

September 20, 2019

Ms. Ruth Curley
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation, BURB
625 Broadway
Albany, NY 12233-7016

**Subject: Revised Periodic Review Report (PRR) - 2019
Sterling Drug Site 3, East Greenbush, New York – Site 442011**

Dear Ms. Curley:

Please find enclosed the Revised Periodic Review Report (PRR) – 2019 for Sterling Drug Site 3 in East Greenbush, New York, prepared by our Consultant, GHD. The inspection, monitoring, and reporting were completed in accordance with the Site Management Plan (SMP). The SMP was revised on December 14, 2015, and approved by New York State Department of Environmental Conservation (NYSDEC) on February 18, 2016. The PRR was revised to address comments dated August 8, 2019, from NYSDEC. Kodak responses to the NYSDEC comments are provided in Attachment A.

Please feel free to contact me if you have any questions or would like to discuss the project.

Sincerely,



Bryan P. Gallagher
Director of Environmental Remediation

C: Michael Komoroske, NYSDEC (electronic copy)
Richard Mustico, NYSDEC (electronic copy)
Richard Snyder, GHD (electronic copy)
Michael Okamoto, GHD (electronic copy)

Attachment A
Responses to NYSDEC Comments
Dated August 8, 2019



Attachment A

Responses to NYSDEC Comments Dated August 8, 2019 Sterling Drug Site 3, East Greenbush, New York

Comment #1

Please update the site area in Section 1.1 to reflect 8.8 acres (in accordance with the 2015 survey) rather than 7 acres.

Kodak Response

The text in Section 1.1 was revised to state 8.8 acres.

Comment #2

Remove the reference to 50 ppb in Section 5.1. As noted in that paragraph, the Federal & State regulators are developing criteria at this time. In Table 10, for emergent contaminants 1,4 dioxane, PFOA and PFOS, replace the 50000 ppt regulatory standard with a note stating that the criteria for comparison at the time of this report is 70 ppt for PFOA and PFOS (EPA's drinking water health advisory limit) and 0.35 ug/l for 1,4 dioxane.

Kodak Response

The sentence referencing 0.050 mg/L (50 ppb) in Section 5.1.4 for the Emerging Contaminants Sampling Event was deleted. Table 10 was revised to present the USEPA drinking water health advisory criteria for PFOA and PFOS of 70 ng/L (70 ppt) and 1,4-dioxane of 0.35 µg/L (10⁻⁶ cancer risk level).

Comment #3

Section 5.1 refers to the highest value of 1,4 dioxane (6.5 ppb) in MW-17B, although the highest value is actually 7.4 ppb in MW-21B.

Kodak Response

The text was corrected to state "The parameter 1,4-dioxane was detected at concentrations ranging from 0.0024 mg/L (PZ-2A) to 0.0074 mg/L (MW-21B)."

Comment #4

Section 6.0

Third bullet indicates that all SVOC TICs in perimeter wells are below SCGs, although 3 are actually above the SCG as noted in Section 5 and in Table 6. Update this bullet



Indicates no changes to the SMP are necessary, but acknowledges that 1,4 dioxane analysis will be added to the 2019 sampling. The Department will require 1,4 dioxane sampling to continue and the SMP will need to be revised incorporate this change, and the addition of the July 2016 installation logs for MW-25 and MW-26.

Kodak Response

The third bullet in Section 6.0 indicates that the majority [emphasis added] and not all of the VOCs, VOC TICs, SVOCs, and SVOC TICs in the upgradient and perimeter monitoring wells are either non-detect or below SCG groundwater standards. The text at the beginning of the bullet was revised to “The majority of VOCs, VOC TICs, SVOCs, and SVOC TICs (three SVOC TICs exceed the SCGs)” to provide further clarification.

NYSDEC’s email dated April 11, 2019 indicated that 1,4-dioxane was to be added to the Spring 2019 sampling parameters and analyzed using Method 8270 SIM. At that time, NYSDEC did not indicate that 1,4-dioxane sampling would be added to the SMP after a single monitoring event that included four sampling locations. Kodak proposes to evaluate the validated 2018 and 2019 groundwater monitoring results for 1,4-dioxane and make recommendations based on these results in the next annual monitoring letter-report. The well logs for monitoring wells MW-25 and MW-26 will be submitted under separate cover.

Comment #5

Although there is an engineering control (cover system), the report has not been certified by a PE. The cover letter states that the report will be re-submitted and certified by a PE when the National Grid easement is finalized and filed. Since timeline for this has been established, the PRR should certify the engineering control, and the 2 institutional controls that are in place. (see below)

Please modify Section 7 of the PRR to include the following certification for the landfill cap (as an engineering control) and 2 institutional controls that are in place. The certification must be signed and stamped made by a PE.

For the two Institutional Controls and Engineering Control identified for the site, I certify that all of the following statements are true:

- (a) the Institutional Controls and Engineering Control employed at this site is unchanged since the date that the Control was put in place, or was last approved by the Department;***
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;***
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;***
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control.***

Kodak Response

Section 7 was modified with the certification language that was requested by NYSDEC.



Revised Periodic Review Report (PRR) - 2019

Sterling Drug Site 3
East Greenbush, New York

Eastman Kodak Company





Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



Site Details		Box 1	
Site No.	442011		
Site Name Sterling Drug Site 3			
Site Address: Riverside Avenue Extension		Zip Code: 12061	
City/Town: East Greenbush			
County: Rensselaer			
Site Acreage: 8.832			
Reporting Period: May 20, 2017 to May 19, 2019			
		YES	NO
1. Is the information above correct?		☒	☐
If NO, include handwritten above or on a separate sheet.			
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?		☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		☐	☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.			
5. Is the site currently undergoing development?		☐	☒
		Box 2	
		YES	NO
6. Is the current site use consistent with the use(s) listed below? Closed Landfill		☒	☐
7. Are all ICs/ECs in place and functioning as designed? *		☒	☐
(* For the two Institutional Controls and Engineering Control identified for the Site)			
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.			
A Corrective Measures Work Plan must be submitted along with this form to address these issues.			
_____ Signature of Owner, Remedial Party or Designated Representative		_____ Date	

Description of Institutional Controls

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
165.-1-24	Kodak	Landuse Restriction Site Management Plan Monitoring Plan IC/EC Plan Ground Water Use Restriction

From Easement recorded 10/2/15 for OU1 Kodak parcel:

1. The property may be used for industrial use;
2. All ECs must be operated and maintained as specified in the SMP;
3. All ECs must be inspected at a frequency and in a manner defined in the SMP;
4. The use of groundwater underlying the property is prohibited without necessary water quality treatment;
5. Groundwater monitoring and other environmental or public health monitoring must be performed as defined in the SMP;
6. Data pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP
6. All future activities that will disturb residually impacted material must be conducted in accordance with the SMP;
7. Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
8. Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy was performed as defined in the SMP;
9. Access to the Site must be provided to agents, employees, or other representatives of the State of New York; and
10. The potential for vapor intrusion must be evaluated for any buildings developed on the property

From ROD:

2. Imposition of an institutional control (ICs) in the form of an environmental easement that will require (a) development and compliance with an approved site management plan (SMP); (b) if groundwater is to be utilized at the site for drinking water or process water, then an acceptable water supply alternative or the necessary water quality treatment as determined by NYSDOH for the Sterling Drug Site 3 related contaminants of concern will be provided; (c) the on-site property owner to complete and submit to the Department a periodic certification of the institutional and engineering controls; and (d) the on-site property owner will be required to enter into an order on consent with the Department, to ensure the long term implementation, maintenance, monitoring and enforcement of the institutional controls for both the on and off-site areas.

3. Development of a site management plan which will include the following institutional and engineering controls: (a) management of the final cover system; (b) continued evaluation of the potential for vapor intrusion for any buildings developed on the site or in the area of the off-site groundwater contamination, including provision for mitigation of any impacts identified; (c) if groundwater contaminated with site related chemicals is to be utilized at the off-site property(s) for drinking water or process water, then an acceptable water supply alternative or the necessary water quality treatment as determined by NYSDOH will be provided; (d) monitoring of groundwater and soil vapor; (e) identification of any use restrictions on the site; (1) controlling site access where warranted; (g) provisions for the continued proper operation and maintenance of the components of the remedy.

4. The on-site property owner will provide a periodic certification of institutional and engineering controls, prepared and submitted by a professional engineer or such other expert acceptable to the Department, until the Department states in writing that this certification is no longer needed. This submittal will: (a) contain certification that the institutional controls and engineering controls put in place are still in place and are either unchanged from the

previous certification or are compliant with Department-approved modifications; (b) allow the Department access to the site; and (c) state that nothing has occurred that will impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.

165.00-01-5

CSX Transportation Inc

Ground Water Use Restriction
Monitoring Plan
Site Management Plan
O&M Plan
IC/EC Plan

Approximately 1.608 acres of the CSX property requires an environmental easement

This acreage is identified in 2015 survey performed by Kodak.

The environmental easement is needed to preserve the landfill cap that extends onto CSX property.

165.00-1-31.1

National Grid

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction
Monitoring Plan
Site Management Plan
O&M Plan
IC/EC Plan

An environmental easement is needed to preserve the landfill cap installed by Kodak.

Based on a 2015 survey, approximately 2.563 acres of National Grid Property are affected.

Description of Engineering Controls

Parcel

Engineering Control

165.-1-24

Cover System
Fencing/Access Control

Site Cover System - from the March 1992 ROD

An impermeable cap will be placed over the site, with contours designed to minimize surface water run-on and enhance surface water run-off to the Papscaanee Creek. Specific cap design details are noted in Section 5.3 of the June 2010 design report. These include a gas collection system, 60 mil liner, geocomposite drainage net, 18-inch barrier layer and 6-inch topsoil layer. (see the January 2014 Construction Completion Report)

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted

YES NO

☒ ☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true: *

(* For the two Institutional Controls and Engineering Control identified for the Site)

- (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
- (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

☒ ☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. 442011

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I BRYAN GALLAGHER at Eastman Kodak Company
1999 Lake Ave., Rochester, NY 14652
print name print business address

am certifying as Remedial Party (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Bryan Gallagher
Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

9/20/19
Date

IC/EC CERTIFICATIONS

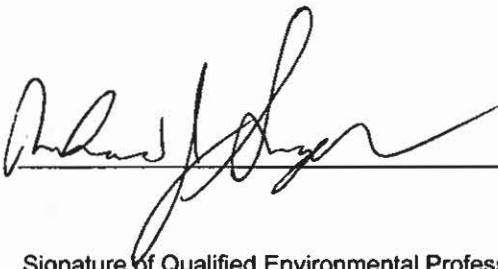
Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Richard Snyder at GHD Consulting Services Inc.
285 Delaware Avenue, Buffalo New York 14202
print name print business address

am certifying as a Qualified Environmental Professional for the Remedial Party
(Owner or Remedial Party)



Signature of Qualified Environmental Professional, for
the Owner or Remedial Party, Rendering Certification



Stamp
(Required for PE)

September 20, 2019

Date



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1. Site Overview

1.1 Site Background

Sterling Drug Site 3 (Site) is located on Riverside Avenue Extension in East Greenbush, Rensselaer County, New York. The Site location is presented on Figure 1. The Site is composed of two Operable Units. Operable Unit 1 (OU-1) consists of a fenced, inactive landfill, where an impermeable cover was constructed in 2012. Operable Unit 2 (OU-2) includes off-Site properties that have impacted groundwater related to historic operations of OU-1.

OU-1 is an approximately 8.8-acre area bounded by agricultural-use land (sod farm) to the north, Papscanee Creek to the south and west, and CSX Transportation railroad tracks to the east (see Figure 1). The site layout for OU-1 is presented on Figure 2.

The primary constituents of concern identified in the OU-1 soils during previous investigations included benzene, ethyl ether, toluene, xylenes, 4-methylphenol, and phenol. The impacts to groundwater in OU-1 have been reduced and controlled by former treatment systems that included air sparging, soil vapor extraction, and groundwater treatment. A groundwater plume (OU-2) consisting primarily of ethyl ether and pharmaceutical compounds has migrated from the former landfill in OU-1 through the upper unconsolidated aquifer approximately 2,400 feet to the northwest of OU-1. There are no known users of groundwater downgradient of the Site, and natural-occurring concentrations of iron in the groundwater in the vicinity of the Site exceed drinking water standards.

Surface water and sediment in Papscanee Creek adjacent to OU-1 are not significantly impacted by the Site. Constituents with concentrations above reporting quantitation limits in historical surface water samples included acetone, toluene, 1,3-dichlorobenzene, and di-n-butyl phthalate. Constituents with concentrations above reporting quantitation limits in historical sediment samples included 2-butanone, acetone, cyclohexane, ethyl ether, and polyaromatic hydrocarbons (PAHs).

No Site-related soil vapor, sub-slab vapor, or air samples were collected and analyzed during historic investigations, since there are no continuously occupied structures on the Site or off-Site properties (OU-2).

1.2 Summary of Remedial Actions

The following is a summary of the Remedial Actions performed at the Site:

- Excavation of soil/fill to native soil or the water table, whichever was encountered first, at the perimeter of the impermeable cover and along the bank of Papscanee Creek and placement under the impermeable cover system as fill.
- Excavation of drums at electromagnetic anomalies along the perimeter of the impermeable cover and disposal off Site of any drums, drum materials, and adjacent impacted soils.
- Reconstruction of the excavated bank of Papscanee Creek and restoration of the creek bank with clay, river cobble, topsoil, erosion control blankets, and water-tolerant vegetation.
- Construction and maintenance of a soil cover system consisting from the bottom upwards of a gas collection layer, 60-mil very flexible polyethylene (VFPE) liner, geocomposite drainage net,



18 inches of common fill (soil protection layer), and 6 inches of vegetated topsoil to prevent human exposure to remaining contaminated soil/fill remaining at the Site.

- Construction of drainage swales.
- Installation of gas probes.
- Re-installation of the perimeter fence.
- Delineation of OU-2 properties impacted above the applicable Standards, Criteria and Guidance (SCGs).
- Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site. Development and implementation of a Site Management Plan (SMP) for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance, and (4) reporting. Table 1 presents a summary of the institutional and engineering controls for the Site.
- Annual Certification of the institutional and engineering controls.

Remedial activities were completed at the Site in December 2012. An environmental easement for OU-1 was recorded in October 2015 as presented in Appendix A. The SMP, designed to serve as a Site work plan for monitoring, inspection, maintenance, and reporting, was revised in December 2015 and approved by New York State Department of Environmental Conservation (NYSDEC) in February 2016. The inspection and monitoring requirements are summarized in Table 2.

This report presents the results of the groundwater and surface water monitoring events and Site inspections performed in 2018. The report is organized as follows:

- Section 1.0 – Site Overview
- Section 2.0 – Remedy Performance, Effectiveness, and Protectiveness
- Section 3.0 – Institutional and Engineering Controls
- Section 4.0 – Inspection and Maintenance Activities
- Section 5.0 – Monitoring
- Section 6.0 – Overall PRR Conclusions and Recommendations
- Section 7.0 – Certification

2. Remedy Performance, Effectiveness, and Protectiveness

2.1 Remediation Goals

The remediation goals for the Site are to eliminate or reduce to the extent practicable:

- The ingestion of groundwater with contaminant levels exceeding drinking water standards



- Contact with volatile organic compounds (VOCs) and or semi-volatile organic compounds (SVOCs), or inhalation of volatiles from contaminated groundwater

The remediation goals also include attaining to the extent practicable:

- Drinking water standards, based upon the potential to use groundwater as a drinking water source, for the site-specific, regulated, unspecified organic contaminants (UOCs)
- Restoration of the groundwater aquifer for the Sterling Drug Site 3 related contaminants

2.2 Remedy Performance, Effectiveness, and Protectiveness

The remedy consists of institutional controls, engineering controls, monitoring, inspection, maintenance, and reporting (see Table 1). The effectiveness of the remedy is discussed in subsequent section of this report.

3. Institutional and Engineering Controls

3.1 Institutional Controls (ICs)

The purpose of the ICs is to:

- Maintain and monitor the Engineering Controls (ECs)
- Prevent future exposure to remaining on-Site contamination by controlling disturbance of the subsurface contamination
- Limit the use and development of the Site to industrial uses only

The ICs that have been established for the Site must be:

- In compliance with the Environmental Easement and the SMP by the Grantor (currently Eastman Kodak Company) and the Grantor's successors and assigns
- Operated and maintained as specified in the SMP
- Inspected at a frequency and in a manner defined in the SMP

Data and information pertinent to management of the Site must be reported at the frequency and in a manner defined in the SMP.

Adherence to the ICs is required by the Environmental Easement. The ICs may not be discontinued without an amendment to or extinguishment of the Environmental Easement.

The Site has a series of ICs in the form of Site restrictions. Adherence to these ICs is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

- Property Use: The Controlled Property may be used for industrial use, provided that the long-term ICs and ECs included in the SMP are adhered to. The Controlled Property may not be used for residential, restricted residential, or commercial purposes.
- Prohibition of Groundwater Use: The use of groundwater underlying the Controlled Property is prohibited without water quality treatment.



- Annual Certification: The Site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that:
 - i) Controls employed at the Site are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC.
 - ii) Nothing has occurred that impairs the ability of the controls to protect public health and the environment or that constitutes a violation or failure to comply with the SMP. NYSDEC retains the right to access the Site at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

3.2 Engineering Controls (ECs)

Engineering controls are required to protect human health and the environment due to impacted groundwater and impacted soils and fill materials are present at the Site. Figure 2 presents the Site layout including the limits of the cover system and location of the Site fence.

The purpose of the ECs is to:

- Isolate the landfill materials from human contact and surface water run-off
- Minimize the infiltration of surface water through the cover system into the landfill
- Promote positive drainage of precipitation to Papscanee Creek
- Minimize erosion of the landfill cover
- Facilitate the venting and control of landfill gas
- Minimize unauthorized access to the Controlled Property

The EC systems at the Site consist of:

- Cover System: Exposure to remaining contamination in soil/fill at the Site is prevented by a soil cover system placed over the Controlled Property. The cover system and surface water controls also minimize surface infiltration from precipitation. The cover system is comprised of a gas collection layer, 60-mil VFPE liner, geocomposite drainage net, 18 inches of common fill (soil protection layer), and 6 inches of vegetated topsoil.
- Fencing/Access Control: Locked gates and a perimeter fence minimize unauthorized access to the Controlled Property.
- Groundwater and Surface Water Monitoring: Groundwater monitoring activities to assess natural attenuation will continue, as determined by the NYSDEC, until residual groundwater concentrations are found to be consistently below NYSDEC standards or have become asymptotic at an acceptable level over an extended period. Monitoring will continue until permission to discontinue is granted in writing by the NYSDEC. If groundwater contaminant levels become asymptotic at a level that is not acceptable to the NYSDEC, additional treatment, alternative water supply, or control measures will be evaluated. Surface water monitoring activities to monitor Papscanee Creek beside OU-1 will be performed in accordance with the



SMP. The groundwater and surface water monitoring program under the SMP began in October 2016 and is summarized in Table 3.

- Soil Vapor: The potential for vapor intrusion must be evaluated for any buildings developed on the property.

4. Inspection and Maintenance Activities

A Site-wide inspection is required to be conducted annually, as specified in the SMP. The intent of the annual inspection is to assess the following:

- Compliance with all ICs including Site usage
- Condition and continued effectiveness of ECs
- General Site conditions at the time of inspection
- Performance of Site management activities including confirmation sampling and health and safety inspections, where appropriate
- Compliance with permits and schedules included in the Operation and Maintenance Plan
- Confirmation that Site records are complete and current

The inspection and maintenance activities were performed by GHD personnel in accordance with the requirements of the SMP.

The annual inspections were conducted on October 11 and 26, 2018. The following sections discuss the findings of the 2018 inspections. The completed Site inspection forms are presented in Appendix B.

4.1 Landfill and Site Features Inspection

In accordance with the SMP, a landfill and site features inspection was conducted by Mr. Brian Pickert of GHD on October 11, 2018. The locations of the extent of the cover system, eastern creek bank, and perimeter fence are presented on Figure 2. The locations of the monitoring wells, gas probes, and gas vents are presented on Figure 3.

All general Site features were in satisfactory condition with a minor animal burrow noted under the east fence. No other issues were noted regarding the cover system, creek banks, monitoring wells, gas probes, gas vents, security, fencing, gate, locks, and access road.

Field measurements of methane, carbon dioxide, oxygen, pressure, and total organic vapor using a photoionization detector (PID) were collected at the gas probes and gas vents. The field measurements are presented in Table 4 and Appendix B. The field measurements are consistent with historical field measurements. Methane readings were recorded as 0.0 percent at all gas probe and gas vent locations. The field measurements indicate that the production of methane is not an issue at the Site.



4.2 Surface Water and Drainage Features Inspection

In accordance with the SMP, a surface water and drainage features inspection was conducted by Mr. Brian Pickert of GHD on October 11, 2018. The general elevations and slopes of the landfill, and creek location are presented on Figure 2. The condition of sediment build-up, riprap, erosion, settlement, and drainage for the swales and eastern bank of Papscanee Creek. The surface water and drainage features inspection form is presented in Appendix B.

The surface water and drainage features were in good condition. Minor vegetative growth in the western drainage ditch was cleared.

5. Monitoring

5.1 Groundwater Monitoring

5.1.1 Monitoring Well Inspection

In accordance with the SMP, monitoring well inspections were conducted by Mr. Brian Pickert of GHD in conjunction with the groundwater monitoring event in October 2018. The locations of the monitoring wells are presented on Figure 3. The inspection of the monitoring wells included the conditions of protective casings, protective caps and locks, concrete aprons, polyvinyl chloride (PVC) well caps, and visible portions of the well casings. Monitoring well conditions are noted on the well inspection summary table presented in Appendix B.

All wells were noted to be in good condition with no repairs required at the time of inspection.

5.1.2 Groundwater Elevations

As part of the monitoring activities described in the SMP, groundwater levels were measured in each monitoring well using an electric water level meter. Water level measurements are summarized in Table 5. Based on the measured groundwater elevations, groundwater contours were prepared and are presented on Figure 4. The Site groundwater elevations are influenced by daily tidal changes in the Hudson River that cause significant variability to the measured groundwater elevations.

5.1.3 Groundwater Sampling

Groundwater samples were collected by Messrs. Brian Pickert and Andrew Martin of GHD using Snap Samplers in October 2018 at the annual and biennial groundwater monitoring locations that are identified in the SMP. A summary of the monitoring locations and analyses is presented in Table 3.

Prior to the groundwater monitoring event in October 2018, non-routine emerging contaminant samples were collected by Mr. Brian Pickert using high density polyethylene HydraSleeves in September 2018 at the monitoring locations that are identified in the revised Scope of Work transmitted to NYSDEC on September 6, 2018. The emerging contaminants that were analyzed included 1,4-dioxane and per- and polyfluoroalkyl substances (PFAS).



5.1.4 Groundwater Data Evaluation

The detected groundwater analytical data generated during this reporting period are summarized in the following tables:

- Table 6 – Summary of Detected Groundwater Analytical Results – Upgradient and Perimeter Monitoring Wells – October 2018
- Table 7 – Summary of Detected Groundwater Analytical Results – Plume Monitoring Wells – October 2018
- Table 8 – Summary of Detected Groundwater Analytical Results – Shallow Monitoring Wells - October 2018
- Table 9 – Summary of Groundwater Field Parameter Results – October 2018
- Table 10 – Summary of Detected Groundwater Analytical Results – Emerging Contaminants Sampling - September 2018

The analytical data reports are presented in Appendix C. A quality assurance/quality control (QA/QC) validation of the analytical data has been conducted. The data usability summary report (DUSR) is presented in Appendix D. All of the groundwater analytical results are summarized in Tables E.1 and E.2 that are presented in Appendix E. Field parameter measurements are presented in Table 9. Detected groundwater results by location from 2014 to 2018 are presented on Figure 5. Detected groundwater emerging contaminant results by location for 2018 are presented on Figure 6. Data was submitted as an electronic data deliverable to NYSDEC on February 25, 2019, and confirmation that the data was uploaded was received on March 20, 2019.

Upgradient and Perimeter Monitoring Wells: The upgradient (MW-4B) and perimeter monitoring wells (MW-7B, MW-8B, MW-10B, MW-11B, MW-14B, MW-20B, MW-22BR, MW-23B, and MW-24B) were sampled for VOCs, VOC Tentatively Identified Compounds (TICs), SVOCs, and SVOC TICs. Table 6 presents the detected groundwater monitoring results in 2018 for the upgradient and perimeter monitoring wells. No VOCs, VOC TICs, or SVOCs were reported above SCGs. Three SVOC TICs were reported above SCGs.

Plume Monitoring Wells: The plume wells (MW-2S, MW-3SR2, MW-12B, MW-16B, MW-17B, MW-19B, MW-21B, and PZ-2A) were sampled for VOCs, VOC TICs, SVOCs, and SVOC TICs. Table 7 presents the detected groundwater monitoring results for the plume monitoring wells. The SCGs were exceeded at relatively low estimated concentrations for 1,2-dichloroethane (MW-3SR2), benzene (PZ-2A), chlorobenzene (MW-3SR2), and phenol (MW-16B). Benzene exceeded the SCG at monitoring well PZ-2A. Ethyl ether, two VOC TICs, and several SVOC TICs (including pharmaceutical compounds) exceeded the UOC criterion of 0.050 mg/L. Concentration versus time charts for ethyl ether from 2012 to 2018 at sampled Site monitoring wells are presented in Appendix F. The charts show that ethyl ether concentrations are slightly decreasing or relatively stable for the majority of plume monitoring wells and below SCG for upgradient and perimeter monitoring wells.

Shallow Monitoring Wells: The shallow wells (MW-25 and MW-26) were installed in 2016 and were sampled for VOCs, VOC TICs, SVOCs, and SVOC TICs in October 2018. Table 8 presents the detected groundwater monitoring results for the shallow monitoring wells. The following constituents detected in the shallow monitoring wells exceeded the SCGs: benzene, chlorobenzene, methylene



chloride, 2-chlorophenol, and several SVOC TICs. An exceedance of the SCG for ethyl ether was reported at monitoring well MW-26. The detected constituents at monitoring wells MW-25 and MW-26 were not detected in the surface water samples as discussed in Section 5.2.

Emerging Contaminants Sampling Event: The monitoring wells MW-4B, MW-17B, MW-21B, and PZ-2A were sampled for 1,4-dioxane and PFAS in September 2018. Table 10 presents the detected emerging contaminants sampling results for the sampled monitoring wells. PFAS are used in the manufacture of various common and widely used products. Several PFAS were detected including some PFAS at concentrations that were similar or lower than the upgradient concentrations. The parameter 1,4-dioxane was detected at concentrations ranging from 0.0024 mg/L (PZ-2A) to 0.0074 mg/L (MW-21B), while the concentration was non-detect at the upgradient location MW-4B. Criteria for emerging contaminants are being evaluated by the Federal and State governments.

5.2 Surface Water Monitoring

5.2.1 Surface Water Sampling

Surface water samples were collected by Mr. Brian Pickert of GHD in November 2018 following the procedures and at the two locations that are identified in the SMP. The surface water samples were analyzed for VOCs, VOC TICs, SVOCs, and SVOC TICs.

5.2.2 Surface Water Data Evaluation

The detected surface water analytical data generated during this reporting period are summarized in Table 11. The analytical data reports are presented in Appendix C. A quality assurance/quality control (QA/QC) validation of the analytical data has been conducted. The validation memorandum is presented in Appendix D. All of the surface water results are summarized in Table E.3 in Appendix E. Detected surface water results by location from 2016 to 2018 are presented on Figure 7. Data was submitted as an electronic data deliverable to NYSDEC on February 25, 2019, and confirmation that the data was uploaded was received on March 20, 2019.

Table 11 presents a summary of detected analytical results. All of the detected results were relatively low, estimated concentrations of unknown SVOC TICs. Papscanee Creek is classified as a Class C fresh surface water, but for this report, no criteria are presented for unknown TICs. None of the detected analytical results in the groundwater samples from shallow monitoring wells MW-25 and MW-26 near Papscanee Creek were detected in the surface water samples.

6. Overall PRR Conclusions and Recommendations

The annual inspection and monitoring activities performed during this reporting period confirmed that:

- Monitoring wells at the Site are in good condition.
- Cover system and drainage system at the Site are in good condition. Minor vegetation in the western drainage ditch was removed in 2018.



- The majority of VOCs, VOC TICs, SVOCs, and SVOC TICs (three SVOC TICs exceed the SCGs) in the upgradient and perimeter monitoring wells are either non-detect or below SCG groundwater standards, indicating that the plume is relatively stable.
- Benzene, chlorobenzene, 1,2-dichloroethane, ethyl ether, and several pharmaceutical compounds (SVOC TICs) exceed SCGs in the plume monitoring wells.
- VOCs, SVOCs, and SVOC TICs that exceed SCGs in the two shallow monitoring wells near Papscanee Creek were not detected in the two surface water samples from Papscanee Creek.
- Some PFAS and 1,4-dioxane were detected during the emerging contaminants sampling event.

Based on the existing and pending institutional controls and engineering controls, groundwater monitoring data, and surface water monitoring data, the remedial action continues to be effective in preventing the ingestion of groundwater with contaminant levels exceeding drinking water standards, eliminating contact with VOCs and SVOCs, and inhalation of volatiles from contaminated groundwater.

Groundwater and surface water sampling should continue in accordance with the SMP in order to augment the Site groundwater and surface water database and monitor the performance, effectiveness, and protectiveness of the Site remedy. No changes to the SMP are necessary at this time, but as requested by NYSDEC in an email dated April 11, 2019, 1,4-dioxane will be added to the parameter list for the Spring 2019 monitoring event and analyzed using Method 8270SIM.

7. Certification

For the two Institutional Controls and Engineering Control identified for the Site, I certify that all of the following statements are true:

- The Institutional Controls and Engineering Control employed at this Site is unchanged since the date that the Control was put in place, or was last approved by the Department.
- Nothing has occurred that would impair the ability of such Control to protect public health and the environment.
- Access to the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this Control.
- Nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control.



I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Richard Snyder, P.E. of GHD Consulting Services, Inc., 285 Delaware Avenue, Suite 500, Buffalo, New York 14202, am certifying as Owner's Designated Site Representative for the Controlled Property.

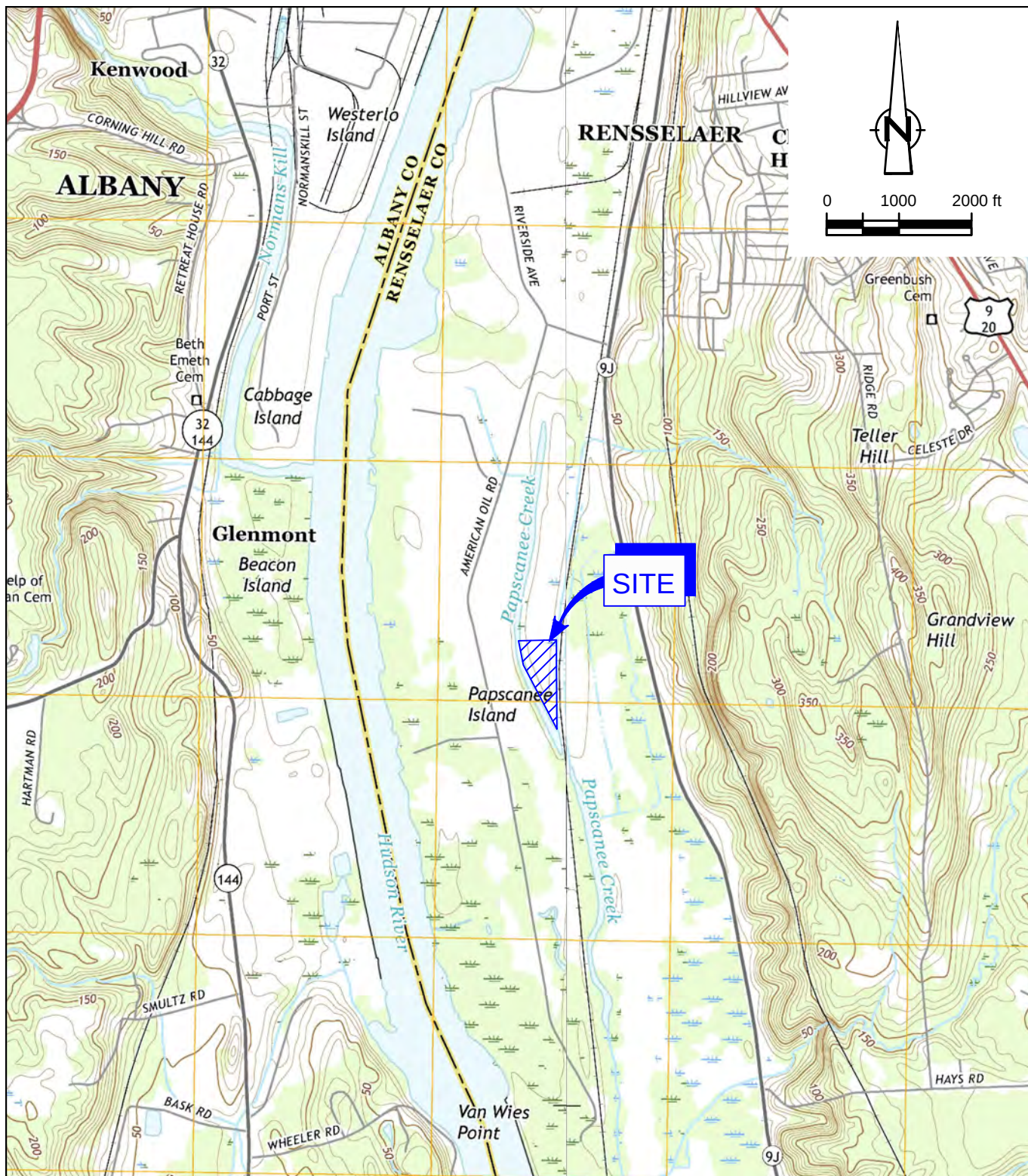
Signature:

A handwritten signature in black ink, appearing to read "Richard J. Snyder", written over a horizontal line.



Date:

September 24, 2019



SOURCE:
USGS TOPOGRAPHIC MAP QUADRANGLES;
DELMAR AND EAST GREENBUSH, N.Y., 2016.

figure 1
SITE LOCATION
PERIODIC REVIEW REPORT
STERLING DRUG SITE 3
East Greenbush, New York

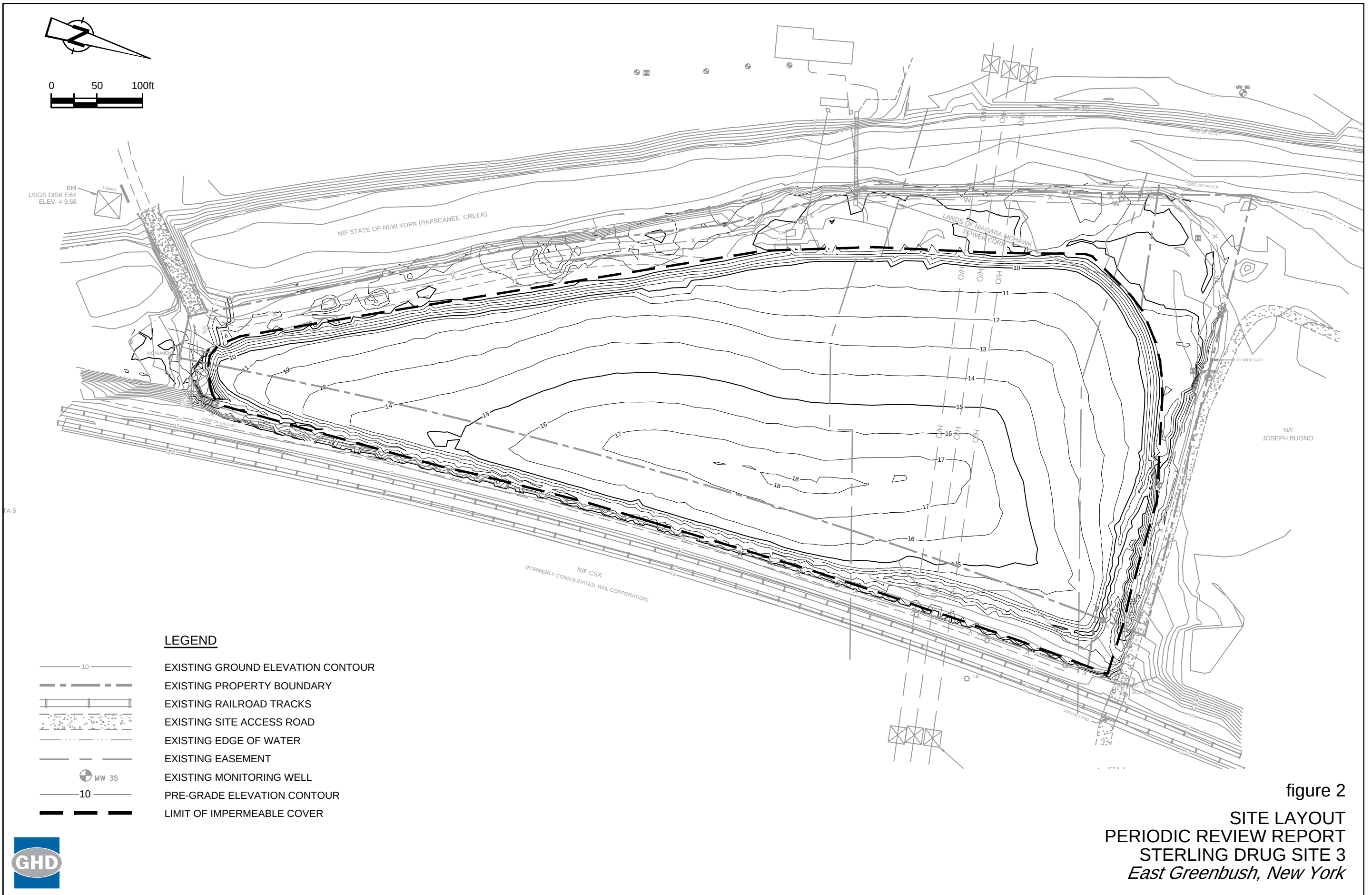


figure 2
 SITE LAYOUT
 PERIODIC REVIEW REPORT
 STERLING DRUG SITE 3
 East Greenbush, New York



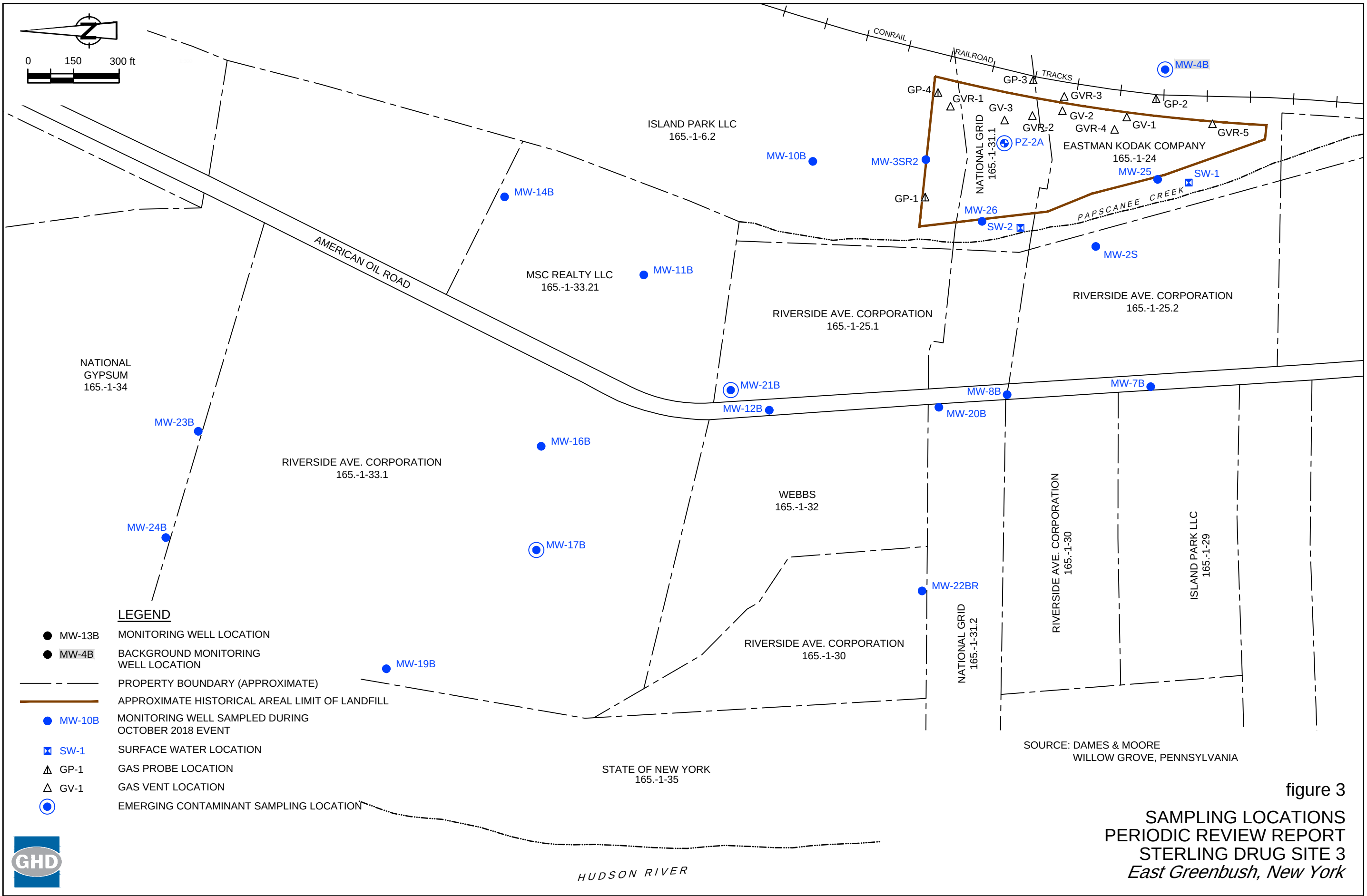


figure 3
 SAMPLING LOCATIONS
 PERIODIC REVIEW REPORT
 STERLING DRUG SITE 3
 East Greenbush, New York



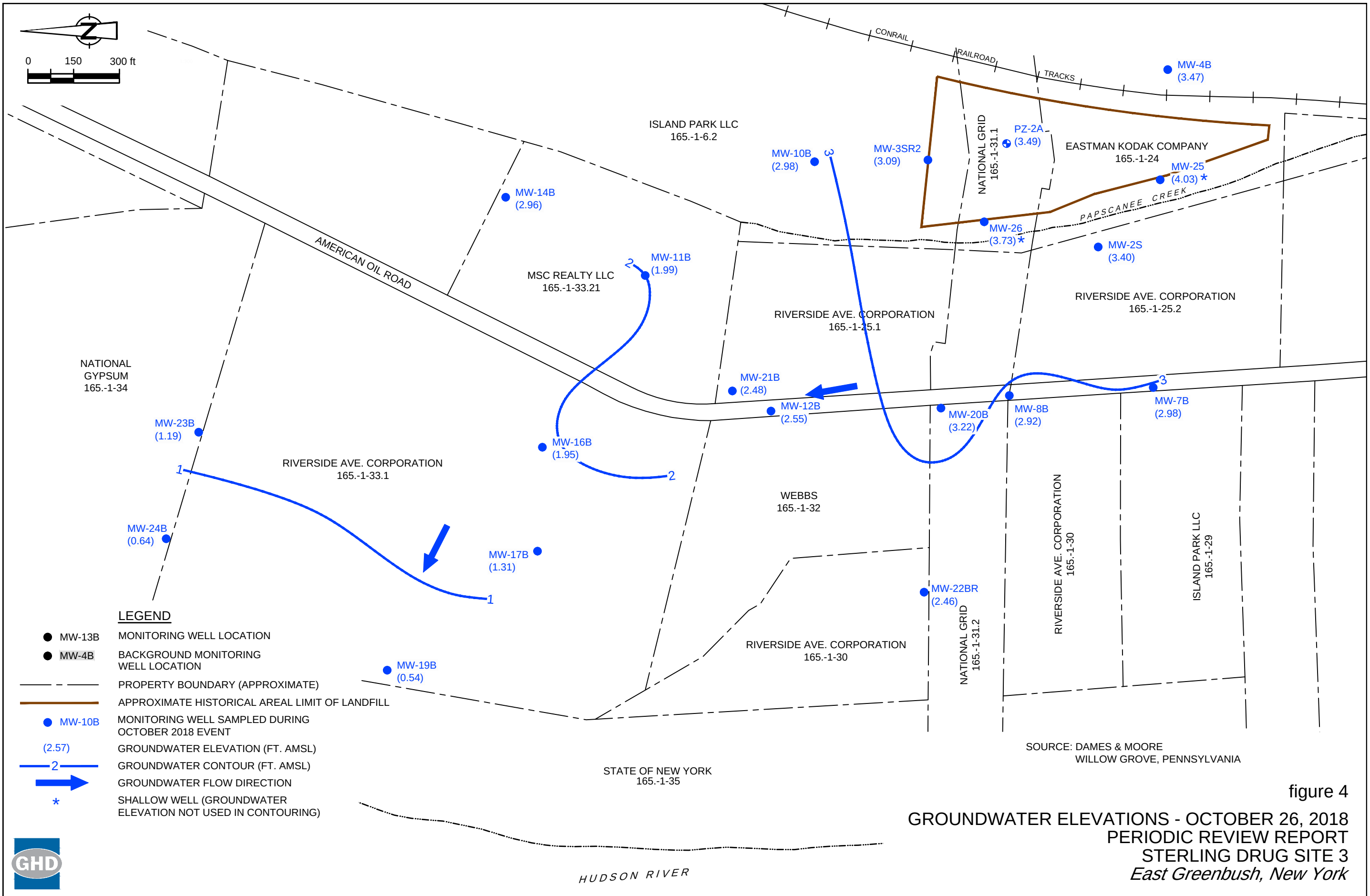
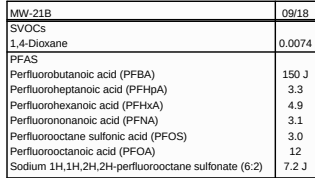


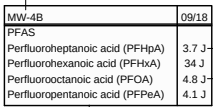
figure 4
 GROUNDWATER ELEVATIONS - OCTOBER 26, 2018
 PERIODIC REVIEW REPORT
 STERLING DRUG SITE 3
 East Greenbush, New York





PZ-2A	09/18
SVOCs	
1,4-Dioxane	0.0024
PFAS	
Perfluorobutane sulfonic acid (PFBS)	0.28 J
Perfluorobutanoic acid (PFBA)	29 J
Perfluorohexanoic acid (PFHpA)	1.8 J
Perfluorooctanoic acid (PFHxA)	2.3
Perfluorooctane sulfonic acid (PFOS)	0.67 J
Perfluorooctanoic acid (PFOA)	5.7
Perfluoropentanoic acid (PFPeA)	4.7
Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	3.2 J

MW-4B	09/18
PFAS	
Perfluoroheptanoic acid (PFHpA)	3.7 J
Perfluorohexanoic acid (PFHxA)	34 J
Perfluorooctanoic acid (PFOA)	4.8 J
Perfluoropentanoic acid (PFPeA)	4.1 J



Report N ^o :	Drawing N ^o :
110	figure 6

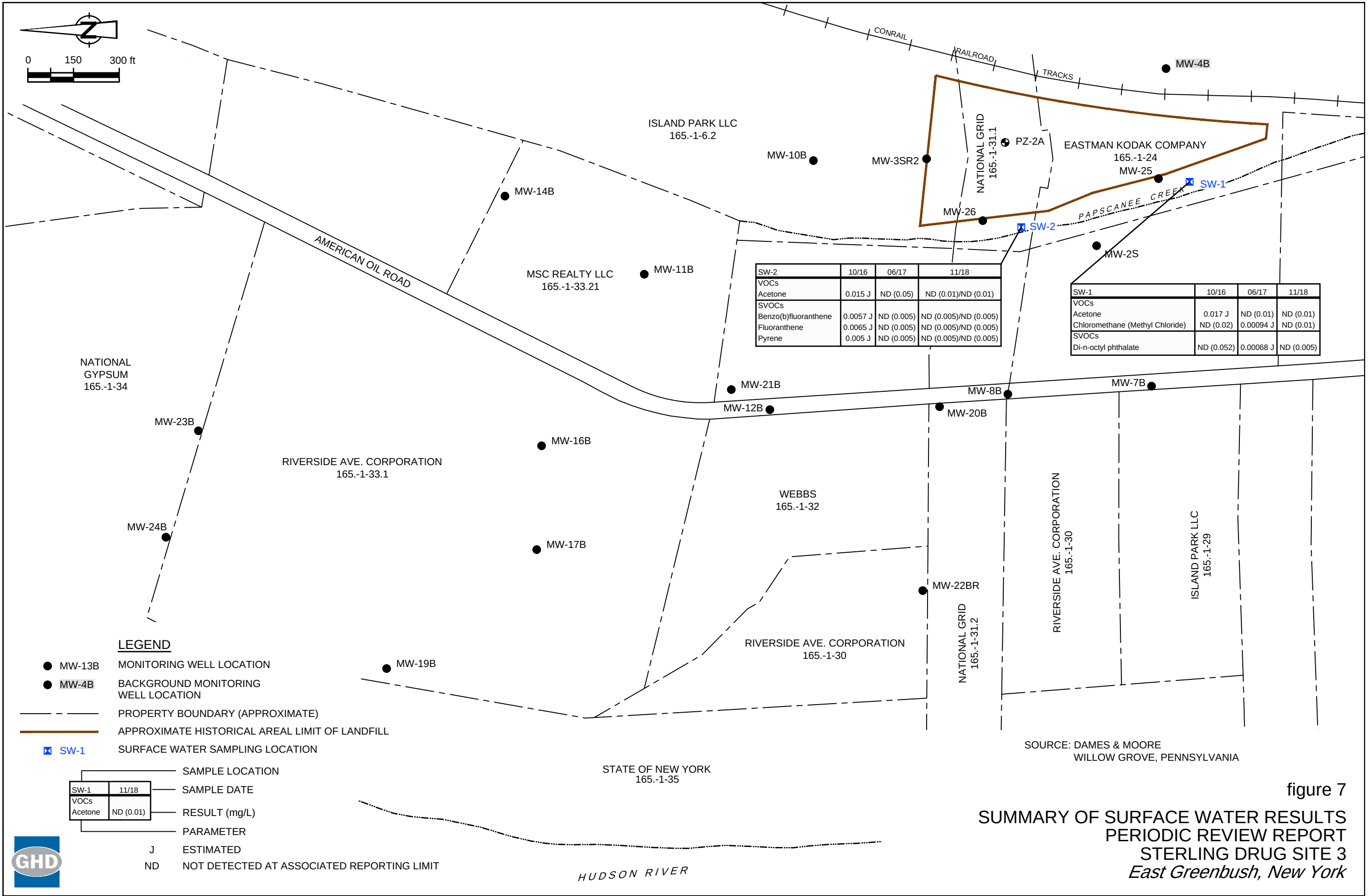


figure 7
SUMMARY OF SURFACE WATER RESULTS
PERIODIC REVIEW REPORT
STERLING DRUG SITE 3
East Greenbush, New York

Table 1

**Summary of Institutional Controls and Engineering Controls
Sterling Drug Site 3
East Greenbush, New York**

Controls	Objective	Status	Method of Evaluation	Effectiveness	Corrective Measures	Conclusions and Recommendations for Change
Land Use Restrictions	Limit inhalation of volatiles from impacted groundwater	Implemented	Inspection	Effective	None	No changes required
Environmental Easement	Provide legal framework for Site Management Plan	Implemented	--	Effective	None	No changes required
Site Management Plan	Specify monitoring and inspection requirements	Implemented	Inspection Monitoring Evaluation of data	Effective	None	No changes required
Monitoring Plan	Monitor remedy performance	Implemented	Inspection Monitoring Evaluation of data	Effective	None	No changes required
IC/EC Plan	- Eliminate ingestion of impacted groundwater - Limit inhalation of volatiles from impacted groundwater - Monitor remedy performance	Implemented	Inspection Monitoring Evaluation of data	Effective	None	No changes required
Groundwater Use Restriction	- Eliminate ingestion of impacted groundwater - Limit inhalation of volatiles from impacted groundwater	Implemented	Inspection	Effective	None	No changes required
Cover System	- Eliminate contact with VOCs and SVOCs - Limit inhalation of volatiles from impacted groundwater - Minimize infiltration from precipitation	Completed	Inspection Evaluation of data	Effective	None	No changes required
Fencing/Access Controls	- Limit access to Site - Limit inhalation of volatiles from impacted groundwater	Completed	Inspection	Effective	None	No changes required

Notes:

VOCs volatile organic compounds
SVOCs semi-volatile organic compounds

Table 2

**Monitoring and Inspection Schedule
Sterling Drug Site 3
East Greenbush, New York**

Monitoring/Inspection	Operable Unit	2018 Frequency*	Media	2018 Locations	Analyses / Measurements
Site Inspection (impermeable cover, creek banks, surface water drainage, access road, fencing)	OU-1	Annually	Not Applicable	Site-wide	Not Applicable
Site Inspection (monitoring network integrity)	OU-1, OU-2	Annually	Not Applicable	20	Not Applicable
Site Inspection (gas vents and gas probes)	OU-1	Annually	Landfill Gas	12	CH ₄ , CO ₂ , O ₂ , PID reading, pressure
Groundwater Monitoring	OU-1, OU-2	Biennially**	Groundwater	20	VOCs + TICs, SVOCs + TICs
	OU-1, OU-2	Non-routine	Groundwater	4	Emerging Contaminants
Surface Water Monitoring	Adjacent to OU-1	Annually	Surface Water	2	VOCs + TICs, SVOCs + TICs

Notes:

* Frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH.

** Includes biennial and annual monitoring well locations.

OU-1 Operable Unit 1.

OU-2 Operable Unit 2.

VOCs Volatile Organic Compounds including ethyl ether.

SVOCs Semi-volatile Organic Compounds.

TICs Tentatively Identified Compounds.

Table 3

**Summary of Monitoring Locations and Analytes
Sterling Drug Site 3
East Greenbush, New York**

Location	Analyses		Sampling Frequency ⁽⁵⁾	Hydraulic Monitoring Frequency ⁽⁵⁾
	VOCs + TICs ⁽¹⁾⁽²⁾	SVOCs + TICs ⁽³⁾⁽⁴⁾		
MW-7B	X	X	Annual	Annual
MW-10B	X	X	Annual	Annual
MW-14B	X	X	Annual	Annual
MW-17B *	X	X	Annual	Annual
MW-19B	X	X	Annual	Annual
MW-22BR	X	X	Annual	Annual
MW-23B	X	X	Annual	Annual
MW-24B	X	X	Annual	Annual
SW-1	X	X	Annual	--
SW-2	X	X	Annual	--
MW-2S	X	X	Biennial	Annual
MW-3SR2	X	X	Biennial	Annual
MW-4B *	X	X	Biennial	Annual
MW-8B	X	X	Biennial	Annual
MW-11B	X	X	Biennial	Annual
MW-12B	X	X	Biennial	Annual
MW-16B	X	X	Biennial	Annual
MW-20B	X	X	Biennial	Annual
MW-21B *	X	X	Biennial	Annual
PZ-2A *	X	X	Biennial	Annual
MW-25	X	X	Biennial	Annual
MW-26	X	X	Biennial	Annual

Notes:

- (1) VOCs + TICs = Volatile Organic Compounds + Tentatively Identified Compounds.
 (2) Includes the Site-specific compound (ethyl ether).
 (3) SVOCs + TICs = Semi-Volatile Organic Compounds + Tentatively Identified Compounds.
 (4) Includes Pharmaceutical parameters.
 (5) Annual monitoring events will rotate between spring and fall from year to year.
 * Sampled for non-routine Emerging Contaminant parameters in September 2018
 Emerging contaminant analyses included 1,4-dioxane and 21 PFAS (Refer to revised Scope of Work dated September 6, 2018)
 NYSDEC New York State Department of Environmental Conservation.

Summary of Gas Probe and Gas Vent Field Parameter Results - October 2018
Sterling Drug Site 3
East Greenbush, New York

	Methane CH₄ %	Carbon Dioxide CO₂ %	Oxygen O₂ %	PID Reading (total organic vapors) ppm	Pressure inches H₂O
Location:					
GP-1	0.0	0.0	20.8	0.0	0.0
GP-2	0.0	0.1	20.6	0.0	0.0
GP-3	0.0	0.0	20.8	0.0	0.0
GP-4	0.0	0.0	20.7	0.0	0.0
GV-1	0.0	0.0	20.8	0.0	0.0
GV-2	0.0	0.0	20.8	0.0	0.0
GV-3	0.0	0.0	20.7	0.0	0.0
GVR-1	0.0	0.0	20.8	0.0	0.0
GVR-2	0.0	0.0	20.8	0.0	0.0
GVR-3	0.0	0.0	20.8	0.1	0.0
GVR-4	0.0	0.0	20.8	0.0	0.0
GVR-5	0.0	0.0	20.8	0.0	0.0

Note:

Field measurements collected on October 11, 2018

Table 5

**Groundwater Elevation Data - October 2018
Sterling Drug Site 3
East Greenbush, New York**

Location	Top of Riser Elevation (ft. AMSL)	Depth to Groundwater (ft.)	Groundwater Elevation 10/26/18 (ft. AMSL)
MW-2S	12.81	9.41	3.40
MW-3SR2	10.21	7.12	3.09
MW-4B	10.76	7.29	3.47
MW-7B	9.95	6.97	2.98
MW-8B	11.42	8.50	2.92
MW-10B	8.56	5.58	2.98
MW-11B	21.24	19.25	1.99
MW-12B	12.34	9.79	2.55
MW-14B	10.94	7.98	2.96
MW-16B	12.71	10.76	1.95
MW-17B	12.42	11.11	1.31
MW-19B	14.53	13.99	0.54
MW-20B	10.18	6.96	3.22
MW-21B	10.69	8.21	2.48
MW-22BR	9.95	7.49	2.46
MW-23B	11.00	9.81	1.19
MW-24B	13.25	12.61	0.64
MW-25	7.30	3.27	4.03
MW-26	7.61	3.88	3.73
PZ-2A	19.72	16.23	3.49

Table 6
Summary of Detected Groundwater Analytical Results - Upgradient and Perimeter Monitoring Wells - October 2018
Sterling Drug Site 3
East Greenbush, New York

Sample Location:			MW-4B	MW-7B	MW-8B	MW-10B	MW-11B	MW-14B	MW-20B	MW-22BR	MW-23B	MW-24B
Sample ID:			WG-7830-102618-BP-022	WG-7830-102618-BP-020	WG-7830-102618-BP-021	WG-7830-102518-BP-008	WG-7830-102518-BP-015	WG-7830-102518-BP-016	WG-7830-102618-BP-019	WG-7830-102518-BP-003	WG-7830-102518-BP-001	WG-7830-102518-BP-002
Sample Date:			10/26/2018	10/26/2018	10/26/2018	10/25/2018	10/25/2018	10/25/2018	10/26/2018	10/25/2018	10/25/2018	10/25/2018
			Upgradient	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter
Parameters	Units	Criteria										
Volatile Organic Compounds												
2-Butanone (Methyl Ethyl Ketone)	mg/L	0.050	0.0017 J	ND (0.01)	ND (0.01)	0.0041 J	0.0029 J	0.0016 J	0.005 J	0.0046 J	0.0035 J	0.004 J
Acetone	mg/L	0.050	0.0042 J	ND (0.01)	ND (0.01)	0.0064 J	0.0046 J	0.0033 J	0.009 J	0.0054 J	0.005 J	0.0056 J
Ethyl Ether	mg/L	0.050	ND (0.01)	ND (0.01)	0.028	0.0046 J	ND (0.01)	0.0013 J	ND (0.02)	ND (0.01)	ND (0.01)	ND (0.01)
TIC Volatile Organic Compounds												
Methanethiol A	mg/L	0.050	0.0035 JN	-	-	-	-	-	-	-	-	-
TIC Semi-Volatile Organic Compounds												
2-Ethyl-hexanoic acid A	mg/L	0.050	-	-	-	0.0023 JN	-	-	-	-	-	-
Chloriodomethane A	mg/L	0.050	-	0.037 JN	0.0063 JN	0.0046 JN	-	0.012 JN	-	-	-	0.0019 JN
Cyclohexane A	mg/L	0.050	0.13 JN	0.24 JN	-	0.012 JN	0.091 JN	0.0057 JN	0.13 JN	-	-	-
Cyclopentasiloxane, decamethyl- A	mg/L	0.050	-	-	0.0019 JN	0.0017 JN	-	0.002 JN	-	-	-	0.0019 JN
Cyclotetrasiloxane, octamethyl- A	mg/L	0.050	-	-	-	0.0018 JN	-	-	-	0.0017 JN	-	0.0018 JN
Diisopropylamine A	mg/L	0.050	-	1.7 JN	0.47 JN	-	-	-	-	0.015 JN	-	-
Ethyl Acetate A	mg/L	0.050	-	-	-	-	-	0.0033 JN	-	-	-	-
Hexobarbital A	mg/L	0.050	-	-	0.0045 JN	-	-	-	-	-	-	-
Mephobarbital A	mg/L	0.050	-	0.017 JN	0.013 JN	-	-	-	-	-	-	-
Phenobarbital A	mg/L	0.050	-	0.028 JN	0.015 JN	-	-	-	-	-	-	-
Phenobarbital di-methyl derivative A	mg/L	0.050	-	-	0.0018 JN	-	-	-	-	-	-	-
Talbutal A	mg/L	0.050	-	0.024 JN	0.011 JN	-	-	-	-	-	-	-
Tetrahydrofuran A	mg/L	0.050	-	-	-	-	-	0.0043 JN	-	-	-	-
Toluene A	mg/L	0.005	-	-	0.0067 JN	0.0057 JN	-	0.0073 JN	-	0.0056 JN	0.0061 JN	0.0054 JN
Triethylamine A	mg/L	0.050	-	-	0.0051 JN	-	-	-	-	-	-	-
Unknown 1	mg/L	NC	0.0092 JN	0.38 JN	0.0024 JN	0.0021 JN	0.0098 JN	0.0028 JN	0.0084 JN	0.002 JN	0.0024 JN	0.0044 JN
Unknown 2	mg/L	NC	0.33 JN	0.044 JN	0.0033 JN	0.0036 JN	0.31 JN	0.041 JN	0.29 JN	0.0027 JN	0.0034 JN	0.0025 JN
Unknown 3	mg/L	NC	0.043 JN	-	0.045 JN	0.0024 JN	0.045 JN	0.0017 JN	0.036 JN	0.01 JN	0.01 JN	0.033 JN
Unknown 4	mg/L	NC	-	-	0.014 JN	0.037 JN	-	0.016 JN	-	0.25 JN	0.25 JN	0.0026 JN
Unknown 5	mg/L	NC	-	-	0.0067 JN	0.0028 JN	-	0.31 JN	-	0.0019 JN	0.002 JN	0.0097 JN
Unknown 6	mg/L	NC	-	-	0.0039 JN	0.0019 JN	-	0.0016 JN	-	0.0044 JN	0.005 JN	0.0018 JN
Unknown 7	mg/L	NC	-	-	0.26 JN	0.003 JN	-	0.0058 JN	-	0.0028 JN	0.0028 JN	0.24 JN
Unknown 8	mg/L	NC	-	-	0.0021 JN	0.011 JN	-	0.0033 JN	-	0.038 JN	0.036 JN	0.0023 JN
Unknown 9	mg/L	NC	-	-	0.0055 JN	0.01 JN	-	-	-	-	-	0.0043 JN
Unknown 10	mg/L	NC	-	-	0.0023 JN	0.28 JN	-	-	-	-	-	0.0027 JN
Unknown 11	mg/L	NC	-	-	-	0.0033 JN	-	-	-	-	-	-
Unknown 12	mg/L	NC	-	-	-	0.0044 JN	-	-	-	-	-	-

Notes:

J Estimated concentration.
JN Estimated TIC.
ND Not detected at the associated reporting limit.
- Not applicable.
Exceeds criterion
NC NC
TIC criteria are assumed to be UOC unless there are other specific criterion
No criteria are applied to unknown TICs

Table 7

Summary of Detected Groundwater Analytical Results - Plume Monitoring Wells - October 2018
Sterling Drug Site 3
East Greenbush, New York

Sample Location:			MW-2S	MW-3SR2	MW-12B	MW-16B	MW-17B	MW-19B	MW-21B	PZ-2A
Sample ID:			WG-7830-102518-BP-005	WG-7830-102518-BP-009	WG-7830-102618-BP-018	WG-7830-102518-BP-006	WG-7830-102518-BP-007	WG-7830-102518-BP-004	WG-7830-102518-BP-017	WG-7830-102518-BP-010
Sample Date:			10/25/2018	10/25/2018	10/26/2018	10/25/2018	10/25/2018	10/25/2018	10/26/2018	10/25/2018
			Plume	Plume	Plume	Plume	Plume	Plume	Plume	Landfill
Parameters	Units	Criteria								
Volatile Organic Compounds										
1,2-Dichloroethane	mg/L	0.0006	ND (0.02)	0.0009 J	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)
2-Butanone (Methyl Ethyl Ketone)	mg/L	0.050	ND (0.04)	ND (0.02)	ND (0.2)	0.0036 J	0.0024 J	0.0064 J	ND (0.04)	ND (0.05)
Acetone	mg/L	0.050	ND (0.04)	ND (0.02)	ND (0.2)	0.0038 J	ND (0.01)	0.0063 J	ND (0.04)	ND (0.05)
Benzene	mg/L	0.001	ND (0.004)	ND (0.002)	ND (0.02)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.004)	0.014
Chlorobenzene	mg/L	0.005	ND (0.02)	0.0064 J	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)
Ethyl Ether	mg/L	0.050	0.23	0.41	1.2	1.3	1.4	0.053	0.92	0.18
Methylene chloride	mg/L	0.005	ND (0.02)	0.0016 J	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)
TIC Volatile Organic Compounds										
(Ethoxymethyl)-benzene A	mg/L	0.050	-	0.027 JN	-	-	-	-	-	0.027 JN
Dichlorofluoromethane A	mg/L	0.005	-	0.0061 JN	-	-	-	-	-	-
Tetrahydrofuran A	mg/L	0.050	-	-	-	-	-	-	-	0.93 JN
Unknown 1	mg/L	NC	-	-	-	0.013 JN	-	-	-	-
Semi-Volatile Organic Compounds										
Benzaldehyde	mg/L	0.050	ND (0.005)	0.0011 J	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	0.00071 J
Diethyl phthalate	mg/L	0.050	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	0.00023 J	ND (0.005)	ND (0.025)	0.0013 J
Phenol	mg/L	0.001	ND (0.005)	ND (0.005)	ND (0.05)	0.0016 J	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)
TIC Semi-Volatile Organic Compounds										
(Ethoxymethyl)-benzene A	mg/L	0.050	-	0.085 JN	-	-	-	-	-	0.025 JN
2-Ethyl-ethanoic acid A	mg/L	0.050	-	-	-	-	-	-	0.0084 JN	-
4-(1,1,3,3-Tetramethylbutyl)-phenol A	mg/L	0.050	-	0.015 JN	-	-	-	-	-	-
Benzenamine,2,6-dimethyl- A	mg/L	0.050	-	0.017 JN	-	-	-	-	-	-
Benzenecetic acid A	mg/L	0.050	-	-	-	-	-	-	0.068 JN	-
Benzoic acid A	mg/L	0.050	-	-	-	-	-	-	0.0094 JN	-
bis(2-Chloroethoxy)ethane A	mg/L	0.050	-	0.014 JN	-	-	-	-	-	-
Chloroacetone A	mg/L	0.050	-	0.012 JN	-	-	-	-	-	-
Chloriodomethane A	mg/L	0.050	0.0026 JN	0.03 JN	-	0.01 JN	0.013 JN	-	0.045 JN	0.081 JN
Cyclobarbitol A	mg/L	0.050	0.0037 JN	-	-	0.033 JN	0.034 JN	0.0035 JN	-	-
Cyclohexane A	mg/L	0.050	-	-	0.24 JN	-	-	-	-	0.023 JN
Diethylcarbamic acid methyl ester A	mg/L	0.050	-	-	-	-	0.0059 JN	-	-	-
Diisopropylamine A	mg/L	0.050	0.017 JN	0.74 JN	2 JN	0.83 JN	-	0.064 JN	0.7 JN	-
Hexobarbital A	mg/L	0.050	-	-	-	0.022 JN	0.02 JN	0.0028 JN	-	0.03 JN
Mephobarbital A	mg/L	0.050	0.0038 JN	0.17 JN	0.04 JN	0.07 JN	0.051 JN	0.014 JN	-	0.19 JN
Mepivacaine A	mg/L	0.050	-	0.072 JN	-	-	-	-	-	0.046 JN
Noramidopyrine A	mg/L	0.050	-	-	-	-	0.025 JN	-	0.024 JN	-
Phenobarbital A	mg/L	0.050	0.0036 JN	0.078 JN	0.041 JN	0.075 JN	0.066 JN	0.011 JN	0.011 JN	0.12 JN
Phenobarbital di-methyl derivative A	mg/L	0.050	-	0.014 JN	-	0.014 JN	0.0092 JN	-	-	-
Pyrimidinetrione, 5-ethyl-1,3-dimethyl-5-phenyl- A	mg/L	0.050	-	-	-	-	-	0.0033 JN	-	0.015 JN
Talbutal A	mg/L	0.050	0.0067 JN	0.055 JN	-	0.051 JN	0.046 JN	0.007 JN	0.033 JN	-
Tetrahydrofuran A	mg/L	0.050	-	-	-	-	-	-	-	0.8 JN
Toluene A	mg/L	0.005	0.0055 JN	-	-	-	0.006 JN	0.006 JN	-	-
Triethylamine A	mg/L	0.050	-	0.027 JN	0.031 JN	0.077 JN	0.047 JN	0.0063 JN	0.022 JN	-
Unknown 1	mg/L	NC	0.0025 JN	0.034 JN	0.033 JN	0.0075 JN	0.0089 JN	0.0023 JN	0.0095 JN	0.027 JN
Unknown 2	mg/L	NC	0.0032 JN	0.011 JN	0.034 JN	0.0064 JN	0.038 JN	0.0029 JN	0.0093 JN	0.021 JN
Unknown 3	mg/L	NC	0.0029 JN	0.0095 JN	0.04 JN	0.034 JN	0.0058 JN	0.045 JN	0.022 JN	0.055 JN
Unknown 4	mg/L	NC	0.05 JN	0.027 JN	0.35 JN	0.01 JN	0.013 JN	0.0092 JN	0.3 JN	0.02 JN
Unknown 5	mg/L	NC	0.02 JN	0.28 JN	0.04 JN	0.0061 JN	0.007 JN	0.26 JN	0.012 JN	0.033 JN
Unknown 6	mg/L	NC	0.0091 JN	0.12 JN	0.017 JN	0.018 JN	1.2 JN	0.0029 JN	0.027 JN	0.014 JN
Unknown 7	mg/L	NC	0.0022 JN	0.067 JN	-	0.011 JN	0.008 JN	0.0045 JN	0.01 JN	0.028 JN
Unknown 8	mg/L	NC	0.012 JN	-	-	0.019 JN	0.26 JN	0.0031 JN	0.014 JN	0.048 JN
Unknown 9	mg/L	NC	0.012 JN	-	-	0.0085 JN	0.0067 JN	-	0.099 JN	0.022 JN
Unknown 10	mg/L	NC	0.011 JN	-	-	0.23 JN	-	-	0.032 JN	0.26 JN
Unknown 11	mg/L	NC	0.23 JN	-	-	0.013 JN	-	-	-	0.015 JN
Unknown 12	mg/L	NC	0.0044 JN	-	-	-	-	-	-	-
Unknown 13	mg/L	NC	0.0045 JN	-	-	-	-	-	-	-

Notes:

J Estimated concentration.

JN Estimated TIC.

ND Not detected at the associated reporting limit.

- Not applicable.

Exceeds criterion

NC NC

TIC criteria are assumed to be UOC unless there are other specific criterion

No criteria are applied to unknown TICs

Table 8

Summary of Detected Groundwater Analytical Results - Shallow Monitoring Wells - October 2018
Sterling Drug Site 3
East Greenbush, New York

Sample Location:			MW-25	MW-26
Sample ID:			WG-7830-102518-BP-011	WG-7830-102518-BP-012
Sample Date:			10/25/2018	10/25/2018
			Shallow	Shallow
Parameters	Units	Criteria		
Volatile Organic Compounds				
2-Butanone (Methyl Ethyl Ketone)	mg/L	0.050	ND (0.05)	0.0023 J
Acetone	mg/L	0.050	ND (0.05)	0.0045 J
Benzene	mg/L	0.001	0.0085	ND (0.001)
Chlorobenzene	mg/L	0.005	0.057	ND (0.005)
Chloroform (Trichloromethane)	mg/L	0.007	0.0019 J	ND (0.005)
Ethyl Ether	mg/L	0.050	0.02 J	0.12
Methylene chloride	mg/L	0.005	0.0077 J	ND (0.005)
Semi-Volatile Organic Compounds				
2,4-Dimethylphenol	mg/L	0.050	0.00072 J	ND (0.005)
2-Chlorophenol	mg/L	0.001	0.0013 J	ND (0.005)
4-Chloroaniline	mg/L	0.005	0.0011 J	ND (0.005)
Benzaldehyde	mg/L	0.050	0.00073 J	0.00043 J
Phenol	mg/L	0.001	0.001 J	ND (0.005)
TIC Semi-Volatile Organic Compounds				
5-Chloroisatin A	mg/L	0.050	0.045 JN	-
Aminopyrine A	mg/L	0.050	0.021 JN	-
Antipyrine A	mg/L	0.050	0.032 JN	-
Chlorobenzene A	mg/L	0.005	0.058 JN	-
Chloriodomethane A	mg/L	0.050	0.047 JN	0.035 JN
Diethoxymethane A	mg/L	0.050	0.024 JN	-
Ethyl Acetate A	mg/L	0.050	-	0.0029 JN
Hexobarbital A	mg/L	0.050	0.12 JN	-
Mephobarbital A	mg/L	0.050	-	0.013 JN
Mepivacaine A	mg/L	0.050	0.076 JN	0.0069 JN
Noramidopyrine A	mg/L	0.050	0.018 JN	-
Phenobarbital A	mg/L	0.050	0.074 JN	0.0016 JN
Talbutal A	mg/L	0.050	0.057 JN	-
Toluene A	mg/L	0.005	-	0.0058 JN
Unknown 1	mg/L	NC	0.032 JN	0.0044 JN
Unknown 2	mg/L	NC	0.02 JN	0.0017 JN
Unknown 3	mg/L	NC	0.056 JN	0.024 JN
Unknown 4	mg/L	NC	0.24 JN	0.004 JN
Unknown 5	mg/L	NC	0.019 JN	0.0056 JN
Unknown 6	mg/L	NC	0.034 JN	0.002 JN
Unknown 7	mg/L	NC	0.018 JN	0.002 JN
Unknown 8	mg/L	NC	0.094 JN	0.0024 JN
Unknown 9	mg/L	NC	0.035 JN	0.019 JN
Unknown 10	mg/L	NC	-	0.24 JN
Unknown 11	mg/L	NC	-	0.0077 JN
Unknown 12	mg/L	NC	-	0.0049 JN
Unknown 13	mg/L	NC	-	0.0022 JN

Notes:

J Estimated concentration.

JN Estimated TIC.

ND Not detected at the associated reporting limit.

- Not applicable.

 Exceeds criterion

NC NC

TIC criteria are assumed to be UOC unless there are other specific criterion

No criteria are applied to unknown TICs

Table 9

Summary of Groundwater Field Parameter Results – October 2018
Sterling Drug Site 3
East Greenbush, New York

Sample Location:		MW-4B	MW-7B	MW-8B	MW-10B	MW-11B	MW-14B	MW-20B
Sample ID:		WG-7830-102618-BP-022	WG-7830-102618-BP-020	WG-7830-102618-BP-021	WG-7830-102518-BP-008	WG-7830-102518-BP-015	WG-7830-102518-BP-016	WG-7830-102618-BP-019
Sample Date:		10/26/2018	10/26/2018	10/26/2018	10/25/2018	10/25/2018	10/25/2018	10/26/2018
		Upgradient	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter
Parameters	Units							
Field Parameters								
Conductivity Field	umhos/cm	813	1010	1120	900	1140	1290	1410
Dissolved Oxygen	mg/L	0.9	1.03	0.94	0.96	1.9	1.21	1.19
Oxidation reduction potentia	millivolts	-5	-60	-30	-40	-10	-35	-30
pH Field	s.u.	6.91	7.19	7.19	6.79	6.98	7.01	7.11
Temperature	deg C	15.5	14.7	14.0	14.4	14.9	14.8	15.3
Turbidity	NTU	20	11	19	20	14	29	62

Table 9

Summary of Groundwater Field Parameter Results – October 2018
Sterling Drug Site 3
East Greenbush, New York

Sample Location:		MW-22BR	MW-23B	MW-24B	MW-2S	MW-3SR2	MW-12B	MW-16B
Sample ID:		WG-7830-102518-BP-003	WG-7830-102518-BP-001	WG-7830-102518-BP-002	WG-7830-102518-BP-005	WG-7830-102518-BP-009	WG-7830-102618-BP-018	WG-7830-102518-BP-006
Sample Date:		10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/25/2018	10/26/2018	10/25/2018
		Perimeter	Perimeter	Perimeter	Plume	Plume	Plume	Plume
Parameters	Units							
Field Parameters								
Conductivity Field	umhos/cm	1010	1390	1140	1100	1210	1210	810
Dissolved Oxygen	mg/L	1.77	2.01	1.31	1.21	0.81	1.41	1
Oxidation reduction potentia	millivolts	-10	-50	-20	-50	-15	-50	-10
pH Field	s.u.	7.04	7.07	7.10	6.88	7.30	6.39	6.79
Temperature	deg C	15.1	15.0	15.1	14.3	14.7	12.2	15.0
Turbidity	NTU	9	14	7	19	33	14	29

Table 9

Summary of Groundwater Field Parameter Results – October 2018
Sterling Drug Site 3
East Greenbush, New York

Sample Location:		MW-17B	MW-19B	MW-21B	PZ-2A	MW-25	MW-26
Sample ID:		WG-7830-102518-BP-007	WG-7830-102518-BP-004	WG-7830-102618-BP-017	WG-7830-102518-BP-010	WG-7830-102518-BP-011	WG-7830-102518-BP-012
Sample Date:		10/25/2018	10/25/2018	10/26/2018	10/25/2018	10/25/2018	10/25/2018
		Plume	Plume	Plume	Landfill	Shallow	Shallow
Parameters	Units						
Field Parameters							
Conductivity Field	umhos/cm	1230	611	1030	1170	1040	1270
Dissolved Oxygen	mg/L	1.79	1.49	1.27	1.29	1.19	1.09
Oxidation reduction potential	millivolts	-25	-40	-10	-30	-25	-30
pH Field	s.u.	7.02	6.96	7.30	7.20	7.39	7.11
Temperature	deg C	14.9	14.3	15.5	15.0	15.2	15.4
Turbidity	NTU	21	47	22	17	22	70

Table 10

**Summary of Detected Groundwater Analytical Results - Emerging Contaminants Sampling - September 2018
Sterling Drug Site 3
East Greenbush, New York**

Sample Location: Sample ID: Sample Date:			MW-4B WG-007830-092718-BP-001 9/27/2018	MW-17B WG-007830-092718-BP-006 9/27/2018	MW-17B WG-007830-092718-BP-007 9/27/2018 Duplicate Plume	MW-21B WG-007830-092718-BP-002 9/27/2018	PZ-2A WG-007830-092718-BP-003 9/27/2018
Parameters	Units	Criteria	Upgradient	Plume		Plume	Landfill
Semi-Volatile Organic Compounds							
1,4-Dioxane	mg/L	0.00035 *	ND (0.0002)	0.0065	0.0064	0.0074	0.0024
PFAS							
Perfluorobutane sulfonic acid (PFBS)	ng/L	50000	ND (10) UJ	0.41 J	0.48 J	ND (1.8)	0.28 J
Perfluorobutanoic acid (PFBA)	ng/L	50000	ND (10) UJ	58	41	150 J	29 J
Perfluoroheptanoic acid (PFHpA)	ng/L	50000	3.7 J	1.9	1.6 J	3.3	1.8 J
Perfluorohexanoic acid (PFHxA)	ng/L	50000	34 J	2.4	2.7	4.9	2.3
Perfluorononanoic acid (PFNA)	ng/L	50000	ND (10) UJ	ND (1.7) U	ND (1.8)	3.1	ND (1.9) U
Perfluorooctane sulfonamide (FOSA)	ng/L	50000	ND (10) UJ	0.57 J	ND (1.8)	ND (1.8)	ND (1.9)
Perfluorooctane sulfonic acid (PFOS)	ng/L	70 **	ND (10) UJ	0.88 J	0.96 J	3.0	0.67 J
Perfluorooctanoic acid (PFOA)	ng/L	70 **	4.8 J	6.3	5.9	12	5.7
Perfluoropentanoic acid (PFPeA)	ng/L	50000	4.1 J	ND (1.7)	3.0	ND (1.8)	4.7
Perfluorotetradecanoic acid (PFTeDA)	ng/L	50000	ND (10) UJ	0.35 J	ND (1.8)	ND (1.8)	ND (1.9)
Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	ng/L	50000	ND (100) UJ	ND (17)	ND (18)	7.2 J	3.2 J

Notes:

J	Estimated concentration.
ND	Not detected at the associated reporting limit.
U	Not detected at the associated reporting limit.
UJ	Not detected; associated reporting limit is estimated. Presented criterion is UOC
*	USEPA Reference concentration (10 ⁻⁶ cancer risk level)
**	USEPA Drinking Water Health Advisory

Table 11

Summary of Detected Surface Water Analytical Results - November 2018
Sterling Drug Site 3
East Greenbush, New York

Sample Location:	SW-1	SW-2	SW-2
Sample ID:	SW-7830-110218-BP-013	SW-7830-110218-BP-014	SW-7830-110218-BP-023
Sample Date:	11/2/2018	11/2/2018	11/2/2018
			Duplicate

Parameters	Units	Criteria

TIC Semi-Volatile Organic Compounds

Unknown 1	mg/L	NC	0.26 JN	0.28 JN	0.28 JN
Unknown 2	mg/L	NC	0.0028 JN	0.002 JN	0.0037 JN
Unknown 3	mg/L	NC	0.0033 JN	0.0038 JN	0.0021 JN
Unknown 4	mg/L	NC	0.05 JN	0.059 JN	0.056 JN
Unknown 5	mg/L	NC	-	-	0.0016 JN

Notes:

JN	Estimated TIC.
-	Not applicable.
NC	NC
	TIC criteria are assumed to be UOC unless there are other specific criterion
	No criteria are applied to unknown TICs

Appendices

Appendix A

Environmental Easement

**ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36
OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW**

THIS INDENTURE made this 14th day of SEPTEMBER, 2015, between Owner(s) Eastman Kodak Company, having an office at 343 State Street, Rochester, New York 14650-1265, County of Monroe, State of New York (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of Riverside Avenue Extension in the Town of East Greenbush, County of Rensselaer and State of New York, known and designated on the tax map of the County Clerk of Rensselaer as tax map parcel numbers: Section 165. Block 1 Lot 24, being a portion of the property conveyed to Grantor by deed dated April 29, 2014 and recorded in the Rensselaer County Clerk's Office in Liber and Page 7136/210. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 4.565 +/- acres, and is hereinafter more fully described in the Land Title Survey dated November 13, 2013 and last revised April 30, 2015 prepared by Richard M. Rybinski, LLS, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is

extinguished pursuant to ECL Article 71, Title 36; and

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Order on Consent Index Number: A4-0624-08-09, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Rensselaer County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential, Restricted Residential or Commercial purposes as defined in 6NYCRR 375-1.8(g)(i), (ii) and (iii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation

Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against

the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to: Site Number: 442011
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to: Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the

recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

Remainder of Page Intentionally Left Blank

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

Eastman Kodak Company:

By: Charles J. Ruffing

Print Name: Charles J. Ruffing

Title: Director, HSE Date: Sept 3, 2015

Grantor's Acknowledgment

STATE OF NEW YORK)
COUNTY OF Monroe) ss:

On the 3 day of September, in the year 2015, before me, the undersigned, personally appeared Charles J. Ruffing, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Catherine M. Dasso
Notary Public - State of New York

CATHERINE M. DASSON
NOTARY PUBLIC, in the State of New York
My Commission Expires 10/31/17

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

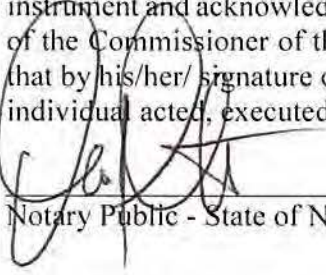
By:


Robert W. Schick, Director
Division of Environmental Remediation

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF ALBANY)

On the 14th day of September, in the year 2015, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.


Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2018

SCHEDULE "A" PROPERTY DESCRIPTION

Environmental Easement
Kodak Parcel 1

All that tract or parcel of land situate in the Town of East Greenbush, County of Rensselaer and State of New York, bounded and described as follows:

Beginning at the northwest corner of lands now or formerly of Eastman Kodak Company recorded in Book 7136 Page 210 at an existing 30" maple stump on the easterly shore of Papscanee Creek (Papskences Kill or Creek) as shown on a map titled "Environmental Easement Sterling Drug Site 3, Operable Unit No. 01, Site No. 442011", Sheet 1 of 5 prepared by Richard M. Rybinski, L.S. dated April 30, 2015 and the map "Boundary Survey of Lands Owned by Salvatore A. & Vincentia L. Graziano" filed in Drawer 1997 Map 7; thence along the northerly line of said Parcel 1 N. 84°30'58" E. a distance of 15.99 feet; thence the following courses and distances in the interior of said Parcel 1 per said Environmental Easement map: S. 80°46'00" E. a distance of 14.31 feet; N. 89°31'56" E. a distance of 98.05 feet; N. 77°57'57" E. a distance of 70.21 feet; N. 88°33'13" E. a distance of 292.15 feet to a point on the westerly line of lands of now or formerly the Consolidated Rail Corp. recorded in Rensselaer County Clerk's Office in Book 163 Page 1401, said point on an arc of a curve to the left having a central angle of 00°14'51", a radius of 5812.50 feet, an arc length of 25.11 feet, a chord bearing of S. 03°55'43" W. a distance of 25.11 feet from the concrete monument at the northeast corner of said Parcel 1; thence along the west line of said railroad lands on a portion of an arc of a curve to the left having a central angle of 00°45'12", a radius of 5812.50 feet, an arc length of 76.41 feet, a chord bearing of S. 03°25'42" W. a distance of 76.41 feet to the southeast corner of said Parcel 1 and the northeast corner of lands now or formerly of Niagara Mohawk Power Corp. recorded in Book 1133 page 269; thence along the northerly line of said Niagara Mohawk lands S. 73°04'37" W. a distance of 261.80 feet to a point; thence along the northerly line of said lands N. 89°54'23" W. a distance of 195.96 feet to the southwest corner of said Parcel 1 on the former east shore of Papscanee Creek (Papskences Kill or Creek) and the west line of lands of the State of New York; thence along the easterly line of New York State and said creek N. 16°12'31" W. a distance of 135.50 feet to the point of beginning, containing 1.309 acres more or less.

Subject to a 12 foot easement for ingress and egress along the west line of said railroad and a 20 feet easement at the northeast corner of Parcel 1 easterly to Castleton Road to Harry J. Abele Jr., John J. Abele and Frances Schmitt, now or formerly per deed Book 1300 Page 659. Note: This easement is permanently blocked at the railroad crossing near the northeast corner said Parcel 1.

Subject to a permanent right to cut, trim and remove brush and trees from Parcels 1 and 2 to said Niagara Mohawk per deed Page 1133 Book 269.

A permanent 25 feet right of way to cross said Niagara Mohawk lands per deed Book 1133 Page 269.

Together with an unwritten access easement from Riverside Ave. Extension (American Oil Road) of a gravel road easement through Parcel A of "Minor 3 Lot Subdivision Property of Penn Central Transportation Co." recorded in Drawer 1988 Map 41 within the 125 feet Electric Transmission Easement to Niagara Mohawk Power Corp. recorded in Book 903 Page 23 used by Niagara Mohawk to access the said 125 feet Easement. The said road continues northeasterly through the lands of New York State across Papscanee Creek to Kodak Parcel 2.

