**Environmental Resources Management**

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

http://www.erm.com

30 August 2017
Reference: 0377766

Mr. David Costello
National Development
2310 Washington Street
Newton Lower Falls, MA 02462

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

Dear Mr. Costello:

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

ERM collected groundwater samples from thirty eight (38) monitoring wells located on National Development property in August 2017. These samples were submitted to TestAmerica Laboratories, Inc. of Amherst, NY and Burlington, VT for analysis. All analytical results are attached to this letter.

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

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

Sincerely,

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

Lyndsey Colburn, P.G.
*Principal Consultant*

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

cc: Jonathan Hone, Raytheon Company
PIP Repositories

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

**BWSC123**

This Notice is Related to:
Release Tracking Number

3 - 13302

# NOTICE OF ENVIRONMENTAL SAMPLING

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

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

1. Street Address: 430 Boston Post Road

City/Town: Wayland Zip Code: 01778

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

1. Name: 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: Louis J. Burkhardt

Street Address: 50 Apple Hill Drive

City/Town: Tewksbury Zip Code: 01876

Telephone: (978) 858-1885 Email: louis_j_burkhardt@raytheon.com

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

**BWSC123**

This Notice is Related to:
Release Tracking Number

3 - 13302

## NOTICE OF ENVIRONMENTAL SAMPLING

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

### MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

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

### THE PERSON(S) PROVIDING THIS NOTICE

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

### PURPOSE OF THIS NOTICE

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

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

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

### FOR MORE INFORMATION

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

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

TestAmerica Job ID: 480-122520-1
Client Project/Site: IDS Wayland

For:
ERM-Northeast
One Beacon Steet
5th Floor
Boston, Massachusetts 02108

Attn: Lyndsey Colburn

Denise L Giglia

*Authorized for release by:*
*8/24/2017 12:12:32 PM*
Denise Giglia, Project Management Assistant II
denise.giglia@testamericainc.com

Designee for

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

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## Qualifiers

### GC/MS VOA

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

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | 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) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (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) |

## Job ID: 480-122520-1

### Laboratory: TestAmerica Buffalo

**Narrative**

**Job Narrative**
**480-122520-1**

**Receipt**
The samples were received on 8/10/2017 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0º C.

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

Method 8260C: The continuing calibration verification (CCV) for 1,4-Dioxane, Chloromethane, Carbon tetrachloride, Dichlorodifluoromethane and sec-Butylbenzene associated with batch 480-373038 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following samples were affected : MW-1020-20170809-01 (480-122520-1), MW-1009-20170809-01 (480-122520-2), MW-1026D-20170809-01 (480-122520-3), MW-1015D-20170809-01 (480-122520-4), MW-1022-20170809-01 (480-122520-5), MW-1030-20170809-01 (480-122520-6), MW-1031-20170809-01 (480-122520-7), MW-1032-20170809-01 (480-122520-8), MW-1028-20170809-01 (480-122520-9), MW-1027-20170809-01 (480-122520-10), MW-1033-20170809-01 (480-122520-11), MW-1013-20170809-01 (480-122520-12), MW-1014-20170809-01 (480-122520-13), MW-1008-20170809-01 (480-122520-14), MW-1005-20170809-01 (480-122520-15), MW-1004-20170809-01 (480-122520-16), MW-1003-20170809-01 (480-122520-17), MW-1002B-20170809-01 (480-122520-18) and MW-1001M-20170809-01 (480-122520-19).

Method 8260C: The laboratory control sample (LCS) for batch 480-373038 exceeded control limits for the following analytes: 4-Chlorotoluene. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : MW-1020-20170809-01 (480-122520-1), MW-1009-20170809-01 (480-122520-2), MW-1026D-20170809-01 (480-122520-3), MW-1015D-20170809-01 (480-122520-4), MW-1022-20170809-01 (480-122520-5), MW-1030-20170809-01 (480-122520-6), MW-1031-20170809-01 (480-122520-7), MW-1032-20170809-01 (480-122520-8), MW-1028-20170809-01 (480-122520-9), MW-1027-20170809-01 (480-122520-10), MW-1033-20170809-01 (480-122520-11), MW-1013-20170809-01 (480-122520-12), MW-1014-20170809-01 (480-122520-13), MW-1008-20170809-01 (480-122520-14), MW-1005-20170809-01 (480-122520-15), MW-1004-20170809-01 (480-122520-16), MW-1003-20170809-01 (480-122520-17), MW-1002B-20170809-01 (480-122520-18) and MW-1001M-20170809-01 (480-122520-19).

Method 8260C: The laboratory control sample (LCS) for batch 480-373038 exceeded control limits for the following analyte: 2-Butanone , 2-Hexanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate, n-butyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were affected : MW-1020-20170809-01 (480-122520-1), MW-1009-20170809-01 (480-122520-2), MW-1026D-20170809-01 (480-122520-3), MW-1015D-20170809-01 (480-122520-4), MW-1022-20170809-01 (480-122520-5), MW-1030-20170809-01 (480-122520-6), MW-1031-20170809-01 (480-122520-7), MW-1032-20170809-01 (480-122520-8), MW-1028-20170809-01 (480-122520-9), MW-1027-20170809-01 (480-122520-10), MW-1033-20170809-01 (480-122520-11), MW-1013-20170809-01 (480-122520-12), MW-1014-20170809-01 (480-122520-13), MW-1008-20170809-01 (480-122520-14), MW-1005-20170809-01 (480-122520-15), MW-1004-20170809-01 (480-122520-16), MW-1003-20170809-01 (480-122520-17), MW-1002B-20170809-01 (480-122520-18) and MW-1001M-20170809-01 (480-122520-19).

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-1037-20170809-01 (480-122520-29). Elevated reporting limits (RLs) are provided.

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-373188 exceeded control limits for the following analytes: Chloromethane. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : MW-1001B-20170809-01 (480-122520-20), MW-1034-20170809-01 (480-122520-23), DUP-004-20170809-01 (480-122520-24), MW-1018-20170809-01 (480-122520-25), MW-1035-20170809-01 (480-122520-26), MW-1036-20170809-01 (480-122520-27), DUP-005-20170809-01 (480-122520-28), MW-1037-20170809-01 (480-122520-29), DUP-002-20170809-01 (480-122520-31), DUP-003-20170809-01 (480-122520-32),

## Job ID: 480-122520-1 (Continued)

### Laboratory: TestAmerica Buffalo (Continued)

DUP-001-20170809-01 (480-122520-33), MW-1024D-20170809-01 (480-122520-34), MW-1023-20170809-01 (480-122520-35), MW-1019B-20170809-01 (480-122520-36), MW-1010D-20170809-01 (480-122520-37), MW-1010M-20170809-01 (480-122520-38), MW-1006-20170809-01 (480-122520-39) and MW-1016D-20170809-01 (480-122520-40).

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-373188 exceeded control limits for the following analyte: 2-Butanone and 2-Hexanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate and n-butyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were affected: MW-1001B-20170809-01 (480-122520-20), MW-1034-20170809-01 (480-122520-23), DUP-004-20170809-01 (480-122520-24), MW-1018-20170809-01 (480-122520-25), MW-1035-20170809-01 (480-122520-26), MW-1036-20170809-01 (480-122520-27), DUP-005-20170809-01 (480-122520-28), MW-1037-20170809-01 (480-122520-29), DUP-002-20170809-01 (480-122520-31), DUP-003-20170809-01 (480-122520-32), DUP-001-20170809-01 (480-122520-33), MW-1024D-20170809-01 (480-122520-34), MW-1023-20170809-01 (480-122520-35), MW-1019B-20170809-01 (480-122520-36), MW-1010D-20170809-01 (480-122520-37), MW-1010M-20170809-01 (480-122520-38), MW-1006-20170809-01 (480-122520-39) and MW-1016D-20170809-01 (480-122520-40).

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-373193 exceeded control limits for the following analytes: Bromoform and Tetrahydrofuran MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : MW-1025M-20170809-01 (480-122520-21) and MW-1025D-20170809-01 (480-122520-22).

Method 8260C: The continuing calibration verification (CCV) for Bromoform and Dichlorodifluoromethane. associated with batch 480-373193 recovered outside the MCP control limit criteria. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference. Difficult analytes are allowed to be outside the 20% difference but not over 60% difference. The following samples were affected : MW-1025M-20170809-01 (480-122520-21) and MW-1025D-20170809-01 (480-122520-22).

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-1037-20170809-01 (480-122520-29). Elevated reporting limits (RLs) are provided.

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-373250 exceeded control limits for the following analyte: Tetrahydrofuran. Unlike the calibration standards, this is due to the coelution with Methacrylonitrile in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following samples were affected : MW-1037-20170809-01 (480-122520-29), MW-1038-20170809-01 (480-122520-30), MW-1017D-20170809-01 (480-122520-41), MW-1011-20170809-01 (480-122520-42), MW-1039-20170809-01 (480-122520-43) and TB-001-20170809-01 (480-122520-44).

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-373250 exceeded control limits for the following analytes: Bromoform. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following samples were affected : MW-1037-20170809-01 (480-122520-29), MW-1038-20170809-01 (480-122520-30), MW-1017D-20170809-01 (480-122520-41), MW-1011-20170809-01 (480-122520-42), MW-1039-20170809-01 (480-122520-43) and TB-001-20170809-01 (480-122520-44).

Method 8260C: The initial calibration curve RSD was greater than the 20% acceptance criteria for Bromoform , however the RSD was less than 40%. MCP protocol allows for 10% of the target compounds to be outside of the 20% RSD limit for the calibration provided the RSDs do not exceed 40%. The following samples are impacted: MW-1037-20170809-01 (480-122520-29), MW-1038-20170809-01 (480-122520-30), MW-1017D-20170809-01 (480-122520-41), MW-1011-20170809-01 (480-122520-42), MW-1039-20170809-01 (480-122520-43) and TB-001-20170809-01 (480-122520-44).

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 #: **480-122520**

Project Location: **IDS Wayland** RTN:

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

**480-122520 [1-44]**

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).<br>b. APH and TO-15 Methods only: Was the complete analyte list reported for each method? | ☐ Yes ☐ No<br>☐ Yes ☐ No |
| **F** | Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)? | ■ Yes ☐ No |

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

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

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

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

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

***I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.***

Signature: Denise L Giglia Position: Project Manager Assistant II

Printed Name: Denise L. Giglia Date: 8/24/17 12:04

# Detection Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

## Client Sample ID: MW-1020-20170809-01 — Lab Sample ID: 480-122520-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 64 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| Methyl tert-butyl ether | 22 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Tert-amyl methyl ether | 17 | | 5.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 9.2 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1009-20170809-01 — Lab Sample ID: 480-122520-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 58 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| Trichlorofluoromethane | 22 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1026D-20170809-01 — Lab Sample ID: 480-122520-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 71 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 34 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 48 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1015D-20170809-01 — Lab Sample ID: 480-122520-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Tetrachloroethene | 2.0 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 11 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1022-20170809-01 — Lab Sample ID: 480-122520-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 57 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 2.4 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1030-20170809-01 — Lab Sample ID: 480-122520-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 100 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 2.3 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1031-20170809-01 — Lab Sample ID: 480-122520-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 58 | | 50 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1032-20170809-01 — Lab Sample ID: 480-122520-8

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | 1.7 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| 1,1-Dichloroethene | 2.8 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Acetone | 51 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| Methyl tert-butyl ether | 33 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Tert-amyl methyl ether | 17 | | 5.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 7.7 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

## Client Sample ID: MW-1028-20170809-01 — Lab Sample ID: 480-122520-9

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 80 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 5.3 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1027-20170809-01 — Lab Sample ID: 480-122520-10

No Detections.

## Client Sample ID: MW-1033-20170809-01 — Lab Sample ID: 480-122520-11

No Detections.

## Client Sample ID: MW-1013-20170809-01 — Lab Sample ID: 480-122520-12

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 58 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 21 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 43 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1014-20170809-01 — Lab Sample ID: 480-122520-13

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 62 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 3.2 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1008-20170809-01 — Lab Sample ID: 480-122520-14

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 70 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 6.0 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 6.9 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1005-20170809-01 — Lab Sample ID: 480-122520-15

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 67 | | 50 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1004-20170809-01 — Lab Sample ID: 480-122520-16

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 66 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 2.9 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 6.1 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1003-20170809-01 — Lab Sample ID: 480-122520-17

No Detections.

## Client Sample ID: MW-1002B-20170809-01 — Lab Sample ID: 480-122520-18

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 81 | | 50 | | ug/L | 1 | | 8260C | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

# Detection Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

## Client Sample ID: MW-1001M-20170809-01 — Lab Sample ID: 480-122520-19

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 63 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 17 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 6.1 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1001B-20170809-01 — Lab Sample ID: 480-122520-20

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 52 | | 50 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1025M-20170809-01 — Lab Sample ID: 480-122520-21

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | 1.1 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| 1,1-Dichloroethene | 3.6 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Acetone | 110 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 6.0 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Methyl tert-butyl ether | 3.4 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 50 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1025D-20170809-01 — Lab Sample ID: 480-122520-22

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 76 | | 50 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1034-20170809-01 — Lab Sample ID: 480-122520-23

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 68 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 13 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| trans-1,2-Dichloroethene | 1.7 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 39 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: DUP-004-20170809-01 — Lab Sample ID: 480-122520-24

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 71 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 14 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| trans-1,2-Dichloroethene | 1.7 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 41 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1018-20170809-01 — Lab Sample ID: 480-122520-25

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 2.2 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Acetone | 55 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| Methyl tert-butyl ether | 1.1 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 9.9 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1035-20170809-01 — Lab Sample ID: 480-122520-26

This Detection Summary does not include radiochemical test results.

## Client Sample ID: MW-1035-20170809-01 (Continued) — Lab Sample ID: 480-122520-26

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 11 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Acetone | 67 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| Methyl tert-butyl ether | 5.9 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Tert-amyl methyl ether | 5.2 | | 5.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 50 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1036-20170809-01 — Lab Sample ID: 480-122520-27

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 56 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 1.9 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 4.1 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: DUP-005-20170809-01 — Lab Sample ID: 480-122520-28

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 57 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 1.9 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 3.7 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1037-20170809-01 — Lab Sample ID: 480-122520-29

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 85 | | 2.0 | | ug/L | 2 | | 8260C | Total/NA |
| 1,1-Dichloroethene | 4.2 | | 2.0 | | ug/L | 2 | | 8260C | Total/NA |
| Acetone | 130 | | 100 | | ug/L | 2 | | 8260C | Total/NA |
| Trichloroethene - DL | 300 | | 10 | | ug/L | 10 | | 8260C | Total/NA |

## Client Sample ID: MW-1038-20170809-01 — Lab Sample ID: 480-122520-30

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 60 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| 1,1-Dichloroethene | 3.4 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Acetone | 96 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 1.2 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Methyl tert-butyl ether | 1.1 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 270 | | 40 | | ug/L | 40 | | 8260C | Total/NA |

## Client Sample ID: DUP-002-20170809-01 — Lab Sample ID: 480-122520-31

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 58 | | 50 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: DUP-003-20170809-01 — Lab Sample ID: 480-122520-32

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | 1.0 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| 1,1-Dichloroethene | 3.6 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Acetone | 98 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 5.1 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: DUP-003-20170809-01 (Continued) — Lab Sample ID: 480-122520-32

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | 3.2 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 45 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: DUP-001-20170809-01 — Lab Sample ID: 480-122520-33

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 73 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 5.6 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 6.6 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1024D-20170809-01 — Lab Sample ID: 480-122520-34

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 65 | | 50 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1023-20170809-01 — Lab Sample ID: 480-122520-35

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 78 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 9.1 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 3.2 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1019B-20170809-01 — Lab Sample ID: 480-122520-36

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 70 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 1.3 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1010D-20170809-01 — Lab Sample ID: 480-122520-37

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 64 | | 50 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1010M-20170809-01 — Lab Sample ID: 480-122520-38

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene | 12 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1006-20170809-01 — Lab Sample ID: 480-122520-39

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 1.2 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Acetone | 64 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 4.4 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1016D-20170809-01 — Lab Sample ID: 480-122520-40

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 65 | | 50 | | ug/L | 1 | | 8260C | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

## Client Sample ID: MW-1017D-20170809-01 — Lab Sample ID: 480-122520-41

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 91 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 81 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| trans-1,2-Dichloroethene | 2.1 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 25 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1011-20170809-01 — Lab Sample ID: 480-122520-42

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 65 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 5.4 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 15 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: MW-1039-20170809-01 — Lab Sample ID: 480-122520-43

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 73 | | 50 | | ug/L | 1 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 33 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| trans-1,2-Dichloroethene | 2.3 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 57 | | 1.0 | | ug/L | 1 | | 8260C | Total/NA |

## Client Sample ID: TB-001-20170809-01 — Lab Sample ID: 480-122520-44

No Detections.

This Detection Summary does not include radiochemical test results.

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1020-20170809-01**
**Date Collected: 08/09/17 07:45**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-1**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 13:07 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 13:07 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/21/17 13:07 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/21/17 13:07 | 1 |
| 4-Chlorotoluene | ND | * | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 13:07 | 1 |
| **Acetone** | **64** | | 50 | | ug/L | | | 08/21/17 13:07 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 13:07 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 13:07 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 13:07 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 13:07 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 13:07 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/21/17 13:07 | 1 |

## Client Sample ID: MW-1020-20170809-01

**Lab Sample ID: 480-122520-1**

**Date Collected: 08/09/17 07:45**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

### 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 | | | 08/21/17 13:07 | 1 |
| **Methyl tert-butyl ether** | **22** | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| **Tert-amyl methyl ether** | **17** | | 5.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 13:07 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 13:07 | 1 |
| **Trichloroethene** | **9.2** | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:07 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* | | *08/21/17 13:07* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *102* | | *70 - 130* | | *08/21/17 13:07* | *1* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *70 - 130* | | *08/21/17 13:07* | *1* |

## Client Sample ID: MW-1009-20170809-01

**Lab Sample ID: 480-122520-2**

**Date Collected: 08/09/17 08:15**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 13:32 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1009-20170809-01**
**Date Collected: 08/09/17 08:15**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-2**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 13:32 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/21/17 13:32 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/21/17 13:32 | 1 |
| 4-Chlorotoluene | ND | * | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 13:32 | 1 |
| **Acetone** | **58** | | 50 | | ug/L | | | 08/21/17 13:32 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 13:32 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 13:32 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 13:32 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 13:32 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 13:32 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/21/17 13:32 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 13:32 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |

## Client Sample ID: MW-1009-20170809-01

**Lab Sample ID: 480-122520-2**

**Date Collected: 08/09/17 08:15**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 13:32 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| **Trichlorofluoromethane** | **22** | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:32 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* | | *08/21/17 13:32* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *97* | | *70 - 130* | | *08/21/17 13:32* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | | *08/21/17 13:32* | *1* |

## Client Sample ID: MW-1026D-20170809-01

**Lab Sample ID: 480-122520-3**

**Date Collected: 08/09/17 08:15**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 13:57 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 13:57 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/21/17 13:57 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/21/17 13:57 | 1 |
| 4-Chlorotoluene | ND | * | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 13:57 | 1 |
| **Acetone** | **71** | | 50 | | ug/L | | | 08/21/17 13:57 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 13:57 | 1 |

**Client Sample ID: MW-1026D-20170809-01**
**Date Collected: 08/09/17 08:15**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-3**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 13:57 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 13:57 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| **cis-1,2-Dichloroethene** | **34** | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 13:57 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 13:57 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 13:57 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/21/17 13:57 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 13:57 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 13:57 | 1 |
| **Trichloroethene** | **48** | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 13:57 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* | | *08/21/17 13:57* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *97* | | *70 - 130* | | *08/21/17 13:57* | *1* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *70 - 130* | | *08/21/17 13:57* | *1* |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1015D-20170809-01**
**Date Collected: 08/09/17 08:43**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-4**
**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 | | | 08/21/17 14:22 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 14:22 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 14:22 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/21/17 14:22 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/21/17 14:22 | 1 |
| 4-Chlorotoluene | ND | * | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 14:22 | 1 |
| Acetone | ND | | 50 | | ug/L | | | 08/21/17 14:22 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 14:22 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 14:22 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 14:22 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 14:22 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 14:22 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/21/17 14:22 | 1 |

## Client Sample ID: MW-1015D-20170809-01

**Lab Sample ID: 480-122520-4**

**Date Collected: 08/09/17 08:43**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

### 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 | | | 08/21/17 14:22 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| **Tetrachloroethene** | **2.0** | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 14:22 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 14:22 | 1 |
| **Trichloroethene** | **11** | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 14:22 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* | | *08/21/17 14:22* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *70 - 130* | | *08/21/17 14:22* | *1* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *70 - 130* | | *08/21/17 14:22* | *1* |

## Client Sample ID: MW-1022-20170809-01

**Lab Sample ID: 480-122520-5**

**Date Collected: 08/09/17 09:10**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 14:47 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1022-20170809-01**
**Date Collected: 08/09/17 09:10**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-5**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 14:47 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/21/17 14:47 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/21/17 14:47 | 1 |
| 4-Chlorotoluene | ND | * | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 14:47 | 1 |
| **Acetone** | **57** | | 50 | | ug/L | | | 08/21/17 14:47 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 14:47 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 14:47 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 14:47 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 14:47 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 14:47 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/21/17 14:47 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 14:47 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |

## Client Sample ID: MW-1022-20170809-01

**Lab Sample ID: 480-122520-5**

**Date Collected: 08/09/17 09:10**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 14:47 | 1 |
| **Trichloroethene** | **2.4** | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 14:47 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* | | *08/21/17 14:47* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *100* | | *70 - 130* | | *08/21/17 14:47* | *1* |
| *4-Bromofluorobenzene (Surr)* | *103* | | *70 - 130* | | *08/21/17 14:47* | *1* |

## Client Sample ID: MW-1030-20170809-01

**Lab Sample ID: 480-122520-6**

**Date Collected: 08/09/17 09:50**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 15:12 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 15:12 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/21/17 15:12 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/21/17 15:12 | 1 |
| 4-Chlorotoluene | ND | * | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 15:12 | 1 |
| **Acetone** | **100** | | 50 | | ug/L | | | 08/21/17 15:12 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 15:12 | 1 |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1030-20170809-01**
**Date Collected: 08/09/17 09:50**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-6**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 15:12 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 15:12 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 15:12 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 15:12 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 15:12 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/21/17 15:12 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 15:12 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 15:12 | 1 |
| **Trichloroethene** | **2.3** | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 15:12 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *98* | | *70 - 130* | | *08/21/17 15:12* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *100* | | *70 - 130* | | *08/21/17 15:12* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | | *08/21/17 15:12* | *1* |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1031-20170809-01**
**Date Collected: 08/09/17 10:05**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-7**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 15:38 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 15:38 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/21/17 15:38 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/21/17 15:38 | 1 |
| 4-Chlorotoluene | ND | * | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 15:38 | 1 |
| **Acetone** | **58** | | 50 | | ug/L | | | 08/21/17 15:38 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 15:38 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 15:38 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 15:38 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 15:38 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 15:38 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/21/17 15:38 | 1 |

## Client Sample ID: MW-1031-20170809-01

**Lab Sample ID: 480-122520-7**

**Date Collected: 08/09/17 10:05**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

### 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 | | | 08/21/17 15:38 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 15:38 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 15:38 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 15:38 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* | | *08/21/17 15:38* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *70 - 130* | | *08/21/17 15:38* | *1* |
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* | | *08/21/17 15:38* | *1* |

## Client Sample ID: MW-1032-20170809-01

**Lab Sample ID: 480-122520-8**

**Date Collected: 08/09/17 10:25**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 16:03 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| **1,1-Dichloroethane** | **1.7** | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| **1,1-Dichloroethene** | **2.8** | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1032-20170809-01**
**Date Collected: 08/09/17 10:25**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-8**
**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 | | | 08/21/17 16:03 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 16:03 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/21/17 16:03 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/21/17 16:03 | 1 |
| 4-Chlorotoluene | ND | * | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 16:03 | 1 |
| **Acetone** | **51** | | 50 | | ug/L | | | 08/21/17 16:03 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 16:03 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 16:03 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 16:03 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 16:03 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 16:03 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/21/17 16:03 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| **Methyl tert-butyl ether** | **33** | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| **Tert-amyl methyl ether** | **17** | | 5.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 16:03 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |

## Client Sample ID: MW-1032-20170809-01

**Lab Sample ID: 480-122520-8**

**Date Collected: 08/09/17 10:25**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 16:03 | 1 |
| **Trichloroethene** | **7.7** | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:03 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *98* | | *70 - 130* | | *08/21/17 16:03* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *101* | | *70 - 130* | | *08/21/17 16:03* | *1* |
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* | | *08/21/17 16:03* | *1* |

## Client Sample ID: MW-1028-20170809-01

**Lab Sample ID: 480-122520-9**

**Date Collected: 08/09/17 11:10**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 16:28 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 16:28 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/21/17 16:28 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/21/17 16:28 | 1 |
| 4-Chlorotoluene | ND | * | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 16:28 | 1 |
| **Acetone** | **80** | | 50 | | ug/L | | | 08/21/17 16:28 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 16:28 | 1 |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1028-20170809-01**
**Date Collected: 08/09/17 11:10**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-9**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 16:28 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 16:28 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 16:28 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 16:28 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 16:28 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/21/17 16:28 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 16:28 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 16:28 | 1 |
| **Trichloroethene** | **5.3** | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* | | *08/21/17 16:28* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *98* | | *70 - 130* | | *08/21/17 16:28* | *1* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *70 - 130* | | *08/21/17 16:28* | *1* |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1027-20170809-01**
**Date Collected: 08/09/17 11:30**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-10**
**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 | | | 08/21/17 17:19 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 17:19 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 17:19 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/21/17 17:19 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/21/17 17:19 | 1 |
| 4-Chlorotoluene | ND | * | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 17:19 | 1 |
| Acetone | ND | | 50 | | ug/L | | | 08/21/17 17:19 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 17:19 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 17:19 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 17:19 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 17:19 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 17:19 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/21/17 17:19 | 1 |

**Client Sample ID: MW-1027-20170809-01** — **Lab Sample ID: 480-122520-10**
**Date Collected: 08/09/17 11:30** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

### 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 | | | 08/21/17 17:19 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 17:19 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 17:19 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 17:19 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* | | *08/21/17 17:19* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *98* | | *70 - 130* | | *08/21/17 17:19* | *1* |
| *4-Bromofluorobenzene (Surr)* | *102* | | *70 - 130* | | *08/21/17 17:19* | *1* |

**Client Sample ID: MW-1033-20170809-01** — **Lab Sample ID: 480-122520-11**
**Date Collected: 08/09/17 11:50** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 17:44 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1033-20170809-01**
**Date Collected: 08/09/17 11:50**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-11**
**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 | | | 08/21/17 17:44 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 17:44 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/21/17 17:44 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/21/17 17:44 | 1 |
| 4-Chlorotoluene | ND | * | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 17:44 | 1 |
| Acetone | ND | | 50 | | ug/L | | | 08/21/17 17:44 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 17:44 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 17:44 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 17:44 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 17:44 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 17:44 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/21/17 17:44 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 17:44 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |

## Client Sample ID: MW-1033-20170809-01

**Lab Sample ID: 480-122520-11**

**Date Collected: 08/09/17 11:50**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 17:44 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 17:44 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* | | *08/21/17 17:44* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *98* | | *70 - 130* | | *08/21/17 17:44* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | | *08/21/17 17:44* | *1* |

## Client Sample ID: MW-1013-20170809-01

**Lab Sample ID: 480-122520-12**

**Date Collected: 08/09/17 08:49**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 18:09 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 18:09 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/21/17 18:09 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/21/17 18:09 | 1 |
| 4-Chlorotoluene | ND | * | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 18:09 | 1 |
| **Acetone** | **58** | | 50 | | ug/L | | | 08/21/17 18:09 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 18:09 | 1 |

**Client Sample ID: MW-1013-20170809-01**
**Date Collected: 08/09/17 08:49**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-12**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 18:09 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 18:09 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| **cis-1,2-Dichloroethene** | **21** | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 18:09 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 18:09 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 18:09 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/21/17 18:09 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 18:09 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 18:09 | 1 |
| **Trichloroethene** | **43** | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 18:09 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* | | *08/21/17 18:09* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *101* | | *70 - 130* | | *08/21/17 18:09* | *1* |
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* | | *08/21/17 18:09* | *1* |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1014-20170809-01**
**Date Collected: 08/09/17 08:57**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-13**
**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 | | | 08/21/17 18:35 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 18:35 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 18:35 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/21/17 18:35 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/21/17 18:35 | 1 |
| 4-Chlorotoluene | ND | * | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 18:35 | 1 |
| **Acetone** | **62** | | 50 | | ug/L | | | 08/21/17 18:35 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 18:35 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 18:35 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 18:35 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 18:35 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 18:35 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/21/17 18:35 | 1 |

## Client Sample ID: MW-1014-20170809-01

**Lab Sample ID: 480-122520-13**

**Date Collected: 08/09/17 08:57**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

### 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 | | | 08/21/17 18:35 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 18:35 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 18:35 | 1 |
| **Trichloroethene** | **3.2** | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 18:35 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* | | *08/21/17 18:35* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *101* | | *70 - 130* | | *08/21/17 18:35* | *1* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *70 - 130* | | *08/21/17 18:35* | *1* |

