Roxie Trachtenberg

From: Paulina Staley
Sent: Friday, August 28, 2020 11:04 AM
To: James Knights; Joanne Frazier
Cc: Clementine Dulieu; Julia Redden; Katie Wolf
Subject: Wayland Property Owner Data Transmittal - July 2020
Attachments: IESI Lab Report_July 2020.pdf; National Development BWSC-123 Form.pdf

Hi James and Joanne,

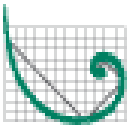
ERM has received the July 2020 analytical results for dissolved gasses (methane, ethane), that were pending. Attached is the updated lab report which include these results, along with the previously attached BWSC-123 form.
The July data transmittal is now complete.

These results are being sent for National Development's records.

Best,

Paulina Staley
Consultant I, Geologist

ERM
One Beacon Street, 5th Floor | Boston, MA 02108
T +1 617 646 7897
E paulina.staley@erm.com | **W** www.erm.com



From: Paulina Staley
Sent: Monday, August 10, 2020 2:56 PM
To: James Knights <jknights@NatDev.com>; Joanne Frazier <JFrazier@NatDev.com>
Cc: Clementine Dulieu <Clementine.Dulieu@erm.com>; Julia Redden <Julia.Redden@erm.com>; Katie Wolf <Katie.Wolf@erm.com>
Subject: Wayland Property Owner Data Transmittal - July 2020

Hi James and Joanne,

Innovative Engineering Solutions, Inc. (IESI) collected groundwater samples from monitoring wells located on National Development property at the former Raytheon Facility located at 430 Boston Post Road in Wayland, MA in July 2020. The analytical results and BWSC-123 form are attached to this email.

Please note that the July 2020 analytical results for dissolved gasses (methane, ethane) are not available at the moment and thus not attached in this email. ERM will send the analytical results for dissolved gasses as soon as they become available.

These results are being sent for National Development's records.

Please let us know if you have any questions or require any additional information.

Best,

Paulina Staley
Consultant I, Geologist

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One Beacon Street, 5th Floor | Boston, MA 02108
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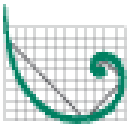


Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

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: National Development

2. Street Address: 2310 Washington Street

City/Town: Newton Lower Falls Zip Code: 02462

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

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

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

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

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

1. Street Address: 430 Boston Post Road

City/Town: Wayland Zip Code: 01778

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

☐ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☑ Phase V/Remedy Operation Status
☐ Post-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 _____ (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: Jonathan Hone, Raytheon Company

Street Address: 366 Lowell Street

City/Town: Andover Zip Code: 01810

Telephone: (978) 474-5753 Email: Jonathan_R_Hone@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.

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 480-172420-1
Client Project/Site: IDS Wayland

For:
Innovative Engineering Solutions, Inc
37 Pearl St
1
Braintree, Massachusetts 02184

Attn: Vicki Pariyar

Authorized for release by:
7/23/2020 12:06:23 PM
Wyatt Watson, Project Management Assistant I
Wyatt.Watson@Eurofinset.com

Designee for

Becky Mason, Project Manager II
(413)572-4000
Becky.Mason@Eurofinset.com

Table of Contents

Definitions/Glossary

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

Job ID: 480-172420-1

Qualifiers

GC/MS VOA

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

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
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)
TNTC	Too Numerous To Count

Job ID: 480-172420-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative
480-172420-1

Receipt
The samples were received on 7/16/2020 8:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.3º C.

GC/MS VOA
Method 8260C: Due to the dilutions required, per question G on the MassDEP Analytical Protocol Certification Form, the CAM reporting limits specified in this CAM protocol could not be achieved for some or all samples/analytes.

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

Method 8260C: The following sample was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: REW-11-20200715 (480-172420-5). pH is 5.

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-540843 exceeded control limits for the following analytes: 2-Butanone and Tetrahydrofuran. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate and Methacrylonitrile, respectfully, in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were affected : MW-268S-20200715 (480-172420-1), MW-268M-20200715 (480-172420-2), MW-268D-20200715 (480-172420-3), REW-11-20200715 (480-172420-5), REW-12-20200715 (480-172420-6) and TRIP BLANK (480-172420-8).

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-268S-20200715 (480-172420-1) and MW-268D-20200715 (480-172420-3). Elevated reporting limits (RLs) are provided.

Method 8260C: The following sample was diluted due to the abundance of non-target analytes: REW-11-20200715 (480-172420-5). Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCVIS) for 1,4-Dioxane associated with batch 480-540988 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following samples were affected : REW-6-20200715 (480-172420-4) and DUP1-20200715 (480-172420-7).

Method 8260C: The continuing calibration verification (CCVIS) for 2-Hexanone associated with batch 480-540988 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following samples were affected : REW-6-20200715 (480-172420-4) and DUP1-20200715 (480-172420-7).

Methods 8260, 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batch 480-540988 exceeded control limits for the following analytes: 2-Butanone and Tetrahydrofuran. Unlike the calibration standards, this is due to the co-elution with Ethyl Acetate and Methacrylonitrile in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were affected : REW-6-20200715 (480-172420-4) and DUP1-20200715 (480-172420-7).

Methods 8260, 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: DUP1-20200715 (480-172420-7). 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.

Job ID: 480-172420-1 (Continued)

Laboratory: Eurofins TestAmerica, Buffalo (Continued)

HPLC/IC

Method 300.0: The following samples were reported with elevated reporting limits for all analytes: MW-268S-20200715 (480-172420-1), MW-268M-20200715 (480-172420-2), MW-268D-20200715 (480-172420-3), REW-6-20200715 (480-172420-4), REW-11-20200715 (480-172420-5) and REW-12-20200715 (480-172420-6). The sample was analyzed at a dilution based on screening results.

Method 300.0: The following samples were reported with elevated reporting limits for all analytes: MW-268S-20200715 (480-172420-1), MW-268M-20200715 (480-172420-2), MW-268D-20200715 (480-172420-3), REW-6-20200715 (480-172420-4), REW-11-20200715 (480-172420-5) and REW-12-20200715 (480-172420-6). The sample was analyzed at a dilution based on screening results.

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

Metals

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

General Chemistry

Methods 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-268S-20200715 (480-172420-1), MW-268M-20200715 (480-172420-2), MW-268D-20200715 (480-172420-3), REW-6-20200715 (480-172420-4), REW-11-20200715 (480-172420-5) and REW-12-20200715 (480-172420-6).

Method 9060A: The reference method requires samples to be preserved to a pH below two. The following sample was received with insufficient preservation at a pH above two: REW-11-20200715 (480-172420-5). The sample(s) was preserved to the appropriate pH in the laboratory prior to analysis.

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

MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-172420**

Project Location: **Wayland MA** RTN:

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

480-172420(1,2,3,4,5,6,7,8)

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

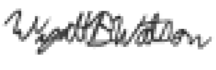
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	☐ Yes ■ No[1]

***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:  Position: Project Manager Assistant

Printed Name: Wyatt Watson Date: 7/23/20 11:50

Detection Summary

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

Job ID: 480-172420-1

Client Sample ID: MW-268S-20200715 — Lab Sample ID: 480-172420-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	160	*	40		ug/L	4		8260C	Total/NA
cis-1,2-Dichloroethene	140		4.0		ug/L	4		8260C	Total/NA
Toluene	110		4.0		ug/L	4		8260C	Total/NA
Trichloroethene	38		4.0		ug/L	4		8260C	Total/NA
Vinyl chloride	5.3		4.0		ug/L	4		8260C	Total/NA
Iron	85		0.050		mg/L	1		6010	Total/NA
Chloride	33		2.5		mg/L	5		300.0	Total/NA
Nitrate as N	0.27		0.25		mg/L	5		300.0	Total/NA
pH	5.6	HF	0.1		SU	1		9040C	Total/NA
Temperature	16.1	HF	0.001		Degrees C	1		9040C	Total/NA
TOC Result 1	8900		500		mg/L	500		9060A	Total/NA
TOC Result 2	8900		500		mg/L	500		9060A	Total/NA
Total Organic Carbon - Duplicates	8900		500		mg/L	500		9060A	Total/NA
Alkalinity, Total	420		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.035		0.020		mg/L	1		SM 4500 P E	Total/NA

Client Sample ID: MW-268M-20200715 — Lab Sample ID: 480-172420-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.2		1.0		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	13		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	21		1.0		ug/L	1		8260C	Total/NA
Iron	42		0.050		mg/L	1		6010	Total/NA
Chloride	36		1.0		mg/L	2		300.0	Total/NA
pH	7.1	HF	0.1		SU	1		9040C	Total/NA
Temperature	16.6	HF	0.001		Degrees C	1		9040C	Total/NA
TOC Result 1	2.2		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	2.4		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	2.3		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	310		5.0		mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-268D-20200715 — Lab Sample ID: 480-172420-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	300	*	80		ug/L	8		8260C	Total/NA
cis-1,2-Dichloroethene	350		8.0		ug/L	8		8260C	Total/NA
Toluene	110		8.0		ug/L	8		8260C	Total/NA
Trichloroethene	83		8.0		ug/L	8		8260C	Total/NA
Iron	2.7		0.050		mg/L	1		6010	Total/NA
Chloride	19		2.5		mg/L	5		300.0	Total/NA
pH	6.8	HF	0.1		SU	1		9040C	Total/NA
Temperature	12.9	HF	0.001		Degrees C	1		9040C	Total/NA
TOC Result 1	3600		40		mg/L	40		9060A	Total/NA
TOC Result 2	3600		40		mg/L	40		9060A	Total/NA
Total Organic Carbon - Duplicates	3600		40		mg/L	40		9060A	Total/NA
Alkalinity, Total	310		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.070		0.020		mg/L	1		SM 4500 P E	Total/NA

Client Sample ID: REW-6-20200715 — Lab Sample ID: 480-172420-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrahydrofuran	94	*	10		ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: REW-6-20200715 (Continued) — Lab Sample ID: 480-172420-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	55		0.050		mg/L	1		6010	Total/NA
Chloride	41		2.5		mg/L	5		300.0	Total/NA
Ammonia	4.7	B	1.0		mg/L	5		350.1	Total/NA
pH	7.3	HF	0.1		SU	1		9040C	Total/NA
Temperature	12.9	HF	0.001		Degrees C	1		9040C	Total/NA
TOC Result 1	3.0		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	3.3		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	3.1		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	640		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.067		0.020		mg/L	1		SM 4500 P E	Total/NA

Client Sample ID: REW-11-20200715 — Lab Sample ID: 480-172420-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	1200	*	200		ug/L	20		8260C	Total/NA
Tetrahydrofuran	220	*	200		ug/L	20		8260C	Total/NA
Iron	250		0.050		mg/L	1		6010	Total/NA
Chloride	85		5.0		mg/L	10		300.0	Total/NA
pH	5.7	HF	0.1		SU	1		9040C	Total/NA
Temperature	12.9	HF	0.001		Degrees C	1		9040C	Total/NA
TOC Result 1	4500		100		mg/L	100		9060A	Total/NA
TOC Result 2	4400		100		mg/L	100		9060A	Total/NA
Total Organic Carbon - Duplicates	4500		100		mg/L	100		9060A	Total/NA
Alkalinity, Total	1500		5.0		mg/L	1		SM 2320B	Total/NA
ortho-Phosphate	0.14		0.020		mg/L	1		SM 4500 P E	Total/NA

Client Sample ID: REW-12-20200715 — Lab Sample ID: 480-172420-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	1.2		1.0		ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	4.2		2.0		ug/L	1		8260C	Total/NA
o-Xylene	1.0		1.0		ug/L	1		8260C	Total/NA
Iron	48		0.050		mg/L	1		6010	Total/NA
Chloride	40		1.0		mg/L	2		300.0	Total/NA
Ammonia	2.3		0.40		mg/L	2		350.1	Total/NA
pH	6.8	HF	0.1		SU	1		9040C	Total/NA
Temperature	12.9	HF	0.001		Degrees C	1		9040C	Total/NA
TOC Result 1	2.0		1.0		mg/L	1		9060A	Total/NA
TOC Result 2	1.9		1.0		mg/L	1		9060A	Total/NA
Total Organic Carbon - Duplicates	2.0		1.0		mg/L	1		9060A	Total/NA
Alkalinity, Total	250		5.0		mg/L	1		SM 2320B	Total/NA

Client Sample ID: DUP1-20200715 — Lab Sample ID: 480-172420-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	300	*	80		ug/L	8		8260C	Total/NA
cis-1,2-Dichloroethene	350		8.0		ug/L	8		8260C	Total/NA
Toluene	110		8.0		ug/L	8		8260C	Total/NA
Trichloroethene	81		8.0		ug/L	8		8260C	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-172420-8

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-268S-20200715
Date Collected: 07/15/20 08:50
Date Received: 07/16/20 08:00

Lab Sample ID: 480-172420-1
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		4.0		ug/L			07/17/20 13:18	4
1,1,1-Trichloroethane	ND		4.0		ug/L			07/17/20 13:18	4
1,1,2,2-Tetrachloroethane	ND		2.0		ug/L			07/17/20 13:18	4
1,1,2-Trichloroethane	ND		4.0		ug/L			07/17/20 13:18	4
1,1-Dichloroethane	ND		4.0		ug/L			07/17/20 13:18	4
1,1-Dichloroethene	ND		4.0		ug/L			07/17/20 13:18	4
1,1-Dichloropropene	ND		4.0		ug/L			07/17/20 13:18	4
1,2,3-Trichlorobenzene	ND		4.0		ug/L			07/17/20 13:18	4
1,2,3-Trichloropropane	ND		4.0		ug/L			07/17/20 13:18	4
1,2,4-Trichlorobenzene	ND		4.0		ug/L			07/17/20 13:18	4
1,2,4-Trimethylbenzene	ND		4.0		ug/L			07/17/20 13:18	4
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			07/17/20 13:18	4
1,2-Dichlorobenzene	ND		4.0		ug/L			07/17/20 13:18	4
1,2-Dichloroethane	ND		4.0		ug/L			07/17/20 13:18	4
1,2-Dichloropropane	ND		4.0		ug/L			07/17/20 13:18	4
1,3,5-Trimethylbenzene	ND		4.0		ug/L			07/17/20 13:18	4
1,3-Dichlorobenzene	ND		4.0		ug/L			07/17/20 13:18	4
1,3-Dichloropropane	ND		4.0		ug/L			07/17/20 13:18	4
1,4-Dichlorobenzene	ND		4.0		ug/L			07/17/20 13:18	4
1,4-Dioxane	ND		200		ug/L			07/17/20 13:18	4
2,2-Dichloropropane	ND		4.0		ug/L			07/17/20 13:18	4
2-Butanone (MEK)	**160**	*	40		ug/L			07/17/20 13:18	4
2-Chlorotoluene	ND		4.0		ug/L			07/17/20 13:18	4
2-Hexanone	ND		40		ug/L			07/17/20 13:18	4
4-Chlorotoluene	ND		4.0		ug/L			07/17/20 13:18	4
4-Isopropyltoluene	ND		4.0		ug/L			07/17/20 13:18	4
4-Methyl-2-pentanone (MIBK)	ND		40		ug/L			07/17/20 13:18	4
Acetone	ND		200		ug/L			07/17/20 13:18	4
Benzene	ND		4.0		ug/L			07/17/20 13:18	4
Bromobenzene	ND		4.0		ug/L			07/17/20 13:18	4
Bromoform	ND		4.0		ug/L			07/17/20 13:18	4
Bromomethane	ND		8.0		ug/L			07/17/20 13:18	4
Carbon disulfide	ND		40		ug/L			07/17/20 13:18	4
Carbon tetrachloride	ND		4.0		ug/L			07/17/20 13:18	4
Chlorobenzene	ND		4.0		ug/L			07/17/20 13:18	4
Chlorobromomethane	ND		4.0		ug/L			07/17/20 13:18	4
Chlorodibromomethane	ND		2.0		ug/L			07/17/20 13:18	4
Chloroethane	ND		8.0		ug/L			07/17/20 13:18	4
Chloroform	ND		4.0		ug/L			07/17/20 13:18	4
Chloromethane	ND		8.0		ug/L			07/17/20 13:18	4
cis-1,2-Dichloroethene	**140**		4.0		ug/L			07/17/20 13:18	4
cis-1,3-Dichloropropene	ND		1.6		ug/L			07/17/20 13:18	4
Dichlorobromomethane	ND		2.0		ug/L			07/17/20 13:18	4
Dichlorodifluoromethane	ND		4.0		ug/L			07/17/20 13:18	4
Ethyl ether	ND		4.0		ug/L			07/17/20 13:18	4
Ethylbenzene	ND		4.0		ug/L			07/17/20 13:18	4
Ethylene Dibromide	ND		4.0		ug/L			07/17/20 13:18	4
Hexachlorobutadiene	ND		1.6		ug/L			07/17/20 13:18	4
Isopropyl ether	ND		40		ug/L			07/17/20 13:18	4

