Environmental Resources Management

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

http://www.erm.com

9 May 2017
Reference: 0377766

Mr. Brian Monahan
Conservation Commission
Wayland Town Hall
41 Cochituate Road
Wayland, MA 01778

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

Dear Mr. Monahan:

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

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

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

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

Sincerely,

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

Lyndsey Colburn, P.G.
Principal Consultant

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

cc: Jonathan Hone, Raytheon Company
PIP Repositories

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3 - 13302

NOTICE OF ENVIRONMENTAL SAMPLING

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

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

1. Street Address: 430 Boston Post Road

City/Town: Wayland Zip Code: 01778

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

1. Name: Town of Wayland Conservation Commission
2. Street Address: 41 Cochituate Road

City/Town: Wayland Zip Code: 01778

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: 0 Old Sudbury 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-Temporary Solution Operation, Maintenance and Monitoring
☐ Other _____ (specify)

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

☐ residential ☐ commercial ☐ industrial ☐ school/playground ☑ Other undeveloped (specify)

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

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: 50 Apple Hill Drive
City/Town: Tewksbury Zip Code: 01876
Telephone: (978) 858-1885 Email: louis_j_burkhardt@raytheon.com

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

3 - 13302

NOTICE OF ENVIRONMENTAL SAMPLING

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

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

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

THE PERSON(S) PROVIDING THIS NOTICE

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

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

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

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

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/eea/agencies/massdep/cleanup. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://public.dep.state.ma.us/SearchableSites2/Search.aspx to view site-specific files on-line or http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 480-116135-1
Client Project/Site: IDS Wayland

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

Attn: Vicki Pariyar

Denise L Giglia

Authorized for release by:
4/24/2017 11:15:45 AM
Denise Giglia, Project Management Assistant II
denise.giglia@testamericainc.com

Designee for

Becky Mason, Project Manager II
(413)572-4000
becky.mason@testamericainc.com

One sample was collected from Conservation Commission property. All other samples have been grayed out for ease of review.

Table of Contents

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-116135-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-116135-1

Receipt
The samples were received on 4/13/2017 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8º C.

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

Method 8260C: The initial calibration curve RSD was greater than the 20% acceptance criteria for Bromoform , however the RSD was less than 40%. MCP protocol allows for 10% of the target compounds to be outside of the 20% RSD limit for the calibration provided the RSDs do not exceed 40%. The following samples are impacted: DEP-21-20170412 (480-116135-1), MW-265S-20170412 (480-116135-2), MW-265M-20170412 (480-116135-3), REW-1-20170412 (480-116135-4), REW-4-20170412 (480-116135-5) and REW-5-20170412 (480-116135-6).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-352240 recovered outside MCP control limit but less than 40% for Acetone, Bromoform and 2-Butanone. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. The following samples are impacted: DEP-21-20170412 (480-116135-1), MW-265S-20170412 (480-116135-2), MW-265M-20170412 (480-116135-3), REW-1-20170412 (480-116135-4), REW-4-20170412 (480-116135-5) and REW-5-20170412 (480-116135-6).

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-352240 recovered outside control limits but were greater than 10% for the following analytes: Acetone and Bromoform. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples are impacted: DEP-21-20170412 (480-116135-1), MW-265S-20170412 (480-116135-2), MW-265M-20170412 (480-116135-3), REW-1-20170412 (480-116135-4), REW-4-20170412 (480-116135-5) and REW-5-20170412 (480-116135-6).

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-352240 exceeded control limits for the following analyte: Tetrahydrofuran. Unlike the calibration standards, this is due to the coelution with Methacrylonitrile in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples are impacted: DEP-21-20170412 (480-116135-1), MW-265S-20170412 (480-116135-2), MW-265M-20170412 (480-116135-3), REW-1-20170412 (480-116135-4), REW-4-20170412 (480-116135-5) and REW-5-20170412 (480-116135-6).

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-265M-20170412 (480-116135-3). Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-352449 recovered outside the MCP control limit but less than 40% for Acetone, Bromoform and 2-Butanone. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference, 60% for poor performing compounds. The following sample is impacted: TRIP BLANKS (480-116135-7).

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-352449 recovered outside control limits but were greater than 10% for the following analytes: Acetone and Bromoform . MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following sample is impacted: TRIP BLANKS (480-116135-7).

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-352449 exceeded control limits for the following analyte: Tetrahydrofuran. Unlike the calibration standards, this is due to the coelution with Methacrylonitrile in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can

Job ID: 480-116135-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

be distinguished from one another if present in a client sample.

Method 8260C: The initial calibration curve RSD was greater than the 20% acceptance criteria for Bromoform , however the RSD was less than 40%. MCP protocol allows for 10% of the target compounds to be outside of the 20% RSD limit for the calibration provided the RSDs do not exceed 40%. The following sample is impacted: TRIP BLANKS (480-116135-7).

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

GC/MS Semi VOA

Method 522: Surrogate recovery for the following sample was outside control limits: MW-265M-20170412 (480-116135-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 522: Surrogate recovery for the following sample was outside control limits: MW-265M-20170412 (480-116135-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC

Method 300.0: The following sample was diluted due to the nature of the sample matrix: MW-265M-20170412 (480-116135-3) and REW-1-20170412 (480-116135-4). Elevated reporting limits (RLs) are provided.

Method 300.0: The following sample was diluted due to the nature of the sample matrix: MW-265M-20170412 (480-116135-3) and REW-1-20170412 (480-116135-4). Elevated reporting limits (RLs) are provided.

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

Metals

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

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

General Chemistry

Method 9040C, SM 4500 H+ B: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: MW-265M-20170412 (480-116135-3), REW-1-20170412 (480-116135-4), REW-4-20170412 (480-116135-5) and REW-5-20170412 (480-116135-6).

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

Organic Prep

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

MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-116135**

Project Location: **IDS Wayland** RTN:

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

480-116135

Matrices: ■ Groundwater/Surface Water ☐ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A ■	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 ☐	7010 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.	■ Yes ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	■ 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?	■ 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"?	■ 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)?	■ 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 ■ 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 ■ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	☐ 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: Denise L Giglia Position: Project Manager Assistant II

Printed Name: Denise L. Giglia Date: 4/24/17 11:00

Detection Summary

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

TestAmerica Job ID: 480-116135-1

Client Sample ID: DEP-21-20170412

Lab Sample ID: 480-116135-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	33		10		ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 480-116135-1

Client Sample ID: TRIP BLANKS **Lab Sample ID: 480-116135-7**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: DEP-21-20170412
Date Collected: 04/12/17 07:55
Date Received: 04/13/17 01:00

Lab Sample ID: 480-116135-1
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		1.0		ug/L			04/16/17 04:39	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/16/17 04:39	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/16/17 04:39	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/16/17 04:39	1
1,1-Dichloroethane	ND		1.0		ug/L			04/16/17 04:39	1
1,1-Dichloroethene	ND		1.0		ug/L			04/16/17 04:39	1
1,1-Dichloropropene	ND		1.0		ug/L			04/16/17 04:39	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/16/17 04:39	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/16/17 04:39	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/16/17 04:39	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/16/17 04:39	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/16/17 04:39	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/16/17 04:39	1
1,2-Dichloroethane	ND		1.0		ug/L			04/16/17 04:39	1
1,2-Dichloropropane	ND		1.0		ug/L			04/16/17 04:39	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/16/17 04:39	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/16/17 04:39	1
1,3-Dichloropropane	ND		1.0		ug/L			04/16/17 04:39	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/16/17 04:39	1
1,4-Dioxane	ND		50		ug/L			04/16/17 04:39	1
2,2-Dichloropropane	ND		1.0		ug/L			04/16/17 04:39	1
2-Butanone (MEK)	ND		10		ug/L			04/16/17 04:39	1
2-Chlorotoluene	ND		1.0		ug/L			04/16/17 04:39	1
2-Hexanone	ND		10		ug/L			04/16/17 04:39	1
4-Chlorotoluene	ND		1.0		ug/L			04/16/17 04:39	1
4-Isopropyltoluene	ND		1.0		ug/L			04/16/17 04:39	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/16/17 04:39	1
Acetone	ND	*	50		ug/L			04/16/17 04:39	1
Benzene	ND		1.0		ug/L			04/16/17 04:39	1
Bromobenzene	ND		1.0		ug/L			04/16/17 04:39	1
Bromoform	ND	*	1.0		ug/L			04/16/17 04:39	1
Bromomethane	ND		2.0		ug/L			04/16/17 04:39	1
Carbon disulfide	**33**		10		ug/L			04/16/17 04:39	1
Carbon tetrachloride	ND		1.0		ug/L			04/16/17 04:39	1
Chlorobenzene	ND		1.0		ug/L			04/16/17 04:39	1
Chlorobromomethane	ND		1.0		ug/L			04/16/17 04:39	1
Chlorodibromomethane	ND		0.50		ug/L			04/16/17 04:39	1
Chloroethane	ND		2.0		ug/L			04/16/17 04:39	1
Chloroform	ND		1.0		ug/L			04/16/17 04:39	1
Chloromethane	ND		2.0		ug/L			04/16/17 04:39	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/16/17 04:39	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			04/16/17 04:39	1
Dichlorobromomethane	ND		0.50		ug/L			04/16/17 04:39	1
Dichlorodifluoromethane	ND		1.0		ug/L			04/16/17 04:39	1
Ethyl ether	ND		1.0		ug/L			04/16/17 04:39	1
Ethylbenzene	ND		1.0		ug/L			04/16/17 04:39	1
Ethylene Dibromide	ND		1.0		ug/L			04/16/17 04:39	1
Hexachlorobutadiene	ND		0.40		ug/L			04/16/17 04:39	1
Isopropyl ether	ND		10		ug/L			04/16/17 04:39	1

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

TestAmerica Job ID: 480-116135-1

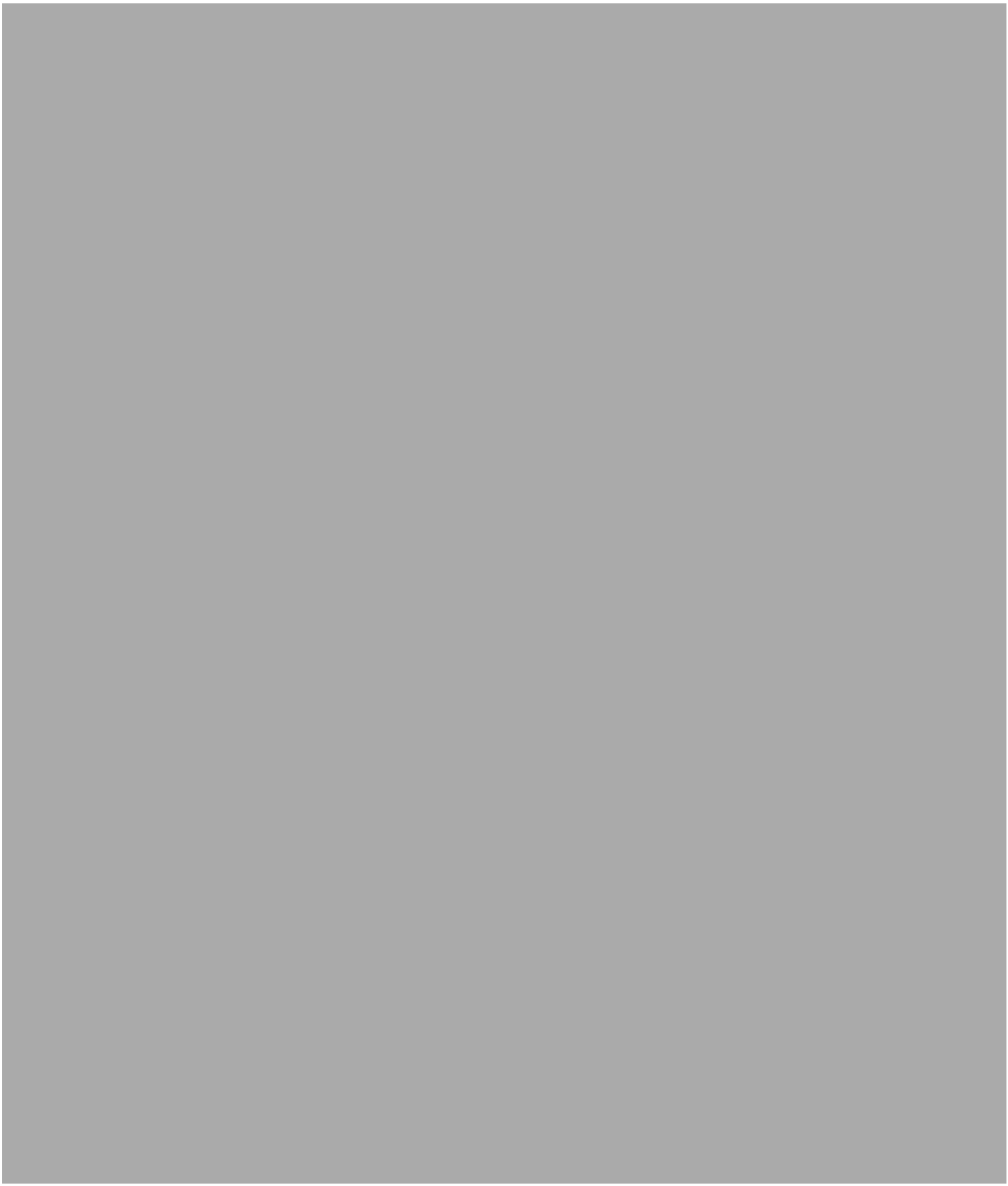
Client Sample ID: DEP-21-20170412
Date Collected: 04/12/17 07:55
Date Received: 04/13/17 01:00

