



Sent via e-mail

Revised April 24, 2017
October 3, 2016

Reference No. 3711082

Mr. Christopher Mannes, III, P.E.
NYSDEC, Region 7
615 Erie Boulevard West
Syracuse, New York 13204

**Re: Supplemental Sampling Activities Summary Letter Report
Celi Drive BCP Site, 5762 Celi Drive, Dewitt, New York
NYSDEC BCP Site #C734108**

Dear Mr. Mannes:

GHD Consulting Services Inc. (GHD) is submitting this letter report on behalf of GSP Holdings, Inc. (formerly known as GSP, Inc., or GSP) to summarize the methods and findings of supplemental remedial investigation activities completed at the above-referenced Brownfield Cleanup Program (BCP) Site (Figures 1 and 2), in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Work Plan (GHD, July 15, 2016). The objective of the supplemental sampling activities was to further refine the nature and extent of soil/sediment and groundwater contamination in order to develop appropriate remedial actions.

1. Groundwater Monitoring Well Replacement

Historically, groundwater monitoring well MW-8 could not be located and sampled, since the area was reportedly filled and the well appeared to have been covered. As a result, one (1) soil boring was advanced to 14 feet below ground surface (bgs) in the vicinity of the historic groundwater monitoring well, and a 1.5-inch inside diameter polyvinyl chloride (PVC) replacement groundwater monitoring well (designated as MW-8) was installed. The soil boring was advanced via direct push methods using a Geoprobe 6620DT with DT-325 tooling. Continuous soil samples were obtained, visually examined by GHD's field representative, and screened for the presence of volatile organic vapors using a photoionization detector (PID). Observations were recorded in a field log book and were used to generate a soil boring/well construction log for groundwater monitoring well MW-8 (Attachment 1).

Soils encountered in the boring consisted of approximately 2 feet of asphalt millings followed by reddish-brown soils with varying amounts of silt, clay, and sand. Groundwater was encountered at approximately 5 feet bgs. As a result, the replacement groundwater monitoring well was set at a depth of 14 feet bgs with 10 feet of slotted well screen and solid PVC riser extending to approximately 2 feet above ground surface. A sand filter pack was placed around the screen and extended to 1 foot above the top of screen, with the remainder of the boring being backfilled with granular bentonite. The well was completed with a steel stick-up protective casing, set in a concrete pad, with a locking cover.



Following installation, the replacement groundwater monitoring well was developed by surging with a PVC surge block and evacuating water and sediment with a peristaltic pump. The tubing of the pump was used to continuously surge the well while pumping. Well development continued until approximately 28 gallons of water were removed from the well and the measured turbidity of the water was below 50 NTU (Table 1). Well development water was transferred to a steel 55-gallon drum, which was staged on-Site awaiting characterization and off-Site disposal.

The location and elevation of replacement groundwater monitoring well MW-8 was surveyed for inclusion on the Site figure and tables.

2. Groundwater Monitoring Well Sampling

2.1 Methods

Seven (7) of the eight (8) Site groundwater monitoring wells, including MW-1, MW-2, MW-3, MW-4, MW-5, MW-7, and MW-8, were sampled by GHD personnel on September 1, 2016. Groundwater monitoring well MW-6 was not sampled with approval from the NYSDEC due to its proximity to MW-7 and historical sample analytical results that indicated no impacts of concern.

Prior to sampling, the depth to water and total depth of well was measured using an electronic water level meter, and the water volume in each well was calculated (Table 2). The groundwater monitoring wells were purged via low-flow sampling techniques, with a peristaltic pump and dedicated tubing, until field parameters (i.e., pH, temperature, conductivity, and turbidity) stabilized, as determined by a YSI 6920 water quality meter equipped with a flow-thru cell (Table 3). Once parameters stabilized, the YSI was disconnected and laboratory provided sample bottles were filled directly from the tubing using the peristaltic pump, with the exception of samples being analyzed for volatile organic compounds (VOCs), which were taken with dedicated disposable bailers. In addition to the groundwater samples, quality assurance/quality control (QA/QC) samples, including a blind field duplicate (taken from MW-3), a matrix spike (taken from MW-1), a matrix spike duplicate (taken from MW-1), and a VOC trip blank, were taken for laboratory analysis.

Groundwater samples, including QA/QC samples, were submitted to TestAmerica, where they were analyzed for target compound list (TCL) VOCs (including CP-51 list VOCs) by Environmental Protection Agency (EPA) Method 8260C, TCL semi-volatile organic compounds (SVOCs) by EPA Method 8270D, TCL polychlorinated biphenyls (PCBs) by EPA Method 8082A, target analyte list (TAL) metals by EPA Methods 6010C and 7470A, hexavalent chromium by EPA Method 7196A, and cyanide by EPA Method 9012.

Groundwater monitoring well purge water was transferred to a steel 55-gallon drum, which was staged on-Site awaiting characterization and off-Site disposal.

2.2 Data Usability Summary Report

Following receipt of laboratory analytical data, a data usability summary report (DUSR) was completed to evaluate the quality control measures that were implemented during the field and laboratory analytical programs, with the objectives of determining whether the reported analytical data are representative and



usable. The DUSR evaluated whether all analytical requirements were met and documented and reviewed Site data to determine whether they are adequate to draw conclusions regarding the nature and extent of contamination. The following items were reviewed as part of the DUSR:

- Completeness (number of samples taken and analyzed compared to plans)
- Chain of custody determined to be complete and accurate
- Holding times met
- Instrument calibration
- Relative percent difference between field duplicates
- Reasonableness of data (e.g., relationships between total and soluble analytes)
- Blank contamination.

The DUSR (Attachment 2) determined that laboratory analytical results met the technical screening criteria for data usability, with minor qualifications necessary. Qualifications included in the DUSR were addition of “J” flags to several of the non-detect laboratory analytical results, including hexavalent chromium, benzo(g,h,i)perylene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene, in the groundwater sample taken from MW-1 due to analytical holding time being exceeded (hexavalent chromium only) and MS/MSD results being outside of acceptable control limits. Overall, the data was considered usable with the qualifiers applied by the DUSR and those applied by the laboratory.

The laboratory analytical results, modified with the changes made by the DUSR, were uploaded to the NYSDEC’s EQuIS Database in the required electronic data deliverable format and are currently awaiting upload.

2.3 Results and Conclusions

Depth to water measurements were taken from each of the groundwater monitoring wells prior to purging (Table 2). This information was used to calculate groundwater elevations, which were used to create a groundwater contour figure and to estimate groundwater flow direction (Figure 3). Based on the calculated groundwater elevations, it was inferred that groundwater flow at the time of sampling was generally to the northeast.

Groundwater field parameters were recorded after every liter of purge (which equates to approximately once every two minutes) using a YSI 6920 multi-parameter water quality meter equipped with a flow-thru cell (Table 3). Groundwater field parameters appear to indicate that groundwater quality across the Site is quite consistent, with only minor variations being identified.

Laboratory analytical results for groundwater samples (Attachment 3) are compared to the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 Class GA ambient water quality standards and guidance values (June 1998 and subsequent addenda) in Table 4. Figure 4 identifies groundwater sample locations and analytes that exceed Class GA groundwater standards or guidance values.

During the September 1, 2016 sampling event, there were no identified exceedances of applicable groundwater standards or guidance values for VOCs or SVOCs, with only one VOC (methyl tert-butyl ether) detected in one sample (MW-7). For the contaminants of concern, there were no exceedances for



copper, total chromium, hexavalent chromium or cyanide. The following analytes were identified at concentrations that exceed applicable groundwater standards or guidance values:

- Arsenic (MW-7)
- Barium (MW-1, MW-4)
- Iron (all samples)
- Magnesium (MW-1, MW-2, MW-3, MW-8, and Duplicate)
- Manganese (MW-2, MW-3, MW-4, MW-7, and Duplicate)
- Nickel (MW-3, MW-4, and Duplicate)
- Sodium (all samples)
- Total PCBs (MW-4)

The Duplicate sample was taken from groundwater monitoring well MW-3.

Exceedances of groundwater standards for common earth elements (iron, magnesium, manganese, and sodium) were identified across the Site and can likely be considered typical of groundwater samples taken from the area. These compounds were not previously sampled for so there is no comparison relative to possible trends.

One PCB Aroclor was detected in MW-4 at 4.6 ppb (versus standard of 0.09 ppb). All the other samples were non-detect for PCBs. PCBs have not been sampled for previously, so there is no comparison. The one detection may be an anomaly, and it should be noted that the adjacent property to the north was reportedly historically remediated for PCB contaminants.

Metals contaminants of concern (total chromium, total copper, total nickel, total zinc, hexavalent chromium, and cyanide) were identified at concentrations that were generally below standards, with the exception of total nickel in sample MW-3, MW-4, and the Duplicate (which was taken from MW-3). MW-4 is located in proximity to the historic release. The data is similar to historical sampling events and indicates that migration of contaminants of concern from the historic release area via groundwater is limited. Based on the data, there does not appear to be any additional remedial measures warranted for AOC-1 and AOC-2 related to groundwater.

3. AOC-3 Catch Basin Inspection

The stormwater catch basins in AOC-2 and AOC-3 were inspected by GHD personnel on August 23, 2016. Inspection included gauging the depth of the catch basins from the top of the grates and estimating the amount of water and sediment present. Based on the inspections, Catch Basin 1, located east of the GSP facility in AOC-2, was the only one with appreciable sediment accumulation (approximately 12-inches). Based on the observations, the catch basin located in AOC-2 will be replaced as planned during the AOC-2 remedial activities. There does not appear to be a concern for sediment buildup in the other downgradient catch basins along the storm sewer conveyance pipe and, therefore, no further action is identified for AOC-3.



4. AOC-4 – Bridge Street Swale Sampling

A representative sediment sample was taken in the vicinity of the discharge of the buried culvert pipe by compositing three (3) grab samples taken across the width of the swale. The three (3) grab samples consisted of the upper 6 inches of sediment and were composited into a single sample. Figure 5 identifies the approximate sediment sample location. With the NYSDEC's concurrence, this location was selected based on the proximity to the discharge of the stormwater conveyance pipe.

The composite sample was submitted to Alpha Analytical and analyzed for total chromium, total copper, and total nickel by EPA Method 6010C, hexavalent chromium by EPA Method 7196A, and total cyanide by EPA Method 9010C/9012B. Laboratory analytical results for the Bridge Street swale sediment sample (Attachment 4) are compared to the Protection of Ecological Resources Soil Cleanup Objectives (SCOs) taken from 6NYCRR Part 375-6.8(b) (December 2006 and subsequent addenda) in Table 5. Only one analyte, total chromium (55 milligrams per kilogram [mg/kg]), was identified at a concentration that exceeded the applicable Protection of Ecological Resources SCO of 41 mg/kg.

The detected concentration in the composite sample is similar to total chromium detected in background samples taken in proximity to the site as identified in the *Background Sediment Sampling Letter Report* (GHD, October 24, 2013). Based on the analytical data and the comparison to background sample results, there does not appear to be a concern for ongoing impacts in the portion of the Bridge Street swale that was previously excavated during the Community Bank development activities (*Construction Completion Report - AOC-3 and AOC-4*, GHD, January 2016). Based on the data, there is no further action recommended for this portion of the swale.

5. AOC-4 – Downstream Swale Sampling

Three (3) sediment samples were taken from the upper 6 inches of sediment at each of seven (7) sample transects spaced at approximately 100-foot intervals along the portion of the main swale extending north from the Community Bank development to the intersection of the Interstate 690 right-of-way (Figure 6). The three (3) samples taken along each transect for laboratory analysis consisted of one (1) from just below the edge of water on each side of the swale (as determined at the time of sampling) and one (1) from the bottom of the swale at the approximate mid-point of the width at each location. A total of twenty-three (23) sediment samples, which includes two (2) blind field duplicate samples for QA/QC purposes, were submitted to Alpha Analytical and analyzed for total chromium, total copper, and total nickel by EPA Method 6010C, hexavalent chromium by EPA Method 7196A, and total cyanide by EPA Method 9010C/9012B.

Laboratory analytical results for the Downstream Swale sediment samples (Attachment 4) were compared to the Protection of Ecological Resources Soil Cleanup Objectives (SCOs) taken from 6NYCRR Part 375-6.8(b) (December 2006 and subsequent addenda) in Table 6.

During the August 23, 2016 sampling event, hexavalent chromium and cyanide were not detected at concentrations that exceed applicable Protection of Ecological Resources SCOs. Total chromium, copper, and nickel were identified at concentrations that exceed applicable Protection of Ecological Resources SCOs at more than half of the sample locations. The Duplicate sample was taken from AOC4-SED4C, and the Duplicate 2 sample was taken from AOC4-SED1B.



The samples identified exceedances of Protection of Ecological Resources SCOs at each sample transect for at least one contaminant of concern. The concentrations are similar to those previously identified in this area by ERM during remedial investigation activities and appear to indicate the need to excavate and take confirmation samples from this portion of the AOC-4 Swale in order to achieve Protection of Ecological Resources SCOs. Based on the analytical soil data for this portion of the AOC-4 Swale, it is recommended to excavate the swale soils during the implementation of the proposed AOC-4 Interim Remedial Measure (IRM) activities in order to achieve the Protection of Ecological Resources SCOs, as required by the NYSDEC.

Please contact me to discuss the report once you have had an opportunity to review it. In the meantime, if you have any questions or require additional information, please feel free to contact me at (315) 679-5838.



Sincerely,

GHD CONSULTING SERVICES INC.

A handwritten signature in black ink, appearing to read "Damian J. Vanetti", is written over a faint, light blue circular stamp. The signature is fluid and cursive.

Damian J. Vanetti, P.E.

Principal Engineer - Environment

DJV:IEM/jfs

Enclosures:

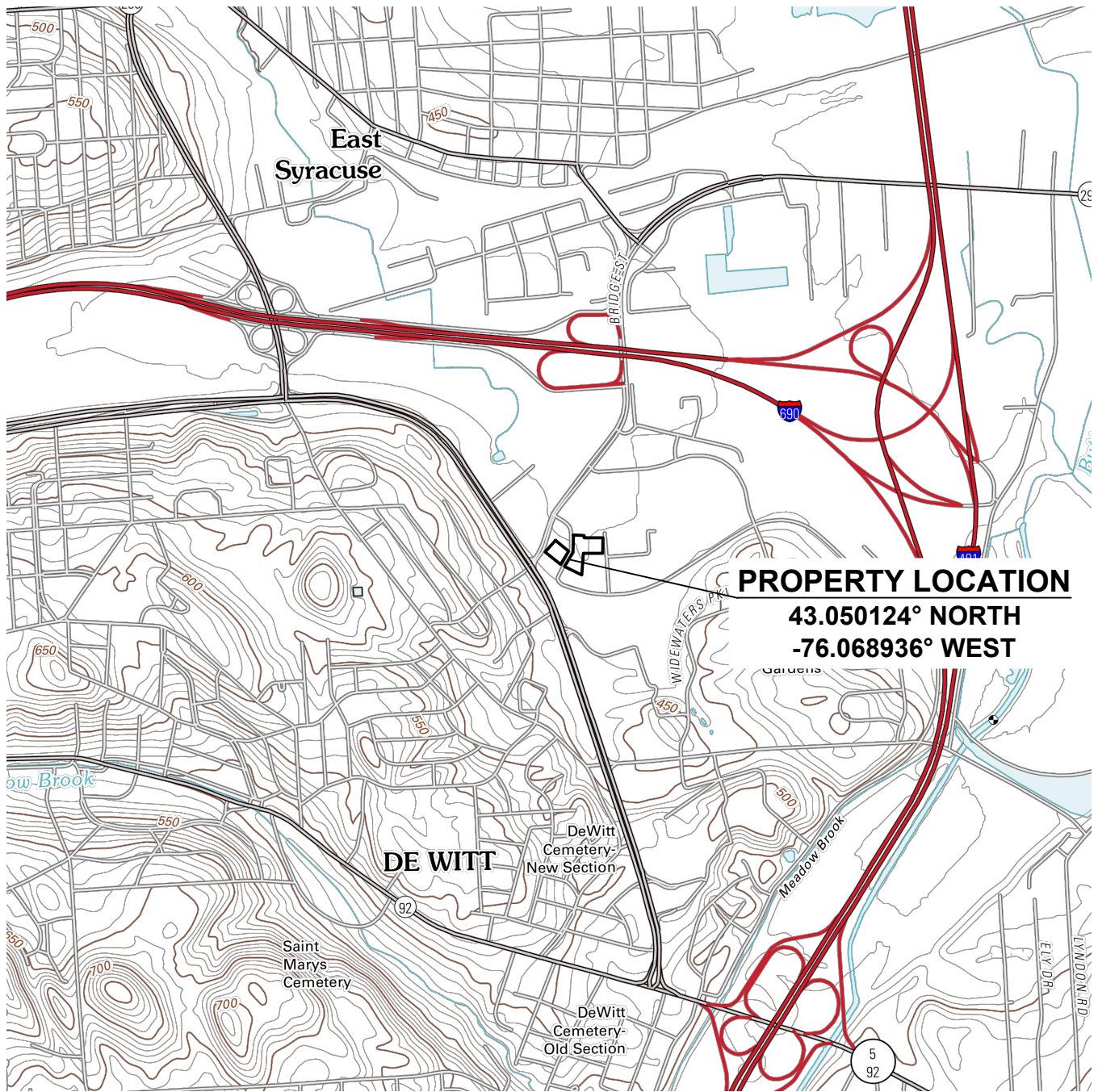
- Figure 1: Property Location Map
- Figure 2: Site Layout
- Figure 3: Groundwater Elevation and Flow
- Figure 4: Groundwater Exceedances of Class GA Standards
- Figure 5: Bridge Street Swale Sediment Sample Locations
- Figure 6: Approximate Swale Sample Locations
- Table 1: Groundwater Monitoring Well Development Log
- Table 2: Groundwater Elevation Data
- Table 3: Groundwater Field Parameter Data
- Table 4: Summary of Groundwater Laboratory Analytical Results
- Table 5: Summary of Post-Excavation Soil Sample Laboratory Analytical Results – Bridge Street Swale
- Table 6: Summary of Post-Excavation Soil Sample Laboratory Analytical Results
- Attachment 1: Soil Boring/Monitoring Well Construction Log
- Attachment 2: Data Usability Summary Report
- Attachment 3: Groundwater Samples Laboratory Analytical Report
- Attachment 4: Sediment Samples Laboratory Analytical Report

cc: Mr. Richard Jones, NYSDOH (w/encs)
Mr. Thomas Gerhardt, GSP Holdings, Inc. (w/encs)
Ms. Kimberly Jeffery, GSP Holdings, Inc. (w/encs)
Ms. Doreen Simmons, Hancock & Estabrook (w/encs)
Ms. Holly Austin, Hancock & Estabrook (w/encs)