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

Job ID: 480-172420-1

Client Sample ID: MW-268S-20200715

Lab Sample ID: 480-172420-1

Date Collected: 07/15/20 08:50

Matrix: Water

Date Received: 07/16/20 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		4.0		ug/L			07/17/20 13:18	4
Methyl tert-butyl ether	ND		4.0		ug/L			07/17/20 13:18	4
Methylene Chloride	ND		4.0		ug/L			07/17/20 13:18	4
m-Xylene & p-Xylene	ND		8.0		ug/L			07/17/20 13:18	4
Naphthalene	ND		20		ug/L			07/17/20 13:18	4
n-Butylbenzene	ND		4.0		ug/L			07/17/20 13:18	4
N-Propylbenzene	ND		4.0		ug/L			07/17/20 13:18	4
o-Xylene	ND		4.0		ug/L			07/17/20 13:18	4
sec-Butylbenzene	ND		4.0		ug/L			07/17/20 13:18	4
Styrene	ND		4.0		ug/L			07/17/20 13:18	4
Tert-amyl methyl ether	ND		20		ug/L			07/17/20 13:18	4
Tert-butyl ethyl ether	ND		20		ug/L			07/17/20 13:18	4
tert-Butylbenzene	ND		4.0		ug/L			07/17/20 13:18	4
Tetrachloroethene	ND		4.0		ug/L			07/17/20 13:18	4
Tetrahydrofuran	ND	*	40		ug/L			07/17/20 13:18	4
Toluene	**110**		4.0		ug/L			07/17/20 13:18	4
trans-1,2-Dichloroethene	ND		4.0		ug/L			07/17/20 13:18	4
trans-1,3-Dichloropropene	ND		1.6		ug/L			07/17/20 13:18	4
Trichloroethene	**38**		4.0		ug/L			07/17/20 13:18	4
Trichlorofluoromethane	ND		4.0		ug/L			07/17/20 13:18	4
Vinyl chloride	**5.3**		4.0		ug/L			07/17/20 13:18	4
Dibromomethane	ND		4.0		ug/L			07/17/20 13:18	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*07/17/20 13:18*	*4*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*07/17/20 13:18*	*4*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*07/17/20 13:18*	*4*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**85**		0.050		mg/L		07/17/20 11:33	07/17/20 21:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**33**		2.5		mg/L			07/16/20 15:09	5
Nitrate as N	**0.27**		0.25		mg/L			07/16/20 15:09	5
Sulfate	ND		10		mg/L			07/16/20 15:09	5
Ammonia	ND	F1	0.20		mg/L		07/20/20 07:00	07/20/20 11:05	1
TOC Result 1	**8900**		500		mg/L			07/17/20 14:31	500
TOC Result 2	**8900**		500		mg/L			07/17/20 14:31	500
Total Organic Carbon - Duplicates	**8900**		500		mg/L			07/17/20 14:31	500
Alkalinity, Total	**420**		5.0		mg/L			07/17/20 09:16	1
ortho-Phosphate	**0.035**		0.020		mg/L			07/16/20 17:08	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.6**	**HF**	0.1		SU			07/18/20 10:27	1
Temperature	**16.1**	**HF**	0.001		Degrees C			07/18/20 10:27	1

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

Job ID: 480-172420-1

Client Sample ID: MW-268M-20200715
Date Collected: 07/15/20 09:45
Date Received: 07/16/20 08:00

Lab Sample ID: 480-172420-2
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			07/17/20 13:42	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/17/20 13:42	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/17/20 13:42	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/17/20 13:42	1
1,1-Dichloroethane	**1.2**		1.0		ug/L			07/17/20 13:42	1
1,1-Dichloroethene	ND		1.0		ug/L			07/17/20 13:42	1
1,1-Dichloropropene	ND		1.0		ug/L			07/17/20 13:42	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/17/20 13:42	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/17/20 13:42	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/17/20 13:42	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/17/20 13:42	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/17/20 13:42	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/17/20 13:42	1
1,2-Dichloroethane	ND		1.0		ug/L			07/17/20 13:42	1
1,2-Dichloropropane	ND		1.0		ug/L			07/17/20 13:42	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/17/20 13:42	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/17/20 13:42	1
1,3-Dichloropropane	ND		1.0		ug/L			07/17/20 13:42	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/17/20 13:42	1
1,4-Dioxane	ND		50		ug/L			07/17/20 13:42	1
2,2-Dichloropropane	ND		1.0		ug/L			07/17/20 13:42	1
2-Butanone (MEK)	ND	*	10		ug/L			07/17/20 13:42	1
2-Chlorotoluene	ND		1.0		ug/L			07/17/20 13:42	1
2-Hexanone	ND		10		ug/L			07/17/20 13:42	1
4-Chlorotoluene	ND		1.0		ug/L			07/17/20 13:42	1
4-Isopropyltoluene	ND		1.0		ug/L			07/17/20 13:42	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/17/20 13:42	1
Acetone	ND		50		ug/L			07/17/20 13:42	1
Benzene	ND		1.0		ug/L			07/17/20 13:42	1
Bromobenzene	ND		1.0		ug/L			07/17/20 13:42	1
Bromoform	ND		1.0		ug/L			07/17/20 13:42	1
Bromomethane	ND		2.0		ug/L			07/17/20 13:42	1
Carbon disulfide	ND		10		ug/L			07/17/20 13:42	1
Carbon tetrachloride	ND		1.0		ug/L			07/17/20 13:42	1
Chlorobenzene	ND		1.0		ug/L			07/17/20 13:42	1
Chlorobromomethane	ND		1.0		ug/L			07/17/20 13:42	1
Chlorodibromomethane	ND		0.50		ug/L			07/17/20 13:42	1
Chloroethane	ND		2.0		ug/L			07/17/20 13:42	1
Chloroform	ND		1.0		ug/L			07/17/20 13:42	1
Chloromethane	ND		2.0		ug/L			07/17/20 13:42	1
cis-1,2-Dichloroethene	**13**		1.0		ug/L			07/17/20 13:42	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/17/20 13:42	1
Dichlorobromomethane	ND		0.50		ug/L			07/17/20 13:42	1
Dichlorodifluoromethane	ND		1.0		ug/L			07/17/20 13:42	1
Ethyl ether	ND		1.0		ug/L			07/17/20 13:42	1
Ethylbenzene	ND		1.0		ug/L			07/17/20 13:42	1
Ethylene Dibromide	ND		1.0		ug/L			07/17/20 13:42	1
Hexachlorobutadiene	ND		0.40		ug/L			07/17/20 13:42	1
Isopropyl ether	ND		10		ug/L			07/17/20 13:42	1

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

Job ID: 480-172420-1

Client Sample ID: MW-268M-20200715
Date Collected: 07/15/20 09:45
Date Received: 07/16/20 08:00

Lab Sample ID: 480-172420-2
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			07/17/20 13:42	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/17/20 13:42	1
Methylene Chloride	ND		1.0		ug/L			07/17/20 13:42	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/17/20 13:42	1
Naphthalene	ND		5.0		ug/L			07/17/20 13:42	1
n-Butylbenzene	ND		1.0		ug/L			07/17/20 13:42	1
N-Propylbenzene	ND		1.0		ug/L			07/17/20 13:42	1
o-Xylene	ND		1.0		ug/L			07/17/20 13:42	1
sec-Butylbenzene	ND		1.0		ug/L			07/17/20 13:42	1
Styrene	ND		1.0		ug/L			07/17/20 13:42	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/17/20 13:42	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/17/20 13:42	1
tert-Butylbenzene	ND		1.0		ug/L			07/17/20 13:42	1
Tetrachloroethene	ND		1.0		ug/L			07/17/20 13:42	1
Tetrahydrofuran	ND	*	10		ug/L			07/17/20 13:42	1
Toluene	ND		1.0		ug/L			07/17/20 13:42	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/17/20 13:42	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/17/20 13:42	1
Trichloroethene	ND		1.0		ug/L			07/17/20 13:42	1
Trichlorofluoromethane	ND		1.0		ug/L			07/17/20 13:42	1
Vinyl chloride	**21**		1.0		ug/L			07/17/20 13:42	1
Dibromomethane	ND		1.0		ug/L			07/17/20 13:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/17/20 13:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*07/17/20 13:42*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*07/17/20 13:42*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**42**		0.050		mg/L		07/17/20 11:33	07/17/20 21:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**36**		1.0		mg/L			07/16/20 15:52	2
Nitrate as N	ND		0.10		mg/L			07/16/20 15:52	2
Sulfate	ND		4.0		mg/L			07/16/20 15:52	2
Ammonia	ND		0.20		mg/L		07/20/20 07:00	07/20/20 11:10	1
TOC Result 1	**2.2**		1.0		mg/L			07/17/20 14:59	1
TOC Result 2	**2.4**		1.0		mg/L			07/17/20 14:59	1
Total Organic Carbon - Duplicates	**2.3**		1.0		mg/L			07/17/20 14:59	1
Alkalinity, Total	**310**		5.0		mg/L			07/17/20 09:24	1
ortho-Phosphate	ND		0.020		mg/L			07/16/20 17:08	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.1**	**HF**	0.1		SU			07/18/20 10:30	1
Temperature	**16.6**	**HF**	0.001		Degrees C			07/18/20 10:30	1

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

Job ID: 480-172420-1

Client Sample ID: MW-268D-20200715
Date Collected: 07/15/20 10:30
Date Received: 07/16/20 08:00

Lab Sample ID: 480-172420-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		8.0		ug/L			07/17/20 14:06	8
1,1,1-Trichloroethane	ND		8.0		ug/L			07/17/20 14:06	8
1,1,2,2-Tetrachloroethane	ND		4.0		ug/L			07/17/20 14:06	8
1,1,2-Trichloroethane	ND		8.0		ug/L			07/17/20 14:06	8
1,1-Dichloroethane	ND		8.0		ug/L			07/17/20 14:06	8
1,1-Dichloroethene	ND		8.0		ug/L			07/17/20 14:06	8
1,1-Dichloropropene	ND		8.0		ug/L			07/17/20 14:06	8
1,2,3-Trichlorobenzene	ND		8.0		ug/L			07/17/20 14:06	8
1,2,3-Trichloropropane	ND		8.0		ug/L			07/17/20 14:06	8
1,2,4-Trichlorobenzene	ND		8.0		ug/L			07/17/20 14:06	8
1,2,4-Trimethylbenzene	ND		8.0		ug/L			07/17/20 14:06	8
1,2-Dibromo-3-Chloropropane	ND		40		ug/L			07/17/20 14:06	8
1,2-Dichlorobenzene	ND		8.0		ug/L			07/17/20 14:06	8
1,2-Dichloroethane	ND		8.0		ug/L			07/17/20 14:06	8
1,2-Dichloropropane	ND		8.0		ug/L			07/17/20 14:06	8
1,3,5-Trimethylbenzene	ND		8.0		ug/L			07/17/20 14:06	8
1,3-Dichlorobenzene	ND		8.0		ug/L			07/17/20 14:06	8
1,3-Dichloropropane	ND		8.0		ug/L			07/17/20 14:06	8
1,4-Dichlorobenzene	ND		8.0		ug/L			07/17/20 14:06	8
1,4-Dioxane	ND		400		ug/L			07/17/20 14:06	8
2,2-Dichloropropane	ND		8.0		ug/L			07/17/20 14:06	8
2-Butanone (MEK)	**300**	*	80		ug/L			07/17/20 14:06	8
2-Chlorotoluene	ND		8.0		ug/L			07/17/20 14:06	8
2-Hexanone	ND		80		ug/L			07/17/20 14:06	8
4-Chlorotoluene	ND		8.0		ug/L			07/17/20 14:06	8
4-Isopropyltoluene	ND		8.0		ug/L			07/17/20 14:06	8
4-Methyl-2-pentanone (MIBK)	ND		80		ug/L			07/17/20 14:06	8
Acetone	ND		400		ug/L			07/17/20 14:06	8
Benzene	ND		8.0		ug/L			07/17/20 14:06	8
Bromobenzene	ND		8.0		ug/L			07/17/20 14:06	8
Bromoform	ND		8.0		ug/L			07/17/20 14:06	8
Bromomethane	ND		16		ug/L			07/17/20 14:06	8
Carbon disulfide	ND		80		ug/L			07/17/20 14:06	8
Carbon tetrachloride	ND		8.0		ug/L			07/17/20 14:06	8
Chlorobenzene	ND		8.0		ug/L			07/17/20 14:06	8
Chlorobromomethane	ND		8.0		ug/L			07/17/20 14:06	8
Chlorodibromomethane	ND		4.0		ug/L			07/17/20 14:06	8
Chloroethane	ND		16		ug/L			07/17/20 14:06	8
Chloroform	ND		8.0		ug/L			07/17/20 14:06	8
Chloromethane	ND		16		ug/L			07/17/20 14:06	8
cis-1,2-Dichloroethene	**350**		8.0		ug/L			07/17/20 14:06	8
cis-1,3-Dichloropropene	ND		3.2		ug/L			07/17/20 14:06	8
Dichlorobromomethane	ND		4.0		ug/L			07/17/20 14:06	8
Dichlorodifluoromethane	ND		8.0		ug/L			07/17/20 14:06	8
Ethyl ether	ND		8.0		ug/L			07/17/20 14:06	8
Ethylbenzene	ND		8.0		ug/L			07/17/20 14:06	8
Ethylene Dibromide	ND		8.0		ug/L			07/17/20 14:06	8
Hexachlorobutadiene	ND		3.2		ug/L			07/17/20 14:06	8
Isopropyl ether	ND		80		ug/L			07/17/20 14:06	8

Client Sample ID: MW-268D-20200715
Date Collected: 07/15/20 10:30
Date Received: 07/16/20 08:00

Lab Sample ID: 480-172420-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		8.0		ug/L			07/17/20 14:06	8
Methyl tert-butyl ether	ND		8.0		ug/L			07/17/20 14:06	8
Methylene Chloride	ND		8.0		ug/L			07/17/20 14:06	8
m-Xylene & p-Xylene	ND		16		ug/L			07/17/20 14:06	8
Naphthalene	ND		40		ug/L			07/17/20 14:06	8
n-Butylbenzene	ND		8.0		ug/L			07/17/20 14:06	8
N-Propylbenzene	ND		8.0		ug/L			07/17/20 14:06	8
o-Xylene	ND		8.0		ug/L			07/17/20 14:06	8
sec-Butylbenzene	ND		8.0		ug/L			07/17/20 14:06	8
Styrene	ND		8.0		ug/L			07/17/20 14:06	8
Tert-amyl methyl ether	ND		40		ug/L			07/17/20 14:06	8
Tert-butyl ethyl ether	ND		40		ug/L			07/17/20 14:06	8
tert-Butylbenzene	ND		8.0		ug/L			07/17/20 14:06	8
Tetrachloroethene	ND		8.0		ug/L			07/17/20 14:06	8
Tetrahydrofuran	ND	*	80		ug/L			07/17/20 14:06	8
Toluene	**110**		8.0		ug/L			07/17/20 14:06	8
trans-1,2-Dichloroethene	ND		8.0		ug/L			07/17/20 14:06	8
trans-1,3-Dichloropropene	ND		3.2		ug/L			07/17/20 14:06	8
Trichloroethene	**83**		8.0		ug/L			07/17/20 14:06	8
Trichlorofluoromethane	ND		8.0		ug/L			07/17/20 14:06	8
Vinyl chloride	ND		8.0		ug/L			07/17/20 14:06	8
Dibromomethane	ND		8.0		ug/L			07/17/20 14:06	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/17/20 14:06*	*8*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*07/17/20 14:06*	*8*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*07/17/20 14:06*	*8*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.7**		0.050		mg/L		07/17/20 11:33	07/17/20 21:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19**		2.5		mg/L			07/16/20 16:06	5
Nitrate as N	ND		0.25		mg/L			07/16/20 16:06	5
Sulfate	ND		10		mg/L			07/16/20 16:06	5
Ammonia	ND		0.20		mg/L		07/20/20 07:00	07/20/20 11:13	1
TOC Result 1	**3600**		40		mg/L			07/18/20 17:36	40
TOC Result 2	**3600**		40		mg/L			07/18/20 17:36	40
Total Organic Carbon - Duplicates	**3600**		40		mg/L			07/18/20 17:36	40
Alkalinity, Total	**310**		5.0		mg/L			07/17/20 09:37	1
ortho-Phosphate	**0.070**		0.020		mg/L			07/16/20 17:08	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.8**	**HF**	0.1		SU			07/18/20 10:33	1
Temperature	**12.9**	**HF**	0.001		Degrees C			07/18/20 10:33	1

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

Job ID: 480-172420-1

Client Sample ID: REW-6-20200715
Date Collected: 07/15/20 12:10
Date Received: 07/16/20 08:00

Lab Sample ID: 480-172420-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/18/20 12:12	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/18/20 12:12	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/18/20 12:12	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/18/20 12:12	1
1,1-Dichloroethane	ND		1.0		ug/L			07/18/20 12:12	1
1,1-Dichloroethene	ND		1.0		ug/L			07/18/20 12:12	1
1,1-Dichloropropene	ND		1.0		ug/L			07/18/20 12:12	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/18/20 12:12	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/18/20 12:12	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/18/20 12:12	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/18/20 12:12	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/18/20 12:12	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/18/20 12:12	1
1,2-Dichloroethane	ND		1.0		ug/L			07/18/20 12:12	1
1,2-Dichloropropane	ND		1.0		ug/L			07/18/20 12:12	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/18/20 12:12	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/18/20 12:12	1
1,3-Dichloropropane	ND		1.0		ug/L			07/18/20 12:12	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/18/20 12:12	1
1,4-Dioxane	ND		50		ug/L			07/18/20 12:12	1
2,2-Dichloropropane	ND		1.0		ug/L			07/18/20 12:12	1
2-Butanone (MEK)	ND	*	10		ug/L			07/18/20 12:12	1
2-Chlorotoluene	ND		1.0		ug/L			07/18/20 12:12	1
2-Hexanone	ND		10		ug/L			07/18/20 12:12	1
4-Chlorotoluene	ND		1.0		ug/L			07/18/20 12:12	1
4-Isopropyltoluene	ND		1.0		ug/L			07/18/20 12:12	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/18/20 12:12	1
Acetone	ND		50		ug/L			07/18/20 12:12	1
Benzene	ND		1.0		ug/L			07/18/20 12:12	1
Bromobenzene	ND		1.0		ug/L			07/18/20 12:12	1
Bromoform	ND		1.0		ug/L			07/18/20 12:12	1
Bromomethane	ND		2.0		ug/L			07/18/20 12:12	1
Carbon disulfide	ND		10		ug/L			07/18/20 12:12	1
Carbon tetrachloride	ND		1.0		ug/L			07/18/20 12:12	1
Chlorobenzene	ND		1.0		ug/L			07/18/20 12:12	1
Chlorobromomethane	ND		1.0		ug/L			07/18/20 12:12	1
Chlorodibromomethane	ND		0.50		ug/L			07/18/20 12:12	1
Chloroethane	ND		2.0		ug/L			07/18/20 12:12	1
Chloroform	ND		1.0		ug/L			07/18/20 12:12	1
Chloromethane	ND		2.0		ug/L			07/18/20 12:12	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/18/20 12:12	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/18/20 12:12	1
Dichlorobromomethane	ND		0.50		ug/L			07/18/20 12:12	1
Dichlorodifluoromethane	ND		1.0		ug/L			07/18/20 12:12	1
Ethyl ether	ND		1.0		ug/L			07/18/20 12:12	1
Ethylbenzene	ND		1.0		ug/L			07/18/20 12:12	1
Ethylene Dibromide	ND		1.0		ug/L			07/18/20 12:12	1
Hexachlorobutadiene	ND		0.40		ug/L			07/18/20 12:12	1
Isopropyl ether	ND		10		ug/L			07/18/20 12:12	1

