September 17, 2021

Northrop Grumman
One Space Park Drive
MS: CER/XE6D21
Redondo Beach, CA 90278

northropgrumman.com

Ms. Rachel K. Gardner, E.I.T.
Assistant Engineer
Region 6 Environmental Remediation
New York State Department of Environmental Conservation
317 Washington Street
Watertown, NY 13601

Subject: Buffer Parcel Additional Soil Sampling
Former TRW Aeronautical Systems Facility, Utica, New York
USEPA ID#: NYD002244911

Dear Ms. Gardner:

Please find enclosed for your review the Buffer Parcel Additional Soil Sampling Letter Report related to the former TRW Aeronautical Systems facility in Utica, New York (Site). This Letter Report was prepared on behalf of Lucas Western LLC (Lucas Western) to present the analytical results from sampling completed on the Buffer Parcel near the Former TRW Aeronautical Systems Facility to support removing the Parcel from the Site (i.e., the property subject to New York State Department of Environmental Conservation (NYSDEC) jurisdiction). The sampling work was performed in accordance with the June 7, 2021, Buffer Parcel Additional Soil Sampling Work Plan (Work Plan) that was approved by NYSDEC on June 9, 2021.

As further explained in the Work Plan, the Buffer Parcel is the southern portion of the existing Site parcel #329.11-02-03, consisting of wooded land south of Site Parking Lot No. 3 that has never been developed or otherwise used in the manufacturing operations of the former TRW Aeronautical Systems facility. In 2020, the NYSDEC removed the nearby Lyon Place parcels from the Site based on findings of lack of historical operations and no site-related constituents, as confirmed by soil samples analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, and polychlorinated biphenyls (PCBs). Given its similar status to the Lyon Place parcels, the NYSDEC has proposed to remove the Buffer Parcel from the “Site” given comparable conditions.

As part of a 2015 soil investigation focused primarily on the Site parking lots, two soil samples were collected from each of four boring locations in the Buffer Parcel for VOCs and PCBs analysis. No PCBs or site-related VOCs were detected above the Unrestricted Use Soil Cleanup Objectives. The NYSDEC later requested in a March 19, 2021, email that additional soil samples be collected from three of the previous sample locations on the Buffer Parcel and analyzed for SVOCs and metals to determine if the data support the lack of site-related SVOC and metals.

As more fully documented in the attached Letter Report, based on this additional analytical data, soil sample results support the lack of site-related SVOC and metals on the Buffer Parcel. Specifically, all SVOC concentrations and most metals concentrations were below the Unrestricted Use Site Cleanup Objectives (SCOs). While a few metals in some locations were somewhat above the NYSDEC unrestricted use SCOs, the detections above the SCOs are either statistical outliers considered to be anomalous, within the range of site-specific and

regional background concentrations, or only slightly above (less than 20%) the unrestricted use SCOs. Thus, the metals results are not considered indicative of site-related contamination. Accordingly, Lucas Western requests that NYSDEC exclude the Buffer Parcel from the "Site," consistent with the approach taken for the Lyon Place parcels.

Should you have any questions or require any additional information related to the enclosed Work Plan, please contact Kurt Batsel, our project manager, at (770) 578-9696 or via e-mail at batsel@dextra-group.com.

Sincerely,

Michael Shannon
Corporate Manager, Environmental Remediation
michael.shannon@ngc.com
p: 310-332-5915 | c: 310-648-1929

Enclosure:
Buffer Parcel Additional Soil Sampling Report

Distribution:
(1) Addressee
(1) Kurt Batsel, The Dextra Group, Inc.
(1) Devin Shay, Groundwater & Environmental Services, Inc.
(1) Mark Flusche, Arcadis of New York, Inc.
(1) Gregg Townsend, New York State Department of Environmental Conservation
(1) Greg Rys, New York State Department of Health

Groundwater & Environmental Services, Inc.
6780 Northern Boulevard, Suite 100
East Syracuse, NY 13057
T. 800.220.3069

September 17, 2021

Mr. Michael Shannon
Corporate Manager, Environmental Remediation
Lucas Western LLC
One Space Park Drive
MS: CER/XE6D21
Redondo Beach, CA 90278

Subject: Buffer Parcel Additional Soil Sampling
Former TRW Aeronautical Systems Facility, Utica, New York
USEPA ID#: NYD002244911

Dear Mr. Shannon:

This letter presents a summary of the additional soil sampling activities that were completed on June 25, 2021 on the Buffer Parcel at the former TRW Aeronautical Systems facility located at 211 Seward Avenue in Utica, New York (Site). A Site location map is presented on **Figure 1**. The 2021 soil sampling event was conducted by Groundwater & Environmental Services, Inc. (GES) in accordance with the June 7, 2021 *Buffer Parcel Additional Soil Sampling Work Plan, Former TRW Aeronautical Systems Facility, 211 Seward Avenue, Utica, New York,* completed by Arcadis of New York, Inc. (Work Plan). The Work Plan, as amended by a response to comments letter, was approved by the New York State Department of Environmental Conservation (NYSDEC) on June 9, 2021. The following sections summarize the results of the 2021 soil sampling event.

Soil Sampling Scope of Work

The soil sampling event was conducted on June 25, 2021. Prior to conducting soil sampling activities, all personnel reviewed the Site-specific Health and Safety Plan (GES, February 2019). Soil samples were collected from three (3) pre-determined locations, SB-112, SB-114, and SB-115, in accordance with the Work Plan (2021). The locations of the soil samples collected during soil sampling activities are presented on **Figure 2**. Soil samples were collected from three different depths, one surface soil sample from 0 to 2 inches below ground surface (in. bgs), a near surface soil sample from 0 to 2 feet (ft.) bgs, and a subsurface soil sample from 2 to 4 ft. bgs. Soil sample location details are included in **Table 1**.

The soil at each sample location was characterized and screened with a photoionization detector (PID) equipped with a 10.7 electron volt lamp. Prior to sample collection, vegetation at the sample locations, including leaves, twigs, grass, rocks, and roots, were removed with a

decontaminated stainless-steel trowel. A hand auger was used to collect each sample. If hand auger refusal was reached before 4 ft. bgs, the third soil sample was collected from 2 ft. bgs to refusal.

The hand auger was decontaminated between each sample collection. Decontamination procedures included rinsing the hand auger with distilled water, thoroughly scrubbing the item with a brush and an Alconox™ solution and rinsing the hand auger with distilled water to remove residual soap. The hand auger was then rinsed with 10% nitric acid to remove residual metals, rinsed with distilled water, rinsed with isopropyl alcohol, and finally rinsed with distilled water three times.

Each soil sample was placed into laboratory supplied glassware and placed into an insulated cooler with ice to maintain a temperature of 4 degrees Celsius. All soil samples were submitted for analysis under chain-of-custody protocol to Eurofins TestAmerica of Buffalo, New York. Each soil sample was analyzed for semi-volatile organic compounds (SVOCs) by United States Environmental Protection Agency (USEPA) Method 8270 and Target Analyte List (TAL) metals by USEPA Methods 6010 and 7471. As a quality assurance/quality control measure, one blind duplicate, one matrix spike, one matrix spike duplicate, and one equipment blank were collected and submitted in accordance with the Work Plan. Analytical results were reported by Eurofins TestAmerica using NYSDEC Analytical Services Protocol Category B data deliverable packages. The laboratory analytical report is included as **Attachment A**.

Analytical data collected during the investigation was validated to demonstrate its usability in supporting the conclusions of the investigation. A third-party data validator (GHD) reviewed and validated the analytical data generated by the subcontract laboratory. The validation was completed in general accordance with applicable USEPA guidance (USEPA 2008) and DER-10. The Data Usability Summary Report is included as **Attachment B**.

Laboratory Analytical Results - SVOCs

Pursuant to NYSDEC request, the validated analytical data from this investigation were evaluated against the NYSDEC Unrestricted Use Soil Cleanup Objectives (SCOs) in NYCRR 375-6.8(a), the most restrictive SCOs established by NYSDEC. Based on the laboratory analytical results, there were no detections of SVOCs above the Unrestricted Use SCOs.

Laboratory Analytical Results – Metals

Based on the laboratory analytical results, there were no detections of aluminum, antimony, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, lead, magnesium, potassium, selenium, silver, sodium, thallium, or vanadium above the NYSDEC Unrestricted Use SCOs. Of the detected metals, manganese and iron are abundant elements in the earth's crust and common constituents in the minerals that comprise soil. These constituents are considered essential nutrients that are not useful indicators of any site-related industrial process, and therefore, are not considered potential contaminants of concern at the Site. The remaining detected constituents, arsenic, zinc, nickel, and mercury, were detected in some locations at

levels slightly to moderately above the NYSDEC Unrestricted Use SCO concentrations, but the concentrations are generally consistent with background levels, and thus, are not considered indicative of site-related contamination, as discussed further below.

Arsenic:

Arsenic was detected above the Unrestricted Use SCO of 13 mg/kg in only 2 out of 9 samples, with a maximum reported concentration of 27 mg/kg. Based on the low frequency of detections above the SCO, the relatively moderate overage, and the fact that arsenic is a known background constituent in the area, these arsenic detections are not considered indicative of site-related contamination. In addition, arsenic was not detected in historical groundwater data which also supports the conclusion that arsenic is not a contaminant of concern in groundwater at the Site.

Zinc:

Zinc was detected above the Unrestricted Use SCO in 5 out of 9 samples (SB-112 (2-3 ft. bgs), SB-114 (0-2 in. bgs), SB-115 (0-2 in. bgs), SB-115 (0-2 ft. bgs), and SB-115 (2-2.5 ft. bgs). However, the detections of zinc were consistent between the samples collected, ranging from 71 to 130 mg/kg, except an apparent anomaly of 6.3 mg/kg at SB-114 (2-4 ft. bgs). Moreover, the maximum concentration was only slightly above the Unrestricted Use SCO of 109 mg/kg. These observations support the conclusion that these zinc detections are indicative of background levels in area soil, and not indicative of site-related contamination.

Nickel:

Nickel was detected above the Unrestriced Use SCO of 30 mg/kg at only 2 out of 9 samples, with a maximum reported concentration of 35 mg/kg. The low frequency of detections of nickel above the Unrestricted Use SCO, and the fact that the maximum detection was only slightly above the Unrestricted Use SCO support the conclusion that this constituent is associated with background conditions and not indicative of site-related contamination.

Mercury:

Mercury was detected above the Unrestricted Use SCO of 0.18 mg/kg in 1 out of 9 samples, with a reported concentration of 0.20 mg/kg, only slightly above the SCO. The low frequency of detections of mercury above the Unrestricted Use SCO, and the fact that the maximum detection was only slightly above the Unrestricted Use SCO support the conclusion that this constituent is associated with background conditions and not indicative of site-related contamination.

A summary of the analytical results for the soil samples collected as part of the soil sampling activities are presented on **Table 2** and **Table 3**. A copy of the Laboratory Report is included as **Attachment A**.

Survey and Site Restoration

After soil sampling activities were completed, the soil borings were backfilled with clean sand. Soil sampling locations were marked in the field with a stake and labeled with identification to facilitate subsequent surveying of the sampling location. Northing and Easting survey data were collected using a Trimble™ GEO 7X Handheld Data Collector to the nearest foot. Ground elevations were collected to the nearest 0.01 foot. Soil sample collection locations and ground surface elevations are presented in **Table 1**.

Should you have any questions, contact me at (800) 220-3069.

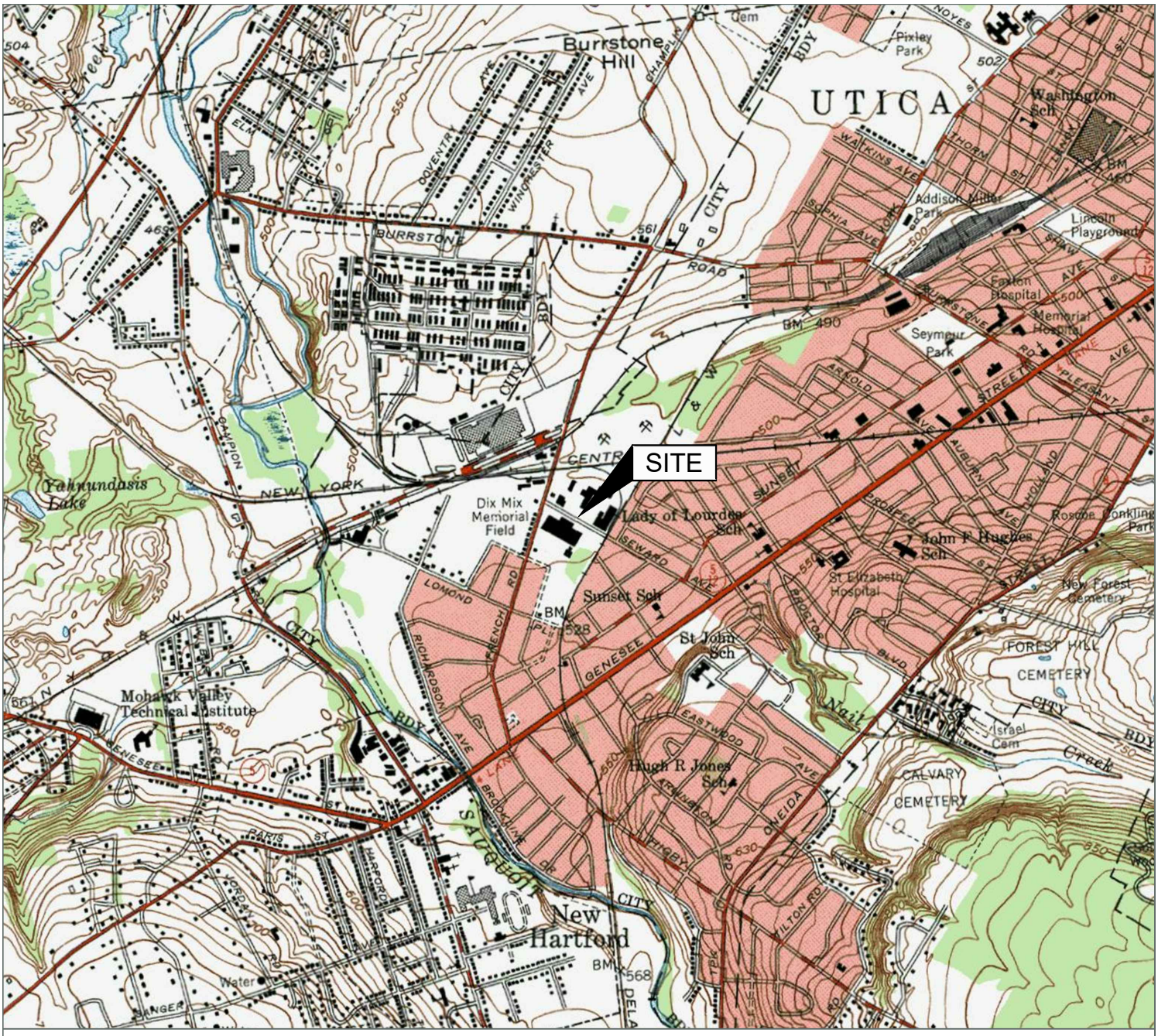
Sincerely,

Devin T. Shay Digitally signed by Devin T. Shay

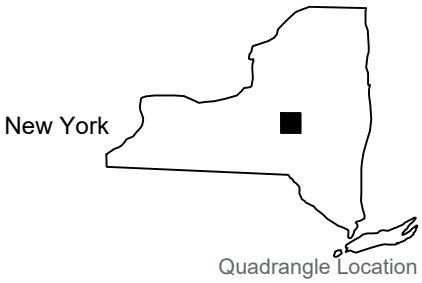
Devin T. Shay
Principal Hydrogeologist

Attachments:
Attachment A – Laboratory Analytical Report
Attachment B – Data Usability Summary Report

Figures



Source:
USGS 7.5 Minute Series
Topographic Quadrangle, 1955
Utica West, New York
Contour Interval = 10'



Site Location Map

Lucas Western, LLC
211 Seward Avenue
Utica, New York

Drawn
W.G.S.
Designed

Approved

Date
4/15/20
Figure
1

N

Scale In Feet
0 2000

GES
Groundwater & Environmental Services, Inc.

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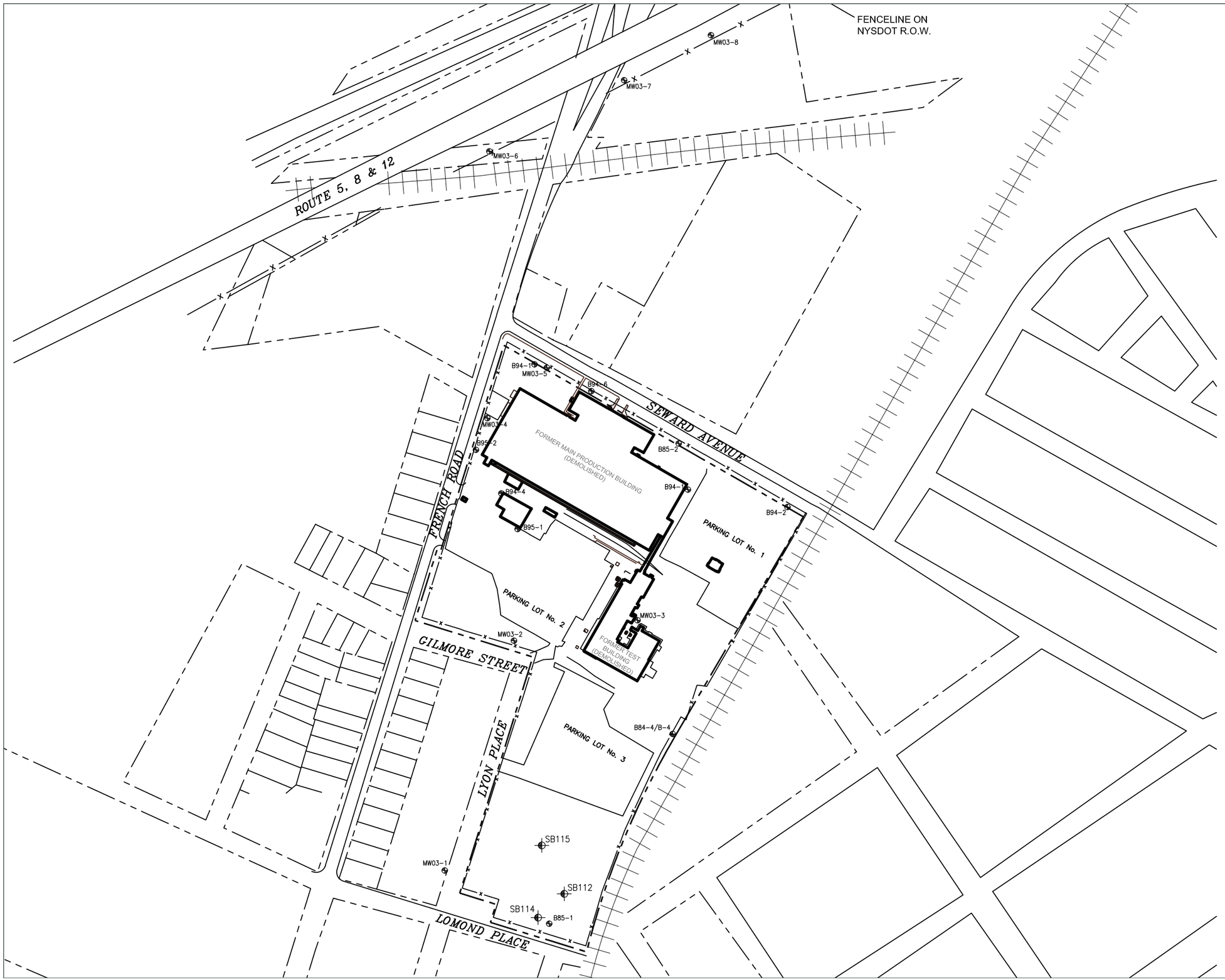

Soil Sample Location Map

Northrop Gruman Corporation
211 Seward Avenue
Utica, New York

Drawn
W.G.S.
Designed

Approved

Date
7/28/21
Figure

N

Scale In Feet
0 250

Groundwater & Environmental Services, Inc.

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Tables

Table 1

Soil Sample Location Details
June 25, 2021
Former TRW Aeronautical Systems Facility
Utica, New York

Location	Sampling Date	Sample Depth	GPS Coordinates		Elevation (ft.msl)
			°N	°W	
J6105-SB-114 (0-2 in.)	6/25/2021	0-2 in.bgs	43°04'49.320	75°16'51.202	429.26
J6105-SB-114 (0-2 ft.)	6/25/2021	0-2.0 ft.bgs	43°04'49.320	75°16'51.202	429.26
J6105-SB-114 (2-4 ft.)	6/25/2021	2.0-4.0 ft.bgs	43°04'49.320	75°16'51.202	429.26
J6105-SB-112 (0-2 in.)	6/25/2021	0-2 in.bgs	43°04'49.926	75°16'50.262	435.40
J6105-SB-112 (0-2 ft.)	6/25/2021	0-2.0 ft.bgs	43°04'49.926	75°16'50.262	435.40
J6105-SB-112 (2-3 ft.)	6/25/2021	2.0-3.0 ft.bgs	43°04'49.926	75°16'50.262	435.40
J6105-SB-115 (0-2 in.)	6/25/2021	0-2 in.bgs	43°04'51.193	75°16'51.031	430.49
J6105-SB-115 (0-2 ft.)	6/25/2021	0-2.0 ft.bgs	43°04'51.193	75°16'51.031	430.49
J6105-SB-115 (2-2.5 ft.)	6/25/2021	2-2.5 ft.bgs	43°04'51.193	75°16'51.031	430.49
J6105-Field Duplicate	6/25/2021	NA	NA	NA	NA
J6105-Field Equipment Blank	6/25/2021	NA	NA	NA	NA

Notes:
ft.bgs = Feet below ground surface
in.bgs = Inches below ground surface

Table 2

Soil Analytical Results (SVOCs)
June 25, 2021
Former TRW Aeronautical Systems Facility
Utica, New York

Location		SB-112	SB-112	SB-112	SB-114	SB-114
PID Screening Value (ppmv)	NYCRR Part 375-6.8(a) Unrestricted Use SCOs (ug/kg)	0.3	0.3	0.3	0.8	0.4
Sample Depth		(0-2 in.bgs)	(0-2 ft.bgs)	(2-3 ft.bgs)	(0-2 in.bgs)	(0-2 ft.bgs)
SVOCs via EPA Method 8270D						
Biphenyl	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
bis (2-chloroisopropyl) ether	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
2,4,5-Trichlorophenol[a]	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
2,4,6-Trichlorophenol	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
2,4-Dichlorophenol[a]	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
2,4-Dimethylphenol[a]	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
2,4-Dinitrophenol	NA	ND<2200	ND<2000	ND<1900	ND<13000 (ND<2100)	ND<2000
2,4-Dinitrotoluene	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
2,6-Dinitrotoluene[a]	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
2-Chloronaphthalene	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
2-Chlorophenol	NA	ND<430	ND<390	ND<380	ND<2500 (ND<420)	ND<390
2-Methylphenol	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
2-Methylnaphthalene[a]	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
2-Nitroaniline[a]	NA	ND<430	ND<390	ND<380	ND<2500 (ND<420)	ND<390
2-Nitrophenol[a]	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
3,3'-Dichlorobenzidine	NA	ND<430	ND<390	ND<380	ND<2500 (ND<420)	ND<390
3-Nitroaniline[a]	NA	ND<430	ND<390	ND<380	ND<2500 (ND<420)	ND<390
4,6-Dinitro-2-methylphenol	NA	ND<430	ND<390	ND<380	ND<2500 (ND<420)	ND<390
4-Bromophenyl phenyl ether	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
4-Chloro-3-methylphenol	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
4-Chloroaniline[a]	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
4-Chlorophenyl phenyl ether	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
4-Methylphenol	NA	ND<430	ND<390	ND<380	ND<2500 (ND<420)	ND<390
4-Nitroaniline	NA	ND<430	ND<390	ND<380	ND<2500 (ND<420)	ND<390
4-Nitrophenol[a]	NA	ND<430	ND<390	ND<380	ND<2500 (ND<420)	ND<390
Acenaphthene	20,000	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Acenaphthylene	100,000	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Acetophenone	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Anthracene	100,000	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Atrazine	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Benzo(a)anthracene	1,000	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Benzo(a)pyrene	1,000	ND<220	ND<200	ND<190	ND<1300 (220)	ND<200
Benzo(b)fluoranthene	1,000	290	ND<200	ND<190	ND<1300 (280)	ND<200
Benzo(g,h,i)perylene	100,000	ND<220	ND<200	ND<190	ND<1300 (380)	ND<200
Benzo(k)fluoranthene	800	ND<220	ND<200	ND<190	ND<1300 (240)	ND<200
Bis(2-chloroethoxy)methane	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Bis(2-chloroethyl)ether	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Bis(2-ethylhexyl) phthalate[a]	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Butyl benzyl phthalate[a]	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Caprolactam	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Carbazole	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Chrysene	1,000	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Dibenz(a,h)anthracene	330	ND<220	ND<200	ND<190	ND<1300 (270)	ND<200
Di-n-butyl phthalate[a]	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Di-n-octyl phthalate[a]	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Dibenzofuran	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Diethyl phthalate[a]	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Dimethyl phthalate[a]	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Fluoranthene	100,000	430	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Fluorene	30,000	ND<220	ND<200	ND<190	ND<1300 (600)	ND<200
Hexachlorobenzene[a]	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Hexachlorobutadiene	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Hexachlorocyclopentadiene	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Hexachloroethane	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Indeno(1,2,3-cd)pyrene	500	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Isophorone[a]	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
N-Nitroso-di-n-propylamine	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
N-Nitrosodiphenylamine	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Naphthalene	12,000	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Nitrobenzene[a]	NA	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Pentachlorophenol	800	ND<430	ND<390	ND<380	ND<2500 (ND<420)	ND<390
Phenanthrene	100,000	ND<220	ND<200	ND<190	ND<1300 (270)	ND<200
Phenol	330	ND<220	ND<200	ND<190	ND<1300 (ND<220)	ND<200
Pyrene	100,000	350	ND<200	ND<190	ND<1300 (500)	ND<200

Notes:
All samples were collected on June 25, 2021

	= Compound exceeds the NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives, effective December 14, 2006
SVOCs	= Semi-Volatile Organic Compounds
EPA	= United States Environmental Protection Agency
ug/kg	= Micrograms per kilogram
in.bgs	= Inches below ground surface
ft.bgs	= Feet below ground surface
ND	= Not detected. Where an analyte is not detected, a reporting limit is given.
ND (<#)	= Less than the method detection limit of #
NYCRR	= New York Codes, Rules and Regulations
NA	= No regulatory standard specified
SCOs	= Soil Cleanup Objectives
[a]	= Associated CCV outside of control limits high, sample was ND (refer to laboratory analytical report)
**	= Field Equipment Blank matrix is water measured in micrograms per liter (µg/L)
Parentheses ( )	= Duplicate Sample
PID	= Photoionization Detector
ppmv	= Parts per million by volume

Table 2

Soil Analytical Results (SVOCs)
June 25, 2021
Former TRW Aeronautical Systems Facility
Utica, New York