## Client Sample ID: MW-1008-20170809-01

**Lab Sample ID: 480-122520-14**

**Date Collected: 08/09/17 09:16**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 19:00 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1008-20170809-01**
**Date Collected: 08/09/17 09:16**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-14**
**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 | | | 08/21/17 19:00 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 19:00 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/21/17 19:00 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/21/17 19:00 | 1 |
| 4-Chlorotoluene | ND | * | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 19:00 | 1 |
| **Acetone** | **70** | | 50 | | ug/L | | | 08/21/17 19:00 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 19:00 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 19:00 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| **cis-1,2-Dichloroethene** | **6.0** | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 19:00 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 19:00 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 19:00 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/21/17 19:00 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 19:00 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |

## Client Sample ID: MW-1008-20170809-01

**Lab Sample ID: 480-122520-14**

**Date Collected: 08/09/17 09:16**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 19:00 | 1 |
| **Trichloroethene** | **6.9** | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:00 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* | | *08/21/17 19:00* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *70 - 130* | | *08/21/17 19:00* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | | *08/21/17 19:00* | *1* |

## Client Sample ID: MW-1005-20170809-01

**Lab Sample ID: 480-122520-15**

**Date Collected: 08/09/17 09:36**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 19:25 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 19:25 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/21/17 19:25 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/21/17 19:25 | 1 |
| 4-Chlorotoluene | ND | * | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 19:25 | 1 |
| **Acetone** | **67** | | 50 | | ug/L | | | 08/21/17 19:25 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 19:25 | 1 |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1005-20170809-01**
**Date Collected: 08/09/17 09:36**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-15**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 19:25 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 19:25 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 19:25 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 19:25 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 19:25 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/21/17 19:25 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 19:25 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 19:25 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:25 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* | | *08/21/17 19:25* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *70 - 130* | | *08/21/17 19:25* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | | *08/21/17 19:25* | *1* |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1004-20170809-01**
**Date Collected: 08/09/17 09:53**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-16**
**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 | | | 08/21/17 19:50 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 19:50 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 19:50 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/21/17 19:50 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/21/17 19:50 | 1 |
| 4-Chlorotoluene | ND | * | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 19:50 | 1 |
| **Acetone** | **66** | | 50 | | ug/L | | | 08/21/17 19:50 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 19:50 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 19:50 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| **cis-1,2-Dichloroethene** | **2.9** | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 19:50 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 19:50 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 19:50 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/21/17 19:50 | 1 |

## Client Sample ID: MW-1004-20170809-01

**Lab Sample ID: 480-122520-16**

**Date Collected: 08/09/17 09:53**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

### 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 | | | 08/21/17 19:50 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 19:50 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 19:50 | 1 |
| **Trichloroethene** | **6.1** | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 19:50 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* | | *08/21/17 19:50* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *100* | | *70 - 130* | | *08/21/17 19:50* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | | *08/21/17 19:50* | *1* |

## Client Sample ID: MW-1003-20170809-01

**Lab Sample ID: 480-122520-17**

**Date Collected: 08/09/17 10:11**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 20:15 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |

**Client Sample ID: MW-1003-20170809-01**
**Date Collected: 08/09/17 10:11**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-17**
**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 | | | 08/21/17 20:15 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 20:15 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/21/17 20:15 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/21/17 20:15 | 1 |
| 4-Chlorotoluene | ND | * | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 20:15 | 1 |
| Acetone | ND | | 50 | | ug/L | | | 08/21/17 20:15 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 20:15 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 20:15 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 20:15 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 20:15 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 20:15 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/21/17 20:15 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 20:15 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |

**Client Sample ID: MW-1003-20170809-01** — **Lab Sample ID: 480-122520-17**
**Date Collected: 08/09/17 10:11** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 20:15 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 20:15 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* | | *08/21/17 20:15* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *96* | | *70 - 130* | | *08/21/17 20:15* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | | *08/21/17 20:15* | *1* |

**Client Sample ID: MW-1002B-20170809-01** — **Lab Sample ID: 480-122520-18**
**Date Collected: 08/09/17 10:26** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 16:53 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 16:53 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/21/17 16:53 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/21/17 16:53 | 1 |
| 4-Chlorotoluene | ND | * | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 16:53 | 1 |
| **Acetone** | **81** | | 50 | | ug/L | | | 08/21/17 16:53 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 16:53 | 1 |

**Client Sample ID: MW-1002B-20170809-01**
**Date Collected: 08/09/17 10:26**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-18**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 16:53 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 16:53 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 16:53 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 16:53 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 16:53 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/21/17 16:53 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 16:53 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 16:53 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 16:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* | | *08/21/17 16:53* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *103* | | *70 - 130* | | *08/21/17 16:53* | *1* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *70 - 130* | | *08/21/17 16:53* | *1* |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1001M-20170809-01**
**Date Collected: 08/09/17 10:48**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-19**
**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 | | | 08/21/17 20:41 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 20:41 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 20:41 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/21/17 20:41 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/21/17 20:41 | 1 |
| 4-Chlorotoluene | ND | * | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 20:41 | 1 |
| **Acetone** | **63** | | 50 | | ug/L | | | 08/21/17 20:41 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 20:41 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 20:41 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| **cis-1,2-Dichloroethene** | **17** | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 20:41 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 20:41 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 20:41 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/21/17 20:41 | 1 |

## Client Sample ID: MW-1001M-20170809-01

**Lab Sample ID: 480-122520-19**

**Date Collected: 08/09/17 10:48**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

### 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 | | | 08/21/17 20:41 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 20:41 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 20:41 | 1 |
| **Trichloroethene** | **6.1** | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 20:41 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* | | *08/21/17 20:41* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *70 - 130* | | *08/21/17 20:41* | *1* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *70 - 130* | | *08/21/17 20:41* | *1* |

## Client Sample ID: MW-1001B-20170809-01

**Lab Sample ID: 480-122520-20**

**Date Collected: 08/09/17 11:00**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 01:25 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1001B-20170809-01**
**Date Collected: 08/09/17 11:00**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-20**
**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 | | | 08/22/17 01:25 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 01:25 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/22/17 01:25 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/22/17 01:25 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 01:25 | 1 |
| **Acetone** | **52** | | 50 | | ug/L | | | 08/22/17 01:25 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 01:25 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 01:25 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 01:25 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 01:25 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 01:25 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 01:25 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 01:25 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |

## Client Sample ID: MW-1001B-20170809-01

**Lab Sample ID: 480-122520-20**

**Date Collected: 08/09/17 11:00**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 01:25 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:25 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* | | *08/22/17 01:25* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *70 - 130* | | *08/22/17 01:25* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | | *08/22/17 01:25* | *1* |

## Client Sample ID: MW-1025M-20170809-01

**Lab Sample ID: 480-122520-21**

**Date Collected: 08/09/17 11:20**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 01:09 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| **1,1-Dichloroethane** | **1.1** | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| **1,1-Dichloroethene** | **3.6** | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 01:09 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 2-Butanone (MEK) | ND | | 10 | | ug/L | | | 08/22/17 01:09 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 2-Hexanone | ND | | 10 | | ug/L | | | 08/22/17 01:09 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 01:09 | 1 |
| **Acetone** | **110** | | 50 | | ug/L | | | 08/22/17 01:09 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Bromoform | ND | * | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 01:09 | 1 |

**Client Sample ID: MW-1025M-20170809-01**
**Date Collected: 08/09/17 11:20**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-21**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 01:09 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 01:09 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Chloromethane | ND | | 2.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| **cis-1,2-Dichloroethene** | **6.0** | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 01:09 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 01:09 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 01:09 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 01:09 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| **Methyl tert-butyl ether** | **3.4** | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Tetrahydrofuran | ND | * | 10 | | ug/L | | | 08/22/17 01:09 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 01:09 | 1 |
| **Trichloroethene** | **50** | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:09 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* | | *08/22/17 01:09* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *105* | | *70 - 130* | | *08/22/17 01:09* | *1* |
| *4-Bromofluorobenzene (Surr)* | *98* | | *70 - 130* | | *08/22/17 01:09* | *1* |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1025D-20170809-01**
**Date Collected: 08/09/17 11:27**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-22**
**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 | | | 08/22/17 01:33 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 01:33 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 01:33 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 2-Butanone (MEK) | ND | | 10 | | ug/L | | | 08/22/17 01:33 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 2-Hexanone | ND | | 10 | | ug/L | | | 08/22/17 01:33 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 01:33 | 1 |
| **Acetone** | **76** | | 50 | | ug/L | | | 08/22/17 01:33 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Bromoform | ND | * | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 01:33 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 01:33 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Chloromethane | ND | | 2.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 01:33 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 01:33 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 01:33 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 01:33 | 1 |

**Client Sample ID: MW-1025D-20170809-01** — **Lab Sample ID: 480-122520-22**
**Date Collected: 08/09/17 11:27** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

### 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 | | | 08/22/17 01:33 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Tetrahydrofuran | ND | * | 10 | | ug/L | | | 08/22/17 01:33 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 01:33 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:33 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *98* | | *70 - 130* | | *08/22/17 01:33* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *103* | | *70 - 130* | | *08/22/17 01:33* | *1* |
| *4-Bromofluorobenzene (Surr)* | *98* | | *70 - 130* | | *08/22/17 01:33* | *1* |

**Client Sample ID: MW-1034-20170809-01** — **Lab Sample ID: 480-122520-23**
**Date Collected: 08/09/17 12:20** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 01:50 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |

**Client Sample ID: MW-1034-20170809-01**
**Date Collected: 08/09/17 12:20**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-23**
**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 | | | 08/22/17 01:50 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 01:50 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/22/17 01:50 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/22/17 01:50 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 01:50 | 1 |
| **Acetone** | **68** | | 50 | | ug/L | | | 08/22/17 01:50 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 01:50 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 01:50 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| **cis-1,2-Dichloroethene** | **13** | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 01:50 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 01:50 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 01:50 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 01:50 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 01:50 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |

## Client Sample ID: MW-1034-20170809-01

**Lab Sample ID: 480-122520-23**

**Date Collected: 08/09/17 12:20**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **trans-1,2-Dichloroethene** | **1.7** | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 01:50 | 1 |
| **Trichloroethene** | **39** | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 01:50 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* | | *08/22/17 01:50* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *98* | | *70 - 130* | | *08/22/17 01:50* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | | *08/22/17 01:50* | *1* |

## Client Sample ID: DUP-004-20170809-01

**Lab Sample ID: 480-122520-24**

**Date Collected: 08/09/17 00:04**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 02:16 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 02:16 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/22/17 02:16 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/22/17 02:16 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 02:16 | 1 |
| **Acetone** | **71** | | 50 | | ug/L | | | 08/22/17 02:16 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 02:16 | 1 |

**Client Sample ID: DUP-004-20170809-01**
**Date Collected: 08/09/17 00:04**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-24**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 02:16 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 02:16 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| **cis-1,2-Dichloroethene** | **14** | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 02:16 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 02:16 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 02:16 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 02:16 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 02:16 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| **trans-1,2-Dichloroethene** | **1.7** | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 02:16 | 1 |
| **Trichloroethene** | **41** | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 02:16 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* | | *08/22/17 02:16* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *70 - 130* | | *08/22/17 02:16* | *1* |
| *4-Bromofluorobenzene (Surr)* | *102* | | *70 - 130* | | *08/22/17 02:16* | *1* |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1018-20170809-01**
**Date Collected: 08/09/17 13:40**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-25**
**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 | | | 08/22/17 02:41 | 1 |
| **1,1,1-Trichloroethane** | **2.2** | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 02:41 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 02:41 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/22/17 02:41 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/22/17 02:41 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 02:41 | 1 |
| **Acetone** | **55** | | 50 | | ug/L | | | 08/22/17 02:41 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 02:41 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 02:41 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 02:41 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 02:41 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 02:41 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 02:41 | 1 |

## Client Sample ID: MW-1018-20170809-01

**Lab Sample ID: 480-122520-25**

**Date Collected: 08/09/17 13:40**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

### 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 | | | 08/22/17 02:41 | 1 |
| **Methyl tert-butyl ether** | **1.1** | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 02:41 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 02:41 | 1 |
| **Trichloroethene** | **9.9** | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 02:41 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* | | *08/22/17 02:41* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *70 - 130* | | *08/22/17 02:41* | *1* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *70 - 130* | | *08/22/17 02:41* | *1* |

## Client Sample ID: MW-1035-20170809-01

**Lab Sample ID: 480-122520-26**

**Date Collected: 08/09/17 13:55**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| **1,1,1-Trichloroethane** | **11** | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 03:06 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1035-20170809-01**
**Date Collected: 08/09/17 13:55**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-26**
**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 | | | 08/22/17 03:06 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 03:06 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/22/17 03:06 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/22/17 03:06 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 03:06 | 1 |
| **Acetone** | **67** | | 50 | | ug/L | | | 08/22/17 03:06 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 03:06 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 03:06 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 03:06 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 03:06 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 03:06 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 03:06 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| **Methyl tert-butyl ether** | **5.9** | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| **Tert-amyl methyl ether** | **5.2** | | 5.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 03:06 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |

## Client Sample ID: MW-1035-20170809-01

**Lab Sample ID: 480-122520-26**

**Date Collected: 08/09/17 13:55**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 03:06 | 1 |
| **Trichloroethene** | **50** | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:06 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *98* | | *70 - 130* | | *08/22/17 03:06* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *100* | | *70 - 130* | | *08/22/17 03:06* | *1* |
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* | | *08/22/17 03:06* | *1* |

## Client Sample ID: MW-1036-20170809-01

**Lab Sample ID: 480-122520-27**

**Date Collected: 08/09/17 14:10**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 03:32 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 03:32 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/22/17 03:32 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/22/17 03:32 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 03:32 | 1 |
| **Acetone** | **56** | | 50 | | ug/L | | | 08/22/17 03:32 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 03:32 | 1 |

**Client Sample ID: MW-1036-20170809-01**
**Date Collected: 08/09/17 14:10**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-27**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 03:32 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 03:32 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| **cis-1,2-Dichloroethene** | **1.9** | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 03:32 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 03:32 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 03:32 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 03:32 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 03:32 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 03:32 | 1 |
| **Trichloroethene** | **4.1** | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:32 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *97* | | *70 - 130* | | *08/22/17 03:32* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *101* | | *70 - 130* | | *08/22/17 03:32* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | | *08/22/17 03:32* | *1* |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: DUP-005-20170809-01**
**Date Collected: 08/09/17 00:05**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-28**
**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 | | | 08/22/17 03:57 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 03:57 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 03:57 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/22/17 03:57 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/22/17 03:57 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 03:57 | 1 |
| **Acetone** | **57** | | 50 | | ug/L | | | 08/22/17 03:57 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 03:57 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 03:57 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| **cis-1,2-Dichloroethene** | **1.9** | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 03:57 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 03:57 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 03:57 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 03:57 | 1 |

## Client Sample ID: DUP-005-20170809-01

**Lab Sample ID: 480-122520-28**

**Date Collected: 08/09/17 00:05**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

### 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 | | | 08/22/17 03:57 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 03:57 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 03:57 | 1 |
| **Trichloroethene** | **3.7** | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 03:57 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *98* | | *70 - 130* | | *08/22/17 03:57* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *70 - 130* | | *08/22/17 03:57* | *1* |
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* | | *08/22/17 03:57* | *1* |

## Client Sample ID: MW-1037-20170809-01

**Lab Sample ID: 480-122520-29**

**Date Collected: 08/09/17 14:31**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| **1,1,1-Trichloroethane** | **85** | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| 1,1,2-Trichloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| 1,1-Dichloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| **1,1-Dichloroethene** | **4.2** | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| 1,1-Dichloropropene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| 1,2,3-Trichlorobenzene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| 1,2,3-Trichloropropane | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| 1,2,4-Trichlorobenzene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| 1,2,4-Trimethylbenzene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| 1,2-Dibromo-3-Chloropropane | ND | | 10 | | ug/L | | | 08/22/17 17:14 | 2 |
| 1,2-Dichlorobenzene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| 1,2-Dichloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| 1,2-Dichloropropane | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| 1,3,5-Trimethylbenzene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1037-20170809-01**
**Date Collected: 08/09/17 14:31**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-29**
**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 | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| 1,3-Dichloropropane | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| 1,4-Dichlorobenzene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| 1,4-Dioxane | ND | | 100 | | ug/L | | | 08/22/17 17:14 | 2 |
| 2,2-Dichloropropane | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| 2-Butanone (MEK) | ND | | 20 | | ug/L | | | 08/22/17 17:14 | 2 |
| 2-Chlorotoluene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| 2-Hexanone | ND | | 20 | | ug/L | | | 08/22/17 17:14 | 2 |
| 4-Chlorotoluene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| 4-Isopropyltoluene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 20 | | ug/L | | | 08/22/17 17:14 | 2 |
| **Acetone** | **130** | | 100 | | ug/L | | | 08/22/17 17:14 | 2 |
| Benzene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Bromobenzene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Bromoform | ND | * | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Bromomethane | ND | | 4.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Carbon disulfide | ND | | 20 | | ug/L | | | 08/22/17 17:14 | 2 |
| Carbon tetrachloride | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Chlorobenzene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Chlorobromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Chlorodibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Chloroethane | ND | | 4.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Chloroform | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Chloromethane | ND | | 4.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| cis-1,2-Dichloroethene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| cis-1,3-Dichloropropene | ND | | 0.80 | | ug/L | | | 08/22/17 17:14 | 2 |
| Dichlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Dichlorodifluoromethane | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Ethyl ether | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Ethylbenzene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Ethylene Dibromide | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Hexachlorobutadiene | ND | | 0.80 | | ug/L | | | 08/22/17 17:14 | 2 |
| Isopropyl ether | ND | | 20 | | ug/L | | | 08/22/17 17:14 | 2 |
| Isopropylbenzene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Methyl tert-butyl ether | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Methylene Chloride | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| m-Xylene & p-Xylene | ND | | 4.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Naphthalene | ND | | 10 | | ug/L | | | 08/22/17 17:14 | 2 |
| n-Butylbenzene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| N-Propylbenzene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| o-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| sec-Butylbenzene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Styrene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Tert-amyl methyl ether | ND | | 10 | | ug/L | | | 08/22/17 17:14 | 2 |
| Tert-butyl ethyl ether | ND | | 10 | | ug/L | | | 08/22/17 17:14 | 2 |
| tert-Butylbenzene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Tetrachloroethene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Tetrahydrofuran | ND | * | 20 | | ug/L | | | 08/22/17 17:14 | 2 |
| Toluene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |

## Client Sample ID: MW-1037-20170809-01

**Lab Sample ID: 480-122520-29**

**Date Collected: 08/09/17 14:31**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| trans-1,2-Dichloroethene | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| trans-1,3-Dichloropropene | ND | | 0.80 | | ug/L | | | 08/22/17 17:14 | 2 |
| Trichlorofluoromethane | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Vinyl chloride | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |
| Dibromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 17:14 | 2 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *101* | | *70 - 130* | | *08/22/17 17:14* | *2* |
| *1,2-Dichloroethane-d4 (Surr)* | *105* | | *70 - 130* | | *08/22/17 17:14* | *2* |
| *4-Bromofluorobenzene (Surr)* | *97* | | *70 - 130* | | *08/22/17 17:14* | *2* |

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Trichloroethene** | **300** | | 10 | | ug/L | | | 08/22/17 04:22 | 10 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* | | *08/22/17 04:22* | *10* |
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *70 - 130* | | *08/22/17 04:22* | *10* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *70 - 130* | | *08/22/17 04:22* | *10* |

## Client Sample ID: MW-1038-20170809-01

**Lab Sample ID: 480-122520-30**

**Date Collected: 08/09/17 14:50**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| **1,1,1-Trichloroethane** | **60** | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 17:37 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| **1,1-Dichloroethene** | **3.4** | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 17:37 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 2-Butanone (MEK) | ND | | 10 | | ug/L | | | 08/22/17 17:37 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 2-Hexanone | ND | | 10 | | ug/L | | | 08/22/17 17:37 | 1 |

**Client Sample ID: MW-1038-20170809-01**
**Date Collected: 08/09/17 14:50**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-30**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 17:37 | 1 |
| **Acetone** | **96** | | 50 | | ug/L | | | 08/22/17 17:37 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Bromoform | ND | * | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 17:37 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 17:37 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Chloromethane | ND | | 2.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| **cis-1,2-Dichloroethene** | **1.2** | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 17:37 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 17:37 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 17:37 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 17:37 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| **Methyl tert-butyl ether** | **1.1** | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Tetrahydrofuran | ND | * | 10 | | ug/L | | | 08/22/17 17:37 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 17:37 | 1 |
| **Trichloroethene** | **270** | | 40 | | ug/L | | | 08/22/17 04:47 | 40 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 17:37 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* | | *08/22/17 17:37* | *1* |

**Client Sample ID: MW-1038-20170809-01** — **Lab Sample ID: 480-122520-30**
**Date Collected: 08/09/17 14:50** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

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

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *70 - 130* | | *08/22/17 17:37* | *1* |
| *4-Bromofluorobenzene (Surr)* | *97* | | *70 - 130* | | *08/22/17 17:37* | *1* |

**Client Sample ID: DUP-002-20170809-01** — **Lab Sample ID: 480-122520-31**
**Date Collected: 08/09/17 00:02** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 05:12 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 05:12 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/22/17 05:12 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/22/17 05:12 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 05:12 | 1 |
| **Acetone** | **58** | | 50 | | ug/L | | | 08/22/17 05:12 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 05:12 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 05:12 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/22/17 05:12 | 1 |

## Client Sample ID: DUP-002-20170809-01

**Lab Sample ID: 480-122520-31**

**Date Collected: 08/09/17 00:02**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 05:12 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 05:12 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 05:12 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 05:12 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 05:12 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 05:12 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 05:12 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *98* | | *70 - 130* | | *08/22/17 05:12* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *98* | | *70 - 130* | | *08/22/17 05:12* | *1* |
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* | | *08/22/17 05:12* | *1* |

## Client Sample ID: DUP-003-20170809-01

**Lab Sample ID: 480-122520-32**

**Date Collected: 08/09/17 00:03**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 05:38 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| **1,1-Dichloroethane** | **1.0** | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| **1,1-Dichloroethene** | **3.6** | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |

**Client Sample ID: DUP-003-20170809-01**
**Date Collected: 08/09/17 00:03**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-32**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 05:38 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/22/17 05:38 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/22/17 05:38 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 05:38 | 1 |
| **Acetone** | **98** | | 50 | | ug/L | | | 08/22/17 05:38 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 05:38 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 05:38 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| **cis-1,2-Dichloroethene** | **5.1** | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 05:38 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 05:38 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 05:38 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 05:38 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| **Methyl tert-butyl ether** | **3.2** | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |

## Client Sample ID: DUP-003-20170809-01

**Lab Sample ID: 480-122520-32**

**Date Collected: 08/09/17 00:03**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 05:38 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 05:38 | 1 |
| **Trichloroethene** | **45** | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 05:38 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *98* | | *70 - 130* | | *08/22/17 05:38* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *100* | | *70 - 130* | | *08/22/17 05:38* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | | *08/22/17 05:38* | *1* |

## Client Sample ID: DUP-001-20170809-01

**Lab Sample ID: 480-122520-33**

**Date Collected: 08/09/17 00:01**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 06:03 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 06:03 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/22/17 06:03 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |

**Client Sample ID: DUP-001-20170809-01**
**Date Collected: 08/09/17 00:01**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-33**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/22/17 06:03 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 06:03 | 1 |
| **Acetone** | **73** | | 50 | | ug/L | | | 08/22/17 06:03 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 06:03 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 06:03 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| **cis-1,2-Dichloroethene** | **5.6** | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 06:03 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 06:03 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 06:03 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 06:03 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 06:03 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 06:03 | 1 |
| **Trichloroethene** | **6.6** | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:03 | 1 |

## Client Sample ID: DUP-001-20170809-01

**Lab Sample ID: 480-122520-33**

**Date Collected: 08/09/17 00:01**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *97* | | *70 - 130* | | *08/22/17 06:03* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *70 - 130* | | *08/22/17 06:03* | *1* |
| *4-Bromofluorobenzene (Surr)* | *98* | | *70 - 130* | | *08/22/17 06:03* | *1* |

## Client Sample ID: MW-1024D-20170809-01

**Lab Sample ID: 480-122520-34**

**Date Collected: 08/09/17 11:53**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 06:28 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 06:28 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/22/17 06:28 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/22/17 06:28 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 06:28 | 1 |
| **Acetone** | **65** | | 50 | | ug/L | | | 08/22/17 06:28 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 06:28 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 06:28 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/22/17 06:28 | 1 |

**Client Sample ID: MW-1024D-20170809-01** — **Lab Sample ID: 480-122520-34**
**Date Collected: 08/09/17 11:53** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 06:28 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 06:28 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 06:28 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 06:28 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 06:28 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 06:28 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *98* | | *70 - 130* | | *08/22/17 06:28* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *100* | | *70 - 130* | | *08/22/17 06:28* | *1* |
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* | | *08/22/17 06:28* | *1* |

**Client Sample ID: MW-1023-20170809-01** — **Lab Sample ID: 480-122520-35**
**Date Collected: 08/09/17 12:10** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 06:54 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1023-20170809-01**
**Date Collected: 08/09/17 12:10**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-35**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 06:54 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/22/17 06:54 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/22/17 06:54 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 06:54 | 1 |
| **Acetone** | **78** | | 50 | | ug/L | | | 08/22/17 06:54 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 06:54 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 06:54 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| **cis-1,2-Dichloroethene** | **9.1** | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 06:54 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 06:54 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 06:54 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 06:54 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |

## Client Sample ID: MW-1023-20170809-01

**Lab Sample ID: 480-122520-35**

**Date Collected: 08/09/17 12:10**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 06:54 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 06:54 | 1 |
| **Trichloroethene** | **3.2** | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 06:54 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *98* | | *70 - 130* | | *08/22/17 06:54* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *70 - 130* | | *08/22/17 06:54* | *1* |
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* | | *08/22/17 06:54* | *1* |

## Client Sample ID: MW-1019B-20170809-01

**Lab Sample ID: 480-122520-36**

**Date Collected: 08/09/17 13:15**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 07:19 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 07:19 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/22/17 07:19 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1019B-20170809-01**
**Date Collected: 08/09/17 13:15**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-36**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/22/17 07:19 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 07:19 | 1 |
| **Acetone** | **70** | | 50 | | ug/L | | | 08/22/17 07:19 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 07:19 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 07:19 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 07:19 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 07:19 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 07:19 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 07:19 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 07:19 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 07:19 | 1 |
| **Trichloroethene** | **1.3** | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 07:19 | 1 |

## Client Sample ID: MW-1019B-20170809-01

**Lab Sample ID: 480-122520-36**

**Date Collected: 08/09/17 13:15**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *97* | | *70 - 130* | | *08/22/17 07:19* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *96* | | *70 - 130* | | *08/22/17 07:19* | *1* |
| *4-Bromofluorobenzene (Surr)* | *97* | | *70 - 130* | | *08/22/17 07:19* | *1* |

## Client Sample ID: MW-1010D-20170809-01

**Lab Sample ID: 480-122520-37**

**Date Collected: 08/09/17 13:32**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 07:44 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 07:44 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/22/17 07:44 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/22/17 07:44 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 07:44 | 1 |
| **Acetone** | **64** | | 50 | | ug/L | | | 08/22/17 07:44 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 07:44 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 07:44 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/22/17 07:44 | 1 |

**Client Sample ID: MW-1010D-20170809-01** — **Lab Sample ID: 480-122520-37**
**Date Collected: 08/09/17 13:32** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 07:44 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 07:44 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 07:44 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 07:44 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 07:44 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 07:44 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 07:44 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *98* | | *70 - 130* | | *08/22/17 07:44* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *100* | | *70 - 130* | | *08/22/17 07:44* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* | | *08/22/17 07:44* | *1* |

**Client Sample ID: MW-1010M-20170809-01** — **Lab Sample ID: 480-122520-38**
**Date Collected: 08/09/17 13:45** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 08:09 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1010M-20170809-01**
**Date Collected: 08/09/17 13:45**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-38**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 08:09 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/22/17 08:09 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/22/17 08:09 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 08:09 | 1 |
| Acetone | ND | | 50 | | ug/L | | | 08/22/17 08:09 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 08:09 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 08:09 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 08:09 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 08:09 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 08:09 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 08:09 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |

## Client Sample ID: MW-1010M-20170809-01

**Lab Sample ID: 480-122520-38**

**Date Collected: 08/09/17 13:45**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 08:09 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 08:09 | 1 |
| **Trichloroethene** | **12** | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 08:09 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *98* | | *70 - 130* | | *08/22/17 08:09* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *98* | | *70 - 130* | | *08/22/17 08:09* | *1* |
| *4-Bromofluorobenzene (Surr)* | *98* | | *70 - 130* | | *08/22/17 08:09* | *1* |