Environmental Easement:
Eastman Kodak Parcel 2

All that tract or parcel of land situate in the Town of East Greenbush, County of Rensselaer and State of New York, bounded and described as follows:

Beginning at a point at the northwest corner of lands now or formerly Eastman Kodak Co. at the former east shore of Papscanee Creek (Papskences Kill or Creek) recorded in Rensselaer County Clerk's Office in Book 7136 Page 210 and (Papskences Kill or Creek) (Papskences Kill or Creek), as Parcel 2 per filed map "Boundary Survey of Lands Owned by Salvatore A. & Vincentia L. Graziano" in Drawer 1997 Map 7 prepared by Smith & Mahoney, PC. recorded January 27, 1997 and also shown on a map titled "Environmental Easement Sterling Drug Site 3, Operable Unit No. 01, Site No. 442011", Sheet 2 of 5 prepared by Richard M. Rybinski, L.S. dated April 30, 2015 as Kodak Parcel 2; thence S. 89°54'23" E. a distance of 66.99 feet to a point; thence S. 00°05'37" W. a distance of 25.00 feet to a point; thence S. 89°54'23" E. a distance of 97.00

feet to a point; thence N. 73°04'37" E. a distance of 97.00 feet to a point; thence N. 16°55'23" W. a distance of 25.00 feet to a point; thence N. 73°04'37" E. a distance of 121.44 feet to a point on the west line of Consolidated Rail Corp.; thence along the west line of the said railroad on a portion of an arc of a curve to the left having a central angle of 06°20'24", a radius of 5812.50 feet, an arc length of 643.18 feet, a chord bearing of S. 02°43'11" E. a distance of 642.85 feet to a point; thence S. 05°53'23" E. along said railroad west line a distance of 90.85 feet to a point at the southeast corner of said Kodak Parcel 2; thence S. 84°06'37" W. a distance of 52.95 feet to a point on the former east shore of Papscanee Creek (Papskences Kill or Creek); thence northwesterly the following courses and distances along the former east shore of said creek: N. 29°01'58" W. a distance of 340.98 feet to a point; N. 23°56'04" W. a distance of 240.00 feet to a point; N. 31°39'31" W. a distance of 158.51 feet; N. 16°12'31" W. a distance of 24.24 feet to the point of beginning, containing 3.256 acres of land more or less.

Subject to a 12 foot easement for ingress and egress along the west line of said railroad through said Niagara Mohawk lands, Parcels 1 and 2 of said Kodak lands and a 20 feet easement easterly to Castleton Road to Harry J. Abele Jr., John J. Abele and Frances Schmitt, now or formerly per deed Book 1010 Page 498. Note: There is a permanent barrier near the northeast corner of Kodak Parcel 1 preventing access to the railroad track crossing to the said 20 feet easement to Castleton Road.

Subject to a permanent right to cut, trim and remove brush and trees from said Kodak Parcels 1 and 2 to said Niagara Mohawk per deed Page 1133 Book 269.

Together with a single 25 feet right of way to said Kodak Parcels 1 and 2 to cross said Niagara Mohawk lands per deed Book 1133 Page 269.

Together with an unwritten easement from Riverside Ave. Extension using the Niagara Mohawk gravel access road through Parcel A of the "Minor 3 Lot Subdivision Property of Penn Central Transportation Co." filed as Map 41 in Drawer 1988 and as described in the Niagara Mohawk 125 feet Electric Transmission Easement Book 903 Page 23 and continuing on said road northeasterly as an unwritten easement across Papscanee Creek and lands of New York State to said Kodak Parcel 2.

Appendix B

Inspection Forms

TEMPERATURE: <u>60°F</u> WEATHER: <u>cloudy</u>		INSPECTED BY: <u>B. PICKERT</u> DATE OF INSPECTION: <u>October 11, 2018</u>			
ITEM	TYPES OF PROBLEMS	CHECKED		DETAILED ACTIONS REQUIRED	DATE AND NATURE OF ACTIONS COMPLETED
		NO PROBLEMS	CORRECTIVE ACTION REQUIRED		
SITE COVER: LANDFILL CAP	• VEGETATIVE COVER (MOWING/FERTILIZING) • PRESENCE OF DEEP ROOTED VEGETATION OR BURROWING MAMMALS • EROSION CONTROL (IF REQUIRED) • LOCALIZED SETTLEMENT/SUMPING • PONDING OF WATER/DRAINAGE • SEEPAGE	✓ ✓ ✓ ✓ ✓			1 minor burrow under east fence.
PAPECANEE CREEK BANKS	• BIOENGINEERED VEGETATION • SLOPE FAILURE • EROSION CONTROL (IF NECESSARY) • SEEPAGE • OUTFALL STRUCTURE	✓ ✓ ✓ ✓ ✓			
MONITORING WELLS	• CASING/LOCK CONDITION • CORROSION OR STRUCTURAL DAMAGE	✓ ✓			
GAS PROBES	• CASING/LOCK CONDITION • SURROUNDING GRASS	✓ ✓			
GAS VENTS	• CORROSION OR STRUCTURAL DAMAGE • SCREEN INTACT	✓ ✓			
SECURITY: PERIMETER FENCE	• CORROSION OR STRUCTURAL DAMAGE TO SUPPORT POSTS AND FENCE FABRIC • CORROSION DAMAGE TO GATE HINGES AND FABRIC • LOCKS STICKING OR CORRODING • CORROSION, VISIBILITY, DAMAGE • MISSING	✓ ✓ ✓ ✓ ✓			

figure 5.1
LANDFILL AND SITE FEATURES INSPECTION LOG
STERLING SITE 3
East Greenbush, New York

FIELD MEASUREMENTS - GAS PROBES AND GAS VENTS
STERLING SITE 3, OPERABLE UNIT1
EAST GREENBUSH, NEW YORK

October 11, 2018

	CH₄ (%)	CO₂ (%)	O₂ (%)	PID (ppm)	Pressure (In. H₂O)	
Location						Location
GP-1	<u>0.0</u>	<u>0.0</u>	<u>20.8</u>	<u>0.0</u>	<u>0.0</u>	GP-1
GP-2	<u>0.0</u>	<u>0.1</u>	<u>20.6</u>	<u>0.0</u>	<u>0.0</u>	GP-2
GP-3	<u>0.0</u>	<u>0.0</u>	<u>20.8</u>	<u>0.0</u>	<u>0.0</u>	GP-3
GP-4	<u>0.0</u>	<u>0.0</u>	<u>20.7</u>	<u>0.0</u>	<u>0.0</u>	GP-4
GV-1	<u>0.0</u>	<u>0.0</u>	<u>20.8</u>	<u>0.0</u>	<u>0.0</u>	GV-1
GV-2	<u>0.0</u>	<u>0.0</u>	<u>20.8</u>	<u>0.0</u>	<u>0.0</u>	GV-2
GV-3	<u>0.0</u>	<u>0.0</u>	<u>20.7</u>	<u>0.0</u>	<u>0.0</u>	GV-3
GVR-1	<u>0.0</u>	<u>0.0</u>	<u>20.8</u>	<u>0.0</u>	<u>0.0</u>	GVR-1
GVR-2	<u>0.0</u>	<u>0.0</u>	<u>20.8</u>	<u>0.0</u>	<u>0.0</u>	GVR-2
GVR-3	<u>0.0</u>	<u>0.0</u>	<u>20.8</u>	<u>0.7</u>	<u>0.0</u>	GVR-3
GVR-4	<u>0.0</u>	<u>0.0</u>	<u>20.8</u>	<u>0.0</u>	<u>0.0</u>	GVR-4
GVR-5	<u>0.0</u>	<u>0.0</u>	<u>20.8</u>	<u>0.0</u>	<u>0.0</u>	GVR-5

Date of Inspection: October 11, 2018 Name of Inspector: B. PICKERT
 Time of Inspection: 1000 Weather Conditions: Cloudy 60°F

	No Problem	Action Req'd	Detail Actions Required	Date and Nature of Actions Completed
<u>South Drainage Swale</u>				
Sediment Buildup/Depth	☒	☐		
Erosion	☒	☐		
Settlement	☒	☐		
Drainage	☒	☐		
Culvert	☒	☐		
<u>East Drainage Swale</u>				
Sediment Buildup/Depth	☒	☐		
Erosion	☒	☐		
Settlement	☒	☐		
Drainage	☒	☐		
<u>North Drainage Swale</u>				
Sediment Buildup/Depth	☒	☐		
Erosion	☒	☐		
Settlement	☒	☐		
Drainage	☒	☐		
Culvert	☒	☐		
<u>West Drainage Swale</u>				
Sediment Buildup/Depth	☒	☐		
Erosion	☒	☐		
Settlement	☒	☐		
Drainage	☒	☐		
Culvert	☒	☐		
<u>Papascanec Creek</u>				
Sediment Buildup/Depth	☒	☐	Some sediment @ creek mouth	
Riprap	☒	☐		
Erosion	☒	☐		
Settlement	☒	☐		
Drainage	☒	☐		
Culvert	☒	☐		

General Comments Some minor small bush/tree buildup in
western ditch. Larger vegetation is cut &
removed

figure 5.2

SURFACE WATER/DRAINAGE FEATURES INSPECTION REPORT
STERLING SITE 3
East Greenbush, New York

Table B.1

Well Inspection Summary
October 26, 2018
Sterling Drug Site 3
East Greenbush, New York

Well Number	Protective Casing	Protective Cap/Lock	PVC Casing	PVC Cap	Concrete Apron	Observations and Recommendations
MW-2S	T	Y/Y	T	Y	CS	Evidence of burrowing beneath concrete apron; casing is solid
MW-3SR2	T	Y/Y	T	Y	SC	
MW-4B	T	Y/Y	T	Y	E	
MW-7B	T	Y/Y	T	Y	CS	
MW-8B	T	Y/Y	T	Y	CS	
MW-10B	T	Y/Y	T	Y	SC	
MW-11B	T	Y/Y	T	Y	SC	
MW-12B	T	Y/Y	T	Y	SC	Evidence of burrowing beneath concrete apron; casing is solid
MW-14B	T	Y/N	T	Y	SC	
MW-16B	T	Y/Y	T	Y	SC	
MW-17B	T	Y/Y	T	Y	CS	
MW-19B	T	Y/Y	T	Y	SC	
MW-20B	T	Y/Y	T	Y	SC	
MW-21B	T	Y/Y	T	Y	SC	
MW-22BR	T	Y/Y	T	Y	SC	
MW-23B	T	Y/Y	T	Y	SC	
MW-24B	T	Y/Y	T	Y	SC	
MW-25	T	Y/Y	T	Y	SC	
MW-26	T	Y/Y	T	Y	SC	
PZ-2A	T	Y/Y	T	Y	SC	

Notes:

SC - Satisfactory	F - Frozen	E - Eroded beneath	Unk- Unknown
T - Tight	W- Weathered	CS - Covered with soil	N - No or none
L - Loose	B - Broken	X - Damaged	Y - Yes

Appendix C

Analytical Data Reports

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: 480-144405-1

Client Project/Site: Sterling Site #3

For:

GHD Services Inc.

2055 Niagara Falls Blvd., Suite 3

Niagara Falls, New York 14304

Attn: Kathleen Willy



Authorized for release by:

11/19/2018 3:33:55 PM

Mary Schwartzmyer, Project Manager I

mary.schwartzmyer@testamericainc.com

Designee for

John Schove, Project Manager II

(716)504-9838

john.schove@testamericainc.com

LINKS

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results through

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
E	Result exceeded calibration range.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
T	Result is a tentatively identified compound (TIC) and an estimated value.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
T	Result is a tentatively identified compound (TIC) and an estimated value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

Case Narrative

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Job ID: 480-144405-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-144405-1

Comments

No additional comments.

Receipt

The samples were received on 10/27/2018 1:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.4° C and 3.4° C.

GC/MS VOA

Method(s) 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: WG-7830-102518-BP-009 (480-144405-9) and WG-7830-102518-BP-011 (480-144405-11). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-443761 recovered outside acceptance criteria, low biased, for Carbon disulfide. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: WG-7830-102518-BP-005 (480-144405-5), WG-7830-102518-BP-006 (480-144405-6), WG-7830-102518-BP-007 (480-144405-7), WG-7830-102518-BP-008 (480-144405-8), WG-7830-102518-BP-009 (480-144405-9), WG-7830-102518-BP-010 (480-144405-10), WG-7830-102518-BP-012 (480-144405-12), WG-7830-102518-BP-015 (480-144405-15), WG-7830-102518-BP-016 (480-144405-16), WG-7830-102618-BP-017 (480-144405-17), WG-7830-102618-BP-018 (480-144405-18) and WG-7830-102618-BP-019 (480-144405-19).

Method(s) 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: WG-7830-102618-BP-019 (480-144405-19). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: WG-7830-102518-BP-005 (480-144405-5), WG-7830-102518-BP-006 (480-144405-6), WG-7830-102518-BP-007 (480-144405-7), WG-7830-102518-BP-009 (480-144405-9), WG-7830-102518-BP-010 (480-144405-10), WG-7830-102518-BP-012 (480-144405-12), WG-7830-102618-BP-017 (480-144405-17), WG-7830-102618-BP-018 (480-144405-18), (480-144405-D-6 MS) and (480-144405-D-6 MSD). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: WG-7830-102618-BP-017 (480-144405-17). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, when verified by the laboratory, the pH was greater than 2 and the following sample was analyzed after 7 days from sampling: WG-7830-102618-BP-021 (480-144405-21).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-444017 recovered above the upper control limit for 2-Butanone (MEK) and cis-1,3-Dichloropropene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: WG-7830-102618-BP-020 (480-144405-20).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-444017 recovered outside acceptance criteria, low biased, for Carbon disulfide. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: WG-7830-102618-BP-020 (480-144405-20).

Method(s) 8260C: The sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, when verified by the laboratory, the pH was greater than 2 and the following sample was analyzed after 7 days from sampling: WG-7830-102618-BP-020 (480-144405-20).

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

GC/MS Semi VOA

Method(s) 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of

Case Narrative

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Job ID: 480-144405-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

surrogate compounds outside limits: WG-7830-102518-BP-006 (480-144405-6) and WG-7830-102518-BP-011 (480-144405-11). These results have been reported and qualified.

Method(s) 8270D: The following samples were diluted due to the nature of the sample matrix: WG-7830-102618-BP-017 (480-144405-17) and WG-7830-102618-BP-020 (480-144405-20). Elevated reporting limits (RLs) are provided.

Method(s) 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: WG-7830-102618-BP-018 (480-144405-18). These results have been reported and qualified.

Method(s) 8270D: The following samples were diluted due to the nature of the sample matrix: WG-7830-102518-BP-015 (480-144405-15), WG-7830-102618-BP-018 (480-144405-18), WG-7830-102618-BP-019 (480-144405-19) and WG-7830-102618-BP-022 (480-144405-22). Elevated reporting limits (RLs) are provided.

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

Organic Prep

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 480-443009.

Method(s) 3510C: All samples received in plastic containers

WG-7830-102518-BP-001 (480-144405-1), WG-7830-102518-BP-002 (480-144405-2), WG-7830-102518-BP-003 (480-144405-3), WG-7830-102518-BP-004 (480-144405-4), WG-7830-102518-BP-005 (480-144405-5), WG-7830-102518-BP-006 (480-144405-6), WG-7830-102518-BP-007 (480-144405-7), WG-7830-102518-BP-008 (480-144405-8), WG-7830-102518-BP-009 (480-144405-9), WG-7830-102518-BP-010 (480-144405-10), WG-7830-102518-BP-011 (480-144405-11), WG-7830-102518-BP-012 (480-144405-12), WG-7830-102518-BP-015 (480-144405-15), WG-7830-102518-BP-016 (480-144405-16), WG-7830-102618-BP-017 (480-144405-17), WG-7830-102618-BP-018 (480-144405-18), WG-7830-102618-BP-019 (480-144405-19), WG-7830-102618-BP-020 (480-144405-20), WG-7830-102618-BP-021 (480-144405-21) and WG-7830-102618-BP-022 (480-144405-22)

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

Detection Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-001

Lab Sample ID: 480-144405-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	3.5	J	10	1.3	ug/L	1		8260C	Total/NA
Acetone	5.0	J	10	3.0	ug/L	1		8260C	Total/NA
Carbon disulfide	0.22	J B	5.0	0.19	ug/L	1		8260C	Total/NA

Client Sample ID: WG-7830-102518-BP-002

Lab Sample ID: 480-144405-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	4.0	J	10	1.3	ug/L	1		8260C	Total/NA
Acetone	5.6	J	10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: WG-7830-102518-BP-003

Lab Sample ID: 480-144405-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	4.6	J	10	1.3	ug/L	1		8260C	Total/NA
Acetone	5.4	J	10	3.0	ug/L	1		8260C	Total/NA

Client Sample ID: WG-7830-102518-BP-004

Lab Sample ID: 480-144405-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	6.4	J	10	1.3	ug/L	1		8260C	Total/NA
Acetone	6.3	J	10	3.0	ug/L	1		8260C	Total/NA
Ethyl ether	53		10	0.72	ug/L	1		8260C	Total/NA

Client Sample ID: WG-7830-102518-BP-005

Lab Sample ID: 480-144405-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethyl ether	230		40	2.9	ug/L	4		8260C	Total/NA

Client Sample ID: WG-7830-102518-BP-006

Lab Sample ID: 480-144405-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	3.6	J	10	1.3	ug/L	1		8260C	Total/NA
Acetone	3.8	J	10	3.0	ug/L	1		8260C	Total/NA
Ethyl ether	1100	E	10	0.72	ug/L	1		8260C	Total/NA
Ethyl ether - DL	1300		500	36	ug/L	50		8260C	Total/NA
Phenol	1.6	J	5.0	0.39	ug/L	1		8270D	Total/NA

Client Sample ID: WG-7830-102518-BP-007

Lab Sample ID: 480-144405-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	2.4	J	10	1.3	ug/L	1		8260C	Total/NA
Ethyl ether	970	E	10	0.72	ug/L	1		8260C	Total/NA
Ethyl ether - DL	1400		400	29	ug/L	40		8260C	Total/NA
Diethyl phthalate	0.23	J	5.0	0.22	ug/L	1		8270D	Total/NA

Client Sample ID: WG-7830-102518-BP-008

Lab Sample ID: 480-144405-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	4.1	J	10	1.3	ug/L	1		8260C	Total/NA
Acetone	6.4	J	10	3.0	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-008 (Continued)

Lab Sample ID: 480-144405-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethyl ether	4.6	J	10	0.72	ug/L	1		8260C	Total/NA

Client Sample ID: WG-7830-102518-BP-009

Lab Sample ID: 480-144405-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.90	J	10	0.42	ug/L	2		8260C	Total/NA
Chlorobenzene	6.4	J	10	1.5	ug/L	2		8260C	Total/NA
Ethyl ether	430	E	20	1.4	ug/L	2		8260C	Total/NA
Methylene Chloride	1.6	J	10	0.88	ug/L	2		8260C	Total/NA
Ethyl ether - DL	410		100	7.2	ug/L	10		8260C	Total/NA
Benzaldehyde	1.1	J	5.0	0.27	ug/L	1		8270D	Total/NA

Client Sample ID: WG-7830-102518-BP-010

Lab Sample ID: 480-144405-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	14		5.0	2.1	ug/L	5		8260C	Total/NA
Ethyl ether	180		50	3.6	ug/L	5		8260C	Total/NA
Benzaldehyde	0.71	J	5.0	0.27	ug/L	1		8270D	Total/NA
Diethyl phthalate	1.3	J	5.0	0.22	ug/L	1		8270D	Total/NA

Client Sample ID: WG-7830-102518-BP-011

Lab Sample ID: 480-144405-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	8.5		5.0	2.1	ug/L	5		8260C	Total/NA
Chlorobenzene	57		25	3.8	ug/L	5		8260C	Total/NA
Chloroform	1.9	J	25	1.7	ug/L	5		8260C	Total/NA
Ethyl ether	20	J	50	3.6	ug/L	5		8260C	Total/NA
Methylene Chloride	7.7	J	25	2.2	ug/L	5		8260C	Total/NA
2,4-Dimethylphenol	0.72	J	5.0	0.50	ug/L	1		8270D	Total/NA
2-Chlorophenol	1.3	J	5.0	0.53	ug/L	1		8270D	Total/NA
4-Chloroaniline	1.1	J	5.0	0.59	ug/L	1		8270D	Total/NA
Benzaldehyde	0.73	J	5.0	0.27	ug/L	1		8270D	Total/NA
Phenol	1.0	J	5.0	0.39	ug/L	1		8270D	Total/NA

Client Sample ID: WG-7830-102518-BP-012

Lab Sample ID: 480-144405-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	2.3	J	10	1.3	ug/L	1		8260C	Total/NA
Acetone	4.5	J	10	3.0	ug/L	1		8260C	Total/NA
Ethyl ether	120	E	10	0.72	ug/L	1		8260C	Total/NA
Ethyl ether - DL	120		40	2.9	ug/L	4		8260C	Total/NA
Benzaldehyde	0.43	J	5.0	0.27	ug/L	1		8270D	Total/NA

Client Sample ID: WG-7830-102518-BP-015

Lab Sample ID: 480-144405-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	2.9	J	10	1.3	ug/L	1		8260C	Total/NA
Acetone	4.6	J	10	3.0	ug/L	1		8260C	Total/NA
Carbon disulfide	0.28	J B	5.0	0.19	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-016

Lab Sample ID: 480-144405-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	1.6	J	10	1.3	ug/L	1		8260C	Total/NA
Acetone	3.3	J	10	3.0	ug/L	1		8260C	Total/NA
Ethyl ether	1.3	J	10	0.72	ug/L	1		8260C	Total/NA

Client Sample ID: WG-7830-102618-BP-017

Lab Sample ID: 480-144405-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethyl ether	810	E	40	2.9	ug/L	4		8260C	Total/NA
Ethyl ether - DL	920		200	14	ug/L	20		8260C	Total/NA
Methylene Chloride - DL	11	J	100	8.8	ug/L	20		8260C	Total/NA

Client Sample ID: WG-7830-102618-BP-018

Lab Sample ID: 480-144405-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethyl ether	1200		200	14	ug/L	20		8260C	Total/NA

Client Sample ID: WG-7830-102618-BP-019

Lab Sample ID: 480-144405-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	5.0	J	20	2.6	ug/L	2		8260C	Total/NA
Acetone	9.0	J	20	6.0	ug/L	2		8260C	Total/NA

Client Sample ID: WG-7830-102618-BP-020

Lab Sample ID: 480-144405-20

No Detections.

Client Sample ID: WG-7830-102618-BP-021

Lab Sample ID: 480-144405-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethyl ether	28		10	0.72	ug/L	1		8260C	Total/NA

Client Sample ID: WG-7830-102618-BP-022

Lab Sample ID: 480-144405-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	1.7	J	10	1.3	ug/L	1		8260C	Total/NA
Acetone	4.2	J	10	3.0	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-001

Lab Sample ID: 480-144405-1

Date Collected: 10/25/18 11:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/05/18 11:50	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/05/18 11:50	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/05/18 11:50	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/05/18 11:50	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/05/18 11:50	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/05/18 11:50	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/05/18 11:50	1
2-Butanone (MEK)	3.5	J	10	1.3	ug/L			11/05/18 11:50	1
2-Hexanone	10	U	10	1.2	ug/L			11/05/18 11:50	1
2-Methylthiophene	10	U	10	0.44	ug/L			11/05/18 11:50	1
3-Methylthiophene	10	U	10	0.53	ug/L			11/05/18 11:50	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/05/18 11:50	1
Acetone	5.0	J	10	3.0	ug/L			11/05/18 11:50	1
Benzene	1.0	U	1.0	0.41	ug/L			11/05/18 11:50	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/05/18 11:50	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/05/18 11:50	1
Bromomethane	10	U	10	0.69	ug/L			11/05/18 11:50	1
Carbon disulfide	0.22	J B	5.0	0.19	ug/L			11/05/18 11:50	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/05/18 11:50	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/05/18 11:50	1
Chloroethane	10	U	10	0.32	ug/L			11/05/18 11:50	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/05/18 11:50	1
Chloromethane	10	U	10	0.35	ug/L			11/05/18 11:50	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/05/18 11:50	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/05/18 11:50	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/05/18 11:50	1
Ethyl ether	10	U	10	0.72	ug/L			11/05/18 11:50	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/05/18 11:50	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/05/18 11:50	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/05/18 11:50	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/05/18 11:50	1
Styrene	5.0	U	5.0	0.73	ug/L			11/05/18 11:50	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/05/18 11:50	1
Toluene	5.0	U	5.0	0.51	ug/L			11/05/18 11:50	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/05/18 11:50	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/05/18 11:50	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/05/18 11:50	1
Vinyl chloride	10	U	10	0.90	ug/L			11/05/18 11:50	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/05/18 11:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		77 - 120					11/05/18 11:50	1
4-Bromofluorobenzene (Surr)	104		73 - 120					11/05/18 11:50	1
Toluene-d8 (Surr)	93		80 - 120					11/05/18 11:50	1
Dibromofluoromethane (Surr)	97		75 - 123					11/05/18 11:50	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-001

Lab Sample ID: 480-144405-1

Date Collected: 10/25/18 11:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	10	U	10	0.44	ug/L		11/01/18 09:28	11/15/18 11:24	1
1,2-Dichlorobenzene	10	U	10	0.40	ug/L		11/01/18 09:28	11/15/18 11:24	1
1,3-Dichlorobenzene	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 11:24	1
1,4-Dichlorobenzene	10	U	10	0.46	ug/L		11/01/18 09:28	11/15/18 11:24	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 11:24	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.61	ug/L		11/01/18 09:28	11/15/18 11:24	1
2,4-Dichlorophenol	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 11:24	1
2,4-Dimethylphenol	5.0	U	5.0	0.50	ug/L		11/01/18 09:28	11/15/18 11:24	1
2,4-Dinitrophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 11:24	1
2,4-Dinitrotoluene	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 11:24	1
2,6-Dinitrotoluene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 11:24	1
2-Chloronaphthalene	5.0	U	5.0	0.46	ug/L		11/01/18 09:28	11/15/18 11:24	1
2-Chlorophenol	5.0	U	5.0	0.53	ug/L		11/01/18 09:28	11/15/18 11:24	1
2-Methylnaphthalene	5.0	U	5.0	0.60	ug/L		11/01/18 09:28	11/15/18 11:24	1
2-Methylphenol	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 11:24	1
2-Nitroaniline	10	U	10	0.42	ug/L		11/01/18 09:28	11/15/18 11:24	1
2-Nitrophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 11:24	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 11:24	1
3-Nitroaniline	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 11:24	1
4,6-Dinitro-2-methylphenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 11:24	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 11:24	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 11:24	1
4-Chloroaniline	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 11:24	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 11:24	1
4-Methylphenol	10	U	10	0.36	ug/L		11/01/18 09:28	11/15/18 11:24	1
4-Nitroaniline	10	U	10	0.25	ug/L		11/01/18 09:28	11/15/18 11:24	1
4-Nitrophenol	10	U	10	1.5	ug/L		11/01/18 09:28	11/15/18 11:24	1
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/01/18 09:28	11/15/18 11:24	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/01/18 09:28	11/15/18 11:24	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/01/18 09:28	11/15/18 11:24	1
Benzaldehyde	5.0	U	5.0	0.27	ug/L		11/01/18 09:28	11/15/18 11:24	1
Benzo[a]anthracene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 11:24	1
Benzo[a]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 11:24	1
Benzo[b]fluoranthene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 11:24	1
Benzo[g,h,i]perylene	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 11:24	1
Benzo[k]fluoranthene	5.0	U	5.0	0.73	ug/L		11/01/18 09:28	11/15/18 11:24	1
bis (2-chloroisopropyl) ether	5.0	U	5.0	0.52	ug/L		11/01/18 09:28	11/15/18 11:24	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 11:24	1
Bis(2-chloroethyl)ether	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 11:24	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		11/01/18 09:28	11/15/18 11:24	1
Butyl benzyl phthalate	5.0	U	5.0	1.0	ug/L		11/01/18 09:28	11/15/18 11:24	1
Carbazole	5.0	U	5.0	0.30	ug/L		11/01/18 09:28	11/15/18 11:24	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/01/18 09:28	11/15/18 11:24	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/01/18 09:28	11/15/18 11:24	1
Dibenzofuran	10	U	10	0.51	ug/L		11/01/18 09:28	11/15/18 11:24	1
Diethyl phthalate	5.0	U	5.0	0.22	ug/L		11/01/18 09:28	11/15/18 11:24	1
Dimethyl phthalate	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 11:24	1
Di-n-butyl phthalate	5.0	U	5.0	0.31	ug/L		11/01/18 09:28	11/15/18 11:24	1
Di-n-octyl phthalate	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 11:24	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-001

Lab Sample ID: 480-144405-1

Date Collected: 10/25/18 11:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 11:24	1
Fluorene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 11:24	1
Hexachlorobenzene	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 11:24	1
Hexachlorobutadiene	5.0	U	5.0	0.68	ug/L		11/01/18 09:28	11/15/18 11:24	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 11:24	1
Hexachloroethane	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 11:24	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 11:24	1
Isophorone	5.0	U	5.0	0.43	ug/L		11/01/18 09:28	11/15/18 11:24	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/01/18 09:28	11/15/18 11:24	1
Nitrobenzene	5.0	U	5.0	0.29	ug/L		11/01/18 09:28	11/15/18 11:24	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.54	ug/L		11/01/18 09:28	11/15/18 11:24	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 11:24	1
Pentachlorophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 11:24	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/01/18 09:28	11/15/18 11:24	1
Phenol	5.0	U	5.0	0.39	ug/L		11/01/18 09:28	11/15/18 11:24	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 11:24	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	2.4	T J	ug/L		2.47		11/01/18 09:28	11/15/18 11:24	1
Unknown	3.4	T J	ug/L		2.60		11/01/18 09:28	11/15/18 11:24	1
Unknown	10	T J	ug/L		2.89		11/01/18 09:28	11/15/18 11:24	1
Unknown	250	T J	ug/L		3.32		11/01/18 09:28	11/15/18 11:24	1
Unknown	2.0	T J	ug/L		3.38		11/01/18 09:28	11/15/18 11:24	1
Unknown	5.0	T J	ug/L		3.75		11/01/18 09:28	11/15/18 11:24	1
Unknown	2.8	T J	ug/L		4.38		11/01/18 09:28	11/15/18 11:24	1
Toluene	6.1	T J N	ug/L		4.43	108-88-3	11/01/18 09:28	11/15/18 11:24	1
Unknown	36	T J	ug/L		5.15		11/01/18 09:28	11/15/18 11:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	73		41 - 120	11/01/18 09:28	11/15/18 11:24	1
2-Fluorobiphenyl	77		48 - 120	11/01/18 09:28	11/15/18 11:24	1
2-Fluorophenol (Surr)	54		35 - 120	11/01/18 09:28	11/15/18 11:24	1
Nitrobenzene-d5 (Surr)	74		46 - 120	11/01/18 09:28	11/15/18 11:24	1
Phenol-d5 (Surr)	40		22 - 120	11/01/18 09:28	11/15/18 11:24	1
p-Terphenyl-d14 (Surr)	73		59 - 136	11/01/18 09:28	11/15/18 11:24	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-002

Lab Sample ID: 480-144405-2

Date Collected: 10/25/18 11:10

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/05/18 12:17	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/05/18 12:17	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/05/18 12:17	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/05/18 12:17	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/05/18 12:17	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/05/18 12:17	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/05/18 12:17	1
2-Butanone (MEK)	4.0	J	10	1.3	ug/L			11/05/18 12:17	1
2-Hexanone	10	U	10	1.2	ug/L			11/05/18 12:17	1
2-Methylthiophene	10	U	10	0.44	ug/L			11/05/18 12:17	1
3-Methylthiophene	10	U	10	0.53	ug/L			11/05/18 12:17	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/05/18 12:17	1
Acetone	5.6	J	10	3.0	ug/L			11/05/18 12:17	1
Benzene	1.0	U	1.0	0.41	ug/L			11/05/18 12:17	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/05/18 12:17	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/05/18 12:17	1
Bromomethane	10	U	10	0.69	ug/L			11/05/18 12:17	1
Carbon disulfide	5.0	U	5.0	0.19	ug/L			11/05/18 12:17	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/05/18 12:17	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/05/18 12:17	1
Chloroethane	10	U	10	0.32	ug/L			11/05/18 12:17	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/05/18 12:17	1
Chloromethane	10	U	10	0.35	ug/L			11/05/18 12:17	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/05/18 12:17	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/05/18 12:17	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/05/18 12:17	1
Ethyl ether	10	U	10	0.72	ug/L			11/05/18 12:17	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/05/18 12:17	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/05/18 12:17	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/05/18 12:17	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/05/18 12:17	1
Styrene	5.0	U	5.0	0.73	ug/L			11/05/18 12:17	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/05/18 12:17	1
Toluene	5.0	U	5.0	0.51	ug/L			11/05/18 12:17	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/05/18 12:17	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/05/18 12:17	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/05/18 12:17	1
Vinyl chloride	10	U	10	0.90	ug/L			11/05/18 12:17	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/05/18 12:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		77 - 120		11/05/18 12:17	1
4-Bromofluorobenzene (Surr)	101		73 - 120		11/05/18 12:17	1
Toluene-d8 (Surr)	97		80 - 120		11/05/18 12:17	1
Dibromofluoromethane (Surr)	98		75 - 123		11/05/18 12:17	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-002

Lab Sample ID: 480-144405-2

Date Collected: 10/25/18 11:10

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	10	U	10	0.44	ug/L		11/01/18 09:28	11/16/18 06:31	1
1,2-Dichlorobenzene	10	U	10	0.40	ug/L		11/01/18 09:28	11/16/18 06:31	1
1,3-Dichlorobenzene	10	U	10	0.48	ug/L		11/01/18 09:28	11/16/18 06:31	1
1,4-Dichlorobenzene	10	U	10	0.46	ug/L		11/01/18 09:28	11/16/18 06:31	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/16/18 06:31	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.61	ug/L		11/01/18 09:28	11/16/18 06:31	1
2,4-Dichlorophenol	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/16/18 06:31	1
2,4-Dimethylphenol	5.0	U	5.0	0.50	ug/L		11/01/18 09:28	11/16/18 06:31	1
2,4-Dinitrophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/16/18 06:31	1
2,4-Dinitrotoluene	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/16/18 06:31	1
2,6-Dinitrotoluene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/16/18 06:31	1
2-Chloronaphthalene	5.0	U	5.0	0.46	ug/L		11/01/18 09:28	11/16/18 06:31	1
2-Chlorophenol	5.0	U	5.0	0.53	ug/L		11/01/18 09:28	11/16/18 06:31	1
2-Methylnaphthalene	5.0	U	5.0	0.60	ug/L		11/01/18 09:28	11/16/18 06:31	1
2-Methylphenol	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/16/18 06:31	1
2-Nitroaniline	10	U	10	0.42	ug/L		11/01/18 09:28	11/16/18 06:31	1
2-Nitrophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/16/18 06:31	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/16/18 06:31	1
3-Nitroaniline	10	U	10	0.48	ug/L		11/01/18 09:28	11/16/18 06:31	1
4,6-Dinitro-2-methylphenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/16/18 06:31	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/16/18 06:31	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/16/18 06:31	1
4-Chloroaniline	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/16/18 06:31	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/16/18 06:31	1
4-Methylphenol	10	U	10	0.36	ug/L		11/01/18 09:28	11/16/18 06:31	1
4-Nitroaniline	10	U	10	0.25	ug/L		11/01/18 09:28	11/16/18 06:31	1
4-Nitrophenol	10	U	10	1.5	ug/L		11/01/18 09:28	11/16/18 06:31	1
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/01/18 09:28	11/16/18 06:31	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/01/18 09:28	11/16/18 06:31	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/01/18 09:28	11/16/18 06:31	1
Benzaldehyde	5.0	U	5.0	0.27	ug/L		11/01/18 09:28	11/16/18 06:31	1
Benzo[a]anthracene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/16/18 06:31	1
Benzo[a]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/16/18 06:31	1
Benzo[b]fluoranthene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/16/18 06:31	1
Benzo[g,h,i]perylene	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/16/18 06:31	1
Benzo[k]fluoranthene	5.0	U	5.0	0.73	ug/L		11/01/18 09:28	11/16/18 06:31	1
bis (2-chloroisopropyl) ether	5.0	U	5.0	0.52	ug/L		11/01/18 09:28	11/16/18 06:31	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/16/18 06:31	1
Bis(2-chloroethyl)ether	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/16/18 06:31	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		11/01/18 09:28	11/16/18 06:31	1
Butyl benzyl phthalate	5.0	U	5.0	1.0	ug/L		11/01/18 09:28	11/16/18 06:31	1
Carbazole	5.0	U	5.0	0.30	ug/L		11/01/18 09:28	11/16/18 06:31	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/01/18 09:28	11/16/18 06:31	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/01/18 09:28	11/16/18 06:31	1
Dibenzofuran	10	U	10	0.51	ug/L		11/01/18 09:28	11/16/18 06:31	1
Diethyl phthalate	5.0	U	5.0	0.22	ug/L		11/01/18 09:28	11/16/18 06:31	1
Dimethyl phthalate	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/16/18 06:31	1
Di-n-butyl phthalate	5.0	U	5.0	0.31	ug/L		11/01/18 09:28	11/16/18 06:31	1
Di-n-octyl phthalate	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/16/18 06:31	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-002

Lab Sample ID: 480-144405-2

Date Collected: 10/25/18 11:10

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/16/18 06:31	1
Fluorene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/16/18 06:31	1
Hexachlorobenzene	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/16/18 06:31	1
Hexachlorobutadiene	5.0	U	5.0	0.68	ug/L		11/01/18 09:28	11/16/18 06:31	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/16/18 06:31	1
Hexachloroethane	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/16/18 06:31	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/16/18 06:31	1
Isophorone	5.0	U	5.0	0.43	ug/L		11/01/18 09:28	11/16/18 06:31	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/01/18 09:28	11/16/18 06:31	1
Nitrobenzene	5.0	U	5.0	0.29	ug/L		11/01/18 09:28	11/16/18 06:31	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.54	ug/L		11/01/18 09:28	11/16/18 06:31	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/16/18 06:31	1
Pentachlorophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/16/18 06:31	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/01/18 09:28	11/16/18 06:31	1
Phenol	5.0	U	5.0	0.39	ug/L		11/01/18 09:28	11/16/18 06:31	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/16/18 06:31	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	4.4	T J	ug/L		2.42		11/01/18 09:28	11/16/18 06:31	1
Unknown	2.5	T J	ug/L		2.47		11/01/18 09:28	11/16/18 06:31	1
Unknown	2.6	T J	ug/L		2.59		11/01/18 09:28	11/16/18 06:31	1
Unknown	9.7	T J	ug/L		2.88		11/01/18 09:28	11/16/18 06:31	1
Unknown	1.8	T J	ug/L		3.17		11/01/18 09:28	11/16/18 06:31	1
Unknown	240	T J	ug/L		3.31		11/01/18 09:28	11/16/18 06:31	1
Unknown	2.3	T J	ug/L		3.37		11/01/18 09:28	11/16/18 06:31	1
Unknown	4.3	T J	ug/L		3.75		11/01/18 09:28	11/16/18 06:31	1
Chloriodomethane	1.9	T J N	ug/L		3.95	593-71-5	11/01/18 09:28	11/16/18 06:31	1
Unknown	2.7	T J	ug/L		4.37		11/01/18 09:28	11/16/18 06:31	1
Toluene	5.4	T J N	ug/L		4.42	108-88-3	11/01/18 09:28	11/16/18 06:31	1
Unknown	33	T J	ug/L		5.14		11/01/18 09:28	11/16/18 06:31	1
Cyclotetrasiloxane, octamethyl-	1.8	T J N	ug/L		6.21	556-67-2	11/01/18 09:28	11/16/18 06:31	1
Cyclopentasiloxane, decamethyl-	1.9	T J N	ug/L		7.16	541-02-6	11/01/18 09:28	11/16/18 06:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	64		41 - 120	11/01/18 09:28	11/16/18 06:31	1
2-Fluorobiphenyl	73		48 - 120	11/01/18 09:28	11/16/18 06:31	1
2-Fluorophenol (Surr)	53		35 - 120	11/01/18 09:28	11/16/18 06:31	1
Nitrobenzene-d5 (Surr)	71		46 - 120	11/01/18 09:28	11/16/18 06:31	1
Phenol-d5 (Surr)	40		22 - 120	11/01/18 09:28	11/16/18 06:31	1
p-Terphenyl-d14 (Surr)	68		59 - 136	11/01/18 09:28	11/16/18 06:31	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-003

Lab Sample ID: 480-144405-3

Date Collected: 10/25/18 11:30

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/05/18 12:43	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/05/18 12:43	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/05/18 12:43	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/05/18 12:43	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/05/18 12:43	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/05/18 12:43	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/05/18 12:43	1
2-Butanone (MEK)	4.6	J	10	1.3	ug/L			11/05/18 12:43	1
2-Hexanone	10	U	10	1.2	ug/L			11/05/18 12:43	1
2-Methylthiophene	10	U	10	0.44	ug/L			11/05/18 12:43	1
3-Methylthiophene	10	U	10	0.53	ug/L			11/05/18 12:43	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/05/18 12:43	1
Acetone	5.4	J	10	3.0	ug/L			11/05/18 12:43	1
Benzene	1.0	U	1.0	0.41	ug/L			11/05/18 12:43	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/05/18 12:43	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/05/18 12:43	1
Bromomethane	10	U	10	0.69	ug/L			11/05/18 12:43	1
Carbon disulfide	5.0	U	5.0	0.19	ug/L			11/05/18 12:43	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/05/18 12:43	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/05/18 12:43	1
Chloroethane	10	U	10	0.32	ug/L			11/05/18 12:43	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/05/18 12:43	1
Chloromethane	10	U	10	0.35	ug/L			11/05/18 12:43	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/05/18 12:43	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/05/18 12:43	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/05/18 12:43	1
Ethyl ether	10	U	10	0.72	ug/L			11/05/18 12:43	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/05/18 12:43	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/05/18 12:43	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/05/18 12:43	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/05/18 12:43	1
Styrene	5.0	U	5.0	0.73	ug/L			11/05/18 12:43	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/05/18 12:43	1
Toluene	5.0	U	5.0	0.51	ug/L			11/05/18 12:43	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/05/18 12:43	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/05/18 12:43	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/05/18 12:43	1
Vinyl chloride	10	U	10	0.90	ug/L			11/05/18 12:43	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/05/18 12:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		77 - 120					11/05/18 12:43	1
4-Bromofluorobenzene (Surr)	104		73 - 120					11/05/18 12:43	1
Toluene-d8 (Surr)	99		80 - 120					11/05/18 12:43	1
Dibromofluoromethane (Surr)	106		75 - 123					11/05/18 12:43	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-003

Lab Sample ID: 480-144405-3

Date Collected: 10/25/18 11:30

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	10	U	10	0.44	ug/L		11/01/18 09:28	11/15/18 12:22	1
1,2-Dichlorobenzene	10	U	10	0.40	ug/L		11/01/18 09:28	11/15/18 12:22	1
1,3-Dichlorobenzene	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 12:22	1
1,4-Dichlorobenzene	10	U	10	0.46	ug/L		11/01/18 09:28	11/15/18 12:22	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 12:22	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.61	ug/L		11/01/18 09:28	11/15/18 12:22	1
2,4-Dichlorophenol	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 12:22	1
2,4-Dimethylphenol	5.0	U	5.0	0.50	ug/L		11/01/18 09:28	11/15/18 12:22	1
2,4-Dinitrophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 12:22	1
2,4-Dinitrotoluene	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 12:22	1
2,6-Dinitrotoluene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 12:22	1
2-Chloronaphthalene	5.0	U	5.0	0.46	ug/L		11/01/18 09:28	11/15/18 12:22	1
2-Chlorophenol	5.0	U	5.0	0.53	ug/L		11/01/18 09:28	11/15/18 12:22	1
2-Methylnaphthalene	5.0	U	5.0	0.60	ug/L		11/01/18 09:28	11/15/18 12:22	1
2-Methylphenol	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 12:22	1
2-Nitroaniline	10	U	10	0.42	ug/L		11/01/18 09:28	11/15/18 12:22	1
2-Nitrophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 12:22	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 12:22	1
3-Nitroaniline	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 12:22	1
4,6-Dinitro-2-methylphenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 12:22	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 12:22	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 12:22	1
4-Chloroaniline	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 12:22	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 12:22	1
4-Methylphenol	10	U	10	0.36	ug/L		11/01/18 09:28	11/15/18 12:22	1
4-Nitroaniline	10	U	10	0.25	ug/L		11/01/18 09:28	11/15/18 12:22	1
4-Nitrophenol	10	U	10	1.5	ug/L		11/01/18 09:28	11/15/18 12:22	1
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/01/18 09:28	11/15/18 12:22	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/01/18 09:28	11/15/18 12:22	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/01/18 09:28	11/15/18 12:22	1
Benzaldehyde	5.0	U	5.0	0.27	ug/L		11/01/18 09:28	11/15/18 12:22	1
Benzo[a]anthracene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 12:22	1
Benzo[a]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 12:22	1
Benzo[b]fluoranthene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 12:22	1
Benzo[g,h,i]perylene	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 12:22	1
Benzo[k]fluoranthene	5.0	U	5.0	0.73	ug/L		11/01/18 09:28	11/15/18 12:22	1
bis (2-chloroisopropyl) ether	5.0	U	5.0	0.52	ug/L		11/01/18 09:28	11/15/18 12:22	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 12:22	1
Bis(2-chloroethyl)ether	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 12:22	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		11/01/18 09:28	11/15/18 12:22	1
Butyl benzyl phthalate	5.0	U	5.0	1.0	ug/L		11/01/18 09:28	11/15/18 12:22	1
Carbazole	5.0	U	5.0	0.30	ug/L		11/01/18 09:28	11/15/18 12:22	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/01/18 09:28	11/15/18 12:22	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/01/18 09:28	11/15/18 12:22	1
Dibenzofuran	10	U	10	0.51	ug/L		11/01/18 09:28	11/15/18 12:22	1
Diethyl phthalate	5.0	U	5.0	0.22	ug/L		11/01/18 09:28	11/15/18 12:22	1
Dimethyl phthalate	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 12:22	1
Di-n-butyl phthalate	5.0	U	5.0	0.31	ug/L		11/01/18 09:28	11/15/18 12:22	1
Di-n-octyl phthalate	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 12:22	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-003

Lab Sample ID: 480-144405-3

Date Collected: 10/25/18 11:30

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 12:22	1
Fluorene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 12:22	1
Hexachlorobenzene	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 12:22	1
Hexachlorobutadiene	5.0	U	5.0	0.68	ug/L		11/01/18 09:28	11/15/18 12:22	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 12:22	1
Hexachloroethane	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 12:22	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 12:22	1
Isophorone	5.0	U	5.0	0.43	ug/L		11/01/18 09:28	11/15/18 12:22	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/01/18 09:28	11/15/18 12:22	1
Nitrobenzene	5.0	U	5.0	0.29	ug/L		11/01/18 09:28	11/15/18 12:22	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.54	ug/L		11/01/18 09:28	11/15/18 12:22	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 12:22	1
Pentachlorophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 12:22	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/01/18 09:28	11/15/18 12:22	1
Phenol	5.0	U	5.0	0.39	ug/L		11/01/18 09:28	11/15/18 12:22	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 12:22	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	2.0	T J	ug/L		2.47		11/01/18 09:28	11/15/18 12:22	1
Unknown	2.7	T J	ug/L		2.60		11/01/18 09:28	11/15/18 12:22	1
Unknown	10	T J	ug/L		2.89		11/01/18 09:28	11/15/18 12:22	1
Diisopropylamine	15	T J N	ug/L		3.09	108-18-9	11/01/18 09:28	11/15/18 12:22	1
Unknown	250	T J	ug/L		3.32		11/01/18 09:28	11/15/18 12:22	1
Unknown	1.9	T J	ug/L		3.38		11/01/18 09:28	11/15/18 12:22	1
Unknown	4.4	T J	ug/L		3.76		11/01/18 09:28	11/15/18 12:22	1
Unknown	2.8	T J	ug/L		4.38		11/01/18 09:28	11/15/18 12:22	1
Toluene	5.6	T J N	ug/L		4.43	108-88-3	11/01/18 09:28	11/15/18 12:22	1
Unknown	38	T J	ug/L		5.15		11/01/18 09:28	11/15/18 12:22	1
Cyclotetrasiloxane, octamethyl-	1.7	T J N	ug/L		6.21	556-67-2	11/01/18 09:28	11/15/18 12:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	69		41 - 120	11/01/18 09:28	11/15/18 12:22	1
2-Fluorobiphenyl	77		48 - 120	11/01/18 09:28	11/15/18 12:22	1
2-Fluorophenol (Surr)	56		35 - 120	11/01/18 09:28	11/15/18 12:22	1
Nitrobenzene-d5 (Surr)	73		46 - 120	11/01/18 09:28	11/15/18 12:22	1
Phenol-d5 (Surr)	40		22 - 120	11/01/18 09:28	11/15/18 12:22	1
p-Terphenyl-d14 (Surr)	75		59 - 136	11/01/18 09:28	11/15/18 12:22	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-004

Lab Sample ID: 480-144405-4

Date Collected: 10/25/18 11:40

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/05/18 13:10	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/05/18 13:10	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/05/18 13:10	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/05/18 13:10	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/05/18 13:10	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/05/18 13:10	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/05/18 13:10	1
2-Butanone (MEK)	6.4	J	10	1.3	ug/L			11/05/18 13:10	1
2-Hexanone	10	U	10	1.2	ug/L			11/05/18 13:10	1
2-Methylthiophene	10	U	10	0.44	ug/L			11/05/18 13:10	1
3-Methylthiophene	10	U	10	0.53	ug/L			11/05/18 13:10	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/05/18 13:10	1
Acetone	6.3	J	10	3.0	ug/L			11/05/18 13:10	1
Benzene	1.0	U	1.0	0.41	ug/L			11/05/18 13:10	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/05/18 13:10	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/05/18 13:10	1
Bromomethane	10	U	10	0.69	ug/L			11/05/18 13:10	1
Carbon disulfide	5.0	U	5.0	0.19	ug/L			11/05/18 13:10	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/05/18 13:10	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/05/18 13:10	1
Chloroethane	10	U	10	0.32	ug/L			11/05/18 13:10	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/05/18 13:10	1
Chloromethane	10	U	10	0.35	ug/L			11/05/18 13:10	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/05/18 13:10	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/05/18 13:10	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/05/18 13:10	1
Ethyl ether	53		10	0.72	ug/L			11/05/18 13:10	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/05/18 13:10	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/05/18 13:10	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/05/18 13:10	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/05/18 13:10	1
Styrene	5.0	U	5.0	0.73	ug/L			11/05/18 13:10	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/05/18 13:10	1
Toluene	5.0	U	5.0	0.51	ug/L			11/05/18 13:10	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/05/18 13:10	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/05/18 13:10	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/05/18 13:10	1
Vinyl chloride	10	U	10	0.90	ug/L			11/05/18 13:10	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/05/18 13:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		11/05/18 13:10	1
4-Bromofluorobenzene (Surr)	109		73 - 120		11/05/18 13:10	1
Toluene-d8 (Surr)	102		80 - 120		11/05/18 13:10	1
Dibromofluoromethane (Surr)	98		75 - 123		11/05/18 13:10	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-004

Lab Sample ID: 480-144405-4

Date Collected: 10/25/18 11:40

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	10	U	10	0.44	ug/L		11/01/18 09:28	11/15/18 12:52	1
1,2-Dichlorobenzene	10	U	10	0.40	ug/L		11/01/18 09:28	11/15/18 12:52	1
1,3-Dichlorobenzene	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 12:52	1
1,4-Dichlorobenzene	10	U	10	0.46	ug/L		11/01/18 09:28	11/15/18 12:52	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 12:52	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.61	ug/L		11/01/18 09:28	11/15/18 12:52	1
2,4-Dichlorophenol	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 12:52	1
2,4-Dimethylphenol	5.0	U	5.0	0.50	ug/L		11/01/18 09:28	11/15/18 12:52	1
2,4-Dinitrophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 12:52	1
2,4-Dinitrotoluene	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 12:52	1
2,6-Dinitrotoluene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 12:52	1
2-Chloronaphthalene	5.0	U	5.0	0.46	ug/L		11/01/18 09:28	11/15/18 12:52	1
2-Chlorophenol	5.0	U	5.0	0.53	ug/L		11/01/18 09:28	11/15/18 12:52	1
2-Methylnaphthalene	5.0	U	5.0	0.60	ug/L		11/01/18 09:28	11/15/18 12:52	1
2-Methylphenol	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 12:52	1
2-Nitroaniline	10	U	10	0.42	ug/L		11/01/18 09:28	11/15/18 12:52	1
2-Nitrophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 12:52	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 12:52	1
3-Nitroaniline	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 12:52	1
4,6-Dinitro-2-methylphenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 12:52	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 12:52	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 12:52	1
4-Chloroaniline	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 12:52	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 12:52	1
4-Methylphenol	10	U	10	0.36	ug/L		11/01/18 09:28	11/15/18 12:52	1
4-Nitroaniline	10	U	10	0.25	ug/L		11/01/18 09:28	11/15/18 12:52	1
4-Nitrophenol	10	U	10	1.5	ug/L		11/01/18 09:28	11/15/18 12:52	1
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/01/18 09:28	11/15/18 12:52	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/01/18 09:28	11/15/18 12:52	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/01/18 09:28	11/15/18 12:52	1
Benzaldehyde	5.0	U	5.0	0.27	ug/L		11/01/18 09:28	11/15/18 12:52	1
Benzo[a]anthracene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 12:52	1
Benzo[a]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 12:52	1
Benzo[b]fluoranthene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 12:52	1
Benzo[g,h,i]perylene	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 12:52	1
Benzo[k]fluoranthene	5.0	U	5.0	0.73	ug/L		11/01/18 09:28	11/15/18 12:52	1
bis (2-chloroisopropyl) ether	5.0	U	5.0	0.52	ug/L		11/01/18 09:28	11/15/18 12:52	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 12:52	1
Bis(2-chloroethyl)ether	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 12:52	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		11/01/18 09:28	11/15/18 12:52	1
Butyl benzyl phthalate	5.0	U	5.0	1.0	ug/L		11/01/18 09:28	11/15/18 12:52	1
Carbazole	5.0	U	5.0	0.30	ug/L		11/01/18 09:28	11/15/18 12:52	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/01/18 09:28	11/15/18 12:52	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/01/18 09:28	11/15/18 12:52	1
Dibenzofuran	10	U	10	0.51	ug/L		11/01/18 09:28	11/15/18 12:52	1
Diethyl phthalate	5.0	U	5.0	0.22	ug/L		11/01/18 09:28	11/15/18 12:52	1
Dimethyl phthalate	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 12:52	1
Di-n-butyl phthalate	5.0	U	5.0	0.31	ug/L		11/01/18 09:28	11/15/18 12:52	1
Di-n-octyl phthalate	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 12:52	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-004

Lab Sample ID: 480-144405-4

Date Collected: 10/25/18 11:40

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 12:52	1
Fluorene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 12:52	1
Hexachlorobenzene	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 12:52	1
Hexachlorobutadiene	5.0	U	5.0	0.68	ug/L		11/01/18 09:28	11/15/18 12:52	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 12:52	1
Hexachloroethane	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 12:52	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 12:52	1
Isophorone	5.0	U	5.0	0.43	ug/L		11/01/18 09:28	11/15/18 12:52	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/01/18 09:28	11/15/18 12:52	1
Nitrobenzene	5.0	U	5.0	0.29	ug/L		11/01/18 09:28	11/15/18 12:52	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.54	ug/L		11/01/18 09:28	11/15/18 12:52	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 12:52	1
Pentachlorophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 12:52	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/01/18 09:28	11/15/18 12:52	1
Phenol	5.0	U	5.0	0.39	ug/L		11/01/18 09:28	11/15/18 12:52	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 12:52	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	2.3	T J	ug/L		2.47		11/01/18 09:28	11/15/18 12:52	1
Unknown	2.9	T J	ug/L		2.60		11/01/18 09:28	11/15/18 12:52	1
Unknown	9.2	T J	ug/L		2.88		11/01/18 09:28	11/15/18 12:52	1
Diisopropylamine	64	T J N	ug/L		3.10	108-18-9	11/01/18 09:28	11/15/18 12:52	1
Unknown	260	T J	ug/L		3.33		11/01/18 09:28	11/15/18 12:52	1
Unknown	2.9	T J	ug/L		3.38		11/01/18 09:28	11/15/18 12:52	1
Triethylamine	6.3	T J N	ug/L		3.42	121-44-8	11/01/18 09:28	11/15/18 12:52	1
Unknown	4.5	T J	ug/L		3.75		11/01/18 09:28	11/15/18 12:52	1
Unknown	3.1	T J	ug/L		4.38		11/01/18 09:28	11/15/18 12:52	1
Toluene	6.0	T J N	ug/L		4.43	108-88-3	11/01/18 09:28	11/15/18 12:52	1
Unknown	45	T J	ug/L		5.15		11/01/18 09:28	11/15/18 12:52	1
Talbutal	7.0	T J N	ug/L		10.04	115-44-6	11/01/18 09:28	11/15/18 12:52	1
2,4,6-(1H,3H,5H)-Pyrimidinetrione, 5-ethyl-1,3-dimethyl-5-phe	3.3	T J N	ug/L		10.56	730-66-5	11/01/18 09:28	11/15/18 12:52	1
Hexobarbital	2.8	T J N	ug/L		10.63	56-29-1	11/01/18 09:28	11/15/18 12:52	1
Mephobarbital	14	T J N	ug/L		10.78	115-38-8	11/01/18 09:28	11/15/18 12:52	1
Phenobarbital	11	T J N	ug/L		11.01	50-06-6	11/01/18 09:28	11/15/18 12:52	1
Cyclobarbital	3.5	T J N	ug/L		11.05	52-31-3	11/01/18 09:28	11/15/18 12:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	78		41 - 120	11/01/18 09:28	11/15/18 12:52	1
2-Fluorobiphenyl	83		48 - 120	11/01/18 09:28	11/15/18 12:52	1
2-Fluorophenol (Surr)	58		35 - 120	11/01/18 09:28	11/15/18 12:52	1
Nitrobenzene-d5 (Surr)	78		46 - 120	11/01/18 09:28	11/15/18 12:52	1
Phenol-d5 (Surr)	43		22 - 120	11/01/18 09:28	11/15/18 12:52	1
p-Terphenyl-d14 (Surr)	70		59 - 136	11/01/18 09:28	11/15/18 12:52	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-005

Lab Sample ID: 480-144405-5

Date Collected: 10/25/18 12:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	20	U	20	3.3	ug/L			11/06/18 03:34	4
1,1,2,2-Tetrachloroethane	20	U	20	0.84	ug/L			11/06/18 03:34	4
1,1,2-Trichloroethane	20	U	20	0.92	ug/L			11/06/18 03:34	4
1,1-Dichloroethane	20	U	20	1.5	ug/L			11/06/18 03:34	4
1,1-Dichloroethene	20	U	20	1.2	ug/L			11/06/18 03:34	4
1,2-Dichloroethane	20	U	20	0.84	ug/L			11/06/18 03:34	4
1,2-Dichloropropane	20	U	20	2.9	ug/L			11/06/18 03:34	4
2-Butanone (MEK)	40	U	40	5.3	ug/L			11/06/18 03:34	4
2-Hexanone	40	U	40	5.0	ug/L			11/06/18 03:34	4
2-Methylthiophene	40	U	40	1.8	ug/L			11/06/18 03:34	4
3-Methylthiophene	40	U	40	2.1	ug/L			11/06/18 03:34	4
4-Methyl-2-pentanone (MIBK)	40	U	40	8.4	ug/L			11/06/18 03:34	4
Acetone	40	U	40	12	ug/L			11/06/18 03:34	4
Benzene	4.0	U	4.0	1.6	ug/L			11/06/18 03:34	4
Bromodichloromethane	20	U	20	1.6	ug/L			11/06/18 03:34	4
Bromoform	20	U	20	1.0	ug/L			11/06/18 03:34	4
Bromomethane	40	U	40	2.8	ug/L			11/06/18 03:34	4
Carbon disulfide	20	U	20	0.76	ug/L			11/06/18 03:34	4
Carbon tetrachloride	20	U	20	1.1	ug/L			11/06/18 03:34	4
Chlorobenzene	20	U	20	3.0	ug/L			11/06/18 03:34	4
Chloroethane	40	U	40	1.3	ug/L			11/06/18 03:34	4
Chloroform	20	U	20	1.4	ug/L			11/06/18 03:34	4
Chloromethane	40	U	40	1.4	ug/L			11/06/18 03:34	4
cis-1,2-Dichloroethene	20	U	20	3.2	ug/L			11/06/18 03:34	4
cis-1,3-Dichloropropene	20	U	20	1.4	ug/L			11/06/18 03:34	4
Dibromochloromethane	20	U	20	1.3	ug/L			11/06/18 03:34	4
Ethyl ether	230		40	2.9	ug/L			11/06/18 03:34	4
Ethylbenzene	20	U	20	3.0	ug/L			11/06/18 03:34	4
m&p-Xylene	20	U	20	2.6	ug/L			11/06/18 03:34	4
Methylene Chloride	20	U	20	1.8	ug/L			11/06/18 03:34	4
o-Xylene	20	U	20	3.0	ug/L			11/06/18 03:34	4
Styrene	20	U	20	2.9	ug/L			11/06/18 03:34	4
Tetrachloroethene	20	U	20	1.4	ug/L			11/06/18 03:34	4
Toluene	20	U	20	2.0	ug/L			11/06/18 03:34	4
trans-1,2-Dichloroethene	20	U	20	3.6	ug/L			11/06/18 03:34	4
trans-1,3-Dichloropropene	20	U	20	1.5	ug/L			11/06/18 03:34	4
Trichloroethene	20	U	20	1.8	ug/L			11/06/18 03:34	4
Vinyl chloride	40	U	40	3.6	ug/L			11/06/18 03:34	4

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/06/18 03:34	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		77 - 120		11/06/18 03:34	4
4-Bromofluorobenzene (Surr)	102		73 - 120		11/06/18 03:34	4
Toluene-d8 (Surr)	99		80 - 120		11/06/18 03:34	4
Dibromofluoromethane (Surr)	101		75 - 123		11/06/18 03:34	4

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-005

Lab Sample ID: 480-144405-5

Date Collected: 10/25/18 12:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	10	U	10	0.44	ug/L		11/01/18 09:28	11/15/18 13:21	1
1,2-Dichlorobenzene	10	U	10	0.40	ug/L		11/01/18 09:28	11/15/18 13:21	1
1,3-Dichlorobenzene	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 13:21	1
1,4-Dichlorobenzene	10	U	10	0.46	ug/L		11/01/18 09:28	11/15/18 13:21	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 13:21	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.61	ug/L		11/01/18 09:28	11/15/18 13:21	1
2,4-Dichlorophenol	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 13:21	1
2,4-Dimethylphenol	5.0	U	5.0	0.50	ug/L		11/01/18 09:28	11/15/18 13:21	1
2,4-Dinitrophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 13:21	1
2,4-Dinitrotoluene	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 13:21	1
2,6-Dinitrotoluene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 13:21	1
2-Chloronaphthalene	5.0	U	5.0	0.46	ug/L		11/01/18 09:28	11/15/18 13:21	1
2-Chlorophenol	5.0	U	5.0	0.53	ug/L		11/01/18 09:28	11/15/18 13:21	1
2-Methylnaphthalene	5.0	U	5.0	0.60	ug/L		11/01/18 09:28	11/15/18 13:21	1
2-Methylphenol	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 13:21	1
2-Nitroaniline	10	U	10	0.42	ug/L		11/01/18 09:28	11/15/18 13:21	1
2-Nitrophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 13:21	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 13:21	1
3-Nitroaniline	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 13:21	1
4,6-Dinitro-2-methylphenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 13:21	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 13:21	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 13:21	1
4-Chloroaniline	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 13:21	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 13:21	1
4-Methylphenol	10	U	10	0.36	ug/L		11/01/18 09:28	11/15/18 13:21	1
4-Nitroaniline	10	U	10	0.25	ug/L		11/01/18 09:28	11/15/18 13:21	1
4-Nitrophenol	10	U	10	1.5	ug/L		11/01/18 09:28	11/15/18 13:21	1
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/01/18 09:28	11/15/18 13:21	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/01/18 09:28	11/15/18 13:21	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/01/18 09:28	11/15/18 13:21	1
Benzaldehyde	5.0	U	5.0	0.27	ug/L		11/01/18 09:28	11/15/18 13:21	1
Benzo[a]anthracene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 13:21	1
Benzo[a]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 13:21	1
Benzo[b]fluoranthene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 13:21	1
Benzo[g,h,i]perylene	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 13:21	1
Benzo[k]fluoranthene	5.0	U	5.0	0.73	ug/L		11/01/18 09:28	11/15/18 13:21	1
bis (2-chloroisopropyl) ether	5.0	U	5.0	0.52	ug/L		11/01/18 09:28	11/15/18 13:21	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 13:21	1
Bis(2-chloroethyl)ether	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 13:21	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		11/01/18 09:28	11/15/18 13:21	1
Butyl benzyl phthalate	5.0	U	5.0	1.0	ug/L		11/01/18 09:28	11/15/18 13:21	1
Carbazole	5.0	U	5.0	0.30	ug/L		11/01/18 09:28	11/15/18 13:21	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/01/18 09:28	11/15/18 13:21	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/01/18 09:28	11/15/18 13:21	1
Dibenzofuran	10	U	10	0.51	ug/L		11/01/18 09:28	11/15/18 13:21	1
Diethyl phthalate	5.0	U	5.0	0.22	ug/L		11/01/18 09:28	11/15/18 13:21	1
Dimethyl phthalate	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 13:21	1
Di-n-butyl phthalate	5.0	U	5.0	0.31	ug/L		11/01/18 09:28	11/15/18 13:21	1
Di-n-octyl phthalate	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 13:21	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-005

Lab Sample ID: 480-144405-5

Date Collected: 10/25/18 12:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 13:21	1
Fluorene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 13:21	1
Hexachlorobenzene	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 13:21	1
Hexachlorobutadiene	5.0	U	5.0	0.68	ug/L		11/01/18 09:28	11/15/18 13:21	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 13:21	1
Hexachloroethane	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 13:21	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 13:21	1
Isophorone	5.0	U	5.0	0.43	ug/L		11/01/18 09:28	11/15/18 13:21	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/01/18 09:28	11/15/18 13:21	1
Nitrobenzene	5.0	U	5.0	0.29	ug/L		11/01/18 09:28	11/15/18 13:21	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.54	ug/L		11/01/18 09:28	11/15/18 13:21	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 13:21	1
Pentachlorophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 13:21	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/01/18 09:28	11/15/18 13:21	1
Phenol	5.0	U	5.0	0.39	ug/L		11/01/18 09:28	11/15/18 13:21	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 13:21	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	2.5	T J	ug/L		2.47		11/01/18 09:28	11/15/18 13:21	1
Unknown	3.2	T J	ug/L		2.60		11/01/18 09:28	11/15/18 13:21	1
Unknown	9.1	T J	ug/L		2.88		11/01/18 09:28	11/15/18 13:21	1
Diisopropylamine	17	T J N	ug/L		3.08	108-18-9	11/01/18 09:28	11/15/18 13:21	1
Unknown	11	T J	ug/L		3.26		11/01/18 09:28	11/15/18 13:21	1
Unknown	230	T J	ug/L		3.32		11/01/18 09:28	11/15/18 13:21	1
Unknown	4.4	T J	ug/L		3.38		11/01/18 09:28	11/15/18 13:21	1
Unknown	4.5	T J	ug/L		3.75		11/01/18 09:28	11/15/18 13:21	1
Chloriodomethane	2.6	T J N	ug/L		3.95	593-71-5	11/01/18 09:28	11/15/18 13:21	1
Unknown	2.9	T J	ug/L		4.38		11/01/18 09:28	11/15/18 13:21	1
Toluene	5.5	T J N	ug/L		4.43	108-88-3	11/01/18 09:28	11/15/18 13:21	1
Unknown	50	T J	ug/L		5.14		11/01/18 09:28	11/15/18 13:21	1
Unknown	20	T J	ug/L		5.47		11/01/18 09:28	11/15/18 13:21	1
Unknown	2.2	T J	ug/L		8.62		11/01/18 09:28	11/15/18 13:21	1
Unknown	12	T J	ug/L		9.11		11/01/18 09:28	11/15/18 13:21	1
Talbutal	6.7	T J N	ug/L		10.04	115-44-6	11/01/18 09:28	11/15/18 13:21	1
Mephobarbital	3.8	T J N	ug/L		10.78	115-38-8	11/01/18 09:28	11/15/18 13:21	1
Phenobarbital	3.6	T J N	ug/L		11.02	50-06-6	11/01/18 09:28	11/15/18 13:21	1
Cyclobarbital	3.7	T J N	ug/L		11.05	52-31-3	11/01/18 09:28	11/15/18 13:21	1
Unknown	12	T J	ug/L		12.42		11/01/18 09:28	11/15/18 13:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	79		41 - 120	11/01/18 09:28	11/15/18 13:21	1
2-Fluorobiphenyl	78		48 - 120	11/01/18 09:28	11/15/18 13:21	1
2-Fluorophenol (Surr)	56		35 - 120	11/01/18 09:28	11/15/18 13:21	1
Nitrobenzene-d5 (Surr)	75		46 - 120	11/01/18 09:28	11/15/18 13:21	1
Phenol-d5 (Surr)	42		22 - 120	11/01/18 09:28	11/15/18 13:21	1
p-Terphenyl-d14 (Surr)	67		59 - 136	11/01/18 09:28	11/15/18 13:21	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-006

Lab Sample ID: 480-144405-6

Date Collected: 10/25/18 12:10

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/05/18 14:03	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/05/18 14:03	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/05/18 14:03	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/05/18 14:03	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/05/18 14:03	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/05/18 14:03	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/05/18 14:03	1
2-Butanone (MEK)	3.6	J	10	1.3	ug/L			11/05/18 14:03	1
2-Hexanone	10	U	10	1.2	ug/L			11/05/18 14:03	1
2-Methylthiophene	10	U	10	0.44	ug/L			11/05/18 14:03	1
3-Methylthiophene	10	U	10	0.53	ug/L			11/05/18 14:03	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/05/18 14:03	1
Acetone	3.8	J	10	3.0	ug/L			11/05/18 14:03	1
Benzene	1.0	U	1.0	0.41	ug/L			11/05/18 14:03	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/05/18 14:03	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/05/18 14:03	1
Bromomethane	10	U	10	0.69	ug/L			11/05/18 14:03	1
Carbon disulfide	5.0	U	5.0	0.19	ug/L			11/05/18 14:03	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/05/18 14:03	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/05/18 14:03	1
Chloroethane	10	U	10	0.32	ug/L			11/05/18 14:03	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/05/18 14:03	1
Chloromethane	10	U	10	0.35	ug/L			11/05/18 14:03	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/05/18 14:03	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/05/18 14:03	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/05/18 14:03	1
Ethyl ether	1100	E	10	0.72	ug/L			11/05/18 14:03	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/05/18 14:03	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/05/18 14:03	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/05/18 14:03	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/05/18 14:03	1
Styrene	5.0	U	5.0	0.73	ug/L			11/05/18 14:03	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/05/18 14:03	1
Toluene	5.0	U	5.0	0.51	ug/L			11/05/18 14:03	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/05/18 14:03	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/05/18 14:03	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/05/18 14:03	1
Vinyl chloride	10	U	10	0.90	ug/L			11/05/18 14:03	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	13	T J	ug/L		2.38			11/05/18 14:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		77 - 120		11/05/18 14:03	1
4-Bromofluorobenzene (Surr)	106		73 - 120		11/05/18 14:03	1
Toluene-d8 (Surr)	97		80 - 120		11/05/18 14:03	1
Dibromofluoromethane (Surr)	105		75 - 123		11/05/18 14:03	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-006

Lab Sample ID: 480-144405-6

Date Collected: 10/25/18 12:10

Matrix: Water

Date Received: 10/27/18 01:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	250	U	250	41	ug/L			11/06/18 04:01	50
1,1,2,2-Tetrachloroethane	250	U	250	11	ug/L			11/06/18 04:01	50
1,1,2-Trichloroethane	250	U	250	12	ug/L			11/06/18 04:01	50
1,1-Dichloroethane	250	U	250	19	ug/L			11/06/18 04:01	50
1,1-Dichloroethene	250	U	250	15	ug/L			11/06/18 04:01	50
1,2-Dichloroethane	250	U	250	11	ug/L			11/06/18 04:01	50
1,2-Dichloropropane	250	U	250	36	ug/L			11/06/18 04:01	50
2-Butanone (MEK)	500	U	500	66	ug/L			11/06/18 04:01	50
2-Hexanone	500	U	500	62	ug/L			11/06/18 04:01	50
2-Methylthiophene	500	U	500	22	ug/L			11/06/18 04:01	50
3-Methylthiophene	500	U	500	27	ug/L			11/06/18 04:01	50
4-Methyl-2-pentanone (MIBK)	500	U	500	110	ug/L			11/06/18 04:01	50
Acetone	500	U	500	150	ug/L			11/06/18 04:01	50
Benzene	50	U	50	21	ug/L			11/06/18 04:01	50
Bromodichloromethane	250	U	250	20	ug/L			11/06/18 04:01	50
Bromoform	250	U	250	13	ug/L			11/06/18 04:01	50
Bromomethane	500	U	500	35	ug/L			11/06/18 04:01	50
Carbon disulfide	250	U	250	9.5	ug/L			11/06/18 04:01	50
Carbon tetrachloride	250	U	250	14	ug/L			11/06/18 04:01	50
Chlorobenzene	250	U	250	38	ug/L			11/06/18 04:01	50
Chloroethane	500	U	500	16	ug/L			11/06/18 04:01	50
Chloroform	250	U	250	17	ug/L			11/06/18 04:01	50
Chloromethane	500	U	500	18	ug/L			11/06/18 04:01	50
cis-1,2-Dichloroethene	250	U	250	41	ug/L			11/06/18 04:01	50
cis-1,3-Dichloropropene	250	U	250	18	ug/L			11/06/18 04:01	50
Dibromochloromethane	250	U	250	16	ug/L			11/06/18 04:01	50
Ethyl ether	1300		500	36	ug/L			11/06/18 04:01	50
Ethylbenzene	250	U	250	37	ug/L			11/06/18 04:01	50
m&p-Xylene	250	U	250	33	ug/L			11/06/18 04:01	50
Methylene Chloride	250	U	250	22	ug/L			11/06/18 04:01	50
o-Xylene	250	U	250	38	ug/L			11/06/18 04:01	50
Styrene	250	U	250	37	ug/L			11/06/18 04:01	50
Tetrachloroethene	250	U	250	18	ug/L			11/06/18 04:01	50
Toluene	250	U	250	26	ug/L			11/06/18 04:01	50
trans-1,2-Dichloroethene	250	U	250	45	ug/L			11/06/18 04:01	50
trans-1,3-Dichloropropene	250	U	250	19	ug/L			11/06/18 04:01	50
Trichloroethene	250	U	250	23	ug/L			11/06/18 04:01	50
Vinyl chloride	500	U	500	45	ug/L			11/06/18 04:01	50

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/06/18 04:01	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		11/06/18 04:01	50
4-Bromofluorobenzene (Surr)	106		73 - 120		11/06/18 04:01	50
Toluene-d8 (Surr)	100		80 - 120		11/06/18 04:01	50
Dibromofluoromethane (Surr)	100		75 - 123		11/06/18 04:01	50

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-006

Lab Sample ID: 480-144405-6

Date Collected: 10/25/18 12:10

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	10	U	10	0.44	ug/L		11/01/18 09:28	11/15/18 13:50	1
1,2-Dichlorobenzene	10	U	10	0.40	ug/L		11/01/18 09:28	11/15/18 13:50	1
1,3-Dichlorobenzene	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 13:50	1
1,4-Dichlorobenzene	10	U	10	0.46	ug/L		11/01/18 09:28	11/15/18 13:50	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 13:50	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.61	ug/L		11/01/18 09:28	11/15/18 13:50	1
2,4-Dichlorophenol	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 13:50	1
2,4-Dimethylphenol	5.0	U	5.0	0.50	ug/L		11/01/18 09:28	11/15/18 13:50	1
2,4-Dinitrophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 13:50	1
2,4-Dinitrotoluene	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 13:50	1
2,6-Dinitrotoluene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 13:50	1
2-Chloronaphthalene	5.0	U	5.0	0.46	ug/L		11/01/18 09:28	11/15/18 13:50	1
2-Chlorophenol	5.0	U	5.0	0.53	ug/L		11/01/18 09:28	11/15/18 13:50	1
2-Methylnaphthalene	5.0	U	5.0	0.60	ug/L		11/01/18 09:28	11/15/18 13:50	1
2-Methylphenol	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 13:50	1
2-Nitroaniline	10	U	10	0.42	ug/L		11/01/18 09:28	11/15/18 13:50	1
2-Nitrophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 13:50	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 13:50	1
3-Nitroaniline	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 13:50	1
4,6-Dinitro-2-methylphenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 13:50	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 13:50	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 13:50	1
4-Chloroaniline	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 13:50	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 13:50	1
4-Methylphenol	10	U	10	0.36	ug/L		11/01/18 09:28	11/15/18 13:50	1
4-Nitroaniline	10	U	10	0.25	ug/L		11/01/18 09:28	11/15/18 13:50	1
4-Nitrophenol	10	U	10	1.5	ug/L		11/01/18 09:28	11/15/18 13:50	1
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/01/18 09:28	11/15/18 13:50	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/01/18 09:28	11/15/18 13:50	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/01/18 09:28	11/15/18 13:50	1
Benzaldehyde	5.0	U	5.0	0.27	ug/L		11/01/18 09:28	11/15/18 13:50	1
Benzo[a]anthracene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 13:50	1
Benzo[a]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 13:50	1
Benzo[b]fluoranthene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 13:50	1
Benzo[g,h,i]perylene	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 13:50	1
Benzo[k]fluoranthene	5.0	U	5.0	0.73	ug/L		11/01/18 09:28	11/15/18 13:50	1
bis (2-chloroisopropyl) ether	5.0	U	5.0	0.52	ug/L		11/01/18 09:28	11/15/18 13:50	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 13:50	1
Bis(2-chloroethyl)ether	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 13:50	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		11/01/18 09:28	11/15/18 13:50	1
Butyl benzyl phthalate	5.0	U	5.0	1.0	ug/L		11/01/18 09:28	11/15/18 13:50	1
Carbazole	5.0	U	5.0	0.30	ug/L		11/01/18 09:28	11/15/18 13:50	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/01/18 09:28	11/15/18 13:50	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/01/18 09:28	11/15/18 13:50	1
Dibenzofuran	10	U	10	0.51	ug/L		11/01/18 09:28	11/15/18 13:50	1
Diethyl phthalate	5.0	U	5.0	0.22	ug/L		11/01/18 09:28	11/15/18 13:50	1
Dimethyl phthalate	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 13:50	1
Di-n-butyl phthalate	5.0	U	5.0	0.31	ug/L		11/01/18 09:28	11/15/18 13:50	1
Di-n-octyl phthalate	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 13:50	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-006

Lab Sample ID: 480-144405-6

Date Collected: 10/25/18 12:10

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 13:50	1
Fluorene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 13:50	1
Hexachlorobenzene	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 13:50	1
Hexachlorobutadiene	5.0	U	5.0	0.68	ug/L		11/01/18 09:28	11/15/18 13:50	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 13:50	1
Hexachloroethane	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 13:50	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 13:50	1
Isophorone	5.0	U	5.0	0.43	ug/L		11/01/18 09:28	11/15/18 13:50	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/01/18 09:28	11/15/18 13:50	1
Nitrobenzene	5.0	U	5.0	0.29	ug/L		11/01/18 09:28	11/15/18 13:50	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.54	ug/L		11/01/18 09:28	11/15/18 13:50	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 13:50	1
Pentachlorophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 13:50	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/01/18 09:28	11/15/18 13:50	1
Phenol	1.6	J	5.0	0.39	ug/L		11/01/18 09:28	11/15/18 13:50	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 13:50	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	6.4	T J	ug/L		2.60		11/01/18 09:28	11/15/18 13:50	1
Unknown	10	T J	ug/L		2.89		11/01/18 09:28	11/15/18 13:50	1
Diisopropylamine	830	T J N	ug/L		3.08	108-18-9	11/01/18 09:28	11/15/18 13:50	1
Unknown	19	T J	ug/L		3.26		11/01/18 09:28	11/15/18 13:50	1
Unknown	230	T J	ug/L		3.32		11/01/18 09:28	11/15/18 13:50	1
Unknown	13	T J	ug/L		3.38		11/01/18 09:28	11/15/18 13:50	1
Triethylamine	77	T J N	ug/L		3.43	121-44-8	11/01/18 09:28	11/15/18 13:50	1
Chloriodomethane	10	T J N	ug/L		3.96	593-71-5	11/01/18 09:28	11/15/18 13:50	1
Unknown	34	T J	ug/L		5.15		11/01/18 09:28	11/15/18 13:50	1
Piperazine	7.5	T J	ug/L		6.64		11/01/18 09:28	11/15/18 13:50	1
Unknown	6.1	T J	ug/L		8.63		11/01/18 09:28	11/15/18 13:50	1
Unknown	18	T J	ug/L		9.11		11/01/18 09:28	11/15/18 13:50	1
Talbutal	51	T J N	ug/L		10.06	115-44-6	11/01/18 09:28	11/15/18 13:50	1
Unknown	11	T J	ug/L		10.23		11/01/18 09:28	11/15/18 13:50	1
Phenobarbital di-methyl derivative	14	T J N	ug/L		10.56	1000137-13-1	11/01/18 09:28	11/15/18 13:50	1
Hexobarbital	22	T J N	ug/L		10.64	56-29-1	11/01/18 09:28	11/15/18 13:50	1
Unknown	8.5	T J	ug/L		10.72		11/01/18 09:28	11/15/18 13:50	1
Mephobarbital	70	T J N	ug/L		10.79	115-38-8	11/01/18 09:28	11/15/18 13:50	1
Phenobarbital	75	T J N	ug/L		11.04	50-06-6	11/01/18 09:28	11/15/18 13:50	1
Cyclobarbital	33	T J N	ug/L		11.07	52-31-3	11/01/18 09:28	11/15/18 13:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	88		41 - 120	11/01/18 09:28	11/15/18 13:50	1
2-Fluorobiphenyl	84		48 - 120	11/01/18 09:28	11/15/18 13:50	1
2-Fluorophenol (Surr)	59		35 - 120	11/01/18 09:28	11/15/18 13:50	1
Nitrobenzene-d5 (Surr)	81		46 - 120	11/01/18 09:28	11/15/18 13:50	1
Phenol-d5 (Surr)	44		22 - 120	11/01/18 09:28	11/15/18 13:50	1
p-Terphenyl-d14 (Surr)	58	X	59 - 136	11/01/18 09:28	11/15/18 13:50	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-007

Lab Sample ID: 480-144405-7

Date Collected: 10/25/18 12:40

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/05/18 14:30	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/05/18 14:30	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/05/18 14:30	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/05/18 14:30	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/05/18 14:30	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/05/18 14:30	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/05/18 14:30	1
2-Butanone (MEK)	2.4	J	10	1.3	ug/L			11/05/18 14:30	1
2-Hexanone	10	U	10	1.2	ug/L			11/05/18 14:30	1
2-Methylthiophene	10	U	10	0.44	ug/L			11/05/18 14:30	1
3-Methylthiophene	10	U	10	0.53	ug/L			11/05/18 14:30	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/05/18 14:30	1
Acetone	10	U	10	3.0	ug/L			11/05/18 14:30	1
Benzene	1.0	U	1.0	0.41	ug/L			11/05/18 14:30	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/05/18 14:30	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/05/18 14:30	1
Bromomethane	10	U	10	0.69	ug/L			11/05/18 14:30	1
Carbon disulfide	5.0	U	5.0	0.19	ug/L			11/05/18 14:30	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/05/18 14:30	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/05/18 14:30	1
Chloroethane	10	U	10	0.32	ug/L			11/05/18 14:30	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/05/18 14:30	1
Chloromethane	10	U	10	0.35	ug/L			11/05/18 14:30	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/05/18 14:30	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/05/18 14:30	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/05/18 14:30	1
Ethyl ether	970	E	10	0.72	ug/L			11/05/18 14:30	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/05/18 14:30	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/05/18 14:30	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/05/18 14:30	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/05/18 14:30	1
Styrene	5.0	U	5.0	0.73	ug/L			11/05/18 14:30	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/05/18 14:30	1
Toluene	5.0	U	5.0	0.51	ug/L			11/05/18 14:30	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/05/18 14:30	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/05/18 14:30	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/05/18 14:30	1
Vinyl chloride	10	U	10	0.90	ug/L			11/05/18 14:30	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/05/18 14:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		77 - 120		11/05/18 14:30	1
4-Bromofluorobenzene (Surr)	105		73 - 120		11/05/18 14:30	1
Toluene-d8 (Surr)	98		80 - 120		11/05/18 14:30	1
Dibromofluoromethane (Surr)	96		75 - 123		11/05/18 14:30	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-007

Lab Sample ID: 480-144405-7

Date Collected: 10/25/18 12:40

Matrix: Water

Date Received: 10/27/18 01:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	200	U	200	33	ug/L			11/06/18 04:28	40
1,1,2,2-Tetrachloroethane	200	U	200	8.4	ug/L			11/06/18 04:28	40
1,1,2-Trichloroethane	200	U	200	9.2	ug/L			11/06/18 04:28	40
1,1-Dichloroethane	200	U	200	15	ug/L			11/06/18 04:28	40
1,1-Dichloroethene	200	U	200	12	ug/L			11/06/18 04:28	40
1,2-Dichloroethane	200	U	200	8.4	ug/L			11/06/18 04:28	40
1,2-Dichloropropane	200	U	200	29	ug/L			11/06/18 04:28	40
2-Butanone (MEK)	400	U	400	53	ug/L			11/06/18 04:28	40
2-Hexanone	400	U	400	50	ug/L			11/06/18 04:28	40
2-Methylthiophene	400	U	400	18	ug/L			11/06/18 04:28	40
3-Methylthiophene	400	U	400	21	ug/L			11/06/18 04:28	40
4-Methyl-2-pentanone (MIBK)	400	U	400	84	ug/L			11/06/18 04:28	40
Acetone	400	U	400	120	ug/L			11/06/18 04:28	40
Benzene	40	U	40	16	ug/L			11/06/18 04:28	40
Bromodichloromethane	200	U	200	16	ug/L			11/06/18 04:28	40
Bromoform	200	U	200	10	ug/L			11/06/18 04:28	40
Bromomethane	400	U	400	28	ug/L			11/06/18 04:28	40
Carbon disulfide	200	U	200	7.6	ug/L			11/06/18 04:28	40
Carbon tetrachloride	200	U	200	11	ug/L			11/06/18 04:28	40
Chlorobenzene	200	U	200	30	ug/L			11/06/18 04:28	40
Chloroethane	400	U	400	13	ug/L			11/06/18 04:28	40
Chloroform	200	U	200	14	ug/L			11/06/18 04:28	40
Chloromethane	400	U	400	14	ug/L			11/06/18 04:28	40
cis-1,2-Dichloroethene	200	U	200	32	ug/L			11/06/18 04:28	40
cis-1,3-Dichloropropene	200	U	200	14	ug/L			11/06/18 04:28	40
Dibromochloromethane	200	U	200	13	ug/L			11/06/18 04:28	40
Ethyl ether	1400		400	29	ug/L			11/06/18 04:28	40
Ethylbenzene	200	U	200	30	ug/L			11/06/18 04:28	40
m&p-Xylene	200	U	200	26	ug/L			11/06/18 04:28	40
Methylene Chloride	200	U	200	18	ug/L			11/06/18 04:28	40
o-Xylene	200	U	200	30	ug/L			11/06/18 04:28	40
Styrene	200	U	200	29	ug/L			11/06/18 04:28	40
Tetrachloroethene	200	U	200	14	ug/L			11/06/18 04:28	40
Toluene	200	U	200	20	ug/L			11/06/18 04:28	40
trans-1,2-Dichloroethene	200	U	200	36	ug/L			11/06/18 04:28	40
trans-1,3-Dichloropropene	200	U	200	15	ug/L			11/06/18 04:28	40
Trichloroethene	200	U	200	18	ug/L			11/06/18 04:28	40
Vinyl chloride	400	U	400	36	ug/L			11/06/18 04:28	40

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/06/18 04:28	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		77 - 120		11/06/18 04:28	40
4-Bromofluorobenzene (Surr)	102		73 - 120		11/06/18 04:28	40
Toluene-d8 (Surr)	103		80 - 120		11/06/18 04:28	40
Dibromofluoromethane (Surr)	105		75 - 123		11/06/18 04:28	40