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Figures



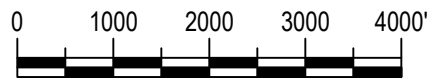
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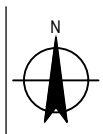
-76.068936° WEST

CONTOUR INTERVAL: 10 FEET

MAPS TAKEN FROM: USGS 7.5 MINUTE SERIES
 TOPOGRAPHIC QUADRANGLES:
 SYRACUSE EAST, NY (2010)
 (U.S. GEOLOGICAL SURVEY WEBSITE)



SCALE 1"=2000' AT ORIGINAL SIZE



GSP Holdings, Inc.
 Celi Drive BCP Site (BCP Site #C734108)
 Supplemental Sampling Activities

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 Date | 09.21.2016

Property Location Map

Figure 1



0150300450600'

SCALE 1"=300' AT ORIGINAL SIZE

N

NOTES:
1. Site features are from a field survey completed by D.W. Hannig L.S., P.C. dated November 8, 2002 and revised 9-1-2005, 3-2-2010, 5-10-2010, 6-15-2010, 6-24-2010, and 4-1-2014.
2. Aerial photographs are 2015 half foot 4 band central zone index from the NYSGIS Clearinghouse website: <http://gis.ny.gov/>

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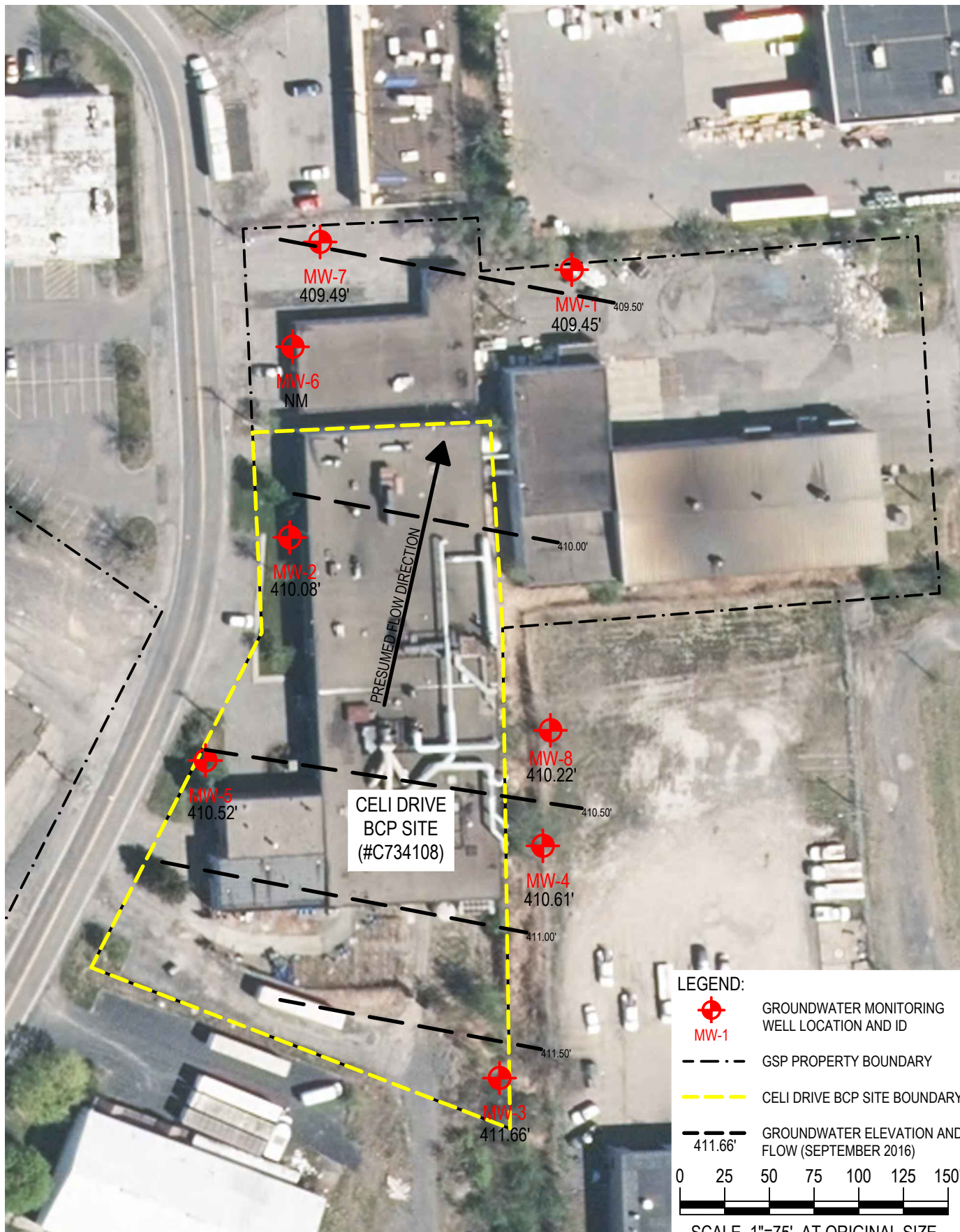
Site Layout

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Revision A
Date 09.21.2016

Figure 2

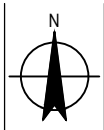
One Remington Park Drive, Cazenovia NY 13035 USA T 1 315 679 5800 F 1 315 679 5801 E cazmail@ghd.com W www.ghd.com

Plot Date: 21 September 2016 - 2:16 PM Cad File No: G:\3711082\Additional Investigation - 2016\Report\Figure 2 - Site Layout.dwg



NOTES:

1. Site features are from a field survey completed by D.W. Hannig L.S., P.C. dated November 8, 2002 and revised 9-1-2005, 3-2-2010, 5-10-2010, 6-15-2010, 6-24-2010, and 4-1-2014.
2. Aerial photographs are 2015 half foot 4 band central zone index from the NYSGIS Clearinghouse website: <http://gis.ny.gov/>

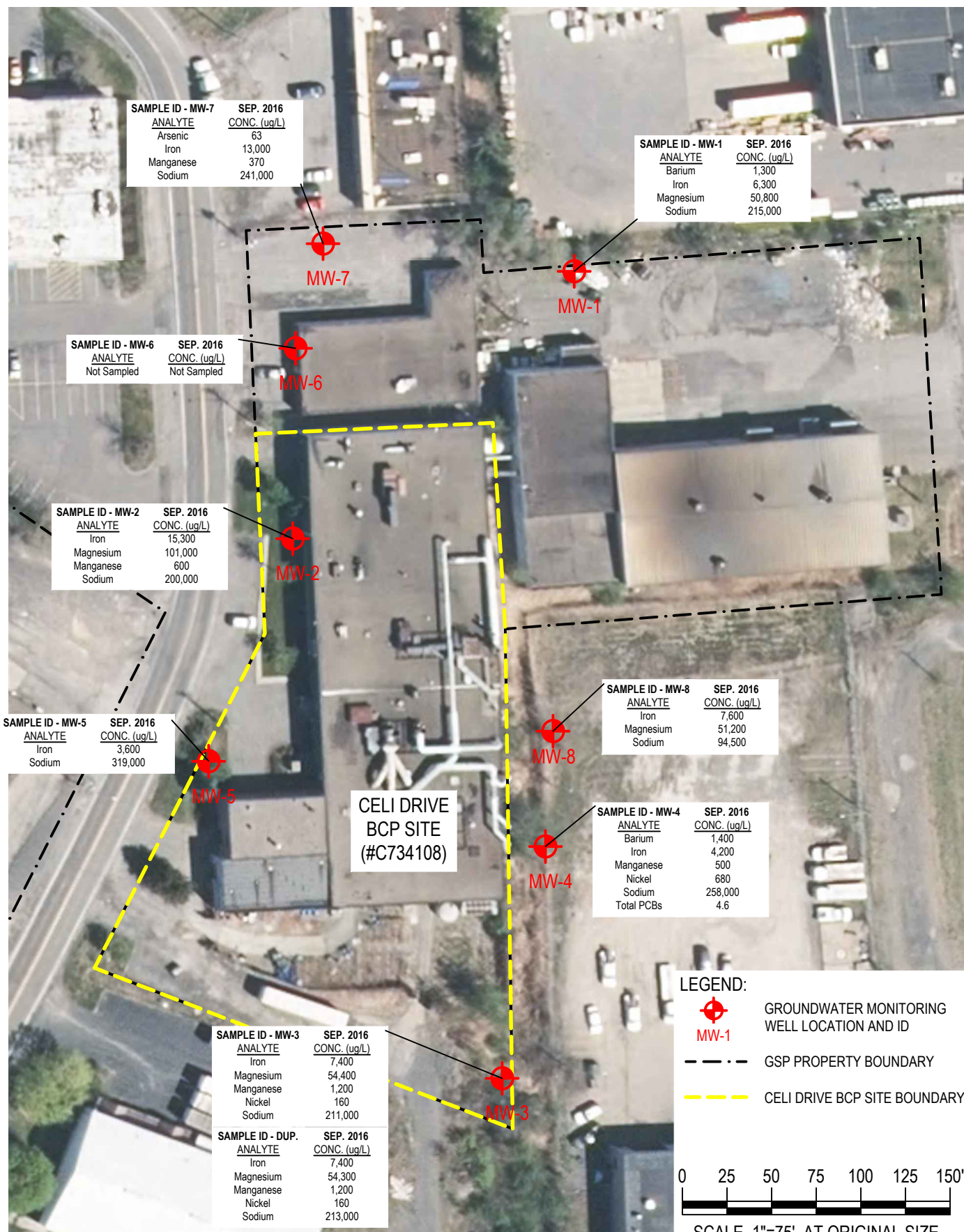


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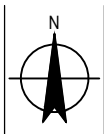
Groundwater Elevation and Flow

Figure 3



NOTES:

- Site features are from a field survey completed by D.W. Hannig L.S., P.C. dated November 8, 2002 and revised 9-1-2005, 3-2-2010, 5-10-2010, 6-15-2010, 6-24-2010, and 4-1-2014.
- Aerial photographs are 2015 half foot 4 band central zone index from the NYSGIS Clearinghouse website: <http://gis.ny.gov/>
- Only analytes that exceed applicable Class GA standards or guidance values are shown here.



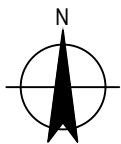
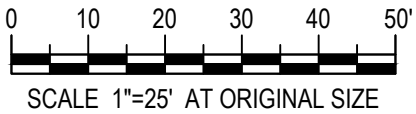
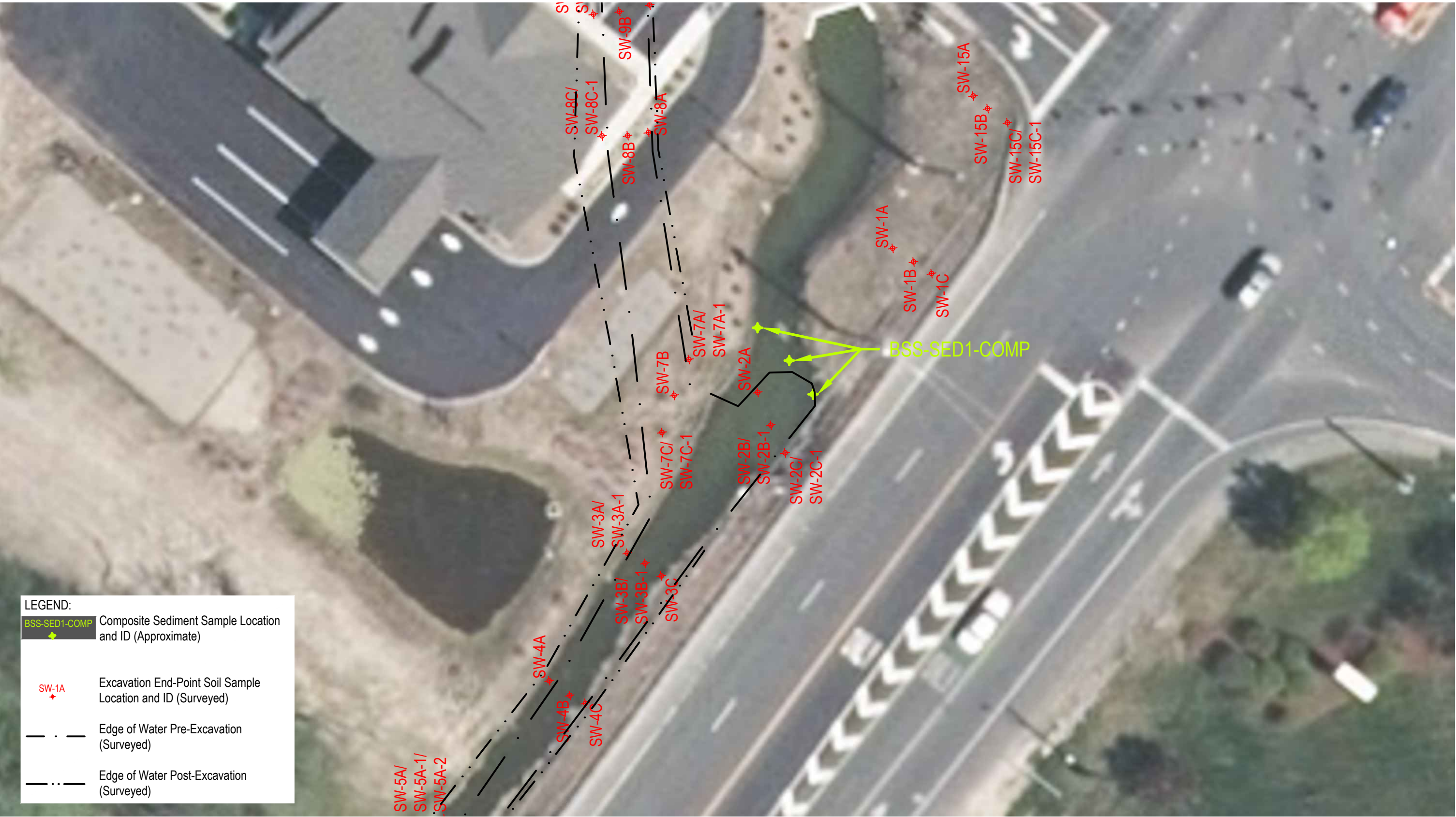
GSP Holdings, Inc.
Celi Drive BCP Site (BCP Site #C734108)
Supplemental Sampling Activities
Groundwater Exceedances of
Class GA Standards

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Figure 4



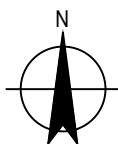
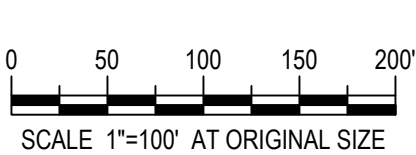
NOTES:
1. Aerial photographs are 2015 1-foot resolution color orthoimagery from the NYS GIS Clearinghouse website (<http://gis.ny.gov/gateway/mg/index.html>).
2. Previous sediment sample locations were surveyed.



GSP Holdings, Inc.
Celi Drive BCP Site (BCP Site #C734108)
Supplemental Sampling Activities
**Bridge Street Swale Sediment
Sample Locations**

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Figure 5



NOTES:
1. Aerial photographs are 0.5 foot resolution color orthoimagery from the U.S. Geological Survey website (<http://earthexplorer.usgs.gov/>).



GSP Holdings, Inc.
Celi Drive BCP Site (BCP Site #C734108)
Supplemental Sampling Activities

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Approximate Swale Sample Locations **Figure 6**

□
□
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Tables



Table 1: (Page 1 of 1) Groundwater Monitoring Well Development Log. Celi Drive BCP Site, Syracuse, NY.

Well I.D.	Date	PID	DTW	DOW	Time	Volume Removed (gallons)	Turbidity (NTU)	Comments
MW-8	8/26/2016	1.0	4.85	14.44	10:05	0.0	-	Removed 28 gallons of water with peristaltic pump and dedicated tubing. Pumped as fast as the pump would go the entire time and well never went dry. Shut off pump twice for approximately 10 minutes each time to empty buckets. Water started very turbid with lots of very fine silty sediment. Water cleared with development to little sediment at completion of development. Removed approximately 1.5 feet of sediment from well. Development water contained in steel 55-gallon drum staged on-site awaiting characterization and disposal.
					11:00	3.5	MAX	
					11:12	7.0	MAX	
					11:16	8.0	314.0	
					11:27	10.5	366.0	
					11:37	11.0	233.0	
					11:50	14.0	163.0	
					12:05	17.5	52.4	
					12:20	21.0	28.4	
					12:26	21.5	41.3	
					12:42	24.5	136.0	
					12:58	28.0	52.0	
			6.80	15.90	13:00	-	-	

Turbidity collected during development using a HACH2100Q.

MAX - turbidity meter maximum reading output was 1000 NTU.

[illegible]



Table 3: (Page 1 of 8) Groundwater Field Parameter Data. Celi Drive BCP Site, Syracuse, NY.