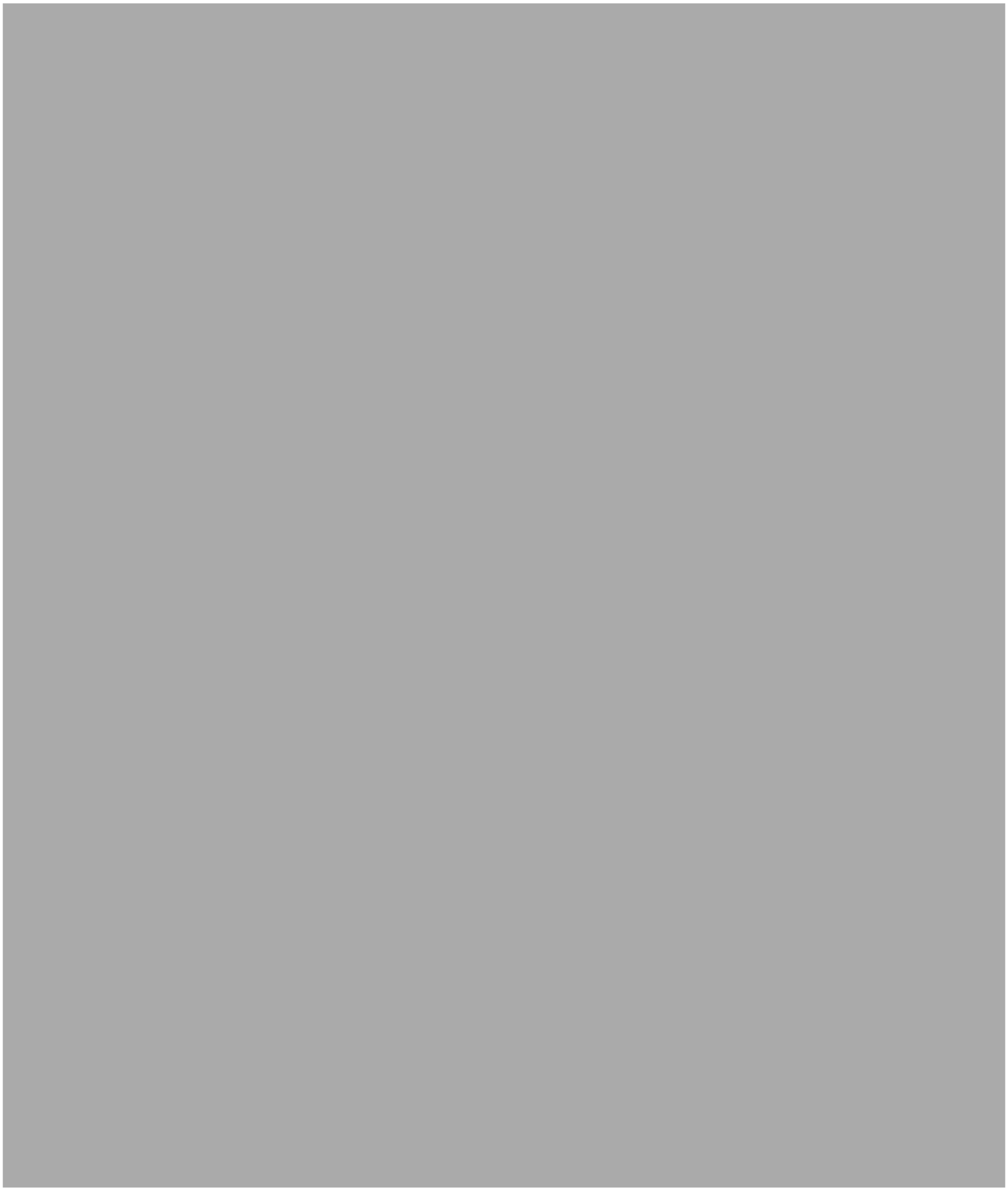
Lab Sample ID: 480-116135-1
Matrix: Water

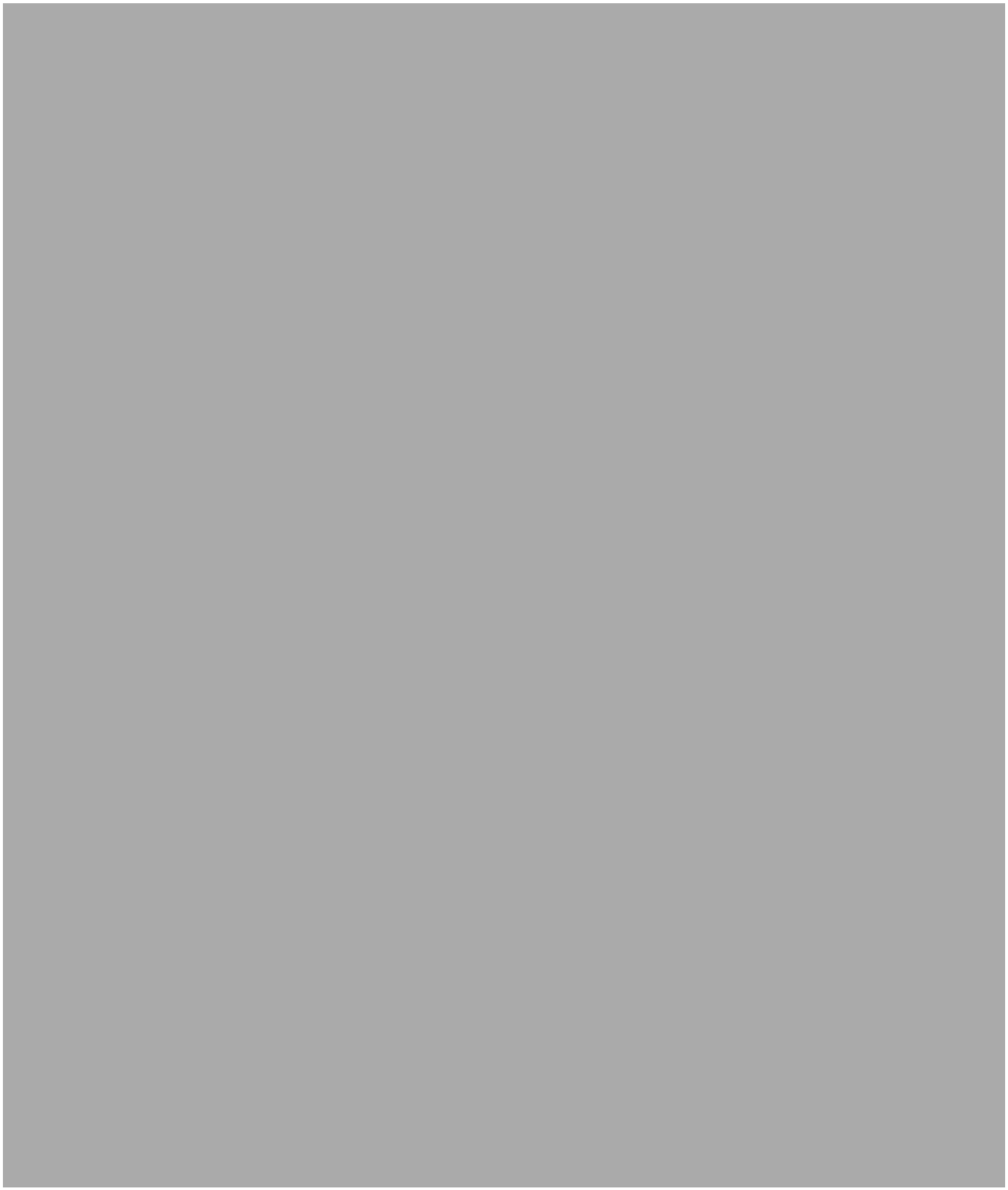
Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

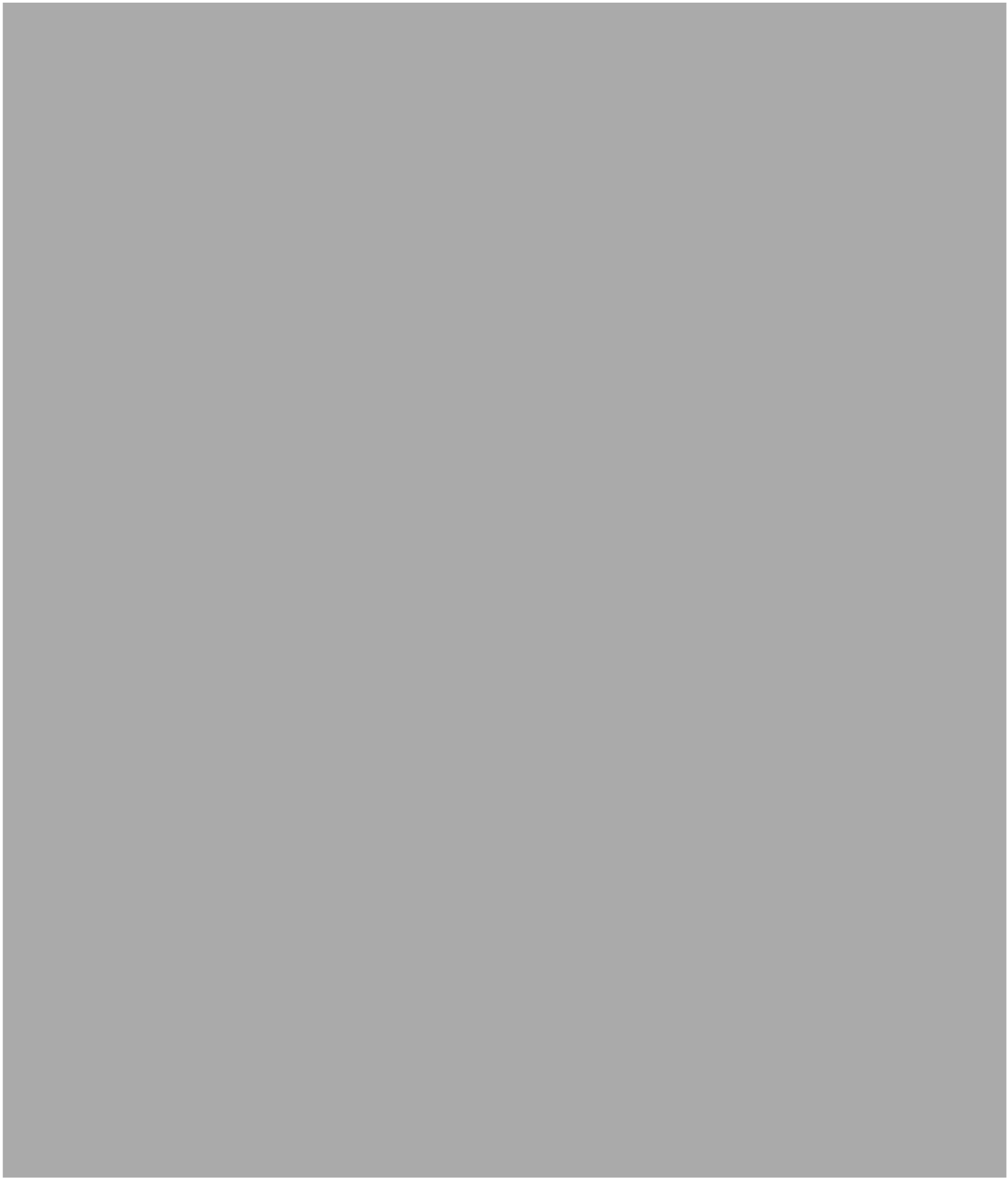
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0		ug/L			04/16/17 04:39	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/16/17 04:39	1
Methylene Chloride	ND		1.0		ug/L			04/16/17 04:39	1
m-Xylene & p-Xylene	ND		2.0		ug/L			04/16/17 04:39	1
Naphthalene	ND		5.0		ug/L			04/16/17 04:39	1
n-Butylbenzene	ND		1.0		ug/L			04/16/17 04:39	1
N-Propylbenzene	ND		1.0		ug/L			04/16/17 04:39	1
o-Xylene	ND		1.0		ug/L			04/16/17 04:39	1
sec-Butylbenzene	ND		1.0		ug/L			04/16/17 04:39	1
Styrene	ND		1.0		ug/L			04/16/17 04:39	1
Tert-amyl methyl ether	ND		5.0		ug/L			04/16/17 04:39	1
Tert-butyl ethyl ether	ND		5.0		ug/L			04/16/17 04:39	1
tert-Butylbenzene	ND		1.0		ug/L			04/16/17 04:39	1
Tetrachloroethene	ND		1.0		ug/L			04/16/17 04:39	1
Tetrahydrofuran	ND	*	10		ug/L			04/16/17 04:39	1
Toluene	ND		1.0		ug/L			04/16/17 04:39	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/16/17 04:39	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			04/16/17 04:39	1
Trichloroethene	ND		1.0		ug/L			04/16/17 04:39	1
Trichlorofluoromethane	ND		1.0		ug/L			04/16/17 04:39	1
Vinyl chloride	ND		1.0		ug/L			04/16/17 04:39	1
Dibromomethane	ND		1.0		ug/L			04/16/17 04:39	1

