September 30, 2016 Reference No. 11124679

Mr. David Szymanski
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203-2999

Dear Mr. Szymanski:

Re: Annual Periodic Review
Former NL Industries Site No. C915200

GHD Consulting Services, Inc. (GHD), on behalf of Cascades Containerboard Packaging, A Division of Cascades Canada ULC, is submitting the attached Institutional and Engineering Controls Certification Form for the Former NL Industries Site (Site) in Depew, New York. In addition, the annual Periodic Review Report (PRR) is provided under separate cover. The report presents the results of the groundwater monitoring conducted at the Site in August 2016 and the annual inspection conducted in September 2016.

The groundwater monitoring results demonstrate that groundwater conditions have remained stable since the monitoring program began in 2010 and that the remedial measures have been effective. GHD recommends that inspections continue to be conducted on an annual basis, but that the groundwater monitoring frequency be reduced from an annual to triennial basis.

Please contact me at 716/856-2142 should you have any questions or require additional information.

Sincerely,

GHD

Katherine B. Galanti

KBG/ck/1

Encl.

cc: L. Marineau, Cascades
R. Adams, GHD

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. **C915200**

Site Name **Former NL Industries Foundry**

Site Address: 3241 Walden Avenue Zip Code: 14043
City/Town: Cheektowaga
County: Erie
Site Acreage: 7.5

Reporting Period: August 31, 2015 to August 31, 2016

	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? Commercial and Industrial	☑	☐
7. Are all ICs/ECs in place and functioning as designed?	☑	☐

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

Box 2A

	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	☑

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	☑	☐

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C915200

Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
104.09-5-1	Cascades, Inc.	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan

[For details- see Section 5 in the Site Management Plan, dated October 16, 2009]
Environmental Easement is included in the FER in Appendix E. The Easement was recorded with the Erie County clerk on 12/1/2009.

(i) Prohibition of groundwater use.
(ii) Restrictions on property use.
(iii) Maintenance of cover on the containment cell.
(iv) Maintenance of asphalt cover over trucking yard, eastern parking lot, and rail siding areas.
(v) Maintenance of concrete cover in the building and apron areas.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
104.09-5-1	Cover System Fencing/Access Control

Box 5

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 engineering practices; and the information presented is accurate and compete.

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:

   (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. C915200

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 ROBERT G. ADAMS (print name) at GHD CONSULTING SERVICES INC. 285 DELAWARE AVE, BUFFALO NY, 14202 (print business address)

am certifying as OWNER'S REPRESENTATIVE (Owner or Remedial Party)

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

Robert G. Adams
Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

09/28/16
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer 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 ROBERT G. ADAMS (print name) at GHD CONSULTING SERVICES, INC. 285 DELAWARE AVE, BUFFALO, NY 14202 (print business address)

am certifying as a Professional Engineer for the OWNER (Owner or Remedial Party)

STATE OF NEW YORK ★ ROBERT G. ADAMS ★ LICENSED PROFESSIONAL ENGINEER 064918

Robert G. Adams — 09/28/16

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

Stamp (Required for PE)

Date

2016 Periodic Review Report

Former NL Industries Site
NYSDEC Site No. C915200
3241 Walden Avenue
Depew, New York

Cascades Containerboard Packaging, A Division of Cascades Canada ULC

GHD | 285 Delaware Avenue Suite 500 Buffalo New York 14202

11124679| Report No 1 | September 30 2016

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1. Introduction

The former NL Industries facility (Site) is located at 3241 Walden Avenue in Depew, New York (Figure 1.1). The property and facility are currently owned and operated by Cascades, Inc. Remediation of the Site was completed in 2008 under the oversight of the New York State Department of Environmental Conservation (NYSDEC) in accordance with Brownfield Cleanup Agreement (BCA) Index #B9-0554-98-12, Site #C-915200. A Site Management Plan (SMP) was developed upon completion of the remedial construction to ensure implementation and management of the institutional controls (ICs) and engineering controls (ECs) in place at the Site. This Periodic Review Report (PRR) is being prepared to certify that site management activities are being conducted in accordance with the SMP.

The final remedial alternative for the Site, as described in the SMP dated October 2009, included the following components:

1. Excavation of impacted soils from the western section of the Site and consolidation within a containment cell constructed within the central portion of the Site.
2. Capping of the containment cell with imported clean fill, geo-synthetic clay liner (GCL), and soil/vegetative or asphalt cover.
3. Construction of a GCL and soil cover system on all non-paved areas of the containment cell (i.e., side slopes).
4. Construction of a GCL and asphalt cover system on all paved areas of the containment cell.
5. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to remaining impacted materials for the central and eastern portions of the Site.
6. Development and implementation of a SMP for long-term management of the ECs/ICs at the Site.

The SMP, designed to serve as a work plan for Site monitoring and maintenance, was prepared and approved by NYSDEC in December 2009.

This report presents the results of the groundwater monitoring event and the Site inspection conducted in September 2016, discussions with the Site Manager, Mr. Tom Derkovitz, and recordkeeping conducted through August 2016. The report is organized as follows:

- Section 1 – Introduction: The background and brief remedial history of the Site
- Section 2 – Engineering and Institutional Controls: The ECs/ICs for this Site are described
- Section 3 – Inspections and Maintenance Activities: Activities performed during the current reporting period and their results
- Section 4 - Groundwater Monitoring: Discussion of groundwater monitoring data and analytical results generated from the current monitoring period

- Section 5 – Conclusions and Recommendations: Conclusions and recommendations based upon the data and results of the current monitoring period

2. Engineering and Institutional Controls

Engineering controls are required to protect human health and the environment because impacted fill is still present below various structures at the Site. Figure 2.1 shows the Site layout, and Figure 2.2 shows the various EC systems in place at the Site.

2.1 Engineering Controls (ECs)

The purpose of the EC systems is to eliminate the potential for human contact with fill material, prevent percolation of precipitation through the impacted fill, and eliminate the potential for contaminated runoff from the Site. The EC systems in place at the Site consist of the following

- **Asphalt Only:** The trucking yard within the eastern section of the Site was paved in 2004 and is covered by 4.5 inches of sub-base material and 6 inches of asphalt (4.5 inches binder coat and 1.5 inches top coat). The eastern parking lot was historically paved with asphalt for employee parking, and was repaved in August 2011. In addition, the area identified as the "rail siding area" was paved with 6 inches of asphalt (4 inches binder coat and 2 inches top coat) in August 2008.
- **Building and Apron Concrete:** The concrete floor of the existing building and exterior concrete pads/aprons are believed to be a minimum of 6 inches in thickness.
- **GCL and Soil:** All non-paved areas (side slopes) of the containment cell are covered by approximately 12 inches of clean soil underlain by a GCL covering with a 6-inch sand layer between the GCL and impacted fill. All exposed environmentally clean soil/fill has been hydro seeded as an erosion control methodology.
- **GCL and Asphalt:** All paved areas of the central section containment cell are covered by 6 inches of asphalt (4 inches binder coat and 2 inches top coat) underlain by 12 inches of clean fill, followed by a GCL covering with a 6-inch sand layer between the GCL and the impacted fill.

2.2 Institutional Controls (ICs)

The purpose of the ICs is to:

- Implement, maintain, and monitor the ECs
- Prevent future exposure to remaining on-Site contamination by controlling disturbance of the subsurface contamination
- Limit the use and development of portions 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 Norampac, Inc.) 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.

In addition, the Site has a series of ICs in the form of site restrictions as required by the Environmental Easement. Site restrictions that apply to the Site are:

- The central and eastern portions of the property may only be used for commercial/industrial purposes provided that the long-term ECs/ICs included in the SMP are employed
- The central and eastern portions of the property may not be used for a higher level of use, such as unrestricted or restricted residential use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC
- All future activities on the property that will disturb remaining impacted material must be conducted in accordance with the SMP
- The Site owner or remedial party will submit to the NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Site are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP
- The groundwater beneath the central and eastern sections of the property may not be used for potable or non-potable purposes

3. Inspections and Maintenance Activities

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

- The ECs continue to perform as designed
- The ECs continue to be protective of human health and the environment
- The Site is operated and maintained in compliance with the SMP and Environmental Easement
- The remedial performance criteria have been achieved
- Sampling and analysis of appropriate media were conducted
- Site records are complete and current
- Changes to the remedial systems or monitoring are needed

The inspection was performed by GHD personnel in accordance with the requirements of the SMP.

The annual comprehensive Site inspection was conducted on September 14, 2016. The following sections discuss the findings of the 2016 inspection. The completed Site Inspection Form is provided as Appendix A to this report.

3.1 Asphalt Only Cover System

The three areas of asphalt only cover consist of the Trucking Yard (west of the main building), Parking Lot (east of the main building), and Former Rail Siding (south of the main building) as shown on Figure 2.2. The areas of asphalt only cover were visually inspected for cracks and deterioration.

3.1.1 Trucking Yard

The asphalt surface in the trucking yard was generally free of cracks and deterioration and appeared in satisfactory condition. Some minor surficial cracking is present. Larger cracks (greater than 0.25 inch in width) that were sealed in 2015 remain in good condition, and no additional large cracks were observed. Some shallow depressions/divots from roll-off box wheels and trailer supports are present; however, no corrective action is necessary at this time. The test pit locations excavated in 2009 were repaved in 2011 and remain in good condition. Photos of the trucking yard are provided in Appendix B.

3.1.2 Parking Lot

The Parking Lot was repaved in 2011 and is generally free of cracks and deterioration. Photos of the pavement are provided in Appendix B.

3.1.3 Former Rail Siding

The asphalt cover on the Former Rail Siding was generally free of cracks and deterioration and appeared in good condition, although the presence of staged inventory within the area inhibited full inspection. Photos of the pavement are provided in Appendix B.

3.1.4 Corrective Action

No corrective action is necessary for the asphalt only cover system at this time.

3.2 Building and Apron Cover System

The building floor slab and apron concrete were visually inspected for cracks and deterioration. Areas that were patched with asphalt and tar sealant in 2015 remain in good condition and no other areas of deterioration were observed. The need for more permanent repair/replacement will be evaluated again in 2017. Photos of the concrete are provided in Appendix B.

No other corrective action is necessary for the building and apron concrete cover system at this time.

3.3 GCL and Soil Cover System

The GCL and soil cover system was visually inspected as part of the annual comprehensive Site inspection. No areas of subsidence, erosion, or exposed GCL were observed; however, the grass had not been mowed routinely in 2016 as in past years. At the time of the inspection, the grass was approximately 6 to 8 inches in length with sporadic patches of taller growth. Photos of the GCL and soil cover are provided in Appendix B.

Corrective action is not necessary for the GCL and soil cover system at this time. Site management was advised to have the grass cut before winter to insure proper growth.

3.4 GCL and Asphalt Cover System

The GCL and asphalt cover system was visually inspected as part of the annual comprehensive Site inspection. No areas of subsidence or exposed GCL were observed. Minor surface indentations caused by tractor trailer supports were noted in the asphalt, consistent with past years. The indentations were approximately 0.25 to 0.5 inch in depth, but do not affect the integrity of the cap. Photos of the GCL and asphalt cover are provided in Appendix B.

No corrective action is necessary for the GCL and asphalt cover system at this time.

3.5 Retention Pond

The retention pond was inspected as part of the annual comprehensive Site inspection. Approximately 6 inches of standing water was present in the center of the pond, as the water level was below the invert of the outflow pipe. Although vegetation was cut in 2015, significant plant growth is present within the pond, primarily invasive phragmites. No other debris was observed and the outlet pipes are open. No evidence of erosion was observed along the banks of the pond.

A gate was installed at the southeast corner of the pond fence enclosure in June 2011 to allow access for mowing and maintenance. The gate is locked to prevent unauthorized access. Photos of the retention pond are provided in Appendix B.

Site management was advised that continual regrowth must be addressed to prevent a condition where the function of the pond could be impaired.

3.6 Fencing

The fencing was inspected as part of the annual comprehensive site inspection. Mr. Derkovitz indicated that the fence along the west property line was damaged by a snowplow over the winter, but had been repaired. At the time of the annual inspection, the fence and fence posts appeared in good condition with no holes in the fence or heaved supports posts. The fence north of the Site along Walden Avenue was constructed with braided wire rather than a top support pole. At the time of the inspection, the wire provided sufficient support for the fence. Photos of the fencing are provided in Appendix B.

No corrective action is necessary for the fence at this time.

3.7 Vegetative Cover

The vegetative cover was inspected as part of the annual comprehensive site inspection. No areas of distressed vegetation, invading species, or woody growth were observed; however, the grass had not been cut regularly in 2016. Photos of the vegetative cover are provided in Appendix B.

The grass should be cut before the end of the 2016 growing season to ensure proper regrowth in the spring.

4. Groundwater Monitoring

4.1 Monitoring Well Inspection

In accordance with the SMP, monitoring well inspections were conducted in conjunction with the groundwater monitoring event in August 2016. The locations of the groundwater monitoring wells are shown on Figure 4.1. The inspections of the monitoring wells included the condition of well caps, J plugs, seals, protective pads, and visible portions of the well casings. Monitoring well conditions are noted on the Site Inspection Form presented in Appendix A.

In addition, prior to purging the well for sampling, the open depth of each monitoring well was measured (sounded). The sounded depths and installed screened intervals of each well are presented in Table 4.1. Comparison of these details shows that the screened intervals of all wells are open. The recharge during purging for sampling demonstrates that the presence of the small amounts of observed sediment does not interfere with the flow of groundwater through the wells or sand packs.

All wells were noted to be in good condition at the time of sampling.

4.2 Groundwater Elevation

As part of the monitoring activities described in the SMP, each monitoring well was gauged before sampling using an electronic water level meter. The depth to the groundwater surface was measured prior to beginning the purging of monitoring wells for sampling. Water level measurements are included in the Groundwater Monitoring Field Forms presented in Appendix C and water level elevations are summarized in Table 4.2. A groundwater contour map is provided as Figure 4.2.

4.3 Groundwater Sampling

Groundwater samples were collected using low flow techniques in accordance with the SMP. A sample collection and analysis summary is presented in Table 4.3. The purging parameters are provided on the Groundwater Monitoring Field Forms presented in Appendix C.

4.4 Groundwater Data Evaluation

The groundwater analytical data generated during this reporting period are summarized in Table 4.4. The analytical data report is provided as Appendix D. A quality assurance/quality control

(QA/QC) review of the analytical data has been conducted. The Data Usability Summary Report (DUSR) is presented in Appendix E.

Analytical results for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs) were all non-detect at all well locations.

Iron was detected in monitoring wells MW-102 through MW-105 at concentrations ranging from 360 µg/L to 1,200 µg/L, above the New York State water quality criteria of 300 µg/L for iron. In addition, magnesium and sodium were detected in all monitoring wells at concentrations above the New York State water quality criteria of 35,000 µg/L for magnesium (guidance value) and 20,000 µg/L for sodium (standard) in potable groundwater. Detections ranged from 64,000 µg/L to 99,000 µg/L for magnesium; and from 53,000 µg/L to 150,000 µg/L for sodium. The observations of these metals are consistent with those from previous monitoring years. Iron, magnesium, and sodium are common elements contained in soils and are also typically present in groundwater. Although low-level exceedances of lead were historically detected at the Site, lead was not detected above the New York State water quality criteria for potable groundwater of 25 µg/L in any of the 2016 groundwater samples.

5. Conclusions and Recommendations

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

- Monitoring wells at the Site are in good condition.
- The asphalt only cover system is generally in good condition.
- Areas of the building and apron concrete cover system that were patched with asphalt and tar in 2015 remain in good condition. No other deterioration of the building and apron cover system was observed.
- The GCL and soil, and GCL and asphalt cover systems are generally in good condition with no deficiencies noted.
- Perimeter fencing is in good condition.
- The retention pond is exhibiting regrowth of vegetation and phragmites.
- VOCs and SVOCs were not detected in the groundwater samples.
- Iron was present in 4 of the 6 monitoring wells, while magnesium and sodium were present at all of the Site monitoring wells at concentrations exceeding the New York State water quality criteria for these parameters. Iron, magnesium, and sodium are common elements contained in soils and are also typically present in groundwater.

Based on these observations, it is concluded that the remedial action continues to be effective.

GHD recommends that the groundwater monitoring frequency for this Site be reduced to a triennial basis since groundwater conditions appear stable and Site usage/conditions remain consistent from year to year. The comprehensive site inspection should still be conducted on an annual basis.

6. Certification

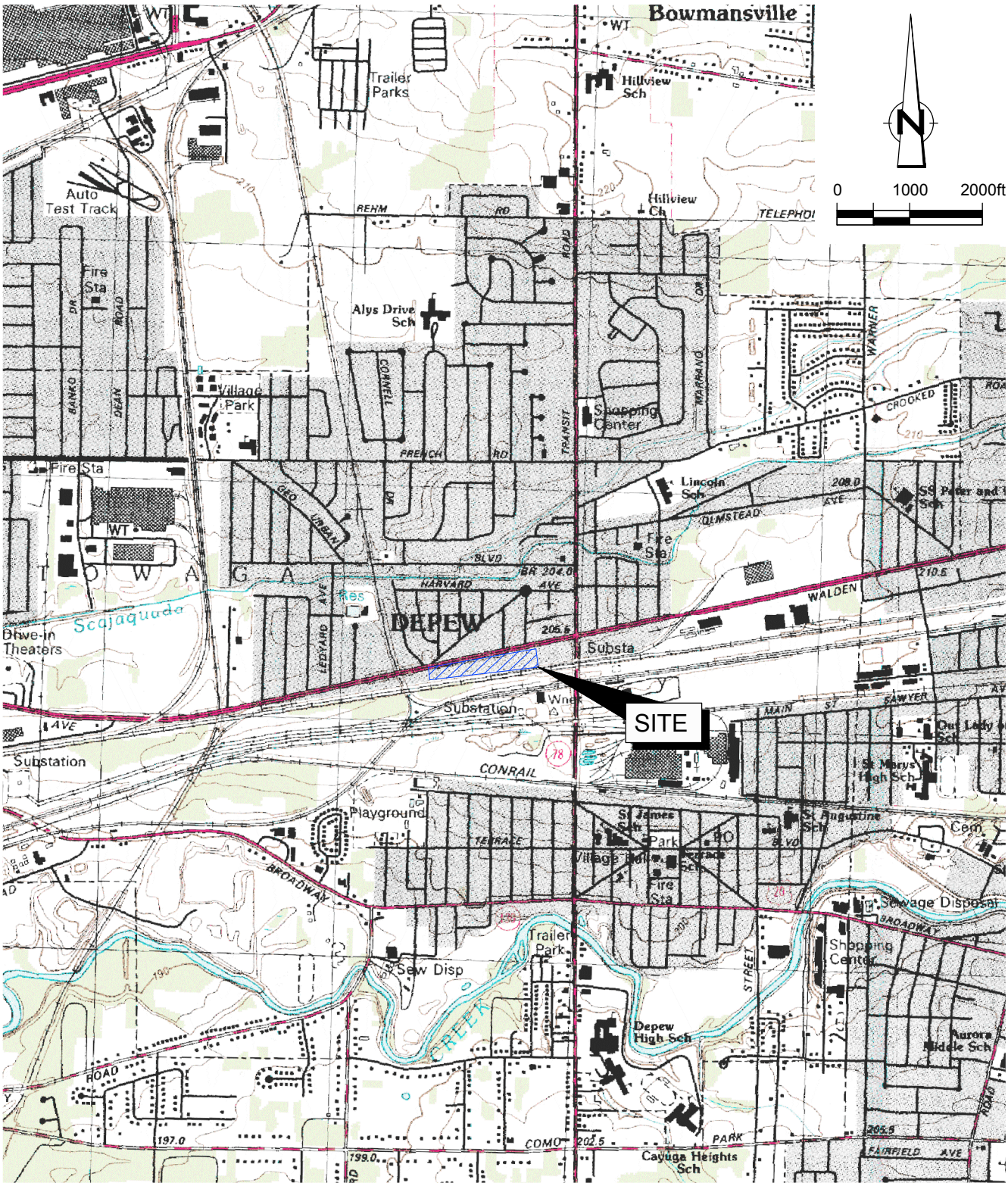
For each institutional or engineering control identified for the site, I certify that all of the following statements are true:

- The inspection of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction.
- Except as indicated in this report, the institutional controls and/or engineering controls employed at this Site are unchanged from the date the control was put in place, or last approved by the Department.
- Nothing has occurred that would impair the ability of the control to protect the public health and environment.
- Nothing has occurred that would constitute a violation or failure to comply with the SMP for this control.
- 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.
- Use of the Site is compliant with the environmental easement.
- The engineering control systems are performing as designed and are effective.
- 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.
- The information presented in this report is accurate and complete.

Robert G. Adams, P.E.
GHD Consulting Services, Inc.
285 Delaware Avenue, Suite 500
Buffalo, New York 14202

Signature: Robert G. Adams Date: 09/28/16

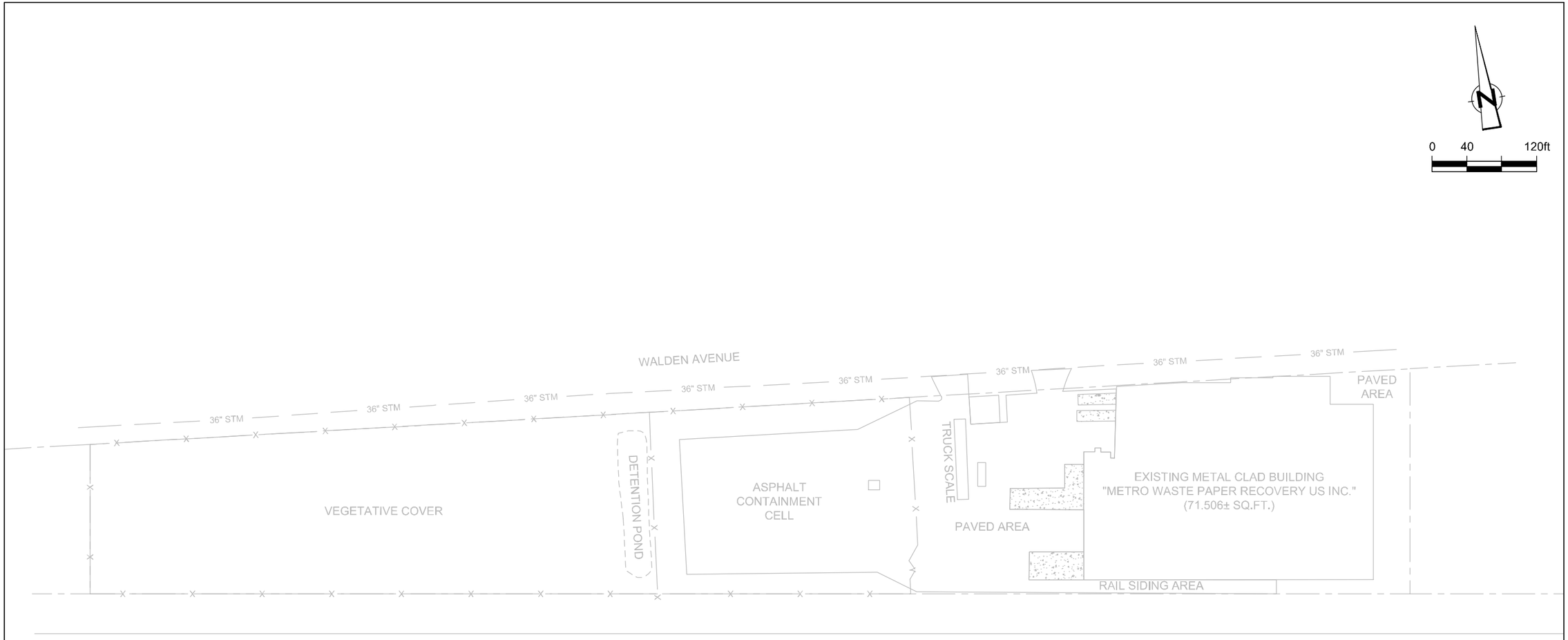
Figures



SOURCE : USGS QUADRANGLE MAP:
LANCASTER, NEW YORK

figure 1.1

SITE LOCATION MAP
FORMER N.L. INDUSTRIES SITE REMEDIATION
3241 WALDEN AVENUE
Depew, New York



SOURCE: DRAWING FILE (MWL-126254-01.dwg)
FROM TIGHE & BOND
(MIDDLETOWN, CONNECTICUT)

figure 2.1

SITE LAYOUT
FORMER N.L. INDUSTRIES SITE REMEDIATION
3241 WALDEN AVENUE
Depew, New York

LEGEND:

- COVER SYSTEM A - ASPHALT ONLY
- COVER SYSTEM B - BUILDING & APRON CONCRETE
- COVER SYSTEM C - GEOSYNTHETIC CLAY LINER & SOIL
- COVER SYSTEM D - GEOSYNTHETIC CLAY LINER, SOIL, & ASPHALT (CONTAINMENT CELL)

SOURCE: DRAWING FILE (MWL-126254-01.dwg)
FROM TIGHE & BOND
(MIDDLETOWN, CONNECTICUT)

figure 2.2

LOCATION OF ENGINEERING CONTROL SYSTEMS
FORMER N.L. INDUSTRIES SITE REMEDIATION
3241 WALDEN AVENUE
Depew, New York

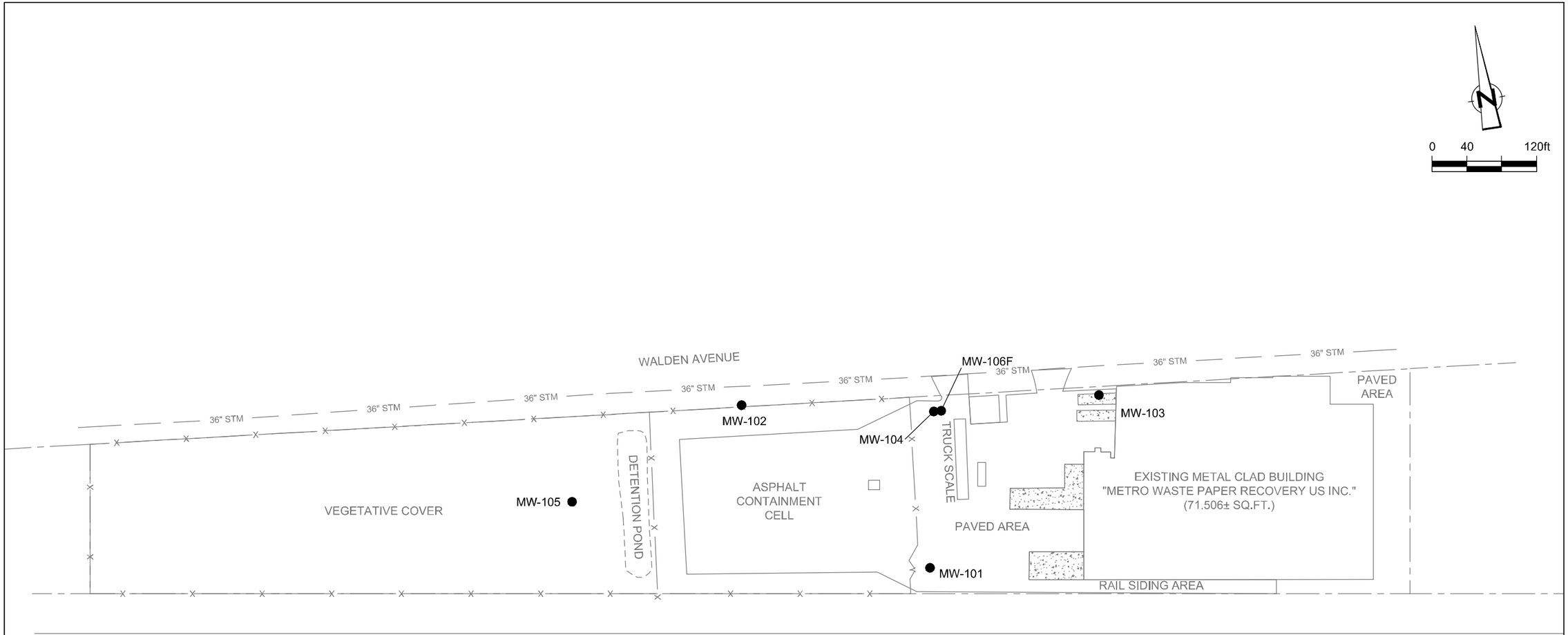


figure 4.1

MONITORING WELL LOCATIONS
FORMER N.L. INDUSTRIES SITE REMEDIATION
3241 WALDEN AVENUE
Depew, New York

SOURCE: DRAWING FILE (MWL-126254-01.dwg)
FROM TIGHE & BOND
(MIDDLETOWN, CONNECTICUT)

LEGEND

- MW-101 — MONITORING WELL LOCATION
- FENCELINE
- PROPERTY BOUNDARY
- RAILROAD
- 673.79 — GROUNDWATER ELEVATION (ft.)
- 672 — GROUNDWATER ELEVATION CONTOUR (ft.)
- APPARENT GROUNDWATER FLOW DIRECTION

NOTE: WATER LEVEL MEASUREMENTS COLLECTED AUGUST 17, 2016

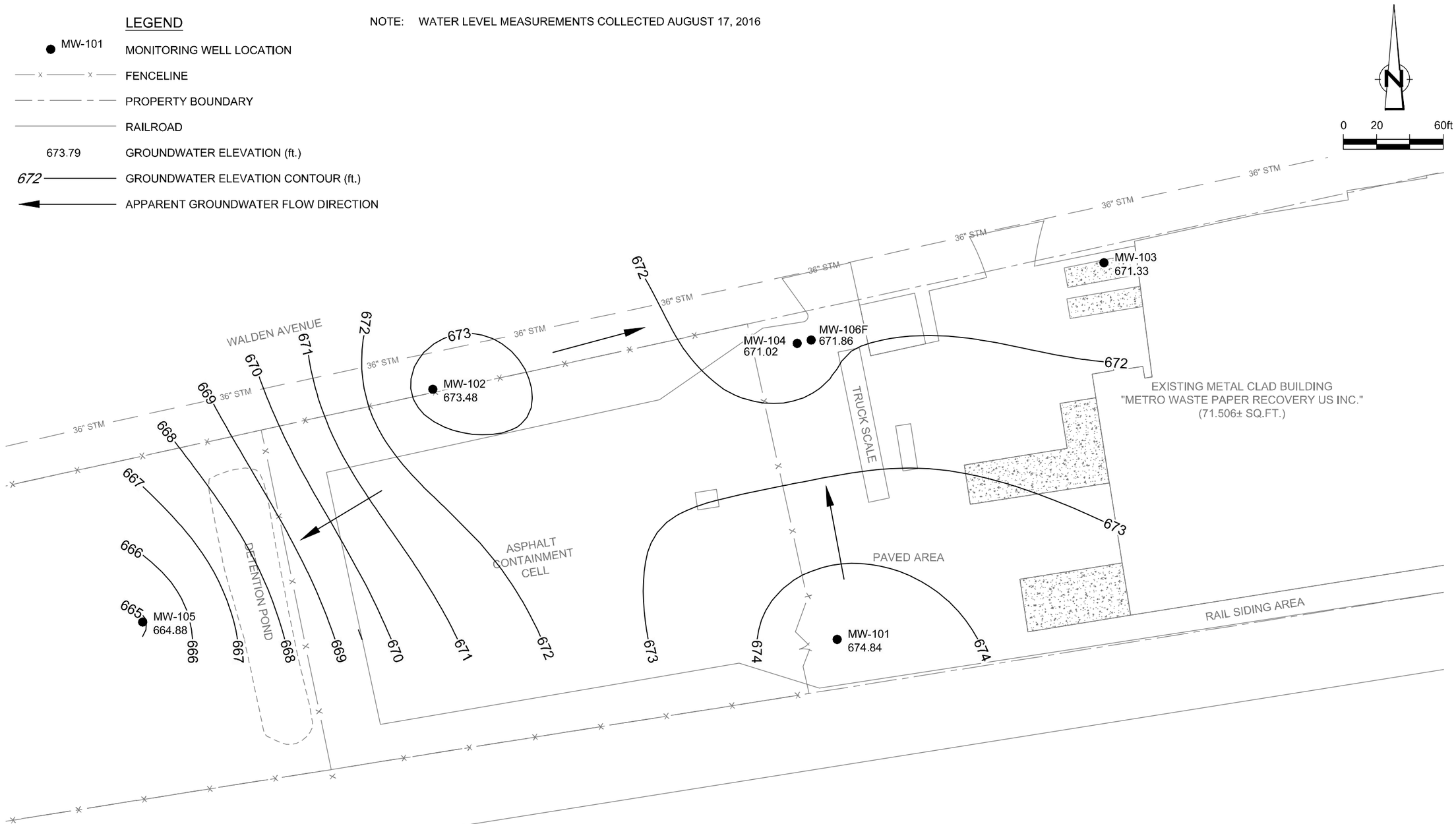


figure 4.2

GROUNDWATER CONTOUR MAP
FORMER N.L. INDUSTRIES SITE REMEDIATION
3241 WALDEN AVENUE
Depew, New York

SOURCE: DRAWING FILE (MWL-126254-01.dwg)
FROM TIGHE & BOND
(MIDDLETOWN, CONNECTICUT)

Tables

Table 4.1

Monitoring Well Measurement Summary
2016 Annual Periodic Review Report
Former NL Industries Site
NYSDEC Site No. C915200
Depew, New York

Well	*Sounded Depth (ft. BTOC)*	*Screened Interval (ft. BTOC)*	*Percent Screened Interval Open*
MW-101	26.85	17.0 to 27.0	99
MW-102	24.50	15.1 to 25.1	93
MW-103	26.67	17.0 to 27.0	97
MW-104	26.44	17.0 to 27.0	94
MW-105	24.04	16.1 to 26.1	79
MW-106F	10.30	6.05 to 11.05	85

Notes:
BTOC Below Top of Casing.
Measurements were taken in September 2015.