Well I.D.	Date	Time	Temp (°C)	Conductivity (mmhos/cm)	Salinity (%)	Dissolved Oxygen (mg/L)	pH (units)	ORP (mV)	Turbidity (NTU)	Amount Purged (liters)	Comments
MW-1	1/31/2014	7:51	9.16	1.436	1.05	3.2	8.12	45.3	1401.5	14.0	Purged 14 liters at 3 cycles per minute with bladder pump. Water started cloudy light yellowish brown with some sediment and cleared quickly. Sample water was clear with no sheen or odor.
		7:55	10.82	1.501	1.06	0.89	7.09	9.3	1145.4		
		7:58	10.78	1.504	1.06	0.75	7.04	-0.7	800.8		
		8:01	10.76	1.502	1.06	0.62	7.03	1.2	687.4		
		8:04	10.74	1.503	1.06	0.57	7.03	-2.0	501.7		
		8:07	10.73	1.502	1.06	0.55	7.03	-6.5	346.4		
		8:13	10.61	1.507	1.07	0.47	7.05	-15.9	164.6		
		8:16	10.62	1.511	1.07	0.45	6.98	-16.2	117.4		
		8:19	10.60	1.511	1.07	0.42	6.98	-19.5	95.4		
		8:23	10.61	1.517	1.08	0.41	7.00	-23.2	68.6		
		8:26	10.54	1.519	1.08	0.40	7.01	-26.2	56.8		
		8:30	10.55	1.521	1.08	0.39	7.02	-29.2	49.4		
		8:33	10.57	1.521	1.08	0.41	7.04	-34.0	45.1		
		8:36	10.55	1.522	1.08	0.39	7.04	-25.4	42.2		
	9/1/2016	7:35	18.11	1.752	1.03	2.96	6.70	16.4	460.0	18.0	Purged 18 liters with peristaltic pump. Water cleared with purge, yellow tint, no sediment, no odor, no sheen. MS/MSD sample taken from this location.
		7:37	16.92	1.738	1.06	1.05	6.76	-28.8	246.5		
		7:39	17.24	1.754	1.06	1.53	6.73	-36.2	1169.8		
		7:42	17.53	1.767	1.06	1.83	6.75	-45.2	284.4		
		7:43	17.65	1.771	1.06	2.29	6.75	-47.9	1128.3		
		7:45	17.89	1.776	1.05	1.87	6.77	-53.4	276.2		
		7:47	18.09	1.778	1.05	1.51	6.82	-58.4	149.9		
		7:49	18.21	1.779	1.05	1.45	6.87	-62.2	119.6		
		7:51	18.29	1.784	1.05	1.09	6.86	-67.8	59.2		
		7:52	18.36	1.790	1.05	1.25	6.87	-67.4	43.8		
		7:54	18.40	1.796	1.05	2.50	6.87	-69.0	45.6		
		7:56	18.48	1.803	1.06	1.99	6.88	-71.5	27.2		
		7:58	18.53	1.808	1.06	2.02	6.76	-73.6	23.9		
		8:00	18.61	1.818	1.06	1.66	6.89	-75.9	17.4		
		8:04	18.67	1.827	1.07	1.53	6.92	-77.8	13.4		
		8:06	18.72	1.834	1.07	1.27	6.90	-78.4	20.3		

Field parameters collected during purging using a YSI 6920 with flow thru cell.

Field parameters recorded after every liter of purge.

NM - Not Measured



Table 3: (Page 2 of 8) Groundwater Field Parameter Data. Celi Drive BCP Site, Syracuse, NY.

Well I.D.	Date	Time	Temp (°C)	Conductivity (mmhos/cm)	Salinity (%)	Dissolved Oxygen (mg/L)	pH (units)	ORP (mV)	Turbidity (NTU)	Amount Purged (liters)	Comments
MW-2	1/31/2014	11:41	8.20	1.290	0.97	2.95	7.70	88.5	1268.4	16.0	Purged 16 liters at 2 cycles per minute with bladder pump. Water started turbid brown and took a long time to clear. Sample water was clear with a blocky sheen and no odor.
		11:45	9.63	1.332	0.96	0.78	7.37	55.6	1398.5		
		11:49	10.22	1.354	0.97	0.54	7.31	38.2	1445.3		
		11:53	10.25	1.355	0.96	0.48	7.27	27.1	1442.1		
		11:57	10.53	1.361	0.96	0.54	7.29	35.2	1442.1		
		12:00	10.54	1.364	0.96	0.52	7.23	25.4	1442.2		
		12:05	10.72	1.368	0.96	0.45	7.23	10.3	1400.2		
		12:10	10.82	1.371	0.96	0.39	7.22	2.4	1032.5		
		12:15	10.83	1.370	0.96	0.38	7.20	-2.7	669.6		
		12:20	10.82	1.369	0.96	0.38	7.18	-6.7	412.9		
		12:25	10.82	1.368	0.96	0.39	7.17	-9.2	278.5		
		12:30	10.79	1.365	0.96	0.40	7.14	-10.5	175.8		
		12:35	10.82	1.363	0.95	0.40	7.13	-12.8	131.9		
		12:40	10.84	1.361	0.95	0.40	7.14	-15.3	108.5		
		12:45	10.93	1.363	0.95	0.39	7.14	-17.7	83.4		
		12:50	11.00	1.366	0.95	0.38	7.13	-18.5	72.9		
		12:55	11.03	1.367	0.95	0.38	7.13	-19.9	48.7		
	9/1/2016	10:04	16.78	1.687	1.03	3.32	7.58	-34.5	1365.6	17.0	Purged 17 liters with peristaltic pump. Water turbid brown with lots of floaters at start. Floaters decreased with purge but turbidity didn't, no sheen, no odor.
		10:05	15.65	1.656	1.03	0.84	7.37	-42.0	1658.9		
		10:06	15.59	1.653	1.03	0.54	7.37	-44.5	646.2		
		10:08	15.67	1.657	1.03	0.40	7.19	-49.8	696.0		
		10:10	15.62	1.653	1.03	0.35	7.14	-50.8	597.8		
		10:11	15.60	1.653	1.03	0.33	7.11	-52.1	634.2		
		10:13	15.60	1.650	1.03	0.30	7.06	-54.0	424.6		
		10:15	15.62	1.648	1.03	0.28	7.08	-55.2	305.7		
		10:16	15.60	1.648	1.03	0.30	7.05	-57.0	305.2		
		10:18	15.61	1.646	1.03	0.26	7.06	-57.7	170.4		
		10:20	15.58	1.639	1.03	0.25	7.05	-58.5	235.8		
		10:22	15.61	1.633	1.02	0.24	7.03	-60.0	178.6		
		10:25	15.80	1.645	1.02	0.27	7.07	-52.2	110.4		
		10:27	15.53	1.624	1.02	1.98	7.08	-56.0	148.5		
		10:29	15.55	1.621	1.01	1.88	7.06	-57.8	151.6		
		10:31	15.51	1.620	1.01	2.23	7.08	-59.0	130.3		
		10:33	15.51	1.617	1.01	1.93	7.07	-59.2	105.6		

Field parameters collected during purging using a YSI 6920 with flow thru cell.

Field parameters recorded after every liter of purge.

NM - Not Measured



Table 3: (Page 3 of 8) Groundwater Field Parameter Data. Celi Drive BCP Site, Syracuse, NY.

Well I.D.	Date	Time	Temp (°C)	Conductivity (mmhos/cm)	Salinity (%)	Dissolved Oxygen (mg/L)	pH (units)	ORP (mV)	Turbidity (NTU)	Amount Purged (liters)	Comments
MW-3	1/31/2014	15:21	7.04	0.811	0.62	2.77	7.48	108.0	901.0	12.0	Purged 12 liters at 2 cycles per minute with bladder pump. Water started cloudy and cleared fairly quickly. Sample water was slightly cloudy with no sheen or odor.
		15:24	7.67	0.812	0.61	1.06	7.08	96.8	518.4		
		15:28	7.85	0.817	0.61	0.76	6.85	91.6	344.3		
		15:31	7.98	0.825	0.61	0.65	6.72	90.6	278.9		
		15:34	8.12	0.831	0.61	0.56	6.66	89.2	190.1		
		15:39	8.04	0.831	0.62	0.51	6.61	87.0	158.5		
		15:44	8.19	0.834	0.61	0.47	6.66	80.8	126.0		
		15:49	8.32	0.835	0.61	0.44	6.63	79.3	94.7		
		15:53	8.35	0.835	0.61	0.42	6.62	78.1	74.1		
		15:58	8.44	0.836	0.61	0.41	6.61	77.5	66.3		
		16:03	8.51	0.836	0.61	0.42	6.61	76.6	63.5		
		16:08	8.57	0.836	0.61	0.41	6.60	75.3	49.3		
	9/1/2016	15:22	17.77	1.922	1.16	5.93	7.40	-57.4	220.9	12.0	Purged 12 liters with peristaltic pump. Water clear, no sheen, no odor. Duplicate sample taken from this location.
		15:24	14.73	1.777	1.14	0.80	7.24	-68.8	107.8		
		15:25	14.94	1.779	1.13	0.43	7.18	-71.1	100.7		
		15:27	15.14	1.786	1.13	0.38	7.11	-72.6	80.1		
		15:28	15.31	1.785	1.13	0.35	7.09	-72.6	82.6		
		15:30	15.42	1.781	1.12	0.34	7.07	-71.2	106.7		
		15:31	15.54	1.778	1.12	0.36	7.04	-68.3	98.2		
		15:33	15.56	1.776	1.12	0.35	7.02	-68.4	59.0		
		15:34	15.45	1.772	1.12	0.34	7.01	-67.9	23.3		
		15:36	15.33	1.771	1.12	0.32	6.99	-67.4	17.3		
		15:38	15.29	1.772	1.13	0.30	6.99	-66.8	12.1		

Field parameters collected during purging using a YSI 6920 with flow thru cell.

Field parameters recorded after every liter of purge.

NM - Not Measured



Table 3: (Page 4 of 8) Groundwater Field Parameter Data. Celi Drive BCP Site, Syracuse, NY.

Well I.D.	Date	Time	Temp (°C)	Conductivity (mmhos/cm)	Salinity (%)	Dissolved Oxygen (mg/L)	pH (units)	ORP (mV)	Turbidity (NTU)	Amount Purged (liters)	Comments
MW-4	1/31/2014	16:38	5.18	0.865	0.70	4.22	7.22	132.3	1004.3	14.0	Purged 14 liters at 2 cycles per minute with bladder pump. Water started slightly cloudy and cleared fairly quickly. Sample water was slightly cloudy with no sheen or odor. Sample taken prior to reaching less than 50 NTUs due to running out of daylight.
		16:41	6.16	0.907	0.71	1.07	7.05	107.7	511.1		
		16:45	6.03	0.906	0.71	0.71	7.03	87.3	429.8		
		16:49	5.98	0.909	0.72	0.60	6.98	74.1	394.9		
		16:54	6.10	0.918	0.72	0.55	6.96	53.7	336.6		
		16:59	6.17	0.929	0.73	0.58	6.97	54.5	279.8		
		17:04	6.20	0.934	0.73	0.62	6.93	45.7	224.6		
		17:09	6.21	0.938	0.74	0.49	7.02	33.8	212.9		
		17:13	6.19	0.943	0.74	0.43	7.01	27.7	171.4		
		17:18	6.25	0.948	0.74	0.40	6.98	23.5	148.9		
		17:23	6.25	0.952	0.75	0.39	6.97	20.3	133.4		
		17:28	6.23	0.954	0.75	0.37	6.95	16.6	146.3		
		17:33	6.24	0.956	0.75	0.37	6.95	14.1	121.9		
		17:37	6.26	0.957	0.75	0.36	6.96	12.7	114.7		
	9/1/2016	13:52	19.18	1.146	0.65	3.95	7.44	-64.5	508.3	24.0	Purged 24 liters with peristaltic pump. Water slight brown tint at first and cleared with purged. Sample water clear with no sheen and no odor.
		13:54	16.52	0.914	0.54	1.91	7.37	-52.6	203.7		
		13:56	16.49	0.856	0.51	1.48	7.30	-43.1	147.0		
		13:58	16.81	0.839	0.49	1.20	7.32	-34.5	128.5		
		13:59	17.13	0.850	0.50	1.03	7.21	-29.0	166.0		
		14:00	17.48	0.881	0.51	0.94	7.20	-23.4	218.2		
		14:02	17.70	0.929	0.54	0.73	7.08	-20.9	300.0		
		14:04	17.67	0.989	0.58	0.68	7.14	-20.7	331.2		
		14:05	17.47	1.059	0.62	0.93	7.11	-24.4	326.1		
		14:07	17.24	1.103	0.65	1.45	7.09	-27.2	322.3		
		14:09	17.03	1.180	0.70	2.16	7.09	-29.5	298.1		
		14:11	16.85	1.266	0.76	2.70	7.07	-31.5	232.5		
		14:13	16.74	1.345	0.81	3.37	7.08	-32.4	150.0		
		14:14	16.65	1.393	0.84	3.64	7.07	-32.1	129.7		
		14:16	16.58	1.438	0.87	3.79	7.06	-32.3	92.7		
		14:18	16.70	1.540	0.94	3.82	7.05	-34.5	102.8		
		14:20	16.31	1.664	1.02	3.71	7.07	-34.8	90.8		
		14:22	16.42	1.589	0.97	3.85	7.06	-36.7	120.0		
		14:23	16.45	1.532	0.94	4.28	7.05	-36.2	121.6		
		14:25	16.40	1.557	0.95	4.38	7.03	-35.1	126.9		
		14:27	16.46	1.601	0.98	4.49	7.04	-33.7	94.0		
		14:28	16.42	1.718	0.99	4.41	7.02	-33.0	66.5		
		14:30	16.36	1.790	1.10	4.32	7.00	-33.2	49.7		
		14:32	16.35	1.829	1.13	4.32	6.99	-33.5	39.7		

Field parameters collected during purging using a YSI 6920 with flow thru cell.

Field parameters recorded after every liter of purge.

NM - Not Measured



Table 3: (Page 5 of 8) Groundwater Field Parameter Data. Celi Drive BCP Site, Syracuse, NY.

Well I.D.	Date	Time	Temp (°C)	Conductivity (mmhos/cm)	Salinity (%)	Dissolved Oxygen (mg/L)	pH (units)	ORP (mV)	Turbidity (NTU)	Amount Purged (liters)	Comments
MW-5	1/31/2014	13:34	7.80	1.540	1.18	3.92	7.72	106.5	1420.8	22.0	Purged 22 liters at 3 cycles per minute with bladder pump. Water started turbid brown and cleared slowly. Sample water was slightly cloudy with no sheen or odor. Sample taken prior to reaching less than 50 NTUs due to minimal improvement in water clarity.
		13:37	9.19	1.692	1.26	1.12	7.35	86.6	1427.2		
		13:40	9.21	1.681	1.24	0.92	7.29	74.9	1422.4		
		13:43	9.08	1.675	1.24	0.89	7.20	66.3	1188.4		
		13:46	9.09	1.675	1.24	0.85	7.16	60.0	1138.7		
		13:49	9.11	1.685	1.25	0.87	7.12	54.8	1356.4		
		13:53	9.17	1.702	1.26	0.82	7.11	48.2	1350.2		
		13:55	9.11	1.708	1.27	0.88	7.12	44.1	1204.2		
		13:58	8.97	1.704	1.27	1.02	7.23	47.6	1171.3		
		14:00	8.86	1.703	1.27	1.19	7.09	48.0	1081.1		
		14:03	8.85	1.708	1.28	1.05	7.08	43.8	950.0		
		14:07	8.85	1.705	1.28	1.03	7.08	38.5	755.2		
		14:11	8.95	1.726	1.29	0.95	7.09	34.3	636.4		
		14:14	8.91	1.711	1.28	0.97	7.11	29.8	545.3		
		14:17	8.88	1.710	1.28	0.97	7.11	27.7	494.4		
		14:20	8.99	1.718	1.28	0.91	7.11	25.2	377.4		
		14:24	9.02	1.723	1.28	0.94	7.12	22.2	333.8		
		14:27	9.06	1.725	1.28	0.91	7.12	21.0	304.7		
		14:30	9.00	1.724	1.29	0.94	7.12	19.4	243.0		
		14:34	9.07	1.729	1.29	0.90	7.12	18.1	211.7		
		14:37	9.05	1.730	1.29	0.88	7.12	17.1	104.5		
		14:41	9.05	1.728	1.29	0.88	7.11	17.0	150.3		
	9/1/2016	11:14	18.58	1.775	1.04	5.11	7.41	-13.2	1375.4	13.0	Purged 13 liters with peristaltic pump. Water started rusty orange with lots of rusty orange floaters. Sample water clear with no sheen and no odor.
		11:16	16.59	1.722	1.05	1.02	7.39	-38.9	1381.3		
		11:18	16.52	1.710	1.05	0.65	7.31	-44.6	1143.3		
		11:21	16.94	1.714	1.04	0.72	7.32	-44.5	260.2		
		11:22	16.84	1.701	1.03	0.73	7.29	-49.0	141.6		
		11:24	17.01	1.689	1.02	0.37	7.24	-50.7	155.3		
		11:26	17.14	1.677	1.01	0.33	7.20	-49.7	188.4		
		11:28	17.25	1.674	1.01	0.35	7.22	-50.7	169.9		
		11:29	17.25	1.646	1.01	0.37	7.18	-50.6	168.8		
		11:31	17.25	1.682	1.01	0.39	7.18	-52.0	143.1		
		11:32	17.24	1.686	1.01	0.39	7.17	-53.7	112.2		
		11:34	17.21	1.692	1.02	0.40	7.12	-56.0	69.3		
		11:36	17.21	1.697	1.02	0.39	7.18	-57.0	60.2		
		11:37	17.20	1.702	1.02	0.36	7.13	-58.8	48.6		
		11:39	17.22	1.706	1.03	0.38	7.18	-59.8	50.7		

Field parameters collected during purging using a YSI 6920 with flow thru cell.

Field parameters recorded after every liter of purge.

NM - Not Measured



Table 3: (Page 6 of 8) Groundwater Field Parameter Data. Celi Drive BCP Site, Syracuse, NY.