## Client Sample ID: MW-1006-20170809-01

**Lab Sample ID: 480-122520-39**

**Date Collected: 08/09/17 14:03**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 08:35 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| **1,1-Dichloroethene** | **1.2** | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 08:35 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/22/17 08:35 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |

**Client Sample ID: MW-1006-20170809-01**
**Date Collected: 08/09/17 14:03**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-39**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/22/17 08:35 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 08:35 | 1 |
| **Acetone** | **64** | | 50 | | ug/L | | | 08/22/17 08:35 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 08:35 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 08:35 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 08:35 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 08:35 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 08:35 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 08:35 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 08:35 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 08:35 | 1 |
| **Trichloroethene** | **4.4** | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 08:35 | 1 |

## Client Sample ID: MW-1006-20170809-01

**Lab Sample ID: 480-122520-39**

**Date Collected: 08/09/17 14:03**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *98* | | *70 - 130* | | *08/22/17 08:35* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *70 - 130* | | *08/22/17 08:35* | *1* |
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* | | *08/22/17 08:35* | *1* |

## Client Sample ID: MW-1016D-20170809-01

**Lab Sample ID: 480-122520-40**

**Date Collected: 08/09/17 14:18**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 09:00 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 09:00 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 2-Butanone (MEK) | ND | * | 10 | | ug/L | | | 08/22/17 09:00 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 2-Hexanone | ND | * | 10 | | ug/L | | | 08/22/17 09:00 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 09:00 | 1 |
| **Acetone** | **65** | | 50 | | ug/L | | | 08/22/17 09:00 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 09:00 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 09:00 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Chloromethane | ND | * | 2.0 | | ug/L | | | 08/22/17 09:00 | 1 |

**Client Sample ID: MW-1016D-20170809-01** — **Lab Sample ID: 480-122520-40**
**Date Collected: 08/09/17 14:18** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 09:00 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 09:00 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 09:00 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 09:00 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 09:00 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 09:00 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 09:00 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* | | *08/22/17 09:00* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *101* | | *70 - 130* | | *08/22/17 09:00* | *1* |
| *4-Bromofluorobenzene (Surr)* | *99* | | *70 - 130* | | *08/22/17 09:00* | *1* |

**Client Sample ID: MW-1017D-20170809-01** — **Lab Sample ID: 480-122520-41**
**Date Collected: 08/09/17 14:38** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 18:01 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |

**Client Sample ID: MW-1017D-20170809-01**
**Date Collected: 08/09/17 14:38**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-41**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 18:01 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 2-Butanone (MEK) | ND | | 10 | | ug/L | | | 08/22/17 18:01 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 2-Hexanone | ND | | 10 | | ug/L | | | 08/22/17 18:01 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 18:01 | 1 |
| **Acetone** | **91** | | 50 | | ug/L | | | 08/22/17 18:01 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Bromoform | ND | * | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 18:01 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 18:01 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Chloromethane | ND | | 2.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| **cis-1,2-Dichloroethene** | **81** | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 18:01 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 18:01 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 18:01 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 18:01 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |

**Client Sample ID: MW-1017D-20170809-01** — **Lab Sample ID: 480-122520-41**
**Date Collected: 08/09/17 14:38** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Tetrahydrofuran | ND | * | 10 | | ug/L | | | 08/22/17 18:01 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| **trans-1,2-Dichloroethene** | **2.1** | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 18:01 | 1 |
| **Trichloroethene** | **25** | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:01 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* | | *08/22/17 18:01* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *103* | | *70 - 130* | | *08/22/17 18:01* | *1* |
| *4-Bromofluorobenzene (Surr)* | *96* | | *70 - 130* | | *08/22/17 18:01* | *1* |

**Client Sample ID: MW-1011-20170809-01** — **Lab Sample ID: 480-122520-42**
**Date Collected: 08/09/17 15:00** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 18:24 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 18:24 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 2-Butanone (MEK) | ND | | 10 | | ug/L | | | 08/22/17 18:24 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: MW-1011-20170809-01**
**Date Collected: 08/09/17 15:00**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-42**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Hexanone | ND | | 10 | | ug/L | | | 08/22/17 18:24 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 18:24 | 1 |
| **Acetone** | **65** | | 50 | | ug/L | | | 08/22/17 18:24 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Bromoform | ND | * | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 18:24 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 18:24 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Chloromethane | ND | | 2.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| **cis-1,2-Dichloroethene** | **5.4** | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 18:24 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 18:24 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 18:24 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 18:24 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Tetrahydrofuran | ND | * | 10 | | ug/L | | | 08/22/17 18:24 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 18:24 | 1 |
| **Trichloroethene** | **15** | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:24 | 1 |

## Client Sample ID: MW-1011-20170809-01

**Lab Sample ID: 480-122520-42**

**Date Collected: 08/09/17 15:00**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *98* | | *70 - 130* | | *08/22/17 18:24* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *102* | | *70 - 130* | | *08/22/17 18:24* | *1* |
| *4-Bromofluorobenzene (Surr)* | *97* | | *70 - 130* | | *08/22/17 18:24* | *1* |

## Client Sample ID: MW-1039-20170809-01

**Lab Sample ID: 480-122520-43**

**Date Collected: 08/09/17 15:11**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 18:48 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 18:48 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 2-Butanone (MEK) | ND | | 10 | | ug/L | | | 08/22/17 18:48 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 2-Hexanone | ND | | 10 | | ug/L | | | 08/22/17 18:48 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 18:48 | 1 |
| **Acetone** | **73** | | 50 | | ug/L | | | 08/22/17 18:48 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Bromoform | ND | * | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 18:48 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 18:48 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Chloromethane | ND | | 2.0 | | ug/L | | | 08/22/17 18:48 | 1 |

## Client Sample ID: MW-1039-20170809-01

**Lab Sample ID: 480-122520-43**

**Date Collected: 08/09/17 15:11**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **cis-1,2-Dichloroethene** | **33** | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 18:48 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 18:48 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 18:48 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 18:48 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Tetrahydrofuran | ND | * | 10 | | ug/L | | | 08/22/17 18:48 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| **trans-1,2-Dichloroethene** | **2.3** | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 18:48 | 1 |
| **Trichloroethene** | **57** | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 18:48 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *98* | | *70 - 130* | | *08/22/17 18:48* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *103* | | *70 - 130* | | *08/22/17 18:48* | *1* |
| *4-Bromofluorobenzene (Surr)* | *98* | | *70 - 130* | | *08/22/17 18:48* | *1* |

## Client Sample ID: TB-001-20170809-01

**Lab Sample ID: 480-122520-44**

**Date Collected: 08/09/17 00:00**

**Matrix: Water**

**Date Received: 08/10/17 09:30**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 19:11 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: TB-001-20170809-01**
**Date Collected: 08/09/17 00:00**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-44**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 19:11 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 2-Butanone (MEK) | ND | | 10 | | ug/L | | | 08/22/17 19:11 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 2-Hexanone | ND | | 10 | | ug/L | | | 08/22/17 19:11 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 19:11 | 1 |
| Acetone | ND | | 50 | | ug/L | | | 08/22/17 19:11 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Bromoform | ND | * | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 19:11 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 19:11 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Chloromethane | ND | | 2.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 19:11 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 19:11 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 19:11 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 19:11 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

**Client Sample ID: TB-001-20170809-01**
**Date Collected: 08/09/17 00:00**
**Date Received: 08/10/17 09:30**

**Lab Sample ID: 480-122520-44**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Tetrahydrofuran | ND | * | 10 | | ug/L | | | 08/22/17 19:11 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 19:11 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 19:11 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* | | *08/22/17 19:11* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *103* | | *70 - 130* | | *08/22/17 19:11* | *1* |
| *4-Bromofluorobenzene (Surr)* | *97* | | *70 - 130* | | *08/22/17 19:11* | *1* |

# Surrogate Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

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

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

| | | Percent Surrogate Recovery (Acceptance Limits) | | |
|---|---|---|---|---|
| | | TOL | 12DCE | BFB |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) | (70-130) |
| 480-122520-1 | MW-1020-20170809-01 | 100 | 102 | 101 |
| 480-122520-2 | MW-1009-20170809-01 | 99 | 97 | 100 |
| 480-122520-3 | MW-1026D-20170809-01 | 99 | 97 | 101 |
| 480-122520-4 | MW-1015D-20170809-01 | 99 | 99 | 101 |
| 480-122520-5 | MW-1022-20170809-01 | 100 | 100 | 103 |
| 480-122520-6 | MW-1030-20170809-01 | 98 | 100 | 100 |
| 480-122520-7 | MW-1031-20170809-01 | 99 | 99 | 99 |
| 480-122520-8 | MW-1032-20170809-01 | 98 | 101 | 99 |
| 480-122520-9 | MW-1028-20170809-01 | 100 | 98 | 101 |
| 480-122520-10 | MW-1027-20170809-01 | 100 | 98 | 102 |
| 480-122520-11 | MW-1033-20170809-01 | 99 | 98 | 100 |
| 480-122520-12 | MW-1013-20170809-01 | 100 | 101 | 99 |
| 480-122520-13 | MW-1014-20170809-01 | 99 | 101 | 101 |
| 480-122520-14 | MW-1008-20170809-01 | 100 | 99 | 100 |
| 480-122520-15 | MW-1005-20170809-01 | 99 | 99 | 100 |
| 480-122520-16 | MW-1004-20170809-01 | 99 | 100 | 100 |
| 480-122520-17 | MW-1003-20170809-01 | 99 | 96 | 100 |
| 480-122520-18 | MW-1002B-20170809-01 | 99 | 103 | 101 |
| 480-122520-19 | MW-1001M-20170809-01 | 99 | 99 | 101 |
| 480-122520-20 | MW-1001B-20170809-01 | 99 | 99 | 100 |
| 480-122520-21 | MW-1025M-20170809-01 | 100 | 105 | 98 |
| 480-122520-22 | MW-1025D-20170809-01 | 98 | 103 | 98 |
| 480-122520-23 | MW-1034-20170809-01 | 100 | 98 | 100 |
| 480-122520-24 | DUP-004-20170809-01 | 99 | 99 | 102 |
| 480-122520-25 | MW-1018-20170809-01 | 99 | 99 | 101 |
| 480-122520-26 | MW-1035-20170809-01 | 98 | 100 | 99 |
| 480-122520-27 | MW-1036-20170809-01 | 97 | 101 | 100 |
| 480-122520-28 | DUP-005-20170809-01 | 98 | 99 | 99 |
| 480-122520-29 - DL | MW-1037-20170809-01 | 99 | 99 | 101 |
| 480-122520-29 | MW-1037-20170809-01 | 101 | 105 | 97 |
| 480-122520-30 | MW-1038-20170809-01 | 100 | 99 | 97 |
| 480-122520-31 | DUP-002-20170809-01 | 98 | 98 | 99 |
| 480-122520-32 | DUP-003-20170809-01 | 98 | 100 | 100 |
| 480-122520-33 | DUP-001-20170809-01 | 97 | 99 | 98 |
| 480-122520-34 | MW-1024D-20170809-01 | 98 | 100 | 99 |
| 480-122520-35 | MW-1023-20170809-01 | 98 | 99 | 99 |
| 480-122520-36 | MW-1019B-20170809-01 | 97 | 96 | 97 |
| 480-122520-37 | MW-1010D-20170809-01 | 98 | 100 | 100 |
| 480-122520-38 | MW-1010M-20170809-01 | 98 | 98 | 98 |
| 480-122520-39 | MW-1006-20170809-01 | 98 | 99 | 99 |
| 480-122520-40 | MW-1016D-20170809-01 | 99 | 101 | 99 |
| 480-122520-41 | MW-1017D-20170809-01 | 100 | 103 | 96 |
| 480-122520-42 | MW-1011-20170809-01 | 98 | 102 | 97 |
| 480-122520-43 | MW-1039-20170809-01 | 98 | 103 | 98 |
| 480-122520-44 | TB-001-20170809-01 | 100 | 103 | 97 |
| LCS 480-373038/5 | Lab Control Sample | 99 | 94 | 102 |
| LCS 480-373188/5 | Lab Control Sample | 99 | 95 | 102 |
| LCS 480-373193/8 | Lab Control Sample | 97 | 103 | 98 |
| LCS 480-373250/4 | Lab Control Sample | 101 | 101 | 100 |

# Surrogate Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

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

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

| | | Percent Surrogate Recovery (Acceptance Limits) | | |
|---|---|---|---|---|
| | | TOL | 12DCE | BFB |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) | (70-130) |
| LCSD 480-373038/9 | Lab Control Sample Dup | 101 | 97 | 105 |
| LCSD 480-373188/6 | Lab Control Sample Dup | 100 | 94 | 102 |
| LCSD 480-373193/9 | Lab Control Sample Dup | 101 | 102 | 100 |
| LCSD 480-373250/5 | Lab Control Sample Dup | 98 | 101 | 98 |
| MB 480-373038/8 | Method Blank | 100 | 97 | 102 |
| MB 480-373188/8 | Method Blank | 100 | 100 | 101 |
| MB 480-373193/11 | Method Blank | 100 | 102 | 96 |
| MB 480-373250/7 | Method Blank | 98 | 107 | 96 |

**Surrogate Legend**

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

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

**Lab Sample ID: MB 480-373038/8**
**Matrix: Water**
**Analysis Batch: 373038**

**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 | | | 08/21/17 12:29 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/21/17 12:29 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/21/17 12:29 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 2-Butanone (MEK) | ND | | 10 | | ug/L | | | 08/21/17 12:29 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 2-Hexanone | ND | | 10 | | ug/L | | | 08/21/17 12:29 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/21/17 12:29 | 1 |
| Acetone | ND | | 50 | | ug/L | | | 08/21/17 12:29 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/21/17 12:29 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 12:29 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Chloromethane | ND | | 2.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 12:29 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/21/17 12:29 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/21/17 12:29 | 1 |

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

**Lab Sample ID: MB 480-373038/8**
**Matrix: Water**
**Analysis Batch: 373038**

**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 | | | 08/21/17 12:29 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/21/17 12:29 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/21/17 12:29 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/21/17 12:29 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* | | *08/21/17 12:29* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *97* | | *70 - 130* | | *08/21/17 12:29* | *1* |
| *4-Bromofluorobenzene (Surr)* | *102* | | *70 - 130* | | *08/21/17 12:29* | *1* |

**Lab Sample ID: LCS 480-373038/5**
**Matrix: Water**
**Analysis Batch: 373038**

**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 | 27.6 | | ug/L | | 111 | 70 - 130 |
| 1,1,1-Trichloroethane | 25.0 | 26.8 | | ug/L | | 107 | 70 - 130 |
| 1,1,2,2-Tetrachloroethane | 25.0 | 28.9 | | ug/L | | 116 | 70 - 130 |
| 1,1,2-Trichloroethane | 25.0 | 27.8 | | ug/L | | 111 | 70 - 130 |
| 1,1-Dichloroethane | 25.0 | 25.4 | | ug/L | | 102 | 70 - 130 |
| 1,1-Dichloroethene | 25.0 | 26.3 | | ug/L | | 105 | 70 - 130 |
| 1,1-Dichloropropene | 25.0 | 27.0 | | ug/L | | 108 | 70 - 130 |
| 1,2,3-Trichlorobenzene | 25.0 | 28.6 | | ug/L | | 114 | 70 - 130 |
| 1,2,3-Trichloropropane | 25.0 | 28.5 | | ug/L | | 114 | 70 - 130 |
| 1,2,4-Trichlorobenzene | 25.0 | 28.5 | | ug/L | | 114 | 70 - 130 |
| 1,2,4-Trimethylbenzene | 25.0 | 29.1 | | ug/L | | 117 | 70 - 130 |
| 1,2-Dibromo-3-Chloropropane | 25.0 | 27.4 | | ug/L | | 110 | 70 - 130 |
| 1,2-Dichlorobenzene | 25.0 | 27.8 | | ug/L | | 111 | 70 - 130 |
| 1,2-Dichloroethane | 25.0 | 23.7 | | ug/L | | 95 | 70 - 130 |

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

**Lab Sample ID: LCS 480-373038/5**
**Matrix: Water**
**Analysis Batch: 373038**

**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 | 24.7 | | ug/L | | 99 | 70 - 130 |
| 1,3,5-Trimethylbenzene | 25.0 | 29.5 | | ug/L | | 118 | 70 - 130 |
| 1,3-Dichlorobenzene | 25.0 | 27.9 | | ug/L | | 112 | 70 - 130 |
| 1,3-Dichloropropane | 25.0 | 28.2 | | ug/L | | 113 | 70 - 130 |
| 1,4-Dichlorobenzene | 25.0 | 27.7 | | ug/L | | 111 | 70 - 130 |
| 1,4-Dioxane | 500 | 595 | | ug/L | | 119 | 70 - 130 |
| 2,2-Dichloropropane | 25.0 | 26.3 | | ug/L | | 105 | 70 - 130 |
| 2-Butanone (MEK) | 125 | 211 | * | ug/L | | 169 | 70 - 130 |
| 2-Chlorotoluene | 25.0 | 32.3 | | ug/L | | 129 | 70 - 130 |
| 2-Hexanone | 125 | 186 | * | ug/L | | 149 | 70 - 130 |
| 4-Chlorotoluene | 25.0 | 32.7 | * | ug/L | | 131 | 70 - 130 |
| 4-Isopropyltoluene | 25.0 | 29.8 | | ug/L | | 119 | 70 - 130 |
| 4-Methyl-2-pentanone (MIBK) | 125 | 134 | | ug/L | | 107 | 70 - 130 |
| Acetone | 125 | 117 | | ug/L | | 94 | 70 - 130 |
| Benzene | 25.0 | 25.5 | | ug/L | | 102 | 70 - 130 |
| Bromobenzene | 25.0 | 27.9 | | ug/L | | 112 | 70 - 130 |
| Bromoform | 25.0 | 25.1 | | ug/L | | 100 | 70 - 130 |
| Bromomethane | 25.0 | 21.7 | | ug/L | | 87 | 70 - 130 |
| Carbon disulfide | 25.0 | 26.1 | | ug/L | | 104 | 70 - 130 |
| Carbon tetrachloride | 25.0 | 27.8 | | ug/L | | 111 | 70 - 130 |
| Chlorobenzene | 25.0 | 27.7 | | ug/L | | 111 | 70 - 130 |
| Chlorobromomethane | 25.0 | 25.1 | | ug/L | | 100 | 70 - 130 |
| Chlorodibromomethane | 25.0 | 28.8 | | ug/L | | 115 | 70 - 130 |
| Chloroethane | 25.0 | 22.6 | | ug/L | | 91 | 70 - 130 |
| Chloroform | 25.0 | 25.0 | | ug/L | | 100 | 70 - 130 |
| Chloromethane | 25.0 | 17.9 | | ug/L | | 72 | 70 - 130 |
| cis-1,2-Dichloroethene | 25.0 | 25.3 | | ug/L | | 101 | 70 - 130 |
| cis-1,3-Dichloropropene | 25.0 | 26.3 | | ug/L | | 105 | 70 - 130 |
| Dichlorobromomethane | 25.0 | 26.0 | | ug/L | | 104 | 70 - 130 |
| Dichlorodifluoromethane | 25.0 | 19.7 | | ug/L | | 79 | 70 - 130 |
| Ethyl ether | 25.0 | 24.5 | | ug/L | | 98 | 70 - 130 |
| Ethylbenzene | 25.0 | 28.4 | | ug/L | | 114 | 70 - 130 |
| Ethylene Dibromide | 25.0 | 28.7 | | ug/L | | 115 | 70 - 130 |
| Hexachlorobutadiene | 25.0 | 29.2 | | ug/L | | 117 | 70 - 130 |
| Isopropyl ether | 25.0 | 26.8 | | ug/L | | 107 | 70 - 130 |
| Isopropylbenzene | 25.0 | 29.4 | | ug/L | | 117 | 70 - 130 |
| Methyl tert-butyl ether | 25.0 | 24.8 | | ug/L | | 99 | 70 - 130 |
| Methylene Chloride | 25.0 | 23.0 | | ug/L | | 92 | 70 - 130 |
| m-Xylene & p-Xylene | 25.0 | 28.8 | | ug/L | | 115 | 70 - 130 |
| Naphthalene | 25.0 | 29.0 | | ug/L | | 116 | 70 - 130 |
| n-Butylbenzene | 25.0 | 30.6 | | ug/L | | 122 | 70 - 130 |
| N-Propylbenzene | 25.0 | 29.9 | | ug/L | | 119 | 70 - 130 |
| o-Xylene | 25.0 | 28.6 | | ug/L | | 114 | 70 - 130 |
| sec-Butylbenzene | 25.0 | 30.8 | | ug/L | | 123 | 70 - 130 |
| Styrene | 25.0 | 29.0 | | ug/L | | 116 | 70 - 130 |
| Tert-amyl methyl ether | 25.0 | 28.0 | | ug/L | | 112 | 70 - 130 |
| Tert-butyl ethyl ether | 25.0 | 26.8 | | ug/L | | 107 | 70 - 130 |
| tert-Butylbenzene | 25.0 | 29.4 | | ug/L | | 118 | 70 - 130 |

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

**Lab Sample ID: LCS 480-373038/5**
**Matrix: Water**
**Analysis Batch: 373038**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Tetrachloroethene | 25.0 | 31.5 | | ug/L | | 126 | 70 - 130 |
| Tetrahydrofuran | 50.0 | 44.5 | | ug/L | | 89 | 70 - 130 |
| Toluene | 25.0 | 28.4 | | ug/L | | 113 | 70 - 130 |
| trans-1,2-Dichloroethene | 25.0 | 25.5 | | ug/L | | 102 | 70 - 130 |
| trans-1,3-Dichloropropene | 25.0 | 29.3 | | ug/L | | 117 | 70 - 130 |
| Trichloroethene | 25.0 | 26.5 | | ug/L | | 106 | 70 - 130 |
| Trichlorofluoromethane | 25.0 | 26.6 | | ug/L | | 106 | 70 - 130 |
| Vinyl chloride | 25.0 | 22.2 | | ug/L | | 89 | 70 - 130 |
| Dibromomethane | 25.0 | 25.0 | | ug/L | | 100 | 70 - 130 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* |
| *1,2-Dichloroethane-d4 (Surr)* | *94* | | *70 - 130* |
| *4-Bromofluorobenzene (Surr)* | *102* | | *70 - 130* |

**Lab Sample ID: LCSD 480-373038/9**
**Matrix: Water**
**Analysis Batch: 373038**

**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 | 27.5 | | ug/L | | 110 | 70 - 130 | 1 | 20 |
| 1,1,1-Trichloroethane | 25.0 | 25.8 | | ug/L | | 103 | 70 - 130 | 3 | 20 |
| 1,1,2,2-Tetrachloroethane | 25.0 | 28.2 | | ug/L | | 113 | 70 - 130 | 2 | 20 |
| 1,1,2-Trichloroethane | 25.0 | 27.8 | | ug/L | | 111 | 70 - 130 | 0 | 20 |
| 1,1-Dichloroethane | 25.0 | 24.8 | | ug/L | | 99 | 70 - 130 | 3 | 20 |
| 1,1-Dichloroethene | 25.0 | 25.6 | | ug/L | | 102 | 70 - 130 | 3 | 20 |
| 1,1-Dichloropropene | 25.0 | 26.1 | | ug/L | | 104 | 70 - 130 | 3 | 20 |
| 1,2,3-Trichlorobenzene | 25.0 | 28.3 | | ug/L | | 113 | 70 - 130 | 1 | 20 |
| 1,2,3-Trichloropropane | 25.0 | 28.0 | | ug/L | | 112 | 70 - 130 | 2 | 20 |
| 1,2,4-Trichlorobenzene | 25.0 | 28.3 | | ug/L | | 113 | 70 - 130 | 1 | 20 |
| 1,2,4-Trimethylbenzene | 25.0 | 27.8 | | ug/L | | 111 | 70 - 130 | 5 | 20 |
| 1,2-Dibromo-3-Chloropropane | 25.0 | 26.6 | | ug/L | | 106 | 70 - 130 | 3 | 20 |
| 1,2-Dichlorobenzene | 25.0 | 27.2 | | ug/L | | 109 | 70 - 130 | 3 | 20 |
| 1,2-Dichloroethane | 25.0 | 23.3 | | ug/L | | 93 | 70 - 130 | 2 | 20 |
| 1,2-Dichloropropane | 25.0 | 23.8 | | ug/L | | 95 | 70 - 130 | 4 | 20 |
| 1,3,5-Trimethylbenzene | 25.0 | 28.5 | | ug/L | | 114 | 70 - 130 | 3 | 20 |
| 1,3-Dichlorobenzene | 25.0 | 26.9 | | ug/L | | 108 | 70 - 130 | 4 | 20 |
| 1,3-Dichloropropane | 25.0 | 28.2 | | ug/L | | 113 | 70 - 130 | 0 | 20 |
| 1,4-Dichlorobenzene | 25.0 | 27.2 | | ug/L | | 109 | 70 - 130 | 2 | 20 |
| 1,4-Dioxane | 500 | 593 | | ug/L | | 119 | 70 - 130 | 0 | 20 |
| 2,2-Dichloropropane | 25.0 | 25.5 | | ug/L | | 102 | 70 - 130 | 3 | 20 |
| 2-Butanone (MEK) | 125 | 211 | * | ug/L | | 168 | 70 - 130 | 0 | 20 |
| 2-Chlorotoluene | 25.0 | 31.4 | | ug/L | | 125 | 70 - 130 | 3 | 20 |
| 2-Hexanone | 125 | 187 | * | ug/L | | 149 | 70 - 130 | 0 | 20 |
| 4-Chlorotoluene | 25.0 | 31.4 | | ug/L | | 126 | 70 - 130 | 4 | 20 |
| 4-Isopropyltoluene | 25.0 | 28.5 | | ug/L | | 114 | 70 - 130 | 4 | 20 |
| 4-Methyl-2-pentanone (MIBK) | 125 | 133 | | ug/L | | 107 | 70 - 130 | 0 | 20 |
| Acetone | 125 | 114 | | ug/L | | 91 | 70 - 130 | 2 | 20 |

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

**Lab Sample ID: LCSD 480-373038/9**
**Matrix: Water**
**Analysis Batch: 373038**

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

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 25.0 | 24.7 | | ug/L | | 99 | 70 - 130 | 3 | 20 |
| Bromobenzene | | | 25.0 | 27.3 | | ug/L | | 109 | 70 - 130 | 2 | 20 |
| Bromoform | | | 25.0 | 25.2 | | ug/L | | 101 | 70 - 130 | 0 | 20 |
| Bromomethane | | | 25.0 | 21.2 | | ug/L | | 85 | 70 - 130 | 2 | 20 |
| Carbon disulfide | | | 25.0 | 21.5 | | ug/L | | 86 | 70 - 130 | 19 | 20 |
| Carbon tetrachloride | | | 25.0 | 26.7 | | ug/L | | 107 | 70 - 130 | 4 | 20 |
| Chlorobenzene | | | 25.0 | 27.5 | | ug/L | | 110 | 70 - 130 | 1 | 20 |
| Chlorobromomethane | | | 25.0 | 25.2 | | ug/L | | 101 | 70 - 130 | 1 | 20 |
| Chlorodibromomethane | | | 25.0 | 28.8 | | ug/L | | 115 | 70 - 130 | 0 | 20 |
| Chloroethane | | | 25.0 | 21.4 | | ug/L | | 86 | 70 - 130 | 5 | 20 |
| Chloroform | | | 25.0 | 24.6 | | ug/L | | 98 | 70 - 130 | 2 | 20 |
| Chloromethane | | | 25.0 | 17.2 | * | ug/L | | 69 | 70 - 130 | 4 | 20 |
| cis-1,2-Dichloroethene | | | 25.0 | 24.8 | | ug/L | | 99 | 70 - 130 | 2 | 20 |
| cis-1,3-Dichloropropene | | | 25.0 | 26.0 | | ug/L | | 104 | 70 - 130 | 1 | 20 |
| Dichlorobromomethane | | | 25.0 | 26.0 | | ug/L | | 104 | 70 - 130 | 0 | 20 |
| Dichlorodifluoromethane | | | 25.0 | 18.7 | | ug/L | | 75 | 70 - 130 | 5 | 20 |
| Ethyl ether | | | 25.0 | 24.4 | | ug/L | | 98 | 70 - 130 | 0 | 20 |
| Ethylbenzene | | | 25.0 | 28.0 | | ug/L | | 112 | 70 - 130 | 2 | 20 |
| Ethylene Dibromide | | | 25.0 | 28.6 | | ug/L | | 114 | 70 - 130 | 1 | 20 |
| Hexachlorobutadiene | | | 25.0 | 27.9 | | ug/L | | 112 | 70 - 130 | 4 | 20 |
| Isopropyl ether | | | 25.0 | 26.6 | | ug/L | | 106 | 70 - 130 | 1 | 20 |
| Isopropylbenzene | | | 25.0 | 28.0 | | ug/L | | 112 | 70 - 130 | 5 | 20 |
| Methyl tert-butyl ether | | | 25.0 | 24.7 | | ug/L | | 99 | 70 - 130 | 0 | 20 |
| Methylene Chloride | | | 25.0 | 22.9 | | ug/L | | 92 | 70 - 130 | 0 | 20 |
| m-Xylene & p-Xylene | | | 25.0 | 28.3 | | ug/L | | 113 | 70 - 130 | 2 | 20 |
| Naphthalene | | | 25.0 | 28.9 | | ug/L | | 116 | 70 - 130 | 0 | 20 |
| n-Butylbenzene | | | 25.0 | 29.0 | | ug/L | | 116 | 70 - 130 | 5 | 20 |
| N-Propylbenzene | | | 25.0 | 28.6 | | ug/L | | 114 | 70 - 130 | 4 | 20 |
| o-Xylene | | | 25.0 | 28.0 | | ug/L | | 112 | 70 - 130 | 2 | 20 |
| sec-Butylbenzene | | | 25.0 | 29.4 | | ug/L | | 118 | 70 - 130 | 4 | 20 |
| Styrene | | | 25.0 | 28.7 | | ug/L | | 115 | 70 - 130 | 1 | 20 |
| Tert-amyl methyl ether | | | 25.0 | 28.2 | | ug/L | | 113 | 70 - 130 | 1 | 20 |
| Tert-butyl ethyl ether | | | 25.0 | 27.1 | | ug/L | | 108 | 70 - 130 | 1 | 20 |
| tert-Butylbenzene | | | 25.0 | 28.1 | | ug/L | | 112 | 70 - 130 | 4 | 20 |
| Tetrachloroethene | | | 25.0 | 31.1 | | ug/L | | 124 | 70 - 130 | 1 | 20 |
| Tetrahydrofuran | | | 50.0 | 45.8 | | ug/L | | 92 | 70 - 130 | 3 | 20 |
| Toluene | | | 25.0 | 27.9 | | ug/L | | 112 | 70 - 130 | 2 | 20 |
| trans-1,2-Dichloroethene | | | 25.0 | 24.7 | | ug/L | | 99 | 70 - 130 | 3 | 20 |
| trans-1,3-Dichloropropene | | | 25.0 | 29.3 | | ug/L | | 117 | 70 - 130 | 0 | 20 |
| Trichloroethene | | | 25.0 | 25.8 | | ug/L | | 103 | 70 - 130 | 3 | 20 |
| Trichlorofluoromethane | | | 25.0 | 25.5 | | ug/L | | 102 | 70 - 130 | 4 | 20 |
| Vinyl chloride | | | 25.0 | 21.4 | | ug/L | | 86 | 70 - 130 | 4 | 20 |
| Dibromomethane | | | 25.0 | 24.9 | | ug/L | | 100 | 70 - 130 | 0 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *101* | | *70 - 130* |
| *1,2-Dichloroethane-d4 (Surr)* | *97* | | *70 - 130* |
| *4-Bromofluorobenzene (Surr)* | *105* | | *70 - 130* |