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-007

Lab Sample ID: 480-144405-7

Date Collected: 10/25/18 12:40

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	10	U	10	0.44	ug/L		11/01/18 09:28	11/15/18 14:19	1
1,2-Dichlorobenzene	10	U	10	0.40	ug/L		11/01/18 09:28	11/15/18 14:19	1
1,3-Dichlorobenzene	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 14:19	1
1,4-Dichlorobenzene	10	U	10	0.46	ug/L		11/01/18 09:28	11/15/18 14:19	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 14:19	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.61	ug/L		11/01/18 09:28	11/15/18 14:19	1
2,4-Dichlorophenol	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 14:19	1
2,4-Dimethylphenol	5.0	U	5.0	0.50	ug/L		11/01/18 09:28	11/15/18 14:19	1
2,4-Dinitrophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 14:19	1
2,4-Dinitrotoluene	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 14:19	1
2,6-Dinitrotoluene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 14:19	1
2-Chloronaphthalene	5.0	U	5.0	0.46	ug/L		11/01/18 09:28	11/15/18 14:19	1
2-Chlorophenol	5.0	U	5.0	0.53	ug/L		11/01/18 09:28	11/15/18 14:19	1
2-Methylnaphthalene	5.0	U	5.0	0.60	ug/L		11/01/18 09:28	11/15/18 14:19	1
2-Methylphenol	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 14:19	1
2-Nitroaniline	10	U	10	0.42	ug/L		11/01/18 09:28	11/15/18 14:19	1
2-Nitrophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 14:19	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 14:19	1
3-Nitroaniline	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 14:19	1
4,6-Dinitro-2-methylphenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 14:19	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 14:19	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 14:19	1
4-Chloroaniline	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 14:19	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 14:19	1
4-Methylphenol	10	U	10	0.36	ug/L		11/01/18 09:28	11/15/18 14:19	1
4-Nitroaniline	10	U	10	0.25	ug/L		11/01/18 09:28	11/15/18 14:19	1
4-Nitrophenol	10	U	10	1.5	ug/L		11/01/18 09:28	11/15/18 14:19	1
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/01/18 09:28	11/15/18 14:19	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/01/18 09:28	11/15/18 14:19	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/01/18 09:28	11/15/18 14:19	1
Benzaldehyde	5.0	U	5.0	0.27	ug/L		11/01/18 09:28	11/15/18 14:19	1
Benzo[a]anthracene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 14:19	1
Benzo[a]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 14:19	1
Benzo[b]fluoranthene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 14:19	1
Benzo[g,h,i]perylene	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 14:19	1
Benzo[k]fluoranthene	5.0	U	5.0	0.73	ug/L		11/01/18 09:28	11/15/18 14:19	1
bis (2-chloroisopropyl) ether	5.0	U	5.0	0.52	ug/L		11/01/18 09:28	11/15/18 14:19	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 14:19	1
Bis(2-chloroethyl)ether	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 14:19	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		11/01/18 09:28	11/15/18 14:19	1
Butyl benzyl phthalate	5.0	U	5.0	1.0	ug/L		11/01/18 09:28	11/15/18 14:19	1
Carbazole	5.0	U	5.0	0.30	ug/L		11/01/18 09:28	11/15/18 14:19	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/01/18 09:28	11/15/18 14:19	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/01/18 09:28	11/15/18 14:19	1
Dibenzofuran	10	U	10	0.51	ug/L		11/01/18 09:28	11/15/18 14:19	1
Diethyl phthalate	0.23	J	5.0	0.22	ug/L		11/01/18 09:28	11/15/18 14:19	1
Dimethyl phthalate	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 14:19	1
Di-n-butyl phthalate	5.0	U	5.0	0.31	ug/L		11/01/18 09:28	11/15/18 14:19	1
Di-n-octyl phthalate	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 14:19	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-007

Lab Sample ID: 480-144405-7

Date Collected: 10/25/18 12:40

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 14:19	1
Fluorene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 14:19	1
Hexachlorobenzene	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 14:19	1
Hexachlorobutadiene	5.0	U	5.0	0.68	ug/L		11/01/18 09:28	11/15/18 14:19	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 14:19	1
Hexachloroethane	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 14:19	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 14:19	1
Isophorone	5.0	U	5.0	0.43	ug/L		11/01/18 09:28	11/15/18 14:19	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/01/18 09:28	11/15/18 14:19	1
Nitrobenzene	5.0	U	5.0	0.29	ug/L		11/01/18 09:28	11/15/18 14:19	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.54	ug/L		11/01/18 09:28	11/15/18 14:19	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 14:19	1
Pentachlorophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 14:19	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/01/18 09:28	11/15/18 14:19	1
Phenol	5.0	U	5.0	0.39	ug/L		11/01/18 09:28	11/15/18 14:19	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 14:19	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	8.9	T J	ug/L		2.61		11/01/18 09:28	11/15/18 14:19	1
Unknown	13	T J	ug/L		2.90		11/01/18 09:28	11/15/18 14:19	1
Unknown	1200	T J	ug/L		3.09		11/01/18 09:28	11/15/18 14:19	1
Unknown	260	T J	ug/L		3.33		11/01/18 09:28	11/15/18 14:19	1
Unknown	6.7	T J	ug/L		3.39		11/01/18 09:28	11/15/18 14:19	1
Triethylamine	47	T J N	ug/L		3.43	121-44-8	11/01/18 09:28	11/15/18 14:19	1
Chloriodomethane	13	T J N	ug/L		3.96	593-71-5	11/01/18 09:28	11/15/18 14:19	1
Toluene	6.0	T J N	ug/L		4.43	108-88-3	11/01/18 09:28	11/15/18 14:19	1
Unknown	38	T J	ug/L		5.15		11/01/18 09:28	11/15/18 14:19	1
Carbamic acid, diethyl-, methyl ester	5.9	T J N	ug/L		5.99	4652-44-2	11/01/18 09:28	11/15/18 14:19	1
Unknown	5.8	T J	ug/L		6.47		11/01/18 09:28	11/15/18 14:19	1
Unknown	7.0	T J	ug/L		8.63		11/01/18 09:28	11/15/18 14:19	1
Talbutal	46	T J N	ug/L		10.06	115-44-6	11/01/18 09:28	11/15/18 14:19	1
Unknown	8.0	T J	ug/L		10.22		11/01/18 09:28	11/15/18 14:19	1
Phenobarbital di-methyl derivative	9.2	T J N	ug/L		10.56	1000137-13-1	11/01/18 09:28	11/15/18 14:19	1
Hexobarbital	20	T J N	ug/L		10.64	56-29-1	11/01/18 09:28	11/15/18 14:19	1
Mephobarbital	51	T J N	ug/L		10.78	115-38-8	11/01/18 09:28	11/15/18 14:19	1
Phenobarbital	66	T J N	ug/L		11.04	50-06-6	11/01/18 09:28	11/15/18 14:19	1
Cyclobarbital	34	T J N	ug/L		11.06	52-31-3	11/01/18 09:28	11/15/18 14:19	1
3H-Pyrazol-3-one, 1,2-dihydro-1,5-dimethyl-4- (methylamino)-2	25	T J N	ug/L		12.42	519-98-2	11/01/18 09:28	11/15/18 14:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	89		41 - 120	11/01/18 09:28	11/15/18 14:19	1
2-Fluorobiphenyl	85		48 - 120	11/01/18 09:28	11/15/18 14:19	1
2-Fluorophenol (Surr)	60		35 - 120	11/01/18 09:28	11/15/18 14:19	1
Nitrobenzene-d5 (Surr)	80		46 - 120	11/01/18 09:28	11/15/18 14:19	1
Phenol-d5 (Surr)	44		22 - 120	11/01/18 09:28	11/15/18 14:19	1
p-Terphenyl-d14 (Surr)	63		59 - 136	11/01/18 09:28	11/15/18 14:19	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-008

Lab Sample ID: 480-144405-8

Date Collected: 10/25/18 12:50

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/06/18 02:42	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/06/18 02:42	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/06/18 02:42	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/06/18 02:42	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/06/18 02:42	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/06/18 02:42	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/06/18 02:42	1
2-Butanone (MEK)	4.1	J	10	1.3	ug/L			11/06/18 02:42	1
2-Hexanone	10	U	10	1.2	ug/L			11/06/18 02:42	1
2-Methylthiophene	10	U	10	0.44	ug/L			11/06/18 02:42	1
3-Methylthiophene	10	U	10	0.53	ug/L			11/06/18 02:42	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/06/18 02:42	1
Acetone	6.4	J	10	3.0	ug/L			11/06/18 02:42	1
Benzene	1.0	U	1.0	0.41	ug/L			11/06/18 02:42	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/06/18 02:42	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/06/18 02:42	1
Bromomethane	10	U	10	0.69	ug/L			11/06/18 02:42	1
Carbon disulfide	5.0	U	5.0	0.19	ug/L			11/06/18 02:42	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/06/18 02:42	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/06/18 02:42	1
Chloroethane	10	U	10	0.32	ug/L			11/06/18 02:42	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/06/18 02:42	1
Chloromethane	10	U	10	0.35	ug/L			11/06/18 02:42	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/06/18 02:42	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/06/18 02:42	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/06/18 02:42	1
Ethyl ether	4.6	J	10	0.72	ug/L			11/06/18 02:42	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/06/18 02:42	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/06/18 02:42	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/06/18 02:42	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/06/18 02:42	1
Styrene	5.0	U	5.0	0.73	ug/L			11/06/18 02:42	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/06/18 02:42	1
Toluene	5.0	U	5.0	0.51	ug/L			11/06/18 02:42	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/06/18 02:42	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/06/18 02:42	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/06/18 02:42	1
Vinyl chloride	10	U	10	0.90	ug/L			11/06/18 02:42	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/06/18 02:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		77 - 120					11/06/18 02:42	1
4-Bromofluorobenzene (Surr)	101		73 - 120					11/06/18 02:42	1
Toluene-d8 (Surr)	100		80 - 120					11/06/18 02:42	1
Dibromofluoromethane (Surr)	108		75 - 123					11/06/18 02:42	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-008

Lab Sample ID: 480-144405-8

Date Collected: 10/25/18 12:50

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	10	U	10	0.44	ug/L		11/01/18 09:28	11/15/18 14:49	1
1,2-Dichlorobenzene	10	U	10	0.40	ug/L		11/01/18 09:28	11/15/18 14:49	1
1,3-Dichlorobenzene	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 14:49	1
1,4-Dichlorobenzene	10	U	10	0.46	ug/L		11/01/18 09:28	11/15/18 14:49	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 14:49	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.61	ug/L		11/01/18 09:28	11/15/18 14:49	1
2,4-Dichlorophenol	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 14:49	1
2,4-Dimethylphenol	5.0	U	5.0	0.50	ug/L		11/01/18 09:28	11/15/18 14:49	1
2,4-Dinitrophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 14:49	1
2,4-Dinitrotoluene	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 14:49	1
2,6-Dinitrotoluene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 14:49	1
2-Chloronaphthalene	5.0	U	5.0	0.46	ug/L		11/01/18 09:28	11/15/18 14:49	1
2-Chlorophenol	5.0	U	5.0	0.53	ug/L		11/01/18 09:28	11/15/18 14:49	1
2-Methylnaphthalene	5.0	U	5.0	0.60	ug/L		11/01/18 09:28	11/15/18 14:49	1
2-Methylphenol	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 14:49	1
2-Nitroaniline	10	U	10	0.42	ug/L		11/01/18 09:28	11/15/18 14:49	1
2-Nitrophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 14:49	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 14:49	1
3-Nitroaniline	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 14:49	1
4,6-Dinitro-2-methylphenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 14:49	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 14:49	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 14:49	1
4-Chloroaniline	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 14:49	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 14:49	1
4-Methylphenol	10	U	10	0.36	ug/L		11/01/18 09:28	11/15/18 14:49	1
4-Nitroaniline	10	U	10	0.25	ug/L		11/01/18 09:28	11/15/18 14:49	1
4-Nitrophenol	10	U	10	1.5	ug/L		11/01/18 09:28	11/15/18 14:49	1
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/01/18 09:28	11/15/18 14:49	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/01/18 09:28	11/15/18 14:49	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/01/18 09:28	11/15/18 14:49	1
Benzaldehyde	5.0	U	5.0	0.27	ug/L		11/01/18 09:28	11/15/18 14:49	1
Benzo[a]anthracene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 14:49	1
Benzo[a]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 14:49	1
Benzo[b]fluoranthene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 14:49	1
Benzo[g,h,i]perylene	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 14:49	1
Benzo[k]fluoranthene	5.0	U	5.0	0.73	ug/L		11/01/18 09:28	11/15/18 14:49	1
bis (2-chloroisopropyl) ether	5.0	U	5.0	0.52	ug/L		11/01/18 09:28	11/15/18 14:49	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 14:49	1
Bis(2-chloroethyl)ether	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 14:49	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		11/01/18 09:28	11/15/18 14:49	1
Butyl benzyl phthalate	5.0	U	5.0	1.0	ug/L		11/01/18 09:28	11/15/18 14:49	1
Carbazole	5.0	U	5.0	0.30	ug/L		11/01/18 09:28	11/15/18 14:49	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/01/18 09:28	11/15/18 14:49	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/01/18 09:28	11/15/18 14:49	1
Dibenzofuran	10	U	10	0.51	ug/L		11/01/18 09:28	11/15/18 14:49	1
Diethyl phthalate	5.0	U	5.0	0.22	ug/L		11/01/18 09:28	11/15/18 14:49	1
Dimethyl phthalate	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 14:49	1
Di-n-butyl phthalate	5.0	U	5.0	0.31	ug/L		11/01/18 09:28	11/15/18 14:49	1
Di-n-octyl phthalate	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 14:49	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-008

Lab Sample ID: 480-144405-8

Date Collected: 10/25/18 12:50

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 14:49	1
Fluorene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 14:49	1
Hexachlorobenzene	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 14:49	1
Hexachlorobutadiene	5.0	U	5.0	0.68	ug/L		11/01/18 09:28	11/15/18 14:49	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 14:49	1
Hexachloroethane	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 14:49	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 14:49	1
Isophorone	5.0	U	5.0	0.43	ug/L		11/01/18 09:28	11/15/18 14:49	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/01/18 09:28	11/15/18 14:49	1
Nitrobenzene	5.0	U	5.0	0.29	ug/L		11/01/18 09:28	11/15/18 14:49	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.54	ug/L		11/01/18 09:28	11/15/18 14:49	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 14:49	1
Pentachlorophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 14:49	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/01/18 09:28	11/15/18 14:49	1
Phenol	5.0	U	5.0	0.39	ug/L		11/01/18 09:28	11/15/18 14:49	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 14:49	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	2.1	T J	ug/L		2.48		11/01/18 09:28	11/15/18 14:49	1
Unknown	3.6	T J	ug/L		2.58		11/01/18 09:28	11/15/18 14:49	1
Unknown	2.8	T J	ug/L		2.61		11/01/18 09:28	11/15/18 14:49	1
Unknown	11	T J	ug/L		2.89		11/01/18 09:28	11/15/18 14:49	1
Cyclohexane	12	T J N	ug/L		3.06	110-82-7	11/01/18 09:28	11/15/18 14:49	1
Unknown	10	T J	ug/L		3.10		11/01/18 09:28	11/15/18 14:49	1
Unknown	280	T J	ug/L		3.33		11/01/18 09:28	11/15/18 14:49	1
Unknown	3.3	T J	ug/L		3.38		11/01/18 09:28	11/15/18 14:49	1
Unknown	4.4	T J	ug/L		3.76		11/01/18 09:28	11/15/18 14:49	1
Chloriodomethane	4.6	T J N	ug/L		3.96	593-71-5	11/01/18 09:28	11/15/18 14:49	1
Unknown	2.4	T J	ug/L		4.38		11/01/18 09:28	11/15/18 14:49	1
Toluene	5.7	T J N	ug/L		4.43	108-88-3	11/01/18 09:28	11/15/18 14:49	1
Unknown	37	T J	ug/L		5.15		11/01/18 09:28	11/15/18 14:49	1
Cyclotetrasiloxane, octamethyl-	1.8	T J N	ug/L		6.21	556-67-2	11/01/18 09:28	11/15/18 14:49	1
Hexanoic acid, 2-ethyl-	2.3	T J N	ug/L		7.07	149-57-5	11/01/18 09:28	11/15/18 14:49	1
Cyclopentasiloxane, decamethyl-	1.7	T J N	ug/L		7.16	541-02-6	11/01/18 09:28	11/15/18 14:49	1
Unknown	1.9	T J	ug/L		9.39		11/01/18 09:28	11/15/18 14:49	1
Unknown	3.0	T J	ug/L		12.65		11/01/18 09:28	11/15/18 14:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	79		41 - 120	11/01/18 09:28	11/15/18 14:49	1
2-Fluorobiphenyl	86		48 - 120	11/01/18 09:28	11/15/18 14:49	1
2-Fluorophenol (Surr)	62		35 - 120	11/01/18 09:28	11/15/18 14:49	1
Nitrobenzene-d5 (Surr)	81		46 - 120	11/01/18 09:28	11/15/18 14:49	1
Phenol-d5 (Surr)	47		22 - 120	11/01/18 09:28	11/15/18 14:49	1
p-Terphenyl-d14 (Surr)	64		59 - 136	11/01/18 09:28	11/15/18 14:49	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-009

Lab Sample ID: 480-144405-9

Date Collected: 10/25/18 13:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	10	U	10	1.6	ug/L			11/05/18 15:23	2
1,1,2,2-Tetrachloroethane	10	U	10	0.42	ug/L			11/05/18 15:23	2
1,1,2-Trichloroethane	10	U	10	0.46	ug/L			11/05/18 15:23	2
1,1-Dichloroethane	10	U	10	0.76	ug/L			11/05/18 15:23	2
1,1-Dichloroethene	10	U	10	0.58	ug/L			11/05/18 15:23	2
1,2-Dichloroethane	0.90	J	10	0.42	ug/L			11/05/18 15:23	2
1,2-Dichloropropane	10	U	10	1.4	ug/L			11/05/18 15:23	2
2-Butanone (MEK)	20	U	20	2.6	ug/L			11/05/18 15:23	2
2-Hexanone	20	U	20	2.5	ug/L			11/05/18 15:23	2
2-Methylthiophene	20	U	20	0.88	ug/L			11/05/18 15:23	2
3-Methylthiophene	20	U	20	1.1	ug/L			11/05/18 15:23	2
4-Methyl-2-pentanone (MIBK)	20	U	20	4.2	ug/L			11/05/18 15:23	2
Acetone	20	U	20	6.0	ug/L			11/05/18 15:23	2
Benzene	2.0	U	2.0	0.82	ug/L			11/05/18 15:23	2
Bromodichloromethane	10	U	10	0.78	ug/L			11/05/18 15:23	2
Bromoform	10	U	10	0.52	ug/L			11/05/18 15:23	2
Bromomethane	20	U	20	1.4	ug/L			11/05/18 15:23	2
Carbon disulfide	10	U	10	0.38	ug/L			11/05/18 15:23	2
Carbon tetrachloride	10	U	10	0.54	ug/L			11/05/18 15:23	2
Chlorobenzene	6.4	J	10	1.5	ug/L			11/05/18 15:23	2
Chloroethane	20	U	20	0.64	ug/L			11/05/18 15:23	2
Chloroform	10	U	10	0.68	ug/L			11/05/18 15:23	2
Chloromethane	20	U	20	0.70	ug/L			11/05/18 15:23	2
cis-1,2-Dichloroethene	10	U	10	1.6	ug/L			11/05/18 15:23	2
cis-1,3-Dichloropropene	10	U	10	0.72	ug/L			11/05/18 15:23	2
Dibromochloromethane	10	U	10	0.64	ug/L			11/05/18 15:23	2
Ethyl ether	430	E	20	1.4	ug/L			11/05/18 15:23	2
Ethylbenzene	10	U	10	1.5	ug/L			11/05/18 15:23	2
m&p-Xylene	10	U	10	1.3	ug/L			11/05/18 15:23	2
Methylene Chloride	1.6	J	10	0.88	ug/L			11/05/18 15:23	2
o-Xylene	10	U	10	1.5	ug/L			11/05/18 15:23	2
Styrene	10	U	10	1.5	ug/L			11/05/18 15:23	2
Tetrachloroethene	10	U	10	0.72	ug/L			11/05/18 15:23	2
Toluene	10	U	10	1.0	ug/L			11/05/18 15:23	2
trans-1,2-Dichloroethene	10	U	10	1.8	ug/L			11/05/18 15:23	2
trans-1,3-Dichloropropene	10	U	10	0.74	ug/L			11/05/18 15:23	2
Trichloroethene	10	U	10	0.92	ug/L			11/05/18 15:23	2
Vinyl chloride	20	U	20	1.8	ug/L			11/05/18 15:23	2

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Methane, dichlorofluoro-	6.1	T J N	ug/L		2.05	75-43-4		11/05/18 15:23	2
Benzene, (ethoxymethyl)-	27	T J N	ug/L		9.53	539-30-0		11/05/18 15:23	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		77 - 120		11/05/18 15:23	2
4-Bromofluorobenzene (Surr)	109		73 - 120		11/05/18 15:23	2
Toluene-d8 (Surr)	100		80 - 120		11/05/18 15:23	2
Dibromofluoromethane (Surr)	106		75 - 123		11/05/18 15:23	2

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-009

Lab Sample ID: 480-144405-9

Date Collected: 10/25/18 13:00

Matrix: Water

Date Received: 10/27/18 01:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	50	U	50	8.2	ug/L			11/06/18 04:54	10
1,1,2,2-Tetrachloroethane	50	U	50	2.1	ug/L			11/06/18 04:54	10
1,1,2-Trichloroethane	50	U	50	2.3	ug/L			11/06/18 04:54	10
1,1-Dichloroethane	50	U	50	3.8	ug/L			11/06/18 04:54	10
1,1-Dichloroethene	50	U	50	2.9	ug/L			11/06/18 04:54	10
1,2-Dichloroethane	50	U	50	2.1	ug/L			11/06/18 04:54	10
1,2-Dichloropropane	50	U	50	7.2	ug/L			11/06/18 04:54	10
2-Butanone (MEK)	100	U	100	13	ug/L			11/06/18 04:54	10
2-Hexanone	100	U	100	12	ug/L			11/06/18 04:54	10
2-Methylthiophene	100	U	100	4.4	ug/L			11/06/18 04:54	10
3-Methylthiophene	100	U	100	5.3	ug/L			11/06/18 04:54	10
4-Methyl-2-pentanone (MIBK)	100	U	100	21	ug/L			11/06/18 04:54	10
Acetone	100	U	100	30	ug/L			11/06/18 04:54	10
Benzene	10	U	10	4.1	ug/L			11/06/18 04:54	10
Bromodichloromethane	50	U	50	3.9	ug/L			11/06/18 04:54	10
Bromoform	50	U	50	2.6	ug/L			11/06/18 04:54	10
Bromomethane	100	U	100	6.9	ug/L			11/06/18 04:54	10
Carbon disulfide	50	U	50	1.9	ug/L			11/06/18 04:54	10
Carbon tetrachloride	50	U	50	2.7	ug/L			11/06/18 04:54	10
Chlorobenzene	50	U	50	7.5	ug/L			11/06/18 04:54	10
Chloroethane	100	U	100	3.2	ug/L			11/06/18 04:54	10
Chloroform	50	U	50	3.4	ug/L			11/06/18 04:54	10
Chloromethane	100	U	100	3.5	ug/L			11/06/18 04:54	10
cis-1,2-Dichloroethene	50	U	50	8.1	ug/L			11/06/18 04:54	10
cis-1,3-Dichloropropene	50	U	50	3.6	ug/L			11/06/18 04:54	10
Dibromochloromethane	50	U	50	3.2	ug/L			11/06/18 04:54	10
Ethyl ether	410		100	7.2	ug/L			11/06/18 04:54	10
Ethylbenzene	50	U	50	7.4	ug/L			11/06/18 04:54	10
m&p-Xylene	50	U	50	6.6	ug/L			11/06/18 04:54	10
Methylene Chloride	50	U	50	4.4	ug/L			11/06/18 04:54	10
o-Xylene	50	U	50	7.6	ug/L			11/06/18 04:54	10
Styrene	50	U	50	7.3	ug/L			11/06/18 04:54	10
Tetrachloroethene	50	U	50	3.6	ug/L			11/06/18 04:54	10
Toluene	50	U	50	5.1	ug/L			11/06/18 04:54	10
trans-1,2-Dichloroethene	50	U	50	9.0	ug/L			11/06/18 04:54	10
trans-1,3-Dichloropropene	50	U	50	3.7	ug/L			11/06/18 04:54	10
Trichloroethene	50	U	50	4.6	ug/L			11/06/18 04:54	10
Vinyl chloride	100	U	100	9.0	ug/L			11/06/18 04:54	10

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Benzene, (ethoxymethyl)-	27	T J N	ug/L		9.53	539-30-0		11/06/18 04:54	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		77 - 120		11/06/18 04:54	10
4-Bromofluorobenzene (Surr)	97		73 - 120		11/06/18 04:54	10
Toluene-d8 (Surr)	97		80 - 120		11/06/18 04:54	10
Dibromofluoromethane (Surr)	101		75 - 123		11/06/18 04:54	10

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-009

Lab Sample ID: 480-144405-9

Date Collected: 10/25/18 13:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	10	U	10	0.44	ug/L		11/01/18 09:28	11/15/18 15:18	1
1,2-Dichlorobenzene	10	U	10	0.40	ug/L		11/01/18 09:28	11/15/18 15:18	1
1,3-Dichlorobenzene	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 15:18	1
1,4-Dichlorobenzene	10	U	10	0.46	ug/L		11/01/18 09:28	11/15/18 15:18	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 15:18	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.61	ug/L		11/01/18 09:28	11/15/18 15:18	1
2,4-Dichlorophenol	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 15:18	1
2,4-Dimethylphenol	5.0	U	5.0	0.50	ug/L		11/01/18 09:28	11/15/18 15:18	1
2,4-Dinitrophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 15:18	1
2,4-Dinitrotoluene	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 15:18	1
2,6-Dinitrotoluene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 15:18	1
2-Chloronaphthalene	5.0	U	5.0	0.46	ug/L		11/01/18 09:28	11/15/18 15:18	1
2-Chlorophenol	5.0	U	5.0	0.53	ug/L		11/01/18 09:28	11/15/18 15:18	1
2-Methylnaphthalene	5.0	U	5.0	0.60	ug/L		11/01/18 09:28	11/15/18 15:18	1
2-Methylphenol	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 15:18	1
2-Nitroaniline	10	U	10	0.42	ug/L		11/01/18 09:28	11/15/18 15:18	1
2-Nitrophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 15:18	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 15:18	1
3-Nitroaniline	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 15:18	1
4,6-Dinitro-2-methylphenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 15:18	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 15:18	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 15:18	1
4-Chloroaniline	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 15:18	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 15:18	1
4-Methylphenol	10	U	10	0.36	ug/L		11/01/18 09:28	11/15/18 15:18	1
4-Nitroaniline	10	U	10	0.25	ug/L		11/01/18 09:28	11/15/18 15:18	1
4-Nitrophenol	10	U	10	1.5	ug/L		11/01/18 09:28	11/15/18 15:18	1
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/01/18 09:28	11/15/18 15:18	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/01/18 09:28	11/15/18 15:18	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/01/18 09:28	11/15/18 15:18	1
Benzaldehyde	1.1	J	5.0	0.27	ug/L		11/01/18 09:28	11/15/18 15:18	1
Benzo[a]anthracene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 15:18	1
Benzo[a]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 15:18	1
Benzo[b]fluoranthene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 15:18	1
Benzo[g,h,i]perylene	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 15:18	1
Benzo[k]fluoranthene	5.0	U	5.0	0.73	ug/L		11/01/18 09:28	11/15/18 15:18	1
bis (2-chloroisopropyl) ether	5.0	U	5.0	0.52	ug/L		11/01/18 09:28	11/15/18 15:18	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 15:18	1
Bis(2-chloroethyl)ether	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 15:18	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		11/01/18 09:28	11/15/18 15:18	1
Butyl benzyl phthalate	5.0	U	5.0	1.0	ug/L		11/01/18 09:28	11/15/18 15:18	1
Carbazole	5.0	U	5.0	0.30	ug/L		11/01/18 09:28	11/15/18 15:18	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/01/18 09:28	11/15/18 15:18	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/01/18 09:28	11/15/18 15:18	1
Dibenzofuran	10	U	10	0.51	ug/L		11/01/18 09:28	11/15/18 15:18	1
Diethyl phthalate	5.0	U	5.0	0.22	ug/L		11/01/18 09:28	11/15/18 15:18	1
Dimethyl phthalate	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 15:18	1
Di-n-butyl phthalate	5.0	U	5.0	0.31	ug/L		11/01/18 09:28	11/15/18 15:18	1
Di-n-octyl phthalate	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 15:18	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-009

Lab Sample ID: 480-144405-9

Date Collected: 10/25/18 13:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 15:18	1
Fluorene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 15:18	1
Hexachlorobenzene	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 15:18	1
Hexachlorobutadiene	5.0	U	5.0	0.68	ug/L		11/01/18 09:28	11/15/18 15:18	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 15:18	1
Hexachloroethane	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 15:18	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 15:18	1
Isophorone	5.0	U	5.0	0.43	ug/L		11/01/18 09:28	11/15/18 15:18	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/01/18 09:28	11/15/18 15:18	1
Nitrobenzene	5.0	U	5.0	0.29	ug/L		11/01/18 09:28	11/15/18 15:18	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.54	ug/L		11/01/18 09:28	11/15/18 15:18	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 15:18	1
Pentachlorophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 15:18	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/01/18 09:28	11/15/18 15:18	1
Phenol	5.0	U	5.0	0.39	ug/L		11/01/18 09:28	11/15/18 15:18	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 15:18	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	11	T J	ug/L		2.89		11/01/18 09:28	11/15/18 15:18	1
Diisopropylamine	740	T J N	ug/L		3.08	108-18-9	11/01/18 09:28	11/15/18 15:18	1
Unknown	280	T J	ug/L		3.32		11/01/18 09:28	11/15/18 15:18	1
2-Propanone, 1-chloro-	12	T J N	ug/L		3.38	78-95-5	11/01/18 09:28	11/15/18 15:18	1
Triethylamine	27	T J N	ug/L		3.43	121-44-8	11/01/18 09:28	11/15/18 15:18	1
Chloriodomethane	30	T J N	ug/L		3.95	593-71-5	11/01/18 09:28	11/15/18 15:18	1
Unknown	34	T J	ug/L		5.15		11/01/18 09:28	11/15/18 15:18	1
Benzene, (ethoxymethyl)-	85	T J N	ug/L		6.84	539-30-0	11/01/18 09:28	11/15/18 15:18	1
Benzenamine, 2,6-dimethyl-	17	T J N	ug/L		7.51	87-62-7	11/01/18 09:28	11/15/18 15:18	1
Ethane, 1,2-bis(2-chloroethoxy)-	14	T J N	ug/L		8.02	112-26-5	11/01/18 09:28	11/15/18 15:18	1
Unknown	9.5	T J	ug/L		8.69		11/01/18 09:28	11/15/18 15:18	1
Unknown	27	T J	ug/L		8.76		11/01/18 09:28	11/15/18 15:18	1
Phenol, 4-(1,1,3,3-tetramethylbutyl)-	15	T J N	ug/L		9.56	140-66-9	11/01/18 09:28	11/15/18 15:18	1
Talbutal	55	T J N	ug/L		10.06	115-44-6	11/01/18 09:28	11/15/18 15:18	1
Phenobarbital di-methyl derivative	14	T J N	ug/L		10.56	1000137-13-1	11/01/18 09:28	11/15/18 15:18	1
Unknown	120	T J	ug/L		10.69		11/01/18 09:28	11/15/18 15:18	1
Mephobarbital	170	T J N	ug/L		10.80	115-38-8	11/01/18 09:28	11/15/18 15:18	1
Phenobarbital	78	T J N	ug/L		11.04	50-06-6	11/01/18 09:28	11/15/18 15:18	1
Mepivacaine	72	T J N	ug/L		11.56	96-88-8	11/01/18 09:28	11/15/18 15:18	1
Unknown	67	T J	ug/L		12.67		11/01/18 09:28	11/15/18 15:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	89		41 - 120	11/01/18 09:28	11/15/18 15:18	1
2-Fluorobiphenyl	83		48 - 120	11/01/18 09:28	11/15/18 15:18	1
2-Fluorophenol (Surr)	59		35 - 120	11/01/18 09:28	11/15/18 15:18	1
Nitrobenzene-d5 (Surr)	78		46 - 120	11/01/18 09:28	11/15/18 15:18	1
Phenol-d5 (Surr)	44		22 - 120	11/01/18 09:28	11/15/18 15:18	1
p-Terphenyl-d14 (Surr)	69		59 - 136	11/01/18 09:28	11/15/18 15:18	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-010

Lab Sample ID: 480-144405-10

Date Collected: 10/25/18 14:30

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	25	U	25	4.1	ug/L			11/06/18 03:08	5
1,1,2,2-Tetrachloroethane	25	U	25	1.1	ug/L			11/06/18 03:08	5
1,1,2-Trichloroethane	25	U	25	1.2	ug/L			11/06/18 03:08	5
1,1-Dichloroethane	25	U	25	1.9	ug/L			11/06/18 03:08	5
1,1-Dichloroethene	25	U	25	1.5	ug/L			11/06/18 03:08	5
1,2-Dichloroethane	25	U	25	1.1	ug/L			11/06/18 03:08	5
1,2-Dichloropropane	25	U	25	3.6	ug/L			11/06/18 03:08	5
2-Butanone (MEK)	50	U	50	6.6	ug/L			11/06/18 03:08	5
2-Hexanone	50	U	50	6.2	ug/L			11/06/18 03:08	5
2-Methylthiophene	50	U	50	2.2	ug/L			11/06/18 03:08	5
3-Methylthiophene	50	U	50	2.7	ug/L			11/06/18 03:08	5
4-Methyl-2-pentanone (MIBK)	50	U	50	11	ug/L			11/06/18 03:08	5
Acetone	50	U	50	15	ug/L			11/06/18 03:08	5
Benzene	14		5.0	2.1	ug/L			11/06/18 03:08	5
Bromodichloromethane	25	U	25	2.0	ug/L			11/06/18 03:08	5
Bromoform	25	U	25	1.3	ug/L			11/06/18 03:08	5
Bromomethane	50	U	50	3.5	ug/L			11/06/18 03:08	5
Carbon disulfide	25	U	25	0.95	ug/L			11/06/18 03:08	5
Carbon tetrachloride	25	U	25	1.4	ug/L			11/06/18 03:08	5
Chlorobenzene	25	U	25	3.8	ug/L			11/06/18 03:08	5
Chloroethane	50	U	50	1.6	ug/L			11/06/18 03:08	5
Chloroform	25	U	25	1.7	ug/L			11/06/18 03:08	5
Chloromethane	50	U	50	1.8	ug/L			11/06/18 03:08	5
cis-1,2-Dichloroethene	25	U	25	4.1	ug/L			11/06/18 03:08	5
cis-1,3-Dichloropropene	25	U	25	1.8	ug/L			11/06/18 03:08	5
Dibromochloromethane	25	U	25	1.6	ug/L			11/06/18 03:08	5
Ethyl ether	180		50	3.6	ug/L			11/06/18 03:08	5
Ethylbenzene	25	U	25	3.7	ug/L			11/06/18 03:08	5
m&p-Xylene	25	U	25	3.3	ug/L			11/06/18 03:08	5
Methylene Chloride	25	U	25	2.2	ug/L			11/06/18 03:08	5
o-Xylene	25	U	25	3.8	ug/L			11/06/18 03:08	5
Styrene	25	U	25	3.7	ug/L			11/06/18 03:08	5
Tetrachloroethene	25	U	25	1.8	ug/L			11/06/18 03:08	5
Toluene	25	U	25	2.6	ug/L			11/06/18 03:08	5
trans-1,2-Dichloroethene	25	U	25	4.5	ug/L			11/06/18 03:08	5
trans-1,3-Dichloropropene	25	U	25	1.9	ug/L			11/06/18 03:08	5
Trichloroethene	25	U	25	2.3	ug/L			11/06/18 03:08	5
Vinyl chloride	50	U	50	4.5	ug/L			11/06/18 03:08	5

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Furan, tetrahydro-	930	T J N	ug/L		4.30	109-99-9		11/06/18 03:08	5
Benzene, (ethoxymethyl)-	27	T J N	ug/L		9.53	539-30-0		11/06/18 03:08	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		11/06/18 03:08	5
4-Bromofluorobenzene (Surr)	106		73 - 120		11/06/18 03:08	5
Toluene-d8 (Surr)	100		80 - 120		11/06/18 03:08	5
Dibromofluoromethane (Surr)	98		75 - 123		11/06/18 03:08	5

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-010

Lab Sample ID: 480-144405-10

Date Collected: 10/25/18 14:30

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	10	U	10	0.44	ug/L		11/01/18 09:28	11/15/18 15:47	1
1,2-Dichlorobenzene	10	U	10	0.40	ug/L		11/01/18 09:28	11/15/18 15:47	1
1,3-Dichlorobenzene	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 15:47	1
1,4-Dichlorobenzene	10	U	10	0.46	ug/L		11/01/18 09:28	11/15/18 15:47	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 15:47	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.61	ug/L		11/01/18 09:28	11/15/18 15:47	1
2,4-Dichlorophenol	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 15:47	1
2,4-Dimethylphenol	5.0	U	5.0	0.50	ug/L		11/01/18 09:28	11/15/18 15:47	1
2,4-Dinitrophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 15:47	1
2,4-Dinitrotoluene	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 15:47	1
2,6-Dinitrotoluene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 15:47	1
2-Chloronaphthalene	5.0	U	5.0	0.46	ug/L		11/01/18 09:28	11/15/18 15:47	1
2-Chlorophenol	5.0	U	5.0	0.53	ug/L		11/01/18 09:28	11/15/18 15:47	1
2-Methylnaphthalene	5.0	U	5.0	0.60	ug/L		11/01/18 09:28	11/15/18 15:47	1
2-Methylphenol	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 15:47	1
2-Nitroaniline	10	U	10	0.42	ug/L		11/01/18 09:28	11/15/18 15:47	1
2-Nitrophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 15:47	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 15:47	1
3-Nitroaniline	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 15:47	1
4,6-Dinitro-2-methylphenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 15:47	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 15:47	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 15:47	1
4-Chloroaniline	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 15:47	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 15:47	1
4-Methylphenol	10	U	10	0.36	ug/L		11/01/18 09:28	11/15/18 15:47	1
4-Nitroaniline	10	U	10	0.25	ug/L		11/01/18 09:28	11/15/18 15:47	1
4-Nitrophenol	10	U	10	1.5	ug/L		11/01/18 09:28	11/15/18 15:47	1
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/01/18 09:28	11/15/18 15:47	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/01/18 09:28	11/15/18 15:47	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/01/18 09:28	11/15/18 15:47	1
Benzaldehyde	0.71	J	5.0	0.27	ug/L		11/01/18 09:28	11/15/18 15:47	1
Benzo[a]anthracene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 15:47	1
Benzo[a]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 15:47	1
Benzo[b]fluoranthene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 15:47	1
Benzo[g,h,i]perylene	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 15:47	1
Benzo[k]fluoranthene	5.0	U	5.0	0.73	ug/L		11/01/18 09:28	11/15/18 15:47	1
bis (2-chloroisopropyl) ether	5.0	U	5.0	0.52	ug/L		11/01/18 09:28	11/15/18 15:47	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 15:47	1
Bis(2-chloroethyl)ether	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 15:47	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		11/01/18 09:28	11/15/18 15:47	1
Butyl benzyl phthalate	5.0	U	5.0	1.0	ug/L		11/01/18 09:28	11/15/18 15:47	1
Carbazole	5.0	U	5.0	0.30	ug/L		11/01/18 09:28	11/15/18 15:47	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/01/18 09:28	11/15/18 15:47	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/01/18 09:28	11/15/18 15:47	1
Dibenzofuran	10	U	10	0.51	ug/L		11/01/18 09:28	11/15/18 15:47	1
Diethyl phthalate	1.3	J	5.0	0.22	ug/L		11/01/18 09:28	11/15/18 15:47	1
Dimethyl phthalate	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 15:47	1
Di-n-butyl phthalate	5.0	U	5.0	0.31	ug/L		11/01/18 09:28	11/15/18 15:47	1
Di-n-octyl phthalate	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 15:47	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-010

Lab Sample ID: 480-144405-10

Date Collected: 10/25/18 14:30

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 15:47	1
Fluorene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 15:47	1
Hexachlorobenzene	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 15:47	1
Hexachlorobutadiene	5.0	U	5.0	0.68	ug/L		11/01/18 09:28	11/15/18 15:47	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 15:47	1
Hexachloroethane	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 15:47	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 15:47	1
Isophorone	5.0	U	5.0	0.43	ug/L		11/01/18 09:28	11/15/18 15:47	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/01/18 09:28	11/15/18 15:47	1
Nitrobenzene	5.0	U	5.0	0.29	ug/L		11/01/18 09:28	11/15/18 15:47	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.54	ug/L		11/01/18 09:28	11/15/18 15:47	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 15:47	1
Pentachlorophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 15:47	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/01/18 09:28	11/15/18 15:47	1
Phenol	5.0	U	5.0	0.39	ug/L		11/01/18 09:28	11/15/18 15:47	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 15:47	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	27	T J	ug/L		2.61		11/01/18 09:28	11/15/18 15:47	1
Unknown	55	T J	ug/L		2.67		11/01/18 09:28	11/15/18 15:47	1
Furan, tetrahydro-	800	T J N	ug/L		2.77	109-99-9	11/01/18 09:28	11/15/18 15:47	1
Unknown	20	T J	ug/L		2.91		11/01/18 09:28	11/15/18 15:47	1
Cyclohexane	23	T J N	ug/L		3.06	110-82-7	11/01/18 09:28	11/15/18 15:47	1
Unknown	260	T J	ug/L		3.34		11/01/18 09:28	11/15/18 15:47	1
Chloriodomethane	81	T J N	ug/L		3.96	593-71-5	11/01/18 09:28	11/15/18 15:47	1
Unknown	21	T J	ug/L		5.15		11/01/18 09:28	11/15/18 15:47	1
Benzene, (ethoxymethyl)-	25	T J N	ug/L		6.84	539-30-0	11/01/18 09:28	11/15/18 15:47	1
Unknown	33	T J	ug/L		10.05		11/01/18 09:28	11/15/18 15:47	1
Unknown	14	T J	ug/L		10.23		11/01/18 09:28	11/15/18 15:47	1
Unknown	28	T J	ug/L		10.35		11/01/18 09:28	11/15/18 15:47	1
2,4,6-(1H,3H,5H)-Pyrimidinetrione, 5-ethyl-1,3-dimethyl-5-phe	15	T J N	ug/L		10.56	730-66-5	11/01/18 09:28	11/15/18 15:47	1
Hexobarbital	30	T J N	ug/L		10.64	56-29-1	11/01/18 09:28	11/15/18 15:47	1
Mephobarbital	190	T J N	ug/L		10.80	115-38-8	11/01/18 09:28	11/15/18 15:47	1
Phenobarbital	120	T J N	ug/L		11.05	50-06-6	11/01/18 09:28	11/15/18 15:47	1
Unknown	48	T J	ug/L		11.08		11/01/18 09:28	11/15/18 15:47	1
Unknown	22	T J	ug/L		11.43		11/01/18 09:28	11/15/18 15:47	1
Mepivacaine	46	T J N	ug/L		11.58	96-88-8	11/01/18 09:28	11/15/18 15:47	1
Unknown	15	T J	ug/L		14.33		11/01/18 09:28	11/15/18 15:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	93		41 - 120	11/01/18 09:28	11/15/18 15:47	1
2-Fluorobiphenyl	82		48 - 120	11/01/18 09:28	11/15/18 15:47	1
2-Fluorophenol (Surr)	55		35 - 120	11/01/18 09:28	11/15/18 15:47	1
Nitrobenzene-d5 (Surr)	76		46 - 120	11/01/18 09:28	11/15/18 15:47	1
Phenol-d5 (Surr)	44		22 - 120	11/01/18 09:28	11/15/18 15:47	1
p-Terphenyl-d14 (Surr)	68		59 - 136	11/01/18 09:28	11/15/18 15:47	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-011

Lab Sample ID: 480-144405-11

Date Collected: 10/25/18 13:10

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	25	U	25	4.1	ug/L			11/05/18 16:17	5
1,1,2,2-Tetrachloroethane	25	U	25	1.1	ug/L			11/05/18 16:17	5
1,1,2-Trichloroethane	25	U	25	1.2	ug/L			11/05/18 16:17	5
1,1-Dichloroethane	25	U	25	1.9	ug/L			11/05/18 16:17	5
1,1-Dichloroethene	25	U	25	1.5	ug/L			11/05/18 16:17	5
1,2-Dichloroethane	25	U	25	1.1	ug/L			11/05/18 16:17	5
1,2-Dichloropropane	25	U	25	3.6	ug/L			11/05/18 16:17	5
2-Butanone (MEK)	50	U	50	6.6	ug/L			11/05/18 16:17	5
2-Hexanone	50	U	50	6.2	ug/L			11/05/18 16:17	5
2-Methylthiophene	50	U	50	2.2	ug/L			11/05/18 16:17	5
3-Methylthiophene	50	U	50	2.7	ug/L			11/05/18 16:17	5
4-Methyl-2-pentanone (MIBK)	50	U	50	11	ug/L			11/05/18 16:17	5
Acetone	50	U	50	15	ug/L			11/05/18 16:17	5
Benzene	8.5		5.0	2.1	ug/L			11/05/18 16:17	5
Bromodichloromethane	25	U	25	2.0	ug/L			11/05/18 16:17	5
Bromoform	25	U	25	1.3	ug/L			11/05/18 16:17	5
Bromomethane	50	U	50	3.5	ug/L			11/05/18 16:17	5
Carbon disulfide	25	U	25	0.95	ug/L			11/05/18 16:17	5
Carbon tetrachloride	25	U	25	1.4	ug/L			11/05/18 16:17	5
Chlorobenzene	57		25	3.8	ug/L			11/05/18 16:17	5
Chloroethane	50	U	50	1.6	ug/L			11/05/18 16:17	5
Chloroform	1.9 J		25	1.7	ug/L			11/05/18 16:17	5
Chloromethane	50	U	50	1.8	ug/L			11/05/18 16:17	5
cis-1,2-Dichloroethene	25	U	25	4.1	ug/L			11/05/18 16:17	5
cis-1,3-Dichloropropene	25	U	25	1.8	ug/L			11/05/18 16:17	5
Dibromochloromethane	25	U	25	1.6	ug/L			11/05/18 16:17	5
Ethyl ether	20 J		50	3.6	ug/L			11/05/18 16:17	5
Ethylbenzene	25	U	25	3.7	ug/L			11/05/18 16:17	5
m&p-Xylene	25	U	25	3.3	ug/L			11/05/18 16:17	5
Methylene Chloride	7.7 J		25	2.2	ug/L			11/05/18 16:17	5
o-Xylene	25	U	25	3.8	ug/L			11/05/18 16:17	5
Styrene	25	U	25	3.7	ug/L			11/05/18 16:17	5
Tetrachloroethene	25	U	25	1.8	ug/L			11/05/18 16:17	5
Toluene	25	U	25	2.6	ug/L			11/05/18 16:17	5
trans-1,2-Dichloroethene	25	U	25	4.5	ug/L			11/05/18 16:17	5
trans-1,3-Dichloropropene	25	U	25	1.9	ug/L			11/05/18 16:17	5
Trichloroethene	25	U	25	2.3	ug/L			11/05/18 16:17	5
Vinyl chloride	50	U	50	4.5	ug/L			11/05/18 16:17	5

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/05/18 16:17	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		11/05/18 16:17	5
4-Bromofluorobenzene (Surr)	109		73 - 120		11/05/18 16:17	5
Toluene-d8 (Surr)	97		80 - 120		11/05/18 16:17	5
Dibromofluoromethane (Surr)	98		75 - 123		11/05/18 16:17	5

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-011

Lab Sample ID: 480-144405-11

Date Collected: 10/25/18 13:10

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	10	U	10	0.44	ug/L		11/01/18 09:28	11/15/18 16:17	1
1,2-Dichlorobenzene	10	U	10	0.40	ug/L		11/01/18 09:28	11/15/18 16:17	1
1,3-Dichlorobenzene	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 16:17	1
1,4-Dichlorobenzene	10	U	10	0.46	ug/L		11/01/18 09:28	11/15/18 16:17	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 16:17	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.61	ug/L		11/01/18 09:28	11/15/18 16:17	1
2,4-Dichlorophenol	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 16:17	1
2,4-Dimethylphenol	0.72	J	5.0	0.50	ug/L		11/01/18 09:28	11/15/18 16:17	1
2,4-Dinitrophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 16:17	1
2,4-Dinitrotoluene	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 16:17	1
2,6-Dinitrotoluene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 16:17	1
2-Chloronaphthalene	5.0	U	5.0	0.46	ug/L		11/01/18 09:28	11/15/18 16:17	1
2-Chlorophenol	1.3	J	5.0	0.53	ug/L		11/01/18 09:28	11/15/18 16:17	1
2-Methylnaphthalene	5.0	U	5.0	0.60	ug/L		11/01/18 09:28	11/15/18 16:17	1
2-Methylphenol	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 16:17	1
2-Nitroaniline	10	U	10	0.42	ug/L		11/01/18 09:28	11/15/18 16:17	1
2-Nitrophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 16:17	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 16:17	1
3-Nitroaniline	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 16:17	1
4,6-Dinitro-2-methylphenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 16:17	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 16:17	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 16:17	1
4-Chloroaniline	1.1	J	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 16:17	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 16:17	1
4-Methylphenol	10	U	10	0.36	ug/L		11/01/18 09:28	11/15/18 16:17	1
4-Nitroaniline	10	U	10	0.25	ug/L		11/01/18 09:28	11/15/18 16:17	1
4-Nitrophenol	10	U	10	1.5	ug/L		11/01/18 09:28	11/15/18 16:17	1
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/01/18 09:28	11/15/18 16:17	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/01/18 09:28	11/15/18 16:17	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/01/18 09:28	11/15/18 16:17	1
Benzaldehyde	0.73	J	5.0	0.27	ug/L		11/01/18 09:28	11/15/18 16:17	1
Benzo[a]anthracene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 16:17	1
Benzo[a]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 16:17	1
Benzo[b]fluoranthene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 16:17	1
Benzo[g,h,i]perylene	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 16:17	1
Benzo[k]fluoranthene	5.0	U	5.0	0.73	ug/L		11/01/18 09:28	11/15/18 16:17	1
bis (2-chloroisopropyl) ether	5.0	U	5.0	0.52	ug/L		11/01/18 09:28	11/15/18 16:17	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 16:17	1
Bis(2-chloroethyl)ether	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 16:17	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		11/01/18 09:28	11/15/18 16:17	1
Butyl benzyl phthalate	5.0	U	5.0	1.0	ug/L		11/01/18 09:28	11/15/18 16:17	1
Carbazole	5.0	U	5.0	0.30	ug/L		11/01/18 09:28	11/15/18 16:17	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/01/18 09:28	11/15/18 16:17	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/01/18 09:28	11/15/18 16:17	1
Dibenzofuran	10	U	10	0.51	ug/L		11/01/18 09:28	11/15/18 16:17	1
Diethyl phthalate	5.0	U	5.0	0.22	ug/L		11/01/18 09:28	11/15/18 16:17	1
Dimethyl phthalate	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 16:17	1
Di-n-butyl phthalate	5.0	U	5.0	0.31	ug/L		11/01/18 09:28	11/15/18 16:17	1
Di-n-octyl phthalate	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 16:17	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-011

Lab Sample ID: 480-144405-11

Date Collected: 10/25/18 13:10

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 16:17	1
Fluorene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 16:17	1
Hexachlorobenzene	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 16:17	1
Hexachlorobutadiene	5.0	U	5.0	0.68	ug/L		11/01/18 09:28	11/15/18 16:17	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 16:17	1
Hexachloroethane	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 16:17	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 16:17	1
Isophorone	5.0	U	5.0	0.43	ug/L		11/01/18 09:28	11/15/18 16:17	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/01/18 09:28	11/15/18 16:17	1
Nitrobenzene	5.0	U	5.0	0.29	ug/L		11/01/18 09:28	11/15/18 16:17	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.54	ug/L		11/01/18 09:28	11/15/18 16:17	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 16:17	1
Pentachlorophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 16:17	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/01/18 09:28	11/15/18 16:17	1
Phenol	1.0	J	5.0	0.39	ug/L		11/01/18 09:28	11/15/18 16:17	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 16:17	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	20	T J	ug/L		2.90		11/01/18 09:28	11/15/18 16:17	1
Methane, diethoxy-	24	T J N	ug/L		3.27	462-95-3	11/01/18 09:28	11/15/18 16:17	1
Unknown	240	T J	ug/L		3.33		11/01/18 09:28	11/15/18 16:17	1
Chloriodomethane	47	T J N	ug/L		3.96	593-71-5	11/01/18 09:28	11/15/18 16:17	1
Unknown	32	T J	ug/L		5.15		11/01/18 09:28	11/15/18 16:17	1
Benzene, chloro-	58	T J N	ug/L		5.26	108-90-7	11/01/18 09:28	11/15/18 16:17	1
Unknown	56	T J	ug/L		9.12		11/01/18 09:28	11/15/18 16:17	1
Talbutal	57	T J N	ug/L		10.07	115-44-6	11/01/18 09:28	11/15/18 16:17	1
5-Chloroisatin	45	T J N	ug/L		10.26	17630-76-1	11/01/18 09:28	11/15/18 16:17	1
Hexobarbital	120	T J N	ug/L		10.65	56-29-1	11/01/18 09:28	11/15/18 16:17	1
Antipyrine	32	T J N	ug/L		10.72	60-80-0	11/01/18 09:28	11/15/18 16:17	1
Aminopyrine	21	T J N	ug/L		10.87	58-15-1	11/01/18 09:28	11/15/18 16:17	1
Phenobarbital	74	T J N	ug/L		11.04	50-06-6	11/01/18 09:28	11/15/18 16:17	1
Unknown	19	T J	ug/L		11.07		11/01/18 09:28	11/15/18 16:17	1
Unknown	34	T J	ug/L		11.42		11/01/18 09:28	11/15/18 16:17	1
Mepivacaine	76	T J N	ug/L		11.46	96-88-8	11/01/18 09:28	11/15/18 16:17	1
Unknown	18	T J	ug/L		11.55		11/01/18 09:28	11/15/18 16:17	1
Unknown	94	T J	ug/L		11.70		11/01/18 09:28	11/15/18 16:17	1
Unknown	35	T J	ug/L		11.73		11/01/18 09:28	11/15/18 16:17	1
3H-Pyrazol-3-one, 1,2-dihydro-1,5-dimethyl-4- (methylamino)-2	18	T J N	ug/L		12.44	519-98-2	11/01/18 09:28	11/15/18 16:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	94		41 - 120	11/01/18 09:28	11/15/18 16:17	1
2-Fluorobiphenyl	81		48 - 120	11/01/18 09:28	11/15/18 16:17	1
2-Fluorophenol (Surr)	60		35 - 120	11/01/18 09:28	11/15/18 16:17	1
Nitrobenzene-d5 (Surr)	77		46 - 120	11/01/18 09:28	11/15/18 16:17	1
Phenol-d5 (Surr)	44		22 - 120	11/01/18 09:28	11/15/18 16:17	1
p-Terphenyl-d14 (Surr)	54	X	59 - 136	11/01/18 09:28	11/15/18 16:17	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-012

Lab Sample ID: 480-144405-12

Date Collected: 10/25/18 15:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/05/18 16:43	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/05/18 16:43	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/05/18 16:43	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/05/18 16:43	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/05/18 16:43	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/05/18 16:43	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/05/18 16:43	1
2-Butanone (MEK)	2.3	J	10	1.3	ug/L			11/05/18 16:43	1
2-Hexanone	10	U	10	1.2	ug/L			11/05/18 16:43	1
2-Methylthiophene	10	U	10	0.44	ug/L			11/05/18 16:43	1
3-Methylthiophene	10	U	10	0.53	ug/L			11/05/18 16:43	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/05/18 16:43	1
Acetone	4.5	J	10	3.0	ug/L			11/05/18 16:43	1
Benzene	1.0	U	1.0	0.41	ug/L			11/05/18 16:43	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/05/18 16:43	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/05/18 16:43	1
Bromomethane	10	U	10	0.69	ug/L			11/05/18 16:43	1
Carbon disulfide	5.0	U	5.0	0.19	ug/L			11/05/18 16:43	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/05/18 16:43	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/05/18 16:43	1
Chloroethane	10	U	10	0.32	ug/L			11/05/18 16:43	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/05/18 16:43	1
Chloromethane	10	U	10	0.35	ug/L			11/05/18 16:43	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/05/18 16:43	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/05/18 16:43	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/05/18 16:43	1
Ethyl ether	120	E	10	0.72	ug/L			11/05/18 16:43	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/05/18 16:43	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/05/18 16:43	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/05/18 16:43	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/05/18 16:43	1
Styrene	5.0	U	5.0	0.73	ug/L			11/05/18 16:43	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/05/18 16:43	1
Toluene	5.0	U	5.0	0.51	ug/L			11/05/18 16:43	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/05/18 16:43	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/05/18 16:43	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/05/18 16:43	1
Vinyl chloride	10	U	10	0.90	ug/L			11/05/18 16:43	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/05/18 16:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120					11/05/18 16:43	1
4-Bromofluorobenzene (Surr)	99		73 - 120					11/05/18 16:43	1
Toluene-d8 (Surr)	100		80 - 120					11/05/18 16:43	1
Dibromofluoromethane (Surr)	104		75 - 123					11/05/18 16:43	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-012

Lab Sample ID: 480-144405-12

Date Collected: 10/25/18 15:00

Matrix: Water

Date Received: 10/27/18 01:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	20	U	20	3.3	ug/L			11/06/18 05:21	4
1,1,2,2-Tetrachloroethane	20	U	20	0.84	ug/L			11/06/18 05:21	4
1,1,2-Trichloroethane	20	U	20	0.92	ug/L			11/06/18 05:21	4
1,1-Dichloroethane	20	U	20	1.5	ug/L			11/06/18 05:21	4
1,1-Dichloroethene	20	U	20	1.2	ug/L			11/06/18 05:21	4
1,2-Dichloroethane	20	U	20	0.84	ug/L			11/06/18 05:21	4
1,2-Dichloropropane	20	U	20	2.9	ug/L			11/06/18 05:21	4
2-Butanone (MEK)	40	U	40	5.3	ug/L			11/06/18 05:21	4
2-Hexanone	40	U	40	5.0	ug/L			11/06/18 05:21	4
2-Methylthiophene	40	U	40	1.8	ug/L			11/06/18 05:21	4
3-Methylthiophene	40	U	40	2.1	ug/L			11/06/18 05:21	4
4-Methyl-2-pentanone (MIBK)	40	U	40	8.4	ug/L			11/06/18 05:21	4
Acetone	40	U	40	12	ug/L			11/06/18 05:21	4
Benzene	4.0	U	4.0	1.6	ug/L			11/06/18 05:21	4
Bromodichloromethane	20	U	20	1.6	ug/L			11/06/18 05:21	4
Bromoform	20	U	20	1.0	ug/L			11/06/18 05:21	4
Bromomethane	40	U	40	2.8	ug/L			11/06/18 05:21	4
Carbon disulfide	20	U	20	0.76	ug/L			11/06/18 05:21	4
Carbon tetrachloride	20	U	20	1.1	ug/L			11/06/18 05:21	4
Chlorobenzene	20	U	20	3.0	ug/L			11/06/18 05:21	4
Chloroethane	40	U	40	1.3	ug/L			11/06/18 05:21	4
Chloroform	20	U	20	1.4	ug/L			11/06/18 05:21	4
Chloromethane	40	U	40	1.4	ug/L			11/06/18 05:21	4
cis-1,2-Dichloroethene	20	U	20	3.2	ug/L			11/06/18 05:21	4
cis-1,3-Dichloropropene	20	U	20	1.4	ug/L			11/06/18 05:21	4
Dibromochloromethane	20	U	20	1.3	ug/L			11/06/18 05:21	4
Ethyl ether	120		40	2.9	ug/L			11/06/18 05:21	4
Ethylbenzene	20	U	20	3.0	ug/L			11/06/18 05:21	4
m&p-Xylene	20	U	20	2.6	ug/L			11/06/18 05:21	4
Methylene Chloride	20	U	20	1.8	ug/L			11/06/18 05:21	4
o-Xylene	20	U	20	3.0	ug/L			11/06/18 05:21	4
Styrene	20	U	20	2.9	ug/L			11/06/18 05:21	4
Tetrachloroethene	20	U	20	1.4	ug/L			11/06/18 05:21	4
Toluene	20	U	20	2.0	ug/L			11/06/18 05:21	4
trans-1,2-Dichloroethene	20	U	20	3.6	ug/L			11/06/18 05:21	4
trans-1,3-Dichloropropene	20	U	20	1.5	ug/L			11/06/18 05:21	4
Trichloroethene	20	U	20	1.8	ug/L			11/06/18 05:21	4
Vinyl chloride	40	U	40	3.6	ug/L			11/06/18 05:21	4

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/06/18 05:21	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		11/06/18 05:21	4
4-Bromofluorobenzene (Surr)	106		73 - 120		11/06/18 05:21	4
Toluene-d8 (Surr)	99		80 - 120		11/06/18 05:21	4
Dibromofluoromethane (Surr)	101		75 - 123		11/06/18 05:21	4

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-012

Lab Sample ID: 480-144405-12

Date Collected: 10/25/18 15:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	10	U	10	0.44	ug/L		11/01/18 09:28	11/15/18 16:46	1
1,2-Dichlorobenzene	10	U	10	0.40	ug/L		11/01/18 09:28	11/15/18 16:46	1
1,3-Dichlorobenzene	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 16:46	1
1,4-Dichlorobenzene	10	U	10	0.46	ug/L		11/01/18 09:28	11/15/18 16:46	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 16:46	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.61	ug/L		11/01/18 09:28	11/15/18 16:46	1
2,4-Dichlorophenol	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 16:46	1
2,4-Dimethylphenol	5.0	U	5.0	0.50	ug/L		11/01/18 09:28	11/15/18 16:46	1
2,4-Dinitrophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 16:46	1
2,4-Dinitrotoluene	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 16:46	1
2,6-Dinitrotoluene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 16:46	1
2-Chloronaphthalene	5.0	U	5.0	0.46	ug/L		11/01/18 09:28	11/15/18 16:46	1
2-Chlorophenol	5.0	U	5.0	0.53	ug/L		11/01/18 09:28	11/15/18 16:46	1
2-Methylnaphthalene	5.0	U	5.0	0.60	ug/L		11/01/18 09:28	11/15/18 16:46	1
2-Methylphenol	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 16:46	1
2-Nitroaniline	10	U	10	0.42	ug/L		11/01/18 09:28	11/15/18 16:46	1
2-Nitrophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 16:46	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 16:46	1
3-Nitroaniline	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 16:46	1
4,6-Dinitro-2-methylphenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 16:46	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 16:46	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 16:46	1
4-Chloroaniline	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 16:46	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 16:46	1
4-Methylphenol	10	U	10	0.36	ug/L		11/01/18 09:28	11/15/18 16:46	1
4-Nitroaniline	10	U	10	0.25	ug/L		11/01/18 09:28	11/15/18 16:46	1
4-Nitrophenol	10	U	10	1.5	ug/L		11/01/18 09:28	11/15/18 16:46	1
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/01/18 09:28	11/15/18 16:46	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/01/18 09:28	11/15/18 16:46	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/01/18 09:28	11/15/18 16:46	1
Benzaldehyde	0.43	J	5.0	0.27	ug/L		11/01/18 09:28	11/15/18 16:46	1
Benzo[a]anthracene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 16:46	1
Benzo[a]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 16:46	1
Benzo[b]fluoranthene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 16:46	1
Benzo[g,h,i]perylene	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 16:46	1
Benzo[k]fluoranthene	5.0	U	5.0	0.73	ug/L		11/01/18 09:28	11/15/18 16:46	1
bis (2-chloroisopropyl) ether	5.0	U	5.0	0.52	ug/L		11/01/18 09:28	11/15/18 16:46	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 16:46	1
Bis(2-chloroethyl)ether	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 16:46	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		11/01/18 09:28	11/15/18 16:46	1
Butyl benzyl phthalate	5.0	U	5.0	1.0	ug/L		11/01/18 09:28	11/15/18 16:46	1
Carbazole	5.0	U	5.0	0.30	ug/L		11/01/18 09:28	11/15/18 16:46	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/01/18 09:28	11/15/18 16:46	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/01/18 09:28	11/15/18 16:46	1
Dibenzofuran	10	U	10	0.51	ug/L		11/01/18 09:28	11/15/18 16:46	1
Diethyl phthalate	5.0	U	5.0	0.22	ug/L		11/01/18 09:28	11/15/18 16:46	1
Dimethyl phthalate	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 16:46	1
Di-n-butyl phthalate	5.0	U	5.0	0.31	ug/L		11/01/18 09:28	11/15/18 16:46	1
Di-n-octyl phthalate	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 16:46	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-012

Lab Sample ID: 480-144405-12

Date Collected: 10/25/18 15:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 16:46	1
Fluorene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 16:46	1
Hexachlorobenzene	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 16:46	1
Hexachlorobutadiene	5.0	U	5.0	0.68	ug/L		11/01/18 09:28	11/15/18 16:46	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 16:46	1
Hexachloroethane	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 16:46	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 16:46	1
Isophorone	5.0	U	5.0	0.43	ug/L		11/01/18 09:28	11/15/18 16:46	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/01/18 09:28	11/15/18 16:46	1
Nitrobenzene	5.0	U	5.0	0.29	ug/L		11/01/18 09:28	11/15/18 16:46	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.54	ug/L		11/01/18 09:28	11/15/18 16:46	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 16:46	1
Pentachlorophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 16:46	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/01/18 09:28	11/15/18 16:46	1
Phenol	5.0	U	5.0	0.39	ug/L		11/01/18 09:28	11/15/18 16:46	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 16:46	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	4.4	T J	ug/L		2.46		11/01/18 09:28	11/15/18 16:46	1
Unknown	1.7	T J	ug/L		2.49		11/01/18 09:28	11/15/18 16:46	1
Ethyl Acetate	2.9	T J N	ug/L		2.62	141-78-6	11/01/18 09:28	11/15/18 16:46	1
Unknown	2.4	T J	ug/L		2.71		11/01/18 09:28	11/15/18 16:46	1
Unknown	19	T J	ug/L		2.90		11/01/18 09:28	11/15/18 16:46	1
Unknown	240	T J	ug/L		3.34		11/01/18 09:28	11/15/18 16:46	1
Unknown	7.7	T J	ug/L		3.39		11/01/18 09:28	11/15/18 16:46	1
Unknown	4.9	T J	ug/L		3.76		11/01/18 09:28	11/15/18 16:46	1
Chloriodomethane	35	T J N	ug/L		3.97	593-71-5	11/01/18 09:28	11/15/18 16:46	1
Unknown	2.2	T J	ug/L		4.39		11/01/18 09:28	11/15/18 16:46	1
Toluene	5.8	T J N	ug/L		4.44	108-88-3	11/01/18 09:28	11/15/18 16:46	1
Unknown	24	T J	ug/L		5.15		11/01/18 09:28	11/15/18 16:46	1
Unknown	4.0	T J	ug/L		6.38		11/01/18 09:28	11/15/18 16:46	1
Mephobarbital	13	T J N	ug/L		10.78	115-38-8	11/01/18 09:28	11/15/18 16:46	1
Phenobarbital	1.6	T J N	ug/L		11.02	50-06-6	11/01/18 09:28	11/15/18 16:46	1
Mepivacaine	6.9	T J N	ug/L		11.44	96-88-8	11/01/18 09:28	11/15/18 16:46	1
Unknown	5.6	T J	ug/L		11.47		11/01/18 09:28	11/15/18 16:46	1
Unknown	2.0	T J	ug/L		12.07		11/01/18 09:28	11/15/18 16:46	1
Unknown	2.0	T J	ug/L		12.15		11/01/18 09:28	11/15/18 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	87		41 - 120	11/01/18 09:28	11/15/18 16:46	1
2-Fluorobiphenyl	82		48 - 120	11/01/18 09:28	11/15/18 16:46	1
2-Fluorophenol (Surr)	58		35 - 120	11/01/18 09:28	11/15/18 16:46	1
Nitrobenzene-d5 (Surr)	79		46 - 120	11/01/18 09:28	11/15/18 16:46	1
Phenol-d5 (Surr)	43		22 - 120	11/01/18 09:28	11/15/18 16:46	1
p-Terphenyl-d14 (Surr)	59		59 - 136	11/01/18 09:28	11/15/18 16:46	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-015

Lab Sample ID: 480-144405-15

Date Collected: 10/25/18 16:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/06/18 05:48	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/06/18 05:48	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/06/18 05:48	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/06/18 05:48	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/06/18 05:48	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/06/18 05:48	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/06/18 05:48	1
2-Butanone (MEK)	2.9	J	10	1.3	ug/L			11/06/18 05:48	1
2-Hexanone	10	U	10	1.2	ug/L			11/06/18 05:48	1
2-Methylthiophene	10	U	10	0.44	ug/L			11/06/18 05:48	1
3-Methylthiophene	10	U	10	0.53	ug/L			11/06/18 05:48	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/06/18 05:48	1
Acetone	4.6	J	10	3.0	ug/L			11/06/18 05:48	1
Benzene	1.0	U	1.0	0.41	ug/L			11/06/18 05:48	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/06/18 05:48	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/06/18 05:48	1
Bromomethane	10	U	10	0.69	ug/L			11/06/18 05:48	1
Carbon disulfide	0.28	J B	5.0	0.19	ug/L			11/06/18 05:48	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/06/18 05:48	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/06/18 05:48	1
Chloroethane	10	U	10	0.32	ug/L			11/06/18 05:48	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/06/18 05:48	1
Chloromethane	10	U	10	0.35	ug/L			11/06/18 05:48	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/06/18 05:48	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/06/18 05:48	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/06/18 05:48	1
Ethyl ether	10	U	10	0.72	ug/L			11/06/18 05:48	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/06/18 05:48	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/06/18 05:48	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/06/18 05:48	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/06/18 05:48	1
Styrene	5.0	U	5.0	0.73	ug/L			11/06/18 05:48	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/06/18 05:48	1
Toluene	5.0	U	5.0	0.51	ug/L			11/06/18 05:48	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/06/18 05:48	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/06/18 05:48	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/06/18 05:48	1
Vinyl chloride	10	U	10	0.90	ug/L			11/06/18 05:48	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/06/18 05:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		77 - 120		11/06/18 05:48	1
4-Bromofluorobenzene (Surr)	106		73 - 120		11/06/18 05:48	1
Toluene-d8 (Surr)	99		80 - 120		11/06/18 05:48	1
Dibromofluoromethane (Surr)	107		75 - 123		11/06/18 05:48	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-015

Lab Sample ID: 480-144405-15

Date Collected: 10/25/18 16:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	50	U	50	2.2	ug/L		11/01/18 09:28	11/16/18 07:00	5
1,2-Dichlorobenzene	50	U	50	2.0	ug/L		11/01/18 09:28	11/16/18 07:00	5
1,3-Dichlorobenzene	50	U	50	2.4	ug/L		11/01/18 09:28	11/16/18 07:00	5
1,4-Dichlorobenzene	50	U	50	2.3	ug/L		11/01/18 09:28	11/16/18 07:00	5
2,4,5-Trichlorophenol	25	U	25	2.4	ug/L		11/01/18 09:28	11/16/18 07:00	5
2,4,6-Trichlorophenol	25	U	25	3.1	ug/L		11/01/18 09:28	11/16/18 07:00	5
2,4-Dichlorophenol	25	U	25	2.6	ug/L		11/01/18 09:28	11/16/18 07:00	5
2,4-Dimethylphenol	25	U	25	2.5	ug/L		11/01/18 09:28	11/16/18 07:00	5
2,4-Dinitrophenol	50	U	50	11	ug/L		11/01/18 09:28	11/16/18 07:00	5
2,4-Dinitrotoluene	25	U	25	2.2	ug/L		11/01/18 09:28	11/16/18 07:00	5
2,6-Dinitrotoluene	25	U	25	2.0	ug/L		11/01/18 09:28	11/16/18 07:00	5
2-Chloronaphthalene	25	U	25	2.3	ug/L		11/01/18 09:28	11/16/18 07:00	5
2-Chlorophenol	25	U	25	2.7	ug/L		11/01/18 09:28	11/16/18 07:00	5
2-Methylnaphthalene	25	U	25	3.0	ug/L		11/01/18 09:28	11/16/18 07:00	5
2-Methylphenol	25	U	25	2.0	ug/L		11/01/18 09:28	11/16/18 07:00	5
2-Nitroaniline	50	U	50	2.1	ug/L		11/01/18 09:28	11/16/18 07:00	5
2-Nitrophenol	25	U	25	2.4	ug/L		11/01/18 09:28	11/16/18 07:00	5
3,3'-Dichlorobenzidine	25	U	25	2.0	ug/L		11/01/18 09:28	11/16/18 07:00	5
3-Nitroaniline	50	U	50	2.4	ug/L		11/01/18 09:28	11/16/18 07:00	5
4,6-Dinitro-2-methylphenol	50	U	50	11	ug/L		11/01/18 09:28	11/16/18 07:00	5
4-Bromophenyl phenyl ether	25	U	25	2.3	ug/L		11/01/18 09:28	11/16/18 07:00	5
4-Chloro-3-methylphenol	25	U	25	2.3	ug/L		11/01/18 09:28	11/16/18 07:00	5
4-Chloroaniline	25	U	25	3.0	ug/L		11/01/18 09:28	11/16/18 07:00	5
4-Chlorophenyl phenyl ether	25	U	25	1.8	ug/L		11/01/18 09:28	11/16/18 07:00	5
4-Methylphenol	50	U	50	1.8	ug/L		11/01/18 09:28	11/16/18 07:00	5
4-Nitroaniline	50	U	50	1.3	ug/L		11/01/18 09:28	11/16/18 07:00	5
4-Nitrophenol	50	U	50	7.6	ug/L		11/01/18 09:28	11/16/18 07:00	5
Acenaphthene	25	U	25	2.1	ug/L		11/01/18 09:28	11/16/18 07:00	5
Acenaphthylene	25	U	25	1.9	ug/L		11/01/18 09:28	11/16/18 07:00	5
Anthracene	25	U	25	1.4	ug/L		11/01/18 09:28	11/16/18 07:00	5
Benzaldehyde	25	U	25	1.3	ug/L		11/01/18 09:28	11/16/18 07:00	5
Benzo[a]anthracene	25	U	25	1.8	ug/L		11/01/18 09:28	11/16/18 07:00	5
Benzo[a]pyrene	25	U	25	2.4	ug/L		11/01/18 09:28	11/16/18 07:00	5
Benzo[b]fluoranthene	25	U	25	1.7	ug/L		11/01/18 09:28	11/16/18 07:00	5
Benzo[g,h,i]perylene	25	U	25	1.8	ug/L		11/01/18 09:28	11/16/18 07:00	5
Benzo[k]fluoranthene	25	U	25	3.7	ug/L		11/01/18 09:28	11/16/18 07:00	5
bis (2-chloroisopropyl) ether	25	U	25	2.6	ug/L		11/01/18 09:28	11/16/18 07:00	5
Bis(2-chloroethoxy)methane	25	U	25	1.8	ug/L		11/01/18 09:28	11/16/18 07:00	5
Bis(2-chloroethyl)ether	25	U	25	2.0	ug/L		11/01/18 09:28	11/16/18 07:00	5
Bis(2-ethylhexyl) phthalate	25	U	25	11	ug/L		11/01/18 09:28	11/16/18 07:00	5
Butyl benzyl phthalate	25	U	25	5.0	ug/L		11/01/18 09:28	11/16/18 07:00	5
Carbazole	25	U	25	1.5	ug/L		11/01/18 09:28	11/16/18 07:00	5
Chrysene	25	U	25	1.7	ug/L		11/01/18 09:28	11/16/18 07:00	5
Dibenz(a,h)anthracene	25	U	25	2.1	ug/L		11/01/18 09:28	11/16/18 07:00	5
Dibenzofuran	50	U	50	2.6	ug/L		11/01/18 09:28	11/16/18 07:00	5
Diethyl phthalate	25	U	25	1.1	ug/L		11/01/18 09:28	11/16/18 07:00	5
Dimethyl phthalate	25	U	25	1.8	ug/L		11/01/18 09:28	11/16/18 07:00	5
Di-n-butyl phthalate	25	U	25	1.6	ug/L		11/01/18 09:28	11/16/18 07:00	5
Di-n-octyl phthalate	25	U	25	2.4	ug/L		11/01/18 09:28	11/16/18 07:00	5

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-015

Lab Sample ID: 480-144405-15

Date Collected: 10/25/18 16:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	25	U	25	2.0	ug/L		11/01/18 09:28	11/16/18 07:00	5
Fluorene	25	U	25	1.8	ug/L		11/01/18 09:28	11/16/18 07:00	5
Hexachlorobenzene	25	U	25	2.6	ug/L		11/01/18 09:28	11/16/18 07:00	5
Hexachlorobutadiene	25	U	25	3.4	ug/L		11/01/18 09:28	11/16/18 07:00	5
Hexachlorocyclopentadiene	25	U	25	3.0	ug/L		11/01/18 09:28	11/16/18 07:00	5
Hexachloroethane	25	U	25	3.0	ug/L		11/01/18 09:28	11/16/18 07:00	5
Indeno[1,2,3-cd]pyrene	25	U	25	2.4	ug/L		11/01/18 09:28	11/16/18 07:00	5
Isophorone	25	U	25	2.2	ug/L		11/01/18 09:28	11/16/18 07:00	5
Naphthalene	25	U	25	3.8	ug/L		11/01/18 09:28	11/16/18 07:00	5
Nitrobenzene	25	U	25	1.5	ug/L		11/01/18 09:28	11/16/18 07:00	5
N-Nitrosodi-n-propylamine	25	U	25	2.7	ug/L		11/01/18 09:28	11/16/18 07:00	5
N-Nitrosodiphenylamine	25	U	25	2.6	ug/L		11/01/18 09:28	11/16/18 07:00	5
Pentachlorophenol	50	U	50	11	ug/L		11/01/18 09:28	11/16/18 07:00	5
Phenanthrene	25	U	25	2.2	ug/L		11/01/18 09:28	11/16/18 07:00	5
Phenol	25	U	25	2.0	ug/L		11/01/18 09:28	11/16/18 07:00	5
Pyrene	25	U	25	1.7	ug/L		11/01/18 09:28	11/16/18 07:00	5

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	9.8	T J	ug/L		2.79		11/01/18 09:28	11/16/18 07:00	5
Cyclohexane	91	T J N	ug/L		3.06	110-82-7	11/01/18 09:28	11/16/18 07:00	5
Unknown	310	T J	ug/L		3.24		11/01/18 09:28	11/16/18 07:00	5
Unknown	26	T J	ug/L		5.13		11/01/18 09:28	11/16/18 07:00	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	61		41 - 120	11/01/18 09:28	11/16/18 07:00	5
2-Fluorobiphenyl	81		48 - 120	11/01/18 09:28	11/16/18 07:00	5
2-Fluorophenol (Surr)	57		35 - 120	11/01/18 09:28	11/16/18 07:00	5
Nitrobenzene-d5 (Surr)	73		46 - 120	11/01/18 09:28	11/16/18 07:00	5
Phenol-d5 (Surr)	37		22 - 120	11/01/18 09:28	11/16/18 07:00	5
p-Terphenyl-d14 (Surr)	61		59 - 136	11/01/18 09:28	11/16/18 07:00	5

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-016

Lab Sample ID: 480-144405-16

Date Collected: 10/25/18 16:30

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/06/18 06:15	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/06/18 06:15	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/06/18 06:15	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/06/18 06:15	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/06/18 06:15	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/06/18 06:15	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/06/18 06:15	1
2-Butanone (MEK)	1.6	J	10	1.3	ug/L			11/06/18 06:15	1
2-Hexanone	10	U	10	1.2	ug/L			11/06/18 06:15	1
2-Methylthiophene	10	U	10	0.44	ug/L			11/06/18 06:15	1
3-Methylthiophene	10	U	10	0.53	ug/L			11/06/18 06:15	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/06/18 06:15	1
Acetone	3.3	J	10	3.0	ug/L			11/06/18 06:15	1
Benzene	1.0	U	1.0	0.41	ug/L			11/06/18 06:15	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/06/18 06:15	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/06/18 06:15	1
Bromomethane	10	U	10	0.69	ug/L			11/06/18 06:15	1
Carbon disulfide	5.0	U	5.0	0.19	ug/L			11/06/18 06:15	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/06/18 06:15	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/06/18 06:15	1
Chloroethane	10	U	10	0.32	ug/L			11/06/18 06:15	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/06/18 06:15	1
Chloromethane	10	U	10	0.35	ug/L			11/06/18 06:15	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/06/18 06:15	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/06/18 06:15	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/06/18 06:15	1
Ethyl ether	1.3	J	10	0.72	ug/L			11/06/18 06:15	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/06/18 06:15	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/06/18 06:15	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/06/18 06:15	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/06/18 06:15	1
Styrene	5.0	U	5.0	0.73	ug/L			11/06/18 06:15	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/06/18 06:15	1
Toluene	5.0	U	5.0	0.51	ug/L			11/06/18 06:15	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/06/18 06:15	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/06/18 06:15	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/06/18 06:15	1
Vinyl chloride	10	U	10	0.90	ug/L			11/06/18 06:15	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/06/18 06:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		11/06/18 06:15	1
4-Bromofluorobenzene (Surr)	107		73 - 120		11/06/18 06:15	1
Toluene-d8 (Surr)	98		80 - 120		11/06/18 06:15	1
Dibromofluoromethane (Surr)	99		75 - 123		11/06/18 06:15	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-016

Lab Sample ID: 480-144405-16

Date Collected: 10/25/18 16:30

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	10	U	10	0.44	ug/L		11/01/18 09:28	11/15/18 17:45	1
1,2-Dichlorobenzene	10	U	10	0.40	ug/L		11/01/18 09:28	11/15/18 17:45	1
1,3-Dichlorobenzene	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 17:45	1
1,4-Dichlorobenzene	10	U	10	0.46	ug/L		11/01/18 09:28	11/15/18 17:45	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 17:45	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.61	ug/L		11/01/18 09:28	11/15/18 17:45	1
2,4-Dichlorophenol	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 17:45	1
2,4-Dimethylphenol	5.0	U	5.0	0.50	ug/L		11/01/18 09:28	11/15/18 17:45	1
2,4-Dinitrophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 17:45	1
2,4-Dinitrotoluene	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 17:45	1
2,6-Dinitrotoluene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 17:45	1
2-Chloronaphthalene	5.0	U	5.0	0.46	ug/L		11/01/18 09:28	11/15/18 17:45	1
2-Chlorophenol	5.0	U	5.0	0.53	ug/L		11/01/18 09:28	11/15/18 17:45	1
2-Methylnaphthalene	5.0	U	5.0	0.60	ug/L		11/01/18 09:28	11/15/18 17:45	1
2-Methylphenol	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 17:45	1
2-Nitroaniline	10	U	10	0.42	ug/L		11/01/18 09:28	11/15/18 17:45	1
2-Nitrophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 17:45	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 17:45	1
3-Nitroaniline	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 17:45	1
4,6-Dinitro-2-methylphenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 17:45	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 17:45	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 17:45	1
4-Chloroaniline	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 17:45	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 17:45	1
4-Methylphenol	10	U	10	0.36	ug/L		11/01/18 09:28	11/15/18 17:45	1
4-Nitroaniline	10	U	10	0.25	ug/L		11/01/18 09:28	11/15/18 17:45	1
4-Nitrophenol	10	U	10	1.5	ug/L		11/01/18 09:28	11/15/18 17:45	1
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/01/18 09:28	11/15/18 17:45	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/01/18 09:28	11/15/18 17:45	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/01/18 09:28	11/15/18 17:45	1
Benzaldehyde	5.0	U	5.0	0.27	ug/L		11/01/18 09:28	11/15/18 17:45	1
Benzo[a]anthracene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 17:45	1
Benzo[a]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 17:45	1
Benzo[b]fluoranthene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 17:45	1
Benzo[g,h,i]perylene	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 17:45	1
Benzo[k]fluoranthene	5.0	U	5.0	0.73	ug/L		11/01/18 09:28	11/15/18 17:45	1
bis (2-chloroisopropyl) ether	5.0	U	5.0	0.52	ug/L		11/01/18 09:28	11/15/18 17:45	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 17:45	1
Bis(2-chloroethyl)ether	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 17:45	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		11/01/18 09:28	11/15/18 17:45	1
Butyl benzyl phthalate	5.0	U	5.0	1.0	ug/L		11/01/18 09:28	11/15/18 17:45	1
Carbazole	5.0	U	5.0	0.30	ug/L		11/01/18 09:28	11/15/18 17:45	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/01/18 09:28	11/15/18 17:45	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/01/18 09:28	11/15/18 17:45	1
Dibenzofuran	10	U	10	0.51	ug/L		11/01/18 09:28	11/15/18 17:45	1
Diethyl phthalate	5.0	U	5.0	0.22	ug/L		11/01/18 09:28	11/15/18 17:45	1
Dimethyl phthalate	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 17:45	1
Di-n-butyl phthalate	5.0	U	5.0	0.31	ug/L		11/01/18 09:28	11/15/18 17:45	1
Di-n-octyl phthalate	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 17:45	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-016

Lab Sample ID: 480-144405-16

Date Collected: 10/25/18 16:30

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 17:45	1
Fluorene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 17:45	1
Hexachlorobenzene	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 17:45	1
Hexachlorobutadiene	5.0	U	5.0	0.68	ug/L		11/01/18 09:28	11/15/18 17:45	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 17:45	1
Hexachloroethane	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 17:45	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 17:45	1
Isophorone	5.0	U	5.0	0.43	ug/L		11/01/18 09:28	11/15/18 17:45	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/01/18 09:28	11/15/18 17:45	1
Nitrobenzene	5.0	U	5.0	0.29	ug/L		11/01/18 09:28	11/15/18 17:45	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.54	ug/L		11/01/18 09:28	11/15/18 17:45	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 17:45	1
Pentachlorophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 17:45	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/01/18 09:28	11/15/18 17:45	1
Phenol	5.0	U	5.0	0.39	ug/L		11/01/18 09:28	11/15/18 17:45	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 17:45	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	2.8	T J	ug/L		2.49		11/01/18 09:28	11/15/18 17:45	1
Ethyl Acetate	3.3	T J N	ug/L		2.62	141-78-6	11/01/18 09:28	11/15/18 17:45	1
Furan, tetrahydro-	4.3	T J N	ug/L		2.78	109-99-9	11/01/18 09:28	11/15/18 17:45	1
Unknown	16	T J	ug/L		2.91		11/01/18 09:28	11/15/18 17:45	1
Cyclohexane	5.7	T J N	ug/L		3.04	110-82-7	11/01/18 09:28	11/15/18 17:45	1
Unknown	310	T J	ug/L		3.34		11/01/18 09:28	11/15/18 17:45	1
Unknown	1.6	T J	ug/L		3.40		11/01/18 09:28	11/15/18 17:45	1
Unknown	5.8	T J	ug/L		3.77		11/01/18 09:28	11/15/18 17:45	1
Chloriodomethane	12	T J N	ug/L		3.97	593-71-5	11/01/18 09:28	11/15/18 17:45	1
Unknown	3.3	T J	ug/L		4.39		11/01/18 09:28	11/15/18 17:45	1
Toluene	7.3	T J N	ug/L		4.44	108-88-3	11/01/18 09:28	11/15/18 17:45	1
Unknown	41	T J	ug/L		5.15		11/01/18 09:28	11/15/18 17:45	1
Unknown	1.7	T J	ug/L		6.21		11/01/18 09:28	11/15/18 17:45	1
Cyclopentasiloxane, decamethyl-	2.0	T J N	ug/L		7.16	541-02-6	11/01/18 09:28	11/15/18 17:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	91		41 - 120	11/01/18 09:28	11/15/18 17:45	1
2-Fluorobiphenyl	91		48 - 120	11/01/18 09:28	11/15/18 17:45	1
2-Fluorophenol (Surr)	69		35 - 120	11/01/18 09:28	11/15/18 17:45	1
Nitrobenzene-d5 (Surr)	87		46 - 120	11/01/18 09:28	11/15/18 17:45	1
Phenol-d5 (Surr)	50		22 - 120	11/01/18 09:28	11/15/18 17:45	1
p-Terphenyl-d14 (Surr)	72		59 - 136	11/01/18 09:28	11/15/18 17:45	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-017