Location	NYCRR Part 375-6.8(a) Unrestricted Use SCOs (ug/kg)	SB-114	SB-115	SB-115	SB-115	Field Equipment Blank**
PID Screening Value (ppmv)		0.3	0.2	0.5	1.4	NA
Sample Depth		(2-4 ft.bgs)	(0-2 in.bgs)	(0-2 ft.bgs)	(2-2.5 ft.bgs)	NA
SVOCs via EPA Method 8270D						
Biphenyl	NA	ND<240	ND<300	ND<210	ND<270	ND<5
bis (2-chloroisopropyl) ether	NA	ND<240	ND<300	ND<210	ND<270	ND<5
2,4,5-Trichlorophenol[a]	NA	ND<240	ND<300	ND<210	ND<270	ND<5
2,4,6-Trichlorophenol	NA	ND<240	ND<300	ND<210	ND<270	ND<5
2,4-Dichlorophenol[a]	NA	ND<240	ND<300	ND<210	ND<270	ND<5
2,4-Dimethylphenol[a]	NA	ND<240	ND<300	ND<210	ND<270	ND<5
2,4-Dinitrophenol	NA	ND<2300	ND<2900	ND<2100	ND<2600	ND<10
2,4-Dinitrotoluene	NA	ND<240	ND<300	ND<210	ND<270	ND<5
2,6-Dinitrotoluene[a]	NA	ND<240	ND<300	ND<210	ND<270	ND<5
2-Chloronaphthalene	NA	ND<240	ND<300	ND<210	ND<270	ND<5
2-Chlorophenol	NA	ND<460	ND<580	ND<410	ND<520	ND<10
2-Methylphenol	NA	ND<240	ND<300	ND<210	ND<270	ND<5
2-Methylnaphthalene[a]	NA	ND<240	ND<300	ND<210	ND<270	ND<5
2-Nitroaniline[a]	NA	ND<460	ND<580	ND<410	ND<520	ND<10
2-Nitrophenol[a]	NA	ND<240	ND<300	ND<210	ND<270	ND<5
3,3'-Dichlorobenzidine	NA	ND<460	ND<580	ND<410	ND<520	ND<10
3-Nitroaniline[a]	NA	ND<460	ND<580	ND<410	ND<520	ND<10
4,6-Dinitro-2-methylphenol	NA	ND<460	ND<580	ND<410	ND<520	ND<10
4-Bromophenyl phenyl ether	NA	ND<240	ND<300	ND<210	ND<270	ND<5
4-Chloro-3-methylphenol	NA	ND<240	ND<300	ND<210	ND<270	ND<5
4-Chloroaniline[a]	NA	ND<240	ND<300	ND<210	ND<270	ND<5
4-Chlorophenyl phenyl ether	NA	ND<240	ND<300	ND<210	ND<270	ND<5
4-Methylphenol	NA	ND<460	ND<580	ND<410	ND<520	ND<10
4-Nitroaniline	NA	ND<460	ND<580	ND<410	ND<520	ND<10
4-Nitrophenol[a]	NA	ND<460	ND<580	ND<410	ND<520	ND<10
Acenaphthene	20,000	ND<240	ND<300	ND<210	ND<270	ND<5
Acenaphthylene	100,000	ND<240	ND<300	ND<210	ND<270	ND<5
Acetophenone	NA	ND<240	ND<300	ND<210	ND<270	ND<5
Anthracene	100,000	ND<240	ND<300	ND<210	ND<270	ND<5
Atrazine	NA	ND<240	ND<300	ND<210	ND<270	ND<5
Benzo(a)anthracene	1,000	ND<240	340	ND<210	ND<270	ND<5
Benzo(a)pyrene	1,000	ND<240	360	ND<210	ND<270	ND<5
Benzo(b)fluoranthene	1,000	ND<240	530	ND<210	ND<270	ND<5
Benzo(g,h,i)perylene	100,000	ND<240	330	ND<210	ND<270	ND<5
Benzo(k)fluoranthene	800	ND<240	ND<300	ND<210	ND<270	ND<5
Bis(2-chloroethoxy)methane	NA	ND<240	ND<300	ND<210	ND<270	ND<5
Bis(2-chloroethyl)ether	NA	ND<240	ND<300	ND<210	ND<270	ND<5
Bis(2-ethylhexyl) phthalate[a]	NA	ND<240	ND<300	ND<210	ND<270	ND<5
Butyl benzyl phthalate[a]	NA	ND<240	ND<300	ND<210	ND<270	ND<5
Caprolactam	NA	ND<240	ND<300	ND<210	ND<270	ND<5
Carbazole	NA	ND<240	ND<300	ND<210	ND<270	ND<5
Chrysene	1,000	ND<240	420	ND<210	ND<270	ND<5
Dibenz(a,h)anthracene	330	ND<240	ND<300	ND<210	ND<270	ND<5
Di-n-butyl phthalate[a]	NA	ND<240	ND<300	ND<210	ND<270	ND<5
Di-n-octyl phthalate[a]	NA	ND<240	ND<300	ND<210	ND<270	ND<5
Dibenzofuran	NA	ND<240	ND<300	ND<210	ND<270	ND<5
Diethyl phthalate[a]	NA	ND<240	ND<300	ND<210	ND<270	ND<5
Dimethyl phthalate[a]	NA	ND<240	ND<300	ND<210	ND<270	ND<5
Fluoranthene	100,000	ND<240	970	210	ND<270	ND<5
Fluorene	30,000	ND<240	ND<300	ND<210	ND<270	ND<5
Hexachlorobenzene[a]	NA	ND<240	ND<300	ND<210	ND<270	ND<5
Hexachlorobutadiene	NA	ND<240	ND<300	ND<210	ND<270	ND<5
Hexachlorocyclopentadiene	NA	ND<240	ND<300	ND<210	ND<270	ND<5
Hexachloroethane	NA	ND<240	ND<300	ND<210	ND<270	ND<5
Indeno(1,2,3-cd)pyrene	500	ND<240	ND<300	ND<210	ND<270	ND<5
Isophorone[a]	NA	ND<240	ND<300	ND<210	ND<270	ND<5
N-Nitroso-di-n-propylamine	NA	ND<240	ND<300	ND<210	ND<270	ND<5
N-Nitrosodiphenylamine	NA	ND<240	ND<300	ND<210	ND<270	ND<5
Naphthalene	12,000	ND<240	ND<300	ND<210	ND<270	ND<5
Nitrobenzene[a]	NA	ND<240	ND<300	ND<210	ND<270	ND<5
Pentachlorophenol	800	ND<460	ND<580	ND<410	ND<520	ND<10
Phenanthrene	100,000	ND<240	330	ND<210	ND<270	ND<5
Phenol	330	ND<240	ND<300	ND<210	ND<270	ND<5
Pyrene	100,000	ND<240	760	ND<210	ND<270	ND<5

Notes:
All samples were collected on June 25, 2021

	= Compound exceeds the NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives, effective December 14, 2006
SVOCs	= Semi-Volatile Organic Compounds
EPA	= United States Environmental Protection Agency
ug/kg	= Micrograms per kilogram
in.bgs	= Inches below ground surface
ft.bgs	= Feet below ground surface
ND	= Not detected. Where an analyte is not detected, a reporting limit is given.
ND (<#)	= Less than the method detection limit of #
NYCRR	= New York Codes, Rules and Regulations
NA	= No regulatory standard specified
SCOs	= Soil Cleanup Objectives
[a]	= Associated CCV outside of control limits high, sample was ND (refer to laboratory analytical report)
**	= Field Equipment Blank matrix is water measured in micrograms per liter (µg/L)
Parentheses ( )	= Duplicate Sample
PID	= Photoionization Detector
ppmv	= Parts per million by volume

Table 3

Soil Analytical Results (Metals)
June 25, 2021
Former TRW Aeronautical Systems Facility
Utica, New York

Location	NYCRR Part 375-6.8(a) Unrestricted Use SCOs (mg/kg)	SB-112	SB-112	SB-112	SB-114	SB-114	SB-114	SB-115	SB-115	SB-115	Field Equipment Blank*
PID Screening Value (ppmv)		0.3	0.3	0.3	0.8	0.4	0.3	0.2	0.5	1.4	NA
Sample Depth		(0-2 in.bgs)	(0-2 ft.bgs)	(2-3 ft.bgs)	(0-2 in.bgs)	(0-2 ft.bgs)	(2-4 ft.bgs)	(0-2 in.bgs)	(0-2 ft.bgs)	(2-2.5 ft.bgs)	NA
Metals via EPA Method 6010C											
Aluminum	NA	15,000	15,000	15,000	17,000 (10,000)	13,000	1,400	13,000	15,000	17,000	ND<0.20
Antimony	NA	ND<19	ND<18	ND<18	ND<23 (ND<20)	ND<19	ND<22	ND<28	ND<19	ND<24	ND<0.020
Arsenic	13	12	**27**	12	11 (7.0)	8.7	ND<2.9	11	12	**14**	ND<0.015
Barium[b]	350	80	97	66	99 (87)	69	6.0	130	99	120	ND<0.0020
Beryllium	7.2	0.53	0.57	0.57	0.68 (0.41)	0.5	ND<0.29	0.56	0.58	0.68	ND<0.0020
Cadmium	2.5	0.30	0.31	ND<0.24	0.40 (0.40)	ND<0.25	ND<0.29	0.52	0.36	0.53	ND<0.0020
Calcium	NA	1,500	1,500	1,000	2,700 (5,800)	550	89	7,600	1,900	3,100	ND<0.50
Chromium	30	20	17	18	21 (14)	15	1.5	18	19	21	ND<0.0040
Cobalt[a]	NA	9.9	8.7	8.4	11 (6.6)	7.9	ND<0.72	9.2	10	12	ND<0.0040
Copper	50	26	23	46	29 (19)	21	1.9	31	32	33	ND<0.010
Iron[a]	NA	31,000	31,000	32,000	31,000 (18,000)	24,000	1,700	29,000	32,000	35,000	ND<0.050
Lead	63	45	33	22	52 (33)	22	ND<1.4	55	47	61	ND<0.010
Magnesium	NA	3,100	3,200	4,200	3,900 (2,300)	2,800	290	3,100	3,200	3,600	ND<0.20
Manganese	1600	1,600	1,600	1,200	**1,900** (1,200)	1,200	54	**1,900**	**1,700**	**2,100**	ND<0.0030
Nickel	30	26	19	24	28 (22)	17	ND<7.2	**33**	27	**35**	ND<0.010
Potassium	NA	1,600	1,300	1,100	1,800 (1,300)	1,200	260	1,700	1,500	2,000	ND<0.50
Selenium	3.9	ND<5.1	ND<4.9	ND<4.8	ND<6.1 (ND<5.2)	ND<5.0	ND<5.8	ND<7.5	ND<5.0	ND<6.4	ND<0.025
Silver	2	ND<0.77	ND<0.74	ND<0.72	ND<0.92 (ND<0.79)	ND<0.74	ND<0.87	ND<1.1	ND<0.76	ND<0.96	ND<0.0060
Sodium	NA	ND<180	ND<170	ND<170	ND<220 (ND<180)	ND<170	ND<200	ND<260	ND<180	ND<220	ND<1.0
Thallium	NA	ND<7.7	ND<7.4	ND<7.2	ND<9.2 (ND<7.9)	ND<7.4	ND<8.7	ND<11	ND<7.6	ND<9.6	ND<0.020
Vanadium	NA	30	28	23	32 (20)	24	2.1	28	29	36	ND<0.0050
Zinc	109	97	94	**110**	**130** (78)	71	6.3	**120**	**110**	**120**	ND<0.010
Mercury[c]	0.18	0.12	0.089	**0.20**	0.1 (0.077)	0.065	0.065	0.14	0.12	0.13	ND<0.00020

Notes:

All samples were collected on June 25, 2021

= Compound exceeds the NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives, effective December 14, 2

mg/kg = Milligrams per kilogram
in.bgs = Inches below ground surface
ft.bgs = Feet below ground surface
ND = Not detected. Where an analyte is not detected, a reporting limit is given.
ND (<#) = Less than the method detection limit of #
NA = No regulatory standard specified
NYCRR = New York Codes, Rules and Regulations
SCOs = Soil Cleanup Objectives
[a] = SCO was not included in the NYCRR Part 375-6.8 Restricted Use SCOs and therefore, NYSDEC CP-51=New York Department of Environmental Conservation (NYSDEC) Final Number 51 Table 1 Supplemental Soil Cleanup Objectives (SSCO) were used
[b] = Interference Check Standard (ICSA and/or ICSAB) is outside acceptance limits, high biased (see laboratory report)
[c] = Mercury was sampled via Method 7471B
Parentheses ( ) = Duplicate Sample
PID = Photoionization Detector
ppmv = Parts per million by volume
* = Field Equipment Blank matrix is water measured in micrograms per liter (µg/L)

Attachment A – Laboratory Analytical Report

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 480-186604-1
Client Project/Site: 11224293, Utica J6105, SSOW 016

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

Attn: Ms. Sue Scrocchi

Denise D Heckler

Authorized for release by:
7/12/2021 3:29:10 PM

Denise Heckler, Project Manager II
(330)966-9477
Denise.Heckler@Eurofinset.com

Table of Contents

Definitions/Glossary

Client: GHD Services Inc.
Job ID: 480-186604-1
Project/Site: 11224293, Utica J6105, SSOW 016

Qualifiers

GC/MS Semi VOA

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

Metals

Qualifier	Qualifier Description
^6+	Interference Check Standard (ICSA and/or ICSAB) is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-186604-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative
480-186604-1

Comments
A VOC trip blank was received with the samples. The trip blank was not analyzed as there were no VOC samples.

Receipt
The samples were received on 6/26/2021 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.9º C.

GC/MS Semi VOA
Method 8270D: The continuing calibration verification (CCV) associated with batch 480-587913 recovered above the upper control limit for Atrazine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: J6105-Field Equipment Blank (480-186604-4).

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-587913 recovered outside acceptance criteria, low biased, for 2,4-Dinitrophenol and Pentachlorophenol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: The following sample was diluted due to color and appearance: J6105-SB-114 (0-2inches) (480-186604-1). Elevated reporting limits (RL) are provided.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-588584 recovered above the upper control limit for Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: J6105-SB-114 (0-2inches) (480-186604-1), J6105-Field Duplicate (480-186604-2), J6105-SB-114 (0-2feet) (480-186604-3), J6105-SB-114 (2-4 feet) (480-186604-5), J6105-SB-114 (2-4 feet) (480-186604-5[MS]), J6105-SB-114 (2-4 feet) (480-186604-5[MSD]), J6105-SB-112 (0-2 inches) (480-186604-6), J6105-SB-112 (0-2 feet) (480-186604-7), J6105-SB-112 (2-3 feet) (480-186604-8), J6105-SB-115 (0-2 inches) (480-186604-9), J6105-SB-115 (0-2 feet) (480-186604-10) and J6105-SB-115 (2-2.5 feet) (480-186604-11).

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

Metals
Method 6010C: The interference check standard solution (ICSA) associated with the following samples showed results for Barium at a level greater than 2 times the limit of detection (LOD). It is believed that the solution contains trace impurities of this element / these elements and the results are not due to matrix interference. These results are consistent with those found by the manufacturer of the ICSA solution. J6105-Field Equipment Blank (480-186604-4), (LCS 480-587267/2-A), (LCSD 480-587267/3-A) and (MB 480-587267/1-A)

Method 6010C: The interference check standard solution (ICSA) associated with the following samples showed results for Barium at a level greater than 2 times the limit of detection (LOD). It is believed that the solution contains trace impurities of this element and the results are not due to matrix interference. These results are consistent with those found by the manufacturer of the ICSA solution. J6105-SB-114 (0-2inches) (480-186604-1), J6105-Field Duplicate (480-186604-2), J6105-SB-114 (0-2feet) (480-186604-3), J6105-SB-114 (2-4 feet) (480-186604-5), J6105-SB-114 (2-4 feet) (480-186604-5[MS]), J6105-SB-114 (2-4 feet) (480-186604-5[MSD]), J6105-SB-112 (0-2 inches) (480-186604-6), J6105-SB-112 (0-2 feet) (480-186604-7), J6105-SB-112 (2-3 feet) (480-186604-8), J6105-SB-115 (0-2 inches) (480-186604-9), J6105-SB-115 (0-2 feet) (480-186604-10), J6105-SB-115 (2-2.5 feet) (480-186604-11), (LCSSRM 480-587922/2-A), (MB 480-587922/1-A), (480-186604-B-5-A PDS) and (480-186604-B-5-A SD ^5)

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

Organic Prep
Method 3550C: The following samples: J6105-SB-114 (2-4 feet) (480-186604-5), J6105-SB-114 (2-4 feet) (480-186604-5[MS]) and J6105-SB-115 (2-2.5 feet) (480-186604-11) were decanted prior to preparation.

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

Detection Summary

Client: GHD Services Inc.
Project/Site: 11224293, Utica J6105, SSOW 016

Job ID: 480-186604-1

Client Sample ID: J6105-SB-114 (0-2inches) — Lab Sample ID: 480-186604-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Aluminum	17000		15		mg/Kg	1	☼	6010C	Total/NA
Arsenic	11		3.1		mg/Kg	1	☼	6010C	Total/NA
Barium	99	^6+	0.77		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.68		0.31		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.40		0.31		mg/Kg	1	☼	6010C	Total/NA
Calcium	2700		77		mg/Kg	1	☼	6010C	Total/NA
Chromium	21		0.77		mg/Kg	1	☼	6010C	Total/NA
Cobalt	11		0.77		mg/Kg	1	☼	6010C	Total/NA
Copper	29		1.5		mg/Kg	1	☼	6010C	Total/NA
Iron	31000		15		mg/Kg	1	☼	6010C	Total/NA
Lead	52		1.5		mg/Kg	1	☼	6010C	Total/NA
Magnesium	3900		31		mg/Kg	1	☼	6010C	Total/NA
Manganese	1900		0.31		mg/Kg	1	☼	6010C	Total/NA
Nickel	28		7.7		mg/Kg	1	☼	6010C	Total/NA
Potassium	1800		46		mg/Kg	1	☼	6010C	Total/NA
Vanadium	32		0.77		mg/Kg	1	☼	6010C	Total/NA
Zinc	130		3.1		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.10		0.033		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: J6105-Field Duplicate — Lab Sample ID: 480-186604-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	220		220		ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	280		220		ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	380		220		ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	240		220		ug/Kg	1	☼	8270D	Total/NA
Chrysene	270		220		ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	600		220		ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	270		220		ug/Kg	1	☼	8270D	Total/NA
Pyrene	500		220		ug/Kg	1	☼	8270D	Total/NA
Aluminum	10000		13		mg/Kg	1	☼	6010C	Total/NA
Arsenic	7.0		2.6		mg/Kg	1	☼	6010C	Total/NA
Barium	87	^6+	0.66		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.41		0.26		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.40		0.26		mg/Kg	1	☼	6010C	Total/NA
Calcium	5800		66		mg/Kg	1	☼	6010C	Total/NA
Chromium	14		0.66		mg/Kg	1	☼	6010C	Total/NA
Cobalt	6.6		0.66		mg/Kg	1	☼	6010C	Total/NA
Copper	19		1.3		mg/Kg	1	☼	6010C	Total/NA
Iron	18000		13		mg/Kg	1	☼	6010C	Total/NA
Lead	33		1.3		mg/Kg	1	☼	6010C	Total/NA
Magnesium	2300		26		mg/Kg	1	☼	6010C	Total/NA
Manganese	1200		0.26		mg/Kg	1	☼	6010C	Total/NA
Nickel	22		6.6		mg/Kg	1	☼	6010C	Total/NA
Potassium	1300		39		mg/Kg	1	☼	6010C	Total/NA
Vanadium	20		0.66		mg/Kg	1	☼	6010C	Total/NA
Zinc	78		2.6		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.077		0.030		mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Project/Site: 11224293, Utica J6105, SSOW 016

Job ID: 480-186604-1

Client Sample ID: J6105-SB-114 (0-2feet) — Lab Sample ID: 480-186604-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Aluminum	13000		12		mg/Kg	1	☼	6010C	Total/NA
Arsenic	8.7		2.5		mg/Kg	1	☼	6010C	Total/NA
Barium	69	^6+	0.62		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.50		0.25		mg/Kg	1	☼	6010C	Total/NA
Calcium	550		62		mg/Kg	1	☼	6010C	Total/NA
Chromium	15		0.62		mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.9		0.62		mg/Kg	1	☼	6010C	Total/NA
Copper	21		1.2		mg/Kg	1	☼	6010C	Total/NA
Iron	24000		12		mg/Kg	1	☼	6010C	Total/NA
Lead	22		1.2		mg/Kg	1	☼	6010C	Total/NA
Magnesium	2800		25		mg/Kg	1	☼	6010C	Total/NA
Manganese	1200		0.25		mg/Kg	1	☼	6010C	Total/NA
Nickel	17		6.2		mg/Kg	1	☼	6010C	Total/NA
Potassium	1200		37		mg/Kg	1	☼	6010C	Total/NA
Vanadium	24		0.62		mg/Kg	1	☼	6010C	Total/NA
Zinc	71		2.5		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.065		0.029		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: J6105-Field Equipment Blank — Lab Sample ID: 480-186604-4

No Detections.

Client Sample ID: J6105-SB-114 (2-4 feet) — Lab Sample ID: 480-186604-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Aluminum	1400	F1 F2	14		mg/Kg	1	☼	6010C	Total/NA
Barium	6.0	^6+ F1 F2	0.72		mg/Kg	1	☼	6010C	Total/NA
Calcium	89		72		mg/Kg	1	☼	6010C	Total/NA
Chromium	1.5		0.72		mg/Kg	1	☼	6010C	Total/NA
Copper	1.9		1.4		mg/Kg	1	☼	6010C	Total/NA
Iron	1700	F1 F2	14		mg/Kg	1	☼	6010C	Total/NA
Magnesium	290	F1 F2	29		mg/Kg	1	☼	6010C	Total/NA
Manganese	54	F1 F2	0.29		mg/Kg	1	☼	6010C	Total/NA
Potassium	260	F1 F2	43		mg/Kg	1	☼	6010C	Total/NA
Vanadium	2.1		0.72		mg/Kg	1	☼	6010C	Total/NA
Zinc	6.3	F1 F2	2.9		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.065		0.029		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: J6105-SB-112 (0-2 inches) — Lab Sample ID: 480-186604-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	290		220		ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	430		220		ug/Kg	1	☼	8270D	Total/NA
Pyrene	350		220		ug/Kg	1	☼	8270D	Total/NA
Aluminum	15000		13		mg/Kg	1	☼	6010C	Total/NA
Arsenic	12		2.6		mg/Kg	1	☼	6010C	Total/NA
Barium	80	^6+	0.64		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.53		0.26		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.30		0.26		mg/Kg	1	☼	6010C	Total/NA
Calcium	1500		64		mg/Kg	1	☼	6010C	Total/NA
Chromium	20		0.64		mg/Kg	1	☼	6010C	Total/NA
Cobalt	9.9		0.64		mg/Kg	1	☼	6010C	Total/NA
Copper	26		1.3		mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: J6105-SB-112 (0-2 inches) (Continued) — Lab Sample ID: 480-186604-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Iron	31000		13		mg/Kg	1	☼	6010C	Total/NA
Lead	45		1.3		mg/Kg	1	☼	6010C	Total/NA
Magnesium	3100		26		mg/Kg	1	☼	6010C	Total/NA
Manganese	1600		0.26		mg/Kg	1	☼	6010C	Total/NA
Nickel	26		6.4		mg/Kg	1	☼	6010C	Total/NA
Potassium	1600		38		mg/Kg	1	☼	6010C	Total/NA
Vanadium	30		0.64		mg/Kg	1	☼	6010C	Total/NA
Zinc	97		2.6		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.12		0.026		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: J6105-SB-112 (0-2 feet) — Lab Sample ID: 480-186604-7

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Aluminum	15000		12		mg/Kg	1	☼	6010C	Total/NA
Arsenic	27		2.5		mg/Kg	1	☼	6010C	Total/NA
Barium	97	^6+	0.62		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.57		0.25		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.31		0.25		mg/Kg	1	☼	6010C	Total/NA
Calcium	1500		62		mg/Kg	1	☼	6010C	Total/NA
Chromium	17		0.62		mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.7		0.62		mg/Kg	1	☼	6010C	Total/NA
Copper	23		1.2		mg/Kg	1	☼	6010C	Total/NA
Iron	31000		12		mg/Kg	1	☼	6010C	Total/NA
Lead	33		1.2		mg/Kg	1	☼	6010C	Total/NA
Magnesium	3200		25		mg/Kg	1	☼	6010C	Total/NA
Manganese	1600		0.25		mg/Kg	1	☼	6010C	Total/NA
Nickel	19		6.2		mg/Kg	1	☼	6010C	Total/NA
Potassium	1300		37		mg/Kg	1	☼	6010C	Total/NA
Vanadium	28		0.62		mg/Kg	1	☼	6010C	Total/NA
Zinc	94		2.5		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.089		0.025		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: J6105-SB-112 (2-3 feet) — Lab Sample ID: 480-186604-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Aluminum	15000		12		mg/Kg	1	☼	6010C	Total/NA
Arsenic	12		2.4		mg/Kg	1	☼	6010C	Total/NA
Barium	66	^6+	0.60		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.57		0.24		mg/Kg	1	☼	6010C	Total/NA
Calcium	1000		60		mg/Kg	1	☼	6010C	Total/NA
Chromium	18		0.60		mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.4		0.60		mg/Kg	1	☼	6010C	Total/NA
Copper	46		1.2		mg/Kg	1	☼	6010C	Total/NA
Iron	32000		12		mg/Kg	1	☼	6010C	Total/NA
Lead	22		1.2		mg/Kg	1	☼	6010C	Total/NA
Magnesium	4200		24		mg/Kg	1	☼	6010C	Total/NA
Manganese	1200		0.24		mg/Kg	1	☼	6010C	Total/NA
Nickel	24		6.0		mg/Kg	1	☼	6010C	Total/NA
Potassium	1100		36		mg/Kg	1	☼	6010C	Total/NA
Vanadium	23		0.60		mg/Kg	1	☼	6010C	Total/NA
Zinc	110		2.4		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.20		0.021		mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: J6105-SB-115 (0-2 inches) — Lab Sample ID: 480-186604-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	340		300		ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	360		300		ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	530		300		ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	330		300		ug/Kg	1	☼	8270D	Total/NA
Chrysene	420		300		ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	970		300		ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	330		300		ug/Kg	1	☼	8270D	Total/NA
Pyrene	760		300		ug/Kg	1	☼	8270D	Total/NA
Aluminum	13000		19		mg/Kg	1	☼	6010C	Total/NA
Arsenic	11		3.7		mg/Kg	1	☼	6010C	Total/NA
Barium	130	^6+	0.94		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.56		0.37		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.52		0.37		mg/Kg	1	☼	6010C	Total/NA
Calcium	7600		94		mg/Kg	1	☼	6010C	Total/NA
Chromium	18		0.94		mg/Kg	1	☼	6010C	Total/NA
Cobalt	9.2		0.94		mg/Kg	1	☼	6010C	Total/NA
Copper	31		1.9		mg/Kg	1	☼	6010C	Total/NA
Iron	29000		19		mg/Kg	1	☼	6010C	Total/NA
Lead	55		1.9		mg/Kg	1	☼	6010C	Total/NA
Magnesium	3100		37		mg/Kg	1	☼	6010C	Total/NA
Manganese	1900		0.37		mg/Kg	1	☼	6010C	Total/NA
Nickel	33		9.4		mg/Kg	1	☼	6010C	Total/NA
Potassium	1700		56		mg/Kg	1	☼	6010C	Total/NA
Vanadium	28		0.94		mg/Kg	1	☼	6010C	Total/NA
Zinc	120		3.7		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.14		0.035		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: J6105-SB-115 (0-2 feet) — Lab Sample ID: 480-186604-10

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	210		210		ug/Kg	1	☼	8270D	Total/NA
Aluminum	15000		13		mg/Kg	1	☼	6010C	Total/NA
Arsenic	12		2.5		mg/Kg	1	☼	6010C	Total/NA
Barium	99	^6+	0.63		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.58		0.25		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.36		0.25		mg/Kg	1	☼	6010C	Total/NA
Calcium	1900		63		mg/Kg	1	☼	6010C	Total/NA
Chromium	19		0.63		mg/Kg	1	☼	6010C	Total/NA
Cobalt	10		0.63		mg/Kg	1	☼	6010C	Total/NA
Copper	32		1.3		mg/Kg	1	☼	6010C	Total/NA
Iron	32000		13		mg/Kg	1	☼	6010C	Total/NA
Lead	47		1.3		mg/Kg	1	☼	6010C	Total/NA
Magnesium	3200		25		mg/Kg	1	☼	6010C	Total/NA
Manganese	1700		0.25		mg/Kg	1	☼	6010C	Total/NA
Nickel	27		6.3		mg/Kg	1	☼	6010C	Total/NA
Potassium	1500		38		mg/Kg	1	☼	6010C	Total/NA
Vanadium	29		0.63		mg/Kg	1	☼	6010C	Total/NA
Zinc	110		2.5		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.12		0.029		mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Project/Site: 11224293, Utica J6105, SSOW 016

Job ID: 480-186604-1

Client Sample ID: J6105-SB-115 (2-2.5 feet)

Lab Sample ID: 480-186604-11

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Aluminum	17000		16		mg/Kg	1	☼	6010C	Total/NA
Arsenic	14		3.2		mg/Kg	1	☼	6010C	Total/NA
Barium	120	^6+	0.80		mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.68		0.32		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.53		0.32		mg/Kg	1	☼	6010C	Total/NA
Calcium	3100		80		mg/Kg	1	☼	6010C	Total/NA
Chromium	21		0.80		mg/Kg	1	☼	6010C	Total/NA
Cobalt	12		0.80		mg/Kg	1	☼	6010C	Total/NA
Copper	33		1.6		mg/Kg	1	☼	6010C	Total/NA
Iron	35000		16		mg/Kg	1	☼	6010C	Total/NA
Lead	61		1.6		mg/Kg	1	☼	6010C	Total/NA
Magnesium	3600		32		mg/Kg	1	☼	6010C	Total/NA
Manganese	2100		0.32		mg/Kg	1	☼	6010C	Total/NA
Nickel	35		8.0		mg/Kg	1	☼	6010C	Total/NA
Potassium	2000		48		mg/Kg	1	☼	6010C	Total/NA
Vanadium	36		0.80		mg/Kg	1	☼	6010C	Total/NA
Zinc	120		3.2		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.13		0.033		mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: GHD Services Inc.
Job ID: 480-186604-1
Project/Site: 11224293, Utica J6105, SSOW 016

Client Sample ID: J6105-SB-114 (0-2inches)
Lab Sample ID: 480-186604-1
Date Collected: 06/25/21 13:00
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 65.3