Table 4.2

Summary of Groundwater Level Measurements
2016 Annual Periodic Review Report
Former NL Industries Site
NYSDEC Site No. C915200
Depew, New York

			Water Level Elevations						
Well	***Ground Elevation***	***Top of Casing Elevation***	***4/2009***	***6/2010***	***8/2012***	***8/2013***	***9/2014***	***9/2015***	***8/2016***
MW-101	678.03	678.03	675.12	676.28	674.71	675.93	676.83	670.73	674.84
MW-102	675.56	676.67	672.21	673.66	672.56	673.76	674.20	673.79	673.48
MW-103	677.57	677.56	672.68	672.81	671.56	672.56	672.44	672.34	671.33
MW-104	677.06	677.06	671.44	671.78	670.88	671.24	671.37	671.45	671.02
MW-105	675.51	675.48	668.87	668.34	663.92	667.38	667.16	667.04	664.88
MW-106F	677.38	677.43	668.9	674.10	672.05	674.93	672.61	672.41	671.86

Notes:

Elevations are referenced to the NVGD datum.
NVGD National Vertical Geodetic Datum.

Table 4.3

Sample Collection and Analysis Summary
2016 Annual Periodic Review Report
Former NL Industries Site
NYSDEC Site No. C915200
Depew, New York

Sample ID	Location I.D.	Collection Date	Collection Time	Parameter			Comment
				TCL VOCs	TAL Metals	TCL SVOCs	
WG-11124679-081716-SG-001	MW-106F	8/17/2016	10:35	X	X	X	
WG-11124679-081716-SG-002	MW-101	8/17/2016	10:25	X	X	X	
WG-11124679-081716-SG-003	-	8/17/2016	10:20	X	X	X	Equipment Blank
WG-11124679-081716-SG-004	MW-102	8/17/2016	12:05	X	X	X	
WG-11124679-081716-SG-005	MW-104	8/17/2016	11:20	X	X	X	
WG-11124679-081716-SG-006	MW-102	8/17/2016	12:05	X	X	X	*Duplicate of WG-11124679-081716-SG-004*
WG-11124679-081716-SG-007	MW-103	8/17/2016	13:00	X	X	X	
WG-11124679-081716-SG-008	MW-105	8/17/2016	14:30	X	X	X	
TB-11124670-081716-SG	-	8/17/2016	-	X			Trip Blank

Notes:

-	Not applicable
TCL	Target Compound List
TAL	Target Analyte List
SVOCs	Semi-Volatile Organic Compounds
VOCs	Volatile Organic Compounds

Table 4.4

Analytical Results Summary
2016 Annual Periodic Review Report
Former NL Industries Site
NYSDEC Site No. C915200
Depew, New York

Location ID:			MW-101	MW-102	MW-102	MW-103	MW-104	MW-105	MW-106F
Sample Name:			WG-11124679-081716-SG-002	WG-11124679-081716-SG-004	WG-11124679-081716-SG-006	WG-11124679-081716-SG-007	WG-11124679-081716-SG-005	WG-11124679-081716-SG-008	WG-11124679-081716-SG-001
Sample Date:			08/17/2016	08/17/2016	08/17/2016 Duplicate	08/17/2016	08/17/2016	08/17/2016	08/17/2016
	New York State Water Quality								
Parameters	***Standards a***	***Guidance Values b***	**Unit**						
Volatile Organic Compounds									
1,1,1-Trichloroethane	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	0.04	NC	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dibromoethane (Ethylene dibromide)	0.0006	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	NC	50	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	NC	50	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	NC	NC	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	NC	50	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	1	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	NC	50	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	NC	50	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	60	60	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	7	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	NC	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	NC	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	NC	50	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	NC	NC	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	NC	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	NC	10	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Volatile Organic Compounds										
Toluene	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	NC	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (CFC-113)	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	2	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	NC	NC	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Semi-volatile Organic Compounds										
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	5	NC	µg/L	1.0 U	0.95 U	0.95 U	0.95 U	0.95 U	0.98 U	1.0 U
2,4,5-Trichlorophenol	NC	NC	µg/L	5.0 U	4.8 U	4.8 U	4.8 U	4.8 U	4.9 U	5.0 U
2,4,6-Trichlorophenol	NC	NC	µg/L	5.0 U	4.8 U	4.8 U	4.8 U	4.8 U	4.9 U	5.0 U
2,4-Dichlorophenol	5	NC	µg/L	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	2.0 U
2,4-Dimethylphenol	NC	50	µg/L	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	2.0 U
2,4-Dinitrophenol	NC	10	µg/L	5.0 U	4.8 U	4.8 U	4.8 U	4.8 U	4.9 U	5.0 U
2,4-Dinitrotoluene	5	NC	µg/L	5.0 U	4.8 U	4.8 U	4.8 U	4.8 U	4.9 U	5.0 U
2,6-Dinitrotoluene	5	NC	µg/L	5.0 U	4.8 U	4.8 U	4.8 U	4.8 U	4.9 U	5.0 U
2-Chloronaphthalene	NC	10	µg/L	1.0 U	0.95 U	0.95 U	0.95 U	0.95 U	0.98 U	1.0 U
2-Chlorophenol	NC	NC	µg/L	1.0 U	0.95 U	0.95 U	0.95 U	0.95 U	0.98 U	1.0 U
2-Methylnaphthalene	NC	NC	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U
2-Methylphenol	NC	NC	µg/L	1.0 U	0.95 U	0.95 U	0.95 U	0.95 U	0.98 U	1.0 U
2-Nitroaniline	5	NC	µg/L	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	2.0 U
2-Nitrophenol	NC	NC	µg/L	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	2.0 U

Table 4.4

Analytical Results Summary
2016 Annual Periodic Review Report
Former NL Industries Site
NYSDEC Site No. C915200
Depew, New York

Location ID:				**MW-101**	**MW-102**	**MW-102**	**MW-103**	**MW-104**	**MW-105**	**MW-106F**
Sample Name:				**WG-11124679-081716-SG-002**	**WG-11124679-081716-SG-004**	**WG-11124679-081716-SG-006**	**WG-11124679-081716-SG-007**	**WG-11124679-081716-SG-005**	**WG-11124679-081716-SG-008**	**WG-11124679-081716-SG-001**
Sample Date:				**08/17/2016**	**08/17/2016**	**08/17/2016**	**08/17/2016**	**08/17/2016**	**08/17/2016**	**08/17/2016**
						Duplicate				
	New York State Water Quality									
Parameters	***Standards***	***Guidance Values***	**Unit**							
	a	***b***								
3&4-Methylphenol	5	NC	µg/L	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	2.0 U
3,3'-Dichlorobenzidine	5	NC	µg/L	5.0 U	4.8 U	4.8 U	4.8 U	4.8 U	4.9 U	5.0 U
3-Nitroaniline	NC	NC	µg/L	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	2.0 U
4,6-Dinitro-2-methylphenol	NC	NC	µg/L	5.0 U	4.8 U	4.8 U	4.8 U	4.8 U	4.9 U	5.0 U
4-Bromophenyl phenyl ether	NC	NC	µg/L	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	5	NC	µg/L	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	2.0 U
4-Chloroaniline	NC	NC	µg/L	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	2.0 U
4-Chlorophenyl phenyl ether	NC	NC	µg/L	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	2.0 U
4-Nitroaniline	5	NC	µg/L	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	2.0 U
4-Nitrophenol	NC	NC	µg/L	5.0 U	4.8 U	4.8 U	4.8 U	4.8 U	4.9 U	5.0 U
Acenaphthene	NC	20	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U
Acenaphthylene	NC	NC	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U
Acetophenone	NC	NC	µg/L	1.0 U	0.95 U	0.95 U	0.95 U	0.95 U	0.98 U	1.0 U
Anthracene	NC	50	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U
Atrazine	7.5	NC	µg/L	1.0 U	0.95 U	0.95 U	0.95 U	0.95 U	0.98 U	1.0 U
Benzaldehyde	NC	NC	µg/L	1.0 U	0.95 U	0.95 U	0.95 U	0.95 U	0.98 U	1.0 U
Semi-volatile Organic Compounds										
Benzo(a)anthracene	NC	0.002	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U
Benzo(a)pyrene	NC	NC	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U
Benzo(b)fluoranthene	NC	0.002	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U
Benzo(g,h,i)perylene	NC	NC	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U
Benzo(k)fluoranthene	NC	0.002	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U
Biphenyl (1,1-Biphenyl)	5	NC	µg/L	1.0 U	0.95 U	0.95 U	0.95 U	0.95 U	0.98 U	1.0 U
bis(2-Chloroethoxy)methane	5	NC	µg/L	1.0 U	0.95 U	0.95 U	0.95 U	0.95 U	0.98 U	1.0 U
bis(2-Chloroethyl)ether	1	NC	µg/L	1.0 U	0.95 U	0.95 U	0.95 U	0.95 U	0.98 U	1.0 U
bis(2-Ethylhexyl)phthalate (DEHP)	5	NC	µg/L	5.0 U	4.8 U	4.8 U	4.8 U	4.8 U	4.9 U	5.0 U
Butyl benzylphthalate (BBP)	NC	50	µg/L	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	2.0 U
Caprolactam	NC	NC	µg/L	5.0 U	4.8 U	4.8 U	4.8 U	4.8 U	4.9 U	5.0 U
Carbazole	NC	NC	µg/L	1.0 U	0.95 U	0.95 U	0.95 U	0.95 U	0.98 U	1.0 U
Chrysene	NC	0.002	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U
Di-n-butylphthalate (DBP)	50	NC	µg/L	5.0 U	4.8 U	4.8 U	4.8 U	4.8 U	4.9 U	5.0 U
Di-n-octyl phthalate (DnOP)	NC	50	µg/L	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	2.0 U
Dibenz(a,h)anthracene	NC	NC	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U
Dibenzofuran	NC	NC	µg/L	1.0 U	0.95 U	0.95 U	0.95 U	0.95 U	0.98 U	1.0 U
Diethyl phthalate	NC	50	µg/L	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	2.0 U
Dimethyl phthalate	NC	50	µg/L	2.0 U	1.9 U	1.9 U	1.9 U	1.9 U	2.0 U	2.0 U
Fluoranthene	NC	50	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U
Fluorene	NC	50	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U
Hexachlorobenzene	0.04	NC	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U
Hexachlorobutadiene	0.5	NC	µg/L	1.0 U	0.95 U	0.95 U	0.95 U	0.95 U	0.98 U	1.0 U
Hexachlorocyclopentadiene	5	NC	µg/L	10 U	9.5 U	9.5 U	9.5 U	9.5 U	9.8 U	10 U
Hexachloroethane	5	NC	µg/L	1.0 U	0.95 U	0.95 U	0.95 U	0.95 U	0.98 U	1.0 U
Indeno(1,2,3-cd)pyrene	NC	0.002	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U
Isophorone	NC	50	µg/L	1.0 U	0.95 U	0.95 U	0.95 U	0.95 U	0.98 U	1.0 U
N-Nitrosodi-n-propylamine	NC	NC	µg/L	1.0 U	0.95 U	0.95 U	0.95 U	0.95 U	0.98 U	1.0 U
N-Nitrosodiphenylamine	NC	50	µg/L	1.0 U	0.95 U	0.95 U	0.95 U	0.95 U	0.98 U	1.0 U
Naphthalene	NC	10	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U
Nitrobenzene	0.4	NC	µg/L	1.0 U	0.95 U	0.95 U	0.95 U	0.95 U	0.98 U	1.0 U
Pentachlorophenol	1	NC	µg/L	5.0 U	4.8 U	4.8 U	4.8 U	4.8 U	4.9 U	5.0 U
Phenanthrene	NC	50	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U
Phenol	1	NC	µg/L	1.0 U	0.95 U	0.95 U	0.95 U	0.95 U	0.98 U	1.0 U
Pyrene	NC	50	µg/L	0.20 U	0.19 U	0.19 U	0.19 U	0.19 U	0.20 U	0.20 U
Metals										
Aluminum	NC	NC	µg/L	50 U	150	200	50 U	50 U	69	72
Antimony	3	NC	µg/L	0.52 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.45 J
Arsenic	25	NC	µg/L	4.2 J	1.3 J	1.3 J	1.8 J	8.8	0.88 J	0.41 J
Metals (continued)										
Barium	1000	NC	µg/L	160	81	81	100	38	180	180
Beryllium	NC	3	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	5	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Calcium	NC	NC	µg/L	55000	59000	58000	110000	63000	30000	81000
Chromium	50	NC	µg/L	2.0 U	0.81 J	0.51 J	2.0 U	2.0 U	2.0 U	2.0 U
Cobalt	NC	NC	µg/L	0.43 J	0.71 J	0.74 J	0.34 J	0.15 J	0.31 J	1.0 U
Copper	200	NC	µg/L	25	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.9 U
Iron	300	NC	µg/L	100 U	**1100**	**1200**	**460**	**360**	**580**	100 U

Table 4.4

Analytical Results Summary
2016 Annual Periodic Review Report
Former NL Industries Site
NYSDEC Site No. C915200
Depew, New York

Location ID:				**MW-101**	**MW-102**	**MW-102**	**MW-103**	**MW-104**	**MW-105**	**MW-106F**
Sample Name:				**WG-11124679-081716-SG-002**	**WG-11124679-081716-SG-004**	**WG-11124679-081716-SG-006**	**WG-11124679-081716-SG-007**	**WG-11124679-081716-SG-005**	**WG-11124679-081716-SG-008**	**WG-11124679-081716-SG-001**
Sample Date:				**08/17/2016**	**08/17/2016**	**08/17/2016**	**08/17/2016**	**08/17/2016**	**08/17/2016**	**08/17/2016**
						Duplicate				
	New York State Water Quality									
Parameters	***Standards***	***Guidance Values***	**Unit**							
	a	***b***								
Lead	25	NC	µg/L	6.9	1.0	1.1	0.42 J	1.0 U	1.0 U	2.6
Magnesium	NC	35000	µg/L	**81000**	**66000**	**64000**	**91000**	**99000**	**75000**	**97000**
Manganese	300	NC	µg/L	120	150	150	44	19	23	3.0 J
Mercury	0.7	NC	µg/L	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	100	NC	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Potassium	NC	NC	µg/L	2300	2000	2100	3200	1800	3100	960 J
Selenium	10	NC	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	50	NC	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Sodium	20000	NC	µg/L	**77000**	**53000**	**53000**	**150000**	**63000**	**61000**	**80000**
Thallium	NC	0.5	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	NC	NC	µg/L	5.0 U	5.0 U	0.58 J	5.0 U	5.0 U	5.0 U	0.73 J
Zinc	NC	2000	µg/L	49	9.3 J	9.3 J	20 U	20 U	7.8 J	8.8 J

Notes:

All concentrations are expressed in units of micrograms per litre (µg/L), unless otherwise noted.
1100 - Concentration was greater than applicable criteria.
U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
-- - Not available.
NC - No criteria.
a - New York State Department of Environmental Conservation (NYSDEC) 6 NYCRR Part 703.5 New York State Water Quality Standards.
b - NYSDEC Division of Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998).

Appendices

Appendix A
Site Inspection Form

Site Inspection Form

Former N.L. Industries
3241 Walden Avenue
Depew, NY

Name of Inspector: KATHERINE GALANTI
Date of Inspection: 9/14/16

The purpose of this inspection is to monitor the overall integrity of the containment cell, the site wide paving and the building foundation. Please take photographs from all four sides of the containment cell cap, as well as the asphalt pavement and building foundation to document the existing conditions of the consolidated soil area, erosion control technologies in place, and the immediate surrounding area each week. Please fill out the following inspection items. If at any time impacted fill material has been exposed, please notify the Project Manager listed in the SMP immediately.

Monitoring Well Network

Condition of Monitoring Wells

	Good	Fair	Needs Repair	Details
MW-101	☑	☐	☐	
MW-102	☑	☐	☐	
MW-103	☑	☐	☐	
MW-104	☑	☐	☐	
MW-105	☑	☐	☐	
MW-106	☑	☐	☐	
~~MW-99-01~~	☐	☐	☐	N/A

Asphalt Only Cover System

Are there any obvious areas of damage to the asphalt in the trucking yard?

YES ☐ NO ☑ If yes, please describe _____

Site Inspection Form

Former N.L. Industries
3241 Walden Avenue
Depew, NY

Asphalt Only Cover System

Are there any obvious areas of damage to the asphalt in the parking lot?

YES ☐ NO ☑ If yes, please describe _____

Are there any obvious areas of damage to the asphalt in the former rail siding area?

YES ☐ NO ☑ If yes, please describe _____

Building and Apron Concrete Cover System

Are there any obvious areas of damage to the building's foundations?

YES ☐ NO ☑ If yes, please describe _____

Are there any obvious areas of damage to any concrete pads?

YES ☐ NO ☑ If yes, please describe CRACKS TARRED LAST YEAR ARE STILL IN GOOD SHAPE.

GCL and Soil Cover System

Are there any signs of soil run-off or erosion on the sides of the containment cell?

YES ☐ NO ☑ If yes, please describe _____

Site Inspection Form

Former N.L. Industries
3241 Walden Avenue
Depew, NY

GCL and Soil Cover System

Are there any areas of exposed GCL?

YES ☐ NO ☑ If yes, please describe _____

Has the grass appeared to have been mowed at a regular basis during the previous growing season?

YES ☐ NO ☑ If yes, please describe REGULAR MOWING HAS NOT OCCURED IN 2016

Are there any woody types plants growing within the this Cover System?

YES ☐ NO ☑ If yes, please describe _____

GCL and Asphalt Cover System

Are there any obvious areas of damage to the asphalt within this cover system?

YES ☐ NO ☑ If yes, please describe _____

Are there any obvious signs of cracking within this cover system?

YES ☐ NO ☑ If yes, please describe _____

Site Inspection Form

Former N.L. Industries
3241 Walden Avenue
Depew, NY

Pond

Is there standing water in the retention pond?

YES ☑ NO ☐ If yes, approximately how much? ~ 6"

Is there any debris within the retention pond?

YES ☑ NO ☐ If yes, please describe SIGNIFICANT PLANT GROWTH - PHRAGMITES

Is the inlet and outlet of the retention pond free of debris?

YES ☑ NO ☐ If no, please describe

Is there any sign of erosion along the banks of the retention pond?

YES ☐ NO ☑ If yes, please describe

Vegetatives

Is there any sign of distress, disease or die off of the vegetatives associated with the cover systems?

YES ☐ NO ☑ If yes, please describe NEEDS TO BE MOWED

Site Inspection Form

Former N.L. Industries
3241 Walden Avenue
Depew, NY

Fencing

Is there signs of damage to the fencing around the retention pond or within the area of the environmental easement?

YES ☐ NO ☑ If yes, describe location and extent of damage

Is there signs of frost heaving within the supports of the fencing?

YES ☐ NO ☑ If yes, please describe

Is the chain link still attached to support poles at all locations around the retention pond or within the area of the environmental easement?

YES ☑ NO ☐ If no, please describe

Is there any sign of erosion along the banks of the retention pond?

YES ☐ NO ☑ If yes, please describe

Please describe any changes to the overall area since the last inspection

NO SIGNIFICANT CHANGES.

Appendix B
Photographs

Photo 1 – Parking lot looking west along north side of office.

Photo 2 – Parking lot looking south.

Photo 3 – Former rail Siding looking east.

Photo 4 – Building Apron Concrete System (north end of building) looking southeast.

Photo 5 – Building Apron Concrete System (south end of building) looking east.

Photo 6 – Building Apron Concrete System (close-up of repaired cracks).

Photo 7 – Trucking Yard looking northeast.

Photo 8 – Trucking Yard looking northwest.

Photo 9 – GCL and Soil Cover System looking west along north slope.

Photo 10 – GCL and Soil Cover System looking south along west slope.

Photo 11 – GCL and Soil Cover System looking east along south slope.

Photo 12 – GCL and Soil Cover System looking west along south slope.

Photo 13 – South end of retention pond enclosure showing vegetation re-growth.

Photo 14 – Looking northwest across retention pond.

Photo 15 – Retention pond outlet pipes in northeast corner.

Photo 16 – GCL and Asphalt Cover System looking northeast across cap.

Photo 17 – GCL and Asphalt Cover System looking southeast across cap.

Photo 18 – Looking east across MW-104 (foreground) and MW-106F (background).

Appendix C
Groundwater Monitoring Field Forms

SAMPLE ID# WG-11124679-081716-SG-002

TIME 1025

Monitoring Well Record for Low-Flow Purging
(Form SP-09)

COC # 55706

Project Data:

Project Name: CASCADE PAPER
Ref. No.: 11124679

Date: 8/17/16
Personnel:
SG

Monitoring Well Data:

Well No.: MW101
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft): 20.85
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in):
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 3.19

Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required:				±3 %	±0.005 or 0.01[5]	±10 %	±10 %	±0.1 Units	±10 mV		
0959	104	4.32	1.13	17.6	1.16	3.77	0.38	7.26	137.9		
1004	96	4.92	1.73	17.8	1.15	2.69	0.28	7.34	88.4		
1009		5.45	2.26	18.2	1.14	2.25	0.24	7.37	114.8		
1014		5.89	2.70	17.9	1.14	1.54	0.25	7.39	101.2		
1019	96	6.30		17.9	1.14	0.95	0.23	7.41	106.7		

Notes:

INST. CONTROL #'S
YSI - NF07002
W/L METER - NF06118
TURBIDIMETER - NF05041

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

START PURGE @ 0952

SAMPLE ID# WG-11124679-081716-SG-004

BLIND DUPLICATE - WG-11124679-081716-SG-006

TIME 1205

TIME 1205

Monitoring Well Record for Low-Flow Purging
(Form SP-09)

Project Data:

Project Name: CASCADE PAPER

Ref. No.: 11124679

Date: 8/17/16

Personnel: SG

CofC # 55706

Monitoring Well Data:

Well No.: MW102

Vapour PID (ppm):

Measurement Point:

Constructed Well Depth (m/ft):

Measured Well Depth (m/ft): 24.50

Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):

Depth to Pump Intake (m/ft)[1]:

Well Diameter, D (cm/in):

Well Screen Volume, V_s (L)[2]:

Initial Depth to Water (m/ft): 3.19

Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required:				±3 %	±0.005 or 0.01[5]	±10 %	±10 %	±0.1 Units	±10 mV		
1133	100	4.05	0.86	18.2	1.27	4.72	0.48	7.39	-45.1		
1138	104	4.55	1.36	17.6	1.26	4.58	0.29	7.43	-81.3		
1143		5.20	2.01	17.5	1.27	4.19	0.26	7.48	-56.4		
1148	104	5.74	2.55	17.4	1.26	3.17	0.19	7.51	-44.6		
1153		6.20	3.01	17.1	1.26	3.15	0.18	7.52	-40.2		
1158		6.85		16.9	1.26	2.50	0.17	7.54	-38.6		

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

INST CONTROL #S

YSI - NF07602

W/L METER - NF01118

TURBIDIMETER - NF05041

START PURGE @ 1127

Sample ID WG-1112479-081716-SG-007
Time 1300

Monitoring Well Record for Low-Flow Purging
(Form SP-09)

Project Data:
Project Name: Cascade Paper
Ref. No.: 1112479

Date: 8.17.16
Personnel: D. Ryan

CofC # 55706

Monitoring Well Data:
Well No.: MW103
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft): 26.67
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in):
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 6.23

Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required:				±3 %	±0.005 or 0.01[5]	±10 %	±10 %	±0.1 Units	±10 mV		
1244	84	6.99	0.76	19.6	1.69	4.89	1.31	7.14	6.1		
1249		7.42		20.0	1.68	2.93	0.00	7.07	-6.8		
1254	84	7.80	1.57	18.4	1.68	3.02	0.00	7.09	-15.9		
1259		8.08		18.4	1.68	3.54	0.00	7.08	-17.5		

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

Inst Control #'S
Turb NF05039
YSI NF07610
W/L Meter NF06117

Start Purge @ 1236

Sample ID WG-1112467 9-081716-SG-005
Time 1120

Monitoring Well Record for Low-Flow Purging
(Form SP-09)

Project Data:
Project Name: Cascade Paper
Ref. No.: 1112467 9

Date: 8.17.16
Personnel: D. Tyran

CofC # 55706

Monitoring Well Data:
Well No.: MW-104
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft): 26.44
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in):
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 6.04

Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required:				±3 %	±0.005 or 0.01[5]	±10 %	±10 %	±0.1 Units	±10 mV		
1105	66	6.99	0.95	21.0	1.13	8.81	0.41	7.50	-42.8		
1110				21.4	1.13	2.91		7.42	-37.3		
1115	60	7.57	1.53	21.3	1.13	1.29	0.02	7.42	-38.1		
1120				22.1	1.13	1.00	0.00	7.43	-48.6		

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

Inst. Control #'s
W/L Meter NF06117
YSI NF07610
Turb. NF05039

Start Purge @ 1059

SAMPLE ID# WG-111246 79-081716-SG-008

TIME 1430

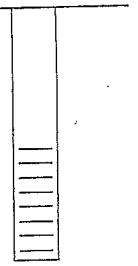
Monitoring Well Record for Low-Flow Purging
(Form SP-09)

Project Data:
Project Name: CASCADE PAPER
Ref. No.: 111246 79

Date: 8/17/16
Personnel:
SG

Monitoring Well Data:
Well No.: MW-105
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft): 24.04 SOFT BOTTOM
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in):
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 10.60



Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required:				±3 %	±0.005 or 0.01[5]	±10 %	±10 %	±0.1 Units	±10 mV		
1345	106	11.42	0.82	16.0	1.00	281	1.05	7.91	272.5		
1350	104	11.62	1.02	16.1	1.01	120	0.44	7.96	262.3		
1355		11.83	1.23	15.6	1.01	26.4	0.27	7.97	148.5		
1400	100	11.94	1.34	15.6	1.01	27.4	0.26	7.96	118.5		
1405		12.05	1.45	15.5	1.01	19.3	0.21	7.95	123.0		
1410		12.17	1.57	15.7	1.00	12.1	0.20	7.97	157.9		
1415		12.22		15.7	0.99	10.1	0.19	8.00	76.3		
1420	100	12.27		15.8	0.98	9.10	0.20	8.02	73.2		
1425		12.31		15.6	0.97	9.38	0.20	8.04	70.6		

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

INST CONTROL #S
YSI - NFOTL002
W/L METER - NFOL118
TURBIDIMETER - NFO5041

START PURGE @ 1339

Sample ID WG-11124679-081716-SG-001
Time 1035

Monitoring Well Record for Low-Flow Purging
(Form SP-09)

Project Data:
Project Name: Cascade Paper
Ref. No.: 11124679

Date: 8.17.16
Personnel: D. Tyson

CofC# 55706

Monitoring Well Data:
Well No.: MW106F
Vapour PID (ppm):
Measurement Point:
Constructed Well Depth (m/ft):
Measured Well Depth (m/ft): 10.30
Depth of Sediment (m/ft):

Saturated Screen Length (m/ft):
Depth to Pump Intake (m/ft)[1]:
Well Diameter, D (cm/in):
Well Screen Volume, V_s (L)[2]:
Initial Depth to Water (m/ft): 5.57

Time	Pumping Rate (mL/min)	Depth to Water (m/ft)	Drawdown from Initial Water Level[3] (m/ft)	Temperature °C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged[4]
Precision Required:				±3 %	±0.005 or 0.01[5]	±10 %	±10 %	±0.1 Units	±10 mV		
1001	66	5.88	0.31	21.5	1.30	35.4	0.20	6.67	37.7		
1006		6.01	0.44	21.8	1.30	31.8	0.15	6.80	51.9		
1011	62	6.23	0.66	22.1	1.30	27.8	0.11	6.89	61.4		
1016		6.35	0.78	22.6	1.30	21.4	0.10	6.93	67.3		
1021	64	6.50	0.93	22.8	1.30	14.2	0.09	6.93	71.7		
1026		6.61	1.04	22.9	1.31	13.3	0.09	6.94	78.3		
1031		6.74	1.17	22.8	1.31	8.81	0.10	6.94	75.6		

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 0.6 m (2 ft) above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 1.52 metres (5-foot) screen length (L). For metric units, $V_s=\pi*(r^2)*L$ in mL, where r (r=D/2) and L are in cm.
For Imperial units, $V_s=\pi*(r^2)*L*(2.54)^3$, where r and L are in inches

(3) The drawdown from the initial water level should not exceed 0.1 m (0.3 ft). The pumping rate should not exceed 600 mL/min.

(4) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing), No. of Well Screen Volumes Purged= Vp/Vs.

(5) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.

Inst. Control #'s
W/L Meter NF06117
Turb. NF05039
YSI NF07610

start Purge @ 0952

Appendix D
Analytical Data Report

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-68530-1
Client Project/Site: 11124679, NL Industries

For:
GHD Services Inc.
2055 Niagara Falls Blvd., Suite 3
Niagara Falls, New York 14304

Attn: Mr. Paul McMahon

Denise D Heckler

Authorized for release by:
8/30/2016 8:10:57 AM

Denise Heckler, Project Manager II
(330)966-9477
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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: 11124679, NL Industries

TestAmerica Job ID: 240-68530-1

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.
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

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.

Glossary

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

Job ID: 240-68530-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-68530-1

Comments
No additional comments.

Receipt
The samples were received on 8/19/2016 9:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.9º C and 3.1º C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 240-244515 recovered above the upper control limit for bromoform. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 240-244515 recovered outside control limits for 1,3-dichloropropene. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The MS/MSD for batch 240-244515 was not analyzed due to an instrument malfunction.