Lab Sample ID: 480-144405-17

Date Collected: 10/26/18 09:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	20	U	20	3.3	ug/L			11/06/18 06:41	4
1,1,2,2-Tetrachloroethane	20	U	20	0.84	ug/L			11/06/18 06:41	4
1,1,2-Trichloroethane	20	U	20	0.92	ug/L			11/06/18 06:41	4
1,1-Dichloroethane	20	U	20	1.5	ug/L			11/06/18 06:41	4
1,1-Dichloroethene	20	U	20	1.2	ug/L			11/06/18 06:41	4
1,2-Dichloroethane	20	U	20	0.84	ug/L			11/06/18 06:41	4
1,2-Dichloropropane	20	U	20	2.9	ug/L			11/06/18 06:41	4
2-Butanone (MEK)	40	U	40	5.3	ug/L			11/06/18 06:41	4
2-Hexanone	40	U	40	5.0	ug/L			11/06/18 06:41	4
2-Methylthiophene	40	U	40	1.8	ug/L			11/06/18 06:41	4
3-Methylthiophene	40	U	40	2.1	ug/L			11/06/18 06:41	4
4-Methyl-2-pentanone (MIBK)	40	U	40	8.4	ug/L			11/06/18 06:41	4
Acetone	40	U	40	12	ug/L			11/06/18 06:41	4
Benzene	4.0	U	4.0	1.6	ug/L			11/06/18 06:41	4
Bromodichloromethane	20	U	20	1.6	ug/L			11/06/18 06:41	4
Bromoform	20	U	20	1.0	ug/L			11/06/18 06:41	4
Bromomethane	40	U	40	2.8	ug/L			11/06/18 06:41	4
Carbon disulfide	20	U	20	0.76	ug/L			11/06/18 06:41	4
Carbon tetrachloride	20	U	20	1.1	ug/L			11/06/18 06:41	4
Chlorobenzene	20	U	20	3.0	ug/L			11/06/18 06:41	4
Chloroethane	40	U	40	1.3	ug/L			11/06/18 06:41	4
Chloroform	20	U	20	1.4	ug/L			11/06/18 06:41	4
Chloromethane	40	U	40	1.4	ug/L			11/06/18 06:41	4
cis-1,2-Dichloroethene	20	U	20	3.2	ug/L			11/06/18 06:41	4
cis-1,3-Dichloropropene	20	U	20	1.4	ug/L			11/06/18 06:41	4
Dibromochloromethane	20	U	20	1.3	ug/L			11/06/18 06:41	4
Ethyl ether	810	E	40	2.9	ug/L			11/06/18 06:41	4
Ethylbenzene	20	U	20	3.0	ug/L			11/06/18 06:41	4
m&p-Xylene	20	U	20	2.6	ug/L			11/06/18 06:41	4
Methylene Chloride	20	U	20	1.8	ug/L			11/06/18 06:41	4
o-Xylene	20	U	20	3.0	ug/L			11/06/18 06:41	4
Styrene	20	U	20	2.9	ug/L			11/06/18 06:41	4
Tetrachloroethene	20	U	20	1.4	ug/L			11/06/18 06:41	4
Toluene	20	U	20	2.0	ug/L			11/06/18 06:41	4
trans-1,2-Dichloroethene	20	U	20	3.6	ug/L			11/06/18 06:41	4
trans-1,3-Dichloropropene	20	U	20	1.5	ug/L			11/06/18 06:41	4
Trichloroethene	20	U	20	1.8	ug/L			11/06/18 06:41	4
Vinyl chloride	40	U	40	3.6	ug/L			11/06/18 06:41	4

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/06/18 06:41	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		77 - 120					11/06/18 06:41	4
4-Bromofluorobenzene (Surr)	105		73 - 120					11/06/18 06:41	4
Toluene-d8 (Surr)	99		80 - 120					11/06/18 06:41	4
Dibromofluoromethane (Surr)	105		75 - 123					11/06/18 06:41	4

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-017

Lab Sample ID: 480-144405-17

Date Collected: 10/26/18 09:00

Matrix: Water

Date Received: 10/27/18 01:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	100	U	100	16	ug/L			11/06/18 15:39	20
1,1,2,2-Tetrachloroethane	100	U	100	4.2	ug/L			11/06/18 15:39	20
1,1,2-Trichloroethane	100	U	100	4.6	ug/L			11/06/18 15:39	20
1,1-Dichloroethane	100	U	100	7.6	ug/L			11/06/18 15:39	20
1,1-Dichloroethene	100	U	100	5.8	ug/L			11/06/18 15:39	20
1,2-Dichloroethane	100	U	100	4.2	ug/L			11/06/18 15:39	20
1,2-Dichloropropane	100	U	100	14	ug/L			11/06/18 15:39	20
2-Butanone (MEK)	200	U	200	26	ug/L			11/06/18 15:39	20
2-Hexanone	200	U	200	25	ug/L			11/06/18 15:39	20
2-Methylthiophene	200	U	200	8.8	ug/L			11/06/18 15:39	20
3-Methylthiophene	200	U	200	11	ug/L			11/06/18 15:39	20
4-Methyl-2-pentanone (MIBK)	200	U	200	42	ug/L			11/06/18 15:39	20
Acetone	200	U	200	60	ug/L			11/06/18 15:39	20
Benzene	20	U	20	8.2	ug/L			11/06/18 15:39	20
Bromodichloromethane	100	U	100	7.8	ug/L			11/06/18 15:39	20
Bromoform	100	U	100	5.2	ug/L			11/06/18 15:39	20
Bromomethane	200	U	200	14	ug/L			11/06/18 15:39	20
Carbon disulfide	100	U	100	3.8	ug/L			11/06/18 15:39	20
Carbon tetrachloride	100	U	100	5.4	ug/L			11/06/18 15:39	20
Chlorobenzene	100	U	100	15	ug/L			11/06/18 15:39	20
Chloroethane	200	U	200	6.4	ug/L			11/06/18 15:39	20
Chloroform	100	U	100	6.8	ug/L			11/06/18 15:39	20
Chloromethane	200	U	200	7.0	ug/L			11/06/18 15:39	20
cis-1,2-Dichloroethene	100	U	100	16	ug/L			11/06/18 15:39	20
cis-1,3-Dichloropropene	100	U	100	7.2	ug/L			11/06/18 15:39	20
Dibromochloromethane	100	U	100	6.4	ug/L			11/06/18 15:39	20
Ethyl ether	920		200	14	ug/L			11/06/18 15:39	20
Ethylbenzene	100	U	100	15	ug/L			11/06/18 15:39	20
m&p-Xylene	100	U	100	13	ug/L			11/06/18 15:39	20
Methylene Chloride	11 J		100	8.8	ug/L			11/06/18 15:39	20
o-Xylene	100	U	100	15	ug/L			11/06/18 15:39	20
Styrene	100	U	100	15	ug/L			11/06/18 15:39	20
Tetrachloroethene	100	U	100	7.2	ug/L			11/06/18 15:39	20
Toluene	100	U	100	10	ug/L			11/06/18 15:39	20
trans-1,2-Dichloroethene	100	U	100	18	ug/L			11/06/18 15:39	20
trans-1,3-Dichloropropene	100	U	100	7.4	ug/L			11/06/18 15:39	20
Trichloroethene	100	U	100	9.2	ug/L			11/06/18 15:39	20
Vinyl chloride	200	U	200	18	ug/L			11/06/18 15:39	20

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/06/18 15:39	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		11/06/18 15:39	20
4-Bromofluorobenzene (Surr)	103		73 - 120		11/06/18 15:39	20
Toluene-d8 (Surr)	98		80 - 120		11/06/18 15:39	20
Dibromofluoromethane (Surr)	107		75 - 123		11/06/18 15:39	20

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-017

Lab Sample ID: 480-144405-17

Date Collected: 10/26/18 09:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	50	U	50	2.2	ug/L		11/01/18 09:28	11/15/18 18:15	5
1,2-Dichlorobenzene	50	U	50	2.0	ug/L		11/01/18 09:28	11/15/18 18:15	5
1,3-Dichlorobenzene	50	U	50	2.4	ug/L		11/01/18 09:28	11/15/18 18:15	5
1,4-Dichlorobenzene	50	U	50	2.3	ug/L		11/01/18 09:28	11/15/18 18:15	5
2,4,5-Trichlorophenol	25	U	25	2.4	ug/L		11/01/18 09:28	11/15/18 18:15	5
2,4,6-Trichlorophenol	25	U	25	3.1	ug/L		11/01/18 09:28	11/15/18 18:15	5
2,4-Dichlorophenol	25	U	25	2.6	ug/L		11/01/18 09:28	11/15/18 18:15	5
2,4-Dimethylphenol	25	U	25	2.5	ug/L		11/01/18 09:28	11/15/18 18:15	5
2,4-Dinitrophenol	50	U	50	11	ug/L		11/01/18 09:28	11/15/18 18:15	5
2,4-Dinitrotoluene	25	U	25	2.2	ug/L		11/01/18 09:28	11/15/18 18:15	5
2,6-Dinitrotoluene	25	U	25	2.0	ug/L		11/01/18 09:28	11/15/18 18:15	5
2-Chloronaphthalene	25	U	25	2.3	ug/L		11/01/18 09:28	11/15/18 18:15	5
2-Chlorophenol	25	U	25	2.7	ug/L		11/01/18 09:28	11/15/18 18:15	5
2-Methylnaphthalene	25	U	25	3.0	ug/L		11/01/18 09:28	11/15/18 18:15	5
2-Methylphenol	25	U	25	2.0	ug/L		11/01/18 09:28	11/15/18 18:15	5
2-Nitroaniline	50	U	50	2.1	ug/L		11/01/18 09:28	11/15/18 18:15	5
2-Nitrophenol	25	U	25	2.4	ug/L		11/01/18 09:28	11/15/18 18:15	5
3,3'-Dichlorobenzidine	25	U	25	2.0	ug/L		11/01/18 09:28	11/15/18 18:15	5
3-Nitroaniline	50	U	50	2.4	ug/L		11/01/18 09:28	11/15/18 18:15	5
4,6-Dinitro-2-methylphenol	50	U	50	11	ug/L		11/01/18 09:28	11/15/18 18:15	5
4-Bromophenyl phenyl ether	25	U	25	2.3	ug/L		11/01/18 09:28	11/15/18 18:15	5
4-Chloro-3-methylphenol	25	U	25	2.3	ug/L		11/01/18 09:28	11/15/18 18:15	5
4-Chloroaniline	25	U	25	3.0	ug/L		11/01/18 09:28	11/15/18 18:15	5
4-Chlorophenyl phenyl ether	25	U	25	1.8	ug/L		11/01/18 09:28	11/15/18 18:15	5
4-Methylphenol	50	U	50	1.8	ug/L		11/01/18 09:28	11/15/18 18:15	5
4-Nitroaniline	50	U	50	1.3	ug/L		11/01/18 09:28	11/15/18 18:15	5
4-Nitrophenol	50	U	50	7.6	ug/L		11/01/18 09:28	11/15/18 18:15	5
Acenaphthene	25	U	25	2.1	ug/L		11/01/18 09:28	11/15/18 18:15	5
Acenaphthylene	25	U	25	1.9	ug/L		11/01/18 09:28	11/15/18 18:15	5
Anthracene	25	U	25	1.4	ug/L		11/01/18 09:28	11/15/18 18:15	5
Benzaldehyde	25	U	25	1.3	ug/L		11/01/18 09:28	11/15/18 18:15	5
Benzo[a]anthracene	25	U	25	1.8	ug/L		11/01/18 09:28	11/15/18 18:15	5
Benzo[a]pyrene	25	U	25	2.4	ug/L		11/01/18 09:28	11/15/18 18:15	5
Benzo[b]fluoranthene	25	U	25	1.7	ug/L		11/01/18 09:28	11/15/18 18:15	5
Benzo[g,h,i]perylene	25	U	25	1.8	ug/L		11/01/18 09:28	11/15/18 18:15	5
Benzo[k]fluoranthene	25	U	25	3.7	ug/L		11/01/18 09:28	11/15/18 18:15	5
bis (2-chloroisopropyl) ether	25	U	25	2.6	ug/L		11/01/18 09:28	11/15/18 18:15	5
Bis(2-chloroethoxy)methane	25	U	25	1.8	ug/L		11/01/18 09:28	11/15/18 18:15	5
Bis(2-chloroethyl)ether	25	U	25	2.0	ug/L		11/01/18 09:28	11/15/18 18:15	5
Bis(2-ethylhexyl) phthalate	25	U	25	11	ug/L		11/01/18 09:28	11/15/18 18:15	5
Butyl benzyl phthalate	25	U	25	5.0	ug/L		11/01/18 09:28	11/15/18 18:15	5
Carbazole	25	U	25	1.5	ug/L		11/01/18 09:28	11/15/18 18:15	5
Chrysene	25	U	25	1.7	ug/L		11/01/18 09:28	11/15/18 18:15	5
Dibenz(a,h)anthracene	25	U	25	2.1	ug/L		11/01/18 09:28	11/15/18 18:15	5
Dibenzofuran	50	U	50	2.6	ug/L		11/01/18 09:28	11/15/18 18:15	5
Diethyl phthalate	25	U	25	1.1	ug/L		11/01/18 09:28	11/15/18 18:15	5
Dimethyl phthalate	25	U	25	1.8	ug/L		11/01/18 09:28	11/15/18 18:15	5
Di-n-butyl phthalate	25	U	25	1.6	ug/L		11/01/18 09:28	11/15/18 18:15	5
Di-n-octyl phthalate	25	U	25	2.4	ug/L		11/01/18 09:28	11/15/18 18:15	5

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-017

Lab Sample ID: 480-144405-17

Date Collected: 10/26/18 09:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	25	U	25	2.0	ug/L		11/01/18 09:28	11/15/18 18:15	5
Fluorene	25	U	25	1.8	ug/L		11/01/18 09:28	11/15/18 18:15	5
Hexachlorobenzene	25	U	25	2.6	ug/L		11/01/18 09:28	11/15/18 18:15	5
Hexachlorobutadiene	25	U	25	3.4	ug/L		11/01/18 09:28	11/15/18 18:15	5
Hexachlorocyclopentadiene	25	U	25	3.0	ug/L		11/01/18 09:28	11/15/18 18:15	5
Hexachloroethane	25	U	25	3.0	ug/L		11/01/18 09:28	11/15/18 18:15	5
Indeno[1,2,3-cd]pyrene	25	U	25	2.4	ug/L		11/01/18 09:28	11/15/18 18:15	5
Isophorone	25	U	25	2.2	ug/L		11/01/18 09:28	11/15/18 18:15	5
Naphthalene	25	U	25	3.8	ug/L		11/01/18 09:28	11/15/18 18:15	5
Nitrobenzene	25	U	25	1.5	ug/L		11/01/18 09:28	11/15/18 18:15	5
N-Nitrosodi-n-propylamine	25	U	25	2.7	ug/L		11/01/18 09:28	11/15/18 18:15	5
N-Nitrosodiphenylamine	25	U	25	2.6	ug/L		11/01/18 09:28	11/15/18 18:15	5
Pentachlorophenol	50	U	50	11	ug/L		11/01/18 09:28	11/15/18 18:15	5
Phenanthrene	25	U	25	2.2	ug/L		11/01/18 09:28	11/15/18 18:15	5
Phenol	25	U	25	2.0	ug/L		11/01/18 09:28	11/15/18 18:15	5
Pyrene	25	U	25	1.7	ug/L		11/01/18 09:28	11/15/18 18:15	5

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	9.5	T J	ug/L		2.79		11/01/18 09:28	11/15/18 18:15	5
Diisopropylamine	700	T J N	ug/L		2.99	108-18-9	11/01/18 09:28	11/15/18 18:15	5
Unknown	300	T J	ug/L		3.24		11/01/18 09:28	11/15/18 18:15	5
Triethylamine	22	T J N	ug/L		3.36	121-44-8	11/01/18 09:28	11/15/18 18:15	5
Chloriodomethane	45	T J N	ug/L		3.91	593-71-5	11/01/18 09:28	11/15/18 18:15	5
Unknown	14	T J	ug/L		4.23		11/01/18 09:28	11/15/18 18:15	5
Butanoic acid	8.4	T J N	ug/L		4.53	107-92-6	11/01/18 09:28	11/15/18 18:15	5
Unknown	99	T J	ug/L		5.14		11/01/18 09:28	11/15/18 18:15	5
Unknown	32	T J	ug/L		5.26		11/01/18 09:28	11/15/18 18:15	5
Benzoic Acid	9.4	T J N	ug/L		7.38	65-85-0	11/01/18 09:28	11/15/18 18:15	5
Benzeneacetic acid	68	T J N	ug/L		7.84	103-82-2	11/01/18 09:28	11/15/18 18:15	5
Unknown	9.3	T J	ug/L		7.90		11/01/18 09:28	11/15/18 18:15	5
Unknown	22	T J	ug/L		9.11		11/01/18 09:28	11/15/18 18:15	5
Talbutal	33	T J N	ug/L		10.04	115-44-6	11/01/18 09:28	11/15/18 18:15	5
Unknown	12	T J	ug/L		10.57		11/01/18 09:28	11/15/18 18:15	5
Phenobarbital	11	T J N	ug/L		11.02	50-06-6	11/01/18 09:28	11/15/18 18:15	5
Unknown	27	T J	ug/L		11.05		11/01/18 09:28	11/15/18 18:15	5
3H-Pyrazol-3-one, 1,2-dihydro-1,5-dimethyl-4- (methylamino)-2	24	T J N	ug/L		12.41	519-98-2	11/01/18 09:28	11/15/18 18:15	5
Unknown	10	T J	ug/L		13.69		11/01/18 09:28	11/15/18 18:15	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	78		41 - 120	11/01/18 09:28	11/15/18 18:15	5
2-Fluorobiphenyl	75		48 - 120	11/01/18 09:28	11/15/18 18:15	5
2-Fluorophenol (Surr)	58		35 - 120	11/01/18 09:28	11/15/18 18:15	5
Nitrobenzene-d5 (Surr)	70		46 - 120	11/01/18 09:28	11/15/18 18:15	5
Phenol-d5 (Surr)	38		22 - 120	11/01/18 09:28	11/15/18 18:15	5
p-Terphenyl-d14 (Surr)	77		59 - 136	11/01/18 09:28	11/15/18 18:15	5

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-018

Lab Sample ID: 480-144405-18

Date Collected: 10/26/18 10:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	100	U	100	16	ug/L			11/06/18 07:08	20
1,1,1,2-Tetrachloroethane	100	U	100	4.2	ug/L			11/06/18 07:08	20
1,1,2-Trichloroethane	100	U	100	4.6	ug/L			11/06/18 07:08	20
1,1-Dichloroethane	100	U	100	7.6	ug/L			11/06/18 07:08	20
1,1-Dichloroethene	100	U	100	5.8	ug/L			11/06/18 07:08	20
1,2-Dichloroethane	100	U	100	4.2	ug/L			11/06/18 07:08	20
1,2-Dichloropropane	100	U	100	14	ug/L			11/06/18 07:08	20
2-Butanone (MEK)	200	U	200	26	ug/L			11/06/18 07:08	20
2-Hexanone	200	U	200	25	ug/L			11/06/18 07:08	20
2-Methylthiophene	200	U	200	8.8	ug/L			11/06/18 07:08	20
3-Methylthiophene	200	U	200	11	ug/L			11/06/18 07:08	20
4-Methyl-2-pentanone (MIBK)	200	U	200	42	ug/L			11/06/18 07:08	20
Acetone	200	U	200	60	ug/L			11/06/18 07:08	20
Benzene	20	U	20	8.2	ug/L			11/06/18 07:08	20
Bromodichloromethane	100	U	100	7.8	ug/L			11/06/18 07:08	20
Bromoform	100	U	100	5.2	ug/L			11/06/18 07:08	20
Bromomethane	200	U	200	14	ug/L			11/06/18 07:08	20
Carbon disulfide	100	U	100	3.8	ug/L			11/06/18 07:08	20
Carbon tetrachloride	100	U	100	5.4	ug/L			11/06/18 07:08	20
Chlorobenzene	100	U	100	15	ug/L			11/06/18 07:08	20
Chloroethane	200	U	200	6.4	ug/L			11/06/18 07:08	20
Chloroform	100	U	100	6.8	ug/L			11/06/18 07:08	20
Chloromethane	200	U	200	7.0	ug/L			11/06/18 07:08	20
cis-1,2-Dichloroethene	100	U	100	16	ug/L			11/06/18 07:08	20
cis-1,3-Dichloropropene	100	U	100	7.2	ug/L			11/06/18 07:08	20
Dibromochloromethane	100	U	100	6.4	ug/L			11/06/18 07:08	20
Ethyl ether	1200		200	14	ug/L			11/06/18 07:08	20
Ethylbenzene	100	U	100	15	ug/L			11/06/18 07:08	20
m&p-Xylene	100	U	100	13	ug/L			11/06/18 07:08	20
Methylene Chloride	100	U	100	8.8	ug/L			11/06/18 07:08	20
o-Xylene	100	U	100	15	ug/L			11/06/18 07:08	20
Styrene	100	U	100	15	ug/L			11/06/18 07:08	20
Tetrachloroethene	100	U	100	7.2	ug/L			11/06/18 07:08	20
Toluene	100	U	100	10	ug/L			11/06/18 07:08	20
trans-1,2-Dichloroethene	100	U	100	18	ug/L			11/06/18 07:08	20
trans-1,3-Dichloropropene	100	U	100	7.4	ug/L			11/06/18 07:08	20
Trichloroethene	100	U	100	9.2	ug/L			11/06/18 07:08	20
Vinyl chloride	200	U	200	18	ug/L			11/06/18 07:08	20

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/06/18 07:08	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		77 - 120					11/06/18 07:08	20
4-Bromofluorobenzene (Surr)	102		73 - 120					11/06/18 07:08	20
Toluene-d8 (Surr)	97		80 - 120					11/06/18 07:08	20
Dibromofluoromethane (Surr)	107		75 - 123					11/06/18 07:08	20

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-018

Lab Sample ID: 480-144405-18

Date Collected: 10/26/18 10:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	100	U	100	4.4	ug/L		11/01/18 09:28	11/16/18 07:29	10
1,2-Dichlorobenzene	100	U	100	4.0	ug/L		11/01/18 09:28	11/16/18 07:29	10
1,3-Dichlorobenzene	100	U	100	4.8	ug/L		11/01/18 09:28	11/16/18 07:29	10
1,4-Dichlorobenzene	100	U	100	4.6	ug/L		11/01/18 09:28	11/16/18 07:29	10
2,4,5-Trichlorophenol	50	U	50	4.8	ug/L		11/01/18 09:28	11/16/18 07:29	10
2,4,6-Trichlorophenol	50	U	50	6.1	ug/L		11/01/18 09:28	11/16/18 07:29	10
2,4-Dichlorophenol	50	U	50	5.1	ug/L		11/01/18 09:28	11/16/18 07:29	10
2,4-Dimethylphenol	50	U	50	5.0	ug/L		11/01/18 09:28	11/16/18 07:29	10
2,4-Dinitrophenol	100	U	100	22	ug/L		11/01/18 09:28	11/16/18 07:29	10
2,4-Dinitrotoluene	50	U	50	4.5	ug/L		11/01/18 09:28	11/16/18 07:29	10
2,6-Dinitrotoluene	50	U	50	4.0	ug/L		11/01/18 09:28	11/16/18 07:29	10
2-Chloronaphthalene	50	U	50	4.6	ug/L		11/01/18 09:28	11/16/18 07:29	10
2-Chlorophenol	50	U	50	5.3	ug/L		11/01/18 09:28	11/16/18 07:29	10
2-Methylnaphthalene	50	U	50	6.0	ug/L		11/01/18 09:28	11/16/18 07:29	10
2-Methylphenol	50	U	50	4.0	ug/L		11/01/18 09:28	11/16/18 07:29	10
2-Nitroaniline	100	U	100	4.2	ug/L		11/01/18 09:28	11/16/18 07:29	10
2-Nitrophenol	50	U	50	4.8	ug/L		11/01/18 09:28	11/16/18 07:29	10
3,3'-Dichlorobenzidine	50	U	50	4.0	ug/L		11/01/18 09:28	11/16/18 07:29	10
3-Nitroaniline	100	U	100	4.8	ug/L		11/01/18 09:28	11/16/18 07:29	10
4,6-Dinitro-2-methylphenol	100	U	100	22	ug/L		11/01/18 09:28	11/16/18 07:29	10
4-Bromophenyl phenyl ether	50	U	50	4.5	ug/L		11/01/18 09:28	11/16/18 07:29	10
4-Chloro-3-methylphenol	50	U	50	4.5	ug/L		11/01/18 09:28	11/16/18 07:29	10
4-Chloroaniline	50	U	50	5.9	ug/L		11/01/18 09:28	11/16/18 07:29	10
4-Chlorophenyl phenyl ether	50	U	50	3.5	ug/L		11/01/18 09:28	11/16/18 07:29	10
4-Methylphenol	100	U	100	3.6	ug/L		11/01/18 09:28	11/16/18 07:29	10
4-Nitroaniline	100	U	100	2.5	ug/L		11/01/18 09:28	11/16/18 07:29	10
4-Nitrophenol	100	U	100	15	ug/L		11/01/18 09:28	11/16/18 07:29	10
Acenaphthene	50	U	50	4.1	ug/L		11/01/18 09:28	11/16/18 07:29	10
Acenaphthylene	50	U	50	3.8	ug/L		11/01/18 09:28	11/16/18 07:29	10
Anthracene	50	U	50	2.8	ug/L		11/01/18 09:28	11/16/18 07:29	10
Benzaldehyde	50	U	50	2.7	ug/L		11/01/18 09:28	11/16/18 07:29	10
Benzo[a]anthracene	50	U	50	3.6	ug/L		11/01/18 09:28	11/16/18 07:29	10
Benzo[a]pyrene	50	U	50	4.7	ug/L		11/01/18 09:28	11/16/18 07:29	10
Benzo[b]fluoranthene	50	U	50	3.4	ug/L		11/01/18 09:28	11/16/18 07:29	10
Benzo[g,h,i]perylene	50	U	50	3.5	ug/L		11/01/18 09:28	11/16/18 07:29	10
Benzo[k]fluoranthene	50	U	50	7.3	ug/L		11/01/18 09:28	11/16/18 07:29	10
bis (2-chloroisopropyl) ether	50	U	50	5.2	ug/L		11/01/18 09:28	11/16/18 07:29	10
Bis(2-chloroethoxy)methane	50	U	50	3.5	ug/L		11/01/18 09:28	11/16/18 07:29	10
Bis(2-chloroethyl)ether	50	U	50	4.0	ug/L		11/01/18 09:28	11/16/18 07:29	10
Bis(2-ethylhexyl) phthalate	50	U	50	22	ug/L		11/01/18 09:28	11/16/18 07:29	10
Butyl benzyl phthalate	50	U	50	10	ug/L		11/01/18 09:28	11/16/18 07:29	10
Carbazole	50	U	50	3.0	ug/L		11/01/18 09:28	11/16/18 07:29	10
Chrysene	50	U	50	3.3	ug/L		11/01/18 09:28	11/16/18 07:29	10
Dibenz(a,h)anthracene	50	U	50	4.2	ug/L		11/01/18 09:28	11/16/18 07:29	10
Dibenzofuran	100	U	100	5.1	ug/L		11/01/18 09:28	11/16/18 07:29	10
Diethyl phthalate	50	U	50	2.2	ug/L		11/01/18 09:28	11/16/18 07:29	10
Dimethyl phthalate	50	U	50	3.6	ug/L		11/01/18 09:28	11/16/18 07:29	10
Di-n-butyl phthalate	50	U	50	3.1	ug/L		11/01/18 09:28	11/16/18 07:29	10
Di-n-octyl phthalate	50	U	50	4.7	ug/L		11/01/18 09:28	11/16/18 07:29	10

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-018

Lab Sample ID: 480-144405-18

Date Collected: 10/26/18 10:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	50	U	50	4.0	ug/L		11/01/18 09:28	11/16/18 07:29	10
Fluorene	50	U	50	3.6	ug/L		11/01/18 09:28	11/16/18 07:29	10
Hexachlorobenzene	50	U	50	5.1	ug/L		11/01/18 09:28	11/16/18 07:29	10
Hexachlorobutadiene	50	U	50	6.8	ug/L		11/01/18 09:28	11/16/18 07:29	10
Hexachlorocyclopentadiene	50	U	50	5.9	ug/L		11/01/18 09:28	11/16/18 07:29	10
Hexachloroethane	50	U	50	5.9	ug/L		11/01/18 09:28	11/16/18 07:29	10
Indeno[1,2,3-cd]pyrene	50	U	50	4.7	ug/L		11/01/18 09:28	11/16/18 07:29	10
Isophorone	50	U	50	4.3	ug/L		11/01/18 09:28	11/16/18 07:29	10
Naphthalene	50	U	50	7.6	ug/L		11/01/18 09:28	11/16/18 07:29	10
Nitrobenzene	50	U	50	2.9	ug/L		11/01/18 09:28	11/16/18 07:29	10
N-Nitrosodi-n-propylamine	50	U	50	5.4	ug/L		11/01/18 09:28	11/16/18 07:29	10
N-Nitrosodiphenylamine	50	U	50	5.1	ug/L		11/01/18 09:28	11/16/18 07:29	10
Pentachlorophenol	100	U	100	22	ug/L		11/01/18 09:28	11/16/18 07:29	10
Phenanthrene	50	U	50	4.4	ug/L		11/01/18 09:28	11/16/18 07:29	10
Phenol	50	U	50	3.9	ug/L		11/01/18 09:28	11/16/18 07:29	10
Pyrene	50	U	50	3.4	ug/L		11/01/18 09:28	11/16/18 07:29	10

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Diisopropylamine	2000	T J N	ug/L		2.97	108-18-9	11/01/18 09:28	11/16/18 07:29	10
Cyclohexane	240	T J N	ug/L		3.05	110-82-7	11/01/18 09:28	11/16/18 07:29	10
Unknown	350	T J	ug/L		3.23		11/01/18 09:28	11/16/18 07:29	10
Triethylamine	31	T J N	ug/L		3.33	121-44-8	11/01/18 09:28	11/16/18 07:29	10
Unknown	40	T J	ug/L		5.13		11/01/18 09:28	11/16/18 07:29	10
Unknown	17	T J	ug/L		9.10		11/01/18 09:28	11/16/18 07:29	10
Unknown	33	T J	ug/L		10.04		11/01/18 09:28	11/16/18 07:29	10
Mephobarbital	40	T J N	ug/L		10.78	115-38-8	11/01/18 09:28	11/16/18 07:29	10
Phenobarbital	41	T J N	ug/L		11.02	50-06-6	11/01/18 09:28	11/16/18 07:29	10
Unknown	34	T J	ug/L		11.05		11/01/18 09:28	11/16/18 07:29	10
Unknown	40	T J	ug/L		12.41		11/01/18 09:28	11/16/18 07:29	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	67		41 - 120	11/01/18 09:28	11/16/18 07:29	10
2-Fluorobiphenyl	75		48 - 120	11/01/18 09:28	11/16/18 07:29	10
2-Fluorophenol (Surr)	52		35 - 120	11/01/18 09:28	11/16/18 07:29	10
Nitrobenzene-d5 (Surr)	66		46 - 120	11/01/18 09:28	11/16/18 07:29	10
Phenol-d5 (Surr)	32		22 - 120	11/01/18 09:28	11/16/18 07:29	10
p-Terphenyl-d14 (Surr)	56	X	59 - 136	11/01/18 09:28	11/16/18 07:29	10

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-019

Lab Sample ID: 480-144405-19

Date Collected: 10/26/18 10:30

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	10	U	10	1.6	ug/L			11/06/18 07:35	2
1,1,2,2-Tetrachloroethane	10	U	10	0.42	ug/L			11/06/18 07:35	2
1,1,2-Trichloroethane	10	U	10	0.46	ug/L			11/06/18 07:35	2
1,1-Dichloroethane	10	U	10	0.76	ug/L			11/06/18 07:35	2
1,1-Dichloroethene	10	U	10	0.58	ug/L			11/06/18 07:35	2
1,2-Dichloroethane	10	U	10	0.42	ug/L			11/06/18 07:35	2
1,2-Dichloropropane	10	U	10	1.4	ug/L			11/06/18 07:35	2
2-Butanone (MEK)	5.0	J	20	2.6	ug/L			11/06/18 07:35	2
2-Hexanone	20	U	20	2.5	ug/L			11/06/18 07:35	2
2-Methylthiophene	20	U	20	0.88	ug/L			11/06/18 07:35	2
3-Methylthiophene	20	U	20	1.1	ug/L			11/06/18 07:35	2
4-Methyl-2-pentanone (MIBK)	20	U	20	4.2	ug/L			11/06/18 07:35	2
Acetone	9.0	J	20	6.0	ug/L			11/06/18 07:35	2
Benzene	2.0	U	2.0	0.82	ug/L			11/06/18 07:35	2
Bromodichloromethane	10	U	10	0.78	ug/L			11/06/18 07:35	2
Bromoform	10	U	10	0.52	ug/L			11/06/18 07:35	2
Bromomethane	20	U	20	1.4	ug/L			11/06/18 07:35	2
Carbon disulfide	10	U	10	0.38	ug/L			11/06/18 07:35	2
Carbon tetrachloride	10	U	10	0.54	ug/L			11/06/18 07:35	2
Chlorobenzene	10	U	10	1.5	ug/L			11/06/18 07:35	2
Chloroethane	20	U	20	0.64	ug/L			11/06/18 07:35	2
Chloroform	10	U	10	0.68	ug/L			11/06/18 07:35	2
Chloromethane	20	U	20	0.70	ug/L			11/06/18 07:35	2
cis-1,2-Dichloroethene	10	U	10	1.6	ug/L			11/06/18 07:35	2
cis-1,3-Dichloropropene	10	U	10	0.72	ug/L			11/06/18 07:35	2
Dibromochloromethane	10	U	10	0.64	ug/L			11/06/18 07:35	2
Ethyl ether	20	U	20	1.4	ug/L			11/06/18 07:35	2
Ethylbenzene	10	U	10	1.5	ug/L			11/06/18 07:35	2
m&p-Xylene	10	U	10	1.3	ug/L			11/06/18 07:35	2
Methylene Chloride	10	U	10	0.88	ug/L			11/06/18 07:35	2
o-Xylene	10	U	10	1.5	ug/L			11/06/18 07:35	2
Styrene	10	U	10	1.5	ug/L			11/06/18 07:35	2
Tetrachloroethene	10	U	10	0.72	ug/L			11/06/18 07:35	2
Toluene	10	U	10	1.0	ug/L			11/06/18 07:35	2
trans-1,2-Dichloroethene	10	U	10	1.8	ug/L			11/06/18 07:35	2
trans-1,3-Dichloropropene	10	U	10	0.74	ug/L			11/06/18 07:35	2
Trichloroethene	10	U	10	0.92	ug/L			11/06/18 07:35	2
Vinyl chloride	20	U	20	1.8	ug/L			11/06/18 07:35	2

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/06/18 07:35	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		77 - 120					11/06/18 07:35	2
4-Bromofluorobenzene (Surr)	105		73 - 120					11/06/18 07:35	2
Toluene-d8 (Surr)	104		80 - 120					11/06/18 07:35	2
Dibromofluoromethane (Surr)	109		75 - 123					11/06/18 07:35	2

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-019

Lab Sample ID: 480-144405-19

Date Collected: 10/26/18 10:30

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	50	U	50	2.2	ug/L		11/01/18 09:28	11/16/18 07:59	5
1,2-Dichlorobenzene	50	U	50	2.0	ug/L		11/01/18 09:28	11/16/18 07:59	5
1,3-Dichlorobenzene	50	U	50	2.4	ug/L		11/01/18 09:28	11/16/18 07:59	5
1,4-Dichlorobenzene	50	U	50	2.3	ug/L		11/01/18 09:28	11/16/18 07:59	5
2,4,5-Trichlorophenol	25	U	25	2.4	ug/L		11/01/18 09:28	11/16/18 07:59	5
2,4,6-Trichlorophenol	25	U	25	3.1	ug/L		11/01/18 09:28	11/16/18 07:59	5
2,4-Dichlorophenol	25	U	25	2.6	ug/L		11/01/18 09:28	11/16/18 07:59	5
2,4-Dimethylphenol	25	U	25	2.5	ug/L		11/01/18 09:28	11/16/18 07:59	5
2,4-Dinitrophenol	50	U	50	11	ug/L		11/01/18 09:28	11/16/18 07:59	5
2,4-Dinitrotoluene	25	U	25	2.2	ug/L		11/01/18 09:28	11/16/18 07:59	5
2,6-Dinitrotoluene	25	U	25	2.0	ug/L		11/01/18 09:28	11/16/18 07:59	5
2-Chloronaphthalene	25	U	25	2.3	ug/L		11/01/18 09:28	11/16/18 07:59	5
2-Chlorophenol	25	U	25	2.7	ug/L		11/01/18 09:28	11/16/18 07:59	5
2-Methylnaphthalene	25	U	25	3.0	ug/L		11/01/18 09:28	11/16/18 07:59	5
2-Methylphenol	25	U	25	2.0	ug/L		11/01/18 09:28	11/16/18 07:59	5
2-Nitroaniline	50	U	50	2.1	ug/L		11/01/18 09:28	11/16/18 07:59	5
2-Nitrophenol	25	U	25	2.4	ug/L		11/01/18 09:28	11/16/18 07:59	5
3,3'-Dichlorobenzidine	25	U	25	2.0	ug/L		11/01/18 09:28	11/16/18 07:59	5
3-Nitroaniline	50	U	50	2.4	ug/L		11/01/18 09:28	11/16/18 07:59	5
4,6-Dinitro-2-methylphenol	50	U	50	11	ug/L		11/01/18 09:28	11/16/18 07:59	5
4-Bromophenyl phenyl ether	25	U	25	2.3	ug/L		11/01/18 09:28	11/16/18 07:59	5
4-Chloro-3-methylphenol	25	U	25	2.3	ug/L		11/01/18 09:28	11/16/18 07:59	5
4-Chloroaniline	25	U	25	3.0	ug/L		11/01/18 09:28	11/16/18 07:59	5
4-Chlorophenyl phenyl ether	25	U	25	1.8	ug/L		11/01/18 09:28	11/16/18 07:59	5
4-Methylphenol	50	U	50	1.8	ug/L		11/01/18 09:28	11/16/18 07:59	5
4-Nitroaniline	50	U	50	1.3	ug/L		11/01/18 09:28	11/16/18 07:59	5
4-Nitrophenol	50	U	50	7.6	ug/L		11/01/18 09:28	11/16/18 07:59	5
Acenaphthene	25	U	25	2.1	ug/L		11/01/18 09:28	11/16/18 07:59	5
Acenaphthylene	25	U	25	1.9	ug/L		11/01/18 09:28	11/16/18 07:59	5
Anthracene	25	U	25	1.4	ug/L		11/01/18 09:28	11/16/18 07:59	5
Benzaldehyde	25	U	25	1.3	ug/L		11/01/18 09:28	11/16/18 07:59	5
Benzo[a]anthracene	25	U	25	1.8	ug/L		11/01/18 09:28	11/16/18 07:59	5
Benzo[a]pyrene	25	U	25	2.4	ug/L		11/01/18 09:28	11/16/18 07:59	5
Benzo[b]fluoranthene	25	U	25	1.7	ug/L		11/01/18 09:28	11/16/18 07:59	5
Benzo[g,h,i]perylene	25	U	25	1.8	ug/L		11/01/18 09:28	11/16/18 07:59	5
Benzo[k]fluoranthene	25	U	25	3.7	ug/L		11/01/18 09:28	11/16/18 07:59	5
bis (2-chloroisopropyl) ether	25	U	25	2.6	ug/L		11/01/18 09:28	11/16/18 07:59	5
Bis(2-chloroethoxy)methane	25	U	25	1.8	ug/L		11/01/18 09:28	11/16/18 07:59	5
Bis(2-chloroethyl)ether	25	U	25	2.0	ug/L		11/01/18 09:28	11/16/18 07:59	5
Bis(2-ethylhexyl) phthalate	25	U	25	11	ug/L		11/01/18 09:28	11/16/18 07:59	5
Butyl benzyl phthalate	25	U	25	5.0	ug/L		11/01/18 09:28	11/16/18 07:59	5
Carbazole	25	U	25	1.5	ug/L		11/01/18 09:28	11/16/18 07:59	5
Chrysene	25	U	25	1.7	ug/L		11/01/18 09:28	11/16/18 07:59	5
Dibenz(a,h)anthracene	25	U	25	2.1	ug/L		11/01/18 09:28	11/16/18 07:59	5
Dibenzofuran	50	U	50	2.6	ug/L		11/01/18 09:28	11/16/18 07:59	5
Diethyl phthalate	25	U	25	1.1	ug/L		11/01/18 09:28	11/16/18 07:59	5
Dimethyl phthalate	25	U	25	1.8	ug/L		11/01/18 09:28	11/16/18 07:59	5
Di-n-butyl phthalate	25	U	25	1.6	ug/L		11/01/18 09:28	11/16/18 07:59	5
Di-n-octyl phthalate	25	U	25	2.4	ug/L		11/01/18 09:28	11/16/18 07:59	5

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-019

Lab Sample ID: 480-144405-19

Date Collected: 10/26/18 10:30

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	25	U	25	2.0	ug/L		11/01/18 09:28	11/16/18 07:59	5
Fluorene	25	U	25	1.8	ug/L		11/01/18 09:28	11/16/18 07:59	5
Hexachlorobenzene	25	U	25	2.6	ug/L		11/01/18 09:28	11/16/18 07:59	5
Hexachlorobutadiene	25	U	25	3.4	ug/L		11/01/18 09:28	11/16/18 07:59	5
Hexachlorocyclopentadiene	25	U	25	3.0	ug/L		11/01/18 09:28	11/16/18 07:59	5
Hexachloroethane	25	U	25	3.0	ug/L		11/01/18 09:28	11/16/18 07:59	5
Indeno[1,2,3-cd]pyrene	25	U	25	2.4	ug/L		11/01/18 09:28	11/16/18 07:59	5
Isophorone	25	U	25	2.2	ug/L		11/01/18 09:28	11/16/18 07:59	5
Naphthalene	25	U	25	3.8	ug/L		11/01/18 09:28	11/16/18 07:59	5
Nitrobenzene	25	U	25	1.5	ug/L		11/01/18 09:28	11/16/18 07:59	5
N-Nitrosodi-n-propylamine	25	U	25	2.7	ug/L		11/01/18 09:28	11/16/18 07:59	5
N-Nitrosodiphenylamine	25	U	25	2.6	ug/L		11/01/18 09:28	11/16/18 07:59	5
Pentachlorophenol	50	U	50	11	ug/L		11/01/18 09:28	11/16/18 07:59	5
Phenanthrene	25	U	25	2.2	ug/L		11/01/18 09:28	11/16/18 07:59	5
Phenol	25	U	25	2.0	ug/L		11/01/18 09:28	11/16/18 07:59	5
Pyrene	25	U	25	1.7	ug/L		11/01/18 09:28	11/16/18 07:59	5

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	8.4	T J	ug/L		2.78		11/01/18 09:28	11/16/18 07:59	5
Cyclohexane	130	T J N	ug/L		3.05	110-82-7	11/01/18 09:28	11/16/18 07:59	5
Unknown	290	T J	ug/L		3.24		11/01/18 09:28	11/16/18 07:59	5
Unknown	36	T J	ug/L		5.13		11/01/18 09:28	11/16/18 07:59	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	47		41 - 120	11/01/18 09:28	11/16/18 07:59	5
2-Fluorobiphenyl	74		48 - 120	11/01/18 09:28	11/16/18 07:59	5
2-Fluorophenol (Surr)	49		35 - 120	11/01/18 09:28	11/16/18 07:59	5
Nitrobenzene-d5 (Surr)	66		46 - 120	11/01/18 09:28	11/16/18 07:59	5
Phenol-d5 (Surr)	32		22 - 120	11/01/18 09:28	11/16/18 07:59	5
p-Terphenyl-d14 (Surr)	64		59 - 136	11/01/18 09:28	11/16/18 07:59	5

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-020

Lab Sample ID: 480-144405-20

Date Collected: 10/26/18 11:30

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/07/18 04:56	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/07/18 04:56	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/07/18 04:56	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/07/18 04:56	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/07/18 04:56	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/07/18 04:56	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/07/18 04:56	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			11/07/18 04:56	1
2-Hexanone	10	U	10	1.2	ug/L			11/07/18 04:56	1
2-Methylthiophene	10	U	10	0.44	ug/L			11/07/18 04:56	1
3-Methylthiophene	10	U	10	0.53	ug/L			11/07/18 04:56	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/07/18 04:56	1
Acetone	10	U	10	3.0	ug/L			11/07/18 04:56	1
Benzene	1.0	U	1.0	0.41	ug/L			11/07/18 04:56	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/07/18 04:56	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/07/18 04:56	1
Bromomethane	10	U	10	0.69	ug/L			11/07/18 04:56	1
Carbon disulfide	5.0	U	5.0	0.19	ug/L			11/07/18 04:56	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/07/18 04:56	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/07/18 04:56	1
Chloroethane	10	U	10	0.32	ug/L			11/07/18 04:56	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/07/18 04:56	1
Chloromethane	10	U	10	0.35	ug/L			11/07/18 04:56	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/07/18 04:56	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/07/18 04:56	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/07/18 04:56	1
Ethyl ether	10	U	10	0.72	ug/L			11/07/18 04:56	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/07/18 04:56	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/07/18 04:56	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/07/18 04:56	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/07/18 04:56	1
Styrene	5.0	U	5.0	0.73	ug/L			11/07/18 04:56	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/07/18 04:56	1
Toluene	5.0	U	5.0	0.51	ug/L			11/07/18 04:56	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/07/18 04:56	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/07/18 04:56	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/07/18 04:56	1
Vinyl chloride	10	U	10	0.90	ug/L			11/07/18 04:56	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/07/18 04:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		77 - 120		11/07/18 04:56	1
4-Bromofluorobenzene (Surr)	101		73 - 120		11/07/18 04:56	1
Toluene-d8 (Surr)	100		80 - 120		11/07/18 04:56	1
Dibromofluoromethane (Surr)	111		75 - 123		11/07/18 04:56	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-020

Lab Sample ID: 480-144405-20

Date Collected: 10/26/18 11:30

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	100	U	100	4.4	ug/L		11/01/18 09:28	11/15/18 19:42	10
1,2-Dichlorobenzene	100	U	100	4.0	ug/L		11/01/18 09:28	11/15/18 19:42	10
1,3-Dichlorobenzene	100	U	100	4.8	ug/L		11/01/18 09:28	11/15/18 19:42	10
1,4-Dichlorobenzene	100	U	100	4.6	ug/L		11/01/18 09:28	11/15/18 19:42	10
2,4,5-Trichlorophenol	50	U	50	4.8	ug/L		11/01/18 09:28	11/15/18 19:42	10
2,4,6-Trichlorophenol	50	U	50	6.1	ug/L		11/01/18 09:28	11/15/18 19:42	10
2,4-Dichlorophenol	50	U	50	5.1	ug/L		11/01/18 09:28	11/15/18 19:42	10
2,4-Dimethylphenol	50	U	50	5.0	ug/L		11/01/18 09:28	11/15/18 19:42	10
2,4-Dinitrophenol	100	U	100	22	ug/L		11/01/18 09:28	11/15/18 19:42	10
2,4-Dinitrotoluene	50	U	50	4.5	ug/L		11/01/18 09:28	11/15/18 19:42	10
2,6-Dinitrotoluene	50	U	50	4.0	ug/L		11/01/18 09:28	11/15/18 19:42	10
2-Chloronaphthalene	50	U	50	4.6	ug/L		11/01/18 09:28	11/15/18 19:42	10
2-Chlorophenol	50	U	50	5.3	ug/L		11/01/18 09:28	11/15/18 19:42	10
2-Methylnaphthalene	50	U	50	6.0	ug/L		11/01/18 09:28	11/15/18 19:42	10
2-Methylphenol	50	U	50	4.0	ug/L		11/01/18 09:28	11/15/18 19:42	10
2-Nitroaniline	100	U	100	4.2	ug/L		11/01/18 09:28	11/15/18 19:42	10
2-Nitrophenol	50	U	50	4.8	ug/L		11/01/18 09:28	11/15/18 19:42	10
3,3'-Dichlorobenzidine	50	U	50	4.0	ug/L		11/01/18 09:28	11/15/18 19:42	10
3-Nitroaniline	100	U	100	4.8	ug/L		11/01/18 09:28	11/15/18 19:42	10
4,6-Dinitro-2-methylphenol	100	U	100	22	ug/L		11/01/18 09:28	11/15/18 19:42	10
4-Bromophenyl phenyl ether	50	U	50	4.5	ug/L		11/01/18 09:28	11/15/18 19:42	10
4-Chloro-3-methylphenol	50	U	50	4.5	ug/L		11/01/18 09:28	11/15/18 19:42	10
4-Chloroaniline	50	U	50	5.9	ug/L		11/01/18 09:28	11/15/18 19:42	10
4-Chlorophenyl phenyl ether	50	U	50	3.5	ug/L		11/01/18 09:28	11/15/18 19:42	10
4-Methylphenol	100	U	100	3.6	ug/L		11/01/18 09:28	11/15/18 19:42	10
4-Nitroaniline	100	U	100	2.5	ug/L		11/01/18 09:28	11/15/18 19:42	10
4-Nitrophenol	100	U	100	15	ug/L		11/01/18 09:28	11/15/18 19:42	10
Acenaphthene	50	U	50	4.1	ug/L		11/01/18 09:28	11/15/18 19:42	10
Acenaphthylene	50	U	50	3.8	ug/L		11/01/18 09:28	11/15/18 19:42	10
Anthracene	50	U	50	2.8	ug/L		11/01/18 09:28	11/15/18 19:42	10
Benzaldehyde	50	U	50	2.7	ug/L		11/01/18 09:28	11/15/18 19:42	10
Benzo[a]anthracene	50	U	50	3.6	ug/L		11/01/18 09:28	11/15/18 19:42	10
Benzo[a]pyrene	50	U	50	4.7	ug/L		11/01/18 09:28	11/15/18 19:42	10
Benzo[b]fluoranthene	50	U	50	3.4	ug/L		11/01/18 09:28	11/15/18 19:42	10
Benzo[g,h,i]perylene	50	U	50	3.5	ug/L		11/01/18 09:28	11/15/18 19:42	10
Benzo[k]fluoranthene	50	U	50	7.3	ug/L		11/01/18 09:28	11/15/18 19:42	10
bis (2-chloroisopropyl) ether	50	U	50	5.2	ug/L		11/01/18 09:28	11/15/18 19:42	10
Bis(2-chloroethoxy)methane	50	U	50	3.5	ug/L		11/01/18 09:28	11/15/18 19:42	10
Bis(2-chloroethyl)ether	50	U	50	4.0	ug/L		11/01/18 09:28	11/15/18 19:42	10
Bis(2-ethylhexyl) phthalate	50	U	50	22	ug/L		11/01/18 09:28	11/15/18 19:42	10
Butyl benzyl phthalate	50	U	50	10	ug/L		11/01/18 09:28	11/15/18 19:42	10
Carbazole	50	U	50	3.0	ug/L		11/01/18 09:28	11/15/18 19:42	10
Chrysene	50	U	50	3.3	ug/L		11/01/18 09:28	11/15/18 19:42	10
Dibenz(a,h)anthracene	50	U	50	4.2	ug/L		11/01/18 09:28	11/15/18 19:42	10
Dibenzofuran	100	U	100	5.1	ug/L		11/01/18 09:28	11/15/18 19:42	10
Diethyl phthalate	50	U	50	2.2	ug/L		11/01/18 09:28	11/15/18 19:42	10
Dimethyl phthalate	50	U	50	3.6	ug/L		11/01/18 09:28	11/15/18 19:42	10
Di-n-butyl phthalate	50	U	50	3.1	ug/L		11/01/18 09:28	11/15/18 19:42	10
Di-n-octyl phthalate	50	U	50	4.7	ug/L		11/01/18 09:28	11/15/18 19:42	10

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-020

Lab Sample ID: 480-144405-20

Date Collected: 10/26/18 11:30

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	50	U	50	4.0	ug/L		11/01/18 09:28	11/15/18 19:42	10
Fluorene	50	U	50	3.6	ug/L		11/01/18 09:28	11/15/18 19:42	10
Hexachlorobenzene	50	U	50	5.1	ug/L		11/01/18 09:28	11/15/18 19:42	10
Hexachlorobutadiene	50	U	50	6.8	ug/L		11/01/18 09:28	11/15/18 19:42	10
Hexachlorocyclopentadiene	50	U	50	5.9	ug/L		11/01/18 09:28	11/15/18 19:42	10
Hexachloroethane	50	U	50	5.9	ug/L		11/01/18 09:28	11/15/18 19:42	10
Indeno[1,2,3-cd]pyrene	50	U	50	4.7	ug/L		11/01/18 09:28	11/15/18 19:42	10
Isophorone	50	U	50	4.3	ug/L		11/01/18 09:28	11/15/18 19:42	10
Naphthalene	50	U	50	7.6	ug/L		11/01/18 09:28	11/15/18 19:42	10
Nitrobenzene	50	U	50	2.9	ug/L		11/01/18 09:28	11/15/18 19:42	10
N-Nitrosodi-n-propylamine	50	U	50	5.4	ug/L		11/01/18 09:28	11/15/18 19:42	10
N-Nitrosodiphenylamine	50	U	50	5.1	ug/L		11/01/18 09:28	11/15/18 19:42	10
Pentachlorophenol	100	U	100	22	ug/L		11/01/18 09:28	11/15/18 19:42	10
Phenanthrene	50	U	50	4.4	ug/L		11/01/18 09:28	11/15/18 19:42	10
Phenol	50	U	50	3.9	ug/L		11/01/18 09:28	11/15/18 19:42	10
Pyrene	50	U	50	3.4	ug/L		11/01/18 09:28	11/15/18 19:42	10
Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Diisopropylamine	1700	T J N	ug/L		2.97	108-18-9	11/01/18 09:28	11/15/18 19:42	10
Cyclohexane	240	T J N	ug/L		3.05	110-82-7	11/01/18 09:28	11/15/18 19:42	10
Unknown	380	T J	ug/L		3.23		11/01/18 09:28	11/15/18 19:42	10
Chloriodomethane	37	T J N	ug/L		3.90	593-71-5	11/01/18 09:28	11/15/18 19:42	10
Unknown	44	T J	ug/L		5.13		11/01/18 09:28	11/15/18 19:42	10
Talbutal	24	T J N	ug/L		10.04	115-44-6	11/01/18 09:28	11/15/18 19:42	10
Mephobarbital	17	T J N	ug/L		10.78	115-38-8	11/01/18 09:28	11/15/18 19:42	10
Phenobarbital	28	T J N	ug/L		11.02	50-06-6	11/01/18 09:28	11/15/18 19:42	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	66		41 - 120				11/01/18 09:28	11/15/18 19:42	10
2-Fluorobiphenyl	81		48 - 120				11/01/18 09:28	11/15/18 19:42	10
2-Fluorophenol (Surr)	57		35 - 120				11/01/18 09:28	11/15/18 19:42	10
Nitrobenzene-d5 (Surr)	71		46 - 120				11/01/18 09:28	11/15/18 19:42	10
Phenol-d5 (Surr)	37		22 - 120				11/01/18 09:28	11/15/18 19:42	10
p-Terphenyl-d14 (Surr)	60		59 - 136				11/01/18 09:28	11/15/18 19:42	10

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-021

Lab Sample ID: 480-144405-21

Date Collected: 10/26/18 12:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/06/18 16:32	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/06/18 16:32	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/06/18 16:32	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/06/18 16:32	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/06/18 16:32	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/06/18 16:32	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/06/18 16:32	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			11/06/18 16:32	1
2-Hexanone	10	U	10	1.2	ug/L			11/06/18 16:32	1
2-Methylthiophene	10	U	10	0.44	ug/L			11/06/18 16:32	1
3-Methylthiophene	10	U	10	0.53	ug/L			11/06/18 16:32	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/06/18 16:32	1
Acetone	10	U	10	3.0	ug/L			11/06/18 16:32	1
Benzene	1.0	U	1.0	0.41	ug/L			11/06/18 16:32	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/06/18 16:32	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/06/18 16:32	1
Bromomethane	10	U	10	0.69	ug/L			11/06/18 16:32	1
Carbon disulfide	5.0	U	5.0	0.19	ug/L			11/06/18 16:32	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/06/18 16:32	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/06/18 16:32	1
Chloroethane	10	U	10	0.32	ug/L			11/06/18 16:32	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/06/18 16:32	1
Chloromethane	10	U	10	0.35	ug/L			11/06/18 16:32	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/06/18 16:32	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/06/18 16:32	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/06/18 16:32	1
Ethyl ether	28		10	0.72	ug/L			11/06/18 16:32	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/06/18 16:32	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/06/18 16:32	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/06/18 16:32	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/06/18 16:32	1
Styrene	5.0	U	5.0	0.73	ug/L			11/06/18 16:32	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/06/18 16:32	1
Toluene	5.0	U	5.0	0.51	ug/L			11/06/18 16:32	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/06/18 16:32	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/06/18 16:32	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/06/18 16:32	1
Vinyl chloride	10	U	10	0.90	ug/L			11/06/18 16:32	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/06/18 16:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		77 - 120					11/06/18 16:32	1
4-Bromofluorobenzene (Surr)	107		73 - 120					11/06/18 16:32	1
Toluene-d8 (Surr)	99		80 - 120					11/06/18 16:32	1
Dibromofluoromethane (Surr)	103		75 - 123					11/06/18 16:32	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-021

Lab Sample ID: 480-144405-21

Date Collected: 10/26/18 12:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	10	U	10	0.44	ug/L		11/01/18 09:28	11/15/18 20:12	1
1,2-Dichlorobenzene	10	U	10	0.40	ug/L		11/01/18 09:28	11/15/18 20:12	1
1,3-Dichlorobenzene	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 20:12	1
1,4-Dichlorobenzene	10	U	10	0.46	ug/L		11/01/18 09:28	11/15/18 20:12	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 20:12	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.61	ug/L		11/01/18 09:28	11/15/18 20:12	1
2,4-Dichlorophenol	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 20:12	1
2,4-Dimethylphenol	5.0	U	5.0	0.50	ug/L		11/01/18 09:28	11/15/18 20:12	1
2,4-Dinitrophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 20:12	1
2,4-Dinitrotoluene	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 20:12	1
2,6-Dinitrotoluene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 20:12	1
2-Chloronaphthalene	5.0	U	5.0	0.46	ug/L		11/01/18 09:28	11/15/18 20:12	1
2-Chlorophenol	5.0	U	5.0	0.53	ug/L		11/01/18 09:28	11/15/18 20:12	1
2-Methylnaphthalene	5.0	U	5.0	0.60	ug/L		11/01/18 09:28	11/15/18 20:12	1
2-Methylphenol	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 20:12	1
2-Nitroaniline	10	U	10	0.42	ug/L		11/01/18 09:28	11/15/18 20:12	1
2-Nitrophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 20:12	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 20:12	1
3-Nitroaniline	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 20:12	1
4,6-Dinitro-2-methylphenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 20:12	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 20:12	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 20:12	1
4-Chloroaniline	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 20:12	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 20:12	1
4-Methylphenol	10	U	10	0.36	ug/L		11/01/18 09:28	11/15/18 20:12	1
4-Nitroaniline	10	U	10	0.25	ug/L		11/01/18 09:28	11/15/18 20:12	1
4-Nitrophenol	10	U	10	1.5	ug/L		11/01/18 09:28	11/15/18 20:12	1
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/01/18 09:28	11/15/18 20:12	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/01/18 09:28	11/15/18 20:12	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/01/18 09:28	11/15/18 20:12	1
Benzaldehyde	5.0	U	5.0	0.27	ug/L		11/01/18 09:28	11/15/18 20:12	1
Benzo[a]anthracene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 20:12	1
Benzo[a]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 20:12	1
Benzo[b]fluoranthene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 20:12	1
Benzo[g,h,i]perylene	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 20:12	1
Benzo[k]fluoranthene	5.0	U	5.0	0.73	ug/L		11/01/18 09:28	11/15/18 20:12	1
bis (2-chloroisopropyl) ether	5.0	U	5.0	0.52	ug/L		11/01/18 09:28	11/15/18 20:12	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 20:12	1
Bis(2-chloroethyl)ether	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 20:12	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		11/01/18 09:28	11/15/18 20:12	1
Butyl benzyl phthalate	5.0	U	5.0	1.0	ug/L		11/01/18 09:28	11/15/18 20:12	1
Carbazole	5.0	U	5.0	0.30	ug/L		11/01/18 09:28	11/15/18 20:12	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/01/18 09:28	11/15/18 20:12	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/01/18 09:28	11/15/18 20:12	1
Dibenzofuran	10	U	10	0.51	ug/L		11/01/18 09:28	11/15/18 20:12	1
Diethyl phthalate	5.0	U	5.0	0.22	ug/L		11/01/18 09:28	11/15/18 20:12	1
Dimethyl phthalate	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 20:12	1
Di-n-butyl phthalate	5.0	U	5.0	0.31	ug/L		11/01/18 09:28	11/15/18 20:12	1
Di-n-octyl phthalate	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 20:12	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-021

Lab Sample ID: 480-144405-21

Date Collected: 10/26/18 12:00

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 20:12	1
Fluorene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 20:12	1
Hexachlorobenzene	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 20:12	1
Hexachlorobutadiene	5.0	U	5.0	0.68	ug/L		11/01/18 09:28	11/15/18 20:12	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 20:12	1
Hexachloroethane	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 20:12	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 20:12	1
Isophorone	5.0	U	5.0	0.43	ug/L		11/01/18 09:28	11/15/18 20:12	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/01/18 09:28	11/15/18 20:12	1
Nitrobenzene	5.0	U	5.0	0.29	ug/L		11/01/18 09:28	11/15/18 20:12	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.54	ug/L		11/01/18 09:28	11/15/18 20:12	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 20:12	1
Pentachlorophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 20:12	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/01/18 09:28	11/15/18 20:12	1
Phenol	5.0	U	5.0	0.39	ug/L		11/01/18 09:28	11/15/18 20:12	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 20:12	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	2.4	T J	ug/L		2.48		11/01/18 09:28	11/15/18 20:12	1
Unknown	3.3	T J	ug/L		2.61		11/01/18 09:28	11/15/18 20:12	1
Unknown	14	T J	ug/L		2.90		11/01/18 09:28	11/15/18 20:12	1
Diisopropylamine	470	T J N	ug/L		3.09	108-18-9	11/01/18 09:28	11/15/18 20:12	1
Unknown	260	T J	ug/L		3.34		11/01/18 09:28	11/15/18 20:12	1
Unknown	2.1	T J	ug/L		3.39		11/01/18 09:28	11/15/18 20:12	1
Triethylamine	5.1	T J N	ug/L		3.44	121-44-8	11/01/18 09:28	11/15/18 20:12	1
Unknown	5.5	T J	ug/L		3.76		11/01/18 09:28	11/15/18 20:12	1
Chloriodomethane	6.3	T J N	ug/L		3.97	593-71-5	11/01/18 09:28	11/15/18 20:12	1
Unknown	2.3	T J	ug/L		4.39		11/01/18 09:28	11/15/18 20:12	1
Toluene	6.7	T J N	ug/L		4.44	108-88-3	11/01/18 09:28	11/15/18 20:12	1
Unknown	45	T J	ug/L		5.15		11/01/18 09:28	11/15/18 20:12	1
Cyclopentasiloxane, decamethyl-	1.9	T J N	ug/L		7.15	541-02-6	11/01/18 09:28	11/15/18 20:12	1
Talbutal	11	T J N	ug/L		10.04	115-44-6	11/01/18 09:28	11/15/18 20:12	1
Phenobarbital di-methyl derivative	1.8	T J N	ug/L		10.56	1000137-13-1	11/01/18 09:28	11/15/18 20:12	1
Hexobarbital	4.5	T J N	ug/L		10.63	56-29-1	11/01/18 09:28	11/15/18 20:12	1
Mephobarbital	13	T J N	ug/L		10.78	115-38-8	11/01/18 09:28	11/15/18 20:12	1
Phenobarbital	15	T J N	ug/L		11.02	50-06-6	11/01/18 09:28	11/15/18 20:12	1
Unknown	6.7	T J	ug/L		11.05		11/01/18 09:28	11/15/18 20:12	1
Unknown	3.9	T J	ug/L		12.41		11/01/18 09:28	11/15/18 20:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	71		41 - 120	11/01/18 09:28	11/15/18 20:12	1
2-Fluorobiphenyl	78		48 - 120	11/01/18 09:28	11/15/18 20:12	1
2-Fluorophenol (Surr)	57		35 - 120	11/01/18 09:28	11/15/18 20:12	1
Nitrobenzene-d5 (Surr)	75		46 - 120	11/01/18 09:28	11/15/18 20:12	1
Phenol-d5 (Surr)	42		22 - 120	11/01/18 09:28	11/15/18 20:12	1
p-Terphenyl-d14 (Surr)	69		59 - 136	11/01/18 09:28	11/15/18 20:12	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-022

Lab Sample ID: 480-144405-22

Date Collected: 10/26/18 12:30

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/06/18 16:59	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/06/18 16:59	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/06/18 16:59	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/06/18 16:59	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/06/18 16:59	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/06/18 16:59	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/06/18 16:59	1
2-Butanone (MEK)	1.7	J	10	1.3	ug/L			11/06/18 16:59	1
2-Hexanone	10	U	10	1.2	ug/L			11/06/18 16:59	1
2-Methylthiophene	10	U	10	0.44	ug/L			11/06/18 16:59	1
3-Methylthiophene	10	U	10	0.53	ug/L			11/06/18 16:59	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/06/18 16:59	1
Acetone	4.2	J	10	3.0	ug/L			11/06/18 16:59	1
Benzene	1.0	U	1.0	0.41	ug/L			11/06/18 16:59	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/06/18 16:59	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/06/18 16:59	1
Bromomethane	10	U	10	0.69	ug/L			11/06/18 16:59	1
Carbon disulfide	5.0	U	5.0	0.19	ug/L			11/06/18 16:59	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/06/18 16:59	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/06/18 16:59	1
Chloroethane	10	U	10	0.32	ug/L			11/06/18 16:59	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/06/18 16:59	1
Chloromethane	10	U	10	0.35	ug/L			11/06/18 16:59	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/06/18 16:59	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/06/18 16:59	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/06/18 16:59	1
Ethyl ether	10	U	10	0.72	ug/L			11/06/18 16:59	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/06/18 16:59	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/06/18 16:59	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/06/18 16:59	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/06/18 16:59	1
Styrene	5.0	U	5.0	0.73	ug/L			11/06/18 16:59	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/06/18 16:59	1
Toluene	5.0	U	5.0	0.51	ug/L			11/06/18 16:59	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/06/18 16:59	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/06/18 16:59	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/06/18 16:59	1
Vinyl chloride	10	U	10	0.90	ug/L			11/06/18 16:59	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Methanethiol	3.5	T J N	ug/L		1.66	74-93-1		11/06/18 16:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		11/06/18 16:59	1
4-Bromofluorobenzene (Surr)	103		73 - 120		11/06/18 16:59	1
Toluene-d8 (Surr)	99		80 - 120		11/06/18 16:59	1
Dibromofluoromethane (Surr)	103		75 - 123		11/06/18 16:59	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-022

Lab Sample ID: 480-144405-22

Date Collected: 10/26/18 12:30

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	50	U	50	2.2	ug/L		11/01/18 09:28	11/16/18 08:28	5
1,2-Dichlorobenzene	50	U	50	2.0	ug/L		11/01/18 09:28	11/16/18 08:28	5
1,3-Dichlorobenzene	50	U	50	2.4	ug/L		11/01/18 09:28	11/16/18 08:28	5
1,4-Dichlorobenzene	50	U	50	2.3	ug/L		11/01/18 09:28	11/16/18 08:28	5
2,4,5-Trichlorophenol	25	U	25	2.4	ug/L		11/01/18 09:28	11/16/18 08:28	5
2,4,6-Trichlorophenol	25	U	25	3.1	ug/L		11/01/18 09:28	11/16/18 08:28	5
2,4-Dichlorophenol	25	U	25	2.6	ug/L		11/01/18 09:28	11/16/18 08:28	5
2,4-Dimethylphenol	25	U	25	2.5	ug/L		11/01/18 09:28	11/16/18 08:28	5
2,4-Dinitrophenol	50	U	50	11	ug/L		11/01/18 09:28	11/16/18 08:28	5
2,4-Dinitrotoluene	25	U	25	2.2	ug/L		11/01/18 09:28	11/16/18 08:28	5
2,6-Dinitrotoluene	25	U	25	2.0	ug/L		11/01/18 09:28	11/16/18 08:28	5
2-Chloronaphthalene	25	U	25	2.3	ug/L		11/01/18 09:28	11/16/18 08:28	5
2-Chlorophenol	25	U	25	2.7	ug/L		11/01/18 09:28	11/16/18 08:28	5
2-Methylnaphthalene	25	U	25	3.0	ug/L		11/01/18 09:28	11/16/18 08:28	5
2-Methylphenol	25	U	25	2.0	ug/L		11/01/18 09:28	11/16/18 08:28	5
2-Nitroaniline	50	U	50	2.1	ug/L		11/01/18 09:28	11/16/18 08:28	5
2-Nitrophenol	25	U	25	2.4	ug/L		11/01/18 09:28	11/16/18 08:28	5
3,3'-Dichlorobenzidine	25	U	25	2.0	ug/L		11/01/18 09:28	11/16/18 08:28	5
3-Nitroaniline	50	U	50	2.4	ug/L		11/01/18 09:28	11/16/18 08:28	5
4,6-Dinitro-2-methylphenol	50	U	50	11	ug/L		11/01/18 09:28	11/16/18 08:28	5
4-Bromophenyl phenyl ether	25	U	25	2.3	ug/L		11/01/18 09:28	11/16/18 08:28	5
4-Chloro-3-methylphenol	25	U	25	2.3	ug/L		11/01/18 09:28	11/16/18 08:28	5
4-Chloroaniline	25	U	25	3.0	ug/L		11/01/18 09:28	11/16/18 08:28	5
4-Chlorophenyl phenyl ether	25	U	25	1.8	ug/L		11/01/18 09:28	11/16/18 08:28	5
4-Methylphenol	50	U	50	1.8	ug/L		11/01/18 09:28	11/16/18 08:28	5
4-Nitroaniline	50	U	50	1.3	ug/L		11/01/18 09:28	11/16/18 08:28	5
4-Nitrophenol	50	U	50	7.6	ug/L		11/01/18 09:28	11/16/18 08:28	5
Acenaphthene	25	U	25	2.1	ug/L		11/01/18 09:28	11/16/18 08:28	5
Acenaphthylene	25	U	25	1.9	ug/L		11/01/18 09:28	11/16/18 08:28	5
Anthracene	25	U	25	1.4	ug/L		11/01/18 09:28	11/16/18 08:28	5
Benzaldehyde	25	U	25	1.3	ug/L		11/01/18 09:28	11/16/18 08:28	5
Benzo[a]anthracene	25	U	25	1.8	ug/L		11/01/18 09:28	11/16/18 08:28	5
Benzo[a]pyrene	25	U	25	2.4	ug/L		11/01/18 09:28	11/16/18 08:28	5
Benzo[b]fluoranthene	25	U	25	1.7	ug/L		11/01/18 09:28	11/16/18 08:28	5
Benzo[g,h,i]perylene	25	U	25	1.8	ug/L		11/01/18 09:28	11/16/18 08:28	5
Benzo[k]fluoranthene	25	U	25	3.7	ug/L		11/01/18 09:28	11/16/18 08:28	5
bis (2-chloroisopropyl) ether	25	U	25	2.6	ug/L		11/01/18 09:28	11/16/18 08:28	5
Bis(2-chloroethoxy)methane	25	U	25	1.8	ug/L		11/01/18 09:28	11/16/18 08:28	5
Bis(2-chloroethyl)ether	25	U	25	2.0	ug/L		11/01/18 09:28	11/16/18 08:28	5
Bis(2-ethylhexyl) phthalate	25	U	25	11	ug/L		11/01/18 09:28	11/16/18 08:28	5
Butyl benzyl phthalate	25	U	25	5.0	ug/L		11/01/18 09:28	11/16/18 08:28	5
Carbazole	25	U	25	1.5	ug/L		11/01/18 09:28	11/16/18 08:28	5
Chrysene	25	U	25	1.7	ug/L		11/01/18 09:28	11/16/18 08:28	5
Dibenz(a,h)anthracene	25	U	25	2.1	ug/L		11/01/18 09:28	11/16/18 08:28	5
Dibenzofuran	50	U	50	2.6	ug/L		11/01/18 09:28	11/16/18 08:28	5
Diethyl phthalate	25	U	25	1.1	ug/L		11/01/18 09:28	11/16/18 08:28	5
Dimethyl phthalate	25	U	25	1.8	ug/L		11/01/18 09:28	11/16/18 08:28	5
Di-n-butyl phthalate	25	U	25	1.6	ug/L		11/01/18 09:28	11/16/18 08:28	5
Di-n-octyl phthalate	25	U	25	2.4	ug/L		11/01/18 09:28	11/16/18 08:28	5

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-022

Lab Sample ID: 480-144405-22

Date Collected: 10/26/18 12:30

Matrix: Water

Date Received: 10/27/18 01:15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	25	U	25	2.0	ug/L		11/01/18 09:28	11/16/18 08:28	5
Fluorene	25	U	25	1.8	ug/L		11/01/18 09:28	11/16/18 08:28	5
Hexachlorobenzene	25	U	25	2.6	ug/L		11/01/18 09:28	11/16/18 08:28	5
Hexachlorobutadiene	25	U	25	3.4	ug/L		11/01/18 09:28	11/16/18 08:28	5
Hexachlorocyclopentadiene	25	U	25	3.0	ug/L		11/01/18 09:28	11/16/18 08:28	5
Hexachloroethane	25	U	25	3.0	ug/L		11/01/18 09:28	11/16/18 08:28	5
Indeno[1,2,3-cd]pyrene	25	U	25	2.4	ug/L		11/01/18 09:28	11/16/18 08:28	5
Isophorone	25	U	25	2.2	ug/L		11/01/18 09:28	11/16/18 08:28	5
Naphthalene	25	U	25	3.8	ug/L		11/01/18 09:28	11/16/18 08:28	5
Nitrobenzene	25	U	25	1.5	ug/L		11/01/18 09:28	11/16/18 08:28	5
N-Nitrosodi-n-propylamine	25	U	25	2.7	ug/L		11/01/18 09:28	11/16/18 08:28	5
N-Nitrosodiphenylamine	25	U	25	2.6	ug/L		11/01/18 09:28	11/16/18 08:28	5
Pentachlorophenol	50	U	50	11	ug/L		11/01/18 09:28	11/16/18 08:28	5
Phenanthrene	25	U	25	2.2	ug/L		11/01/18 09:28	11/16/18 08:28	5
Phenol	25	U	25	2.0	ug/L		11/01/18 09:28	11/16/18 08:28	5
Pyrene	25	U	25	1.7	ug/L		11/01/18 09:28	11/16/18 08:28	5

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	9.2	T J	ug/L		2.79		11/01/18 09:28	11/16/18 08:28	5
Cyclohexane	130	T J N	ug/L		3.06	110-82-7	11/01/18 09:28	11/16/18 08:28	5
Unknown	330	T J	ug/L		3.24		11/01/18 09:28	11/16/18 08:28	5
Unknown	43	T J	ug/L		5.13		11/01/18 09:28	11/16/18 08:28	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	49		41 - 120	11/01/18 09:28	11/16/18 08:28	5
2-Fluorobiphenyl	78		48 - 120	11/01/18 09:28	11/16/18 08:28	5
2-Fluorophenol (Surr)	55		35 - 120	11/01/18 09:28	11/16/18 08:28	5
Nitrobenzene-d5 (Surr)	66		46 - 120	11/01/18 09:28	11/16/18 08:28	5
Phenol-d5 (Surr)	37		22 - 120	11/01/18 09:28	11/16/18 08:28	5
p-Terphenyl-d14 (Surr)	72		59 - 136	11/01/18 09:28	11/16/18 08:28	5

Surrogate Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (77-120)	BFB (73-120)	TOL (80-120)	DBFM (75-123)
480-144405-1	WG-7830-102518-BP-001	102	104	93	97
480-144405-2	WG-7830-102518-BP-002	97	101	97	98
480-144405-3	WG-7830-102518-BP-003	105	104	99	106
480-144405-4	WG-7830-102518-BP-004	100	109	102	98
480-144405-5	WG-7830-102518-BP-005	102	102	99	101
480-144405-6	WG-7830-102518-BP-006	107	106	97	105
480-144405-6 - DL	WG-7830-102518-BP-006	103	106	100	100
480-144405-6 MS	WG-7830-102518-BP-006	99	105	100	100
480-144405-6 MSD	WG-7830-102518-BP-006	103	102	101	102
480-144405-7	WG-7830-102518-BP-007	98	105	98	96
480-144405-7 - DL	WG-7830-102518-BP-007	105	102	103	105
480-144405-8	WG-7830-102518-BP-008	105	101	100	108
480-144405-9	WG-7830-102518-BP-009	102	109	100	106
480-144405-9 - DL	WG-7830-102518-BP-009	102	97	97	101
480-144405-10	WG-7830-102518-BP-010	100	106	100	98
480-144405-11	WG-7830-102518-BP-011	100	109	97	98
480-144405-12	WG-7830-102518-BP-012	101	99	100	104
480-144405-12 - DL	WG-7830-102518-BP-012	103	106	99	101
480-144405-15	WG-7830-102518-BP-015	110	106	99	107
480-144405-16	WG-7830-102518-BP-016	101	107	98	99
480-144405-17	WG-7830-102618-BP-017	106	105	99	105
480-144405-17 - DL	WG-7830-102618-BP-017	103	103	98	107
480-144405-18	WG-7830-102618-BP-018	106	102	97	107
480-144405-19	WG-7830-102618-BP-019	107	105	104	109
480-144405-20	WG-7830-102618-BP-020	112	101	100	111
480-144405-21	WG-7830-102618-BP-021	106	107	99	103
480-144405-22	WG-7830-102618-BP-022	101	103	99	103
LCS 480-443578/5	Lab Control Sample	98	99	98	100
LCS 480-443761/5	Lab Control Sample	100	102	100	102
LCS 480-443808/5	Lab Control Sample	99	102	103	104
LCS 480-444017/5	Lab Control Sample	101	106	99	101
MB 480-443578/7	Method Blank	101	102	94	102
MB 480-443761/7	Method Blank	110	100	102	109
MB 480-443808/28	Method Blank	106	103	103	114
MB 480-444017/7	Method Blank	107	103	98	105

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (41-120)	FBP (48-120)	2FP (35-120)	NBZ (46-120)	PHL (22-120)	TPHd14 (59-136)
480-144405-1	WG-7830-102518-BP-001	73	77	54	74	40	73

TestAmerica Buffalo

Surrogate Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (41-120)	FBP (48-120)	2FP (35-120)	NBZ (46-120)	PHL (22-120)	TPHd14 (59-136)
480-144405-2	WG-7830-102518-BP-002	64	73	53	71	40	68
480-144405-3	WG-7830-102518-BP-003	69	77	56	73	40	75
480-144405-4	WG-7830-102518-BP-004	78	83	58	78	43	70
480-144405-5	WG-7830-102518-BP-005	79	78	56	75	42	67
480-144405-6	WG-7830-102518-BP-006	88	84	59	81	44	58 X
480-144405-7	WG-7830-102518-BP-007	89	85	60	80	44	63
480-144405-8	WG-7830-102518-BP-008	79	86	62	81	47	64
480-144405-9	WG-7830-102518-BP-009	89	83	59	78	44	69
480-144405-10	WG-7830-102518-BP-010	93	82	55	76	44	68
480-144405-11	WG-7830-102518-BP-011	94	81	60	77	44	54 X
480-144405-12	WG-7830-102518-BP-012	87	82	58	79	43	59
480-144405-15	WG-7830-102518-BP-015	61	81	57	73	37	61
480-144405-16	WG-7830-102518-BP-016	91	91	69	87	50	72
480-144405-17	WG-7830-102618-BP-017	78	75	58	70	38	77
480-144405-18	WG-7830-102618-BP-018	67	75	52	66	32	56 X
480-144405-19	WG-7830-102618-BP-019	47	74	49	66	32	64
480-144405-20	WG-7830-102618-BP-020	66	81	57	71	37	60
480-144405-21	WG-7830-102618-BP-021	71	78	57	75	42	69
480-144405-22	WG-7830-102618-BP-022	49	78	55	66	37	72
LCS 480-443009/2-A	Lab Control Sample	83	77	60	81	49	88
LCSD 480-443009/3-A	Lab Control Sample Dup	88	78	62	83	49	88
MB 480-443009/1-A	Method Blank	60	78	55	75	41	87

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-443578/7

Matrix: Water

Analysis Batch: 443578

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-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/05/18 11:13	1
1,1,1,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/05/18 11:13	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/05/18 11:13	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/05/18 11:13	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/05/18 11:13	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/05/18 11:13	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/05/18 11:13	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			11/05/18 11:13	1
2-Hexanone	10	U	10	1.2	ug/L			11/05/18 11:13	1
2-Methylthiophene	10	U	10	0.44	ug/L			11/05/18 11:13	1
3-Methylthiophene	10	U	10	0.53	ug/L			11/05/18 11:13	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/05/18 11:13	1
Acetone	10	U	10	3.0	ug/L			11/05/18 11:13	1
Benzene	1.0	U	1.0	0.41	ug/L			11/05/18 11:13	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/05/18 11:13	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/05/18 11:13	1
Bromomethane	10	U	10	0.69	ug/L			11/05/18 11:13	1
Carbon disulfide	0.199	J	5.0	0.19	ug/L			11/05/18 11:13	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/05/18 11:13	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/05/18 11:13	1
Chloroethane	10	U	10	0.32	ug/L			11/05/18 11:13	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/05/18 11:13	1
Chloromethane	10	U	10	0.35	ug/L			11/05/18 11:13	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/05/18 11:13	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/05/18 11:13	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/05/18 11:13	1
Ethyl ether	10	U	10	0.72	ug/L			11/05/18 11:13	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/05/18 11:13	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/05/18 11:13	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/05/18 11:13	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/05/18 11:13	1
Styrene	5.0	U	5.0	0.73	ug/L			11/05/18 11:13	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/05/18 11:13	1
Toluene	5.0	U	5.0	0.51	ug/L			11/05/18 11:13	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/05/18 11:13	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/05/18 11:13	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/05/18 11:13	1
Vinyl chloride	10	U	10	0.90	ug/L			11/05/18 11:13	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/05/18 11:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		11/05/18 11:13	1
4-Bromofluorobenzene (Surr)	102		73 - 120		11/05/18 11:13	1
Toluene-d8 (Surr)	94		80 - 120		11/05/18 11:13	1
Dibromofluoromethane (Surr)	102		75 - 123		11/05/18 11:13	1

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Lab Sample ID: LCS 480-443578/5

Matrix: Water

Analysis Batch: 443578

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-Trichloroethane	25.0	27.5		ug/L		110	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.0		ug/L		96	76 - 120
1,1,2-Trichloroethane	25.0	25.8		ug/L		103	76 - 122
1,1-Dichloroethane	25.0	26.8		ug/L		107	77 - 120
1,1-Dichloroethene	25.0	27.7		ug/L		111	66 - 127
1,2-Dichloroethane	25.0	25.1		ug/L		100	75 - 120
1,2-Dichloropropane	25.0	26.8		ug/L		107	76 - 120
2-Butanone (MEK)	125	143		ug/L		114	57 - 140
2-Hexanone	125	141		ug/L		113	65 - 127
4-Methyl-2-pentanone (MIBK)	125	129		ug/L		103	71 - 125
Acetone	125	134		ug/L		107	56 - 142
Benzene	25.0	27.6		ug/L		111	71 - 124
Bromodichloromethane	25.0	28.6		ug/L		115	80 - 122
Bromoform	25.0	25.0		ug/L		100	61 - 132
Bromomethane	25.0	23.7		ug/L		95	55 - 144
Carbon disulfide	25.0	25.5		ug/L		102	59 - 134
Carbon tetrachloride	25.0	28.9		ug/L		116	72 - 134
Chlorobenzene	25.0	25.5		ug/L		102	80 - 120
Chloroethane	25.0	24.4		ug/L		98	69 - 136
Chloroform	25.0	25.9		ug/L		104	73 - 127
Chloromethane	25.0	22.9		ug/L		92	68 - 124
cis-1,2-Dichloroethene	25.0	26.3		ug/L		105	74 - 124
cis-1,3-Dichloropropene	25.0	29.1		ug/L		116	74 - 124
Dibromochloromethane	25.0	26.4		ug/L		105	75 - 125
Ethyl ether	25.0	25.2		ug/L		101	76 - 123
Ethylbenzene	25.0	26.2		ug/L		105	77 - 123
m&p-Xylene	25.0	26.8		ug/L		107	76 - 122
Methylene Chloride	25.0	23.1		ug/L		93	75 - 124
o-Xylene	25.0	26.9		ug/L		108	76 - 122
Styrene	25.0	26.8		ug/L		107	80 - 120
Tetrachloroethene	25.0	28.2		ug/L		113	74 - 122
Toluene	25.0	25.5		ug/L		102	80 - 122
trans-1,2-Dichloroethene	25.0	25.1		ug/L		100	73 - 127
trans-1,3-Dichloropropene	25.0	27.4		ug/L		110	80 - 120
Trichloroethene	25.0	27.0		ug/L		108	74 - 123
Vinyl chloride	25.0	27.0		ug/L		108	65 - 133

LCS LCS			
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		77 - 120
4-Bromofluorobenzene (Surr)	99		73 - 120
Toluene-d8 (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	100		75 - 123

Lab Sample ID: MB 480-443761/7

Matrix: Water

Analysis Batch: 443761

Client Sample ID: Method Blank

Prep Type: Total/NA

MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result							
1,1,1-Trichloroethane	5.0 U	5.0	0.82	ug/L			11/05/18 23:23	1
1,1,2,2-Tetrachloroethane	5.0 U	5.0	0.21	ug/L			11/05/18 23:23	1

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

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

Lab Sample ID: MB 480-443761/7

Matrix: Water

Analysis Batch: 443761

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/05/18 23:23	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/05/18 23:23	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/05/18 23:23	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/05/18 23:23	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/05/18 23:23	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			11/05/18 23:23	1
2-Hexanone	10	U	10	1.2	ug/L			11/05/18 23:23	1
2-Methylthiophene	10	U	10	0.44	ug/L			11/05/18 23:23	1
3-Methylthiophene	10	U	10	0.53	ug/L			11/05/18 23:23	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/05/18 23:23	1
Acetone	10	U	10	3.0	ug/L			11/05/18 23:23	1
Benzene	1.0	U	1.0	0.41	ug/L			11/05/18 23:23	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/05/18 23:23	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/05/18 23:23	1
Bromomethane	10	U	10	0.69	ug/L			11/05/18 23:23	1
Carbon disulfide	0.201	J	5.0	0.19	ug/L			11/05/18 23:23	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/05/18 23:23	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/05/18 23:23	1
Chloroethane	10	U	10	0.32	ug/L			11/05/18 23:23	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/05/18 23:23	1
Chloromethane	10	U	10	0.35	ug/L			11/05/18 23:23	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/05/18 23:23	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/05/18 23:23	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/05/18 23:23	1
Ethyl ether	10	U	10	0.72	ug/L			11/05/18 23:23	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/05/18 23:23	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/05/18 23:23	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/05/18 23:23	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/05/18 23:23	1
Styrene	5.0	U	5.0	0.73	ug/L			11/05/18 23:23	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/05/18 23:23	1
Toluene	5.0	U	5.0	0.51	ug/L			11/05/18 23:23	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/05/18 23:23	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/05/18 23:23	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/05/18 23:23	1
Vinyl chloride	10	U	10	0.90	ug/L			11/05/18 23:23	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	0.359	J	ug/L		10.88	87-68-3		11/05/18 23:23	1
Tentatively Identified Compound	None		ug/L					11/05/18 23:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		77 - 120		11/05/18 23:23	1
4-Bromofluorobenzene (Surr)	100		73 - 120		11/05/18 23:23	1
Toluene-d8 (Surr)	102		80 - 120		11/05/18 23:23	1
Dibromofluoromethane (Surr)	109		75 - 123		11/05/18 23:23	1

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

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

Lab Sample ID: LCS 480-443761/5

Matrix: Water

Analysis Batch: 443761

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-Trichloroethane	25.0	25.9		ug/L		104	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.1		ug/L		97	76 - 120
1,1,2-Trichloroethane	25.0	25.6		ug/L		102	76 - 122
1,1-Dichloroethane	25.0	25.2		ug/L		101	77 - 120
1,1-Dichloroethene	25.0	22.3		ug/L		89	66 - 127
1,2-Dichloroethane	25.0	24.5		ug/L		98	75 - 120
1,2-Dichloropropane	25.0	26.9		ug/L		107	76 - 120
2-Butanone (MEK)	125	151		ug/L		121	57 - 140
2-Hexanone	125	149		ug/L		119	65 - 127
4-Methyl-2-pentanone (MIBK)	125	131		ug/L		104	71 - 125
Acetone	125	157		ug/L		126	56 - 142
Benzene	25.0	26.8		ug/L		107	71 - 124
Bromodichloromethane	25.0	27.6		ug/L		110	80 - 122
Bromoform	25.0	25.9		ug/L		104	61 - 132
Bromomethane	25.0	22.7		ug/L		91	55 - 144
Carbon disulfide	25.0	19.0		ug/L		76	59 - 134
Carbon tetrachloride	25.0	25.7		ug/L		103	72 - 134
Chlorobenzene	25.0	26.0		ug/L		104	80 - 120
Chloroethane	25.0	23.7		ug/L		95	69 - 136
Chloroform	25.0	25.2		ug/L		101	73 - 127
Chloromethane	25.0	22.4		ug/L		90	68 - 124
cis-1,2-Dichloroethene	25.0	24.4		ug/L		98	74 - 124
cis-1,3-Dichloropropene	25.0	29.4		ug/L		118	74 - 124
Dibromochloromethane	25.0	26.9		ug/L		107	75 - 125
Ethyl ether	25.0	23.5		ug/L		94	76 - 123
Ethylbenzene	25.0	25.3		ug/L		101	77 - 123
m&p-Xylene	25.0	26.0		ug/L		104	76 - 122
Methylene Chloride	25.0	22.8		ug/L		91	75 - 124
o-Xylene	25.0	25.9		ug/L		104	76 - 122
Styrene	25.0	27.1		ug/L		108	80 - 120
Tetrachloroethene	25.0	26.7		ug/L		107	74 - 122
Toluene	25.0	24.7		ug/L		99	80 - 122
trans-1,2-Dichloroethene	25.0	22.9		ug/L		91	73 - 127
trans-1,3-Dichloropropene	25.0	27.6		ug/L		110	80 - 120
Trichloroethene	25.0	26.1		ug/L		104	74 - 123
Vinyl chloride	25.0	24.8		ug/L		99	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		77 - 120
4-Bromofluorobenzene (Surr)	102		73 - 120
Toluene-d8 (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	102		75 - 123