**Lab Sample ID: MB 480-373188/8**
**Matrix: Water**
**Analysis Batch: 373188**

**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 | | | 08/22/17 00:46 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 00:46 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 00:46 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 2-Butanone (MEK) | ND | | 10 | | ug/L | | | 08/22/17 00:46 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 2-Hexanone | ND | | 10 | | ug/L | | | 08/22/17 00:46 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 00:46 | 1 |
| Acetone | ND | | 50 | | ug/L | | | 08/22/17 00:46 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 00:46 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 00:46 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Chloromethane | ND | | 2.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 00:46 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 00:46 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 00:46 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 00:46 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |

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

**Lab Sample ID: MB 480-373188/8**
**Matrix: Water**
**Analysis Batch: 373188**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 00:46 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 00:46 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 00:46 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* | | *08/22/17 00:46* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *100* | | *70 - 130* | | *08/22/17 00:46* | *1* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *70 - 130* | | *08/22/17 00:46* | *1* |

**Lab Sample ID: LCS 480-373188/5**
**Matrix: Water**
**Analysis Batch: 373188**

**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 | 25.2 | | ug/L | | 101 | 70 - 130 |
| 1,1,1-Trichloroethane | 25.0 | 22.9 | | ug/L | | 92 | 70 - 130 |
| 1,1,2,2-Tetrachloroethane | 25.0 | 26.5 | | ug/L | | 106 | 70 - 130 |
| 1,1,2-Trichloroethane | 25.0 | 25.8 | | ug/L | | 103 | 70 - 130 |
| 1,1-Dichloroethane | 25.0 | 22.1 | | ug/L | | 88 | 70 - 130 |
| 1,1-Dichloroethene | 25.0 | 22.3 | | ug/L | | 89 | 70 - 130 |
| 1,1-Dichloropropene | 25.0 | 22.5 | | ug/L | | 90 | 70 - 130 |
| 1,2,3-Trichlorobenzene | 25.0 | 26.4 | | ug/L | | 105 | 70 - 130 |
| 1,2,3-Trichloropropane | 25.0 | 26.0 | | ug/L | | 104 | 70 - 130 |
| 1,2,4-Trichlorobenzene | 25.0 | 25.7 | | ug/L | | 103 | 70 - 130 |
| 1,2,4-Trimethylbenzene | 25.0 | 25.3 | | ug/L | | 101 | 70 - 130 |
| 1,2-Dibromo-3-Chloropropane | 25.0 | 25.2 | | ug/L | | 101 | 70 - 130 |
| 1,2-Dichlorobenzene | 25.0 | 24.7 | | ug/L | | 99 | 70 - 130 |
| 1,2-Dichloroethane | 25.0 | 21.9 | | ug/L | | 88 | 70 - 130 |
| 1,2-Dichloropropane | 25.0 | 21.9 | | ug/L | | 88 | 70 - 130 |
| 1,3,5-Trimethylbenzene | 25.0 | 25.5 | | ug/L | | 102 | 70 - 130 |

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

**Lab Sample ID: LCS 480-373188/5**
**Matrix: Water**
**Analysis Batch: 373188**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 25.0 | 24.7 | | ug/L | | 99 | 70 - 130 |
| 1,3-Dichloropropane | 25.0 | 25.5 | | ug/L | | 102 | 70 - 130 |
| 1,4-Dichlorobenzene | 25.0 | 24.4 | | ug/L | | 97 | 70 - 130 |
| 1,4-Dioxane | 500 | 585 | | ug/L | | 117 | 70 - 130 |
| 2,2-Dichloropropane | 25.0 | 22.5 | | ug/L | | 90 | 70 - 130 |
| 2-Butanone (MEK) | 125 | 194 | * | ug/L | | 156 | 70 - 130 |
| 2-Chlorotoluene | 25.0 | 28.2 | | ug/L | | 113 | 70 - 130 |
| 2-Hexanone | 125 | 171 | * | ug/L | | 137 | 70 - 130 |
| 4-Chlorotoluene | 25.0 | 29.2 | | ug/L | | 117 | 70 - 130 |
| 4-Isopropyltoluene | 25.0 | 25.6 | | ug/L | | 102 | 70 - 130 |
| 4-Methyl-2-pentanone (MIBK) | 125 | 124 | | ug/L | | 99 | 70 - 130 |
| Acetone | 125 | 111 | | ug/L | | 89 | 70 - 130 |
| Benzene | 25.0 | 22.3 | | ug/L | | 89 | 70 - 130 |
| Bromobenzene | 25.0 | 24.8 | | ug/L | | 99 | 70 - 130 |
| Bromoform | 25.0 | 22.6 | | ug/L | | 91 | 70 - 130 |
| Bromomethane | 25.0 | 19.8 | | ug/L | | 79 | 70 - 130 |
| Carbon disulfide | 25.0 | 21.2 | | ug/L | | 85 | 70 - 130 |
| Carbon tetrachloride | 25.0 | 23.4 | | ug/L | | 94 | 70 - 130 |
| Chlorobenzene | 25.0 | 24.4 | | ug/L | | 98 | 70 - 130 |
| Chlorobromomethane | 25.0 | 22.7 | | ug/L | | 91 | 70 - 130 |
| Chlorodibromomethane | 25.0 | 26.0 | | ug/L | | 104 | 70 - 130 |
| Chloroethane | 25.0 | 20.3 | | ug/L | | 81 | 70 - 130 |
| Chloroform | 25.0 | 22.1 | | ug/L | | 88 | 70 - 130 |
| Chloromethane | 25.0 | 16.8 | * | ug/L | | 67 | 70 - 130 |
| cis-1,2-Dichloroethene | 25.0 | 22.3 | | ug/L | | 89 | 70 - 130 |
| cis-1,3-Dichloropropene | 25.0 | 23.3 | | ug/L | | 93 | 70 - 130 |
| Dichlorobromomethane | 25.0 | 23.3 | | ug/L | | 93 | 70 - 130 |
| Dichlorodifluoromethane | 25.0 | 19.2 | | ug/L | | 77 | 70 - 130 |
| Ethyl ether | 25.0 | 22.3 | | ug/L | | 89 | 70 - 130 |
| Ethylbenzene | 25.0 | 24.6 | | ug/L | | 98 | 70 - 130 |
| Ethylene Dibromide | 25.0 | 25.7 | | ug/L | | 103 | 70 - 130 |
| Hexachlorobutadiene | 25.0 | 24.2 | | ug/L | | 97 | 70 - 130 |
| Isopropyl ether | 25.0 | 24.3 | | ug/L | | 97 | 70 - 130 |
| Isopropylbenzene | 25.0 | 25.6 | | ug/L | | 102 | 70 - 130 |
| Methyl tert-butyl ether | 25.0 | 22.5 | | ug/L | | 90 | 70 - 130 |
| Methylene Chloride | 25.0 | 20.5 | | ug/L | | 82 | 70 - 130 |
| m-Xylene & p-Xylene | 25.0 | 25.0 | | ug/L | | 100 | 70 - 130 |
| Naphthalene | 25.0 | 26.8 | | ug/L | | 107 | 70 - 130 |
| n-Butylbenzene | 25.0 | 25.9 | | ug/L | | 104 | 70 - 130 |
| N-Propylbenzene | 25.0 | 25.6 | | ug/L | | 102 | 70 - 130 |
| o-Xylene | 25.0 | 24.8 | | ug/L | | 99 | 70 - 130 |
| sec-Butylbenzene | 25.0 | 26.4 | | ug/L | | 106 | 70 - 130 |
| Styrene | 25.0 | 25.5 | | ug/L | | 102 | 70 - 130 |
| Tert-amyl methyl ether | 25.0 | 25.9 | | ug/L | | 103 | 70 - 130 |
| Tert-butyl ethyl ether | 25.0 | 24.7 | | ug/L | | 99 | 70 - 130 |
| tert-Butylbenzene | 25.0 | 24.9 | | ug/L | | 100 | 70 - 130 |
| Tetrachloroethene | 25.0 | 29.1 | | ug/L | | 116 | 70 - 130 |
| Tetrahydrofuran | 50.0 | 42.8 | | ug/L | | 86 | 70 - 130 |

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

**Lab Sample ID: LCS 480-373188/5**
**Matrix: Water**
**Analysis Batch: 373188**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Toluene | 25.0 | 24.3 | | ug/L | | 97 | 70 - 130 |
| trans-1,2-Dichloroethene | 25.0 | 21.5 | | ug/L | | 86 | 70 - 130 |
| trans-1,3-Dichloropropene | 25.0 | 26.2 | | ug/L | | 105 | 70 - 130 |
| Trichloroethene | 25.0 | 23.1 | | ug/L | | 92 | 70 - 130 |
| Trichlorofluoromethane | 25.0 | 23.2 | | ug/L | | 93 | 70 - 130 |
| Vinyl chloride | 25.0 | 20.1 | | ug/L | | 80 | 70 - 130 |
| Dibromomethane | 25.0 | 22.9 | | ug/L | | 92 | 70 - 130 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* |
| *1,2-Dichloroethane-d4 (Surr)* | *95* | | *70 - 130* |
| *4-Bromofluorobenzene (Surr)* | *102* | | *70 - 130* |

**Lab Sample ID: LCSD 480-373188/6**
**Matrix: Water**
**Analysis Batch: 373188**

**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 | 25.7 | | ug/L | | 103 | 70 - 130 | 2 | 20 |
| 1,1,1-Trichloroethane | 25.0 | 24.0 | | ug/L | | 96 | 70 - 130 | 5 | 20 |
| 1,1,2,2-Tetrachloroethane | 25.0 | 26.0 | | ug/L | | 104 | 70 - 130 | 2 | 20 |
| 1,1,2-Trichloroethane | 25.0 | 26.3 | | ug/L | | 105 | 70 - 130 | 2 | 20 |
| 1,1-Dichloroethane | 25.0 | 23.0 | | ug/L | | 92 | 70 - 130 | 4 | 20 |
| 1,1-Dichloroethene | 25.0 | 23.3 | | ug/L | | 93 | 70 - 130 | 4 | 20 |
| 1,1-Dichloropropene | 25.0 | 23.9 | | ug/L | | 96 | 70 - 130 | 6 | 20 |
| 1,2,3-Trichlorobenzene | 25.0 | 26.5 | | ug/L | | 106 | 70 - 130 | 1 | 20 |
| 1,2,3-Trichloropropane | 25.0 | 25.8 | | ug/L | | 103 | 70 - 130 | 1 | 20 |
| 1,2,4-Trichlorobenzene | 25.0 | 26.0 | | ug/L | | 104 | 70 - 130 | 1 | 20 |
| 1,2,4-Trimethylbenzene | 25.0 | 26.0 | | ug/L | | 104 | 70 - 130 | 3 | 20 |
| 1,2-Dibromo-3-Chloropropane | 25.0 | 24.7 | | ug/L | | 99 | 70 - 130 | 2 | 20 |
| 1,2-Dichlorobenzene | 25.0 | 25.2 | | ug/L | | 101 | 70 - 130 | 2 | 20 |
| 1,2-Dichloroethane | 25.0 | 22.2 | | ug/L | | 89 | 70 - 130 | 1 | 20 |
| 1,2-Dichloropropane | 25.0 | 22.7 | | ug/L | | 91 | 70 - 130 | 3 | 20 |
| 1,3,5-Trimethylbenzene | 25.0 | 26.1 | | ug/L | | 104 | 70 - 130 | 2 | 20 |
| 1,3-Dichlorobenzene | 25.0 | 25.1 | | ug/L | | 100 | 70 - 130 | 2 | 20 |
| 1,3-Dichloropropane | 25.0 | 26.0 | | ug/L | | 104 | 70 - 130 | 2 | 20 |
| 1,4-Dichlorobenzene | 25.0 | 25.0 | | ug/L | | 100 | 70 - 130 | 3 | 20 |
| 1,4-Dioxane | 500 | 595 | | ug/L | | 119 | 70 - 130 | 2 | 20 |
| 2,2-Dichloropropane | 25.0 | 23.3 | | ug/L | | 93 | 70 - 130 | 4 | 20 |
| 2-Butanone (MEK) | 125 | 196 | * | ug/L | | 156 | 70 - 130 | 1 | 20 |
| 2-Chlorotoluene | 25.0 | 29.1 | | ug/L | | 116 | 70 - 130 | 3 | 20 |
| 2-Hexanone | 125 | 171 | * | ug/L | | 137 | 70 - 130 | 0 | 20 |
| 4-Chlorotoluene | 25.0 | 28.9 | | ug/L | | 116 | 70 - 130 | 1 | 20 |
| 4-Isopropyltoluene | 25.0 | 26.3 | | ug/L | | 105 | 70 - 130 | 3 | 20 |
| 4-Methyl-2-pentanone (MIBK) | 125 | 124 | | ug/L | | 99 | 70 - 130 | 0 | 20 |
| Acetone | 125 | 112 | | ug/L | | 89 | 70 - 130 | 0 | 20 |
| Benzene | 25.0 | 23.4 | | ug/L | | 93 | 70 - 130 | 5 | 20 |
| Bromobenzene | 25.0 | 25.4 | | ug/L | | 102 | 70 - 130 | 2 | 20 |

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

**Lab Sample ID: LCSD 480-373188/6**
**Matrix: Water**
**Analysis Batch: 373188**

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

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromoform | | | 25.0 | 23.0 | | ug/L | | 92 | 70 - 130 | 1 | 20 |
| Bromomethane | | | 25.0 | 20.6 | | ug/L | | 83 | 70 - 130 | 4 | 20 |
| Carbon disulfide | | | 25.0 | 22.4 | | ug/L | | 90 | 70 - 130 | 6 | 20 |
| Carbon tetrachloride | | | 25.0 | 24.7 | | ug/L | | 99 | 70 - 130 | 5 | 20 |
| Chlorobenzene | | | 25.0 | 25.1 | | ug/L | | 100 | 70 - 130 | 3 | 20 |
| Chlorobromomethane | | | 25.0 | 23.5 | | ug/L | | 94 | 70 - 130 | 4 | 20 |
| Chlorodibromomethane | | | 25.0 | 26.1 | | ug/L | | 104 | 70 - 130 | 0 | 20 |
| Chloroethane | | | 25.0 | 21.5 | | ug/L | | 86 | 70 - 130 | 6 | 20 |
| Chloroform | | | 25.0 | 23.2 | | ug/L | | 93 | 70 - 130 | 5 | 20 |
| Chloromethane | | | 25.0 | 17.5 | | ug/L | | 70 | 70 - 130 | 4 | 20 |
| cis-1,2-Dichloroethene | | | 25.0 | 23.1 | | ug/L | | 92 | 70 - 130 | 4 | 20 |
| cis-1,3-Dichloropropene | | | 25.0 | 24.3 | | ug/L | | 97 | 70 - 130 | 4 | 20 |
| Dichlorobromomethane | | | 25.0 | 24.2 | | ug/L | | 97 | 70 - 130 | 4 | 20 |
| Dichlorodifluoromethane | | | 25.0 | 20.7 | | ug/L | | 83 | 70 - 130 | 8 | 20 |
| Ethyl ether | | | 25.0 | 22.4 | | ug/L | | 90 | 70 - 130 | 0 | 20 |
| Ethylbenzene | | | 25.0 | 25.3 | | ug/L | | 101 | 70 - 130 | 3 | 20 |
| Ethylene Dibromide | | | 25.0 | 26.1 | | ug/L | | 104 | 70 - 130 | 2 | 20 |
| Hexachlorobutadiene | | | 25.0 | 24.7 | | ug/L | | 99 | 70 - 130 | 2 | 20 |
| Isopropyl ether | | | 25.0 | 25.1 | | ug/L | | 100 | 70 - 130 | 3 | 20 |
| Isopropylbenzene | | | 25.0 | 26.2 | | ug/L | | 105 | 70 - 130 | 2 | 20 |
| Methyl tert-butyl ether | | | 25.0 | 23.2 | | ug/L | | 93 | 70 - 130 | 3 | 20 |
| Methylene Chloride | | | 25.0 | 21.3 | | ug/L | | 85 | 70 - 130 | 4 | 20 |
| m-Xylene & p-Xylene | | | 25.0 | 25.7 | | ug/L | | 103 | 70 - 130 | 3 | 20 |
| Naphthalene | | | 25.0 | 26.6 | | ug/L | | 106 | 70 - 130 | 1 | 20 |
| n-Butylbenzene | | | 25.0 | 26.6 | | ug/L | | 107 | 70 - 130 | 3 | 20 |
| N-Propylbenzene | | | 25.0 | 26.3 | | ug/L | | 105 | 70 - 130 | 3 | 20 |
| o-Xylene | | | 25.0 | 25.6 | | ug/L | | 102 | 70 - 130 | 3 | 20 |
| sec-Butylbenzene | | | 25.0 | 27.1 | | ug/L | | 108 | 70 - 130 | 2 | 20 |
| Styrene | | | 25.0 | 26.3 | | ug/L | | 105 | 70 - 130 | 3 | 20 |
| Tert-amyl methyl ether | | | 25.0 | 26.6 | | ug/L | | 106 | 70 - 130 | 3 | 20 |
| Tert-butyl ethyl ether | | | 25.0 | 25.8 | | ug/L | | 103 | 70 - 130 | 4 | 20 |
| tert-Butylbenzene | | | 25.0 | 25.9 | | ug/L | | 103 | 70 - 130 | 4 | 20 |
| Tetrachloroethene | | | 25.0 | 31.6 | | ug/L | | 126 | 70 - 130 | 8 | 20 |
| Tetrahydrofuran | | | 50.0 | 42.4 | | ug/L | | 85 | 70 - 130 | 1 | 20 |
| Toluene | | | 25.0 | 25.5 | | ug/L | | 102 | 70 - 130 | 5 | 20 |
| trans-1,2-Dichloroethene | | | 25.0 | 22.7 | | ug/L | | 91 | 70 - 130 | 5 | 20 |
| trans-1,3-Dichloropropene | | | 25.0 | 26.6 | | ug/L | | 107 | 70 - 130 | 2 | 20 |
| Trichloroethene | | | 25.0 | 24.2 | | ug/L | | 97 | 70 - 130 | 5 | 20 |
| Trichlorofluoromethane | | | 25.0 | 24.4 | | ug/L | | 98 | 70 - 130 | 5 | 20 |
| Vinyl chloride | | | 25.0 | 21.0 | | ug/L | | 84 | 70 - 130 | 4 | 20 |
| Dibromomethane | | | 25.0 | 23.1 | | ug/L | | 92 | 70 - 130 | 1 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* |
| *1,2-Dichloroethane-d4 (Surr)* | *94* | | *70 - 130* |
| *4-Bromofluorobenzene (Surr)* | *102* | | *70 - 130* |

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

**Lab Sample ID: MB 480-373193/11**
**Matrix: Water**
**Analysis Batch: 373193**

**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 | | | 08/22/17 00:37 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 00:37 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 00:37 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 2-Butanone (MEK) | ND | | 10 | | ug/L | | | 08/22/17 00:37 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 2-Hexanone | ND | | 10 | | ug/L | | | 08/22/17 00:37 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 00:37 | 1 |
| Acetone | ND | | 50 | | ug/L | | | 08/22/17 00:37 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 00:37 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 00:37 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Chloromethane | ND | | 2.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 00:37 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 00:37 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 00:37 | 1 |

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

**Lab Sample ID: MB 480-373193/11**
**Matrix: Water**
**Analysis Batch: 373193**

**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 | | | 08/22/17 00:37 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 00:37 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 00:37 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 00:37 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *100* | | *70 - 130* | | *08/22/17 00:37* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *102* | | *70 - 130* | | *08/22/17 00:37* | *1* |
| *4-Bromofluorobenzene (Surr)* | *96* | | *70 - 130* | | *08/22/17 00:37* | *1* |

**Lab Sample ID: LCS 480-373193/8**
**Matrix: Water**
**Analysis Batch: 373193**

**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 | 27.2 | | ug/L | | 109 | 70 - 130 |
| 1,1,1-Trichloroethane | 25.0 | 28.1 | | ug/L | | 113 | 70 - 130 |
| 1,1,2,2-Tetrachloroethane | 25.0 | 27.3 | | ug/L | | 109 | 70 - 130 |
| 1,1,2-Trichloroethane | 25.0 | 24.4 | | ug/L | | 98 | 70 - 130 |
| 1,1-Dichloroethane | 25.0 | 27.6 | | ug/L | | 111 | 70 - 130 |
| 1,1-Dichloroethene | 25.0 | 25.9 | | ug/L | | 104 | 70 - 130 |
| 1,1-Dichloropropene | 25.0 | 26.9 | | ug/L | | 108 | 70 - 130 |
| 1,2,3-Trichlorobenzene | 25.0 | 26.4 | | ug/L | | 106 | 70 - 130 |
| 1,2,3-Trichloropropane | 25.0 | 25.9 | | ug/L | | 104 | 70 - 130 |
| 1,2,4-Trichlorobenzene | 25.0 | 25.7 | | ug/L | | 103 | 70 - 130 |
| 1,2,4-Trimethylbenzene | 25.0 | 26.7 | | ug/L | | 107 | 70 - 130 |
| 1,2-Dibromo-3-Chloropropane | 25.0 | 24.3 | | ug/L | | 97 | 70 - 130 |
| 1,2-Dichlorobenzene | 25.0 | 25.7 | | ug/L | | 103 | 70 - 130 |
| 1,2-Dichloroethane | 25.0 | 25.9 | | ug/L | | 104 | 70 - 130 |

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

**Lab Sample ID: LCS 480-373193/8**
**Matrix: Water**
**Analysis Batch: 373193**

**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 | 26.3 | | ug/L | | 105 | 70 - 130 |
| 1,3,5-Trimethylbenzene | 25.0 | 27.0 | | ug/L | | 108 | 70 - 130 |
| 1,3-Dichlorobenzene | 25.0 | 24.9 | | ug/L | | 99 | 70 - 130 |
| 1,3-Dichloropropane | 25.0 | 25.2 | | ug/L | | 101 | 70 - 130 |
| 1,4-Dichlorobenzene | 25.0 | 25.8 | | ug/L | | 103 | 70 - 130 |
| 1,4-Dioxane | 500 | 470 | | ug/L | | 94 | 70 - 130 |
| 2,2-Dichloropropane | 25.0 | 27.6 | | ug/L | | 110 | 70 - 130 |
| 2-Butanone (MEK) | 125 | 132 | | ug/L | | 105 | 70 - 130 |
| 2-Chlorotoluene | 25.0 | 26.8 | | ug/L | | 107 | 70 - 130 |
| 2-Hexanone | 125 | 133 | | ug/L | | 106 | 70 - 130 |
| 4-Chlorotoluene | 25.0 | 25.8 | | ug/L | | 103 | 70 - 130 |
| 4-Isopropyltoluene | 25.0 | 27.5 | | ug/L | | 110 | 70 - 130 |
| 4-Methyl-2-pentanone (MIBK) | 125 | 130 | | ug/L | | 104 | 70 - 130 |
| Acetone | 125 | 135 | | ug/L | | 108 | 70 - 130 |
| Benzene | 25.0 | 26.5 | | ug/L | | 106 | 70 - 130 |
| Bromobenzene | 25.0 | 25.5 | | ug/L | | 102 | 70 - 130 |
| Bromoform | 25.0 | 33.9 | * | ug/L | | 136 | 70 - 130 |
| Bromomethane | 25.0 | 23.4 | | ug/L | | 94 | 70 - 130 |
| Carbon disulfide | 25.0 | 26.3 | | ug/L | | 105 | 70 - 130 |
| Carbon tetrachloride | 25.0 | 29.1 | | ug/L | | 116 | 70 - 130 |
| Chlorobenzene | 25.0 | 25.3 | | ug/L | | 101 | 70 - 130 |
| Chlorobromomethane | 25.0 | 25.7 | | ug/L | | 103 | 70 - 130 |
| Chlorodibromomethane | 25.0 | 23.2 | | ug/L | | 93 | 70 - 130 |
| Chloroethane | 25.0 | 25.4 | | ug/L | | 102 | 70 - 130 |
| Chloroform | 25.0 | 26.5 | | ug/L | | 106 | 70 - 130 |
| Chloromethane | 25.0 | 23.9 | | ug/L | | 96 | 70 - 130 |
| cis-1,2-Dichloroethene | 25.0 | 27.1 | | ug/L | | 109 | 70 - 130 |
| cis-1,3-Dichloropropene | 25.0 | 28.4 | | ug/L | | 114 | 70 - 130 |
| Dichlorobromomethane | 25.0 | 28.7 | | ug/L | | 115 | 70 - 130 |
| Dichlorodifluoromethane | 25.0 | 23.3 | | ug/L | | 93 | 70 - 130 |
| Ethyl ether | 25.0 | 25.5 | | ug/L | | 102 | 70 - 130 |
| Ethylbenzene | 25.0 | 26.1 | | ug/L | | 104 | 70 - 130 |
| Ethylene Dibromide | 25.0 | 25.8 | | ug/L | | 103 | 70 - 130 |
| Hexachlorobutadiene | 25.0 | 28.3 | | ug/L | | 113 | 70 - 130 |
| Isopropyl ether | 25.0 | 25.8 | | ug/L | | 103 | 70 - 130 |
| Isopropylbenzene | 25.0 | 27.1 | | ug/L | | 108 | 70 - 130 |
| Methyl tert-butyl ether | 25.0 | 25.7 | | ug/L | | 103 | 70 - 130 |
| Methylene Chloride | 25.0 | 25.1 | | ug/L | | 100 | 70 - 130 |
| m-Xylene & p-Xylene | 25.0 | 26.4 | | ug/L | | 106 | 70 - 130 |
| Naphthalene | 25.0 | 27.2 | | ug/L | | 109 | 70 - 130 |
| n-Butylbenzene | 25.0 | 27.6 | | ug/L | | 110 | 70 - 130 |
| N-Propylbenzene | 25.0 | 26.7 | | ug/L | | 107 | 70 - 130 |
| o-Xylene | 25.0 | 26.0 | | ug/L | | 104 | 70 - 130 |
| sec-Butylbenzene | 25.0 | 26.9 | | ug/L | | 108 | 70 - 130 |
| Styrene | 25.0 | 26.3 | | ug/L | | 105 | 70 - 130 |
| Tert-amyl methyl ether | 25.0 | 26.5 | | ug/L | | 106 | 70 - 130 |
| Tert-butyl ethyl ether | 25.0 | 25.9 | | ug/L | | 104 | 70 - 130 |
| tert-Butylbenzene | 25.0 | 26.7 | | ug/L | | 107 | 70 - 130 |