Well I.D.	Date	Time	Temp (°C)	Conductivity (mmhos/cm)	Salinity (%)	Dissolved Oxygen (mg/L)	pH (units)	ORP (mV)	Turbidity (NTU)	Amount Purged (liters)	Comments
MW-6	1/31/2014	10:34	8.30	1.839	1.40	3.31	7.77	76.0	232.6	10.0	Purged 10 liters at 3 cycles per minute with bladder pump. Water started slightly yellowish brown and cleared quickly. Sample water was clear with no sheen or odor.
		10:37	9.69	1.952	1.44	1.06	7.48	25.8	195.4		
		10:40	9.45	1.948	1.44	0.72	7.38	2.7	104.8		
		10:43	9.44	1.948	1.44	0.58	7.34	-10.6	94.7		
		10:46	9.48	1.960	1.45	0.52	7.31	-18.9	70.8		
		10:48	9.51	1.971	1.46	0.48	7.29	-25.2	60.3		
		10:51	9.56	1.991	1.48	0.45	7.27	-30.1	50.4		
		10:55	9.63	2.001	1.48	0.44	7.27	-35.1	46.9		
		10:58	9.70	2.012	1.48	0.42	7.25	-38.3	36.8		
		11:01	9.70	2.017	1.49	0.41	7.23	-39.8	32.1		
		11:04	9.72	2.027	1.49	0.38	7.21	-42.0	29.5		
	9/1/2016	NM	NM	NM	NM	NM	NM	NM	NM	-	Well was not sampled during this event.

Field parameters collected during purging using a YSI 6920 with flow thru cell.

Field parameters recorded after every liter of purge.

NM - Not Measured



Table 3: (Page 7 of 8) Groundwater Field Parameter Data. Celi Drive BCP Site, Syracuse, NY.

Well I.D.	Date	Time	Temp (°C)	Conductivity (mmhos/cm)	Salinity (%)	Dissolved Oxygen (mg/L)	pH (units)	ORP (mV)	Turbidity (NTU)	Amount Purged (liters)	Comments
MW-7	1/31/2014	9:12	8.29	1.627	1.23	2.92	7.44	56.6	842.7	13.0	Purged 13 liters at 3 cycles per minute with bladder pump. Water started cloudy brown with little sediment and cleared quickly. Sample water was clear with no sheen or odor.
		9:16	9.40	1.708	1.26	0.95	7.27	-1.4	419.0		
		9:19	8.86	1.683	1.26	0.68	7.27	-19.5	224.4		
		9:23	8.86	1.687	1.26	0.56	7.24	-33.4	169.0		
		9:26	8.93	1.659	1.24	0.56	7.24	-39.4	122.2		
		9:29	8.95	1.638	1.22	0.49	7.24	-43.0	102.2		
		9:32	8.97	1.625	1.21	0.46	7.23	-47.5	92.6		
		9:35	9.10	1.610	1.19	0.43	7.23	-50.6	82.3		
		9:38	9.10	1.599	1.18	0.41	7.23	-52.9	74.4		
		9:41	9.12	1.588	1.18	0.40	7.23	-55.3	62.8		
		9:44	9.15	1.580	1.17	0.38	7.23	-57.0	54.0		
		9:48	9.19	1.576	1.16	0.38	7.23	-58.6	48.1		
		9:51	9.19	1.568	1.16	0.36	7.23	-59.9	48.9		
		9:54	9.21	1.564	1.15	0.36	7.22	-61.2	41.6		
	9/1/2016	9:03	20.41	1.590	0.89	2.77	7.24	-72.6	55.6	11.0	Purged 11 liters with peristaltic pump. Water clear with lots of black floaters at start, floaters decreased with purge, sample water clear, petroleum like sheen, no odor.
		9:05	19.36	1.518	0.86	0.67	7.09	-87.5	49.7		
		9:07	19.74	1.506	0.85	0.43	7.15	-91.2	50.8		
		9:08	20.25	1.517	0.85	0.35	6.97	-94.1	53.5		
		9:09	20.78	1.540	0.85	0.29	6.94	-96.7	43.9		
		9:10	21.09	1.561	0.85	0.28	7.01	-98.3	40.1		
		9:12	21.30	1.580	0.86	0.27	6.94	-100.2	41.9		
		9:14	21.31	1.595	0.87	0.27	6.93	-99.6	42.9		
		9:15	21.29	1.609	0.88	0.27	6.99	-98.5	39.2		
		9:17	21.28	1.627	0.89	0.26	6.94	-99.9	34.0		
		9:19	21.17	1.649	0.90	0.28	6.93	-99.6	23.6		
		9:21	21.09	1.669	0.92	0.24	6.98	-99.7	15.1		

Field parameters collected during purging using a YSI 6920 with flow thru cell.

Field parameters recorded after every liter of purge.

NM - Not Measured



Table 3: (Page 8 of 8) Groundwater Field Parameter Data. Celi Drive BCP Site, Syracuse, NY.

Well I.D.	Date	Time	Temp (°C)	Conductivity (mmhos/cm)	Salinity (%)	Dissolved Oxygen (mg/L)	pH (units)	ORP (mV)	Turbidity (NTU)	Amount Purged (liters)	Comments
MW-8	1/31/2014	NM	NM	NM	NM	NM	NM	NM	NM	-	Well could not be located to be sampled.
	9/1/2016	12:36	19.24	1.336	0.76	4.91	7.63	-48.9	1395.8	15.0	Purged 15 liters with peristaltic pump. Water turbid at first with very fine sediment. Cleared with purge. Sample water clear with no sheen and no odor.
		12:39	16.61	1.264	0.76	2.56	7.41	-52.6	569.0		
		12:42	16.90	1.254	0.75	2.14	7.38	-51.1	291.7		
		12:43	16.89	1.248	0.75	2.01	7.22	-50.5	221.4		
		12:45	16.95	1.255	0.75	1.82	7.03	-50.8	113.8		
		12:48	16.78	1.260	0.76	1.62	7.03	-51.9	91.6		
		12:54	16.64	1.262	0.76	1.02	7.00	-54.9	44.2		
		12:56	16.53	1.258	0.76	1.04	6.98	-56.8	91.2		
		12:57	16.58	1.257	0.76	1.50	6.99	-57.7	70.5		
		12:59	16.78	1.259	0.75	1.42	6.97	-58.6	57.5		
		13:01	16.69	1.261	0.76	1.23	6.95	-58.6	25.7		
		13:03	16.64	1.258	0.76	1.15	6.96	-58.8	36.5		
		13:05	16.64	1.260	0.76	1.09	6.97	-58.9	28.8		

Field parameters collected during purging using a YSI 6920 with flow thru cell.

Field parameters recorded after every liter of purge.

NM - Not Measured



Table 4: (Page 1 of 14) Summary of Groundwater Laboratory Analytical Results. Celi Drive BCP Site, Syracuse, NY.

Analyte	GW Std (ug/L)	Sample Identification							
		MW-1							
Date Sampled		Aug-05*	Mar-10*	Jan-14			Sep-16		
Metals by EPA Method 6010C							D.L.		R.L.
Aluminum		-	-	-				U	200
Antimony	3	-	-	-				U	20
Arsenic	25	-	-	-				U	15
Barium	1,000	-	-	-			1,300		2
Beryllium	3 (G)	-	-	-				U	2
Cadmium	5	-	-	-				U	2
Calcium		-	-	-			190,000		500
Chromium, total	50	U	U	2.3	J	1		U	4
Cobalt		-	-	-				U	4
Copper	200	U	U	4.4	J^B	1.6		U	10
Iron	300	-	-	-			6,300		50
Lead	25	-	-	-				U	10
Magnesium	35,000 (G)	-	-	-			50,800		200
Manganese	300	-	-	-			54		3
Nickel	100	U	1.4	J	3.8	J	1.3	U	10
Potassium		-	-	-			5,200		500
Selenium	10	-	-	-				U	25
Silver	50	-	-	-				U	6
Sodium	20,000	-	-	-			215,000		1000
Thallium	0.5 (G)	-	-	-				U	20
Vanadium		-	-	-				U	5
Zinc	2,000 (G)	U	9.4	J	7.7	JB	1.5	U	10
Hexavalent Chromium by EPA Method 7196A									
Chromium, hexavalent	50	11		U		U	5	UJ	100
Mercury by EPA Method 7470A									
Mercury	0.7	-	-	-				U	0.2
Cyanide by EPA Method 9012									
Cyanide	200	U	U		U	5		U	10

All values reported as ug/L

GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

(G) - Guidance value

* - Historic samples taken by ERM

U - Analyzed for but Not Detected

J - Indicates an estimated value

B - Compound was found in the blank and sample

^ - Instrument related QC exceeds the control limits

NS - Not sampled during sampling event

D.L. - Laboratory Detection Limit

R.L. - Laboratory Reporting Limit

Bold and boxed results indicate an exceedance of Groundwater Standards



Table 4: (Page 2 of 14) Summary of Groundwater Laboratory Analytical Results. Celi Drive BCP Site, Syracuse, NY.

Analyte	GW Std (ug/L)	Sample Identification							
		MW-2							
Date Sampled		Aug-05*	Mar-10*	Jan-14	Sep-16				
Metals by EPA Method 6010C						D.L.		R.L.	
Aluminum		-	-	-		5,000		200	
Antimony	3	-	-	-			U	20	
Arsenic	25	-	-	-			U	15	
Barium	1,000	-	-	-		430		2	
Beryllium	3 (G)	-	-	-			U	2	
Cadmium	5	-	-	-			U	2	
Calcium		-	-	-		291,000		500	
Chromium, total	50	U	2.4	J	3.7	J	1	10	4
Cobalt		-	-	-				U	4
Copper	200	3.6		U	4.1	JB	1.6	11	10
Iron	300	-	-	-				15,300	50
Lead	25	-	-	-				12	10
Magnesium	35,000 (G)	-	-	-				101,000	200
Manganese	300	-	-	-				600	3
Nickel	100	5.9	8.4		7.8	J	1.3	18	10
Potassium		-	-	-				6,800	500
Selenium	10	-	-	-				U	25
Silver	50	-	-	-				U	6
Sodium	20,000	-	-	-				200,000	1000
Thallium	0.5 (G)	-	-	-				U	20
Vanadium		-	-	-				13	5
Zinc	2,000 (G)	U	10.4	J	6.4	JB	1.5	16	10
Hexavalent Chromium by EPA Method 7196A									
Chromium, hexavalent	50	9		U		U	5	U	10
Mercury by EPA Method 7470A									
Mercury	0.7	-	-	-				U	0.2
Cyanide by EPA Method 9012									
Cyanide	200	U	3.56	J		U	5	U	10

All values reported as ug/L

GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

(G) - Guidance value

* - Historic samples taken by ERM

U - Analyzed for but Not Detected

J - Indicates an estimated value

B - Compound was found in the blank and sample

^ - Instrument related QC exceeds the control limits

NS - Not sampled during sampling event

D.L. - Laboratory Detection Limit

R.L. - Laboratory Reporting Limit

Bold and boxed results indicate an exceedance of Groundwater Standards



Table 4: (Page 3 of 14) Summary of Groundwater Laboratory Analytical Results. Celi Drive BCP Site, Syracuse, NY.

Analyte	GW Std (ug/L)	Sample Identification					
		MW-3					
Date Sampled		Aug-05*	Mar-10*	Jan-14		Sep-16	
Metals by EPA Method 6010C					D.L.		R.L.
Aluminum		-	-	-		U	200
Antimony	3	-	-	-		U	20
Arsenic	25	-	-	-		U	15
Barium	1,000	-	-	-		220	2
Beryllium	3 (G)	-	-	-		U	2
Cadmium	5	-	-	-		U	2
Calcium		-	-	-		219,000	500
Chromium, total	50	U	U	5.1	1	U	4
Cobalt		-	-	-		U	4
Copper	200	U	4.1 J	10 B	1.6	U	10
Iron	300	-	-	-		7,400	50
Lead	25	-	-	-		U	10
Magnesium	35,000 (G)	-	-	-		54,400	200
Manganese	300	-	-	-		1,200	3
Nickel	100	4.7	102	120	1.3	160	10
Potassium		-	-	-		3,400	500
Selenium	10	-	-	-		U	25
Silver	50	-	-	-		U	6
Sodium	20,000	-	-	-		211,000	1000
Thallium	0.5 (G)	-	-	-		U	20
Vanadium		-	-	-		U	5
Zinc	2,000 (G)	U	11.8 J	12 B	1.5	U	10
Hexavalent Chromium by EPA Method 7196A							
Chromium, hexavalent	50	14	U	U	5	U	10
Mercury by EPA Method 7470A							
Mercury	0.7	-	-	-		U	0.2
Cyanide by EPA Method 9012							
Cyanide	200	U	3.71 J	UJ	5	U	10

All values reported as ug/L

GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

(G) - Guidance value

* - Historic samples taken by ERM

U - Analyzed for but Not Detected

J - Indicates an estimated value

B - Compound was found in the blank and sample

^ - Instrument related QC exceeds the control limits

NS - Not sampled during sampling event

D.L. - Laboratory Detection Limit

R.L. - Laboratory Reporting Limit

Bold and boxed results indicate an exceedance of Groundwater Standards



Table 4: (Page 4 of 14) Summary of Groundwater Laboratory Analytical Results. Celi Drive BCP Site, Syracuse, NY.

Analyte	GW Std (ug/L)	Sample Identification					
		MW-4					
Date Sampled		Mar-10*	Jan-14		Sep-16		
Metals by EPA Method 6010C				D.L.		R.L.	
Aluminum		-	-		480		200
Antimony	3	-	-			U	20
Arsenic	25	-	-			U	15
Barium	1,000	-	-		1,400		2
Beryllium	3 (G)	-	-			U	2
Cadmium	5	-	-			U	2
Calcium		-	-		205,000		500
Chromium, total	50	10	29	1	5.4		4
Cobalt		-	-			U	4
Copper	200	22.6	93	B 1.6	34		10
Iron	300	-	-		4,200		50
Lead	25	-	-			U	10
Magnesium	35,000 (G)	-	-		32,500		200
Manganese	300	-	-		500		3
Nickel	100	237	340	1.3	680		10
Potassium		-	-		6,300		500
Selenium	10	-	-			U	25
Silver	50	-	-			U	6
Sodium	20,000	-	-		258,000		1000
Thallium	0.5 (G)	-	-			U	20
Vanadium		-	-			U	5
Zinc	2,000 (G)	22	23	B 1.5		U	10
Hexavalent Chromium by EPA Method 7196A							
Chromium, hexavalent	50	U	U	5		U	10
Mercury by EPA Method 7470A							
Mercury	0.7	-	-			U	0.2
Cyanide by EPA Method 9012							
Cyanide	200	U	U	5		U	10

All values reported as ug/L

GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

(G) - Guidance value

* - Historic samples taken by ERM

U - Analyzed for but Not Detected

J - Indicates an estimated value

B - Compound was found in the blank and sample

^ - Instrument related QC exceeds the control limits

NS - Not sampled during sampling event

D.L. - Laboratory Detection Limit

R.L. - Laboratory Reporting Limit

Bold and boxed results indicate an exceedance of Groundwater Standards



Table 4: (Page 5 of 14) Summary of Groundwater Laboratory Analytical Results. Celi Drive BCP Site, Syracuse, NY.

Analyte	GW Std (ug/L)	Sample Identification					
		MW-5					
Date Sampled		Mar-10*		Jan-14		Sep-16	
Metals by EPA Method 6010C					D.L.		R.L.
Aluminum		-	-			710	200
Antimony	3	-	-			U	20
Arsenic	25	-	-			22	15
Barium	1,000	-	-			91	2
Beryllium	3 (G)	-	-			U	2
Cadmium	5	-	-			U	2
Calcium		-	-			112,000	500
Chromium, total	50		U	10	1	U	4
Cobalt		-		-		U	4
Copper	200		U	11	B 1.6	U	10
Iron	300	-		-		3,600	50
Lead	25	-		-		U	10
Magnesium	35,000 (G)	-		-		28,500	200
Manganese	300	-		-		69	3
Nickel	100	3.1	J	12	1.3	U	10
Potassium		-		-		4,000	500
Selenium	10	-		-		U	25
Silver	50	-		-		U	6
Sodium	20,000	-		-		319,000	1000
Thallium	0.5 (G)	-		-		U	20
Vanadium		-		-		U	5
Zinc	2,000 (G)	11.9	J	18	B 1.5	U	10
Hexavalent Chromium by EPA Method 7196A							
Chromium, hexavalent	50	10	J		U 5	U	10
Mercury by EPA Method 7470A							
Mercury	0.7	-		-		U	0.2
Cyanide by EPA Method 9012							
Cyanide	200		U		U 5	U	10

All values reported as ug/L

GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

(G) - Guidance value

* - Historic samples taken by ERM

U - Analyzed for but Not Detected

J - Indicates an estimated value

B - Compound was found in the blank and sample

^ - Instrument related QC exceeds the control limits

NS - Not sampled during sampling event

D.L. - Laboratory Detection Limit

R.L. - Laboratory Reporting Limit

Bold and boxed results indicate an exceedance of Groundwater Standards



Table 4: (Page 6 of 14) Summary of Groundwater Laboratory Analytical Results. Celi Drive BCP Site, Syracuse, NY.

Analyte	GW Std (ug/L)	Sample Identification				
		MW-6				
Date Sampled		Mar-10*	Jan-14	Sep-16		
Metals by EPA Method 6010C					D.L.	R.L.
Aluminum		-	-			NS
Antimony	3	-	-			NS
Arsenic	25	-	-			NS
Barium	1,000	-	-			NS
Beryllium	3 (G)	-	-			NS
Cadmium	5	-	-			NS
Calcium		-	-			NS
Chromium, total	50	U	2.0 J	1		NS
Cobalt		-	-			NS
Copper	200	U	3.4 JB	1.6		NS
Iron	300	-	-			NS
Lead	25	-	-			NS
Magnesium	35,000 (G)	-	-			NS
Manganese	300	-	-			NS
Nickel	100	10	3.9 J	1.3		NS
Potassium		-	-			NS
Selenium	10	-	-			NS
Silver	50	-	-			NS
Sodium	20,000	-	-			NS
Thallium	0.5 (G)	-	-			NS
Vanadium		-	-			NS
Zinc	2,000 (G)	11.4 J	7.0 JB	1.5		NS
Hexavalent Chromium by EPA Method 7196A						
Chromium, hexavalent	50	U	U	5		NS
Mercury by EPA Method 7470A						
Mercury	0.7	-	-			NS
Cyanide by EPA Method 9012						
Cyanide	200	U	U	5		NS

All values reported as ug/L

GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

(G) - Guidance value

* - Historic samples taken by ERM

U - Analyzed for but Not Detected

J - Indicates an estimated value

B - Compound was found in the blank and sample

^ - Instrument related QC exceeds the control limits

NS - Not sampled during sampling event

D.L. - Laboratory Detection Limit

R.L. - Laboratory Reporting Limit

Bold and boxed results indicate an exceedance of Groundwater Standards



Table 4: (Page 7 of 14) Summary of Groundwater Laboratory Analytical Results. Celi Drive BCP Site, Syracuse, NY.