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
bis (2-chloroisopropyl) ether	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
2,4,5-Trichlorophenol	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
2,4,6-Trichlorophenol	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
2,4-Dichlorophenol	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
2,4-Dimethylphenol	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
2,4-Dinitrophenol	13000	U	13000		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
2,4-Dinitrotoluene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
2,6-Dinitrotoluene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
2-Chloronaphthalene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
2-Chlorophenol	2500	U	2500		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
2-Methylphenol	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
2-Methylnaphthalene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
2-Nitroaniline	2500	U	2500		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
2-Nitrophenol	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
3,3'-Dichlorobenzidine	2500	U	2500		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
3-Nitroaniline	2500	U	2500		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
4,6-Dinitro-2-methylphenol	2500	U	2500		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
4-Bromophenyl phenyl ether	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
4-Chloro-3-methylphenol	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
4-Chloroaniline	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
4-Chlorophenyl phenyl ether	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
4-Methylphenol	2500	U	2500		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
4-Nitroaniline	2500	U	2500		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
4-Nitrophenol	2500	U	2500		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Acenaphthene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Acenaphthylene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Acetophenone	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Anthracene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Atrazine	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Benzaldehyde	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Benzo[a]anthracene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Benzo[a]pyrene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Benzo[b]fluoranthene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Benzo[g,h,i]perylene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Benzo[k]fluoranthene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Bis(2-chloroethoxy)methane	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Bis(2-chloroethyl)ether	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Bis(2-ethylhexyl) phthalate	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Butyl benzyl phthalate	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Caprolactam	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Carbazole	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Chrysene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Dibenz(a,h)anthracene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Di-n-butyl phthalate	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Di-n-octyl phthalate	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Dibenzofuran	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Diethyl phthalate	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Dimethyl phthalate	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5

Client Sample ID: J6105-SB-114 (0-2inches)
Lab Sample ID: 480-186604-1

Date Collected: 06/25/21 13:00
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 65.3

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Fluorene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Hexachlorobenzene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Hexachlorobutadiene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Hexachlorocyclopentadiene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Hexachloroethane	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Indeno[1,2,3-cd]pyrene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Isophorone	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
N-Nitrosodi-n-propylamine	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
N-Nitrosodiphenylamine	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Naphthalene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Nitrobenzene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Pentachlorophenol	2500	U	2500		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Phenanthrene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Phenol	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5
Pyrene	1300	U	1300		ug/Kg	☼	07/01/21 07:52	07/09/21 21:53	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*85*		*53 - 120*	*07/01/21 07:52*	*07/09/21 21:53*	*5*
Phenol-d5 (Surr)	*82*		*54 - 120*	*07/01/21 07:52*	*07/09/21 21:53*	*5*
p-Terphenyl-d14 (Surr)	*100*		*79 - 130*	*07/01/21 07:52*	*07/09/21 21:53*	*5*
2,4,6-Tribromophenol (Surr)	*109*		*54 - 120*	*07/01/21 07:52*	*07/09/21 21:53*	*5*
2-Fluorobiphenyl	*90*		*60 - 120*	*07/01/21 07:52*	*07/09/21 21:53*	*5*
2-Fluorophenol (Surr)	*76*		*52 - 120*	*07/01/21 07:52*	*07/09/21 21:53*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**17000**		15		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Antimony	23	U	23		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Arsenic	**11**		3.1		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Barium	**99**	**^6+**	0.77		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Beryllium	**0.68**		0.31		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Cadmium	**0.40**		0.31		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Calcium	**2700**		77		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Chromium	**21**		0.77		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Cobalt	**11**		0.77		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Copper	**29**		1.5		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Iron	**31000**		15		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Lead	**52**		1.5		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Magnesium	**3900**		31		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Manganese	**1900**		0.31		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Nickel	**28**		7.7		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Potassium	**1800**		46		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Selenium	6.1	U	6.1		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Silver	0.92	U	0.92		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Sodium	220	U	220		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Thallium	9.2	U	9.2		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Vanadium	**32**		0.77		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1
Zinc	**130**		3.1		mg/Kg	☼	07/02/21 11:14	07/06/21 19:14	1

Client Sample ID: J6105-SB-114 (0-2inches)
Lab Sample ID: 480-186604-1

Date Collected: 06/25/21 13:00
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 65.3

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.10**		0.033		mg/Kg	☼	07/02/21 14:10	07/02/21 16:25	1

Client Sample ID: J6105-Field Duplicate
Lab Sample ID: 480-186604-2

Date Collected: 06/25/21 00:00
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 78.3

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
bis (2-chloroisopropyl) ether	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
2,4,5-Trichlorophenol	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
2,4,6-Trichlorophenol	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
2,4-Dichlorophenol	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
2,4-Dimethylphenol	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
2,4-Dinitrophenol	2100	U	2100		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
2,4-Dinitrotoluene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
2,6-Dinitrotoluene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
2-Chloronaphthalene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
2-Chlorophenol	420	U	420		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
2-Methylphenol	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
2-Methylnaphthalene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
2-Nitroaniline	420	U	420		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
2-Nitrophenol	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
3,3'-Dichlorobenzidine	420	U	420		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
3-Nitroaniline	420	U	420		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
4,6-Dinitro-2-methylphenol	420	U	420		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
4-Bromophenyl phenyl ether	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
4-Chloro-3-methylphenol	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
4-Chloroaniline	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
4-Chlorophenyl phenyl ether	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
4-Methylphenol	420	U	420		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
4-Nitroaniline	420	U	420		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
4-Nitrophenol	420	U	420		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Acenaphthene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Acenaphthylene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Acetophenone	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Anthracene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Atrazine	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Benzaldehyde	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Benzo[a]anthracene	**220**		220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Benzo[a]pyrene	**280**		220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Benzo[b]fluoranthene	**380**		220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Benzo[g,h,i]perylene	**240**		220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Benzo[k]fluoranthene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Bis(2-chloroethoxy)methane	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Bis(2-chloroethyl)ether	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Bis(2-ethylhexyl) phthalate	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Butyl benzyl phthalate	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Caprolactam	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Carbazole	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1

Client Sample ID: J6105-Field Duplicate
Lab Sample ID: 480-186604-2

Date Collected: 06/25/21 00:00
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 78.3

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**270**		220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Dibenz(a,h)anthracene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Di-n-butyl phthalate	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Di-n-octyl phthalate	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Dibenzofuran	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Diethyl phthalate	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Dimethyl phthalate	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Fluoranthene	**600**		220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Fluorene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Hexachlorobenzene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Hexachlorobutadiene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Hexachlorocyclopentadiene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Hexachloroethane	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Indeno[1,2,3-cd]pyrene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Isophorone	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
N-Nitrosodi-n-propylamine	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
N-Nitrosodiphenylamine	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Naphthalene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Nitrobenzene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Pentachlorophenol	420	U	420		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Phenanthrene	**270**		220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Phenol	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1
Pyrene	**500**		220		ug/Kg	☼	07/01/21 07:52	07/09/21 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*80*		*53 - 120*	*07/01/21 07:52*	*07/09/21 22:17*	*1*
Phenol-d5 (Surr)	*80*		*54 - 120*	*07/01/21 07:52*	*07/09/21 22:17*	*1*
p-Terphenyl-d14 (Surr)	*99*		*79 - 130*	*07/01/21 07:52*	*07/09/21 22:17*	*1*
2,4,6-Tribromophenol (Surr)	*103*		*54 - 120*	*07/01/21 07:52*	*07/09/21 22:17*	*1*
2-Fluorobiphenyl	*80*		*60 - 120*	*07/01/21 07:52*	*07/09/21 22:17*	*1*
2-Fluorophenol (Surr)	*79*		*52 - 120*	*07/01/21 07:52*	*07/09/21 22:17*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**10000**		13		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Antimony	20	U	20		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Arsenic	**7.0**		2.6		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Barium	**87**	**^6+**	0.66		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Beryllium	**0.41**		0.26		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Cadmium	**0.40**		0.26		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Calcium	**5800**		66		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Chromium	**14**		0.66		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Cobalt	**6.6**		0.66		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Copper	**19**		1.3		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Iron	**18000**		13		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Lead	**33**		1.3		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Magnesium	**2300**		26		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Manganese	**1200**		0.26		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Nickel	**22**		6.6		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Potassium	**1300**		39		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1

Client Sample ID: J6105-Field Duplicate — Lab Sample ID: 480-186604-2

Date Collected: 06/25/21 00:00 — **Matrix: Solid**
Date Received: 06/26/21 10:00 — **Percent Solids: 78.3**

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Selenium	5.2	U	5.2		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Silver	0.79	U	0.79		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Sodium	180	U	180		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Thallium	7.9	U	7.9		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Vanadium	**20**		0.66		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1
Zinc	**78**		2.6		mg/Kg	☼	07/02/21 11:14	07/06/21 19:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.077**		0.030		mg/Kg	☼	07/02/21 14:10	07/02/21 16:26	1

Client Sample ID: J6105-SB-114 (0-2feet) — Lab Sample ID: 480-186604-3

Date Collected: 06/25/21 13:25 — **Matrix: Solid**
Date Received: 06/26/21 10:00 — **Percent Solids: 84.9**

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
bis (2-chloroisopropyl) ether	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
2,4,5-Trichlorophenol	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
2,4,6-Trichlorophenol	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
2,4-Dichlorophenol	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
2,4-Dimethylphenol	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
2,4-Dinitrophenol	2000	U	2000		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
2,4-Dinitrotoluene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
2,6-Dinitrotoluene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
2-Chloronaphthalene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
2-Chlorophenol	390	U	390		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
2-Methylphenol	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
2-Methylnaphthalene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
2-Nitroaniline	390	U	390		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
2-Nitrophenol	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
3,3'-Dichlorobenzidine	390	U	390		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
3-Nitroaniline	390	U	390		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
4,6-Dinitro-2-methylphenol	390	U	390		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
4-Bromophenyl phenyl ether	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
4-Chloro-3-methylphenol	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
4-Chloroaniline	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
4-Chlorophenyl phenyl ether	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
4-Methylphenol	390	U	390		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
4-Nitroaniline	390	U	390		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
4-Nitrophenol	390	U	390		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Acenaphthene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Acenaphthylene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Acetophenone	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Anthracene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Atrazine	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Benzaldehyde	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Benzo[a]anthracene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Benzo[a]pyrene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1

Client: GHD Services Inc.
Project/Site: 11224293, Utica J6105, SSOW 016

Job ID: 480-186604-1

Client Sample ID: J6105-SB-114 (0-2feet)
Date Collected: 06/25/21 13:25
Date Received: 06/26/21 10:00

Lab Sample ID: 480-186604-3
Matrix: Solid
Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Benzo[g,h,i]perylene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Benzo[k]fluoranthene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Bis(2-chloroethoxy)methane	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Bis(2-chloroethyl)ether	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Bis(2-ethylhexyl) phthalate	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Butyl benzyl phthalate	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Caprolactam	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Carbazole	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Chrysene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Dibenz(a,h)anthracene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Di-n-butyl phthalate	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Di-n-octyl phthalate	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Dibenzofuran	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Diethyl phthalate	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Dimethyl phthalate	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Fluoranthene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Fluorene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Hexachlorobenzene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Hexachlorobutadiene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Hexachlorocyclopentadiene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Hexachloroethane	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Indeno[1,2,3-cd]pyrene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Isophorone	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
N-Nitrosodi-n-propylamine	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
N-Nitrosodiphenylamine	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Naphthalene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Nitrobenzene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Pentachlorophenol	390	U	390		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Phenanthrene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Phenol	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1
Pyrene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 22:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*84*		*53 - 120*	*07/01/21 07:52*	*07/09/21 22:40*	*1*
Phenol-d5 (Surr)	*82*		*54 - 120*	*07/01/21 07:52*	*07/09/21 22:40*	*1*
p-Terphenyl-d14 (Surr)	*102*		*79 - 130*	*07/01/21 07:52*	*07/09/21 22:40*	*1*
2,4,6-Tribromophenol (Surr)	*101*		*54 - 120*	*07/01/21 07:52*	*07/09/21 22:40*	*1*
2-Fluorobiphenyl	*85*		*60 - 120*	*07/01/21 07:52*	*07/09/21 22:40*	*1*
2-Fluorophenol (Surr)	*80*		*52 - 120*	*07/01/21 07:52*	*07/09/21 22:40*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**13000**		12		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Antimony	19	U	19		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Arsenic	**8.7**		2.5		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Barium	**69**	**^6+**	0.62		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Beryllium	**0.50**		0.25		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Cadmium	0.25	U	0.25		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Calcium	**550**		62		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1

Client Sample ID: J6105-SB-114 (0-2feet)
Lab Sample ID: 480-186604-3

Date Collected: 06/25/21 13:25
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 84.9

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**15**		0.62		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Cobalt	**7.9**		0.62		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Copper	**21**		1.2		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Iron	**24000**		12		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Lead	**22**		1.2		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Magnesium	**2800**		25		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Manganese	**1200**		0.25		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Nickel	**17**		6.2		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Potassium	**1200**		37		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Selenium	5.0	U	5.0		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Silver	0.74	U	0.74		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Sodium	170	U	170		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Thallium	7.4	U	7.4		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Vanadium	**24**		0.62		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1
Zinc	**71**		2.5		mg/Kg	☼	07/02/21 11:14	07/06/21 19:22	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.065**		0.029		mg/Kg	☼	07/02/21 14:10	07/02/21 16:28	1

Client Sample ID: J6105-Field Equipment Blank
Lab Sample ID: 480-186604-4

Date Collected: 06/25/21 13:30
Matrix: Water
Date Received: 06/26/21 10:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
2,4-Dichlorophenol	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
2,4-Dimethylphenol	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
2,4-Dinitrophenol	10	U	10		ug/L		06/29/21 09:12	07/03/21 04:03	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
2-Chloronaphthalene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
2-Chlorophenol	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
2-Methylphenol	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
2-Methylnaphthalene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
2-Nitroaniline	10	U	10		ug/L		06/29/21 09:12	07/03/21 04:03	1
2-Nitrophenol	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
3-Nitroaniline	10	U	10		ug/L		06/29/21 09:12	07/03/21 04:03	1
4,6-Dinitro-2-methylphenol	10	U	10		ug/L		06/29/21 09:12	07/03/21 04:03	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
4-Chloroaniline	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
4-Methylphenol	10	U	10		ug/L		06/29/21 09:12	07/03/21 04:03	1
4-Nitroaniline	10	U	10		ug/L		06/29/21 09:12	07/03/21 04:03	1

Client: GHD Services Inc.
Job ID: 480-186604-1
Project/Site: 11224293, Utica J6105, SSOW 016

Client Sample ID: J6105-Field Equipment Blank
Lab Sample ID: 480-186604-4
Date Collected: 06/25/21 13:30
Matrix: Water
Date Received: 06/26/21 10:00

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	10	U	10		ug/L		06/29/21 09:12	07/03/21 04:03	1
Acenaphthene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Acenaphthylene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Acetophenone	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Anthracene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Atrazine	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Benzaldehyde	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Benzo[a]anthracene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Benzo[a]pyrene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Benzo[b]fluoranthene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Benzo[g,h,i]perylene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Benzo[k]fluoranthene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Butyl benzyl phthalate	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Caprolactam	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Carbazole	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Chrysene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Dibenz(a,h)anthracene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Di-n-butyl phthalate	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Dibenzofuran	10	U	10		ug/L		06/29/21 09:12	07/03/21 04:03	1
Diethyl phthalate	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Dimethyl phthalate	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Fluoranthene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Fluorene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Hexachlorobenzene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Hexachlorobutadiene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Hexachlorocyclopentadiene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Hexachloroethane	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Isophorone	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Naphthalene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Nitrobenzene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Pentachlorophenol	10	U	10		ug/L		06/29/21 09:12	07/03/21 04:03	1
Phenanthrene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Phenol	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1
Pyrene	5.0	U	5.0		ug/L		06/29/21 09:12	07/03/21 04:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*107*		*46 - 120*	*06/29/21 09:12*	*07/03/21 04:03*	*1*
Phenol-d5 (Surr)	*56*		*22 - 120*	*06/29/21 09:12*	*07/03/21 04:03*	*1*
p-Terphenyl-d14 (Surr)	*117*		*60 - 148*	*06/29/21 09:12*	*07/03/21 04:03*	*1*
2,4,6-Tribromophenol (Surr)	*113*		*41 - 120*	*06/29/21 09:12*	*07/03/21 04:03*	*1*
2-Fluorobiphenyl	*118*		*48 - 120*	*06/29/21 09:12*	*07/03/21 04:03*	*1*
2-Fluorophenol (Surr)	*88*		*35 - 120*	*06/29/21 09:12*	*07/03/21 04:03*	*1*

Client Sample ID: J6105-Field Equipment Blank
Lab Sample ID: 480-186604-4
Date Collected: 06/25/21 13:30
Matrix: Water
Date Received: 06/26/21 10:00

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.20	U	0.20		mg/L		06/29/21 07:23	06/29/21 18:23	1
Antimony	0.020	U	0.020		mg/L		06/29/21 07:23	06/29/21 18:23	1
Arsenic	0.015	U	0.015		mg/L		06/29/21 07:23	06/29/21 18:23	1
Barium	0.0020	U ^6+	0.0020		mg/L		06/29/21 07:23	06/29/21 18:23	1
Beryllium	0.0020	U	0.0020		mg/L		06/29/21 07:23	06/29/21 18:23	1
Cadmium	0.0020	U	0.0020		mg/L		06/29/21 07:23	06/29/21 18:23	1
Calcium	0.50	U	0.50		mg/L		06/29/21 07:23	06/29/21 18:23	1
Chromium	0.0040	U	0.0040		mg/L		06/29/21 07:23	06/29/21 18:23	1
Cobalt	0.0040	U	0.0040		mg/L		06/29/21 07:23	06/29/21 18:23	1
Copper	0.010	U	0.010		mg/L		06/29/21 07:23	06/29/21 18:23	1
Iron	0.050	U	0.050		mg/L		06/29/21 07:23	06/29/21 18:23	1
Lead	0.010	U	0.010		mg/L		06/29/21 07:23	06/29/21 18:23	1
Magnesium	0.20	U	0.20		mg/L		06/29/21 07:23	06/29/21 18:23	1
Manganese	0.0030	U	0.0030		mg/L		06/29/21 07:23	06/29/21 18:23	1
Nickel	0.010	U	0.010		mg/L		06/29/21 07:23	06/29/21 18:23	1
Potassium	0.50	U	0.50		mg/L		06/29/21 07:23	06/29/21 18:23	1
Selenium	0.025	U	0.025		mg/L		06/29/21 07:23	06/29/21 18:23	1
Silver	0.0060	U	0.0060		mg/L		06/29/21 07:23	06/29/21 18:23	1
Sodium	1.0	U	1.0		mg/L		06/29/21 07:23	06/29/21 18:23	1
Thallium	0.020	U	0.020		mg/L		06/29/21 07:23	06/29/21 18:23	1
Vanadium	0.0050	U	0.0050		mg/L		06/29/21 07:23	06/29/21 18:23	1
Zinc	0.010	U	0.010		mg/L		06/29/21 07:23	06/29/21 18:23	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020		mg/L		06/30/21 13:36	06/30/21 18:01	1

Client Sample ID: J6105-SB-114 (2-4 feet)
Lab Sample ID: 480-186604-5
Date Collected: 06/25/21 14:00
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 69.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
bis (2-chloroisopropyl) ether	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
2,4,5-Trichlorophenol	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
2,4,6-Trichlorophenol	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
2,4-Dichlorophenol	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
2,4-Dimethylphenol	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
2,4-Dinitrophenol	2300	U	2300		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
2,4-Dinitrotoluene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
2,6-Dinitrotoluene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
2-Chloronaphthalene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
2-Chlorophenol	460	U	460		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
2-Methylphenol	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
2-Methylnaphthalene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
2-Nitroaniline	460	U	460		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
2-Nitrophenol	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
3,3'-Dichlorobenzidine	460	U	460		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
3-Nitroaniline	460	U	460		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1

Client: GHD Services Inc.
Project/Site: 11224293, Utica J6105, SSOW 016

Job ID: 480-186604-1

Client Sample ID: J6105-SB-114 (2-4 feet)
Date Collected: 06/25/21 14:00
Date Received: 06/26/21 10:00

Lab Sample ID: 480-186604-5
Matrix: Solid
Percent Solids: 69.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	460	U	460		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
4-Bromophenyl phenyl ether	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
4-Chloro-3-methylphenol	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
4-Chloroaniline	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
4-Chlorophenyl phenyl ether	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
4-Methylphenol	460	U	460		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
4-Nitroaniline	460	U	460		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
4-Nitrophenol	460	U	460		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Acenaphthene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Acenaphthylene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Acetophenone	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Anthracene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Atrazine	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Benzaldehyde	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Benzo[a]anthracene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Benzo[a]pyrene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Benzo[b]fluoranthene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Benzo[g,h,i]perylene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Benzo[k]fluoranthene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Bis(2-chloroethoxy)methane	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Bis(2-chloroethyl)ether	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Bis(2-ethylhexyl) phthalate	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Butyl benzyl phthalate	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Caprolactam	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Carbazole	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Chrysene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Dibenz(a,h)anthracene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Di-n-butyl phthalate	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Di-n-octyl phthalate	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Dibenzofuran	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Diethyl phthalate	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Dimethyl phthalate	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Fluoranthene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Fluorene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Hexachlorobenzene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Hexachlorobutadiene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Hexachlorocyclopentadiene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Hexachloroethane	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Indeno[1,2,3-cd]pyrene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Isophorone	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
N-Nitrosodi-n-propylamine	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
N-Nitrosodiphenylamine	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Naphthalene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Nitrobenzene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Pentachlorophenol	460	U	460		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Phenanthrene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Phenol	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1
Pyrene	240	U	240		ug/Kg	☼	07/01/21 07:52	07/09/21 17:54	1

Client Sample ID: J6105-SB-114 (2-4 feet)
Lab Sample ID: 480-186604-5

Date Collected: 06/25/21 14:00
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 69.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*67*		*53 - 120*	*07/01/21 07:52*	*07/09/21 17:54*	*1*
Phenol-d5 (Surr)	*66*		*54 - 120*	*07/01/21 07:52*	*07/09/21 17:54*	*1*
p-Terphenyl-d14 (Surr)	*82*		*79 - 130*	*07/01/21 07:52*	*07/09/21 17:54*	*1*
2,4,6-Tribromophenol (Surr)	*77*		*54 - 120*	*07/01/21 07:52*	*07/09/21 17:54*	*1*
2-Fluorobiphenyl	*70*		*60 - 120*	*07/01/21 07:52*	*07/09/21 17:54*	*1*
2-Fluorophenol (Surr)	*64*		*52 - 120*	*07/01/21 07:52*	*07/09/21 17:54*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1400**	**F1 F2**	14	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Antimony	22	U F2	22	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Arsenic	2.9	U	2.9	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Barium	**6.0**	**^6+ F1 F2**	0.72	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Beryllium	0.29	U	0.29	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Cadmium	0.29	U	0.29	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Calcium	**89**		72	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Chromium	**1.5**		0.72	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Cobalt	0.72	U	0.72	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Copper	**1.9**		1.4	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Iron	**1700**	**F1 F2**	14	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Lead	1.4	U F2	1.4	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Magnesium	**290**	**F1 F2**	29	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Manganese	**54**	**F1 F2**	0.29	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Nickel	7.2	U F2	7.2	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Potassium	**260**	**F1 F2**	43	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Selenium	5.8	U	5.8	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Silver	0.87	U	0.87	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Sodium	200	U	200	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Thallium	8.7	U	8.7	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Vanadium	**2.1**		0.72	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1
Zinc	**6.3**	**F1 F2**	2.9	mg/Kg	☼	07/02/21 11:14	07/06/21 19:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.065**		0.029	mg/Kg	☼	07/02/21 14:10	07/02/21 16:29	1

Client Sample ID: J6105-SB-112 (0-2 inches)
Lab Sample ID: 480-186604-6

Date Collected: 06/25/21 14:20
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 75.1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	220	U	220	ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
bis (2-chloroisopropyl) ether	220	U	220	ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
2,4,5-Trichlorophenol	220	U	220	ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
2,4,6-Trichlorophenol	220	U	220	ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
2,4-Dichlorophenol	220	U	220	ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
2,4-Dimethylphenol	220	U	220	ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
2,4-Dinitrophenol	2200	U	2200	ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
2,4-Dinitrotoluene	220	U	220	ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
2,6-Dinitrotoluene	220	U	220	ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1

Client: GHD Services Inc.
Project/Site: 11224293, Utica J6105, SSOW 016

Job ID: 480-186604-1

Client Sample ID: J6105-SB-112 (0-2 inches)
Date Collected: 06/25/21 14:20
Date Received: 06/26/21 10:00

Lab Sample ID: 480-186604-6
Matrix: Solid
Percent Solids: 75.1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
2-Chlorophenol	430	U	430		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
2-Methylphenol	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
2-Methylnaphthalene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
2-Nitroaniline	430	U	430		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
2-Nitrophenol	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
3,3'-Dichlorobenzidine	430	U	430		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
3-Nitroaniline	430	U	430		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
4,6-Dinitro-2-methylphenol	430	U	430		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
4-Bromophenyl phenyl ether	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
4-Chloro-3-methylphenol	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
4-Chloroaniline	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
4-Chlorophenyl phenyl ether	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
4-Methylphenol	430	U	430		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
4-Nitroaniline	430	U	430		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
4-Nitrophenol	430	U	430		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Acenaphthene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Acenaphthylene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Acetophenone	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Anthracene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Atrazine	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Benzaldehyde	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Benzo[a]anthracene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Benzo[a]pyrene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Benzo[b]fluoranthene	**290**		220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Benzo[g,h,i]perylene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Benzo[k]fluoranthene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Bis(2-chloroethoxy)methane	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Bis(2-chloroethyl)ether	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Bis(2-ethylhexyl) phthalate	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Butyl benzyl phthalate	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Caprolactam	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Carbazole	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Chrysene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Dibenz(a,h)anthracene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Di-n-butyl phthalate	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Di-n-octyl phthalate	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Dibenzofuran	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Diethyl phthalate	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Dimethyl phthalate	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Fluoranthene	**430**		220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Fluorene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Hexachlorobenzene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Hexachlorobutadiene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Hexachlorocyclopentadiene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Hexachloroethane	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Indeno[1,2,3-cd]pyrene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Isophorone	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
N-Nitrosodi-n-propylamine	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1

Client Sample ID: J6105-SB-112 (0-2 inches)
Lab Sample ID: 480-186604-6

Date Collected: 06/25/21 14:20
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 75.1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Naphthalene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Nitrobenzene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Pentachlorophenol	430	U	430		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Phenanthrene	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Phenol	220	U	220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1
Pyrene	**350**		220		ug/Kg	☼	07/01/21 07:52	07/09/21 23:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*79*		*53 - 120*	*07/01/21 07:52*	*07/09/21 23:04*	*1*
Phenol-d5 (Surr)	*76*		*54 - 120*	*07/01/21 07:52*	*07/09/21 23:04*	*1*
p-Terphenyl-d14 (Surr)	*96*		*79 - 130*	*07/01/21 07:52*	*07/09/21 23:04*	*1*
2,4,6-Tribromophenol (Surr)	*99*		*54 - 120*	*07/01/21 07:52*	*07/09/21 23:04*	*1*
2-Fluorobiphenyl	*84*		*60 - 120*	*07/01/21 07:52*	*07/09/21 23:04*	*1*
2-Fluorophenol (Surr)	*73*		*52 - 120*	*07/01/21 07:52*	*07/09/21 23:04*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**15000**		13		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Antimony	19	U	19		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Arsenic	**12**		2.6		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Barium	**80**	**^6+**	0.64		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Beryllium	**0.53**		0.26		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Cadmium	**0.30**		0.26		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Calcium	**1500**		64		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Chromium	**20**		0.64		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Cobalt	**9.9**		0.64		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Copper	**26**		1.3		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Iron	**31000**		13		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Lead	**45**		1.3		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Magnesium	**3100**		26		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Manganese	**1600**		0.26		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Nickel	**26**		6.4		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Potassium	**1600**		38		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Selenium	5.1	U	5.1		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Silver	0.77	U	0.77		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Sodium	180	U	180		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Thallium	7.7	U	7.7		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Vanadium	**30**		0.64		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1
Zinc	**97**		2.6		mg/Kg	☼	07/02/21 11:14	07/06/21 19:55	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.12**		0.026		mg/Kg	☼	07/02/21 14:10	07/02/21 16:37	1

Client: GHD Services Inc.
Project/Site: 11224293, Utica J6105, SSOW 016

Job ID: 480-186604-1

Client Sample ID: J6105-SB-112 (0-2 feet)
Date Collected: 06/25/21 14:30
Date Received: 06/26/21 10:00

Lab Sample ID: 480-186604-7
Matrix: Solid
Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
bis (2-chloroisopropyl) ether	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
2,4,5-Trichlorophenol	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
2,4,6-Trichlorophenol	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
2,4-Dichlorophenol	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
2,4-Dimethylphenol	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
2,4-Dinitrophenol	2000	U	2000		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
2,4-Dinitrotoluene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
2,6-Dinitrotoluene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
2-Chloronaphthalene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
2-Chlorophenol	390	U	390		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
2-Methylphenol	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
2-Methylnaphthalene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
2-Nitroaniline	390	U	390		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
2-Nitrophenol	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
3,3'-Dichlorobenzidine	390	U	390		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
3-Nitroaniline	390	U	390		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
4,6-Dinitro-2-methylphenol	390	U	390		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
4-Bromophenyl phenyl ether	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
4-Chloro-3-methylphenol	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
4-Chloroaniline	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
4-Chlorophenyl phenyl ether	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
4-Methylphenol	390	U	390		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
4-Nitroaniline	390	U	390		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
4-Nitrophenol	390	U	390		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Acenaphthene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Acenaphthylene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Acetophenone	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Anthracene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Atrazine	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Benzaldehyde	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Benzo[a]anthracene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Benzo[a]pyrene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Benzo[b]fluoranthene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Benzo[g,h,i]perylene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Benzo[k]fluoranthene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Bis(2-chloroethoxy)methane	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Bis(2-chloroethyl)ether	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Bis(2-ethylhexyl) phthalate	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Butyl benzyl phthalate	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Caprolactam	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Carbazole	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Chrysene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Dibenz(a,h)anthracene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Di-n-butyl phthalate	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Di-n-octyl phthalate	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Dibenzofuran	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Diethyl phthalate	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Dimethyl phthalate	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1