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

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

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

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

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

Method Summary

Client: GHD Services Inc.
Project/Site: 11124679, NL Industries

TestAmerica Job ID: 240-68530-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
6020A	Metals (ICP/MS)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: GHD Services Inc.
Project/Site: 11124679, NL Industries

TestAmerica Job ID: 240-68530-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-68530-1	TB-11124679-081716-SG	Water	08/17/16 00:00	08/19/16 09:35
240-68530-2	FB-11124679-081716-SG-003	Water	08/17/16 10:20	08/19/16 09:35
240-68530-3	WG-11124679-081716-SG-001	Water	08/17/16 10:35	08/19/16 09:35
240-68530-4	WG-11124679-081716-SG-002	Water	08/17/16 10:25	08/19/16 09:35
240-68530-5	WG-11124679-081716-SG-005	Water	08/17/16 11:20	08/19/16 09:35
240-68530-6	WG-11124679-081716-SG-004	Water	08/17/16 12:05	08/19/16 09:35
240-68530-7	WG-11124679-081716-SG-006	Water	08/17/16 12:05	08/19/16 09:35
240-68530-8	WG-11124679-081716-SG-007	Water	08/17/16 13:00	08/19/16 09:35
240-68530-9	WG-11124679-081716-SG-008	Water	08/17/16 14:30	08/19/16 09:35

Detection Summary

Client: GHD Services Inc.
Project/Site: 11124679, NL Industries

TestAmerica Job ID: 240-68530-1

Client Sample ID: TB-11124679-081716-SG — Lab Sample ID: 240-68530-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.8	J	10	0.94	ug/L	1		8260C	Total/NA

Client Sample ID: FB-11124679-081716-SG-003 — Lab Sample ID: 240-68530-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.8	J	10	0.94	ug/L	1		8260C	Total/NA
Aluminum	30	J	50	13	ug/L	1		6020A	Total Recoverable
Copper	0.36	J B	2.0	0.36	ug/L	1		6020A	Total Recoverable
Iron	17	J B	100	5.3	ug/L	1		6020A	Total Recoverable
Calcium	340	J B	1000	43	ug/L	1		6020A	Total Recoverable
Potassium	11	J B	1000	6.6	ug/L	1		6020A	Total Recoverable
Sodium	660	J B	1000	14	ug/L	1		6020A	Total Recoverable

Client Sample ID: WG-11124679-081716-SG-001 — Lab Sample ID: 240-68530-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	72		50	13	ug/L	1		6020A	Total Recoverable
Arsenic	0.41	J	5.0	0.35	ug/L	1		6020A	Total Recoverable
Barium	180	B	5.0	0.52	ug/L	1		6020A	Total Recoverable
Copper	3.9	B	2.0	0.36	ug/L	1		6020A	Total Recoverable
Iron	74	J B	100	5.3	ug/L	1		6020A	Total Recoverable
Manganese	3.0	J	5.0	0.25	ug/L	1		6020A	Total Recoverable
Nickel	0.70	J B	2.0	0.28	ug/L	1		6020A	Total Recoverable
Lead	2.6		1.0	0.16	ug/L	1		6020A	Total Recoverable
Antimony	0.45	J	2.0	0.27	ug/L	1		6020A	Total Recoverable
Vanadium	0.73	J	5.0	0.54	ug/L	1		6020A	Total Recoverable
Zinc	8.8	J	20	6.2	ug/L	1		6020A	Total Recoverable
Calcium	81000	B	1000	43	ug/L	1		6020A	Total Recoverable
Potassium	960	J B	1000	6.6	ug/L	1		6020A	Total Recoverable
Magnesium	97000	B	1000	16	ug/L	1		6020A	Total Recoverable
Sodium	80000	B	1000	14	ug/L	1		6020A	Total Recoverable

Client Sample ID: WG-11124679-081716-SG-002 — Lab Sample ID: 240-68530-4

This Detection Summary does not include radiochemical test results.

Client Sample ID: WG-11124679-081716-SG-002 (Continued) — Lab Sample ID: 240-68530-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.99	J	10	0.94	ug/L	1		8260C	Total/NA
Arsenic	4.2	J	5.0	0.35	ug/L	1		6020A	Total Recoverable
Barium	160	B	5.0	0.52	ug/L	1		6020A	Total Recoverable
Cobalt	0.43	J	1.0	0.13	ug/L	1		6020A	Total Recoverable
Copper	25	B	2.0	0.36	ug/L	1		6020A	Total Recoverable
Iron	28	J B	100	5.3	ug/L	1		6020A	Total Recoverable
Manganese	120		5.0	0.25	ug/L	1		6020A	Total Recoverable
Nickel	0.79	J B	2.0	0.28	ug/L	1		6020A	Total Recoverable
Lead	6.9		1.0	0.16	ug/L	1		6020A	Total Recoverable
Antimony	0.52	J	2.0	0.27	ug/L	1		6020A	Total Recoverable
Zinc	49		20	6.2	ug/L	1		6020A	Total Recoverable
Calcium	55000	B	1000	43	ug/L	1		6020A	Total Recoverable
Potassium	2300	B	1000	6.6	ug/L	1		6020A	Total Recoverable
Magnesium	81000	B	1000	16	ug/L	1		6020A	Total Recoverable
Sodium	77000	B	1000	14	ug/L	1		6020A	Total Recoverable

Client Sample ID: WG-11124679-081716-SG-005 — Lab Sample ID: 240-68530-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	8.8		5.0	0.35	ug/L	1		6020A	Total Recoverable
Barium	38	B	5.0	0.52	ug/L	1		6020A	Total Recoverable
Cobalt	0.15	J	1.0	0.13	ug/L	1		6020A	Total Recoverable
Iron	360	B	100	5.3	ug/L	1		6020A	Total Recoverable
Manganese	19		5.0	0.25	ug/L	1		6020A	Total Recoverable
Calcium	63000	B	1000	43	ug/L	1		6020A	Total Recoverable
Potassium	1800	B	1000	6.6	ug/L	1		6020A	Total Recoverable
Magnesium	99000	B	1000	16	ug/L	1		6020A	Total Recoverable
Sodium	63000	B	1000	14	ug/L	1		6020A	Total Recoverable

Client Sample ID: WG-11124679-081716-SG-004 — Lab Sample ID: 240-68530-6

This Detection Summary does not include radiochemical test results.

Client Sample ID: WG-11124679-081716-SG-004 (Continued) — Lab Sample ID: 240-68530-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	150		50	13	ug/L	1		6020A	Total Recoverable
Arsenic	1.3	J	5.0	0.35	ug/L	1		6020A	Total Recoverable
Barium	81	B	5.0	0.52	ug/L	1		6020A	Total Recoverable
Cobalt	0.71	J	1.0	0.13	ug/L	1		6020A	Total Recoverable
Chromium	0.81	J	2.0	0.26	ug/L	1		6020A	Total Recoverable
Copper	1.7	J B	2.0	0.36	ug/L	1		6020A	Total Recoverable
Iron	1100	B	100	5.3	ug/L	1		6020A	Total Recoverable
Manganese	150		5.0	0.25	ug/L	1		6020A	Total Recoverable
Nickel	1.2	J B	2.0	0.28	ug/L	1		6020A	Total Recoverable
Lead	1.0		1.0	0.16	ug/L	1		6020A	Total Recoverable
Zinc	9.3	J	20	6.2	ug/L	1		6020A	Total Recoverable
Calcium	59000	B	1000	43	ug/L	1		6020A	Total Recoverable
Potassium	2000	B	1000	6.6	ug/L	1		6020A	Total Recoverable
Magnesium	66000	B	1000	16	ug/L	1		6020A	Total Recoverable
Sodium	53000	B	1000	14	ug/L	1		6020A	Total Recoverable

Client Sample ID: WG-11124679-081716-SG-006 — Lab Sample ID: 240-68530-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	200		50	13	ug/L	1		6020A	Total Recoverable
Arsenic	1.3	J	5.0	0.35	ug/L	1		6020A	Total Recoverable
Barium	81	B	5.0	0.52	ug/L	1		6020A	Total Recoverable
Cobalt	0.74	J	1.0	0.13	ug/L	1		6020A	Total Recoverable
Chromium	0.51	J	2.0	0.26	ug/L	1		6020A	Total Recoverable
Copper	2.0	B	2.0	0.36	ug/L	1		6020A	Total Recoverable
Iron	1200	B	100	5.3	ug/L	1		6020A	Total Recoverable
Manganese	150		5.0	0.25	ug/L	1		6020A	Total Recoverable
Nickel	0.80	J B	2.0	0.28	ug/L	1		6020A	Total Recoverable
Lead	1.1		1.0	0.16	ug/L	1		6020A	Total Recoverable
Vanadium	0.58	J	5.0	0.54	ug/L	1		6020A	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: WG-11124679-081716-SG-006 (Continued) — Lab Sample ID: 240-68530-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	9.3	J	20	6.2	ug/L	1		6020A	Total Recoverable
Calcium	58000	B	1000	43	ug/L	1		6020A	Total Recoverable
Potassium	2100	B	1000	6.6	ug/L	1		6020A	Total Recoverable
Magnesium	64000	B	1000	16	ug/L	1		6020A	Total Recoverable
Sodium	53000	B	1000	14	ug/L	1		6020A	Total Recoverable

Client Sample ID: WG-11124679-081716-SG-007 — Lab Sample ID: 240-68530-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.8	J	5.0	0.35	ug/L	1		6020A	Total Recoverable
Barium	100	B	5.0	0.52	ug/L	1		6020A	Total Recoverable
Cobalt	0.34	J	1.0	0.13	ug/L	1		6020A	Total Recoverable
Copper	0.60	J B	2.0	0.36	ug/L	1		6020A	Total Recoverable
Iron	460	B	100	5.3	ug/L	1		6020A	Total Recoverable
Manganese	44		5.0	0.25	ug/L	1		6020A	Total Recoverable
Nickel	0.74	J B	2.0	0.28	ug/L	1		6020A	Total Recoverable
Lead	0.42	J	1.0	0.16	ug/L	1		6020A	Total Recoverable
Calcium	110000	B	1000	43	ug/L	1		6020A	Total Recoverable
Potassium	3200	B	1000	6.6	ug/L	1		6020A	Total Recoverable
Magnesium	91000	B	1000	16	ug/L	1		6020A	Total Recoverable
Sodium	150000	B	1000	14	ug/L	1		6020A	Total Recoverable

Client Sample ID: WG-11124679-081716-SG-008 — Lab Sample ID: 240-68530-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.9	J	10	0.94	ug/L	1		8260C	Total/NA
Aluminum	69		50	13	ug/L	1		6020A	Total Recoverable
Arsenic	0.88	J	5.0	0.35	ug/L	1		6020A	Total Recoverable
Barium	180	B	5.0	0.52	ug/L	1		6020A	Total Recoverable
Cobalt	0.31	J	1.0	0.13	ug/L	1		6020A	Total Recoverable
Copper	0.55	J B	2.0	0.36	ug/L	1		6020A	Total Recoverable
Iron	580	B	100	5.3	ug/L	1		6020A	Total Recoverable

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Project/Site: 11124679, NL Industries

TestAmerica Job ID: 240-68530-1

Client Sample ID: WG-11124679-081716-SG-008 (Continued) — Lab Sample ID: 240-68530-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	23		5.0	0.25	ug/L	1		6020A	Total Recoverable
Nickel	0.70	J B	2.0	0.28	ug/L	1		6020A	Total Recoverable
Zinc	7.8	J	20	6.2	ug/L	1		6020A	Total Recoverable
Calcium	30000	B	1000	43	ug/L	1		6020A	Total Recoverable
Potassium	3100	B	1000	6.6	ug/L	1		6020A	Total Recoverable
Magnesium	75000	B	1000	16	ug/L	1		6020A	Total Recoverable
Sodium	61000	B	1000	14	ug/L	1		6020A	Total Recoverable

This Detection Summary does not include radiochemical test results.

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

Client Sample ID: TB-11124679-081716-SG
Date Collected: 08/17/16 00:00
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			08/26/16 20:51	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			08/26/16 20:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			08/26/16 20:51	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/26/16 20:51	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			08/26/16 20:51	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			08/26/16 20:51	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			08/26/16 20:51	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			08/26/16 20:51	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			08/26/16 20:51	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			08/26/16 20:51	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			08/26/16 20:51	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			08/26/16 20:51	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			08/26/16 20:51	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			08/26/16 20:51	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			08/26/16 20:51	1
2-Hexanone	10	U	10	0.48	ug/L			08/26/16 20:51	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			08/26/16 20:51	1
Acetone	**7.8**	**J**	10	0.94	ug/L			08/26/16 20:51	1
Benzene	1.0	U	1.0	0.35	ug/L			08/26/16 20:51	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			08/26/16 20:51	1
Bromoform	1.0	U	1.0	0.56	ug/L			08/26/16 20:51	1
Bromomethane	1.0	U	1.0	0.44	ug/L			08/26/16 20:51	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			08/26/16 20:51	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			08/26/16 20:51	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			08/26/16 20:51	1
Chloroethane	1.0	U	1.0	0.32	ug/L			08/26/16 20:51	1
Chloroform	1.0	U	1.0	0.25	ug/L			08/26/16 20:51	1
Chloromethane	1.0	U	1.0	0.44	ug/L			08/26/16 20:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			08/26/16 20:51	1
cis-1,3-Dichloropropene	1.0	U *	1.0	0.46	ug/L			08/26/16 20:51	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			08/26/16 20:51	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			08/26/16 20:51	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			08/26/16 20:51	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			08/26/16 20:51	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			08/26/16 20:51	1
Methyl acetate	10	U	10	2.3	ug/L			08/26/16 20:51	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			08/26/16 20:51	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			08/26/16 20:51	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			08/26/16 20:51	1
Styrene	1.0	U	1.0	0.45	ug/L			08/26/16 20:51	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			08/26/16 20:51	1
Toluene	1.0	U	1.0	0.23	ug/L			08/26/16 20:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			08/26/16 20:51	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			08/26/16 20:51	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			08/26/16 20:51	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			08/26/16 20:51	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			08/26/16 20:51	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			08/26/16 20:51	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*88*		*73 - 124*		*08/26/16 20:51*	*1*
Dibromofluoromethane (Surr)	*90*		*80 - 120*		*08/26/16 20:51*	*1*
4-Bromofluorobenzene (Surr)	*81*		*73 - 120*		*08/26/16 20:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*63 - 132*		*08/26/16 20:51*	*1*

Client Sample ID: FB-11124679-081716-SG-003 — **Lab Sample ID: 240-68530-2**
Date Collected: 08/17/16 10:20 — **Matrix: Water**
Date Received: 08/19/16 09:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			08/26/16 21:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			08/26/16 21:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			08/26/16 21:14	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/26/16 21:14	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			08/26/16 21:14	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			08/26/16 21:14	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			08/26/16 21:14	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			08/26/16 21:14	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			08/26/16 21:14	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			08/26/16 21:14	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			08/26/16 21:14	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			08/26/16 21:14	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			08/26/16 21:14	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			08/26/16 21:14	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			08/26/16 21:14	1
2-Hexanone	10	U	10	0.48	ug/L			08/26/16 21:14	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			08/26/16 21:14	1
Acetone	**2.8**	**J**	10	0.94	ug/L			08/26/16 21:14	1
Benzene	1.0	U	1.0	0.35	ug/L			08/26/16 21:14	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			08/26/16 21:14	1
Bromoform	1.0	U	1.0	0.56	ug/L			08/26/16 21:14	1
Bromomethane	1.0	U	1.0	0.44	ug/L			08/26/16 21:14	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			08/26/16 21:14	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			08/26/16 21:14	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			08/26/16 21:14	1
Chloroethane	1.0	U	1.0	0.32	ug/L			08/26/16 21:14	1
Chloroform	1.0	U	1.0	0.25	ug/L			08/26/16 21:14	1
Chloromethane	1.0	U	1.0	0.44	ug/L			08/26/16 21:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			08/26/16 21:14	1
cis-1,3-Dichloropropene	1.0	U *	1.0	0.46	ug/L			08/26/16 21:14	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			08/26/16 21:14	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			08/26/16 21:14	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			08/26/16 21:14	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			08/26/16 21:14	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			08/26/16 21:14	1
Methyl acetate	10	U	10	2.3	ug/L			08/26/16 21:14	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			08/26/16 21:14	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			08/26/16 21:14	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			08/26/16 21:14	1
Styrene	1.0	U	1.0	0.45	ug/L			08/26/16 21:14	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			08/26/16 21:14	1
Toluene	1.0	U	1.0	0.23	ug/L			08/26/16 21:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			08/26/16 21:14	1

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

Client Sample ID: FB-11124679-081716-SG-003
Date Collected: 08/17/16 10:20
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			08/26/16 21:14	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			08/26/16 21:14	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			08/26/16 21:14	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			08/26/16 21:14	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			08/26/16 21:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*73 - 124*		*08/26/16 21:14*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*08/26/16 21:14*	*1*
4-Bromofluorobenzene (Surr)	*87*		*73 - 120*		*08/26/16 21:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*63 - 132*		*08/26/16 21:14*	*1*

Client Sample ID: WG-11124679-081716-SG-001
Date Collected: 08/17/16 10:35
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			08/26/16 21:38	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			08/26/16 21:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			08/26/16 21:38	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/26/16 21:38	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			08/26/16 21:38	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			08/26/16 21:38	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			08/26/16 21:38	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			08/26/16 21:38	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			08/26/16 21:38	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			08/26/16 21:38	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			08/26/16 21:38	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			08/26/16 21:38	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			08/26/16 21:38	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			08/26/16 21:38	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			08/26/16 21:38	1
2-Hexanone	10	U	10	0.48	ug/L			08/26/16 21:38	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			08/26/16 21:38	1
Acetone	10	U	10	0.94	ug/L			08/26/16 21:38	1
Benzene	1.0	U	1.0	0.35	ug/L			08/26/16 21:38	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			08/26/16 21:38	1
Bromoform	1.0	U	1.0	0.56	ug/L			08/26/16 21:38	1
Bromomethane	1.0	U	1.0	0.44	ug/L			08/26/16 21:38	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			08/26/16 21:38	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			08/26/16 21:38	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			08/26/16 21:38	1
Chloroethane	1.0	U	1.0	0.32	ug/L			08/26/16 21:38	1
Chloroform	1.0	U	1.0	0.25	ug/L			08/26/16 21:38	1
Chloromethane	1.0	U	1.0	0.44	ug/L			08/26/16 21:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			08/26/16 21:38	1
cis-1,3-Dichloropropene	1.0	U *	1.0	0.46	ug/L			08/26/16 21:38	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			08/26/16 21:38	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			08/26/16 21:38	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			08/26/16 21:38	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			08/26/16 21:38	1

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

Client Sample ID: WG-11124679-081716-SG-001
Date Collected: 08/17/16 10:35
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			08/26/16 21:38	1
Methyl acetate	10	U	10	2.3	ug/L			08/26/16 21:38	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			08/26/16 21:38	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			08/26/16 21:38	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			08/26/16 21:38	1
Styrene	1.0	U	1.0	0.45	ug/L			08/26/16 21:38	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			08/26/16 21:38	1
Toluene	1.0	U	1.0	0.23	ug/L			08/26/16 21:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			08/26/16 21:38	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			08/26/16 21:38	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			08/26/16 21:38	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			08/26/16 21:38	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			08/26/16 21:38	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			08/26/16 21:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*73 - 124*		*08/26/16 21:38*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*08/26/16 21:38*	*1*
4-Bromofluorobenzene (Surr)	*81*		*73 - 120*		*08/26/16 21:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*63 - 132*		*08/26/16 21:38*	*1*

Client Sample ID: WG-11124679-081716-SG-002
Date Collected: 08/17/16 10:25
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			08/26/16 22:00	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			08/26/16 22:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			08/26/16 22:00	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/26/16 22:00	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			08/26/16 22:00	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			08/26/16 22:00	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			08/26/16 22:00	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			08/26/16 22:00	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			08/26/16 22:00	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			08/26/16 22:00	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			08/26/16 22:00	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			08/26/16 22:00	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			08/26/16 22:00	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			08/26/16 22:00	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			08/26/16 22:00	1
2-Hexanone	10	U	10	0.48	ug/L			08/26/16 22:00	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			08/26/16 22:00	1
Acetone	**0.99**	**J**	10	0.94	ug/L			08/26/16 22:00	1
Benzene	1.0	U	1.0	0.35	ug/L			08/26/16 22:00	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			08/26/16 22:00	1
Bromoform	1.0	U	1.0	0.56	ug/L			08/26/16 22:00	1
Bromomethane	1.0	U	1.0	0.44	ug/L			08/26/16 22:00	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			08/26/16 22:00	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			08/26/16 22:00	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			08/26/16 22:00	1

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

Client Sample ID: WG-11124679-081716-SG-002 — **Lab Sample ID: 240-68530-4**
Date Collected: 08/17/16 10:25 — **Matrix: Water**
Date Received: 08/19/16 09:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	1.0	U	1.0	0.32	ug/L			08/26/16 22:00	1
Chloroform	1.0	U	1.0	0.25	ug/L			08/26/16 22:00	1
Chloromethane	1.0	U	1.0	0.44	ug/L			08/26/16 22:00	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			08/26/16 22:00	1
cis-1,3-Dichloropropene	1.0	U *	1.0	0.46	ug/L			08/26/16 22:00	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			08/26/16 22:00	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			08/26/16 22:00	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			08/26/16 22:00	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			08/26/16 22:00	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			08/26/16 22:00	1
Methyl acetate	10	U	10	2.3	ug/L			08/26/16 22:00	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			08/26/16 22:00	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			08/26/16 22:00	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			08/26/16 22:00	1
Styrene	1.0	U	1.0	0.45	ug/L			08/26/16 22:00	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			08/26/16 22:00	1
Toluene	1.0	U	1.0	0.23	ug/L			08/26/16 22:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			08/26/16 22:00	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			08/26/16 22:00	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			08/26/16 22:00	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			08/26/16 22:00	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			08/26/16 22:00	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			08/26/16 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*89*		*73 - 124*		*08/26/16 22:00*	*1*
Dibromofluoromethane (Surr)	*92*		*80 - 120*		*08/26/16 22:00*	*1*
4-Bromofluorobenzene (Surr)	*82*		*73 - 120*		*08/26/16 22:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*63 - 132*		*08/26/16 22:00*	*1*

Client Sample ID: WG-11124679-081716-SG-005 — **Lab Sample ID: 240-68530-5**
Date Collected: 08/17/16 11:20 — **Matrix: Water**
Date Received: 08/19/16 09:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			08/26/16 22:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			08/26/16 22:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			08/26/16 22:24	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/26/16 22:24	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			08/26/16 22:24	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			08/26/16 22:24	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			08/26/16 22:24	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			08/26/16 22:24	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			08/26/16 22:24	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			08/26/16 22:24	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			08/26/16 22:24	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			08/26/16 22:24	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			08/26/16 22:24	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			08/26/16 22:24	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			08/26/16 22:24	1
2-Hexanone	10	U	10	0.48	ug/L			08/26/16 22:24	1

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

Client Sample ID: WG-11124679-081716-SG-005
Date Collected: 08/17/16 11:20
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			08/26/16 22:24	1
Acetone	10	U	10	0.94	ug/L			08/26/16 22:24	1
Benzene	1.0	U	1.0	0.35	ug/L			08/26/16 22:24	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			08/26/16 22:24	1
Bromoform	1.0	U	1.0	0.56	ug/L			08/26/16 22:24	1
Bromomethane	1.0	U	1.0	0.44	ug/L			08/26/16 22:24	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			08/26/16 22:24	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			08/26/16 22:24	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			08/26/16 22:24	1
Chloroethane	1.0	U	1.0	0.32	ug/L			08/26/16 22:24	1
Chloroform	1.0	U	1.0	0.25	ug/L			08/26/16 22:24	1
Chloromethane	1.0	U	1.0	0.44	ug/L			08/26/16 22:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			08/26/16 22:24	1
cis-1,3-Dichloropropene	1.0	U *	1.0	0.46	ug/L			08/26/16 22:24	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			08/26/16 22:24	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			08/26/16 22:24	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			08/26/16 22:24	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			08/26/16 22:24	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			08/26/16 22:24	1
Methyl acetate	10	U	10	2.3	ug/L			08/26/16 22:24	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			08/26/16 22:24	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			08/26/16 22:24	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			08/26/16 22:24	1
Styrene	1.0	U	1.0	0.45	ug/L			08/26/16 22:24	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			08/26/16 22:24	1
Toluene	1.0	U	1.0	0.23	ug/L			08/26/16 22:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			08/26/16 22:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			08/26/16 22:24	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			08/26/16 22:24	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			08/26/16 22:24	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			08/26/16 22:24	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			08/26/16 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*73 - 124*		*08/26/16 22:24*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*08/26/16 22:24*	*1*
4-Bromofluorobenzene (Surr)	*84*		*73 - 120*		*08/26/16 22:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*63 - 132*		*08/26/16 22:24*	*1*

Client Sample ID: WG-11124679-081716-SG-004
Date Collected: 08/17/16 12:05
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			08/26/16 22:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			08/26/16 22:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			08/26/16 22:49	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/26/16 22:49	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			08/26/16 22:49	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			08/26/16 22:49	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			08/26/16 22:49	1

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

Client Sample ID: WG-11124679-081716-SG-004
Date Collected: 08/17/16 12:05
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			08/26/16 22:49	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			08/26/16 22:49	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			08/26/16 22:49	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			08/26/16 22:49	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			08/26/16 22:49	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			08/26/16 22:49	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			08/26/16 22:49	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			08/26/16 22:49	1
2-Hexanone	10	U	10	0.48	ug/L			08/26/16 22:49	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			08/26/16 22:49	1
Acetone	10	U	10	0.94	ug/L			08/26/16 22:49	1
Benzene	1.0	U	1.0	0.35	ug/L			08/26/16 22:49	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			08/26/16 22:49	1
Bromoform	1.0	U	1.0	0.56	ug/L			08/26/16 22:49	1
Bromomethane	1.0	U	1.0	0.44	ug/L			08/26/16 22:49	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			08/26/16 22:49	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			08/26/16 22:49	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			08/26/16 22:49	1
Chloroethane	1.0	U	1.0	0.32	ug/L			08/26/16 22:49	1
Chloroform	1.0	U	1.0	0.25	ug/L			08/26/16 22:49	1
Chloromethane	1.0	U	1.0	0.44	ug/L			08/26/16 22:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			08/26/16 22:49	1
cis-1,3-Dichloropropene	1.0	U *	1.0	0.46	ug/L			08/26/16 22:49	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			08/26/16 22:49	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			08/26/16 22:49	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			08/26/16 22:49	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			08/26/16 22:49	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			08/26/16 22:49	1
Methyl acetate	10	U	10	2.3	ug/L			08/26/16 22:49	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			08/26/16 22:49	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			08/26/16 22:49	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			08/26/16 22:49	1
Styrene	1.0	U	1.0	0.45	ug/L			08/26/16 22:49	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			08/26/16 22:49	1
Toluene	1.0	U	1.0	0.23	ug/L			08/26/16 22:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			08/26/16 22:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			08/26/16 22:49	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			08/26/16 22:49	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			08/26/16 22:49	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			08/26/16 22:49	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			08/26/16 22:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*73 - 124*		*08/26/16 22:49*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 120*		*08/26/16 22:49*	*1*
4-Bromofluorobenzene (Surr)	*83*		*73 - 120*		*08/26/16 22:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*63 - 132*		*08/26/16 22:49*	*1*

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

Client Sample ID: WG-11124679-081716-SG-006
Date Collected: 08/17/16 12:05
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			08/26/16 23:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			08/26/16 23:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			08/26/16 23:13	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/26/16 23:13	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			08/26/16 23:13	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			08/26/16 23:13	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			08/26/16 23:13	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			08/26/16 23:13	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			08/26/16 23:13	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			08/26/16 23:13	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			08/26/16 23:13	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			08/26/16 23:13	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			08/26/16 23:13	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			08/26/16 23:13	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			08/26/16 23:13	1
2-Hexanone	10	U	10	0.48	ug/L			08/26/16 23:13	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			08/26/16 23:13	1
Acetone	10	U	10	0.94	ug/L			08/26/16 23:13	1
Benzene	1.0	U	1.0	0.35	ug/L			08/26/16 23:13	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			08/26/16 23:13	1
Bromoform	1.0	U	1.0	0.56	ug/L			08/26/16 23:13	1
Bromomethane	1.0	U	1.0	0.44	ug/L			08/26/16 23:13	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			08/26/16 23:13	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			08/26/16 23:13	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			08/26/16 23:13	1
Chloroethane	1.0	U	1.0	0.32	ug/L			08/26/16 23:13	1
Chloroform	1.0	U	1.0	0.25	ug/L			08/26/16 23:13	1
Chloromethane	1.0	U	1.0	0.44	ug/L			08/26/16 23:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			08/26/16 23:13	1
cis-1,3-Dichloropropene	1.0	U *	1.0	0.46	ug/L			08/26/16 23:13	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			08/26/16 23:13	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			08/26/16 23:13	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			08/26/16 23:13	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			08/26/16 23:13	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			08/26/16 23:13	1
Methyl acetate	10	U	10	2.3	ug/L			08/26/16 23:13	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			08/26/16 23:13	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			08/26/16 23:13	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			08/26/16 23:13	1
Styrene	1.0	U	1.0	0.45	ug/L			08/26/16 23:13	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			08/26/16 23:13	1
Toluene	1.0	U	1.0	0.23	ug/L			08/26/16 23:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			08/26/16 23:13	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			08/26/16 23:13	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			08/26/16 23:13	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			08/26/16 23:13	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			08/26/16 23:13	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			08/26/16 23:13	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*98*		*73 - 124*		*08/26/16 23:13*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*08/26/16 23:13*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*08/26/16 23:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*63 - 132*		*08/26/16 23:13*	*1*

Client Sample ID: WG-11124679-081716-SG-007 — **Lab Sample ID: 240-68530-8**
Date Collected: 08/17/16 13:00 — **Matrix: Water**
Date Received: 08/19/16 09:35

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			08/26/16 23:37	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			08/26/16 23:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			08/26/16 23:37	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/26/16 23:37	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			08/26/16 23:37	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			08/26/16 23:37	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			08/26/16 23:37	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			08/26/16 23:37	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			08/26/16 23:37	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			08/26/16 23:37	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			08/26/16 23:37	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			08/26/16 23:37	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			08/26/16 23:37	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			08/26/16 23:37	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			08/26/16 23:37	1
2-Hexanone	10	U	10	0.48	ug/L			08/26/16 23:37	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			08/26/16 23:37	1
Acetone	10	U	10	0.94	ug/L			08/26/16 23:37	1
Benzene	1.0	U	1.0	0.35	ug/L			08/26/16 23:37	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			08/26/16 23:37	1
Bromoform	1.0	U	1.0	0.56	ug/L			08/26/16 23:37	1
Bromomethane	1.0	U	1.0	0.44	ug/L			08/26/16 23:37	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			08/26/16 23:37	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			08/26/16 23:37	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			08/26/16 23:37	1
Chloroethane	1.0	U	1.0	0.32	ug/L			08/26/16 23:37	1
Chloroform	1.0	U	1.0	0.25	ug/L			08/26/16 23:37	1
Chloromethane	1.0	U	1.0	0.44	ug/L			08/26/16 23:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			08/26/16 23:37	1
cis-1,3-Dichloropropene	1.0	U *	1.0	0.46	ug/L			08/26/16 23:37	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			08/26/16 23:37	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			08/26/16 23:37	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			08/26/16 23:37	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			08/26/16 23:37	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			08/26/16 23:37	1
Methyl acetate	10	U	10	2.3	ug/L			08/26/16 23:37	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			08/26/16 23:37	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			08/26/16 23:37	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			08/26/16 23:37	1
Styrene	1.0	U	1.0	0.45	ug/L			08/26/16 23:37	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			08/26/16 23:37	1
Toluene	1.0	U	1.0	0.23	ug/L			08/26/16 23:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			08/26/16 23:37	1

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

Client Sample ID: WG-11124679-081716-SG-007
Date Collected: 08/17/16 13:00
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			08/26/16 23:37	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			08/26/16 23:37	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			08/26/16 23:37	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			08/26/16 23:37	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			08/26/16 23:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*73 - 124*		*08/26/16 23:37*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*08/26/16 23:37*	*1*
4-Bromofluorobenzene (Surr)	*80*		*73 - 120*		*08/26/16 23:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*63 - 132*		*08/26/16 23:37*	*1*

Client Sample ID: WG-11124679-081716-SG-008
Date Collected: 08/17/16 14:30
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			08/27/16 00:01	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			08/27/16 00:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			08/27/16 00:01	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/27/16 00:01	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			08/27/16 00:01	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			08/27/16 00:01	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			08/27/16 00:01	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			08/27/16 00:01	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			08/27/16 00:01	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			08/27/16 00:01	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			08/27/16 00:01	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			08/27/16 00:01	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			08/27/16 00:01	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			08/27/16 00:01	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			08/27/16 00:01	1
2-Hexanone	10	U	10	0.48	ug/L			08/27/16 00:01	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			08/27/16 00:01	1
Acetone	**1.9**	**J**	10	0.94	ug/L			08/27/16 00:01	1
Benzene	1.0	U	1.0	0.35	ug/L			08/27/16 00:01	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			08/27/16 00:01	1
Bromoform	1.0	U	1.0	0.56	ug/L			08/27/16 00:01	1
Bromomethane	1.0	U	1.0	0.44	ug/L			08/27/16 00:01	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			08/27/16 00:01	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			08/27/16 00:01	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			08/27/16 00:01	1
Chloroethane	1.0	U	1.0	0.32	ug/L			08/27/16 00:01	1
Chloroform	1.0	U	1.0	0.25	ug/L			08/27/16 00:01	1
Chloromethane	1.0	U	1.0	0.44	ug/L			08/27/16 00:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			08/27/16 00:01	1
cis-1,3-Dichloropropene	1.0	U *	1.0	0.46	ug/L			08/27/16 00:01	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			08/27/16 00:01	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			08/27/16 00:01	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			08/27/16 00:01	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			08/27/16 00:01	1