Analyte	GW Std (ug/L)	Sample Identification						
		MW-7						
Date Sampled		Mar-10*		Jan-14		Sep-16		
Metals by EPA Method 6010C					D.L.		R.L.	
Aluminum		-	-			U	200	
Antimony	3	-	-			U	20	
Arsenic	25	-	-			63	15	
Barium	1,000	-	-			490	2	
Beryllium	3 (G)	-	-			U	2	
Cadmium	5	-	-			U	2	
Calcium		-	-			143,000	500	
Chromium, total	50	U	3.1	J	1	U	4	
Cobalt		-	-			U	4	
Copper	200	U	5.7	JB	1.6	U	10	
Iron	300	-	-			13,000	50	
Lead	25	-	-			U	10	
Magnesium	35,000 (G)	-	-			28,400	200	
Manganese	300	-	-			370	3	
Nickel	100	1.8	J	4.5	J	1.3	U	10
Potassium		-	-			10,900	500	
Selenium	10	-	-			U	25	
Silver	50	-	-			U	6	
Sodium	20,000	-	-			241,000	1000	
Thallium	0.5 (G)	-	-			U	20	
Vanadium		-	-			U	5	
Zinc	2,000 (G)	13.8	J	11	B	1.5	10	10
Hexavalent Chromium by EPA Method 7196A								
Chromium, hexavalent	50	U		UJ	5	U	10	
Mercury by EPA Method 7470A								
Mercury	0.7	-	-			U	0.2	
Cyanide by EPA Method 9012								
Cyanide	200	7.77		U	5	U	10	

All values reported as ug/L

GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

(G) - Guidance value

* - Historic samples taken by ERM

U - Analyzed for but Not Detected

J - Indicates an estimated value

B - Compound was found in the blank and sample

^ - Instrument related QC exceeds the control limits

NS - Not sampled during sampling event

D.L. - Laboratory Detection Limit

R.L. - Laboratory Reporting Limit

Bold and boxed results indicate an exceedance of Groundwater Standards



Table 4: (Page 8 of 14) Summary of Groundwater Laboratory Analytical Results. Celi Drive BCP Site, Syracuse, NY.

Analyte	GW Std (ug/L)	Sample Identification				
		MW-8				
Date Sampled		Mar-10*	Jan-14	Sep-16		
Metals by EPA Method 6010C					D.L.	R.L.
Aluminum		-	-	1,000		200
Antimony	3	-	-		U	20
Arsenic	25	-	-		U	15
Barium	1,000	-	-	270		2
Beryllium	3 (G)	-	-		U	2
Cadmium	5	-	-		U	2
Calcium		-	-	215,000		500
Chromium, total	50		U NS		U	4
Cobalt		-	-		U	4
Copper	200		U NS		U	10
Iron	300	-	-	7,600		50
Lead	25	-	-		U	10
Magnesium	35,000 (G)	-	-	51,200		200
Manganese	300	-	-	210		3
Nickel	100	4.2 J	NS		U	10
Potassium		-	-	2,600		500
Selenium	10	-	-		U	25
Silver	50	-	-		U	6
Sodium	20,000	-	-	94,500		1000
Thallium	0.5 (G)	-	-		U	20
Vanadium		-	-		U	5
Zinc	2,000 (G)	14.5	NS		U	10
Hexavalent Chromium by EPA Method 7196A						
Chromium, hexavalent	50		U NS		U	10
Mercury by EPA Method 7470A						
Mercury	0.7	-	-		U	0.2
Cyanide by EPA Method 9012						
Cyanide	200	4.1 J	NS		U	10

All values reported as ug/L

GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

(G) - Guidance value

* - Historic samples taken by ERM

U - Analyzed for but Not Detected

J - Indicates an estimated value

B - Compound was found in the blank and sample

^ - Instrument related QC exceeds the control limits

NS - Not sampled during sampling event

D.L. - Laboratory Detection Limit

R.L. - Laboratory Reporting Limit

Bold and boxed results indicate an exceedance of Groundwater Standards



Table 4: (Page 9 of 14) Summary of Groundwater Laboratory Analytical Results. Celi Drive BCP Site, Syracuse, NY.

Analyte	GW Std (ug/L)	Sample Identification						
		Duplicate						
Date Sampled		Aug-05* (MW-1)	Jan-14 (MW-3)				Sep-16 (MW-3)	
				D.L.	RPD		R.L.	RPD
Metals by EPA Method 6010C								
Aluminum		-	-		-		U 200	N/A
Antimony	3	-	-		-		U 20	N/A
Arsenic	25	-	-		-		U 15	N/A
Barium	1,000	-	-		-	220	2	0.00%
Beryllium	3 (G)	-	-		-		U 2	N/A
Cadmium	5	-	-		-		U 2	N/A
Calcium		-	-		-	219,000	500	0.00%
Chromium, total	50	U	4.7	1	8.16%		U 4	N/A
Cobalt		-	-		-		U 4	N/A
Copper	200	U	9.6	JB	1.6	4.08%	U 10	N/A
Iron	300	-	-		-	7,400	50	0.00%
Lead	25	-	-		-		U 10	N/A
Magnesium	35,000 (G)	-	-		-	54,300	200	0.18%
Manganese	300	-	-		-	1,200	3	0.00%
Nickel	100	U	120	1.3	0.00%	160	10	0.00%
Potassium		-	-		-	3,500	500	2.90%
Selenium	10	-	-		-		U 25	N/A
Silver	50	-	-		-		U 6	N/A
Sodium	20,000	-	-		-	213,000	1000	0.94%
Thallium	0.5 (G)	-	-		-		U 20	N/A
Vanadium		-	-		-		U 5	N/A
Zinc	2,000 (G)	U	9.8	JB	1.5	20.18%	U 10	N/A
Hexavalent Chromium by EPA Method 7196A								
Chromium, hexavalent	50	10		UJ	5	N/A	U 10	N/A
Mercury by EPA Method 7470A								
Mercury	0.7	-	-		-		U 0.2	N/A
Cyanide by EPA Method 9012								
Cyanide	200	U		U	5	N/A	U 10	N/A

All values reported as ug/L

GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

(G) - Guidance value

* - Historic samples taken by ERM

U - Analyzed for but Not Detected

J - Indicates an estimated value

B - Compound was found in the blank and sample

^ - Instrument related QC exceeds the control limits

NS - Not sampled during sampling event

N/A - Not Applicable, analyte not detected in either parent sample or duplicate sample

D.L. - Laboratory Detection Limit

R.L. - Laboratory Reporting Limit

Bold and boxed results indicate an exceedance of Groundwater Standards



Table 4: (Page 10 of 14) Summary of Groundwater Laboratory Analytical Results. Celi Drive BCP Site, Syracuse, NY.

Analyte	GW Std (ug/L)	Sample Identification					
		MW-1	MW-2	MW-3	MW-4	MW-5	
Date Sampled		Sep-16	Sep-16	Sep-16	Sep-16	Sep-16	
Polychlorinated Biphenyls by EPA Method 8082A		R.L.	R.L.	R.L.	R.L.	R.L.	R.L.
PCB-1016 (Aroclor 1016)		U 0.5	U 0.49	U 0.49	U 0.49	U 0.49	U 0.49
PCB-1221 (Aroclor 1221)		U 0.5	U 0.49	U 0.49	U 0.49	U 0.49	U 0.49
PCB-1232 (Aroclor 1232)		U 0.5	U 0.49	U 0.49	U 0.49	U 0.49	U 0.49
PCB-1242 (Aroclor 1242)		U 0.5	U 0.49	U 0.49	U 0.49	U 0.49	U 0.49
PCB-1248 (Aroclor 1248)		U 0.5	U 0.49	U 0.49	4.6 0.49	U 0.49	U 0.49
PCB-1254 (Aroclor 1254)		U 0.5	U 0.49	U 0.49	U 0.49	U 0.49	U 0.49
PCB-1260 (Aroclor 1260)		U 0.5	U 0.49	U 0.49	U 0.49	U 0.49	U 0.49
Total PCBs	0.09	ND	ND	ND	4.6	ND	

Analyte	GW Std (ug/L)	Sample Identification					
		MW-6	MW-7	MW-8	Duplicate		
Date Sampled		Sep-16	Sep-16	Sep-16	Sep-16	(MW-3)	
Polychlorinated Biphenyls by EPA Method 8082A		R.L.	R.L.	R.L.	R.L.	RPD	
PCB-1016 (Aroclor 1016)		NS	U 0.51	U 0.49	U 0.5	N/A	
PCB-1221 (Aroclor 1221)		NS	U 0.51	U 0.49	U 0.5	N/A	
PCB-1232 (Aroclor 1232)		NS	U 0.51	U 0.49	U 0.5	N/A	
PCB-1242 (Aroclor 1242)		NS	U 0.51	U 0.49	U 0.5	N/A	
PCB-1248 (Aroclor 1248)		NS	U 0.51	U 0.49	U 0.5	N/A	
PCB-1254 (Aroclor 1254)		NS	U 0.51	U 0.49	U 0.5	N/A	
PCB-1260 (Aroclor 1260)		NS	U 0.51	U 0.49	U 0.5	N/A	
Total PCBs	0.09	NS	ND	ND	ND	N/A	

All values reported as ug/L

GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

(G) - Guidance value

U - Analyzed for but Not Detected

J - Indicates an estimated value

NS - Not sampled during sampling event

ND - Not Detected above laboratory detection limits

N/A - Not Applicable, analyte not detected in either parent sample or duplicate sample

R.L. - Laboratory Reporting Limit

Bold and boxed results indicate an exceedance of Groundwater Standards



Table 4: (Page 11 of 14) Summary of Groundwater Laboratory Analytical Results. Celi Drive BCP Site, Syracuse, NY.

Analyte	GW Std (ug/L)	Sample Identification					
		MW-1 Sep-16	MW-2 Sep-16	MW-3 Sep-16	MW-4 Sep-16	MW-5 Sep-16	
Date Sampled							
Volatile Organic Compounds by EPA Method 8260C		R.L.	R.L.	R.L.	R.L.	R.L.	R.L.
1,1,1-trichloroethane	5	U 1	U 1	U 1	U 1	U 1	U 1
1,1,2,2-tetrachloroethane	5	U 1	U 1	U 1	U 1	U 1	U 1
1,1,2-trichloro-1,2,2-trifluoroethane	5	U 1	U 1	U 1	U 1	U 1	U 1
1,1,2-trichloroethane	1	U 1	U 1	U 1	U 1	U 1	U 1
1,1-dichloroethane	5	U 1	U 1	U 1	U 1	U 1	U 1
1,1-dichloroethene	5	U 1	U 1	U 1	U 1	U 1	U 1
1,2,4-trichlorobenzene	5	U 1	U 1	U 1	U 1	U 1	U 1
1,2,4-trimethylbenzene	5	U 1	U 1	U 1	U 1	U 1	U 1
1,2-dibromo-3-chloropropane	0.04	U 1	U 1	U 1	U 1	U 1	U 1
1,2-dibromoethane (ethylene dibromide)	6.00E-04	U 1	U 1	U 1	U 1	U 1	U 1
1,2-dichlorobenzene	3	U 1	U 1	U 1	U 1	U 1	U 1
1,2-dichloroethane	0.6	U 1	U 1	U 1	U 1	U 1	U 1
1,2-dichloropropane	1	U 1	U 1	U 1	U 1	U 1	U 1
1,3,5-trimethylbenzene (mesitylene)	5	U 1	U 1	U 1	U 1	U 1	U 1
1,3-dichlorobenzene	3	U 1	U 1	U 1	U 1	U 1	U 1
1,4-dichlorobenzene	3	U 1	U 1	U 1	U 1	U 1	U 1
2-hexanone	50 (G)	U 5	U 5	U 5	U 5	U 5	U 5
Acetone	50 (G)	U 10	U 10	U 10	U 10	U 10	U 10
Benzene	1	U 1	U 1	U 1	U 1	U 1	U 1
Bromodichloromethane	50 (G)	U 1	U 1	U 1	U 1	U 1	U 1
Bromoform	50 (G)	U 1	U 1	U 1	U 1	U 1	U 1
Bromomethane	5	U 1	U 1	U 1	U 1	U 1	U 1
Carbon disulfide	60 (G)	U 1	U 1	U 1	U 1	U 1	U 1
Carbon tetrachloride	5	U 1	U 1	U 1	U 1	U 1	U 1
Chlorobenzene	5	U 1	U 1	U 1	U 1	U 1	U 1
Chloroethane	5	U 1	U 1	U 1	U 1	U 1	U 1
Chloroform	7	U 1	U 1	U 1	U 1	U 1	U 1
Chloromethane	5	U 1	U 1	U 1	U 1	U 1	U 1
cis-1,2-dichloroethylene	5	U 1	U 1	U 1	U 1	U 1	U 1
cis-1,3-dichloropropene	0.4*	U 1	U 1	U 1	U 1	U 1	U 1
Cyclohexane	U	U 1	U 1	U 1	U 1	U 1	U 1
Cymene	5	U 1	U 1	U 1	U 1	U 1	U 1
Dibromochloromethane	50 (G)	U 1	U 1	U 1	U 1	U 1	U 1
Dichlorodifluoromethane	5	U 1	U 1	U 1	U 1	U 1	U 1
Ethylbenzene	5	U 1	U 1	U 1	U 1	U 1	U 1
Isopropylbenzene (cumene)	5	U 1	U 1	U 1	U 1	U 1	U 1
Methyl acetate	U	U 2.5	U 2.5	U 2.5	U 2.5	U 2.5	U 2.5
Methyl ethyl ketone (2-butanone)	50 (G)	U 10	U 10	U 10	U 10	U 10	U 10
Methyl isobutyl ketone (4-methyl-2-pentanone)	U	U 5	U 5	U 5	U 5	U 5	U 5
Methylcyclohexane	U	U 1	U 1	U 1	U 1	U 1	U 1
Methylene chloride	5	U 1	U 1	U 1	U 1	U 1	U 1
Naphthalene	10 (G)	U 1	U 1	U 1	U 1	U 1	U 1
n-butylbenzene	5	U 1	U 1	U 1	U 1	U 1	U 1
n-propylbenzene	5	U 1	U 1	U 1	U 1	U 1	U 1
sec-butylbenzene	5	U 1	U 1	U 1	U 1	U 1	U 1
Styrene	5	U 1	U 1	U 1	U 1	U 1	U 1
t-butylbenzene	5	U 1	U 1	U 1	U 1	U 1	U 1
Tert-butyl methyl ether	10 (G)	U 1	U 1	U 1	U 1	U 1	U 1
Tetrachloroethylene (PCE)	5	U 1	U 1	U 1	U 1	U 1	U 1
Toluene	5	U 1	U 1	U 1	U 1	U 1	U 1
trans-1,2-dichloroethene	5	U 1	U 1	U 1	U 1	U 1	U 1
trans-1,3-dichloropropene	0.4*	U 1	U 1	U 1	U 1	U 1	U 1
Trichloroethylene (TCE)	5	U 1	U 1	U 1	U 1	U 1	U 1
Trichlorofluoromethane	5	U 1	U 1	U 1	U 1	U 1	U 1
Vinyl chloride	2	U 1	U 1	U 1	U 1	U 1	U 1
Xylenes, total	5	U 2	U 2	U 2	U 2	U 2	U 2
Total VOCs		ND	ND	ND	ND	ND	ND

All values reported as ug/L

GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

(G) - Guidance value

* - applies to the sum of cis and trans

U - Analyzed for but Not Detected

J - Indicates an estimated value

NS - Not sampled during sampling event

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R.L. - Laboratory Reporting Limit

Bold and boxed results indicate an exceedance of Groundwater Standards



Table 4: (Page 12 of 14) Summary of Groundwater Laboratory Analytical Results. Celi Drive BCP Site, Syracuse, NY.