Client Sample ID: J6105-SB-112 (0-2 feet)
Lab Sample ID: 480-186604-7

Date Collected: 06/25/21 14:30
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Fluorene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Hexachlorobenzene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Hexachlorobutadiene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Hexachlorocyclopentadiene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Hexachloroethane	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Indeno[1,2,3-cd]pyrene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Isophorone	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
N-Nitrosodi-n-propylamine	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
N-Nitrosodiphenylamine	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Naphthalene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Nitrobenzene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Pentachlorophenol	390	U	390		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Phenanthrene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Phenol	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1
Pyrene	200	U	200		ug/Kg	☼	07/01/21 07:52	07/09/21 23:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*76*		*53 - 120*	*07/01/21 07:52*	*07/09/21 23:28*	*1*
Phenol-d5 (Surr)	*76*		*54 - 120*	*07/01/21 07:52*	*07/09/21 23:28*	*1*
p-Terphenyl-d14 (Surr)	*97*		*79 - 130*	*07/01/21 07:52*	*07/09/21 23:28*	*1*
2,4,6-Tribromophenol (Surr)	*97*		*54 - 120*	*07/01/21 07:52*	*07/09/21 23:28*	*1*
2-Fluorobiphenyl	*77*		*60 - 120*	*07/01/21 07:52*	*07/09/21 23:28*	*1*
2-Fluorophenol (Surr)	*70*		*52 - 120*	*07/01/21 07:52*	*07/09/21 23:28*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**15000**		12		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Antimony	18	U	18		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Arsenic	**27**		2.5		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Barium	**97**	**^6+**	0.62		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Beryllium	**0.57**		0.25		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Cadmium	**0.31**		0.25		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Calcium	**1500**		62		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Chromium	**17**		0.62		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Cobalt	**8.7**		0.62		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Copper	**23**		1.2		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Iron	**31000**		12		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Lead	**33**		1.2		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Magnesium	**3200**		25		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Manganese	**1600**		0.25		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Nickel	**19**		6.2		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Potassium	**1300**		37		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Selenium	4.9	U	4.9		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Silver	0.74	U	0.74		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Sodium	170	U	170		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Thallium	7.4	U	7.4		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Vanadium	**28**		0.62		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1
Zinc	**94**		2.5		mg/Kg	☼	07/02/21 11:14	07/06/21 19:59	1

Client Sample ID: J6105-SB-112 (0-2 feet)
Lab Sample ID: 480-186604-7

Date Collected: 06/25/21 14:30
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 84.4

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.089		0.025		mg/Kg	☼	07/02/21 14:10	07/02/21 16:38	1

Client Sample ID: J6105-SB-112 (2-3 feet)
Lab Sample ID: 480-186604-8

Date Collected: 06/25/21 14:45
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
bis (2-chloroisopropyl) ether	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
2,4,5-Trichlorophenol	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
2,4,6-Trichlorophenol	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
2,4-Dichlorophenol	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
2,4-Dimethylphenol	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
2,4-Dinitrophenol	1900	U	1900		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
2,4-Dinitrotoluene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
2,6-Dinitrotoluene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
2-Chloronaphthalene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
2-Chlorophenol	380	U	380		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
2-Methylphenol	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
2-Methylnaphthalene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
2-Nitroaniline	380	U	380		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
2-Nitrophenol	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
3,3'-Dichlorobenzidine	380	U	380		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
3-Nitroaniline	380	U	380		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
4,6-Dinitro-2-methylphenol	380	U	380		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
4-Bromophenyl phenyl ether	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
4-Chloro-3-methylphenol	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
4-Chloroaniline	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
4-Chlorophenyl phenyl ether	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
4-Methylphenol	380	U	380		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
4-Nitroaniline	380	U	380		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
4-Nitrophenol	380	U	380		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Acenaphthene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Acenaphthylene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Acetophenone	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Anthracene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Atrazine	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Benzaldehyde	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Benzo[a]anthracene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Benzo[a]pyrene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Benzo[b]fluoranthene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Benzo[g,h,i]perylene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Benzo[k]fluoranthene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Bis(2-chloroethoxy)methane	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Bis(2-chloroethyl)ether	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Bis(2-ethylhexyl) phthalate	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Butyl benzyl phthalate	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Caprolactam	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Carbazole	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1

Client Sample ID: J6105-SB-112 (2-3 feet)
Lab Sample ID: 480-186604-8

Date Collected: 06/25/21 14:45
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Dibenz(a,h)anthracene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Di-n-butyl phthalate	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Di-n-octyl phthalate	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Dibenzofuran	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Diethyl phthalate	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Dimethyl phthalate	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Fluoranthene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Fluorene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Hexachlorobenzene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Hexachlorobutadiene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Hexachlorocyclopentadiene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Hexachloroethane	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Indeno[1,2,3-cd]pyrene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Isophorone	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
N-Nitrosodi-n-propylamine	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
N-Nitrosodiphenylamine	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Naphthalene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Nitrobenzene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Pentachlorophenol	380	U	380		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Phenanthrene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Phenol	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1
Pyrene	190	U	190		ug/Kg	☼	07/01/21 07:52	07/09/21 23:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*65*		*53 - 120*	*07/01/21 07:52*	*07/09/21 23:51*	*1*
Phenol-d5 (Surr)	*66*		*54 - 120*	*07/01/21 07:52*	*07/09/21 23:51*	*1*
p-Terphenyl-d14 (Surr)	*89*		*79 - 130*	*07/01/21 07:52*	*07/09/21 23:51*	*1*
2,4,6-Tribromophenol (Surr)	*85*		*54 - 120*	*07/01/21 07:52*	*07/09/21 23:51*	*1*
2-Fluorobiphenyl	*68*		*60 - 120*	*07/01/21 07:52*	*07/09/21 23:51*	*1*
2-Fluorophenol (Surr)	*62*		*52 - 120*	*07/01/21 07:52*	*07/09/21 23:51*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**15000**		12		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Antimony	18	U	18		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Arsenic	**12**		2.4		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Barium	**66**	**^6+**	0.60		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Beryllium	**0.57**		0.24		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Cadmium	0.24	U	0.24		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Calcium	**1000**		60		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Chromium	**18**		0.60		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Cobalt	**8.4**		0.60		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Copper	**46**		1.2		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Iron	**32000**		12		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Lead	**22**		1.2		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Magnesium	**4200**		24		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Manganese	**1200**		0.24		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Nickel	**24**		6.0		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Potassium	**1100**		36		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1

Client Sample ID: J6105-SB-112 (2-3 feet)
Lab Sample ID: 480-186604-8
Date Collected: 06/25/21 14:45
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 87.2

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Selenium	4.8	U	4.8		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Silver	0.72	U	0.72		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Sodium	170	U	170		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Thallium	7.2	U	7.2		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Vanadium	**23**		0.60		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1
Zinc	**110**		2.4		mg/Kg	☼	07/02/21 11:14	07/06/21 20:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.20**		0.021		mg/Kg	☼	07/02/21 14:10	07/02/21 16:39	1

Client Sample ID: J6105-SB-115 (0-2 inches)
Lab Sample ID: 480-186604-9
Date Collected: 06/25/21 15:00
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 56.8

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
bis (2-chloroisopropyl) ether	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
2,4,5-Trichlorophenol	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
2,4,6-Trichlorophenol	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
2,4-Dichlorophenol	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
2,4-Dimethylphenol	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
2,4-Dinitrophenol	2900	U	2900		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
2,4-Dinitrotoluene	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
2,6-Dinitrotoluene	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
2-Chloronaphthalene	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
2-Chlorophenol	580	U	580		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
2-Methylphenol	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
2-Methylnaphthalene	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
2-Nitroaniline	580	U	580		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
2-Nitrophenol	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
3,3'-Dichlorobenzidine	580	U	580		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
3-Nitroaniline	580	U	580		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
4,6-Dinitro-2-methylphenol	580	U	580		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
4-Bromophenyl phenyl ether	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
4-Chloro-3-methylphenol	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
4-Chloroaniline	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
4-Chlorophenyl phenyl ether	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
4-Methylphenol	580	U	580		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
4-Nitroaniline	580	U	580		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
4-Nitrophenol	580	U	580		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Acenaphthene	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Acenaphthylene	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Acetophenone	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Anthracene	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Atrazine	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Benzaldehyde	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Benzo[a]anthracene	**340**		300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Benzo[a]pyrene	**360**		300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1

Client Sample ID: J6105-SB-115 (0-2 inches)
Lab Sample ID: 480-186604-9

Date Collected: 06/25/21 15:00
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 56.8

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	**530**		300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Benzo[g,h,i]perylene	**330**		300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Benzo[k]fluoranthene	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Bis(2-chloroethoxy)methane	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Bis(2-chloroethyl)ether	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Bis(2-ethylhexyl) phthalate	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Butyl benzyl phthalate	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Caprolactam	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Carbazole	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Chrysene	**420**		300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Dibenz(a,h)anthracene	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Di-n-butyl phthalate	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Di-n-octyl phthalate	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Dibenzofuran	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Diethyl phthalate	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Dimethyl phthalate	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Fluoranthene	**970**		300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Fluorene	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Hexachlorobenzene	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Hexachlorobutadiene	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Hexachlorocyclopentadiene	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Hexachloroethane	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Indeno[1,2,3-cd]pyrene	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Isophorone	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
N-Nitrosodi-n-propylamine	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
N-Nitrosodiphenylamine	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Naphthalene	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Nitrobenzene	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Pentachlorophenol	580	U	580		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Phenanthrene	**330**		300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Phenol	300	U	300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1
Pyrene	**760**		300		ug/Kg	☼	07/01/21 07:52	07/10/21 00:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*78*		*53 - 120*	*07/01/21 07:52*	*07/10/21 00:15*	*1*
Phenol-d5 (Surr)	*78*		*54 - 120*	*07/01/21 07:52*	*07/10/21 00:15*	*1*
p-Terphenyl-d14 (Surr)	*94*		*79 - 130*	*07/01/21 07:52*	*07/10/21 00:15*	*1*
2,4,6-Tribromophenol (Surr)	*98*		*54 - 120*	*07/01/21 07:52*	*07/10/21 00:15*	*1*
2-Fluorobiphenyl	*80*		*60 - 120*	*07/01/21 07:52*	*07/10/21 00:15*	*1*
2-Fluorophenol (Surr)	*70*		*52 - 120*	*07/01/21 07:52*	*07/10/21 00:15*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**13000**		19		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Antimony	28	U	28		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Arsenic	**11**		3.7		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Barium	**130**	**^6+**	0.94		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Beryllium	**0.56**		0.37		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Cadmium	**0.52**		0.37		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Calcium	**7600**		94		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1

Client Sample ID: J6105-SB-115 (0-2 inches)
Lab Sample ID: 480-186604-9

Date Collected: 06/25/21 15:00
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 56.8

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**18**		0.94		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Cobalt	**9.2**		0.94		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Copper	**31**		1.9		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Iron	**29000**		19		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Lead	**55**		1.9		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Magnesium	**3100**		37		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Manganese	**1900**		0.37		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Nickel	**33**		9.4		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Potassium	**1700**		56		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Selenium	7.5	U	7.5		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Silver	1.1	U	1.1		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Sodium	260	U	260		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Thallium	11	U	11		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Vanadium	**28**		0.94		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1
Zinc	**120**		3.7		mg/Kg	☼	07/02/21 11:14	07/06/21 20:07	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.14**		0.035		mg/Kg	☼	07/02/21 14:10	07/02/21 16:41	1

Client Sample ID: J6105-SB-115 (0-2 feet)
Lab Sample ID: 480-186604-10

Date Collected: 06/25/21 15:15
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 79.6

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
bis (2-chloroisopropyl) ether	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
2,4,5-Trichlorophenol	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
2,4,6-Trichlorophenol	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
2,4-Dichlorophenol	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
2,4-Dimethylphenol	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
2,4-Dinitrophenol	2100	U	2100		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
2,4-Dinitrotoluene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
2,6-Dinitrotoluene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
2-Chloronaphthalene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
2-Chlorophenol	410	U	410		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
2-Methylphenol	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
2-Methylnaphthalene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
2-Nitroaniline	410	U	410		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
2-Nitrophenol	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
3,3'-Dichlorobenzidine	410	U	410		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
3-Nitroaniline	410	U	410		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
4,6-Dinitro-2-methylphenol	410	U	410		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
4-Bromophenyl phenyl ether	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
4-Chloro-3-methylphenol	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
4-Chloroaniline	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
4-Chlorophenyl phenyl ether	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
4-Methylphenol	410	U	410		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
4-Nitroaniline	410	U	410		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1

Client: GHD Services Inc.
Project/Site: 11224293, Utica J6105, SSOW 016

Job ID: 480-186604-1

Client Sample ID: J6105-SB-115 (0-2 feet)
Date Collected: 06/25/21 15:15
Date Received: 06/26/21 10:00

Lab Sample ID: 480-186604-10
Matrix: Solid
Percent Solids: 79.6

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	410	U	410		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Acenaphthene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Acenaphthylene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Acetophenone	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Anthracene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Atrazine	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Benzaldehyde	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Benzo[a]anthracene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Benzo[a]pyrene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Benzo[b]fluoranthene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Benzo[g,h,i]perylene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Benzo[k]fluoranthene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Bis(2-chloroethoxy)methane	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Bis(2-chloroethyl)ether	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Bis(2-ethylhexyl) phthalate	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Butyl benzyl phthalate	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Caprolactam	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Carbazole	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Chrysene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Dibenz(a,h)anthracene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Di-n-butyl phthalate	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Di-n-octyl phthalate	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Dibenzofuran	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Diethyl phthalate	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Dimethyl phthalate	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Fluoranthene	**210**		210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Fluorene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Hexachlorobenzene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Hexachlorobutadiene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Hexachlorocyclopentadiene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Hexachloroethane	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Indeno[1,2,3-cd]pyrene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Isophorone	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
N-Nitrosodi-n-propylamine	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
N-Nitrosodiphenylamine	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Naphthalene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Nitrobenzene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Pentachlorophenol	410	U	410		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Phenanthrene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Phenol	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1
Pyrene	210	U	210		ug/Kg	☼	07/01/21 07:52	07/10/21 00:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*76*		*53 - 120*	*07/01/21 07:52*	*07/10/21 00:39*	*1*
Phenol-d5 (Surr)	*78*		*54 - 120*	*07/01/21 07:52*	*07/10/21 00:39*	*1*
p-Terphenyl-d14 (Surr)	*96*		*79 - 130*	*07/01/21 07:52*	*07/10/21 00:39*	*1*
2,4,6-Tribromophenol (Surr)	*97*		*54 - 120*	*07/01/21 07:52*	*07/10/21 00:39*	*1*
2-Fluorobiphenyl	*78*		*60 - 120*	*07/01/21 07:52*	*07/10/21 00:39*	*1*
2-Fluorophenol (Surr)	*71*		*52 - 120*	*07/01/21 07:52*	*07/10/21 00:39*	*1*

Client Sample ID: J6105-SB-115 (0-2 feet)
Lab Sample ID: 480-186604-10

Date Collected: 06/25/21 15:15
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 79.6

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**15000**		13		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Antimony	19	U	19		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Arsenic	**12**		2.5		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Barium	**99**	**^6+**	0.63		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Beryllium	**0.58**		0.25		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Cadmium	**0.36**		0.25		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Calcium	**1900**		63		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Chromium	**19**		0.63		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Cobalt	**10**		0.63		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Copper	**32**		1.3		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Iron	**32000**		13		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Lead	**47**		1.3		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Magnesium	**3200**		25		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Manganese	**1700**		0.25		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Nickel	**27**		6.3		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Potassium	**1500**		38		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Selenium	5.0	U	5.0		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Silver	0.76	U	0.76		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Sodium	180	U	180		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Thallium	7.6	U	7.6		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Vanadium	**29**		0.63		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1
Zinc	**110**		2.5		mg/Kg	☼	07/02/21 11:14	07/06/21 20:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.12**		0.029		mg/Kg	☼	07/02/21 14:10	07/02/21 16:42	1

Client Sample ID: J6105-SB-115 (2-2.5 feet)
Lab Sample ID: 480-186604-11

Date Collected: 06/25/21 15:30
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 63.0

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
bis (2-chloroisopropyl) ether	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
2,4,5-Trichlorophenol	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
2,4,6-Trichlorophenol	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
2,4-Dichlorophenol	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
2,4-Dimethylphenol	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
2,4-Dinitrophenol	2600	U	2600		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
2,4-Dinitrotoluene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
2,6-Dinitrotoluene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
2-Chloronaphthalene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
2-Chlorophenol	520	U	520		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
2-Methylphenol	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
2-Methylnaphthalene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
2-Nitroaniline	520	U	520		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
2-Nitrophenol	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
3,3'-Dichlorobenzidine	520	U	520		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
3-Nitroaniline	520	U	520		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1

Client: GHD Services Inc.
Project/Site: 11224293, Utica J6105, SSOW 016

Job ID: 480-186604-1

Client Sample ID: J6105-SB-115 (2-2.5 feet)
Date Collected: 06/25/21 15:30
Date Received: 06/26/21 10:00

Lab Sample ID: 480-186604-11
Matrix: Solid
Percent Solids: 63.0

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	520	U	520		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
4-Bromophenyl phenyl ether	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
4-Chloro-3-methylphenol	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
4-Chloroaniline	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
4-Chlorophenyl phenyl ether	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
4-Methylphenol	520	U	520		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
4-Nitroaniline	520	U	520		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
4-Nitrophenol	520	U	520		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Acenaphthene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Acenaphthylene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Acetophenone	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Anthracene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Atrazine	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Benzaldehyde	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Benzo[a]anthracene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Benzo[a]pyrene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Benzo[b]fluoranthene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Benzo[g,h,i]perylene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Benzo[k]fluoranthene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Bis(2-chloroethoxy)methane	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Bis(2-chloroethyl)ether	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Bis(2-ethylhexyl) phthalate	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Butyl benzyl phthalate	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Caprolactam	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Carbazole	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Chrysene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Dibenz(a,h)anthracene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Di-n-butyl phthalate	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Di-n-octyl phthalate	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Dibenzofuran	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Diethyl phthalate	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Dimethyl phthalate	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Fluoranthene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Fluorene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Hexachlorobenzene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Hexachlorobutadiene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Hexachlorocyclopentadiene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Hexachloroethane	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Indeno[1,2,3-cd]pyrene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Isophorone	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
N-Nitrosodi-n-propylamine	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
N-Nitrosodiphenylamine	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Naphthalene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Nitrobenzene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Pentachlorophenol	520	U	520		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Phenanthrene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Phenol	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1
Pyrene	270	U	270		ug/Kg	☼	07/01/21 07:52	07/10/21 01:03	1

Client Sample ID: J6105-SB-115 (2-2.5 feet)
Lab Sample ID: 480-186604-11

Date Collected: 06/25/21 15:30
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 63.0

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*82*		*53 - 120*	*07/01/21 07:52*	*07/10/21 01:03*	*1*
Phenol-d5 (Surr)	*82*		*54 - 120*	*07/01/21 07:52*	*07/10/21 01:03*	*1*
p-Terphenyl-d14 (Surr)	*103*		*79 - 130*	*07/01/21 07:52*	*07/10/21 01:03*	*1*
2,4,6-Tribromophenol (Surr)	*107*		*54 - 120*	*07/01/21 07:52*	*07/10/21 01:03*	*1*
2-Fluorobiphenyl	*87*		*60 - 120*	*07/01/21 07:52*	*07/10/21 01:03*	*1*
2-Fluorophenol (Surr)	*76*		*52 - 120*	*07/01/21 07:52*	*07/10/21 01:03*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**17000**		16		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Antimony	24	U	24		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Arsenic	**14**		3.2		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Barium	**120**	**^6+**	0.80		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Beryllium	**0.68**		0.32		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Cadmium	**0.53**		0.32		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Calcium	**3100**		80		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Chromium	**21**		0.80		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Cobalt	**12**		0.80		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Copper	**33**		1.6		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Iron	**35000**		16		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Lead	**61**		1.6		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Magnesium	**3600**		32		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Manganese	**2100**		0.32		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Nickel	**35**		8.0		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Potassium	**2000**		48		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Selenium	6.4	U	6.4		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Silver	0.96	U	0.96		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Sodium	220	U	220		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Thallium	9.6	U	9.6		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Vanadium	**36**		0.80		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1
Zinc	**120**		3.2		mg/Kg	☼	07/02/21 11:14	07/06/21 20:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.13**		0.033		mg/Kg	☼	07/02/21 14:10	07/02/21 16:43	1

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 11224293, Utica J6105, SSOW 016

Job ID: 480-186604-1

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

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	PHL	TPHd14	TBP	FBP	2FP
Lab Sample ID	Client Sample ID	(53-120)	(54-120)	(79-130)	(54-120)	(60-120)	(52-120)
480-186604-1	J6105-SB-114 (0-2inches)	85	82	100	109	90	76
480-186604-2	J6105-Field Duplicate	80	80	99	103	80	79
480-186604-3	J6105-SB-114 (0-2feet)	84	82	102	101	85	80
480-186604-5	J6105-SB-114 (2-4 feet)	67	66	82	77	70	64
480-186604-5 MS	J6105-SB-114 (2-4 feet)	70	66	79	88	73	65
480-186604-5 MSD	J6105-SB-114 (2-4 feet)	78	75	90	95	81	72
480-186604-6	J6105-SB-112 (0-2 inches)	79	76	96	99	84	73
480-186604-7	J6105-SB-112 (0-2 feet)	76	76	97	97	77	70
480-186604-8	J6105-SB-112 (2-3 feet)	65	66	89	85	68	62
480-186604-9	J6105-SB-115 (0-2 inches)	78	78	94	98	80	70
480-186604-10	J6105-SB-115 (0-2 feet)	76	78	96	97	78	71
480-186604-11	J6105-SB-115 (2-2.5 feet)	82	82	103	107	87	76
LCS 480-587706/2-A	Lab Control Sample	73	72	88	95	76	68
MB 480-587706/1-A	Method Blank	82	79	106	94	82	77

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	PHL	TPHd14	TBP	FBP	2FP
Lab Sample ID	Client Sample ID	(46-120)	(22-120)	(60-148)	(41-120)	(48-120)	(35-120)
480-186604-4	J6105-Field Equipment Blank	107	56	117	113	118	88
LCS 480-587370/2-A	Lab Control Sample	96	56	104	105	95	77
MB 480-587370/1-A	Method Blank	101	51	111	103	104	78

Surrogate Legend

NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol (Surr)

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

Lab Sample ID: MB 480-587370/1-A
Matrix: Water
Analysis Batch: 587909

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 587370

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
bis (2-chloroisopropyl) ether	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
2,4,5-Trichlorophenol	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
2,4,6-Trichlorophenol	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
2,4-Dichlorophenol	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
2,4-Dimethylphenol	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
2,4-Dinitrophenol	10	U	10		ug/L		06/29/21 09:12	07/02/21 16:38	1
2,4-Dinitrotoluene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
2,6-Dinitrotoluene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
2-Chloronaphthalene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
2-Chlorophenol	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
2-Methylphenol	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
2-Methylnaphthalene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
2-Nitroaniline	10	U	10		ug/L		06/29/21 09:12	07/02/21 16:38	1
2-Nitrophenol	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
3,3'-Dichlorobenzidine	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
3-Nitroaniline	10	U	10		ug/L		06/29/21 09:12	07/02/21 16:38	1
4,6-Dinitro-2-methylphenol	10	U	10		ug/L		06/29/21 09:12	07/02/21 16:38	1
4-Bromophenyl phenyl ether	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
4-Chloro-3-methylphenol	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
4-Chloroaniline	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
4-Chlorophenyl phenyl ether	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
4-Methylphenol	10	U	10		ug/L		06/29/21 09:12	07/02/21 16:38	1
4-Nitroaniline	10	U	10		ug/L		06/29/21 09:12	07/02/21 16:38	1
4-Nitrophenol	10	U	10		ug/L		06/29/21 09:12	07/02/21 16:38	1
Acenaphthene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Acenaphthylene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Acetophenone	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Anthracene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Atrazine	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Benzaldehyde	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Benzo[a]anthracene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Benzo[a]pyrene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Benzo[b]fluoranthene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Benzo[g,h,i]perylene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Benzo[k]fluoranthene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Bis(2-chloroethoxy)methane	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Bis(2-chloroethyl)ether	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Butyl benzyl phthalate	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Caprolactam	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Carbazole	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Chrysene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Dibenz(a,h)anthracene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Di-n-butyl phthalate	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Di-n-octyl phthalate	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Dibenzofuran	10	U	10		ug/L		06/29/21 09:12	07/02/21 16:38	1
Diethyl phthalate	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1

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

Lab Sample ID: MB 480-587370/1-A
Matrix: Water
Analysis Batch: 587909

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 587370

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Fluoranthene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Fluorene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Hexachlorobenzene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Hexachlorobutadiene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Hexachlorocyclopentadiene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Hexachloroethane	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Indeno[1,2,3-cd]pyrene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Isophorone	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
N-Nitrosodi-n-propylamine	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
N-Nitrosodiphenylamine	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Naphthalene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Nitrobenzene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Pentachlorophenol	10	U	10		ug/L		06/29/21 09:12	07/02/21 16:38	1
Phenanthrene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Phenol	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1
Pyrene	5.0	U	5.0		ug/L		06/29/21 09:12	07/02/21 16:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*101*		*46 - 120*	*06/29/21 09:12*	*07/02/21 16:38*	*1*
Phenol-d5 (Surr)	*51*		*22 - 120*	*06/29/21 09:12*	*07/02/21 16:38*	*1*
p-Terphenyl-d14 (Surr)	*111*		*60 - 148*	*06/29/21 09:12*	*07/02/21 16:38*	*1*
2,4,6-Tribromophenol (Surr)	*103*		*41 - 120*	*06/29/21 09:12*	*07/02/21 16:38*	*1*
2-Fluorobiphenyl	*104*		*48 - 120*	*06/29/21 09:12*	*07/02/21 16:38*	*1*
2-Fluorophenol (Surr)	*78*		*35 - 120*	*06/29/21 09:12*	*07/02/21 16:38*	*1*

Lab Sample ID: LCS 480-587370/2-A
Matrix: Water
Analysis Batch: 587909

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 587370

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biphenyl	32.0	27.9		ug/L		87	59 - 120
bis (2-chloroisopropyl) ether	32.0	27.0		ug/L		84	21 - 136
2,4,5-Trichlorophenol	32.0	33.2		ug/L		104	65 - 126
2,4,6-Trichlorophenol	32.0	30.6		ug/L		96	64 - 120
2,4-Dichlorophenol	32.0	31.3		ug/L		98	63 - 120
2,4-Dimethylphenol	32.0	31.0		ug/L		97	47 - 120
2,4-Dinitrophenol	64.0	65.4		ug/L		102	31 - 137
2,4-Dinitrotoluene	32.0	30.1		ug/L		94	69 - 120
2,6-Dinitrotoluene	32.0	29.9		ug/L		93	68 - 120
2-Chloronaphthalene	32.0	26.8		ug/L		84	58 - 120
2-Chlorophenol	32.0	29.1		ug/L		91	48 - 120
2-Methylphenol	32.0	29.1		ug/L		91	39 - 120
2-Methylnaphthalene	32.0	29.6		ug/L		92	59 - 120
2-Nitroaniline	32.0	30.7		ug/L		96	54 - 127
2-Nitrophenol	32.0	31.1		ug/L		97	52 - 125
3,3'-Dichlorobenzidine	64.0	60.4		ug/L		94	49 - 135
3-Nitroaniline	32.0	25.5		ug/L		80	51 - 120