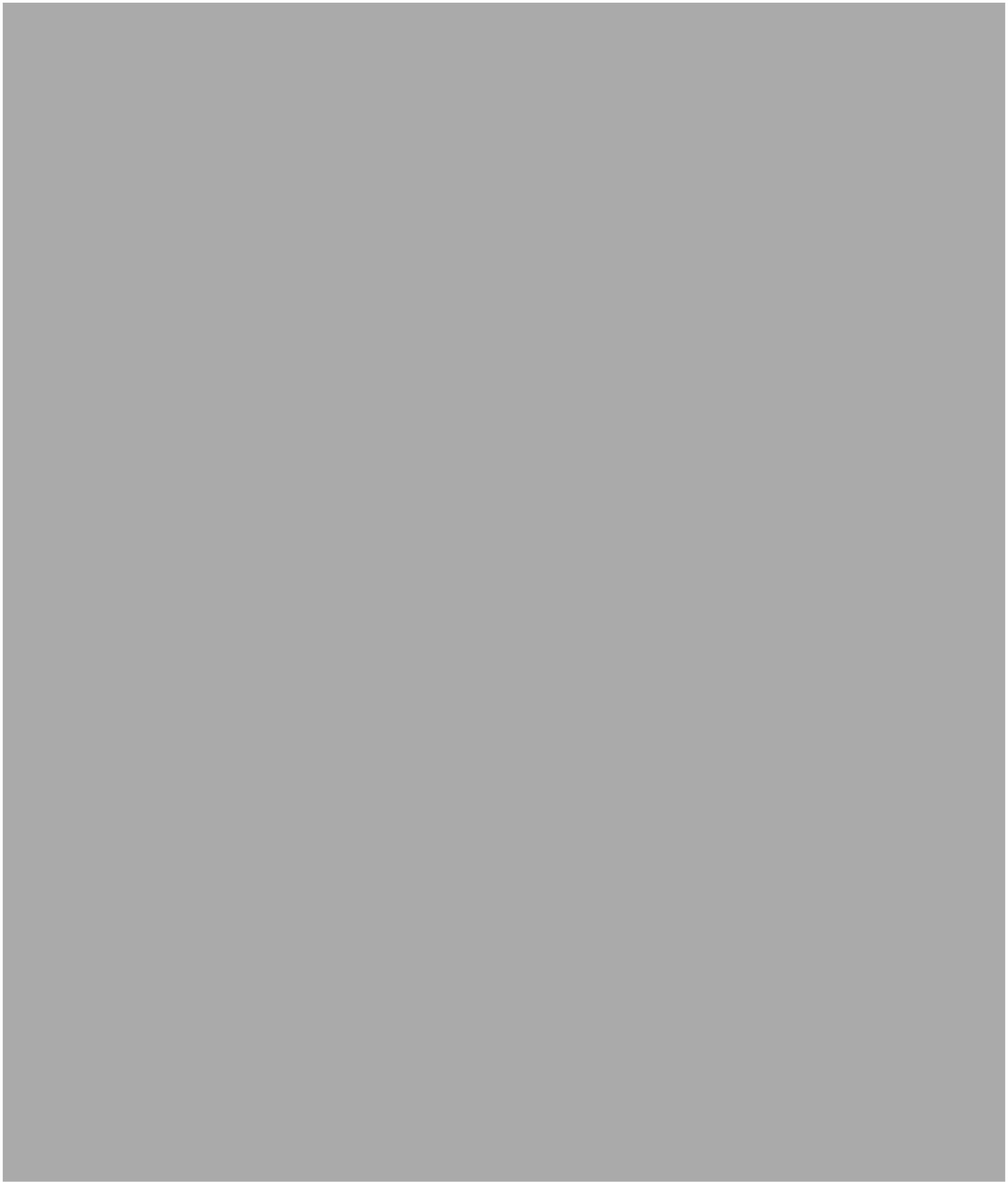
Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*04/16/17 04:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*04/16/17 04:39*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*04/16/17 04:39*	*1*