Analyte	GW Std (ug/L)	Sample Identification					
		MW-6 Sep-16	MW-7 Sep-16	MW-8 Sep-16	Duplicate Sep-16 (MW-3)		
Volatile Organic Compounds by EPA Method 8260C		R.L.	R.L.	R.L.	R.L.	RPD	
1,1,1-trichloroethane	5	NS	U 1	U 1	U 1	1	N/A
1,1,2,2-tetrachloroethane	5	NS	U 1	U 1	U 1	1	N/A
1,1,2-trichloro-1,2,2-trifluoroethane	5	NS	U 1	U 1	U 1	1	N/A
1,1,2-trichloroethane	1	NS	U 1	U 1	U 1	1	N/A
1,1-dichloroethane	5	NS	U 1	U 1	U 1	1	N/A
1,1-dichloroethene	5	NS	U 1	U 1	U 1	1	N/A
1,2,4-trichlorobenzene	5	NS	U 1	U 1	U 1	1	N/A
1,2,4-trimethylbenzene	5	NS	U 1	U 1	U 1	1	N/A
1,2-dibromo-3-chloropropane	0.04	NS	U 1	U 1	U 1	1	N/A
1,2-dibromoethane (ethylene dibromide)	6.00E-04	NS	U 1	U 1	U 1	1	N/A
1,2-dichlorobenzene	3	NS	U 1	U 1	U 1	1	N/A
1,2-dichloroethane	0.6	NS	U 1	U 1	U 1	1	N/A
1,2-dichloropropane	1	NS	U 1	U 1	U 1	1	N/A
1,3,5-trimethylbenzene (mesitylene)	5	NS	U 1	U 1	U 1	1	N/A
1,3-dichlorobenzene	3	NS	U 1	U 1	U 1	1	N/A
1,4-dichlorobenzene	3	NS	U 1	U 1	U 1	1	N/A
2-hexanone	50 (G)	NS	U 5	U 5	U 5	5	N/A
Acetone	50 (G)	NS	U 10	U 10	U 10	10	N/A
Benzene	1	NS	U 1	U 1	U 1	1	N/A
Bromodichloromethane	50 (G)	NS	U 1	U 1	U 1	1	N/A
Bromoform	50 (G)	NS	U 1	U 1	U 1	1	N/A
Bromomethane	5	NS	U 1	U 1	U 1	1	N/A
Carbon disulfide	60 (G)	NS	U 1	U 1	U 1	1	N/A
Carbon tetrachloride	5	NS	U 1	U 1	U 1	1	N/A
Chlorobenzene	5	NS	U 1	U 1	U 1	1	N/A
Chloroethane	5	NS	U 1	U 1	U 1	1	N/A
Chloroform	7	NS	U 1	U 1	U 1	1	N/A
Chloromethane	5	NS	U 1	U 1	U 1	1	N/A
cis-1,2-dichloroethylene	5	NS	U 1	U 1	U 1	1	N/A
cis-1,3-dichloropropene	0.4*	NS	U 1	U 1	U 1	1	N/A
Cyclohexane		NS	U 1	U 1	U 1	1	N/A
Cymene	5	NS	U 1	U 1	U 1	1	N/A
Dibromochloromethane	50 (G)	NS	U 1	U 1	U 1	1	N/A
Dichlorodifluoromethane	5	NS	U 1	U 1	U 1	1	N/A
Ethylbenzene	5	NS	U 1	U 1	U 1	1	N/A
Isopropylbenzene (cumene)	5	NS	U 1	U 1	U 1	1	N/A
Methyl acetate		NS	U 2.5	U 2.5	U 2.5	2.5	N/A
Methyl ethyl ketone (2-butanone)	50 (G)	NS	U 10	U 10	U 10	10	N/A
Methyl isobutyl ketone (4-methyl-2-pentanone)		NS	U 5	U 5	U 5	5	N/A
Methylcyclohexane		NS	U 1	U 1	U 1	1	N/A
Methylene chloride	5	NS	U 1	U 1	U 1	1	N/A
Naphthalene	10 (G)	NS	U 1	U 1	U 1	1	N/A
n-butylbenzene	5	NS	U 1	U 1	U 1	1	N/A
n-propylbenzene	5	NS	U 1	U 1	U 1	1	N/A
sec-butylbenzene	5	NS	U 1	U 1	U 1	1	N/A
Styrene	5	NS	U 1	U 1	U 1	1	N/A
t-butylbenzene	5	NS	U 1	U 1	U 1	1	N/A
Tert-butyl methyl ether	10 (G)	NS	1.2	U 1	U 1	1	N/A
Tetrachloroethylene(PCE)	5	NS	U 1	U 1	U 1	1	N/A
Toluene	5	NS	U 1	U 1	U 1	1	N/A
trans-1,2-dichloroethene	5	NS	U 1	U 1	U 1	1	N/A
trans-1,3-dichloropropene	0.4*	NS	U 1	U 1	U 1	1	N/A
Trichloroethylene (TCE)	5	NS	U 1	U 1	U 1	1	N/A
Trichlorofluoromethane	5	NS	U 1	U 1	U 1	1	N/A
Vinyl chloride	2	NS	U 1	U 1	U 1	1	N/A
Xylenes, total	5	NS	U 2	U 2	U 2	2	N/A
Total VOCs		NS	1.20	ND	ND		N/A

All values reported as ug/L.

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Table 4: (Page 13 of 14) Summary of Groundwater Laboratory Analytical Results, Celi Drive BCP Site, Syracuse, NY.

Analyte	GW Std (ug/L)	Sample Identification									
		MW-1		MW-2		MW-3		MW-4		MW-5	
Date Sampled		Sep-16		Sep-16		Sep-16		Sep-16		Sep-16	
			R.L.		R.L.		R.L.		R.L.		R.L.
Semi Volatile Organic Compounds by EPA Method 8270D											
2,4,5-trichlorophenol		U	5	U	5	U	4.8	U	4.9	U	4.8
2,4,6-trichlorophenol		U	5	U	5	U	4.8	U	4.9	U	4.8
2,4-dichlorophenol	5	U	5	U	5	U	4.8	U	4.9	U	4.8
2,4-dimethylphenol	50 (G)	U	5	U	5	U	4.8	U	4.9	U	4.8
2,4-dinitrophenol	10 (G)	UT	10	U	10	U	9.7	U	9.9	U	9.6
2,4-dinitrotoluene	5	U	5	U	5	U	4.8	U	4.9	U	4.8
2,6-dinitrotoluene	5	U	5	U	5	U	4.8	U	4.9	U	4.8
2-chloronaphthalene	10 (G)	U	5	U	5	U	4.8	U	4.9	U	4.8
2-chlorophenol		U	5	U	5	U	4.8	U	4.9	U	4.8
2-methylnaphthalene		U	5	U	5	U	4.8	U	4.9	U	4.8
2-methylphenol (o-cresol)		U	5	U	5	U	4.8	U	4.9	U	4.8
2-nitroaniline	5	U	10	U	10	U	9.7	U	9.9	U	9.6
2-nitrophenol		U	5	U	5	U	4.8	U	4.9	U	4.8
3,3'-dichlorobenzidine	5	U	5	U	5	U	4.8	U	4.9	U	4.8
3-nitroaniline	5	U	10	U	10	U	9.7	U	9.9	U	9.6
4,6-dinitro-2-methylphenol		U	10	U	10	U	9.7	U	9.9	U	9.6
4-bromophenyl phenyl ether		U	5	U	5	U	4.8	U	4.9	U	4.8
4-chloro-3-methylphenol		U	5	U	5	U	4.8	U	4.9	U	4.8
4-chloroaniline	5	U	5	U	5	U	4.8	U	4.9	U	4.8
4-chlorophenyl phenyl ether		U	5	U	5	U	4.8	U	4.9	U	4.8
4-methylphenol (p-cresol)		U	10	U	10	U	9.7	U	9.9	U	9.6
4-nitroaniline	5	U	10	U	10	U	9.7	U	9.9	U	9.6
4-nitrophenol		UT	10	U	10	U	9.7	U	9.9	U	9.6
Acenaphthene	20 (G)	U	5	U	5	U	4.8	U	4.9	U	4.8
Acenaphthylene		U	5	U	5	U	4.8	U	4.9	U	4.8
Acetophenone		U	5	U	5	U	4.8	U	4.9	U	4.8
Anthracene	50 (G)	U	5	U	5	U	4.8	U	4.9	U	4.8
Atrazine	7.5	U	5	U	5	U	4.8	U	4.9	U	4.8
Benzaldehyde		U	5	U	5	U	4.8	U	4.9	U	4.8
Benzo(a)anthracene	0.002 (G)	U	5	U	5	U	4.8	U	4.9	U	4.8
Benzo(a)pyrene	ND	U	5	U	5	U	4.8	U	4.9	U	4.8
Benzo(b)fluoranthene	0.002 (G)	U	5	U	5	U	4.8	U	4.9	U	4.8
Benzo(g,h,i)perylene		UJ	5	U	5	U	4.8	U	4.9	U	4.8
Benzo(k)fluoranthene	0.002 (G)	U	5	U	5	U	4.8	U	4.9	U	4.8
Benzyl butyl phthalate		U	5	U	5	U	4.8	U	4.9	U	4.8
Biphenyl (diphenyl)		U	5	U	5	U	4.8	U	4.9	U	4.8
bis(2-chloroethoxy) methane	5	U	5	U	5	U	4.8	U	4.9	U	4.8
bis(2-chloroethyl) ether (2-chloroethyl ether)	1	U	5	U	5	U	4.8	U	4.9	U	4.8
bis(2-chloroisopropyl) ether		U	5	U	5	U	4.8	U	4.9	U	4.8
bis(2-ethylhexyl) phthalate	5	U	5	U	5	U	4.8	U	4.9	U	4.8
Caprolactam		U	5	U	5	U	4.8	U	4.9	U	4.8
Carbazole		U	5	U	5	U	4.8	U	4.9	U	4.8
Chrysene	0.002 (G)	U	5	U	5	U	4.8	U	4.9	U	4.8
Dibenz(a,h)anthracene		UJ	5	U	5	U	4.8	U	4.9	U	4.8
Dibenzofuran		U	10	U	10	U	9.7	U	9.9	U	9.6
Diethyl phthalate	50 (G)	U	5	U	5	U	4.8	U	4.9	U	4.8
Dimethyl phthalate	50 (G)	U	5	U	5	U	4.8	U	4.9	U	4.8
di-n-butyl phthalate		U	5	U	5	U	4.8	U	4.9	U	4.8
di-n-octylphthalate	50 (G)	U	5	U	5	U	4.8	U	4.9	U	4.8
Fluoranthene	50 (G)	U	5	U	5	U	4.8	U	4.9	U	4.8
Fluorene	50 (G)	U	5	U	5	U	4.8	U	4.9	U	4.8
Hexachlorobenzene	0.04	U	5	U	5	U	4.8	U	4.9	U	4.8
Hexachlorobutadiene	0.5	U	5	U	5	U	4.8	U	4.9	U	4.8
Hexachlorocyclopentadiene	5	U	5	U	5	U	4.8	U	4.9	U	4.8
Hexachloroethane	5	U	5	U	5	U	4.8	U	4.9	U	4.8
Indeno(1,2,3-c,d)pyrene	0.002 (G)	UJ	5	U	5	U	4.8	U	4.9	U	4.8
Isophorone	50 (G)	U	5	U	5	U	4.8	U	4.9	U	4.8
Naphthalene	10 (G)	U	5	U	5	U	4.8	U	4.9	U	4.8
Nitrobenzene	0.4	U	5	U	5	U	4.8	U	4.9	U	4.8
n-nitrosodi-n-propylamine		U	5	U	5	U	4.8	U	4.9	U	4.8
n-nitrosodiphenylamine	50 (G)	U	5	U	5	U	4.8	U	4.9	U	4.8
Pentachlorophenol	1	U	10	U	10	U	9.7	U	9.9	U	9.6
Phenanthrene	50 (G)	U	5	U	5	U	4.8	U	4.9	U	4.8
Phenol	1	U	5	U	5	U	4.8	U	4.9	U	4.8
Pyrene	50 (G)	U	5	U	5	U	4.8	U	4.9	U	4.8
Total SVOCs		ND		ND		ND		ND		ND	

All values reported as ug/L

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Table 4: (Page 14 of 14) Summary of Groundwater Laboratory Analytical Results. Celi Drive BCP Site, Syracuse, NY.

Date Sampled	Analyte	GW Std (ug/L)	Sample Identification					
			MW-6 Sep-16	MW-7 Sep-16	MW-8 Sep-16	Duplicate Sep-16 (MW-3)		
			R.L.	R.L.	R.L.	R.L.	RPD	
	Semi Volatile Organic Compounds by EPA Method 8270D							
	2,4,5-trichlorophenol		NS	U 5	U 4.9	U 4.9	N/A	
	2,4,6-trichlorophenol		NS	U 5	U 4.9	U 4.9	N/A	
	2,4-dichlorophenol	5	NS	U 5	U 4.9	U 4.9	N/A	
	2,4-dimethylphenol	50 (G)	NS	U 5	U 4.9	U 4.9	N/A	
	2,4-dinitrophenol	10 (G)	NS	U 10	U 9.8	U 9.9	N/A	
	2,4-dinitrotoluene	5	NS	U 5	U 4.9	U 4.9	N/A	
	2,6-dinitrotoluene	5	NS	U 5	U 4.9	U 4.9	N/A	
	2-chloronaphthalene	10 (G)	NS	U 5	U 4.9	U 4.9	N/A	
	2-chlorophenol		NS	U 5	U 4.9	U 4.9	N/A	
	2-methylnaphthalene		NS	U 5	U 4.9	U 4.9	N/A	
	2-methylphenol (o-cresol)		NS	U 5	U 4.9	U 4.9	N/A	
	2-nitroaniline	5	NS	U 10	U 9.8	U 9.9	N/A	
	2-nitrophenol		NS	U 5	U 4.9	U 4.9	N/A	
	3,3'-dichlorobenzidine	5	NS	U 5	U 4.9	U 4.9	N/A	
	3-nitroaniline	5	NS	U 10	U 9.8	U 9.9	N/A	
	4,6-dinitro-2-methylphenol		NS	U 10	U 9.8	U 9.9	N/A	
	4-bromophenyl phenyl ether		NS	U 5	U 4.9	U 4.9	N/A	
	4-chloro-3-methylphenol		NS	U 5	U 4.9	U 4.9	N/A	
	4-chloroaniline	5	NS	U 5	U 4.9	U 4.9	N/A	
	4-chlorophenyl phenyl ether		NS	U 5	U 4.9	U 4.9	N/A	
	4-methylphenol (p-cresol)		NS	U 10	U 9.8	U 9.9	N/A	
	4-nitroaniline	5	NS	U 10	U 9.8	U 9.9	N/A	
	4-nitrophenol		NS	U 10	U 9.8	U 9.9	N/A	
	acenaphthene	20 (G)	NS	U 5	U 4.9	U 4.9	N/A	
	acenaphthylene		NS	U 5	U 4.9	U 4.9	N/A	
	acetophenone		NS	U 5	U 4.9	U 4.9	N/A	
	anthracene	50 (G)	NS	U 5	U 4.9	U 4.9	N/A	
	atrazine	7.5	NS	U 5	U 4.9	U 4.9	N/A	
	benzaldehyde		NS	U 5	U 4.9	U 4.9	N/A	
	benzo(a)anthracene	0.002 (G)	NS	U 5	U 4.9	U 4.9	N/A	
	benzo(a)pyrene	ND	NS	U 5	U 4.9	U 4.9	N/A	
	benzo(b)fluoranthene	0.002 (G)	NS	U 5	U 4.9	U 4.9	N/A	
	benzo(g,h,i)perylene		NS	U 5	U 4.9	U 4.9	N/A	
	benzo(k)fluoranthene	0.002 (G)	NS	U 5	U 4.9	U 4.9	N/A	
	benzyl butyl phthalate		NS	U 5	U 4.9	U 4.9	N/A	
	biphenyl (diphenyl)		NS	U 5	U 4.9	U 4.9	N/A	
	bis(2-chloroethoxy) methane	5	NS	U 5	U 4.9	U 4.9	N/A	
	bis(2-chloroethyl) ether (2-chloroethyl ether)	1	NS	U 5	U 4.9	U 4.9	N/A	
	bis(2-chloroisopropyl) ether		NS	U 5	U 4.9	U 4.9	N/A	
	bis(2-ethylhexyl) phthalate	5	NS	U 5	U 4.9	U 4.9	N/A	
	caprolactam		NS	U 5	U 4.9	U 4.9	N/A	
	carbazole		NS	U 5	U 4.9	U 4.9	N/A	
	chrysene	0.002 (G)	NS	U 5	U 4.9	U 4.9	N/A	
	dibenz(a,h)anthracene		NS	U 5	U 4.9	U 4.9	N/A	
	dibenzofuran		NS	U 10	U 9.8	U 9.9	N/A	
	diethyl phthalate	50 (G)	NS	U 5	U 4.9	U 4.9	N/A	
	dimethyl phthalate	50 (G)	NS	U 5	U 4.9	U 4.9	N/A	
	di-n-butyl phthalate		NS	U 5	U 4.9	U 4.9	N/A	
	di-n-octylphthalate	50 (G)	NS	U 5	U 4.9	U 4.9	N/A	
	fluoranthene	50 (G)	NS	U 5	U 4.9	U 4.9	N/A	
	fluorene	50 (G)	NS	U 5	U 4.9	U 4.9	N/A	
	hexachlorobenzene	0.04	NS	U 5	U 4.9	U 4.9	N/A	
	hexachlorobutadiene	0.5	NS	U 5	U 4.9	U 4.9	N/A	
	hexachlorocyclopentadiene	5	NS	U 5	U 4.9	U 4.9	N/A	
	hexachloroethane	5	NS	U 5	U 4.9	U 4.9	N/A	
	indeno(1,2,3-c,d)pyrene	0.002 (G)	NS	U 5	U 4.9	U 4.9	N/A	
	isophorone	50 (G)	NS	U 5	U 4.9	U 4.9	N/A	
	naphthalene	10 (G)	NS	U 5	U 4.9	U 4.9	N/A	
	nitrobenzene	0.4	NS	U 5	U 4.9	U 4.9	N/A	
	n-nitrosodi-n-propylamine		NS	U 5	U 4.9	U 4.9	N/A	
	n-nitrosodiphenylamine	50 (G)	NS	U 5	U 4.9	U 4.9	N/A	
	pentachlorophenol	1	NS	U 10	U 9.8	U 9.9	N/A	
	phenanthrene	50 (G)	NS	U 5	U 4.9	U 4.9	N/A	
	phenol	1	NS	U 5	U 4.9	U 4.9	N/A	
	pyrene	50 (G)	NS	U 5	U 4.9	U 4.9	N/A	
	Total SVOCs		NS	ND	ND	ND	N/A	

All values reported as ug/L.

GW Std - Class GA Groundwater Quality Standard or Guidance Value from New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (June 1998).

(G) - Guidance value

U - Analyzed for but Not Detected

J - Indicates an estimated value

NS - Not sampled during sampling event

ND - Not Detected above laboratory detection limits

N/A - Not Applicable, analyte not detected in either parent sample or duplicate sample

R.L. - Laboratory Reporting Limit

Bold and boxed results indicate an exceedance of Groundwater Standards



Table 5 - (Page 1 of 1): Summary of Post-Excavation Soil Sample Laboratory Analytical Results - Bridge Street Swale. Celi Drive BCP Site (BCP Site #C734108). Syracuse, NY.