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

Client Sample ID: WG-11124679-081716-SG-008
Date Collected: 08/17/16 14:30
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			08/27/16 00:01	1
Methyl acetate	10	U	10	2.3	ug/L			08/27/16 00:01	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			08/27/16 00:01	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			08/27/16 00:01	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			08/27/16 00:01	1
Styrene	1.0	U	1.0	0.45	ug/L			08/27/16 00:01	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			08/27/16 00:01	1
Toluene	1.0	U	1.0	0.23	ug/L			08/27/16 00:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			08/27/16 00:01	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			08/27/16 00:01	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			08/27/16 00:01	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			08/27/16 00:01	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			08/27/16 00:01	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			08/27/16 00:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*73 - 124*		*08/27/16 00:01*	*1*
Dibromofluoromethane (Surr)	*88*		*80 - 120*		*08/27/16 00:01*	*1*
4-Bromofluorobenzene (Surr)	*83*		*73 - 120*		*08/27/16 00:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*63 - 132*		*08/27/16 00:01*	*1*

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

Client Sample ID: FB-11124679-081716-SG-003
Date Collected: 08/17/16 10:20
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.13	ug/L		08/22/16 08:04	08/26/16 11:45	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.40	ug/L		08/22/16 08:04	08/26/16 11:45	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		08/22/16 08:04	08/26/16 11:45	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.24	ug/L		08/22/16 08:04	08/26/16 11:45	1
2,4-Dichlorophenol	2.0	U	2.0	0.19	ug/L		08/22/16 08:04	08/26/16 11:45	1
2,4-Dimethylphenol	2.0	U	2.0	0.25	ug/L		08/22/16 08:04	08/26/16 11:45	1
2,4-Dinitrophenol	5.0	U	5.0	0.32	ug/L		08/22/16 08:04	08/26/16 11:45	1
2,4-Dinitrotoluene	5.0	U	5.0	0.25	ug/L		08/22/16 08:04	08/26/16 11:45	1
2,6-Dinitrotoluene	5.0	U	5.0	0.80	ug/L		08/22/16 08:04	08/26/16 11:45	1
2-Chloronaphthalene	1.0	U	1.0	0.10	ug/L		08/22/16 08:04	08/26/16 11:45	1
2-Chlorophenol	1.0	U	1.0	0.29	ug/L		08/22/16 08:04	08/26/16 11:45	1
2-Methylnaphthalene	0.20	U	0.20	0.090	ug/L		08/22/16 08:04	08/26/16 11:45	1
2-Methylphenol	1.0	U	1.0	0.17	ug/L		08/22/16 08:04	08/26/16 11:45	1
2-Nitroaniline	2.0	U	2.0	0.21	ug/L		08/22/16 08:04	08/26/16 11:45	1
2-Nitrophenol	2.0	U	2.0	0.28	ug/L		08/22/16 08:04	08/26/16 11:45	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.37	ug/L		08/22/16 08:04	08/26/16 11:45	1
3-Nitroaniline	2.0	U	2.0	0.28	ug/L		08/22/16 08:04	08/26/16 11:45	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	2.4	ug/L		08/22/16 08:04	08/26/16 11:45	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.22	ug/L		08/22/16 08:04	08/26/16 11:45	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.21	ug/L		08/22/16 08:04	08/26/16 11:45	1
4-Chloroaniline	2.0	U	2.0	0.21	ug/L		08/22/16 08:04	08/26/16 11:45	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.30	ug/L		08/22/16 08:04	08/26/16 11:45	1
4-Nitroaniline	2.0	U	2.0	0.22	ug/L		08/22/16 08:04	08/26/16 11:45	1
4-Nitrophenol	5.0	U	5.0	0.29	ug/L		08/22/16 08:04	08/26/16 11:45	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		08/22/16 08:04	08/26/16 11:45	1
Acenaphthylene	0.20	U	0.20	0.048	ug/L		08/22/16 08:04	08/26/16 11:45	1
Acetophenone	1.0	U	1.0	0.34	ug/L		08/22/16 08:04	08/26/16 11:45	1
Anthracene	0.20	U	0.20	0.088	ug/L		08/22/16 08:04	08/26/16 11:45	1
Atrazine	1.0	U	1.0	0.34	ug/L		08/22/16 08:04	08/26/16 11:45	1
Benzaldehyde	1.0	U	1.0	0.39	ug/L		08/22/16 08:04	08/26/16 11:45	1
Benzo[a]anthracene	0.20	U	0.20	0.030	ug/L		08/22/16 08:04	08/26/16 11:45	1
Benzo[a]pyrene	0.20	U	0.20	0.051	ug/L		08/22/16 08:04	08/26/16 11:45	1
Benzo[b]fluoranthene	0.20	U	0.20	0.039	ug/L		08/22/16 08:04	08/26/16 11:45	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.046	ug/L		08/22/16 08:04	08/26/16 11:45	1
Benzo[k]fluoranthene	0.20	U	0.20	0.045	ug/L		08/22/16 08:04	08/26/16 11:45	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.32	ug/L		08/22/16 08:04	08/26/16 11:45	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		08/22/16 08:04	08/26/16 11:45	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	1.7	ug/L		08/22/16 08:04	08/26/16 11:45	1
Butyl benzyl phthalate	2.0	U	2.0	0.26	ug/L		08/22/16 08:04	08/26/16 11:45	1
Caprolactam	5.0	U	5.0	0.20	ug/L		08/22/16 08:04	08/26/16 11:45	1
Carbazole	1.0	U	1.0	0.28	ug/L		08/22/16 08:04	08/26/16 11:45	1
Chrysene	0.20	U	0.20	0.050	ug/L		08/22/16 08:04	08/26/16 11:45	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.045	ug/L		08/22/16 08:04	08/26/16 11:45	1
Dibenzofuran	1.0	U	1.0	0.020	ug/L		08/22/16 08:04	08/26/16 11:45	1
Diethyl phthalate	2.0	U	2.0	0.60	ug/L		08/22/16 08:04	08/26/16 11:45	1
Dimethyl phthalate	2.0	U	2.0	0.29	ug/L		08/22/16 08:04	08/26/16 11:45	1
Di-n-butyl phthalate	5.0	U	5.0	1.7	ug/L		08/22/16 08:04	08/26/16 11:45	1
Di-n-octyl phthalate	2.0	U	2.0	0.23	ug/L		08/22/16 08:04	08/26/16 11:45	1
Fluoranthene	0.20	U	0.20	0.045	ug/L		08/22/16 08:04	08/26/16 11:45	1

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

Client Sample ID: FB-11124679-081716-SG-003
Date Collected: 08/17/16 10:20
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.20	U	0.20	0.041	ug/L		08/22/16 08:04	08/26/16 11:45	1
Hexachlorobenzene	0.20	U	0.20	0.085	ug/L		08/22/16 08:04	08/26/16 11:45	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		08/22/16 08:04	08/26/16 11:45	1
Hexachlorocyclopentadiene	10	U	10	0.24	ug/L		08/22/16 08:04	08/26/16 11:45	1
Hexachloroethane	1.0	U	1.0	0.19	ug/L		08/22/16 08:04	08/26/16 11:45	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.043	ug/L		08/22/16 08:04	08/26/16 11:45	1
Isophorone	1.0	U	1.0	0.27	ug/L		08/22/16 08:04	08/26/16 11:45	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.24	ug/L		08/22/16 08:04	08/26/16 11:45	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.31	ug/L		08/22/16 08:04	08/26/16 11:45	1
Naphthalene	0.20	U	0.20	0.063	ug/L		08/22/16 08:04	08/26/16 11:45	1
Nitrobenzene	1.0	U	1.0	0.040	ug/L		08/22/16 08:04	08/26/16 11:45	1
Pentachlorophenol	5.0	U	5.0	0.27	ug/L		08/22/16 08:04	08/26/16 11:45	1
Phenanthrene	0.20	U	0.20	0.062	ug/L		08/22/16 08:04	08/26/16 11:45	1
Phenol	1.0	U	1.0	0.60	ug/L		08/22/16 08:04	08/26/16 11:45	1
Pyrene	0.20	U	0.20	0.042	ug/L		08/22/16 08:04	08/26/16 11:45	1
3 & 4 Methylphenol	2.0	U	2.0	0.80	ug/L		08/22/16 08:04	08/26/16 11:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14 (Surr)	*78*		*17 - 120*	*08/22/16 08:04*	*08/26/16 11:45*	*1*
Phenol-d5 (Surr)	*20*		*10 - 120*	*08/22/16 08:04*	*08/26/16 11:45*	*1*
Nitrobenzene-d5 (Surr)	*69*		*36 - 120*	*08/22/16 08:04*	*08/26/16 11:45*	*1*
2-Fluorophenol (Surr)	*34*		*10 - 120*	*08/22/16 08:04*	*08/26/16 11:45*	*1*
2-Fluorobiphenyl (Surr)	*70*		*42 - 120*	*08/22/16 08:04*	*08/26/16 11:45*	*1*
2,4,6-Tribromophenol (Surr)	*68*		*35 - 125*	*08/22/16 08:04*	*08/26/16 11:45*	*1*

Client Sample ID: WG-11124679-081716-SG-001
Date Collected: 08/17/16 10:35
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.13	ug/L		08/22/16 08:04	08/26/16 12:09	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.40	ug/L		08/22/16 08:04	08/26/16 12:09	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		08/22/16 08:04	08/26/16 12:09	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.24	ug/L		08/22/16 08:04	08/26/16 12:09	1
2,4-Dichlorophenol	2.0	U	2.0	0.19	ug/L		08/22/16 08:04	08/26/16 12:09	1
2,4-Dimethylphenol	2.0	U	2.0	0.25	ug/L		08/22/16 08:04	08/26/16 12:09	1
2,4-Dinitrophenol	5.0	U	5.0	0.32	ug/L		08/22/16 08:04	08/26/16 12:09	1
2,4-Dinitrotoluene	5.0	U	5.0	0.25	ug/L		08/22/16 08:04	08/26/16 12:09	1
2,6-Dinitrotoluene	5.0	U	5.0	0.80	ug/L		08/22/16 08:04	08/26/16 12:09	1
2-Chloronaphthalene	1.0	U	1.0	0.10	ug/L		08/22/16 08:04	08/26/16 12:09	1
2-Chlorophenol	1.0	U	1.0	0.29	ug/L		08/22/16 08:04	08/26/16 12:09	1
2-Methylnaphthalene	0.20	U	0.20	0.090	ug/L		08/22/16 08:04	08/26/16 12:09	1
2-Methylphenol	1.0	U	1.0	0.17	ug/L		08/22/16 08:04	08/26/16 12:09	1
2-Nitroaniline	2.0	U	2.0	0.21	ug/L		08/22/16 08:04	08/26/16 12:09	1
2-Nitrophenol	2.0	U	2.0	0.28	ug/L		08/22/16 08:04	08/26/16 12:09	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.37	ug/L		08/22/16 08:04	08/26/16 12:09	1
3-Nitroaniline	2.0	U	2.0	0.28	ug/L		08/22/16 08:04	08/26/16 12:09	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	2.4	ug/L		08/22/16 08:04	08/26/16 12:09	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.22	ug/L		08/22/16 08:04	08/26/16 12:09	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.21	ug/L		08/22/16 08:04	08/26/16 12:09	1
4-Chloroaniline	2.0	U	2.0	0.21	ug/L		08/22/16 08:04	08/26/16 12:09	1

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

Client Sample ID: WG-11124679-081716-SG-001
Date Collected: 08/17/16 10:35
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.30	ug/L		08/22/16 08:04	08/26/16 12:09	1
4-Nitroaniline	2.0	U	2.0	0.22	ug/L		08/22/16 08:04	08/26/16 12:09	1
4-Nitrophenol	5.0	U	5.0	0.29	ug/L		08/22/16 08:04	08/26/16 12:09	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		08/22/16 08:04	08/26/16 12:09	1
Acenaphthylene	0.20	U	0.20	0.048	ug/L		08/22/16 08:04	08/26/16 12:09	1
Acetophenone	1.0	U	1.0	0.34	ug/L		08/22/16 08:04	08/26/16 12:09	1
Anthracene	0.20	U	0.20	0.088	ug/L		08/22/16 08:04	08/26/16 12:09	1
Atrazine	1.0	U	1.0	0.34	ug/L		08/22/16 08:04	08/26/16 12:09	1
Benzaldehyde	1.0	U	1.0	0.39	ug/L		08/22/16 08:04	08/26/16 12:09	1
Benzo[a]anthracene	0.20	U	0.20	0.030	ug/L		08/22/16 08:04	08/26/16 12:09	1
Benzo[a]pyrene	0.20	U	0.20	0.051	ug/L		08/22/16 08:04	08/26/16 12:09	1
Benzo[b]fluoranthene	0.20	U	0.20	0.039	ug/L		08/22/16 08:04	08/26/16 12:09	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.046	ug/L		08/22/16 08:04	08/26/16 12:09	1
Benzo[k]fluoranthene	0.20	U	0.20	0.045	ug/L		08/22/16 08:04	08/26/16 12:09	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.32	ug/L		08/22/16 08:04	08/26/16 12:09	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		08/22/16 08:04	08/26/16 12:09	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	1.7	ug/L		08/22/16 08:04	08/26/16 12:09	1
Butyl benzyl phthalate	2.0	U	2.0	0.26	ug/L		08/22/16 08:04	08/26/16 12:09	1
Caprolactam	5.0	U	5.0	0.20	ug/L		08/22/16 08:04	08/26/16 12:09	1
Carbazole	1.0	U	1.0	0.28	ug/L		08/22/16 08:04	08/26/16 12:09	1
Chrysene	0.20	U	0.20	0.050	ug/L		08/22/16 08:04	08/26/16 12:09	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.045	ug/L		08/22/16 08:04	08/26/16 12:09	1
Dibenzofuran	1.0	U	1.0	0.020	ug/L		08/22/16 08:04	08/26/16 12:09	1
Diethyl phthalate	2.0	U	2.0	0.60	ug/L		08/22/16 08:04	08/26/16 12:09	1
Dimethyl phthalate	2.0	U	2.0	0.29	ug/L		08/22/16 08:04	08/26/16 12:09	1
Di-n-butyl phthalate	5.0	U	5.0	1.7	ug/L		08/22/16 08:04	08/26/16 12:09	1
Di-n-octyl phthalate	2.0	U	2.0	0.23	ug/L		08/22/16 08:04	08/26/16 12:09	1
Fluoranthene	0.20	U	0.20	0.045	ug/L		08/22/16 08:04	08/26/16 12:09	1
Fluorene	0.20	U	0.20	0.041	ug/L		08/22/16 08:04	08/26/16 12:09	1
Hexachlorobenzene	0.20	U	0.20	0.085	ug/L		08/22/16 08:04	08/26/16 12:09	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		08/22/16 08:04	08/26/16 12:09	1
Hexachlorocyclopentadiene	10	U	10	0.24	ug/L		08/22/16 08:04	08/26/16 12:09	1
Hexachloroethane	1.0	U	1.0	0.19	ug/L		08/22/16 08:04	08/26/16 12:09	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.043	ug/L		08/22/16 08:04	08/26/16 12:09	1
Isophorone	1.0	U	1.0	0.27	ug/L		08/22/16 08:04	08/26/16 12:09	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.24	ug/L		08/22/16 08:04	08/26/16 12:09	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.31	ug/L		08/22/16 08:04	08/26/16 12:09	1
Naphthalene	0.20	U	0.20	0.063	ug/L		08/22/16 08:04	08/26/16 12:09	1
Nitrobenzene	1.0	U	1.0	0.040	ug/L		08/22/16 08:04	08/26/16 12:09	1
Pentachlorophenol	5.0	U	5.0	0.27	ug/L		08/22/16 08:04	08/26/16 12:09	1
Phenanthrene	0.20	U	0.20	0.062	ug/L		08/22/16 08:04	08/26/16 12:09	1
Phenol	1.0	U	1.0	0.60	ug/L		08/22/16 08:04	08/26/16 12:09	1
Pyrene	0.20	U	0.20	0.042	ug/L		08/22/16 08:04	08/26/16 12:09	1
3 & 4 Methylphenol	2.0	U	2.0	0.80	ug/L		08/22/16 08:04	08/26/16 12:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14 (Surr)	*58*		*17 - 120*	*08/22/16 08:04*	*08/26/16 12:09*	*1*
Phenol-d5 (Surr)	*19*		*10 - 120*	*08/22/16 08:04*	*08/26/16 12:09*	*1*
Nitrobenzene-d5 (Surr)	*69*		*36 - 120*	*08/22/16 08:04*	*08/26/16 12:09*	*1*
2-Fluorophenol (Surr)	*34*		*10 - 120*	*08/22/16 08:04*	*08/26/16 12:09*	*1*

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

Client Sample ID: WG-11124679-081716-SG-001
Date Collected: 08/17/16 10:35
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-3
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*63*		*42 - 120*	*08/22/16 08:04*	*08/26/16 12:09*	*1*
2,4,6-Tribromophenol (Surr)	*65*		*35 - 125*	*08/22/16 08:04*	*08/26/16 12:09*	*1*

Client Sample ID: WG-11124679-081716-SG-002
Date Collected: 08/17/16 10:25
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.13	ug/L		08/22/16 08:04	08/26/16 12:32	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.40	ug/L		08/22/16 08:04	08/26/16 12:32	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		08/22/16 08:04	08/26/16 12:32	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.24	ug/L		08/22/16 08:04	08/26/16 12:32	1
2,4-Dichlorophenol	2.0	U	2.0	0.19	ug/L		08/22/16 08:04	08/26/16 12:32	1
2,4-Dimethylphenol	2.0	U	2.0	0.25	ug/L		08/22/16 08:04	08/26/16 12:32	1
2,4-Dinitrophenol	5.0	U	5.0	0.32	ug/L		08/22/16 08:04	08/26/16 12:32	1
2,4-Dinitrotoluene	5.0	U	5.0	0.25	ug/L		08/22/16 08:04	08/26/16 12:32	1
2,6-Dinitrotoluene	5.0	U	5.0	0.80	ug/L		08/22/16 08:04	08/26/16 12:32	1
2-Chloronaphthalene	1.0	U	1.0	0.10	ug/L		08/22/16 08:04	08/26/16 12:32	1
2-Chlorophenol	1.0	U	1.0	0.29	ug/L		08/22/16 08:04	08/26/16 12:32	1
2-Methylnaphthalene	0.20	U	0.20	0.090	ug/L		08/22/16 08:04	08/26/16 12:32	1
2-Methylphenol	1.0	U	1.0	0.17	ug/L		08/22/16 08:04	08/26/16 12:32	1
2-Nitroaniline	2.0	U	2.0	0.21	ug/L		08/22/16 08:04	08/26/16 12:32	1
2-Nitrophenol	2.0	U	2.0	0.28	ug/L		08/22/16 08:04	08/26/16 12:32	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.37	ug/L		08/22/16 08:04	08/26/16 12:32	1
3-Nitroaniline	2.0	U	2.0	0.28	ug/L		08/22/16 08:04	08/26/16 12:32	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	2.4	ug/L		08/22/16 08:04	08/26/16 12:32	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.22	ug/L		08/22/16 08:04	08/26/16 12:32	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.21	ug/L		08/22/16 08:04	08/26/16 12:32	1
4-Chloroaniline	2.0	U	2.0	0.21	ug/L		08/22/16 08:04	08/26/16 12:32	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.30	ug/L		08/22/16 08:04	08/26/16 12:32	1
4-Nitroaniline	2.0	U	2.0	0.22	ug/L		08/22/16 08:04	08/26/16 12:32	1
4-Nitrophenol	5.0	U	5.0	0.29	ug/L		08/22/16 08:04	08/26/16 12:32	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		08/22/16 08:04	08/26/16 12:32	1
Acenaphthylene	0.20	U	0.20	0.048	ug/L		08/22/16 08:04	08/26/16 12:32	1
Acetophenone	1.0	U	1.0	0.34	ug/L		08/22/16 08:04	08/26/16 12:32	1
Anthracene	0.20	U	0.20	0.088	ug/L		08/22/16 08:04	08/26/16 12:32	1
Atrazine	1.0	U	1.0	0.34	ug/L		08/22/16 08:04	08/26/16 12:32	1
Benzaldehyde	1.0	U	1.0	0.39	ug/L		08/22/16 08:04	08/26/16 12:32	1
Benzo[a]anthracene	0.20	U	0.20	0.030	ug/L		08/22/16 08:04	08/26/16 12:32	1
Benzo[a]pyrene	0.20	U	0.20	0.051	ug/L		08/22/16 08:04	08/26/16 12:32	1
Benzo[b]fluoranthene	0.20	U	0.20	0.039	ug/L		08/22/16 08:04	08/26/16 12:32	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.046	ug/L		08/22/16 08:04	08/26/16 12:32	1
Benzo[k]fluoranthene	0.20	U	0.20	0.045	ug/L		08/22/16 08:04	08/26/16 12:32	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.32	ug/L		08/22/16 08:04	08/26/16 12:32	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		08/22/16 08:04	08/26/16 12:32	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	1.7	ug/L		08/22/16 08:04	08/26/16 12:32	1
Butyl benzyl phthalate	2.0	U	2.0	0.26	ug/L		08/22/16 08:04	08/26/16 12:32	1
Caprolactam	5.0	U	5.0	0.20	ug/L		08/22/16 08:04	08/26/16 12:32	1
Carbazole	1.0	U	1.0	0.28	ug/L		08/22/16 08:04	08/26/16 12:32	1
Chrysene	0.20	U	0.20	0.050	ug/L		08/22/16 08:04	08/26/16 12:32	1

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

Client Sample ID: WG-11124679-081716-SG-002
Date Collected: 08/17/16 10:25
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	0.20	U	0.20	0.045	ug/L		08/22/16 08:04	08/26/16 12:32	1
Dibenzofuran	1.0	U	1.0	0.020	ug/L		08/22/16 08:04	08/26/16 12:32	1
Diethyl phthalate	2.0	U	2.0	0.60	ug/L		08/22/16 08:04	08/26/16 12:32	1
Dimethyl phthalate	2.0	U	2.0	0.29	ug/L		08/22/16 08:04	08/26/16 12:32	1
Di-n-butyl phthalate	5.0	U	5.0	1.7	ug/L		08/22/16 08:04	08/26/16 12:32	1
Di-n-octyl phthalate	2.0	U	2.0	0.23	ug/L		08/22/16 08:04	08/26/16 12:32	1
Fluoranthene	0.20	U	0.20	0.045	ug/L		08/22/16 08:04	08/26/16 12:32	1
Fluorene	0.20	U	0.20	0.041	ug/L		08/22/16 08:04	08/26/16 12:32	1
Hexachlorobenzene	0.20	U	0.20	0.085	ug/L		08/22/16 08:04	08/26/16 12:32	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		08/22/16 08:04	08/26/16 12:32	1
Hexachlorocyclopentadiene	10	U	10	0.24	ug/L		08/22/16 08:04	08/26/16 12:32	1
Hexachloroethane	1.0	U	1.0	0.19	ug/L		08/22/16 08:04	08/26/16 12:32	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.043	ug/L		08/22/16 08:04	08/26/16 12:32	1
Isophorone	1.0	U	1.0	0.27	ug/L		08/22/16 08:04	08/26/16 12:32	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.24	ug/L		08/22/16 08:04	08/26/16 12:32	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.31	ug/L		08/22/16 08:04	08/26/16 12:32	1
Naphthalene	0.20	U	0.20	0.063	ug/L		08/22/16 08:04	08/26/16 12:32	1
Nitrobenzene	1.0	U	1.0	0.040	ug/L		08/22/16 08:04	08/26/16 12:32	1
Pentachlorophenol	5.0	U	5.0	0.27	ug/L		08/22/16 08:04	08/26/16 12:32	1
Phenanthrene	0.20	U	0.20	0.062	ug/L		08/22/16 08:04	08/26/16 12:32	1
Phenol	1.0	U	1.0	0.60	ug/L		08/22/16 08:04	08/26/16 12:32	1
Pyrene	0.20	U	0.20	0.042	ug/L		08/22/16 08:04	08/26/16 12:32	1
3 & 4 Methylphenol	2.0	U	2.0	0.80	ug/L		08/22/16 08:04	08/26/16 12:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14 (Surr)	*78*		*17 - 120*	*08/22/16 08:04*	*08/26/16 12:32*	*1*
Phenol-d5 (Surr)	*25*		*10 - 120*	*08/22/16 08:04*	*08/26/16 12:32*	*1*
Nitrobenzene-d5 (Surr)	*78*		*36 - 120*	*08/22/16 08:04*	*08/26/16 12:32*	*1*
2-Fluorophenol (Surr)	*37*		*10 - 120*	*08/22/16 08:04*	*08/26/16 12:32*	*1*
2-Fluorobiphenyl (Surr)	*72*		*42 - 120*	*08/22/16 08:04*	*08/26/16 12:32*	*1*
2,4,6-Tribromophenol (Surr)	*63*		*35 - 125*	*08/22/16 08:04*	*08/26/16 12:32*	*1*

Client Sample ID: WG-11124679-081716-SG-005
Date Collected: 08/17/16 11:20
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.95	U	0.95	0.12	ug/L		08/22/16 08:04	08/26/16 13:19	1
bis (2-chloroisopropyl) ether	0.95	U	0.95	0.38	ug/L		08/22/16 08:04	08/26/16 13:19	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		08/22/16 08:04	08/26/16 13:19	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.23	ug/L		08/22/16 08:04	08/26/16 13:19	1
2,4-Dichlorophenol	1.9	U	1.9	0.18	ug/L		08/22/16 08:04	08/26/16 13:19	1
2,4-Dimethylphenol	1.9	U	1.9	0.24	ug/L		08/22/16 08:04	08/26/16 13:19	1
2,4-Dinitrophenol	4.8	U	4.8	0.30	ug/L		08/22/16 08:04	08/26/16 13:19	1
2,4-Dinitrotoluene	4.8	U	4.8	0.24	ug/L		08/22/16 08:04	08/26/16 13:19	1
2,6-Dinitrotoluene	4.8	U	4.8	0.76	ug/L		08/22/16 08:04	08/26/16 13:19	1
2-Chloronaphthalene	0.95	U	0.95	0.095	ug/L		08/22/16 08:04	08/26/16 13:19	1
2-Chlorophenol	0.95	U	0.95	0.28	ug/L		08/22/16 08:04	08/26/16 13:19	1
2-Methylnaphthalene	0.19	U	0.19	0.086	ug/L		08/22/16 08:04	08/26/16 13:19	1
2-Methylphenol	0.95	U	0.95	0.16	ug/L		08/22/16 08:04	08/26/16 13:19	1
2-Nitroaniline	1.9	U	1.9	0.20	ug/L		08/22/16 08:04	08/26/16 13:19	1

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

Client Sample ID: WG-11124679-081716-SG-005
Date Collected: 08/17/16 11:20
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	1.9	U	1.9	0.27	ug/L		08/22/16 08:04	08/26/16 13:19	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.35	ug/L		08/22/16 08:04	08/26/16 13:19	1
3-Nitroaniline	1.9	U	1.9	0.27	ug/L		08/22/16 08:04	08/26/16 13:19	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	2.3	ug/L		08/22/16 08:04	08/26/16 13:19	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.21	ug/L		08/22/16 08:04	08/26/16 13:19	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.20	ug/L		08/22/16 08:04	08/26/16 13:19	1
4-Chloroaniline	1.9	U	1.9	0.20	ug/L		08/22/16 08:04	08/26/16 13:19	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.29	ug/L		08/22/16 08:04	08/26/16 13:19	1
4-Nitroaniline	1.9	U	1.9	0.21	ug/L		08/22/16 08:04	08/26/16 13:19	1
4-Nitrophenol	4.8	U	4.8	0.28	ug/L		08/22/16 08:04	08/26/16 13:19	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		08/22/16 08:04	08/26/16 13:19	1
Acenaphthylene	0.19	U	0.19	0.046	ug/L		08/22/16 08:04	08/26/16 13:19	1
Acetophenone	0.95	U	0.95	0.32	ug/L		08/22/16 08:04	08/26/16 13:19	1
Anthracene	0.19	U	0.19	0.084	ug/L		08/22/16 08:04	08/26/16 13:19	1
Atrazine	0.95	U	0.95	0.32	ug/L		08/22/16 08:04	08/26/16 13:19	1
Benzaldehyde	0.95	U	0.95	0.37	ug/L		08/22/16 08:04	08/26/16 13:19	1
Benzo[a]anthracene	0.19	U	0.19	0.028	ug/L		08/22/16 08:04	08/26/16 13:19	1
Benzo[a]pyrene	0.19	U	0.19	0.049	ug/L		08/22/16 08:04	08/26/16 13:19	1
Benzo[b]fluoranthene	0.19	U	0.19	0.038	ug/L		08/22/16 08:04	08/26/16 13:19	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.044	ug/L		08/22/16 08:04	08/26/16 13:19	1
Benzo[k]fluoranthene	0.19	U	0.19	0.043	ug/L		08/22/16 08:04	08/26/16 13:19	1
Bis(2-chloroethoxy)methane	0.95	U	0.95	0.30	ug/L		08/22/16 08:04	08/26/16 13:19	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		08/22/16 08:04	08/26/16 13:19	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8	1.6	ug/L		08/22/16 08:04	08/26/16 13:19	1
Butyl benzyl phthalate	1.9	U	1.9	0.25	ug/L		08/22/16 08:04	08/26/16 13:19	1
Caprolactam	4.8	U	4.8	0.19	ug/L		08/22/16 08:04	08/26/16 13:19	1
Carbazole	0.95	U	0.95	0.27	ug/L		08/22/16 08:04	08/26/16 13:19	1
Chrysene	0.19	U	0.19	0.048	ug/L		08/22/16 08:04	08/26/16 13:19	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.042	ug/L		08/22/16 08:04	08/26/16 13:19	1
Dibenzofuran	0.95	U	0.95	0.019	ug/L		08/22/16 08:04	08/26/16 13:19	1
Diethyl phthalate	1.9	U	1.9	0.57	ug/L		08/22/16 08:04	08/26/16 13:19	1
Dimethyl phthalate	1.9	U	1.9	0.28	ug/L		08/22/16 08:04	08/26/16 13:19	1
Di-n-butyl phthalate	4.8	U	4.8	1.6	ug/L		08/22/16 08:04	08/26/16 13:19	1
Di-n-octyl phthalate	1.9	U	1.9	0.22	ug/L		08/22/16 08:04	08/26/16 13:19	1
Fluoranthene	0.19	U	0.19	0.042	ug/L		08/22/16 08:04	08/26/16 13:19	1
Fluorene	0.19	U	0.19	0.039	ug/L		08/22/16 08:04	08/26/16 13:19	1
Hexachlorobenzene	0.19	U	0.19	0.081	ug/L		08/22/16 08:04	08/26/16 13:19	1
Hexachlorobutadiene	0.95	U	0.95	0.26	ug/L		08/22/16 08:04	08/26/16 13:19	1
Hexachlorocyclopentadiene	9.5	U	9.5	0.23	ug/L		08/22/16 08:04	08/26/16 13:19	1
Hexachloroethane	0.95	U	0.95	0.18	ug/L		08/22/16 08:04	08/26/16 13:19	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.041	ug/L		08/22/16 08:04	08/26/16 13:19	1
Isophorone	0.95	U	0.95	0.26	ug/L		08/22/16 08:04	08/26/16 13:19	1
N-Nitrosodi-n-propylamine	0.95	U	0.95	0.23	ug/L		08/22/16 08:04	08/26/16 13:19	1
N-Nitrosodiphenylamine	0.95	U	0.95	0.30	ug/L		08/22/16 08:04	08/26/16 13:19	1
Naphthalene	0.19	U	0.19	0.060	ug/L		08/22/16 08:04	08/26/16 13:19	1
Nitrobenzene	0.95	U	0.95	0.038	ug/L		08/22/16 08:04	08/26/16 13:19	1
Pentachlorophenol	4.8	U	4.8	0.26	ug/L		08/22/16 08:04	08/26/16 13:19	1
Phenanthrene	0.19	U	0.19	0.059	ug/L		08/22/16 08:04	08/26/16 13:19	1
Phenol	0.95	U	0.95	0.57	ug/L		08/22/16 08:04	08/26/16 13:19	1