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

Lab Sample ID: LCS 480-587370/2-A
Matrix: Water
Analysis Batch: 587909

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 587370

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,6-Dinitro-2-methylphenol	64.0	71.0		ug/L		111	46 - 136
4-Bromophenyl phenyl ether	32.0	33.3		ug/L		104	65 - 120
4-Chloro-3-methylphenol	32.0	30.3		ug/L		95	61 - 123
4-Chloroaniline	32.0	24.3		ug/L		76	30 - 120
4-Chlorophenyl phenyl ether	32.0	31.0		ug/L		97	62 - 120
4-Methylphenol	32.0	29.9		ug/L		93	29 - 131
4-Nitroaniline	32.0	25.9		ug/L		81	65 - 120
4-Nitrophenol	64.0	54.1		ug/L		85	45 - 120
Acenaphthene	32.0	29.4		ug/L		92	60 - 120
Acenaphthylene	32.0	29.4		ug/L		92	63 - 120
Acetophenone	32.0	30.8		ug/L		96	45 - 120
Anthracene	32.0	31.4		ug/L		98	67 - 120
Atrazine	64.0	77.9		ug/L		122	71 - 130
Benzaldehyde	64.0	70.3		ug/L		110	10 - 140
Benzo[a]anthracene	32.0	32.3		ug/L		101	70 - 121
Benzo[a]pyrene	32.0	30.3		ug/L		95	60 - 123
Benzo[b]fluoranthene	32.0	31.8		ug/L		99	66 - 126
Benzo[g,h,i]perylene	32.0	34.8		ug/L		109	66 - 150
Benzo[k]fluoranthene	32.0	31.4		ug/L		98	65 - 124
Bis(2-chloroethoxy)methane	32.0	30.1		ug/L		94	50 - 128
Bis(2-chloroethyl)ether	32.0	27.0		ug/L		84	44 - 120
Bis(2-ethylhexyl) phthalate	32.0	30.2		ug/L		94	63 - 139
Butyl benzyl phthalate	32.0	31.4		ug/L		98	70 - 129
Caprolactam	64.0	24.0		ug/L		38	22 - 120
Carbazole	32.0	32.2		ug/L		101	66 - 123
Chrysene	32.0	30.9		ug/L		97	69 - 120
Dibenz(a,h)anthracene	32.0	35.8		ug/L		112	65 - 135
Di-n-butyl phthalate	32.0	33.1		ug/L		103	69 - 131
Di-n-octyl phthalate	32.0	28.9		ug/L		90	63 - 140
Dibenzofuran	32.0	29.4		ug/L		92	66 - 120
Diethyl phthalate	32.0	32.0		ug/L		100	59 - 127
Dimethyl phthalate	32.0	30.6		ug/L		96	68 - 120
Fluoranthene	32.0	32.0		ug/L		100	69 - 126
Fluorene	32.0	30.6		ug/L		96	66 - 120
Hexachlorobenzene	32.0	33.5		ug/L		105	61 - 120
Hexachlorobutadiene	32.0	25.4		ug/L		79	35 - 120
Hexachlorocyclopentadiene	32.0	17.9		ug/L		56	31 - 120
Hexachloroethane	32.0	27.1		ug/L		85	43 - 120
Indeno[1,2,3-cd]pyrene	32.0	35.4		ug/L		111	69 - 146
Isophorone	32.0	31.4		ug/L		98	55 - 120
N-Nitrosodi-n-propylamine	32.0	30.5		ug/L		95	32 - 140
N-Nitrosodiphenylamine	32.0	32.0		ug/L		100	61 - 120
Naphthalene	32.0	28.5		ug/L		89	57 - 120
Nitrobenzene	32.0	30.8		ug/L		96	53 - 123
Pentachlorophenol	64.0	66.1		ug/L		103	29 - 136
Phenanthrene	32.0	31.9		ug/L		100	68 - 120
Phenol	32.0	19.1		ug/L		60	17 - 120
Pyrene	32.0	32.0		ug/L		100	70 - 125

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

Lab Sample ID: LCS 480-587370/2-A
Matrix: Water
Analysis Batch: 587909

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 587370

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*96*		*46 - 120*
Phenol-d5 (Surr)	*56*		*22 - 120*
p-Terphenyl-d14 (Surr)	*104*		*60 - 148*
2,4,6-Tribromophenol (Surr)	*105*		*41 - 120*
2-Fluorobiphenyl	*95*		*48 - 120*
2-Fluorophenol (Surr)	*77*		*35 - 120*

Lab Sample ID: MB 480-587706/1-A
Matrix: Solid
Analysis Batch: 588584

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 587706

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
bis (2-chloroisopropyl) ether	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
2,4,5-Trichlorophenol	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
2,4,6-Trichlorophenol	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
2,4-Dichlorophenol	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
2,4-Dimethylphenol	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
2,4-Dinitrophenol	1600	U	1600		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
2,4-Dinitrotoluene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
2,6-Dinitrotoluene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
2-Chloronaphthalene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
2-Chlorophenol	320	U	320		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
2-Methylphenol	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
2-Methylnaphthalene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
2-Nitroaniline	320	U	320		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
2-Nitrophenol	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
3,3'-Dichlorobenzidine	320	U	320		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
3-Nitroaniline	320	U	320		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
4,6-Dinitro-2-methylphenol	320	U	320		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
4-Bromophenyl phenyl ether	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
4-Chloro-3-methylphenol	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
4-Chloroaniline	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
4-Chlorophenyl phenyl ether	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
4-Methylphenol	320	U	320		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
4-Nitroaniline	320	U	320		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
4-Nitrophenol	320	U	320		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Acenaphthene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Acenaphthylene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Acetophenone	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Anthracene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Atrazine	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Benzaldehyde	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Benzo[a]anthracene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Benzo[a]pyrene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Benzo[b]fluoranthene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Benzo[g,h,i]perylene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Benzo[k]fluoranthene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1

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

Lab Sample ID: MB 480-587706/1-A
Matrix: Solid
Analysis Batch: 588584

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 587706

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Bis(2-chloroethyl)ether	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Bis(2-ethylhexyl) phthalate	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Butyl benzyl phthalate	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Caprolactam	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Carbazole	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Chrysene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Dibenz(a,h)anthracene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Di-n-butyl phthalate	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Di-n-octyl phthalate	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Dibenzofuran	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Diethyl phthalate	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Dimethyl phthalate	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Fluoranthene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Fluorene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Hexachlorobenzene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Hexachlorobutadiene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Hexachlorocyclopentadiene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Hexachloroethane	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Indeno[1,2,3-cd]pyrene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Isophorone	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
N-Nitrosodi-n-propylamine	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
N-Nitrosodiphenylamine	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Naphthalene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Nitrobenzene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Pentachlorophenol	320	U	320		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Phenanthrene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Phenol	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1
Pyrene	170	U	170		ug/Kg		07/01/21 07:52	07/09/21 16:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*82*		*53 - 120*	*07/01/21 07:52*	*07/09/21 16:17*	*1*
Phenol-d5 (Surr)	*79*		*54 - 120*	*07/01/21 07:52*	*07/09/21 16:17*	*1*
p-Terphenyl-d14 (Surr)	*106*		*79 - 130*	*07/01/21 07:52*	*07/09/21 16:17*	*1*
2,4,6-Tribromophenol (Surr)	*94*		*54 - 120*	*07/01/21 07:52*	*07/09/21 16:17*	*1*
2-Fluorobiphenyl	*82*		*60 - 120*	*07/01/21 07:52*	*07/09/21 16:17*	*1*
2-Fluorophenol (Surr)	*77*		*52 - 120*	*07/01/21 07:52*	*07/09/21 16:17*	*1*

Lab Sample ID: LCS 480-587706/2-A
Matrix: Solid
Analysis Batch: 588584

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 587706

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biphenyl	1650	1230		ug/Kg		75	59 - 120
bis (2-chloroisopropyl) ether	1650	962		ug/Kg		58	44 - 120
2,4,5-Trichlorophenol	1650	1360		ug/Kg		82	59 - 126
2,4,6-Trichlorophenol	1650	1310		ug/Kg		80	59 - 123
2,4-Dichlorophenol	1650	1340		ug/Kg		81	61 - 120

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

Lab Sample ID: LCS 480-587706/2-A
Matrix: Solid
Analysis Batch: 588584

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 587706

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dimethylphenol	1650	1260		ug/Kg		77	59 - 120
2,4-Dinitrophenol	3300	2900		ug/Kg		88	41 - 146
2,4-Dinitrotoluene	1650	1390		ug/Kg		84	63 - 120
2,6-Dinitrotoluene	1650	1400		ug/Kg		85	66 - 120
2-Chloronaphthalene	1650	1230		ug/Kg		74	57 - 120
2-Chlorophenol	1650	1140		ug/Kg		69	53 - 120
2-Methylphenol	1650	1240		ug/Kg		75	54 - 120
2-Methylnaphthalene	1650	1160		ug/Kg		70	59 - 120
2-Nitroaniline	1650	1370		ug/Kg		83	61 - 120
2-Nitrophenol	1650	1230		ug/Kg		74	56 - 120
3,3'-Dichlorobenzidine	3300	2830		ug/Kg		86	54 - 120
3-Nitroaniline	1650	1290		ug/Kg		78	48 - 120
4,6-Dinitro-2-methylphenol	3300	3050		ug/Kg		92	49 - 122
4-Bromophenyl phenyl ether	1650	1480		ug/Kg		90	58 - 120
4-Chloro-3-methylphenol	1650	1450		ug/Kg		88	61 - 120
4-Chloroaniline	1650	1210		ug/Kg		73	38 - 120
4-Chlorophenyl phenyl ether	1650	1370		ug/Kg		83	63 - 124
4-Methylphenol	1650	1250		ug/Kg		76	55 - 120
4-Nitroaniline	1650	1380		ug/Kg		83	56 - 120
4-Nitrophenol	3300	3260		ug/Kg		99	43 - 147
Acenaphthene	1650	1280		ug/Kg		77	62 - 120
Acenaphthylene	1650	1340		ug/Kg		81	58 - 121
Acetophenone	1650	1200		ug/Kg		72	54 - 120
Anthracene	1650	1430		ug/Kg		87	62 - 120
Atrazine	3300	2920		ug/Kg		88	60 - 127
Benzaldehyde	3300	2390		ug/Kg		72	10 - 150
Benzo[a]anthracene	1650	1450		ug/Kg		88	65 - 120
Benzo[a]pyrene	1650	1360		ug/Kg		83	64 - 120
Benzo[b]fluoranthene	1650	1390		ug/Kg		84	64 - 120
Benzo[g,h,i]perylene	1650	1350		ug/Kg		82	45 - 145
Benzo[k]fluoranthene	1650	1470		ug/Kg		89	65 - 120
Bis(2-chloroethoxy)methane	1650	1210		ug/Kg		74	55 - 120
Bis(2-chloroethyl)ether	1650	1040		ug/Kg		63	45 - 120
Bis(2-ethylhexyl) phthalate	1650	1460		ug/Kg		88	61 - 133
Butyl benzyl phthalate	1650	1520		ug/Kg		92	61 - 129
Caprolactam	3300	2640		ug/Kg		80	47 - 120
Carbazole	1650	1450		ug/Kg		88	65 - 120
Chrysene	1650	1390		ug/Kg		84	64 - 120
Dibenz(a,h)anthracene	1650	1440		ug/Kg		87	54 - 132
Di-n-butyl phthalate	1650	1540		ug/Kg		93	58 - 130
Di-n-octyl phthalate	1650	1450		ug/Kg		88	57 - 133
Dibenzofuran	1650	1280		ug/Kg		78	63 - 120
Diethyl phthalate	1650	1450		ug/Kg		88	66 - 120
Dimethyl phthalate	1650	1410		ug/Kg		85	65 - 124
Fluoranthene	1650	1460		ug/Kg		89	62 - 120
Fluorene	1650	1360		ug/Kg		82	63 - 120
Hexachlorobenzene	1650	1500		ug/Kg		91	60 - 120
Hexachlorobutadiene	1650	1230		ug/Kg		74	45 - 120
Hexachlorocyclopentadiene	1650	1110		ug/Kg		67	47 - 120

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

Lab Sample ID: LCS 480-587706/2-A
Matrix: Solid
Analysis Batch: 588584

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 587706

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachloroethane	1650	1060		ug/Kg		64	41 - 120
Indeno[1,2,3-cd]pyrene	1650	1380		ug/Kg		84	56 - 134
Isophorone	1650	1280		ug/Kg		78	56 - 120
N-Nitrosodi-n-propylamine	1650	1180		ug/Kg		72	52 - 120
N-Nitrosodiphenylamine	1650	1410		ug/Kg		85	51 - 128
Naphthalene	1650	1160		ug/Kg		70	55 - 120
Nitrobenzene	1650	1180		ug/Kg		72	54 - 120
Pentachlorophenol	3300	3080		ug/Kg		93	51 - 120
Phenanthrene	1650	1380		ug/Kg		83	60 - 120
Phenol	1650	1210		ug/Kg		73	53 - 120
Pyrene	1650	1420		ug/Kg		86	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*73*		*53 - 120*
Phenol-d5 (Surr)	*72*		*54 - 120*
p-Terphenyl-d14 (Surr)	*88*		*79 - 130*
2,4,6-Tribromophenol (Surr)	*95*		*54 - 120*
2-Fluorobiphenyl	*76*		*60 - 120*
2-Fluorophenol (Surr)	*68*		*52 - 120*

Lab Sample ID: 480-186604-5 MS
Matrix: Solid
Analysis Batch: 588584

Client Sample ID: J6105-SB-114 (2-4 feet)
Prep Type: Total/NA
Prep Batch: 587706

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Biphenyl	240	U	2380	1620		ug/Kg	☼	68	58 - 120
bis (2-chloroisopropyl) ether	240	U	2380	1300		ug/Kg	☼	55	31 - 120
2,4,5-Trichlorophenol	240	U	2380	1820		ug/Kg	☼	76	46 - 120
2,4,6-Trichlorophenol	240	U	2380	1670		ug/Kg	☼	70	41 - 123
2,4-Dichlorophenol	240	U	2380	1740		ug/Kg	☼	73	45 - 120
2,4-Dimethylphenol	240	U	2380	1660		ug/Kg	☼	70	52 - 120
2,4-Dinitrophenol	2300	U	4760	3600		ug/Kg	☼	76	41 - 146
2,4-Dinitrotoluene	240	U	2380	1800		ug/Kg	☼	76	63 - 125
2,6-Dinitrotoluene	240	U	2380	1740		ug/Kg	☼	73	66 - 120
2-Chloronaphthalene	240	U	2380	1610		ug/Kg	☼	68	57 - 120
2-Chlorophenol	460	U	2380	1540		ug/Kg	☼	65	43 - 120
2-Methylphenol	240	U	2380	1590		ug/Kg	☼	67	48 - 120
2-Methylnaphthalene	240	U	2380	1560		ug/Kg	☼	65	55 - 120
2-Nitroaniline	460	U	2380	1740		ug/Kg	☼	73	61 - 120
2-Nitrophenol	240	U	2380	1630		ug/Kg	☼	68	37 - 120
3,3'-Dichlorobenzidine	460	U	4760	3210		ug/Kg	☼	68	37 - 126
3-Nitroaniline	460	U	2380	1600		ug/Kg	☼	67	48 - 120
4,6-Dinitro-2-methylphenol	460	U	4760	3980		ug/Kg	☼	84	23 - 149
4-Bromophenyl phenyl ether	240	U	2380	1990		ug/Kg	☼	84	58 - 120
4-Chloro-3-methylphenol	240	U	2380	1840		ug/Kg	☼	77	49 - 125
4-Chloroaniline	240	U	2380	1490		ug/Kg	☼	62	38 - 120
4-Chlorophenyl phenyl ether	240	U	2380	1760		ug/Kg	☼	74	63 - 124
4-Methylphenol	460	U	2380	1620		ug/Kg	☼	68	50 - 120

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

Lab Sample ID: 480-186604-5 MS
Matrix: Solid
Analysis Batch: 588584

Client Sample ID: J6105-SB-114 (2-4 feet)
Prep Type: Total/NA
Prep Batch: 587706

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Nitroaniline	460	U	2380	1670		ug/Kg	☼	70	47 - 120
4-Nitrophenol	460	U	4760	3900		ug/Kg	☼	82	31 - 147
Acenaphthene	240	U	2380	1680		ug/Kg	☼	71	60 - 120
Acenaphthylene	240	U	2380	1770		ug/Kg	☼	74	58 - 121
Acetophenone	240	U	2380	1610		ug/Kg	☼	68	47 - 120
Anthracene	240	U	2380	1840		ug/Kg	☼	77	62 - 120
Atrazine	240	U	4760	3630		ug/Kg	☼	76	60 - 150
Benzaldehyde	240	U	4760	3230		ug/Kg	☼	68	10 - 150
Benzo[a]anthracene	240	U	2380	1830		ug/Kg	☼	77	65 - 120
Benzo[a]pyrene	240	U	2380	1740		ug/Kg	☼	73	64 - 120
Benzo[b]fluoranthene	240	U	2380	1860		ug/Kg	☼	78	10 - 150
Benzo[g,h,i]perylene	240	U	2380	1720		ug/Kg	☼	72	45 - 145
Benzo[k]fluoranthene	240	U	2380	1830		ug/Kg	☼	77	23 - 150
Bis(2-chloroethoxy)methane	240	U	2380	1620		ug/Kg	☼	68	52 - 120
Bis(2-chloroethyl)ether	240	U	2380	1410		ug/Kg	☼	59	45 - 120
Bis(2-ethylhexyl) phthalate	240	U	2380	1870		ug/Kg	☼	79	61 - 133
Butyl benzyl phthalate	240	U	2380	1850		ug/Kg	☼	78	61 - 120
Caprolactam	240	U	4760	3460		ug/Kg	☼	73	37 - 133
Carbazole	240	U	2380	1810		ug/Kg	☼	76	59 - 120
Chrysene	240	U	2380	1820		ug/Kg	☼	77	64 - 120
Dibenz(a,h)anthracene	240	U	2380	1810		ug/Kg	☼	76	54 - 132
Di-n-butyl phthalate	240	U	2380	1960		ug/Kg	☼	82	58 - 130
Di-n-octyl phthalate	240	U	2380	1820		ug/Kg	☼	76	57 - 133
Dibenzofuran	240	U	2380	1690		ug/Kg	☼	71	62 - 120
Diethyl phthalate	240	U	2380	1830		ug/Kg	☼	77	66 - 120
Dimethyl phthalate	240	U	2380	1750		ug/Kg	☼	74	65 - 124
Fluoranthene	240	U	2380	1900		ug/Kg	☼	78	62 - 120
Fluorene	240	U	2380	1740		ug/Kg	☼	73	63 - 120
Hexachlorobenzene	240	U	2380	2010		ug/Kg	☼	84	60 - 120
Hexachlorobutadiene	240	U	2380	1720		ug/Kg	☼	72	45 - 120
Hexachlorocyclopentadiene	240	U	2380	1490		ug/Kg	☼	63	31 - 120
Hexachloroethane	240	U	2380	1420		ug/Kg	☼	60	21 - 120
Indeno[1,2,3-cd]pyrene	240	U	2380	1730		ug/Kg	☼	73	56 - 134
Isophorone	240	U	2380	1680		ug/Kg	☼	70	56 - 120
N-Nitrosodi-n-propylamine	240	U	2380	1570		ug/Kg	☼	66	46 - 120
N-Nitrosodiphenylamine	240	U	2380	1790		ug/Kg	☼	75	20 - 128
Naphthalene	240	U	2380	1580		ug/Kg	☼	66	46 - 120
Nitrobenzene	240	U	2380	1590		ug/Kg	☼	67	49 - 120
Pentachlorophenol	460	U	4760	3960		ug/Kg	☼	83	25 - 136
Phenanthrene	240	U	2380	1810		ug/Kg	☼	76	60 - 122
Phenol	240	U	2380	1560		ug/Kg	☼	66	50 - 120
Pyrene	240	U	2380	1860		ug/Kg	☼	76	61 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*70*		*53 - 120*
Phenol-d5 (Surr)	*66*		*54 - 120*
p-Terphenyl-d14 (Surr)	*79*		*79 - 130*
2,4,6-Tribromophenol (Surr)	*88*		*54 - 120*

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

Lab Sample ID: 480-186604-5 MS
Matrix: Solid
Analysis Batch: 588584

Client Sample ID: J6105-SB-114 (2-4 feet)
Prep Type: Total/NA
Prep Batch: 587706

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl	73		60 - 120
2-Fluorophenol (Surr)	65		52 - 120

Lab Sample ID: 480-186604-5 MSD
Matrix: Solid
Analysis Batch: 588584

Client Sample ID: J6105-SB-114 (2-4 feet)
Prep Type: Total/NA
Prep Batch: 587706

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Biphenyl	240	U	2380	1830		ug/Kg	☼	77	58 - 120	12	20
bis (2-chloroisopropyl) ether	240	U	2380	1510		ug/Kg	☼	63	31 - 120	15	24
2,4,5-Trichlorophenol	240	U	2380	2090		ug/Kg	☼	88	46 - 120	14	18
2,4,6-Trichlorophenol	240	U	2380	1940		ug/Kg	☼	81	41 - 123	15	19
2,4-Dichlorophenol	240	U	2380	1960		ug/Kg	☼	82	45 - 120	12	19
2,4-Dimethylphenol	240	U	2380	1770		ug/Kg	☼	74	52 - 120	7	42
2,4-Dinitrophenol	2300	U	4760	4180		ug/Kg	☼	88	41 - 146	15	22
2,4-Dinitrotoluene	240	U	2380	2080		ug/Kg	☼	87	63 - 125	14	20
2,6-Dinitrotoluene	240	U	2380	1970		ug/Kg	☼	83	66 - 120	12	15
2-Chloronaphthalene	240	U	2380	1840		ug/Kg	☼	77	57 - 120	13	21
2-Chlorophenol	460	U	2380	1770		ug/Kg	☼	74	43 - 120	14	25
2-Methylphenol	240	U	2380	1820		ug/Kg	☼	76	48 - 120	13	27
2-Methylnaphthalene	240	U	2380	1750		ug/Kg	☼	74	55 - 120	12	21
2-Nitroaniline	460	U	2380	1950		ug/Kg	☼	82	61 - 120	12	15
2-Nitrophenol	240	U	2380	1850		ug/Kg	☼	78	37 - 120	13	18
3,3'-Dichlorobenzidine	460	U	4760	3350		ug/Kg	☼	70	37 - 126	4	25
3-Nitroaniline	460	U	2380	1760		ug/Kg	☼	74	48 - 120	10	19
4,6-Dinitro-2-methylphenol	460	U	4760	4390		ug/Kg	☼	92	23 - 149	10	15
4-Bromophenyl phenyl ether	240	U	2380	2200		ug/Kg	☼	92	58 - 120	10	15
4-Chloro-3-methylphenol	240	U	2380	2070		ug/Kg	☼	87	49 - 125	12	27
4-Chloroaniline	240	U	2380	1580		ug/Kg	☼	66	38 - 120	6	22
4-Chlorophenyl phenyl ether	240	U	2380	2000		ug/Kg	☼	84	63 - 124	13	16
4-Methylphenol	460	U	2380	1830		ug/Kg	☼	77	50 - 120	12	24
4-Nitroaniline	460	U	2380	1850		ug/Kg	☼	78	47 - 120	10	24
4-Nitrophenol	460	U	4760	4530		ug/Kg	☼	95	31 - 147	15	25
Acenaphthene	240	U	2380	1850		ug/Kg	☼	78	60 - 120	10	35
Acenaphthylene	240	U	2380	1990		ug/Kg	☼	83	58 - 121	12	18
Acetophenone	240	U	2380	1840		ug/Kg	☼	77	47 - 120	13	20
Anthracene	240	U	2380	2060		ug/Kg	☼	87	62 - 120	12	15
Atrazine	240	U	4760	4180		ug/Kg	☼	88	60 - 150	14	20
Benzaldehyde	240	U	4760	3680		ug/Kg	☼	77	10 - 150	13	20
Benzo[a]anthracene	240	U	2380	2130		ug/Kg	☼	89	65 - 120	15	15
Benzo[a]pyrene	240	U	2380	1970		ug/Kg	☼	83	64 - 120	12	15
Benzo[b]fluoranthene	240	U	2380	2050		ug/Kg	☼	86	10 - 150	10	15
Benzo[g,h,i]perylene	240	U	2380	1950		ug/Kg	☼	82	45 - 145	12	15
Benzo[k]fluoranthene	240	U	2380	2130		ug/Kg	☼	89	23 - 150	15	22
Bis(2-chloroethoxy)methane	240	U	2380	1800		ug/Kg	☼	76	52 - 120	10	17
Bis(2-chloroethyl)ether	240	U	2380	1670		ug/Kg	☼	70	45 - 120	17	21
Bis(2-ethylhexyl) phthalate	240	U	2380	2120		ug/Kg	☼	89	61 - 133	12	15
Butyl benzyl phthalate	240	U	2380	2150		ug/Kg	☼	90	61 - 120	15	16

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

Lab Sample ID: 480-186604-5 MSD
Matrix: Solid
Analysis Batch: 588584

Client Sample ID: J6105-SB-114 (2-4 feet)
Prep Type: Total/NA
Prep Batch: 587706

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Caprolactam	240	U	4760	3800		ug/Kg	☼	80	37 - 133	9	20
Carbazole	240	U	2380	2030		ug/Kg	☼	85	59 - 120	11	20
Chrysene	240	U	2380	2070		ug/Kg	☼	87	64 - 120	13	15
Dibenz(a,h)anthracene	240	U	2380	2000		ug/Kg	☼	84	54 - 132	10	15
Di-n-butyl phthalate	240	U	2380	2180		ug/Kg	☼	92	58 - 130	11	15
Di-n-octyl phthalate	240	U	2380	2040		ug/Kg	☼	86	57 - 133	12	16
Dibenzofuran	240	U	2380	1910		ug/Kg	☼	80	62 - 120	12	15
Diethyl phthalate	240	U	2380	2100		ug/Kg	☼	88	66 - 120	14	15
Dimethyl phthalate	240	U	2380	2000		ug/Kg	☼	84	65 - 124	13	15
Fluoranthene	240	U	2380	2180		ug/Kg	☼	89	62 - 120	13	15
Fluorene	240	U	2380	1980		ug/Kg	☼	83	63 - 120	13	15
Hexachlorobenzene	240	U	2380	2220		ug/Kg	☼	93	60 - 120	10	15
Hexachlorobutadiene	240	U	2380	1860		ug/Kg	☼	78	45 - 120	8	44
Hexachlorocyclopentadiene	240	U	2380	1830		ug/Kg	☼	77	31 - 120	20	49
Hexachloroethane	240	U	2380	1660		ug/Kg	☼	70	21 - 120	15	46
Indeno[1,2,3-cd]pyrene	240	U	2380	1970		ug/Kg	☼	83	56 - 134	13	15
Isophorone	240	U	2380	1900		ug/Kg	☼	80	56 - 120	13	17
N-Nitrosodi-n-propylamine	240	U	2380	1750		ug/Kg	☼	73	46 - 120	10	31
N-Nitrosodiphenylamine	240	U	2380	1950		ug/Kg	☼	82	20 - 128	9	15
Naphthalene	240	U	2380	1780		ug/Kg	☼	75	46 - 120	12	29
Nitrobenzene	240	U	2380	1810		ug/Kg	☼	76	49 - 120	13	24
Pentachlorophenol	460	U	4760	4460		ug/Kg	☼	94	25 - 136	12	35
Phenanthrene	240	U	2380	2020		ug/Kg	☼	85	60 - 122	11	15
Phenol	240	U	2380	1780		ug/Kg	☼	75	50 - 120	13	35
Pyrene	240	U	2380	2180		ug/Kg	☼	90	61 - 133	16	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*78*		*53 - 120*
Phenol-d5 (Surr)	*75*		*54 - 120*
p-Terphenyl-d14 (Surr)	*90*		*79 - 130*
2,4,6-Tribromophenol (Surr)	*95*		*54 - 120*
2-Fluorobiphenyl	*81*		*60 - 120*
2-Fluorophenol (Surr)	*72*		*52 - 120*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-587267/1-A
Matrix: Water
Analysis Batch: 587587

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 587267

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.20	U	0.20		mg/L		06/29/21 07:23	06/29/21 17:09	1
Antimony	0.020	U	0.020		mg/L		06/29/21 07:23	06/29/21 17:09	1
Arsenic	0.015	U	0.015		mg/L		06/29/21 07:23	06/29/21 17:09	1
Barium	0.0020	U ^6+	0.0020		mg/L		06/29/21 07:23	06/29/21 17:09	1
Beryllium	0.0020	U	0.0020		mg/L		06/29/21 07:23	06/29/21 17:09	1
Cadmium	0.0020	U	0.0020		mg/L		06/29/21 07:23	06/29/21 17:09	1
Calcium	0.50	U	0.50		mg/L		06/29/21 07:23	06/29/21 17:09	1
Chromium	0.0040	U	0.0040		mg/L		06/29/21 07:23	06/29/21 17:09	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-587267/1-A
Matrix: Water
Analysis Batch: 587587

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 587267

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.0040	U	0.0040		mg/L		06/29/21 07:23	06/29/21 17:09	1
Copper	0.010	U	0.010		mg/L		06/29/21 07:23	06/29/21 17:09	1
Iron	0.050	U	0.050		mg/L		06/29/21 07:23	06/29/21 17:09	1
Lead	0.010	U	0.010		mg/L		06/29/21 07:23	06/29/21 17:09	1
Magnesium	0.20	U	0.20		mg/L		06/29/21 07:23	06/29/21 17:09	1
Manganese	0.0030	U	0.0030		mg/L		06/29/21 07:23	06/29/21 17:09	1
Nickel	0.010	U	0.010		mg/L		06/29/21 07:23	06/29/21 17:09	1
Potassium	0.50	U	0.50		mg/L		06/29/21 07:23	06/29/21 17:09	1
Selenium	0.025	U	0.025		mg/L		06/29/21 07:23	06/29/21 17:09	1
Silver	0.0060	U	0.0060		mg/L		06/29/21 07:23	06/29/21 17:09	1
Sodium	1.0	U	1.0		mg/L		06/29/21 07:23	06/29/21 17:09	1
Thallium	0.020	U	0.020		mg/L		06/29/21 07:23	06/29/21 17:09	1
Vanadium	0.0050	U	0.0050		mg/L		06/29/21 07:23	06/29/21 17:09	1
Zinc	0.010	U	0.010		mg/L		06/29/21 07:23	06/29/21 17:09	1