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

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

Lab Sample ID: 480-144405-6 MS

Matrix: Water

Analysis Batch: 443761

Client Sample ID: WG-7830-102518-BP-006

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	250	U	1250	1230		ug/L		99	73 - 126
1,1,2,2-Tetrachloroethane	250	U	1250	1160		ug/L		93	76 - 120
1,1,2-Trichloroethane	250	U	1250	1250		ug/L		100	76 - 122
1,1-Dichloroethane	250	U	1250	1200		ug/L		96	77 - 120
1,1-Dichloroethene	250	U	1250	1050		ug/L		84	66 - 127
1,2-Dichloroethane	250	U	1250	1170		ug/L		94	75 - 120
1,2-Dichloropropane	250	U	1250	1270		ug/L		101	76 - 120
2-Butanone (MEK)	500	U	6250	6580		ug/L		105	57 - 140
2-Hexanone	500	U	6250	6810		ug/L		109	65 - 127
4-Methyl-2-pentanone (MIBK)	500	U	6250	6170		ug/L		99	71 - 125
Acetone	500	U	6250	5540		ug/L		89	56 - 142
Benzene	50	U	1250	1240		ug/L		99	71 - 124
Bromodichloromethane	250	U	1250	1300		ug/L		104	80 - 122
Bromoform	250	U	1250	1080		ug/L		86	61 - 132
Bromomethane	500	U	1250	1060		ug/L		85	55 - 144
Carbon disulfide	250	U	1250	880		ug/L		70	59 - 134
Carbon tetrachloride	250	U	1250	1250		ug/L		100	72 - 134
Chlorobenzene	250	U	1250	1240		ug/L		100	80 - 120
Chloroethane	500	U	1250	1110		ug/L		89	69 - 136
Chloroform	250	U	1250	1170		ug/L		93	73 - 127
Chloromethane	500	U	1250	1080		ug/L		86	68 - 124
cis-1,2-Dichloroethene	250	U	1250	1170		ug/L		94	74 - 124
cis-1,3-Dichloropropene	250	U	1250	1280		ug/L		102	74 - 124
Dibromochloromethane	250	U	1250	1190		ug/L		95	75 - 125
Ethyl ether	1300		1250	2500		ug/L		92	76 - 123
Ethylbenzene	250	U	1250	1230		ug/L		99	77 - 123
m&p-Xylene	250	U	1250	1230		ug/L		99	76 - 122
Methylene Chloride	250	U	1250	1040		ug/L		83	75 - 124
o-Xylene	250	U	1250	1210		ug/L		97	76 - 122
Styrene	250	U	1250	1290		ug/L		103	80 - 120
Tetrachloroethene	250	U	1250	1300		ug/L		104	74 - 122
Toluene	250	U	1250	1200		ug/L		96	80 - 122
trans-1,2-Dichloroethene	250	U	1250	1070		ug/L		86	73 - 127
trans-1,3-Dichloropropene	250	U	1250	1190		ug/L		95	80 - 120
Trichloroethene	250	U	1250	1260		ug/L		101	74 - 123
Vinyl chloride	500	U	1250	1170		ug/L		93	65 - 133
MS MS									
Surrogate	%Recovery	Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	99		77 - 120						
4-Bromofluorobenzene (Surr)	105		73 - 120						
Toluene-d8 (Surr)	100		80 - 120						
Dibromofluoromethane (Surr)	100		75 - 123						

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

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

Lab Sample ID: 480-144405-6 MSD

Matrix: Water

Analysis Batch: 443761

Client Sample ID: WG-7830-102518-BP-006

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	250	U	1250	1250		ug/L		100	73 - 126	2	15
1,1,2,2-Tetrachloroethane	250	U	1250	1120		ug/L		89	76 - 120	3	15
1,1,2-Trichloroethane	250	U	1250	1240		ug/L		99	76 - 122	0	15
1,1-Dichloroethane	250	U	1250	1260		ug/L		100	77 - 120	4	20
1,1-Dichloroethene	250	U	1250	1110		ug/L		89	66 - 127	6	16
1,2-Dichloroethane	250	U	1250	1190		ug/L		95	75 - 120	2	20
1,2-Dichloropropane	250	U	1250	1290		ug/L		104	76 - 120	2	20
2-Butanone (MEK)	500	U	6250	6670		ug/L		107	57 - 140	1	20
2-Hexanone	500	U	6250	6870		ug/L		110	65 - 127	1	15
4-Methyl-2-pentanone (MIBK)	500	U	6250	6370		ug/L		102	71 - 125	3	35
Acetone	500	U	6250	5670		ug/L		91	56 - 142	2	15
Benzene	50	U	1250	1270		ug/L		102	71 - 124	3	13
Bromodichloromethane	250	U	1250	1310		ug/L		105	80 - 122	1	15
Bromoform	250	U	1250	1120		ug/L		90	61 - 132	4	15
Bromomethane	500	U	1250	1060		ug/L		85	55 - 144	0	15
Carbon disulfide	250	U	1250	904		ug/L		72	59 - 134	3	15
Carbon tetrachloride	250	U	1250	1310		ug/L		105	72 - 134	4	15
Chlorobenzene	250	U	1250	1230		ug/L		98	80 - 120	1	25
Chloroethane	500	U	1250	1110		ug/L		89	69 - 136	0	15
Chloroform	250	U	1250	1180		ug/L		95	73 - 127	2	20
Chloromethane	500	U	1250	1110		ug/L		89	68 - 124	3	15
cis-1,2-Dichloroethene	250	U	1250	1220		ug/L		97	74 - 124	4	15
cis-1,3-Dichloropropene	250	U	1250	1330		ug/L		107	74 - 124	4	15
Dibromochloromethane	250	U	1250	1240		ug/L		99	75 - 125	4	15
Ethyl ether	1300		1250	2540		ug/L		95	76 - 123	2	20
Ethylbenzene	250	U	1250	1240		ug/L		99	77 - 123	1	15
m&p-Xylene	250	U	1250	1300		ug/L		104	76 - 122	5	16
Methylene Chloride	250	U	1250	1070		ug/L		86	75 - 124	3	15
o-Xylene	250	U	1250	1240		ug/L		99	76 - 122	3	16
Styrene	250	U	1250	1290		ug/L		103	80 - 120	0	20
Tetrachloroethene	250	U	1250	1260		ug/L		101	74 - 122	3	20
Toluene	250	U	1250	1190		ug/L		95	80 - 122	1	15
trans-1,2-Dichloroethene	250	U	1250	1100		ug/L		88	73 - 127	2	20
trans-1,3-Dichloropropene	250	U	1250	1230		ug/L		99	80 - 120	4	15
Trichloroethene	250	U	1250	1280		ug/L		103	74 - 123	2	16
Vinyl chloride	500	U	1250	1190		ug/L		95	65 - 133	2	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		77 - 120
4-Bromofluorobenzene (Surr)	102		73 - 120
Toluene-d8 (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	102		75 - 123

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

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

Lab Sample ID: MB 480-443808/28

Matrix: Water

Analysis Batch: 443808

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-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/06/18 11:53	1
1,1,1,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/06/18 11:53	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/06/18 11:53	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/06/18 11:53	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/06/18 11:53	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/06/18 11:53	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/06/18 11:53	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			11/06/18 11:53	1
2-Hexanone	10	U	10	1.2	ug/L			11/06/18 11:53	1
2-Methylthiophene	10	U	10	0.44	ug/L			11/06/18 11:53	1
3-Methylthiophene	10	U	10	0.53	ug/L			11/06/18 11:53	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/06/18 11:53	1
Acetone	10	U	10	3.0	ug/L			11/06/18 11:53	1
Benzene	1.0	U	1.0	0.41	ug/L			11/06/18 11:53	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/06/18 11:53	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/06/18 11:53	1
Bromomethane	10	U	10	0.69	ug/L			11/06/18 11:53	1
Carbon disulfide	5.0	U	5.0	0.19	ug/L			11/06/18 11:53	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/06/18 11:53	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/06/18 11:53	1
Chloroethane	10	U	10	0.32	ug/L			11/06/18 11:53	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/06/18 11:53	1
Chloromethane	10	U	10	0.35	ug/L			11/06/18 11:53	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/06/18 11:53	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/06/18 11:53	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/06/18 11:53	1
Ethyl ether	10	U	10	0.72	ug/L			11/06/18 11:53	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/06/18 11:53	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/06/18 11:53	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/06/18 11:53	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/06/18 11:53	1
Styrene	5.0	U	5.0	0.73	ug/L			11/06/18 11:53	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/06/18 11:53	1
Toluene	5.0	U	5.0	0.51	ug/L			11/06/18 11:53	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/06/18 11:53	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/06/18 11:53	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/06/18 11:53	1
Vinyl chloride	10	U	10	0.90	ug/L			11/06/18 11:53	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/06/18 11:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		77 - 120		11/06/18 11:53	1
4-Bromofluorobenzene (Surr)	103		73 - 120		11/06/18 11:53	1
Toluene-d8 (Surr)	103		80 - 120		11/06/18 11:53	1
Dibromofluoromethane (Surr)	114		75 - 123		11/06/18 11:53	1

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Lab Sample ID: LCS 480-443808/5

Matrix: Water

Analysis Batch: 443808

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-Trichloroethane	25.0	26.5		ug/L		106	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.1		ug/L		92	76 - 120
1,1,2-Trichloroethane	25.0	24.8		ug/L		99	76 - 122
1,1-Dichloroethane	25.0	25.7		ug/L		103	77 - 120
1,1-Dichloroethene	25.0	26.9		ug/L		108	66 - 127
1,2-Dichloroethane	25.0	23.1		ug/L		92	75 - 120
1,2-Dichloropropane	25.0	25.6		ug/L		102	76 - 120
2-Butanone (MEK)	125	138		ug/L		111	57 - 140
2-Hexanone	125	142		ug/L		114	65 - 127
4-Methyl-2-pentanone (MIBK)	125	132		ug/L		106	71 - 125
Acetone	125	139		ug/L		111	56 - 142
Benzene	25.0	25.6		ug/L		102	71 - 124
Bromodichloromethane	25.0	25.3		ug/L		101	80 - 122
Bromoform	25.0	23.4		ug/L		94	61 - 132
Bromomethane	25.0	23.3		ug/L		93	55 - 144
Carbon disulfide	25.0	24.3		ug/L		97	59 - 134
Carbon tetrachloride	25.0	27.8		ug/L		111	72 - 134
Chlorobenzene	25.0	25.4		ug/L		101	80 - 120
Chloroethane	25.0	24.8		ug/L		99	69 - 136
Chloroform	25.0	25.1		ug/L		101	73 - 127
Chloromethane	25.0	22.5		ug/L		90	68 - 124
cis-1,2-Dichloroethene	25.0	25.9		ug/L		104	74 - 124
cis-1,3-Dichloropropene	25.0	26.0		ug/L		104	74 - 124
Dibromochloromethane	25.0	25.1		ug/L		100	75 - 125
Ethyl ether	25.0	24.4		ug/L		98	76 - 123
Ethylbenzene	25.0	25.8		ug/L		103	77 - 123
m&p-Xylene	25.0	26.8		ug/L		107	76 - 122
Methylene Chloride	25.0	22.8		ug/L		91	75 - 124
o-Xylene	25.0	27.4		ug/L		110	76 - 122
Styrene	25.0	25.5		ug/L		102	80 - 120
Tetrachloroethene	25.0	26.5		ug/L		106	74 - 122
Toluene	25.0	25.2		ug/L		101	80 - 122
trans-1,2-Dichloroethene	25.0	24.8		ug/L		99	73 - 127
trans-1,3-Dichloropropene	25.0	25.2		ug/L		101	80 - 120
Trichloroethene	25.0	25.8		ug/L		103	74 - 123
Vinyl chloride	25.0	27.3		ug/L		109	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		77 - 120
4-Bromofluorobenzene (Surr)	102		73 - 120
Toluene-d8 (Surr)	103		80 - 120
Dibromofluoromethane (Surr)	104		75 - 123

Lab Sample ID: MB 480-444017/7

Matrix: Water

Analysis Batch: 444017

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-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/06/18 23:20	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/06/18 23:20	1

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

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

Lab Sample ID: MB 480-444017/7

Matrix: Water

Analysis Batch: 444017

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/06/18 23:20	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/06/18 23:20	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/06/18 23:20	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/06/18 23:20	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/06/18 23:20	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			11/06/18 23:20	1
2-Hexanone	10	U	10	1.2	ug/L			11/06/18 23:20	1
2-Methylthiophene	10	U	10	0.44	ug/L			11/06/18 23:20	1
3-Methylthiophene	10	U	10	0.53	ug/L			11/06/18 23:20	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/06/18 23:20	1
Acetone	10	U	10	3.0	ug/L			11/06/18 23:20	1
Benzene	1.0	U	1.0	0.41	ug/L			11/06/18 23:20	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/06/18 23:20	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/06/18 23:20	1
Bromomethane	10	U	10	0.69	ug/L			11/06/18 23:20	1
Carbon disulfide	5.0	U	5.0	0.19	ug/L			11/06/18 23:20	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/06/18 23:20	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/06/18 23:20	1
Chloroethane	10	U	10	0.32	ug/L			11/06/18 23:20	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/06/18 23:20	1
Chloromethane	10	U	10	0.35	ug/L			11/06/18 23:20	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/06/18 23:20	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/06/18 23:20	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/06/18 23:20	1
Ethyl ether	10	U	10	0.72	ug/L			11/06/18 23:20	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/06/18 23:20	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/06/18 23:20	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/06/18 23:20	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/06/18 23:20	1
Styrene	5.0	U	5.0	0.73	ug/L			11/06/18 23:20	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/06/18 23:20	1
Toluene	5.0	U	5.0	0.51	ug/L			11/06/18 23:20	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/06/18 23:20	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/06/18 23:20	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/06/18 23:20	1
Vinyl chloride	10	U	10	0.90	ug/L			11/06/18 23:20	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/06/18 23:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		77 - 120		11/06/18 23:20	1
4-Bromofluorobenzene (Surr)	103		73 - 120		11/06/18 23:20	1
Toluene-d8 (Surr)	98		80 - 120		11/06/18 23:20	1
Dibromofluoromethane (Surr)	105		75 - 123		11/06/18 23:20	1

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

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

Lab Sample ID: LCS 480-444017/5

Matrix: Water

Analysis Batch: 444017

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-Trichloroethane	25.0	25.2		ug/L		101	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.5		ug/L		94	76 - 120
1,1,2-Trichloroethane	25.0	26.0		ug/L		104	76 - 122
1,1-Dichloroethane	25.0	25.0		ug/L		100	77 - 120
1,1-Dichloroethene	25.0	20.1		ug/L		80	66 - 127
1,2-Dichloroethane	25.0	24.5		ug/L		98	75 - 120
1,2-Dichloropropane	25.0	27.1		ug/L		108	76 - 120
2-Butanone (MEK)	125	147		ug/L		117	57 - 140
2-Hexanone	125	140		ug/L		112	65 - 127
4-Methyl-2-pentanone (MIBK)	125	125		ug/L		100	71 - 125
Acetone	125	152		ug/L		122	56 - 142
Benzene	25.0	26.4		ug/L		106	71 - 124
Bromodichloromethane	25.0	27.5		ug/L		110	80 - 122
Bromoform	25.0	24.4		ug/L		98	61 - 132
Bromomethane	25.0	21.7		ug/L		87	55 - 144
Carbon disulfide	25.0	16.5		ug/L		66	59 - 134
Carbon tetrachloride	25.0	26.4		ug/L		105	72 - 134
Chlorobenzene	25.0	25.8		ug/L		103	80 - 120
Chloroethane	25.0	23.4		ug/L		94	69 - 136
Chloroform	25.0	24.7		ug/L		99	73 - 127
Chloromethane	25.0	21.2		ug/L		85	68 - 124
cis-1,2-Dichloroethene	25.0	24.9		ug/L		100	74 - 124
cis-1,3-Dichloropropene	25.0	29.6		ug/L		118	74 - 124
Dibromochloromethane	25.0	25.7		ug/L		103	75 - 125
Ethyl ether	25.0	23.0		ug/L		92	76 - 123
Ethylbenzene	25.0	25.8		ug/L		103	77 - 123
m&p-Xylene	25.0	26.7		ug/L		107	76 - 122
Methylene Chloride	25.0	21.9		ug/L		88	75 - 124
o-Xylene	25.0	25.7		ug/L		103	76 - 122
Styrene	25.0	27.5		ug/L		110	80 - 120
Tetrachloroethene	25.0	26.1		ug/L		104	74 - 122
Toluene	25.0	24.6		ug/L		99	80 - 122
trans-1,2-Dichloroethene	25.0	22.6		ug/L		90	73 - 127
trans-1,3-Dichloropropene	25.0	27.3		ug/L		109	80 - 120
Trichloroethene	25.0	26.2		ug/L		105	74 - 123
Vinyl chloride	25.0	24.1		ug/L		96	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		77 - 120
4-Bromofluorobenzene (Surr)	106		73 - 120
Toluene-d8 (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	101		75 - 123

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-443009/1-A

Matrix: Water

Analysis Batch: 445727

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 443009

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	10	U	10	0.44	ug/L		11/01/18 09:28	11/15/18 09:57	1
1,2-Dichlorobenzene	10	U	10	0.40	ug/L		11/01/18 09:28	11/15/18 09:57	1
1,3-Dichlorobenzene	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 09:57	1
1,4-Dichlorobenzene	10	U	10	0.46	ug/L		11/01/18 09:28	11/15/18 09:57	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 09:57	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.61	ug/L		11/01/18 09:28	11/15/18 09:57	1
2,4-Dichlorophenol	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 09:57	1
2,4-Dimethylphenol	5.0	U	5.0	0.50	ug/L		11/01/18 09:28	11/15/18 09:57	1
2,4-Dinitrophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 09:57	1
2,4-Dinitrotoluene	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 09:57	1
2,6-Dinitrotoluene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 09:57	1
2-Chloronaphthalene	5.0	U	5.0	0.46	ug/L		11/01/18 09:28	11/15/18 09:57	1
2-Chlorophenol	5.0	U	5.0	0.53	ug/L		11/01/18 09:28	11/15/18 09:57	1
2-Methylnaphthalene	5.0	U	5.0	0.60	ug/L		11/01/18 09:28	11/15/18 09:57	1
2-Methylphenol	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 09:57	1
2-Nitroaniline	10	U	10	0.42	ug/L		11/01/18 09:28	11/15/18 09:57	1
2-Nitrophenol	5.0	U	5.0	0.48	ug/L		11/01/18 09:28	11/15/18 09:57	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 09:57	1
3-Nitroaniline	10	U	10	0.48	ug/L		11/01/18 09:28	11/15/18 09:57	1
4,6-Dinitro-2-methylphenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 09:57	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 09:57	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.45	ug/L		11/01/18 09:28	11/15/18 09:57	1
4-Chloroaniline	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 09:57	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 09:57	1
4-Methylphenol	10	U	10	0.36	ug/L		11/01/18 09:28	11/15/18 09:57	1
4-Nitroaniline	10	U	10	0.25	ug/L		11/01/18 09:28	11/15/18 09:57	1
4-Nitrophenol	10	U	10	1.5	ug/L		11/01/18 09:28	11/15/18 09:57	1
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/01/18 09:28	11/15/18 09:57	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/01/18 09:28	11/15/18 09:57	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/01/18 09:28	11/15/18 09:57	1
Benzaldehyde	5.0	U	5.0	0.27	ug/L		11/01/18 09:28	11/15/18 09:57	1
Benzo[a]anthracene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 09:57	1
Benzo[a]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 09:57	1
Benzo[b]fluoranthene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 09:57	1
Benzo[g,h,i]perylene	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 09:57	1
Benzo[k]fluoranthene	5.0	U	5.0	0.73	ug/L		11/01/18 09:28	11/15/18 09:57	1
bis (2-chloroisopropyl) ether	5.0	U	5.0	0.52	ug/L		11/01/18 09:28	11/15/18 09:57	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.35	ug/L		11/01/18 09:28	11/15/18 09:57	1
Bis(2-chloroethyl)ether	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 09:57	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		11/01/18 09:28	11/15/18 09:57	1
Butyl benzyl phthalate	5.0	U	5.0	1.0	ug/L		11/01/18 09:28	11/15/18 09:57	1
Carbazole	5.0	U	5.0	0.30	ug/L		11/01/18 09:28	11/15/18 09:57	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/01/18 09:28	11/15/18 09:57	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/01/18 09:28	11/15/18 09:57	1
Dibenzofuran	10	U	10	0.51	ug/L		11/01/18 09:28	11/15/18 09:57	1
Diethyl phthalate	5.0	U	5.0	0.22	ug/L		11/01/18 09:28	11/15/18 09:57	1
Dimethyl phthalate	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 09:57	1
Di-n-butyl phthalate	5.0	U	5.0	0.31	ug/L		11/01/18 09:28	11/15/18 09:57	1

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-443009/1-A

Matrix: Water

Analysis Batch: 445727

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 443009

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 09:57	1
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/01/18 09:28	11/15/18 09:57	1
Fluorene	5.0	U	5.0	0.36	ug/L		11/01/18 09:28	11/15/18 09:57	1
Hexachlorobenzene	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 09:57	1
Hexachlorobutadiene	5.0	U	5.0	0.68	ug/L		11/01/18 09:28	11/15/18 09:57	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 09:57	1
Hexachloroethane	5.0	U	5.0	0.59	ug/L		11/01/18 09:28	11/15/18 09:57	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0	0.47	ug/L		11/01/18 09:28	11/15/18 09:57	1
Isophorone	5.0	U	5.0	0.43	ug/L		11/01/18 09:28	11/15/18 09:57	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/01/18 09:28	11/15/18 09:57	1
Nitrobenzene	5.0	U	5.0	0.29	ug/L		11/01/18 09:28	11/15/18 09:57	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.54	ug/L		11/01/18 09:28	11/15/18 09:57	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.51	ug/L		11/01/18 09:28	11/15/18 09:57	1
Pentachlorophenol	10	U	10	2.2	ug/L		11/01/18 09:28	11/15/18 09:57	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/01/18 09:28	11/15/18 09:57	1
Phenol	5.0	U	5.0	0.39	ug/L		11/01/18 09:28	11/15/18 09:57	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/01/18 09:28	11/15/18 09:57	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	1.89	T J	ug/L		2.47		11/01/18 09:28	11/15/18 09:57	1
Cyclohexane	2.69	T J N	ug/L		2.57	110-82-7	11/01/18 09:28	11/15/18 09:57	1
Unknown	3.25	T J	ug/L		2.61		11/01/18 09:28	11/15/18 09:57	1
Unknown	19.6	T J	ug/L		2.89		11/01/18 09:28	11/15/18 09:57	1
Unknown	254	T J	ug/L		3.33		11/01/18 09:28	11/15/18 09:57	1
Unknown	1.88	T J	ug/L		3.38		11/01/18 09:28	11/15/18 09:57	1
Unknown	4.71	T J	ug/L		3.76		11/01/18 09:28	11/15/18 09:57	1
Unknown	3.04	T J	ug/L		4.38		11/01/18 09:28	11/15/18 09:57	1
Toluene	5.81	T J N	ug/L		4.44	108-88-3	11/01/18 09:28	11/15/18 09:57	1
Unknown	17.8	T J	ug/L		5.15		11/01/18 09:28	11/15/18 09:57	1
Cyclotetrasiloxane, octamethyl-	2.33	T J N	ug/L		6.21	556-67-2	11/01/18 09:28	11/15/18 09:57	1
Cyclopentasiloxane, decamethyl-	2.41	T J N	ug/L		7.16	541-02-6	11/01/18 09:28	11/15/18 09:57	1
Cyclohexasiloxane, dodecamethyl-	1.74	T J N	ug/L		8.04	540-97-6	11/01/18 09:28	11/15/18 09:57	1
Unknown	1.88	T J	ug/L		10.44		11/01/18 09:28	11/15/18 09:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	60		41 - 120	11/01/18 09:28	11/15/18 09:57	1
2-Fluorobiphenyl	78		48 - 120	11/01/18 09:28	11/15/18 09:57	1
2-Fluorophenol (Surr)	55		35 - 120	11/01/18 09:28	11/15/18 09:57	1
Nitrobenzene-d5 (Surr)	75		46 - 120	11/01/18 09:28	11/15/18 09:57	1
Phenol-d5 (Surr)	41		22 - 120	11/01/18 09:28	11/15/18 09:57	1
p-Terphenyl-d14 (Surr)	87		59 - 136	11/01/18 09:28	11/15/18 09:57	1

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-443009/2-A

Matrix: Water

Analysis Batch: 445727

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 443009

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,2,4-Trichlorobenzene	32.0	28.5		ug/L		89	40 - 120
1,2-Dichlorobenzene	32.0	27.3		ug/L		85	49 - 120
1,3-Dichlorobenzene	32.0	26.3		ug/L		82	50 - 120
1,4-Dichlorobenzene	32.0	26.8		ug/L		84	51 - 120
2,4,5-Trichlorophenol	32.0	33.1		ug/L		104	65 - 126
2,4,6-Trichlorophenol	32.0	32.1		ug/L		100	64 - 120
2,4-Dichlorophenol	32.0	31.7		ug/L		99	63 - 120
2,4-Dimethylphenol	32.0	32.3		ug/L		101	47 - 120
2,4-Dinitrophenol	64.0	67.4		ug/L		105	31 - 137
2,4-Dinitrotoluene	32.0	34.6		ug/L		108	69 - 120
2,6-Dinitrotoluene	32.0	33.2		ug/L		104	68 - 120
2-Chloronaphthalene	32.0	29.6		ug/L		92	58 - 120
2-Chlorophenol	32.0	29.0		ug/L		91	48 - 120
2-Methylnaphthalene	32.0	30.1		ug/L		94	59 - 120
2-Methylphenol	32.0	28.4		ug/L		89	39 - 120
2-Nitroaniline	32.0	32.3		ug/L		101	54 - 127
2-Nitrophenol	32.0	30.9		ug/L		97	52 - 125
3,3'-Dichlorobenzidine	64.0	67.8		ug/L		106	49 - 135
3-Nitroaniline	32.0	29.7		ug/L		93	51 - 120
4,6-Dinitro-2-methylphenol	64.0	69.5		ug/L		109	46 - 136
4-Bromophenyl phenyl ether	32.0	32.5		ug/L		102	65 - 120
4-Chloro-3-methylphenol	32.0	32.9		ug/L		103	61 - 123
4-Chloroaniline	32.0	27.2		ug/L		85	30 - 120
4-Chlorophenyl phenyl ether	32.0	32.0		ug/L		100	62 - 120
4-Methylphenol	32.0	27.7		ug/L		86	29 - 131
4-Nitroaniline	32.0	32.0		ug/L		100	65 - 120
4-Nitrophenol	64.0	58.2		ug/L		91	45 - 120
Acenaphthene	32.0	29.8		ug/L		93	60 - 120
Acenaphthylene	32.0	30.9		ug/L		97	63 - 120
Anthracene	32.0	33.0		ug/L		103	67 - 120
Benzaldehyde	64.0	59.4		ug/L		93	10 - 140
Benzo[a]anthracene	32.0	32.7		ug/L		102	70 - 121
Benzo[a]pyrene	32.0	33.6		ug/L		105	60 - 123
Benzo[b]fluoranthene	32.0	34.3		ug/L		107	66 - 126
Benzo[g,h,i]perylene	32.0	33.8		ug/L		106	66 - 150
Benzo[k]fluoranthene	32.0	33.7		ug/L		105	65 - 124
bis (2-chloroisopropyl) ether	32.0	26.5		ug/L		83	21 - 136
Bis(2-chloroethoxy)methane	32.0	29.8		ug/L		93	50 - 128
Bis(2-chloroethyl)ether	32.0	28.4		ug/L		89	44 - 120
Bis(2-ethylhexyl) phthalate	32.0	31.6		ug/L		99	63 - 139
Butyl benzyl phthalate	32.0	32.2		ug/L		101	70 - 129
Carbazole	32.0	36.4		ug/L		114	66 - 123
Chrysene	32.0	32.4		ug/L		101	69 - 120
Dibenz(a,h)anthracene	32.0	34.0		ug/L		106	65 - 135
Dibenzofuran	32.0	30.9		ug/L		97	66 - 120
Diethyl phthalate	32.0	33.4		ug/L		104	59 - 127
Dimethyl phthalate	32.0	32.8		ug/L		103	68 - 120
Di-n-butyl phthalate	32.0	33.7		ug/L		105	69 - 131

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-443009/2-A

Matrix: Water

Analysis Batch: 445727

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 443009

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Di-n-octyl phthalate	32.0	33.0		ug/L		103	63 - 140
Fluoranthene	32.0	33.3		ug/L		104	69 - 126
Fluorene	32.0	31.4		ug/L		98	66 - 120
Hexachlorobenzene	32.0	32.4		ug/L		101	61 - 120
Hexachlorobutadiene	32.0	27.7		ug/L		87	35 - 120
Hexachlorocyclopentadiene	32.0	24.2		ug/L		76	31 - 120
Hexachloroethane	32.0	26.8		ug/L		84	43 - 120
Indeno[1,2,3-cd]pyrene	32.0	34.0		ug/L		106	69 - 146
Isophorone	32.0	31.6		ug/L		99	55 - 120
Naphthalene	32.0	28.8		ug/L		90	57 - 120
Nitrobenzene	32.0	30.6		ug/L		96	53 - 123
N-Nitrosodi-n-propylamine	32.0	30.9		ug/L		97	32 - 140
N-Nitrosodiphenylamine	32.0	32.5		ug/L		102	61 - 120
Pentachlorophenol	64.0	61.8		ug/L		97	29 - 136
Phenanthrene	32.0	32.4		ug/L		101	68 - 120
Phenol	32.0	19.0		ug/L		59	17 - 120
Pyrene	32.0	32.6		ug/L		102	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	83		41 - 120
2-Fluorobiphenyl	77		48 - 120
2-Fluorophenol (Surr)	60		35 - 120
Nitrobenzene-d5 (Surr)	81		46 - 120
Phenol-d5 (Surr)	49		22 - 120
p-Terphenyl-d14 (Surr)	88		59 - 136

Lab Sample ID: LCSD 480-443009/3-A

Matrix: Water

Analysis Batch: 445727

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 443009

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
1,2,4-Trichlorobenzene	32.0	28.6		ug/L		89	40 - 120	0	30
1,2-Dichlorobenzene	32.0	28.2		ug/L		88	49 - 120	3	29
1,3-Dichlorobenzene	32.0	27.4		ug/L		86	50 - 120	4	37
1,4-Dichlorobenzene	32.0	28.3		ug/L		88	51 - 120	5	36
2,4,5-Trichlorophenol	32.0	32.1		ug/L		100	65 - 126	3	18
2,4,6-Trichlorophenol	32.0	33.0		ug/L		103	64 - 120	3	19
2,4-Dichlorophenol	32.0	32.4		ug/L		101	63 - 120	2	19
2,4-Dimethylphenol	32.0	32.6		ug/L		102	47 - 120	1	42
2,4-Dinitrophenol	64.0	69.7		ug/L		109	31 - 137	3	22
2,4-Dinitrotoluene	32.0	34.8		ug/L		109	69 - 120	1	20
2,6-Dinitrotoluene	32.0	33.3		ug/L		104	68 - 120	0	15
2-Chloronaphthalene	32.0	30.3		ug/L		95	58 - 120	3	21
2-Chlorophenol	32.0	30.6		ug/L		96	48 - 120	6	25
2-Methylnaphthalene	32.0	29.9		ug/L		93	59 - 120	1	21
2-Methylphenol	32.0	29.1		ug/L		91	39 - 120	3	27
2-Nitroaniline	32.0	32.8		ug/L		102	54 - 127	1	15
2-Nitrophenol	32.0	31.9		ug/L		100	52 - 125	3	18

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-443009/3-A

Matrix: Water

Analysis Batch: 445727

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 443009

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	64.0	63.9		ug/L		100	49 - 135	6	25
3-Nitroaniline	32.0	29.4		ug/L		92	51 - 120	1	19
4,6-Dinitro-2-methylphenol	64.0	71.6		ug/L		112	46 - 136	3	15
4-Bromophenyl phenyl ether	32.0	33.7		ug/L		105	65 - 120	3	15
4-Chloro-3-methylphenol	32.0	32.5		ug/L		102	61 - 123	1	27
4-Chloroaniline	32.0	25.4		ug/L		79	30 - 120	7	22
4-Chlorophenyl phenyl ether	32.0	32.8		ug/L		102	62 - 120	2	16
4-Methylphenol	32.0	28.5		ug/L		89	29 - 131	3	24
4-Nitroaniline	32.0	32.7		ug/L		102	65 - 120	2	24
4-Nitrophenol	64.0	60.1		ug/L		94	45 - 120	3	48
Acenaphthene	32.0	30.7		ug/L		96	60 - 120	3	24
Acenaphthylene	32.0	31.6		ug/L		99	63 - 120	2	18
Anthracene	32.0	33.6		ug/L		105	67 - 120	2	15
Benzaldehyde	64.0	60.7		ug/L		95	10 - 140	2	20
Benzo[a]anthracene	32.0	33.1		ug/L		104	70 - 121	1	15
Benzo[a]pyrene	32.0	34.0		ug/L		106	60 - 123	1	15
Benzo[b]fluoranthene	32.0	35.6		ug/L		111	66 - 126	4	15
Benzo[g,h,i]perylene	32.0	33.9		ug/L		106	66 - 150	0	15
Benzo[k]fluoranthene	32.0	33.2		ug/L		104	65 - 124	1	22
bis (2-chloroisopropyl) ether	32.0	28.0		ug/L		87	21 - 136	5	24
Bis(2-chloroethoxy)methane	32.0	30.5		ug/L		95	50 - 128	2	17
Bis(2-chloroethyl)ether	32.0	29.8		ug/L		93	44 - 120	5	21
Bis(2-ethylhexyl) phthalate	32.0	31.6		ug/L		99	63 - 139	0	15
Butyl benzyl phthalate	32.0	33.2		ug/L		104	70 - 129	3	16
Carbazole	32.0	37.6		ug/L		117	66 - 123	3	20
Chrysene	32.0	32.7		ug/L		102	69 - 120	1	15
Dibenz(a,h)anthracene	32.0	33.8		ug/L		106	65 - 135	0	15
Dibenzofuran	32.0	31.6		ug/L		99	66 - 120	2	15
Diethyl phthalate	32.0	34.3		ug/L		107	59 - 127	3	15
Dimethyl phthalate	32.0	33.7		ug/L		105	68 - 120	3	15
Di-n-butyl phthalate	32.0	34.3		ug/L		107	69 - 131	2	15
Di-n-octyl phthalate	32.0	33.3		ug/L		104	63 - 140	1	16
Fluoranthene	32.0	34.5		ug/L		108	69 - 126	3	15
Fluorene	32.0	31.7		ug/L		99	66 - 120	1	15
Hexachlorobenzene	32.0	32.3		ug/L		101	61 - 120	0	15
Hexachlorobutadiene	32.0	28.4		ug/L		89	35 - 120	2	44
Hexachlorocyclopentadiene	32.0	25.8		ug/L		81	31 - 120	7	49
Hexachloroethane	32.0	28.5		ug/L		89	43 - 120	6	46
Indeno[1,2,3-cd]pyrene	32.0	34.4		ug/L		107	69 - 146	1	15
Isophorone	32.0	32.2		ug/L		101	55 - 120	2	17
Naphthalene	32.0	29.4		ug/L		92	57 - 120	2	29
Nitrobenzene	32.0	30.8		ug/L		96	53 - 123	1	24
N-Nitrosodi-n-propylamine	32.0	32.4		ug/L		101	32 - 140	5	31
N-Nitrosodiphenylamine	32.0	33.2		ug/L		104	61 - 120	2	15
Pentachlorophenol	64.0	63.6		ug/L		99	29 - 136	3	37
Phenanthrene	32.0	32.4		ug/L		101	68 - 120	0	15
Phenol	32.0	19.9		ug/L		62	17 - 120	5	34
Pyrene	32.0	32.6		ug/L		102	70 - 125	0	19

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-443009/3-A

Matrix: Water

Analysis Batch: 445727

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 443009

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	88		41 - 120
2-Fluorobiphenyl	78		48 - 120
2-Fluorophenol (Surr)	62		35 - 120
Nitrobenzene-d5 (Surr)	83		46 - 120
Phenol-d5 (Surr)	49		22 - 120
p-Terphenyl-d14 (Surr)	88		59 - 136

QC Association Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

GC/MS VOA

Analysis Batch: 443578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144405-1	WG-7830-102518-BP-001	Total/NA	Water	8260C	
480-144405-2	WG-7830-102518-BP-002	Total/NA	Water	8260C	
480-144405-3	WG-7830-102518-BP-003	Total/NA	Water	8260C	
480-144405-4	WG-7830-102518-BP-004	Total/NA	Water	8260C	
480-144405-6	WG-7830-102518-BP-006	Total/NA	Water	8260C	
480-144405-7	WG-7830-102518-BP-007	Total/NA	Water	8260C	
480-144405-9	WG-7830-102518-BP-009	Total/NA	Water	8260C	
480-144405-11	WG-7830-102518-BP-011	Total/NA	Water	8260C	
480-144405-12	WG-7830-102518-BP-012	Total/NA	Water	8260C	
MB 480-443578/7	Method Blank	Total/NA	Water	8260C	
LCS 480-443578/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 443761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144405-5	WG-7830-102518-BP-005	Total/NA	Water	8260C	
480-144405-6 - DL	WG-7830-102518-BP-006	Total/NA	Water	8260C	
480-144405-7 - DL	WG-7830-102518-BP-007	Total/NA	Water	8260C	
480-144405-8	WG-7830-102518-BP-008	Total/NA	Water	8260C	
480-144405-9 - DL	WG-7830-102518-BP-009	Total/NA	Water	8260C	
480-144405-10	WG-7830-102518-BP-010	Total/NA	Water	8260C	
480-144405-12 - DL	WG-7830-102518-BP-012	Total/NA	Water	8260C	
480-144405-15	WG-7830-102518-BP-015	Total/NA	Water	8260C	
480-144405-16	WG-7830-102518-BP-016	Total/NA	Water	8260C	
480-144405-17	WG-7830-102618-BP-017	Total/NA	Water	8260C	
480-144405-18	WG-7830-102618-BP-018	Total/NA	Water	8260C	
480-144405-19	WG-7830-102618-BP-019	Total/NA	Water	8260C	
MB 480-443761/7	Method Blank	Total/NA	Water	8260C	
LCS 480-443761/5	Lab Control Sample	Total/NA	Water	8260C	
480-144405-6 MS	WG-7830-102518-BP-006	Total/NA	Water	8260C	
480-144405-6 MSD	WG-7830-102518-BP-006	Total/NA	Water	8260C	

Analysis Batch: 443808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144405-17 - DL	WG-7830-102618-BP-017	Total/NA	Water	8260C	
480-144405-21	WG-7830-102618-BP-021	Total/NA	Water	8260C	
480-144405-22	WG-7830-102618-BP-022	Total/NA	Water	8260C	
MB 480-443808/28	Method Blank	Total/NA	Water	8260C	
LCS 480-443808/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 444017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144405-20	WG-7830-102618-BP-020	Total/NA	Water	8260C	
MB 480-444017/7	Method Blank	Total/NA	Water	8260C	
LCS 480-444017/5	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 443009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144405-1	WG-7830-102518-BP-001	Total/NA	Water	3510C	

TestAmerica Buffalo

QC Association Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

GC/MS Semi VOA (Continued)

Prep Batch: 443009 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144405-2	WG-7830-102518-BP-002	Total/NA	Water	3510C	
480-144405-3	WG-7830-102518-BP-003	Total/NA	Water	3510C	
480-144405-4	WG-7830-102518-BP-004	Total/NA	Water	3510C	
480-144405-5	WG-7830-102518-BP-005	Total/NA	Water	3510C	
480-144405-6	WG-7830-102518-BP-006	Total/NA	Water	3510C	
480-144405-7	WG-7830-102518-BP-007	Total/NA	Water	3510C	
480-144405-8	WG-7830-102518-BP-008	Total/NA	Water	3510C	
480-144405-9	WG-7830-102518-BP-009	Total/NA	Water	3510C	
480-144405-10	WG-7830-102518-BP-010	Total/NA	Water	3510C	
480-144405-11	WG-7830-102518-BP-011	Total/NA	Water	3510C	
480-144405-12	WG-7830-102518-BP-012	Total/NA	Water	3510C	
480-144405-15	WG-7830-102518-BP-015	Total/NA	Water	3510C	
480-144405-16	WG-7830-102518-BP-016	Total/NA	Water	3510C	
480-144405-17	WG-7830-102618-BP-017	Total/NA	Water	3510C	
480-144405-18	WG-7830-102618-BP-018	Total/NA	Water	3510C	
480-144405-19	WG-7830-102618-BP-019	Total/NA	Water	3510C	
480-144405-20	WG-7830-102618-BP-020	Total/NA	Water	3510C	
480-144405-21	WG-7830-102618-BP-021	Total/NA	Water	3510C	
480-144405-22	WG-7830-102618-BP-022	Total/NA	Water	3510C	
MB 480-443009/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-443009/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-443009/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 445727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144405-1	WG-7830-102518-BP-001	Total/NA	Water	8270D	443009
480-144405-3	WG-7830-102518-BP-003	Total/NA	Water	8270D	443009
480-144405-4	WG-7830-102518-BP-004	Total/NA	Water	8270D	443009
480-144405-5	WG-7830-102518-BP-005	Total/NA	Water	8270D	443009
480-144405-6	WG-7830-102518-BP-006	Total/NA	Water	8270D	443009
480-144405-7	WG-7830-102518-BP-007	Total/NA	Water	8270D	443009
480-144405-8	WG-7830-102518-BP-008	Total/NA	Water	8270D	443009
480-144405-9	WG-7830-102518-BP-009	Total/NA	Water	8270D	443009
480-144405-10	WG-7830-102518-BP-010	Total/NA	Water	8270D	443009
480-144405-11	WG-7830-102518-BP-011	Total/NA	Water	8270D	443009
480-144405-12	WG-7830-102518-BP-012	Total/NA	Water	8270D	443009
480-144405-16	WG-7830-102518-BP-016	Total/NA	Water	8270D	443009
480-144405-17	WG-7830-102618-BP-017	Total/NA	Water	8270D	443009
480-144405-20	WG-7830-102618-BP-020	Total/NA	Water	8270D	443009
480-144405-21	WG-7830-102618-BP-021	Total/NA	Water	8270D	443009
MB 480-443009/1-A	Method Blank	Total/NA	Water	8270D	443009
LCS 480-443009/2-A	Lab Control Sample	Total/NA	Water	8270D	443009
LCSD 480-443009/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	443009

Analysis Batch: 445903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144405-2	WG-7830-102518-BP-002	Total/NA	Water	8270D	443009
480-144405-15	WG-7830-102518-BP-015	Total/NA	Water	8270D	443009
480-144405-18	WG-7830-102618-BP-018	Total/NA	Water	8270D	443009
480-144405-19	WG-7830-102618-BP-019	Total/NA	Water	8270D	443009
480-144405-22	WG-7830-102618-BP-022	Total/NA	Water	8270D	443009

TestAmerica Buffalo

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-001

Lab Sample ID: 480-144405-1

Date Collected: 10/25/18 11:00

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	443578	11/05/18 11:50	NMC	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		1	445727	11/15/18 11:24	RJS	TAL BUF

Client Sample ID: WG-7830-102518-BP-002

Lab Sample ID: 480-144405-2

Date Collected: 10/25/18 11:10

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	443578	11/05/18 12:17	NMC	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		1	445903	11/16/18 06:31	RJS	TAL BUF

Client Sample ID: WG-7830-102518-BP-003

Lab Sample ID: 480-144405-3

Date Collected: 10/25/18 11:30

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	443578	11/05/18 12:43	NMC	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		1	445727	11/15/18 12:22	RJS	TAL BUF

Client Sample ID: WG-7830-102518-BP-004

Lab Sample ID: 480-144405-4

Date Collected: 10/25/18 11:40

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	443578	11/05/18 13:10	NMC	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		1	445727	11/15/18 12:52	RJS	TAL BUF

Client Sample ID: WG-7830-102518-BP-005

Lab Sample ID: 480-144405-5

Date Collected: 10/25/18 12:00

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	443761	11/06/18 03:34	KMN	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		1	445727	11/15/18 13:21	RJS	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-006

Lab Sample ID: 480-144405-6

Date Collected: 10/25/18 12:10

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	443578	11/05/18 14:03	NMC	TAL BUF
Total/NA	Analysis	8260C	DL	50	443761	11/06/18 04:01	KMN	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		1	445727	11/15/18 13:50	RJS	TAL BUF

Client Sample ID: WG-7830-102518-BP-007

Lab Sample ID: 480-144405-7

Date Collected: 10/25/18 12:40

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	443578	11/05/18 14:30	NMC	TAL BUF
Total/NA	Analysis	8260C	DL	40	443761	11/06/18 04:28	KMN	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		1	445727	11/15/18 14:19	RJS	TAL BUF

Client Sample ID: WG-7830-102518-BP-008

Lab Sample ID: 480-144405-8

Date Collected: 10/25/18 12:50

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	443761	11/06/18 02:42	KMN	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		1	445727	11/15/18 14:49	RJS	TAL BUF

Client Sample ID: WG-7830-102518-BP-009

Lab Sample ID: 480-144405-9

Date Collected: 10/25/18 13:00

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	443578	11/05/18 15:23	NMC	TAL BUF
Total/NA	Analysis	8260C	DL	10	443761	11/06/18 04:54	KMN	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		1	445727	11/15/18 15:18	RJS	TAL BUF

Client Sample ID: WG-7830-102518-BP-010

Lab Sample ID: 480-144405-10

Date Collected: 10/25/18 14:30

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	443761	11/06/18 03:08	KMN	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		1	445727	11/15/18 15:47	RJS	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102518-BP-011

Lab Sample ID: 480-144405-11

Date Collected: 10/25/18 13:10

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	443578	11/05/18 16:17	NMC	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		1	445727	11/15/18 16:17	RJS	TAL BUF

Client Sample ID: WG-7830-102518-BP-012

Lab Sample ID: 480-144405-12

Date Collected: 10/25/18 15:00

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	443578	11/05/18 16:43	NMC	TAL BUF
Total/NA	Analysis	8260C	DL	4	443761	11/06/18 05:21	KMN	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		1	445727	11/15/18 16:46	RJS	TAL BUF

Client Sample ID: WG-7830-102518-BP-015

Lab Sample ID: 480-144405-15

Date Collected: 10/25/18 16:00

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	443761	11/06/18 05:48	KMN	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		5	445903	11/16/18 07:00	RJS	TAL BUF

Client Sample ID: WG-7830-102518-BP-016

Lab Sample ID: 480-144405-16

Date Collected: 10/25/18 16:30

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	443761	11/06/18 06:15	KMN	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		1	445727	11/15/18 17:45	RJS	TAL BUF

Client Sample ID: WG-7830-102618-BP-017

Lab Sample ID: 480-144405-17

Date Collected: 10/26/18 09:00

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	443761	11/06/18 06:41	KMN	TAL BUF
Total/NA	Analysis	8260C	DL	20	443808	11/06/18 15:39	NMC	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		5	445727	11/15/18 18:15	RJS	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Client Sample ID: WG-7830-102618-BP-018

Lab Sample ID: 480-144405-18

Date Collected: 10/26/18 10:00

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	443761	11/06/18 07:08	KMN	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		10	445903	11/16/18 07:29	RJS	TAL BUF

Client Sample ID: WG-7830-102618-BP-019

Lab Sample ID: 480-144405-19

Date Collected: 10/26/18 10:30

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	443761	11/06/18 07:35	KMN	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		5	445903	11/16/18 07:59	RJS	TAL BUF

Client Sample ID: WG-7830-102618-BP-020

Lab Sample ID: 480-144405-20

Date Collected: 10/26/18 11:30

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	444017	11/07/18 04:56	KMN	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		10	445727	11/15/18 19:42	RJS	TAL BUF

Client Sample ID: WG-7830-102618-BP-021

Lab Sample ID: 480-144405-21

Date Collected: 10/26/18 12:00

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	443808	11/06/18 16:32	NMC	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		1	445727	11/15/18 20:12	RJS	TAL BUF

Client Sample ID: WG-7830-102618-BP-022

Lab Sample ID: 480-144405-22

Date Collected: 10/26/18 12:30

Matrix: Water

Date Received: 10/27/18 01:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	443808	11/06/18 16:59	NMC	TAL BUF
Total/NA	Prep	3510C			443009	11/01/18 09:28	AAP	TAL BUF
Total/NA	Analysis	8270D		5	445903	11/16/18 08:28	RJS	TAL BUF

Laboratory References:

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

TestAmerica Buffalo

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	2-Methylthiophene
8260C		Water	3-Methylthiophene

Method Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144405-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-144405-1	WG-7830-102518-BP-001	Water	10/25/18 11:00	10/27/18 01:15
480-144405-2	WG-7830-102518-BP-002	Water	10/25/18 11:10	10/27/18 01:15
480-144405-3	WG-7830-102518-BP-003	Water	10/25/18 11:30	10/27/18 01:15
480-144405-4	WG-7830-102518-BP-004	Water	10/25/18 11:40	10/27/18 01:15
480-144405-5	WG-7830-102518-BP-005	Water	10/25/18 12:00	10/27/18 01:15
480-144405-6	WG-7830-102518-BP-006	Water	10/25/18 12:10	10/27/18 01:15
480-144405-7	WG-7830-102518-BP-007	Water	10/25/18 12:40	10/27/18 01:15
480-144405-8	WG-7830-102518-BP-008	Water	10/25/18 12:50	10/27/18 01:15
480-144405-9	WG-7830-102518-BP-009	Water	10/25/18 13:00	10/27/18 01:15
480-144405-10	WG-7830-102518-BP-010	Water	10/25/18 14:30	10/27/18 01:15
480-144405-11	WG-7830-102518-BP-011	Water	10/25/18 13:10	10/27/18 01:15
480-144405-12	WG-7830-102518-BP-012	Water	10/25/18 15:00	10/27/18 01:15
480-144405-15	WG-7830-102518-BP-015	Water	10/25/18 16:00	10/27/18 01:15
480-144405-16	WG-7830-102518-BP-016	Water	10/25/18 16:30	10/27/18 01:15
480-144405-17	WG-7830-102618-BP-017	Water	10/26/18 09:00	10/27/18 01:15
480-144405-18	WG-7830-102618-BP-018	Water	10/26/18 10:00	10/27/18 01:15
480-144405-19	WG-7830-102618-BP-019	Water	10/26/18 10:30	10/27/18 01:15
480-144405-20	WG-7830-102618-BP-020	Water	10/26/18 11:30	10/27/18 01:15
480-144405-21	WG-7830-102618-BP-021	Water	10/26/18 12:00	10/27/18 01:15
480-144405-22	WG-7830-102618-BP-022	Water	10/26/18 12:30	10/27/18 01:15



COC NO.: 56813
PAGE 1 OF 2

Address: _____ PAGE 1 OF 1
Phone: _____ Fax: _____

480-144405 COC

* Vol's 7 Ties includes
SSPs (ethy/ ether)

TAT Required in business days (use separate COCs for different TATs): ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other:				Notes/ Special Requirements: 3.4°C ✱ 3					
RELINQUISHED BY		COMPANY	DATE	TIME	RECEIVED BY		COMPANY	DATE	TIME
1. 		GHD	10/26/18	1520	1. Karl Zech		TA	10-26-18	1520
2. Karl Zech		TA	10-26-18	1700	2. 		PAB	10/27/18	0115
3.					3.				

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew GHD Form: COC-10B (20110804)

GHD Form: COC-10B (20110804)

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11/19/2018



CHAIN OF CUSTODY RECORD

COC NO.: **56814**

430501-Albany

Address: _____ PAGE **2** OF **2**

Phone: _____ Fax: _____

Project No/ Phase/Task Code: 007830				Laboratory Name: Test America				Lab Location: Amherst, NY				SSOW ID:			
Project Name: Sterling - site 3				Lab Contact: John Schore								Cooler No:			
Project Location: E. Greenbush, NY				SAMPLE TYPE				ANALYSIS REQUESTED (See Back of COC for Definitions)				Carrier: Test America			
GHD Chemistry Contact: K-Willy				Matrix Code (see back of COC)				Grab (G) or Comp (C)				Filtered (Y/N)			
Sampler(s): B. Pickert															
Airbill No:				Total Containers/sample				MS/MSD Request				Total # of Containers:			
COMMENTS/ SPECIAL INSTRUCTIONS:															

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PRESERVATION - (SEE BACK OF COC FOR ABBREVIATIONS)												*																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other:

Notes/ Special Requirements:

34°C #3

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME
1. <i>[Signature]</i>	GHD	10/26/18	1520	1. <i>Karl Zocher</i>	TA	10-26-18	1520
2. <i>Karl Zocher</i>	TA	10-26-18	1700	2. <i>[Signature]</i>	VBS	10/27/18	0115
3.				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT - ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE - Fully Executed Copy (CRA)

YELLOW - Receiving Laboratory Copy

PINK - Shipper

GOLDENROD - Sampling Crew

GHD Form: COC-10B (20110804)

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11/19/2018



Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 480-144405-1

Login Number: 144405

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kinecki, Kenneth P

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	GHD
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	False	LAB TO CHECK

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: 480-144671-1

Client Project/Site: Sterling Site #3

For:

GHD Services Inc.

2055 Niagara Falls Blvd., Suite 3

Niagara Falls, New York 14304

Attn: Kathleen Willy



Authorized for release by:

11/26/2018 11:22:25 AM

Mary Schwartzmyer, Project Manager I

mary.schwartzmyer@testamericainc.com

Designee for

John Schove, Project Manager II

(716)504-9838

john.schove@testamericainc.com

LINKS

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results through

TotalAccess

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
T	Result is a tentatively identified compound (TIC) and an estimated value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

Case Narrative

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Job ID: 480-144671-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-144671-1

Comments

No additional comments.

Receipt

The samples were received on 11/3/2018 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-444964 recovered outside acceptance criteria, low biased, for Methylene Chloride. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: SW-7830-110218-BP-013 (480-144671-1), SW-7830-110218-BP-014 (480-144671-2) and SW-7830-110218-BP-023 (480-144671-3).

Method(s) 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone in the full spike solution, 2-Butanone exceeded control limits in the laboratory control sample (LCS) associated with batch 480-444964. The following samples were affected: SW-7830-110218-BP-013 (480-144671-1), SW-7830-110218-BP-014 (480-144671-2) and SW-7830-110218-BP-023 (480-144671-3).

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

GC/MS Semi VOA

Method(s) 8270D: The analyte 4,6-Dinitro-2-methylphenol is "E" flagging for recovery above calibration range in the batch LCSD due to the upper 2 calibration points being removed in the initial calibration for this analyte. The % recovery is within control limits. (LCSD 480-443944/3-A)

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

Organic Prep

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

Detection Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Client Sample ID: SW-7830-110218-BP-013

Lab Sample ID: 480-144671-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenol	0.80	J B	5.0	0.39	ug/L	1		8270D	Total/NA

Client Sample ID: SW-7830-110218-BP-014

Lab Sample ID: 480-144671-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenol	1.0	J B	5.0	0.39	ug/L	1		8270D	Total/NA

Client Sample ID: SW-7830-110218-BP-023

Lab Sample ID: 480-144671-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenol	0.88	J B	5.0	0.39	ug/L	1		8270D	Total/NA

Client Sample ID: Trip Blanks

Lab Sample ID: 480-144671-4

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Client Sample ID: SW-7830-110218-BP-013

Lab Sample ID: 480-144671-1

Date Collected: 11/02/18 11:00

Matrix: Water

Date Received: 11/03/18 01:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/12/18 13:56	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/12/18 13:56	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/12/18 13:56	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/12/18 13:56	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/12/18 13:56	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/12/18 13:56	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/12/18 13:56	1
2-Butanone (MEK)	10	U *	10	1.3	ug/L			11/12/18 13:56	1
2-Hexanone	10	U	10	1.2	ug/L			11/12/18 13:56	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/12/18 13:56	1
Acetone	10	U	10	3.0	ug/L			11/12/18 13:56	1
Benzene	1.0	U	1.0	0.41	ug/L			11/12/18 13:56	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/12/18 13:56	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/12/18 13:56	1
Bromomethane	10	U	10	0.69	ug/L			11/12/18 13:56	1
Carbon disulfide	5.0	U	5.0	0.19	ug/L			11/12/18 13:56	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/12/18 13:56	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/12/18 13:56	1
Chloroethane	10	U	10	0.32	ug/L			11/12/18 13:56	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/12/18 13:56	1
Chloromethane	10	U	10	0.35	ug/L			11/12/18 13:56	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/12/18 13:56	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/12/18 13:56	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/12/18 13:56	1
Ethyl ether	10	U	10	0.72	ug/L			11/12/18 13:56	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/12/18 13:56	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/12/18 13:56	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/12/18 13:56	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/12/18 13:56	1
Styrene	5.0	U	5.0	0.73	ug/L			11/12/18 13:56	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/12/18 13:56	1
Toluene	5.0	U	5.0	0.51	ug/L			11/12/18 13:56	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/12/18 13:56	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/12/18 13:56	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/12/18 13:56	1
Vinyl chloride	10	U	10	0.90	ug/L			11/12/18 13:56	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/12/18 13:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		11/12/18 13:56	1
4-Bromofluorobenzene (Surr)	97		73 - 120		11/12/18 13:56	1
Toluene-d8 (Surr)	99		80 - 120		11/12/18 13:56	1
Dibromofluoromethane (Surr)	104		75 - 123		11/12/18 13:56	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	10	U	10	0.44	ug/L		11/06/18 14:18	11/16/18 02:37	1
1,2-Dichlorobenzene	10	U	10	0.40	ug/L		11/06/18 14:18	11/16/18 02:37	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Client Sample ID: SW-7830-110218-BP-013

Lab Sample ID: 480-144671-1

Date Collected: 11/02/18 11:00

Matrix: Water

Date Received: 11/03/18 01:00

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	10	U	10	0.48	ug/L		11/06/18 14:18	11/16/18 02:37	1
1,4-Dichlorobenzene	10	U	10	0.46	ug/L		11/06/18 14:18	11/16/18 02:37	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.48	ug/L		11/06/18 14:18	11/16/18 02:37	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.61	ug/L		11/06/18 14:18	11/16/18 02:37	1
2,4-Dichlorophenol	5.0	U	5.0	0.51	ug/L		11/06/18 14:18	11/16/18 02:37	1
2,4-Dimethylphenol	5.0	U	5.0	0.50	ug/L		11/06/18 14:18	11/16/18 02:37	1
2,4-Dinitrophenol	10	U	10	2.2	ug/L		11/06/18 14:18	11/16/18 02:37	1
2,4-Dinitrotoluene	5.0	U	5.0	0.45	ug/L		11/06/18 14:18	11/16/18 02:37	1
2,6-Dinitrotoluene	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 02:37	1
2-Chloronaphthalene	5.0	U	5.0	0.46	ug/L		11/06/18 14:18	11/16/18 02:37	1
2-Chlorophenol	5.0	U	5.0	0.53	ug/L		11/06/18 14:18	11/16/18 02:37	1
2-Methylnaphthalene	5.0	U	5.0	0.60	ug/L		11/06/18 14:18	11/16/18 02:37	1
2-Methylphenol	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 02:37	1
2-Nitroaniline	10	U	10	0.42	ug/L		11/06/18 14:18	11/16/18 02:37	1
2-Nitrophenol	5.0	U	5.0	0.48	ug/L		11/06/18 14:18	11/16/18 02:37	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 02:37	1
3-Nitroaniline	10	U	10	0.48	ug/L		11/06/18 14:18	11/16/18 02:37	1
4,6-Dinitro-2-methylphenol	10	U	10	2.2	ug/L		11/06/18 14:18	11/16/18 02:37	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.45	ug/L		11/06/18 14:18	11/16/18 02:37	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.45	ug/L		11/06/18 14:18	11/16/18 02:37	1
4-Chloroaniline	5.0	U	5.0	0.59	ug/L		11/06/18 14:18	11/16/18 02:37	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.35	ug/L		11/06/18 14:18	11/16/18 02:37	1
4-Methylphenol	10	U	10	0.36	ug/L		11/06/18 14:18	11/16/18 02:37	1
4-Nitroaniline	10	U	10	0.25	ug/L		11/06/18 14:18	11/16/18 02:37	1
4-Nitrophenol	10	U	10	1.5	ug/L		11/06/18 14:18	11/16/18 02:37	1
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/06/18 14:18	11/16/18 02:37	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/06/18 14:18	11/16/18 02:37	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/06/18 14:18	11/16/18 02:37	1
Benzaldehyde	5.0	U	5.0	0.27	ug/L		11/06/18 14:18	11/16/18 02:37	1
Benzo[a]anthracene	5.0	U	5.0	0.36	ug/L		11/06/18 14:18	11/16/18 02:37	1
Benzo[a]pyrene	5.0	U	5.0	0.47	ug/L		11/06/18 14:18	11/16/18 02:37	1
Benzo[b]fluoranthene	5.0	U	5.0	0.34	ug/L		11/06/18 14:18	11/16/18 02:37	1
Benzo[g,h,i]perylene	5.0	U	5.0	0.35	ug/L		11/06/18 14:18	11/16/18 02:37	1
Benzo[k]fluoranthene	5.0	U	5.0	0.73	ug/L		11/06/18 14:18	11/16/18 02:37	1
bis (2-chloroisopropyl) ether	5.0	U	5.0	0.52	ug/L		11/06/18 14:18	11/16/18 02:37	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.35	ug/L		11/06/18 14:18	11/16/18 02:37	1
Bis(2-chloroethyl)ether	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 02:37	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		11/06/18 14:18	11/16/18 02:37	1
Butyl benzyl phthalate	5.0	U	5.0	1.0	ug/L		11/06/18 14:18	11/16/18 02:37	1
Carbazole	5.0	U	5.0	0.30	ug/L		11/06/18 14:18	11/16/18 02:37	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/06/18 14:18	11/16/18 02:37	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/06/18 14:18	11/16/18 02:37	1
Dibenzofuran	10	U	10	0.51	ug/L		11/06/18 14:18	11/16/18 02:37	1
Diethyl phthalate	5.0	U	5.0	0.22	ug/L		11/06/18 14:18	11/16/18 02:37	1
Dimethyl phthalate	5.0	U	5.0	0.36	ug/L		11/06/18 14:18	11/16/18 02:37	1
Di-n-butyl phthalate	5.0	U	5.0	0.31	ug/L		11/06/18 14:18	11/16/18 02:37	1
Di-n-octyl phthalate	5.0	U	5.0	0.47	ug/L		11/06/18 14:18	11/16/18 02:37	1
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 02:37	1
Fluorene	5.0	U	5.0	0.36	ug/L		11/06/18 14:18	11/16/18 02:37	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Client Sample ID: SW-7830-110218-BP-013

Lab Sample ID: 480-144671-1

Date Collected: 11/02/18 11:00

Matrix: Water

Date Received: 11/03/18 01:00

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	5.0	U	5.0	0.51	ug/L		11/06/18 14:18	11/16/18 02:37	1
Hexachlorobutadiene	5.0	U	5.0	0.68	ug/L		11/06/18 14:18	11/16/18 02:37	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.59	ug/L		11/06/18 14:18	11/16/18 02:37	1
Hexachloroethane	5.0	U	5.0	0.59	ug/L		11/06/18 14:18	11/16/18 02:37	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0	0.47	ug/L		11/06/18 14:18	11/16/18 02:37	1
Isophorone	5.0	U	5.0	0.43	ug/L		11/06/18 14:18	11/16/18 02:37	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/06/18 14:18	11/16/18 02:37	1
Nitrobenzene	5.0	U	5.0	0.29	ug/L		11/06/18 14:18	11/16/18 02:37	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.54	ug/L		11/06/18 14:18	11/16/18 02:37	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.51	ug/L		11/06/18 14:18	11/16/18 02:37	1
Pentachlorophenol	10	U	10	2.2	ug/L		11/06/18 14:18	11/16/18 02:37	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/06/18 14:18	11/16/18 02:37	1
Phenol	0.80	J B	5.0	0.39	ug/L		11/06/18 14:18	11/16/18 02:37	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/06/18 14:18	11/16/18 02:37	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	260	T J	ug/L		2.65		11/06/18 14:18	11/16/18 02:37	1
Unknown	2.8	T J	ug/L		2.71		11/06/18 14:18	11/16/18 02:37	1
Unknown	3.3	T J	ug/L		3.87		11/06/18 14:18	11/16/18 02:37	1
Unknown	50	T J	ug/L		4.72		11/06/18 14:18	11/16/18 02:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	73		41 - 120	11/06/18 14:18	11/16/18 02:37	1
2-Fluorobiphenyl	71		48 - 120	11/06/18 14:18	11/16/18 02:37	1
2-Fluorophenol (Surr)	59		35 - 120	11/06/18 14:18	11/16/18 02:37	1
Nitrobenzene-d5 (Surr)	72		46 - 120	11/06/18 14:18	11/16/18 02:37	1
Phenol-d5 (Surr)	40		22 - 120	11/06/18 14:18	11/16/18 02:37	1
p-Terphenyl-d14 (Surr)	72		59 - 136	11/06/18 14:18	11/16/18 02:37	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Client Sample ID: SW-7830-110218-BP-014

Lab Sample ID: 480-144671-2

Date Collected: 11/02/18 11:40

Matrix: Water

Date Received: 11/03/18 01:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/12/18 14:20	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/12/18 14:20	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/12/18 14:20	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/12/18 14:20	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/12/18 14:20	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/12/18 14:20	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/12/18 14:20	1
2-Butanone (MEK)	10	U *	10	1.3	ug/L			11/12/18 14:20	1
2-Hexanone	10	U	10	1.2	ug/L			11/12/18 14:20	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/12/18 14:20	1
Acetone	10	U	10	3.0	ug/L			11/12/18 14:20	1
Benzene	1.0	U	1.0	0.41	ug/L			11/12/18 14:20	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/12/18 14:20	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/12/18 14:20	1
Bromomethane	10	U	10	0.69	ug/L			11/12/18 14:20	1
Carbon disulfide	5.0	U	5.0	0.19	ug/L			11/12/18 14:20	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/12/18 14:20	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/12/18 14:20	1
Chloroethane	10	U	10	0.32	ug/L			11/12/18 14:20	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/12/18 14:20	1
Chloromethane	10	U	10	0.35	ug/L			11/12/18 14:20	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/12/18 14:20	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/12/18 14:20	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/12/18 14:20	1
Ethyl ether	10	U	10	0.72	ug/L			11/12/18 14:20	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/12/18 14:20	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/12/18 14:20	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/12/18 14:20	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/12/18 14:20	1
Styrene	5.0	U	5.0	0.73	ug/L			11/12/18 14:20	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/12/18 14:20	1
Toluene	5.0	U	5.0	0.51	ug/L			11/12/18 14:20	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/12/18 14:20	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/12/18 14:20	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/12/18 14:20	1
Vinyl chloride	10	U	10	0.90	ug/L			11/12/18 14:20	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/12/18 14:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		11/12/18 14:20	1
4-Bromofluorobenzene (Surr)	103		73 - 120		11/12/18 14:20	1
Toluene-d8 (Surr)	100		80 - 120		11/12/18 14:20	1
Dibromofluoromethane (Surr)	98		75 - 123		11/12/18 14:20	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	10	U	10	0.44	ug/L		11/06/18 14:18	11/16/18 03:06	1
1,2-Dichlorobenzene	10	U	10	0.40	ug/L		11/06/18 14:18	11/16/18 03:06	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Client Sample ID: SW-7830-110218-BP-014

Lab Sample ID: 480-144671-2

Date Collected: 11/02/18 11:40

Matrix: Water

Date Received: 11/03/18 01:00

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	10	U	10	0.48	ug/L		11/06/18 14:18	11/16/18 03:06	1
1,4-Dichlorobenzene	10	U	10	0.46	ug/L		11/06/18 14:18	11/16/18 03:06	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.48	ug/L		11/06/18 14:18	11/16/18 03:06	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.61	ug/L		11/06/18 14:18	11/16/18 03:06	1
2,4-Dichlorophenol	5.0	U	5.0	0.51	ug/L		11/06/18 14:18	11/16/18 03:06	1
2,4-Dimethylphenol	5.0	U	5.0	0.50	ug/L		11/06/18 14:18	11/16/18 03:06	1
2,4-Dinitrophenol	10	U	10	2.2	ug/L		11/06/18 14:18	11/16/18 03:06	1
2,4-Dinitrotoluene	5.0	U	5.0	0.45	ug/L		11/06/18 14:18	11/16/18 03:06	1
2,6-Dinitrotoluene	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 03:06	1
2-Chloronaphthalene	5.0	U	5.0	0.46	ug/L		11/06/18 14:18	11/16/18 03:06	1
2-Chlorophenol	5.0	U	5.0	0.53	ug/L		11/06/18 14:18	11/16/18 03:06	1
2-Methylnaphthalene	5.0	U	5.0	0.60	ug/L		11/06/18 14:18	11/16/18 03:06	1
2-Methylphenol	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 03:06	1
2-Nitroaniline	10	U	10	0.42	ug/L		11/06/18 14:18	11/16/18 03:06	1
2-Nitrophenol	5.0	U	5.0	0.48	ug/L		11/06/18 14:18	11/16/18 03:06	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 03:06	1
3-Nitroaniline	10	U	10	0.48	ug/L		11/06/18 14:18	11/16/18 03:06	1
4,6-Dinitro-2-methylphenol	10	U	10	2.2	ug/L		11/06/18 14:18	11/16/18 03:06	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.45	ug/L		11/06/18 14:18	11/16/18 03:06	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.45	ug/L		11/06/18 14:18	11/16/18 03:06	1
4-Chloroaniline	5.0	U	5.0	0.59	ug/L		11/06/18 14:18	11/16/18 03:06	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.35	ug/L		11/06/18 14:18	11/16/18 03:06	1
4-Methylphenol	10	U	10	0.36	ug/L		11/06/18 14:18	11/16/18 03:06	1
4-Nitroaniline	10	U	10	0.25	ug/L		11/06/18 14:18	11/16/18 03:06	1
4-Nitrophenol	10	U	10	1.5	ug/L		11/06/18 14:18	11/16/18 03:06	1
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/06/18 14:18	11/16/18 03:06	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/06/18 14:18	11/16/18 03:06	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/06/18 14:18	11/16/18 03:06	1
Benzaldehyde	5.0	U	5.0	0.27	ug/L		11/06/18 14:18	11/16/18 03:06	1
Benzo[a]anthracene	5.0	U	5.0	0.36	ug/L		11/06/18 14:18	11/16/18 03:06	1
Benzo[a]pyrene	5.0	U	5.0	0.47	ug/L		11/06/18 14:18	11/16/18 03:06	1
Benzo[b]fluoranthene	5.0	U	5.0	0.34	ug/L		11/06/18 14:18	11/16/18 03:06	1
Benzo[g,h,i]perylene	5.0	U	5.0	0.35	ug/L		11/06/18 14:18	11/16/18 03:06	1
Benzo[k]fluoranthene	5.0	U	5.0	0.73	ug/L		11/06/18 14:18	11/16/18 03:06	1
bis (2-chloroisopropyl) ether	5.0	U	5.0	0.52	ug/L		11/06/18 14:18	11/16/18 03:06	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.35	ug/L		11/06/18 14:18	11/16/18 03:06	1
Bis(2-chloroethyl)ether	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 03:06	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		11/06/18 14:18	11/16/18 03:06	1
Butyl benzyl phthalate	5.0	U	5.0	1.0	ug/L		11/06/18 14:18	11/16/18 03:06	1
Carbazole	5.0	U	5.0	0.30	ug/L		11/06/18 14:18	11/16/18 03:06	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/06/18 14:18	11/16/18 03:06	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/06/18 14:18	11/16/18 03:06	1
Dibenzofuran	10	U	10	0.51	ug/L		11/06/18 14:18	11/16/18 03:06	1
Diethyl phthalate	5.0	U	5.0	0.22	ug/L		11/06/18 14:18	11/16/18 03:06	1
Dimethyl phthalate	5.0	U	5.0	0.36	ug/L		11/06/18 14:18	11/16/18 03:06	1
Di-n-butyl phthalate	5.0	U	5.0	0.31	ug/L		11/06/18 14:18	11/16/18 03:06	1
Di-n-octyl phthalate	5.0	U	5.0	0.47	ug/L		11/06/18 14:18	11/16/18 03:06	1
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 03:06	1
Fluorene	5.0	U	5.0	0.36	ug/L		11/06/18 14:18	11/16/18 03:06	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Client Sample ID: SW-7830-110218-BP-014

Lab Sample ID: 480-144671-2

Date Collected: 11/02/18 11:40

Matrix: Water

Date Received: 11/03/18 01:00

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	5.0	U	5.0	0.51	ug/L		11/06/18 14:18	11/16/18 03:06	1
Hexachlorobutadiene	5.0	U	5.0	0.68	ug/L		11/06/18 14:18	11/16/18 03:06	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.59	ug/L		11/06/18 14:18	11/16/18 03:06	1
Hexachloroethane	5.0	U	5.0	0.59	ug/L		11/06/18 14:18	11/16/18 03:06	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0	0.47	ug/L		11/06/18 14:18	11/16/18 03:06	1
Isophorone	5.0	U	5.0	0.43	ug/L		11/06/18 14:18	11/16/18 03:06	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/06/18 14:18	11/16/18 03:06	1
Nitrobenzene	5.0	U	5.0	0.29	ug/L		11/06/18 14:18	11/16/18 03:06	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.54	ug/L		11/06/18 14:18	11/16/18 03:06	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.51	ug/L		11/06/18 14:18	11/16/18 03:06	1
Pentachlorophenol	10	U	10	2.2	ug/L		11/06/18 14:18	11/16/18 03:06	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/06/18 14:18	11/16/18 03:06	1
Phenol	1.0	J B	5.0	0.39	ug/L		11/06/18 14:18	11/16/18 03:06	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/06/18 14:18	11/16/18 03:06	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	280	T J	ug/L		2.66		11/06/18 14:18	11/16/18 03:06	1
Unknown	2.0	T J	ug/L		2.72		11/06/18 14:18	11/16/18 03:06	1
Unknown	3.8	T J	ug/L		3.88		11/06/18 14:18	11/16/18 03:06	1
Unknown	59	T J	ug/L		4.73		11/06/18 14:18	11/16/18 03:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	82		41 - 120	11/06/18 14:18	11/16/18 03:06	1
2-Fluorobiphenyl	82		48 - 120	11/06/18 14:18	11/16/18 03:06	1
2-Fluorophenol (Surr)	69		35 - 120	11/06/18 14:18	11/16/18 03:06	1
Nitrobenzene-d5 (Surr)	84		46 - 120	11/06/18 14:18	11/16/18 03:06	1
Phenol-d5 (Surr)	49		22 - 120	11/06/18 14:18	11/16/18 03:06	1
p-Terphenyl-d14 (Surr)	79		59 - 136	11/06/18 14:18	11/16/18 03:06	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Client Sample ID: SW-7830-110218-BP-023

Lab Sample ID: 480-144671-3

Date Collected: 11/02/18 12:00

Matrix: Water

Date Received: 11/03/18 01:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/12/18 14:43	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/12/18 14:43	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/12/18 14:43	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/12/18 14:43	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/12/18 14:43	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/12/18 14:43	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/12/18 14:43	1
2-Butanone (MEK)	10	U *	10	1.3	ug/L			11/12/18 14:43	1
2-Hexanone	10	U	10	1.2	ug/L			11/12/18 14:43	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/12/18 14:43	1
Acetone	10	U	10	3.0	ug/L			11/12/18 14:43	1
Benzene	1.0	U	1.0	0.41	ug/L			11/12/18 14:43	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/12/18 14:43	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/12/18 14:43	1
Bromomethane	10	U	10	0.69	ug/L			11/12/18 14:43	1
Carbon disulfide	5.0	U	5.0	0.19	ug/L			11/12/18 14:43	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/12/18 14:43	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/12/18 14:43	1
Chloroethane	10	U	10	0.32	ug/L			11/12/18 14:43	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/12/18 14:43	1
Chloromethane	10	U	10	0.35	ug/L			11/12/18 14:43	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/12/18 14:43	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/12/18 14:43	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/12/18 14:43	1
Ethyl ether	10	U	10	0.72	ug/L			11/12/18 14:43	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/12/18 14:43	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/12/18 14:43	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/12/18 14:43	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/12/18 14:43	1
Styrene	5.0	U	5.0	0.73	ug/L			11/12/18 14:43	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/12/18 14:43	1
Toluene	5.0	U	5.0	0.51	ug/L			11/12/18 14:43	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/12/18 14:43	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/12/18 14:43	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/12/18 14:43	1
Vinyl chloride	10	U	10	0.90	ug/L			11/12/18 14:43	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/12/18 14:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		11/12/18 14:43	1
4-Bromofluorobenzene (Surr)	101		73 - 120		11/12/18 14:43	1
Toluene-d8 (Surr)	100		80 - 120		11/12/18 14:43	1
Dibromofluoromethane (Surr)	102		75 - 123		11/12/18 14:43	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	10	U	10	0.44	ug/L		11/06/18 14:18	11/16/18 03:35	1
1,2-Dichlorobenzene	10	U	10	0.40	ug/L		11/06/18 14:18	11/16/18 03:35	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Client Sample ID: SW-7830-110218-BP-023

Lab Sample ID: 480-144671-3

Date Collected: 11/02/18 12:00

Matrix: Water

Date Received: 11/03/18 01:00

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	10	U	10	0.48	ug/L		11/06/18 14:18	11/16/18 03:35	1
1,4-Dichlorobenzene	10	U	10	0.46	ug/L		11/06/18 14:18	11/16/18 03:35	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.48	ug/L		11/06/18 14:18	11/16/18 03:35	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.61	ug/L		11/06/18 14:18	11/16/18 03:35	1
2,4-Dichlorophenol	5.0	U	5.0	0.51	ug/L		11/06/18 14:18	11/16/18 03:35	1
2,4-Dimethylphenol	5.0	U	5.0	0.50	ug/L		11/06/18 14:18	11/16/18 03:35	1
2,4-Dinitrophenol	10	U	10	2.2	ug/L		11/06/18 14:18	11/16/18 03:35	1
2,4-Dinitrotoluene	5.0	U	5.0	0.45	ug/L		11/06/18 14:18	11/16/18 03:35	1
2,6-Dinitrotoluene	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 03:35	1
2-Chloronaphthalene	5.0	U	5.0	0.46	ug/L		11/06/18 14:18	11/16/18 03:35	1
2-Chlorophenol	5.0	U	5.0	0.53	ug/L		11/06/18 14:18	11/16/18 03:35	1
2-Methylnaphthalene	5.0	U	5.0	0.60	ug/L		11/06/18 14:18	11/16/18 03:35	1
2-Methylphenol	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 03:35	1
2-Nitroaniline	10	U	10	0.42	ug/L		11/06/18 14:18	11/16/18 03:35	1
2-Nitrophenol	5.0	U	5.0	0.48	ug/L		11/06/18 14:18	11/16/18 03:35	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 03:35	1
3-Nitroaniline	10	U	10	0.48	ug/L		11/06/18 14:18	11/16/18 03:35	1
4,6-Dinitro-2-methylphenol	10	U	10	2.2	ug/L		11/06/18 14:18	11/16/18 03:35	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.45	ug/L		11/06/18 14:18	11/16/18 03:35	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.45	ug/L		11/06/18 14:18	11/16/18 03:35	1
4-Chloroaniline	5.0	U	5.0	0.59	ug/L		11/06/18 14:18	11/16/18 03:35	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.35	ug/L		11/06/18 14:18	11/16/18 03:35	1
4-Methylphenol	10	U	10	0.36	ug/L		11/06/18 14:18	11/16/18 03:35	1
4-Nitroaniline	10	U	10	0.25	ug/L		11/06/18 14:18	11/16/18 03:35	1
4-Nitrophenol	10	U	10	1.5	ug/L		11/06/18 14:18	11/16/18 03:35	1
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/06/18 14:18	11/16/18 03:35	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/06/18 14:18	11/16/18 03:35	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/06/18 14:18	11/16/18 03:35	1
Benzaldehyde	5.0	U	5.0	0.27	ug/L		11/06/18 14:18	11/16/18 03:35	1
Benzo[a]anthracene	5.0	U	5.0	0.36	ug/L		11/06/18 14:18	11/16/18 03:35	1
Benzo[a]pyrene	5.0	U	5.0	0.47	ug/L		11/06/18 14:18	11/16/18 03:35	1
Benzo[b]fluoranthene	5.0	U	5.0	0.34	ug/L		11/06/18 14:18	11/16/18 03:35	1
Benzo[g,h,i]perylene	5.0	U	5.0	0.35	ug/L		11/06/18 14:18	11/16/18 03:35	1
Benzo[k]fluoranthene	5.0	U	5.0	0.73	ug/L		11/06/18 14:18	11/16/18 03:35	1
bis (2-chloroisopropyl) ether	5.0	U	5.0	0.52	ug/L		11/06/18 14:18	11/16/18 03:35	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.35	ug/L		11/06/18 14:18	11/16/18 03:35	1
Bis(2-chloroethyl)ether	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 03:35	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		11/06/18 14:18	11/16/18 03:35	1
Butyl benzyl phthalate	5.0	U	5.0	1.0	ug/L		11/06/18 14:18	11/16/18 03:35	1
Carbazole	5.0	U	5.0	0.30	ug/L		11/06/18 14:18	11/16/18 03:35	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/06/18 14:18	11/16/18 03:35	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/06/18 14:18	11/16/18 03:35	1
Dibenzofuran	10	U	10	0.51	ug/L		11/06/18 14:18	11/16/18 03:35	1
Diethyl phthalate	5.0	U	5.0	0.22	ug/L		11/06/18 14:18	11/16/18 03:35	1
Dimethyl phthalate	5.0	U	5.0	0.36	ug/L		11/06/18 14:18	11/16/18 03:35	1
Di-n-butyl phthalate	5.0	U	5.0	0.31	ug/L		11/06/18 14:18	11/16/18 03:35	1
Di-n-octyl phthalate	5.0	U	5.0	0.47	ug/L		11/06/18 14:18	11/16/18 03:35	1
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 03:35	1
Fluorene	5.0	U	5.0	0.36	ug/L		11/06/18 14:18	11/16/18 03:35	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Client Sample ID: SW-7830-110218-BP-023

Lab Sample ID: 480-144671-3

Date Collected: 11/02/18 12:00

Matrix: Water

Date Received: 11/03/18 01:00

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	5.0	U	5.0	0.51	ug/L		11/06/18 14:18	11/16/18 03:35	1
Hexachlorobutadiene	5.0	U	5.0	0.68	ug/L		11/06/18 14:18	11/16/18 03:35	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.59	ug/L		11/06/18 14:18	11/16/18 03:35	1
Hexachloroethane	5.0	U	5.0	0.59	ug/L		11/06/18 14:18	11/16/18 03:35	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0	0.47	ug/L		11/06/18 14:18	11/16/18 03:35	1
Isophorone	5.0	U	5.0	0.43	ug/L		11/06/18 14:18	11/16/18 03:35	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/06/18 14:18	11/16/18 03:35	1
Nitrobenzene	5.0	U	5.0	0.29	ug/L		11/06/18 14:18	11/16/18 03:35	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.54	ug/L		11/06/18 14:18	11/16/18 03:35	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.51	ug/L		11/06/18 14:18	11/16/18 03:35	1
Pentachlorophenol	10	U	10	2.2	ug/L		11/06/18 14:18	11/16/18 03:35	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/06/18 14:18	11/16/18 03:35	1
Phenol	0.88	J B	5.0	0.39	ug/L		11/06/18 14:18	11/16/18 03:35	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/06/18 14:18	11/16/18 03:35	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	280	T J	ug/L		2.65		11/06/18 14:18	11/16/18 03:35	1
Unknown	3.7	T J	ug/L		3.87		11/06/18 14:18	11/16/18 03:35	1
Unknown	56	T J	ug/L		4.72		11/06/18 14:18	11/16/18 03:35	1
Unknown	1.6	T J	ug/L		8.46		11/06/18 14:18	11/16/18 03:35	1
Unknown	2.1	T J	ug/L		9.90		11/06/18 14:18	11/16/18 03:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	77		41 - 120	11/06/18 14:18	11/16/18 03:35	1
2-Fluorobiphenyl	78		48 - 120	11/06/18 14:18	11/16/18 03:35	1
2-Fluorophenol (Surr)	62		35 - 120	11/06/18 14:18	11/16/18 03:35	1
Nitrobenzene-d5 (Surr)	75		46 - 120	11/06/18 14:18	11/16/18 03:35	1
Phenol-d5 (Surr)	44		22 - 120	11/06/18 14:18	11/16/18 03:35	1
p-Terphenyl-d14 (Surr)	72		59 - 136	11/06/18 14:18	11/16/18 03:35	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Client Sample ID: Trip Blanks

Date Collected: 11/02/18 00:00

Date Received: 11/03/18 01:00

Lab Sample ID: 480-144671-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/06/18 17:53	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/06/18 17:53	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/06/18 17:53	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/06/18 17:53	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/06/18 17:53	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/06/18 17:53	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/06/18 17:53	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			11/06/18 17:53	1
2-Hexanone	10	U	10	1.2	ug/L			11/06/18 17:53	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/06/18 17:53	1
Acetone	10	U	10	3.0	ug/L			11/06/18 17:53	1
Benzene	1.0	U	1.0	0.41	ug/L			11/06/18 17:53	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/06/18 17:53	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/06/18 17:53	1
Bromomethane	10	U	10	0.69	ug/L			11/06/18 17:53	1
Carbon disulfide	5.0	U	5.0	0.19	ug/L			11/06/18 17:53	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/06/18 17:53	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/06/18 17:53	1
Chloroethane	10	U	10	0.32	ug/L			11/06/18 17:53	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/06/18 17:53	1
Chloromethane	10	U	10	0.35	ug/L			11/06/18 17:53	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/06/18 17:53	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/06/18 17:53	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/06/18 17:53	1
Ethyl ether	10	U	10	0.72	ug/L			11/06/18 17:53	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/06/18 17:53	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/06/18 17:53	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/06/18 17:53	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/06/18 17:53	1
Styrene	5.0	U	5.0	0.73	ug/L			11/06/18 17:53	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/06/18 17:53	1
Toluene	5.0	U	5.0	0.51	ug/L			11/06/18 17:53	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/06/18 17:53	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/06/18 17:53	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/06/18 17:53	1
Vinyl chloride	10	U	10	0.90	ug/L			11/06/18 17:53	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/06/18 17:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		11/06/18 17:53	1
4-Bromofluorobenzene (Surr)	105		73 - 120		11/06/18 17:53	1
Dibromofluoromethane (Surr)	104		75 - 123		11/06/18 17:53	1
Toluene-d8 (Surr)	101		80 - 120		11/06/18 17:53	1

TestAmerica Buffalo

Surrogate Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (77-120)	BFB (73-120)	TOL (80-120)	DBFM (75-123)
480-144671-1	SW-7830-110218-BP-013	100	97	99	104
480-144671-2	SW-7830-110218-BP-014	101	103	100	98
480-144671-3	SW-7830-110218-BP-023	99	101	100	102
480-144671-4	Trip Blanks	103	105	101	104
LCS 480-443808/5	Lab Control Sample	99	102	103	104
LCS 480-444964/5	Lab Control Sample	101	104	100	106
MB 480-443808/28	Method Blank	106	103	103	114
MB 480-444964/8	Method Blank	99	97	100	100

Surrogate Legend

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

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (41-120)	FBP (48-120)	2FP (35-120)	NBZ (46-120)	PHL (22-120)	TPHd14 (59-136)
480-144671-1	SW-7830-110218-BP-013	73	71	59	72	40	72
480-144671-2	SW-7830-110218-BP-014	82	82	69	84	49	79
480-144671-3	SW-7830-110218-BP-023	77	78	62	75	44	72
LCS 480-443944/2-A	Lab Control Sample	83	75	61	74	48	83
LCSD 480-443944/3-A	Lab Control Sample Dup	83	78	58	75	47	86
MB 480-443944/1-A	Method Blank	50	82	64	80	49	94