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

**Lab Sample ID: LCS 480-373193/8**
**Matrix: Water**
**Analysis Batch: 373193**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Tetrachloroethene | 25.0 | 27.8 | | ug/L | | 111 | 70 - 130 |
| Tetrahydrofuran | 50.0 | 72.0 | * | ug/L | | 144 | 70 - 130 |
| Toluene | 25.0 | 25.4 | | ug/L | | 102 | 70 - 130 |
| trans-1,2-Dichloroethene | 25.0 | 27.3 | | ug/L | | 109 | 70 - 130 |
| trans-1,3-Dichloropropene | 25.0 | 24.9 | | ug/L | | 100 | 70 - 130 |
| Trichloroethene | 25.0 | 26.2 | | ug/L | | 105 | 70 - 130 |
| Trichlorofluoromethane | 25.0 | 28.3 | | ug/L | | 113 | 70 - 130 |
| Vinyl chloride | 25.0 | 26.3 | | ug/L | | 105 | 70 - 130 |
| Dibromomethane | 25.0 | 25.9 | | ug/L | | 103 | 70 - 130 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *97* | | *70 - 130* |
| *1,2-Dichloroethane-d4 (Surr)* | *103* | | *70 - 130* |
| *4-Bromofluorobenzene (Surr)* | *98* | | *70 - 130* |

**Lab Sample ID: LCSD 480-373193/9**
**Matrix: Water**
**Analysis Batch: 373193**

**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 | 28.6 | | ug/L | | 115 | 70 - 130 | 5 | 20 |
| 1,1,1-Trichloroethane | 25.0 | 29.8 | | ug/L | | 119 | 70 - 130 | 6 | 20 |
| 1,1,2,2-Tetrachloroethane | 25.0 | 26.9 | | ug/L | | 107 | 70 - 130 | 2 | 20 |
| 1,1,2-Trichloroethane | 25.0 | 25.2 | | ug/L | | 101 | 70 - 130 | 3 | 20 |
| 1,1-Dichloroethane | 25.0 | 28.0 | | ug/L | | 112 | 70 - 130 | 1 | 20 |
| 1,1-Dichloroethene | 25.0 | 27.8 | | ug/L | | 111 | 70 - 130 | 7 | 20 |
| 1,1-Dichloropropene | 25.0 | 28.6 | | ug/L | | 115 | 70 - 130 | 6 | 20 |
| 1,2,3-Trichlorobenzene | 25.0 | 26.1 | | ug/L | | 104 | 70 - 130 | 1 | 20 |
| 1,2,3-Trichloropropane | 25.0 | 25.5 | | ug/L | | 102 | 70 - 130 | 2 | 20 |
| 1,2,4-Trichlorobenzene | 25.0 | 26.0 | | ug/L | | 104 | 70 - 130 | 1 | 20 |
| 1,2,4-Trimethylbenzene | 25.0 | 27.3 | | ug/L | | 109 | 70 - 130 | 2 | 20 |
| 1,2-Dibromo-3-Chloropropane | 25.0 | 24.3 | | ug/L | | 97 | 70 - 130 | 0 | 20 |
| 1,2-Dichlorobenzene | 25.0 | 25.8 | | ug/L | | 103 | 70 - 130 | 0 | 20 |
| 1,2-Dichloroethane | 25.0 | 26.1 | | ug/L | | 104 | 70 - 130 | 1 | 20 |
| 1,2-Dichloropropane | 25.0 | 26.6 | | ug/L | | 107 | 70 - 130 | 1 | 20 |
| 1,3,5-Trimethylbenzene | 25.0 | 27.7 | | ug/L | | 111 | 70 - 130 | 2 | 20 |
| 1,3-Dichlorobenzene | 25.0 | 25.7 | | ug/L | | 103 | 70 - 130 | 3 | 20 |
| 1,3-Dichloropropane | 25.0 | 25.2 | | ug/L | | 101 | 70 - 130 | 0 | 20 |
| 1,4-Dichlorobenzene | 25.0 | 26.3 | | ug/L | | 105 | 70 - 130 | 2 | 20 |
| 1,4-Dioxane | 500 | 495 | | ug/L | | 99 | 70 - 130 | 5 | 20 |
| 2,2-Dichloropropane | 25.0 | 28.5 | | ug/L | | 114 | 70 - 130 | 4 | 20 |
| 2-Butanone (MEK) | 125 | 124 | | ug/L | | 99 | 70 - 130 | 6 | 20 |
| 2-Chlorotoluene | 25.0 | 27.0 | | ug/L | | 108 | 70 - 130 | 1 | 20 |
| 2-Hexanone | 125 | 132 | | ug/L | | 106 | 70 - 130 | 0 | 20 |
| 4-Chlorotoluene | 25.0 | 26.4 | | ug/L | | 105 | 70 - 130 | 2 | 20 |
| 4-Isopropyltoluene | 25.0 | 28.1 | | ug/L | | 113 | 70 - 130 | 2 | 20 |
| 4-Methyl-2-pentanone (MIBK) | 125 | 131 | | ug/L | | 104 | 70 - 130 | 0 | 20 |
| Acetone | 125 | 128 | | ug/L | | 102 | 70 - 130 | 6 | 20 |

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

**Lab Sample ID: LCSD 480-373193/9**
**Matrix: Water**
**Analysis Batch: 373193**

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

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 25.0 | 26.8 | | ug/L | | 107 | 70 - 130 | 1 | 20 |
| Bromobenzene | | | 25.0 | 25.1 | | ug/L | | 101 | 70 - 130 | 1 | 20 |
| Bromoform | | | 25.0 | 33.8 | * | ug/L | | 135 | 70 - 130 | 0 | 20 |
| Bromomethane | | | 25.0 | 23.8 | | ug/L | | 95 | 70 - 130 | 2 | 20 |
| Carbon disulfide | | | 25.0 | 27.8 | | ug/L | | 111 | 70 - 130 | 5 | 20 |
| Carbon tetrachloride | | | 25.0 | 30.5 | | ug/L | | 122 | 70 - 130 | 5 | 20 |
| Chlorobenzene | | | 25.0 | 26.3 | | ug/L | | 105 | 70 - 130 | 4 | 20 |
| Chlorobromomethane | | | 25.0 | 26.5 | | ug/L | | 106 | 70 - 130 | 3 | 20 |
| Chlorodibromomethane | | | 25.0 | 23.4 | | ug/L | | 94 | 70 - 130 | 1 | 20 |
| Chloroethane | | | 25.0 | 26.2 | | ug/L | | 105 | 70 - 130 | 3 | 20 |
| Chloroform | | | 25.0 | 27.4 | | ug/L | | 110 | 70 - 130 | 3 | 20 |
| Chloromethane | | | 25.0 | 25.1 | | ug/L | | 100 | 70 - 130 | 5 | 20 |
| cis-1,2-Dichloroethene | | | 25.0 | 27.1 | | ug/L | | 108 | 70 - 130 | 0 | 20 |
| cis-1,3-Dichloropropene | | | 25.0 | 28.6 | | ug/L | | 114 | 70 - 130 | 1 | 20 |
| Dichlorobromomethane | | | 25.0 | 29.2 | | ug/L | | 117 | 70 - 130 | 2 | 20 |
| Dichlorodifluoromethane | | | 25.0 | 24.6 | | ug/L | | 98 | 70 - 130 | 5 | 20 |
| Ethyl ether | | | 25.0 | 27.2 | | ug/L | | 109 | 70 - 130 | 7 | 20 |
| Ethylbenzene | | | 25.0 | 27.5 | | ug/L | | 110 | 70 - 130 | 5 | 20 |
| Ethylene Dibromide | | | 25.0 | 25.9 | | ug/L | | 104 | 70 - 130 | 0 | 20 |
| Hexachlorobutadiene | | | 25.0 | 28.7 | | ug/L | | 115 | 70 - 130 | 2 | 20 |
| Isopropyl ether | | | 25.0 | 26.4 | | ug/L | | 106 | 70 - 130 | 2 | 20 |
| Isopropylbenzene | | | 25.0 | 27.7 | | ug/L | | 111 | 70 - 130 | 2 | 20 |
| Methyl tert-butyl ether | | | 25.0 | 25.7 | | ug/L | | 103 | 70 - 130 | 0 | 20 |
| Methylene Chloride | | | 25.0 | 25.5 | | ug/L | | 102 | 70 - 130 | 1 | 20 |
| m-Xylene & p-Xylene | | | 25.0 | 27.7 | | ug/L | | 111 | 70 - 130 | 5 | 20 |
| Naphthalene | | | 25.0 | 27.0 | | ug/L | | 108 | 70 - 130 | 1 | 20 |
| n-Butylbenzene | | | 25.0 | 28.5 | | ug/L | | 114 | 70 - 130 | 3 | 20 |
| N-Propylbenzene | | | 25.0 | 27.6 | | ug/L | | 110 | 70 - 130 | 3 | 20 |
| o-Xylene | | | 25.0 | 27.1 | | ug/L | | 108 | 70 - 130 | 4 | 20 |
| sec-Butylbenzene | | | 25.0 | 27.9 | | ug/L | | 112 | 70 - 130 | 4 | 20 |
| Styrene | | | 25.0 | 26.7 | | ug/L | | 107 | 70 - 130 | 2 | 20 |
| Tert-amyl methyl ether | | | 25.0 | 26.5 | | ug/L | | 106 | 70 - 130 | 0 | 20 |
| Tert-butyl ethyl ether | | | 25.0 | 26.3 | | ug/L | | 105 | 70 - 130 | 1 | 20 |
| tert-Butylbenzene | | | 25.0 | 27.1 | | ug/L | | 108 | 70 - 130 | 2 | 20 |
| Tetrachloroethene | | | 25.0 | 29.7 | | ug/L | | 119 | 70 - 130 | 7 | 20 |
| Tetrahydrofuran | | | 50.0 | 70.8 | * | ug/L | | 142 | 70 - 130 | 2 | 20 |
| Toluene | | | 25.0 | 26.3 | | ug/L | | 105 | 70 - 130 | 3 | 20 |
| trans-1,2-Dichloroethene | | | 25.0 | 27.7 | | ug/L | | 111 | 70 - 130 | 1 | 20 |
| trans-1,3-Dichloropropene | | | 25.0 | 25.5 | | ug/L | | 102 | 70 - 130 | 2 | 20 |
| Trichloroethene | | | 25.0 | 28.0 | | ug/L | | 112 | 70 - 130 | 7 | 20 |
| Trichlorofluoromethane | | | 25.0 | 29.4 | | ug/L | | 118 | 70 - 130 | 4 | 20 |
| Vinyl chloride | | | 25.0 | 27.6 | | ug/L | | 110 | 70 - 130 | 5 | 20 |
| Dibromomethane | | | 25.0 | 26.2 | | ug/L | | 105 | 70 - 130 | 1 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *101* | | *70 - 130* |
| *1,2-Dichloroethane-d4 (Surr)* | *102* | | *70 - 130* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *70 - 130* |

**Lab Sample ID: MB 480-373250/7**
**Matrix: Water**
**Analysis Batch: 373250**

**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 | | | 08/22/17 14:27 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/22/17 14:27 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/22/17 14:27 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 2-Butanone (MEK) | ND | | 10 | | ug/L | | | 08/22/17 14:27 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 2-Hexanone | ND | | 10 | | ug/L | | | 08/22/17 14:27 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/22/17 14:27 | 1 |
| Acetone | ND | | 50 | | ug/L | | | 08/22/17 14:27 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/22/17 14:27 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 14:27 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Chloromethane | ND | | 2.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 14:27 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/22/17 14:27 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/22/17 14:27 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/22/17 14:27 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |

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

**Lab Sample ID: MB 480-373250/7**
**Matrix: Water**
**Analysis Batch: 373250**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/22/17 14:27 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/22/17 14:27 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/22/17 14:27 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *98* | | *70 - 130* | | *08/22/17 14:27* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *107* | | *70 - 130* | | *08/22/17 14:27* | *1* |
| *4-Bromofluorobenzene (Surr)* | *96* | | *70 - 130* | | *08/22/17 14:27* | *1* |

**Lab Sample ID: LCS 480-373250/4**
**Matrix: Water**
**Analysis Batch: 373250**

**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 | 29.3 | | ug/L | | 117 | 70 - 130 |
| 1,1,1-Trichloroethane | 25.0 | 30.7 | | ug/L | | 123 | 70 - 130 |
| 1,1,2,2-Tetrachloroethane | 25.0 | 29.6 | | ug/L | | 118 | 70 - 130 |
| 1,1,2-Trichloroethane | 25.0 | 26.3 | | ug/L | | 105 | 70 - 130 |
| 1,1-Dichloroethane | 25.0 | 29.4 | | ug/L | | 118 | 70 - 130 |
| 1,1-Dichloroethene | 25.0 | 27.7 | | ug/L | | 111 | 70 - 130 |
| 1,1-Dichloropropene | 25.0 | 30.0 | | ug/L | | 120 | 70 - 130 |
| 1,2,3-Trichlorobenzene | 25.0 | 28.6 | | ug/L | | 115 | 70 - 130 |
| 1,2,3-Trichloropropane | 25.0 | 27.9 | | ug/L | | 112 | 70 - 130 |
| 1,2,4-Trichlorobenzene | 25.0 | 28.1 | | ug/L | | 112 | 70 - 130 |
| 1,2,4-Trimethylbenzene | 25.0 | 29.4 | | ug/L | | 118 | 70 - 130 |
| 1,2-Dibromo-3-Chloropropane | 25.0 | 26.4 | | ug/L | | 106 | 70 - 130 |
| 1,2-Dichlorobenzene | 25.0 | 28.0 | | ug/L | | 112 | 70 - 130 |
| 1,2-Dichloroethane | 25.0 | 26.8 | | ug/L | | 107 | 70 - 130 |
| 1,2-Dichloropropane | 25.0 | 27.6 | | ug/L | | 110 | 70 - 130 |
| 1,3,5-Trimethylbenzene | 25.0 | 29.8 | | ug/L | | 119 | 70 - 130 |

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

**Lab Sample ID: LCS 480-373250/4**
**Matrix: Water**
**Analysis Batch: 373250**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 25.0 | 27.5 | | ug/L | | 110 | 70 - 130 |
| 1,3-Dichloropropane | 25.0 | 26.7 | | ug/L | | 107 | 70 - 130 |
| 1,4-Dichlorobenzene | 25.0 | 27.5 | | ug/L | | 110 | 70 - 130 |
| 1,4-Dioxane | 500 | 532 | | ug/L | | 106 | 70 - 130 |
| 2,2-Dichloropropane | 25.0 | 30.1 | | ug/L | | 120 | 70 - 130 |
| 2-Butanone (MEK) | 125 | 134 | | ug/L | | 108 | 70 - 130 |
| 2-Chlorotoluene | 25.0 | 28.5 | | ug/L | | 114 | 70 - 130 |
| 2-Hexanone | 125 | 140 | | ug/L | | 112 | 70 - 130 |
| 4-Chlorotoluene | 25.0 | 28.6 | | ug/L | | 114 | 70 - 130 |
| 4-Isopropyltoluene | 25.0 | 30.6 | | ug/L | | 122 | 70 - 130 |
| 4-Methyl-2-pentanone (MIBK) | 125 | 139 | | ug/L | | 111 | 70 - 130 |
| Acetone | 125 | 144 | | ug/L | | 115 | 70 - 130 |
| Benzene | 25.0 | 28.2 | | ug/L | | 113 | 70 - 130 |
| Bromobenzene | 25.0 | 27.3 | | ug/L | | 109 | 70 - 130 |
| Bromoform | 25.0 | 35.9 | * | ug/L | | 144 | 70 - 130 |
| Bromomethane | 25.0 | 26.6 | | ug/L | | 106 | 70 - 130 |
| Carbon disulfide | 25.0 | 29.2 | | ug/L | | 117 | 70 - 130 |
| Carbon tetrachloride | 25.0 | 31.6 | | ug/L | | 126 | 70 - 130 |
| Chlorobenzene | 25.0 | 27.4 | | ug/L | | 110 | 70 - 130 |
| Chlorobromomethane | 25.0 | 28.2 | | ug/L | | 113 | 70 - 130 |
| Chlorodibromomethane | 25.0 | 25.1 | | ug/L | | 100 | 70 - 130 |
| Chloroethane | 25.0 | 28.2 | | ug/L | | 113 | 70 - 130 |
| Chloroform | 25.0 | 28.1 | | ug/L | | 112 | 70 - 130 |
| Chloromethane | 25.0 | 28.4 | | ug/L | | 113 | 70 - 130 |
| cis-1,2-Dichloroethene | 25.0 | 28.2 | | ug/L | | 113 | 70 - 130 |
| cis-1,3-Dichloropropene | 25.0 | 30.3 | | ug/L | | 121 | 70 - 130 |
| Dichlorobromomethane | 25.0 | 30.4 | | ug/L | | 122 | 70 - 130 |
| Dichlorodifluoromethane | 25.0 | 30.1 | | ug/L | | 120 | 70 - 130 |
| Ethyl ether | 25.0 | 26.0 | | ug/L | | 104 | 70 - 130 |
| Ethylbenzene | 25.0 | 28.5 | | ug/L | | 114 | 70 - 130 |
| Ethylene Dibromide | 25.0 | 27.9 | | ug/L | | 112 | 70 - 130 |
| Hexachlorobutadiene | 25.0 | 31.5 | | ug/L | | 126 | 70 - 130 |
| Isopropyl ether | 25.0 | 26.0 | | ug/L | | 104 | 70 - 130 |
| Isopropylbenzene | 25.0 | 30.2 | | ug/L | | 121 | 70 - 130 |
| Methyl tert-butyl ether | 25.0 | 26.7 | | ug/L | | 107 | 70 - 130 |
| Methylene Chloride | 25.0 | 26.1 | | ug/L | | 104 | 70 - 130 |
| m-Xylene & p-Xylene | 25.0 | 28.7 | | ug/L | | 115 | 70 - 130 |
| Naphthalene | 25.0 | 29.5 | | ug/L | | 118 | 70 - 130 |
| n-Butylbenzene | 25.0 | 31.0 | | ug/L | | 124 | 70 - 130 |
| N-Propylbenzene | 25.0 | 29.9 | | ug/L | | 120 | 70 - 130 |
| o-Xylene | 25.0 | 28.3 | | ug/L | | 113 | 70 - 130 |
| sec-Butylbenzene | 25.0 | 30.1 | | ug/L | | 120 | 70 - 130 |
| Styrene | 25.0 | 28.4 | | ug/L | | 114 | 70 - 130 |
| Tert-amyl methyl ether | 25.0 | 26.4 | | ug/L | | 105 | 70 - 130 |
| Tert-butyl ethyl ether | 25.0 | 26.2 | | ug/L | | 105 | 70 - 130 |
| tert-Butylbenzene | 25.0 | 30.0 | | ug/L | | 120 | 70 - 130 |
| Tetrachloroethene | 25.0 | 30.5 | | ug/L | | 122 | 70 - 130 |
| Tetrahydrofuran | 50.0 | 71.4 | * | ug/L | | 143 | 70 - 130 |

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

**Lab Sample ID: LCS 480-373250/4**
**Matrix: Water**
**Analysis Batch: 373250**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Toluene | 25.0 | 28.2 | | ug/L | | 113 | 70 - 130 |
| trans-1,2-Dichloroethene | 25.0 | 30.0 | | ug/L | | 120 | 70 - 130 |
| trans-1,3-Dichloropropene | 25.0 | 26.9 | | ug/L | | 108 | 70 - 130 |
| Trichloroethene | 25.0 | 28.4 | | ug/L | | 114 | 70 - 130 |
| Trichlorofluoromethane | 25.0 | 32.3 | | ug/L | | 129 | 70 - 130 |
| Vinyl chloride | 25.0 | 31.8 | | ug/L | | 127 | 70 - 130 |
| Dibromomethane | 25.0 | 27.0 | | ug/L | | 108 | 70 - 130 |

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

**Lab Sample ID: LCSD 480-373250/5**
**Matrix: Water**
**Analysis Batch: 373250**

**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 | 28.1 | | ug/L | | 112 | 70 - 130 | 4 | 20 |
| 1,1,1-Trichloroethane | 25.0 | 29.4 | | ug/L | | 118 | 70 - 130 | 4 | 20 |
| 1,1,2,2-Tetrachloroethane | 25.0 | 29.2 | | ug/L | | 117 | 70 - 130 | 1 | 20 |
| 1,1,2-Trichloroethane | 25.0 | 24.8 | | ug/L | | 99 | 70 - 130 | 6 | 20 |
| 1,1-Dichloroethane | 25.0 | 28.3 | | ug/L | | 113 | 70 - 130 | 4 | 20 |
| 1,1-Dichloroethene | 25.0 | 27.8 | | ug/L | | 111 | 70 - 130 | 0 | 20 |
| 1,1-Dichloropropene | 25.0 | 29.6 | | ug/L | | 118 | 70 - 130 | 2 | 20 |
| 1,2,3-Trichlorobenzene | 25.0 | 27.9 | | ug/L | | 112 | 70 - 130 | 2 | 20 |
| 1,2,3-Trichloropropane | 25.0 | 26.9 | | ug/L | | 107 | 70 - 130 | 4 | 20 |
| 1,2,4-Trichlorobenzene | 25.0 | 27.1 | | ug/L | | 109 | 70 - 130 | 4 | 20 |
| 1,2,4-Trimethylbenzene | 25.0 | 28.1 | | ug/L | | 113 | 70 - 130 | 4 | 20 |
| 1,2-Dibromo-3-Chloropropane | 25.0 | 26.4 | | ug/L | | 106 | 70 - 130 | 0 | 20 |
| 1,2-Dichlorobenzene | 25.0 | 27.7 | | ug/L | | 111 | 70 - 130 | 1 | 20 |
| 1,2-Dichloroethane | 25.0 | 26.2 | | ug/L | | 105 | 70 - 130 | 2 | 20 |
| 1,2-Dichloropropane | 25.0 | 27.8 | | ug/L | | 111 | 70 - 130 | 1 | 20 |
| 1,3,5-Trimethylbenzene | 25.0 | 28.9 | | ug/L | | 116 | 70 - 130 | 3 | 20 |
| 1,3-Dichlorobenzene | 25.0 | 26.7 | | ug/L | | 107 | 70 - 130 | 3 | 20 |
| 1,3-Dichloropropane | 25.0 | 26.0 | | ug/L | | 104 | 70 - 130 | 2 | 20 |
| 1,4-Dichlorobenzene | 25.0 | 27.3 | | ug/L | | 109 | 70 - 130 | 1 | 20 |
| 1,4-Dioxane | 500 | 593 | | ug/L | | 119 | 70 - 130 | 11 | 20 |
| 2,2-Dichloropropane | 25.0 | 29.2 | | ug/L | | 117 | 70 - 130 | 3 | 20 |
| 2-Butanone (MEK) | 125 | 143 | | ug/L | | 114 | 70 - 130 | 6 | 20 |
| 2-Chlorotoluene | 25.0 | 27.8 | | ug/L | | 111 | 70 - 130 | 2 | 20 |
| 2-Hexanone | 125 | 139 | | ug/L | | 111 | 70 - 130 | 1 | 20 |
| 4-Chlorotoluene | 25.0 | 27.9 | | ug/L | | 112 | 70 - 130 | 2 | 20 |
| 4-Isopropyltoluene | 25.0 | 29.6 | | ug/L | | 118 | 70 - 130 | 3 | 20 |
| 4-Methyl-2-pentanone (MIBK) | 125 | 136 | | ug/L | | 108 | 70 - 130 | 3 | 20 |
| Acetone | 125 | 140 | | ug/L | | 112 | 70 - 130 | 3 | 20 |
| Benzene | 25.0 | 27.2 | | ug/L | | 109 | 70 - 130 | 4 | 20 |
| Bromobenzene | 25.0 | 27.7 | | ug/L | | 111 | 70 - 130 | 1 | 20 |

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

**Lab Sample ID: LCSD 480-373250/5**
**Matrix: Water**
**Analysis Batch: 373250**

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

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromoform | | | 25.0 | 34.6 | * | ug/L | | 138 | 70 - 130 | 4 | 20 |
| Bromomethane | | | 25.0 | 25.3 | | ug/L | | 101 | 70 - 130 | 5 | 20 |
| Carbon disulfide | | | 25.0 | 28.0 | | ug/L | | 112 | 70 - 130 | 4 | 20 |
| Carbon tetrachloride | | | 25.0 | 30.8 | | ug/L | | 123 | 70 - 130 | 3 | 20 |
| Chlorobenzene | | | 25.0 | 26.4 | | ug/L | | 106 | 70 - 130 | 4 | 20 |
| Chlorobromomethane | | | 25.0 | 26.8 | | ug/L | | 107 | 70 - 130 | 5 | 20 |
| Chlorodibromomethane | | | 25.0 | 24.3 | | ug/L | | 97 | 70 - 130 | 3 | 20 |
| Chloroethane | | | 25.0 | 27.1 | | ug/L | | 109 | 70 - 130 | 4 | 20 |
| Chloroform | | | 25.0 | 27.6 | | ug/L | | 110 | 70 - 130 | 2 | 20 |
| Chloromethane | | | 25.0 | 26.8 | | ug/L | | 107 | 70 - 130 | 5 | 20 |
| cis-1,2-Dichloroethene | | | 25.0 | 27.0 | | ug/L | | 108 | 70 - 130 | 4 | 20 |
| cis-1,3-Dichloropropene | | | 25.0 | 29.5 | | ug/L | | 118 | 70 - 130 | 3 | 20 |
| Dichlorobromomethane | | | 25.0 | 29.6 | | ug/L | | 119 | 70 - 130 | 3 | 20 |
| Dichlorodifluoromethane | | | 25.0 | 27.9 | | ug/L | | 112 | 70 - 130 | 7 | 20 |
| Ethyl ether | | | 25.0 | 27.2 | | ug/L | | 109 | 70 - 130 | 5 | 20 |
| Ethylbenzene | | | 25.0 | 27.3 | | ug/L | | 109 | 70 - 130 | 4 | 20 |
| Ethylene Dibromide | | | 25.0 | 26.7 | | ug/L | | 107 | 70 - 130 | 4 | 20 |
| Hexachlorobutadiene | | | 25.0 | 30.0 | | ug/L | | 120 | 70 - 130 | 5 | 20 |
| Isopropyl ether | | | 25.0 | 25.8 | | ug/L | | 103 | 70 - 130 | 1 | 20 |
| Isopropylbenzene | | | 25.0 | 28.7 | | ug/L | | 115 | 70 - 130 | 5 | 20 |
| Methyl tert-butyl ether | | | 25.0 | 26.4 | | ug/L | | 106 | 70 - 130 | 1 | 20 |
| Methylene Chloride | | | 25.0 | 25.8 | | ug/L | | 103 | 70 - 130 | 1 | 20 |
| m-Xylene & p-Xylene | | | 25.0 | 27.0 | | ug/L | | 108 | 70 - 130 | 6 | 20 |
| Naphthalene | | | 25.0 | 28.6 | | ug/L | | 115 | 70 - 130 | 3 | 20 |
| n-Butylbenzene | | | 25.0 | 29.7 | | ug/L | | 119 | 70 - 130 | 4 | 20 |
| N-Propylbenzene | | | 25.0 | 28.9 | | ug/L | | 116 | 70 - 130 | 3 | 20 |
| o-Xylene | | | 25.0 | 26.5 | | ug/L | | 106 | 70 - 130 | 7 | 20 |
| sec-Butylbenzene | | | 25.0 | 28.8 | | ug/L | | 115 | 70 - 130 | 4 | 20 |
| Styrene | | | 25.0 | 27.3 | | ug/L | | 109 | 70 - 130 | 4 | 20 |
| Tert-amyl methyl ether | | | 25.0 | 26.5 | | ug/L | | 106 | 70 - 130 | 0 | 20 |
| Tert-butyl ethyl ether | | | 25.0 | 25.8 | | ug/L | | 103 | 70 - 130 | 2 | 20 |
| tert-Butylbenzene | | | 25.0 | 28.4 | | ug/L | | 114 | 70 - 130 | 5 | 20 |
| Tetrachloroethene | | | 25.0 | 29.3 | | ug/L | | 117 | 70 - 130 | 4 | 20 |
| Tetrahydrofuran | | | 50.0 | 72.9 | * | ug/L | | 146 | 70 - 130 | 2 | 20 |
| Toluene | | | 25.0 | 26.8 | | ug/L | | 107 | 70 - 130 | 5 | 20 |
| trans-1,2-Dichloroethene | | | 25.0 | 28.7 | | ug/L | | 115 | 70 - 130 | 5 | 20 |
| trans-1,3-Dichloropropene | | | 25.0 | 26.2 | | ug/L | | 105 | 70 - 130 | 3 | 20 |
| Trichloroethene | | | 25.0 | 27.3 | | ug/L | | 109 | 70 - 130 | 4 | 20 |
| Trichlorofluoromethane | | | 25.0 | 31.4 | | ug/L | | 126 | 70 - 130 | 3 | 20 |
| Vinyl chloride | | | 25.0 | 29.0 | | ug/L | | 116 | 70 - 130 | 9 | 20 |
| Dibromomethane | | | 25.0 | 26.7 | | ug/L | | 107 | 70 - 130 | 1 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *98* | | *70 - 130* |
| *1,2-Dichloroethane-d4 (Surr)* | *101* | | *70 - 130* |
| *4-Bromofluorobenzene (Surr)* | *98* | | *70 - 130* |