Client Sample ID: REW-6-20200715
Date Collected: 07/15/20 12:10
Date Received: 07/16/20 08:00

Lab Sample ID: 480-172420-4
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			07/18/20 12:12	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/18/20 12:12	1
Methylene Chloride	ND		1.0		ug/L			07/18/20 12:12	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/18/20 12:12	1
Naphthalene	ND		5.0		ug/L			07/18/20 12:12	1
n-Butylbenzene	ND		1.0		ug/L			07/18/20 12:12	1
N-Propylbenzene	ND		1.0		ug/L			07/18/20 12:12	1
o-Xylene	ND		1.0		ug/L			07/18/20 12:12	1
sec-Butylbenzene	ND		1.0		ug/L			07/18/20 12:12	1
Styrene	ND		1.0		ug/L			07/18/20 12:12	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/18/20 12:12	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/18/20 12:12	1
tert-Butylbenzene	ND		1.0		ug/L			07/18/20 12:12	1
Tetrachloroethene	ND		1.0		ug/L			07/18/20 12:12	1
Tetrahydrofuran	**94**	*	10		ug/L			07/18/20 12:12	1
Toluene	ND		1.0		ug/L			07/18/20 12:12	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/18/20 12:12	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/18/20 12:12	1
Trichloroethene	ND		1.0		ug/L			07/18/20 12:12	1
Trichlorofluoromethane	ND		1.0		ug/L			07/18/20 12:12	1
Vinyl chloride	ND		1.0		ug/L			07/18/20 12:12	1
Dibromomethane	ND		1.0		ug/L			07/18/20 12:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*07/18/20 12:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*07/18/20 12:12*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*07/18/20 12:12*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**55**		0.050		mg/L		07/17/20 11:33	07/17/20 22:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**41**		2.5		mg/L			07/16/20 16:21	5
Nitrate as N	ND		0.25		mg/L			07/16/20 16:21	5
Sulfate	ND		10		mg/L			07/16/20 16:21	5
Ammonia	**4.7**	**B**	1.0		mg/L		07/22/20 07:00	07/22/20 11:08	5
TOC Result 1	**3.0**		1.0		mg/L			07/18/20 18:04	1
TOC Result 2	**3.3**		1.0		mg/L			07/18/20 18:04	1
Total Organic Carbon - Duplicates	**3.1**		1.0		mg/L			07/18/20 18:04	1
Alkalinity, Total	**640**		5.0		mg/L			07/17/20 09:46	1
ortho-Phosphate	**0.067**		0.020		mg/L			07/16/20 17:08	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.3**	**HF**	0.1		SU			07/18/20 10:36	1
Temperature	**12.9**	**HF**	0.001		Degrees C			07/18/20 10:36	1

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

Job ID: 480-172420-1

Client Sample ID: REW-11-20200715
Date Collected: 07/15/20 11:13
Date Received: 07/16/20 08:00

Lab Sample ID: 480-172420-5
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		20		ug/L			07/17/20 14:54	20
1,1,1-Trichloroethane	ND		20		ug/L			07/17/20 14:54	20
1,1,2,2-Tetrachloroethane	ND		10		ug/L			07/17/20 14:54	20
1,1,2-Trichloroethane	ND		20		ug/L			07/17/20 14:54	20
1,1-Dichloroethane	ND		20		ug/L			07/17/20 14:54	20
1,1-Dichloroethene	ND		20		ug/L			07/17/20 14:54	20
1,1-Dichloropropene	ND		20		ug/L			07/17/20 14:54	20
1,2,3-Trichlorobenzene	ND		20		ug/L			07/17/20 14:54	20
1,2,3-Trichloropropane	ND		20		ug/L			07/17/20 14:54	20
1,2,4-Trichlorobenzene	ND		20		ug/L			07/17/20 14:54	20
1,2,4-Trimethylbenzene	ND		20		ug/L			07/17/20 14:54	20
1,2-Dibromo-3-Chloropropane	ND		100		ug/L			07/17/20 14:54	20
1,2-Dichlorobenzene	ND		20		ug/L			07/17/20 14:54	20
1,2-Dichloroethane	ND		20		ug/L			07/17/20 14:54	20
1,2-Dichloropropane	ND		20		ug/L			07/17/20 14:54	20
1,3,5-Trimethylbenzene	ND		20		ug/L			07/17/20 14:54	20
1,3-Dichlorobenzene	ND		20		ug/L			07/17/20 14:54	20
1,3-Dichloropropane	ND		20		ug/L			07/17/20 14:54	20
1,4-Dichlorobenzene	ND		20		ug/L			07/17/20 14:54	20
1,4-Dioxane	ND		1000		ug/L			07/17/20 14:54	20
2,2-Dichloropropane	ND		20		ug/L			07/17/20 14:54	20
2-Butanone (MEK)	**1200**	*	200		ug/L			07/17/20 14:54	20
2-Chlorotoluene	ND		20		ug/L			07/17/20 14:54	20
2-Hexanone	ND		200		ug/L			07/17/20 14:54	20
4-Chlorotoluene	ND		20		ug/L			07/17/20 14:54	20
4-Isopropyltoluene	ND		20		ug/L			07/17/20 14:54	20
4-Methyl-2-pentanone (MIBK)	ND		200		ug/L			07/17/20 14:54	20
Acetone	ND		1000		ug/L			07/17/20 14:54	20
Benzene	ND		20		ug/L			07/17/20 14:54	20
Bromobenzene	ND		20		ug/L			07/17/20 14:54	20
Bromoform	ND		20		ug/L			07/17/20 14:54	20
Bromomethane	ND		40		ug/L			07/17/20 14:54	20
Carbon disulfide	ND		200		ug/L			07/17/20 14:54	20
Carbon tetrachloride	ND		20		ug/L			07/17/20 14:54	20
Chlorobenzene	ND		20		ug/L			07/17/20 14:54	20
Chlorobromomethane	ND		20		ug/L			07/17/20 14:54	20
Chlorodibromomethane	ND		10		ug/L			07/17/20 14:54	20
Chloroethane	ND		40		ug/L			07/17/20 14:54	20
Chloroform	ND		20		ug/L			07/17/20 14:54	20
Chloromethane	ND		40		ug/L			07/17/20 14:54	20
cis-1,2-Dichloroethene	ND		20		ug/L			07/17/20 14:54	20
cis-1,3-Dichloropropene	ND		8.0		ug/L			07/17/20 14:54	20
Dichlorobromomethane	ND		10		ug/L			07/17/20 14:54	20
Dichlorodifluoromethane	ND		20		ug/L			07/17/20 14:54	20
Ethyl ether	ND		20		ug/L			07/17/20 14:54	20
Ethylbenzene	ND		20		ug/L			07/17/20 14:54	20
Ethylene Dibromide	ND		20		ug/L			07/17/20 14:54	20
Hexachlorobutadiene	ND		8.0		ug/L			07/17/20 14:54	20
Isopropyl ether	ND		200		ug/L			07/17/20 14:54	20

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

Job ID: 480-172420-1

Client Sample ID: REW-11-20200715
Date Collected: 07/15/20 11:13
Date Received: 07/16/20 08:00

Lab Sample ID: 480-172420-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		20		ug/L			07/17/20 14:54	20
Methyl tert-butyl ether	ND		20		ug/L			07/17/20 14:54	20
Methylene Chloride	ND		20		ug/L			07/17/20 14:54	20
m-Xylene & p-Xylene	ND		40		ug/L			07/17/20 14:54	20
Naphthalene	ND		100		ug/L			07/17/20 14:54	20
n-Butylbenzene	ND		20		ug/L			07/17/20 14:54	20
N-Propylbenzene	ND		20		ug/L			07/17/20 14:54	20
o-Xylene	ND		20		ug/L			07/17/20 14:54	20
sec-Butylbenzene	ND		20		ug/L			07/17/20 14:54	20
Styrene	ND		20		ug/L			07/17/20 14:54	20
Tert-amyl methyl ether	ND		100		ug/L			07/17/20 14:54	20
Tert-butyl ethyl ether	ND		100		ug/L			07/17/20 14:54	20
tert-Butylbenzene	ND		20		ug/L			07/17/20 14:54	20
Tetrachloroethene	ND		20		ug/L			07/17/20 14:54	20
Tetrahydrofuran	**220**	*	200		ug/L			07/17/20 14:54	20
Toluene	ND		20		ug/L			07/17/20 14:54	20
trans-1,2-Dichloroethene	ND		20		ug/L			07/17/20 14:54	20
trans-1,3-Dichloropropene	ND		8.0		ug/L			07/17/20 14:54	20
Trichloroethene	ND		20		ug/L			07/17/20 14:54	20
Trichlorofluoromethane	ND		20		ug/L			07/17/20 14:54	20
Vinyl chloride	ND		20		ug/L			07/17/20 14:54	20
Dibromomethane	ND		20		ug/L			07/17/20 14:54	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*07/17/20 14:54*	*20*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*07/17/20 14:54*	*20*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*07/17/20 14:54*	*20*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**250**		0.050		mg/L		07/17/20 11:33	07/17/20 22:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**85**		5.0		mg/L			07/16/20 16:35	10
Nitrate as N	ND		0.50		mg/L			07/16/20 16:35	10
Sulfate	ND		20		mg/L			07/16/20 16:35	10
Ammonia	ND		0.20		mg/L		07/20/20 07:00	07/20/20 11:53	1
TOC Result 1	**4500**		100		mg/L			07/17/20 16:23	100
TOC Result 2	**4400**		100		mg/L			07/17/20 16:23	100
Total Organic Carbon - Duplicates	**4500**		100		mg/L			07/17/20 16:23	100
Alkalinity, Total	**1500**		5.0		mg/L			07/17/20 10:44	1
ortho-Phosphate	**0.14**		0.020		mg/L			07/16/20 17:08	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**5.7**	**HF**	0.1		SU			07/18/20 10:39	1
Temperature	**12.9**	**HF**	0.001		Degrees C			07/18/20 10:39	1

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

Job ID: 480-172420-1

Client Sample ID: REW-12-20200715
Date Collected: 07/15/20 12:55
Date Received: 07/16/20 08:00

Lab Sample ID: 480-172420-6
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			07/17/20 15:17	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/17/20 15:17	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/17/20 15:17	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/17/20 15:17	1
1,1-Dichloroethane	ND		1.0		ug/L			07/17/20 15:17	1
1,1-Dichloroethene	ND		1.0		ug/L			07/17/20 15:17	1
1,1-Dichloropropene	ND		1.0		ug/L			07/17/20 15:17	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/17/20 15:17	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/17/20 15:17	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/17/20 15:17	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/17/20 15:17	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/17/20 15:17	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/17/20 15:17	1
1,2-Dichloroethane	ND		1.0		ug/L			07/17/20 15:17	1
1,2-Dichloropropane	ND		1.0		ug/L			07/17/20 15:17	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/17/20 15:17	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/17/20 15:17	1
1,3-Dichloropropane	ND		1.0		ug/L			07/17/20 15:17	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/17/20 15:17	1
1,4-Dioxane	ND		50		ug/L			07/17/20 15:17	1
2,2-Dichloropropane	ND		1.0		ug/L			07/17/20 15:17	1
2-Butanone (MEK)	ND	*	10		ug/L			07/17/20 15:17	1
2-Chlorotoluene	ND		1.0		ug/L			07/17/20 15:17	1
2-Hexanone	ND		10		ug/L			07/17/20 15:17	1
4-Chlorotoluene	ND		1.0		ug/L			07/17/20 15:17	1
4-Isopropyltoluene	ND		1.0		ug/L			07/17/20 15:17	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/17/20 15:17	1
Acetone	ND		50		ug/L			07/17/20 15:17	1
Benzene	ND		1.0		ug/L			07/17/20 15:17	1
Bromobenzene	ND		1.0		ug/L			07/17/20 15:17	1
Bromoform	ND		1.0		ug/L			07/17/20 15:17	1
Bromomethane	ND		2.0		ug/L			07/17/20 15:17	1
Carbon disulfide	ND		10		ug/L			07/17/20 15:17	1
Carbon tetrachloride	ND		1.0		ug/L			07/17/20 15:17	1
Chlorobenzene	ND		1.0		ug/L			07/17/20 15:17	1
Chlorobromomethane	ND		1.0		ug/L			07/17/20 15:17	1
Chlorodibromomethane	ND		0.50		ug/L			07/17/20 15:17	1
Chloroethane	ND		2.0		ug/L			07/17/20 15:17	1
Chloroform	ND		1.0		ug/L			07/17/20 15:17	1
Chloromethane	ND		2.0		ug/L			07/17/20 15:17	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/17/20 15:17	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/17/20 15:17	1
Dichlorobromomethane	ND		0.50		ug/L			07/17/20 15:17	1
Dichlorodifluoromethane	ND		1.0		ug/L			07/17/20 15:17	1
Ethyl ether	ND		1.0		ug/L			07/17/20 15:17	1
Ethylbenzene	**1.2**		1.0		ug/L			07/17/20 15:17	1
Ethylene Dibromide	ND		1.0		ug/L			07/17/20 15:17	1
Hexachlorobutadiene	ND		0.40		ug/L			07/17/20 15:17	1
Isopropyl ether	ND		10		ug/L			07/17/20 15:17	1

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

Job ID: 480-172420-1

Client Sample ID: REW-12-20200715
Date Collected: 07/15/20 12:55
Date Received: 07/16/20 08:00

Lab Sample ID: 480-172420-6
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			07/17/20 15:17	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/17/20 15:17	1
Methylene Chloride	ND		1.0		ug/L			07/17/20 15:17	1
m-Xylene & p-Xylene	**4.2**		2.0		ug/L			07/17/20 15:17	1
Naphthalene	ND		5.0		ug/L			07/17/20 15:17	1
n-Butylbenzene	ND		1.0		ug/L			07/17/20 15:17	1
N-Propylbenzene	ND		1.0		ug/L			07/17/20 15:17	1
o-Xylene	**1.0**		1.0		ug/L			07/17/20 15:17	1
sec-Butylbenzene	ND		1.0		ug/L			07/17/20 15:17	1
Styrene	ND		1.0		ug/L			07/17/20 15:17	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/17/20 15:17	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/17/20 15:17	1
tert-Butylbenzene	ND		1.0		ug/L			07/17/20 15:17	1
Tetrachloroethene	ND		1.0		ug/L			07/17/20 15:17	1
Tetrahydrofuran	ND	*	10		ug/L			07/17/20 15:17	1
Toluene	ND		1.0		ug/L			07/17/20 15:17	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/17/20 15:17	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/17/20 15:17	1
Trichloroethene	ND		1.0		ug/L			07/17/20 15:17	1
Trichlorofluoromethane	ND		1.0		ug/L			07/17/20 15:17	1
Vinyl chloride	ND		1.0		ug/L			07/17/20 15:17	1
Dibromomethane	ND		1.0		ug/L			07/17/20 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*07/17/20 15:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*07/17/20 15:17*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*07/17/20 15:17*	*1*

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**48**		0.050		mg/L		07/17/20 11:33	07/17/20 22:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**40**		1.0		mg/L			07/16/20 16:49	2
Nitrate as N	ND		0.10		mg/L			07/16/20 16:49	2
Sulfate	ND		4.0		mg/L			07/16/20 16:49	2
Ammonia	**2.3**		0.40		mg/L		07/20/20 07:00	07/20/20 13:40	2
TOC Result 1	**2.0**		1.0		mg/L			07/17/20 16:51	1
TOC Result 2	**1.9**		1.0		mg/L			07/17/20 16:51	1
Total Organic Carbon - Duplicates	**2.0**		1.0		mg/L			07/17/20 16:51	1
Alkalinity, Total	**250**		5.0		mg/L			07/17/20 10:52	1
ortho-Phosphate	ND		0.020		mg/L			07/16/20 17:08	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.8**	**HF**	0.1		SU			07/18/20 10:42	1
Temperature	**12.9**	**HF**	0.001		Degrees C			07/18/20 10:42	1

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

Job ID: 480-172420-1

Client Sample ID: DUP1-20200715
Date Collected: 07/15/20 00:00
Date Received: 07/16/20 08:00