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-443808/28

Matrix: Water

Analysis Batch: 443808

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-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/06/18 11:53	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/06/18 11:53	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/06/18 11:53	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/06/18 11:53	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/06/18 11:53	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/06/18 11:53	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/06/18 11:53	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			11/06/18 11:53	1
2-Hexanone	10	U	10	1.2	ug/L			11/06/18 11:53	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/06/18 11:53	1
Acetone	10	U	10	3.0	ug/L			11/06/18 11:53	1
Benzene	1.0	U	1.0	0.41	ug/L			11/06/18 11:53	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/06/18 11:53	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/06/18 11:53	1
Bromomethane	10	U	10	0.69	ug/L			11/06/18 11:53	1
Carbon disulfide	5.0	U	5.0	0.19	ug/L			11/06/18 11:53	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/06/18 11:53	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/06/18 11:53	1
Chloroethane	10	U	10	0.32	ug/L			11/06/18 11:53	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/06/18 11:53	1
Chloromethane	10	U	10	0.35	ug/L			11/06/18 11:53	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/06/18 11:53	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/06/18 11:53	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/06/18 11:53	1
Ethyl ether	10	U	10	0.72	ug/L			11/06/18 11:53	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/06/18 11:53	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/06/18 11:53	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/06/18 11:53	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/06/18 11:53	1
Styrene	5.0	U	5.0	0.73	ug/L			11/06/18 11:53	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/06/18 11:53	1
Toluene	5.0	U	5.0	0.51	ug/L			11/06/18 11:53	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/06/18 11:53	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/06/18 11:53	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/06/18 11:53	1
Vinyl chloride	10	U	10	0.90	ug/L			11/06/18 11:53	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/06/18 11:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		77 - 120		11/06/18 11:53	1
4-Bromofluorobenzene (Surr)	103		73 - 120		11/06/18 11:53	1
Toluene-d8 (Surr)	103		80 - 120		11/06/18 11:53	1
Dibromofluoromethane (Surr)	114		75 - 123		11/06/18 11:53	1

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

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

Lab Sample ID: LCS 480-443808/5

Matrix: Water

Analysis Batch: 443808

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-Trichloroethane	25.0	26.5		ug/L		106	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.1		ug/L		92	76 - 120
1,1,2-Trichloroethane	25.0	24.8		ug/L		99	76 - 122
1,1-Dichloroethane	25.0	25.7		ug/L		103	77 - 120
1,1-Dichloroethene	25.0	26.9		ug/L		108	66 - 127
1,2-Dichloroethane	25.0	23.1		ug/L		92	75 - 120
1,2-Dichloropropane	25.0	25.6		ug/L		102	76 - 120
2-Butanone (MEK)	125	138		ug/L		111	57 - 140
2-Hexanone	125	142		ug/L		114	65 - 127
4-Methyl-2-pentanone (MIBK)	125	132		ug/L		106	71 - 125
Acetone	125	139		ug/L		111	56 - 142
Benzene	25.0	25.6		ug/L		102	71 - 124
Bromodichloromethane	25.0	25.3		ug/L		101	80 - 122
Bromoform	25.0	23.4		ug/L		94	61 - 132
Bromomethane	25.0	23.3		ug/L		93	55 - 144
Carbon disulfide	25.0	24.3		ug/L		97	59 - 134
Carbon tetrachloride	25.0	27.8		ug/L		111	72 - 134
Chlorobenzene	25.0	25.4		ug/L		101	80 - 120
Chloroethane	25.0	24.8		ug/L		99	69 - 136
Chloroform	25.0	25.1		ug/L		101	73 - 127
Chloromethane	25.0	22.5		ug/L		90	68 - 124
cis-1,2-Dichloroethene	25.0	25.9		ug/L		104	74 - 124
cis-1,3-Dichloropropene	25.0	26.0		ug/L		104	74 - 124
Dibromochloromethane	25.0	25.1		ug/L		100	75 - 125
Ethyl ether	25.0	24.4		ug/L		98	76 - 123
Ethylbenzene	25.0	25.8		ug/L		103	77 - 123
m&p-Xylene	25.0	26.8		ug/L		107	76 - 122
Methylene Chloride	25.0	22.8		ug/L		91	75 - 124
o-Xylene	25.0	27.4		ug/L		110	76 - 122
Styrene	25.0	25.5		ug/L		102	80 - 120
Tetrachloroethene	25.0	26.5		ug/L		106	74 - 122
Toluene	25.0	25.2		ug/L		101	80 - 122
trans-1,2-Dichloroethene	25.0	24.8		ug/L		99	73 - 127
trans-1,3-Dichloropropene	25.0	25.2		ug/L		101	80 - 120
Trichloroethene	25.0	25.8		ug/L		103	74 - 123
Vinyl chloride	25.0	27.3		ug/L		109	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		77 - 120
4-Bromofluorobenzene (Surr)	102		73 - 120
Toluene-d8 (Surr)	103		80 - 120
Dibromofluoromethane (Surr)	104		75 - 123

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

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

Lab Sample ID: MB 480-444964/8

Matrix: Water

Analysis Batch: 444964

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-Trichloroethane	5.0	U	5.0	0.82	ug/L			11/12/18 11:26	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.21	ug/L			11/12/18 11:26	1
1,1,2-Trichloroethane	5.0	U	5.0	0.23	ug/L			11/12/18 11:26	1
1,1-Dichloroethane	5.0	U	5.0	0.38	ug/L			11/12/18 11:26	1
1,1-Dichloroethene	5.0	U	5.0	0.29	ug/L			11/12/18 11:26	1
1,2-Dichloroethane	5.0	U	5.0	0.21	ug/L			11/12/18 11:26	1
1,2-Dichloropropane	5.0	U	5.0	0.72	ug/L			11/12/18 11:26	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			11/12/18 11:26	1
2-Hexanone	10	U	10	1.2	ug/L			11/12/18 11:26	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.1	ug/L			11/12/18 11:26	1
Acetone	10	U	10	3.0	ug/L			11/12/18 11:26	1
Benzene	1.0	U	1.0	0.41	ug/L			11/12/18 11:26	1
Bromodichloromethane	5.0	U	5.0	0.39	ug/L			11/12/18 11:26	1
Bromoform	5.0	U	5.0	0.26	ug/L			11/12/18 11:26	1
Bromomethane	10	U	10	0.69	ug/L			11/12/18 11:26	1
Carbon disulfide	5.0	U	5.0	0.19	ug/L			11/12/18 11:26	1
Carbon tetrachloride	5.0	U	5.0	0.27	ug/L			11/12/18 11:26	1
Chlorobenzene	5.0	U	5.0	0.75	ug/L			11/12/18 11:26	1
Chloroethane	10	U	10	0.32	ug/L			11/12/18 11:26	1
Chloroform	5.0	U	5.0	0.34	ug/L			11/12/18 11:26	1
Chloromethane	10	U	10	0.35	ug/L			11/12/18 11:26	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.81	ug/L			11/12/18 11:26	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.36	ug/L			11/12/18 11:26	1
Dibromochloromethane	5.0	U	5.0	0.32	ug/L			11/12/18 11:26	1
Ethyl ether	10	U	10	0.72	ug/L			11/12/18 11:26	1
Ethylbenzene	5.0	U	5.0	0.74	ug/L			11/12/18 11:26	1
m&p-Xylene	5.0	U	5.0	0.66	ug/L			11/12/18 11:26	1
Methylene Chloride	5.0	U	5.0	0.44	ug/L			11/12/18 11:26	1
o-Xylene	5.0	U	5.0	0.76	ug/L			11/12/18 11:26	1
Styrene	5.0	U	5.0	0.73	ug/L			11/12/18 11:26	1
Tetrachloroethene	5.0	U	5.0	0.36	ug/L			11/12/18 11:26	1
Toluene	5.0	U	5.0	0.51	ug/L			11/12/18 11:26	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.90	ug/L			11/12/18 11:26	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.37	ug/L			11/12/18 11:26	1
Trichloroethene	5.0	U	5.0	0.46	ug/L			11/12/18 11:26	1
Vinyl chloride	10	U	10	0.90	ug/L			11/12/18 11:26	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					11/12/18 11:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		11/12/18 11:26	1
4-Bromofluorobenzene (Surr)	97		73 - 120		11/12/18 11:26	1
Toluene-d8 (Surr)	100		80 - 120		11/12/18 11:26	1
Dibromofluoromethane (Surr)	100		75 - 123		11/12/18 11:26	1

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

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

Lab Sample ID: LCS 480-444964/5

Matrix: Water

Analysis Batch: 444964

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-Trichloroethane	25.0	25.3		ug/L		101	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.3		ug/L		101	76 - 120
1,1,2-Trichloroethane	25.0	23.0		ug/L		92	76 - 122
1,1-Dichloroethane	25.0	26.3		ug/L		105	77 - 120
1,1-Dichloroethene	25.0	25.8		ug/L		103	66 - 127
1,2-Dichloroethane	25.0	24.1		ug/L		96	75 - 120
1,2-Dichloropropane	25.0	25.3		ug/L		101	76 - 120
2-Butanone (MEK)	125	240 *		ug/L		192	57 - 140
2-Hexanone	125	127		ug/L		102	65 - 127
4-Methyl-2-pentanone (MIBK)	125	124		ug/L		99	71 - 125
Acetone	125	130		ug/L		104	56 - 142
Benzene	25.0	25.4		ug/L		102	71 - 124
Bromodichloromethane	25.0	26.3		ug/L		105	80 - 122
Bromoform	25.0	25.3		ug/L		101	61 - 132
Bromomethane	25.0	21.5		ug/L		86	55 - 144
Carbon disulfide	25.0	25.2		ug/L		101	59 - 134
Carbon tetrachloride	25.0	26.1		ug/L		104	72 - 134
Chlorobenzene	25.0	23.7		ug/L		95	80 - 120
Chloroethane	25.0	20.6		ug/L		83	69 - 136
Chloroform	25.0	24.1		ug/L		96	73 - 127
Chloromethane	25.0	18.4		ug/L		74	68 - 124
cis-1,2-Dichloroethene	25.0	26.2		ug/L		105	74 - 124
cis-1,3-Dichloropropene	25.0	26.4		ug/L		106	74 - 124
Dibromochloromethane	25.0	26.9		ug/L		107	75 - 125
Ethyl ether	25.0	23.9		ug/L		96	76 - 123
Ethylbenzene	25.0	24.1		ug/L		96	77 - 123
m&p-Xylene	25.0	23.0		ug/L		92	76 - 122
Methylene Chloride	25.0	18.8		ug/L		75	75 - 124
o-Xylene	25.0	23.7		ug/L		95	76 - 122
Styrene	25.0	24.3		ug/L		97	80 - 120
Tetrachloroethene	25.0	26.6		ug/L		106	74 - 122
Toluene	25.0	23.7		ug/L		95	80 - 122
trans-1,2-Dichloroethene	25.0	25.9		ug/L		103	73 - 127
trans-1,3-Dichloropropene	25.0	25.2		ug/L		101	80 - 120
Trichloroethene	25.0	25.9		ug/L		104	74 - 123
Vinyl chloride	25.0	19.1		ug/L		76	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		77 - 120
4-Bromofluorobenzene (Surr)	104		73 - 120
Toluene-d8 (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	106		75 - 123

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-443944/1-A

Matrix: Water

Analysis Batch: 445839

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 443944

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	10	U	10	0.44	ug/L		11/06/18 14:18	11/16/18 00:40	1
1,2-Dichlorobenzene	10	U	10	0.40	ug/L		11/06/18 14:18	11/16/18 00:40	1
1,3-Dichlorobenzene	10	U	10	0.48	ug/L		11/06/18 14:18	11/16/18 00:40	1
1,4-Dichlorobenzene	10	U	10	0.46	ug/L		11/06/18 14:18	11/16/18 00:40	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.48	ug/L		11/06/18 14:18	11/16/18 00:40	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.61	ug/L		11/06/18 14:18	11/16/18 00:40	1
2,4-Dichlorophenol	5.0	U	5.0	0.51	ug/L		11/06/18 14:18	11/16/18 00:40	1
2,4-Dimethylphenol	5.0	U	5.0	0.50	ug/L		11/06/18 14:18	11/16/18 00:40	1
2,4-Dinitrophenol	10	U	10	2.2	ug/L		11/06/18 14:18	11/16/18 00:40	1
2,4-Dinitrotoluene	5.0	U	5.0	0.45	ug/L		11/06/18 14:18	11/16/18 00:40	1
2,6-Dinitrotoluene	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 00:40	1
2-Chloronaphthalene	5.0	U	5.0	0.46	ug/L		11/06/18 14:18	11/16/18 00:40	1
2-Chlorophenol	5.0	U	5.0	0.53	ug/L		11/06/18 14:18	11/16/18 00:40	1
2-Methylnaphthalene	5.0	U	5.0	0.60	ug/L		11/06/18 14:18	11/16/18 00:40	1
2-Methylphenol	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 00:40	1
2-Nitroaniline	10	U	10	0.42	ug/L		11/06/18 14:18	11/16/18 00:40	1
2-Nitrophenol	5.0	U	5.0	0.48	ug/L		11/06/18 14:18	11/16/18 00:40	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 00:40	1
3-Nitroaniline	10	U	10	0.48	ug/L		11/06/18 14:18	11/16/18 00:40	1
4,6-Dinitro-2-methylphenol	10	U	10	2.2	ug/L		11/06/18 14:18	11/16/18 00:40	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.45	ug/L		11/06/18 14:18	11/16/18 00:40	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.45	ug/L		11/06/18 14:18	11/16/18 00:40	1
4-Chloroaniline	5.0	U	5.0	0.59	ug/L		11/06/18 14:18	11/16/18 00:40	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.35	ug/L		11/06/18 14:18	11/16/18 00:40	1
4-Methylphenol	10	U	10	0.36	ug/L		11/06/18 14:18	11/16/18 00:40	1
4-Nitroaniline	10	U	10	0.25	ug/L		11/06/18 14:18	11/16/18 00:40	1
4-Nitrophenol	10	U	10	1.5	ug/L		11/06/18 14:18	11/16/18 00:40	1
Acenaphthene	5.0	U	5.0	0.41	ug/L		11/06/18 14:18	11/16/18 00:40	1
Acenaphthylene	5.0	U	5.0	0.38	ug/L		11/06/18 14:18	11/16/18 00:40	1
Anthracene	5.0	U	5.0	0.28	ug/L		11/06/18 14:18	11/16/18 00:40	1
Benzaldehyde	5.0	U	5.0	0.27	ug/L		11/06/18 14:18	11/16/18 00:40	1
Benzo[a]anthracene	5.0	U	5.0	0.36	ug/L		11/06/18 14:18	11/16/18 00:40	1
Benzo[a]pyrene	5.0	U	5.0	0.47	ug/L		11/06/18 14:18	11/16/18 00:40	1
Benzo[b]fluoranthene	5.0	U	5.0	0.34	ug/L		11/06/18 14:18	11/16/18 00:40	1
Benzo[g,h,i]perylene	5.0	U	5.0	0.35	ug/L		11/06/18 14:18	11/16/18 00:40	1
Benzo[k]fluoranthene	5.0	U	5.0	0.73	ug/L		11/06/18 14:18	11/16/18 00:40	1
bis (2-chloroisopropyl) ether	5.0	U	5.0	0.52	ug/L		11/06/18 14:18	11/16/18 00:40	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.35	ug/L		11/06/18 14:18	11/16/18 00:40	1
Bis(2-chloroethyl)ether	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 00:40	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	2.2	ug/L		11/06/18 14:18	11/16/18 00:40	1
Butyl benzyl phthalate	5.0	U	5.0	1.0	ug/L		11/06/18 14:18	11/16/18 00:40	1
Carbazole	5.0	U	5.0	0.30	ug/L		11/06/18 14:18	11/16/18 00:40	1
Chrysene	5.0	U	5.0	0.33	ug/L		11/06/18 14:18	11/16/18 00:40	1
Dibenz(a,h)anthracene	5.0	U	5.0	0.42	ug/L		11/06/18 14:18	11/16/18 00:40	1
Dibenzofuran	10	U	10	0.51	ug/L		11/06/18 14:18	11/16/18 00:40	1
Diethyl phthalate	5.0	U	5.0	0.22	ug/L		11/06/18 14:18	11/16/18 00:40	1
Dimethyl phthalate	5.0	U	5.0	0.36	ug/L		11/06/18 14:18	11/16/18 00:40	1
Di-n-butyl phthalate	5.0	U	5.0	0.31	ug/L		11/06/18 14:18	11/16/18 00:40	1

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-443944/1-A

Matrix: Water

Analysis Batch: 445839

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 443944

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	5.0	U	5.0	0.47	ug/L		11/06/18 14:18	11/16/18 00:40	1
Fluoranthene	5.0	U	5.0	0.40	ug/L		11/06/18 14:18	11/16/18 00:40	1
Fluorene	5.0	U	5.0	0.36	ug/L		11/06/18 14:18	11/16/18 00:40	1
Hexachlorobenzene	5.0	U	5.0	0.51	ug/L		11/06/18 14:18	11/16/18 00:40	1
Hexachlorobutadiene	5.0	U	5.0	0.68	ug/L		11/06/18 14:18	11/16/18 00:40	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.59	ug/L		11/06/18 14:18	11/16/18 00:40	1
Hexachloroethane	5.0	U	5.0	0.59	ug/L		11/06/18 14:18	11/16/18 00:40	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0	0.47	ug/L		11/06/18 14:18	11/16/18 00:40	1
Isophorone	5.0	U	5.0	0.43	ug/L		11/06/18 14:18	11/16/18 00:40	1
Naphthalene	5.0	U	5.0	0.76	ug/L		11/06/18 14:18	11/16/18 00:40	1
Nitrobenzene	5.0	U	5.0	0.29	ug/L		11/06/18 14:18	11/16/18 00:40	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.54	ug/L		11/06/18 14:18	11/16/18 00:40	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.51	ug/L		11/06/18 14:18	11/16/18 00:40	1
Pentachlorophenol	10	U	10	2.2	ug/L		11/06/18 14:18	11/16/18 00:40	1
Phenanthrene	5.0	U	5.0	0.44	ug/L		11/06/18 14:18	11/16/18 00:40	1
Phenol	0.910	J	5.0	0.39	ug/L		11/06/18 14:18	11/16/18 00:40	1
Pyrene	5.0	U	5.0	0.34	ug/L		11/06/18 14:18	11/16/18 00:40	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L				11/06/18 14:18	11/16/18 00:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	50		41 - 120	11/06/18 14:18	11/16/18 00:40	1
2-Fluorobiphenyl	82		48 - 120	11/06/18 14:18	11/16/18 00:40	1
2-Fluorophenol (Surr)	64		35 - 120	11/06/18 14:18	11/16/18 00:40	1
Nitrobenzene-d5 (Surr)	80		46 - 120	11/06/18 14:18	11/16/18 00:40	1
Phenol-d5 (Surr)	49		22 - 120	11/06/18 14:18	11/16/18 00:40	1
p-Terphenyl-d14 (Surr)	94		59 - 136	11/06/18 14:18	11/16/18 00:40	1

Lab Sample ID: LCS 480-443944/2-A

Matrix: Water

Analysis Batch: 445839

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 443944

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	32.0	23.2		ug/L		72	40 - 120
1,2-Dichlorobenzene	32.0	23.3		ug/L		73	49 - 120
1,3-Dichlorobenzene	32.0	22.3		ug/L		70	50 - 120
1,4-Dichlorobenzene	32.0	22.5		ug/L		70	51 - 120
2,4,5-Trichlorophenol	32.0	30.5		ug/L		95	65 - 126
2,4,6-Trichlorophenol	32.0	29.6		ug/L		92	64 - 120
2,4-Dichlorophenol	32.0	29.2		ug/L		91	63 - 120
2,4-Dimethylphenol	32.0	29.5		ug/L		92	47 - 120
2,4-Dinitrophenol	64.0	55.9		ug/L		87	31 - 137
2,4-Dinitrotoluene	32.0	32.4		ug/L		101	69 - 120
2,6-Dinitrotoluene	32.0	31.6		ug/L		99	68 - 120
2-Chloronaphthalene	32.0	27.5		ug/L		86	58 - 120
2-Chlorophenol	32.0	26.8		ug/L		84	48 - 120

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-443944/2-A

Matrix: Water

Analysis Batch: 445839

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 443944

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	32.0	26.9		ug/L		84	59 - 120
2-Methylphenol	32.0	27.9		ug/L		87	39 - 120
2-Nitroaniline	32.0	31.2		ug/L		98	54 - 127
2-Nitrophenol	32.0	28.4		ug/L		89	52 - 125
3,3'-Dichlorobenzidine	64.0	59.2		ug/L		93	49 - 135
3-Nitroaniline	32.0	28.0		ug/L		88	51 - 120
4,6-Dinitro-2-methylphenol	64.0	63.9		ug/L		100	46 - 136
4-Bromophenyl phenyl ether	32.0	30.2		ug/L		94	65 - 120
4-Chloro-3-methylphenol	32.0	31.4		ug/L		98	61 - 123
4-Chloroaniline	32.0	25.5		ug/L		80	30 - 120
4-Chlorophenyl phenyl ether	32.0	30.0		ug/L		94	62 - 120
4-Methylphenol	32.0	27.4		ug/L		86	29 - 131
4-Nitroaniline	32.0	32.1		ug/L		100	65 - 120
4-Nitrophenol	64.0	56.3		ug/L		88	45 - 120
Acenaphthene	32.0	29.3		ug/L		92	60 - 120
Acenaphthylene	32.0	29.8		ug/L		93	63 - 120
Anthracene	32.0	29.5		ug/L		92	67 - 120
Benzaldehyde	64.0	56.6		ug/L		88	10 - 140
Benzo[a]anthracene	32.0	31.6		ug/L		99	70 - 121
Benzo[a]pyrene	32.0	31.2		ug/L		97	60 - 123
Benzo[b]fluoranthene	32.0	32.6		ug/L		102	66 - 126
Benzo[g,h,i]perylene	32.0	32.4		ug/L		101	66 - 150
Benzo[k]fluoranthene	32.0	33.2		ug/L		104	65 - 124
bis (2-chloroisopropyl) ether	32.0	25.5		ug/L		80	21 - 136
Bis(2-chloroethoxy)methane	32.0	28.9		ug/L		90	50 - 128
Bis(2-chloroethyl)ether	32.0	26.7		ug/L		84	44 - 120
Bis(2-ethylhexyl) phthalate	32.0	33.8		ug/L		105	63 - 139
Butyl benzyl phthalate	32.0	33.0		ug/L		103	70 - 129
Carbazole	32.0	32.2		ug/L		101	66 - 123
Chrysene	32.0	30.8		ug/L		96	69 - 120
Dibenz(a,h)anthracene	32.0	33.0		ug/L		103	65 - 135
Dibenzofuran	32.0	29.3		ug/L		92	66 - 120
Diethyl phthalate	32.0	32.5		ug/L		102	59 - 127
Dimethyl phthalate	32.0	32.2		ug/L		101	68 - 120
Di-n-butyl phthalate	32.0	32.4		ug/L		101	69 - 131
Di-n-octyl phthalate	32.0	34.6		ug/L		108	63 - 140
Fluoranthene	32.0	33.0		ug/L		103	69 - 126
Fluorene	32.0	30.6		ug/L		96	66 - 120
Hexachlorobenzene	32.0	31.0		ug/L		97	61 - 120
Hexachlorobutadiene	32.0	21.0		ug/L		66	35 - 120
Hexachlorocyclopentadiene	32.0	16.4		ug/L		51	31 - 120
Hexachloroethane	32.0	20.6		ug/L		64	43 - 120
Indeno[1,2,3-cd]pyrene	32.0	31.5		ug/L		98	69 - 146
Isophorone	32.0	31.3		ug/L		98	55 - 120
Naphthalene	32.0	24.5		ug/L		77	57 - 120
Nitrobenzene	32.0	28.8		ug/L		90	53 - 123
N-Nitrosodi-n-propylamine	32.0	29.6		ug/L		92	32 - 140
N-Nitrosodiphenylamine	32.0	30.9		ug/L		97	61 - 120

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-443944/2-A

Matrix: Water

Analysis Batch: 445839

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 443944

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pentachlorophenol	64.0	62.0		ug/L		97	29 - 136
Phenanthrene	32.0	28.8		ug/L		90	68 - 120
Phenol	32.0	21.9		ug/L		68	17 - 120
Pyrene	32.0	29.7		ug/L		93	70 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	83		41 - 120
2-Fluorobiphenyl	75		48 - 120
2-Fluorophenol (Surr)	61		35 - 120
Nitrobenzene-d5 (Surr)	74		46 - 120
Phenol-d5 (Surr)	48		22 - 120
p-Terphenyl-d14 (Surr)	83		59 - 136

Lab Sample ID: LCSD 480-443944/3-A

Matrix: Water

Analysis Batch: 445839

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 443944

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	32.0	23.9		ug/L		75	40 - 120	3	30
1,2-Dichlorobenzene	32.0	23.0		ug/L		72	49 - 120	1	29
1,3-Dichlorobenzene	32.0	21.8		ug/L		68	50 - 120	2	37
1,4-Dichlorobenzene	32.0	22.5		ug/L		70	51 - 120	0	36
2,4,5-Trichlorophenol	32.0	32.7		ug/L		102	65 - 126	7	18
2,4,6-Trichlorophenol	32.0	31.3		ug/L		98	64 - 120	6	19
2,4-Dichlorophenol	32.0	30.2		ug/L		94	63 - 120	3	19
2,4-Dimethylphenol	32.0	30.4		ug/L		95	47 - 120	3	42
2,4-Dinitrophenol	64.0	57.1		ug/L		89	31 - 137	2	22
2,4-Dinitrotoluene	32.0	34.8		ug/L		109	69 - 120	7	20
2,6-Dinitrotoluene	32.0	33.4		ug/L		104	68 - 120	6	15
2-Chloronaphthalene	32.0	29.4		ug/L		92	58 - 120	7	21
2-Chlorophenol	32.0	26.3		ug/L		82	48 - 120	2	25
2-Methylnaphthalene	32.0	28.1		ug/L		88	59 - 120	4	21
2-Methylphenol	32.0	28.3		ug/L		88	39 - 120	1	27
2-Nitroaniline	32.0	33.6		ug/L		105	54 - 127	7	15
2-Nitrophenol	32.0	29.6		ug/L		92	52 - 125	4	18
3,3'-Dichlorobenzidine	64.0	61.6		ug/L		96	49 - 135	4	25
3-Nitroaniline	32.0	30.1		ug/L		94	51 - 120	7	19
4,6-Dinitro-2-methylphenol	64.0	66.3	E	ug/L		104	46 - 136	4	15
4-Bromophenyl phenyl ether	32.0	31.3		ug/L		98	65 - 120	4	15
4-Chloro-3-methylphenol	32.0	32.6		ug/L		102	61 - 123	3	27
4-Chloroaniline	32.0	26.2		ug/L		82	30 - 120	3	22
4-Chlorophenyl phenyl ether	32.0	31.4		ug/L		98	62 - 120	5	16
4-Methylphenol	32.0	27.8		ug/L		87	29 - 131	1	24
4-Nitroaniline	32.0	33.5		ug/L		105	65 - 120	4	24
4-Nitrophenol	64.0	59.3		ug/L		93	45 - 120	5	48
Acenaphthene	32.0	31.1		ug/L		97	60 - 120	6	24
Acenaphthylene	32.0	31.5		ug/L		98	63 - 120	6	18
Anthracene	32.0	30.2		ug/L		95	67 - 120	3	15

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-443944/3-A

Matrix: Water

Analysis Batch: 445839

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 443944

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzaldehyde	64.0	56.1		ug/L		88	10 - 140	1	20
Benzo[a]anthracene	32.0	32.6		ug/L		102	70 - 121	3	15
Benzo[a]pyrene	32.0	32.4		ug/L		101	60 - 123	4	15
Benzo[b]fluoranthene	32.0	34.0		ug/L		106	66 - 126	4	15
Benzo[g,h,i]perylene	32.0	33.5		ug/L		105	66 - 150	3	15
Benzo[k]fluoranthene	32.0	35.0		ug/L		109	65 - 124	5	22
bis (2-chloroisopropyl) ether	32.0	25.4		ug/L		79	21 - 136	0	24
Bis(2-chloroethoxy)methane	32.0	29.8		ug/L		93	50 - 128	3	17
Bis(2-chloroethyl)ether	32.0	26.4		ug/L		83	44 - 120	1	21
Bis(2-ethylhexyl) phthalate	32.0	35.7		ug/L		111	63 - 139	6	15
Butyl benzyl phthalate	32.0	34.6		ug/L		108	70 - 129	5	16
Carbazole	32.0	32.6		ug/L		102	66 - 123	1	20
Chrysene	32.0	31.7		ug/L		99	69 - 120	3	15
Dibenz(a,h)anthracene	32.0	34.8		ug/L		109	65 - 135	5	15
Dibenzofuran	32.0	31.2		ug/L		97	66 - 120	6	15
Diethyl phthalate	32.0	34.6		ug/L		108	59 - 127	6	15
Dimethyl phthalate	32.0	34.2		ug/L		107	68 - 120	6	15
Di-n-butyl phthalate	32.0	32.9		ug/L		103	69 - 131	1	15
Di-n-octyl phthalate	32.0	36.5		ug/L		114	63 - 140	5	16
Fluoranthene	32.0	33.3		ug/L		104	69 - 126	1	15
Fluorene	32.0	32.3		ug/L		101	66 - 120	5	15
Hexachlorobenzene	32.0	31.7		ug/L		99	61 - 120	2	15
Hexachlorobutadiene	32.0	21.4		ug/L		67	35 - 120	2	44
Hexachlorocyclopentadiene	32.0	16.9		ug/L		53	31 - 120	3	49
Hexachloroethane	32.0	20.3		ug/L		64	43 - 120	1	46
Indeno[1,2,3-cd]pyrene	32.0	32.5		ug/L		102	69 - 146	3	15
Isophorone	32.0	32.3		ug/L		101	55 - 120	3	17
Naphthalene	32.0	25.0		ug/L		78	57 - 120	2	29
Nitrobenzene	32.0	29.1		ug/L		91	53 - 123	1	24
N-Nitrosodi-n-propylamine	32.0	29.8		ug/L		93	32 - 140	1	31
N-Nitrosodiphenylamine	32.0	31.4		ug/L		98	61 - 120	2	15
Pentachlorophenol	64.0	64.0		ug/L		100	29 - 136	3	37
Phenanthrene	32.0	29.2		ug/L		91	68 - 120	1	15
Phenol	32.0	22.0		ug/L		69	17 - 120	1	34
Pyrene	32.0	31.0		ug/L		97	70 - 125	4	19

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	83		41 - 120
2-Fluorobiphenyl	78		48 - 120
2-Fluorophenol (Surr)	58		35 - 120
Nitrobenzene-d5 (Surr)	75		46 - 120
Phenol-d5 (Surr)	47		22 - 120
p-Terphenyl-d14 (Surr)	86		59 - 136

TestAmerica Buffalo

QC Association Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

GC/MS VOA

Analysis Batch: 443808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144671-4	Trip Blanks	Total/NA	Water	8260C	
MB 480-443808/28	Method Blank	Total/NA	Water	8260C	
LCS 480-443808/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 444964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144671-1	SW-7830-110218-BP-013	Total/NA	Water	8260C	
480-144671-2	SW-7830-110218-BP-014	Total/NA	Water	8260C	
480-144671-3	SW-7830-110218-BP-023	Total/NA	Water	8260C	
MB 480-444964/8	Method Blank	Total/NA	Water	8260C	
LCS 480-444964/5	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 443944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144671-1	SW-7830-110218-BP-013	Total/NA	Water	3510C	
480-144671-2	SW-7830-110218-BP-014	Total/NA	Water	3510C	
480-144671-3	SW-7830-110218-BP-023	Total/NA	Water	3510C	
MB 480-443944/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-443944/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-443944/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 445839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-144671-1	SW-7830-110218-BP-013	Total/NA	Water	8270D	443944
480-144671-2	SW-7830-110218-BP-014	Total/NA	Water	8270D	443944
480-144671-3	SW-7830-110218-BP-023	Total/NA	Water	8270D	443944
MB 480-443944/1-A	Method Blank	Total/NA	Water	8270D	443944
LCS 480-443944/2-A	Lab Control Sample	Total/NA	Water	8270D	443944
LCSD 480-443944/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	443944

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Client Sample ID: SW-7830-110218-BP-013

Date Collected: 11/02/18 11:00

Date Received: 11/03/18 01:00

Lab Sample ID: 480-144671-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	444964	11/12/18 13:56	AEM	TAL BUF
Total/NA	Prep	3510C			443944	11/06/18 14:18	ATG	TAL BUF
Total/NA	Analysis	8270D		1	445839	11/16/18 02:37	PJQ	TAL BUF

Client Sample ID: SW-7830-110218-BP-014

Date Collected: 11/02/18 11:40

Date Received: 11/03/18 01:00

Lab Sample ID: 480-144671-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	444964	11/12/18 14:20	AEM	TAL BUF
Total/NA	Prep	3510C			443944	11/06/18 14:18	ATG	TAL BUF
Total/NA	Analysis	8270D		1	445839	11/16/18 03:06	PJQ	TAL BUF

Client Sample ID: SW-7830-110218-BP-023

Date Collected: 11/02/18 12:00

Date Received: 11/03/18 01:00

Lab Sample ID: 480-144671-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	444964	11/12/18 14:43	AEM	TAL BUF
Total/NA	Prep	3510C			443944	11/06/18 14:18	ATG	TAL BUF
Total/NA	Analysis	8270D		1	445839	11/16/18 03:35	PJQ	TAL BUF

Client Sample ID: Trip Blanks

Date Collected: 11/02/18 00:00

Date Received: 11/03/18 01:00

Lab Sample ID: 480-144671-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	443808	11/06/18 17:53	NMC	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19

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

Method Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3

TestAmerica Job ID: 480-144671-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-144671-1	SW-7830-110218-BP-013	Water	11/02/18 11:00	11/03/18 01:00
480-144671-2	SW-7830-110218-BP-014	Water	11/02/18 11:40	11/03/18 01:00
480-144671-3	SW-7830-110218-BP-023	Water	11/02/18 12:00	11/03/18 01:00
480-144671-4	Trip Blanks	Water	11/02/18 00:00	11/03/18 01:00

[illegible]

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 480-144671-1

Login Number: 144671

List Source: TestAmerica Buffalo

List Number: 1

Creator: Velickovic, Zoran

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	GHD
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	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-142544-1

Client Project/Site: Sterling Site #3 Emerging Contaminants

For:

GHD Services Inc.

2055 Niagara Falls Blvd., Suite 3

Niagara Falls, New York 14304

Attn: Kathleen Willy



Authorized for release by:

10/19/2018 3:48:39 PM

Rebecca Jones, Project Management Assistant I

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Designee for

John Schove, Project Manager II

(716)504-9838

john.schove@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
E	Result exceeded calibration range.

LCMS

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	Isotope Dilution analyte is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

Case Narrative

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Job ID: 480-142544-1

Laboratory: TestAmerica Buffalo

Narrative

**Job Narrative
480-142544-1**

Comments

No additional comments.

Receipt

The samples were received on 9/28/2018 1:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 1.4° C, 1.9° C and 2.6° C.

Receipt Exceptions

The following samples were received at the laboratory outside the required temperature criteria for method 537: WG-007830-092718-BP-001 (480-142544-1), WG-007830-092718-BP-001 (480-142544-1[MSJ]), WG-007830-092718-BP-001 (480-142544-1[MSD]), WG-007830-092718-BP-002 (480-142544-2), WG-007830-092718-BP-003 (480-142544-3), EB-007830-092718-BP-004 (480-142544-4), FB-007830-092718-BP-005 (480-142544-5), WG-007830-092718-BP-006 (480-142544-6) and WG-007830-092718-BP-007 (480-142544-7). Received at 6.4 degrees Celsius with wet ice melted.

GC/MS Semi VOA

Method(s) 8270D SIM ID: The following samples were diluted to bring the concentration of target analytes within the calibration range: WG-007830-092718-BP-002 (480-142544-2), WG-007830-092718-BP-003 (480-142544-3), WG-007830-092718-BP-006 (480-142544-6) and WG-007830-092718-BP-007 (480-142544-7). Elevated reporting limits (RLs) are provided.

Method(s) 8270D SIM ID: The 1,4-Dioxane result reported for sample WG-007830-092718-BP-002 (480-142544-2) have an E flag qualifier indicating the results are over the calibration range on the raw data. The actual amounts are within the calibration range; however, the E flag is generated based upon the bias corrected concentration. The LIMS system calculates a bias correction based on the recovery of the 1,4-Dioxane-d8 isotope.

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

LCMS

Method(s) 537 (modified): Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for M2-6:2 FTS and M2-8:2 FTS in the following sample: WG-007830-092718-BP-002 (480-142544-2) and WG-007830-092718-BP-003 (480-142544-3). Re-analysis was performed with concurring results. Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Method(s) 537 (modified): The Isotope Dilution Analyte (IDA) recovery associated with the following samples is below the method recommended limit for 13C4 PFBWG-007830-092718-BP-002 (480-142544-2) and WG-007830-092718-BP-003 (480-142544-3). Re-analysis was performed with concurring results. Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the samples. All detection limits are below the lower calibration.

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

Organic Prep

Method(s) 3510C: Elevated reporting limits are provided for the following samples due to insufficient sample provided for preparation: WG-007830-092718-BP-001 (480-142544-1[MSD]), WG-007830-092718-BP-006 (480-142544-6) and WG-007830-092718-BP-007 (480-142544-7).

Method(s) 3535: The following samples had non-settleable particulate matter which plugged the SPE extraction disk. The amount of sample remaining plus the weight of the bottle are recorded in the "Notes" field of the prep batch. The "Tare Weight" recorded is the weight of the emptied bottle.: WG-007830-092718-BP-001 (480-142544-1), WG-007830-092718-BP-001 (480-142544-1[MSJ]), WG-007830-092718-BP-001 (480-142544-1[MSD]), WG-007830-092718-BP-002 (480-142544-2) and WG-007830-092718-BP-006 (480-142544-6). The reporting limits (RLs) have been adjusted proportionately.

Method(s) 3535: The following samples: WG-007830-092718-BP-001 (480-142544-1), WG-007830-092718-BP-001 (480-142544-1[MSJ])

Case Narrative

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Job ID: 480-142544-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

and WG-007830-092718-BP-001 (480-142544-1[MSD]) were observed to be similar to the other samples in job number 142544 but during extraction sediment clogged the column after about 50 mL.

Method(s) 3535: The following samples were re-prepared outside of preparation holding time because an insufficient amount of samples were loaded onto the solid phase extraction column in the original extraction due to excessive sediment and turbidity in the sample..WG-007830-092718-BP-001 (480-142544-1), WG-007830-092718-BP-001 (480-142544-1[MS]) and WG-007830-092718-BP-001 (480-142544-1[MSD]).

Method(s) 3535: Samples were centrifuged prior to re-extraction due to the excessive amount of sediment and turbidity in the samples. After centrifugation the samples still had an excessive amount of turbidity which could clog the solid-phase extraction column. Therefore 50mL of the aqueous portion after it was centrifuged was fortified with IDA and then extracted:WG-007830-092718-BP-001 (480-142544-1), WG-007830-092718-BP-001 (480-142544-1[MS]) and WG-007830-092718-BP-001 (480-142544-1[MSD]). The reporting limits (RLs) have been adjusted proportionately.

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

Detection Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Client Sample ID: WG-007830-092718-BP-001

Lab Sample ID: 480-142544-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	5.7	J H B	10	1.8	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	4.1	J H	10	2.5	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	34	H	10	2.9	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	3.7	J H	10	1.3	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	4.8	J H	10	4.3	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.4	J H B	10	0.85	ng/L	1		537 (modified)	Total/NA

Client Sample ID: WG-007830-092718-BP-002

Lab Sample ID: 480-142544-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	7.4	E	1.1	0.54	ug/L	5		8270D SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	150		1.8	0.32	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	4.9		1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	3.3		1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	12		1.8	0.77	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	3.1		1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.0		1.8	0.49	ng/L	1		537 (modified)	Total/NA
6:2 FTS	7.2	J	18	1.8	ng/L	1		537 (modified)	Total/NA

Client Sample ID: WG-007830-092718-BP-003

Lab Sample ID: 480-142544-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.4		0.99	0.50	ug/L	5		8270D SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	29		1.9	0.34	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	4.7		1.9	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.3		1.9	0.56	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.8	J	1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	5.7		1.9	0.82	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.56	J	1.9	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.40	J	1.9	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.28	J	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.52	J B	1.9	0.16	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.67	J	1.9	0.52	ng/L	1		537 (modified)	Total/NA
6:2 FTS	3.2	J	19	1.9	ng/L	1		537 (modified)	Total/NA

Client Sample ID: EB-007830-092718-BP-004

Lab Sample ID: 480-142544-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.34	J	1.7	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.42	J	1.7	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.65	J	1.7	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.23	J B	1.7	0.15	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-007830-092718-BP-005

Lab Sample ID: 480-142544-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	0.24	J B	1.7	0.15	ng/L	1		537 (modified)	Total/NA

Client Sample ID: WG-007830-092718-BP-006

Lab Sample ID: 480-142544-6

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Client Sample ID: WG-007830-092718-BP-006 (Continued)

Lab Sample ID: 480-142544-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.5		1.2	0.62	ug/L	5		8270D SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	58		1.7	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.4		1.7	0.49	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.9		1.7	0.21	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	6.3		1.7	0.72	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.61	J	1.7	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.35	J	1.7	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.41	J	1.7	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.43	J B	1.7	0.14	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.88	J	1.7	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.57	J	1.7	0.30	ng/L	1		537 (modified)	Total/NA

Client Sample ID: WG-007830-092718-BP-007

Lab Sample ID: 480-142544-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	6.4		2.0	1.0	ug/L	5		8270D SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	41		1.8	0.31	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	3.0		1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.7		1.8	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.6	J	1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	5.9		1.8	0.76	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.48	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.55	J B	1.8	0.15	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.96	J	1.8	0.48	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Client Sample ID: WG-007830-092718-BP-001

Lab Sample ID: 480-142544-1

Date Collected: 09/27/18 09:00

Matrix: Water

Date Received: 09/28/18 01:30

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U	0.20	0.098	ug/L		10/02/18 07:36	10/09/18 05:24	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	35		15 - 110				10/02/18 07:36	10/09/18 05:24	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	5.7	J H B	10	1.8	ng/L		10/16/18 17:49	10/17/18 22:09	1
Perfluoropentanoic acid (PFPeA)	4.1	J H	10	2.5	ng/L		10/16/18 17:49	10/17/18 22:09	1
Perfluorohexanoic acid (PFHxA)	34	H	10	2.9	ng/L		10/16/18 17:49	10/17/18 22:09	1
Perfluoroheptanoic acid (PFHpA)	3.7	J H	10	1.3	ng/L		10/16/18 17:49	10/17/18 22:09	1
Perfluorooctanoic acid (PFOA)	4.8	J H	10	4.3	ng/L		10/16/18 17:49	10/17/18 22:09	1
Perfluorononanoic acid (PFNA)	10	U H	10	1.4	ng/L		10/16/18 17:49	10/17/18 22:09	1
Perfluorodecanoic acid (PFDA)	10	U H	10	1.6	ng/L		10/16/18 17:49	10/17/18 22:09	1
Perfluoroundecanoic acid (PFUnA)	10	U H	10	5.5	ng/L		10/16/18 17:49	10/17/18 22:09	1
Perfluorododecanoic acid (PFDoA)	10	U H	10	2.8	ng/L		10/16/18 17:49	10/17/18 22:09	1
Perfluorotridecanoic acid (PFTriA)	10	U H	10	6.5	ng/L		10/16/18 17:49	10/17/18 22:09	1
Perfluorotetradecanoic acid (PFTeA)	10	U H	10	1.5	ng/L		10/16/18 17:49	10/17/18 22:09	1
Perfluorobutanesulfonic acid (PFBS)	10	U H	10	1.0	ng/L		10/16/18 17:49	10/17/18 22:09	1
Perfluorohexanesulfonic acid (PFHxS)	1.4	J H B	10	0.85	ng/L		10/16/18 17:49	10/17/18 22:09	1
Perfluoroheptanesulfonic Acid (PFHpS)	10	U H	10	0.95	ng/L		10/16/18 17:49	10/17/18 22:09	1
Perfluorooctanesulfonic acid (PFOS)	10	U H	10	2.7	ng/L		10/16/18 17:49	10/17/18 22:09	1
Perfluorodecanesulfonic acid (PFDS)	10	U H	10	1.6	ng/L		10/16/18 17:49	10/17/18 22:09	1
Perfluorooctanesulfonamide (FOSA)	10	U H	10	1.8	ng/L		10/16/18 17:49	10/17/18 22:09	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	100	U H	100	16	ng/L		10/16/18 17:49	10/17/18 22:09	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	100	U H	100	9.5	ng/L		10/16/18 17:49	10/17/18 22:09	1
6:2 FTS	100	U H	100	10	ng/L		10/16/18 17:49	10/17/18 22:09	1
8:2 FTS	100	U H	100	10	ng/L		10/16/18 17:49	10/17/18 22:09	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	93		25 - 150				10/16/18 17:49	10/17/18 22:09	1
13C5 PFPeA	88		25 - 150				10/16/18 17:49	10/17/18 22:09	1
13C2 PFHxA	89		25 - 150				10/16/18 17:49	10/17/18 22:09	1
13C4 PFHpA	96		25 - 150				10/16/18 17:49	10/17/18 22:09	1
13C4 PFOA	91		25 - 150				10/16/18 17:49	10/17/18 22:09	1
13C5 PFNA	90		25 - 150				10/16/18 17:49	10/17/18 22:09	1
13C2 PFDA	91		25 - 150				10/16/18 17:49	10/17/18 22:09	1
13C2 PFUnA	92		25 - 150				10/16/18 17:49	10/17/18 22:09	1
13C2 PFDoA	86		25 - 150				10/16/18 17:49	10/17/18 22:09	1
13C2 PFTeDA	96		25 - 150				10/16/18 17:49	10/17/18 22:09	1
13C3 PFBS	89		25 - 150				10/16/18 17:49	10/17/18 22:09	1
18O2 PFHxS	91		25 - 150				10/16/18 17:49	10/17/18 22:09	1
13C4 PFOS	95		25 - 150				10/16/18 17:49	10/17/18 22:09	1
13C8 FOSA	90		25 - 150				10/16/18 17:49	10/17/18 22:09	1
d3-NMeFOSAA	100		25 - 150				10/16/18 17:49	10/17/18 22:09	1
d5-NEtFOSAA	100		25 - 150				10/16/18 17:49	10/17/18 22:09	1
M2-6:2 FTS	97		25 - 150				10/16/18 17:49	10/17/18 22:09	1
M2-8:2 FTS	92		25 - 150				10/16/18 17:49	10/17/18 22:09	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Client Sample ID: WG-007830-092718-BP-002

Lab Sample ID: 480-142544-2

Date Collected: 09/27/18 11:00

Matrix: Water

Date Received: 09/28/18 01:30

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	7.4	E	1.1	0.54	ug/L		10/02/18 07:36	10/09/18 06:11	5
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	34		15 - 110				10/02/18 07:36	10/09/18 06:11	5

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	150		1.8	0.32	ng/L		10/10/18 10:49	10/13/18 16:33	1
Perfluoropentanoic acid (PFPeA)	1.8	U	1.8	0.44	ng/L		10/10/18 10:49	10/13/18 16:33	1
Perfluorohexanoic acid (PFHxA)	4.9		1.8	0.53	ng/L		10/10/18 10:49	10/13/18 16:33	1
Perfluoroheptanoic acid (PFHpA)	3.3		1.8	0.23	ng/L		10/10/18 10:49	10/13/18 16:33	1
Perfluorooctanoic acid (PFOA)	12		1.8	0.77	ng/L		10/10/18 10:49	10/13/18 16:33	1
Perfluorononanoic acid (PFNA)	3.1		1.8	0.24	ng/L		10/10/18 10:49	10/13/18 16:33	1
Perfluorodecanoic acid (PFDA)	1.8	U	1.8	0.28	ng/L		10/10/18 10:49	10/13/18 16:33	1
Perfluoroundecanoic acid (PFUnA)	1.8	U	1.8	1.0	ng/L		10/10/18 10:49	10/13/18 16:33	1
Perfluorododecanoic acid (PFDoA)	1.8	U	1.8	0.50	ng/L		10/10/18 10:49	10/13/18 16:33	1
Perfluorotridecanoic acid (PFTriA)	1.8	U	1.8	1.2	ng/L		10/10/18 10:49	10/13/18 16:33	1
Perfluorotetradecanoic acid (PFTeA)	1.8	U	1.8	0.26	ng/L		10/10/18 10:49	10/13/18 16:33	1
Perfluorobutanesulfonic acid (PFBS)	1.8	U	1.8	0.18	ng/L		10/10/18 10:49	10/13/18 16:33	1
Perfluorohexanesulfonic acid (PFHxS)	1.8	U	1.8	0.15	ng/L		10/10/18 10:49	10/13/18 16:33	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.8	U	1.8	0.17	ng/L		10/10/18 10:49	10/13/18 16:33	1
Perfluorooctanesulfonic acid (PFOS)	3.0		1.8	0.49	ng/L		10/10/18 10:49	10/13/18 16:33	1
Perfluorodecanesulfonic acid (PFDS)	1.8	U	1.8	0.29	ng/L		10/10/18 10:49	10/13/18 16:33	1
Perfluorooctanesulfonamide (FOSA)	1.8	U	1.8	0.32	ng/L		10/10/18 10:49	10/13/18 16:33	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	18	U	18	2.8	ng/L		10/10/18 10:49	10/13/18 16:33	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	18	U	18	1.7	ng/L		10/10/18 10:49	10/13/18 16:33	1
6:2 FTS	7.2	J	18	1.8	ng/L		10/10/18 10:49	10/13/18 16:33	1
8:2 FTS	18	U	18	1.8	ng/L		10/10/18 10:49	10/13/18 16:33	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	16	*	25 - 150				10/10/18 10:49	10/13/18 16:33	1
13C5 PFPeA	28		25 - 150				10/10/18 10:49	10/13/18 16:33	1
13C2 PFHxA	57		25 - 150				10/10/18 10:49	10/13/18 16:33	1
13C4 PFHpA	62		25 - 150				10/10/18 10:49	10/13/18 16:33	1
13C4 PFOA	85		25 - 150				10/10/18 10:49	10/13/18 16:33	1
13C5 PFNA	93		25 - 150				10/10/18 10:49	10/13/18 16:33	1
13C2 PFDA	59		25 - 150				10/10/18 10:49	10/13/18 16:33	1
13C2 PFUnA	85		25 - 150				10/10/18 10:49	10/13/18 16:33	1
13C2 PFDoA	85		25 - 150				10/10/18 10:49	10/13/18 16:33	1
13C2 PFTeDA	69		25 - 150				10/10/18 10:49	10/13/18 16:33	1
13C3 PFBS	79		25 - 150				10/10/18 10:49	10/13/18 16:33	1
18O2 PFHxS	79		25 - 150				10/10/18 10:49	10/13/18 16:33	1
13C4 PFOS	84		25 - 150				10/10/18 10:49	10/13/18 16:33	1
13C8 FOSA	26		25 - 150				10/10/18 10:49	10/13/18 16:33	1
d3-NMeFOSAA	100		25 - 150				10/10/18 10:49	10/13/18 16:33	1
d5-NEtFOSAA	90		25 - 150				10/10/18 10:49	10/13/18 16:33	1
M2-6:2 FTS	284	*	25 - 150				10/10/18 10:49	10/13/18 16:33	1
M2-8:2 FTS	191	*	25 - 150				10/10/18 10:49	10/13/18 16:33	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Client Sample ID: WG-007830-092718-BP-003

Lab Sample ID: 480-142544-3

Date Collected: 09/27/18 12:30

Matrix: Water

Date Received: 09/28/18 01:30

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.4		0.99	0.50	ug/L		10/02/18 07:36	10/09/18 06:34	5
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	30		15 - 110				10/02/18 07:36	10/09/18 06:34	5

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	29		1.9	0.34	ng/L		10/10/18 10:49	10/15/18 02:01	1
Perfluoropentanoic acid (PFPeA)	4.7		1.9	0.47	ng/L		10/10/18 10:49	10/15/18 02:01	1
Perfluorohexanoic acid (PFHxA)	2.3		1.9	0.56	ng/L		10/10/18 10:49	10/15/18 02:01	1
Perfluoroheptanoic acid (PFHpA)	1.8	J	1.9	0.24	ng/L		10/10/18 10:49	10/15/18 02:01	1
Perfluorooctanoic acid (PFOA)	5.7		1.9	0.82	ng/L		10/10/18 10:49	10/15/18 02:01	1
Perfluorononanoic acid (PFNA)	0.56	J	1.9	0.26	ng/L		10/10/18 10:49	10/15/18 02:01	1
Perfluorodecanoic acid (PFDA)	0.40	J	1.9	0.30	ng/L		10/10/18 10:49	10/15/18 02:01	1
Perfluoroundecanoic acid (PFUnA)	1.9	U	1.9	1.1	ng/L		10/10/18 10:49	10/15/18 02:01	1
Perfluorododecanoic acid (PFDoA)	1.9	U	1.9	0.53	ng/L		10/10/18 10:49	10/15/18 02:01	1
Perfluorotridecanoic acid (PFTriA)	1.9	U	1.9	1.3	ng/L		10/10/18 10:49	10/15/18 02:01	1
Perfluorotetradecanoic acid (PFTeA)	1.9	U	1.9	0.28	ng/L		10/10/18 10:49	10/15/18 02:01	1
Perfluorobutanesulfonic acid (PFBS)	0.28	J	1.9	0.19	ng/L		10/10/18 10:49	10/15/18 02:01	1
Perfluorohexanesulfonic acid (PFHxS)	0.52	J B	1.9	0.16	ng/L		10/10/18 10:49	10/15/18 02:01	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.9	U	1.9	0.18	ng/L		10/10/18 10:49	10/15/18 02:01	1
Perfluorooctanesulfonic acid (PFOS)	0.67	J	1.9	0.52	ng/L		10/10/18 10:49	10/15/18 02:01	1
Perfluorodecanesulfonic acid (PFDS)	1.9	U	1.9	0.31	ng/L		10/10/18 10:49	10/15/18 02:01	1
Perfluorooctanesulfonamide (FOSA)	1.9	U	1.9	0.34	ng/L		10/10/18 10:49	10/15/18 02:01	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	19	U	19	3.0	ng/L		10/10/18 10:49	10/15/18 02:01	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	19	U	19	1.8	ng/L		10/10/18 10:49	10/15/18 02:01	1
6:2 FTS	3.2	J	19	1.9	ng/L		10/10/18 10:49	10/15/18 02:01	1
8:2 FTS	19	U	19	1.9	ng/L		10/10/18 10:49	10/15/18 02:01	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	21	*	25 - 150				10/10/18 10:49	10/15/18 02:01	1
13C5 PFPeA	62		25 - 150				10/10/18 10:49	10/15/18 02:01	1
13C2 PFHxA	79		25 - 150				10/10/18 10:49	10/15/18 02:01	1
13C4 PFHpA	89		25 - 150				10/10/18 10:49	10/15/18 02:01	1
13C4 PFOA	97		25 - 150				10/10/18 10:49	10/15/18 02:01	1
13C5 PFNA	105		25 - 150				10/10/18 10:49	10/15/18 02:01	1
13C2 PFDA	89		25 - 150				10/10/18 10:49	10/15/18 02:01	1
13C2 PFUnA	96		25 - 150				10/10/18 10:49	10/15/18 02:01	1
13C2 PFDoA	93		25 - 150				10/10/18 10:49	10/15/18 02:01	1
13C2 PFTeDA	66		25 - 150				10/10/18 10:49	10/15/18 02:01	1
13C3 PFBS	97		25 - 150				10/10/18 10:49	10/15/18 02:01	1
18O2 PFHxS	96		25 - 150				10/10/18 10:49	10/15/18 02:01	1
13C4 PFOS	98		25 - 150				10/10/18 10:49	10/15/18 02:01	1
13C8 FOSA	63		25 - 150				10/10/18 10:49	10/15/18 02:01	1
d3-NMeFOSAA	114		25 - 150				10/10/18 10:49	10/15/18 02:01	1
d5-NEtFOSAA	116		25 - 150				10/10/18 10:49	10/15/18 02:01	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Client Sample ID: WG-007830-092718-BP-003

Lab Sample ID: 480-142544-3

Date Collected: 09/27/18 12:30

Matrix: Water

Date Received: 09/28/18 01:30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
M2-6:2 FTS	218	*	25 - 150
M2-8:2 FTS	302	*	25 - 150

<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
10/10/18 10:49	10/15/18 02:01	1
10/10/18 10:49	10/15/18 02:01	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Client Sample ID: EB-007830-092718-BP-004

Lab Sample ID: 480-142544-4

Date Collected: 09/27/18 13:00

Matrix: Water

Date Received: 09/28/18 01:30

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.19	U	0.19	0.096	ug/L		10/02/18 07:36	10/09/18 06:57	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	35		15 - 110				10/02/18 07:36	10/09/18 06:57	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.34	J	1.7	0.30	ng/L		10/10/18 10:49	10/13/18 16:48	1
Perfluoropentanoic acid (PFPeA)	1.7	U	1.7	0.42	ng/L		10/10/18 10:49	10/13/18 16:48	1
Perfluorohexanoic acid (PFHxA)	1.7	U	1.7	0.50	ng/L		10/10/18 10:49	10/13/18 16:48	1
Perfluoroheptanoic acid (PFHpA)	1.7	U	1.7	0.21	ng/L		10/10/18 10:49	10/13/18 16:48	1
Perfluorooctanoic acid (PFOA)	1.7	U	1.7	0.73	ng/L		10/10/18 10:49	10/13/18 16:48	1
Perfluorononanoic acid (PFNA)	0.42	J	1.7	0.23	ng/L		10/10/18 10:49	10/13/18 16:48	1
Perfluorodecanoic acid (PFDA)	0.65	J	1.7	0.27	ng/L		10/10/18 10:49	10/13/18 16:48	1
Perfluoroundecanoic acid (PFUnA)	1.7	U	1.7	0.94	ng/L		10/10/18 10:49	10/13/18 16:48	1
Perfluorododecanoic acid (PFDoA)	1.7	U	1.7	0.47	ng/L		10/10/18 10:49	10/13/18 16:48	1
Perfluorotridecanoic acid (PFTriA)	1.7	U	1.7	1.1	ng/L		10/10/18 10:49	10/13/18 16:48	1
Perfluorotetradecanoic acid (PFTeA)	1.7	U	1.7	0.25	ng/L		10/10/18 10:49	10/13/18 16:48	1
Perfluorobutanesulfonic acid (PFBS)	1.7	U	1.7	0.17	ng/L		10/10/18 10:49	10/13/18 16:48	1
Perfluorohexanesulfonic acid (PFHxS)	0.23	J B	1.7	0.15	ng/L		10/10/18 10:49	10/13/18 16:48	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.7	U	1.7	0.16	ng/L		10/10/18 10:49	10/13/18 16:48	1
Perfluorooctanesulfonic acid (PFOS)	1.7	U	1.7	0.46	ng/L		10/10/18 10:49	10/13/18 16:48	1
Perfluorodecanesulfonic acid (PFDS)	1.7	U	1.7	0.27	ng/L		10/10/18 10:49	10/13/18 16:48	1
Perfluorooctanesulfonamide (FOSA)	1.7	U	1.7	0.30	ng/L		10/10/18 10:49	10/13/18 16:48	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	17	U	17	2.7	ng/L		10/10/18 10:49	10/13/18 16:48	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	17	U	17	1.6	ng/L		10/10/18 10:49	10/13/18 16:48	1
6:2 FTS	17	U	17	1.7	ng/L		10/10/18 10:49	10/13/18 16:48	1
8:2 FTS	17	U	17	1.7	ng/L		10/10/18 10:49	10/13/18 16:48	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	92		25 - 150				10/10/18 10:49	10/13/18 16:48	1
13C5 PFPeA	95		25 - 150				10/10/18 10:49	10/13/18 16:48	1
13C2 PFHxA	94		25 - 150				10/10/18 10:49	10/13/18 16:48	1
13C4 PFHpA	95		25 - 150				10/10/18 10:49	10/13/18 16:48	1
13C4 PFOA	103		25 - 150				10/10/18 10:49	10/13/18 16:48	1
13C5 PFNA	101		25 - 150				10/10/18 10:49	10/13/18 16:48	1
13C2 PFDA	96		25 - 150				10/10/18 10:49	10/13/18 16:48	1
13C2 PFUnA	94		25 - 150				10/10/18 10:49	10/13/18 16:48	1
13C2 PFDoA	92		25 - 150				10/10/18 10:49	10/13/18 16:48	1
13C2 PFTeDA	89		25 - 150				10/10/18 10:49	10/13/18 16:48	1
13C3 PFBS	94		25 - 150				10/10/18 10:49	10/13/18 16:48	1
18O2 PFHxS	95		25 - 150				10/10/18 10:49	10/13/18 16:48	1
13C4 PFOS	96		25 - 150				10/10/18 10:49	10/13/18 16:48	1
13C8 FOSA	83		25 - 150				10/10/18 10:49	10/13/18 16:48	1
d3-NMeFOSAA	95		25 - 150				10/10/18 10:49	10/13/18 16:48	1
d5-NEtFOSAA	94		25 - 150				10/10/18 10:49	10/13/18 16:48	1
M2-6:2 FTS	105		25 - 150				10/10/18 10:49	10/13/18 16:48	1
M2-8:2 FTS	97		25 - 150				10/10/18 10:49	10/13/18 16:48	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Client Sample ID: FB-007830-092718-BP-005

Lab Sample ID: 480-142544-5

Date Collected: 09/27/18 12:35

Matrix: Water

Date Received: 09/28/18 01:30

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.19	U	0.19	0.096	ug/L		10/02/18 07:36	10/09/18 07:21	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	36		15 - 110				10/02/18 07:36	10/09/18 07:21	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.7	U	1.7	0.30	ng/L		10/10/18 10:49	10/13/18 16:56	1
Perfluoropentanoic acid (PFPeA)	1.7	U	1.7	0.43	ng/L		10/10/18 10:49	10/13/18 16:56	1
Perfluorohexanoic acid (PFHxA)	1.7	U	1.7	0.50	ng/L		10/10/18 10:49	10/13/18 16:56	1
Perfluoroheptanoic acid (PFHpA)	1.7	U	1.7	0.22	ng/L		10/10/18 10:49	10/13/18 16:56	1
Perfluorooctanoic acid (PFOA)	1.7	U	1.7	0.74	ng/L		10/10/18 10:49	10/13/18 16:56	1
Perfluorononanoic acid (PFNA)	1.7	U	1.7	0.23	ng/L		10/10/18 10:49	10/13/18 16:56	1
Perfluorodecanoic acid (PFDA)	1.7	U	1.7	0.27	ng/L		10/10/18 10:49	10/13/18 16:56	1
Perfluoroundecanoic acid (PFUnA)	1.7	U	1.7	0.96	ng/L		10/10/18 10:49	10/13/18 16:56	1
Perfluorododecanoic acid (PFDoA)	1.7	U	1.7	0.48	ng/L		10/10/18 10:49	10/13/18 16:56	1
Perfluorotridecanoic acid (PFTriA)	1.7	U	1.7	1.1	ng/L		10/10/18 10:49	10/13/18 16:56	1
Perfluorotetradecanoic acid (PFTeA)	1.7	U	1.7	0.25	ng/L		10/10/18 10:49	10/13/18 16:56	1
Perfluorobutanesulfonic acid (PFBS)	1.7	U	1.7	0.17	ng/L		10/10/18 10:49	10/13/18 16:56	1
Perfluorohexanesulfonic acid (PFHxS)	0.24	J B	1.7	0.15	ng/L		10/10/18 10:49	10/13/18 16:56	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.7	U	1.7	0.17	ng/L		10/10/18 10:49	10/13/18 16:56	1
Perfluorooctanesulfonic acid (PFOS)	1.7	U	1.7	0.47	ng/L		10/10/18 10:49	10/13/18 16:56	1
Perfluorodecanesulfonic acid (PFDS)	1.7	U	1.7	0.28	ng/L		10/10/18 10:49	10/13/18 16:56	1
Perfluorooctanesulfonamide (FOSA)	1.7	U	1.7	0.30	ng/L		10/10/18 10:49	10/13/18 16:56	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	17	U	17	2.7	ng/L		10/10/18 10:49	10/13/18 16:56	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	17	U	17	1.7	ng/L		10/10/18 10:49	10/13/18 16:56	1
6:2 FTS	17	U	17	1.7	ng/L		10/10/18 10:49	10/13/18 16:56	1
8:2 FTS	17	U	17	1.7	ng/L		10/10/18 10:49	10/13/18 16:56	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	95		25 - 150				10/10/18 10:49	10/13/18 16:56	1
13C5 PFPeA	95		25 - 150				10/10/18 10:49	10/13/18 16:56	1
13C2 PFHxA	100		25 - 150				10/10/18 10:49	10/13/18 16:56	1
13C4 PFHpA	97		25 - 150				10/10/18 10:49	10/13/18 16:56	1
13C4 PFOA	103		25 - 150				10/10/18 10:49	10/13/18 16:56	1
13C5 PFNA	99		25 - 150				10/10/18 10:49	10/13/18 16:56	1
13C2 PFDA	96		25 - 150				10/10/18 10:49	10/13/18 16:56	1
13C2 PFUnA	92		25 - 150				10/10/18 10:49	10/13/18 16:56	1
13C2 PFDoA	91		25 - 150				10/10/18 10:49	10/13/18 16:56	1
13C2 PFTeDA	91		25 - 150				10/10/18 10:49	10/13/18 16:56	1
13C3 PFBS	104		25 - 150				10/10/18 10:49	10/13/18 16:56	1
18O2 PFHxS	98		25 - 150				10/10/18 10:49	10/13/18 16:56	1
13C4 PFOS	95		25 - 150				10/10/18 10:49	10/13/18 16:56	1
13C8 FOSA	87		25 - 150				10/10/18 10:49	10/13/18 16:56	1
d3-NMeFOSAA	94		25 - 150				10/10/18 10:49	10/13/18 16:56	1
d5-NEtFOSAA	94		25 - 150				10/10/18 10:49	10/13/18 16:56	1
M2-6:2 FTS	104		25 - 150				10/10/18 10:49	10/13/18 16:56	1
M2-8:2 FTS	98		25 - 150				10/10/18 10:49	10/13/18 16:56	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Client Sample ID: WG-007830-092718-BP-006

Lab Sample ID: 480-142544-6

Date Collected: 09/27/18 14:00

Matrix: Water

Date Received: 09/28/18 01:30

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	6.5		1.2	0.62	ug/L		10/02/18 07:36	10/09/18 07:45	5
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	35		15 - 110				10/02/18 07:36	10/09/18 07:45	5

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	58		1.7	0.30	ng/L		10/10/18 10:49	10/15/18 22:05	1
Perfluoropentanoic acid (PFPeA)	1.7	U	1.7	0.42	ng/L		10/10/18 10:49	10/15/18 22:05	1
Perfluorohexanoic acid (PFHxA)	2.4		1.7	0.49	ng/L		10/10/18 10:49	10/15/18 22:05	1
Perfluoroheptanoic acid (PFHpA)	1.9		1.7	0.21	ng/L		10/10/18 10:49	10/15/18 22:05	1
Perfluorooctanoic acid (PFOA)	6.3		1.7	0.72	ng/L		10/10/18 10:49	10/15/18 22:05	1
Perfluorononanoic acid (PFNA)	0.61	J	1.7	0.23	ng/L		10/10/18 10:49	10/15/18 22:05	1
Perfluorodecanoic acid (PFDA)	1.7	U	1.7	0.26	ng/L		10/10/18 10:49	10/15/18 22:05	1
Perfluoroundecanoic acid (PFUnA)	1.7	U	1.7	0.93	ng/L		10/10/18 10:49	10/15/18 22:05	1
Perfluorododecanoic acid (PFDoA)	1.7	U	1.7	0.47	ng/L		10/10/18 10:49	10/15/18 22:05	1
Perfluorotridecanoic acid (PFTriA)	1.7	U	1.7	1.1	ng/L		10/10/18 10:49	10/15/18 22:05	1
Perfluorotetradecanoic acid (PFTeA)	0.35	J	1.7	0.25	ng/L		10/10/18 10:49	10/15/18 22:05	1
Perfluorobutanesulfonic acid (PFBS)	0.41	J	1.7	0.17	ng/L		10/10/18 10:49	10/15/18 22:05	1
Perfluorohexanesulfonic acid (PFHxS)	0.43	J B	1.7	0.14	ng/L		10/10/18 10:49	10/15/18 22:05	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.7	U	1.7	0.16	ng/L		10/10/18 10:49	10/15/18 22:05	1
Perfluorooctanesulfonic acid (PFOS)	0.88	J	1.7	0.46	ng/L		10/10/18 10:49	10/15/18 22:05	1
Perfluorodecanesulfonic acid (PFDS)	1.7	U	1.7	0.27	ng/L		10/10/18 10:49	10/15/18 22:05	1
Perfluorooctanesulfonamide (FOSA)	0.57	J	1.7	0.30	ng/L		10/10/18 10:49	10/15/18 22:05	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	17	U	17	2.6	ng/L		10/10/18 10:49	10/15/18 22:05	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	17	U	17	1.6	ng/L		10/10/18 10:49	10/15/18 22:05	1
6:2 FTS	17	U	17	1.7	ng/L		10/10/18 10:49	10/15/18 22:05	1
8:2 FTS	17	U	17	1.7	ng/L		10/10/18 10:49	10/15/18 22:05	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	51		25 - 150				10/10/18 10:49	10/15/18 22:05	1
13C5 PFPeA	44		25 - 150				10/10/18 10:49	10/15/18 22:05	1
13C2 PFHxA	66		25 - 150				10/10/18 10:49	10/15/18 22:05	1
13C4 PFHpA	75		25 - 150				10/10/18 10:49	10/15/18 22:05	1
13C4 PFOA	78		25 - 150				10/10/18 10:49	10/15/18 22:05	1
13C5 PFNA	75		25 - 150				10/10/18 10:49	10/15/18 22:05	1
13C2 PFDA	75		25 - 150				10/10/18 10:49	10/15/18 22:05	1
13C2 PFUnA	71		25 - 150				10/10/18 10:49	10/15/18 22:05	1
13C2 PFDoA	65		25 - 150				10/10/18 10:49	10/15/18 22:05	1
13C2 PFTeDA	57		25 - 150				10/10/18 10:49	10/15/18 22:05	1
13C3 PFBS	68		25 - 150				10/10/18 10:49	10/15/18 22:05	1
18O2 PFHxS	74		25 - 150				10/10/18 10:49	10/15/18 22:05	1
13C4 PFOS	74		25 - 150				10/10/18 10:49	10/15/18 22:05	1
13C8 FOSA	63		25 - 150				10/10/18 10:49	10/15/18 22:05	1
d3-NMeFOSAA	77		25 - 150				10/10/18 10:49	10/15/18 22:05	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Client Sample ID: WG-007830-092718-BP-006

Lab Sample ID: 480-142544-6

Date Collected: 09/27/18 14:00

Matrix: Water

Date Received: 09/28/18 01:30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
d5-NEtFOSAA	80		25 - 150	10/10/18 10:49	10/15/18 22:05	1
M2-6:2 FTS	105		25 - 150	10/10/18 10:49	10/15/18 22:05	1
M2-8:2 FTS	105		25 - 150	10/10/18 10:49	10/15/18 22:05	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Client Sample ID: WG-007830-092718-BP-007

Lab Sample ID: 480-142544-7

Date Collected: 09/27/18 14:05

Matrix: Water

Date Received: 09/28/18 01:30

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	6.4		2.0	1.0	ug/L		10/02/18 07:36	10/09/18 08:09	5
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	49		15 - 110				10/02/18 07:36	10/09/18 08:09	5

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	41		1.8	0.31	ng/L		10/10/18 10:49	10/13/18 17:18	1
Perfluoropentanoic acid (PFPeA)	3.0		1.8	0.44	ng/L		10/10/18 10:49	10/13/18 17:18	1
Perfluorohexanoic acid (PFHxA)	2.7		1.8	0.52	ng/L		10/10/18 10:49	10/13/18 17:18	1
Perfluoroheptanoic acid (PFHpA)	1.6 J		1.8	0.22	ng/L		10/10/18 10:49	10/13/18 17:18	1
Perfluorooctanoic acid (PFOA)	5.9		1.8	0.76	ng/L		10/10/18 10:49	10/13/18 17:18	1
Perfluorononanoic acid (PFNA)	1.8 U		1.8	0.24	ng/L		10/10/18 10:49	10/13/18 17:18	1
Perfluorodecanoic acid (PFDA)	1.8 U		1.8	0.28	ng/L		10/10/18 10:49	10/13/18 17:18	1
Perfluoroundecanoic acid (PFUnA)	1.8 U		1.8	0.98	ng/L		10/10/18 10:49	10/13/18 17:18	1
Perfluorododecanoic acid (PFDoA)	1.8 U		1.8	0.49	ng/L		10/10/18 10:49	10/13/18 17:18	1
Perfluorotridecanoic acid (PFTriA)	1.8 U		1.8	1.2	ng/L		10/10/18 10:49	10/13/18 17:18	1
Perfluorotetradecanoic acid (PFTeA)	1.8 U		1.8	0.26	ng/L		10/10/18 10:49	10/13/18 17:18	1
Perfluorobutanesulfonic acid (PFBS)	0.48 J		1.8	0.18	ng/L		10/10/18 10:49	10/13/18 17:18	1
Perfluorohexanesulfonic acid (PFHxS)	0.55 J B		1.8	0.15	ng/L		10/10/18 10:49	10/13/18 17:18	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.8 U		1.8	0.17	ng/L		10/10/18 10:49	10/13/18 17:18	1
Perfluorooctanesulfonic acid (PFOS)	0.96 J		1.8	0.48	ng/L		10/10/18 10:49	10/13/18 17:18	1
Perfluorodecanesulfonic acid (PFDS)	1.8 U		1.8	0.28	ng/L		10/10/18 10:49	10/13/18 17:18	1
Perfluorooctanesulfonamide (FOSA)	1.8 U		1.8	0.31	ng/L		10/10/18 10:49	10/13/18 17:18	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	18 U		18	2.8	ng/L		10/10/18 10:49	10/13/18 17:18	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	18 U		18	1.7	ng/L		10/10/18 10:49	10/13/18 17:18	1
6:2 FTS	18 U		18	1.8	ng/L		10/10/18 10:49	10/13/18 17:18	1
8:2 FTS	18 U		18	1.8	ng/L		10/10/18 10:49	10/13/18 17:18	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	53		25 - 150				10/10/18 10:49	10/13/18 17:18	1
13C5 PFPeA	67		25 - 150				10/10/18 10:49	10/13/18 17:18	1
13C2 PFHxA	86		25 - 150				10/10/18 10:49	10/13/18 17:18	1
13C4 PFHpA	103		25 - 150				10/10/18 10:49	10/13/18 17:18	1
13C4 PFOA	102		25 - 150				10/10/18 10:49	10/13/18 17:18	1
13C5 PFNA	103		25 - 150				10/10/18 10:49	10/13/18 17:18	1
13C2 PFDA	104		25 - 150				10/10/18 10:49	10/13/18 17:18	1
13C2 PFUnA	91		25 - 150				10/10/18 10:49	10/13/18 17:18	1
13C2 PFDoA	100		25 - 150				10/10/18 10:49	10/13/18 17:18	1
13C2 PFTeDA	96		25 - 150				10/10/18 10:49	10/13/18 17:18	1
13C3 PFBS	90		25 - 150				10/10/18 10:49	10/13/18 17:18	1
18O2 PFHxS	94		25 - 150				10/10/18 10:49	10/13/18 17:18	1
13C4 PFOS	93		25 - 150				10/10/18 10:49	10/13/18 17:18	1
13C8 FOSA	80		25 - 150				10/10/18 10:49	10/13/18 17:18	1
d3-NMeFOSAA	104		25 - 150				10/10/18 10:49	10/13/18 17:18	1
d5-NEtFOSAA	96		25 - 150				10/10/18 10:49	10/13/18 17:18	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Client Sample ID: WG-007830-092718-BP-007

Lab Sample ID: 480-142544-7

Date Collected: 09/27/18 14:05

Matrix: Water

Date Received: 09/28/18 01:30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
M2-6:2 FTS	132		25 - 150
M2-8:2 FTS	126		25 - 150

<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
10/10/18 10:49	10/13/18 17:18	1
10/10/18 10:49	10/13/18 17:18	1

Isotope Dilution Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	DXE (15-110)
480-142544-1	WG-007830-092718-BP-001	35
480-142544-1 MS	WG-007830-092718-BP-001	35
480-142544-1 MSD	WG-007830-092718-BP-001	38
480-142544-2	WG-007830-092718-BP-002	34
480-142544-3	WG-007830-092718-BP-003	30
480-142544-4	EB-007830-092718-BP-004	35
480-142544-5	FB-007830-092718-BP-005	36
480-142544-6	WG-007830-092718-BP-006	35
480-142544-7	WG-007830-092718-BP-007	49
LCS 480-437196/2-A	Lab Control Sample	36
MB 480-437196/1-A	Method Blank	37
Surrogate Legend		
DXE = 1,4-Dioxane-d8		

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	PFHpA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
480-142544-1	WG-007830-092718-BP-001	93	88	89	96	91	90	91	92
480-142544-1 MS	WG-007830-092718-BP-001	93	96	89	95	93	94	95	98
480-142544-1 MSD	WG-007830-092718-BP-001	94	92	93	96	95	92	92	95
480-142544-2	WG-007830-092718-BP-002	16 *	28	57	62	85	93	59	85
480-142544-3	WG-007830-092718-BP-003	21 *	62	79	89	97	105	89	96
480-142544-4	EB-007830-092718-BP-004	92	95	94	95	103	101	96	94
480-142544-5	FB-007830-092718-BP-005	95	95	100	97	103	99	96	92
480-142544-6	WG-007830-092718-BP-006	51	44	66	75	78	75	75	71
480-142544-7	WG-007830-092718-BP-007	53	67	86	103	102	103	104	91
LCS 320-251063/2-A	Lab Control Sample	91	94	94	96	103	92	93	98
LCS 320-252788/2-A	Lab Control Sample	96	97	94	98	95	94	95	98
LCSD 320-252788/3-A	Lab Control Sample Dup	96	96	97	100	94	96	97	98
MB 320-251063/1-A	Method Blank	91	94	91	96	99	98	93	91
MB 320-252788/1-A	Method Blank	96	97	97	100	98	97	98	98
Percent Isotope Dilution Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	3C3-PFB: (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (25-150)	-NMeFOS/ (25-150)	-NEtFOS/ (25-150)
480-142544-1	WG-007830-092718-BP-001	86	96	89	91	95	90	100	100
480-142544-1 MS	WG-007830-092718-BP-001	92	90	91	92	95	93	101	99
480-142544-1 MSD	WG-007830-092718-BP-001	92	95	93	88	96	88	99	99
480-142544-2	WG-007830-092718-BP-002	85	69	79	79	84	26	100	90
480-142544-3	WG-007830-092718-BP-003	93	66	97	96	98	63	114	116
480-142544-4	EB-007830-092718-BP-004	92	89	94	95	96	83	95	94
480-142544-5	FB-007830-092718-BP-005	91	91	104	98	95	87	94	94
480-142544-6	WG-007830-092718-BP-006	65	57	68	74	74	63	77	80
480-142544-7	WG-007830-092718-BP-007	100	96	90	94	93	80	104	96
LCS 320-251063/2-A	Lab Control Sample	92	95	98	96	92	89	98	93
LCS 320-252788/2-A	Lab Control Sample	95	100	97	95	98	91	102	102

TestAmerica Buffalo

Isotope Dilution Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFD _o A (25-150)	PFTDA (25-150)	3C3-PFB _o S (25-150)	PFH _x S (25-150)	PFOS (25-150)	PFOSA (25-150)	d3-NMeFOSAA (25-150)	d5-NEtFOSAA (25-150)
LCSD 320-252788/3-A	Lab Control Sample Dup	94	95	92	94	96	90	105	104
MB 320-251063/1-A	Method Blank	92	98	96	93	87	86	99	98
MB 320-252788/1-A	Method Blank	99	99	92	95	100	92	104	107

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M262FTS (25-150)	M282FTS (25-150)
480-142544-1	WG-007830-092718-BP-001	97	92
480-142544-1 MS	WG-007830-092718-BP-001	100	97
480-142544-1 MSD	WG-007830-092718-BP-001	94	92
480-142544-2	WG-007830-092718-BP-002	284 *	191 *
480-142544-3	WG-007830-092718-BP-003	218 *	302 *
480-142544-4	EB-007830-092718-BP-004	105	97
480-142544-5	FB-007830-092718-BP-005	104	98
480-142544-6	WG-007830-092718-BP-006	105	105
480-142544-7	WG-007830-092718-BP-007	132	126
LCS 320-251063/2-A	Lab Control Sample	104	97
LCS 320-252788/2-A	Lab Control Sample	101	95
LCSD 320-252788/3-A	Lab Control Sample Dup	102	99
MB 320-251063/1-A	Method Blank	101	100
MB 320-252788/1-A	Method Blank	104	99

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
PFHpA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFD_oA = 13C2 PFD_oA
PFTDA = 13C2 PFTeDA
13C3-PFBS = 13C3 PFBS
PFH_xS = 18O2 PFH_xS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
d3-NMeFOSAA = d3-NMeFOSAA
d5-NEtFOSAA = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-437196/1-A

Matrix: Water

Analysis Batch: 438251

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 437196

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U	0.20	0.10	ug/L	-	10/02/18 07:36	10/09/18 03:04	1
Isotope Dilution	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	37		15 - 110				10/02/18 07:36	10/09/18 03:04	1

Lab Sample ID: LCS 480-437196/2-A

Matrix: Water

Analysis Batch: 438251

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 437196

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	1.00	1.07		ug/L	-	107	40 - 140
Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits				
1,4-Dioxane-d8	36		15 - 110				

Lab Sample ID: 480-142544-1 MS

Matrix: Water

Analysis Batch: 438251

Client Sample ID: WG-007830-092718-BP-001

Prep Type: Total/NA

Prep Batch: 437196

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.20	U	1.02	1.11		ug/L	-	109	40 - 140
Isotope Dilution	MS %Recovery	MS Qualifier	Limits						
1,4-Dioxane-d8	35		15 - 110						

Lab Sample ID: 480-142544-1 MSD

Matrix: Water

Analysis Batch: 438251

Client Sample ID: WG-007830-092718-BP-001

Prep Type: Total/NA

Prep Batch: 437196

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	0.20	U	1.16	1.25		ug/L	-	108	40 - 140	12	20
Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits								
1,4-Dioxane-d8	38		15 - 110								

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-251063/1-A

Matrix: Water

Analysis Batch: 252061

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 251063

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	2.0	U	2.0	0.35	ng/L	-	10/10/18 10:49	10/13/18 15:56	1
Perfluoropentanoic acid (PFPeA)	2.0	U	2.0	0.49	ng/L	-	10/10/18 10:49	10/13/18 15:56	1
Perfluorohexanoic acid (PFHxA)	2.0	U	2.0	0.58	ng/L	-	10/10/18 10:49	10/13/18 15:56	1
Perfluoroheptanoic acid (PFHpA)	2.0	U	2.0	0.25	ng/L	-	10/10/18 10:49	10/13/18 15:56	1
Perfluorooctanoic acid (PFOA)	2.0	U	2.0	0.85	ng/L	-	10/10/18 10:49	10/13/18 15:56	1
Perfluorononanoic acid (PFNA)	2.0	U	2.0	0.27	ng/L	-	10/10/18 10:49	10/13/18 15:56	1
Perfluorodecanoic acid (PFDA)	2.0	U	2.0	0.31	ng/L	-	10/10/18 10:49	10/13/18 15:56	1

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-251063/1-A

Matrix: Water

Analysis Batch: 252061

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 251063

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroundecanoic acid (PFUnA)	2.0	U	2.0	1.1	ng/L		10/10/18 10:49	10/13/18 15:56	1
Perfluorododecanoic acid (PFDoA)	2.0	U	2.0	0.55	ng/L		10/10/18 10:49	10/13/18 15:56	1
Perfluorotridecanoic acid (PFTriA)	2.0	U	2.0	1.3	ng/L		10/10/18 10:49	10/13/18 15:56	1
Perfluorotetradecanoic acid (PFTeA)	2.0	U	2.0	0.29	ng/L		10/10/18 10:49	10/13/18 15:56	1
Perfluorobutanesulfonic acid (PFBS)	2.0	U	2.0	0.20	ng/L		10/10/18 10:49	10/13/18 15:56	1
Perfluorohexanesulfonic acid (PFHxS)	0.286	J	2.0	0.17	ng/L		10/10/18 10:49	10/13/18 15:56	1
Perfluoroheptanesulfonic Acid (PFHpS)	2.0	U	2.0	0.19	ng/L		10/10/18 10:49	10/13/18 15:56	1
Perfluorooctanesulfonic acid (PFOS)	2.0	U	2.0	0.54	ng/L		10/10/18 10:49	10/13/18 15:56	1
Perfluorodecanesulfonic acid (PFDS)	2.0	U	2.0	0.32	ng/L		10/10/18 10:49	10/13/18 15:56	1
Perfluorooctanesulfonamide (FOSA)	2.0	U	2.0	0.35	ng/L		10/10/18 10:49	10/13/18 15:56	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	20	U	20	3.1	ng/L		10/10/18 10:49	10/13/18 15:56	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	20	U	20	1.9	ng/L		10/10/18 10:49	10/13/18 15:56	1
6:2 FTS	20	U	20	2.0	ng/L		10/10/18 10:49	10/13/18 15:56	1
8:2 FTS	20	U	20	2.0	ng/L		10/10/18 10:49	10/13/18 15:56	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	91		25 - 150	10/10/18 10:49	10/13/18 15:56	1
13C5 PFPeA	94		25 - 150	10/10/18 10:49	10/13/18 15:56	1
13C2 PFHxA	91		25 - 150	10/10/18 10:49	10/13/18 15:56	1
13C4 PFHpA	96		25 - 150	10/10/18 10:49	10/13/18 15:56	1
13C4 PFOA	99		25 - 150	10/10/18 10:49	10/13/18 15:56	1
13C5 PFNA	98		25 - 150	10/10/18 10:49	10/13/18 15:56	1
13C2 PFDA	93		25 - 150	10/10/18 10:49	10/13/18 15:56	1
13C2 PFUnA	91		25 - 150	10/10/18 10:49	10/13/18 15:56	1
13C2 PFDoA	92		25 - 150	10/10/18 10:49	10/13/18 15:56	1
13C2 PFTeDA	98		25 - 150	10/10/18 10:49	10/13/18 15:56	1
13C3 PFBS	96		25 - 150	10/10/18 10:49	10/13/18 15:56	1
18O2 PFHxS	93		25 - 150	10/10/18 10:49	10/13/18 15:56	1
13C4 PFOS	87		25 - 150	10/10/18 10:49	10/13/18 15:56	1
13C8 FOSA	86		25 - 150	10/10/18 10:49	10/13/18 15:56	1
d3-NMeFOSAA	99		25 - 150	10/10/18 10:49	10/13/18 15:56	1
d5-NEtFOSAA	98		25 - 150	10/10/18 10:49	10/13/18 15:56	1
M2-6:2 FTS	101		25 - 150	10/10/18 10:49	10/13/18 15:56	1
M2-8:2 FTS	100		25 - 150	10/10/18 10:49	10/13/18 15:56	1

Lab Sample ID: LCS 320-251063/2-A

Matrix: Water

Analysis Batch: 252061

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 251063

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	40.2		ng/L		100	70 - 130
Perfluoropentanoic acid (PFPeA)	40.0	41.8		ng/L		104	66 - 126
Perfluorohexanoic acid (PFHxA)	40.0	38.1		ng/L		95	66 - 126
Perfluoroheptanoic acid (PFHpA)	40.0	39.0		ng/L		98	66 - 126
Perfluorooctanoic acid (PFOA)	40.0	36.8		ng/L		92	64 - 124
Perfluorononanoic acid (PFNA)	40.0	39.1		ng/L		98	68 - 128

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-251063/2-A

Matrix: Water

Analysis Batch: 252061

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 251063

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorodecanoic acid (PFDA)	40.0	40.7		ng/L		102	69 - 129
Perfluoroundecanoic acid (PFUnA)	40.0	33.9		ng/L		85	60 - 120
Perfluorododecanoic acid (PFDoA)	40.0	38.5		ng/L		96	71 - 131
Perfluorotridecanoic acid (PFTriA)	40.0	39.1		ng/L		98	72 - 132
Perfluorotetradecanoic acid (PFTeA)	40.0	37.3		ng/L		93	68 - 128
Perfluorobutanesulfonic acid (PFBS)	35.4	31.3		ng/L		89	73 - 133
Perfluorohexanesulfonic acid (PFHxS)	36.4	32.6		ng/L		90	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	38.7		ng/L		102	68 - 128
Perfluorooctanesulfonic acid (PFOS)	37.1	34.0		ng/L		91	67 - 127
Perfluorodecanesulfonic acid (PFDS)	38.6	37.6		ng/L		98	68 - 128
Perfluorooctanesulfonamide (FOSA)	40.0	36.3		ng/L		91	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	35.8		ng/L		89	67 - 127
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	40.2		ng/L		100	65 - 125
6:2 FTS	37.9	37.1		ng/L		98	66 - 126
8:2 FTS	38.3	38.2		ng/L		100	67 - 127