Lab Sample ID: LCS 480-587267/2-A
Matrix: Water
Analysis Batch: 587587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 587267

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aluminum			10.0	10.1		mg/L		101	80 - 120		
Antimony			0.200	0.219		mg/L		109	80 - 120		
Arsenic			0.200	0.206		mg/L		103	80 - 120		
Barium			0.200	0.224	^6+	mg/L		112	80 - 120		
Beryllium			0.200	0.208		mg/L		104	80 - 120		
Cadmium			0.200	0.205		mg/L		103	80 - 120		
Calcium			10.0	10.1		mg/L		101	80 - 120		
Chromium			0.200	0.203		mg/L		101	80 - 120		
Cobalt			0.200	0.198		mg/L		99	80 - 120		
Copper			0.200	0.204		mg/L		102	80 - 120		
Iron			10.0	9.70		mg/L		97	80 - 120		
Lead			0.200	0.202		mg/L		101	80 - 120		
Magnesium			10.0	10.2		mg/L		102	80 - 120		
Manganese			0.200	0.210		mg/L		105	80 - 120		
Nickel			0.200	0.199		mg/L		100	80 - 120		
Potassium			10.0	9.54		mg/L		95	80 - 120		
Selenium			0.200	0.201		mg/L		100	80 - 120		
Silver			0.0500	0.0509		mg/L		102	80 - 120		
Sodium			10.0	9.85		mg/L		98	80 - 120		
Thallium			0.200	0.207		mg/L		104	80 - 120		
Vanadium			0.200	0.204		mg/L		102	80 - 120		
Zinc			0.200	0.204		mg/L		102	80 - 120		

Lab Sample ID: LCSD 480-587267/3-A
Matrix: Water
Analysis Batch: 587587

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 587267

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum			10.0	10.1		mg/L		101	80 - 120	0	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSD 480-587267/3-A
Matrix: Water
Analysis Batch: 587587

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 587267

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.200	0.219		mg/L		109	80 - 120	0	20
Arsenic	0.200	0.204		mg/L		102	80 - 120	1	20
Barium	0.200	0.221	^6+	mg/L		111	80 - 120	1	20
Beryllium	0.200	0.207		mg/L		103	80 - 120	0	20
Cadmium	0.200	0.203		mg/L		101	80 - 120	1	20
Calcium	10.0	9.95		mg/L		100	80 - 120	1	20
Chromium	0.200	0.201		mg/L		100	80 - 120	1	20
Cobalt	0.200	0.195		mg/L		98	80 - 120	1	20
Copper	0.200	0.202		mg/L		101	80 - 120	1	20
Iron	10.0	9.61		mg/L		96	80 - 120	1	20
Lead	0.200	0.200		mg/L		100	80 - 120	1	20
Magnesium	10.0	10.0		mg/L		100	80 - 120	2	20
Manganese	0.200	0.207		mg/L		103	80 - 120	2	20
Nickel	0.200	0.197		mg/L		98	80 - 120	1	20
Potassium	10.0	9.42		mg/L		94	80 - 120	1	20
Selenium	0.200	0.200		mg/L		100	80 - 120	0	20
Silver	0.0500	0.0510		mg/L		102	80 - 120	0	20
Sodium	10.0	9.76		mg/L		97	80 - 120	1	20
Thallium	0.200	0.205		mg/L		102	80 - 120	1	20
Vanadium	0.200	0.202		mg/L		101	80 - 120	1	20
Zinc	0.200	0.202		mg/L		101	80 - 120	1	20

Lab Sample ID: MB 480-587922/1-A
Matrix: Solid
Analysis Batch: 588234

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 587922

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10	U	10		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Antimony	15	U	15		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Arsenic	2.0	U	2.0		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Barium	0.51	U ^6+	0.51		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Beryllium	0.20	U	0.20		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Cadmium	0.20	U	0.20		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Calcium	51	U	51		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Chromium	0.51	U	0.51		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Cobalt	0.51	U	0.51		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Copper	1.0	U	1.0		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Iron	10	U	10		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Lead	1.0	U	1.0		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Magnesium	20	U	20		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Manganese	0.20	U	0.20		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Nickel	5.1	U	5.1		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Potassium	31	U	31		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Selenium	4.1	U	4.1		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Silver	0.61	U	0.61		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Sodium	140	U	140		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Thallium	6.1	U	6.1		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Vanadium	0.51	U	0.51		mg/Kg		07/02/21 11:14	07/06/21 19:07	1
Zinc	2.0	U	2.0		mg/Kg		07/02/21 11:14	07/06/21 19:07	1

Method: 6010C - Metals (ICP)

Lab Sample ID: LCSSRM 480-587922/2-A
Matrix: Solid
Analysis Batch: 588234

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 587922

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	8190	8890		mg/Kg		108.5	50.1 - 150.2
Antimony	110	92.9		mg/Kg		84.5	22.2 - 254.5
Arsenic	162	133		mg/Kg		82.0	70.4 - 130.2
Barium	138	119	^6+	mg/Kg		86.4	74.6 - 124.6
Beryllium	157	147		mg/Kg		93.9	75.2 - 125.5
Cadmium	135	126		mg/Kg		93.0	74.8 - 124.4
Calcium	4790	4230		mg/Kg		88.3	72.7 - 127.3
Chromium	117	98.9		mg/Kg		84.5	70.1 - 129.9
Cobalt	92.6	93.3		mg/Kg		100.8	75.1 - 125.3
Copper	143	120		mg/Kg		83.6	74.8 - 124.5
Iron	15100	11900		mg/Kg		79.1	37.2 - 162.9
Lead	77.6	69.3		mg/Kg		89.3	68.8 - 131.4
Magnesium	2320	2040		mg/Kg		88.0	62.1 - 137.9
Manganese	319	280		mg/Kg		87.9	74.9 - 125.1
Nickel	79.9	81.0		mg/Kg		101.4	70.0 - 130.2
Potassium	2050	1860		mg/Kg		90.7	59.5 - 141.0
Selenium	172	147		mg/Kg		85.6	68.0 - 132.6
Silver	24.7	18.9		mg/Kg		76.7	67.2 - 133.2
Sodium	137	136	J	mg/Kg		99.6	35.8 - 164.2
Thallium	88.0	86.3		mg/Kg		98.0	66.0 - 134.1
Vanadium	99.9	82.8		mg/Kg		82.9	67.4 - 132.1
Zinc	312	267		mg/Kg		85.4	69.9 - 129.8

Lab Sample ID: 480-186604-5 MS
Matrix: Solid
Analysis Batch: 588234

Client Sample ID: J6105-SB-114 (2-4 feet)
Prep Type: Total/NA
Prep Batch: 587922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1400	F1 F2	3010	13300	F1	mg/Kg	☼	395	75 - 125
Antimony	22	U F2	60.1	48.0		mg/Kg	☼	80	75 - 125
Arsenic	2.9	U	60.1	56.7		mg/Kg	☼	93	75 - 125
Barium	6.0	^6+ F1 F2	60.1	102	^6+ F1	mg/Kg	☼	159	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-186604-5 MS
Matrix: Solid
Analysis Batch: 588234

Client Sample ID: J6105-SB-114 (2-4 feet)
Prep Type: Total/NA
Prep Batch: 587922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	0.29	U	60.1	51.9		mg/Kg	☼	86	75 - 125
Cadmium	0.29	U	60.1	51.4		mg/Kg	☼	86	75 - 125
Calcium	89		3000	3030		mg/Kg	☼	98	75 - 125
Chromium	1.5		60.1	60.2		mg/Kg	☼	98	75 - 125
Cobalt	0.72	U	60.1	63.8		mg/Kg	☼	106	75 - 125
Copper	1.9		60.1	68.0		mg/Kg	☼	110	75 - 125
Iron	1700	F1 F2	3000	14400	F1	mg/Kg	☼	421	75 - 125
Lead	1.4	U F2	60.1	71.9		mg/Kg	☼	118	75 - 125
Magnesium	290	F1 F2	3000	4410	F1	mg/Kg	☼	137	75 - 125
Manganese	54	F1 F2	60.1	603	F1	mg/Kg	☼	914	75 - 125
Nickel	7.2	U F2	60.1	70.5		mg/Kg	☼	115	75 - 125
Potassium	260	F1 F2	3010	4960	F1	mg/Kg	☼	156	75 - 125
Selenium	5.8	U	60.1	51.3		mg/Kg	☼	85	75 - 125
Silver	0.87	U	15.0	12.3		mg/Kg	☼	82	75 - 125
Sodium	200	U	3010	2510		mg/Kg	☼	84	75 - 125
Thallium	8.7	U	60.1	59.6		mg/Kg	☼	99	75 - 125
Vanadium	2.1		60.1	66.7		mg/Kg	☼	108	75 - 125
Zinc	6.3	F1 F2	60.1	92.8	F1	mg/Kg	☼	144	75 - 125

Lab Sample ID: 480-186604-5 MSD
Matrix: Solid
Analysis Batch: 588234

Client Sample ID: J6105-SB-114 (2-4 feet)
Prep Type: Total/NA
Prep Batch: 587922

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	1400	F1 F2	2750	3880	F2	mg/Kg	☼	91	75 - 125	110	20
Antimony	22	U F2	54.9	59.9	F2	mg/Kg	☼	109	75 - 125	22	20
Arsenic	2.9	U	54.9	56.5		mg/Kg	☼	101	75 - 125	0	20
Barium	6.0	^6+ F1 F2	54.9	62.8	^6+ F2	mg/Kg	☼	103	75 - 125	47	20
Beryllium	0.29	U	54.9	56.1		mg/Kg	☼	102	75 - 125	8	20
Cadmium	0.29	U	54.9	55.3		mg/Kg	☼	101	75 - 125	7	20
Calcium	89		2750	2820		mg/Kg	☼	100	75 - 125	7	20
Chromium	1.5		54.9	54.1		mg/Kg	☼	96	75 - 125	11	20
Cobalt	0.72	U	54.9	54.6		mg/Kg	☼	99	75 - 125	15	20
Copper	1.9		54.9	56.1		mg/Kg	☼	99	75 - 125	19	20
Iron	1700	F1 F2	2750	3560	F1 F2	mg/Kg	☼	67	75 - 125	121	20
Lead	1.4	U F2	54.9	56.3	F2	mg/Kg	☼	101	75 - 125	24	20
Magnesium	290	F1 F2	2750	2890	F2	mg/Kg	☼	95	75 - 125	41	20
Manganese	54	F1 F2	54.9	83.0	F1 F2	mg/Kg	☼	53	75 - 125	152	20
Nickel	7.2	U F2	54.9	55.6	F2	mg/Kg	☼	99	75 - 125	24	20
Potassium	260	F1 F2	2750	2880	F2	mg/Kg	☼	95	75 - 125	53	20
Selenium	5.8	U	54.9	54.6		mg/Kg	☼	99	75 - 125	6	20
Silver	0.87	U	13.7	13.1		mg/Kg	☼	95	75 - 125	6	20
Sodium	200	U	2750	2640		mg/Kg	☼	96	75 - 125	5	20
Thallium	8.7	U	54.9	55.9		mg/Kg	☼	102	75 - 125	6	20
Vanadium	2.1		54.9	54.7		mg/Kg	☼	96	75 - 125	20	20
Zinc	6.3	F1 F2	54.9	58.2	F2	mg/Kg	☼	95	75 - 125	46	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-587626/1-A
Matrix: Water
Analysis Batch: 587685

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 587626

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020		mg/L		06/30/21 13:36	06/30/21 17:34	1

Lab Sample ID: LCS 480-587626/2-A
Matrix: Water
Analysis Batch: 587685

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 587626

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00667	0.00678		mg/L		102	80 - 120		

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-587941/1-A
Matrix: Solid
Analysis Batch: 587992

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 587941

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020	U	0.020		mg/Kg		07/02/21 14:10	07/02/21 16:23	1

Lab Sample ID: LCSSRM 480-587941/2-A ^10
Matrix: Solid
Analysis Batch: 587992

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 587941

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			27.2	21.2		mg/Kg		77.8	59.9 - 140.1		

Lab Sample ID: 480-186604-5 MS
Matrix: Solid
Analysis Batch: 587992

Client Sample ID: J6105-SB-114 (2-4 feet)
Prep Type: Total/NA
Prep Batch: 587941

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.065		0.406	0.457		mg/Kg	☼	97	80 - 120		

Lab Sample ID: 480-186604-5 MSD
Matrix: Solid
Analysis Batch: 587992

Client Sample ID: J6105-SB-114 (2-4 feet)
Prep Type: Total/NA
Prep Batch: 587941

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.065		0.410	0.438		mg/Kg	☼	91	80 - 120	4	20

GC/MS Semi VOA

Prep Batch: 587370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186604-4	J6105-Field Equipment Blank	Total/NA	Water	3510C	
MB 480-587370/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-587370/2-A	Lab Control Sample	Total/NA	Water	3510C	

Prep Batch: 587706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186604-1	J6105-SB-114 (0-2inches)	Total/NA	Solid	3550C	
480-186604-2	J6105-Field Duplicate	Total/NA	Solid	3550C	
480-186604-3	J6105-SB-114 (0-2feet)	Total/NA	Solid	3550C	
480-186604-5	J6105-SB-114 (2-4 feet)	Total/NA	Solid	3550C	
480-186604-6	J6105-SB-112 (0-2 inches)	Total/NA	Solid	3550C	
480-186604-7	J6105-SB-112 (0-2 feet)	Total/NA	Solid	3550C	
480-186604-8	J6105-SB-112 (2-3 feet)	Total/NA	Solid	3550C	
480-186604-9	J6105-SB-115 (0-2 inches)	Total/NA	Solid	3550C	
480-186604-10	J6105-SB-115 (0-2 feet)	Total/NA	Solid	3550C	
480-186604-11	J6105-SB-115 (2-2.5 feet)	Total/NA	Solid	3550C	
MB 480-587706/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-587706/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-186604-5 MS	J6105-SB-114 (2-4 feet)	Total/NA	Solid	3550C	
480-186604-5 MSD	J6105-SB-114 (2-4 feet)	Total/NA	Solid	3550C	

Analysis Batch: 587909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-587370/1-A	Method Blank	Total/NA	Water	8270D	587370
LCS 480-587370/2-A	Lab Control Sample	Total/NA	Water	8270D	587370

Analysis Batch: 587913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186604-4	J6105-Field Equipment Blank	Total/NA	Water	8270D	587370

Analysis Batch: 588584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186604-1	J6105-SB-114 (0-2inches)	Total/NA	Solid	8270D	587706
480-186604-2	J6105-Field Duplicate	Total/NA	Solid	8270D	587706
480-186604-3	J6105-SB-114 (0-2feet)	Total/NA	Solid	8270D	587706
480-186604-5	J6105-SB-114 (2-4 feet)	Total/NA	Solid	8270D	587706
480-186604-6	J6105-SB-112 (0-2 inches)	Total/NA	Solid	8270D	587706
480-186604-7	J6105-SB-112 (0-2 feet)	Total/NA	Solid	8270D	587706
480-186604-8	J6105-SB-112 (2-3 feet)	Total/NA	Solid	8270D	587706
480-186604-9	J6105-SB-115 (0-2 inches)	Total/NA	Solid	8270D	587706
480-186604-10	J6105-SB-115 (0-2 feet)	Total/NA	Solid	8270D	587706
480-186604-11	J6105-SB-115 (2-2.5 feet)	Total/NA	Solid	8270D	587706
MB 480-587706/1-A	Method Blank	Total/NA	Solid	8270D	587706
LCS 480-587706/2-A	Lab Control Sample	Total/NA	Solid	8270D	587706
480-186604-5 MS	J6105-SB-114 (2-4 feet)	Total/NA	Solid	8270D	587706
480-186604-5 MSD	J6105-SB-114 (2-4 feet)	Total/NA	Solid	8270D	587706

Metals

Prep Batch: 587267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186604-4	J6105-Field Equipment Blank	Total/NA	Water	3005A	
MB 480-587267/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-587267/2-A	Lab Control Sample	Total/NA	Water	3005A	
LCSD 480-587267/3-A	Lab Control Sample Dup	Total/NA	Water	3005A	

Analysis Batch: 587587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186604-4	J6105-Field Equipment Blank	Total/NA	Water	6010C	587267
MB 480-587267/1-A	Method Blank	Total/NA	Water	6010C	587267
LCS 480-587267/2-A	Lab Control Sample	Total/NA	Water	6010C	587267
LCSD 480-587267/3-A	Lab Control Sample Dup	Total/NA	Water	6010C	587267

Prep Batch: 587626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186604-4	J6105-Field Equipment Blank	Total/NA	Water	7470A	
MB 480-587626/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-587626/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 587685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186604-4	J6105-Field Equipment Blank	Total/NA	Water	7470A	587626
MB 480-587626/1-A	Method Blank	Total/NA	Water	7470A	587626
LCS 480-587626/2-A	Lab Control Sample	Total/NA	Water	7470A	587626

Prep Batch: 587922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186604-1	J6105-SB-114 (0-2inches)	Total/NA	Solid	3050B	
480-186604-2	J6105-Field Duplicate	Total/NA	Solid	3050B	
480-186604-3	J6105-SB-114 (0-2feet)	Total/NA	Solid	3050B	
480-186604-5	J6105-SB-114 (2-4 feet)	Total/NA	Solid	3050B	
480-186604-6	J6105-SB-112 (0-2 inches)	Total/NA	Solid	3050B	
480-186604-7	J6105-SB-112 (0-2 feet)	Total/NA	Solid	3050B	
480-186604-8	J6105-SB-112 (2-3 feet)	Total/NA	Solid	3050B	
480-186604-9	J6105-SB-115 (0-2 inches)	Total/NA	Solid	3050B	
480-186604-10	J6105-SB-115 (0-2 feet)	Total/NA	Solid	3050B	
480-186604-11	J6105-SB-115 (2-2.5 feet)	Total/NA	Solid	3050B	
MB 480-587922/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-587922/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-186604-5 MS	J6105-SB-114 (2-4 feet)	Total/NA	Solid	3050B	
480-186604-5 MSD	J6105-SB-114 (2-4 feet)	Total/NA	Solid	3050B	

Prep Batch: 587941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186604-1	J6105-SB-114 (0-2inches)	Total/NA	Solid	7471B	
480-186604-2	J6105-Field Duplicate	Total/NA	Solid	7471B	
480-186604-3	J6105-SB-114 (0-2feet)	Total/NA	Solid	7471B	
480-186604-5	J6105-SB-114 (2-4 feet)	Total/NA	Solid	7471B	
480-186604-6	J6105-SB-112 (0-2 inches)	Total/NA	Solid	7471B	
480-186604-7	J6105-SB-112 (0-2 feet)	Total/NA	Solid	7471B	
480-186604-8	J6105-SB-112 (2-3 feet)	Total/NA	Solid	7471B	
480-186604-9	J6105-SB-115 (0-2 inches)	Total/NA	Solid	7471B	

Metals (Continued)

Prep Batch: 587941 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186604-10	J6105-SB-115 (0-2 feet)	Total/NA	Solid	7471B	
480-186604-11	J6105-SB-115 (2-2.5 feet)	Total/NA	Solid	7471B	
MB 480-587941/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-587941/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	
480-186604-5 MS	J6105-SB-114 (2-4 feet)	Total/NA	Solid	7471B	
480-186604-5 MSD	J6105-SB-114 (2-4 feet)	Total/NA	Solid	7471B	

Analysis Batch: 587992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186604-1	J6105-SB-114 (0-2inches)	Total/NA	Solid	7471B	587941
480-186604-2	J6105-Field Duplicate	Total/NA	Solid	7471B	587941
480-186604-3	J6105-SB-114 (0-2feet)	Total/NA	Solid	7471B	587941
480-186604-5	J6105-SB-114 (2-4 feet)	Total/NA	Solid	7471B	587941
480-186604-6	J6105-SB-112 (0-2 inches)	Total/NA	Solid	7471B	587941
480-186604-7	J6105-SB-112 (0-2 feet)	Total/NA	Solid	7471B	587941
480-186604-8	J6105-SB-112 (2-3 feet)	Total/NA	Solid	7471B	587941
480-186604-9	J6105-SB-115 (0-2 inches)	Total/NA	Solid	7471B	587941
480-186604-10	J6105-SB-115 (0-2 feet)	Total/NA	Solid	7471B	587941
480-186604-11	J6105-SB-115 (2-2.5 feet)	Total/NA	Solid	7471B	587941
MB 480-587941/1-A	Method Blank	Total/NA	Solid	7471B	587941
LCSSRM 480-587941/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	587941
480-186604-5 MS	J6105-SB-114 (2-4 feet)	Total/NA	Solid	7471B	587941
480-186604-5 MSD	J6105-SB-114 (2-4 feet)	Total/NA	Solid	7471B	587941

Analysis Batch: 588234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186604-1	J6105-SB-114 (0-2inches)	Total/NA	Solid	6010C	587922
480-186604-2	J6105-Field Duplicate	Total/NA	Solid	6010C	587922
480-186604-3	J6105-SB-114 (0-2feet)	Total/NA	Solid	6010C	587922
480-186604-5	J6105-SB-114 (2-4 feet)	Total/NA	Solid	6010C	587922
480-186604-6	J6105-SB-112 (0-2 inches)	Total/NA	Solid	6010C	587922
480-186604-7	J6105-SB-112 (0-2 feet)	Total/NA	Solid	6010C	587922
480-186604-8	J6105-SB-112 (2-3 feet)	Total/NA	Solid	6010C	587922
480-186604-9	J6105-SB-115 (0-2 inches)	Total/NA	Solid	6010C	587922
480-186604-10	J6105-SB-115 (0-2 feet)	Total/NA	Solid	6010C	587922
480-186604-11	J6105-SB-115 (2-2.5 feet)	Total/NA	Solid	6010C	587922
MB 480-587922/1-A	Method Blank	Total/NA	Solid	6010C	587922
LCSSRM 480-587922/2-A	Lab Control Sample	Total/NA	Solid	6010C	587922
480-186604-5 MS	J6105-SB-114 (2-4 feet)	Total/NA	Solid	6010C	587922
480-186604-5 MSD	J6105-SB-114 (2-4 feet)	Total/NA	Solid	6010C	587922

General Chemistry

Analysis Batch: 587281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186604-1	J6105-SB-114 (0-2inches)	Total/NA	Solid	Moisture	
480-186604-2	J6105-Field Duplicate	Total/NA	Solid	Moisture	
480-186604-3	J6105-SB-114 (0-2feet)	Total/NA	Solid	Moisture	
480-186604-5	J6105-SB-114 (2-4 feet)	Total/NA	Solid	Moisture	
480-186604-6	J6105-SB-112 (0-2 inches)	Total/NA	Solid	Moisture	
480-186604-7	J6105-SB-112 (0-2 feet)	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 587281 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-186604-8	J6105-SB-112 (2-3 feet)	Total/NA	Solid	Moisture	
480-186604-9	J6105-SB-115 (0-2 inches)	Total/NA	Solid	Moisture	
480-186604-10	J6105-SB-115 (0-2 feet)	Total/NA	Solid	Moisture	
480-186604-11	J6105-SB-115 (2-2.5 feet)	Total/NA	Solid	Moisture	
480-186604-5 MS	J6105-SB-114 (2-4 feet)	Total/NA	Solid	Moisture	
480-186604-5 MSD	J6105-SB-114 (2-4 feet)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: GHD Services Inc.
Job ID: 480-186604-1
Project/Site: 11224293, Utica J6105, SSOW 016

Client Sample ID: J6105-SB-114 (0-2inches)
Lab Sample ID: 480-186604-1
Date Collected: 06/25/21 13:00
Matrix: Solid
Date Received: 06/26/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	587281	06/28/21 16:00	DSC	TAL BUF

Client Sample ID: J6105-SB-114 (0-2inches)
Lab Sample ID: 480-186604-1
Date Collected: 06/25/21 13:00
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 65.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			587706	07/01/21 07:52	VXF	TAL BUF
Total/NA	Analysis	8270D		5	588584	07/09/21 21:53	PJQ	TAL BUF
Total/NA	Prep	3050B			587922	07/02/21 11:14	KMP	TAL BUF
Total/NA	Analysis	6010C		1	588234	07/06/21 19:14	AMH	TAL BUF
Total/NA	Prep	7471B			587941	07/02/21 14:10	BMB	TAL BUF
Total/NA	Analysis	7471B		1	587992	07/02/21 16:25	BMB	TAL BUF

Client Sample ID: J6105-Field Duplicate
Lab Sample ID: 480-186604-2
Date Collected: 06/25/21 00:00
Matrix: Solid
Date Received: 06/26/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	587281	06/28/21 16:00	DSC	TAL BUF

Client Sample ID: J6105-Field Duplicate
Lab Sample ID: 480-186604-2
Date Collected: 06/25/21 00:00
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 78.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			587706	07/01/21 07:52	VXF	TAL BUF
Total/NA	Analysis	8270D		1	588584	07/09/21 22:17	PJQ	TAL BUF
Total/NA	Prep	3050B			587922	07/02/21 11:14	KMP	TAL BUF
Total/NA	Analysis	6010C		1	588234	07/06/21 19:18	AMH	TAL BUF
Total/NA	Prep	7471B			587941	07/02/21 14:10	BMB	TAL BUF
Total/NA	Analysis	7471B		1	587992	07/02/21 16:26	BMB	TAL BUF

Client Sample ID: J6105-SB-114 (0-2feet)
Lab Sample ID: 480-186604-3
Date Collected: 06/25/21 13:25
Matrix: Solid
Date Received: 06/26/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	587281	06/28/21 16:00	DSC	TAL BUF

Lab Chronicle

Client: GHD Services Inc.
Job ID: 480-186604-1
Project/Site: 11224293, Utica J6105, SSOW 016

Client Sample ID: J6105-SB-114 (0-2feet)
Lab Sample ID: 480-186604-3
Date Collected: 06/25/21 13:25
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 84.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			587706	07/01/21 07:52	VXF	TAL BUF
Total/NA	Analysis	8270D		1	588584	07/09/21 22:40	PJQ	TAL BUF
Total/NA	Prep	3050B			587922	07/02/21 11:14	KMP	TAL BUF
Total/NA	Analysis	6010C		1	588234	07/06/21 19:22	AMH	TAL BUF
Total/NA	Prep	7471B			587941	07/02/21 14:10	BMB	TAL BUF
Total/NA	Analysis	7471B		1	587992	07/02/21 16:28	BMB	TAL BUF

Client Sample ID: J6105-Field Equipment Blank
Lab Sample ID: 480-186604-4
Date Collected: 06/25/21 13:30
Matrix: Water
Date Received: 06/26/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			587370	06/29/21 09:12	JMP	TAL BUF
Total/NA	Analysis	8270D		1	587913	07/03/21 04:03	JMM	TAL BUF
Total/NA	Prep	3005A			587267	06/29/21 07:23	KMP	TAL BUF
Total/NA	Analysis	6010C		1	587587	06/29/21 18:23	LMH	TAL BUF
Total/NA	Prep	7470A			587626	06/30/21 13:36	BMB	TAL BUF
Total/NA	Analysis	7470A		1	587685	06/30/21 18:01	BMB	TAL BUF

Client Sample ID: J6105-SB-114 (2-4 feet)
Lab Sample ID: 480-186604-5
Date Collected: 06/25/21 14:00
Matrix: Solid
Date Received: 06/26/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	587281	06/28/21 16:00	DSC	TAL BUF

Client Sample ID: J6105-SB-114 (2-4 feet)
Lab Sample ID: 480-186604-5
Date Collected: 06/25/21 14:00
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 69.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			587706	07/01/21 07:52	VXF	TAL BUF
Total/NA	Analysis	8270D		1	588584	07/09/21 17:54	PJQ	TAL BUF
Total/NA	Prep	3050B			587922	07/02/21 11:14	KMP	TAL BUF
Total/NA	Analysis	6010C		1	588234	07/06/21 19:26	AMH	TAL BUF
Total/NA	Prep	7471B			587941	07/02/21 14:10	BMB	TAL BUF
Total/NA	Analysis	7471B		1	587992	07/02/21 16:29	BMB	TAL BUF

Client Sample ID: J6105-SB-112 (0-2 inches)
Lab Sample ID: 480-186604-6
Date Collected: 06/25/21 14:20
Matrix: Solid
Date Received: 06/26/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	587281	06/28/21 16:00	DSC	TAL BUF

Client Sample ID: J6105-SB-112 (0-2 inches)
Lab Sample ID: 480-186604-6
Date Collected: 06/25/21 14:20
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 75.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			587706	07/01/21 07:52	VXF	TAL BUF
Total/NA	Analysis	8270D		1	588584	07/09/21 23:04	PJQ	TAL BUF
Total/NA	Prep	3050B			587922	07/02/21 11:14	KMP	TAL BUF
Total/NA	Analysis	6010C		1	588234	07/06/21 19:55	AMH	TAL BUF
Total/NA	Prep	7471B			587941	07/02/21 14:10	BMB	TAL BUF
Total/NA	Analysis	7471B		1	587992	07/02/21 16:37	BMB	TAL BUF