Lab Sample ID: 480-172420-7
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		8.0		ug/L			07/18/20 12:35	8
1,1,1-Trichloroethane	ND		8.0		ug/L			07/18/20 12:35	8
1,1,2,2-Tetrachloroethane	ND		4.0		ug/L			07/18/20 12:35	8
1,1,2-Trichloroethane	ND		8.0		ug/L			07/18/20 12:35	8
1,1-Dichloroethane	ND		8.0		ug/L			07/18/20 12:35	8
1,1-Dichloroethene	ND		8.0		ug/L			07/18/20 12:35	8
1,1-Dichloropropene	ND		8.0		ug/L			07/18/20 12:35	8
1,2,3-Trichlorobenzene	ND		8.0		ug/L			07/18/20 12:35	8
1,2,3-Trichloropropane	ND		8.0		ug/L			07/18/20 12:35	8
1,2,4-Trichlorobenzene	ND		8.0		ug/L			07/18/20 12:35	8
1,2,4-Trimethylbenzene	ND		8.0		ug/L			07/18/20 12:35	8
1,2-Dibromo-3-Chloropropane	ND		40		ug/L			07/18/20 12:35	8
1,2-Dichlorobenzene	ND		8.0		ug/L			07/18/20 12:35	8
1,2-Dichloroethane	ND		8.0		ug/L			07/18/20 12:35	8
1,2-Dichloropropane	ND		8.0		ug/L			07/18/20 12:35	8
1,3,5-Trimethylbenzene	ND		8.0		ug/L			07/18/20 12:35	8
1,3-Dichlorobenzene	ND		8.0		ug/L			07/18/20 12:35	8
1,3-Dichloropropane	ND		8.0		ug/L			07/18/20 12:35	8
1,4-Dichlorobenzene	ND		8.0		ug/L			07/18/20 12:35	8
1,4-Dioxane	ND		400		ug/L			07/18/20 12:35	8
2,2-Dichloropropane	ND		8.0		ug/L			07/18/20 12:35	8
2-Butanone (MEK)	**300**	*	80		ug/L			07/18/20 12:35	8
2-Chlorotoluene	ND		8.0		ug/L			07/18/20 12:35	8
2-Hexanone	ND		80		ug/L			07/18/20 12:35	8
4-Chlorotoluene	ND		8.0		ug/L			07/18/20 12:35	8
4-Isopropyltoluene	ND		8.0		ug/L			07/18/20 12:35	8
4-Methyl-2-pentanone (MIBK)	ND		80		ug/L			07/18/20 12:35	8
Acetone	ND		400		ug/L			07/18/20 12:35	8
Benzene	ND		8.0		ug/L			07/18/20 12:35	8
Bromobenzene	ND		8.0		ug/L			07/18/20 12:35	8
Bromoform	ND		8.0		ug/L			07/18/20 12:35	8
Bromomethane	ND		16		ug/L			07/18/20 12:35	8
Carbon disulfide	ND		80		ug/L			07/18/20 12:35	8
Carbon tetrachloride	ND		8.0		ug/L			07/18/20 12:35	8
Chlorobenzene	ND		8.0		ug/L			07/18/20 12:35	8
Chlorobromomethane	ND		8.0		ug/L			07/18/20 12:35	8
Chlorodibromomethane	ND		4.0		ug/L			07/18/20 12:35	8
Chloroethane	ND		16		ug/L			07/18/20 12:35	8
Chloroform	ND		8.0		ug/L			07/18/20 12:35	8
Chloromethane	ND		16		ug/L			07/18/20 12:35	8
cis-1,2-Dichloroethene	**350**		8.0		ug/L			07/18/20 12:35	8
cis-1,3-Dichloropropene	ND		3.2		ug/L			07/18/20 12:35	8
Dichlorobromomethane	ND		4.0		ug/L			07/18/20 12:35	8
Dichlorodifluoromethane	ND		8.0		ug/L			07/18/20 12:35	8
Ethyl ether	ND		8.0		ug/L			07/18/20 12:35	8
Ethylbenzene	ND		8.0		ug/L			07/18/20 12:35	8
Ethylene Dibromide	ND		8.0		ug/L			07/18/20 12:35	8
Hexachlorobutadiene	ND		3.2		ug/L			07/18/20 12:35	8
Isopropyl ether	ND		80		ug/L			07/18/20 12:35	8

Client Sample ID: DUP1-20200715

Lab Sample ID: 480-172420-7

Date Collected: 07/15/20 00:00
Matrix: Water
Date Received: 07/16/20 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		8.0		ug/L			07/18/20 12:35	8
Methyl tert-butyl ether	ND		8.0		ug/L			07/18/20 12:35	8
Methylene Chloride	ND		8.0		ug/L			07/18/20 12:35	8
m-Xylene & p-Xylene	ND		16		ug/L			07/18/20 12:35	8
Naphthalene	ND		40		ug/L			07/18/20 12:35	8
n-Butylbenzene	ND		8.0		ug/L			07/18/20 12:35	8
N-Propylbenzene	ND		8.0		ug/L			07/18/20 12:35	8
o-Xylene	ND		8.0		ug/L			07/18/20 12:35	8
sec-Butylbenzene	ND		8.0		ug/L			07/18/20 12:35	8
Styrene	ND		8.0		ug/L			07/18/20 12:35	8
Tert-amyl methyl ether	ND		40		ug/L			07/18/20 12:35	8
Tert-butyl ethyl ether	ND		40		ug/L			07/18/20 12:35	8
tert-Butylbenzene	ND		8.0		ug/L			07/18/20 12:35	8
Tetrachloroethene	ND		8.0		ug/L			07/18/20 12:35	8
Tetrahydrofuran	ND	*	80		ug/L			07/18/20 12:35	8
Toluene	**110**		8.0		ug/L			07/18/20 12:35	8
trans-1,2-Dichloroethene	ND		8.0		ug/L			07/18/20 12:35	8
trans-1,3-Dichloropropene	ND		3.2		ug/L			07/18/20 12:35	8
Trichloroethene	**81**		8.0		ug/L			07/18/20 12:35	8
Trichlorofluoromethane	ND		8.0		ug/L			07/18/20 12:35	8
Vinyl chloride	ND		8.0		ug/L			07/18/20 12:35	8
Dibromomethane	ND		8.0		ug/L			07/18/20 12:35	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*07/18/20 12:35*	*8*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*07/18/20 12:35*	*8*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*07/18/20 12:35*	*8*

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-172420-8

Date Collected: 07/15/20 00:00
Matrix: Water
Date Received: 07/16/20 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/17/20 16:04	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/17/20 16:04	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/17/20 16:04	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/17/20 16:04	1
1,1-Dichloroethane	ND		1.0		ug/L			07/17/20 16:04	1
1,1-Dichloroethene	ND		1.0		ug/L			07/17/20 16:04	1
1,1-Dichloropropene	ND		1.0		ug/L			07/17/20 16:04	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/17/20 16:04	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/17/20 16:04	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/17/20 16:04	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/17/20 16:04	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/17/20 16:04	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/17/20 16:04	1
1,2-Dichloroethane	ND		1.0		ug/L			07/17/20 16:04	1
1,2-Dichloropropane	ND		1.0		ug/L			07/17/20 16:04	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/17/20 16:04	1

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

Job ID: 480-172420-1

Client Sample ID: TRIP BLANK
Date Collected: 07/15/20 00:00
Date Received: 07/16/20 08:00

Lab Sample ID: 480-172420-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			07/17/20 16:04	1
1,3-Dichloropropane	ND		1.0		ug/L			07/17/20 16:04	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/17/20 16:04	1
1,4-Dioxane	ND		50		ug/L			07/17/20 16:04	1
2,2-Dichloropropane	ND		1.0		ug/L			07/17/20 16:04	1
2-Butanone (MEK)	ND	*	10		ug/L			07/17/20 16:04	1
2-Chlorotoluene	ND		1.0		ug/L			07/17/20 16:04	1
2-Hexanone	ND		10		ug/L			07/17/20 16:04	1
4-Chlorotoluene	ND		1.0		ug/L			07/17/20 16:04	1
4-Isopropyltoluene	ND		1.0		ug/L			07/17/20 16:04	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/17/20 16:04	1
Acetone	ND		50		ug/L			07/17/20 16:04	1
Benzene	ND		1.0		ug/L			07/17/20 16:04	1
Bromobenzene	ND		1.0		ug/L			07/17/20 16:04	1
Bromoform	ND		1.0		ug/L			07/17/20 16:04	1
Bromomethane	ND		2.0		ug/L			07/17/20 16:04	1
Carbon disulfide	ND		10		ug/L			07/17/20 16:04	1
Carbon tetrachloride	ND		1.0		ug/L			07/17/20 16:04	1
Chlorobenzene	ND		1.0		ug/L			07/17/20 16:04	1
Chlorobromomethane	ND		1.0		ug/L			07/17/20 16:04	1
Chlorodibromomethane	ND		0.50		ug/L			07/17/20 16:04	1
Chloroethane	ND		2.0		ug/L			07/17/20 16:04	1
Chloroform	ND		1.0		ug/L			07/17/20 16:04	1
Chloromethane	ND		2.0		ug/L			07/17/20 16:04	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/17/20 16:04	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/17/20 16:04	1
Dichlorobromomethane	ND		0.50		ug/L			07/17/20 16:04	1
Dichlorodifluoromethane	ND		1.0		ug/L			07/17/20 16:04	1
Ethyl ether	ND		1.0		ug/L			07/17/20 16:04	1
Ethylbenzene	ND		1.0		ug/L			07/17/20 16:04	1
Ethylene Dibromide	ND		1.0		ug/L			07/17/20 16:04	1
Hexachlorobutadiene	ND		0.40		ug/L			07/17/20 16:04	1
Isopropyl ether	ND		10		ug/L			07/17/20 16:04	1
Isopropylbenzene	ND		1.0		ug/L			07/17/20 16:04	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/17/20 16:04	1
Methylene Chloride	ND		1.0		ug/L			07/17/20 16:04	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/17/20 16:04	1
Naphthalene	ND		5.0		ug/L			07/17/20 16:04	1
n-Butylbenzene	ND		1.0		ug/L			07/17/20 16:04	1
N-Propylbenzene	ND		1.0		ug/L			07/17/20 16:04	1
o-Xylene	ND		1.0		ug/L			07/17/20 16:04	1
sec-Butylbenzene	ND		1.0		ug/L			07/17/20 16:04	1
Styrene	ND		1.0		ug/L			07/17/20 16:04	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/17/20 16:04	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/17/20 16:04	1
tert-Butylbenzene	ND		1.0		ug/L			07/17/20 16:04	1
Tetrachloroethene	ND		1.0		ug/L			07/17/20 16:04	1
Tetrahydrofuran	ND	*	10		ug/L			07/17/20 16:04	1
Toluene	ND		1.0		ug/L			07/17/20 16:04	1

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

Job ID: 480-172420-1

Client Sample ID: TRIP BLANK
Date Collected: 07/15/20 00:00
Date Received: 07/16/20 08:00

Lab Sample ID: 480-172420-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/17/20 16:04	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/17/20 16:04	1
Trichloroethene	ND		1.0		ug/L			07/17/20 16:04	1
Trichlorofluoromethane	ND		1.0		ug/L			07/17/20 16:04	1
Vinyl chloride	ND		1.0		ug/L			07/17/20 16:04	1
Dibromomethane	ND		1.0		ug/L			07/17/20 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*70 - 130*		*07/17/20 16:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*07/17/20 16:04*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*07/17/20 16:04*	*1*

Surrogate Summary

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

Job ID: 480-172420-1

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)	DCA (70-130)	BFB (70-130)
480-172420-1	MW-268S-20200715	98	97	99
480-172420-2	MW-268M-20200715	94	105	95
480-172420-3	MW-268D-20200715	94	98	96
480-172420-4	REW-6-20200715	96	104	96
480-172420-5	REW-11-20200715	98	101	99
480-172420-6	REW-12-20200715	95	100	98
480-172420-7	DUP1-20200715	98	99	92
480-172420-8	TRIP BLANK	93	101	94
LCS 480-540843/5	Lab Control Sample	97	98	98
LCS 480-540988/5	Lab Control Sample	99	97	98
LCSD 480-540843/6	Lab Control Sample Dup	95	97	100
LCSD 480-540988/6	Lab Control Sample Dup	97	95	94
MB 480-540843/8	Method Blank	95	95	95
MB 480-540988/8	Method Blank	95	102	93

Surrogate Legend

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

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

Lab Sample ID: MB 480-540843/8
Matrix: Water
Analysis Batch: 540843

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/17/20 12:19	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/17/20 12:19	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/17/20 12:19	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/17/20 12:19	1
1,1-Dichloroethane	ND		1.0		ug/L			07/17/20 12:19	1
1,1-Dichloroethene	ND		1.0		ug/L			07/17/20 12:19	1
1,1-Dichloropropene	ND		1.0		ug/L			07/17/20 12:19	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/17/20 12:19	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/17/20 12:19	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/17/20 12:19	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/17/20 12:19	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/17/20 12:19	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/17/20 12:19	1
1,2-Dichloroethane	ND		1.0		ug/L			07/17/20 12:19	1
1,2-Dichloropropane	ND		1.0		ug/L			07/17/20 12:19	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/17/20 12:19	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/17/20 12:19	1
1,3-Dichloropropane	ND		1.0		ug/L			07/17/20 12:19	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/17/20 12:19	1
1,4-Dioxane	ND		50		ug/L			07/17/20 12:19	1
2,2-Dichloropropane	ND		1.0		ug/L			07/17/20 12:19	1
2-Butanone (MEK)	ND		10		ug/L			07/17/20 12:19	1
2-Chlorotoluene	ND		1.0		ug/L			07/17/20 12:19	1
2-Hexanone	ND		10		ug/L			07/17/20 12:19	1
4-Chlorotoluene	ND		1.0		ug/L			07/17/20 12:19	1
4-Isopropyltoluene	ND		1.0		ug/L			07/17/20 12:19	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/17/20 12:19	1
Acetone	ND		50		ug/L			07/17/20 12:19	1
Benzene	ND		1.0		ug/L			07/17/20 12:19	1
Bromobenzene	ND		1.0		ug/L			07/17/20 12:19	1
Bromoform	ND		1.0		ug/L			07/17/20 12:19	1
Bromomethane	ND		2.0		ug/L			07/17/20 12:19	1
Carbon disulfide	ND		10		ug/L			07/17/20 12:19	1
Carbon tetrachloride	ND		1.0		ug/L			07/17/20 12:19	1
Chlorobenzene	ND		1.0		ug/L			07/17/20 12:19	1
Chlorobromomethane	ND		1.0		ug/L			07/17/20 12:19	1
Chlorodibromomethane	ND		0.50		ug/L			07/17/20 12:19	1
Chloroethane	ND		2.0		ug/L			07/17/20 12:19	1
Chloroform	ND		1.0		ug/L			07/17/20 12:19	1
Chloromethane	ND		2.0		ug/L			07/17/20 12:19	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/17/20 12:19	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/17/20 12:19	1
Dichlorobromomethane	ND		0.50		ug/L			07/17/20 12:19	1
Dichlorodifluoromethane	ND		1.0		ug/L			07/17/20 12:19	1
Ethyl ether	ND		1.0		ug/L			07/17/20 12:19	1
Ethylbenzene	ND		1.0		ug/L			07/17/20 12:19	1
Ethylene Dibromide	ND		1.0		ug/L			07/17/20 12:19	1
Hexachlorobutadiene	ND		0.40		ug/L			07/17/20 12:19	1

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

Lab Sample ID: MB 480-540843/8
Matrix: Water
Analysis Batch: 540843

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			07/17/20 12:19	1
Isopropylbenzene	ND		1.0		ug/L			07/17/20 12:19	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/17/20 12:19	1
Methylene Chloride	ND		1.0		ug/L			07/17/20 12:19	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/17/20 12:19	1
Naphthalene	ND		5.0		ug/L			07/17/20 12:19	1
n-Butylbenzene	ND		1.0		ug/L			07/17/20 12:19	1
N-Propylbenzene	ND		1.0		ug/L			07/17/20 12:19	1
o-Xylene	ND		1.0		ug/L			07/17/20 12:19	1
sec-Butylbenzene	ND		1.0		ug/L			07/17/20 12:19	1
Styrene	ND		1.0		ug/L			07/17/20 12:19	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/17/20 12:19	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/17/20 12:19	1
tert-Butylbenzene	ND		1.0		ug/L			07/17/20 12:19	1
Tetrachloroethene	ND		1.0		ug/L			07/17/20 12:19	1
Tetrahydrofuran	ND		10		ug/L			07/17/20 12:19	1
Toluene	ND		1.0		ug/L			07/17/20 12:19	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/17/20 12:19	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/17/20 12:19	1
Trichloroethene	ND		1.0		ug/L			07/17/20 12:19	1
Trichlorofluoromethane	ND		1.0		ug/L			07/17/20 12:19	1
Vinyl chloride	ND		1.0		ug/L			07/17/20 12:19	1
Dibromomethane	ND		1.0		ug/L			07/17/20 12:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*07/17/20 12:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*07/17/20 12:19*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*07/17/20 12:19*	*1*

Lab Sample ID: LCS 480-540843/5
Matrix: Water
Analysis Batch: 540843

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	26.4		ug/L		106	70 - 130
1,1,1-Trichloroethane	25.0	24.9		ug/L		99	70 - 130
1,1,2,2-Tetrachloroethane	25.0	24.6		ug/L		98	70 - 130
1,1,2-Trichloroethane	25.0	24.9		ug/L		100	70 - 130
1,1-Dichloroethane	25.0	26.0		ug/L		104	70 - 130
1,1-Dichloroethene	25.0	23.5		ug/L		94	70 - 130
1,1-Dichloropropene	25.0	23.5		ug/L		94	70 - 130
1,2,3-Trichlorobenzene	25.0	26.0		ug/L		104	70 - 130
1,2,3-Trichloropropane	25.0	25.7		ug/L		103	70 - 130
1,2,4-Trichlorobenzene	25.0	26.3		ug/L		105	70 - 130
1,2,4-Trimethylbenzene	25.0	27.2		ug/L		109	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	25.9		ug/L		104	70 - 130
1,2-Dichlorobenzene	25.0	26.4		ug/L		106	70 - 130
1,2-Dichloroethane	25.0	24.0		ug/L		96	70 - 130