ANALYTE (mg/kg)	SOIL CLEANUP OBJECTIVES		SAMPLE IDENTIFICATION BRIDGE STREET SWALE		
	UNRESTRICTED USE	PROTECTION OF ECOLOGICAL RESOURCES	BSS-SED1-COMP		
Sample Date			8/23/2016		
Metals by EPA Method 6010C				D.L.	R.L.
Chromium, Total	30	41	55		
Copper, Total	50	50	30		
Nickel, Total	30	30	17		
Cyanide by EPA Method 9010C					
Cyanide, Total	27	NS	U	0.21	1.3
Chromium by EPA Method 7196A					
Chromium, Hexavalent	1	1	U	0.22	1.1

All values reported as mg/kg (parts per million)

Soil Cleanup Objectives from 6 NYCRR Part 375-6.8(b) (December 2006) and Supplemental Soil Cleanup Objectives (October 2010)

U - Analyzed for but not detected above the laboratory reporting limit

J - Estimated value

D.L. - Laboratory Detection Limit

R.L. - Laboratory Reporting Limit

NS - Not Specified

Bold, thick outlined, and shaded cell indicates analyte exceeds the Protection of Ecological Resources Soil Cleanup Objectives



Table 6 - (Page 1 of 7): Summary of Post-Excavation Soil Sample Laboratory Analytical Results. Celi Drive BCP Site (BCP Site #C734108). Syracuse, NY.

ANALYTE (mg/kg)	SOIL CLEANUP OBJECTIVES		SAMPLE IDENTIFICATION											
	UNRESTRICTED USE	PROTECTION OF ECOLOGICAL RESOURCES	MAIN SWALE											
			AOC4-SED1A				AOC4-SED1B				AOC4-SED1C			
Sample Date			8/23/2016				8/23/2016				8/23/2016			
Metals by EPA Method 6010C														
Chromium, Total	30	41	11	D.L.	R.L.		140	D.L.	R.L.		160	D.L.	R.L.	31
Copper, Total	50	50	39				170				300			57
Nickel, Total	30	30	14				57				140			27
Cyanide by EPA Method 9010C														
Cyanide, Total	27	NS	0.26	J	0.2	1.2	0.92	J	0.27	1.6	0.78	J	0.57	3.4
Chromium by EPA Method 7196A														
Chromium, Hexavalent	1	1	U	0.21	1		U	0.27	1.4		U	0.3	1.5	U

All values reported as mg/kg (parts per million)

Soil Cleanup Objectives from 6 NYCRR Part 375-6.8(b) (December 2006) and Supplemental Soil Cleanup Objectives (October 2010)

U - Analyzed for but not detected above the laboratory reporting limit

J - Estimated value

D.L. - Laboratory Detection Limit

R.L. - Laboratory Reporting Limit

NS - Not Specified

Bold, thick outlined, and shaded cell indicates analyte exceeds the Protection of Ecological Resources Soil Cleanup Objectives



Table 6 - (Page 2 of 7): Summary of Post-Excavation Soil Sample Laboratory Analytical Results. Celi Drive BCP Site (BCP Site #C734108). Syracuse, NY.

ANALYTE (mg/kg)	SOIL CLEANUP OBJECTIVES		SAMPLE IDENTIFICATION											
			MAIN SWALE											
	UNRESTRICTED USE	PROTECTION OF ECOLOGICAL RESOURCES	AOC4-SED2A				AOC4-SED2B				AOC4-SED2C			
Sample Date			8/23/2016				8/23/2016				8/23/2016			
Metals by EPA Method 6010C				D.L.	R.L.			D.L.	R.L.			D.L.	R.L.	
Chromium, Total	30	41	130				210				190			
Copper, Total	50	50	220				530				66			
Nickel, Total	30	30	130				140				53			
Cyanide by EPA Method 9010C														
Cyanide, Total	27	NS	0.96	J	0.6	3.6	2.8	J	1	6.1	1.6	J	0.4	2.4
Chromium by EPA Method 7196A														
Chromium, Hexavalent	1	1	U	0.31	1.6		U	0.52	2.6		U	0.4	2	

All values reported as mg/kg (parts per million)

Soil Cleanup Objectives from 6 NYCRR Part 375-6.8(b) (December 2006) and Supplemental Soil Cleanup Objectives (October 2010)

U - Analyzed for but not detected above the laboratory reporting limit

J - Estimated value

D.L. - Laboratory Detection Limit

R.L. - Laboratory Reporting Limit

NS - Not Specified

Bold, thick outlined, and shaded cell indicates analyte exceeds the Protection of Ecological Resources Soil Cleanup Objectives



Table 6 - (Page 3 of 7): Summary of Post-Excavation Soil Sample Laboratory Analytical Results. Celi Drive BCP Site (BCP Site #C734108). Syracuse, NY.

ANALYTE (mg/kg)	SOIL CLEANUP OBJECTIVES		SAMPLE IDENTIFICATION								
	UNRESTRICTED USE	PROTECTION OF ECOLOGICAL RESOURCES	MAIN SWALE								
			AOC4-SED3A			AOC4-SED3B			AOC4-SED3C		
Sample Date			8/23/2016			8/23/2016			8/23/2016		
Metals by EPA Method 6010C				D.L.	R.L.		D.L.	R.L.		D.L.	R.L.
Chromium, Total	30	41	270			62			40		
Copper, Total	50	50	240			150			40		
Nickel, Total	30	30	59			54			27		
Cyanide by EPA Method 9010C											
Cyanide, Total	27	NS	1.4	J	0.39	2.3	1.5	J	0.41	2.5	U 0.3 1.8
Chromium by EPA Method 7196A											
Chromium, Hexavalent	1	1	U	0.38	1.9	U	0.42	2.1	U	0.31	1.5

All values reported as mg/kg (parts per million)

Soil Cleanup Objectives from 6 NYCRR Part 375-6.8(b) (December 2006) and Supplemental Soil Cleanup Objectives (October 2010)

U - Analyzed for but not detected above the laboratory reporting limit

J - Estimated value

D.L. - Laboratory Detection Limit

R.L. - Laboratory Reporting Limit

NS - Not Specified

Bold, thick outlined, and shaded cell indicates analyte exceeds the Protection of Ecological Resources Soil Cleanup Objectives



Table 6 - (Page 4 of 7): Summary of Post-Excavation Soil Sample Laboratory Analytical Results. Celi Drive BCP Site (BCP Site #C734108). Syracuse, NY.

ANALYTE (mg/kg)	SOIL CLEANUP OBJECTIVES		SAMPLE IDENTIFICATION											
	UNRESTRICTED USE	PROTECTION OF ECOLOGICAL RESOURCES	MAIN SWALE											
			AOC4-SED4A				AOC4-SED4B				AOC4-SED4C			
Sample Date			8/23/2016				8/23/2016				8/23/2016			
Metals by EPA Method 6010C														
			D.L. R.L.				D.L. R.L.				D.L. R.L.			
Chromium, Total	30	41	75				120				160			
Copper, Total	50	50	230				81				440			
Nickel, Total	30	30	60				34				67			
Cyanide by EPA Method 9010C														
Cyanide, Total	27	NS	1.1	J	0.67	4	16	0.29	1.8		1.2	J	0.55	3.3
Chromium by EPA Method 7196A														
Chromium, Hexavalent	1	1	U	0.33	1.6		U	0.23	1.4		U	0.28	1.4	U

All values reported as mg/kg (parts per million)

Soil Cleanup Objectives from 6 NYCRR Part 375-6.8(b) (December 2006) and Supplemental Soil Cleanup Objectives (October 2010)

U - Analyzed for but not detected above the laboratory reporting limit

J - Estimated value

D.L. - Laboratory Detection Limit

R.L. - Laboratory Reporting Limit

NS - Not Specified

Bold, thick outlined, and shaded cell indicates analyte exceeds the Protection of Ecological Resources Soil Cleanup Objectives



Table 6 - (Page 5 of 7): Summary of Post-Excavation Soil Sample Laboratory Analytical Results. Celi Drive BCP Site (BCP Site #C734108). Syracuse, NY.

ANALYTE (mg/kg)	SOIL CLEANUP OBJECTIVES		SAMPLE IDENTIFICATION								
	UNRESTRICTED USE	PROTECTION OF ECOLOGICAL RESOURCES	MAIN SWALE								
			AOC4-SED5A			AOC4-SED5B			AOC4-SED5C		
Sample Date			8/23/2016			8/23/2016			8/23/2016		
Metals by EPA Method 6010C				D.L.	R.L.		D.L.	R.L.		D.L.	R.L.
Chromium, Total	30	41	27			170			33		
Copper, Total	50	50	70			410			150		
Nickel, Total	30	30	34			170			340		
Cyanide by EPA Method 9010C											
Cyanide, Total	27	NS	U	0.24	1.4	2.2	J	0.42	2.5	0.58	J 0.28 1.7
Chromium by EPA Method 7196A											
Chromium, Hexavalent	1	1	U	0.24	1.2	U	0.44	2.2	U	0.28	1.4

All values reported as mg/kg (parts per million)

Soil Cleanup Objectives from 6 NYCRR Part 375-6.8(b) (December 2006) and Supplemental Soil Cleanup Objectives (October 2010)

U - Analyzed for but not detected above the laboratory reporting limit

J - Estimated value

D.L. - Laboratory Detection Limit

R.L. - Laboratory Reporting Limit

NS - Not Specified

Bold, thick outlined, and shaded cell indicates analyte exceeds the Protection of Ecological Resources Soil Cleanup Objectives



Table 6 - (Page 6 of 7): Summary of Post-Excavation Soil Sample Laboratory Analytical Results. Celi Drive BCP Site (BCP Site #C734108). Syracuse, NY.

ANALYTE (mg/kg)	SOIL CLEANUP OBJECTIVES		SAMPLE IDENTIFICATION							
	UNRESTRICTED USE	PROTECTION OF ECOLOGICAL RESOURCES	MAIN SWALE							
			AOC4-SED6A				AOC4-SED6B			
Sample Date			8/23/2016				8/23/2016			
Metals by EPA Method 6010C										
Chromium, Total	30	41	51	D.L.	R.L.		210	D.L.	R.L.	220
Copper, Total	50	50	120				730			500
Nickel, Total	30	30	51				200			140
Cyanide by EPA Method 9010C										
Cyanide, Total	27	NS	0.33	J	0.29	1.8	1.7	J	0.45	2.7
Chromium by EPA Method 7196A										
Chromium, Hexavalent	1	1	U	0.31	1.5		U	0.46	2.3	U

All values reported as mg/kg (parts per million)

Soil Cleanup Objectives from 6 NYCRR Part 375-6.8(b) (December 2006) and Supplemental Soil Cleanup Objectives (October 2010)

U - Analyzed for but not detected above the laboratory reporting limit

J - Estimated value

D.L. - Laboratory Detection Limit

R.L. - Laboratory Reporting Limit

NS - Not Specified

Bold, thick outlined, and shaded cell indicates analyte exceeds the Protection of Ecological Resources Soil Cleanup Objectives



Table 6 - (Page 7 of 7): Summary of Post-Excavation Soil Sample Laboratory Analytical Results. Celi Drive BCP Site (BCP Site #C734108). Syracuse, NY.

ANALYTE (mg/kg)	SOIL CLEANUP OBJECTIVES		SAMPLE IDENTIFICATION											
			MAIN SWALE											
	UNRESTRICTED USE	PROTECTION OF ECOLOGICAL RESOURCES	AOC4-SED7A				AOC4-SED7B				AOC4-SED7C			
Sample Date			8/23/2016				8/23/2016				8/23/2016			
Metals by EPA Method 6010C				D.L.	R.L.			D.L.	R.L.			D.L.	R.L.	
Chromium, Total	30	41	290				86				35			
Copper, Total	50	50	980				89				70			
Nickel, Total	30	30	370				56				33			
Cyanide by EPA Method 9010C														
Cyanide, Total	27	NS	0.74	J	0.69	4.2	1.4	J	0.24	1.5	1.2	J	0.34	2.1
Chromium by EPA Method 7196A														
Chromium, Hexavalent	1	1	U	0.36	1.8		U	0.25	1.3		U	0.34	1.7	

All values reported as mg/kg (parts per million)

Soil Cleanup Objectives from 6 NYCRR Part 375-6.8(b) (December 2006) and Supplemental Soil Cleanup Objectives (October 2010)

U - Analyzed for but not detected above the laboratory reporting limit

J - Estimated value

D.L. - Laboratory Detection Limit

R.L. - Laboratory Reporting Limit

NS - Not Specified

Bold, thick outlined, and shaded cell indicates analyte exceeds the Protection of Ecological Resources Soil Cleanup Objectives

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Attachments

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Attachment 1

Soil Boring/Monitoring Well Construction Log



GSP Holdings, Inc.
Celi Drive BCP Site
BCP Site #E734108
Dewitt, New York

Project No. 37-11082

Depth of Boring : 14.0-feet bgs
Drilling Contractor : Parratt-Wolff
Driller : Mark Eaves
Drilling Method : Direct Push
Sample Equipment : DT-325
Field Geologist : Ian McNamara
Initial Depth to GW : 3.0'
Stable Depth to GW : 2.5'
Surveyed By : D.W. Hannig

LOG OF BORING MW-8

(Page 1 of 1)

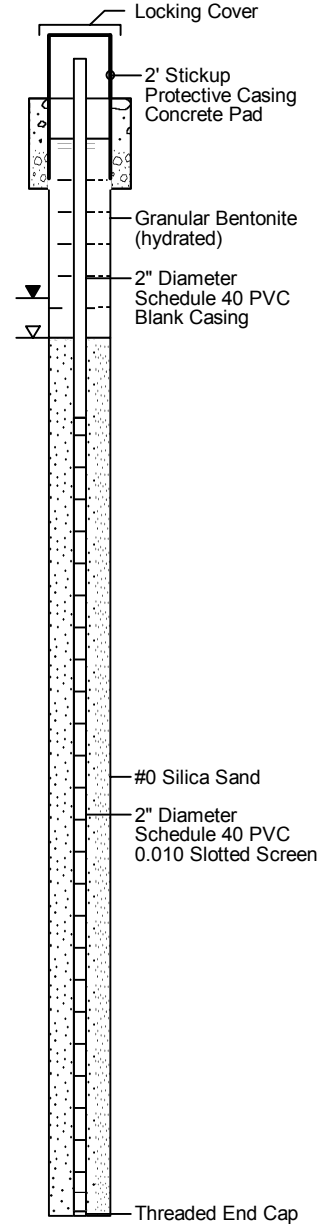
Date Started : August 26, 2016
Date Completed : August 26, 2016

Northing/Latitude : 43.05008
Easting/Longitude : -76.06868
Surface Elevation : 412.8'

DEPTH (feet bgs)	Water Level ▼ After Completion ▽ During Drilling	SOIL DESCRIPTION	BLOW COUNT	RECOVERY (inches)	PID READING (ppm)	DEPTH (feet bgs)
0		Asphalt millings, brick and concrete fragments, loose (fill)				0
1						1
2		Brown, CLAY and SILT with fine to medium grained SAND and fine GRAVEL, medium-stiff, moist to wet with depth	N/A	30	0.0	2
3						3
4						4
5		Gray, CLAY and SILT, some fine to medium grained SAND, rusty orange mottling, medium-stiff to stiff, wet				5
6		Decreasing clay with depth	N/A	42	0.1	6
7						7
8		Brown, SILT and fine to medium grained SAND, loose, wet				8
9						9
10		Brown, fine to coarse grained SAND, some fine GRAVEL and SILT, loose, wet	N/A	48	0.0	10
11						11
12		Reddish-brown, CLAY with SILT, medium-stiff, wet (dilatancy)				12
13			N/A	24	0.1	13
14		End of Boring at 14' bgs				14
15						15

Well: MW-8

Top of Casing: 414.70'



NOTES:
BGS - Below Ground Surface
N/A - Not Applicable
ppm - Parts Per Million

LOG OF BORING MW-8

(Page 1 of 1)

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Attachment 2 Data Usability Summary Report



10 of 10

REGISTERED COMPANY FOR
ISO 9001
ENGINEERING DESIGN

Table 1

Sample Collection and Analysis Summary
Groundwater Sampling
GSP AOC1 -3 Remedial Action
East Syracuse, New York
September 2016

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters							Comments
					Metals	Hexavalent Chromium	Mercury	PCBs	VOCs	SVOCs	Cyanide	
MW-1	MW-1	Water	09/01/2016	08:10	X	X	X	X	X	X	X	MS/MSD
MW-2	MW-2	Water	09/01/2016	10:40	X	X	X	X	X	X	X	
MW-3	MW-3	Water	09/01/2016	15:40	X	X	X	X	X	X	X	FD (MW-3)
DUPLICATE	MW-3	Water	09/01/2016	--	X	X	X	X	X	X	X	
MW-4	MW-4	Water	09/01/2016	14:40	X	X	X	X	X	X	X	
MW-5	MW-5	Water	09/01/2016	11:45	X	X	X	X	X	X	X	MS
MW-7	MW-7	Water	09/01/2016	09:25	X	X	X	X	X	X	X	
MW-8	MW-8	Water	09/01/2016	13:10	X	X	X	X	X	X	X	
TRIP BLANK	--	Water	09/01/2016	--					X			TRIP BLANK

Notes:

- FD - Field Duplicate sample of sample in parenthesis
- MS - Matrix Spike
- MS/MSD - Matrix Spike/Matrix Spike Duplicate
- VOCs - Volatile Organic Compounds
- SVOCs - Semi-volatile Organic Compounds
- PCBs - Polychlorinated Biphenyls
- - Not Applicable

Table 2

**Analytical Methods
Groundwater Sampling
GSP AOC1 -3 Remedial Action
East Syracuse, New York
September 2016**

Parameter	Method	Matrix
Volatile Organic Compounds (VOCs)	SW-846 8260C ⁽¹⁾	Water
Semivolatile Organic Compounds (SVOCs)	SW-846 8270D ⁽¹⁾	Water
Polychlorinated Biphenyls (PCBs)	SW-846 8082A ⁽¹⁾	Water
Metals	SW-846 6010C ⁽¹⁾	Water
Mercury	SW-846 7470A ⁽¹⁾	Water
Cyanide	SW-846 9012B ⁽¹⁾	Water
Hexavalent Chromium	SW-846 7196A ⁽¹⁾	Water

Notes:

- ⁽¹⁾ - SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions

Table 3

**Analytical Results Summary
Groundwater Sampling
GSP AOC1-3 Remedial Action
East Syracuse, New York
September 2016**

Location ID:	MW-1	MW-2	MW-3	MW-3	MW-4	MW-5	MW-7	MW-8
Sample Name:	MW-1	MW-2	MW-3	DUPLICATE	MW-4	MW-5	MW-7	MW-8
Sample Date:	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016
				Duplicate				