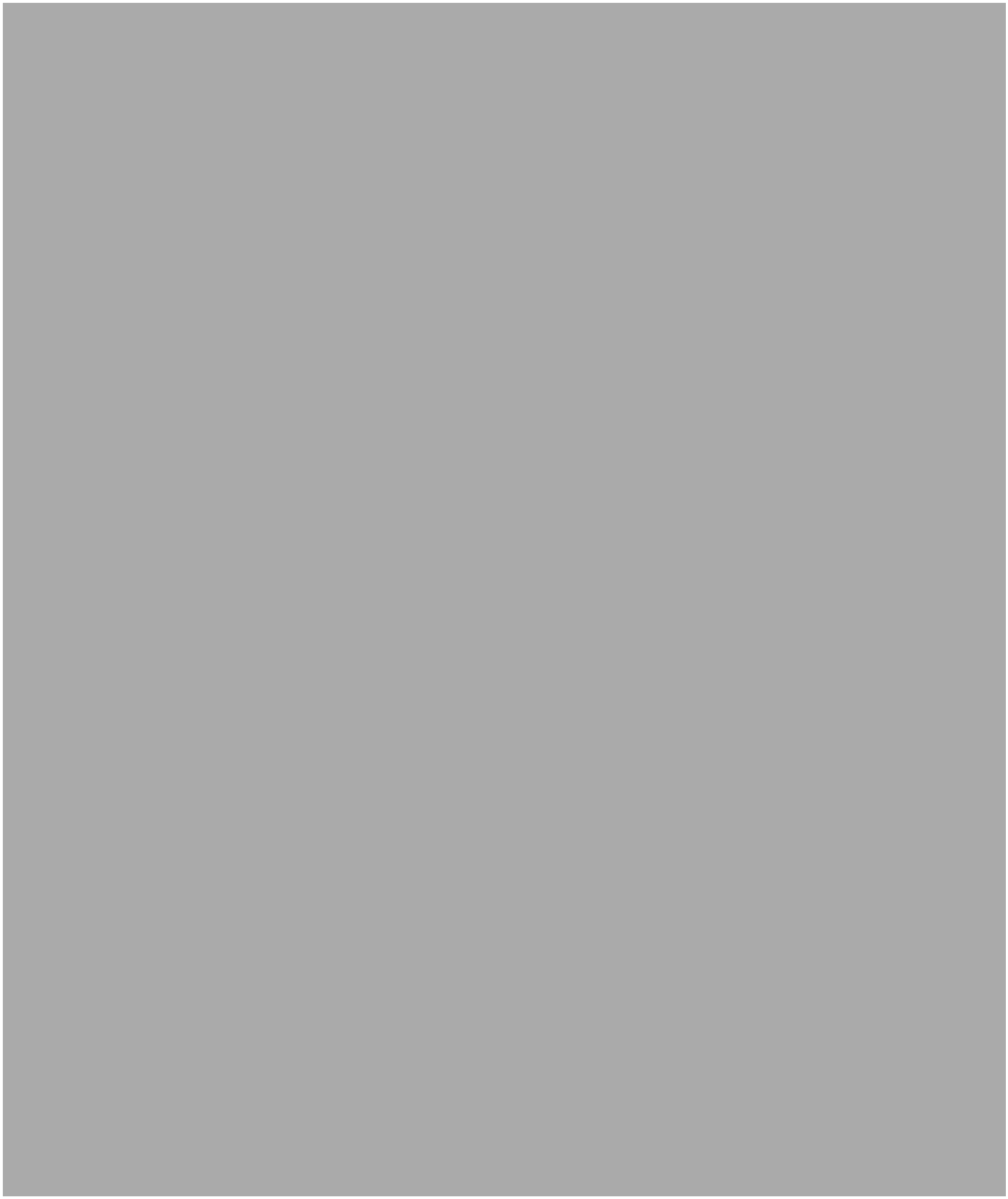


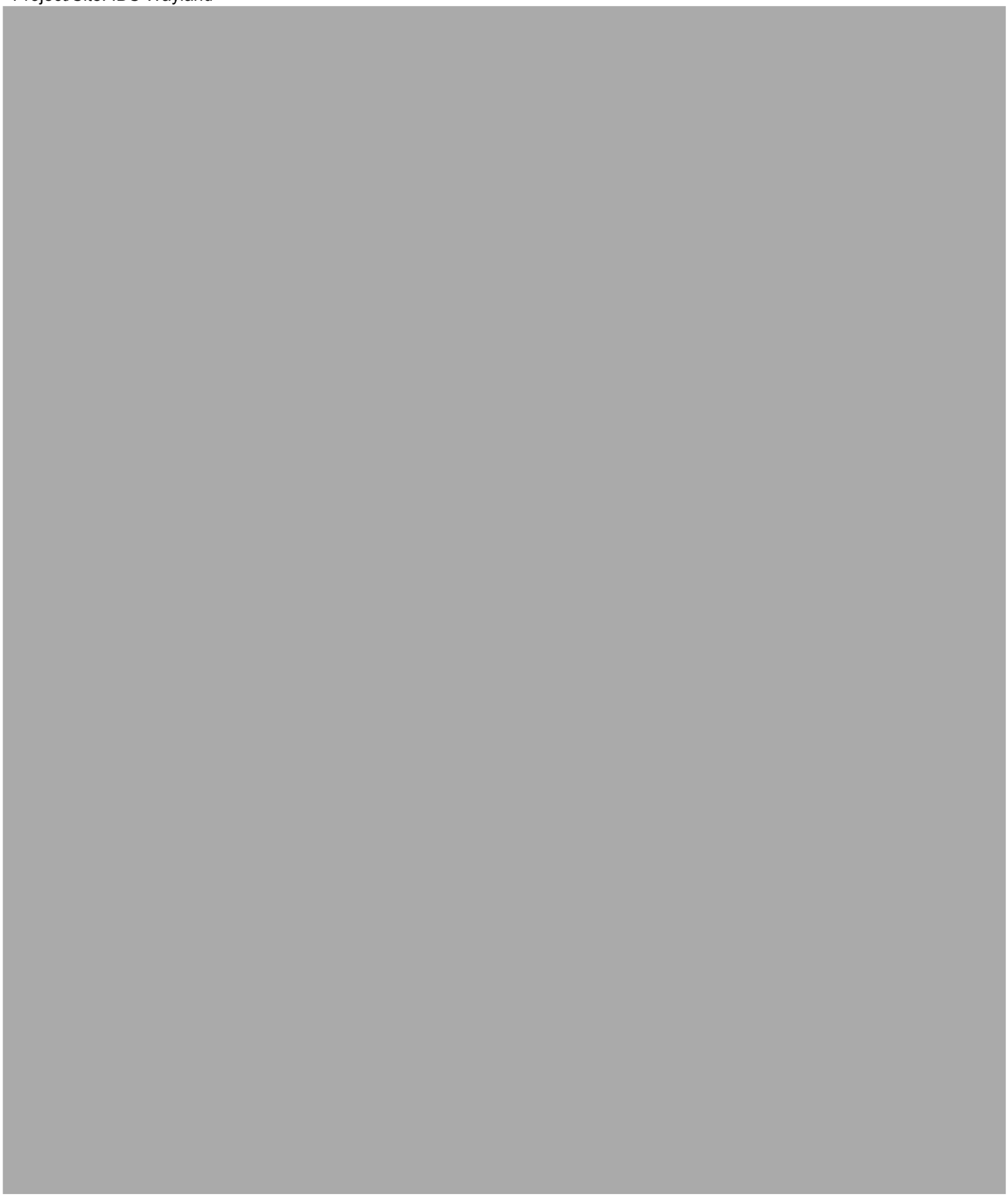


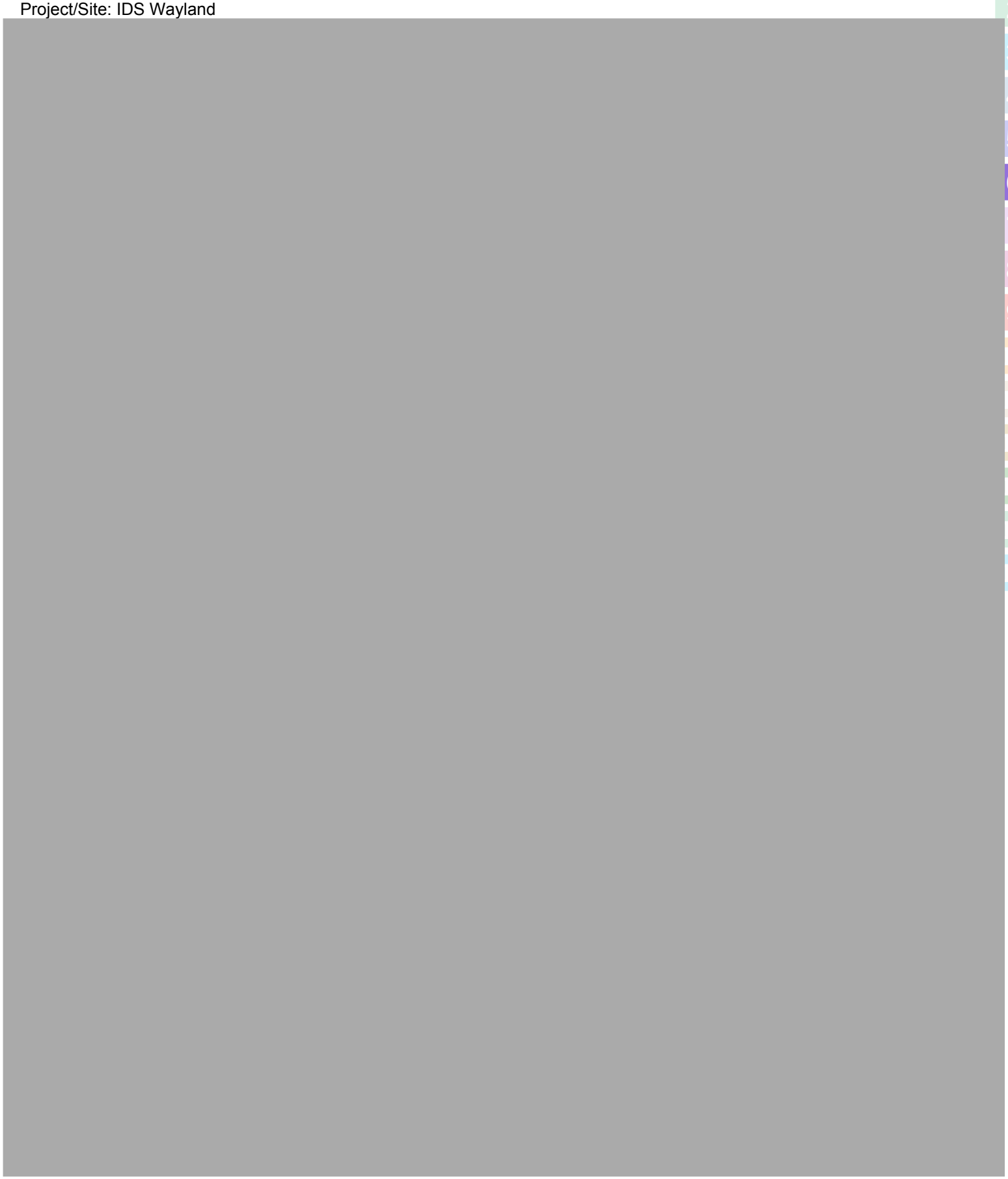


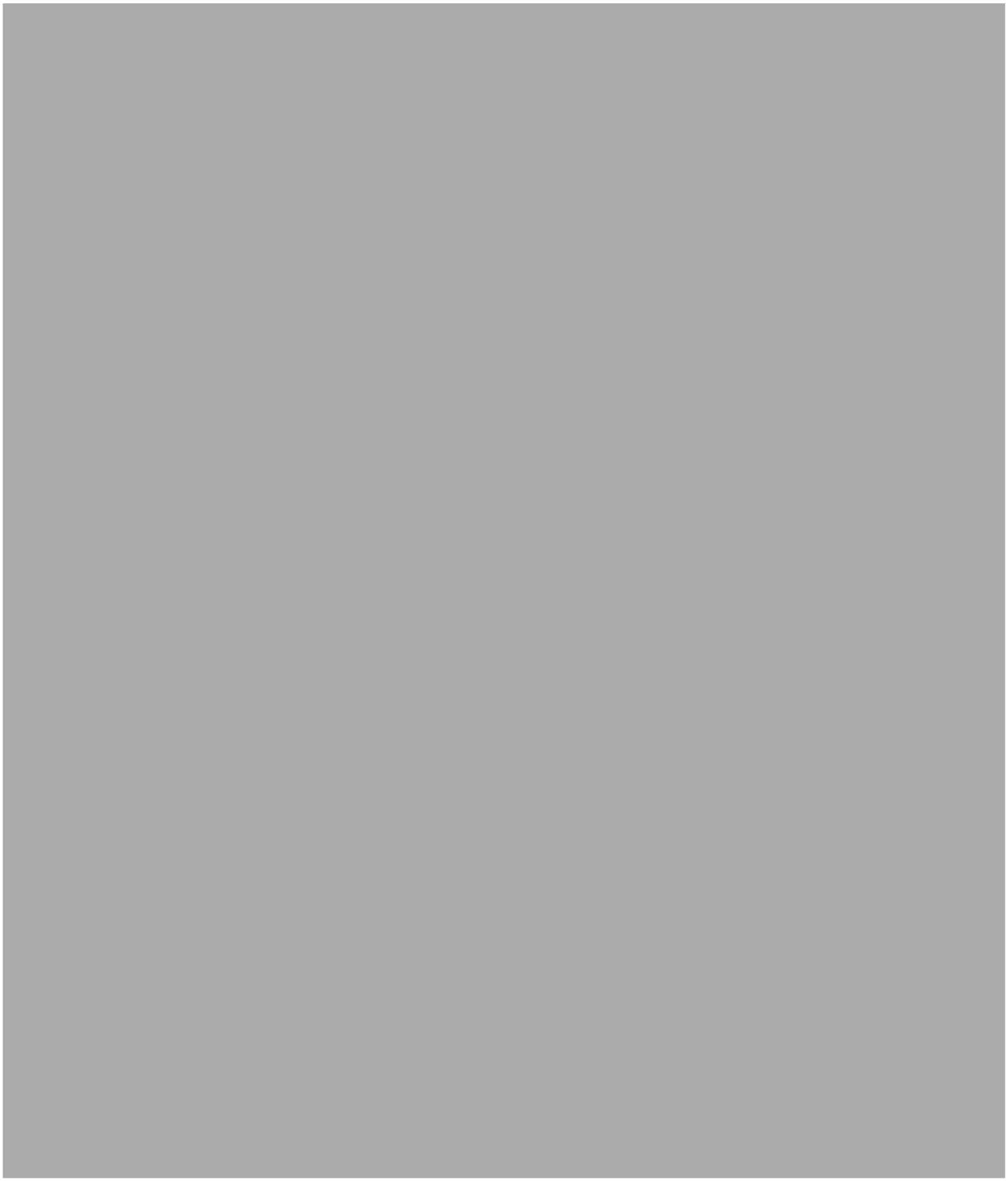












Client Sample ID: TRIP BLANKS
Date Collected: 04/12/17 00:00
Date Received: 04/13/17 01:00

Lab Sample ID: 480-116135-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/17/17 23:19	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/17/17 23:19	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/17/17 23:19	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/17/17 23:19	1
1,1-Dichloroethane	ND		1.0		ug/L			04/17/17 23:19	1
1,1-Dichloroethene	ND		1.0		ug/L			04/17/17 23:19	1
1,1-Dichloropropene	ND		1.0		ug/L			04/17/17 23:19	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/17/17 23:19	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/17/17 23:19	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/17/17 23:19	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/17/17 23:19	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/17/17 23:19	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/17/17 23:19	1
1,2-Dichloroethane	ND		1.0		ug/L			04/17/17 23:19	1
1,2-Dichloropropane	ND		1.0		ug/L			04/17/17 23:19	1

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

TestAmerica Job ID: 480-116135-1

Client Sample ID: TRIP BLANKS
Date Collected: 04/12/17 00:00
Date Received: 04/13/17 01:00

Lab Sample ID: 480-116135-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/17/17 23:19	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/17/17 23:19	1
1,3-Dichloropropane	ND		1.0		ug/L			04/17/17 23:19	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/17/17 23:19	1
1,4-Dioxane	ND		50		ug/L			04/17/17 23:19	1
2,2-Dichloropropane	ND		1.0		ug/L			04/17/17 23:19	1
2-Butanone (MEK)	ND		10		ug/L			04/17/17 23:19	1
2-Chlorotoluene	ND		1.0		ug/L			04/17/17 23:19	1
2-Hexanone	ND		10		ug/L			04/17/17 23:19	1
4-Chlorotoluene	ND		1.0		ug/L			04/17/17 23:19	1
4-Isopropyltoluene	ND		1.0		ug/L			04/17/17 23:19	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/17/17 23:19	1
Acetone	ND	*	50		ug/L			04/17/17 23:19	1
Benzene	ND		1.0		ug/L			04/17/17 23:19	1
Bromobenzene	ND		1.0		ug/L			04/17/17 23:19	1
Bromoform	ND	*	1.0		ug/L			04/17/17 23:19	1
Bromomethane	ND		2.0		ug/L			04/17/17 23:19	1
Carbon disulfide	ND		10		ug/L			04/17/17 23:19	1
Carbon tetrachloride	ND		1.0		ug/L			04/17/17 23:19	1
Chlorobenzene	ND		1.0		ug/L			04/17/17 23:19	1
Chlorobromomethane	ND		1.0		ug/L			04/17/17 23:19	1
Chlorodibromomethane	ND		0.50		ug/L			04/17/17 23:19	1
Chloroethane	ND		2.0		ug/L			04/17/17 23:19	1
Chloroform	ND		1.0		ug/L			04/17/17 23:19	1
Chloromethane	ND		2.0		ug/L			04/17/17 23:19	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/17/17 23:19	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			04/17/17 23:19	1
Dichlorobromomethane	ND		0.50		ug/L			04/17/17 23:19	1
Dichlorodifluoromethane	ND		1.0		ug/L			04/17/17 23:19	1
Ethyl ether	ND		1.0		ug/L			04/17/17 23:19	1
Ethylbenzene	ND		1.0		ug/L			04/17/17 23:19	1
Ethylene Dibromide	ND		1.0		ug/L			04/17/17 23:19	1
Hexachlorobutadiene	ND		0.40		ug/L			04/17/17 23:19	1
Isopropyl ether	ND		10		ug/L			04/17/17 23:19	1
Isopropylbenzene	ND		1.0		ug/L			04/17/17 23:19	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/17/17 23:19	1
Methylene Chloride	ND		1.0		ug/L			04/17/17 23:19	1
m-Xylene & p-Xylene	ND		2.0		ug/L			04/17/17 23:19	1
Naphthalene	ND		5.0		ug/L			04/17/17 23:19	1
n-Butylbenzene	ND		1.0		ug/L			04/17/17 23:19	1
N-Propylbenzene	ND		1.0		ug/L			04/17/17 23:19	1
o-Xylene	ND		1.0		ug/L			04/17/17 23:19	1
sec-Butylbenzene	ND		1.0		ug/L			04/17/17 23:19	1
Styrene	ND		1.0		ug/L			04/17/17 23:19	1
Tert-amyl methyl ether	ND		5.0		ug/L			04/17/17 23:19	1
Tert-butyl ethyl ether	ND		5.0		ug/L			04/17/17 23:19	1
tert-Butylbenzene	ND		1.0		ug/L			04/17/17 23:19	1
Tetrachloroethene	ND		1.0		ug/L			04/17/17 23:19	1
Tetrahydrofuran	ND	*	10		ug/L			04/17/17 23:19	1

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

TestAmerica Job ID: 480-116135-1

Client Sample ID: TRIP BLANKS
Date Collected: 04/12/17 00:00
Date Received: 04/13/17 01:00

Lab Sample ID: 480-116135-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.0		ug/L			04/17/17 23:19	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/17/17 23:19	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			04/17/17 23:19	1
Trichloroethene	ND		1.0		ug/L			04/17/17 23:19	1
Trichlorofluoromethane	ND		1.0		ug/L			04/17/17 23:19	1
Vinyl chloride	ND		1.0		ug/L			04/17/17 23:19	1
Dibromomethane	ND		1.0		ug/L			04/17/17 23:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*04/17/17 23:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*04/17/17 23:19*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*04/17/17 23:19*	*1*

Surrogate Summary

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

TestAmerica Job ID: 480-116135-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	TOL (70-130)	12DCE (70-130)	BFB (70-130)
480-116135-1	DEP-21-20170412	95	101	101
480-116135-7	TRIP BLANKS	95	102	97
LCS 480-352240/4	Lab Control Sample	97	101	100
LCS 480-352449/5	Lab Control Sample	93	96	97
LCSD 480-352240/5	Lab Control Sample Dup	97	95	103
LCSD 480-352449/6	Lab Control Sample Dup	93	96	98
MB 480-352240/7	Method Blank	98	99	101
MB 480-352449/8	Method Blank	92	97	98

Surrogate Legend

TOL = Toluene-d8 (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	14DD8 (46-130)
LCS 200-115930/2-A	Lab Control Sample	98
LCSD 200-115930/3-A	Lab Control Sample Dup	88
MB 200-115930/1-A	Method Blank	77

Surrogate Legend

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

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

Lab Sample ID: MB 480-352240/7
Matrix: Water
Analysis Batch: 352240

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/15/17 23:17	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/15/17 23:17	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			04/15/17 23:17	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/15/17 23:17	1
1,1-Dichloroethane	ND		1.0		ug/L			04/15/17 23:17	1
1,1-Dichloroethene	ND		1.0		ug/L			04/15/17 23:17	1
1,1-Dichloropropene	ND		1.0		ug/L			04/15/17 23:17	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/15/17 23:17	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/15/17 23:17	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/15/17 23:17	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/15/17 23:17	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/15/17 23:17	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/15/17 23:17	1
1,2-Dichloroethane	ND		1.0		ug/L			04/15/17 23:17	1
1,2-Dichloropropane	ND		1.0		ug/L			04/15/17 23:17	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/15/17 23:17	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/15/17 23:17	1
1,3-Dichloropropane	ND		1.0		ug/L			04/15/17 23:17	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/15/17 23:17	1
1,4-Dioxane	ND		50		ug/L			04/15/17 23:17	1
2,2-Dichloropropane	ND		1.0		ug/L			04/15/17 23:17	1
2-Butanone (MEK)	ND		10		ug/L			04/15/17 23:17	1
2-Chlorotoluene	ND		1.0		ug/L			04/15/17 23:17	1
2-Hexanone	ND		10		ug/L			04/15/17 23:17	1
4-Chlorotoluene	ND		1.0		ug/L			04/15/17 23:17	1
4-Isopropyltoluene	ND		1.0		ug/L			04/15/17 23:17	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			04/15/17 23:17	1
Acetone	ND		50		ug/L			04/15/17 23:17	1
Benzene	ND		1.0		ug/L			04/15/17 23:17	1
Bromobenzene	ND		1.0		ug/L			04/15/17 23:17	1
Bromoform	ND		1.0		ug/L			04/15/17 23:17	1
Bromomethane	ND		2.0		ug/L			04/15/17 23:17	1
Carbon disulfide	ND		10		ug/L			04/15/17 23:17	1
Carbon tetrachloride	ND		1.0		ug/L			04/15/17 23:17	1
Chlorobenzene	ND		1.0		ug/L			04/15/17 23:17	1
Chlorobromomethane	ND		1.0		ug/L			04/15/17 23:17	1
Chlorodibromomethane	ND		0.50		ug/L			04/15/17 23:17	1
Chloroethane	ND		2.0		ug/L			04/15/17 23:17	1
Chloroform	ND		1.0		ug/L			04/15/17 23:17	1
Chloromethane	ND		2.0		ug/L			04/15/17 23:17	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/15/17 23:17	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			04/15/17 23:17	1
Dichlorobromomethane	ND		0.50		ug/L			04/15/17 23:17	1
Dichlorodifluoromethane	ND		1.0		ug/L			04/15/17 23:17	1
Ethyl ether	ND		1.0		ug/L			04/15/17 23:17	1
Ethylbenzene	ND		1.0		ug/L			04/15/17 23:17	1
Ethylene Dibromide	ND		1.0		ug/L			04/15/17 23:17	1
Hexachlorobutadiene	ND		0.40		ug/L			04/15/17 23:17	1