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

Lab Sample ID: LCS 480-540843/5
Matrix: Water
Analysis Batch: 540843

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	25.8		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	25.0	27.6		ug/L		111	70 - 130
1,3-Dichlorobenzene	25.0	26.1		ug/L		104	70 - 130
1,3-Dichloropropane	25.0	25.0		ug/L		100	70 - 130
1,4-Dichlorobenzene	25.0	25.9		ug/L		103	70 - 130
1,4-Dioxane	500	578		ug/L		116	70 - 130
2,2-Dichloropropane	25.0	26.5		ug/L		106	70 - 130
2-Butanone (MEK)	125	228	*	ug/L		183	70 - 130
2-Chlorotoluene	25.0	25.3		ug/L		101	70 - 130
2-Hexanone	125	132		ug/L		106	70 - 130
4-Chlorotoluene	25.0	24.7		ug/L		99	70 - 130
4-Isopropyltoluene	25.0	25.7		ug/L		103	70 - 130
4-Methyl-2-pentanone (MIBK)	125	129		ug/L		103	70 - 130
Acetone	125	124		ug/L		99	70 - 130
Benzene	25.0	25.9		ug/L		104	70 - 130
Bromobenzene	25.0	26.4		ug/L		106	70 - 130
Bromoform	25.0	25.5		ug/L		102	70 - 130
Bromomethane	25.0	23.7		ug/L		95	70 - 130
Carbon disulfide	25.0	25.5		ug/L		102	70 - 130
Carbon tetrachloride	25.0	23.9		ug/L		95	70 - 130
Chlorobenzene	25.0	24.9		ug/L		100	70 - 130
Chlorobromomethane	25.0	24.8		ug/L		99	70 - 130
Chlorodibromomethane	25.0	26.5		ug/L		106	70 - 130
Chloroethane	25.0	23.1		ug/L		92	70 - 130
Chloroform	25.0	24.6		ug/L		98	70 - 130
Chloromethane	25.0	24.5		ug/L		98	70 - 130
cis-1,2-Dichloroethene	25.0	26.2		ug/L		105	70 - 130
cis-1,3-Dichloropropene	25.0	27.9		ug/L		111	70 - 130
Dichlorobromomethane	25.0	27.0		ug/L		108	70 - 130
Dichlorodifluoromethane	25.0	23.5		ug/L		94	70 - 130
Ethyl ether	25.0	26.1		ug/L		104	70 - 130
Ethylbenzene	25.0	26.3		ug/L		105	70 - 130
Ethylene Dibromide	25.0	26.0		ug/L		104	70 - 130
Hexachlorobutadiene	25.0	22.6		ug/L		90	70 - 130
Isopropyl ether	25.0	27.6		ug/L		110	70 - 130
Isopropylbenzene	25.0	26.1		ug/L		104	70 - 130
Methyl tert-butyl ether	25.0	25.9		ug/L		104	70 - 130
Methylene Chloride	25.0	24.4		ug/L		98	70 - 130
m-Xylene & p-Xylene	25.0	26.6		ug/L		107	70 - 130
Naphthalene	25.0	26.3		ug/L		105	70 - 130
n-Butylbenzene	25.0	26.2		ug/L		105	70 - 130
N-Propylbenzene	25.0	27.1		ug/L		108	70 - 130
o-Xylene	25.0	25.9		ug/L		104	70 - 130
sec-Butylbenzene	25.0	25.6		ug/L		102	70 - 130
Styrene	25.0	26.6		ug/L		106	70 - 130
Tert-amyl methyl ether	25.0	25.1		ug/L		100	70 - 130
Tert-butyl ethyl ether	25.0	25.8		ug/L		103	70 - 130
tert-Butylbenzene	25.0	25.7		ug/L		103	70 - 130
Tetrachloroethene	25.0	24.3		ug/L		97	70 - 130

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

Lab Sample ID: LCS 480-540843/5
Matrix: Water
Analysis Batch: 540843

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrahydrofuran	50.0	63.1		ug/L		126	70 - 130
Toluene	25.0	25.2		ug/L		101	70 - 130
trans-1,2-Dichloroethene	25.0	26.2		ug/L		105	70 - 130
trans-1,3-Dichloropropene	25.0	26.7		ug/L		107	70 - 130
Trichloroethene	25.0	26.0		ug/L		104	70 - 130
Trichlorofluoromethane	25.0	20.7		ug/L		83	70 - 130
Vinyl chloride	25.0	22.7		ug/L		91	70 - 130
Dibromomethane	25.0	24.7		ug/L		99	70 - 130

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

Lab Sample ID: LCSD 480-540843/6
Matrix: Water
Analysis Batch: 540843

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	26.1		ug/L		104	70 - 130	1	20
1,1,1-Trichloroethane	25.0	23.4		ug/L		94	70 - 130	6	20
1,1,2,2-Tetrachloroethane	25.0	25.0		ug/L		100	70 - 130	1	20
1,1,2-Trichloroethane	25.0	25.3		ug/L		101	70 - 130	2	20
1,1-Dichloroethane	25.0	25.6		ug/L		102	70 - 130	2	20
1,1-Dichloroethene	25.0	22.6		ug/L		90	70 - 130	4	20
1,1-Dichloropropene	25.0	23.7		ug/L		95	70 - 130	1	20
1,2,3-Trichlorobenzene	25.0	25.5		ug/L		102	70 - 130	2	20
1,2,3-Trichloropropane	25.0	25.9		ug/L		103	70 - 130	1	20
1,2,4-Trichlorobenzene	25.0	25.6		ug/L		103	70 - 130	3	20
1,2,4-Trimethylbenzene	25.0	26.3		ug/L		105	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	25.0	26.3		ug/L		105	70 - 130	2	20
1,2-Dichlorobenzene	25.0	25.6		ug/L		103	70 - 130	3	20
1,2-Dichloroethane	25.0	24.1		ug/L		96	70 - 130	0	20
1,2-Dichloropropane	25.0	26.4		ug/L		106	70 - 130	2	20
1,3,5-Trimethylbenzene	25.0	26.6		ug/L		106	70 - 130	4	20
1,3-Dichlorobenzene	25.0	25.6		ug/L		103	70 - 130	2	20
1,3-Dichloropropane	25.0	24.8		ug/L		99	70 - 130	0	20
1,4-Dichlorobenzene	25.0	24.9		ug/L		100	70 - 130	4	20
1,4-Dioxane	500	556		ug/L		111	70 - 130	4	20
2,2-Dichloropropane	25.0	25.8		ug/L		103	70 - 130	3	20
2-Butanone (MEK)	125	237	*	ug/L		190	70 - 130	4	20
2-Chlorotoluene	25.0	24.4		ug/L		98	70 - 130	4	20
2-Hexanone	125	136		ug/L		109	70 - 130	3	20
4-Chlorotoluene	25.0	24.2		ug/L		97	70 - 130	2	20
4-Isopropyltoluene	25.0	25.0		ug/L		100	70 - 130	3	20
4-Methyl-2-pentanone (MIBK)	125	135		ug/L		108	70 - 130	5	20
Acetone	125	134		ug/L		107	70 - 130	8	20
Benzene	25.0	25.4		ug/L		102	70 - 130	2	20

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

Lab Sample ID: LCSD 480-540843/6
Matrix: Water
Analysis Batch: 540843

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
Bromobenzene			25.0	26.0		ug/L		104	70 - 130	1	20
Bromoform			25.0	25.4		ug/L		102	70 - 130	0	20
Bromomethane			25.0	22.2		ug/L		89	70 - 130	7	20
Carbon disulfide			25.0	23.9		ug/L		95	70 - 130	7	20
Carbon tetrachloride			25.0	22.5		ug/L		90	70 - 130	6	20
Chlorobenzene			25.0	24.1		ug/L		96	70 - 130	3	20
Chlorobromomethane			25.0	24.5		ug/L		98	70 - 130	1	20
Chlorodibromomethane			25.0	26.2		ug/L		105	70 - 130	1	20
Chloroethane			25.0	22.7		ug/L		91	70 - 130	2	20
Chloroform			25.0	24.0		ug/L		96	70 - 130	3	20
Chloromethane			25.0	23.4		ug/L		93	70 - 130	5	20
cis-1,2-Dichloroethene			25.0	25.9		ug/L		104	70 - 130	1	20
cis-1,3-Dichloropropene			25.0	27.8		ug/L		111	70 - 130	0	20
Dichlorobromomethane			25.0	26.2		ug/L		105	70 - 130	3	20
Dichlorodifluoromethane			25.0	21.6		ug/L		86	70 - 130	8	20
Ethyl ether			25.0	26.6		ug/L		107	70 - 130	2	20
Ethylbenzene			25.0	25.1		ug/L		100	70 - 130	5	20
Ethylene Dibromide			25.0	25.5		ug/L		102	70 - 130	2	20
Hexachlorobutadiene			25.0	22.5		ug/L		90	70 - 130	1	20
Isopropyl ether			25.0	27.0		ug/L		108	70 - 130	2	20
Isopropylbenzene			25.0	25.1		ug/L		100	70 - 130	4	20
Methyl tert-butyl ether			25.0	26.1		ug/L		105	70 - 130	1	20
Methylene Chloride			25.0	24.0		ug/L		96	70 - 130	2	20
m-Xylene & p-Xylene			25.0	25.0		ug/L		100	70 - 130	6	20
Naphthalene			25.0	26.8		ug/L		107	70 - 130	2	20
n-Butylbenzene			25.0	25.4		ug/L		101	70 - 130	3	20
N-Propylbenzene			25.0	26.1		ug/L		104	70 - 130	4	20
o-Xylene			25.0	24.7		ug/L		99	70 - 130	5	20
sec-Butylbenzene			25.0	24.0		ug/L		96	70 - 130	6	20
Styrene			25.0	25.6		ug/L		102	70 - 130	4	20
Tert-amyl methyl ether			25.0	26.7		ug/L		107	70 - 130	6	20
Tert-butyl ethyl ether			25.0	26.1		ug/L		104	70 - 130	1	20
tert-Butylbenzene			25.0	25.3		ug/L		101	70 - 130	2	20
Tetrachloroethene			25.0	24.0		ug/L		96	70 - 130	1	20
Tetrahydrofuran			50.0	68.0	*	ug/L		136	70 - 130	7	20
Toluene			25.0	24.3		ug/L		97	70 - 130	3	20
trans-1,2-Dichloroethene			25.0	24.9		ug/L		100	70 - 130	5	20
trans-1,3-Dichloropropene			25.0	26.2		ug/L		105	70 - 130	2	20
Trichloroethene			25.0	25.6		ug/L		103	70 - 130	1	20
Trichlorofluoromethane			25.0	20.1		ug/L		80	70 - 130	3	20
Vinyl chloride			25.0	21.4		ug/L		86	70 - 130	6	20
Dibromomethane			25.0	25.3		ug/L		101	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*

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

Lab Sample ID: MB 480-540988/8
Matrix: Water
Analysis Batch: 540988

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/18/20 11:39	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/18/20 11:39	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/18/20 11:39	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/18/20 11:39	1
1,1-Dichloroethane	ND		1.0		ug/L			07/18/20 11:39	1
1,1-Dichloroethene	ND		1.0		ug/L			07/18/20 11:39	1
1,1-Dichloropropene	ND		1.0		ug/L			07/18/20 11:39	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/18/20 11:39	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/18/20 11:39	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/18/20 11:39	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/18/20 11:39	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/18/20 11:39	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/18/20 11:39	1
1,2-Dichloroethane	ND		1.0		ug/L			07/18/20 11:39	1
1,2-Dichloropropane	ND		1.0		ug/L			07/18/20 11:39	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/18/20 11:39	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/18/20 11:39	1
1,3-Dichloropropane	ND		1.0		ug/L			07/18/20 11:39	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/18/20 11:39	1
1,4-Dioxane	ND		50		ug/L			07/18/20 11:39	1
2,2-Dichloropropane	ND		1.0		ug/L			07/18/20 11:39	1
2-Butanone (MEK)	ND		10		ug/L			07/18/20 11:39	1
2-Chlorotoluene	ND		1.0		ug/L			07/18/20 11:39	1
2-Hexanone	ND		10		ug/L			07/18/20 11:39	1
4-Chlorotoluene	ND		1.0		ug/L			07/18/20 11:39	1
4-Isopropyltoluene	ND		1.0		ug/L			07/18/20 11:39	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			07/18/20 11:39	1
Acetone	ND		50		ug/L			07/18/20 11:39	1
Benzene	ND		1.0		ug/L			07/18/20 11:39	1
Bromobenzene	ND		1.0		ug/L			07/18/20 11:39	1
Bromoform	ND		1.0		ug/L			07/18/20 11:39	1
Bromomethane	ND		2.0		ug/L			07/18/20 11:39	1
Carbon disulfide	ND		10		ug/L			07/18/20 11:39	1
Carbon tetrachloride	ND		1.0		ug/L			07/18/20 11:39	1
Chlorobenzene	ND		1.0		ug/L			07/18/20 11:39	1
Chlorobromomethane	ND		1.0		ug/L			07/18/20 11:39	1
Chlorodibromomethane	ND		0.50		ug/L			07/18/20 11:39	1
Chloroethane	ND		2.0		ug/L			07/18/20 11:39	1
Chloroform	ND		1.0		ug/L			07/18/20 11:39	1
Chloromethane	ND		2.0		ug/L			07/18/20 11:39	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/18/20 11:39	1
cis-1,3-Dichloropropene	ND		0.40		ug/L			07/18/20 11:39	1
Dichlorobromomethane	ND		0.50		ug/L			07/18/20 11:39	1
Dichlorodifluoromethane	ND		1.0		ug/L			07/18/20 11:39	1
Ethyl ether	ND		1.0		ug/L			07/18/20 11:39	1
Ethylbenzene	ND		1.0		ug/L			07/18/20 11:39	1
Ethylene Dibromide	ND		1.0		ug/L			07/18/20 11:39	1
Hexachlorobutadiene	ND		0.40		ug/L			07/18/20 11:39	1

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

Lab Sample ID: MB 480-540988/8
Matrix: Water
Analysis Batch: 540988

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			07/18/20 11:39	1
Isopropylbenzene	ND		1.0		ug/L			07/18/20 11:39	1
Methyl tert-butyl ether	ND		1.0		ug/L			07/18/20 11:39	1
Methylene Chloride	ND		1.0		ug/L			07/18/20 11:39	1
m-Xylene & p-Xylene	ND		2.0		ug/L			07/18/20 11:39	1
Naphthalene	ND		5.0		ug/L			07/18/20 11:39	1
n-Butylbenzene	ND		1.0		ug/L			07/18/20 11:39	1
N-Propylbenzene	ND		1.0		ug/L			07/18/20 11:39	1
o-Xylene	ND		1.0		ug/L			07/18/20 11:39	1
sec-Butylbenzene	ND		1.0		ug/L			07/18/20 11:39	1
Styrene	ND		1.0		ug/L			07/18/20 11:39	1
Tert-amyl methyl ether	ND		5.0		ug/L			07/18/20 11:39	1
Tert-butyl ethyl ether	ND		5.0		ug/L			07/18/20 11:39	1
tert-Butylbenzene	ND		1.0		ug/L			07/18/20 11:39	1
Tetrachloroethene	ND		1.0		ug/L			07/18/20 11:39	1
Tetrahydrofuran	ND		10		ug/L			07/18/20 11:39	1
Toluene	ND		1.0		ug/L			07/18/20 11:39	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/18/20 11:39	1
trans-1,3-Dichloropropene	ND		0.40		ug/L			07/18/20 11:39	1
Trichloroethene	ND		1.0		ug/L			07/18/20 11:39	1
Trichlorofluoromethane	ND		1.0		ug/L			07/18/20 11:39	1
Vinyl chloride	ND		1.0		ug/L			07/18/20 11:39	1
Dibromomethane	ND		1.0		ug/L			07/18/20 11:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*07/18/20 11:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*07/18/20 11:39*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*07/18/20 11:39*	*1*

Lab Sample ID: LCS 480-540988/5
Matrix: Water
Analysis Batch: 540988

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	25.6		ug/L		102	70 - 130
1,1,1-Trichloroethane	25.0	23.7		ug/L		95	70 - 130
1,1,2,2-Tetrachloroethane	25.0	24.8		ug/L		99	70 - 130
1,1,2-Trichloroethane	25.0	25.3		ug/L		101	70 - 130
1,1-Dichloroethane	25.0	25.7		ug/L		103	70 - 130
1,1-Dichloroethene	25.0	22.6		ug/L		90	70 - 130
1,1-Dichloropropene	25.0	23.4		ug/L		94	70 - 130
1,2,3-Trichlorobenzene	25.0	26.3		ug/L		105	70 - 130
1,2,3-Trichloropropane	25.0	25.2		ug/L		101	70 - 130
1,2,4-Trichlorobenzene	25.0	25.6		ug/L		102	70 - 130
1,2,4-Trimethylbenzene	25.0	27.2		ug/L		109	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	25.1		ug/L		100	70 - 130
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	70 - 130
1,2-Dichloroethane	25.0	23.9		ug/L		96	70 - 130