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C4 PFBA	91		25 - 150
13C5 PFPeA	94		25 - 150
13C2 PFHxA	94		25 - 150
13C4 PFHpA	96		25 - 150
13C4 PFOA	103		25 - 150
13C5 PFNA	92		25 - 150
13C2 PFDA	93		25 - 150
13C2 PFUnA	98		25 - 150
13C2 PFDoA	92		25 - 150
13C2 PFTeDA	95		25 - 150
13C3 PFBS	98		25 - 150
18O2 PFHxS	96		25 - 150
13C4 PFOS	92		25 - 150
13C8 FOSA	89		25 - 150
d3-NMeFOSAA	98		25 - 150
d5-NEtFOSAA	93		25 - 150
M2-6:2 FTS	104		25 - 150
M2-8:2 FTS	97		25 - 150

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-252788/1-A

Matrix: Water

Analysis Batch: 253075

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 252788

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.457	J	2.0	0.35	ng/L		10/16/18 17:49	10/17/18 21:32	1
Perfluoropentanoic acid (PFPeA)	2.0	U	2.0	0.49	ng/L		10/16/18 17:49	10/17/18 21:32	1
Perfluorohexanoic acid (PFHxA)	2.0	U	2.0	0.58	ng/L		10/16/18 17:49	10/17/18 21:32	1
Perfluoroheptanoic acid (PFHpA)	2.0	U	2.0	0.25	ng/L		10/16/18 17:49	10/17/18 21:32	1
Perfluorooctanoic acid (PFOA)	2.0	U	2.0	0.85	ng/L		10/16/18 17:49	10/17/18 21:32	1
Perfluorononanoic acid (PFNA)	2.0	U	2.0	0.27	ng/L		10/16/18 17:49	10/17/18 21:32	1
Perfluorodecanoic acid (PFDA)	2.0	U	2.0	0.31	ng/L		10/16/18 17:49	10/17/18 21:32	1
Perfluoroundecanoic acid (PFUnA)	2.0	U	2.0	1.1	ng/L		10/16/18 17:49	10/17/18 21:32	1
Perfluorododecanoic acid (PFDoA)	2.0	U	2.0	0.55	ng/L		10/16/18 17:49	10/17/18 21:32	1
Perfluorotridecanoic acid (PFTriA)	2.0	U	2.0	1.3	ng/L		10/16/18 17:49	10/17/18 21:32	1
Perfluorotetradecanoic acid (PFTeA)	2.0	U	2.0	0.29	ng/L		10/16/18 17:49	10/17/18 21:32	1
Perfluorobutanesulfonic acid (PFBS)	2.0	U	2.0	0.20	ng/L		10/16/18 17:49	10/17/18 21:32	1
Perfluorohexanesulfonic acid (PFHxS)	0.447	J	2.0	0.17	ng/L		10/16/18 17:49	10/17/18 21:32	1
Perfluoroheptanesulfonic Acid (PFHpS)	2.0	U	2.0	0.19	ng/L		10/16/18 17:49	10/17/18 21:32	1
Perfluorooctanesulfonic acid (PFOS)	2.0	U	2.0	0.54	ng/L		10/16/18 17:49	10/17/18 21:32	1
Perfluorodecanesulfonic acid (PFDS)	2.0	U	2.0	0.32	ng/L		10/16/18 17:49	10/17/18 21:32	1
Perfluorooctanesulfonamide (FOSA)	2.0	U	2.0	0.35	ng/L		10/16/18 17:49	10/17/18 21:32	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	20	U	20	3.1	ng/L		10/16/18 17:49	10/17/18 21:32	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	20	U	20	1.9	ng/L		10/16/18 17:49	10/17/18 21:32	1
6:2 FTS	20	U	20	2.0	ng/L		10/16/18 17:49	10/17/18 21:32	1
8:2 FTS	20	U	20	2.0	ng/L		10/16/18 17:49	10/17/18 21:32	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	96		25 - 150	10/16/18 17:49	10/17/18 21:32	1
13C5 PFPeA	97		25 - 150	10/16/18 17:49	10/17/18 21:32	1
13C2 PFHxA	97		25 - 150	10/16/18 17:49	10/17/18 21:32	1
13C4 PFHpA	100		25 - 150	10/16/18 17:49	10/17/18 21:32	1
13C4 PFOA	98		25 - 150	10/16/18 17:49	10/17/18 21:32	1
13C5 PFNA	97		25 - 150	10/16/18 17:49	10/17/18 21:32	1
13C2 PFDA	98		25 - 150	10/16/18 17:49	10/17/18 21:32	1
13C2 PFUnA	98		25 - 150	10/16/18 17:49	10/17/18 21:32	1
13C2 PFDoA	99		25 - 150	10/16/18 17:49	10/17/18 21:32	1
13C2 PFTeDA	99		25 - 150	10/16/18 17:49	10/17/18 21:32	1
13C3 PFBS	92		25 - 150	10/16/18 17:49	10/17/18 21:32	1
18O2 PFHxS	95		25 - 150	10/16/18 17:49	10/17/18 21:32	1
13C4 PFOS	100		25 - 150	10/16/18 17:49	10/17/18 21:32	1
13C8 FOSA	92		25 - 150	10/16/18 17:49	10/17/18 21:32	1
d3-NMeFOSAA	104		25 - 150	10/16/18 17:49	10/17/18 21:32	1
d5-NEtFOSAA	107		25 - 150	10/16/18 17:49	10/17/18 21:32	1
M2-6:2 FTS	104		25 - 150	10/16/18 17:49	10/17/18 21:32	1
M2-8:2 FTS	99		25 - 150	10/16/18 17:49	10/17/18 21:32	1

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-252788/2-A

Matrix: Water

Analysis Batch: 253075

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 252788

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	39.3		ng/L		98	70 - 130
Perfluoropentanoic acid (PFPeA)	40.0	37.7		ng/L		94	66 - 126
Perfluorohexanoic acid (PFHxA)	40.0	37.7		ng/L		94	66 - 126
Perfluoroheptanoic acid (PFHpA)	40.0	37.2		ng/L		93	66 - 126
Perfluorooctanoic acid (PFOA)	40.0	40.1		ng/L		100	64 - 124
Perfluorononanoic acid (PFNA)	40.0	39.9		ng/L		100	68 - 128
Perfluorodecanoic acid (PFDA)	40.0	39.8		ng/L		100	69 - 129
Perfluoroundecanoic acid (PFUnA)	40.0	37.8		ng/L		95	60 - 120
Perfluorododecanoic acid (PFDoA)	40.0	34.4		ng/L		86	71 - 131
Perfluorotridecanoic acid (PFTriA)	40.0	39.1		ng/L		98	72 - 132
Perfluorotetradecanoic acid (PFTeA)	40.0	37.6		ng/L		94	68 - 128
Perfluorobutanesulfonic acid (PFBS)	35.4	33.2		ng/L		94	73 - 133
Perfluorohexanesulfonic acid (PFHxS)	36.4	32.9		ng/L		90	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	37.6		ng/L		99	68 - 128
Perfluorooctanesulfonic acid (PFOS)	37.1	33.6		ng/L		91	67 - 127
Perfluorodecanesulfonic acid (PFDS)	38.6	35.8		ng/L		93	68 - 128
Perfluorooctanesulfonamide (FOSA)	40.0	37.4		ng/L		94	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	35.4		ng/L		88	67 - 127
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	37.6		ng/L		94	65 - 125
6:2 FTS	37.9	33.9		ng/L		89	66 - 126
8:2 FTS	38.3	37.6		ng/L		98	67 - 127

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C4 PFBA	96		25 - 150
13C5 PFPeA	97		25 - 150
13C2 PFHxA	94		25 - 150
13C4 PFHpA	98		25 - 150
13C4 PFOA	95		25 - 150
13C5 PFNA	94		25 - 150
13C2 PFDA	95		25 - 150
13C2 PFUnA	98		25 - 150
13C2 PFDoA	95		25 - 150
13C2 PFTeDA	100		25 - 150
13C3 PFBS	97		25 - 150
18O2 PFHxS	95		25 - 150
13C4 PFOS	98		25 - 150
13C8 FOSA	91		25 - 150
d3-NMeFOSAA	102		25 - 150
d5-NEtFOSAA	102		25 - 150

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-252788/2-A

Matrix: Water

Analysis Batch: 253075

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 252788

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-6:2 FTS	101		25 - 150
M2-8:2 FTS	95		25 - 150

Lab Sample ID: LCSD 320-252788/3-A

Matrix: Water

Analysis Batch: 253075

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 252788

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	40.0	40.5		ng/L		101	70 - 130	3	30
Perfluoropentanoic acid (PFPeA)	40.0	39.7		ng/L		99	66 - 126	5	30
Perfluorohexanoic acid (PFHxA)	40.0	37.5		ng/L		94	66 - 126	0	30
Perfluoroheptanoic acid (PFHpA)	40.0	36.5		ng/L		91	66 - 126	2	30
Perfluorooctanoic acid (PFOA)	40.0	42.6		ng/L		106	64 - 124	6	30
Perfluorononanoic acid (PFNA)	40.0	41.5		ng/L		104	68 - 128	4	30
Perfluorodecanoic acid (PFDA)	40.0	39.0		ng/L		97	69 - 129	2	30
Perfluoroundecanoic acid (PFUnA)	40.0	39.1		ng/L		98	60 - 120	3	30
Perfluorododecanoic acid (PFDoA)	40.0	39.6		ng/L		99	71 - 131	14	30
Perfluorotridecanoic acid (PFTriA)	40.0	41.1		ng/L		103	72 - 132	5	30
Perfluorotetradecanoic acid (PFTeA)	40.0	39.1		ng/L		98	68 - 128	4	30
Perfluorobutanesulfonic acid (PFBS)	35.4	34.8		ng/L		98	73 - 133	5	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	33.2		ng/L		91	63 - 123	1	30
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	38.2		ng/L		100	68 - 128	2	30
Perfluorooctanesulfonic acid (PFOS)	37.1	35.2		ng/L		95	67 - 127	5	30
Perfluorodecanesulfonic acid (PFDS)	38.6	38.7		ng/L		100	68 - 128	8	30
Perfluorooctanesulfonamide (FOSA)	40.0	39.4		ng/L		99	70 - 130	5	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	35.4		ng/L		89	67 - 127	0	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	38.0		ng/L		95	65 - 125	1	30
6:2 FTS	37.9	35.3		ng/L		93	66 - 126	4	30
8:2 FTS	38.3	38.1		ng/L		99	67 - 127	1	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C4 PFBA	96		25 - 150
13C5 PFPeA	96		25 - 150
13C2 PFHxA	97		25 - 150
13C4 PFHpA	100		25 - 150
13C4 PFOA	94		25 - 150
13C5 PFNA	96		25 - 150
13C2 PFDA	97		25 - 150
13C2 PFUnA	98		25 - 150

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-252788/3-A

Matrix: Water

Analysis Batch: 253075

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 252788

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C2 PFDoA	94		25 - 150
13C2 PFTeDA	95		25 - 150
13C3 PFBS	92		25 - 150
18O2 PFHxS	94		25 - 150
13C4 PFOS	96		25 - 150
13C8 FOSA	90		25 - 150
d3-NMeFOSAA	105		25 - 150
d5-NEtFOSAA	104		25 - 150
M2-6:2 FTS	102		25 - 150
M2-8:2 FTS	99		25 - 150

Lab Sample ID: 480-142544-1 MS

Matrix: Water

Analysis Batch: 253075

Client Sample ID: WG-007830-092718-BP-001

Prep Type: Total/NA

Prep Batch: 252788

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	5.7	J H B	200	199	H	ng/L		97	70 - 130
Perfluoropentanoic acid (PFPeA)	4.1	J H	200	193	H	ng/L		94	66 - 126
Perfluorohexanoic acid (PFHxA)	34	H	200	214	H	ng/L		90	66 - 126
Perfluoroheptanoic acid (PFHpA)	3.7	J H	200	191	H	ng/L		94	66 - 126
Perfluorooctanoic acid (PFOA)	4.8	J H	200	200	H	ng/L		98	64 - 124
Perfluorononanoic acid (PFNA)	10	U H	200	209	H	ng/L		104	68 - 128
Perfluorodecanoic acid (PFDA)	10	U H	200	191	H	ng/L		95	69 - 129
Perfluoroundecanoic acid (PFUnA)	10	U H	200	174	H	ng/L		87	60 - 120
Perfluorododecanoic acid (PFDoA)	10	U H	200	185	H	ng/L		93	71 - 131
Perfluorotridecanoic acid (PFTriA)	10	U H	200	203	H	ng/L		101	72 - 132
Perfluorotetradecanoic acid (PFTeA)	10	U H	200	196	H	ng/L		98	68 - 128
Perfluorobutanesulfonic acid (PFBS)	10	U H	177	169	H	ng/L		95	73 - 133
Perfluorohexanesulfonic acid (PFHxS)	1.4	J H B	182	166	H	ng/L		91	63 - 123
Perfluoroheptanesulfonic Acid (PFHpS)	10	U H	190	181	H	ng/L		95	68 - 128
Perfluorooctanesulfonic acid (PFOS)	10	U H	186	165	H	ng/L		89	67 - 127
Perfluorodecanesulfonic acid (PFDS)	10	U H	193	176	H	ng/L		91	68 - 128
Perfluorooctanesulfonamide (FOSA)	10	U H	200	187	H	ng/L		93	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	100	U H	200	183	H	ng/L		91	67 - 127
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	100	U H	200	184	H	ng/L		92	65 - 125
6:2 FTS	100	U H	190	172	H	ng/L		91	66 - 126
8:2 FTS	100	U H	192	184	H	ng/L		96	67 - 127

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
13C4 PFBA	93		25 - 150
13C5 PFPeA	96		25 - 150
13C2 PFHxA	89		25 - 150
13C4 PFHpA	95		25 - 150
13C4 PFOA	93		25 - 150
13C5 PFNA	94		25 - 150
13C2 PFDA	95		25 - 150
13C2 PFUnA	98		25 - 150
13C2 PFDoA	92		25 - 150
13C2 PFTeDA	90		25 - 150
13C3 PFBS	91		25 - 150
18O2 PFHxS	92		25 - 150
13C4 PFOS	95		25 - 150
13C8 FOSA	93		25 - 150
d3-NMeFOSAA	101		25 - 150
d5-NEtFOSAA	99		25 - 150
M2-6:2 FTS	100		25 - 150
M2-8:2 FTS	97		25 - 150

Lab Sample ID: 480-142544-1 MSD

Matrix: Water

Analysis Batch: 253075

Client Sample ID: WG-007830-092718-BP-001

Prep Type: Total/NA

Prep Batch: 252788

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	5.7	J H B	200	197	H	ng/L		96	70 - 130	1	30
Perfluoropentanoic acid (PFPeA)	4.1	J H	200	189	H	ng/L		92	66 - 126	2	30
Perfluorohexanoic acid (PFHxA)	34	H	200	200	H	ng/L		83	66 - 126	7	30
Perfluoroheptanoic acid (PFHpA)	3.7	J H	200	187	H	ng/L		91	66 - 126	3	30
Perfluorooctanoic acid (PFOA)	4.8	J H	200	193	H	ng/L		94	64 - 124	3	30
Perfluorononanoic acid (PFNA)	10	U H	200	217	H	ng/L		109	68 - 128	4	30
Perfluorodecanoic acid (PFDA)	10	U H	200	192	H	ng/L		96	69 - 129	1	30
Perfluoroundecanoic acid (PFUnA)	10	U H	200	191	H	ng/L		96	60 - 120	9	30
Perfluorododecanoic acid (PFDoA)	10	U H	200	187	H	ng/L		94	71 - 131	1	30
Perfluorotridecanoic acid (PFTriA)	10	U H	200	196	H	ng/L		98	72 - 132	3	30
Perfluorotetradecanoic acid (PFTeA)	10	U H	200	200	H	ng/L		100	68 - 128	2	30
Perfluorobutanesulfonic acid (PFBS)	10	U H	177	170	H	ng/L		96	73 - 133	1	30
Perfluorohexanesulfonic acid (PFHxS)	1.4	J H B	182	168	H	ng/L		91	63 - 123	1	30
Perfluoroheptanesulfonic Acid (PFHpS)	10	U H	190	187	H	ng/L		98	68 - 128	3	30
Perfluorooctanesulfonic acid (PFOS)	10	U H	186	164	H	ng/L		89	67 - 127	0	30
Perfluorodecanesulfonic acid (PFDS)	10	U H	193	178	H	ng/L		92	68 - 128	1	30
Perfluorooctanesulfonamide (FOSA)	10	U H	200	195	H	ng/L		98	70 - 130	5	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	100	U H	200	179	H	ng/L		90	67 - 127	2	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	100	U H	200	189	H	ng/L		95	65 - 125	3	30
6:2 FTS	100	U H	190	175	H	ng/L		92	66 - 126	1	30
8:2 FTS	100	U H	192	193	H	ng/L		101	67 - 127	5	30

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.

TestAmerica Job ID: 480-142544-1

Project/Site: Sterling Site #3 Emerging Contaminants

<i>Isotope Dilution</i>	<i>MSD MSD</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
13C4 PFBA	94		25 - 150
13C5 PFPeA	92		25 - 150
13C2 PFHxA	93		25 - 150
13C4 PFHpA	96		25 - 150
13C4 PFOA	95		25 - 150
13C5 PFNA	92		25 - 150
13C2 PFDA	92		25 - 150
13C2 PFUnA	95		25 - 150
13C2 PFDoA	92		25 - 150
13C2 PFTeDA	95		25 - 150
13C3 PFBS	93		25 - 150
18O2 PFHxS	88		25 - 150
13C4 PFOS	96		25 - 150
13C8 FOSA	88		25 - 150
d3-NMeFOSAA	99		25 - 150
d5-NEtFOSAA	99		25 - 150
M2-6:2 FTS	94		25 - 150
M2-8:2 FTS	92		25 - 150

QC Association Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

GC/MS Semi VOA

Prep Batch: 437196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-142544-1	WG-007830-092718-BP-001	Total/NA	Water	3510C	
480-142544-2	WG-007830-092718-BP-002	Total/NA	Water	3510C	
480-142544-3	WG-007830-092718-BP-003	Total/NA	Water	3510C	
480-142544-4	EB-007830-092718-BP-004	Total/NA	Water	3510C	
480-142544-5	FB-007830-092718-BP-005	Total/NA	Water	3510C	
480-142544-6	WG-007830-092718-BP-006	Total/NA	Water	3510C	
480-142544-7	WG-007830-092718-BP-007	Total/NA	Water	3510C	
MB 480-437196/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-437196/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-142544-1 MS	WG-007830-092718-BP-001	Total/NA	Water	3510C	
480-142544-1 MSD	WG-007830-092718-BP-001	Total/NA	Water	3510C	

Analysis Batch: 438251

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-142544-1	WG-007830-092718-BP-001	Total/NA	Water	8270D SIM ID	437196
480-142544-2	WG-007830-092718-BP-002	Total/NA	Water	8270D SIM ID	437196
480-142544-3	WG-007830-092718-BP-003	Total/NA	Water	8270D SIM ID	437196
480-142544-4	EB-007830-092718-BP-004	Total/NA	Water	8270D SIM ID	437196
480-142544-5	FB-007830-092718-BP-005	Total/NA	Water	8270D SIM ID	437196
480-142544-6	WG-007830-092718-BP-006	Total/NA	Water	8270D SIM ID	437196
480-142544-7	WG-007830-092718-BP-007	Total/NA	Water	8270D SIM ID	437196
MB 480-437196/1-A	Method Blank	Total/NA	Water	8270D SIM ID	437196
LCS 480-437196/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	437196
480-142544-1 MS	WG-007830-092718-BP-001	Total/NA	Water	8270D SIM ID	437196
480-142544-1 MSD	WG-007830-092718-BP-001	Total/NA	Water	8270D SIM ID	437196

LCMS

Prep Batch: 251063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-142544-2	WG-007830-092718-BP-002	Total/NA	Water	3535	
480-142544-3	WG-007830-092718-BP-003	Total/NA	Water	3535	
480-142544-4	EB-007830-092718-BP-004	Total/NA	Water	3535	
480-142544-5	FB-007830-092718-BP-005	Total/NA	Water	3535	
480-142544-6	WG-007830-092718-BP-006	Total/NA	Water	3535	
480-142544-7	WG-007830-092718-BP-007	Total/NA	Water	3535	
MB 320-251063/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-251063/2-A	Lab Control Sample	Total/NA	Water	3535	

Analysis Batch: 252061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-142544-2	WG-007830-092718-BP-002	Total/NA	Water	537 (modified)	251063
480-142544-4	EB-007830-092718-BP-004	Total/NA	Water	537 (modified)	251063
480-142544-5	FB-007830-092718-BP-005	Total/NA	Water	537 (modified)	251063
480-142544-7	WG-007830-092718-BP-007	Total/NA	Water	537 (modified)	251063
MB 320-251063/1-A	Method Blank	Total/NA	Water	537 (modified)	251063
LCS 320-251063/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	251063

TestAmerica Buffalo

QC Association Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

LCMS (Continued)

Analysis Batch: 252228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-142544-3	WG-007830-092718-BP-003	Total/NA	Water	537 (modified)	251063

Analysis Batch: 252414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-142544-6	WG-007830-092718-BP-006	Total/NA	Water	537 (modified)	251063

Prep Batch: 252788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-142544-1	WG-007830-092718-BP-001	Total/NA	Water	3535	
MB 320-252788/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-252788/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-252788/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
480-142544-1 MS	WG-007830-092718-BP-001	Total/NA	Water	3535	
480-142544-1 MSD	WG-007830-092718-BP-001	Total/NA	Water	3535	

Analysis Batch: 253075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-142544-1	WG-007830-092718-BP-001	Total/NA	Water	537 (modified)	252788
MB 320-252788/1-A	Method Blank	Total/NA	Water	537 (modified)	252788
LCS 320-252788/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	252788
LCSD 320-252788/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	252788
480-142544-1 MS	WG-007830-092718-BP-001	Total/NA	Water	537 (modified)	252788
480-142544-1 MSD	WG-007830-092718-BP-001	Total/NA	Water	537 (modified)	252788

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Client Sample ID: WG-007830-092718-BP-001

Lab Sample ID: 480-142544-1

Date Collected: 09/27/18 09:00

Matrix: Water

Date Received: 09/28/18 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			437196	10/02/18 07:36	JMP	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	438251	10/09/18 05:24	DMR	TAL BUF
Total/NA	Prep	3535			252788	10/16/18 17:49	JER	TAL SAC
Total/NA	Analysis	537 (modified)		1	253075	10/17/18 22:09	ABH	TAL SAC

Client Sample ID: WG-007830-092718-BP-002

Lab Sample ID: 480-142544-2

Date Collected: 09/27/18 11:00

Matrix: Water

Date Received: 09/28/18 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			437196	10/02/18 07:36	JMP	TAL BUF
Total/NA	Analysis	8270D SIM ID		5	438251	10/09/18 06:11	DMR	TAL BUF
Total/NA	Prep	3535			251063	10/10/18 10:49	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	252061	10/13/18 16:33	D1R	TAL SAC

Client Sample ID: WG-007830-092718-BP-003

Lab Sample ID: 480-142544-3

Date Collected: 09/27/18 12:30

Matrix: Water

Date Received: 09/28/18 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			437196	10/02/18 07:36	JMP	TAL BUF
Total/NA	Analysis	8270D SIM ID		5	438251	10/09/18 06:34	DMR	TAL BUF
Total/NA	Prep	3535			251063	10/10/18 10:49	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	252228	10/15/18 02:01	S1M	TAL SAC

Client Sample ID: EB-007830-092718-BP-004

Lab Sample ID: 480-142544-4

Date Collected: 09/27/18 13:00

Matrix: Water

Date Received: 09/28/18 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			437196	10/02/18 07:36	JMP	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	438251	10/09/18 06:57	DMR	TAL BUF
Total/NA	Prep	3535			251063	10/10/18 10:49	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	252061	10/13/18 16:48	D1R	TAL SAC

Client Sample ID: FB-007830-092718-BP-005

Lab Sample ID: 480-142544-5

Date Collected: 09/27/18 12:35

Matrix: Water

Date Received: 09/28/18 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			437196	10/02/18 07:36	JMP	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	438251	10/09/18 07:21	DMR	TAL BUF
Total/NA	Prep	3535			251063	10/10/18 10:49	TWL	TAL SAC

TestAmerica Buffalo

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Client Sample ID: FB-007830-092718-BP-005

Lab Sample ID: 480-142544-5

Date Collected: 09/27/18 12:35

Matrix: Water

Date Received: 09/28/18 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	537 (modified)		1	252061	10/13/18 16:56	D1R	TAL SAC

Client Sample ID: WG-007830-092718-BP-006

Lab Sample ID: 480-142544-6

Date Collected: 09/27/18 14:00

Matrix: Water

Date Received: 09/28/18 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			437196	10/02/18 07:36	JMP	TAL BUF
Total/NA	Analysis	8270D SIM ID		5	438251	10/09/18 07:45	DMR	TAL BUF
Total/NA	Prep	3535			251063	10/10/18 10:49	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	252414	10/15/18 22:05	S1M	TAL SAC

Client Sample ID: WG-007830-092718-BP-007

Lab Sample ID: 480-142544-7

Date Collected: 09/27/18 14:05

Matrix: Water

Date Received: 09/28/18 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			437196	10/02/18 07:36	JMP	TAL BUF
Total/NA	Analysis	8270D SIM ID		5	438251	10/09/18 08:09	DMR	TAL BUF
Total/NA	Prep	3535			251063	10/10/18 10:49	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	252061	10/13/18 17:18	D1R	TAL SAC

Laboratory References:

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

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19

Laboratory: TestAmerica Sacramento

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
Alaska (UST)	State Program	10	17-020	01-20-21
ANAB	DoD ELAP		L2468	01-20-21
Arizona	State Program	9	AZ0708	08-11-19
Arkansas DEQ	State Program	6	88-0691	06-17-19
California	State Program	9	2897	01-31-19
Colorado	State Program	8	CA00044	08-31-19
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-19
Georgia	State Program	4	N/A	01-28-19
Hawaii	State Program	9	N/A	01-29-19
Illinois	NELAP	5	200060	03-17-19
Kansas	NELAP	7	E-10375	10-31-18 *
Louisiana	NELAP	6	30612	06-30-19
Maine	State Program	1	CA0004	04-14-20
Michigan	State Program	5	9947	01-31-20
Nevada	State Program	9	CA00044	07-31-19
New Hampshire	NELAP	1	2997	04-18-19
New Jersey	NELAP	2	CA005	06-30-19
New York	NELAP	2	11666	03-31-19
Oregon	NELAP	10	4040	01-29-19
Pennsylvania	NELAP	3	68-01272	03-31-19
Texas	NELAP	6	T104704399	05-31-19
US Fish & Wildlife	Federal		LE148388-0	07-31-19
USDA	Federal		P330-18-00239	01-17-21
USEPA UCMR	Federal	1	CA00044	12-31-20
Utah	NELAP	8	CA00044	02-28-19
Vermont	State Program	1	VT-4040	04-30-19
Virginia	NELAP	3	460278	03-14-19
Washington	State Program	10	C581	05-05-19
West Virginia (DW)	State Program	3	9930C	12-31-18
Wyoming	State Program	8	8TMS-L	01-28-19

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

TestAmerica Buffalo

Method Summary

Client: GHD Services Inc.
Project/Site: Sterling Site #3 Emerging Contaminants

TestAmerica Job ID: 480-142544-1

Method	Method Description	Protocol	Laboratory
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	TAL BUF
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: GHD Services Inc.

TestAmerica Job ID: 480-142544-1

Project/Site: Sterling Site #3 Emerging Contaminants

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-142544-1	WG-007830-092718-BP-001	Water	09/27/18 09:00	09/28/18 01:30
480-142544-2	WG-007830-092718-BP-002	Water	09/27/18 11:00	09/28/18 01:30
480-142544-3	WG-007830-092718-BP-003	Water	09/27/18 12:30	09/28/18 01:30
480-142544-4	EB-007830-092718-BP-004	Water	09/27/18 13:00	09/28/18 01:30
480-142544-5	FB-007830-092718-BP-005	Water	09/27/18 12:35	09/28/18 01:30
480-142544-6	WG-007830-092718-BP-006	Water	09/27/18 14:00	09/28/18 01:30
480-142544-7	WG-007830-092718-BP-007	Water	09/27/18 14:05	09/28/18 01:30

Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL



Client Information Client Contact: Kathleen Willy Company: GHD Services Inc. Address: 2055 Niagara Falls Blvd., Suite 3 City: Niagara Falls State, Zip: NY, 14304 Phone: 585-586-7483(Tel) Email: kathleen.willy@ghd.com Project Name: Sterling #3 Emerging Contaminants Site: New York		Sampler: BK PICKERT Lab PM: Schove, John R E-Mail: john.schove@testamericainc.com		Carrier Tracking No(s): COC No: 480-118227-27214 Page: Page 1 of 1 Job #: 480-142544 COC	
		Analysis Requested			
Due Date Requested: TAT Requested (days): PO #: 710C790211 WO #: Project #: 480C3568 SSOW#:		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) PFC_IDA - PFAS, Standard List (21 Analytes) 8270D_SML_MS_ID - 1,4-Dioxane		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDTA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=soil/sediment, BT=biological, A=air)		Preservation Code: Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) PFC_IDA - PFAS, Standard List (21 Analytes) 8270D_SML_MS_ID - 1,4-Dioxane		Total Number of Containers Special Instructions/Note:	
WG-007830-092718-BP-001 9/27/18 0900 Water		Y 6 6		12 MS/MSD *	
WG-007830-092718-BP-002 9/27/18 1100 Water		2 1		3	
WG-007830-092718-BP-003 9/27/18 1230 Water		2 1		3	
EB-007830-092718-BP-004 9/27/18 1300 Water		2 2		4	
FB-007830-092718-BP-005 9/27/18 1235 Water		2 2		4	
WG-007830-092718-BP-006 9/27/18 1400 Water		2 1		3	
WG-007830-092718-BP-007 9/27/18 1405 Water		2 1		3	
Water					
Water					
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: Rail Zacher Date/Time: 9/27/18 1545 Company: TR		Received by: Rail Zacher Date/Time: 9-27-18 1525 Company: TR			
Relinquished by: Rail Zacher Date/Time: 9-27-18 0000 Company: TR		Received by: Rail Zacher Date/Time: 9/28/18 0130 Company: TR			
Relinquished by: _____ Date/Time: _____ Company: _____		Received by: _____ Date/Time: _____ Company: _____			
Custody Seals Intact: ☐ Yes ☐ No Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 1.4, 1.9, 2.6 °C #3			

Ver. 08/04/2016

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)		Sampler:		Lab PM: Schove, John R		Carrier Tracking No(s):		COC No: 480-45324.1	
Client Contact:		Phone:		E-Mail: john.schove@testamericainc.com		State of Origin: New York		Page: Page 1 of 1	
Shipping/Receiving		Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #:		480-142544-1	
Address: 880 Riverside Parkway,		Due Date Requested: 10/16/2018		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:	
City: West Sacramento		TAT Requested (days):							
State, Zip: CA, 95605		PO #:							
Phone: 916-373-5600(Tel) 916-372-1059(Fax)		WO #:							
Email:		Project #:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of containers	
Project Name: Sterling Site #2 and #3 East Greenbush,		Project #: 48003558		PFC, IDA/3535, PFC PFAS, Standard List (21 Analytes)					
Site: Sterling Site #2 and 3		SSOW#:							
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=tissue, A=air)	
						Preservation Code:		Special Instructions/Note:	
WG-007830-092718-BP-001 (480-142544-1)		9/27/18		09:00 Eastern				Water	
WG-007830-092718-BP-001 (480-142544-1MS)		9/27/18		09:00 Eastern		MS		Water	
WG-007830-092718-BP-001 (480-142544-1MSD)		9/27/18		09:00 Eastern		MSD		Water	
WG-007830-092718-BP-002 (480-142544-2)		9/27/18		11:00 Eastern				Water	
WG-007830-092718-BP-003 (480-142544-3)		9/27/18		12:30 Eastern				Water	
EB-007830-092718-BP-004 (480-142544-4)		9/27/18		13:00 Eastern				Water	
FB-007830-092718-BP-005 (480-142544-5)		9/27/18		12:35 Eastern				Water	
WG-007830-092718-BP-006 (480-142544-6)		9/27/18		14:00 Eastern				Water	
WG-007830-092718-BP-007 (480-142544-7)		9/27/18		14:05 Eastern				Water	
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.									
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
Unconfirmed					☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months				
Deliverable Requested: I, II, III, IV, Other (specify)					Primary Deliverable Rank: 2				
Empty Kit Relinquished by:					Special Instructions/QC Requirements:				
Relinquished by: <i>[Signature]</i>					Date/Time: 10/2/18				
Relinquished by:					Date/Time:				
Relinquished by:					Date/Time:				
Custody Seals Intact: ☒ Yes ☐ No					Custody Seal No.: 526209				
					Cooler Temperature(s) °C and Other Remarks: 6.4				

Ver: 09/20/2016

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sacramento

Sample Receipt



480-142544 Field Sheet

Job: _____

Tracking # 4276 0717 8432 SO / FO / FO / 2-Day / SAT / Ground / UPS / Courier /
Drop Off / GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations.
File in the job folder with the COC.

Notes: all ice has melted

MLG 10-3-18

Therm. ID: AK-2 / AK-3 / AK-5 / AK-6 / HACCP / Other _____
(+0.7°C)

Ice ☒ Wet ☐ Gel ☐ Other ☐

Cooler Custody Seal: B26209

Sample Custody Seal: —

Cooler ID: 1 of 2

Temp: Observed 6.4 Corrected 6.4

From: Temp Blank ☐ Sample ☒

NCM Filed: Yes ☐ No ☐

	Yes	No	NA
Perchlorate has headspace?	☐	☐	☒
Alkalinity has no headspace?	☐	☐	☒
CoC is complete w/o discrepancies?	☒	☐	☐
Samples received within holding time?	☒	☐	☐
Sample preservatives verified?	☐	☐	☒
Cooler compromised/tampered with?	☐	☒	☐
Samples compromised/tampered with?	☐	☒	☐
Samples w/o discrepancies?	☒	☐	☐
Sample containers have legible labels?	☒	☐	☐
Containers are not broken or leaking?	☒	☐	☐
Sample date/times are provided.	☒	☐	☐
Appropriate containers are used?	☒	☐	☐
Sample bottles are completely filled?	☒	☐	☐
Zero headspace?*	☐	☐	☒
Multiphasic samples are not present?	☒	☐	☐
Sample temp OK?	☐	☒	☐
Sample out of temp?	☒	☐	☐

Initials: MLG Date: 10-3-18

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 480-142544-1

Login Number: 142544

List Source: TestAmerica Buffalo

List Number: 1

Creator: Harper, Marcus D

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	GHD
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: GHD Services Inc.

Job Number: 480-142544-1

Login Number: 142544

List Number: 2

Creator: Hytrek, Cheryl

List Source: TestAmerica Sacramento

List Creation: 10/06/18 04:08 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	6.4
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?	False	Received project as a subcontract.
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.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix D

Data Usability Summary Report (DUSR)



Memorandum

December 10, 2018

To: Mike Okamoto

Ref. No.: 007830

From: Kathy Willy/adh/8

Tel: 716-205-1942

**Subject: Analytical Results and Reduced Validation
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018**

1. Introduction

This document details a reduced validation of analytical results for groundwater samples collected in support of the Annual Groundwater Monitoring at the Eastman Kodak Company Sterling Site #3 site during November 2018. Samples were submitted to TestAmerica Laboratories, Inc. located in Amherst, New York. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented in Table 3.

Standard GHD report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, and recovery data from surrogate spikes/laboratory control samples (LCS)/matrix spikes (MS) and field QA/QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and applicable guidance from the document entitled "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review", United States Environmental Protection Agency (USEPA) 540-R-08-01, June 2008. This item will subsequently be referred to as the "Guidelines" in this Memorandum.

2. Sample Holding Time and Preservation

The sample holding time criteria for the analyses are summarized in Table 3. Sample chain of custody documents and analytical reports were used to determine sample holding times. All samples were prepared and analyzed within the required holding times.

All samples were properly preserved, delivered on ice, and stored by the laboratory at the required temperature (0-6°C).



3. Laboratory Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

Most method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation. Low concentrations of carbon disulfide and phenol were reported in some blanks, indicating a potential for laboratory contamination. Associated sample results with concentrations similar to that found in the method blanks were assumed to be a reflection of laboratory contamination and were qualified as non-detect. A summary of qualified results is presented in Table 4.

4. Surrogate Spike Recoveries - Organic Analyses

In accordance with the methods employed, all samples, blanks, and QC samples analyzed for organics are spiked with surrogate compounds prior to sample extraction and/or analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for volatile organic compounds (VOC) and semi-volatile organic compounds (SVOC) determinations were spiked with the appropriate number of surrogate compounds prior to sample extraction and/or analysis.

Each individual surrogate compound is expected to meet the laboratory control limits with the exception of SVOC analyses. According to the "Guidelines" for SVOC analyses, up to one outlying surrogate in the base/neutral or acid fractions is acceptable as long as the recovery is at least 10 percent.

Surrogate recoveries were assessed against laboratory control limits. Some surrogate recoveries could not be assessed due to necessary dilutions. All assessed surrogate recoveries met the laboratory criteria.

5. Laboratory Control Sample Analyses

LCS and/or laboratory control sample duplicates (LCSD) are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects. The relative percent difference (RPD) of the LCS/LCSD recoveries is used to evaluate analytical precision.

For this study, LCS and LCS/LCSD were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

The LCS/LCSD contained all compounds of interest. All LCS recoveries and RPDs (where applicable) were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision with the exception of a high recovery for 2-butanone. The associated sample results were non-detect and would not be impacted by the implied high bias.



6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

To evaluate the effects of sample matrices on the distillation process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS/MSD samples. The RPD between the MS and MSD is used to assess analytical precision.

MS/MSD analyses were performed as specified in the methods.

The MS/MSD samples were spiked with all compounds of interest. All percent recoveries and RPD values were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision.

7. Field QA/QC Samples

The field QA/QC consisted of one trip blank sample and one field duplicate sample set.

Trip Blank Sample Analysis

To evaluate contamination from sample collection, transportation, storage, and analytical activities, one trip blank was submitted to the laboratory for VOC analysis. All results were non-detect for the compounds of interest.

Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, one field duplicate sample was collected and submitted "blind" to the laboratory, as specified in Table 1. The RPDs associated with these duplicate samples must be less than 50 percent for water samples. If the reported concentration in either the investigative sample or its duplicate is less than five times the reporting limit (RL), the evaluation criterion is one times the RL value for water samples.

All field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision.

8. Analyte Reporting

The laboratory reported detected results down to the laboratory's method detection limit (MDL) for each analyte. Positive analyte detections less than the RL but greater than the MDL were qualified as estimated (J) in Table 2 unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the RL in Table 2.

9. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2 are acceptable with the specific qualifications noted herein.

Table 1

**Sample Collection and Analysis Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018**

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	<u>Analysis/Parameters</u>		Comments
					TCL VOCs, SSPs, TICs	TCL SVOCs, SSPs, TICs	
WG-7830-102518-BP-001	MW-23B	Water	10/25/2018	11:00	x	x	
WG-7830-102518-BP-010	PZ-2A	Water	10/25/2018	14:30	x	x	
WG-7830-102518-BP-011	MW-25	Water	10/25/2018	13:10	x	x	
WG-7830-102518-BP-012	MW-26	Water	10/25/2018	15:00	x	x	
WG-7830-102518-BP-015	MW-11B	Water	10/25/2018	16:00	x	x	
WG-7830-102518-BP-016	MW-14B	Water	10/25/2018	16:30	x	x	
WG-7830-102618-BP-017	MW-21B	Water	10/26/2018	09:00	x	x	
WG-7830-102618-BP-018	MW-12B	Water	10/26/2018	10:00	x	x	
WG-7830-102618-BP-019	MW-20B	Water	10/26/2018	10:30	x	x	
WG-7830-102518-BP-002	MW-24B	Water	10/25/2018	11:10	x	x	
WG-7830-102618-BP-020	MW-7B	Water	10/26/2018	11:30	x	x	
WG-7830-102618-BP-021	MW-8B	Water	10/26/2018	12:00	x	x	
WG-7830-102618-BP-022	MW-4B	Water	10/26/2018	12:30	x	x	
WG-7830-102518-BP-003	MW-22B	Water	10/25/2018	11:30	x	x	
WG-7830-102518-BP-004	MW-19B	Water	10/25/2018	11:40	x	x	
WG-7830-102518-BP-005	MW-2S	Water	10/25/2018	12:00	x	x	
WG-7830-102518-BP-006	MW-16B	Water	10/25/2018	12:10	x	x	
WG-7830-102518-BP-007	MW-17B	Water	10/25/2018	12:40	x	x	
WG-7830-102518-BP-008	MW-10B	Water	10/25/2018	12:50	x	x	
WG-7830-102518-BP-009	MW-3SR	Water	10/25/2018	13:00	x	x	
SW-7830-110218-BP-013	SW-1	Water	11/2/2018	11:00	x	x	
SW-7830-110218-BP-014	SW-2	Water	11/2/2018	11:40	x	x	

Table 1

**Sample Collection and Analysis Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018**

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters		Comments
					TCL VOCs, SSPs, TICs	TCL SVOCs, SSPs, TICs	
SW-7830-110218-BP-023	SW-2	Water	11/2/2018	12:00	x	x	Field duplicate of sample SW-7830-110218-BP-014 Trip Blank
Trip Blanks	-	Water	11/2/2018	-	x		

Notes:

- TCL - Target Compound List
- VOCs - Volatile Organic Compounds
- SVOCs - Semi-volatile Organic Compounds
- TICs - Tentatively Identified Compounds
- SSPs - Site-specific Parameters
- - Not applicable

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:	MW-2S	MW-3SR	MW-4B	MW-7B
Sample ID:	WG-7830-102518-BP-005	WG-7830-102518-BP-009	WG-7830-102618-BP-022	WG-7830-102618-BP-020
Sample Date:	10/25/2018	10/25/2018	10/26/2018	10/26/2018
Parameters	Units			
Volatiles				
1,1,1-Trichloroethane	µg/L	ND (20)	ND (10)	ND (5.0)
1,1,2,2-Tetrachloroethane	µg/L	ND (20)	ND (10)	ND (5.0)
1,1,2-Trichloroethane	µg/L	ND (20)	ND (10)	ND (5.0)
1,1-Dichloroethane	µg/L	ND (20)	ND (10)	ND (5.0)
1,1-Dichloroethene	µg/L	ND (20)	ND (10)	ND (5.0)
1,2-Dichloroethane	µg/L	ND (20)	0.90 J	ND (5.0)
1,2-Dichloropropane	µg/L	ND (20)	ND (10)	ND (5.0)
2-Butanone (Methyl Ethyl Ketone)	µg/L	ND (40)	ND (20)	1.7 J
2-Hexanone	µg/L	ND (40)	ND (20)	ND (10)
2-Methylthiophene	µg/L	ND (40)	ND (20)	ND (10)
3-Methylthiophene	µg/L	ND (40)	ND (20)	ND (10)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	ND (40)	ND (20)	ND (10)
Acetone	µg/L	ND (40)	ND (20)	4.2 J
Benzene	µg/L	ND (4.0)	ND (2.0)	ND (1.0)
Bromodichloromethane	µg/L	ND (20)	ND (10)	ND (5.0)
Bromoform	µg/L	ND (20)	ND (10)	ND (5.0)
Bromomethane (Methyl Bromide)	µg/L	ND (40)	ND (20)	ND (10)
Carbon disulfide	µg/L	ND (20)	ND (10)	ND (5.0)
Carbon tetrachloride	µg/L	ND (20)	ND (10)	ND (5.0)
Chlorobenzene	µg/L	ND (20)	6.4 J	ND (5.0)
Chloroethane	µg/L	ND (40)	ND (20)	ND (10)
Chloroform (Trichloromethane)	µg/L	ND (20)	ND (10)	ND (5.0)
Chloromethane (Methyl Chloride)	µg/L	ND (40)	ND (20)	ND (10)
cis-1,2-Dichloroethene	µg/L	ND (20)	ND (10)	ND (5.0)
cis-1,3-Dichloropropene	µg/L	ND (20)	ND (10)	ND (5.0)
Dibromochloromethane	µg/L	ND (20)	ND (10)	ND (5.0)
Ethyl Ether	µg/L	230	410	ND (10)
Ethylbenzene	µg/L	ND (20)	ND (10)	ND (5.0)
m&p-Xylene	µg/L	ND (20)	ND (10)	ND (5.0)
Methylene chloride	µg/L	ND (20)	1.6 J	ND (5.0)
o-Xylene	µg/L	ND (20)	ND (10)	ND (5.0)
Styrene	µg/L	ND (20)	ND (10)	ND (5.0)
Tetrachloroethene	µg/L	ND (20)	ND (10)	ND (5.0)
Toluene	µg/L	ND (20)	ND (10)	ND (5.0)
trans-1,2-Dichloroethene	µg/L	ND (20)	ND (10)	ND (5.0)

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:	MW-2S	MW-3SR	MW-4B	MW-7B
Sample ID:	WG-7830-102518-BP-005	WG-7830-102518-BP-009	WG-7830-102618-BP-022	WG-7830-102618-BP-020
Sample Date:	10/25/2018	10/25/2018	10/26/2018	10/26/2018
Parameters	Units			
Volatiles-Continued				
trans-1,3-Dichloropropene	µg/L	ND (20)	ND (10)	ND (5.0)
Trichloroethene	µg/L	ND (20)	ND (10)	ND (5.0)
Vinyl chloride	µg/L	ND (40)	ND (20)	ND (10)
TICs Volatiles				
(Ethoxymethyl)-benzene A	µg/L	-	27 JN	-
Dichlorofluoromethane A	µg/L	-	6.1 JN	-
Methanethiol A	µg/L	-	-	3.5 JN
Tetrahydrofuran A	µg/L	-	-	-
Unknown 1	µg/L	-	-	-
Semi-volatiles				
1,2,4-Trichlorobenzene	µg/L	ND (10)	ND (10)	ND (50)
1,2-Dichlorobenzene	µg/L	ND (10)	ND (10)	ND (50)
1,3-Dichlorobenzene	µg/L	ND (10)	ND (10)	ND (50)
1,4-Dichlorobenzene	µg/L	ND (10)	ND (10)	ND (50)
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	µg/L	ND (5.0)	ND (5.0)	ND (25)
2,4,5-Trichlorophenol	µg/L	ND (5.0)	ND (5.0)	ND (25)
2,4,6-Trichlorophenol	µg/L	ND (5.0)	ND (5.0)	ND (25)
2,4-Dichlorophenol	µg/L	ND (5.0)	ND (5.0)	ND (25)
2,4-Dimethylphenol	µg/L	ND (5.0)	ND (5.0)	ND (25)
2,4-Dinitrophenol	µg/L	ND (10)	ND (10)	ND (50)
2,4-Dinitrotoluene	µg/L	ND (5.0)	ND (5.0)	ND (25)
2,6-Dinitrotoluene	µg/L	ND (5.0)	ND (5.0)	ND (25)
2-Chloronaphthalene	µg/L	ND (5.0)	ND (5.0)	ND (25)
2-Chlorophenol	µg/L	ND (5.0)	ND (5.0)	ND (25)
2-Methylnaphthalene	µg/L	ND (5.0)	ND (5.0)	ND (25)
2-Methylphenol	µg/L	ND (5.0)	ND (5.0)	ND (25)
2-Nitroaniline	µg/L	ND (10)	ND (10)	ND (50)
2-Nitrophenol	µg/L	ND (5.0)	ND (5.0)	ND (25)
3,3'-Dichlorobenzidine	µg/L	ND (5.0)	ND (5.0)	ND (25)
3-Nitroaniline	µg/L	ND (10)	ND (10)	ND (50)
4,6-Dinitro-2-methylphenol	µg/L	ND (10)	ND (10)	ND (50)
4-Bromophenyl phenyl ether	µg/L	ND (5.0)	ND (5.0)	ND (25)
4-Chloro-3-methylphenol	µg/L	ND (5.0)	ND (5.0)	ND (25)

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:	MW-2S	MW-3SR	MW-4B	MW-7B
Sample ID:	WG-7830-102518-BP-005	WG-7830-102518-BP-009	WG-7830-102618-BP-022	WG-7830-102618-BP-020
Sample Date:	10/25/2018	10/25/2018	10/26/2018	10/26/2018
Parameters	Units			
Semi-volatiles-Continued				
4-Chloroaniline	µg/L	ND (5.0)	ND (5.0)	ND (25)
4-Chlorophenyl phenyl ether	µg/L	ND (5.0)	ND (5.0)	ND (25)
4-Methylphenol	µg/L	ND (10)	ND (10)	ND (50)
4-Nitroaniline	µg/L	ND (10)	ND (10)	ND (50)
4-Nitrophenol	µg/L	ND (10)	ND (10)	ND (50)
Acenaphthene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Acenaphthylene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Anthracene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Benzaldehyde	µg/L	ND (5.0)	1.1 J	ND (25)
Benzo(a)anthracene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Benzo(a)pyrene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Benzo(b)fluoranthene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Benzo(g,h,i)perylene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Benzo(k)fluoranthene	µg/L	ND (5.0)	ND (5.0)	ND (25)
bis(2-Chloroethoxy)methane	µg/L	ND (5.0)	ND (5.0)	ND (25)
bis(2-Chloroethyl)ether	µg/L	ND (5.0)	ND (5.0)	ND (25)
bis(2-Ethylhexyl)phthalate	µg/L	ND (5.0)	ND (5.0)	ND (25)
Butyl benzylphthalate	µg/L	ND (5.0)	ND (5.0)	ND (25)
Carbazole	µg/L	ND (5.0)	ND (5.0)	ND (25)
Chrysene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Dibenz(a,h)anthracene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Dibenzofuran	µg/L	ND (10)	ND (10)	ND (50)
Diethyl phthalate	µg/L	ND (5.0)	ND (5.0)	ND (25)
Dimethyl phthalate	µg/L	ND (5.0)	ND (5.0)	ND (25)
Di-n-butylphthalate	µg/L	ND (5.0)	ND (5.0)	ND (25)
Di-n-octyl phthalate	µg/L	ND (5.0)	ND (5.0)	ND (25)
Fluoranthene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Fluorene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Hexachlorobenzene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Hexachlorobutadiene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Hexachlorocyclopentadiene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Hexachloroethane	µg/L	ND (5.0)	ND (5.0)	ND (25)
Indeno(1,2,3-cd)pyrene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Isophorone	µg/L	ND (5.0)	ND (5.0)	ND (25)
Naphthalene	µg/L	ND (5.0)	ND (5.0)	ND (25)

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:	MW-2S	MW-3SR	MW-4B	MW-7B
Sample ID:	WG-7830-102518-BP-005	WG-7830-102518-BP-009	WG-7830-102618-BP-022	WG-7830-102618-BP-020
Sample Date:	10/25/2018	10/25/2018	10/26/2018	10/26/2018
Parameters	Units			
Semi-volatiles-Continued				
Nitrobenzene	µg/L	ND (5.0)	ND (5.0)	ND (25)
N-Nitrosodi-n-propylamine	µg/L	ND (5.0)	ND (5.0)	ND (25)
N-Nitrosodiphenylamine	µg/L	ND (5.0)	ND (5.0)	ND (25)
Pentachlorophenol	µg/L	ND (10)	ND (10)	ND (50)
Phenanthrene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Phenol	µg/L	ND (5.0)	ND (5.0)	ND (25)
Pyrene	µg/L	ND (5.0)	ND (5.0)	ND (25)
TICs Semi-volatiles				
(Ethoxymethyl)-benzene A	µg/L	-	85 JN	-
2-Ethyl-ethanoic acid A	µg/L	-	-	-
2-Ethyl-hexanoic acid A	µg/L	-	-	-
4-(1,1,3,3-Tetramethylbutyl)-phenol A	µg/L	-	15 JN	-
5-Chloroisatin A	µg/L	-	-	-
Aminopyrine A	µg/L	-	-	-
Antipyrine A	µg/L	-	-	-
Benzenamine,2,6-dimethyl- A	µg/L	-	17 JN	-
Benzeneacetic acid A	µg/L	-	-	-
Benzoic acid A	µg/L	-	-	-
bis(2-Chloroethoxy)ethane A	µg/L	-	14 JN	-
Chloroacetone A	µg/L	-	12 JN	-
Chlorobenzene A	µg/L	-	-	-
Chloriodomethane A	µg/L	2.6 JN	30 JN	-
Cyclobarbitol A	µg/L	3.7 JN	-	-
Cyclohexane A	µg/L	-	-	130 JN
Cyclopentasiloxane, decamethyl- A	µg/L	-	-	-
Cyclotetrasiloxane, octamethyl- A	µg/L	-	-	-
Diethoxymethane A	µg/L	-	-	-
Diethylcarbamic acid methyl ester A	µg/L	-	-	-
Diisopropylamine A	µg/L	17 JN	740 JN	1700 JN
Ethyl Acetate A	µg/L	-	-	-
Hexobarbital A	µg/L	-	-	-
Mephobarbital A	µg/L	3.8 JN	170 JN	-
Mepivacaine A	µg/L	-	72 JN	-
Noramidopyrine A	µg/L	-	-	-

Table 2

**Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018**

Sample Location:		MW-2S	MW-3SR	MW-4B	MW-7B
Sample ID:		WG-7830-102518-BP-005	WG-7830-102518-BP-009	WG-7830-102618-BP-022	WG-7830-102618-BP-020
Sample Date:		10/25/2018	10/25/2018	10/26/2018	10/26/2018
Parameters	Units				
TICs Semi-volatiles-Continued					
Phenobarbital A	µg/L	3.6 JN	78 JN	-	28 JN
Phenobarbital di-methyl derivative A	µg/L	-	14 JN	-	-
Pyrimidinetrione, 5-ethyl-1,3-dimethyl-5-phenyl- A	µg/L	-	-	-	-
Talbutal A	µg/L	6.7 JN	55 JN	-	24 JN
Tetrahydrofuran A	µg/L	-	-	-	-
Toluene A	µg/L	5.5 JN	-	-	-
Triethylamine A	µg/L	-	27 JN	-	-
Unknown	µg/L	360 JN	550 JN	380 JN	420 JN

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:		MW-8B	MW-10B	MW-11B	MW-12B
Sample ID:		WG-7830-102618-BP-021	WG-7830-102518-BP-008	WG-7830-102518-BP-015	WG-7830-102618-BP-018
Sample Date:		10/26/2018	10/25/2018	10/25/2018	10/26/2018
Parameters	Units				
Volatiles					
1,1,1-Trichloroethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
1,1,2,2-Tetrachloroethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
1,1,2-Trichloroethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
1,1-Dichloroethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
1,1-Dichloroethene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
1,2-Dichloroethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
1,2-Dichloropropane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
2-Butanone (Methyl Ethyl Ketone)	µg/L	ND (10)	4.1 J	2.9 J	ND (200)
2-Hexanone	µg/L	ND (10)	ND (10)	ND (10)	ND (200)
2-Methylthiophene	µg/L	ND (10)	ND (10)	ND (10)	ND (200)
3-Methylthiophene	µg/L	ND (10)	ND (10)	ND (10)	ND (200)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	ND (10)	ND (10)	ND (10)	ND (200)
Acetone	µg/L	ND (10)	6.4 J	4.6 J	ND (200)
Benzene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (20)
Bromodichloromethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
Bromoform	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
Bromomethane (Methyl Bromide)	µg/L	ND (10)	ND (10)	ND (10)	ND (200)
Carbon disulfide	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
Carbon tetrachloride	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
Chlorobenzene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
Chloroethane	µg/L	ND (10)	ND (10)	ND (10)	ND (200)
Chloroform (Trichloromethane)	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
Chloromethane (Methyl Chloride)	µg/L	ND (10)	ND (10)	ND (10)	ND (200)
cis-1,2-Dichloroethene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
cis-1,3-Dichloropropene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
Dibromochloromethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
Ethyl Ether	µg/L	28	4.6 J	ND (10)	1200
Ethylbenzene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
m&p-Xylene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
Methylene chloride	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
o-Xylene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
Styrene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
Tetrachloroethene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
Toluene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)
trans-1,2-Dichloroethene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (100)

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:	MW-8B	MW-10B	MW-11B	MW-12B
Sample ID:	WG-7830-102618-BP-021	WG-7830-102518-BP-008	WG-7830-102518-BP-015	WG-7830-102618-BP-018
Sample Date:	10/26/2018	10/25/2018	10/25/2018	10/26/2018
Parameters	Units			
Volatiles-Continued				
trans-1,3-Dichloropropene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Trichloroethene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Vinyl chloride	µg/L	ND (10)	ND (10)	ND (10)
TICs Volatiles				
(Ethoxymethyl)-benzene A	µg/L	-	-	-
Dichlorofluoromethane A	µg/L	-	-	-
Methanethiol A	µg/L	-	-	-
Tetrahydrofuran A	µg/L	-	-	-
Unknown 1	µg/L	-	-	-
Semi-volatiles				
1,2,4-Trichlorobenzene	µg/L	ND (10)	ND (10)	ND (50)
1,2-Dichlorobenzene	µg/L	ND (10)	ND (10)	ND (50)
1,3-Dichlorobenzene	µg/L	ND (10)	ND (10)	ND (50)
1,4-Dichlorobenzene	µg/L	ND (10)	ND (10)	ND (50)
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	µg/L	ND (5.0)	ND (5.0)	ND (25)
2,4,5-Trichlorophenol	µg/L	ND (5.0)	ND (5.0)	ND (25)
2,4,6-Trichlorophenol	µg/L	ND (5.0)	ND (5.0)	ND (25)
2,4-Dichlorophenol	µg/L	ND (5.0)	ND (5.0)	ND (25)
2,4-Dimethylphenol	µg/L	ND (5.0)	ND (5.0)	ND (25)
2,4-Dinitrophenol	µg/L	ND (10)	ND (10)	ND (50)
2,4-Dinitrotoluene	µg/L	ND (5.0)	ND (5.0)	ND (25)
2,6-Dinitrotoluene	µg/L	ND (5.0)	ND (5.0)	ND (25)
2-Chloronaphthalene	µg/L	ND (5.0)	ND (5.0)	ND (25)
2-Chlorophenol	µg/L	ND (5.0)	ND (5.0)	ND (25)
2-Methylnaphthalene	µg/L	ND (5.0)	ND (5.0)	ND (25)
2-Methylphenol	µg/L	ND (5.0)	ND (5.0)	ND (25)
2-Nitroaniline	µg/L	ND (10)	ND (10)	ND (50)
2-Nitrophenol	µg/L	ND (5.0)	ND (5.0)	ND (25)
3,3'-Dichlorobenzidine	µg/L	ND (5.0)	ND (5.0)	ND (25)
3-Nitroaniline	µg/L	ND (10)	ND (10)	ND (50)
4,6-Dinitro-2-methylphenol	µg/L	ND (10)	ND (10)	ND (50)
4-Bromophenyl phenyl ether	µg/L	ND (5.0)	ND (5.0)	ND (25)
4-Chloro-3-methylphenol	µg/L	ND (5.0)	ND (5.0)	ND (25)

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:	MW-8B	MW-10B	MW-11B	MW-12B
Sample ID:	WG-7830-102618-BP-021	WG-7830-102518-BP-008	WG-7830-102518-BP-015	WG-7830-102618-BP-018
Sample Date:	10/26/2018	10/25/2018	10/25/2018	10/26/2018
Parameters	Units			
Semi-volatiles-Continued				
4-Chloroaniline	µg/L	ND (5.0)	ND (5.0)	ND (25)
4-Chlorophenyl phenyl ether	µg/L	ND (5.0)	ND (5.0)	ND (25)
4-Methylphenol	µg/L	ND (10)	ND (10)	ND (50)
4-Nitroaniline	µg/L	ND (10)	ND (10)	ND (50)
4-Nitrophenol	µg/L	ND (10)	ND (10)	ND (50)
Acenaphthene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Acenaphthylene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Anthracene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Benzaldehyde	µg/L	ND (5.0)	ND (5.0)	ND (25)
Benzo(a)anthracene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Benzo(a)pyrene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Benzo(b)fluoranthene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Benzo(g,h,i)perylene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Benzo(k)fluoranthene	µg/L	ND (5.0)	ND (5.0)	ND (25)
bis(2-Chloroethoxy)methane	µg/L	ND (5.0)	ND (5.0)	ND (25)
bis(2-Chloroethyl)ether	µg/L	ND (5.0)	ND (5.0)	ND (25)
bis(2-Ethylhexyl)phthalate	µg/L	ND (5.0)	ND (5.0)	ND (25)
Butyl benzylphthalate	µg/L	ND (5.0)	ND (5.0)	ND (25)
Carbazole	µg/L	ND (5.0)	ND (5.0)	ND (25)
Chrysene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Dibenz(a,h)anthracene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Dibenzofuran	µg/L	ND (10)	ND (10)	ND (50)
Diethyl phthalate	µg/L	ND (5.0)	ND (5.0)	ND (25)
Dimethyl phthalate	µg/L	ND (5.0)	ND (5.0)	ND (25)
Di-n-butylphthalate	µg/L	ND (5.0)	ND (5.0)	ND (25)
Di-n-octyl phthalate	µg/L	ND (5.0)	ND (5.0)	ND (25)
Fluoranthene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Fluorene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Hexachlorobenzene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Hexachlorobutadiene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Hexachlorocyclopentadiene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Hexachloroethane	µg/L	ND (5.0)	ND (5.0)	ND (25)
Indeno(1,2,3-cd)pyrene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Isophorone	µg/L	ND (5.0)	ND (5.0)	ND (25)
Naphthalene	µg/L	ND (5.0)	ND (5.0)	ND (25)

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:	MW-8B	MW-10B	MW-11B	MW-12B
Sample ID:	WG-7830-102618-BP-021	WG-7830-102518-BP-008	WG-7830-102518-BP-015	WG-7830-102618-BP-018
Sample Date:	10/26/2018	10/25/2018	10/25/2018	10/26/2018
Parameters	Units			
Semi-volatiles-Continued				
Nitrobenzene	µg/L	ND (5.0)	ND (5.0)	ND (25)
N-Nitrosodi-n-propylamine	µg/L	ND (5.0)	ND (5.0)	ND (25)
N-Nitrosodiphenylamine	µg/L	ND (5.0)	ND (5.0)	ND (25)
Pentachlorophenol	µg/L	ND (10)	ND (10)	ND (50)
Phenanthrene	µg/L	ND (5.0)	ND (5.0)	ND (25)
Phenol	µg/L	ND (5.0)	ND (5.0)	ND (25)
Pyrene	µg/L	ND (5.0)	ND (5.0)	ND (25)
TICs Semi-volatiles				
(Ethoxymethyl)-benzene A	µg/L	-	-	-
2-Ethyl-ethanoic acid A	µg/L	-	-	-
2-Ethyl-hexanoic acid A	µg/L	-	2.3 JN	-
4-(1,1,3,3-Tetramethylbutyl)-phenol A	µg/L	-	-	-
5-Chloroisatin A	µg/L	-	-	-
Aminopyrine A	µg/L	-	-	-
Antipyrine A	µg/L	-	-	-
Benzenamine,2,6-dimethyl- A	µg/L	-	-	-
Benzeneacetic acid A	µg/L	-	-	-
Benzoic acid A	µg/L	-	-	-
bis(2-Chloroethoxy)ethane A	µg/L	-	-	-
Chloroacetone A	µg/L	-	-	-
Chlorobenzene A	µg/L	-	-	-
Chloriodomethane A	µg/L	6.3 JN	4.6 JN	-
Cyclobarbitol A	µg/L	-	-	-
Cyclohexane A	µg/L	-	12 JN	91 JN
Cyclopentasiloxane, decamethyl- A	µg/L	1.9 JN	1.7 JN	-
Cyclotetrasiloxane, octamethyl- A	µg/L	-	1.8 JN	-
Diethoxymethane A	µg/L	-	-	-
Diethylcarbamic acid methyl ester A	µg/L	-	-	-
Diisopropylamine A	µg/L	470 JN	-	2000 JN
Ethyl Acetate A	µg/L	-	-	-
Hexobarbital A	µg/L	4.5 JN	-	-
Mephobarbital A	µg/L	13 JN	-	40 JN
Mepivacaine A	µg/L	-	-	-
Noramidopyrine A	µg/L	-	-	-

Table 2

**Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018**

Sample Location:		MW-8B	MW-10B	MW-11B	MW-12B
Sample ID:		WG-7830-102618-BP-021	WG-7830-102518-BP-008	WG-7830-102518-BP-015	WG-7830-102618-BP-018
Sample Date:		10/26/2018	10/25/2018	10/25/2018	10/26/2018
Parameters	Units				
TICs Semi-volatiles-Continued					
Phenobarbital A	µg/L	15 JN	-	-	41 JN
Phenobarbital di-methyl derivative A	µg/L	1.8 JN	-	-	-
Pyrimidinetrione, 5-ethyl-1,3-dimethyl-5-phenyl- A	µg/L	-	-	-	-
Talbutal A	µg/L	11 JN	-	-	-
Tetrahydrofuran A	µg/L	-	-	-	-
Toluene A	µg/L	6.7 JN	5.7 JN	-	-
Triethylamine A	µg/L	5.1 JN	-	-	31 JN
Unknown	µg/L	340 JN	360 JN	340 JN	510 JN

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:		MW-14B	MW-16B	MW-17B	MW-19B
Sample ID:		WG-7830-102518-BP-016	WG-7830-102518-BP-006	WG-7830-102518-BP-007	WG-7830-102518-BP-004
Sample Date:		10/25/2018	10/25/2018	10/25/2018	10/25/2018
Parameters	Units				
Volatiles					
1,1,1-Trichloroethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
1,1,2,2-Tetrachloroethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
1,1,2-Trichloroethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
1,1-Dichloroethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
1,1-Dichloroethene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
1,2-Dichloroethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
1,2-Dichloropropane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
2-Butanone (Methyl Ethyl Ketone)	µg/L	1.6 J	3.6 J	2.4 J	6.4 J
2-Hexanone	µg/L	ND (10)	ND (10)	ND (10)	ND (10)
2-Methylthiophene	µg/L	ND (10)	ND (10)	ND (10)	ND (10)
3-Methylthiophene	µg/L	ND (10)	ND (10)	ND (10)	ND (10)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	ND (10)	ND (10)	ND (10)	ND (10)
Acetone	µg/L	3.3 J	3.8 J	ND (10)	6.3 J
Benzene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Bromodichloromethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Bromoform	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Bromomethane (Methyl Bromide)	µg/L	ND (10)	ND (10)	ND (10)	ND (10)
Carbon disulfide	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Carbon tetrachloride	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Chlorobenzene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Chloroethane	µg/L	ND (10)	ND (10)	ND (10)	ND (10)
Chloroform (Trichloromethane)	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Chloromethane (Methyl Chloride)	µg/L	ND (10)	ND (10)	ND (10)	ND (10)
cis-1,2-Dichloroethene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
cis-1,3-Dichloropropene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Dibromochloromethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Ethyl Ether	µg/L	1.3 J	1300	1400	53
Ethylbenzene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
m&p-Xylene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Methylene chloride	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
o-Xylene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Styrene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Tetrachloroethene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Toluene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
trans-1,2-Dichloroethene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:	MW-14B	MW-16B	MW-17B	MW-19B
Sample ID:	WG-7830-102518-BP-016	WG-7830-102518-BP-006	WG-7830-102518-BP-007	WG-7830-102518-BP-004
Sample Date:	10/25/2018	10/25/2018	10/25/2018	10/25/2018
Parameters	Units			
Volatiles-Continued				
trans-1,3-Dichloropropene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Trichloroethene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Vinyl chloride	µg/L	ND (10)	ND (10)	ND (10)
TICs Volatiles				
(Ethoxymethyl)-benzene A	µg/L	-	-	-
Dichlorofluoromethane A	µg/L	-	-	-
Methanethiol A	µg/L	-	-	-
Tetrahydrofuran A	µg/L	-	-	-
Unknown 1	µg/L	-	13 JN	-
Semi-volatiles				
1,2,4-Trichlorobenzene	µg/L	ND (10)	ND (10)	ND (10)
1,2-Dichlorobenzene	µg/L	ND (10)	ND (10)	ND (10)
1,3-Dichlorobenzene	µg/L	ND (10)	ND (10)	ND (10)
1,4-Dichlorobenzene	µg/L	ND (10)	ND (10)	ND (10)
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2,4,5-Trichlorophenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2,4,6-Trichlorophenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2,4-Dichlorophenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2,4-Dimethylphenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2,4-Dinitrophenol	µg/L	ND (10)	ND (10)	ND (10)
2,4-Dinitrotoluene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2,6-Dinitrotoluene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2-Chloronaphthalene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2-Chlorophenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2-Methylnaphthalene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2-Methylphenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2-Nitroaniline	µg/L	ND (10)	ND (10)	ND (10)
2-Nitrophenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
3,3'-Dichlorobenzidine	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
3-Nitroaniline	µg/L	ND (10)	ND (10)	ND (10)
4,6-Dinitro-2-methylphenol	µg/L	ND (10)	ND (10)	ND (10)
4-Bromophenyl phenyl ether	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
4-Chloro-3-methylphenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)

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Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:	MW-14B	MW-16B	MW-17B	MW-19B
Sample ID:	WG-7830-102518-BP-016	WG-7830-102518-BP-006	WG-7830-102518-BP-007	WG-7830-102518-BP-004
Sample Date:	10/25/2018	10/25/2018	10/25/2018	10/25/2018
Parameters	Units			
Semi-volatiles-Continued				
4-Chloroaniline	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
4-Chlorophenyl phenyl ether	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
4-Methylphenol	µg/L	ND (10)	ND (10)	ND (10)
4-Nitroaniline	µg/L	ND (10)	ND (10)	ND (10)
4-Nitrophenol	µg/L	ND (10)	ND (10)	ND (10)
Acenaphthene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Acenaphthylene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Anthracene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Benzaldehyde	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Benzo(a)anthracene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Benzo(a)pyrene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Benzo(b)fluoranthene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Benzo(g,h,i)perylene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Benzo(k)fluoranthene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
bis(2-Chloroethoxy)methane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
bis(2-Chloroethyl)ether	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
bis(2-Ethylhexyl)phthalate	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Butyl benzylphthalate	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Carbazole	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Chrysene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Dibenz(a,h)anthracene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Dibenzofuran	µg/L	ND (10)	ND (10)	ND (10)
Diethyl phthalate	µg/L	ND (5.0)	ND (5.0)	0.23 J
Dimethyl phthalate	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Di-n-butylphthalate	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Di-n-octyl phthalate	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Fluoranthene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Fluorene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Hexachlorobenzene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Hexachlorobutadiene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Hexachlorocyclopentadiene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Hexachloroethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Indeno(1,2,3-cd)pyrene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Isophorone	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Naphthalene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:	MW-14B	MW-16B	MW-17B	MW-19B
Sample ID:	WG-7830-102518-BP-016	WG-7830-102518-BP-006	WG-7830-102518-BP-007	WG-7830-102518-BP-004
Sample Date:	10/25/2018	10/25/2018	10/25/2018	10/25/2018
Parameters	Units			
Semi-volatiles-Continued				
Nitrobenzene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
N-Nitrosodi-n-propylamine	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
N-Nitrosodiphenylamine	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Pentachlorophenol	µg/L	ND (10)	ND (10)	ND (10)
Phenanthrene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Phenol	µg/L	ND (5.0)	1.6 J	ND (5.0)
Pyrene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
TICs Semi-volatiles				
(Ethoxymethyl)-benzene A	µg/L	-	-	-
2-Ethyl-ethanoic acid A	µg/L	-	-	-
2-Ethyl-hexanoic acid A	µg/L	-	-	-
4-(1,1,3,3-Tetramethylbutyl)-phenol A	µg/L	-	-	-
5-Chloroisatin A	µg/L	-	-	-
Aminopyrine A	µg/L	-	-	-
Antipyrine A	µg/L	-	-	-
Benzenamine,2,6-dimethyl- A	µg/L	-	-	-
Benzeneacetic acid A	µg/L	-	-	-
Benzoic acid A	µg/L	-	-	-
bis(2-Chloroethoxy)ethane A	µg/L	-	-	-
Chloroacetone A	µg/L	-	-	-
Chlorobenzene A	µg/L	-	-	-
Chloriodomethane A	µg/L	12 JN	10 JN	13 JN
Cyclobarbitol A	µg/L	-	33 JN	34 JN
Cyclohexane A	µg/L	5.7 JN	-	-
Cyclopentasiloxane, decamethyl- A	µg/L	2.0 JN	-	-
Cyclotetrasiloxane, octamethyl- A	µg/L	-	-	-
Diethoxymethane A	µg/L	-	-	-
Diethylcarbamic acid methyl ester A	µg/L	-	-	5.9 JN
Diisopropylamine A	µg/L	-	830 JN	-
Ethyl Acetate A	µg/L	3.3 JN	-	64 JN
Hexobarbital A	µg/L	-	22 JN	20 JN
Mephobarbital A	µg/L	-	70 JN	51 JN
Mepivacaine A	µg/L	-	-	14 JN
Noramidopyrine A	µg/L	-	-	-
			25 JN	-

Table 2

**Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018**

Sample Location:		MW-14B	MW-16B	MW-17B	MW-19B
Sample ID:		WG-7830-102518-BP-016	WG-7830-102518-BP-006	WG-7830-102518-BP-007	WG-7830-102518-BP-004
Sample Date:		10/25/2018	10/25/2018	10/25/2018	10/25/2018
Parameters	Units				
TICs Semi-volatiles-Continued					
Phenobarbital A	µg/L	-	75 JN	66 JN	11 JN
Phenobarbital di-methyl derivative A	µg/L	-	14 JN	9.2 JN	-
Pyrimidinetrione, 5-ethyl-1,3-dimethyl-5-phenyl- A	µg/L	-	-	-	3.3 JN
Talbutal A	µg/L	-	51 JN	46 JN	7.0 JN
Tetrahydrofuran A	µg/L	4.3 JN	-	-	-
Toluene A	µg/L	7.3 JN	-	6.0 JN	6.0 JN
Triethylamine A	µg/L	-	77 JN	47 JN	6.3 JN
Unknown	µg/L	380 JN	360 JN	1500 JN	330 JN

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:		MW-20B	MW-21B	MW-22B	MW-23B
Sample ID:		WG-7830-102618-BP-019	WG-7830-102618-BP-017	WG-7830-102518-BP-003	WG-7830-102518-BP-001
Sample Date:		10/26/2018	10/26/2018	10/25/2018	10/25/2018
Parameters	Units				
Volatiles					
1,1,1-Trichloroethane	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
1,1,2,2-Tetrachloroethane	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
1,1,2-Trichloroethane	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
1,1-Dichloroethane	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
1,1-Dichloroethene	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
1,2-Dichloroethane	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
1,2-Dichloropropane	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
2-Butanone (Methyl Ethyl Ketone)	µg/L	5.0 J	ND (40)	4.6 J	3.5 J
2-Hexanone	µg/L	ND (20)	ND (40)	ND (10)	ND (10)
2-Methylthiophene	µg/L	ND (20)	ND (40)	ND (10)	ND (10)
3-Methylthiophene	µg/L	ND (20)	ND (40)	ND (10)	ND (10)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	ND (20)	ND (40)	ND (10)	ND (10)
Acetone	µg/L	9.0 J	ND (40)	5.4 J	5.0 J
Benzene	µg/L	ND (2.0)	ND (4.0)	ND (1.0)	ND (1.0)
Bromodichloromethane	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
Bromoform	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
Bromomethane (Methyl Bromide)	µg/L	ND (20)	ND (40)	ND (10)	ND (10)
Carbon disulfide	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
Carbon tetrachloride	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
Chlorobenzene	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
Chloroethane	µg/L	ND (20)	ND (40)	ND (10)	ND (10)
Chloroform (Trichloromethane)	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
Chloromethane (Methyl Chloride)	µg/L	ND (20)	ND (40)	ND (10)	ND (10)
cis-1,2-Dichloroethene	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
cis-1,3-Dichloropropene	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
Dibromochloromethane	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
Ethyl Ether	µg/L	ND (20)	920	ND (10)	ND (10)
Ethylbenzene	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
m&p-Xylene	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
Methylene chloride	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
o-Xylene	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
Styrene	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
Tetrachloroethene	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
Toluene	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)
trans-1,2-Dichloroethene	µg/L	ND (10)	ND (20)	ND (5.0)	ND (5.0)

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:	MW-20B	MW-21B	MW-22B	MW-23B
Sample ID:	WG-7830-102618-BP-019	WG-7830-102618-BP-017	WG-7830-102518-BP-003	WG-7830-102518-BP-001
Sample Date:	10/26/2018	10/26/2018	10/25/2018	10/25/2018
Parameters	Units			
Volatiles-Continued				
trans-1,3-Dichloropropene	µg/L	ND (10)	ND (20)	ND (5.0)
Trichloroethene	µg/L	ND (10)	ND (20)	ND (5.0)
Vinyl chloride	µg/L	ND (20)	ND (40)	ND (10)
TICs Volatiles				
(Ethoxymethyl)-benzene A	µg/L	-	-	-
Dichlorofluoromethane A	µg/L	-	-	-
Methanethiol A	µg/L	-	-	-
Tetrahydrofuran A	µg/L	-	-	-
Unknown 1	µg/L	-	-	-
Semi-volatiles				
1,2,4-Trichlorobenzene	µg/L	ND (50)	ND (50)	ND (10)
1,2-Dichlorobenzene	µg/L	ND (50)	ND (50)	ND (10)
1,3-Dichlorobenzene	µg/L	ND (50)	ND (50)	ND (10)
1,4-Dichlorobenzene	µg/L	ND (50)	ND (50)	ND (10)
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	µg/L	ND (25)	ND (25)	ND (5.0)
2,4,5-Trichlorophenol	µg/L	ND (25)	ND (25)	ND (5.0)
2,4,6-Trichlorophenol	µg/L	ND (25)	ND (25)	ND (5.0)
2,4-Dichlorophenol	µg/L	ND (25)	ND (25)	ND (5.0)
2,4-Dimethylphenol	µg/L	ND (25)	ND (25)	ND (5.0)
2,4-Dinitrophenol	µg/L	ND (50)	ND (50)	ND (10)
2,4-Dinitrotoluene	µg/L	ND (25)	ND (25)	ND (5.0)
2,6-Dinitrotoluene	µg/L	ND (25)	ND (25)	ND (5.0)
2-Chloronaphthalene	µg/L	ND (25)	ND (25)	ND (5.0)
2-Chlorophenol	µg/L	ND (25)	ND (25)	ND (5.0)
2-Methylnaphthalene	µg/L	ND (25)	ND (25)	ND (5.0)
2-Methylphenol	µg/L	ND (25)	ND (25)	ND (5.0)
2-Nitroaniline	µg/L	ND (50)	ND (50)	ND (10)
2-Nitrophenol	µg/L	ND (25)	ND (25)	ND (5.0)
3,3'-Dichlorobenzidine	µg/L	ND (25)	ND (25)	ND (5.0)
3-Nitroaniline	µg/L	ND (50)	ND (50)	ND (10)
4,6-Dinitro-2-methylphenol	µg/L	ND (50)	ND (50)	ND (10)
4-Bromophenyl phenyl ether	µg/L	ND (25)	ND (25)	ND (5.0)
4-Chloro-3-methylphenol	µg/L	ND (25)	ND (25)	ND (5.0)

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:	MW-20B	MW-21B	MW-22B	MW-23B
Sample ID:	WG-7830-102618-BP-019	WG-7830-102618-BP-017	WG-7830-102518-BP-003	WG-7830-102518-BP-001
Sample Date:	10/26/2018	10/26/2018	10/25/2018	10/25/2018
Parameters	Units			
Semi-volatiles-Continued				
4-Chloroaniline	µg/L	ND (25)	ND (25)	ND (5.0)
4-Chlorophenyl phenyl ether	µg/L	ND (25)	ND (25)	ND (5.0)
4-Methylphenol	µg/L	ND (50)	ND (50)	ND (10)
4-Nitroaniline	µg/L	ND (50)	ND (50)	ND (10)
4-Nitrophenol	µg/L	ND (50)	ND (50)	ND (10)
Acenaphthene	µg/L	ND (25)	ND (25)	ND (5.0)
Acenaphthylene	µg/L	ND (25)	ND (25)	ND (5.0)
Anthracene	µg/L	ND (25)	ND (25)	ND (5.0)
Benzaldehyde	µg/L	ND (25)	ND (25)	ND (5.0)
Benzo(a)anthracene	µg/L	ND (25)	ND (25)	ND (5.0)
Benzo(a)pyrene	µg/L	ND (25)	ND (25)	ND (5.0)
Benzo(b)fluoranthene	µg/L	ND (25)	ND (25)	ND (5.0)
Benzo(g,h,i)perylene	µg/L	ND (25)	ND (25)	ND (5.0)
Benzo(k)fluoranthene	µg/L	ND (25)	ND (25)	ND (5.0)
bis(2-Chloroethoxy)methane	µg/L	ND (25)	ND (25)	ND (5.0)
bis(2-Chloroethyl)ether	µg/L	ND (25)	ND (25)	ND (5.0)
bis(2-Ethylhexyl)phthalate	µg/L	ND (25)	ND (25)	ND (5.0)
Butyl benzylphthalate	µg/L	ND (25)	ND (25)	ND (5.0)
Carbazole	µg/L	ND (25)	ND (25)	ND (5.0)
Chrysene	µg/L	ND (25)	ND (25)	ND (5.0)
Dibenz(a,h)anthracene	µg/L	ND (25)	ND (25)	ND (5.0)
Dibenzofuran	µg/L	ND (50)	ND (50)	ND (10)
Diethyl phthalate	µg/L	ND (25)	ND (25)	ND (5.0)
Dimethyl phthalate	µg/L	ND (25)	ND (25)	ND (5.0)
Di-n-butylphthalate	µg/L	ND (25)	ND (25)	ND (5.0)
Di-n-octyl phthalate	µg/L	ND (25)	ND (25)	ND (5.0)
Fluoranthene	µg/L	ND (25)	ND (25)	ND (5.0)
Fluorene	µg/L	ND (25)	ND (25)	ND (5.0)
Hexachlorobenzene	µg/L	ND (25)	ND (25)	ND (5.0)
Hexachlorobutadiene	µg/L	ND (25)	ND (25)	ND (5.0)
Hexachlorocyclopentadiene	µg/L	ND (25)	ND (25)	ND (5.0)
Hexachloroethane	µg/L	ND (25)	ND (25)	ND (5.0)
Indeno(1,2,3-cd)pyrene	µg/L	ND (25)	ND (25)	ND (5.0)
Isophorone	µg/L	ND (25)	ND (25)	ND (5.0)
Naphthalene	µg/L	ND (25)	ND (25)	ND (5.0)

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:	MW-20B	MW-21B	MW-22B	MW-23B
Sample ID:	WG-7830-102618-BP-019	WG-7830-102618-BP-017	WG-7830-102518-BP-003	WG-7830-102518-BP-001
Sample Date:	10/26/2018	10/26/2018	10/25/2018	10/25/2018
Parameters	Units			
Semi-volatiles-Continued				
Nitrobenzene	µg/L	ND (25)	ND (25)	ND (5.0)
N-Nitrosodi-n-propylamine	µg/L	ND (25)	ND (25)	ND (5.0)
N-Nitrosodiphenylamine	µg/L	ND (25)	ND (25)	ND (5.0)
Pentachlorophenol	µg/L	ND (50)	ND (50)	ND (10)
Phenanthrene	µg/L	ND (25)	ND (25)	ND (5.0)
Phenol	µg/L	ND (25)	ND (25)	ND (5.0)
Pyrene	µg/L	ND (25)	ND (25)	ND (5.0)
TICs Semi-volatiles				
(Ethoxymethyl)-benzene A	µg/L	-	-	-
2-Ethyl-ethanoic acid A	µg/L	-	8.4 JN	-
2-Ethyl-hexanoic acid A	µg/L	-	-	-
4-(1,1,3,3-Tetramethylbutyl)-phenol A	µg/L	-	-	-
5-Chloroisatin A	µg/L	-	-	-
Aminopyrine A	µg/L	-	-	-
Antipyrine A	µg/L	-	-	-
Benzenamine,2,6-dimethyl- A	µg/L	-	-	-
Benzeneacetic acid A	µg/L	-	68 JN	-
Benzoic acid A	µg/L	-	9.4 JN	-
bis(2-Chloroethoxy)ethane A	µg/L	-	-	-
Chloroacetone A	µg/L	-	-	-
Chlorobenzene A	µg/L	-	-	-
Chloriodomethane A	µg/L	-	45 JN	-
Cyclobarbitol A	µg/L	-	-	-
Cyclohexane A	µg/L	130 JN	-	-
Cyclopentasiloxane, decamethyl- A	µg/L	-	-	-
Cyclotetrasiloxane, octamethyl- A	µg/L	-	-	1.7 JN
Diethoxymethane A	µg/L	-	-	-
Diethylcarbamic acid methyl ester A	µg/L	-	-	-
Diisopropylamine A	µg/L	-	700 JN	15 JN
Ethyl Acetate A	µg/L	-	-	-
Hexobarbital A	µg/L	-	-	-
Mephobarbital A	µg/L	-	-	-
Mepivacaine A	µg/L	-	-	-
Noramidopyrine A	µg/L	-	24 JN	-

Table 2

**Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018**

Sample Location:		MW-20B	MW-21B	MW-22B	MW-23B
Sample ID:		WG-7830-102618-BP-019	WG-7830-102618-BP-017	WG-7830-102518-BP-003	WG-7830-102518-BP-001
Sample Date:		10/26/2018	10/26/2018	10/25/2018	10/25/2018
Parameters	Units				
TICs Semi-volatiles-Continued					
Phenobarbital A	µg/L	-	11 JN	-	-
Phenobarbital di-methyl derivative A	µg/L	-	-	-	-
Pyrimidinetrione, 5-ethyl-1,3-dimethyl-5-phenyl- A	µg/L	-	-	-	-
Talbutal A	µg/L	-	33 JN	-	-
Tetrahydrofuran A	µg/L	-	-	-	-
Toluene A	µg/L	-	-	5.6 JN	6.1 JN
Triethylamine A	µg/L	-	22 JN	-	-
Unknown	µg/L	330 JN	530 JN	310 JN	310 JN

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:	MW-24B	MW-25	MW-26	PZ-2A
Sample ID:	WG-7830-102518-BP-002	WG-7830-102518-BP-011	WG-7830-102518-BP-012	WG-7830-102518-BP-010
Sample Date:	10/25/2018	10/25/2018	10/25/2018	10/25/2018
Parameters	Units			
Volatiles				
1,1,1-Trichloroethane	µg/L	ND (5.0)	ND (25)	ND (5.0)
1,1,2,2-Tetrachloroethane	µg/L	ND (5.0)	ND (25)	ND (5.0)
1,1,2-Trichloroethane	µg/L	ND (5.0)	ND (25)	ND (5.0)
1,1-Dichloroethane	µg/L	ND (5.0)	ND (25)	ND (5.0)
1,1-Dichloroethene	µg/L	ND (5.0)	ND (25)	ND (5.0)
1,2-Dichloroethane	µg/L	ND (5.0)	ND (25)	ND (5.0)
1,2-Dichloropropane	µg/L	ND (5.0)	ND (25)	ND (5.0)
2-Butanone (Methyl Ethyl Ketone)	µg/L	4.0 J	ND (50)	2.3 J
2-Hexanone	µg/L	ND (10)	ND (50)	ND (10)
2-Methylthiophene	µg/L	ND (10)	ND (50)	ND (10)
3-Methylthiophene	µg/L	ND (10)	ND (50)	ND (10)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	ND (10)	ND (50)	ND (10)
Acetone	µg/L	5.6 J	ND (50)	4.5 J
Benzene	µg/L	ND (1.0)	8.5	ND (1.0)
Bromodichloromethane	µg/L	ND (5.0)	ND (25)	ND (5.0)
Bromoform	µg/L	ND (5.0)	ND (25)	ND (5.0)
Bromomethane (Methyl Bromide)	µg/L	ND (10)	ND (50)	ND (10)
Carbon disulfide	µg/L	ND (5.0)	ND (25)	ND (5.0)
Carbon tetrachloride	µg/L	ND (5.0)	ND (25)	ND (5.0)
Chlorobenzene	µg/L	ND (5.0)	57	ND (5.0)
Chloroethane	µg/L	ND (10)	ND (50)	ND (10)
Chloroform (Trichloromethane)	µg/L	ND (5.0)	1.9 J	ND (5.0)
Chloromethane (Methyl Chloride)	µg/L	ND (10)	ND (50)	ND (10)
cis-1,2-Dichloroethene	µg/L	ND (5.0)	ND (25)	ND (5.0)
cis-1,3-Dichloropropene	µg/L	ND (5.0)	ND (25)	ND (5.0)
Dibromochloromethane	µg/L	ND (5.0)	ND (25)	ND (5.0)
Ethyl Ether	µg/L	ND (10)	20 J	120
Ethylbenzene	µg/L	ND (5.0)	ND (25)	ND (5.0)
m&p-Xylene	µg/L	ND (5.0)	ND (25)	ND (5.0)
Methylene chloride	µg/L	ND (5.0)	7.7 J	ND (5.0)
o-Xylene	µg/L	ND (5.0)	ND (25)	ND (5.0)
Styrene	µg/L	ND (5.0)	ND (25)	ND (5.0)
Tetrachloroethene	µg/L	ND (5.0)	ND (25)	ND (5.0)
Toluene	µg/L	ND (5.0)	ND (25)	ND (5.0)
trans-1,2-Dichloroethene	µg/L	ND (5.0)	ND (25)	ND (5.0)