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

Lab Sample ID: MB 480-352240/7
Matrix: Water
Analysis Batch: 352240

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		10		ug/L			04/15/17 23:17	1
Isopropylbenzene	ND		1.0		ug/L			04/15/17 23:17	1
Methyl tert-butyl ether	ND		1.0		ug/L			04/15/17 23:17	1
Methylene Chloride	ND		1.0		ug/L			04/15/17 23:17	1
m-Xylene & p-Xylene	ND		2.0		ug/L			04/15/17 23:17	1
Naphthalene	ND		5.0		ug/L			04/15/17 23:17	1
n-Butylbenzene	ND		1.0		ug/L			04/15/17 23:17	1
N-Propylbenzene	ND		1.0		ug/L			04/15/17 23:17	1
o-Xylene	ND		1.0		ug/L			04/15/17 23:17	1
sec-Butylbenzene	ND		1.0		ug/L			04/15/17 23:17	1
Styrene	ND		1.0		ug/L			04/15/17 23:17	1
Tert-amyl methyl ether	ND		5.0		ug/L			04/15/17 23:17	1
Tert-butyl ethyl ether	ND		5.0		ug/L			04/15/17 23:17	1
tert-Butylbenzene	ND		1.0		ug/L			04/15/17 23:17	1
Tetrachloroethene	ND		1.0		ug/L			04/15/17 23:17	1
Tetrahydrofuran	ND		10		ug/L			04/15/17 23:17	1
Toluene	ND		1.0		ug/L			04/15/17 23:17	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/15/17 23:17	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			04/15/17 23:17	1
Trichloroethene	ND		1.0		ug/L			04/15/17 23:17	1
Trichlorofluoromethane	ND		1.0		ug/L			04/15/17 23:17	1
Vinyl chloride	ND		1.0		ug/L			04/15/17 23:17	1
Dibromomethane	ND		1.0		ug/L			04/15/17 23:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*04/15/17 23:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*04/15/17 23:17*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*04/15/17 23:17*	*1*

Lab Sample ID: LCS 480-352240/4
Matrix: Water
Analysis Batch: 352240

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.2		ug/L		97	70 - 130
1,1,1-Trichloroethane	25.0	24.8		ug/L		99	70 - 130
1,1,2,2-Tetrachloroethane	25.0	26.5		ug/L		106	70 - 130
1,1,2-Trichloroethane	25.0	25.3		ug/L		101	70 - 130
1,1-Dichloroethane	25.0	25.5		ug/L		102	70 - 130
1,1-Dichloroethene	25.0	24.1		ug/L		96	70 - 130
1,1-Dichloropropene	25.0	24.4		ug/L		98	70 - 130
1,2,3-Trichlorobenzene	25.0	26.3		ug/L		105	70 - 130
1,2,3-Trichloropropane	25.0	24.5		ug/L		98	70 - 130
1,2,4-Trichlorobenzene	25.0	25.7		ug/L		103	70 - 130
1,2,4-Trimethylbenzene	25.0	23.3		ug/L		93	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	24.7		ug/L		99	70 - 130
1,2-Dichlorobenzene	25.0	24.4		ug/L		97	70 - 130
1,2-Dichloroethane	25.0	24.4		ug/L		98	70 - 130

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

Lab Sample ID: LCS 480-352240/4
Matrix: Water
Analysis Batch: 352240

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	25.0	25.0		ug/L		100	70 - 130
1,3,5-Trimethylbenzene	25.0	23.4		ug/L		94	70 - 130
1,3-Dichlorobenzene	25.0	24.0		ug/L		96	70 - 130
1,3-Dichloropropane	25.0	24.7		ug/L		99	70 - 130
1,4-Dichlorobenzene	25.0	23.8		ug/L		95	70 - 130
1,4-Dioxane	500	464		ug/L		93	70 - 130
2,2-Dichloropropane	25.0	24.3		ug/L		97	70 - 130
2-Butanone (MEK)	125	149		ug/L		119	70 - 130
2-Chlorotoluene	25.0	23.3		ug/L		93	70 - 130
2-Hexanone	125	142		ug/L		114	70 - 130
4-Chlorotoluene	25.0	25.7		ug/L		103	70 - 130
4-Isopropyltoluene	25.0	24.1		ug/L		96	70 - 130
4-Methyl-2-pentanone (MIBK)	125	139		ug/L		111	70 - 130
Acetone	125	166	*	ug/L		133	70 - 130
Benzene	25.0	24.7		ug/L		99	70 - 130
Bromobenzene	25.0	24.1		ug/L		96	70 - 130
Bromoform	25.0	34.3	*	ug/L		137	70 - 130
Bromomethane	25.0	24.7		ug/L		99	70 - 130
Carbon disulfide	25.0	23.8		ug/L		95	70 - 130
Carbon tetrachloride	25.0	27.9		ug/L		112	70 - 130
Chlorobenzene	25.0	24.3		ug/L		97	70 - 130
Chlorobromomethane	25.0	26.1		ug/L		104	70 - 130
Chlorodibromomethane	25.0	27.2		ug/L		109	70 - 130
Chloroethane	25.0	22.5		ug/L		90	70 - 130
Chloroform	25.0	24.4		ug/L		98	70 - 130
Chloromethane	25.0	24.4		ug/L		98	70 - 130
cis-1,2-Dichloroethene	25.0	24.8		ug/L		99	70 - 130
cis-1,3-Dichloropropene	25.0	26.7		ug/L		107	70 - 130
Dichlorobromomethane	25.0	28.6		ug/L		114	70 - 130
Dichlorodifluoromethane	25.0	24.1		ug/L		96	70 - 130
Ethyl ether	25.0	24.8		ug/L		99	70 - 130
Ethylbenzene	25.0	23.5		ug/L		94	70 - 130
Ethylene Dibromide	25.0	25.6		ug/L		102	70 - 130
Hexachlorobutadiene	25.0	24.9		ug/L		100	70 - 130
Isopropyl ether	25.0	24.0		ug/L		96	70 - 130
Isopropylbenzene	25.0	23.4		ug/L		94	70 - 130
Methyl tert-butyl ether	25.0	24.9		ug/L		100	70 - 130
Methylene Chloride	25.0	22.4		ug/L		90	70 - 130
m-Xylene & p-Xylene	25.0	23.9		ug/L		96	70 - 130
Naphthalene	25.0	25.9		ug/L		104	70 - 130
n-Butylbenzene	25.0	23.4		ug/L		94	70 - 130
N-Propylbenzene	25.0	23.3		ug/L		93	70 - 130
o-Xylene	25.0	23.8		ug/L		95	70 - 130
sec-Butylbenzene	25.0	23.4		ug/L		94	70 - 130
Styrene	25.0	24.6		ug/L		98	70 - 130
Tert-amyl methyl ether	25.0	23.6		ug/L		95	70 - 130
Tert-butyl ethyl ether	25.0	23.0		ug/L		92	70 - 130
tert-Butylbenzene	25.0	24.0		ug/L		96	70 - 130

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

Lab Sample ID: LCS 480-352240/4
Matrix: Water
Analysis Batch: 352240

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	25.0	25.2		ug/L		101	70 - 130
Tetrahydrofuran	50.0	71.3	*	ug/L		143	70 - 130
Toluene	25.0	23.8		ug/L		95	70 - 130
trans-1,2-Dichloroethene	25.0	24.3		ug/L		97	70 - 130
trans-1,3-Dichloropropene	25.0	25.9		ug/L		104	70 - 130
Trichloroethene	25.0	24.5		ug/L		98	70 - 130
Trichlorofluoromethane	25.0	25.1		ug/L		101	70 - 130
Vinyl chloride	25.0	24.3		ug/L		97	70 - 130
Dibromomethane	25.0	25.7		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 480-352240/5
Matrix: Water
Analysis Batch: 352240

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	25.0	24.8		ug/L		99	70 - 130	3	20
1,1,1-Trichloroethane	25.0	25.0		ug/L		100	70 - 130	1	20
1,1,2,2-Tetrachloroethane	25.0	26.1		ug/L		105	70 - 130	1	20
1,1,2-Trichloroethane	25.0	25.0		ug/L		100	70 - 130	1	20
1,1-Dichloroethane	25.0	25.8		ug/L		103	70 - 130	1	20
1,1-Dichloroethene	25.0	24.9		ug/L		99	70 - 130	3	20
1,1-Dichloropropene	25.0	24.4		ug/L		97	70 - 130	0	20
1,2,3-Trichlorobenzene	25.0	25.5		ug/L		102	70 - 130	3	20
1,2,3-Trichloropropane	25.0	23.1		ug/L		92	70 - 130	6	20
1,2,4-Trichlorobenzene	25.0	25.2		ug/L		101	70 - 130	2	20
1,2,4-Trimethylbenzene	25.0	23.6		ug/L		95	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	25.0	22.5		ug/L		90	70 - 130	9	20
1,2-Dichlorobenzene	25.0	23.8		ug/L		95	70 - 130	2	20
1,2-Dichloroethane	25.0	24.2		ug/L		97	70 - 130	1	20
1,2-Dichloropropane	25.0	25.2		ug/L		101	70 - 130	1	20
1,3,5-Trimethylbenzene	25.0	23.8		ug/L		95	70 - 130	2	20
1,3-Dichlorobenzene	25.0	24.6		ug/L		98	70 - 130	3	20
1,3-Dichloropropane	25.0	24.7		ug/L		99	70 - 130	0	20
1,4-Dichlorobenzene	25.0	24.0		ug/L		96	70 - 130	1	20
1,4-Dioxane	500	471		ug/L		94	70 - 130	1	20
2,2-Dichloropropane	25.0	24.5		ug/L		98	70 - 130	1	20
2-Butanone (MEK)	125	137		ug/L		110	70 - 130	8	20
2-Chlorotoluene	25.0	23.8		ug/L		95	70 - 130	2	20
2-Hexanone	125	138		ug/L		110	70 - 130	3	20
4-Chlorotoluene	25.0	25.6		ug/L		102	70 - 130	0	20
4-Isopropyltoluene	25.0	24.3		ug/L		97	70 - 130	1	20
4-Methyl-2-pentanone (MIBK)	125	136		ug/L		109	70 - 130	2	20
Acetone	125	157		ug/L		126	70 - 130	6	20

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

Lab Sample ID: LCSD 480-352240/5
Matrix: Water
Analysis Batch: 352240

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			25.0	24.7		ug/L		99	70 - 130	0	20
Bromobenzene			25.0	24.3		ug/L		97	70 - 130	1	20
Bromoform			25.0	36.1	*	ug/L		144	70 - 130	5	20
Bromomethane			25.0	25.7		ug/L		103	70 - 130	4	20
Carbon disulfide			25.0	24.6		ug/L		99	70 - 130	4	20
Carbon tetrachloride			25.0	28.9		ug/L		115	70 - 130	3	20
Chlorobenzene			25.0	25.2		ug/L		101	70 - 130	4	20
Chlorobromomethane			25.0	26.0		ug/L		104	70 - 130	0	20
Chlorodibromomethane			25.0	27.7		ug/L		111	70 - 130	2	20
Chloroethane			25.0	23.2		ug/L		93	70 - 130	3	20
Chloroform			25.0	24.2		ug/L		97	70 - 130	1	20
Chloromethane			25.0	24.7		ug/L		99	70 - 130	1	20
cis-1,2-Dichloroethene			25.0	24.8		ug/L		99	70 - 130	0	20
cis-1,3-Dichloropropene			25.0	27.0		ug/L		108	70 - 130	1	20
Dichlorobromomethane			25.0	28.5		ug/L		114	70 - 130	0	20
Dichlorodifluoromethane			25.0	25.5		ug/L		102	70 - 130	6	20
Ethyl ether			25.0	24.6		ug/L		98	70 - 130	1	20
Ethylbenzene			25.0	24.1		ug/L		96	70 - 130	2	20
Ethylene Dibromide			25.0	25.4		ug/L		101	70 - 130	1	20
Hexachlorobutadiene			25.0	25.8		ug/L		103	70 - 130	3	20
Isopropyl ether			25.0	23.9		ug/L		96	70 - 130	0	20
Isopropylbenzene			25.0	23.5		ug/L		94	70 - 130	0	20
Methyl tert-butyl ether			25.0	24.5		ug/L		98	70 - 130	2	20
Methylene Chloride			25.0	22.9		ug/L		92	70 - 130	2	20
m-Xylene & p-Xylene			25.0	24.7		ug/L		99	70 - 130	3	20
Naphthalene			25.0	25.1		ug/L		100	70 - 130	3	20
n-Butylbenzene			25.0	23.9		ug/L		95	70 - 130	2	20
N-Propylbenzene			25.0	23.8		ug/L		95	70 - 130	2	20
o-Xylene			25.0	24.5		ug/L		98	70 - 130	3	20
sec-Butylbenzene			25.0	24.3		ug/L		97	70 - 130	4	20
Styrene			25.0	25.0		ug/L		100	70 - 130	2	20
Tert-amyl methyl ether			25.0	23.5		ug/L		94	70 - 130	0	20
Tert-butyl ethyl ether			25.0	22.6		ug/L		90	70 - 130	2	20
tert-Butylbenzene			25.0	24.8		ug/L		99	70 - 130	4	20
Tetrachloroethene			25.0	26.4		ug/L		106	70 - 130	5	20
Tetrahydrofuran			50.0	67.0	*	ug/L		134	70 - 130	6	20
Toluene			25.0	24.3		ug/L		97	70 - 130	2	20
trans-1,2-Dichloroethene			25.0	25.0		ug/L		100	70 - 130	3	20
trans-1,3-Dichloropropene			25.0	26.8		ug/L		107	70 - 130	3	20
Trichloroethene			25.0	24.9		ug/L		100	70 - 130	2	20
Trichlorofluoromethane			25.0	26.2		ug/L		105	70 - 130	4	20
Vinyl chloride			25.0	25.1		ug/L		101	70 - 130	3	20
Dibromomethane			25.0	25.6		ug/L		102	70 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: MB 480-352449/8
Matrix: Water
Analysis Batch: 352449