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

Lab Sample ID: LCS 480-540988/5
Matrix: Water
Analysis Batch: 540988

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	26.5		ug/L		106	70 - 130
1,3,5-Trimethylbenzene	25.0	27.4		ug/L		110	70 - 130
1,3-Dichlorobenzene	25.0	26.4		ug/L		106	70 - 130
1,3-Dichloropropane	25.0	25.3		ug/L		101	70 - 130
1,4-Dichlorobenzene	25.0	25.9		ug/L		104	70 - 130
1,4-Dioxane	500	580		ug/L		116	70 - 130
2,2-Dichloropropane	25.0	26.2		ug/L		105	70 - 130
2-Butanone (MEK)	125	234	*	ug/L		187	70 - 130
2-Chlorotoluene	25.0	25.2		ug/L		101	70 - 130
2-Hexanone	125	136		ug/L		109	70 - 130
4-Chlorotoluene	25.0	25.1		ug/L		100	70 - 130
4-Isopropyltoluene	25.0	25.5		ug/L		102	70 - 130
4-Methyl-2-pentanone (MIBK)	125	134		ug/L		107	70 - 130
Acetone	125	126		ug/L		101	70 - 130
Benzene	25.0	25.2		ug/L		101	70 - 130
Bromobenzene	25.0	25.8		ug/L		103	70 - 130
Bromoform	25.0	24.4		ug/L		98	70 - 130
Bromomethane	25.0	22.2		ug/L		89	70 - 130
Carbon disulfide	25.0	23.7		ug/L		95	70 - 130
Carbon tetrachloride	25.0	22.2		ug/L		89	70 - 130
Chlorobenzene	25.0	25.0		ug/L		100	70 - 130
Chlorobromomethane	25.0	24.4		ug/L		98	70 - 130
Chlorodibromomethane	25.0	25.1		ug/L		101	70 - 130
Chloroethane	25.0	23.4		ug/L		94	70 - 130
Chloroform	25.0	23.3		ug/L		93	70 - 130
Chloromethane	25.0	23.6		ug/L		95	70 - 130
cis-1,2-Dichloroethene	25.0	25.7		ug/L		103	70 - 130
cis-1,3-Dichloropropene	25.0	27.1		ug/L		109	70 - 130
Dichlorobromomethane	25.0	25.6		ug/L		102	70 - 130
Dichlorodifluoromethane	25.0	21.5		ug/L		86	70 - 130
Ethyl ether	25.0	26.0		ug/L		104	70 - 130
Ethylbenzene	25.0	25.7		ug/L		103	70 - 130
Ethylene Dibromide	25.0	25.8		ug/L		103	70 - 130
Hexachlorobutadiene	25.0	23.3		ug/L		93	70 - 130
Isopropyl ether	25.0	27.4		ug/L		109	70 - 130
Isopropylbenzene	25.0	25.9		ug/L		104	70 - 130
Methyl tert-butyl ether	25.0	25.2		ug/L		101	70 - 130
Methylene Chloride	25.0	24.1		ug/L		97	70 - 130
m-Xylene & p-Xylene	25.0	25.6		ug/L		103	70 - 130
Naphthalene	25.0	26.1		ug/L		104	70 - 130
n-Butylbenzene	25.0	25.9		ug/L		104	70 - 130
N-Propylbenzene	25.0	26.6		ug/L		107	70 - 130
o-Xylene	25.0	25.2		ug/L		101	70 - 130
sec-Butylbenzene	25.0	25.0		ug/L		100	70 - 130
Styrene	25.0	26.1		ug/L		104	70 - 130
Tert-amyl methyl ether	25.0	24.3		ug/L		97	70 - 130
Tert-butyl ethyl ether	25.0	26.0		ug/L		104	70 - 130
tert-Butylbenzene	25.0	25.1		ug/L		100	70 - 130
Tetrachloroethene	25.0	23.6		ug/L		94	70 - 130

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

Lab Sample ID: LCS 480-540988/5
Matrix: Water
Analysis Batch: 540988

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrahydrofuran	50.0	66.0	*	ug/L		132	70 - 130
Toluene	25.0	24.8		ug/L		99	70 - 130
trans-1,2-Dichloroethene	25.0	24.8		ug/L		99	70 - 130
trans-1,3-Dichloropropene	25.0	26.1		ug/L		104	70 - 130
Trichloroethene	25.0	25.1		ug/L		100	70 - 130
Trichlorofluoromethane	25.0	20.4		ug/L		81	70 - 130
Vinyl chloride	25.0	22.3		ug/L		89	70 - 130
Dibromomethane	25.0	24.3		ug/L		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 480-540988/6
Matrix: Water
Analysis Batch: 540988

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	25.2		ug/L		101	70 - 130	2	20
1,1,1-Trichloroethane	25.0	22.5		ug/L		90	70 - 130	5	20
1,1,2,2-Tetrachloroethane	25.0	25.5		ug/L		102	70 - 130	3	20
1,1,2-Trichloroethane	25.0	25.6		ug/L		102	70 - 130	1	20
1,1-Dichloroethane	25.0	24.6		ug/L		98	70 - 130	5	20
1,1-Dichloroethene	25.0	20.9		ug/L		84	70 - 130	8	20
1,1-Dichloropropene	25.0	22.2		ug/L		89	70 - 130	5	20
1,2,3-Trichlorobenzene	25.0	25.1		ug/L		100	70 - 130	5	20
1,2,3-Trichloropropane	25.0	25.4		ug/L		102	70 - 130	1	20
1,2,4-Trichlorobenzene	25.0	25.5		ug/L		102	70 - 130	0	20
1,2,4-Trimethylbenzene	25.0	26.2		ug/L		105	70 - 130	4	20
1,2-Dibromo-3-Chloropropane	25.0	24.9		ug/L		100	70 - 130	1	20
1,2-Dichlorobenzene	25.0	25.6		ug/L		102	70 - 130	0	20
1,2-Dichloroethane	25.0	23.8		ug/L		95	70 - 130	1	20
1,2-Dichloropropane	25.0	25.1		ug/L		100	70 - 130	5	20
1,3,5-Trimethylbenzene	25.0	26.5		ug/L		106	70 - 130	3	20
1,3-Dichlorobenzene	25.0	25.0		ug/L		100	70 - 130	5	20
1,3-Dichloropropane	25.0	25.2		ug/L		101	70 - 130	0	20
1,4-Dichlorobenzene	25.0	25.1		ug/L		100	70 - 130	3	20
1,4-Dioxane	500	630		ug/L		126	70 - 130	8	20
2,2-Dichloropropane	25.0	24.9		ug/L		99	70 - 130	5	20
2-Butanone (MEK)	125	241	*	ug/L		193	70 - 130	3	20
2-Chlorotoluene	25.0	24.8		ug/L		99	70 - 130	1	20
2-Hexanone	125	141		ug/L		113	70 - 130	3	20
4-Chlorotoluene	25.0	23.7		ug/L		95	70 - 130	6	20
4-Isopropyltoluene	25.0	24.5		ug/L		98	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	125	136		ug/L		109	70 - 130	2	20
Acetone	125	134		ug/L		107	70 - 130	6	20
Benzene	25.0	24.1		ug/L		96	70 - 130	5	20

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

Lab Sample ID: LCSD 480-540988/6
Matrix: Water
Analysis Batch: 540988

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
Bromobenzene			25.0	25.8		ug/L		103	70 - 130	0	20
Bromoform			25.0	24.0		ug/L		96	70 - 130	1	20
Bromomethane			25.0	20.8		ug/L		83	70 - 130	7	20
Carbon disulfide			25.0	22.7		ug/L		91	70 - 130	4	20
Carbon tetrachloride			25.0	21.2		ug/L		85	70 - 130	5	20
Chlorobenzene			25.0	23.9		ug/L		96	70 - 130	5	20
Chlorobromomethane			25.0	23.5		ug/L		94	70 - 130	4	20
Chlorodibromomethane			25.0	24.9		ug/L		100	70 - 130	1	20
Chloroethane			25.0	22.2		ug/L		89	70 - 130	5	20
Chloroform			25.0	22.6		ug/L		90	70 - 130	3	20
Chloromethane			25.0	22.9		ug/L		92	70 - 130	3	20
cis-1,2-Dichloroethene			25.0	24.6		ug/L		98	70 - 130	5	20
cis-1,3-Dichloropropene			25.0	27.0		ug/L		108	70 - 130	1	20
Dichlorobromomethane			25.0	25.1		ug/L		100	70 - 130	2	20
Dichlorodifluoromethane			25.0	19.2		ug/L		77	70 - 130	12	20
Ethyl ether			25.0	25.7		ug/L		103	70 - 130	1	20
Ethylbenzene			25.0	25.1		ug/L		100	70 - 130	2	20
Ethylene Dibromide			25.0	25.8		ug/L		103	70 - 130	0	20
Hexachlorobutadiene			25.0	22.1		ug/L		88	70 - 130	5	20
Isopropyl ether			25.0	26.4		ug/L		106	70 - 130	3	20
Isopropylbenzene			25.0	24.8		ug/L		99	70 - 130	4	20
Methyl tert-butyl ether			25.0	25.4		ug/L		102	70 - 130	1	20
Methylene Chloride			25.0	22.7		ug/L		91	70 - 130	6	20
m-Xylene & p-Xylene			25.0	24.7		ug/L		99	70 - 130	4	20
Naphthalene			25.0	26.0		ug/L		104	70 - 130	0	20
n-Butylbenzene			25.0	24.9		ug/L		100	70 - 130	4	20
N-Propylbenzene			25.0	25.8		ug/L		103	70 - 130	3	20
o-Xylene			25.0	23.9		ug/L		96	70 - 130	5	20
sec-Butylbenzene			25.0	23.8		ug/L		95	70 - 130	5	20
Styrene			25.0	24.8		ug/L		99	70 - 130	5	20
Tert-amyl methyl ether			25.0	26.3		ug/L		105	70 - 130	8	20
Tert-butyl ethyl ether			25.0	25.2		ug/L		101	70 - 130	3	20
tert-Butylbenzene			25.0	23.7		ug/L		95	70 - 130	6	20
Tetrachloroethene			25.0	23.0		ug/L		92	70 - 130	3	20
Tetrahydrofuran			50.0	68.0	*	ug/L		136	70 - 130	3	20
Toluene			25.0	23.7		ug/L		95	70 - 130	5	20
trans-1,2-Dichloroethene			25.0	23.9		ug/L		96	70 - 130	4	20
trans-1,3-Dichloropropene			25.0	26.0		ug/L		104	70 - 130	0	20
Trichloroethene			25.0	23.8		ug/L		95	70 - 130	5	20
Trichlorofluoromethane			25.0	18.7		ug/L		75	70 - 130	8	20
Vinyl chloride			25.0	20.7		ug/L		83	70 - 130	7	20
Dibromomethane			25.0	24.4		ug/L		98	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-540833/1-A
Matrix: Water
Analysis Batch: 541109

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540833

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050		mg/L		07/17/20 11:33	07/17/20 21:19	1

Lab Sample ID: LCS 480-540833/2-A
Matrix: Water
Analysis Batch: 541109

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540833

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.98		mg/L		100	80 - 120

Lab Sample ID: LCSD 480-540833/24-A
Matrix: Water
Analysis Batch: 541109

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540833

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	10.0	10.0		mg/L		100	80 - 120	1	20

Lab Sample ID: 480-172420-1 MS
Matrix: Water
Analysis Batch: 541109

Client Sample ID: MW-268S-20200715
Prep Type: Total/NA
Prep Batch: 540833

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	85		10.0	92.6	4	mg/L		76	75 - 125

Lab Sample ID: 480-172420-1 MSD
Matrix: Water
Analysis Batch: 541109

Client Sample ID: MW-268S-20200715
Prep Type: Total/NA
Prep Batch: 540833

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	85		10.0	90.9	4	mg/L		60	75 - 125	2	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-540747/4
Matrix: Water
Analysis Batch: 540747

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			07/16/20 14:55	1
Sulfate	ND		2.0		mg/L			07/16/20 14:55	1

Lab Sample ID: LCS 480-540747/3
Matrix: Water
Analysis Batch: 540747

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	50.6		mg/L		101	90 - 110
Sulfate	50.0	52.2		mg/L		104	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 480-172420-6 MS
Matrix: Water
Analysis Batch: 540747

Client Sample ID: REW-12-20200715
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	40		100	138		mg/L		98	81 - 120
Sulfate	ND		100	101		mg/L		101	80 - 120

Lab Sample ID: 480-172420-6 MSD
Matrix: Water
Analysis Batch: 540747

Client Sample ID: REW-12-20200715
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	40		100	138		mg/L		98	81 - 120	0	15
Sulfate	ND		100	101		mg/L		101	80 - 120	0	15

Lab Sample ID: MB 480-540750/4
Matrix: Water
Analysis Batch: 540750

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.050		mg/L			07/16/20 14:55	1

Lab Sample ID: LCS 480-540750/3
Matrix: Water
Analysis Batch: 540750

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	5.00	5.20		mg/L		104	90 - 110

Lab Sample ID: 480-172420-6 MS
Matrix: Water
Analysis Batch: 540750

Client Sample ID: REW-12-20200715
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	ND		10.0	10.3		mg/L		103	80 - 120

Lab Sample ID: 480-172420-6 MSD
Matrix: Water
Analysis Batch: 540750

Client Sample ID: REW-12-20200715
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	ND		10.0	10.3		mg/L		102	80 - 120	0	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: 480-172420-1 MS
Matrix: Water
Analysis Batch: 541190

Client Sample ID: MW-268S-20200715
Prep Type: Total/NA
Prep Batch: 541139

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	ND	F1	0.200	ND	F1	mg/L		66	90 - 110

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: MB 480-541190/17
Matrix: Water
Analysis Batch: 541190

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.20		mg/L			07/20/20 11:00	1

Lab Sample ID: MB 480-541190/45
Matrix: Water
Analysis Batch: 541190

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.20		mg/L			07/20/20 12:15	1

Lab Sample ID: MB 480-541190/73
Matrix: Water
Analysis Batch: 541190

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.20		mg/L			07/20/20 13:30	1

Lab Sample ID: LCS 480-541190/18
Matrix: Water
Analysis Batch: 541190

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.03		mg/L		103	90 - 110

Lab Sample ID: LCS 480-541190/46
Matrix: Water
Analysis Batch: 541190

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.00		mg/L		100	90 - 110

Lab Sample ID: LCS 480-541190/74
Matrix: Water
Analysis Batch: 541190

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.01		mg/L		101	90 - 110

Lab Sample ID: MB 480-541561/17
Matrix: Water
Analysis Batch: 541561

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.20		mg/L			07/22/20 10:55	1

Lab Sample ID: LCS 480-541561/18
Matrix: Water
Analysis Batch: 541561

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	0.983		mg/L		98	90 - 110

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

Lab Sample ID: MB 480-540983/27
Matrix: Water
Analysis Batch: 540983

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			07/17/20 07:02	1
TOC Result 2	ND		1.0		mg/L			07/17/20 07:02	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			07/17/20 07:02	1

Lab Sample ID: MB 480-540983/4
Matrix: Water
Analysis Batch: 540983

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			07/16/20 19:59	1
TOC Result 2	ND		1.0		mg/L			07/16/20 19:59	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			07/16/20 19:59	1

Lab Sample ID: LCS 480-540983/28
Matrix: Water
Analysis Batch: 540983

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	63.5		mg/L		106	90 - 110
TOC Result 2	60.0	63.2		mg/L		105	90 - 110
Total Organic Carbon - Duplicates	60.0	63.4		mg/L		106	90 - 110

Lab Sample ID: LCS 480-540983/5
Matrix: Water
Analysis Batch: 540983

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	62.8		mg/L		105	90 - 110
TOC Result 2	60.0	62.6		mg/L		104	90 - 110
Total Organic Carbon - Duplicates	60.0	62.7		mg/L		104	90 - 110

Lab Sample ID: MB 480-541379/4
Matrix: Water
Analysis Batch: 541379

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			07/18/20 13:52	1
TOC Result 2	ND		1.0		mg/L			07/18/20 13:52	1
Total Organic Carbon - Duplicates	ND		1.0		mg/L			07/18/20 13:52	1

Lab Sample ID: LCS 480-541379/5
Matrix: Water
Analysis Batch: 541379

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	62.8		mg/L		105	90 - 110
TOC Result 2	60.0	63.7		mg/L		106	90 - 110

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

Lab Sample ID: LCS 480-541379/5
Matrix: Water
Analysis Batch: 541379

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	63.3		mg/L		105	90 - 110

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 480-541059/4
Matrix: Water
Analysis Batch: 541059

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			07/17/20 08:23	1

Lab Sample ID: LCS 480-541059/5
Matrix: Water
Analysis Batch: 541059

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	97.5		mg/L		98	90 - 110

Method: SM 4500 P E - Orthophosphate

Lab Sample ID: MB 480-540814/3
Matrix: Water
Analysis Batch: 540814

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			07/16/20 17:08	1

Lab Sample ID: LCS 480-540814/4
Matrix: Water
Analysis Batch: 540814

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	0.212		mg/L		106	90 - 110

Lab Sample ID: 480-172420-1 MS
Matrix: Water
Analysis Batch: 540814

Client Sample ID: MW-268S-20200715
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
ortho-Phosphate	0.035		0.500	0.541		mg/L		101	49 - 138

Lab Sample ID: 480-172420-5 MS
Matrix: Water
Analysis Batch: 540814

Client Sample ID: REW-11-20200715
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
ortho-Phosphate	0.14		0.500	0.655		mg/L		104	49 - 138

Method: SM 4500 P E - Orthophosphate (Continued)

Lab Sample ID: 480-172420-1 DU
Matrix: Water
Analysis Batch: 540814

Client Sample ID: MW-268S-20200715
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
ortho-Phosphate	0.035			0.0376		mg/L				8	20

Lab Sample ID: 480-172420-2 DU
Matrix: Water
Analysis Batch: 540814

Client Sample ID: MW-268M-20200715
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
ortho-Phosphate	ND			ND		mg/L				NC	20

Lab Sample ID: 480-172420-3 DU
Matrix: Water
Analysis Batch: 540814

Client Sample ID: MW-268D-20200715
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
ortho-Phosphate	0.070			0.0716		mg/L				2	20

Lab Sample ID: 480-172420-4 DU
Matrix: Water
Analysis Batch: 540814

Client Sample ID: REW-6-20200715
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
ortho-Phosphate	0.067			0.0631		mg/L				7	20

Lab Sample ID: 480-172420-5 DU
Matrix: Water
Analysis Batch: 540814

Client Sample ID: REW-11-20200715
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
ortho-Phosphate	0.14			0.135		mg/L				1	20

Lab Sample ID: 480-172420-6 DU
Matrix: Water
Analysis Batch: 540814

Client Sample ID: REW-12-20200715
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
ortho-Phosphate	ND			ND		mg/L				NC	20

GC/MS VOA

Analysis Batch: 540843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-172420-1	MW-268S-20200715	Total/NA	Water	8260C	
480-172420-2	MW-268M-20200715	Total/NA	Water	8260C	
480-172420-3	MW-268D-20200715	Total/NA	Water	8260C	
480-172420-5	REW-11-20200715	Total/NA	Water	8260C	
480-172420-6	REW-12-20200715	Total/NA	Water	8260C	
480-172420-8	TRIP BLANK	Total/NA	Water	8260C	
MB 480-540843/8	Method Blank	Total/NA	Water	8260C	
LCS 480-540843/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-540843/6	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 540988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-172420-4	REW-6-20200715	Total/NA	Water	8260C	
480-172420-7	DUP1-20200715	Total/NA	Water	8260C	
MB 480-540988/8	Method Blank	Total/NA	Water	8260C	
LCS 480-540988/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-540988/6	Lab Control Sample Dup	Total/NA	Water	8260C	