Client Sample ID: J6105-SB-112 (0-2 feet)
Lab Sample ID: 480-186604-7
Date Collected: 06/25/21 14:30
Matrix: Solid
Date Received: 06/26/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	587281	06/28/21 16:00	DSC	TAL BUF

Client Sample ID: J6105-SB-112 (0-2 feet)
Lab Sample ID: 480-186604-7
Date Collected: 06/25/21 14:30
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			587706	07/01/21 07:52	VXF	TAL BUF
Total/NA	Analysis	8270D		1	588584	07/09/21 23:28	PJQ	TAL BUF
Total/NA	Prep	3050B			587922	07/02/21 11:14	KMP	TAL BUF
Total/NA	Analysis	6010C		1	588234	07/06/21 19:59	AMH	TAL BUF
Total/NA	Prep	7471B			587941	07/02/21 14:10	BMB	TAL BUF
Total/NA	Analysis	7471B		1	587992	07/02/21 16:38	BMB	TAL BUF

Client Sample ID: J6105-SB-112 (2-3 feet)
Lab Sample ID: 480-186604-8
Date Collected: 06/25/21 14:45
Matrix: Solid
Date Received: 06/26/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	587281	06/28/21 16:00	DSC	TAL BUF

Client Sample ID: J6105-SB-112 (2-3 feet)
Lab Sample ID: 480-186604-8
Date Collected: 06/25/21 14:45
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			587706	07/01/21 07:52	VXF	TAL BUF
Total/NA	Analysis	8270D		1	588584	07/09/21 23:51	PJQ	TAL BUF
Total/NA	Prep	3050B			587922	07/02/21 11:14	KMP	TAL BUF
Total/NA	Analysis	6010C		1	588234	07/06/21 20:03	AMH	TAL BUF
Total/NA	Prep	7471B			587941	07/02/21 14:10	BMB	TAL BUF
Total/NA	Analysis	7471B		1	587992	07/02/21 16:39	BMB	TAL BUF

Lab Chronicle

Client: GHD Services Inc.
Job ID: 480-186604-1
Project/Site: 11224293, Utica J6105, SSOW 016

Client Sample ID: J6105-SB-115 (0-2 inches)
Lab Sample ID: 480-186604-9
Date Collected: 06/25/21 15:00
Matrix: Solid
Date Received: 06/26/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	587281	06/28/21 16:00	DSC	TAL BUF

Client Sample ID: J6105-SB-115 (0-2 inches)
Lab Sample ID: 480-186604-9
Date Collected: 06/25/21 15:00
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 56.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			587706	07/01/21 07:52	VXF	TAL BUF
Total/NA	Analysis	8270D		1	588584	07/10/21 00:15	PJQ	TAL BUF
Total/NA	Prep	3050B			587922	07/02/21 11:14	KMP	TAL BUF
Total/NA	Analysis	6010C		1	588234	07/06/21 20:07	AMH	TAL BUF
Total/NA	Prep	7471B			587941	07/02/21 14:10	BMB	TAL BUF
Total/NA	Analysis	7471B		1	587992	07/02/21 16:41	BMB	TAL BUF

Client Sample ID: J6105-SB-115 (0-2 feet)
Lab Sample ID: 480-186604-10
Date Collected: 06/25/21 15:15
Matrix: Solid
Date Received: 06/26/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	587281	06/28/21 16:00	DSC	TAL BUF

Client Sample ID: J6105-SB-115 (0-2 feet)
Lab Sample ID: 480-186604-10
Date Collected: 06/25/21 15:15
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			587706	07/01/21 07:52	VXF	TAL BUF
Total/NA	Analysis	8270D		1	588584	07/10/21 00:39	PJQ	TAL BUF
Total/NA	Prep	3050B			587922	07/02/21 11:14	KMP	TAL BUF
Total/NA	Analysis	6010C		1	588234	07/06/21 20:10	AMH	TAL BUF
Total/NA	Prep	7471B			587941	07/02/21 14:10	BMB	TAL BUF
Total/NA	Analysis	7471B		1	587992	07/02/21 16:42	BMB	TAL BUF

Client Sample ID: J6105-SB-115 (2-2.5 feet)
Lab Sample ID: 480-186604-11
Date Collected: 06/25/21 15:30
Matrix: Solid
Date Received: 06/26/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	587281	06/28/21 16:00	DSC	TAL BUF

Lab Chronicle

Client: GHD Services Inc.
Job ID: 480-186604-1
Project/Site: 11224293, Utica J6105, SSOW 016

Client Sample ID: J6105-SB-115 (2-2.5 feet)
Lab Sample ID: 480-186604-11

Date Collected: 06/25/21 15:30
Matrix: Solid
Date Received: 06/26/21 10:00
Percent Solids: 63.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			587706	07/01/21 07:52	VXF	TAL BUF
Total/NA	Analysis	8270D		1	588584	07/10/21 01:03	PJQ	TAL BUF
Total/NA	Prep	3050B			587922	07/02/21 11:14	KMP	TAL BUF
Total/NA	Analysis	6010C		1	588234	07/06/21 20:14	AMH	TAL BUF
Total/NA	Prep	7471B			587941	07/02/21 14:10	BMB	TAL BUF
Total/NA	Analysis	7471B		1	587992	07/02/21 16:43	BMB	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: GHD Services Inc.
Job ID: 480-186604-1
Project/Site: 11224293, Utica J6105, SSOW 016

Laboratory: Eurofins TestAmerica, Buffalo

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-0686	07-07-21 *
Connecticut	State	PH-0568	09-30-22
Florida	NELAP	E87672	06-30-22
Georgia	State	10026 (NY)	03-31-22
Georgia	State Program	N/A	03-31-09 *
Georgia (DW)	State	956	03-31-22
Illinois	NELAP	200003	10-01-21
Iowa	State	374	03-01-23
Iowa	State Program	374	03-01-09 *
Kansas	NELAP	E-10187	02-02-22
Kentucky (DW)	State	90029	12-31-21
Kentucky (UST)	State	30	04-01-22
Kentucky (WW)	State	KY90029	01-01-22
Louisiana	NELAP	02031	06-30-22
Maine	State	NY00044	12-05-22
Maryland	State	294	04-02-22
Massachusetts	State	M-NY044	06-30-22
Michigan	State	9937	04-01-22
Michigan	State Program	9937	04-01-09 *
Minnesota	NELAP	1524384	01-01-22
New Hampshire	NELAP	2973	09-11-19 *
New Hampshire	NELAP	2337	11-19-21
New Jersey	NELAP	NY455	06-30-22
New York	NELAP	10026	04-01-22
Oklahoma	State	9421	09-02-21
Oregon	NELAP	NY200003	06-12-22
Pennsylvania	NELAP	68-00281	07-31-21
Rhode Island	State	LAO00328	12-31-21
Tennessee	State	02970	03-31-22
Texas	NELAP	T104704412-18-10	08-02-21
USDA	US Federal Programs	P330-18-00039	02-06-21 *
Virginia	NELAP	460185	09-14-21
Washington	State	C784	02-10-22
Wisconsin	State	998310390	09-01-21

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

Method Summary

Client: GHD Services Inc.
Project/Site: 11224293, Utica J6105, SSOW 016

Job ID: 480-186604-1

Method	Method Description	Protocol	Laboratory
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
3005A	Preparation, Total Metals	SW846	TAL BUF
3050B	Preparation, Metals	SW846	TAL BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
3550C	Ultrasonic Extraction	SW846	TAL BUF
7470A	Preparation, Mercury	SW846	TAL BUF
7471B	Preparation, Mercury	SW846	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

Sample Summary

Client: GHD Services Inc.
Job ID: 480-186604-1
Project/Site: 11224293, Utica J6105, SSOW 016

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-186604-1	J6105-SB-114 (0-2inches)	Solid	06/25/21 13:00	06/26/21 10:00	
480-186604-2	J6105-Field Duplicate	Solid	06/25/21 00:00	06/26/21 10:00	
480-186604-3	J6105-SB-114 (0-2feet)	Solid	06/25/21 13:25	06/26/21 10:00	
480-186604-4	J6105-Field Equipment Blank	Water	06/25/21 13:30	06/26/21 10:00	
480-186604-5	J6105-SB-114 (2-4 feet)	Solid	06/25/21 14:00	06/26/21 10:00	
480-186604-6	J6105-SB-112 (0-2 inches)	Solid	06/25/21 14:20	06/26/21 10:00	
480-186604-7	J6105-SB-112 (0-2 feet)	Solid	06/25/21 14:30	06/26/21 10:00	
480-186604-8	J6105-SB-112 (2-3 feet)	Solid	06/25/21 14:45	06/26/21 10:00	
480-186604-9	J6105-SB-115 (0-2 inches)	Solid	06/25/21 15:00	06/26/21 10:00	
480-186604-10	J6105-SB-115 (0-2 feet)	Solid	06/25/21 15:15	06/26/21 10:00	
480-186604-11	J6105-SB-115 (2-2.5 feet)	Solid	06/25/21 15:30	06/26/21 10:00	

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Syracuse #225

Client Information	Sampler: Dorian Kessler	Lab PM: Heckler, Denise D	Carrier Tracking No(s):	COC No: 480-161923-35564.2
Client Contact: Ms. Sue Scrocchi	Phone: 917-345-6416	E-Mail: Denise.Heckler@Eurofinset.com	State of Origin:	Page: Page 2 of 2
Company: GHD Services Inc.	PWSID:			Job #:

Client	Details
Address: 2055 Niagara Falls Blvd., Suite 3	Due Date Requested:
City: Niagara Falls	TAT Requested (days):
State, Zip: NY, 14304	Compliance Project: Δ Yes Δ No
Phone: 716-206-0202(Tel) 716-206-0201(Fax)	PO #: Purchase Order Requested
Email: sue.scrocchi@ghd.com	WO #: 11224293
Project Name: 11224293, Utica J6105	Project #: 48021035
Site: Utica	SSOW#:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D - SVOCs	6010C - TAL Metals	6010C - TAL Metals	Total Number of containers	Special Instructions/Note:
				Preservation Code:	X	X	N	D	N	X	
J6105-SB-114 (0-2 inches)	6/25/21	1300	G	Solid			X		X		
J6105-Field Duplicate	6/25/21	—	G	Solid			X		X		
J6105-SB-114 (0-2 feet)	6/25/21	1325	G	Solid			X		X		
J6105-Field Equipment Blank	6/25/21	1330	G	W			X	X			
J6105-SB-114 (2-4 feet)	6/25/21	1400	G	S			X		X		
J6105-SB-114 (2-4feet) MS	6/25/21	1400	G	S			X		X		
J6105-SB-114 (2-4feet) MSD	6/25/21	1400	G	S			X		X		
J6105-SB-117 (0-2 inches)	6/25/21	1420	G	S			X		X		
J6105-SB-112 ~~114~~ (0-2 feet)	6/25/21	1430	G	S			X		X		
J6105-SB-112 (2-3 feet)	6/25/21	1445	G	S			X		X		
J6105-SB-115 (0-2 inches)	6/25/21	1500	G	S			X		X		

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

480-186604 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Dorian Kessler	Date/Time: 6/25/21 1645	Company: GES	Received by: R. English	Date/Time: 6-25-21, 16:45	Company: Syr
Relinquished by: R. English	Date/Time: 6-25-21, 1800	Company: Syr	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by: [signature]	Date/Time: 6/26/21 1000	Company: TA
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 2.9 #1		

Ver: 11/01/2020

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Syracuse #225

Client Information	Sampler: Dorian Kessler	Lab PM: Heckler, Denise D	Carrier Tracking No(s):	COC No: 480-161923-35564.1
Client Contact: Ms. Sue Scrocchi	Phone:	E-Mail: Denise.Heckler@Eurofinset.com	State of Origin:	Page: Page 2 of 2
Company: GHD Services Inc.	PWSID:	Analysis Requested		Job #:
Address: 2055 Niagara Falls Blvd., Suite 3	Due Date Requested:			Preservation Codes:
City: Niagara Falls	TAT Requested (days):			
State, Zip: NY, 14304	Compliance Project: Δ Yes Δ No			
Phone: 716-206-0202(Tel) 716-206-0201(Fax)	PO #: Purchase Order Requested			
Email: sue.scrocchi@ghd.com	WO #: 11224293			
Project Name: 11224293, Utica J6105	Project #: 48021035			
Site:	SSOW#:			Other:

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D - SVOCs	6010C - TAL Metals	6010C - TAL Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	D	N	X	
J6105-SB-115 (0-2 feet)	6/25/21	1515	C	Waters			X		X		
J6105-SB-115 (2-2.5 feet)	6/25/21	1530	C	Solid			X		X		
TRIP Blank	—	—	W	W			X	X			
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							

RC 6-25-21

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Dorian Kessler	6/25/21 1645	GES	R Cziglich	6-25-21, 1645	Syr
R Cziglich	6-25-21, 1900	Syr			
			[signature]	6/26/21 1000	TA

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.9 #1

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 480-186604-1

Login Number: 186604
List Number: 1
Creator: Sabuda, Brendan D

List Source: Eurofins TestAmerica, Buffalo

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.9 #1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Attachment B – Data Usability Summary Report

Memorandum

21 July 2021

To	Devin Shay		
Copy to	Sue Scrocchi		
From	Kathy Shaw/ro/eew/7-NF	**Tel**	860 747-8298
Subject	Analytical Results and Full Validation Additional Soil Sampling at three locations in Buffer Parcel NGC Utica Utica, New York June 2021	**Project no.**	11224293-J6105

1. Introduction

This document details a validation of analytical results for soil samples collected in support of the Additional Soil Sampling at three locations in Buffer Parcel at the NGC Utica, New York site during June 2021. Samples were submitted to Eurofins TestAmerica Laboratory, located in Buffalo, New York. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented in Table 3.

Full Contract Laboratory Program (CLP) equivalent raw data deliverables were provided by the laboratory. Evaluation of the data was based on information obtained from the finished data sheets, raw data, chain of custody form, calibration data, blank data, recovery data from surrogate spikes/laboratory control samples (LCS) and matrix spike (MS) samples. The assessment of analytical and in-house data included checks for: data consistency (by observing comparability of duplicate analyses), adherence to accuracy and precision criteria, and transmittal errors.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and applicable guidance from the documents entitled:

i) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540-R-2016-002, September 2016

ii) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", United States Environmental Protection Agency (USEPA) 540-R-2016-001, September 2016

These items will subsequently be referred to as the "Guidelines" in this Memorandum.

2. Sample Holding Time and Preservation

The sample holding time criteria and sample preservation requirements for the analyses are summarized in Table 3. Sample chain of custody documents and analytical reports were used to determine sample holding times. All samples were prepared and analyzed within the required holding times.

All samples were properly preserved, delivered on ice, and stored by the laboratory at the required temperature (0-6°C).

3. Gas Chromatography/Mass Spectrometer (GC/MS) – Tuning and Mass Calibration (Instrument Performance Check)

Prior to semi-volatile organic compound (SVOC) analysis, the GC/MS instrumentation is tuned to ensure optimization over the mass range of interest. To evaluate instrument tuning, the method requires the analysis of the specific tuning compound decafluorotriphenylphosphine (DFTPP. The resulting spectra must meet the criteria cited in the methods before analysis is initiated. Analysis of the tuning compound must then be repeated every 12 hours throughout sample analysis to ensure the continued optimization of the instrument.

Tuning compounds were analyzed at the required frequency throughout SVOC analysis periods. All tuning criteria were met indicating that proper optimization of the instrumentation was achieved.

4. Initial Calibration - Organic Analyses

4.1 GC/MS

To quantify SVOCs of interest in samples, calibration of the GC/MS over a specific concentration range must be performed. Initially, a five-point calibration curve containing all compounds of interest is analyzed to characterize instrument response for each analyte over a specific concentration range. Linearity of the calibration curve and instrument sensitivity are evaluated against the following criteria:

i) All relative response factors (RRFs) must be greater than or equal to 0.050 (greater than or equal to 0.010 for compounds that exhibit poor response)

ii) The percent relative standard deviation (%RSD) values must not exceed 20.0 percent (40.0 percent for compounds that exhibit poor response) or a minimum correlation coefficient (R) and minimum coefficient of determination (R^2) of 0.99 if linear and quadratic equation calibration curves are used

The initial calibration data for SVOCs were reviewed. All compounds met the above criteria for sensitivity and linearity.

5. Initial Calibration – Inorganic Analyses

Initial calibration of the instruments ensures that they are capable of producing satisfactory quantitative data at the beginning of a series of analyses. For ICP analysis, a calibration blank and at least one standard must be analyzed at each wavelength to establish the analytical curve. For mercury atomic absorption (AA) analyses, a calibration blank and a minimum of five standards must be analyzed to establish the analytical curve and resulting correlation coefficients (R) must be 0.995 or greater. After the analyses of the calibration curves, an initial calibration verification (ICV) standard must be analyzed to verify the analytical accuracy of the calibration curves. All analyte recoveries from the analyses of the ICVs must be within the following control limits:

Analytical Method	Parameter	Control Limits
ICP/AA	Metals	90 - 110%
Cold Vapor AA	Mercury	80 - 120%

Upon review of the data, it was determined that the calibration curves and ICVs were analyzed at the proper frequencies and that all of the above-specified criteria were met. The laboratory effectively demonstrated that the instrumentation used for metals and general chemistry analyses were properly calibrated prior to sample analysis.

6. Continuing Calibration - Organic Analyses

6.1 GC/MS

To ensure that instrument calibration for SVOC analyses is acceptable throughout the sample analysis period, continuing calibration standards must be analyzed and compared to the initial calibration curve every 12 hours.

The following criteria were employed to evaluate continuing calibration data:

i) All RRF values must be greater than or equal to 0.050 (greater than or equal to 0.010 for compounds that exhibit poor response)

ii) Percent difference (%D) values must not exceed 25.0 percent (40.0 percent for compounds that exhibit poor response)

Calibration standards were analyzed at the required frequency, and most results met the above criteria for instrument sensitivity and stability; however, the continuing calibration standard results for hexachlorobutadiene indicated variability in instrument response for various compounds and were qualified in Table 4.

7. Continuing Calibration - Inorganic Analyses

To ensure that instrument calibration is acceptable throughout the sample analysis period, continuing calibration verification (CCV) standards are analyzed on a regular basis. Each CCV is deemed acceptable if all analyte recoveries are within the control limits specified above for the ICVs. If some of the CCV analyte recoveries are outside the control limits, samples analyzed before and after the CCV, up until the previous and proceeding CCV analyses, are affected.

For this study, CCVs were analyzed at the proper frequency. All analyte recoveries reported for the CCVs were within the specified limits.

8. Laboratory Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures. Additionally, initial and continuing calibration blanks (ICBs/CCBs) are routinely analyzed after each ICV/CCV for the inorganic parameters.

For this study, laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

8.1 Organic Analyses

All method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation.

8.2 Inorganic Analyses

All ICBs, CCBs, and method blanks were non-detect, indicating that laboratory contamination was not a factor for this investigation.

9. Surrogate Spike Recoveries

In accordance with the methods employed, all samples, blanks, and QC samples analyzed for organics are spiked with surrogate compounds prior to sample extraction and/or analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for SVOC determinations were spiked with the appropriate number of surrogate compounds prior to sample extraction and/or analysis.

Each individual surrogate compound is expected to meet the laboratory control limits with the exception of SVOC analyses. According to the "Guidelines" for SVOC analyses, up to one outlying surrogate in the base/neutral or acid fractions is acceptable if the recovery is at least 10 percent.

Surrogate recoveries were assessed against laboratory control limits. All surrogate recoveries were within the laboratory criteria.

10. Internal Standards (IS) Analyses

IS data were evaluated for all SVOC sample analyses.

To ensure that changes in the GC/MS sensitivity and response do not affect sample analysis results, IS compounds are added to each sample prior to analysis. All results are then calculated as a ratio of the IS responses.

The sample IS results were evaluated against the following criteria:

i) The retention time of the IS must not vary more than ±30 seconds from the associated calibration standard.

ii) IS area counts must not vary by more than a factor of two (-50 percent to +100 percent) from the associated calibration standard.

All organic IS recoveries and retention times met the above criteria.

11. Laboratory Control Sample Analyses

LCS and/or laboratory control sample duplicates (LCSD) are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects. The relative percent difference (RPD) of the LCS/LCSD recoveries is used to evaluate analytical precision.

For this study, LCS/LCSD were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

11.1 Organic Analyses

The LCS contained all compounds of interest. All LCS recoveries were within the laboratory control limits, demonstrating acceptable analytical accuracy.

11.2 Inorganic Analyses

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

12. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

To evaluate the effects of sample matrices on the preparation process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS/MSD samples. The RPD between the MS and MSD is used to assess analytical precision.

MS/MSD analyses were performed as specified in Table 1.

12.1 Organic Analyses

The MS/MSD samples were spiked with all compounds of interest. All percent recoveries and RPD values were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision.

12.2 Inorganic Analyses

The MS/MSD samples were spiked with the analytes of interest, and the results were evaluated using the "Guidelines". High RPD values were reported for several metals. Positive results were qualified as estimated in Table 5. Non-detect results were not impacted by the indicated variability.

13. ICP Serial Dilution

The serial dilution determines whether significant physical or chemical interferences exist due to sample matrix. A minimum of 1 per 20 investigative samples or at least 1 per analytical batch must be analyzed at a five-fold dilution. For samples with sufficient analyte concentrations (>50 times the method detection limit), the serial dilution results must agree within 10 percent of the original results.

A serial dilution was performed on the MS/MSD sample. Most results agreed within 10% of the original results except for the samples in exceedance of the criteria which were qualified as estimated in Table 6.

14. ICP Interference Check Sample Analysis (ICS)

To verify that the laboratory has established proper inter-element and background correction factors, ICSs are analyzed. These samples contain high concentrations of aluminum, calcium, magnesium, and iron are analyzed at the beginning and end of each sample analysis period. The ICSs are evaluated against recovery control limits of 80 to 120 percent.

ICS analysis results were evaluated for all samples using the criteria in the "Guidelines". All ICS recoveries and results were acceptable.

15. Field QA/QC Samples

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

15.1 Rinse Blank Sample Analysis

To assess field decontamination procedures, ambient conditions at the site, and cleanliness of sample containers, one rinse blank was submitted for analysis, as identified in Table 1. All results were non-detect for the analytes of interest.

15.2 Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, one field duplicate sample set was collected and submitted "blind" to the laboratory, as specified in Table 1. The RPDs associated with these duplicate samples must be less than 100 percent for soil samples. If the reported concentration in either the investigative sample or its duplicate is less than five times the reporting limit (RL), the evaluation criteria is two times the RL value for soil samples.

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

16. Analyte Reporting

The laboratory reported detected results down to the laboratory's MDL for each analyte. Positive analyte detections less than the RL but greater than the MDL were qualified as estimated (J) in Table 2 unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the RL in Table 2.

All soil results were reported on a dry weight basis.

17. Target Compound Identification

To minimize erroneous compound identification during organic analyses, qualitative criteria including compound retention time and mass spectra (if applicable) were evaluated according to the identification criteria established by the methods. The organic compounds reported adhered to the specified identification criteria.

18. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2 are acceptable with the specific qualifications noted herein.

Regards

Kathleen Shaw
Data Management Team – Data Validator

Table 1

Sample Collection and Analysis Summary
Additional Soil Sampling at three locations in Buffer Parcerl
NGC Utica
Utica, New York
June 2021

Sample Identification	Location	Matrix	Initial Sample Depth	Final Sample Depth	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters: SVOC	Analysis/Parameters: TAL Metals	Comments
J6105-SB-112 (2-3 feet)	SB-112	Soil	2'	3'	06/25/2021	14:45	X	X	
J6105-SB-112 (0-2 inches)	SB-112	Soil	0"	2"	06/25/2021	14:20	X	X	
J6105-SB-112 (0-2 feet)	SB-112	Soil	0'	2'	06/25/2021	14:30	X	X	
J6105-SB-114 (2-4 feet)	SB-114	Soil	2'	4'	06/25/2021	14:00	X	X	MS/MSD
J6105-SB-114 (0-2inches)	SB-114	Soil	0"	2"	06/25/2021	13:00	X	X	
J6105-SB-114 (0-2feet)	SB-114	Soil	0'	2'	06/25/2021	13:25	X	X	
J6105-Field Duplicate	SB-114	Soil	0"	2"	06/25/2021	00:00	X	X	Field Duplicate (SB-114 (0-2))
J6105-SB-115 (2-2.5 feet)	SB-115	Soil	2'	2.5'	06/25/2021	15:30	X	X	
J6105-SB-115 (0-2 feet)	SB-115	Soil	0'	2'	06/25/2021	15:15	X	X	
J6105-SB-115 (0-2 inches)	SB-115	Soil	0"	2"	06/25/2021	15:00	X	X	
J6105-Field Equipment Blank	--	Water	--	--	06/25/2021	13:30	X	X	Equipment Blank

Notes:

MS/MSD - Matrix Spike/Matrix Spike Duplicate
SVOC - Semi-volatile Organic Compounds
TAL - Target Analyte List
' - feet
" - inches

Table 2

Sample Collection and Analysis Summary
Additional Soil Sampling at three locations in Buffer Parcel
NGC Utica
Utica, New York
June 2021

Location ID:		**SB-112**	**SB-112**	**SB-112**	**SB-114**	**SB-114**
Sample Name:		**J6105-SB-112 (2-3 feet)**	**J6105-SB-112 (0-2 feet)**	**J6105-SB-112 (0-2 inches)**	**J6105-SB-114 (2-4 feet)**	**J6105-SB-114 (0-2inches)**
Sample Date:		**06/25/2021**	**06/25/2021**	**06/25/2021**	**06/25/2021**	**06/25/2021**
Depth:		**2-3 ft BGS**	**0-2 ft BGS**	**0-2 in BGS**	**2-4 ft BGS**	**0-2 in BGS**
Parameters	**Unit**					
Semi-volatile Organic Compounds						
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/kg	<190	<200	<220	<240	<1300
2,4,5-Trichlorophenol	µg/kg	<190	<200	<220	<240	<1300
2,4,6-Trichlorophenol	µg/kg	<190	<200	<220	<240	<1300
2,4-Dichlorophenol	µg/kg	<190	<200	<220	<240	<1300
2,4-Dimethylphenol	µg/kg	<190	<200	<220	<240	<1300
2,4-Dinitrophenol	µg/kg	<1900	<2000	<2200	<2300	<13000
2,4-Dinitrotoluene	µg/kg	<190	<200	<220	<240	<1300
2,6-Dinitrotoluene	µg/kg	<190	<200	<220	<240	<1300
2-Chloronaphthalene	µg/kg	<190	<200	<220	<240	<1300
2-Chlorophenol	µg/kg	<380	<390	<430	<460	<2500
2-Methylnaphthalene	µg/kg	<190	<200	<220	<240	<1300
2-Methylphenol	µg/kg	<190	<200	<220	<240	<1300
2-Nitroaniline	µg/kg	<380	<390	<430	<460	<2500
2-Nitrophenol	µg/kg	<190	<200	<220	<240	<1300
3,3'-Dichlorobenzidine	µg/kg	<380	<390	<430	<460	<2500
3-Nitroaniline	µg/kg	<380	<390	<430	<460	<2500
4,6-Dinitro-2-methylphenol	µg/kg	<380	<390	<430	<460	<2500
4-Bromophenyl phenyl ether	µg/kg	<190	<200	<220	<240	<1300
4-Chloro-3-methylphenol	µg/kg	<190	<200	<220	<240	<1300
4-Chloroaniline	µg/kg	<190	<200	<220	<240	<1300
4-Chlorophenyl phenyl ether	µg/kg	<190	<200	<220	<240	<1300
4-Methylphenol	µg/kg	<380	<390	<430	<460	<2500
4-Nitroaniline	µg/kg	<380	<390	<430	<460	<2500
4-Nitrophenol	µg/kg	<380	<390	<430	<460	<2500
Acenaphthene	µg/kg	<190	<200	<220	<240	<1300

Table 2

Sample Collection and Analysis Summary
Additional Soil Sampling at three locations in Buffer Parcel
NGC Utica
Utica, New York
June 2021