## GC/MS VOA

### Analysis Batch: 373038

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-122520-1 | MW-1020-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-2 | MW-1009-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-3 | MW-1026D-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-4 | MW-1015D-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-5 | MW-1022-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-6 | MW-1030-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-7 | MW-1031-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-8 | MW-1032-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-9 | MW-1028-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-10 | MW-1027-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-11 | MW-1033-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-12 | MW-1013-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-13 | MW-1014-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-14 | MW-1008-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-15 | MW-1005-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-16 | MW-1004-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-17 | MW-1003-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-18 | MW-1002B-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-19 | MW-1001M-20170809-01 | Total/NA | Water | 8260C | |
| MB 480-373038/8 | Method Blank | Total/NA | Water | 8260C | |
| LCS 480-373038/5 | Lab Control Sample | Total/NA | Water | 8260C | |
| LCSD 480-373038/9 | Lab Control Sample Dup | Total/NA | Water | 8260C | |

### Analysis Batch: 373188

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-122520-20 | MW-1001B-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-23 | MW-1034-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-24 | DUP-004-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-25 | MW-1018-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-26 | MW-1035-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-27 | MW-1036-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-28 | DUP-005-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-29 - DL | MW-1037-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-30 | MW-1038-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-31 | DUP-002-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-32 | DUP-003-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-33 | DUP-001-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-34 | MW-1024D-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-35 | MW-1023-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-36 | MW-1019B-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-37 | MW-1010D-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-38 | MW-1010M-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-39 | MW-1006-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-40 | MW-1016D-20170809-01 | Total/NA | Water | 8260C | |
| MB 480-373188/8 | Method Blank | Total/NA | Water | 8260C | |
| LCS 480-373188/5 | Lab Control Sample | Total/NA | Water | 8260C | |
| LCSD 480-373188/6 | Lab Control Sample Dup | Total/NA | Water | 8260C | |

### Analysis Batch: 373193

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-122520-21 | MW-1025M-20170809-01 | Total/NA | Water | 8260C | |

## GC/MS VOA (Continued)

### Analysis Batch: 373193 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-122520-22 | MW-1025D-20170809-01 | Total/NA | Water | 8260C | |
| MB 480-373193/11 | Method Blank | Total/NA | Water | 8260C | |
| LCS 480-373193/8 | Lab Control Sample | Total/NA | Water | 8260C | |
| LCSD 480-373193/9 | Lab Control Sample Dup | Total/NA | Water | 8260C | |

### Analysis Batch: 373250

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-122520-29 | MW-1037-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-30 | MW-1038-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-41 | MW-1017D-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-42 | MW-1011-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-43 | MW-1039-20170809-01 | Total/NA | Water | 8260C | |
| 480-122520-44 | TB-001-20170809-01 | Total/NA | Water | 8260C | |
| MB 480-373250/7 | Method Blank | Total/NA | Water | 8260C | |
| LCS 480-373250/4 | Lab Control Sample | Total/NA | Water | 8260C | |
| LCSD 480-373250/5 | Lab Control Sample Dup | Total/NA | Water | 8260C | |

# Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

## Client Sample ID: MW-1020-20170809-01 — Lab Sample ID: 480-122520-1

**Date Collected: 08/09/17 07:45** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373038 | 08/21/17 13:07 | KMN | TAL BUF |

## Client Sample ID: MW-1009-20170809-01 — Lab Sample ID: 480-122520-2

**Date Collected: 08/09/17 08:15** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373038 | 08/21/17 13:32 | KMN | TAL BUF |

## Client Sample ID: MW-1026D-20170809-01 — Lab Sample ID: 480-122520-3

**Date Collected: 08/09/17 08:15** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373038 | 08/21/17 13:57 | KMN | TAL BUF |

## Client Sample ID: MW-1015D-20170809-01 — Lab Sample ID: 480-122520-4

**Date Collected: 08/09/17 08:43** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373038 | 08/21/17 14:22 | KMN | TAL BUF |

## Client Sample ID: MW-1022-20170809-01 — Lab Sample ID: 480-122520-5

**Date Collected: 08/09/17 09:10** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373038 | 08/21/17 14:47 | KMN | TAL BUF |

## Client Sample ID: MW-1030-20170809-01 — Lab Sample ID: 480-122520-6

**Date Collected: 08/09/17 09:50** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373038 | 08/21/17 15:12 | KMN | TAL BUF |

# Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

## Client Sample ID: MW-1031-20170809-01 — Lab Sample ID: 480-122520-7

**Date Collected: 08/09/17 10:05** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373038 | 08/21/17 15:38 | KMN | TAL BUF |

## Client Sample ID: MW-1032-20170809-01 — Lab Sample ID: 480-122520-8

**Date Collected: 08/09/17 10:25** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373038 | 08/21/17 16:03 | KMN | TAL BUF |

## Client Sample ID: MW-1028-20170809-01 — Lab Sample ID: 480-122520-9

**Date Collected: 08/09/17 11:10** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373038 | 08/21/17 16:28 | KMN | TAL BUF |

## Client Sample ID: MW-1027-20170809-01 — Lab Sample ID: 480-122520-10

**Date Collected: 08/09/17 11:30** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373038 | 08/21/17 17:19 | KMN | TAL BUF |

## Client Sample ID: MW-1033-20170809-01 — Lab Sample ID: 480-122520-11

**Date Collected: 08/09/17 11:50** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373038 | 08/21/17 17:44 | KMN | TAL BUF |

## Client Sample ID: MW-1013-20170809-01 — Lab Sample ID: 480-122520-12

**Date Collected: 08/09/17 08:49** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373038 | 08/21/17 18:09 | KMN | TAL BUF |

# Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

## Client Sample ID: MW-1014-20170809-01 — Lab Sample ID: 480-122520-13

**Date Collected: 08/09/17 08:57** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373038 | 08/21/17 18:35 | KMN | TAL BUF |

## Client Sample ID: MW-1008-20170809-01 — Lab Sample ID: 480-122520-14

**Date Collected: 08/09/17 09:16** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373038 | 08/21/17 19:00 | KMN | TAL BUF |

## Client Sample ID: MW-1005-20170809-01 — Lab Sample ID: 480-122520-15

**Date Collected: 08/09/17 09:36** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373038 | 08/21/17 19:25 | KMN | TAL BUF |

## Client Sample ID: MW-1004-20170809-01 — Lab Sample ID: 480-122520-16

**Date Collected: 08/09/17 09:53** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373038 | 08/21/17 19:50 | KMN | TAL BUF |

## Client Sample ID: MW-1003-20170809-01 — Lab Sample ID: 480-122520-17

**Date Collected: 08/09/17 10:11** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373038 | 08/21/17 20:15 | KMN | TAL BUF |

## Client Sample ID: MW-1002B-20170809-01 — Lab Sample ID: 480-122520-18

**Date Collected: 08/09/17 10:26** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373038 | 08/21/17 16:53 | KMN | TAL BUF |

# Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

## Client Sample ID: MW-1001M-20170809-01
**Lab Sample ID: 480-122520-19**
**Date Collected: 08/09/17 10:48**
**Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373038 | 08/21/17 20:41 | KMN | TAL BUF |

## Client Sample ID: MW-1001B-20170809-01
**Lab Sample ID: 480-122520-20**
**Date Collected: 08/09/17 11:00**
**Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373188 | 08/22/17 01:25 | KMN | TAL BUF |

## Client Sample ID: MW-1025M-20170809-01
**Lab Sample ID: 480-122520-21**
**Date Collected: 08/09/17 11:20**
**Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373193 | 08/22/17 01:09 | KMN | TAL BUF |

## Client Sample ID: MW-1025D-20170809-01
**Lab Sample ID: 480-122520-22**
**Date Collected: 08/09/17 11:27**
**Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373193 | 08/22/17 01:33 | KMN | TAL BUF |

## Client Sample ID: MW-1034-20170809-01
**Lab Sample ID: 480-122520-23**
**Date Collected: 08/09/17 12:20**
**Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373188 | 08/22/17 01:50 | KMN | TAL BUF |

## Client Sample ID: DUP-004-20170809-01
**Lab Sample ID: 480-122520-24**
**Date Collected: 08/09/17 00:04**
**Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373188 | 08/22/17 02:16 | KMN | TAL BUF |

# Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

## Client Sample ID: MW-1018-20170809-01
**Lab Sample ID: 480-122520-25**
**Date Collected: 08/09/17 13:40**
**Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373188 | 08/22/17 02:41 | KMN | TAL BUF |

## Client Sample ID: MW-1035-20170809-01
**Lab Sample ID: 480-122520-26**
**Date Collected: 08/09/17 13:55**
**Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373188 | 08/22/17 03:06 | KMN | TAL BUF |

## Client Sample ID: MW-1036-20170809-01
**Lab Sample ID: 480-122520-27**
**Date Collected: 08/09/17 14:10**
**Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373188 | 08/22/17 03:32 | KMN | TAL BUF |

## Client Sample ID: DUP-005-20170809-01
**Lab Sample ID: 480-122520-28**
**Date Collected: 08/09/17 00:05**
**Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373188 | 08/22/17 03:57 | KMN | TAL BUF |

## Client Sample ID: MW-1037-20170809-01
**Lab Sample ID: 480-122520-29**
**Date Collected: 08/09/17 14:31**
**Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | DL | 10 | 373188 | 08/22/17 04:22 | KMN | TAL BUF |
| Total/NA | Analysis | 8260C | | 2 | 373250 | 08/22/17 17:14 | KMN | TAL BUF |

## Client Sample ID: MW-1038-20170809-01
**Lab Sample ID: 480-122520-30**
**Date Collected: 08/09/17 14:50**
**Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 40 | 373188 | 08/22/17 04:47 | KMN | TAL BUF |
| Total/NA | Analysis | 8260C | | 1 | 373250 | 08/22/17 17:37 | KMN | TAL BUF |

## Client Sample ID: DUP-002-20170809-01 — Lab Sample ID: 480-122520-31

**Date Collected: 08/09/17 00:02** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373188 | 08/22/17 05:12 | KMN | TAL BUF |

## Client Sample ID: DUP-003-20170809-01 — Lab Sample ID: 480-122520-32

**Date Collected: 08/09/17 00:03** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373188 | 08/22/17 05:38 | KMN | TAL BUF |

## Client Sample ID: DUP-001-20170809-01 — Lab Sample ID: 480-122520-33

**Date Collected: 08/09/17 00:01** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373188 | 08/22/17 06:03 | KMN | TAL BUF |

## Client Sample ID: MW-1024D-20170809-01 — Lab Sample ID: 480-122520-34

**Date Collected: 08/09/17 11:53** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373188 | 08/22/17 06:28 | KMN | TAL BUF |

## Client Sample ID: MW-1023-20170809-01 — Lab Sample ID: 480-122520-35

**Date Collected: 08/09/17 12:10** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373188 | 08/22/17 06:54 | KMN | TAL BUF |

## Client Sample ID: MW-1019B-20170809-01 — Lab Sample ID: 480-122520-36

**Date Collected: 08/09/17 13:15** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373188 | 08/22/17 07:19 | KMN | TAL BUF |

# Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

## Client Sample ID: MW-1010D-20170809-01 — Lab Sample ID: 480-122520-37

**Date Collected: 08/09/17 13:32** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373188 | 08/22/17 07:44 | KMN | TAL BUF |

## Client Sample ID: MW-1010M-20170809-01 — Lab Sample ID: 480-122520-38

**Date Collected: 08/09/17 13:45** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373188 | 08/22/17 08:09 | KMN | TAL BUF |

## Client Sample ID: MW-1006-20170809-01 — Lab Sample ID: 480-122520-39

**Date Collected: 08/09/17 14:03** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373188 | 08/22/17 08:35 | KMN | TAL BUF |

## Client Sample ID: MW-1016D-20170809-01 — Lab Sample ID: 480-122520-40

**Date Collected: 08/09/17 14:18** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373188 | 08/22/17 09:00 | KMN | TAL BUF |

## Client Sample ID: MW-1017D-20170809-01 — Lab Sample ID: 480-122520-41

**Date Collected: 08/09/17 14:38** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373250 | 08/22/17 18:01 | KMN | TAL BUF |

## Client Sample ID: MW-1011-20170809-01 — Lab Sample ID: 480-122520-42

**Date Collected: 08/09/17 15:00** — **Matrix: Water**
**Date Received: 08/10/17 09:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373250 | 08/22/17 18:24 | KMN | TAL BUF |

# Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

## Client Sample ID: MW-1039-20170809-01

**Date Collected: 08/09/17 15:11**
**Date Received: 08/10/17 09:30**

## Lab Sample ID: 480-122520-43

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373250 | 08/22/17 18:48 | KMN | TAL BUF |

## Client Sample ID: TB-001-20170809-01

**Date Collected: 08/09/17 00:00**
**Date Received: 08/10/17 09:30**

## Lab Sample ID: 480-122520-44

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373250 | 08/22/17 19:11 | KMN | TAL BUF |

**Laboratory References:**

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

# Accreditation/Certification Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

## Laboratory: TestAmerica Buffalo

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

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| Arkansas DEQ | State Program | 6 | 88-0686 | 07-06-18 |
| California | State Program | 9 | 1169CA | 09-30-17 |
| Connecticut | State Program | 1 | PH-0568 | 09-30-18 |
| Florida | NELAP | 4 | E87672 | 06-30-18 |
| Georgia | State Program | 4 | 10026 (NY) | 03-31-18 |
| Georgia | State Program | 4 | 956 | 03-31-18 |
| Illinois | NELAP | 5 | 200003 | 09-30-17 |
| Iowa | State Program | 7 | 374 | 03-01-19 |
| Kansas | NELAP | 7 | E-10187 | 01-31-18 |
| Kentucky (DW) | State Program | 4 | 90029 | 12-31-17 |
| Kentucky (UST) | State Program | 4 | 30 | 03-31-18 |
| Kentucky (WW) | State Program | 4 | 90029 | 12-31-17 |
| Louisiana | NELAP | 6 | 02031 | 06-30-18 |
| Maine | State Program | 1 | NY00044 | 12-04-18 |
| Maryland | State Program | 3 | 294 | 03-31-18 |
| Massachusetts | State Program | 1 | M-NY044 | 06-30-18 |
| Michigan | State Program | 5 | 9937 | 04-01-09 * |
| Minnesota | NELAP | 5 | 036-999-337 | 12-31-17 |
| New Hampshire | NELAP | 1 | 2337 | 11-17-17 |
| New Jersey | NELAP | 2 | NY455 | 06-30-18 |
| New York | NELAP | 2 | 10026 | 03-31-18 |
| North Dakota | State Program | 8 | R-176 | 03-31-18 |
| Oklahoma | State Program | 6 | 9421 | 08-31-17 |
| Oregon | NELAP | 10 | NY200003 | 06-09-18 |
| Pennsylvania | NELAP | 3 | 68-00281 | 07-31-18 |
| Rhode Island | State Program | 1 | LAO00328 | 12-30-17 |
| Tennessee | State Program | 4 | TN02970 | 03-31-18 |
| Texas | NELAP | 6 | T104704412-15-6 | 07-31-18 |
| USDA | Federal | | P330-11-00386 | 11-26-17 |
| Virginia | NELAP | 3 | 460185 | 09-14-17 |
| Washington | State Program | 10 | C784 | 02-10-18 |
| Wisconsin | State Program | 5 | 998310390 | 08-31-17 * |

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

# Method Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

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

**Protocol References:**

MA DEP = Massachusetts Department Of Environmental Protection

**Laboratory References:**

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

# Sample Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122520-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 480-122520-1 | MW-1020-20170809-01 | Water | 08/09/17 07:45 | 08/10/17 09:30 |
| 480-122520-2 | MW-1009-20170809-01 | Water | 08/09/17 08:15 | 08/10/17 09:30 |
| 480-122520-3 | MW-1026D-20170809-01 | Water | 08/09/17 08:15 | 08/10/17 09:30 |
| 480-122520-4 | MW-1015D-20170809-01 | Water | 08/09/17 08:43 | 08/10/17 09:30 |
| 480-122520-5 | MW-1022-20170809-01 | Water | 08/09/17 09:10 | 08/10/17 09:30 |
| 480-122520-6 | MW-1030-20170809-01 | Water | 08/09/17 09:50 | 08/10/17 09:30 |
| 480-122520-7 | MW-1031-20170809-01 | Water | 08/09/17 10:05 | 08/10/17 09:30 |
| 480-122520-8 | MW-1032-20170809-01 | Water | 08/09/17 10:25 | 08/10/17 09:30 |
| 480-122520-9 | MW-1028-20170809-01 | Water | 08/09/17 11:10 | 08/10/17 09:30 |
| 480-122520-10 | MW-1027-20170809-01 | Water | 08/09/17 11:30 | 08/10/17 09:30 |
| 480-122520-11 | MW-1033-20170809-01 | Water | 08/09/17 11:50 | 08/10/17 09:30 |
| 480-122520-12 | MW-1013-20170809-01 | Water | 08/09/17 08:49 | 08/10/17 09:30 |
| 480-122520-13 | MW-1014-20170809-01 | Water | 08/09/17 08:57 | 08/10/17 09:30 |
| 480-122520-14 | MW-1008-20170809-01 | Water | 08/09/17 09:16 | 08/10/17 09:30 |
| 480-122520-15 | MW-1005-20170809-01 | Water | 08/09/17 09:36 | 08/10/17 09:30 |
| 480-122520-16 | MW-1004-20170809-01 | Water | 08/09/17 09:53 | 08/10/17 09:30 |
| 480-122520-17 | MW-1003-20170809-01 | Water | 08/09/17 10:11 | 08/10/17 09:30 |
| 480-122520-18 | MW-1002B-20170809-01 | Water | 08/09/17 10:26 | 08/10/17 09:30 |
| 480-122520-19 | MW-1001M-20170809-01 | Water | 08/09/17 10:48 | 08/10/17 09:30 |
| 480-122520-20 | MW-1001B-20170809-01 | Water | 08/09/17 11:00 | 08/10/17 09:30 |
| 480-122520-21 | MW-1025M-20170809-01 | Water | 08/09/17 11:20 | 08/10/17 09:30 |
| 480-122520-22 | MW-1025D-20170809-01 | Water | 08/09/17 11:27 | 08/10/17 09:30 |
| 480-122520-23 | MW-1034-20170809-01 | Water | 08/09/17 12:20 | 08/10/17 09:30 |
| 480-122520-24 | DUP-004-20170809-01 | Water | 08/09/17 00:04 | 08/10/17 09:30 |
| 480-122520-25 | MW-1018-20170809-01 | Water | 08/09/17 13:40 | 08/10/17 09:30 |
| 480-122520-26 | MW-1035-20170809-01 | Water | 08/09/17 13:55 | 08/10/17 09:30 |
| 480-122520-27 | MW-1036-20170809-01 | Water | 08/09/17 14:10 | 08/10/17 09:30 |
| 480-122520-28 | DUP-005-20170809-01 | Water | 08/09/17 00:05 | 08/10/17 09:30 |
| 480-122520-29 | MW-1037-20170809-01 | Water | 08/09/17 14:31 | 08/10/17 09:30 |
| 480-122520-30 | MW-1038-20170809-01 | Water | 08/09/17 14:50 | 08/10/17 09:30 |
| 480-122520-31 | DUP-002-20170809-01 | Water | 08/09/17 00:02 | 08/10/17 09:30 |
| 480-122520-32 | DUP-003-20170809-01 | Water | 08/09/17 00:03 | 08/10/17 09:30 |
| 480-122520-33 | DUP-001-20170809-01 | Water | 08/09/17 00:01 | 08/10/17 09:30 |
| 480-122520-34 | MW-1024D-20170809-01 | Water | 08/09/17 11:53 | 08/10/17 09:30 |
| 480-122520-35 | MW-1023-20170809-01 | Water | 08/09/17 12:10 | 08/10/17 09:30 |
| 480-122520-36 | MW-1019B-20170809-01 | Water | 08/09/17 13:15 | 08/10/17 09:30 |
| 480-122520-37 | MW-1010D-20170809-01 | Water | 08/09/17 13:32 | 08/10/17 09:30 |
| 480-122520-38 | MW-1010M-20170809-01 | Water | 08/09/17 13:45 | 08/10/17 09:30 |
| 480-122520-39 | MW-1006-20170809-01 | Water | 08/09/17 14:03 | 08/10/17 09:30 |
| 480-122520-40 | MW-1016D-20170809-01 | Water | 08/09/17 14:18 | 08/10/17 09:30 |
| 480-122520-41 | MW-1017D-20170809-01 | Water | 08/09/17 14:38 | 08/10/17 09:30 |
| 480-122520-42 | MW-1011-20170809-01 | Water | 08/09/17 15:00 | 08/10/17 09:30 |
| 480-122520-43 | MW-1039-20170809-01 | Water | 08/09/17 15:11 | 08/10/17 09:30 |
| 480-122520-44 | TB-001-20170809-01 | Water | 08/09/17 00:00 | 08/10/17 09:30 |

# Login Sample Receipt Checklist

Client: ERM-Northeast

Job Number: 480-122520-1

**Login Number: 122520**
**List Number: 1**
**Creator: Janish, Carl M**

**List Source: TestAmerica Buffalo**

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

**TestAmerica Buffalo**
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

# Chain of Custody Record

360325-Boston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: Clementine Duhen | Lab PM: Mason, Becky C | Carrier Tracking No(s): | COC No: 480-100183-10762.6 |
|---|---|---|---|---|
| Client Contact: ~~Mr. Ethan Gyles~~ Larry Mastera | Phone: 774 722 2902 | E-Mail: becky.mason@testamericainc.com | | Page: ~~Page 6 of 6~~ pg 1/4 |
| Company: ERM-Northeast | | | | Job #: |

| Address: One Beacon Steet 5th Floor | Due Date Requested: |
|---|---|
| City: Boston | TAT Requested (days): |
| State, Zip: MA, 02108 | |
| Phone: 617 646 7800 | PO #: Purchase Order not required |
| Email: ethan.gyles@erm.com larry.mastera@erm.com | WO #: |
| Project Name: IDS Wayland | Project #: 48007117 |
| Site: Wayland, MA | SSOW#: |

**Analysis Requested**

**Preservation Codes:**
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Ac
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
480-122520 COC
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260MCP - 8260 | 522 - 1,4 Dioxane 522 | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | A | A | | |
| MW-1020-20170809-01 | 8/9/17 | 7:45 | G | Water | | | 3 | | 3 | |
| MW-1009-20170809-01 | | 0815 | | Water | | | 3 | | 3 | |
| MW-1026D-20170809-01 | | 0815 | | Water | | | 3 | | 3 | |
| MW-1015D-20170809-01 | | 0843 | | Water | | | 3 | | 3 | |
| MW-1022-20170809-01 | | 0910 | | Water | | | 3 | | 3 | |
| MW-1030-20170809-01 | | 0950 | | Water | | | 3 | | 3 | |
| MW-1031-20170809-01 | | 1005 | | Water | | | 3 | | 3 | |
| MW-1032-20170809-01 | | 1025 | | Water | | | 3 | | 3 | |
| MW-1028-20170809-01 | | 11:10 | | Water | | | 3 | | 3 | |
| MW-1027-20170809-01 | | 11:30 | | water | | | 3 | | 3 | |
| MW-1033-20170809-01 | | 11:50 | | water | | | 3 | | 3 | |

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: 8/9/17 @ 17:17 | Company: ERM | Received by: | Date/Time: 8-9-17 1717 | Company: FA |
|---|---|---|---|---|---|
| Relinquished by: | Date/Time: 8-9-17 1800 | Company: D | Received by: | Date/Time: 8/10/17 0930 | Company: FA |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 2.0 #1 |
|---|---|---|



8/24/2017

**TestAmerica Buffalo**
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

# Chain of Custody Record

330325-Boston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: Clementine Dilig | Lab PM: Mason, Becky C | Carrier Tracking No(s): | COC No: 480-100183-10762.5 |
|---|---|---|---|---|
| Client Contact: ~~Mr. Ethan Gyles~~ Larry Mastera | Phone: 774 722 2902 | E-Mail: becky.mason@testamericainc.com | | Page: ~~Page 5 of 6~~ pg 2/4 |
| Company: ERM-Northeast | | | | Job #: |

**Analysis Requested**

| Address: One Beacon Steet 5th Floor | Due Date Requested: |
|---|---|
| City: Boston | TAT Requested (days): |
| State, Zip: MA, 02108 | |
| Phone: 617 646 7800 | PO #: Purchase Order not required |
| Email: ~~ethan.gyles@erm.com~~ larry.mastera@erm.com | WO #: |
| Project Name: IDS Wayland | Project #: ~~46007117~~ |
| Site: Wayland, MA | SSOW#: |

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260MCP - 8260 | 522 - 1,4 Dioxane 522 | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | A | A | | |
| MW-1013-20170809-01 | 8/9/17 | 0849 | G | Water | | | 3 | | 3 | |
| MW-1014-20170809-01 | | 0857 | | Water | | | 3 | | 3 | |
| MW-1008-20170809-01 | | 0916 | | Water | | | 3 | | 3 | |
| MW-1005-20170809-01 | | 0936 | | Water | | | 3 | | 3 | |
| MW-1004-20170809-01 | | 0953 | | Water | | | 3 | | 3 | |
| MW-1003-20170809-01 | | 1011 | | Water | | | 3 | | 3 | |
| MW-1002B-20170809-01 | | 1026 | | Water | | | 3 | | 3 | |
| MW-1001M-20170809-01 | | 1048 | | Water | | | 3 | | 3 | |
| MW-1001B-20170809-01 | | 1100 | | Water | | | 3 | | 3 | |
| MW-1025M-20170809-01 | | 1120 | | Water | | | 3 | | 3 | |
| MW-1025D-20170809-01 | | 1127 | | Water | | | 3 | | 3 | |

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | | 8/9/17 @ 17:17 | ERM | | 8-9-17 1917 | |
| 2 | | 8-9-17 1500 | | | 8/10/17 0930 | |
| 3 | | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 2.0 #1 |
|---|---|---|



8/24/2017

**TestAmerica Buffalo**
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

# Chain of Custody Record

360325-Boston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: Clementine Dulieu | Lab PM: Mason, Becky C | Carrier Tracking No(s): | COC No: 480-100183-10762.2 |
|---|---|---|---|---|
| Client Contact: Mr. ~~Ethan Gyles~~ Larry Mastera | Phone: 774 722 2902 | E-Mail: becky.mason@testamericainc.com | | Page: ~~Page 2 of 6~~ pg 3/4 |
| Company: ERM-Northeast | | | | Job #: |

| Address: One Beacon Steet 5th Floor | Due Date Requested: | Analysis Requested | Preservation Codes: |
|---|---|---|---|
| City: Boston | TAT Requested (days): | | A - HCL M - Hexane<br>B - NaOH N - None<br>C - Zn Acetate O - AsNaO2<br>D - Nitric Acid P - Na2O4S<br>E - NaHSO4 Q - Na2SO3<br>F - MeOH R - Na2S2O3<br>G - Amchlor S - H2SO4<br>H - Ascorbic Acid T - TSP Dodecahydrate<br>I - Ice U - Acetone<br>J - DI Water V - MCAA<br>K - EDTA W - pH 4-5<br>L - EDA Z - other (specify)<br>Other: |
| State, Zip: MA, 02108 | | | |
| Phone: 617 646 7800 | PO #: Purchase Order not required | | |
| Email: ~~ethan.gyles@erm.com~~ Larry.Mastera@erm.com | WO #: | | |
| Project Name: IDS Wayland | Project #: 48007117 | | |
| Site: Wayland, MA | SSOW#: | | |

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260MCP - 8260 | 522 - 1,4 Dioxane 522 | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | A | A | | |
| MW-1034-20170809-01 | 08/09/17 | 12:20 | G | Water | | | 3 | | 3 | |
| DUP-004-20170809-01 | | 00:04 | | Water | | | 3 | | 3 | |
| MW-1018-20170809-01 | | 13:40 | | Water | | | 3 | | 3 | |
| MW-1035-20170809-01 | | 13:55 | | Water | | | 3 | | 3 | |
| MW-1036-20170809-01 | | 14:10 | | Water | | | 3 | | 3 | |
| DUP-005-20170809-01 | | 00:05 | | Water | | | 3 | | 3 | |
| MW-1037-20170809-01 | | 14:31 | | Water | | | 3 | | 3 | |
| MW-1038-20170809-01 | | 14:50 | | Water | | | 3 | | 3 | |
| DUP-002-20170809-01 | | 00:02 | | Water | | | 3 | | 3 | |
| DUP-003-20170809-01 | | 00:03 | | Water | | | 3 | | 3 | |
| DUP-001-20170809-01 | | 00:01 | | Water | | | 3 | | 3 | |

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | | 8/9/17 @1717 | ERM | | 8-9-17 1717 | |
| 2 | | 8-9-17 1800 | | | 8/10/17 0930 | |
| 3 | | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: ∆ Yes ∆ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 20 #1 |
|---|---|---|



8/24/2017

**TestAmerica Buffalo**
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

# Chain of Custody Record

380325-Boston

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: Clementine Barker | Lab PM: Mason, Becky C | Carrier Tracking No(s): | COC No: 480-100183-10762.4 |
|---|---|---|---|---|
| Client Contact: ~~Mr. Ethan Gyles~~ Larry Mastera | Phone: 774 722 2902 | E-Mail: becky.mason@testamericainc.com | | Page: ~~Page 4 of 6~~ pg 4/4 |
| Company: ERM-Northeast | | | | Job #: |

| Address: One Beacon Steet 5th Floor | Due Date Requested: |
|---|---|
| City: Boston | TAT Requested (days): |
| State, Zip: MA, 02108 | |
| Phone: 617 646 7800 | PO #: Purchase Order not required |
| Email: ~~ethan.gyles@erm.com~~ larry.mastera@erm.com | WO #: |
| Project Name: IDS Wayland | Project #: 48007117 |
| Site: Wayland MA | SSOW#: |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2O3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - pH 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260MCP - 8260 | 522 - 1,4 Dioxane 522 | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | A | A | | |
| MW-1024D-20170809-01 | 8/9/17 | 1153 | G | Water | | | 3 | | 3 | |
| MW-1023-20170809-01 | | 1210 | | Water | | | 3 | | 3 | |
| MW-1019B-20170809-01 | | 1315 | | Water | | | 3 | | 3 | |
| MW-1010D-20170809-01 | | 13:32 | | Water | | | 3 | | 3 | |
| MW-1010M-20170809-01 | | 1345 | | Water | | | 3 | | 3 | |
| MW-1006-20170809-01 | | 1403 | | Water | | | 3 | | 3 | |
| MW-1016D-20170809-01 | | 1418 | | Water | | | 3 | | 3 | |
| MW-1017D-20170809-01 | | 1438 | | Water | | | 3 | | 3 | |
| MW-1011-20170809-01 | | 1500 | | Water | | | 3 | | 3 | |
| MW-1039-20170809-01 | | 1511 | | Water | | | 3 | | 3 | |
| TB-001-20170809-01 | 6/21/17 | — | TB | Water | | | 2 | | 2 | lab provided TB |

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | | 8/9/17 1717 | ERM | | 8-9-17 1717 | |
| 2 | | 8-9-17 1801 | | | 8/10/17 0930 | |
| 3 | | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.0 #1

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8/24/2017

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

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

TestAmerica Job ID: 480-122651-1
Client Project/Site: IDS Wayland

For:
ERM-Northeast
One Beacon Steet
5th Floor
Boston, Massachusetts 02108

Attn: Lyndsey Colburn

Denise L Giglia

*Authorized for release by:*
*8/24/2017 11:04:53 AM*
Denise Giglia, Project Management Assistant II
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Designee for

Becky Mason, Project Manager II
(413)572-4000
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# Definitions/Glossary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122651-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | 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) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (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) |

## Job ID: 480-122651-1

### Laboratory: TestAmerica Buffalo

**Narrative**

**Job Narrative**
**480-122651-1**

**Receipt**
The samples were received on 8/12/2017 1:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8º C.

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

Method 8260C: The continuing calibration verification (CCV) for Tert-amyl methyl ether associated with batch 480-373384 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 sample was affected : PDB-001-20170811-01 (480-122651-11).