Metals

Prep Batch: 540833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-172420-1	MW-268S-20200715	Total/NA	Water	3005A	
480-172420-2	MW-268M-20200715	Total/NA	Water	3005A	
480-172420-3	MW-268D-20200715	Total/NA	Water	3005A	
480-172420-4	REW-6-20200715	Total/NA	Water	3005A	
480-172420-5	REW-11-20200715	Total/NA	Water	3005A	
480-172420-6	REW-12-20200715	Total/NA	Water	3005A	
MB 480-540833/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-540833/2-A	Lab Control Sample	Total/NA	Water	3005A	
LCSD 480-540833/24-A	Lab Control Sample Dup	Total/NA	Water	3005A	
480-172420-1 MS	MW-268S-20200715	Total/NA	Water	3005A	
480-172420-1 MSD	MW-268S-20200715	Total/NA	Water	3005A	

Analysis Batch: 541109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-172420-1	MW-268S-20200715	Total/NA	Water	6010	540833
480-172420-2	MW-268M-20200715	Total/NA	Water	6010	540833
480-172420-3	MW-268D-20200715	Total/NA	Water	6010	540833
480-172420-4	REW-6-20200715	Total/NA	Water	6010	540833
480-172420-5	REW-11-20200715	Total/NA	Water	6010	540833
480-172420-6	REW-12-20200715	Total/NA	Water	6010	540833
MB 480-540833/1-A	Method Blank	Total/NA	Water	6010	540833
LCS 480-540833/2-A	Lab Control Sample	Total/NA	Water	6010	540833
LCSD 480-540833/24-A	Lab Control Sample Dup	Total/NA	Water	6010	540833
480-172420-1 MS	MW-268S-20200715	Total/NA	Water	6010	540833
480-172420-1 MSD	MW-268S-20200715	Total/NA	Water	6010	540833

General Chemistry

Analysis Batch: 540747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-172420-1	MW-268S-20200715	Total/NA	Water	300.0	
480-172420-2	MW-268M-20200715	Total/NA	Water	300.0	
480-172420-3	MW-268D-20200715	Total/NA	Water	300.0	
480-172420-4	REW-6-20200715	Total/NA	Water	300.0	
480-172420-5	REW-11-20200715	Total/NA	Water	300.0	
480-172420-6	REW-12-20200715	Total/NA	Water	300.0	
MB 480-540747/4	Method Blank	Total/NA	Water	300.0	
LCS 480-540747/3	Lab Control Sample	Total/NA	Water	300.0	
480-172420-6 MS	REW-12-20200715	Total/NA	Water	300.0	
480-172420-6 MSD	REW-12-20200715	Total/NA	Water	300.0	

Analysis Batch: 540750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-172420-1	MW-268S-20200715	Total/NA	Water	300.0	
480-172420-2	MW-268M-20200715	Total/NA	Water	300.0	
480-172420-3	MW-268D-20200715	Total/NA	Water	300.0	
480-172420-4	REW-6-20200715	Total/NA	Water	300.0	
480-172420-5	REW-11-20200715	Total/NA	Water	300.0	
480-172420-6	REW-12-20200715	Total/NA	Water	300.0	
MB 480-540750/4	Method Blank	Total/NA	Water	300.0	
LCS 480-540750/3	Lab Control Sample	Total/NA	Water	300.0	
480-172420-6 MS	REW-12-20200715	Total/NA	Water	300.0	
480-172420-6 MSD	REW-12-20200715	Total/NA	Water	300.0	

Analysis Batch: 540814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-172420-1	MW-268S-20200715	Total/NA	Water	SM 4500 P E	
480-172420-2	MW-268M-20200715	Total/NA	Water	SM 4500 P E	
480-172420-3	MW-268D-20200715	Total/NA	Water	SM 4500 P E	
480-172420-4	REW-6-20200715	Total/NA	Water	SM 4500 P E	
480-172420-5	REW-11-20200715	Total/NA	Water	SM 4500 P E	
480-172420-6	REW-12-20200715	Total/NA	Water	SM 4500 P E	
MB 480-540814/3	Method Blank	Total/NA	Water	SM 4500 P E	
LCS 480-540814/4	Lab Control Sample	Total/NA	Water	SM 4500 P E	
480-172420-1 MS	MW-268S-20200715	Total/NA	Water	SM 4500 P E	
480-172420-5 MS	REW-11-20200715	Total/NA	Water	SM 4500 P E	
480-172420-1 DU	MW-268S-20200715	Total/NA	Water	SM 4500 P E	
480-172420-2 DU	MW-268M-20200715	Total/NA	Water	SM 4500 P E	
480-172420-3 DU	MW-268D-20200715	Total/NA	Water	SM 4500 P E	
480-172420-4 DU	REW-6-20200715	Total/NA	Water	SM 4500 P E	
480-172420-5 DU	REW-11-20200715	Total/NA	Water	SM 4500 P E	
480-172420-6 DU	REW-12-20200715	Total/NA	Water	SM 4500 P E	

Analysis Batch: 540983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-172420-1	MW-268S-20200715	Total/NA	Water	9060A	
480-172420-2	MW-268M-20200715	Total/NA	Water	9060A	
480-172420-5	REW-11-20200715	Total/NA	Water	9060A	
480-172420-6	REW-12-20200715	Total/NA	Water	9060A	
MB 480-540983/27	Method Blank	Total/NA	Water	9060A	
MB 480-540983/4	Method Blank	Total/NA	Water	9060A	

General Chemistry (Continued)

Analysis Batch: 540983 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-540983/28	Lab Control Sample	Total/NA	Water	9060A	
LCS 480-540983/5	Lab Control Sample	Total/NA	Water	9060A	

Analysis Batch: 541009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-172420-1	MW-268S-20200715	Total/NA	Water	9040C	
480-172420-2	MW-268M-20200715	Total/NA	Water	9040C	
480-172420-3	MW-268D-20200715	Total/NA	Water	9040C	
480-172420-4	REW-6-20200715	Total/NA	Water	9040C	
480-172420-5	REW-11-20200715	Total/NA	Water	9040C	
480-172420-6	REW-12-20200715	Total/NA	Water	9040C	
LCS 480-541009/1	Lab Control Sample	Total/NA	Water	9040C	

Analysis Batch: 541059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-172420-1	MW-268S-20200715	Total/NA	Water	SM 2320B	
480-172420-2	MW-268M-20200715	Total/NA	Water	SM 2320B	
480-172420-3	MW-268D-20200715	Total/NA	Water	SM 2320B	
480-172420-4	REW-6-20200715	Total/NA	Water	SM 2320B	
480-172420-5	REW-11-20200715	Total/NA	Water	SM 2320B	
480-172420-6	REW-12-20200715	Total/NA	Water	SM 2320B	
MB 480-541059/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 480-541059/5	Lab Control Sample	Total/NA	Water	SM 2320B	

Prep Batch: 541139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-172420-1	MW-268S-20200715	Total/NA	Water	Distill/Ammonia	
480-172420-2	MW-268M-20200715	Total/NA	Water	Distill/Ammonia	
480-172420-3	MW-268D-20200715	Total/NA	Water	Distill/Ammonia	
480-172420-5	REW-11-20200715	Total/NA	Water	Distill/Ammonia	
480-172420-1 MS	MW-268S-20200715	Total/NA	Water	Distill/Ammonia	

Prep Batch: 541143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-172420-6	REW-12-20200715	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 541190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-172420-1	MW-268S-20200715	Total/NA	Water	350.1	541139
480-172420-2	MW-268M-20200715	Total/NA	Water	350.1	541139
480-172420-3	MW-268D-20200715	Total/NA	Water	350.1	541139
480-172420-5	REW-11-20200715	Total/NA	Water	350.1	541139
480-172420-6	REW-12-20200715	Total/NA	Water	350.1	541143
MB 480-541190/17	Method Blank	Total/NA	Water	350.1	
MB 480-541190/45	Method Blank	Total/NA	Water	350.1	
MB 480-541190/73	Method Blank	Total/NA	Water	350.1	
LCS 480-541190/18	Lab Control Sample	Total/NA	Water	350.1	
LCS 480-541190/46	Lab Control Sample	Total/NA	Water	350.1	
LCS 480-541190/74	Lab Control Sample	Total/NA	Water	350.1	
480-172420-1 MS	MW-268S-20200715	Total/NA	Water	350.1	541139

QC Association Summary

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

Job ID: 480-172420-1

General Chemistry

Analysis Batch: 541379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-172420-3	MW-268D-20200715	Total/NA	Water	9060A	
480-172420-4	REW-6-20200715	Total/NA	Water	9060A	
MB 480-541379/4	Method Blank	Total/NA	Water	9060A	
LCS 480-541379/5	Lab Control Sample	Total/NA	Water	9060A	

Prep Batch: 541536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-172420-4	REW-6-20200715	Total/NA	Water	Distill/Ammonia	

Analysis Batch: 541561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-172420-4	REW-6-20200715	Total/NA	Water	350.1	541536
MB 480-541561/17	Method Blank	Total/NA	Water	350.1	
LCS 480-541561/18	Lab Control Sample	Total/NA	Water	350.1	

Client Sample ID: MW-268S-20200715

Lab Sample ID: 480-172420-1

Date Collected: 07/15/20 08:50

Matrix: Water

Date Received: 07/16/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	540843	07/17/20 13:18	CRL	TAL BUF
Total/NA	Prep	3005A			540833	07/17/20 11:33	ADM	TAL BUF
Total/NA	Analysis	6010		1	541109	07/17/20 21:26	LMH	TAL BUF
Total/NA	Analysis	300.0		5	540747	07/16/20 15:09	IMZ	TAL BUF
Total/NA	Analysis	300.0		5	540750	07/16/20 15:09	IMZ	TAL BUF
Total/NA	Prep	Distill/Ammonia			541139	07/20/20 07:00	CLT	TAL BUF
Total/NA	Analysis	350.1		1	541190	07/20/20 11:05	CLT	TAL BUF
Total/NA	Analysis	9040C		1	541009	07/18/20 10:27	JRF	TAL BUF
Total/NA	Analysis	9060A		500	540983	07/17/20 14:31	CLA	TAL BUF
Total/NA	Analysis	SM 2320B		1	541059	07/17/20 09:16	BEF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	540814	07/16/20 17:08	CSS	TAL BUF

Client Sample ID: MW-268M-20200715

Lab Sample ID: 480-172420-2

Date Collected: 07/15/20 09:45

Matrix: Water

Date Received: 07/16/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	540843	07/17/20 13:42	CRL	TAL BUF
Total/NA	Prep	3005A			540833	07/17/20 11:33	ADM	TAL BUF
Total/NA	Analysis	6010		1	541109	07/17/20 21:45	LMH	TAL BUF
Total/NA	Analysis	300.0		2	540747	07/16/20 15:52	IMZ	TAL BUF
Total/NA	Analysis	300.0		2	540750	07/16/20 15:52	IMZ	TAL BUF
Total/NA	Prep	Distill/Ammonia			541139	07/20/20 07:00	CLT	TAL BUF
Total/NA	Analysis	350.1		1	541190	07/20/20 11:10	CLT	TAL BUF
Total/NA	Analysis	9040C		1	541009	07/18/20 10:30	JRF	TAL BUF
Total/NA	Analysis	9060A		1	540983	07/17/20 14:59	CLA	TAL BUF
Total/NA	Analysis	SM 2320B		1	541059	07/17/20 09:24	BEF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	540814	07/16/20 17:08	CSS	TAL BUF

Client Sample ID: MW-268D-20200715

Lab Sample ID: 480-172420-3

Date Collected: 07/15/20 10:30

Matrix: Water

Date Received: 07/16/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		8	540843	07/17/20 14:06	CRL	TAL BUF
Total/NA	Prep	3005A			540833	07/17/20 11:33	ADM	TAL BUF
Total/NA	Analysis	6010		1	541109	07/17/20 21:49	LMH	TAL BUF
Total/NA	Analysis	300.0		5	540747	07/16/20 16:06	IMZ	TAL BUF
Total/NA	Analysis	300.0		5	540750	07/16/20 16:06	IMZ	TAL BUF
Total/NA	Prep	Distill/Ammonia			541139	07/20/20 07:00	CLT	TAL BUF
Total/NA	Analysis	350.1		1	541190	07/20/20 11:13	CLT	TAL BUF
Total/NA	Analysis	9040C		1	541009	07/18/20 10:33	JRF	TAL BUF
Total/NA	Analysis	9060A		40	541379	07/18/20 17:36	CLA	TAL BUF

Client Sample ID: MW-268D-20200715

Lab Sample ID: 480-172420-3

Date Collected: 07/15/20 10:30

Matrix: Water

Date Received: 07/16/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1	541059	07/17/20 09:37	BEF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	540814	07/16/20 17:08	CSS	TAL BUF

Client Sample ID: REW-6-20200715

Lab Sample ID: 480-172420-4

Date Collected: 07/15/20 12:10

Matrix: Water

Date Received: 07/16/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	540988	07/18/20 12:12	WJD	TAL BUF
Total/NA	Prep	3005A			540833	07/17/20 11:33	ADM	TAL BUF
Total/NA	Analysis	6010		1	541109	07/17/20 22:04	LMH	TAL BUF
Total/NA	Analysis	300.0		5	540747	07/16/20 16:21	IMZ	TAL BUF
Total/NA	Analysis	300.0		5	540750	07/16/20 16:21	IMZ	TAL BUF
Total/NA	Prep	Distill/Ammonia			541536	07/22/20 07:00	CLT	TAL BUF
Total/NA	Analysis	350.1		5	541561	07/22/20 11:08	CLT	TAL BUF
Total/NA	Analysis	9040C		1	541009	07/18/20 10:36	JRF	TAL BUF
Total/NA	Analysis	9060A		1	541379	07/18/20 18:04	CLA	TAL BUF
Total/NA	Analysis	SM 2320B		1	541059	07/17/20 09:46	BEF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	540814	07/16/20 17:08	CSS	TAL BUF

Client Sample ID: REW-11-20200715

Lab Sample ID: 480-172420-5

Date Collected: 07/15/20 11:13

Matrix: Water

Date Received: 07/16/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	540843	07/17/20 14:54	CRL	TAL BUF
Total/NA	Prep	3005A			540833	07/17/20 11:33	ADM	TAL BUF
Total/NA	Analysis	6010		1	541109	07/17/20 22:08	LMH	TAL BUF
Total/NA	Analysis	300.0		10	540747	07/16/20 16:35	IMZ	TAL BUF
Total/NA	Analysis	300.0		10	540750	07/16/20 16:35	IMZ	TAL BUF
Total/NA	Prep	Distill/Ammonia			541139	07/20/20 07:00	CLT	TAL BUF
Total/NA	Analysis	350.1		1	541190	07/20/20 11:53	CLT	TAL BUF
Total/NA	Analysis	9040C		1	541009	07/18/20 10:39	JRF	TAL BUF
Total/NA	Analysis	9060A		100	540983	07/17/20 16:23	CLA	TAL BUF
Total/NA	Analysis	SM 2320B		1	541059	07/17/20 10:44	BEF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	540814	07/16/20 17:08	CSS	TAL BUF

Client Sample ID: REW-12-20200715

Lab Sample ID: 480-172420-6

Date Collected: 07/15/20 12:55

Matrix: Water

Date Received: 07/16/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	540843	07/17/20 15:17	CRL	TAL BUF

Lab Chronicle

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

Job ID: 480-172420-1

Client Sample ID: REW-12-20200715

Lab Sample ID: 480-172420-6

Date Collected: 07/15/20 12:55

Matrix: Water

Date Received: 07/16/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			540833	07/17/20 11:33	ADM	TAL BUF
Total/NA	Analysis	6010		1	541109	07/17/20 22:12	LMH	TAL BUF
Total/NA	Analysis	300.0		2	540747	07/16/20 16:49	IMZ	TAL BUF
Total/NA	Analysis	300.0		2	540750	07/16/20 16:49	IMZ	TAL BUF
Total/NA	Prep	Distill/Ammonia			541143	07/20/20 07:00	CLT	TAL BUF
Total/NA	Analysis	350.1		2	541190	07/20/20 13:40	CLT	TAL BUF
Total/NA	Analysis	9040C		1	541009	07/18/20 10:42	JRF	TAL BUF
Total/NA	Analysis	9060A		1	540983	07/17/20 16:51	CLA	TAL BUF
Total/NA	Analysis	SM 2320B		1	541059	07/17/20 10:52	BEF	TAL BUF
Total/NA	Analysis	SM 4500 P E		1	540814	07/16/20 17:08	CSS	TAL BUF

Client Sample ID: DUP1-20200715

Lab Sample ID: 480-172420-7

Date Collected: 07/15/20 00:00

Matrix: Water

Date Received: 07/16/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		8	540988	07/18/20 12:35	WJD	TAL BUF

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-172420-8

Date Collected: 07/15/20 00:00

Matrix: Water

Date Received: 07/16/20 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	540843	07/17/20 16:04	CRL	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Innovative Engineering Solutions, Inc
Job ID: 480-172420-1
Project/Site: IDS Wayland