Location ID:		**SB-112**	**SB-112**	**SB-112**	**SB-114**	**SB-114**
Sample Name:		**J6105-SB-112 (2-3 feet)**	**J6105-SB-112 (0-2 feet)**	**J6105-SB-112 (0-2 inches)**	**J6105-SB-114 (2-4 feet)**	**J6105-SB-114 (0-2inches)**
Sample Date:		**06/25/2021**	**06/25/2021**	**06/25/2021**	**06/25/2021**	**06/25/2021**
Depth:		**2-3 ft BGS**	**0-2 ft BGS**	**0-2 in BGS**	**2-4 ft BGS**	**0-2 in BGS**
Parameters	**Unit**					
Semi-volatile Organic Compounds (Continued)						
Acenaphthylene	µg/kg	<190	<200	<220	<240	<1300
Acetophenone	µg/kg	<190	<200	<220	<240	<1300
Anthracene	µg/kg	<190	<200	<220	<240	<1300
Atrazine	µg/kg	<190	<200	<220	<240	<1300
Benzaldehyde	µg/kg	<190	<200	<220	<240	<1300
Benzo(a)anthracene	µg/kg	<190	<200	<220	<240	<1300
Benzo(a)pyrene	µg/kg	<190	<200	<220	<240	<1300
Benzo(b)fluoranthene	µg/kg	<190	<200	290	<240	<1300
Benzo(g,h,i)perylene	µg/kg	<190	<200	<220	<240	<1300
Benzo(k)fluoranthene	µg/kg	<190	<200	<220	<240	<1300
Biphenyl (1,1-Biphenyl)	µg/kg	<190	<200	<220	<240	<1300
bis(2-Chloroethoxy)methane	µg/kg	<190	<200	<220	<240	<1300
bis(2-Chloroethyl)ether	µg/kg	<190	<200	<220	<240	<1300
bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	<190	<200	<220	<240	<1300
Butyl benzylphthalate (BBP)	µg/kg	<190	<200	<220	<240	<1300
Caprolactam	µg/kg	<190	<200	<220	<240	<1300
Carbazole	µg/kg	<190	<200	<220	<240	<1300
Chrysene	µg/kg	<190	<200	<220	<240	<1300
Di-n-butylphthalate (DBP)	µg/kg	<190	<200	<220	<240	<1300
Di-n-octyl phthalate (DnOP)	µg/kg	<190	<200	<220	<240	<1300
Dibenz(a,h)anthracene	µg/kg	<190	<200	<220	<240	<1300
Dibenzofuran	µg/kg	<190	<200	<220	<240	<1300
Diethyl phthalate	µg/kg	<190	<200	<220	<240	<1300
Dimethyl phthalate	µg/kg	<190	<200	<220	<240	<1300
Fluoranthene	µg/kg	<190	<200	430	<240	<1300

Table 2

Sample Collection and Analysis Summary
Additional Soil Sampling at three locations in Buffer Parcel
NGC Utica
Utica, New York
June 2021

Location ID:		**SB-112**	**SB-112**	**SB-112**	**SB-114**	**SB-114**
Sample Name:		**J6105-SB-112 (2-3 feet)**	**J6105-SB-112 (0-2 feet)**	**J6105-SB-112 (0-2 inches)**	**J6105-SB-114 (2-4 feet)**	**J6105-SB-114 (0-2inches)**
Sample Date:		**06/25/2021**	**06/25/2021**	**06/25/2021**	**06/25/2021**	**06/25/2021**
Depth:		**2-3 ft BGS**	**0-2 ft BGS**	**0-2 in BGS**	**2-4 ft BGS**	**0-2 in BGS**
Parameters	**Unit**					
Semi-volatile Organic Compounds (Continued)						
Fluorene	µg/kg	<190	<200	<220	<240	<1300
Hexachlorobenzene	µg/kg	<190	<200	<220	<240	<1300
Hexachlorobutadiene	µg/kg	<190 J	<200 J	<220 J	<240 J	<1300 J
Hexachlorocyclopentadiene	µg/kg	<190	<200	<220	<240	<1300
Hexachloroethane	µg/kg	<190	<200	<220	<240	<1300
Indeno(1,2,3-cd)pyrene	µg/kg	<190	<200	<220	<240	<1300
Isophorone	µg/kg	<190	<200	<220	<240	<1300
N-Nitrosodi-n-propylamine	µg/kg	<190	<200	<220	<240	<1300
N-Nitrosodiphenylamine	µg/kg	<190	<200	<220	<240	<1300
Naphthalene	µg/kg	<190	<200	<220	<240	<1300
Nitrobenzene	µg/kg	<190	<200	<220	<240	<1300
Pentachlorophenol	µg/kg	<380	<390	<430	<460	<2500
Phenanthrene	µg/kg	<190	<200	<220	<240	<1300
Phenol	µg/kg	<190	<200	<220	<240	<1300
Pyrene	µg/kg	<190	<200	350	<240	<1300
Metals						
Aluminum	mg/kg	15000 J	15000 J	15000 J	1400 J	17000 J
Antimony	mg/kg	<18	<18	<19	<22	<23
Arsenic	mg/kg	12	27	12	<2.9	11
Barium	mg/kg	66 J	97 J	80 J	6.0 J	99 J
Beryllium	mg/kg	0.57	0.57	0.53	<0.29	0.68
Cadmium	mg/kg	<0.24	0.31	0.30	<0.29	0.40
Calcium	mg/kg	1000	1500	1500	89	2700
Chromium	mg/kg	18	17	20	1.5	21

Table 2

Sample Collection and Analysis Summary
Additional Soil Sampling at three locations in Buffer Parcel
NGC Utica
Utica, New York
June 2021

Location ID:		**SB-112**	**SB-112**	**SB-112**	**SB-114**	**SB-114**
Sample Name:		**J6105-SB-112 (2-3 feet)**	**J6105-SB-112 (0-2 feet)**	**J6105-SB-112 (0-2 inches)**	**J6105-SB-114 (2-4 feet)**	**J6105-SB-114 (0-2inches)**
Sample Date:		**06/25/2021**	**06/25/2021**	**06/25/2021**	**06/25/2021**	**06/25/2021**
Depth:		**2-3 ft BGS**	**0-2 ft BGS**	**0-2 in BGS**	**2-4 ft BGS**	**0-2 in BGS**
Parameters	**Unit**					
Metals (Continued)						
Cobalt	mg/kg	8.4	8.7	9.9	<0.72	11
Copper	mg/kg	46	23	26	1.9	29
Iron	mg/kg	32000 J	31000 J	31000 J	1700 J	31000 J
Lead	mg/kg	22 J	33 J	45 J	<1.4	52 J
Magnesium	mg/kg	4200 J	3200 J	3100 J	290 J	3900 J
Manganese	mg/kg	1200 J	1600 J	1600 J	54 J	1900 J
Mercury	mg/kg	0.20	0.089	0.12	0.065	0.10
Nickel	mg/kg	24 J	19 J	26 J	<7.2	28 J
Potassium	mg/kg	1100 J	1300 J	1600 J	260 J	1800 J
Selenium	mg/kg	<4.8	<4.9	<5.1	<5.8	<6.1
Silver	mg/kg	<0.72	<0.74	<0.77	<0.87	<0.92
Sodium	mg/kg	<170	<170	<180	<200	<220
Thallium	mg/kg	<7.2	<7.4	<7.7	<8.7	<9.2
Vanadium	mg/kg	23	28	30	2.1	32
Zinc	mg/kg	110 J	94 J	97 J	6.3 J	130 J

Table 2

Sample Collection and Analysis Summary
Additional Soil Sampling at three locations in Buffer Parcel
NGC Utica
Utica, New York
June 2021

Location ID:		**SB-114**	**SB-114**	**SB-115**	**SB-115**	**SB-115**
Sample Name:		**J6105-SB-114 (0-2feet)**	**J6105-Field Duplicate**	**J6105-SB-115 (2-2.5 feet)**	**J6105-SB-115 (0-2 feet)**	**J6105-SB-115 (0-2 inches)**
Sample Date:		**06/25/2021**	**06/25/2021**	**06/25/2021**	**06/25/2021**	**06/25/2021**
Depth:		**0-2 ft BGS**	**0-2 in BGS**	**2-2.5 ft BGS**	**0-2 ft BGS**	**0-2 in BGS**
			Duplicate			
Parameters	**Unit**					
Semi-volatile Organic Compounds						
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/kg	<200	<220	<270	<210	<300
2,4,5-Trichlorophenol	µg/kg	<200	<220	<270	<210	<300
2,4,6-Trichlorophenol	µg/kg	<200	<220	<270	<210	<300
2,4-Dichlorophenol	µg/kg	<200	<220	<270	<210	<300
2,4-Dimethylphenol	µg/kg	<200	<220	<270	<210	<300
2,4-Dinitrophenol	µg/kg	<2000	<2100	<2600	<2100	<2900
2,4-Dinitrotoluene	µg/kg	<200	<220	<270	<210	<300
2,6-Dinitrotoluene	µg/kg	<200	<220	<270	<210	<300
2-Chloronaphthalene	µg/kg	<200	<220	<270	<210	<300
2-Chlorophenol	µg/kg	<390	<420	<520	<410	<580
2-Methylnaphthalene	µg/kg	<200	<220	<270	<210	<300
2-Methylphenol	µg/kg	<200	<220	<270	<210	<300
2-Nitroaniline	µg/kg	<390	<420	<520	<410	<580
2-Nitrophenol	µg/kg	<200	<220	<270	<210	<300
3,3'-Dichlorobenzidine	µg/kg	<390	<420	<520	<410	<580
3-Nitroaniline	µg/kg	<390	<420	<520	<410	<580
4,6-Dinitro-2-methylphenol	µg/kg	<390	<420	<520	<410	<580
4-Bromophenyl phenyl ether	µg/kg	<200	<220	<270	<210	<300
4-Chloro-3-methylphenol	µg/kg	<200	<220	<270	<210	<300
4-Chloroaniline	µg/kg	<200	<220	<270	<210	<300
4-Chlorophenyl phenyl ether	µg/kg	<200	<220	<270	<210	<300
4-Methylphenol	µg/kg	<390	<420	<520	<410	<580
4-Nitroaniline	µg/kg	<390	<420	<520	<410	<580
4-Nitrophenol	µg/kg	<390	<420	<520	<410	<580
Acenaphthene	µg/kg	<200	<220	<270	<210	<300

Table 2

Sample Collection and Analysis Summary
Additional Soil Sampling at three locations in Buffer Parcel
NGC Utica
Utica, New York
June 2021

Location ID:		**SB-114**	**SB-114**	**SB-115**	**SB-115**	**SB-115**
Sample Name:		**J6105-SB-114 (0-2feet)**	**J6105-Field Duplicate**	**J6105-SB-115 (2-2.5 feet)**	**J6105-SB-115 (0-2 feet)**	**J6105-SB-115 (0-2 inches)**
Sample Date:		**06/25/2021**	**06/25/2021**	**06/25/2021**	**06/25/2021**	**06/25/2021**
Depth:		**0-2 ft BGS**	**0-2 in BGS**	**2-2.5 ft BGS**	**0-2 ft BGS**	**0-2 in BGS**
			Duplicate			
Parameters	**Unit**					
Semi-volatile Organic Compounds (Continued)						
Acenaphthylene	µg/kg	<200	<220	<270	<210	<300
Acetophenone	µg/kg	<200	<220	<270	<210	<300
Anthracene	µg/kg	<200	<220	<270	<210	<300
Atrazine	µg/kg	<200	<220	<270	<210	<300
Benzaldehyde	µg/kg	<200	<220	<270	<210	<300
Benzo(a)anthracene	µg/kg	<200	220	<270	<210	340
Benzo(a)pyrene	µg/kg	<200	280	<270	<210	360
Benzo(b)fluoranthene	µg/kg	<200	380	<270	<210	530
Benzo(g,h,i)perylene	µg/kg	<200	240	<270	<210	330
Benzo(k)fluoranthene	µg/kg	<200	<220	<270	<210	<300
Biphenyl (1,1-Biphenyl)	µg/kg	<200	<220	<270	<210	<300
bis(2-Chloroethoxy)methane	µg/kg	<200	<220	<270	<210	<300
bis(2-Chloroethyl)ether	µg/kg	<200	<220	<270	<210	<300
bis(2-Ethylhexyl)phthalate (DEHP)	µg/kg	<200	<220	<270	<210	<300
Butyl benzylphthalate (BBP)	µg/kg	<200	<220	<270	<210	<300
Caprolactam	µg/kg	<200	<220	<270	<210	<300
Carbazole	µg/kg	<200	<220	<270	<210	<300
Chrysene	µg/kg	<200	270	<270	<210	420
Di-n-butylphthalate (DBP)	µg/kg	<200	<220	<270	<210	<300
Di-n-octyl phthalate (DnOP)	µg/kg	<200	<220	<270	<210	<300
Dibenz(a,h)anthracene	µg/kg	<200	<220	<270	<210	<300
Dibenzofuran	µg/kg	<200	<220	<270	<210	<300
Diethyl phthalate	µg/kg	<200	<220	<270	<210	<300
Dimethyl phthalate	µg/kg	<200	<220	<270	<210	<300
Fluoranthene	µg/kg	<200	600	<270	210	970

Table 2

Sample Collection and Analysis Summary
Additional Soil Sampling at three locations in Buffer Parcel
NGC Utica
Utica, New York
June 2021

Location ID:		**SB-114**	**SB-114**	**SB-115**	**SB-115**	**SB-115**
Sample Name:		**J6105-SB-114 (0-2feet)**	**J6105-Field Duplicate**	**J6105-SB-115 (2-2.5 feet)**	**J6105-SB-115 (0-2 feet)**	**J6105-SB-115 (0-2 inches)**
Sample Date:		**06/25/2021**	**06/25/2021**	**06/25/2021**	**06/25/2021**	**06/25/2021**
Depth:		**0-2 ft BGS**	**0-2 in BGS**	**2-2.5 ft BGS**	**0-2 ft BGS**	**0-2 in BGS**
			Duplicate			
Parameters	**Unit**					
Semi-volatile Organic Compounds (Continued)						
Fluorene	µg/kg	<200	<220	<270	<210	<300
Hexachlorobenzene	µg/kg	<200	<220	<270	<210	<300
Hexachlorobutadiene	µg/kg	<200 J	<220 J	<270 J	<210 J	<300 J
Hexachlorocyclopentadiene	µg/kg	<200	<220	<270	<210	<300
Hexachloroethane	µg/kg	<200	<220	<270	<210	<300
Indeno(1,2,3-cd)pyrene	µg/kg	<200	<220	<270	<210	<300
Isophorone	µg/kg	<200	<220	<270	<210	<300
N-Nitrosodi-n-propylamine	µg/kg	<200	<220	<270	<210	<300
N-Nitrosodiphenylamine	µg/kg	<200	<220	<270	<210	<300
Naphthalene	µg/kg	<200	<220	<270	<210	<300
Nitrobenzene	µg/kg	<200	<220	<270	<210	<300
Pentachlorophenol	µg/kg	<390	<420	<520	<410	<580
Phenanthrene	µg/kg	<200	270	<270	<210	330
Phenol	µg/kg	<200	<220	<270	<210	<300
Pyrene	µg/kg	<200	500	<270	<210	760
Metals						
Aluminum	mg/kg	13000 J	10000 J	17000 J	15000 J	13000 J
Antimony	mg/kg	<19	<20	<24	<19	<28
Arsenic	mg/kg	8.7	7.0	14	12	11
Barium	mg/kg	69 J	87 J	120 J	99 J	130 J
Beryllium	mg/kg	0.50	0.41	0.68	0.58	0.56
Cadmium	mg/kg	<0.25	0.40	0.53	0.36	0.52
Calcium	mg/kg	550	5800	3100	1900	7600
Chromium	mg/kg	15	14	21	19	18

Table 2

Sample Collection and Analysis Summary
Additional Soil Sampling at three locations in Buffer Parcel
NGC Utica
Utica, New York
June 2021

Location ID:		**SB-114**	**SB-114**	**SB-115**	**SB-115**	**SB-115**
Sample Name:		**J6105-SB-114 (0-2feet)**	**J6105-Field Duplicate**	**J6105-SB-115 (2-2.5 feet)**	**J6105-SB-115 (0-2 feet)**	**J6105-SB-115 (0-2 inches)**
Sample Date:		**06/25/2021**	**06/25/2021**	**06/25/2021**	**06/25/2021**	**06/25/2021**
Depth:		**0-2 ft BGS**	**0-2 in BGS**	**2-2.5 ft BGS**	**0-2 ft BGS**	**0-2 in BGS**
			Duplicate			
Parameters	**Unit**					
Metals (Continued)						
Cobalt	mg/kg	7.9	6.6	12	10	9.2
Copper	mg/kg	21	19	33	32	31
Iron	mg/kg	24000 J	18000 J	35000 J	32000 J	29000 J
Lead	mg/kg	22 J	33 J	61 J	47 J	55 J
Magnesium	mg/kg	2800 J	2300 J	3600 J	3200 J	3100 J
Manganese	mg/kg	1200 J	1200 J	2100 J	1700 J	1900 J
Mercury	mg/kg	0.065	0.077	0.13	0.12	0.14
Nickel	mg/kg	17 J	22 J	35 J	27 J	33 J
Potassium	mg/kg	1200 J	1300 J	2000 J	1500 J	1700 J
Selenium	mg/kg	<5.0	<5.2	<6.4	<5.0	<7.5
Silver	mg/kg	<0.74	<0.79	<0.96	<0.76	<1.1
Sodium	mg/kg	<170	<180	<220	<180	<260
Thallium	mg/kg	<7.4	<7.9	<9.6	<7.6	<11
Vanadium	mg/kg	24	20	36	29	28
Zinc	mg/kg	71 J	78 J	120 J	110 J	120 J

Notes:

J - Estimated concentration
ft BGS - Feet Below Ground Surface
< - Not detected at the associated reporting limit

Table 3

Analytical Methods
Additional Soil Sampling at three locations in Buffer Parcel
NGC Utica
Utica, New York
June 2021

Parameter	Method	Matrix	Preservation	Holding Time	
				Collection to Extraction (Days)	Collection or Extraction to Analysis (Days)
Semi-Volatile Organic Compounds (SVOC)	SW-846 8270C	Water	Iced, 0-6° C	7	40
		Soil	Iced, 0-6° C	14	40
Metals	SW-846 6020/6010B	Water	pH < 2 and Iced, 0-6° C	-	180
		Soil	Iced, 0-6° C	-	180
Mercury	SW-846 7470A	Water	pH < 2 and Iced, 0-6° C	-	28
	SW-846 7471A	Soil	Iced, 0-6° C	-	28

Notes:

Method References:

SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions

Table 4

Qualified Sample Results Due to Outlying Continuing Calibration Results
Additional Soil Sampling at three locations in Buffer Parcel
NGC Utica
Utica, New York
June 2021

Parameter	Analyte	Calibration Date (mm/dd/yyyy)	%D	Associated Sample ID	Qualified Result	Units
SVOC	Hexachlorobutadiene	07/10/2021	20.2	J6105-SB-114 (0-2inches)	<1300 J	µg/kg
				J6105-SB-115 (0-2 feet)	<210 J	µg/kg
				J6105-SB-115 (2-2.5 feet)	<270 J	µg/kg
				J6105-Field Duplicate	<220 J	µg/kg
				J6105-SB-114 (0-2feet)	<200 J	µg/kg
				J6105-SB-114 (2-4 feet)	<240 J	µg/kg
				J6105-SB-112 (0-2 inches)	<220 J	µg/kg
				J6105-SB-112 (0-2 feet)	<200 J	µg/kg
				J6105-SB-112 (2-3 feet)	<190 J	µg/kg
				J6105-SB-115 (0-2 inches)	<300 J	µg/kg

Notes:

%D - Percent difference

J - Estimated concentration

Table 5

Qualified Sample Results Due to Outlying MS/MSD Results
Additional Soil Sampling at three locations in Buffer Parcel
NGC Utica
Utica, New York
June 2021

Parameter	Sample ID	Analyte	MS % Recovery	MSD % Recovery	RPD (percent)	Control Limits % Recovery	Control Limits RPD	Qualified Result	Units
Metals	J6105-SB-114 (2-4 feet)	Aluminum	395	91	110	75 - 125	20	1400 J	mg/kg
	J6105-SB-114 (0-2inches)							17000 J	mg/kg
	J6105-Field Duplicate							10000 J	mg/kg
	J6105-SB-115 (0-2 feet)							15000 J	mg/kg
	J6105-SB-115 (2-2.5 feet)							17000 J	mg/kg
	J6105-SB-114 (0-2feet)							13000 J	mg/kg
	J6105-SB-112 (0-2 inches)							15000 J	mg/kg
	J6105-SB-112 (0-2 feet)							15000 J	mg/kg
	J6105-SB-112 (2-3 feet)							15000 J	mg/kg
	J6105-SB-115 (0-2 inches)							13000 J	mg/kg
Metals	J6105-SB-114 (2-4 feet)	Barium	159	103	47	75 - 125	20	6.0 J	mg/kg
	J6105-SB-114 (0-2inches)							99 J	mg/kg
	J6105-Field Duplicate							87 J	mg/kg
	J6105-SB-115 (0-2 feet)							99 J	mg/kg
	J6105-SB-115 (2-2.5 feet)							120 J	mg/kg
	J6105-SB-114 (0-2feet)							69 J	mg/kg
	J6105-SB-112 (0-2 inches)							80 J	mg/kg
	J6105-SB-112 (0-2 feet)							97 J	mg/kg
	J6105-SB-112 (2-3 feet)							66 J	mg/kg
	J6105-SB-115 (0-2 inches)							130 J	mg/kg

Table 5

Qualified Sample Results Due to Outlying MS/MSD Results
Additional Soil Sampling at three locations in Buffer Parcel
NGC Utica
Utica, New York
June 2021

Parameter	Sample ID	Analyte	MS % Recovery	MSD % Recovery	RPD (percent)	Control Limits % Recovery	Control Limits RPD	Qualified Result	Units
Metals	J6105-SB-114 (2-4 feet)	Iron	421	67	121	75 - 125	20	1700 J	mg/kg
	J6105-SB-115 (0-2 feet)							32000 J	mg/kg
	J6105-SB-115 (2-2.5 feet)							35000 J	mg/kg
	J6105-SB-114 (0-2inches)							31000 J	mg/kg
	J6105-Field Duplicate							18000 J	mg/kg
	J6105-SB-114 (0-2feet)							24000 J	mg/kg
	J6105-SB-112 (0-2 inches)							31000 J	mg/kg
	J6105-SB-112 (0-2 feet)							31000 J	mg/kg
	J6105-SB-112 (2-3 feet)							32000 J	mg/kg
	J6105-SB-115 (0-2 inches)							29000 J	mg/kg
Metals	J6105-SB-114 (2-4 feet)	Lead	118	101	24	75 - 125	20	--	
	J6105-SB-115 (0-2 feet)							47 J	mg/kg
	J6105-SB-115 (2-2.5 feet)							61 J	mg/kg
	J6105-SB-114 (0-2inches)							52 J	mg/kg
	J6105-Field Duplicate							33 J	mg/kg
	J6105-SB-114 (0-2feet)							22 J	mg/kg
	J6105-SB-112 (0-2 inches)							45 J	mg/kg
	J6105-SB-112 (0-2 feet)							33 J	mg/kg
	J6105-SB-112 (2-3 feet)							22 J	mg/kg
	J6105-SB-115 (0-2 inches)							55 J	mg/kg

Table 5

Qualified Sample Results Due to Outlying MS/MSD Results
Additional Soil Sampling at three locations in Buffer Parcel
NGC Utica
Utica, New York
June 2021

Parameter	Sample ID	Analyte	MS % Recovery	MSD % Recovery	RPD (percent)	Control Limits % Recovery	Control Limits RPD	Qualified Result	Units
Metals	J6105-SB-114 (2-4 feet)	Magnesium	137	95	41	75 - 125	20	290 J	mg/kg
	J6105-SB-115 (0-2 feet)							3200 J	mg/kg
	J6105-SB-115 (2-2.5 feet)							3600 J	mg/kg
	J6105-SB-114 (0-2inches)							3900 J	mg/kg
	J6105-Field Duplicate							2300 J	mg/kg
	J6105-SB-114 (0-2feet)							2800 J	mg/kg
	J6105-SB-112 (0-2 inches)							3100 J	mg/kg
	J6105-SB-112 (0-2 feet)							3200 J	mg/kg
	J6105-SB-112 (2-3 feet)							4200 J	mg/kg
	J6105-SB-115 (0-2 inches)							3100 J	mg/kg
Metals	J6105-SB-114 (2-4 feet)	Manganese	914	53	152	75 - 125	20	54 J	mg/kg
	J6105-SB-115 (0-2 feet)							1700 J	mg/kg
	J6105-SB-115 (2-2.5 feet)							2100 J	mg/kg
	J6105-SB-114 (0-2inches)							1900 J	mg/kg
	J6105-Field Duplicate							1200 J	mg/kg
	J6105-SB-114 (0-2feet)							1200 J	mg/kg
	J6105-SB-112 (0-2 inches)							1600 J	mg/kg
	J6105-SB-112 (0-2 feet)							1600 J	mg/kg
	J6105-SB-112 (2-3 feet)							1200 J	mg/kg
	J6105-SB-115 (0-2 inches)							1900 J	mg/kg

Table 5

Qualified Sample Results Due to Outlying MS/MSD Results
Additional Soil Sampling at three locations in Buffer Parcel
NGC Utica
Utica, New York
June 2021

Parameter	Sample ID	Analyte	MS % Recovery	MSD % Recovery	RPD (percent)	Control Limits % Recovery	Control Limits RPD	Qualified Result	Units
Metals	J6105-SB-114 (2-4 feet)	Nickel	115	99	24	75 - 125	20	--	
	J6105-SB-115 (0-2 feet)							27 J	mg/kg
	J6105-SB-115 (2-2.5 feet)							35 J	mg/kg
	J6105-SB-114 (0-2inches)							28 J	mg/kg
	J6105-Field Duplicate							22 J	mg/kg
	J6105-SB-114 (0-2feet)							17 J	mg/kg
	J6105-SB-112 (0-2 inches)							26 J	mg/kg
	J6105-SB-112 (0-2 feet)							19 J	mg/kg
	J6105-SB-112 (2-3 feet)							24 J	mg/kg
	J6105-SB-115 (0-2 inches)							33 J	mg/kg
Metals	J6105-SB-114 (2-4 feet)	Potassium	156	95	53	75 - 125	20	260 J	mg/kg
	J6105-SB-115 (0-2 feet)							1500 J	mg/kg
	J6105-SB-115 (2-2.5 feet)							2000 J	mg/kg
	J6105-SB-114 (0-2inches)							1800 J	mg/kg
	J6105-Field Duplicate							1300 J	mg/kg
	J6105-SB-114 (0-2feet)							1200 J	mg/kg
	J6105-SB-112 (0-2 inches)							1600 J	mg/kg
	J6105-SB-112 (0-2 feet)							1300 J	mg/kg
	J6105-SB-112 (2-3 feet)							1100 J	mg/kg
	J6105-SB-115 (0-2 inches)							1700 J	mg/kg

Table 5

Qualified Sample Results Due to Outlying MS/MSD Results
Additional Soil Sampling at three locations in Buffer Parcel
NGC Utica
Utica, New York
June 2021

Parameter	Sample ID	Analyte	MS % Recovery	MSD % Recovery	RPD (percent)	Control Limits % Recovery	Control Limits RPD	Qualified Result	Units
Metals	J6105-SB-114 (2-4 feet)	Zinc	144	95	46	75 - 125	20	6.3 J	mg/kg
	J6105-SB-115 (0-2 feet)							110 J	mg/kg
	J6105-SB-115 (2-2.5 feet)							120 J	mg/kg
	J6105-SB-114 (0-2inches)							130 J	mg/kg
	J6105-Field Duplicate							78 J	mg/kg
	J6105-SB-114 (0-2feet)							71 J	mg/kg
	J6105-SB-112 (0-2 inches)							97 J	mg/kg
	J6105-SB-112 (0-2 feet)							94 J	mg/kg
	J6105-SB-112 (2-3 feet)							110 J	mg/kg
	J6105-SB-115 (0-2 inches)							120 J	mg/kg

Notes:

MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative Percent Difference
J - Estimated concentration

Table 6

Qualified Sample Data Due to Outlying ICP Serial Dilution Results
Additional Soil Sampling at three locations in Buffer Parcel
NGC Utica
Utica, New York
June 2021

Parameter	Serial Dilution Sample ID	Analyte	%D	Associated Sample ID	Qualified Result	Units
Metals	J6105-SB-114 (2-4 feet)	Aluminum	20	J6105-SB-114 (0-2inches)	17000 J	mg/kg
				J6105-Field Duplicate	10000 J	mg/kg
				J6105-SB-115 (0-2 feet)	15000 J	mg/kg
				J6105-SB-115 (2-2.5 feet)	17000 J	mg/kg
				J6105-SB-114 (0-2feet)	13000 J	mg/kg
				J6105-SB-114 (2-4 feet)	1400 J	mg/kg
				J6105-SB-112 (0-2 inches)	15000 J	mg/kg
				J6105-SB-112 (0-2 feet)	15000 J	mg/kg
				J6105-SB-112 (2-3 feet)	15000 J	mg/kg
				J6105-SB-115 (0-2 inches)	13000 J	mg/kg
Metals	J6105-SB-114 (2-4 feet)	Barium	25	J6105-SB-114 (0-2inches)	99 J	mg/kg
				J6105-Field Duplicate	87 J	mg/kg
				J6105-SB-115 (0-2 feet)	99 J	mg/kg
				J6105-SB-115 (2-2.5 feet)	120 J	mg/kg
				J6105-SB-114 (0-2feet)	69 J	mg/kg
				J6105-SB-114 (2-4 feet)	6.0 J	mg/kg
				J6105-SB-112 (0-2 inches)	80 J	mg/kg
				J6105-SB-112 (0-2 feet)	97 J	mg/kg
				J6105-SB-112 (2-3 feet)	66 J	mg/kg
				J6105-SB-115 (0-2 inches)	130 J	mg/kg

Notes:

%D - Percent Difference
ICP - Inductively Coupled Plasma
J - Estimated concentration