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-373384 exceeded control limits for the following analytes: Bromoform. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%. The following sample was affected : PDB-001-20170811-01 (480-122651-11).

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 480-373384 exceeded control limits for the following analyte: Tetrahydrofuran. Unlike the calibration standards, this is due to the coelution with Methacrylonitrile in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample. The following sample was affected : PDB-001-20170811-01 (480-122651-11).

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

**GC/MS Semi VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

# MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-122651**

Project Location: **IDS Wayland** RTN:

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

**480-122651[11]**

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).<br>b. APH and TO-15 Methods only: Was the complete analyte list reported for each method? | ☐ Yes ☐ No<br>☐ Yes ☐ No |
| **F** | Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)? | ■ Yes ☐ No |

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

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

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

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

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

***I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.***

Signature: Denise L Giglia Position: Project Manager Assistant II

Printed Name: Denise L. Giglia Date: 8/24/17 10:58

# Detection Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122651-1

## Client Sample ID: MW-1011-20170811-01 — Lab Sample ID: 480-122651-1

No Detections.

## Client Sample ID: MW-1020-20170811-01 — Lab Sample ID: 480-122651-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 0.40 | | 0.20 | | ug/L | 1 | | 522 | Total/NA |

## Client Sample ID: MW-1026D-20170811-01 — Lab Sample ID: 480-122651-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 0.44 | | 0.20 | | ug/L | 1 | | 522 | Total/NA |

## Client Sample ID: MW-1025D-20170811-01 — Lab Sample ID: 480-122651-4

No Detections.

## Client Sample ID: MW-1025M-20170811-01 — Lab Sample ID: 480-122651-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 2.0 | | 0.20 | | ug/L | 1 | | 522 | Total/NA |

## Client Sample ID: MW-1024D-20170811-01 — Lab Sample ID: 480-122651-6

No Detections.

## Client Sample ID: MW-1023-20170811-01 — Lab Sample ID: 480-122651-7

No Detections.

## Client Sample ID: MW-1022-20170811-01 — Lab Sample ID: 480-122651-8

No Detections.

## Client Sample ID: MW-1034-20170811-01 — Lab Sample ID: 480-122651-9

No Detections.

## Client Sample ID: MW-1033-20170811-01 — Lab Sample ID: 480-122651-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 0.70 | | 0.20 | | ug/L | 1 | | 522 | Total/NA |

## Client Sample ID: PDB-001-20170811-01 — Lab Sample ID: 480-122651-11

No Detections.

This Detection Summary does not include radiochemical test results.

## Client Sample ID: MW-1011-20170811-01

**Lab Sample ID: 480-122651-1**
**Date Collected: 08/11/17 07:40**
**Matrix: Water**
**Date Received: 08/12/17 01:45**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | | 0.20 | | ug/L | | 08/14/17 22:57 | 08/15/17 18:50 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8 (Surr)* | *80* | | *46 - 130* | *08/14/17 22:57* | *08/15/17 18:50* | *1* |

## Client Sample ID: MW-1020-20170811-01

**Lab Sample ID: 480-122651-2**
**Date Collected: 08/11/17 07:55**
**Matrix: Water**
**Date Received: 08/12/17 01:45**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 0.40 | | 0.20 | | ug/L | | 08/14/17 22:57 | 08/15/17 19:03 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8 (Surr)* | *80* | | *46 - 130* | *08/14/17 22:57* | *08/15/17 19:03* | *1* |

## Client Sample ID: MW-1026D-20170811-01

**Lab Sample ID: 480-122651-3**
**Date Collected: 08/11/17 08:05**
**Matrix: Water**
**Date Received: 08/12/17 01:45**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 0.44 | | 0.20 | | ug/L | | 08/14/17 22:57 | 08/15/17 19:17 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8 (Surr)* | *77* | | *46 - 130* | *08/14/17 22:57* | *08/15/17 19:17* | *1* |

## Client Sample ID: MW-1025D-20170811-01

**Lab Sample ID: 480-122651-4**
**Date Collected: 08/11/17 08:30**
**Matrix: Water**
**Date Received: 08/12/17 01:45**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | | 0.20 | | ug/L | | 08/14/17 22:57 | 08/15/17 19:30 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8 (Surr)* | *83* | | *46 - 130* | *08/14/17 22:57* | *08/15/17 19:30* | *1* |

## Client Sample ID: MW-1025M-20170811-01

**Lab Sample ID: 480-122651-5**
**Date Collected: 08/11/17 08:35**
**Matrix: Water**
**Date Received: 08/12/17 01:45**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 2.0 | | 0.20 | | ug/L | | 08/14/17 22:57 | 08/15/17 19:43 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8 (Surr)* | *89* | | *46 - 130* | *08/14/17 22:57* | *08/15/17 19:43* | *1* |

## Client Sample ID: MW-1024D-20170811-01

**Lab Sample ID: 480-122651-6**
**Date Collected: 08/11/17 08:55**
**Matrix: Water**
**Date Received: 08/12/17 01:45**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | | 0.20 | | ug/L | | 08/14/17 22:57 | 08/15/17 19:57 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8 (Surr)* | *71* | | *46 - 130* | *08/14/17 22:57* | *08/15/17 19:57* | *1* |

## Client Sample ID: MW-1023-20170811-01

**Lab Sample ID: 480-122651-7**
**Date Collected: 08/11/17 09:10**
**Matrix: Water**
**Date Received: 08/12/17 01:45**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | | 0.20 | | ug/L | | 08/14/17 22:57 | 08/15/17 20:10 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8 (Surr)* | *89* | | *46 - 130* | *08/14/17 22:57* | *08/15/17 20:10* | *1* |

## Client Sample ID: MW-1022-20170811-01

**Lab Sample ID: 480-122651-8**
**Date Collected: 08/11/17 09:25**
**Matrix: Water**
**Date Received: 08/12/17 01:45**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | | 0.20 | | ug/L | | 08/14/17 22:57 | 08/15/17 20:24 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8 (Surr)* | *79* | | *46 - 130* | *08/14/17 22:57* | *08/15/17 20:24* | *1* |

## Client Sample ID: MW-1034-20170811-01

**Lab Sample ID: 480-122651-9**
**Date Collected: 08/11/17 10:00**
**Matrix: Water**
**Date Received: 08/12/17 01:45**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | | 0.20 | | ug/L | | 08/14/17 17:27 | 08/15/17 17:29 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8 (Surr)* | *87* | | *46 - 130* | *08/14/17 17:27* | *08/15/17 17:29* | *1* |

## Client Sample ID: MW-1033-20170811-01

**Lab Sample ID: 480-122651-10**
**Date Collected: 08/11/17 10:20**
**Matrix: Water**
**Date Received: 08/12/17 01:45**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **1,4-Dioxane** | **0.70** | | 0.20 | | ug/L | | 08/14/17 22:57 | 08/15/17 20:51 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8 (Surr)* | *94* | | *46 - 130* | *08/14/17 22:57* | *08/15/17 20:51* | *1* |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122651-1

**Client Sample ID: PDB-001-20170811-01**
**Date Collected: 08/11/17 10:40**
**Date Received: 08/12/17 01:45**

**Lab Sample ID: 480-122651-11**
**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 | | | 08/23/17 06:03 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/23/17 06:03 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/23/17 06:03 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 2-Butanone (MEK) | ND | | 10 | | ug/L | | | 08/23/17 06:03 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 2-Hexanone | ND | | 10 | | ug/L | | | 08/23/17 06:03 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/23/17 06:03 | 1 |
| Acetone | ND | | 50 | | ug/L | | | 08/23/17 06:03 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Bromoform | ND | * | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/23/17 06:03 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/23/17 06:03 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Chloromethane | ND | | 2.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/23/17 06:03 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/23/17 06:03 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/23/17 06:03 | 1 |
| Isopropyl ether | ND | | 10 | | ug/L | | | 08/23/17 06:03 | 1 |

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122651-1

**Client Sample ID: PDB-001-20170811-01**
**Date Collected: 08/11/17 10:40**
**Date Received: 08/12/17 01:45**

**Lab Sample ID: 480-122651-11**
**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 | | | 08/23/17 06:03 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Tetrahydrofuran | ND | * | 10 | | ug/L | | | 08/23/17 06:03 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/23/17 06:03 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/23/17 06:03 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *96* | | *70 - 130* | | *08/23/17 06:03* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *103* | | *70 - 130* | | *08/23/17 06:03* | *1* |
| *4-Bromofluorobenzene (Surr)* | *95* | | *70 - 130* | | *08/23/17 06:03* | *1* |

# Surrogate Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122651-1

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

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

| | | Percent Surrogate Recovery (Acceptance Limits) | | |
|---|---|---|---|---|
| | | TOL | 12DCE | BFB |
| Lab Sample ID | Client Sample ID | (70-130) | (70-130) | (70-130) |
| 480-122651-11 | PDB-001-20170811-01 | 96 | 103 | 95 |
| LCS 480-373384/4 | Lab Control Sample | 99 | 96 | 94 |
| LCSD 480-373384/5 | Lab Control Sample Dup | 96 | 97 | 98 |
| MB 480-373384/7 | Method Blank | 101 | 104 | 96 |

**Surrogate Legend**

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

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

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

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| | | 14DD8 |
| Lab Sample ID | Client Sample ID | (46-130) |
| 480-122651-1 | MW-1011-20170811-01 | 80 |
| 480-122651-2 | MW-1020-20170811-01 | 80 |
| 480-122651-3 | MW-1026D-20170811-01 | 77 |
| 480-122651-4 | MW-1025D-20170811-01 | 83 |
| 480-122651-5 | MW-1025M-20170811-01 | 89 |
| 480-122651-6 | MW-1024D-20170811-01 | 71 |
| 480-122651-7 | MW-1023-20170811-01 | 89 |
| 480-122651-8 | MW-1022-20170811-01 | 79 |
| 480-122651-9 | MW-1034-20170811-01 | 87 |
| 480-122651-10 | MW-1033-20170811-01 | 94 |
| LCS 200-119739/2-A | Lab Control Sample | 88 |
| LLCS 200-119749/2-A | Lab Control Sample | 79 |
| MB 200-119739/1-A | Method Blank | 84 |
| MB 200-119749/1-A | Method Blank | 83 |

**Surrogate Legend**

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

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

**Lab Sample ID: MB 480-373384/7**
**Matrix: Water**
**Analysis Batch: 373384**

**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 | | | 08/23/17 01:34 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | | ug/L | | | 08/23/17 01:34 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 1,4-Dioxane | ND | | 50 | | ug/L | | | 08/23/17 01:34 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 2-Butanone (MEK) | ND | | 10 | | ug/L | | | 08/23/17 01:34 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 2-Hexanone | ND | | 10 | | ug/L | | | 08/23/17 01:34 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 4-Isopropyltoluene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | | ug/L | | | 08/23/17 01:34 | 1 |
| Acetone | ND | | 50 | | ug/L | | | 08/23/17 01:34 | 1 |
| Benzene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Bromobenzene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Bromoform | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Bromomethane | ND | | 2.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Carbon disulfide | ND | | 10 | | ug/L | | | 08/23/17 01:34 | 1 |
| Carbon tetrachloride | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Chlorobenzene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Chlorobromomethane | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Chlorodibromomethane | ND | | 0.50 | | ug/L | | | 08/23/17 01:34 | 1 |
| Chloroethane | ND | | 2.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Chloroform | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Chloromethane | ND | | 2.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| cis-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/23/17 01:34 | 1 |
| Dichlorobromomethane | ND | | 0.50 | | ug/L | | | 08/23/17 01:34 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Ethyl ether | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Ethylbenzene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Ethylene Dibromide | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Hexachlorobutadiene | ND | | 0.40 | | ug/L | | | 08/23/17 01:34 | 1 |

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

**Lab Sample ID: MB 480-373384/7**
**Matrix: Water**
**Analysis Batch: 373384**

**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 | | | 08/23/17 01:34 | 1 |
| Isopropylbenzene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Methyl tert-butyl ether | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Methylene Chloride | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Naphthalene | ND | | 5.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| n-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| N-Propylbenzene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| o-Xylene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| sec-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Styrene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Tert-amyl methyl ether | ND | | 5.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Tert-butyl ethyl ether | ND | | 5.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| tert-Butylbenzene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Tetrachloroethene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Tetrahydrofuran | ND | | 10 | | ug/L | | | 08/23/17 01:34 | 1 |
| Toluene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| trans-1,3-Dichloropropene | ND | | 0.40 | | ug/L | | | 08/23/17 01:34 | 1 |
| Trichloroethene | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Vinyl chloride | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |
| Dibromomethane | ND | | 1.0 | | ug/L | | | 08/23/17 01:34 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *101* | | *70 - 130* | | *08/23/17 01:34* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *104* | | *70 - 130* | | *08/23/17 01:34* | *1* |
| *4-Bromofluorobenzene (Surr)* | *96* | | *70 - 130* | | *08/23/17 01:34* | *1* |

**Lab Sample ID: LCS 480-373384/4**
**Matrix: Water**
**Analysis Batch: 373384**

**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 | 27.2 | | ug/L | | 109 | 70 - 130 |
| 1,1,1-Trichloroethane | 25.0 | 27.8 | | ug/L | | 111 | 70 - 130 |
| 1,1,2,2-Tetrachloroethane | 25.0 | 27.2 | | ug/L | | 109 | 70 - 130 |
| 1,1,2-Trichloroethane | 25.0 | 24.2 | | ug/L | | 97 | 70 - 130 |
| 1,1-Dichloroethane | 25.0 | 27.3 | | ug/L | | 109 | 70 - 130 |
| 1,1-Dichloroethene | 25.0 | 25.6 | | ug/L | | 103 | 70 - 130 |
| 1,1-Dichloropropene | 25.0 | 26.5 | | ug/L | | 106 | 70 - 130 |
| 1,2,3-Trichlorobenzene | 25.0 | 25.2 | | ug/L | | 101 | 70 - 130 |
| 1,2,3-Trichloropropane | 25.0 | 26.5 | | ug/L | | 106 | 70 - 130 |
| 1,2,4-Trichlorobenzene | 25.0 | 24.6 | | ug/L | | 98 | 70 - 130 |
| 1,2,4-Trimethylbenzene | 25.0 | 26.1 | | ug/L | | 105 | 70 - 130 |
| 1,2-Dibromo-3-Chloropropane | 25.0 | 24.5 | | ug/L | | 98 | 70 - 130 |
| 1,2-Dichlorobenzene | 25.0 | 25.1 | | ug/L | | 100 | 70 - 130 |
| 1,2-Dichloroethane | 25.0 | 24.3 | | ug/L | | 97 | 70 - 130 |

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

**Lab Sample ID: LCS 480-373384/4**
**Matrix: Water**
**Analysis Batch: 373384**

**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 | 24.5 | | ug/L | | 98 | 70 - 130 |
| 1,3,5-Trimethylbenzene | 25.0 | 26.8 | | ug/L | | 107 | 70 - 130 |
| 1,3-Dichlorobenzene | 25.0 | 25.4 | | ug/L | | 102 | 70 - 130 |
| 1,3-Dichloropropane | 25.0 | 24.0 | | ug/L | | 96 | 70 - 130 |
| 1,4-Dichlorobenzene | 25.0 | 25.5 | | ug/L | | 102 | 70 - 130 |
| 1,4-Dioxane | 500 | 460 | | ug/L | | 92 | 70 - 130 |
| 2,2-Dichloropropane | 25.0 | 27.5 | | ug/L | | 110 | 70 - 130 |
| 2-Butanone (MEK) | 125 | 143 | | ug/L | | 114 | 70 - 130 |
| 2-Chlorotoluene | 25.0 | 26.4 | | ug/L | | 106 | 70 - 130 |
| 2-Hexanone | 125 | 130 | | ug/L | | 104 | 70 - 130 |
| 4-Chlorotoluene | 25.0 | 25.5 | | ug/L | | 102 | 70 - 130 |
| 4-Isopropyltoluene | 25.0 | 27.0 | | ug/L | | 108 | 70 - 130 |
| 4-Methyl-2-pentanone (MIBK) | 125 | 128 | | ug/L | | 102 | 70 - 130 |
| Acetone | 125 | 132 | | ug/L | | 106 | 70 - 130 |
| Benzene | 25.0 | 25.5 | | ug/L | | 102 | 70 - 130 |
| Bromobenzene | 25.0 | 25.3 | | ug/L | | 101 | 70 - 130 |
| Bromoform | 25.0 | 31.1 | | ug/L | | 124 | 70 - 130 |
| Bromomethane | 25.0 | 22.9 | | ug/L | | 92 | 70 - 130 |
| Carbon disulfide | 25.0 | 26.1 | | ug/L | | 104 | 70 - 130 |
| Carbon tetrachloride | 25.0 | 28.2 | | ug/L | | 113 | 70 - 130 |
| Chlorobenzene | 25.0 | 25.2 | | ug/L | | 101 | 70 - 130 |
| Chlorobromomethane | 25.0 | 25.3 | | ug/L | | 101 | 70 - 130 |
| Chlorodibromomethane | 25.0 | 23.8 | | ug/L | | 95 | 70 - 130 |
| Chloroethane | 25.0 | 25.4 | | ug/L | | 102 | 70 - 130 |
| Chloroform | 25.0 | 25.9 | | ug/L | | 103 | 70 - 130 |
| Chloromethane | 25.0 | 24.8 | | ug/L | | 99 | 70 - 130 |
| cis-1,2-Dichloroethene | 25.0 | 26.1 | | ug/L | | 104 | 70 - 130 |
| cis-1,3-Dichloropropene | 25.0 | 27.0 | | ug/L | | 108 | 70 - 130 |
| Dichlorobromomethane | 25.0 | 27.4 | | ug/L | | 110 | 70 - 130 |
| Dichlorodifluoromethane | 25.0 | 24.2 | | ug/L | | 97 | 70 - 130 |
| Ethyl ether | 25.0 | 24.7 | | ug/L | | 99 | 70 - 130 |
| Ethylbenzene | 25.0 | 25.8 | | ug/L | | 103 | 70 - 130 |
| Ethylene Dibromide | 25.0 | 24.9 | | ug/L | | 99 | 70 - 130 |
| Hexachlorobutadiene | 25.0 | 27.2 | | ug/L | | 109 | 70 - 130 |
| Isopropyl ether | 25.0 | 25.9 | | ug/L | | 103 | 70 - 130 |
| Isopropylbenzene | 25.0 | 27.0 | | ug/L | | 108 | 70 - 130 |
| Methyl tert-butyl ether | 25.0 | 24.3 | | ug/L | | 97 | 70 - 130 |
| Methylene Chloride | 25.0 | 23.7 | | ug/L | | 95 | 70 - 130 |
| m-Xylene & p-Xylene | 25.0 | 26.2 | | ug/L | | 105 | 70 - 130 |
| Naphthalene | 25.0 | 26.5 | | ug/L | | 106 | 70 - 130 |
| n-Butylbenzene | 25.0 | 27.5 | | ug/L | | 110 | 70 - 130 |
| N-Propylbenzene | 25.0 | 27.0 | | ug/L | | 108 | 70 - 130 |
| o-Xylene | 25.0 | 25.8 | | ug/L | | 103 | 70 - 130 |
| sec-Butylbenzene | 25.0 | 26.3 | | ug/L | | 105 | 70 - 130 |
| Styrene | 25.0 | 26.5 | | ug/L | | 106 | 70 - 130 |
| Tert-amyl methyl ether | 25.0 | 25.4 | | ug/L | | 102 | 70 - 130 |
| Tert-butyl ethyl ether | 25.0 | 25.5 | | ug/L | | 102 | 70 - 130 |
| tert-Butylbenzene | 25.0 | 25.9 | | ug/L | | 104 | 70 - 130 |

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

**Lab Sample ID: LCS 480-373384/4**
**Matrix: Water**
**Analysis Batch: 373384**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Tetrachloroethene | 25.0 | 26.8 | | ug/L | | 107 | 70 - 130 |
| Tetrahydrofuran | 50.0 | 68.0 | * | ug/L | | 136 | 70 - 130 |
| Toluene | 25.0 | 25.8 | | ug/L | | 103 | 70 - 130 |
| trans-1,2-Dichloroethene | 25.0 | 26.8 | | ug/L | | 107 | 70 - 130 |
| trans-1,3-Dichloropropene | 25.0 | 24.2 | | ug/L | | 97 | 70 - 130 |
| Trichloroethene | 25.0 | 25.4 | | ug/L | | 102 | 70 - 130 |
| Trichlorofluoromethane | 25.0 | 28.2 | | ug/L | | 113 | 70 - 130 |
| Vinyl chloride | 25.0 | 25.9 | | ug/L | | 104 | 70 - 130 |
| Dibromomethane | 25.0 | 25.0 | | ug/L | | 100 | 70 - 130 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 130* |
| *1,2-Dichloroethane-d4 (Surr)* | *96* | | *70 - 130* |
| *4-Bromofluorobenzene (Surr)* | *94* | | *70 - 130* |

**Lab Sample ID: LCSD 480-373384/5**
**Matrix: Water**
**Analysis Batch: 373384**

**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 | 25.8 | | ug/L | | 103 | 70 - 130 | 5 | 20 |
| 1,1,1-Trichloroethane | 25.0 | 24.8 | | ug/L | | 99 | 70 - 130 | 11 | 20 |
| 1,1,2,2-Tetrachloroethane | 25.0 | 27.6 | | ug/L | | 110 | 70 - 130 | 1 | 20 |
| 1,1,2-Trichloroethane | 25.0 | 24.1 | | ug/L | | 96 | 70 - 130 | 0 | 20 |
| 1,1-Dichloroethane | 25.0 | 25.2 | | ug/L | | 101 | 70 - 130 | 8 | 20 |
| 1,1-Dichloroethene | 25.0 | 23.2 | | ug/L | | 93 | 70 - 130 | 10 | 20 |
| 1,1-Dichloropropene | 25.0 | 24.3 | | ug/L | | 97 | 70 - 130 | 8 | 20 |
| 1,2,3-Trichlorobenzene | 25.0 | 25.5 | | ug/L | | 102 | 70 - 130 | 1 | 20 |
| 1,2,3-Trichloropropane | 25.0 | 26.1 | | ug/L | | 104 | 70 - 130 | 2 | 20 |
| 1,2,4-Trichlorobenzene | 25.0 | 25.1 | | ug/L | | 101 | 70 - 130 | 2 | 20 |
| 1,2,4-Trimethylbenzene | 25.0 | 25.9 | | ug/L | | 104 | 70 - 130 | 1 | 20 |
| 1,2-Dibromo-3-Chloropropane | 25.0 | 23.3 | | ug/L | | 93 | 70 - 130 | 5 | 20 |
| 1,2-Dichlorobenzene | 25.0 | 25.6 | | ug/L | | 102 | 70 - 130 | 2 | 20 |
| 1,2-Dichloroethane | 25.0 | 23.5 | | ug/L | | 94 | 70 - 130 | 3 | 20 |
| 1,2-Dichloropropane | 25.0 | 24.3 | | ug/L | | 97 | 70 - 130 | 1 | 20 |
| 1,3,5-Trimethylbenzene | 25.0 | 26.1 | | ug/L | | 104 | 70 - 130 | 3 | 20 |
| 1,3-Dichlorobenzene | 25.0 | 25.0 | | ug/L | | 100 | 70 - 130 | 1 | 20 |
| 1,3-Dichloropropane | 25.0 | 24.6 | | ug/L | | 98 | 70 - 130 | 3 | 20 |
| 1,4-Dichlorobenzene | 25.0 | 25.3 | | ug/L | | 101 | 70 - 130 | 0 | 20 |
| 1,4-Dioxane | 500 | 472 | | ug/L | | 94 | 70 - 130 | 3 | 20 |
| 2,2-Dichloropropane | 25.0 | 24.9 | | ug/L | | 99 | 70 - 130 | 10 | 20 |
| 2-Butanone (MEK) | 125 | 130 | | ug/L | | 104 | 70 - 130 | 9 | 20 |
| 2-Chlorotoluene | 25.0 | 26.1 | | ug/L | | 104 | 70 - 130 | 1 | 20 |
| 2-Hexanone | 125 | 131 | | ug/L | | 105 | 70 - 130 | 1 | 20 |
| 4-Chlorotoluene | 25.0 | 25.7 | | ug/L | | 103 | 70 - 130 | 1 | 20 |
| 4-Isopropyltoluene | 25.0 | 26.1 | | ug/L | | 104 | 70 - 130 | 3 | 20 |
| 4-Methyl-2-pentanone (MIBK) | 125 | 127 | | ug/L | | 102 | 70 - 130 | 0 | 20 |
| Acetone | 125 | 128 | | ug/L | | 103 | 70 - 130 | 3 | 20 |