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:		MW-24B	MW-25	MW-26	PZ-2A
Sample ID:		WG-7830-102518-BP-002	WG-7830-102518-BP-011	WG-7830-102518-BP-012	WG-7830-102518-BP-010
Sample Date:		10/25/2018	10/25/2018	10/25/2018	10/25/2018
Parameters	Units				
Volatiles-Continued					
trans-1,3-Dichloropropene	µg/L	ND (5.0)	ND (25)	ND (5.0)	ND (25)
Trichloroethene	µg/L	ND (5.0)	ND (25)	ND (5.0)	ND (25)
Vinyl chloride	µg/L	ND (10)	ND (50)	ND (10)	ND (50)
TICs Volatiles					
(Ethoxymethyl)-benzene A	µg/L	-	-	-	27 JN
Dichlorofluoromethane A	µg/L	-	-	-	-
Methanethiol A	µg/L	-	-	-	-
Tetrahydrofuran A	µg/L	-	-	-	930 JN
Unknown 1	µg/L	-	-	-	-
Semi-volatiles					
1,2,4-Trichlorobenzene	µg/L	ND (10)	ND (10)	ND (10)	ND (10)
1,2-Dichlorobenzene	µg/L	ND (10)	ND (10)	ND (10)	ND (10)
1,3-Dichlorobenzene	µg/L	ND (10)	ND (10)	ND (10)	ND (10)
1,4-Dichlorobenzene	µg/L	ND (10)	ND (10)	ND (10)	ND (10)
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
2,4,5-Trichlorophenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
2,4,6-Trichlorophenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
2,4-Dichlorophenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
2,4-Dimethylphenol	µg/L	ND (5.0)	0.72 J	ND (5.0)	ND (5.0)
2,4-Dinitrophenol	µg/L	ND (10)	ND (10)	ND (10)	ND (10)
2,4-Dinitrotoluene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
2,6-Dinitrotoluene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
2-Chloronaphthalene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
2-Chlorophenol	µg/L	ND (5.0)	1.3 J	ND (5.0)	ND (5.0)
2-Methylnaphthalene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
2-Methylphenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
2-Nitroaniline	µg/L	ND (10)	ND (10)	ND (10)	ND (10)
2-Nitrophenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
3,3'-Dichlorobenzidine	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
3-Nitroaniline	µg/L	ND (10)	ND (10)	ND (10)	ND (10)
4,6-Dinitro-2-methylphenol	µg/L	ND (10)	ND (10)	ND (10)	ND (10)
4-Bromophenyl phenyl ether	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
4-Chloro-3-methylphenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:	MW-24B	MW-25	MW-26	PZ-2A
Sample ID:	WG-7830-102518-BP-002	WG-7830-102518-BP-011	WG-7830-102518-BP-012	WG-7830-102518-BP-010
Sample Date:	10/25/2018	10/25/2018	10/25/2018	10/25/2018
Parameters	Units			
Semi-volatiles-Continued				
4-Chloroaniline	µg/L	ND (5.0)	1.1 J	ND (5.0)
4-Chlorophenyl phenyl ether	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
4-Methylphenol	µg/L	ND (10)	ND (10)	ND (10)
4-Nitroaniline	µg/L	ND (10)	ND (10)	ND (10)
4-Nitrophenol	µg/L	ND (10)	ND (10)	ND (10)
Acenaphthene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Acenaphthylene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Anthracene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Benzaldehyde	µg/L	ND (5.0)	0.73 J	0.71 J
Benzo(a)anthracene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Benzo(a)pyrene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Benzo(b)fluoranthene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Benzo(g,h,i)perylene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Benzo(k)fluoranthene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
bis(2-Chloroethoxy)methane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
bis(2-Chloroethyl)ether	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
bis(2-Ethylhexyl)phthalate	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Butyl benzylphthalate	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Carbazole	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Chrysene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Dibenz(a,h)anthracene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Dibenzofuran	µg/L	ND (10)	ND (10)	ND (10)
Diethyl phthalate	µg/L	ND (5.0)	ND (5.0)	1.3 J
Dimethyl phthalate	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Di-n-butylphthalate	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Di-n-octyl phthalate	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Fluoranthene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Fluorene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Hexachlorobenzene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Hexachlorobutadiene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Hexachlorocyclopentadiene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Hexachloroethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Indeno(1,2,3-cd)pyrene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Isophorone	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Naphthalene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:	MW-24B	MW-25	MW-26	PZ-2A
Sample ID:	WG-7830-102518-BP-002	WG-7830-102518-BP-011	WG-7830-102518-BP-012	WG-7830-102518-BP-010
Sample Date:	10/25/2018	10/25/2018	10/25/2018	10/25/2018
Parameters	Units			
Semi-volatiles-Continued				
Nitrobenzene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
N-Nitrosodi-n-propylamine	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
N-Nitrosodiphenylamine	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Pentachlorophenol	µg/L	ND (10)	ND (10)	ND (10)
Phenanthrene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Phenol	µg/L	ND (5.0)	1.0 J	ND (5.0)
Pyrene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
TICs Semi-volatiles				
(Ethoxymethyl)-benzene A	µg/L	-	-	25 JN
2-Ethyl-ethanoic acid A	µg/L	-	-	-
2-Ethyl-hexanoic acid A	µg/L	-	-	-
4-(1,1,3,3-Tetramethylbutyl)-phenol A	µg/L	-	-	-
5-Chloroisatin A	µg/L	-	45 JN	-
Aminopyrine A	µg/L	-	21 JN	-
Antipyrine A	µg/L	-	32 JN	-
Benzenamine,2,6-dimethyl- A	µg/L	-	-	-
Benzeneacetic acid A	µg/L	-	-	-
Benzoic acid A	µg/L	-	-	-
bis(2-Chloroethoxy)ethane A	µg/L	-	-	-
Chloroacetone A	µg/L	-	-	-
Chlorobenzene A	µg/L	-	58 JN	-
Chloriodomethane A	µg/L	1.9 JN	47 JN	81 JN
Cyclobarbitol A	µg/L	-	-	-
Cyclohexane A	µg/L	-	-	23 JN
Cyclopentasiloxane, decamethyl- A	µg/L	1.9 JN	-	-
Cyclotetrasiloxane, octamethyl- A	µg/L	1.8 JN	-	-
Diethoxymethane A	µg/L	-	24 JN	-
Diethylcarbamic acid methyl ester A	µg/L	-	-	-
Diisopropylamine A	µg/L	-	-	-
Ethyl Acetate A	µg/L	-	-	-
Hexobarbital A	µg/L	-	120 JN	30 JN
Mephobarbital A	µg/L	-	-	190 JN
Mepivacaine A	µg/L	-	76 JN	46 JN
Noramidopyrine A	µg/L	-	18 JN	-

Table 2

**Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018**

Sample Location:		MW-24B	MW-25	MW-26	PZ-2A
Sample ID:		WG-7830-102518-BP-002	WG-7830-102518-BP-011	WG-7830-102518-BP-012	WG-7830-102518-BP-010
Sample Date:		10/25/2018	10/25/2018	10/25/2018	10/25/2018
Parameters	Units				
TICs Semi-volatiles-Continued					
Phenobarbital A	µg/L	-	74 JN	1.6 JN	120 JN
Phenobarbital di-methyl derivative A	µg/L	-	-	-	-
Pyrimidinetrione, 5-ethyl-1,3-dimethyl-5-phenyl- A	µg/L	-	-	-	15 JN
Talbutal A	µg/L	-	57 JN	-	-
Tetrahydrofuran A	µg/L	-	-	-	800 JN
Toluene A	µg/L	5.4 JN	-	5.8 JN	-
Triethylamine A	µg/L	-	-	-	-
Unknown	µg/L	300 JN	550 JN	320 JN	540 JN

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:		SW-1	SW-2	SW-2
Sample ID:		SW-7830-110218-BP-013	SW-7830-110218-BP-014	SW-7830-110218-BP-023
Sample Date:		11/2/2018	11/2/2018	11/2/2018 Duplicate
Parameters	Units			
Volatiles				
1,1,1-Trichloroethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
1,1,2,2-Tetrachloroethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
1,1,2-Trichloroethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
1,1-Dichloroethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
1,1-Dichloroethene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
1,2-Dichloroethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
1,2-Dichloropropane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2-Butanone (Methyl Ethyl Ketone)	µg/L	ND (10)	ND (10)	ND (10)
2-Hexanone	µg/L	ND (10)	ND (10)	ND (10)
2-Methylthiophene	µg/L	-	-	-
3-Methylthiophene	µg/L	-	-	-
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/L	ND (10)	ND (10)	ND (10)
Acetone	µg/L	ND (10)	ND (10)	ND (10)
Benzene	µg/L	ND (1.0)	ND (1.0)	ND (1.0)
Bromodichloromethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Bromoform	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Bromomethane (Methyl Bromide)	µg/L	ND (10)	ND (10)	ND (10)
Carbon disulfide	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Carbon tetrachloride	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Chlorobenzene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Chloroethane	µg/L	ND (10)	ND (10)	ND (10)
Chloroform (Trichloromethane)	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Chloromethane (Methyl Chloride)	µg/L	ND (10)	ND (10)	ND (10)
cis-1,2-Dichloroethene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
cis-1,3-Dichloropropene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Dibromochloromethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Ethyl Ether	µg/L	ND (10)	ND (10)	ND (10)
Ethylbenzene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
m&p-Xylene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Methylene chloride	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
o-Xylene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Styrene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Tetrachloroethene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Toluene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
trans-1,2-Dichloroethene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:		SW-1	SW-2	SW-2
Sample ID:		SW-7830-110218-BP-013	SW-7830-110218-BP-014	SW-7830-110218-BP-023
Sample Date:		11/2/2018	11/2/2018	11/2/2018 Duplicate
Parameters	Units			
Volatiles-Continued				
trans-1,3-Dichloropropene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Trichloroethene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Vinyl chloride	µg/L	ND (10)	ND (10)	ND (10)
TICs Volatiles				
(Ethoxymethyl)-benzene A	µg/L	-	-	-
Dichlorofluoromethane A	µg/L	-	-	-
Methanethiol A	µg/L	-	-	-
Tetrahydrofuran A	µg/L	-	-	-
Unknown 1	µg/L	-	-	-
Semi-volatiles				
1,2,4-Trichlorobenzene	µg/L	ND (10)	ND (10)	ND (10)
1,2-Dichlorobenzene	µg/L	ND (10)	ND (10)	ND (10)
1,3-Dichlorobenzene	µg/L	ND (10)	ND (10)	ND (10)
1,4-Dichlorobenzene	µg/L	ND (10)	ND (10)	ND (10)
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2,4,5-Trichlorophenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2,4,6-Trichlorophenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2,4-Dichlorophenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2,4-Dimethylphenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2,4-Dinitrophenol	µg/L	ND (10)	ND (10)	ND (10)
2,4-Dinitrotoluene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2,6-Dinitrotoluene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2-Chloronaphthalene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2-Chlorophenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2-Methylnaphthalene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2-Methylphenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
2-Nitroaniline	µg/L	ND (10)	ND (10)	ND (10)
2-Nitrophenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
3,3'-Dichlorobenzidine	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
3-Nitroaniline	µg/L	ND (10)	ND (10)	ND (10)
4,6-Dinitro-2-methylphenol	µg/L	ND (10)	ND (10)	ND (10)
4-Bromophenyl phenyl ether	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
4-Chloro-3-methylphenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:		SW-1	SW-2	SW-2
Sample ID:		SW-7830-110218-BP-013	SW-7830-110218-BP-014	SW-7830-110218-BP-023
Sample Date:		11/2/2018	11/2/2018	11/2/2018
				Duplicate
Parameters	Units			
Semi-volatiles-Continued				
4-Chloroaniline	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
4-Chlorophenyl phenyl ether	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
4-Methylphenol	µg/L	ND (10)	ND (10)	ND (10)
4-Nitroaniline	µg/L	ND (10)	ND (10)	ND (10)
4-Nitrophenol	µg/L	ND (10)	ND (10)	ND (10)
Acenaphthene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Acenaphthylene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Anthracene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Benzaldehyde	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Benzo(a)anthracene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Benzo(a)pyrene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Benzo(b)fluoranthene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Benzo(g,h,i)perylene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Benzo(k)fluoranthene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
bis(2-Chloroethoxy)methane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
bis(2-Chloroethyl)ether	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
bis(2-Ethylhexyl)phthalate	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Butyl benzylphthalate	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Carbazole	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Chrysene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Dibenz(a,h)anthracene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Dibenzofuran	µg/L	ND (10)	ND (10)	ND (10)
Diethyl phthalate	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Dimethyl phthalate	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Di-n-butylphthalate	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Di-n-octyl phthalate	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Fluoranthene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Fluorene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Hexachlorobenzene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Hexachlorobutadiene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Hexachlorocyclopentadiene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Hexachloroethane	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Indeno(1,2,3-cd)pyrene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Isophorone	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Naphthalene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)

Table 2

Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Sample Location:		SW-1	SW-2	SW-2
Sample ID:		SW-7830-110218-BP-013	SW-7830-110218-BP-014	SW-7830-110218-BP-023
Sample Date:		11/2/2018	11/2/2018	11/2/2018 Duplicate
Parameters	Units			
Semi-volatiles-Continued				
Nitrobenzene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
N-Nitrosodi-n-propylamine	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
N-Nitrosodiphenylamine	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Pentachlorophenol	µg/L	ND (10)	ND (10)	ND (10)
Phenanthrene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Phenol	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
Pyrene	µg/L	ND (5.0)	ND (5.0)	ND (5.0)
TICs Semi-volatiles				
(Ethoxymethyl)-benzene A	µg/L	-	-	-
2-Ethyl-ethanoic acid A	µg/L	-	-	-
2-Ethyl-hexanoic acid A	µg/L	-	-	-
4-(1,1,3,3-Tetramethylbutyl)-phenol A	µg/L	-	-	-
5-Chloroisatin A	µg/L	-	-	-
Aminopyrine A	µg/L	-	-	-
Antipyrine A	µg/L	-	-	-
Benzenamine,2,6-dimethyl- A	µg/L	-	-	-
Benzeneacetic acid A	µg/L	-	-	-
Benzoic acid A	µg/L	-	-	-
bis(2-Chloroethoxy)ethane A	µg/L	-	-	-
Chloroacetone A	µg/L	-	-	-
Chlorobenzene A	µg/L	-	-	-
Chloriodomethane A	µg/L	-	-	-
Cyclobarbitol A	µg/L	-	-	-
Cyclohexane A	µg/L	-	-	-
Cyclopentasiloxane, decamethyl- A	µg/L	-	-	-
Cyclotetrasiloxane, octamethyl- A	µg/L	-	-	-
Diethoxymethane A	µg/L	-	-	-
Diethylcarbamic acid methyl ester A	µg/L	-	-	-
Diisopropylamine A	µg/L	-	-	-
Ethyl Acetate A	µg/L	-	-	-
Hexobarbital A	µg/L	-	-	-
Mephobarbital A	µg/L	-	-	-
Mepivacaine A	µg/L	-	-	-
Noramidopyrine A	µg/L	-	-	-

Table 2

**Analytical Results Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018**

Sample Location:		SW-1	SW-2	SW-2
Sample ID:		SW-7830-110218-BP-013	SW-7830-110218-BP-014	SW-7830-110218-BP-023
Sample Date:		11/2/2018	11/2/2018	11/2/2018 Duplicate
Parameters	Units			
TICs Semi-volatiles-Continued				
Phenobarbital A	µg/L	-	-	-
Phenobarbital di-methyl derivative A	µg/L	-	-	-
Pyrimidinetrione, 5-ethyl-1,3-dimethyl-5-phenyl- A	µg/L	-	-	-
Talbutal A	µg/L	-	-	-
Tetrahydrofuran A	µg/L	-	-	-
Toluene A	µg/L	-	-	-
Triethylamine A	µg/L	-	-	-
Unknown	µg/L	320 JN	340 JN	340 JN

Notes:

- J - Estimated concentration
- JN - Estimated Tentatively Identified Compounds (TICs)
- ND - Not detected at the associated reporting limit
- TICs - Tentatively Identified Compounds
- - Not applicable

Table 3

**Analytical Methods
Sample Collection and Analysis Summary
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018**

Parameter	Method	Matrix	Holding Time	
			Collection to Extraction (Days)	Collection or Extraction to Analysis (Days)
VOCs, SSPs, TICs	SW-846 8260B	Water	-	14
SVOCs, SSPs, TICs	SW-846 8260B	Water	7	40

Notes:

VOCs - Volatile Organic Compounds
 SVOCs - Semi-volatile Organic Compounds
 TICs - Tentatively Identified Compounds
 SSPs - Site-specific parameters
 - - Not applicable

Method Reference:

SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions

Table 4

Qualified Sample Results Due to Analyte Concentrations in the Method Blanks
Annual Groundwater Monitoring
Eastman Kodak Company Sterling Site #3
East Greenbush, New York
November 2018

Parameter	Analyte	Analysis Date (mm/dd/yyyy)	Blank Result *	Sample ID	Original Result	Qualified Result	Units
VOCs	Carbon disulfide	11/05/2018	0.199 J	WG-7830-102518-BP-001	0.22 J	5.0 U	µg/L
VOCs	Carbon disulfide	11/05/2018	0.201 J	WG-7830-102518-BP-015	0.28 J	5.0 U	µg/L
SVOCs	Phenol	11/06/2018	0.910 J	SW-7830-110218-BP-013	0.80 J	5.0 U	µg/L
				SW-7830-110218-BP-014	1.0 J	5.0 U	µg/L
				SW-7830-110218-BP-023	0.88 J	5.0 U	µg/L

Notes:

- * - Blank result adjusted for sample factors where applicable
- U - Not detected at the associated reporting limit
- J - Estimated concentration
- VOCs - Volatile Organic Compounds
- SVOCs - Semi-volatile Organic Compounds



Memorandum

December 6, 2018

To: Mike Okamoto

Ref. No.: 007830

From: Kathy Willy/adh/7

Tel: 716-205-1942

**Subject: Data Usability Summary Report
Emerging Contaminant Sampling
Sterling Site 3
East Greenbush, New York
September 2018**

1. Introduction

The following details the data usability and quality assessment and validation of the analytical data resulting from the collection of four groundwater samples at Sterling Site 3 in East Greenbush, New York. The sample summary detailing sample identification, sample location, quality control (QC) samples and analytical parameters is presented in Table 1. Samples were submitted to TestAmerica Laboratories, Inc. located in Amherst, New York and West Sacramento, California. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented in Table 3.

This Data Usability Summary Report (DUSR) has been prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation "DER-10, Technical Guidance for Site Investigation and Remediation, Appendix 2B-Guidance for Data Deliverables and the Development of Data Usability Summary Reports", (DER-10) May 2010.

2. Analytical Methodology and Data Validation

Evaluation of the data was based on information obtained from the finished data sheets, raw data, chain of custody forms, calibration data, blank data, recovery data from surrogate spikes/laboratory control samples (LCS)/matrix spike (MS) samples, and field quality assurance/quality control (QA/QC) samples. The assessment of analytical and in-house data included checks for: adherence to accuracy and precision criteria and transmittal errors.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and applicable guidance from the document entitled:

- i) "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," United States Environmental Protection Agency (USEPA) 540-R-2016-002, September 2016.

This item will subsequently be referred to as the "Guidelines" in this Memorandum.



Full Contract Laboratory Program (CLP) equivalent raw data deliverables were provided by the laboratory. The data quality assessment and validation presented in the following subsections were performed based on the sample results, supporting QA/QC, and all raw data provided.

3. QA/QC Review

Deliverables

The data package was complete as defined under the requirements for Analytical Services Protocol (ASP) Category B deliverables.

4. Sample Holding Time and Preservation

The sample holding time criteria for the analyses are summarized in Table 3. The sample chain of custody documents and analytical report were used to determine sample holding times. Most samples were analyzed within the required holding times. Due to excessive sediment and turbidity, a sufficient sample volume was unable to load on to the SPE column for the original extraction of sample WG-007830-092718-BP-001. The sample was then centrifuged and a smaller sample volume was utilized in the re-extraction, which was performed 5 days outside of the method required holding time. Only the results of the re-extraction are included in this DUSR. A summary of the qualified results is presented in Table 4.

All samples were properly preserved, delivered on ice, and stored by the laboratory at the required temperature (0-6°C).

5. Gas Chromatography/Mass Spectrometry (GC/MS) – Tuning and Mass Calibration (Instrument Performance Check) – 1,4-Dioxane

Prior to 1,4-dioxane analysis, GC/MS instrumentation is tuned to ensure optimization over the mass range of interest. To evaluate instrument tuning, the method requires the analysis of the specific tuning compound decfluorotriphenylphosphine (DFTPP). The resulting spectra must meet the criteria cited in the method before analysis is initiated. Analysis of the tuning compound must then be repeated every 12 hours throughout sample analysis to ensure the continued optimization of the instrument.

The tuning compound was analyzed at the required frequency throughout the 1,4-dioxane analysis periods. All tuning criteria were met, indicating that proper optimization of the instrumentation was achieved.

6. Liquid Chromatography/Mass Spectrometry – Mass Spectrometry (LC/MS-MS) – Tuning and Mass Calibration (Instrument Performance Check) – Perfluorinated Alkyl Acids (PFAS)

Prior to PFAS analysis, LC/MS-MS instrumentation is tuned initially to ensure optimization over the mass range of interest. Afterwards, the lowest level standard from the initial calibration curve is assessed to ensure



that a signal to noise ratio greater than 10 to 1 ($S/N > 10:1$) is achieved for each PFAS analyte. The resulting spectra must meet the criteria cited in the lab standard operating procedure before analysis to ensure the continued optimization of the instrument.

The tuning procedure was performed at the required frequency throughout the PFAS analysis periods. All tuning criteria were met, indicating that proper optimization of the instrumentation was achieved.

7. Initial Calibration – 1,4-Dioxane

To quantify 1,4-dioxane in samples, calibration of the GC/MS over a specific concentration range must be performed. Initially, a five-point calibration curve containing all compounds of interest is analyzed to characterize instrument response for each analyte over a specific concentration range. Linearity of the calibration curve and instrument sensitivity are evaluated against the following criteria:

- i) All relative response factors (RRFs) must be greater than or equal to 0.010.
- ii) The percent relative standard deviation (%RSD) value must not exceed 40.0 percent or a minimum correlation coefficient (R) and minimum coefficient of determination (R^2) of 0.99 if linear and quadratic equation calibration curves are used.

The initial calibration data for 1,4-dioxane was reviewed. The compound met the above criteria for sensitivity and linearity.

8. Initial Calibration - PFAS

To quantify PFAS in samples, calibration of the LC/MS-MS over a specific concentration range must be performed. Initially, a multi-point calibration curve containing all compounds of interest is analyzed to characterize instrument response for each analyte over a specific concentration range. Linearity of the calibration curve and instrument sensitivity are evaluated against the following criteria:

- i) The %RSD value must not exceed 35 percent for identically labeled compounds and 50 percent for closely labeled compounds or a minimum correlation coefficient (R) and minimum coefficient of determination (R^2) of 0.995 and 0.990, respectively if linear and quadratic equation calibration curves are used.

The initial calibration data for PFAS was reviewed. All compounds met the above criteria for sensitivity and linearity.

9. Continuing Calibration – 1,4-Dioxane

To ensure that instrument calibration for 1,4-dioxane analysis is acceptable throughout the sample analysis period, continuing calibration standards must be analyzed and compared to the initial calibration curve every 12 hours.



The following criteria were employed to evaluate continuing calibration data:

- i) All RRF values must be greater than or equal to 0.010.
- ii) Percent difference (%D) values must not exceed 40.0 percent.

Calibration standards were analyzed at the required frequency, and the results met the above criteria for instrument sensitivity and stability.

10. Continuing Calibration – PFAS

To ensure that instrument calibration for PFAS analyses is acceptable throughout the sample analysis period, continuing calibration standards must be analyzed and compared to the initial calibration curve at the beginning and end of every run sequence and after every ten samples.

The following criteria were employed to evaluate continuing calibration data:

- i) %D values must be within 60 percent-140 percent for all natives quantitated against and identically labeled analog.
- ii) %D values must be within 50 percent-150 percent for all natives quantitated against a closely related labeled analog.

Calibration standards were analyzed at the required frequency, and the results met the above criteria for instrument sensitivity and stability.

11. Laboratory Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

Most method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation. Low concentrations of two PFAS compounds were reported in the blanks. Associated samples with concentrations similar to that found in the method blanks were qualified as estimated. A summary of qualified results is presented in Table 5.

12. Surrogate Spike Recoveries

In accordance with the methods employed, all samples, blanks, and QC samples analyzed for organics are spiked with surrogate compounds prior to sample extraction and/or analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.



All samples submitted for 1,4-dioxane determinations were spiked with the appropriate number of surrogate compounds prior to sample extraction and analysis.

Surrogate recoveries were assessed against laboratory control limits. All surrogate recoveries met the laboratory criteria.

13. Isotope Dilution Analyte (IDA) Spike Recoveries

IDA data were evaluated for all PFAS sample analyses. IDAs are isotopically labeled analogs of the analytes of interest added to the investigative and QC samples at the time of extraction. All results are then calculated as a ratio of the IDA responses.

The IDA recovery results for each sample must be within 25-150 percent.

Most IDA recoveries met the above criteria. Some IDA recovery outliers were reported. Positive sample results associated with high IDA recoveries were qualified as estimated to reflect the implied high bias. Sample results associated with low IDA recoveries were qualified as estimated to reflect the indicated low bias. A summary of qualified results is presented in Table 6.

14. Internal Standards (IS) Analyses - 1,4-Dioxane

IS data were evaluated for all 1,4-dioxane and sample analyses.

To ensure that changes in the GC/MS sensitivity and response do not affect sample results, IS compounds are added to each 1,4-dioxane sample prior to analysis. All results are then calculated as a ratio of the IS responses.

The sample IS results were evaluated against the following criteria:

- i) The retention time of the IS must not vary more than ± 30 seconds from the associated calibration standard.
- ii) IS area counts must not vary by more than a factor of two (-50 percent to +100 percent) from the associated calibration standard.

All 1,4-dioxane IS recoveries and retention times met the above criteria.

15. Internal Standards Analyses - PFAS

IS quantitation is only used to quantitate the IDA recoveries. To assess matrix impact upon the quantitation of IDA recoveries, IS compounds are added to each sample prior to analysis. All results are then calculated as a ratio of the IS responses.

The sample IS results were evaluated against the following criteria:



- i) The IS response (peak area) must not deviate by more than 50 percent from the most recent calibration check standard.

All PFAS IS recoveries met the above criteria.

16. Laboratory Control Sample Analyses

LCS are prepared and analyzed as a sample to assess the analytical efficiencies of the method employed independent of sample matrix effects. Some LCS were prepared in duplicate. The relative percent difference (RPD) of the LCS/LCSD recoveries is used to evaluate analytical precision.

For this study, LCS or LCS/LCSD were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

The LCS contained all compounds of interest. All LCS recoveries and RPDs were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision.

17. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

To evaluate the effects of sample matrices on the preparation process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS/MSD samples. The RPD between the MS and MSD is used to assess analytical precision.

MS/MSD analyses were performed as specified in Table 1.

The MS/MSD samples were spiked with all compounds of interest. All percent recoveries and RPD values were within the laboratory control limits, demonstrating acceptable accuracy and precision.

18. Field QA/QC Samples

The field QA/QC consisted of one rinse blank sample, one field blank sample, and one field duplicate sample set.

Rinse/Field Blank Sample Analysis

To assess field decontamination procedures, ambient conditions at the site, and cleanliness of sample containers, a rinse blank and a field blank were submitted for analysis, as identified in Table 1. Most results were non-detect for the analytes of interest. Low concentrations of some PFAS were reported in both the field blank and rinse blank. Some sample results were previously qualified as non-detect due to method blank contamination, and no additional qualification of the data was required. Associated sample results with concentrations similar to that found in the blanks that were not previously qualified were qualified as non-detect based on the potential outside contamination. A summary of qualified results is presented in Table 7.



Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, one field duplicate sample was collected and submitted "blind" to the laboratory, as specified in Table 1. The RPD associated with the duplicate sample must be less than 50 percent for water samples. If the reported concentration in either the investigative sample or its duplicate is less than five times the reporting limit (RL), the evaluation criterion is one times the RL value for water samples.

All field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision.

19. Analyte Reporting

The laboratory reported detected results down to the laboratory's method detection limits (MDL) for each analyte. Positive analyte detections less than the RL but greater than the MDL were qualified as estimated (J) in Table 2 unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the RL in Table 2.

20. Target Compound Identification

To minimize erroneous compound identification during organic analyses, qualitative criteria including compound retention time and mass spectra were evaluated according to the identification criteria established by the methods. The organic compounds reported adhered to the specified identification criteria.

21. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2 are acceptable with the specific qualifications noted herein.

Table 1

**Sample Collection and Analysis Summary
Emerging Contaminant Sampling
Sterling Site 3
East Greenbush, New York
September 2018**

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	<u>Analysis/Parameters</u>		Comments
					PFAS	1,4-Dioxane	
WG-007830-092718-BP-001	MW-4B	Water	09/27/2018	09:00	x	x	Matrix Spike/Matrix Spike Duplicate
WG-007830-092718-BP-002	MW-21B	Water	09/27/2018	11:00	x	x	
WG-007830-092718-BP-003	PZ-2A	Water	09/27/2018	12:30	x	x	
EB-007830-092718-BP-004	-	Water	09/27/2018	13:00	x	x	Equipment Blank Field Blank
FB-007830-092718-BP-005	-	Water	09/27/2018	12:35	x	x	
WG-007830-092718-BP-006	MW-17B	Water	09/27/2018	14:00	x	x	Field duplicate of sample WG-007830-092718-BP-006
WG-007830-092718-BP-007	MW-17B	Water	09/27/2018	14:05	x	x	

Notes:

PFAS - Perfluorinated Alkyl Acids

- - Not applicable

Table 2

**Analytical Results Summary
Emerging Contaminant Sampling
Sterling Site 3
East Greenbush, New York
September 2018**

Sample Location:		MW-4B	MW-17B	MW-17B
Sample ID:		WG-007830-092718-BP-001	WG-007830-092718-BP-006	WG-007830-092718-BP-007
Sample Date:		9/27/2018	9/27/2018	9/27/2018 Duplicate
Parameters	Units			
Semi-volatiles Organic Compounds (SVOCs)				
1,4-Dioxane	µg/L	ND (0.20)	6.5	6.4
Perfluorinated Alkyl Acids (PFAS)				
Fluorotelomer sulfonic acid(8:2)	ng/L	ND (100) J	ND (17)	ND (18)
N-Ethyl perfluorooctane sulfonamidoacetic acid	ng/L	ND (100) J	ND (17)	ND (18)
N-Methyl perfluorooctane sulfonamido acetic acid	ng/L	ND (100) J	ND (17)	ND (18)
Perfluorobutane sulfonic acid (PFBS)	ng/L	ND (10) J	0.41 J	0.48 J
Perfluorobutanoic acid (PFBA)	ng/L	ND (10) J	58	41
Perfluorodecanesulfonic acid (PFDS)	ng/L	ND (10) J	ND (1.7)	ND (1.8)
Perfluorodecanoic acid (PFDA)	ng/L	ND (10) J	ND (1.7)	ND (1.8)
Perfluorododecanoic acid (PFDoDA)	ng/L	ND (10) J	ND (1.7)	ND (1.8)
Perfluoroheptane sulfonic acid (PFHpS)	ng/L	ND (10) J	ND (1.7)	ND (1.8)
Perfluoroheptanoic acid (PFHpA)	ng/L	3.7 J	1.9	1.6 J
Perfluorohexane sulfonic acid (PFHxS)	ng/L	ND (10) J	ND (1.7)	ND (1.8)
Perfluorohexanoic acid (PFHxA)	ng/L	34 J	2.4	2.7
Perfluorononanoic acid (PFNA)	ng/L	ND (10) J	ND (1.7)	ND (1.8)
Perfluorooctane sulfonamide (FOSA)	ng/L	ND (10) J	0.57 J	ND (1.8)
Perfluorooctane sulfonic acid (PFOS)	ng/L	ND (10) J	0.88 J	0.96 J
Perfluorooctanoic acid (PFOA)	ng/L	4.8 J	6.3	5.9
Perfluoropentanoic acid (PFPeA)	ng/L	4.1 J	ND (1.7)	3.0
Perfluorotetradecanoic acid (PFTeDA)	ng/L	ND (10) J	0.35 J	ND (1.8)
Perfluorotridecanoic acid (PFTTrDA)	ng/L	ND (10) J	ND (1.7)	ND (1.8)
Perfluoroundecanoic acid (PFUnA)	ng/L	ND (10) J	ND (1.7)	ND (1.8)
Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	ng/L	ND (100) J	ND (17)	ND (18)

Table 2

**Analytical Results Summary
Emerging Contaminant Sampling
Sterling Site 3
East Greenbush, New York
September 2018**

Sample Location:		MW-21B	PZ-2A
Sample ID:		WG-007830-092718-BP-002	WG-007830-092718-BP-003
Sample Date:		9/27/2018	9/27/2018
Parameters	Units		
Semi-volatiles Organic Compounds (SVOCs)			
1,4-Dioxane	µg/L	7.4	2.4
Perfluorinated Alkyl Acids (PFAS)			
Fluorotelomer sulfonic acid(8:2)	ng/L	ND (18)	ND (19)
N-Ethyl perfluorooctane sulfonamidoacetic acid	ng/L	ND (18)	ND (19)
N-Methyl perfluorooctane sulfonamido acetic acid	ng/L	ND (18)	ND (19)
Perfluorobutane sulfonic acid (PFBS)	ng/L	ND (1.8)	0.28 J
Perfluorobutanoic acid (PFBA)	ng/L	150 J	29 J
Perfluorodecanesulfonic acid (PFDS)	ng/L	ND (1.8)	ND (1.9)
Perfluorodecanoic acid (PFDA)	ng/L	ND (1.8)	ND (1.9) J
Perfluorododecanoic acid (PFDoDA)	ng/L	ND (1.8)	ND (1.9)
Perfluoroheptane sulfonic acid (PFHpS)	ng/L	ND (1.8)	ND (1.9)
Perfluoroheptanoic acid (PFHpA)	ng/L	3.3	1.8 J
Perfluorohexane sulfonic acid (PFHxS)	ng/L	ND (1.8)	ND (1.9)
Perfluorohexanoic acid (PFHxA)	ng/L	4.9	2.3
Perfluorononanoic acid (PFNA)	ng/L	3.1	ND (1.9)
Perfluorooctane sulfonamide (FOSA)	ng/L	ND (1.8)	ND (1.9)
Perfluorooctane sulfonic acid (PFOS)	ng/L	3.0	0.67 J
Perfluorooctanoic acid (PFOA)	ng/L	12	5.7
Perfluoropentanoic acid (PFPeA)	ng/L	ND (1.8)	4.7
Perfluorotetradecanoic acid (PFTeDA)	ng/L	ND (1.8)	ND (1.9)
Perfluorotridecanoic acid (PFTTrDA)	ng/L	ND (1.8)	ND (1.9)
Perfluoroundecanoic acid (PFUnA)	ng/L	ND (1.8)	ND (1.9)
Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	ng/L	7.2 J	3.2 J

Notes:

- J - Estimated concentration
ND - Not detected at the associated reporting limit

Table 3
Analytical Methods
Emerging Contaminant Sampling
Sterling Site 2
East Greenbush, New York
September 2018

Parameter	Method	Matrix	Holding Time	
			Collection to Extraction (Days)	Collection or Extraction to Analysis (Days)
1,4-Dioxane	SW-846 8270B SIM	Water	7	40
PFAS	EPA 537 (Modified)	Water	14	28

Notes:

PFAS - Perfluorinated Alkyl Acids

Method References:

SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions

EPA 537 - Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS), September 2009

Table 4

**Qualified Sample Results Due to Holding Time Exceedance
Emerging Contaminant Sampling
Sterling Site 2
East Greenbush, New York
September 2018**

Parameter	Sample ID	Holding Time (days)	Holding Time Criteria (days)	Analyte	Qualified Sample Results	Units
PFAS	WG-007830-092718-BP-001	19	14	Perfluorooctane sulfonic acid (PFOS)	ND (10) J	ng/L
				Perfluoroundecanoic acid (PFUnA)	ND (10) J	ng/L
				N-Methyl perfluorooctane sulfonamido acetic acid	ND (100) J	ng/L
				Perfluoropentanoic acid (PFPeA)	4.1 J	ng/L
				Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	ND (100) J	ng/L
				N-Ethyl perfluorooctane sulfonamidoacetic acid	ND (100) J	ng/L
				Perfluorohexanoic acid (PFHxA)	34 J	ng/L
				Perfluorododecanoic acid (PFDoDA)	ND (10) J	ng/L
				Perfluorooctanoic acid (PFOA)	4.8 J	ng/L
				Perfluorodecanoic acid (PFDA)	ND (10) J	ng/L
				Perfluorodecanesulfonic acid (PFDS)	ND (10) J	ng/L
				Perfluorohexane sulfonic acid (PFHxS)	ND (10) J	ng/L
				Perfluorobutanoic acid (PFBA)	ND (10) J	ng/L
				Perfluorobutane sulfonic acid (PFBS)	ND (10) J	ng/L
				Perfluoroheptanoic acid (PFHpA)	3.7 J	ng/L
				Perfluoroheptane sulfonic acid (PFHpS)	ND (10) J	ng/L
				Perfluorononanoic acid (PFNA)	ND (10) J	ng/L
				Perfluorotetradecanoic acid (PFTeDA)	ND (10) J	ng/L
				Fluorotelomer sulfonic acid(8:2)	ND (100) J	ng/L
				Perfluorotridecanoic acid (PFTrDA)	ND (10) J	ng/L
				Perfluorooctane sulfonamide (FOSA)	ND (10) J	ng/L

Notes:

- J - Estimated concentration
 ND - Not detected at the associated reporting limit
 PFAS - Perfluorinated Alkyl Acids

Table 5

**Qualified Sample Results Due to Analyte Concentrations in the Method Blanks
Emerging Contaminant Sampling
Sterling Site 2
East Greenbush, New York
September 2018**

Parameter	Analyte	Analysis Date (mm/dd/yyyy)	Blank Result *	Sample ID	Original Result	Qualified Result	Units
PFAS	Perfluorohexane sulfonic acid (PFHxS)	10/10/2001	0.286 J	WG-007830-092718-BP-003	0.52 J	ND (1.9)	ng/L
				WG-007830-092718-BP-006	0.43 J	ND (1.7)	ng/L
				WG-007830-092718-BP-007	0.55 J	ND (1.8)	ng/L
PFAS	Perfluorohexane sulfonic acid (PFHxS)	10/16/2001	0.447 J	WG-007830-092718-BP-001	1.4 J	ND (10)	ng/L
PFAS	Perfluorobutanoic acid (PFBA)	10/16/2001	0.457 J	WG-007830-092718-BP-001	5.7 J	ND (10)	ng/L

Notes:

- * - Blank result adjusted for sample factors where applicable
- ND - Not detected at the associated reporting limit
- J - Estimated concentration
- PFAS - Perfluorinated Alkyl Acids

Table 6

Qualified Sample Data Due to Outlying of Isotope Dilution Analyte Recoveries
Emerging Contaminant Sampling
Sterling Site 2
East Greenbush, New York
September 2018

Parameter	Sample ID	Surrogate	IDA % Recovery	Control Limits % Recovery	Analyte	Qualified Result	Units
PFAS	WG-007830-092718-BP-002	Perfluoro-n-[1,2,3,4-13C4]butanoic acid (13C4-PFBA)	16	25 - 150	Perfluorobutanoic acid (PFBA)	150 J	ng/L
PFAS	WG-007830-092718-BP-002	Sodium 1H,1H,2H,2H-perfluoro-[1,2-13C2]octane sulfonate (M2-6:2FTS)	284	25 - 150	Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	7.2 J	ng/L
PFAS	WG-007830-092718-BP-003	Sodium 1H,1H,2H,2H-perfluoro-[1,2-13C2]octane sulfonate (M2-6:2FTS)	218	25 - 150	Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	3.2 J	ng/L
PFAS	WG-007830-092718-BP-003	Perfluoro-n-[1,2,3,4-13C4]butanoic acid (13C4-PFBA)	21	25 - 150	Perfluorobutanoic acid (PFBA)	29 J	ng/L

Notes:

- J - Estimated concentration
- PFAS - Perfluorinated Alkyl Acids
- IDA - Isotope Dilution Analyte

Table 7

Qualified Sample Data Due to Analyte Concentrations in the Rinse Blanks
Emerging Contaminant Sampling
Sterling Site 2
East Greenbush, New York
September 2018

Parameter	Rinse Blank ID	Blank Date (dd/mm/yyyy)	Analyte	Blank Result	Associated Sample ID	Original Result	Qualified Result	Units
PFAS	EB-007830-092718-BP-004	09/27/2018	Perfluorodecanoic acid (PFDA)	0.65 J	WG-007830-092718-BP-003	0.40 J	ND (1.9)	ng/L
PFAS	EB-007830-092718-BP-004	09/27/2018	Perfluorononanoic acid (PFNA)	0.42 J	WG-007830-092718-BP-003 WG-007830-092718-BP-006	0.56 J 0.61 J	ND (1.9) ND (1.7)	ng/L ng/L

Notes:

J - Estimated concentration
 ND - Not detected at the associated reporting limit
 PFAS - Perfluorinated Alkyl Acids

Appendix E

Analytical Summary Tables

Table E.1

Summary of GW Analytical Results - Biennial Monitoring Wells - October 2018
Sterling Drug Site 3
East Greenbush, New York

Sample Location:		MW-4B	MW-7B	MW-8B	MW-10B	MW-11B	MW-14B	MW-20B	MW-22BR	MW-23B	MW-24B
Sample ID:		WG-7830-102618-BP-022	WG-7830-102618-BP-020	WG-7830-102618-BP-021	WG-7830-102518-BP-008	WG-7830-102518-BP-015	WG-7830-102518-BP-016	WG-7830-102618-BP-019	WG-7830-102518-BP-003	WG-7830-102518-BP-001	WG-7830-102518-BP-002
Sample Date:		10/26/2018	10/26/2018	10/26/2018	10/25/2018	10/25/2018	10/25/2018	10/26/2018	10/25/2018	10/25/2018	10/25/2018
		Upgradient	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter
Parameters											
Units											
Volatile Organic Compounds											
1,1,1-Trichloroethane	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
1,1,2,2-Tetrachloroethane	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
1,1,2-Trichloroethane	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
1,1-Dichloroethane	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
1,1-Dichloroethene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
1,2-Dichloroethane	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
1,2-Dichloropropane	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
2-Butanone (Methyl Ethyl Ketone)	mg/L	0.0017 J	ND (0.01)	ND (0.01)	0.0041 J	0.0029 J	0.0016 J	0.005 J	0.0046 J	0.0035 J	0.004 J
2-Hexanone	mg/L	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.02)	ND (0.01)	ND (0.01)	ND (0.01)
2-Methylthiophene	mg/L	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.02)	ND (0.01)	ND (0.01)	ND (0.01)
3-Methylthiophene	mg/L	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.02)	ND (0.01)	ND (0.01)	ND (0.01)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.02)	ND (0.01)	ND (0.01)	ND (0.01)
Acetone	mg/L	0.0042 J	ND (0.01)	ND (0.01)	0.0064 J	0.0046 J	0.0033 J	0.009 J	0.0054 J	0.005 J	0.0056 J
Benzene	mg/L	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.002)	ND (0.001)	ND (0.001)	ND (0.001)
Bromodichloromethane	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
Bromoform	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
Bromomethane (Methyl Bromide)	mg/L	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.02)	ND (0.01)	ND (0.01)	ND (0.01)
Carbon disulfide	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005) U	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005) U	ND (0.005)
Carbon tetrachloride	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
Chlorobenzene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
Chloroethane	mg/L	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.02)	ND (0.01)	ND (0.01)	ND (0.01)
Chloroform (Trichloromethane)	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
Chloromethane (Methyl Chloride)	mg/L	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.02)	ND (0.01)	ND (0.01)	ND (0.01)
cis-1,2-Dichloroethene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
cis-1,3-Dichloropropene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
Dibromochloromethane	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
Ethyl Ether	mg/L	ND (0.01)	ND (0.01)	0.028	0.0046 J	ND (0.01)	0.0013 J	ND (0.02)	ND (0.01)	ND (0.01)	ND (0.01)
Ethylbenzene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
m&p-Xylene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
Methylene chloride	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
o-Xylene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
Styrene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
Tetrachloroethene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
Toluene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
trans-1,2-Dichloroethene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
trans-1,3-Dichloropropene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
Trichloroethene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.01)	ND (0.005)	ND (0.005)	ND (0.005)
Vinyl chloride	mg/L	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.02)	ND (0.01)	ND (0.01)	ND (0.01)
TIC Volatile Organic Compounds											
(Ethoxymethyl)-benzene A	mg/L	-	-	-	-	-	-	-	-	-	-
Dichlorofluoromethane A	mg/L	-	-	-	-	-	-	-	-	-	-
Methanethiol A	mg/L	0.0035 JN	-	-	-	-	-	-	-	-	-
Tetrahydrofuran A	mg/L	-	-	-	-	-	-	-	-	-	-
Unknown 1	mg/L	-	-	-	-	-	-	-	-	-	-

Table E.1

Summary of GW Analytical Results - Biennial Monitoring Wells - October 2018
Sterling Drug Site 3
East Greenbush, New York

Sample Location:		MW-4B	MW-7B	MW-8B	MW-10B	MW-11B	MW-14B	MW-20B	MW-22BR	MW-23B	MW-24B
Sample ID:		WG-7830-102618-BP-022	WG-7830-102618-BP-020	WG-7830-102618-BP-021	WG-7830-102518-BP-008	WG-7830-102518-BP-015	WG-7830-102518-BP-016	WG-7830-102618-BP-019	WG-7830-102518-BP-003	WG-7830-102518-BP-001	WG-7830-102518-BP-002
Sample Date:		10/26/2018	10/26/2018	10/26/2018	10/25/2018	10/25/2018	10/25/2018	10/26/2018	10/25/2018	10/25/2018	10/25/2018
		Upgradient	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter
Parameters	Units										
Semi-Volatile Organic Compounds											
1,2,4-Trichlorobenzene	mg/L	ND (0.05)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
1,2-Dichlorobenzene	mg/L	ND (0.05)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
1,3-Dichlorobenzene	mg/L	ND (0.05)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
1,4-Dichlorobenzene	mg/L	ND (0.05)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2,4,5-Trichlorophenol	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2,4,6-Trichlorophenol	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2,4-Dichlorophenol	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2,4-Dimethylphenol	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2,4-Dinitrophenol	mg/L	ND (0.05)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
2,4-Dinitrotoluene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2,6-Dinitrotoluene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2-Chloronaphthalene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2-Chlorophenol	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2-Methylnaphthalene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2-Methylphenol	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2-Nitroaniline	mg/L	ND (0.05)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
2-Nitrophenol	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
3,3'-Dichlorobenzidine	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
3-Nitroaniline	mg/L	ND (0.05)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
4,6-Dinitro-2-methylphenol	mg/L	ND (0.05)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
4-Bromophenyl phenyl ether	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
4-Chloro-3-methylphenol	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
4-Chloroaniline	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
4-Chlorophenyl phenyl ether	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
4-Methylphenol	mg/L	ND (0.05)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
4-Nitroaniline	mg/L	ND (0.05)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
4-Nitrophenol	mg/L	ND (0.05)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
Acenaphthene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Acenaphthylene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Anthracene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Benzaldehyde	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Benzo(a)anthracene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Benzo(a)pyrene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Benzo(b)fluoranthene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Benzo(g,h,i)perylene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Benzo(k)fluoranthene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
bis(2-Chloroethoxy)methane	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
bis(2-Chloroethyl)ether	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
bis(2-Ethylhexyl)phthalate	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Butyl benzylphthalate	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Carbazole	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Chrysene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Dibenz(a,h)anthracene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Dibenzofuran	mg/L	ND (0.05)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
Diethyl phthalate	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Dimethyl phthalate	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Di-n-butylphthalate	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Di-n-octyl phthalate	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Fluoranthene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Fluorene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Hexachlorobenzene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Hexachlorobutadiene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Hexachlorocyclopentadiene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Hexachloroethane	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Indeno(1,2,3-cd)pyrene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Isophorone	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Naphthalene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Nitrobenzene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
N-Nitrosodi-n-propylamine	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
N-Nitrosodiphenylamine	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Pentachlorophenol	mg/L	ND (0.05)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
Phenanthrene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Phenol	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Pyrene	mg/L	ND (0.025)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)

Table E.1

Summary of GW Analytical Results - Biennial Monitoring Wells - October 2018
Sterling Drug Site 3
East Greenbush, New York

Sample Location:	MW-4B	MW-7B	MW-8B	MW-10B	MW-11B	MW-14B	MW-20B	MW-22BR	MW-23B	MW-24B
Sample ID:	WG-7830-102618-BP-022	WG-7830-102618-BP-020	WG-7830-102618-BP-021	WG-7830-102518-BP-008	WG-7830-102518-BP-015	WG-7830-102518-BP-016	WG-7830-102618-BP-019	WG-7830-102518-BP-003	WG-7830-102518-BP-001	WG-7830-102518-BP-002
Sample Date:	10/26/2018	10/26/2018	10/26/2018	10/25/2018	10/25/2018	10/25/2018	10/26/2018	10/25/2018	10/25/2018	10/25/2018
	Upgradient	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter
Parameters	Units									
TIC Semi-Volatile Organic Compounds										
(Ethoxymethyl)-benzene A	mg/L	-	-	-	-	-	-	-	-	-
2-Ethyl-ethanoic acid A	mg/L	-	-	-	-	-	-	-	-	-
2-Ethyl-hexanoic acid A	mg/L	-	-	-	0.0023 JN	-	-	-	-	-
4-(1,1,3,3-Tetramethylbutyl)-phenol A	mg/L	-	-	-	-	-	-	-	-	-
5-Chloroisatin A	mg/L	-	-	-	-	-	-	-	-	-
Aminopyrine A	mg/L	-	-	-	-	-	-	-	-	-
Antipyrine A	mg/L	-	-	-	-	-	-	-	-	-
Benzenamine,2,6-dimethyl- A	mg/L	-	-	-	-	-	-	-	-	-
Benzenecetic acid A	mg/L	-	-	-	-	-	-	-	-	-
Benzoic acid A	mg/L	-	-	-	-	-	-	-	-	-
bis(2-Chloroethoxy)ethane A	mg/L	-	-	-	-	-	-	-	-	-
Chloroacetone A	mg/L	-	-	-	-	-	-	-	-	-
Chlorobenzene A	mg/L	-	-	-	-	-	-	-	-	-
Chloriodomethane A	mg/L	-	0.037 JN	0.0063 JN	0.0046 JN	-	0.012 JN	-	-	0.0019 JN
Cyclobarbitol A	mg/L	-	-	-	-	-	-	-	-	-
Cyclohexane A	mg/L	0.13 JN	0.24 JN	-	0.012 JN	0.091 JN	0.0057 JN	0.13 JN	-	-
Cyclopentasiloxane, decamethyl- A	mg/L	-	-	0.0019 JN	0.0017 JN	-	0.002 JN	-	-	0.0019 JN
Cyclotetrasiloxane, octamethyl- A	mg/L	-	-	-	0.0018 JN	-	-	0.0017 JN	-	0.0018 JN
Diethoxymethane A	mg/L	-	-	-	-	-	-	-	-	-
Diethylcarbamic acid methyl ester A	mg/L	-	-	-	-	-	-	-	-	-
Diisopropylamine A	mg/L	-	1.7 JN	0.47 JN	-	-	-	0.015 JN	-	-
Ethyl Acetate A	mg/L	-	-	-	-	-	0.0033 JN	-	-	-
Hexobarbital A	mg/L	-	-	0.0045 JN	-	-	-	-	-	-
Mephobarbital A	mg/L	-	0.017 JN	0.013 JN	-	-	-	-	-	-
Mepivacaine A	mg/L	-	-	-	-	-	-	-	-	-
Noramidopyrine A	mg/L	-	-	-	-	-	-	-	-	-
Phenobarbital A	mg/L	-	0.028 JN	0.015 JN	-	-	-	-	-	-
Phenobarbital di-methyl derivative A	mg/L	-	-	0.0018 JN	-	-	-	-	-	-
Pyrimidinetrione, 5-ethyl-1,3-dimethyl-5-phenyl- A	mg/L	-	-	-	-	-	-	-	-	-
Talbutal A	mg/L	-	0.024 JN	0.011 JN	-	-	-	-	-	-
Tetrahydrofuran A	mg/L	-	-	-	-	-	0.0043 JN	-	-	-
Toluene A	mg/L	-	-	0.0067 JN	0.0057 JN	-	0.0073 JN	-	0.0056 JN	0.0061 JN
Triethylamine A	mg/L	-	-	0.0051 JN	-	-	-	-	0.0061 JN	0.0054 JN
Unknown 1	mg/L	0.0092 JN	0.38 JN	0.0024 JN	0.0021 JN	0.0098 JN	0.0028 JN	0.0084 JN	0.002 JN	0.0024 JN
Unknown 2	mg/L	0.33 JN	0.044 JN	0.0033 JN	0.0036 JN	0.31 JN	0.041 JN	0.29 JN	0.0027 JN	0.0034 JN
Unknown 3	mg/L	0.043 JN	-	0.045 JN	0.0024 JN	0.026 JN	0.0017 JN	0.036 JN	0.01 JN	0.033 JN
Unknown 4	mg/L	-	-	0.014 JN	0.037 JN	-	0.016 JN	-	0.25 JN	0.25 JN
Unknown 5	mg/L	-	-	0.0067 JN	0.0028 JN	-	0.31 JN	-	0.0019 JN	0.002 JN
Unknown 6	mg/L	-	-	0.0039 JN	0.0019 JN	-	0.0016 JN	-	0.0044 JN	0.005 JN
Unknown 7	mg/L	-	-	0.26 JN	0.003 JN	-	0.0058 JN	-	0.0028 JN	0.0028 JN
Unknown 8	mg/L	-	-	0.0021 JN	0.011 JN	-	0.0033 JN	-	0.038 JN	0.036 JN
Unknown 9	mg/L	-	-	0.0055 JN	0.01 JN	-	-	-	-	-
Unknown 10	mg/L	-	-	0.0023 JN	0.28 JN	-	-	-	-	-
Unknown 11	mg/L	-	-	-	0.0033 JN	-	-	-	-	-
Unknown 12	mg/L	-	-	-	0.0044 JN	-	-	-	-	-
Unknown 13	mg/L	-	-	-	-	-	-	-	-	-

Notes:

J	Estimated concentration.
JN	Estimated TIC.
ND	Not detected at the associated reporting limit.
U	Not detected at the associated reporting limit.
-	Not applicable.

Table E.1

Summary of GW Analytical Results - Biennial Monitoring Wells - October 2018
Sterling Drug Site 3
East Greenbush, New York

Sample Location:		MW-2S	MW-3SR2	MW-12B	MW-16B	MW-17B	MW-19B	MW-21B	PZ-2A	MW-25	MW-26
Sample ID:		WG-7830-102518-BP-005	WG-7830-102518-BP-009	WG-7830-102618-BP-018	WG-7830-102518-BP-006	WG-7830-102518-BP-007	WG-7830-102518-BP-004	WG-7830-102618-BP-017	WG-7830-102518-BP-010	WG-7830-102518-BP-011	WG-7830-102518-BP-012
Sample Date:		10/25/2018	10/25/2018	10/26/2018	10/25/2018	10/25/2018	10/25/2018	10/26/2018	10/25/2018	10/25/2018	10/25/2018
		Plume	Plume	Plume	Plume	Plume	Plume	Plume	Landfill	Shallow	Shallow
Parameters	Units										
Volatile Organic Compounds											
1,1,1-Trichloroethane	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
1,1,2,2-Tetrachloroethane	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
1,1,2-Trichloroethane	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
1,1-Dichloroethane	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
1,1-Dichloroethene	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
1,2-Dichloroethane	mg/L	ND (0.02)	0.0009 J	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
1,2-Dichloropropane	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
2-Butanone (Methyl Ethyl Ketone)	mg/L	ND (0.04)	ND (0.02)	ND (0.2)	0.0036 J	0.0024 J	0.0064 J	ND (0.04)	ND (0.05)	ND (0.05)	0.0023 J
2-Hexanone	mg/L	ND (0.04)	ND (0.02)	ND (0.2)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.04)	ND (0.05)	ND (0.05)	ND (0.01)
2-Methylthiophene	mg/L	ND (0.04)	ND (0.02)	ND (0.2)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.04)	ND (0.05)	ND (0.05)	ND (0.01)
3-Methylthiophene	mg/L	ND (0.04)	ND (0.02)	ND (0.2)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.04)	ND (0.05)	ND (0.05)	ND (0.01)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ND (0.04)	ND (0.02)	ND (0.2)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.04)	ND (0.05)	ND (0.05)	ND (0.01)
Acetone	mg/L	ND (0.04)	ND (0.02)	ND (0.2)	0.0038 J	ND (0.01)	0.0063 J	ND (0.04)	ND (0.05)	ND (0.05)	0.0045 J
Benzene	mg/L	ND (0.004)	ND (0.002)	ND (0.02)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.004)	0.014	0.0085	ND (0.001)
Bromodichloromethane	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
Bromoform	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
Bromomethane (Methyl Bromide)	mg/L	ND (0.04)	ND (0.02)	ND (0.2)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.04)	ND (0.05)	ND (0.05)	ND (0.01)
Carbon disulfide	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
Carbon tetrachloride	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
Chlorobenzene	mg/L	ND (0.02)	0.0064 J	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	0.057	ND (0.005)
Chloroethane	mg/L	ND (0.04)	ND (0.02)	ND (0.2)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.04)	ND (0.05)	ND (0.05)	ND (0.01)
Chloroform (Trichloromethane)	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	0.0019 J	ND (0.005)
Chloromethane (Methyl Chloride)	mg/L	ND (0.04)	ND (0.02)	ND (0.2)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.04)	ND (0.05)	ND (0.05)	ND (0.01)
cis-1,2-Dichloroethene	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
cis-1,3-Dichloropropene	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
Dibromochloromethane	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
Ethyl Ether	mg/L	0.23	0.41	1.2	1.3	1.4	0.053	0.92	0.18	0.02 J	0.12
Ethylbenzene	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
m&p-Xylene	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
Methylene chloride	mg/L	ND (0.02)	0.0016 J	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	0.0077 J	ND (0.005)
o-Xylene	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
Styrene	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
Tetrachloroethene	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
Toluene	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
trans-1,2-Dichloroethene	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
trans-1,3-Dichloropropene	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
Trichloroethene	mg/L	ND (0.02)	ND (0.01)	ND (0.1)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.02)	ND (0.025)	ND (0.025)	ND (0.005)
Vinyl chloride	mg/L	ND (0.04)	ND (0.02)	ND (0.2)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.04)	ND (0.05)	ND (0.05)	ND (0.01)
TIC Volatile Organic Compounds											
(Ethoxymethyl)-benzene A	mg/L	-	0.027 JN	-	-	-	-	-	0.027 JN	-	-
Dichlorofluoromethane A	mg/L	-	0.0061 JN	-	-	-	-	-	-	-	-
Methanethiol A	mg/L	-	-	-	-	-	-	-	-	-	-
Tetrahydrofuran A	mg/L	-	-	-	-	-	-	-	0.93 JN	-	-
Unknown 1	mg/L	-	-	-	0.013 JN	-	-	-	-	-	-

Table E.1

Summary of GW Analytical Results - Biennial Monitoring Wells - October 2018
Sterling Drug Site 3
East Greenbush, New York

Sample Location:		MW-2S	MW-3SR2	MW-12B	MW-16B	MW-17B	MW-19B	MW-21B	PZ-2A	MW-25	MW-26
Sample ID:		WG-7830-102518-BP-005	WG-7830-102518-BP-009	WG-7830-102618-BP-018	WG-7830-102518-BP-006	WG-7830-102518-BP-007	WG-7830-102518-BP-004	WG-7830-102618-BP-017	WG-7830-102518-BP-010	WG-7830-102518-BP-011	WG-7830-102518-BP-012
Sample Date:		10/25/2018	10/25/2018	10/26/2018	10/25/2018	10/25/2018	10/25/2018	10/26/2018	10/25/2018	10/25/2018	10/25/2018
		Plume	Plume	Plume	Plume	Plume	Plume	Plume	Landfill	Shallow	Shallow
Parameters	Units										
Semi-Volatile Organic Compounds											
1,2,4-Trichlorobenzene	mg/L	ND (0.01)	ND (0.01)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
1,2-Dichlorobenzene	mg/L	ND (0.01)	ND (0.01)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
1,3-Dichlorobenzene	mg/L	ND (0.01)	ND (0.01)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
1,4-Dichlorobenzene	mg/L	ND (0.01)	ND (0.01)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2,4,5-Trichlorophenol	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2,4,6-Trichlorophenol	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2,4-Dichlorophenol	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2,4-Dimethylphenol	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	0.00072 J	ND (0.005)
2,4-Dinitrophenol	mg/L	ND (0.01)	ND (0.01)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
2,4-Dinitrotoluene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2,6-Dinitrotoluene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2-Chloronaphthalene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2-Chlorophenol	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	0.0013 J	ND (0.005)
2-Methylnaphthalene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2-Methylphenol	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
2-Nitroaniline	mg/L	ND (0.01)	ND (0.01)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
2-Nitrophenol	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
3,3'-Dichlorobenzidine	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
3-Nitroaniline	mg/L	ND (0.01)	ND (0.01)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
4,6-Dinitro-2-methylphenol	mg/L	ND (0.01)	ND (0.01)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
4-Bromophenyl phenyl ether	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
4-Chloro-3-methylphenol	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
4-Chloroaniline	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	0.0011 J	ND (0.005)
4-Chlorophenyl phenyl ether	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
4-Methylphenol	mg/L	ND (0.01)	ND (0.01)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
4-Nitroaniline	mg/L	ND (0.01)	ND (0.01)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
4-Nitrophenol	mg/L	ND (0.01)	ND (0.01)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
Acenaphthene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Acenaphthylene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Anthracene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Benzaldehyde	mg/L	ND (0.005)	0.0011 J	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	0.00071 J	0.00073 J	0.00043 J
Benzo(a)anthracene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Benzo(a)pyrene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Benzo(b)fluoranthene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Benzo(g,h,i)perylene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Benzo(k)fluoranthene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
bis(2-Chloroethoxy)methane	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
bis(2-Chloroethyl)ether	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
bis(2-Ethylhexyl)phthalate	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Butyl benzylphthalate	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Carbazole	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Chrysene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Dibenz(a,h)anthracene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Dibenzofuran	mg/L	ND (0.01)	ND (0.01)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
Diethyl phthalate	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	0.00023 J	ND (0.005)	ND (0.025)	0.0013 J	ND (0.005)	ND (0.005)
Dimethyl phthalate	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Di-n-butylphthalate	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Di-n-octyl phthalate	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Fluoranthene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Fluorene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Hexachlorobenzene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Hexachlorobutadiene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Hexachlorocyclopentadiene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Hexachloroethane	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Indeno(1,2,3-cd)pyrene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Isophorone	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Naphthalene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Nitrobenzene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
N-Nitrosodi-n-propylamine	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
N-Nitrosodiphenylamine	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Pentachlorophenol	mg/L	ND (0.01)	ND (0.01)	ND (0.1)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.05)	ND (0.01)	ND (0.01)	ND (0.01)
Phenanthrene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)
Phenol	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	0.0016 J	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	0.001 J	ND (0.005)
Pyrene	mg/L	ND (0.005)	ND (0.005)	ND (0.05)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.025)	ND (0.005)	ND (0.005)	ND (0.005)

Table E.1

Summary of GW Analytical Results - Biennial Monitoring Wells - October 2018
Sterling Drug Site 3
East Greenbush, New York

Sample Location:		MW-2S	MW-3SR2	MW-12B	MW-16B	MW-17B	MW-19B	MW-21B	PZ-2A	MW-25	MW-26
Sample ID:		WG-7830-102518-BP-005	WG-7830-102518-BP-009	WG-7830-102618-BP-018	WG-7830-102518-BP-006	WG-7830-102518-BP-007	WG-7830-102518-BP-004	WG-7830-102618-BP-017	WG-7830-102518-BP-010	WG-7830-102518-BP-011	WG-7830-102518-BP-012
Sample Date:		10/25/2018	10/25/2018	10/26/2018	10/25/2018	10/26/2018	10/25/2018	10/26/2018	10/25/2018	10/25/2018	10/25/2018
		Plume	Plume	Plume	Plume	Plume	Plume	Plume	Landfill	Shallow	Shallow
Parameters	Units										
TIC Semi-Volatile Organic Compounds											
(Ethoxymethyl)-benzene A	mg/L	-	0.085 JN	-	-	-	-	-	0.025 JN	-	-
2-Ethyl-ethanoic acid A	mg/L	-	-	-	-	-	-	0.0084 JN	-	-	-
2-Ethyl-hexanoic acid A	mg/L	-	-	-	-	-	-	-	-	-	-
4-(1,1,3,3-Tetramethylbutyl)-phenol A	mg/L	-	0.015 JN	-	-	-	-	-	-	-	-
5-Chloroisatin A	mg/L	-	-	-	-	-	-	-	-	0.045 JN	-
Aminopyrine A	mg/L	-	-	-	-	-	-	-	-	0.021 JN	-
Antipyrine A	mg/L	-	-	-	-	-	-	-	-	0.032 JN	-
Benzenamine,2,6-dimethyl- A	mg/L	-	0.017 JN	-	-	-	-	-	-	-	-
Benzeneacetic acid A	mg/L	-	-	-	-	-	-	0.068 JN	-	-	-
Benzoic acid A	mg/L	-	-	-	-	-	-	0.0094 JN	-	-	-
bis(2-Chloroethoxy)ethane A	mg/L	-	0.014 JN	-	-	-	-	-	-	-	-
Chloroacetone A	mg/L	-	0.012 JN	-	-	-	-	-	-	-	-
Chlorobenzene A	mg/L	-	-	-	-	-	-	-	-	0.058 JN	-
Chloriodomethane A	mg/L	0.0026 JN	0.03 JN	-	0.01 JN	0.013 JN	-	0.045 JN	0.081 JN	0.047 JN	0.035 JN
Cyclobarbitol A	mg/L	0.0037 JN	-	-	0.033 JN	0.034 JN	0.0035 JN	-	-	-	-
Cyclohexane A	mg/L	-	-	0.24 JN	-	-	-	-	0.023 JN	-	-
Cyclopentasiloxane, decamethyl- A	mg/L	-	-	-	-	-	-	-	-	-	-
Cyclotetrasiloxane, octamethyl- A	mg/L	-	-	-	-	-	-	-	-	-	-
Diethoxymethane A	mg/L	-	-	-	-	-	-	-	-	0.024 JN	-
Diethylcarbamic acid methyl ester A	mg/L	-	-	-	-	0.0059 JN	-	-	-	-	-
Diisopropylamine A	mg/L	0.017 JN	0.74 JN	2 JN	0.83 JN	-	0.064 JN	0.7 JN	-	-	-
Ethyl Acetate A	mg/L	-	-	-	-	-	-	-	-	-	0.0029 JN
Hexobarbital A	mg/L	-	-	-	0.022 JN	0.02 JN	0.0028 JN	-	0.03 JN	0.12 JN	-
Mephobarbital A	mg/L	0.0038 JN	0.17 JN	0.04 JN	0.07 JN	0.051 JN	0.014 JN	-	0.19 JN	-	0.013 JN
Mepivacaine A	mg/L	-	0.072 JN	-	-	-	-	-	0.046 JN	0.076 JN	0.0069 JN
Noramidopyrine A	mg/L	-	-	-	-	0.025 JN	-	0.024 JN	-	0.018 JN	-
Phenobarbital A	mg/L	0.0036 JN	0.078 JN	0.041 JN	0.075 JN	0.066 JN	0.011 JN	0.011 JN	0.12 JN	0.074 JN	0.0016 JN
Phenobarbital di-methyl derivative A	mg/L	-	0.014 JN	-	0.014 JN	0.0092 JN	-	-	-	-	-
Pyrimidinetrione, 5-ethyl-1,3-dimethyl-5-phenyl- A	mg/L	-	-	-	-	-	0.0033 JN	-	0.015 JN	-	-
Talbutal A	mg/L	0.0067 JN	0.055 JN	-	0.051 JN	0.046 JN	0.007 JN	0.033 JN	-	0.057 JN	-
Tetrahydrofuran A	mg/L	-	-	-	-	-	-	-	0.8 JN	-	-
Toluene A	mg/L	0.0055 JN	-	-	-	0.006 JN	0.006 JN	-	-	-	0.0058 JN
Triethylamine A	mg/L	-	0.027 JN	0.031 JN	0.077 JN	0.047 JN	0.0063 JN	0.022 JN	-	-	-
Unknown 1	mg/L	0.0025 JN	0.034 JN	0.033 JN	0.0075 JN	0.0089 JN	0.0023 JN	0.0095 JN	0.027 JN	0.032 JN	0.0044 JN
Unknown 2	mg/L	0.0032 JN	0.011 JN	0.034 JN	0.0064 JN	0.038 JN	0.0029 JN	0.0093 JN	0.021 JN	0.02 JN	0.0017 JN
Unknown 3	mg/L	0.0029 JN	0.0095 JN	0.04 JN	0.034 JN	0.0058 JN	0.045 JN	0.022 JN	0.055 JN	0.056 JN	0.024 JN
Unknown 4	mg/L	0.05 JN	0.027 JN	0.35 JN	0.01 JN	0.013 JN	0.0092 JN	0.3 JN	0.02 JN	0.24 JN	0.004 JN
Unknown 5	mg/L	0.02 JN	0.28 JN	0.04 JN	0.0061 JN	0.007 JN	0.26 JN	0.012 JN	0.033 JN	0.019 JN	0.0056 JN
Unknown 6	mg/L	0.0091 JN	0.12 JN	0.017 JN	0.018 JN	1.2 JN	0.0029 JN	0.027 JN	0.014 JN	0.034 JN	0.002 JN
Unknown 7	mg/L	0.0022 JN	0.067 JN	-	0.011 JN	0.008 JN	0.0045 JN	0.01 JN	0.028 JN	0.018 JN	0.002 JN
Unknown 8	mg/L	0.012 JN	-	-	0.019 JN	0.26 JN	0.0031 JN	0.014 JN	0.048 JN	0.094 JN	0.0024 JN
Unknown 9	mg/L	0.012 JN	-	-	0.0085 JN	0.0067 JN	-	0.099 JN	0.022 JN	0.035 JN	0.019 JN
Unknown 10	mg/L	0.011 JN	-	-	0.23 JN	-	-	0.032 JN	0.26 JN	-	0.24 JN
Unknown 11	mg/L	0.23 JN	-	-	0.013 JN	-	-	-	0.015 JN	-	0.0077 JN
Unknown 12	mg/L	0.0044 JN	-	-	-	-	-	-	-	-	0.0049 JN
Unknown 13	mg/L	0.0045 JN	-	-	-	-	-	-	-	-	0.0022 JN

Notes:

J	Estimated concentration.
JN	Estimated TIC.
ND	Not detected at the associated reporting limit.
U	Not detected at the associated reporting limit.
-	Not applicable.

Table E.2

Summary of GW Analytical Results - Emerging Contaminants Sampling - September 2018
Sterling Drug Site 3
East Greenbush, New York

Sample Location:		MW-4B	MW-17B	MW-17B	MW-21B	PZ-2A
Sample ID:		WG-007830-092718-BP-001	WG-007830-092718-BP-006	WG-007830-092718-BP-007	WG-007830-092718-BP-002	WG-007830-092718-BP-003
Sample Date:		9/27/2018	9/27/2018	9/27/2018 Duplicate	9/27/2018	9/27/2018
Parameters	Units	Upgradient	Plume	Plume	Plume	Landfill
Semi-Volatile Organic Compounds						
1,4-Dioxane	mg/L	ND (0.0002)	0.0065	0.0064	0.0074	0.0024
PFAS						
Fluorotelomer sulfonic acid(8:2)	ng/L	ND (100) UJ	ND (17)	ND (18)	ND (18)	ND (19)
N-Ethyl perfluorooctane sulfonamidoacetic acid	ng/L	ND (100) UJ	ND (17)	ND (18)	ND (18)	ND (19)
N-Methyl perfluorooctane sulfonamido acetic acid	ng/L	ND (100) UJ	ND (17)	ND (18)	ND (18)	ND (19)
Perfluorobutane sulfonic acid (PFBS)	ng/L	ND (10) UJ	0.41 J	0.48 J	ND (1.8)	0.28 J
Perfluorobutanoic acid (PFBA)	ng/L	ND (10) UJ	58	41	150 J	29 J
Perfluorodecanesulfonic acid (PFDS)	ng/L	ND (10) UJ	ND (1.7)	ND (1.8)	ND (1.8)	ND (1.9)
Perfluorodecanoic acid (PFDA)	ng/L	ND (10) UJ	ND (1.7)	ND (1.8)	ND (1.8)	ND (1.9) UJ
Perfluorododecanoic acid (PFDoDA)	ng/L	ND (10) UJ	ND (1.7)	ND (1.8)	ND (1.8)	ND (1.9)
Perfluoroheptane sulfonic acid (PFHpS)	ng/L	ND (10) UJ	ND (1.7)	ND (1.8)	ND (1.8)	ND (1.9)
Perfluoroheptanoic acid (PFHpA)	ng/L	3.7 J	1.9	1.6 J	3.3	1.8 J
Perfluorohexane sulfonic acid (PFHxS)	ng/L	ND (10) UJ	ND (1.7) U	ND (1.8) U	ND (1.8)	ND (1.9) U
Perfluorohexanoic acid (PFHxA)	ng/L	34 J	2.4	2.7	4.9	2.3
Perfluorononanoic acid (PFNA)	ng/L	ND (10) UJ	ND (1.7) U	ND (1.8)	3.1	ND (1.9) U
Perfluorooctane sulfonamide (FOSA)	ng/L	ND (10) UJ	0.57 J	ND (1.8)	ND (1.8)	ND (1.9)
Perfluorooctane sulfonic acid (PFOS)	ng/L	ND (10) UJ	0.88 J	0.96 J	3.0	0.67 J
Perfluorooctanoic acid (PFOA)	ng/L	4.8 J	6.3	5.9	12	5.7
Perfluoropentanoic acid (PFPeA)	ng/L	4.1 J	ND (1.7)	3.0	ND (1.8)	4.7
Perfluorotetradecanoic acid (PFTeDA)	ng/L	ND (10) UJ	0.35 J	ND (1.8)	ND (1.8)	ND (1.9)
Perfluorotridecanoic acid (PFTrDA)	ng/L	ND (10) UJ	ND (1.7)	ND (1.8)	ND (1.8)	ND (1.9)
Perfluoroundecanoic acid (PFUnA)	ng/L	ND (10) UJ	ND (1.7)	ND (1.8)	ND (1.8)	ND (1.9)
Sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	ng/L	ND (100) UJ	ND (17)	ND (18)	7.2 J	3.2 J

Notes:

J	Estimated concentration.
ND	Not detected at the associated reporting limit.
U	Not detected at the associated reporting limit.
UJ	Not detected; associated reporting limit is estimated.

Table E.3

Summary of SW Analytical Results - November 2018
Sterling Drug Site 3
East Greenbush, New York

Sample Location:	SW-1		SW-2	SW-2
Sample ID:	SW-7830-110218-BP-013		SW-7830-110218-BP-014	SW-7830-110218-BP-023
Sample Date:	11/2/2018		11/2/2018	11/2/2018
				Duplicate
Parameters	Units			
Volatile Organic Compounds				
1,1,1-Trichloroethane	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
1,1,2,2-Tetrachloroethane	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
1,1,2-Trichloroethane	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
1,1-Dichloroethane	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
1,1-Dichloroethene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
1,2-Dichloroethane	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
1,2-Dichloropropane	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
2-Butanone (Methyl Ethyl Ketone)	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
2-Hexanone	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
Acetone	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
Benzene	mg/L	ND (0.001)	ND (0.001)	ND (0.001)
Bromodichloromethane	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Bromoform	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Bromomethane (Methyl Bromide)	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
Carbon disulfide	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Carbon tetrachloride	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Chlorobenzene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Chloroethane	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
Chloroform (Trichloromethane)	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Chloromethane (Methyl Chloride)	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
cis-1,2-Dichloroethene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
cis-1,3-Dichloropropene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Dibromochloromethane	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Ethyl Ether	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
Ethylbenzene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
m&p-Xylene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Methylene chloride	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
o-Xylene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Styrene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Tetrachloroethene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Toluene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
trans-1,2-Dichloroethene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
trans-1,3-Dichloropropene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Trichloroethene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Vinyl chloride	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
Semi-Volatile Organic Compounds				
1,2,4-Trichlorobenzene	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
1,2-Dichlorobenzene	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
1,3-Dichlorobenzene	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
1,4-Dichlorobenzene	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
2,4,5-Trichlorophenol	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
2,4,6-Trichlorophenol	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
2,4-Dichlorophenol	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
2,4-Dimethylphenol	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
2,4-Dinitrophenol	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
2,4-Dinitrotoluene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
2,6-Dinitrotoluene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
2-Chloronaphthalene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
2-Chlorophenol	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
2-Methylnaphthalene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
2-Methylphenol	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
2-Nitroaniline	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
2-Nitrophenol	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
3,3'-Dichlorobenzidine	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
3-Nitroaniline	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
4,6-Dinitro-2-methylphenol	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
4-Bromophenyl phenyl ether	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
4-Chloro-3-methylphenol	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
4-Chloroaniline	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
4-Chlorophenyl phenyl ether	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
4-Methylphenol	mg/L	ND (0.01)	ND (0.01)	ND (0.01)

Table E.3

Summary of SW Analytical Results - November 2018
Sterling Drug Site 3
East Greenbush, New York

Sample Location:	SW-1	SW-2	SW-2
Sample ID:	SW-7830-110218-BP-013	SW-7830-110218-BP-014	SW-7830-110218-BP-023
Sample Date:	11/2/2018	11/2/2018	11/2/2018
			Duplicate

Parameters	Units			
4-Nitroaniline	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
4-Nitrophenol	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
Acenaphthene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Acenaphthylene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Anthracene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Benzaldehyde	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Benzo(a)anthracene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Benzo(a)pyrene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Benzo(b)fluoranthene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Benzo(g,h,i)perylene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Benzo(k)fluoranthene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
bis(2-Chloroethoxy)methane	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
bis(2-Chloroethyl)ether	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
bis(2-Ethylhexyl)phthalate	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Butyl benzylphthalate	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Carbazole	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Chrysene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Dibenz(a,h)anthracene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Dibenzofuran	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
Diethyl phthalate	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Dimethyl phthalate	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Di-n-butylphthalate	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Di-n-octyl phthalate	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Fluoranthene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Fluorene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Hexachlorobenzene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Hexachlorobutadiene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Hexachlorocyclopentadiene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Hexachloroethane	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Indeno(1,2,3-cd)pyrene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Isophorone	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Naphthalene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Nitrobenzene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
N-Nitrosodi-n-propylamine	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
N-Nitrosodiphenylamine	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Pentachlorophenol	mg/L	ND (0.01)	ND (0.01)	ND (0.01)
Phenanthrene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)
Phenol	mg/L	ND (0.005) U	ND (0.005) U	ND (0.005) U
Pyrene	mg/L	ND (0.005)	ND (0.005)	ND (0.005)

TIC Semi-Volatile Organic Compounds

Unknown 1	mg/L	0.26 JN	0.28 JN	0.28 JN
Unknown 2	mg/L	0.0028 JN	0.002 JN	0.0037 JN
Unknown 3	mg/L	0.0033 JN	0.0038 JN	0.0021 JN
Unknown 4	mg/L	0.05 JN	0.059 JN	0.056 JN
Unknown 5	mg/L	-	-	0.0016 JN

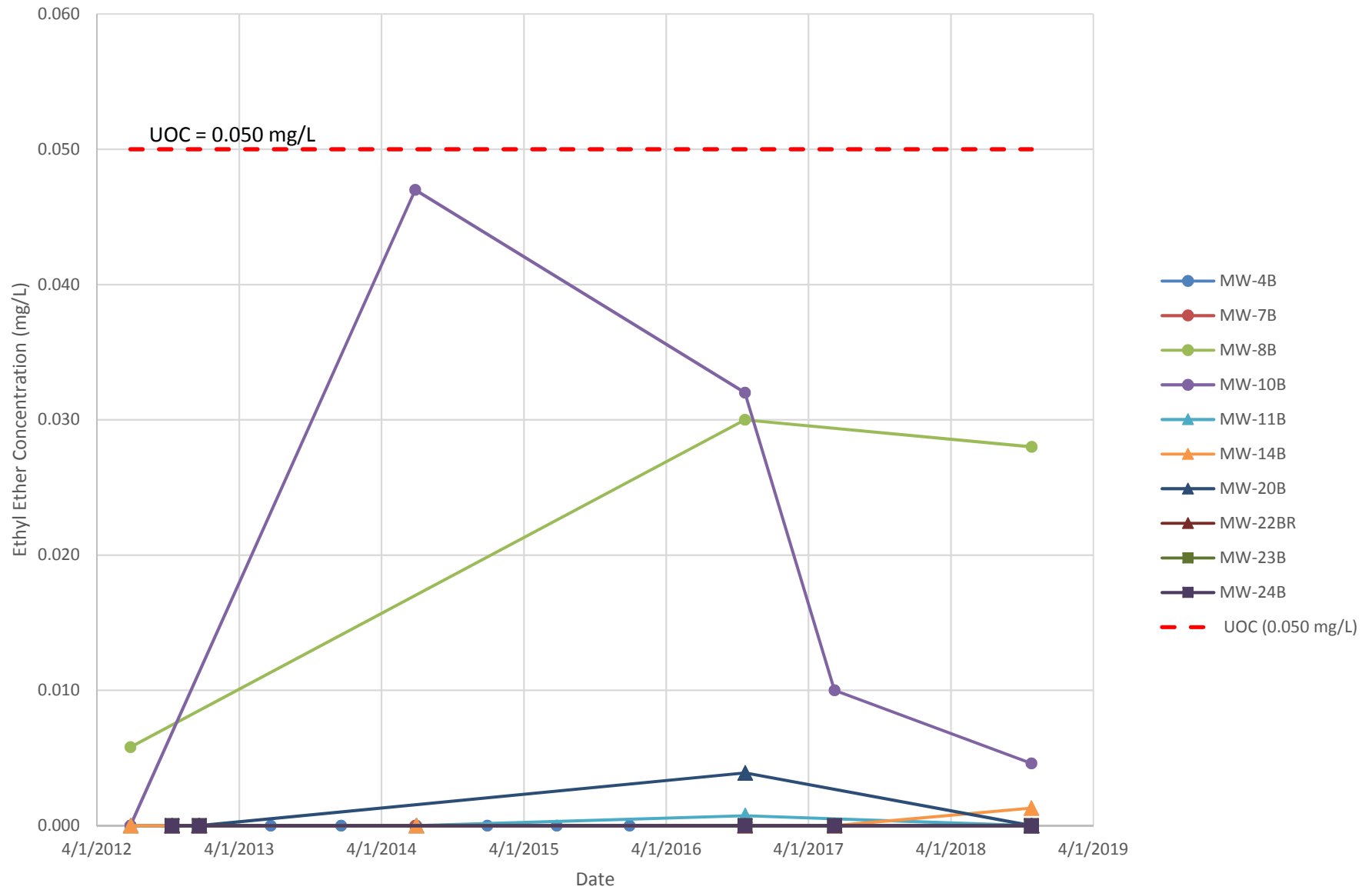
Notes:

JN Estimated TIC.
ND Not detected at the associated reporting limit.
U Not detected at the associated reporting limit.
- Not applicable.

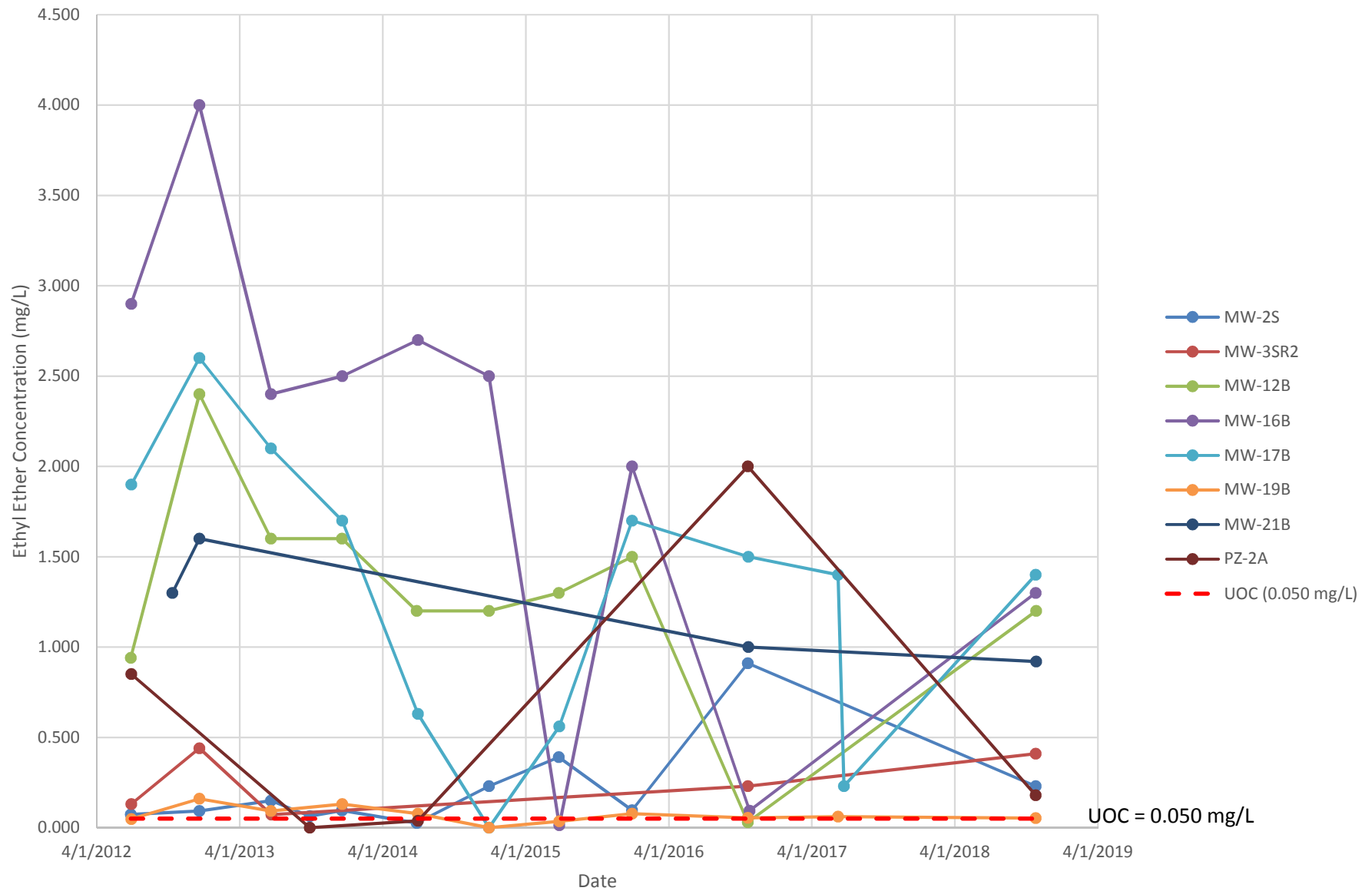
Appendix F

Concentration versus Time Charts for Ethyl Ether

Ethyl Ether Concentrations vs. Time - Upgradient and Perimeter Monitoring Wells Sterling Drug Site 3, East Greenbush, New York



Ethyl Ether Concentrations vs. Time - Plume Monitoring Wells Sterling Drug Site 3, East Greenbush, New York





about GHD

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.

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