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

Client Sample ID: WG-11124679-081716-SG-005
Date Collected: 08/17/16 11:20
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	0.19	U	0.19	0.040	ug/L		08/22/16 08:04	08/26/16 13:19	1
3 & 4 Methylphenol	1.9	U	1.9	0.76	ug/L		08/22/16 08:04	08/26/16 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14 (Surr)	*88*		*17 - 120*	*08/22/16 08:04*	*08/26/16 13:19*	*1*
Phenol-d5 (Surr)	*19*		*10 - 120*	*08/22/16 08:04*	*08/26/16 13:19*	*1*
Nitrobenzene-d5 (Surr)	*68*		*36 - 120*	*08/22/16 08:04*	*08/26/16 13:19*	*1*
2-Fluorophenol (Surr)	*31*		*10 - 120*	*08/22/16 08:04*	*08/26/16 13:19*	*1*
2-Fluorobiphenyl (Surr)	*61*		*42 - 120*	*08/22/16 08:04*	*08/26/16 13:19*	*1*
2,4,6-Tribromophenol (Surr)	*62*		*35 - 125*	*08/22/16 08:04*	*08/26/16 13:19*	*1*

Client Sample ID: WG-11124679-081716-SG-004
Date Collected: 08/17/16 12:05
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.95	U	0.95	0.12	ug/L		08/22/16 08:04	08/26/16 13:43	1
bis (2-chloroisopropyl) ether	0.95	U	0.95	0.38	ug/L		08/22/16 08:04	08/26/16 13:43	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		08/22/16 08:04	08/26/16 13:43	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.23	ug/L		08/22/16 08:04	08/26/16 13:43	1
2,4-Dichlorophenol	1.9	U	1.9	0.18	ug/L		08/22/16 08:04	08/26/16 13:43	1
2,4-Dimethylphenol	1.9	U	1.9	0.24	ug/L		08/22/16 08:04	08/26/16 13:43	1
2,4-Dinitrophenol	4.8	U	4.8	0.30	ug/L		08/22/16 08:04	08/26/16 13:43	1
2,4-Dinitrotoluene	4.8	U	4.8	0.24	ug/L		08/22/16 08:04	08/26/16 13:43	1
2,6-Dinitrotoluene	4.8	U	4.8	0.76	ug/L		08/22/16 08:04	08/26/16 13:43	1
2-Chloronaphthalene	0.95	U	0.95	0.095	ug/L		08/22/16 08:04	08/26/16 13:43	1
2-Chlorophenol	0.95	U	0.95	0.28	ug/L		08/22/16 08:04	08/26/16 13:43	1
2-Methylnaphthalene	0.19	U	0.19	0.086	ug/L		08/22/16 08:04	08/26/16 13:43	1
2-Methylphenol	0.95	U	0.95	0.16	ug/L		08/22/16 08:04	08/26/16 13:43	1
2-Nitroaniline	1.9	U	1.9	0.20	ug/L		08/22/16 08:04	08/26/16 13:43	1
2-Nitrophenol	1.9	U	1.9	0.27	ug/L		08/22/16 08:04	08/26/16 13:43	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.35	ug/L		08/22/16 08:04	08/26/16 13:43	1
3-Nitroaniline	1.9	U	1.9	0.27	ug/L		08/22/16 08:04	08/26/16 13:43	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	2.3	ug/L		08/22/16 08:04	08/26/16 13:43	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.21	ug/L		08/22/16 08:04	08/26/16 13:43	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.20	ug/L		08/22/16 08:04	08/26/16 13:43	1
4-Chloroaniline	1.9	U	1.9	0.20	ug/L		08/22/16 08:04	08/26/16 13:43	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.29	ug/L		08/22/16 08:04	08/26/16 13:43	1
4-Nitroaniline	1.9	U	1.9	0.21	ug/L		08/22/16 08:04	08/26/16 13:43	1
4-Nitrophenol	4.8	U	4.8	0.28	ug/L		08/22/16 08:04	08/26/16 13:43	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		08/22/16 08:04	08/26/16 13:43	1
Acenaphthylene	0.19	U	0.19	0.046	ug/L		08/22/16 08:04	08/26/16 13:43	1
Acetophenone	0.95	U	0.95	0.32	ug/L		08/22/16 08:04	08/26/16 13:43	1
Anthracene	0.19	U	0.19	0.084	ug/L		08/22/16 08:04	08/26/16 13:43	1
Atrazine	0.95	U	0.95	0.32	ug/L		08/22/16 08:04	08/26/16 13:43	1
Benzaldehyde	0.95	U	0.95	0.37	ug/L		08/22/16 08:04	08/26/16 13:43	1
Benzo[a]anthracene	0.19	U	0.19	0.028	ug/L		08/22/16 08:04	08/26/16 13:43	1
Benzo[a]pyrene	0.19	U	0.19	0.049	ug/L		08/22/16 08:04	08/26/16 13:43	1
Benzo[b]fluoranthene	0.19	U	0.19	0.038	ug/L		08/22/16 08:04	08/26/16 13:43	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.044	ug/L		08/22/16 08:04	08/26/16 13:43	1
Benzo[k]fluoranthene	0.19	U	0.19	0.043	ug/L		08/22/16 08:04	08/26/16 13:43	1

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

Client Sample ID: WG-11124679-081716-SG-004
Date Collected: 08/17/16 12:05
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	0.95	U	0.95	0.30	ug/L		08/22/16 08:04	08/26/16 13:43	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		08/22/16 08:04	08/26/16 13:43	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8	1.6	ug/L		08/22/16 08:04	08/26/16 13:43	1
Butyl benzyl phthalate	1.9	U	1.9	0.25	ug/L		08/22/16 08:04	08/26/16 13:43	1
Caprolactam	4.8	U	4.8	0.19	ug/L		08/22/16 08:04	08/26/16 13:43	1
Carbazole	0.95	U	0.95	0.27	ug/L		08/22/16 08:04	08/26/16 13:43	1
Chrysene	0.19	U	0.19	0.048	ug/L		08/22/16 08:04	08/26/16 13:43	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.042	ug/L		08/22/16 08:04	08/26/16 13:43	1
Dibenzofuran	0.95	U	0.95	0.019	ug/L		08/22/16 08:04	08/26/16 13:43	1
Diethyl phthalate	1.9	U	1.9	0.57	ug/L		08/22/16 08:04	08/26/16 13:43	1
Dimethyl phthalate	1.9	U	1.9	0.28	ug/L		08/22/16 08:04	08/26/16 13:43	1
Di-n-butyl phthalate	4.8	U	4.8	1.6	ug/L		08/22/16 08:04	08/26/16 13:43	1
Di-n-octyl phthalate	1.9	U	1.9	0.22	ug/L		08/22/16 08:04	08/26/16 13:43	1
Fluoranthene	0.19	U	0.19	0.042	ug/L		08/22/16 08:04	08/26/16 13:43	1
Fluorene	0.19	U	0.19	0.039	ug/L		08/22/16 08:04	08/26/16 13:43	1
Hexachlorobenzene	0.19	U	0.19	0.081	ug/L		08/22/16 08:04	08/26/16 13:43	1
Hexachlorobutadiene	0.95	U	0.95	0.26	ug/L		08/22/16 08:04	08/26/16 13:43	1
Hexachlorocyclopentadiene	9.5	U	9.5	0.23	ug/L		08/22/16 08:04	08/26/16 13:43	1
Hexachloroethane	0.95	U	0.95	0.18	ug/L		08/22/16 08:04	08/26/16 13:43	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.041	ug/L		08/22/16 08:04	08/26/16 13:43	1
Isophorone	0.95	U	0.95	0.26	ug/L		08/22/16 08:04	08/26/16 13:43	1
N-Nitrosodi-n-propylamine	0.95	U	0.95	0.23	ug/L		08/22/16 08:04	08/26/16 13:43	1
N-Nitrosodiphenylamine	0.95	U	0.95	0.30	ug/L		08/22/16 08:04	08/26/16 13:43	1
Naphthalene	0.19	U	0.19	0.060	ug/L		08/22/16 08:04	08/26/16 13:43	1
Nitrobenzene	0.95	U	0.95	0.038	ug/L		08/22/16 08:04	08/26/16 13:43	1
Pentachlorophenol	4.8	U	4.8	0.26	ug/L		08/22/16 08:04	08/26/16 13:43	1
Phenanthrene	0.19	U	0.19	0.059	ug/L		08/22/16 08:04	08/26/16 13:43	1
Phenol	0.95	U	0.95	0.57	ug/L		08/22/16 08:04	08/26/16 13:43	1
Pyrene	0.19	U	0.19	0.040	ug/L		08/22/16 08:04	08/26/16 13:43	1
3 & 4 Methylphenol	1.9	U	1.9	0.76	ug/L		08/22/16 08:04	08/26/16 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14 (Surr)	*89*		*17 - 120*	*08/22/16 08:04*	*08/26/16 13:43*	*1*
Phenol-d5 (Surr)	*22*		*10 - 120*	*08/22/16 08:04*	*08/26/16 13:43*	*1*
Nitrobenzene-d5 (Surr)	*82*		*36 - 120*	*08/22/16 08:04*	*08/26/16 13:43*	*1*
2-Fluorophenol (Surr)	*43*		*10 - 120*	*08/22/16 08:04*	*08/26/16 13:43*	*1*
2-Fluorobiphenyl (Surr)	*76*		*42 - 120*	*08/22/16 08:04*	*08/26/16 13:43*	*1*
2,4,6-Tribromophenol (Surr)	*80*		*35 - 125*	*08/22/16 08:04*	*08/26/16 13:43*	*1*

Client Sample ID: WG-11124679-081716-SG-006
Date Collected: 08/17/16 12:05
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.95	U	0.95	0.12	ug/L		08/22/16 08:04	08/26/16 14:06	1
bis (2-chloroisopropyl) ether	0.95	U	0.95	0.38	ug/L		08/22/16 08:04	08/26/16 14:06	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		08/22/16 08:04	08/26/16 14:06	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.23	ug/L		08/22/16 08:04	08/26/16 14:06	1
2,4-Dichlorophenol	1.9	U	1.9	0.18	ug/L		08/22/16 08:04	08/26/16 14:06	1
2,4-Dimethylphenol	1.9	U	1.9	0.24	ug/L		08/22/16 08:04	08/26/16 14:06	1
2,4-Dinitrophenol	4.8	U	4.8	0.30	ug/L		08/22/16 08:04	08/26/16 14:06	1

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

Client Sample ID: WG-11124679-081716-SG-006
Date Collected: 08/17/16 12:05
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	4.8	U	4.8	0.24	ug/L		08/22/16 08:04	08/26/16 14:06	1
2,6-Dinitrotoluene	4.8	U	4.8	0.76	ug/L		08/22/16 08:04	08/26/16 14:06	1
2-Chloronaphthalene	0.95	U	0.95	0.095	ug/L		08/22/16 08:04	08/26/16 14:06	1
2-Chlorophenol	0.95	U	0.95	0.28	ug/L		08/22/16 08:04	08/26/16 14:06	1
2-Methylnaphthalene	0.19	U	0.19	0.086	ug/L		08/22/16 08:04	08/26/16 14:06	1
2-Methylphenol	0.95	U	0.95	0.16	ug/L		08/22/16 08:04	08/26/16 14:06	1
2-Nitroaniline	1.9	U	1.9	0.20	ug/L		08/22/16 08:04	08/26/16 14:06	1
2-Nitrophenol	1.9	U	1.9	0.27	ug/L		08/22/16 08:04	08/26/16 14:06	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.35	ug/L		08/22/16 08:04	08/26/16 14:06	1
3-Nitroaniline	1.9	U	1.9	0.27	ug/L		08/22/16 08:04	08/26/16 14:06	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	2.3	ug/L		08/22/16 08:04	08/26/16 14:06	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.21	ug/L		08/22/16 08:04	08/26/16 14:06	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.20	ug/L		08/22/16 08:04	08/26/16 14:06	1
4-Chloroaniline	1.9	U	1.9	0.20	ug/L		08/22/16 08:04	08/26/16 14:06	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.29	ug/L		08/22/16 08:04	08/26/16 14:06	1
4-Nitroaniline	1.9	U	1.9	0.21	ug/L		08/22/16 08:04	08/26/16 14:06	1
4-Nitrophenol	4.8	U	4.8	0.28	ug/L		08/22/16 08:04	08/26/16 14:06	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		08/22/16 08:04	08/26/16 14:06	1
Acenaphthylene	0.19	U	0.19	0.046	ug/L		08/22/16 08:04	08/26/16 14:06	1
Acetophenone	0.95	U	0.95	0.32	ug/L		08/22/16 08:04	08/26/16 14:06	1
Anthracene	0.19	U	0.19	0.084	ug/L		08/22/16 08:04	08/26/16 14:06	1
Atrazine	0.95	U	0.95	0.32	ug/L		08/22/16 08:04	08/26/16 14:06	1
Benzaldehyde	0.95	U	0.95	0.37	ug/L		08/22/16 08:04	08/26/16 14:06	1
Benzo[a]anthracene	0.19	U	0.19	0.028	ug/L		08/22/16 08:04	08/26/16 14:06	1
Benzo[a]pyrene	0.19	U	0.19	0.049	ug/L		08/22/16 08:04	08/26/16 14:06	1
Benzo[b]fluoranthene	0.19	U	0.19	0.038	ug/L		08/22/16 08:04	08/26/16 14:06	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.044	ug/L		08/22/16 08:04	08/26/16 14:06	1
Benzo[k]fluoranthene	0.19	U	0.19	0.043	ug/L		08/22/16 08:04	08/26/16 14:06	1
Bis(2-chloroethoxy)methane	0.95	U	0.95	0.30	ug/L		08/22/16 08:04	08/26/16 14:06	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		08/22/16 08:04	08/26/16 14:06	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8	1.6	ug/L		08/22/16 08:04	08/26/16 14:06	1
Butyl benzyl phthalate	1.9	U	1.9	0.25	ug/L		08/22/16 08:04	08/26/16 14:06	1
Caprolactam	4.8	U	4.8	0.19	ug/L		08/22/16 08:04	08/26/16 14:06	1
Carbazole	0.95	U	0.95	0.27	ug/L		08/22/16 08:04	08/26/16 14:06	1
Chrysene	0.19	U	0.19	0.048	ug/L		08/22/16 08:04	08/26/16 14:06	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.042	ug/L		08/22/16 08:04	08/26/16 14:06	1
Dibenzofuran	0.95	U	0.95	0.019	ug/L		08/22/16 08:04	08/26/16 14:06	1
Diethyl phthalate	1.9	U	1.9	0.57	ug/L		08/22/16 08:04	08/26/16 14:06	1
Dimethyl phthalate	1.9	U	1.9	0.28	ug/L		08/22/16 08:04	08/26/16 14:06	1
Di-n-butyl phthalate	4.8	U	4.8	1.6	ug/L		08/22/16 08:04	08/26/16 14:06	1
Di-n-octyl phthalate	1.9	U	1.9	0.22	ug/L		08/22/16 08:04	08/26/16 14:06	1
Fluoranthene	0.19	U	0.19	0.042	ug/L		08/22/16 08:04	08/26/16 14:06	1
Fluorene	0.19	U	0.19	0.039	ug/L		08/22/16 08:04	08/26/16 14:06	1
Hexachlorobenzene	0.19	U	0.19	0.081	ug/L		08/22/16 08:04	08/26/16 14:06	1
Hexachlorobutadiene	0.95	U	0.95	0.26	ug/L		08/22/16 08:04	08/26/16 14:06	1
Hexachlorocyclopentadiene	9.5	U	9.5	0.23	ug/L		08/22/16 08:04	08/26/16 14:06	1
Hexachloroethane	0.95	U	0.95	0.18	ug/L		08/22/16 08:04	08/26/16 14:06	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.041	ug/L		08/22/16 08:04	08/26/16 14:06	1
Isophorone	0.95	U	0.95	0.26	ug/L		08/22/16 08:04	08/26/16 14:06	1

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

Client Sample ID: WG-11124679-081716-SG-006
Date Collected: 08/17/16 12:05
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	0.95	U	0.95	0.23	ug/L		08/22/16 08:04	08/26/16 14:06	1
N-Nitrosodiphenylamine	0.95	U	0.95	0.30	ug/L		08/22/16 08:04	08/26/16 14:06	1
Naphthalene	0.19	U	0.19	0.060	ug/L		08/22/16 08:04	08/26/16 14:06	1
Nitrobenzene	0.95	U	0.95	0.038	ug/L		08/22/16 08:04	08/26/16 14:06	1
Pentachlorophenol	4.8	U	4.8	0.26	ug/L		08/22/16 08:04	08/26/16 14:06	1
Phenanthrene	0.19	U	0.19	0.059	ug/L		08/22/16 08:04	08/26/16 14:06	1
Phenol	0.95	U	0.95	0.57	ug/L		08/22/16 08:04	08/26/16 14:06	1
Pyrene	0.19	U	0.19	0.040	ug/L		08/22/16 08:04	08/26/16 14:06	1
3 & 4 Methylphenol	1.9	U	1.9	0.76	ug/L		08/22/16 08:04	08/26/16 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14 (Surr)	*88*		*17 - 120*	*08/22/16 08:04*	*08/26/16 14:06*	*1*
Phenol-d5 (Surr)	*18*		*10 - 120*	*08/22/16 08:04*	*08/26/16 14:06*	*1*
Nitrobenzene-d5 (Surr)	*74*		*36 - 120*	*08/22/16 08:04*	*08/26/16 14:06*	*1*
2-Fluorophenol (Surr)	*32*		*10 - 120*	*08/22/16 08:04*	*08/26/16 14:06*	*1*
2-Fluorobiphenyl (Surr)	*71*		*42 - 120*	*08/22/16 08:04*	*08/26/16 14:06*	*1*
2,4,6-Tribromophenol (Surr)	*73*		*35 - 125*	*08/22/16 08:04*	*08/26/16 14:06*	*1*

Client Sample ID: WG-11124679-081716-SG-007
Date Collected: 08/17/16 13:00
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.95	U	0.95	0.12	ug/L		08/22/16 08:04	08/26/16 14:29	1
bis (2-chloroisopropyl) ether	0.95	U	0.95	0.38	ug/L		08/22/16 08:04	08/26/16 14:29	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		08/22/16 08:04	08/26/16 14:29	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.23	ug/L		08/22/16 08:04	08/26/16 14:29	1
2,4-Dichlorophenol	1.9	U	1.9	0.18	ug/L		08/22/16 08:04	08/26/16 14:29	1
2,4-Dimethylphenol	1.9	U	1.9	0.24	ug/L		08/22/16 08:04	08/26/16 14:29	1
2,4-Dinitrophenol	4.8	U	4.8	0.30	ug/L		08/22/16 08:04	08/26/16 14:29	1
2,4-Dinitrotoluene	4.8	U	4.8	0.24	ug/L		08/22/16 08:04	08/26/16 14:29	1
2,6-Dinitrotoluene	4.8	U	4.8	0.76	ug/L		08/22/16 08:04	08/26/16 14:29	1
2-Chloronaphthalene	0.95	U	0.95	0.095	ug/L		08/22/16 08:04	08/26/16 14:29	1
2-Chlorophenol	0.95	U	0.95	0.28	ug/L		08/22/16 08:04	08/26/16 14:29	1
2-Methylnaphthalene	0.19	U	0.19	0.086	ug/L		08/22/16 08:04	08/26/16 14:29	1
2-Methylphenol	0.95	U	0.95	0.16	ug/L		08/22/16 08:04	08/26/16 14:29	1
2-Nitroaniline	1.9	U	1.9	0.20	ug/L		08/22/16 08:04	08/26/16 14:29	1
2-Nitrophenol	1.9	U	1.9	0.27	ug/L		08/22/16 08:04	08/26/16 14:29	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.35	ug/L		08/22/16 08:04	08/26/16 14:29	1
3-Nitroaniline	1.9	U	1.9	0.27	ug/L		08/22/16 08:04	08/26/16 14:29	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	2.3	ug/L		08/22/16 08:04	08/26/16 14:29	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.21	ug/L		08/22/16 08:04	08/26/16 14:29	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.20	ug/L		08/22/16 08:04	08/26/16 14:29	1
4-Chloroaniline	1.9	U	1.9	0.20	ug/L		08/22/16 08:04	08/26/16 14:29	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.29	ug/L		08/22/16 08:04	08/26/16 14:29	1
4-Nitroaniline	1.9	U	1.9	0.21	ug/L		08/22/16 08:04	08/26/16 14:29	1
4-Nitrophenol	4.8	U	4.8	0.28	ug/L		08/22/16 08:04	08/26/16 14:29	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		08/22/16 08:04	08/26/16 14:29	1
Acenaphthylene	0.19	U	0.19	0.046	ug/L		08/22/16 08:04	08/26/16 14:29	1
Acetophenone	0.95	U	0.95	0.32	ug/L		08/22/16 08:04	08/26/16 14:29	1
Anthracene	0.19	U	0.19	0.084	ug/L		08/22/16 08:04	08/26/16 14:29	1

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

Client Sample ID: WG-11124679-081716-SG-007
Date Collected: 08/17/16 13:00
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Atrazine	0.95	U	0.95	0.32	ug/L		08/22/16 08:04	08/26/16 14:29	1
Benzaldehyde	0.95	U	0.95	0.37	ug/L		08/22/16 08:04	08/26/16 14:29	1
Benzo[a]anthracene	0.19	U	0.19	0.028	ug/L		08/22/16 08:04	08/26/16 14:29	1
Benzo[a]pyrene	0.19	U	0.19	0.049	ug/L		08/22/16 08:04	08/26/16 14:29	1
Benzo[b]fluoranthene	0.19	U	0.19	0.038	ug/L		08/22/16 08:04	08/26/16 14:29	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.044	ug/L		08/22/16 08:04	08/26/16 14:29	1
Benzo[k]fluoranthene	0.19	U	0.19	0.043	ug/L		08/22/16 08:04	08/26/16 14:29	1
Bis(2-chloroethoxy)methane	0.95	U	0.95	0.30	ug/L		08/22/16 08:04	08/26/16 14:29	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		08/22/16 08:04	08/26/16 14:29	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8	1.6	ug/L		08/22/16 08:04	08/26/16 14:29	1
Butyl benzyl phthalate	1.9	U	1.9	0.25	ug/L		08/22/16 08:04	08/26/16 14:29	1
Caprolactam	4.8	U	4.8	0.19	ug/L		08/22/16 08:04	08/26/16 14:29	1
Carbazole	0.95	U	0.95	0.27	ug/L		08/22/16 08:04	08/26/16 14:29	1
Chrysene	0.19	U	0.19	0.048	ug/L		08/22/16 08:04	08/26/16 14:29	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.042	ug/L		08/22/16 08:04	08/26/16 14:29	1
Dibenzofuran	0.95	U	0.95	0.019	ug/L		08/22/16 08:04	08/26/16 14:29	1
Diethyl phthalate	1.9	U	1.9	0.57	ug/L		08/22/16 08:04	08/26/16 14:29	1
Dimethyl phthalate	1.9	U	1.9	0.28	ug/L		08/22/16 08:04	08/26/16 14:29	1
Di-n-butyl phthalate	4.8	U	4.8	1.6	ug/L		08/22/16 08:04	08/26/16 14:29	1
Di-n-octyl phthalate	1.9	U	1.9	0.22	ug/L		08/22/16 08:04	08/26/16 14:29	1
Fluoranthene	0.19	U	0.19	0.042	ug/L		08/22/16 08:04	08/26/16 14:29	1
Fluorene	0.19	U	0.19	0.039	ug/L		08/22/16 08:04	08/26/16 14:29	1
Hexachlorobenzene	0.19	U	0.19	0.081	ug/L		08/22/16 08:04	08/26/16 14:29	1
Hexachlorobutadiene	0.95	U	0.95	0.26	ug/L		08/22/16 08:04	08/26/16 14:29	1
Hexachlorocyclopentadiene	9.5	U	9.5	0.23	ug/L		08/22/16 08:04	08/26/16 14:29	1
Hexachloroethane	0.95	U	0.95	0.18	ug/L		08/22/16 08:04	08/26/16 14:29	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.041	ug/L		08/22/16 08:04	08/26/16 14:29	1
Isophorone	0.95	U	0.95	0.26	ug/L		08/22/16 08:04	08/26/16 14:29	1
N-Nitrosodi-n-propylamine	0.95	U	0.95	0.23	ug/L		08/22/16 08:04	08/26/16 14:29	1
N-Nitrosodiphenylamine	0.95	U	0.95	0.30	ug/L		08/22/16 08:04	08/26/16 14:29	1
Naphthalene	0.19	U	0.19	0.060	ug/L		08/22/16 08:04	08/26/16 14:29	1
Nitrobenzene	0.95	U	0.95	0.038	ug/L		08/22/16 08:04	08/26/16 14:29	1
Pentachlorophenol	4.8	U	4.8	0.26	ug/L		08/22/16 08:04	08/26/16 14:29	1
Phenanthrene	0.19	U	0.19	0.059	ug/L		08/22/16 08:04	08/26/16 14:29	1
Phenol	0.95	U	0.95	0.57	ug/L		08/22/16 08:04	08/26/16 14:29	1
Pyrene	0.19	U	0.19	0.040	ug/L		08/22/16 08:04	08/26/16 14:29	1
3 & 4 Methylphenol	1.9	U	1.9	0.76	ug/L		08/22/16 08:04	08/26/16 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14 (Surr)	*81*		*17 - 120*	*08/22/16 08:04*	*08/26/16 14:29*	*1*
Phenol-d5 (Surr)	*22*		*10 - 120*	*08/22/16 08:04*	*08/26/16 14:29*	*1*
Nitrobenzene-d5 (Surr)	*77*		*36 - 120*	*08/22/16 08:04*	*08/26/16 14:29*	*1*
2-Fluorophenol (Surr)	*37*		*10 - 120*	*08/22/16 08:04*	*08/26/16 14:29*	*1*
2-Fluorobiphenyl (Surr)	*77*		*42 - 120*	*08/22/16 08:04*	*08/26/16 14:29*	*1*
2,4,6-Tribromophenol (Surr)	*76*		*35 - 125*	*08/22/16 08:04*	*08/26/16 14:29*	*1*

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

Client Sample ID: WG-11124679-081716-SG-008
Date Collected: 08/17/16 14:30
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.98	U	0.98	0.13	ug/L		08/22/16 08:04	08/26/16 14:53	1
bis (2-chloroisopropyl) ether	0.98	U	0.98	0.39	ug/L		08/22/16 08:04	08/26/16 14:53	1
2,4,5-Trichlorophenol	4.9	U	4.9	0.29	ug/L		08/22/16 08:04	08/26/16 14:53	1
2,4,6-Trichlorophenol	4.9	U	4.9	0.24	ug/L		08/22/16 08:04	08/26/16 14:53	1
2,4-Dichlorophenol	2.0	U	2.0	0.19	ug/L		08/22/16 08:04	08/26/16 14:53	1
2,4-Dimethylphenol	2.0	U	2.0	0.25	ug/L		08/22/16 08:04	08/26/16 14:53	1
2,4-Dinitrophenol	4.9	U	4.9	0.31	ug/L		08/22/16 08:04	08/26/16 14:53	1
2,4-Dinitrotoluene	4.9	U	4.9	0.25	ug/L		08/22/16 08:04	08/26/16 14:53	1
2,6-Dinitrotoluene	4.9	U	4.9	0.78	ug/L		08/22/16 08:04	08/26/16 14:53	1
2-Chloronaphthalene	0.98	U	0.98	0.098	ug/L		08/22/16 08:04	08/26/16 14:53	1
2-Chlorophenol	0.98	U	0.98	0.28	ug/L		08/22/16 08:04	08/26/16 14:53	1
2-Methylnaphthalene	0.20	U	0.20	0.089	ug/L		08/22/16 08:04	08/26/16 14:53	1
2-Methylphenol	0.98	U	0.98	0.17	ug/L		08/22/16 08:04	08/26/16 14:53	1
2-Nitroaniline	2.0	U	2.0	0.21	ug/L		08/22/16 08:04	08/26/16 14:53	1
2-Nitrophenol	2.0	U	2.0	0.27	ug/L		08/22/16 08:04	08/26/16 14:53	1
3,3'-Dichlorobenzidine	4.9	U	4.9	0.36	ug/L		08/22/16 08:04	08/26/16 14:53	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		08/22/16 08:04	08/26/16 14:53	1
4,6-Dinitro-2-methylphenol	4.9	U	4.9	2.4	ug/L		08/22/16 08:04	08/26/16 14:53	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.22	ug/L		08/22/16 08:04	08/26/16 14:53	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.21	ug/L		08/22/16 08:04	08/26/16 14:53	1
4-Chloroaniline	2.0	U	2.0	0.21	ug/L		08/22/16 08:04	08/26/16 14:53	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		08/22/16 08:04	08/26/16 14:53	1
4-Nitroaniline	2.0	U	2.0	0.22	ug/L		08/22/16 08:04	08/26/16 14:53	1
4-Nitrophenol	4.9	U	4.9	0.28	ug/L		08/22/16 08:04	08/26/16 14:53	1
Acenaphthene	0.20	U	0.20	0.043	ug/L		08/22/16 08:04	08/26/16 14:53	1
Acenaphthylene	0.20	U	0.20	0.047	ug/L		08/22/16 08:04	08/26/16 14:53	1
Acetophenone	0.98	U	0.98	0.33	ug/L		08/22/16 08:04	08/26/16 14:53	1
Anthracene	0.20	U	0.20	0.086	ug/L		08/22/16 08:04	08/26/16 14:53	1
Atrazine	0.98	U	0.98	0.33	ug/L		08/22/16 08:04	08/26/16 14:53	1
Benzaldehyde	0.98	U	0.98	0.38	ug/L		08/22/16 08:04	08/26/16 14:53	1
Benzo[a]anthracene	0.20	U	0.20	0.029	ug/L		08/22/16 08:04	08/26/16 14:53	1
Benzo[a]pyrene	0.20	U	0.20	0.050	ug/L		08/22/16 08:04	08/26/16 14:53	1
Benzo[b]fluoranthene	0.20	U	0.20	0.039	ug/L		08/22/16 08:04	08/26/16 14:53	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.045	ug/L		08/22/16 08:04	08/26/16 14:53	1
Benzo[k]fluoranthene	0.20	U	0.20	0.044	ug/L		08/22/16 08:04	08/26/16 14:53	1
Bis(2-chloroethoxy)methane	0.98	U	0.98	0.31	ug/L		08/22/16 08:04	08/26/16 14:53	1
Bis(2-chloroethyl)ether	0.98	U	0.98	0.098	ug/L		08/22/16 08:04	08/26/16 14:53	1
Bis(2-ethylhexyl) phthalate	4.9	U	4.9	1.7	ug/L		08/22/16 08:04	08/26/16 14:53	1
Butyl benzyl phthalate	2.0	U	2.0	0.25	ug/L		08/22/16 08:04	08/26/16 14:53	1
Caprolactam	4.9	U	4.9	0.20	ug/L		08/22/16 08:04	08/26/16 14:53	1
Carbazole	0.98	U	0.98	0.27	ug/L		08/22/16 08:04	08/26/16 14:53	1
Chrysene	0.20	U	0.20	0.049	ug/L		08/22/16 08:04	08/26/16 14:53	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.044	ug/L		08/22/16 08:04	08/26/16 14:53	1
Dibenzofuran	0.98	U	0.98	0.020	ug/L		08/22/16 08:04	08/26/16 14:53	1
Diethyl phthalate	2.0	U	2.0	0.59	ug/L		08/22/16 08:04	08/26/16 14:53	1
Dimethyl phthalate	2.0	U	2.0	0.28	ug/L		08/22/16 08:04	08/26/16 14:53	1
Di-n-butyl phthalate	4.9	U	4.9	1.7	ug/L		08/22/16 08:04	08/26/16 14:53	1
Di-n-octyl phthalate	2.0	U	2.0	0.23	ug/L		08/22/16 08:04	08/26/16 14:53	1
Fluoranthene	0.20	U	0.20	0.044	ug/L		08/22/16 08:04	08/26/16 14:53	1