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

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

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

Lab Sample ID: MB 480-352449/8
Matrix: Water
Analysis Batch: 352449

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

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

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

Lab Sample ID: LCS 480-352449/5
Matrix: Water
Analysis Batch: 352449

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	21.7		ug/L		87	70 - 130
1,1,1-Trichloroethane	25.0	23.8		ug/L		95	70 - 130
1,1,2,2-Tetrachloroethane	25.0	24.1		ug/L		97	70 - 130
1,1,2-Trichloroethane	25.0	23.6		ug/L		95	70 - 130
1,1-Dichloroethane	25.0	25.0		ug/L		100	70 - 130
1,1-Dichloroethene	25.0	23.8		ug/L		95	70 - 130
1,1-Dichloropropene	25.0	24.1		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	25.0	24.4		ug/L		97	70 - 130
1,2,3-Trichloropropane	25.0	22.5		ug/L		90	70 - 130
1,2,4-Trichlorobenzene	25.0	23.5		ug/L		94	70 - 130
1,2,4-Trimethylbenzene	25.0	22.3		ug/L		89	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	22.2		ug/L		89	70 - 130
1,2-Dichlorobenzene	25.0	23.3		ug/L		93	70 - 130
1,2-Dichloroethane	25.0	23.7		ug/L		95	70 - 130
1,2-Dichloropropane	25.0	25.1		ug/L		101	70 - 130
1,3,5-Trimethylbenzene	25.0	22.0		ug/L		88	70 - 130

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

Lab Sample ID: LCS 480-352449/5
Matrix: Water
Analysis Batch: 352449

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	25.0	23.2		ug/L		93	70 - 130
1,3-Dichloropropane	25.0	22.3		ug/L		89	70 - 130
1,4-Dichlorobenzene	25.0	22.5		ug/L		90	70 - 130
1,4-Dioxane	500	439		ug/L		88	70 - 130
2,2-Dichloropropane	25.0	23.3		ug/L		93	70 - 130
2-Butanone (MEK)	125	143		ug/L		114	70 - 130
2-Chlorotoluene	25.0	22.2		ug/L		89	70 - 130
2-Hexanone	125	131		ug/L		105	70 - 130
4-Chlorotoluene	25.0	23.7		ug/L		95	70 - 130
4-Isopropyltoluene	25.0	22.6		ug/L		90	70 - 130
4-Methyl-2-pentanone (MIBK)	125	126		ug/L		101	70 - 130
Acetone	125	169	*	ug/L		135	70 - 130
Benzene	25.0	24.0		ug/L		96	70 - 130
Bromobenzene	25.0	22.1		ug/L		89	70 - 130
Bromoform	25.0	30.8		ug/L		123	70 - 130
Bromomethane	25.0	23.1		ug/L		92	70 - 130
Carbon disulfide	25.0	23.0		ug/L		92	70 - 130
Carbon tetrachloride	25.0	26.9		ug/L		108	70 - 130
Chlorobenzene	25.0	23.1		ug/L		92	70 - 130
Chlorobromomethane	25.0	25.2		ug/L		101	70 - 130
Chlorodibromomethane	25.0	24.6		ug/L		99	70 - 130
Chloroethane	25.0	21.6		ug/L		86	70 - 130
Chloroform	25.0	23.5		ug/L		94	70 - 130
Chloromethane	25.0	23.8		ug/L		95	70 - 130
cis-1,2-Dichloroethene	25.0	24.5		ug/L		98	70 - 130
cis-1,3-Dichloropropene	25.0	25.9		ug/L		103	70 - 130
Dichlorobromomethane	25.0	27.2		ug/L		109	70 - 130
Dichlorodifluoromethane	25.0	23.5		ug/L		94	70 - 130
Ethyl ether	25.0	24.8		ug/L		99	70 - 130
Ethylbenzene	25.0	21.5		ug/L		86	70 - 130
Ethylene Dibromide	25.0	23.3		ug/L		93	70 - 130
Hexachlorobutadiene	25.0	24.1		ug/L		96	70 - 130
Isopropyl ether	25.0	23.2		ug/L		93	70 - 130
Isopropylbenzene	25.0	22.0		ug/L		88	70 - 130
Methyl tert-butyl ether	25.0	24.0		ug/L		96	70 - 130
Methylene Chloride	25.0	23.1		ug/L		93	70 - 130
m-Xylene & p-Xylene	25.0	22.5		ug/L		90	70 - 130
Naphthalene	25.0	23.5		ug/L		94	70 - 130
n-Butylbenzene	25.0	22.3		ug/L		89	70 - 130
N-Propylbenzene	25.0	21.9		ug/L		87	70 - 130
o-Xylene	25.0	22.1		ug/L		88	70 - 130
sec-Butylbenzene	25.0	22.1		ug/L		88	70 - 130
Styrene	25.0	22.8		ug/L		91	70 - 130
Tert-amyl methyl ether	25.0	22.5		ug/L		90	70 - 130
Tert-butyl ethyl ether	25.0	21.9		ug/L		88	70 - 130
tert-Butylbenzene	25.0	23.3		ug/L		93	70 - 130
Tetrachloroethene	25.0	23.8		ug/L		95	70 - 130
Tetrahydrofuran	50.0	66.5	*	ug/L		133	70 - 130

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

Lab Sample ID: LCS 480-352449/5
Matrix: Water
Analysis Batch: 352449

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

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

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

Lab Sample ID: LCSD 480-352449/6
Matrix: Water
Analysis Batch: 352449

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	22.9		ug/L		92	70 - 130	6	20
1,1,1-Trichloroethane	25.0	25.5		ug/L		102	70 - 130	7	20
1,1,2,2-Tetrachloroethane	25.0	24.3		ug/L		97	70 - 130	1	20
1,1,2-Trichloroethane	25.0	23.3		ug/L		93	70 - 130	2	20
1,1-Dichloroethane	25.0	26.4		ug/L		106	70 - 130	6	20
1,1-Dichloroethene	25.0	25.7		ug/L		103	70 - 130	8	20
1,1-Dichloropropene	25.0	25.6		ug/L		102	70 - 130	6	20
1,2,3-Trichlorobenzene	25.0	25.2		ug/L		101	70 - 130	4	20
1,2,3-Trichloropropane	25.0	23.6		ug/L		94	70 - 130	5	20
1,2,4-Trichlorobenzene	25.0	24.9		ug/L		100	70 - 130	6	20
1,2,4-Trimethylbenzene	25.0	23.1		ug/L		92	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	25.0	23.0		ug/L		92	70 - 130	4	20
1,2-Dichlorobenzene	25.0	23.8		ug/L		95	70 - 130	2	20
1,2-Dichloroethane	25.0	24.1		ug/L		96	70 - 130	2	20
1,2-Dichloropropane	25.0	25.8		ug/L		103	70 - 130	3	20
1,3,5-Trimethylbenzene	25.0	23.7		ug/L		95	70 - 130	7	20
1,3-Dichlorobenzene	25.0	24.2		ug/L		97	70 - 130	4	20
1,3-Dichloropropane	25.0	22.9		ug/L		92	70 - 130	3	20
1,4-Dichlorobenzene	25.0	23.3		ug/L		93	70 - 130	4	20
1,4-Dioxane	500	461		ug/L		92	70 - 130	5	20
2,2-Dichloropropane	25.0	25.1		ug/L		100	70 - 130	7	20
2-Butanone (MEK)	125	144		ug/L		115	70 - 130	1	20
2-Chlorotoluene	25.0	23.3		ug/L		93	70 - 130	5	20
2-Hexanone	125	132		ug/L		105	70 - 130	0	20
4-Chlorotoluene	25.0	24.7		ug/L		99	70 - 130	4	20
4-Isopropyltoluene	25.0	24.4		ug/L		98	70 - 130	8	20
4-Methyl-2-pentanone (MIBK)	125	123		ug/L		99	70 - 130	2	20
Acetone	125	164	*	ug/L		132	70 - 130	3	20
Benzene	25.0	25.3		ug/L		101	70 - 130	5	20
Bromobenzene	25.0	24.0		ug/L		96	70 - 130	8	20

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

Lab Sample ID: LCSD 480-352449/6
Matrix: Water
Analysis Batch: 352449

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

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

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

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

Lab Sample ID: MB 200-115930/1-A
Matrix: Water
Analysis Batch: 115998

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 115930

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20		ug/L		04/19/17 10:35	04/21/17 09:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*77*		*46 - 130*	*04/19/17 10:35*	*04/21/17 09:20*	*1*

Lab Sample ID: LCS 200-115930/2-A
Matrix: Water
Analysis Batch: 115937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 115930

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			2.00	2.00		ug/L		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*98*		*46 - 130*

Lab Sample ID: LCSD 200-115930/3-A
Matrix: Water
Analysis Batch: 115937

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 115930

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			2.00	1.95		ug/L		97	70 - 130	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*88*		*46 - 130*

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-351808/1-A
Matrix: Water
Analysis Batch: 352346

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 351808

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050		mg/L		04/13/17 13:25	04/14/17 14:30	1

Lab Sample ID: LCS 480-351808/2-A
Matrix: Water
Analysis Batch: 352346

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 351808

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Iron			10.0	9.95		mg/L		99	80 - 120		

Lab Sample ID: LCSD 480-351808/3-A
Matrix: Water
Analysis Batch: 352346

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 351808

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron			10.0	9.93		mg/L		99	80 - 120	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-352836/52
Matrix: Water
Analysis Batch: 352836

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			04/19/17 19:20	1
Sulfate	ND		2.0		mg/L			04/19/17 19:20	1

Lab Sample ID: LCS 480-352836/51
Matrix: Water
Analysis Batch: 352836

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.6		mg/L		99	90 - 110
Sulfate	50.0	45.7		mg/L		91	90 - 110

Lab Sample ID: 480-116135-4 MS
Matrix: Water
Analysis Batch: 352836

Client Sample ID: REW-1-20170412
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	8.4		100	112		mg/L		104	81 - 120
Sulfate	ND		100	98.9		mg/L		96	80 - 120

Lab Sample ID: 480-116135-4 MSD
Matrix: Water
Analysis Batch: 352836

Client Sample ID: REW-1-20170412
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	8.4		100	111		mg/L		103	81 - 120	1	20
Sulfate	ND		100	97.8		mg/L		95	80 - 120	1	20

Lab Sample ID: MB 480-353081/28
Matrix: Water
Analysis Batch: 353081

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			04/20/17 16:20	1
Sulfate	ND		2.0		mg/L			04/20/17 16:20	1

Lab Sample ID: MB 480-353081/4
Matrix: Water
Analysis Batch: 353081

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			04/20/17 13:04	1
Sulfate	ND		2.0		mg/L			04/20/17 13:04	1

Lab Sample ID: LCS 480-353081/27
Matrix: Water
Analysis Batch: 353081

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	50.2		mg/L		100	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 480-353081/27
Matrix: Water
Analysis Batch: 353081

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	50.0	46.3		mg/L		93	90 - 110

Lab Sample ID: LCS 480-353081/3
Matrix: Water
Analysis Batch: 353081

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.9		mg/L		100	90 - 110
Sulfate	50.0	46.7		mg/L		93	90 - 110

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-351915/2-A
Matrix: Water
Analysis Batch: 352115

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 351915

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.20		mg/L		04/13/17 17:33	04/14/17 08:45	1

Lab Sample ID: LCS 480-351915/1-A
Matrix: Water
Analysis Batch: 352115

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 351915

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.05		mg/L		105	90 - 110

Lab Sample ID: 480-116135-6 MS
Matrix: Water
Analysis Batch: 352115

Client Sample ID: REW-5-20170412
Prep Type: Total/NA
Prep Batch: 351915

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.78	F1	0.500	1.41	F1	mg/L		127	90 - 110