Laboratory: Eurofins TestAmerica, Buffalo

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-07-21
California	State	2931	04-01-20 *
Connecticut	State	PH-0568	09-30-20
Florida	NELAP	E87672	07-01-21
Georgia	State	10026 (NY)	04-01-21
Georgia	State Program	N/A	03-31-09 *
Georgia (DW)	State	956	04-01-21
Illinois	NELAP	200003	09-30-20
Iowa	State	374	02-28-21
Kansas	NELAP	E-10187	02-01-21
Kentucky (DW)	State	90029	12-31-20
Kentucky (UST)	State	30	04-01-21
Kentucky (WW)	State	KY90029	12-31-20
Louisiana	NELAP	02031	07-01-21
Maine	State	NY00044	12-04-20
Maryland	State	294	04-01-21
Massachusetts	State	M-NY044	07-01-21
Michigan	State	9937	03-31-20 *
Michigan	State Program	9937	04-01-09 *
Minnesota	NELAP	1524384	12-31-20
New Hampshire	NELAP	2337	11-18-20
New Jersey	NELAP	NY455	08-01-20
New York	NELAP	10026	04-02-21
North Dakota	State	R-176	04-01-21
Oklahoma	State	9421	09-01-20
Oregon	NELAP	NY200003	06-11-21
Pennsylvania	NELAP	68-00281	07-31-20
Rhode Island	State	LAO00328	12-30-20
Tennessee	State	02970	04-01-21
Texas	NELAP	T104704412-18-10	08-01-20
USDA	US Federal Programs	P330-18-00039	02-06-21
Virginia	NELAP	460185	09-14-20
Washington	State	C784	02-11-21
Wisconsin	State	998310390	08-31-20

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

Method Summary

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

Job ID: 480-172420-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	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
3005A	Preparation, Total Metals	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF
Distill/Ammonia	Distillation, Ammonia	None	TAL BUF

Protocol References:

MA DEP = Massachusetts Department Of Environmental Protection

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

None = None

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

Sample Summary

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

Job ID: 480-172420-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-172420-1	MW-268S-20200715	Water	07/15/20 08:50	07/16/20 08:00	
480-172420-2	MW-268M-20200715	Water	07/15/20 09:45	07/16/20 08:00	
480-172420-3	MW-268D-20200715	Water	07/15/20 10:30	07/16/20 08:00	
480-172420-4	REW-6-20200715	Water	07/15/20 12:10	07/16/20 08:00	
480-172420-5	REW-11-20200715	Water	07/15/20 11:13	07/16/20 08:00	
480-172420-6	REW-12-20200715	Water	07/15/20 12:55	07/16/20 08:00	
480-172420-7	DUP1-20200715	Water	07/15/20 00:00	07/16/20 08:00	
480-172420-8	TRIP BLANK	Water	07/15/20 00:00	07/16/20 08:00	

Login Sample Receipt Checklist

Client: Innovative Engineering Solutions, Inc

Job Number: 480-172420-1

Login Number: 172420
List Number: 1
Creator: Yeager, Brian A

List Source: Eurofins 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	3.3 #1 ICE
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	INNOVATIVE
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

TestAmerica Westfield
501 Southampton Road
Westfield MA 01085
Phone: (413) 572-4000 Fax: (303) 46??24

Boston #215

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

Boston #215 Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information:	Sample Collector's Name (Please Print Neatly): Dave Jones	Lab PM:	COC No: 37936
Client Contact: Dave Falatko	Sample Collector's Phone: 508-B404-3191	E-Mail:	Page: 1 of 1
Company: Innovative Engineering Solutions Inc		Lab COC Barcode Label	Job #:
Address: 37 Pearl St	Due Date Requested: 7/22/20		
City: Braintree	Turnaround Time (TAT) Requested (business days): 5 days		
State and Zip: MA 02184	Quote # or Project #:		
Client's Phone: ~~508~~ 807-767-7331	PO #: RA-008		
Client's Contact Email: d.falatko@IESI online.com	WO #:		
Client's Project Name/Number: Raytheon Wayland RA-008	PWS ID #:		
Sample Collection Site Name & Location: Wayland MA			

Analysis Requested

Analysis columns: 8260C CVOC; 9060A TOC; 6010MCP Total Iron; 350.1 NH3; 2320B Alkalinity; 4500-O/P ortho Phos; 353.2 Nitrate/Nitrite; 300.0 SO4, Cl; 9040C pH

Sample Identification	Sample Collection Date (MM/DD/YY)	Sample Collection Time (24 Hour Clock)	Sample Type: C=Comp G=Grab	Matrix Type **	8260C CVOC	9060A TOC	6010MCP Total Iron	350.1 NH3	2320B Alkalinity	4500-O/P ortho Phos	353.2 Nitrate/Nitrite	300.0 SO4, Cl	Total Number of Containers	Special Instructions & Notes:
Preservation Codes =>					A	A	D	S	N	N		N		
MW-2LBS-20200715	7/15/20	0850	G	W	X	X	X	X	X	X		X	10	GW-3 Requirements
MW-2L8M-20200715	7/13/20	0945	G	W	X	X	X	X	X	X		X	10	
MW-2L8D-20200715	7/13/20	1030	G	W	X	X	X	X	X	X		X	10	
REW-6-20200715	7/15/20	1210	G	W	X	X	X	X	X	X		X	10	
REW-11-20200715	7/15/20	1115	G	W	X	X	X	X	X	X		X	10	
REW-12-20200715	7/15/20	1255	G	W	X	X	X	X	X	X		X	10	
Dupl-20200715	7/15/20	—	G	W	X								3	
Trip Blank	—	—	—	W	X								2	

Preservation Codes:
A - Hydrochloric Acid
B - Sodium Hydroxide
C - Zinc Acetate
D - Nitric Acid
E - Sodium Bisulfite
F - Methanol
J - Deionized Water
M - Hexane
N - No Preservative
P - Sodium Sulfate
Q - Sodium Sulfite
... Sulfate

480-172420 Chain of Custody

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.

Possible Hazard Identification (please check off each that may apply): [X] 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 [X] 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]	7/15/20 1335	IESI	To Test America Lock Box		
[signature]	7/15/20 1600	TA			
			[signature] BDS	7/16/20 0800	TAB

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.3 #1

WI-QA-010 rev 8

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

ANALYTICAL REPORT

Lab Number:	L2029934
Client:	Innovative Engineering Solutions, Inc. 37 Pearl Street Braintree, MA 02148
ATTN:	Dave Falatko
Phone:	(207) 767-7331
Project Name:	RAYTHEON WAYLAND
Project Number:	RA-008
Report Date:	08/10/20

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: RAYTHEON WAYLAND
Project Number: RA-008

Lab Number: L2029934
Report Date: 08/10/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2029934-01	MW-268S-20200715	WATER	WAYLAND, MA	07/15/20 08:50	07/15/20
L2029934-02	MW-268M-20200715	WATER	WAYLAND, MA	07/15/20 09:45	07/15/20
L2029934-03	MW-268D-20200715	WATER	WAYLAND, MA	07/15/20 10:30	07/15/20
L2029934-04	REW-6-20200715	WATER	WAYLAND, MA	07/15/20 12:10	07/15/20
L2029934-05	REW-11-20200715	WATER	WAYLAND, MA	07/15/20 11:15	07/15/20
L2029934-06	REW-12-20200715	WATER	WAYLAND, MA	07/15/20 12:55	07/15/20

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L2029934
Project Number:	RA-008	**Report Date:**	08/10/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative Date: 08/10/20

ORGANICS

VOLATILES

Project Name: RAYTHEON WAYLAND
Lab Number: L2029934
Project Number: RA-008
Report Date: 08/10/20

SAMPLE RESULTS

Lab ID: L2029934-01
Client ID: MW-268S-20200715
Sample Location: WAYLAND, MA
Date Collected: 07/15/20 08:50
Date Received: 07/15/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/16/20 17:12
Analyst: AW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	25400	E	ug/l	2.00	--	1	A
Ethene	7.23		ug/l	0.500	--	1	A
Ethane	6.31		ug/l	0.500	--	1	A

Project Name: RAYTHEON WAYLAND
Lab Number: L2029934
Project Number: RA-008
Report Date: 08/10/20

SAMPLE RESULTS

Lab ID: L2029934-01 D
Client ID: MW-268S-20200715
Sample Location: WAYLAND, MA

Date Collected: 07/15/20 08:50
Date Received: 07/15/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/28/20 13:54
Analyst: AW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	14800		ug/l	4.00	--	2	A

Project Name: RAYTHEON WAYLAND
Lab Number: L2029934
Project Number: RA-008
Report Date: 08/10/20

SAMPLE RESULTS

Lab ID: L2029934-02
Client ID: MW-268M-20200715
Sample Location: WAYLAND, MA

Date Collected: 07/15/20 09:45
Date Received: 07/15/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/16/20 17:35
Analyst: AW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	41600	E	ug/l	2.00	--	1	A
Ethene	5.14		ug/l	0.500	--	1	A
Ethane	16.2		ug/l	0.500	--	1	A

Project Name: RAYTHEON WAYLAND
Lab Number: L2029934
Project Number: RA-008
Report Date: 08/10/20

SAMPLE RESULTS

Lab ID: L2029934-02 D
Client ID: MW-268M-20200715
Sample Location: WAYLAND, MA

Date Collected: 07/15/20 09:45
Date Received: 07/15/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/28/20 14:11
Analyst: AW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	31700		ug/l	4.00	--	2	A

Project Name: RAYTHEON WAYLAND
Lab Number: L2029934
Project Number: RA-008
Report Date: 08/10/20

SAMPLE RESULTS

Lab ID: L2029934-03
Client ID: MW-268D-20200715
Sample Location: WAYLAND, MA

Date Collected: 07/15/20 10:30
Date Received: 07/15/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/16/20 17:58
Analyst: AW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	23000	E	ug/l	2.00	--	1	A
Ethene	3.13		ug/l	0.500	--	1	A
Ethane	1.68		ug/l	0.500	--	1	A

Project Name: RAYTHEON WAYLAND
Lab Number: L2029934
Project Number: RA-008
Report Date: 08/10/20

SAMPLE RESULTS

Lab ID: L2029934-03 D
Client ID: MW-268D-20200715
Sample Location: WAYLAND, MA

Date Collected: 07/15/20 10:30
Date Received: 07/15/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/28/20 14:29
Analyst: AW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	9660		ug/l	4.00	--	2	A

Project Name: RAYTHEON WAYLAND
Lab Number: L2029934
Project Number: RA-008
Report Date: 08/10/20

SAMPLE RESULTS

Lab ID: L2029934-04 D
Client ID: REW-6-20200715
Sample Location: WAYLAND, MA

Date Collected: 07/15/20 12:10
Date Received: 07/15/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/28/20 14:47
Analyst: AW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	25800		ug/l	4.00	--	2	A
Ethene	ND		ug/l	1.00	--	2	A
Ethane	3.20		ug/l	1.00	--	2	A

Project Name: RAYTHEON WAYLAND
Lab Number: L2029934
Project Number: RA-008
Report Date: 08/10/20

SAMPLE RESULTS

Lab ID: L2029934-05 D
Client ID: REW-11-20200715
Sample Location: WAYLAND, MA

Date Collected: 07/15/20 11:15
Date Received: 07/15/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/28/20 15:05
Analyst: AW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	29000		ug/l	4.00	--	2	A
Ethene	2.72		ug/l	1.00	--	2	A
Ethane	17.5		ug/l	1.00	--	2	A

Project Name: RAYTHEON WAYLAND
Lab Number: L2029934
Project Number: RA-008
Report Date: 08/10/20

SAMPLE RESULTS

Lab ID: L2029934-06 D
Client ID: REW-12-20200715
Sample Location: WAYLAND, MA

Date Collected: 07/15/20 12:55
Date Received: 07/15/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 117,-
Analytical Date: 07/28/20 15:23
Analyst: AW

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Dissolved Gases by GC - Mansfield Lab							
Methane	25000		ug/l	4.00	--	2	A
Ethene	ND		ug/l	1.00	--	2	A
Ethane	6.71		ug/l	1.00	--	2	A

Project Name: RAYTHEON WAYLAND **Lab Number:** L2029934

Project Number: RA-008 **Report Date:** 08/10/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 117,-
Analytical Date: 07/28/20 09:26
Analyst: AW

Parameter	Result	Qualifier	Units	RL	MDL	
Dissolved Gases by GC - Mansfield Lab for sample(s): 01-03 Batch: WG1392734-11						
Methane	ND		ug/l	2.00	--	A
Ethene	ND		ug/l	0.500	--	A
Ethane	ND		ug/l	0.500	--	A

Project Name: RAYTHEON WAYLAND **Lab Number:** L2029934

Project Number: RA-008 **Report Date:** 08/10/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 117,-
Analytical Date: 07/16/20 10:33
Analyst: AW

Parameter	Result	Qualifier	Units	RL	MDL	
Dissolved Gases by GC - Mansfield Lab for sample(s): 01-03 Batch: WG1392734-3						
Methane	ND		ug/l	2.00	--	A
Ethene	ND		ug/l	0.500	--	A
Ethane	ND		ug/l	0.500	--	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008
Lab Number: L2029934
Report Date: 08/10/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 117,-
Analytical Date: 07/28/20 09:26
Analyst: AW

Parameter	Result	Qualifier	Units	RL	MDL	
Dissolved Gases by GC - Mansfield Lab for sample(s): 04-06 Batch: WG1394936-3						
Methane	ND		ug/l	2.00	--	A
Ethene	ND		ug/l	0.500	--	A
Ethane	ND		ug/l	0.500	--	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: RA-008

Lab Number: L2029934

Report Date: 08/10/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Dissolved Gases by GC - Mansfield Lab Associated sample(s): 01-03 Batch: WG1392734-10									
Methane	106		-		80-120	-		25	A
Ethene	95		-		80-120	-		25	A
Ethane	93		-		80-120	-		25	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: RA-008

Lab Number: L2029934

Report Date: 08/10/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Dissolved Gases by GC - Mansfield Lab Associated sample(s): 01-03 Batch: WG1392734-2									
Methane	118		-		80-120	-		25	A
Ethene	92		-		80-120	-		25	A
Ethane	87		-		80-120	-		25	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: RAYTHEON WAYLAND

Project Number: RA-008

Lab Number: L2029934

Report Date: 08/10/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Dissolved Gases by GC - Mansfield Lab Associated sample(s): 04-06 Batch: WG1394936-2									
Methane	106		-		80-120	-		25	A
Ethene	95		-		80-120	-		25	A
Ethane	93		-		80-120	-		25	A

Project Name: RAYTHEON WAYLAND
Project Number: RA-008

Lab Number: L2029934
Report Date: 08/10/20

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2029934-01A	20ml Vial HCl preserved	A	NA		2.5	Y	Absent		DISSGAS(14)
L2029934-01B	20ml Vial HCl preserved	A	NA		2.5	Y	Absent		DISSGAS(14)
L2029934-02A	20ml Vial HCl preserved	A	NA		2.5	Y	Absent		DISSGAS(14)
L2029934-02B	20ml Vial HCl preserved	A	NA		2.5	Y	Absent		DISSGAS(14)
L2029934-03A	20ml Vial HCl preserved	A	NA		2.5	Y	Absent		DISSGAS(14)
L2029934-03B	20ml Vial HCl preserved	A	NA		2.5	Y	Absent		DISSGAS(14)
L2029934-04A	20ml Vial HCl preserved	A	NA		2.5	Y	Absent		DISSGAS(14)
L2029934-04B	20ml Vial HCl preserved	A	NA		2.5	Y	Absent		DISSGAS(14)
L2029934-05A	20ml Vial HCl preserved	A	NA		2.5	Y	Absent		DISSGAS(14)
L2029934-05B	20ml Vial HCl preserved	A	NA		2.5	Y	Absent		DISSGAS(14)
L2029934-06A	20ml Vial HCl preserved	A	NA		2.5	Y	Absent		DISSGAS(14)
L2029934-06B	20ml Vial HCl preserved	A	NA		2.5	Y	Absent		DISSGAS(14)

*Values in parentheses indicate holding time in days

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L2029934
Project Number:	RA-008	**Report Date:**	08/10/20

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: Data Usability Report

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L2029934
Project Number:	RA-008	**Report Date:**	08/10/20

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration. (DoD and NYSDEC Part 375 PFAS only.)

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration

Report Format: Data Usability Report

Project Name:	RAYTHEON WAYLAND	**Lab Number:**	L2029934
Project Number:	RA-008	**Report Date:**	08/10/20

Data Qualifiers

Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: Data Usability Report

REFERENCES

117 Technical Guidance for the Natural Attenuation Indicators: Methane, Ethane, and Ethene, EPA-NE, Revision 1, February 21, 2002 and Sample Preparation & Calculations for Dissolved Gas Analysis in Water Samples using a GC Headspace Equilibration Technique, EPA RSKSOP-175, Revision 2, May 2004.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
EPA TO-12 Non-methane organics
EPA 3C Fixed gases
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 7/15/20

ALPHA Job #: L2029934

ALPHA ANALYTICAL
8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Client Information

Client: Innovative Engineering Solutions Inc
Address: 37 Pond St
Braintree MA 02184
Phone: 508-668-0033
Email: d.falatko@iesolutions.com

Project Information

Project Name: Raytheon Wayland
Project Location: Wayland MA
Project #: RA-008
Project Manager: Dave Falatko
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!) 5 days
Date Due: 7/22/20

Additional Project Information:

Report Information - Data Deliverables

☐ ADEx ☒ EMAIL

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

☐ Yes ☒ No MA MCP Analytical Methods ☐ Yes ☒ No CT RCP Analytical Methods
☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☒ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☒ No NPDES RGP
☒ Other State /Fed Program _____ Criteria GW-3

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	ANALYSIS: Dissolved Gases (Ethane, Ethene, Methane)	SAMPLE INFO: Filtration ☐ Field ☐ Lab to do; Preservation ☐ Lab to do	Sample Comments	TOTAL # BOTTLES
29934-01	MW-268S-20200715	7/15/20	0850	GW	DJ	X			2
-02	MW-268M-20200715	7/15/20	0945	GW	DJ	X			2
-03	MW-268D-20200715	7/15/20	1030	GW	DJ	X			2
-04	REW-6-20200715	7/15/20	1210	GW	DJ	X			2
-05	REW-11-20200715	7/15/20	1115	GW	DJ	X			2
-06	REW 12-20200715	7/15/20	1255	GW	DJ	X			2
	Temp Blnks	—	—	—	—	B			1

Container Type
P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

	Container Type	Preservative
		B

Relinquished By:	Date/Time	Received By:	Date/Time
	7/15/20 1920	AAC	7/16/20 14:20

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)