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

Client Sample ID: WG-11124679-081716-SG-008
Date Collected: 08/17/16 14:30
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.20	U	0.20	0.040	ug/L		08/22/16 08:04	08/26/16 14:53	1
Hexachlorobenzene	0.20	U	0.20	0.084	ug/L		08/22/16 08:04	08/26/16 14:53	1
Hexachlorobutadiene	0.98	U	0.98	0.26	ug/L		08/22/16 08:04	08/26/16 14:53	1
Hexachlorocyclopentadiene	9.8	U	9.8	0.24	ug/L		08/22/16 08:04	08/26/16 14:53	1
Hexachloroethane	0.98	U	0.98	0.19	ug/L		08/22/16 08:04	08/26/16 14:53	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.042	ug/L		08/22/16 08:04	08/26/16 14:53	1
Isophorone	0.98	U	0.98	0.26	ug/L		08/22/16 08:04	08/26/16 14:53	1
N-Nitrosodi-n-propylamine	0.98	U	0.98	0.24	ug/L		08/22/16 08:04	08/26/16 14:53	1
N-Nitrosodiphenylamine	0.98	U	0.98	0.30	ug/L		08/22/16 08:04	08/26/16 14:53	1
Naphthalene	0.20	U	0.20	0.061	ug/L		08/22/16 08:04	08/26/16 14:53	1
Nitrobenzene	0.98	U	0.98	0.039	ug/L		08/22/16 08:04	08/26/16 14:53	1
Pentachlorophenol	4.9	U	4.9	0.26	ug/L		08/22/16 08:04	08/26/16 14:53	1
Phenanthrene	0.20	U	0.20	0.061	ug/L		08/22/16 08:04	08/26/16 14:53	1
Phenol	0.98	U	0.98	0.59	ug/L		08/22/16 08:04	08/26/16 14:53	1
Pyrene	0.20	U	0.20	0.041	ug/L		08/22/16 08:04	08/26/16 14:53	1
3 & 4 Methylphenol	2.0	U	2.0	0.78	ug/L		08/22/16 08:04	08/26/16 14:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14 (Surr)	*93*		*17 - 120*	*08/22/16 08:04*	*08/26/16 14:53*	*1*
Phenol-d5 (Surr)	*22*		*10 - 120*	*08/22/16 08:04*	*08/26/16 14:53*	*1*
Nitrobenzene-d5 (Surr)	*76*		*36 - 120*	*08/22/16 08:04*	*08/26/16 14:53*	*1*
2-Fluorophenol (Surr)	*38*		*10 - 120*	*08/22/16 08:04*	*08/26/16 14:53*	*1*
2-Fluorobiphenyl (Surr)	*75*		*42 - 120*	*08/22/16 08:04*	*08/26/16 14:53*	*1*
2,4,6-Tribromophenol (Surr)	*75*		*35 - 125*	*08/22/16 08:04*	*08/26/16 14:53*	*1*

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Client Sample ID: FB-11124679-081716-SG-003
Date Collected: 08/17/16 10:20
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.0	U	1.0	0.030	ug/L		08/22/16 13:38	08/23/16 14:35	1
Aluminum	**30**	**J**	50	13	ug/L		08/22/16 13:38	08/23/16 14:35	1
Arsenic	5.0	U	5.0	0.35	ug/L		08/22/16 13:38	08/23/16 14:35	1
Barium	5.0	U	5.0	0.52	ug/L		08/22/16 13:38	08/23/16 14:35	1
Beryllium	1.0	U	1.0	0.40	ug/L		08/22/16 13:38	08/23/16 14:35	1
Cadmium	1.0	U	1.0	0.31	ug/L		08/22/16 13:38	08/23/16 14:35	1
Cobalt	1.0	U	1.0	0.13	ug/L		08/22/16 13:38	08/23/16 14:35	1
Chromium	2.0	U	2.0	0.26	ug/L		08/22/16 13:38	08/23/16 14:35	1
Copper	**0.36**	**J B**	2.0	0.36	ug/L		08/22/16 13:38	08/23/16 14:35	1
Iron	**17**	**J B**	100	5.3	ug/L		08/22/16 13:38	08/23/16 14:35	1
Manganese	5.0	U	5.0	0.25	ug/L		08/22/16 13:38	08/23/16 14:35	1
Nickel	2.0	U	2.0	0.28	ug/L		08/22/16 13:38	08/23/16 14:35	1
Lead	1.0	U	1.0	0.16	ug/L		08/22/16 13:38	08/23/16 14:35	1
Antimony	2.0	U	2.0	0.27	ug/L		08/22/16 13:38	08/23/16 14:35	1
Selenium	5.0	U	5.0	0.48	ug/L		08/22/16 13:38	08/23/16 14:35	1
Thallium	1.0	U	1.0	0.28	ug/L		08/22/16 13:38	08/23/16 14:35	1
Vanadium	5.0	U	5.0	0.54	ug/L		08/22/16 13:38	08/23/16 14:35	1
Zinc	20	U	20	6.2	ug/L		08/22/16 13:38	08/23/16 14:35	1
Calcium	**340**	**J B**	1000	43	ug/L		08/22/16 13:38	08/23/16 14:35	1
Potassium	**11**	**J B**	1000	6.6	ug/L		08/22/16 13:38	08/23/16 14:35	1
Magnesium	1000	U	1000	16	ug/L		08/22/16 13:38	08/23/16 14:35	1
Sodium	**660**	**J B**	1000	14	ug/L		08/22/16 13:38	08/23/16 14:35	1

Client Sample ID: WG-11124679-081716-SG-001
Date Collected: 08/17/16 10:35
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.0	U	1.0	0.030	ug/L		08/22/16 13:38	08/23/16 14:39	1
Aluminum	**72**		50	13	ug/L		08/22/16 13:38	08/23/16 14:39	1
Arsenic	**0.41**	**J**	5.0	0.35	ug/L		08/22/16 13:38	08/23/16 14:39	1
Barium	**180**	**B**	5.0	0.52	ug/L		08/22/16 13:38	08/23/16 14:39	1
Beryllium	1.0	U	1.0	0.40	ug/L		08/22/16 13:38	08/23/16 14:39	1
Cadmium	1.0	U	1.0	0.31	ug/L		08/22/16 13:38	08/23/16 14:39	1
Cobalt	1.0	U	1.0	0.13	ug/L		08/22/16 13:38	08/23/16 14:39	1
Chromium	2.0	U	2.0	0.26	ug/L		08/22/16 13:38	08/23/16 14:39	1
Copper	**3.9**	**B**	2.0	0.36	ug/L		08/22/16 13:38	08/23/16 14:39	1
Iron	**74**	**J B**	100	5.3	ug/L		08/22/16 13:38	08/23/16 14:39	1
Manganese	**3.0**	**J**	5.0	0.25	ug/L		08/22/16 13:38	08/23/16 14:39	1
Nickel	**0.70**	**J B**	2.0	0.28	ug/L		08/22/16 13:38	08/23/16 14:39	1
Lead	**2.6**		1.0	0.16	ug/L		08/22/16 13:38	08/23/16 14:39	1
Antimony	**0.45**	**J**	2.0	0.27	ug/L		08/22/16 13:38	08/23/16 14:39	1
Selenium	5.0	U	5.0	0.48	ug/L		08/22/16 13:38	08/23/16 14:39	1
Thallium	1.0	U	1.0	0.28	ug/L		08/22/16 13:38	08/23/16 14:39	1
Vanadium	**0.73**	**J**	5.0	0.54	ug/L		08/22/16 13:38	08/23/16 14:39	1
Zinc	**8.8**	**J**	20	6.2	ug/L		08/22/16 13:38	08/23/16 14:39	1
Calcium	**81000**	**B**	1000	43	ug/L		08/22/16 13:38	08/23/16 14:39	1
Potassium	**960**	**J B**	1000	6.6	ug/L		08/22/16 13:38	08/23/16 14:39	1
Magnesium	**97000**	**B**	1000	16	ug/L		08/22/16 13:38	08/23/16 14:39	1
Sodium	**80000**	**B**	1000	14	ug/L		08/22/16 13:38	08/23/16 14:39	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Client Sample ID: WG-11124679-081716-SG-002
Date Collected: 08/17/16 10:25
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.0	U	1.0	0.030	ug/L		08/22/16 13:38	08/23/16 14:43	1
Aluminum	50	U	50	13	ug/L		08/22/16 13:38	08/23/16 14:43	1
Arsenic	**4.2**	**J**	5.0	0.35	ug/L		08/22/16 13:38	08/23/16 14:43	1
Barium	**160**	**B**	5.0	0.52	ug/L		08/22/16 13:38	08/23/16 14:43	1
Beryllium	1.0	U	1.0	0.40	ug/L		08/22/16 13:38	08/23/16 14:43	1
Cadmium	1.0	U	1.0	0.31	ug/L		08/22/16 13:38	08/23/16 14:43	1
Cobalt	**0.43**	**J**	1.0	0.13	ug/L		08/22/16 13:38	08/23/16 14:43	1
Chromium	2.0	U	2.0	0.26	ug/L		08/22/16 13:38	08/23/16 14:43	1
Copper	**25**	**B**	2.0	0.36	ug/L		08/22/16 13:38	08/23/16 14:43	1
Iron	**28**	**J B**	100	5.3	ug/L		08/22/16 13:38	08/23/16 14:43	1
Manganese	**120**		5.0	0.25	ug/L		08/22/16 13:38	08/23/16 14:43	1
Nickel	**0.79**	**J B**	2.0	0.28	ug/L		08/22/16 13:38	08/23/16 14:43	1
Lead	**6.9**		1.0	0.16	ug/L		08/22/16 13:38	08/23/16 14:43	1
Antimony	**0.52**	**J**	2.0	0.27	ug/L		08/22/16 13:38	08/23/16 14:43	1
Selenium	5.0	U	5.0	0.48	ug/L		08/22/16 13:38	08/23/16 14:43	1
Thallium	1.0	U	1.0	0.28	ug/L		08/22/16 13:38	08/23/16 14:43	1
Vanadium	5.0	U	5.0	0.54	ug/L		08/22/16 13:38	08/23/16 14:43	1
Zinc	**49**		20	6.2	ug/L		08/22/16 13:38	08/23/16 14:43	1
Calcium	**55000**	**B**	1000	43	ug/L		08/22/16 13:38	08/23/16 14:43	1
Potassium	**2300**	**B**	1000	6.6	ug/L		08/22/16 13:38	08/23/16 14:43	1
Magnesium	**81000**	**B**	1000	16	ug/L		08/22/16 13:38	08/23/16 14:43	1
Sodium	**77000**	**B**	1000	14	ug/L		08/22/16 13:38	08/23/16 14:43	1

Client Sample ID: WG-11124679-081716-SG-005
Date Collected: 08/17/16 11:20
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.0	U	1.0	0.030	ug/L		08/22/16 13:38	08/23/16 14:47	1
Aluminum	50	U	50	13	ug/L		08/22/16 13:38	08/23/16 14:47	1
Arsenic	**8.8**		5.0	0.35	ug/L		08/22/16 13:38	08/23/16 14:47	1
Barium	**38**	**B**	5.0	0.52	ug/L		08/22/16 13:38	08/23/16 14:47	1
Beryllium	1.0	U	1.0	0.40	ug/L		08/22/16 13:38	08/23/16 14:47	1
Cadmium	1.0	U	1.0	0.31	ug/L		08/22/16 13:38	08/23/16 14:47	1
Cobalt	**0.15**	**J**	1.0	0.13	ug/L		08/22/16 13:38	08/23/16 14:47	1
Chromium	2.0	U	2.0	0.26	ug/L		08/22/16 13:38	08/23/16 14:47	1
Copper	2.0	U	2.0	0.36	ug/L		08/22/16 13:38	08/23/16 14:47	1
Iron	**360**	**B**	100	5.3	ug/L		08/22/16 13:38	08/23/16 14:47	1
Manganese	**19**		5.0	0.25	ug/L		08/22/16 13:38	08/23/16 14:47	1
Nickel	2.0	U	2.0	0.28	ug/L		08/22/16 13:38	08/23/16 14:47	1
Lead	1.0	U	1.0	0.16	ug/L		08/22/16 13:38	08/23/16 14:47	1
Antimony	2.0	U	2.0	0.27	ug/L		08/22/16 13:38	08/23/16 14:47	1
Selenium	5.0	U	5.0	0.48	ug/L		08/22/16 13:38	08/23/16 14:47	1
Thallium	1.0	U	1.0	0.28	ug/L		08/22/16 13:38	08/23/16 14:47	1
Vanadium	5.0	U	5.0	0.54	ug/L		08/22/16 13:38	08/23/16 14:47	1
Zinc	20	U	20	6.2	ug/L		08/22/16 13:38	08/23/16 14:47	1
Calcium	**63000**	**B**	1000	43	ug/L		08/22/16 13:38	08/23/16 14:47	1
Potassium	**1800**	**B**	1000	6.6	ug/L		08/22/16 13:38	08/23/16 14:47	1
Magnesium	**99000**	**B**	1000	16	ug/L		08/22/16 13:38	08/23/16 14:47	1
Sodium	**63000**	**B**	1000	14	ug/L		08/22/16 13:38	08/23/16 14:47	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Client Sample ID: WG-11124679-081716-SG-004
Date Collected: 08/17/16 12:05
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.0	U	1.0	0.030	ug/L		08/22/16 13:38	08/23/16 14:51	1
Aluminum	**150**		50	13	ug/L		08/22/16 13:38	08/23/16 14:51	1
Arsenic	**1.3**	**J**	5.0	0.35	ug/L		08/22/16 13:38	08/23/16 14:51	1
Barium	**81**	**B**	5.0	0.52	ug/L		08/22/16 13:38	08/23/16 14:51	1
Beryllium	1.0	U	1.0	0.40	ug/L		08/22/16 13:38	08/23/16 14:51	1
Cadmium	1.0	U	1.0	0.31	ug/L		08/22/16 13:38	08/23/16 14:51	1
Cobalt	**0.71**	**J**	1.0	0.13	ug/L		08/22/16 13:38	08/23/16 14:51	1
Chromium	**0.81**	**J**	2.0	0.26	ug/L		08/22/16 13:38	08/23/16 14:51	1
Copper	**1.7**	**J B**	2.0	0.36	ug/L		08/22/16 13:38	08/23/16 14:51	1
Iron	**1100**	**B**	100	5.3	ug/L		08/22/16 13:38	08/23/16 14:51	1
Manganese	**150**		5.0	0.25	ug/L		08/22/16 13:38	08/23/16 14:51	1
Nickel	**1.2**	**J B**	2.0	0.28	ug/L		08/22/16 13:38	08/23/16 14:51	1
Lead	**1.0**		1.0	0.16	ug/L		08/22/16 13:38	08/23/16 14:51	1
Antimony	2.0	U	2.0	0.27	ug/L		08/22/16 13:38	08/23/16 14:51	1
Selenium	5.0	U	5.0	0.48	ug/L		08/22/16 13:38	08/23/16 14:51	1
Thallium	1.0	U	1.0	0.28	ug/L		08/22/16 13:38	08/23/16 14:51	1
Vanadium	5.0	U	5.0	0.54	ug/L		08/22/16 13:38	08/23/16 14:51	1
Zinc	**9.3**	**J**	20	6.2	ug/L		08/22/16 13:38	08/23/16 14:51	1
Calcium	**59000**	**B**	1000	43	ug/L		08/22/16 13:38	08/23/16 14:51	1
Potassium	**2000**	**B**	1000	6.6	ug/L		08/22/16 13:38	08/23/16 14:51	1
Magnesium	**66000**	**B**	1000	16	ug/L		08/22/16 13:38	08/23/16 14:51	1
Sodium	**53000**	**B**	1000	14	ug/L		08/22/16 13:38	08/23/16 14:51	1

Client Sample ID: WG-11124679-081716-SG-006
Date Collected: 08/17/16 12:05
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.0	U	1.0	0.030	ug/L		08/22/16 13:38	08/23/16 14:55	1
Aluminum	**200**		50	13	ug/L		08/22/16 13:38	08/23/16 14:55	1
Arsenic	**1.3**	**J**	5.0	0.35	ug/L		08/22/16 13:38	08/23/16 14:55	1
Barium	**81**	**B**	5.0	0.52	ug/L		08/22/16 13:38	08/23/16 14:55	1
Beryllium	1.0	U	1.0	0.40	ug/L		08/22/16 13:38	08/23/16 14:55	1
Cadmium	1.0	U	1.0	0.31	ug/L		08/22/16 13:38	08/23/16 14:55	1
Cobalt	**0.74**	**J**	1.0	0.13	ug/L		08/22/16 13:38	08/23/16 14:55	1
Chromium	**0.51**	**J**	2.0	0.26	ug/L		08/22/16 13:38	08/23/16 14:55	1
Copper	**2.0**	**B**	2.0	0.36	ug/L		08/22/16 13:38	08/23/16 14:55	1
Iron	**1200**	**B**	100	5.3	ug/L		08/22/16 13:38	08/23/16 14:55	1
Manganese	**150**		5.0	0.25	ug/L		08/22/16 13:38	08/23/16 14:55	1
Nickel	**0.80**	**J B**	2.0	0.28	ug/L		08/22/16 13:38	08/23/16 14:55	1
Lead	**1.1**		1.0	0.16	ug/L		08/22/16 13:38	08/23/16 14:55	1
Antimony	2.0	U	2.0	0.27	ug/L		08/22/16 13:38	08/23/16 14:55	1
Selenium	5.0	U	5.0	0.48	ug/L		08/22/16 13:38	08/23/16 14:55	1
Thallium	1.0	U	1.0	0.28	ug/L		08/22/16 13:38	08/23/16 14:55	1
Vanadium	**0.58**	**J**	5.0	0.54	ug/L		08/22/16 13:38	08/23/16 14:55	1
Zinc	**9.3**	**J**	20	6.2	ug/L		08/22/16 13:38	08/23/16 14:55	1
Calcium	**58000**	**B**	1000	43	ug/L		08/22/16 13:38	08/23/16 14:55	1
Potassium	**2100**	**B**	1000	6.6	ug/L		08/22/16 13:38	08/23/16 14:55	1
Magnesium	**64000**	**B**	1000	16	ug/L		08/22/16 13:38	08/23/16 14:55	1
Sodium	**53000**	**B**	1000	14	ug/L		08/22/16 13:38	08/23/16 14:55	1

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Client Sample ID: WG-11124679-081716-SG-007
Date Collected: 08/17/16 13:00
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.0	U	1.0	0.030	ug/L		08/22/16 13:38	08/23/16 15:00	1
Aluminum	50	U	50	13	ug/L		08/22/16 13:38	08/23/16 15:00	1
Arsenic	**1.8**	**J**	5.0	0.35	ug/L		08/22/16 13:38	08/23/16 15:00	1
Barium	**100**	**B**	5.0	0.52	ug/L		08/22/16 13:38	08/23/16 15:00	1
Beryllium	1.0	U	1.0	0.40	ug/L		08/22/16 13:38	08/23/16 15:00	1
Cadmium	1.0	U	1.0	0.31	ug/L		08/22/16 13:38	08/23/16 15:00	1
Cobalt	**0.34**	**J**	1.0	0.13	ug/L		08/22/16 13:38	08/23/16 15:00	1
Chromium	2.0	U	2.0	0.26	ug/L		08/22/16 13:38	08/23/16 15:00	1
Copper	**0.60**	**J B**	2.0	0.36	ug/L		08/22/16 13:38	08/23/16 15:00	1
Iron	**460**	**B**	100	5.3	ug/L		08/22/16 13:38	08/23/16 15:00	1
Manganese	**44**		5.0	0.25	ug/L		08/22/16 13:38	08/23/16 15:00	1
Nickel	**0.74**	**J B**	2.0	0.28	ug/L		08/22/16 13:38	08/23/16 15:00	1
Lead	**0.42**	**J**	1.0	0.16	ug/L		08/22/16 13:38	08/23/16 15:00	1
Antimony	2.0	U	2.0	0.27	ug/L		08/22/16 13:38	08/23/16 15:00	1
Selenium	5.0	U	5.0	0.48	ug/L		08/22/16 13:38	08/23/16 15:00	1
Thallium	1.0	U	1.0	0.28	ug/L		08/22/16 13:38	08/23/16 15:00	1
Vanadium	5.0	U	5.0	0.54	ug/L		08/22/16 13:38	08/23/16 15:00	1
Zinc	20	U	20	6.2	ug/L		08/22/16 13:38	08/23/16 15:00	1
Calcium	**110000**	**B**	1000	43	ug/L		08/22/16 13:38	08/23/16 15:00	1
Potassium	**3200**	**B**	1000	6.6	ug/L		08/22/16 13:38	08/23/16 15:00	1
Magnesium	**91000**	**B**	1000	16	ug/L		08/22/16 13:38	08/23/16 15:00	1
Sodium	**150000**	**B**	1000	14	ug/L		08/22/16 13:38	08/23/16 15:00	1

Client Sample ID: WG-11124679-081716-SG-008
Date Collected: 08/17/16 14:30
Date Received: 08/19/16 09:35

Lab Sample ID: 240-68530-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.0	U	1.0	0.030	ug/L		08/22/16 13:38	08/23/16 15:04	1
Aluminum	**69**		50	13	ug/L		08/22/16 13:38	08/23/16 15:04	1
Arsenic	**0.88**	**J**	5.0	0.35	ug/L		08/22/16 13:38	08/23/16 15:04	1
Barium	**180**	**B**	5.0	0.52	ug/L		08/22/16 13:38	08/23/16 15:04	1
Beryllium	1.0	U	1.0	0.40	ug/L		08/22/16 13:38	08/23/16 15:04	1
Cadmium	1.0	U	1.0	0.31	ug/L		08/22/16 13:38	08/23/16 15:04	1
Cobalt	**0.31**	**J**	1.0	0.13	ug/L		08/22/16 13:38	08/23/16 15:04	1
Chromium	2.0	U	2.0	0.26	ug/L		08/22/16 13:38	08/23/16 15:04	1
Copper	**0.55**	**J B**	2.0	0.36	ug/L		08/22/16 13:38	08/23/16 15:04	1
Iron	**580**	**B**	100	5.3	ug/L		08/22/16 13:38	08/23/16 15:04	1
Manganese	**23**		5.0	0.25	ug/L		08/22/16 13:38	08/23/16 15:04	1
Nickel	**0.70**	**J B**	2.0	0.28	ug/L		08/22/16 13:38	08/23/16 15:04	1
Lead	1.0	U	1.0	0.16	ug/L		08/22/16 13:38	08/23/16 15:04	1
Antimony	2.0	U	2.0	0.27	ug/L		08/22/16 13:38	08/23/16 15:04	1
Selenium	5.0	U	5.0	0.48	ug/L		08/22/16 13:38	08/23/16 15:04	1
Thallium	1.0	U	1.0	0.28	ug/L		08/22/16 13:38	08/23/16 15:04	1
Vanadium	5.0	U	5.0	0.54	ug/L		08/22/16 13:38	08/23/16 15:04	1
Zinc	**7.8**	**J**	20	6.2	ug/L		08/22/16 13:38	08/23/16 15:04	1
Calcium	**30000**	**B**	1000	43	ug/L		08/22/16 13:38	08/23/16 15:04	1
Potassium	**3100**	**B**	1000	6.6	ug/L		08/22/16 13:38	08/23/16 15:04	1
Magnesium	**75000**	**B**	1000	16	ug/L		08/22/16 13:38	08/23/16 15:04	1
Sodium	**61000**	**B**	1000	14	ug/L		08/22/16 13:38	08/23/16 15:04	1

Method: 7470A - Mercury (CVAA)

Client Sample ID: FB-11124679-081716-SG-003
Date Collected: 08/17/16 10:20
Date Received: 08/19/16 09:35
Lab Sample ID: 240-68530-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		08/22/16 14:00	08/23/16 18:11	1

Client Sample ID: WG-11124679-081716-SG-001
Date Collected: 08/17/16 10:35
Date Received: 08/19/16 09:35
Lab Sample ID: 240-68530-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		08/22/16 14:00	08/23/16 18:13	1

Client Sample ID: WG-11124679-081716-SG-002
Date Collected: 08/17/16 10:25
Date Received: 08/19/16 09:35
Lab Sample ID: 240-68530-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		08/22/16 14:00	08/23/16 18:15	1

Client Sample ID: WG-11124679-081716-SG-005
Date Collected: 08/17/16 11:20
Date Received: 08/19/16 09:35
Lab Sample ID: 240-68530-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		08/22/16 14:00	08/23/16 18:18	1

Client Sample ID: WG-11124679-081716-SG-004
Date Collected: 08/17/16 12:05
Date Received: 08/19/16 09:35
Lab Sample ID: 240-68530-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		08/22/16 14:00	08/23/16 18:20	1

Client Sample ID: WG-11124679-081716-SG-006
Date Collected: 08/17/16 12:05
Date Received: 08/19/16 09:35
Lab Sample ID: 240-68530-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		08/22/16 14:00	08/23/16 18:22	1

Client Sample ID: WG-11124679-081716-SG-007
Date Collected: 08/17/16 13:00
Date Received: 08/19/16 09:35
Lab Sample ID: 240-68530-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		08/22/16 14:00	08/24/16 12:21	1

Client Sample ID: WG-11124679-081716-SG-008
Date Collected: 08/17/16 14:30
Date Received: 08/19/16 09:35
Lab Sample ID: 240-68530-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		08/22/16 14:00	08/24/16 12:24	1

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 11124679, NL Industries

TestAmerica Job ID: 240-68530-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	12DCE
Lab Sample ID	Client Sample ID	(73-124)	(80-120)	(73-120)	(63-132)
240-68530-1	TB-11124679-081716-SG	88	90	81	92
240-68530-2	FB-11124679-081716-SG-003	91	99	87	95
240-68530-3	WG-11124679-081716-SG-001	93	97	81	94
240-68530-4	WG-11124679-081716-SG-002	89	92	82	89
240-68530-5	WG-11124679-081716-SG-005	92	99	84	93
240-68530-6	WG-11124679-081716-SG-004	92	94	83	91
240-68530-7	WG-11124679-081716-SG-006	98	100	94	96
240-68530-8	WG-11124679-081716-SG-007	91	99	80	95
240-68530-9	WG-11124679-081716-SG-008	92	88	83	89
LCS 240-244515/4	Lab Control Sample	97	99	96	92
MB 240-244515/7	Method Blank	93	95	87	96

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)					
		TPH	PHL	NBZ	2FP	FBP	TBP
Lab Sample ID	Client Sample ID	(17-120)	(10-120)	(36-120)	(10-120)	(42-120)	(35-125)
240-68530-2	FB-11124679-081716-SG-003	78	20	69	34	70	68
240-68530-3	WG-11124679-081716-SG-001	58	19	69	34	63	65
240-68530-4	WG-11124679-081716-SG-002	78	25	78	37	72	63
240-68530-5	WG-11124679-081716-SG-005	88	19	68	31	61	62
240-68530-6	WG-11124679-081716-SG-004	89	22	82	43	76	80
240-68530-7	WG-11124679-081716-SG-006	88	18	74	32	71	73
240-68530-8	WG-11124679-081716-SG-007	81	22	77	37	77	76
240-68530-9	WG-11124679-081716-SG-008	93	22	76	38	75	75
LCS 240-243599/20-A	Lab Control Sample	99	47	92	66	86	103
MB 240-243599/19-A	Method Blank	88	35	79	54	77	72

Surrogate Legend

TPH = Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)
NBZ = Nitrobenzene-d5 (Surr)
2FP = 2-Fluorophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
TBP = 2,4,6-Tribromophenol (Surr)

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

Lab Sample ID: MB 240-244515/7
Matrix: Water
Analysis Batch: 244515

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	1.0	U	1.0	0.44	ug/L			08/26/16 20:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			08/26/16 20:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			08/26/16 20:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			08/26/16 20:27	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			08/26/16 20:27	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			08/26/16 20:27	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			08/26/16 20:27	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			08/26/16 20:27	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			08/26/16 20:27	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			08/26/16 20:27	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			08/26/16 20:27	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			08/26/16 20:27	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			08/26/16 20:27	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			08/26/16 20:27	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			08/26/16 20:27	1
2-Hexanone	10	U	10	0.48	ug/L			08/26/16 20:27	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			08/26/16 20:27	1
Acetone	10	U	10	0.94	ug/L			08/26/16 20:27	1
Benzene	1.0	U	1.0	0.35	ug/L			08/26/16 20:27	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			08/26/16 20:27	1
Bromoform	1.0	U	1.0	0.56	ug/L			08/26/16 20:27	1
Bromomethane	1.0	U	1.0	0.44	ug/L			08/26/16 20:27	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			08/26/16 20:27	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			08/26/16 20:27	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			08/26/16 20:27	1
Chloroethane	1.0	U	1.0	0.32	ug/L			08/26/16 20:27	1
Chloroform	1.0	U	1.0	0.25	ug/L			08/26/16 20:27	1
Chloromethane	1.0	U	1.0	0.44	ug/L			08/26/16 20:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			08/26/16 20:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			08/26/16 20:27	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			08/26/16 20:27	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			08/26/16 20:27	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			08/26/16 20:27	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			08/26/16 20:27	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			08/26/16 20:27	1
Methyl acetate	10	U	10	2.3	ug/L			08/26/16 20:27	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			08/26/16 20:27	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			08/26/16 20:27	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			08/26/16 20:27	1
Styrene	1.0	U	1.0	0.45	ug/L			08/26/16 20:27	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			08/26/16 20:27	1
Toluene	1.0	U	1.0	0.23	ug/L			08/26/16 20:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			08/26/16 20:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			08/26/16 20:27	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			08/26/16 20:27	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			08/26/16 20:27	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			08/26/16 20:27	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			08/26/16 20:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*93*		*73 - 124*		*08/26/16 20:27*	*1*
Dibromofluoromethane (Surr)	*95*		*80 - 120*		*08/26/16 20:27*	*1*
4-Bromofluorobenzene (Surr)	*87*		*73 - 120*		*08/26/16 20:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*63 - 132*		*08/26/16 20:27*	*1*

Lab Sample ID: LCS 240-244515/4
Matrix: Water
Analysis Batch: 244515

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	20.0	21.8		ug/L		109	79 - 133
1,1,2,2-Tetrachloroethane	20.0	21.1		ug/L		106	61 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	21.7		ug/L		108	65 - 151
1,1,2-Trichloroethane	20.0	21.6		ug/L		108	80 - 120
1,1-Dichloroethane	20.0	20.5		ug/L		102	77 - 121
1,1-Dichloroethene	20.0	20.6		ug/L		103	70 - 141
1,2,4-Trichlorobenzene	20.0	20.6		ug/L		103	53 - 137
1,2-Dibromo-3-Chloropropane	20.0	23.9		ug/L		120	46 - 140
Ethylene Dibromide	20.0	21.9		ug/L		109	80 - 126
1,2-Dichlorobenzene	20.0	22.1		ug/L		110	80 - 120
1,2-Dichloroethane	20.0	21.2		ug/L		106	76 - 130
1,2-Dichloropropane	20.0	22.1		ug/L		111	79 - 121
1,3-Dichlorobenzene	20.0	21.2		ug/L		106	80 - 120
1,4-Dichlorobenzene	20.0	20.9		ug/L		105	80 - 120
2-Butanone (MEK)	40.0	41.7		ug/L		104	54 - 122
2-Hexanone	40.0	42.1		ug/L		105	56 - 124
4-Methyl-2-pentanone (MIBK)	40.0	43.8		ug/L		109	60 - 131
Acetone	40.0	40.2		ug/L		100	46 - 120
Benzene	20.0	22.3		ug/L		111	80 - 120
Dichlorobromomethane	20.0	22.0		ug/L		110	76 - 125
Bromoform	20.0	25.6		ug/L		128	52 - 157
Bromomethane	20.0	19.5		ug/L		98	24 - 160
Carbon disulfide	20.0	23.0		ug/L		115	58 - 160
Carbon tetrachloride	20.0	22.9		ug/L		114	69 - 149
Chlorobenzene	20.0	20.7		ug/L		103	80 - 120
Chloroethane	20.0	19.3		ug/L		97	24 - 147
Chloroform	20.0	21.3		ug/L		107	80 - 120
Chloromethane	20.0	19.6		ug/L		98	50 - 135
cis-1,2-Dichloroethene	20.0	20.5		ug/L		102	80 - 120
cis-1,3-Dichloropropene	20.0	24.7	*	ug/L		124	75 - 120
Cyclohexane	20.0	23.1		ug/L		115	66 - 135
Chlorodibromomethane	20.0	22.6		ug/L		113	68 - 131
Dichlorodifluoromethane	20.0	21.5		ug/L		108	32 - 140
Ethylbenzene	20.0	21.9		ug/L		110	80 - 120
Isopropylbenzene	20.0	22.5		ug/L		112	80 - 120
Methyl acetate	100	98.8		ug/L		99	65 - 124
Methyl tert-butyl ether	20.0	21.5		ug/L		108	75 - 126
Methylcyclohexane	20.0	22.3		ug/L		112	71 - 122
Methylene Chloride	20.0	20.1		ug/L		101	68 - 136
Styrene	20.0	23.0		ug/L		115	80 - 120
Tetrachloroethene	20.0	22.2		ug/L		111	80 - 123
Toluene	20.0	21.2		ug/L		106	80 - 121
trans-1,2-Dichloroethene	20.0	22.0		ug/L		110	80 - 123