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

Lab Sample ID: MB 480-352260/29
Matrix: Water
Analysis Batch: 352260

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

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

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

Lab Sample ID: MB 480-352260/53
Matrix: Water
Analysis Batch: 352260

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			04/15/17 16:00	1
TOC Result 2	ND		1.0		mg/L			04/15/17 16:00	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			04/15/17 16:00	1

Lab Sample ID: LCS 480-352260/30
Matrix: Water
Analysis Batch: 352260

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

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

Lab Sample ID: LCS 480-352260/54
Matrix: Water
Analysis Batch: 352260

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	60.0	61.3		mg/L		102	90 - 110
TOC Result 2	60.0	61.1		mg/L		102	90 - 110
Total Organic Carbon - Duplicates	60.0	61.2		mg/L		102	90 - 110

Lab Sample ID: MB 480-352731/4
Matrix: Water
Analysis Batch: 352731

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

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

Lab Sample ID: MB 480-352731/76
Matrix: Water
Analysis Batch: 352731

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

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

Lab Sample ID: LCS 480-352731/5
Matrix: Water
Analysis Batch: 352731

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

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

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

Lab Sample ID: LCS 480-352731/5
Matrix: Water
Analysis Batch: 352731

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

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

Lab Sample ID: LCS 480-352731/77
Matrix: Water
Analysis Batch: 352731

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	60.0	61.7		mg/L		103	90 - 110
TOC Result 2	60.0	61.9		mg/L		103	90 - 110
Total Organic Carbon - Duplicates	60.0	61.8		mg/L		103	90 - 110

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 480-352401/30
Matrix: Water
Analysis Batch: 352401

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

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

Lab Sample ID: LCS 480-352401/31
Matrix: Water
Analysis Batch: 352401

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

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

Method: SM 4500 P E - Orthophosphate

Lab Sample ID: MB 480-351956/3
Matrix: Water
Analysis Batch: 351956

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ortho-Phosphate	ND		0.020		mg/L			04/13/17 22:07	1

Lab Sample ID: LCS 480-351956/4
Matrix: Water
Analysis Batch: 351956

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
ortho-Phosphate	0.200	0.190		mg/L		95	90 - 110

Method: SM 4500 P E - Orthophosphate (Continued)

Lab Sample ID: 480-116135-4 MS
Matrix: Water
Analysis Batch: 351956

Client Sample ID: REW-1-20170412
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
ortho-Phosphate	0.074		0.500	0.522		mg/L		90	49 - 138		

Lab Sample ID: 480-116135-4 MSD
Matrix: Water
Analysis Batch: 351956

Client Sample ID: REW-1-20170412
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
ortho-Phosphate	0.074		0.500	0.523		mg/L		90	49 - 138	0	20

GC/MS VOA

Analysis Batch: 352240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116135-1	DEP-21-20170412	Total/NA	Water	8260C	
480-116135-2	MW-265S-20170412	Total/NA	Water	8260C	
480-116135-3	MW-265M-20170412	Total/NA	Water	8260C	
480-116135-4	REW-1-20170412	Total/NA	Water	8260C	
480-116135-5	REW-4-20170412	Total/NA	Water	8260C	
480-116135-6	REW-5-20170412	Total/NA	Water	8260C	
MB 480-352240/7	Method Blank	Total/NA	Water	8260C	
LCS 480-352240/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-352240/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 352449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116135-7	TRIP BLANKS	Total/NA	Water	8260C	
MB 480-352449/8	Method Blank	Total/NA	Water	8260C	
LCS 480-352449/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-352449/6	Lab Control Sample Dup	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 115930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116135-3	MW-265M-20170412	Total/NA	Water	3535A	
MB 200-115930/1-A	Method Blank	Total/NA	Water	3535A	
LCS 200-115930/2-A	Lab Control Sample	Total/NA	Water	3535A	
LCSD 200-115930/3-A	Lab Control Sample Dup	Total/NA	Water	3535A	

Analysis Batch: 115937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116135-3	MW-265M-20170412	Total/NA	Water	522	115930
LCS 200-115930/2-A	Lab Control Sample	Total/NA	Water	522	115930
LCSD 200-115930/3-A	Lab Control Sample Dup	Total/NA	Water	522	115930

Analysis Batch: 115998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116135-3	MW-265M-20170412	Total/NA	Water	522	115930
MB 200-115930/1-A	Method Blank	Total/NA	Water	522	115930

Metals

Prep Batch: 351808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116135-3	MW-265M-20170412	Total/NA	Water	3005A	
480-116135-4	REW-1-20170412	Total/NA	Water	3005A	
480-116135-5	REW-4-20170412	Total/NA	Water	3005A	
480-116135-6	REW-5-20170412	Total/NA	Water	3005A	
MB 480-351808/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-351808/2-A	Lab Control Sample	Total/NA	Water	3005A	
LCSD 480-351808/3-A	Lab Control Sample Dup	Total/NA	Water	3005A	

Metals (Continued)

Analysis Batch: 352346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116135-3	MW-265M-20170412	Total/NA	Water	6010	351808
480-116135-4	REW-1-20170412	Total/NA	Water	6010	351808
480-116135-5	REW-4-20170412	Total/NA	Water	6010	351808
480-116135-6	REW-5-20170412	Total/NA	Water	6010	351808
MB 480-351808/1-A	Method Blank	Total/NA	Water	6010	351808
LCS 480-351808/2-A	Lab Control Sample	Total/NA	Water	6010	351808
LCSD 480-351808/3-A	Lab Control Sample Dup	Total/NA	Water	6010	351808

General Chemistry

Analysis Batch: 351853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116135-3	MW-265M-20170412	Total/NA	Water	353.2	
480-116135-4	REW-1-20170412	Total/NA	Water	353.2	
480-116135-5	REW-4-20170412	Total/NA	Water	353.2	
480-116135-6	REW-5-20170412	Total/NA	Water	353.2	

Prep Batch: 351915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116135-3	MW-265M-20170412	Total/NA	Water	Distill/Ammonia	
480-116135-4	REW-1-20170412	Total/NA	Water	Distill/Ammonia	
480-116135-5	REW-4-20170412	Total/NA	Water	Distill/Ammonia	
480-116135-6	REW-5-20170412	Total/NA	Water	Distill/Ammonia	
MB 480-351915/2-A	Method Blank	Total/NA	Water	Distill/Ammonia	
LCS 480-351915/1-A	Lab Control Sample	Total/NA	Water	Distill/Ammonia	
480-116135-6 MS	REW-5-20170412	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 351956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116135-3	MW-265M-20170412	Total/NA	Water	SM 4500 P E	
480-116135-4	REW-1-20170412	Total/NA	Water	SM 4500 P E	
480-116135-5	REW-4-20170412	Total/NA	Water	SM 4500 P E	
480-116135-6	REW-5-20170412	Total/NA	Water	SM 4500 P E	
MB 480-351956/3	Method Blank	Total/NA	Water	SM 4500 P E	
LCS 480-351956/4	Lab Control Sample	Total/NA	Water	SM 4500 P E	
480-116135-4 MS	REW-1-20170412	Total/NA	Water	SM 4500 P E	
480-116135-4 MSD	REW-1-20170412	Total/NA	Water	SM 4500 P E	

Analysis Batch: 352115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116135-3	MW-265M-20170412	Total/NA	Water	350.1	351915
480-116135-4	REW-1-20170412	Total/NA	Water	350.1	351915
480-116135-5	REW-4-20170412	Total/NA	Water	350.1	351915
480-116135-6	REW-5-20170412	Total/NA	Water	350.1	351915
MB 480-351915/2-A	Method Blank	Total/NA	Water	350.1	351915
LCS 480-351915/1-A	Lab Control Sample	Total/NA	Water	350.1	351915
480-116135-6 MS	REW-5-20170412	Total/NA	Water	350.1	351915

General Chemistry (Continued)

Analysis Batch: 352260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116135-4	REW-1-20170412	Total/NA	Water	9060A	
480-116135-6	REW-5-20170412	Total/NA	Water	9060A	
MB 480-352260/29	Method Blank	Total/NA	Water	9060A	
MB 480-352260/53	Method Blank	Total/NA	Water	9060A	
LCS 480-352260/30	Lab Control Sample	Total/NA	Water	9060A	
LCS 480-352260/54	Lab Control Sample	Total/NA	Water	9060A	

Analysis Batch: 352401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116135-3	MW-265M-20170412	Total/NA	Water	SM 2320B	
480-116135-4	REW-1-20170412	Total/NA	Water	SM 2320B	
480-116135-5	REW-4-20170412	Total/NA	Water	SM 2320B	
480-116135-6	REW-5-20170412	Total/NA	Water	SM 2320B	
MB 480-352401/30	Method Blank	Total/NA	Water	SM 2320B	
LCS 480-352401/31	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 352459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116135-3	MW-265M-20170412	Total/NA	Water	9040C	
480-116135-4	REW-1-20170412	Total/NA	Water	9040C	
480-116135-5	REW-4-20170412	Total/NA	Water	9040C	
480-116135-6	REW-5-20170412	Total/NA	Water	9040C	
LCS 480-352459/1	Lab Control Sample	Total/NA	Water	9040C	

Analysis Batch: 352731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116135-3	MW-265M-20170412	Total/NA	Water	9060A	
480-116135-5	REW-4-20170412	Total/NA	Water	9060A	
MB 480-352731/4	Method Blank	Total/NA	Water	9060A	
MB 480-352731/76	Method Blank	Total/NA	Water	9060A	
LCS 480-352731/5	Lab Control Sample	Total/NA	Water	9060A	
LCS 480-352731/77	Lab Control Sample	Total/NA	Water	9060A	

Analysis Batch: 352836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116135-3	MW-265M-20170412	Total/NA	Water	300.0	
480-116135-4	REW-1-20170412	Total/NA	Water	300.0	
MB 480-352836/52	Method Blank	Total/NA	Water	300.0	
LCS 480-352836/51	Lab Control Sample	Total/NA	Water	300.0	
480-116135-4 MS	REW-1-20170412	Total/NA	Water	300.0	
480-116135-4 MSD	REW-1-20170412	Total/NA	Water	300.0	

Analysis Batch: 353081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-116135-3	MW-265M-20170412	Total/NA	Water	300.0	
480-116135-4	REW-1-20170412	Total/NA	Water	300.0	
480-116135-5	REW-4-20170412	Total/NA	Water	300.0	
480-116135-6	REW-5-20170412	Total/NA	Water	300.0	
MB 480-353081/28	Method Blank	Total/NA	Water	300.0	
MB 480-353081/4	Method Blank	Total/NA	Water	300.0	
LCS 480-353081/27	Lab Control Sample	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 353081 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-353081/3	Lab Control Sample	Total/NA	Water	300.0	

Client Sample ID: DEP-21-20170412
Date Collected: 04/12/17 07:55
Date Received: 04/13/17 01:00

Lab Sample ID: 480-116135-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	352240	04/16/17 04:39	LCH	TAL BUF

Client Sample ID: MW-265S-20170412
Date Collected: 04/12/17 10:40
Date Received: 04/13/17 01:00

Lab Sample ID: 480-116135-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	352240	04/16/17 05:03	LCH	TAL BUF

Client Sample ID: MW-265M-20170412
Date Collected: 04/12/17 10:20
Date Received: 04/13/17 01:00

Lab Sample ID: 480-116135-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	352240	04/16/17 05:27	LCH	TAL BUF
Total/NA	Prep	3535A			115930	04/19/17 10:35	JM1	TAL BUR
Total/NA	Analysis	522		1	115937	04/20/17 05:00	TPB	TAL BUR
Total/NA	Prep	3535A			115930	04/19/17 10:35	JM1	TAL BUR
Total/NA	Analysis	522		1	115998	04/21/17 10:40	TPB	TAL BUR
Total/NA	Prep	3005A			351808	04/13/17 13:25	MVZ	TAL BUF
Total/NA	Analysis	6010		1	352346	04/14/17 15:44	AMH	TAL BUF
Total/NA	Analysis	300.0		10	352836	04/19/17 20:01	DMR	TAL BUF
Total/NA	Analysis	300.0		20	353081	04/20/17 13:29	DMR	TAL BUF
Total/NA	Prep	Distill/Ammonia			351915	04/13/17 17:33	KRT	TAL BUF
Total/NA	Analysis	350.1		1	352115	04/14/17 09:18	KRT	TAL BUF
Total/NA	Analysis	353.2		1	351853	04/13/17 10:08	CLT	TAL BUF
Total/NA	Analysis	9040C		1	352459	04/17/17 20:49	ALZ	TAL BUF
Total/NA	Analysis	9060A		40	352731	04/17/17 16:43	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	352401	04/15/17 00:47	ALZ	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	351956	04/13/17 22:07	DSC	TAL BUF

Client Sample ID: REW-1-20170412
Date Collected: 04/12/17 10:00
Date Received: 04/13/17 01:00

Lab Sample ID: 480-116135-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	352240	04/16/17 05:55	LCH	TAL BUF
Total/NA	Prep	3005A			351808	04/13/17 13:25	MVZ	TAL BUF
Total/NA	Analysis	6010		1	352346	04/14/17 15:47	AMH	TAL BUF
Total/NA	Analysis	300.0		2	352836	04/19/17 20:09	DMR	TAL BUF
Total/NA	Analysis	300.0		2	353081	04/20/17 13:37	DMR	TAL BUF

Client Sample ID: REW-1-20170412
Date Collected: 04/12/17 10:00
Date Received: 04/13/17 01:00