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

**Lab Sample ID: LCSD 480-373384/5**
**Matrix: Water**
**Analysis Batch: 373384**

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

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 25.0 | 24.2 | | ug/L | | 97 | 70 - 130 | 6 | 20 |
| Bromobenzene | | | 25.0 | 25.3 | | ug/L | | 101 | 70 - 130 | 0 | 20 |
| Bromoform | | | 25.0 | 33.3 | * | ug/L | | 133 | 70 - 130 | 7 | 20 |
| Bromomethane | | | 25.0 | 21.6 | | ug/L | | 86 | 70 - 130 | 6 | 20 |
| Carbon disulfide | | | 25.0 | 23.5 | | ug/L | | 94 | 70 - 130 | 10 | 20 |
| Carbon tetrachloride | | | 25.0 | 25.6 | | ug/L | | 102 | 70 - 130 | 10 | 20 |
| Chlorobenzene | | | 25.0 | 24.5 | | ug/L | | 98 | 70 - 130 | 3 | 20 |
| Chlorobromomethane | | | 25.0 | 23.9 | | ug/L | | 96 | 70 - 130 | 6 | 20 |
| Chlorodibromomethane | | | 25.0 | 22.8 | | ug/L | | 91 | 70 - 130 | 4 | 20 |
| Chloroethane | | | 25.0 | 22.9 | | ug/L | | 92 | 70 - 130 | 10 | 20 |
| Chloroform | | | 25.0 | 23.9 | | ug/L | | 96 | 70 - 130 | 8 | 20 |
| Chloromethane | | | 25.0 | 22.1 | | ug/L | | 88 | 70 - 130 | 12 | 20 |
| cis-1,2-Dichloroethene | | | 25.0 | 24.6 | | ug/L | | 98 | 70 - 130 | 6 | 20 |
| cis-1,3-Dichloropropene | | | 25.0 | 25.6 | | ug/L | | 103 | 70 - 130 | 5 | 20 |
| Dichlorobromomethane | | | 25.0 | 26.7 | | ug/L | | 107 | 70 - 130 | 2 | 20 |
| Dichlorodifluoromethane | | | 25.0 | 21.4 | | ug/L | | 85 | 70 - 130 | 12 | 20 |
| Ethyl ether | | | 25.0 | 23.7 | | ug/L | | 95 | 70 - 130 | 4 | 20 |
| Ethylbenzene | | | 25.0 | 24.9 | | ug/L | | 99 | 70 - 130 | 4 | 20 |
| Ethylene Dibromide | | | 25.0 | 25.1 | | ug/L | | 100 | 70 - 130 | 1 | 20 |
| Hexachlorobutadiene | | | 25.0 | 25.3 | | ug/L | | 101 | 70 - 130 | 7 | 20 |
| Isopropyl ether | | | 25.0 | 25.2 | | ug/L | | 101 | 70 - 130 | 3 | 20 |
| Isopropylbenzene | | | 25.0 | 26.1 | | ug/L | | 104 | 70 - 130 | 3 | 20 |
| Methyl tert-butyl ether | | | 25.0 | 24.0 | | ug/L | | 96 | 70 - 130 | 1 | 20 |
| Methylene Chloride | | | 25.0 | 23.6 | | ug/L | | 94 | 70 - 130 | 0 | 20 |
| m-Xylene & p-Xylene | | | 25.0 | 25.2 | | ug/L | | 101 | 70 - 130 | 4 | 20 |
| Naphthalene | | | 25.0 | 27.2 | | ug/L | | 109 | 70 - 130 | 3 | 20 |
| n-Butylbenzene | | | 25.0 | 26.2 | | ug/L | | 105 | 70 - 130 | 5 | 20 |
| N-Propylbenzene | | | 25.0 | 26.0 | | ug/L | | 104 | 70 - 130 | 4 | 20 |
| o-Xylene | | | 25.0 | 25.3 | | ug/L | | 101 | 70 - 130 | 2 | 20 |
| sec-Butylbenzene | | | 25.0 | 25.6 | | ug/L | | 102 | 70 - 130 | 3 | 20 |
| Styrene | | | 25.0 | 25.1 | | ug/L | | 100 | 70 - 130 | 6 | 20 |
| Tert-amyl methyl ether | | | 25.0 | 25.1 | | ug/L | | 100 | 70 - 130 | 1 | 20 |
| Tert-butyl ethyl ether | | | 25.0 | 24.9 | | ug/L | | 100 | 70 - 130 | 3 | 20 |
| tert-Butylbenzene | | | 25.0 | 25.7 | | ug/L | | 103 | 70 - 130 | 1 | 20 |
| Tetrachloroethene | | | 25.0 | 26.3 | | ug/L | | 105 | 70 - 130 | 2 | 20 |
| Tetrahydrofuran | | | 50.0 | 66.2 | * | ug/L | | 132 | 70 - 130 | 3 | 20 |
| Toluene | | | 25.0 | 24.4 | | ug/L | | 98 | 70 - 130 | 6 | 20 |
| trans-1,2-Dichloroethene | | | 25.0 | 25.0 | | ug/L | | 100 | 70 - 130 | 7 | 20 |
| trans-1,3-Dichloropropene | | | 25.0 | 23.7 | | ug/L | | 95 | 70 - 130 | 2 | 20 |
| Trichloroethene | | | 25.0 | 23.8 | | ug/L | | 95 | 70 - 130 | 6 | 20 |
| Trichlorofluoromethane | | | 25.0 | 25.2 | | ug/L | | 101 | 70 - 130 | 11 | 20 |
| Vinyl chloride | | | 25.0 | 23.6 | | ug/L | | 94 | 70 - 130 | 9 | 20 |
| Dibromomethane | | | 25.0 | 24.1 | | ug/L | | 96 | 70 - 130 | 4 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *96* | | *70 - 130* |
| *1,2-Dichloroethane-d4 (Surr)* | *97* | | *70 - 130* |
| *4-Bromofluorobenzene (Surr)* | *98* | | *70 - 130* |

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

**Lab Sample ID: MB 200-119739/1-A**
**Matrix: Water**
**Analysis Batch: 119776**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 119739**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | | 0.20 | | ug/L | | 08/14/17 17:27 | 08/15/17 12:19 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8 (Surr)* | *84* | | *46 - 130* | *08/14/17 17:27* | *08/15/17 12:19* | *1* |

**Lab Sample ID: LCS 200-119739/2-A**
**Matrix: Water**
**Analysis Batch: 119776**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 119739**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 8.00 | 7.90 | | ug/L | | 99 | 70 - 130 |

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

**Lab Sample ID: MB 200-119749/1-A**
**Matrix: Water**
**Analysis Batch: 119776**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 119749**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | | 0.20 | | ug/L | | 08/14/17 22:57 | 08/15/17 18:09 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,4-Dioxane-d8 (Surr)* | *83* | | *46 - 130* | *08/14/17 22:57* | *08/15/17 18:09* | *1* |

**Lab Sample ID: LLCS 200-119749/2-A**
**Matrix: Water**
**Analysis Batch: 119776**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 119749**

| Analyte | Spike Added | LLCS Result | LLCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | 0.200 | 0.167 | J | ug/L | | 83 | 50 - 150 |

| *Surrogate* | *LLCS %Recovery* | *LLCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,4-Dioxane-d8 (Surr)* | *79* | | *46 - 130* |

# QC Association Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122651-1

## GC/MS VOA

### Analysis Batch: 373384

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-122651-11 | PDB-001-20170811-01 | Total/NA | Water | 8260C | |
| MB 480-373384/7 | Method Blank | Total/NA | Water | 8260C | |
| LCS 480-373384/4 | Lab Control Sample | Total/NA | Water | 8260C | |
| LCSD 480-373384/5 | Lab Control Sample Dup | Total/NA | Water | 8260C | |

## GC/MS Semi VOA

### Prep Batch: 119739

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-122651-9 | MW-1034-20170811-01 | Total/NA | Water | 3535A | |
| MB 200-119739/1-A | Method Blank | Total/NA | Water | 3535A | |
| LCS 200-119739/2-A | Lab Control Sample | Total/NA | Water | 3535A | |

### Prep Batch: 119749

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-122651-1 | MW-1011-20170811-01 | Total/NA | Water | 3535A | |
| 480-122651-2 | MW-1020-20170811-01 | Total/NA | Water | 3535A | |
| 480-122651-3 | MW-1026D-20170811-01 | Total/NA | Water | 3535A | |
| 480-122651-4 | MW-1025D-20170811-01 | Total/NA | Water | 3535A | |
| 480-122651-5 | MW-1025M-20170811-01 | Total/NA | Water | 3535A | |
| 480-122651-6 | MW-1024D-20170811-01 | Total/NA | Water | 3535A | |
| 480-122651-7 | MW-1023-20170811-01 | Total/NA | Water | 3535A | |
| 480-122651-8 | MW-1022-20170811-01 | Total/NA | Water | 3535A | |
| 480-122651-10 | MW-1033-20170811-01 | Total/NA | Water | 3535A | |
| MB 200-119749/1-A | Method Blank | Total/NA | Water | 3535A | |
| LLCS 200-119749/2-A | Lab Control Sample | Total/NA | Water | 3535A | |

### Analysis Batch: 119776

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-122651-1 | MW-1011-20170811-01 | Total/NA | Water | 522 | 119749 |
| 480-122651-2 | MW-1020-20170811-01 | Total/NA | Water | 522 | 119749 |
| 480-122651-3 | MW-1026D-20170811-01 | Total/NA | Water | 522 | 119749 |
| 480-122651-4 | MW-1025D-20170811-01 | Total/NA | Water | 522 | 119749 |
| 480-122651-5 | MW-1025M-20170811-01 | Total/NA | Water | 522 | 119749 |
| 480-122651-6 | MW-1024D-20170811-01 | Total/NA | Water | 522 | 119749 |
| 480-122651-7 | MW-1023-20170811-01 | Total/NA | Water | 522 | 119749 |
| 480-122651-8 | MW-1022-20170811-01 | Total/NA | Water | 522 | 119749 |
| 480-122651-9 | MW-1034-20170811-01 | Total/NA | Water | 522 | 119739 |
| 480-122651-10 | MW-1033-20170811-01 | Total/NA | Water | 522 | 119749 |
| MB 200-119739/1-A | Method Blank | Total/NA | Water | 522 | 119739 |
| MB 200-119749/1-A | Method Blank | Total/NA | Water | 522 | 119749 |
| LCS 200-119739/2-A | Lab Control Sample | Total/NA | Water | 522 | 119739 |
| LLCS 200-119749/2-A | Lab Control Sample | Total/NA | Water | 522 | 119749 |

# Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122651-1

## Client Sample ID: MW-1011-20170811-01
**Lab Sample ID: 480-122651-1**
**Date Collected: 08/11/17 07:40**
**Matrix: Water**
**Date Received: 08/12/17 01:45**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535A | | | 119749 | 08/14/17 22:57 | MRL | TAL BUR |
| Total/NA | Analysis | 522 | | 1 | 119776 | 08/15/17 18:50 | K1P | TAL BUR |

## Client Sample ID: MW-1020-20170811-01
**Lab Sample ID: 480-122651-2**
**Date Collected: 08/11/17 07:55**
**Matrix: Water**
**Date Received: 08/12/17 01:45**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535A | | | 119749 | 08/14/17 22:57 | MRL | TAL BUR |
| Total/NA | Analysis | 522 | | 1 | 119776 | 08/15/17 19:03 | K1P | TAL BUR |

## Client Sample ID: MW-1026D-20170811-01
**Lab Sample ID: 480-122651-3**
**Date Collected: 08/11/17 08:05**
**Matrix: Water**
**Date Received: 08/12/17 01:45**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535A | | | 119749 | 08/14/17 22:57 | MRL | TAL BUR |
| Total/NA | Analysis | 522 | | 1 | 119776 | 08/15/17 19:17 | K1P | TAL BUR |

## Client Sample ID: MW-1025D-20170811-01
**Lab Sample ID: 480-122651-4**
**Date Collected: 08/11/17 08:30**
**Matrix: Water**
**Date Received: 08/12/17 01:45**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535A | | | 119749 | 08/14/17 22:57 | MRL | TAL BUR |
| Total/NA | Analysis | 522 | | 1 | 119776 | 08/15/17 19:30 | K1P | TAL BUR |

## Client Sample ID: MW-1025M-20170811-01
**Lab Sample ID: 480-122651-5**
**Date Collected: 08/11/17 08:35**
**Matrix: Water**
**Date Received: 08/12/17 01:45**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535A | | | 119749 | 08/14/17 22:57 | MRL | TAL BUR |
| Total/NA | Analysis | 522 | | 1 | 119776 | 08/15/17 19:43 | K1P | TAL BUR |

## Client Sample ID: MW-1024D-20170811-01
**Lab Sample ID: 480-122651-6**
**Date Collected: 08/11/17 08:55**
**Matrix: Water**
**Date Received: 08/12/17 01:45**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535A | | | 119749 | 08/14/17 22:57 | MRL | TAL BUR |
| Total/NA | Analysis | 522 | | 1 | 119776 | 08/15/17 19:57 | K1P | TAL BUR |

# Lab Chronicle

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122651-1

## Client Sample ID: MW-1023-20170811-01
**Date Collected: 08/11/17 09:10**
**Date Received: 08/12/17 01:45**

## Lab Sample ID: 480-122651-7
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535A | | | 119749 | 08/14/17 22:57 | MRL | TAL BUR |
| Total/NA | Analysis | 522 | | 1 | 119776 | 08/15/17 20:10 | K1P | TAL BUR |

## Client Sample ID: MW-1022-20170811-01
**Date Collected: 08/11/17 09:25**
**Date Received: 08/12/17 01:45**

## Lab Sample ID: 480-122651-8
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535A | | | 119749 | 08/14/17 22:57 | MRL | TAL BUR |
| Total/NA | Analysis | 522 | | 1 | 119776 | 08/15/17 20:24 | K1P | TAL BUR |

## Client Sample ID: MW-1034-20170811-01
**Date Collected: 08/11/17 10:00**
**Date Received: 08/12/17 01:45**

## Lab Sample ID: 480-122651-9
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535A | | | 119739 | 08/14/17 17:27 | MRL | TAL BUR |
| Total/NA | Analysis | 522 | | 1 | 119776 | 08/15/17 17:29 | K1P | TAL BUR |

## Client Sample ID: MW-1033-20170811-01
**Date Collected: 08/11/17 10:20**
**Date Received: 08/12/17 01:45**

## Lab Sample ID: 480-122651-10
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3535A | | | 119749 | 08/14/17 22:57 | MRL | TAL BUR |
| Total/NA | Analysis | 522 | | 1 | 119776 | 08/15/17 20:51 | K1P | TAL BUR |

## Client Sample ID: PDB-001-20170811-01
**Date Collected: 08/11/17 10:40**
**Date Received: 08/12/17 01:45**

## Lab Sample ID: 480-122651-11
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 373384 | 08/23/17 06:03 | KMN | TAL BUF |

**Laboratory References:**

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

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

# Accreditation/Certification Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122651-1

## Laboratory: TestAmerica Buffalo

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

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| Arkansas DEQ | State Program | 6 | 88-0686 | 07-06-18 |
| California | State Program | 9 | 1169CA | 09-30-17 |
| Connecticut | State Program | 1 | PH-0568 | 09-30-18 |
| Florida | NELAP | 4 | E87672 | 06-30-18 |
| Georgia | State Program | 4 | 10026 (NY) | 03-31-18 |
| Georgia | State Program | 4 | 956 | 03-31-18 |
| Illinois | NELAP | 5 | 200003 | 09-30-17 |
| Iowa | State Program | 7 | 374 | 03-01-19 |
| Kansas | NELAP | 7 | E-10187 | 01-31-18 |
| Kentucky (DW) | State Program | 4 | 90029 | 12-31-17 |
| Kentucky (UST) | State Program | 4 | 30 | 03-31-18 |
| Kentucky (WW) | State Program | 4 | 90029 | 12-31-17 |
| Louisiana | NELAP | 6 | 02031 | 06-30-18 |
| Maine | State Program | 1 | NY00044 | 12-04-18 |
| Maryland | State Program | 3 | 294 | 03-31-18 |
| Massachusetts | State Program | 1 | M-NY044 | 06-30-18 |
| Michigan | State Program | 5 | 9937 | 04-01-09 * |
| Minnesota | NELAP | 5 | 036-999-337 | 12-31-17 |
| New Hampshire | NELAP | 1 | 2337 | 11-17-17 |
| New Jersey | NELAP | 2 | NY455 | 06-30-18 |
| New York | NELAP | 2 | 10026 | 03-31-18 |
| North Dakota | State Program | 8 | R-176 | 03-31-18 |
| Oklahoma | State Program | 6 | 9421 | 08-31-17 |
| Oregon | NELAP | 10 | NY200003 | 06-09-18 |
| Pennsylvania | NELAP | 3 | 68-00281 | 07-31-18 |
| Rhode Island | State Program | 1 | LAO00328 | 12-30-17 |
| Tennessee | State Program | 4 | TN02970 | 03-31-18 |
| Texas | NELAP | 6 | T104704412-15-6 | 07-31-18 |
| USDA | Federal | | P330-11-00386 | 11-26-17 |
| Virginia | NELAP | 3 | 460185 | 09-14-17 |
| Washington | State Program | 10 | C784 | 02-10-18 |
| Wisconsin | State Program | 5 | 998310390 | 08-31-17 * |

## Laboratory: TestAmerica Burlington

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

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| Connecticut | State Program | 1 | PH-0751 | 09-30-17 * |
| DE Haz. Subst. Cleanup Act (HSCA) | State Program | 3 | NA | 02-02-18 |
| Florida | NELAP | 4 | E87467 | 06-30-18 |
| L-A-B | DoD ELAP | | L2336 | 02-25-20 |
| Maine | State Program | 1 | VT00008 | 04-17-19 |
| Minnesota | NELAP | 5 | 050-999-436 | 12-31-17 |
| New Hampshire | NELAP | 1 | 2006 | 12-18-17 |
| New Jersey | NELAP | 2 | VT972 | 06-30-18 |
| New York | NELAP | 2 | 10391 | 04-01-18 |
| Pennsylvania | NELAP | 3 | 68-00489 | 04-30-18 |
| Rhode Island | State Program | 1 | LAO00298 | 12-30-17 |
| US Fish & Wildlife | Federal | | LE-058448-0 | 10-31-17 |
| USDA | Federal | | P330-11-00093 | 12-05-19 |

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

## Laboratory: TestAmerica Burlington (Continued)

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

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

# Method Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122651-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260C | Volatile Organic Compounds (GC/MS) | MA DEP | TAL BUF |
| 522 | 1,4 Dioxane (GC/MS SIM) | EPA | TAL BUR |

**Protocol References:**

EPA = US Environmental Protection Agency

MA DEP = Massachusetts Department Of Environmental Protection

**Laboratory References:**

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

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

# Sample Summary

Client: ERM-Northeast
Project/Site: IDS Wayland

TestAmerica Job ID: 480-122651-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 480-122651-1 | MW-1011-20170811-01 | Water | 08/11/17 07:40 | 08/12/17 01:45 |
| 480-122651-2 | MW-1020-20170811-01 | Water | 08/11/17 07:55 | 08/12/17 01:45 |
| 480-122651-3 | MW-1026D-20170811-01 | Water | 08/11/17 08:05 | 08/12/17 01:45 |
| 480-122651-4 | MW-1025D-20170811-01 | Water | 08/11/17 08:30 | 08/12/17 01:45 |
| 480-122651-5 | MW-1025M-20170811-01 | Water | 08/11/17 08:35 | 08/12/17 01:45 |
| 480-122651-6 | MW-1024D-20170811-01 | Water | 08/11/17 08:55 | 08/12/17 01:45 |
| 480-122651-7 | MW-1023-20170811-01 | Water | 08/11/17 09:10 | 08/12/17 01:45 |
| 480-122651-8 | MW-1022-20170811-01 | Water | 08/11/17 09:25 | 08/12/17 01:45 |
| 480-122651-9 | MW-1034-20170811-01 | Water | 08/11/17 10:00 | 08/12/17 01:45 |
| 480-122651-10 | MW-1033-20170811-01 | Water | 08/11/17 10:20 | 08/12/17 01:45 |
| 480-122651-11 | PDB-001-20170811-01 | Water | 08/11/17 10:40 | 08/12/17 01:45 |

# Login Sample Receipt Checklist

Client: ERM-Northeast

Job Number: 480-122651-1

**Login Number: 122651**
**List Number: 1**
**Creator: Williams, Christopher S**

**List Source: TestAmerica Buffalo**

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

# Login Sample Receipt Checklist

Client: ERM-Northeast

Job Number: 480-122651-1

**Login Number: 122651**
**List Number: 2**
**Creator: Lavigne, Scott M**

**List Source: TestAmerica Burlington**
**List Creation: 08/12/17 11:53 AM**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | Lab does not accept radioactive samples. |
| The cooler's custody seal, if present, is intact. | True | Seal present with no number. |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | 4.6ºC |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | N/A | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# Chain of Custody Record

360325-Boston

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

480-122651 COC

TAL-4124 (1007)

| Client | Project Manager | Date | Chain of Custody Number |
|---|---|---|---|
| ERM | Larry Mastera | 8/11/17 | 280086 |
| **Address** | **Telephone Number (Area Code)/Fax Number** | **Lab Number** | **Page 1 of 1** |
| One Beacon St 5th Flr | 617 646 7900 | | |
| **City** / **State** / **Zip Code** | **Site Contact** | **Lab Contact** | |
| Boston / MA / 02108 | C. Duben | B. Mason | |
| **Project Name and Location (State)** | **Carrier/Waybill Number** | | |
| DPS Wayland - Wayland, MA | | | |
| **Contract/Purchase Order/Quote No.** | | | |

| Sample I.D. No. and Description (Containers for each sample may be combined on one line) | Date | Time | Matrix: Air | Aqueous | Sed. | Soil | Containers & Preservatives: Unpres. | H2SO4 | HNO3 | HCl | NaOH | ZnAc/ NaOH | Analysis: 8260 - VOC | Analysis: 8270 - 1,4-Dioxane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1011-20170811-01 | 8/11/17 | 0740 | | X | | | | | | X | | | 2 | 1 |
| MW-1020-20170811-01 | | 0755 | | X | | | | | | X | | | | 1 |
| MW-1026D-20170811-01 | | 0805 | | X | | | | | | X | | | | 1 |
| MW-1025D-20170811-01 | | 0830 | | X | | | | | | X | | | | 1 |
| MW-1025M-20170811-01 | | 0835 | | X | | | | | | X | | | | 1 |
| MW-1024D-20170811-01 | | 0855 | | X | | | | | | X | | | | 1 |
| MW-1023-20170811-01 | | 0910 | | X | | | | | | X | | | | 1 |
| MW-1022-20170811-01 | | 0925 | | X | | | | | | X | | | | 1 |
| MW-1034-20170811-01 | | 1000 | | X | | | | | | X | | | | 1 |
| MW-1033-20170811-01 | | 1020 | | X | | | | | | X | | | | 1 |
| PDB-001-20170811-01 | ↓ | 1040 | | X | | | | | | X | | | | 1 |

Special Instructions/ Conditions of Receipt

Contact Clementine Duben @ 774-722-2902 with any questions.

Site is MCP.

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

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

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

**QC Requirements (Specify)**

| | Date | Time | | Date | Time |
|---|---|---|---|---|---|
| 1. Relinquished By | 8/11/17 | 12:45 | 1. Received By: Test America Locke Box | 8/11/17 | 12:45 |
| 2. Relinquished By | 8/11/17 | 15:00 | 2. Received By: TAD 8-12-17 0145 | | |
| 3. Relinquished By | | | 3. Received By | | |

Comments

2.8 #1

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

# Chain of Custody Record

360325-Boston

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

| | | | |
|---|---|---|---|
| Client: ERM | Project Manager: Larry Mastera | Date: 8/11/17 | Chain of Custody Number: 280086 |
| Address: One Beacon St 5th Flr | Telephone Number (Area Code)/Fax Number: 617 646 7800 | Lab Number: | Page 1 of 1 |
| City: Boston / State: MA / Zip Code: 02108 | Site Contact: C. Duren | Lab Contact: B. Mason | |
| Project Name and Location (State): IDS Wayland – Wayland, MA | Carrier/Waybill Number: | | |
| Contract/Purchase Order/Quote No. | | | |

| Sample I.D. No. and Description (Containers for each sample may be combined on one line) | Date | Time | Matrix: Air | Aqueous | Sed. | Soil | Containers & Preservatives: Unpres. | H2SO4 | HNO3 | HCl | NaOH | ZnAc/NaOH | Analysis: 1,4-Dioxane 8260 -VOC | Special Instructions/ Conditions of Receipt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1011-20170811-01 | 8/11/17 | 0740 | | X | | | | | | X | | | 1 | Contact Clementine Duren @ 774-722 2902 with any questions. |
| MW-1020-20170811-01 | | 0755 | | X | | | | | | X | | | 1 | |
| MW-1026D-20170811-01 | | 0805 | | X | | | | | | X | | | 1 | |
| MW-1025D-20170811-01 | | 0830 | | X | | | | | | X | | | 1 | |
| MW-1025M-20170811-01 | | 0835 | | X | | | | | | X | | | 1 | |
| MW-1024D-20170811-01 | | 0855 | | X | | | | | | X | | | 1 | |
| MW-1023-20170811-01 | | 0910 | | X | | | | | | X | | | 1 | |
| MW-1022-20170811-01 | | 0925 | | X | | | | | | X | | | 1 | |
| MW-1034-20170811-01 | | 1000 | | X | | | | | | X | | | 1 | |
| MW-1033-20170811-01 | | 1020 | | X | | | | | | X | | | 1 | |
| PDB-001-20170811-01 | ↓ | 1040 | | X | | | | | | X | | | 2 | Site is MCP. |

480-122651 Chain of Custody

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

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

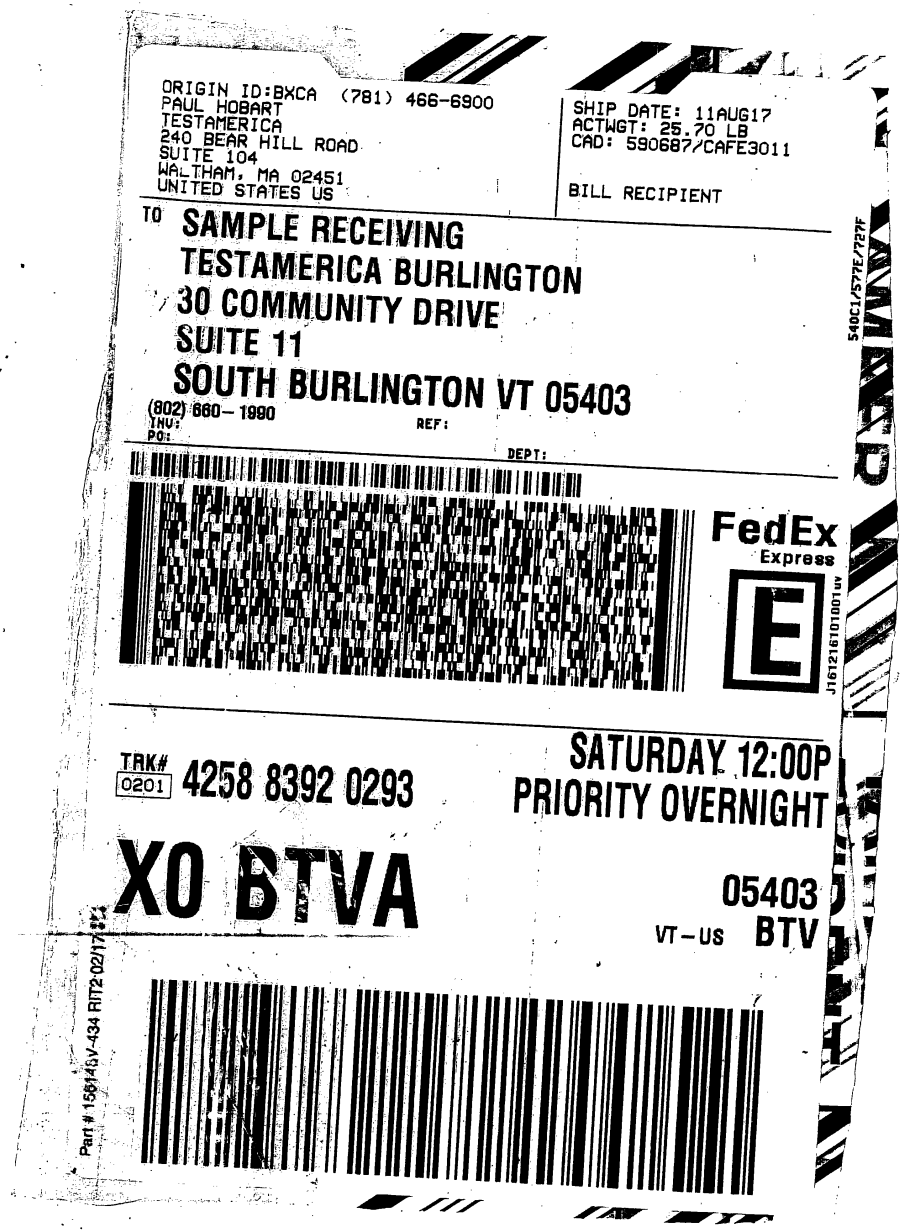
Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

| | Date | Time | | Date | Time |
|---|---|---|---|---|---|
| 1. Relinquished By | 8/11/17 | 12:45 | 1. Received By: Test America Lock Box | 8/11/17 | 12:45 |
| 2. Relinquished By | 8/11/17 | 15:00 | 2. Received By | 8/12/17 | 0940 |
| 3. Relinquished By | | | 3. Received By | | |

Comments

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


ORIGIN ID:BXCA (781) 466-6900
PAUL HOBART
TESTAMERICA
240 BEAR HILL ROAD
SUITE 104
WALTHAM, MA 02451
UNITED STATES US
SHIP DATE: 11AUG17
ACTWGT: 25.70 LB
CAD: 590687/CAFE3011
BILL RECIPIENT
TO SAMPLE RECEIVING
TESTAMERICA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990
INV:
PO:
REF:
DEPT:
FedEx
Express
TRK# 0201 4258 8392 0293
SATURDAY 12:00P
PRIORITY OVERNIGHT
XO BTVA
05403
VT-US BTV
Part # 156146-434 RITE-02/17