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

Lab Sample ID: LCS 240-244515/4
Matrix: Water
Analysis Batch: 244515

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	20.0	21.6		ug/L		108	65 - 120
Trichloroethene	20.0	21.4		ug/L		107	80 - 122
Trichlorofluoromethane	20.0	21.6		ug/L		108	56 - 161
Vinyl chloride	20.0	20.4		ug/L		102	60 - 129
Xylenes, Total	40.0	43.6		ug/L		109	80 - 120
m-Xylene & p-Xylene	20.0	22.5		ug/L		112	80 - 120
o-Xylene	20.0	21.1		ug/L		106	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*73 - 124*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*
1,2-Dichloroethane-d4 (Surr)	*92*		*63 - 132*

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

Lab Sample ID: MB 240-243599/19-A
Matrix: Water
Analysis Batch: 244413

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 243599

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.13	ug/L		08/22/16 08:04	08/26/16 10:35	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.40	ug/L		08/22/16 08:04	08/26/16 10:35	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		08/22/16 08:04	08/26/16 10:35	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.24	ug/L		08/22/16 08:04	08/26/16 10:35	1
2,4-Dichlorophenol	2.0	U	2.0	0.19	ug/L		08/22/16 08:04	08/26/16 10:35	1
2,4-Dimethylphenol	2.0	U	2.0	0.25	ug/L		08/22/16 08:04	08/26/16 10:35	1
2,4-Dinitrophenol	5.0	U	5.0	0.32	ug/L		08/22/16 08:04	08/26/16 10:35	1
2,4-Dinitrotoluene	5.0	U	5.0	0.25	ug/L		08/22/16 08:04	08/26/16 10:35	1
2,6-Dinitrotoluene	5.0	U	5.0	0.80	ug/L		08/22/16 08:04	08/26/16 10:35	1
2-Chloronaphthalene	1.0	U	1.0	0.10	ug/L		08/22/16 08:04	08/26/16 10:35	1
2-Chlorophenol	1.0	U	1.0	0.29	ug/L		08/22/16 08:04	08/26/16 10:35	1
2-Methylnaphthalene	0.20	U	0.20	0.090	ug/L		08/22/16 08:04	08/26/16 10:35	1
2-Methylphenol	1.0	U	1.0	0.17	ug/L		08/22/16 08:04	08/26/16 10:35	1
2-Nitroaniline	2.0	U	2.0	0.21	ug/L		08/22/16 08:04	08/26/16 10:35	1
2-Nitrophenol	2.0	U	2.0	0.28	ug/L		08/22/16 08:04	08/26/16 10:35	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.37	ug/L		08/22/16 08:04	08/26/16 10:35	1
3-Nitroaniline	2.0	U	2.0	0.28	ug/L		08/22/16 08:04	08/26/16 10:35	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	2.4	ug/L		08/22/16 08:04	08/26/16 10:35	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.22	ug/L		08/22/16 08:04	08/26/16 10:35	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.21	ug/L		08/22/16 08:04	08/26/16 10:35	1
4-Chloroaniline	2.0	U	2.0	0.21	ug/L		08/22/16 08:04	08/26/16 10:35	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.30	ug/L		08/22/16 08:04	08/26/16 10:35	1
4-Nitroaniline	2.0	U	2.0	0.22	ug/L		08/22/16 08:04	08/26/16 10:35	1
4-Nitrophenol	5.0	U	5.0	0.29	ug/L		08/22/16 08:04	08/26/16 10:35	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		08/22/16 08:04	08/26/16 10:35	1
Acenaphthylene	0.20	U	0.20	0.048	ug/L		08/22/16 08:04	08/26/16 10:35	1
Acetophenone	1.0	U	1.0	0.34	ug/L		08/22/16 08:04	08/26/16 10:35	1

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

Lab Sample ID: MB 240-243599/19-A
Matrix: Water
Analysis Batch: 244413

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 243599

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	0.20	U	0.20	0.088	ug/L		08/22/16 08:04	08/26/16 10:35	1
Atrazine	1.0	U	1.0	0.34	ug/L		08/22/16 08:04	08/26/16 10:35	1
Benzaldehyde	1.0	U	1.0	0.39	ug/L		08/22/16 08:04	08/26/16 10:35	1
Benzo[a]anthracene	0.20	U	0.20	0.030	ug/L		08/22/16 08:04	08/26/16 10:35	1
Benzo[a]pyrene	0.20	U	0.20	0.051	ug/L		08/22/16 08:04	08/26/16 10:35	1
Benzo[b]fluoranthene	0.20	U	0.20	0.039	ug/L		08/22/16 08:04	08/26/16 10:35	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.046	ug/L		08/22/16 08:04	08/26/16 10:35	1
Benzo[k]fluoranthene	0.20	U	0.20	0.045	ug/L		08/22/16 08:04	08/26/16 10:35	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.32	ug/L		08/22/16 08:04	08/26/16 10:35	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		08/22/16 08:04	08/26/16 10:35	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	1.7	ug/L		08/22/16 08:04	08/26/16 10:35	1
Butyl benzyl phthalate	2.0	U	2.0	0.26	ug/L		08/22/16 08:04	08/26/16 10:35	1
Caprolactam	5.0	U	5.0	0.20	ug/L		08/22/16 08:04	08/26/16 10:35	1
Carbazole	1.0	U	1.0	0.28	ug/L		08/22/16 08:04	08/26/16 10:35	1
Chrysene	0.20	U	0.20	0.050	ug/L		08/22/16 08:04	08/26/16 10:35	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.045	ug/L		08/22/16 08:04	08/26/16 10:35	1
Dibenzofuran	1.0	U	1.0	0.020	ug/L		08/22/16 08:04	08/26/16 10:35	1
Diethyl phthalate	2.0	U	2.0	0.60	ug/L		08/22/16 08:04	08/26/16 10:35	1
Dimethyl phthalate	2.0	U	2.0	0.29	ug/L		08/22/16 08:04	08/26/16 10:35	1
Di-n-butyl phthalate	5.0	U	5.0	1.7	ug/L		08/22/16 08:04	08/26/16 10:35	1
Di-n-octyl phthalate	2.0	U	2.0	0.23	ug/L		08/22/16 08:04	08/26/16 10:35	1
Fluoranthene	0.20	U	0.20	0.045	ug/L		08/22/16 08:04	08/26/16 10:35	1
Fluorene	0.20	U	0.20	0.041	ug/L		08/22/16 08:04	08/26/16 10:35	1
Hexachlorobenzene	0.20	U	0.20	0.085	ug/L		08/22/16 08:04	08/26/16 10:35	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		08/22/16 08:04	08/26/16 10:35	1
Hexachlorocyclopentadiene	10	U	10	0.24	ug/L		08/22/16 08:04	08/26/16 10:35	1
Hexachloroethane	1.0	U	1.0	0.19	ug/L		08/22/16 08:04	08/26/16 10:35	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.043	ug/L		08/22/16 08:04	08/26/16 10:35	1
Isophorone	1.0	U	1.0	0.27	ug/L		08/22/16 08:04	08/26/16 10:35	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.24	ug/L		08/22/16 08:04	08/26/16 10:35	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.31	ug/L		08/22/16 08:04	08/26/16 10:35	1
Naphthalene	0.20	U	0.20	0.063	ug/L		08/22/16 08:04	08/26/16 10:35	1
Nitrobenzene	1.0	U	1.0	0.040	ug/L		08/22/16 08:04	08/26/16 10:35	1
Pentachlorophenol	5.0	U	5.0	0.27	ug/L		08/22/16 08:04	08/26/16 10:35	1
Phenanthrene	0.20	U	0.20	0.062	ug/L		08/22/16 08:04	08/26/16 10:35	1
Phenol	1.0	U	1.0	0.60	ug/L		08/22/16 08:04	08/26/16 10:35	1
Pyrene	0.20	U	0.20	0.042	ug/L		08/22/16 08:04	08/26/16 10:35	1
3 & 4 Methylphenol	2.0	U	2.0	0.80	ug/L		08/22/16 08:04	08/26/16 10:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14 (Surr)	*88*		*17 - 120*	*08/22/16 08:04*	*08/26/16 10:35*	*1*
Phenol-d5 (Surr)	*35*		*10 - 120*	*08/22/16 08:04*	*08/26/16 10:35*	*1*
Nitrobenzene-d5 (Surr)	*79*		*36 - 120*	*08/22/16 08:04*	*08/26/16 10:35*	*1*
2-Fluorophenol (Surr)	*54*		*10 - 120*	*08/22/16 08:04*	*08/26/16 10:35*	*1*
2-Fluorobiphenyl (Surr)	*77*		*42 - 120*	*08/22/16 08:04*	*08/26/16 10:35*	*1*
2,4,6-Tribromophenol (Surr)	*72*		*35 - 125*	*08/22/16 08:04*	*08/26/16 10:35*	*1*

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

Lab Sample ID: LCS 240-243599/20-A
Matrix: Water
Analysis Batch: 244413

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 243599

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	20.0	16.6		ug/L		83	58 - 120
bis (2-chloroisopropyl) ether	20.0	18.0		ug/L		90	46 - 120
2,4,5-Trichlorophenol	20.0	18.3		ug/L		91	57 - 120
2,4,6-Trichlorophenol	20.0	17.8		ug/L		89	60 - 120
2,4-Dichlorophenol	20.0	18.3		ug/L		92	57 - 120
2,4-Dimethylphenol	20.0	18.3		ug/L		91	55 - 120
2,4-Dinitrophenol	40.0	28.1		ug/L		70	18 - 127
2,4-Dinitrotoluene	20.0	20.3		ug/L		102	65 - 120
2,6-Dinitrotoluene	20.0	18.9		ug/L		94	65 - 120
2-Chloronaphthalene	20.0	16.2		ug/L		81	56 - 120
2-Chlorophenol	20.0	17.6		ug/L		88	57 - 120
2-Methylnaphthalene	20.0	16.9		ug/L		84	58 - 120
2-Methylphenol	20.0	16.3		ug/L		81	52 - 120
2-Nitroaniline	20.0	18.0		ug/L		90	56 - 123
2-Nitrophenol	20.0	19.1		ug/L		96	62 - 120
3,3'-Dichlorobenzidine	40.0	35.8		ug/L		89	10 - 134
3-Nitroaniline	20.0	18.5		ug/L		93	36 - 120
4,6-Dinitro-2-methylphenol	40.0	34.4		ug/L		86	35 - 140
4-Bromophenyl phenyl ether	20.0	17.8		ug/L		89	52 - 128
4-Chloro-3-methylphenol	20.0	17.9		ug/L		90	59 - 120
4-Chloroaniline	20.0	7.17		ug/L		36	10 - 120
4-Chlorophenyl phenyl ether	20.0	18.0		ug/L		90	58 - 120
4-Nitroaniline	20.0	20.9		ug/L		104	51 - 122
4-Nitrophenol	40.0	20.4		ug/L		51	16 - 120
Acenaphthene	20.0	17.4		ug/L		87	57 - 120
Acenaphthylene	20.0	16.7		ug/L		83	55 - 120
Acetophenone	20.0	17.8		ug/L		89	60 - 120
Anthracene	20.0	18.1		ug/L		91	58 - 120
Atrazine	40.0	38.1		ug/L		95	61 - 132
Benzaldehyde	40.0	39.4		ug/L		98	60 - 120
Benzo[a]anthracene	20.0	17.3		ug/L		87	59 - 120
Benzo[a]pyrene	20.0	19.2		ug/L		96	60 - 120
Benzo[b]fluoranthene	20.0	18.5		ug/L		92	62 - 120
Benzo[g,h,i]perylene	20.0	18.5		ug/L		92	59 - 120
Benzo[k]fluoranthene	20.0	20.3		ug/L		102	57 - 120
Bis(2-chloroethoxy)methane	20.0	19.9		ug/L		99	61 - 120
Bis(2-chloroethyl)ether	20.0	19.1		ug/L		96	55 - 120
Bis(2-ethylhexyl) phthalate	20.0	18.5		ug/L		92	62 - 123
Butyl benzyl phthalate	20.0	18.5		ug/L		92	61 - 120
Caprolactam	40.0	7.29		ug/L		18	10 - 120
Carbazole	20.0	18.1		ug/L		91	60 - 126
Chrysene	20.0	17.9		ug/L		90	61 - 120
Dibenz(a,h)anthracene	20.0	19.4		ug/L		97	61 - 120
Dibenzofuran	20.0	17.6		ug/L		88	58 - 120
Diethyl phthalate	20.0	19.2		ug/L		96	62 - 120
Dimethyl phthalate	20.0	17.9		ug/L		90	62 - 120
Di-n-butyl phthalate	20.0	18.7		ug/L		94	59 - 128
Di-n-octyl phthalate	20.0	19.1		ug/L		96	58 - 120

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

Lab Sample ID: LCS 240-243599/20-A
Matrix: Water
Analysis Batch: 244413

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 243599

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoranthene	20.0	18.5		ug/L		93	57 - 123
Fluorene	20.0	17.8		ug/L		89	56 - 120
Hexachlorobenzene	20.0	16.5		ug/L		83	47 - 127
Hexachlorobutadiene	20.0	16.1		ug/L		81	50 - 120
Hexachlorocyclopentadiene	20.0	11.0		ug/L		55	25 - 120
Hexachloroethane	20.0	16.0		ug/L		80	50 - 120
Indeno[1,2,3-cd]pyrene	20.0	19.1		ug/L		95	61 - 120
Isophorone	20.0	18.2		ug/L		91	61 - 120
N-Nitrosodi-n-propylamine	20.0	17.7		ug/L		88	60 - 120
N-Nitrosodiphenylamine	20.0	18.2		ug/L		91	54 - 122
Naphthalene	20.0	16.6		ug/L		83	54 - 120
Nitrobenzene	20.0	17.9		ug/L		89	58 - 120
Pentachlorophenol	40.0	31.8		ug/L		80	35 - 121
Phenanthrene	20.0	17.7		ug/L		89	58 - 120
Phenol	20.0	8.43		ug/L		42	16 - 120
Pyrene	20.0	17.6		ug/L		88	60 - 120
3 & 4 Methylphenol	20.0	14.5		ug/L		72	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14 (Surr)	*99*		*17 - 120*
Phenol-d5 (Surr)	*47*		*10 - 120*
Nitrobenzene-d5 (Surr)	*92*		*36 - 120*
2-Fluorophenol (Surr)	*66*		*10 - 120*
2-Fluorobiphenyl (Surr)	*86*		*42 - 120*
2,4,6-Tribromophenol (Surr)	*103*		*35 - 125*

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 240-243686/1-A
Matrix: Water
Analysis Batch: 243971

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 243686

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.0	U	1.0	0.030	ug/L		08/22/16 13:38	08/23/16 13:39	1
Aluminum	50	U	50	13	ug/L		08/22/16 13:38	08/23/16 13:39	1
Arsenic	5.0	U	5.0	0.35	ug/L		08/22/16 13:38	08/23/16 13:39	1
Barium	0.637	J	5.0	0.52	ug/L		08/22/16 13:38	08/23/16 13:39	1
Beryllium	1.0	U	1.0	0.40	ug/L		08/22/16 13:38	08/23/16 13:39	1
Cadmium	1.0	U	1.0	0.31	ug/L		08/22/16 13:38	08/23/16 13:39	1
Cobalt	1.0	U	1.0	0.13	ug/L		08/22/16 13:38	08/23/16 13:39	1
Chromium	2.0	U	2.0	0.26	ug/L		08/22/16 13:38	08/23/16 13:39	1
Copper	3.53		2.0	0.36	ug/L		08/22/16 13:38	08/23/16 13:39	1
Iron	11.0	J	100	5.3	ug/L		08/22/16 13:38	08/23/16 13:39	1
Manganese	5.0	U	5.0	0.25	ug/L		08/22/16 13:38	08/23/16 13:39	1
Nickel	0.406	J	2.0	0.28	ug/L		08/22/16 13:38	08/23/16 13:39	1
Lead	1.0	U	1.0	0.16	ug/L		08/22/16 13:38	08/23/16 13:39	1
Antimony	2.0	U	2.0	0.27	ug/L		08/22/16 13:38	08/23/16 13:39	1
Selenium	5.0	U	5.0	0.48	ug/L		08/22/16 13:38	08/23/16 13:39	1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-243686/1-A
Matrix: Water
Analysis Batch: 243971

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 243686

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	1.0	U	1.0	0.28	ug/L		08/22/16 13:38	08/23/16 13:39	1
Vanadium	5.0	U	5.0	0.54	ug/L		08/22/16 13:38	08/23/16 13:39	1
Zinc	20	U	20	6.2	ug/L		08/22/16 13:38	08/23/16 13:39	1
Calcium	199	J	1000	43	ug/L		08/22/16 13:38	08/23/16 13:39	1
Potassium	8.34	J	1000	6.6	ug/L		08/22/16 13:38	08/23/16 13:39	1
Magnesium	43.5	J	1000	16	ug/L		08/22/16 13:38	08/23/16 13:39	1
Sodium	57.2	J	1000	14	ug/L		08/22/16 13:38	08/23/16 13:39	1

Lab Sample ID: LCS 240-243686/2-A
Matrix: Water
Analysis Batch: 243971

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 243686

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	100	99.2		ug/L		99	80 - 120
Aluminum	10000	9140		ug/L		91	80 - 120
Arsenic	1000	963		ug/L		96	80 - 120
Barium	1000	973		ug/L		97	80 - 120
Beryllium	1000	1000		ug/L		100	80 - 120
Cadmium	1000	1000		ug/L		100	80 - 120
Cobalt	1000	1050		ug/L		105	80 - 120
Chromium	1000	1030		ug/L		103	80 - 120
Copper	1000	1040		ug/L		104	80 - 120
Iron	10000	9890		ug/L		99	80 - 120
Manganese	1000	1070		ug/L		107	80 - 120
Nickel	1000	1040		ug/L		104	80 - 120
Lead	1000	1050		ug/L		105	80 - 120
Antimony	100	97.8		ug/L		98	80 - 120
Selenium	1000	956		ug/L		96	80 - 120
Thallium	250	249		ug/L		99	80 - 120
Vanadium	1000	1010		ug/L		101	80 - 120
Zinc	1000	1000		ug/L		100	80 - 120
Calcium	10000	9330		ug/L		93	80 - 120
Potassium	10000	9560		ug/L		96	80 - 120
Magnesium	10000	9750		ug/L		98	80 - 120
Sodium	10000	9830		ug/L		98	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-243687/1-A
Matrix: Water
Analysis Batch: 243930

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 243687

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		08/22/16 14:00	08/23/16 17:40	1

Client: GHD Services Inc.
Project/Site: 11124679, NL Industries

TestAmerica Job ID: 240-68530-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-243687/2-A
Matrix: Water
Analysis Batch: 243930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 243687

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.00		ug/L		100	80 - 120

GC/MS VOA

Analysis Batch: 244515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-68530-1	TB-11124679-081716-SG	Total/NA	Water	8260C	
240-68530-2	FB-11124679-081716-SG-003	Total/NA	Water	8260C	
240-68530-3	WG-11124679-081716-SG-001	Total/NA	Water	8260C	
240-68530-4	WG-11124679-081716-SG-002	Total/NA	Water	8260C	
240-68530-5	WG-11124679-081716-SG-005	Total/NA	Water	8260C	
240-68530-6	WG-11124679-081716-SG-004	Total/NA	Water	8260C	
240-68530-7	WG-11124679-081716-SG-006	Total/NA	Water	8260C	
240-68530-8	WG-11124679-081716-SG-007	Total/NA	Water	8260C	
240-68530-9	WG-11124679-081716-SG-008	Total/NA	Water	8260C	
MB 240-244515/7	Method Blank	Total/NA	Water	8260C	
LCS 240-244515/4	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 243599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-68530-2	FB-11124679-081716-SG-003	Total/NA	Water	3510C	
240-68530-3	WG-11124679-081716-SG-001	Total/NA	Water	3510C	
240-68530-4	WG-11124679-081716-SG-002	Total/NA	Water	3510C	
240-68530-5	WG-11124679-081716-SG-005	Total/NA	Water	3510C	
240-68530-6	WG-11124679-081716-SG-004	Total/NA	Water	3510C	
240-68530-7	WG-11124679-081716-SG-006	Total/NA	Water	3510C	
240-68530-8	WG-11124679-081716-SG-007	Total/NA	Water	3510C	
240-68530-9	WG-11124679-081716-SG-008	Total/NA	Water	3510C	
MB 240-243599/19-A	Method Blank	Total/NA	Water	3510C	
LCS 240-243599/20-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 244413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-68530-2	FB-11124679-081716-SG-003	Total/NA	Water	8270D	243599
240-68530-3	WG-11124679-081716-SG-001	Total/NA	Water	8270D	243599
240-68530-4	WG-11124679-081716-SG-002	Total/NA	Water	8270D	243599
240-68530-5	WG-11124679-081716-SG-005	Total/NA	Water	8270D	243599
240-68530-6	WG-11124679-081716-SG-004	Total/NA	Water	8270D	243599
240-68530-7	WG-11124679-081716-SG-006	Total/NA	Water	8270D	243599
240-68530-8	WG-11124679-081716-SG-007	Total/NA	Water	8270D	243599
240-68530-9	WG-11124679-081716-SG-008	Total/NA	Water	8270D	243599
MB 240-243599/19-A	Method Blank	Total/NA	Water	8270D	243599
LCS 240-243599/20-A	Lab Control Sample	Total/NA	Water	8270D	243599

Metals

Prep Batch: 243686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-68530-2	FB-11124679-081716-SG-003	Total Recoverable	Water	3005A	
240-68530-3	WG-11124679-081716-SG-001	Total Recoverable	Water	3005A	
240-68530-4	WG-11124679-081716-SG-002	Total Recoverable	Water	3005A	
240-68530-5	WG-11124679-081716-SG-005	Total Recoverable	Water	3005A	
240-68530-6	WG-11124679-081716-SG-004	Total Recoverable	Water	3005A	
240-68530-7	WG-11124679-081716-SG-006	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 243686 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-68530-8	WG-11124679-081716-SG-007	Total Recoverable	Water	3005A	
240-68530-9	WG-11124679-081716-SG-008	Total Recoverable	Water	3005A	
MB 240-243686/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-243686/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 243687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-68530-2	FB-11124679-081716-SG-003	Total/NA	Water	7470A	
240-68530-3	WG-11124679-081716-SG-001	Total/NA	Water	7470A	
240-68530-4	WG-11124679-081716-SG-002	Total/NA	Water	7470A	
240-68530-5	WG-11124679-081716-SG-005	Total/NA	Water	7470A	
240-68530-6	WG-11124679-081716-SG-004	Total/NA	Water	7470A	
240-68530-7	WG-11124679-081716-SG-006	Total/NA	Water	7470A	
240-68530-8	WG-11124679-081716-SG-007	Total/NA	Water	7470A	
240-68530-9	WG-11124679-081716-SG-008	Total/NA	Water	7470A	
MB 240-243687/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-243687/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 243930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-68530-2	FB-11124679-081716-SG-003	Total/NA	Water	7470A	243687
240-68530-3	WG-11124679-081716-SG-001	Total/NA	Water	7470A	243687
240-68530-4	WG-11124679-081716-SG-002	Total/NA	Water	7470A	243687
240-68530-5	WG-11124679-081716-SG-005	Total/NA	Water	7470A	243687
240-68530-6	WG-11124679-081716-SG-004	Total/NA	Water	7470A	243687
240-68530-7	WG-11124679-081716-SG-006	Total/NA	Water	7470A	243687
MB 240-243687/1-A	Method Blank	Total/NA	Water	7470A	243687
LCS 240-243687/2-A	Lab Control Sample	Total/NA	Water	7470A	243687

Analysis Batch: 243971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-68530-2	FB-11124679-081716-SG-003	Total Recoverable	Water	6020A	243686
240-68530-3	WG-11124679-081716-SG-001	Total Recoverable	Water	6020A	243686
240-68530-4	WG-11124679-081716-SG-002	Total Recoverable	Water	6020A	243686
240-68530-5	WG-11124679-081716-SG-005	Total Recoverable	Water	6020A	243686
240-68530-6	WG-11124679-081716-SG-004	Total Recoverable	Water	6020A	243686
240-68530-7	WG-11124679-081716-SG-006	Total Recoverable	Water	6020A	243686
240-68530-8	WG-11124679-081716-SG-007	Total Recoverable	Water	6020A	243686
240-68530-9	WG-11124679-081716-SG-008	Total Recoverable	Water	6020A	243686
MB 240-243686/1-A	Method Blank	Total Recoverable	Water	6020A	243686
LCS 240-243686/2-A	Lab Control Sample	Total Recoverable	Water	6020A	243686

Analysis Batch: 244094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-68530-8	WG-11124679-081716-SG-007	Total/NA	Water	7470A	243687
240-68530-9	WG-11124679-081716-SG-008	Total/NA	Water	7470A	243687

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 11124679, NL Industries

TestAmerica Job ID: 240-68530-1

Client Sample ID: TB-11124679-081716-SG — Lab Sample ID: 240-68530-1

Date Collected: 08/17/16 00:00 — **Matrix: Water**
Date Received: 08/19/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	244515	08/26/16 20:51	TJL1	TAL CAN

Client Sample ID: FB-11124679-081716-SG-003 — Lab Sample ID: 240-68530-2

Date Collected: 08/17/16 10:20 — **Matrix: Water**
Date Received: 08/19/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	244515	08/26/16 21:14	TJL1	TAL CAN
Total/NA	Prep	3510C			243599	08/22/16 08:04	CS	TAL CAN
Total/NA	Analysis	8270D		1	244413	08/26/16 11:45	JMG	TAL CAN
Total Recoverable	Prep	3005A			243686	08/22/16 13:38	AJC	TAL CAN
Total Recoverable	Analysis	6020A		1	243971	08/23/16 14:35	AS1	TAL CAN
Total/NA	Prep	7470A			243687	08/22/16 14:00	AJC	TAL CAN
Total/NA	Analysis	7470A		1	243930	08/23/16 18:11	DSH	TAL CAN

Client Sample ID: WG-11124679-081716-SG-001 — Lab Sample ID: 240-68530-3

Date Collected: 08/17/16 10:35 — **Matrix: Water**
Date Received: 08/19/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	244515	08/26/16 21:38	TJL1	TAL CAN
Total/NA	Prep	3510C			243599	08/22/16 08:04	CS	TAL CAN
Total/NA	Analysis	8270D		1	244413	08/26/16 12:09	JMG	TAL CAN
Total Recoverable	Prep	3005A			243686	08/22/16 13:38	AJC	TAL CAN
Total Recoverable	Analysis	6020A		1	243971	08/23/16 14:39	AS1	TAL CAN
Total/NA	Prep	7470A			243687	08/22/16 14:00	AJC	TAL CAN
Total/NA	Analysis	7470A		1	243930	08/23/16 18:13	DSH	TAL CAN

Client Sample ID: WG-11124679-081716-SG-002 — Lab Sample ID: 240-68530-4

Date Collected: 08/17/16 10:25 — **Matrix: Water**
Date Received: 08/19/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	244515	08/26/16 22:00	TJL1	TAL CAN
Total/NA	Prep	3510C			243599	08/22/16 08:04	CS	TAL CAN
Total/NA	Analysis	8270D		1	244413	08/26/16 12:32	JMG	TAL CAN
Total Recoverable	Prep	3005A			243686	08/22/16 13:38	AJC	TAL CAN
Total Recoverable	Analysis	6020A		1	243971	08/23/16 14:43	AS1	TAL CAN
Total/NA	Prep	7470A			243687	08/22/16 14:00	AJC	TAL CAN
Total/NA	Analysis	7470A		1	243930	08/23/16 18:15	DSH	TAL CAN

Client Sample ID: WG-11124679-081716-SG-005 — Lab Sample ID: 240-68530-5

Date Collected: 08/17/16 11:20 — **Matrix: Water**
Date Received: 08/19/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	244515	08/26/16 22:24	TJL1	TAL CAN
Total/NA	Prep	3510C			243599	08/22/16 08:04	CS	TAL CAN
Total/NA	Analysis	8270D		1	244413	08/26/16 13:19	JMG	TAL CAN
Total Recoverable	Prep	3005A			243686	08/22/16 13:38	AJC	TAL CAN
Total Recoverable	Analysis	6020A		1	243971	08/23/16 14:47	AS1	TAL CAN
Total/NA	Prep	7470A			243687	08/22/16 14:00	AJC	TAL CAN
Total/NA	Analysis	7470A		1	243930	08/23/16 18:18	DSH	TAL CAN

Client Sample ID: WG-11124679-081716-SG-004 — Lab Sample ID: 240-68530-6

Date Collected: 08/17/16 12:05 — **Matrix: Water**
Date Received: 08/19/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	244515	08/26/16 22:49	TJL1	TAL CAN
Total/NA	Prep	3510C			243599	08/22/16 08:04	CS	TAL CAN
Total/NA	Analysis	8270D		1	244413	08/26/16 13:43	JMG	TAL CAN
Total Recoverable	Prep	3005A			243686	08/22/16 13:38	AJC	TAL CAN
Total Recoverable	Analysis	6020A		1	243971	08/23/16 14:51	AS1	TAL CAN
Total/NA	Prep	7470A			243687	08/22/16 14:00	AJC	TAL CAN
Total/NA	Analysis	7470A		1	243930	08/23/16 18:20	DSH	TAL CAN

Client Sample ID: WG-11124679-081716-SG-006 — Lab Sample ID: 240-68530-7

Date Collected: 08/17/16 12:05 — **Matrix: Water**
Date Received: 08/19/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	244515	08/26/16 23:13	TJL1	TAL CAN
Total/NA	Prep	3510C			243599	08/22/16 08:04	CS	TAL CAN
Total/NA	Analysis	8270D		1	244413	08/26/16 14:06	JMG	TAL CAN
Total Recoverable	Prep	3005A			243686	08/22/16 13:38	AJC	TAL CAN
Total Recoverable	Analysis	6020A		1	243971	08/23/16 14:55	AS1	TAL CAN
Total/NA	Prep	7470A			243687	08/22/16 14:00	AJC	TAL CAN
Total/NA	Analysis	7470A		1	243930	08/23/16 18:22	DSH	TAL CAN

Client Sample ID: WG-11124679-081716-SG-007 — Lab Sample ID: 240-68530-8

Date Collected: 08/17/16 13:00 — **Matrix: Water**
Date Received: 08/19/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	244515	08/26/16 23:37	TJL1	TAL CAN
Total/NA	Prep	3510C			243599	08/22/16 08:04	CS	TAL CAN
Total/NA	Analysis	8270D		1	244413	08/26/16 14:29	JMG	TAL CAN
Total Recoverable	Prep	3005A			243686	08/22/16 13:38	AJC	TAL CAN

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 11124679, NL Industries

TestAmerica Job ID: 240-68530-1

Client Sample ID: WG-11124679-081716-SG-007

Lab Sample ID: 240-68530-8

Date Collected: 08/17/16 13:00
Matrix: Water
Date Received: 08/19/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6020A		1	243971	08/23/16 15:00	AS1	TAL CAN
Total/NA	Prep	7470A			243687	08/22/16 14:00	AJC	TAL CAN
Total/NA	Analysis	7470A		1	244094	08/24/16 12:21	WKD	TAL CAN

Client Sample ID: WG-11124679-081716-SG-008

Lab Sample ID: 240-68530-9

Date Collected: 08/17/16 14:30
Matrix: Water
Date Received: 08/19/16 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	244515	08/27/16 00:01	TJL1	TAL CAN
Total/NA	Prep	3510C			243599	08/22/16 08:04	CS	TAL CAN
Total/NA	Analysis	8270D		1	244413	08/26/16 14:53	JMG	TAL CAN
Total Recoverable	Prep	3005A			243686	08/22/16 13:38	AJC	TAL CAN
Total Recoverable	Analysis	6020A		1	243971	08/23/16 15:04	AS1	TAL CAN
Total/NA	Prep	7470A			243687	08/22/16 14:00	AJC	TAL CAN
Total/NA	Analysis	7470A		1	244094	08/24/16 12:24	WKD	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: GHD Services Inc.
Project/Site: 11124679, NL Industries