Lab Sample ID: 480-116135-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Distill/Ammonia			351915	04/13/17 17:33	KRT	TAL BUF
Total/NA	Analysis	350.1		1	352115	04/14/17 09:19	KRT	TAL BUF
Total/NA	Analysis	353.2		1	351853	04/13/17 10:09	CLT	TAL BUF
Total/NA	Analysis	9040C		1	352459	04/17/17 20:52	ALZ	TAL BUF
Total/NA	Analysis	9060A		1	352260	04/15/17 14:38	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	352401	04/15/17 00:53	ALZ	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	351956	04/13/17 22:07	DSC	TAL BUF

Client Sample ID: REW-4-20170412
Date Collected: 04/12/17 09:20
Date Received: 04/13/17 01:00

Lab Sample ID: 480-116135-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	352240	04/16/17 06:18	LCH	TAL BUF
Total/NA	Prep	3005A			351808	04/13/17 13:25	MVZ	TAL BUF
Total/NA	Analysis	6010		1	352346	04/14/17 15:51	AMH	TAL BUF
Total/NA	Analysis	300.0		1	353081	04/20/17 13:12	DMR	TAL BUF
Total/NA	Prep	Distill/Ammonia			351915	04/13/17 17:33	KRT	TAL BUF
Total/NA	Analysis	350.1		1	352115	04/14/17 09:20	KRT	TAL BUF
Total/NA	Analysis	353.2		1	351853	04/13/17 10:11	CLT	TAL BUF
Total/NA	Analysis	9040C		1	352459	04/17/17 20:55	ALZ	TAL BUF
Total/NA	Analysis	9060A		1	352731	04/17/17 17:12	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	352401	04/15/17 00:58	ALZ	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	351956	04/13/17 22:07	DSC	TAL BUF

Client Sample ID: REW-5-20170412
Date Collected: 04/12/17 10:20
Date Received: 04/13/17 01:00

Lab Sample ID: 480-116135-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	352240	04/16/17 06:42	LCH	TAL BUF
Total/NA	Prep	3005A			351808	04/13/17 13:25	MVZ	TAL BUF
Total/NA	Analysis	6010		1	352346	04/14/17 15:54	AMH	TAL BUF
Total/NA	Analysis	300.0		1	353081	04/20/17 13:20	DMR	TAL BUF
Total/NA	Prep	Distill/Ammonia			351915	04/13/17 17:33	KRT	TAL BUF
Total/NA	Analysis	350.1		1	352115	04/14/17 09:21	KRT	TAL BUF
Total/NA	Analysis	353.2		1	351853	04/13/17 10:12	CLT	TAL BUF
Total/NA	Analysis	9040C		1	352459	04/17/17 20:58	ALZ	TAL BUF
Total/NA	Analysis	9060A		1	352260	04/15/17 16:56	EKB	TAL BUF
Total/NA	Analysis	SM 2320B		1	352401	04/15/17 01:04	ALZ	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	351956	04/13/17 22:07	DSC	TAL BUF

Lab Chronicle

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

TestAmerica Job ID: 480-116135-1

Client Sample ID: TRIP BLANKS

Date Collected: 04/12/17 00:00
Date Received: 04/13/17 01:00

Lab Sample ID: 480-116135-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	352449	04/17/17 23:19	JWG	TAL BUF

Laboratory References:

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

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 480-116135-1

Laboratory: TestAmerica Buffalo

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

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

Laboratory: TestAmerica Burlington

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

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

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

Laboratory: TestAmerica Burlington (Continued)

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

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

Method Summary

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

TestAmerica Job ID: 480-116135-1

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

Protocol References:

EPA = US Environmental Protection Agency
MA DEP = Massachusetts Department Of Environmental Protection
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

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

TestAmerica Job ID: 480-116135-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-116135-1	DEP-21-20170412	Water	04/12/17 07:55	04/13/17 01:00
480-116135-2	MW-265S-20170412	Water	04/12/17 10:40	04/13/17 01:00
480-116135-3	MW-265M-20170412	Water	04/12/17 10:20	04/13/17 01:00
480-116135-4	REW-1-20170412	Water	04/12/17 10:00	04/13/17 01:00
480-116135-5	REW-4-20170412	Water	04/12/17 09:20	04/13/17 01:00
480-116135-6	REW-5-20170412	Water	04/12/17 10:20	04/13/17 01:00
480-116135-7	TRIP BLANKS	Water	04/12/17 00:00	04/13/17 01:00

Login Sample Receipt Checklist

Client: Innovative Engineering Solutions, Inc

Job Number: 480-116135-1

Login Number: 116135
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	IESI
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Innovative Engineering Solutions, Inc

Job Number: 480-116135-1

Login Number: 116135
List Number: 2
Creator: Nye, Elizabeth A

List Source: TestAmerica Burlington
List Creation: 04/13/17 11:57 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are 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	3.1º C
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 containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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

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

360325-Boston

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:			
Client Contact: Vicki Parizer	Sample Collector's Name (Please Print Neatly): Dan Jones	Lab PM:	COC No: 37304
	Sample Collector's Phone: 508-404-3196	E-Mail:	Page: ____ of ____
Company: Innovative Engineering Solutions Inc			Job #:
Address: 25 Spring St	Due Date Requested: 4/17		
City: Walpole	Turnaround Time (TAT) Requested (business days): 5 days		
State and Zip: MA 02081			
Client's Phone: 508-668-0033	Quote # or Project #:		
Client's Contact Email: vparizer@IESToday.com	PO #: RA-008		
Client's Project Name/Number: Raytheon Wayland RA-008	WO #:		
Sample Collection Site Name & Location: Wayland MA	PWS ID #:		

Lab C[...] 480-116135 COC

Analysis Requested: 8260C; 522 Dioxane; 9060A TOC; 350.1 NH3; 6010C Total Iron; 300.0 28D SO4 + Cl; 2320B Alkalinity; 4500-P-E ortho Po4; Nitrate, 353.2 NO3

Preservation Codes:
A - Hydrochloric Acid, B - Sodium Hydroxide, C - Zinc Acetate, D - Nitric Acid, E - Sodium Bisulfite, F - Methanol, H - Ascorbic Acid, J - Deionized Water, M - Hexane, N - No Preservative, P - Sodium Sulfate, Q - Sodium Sulfite, R - Sodium Thiosulfate, S - Sulfuric Acid, Z - other (specify)

Regulatory Programs: MCP ☐ RCP ☐ DEP Form ☐ eDEP Filing ☐ GW1/S1 ☐ CT RSR ☐ EDD Required ☐ NPDES ☐

SUBCONTRACT POLICY: Unless you provide instructions to the contrary, or specify which sub-contract labs are or are not to be used, you agree in advance to permit TestAmerica to use certified, subcontract labs, without any additional notification made by us, as necessary to fulfill your work order.

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	8260C	522 Dioxane	9060A TOC	350.1 NH3	6010C Total Iron	300.0 SO4+Cl	2320B Alkalinity	4500-P-E ortho Po4	353.2 NO3	Total Number of Containers	Special Instructions & Notes
				Preservation Codes =>	A	A	A	S	D	N	N	N		↓	
DEP-21-20170412	4/12/17	0755	G	W	X									3	
[redacted]															
Trip Blanks	–	–	–	W	X									2	

Possible Hazard Identification (please check off each that may apply): ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

** Matrix Types: A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: ______

▶ NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !! ◀

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	4/12 1223	IESI	[signature]	4-12-17	TA Bos
[signature]	4-12-17	TA Bos	[signature]	4-13-17 0100	TAB

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 1.8 #1

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Revised 10/29/2014
TAL-8245-360R

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

360325-Boston

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

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

360325-Boston
Chain of Custody

480-116135 COC

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:

Field	Value
Client Contact:	Vicki Prizer
Company:	Innovative Engineering Solutions Inc
Address:	25 Spring St
City:	Walpole
State and Zip:	MA 02081
Client's Phone:	508-668-0033
Client's Contact Email:	v.prizer@IESInc.com
Client's Project Name/Number:	Raytheon Wayland RA-008
Sample Collection Site Name & Location:	Wayland MA
Sample Collector's Name (Please Print Neatly):	Dawn Jones
Sample Collector's Phone:	508-404-3196
Due Date Requested:	4/17
Turnaround Time (TAT) Requested (business days):	5 days
Quote # or Project #:	
PO #:	RA-008
WO #:	
PWS ID #:	
Lab PM:	
E-Mail:	
COC No:	37304
Page:	of
Job #:	

Analysis Requested: 8260C; 522 Dioxane; 9060A TOC; 350.1 NH3; 6010MCP Total Iron; 300.0-28D SO4+ 9040C pH; 9230B Alkalinity; 4500-P-E ortho Pot; Nitrate/Nitrite 353.2 - NO3

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	8260C	Total Number of Containers (enter total for each line)
DEP-21-20170412	4/12/17	0755	G	W	X	3
Trip Blanks	-	-	-	W	X	2

Preservation Codes:
A - Hydrochloric Acid; B - Sodium Hydroxide; C - Zinc Acetate; D - Nitric Acid; E - Sodium Bisulfite; F - Methanol; H - Ascorbic Acid; J - Deionized Water; M - Hexane; N - No Preservative; P - Sodium Sulfate; Q - Sodium Sulfite; R - Sodium Thiosulfate; S - Sulfuric Acid; Z - other (specify)

Preservation row: A A A S D N S A

Regulatory Programs:
MCP ☐ RCP ☐ DEP Form ☐ eDEP Filing ☐ GW1/S1 ☐ CT RSR ☐ EDD Required ☐ NPDES ☐

SUBCONTRACT POLICY: Unless you provide instructions to the contrary, or specify which sub-contract labs are or are not to be used, you agree in advance to permit TestAmerica to use certified, subcontract labs, without any additional notification made by us, as necessary to fulfill your work order.

Special Instructions & Notes:
522 - 1-4 Dioxane To Burlington.

Possible Hazard Identification (please check off each that may apply):
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

** Matrix Types: A=Air S=Solid/Soil W=Water O=Oil X=Waste (non-water) Z=Other: ______

▶ NOTE!! ALL SAMPLES MUST BE TRANSPORTED IN A COOLER, ON ICE !! ◀

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	4/12 1223	IESI	[signature]	4-12-17	Bay TA
[signature]	4-12-17	Foc	[signature]	4/13/17 1035	TA Burl.

Custody Seals Intact: ✓Yes Δ No
Custody Seal No.: no #s
Cooler Temperature(s) °C and Other Remarks:

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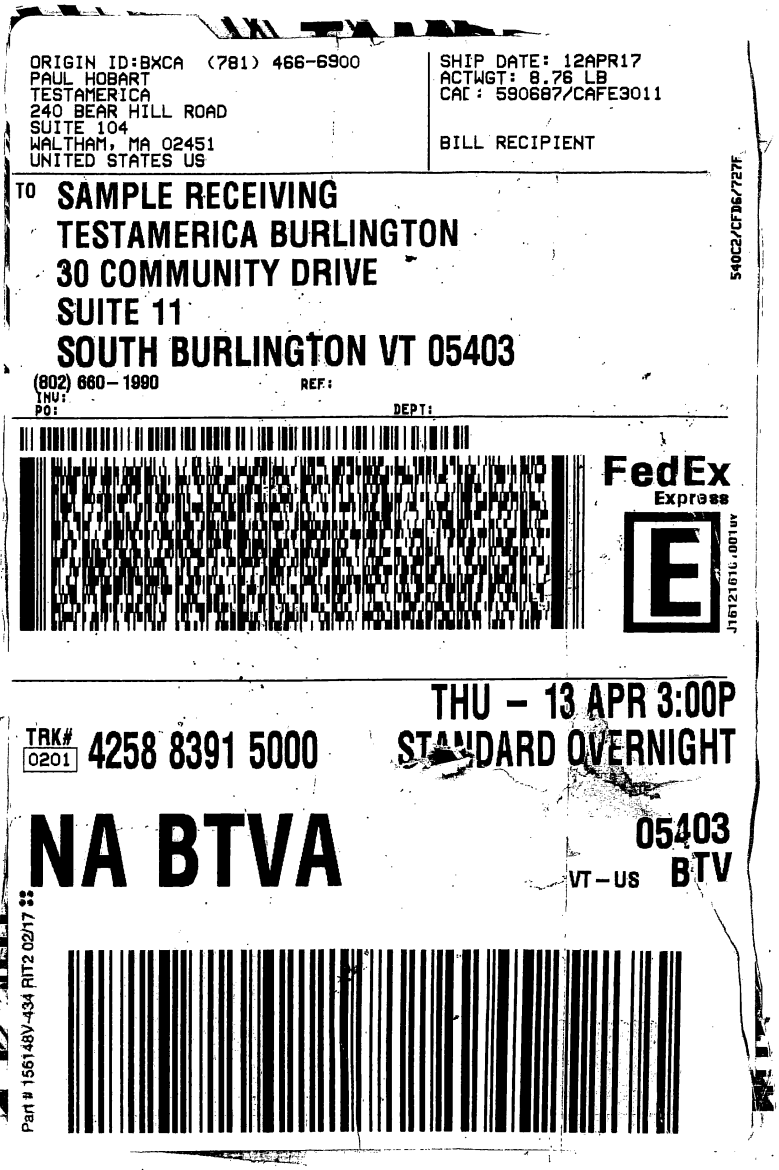
Revised 10/29/2014
TAL-8245-360R



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

SHIP DATE: 12APR17
ACTWGT: 8.76 LB
CAD: 590687/CAFE3011

BILL RECIPIENT

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

FedEx Express

THU - 13 APR 3:00P
STANDARD OVERNIGHT

TRK# 0201 4258 8391 5000

NA BTVA

05403
VT - US BTV

Part # 156148V-434 RIT2 02/17