TestAmerica Job ID: 240-68530-1

Laboratory: TestAmerica Canton

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10975	03-31-17

CHAIN OF CUSTODY RECORD

COC NO.: 55706

1.9/C2.9
2.1/C3.1

Address: 2055 Niagara Falls Blvd Nia. Falls NY PAGE 1 OF 1
Phone: 716 297-6150 Fax:

Project No/ Phase/Task Code: 11124679	Laboratory Name: Test America	Lab Location: Cambridge OH	SSOW ID:
Project Name: Cascade Paper Annual GW Sampling	Lab Contact: Denise Heckler		Cooler No:
Project Location: Walden Ave			Carrier:
GHD Chemistry Contact: Paul McMahon			Airbill No:
Sampler(s): S. Gardner D. Tyran			Total # of Containers: 49

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Filtered (Y/N)	Analysis Requested: TAL Metals	VOCs 8260	SVOCs 8270	Total Containers/sample	MS/MSD Request	Comments/ Special Instructions
	PRESERVATION - (SEE BACK OF COC FOR ABBREVIATIONS)						HNO3	HCl				
1	TB-11124679-081716-SG	8/17/16		TB	G	N		X		1		
2	FB-11124679-081716-SG-003	8/17/16	1020	FB	G	N	X	X	X	6		
3	WG-11124679-081716-SG-001	8/17/16	1035	WG	G	N	X	X	X	6		
4	WG-11124679-081716-SG-002	8/17/16	1025	WG	G	N	X	X	X	6		
5	WG-11124679-081716-SG-005	8/17/16	1120	WG	G	N	X	X	X	6		
6	WG-11124679-081716-SG-004	8/17/16	1205	WG	G	N	X	X	X	6		
7	WG-11124679-081716-SG-006	8/17/16	1205	WG	G	N	X	X	X	6		
8	WG-11124679-081716-SG-007	8/17/16	1300	WG	G	N	X	X	X	6		
9	WG-11124679-081716-SG-008	8/17/16	1430	WG	G	N	X	X	X	6		
10												
11												
12												

240-68530 Chain of Custody

DST

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:

	Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	Dave Tyran	GHD	8/17/16	1600	1. B. Wisenbaugh	TA	8/18/16	1000
2.	B. Wisenbaugh	TA	8/19/16	0900	2. Lan Hu	TAL	8/19/16	900
3.	Lan Hu	TAL	8/19/16	935	3.	TA	8-19-16	935

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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8/30/2016

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 68530
Canton Facility

Client GHD Site Name _____ Cooler unpacked by:

Cooler Received on 8-19-16 Opened on 8-19-16

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☑ See Multiple Cooler Form
   IR GUN# IR-8 (CF +1.3 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #36 (CF +1.0°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 2 Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 11-15 have been checked at the originating laboratory.
11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC574756
12. Were VOAs on the COC? Yes No
13. Were air bubbles >6 mm in any VOA vials? Yes No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ Yes No
15. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica Multiple Cooler Receipt Form/Narrative **Login # :** 68530
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
client	36	1.9	2.9	ice
↓	↓	2.1	3.1	↓

X:\X-Drive Document Control\SOPs\Work Instructions\Word Version Work Instructions\WI-NC-099H-071615 Cooler Receipt Form_page 2 - Multiple Coolers.doc rls

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
FB-11124679-081716-SG-003	240-68530-D-2	Plastic 500ml - with Nitric Acid	<2	_____	_____
WG-11124679-081716-SG-001	240-68530-D-3	Plastic 500ml - with Nitric Acid	<2	_____	_____
WG-11124679-081716-SG-002	240-68530-D-4	Plastic 500ml - with Nitric Acid	<2	_____	_____
WG-11124679-081716-SG-005	240-68530-D-5	Plastic 500ml - with Nitric Acid	<2	_____	_____
WG-11124679-081716-SG-004	240-68530-D-6	Plastic 500ml - with Nitric Acid	<2	_____	_____
WG-11124679-081716-SG-006	240-68530-D-7	Plastic 500ml - with Nitric Acid	<2	_____	_____
WG-11124679-081716-SG-007	240-68530-D-8	Plastic 500ml - with Nitric Acid	<2	_____	_____
WG-11124679-081716-SG-008	240-68530-D-9	Plastic 500ml - with Nitric Acid	<2	_____	_____

Appendix E
Data Usability Summary Report

Memorandum

September 8, 2016

To:	Kathy Galanti	Ref. No.:	11124679
	PM		
From:	Paul McMahon/mkd/1-NF	Tel:	716-205-1970
CC:	Chris Barton		

Subject: **Data Usability Summary Report (DUSR)**
Annual Groundwater Sampling
Cascade Paper
Depew, New York
August 2016

1. Introduction

This document details a quality assessment and validation of the analytical data resulting from the August 2016 collection of nine water samples, including a trip blank and an equipment blank, from Cascades Inc., located in Depew, New York. The sample summary detailing sample identification, sample location, quality control (QC) samples, and analytical parameters is presented in Table 1. The validated analytical results are summarized in Table 2. Sample analysis was completed at TestAmerica Laboratories, Inc. (TA), in North Canton, Ohio, in accordance with the methodologies presented in Table 3. A copy of the executed chain of custody can be found in Attachment A.

This 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 the Development of Data Usability Summary Reports", May 2010.

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 form, finished report forms, method blank data, recovery data from surrogate spikes/laboratory control samples (LCS), 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 documents entitled:

i) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review", United States Environmental Protection Agency (USEPA) 540 R 10 011, January 2010

ii) "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review", USEPA 540 R 08 01, June 2008

Items i) and ii) 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. The sample chain of custody document and analytical report 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. Metals were detected in the method blank. Table 4 presents the sample results that were qualified as non-detect due to analytes concentrations in the method blanks that were similar to the sample concentrations.

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 (VOCs) and semi-volatile organic compounds (SVOCs) analyses 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. All surrogate recoveries were within the laboratory control limits.

5. Laboratory Control Sample Analyses

LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects.

For this study, LCS were analyzed at a minimum frequency of one per analytical batch.

Organic Analyses

The LCS contained all compounds of interest. Most LCS recoveries were within the laboratory control limits, demonstrating acceptable analytical accuracy. One high VOC recovery was reported; the associated sample results were non-detect and were not impacted by the indicated high bias.

Inorganic Analyses

The LCS contained all analytes of interest. LCS recoveries were assessed per the "Guidelines". All LCS recoveries were within the control limits, demonstrating acceptable analytical accuracy.

6. Field QA/QC Samples

The field QA/QC consisted of one equipment blank sample, one trip blank sample, and one field duplicate sample set.

Equipment Blank Sample Analysis

To assess field decontamination procedures, ambient conditions at the site, and cleanliness of sample containers, an equipment blank was submitted for analysis, as identified in Table 1. Most results were non-detect for the analytes of interest. Metals and acetone were detected, and associated sample results with similar concentrations were qualified as non-detect (see Table 5).

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 except acetone. All associated sample results were either non-detect or qualified as non-detect and were not impacted.

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 relative percent differences (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.

All field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision.

7. 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 report limit (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.

8. Conclusion

All deliverables required by the project were present and the data package was complete. Based on the preceding evaluation, the data were acceptable for use with the qualifications noted. Qualifications applied to the analytical results based on the data validation consisted of "U" (not detected at the associated reporting limit).

Table 1

Sampling and Analysis Summary
Groundwater Sampling
Cascades, Inc.
Depew, New York
August 2016

Sample ID	Location I.D.	Collection Date	Collection Time	Parameter			Comment
				TCL VOCs	TAL Metals	TCL SVOCs	
WG-11124679-081716-SG-001	MW-106F	08/17/2016	10:35	X	X	X	
WG-11124679-081716-SG-002	MW-101	08/17/2016	10:25	X	X	X	
FB-11124679-081716-SG-003	-	08/17/2016	10:20	X	X	X	Equipment Blank
WG-11124679-081716-SG-004	MW-102	08/17/2016	12:05	X	X	X	
WG-11124679-081716-SG-005	MW-104	08/17/2016	11:20	X	X	X	
WG-11124679-081716-SG-006	MW-102	08/17/2016	12:05	X	X	X	Duplicate of WG-11124679-081716-SG-004
WG-11124679-081716-SG-007	MW-103	08/17/2016	13:00	X	X	X	
WG-11124679-081716-SG-008	MW-105	08/17/2016	14:30	X	X	X	
TB-11124679-081716-SG	-	08/17/2016	-	X			Trip Blank

Notes:

- Not applicable.
TCL - Target Compound List.
VOCs - Volatile Organic Compounds.
TAL - Target Analyte List.
SVOCs - Semi-Volatile Organic Compounds.

Table 2

Analytical Results Summary
Groundwater Sampling
Cascades, Inc.
Depew, New York
August 2016

	Location ID:	MW-101	MW-102	MW-102	MW-103
	Sample Name:	WG-11124679-081716-SG-002	WG-11124679-081716-SG-004	WG-11124679-081716-SG-006	WG-11124679-081716-SG-007
	Sample Date:	08/17/2016	08/17/2016	08/17/2016 Duplicate	08/17/2016
Parameters	**Unit**				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U	10 U	10 U	10 U
Acetone	µg/L	10 U	10 U	10 U	10 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U

Table 2

Analytical Results Summary
Groundwater Sampling
Cascades, Inc.
Depew, New York
August 2016

	Location ID:	MW-101	MW-102	MW-102	MW-103
	Sample Name:	WG-11124679-081716-SG-002	WG-11124679-081716-SG-004	WG-11124679-081716-SG-006	WG-11124679-081716-SG-007
	Sample Date:	08/17/2016	08/17/2016	08/17/2016 Duplicate	08/17/2016
Parameters	**Unit**				
Volatile Organic Compounds					
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Semi-volatile Organic Compounds					
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/L	1.0 U	0.95 U	0.95 U	0.95 U
2,4,5-Trichlorophenol	µg/L	5.0 U	4.8 U	4.8 U	4.8 U
2,4,6-Trichlorophenol	µg/L	5.0 U	4.8 U	4.8 U	4.8 U
2,4-Dichlorophenol	µg/L	2.0 U	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	µg/L	2.0 U	1.9 U	1.9 U	1.9 U
2,4-Dinitrophenol	µg/L	5.0 U	4.8 U	4.8 U	4.8 U
2,4-Dinitrotoluene	µg/L	5.0 U	4.8 U	4.8 U	4.8 U
2,6-Dinitrotoluene	µg/L	5.0 U	4.8 U	4.8 U	4.8 U
2-Chloronaphthalene	µg/L	1.0 U	0.95 U	0.95 U	0.95 U
2-Chlorophenol	µg/L	1.0 U	0.95 U	0.95 U	0.95 U
2-Methylnaphthalene	µg/L	0.20 U	0.19 U	0.19 U	0.19 U
2-Methylphenol	µg/L	1.0 U	0.95 U	0.95 U	0.95 U
2-Nitroaniline	µg/L	2.0 U	1.9 U	1.9 U	1.9 U
2-Nitrophenol	µg/L	2.0 U	1.9 U	1.9 U	1.9 U
3&4-Methylphenol	µg/L	2.0 U	1.9 U	1.9 U	1.9 U
3,3'-Dichlorobenzidine	µg/L	5.0 U	4.8 U	4.8 U	4.8 U
3-Nitroaniline	µg/L	2.0 U	1.9 U	1.9 U	1.9 U
4,6-Dinitro-2-methylphenol	µg/L	5.0 U	4.8 U	4.8 U	4.8 U
4-Bromophenyl phenyl ether	µg/L	2.0 U	1.9 U	1.9 U	1.9 U
4-Chloro-3-methylphenol	µg/L	2.0 U	1.9 U	1.9 U	1.9 U
4-Chloroaniline	µg/L	2.0 U	1.9 U	1.9 U	1.9 U
4-Chlorophenyl phenyl ether	µg/L	2.0 U	1.9 U	1.9 U	1.9 U
4-Nitroaniline	µg/L	2.0 U	1.9 U	1.9 U	1.9 U
4-Nitrophenol	µg/L	5.0 U	4.8 U	4.8 U	4.8 U
Acenaphthene	µg/L	0.20 U	0.19 U	0.19 U	0.19 U
Acenaphthylene	µg/L	0.20 U	0.19 U	0.19 U	0.19 U

Table 2

Analytical Results Summary
Groundwater Sampling
Cascades, Inc.
Depew, New York
August 2016

	Location ID:	MW-101	MW-102	MW-102	MW-103
	Sample Name:	WG-11124679-081716-SG-002	WG-11124679-081716-SG-004	WG-11124679-081716-SG-006	WG-11124679-081716-SG-007
	Sample Date:	08/17/2016	08/17/2016	08/17/2016 Duplicate	08/17/2016
Parameters	**Unit**				
Semi-volatile Organic Compounds					
Acetophenone	µg/L	1.0 U	0.95 U	0.95 U	0.95 U
Anthracene	µg/L	0.20 U	0.19 U	0.19 U	0.19 U
Atrazine	µg/L	1.0 U	0.95 U	0.95 U	0.95 U
Benzaldehyde	µg/L	1.0 U	0.95 U	0.95 U	0.95 U
Benzo(a)anthracene	µg/L	0.20 U	0.19 U	0.19 U	0.19 U
Benzo(a)pyrene	µg/L	0.20 U	0.19 U	0.19 U	0.19 U
Benzo(b)fluoranthene	µg/L	0.20 U	0.19 U	0.19 U	0.19 U
Benzo(g,h,i)perylene	µg/L	0.20 U	0.19 U	0.19 U	0.19 U
Benzo(k)fluoranthene	µg/L	0.20 U	0.19 U	0.19 U	0.19 U
Biphenyl (1,1-Biphenyl)	µg/L	1.0 U	0.95 U	0.95 U	0.95 U
bis(2-Chloroethoxy)methane	µg/L	1.0 U	0.95 U	0.95 U	0.95 U
bis(2-Chloroethyl)ether	µg/L	1.0 U	0.95 U	0.95 U	0.95 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	5.0 U	4.8 U	4.8 U	4.8 U
Butyl benzylphthalate (BBP)	µg/L	2.0 U	1.9 U	1.9 U	1.9 U
Caprolactam	µg/L	5.0 U	4.8 U	4.8 U	4.8 U
Carbazole	µg/L	1.0 U	0.95 U	0.95 U	0.95 U
Chrysene	µg/L	0.20 U	0.19 U	0.19 U	0.19 U
Di-n-butylphthalate (DBP)	µg/L	5.0 U	4.8 U	4.8 U	4.8 U
Di-n-octyl phthalate (DnOP)	µg/L	2.0 U	1.9 U	1.9 U	1.9 U
Dibenz(a,h)anthracene	µg/L	0.20 U	0.19 U	0.19 U	0.19 U
Dibenzofuran	µg/L	1.0 U	0.95 U	0.95 U	0.95 U
Diethyl phthalate	µg/L	2.0 U	1.9 U	1.9 U	1.9 U
Dimethyl phthalate	µg/L	2.0 U	1.9 U	1.9 U	1.9 U
Fluoranthene	µg/L	0.20 U	0.19 U	0.19 U	0.19 U
Fluorene	µg/L	0.20 U	0.19 U	0.19 U	0.19 U
Hexachlorobenzene	µg/L	0.20 U	0.19 U	0.19 U	0.19 U
Hexachlorobutadiene	µg/L	1.0 U	0.95 U	0.95 U	0.95 U
Hexachlorocyclopentadiene	µg/L	10 U	9.5 U	9.5 U	9.5 U
Hexachloroethane	µg/L	1.0 U	0.95 U	0.95 U	0.95 U
Indeno(1,2,3-cd)pyrene	µg/L	0.20 U	0.19 U	0.19 U	0.19 U
Isophorone	µg/L	1.0 U	0.95 U	0.95 U	0.95 U
N-Nitrosodi-n-propylamine	µg/L	1.0 U	0.95 U	0.95 U	0.95 U
N-Nitrosodiphenylamine	µg/L	1.0 U	0.95 U	0.95 U	0.95 U
Naphthalene	µg/L	0.20 U	0.19 U	0.19 U	0.19 U
Nitrobenzene	µg/L	1.0 U	0.95 U	0.95 U	0.95 U
Pentachlorophenol	µg/L	5.0 U	4.8 U	4.8 U	4.8 U
Phenanthrene	µg/L	0.20 U	0.19 U	0.19 U	0.19 U
Phenol	µg/L	1.0 U	0.95 U	0.95 U	0.95 U
Pyrene	µg/L	0.20 U	0.19 U	0.19 U	0.19 U

Table 2

Analytical Results Summary
Groundwater Sampling
Cascades, Inc.
Depew, New York
August 2016

	Location ID:	MW-101	MW-102	MW-102	MW-103
	Sample Name:	WG-11124679-081716-SG-002	WG-11124679-081716-SG-004	WG-11124679-081716-SG-006	WG-11124679-081716-SG-007
	Sample Date:	08/17/2016	08/17/2016	08/17/2016 Duplicate	08/17/2016
Parameters	**Unit**				
Metals					
Aluminum	µg/L	50 U	150	200	50 U
Antimony	µg/L	0.52 J	2.0 U	2.0 U	2.0 U
Arsenic	µg/L	4.2 J	1.3 J	1.3 J	1.8 J
Barium	µg/L	160	81	81	100
Beryllium	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Calcium	µg/L	55000	59000	58000	110000
Chromium	µg/L	2.0 U	0.81 J	0.51 J	2.0 U
Cobalt	µg/L	0.43 J	0.71 J	0.74 J	0.34 J
Copper	µg/L	25	2.0 U	2.0 U	2.0 U
Iron	µg/L	100 U	1100	1200	460
Lead	µg/L	6.9	1.0	1.1	0.42 J
Magnesium	µg/L	81000	66000	64000	91000
Manganese	µg/L	120	150	150	44
Mercury	µg/L	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	µg/L	2.0 U	2.0 U	2.0 U	2.0 U
Potassium	µg/L	2300	2000	2100	3200
Selenium	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Silver	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Sodium	µg/L	77000	53000	53000	150000
Thallium	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	µg/L	5.0 U	5.0 U	0.58 J	5.0 U
Zinc	µg/L	49	9.3 J	9.3 J	20 U

Notes:

J -Estimated concentration.
U -Not detected at the associated reporting limit.

Table 2

Analytical Results Summary
Groundwater Sampling
Cascades, Inc.
Depew, New York
August 2016

Location ID:		**MW-104**	**MW-105**	**MW-106F**
Sample Name:		**WG-11124679-081716-SG-005**	**WG-11124679-081716-SG-008**	**WG-11124679-081716-SG-001**
Sample Date:		**08/17/2016**	**08/17/2016**	**08/17/2016**
Parameters	**Unit**			
Volatile Organic Compounds				
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	2.0 U	2.0 U	2.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	10 U	10 U	10 U
2-Hexanone	µg/L	10 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	10 U	10 U	10 U
Acetone	µg/L	10 U	10 U	10 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	1.0 U	1.0 U	1.0 U
Methyl acetate	µg/L	10 U	10 U	10 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U

Table 2

Analytical Results Summary
Groundwater Sampling
Cascades, Inc.
Depew, New York
August 2016

Location ID:		**MW-104**	**MW-105**	**MW-106F**
Sample Name:		**WG-11124679-081716-SG-005**	**WG-11124679-081716-SG-008**	**WG-11124679-081716-SG-001**
Sample Date:		**08/17/2016**	**08/17/2016**	**08/17/2016**
Parameters	**Unit**			
Volatile Organic Compounds				
Styrene	µg/L	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	2.0 U	2.0 U	2.0 U
Semi-volatile Organic Compounds				
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/L	0.95 U	0.98 U	1.0 U
2,4,5-Trichlorophenol	µg/L	4.8 U	4.9 U	5.0 U
2,4,6-Trichlorophenol	µg/L	4.8 U	4.9 U	5.0 U
2,4-Dichlorophenol	µg/L	1.9 U	2.0 U	2.0 U
2,4-Dimethylphenol	µg/L	1.9 U	2.0 U	2.0 U
2,4-Dinitrophenol	µg/L	4.8 U	4.9 U	5.0 U
2,4-Dinitrotoluene	µg/L	4.8 U	4.9 U	5.0 U
2,6-Dinitrotoluene	µg/L	4.8 U	4.9 U	5.0 U
2-Chloronaphthalene	µg/L	0.95 U	0.98 U	1.0 U
2-Chlorophenol	µg/L	0.95 U	0.98 U	1.0 U
2-Methylnaphthalene	µg/L	0.19 U	0.20 U	0.20 U
2-Methylphenol	µg/L	0.95 U	0.98 U	1.0 U
2-Nitroaniline	µg/L	1.9 U	2.0 U	2.0 U
2-Nitrophenol	µg/L	1.9 U	2.0 U	2.0 U
3&4-Methylphenol	µg/L	1.9 U	2.0 U	2.0 U
3,3'-Dichlorobenzidine	µg/L	4.8 U	4.9 U	5.0 U
3-Nitroaniline	µg/L	1.9 U	2.0 U	2.0 U
4,6-Dinitro-2-methylphenol	µg/L	4.8 U	4.9 U	5.0 U
4-Bromophenyl phenyl ether	µg/L	1.9 U	2.0 U	2.0 U
4-Chloro-3-methylphenol	µg/L	1.9 U	2.0 U	2.0 U
4-Chloroaniline	µg/L	1.9 U	2.0 U	2.0 U
4-Chlorophenyl phenyl ether	µg/L	1.9 U	2.0 U	2.0 U
4-Nitroaniline	µg/L	1.9 U	2.0 U	2.0 U
4-Nitrophenol	µg/L	4.8 U	4.9 U	5.0 U
Acenaphthene	µg/L	0.19 U	0.20 U	0.20 U
Acenaphthylene	µg/L	0.19 U	0.20 U	0.20 U

Table 2

Analytical Results Summary
Groundwater Sampling
Cascades, Inc.
Depew, New York
August 2016

Location ID:		**MW-104**	**MW-105**	**MW-106F**
Sample Name:		**WG-11124679-081716-SG-005**	**WG-11124679-081716-SG-008**	**WG-11124679-081716-SG-001**
Sample Date:		**08/17/2016**	**08/17/2016**	**08/17/2016**
Parameters	**Unit**			
Semi-volatile Organic Compounds				
Acetophenone	µg/L	0.95 U	0.98 U	1.0 U
Anthracene	µg/L	0.19 U	0.20 U	0.20 U
Atrazine	µg/L	0.95 U	0.98 U	1.0 U
Benzaldehyde	µg/L	0.95 U	0.98 U	1.0 U
Benzo(a)anthracene	µg/L	0.19 U	0.20 U	0.20 U
Benzo(a)pyrene	µg/L	0.19 U	0.20 U	0.20 U
Benzo(b)fluoranthene	µg/L	0.19 U	0.20 U	0.20 U
Benzo(g,h,i)perylene	µg/L	0.19 U	0.20 U	0.20 U
Benzo(k)fluoranthene	µg/L	0.19 U	0.20 U	0.20 U
Biphenyl (1,1-Biphenyl)	µg/L	0.95 U	0.98 U	1.0 U
bis(2-Chloroethoxy)methane	µg/L	0.95 U	0.98 U	1.0 U
bis(2-Chloroethyl)ether	µg/L	0.95 U	0.98 U	1.0 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	4.8 U	4.9 U	5.0 U
Butyl benzylphthalate (BBP)	µg/L	1.9 U	2.0 U	2.0 U
Caprolactam	µg/L	4.8 U	4.9 U	5.0 U
Carbazole	µg/L	0.95 U	0.98 U	1.0 U
Chrysene	µg/L	0.19 U	0.20 U	0.20 U
Di-n-butylphthalate (DBP)	µg/L	4.8 U	4.9 U	5.0 U
Di-n-octyl phthalate (DnOP)	µg/L	1.9 U	2.0 U	2.0 U
Dibenz(a,h)anthracene	µg/L	0.19 U	0.20 U	0.20 U
Dibenzofuran	µg/L	0.95 U	0.98 U	1.0 U
Diethyl phthalate	µg/L	1.9 U	2.0 U	2.0 U
Dimethyl phthalate	µg/L	1.9 U	2.0 U	2.0 U
Fluoranthene	µg/L	0.19 U	0.20 U	0.20 U
Fluorene	µg/L	0.19 U	0.20 U	0.20 U
Hexachlorobenzene	µg/L	0.19 U	0.20 U	0.20 U
Hexachlorobutadiene	µg/L	0.95 U	0.98 U	1.0 U
Hexachlorocyclopentadiene	µg/L	9.5 U	9.8 U	10 U
Hexachloroethane	µg/L	0.95 U	0.98 U	1.0 U
Indeno(1,2,3-cd)pyrene	µg/L	0.19 U	0.20 U	0.20 U
Isophorone	µg/L	0.95 U	0.98 U	1.0 U
N-Nitrosodi-n-propylamine	µg/L	0.95 U	0.98 U	1.0 U
N-Nitrosodiphenylamine	µg/L	0.95 U	0.98 U	1.0 U
Naphthalene	µg/L	0.19 U	0.20 U	0.20 U
Nitrobenzene	µg/L	0.95 U	0.98 U	1.0 U
Pentachlorophenol	µg/L	4.8 U	4.9 U	5.0 U
Phenanthrene	µg/L	0.19 U	0.20 U	0.20 U
Phenol	µg/L	0.95 U	0.98 U	1.0 U
Pyrene	µg/L	0.19 U	0.20 U	0.20 U

Table 2

Analytical Results Summary
Groundwater Sampling
Cascades, Inc.
Depew, New York
August 2016

	Location ID:	**MW-104**	**MW-105**	**MW-106F**
	Sample Name:	**WG-11124679-081716-SG-005**	**WG-11124679-081716-SG-008**	**WG-11124679-081716-SG-001**
	Sample Date:	**08/17/2016**	**08/17/2016**	**08/17/2016**
Parameters	**Unit**			
Metals				
Aluminum	µg/L	50 U	69	72
Antimony	µg/L	2.0 U	2.0 U	0.45 J
Arsenic	µg/L	8.8	0.88 J	0.41 J
Barium	µg/L	38	180	180
Beryllium	µg/L	1.0 U	1.0 U	1.0 U
Cadmium	µg/L	1.0 U	1.0 U	1.0 U
Calcium	µg/L	63000	30000	81000
Chromium	µg/L	2.0 U	2.0 U	2.0 U
Cobalt	µg/L	0.15 J	0.31 J	1.0 U
Copper	µg/L	2.0 U	2.0 U	3.9 U
Iron	µg/L	360	580	100 U
Lead	µg/L	1.0 U	1.0 U	2.6
Magnesium	µg/L	99000	75000	97000
Manganese	µg/L	19	23	3.0 J
Mercury	µg/L	0.20 U	0.20 U	0.20 U
Nickel	µg/L	2.0 U	2.0 U	2.0 U
Potassium	µg/L	1800	3100	960 J
Selenium	µg/L	5.0 U	5.0 U	5.0 U
Silver	µg/L	1.0 U	1.0 U	1.0 U
Sodium	µg/L	63000	61000	80000
Thallium	µg/L	1.0 U	1.0 U	1.0 U
Vanadium	µg/L	5.0 U	5.0 U	0.73 J
Zinc	µg/L	20 U	7.8 J	8.8 J

Notes:

J -Estimated concentration.
U -Not detected at the associated reporting limit.

Table 3

Sample Holding Time Criteria and Analytical Methods Summary
Groundwater Sampling
Cascades, Inc.
Depew, New York
August 2016

Analyses	Methodology [1]	Holding Time to Extraction (Days)	Holding Time to Analyses (Days)
TCL VOCs	SW-846 8260C	-	14
TCL SVOCs	SW-846 8270D	7	40
TAL Metals (except Mercury)	SW-846 6020A	-	180
Mercury	SW-846 7470A	-	28

Notes:

[1] - Referenced from "Test Methods for Evaluating Solid Waste", USEPA OSW, 3rd Edition, 1986 and subsequent revisions.

SVOCs - Semi-Volatile Organic Compounds.

VOCs - Volatile Organic Compounds.

TCL - Target Compound List.

TAL - Target Analyte List.

Table 4

Qualified Sample Results Due to Analyte Concentrations in the Method Blank
Groundwater Sampling
Cascades, Inc.
Depew, New York
August 2016

Parameter	Analysis Date	Analyte	Blank Result	Sample ID	Original Sample Result	Qualified Sample Result	Units
Metals	08/22/16	Copper	3.53	WG-11124679-081716-SG-001	3.9	3.9 U	µg/L
				WG-11124679-081716-SG-004	1.7 J	2.0 U	µg/L
				WG-11124679-081716-SG-006	2.0	2.0 U	µg/L
				WG-11124679-081716-SG-007	0.60 J	2.0 U	µg/L
				WG-11124679-081716-SG-008	0.55 J	2.0 U	µg/L
Metals	08/22/16	Iron	11.0 J	WG-11124679-081716-SG-002	28 J	100 U	µg/L
Metals	08/22/16	Nickel	0.406 J	WG-11124679-081716-SG-001	0.70 J	2.0 U	µg/L
				WG-11124679-081716-SG-002	0.79 J	2.0 U	µg/L
				WG-11124679-081716-SG-004	1.2 J	2.0 U	µg/L
				WG-11124679-081716-SG-006	0.80 J	2.0 U	µg/L
				WG-11124679-081716-SG-007	0.74 J	2.0 U	µg/L
				WG-11124679-081716-SG-008	0.70 J	2.0 U	µg/L

Notes:

J -Estimated concentration.
U -Not detected at the associated reporting limit.

Table 5

Qualified Sample Results Due to Analyte Concentrations in the Equipment Blank
Groundwater Sampling
Cascades, Inc.
Depew, New York
August 2016

Parameter	Blank Sample ID	Analyte	Blank Result	Associated Sample ID	Original Sample Result	Qualified Sample Result	Units
Metals	FB-11124679-081716-SG-003	Acetone	2.8 J	WG-11124679-081716-SG-002	0.99 J	10 U	µg/L
				WG-11124679-081716-SG-008	1.9 J	10 U	µg/L
Metals	FB-11124679-081716-SG-003	Iron	17 J	WG-11124679-081716-SG-001	74 J	100 U	µg/L

Notes:

J -Estimated concentration.
U -Not detected at the associated reporting limit.

Attachment A
Chain of Custody

CHAIN OF CUSTODY RECORD

COC NO.: 55706

1.9/C2.9
2.1/C3.1

Address: 2055 Niagara Falls Blvd Nia. Falls NY PAGE 1 OF 1
Phone: 716 297-6150 Fax:

Project No/ Phase/Task Code: 11124679	Laboratory Name: Test America	Lab Location: Cambridge OH	SSOW ID:
Project Name: Cascade Paper Annual GW Sampling	Lab Contact: Denise Heckler		Cooler No:
Project Location: Walden Ave			Carrier:
GHD Chemistry Contact: Paul McMahon			Airbill No:
Sampler(s): S. Gardner D. Tyran			Total # of Containers: 49

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Filtered (Y/N)	Analysis Requested: TAL Metals	VOCs 8260	SVOCs 8270	Total Containers/sample	MS/MSD Request	Comments/ Special Instructions
	PRESERVATION - (SEE BACK OF COC FOR ABBREVIATIONS)						HNO3	HCl				
1	TB-11124679-081716-SG	8/17/16		TB	G	N		X		1		
2	FB-11124679-081716-SG-003	8/17/16	1020	FB	G	N	X	X	X	6		
3	WG-11124679-081716-SG-001	8/17/16	1035	WG	G	N	X	X	X	6		
4	WG-11124679-081716-SG-002	8/17/16	1025	WG	G	N	X	X	X	6		
5	WG-11124679-081716-SG-005	8/17/16	1120	WG	G	N	X	X	X	6		
6	WG-11124679-081716-SG-004	8/17/16	1205	WG	G	N	X	X	X	6		
7	WG-11124679-081716-SG-006	8/17/16	1205	WG	G	N	X	X	X	6		
8	WG-11124679-081716-SG-007	8/17/16	1300	WG	G	N	X	X	X	6		
9	WG-11124679-081716-SG-008	8/17/16	1430	WG	G	N	X	X	X	6		
10												
11												
12												

240-68530 Chain of Custody

DST

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:

	Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	Dave Tyran	GHD	8/17/16	1600	1. B. Wisenbaugh	TA	8/18/16	1000
2.	B. Wisenbaugh	TA	8/19/16	0900	2. Lan Hu	TAL	8/19/16	900
3.	Lan Hu	TAL	8/19/16	935	3.	TA	8-19-16	935

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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8/30/2016