Parameters	Unit								
Volatile Organic Compounds									
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Phenylbutane (sec-Butylbenzene)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 3

**Analytical Results Summary
Groundwater Sampling
GSP AOC1-3 Remedial Action
East Syracuse, New York
September 2016**

Location ID:	MW-1	MW-2	MW-3	MW-3	MW-4	MW-5	MW-7	MW-8
Sample Name:	MW-1	MW-2	MW-3	DUPLICATE	MW-4	MW-5	MW-7	MW-8
Sample Date:	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016
				Duplicate				

Parameters	Unit							
Volatile Organic Compounds (Continued)								
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cymene (p-Isopropyltoluene)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	µg/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.2	1.0 U
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Butylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Propylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrchloroethane (CFC-113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Table 3

**Analytical Results Summary
Groundwater Sampling
GSP AOC1-3 Remedial Action
East Syracuse, New York
September 2016**

Location ID:	MW-1	MW-2	MW-3	MW-3	MW-4	MW-5	MW-7	MW-8
Sample Name:	MW-1	MW-2	MW-3	DUPLICATE	MW-4	MW-5	MW-7	MW-8
Sample Date:	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016
				Duplicate				

Parameters	Unit								
Semi-volatile Organic Compounds									
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2,4-Dimethylphenol	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2,4-Dinitrophenol	µg/L	10 U	10 U	9.7 U	9.9 U	9.9 U	9.6 U	10 U	9.8 U
2,4-Dinitrotoluene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2,6-Dinitrotoluene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2-Chloronaphthalene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2-Methylnaphthalene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2-Methylphenol	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2-Nitroaniline	µg/L	10 U	10 U	9.7 U	9.9 U	9.9 U	9.6 U	10 U	9.8 U
2-Nitrophenol	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
3,3'-Dichlorobenzidine	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
3-Nitroaniline	µg/L	10 U	10 U	9.7 U	9.9 U	9.9 U	9.6 U	10 U	9.8 U
4,6-Dinitro-2-methylphenol	µg/L	10 U	10 U	9.7 U	9.9 U	9.9 U	9.6 U	10 U	9.8 U
4-Bromophenyl phenyl ether	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
4-Chloro-3-methylphenol	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
4-Chloroaniline	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
4-Chlorophenyl phenyl ether	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
4-Methylphenol	µg/L	10 U	10 U	9.7 U	9.9 U	9.9 U	9.6 U	10 U	9.8 U
4-Nitroaniline	µg/L	10 U	10 U	9.7 U	9.9 U	9.9 U	9.6 U	10 U	9.8 U
4-Nitrophenol	µg/L	10 U	10 U	9.7 U	9.9 U	9.9 U	9.6 U	10 U	9.8 U
Acenaphthene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Acenaphthylene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Acetophenone	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Anthracene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Atrazine	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Benzaldehyde	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U

Table 3

**Analytical Results Summary
Groundwater Sampling
GSP AOC1-3 Remedial Action
East Syracuse, New York
September 2016**

Location ID:	MW-1	MW-2	MW-3	MW-3	MW-4	MW-5	MW-7	MW-8
Sample Name:	MW-1	MW-2	MW-3	DUPLICATE	MW-4	MW-5	MW-7	MW-8
Sample Date:	09/01/2016	09/01/2016	09/01/2016	09/01/2016 Duplicate	09/01/2016	09/01/2016	09/01/2016	09/01/2016

Parameters	Unit
------------	------

Semi-volatile Organic Compounds (Continued)

Benzo(a)anthracene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Benzo(a)pyrene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Benzo(b)fluoranthene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Benzo(g,h,i)perylene	µg/L	5.0 UJ	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Benzo(k)fluoranthene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Biphenyl (1,1-Biphenyl)	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
bis(2-Chloroethoxy)methane	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
bis(2-Chloroethyl)ether	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Butyl benzylphthalate (BBP)	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Caprolactam	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Carbazole	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Chrysene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Di-n-butylphthalate (DBP)	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Di-n-octyl phthalate (DnOP)	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Dibenz(a,h)anthracene	µg/L	5.0 UJ	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Dibenzofuran	µg/L	10 U	10 U	9.7 U	9.9 U	9.9 U	9.6 U	10 U	9.8 U
Diethyl phthalate	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Dimethyl phthalate	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Fluoranthene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Fluorene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Hexachlorobenzene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Hexachlorobutadiene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Hexachlorocyclopentadiene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Hexachloroethane	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Indeno(1,2,3-cd)pyrene	µg/L	5.0 UJ	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Isophorone	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
N-Nitrosodi-n-propylamine	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
N-Nitrosodiphenylamine	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Naphthalene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U

Table 3

**Analytical Results Summary
Groundwater Sampling
GSP AOC1-3 Remedial Action
East Syracuse, New York
September 2016**

Location ID:	MW-1	MW-2	MW-3	MW-3	MW-4	MW-5	MW-7	MW-8
Sample Name:	MW-1	MW-2	MW-3	DUPLICATE	MW-4	MW-5	MW-7	MW-8
Sample Date:	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016
				Duplicate				

Parameters	Unit								
Semi-volatile Organic Compounds (Continued)									
Nitrobenzene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Pentachlorophenol	µg/L	10 U	10 U	9.7 U	9.9 U	9.9 U	9.6 U	10 U	9.8 U
Phenanthrene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Phenol	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Pyrene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Metals									
Aluminum	mg/L	0.20 U	5.0	0.20 U	0.20 U	0.48	0.71	0.20 U	1.0
Antimony	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Arsenic	mg/L	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.022	0.063	0.015 U
Barium	mg/L	1.3	0.43	0.22	0.22	1.4	0.091	0.49	0.27
Beryllium	mg/L	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U
Cadmium	mg/L	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U
Calcium	mg/L	190	291	219	219	205	112	143	215
Chromium	mg/L	0.0040 U	0.010	0.0040 U	0.0040 U	0.0054	0.0040 U	0.0040 U	0.0040 U
Chromium VI (hexavalent)	mg/L	0.10 UJ	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Cobalt	mg/L	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U
Copper	mg/L	0.010 U	0.011	0.010 U	0.010 U	0.034	0.010 U	0.010 U	0.010 U
Iron	mg/L	6.3	15.3	7.4	7.4	4.2	3.6	13.0	7.6
Lead	mg/L	0.010 U	0.012	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Magnesium	mg/L	50.8	101	54.4	54.3	32.5	28.5	28.4	51.2
Manganese	mg/L	0.054	0.60	1.2	1.2	0.50	0.069	0.37	0.21
Mercury	mg/L	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U
Nickel	mg/L	0.010 U	0.018	0.16	0.16	0.68	0.010 U	0.010 U	0.010 U
Potassium	mg/L	5.2	6.8	3.4	3.5	6.3	4.0	10.9	2.6
Selenium	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Silver	mg/L	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.0060 U
Sodium	mg/L	215	200	211	213	258	319	241	94.5
Thallium	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Vanadium	mg/L	0.0050 U	0.013	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Zinc	mg/L	0.010 U	0.016	0.010 U	0.010 U	0.010 U	0.010 U	0.010	0.010 U

Table 3

**Analytical Results Summary
Groundwater Sampling
GSP AOC1-3 Remedial Action
East Syracuse, New York
September 2016**

Location ID:	MW-1	MW-2	MW-3	MW-3	MW-4	MW-5	MW-7	MW-8
Sample Name:	MW-1	MW-2	MW-3	DUPLICATE	MW-4	MW-5	MW-7	MW-8
Sample Date:	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016
				Duplicate				

Parameters	Unit								
Pesticides/PCBs									
Aroclor-1016 (PCB-1016)	µg/L	0.50 U	0.49 U	0.49 U	0.50 U	0.49 U	0.49 U	0.51 U	0.49 U
Aroclor-1221 (PCB-1221)	µg/L	0.50 U	0.49 U	0.49 U	0.50 U	0.49 U	0.49 U	0.51 U	0.49 U
Aroclor-1232 (PCB-1232)	µg/L	0.50 U	0.49 U	0.49 U	0.50 U	0.49 U	0.49 U	0.51 U	0.49 U
Aroclor-1242 (PCB-1242)	µg/L	0.50 U	0.49 U	0.49 U	0.50 U	0.49 U	0.49 U	0.51 U	0.49 U
Aroclor-1248 (PCB-1248)	µg/L	0.50 U	0.49 U	0.49 U	0.50 U	4.6	0.49 U	0.51 U	0.49 U
Aroclor-1254 (PCB-1254)	µg/L	0.50 U	0.49 U	0.49 U	0.50 U	0.49 U	0.49 U	0.51 U	0.49 U
Aroclor-1260 (PCB-1260)	µg/L	0.50 U	0.49 U	0.49 U	0.50 U	0.49 U	0.49 U	0.51 U	0.49 U
General Chemistry									
Cyanide (total)	mg/L	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U

Notes:

U - Not detected at the associated reporting limit

PCBs - Polychlorinated Biphenyls

Table 4

Qualified Sample Results Due to Holding Time Exceedance
Groundwater Sampling
GSP AOC1 -3 Remedial Action
East Syracuse, New York
September 2016

Parameter	Sample ID	Holding Time	Holding Time Criteria	Analyte	Qualified Sample Results	Units
Hexavalent Chromium	MW-1	25 hours	24 hours	Chromium VI (hexavalent)	0.10 UJ	mg/L

Notes:

UJ - Not detected; associated reporting limit is estimated

Table 5

Qualified Sample Results Due to Outlying MS/MSD Results
Groundwater Sampling
GSP AOC1 -3 Remedial Action
East Syracuse, New York
September 2016

Parameter	Sample ID	Analyte	MS	MSD	RPD (percent)	Control Limits		Qualified Result	Units
			% Recovery	% Recovery		% Recovery	RPD		
SVOCs	MW-1	Benzo(g,h,i)perylene	63	62	1	66-152	15	5.0 UJ	µg/L
		Dibenz(a,h)anthracene	56	56	0	57-158	15	5.0 UJ	µg/L
		Indeno(1,2,3-cd)pyrene	60	59	1	69-146	15	5.0 UJ	µg/L

Notes:

MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative Percent Difference
UJ - Not detected; associated reporting limit is estimated
SVOCs - Semi-volatile Organic Compounds

□
□
□

□

Attachment 3

Groundwater Samples Laboratory Analytical Report

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-105374-1

Client Project/Site: 3711082, GSP AOC1 -3 Remedial Action

For:

GHD Services Inc.

One Remington Park Drive

Cazenovia, New York 13035

Attn: Damian Vanetti



Authorized for release by:

9/12/2016 10:51:13 AM

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

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Metals

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

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

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

Case Narrative

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Job ID: 480-105374-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-105374-1

Receipt

The samples were received on 9/2/2016 1:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.1° C, 0.6° C and 0.9° C.

GC/MS VOA

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

GC/MS Semi VOA

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-319435 recovered above the upper control limit for 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol and 4-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: MW-1 (480-105374-1), MW-1MS (480-105374-1[MS]), MW-1MSD (480-105374-1[MSD]), MW-7 (480-105374-2), MW-2 (480-105374-3), MW-5 (480-105374-4), MW-8 (480-105374-5), MW-4 (480-105374-6), MW-3 (480-105374-7) and DUPLICATE (480-105374-8).

Method(s) 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-319263 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

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

Metals

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

General Chemistry

Method(s) 7196A: The following sample(s) was received with less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: MW-1 (480-105374-1), MW-1MS (480-105374-1[MS]) and MW-1MSD (480-105374-1[MSD]).

Method(s) 7196A: The following sample is a client blind duplicate; therefore, the laboratory defaults to a holding time of midnight of the day it was received: DUPLICATE (480-105374-8). Therefore, this sample is marked as being received outside of holding time.

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

Organic Prep

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

Detection Summary

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-1

Lab Sample ID: 480-105374-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	1.3		0.0020		mg/L	1		6010C	Total/NA
Calcium	190		0.50		mg/L	1		6010C	Total/NA
Iron	6.3		0.050		mg/L	1		6010C	Total/NA
Magnesium	50.8		0.20		mg/L	1		6010C	Total/NA
Manganese	0.054		0.0030		mg/L	1		6010C	Total/NA
Potassium	5.2		0.50		mg/L	1		6010C	Total/NA
Sodium	215		1.0		mg/L	1		6010C	Total/NA

Client Sample ID: MW-7

Lab Sample ID: 480-105374-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.2		1.0		ug/L	1		8260C	Total/NA
Arsenic	0.063		0.015		mg/L	1		6010C	Total/NA
Barium	0.49		0.0020		mg/L	1		6010C	Total/NA
Calcium	143		0.50		mg/L	1		6010C	Total/NA
Iron	13.0		0.050		mg/L	1		6010C	Total/NA
Magnesium	28.4		0.20		mg/L	1		6010C	Total/NA
Manganese	0.37		0.0030		mg/L	1		6010C	Total/NA
Potassium	10.9		0.50		mg/L	1		6010C	Total/NA
Sodium	241		1.0		mg/L	1		6010C	Total/NA
Zinc	0.010		0.010		mg/L	1		6010C	Total/NA

Client Sample ID: MW-2

Lab Sample ID: 480-105374-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	5.0		0.20		mg/L	1		6010C	Total/NA
Barium	0.43		0.0020		mg/L	1		6010C	Total/NA
Calcium	291		0.50		mg/L	1		6010C	Total/NA
Chromium	0.010		0.0040		mg/L	1		6010C	Total/NA
Copper	0.011		0.010		mg/L	1		6010C	Total/NA
Iron	15.3		0.050		mg/L	1		6010C	Total/NA
Lead	0.012		0.010		mg/L	1		6010C	Total/NA
Magnesium	101		0.20		mg/L	1		6010C	Total/NA
Manganese	0.60		0.0030		mg/L	1		6010C	Total/NA
Nickel	0.018		0.010		mg/L	1		6010C	Total/NA
Potassium	6.8		0.50		mg/L	1		6010C	Total/NA
Sodium	200		1.0		mg/L	1		6010C	Total/NA
Vanadium	0.013		0.0050		mg/L	1		6010C	Total/NA
Zinc	0.016		0.010		mg/L	1		6010C	Total/NA

Client Sample ID: MW-5

Lab Sample ID: 480-105374-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	0.71		0.20		mg/L	1		6010C	Total/NA
Arsenic	0.022		0.015		mg/L	1		6010C	Total/NA
Barium	0.091		0.0020		mg/L	1		6010C	Total/NA
Calcium	112		0.50		mg/L	1		6010C	Total/NA
Iron	3.6		0.050		mg/L	1		6010C	Total/NA
Magnesium	28.5		0.20		mg/L	1		6010C	Total/NA
Manganese	0.069		0.0030		mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-5 (Continued)

Lab Sample ID: 480-105374-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	4.0		0.50		mg/L	1		6010C	Total/NA
Sodium	319		1.0		mg/L	1		6010C	Total/NA

Client Sample ID: MW-8

Lab Sample ID: 480-105374-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	1.0		0.20		mg/L	1		6010C	Total/NA
Barium	0.27		0.0020		mg/L	1		6010C	Total/NA
Calcium	215		0.50		mg/L	1		6010C	Total/NA
Iron	7.6		0.050		mg/L	1		6010C	Total/NA
Magnesium	51.2		0.20		mg/L	1		6010C	Total/NA
Manganese	0.21		0.0030		mg/L	1		6010C	Total/NA
Potassium	2.6		0.50		mg/L	1		6010C	Total/NA
Sodium	94.5		1.0		mg/L	1		6010C	Total/NA

Client Sample ID: MW-4

Lab Sample ID: 480-105374-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1248	4.6		0.49		ug/L	1		8082A	Total/NA
Aluminum	0.48		0.20		mg/L	1		6010C	Total/NA
Barium	1.4		0.0020		mg/L	1		6010C	Total/NA
Calcium	205		0.50		mg/L	1		6010C	Total/NA
Chromium	0.0054		0.0040		mg/L	1		6010C	Total/NA
Copper	0.034		0.010		mg/L	1		6010C	Total/NA
Iron	4.2		0.050		mg/L	1		6010C	Total/NA
Magnesium	32.5		0.20		mg/L	1		6010C	Total/NA
Manganese	0.50		0.0030		mg/L	1		6010C	Total/NA
Nickel	0.68		0.010		mg/L	1		6010C	Total/NA
Potassium	6.3		0.50		mg/L	1		6010C	Total/NA
Sodium	258		1.0		mg/L	1		6010C	Total/NA

Client Sample ID: MW-3

Lab Sample ID: 480-105374-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.22		0.0020		mg/L	1		6010C	Total/NA
Calcium	219		0.50		mg/L	1		6010C	Total/NA
Iron	7.4		0.050		mg/L	1		6010C	Total/NA
Magnesium	54.4		0.20		mg/L	1		6010C	Total/NA
Manganese	1.2		0.0030		mg/L	1		6010C	Total/NA
Nickel	0.16		0.010		mg/L	1		6010C	Total/NA
Potassium	3.4		0.50		mg/L	1		6010C	Total/NA
Sodium	211		1.0		mg/L	1		6010C	Total/NA

Client Sample ID: DUPLICATE

Lab Sample ID: 480-105374-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.22		0.0020		mg/L	1		6010C	Total/NA
Calcium	219		0.50		mg/L	1		6010C	Total/NA
Iron	7.4		0.050		mg/L	1		6010C	Total/NA
Magnesium	54.3		0.20		mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: DUPLICATE (Continued)

Lab Sample ID: 480-105374-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	1.2		0.0030		mg/L	1		6010C	Total/NA
Nickel	0.16		0.010		mg/L	1		6010C	Total/NA
Potassium	3.5		0.50		mg/L	1		6010C	Total/NA
Sodium	213		1.0		mg/L	1		6010C	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-105374-9

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-1

Lab Sample ID: 480-105374-1

Date Collected: 09/01/16 08:10

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			09/03/16 02:10	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/03/16 02:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			09/03/16 02:10	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/03/16 02:10	1
1,1-Dichloroethane	ND		1.0		ug/L			09/03/16 02:10	1
1,1-Dichloroethene	ND		1.0		ug/L			09/03/16 02:10	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/03/16 02:10	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/03/16 02:10	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			09/03/16 02:10	1
1,2-Dibromoethane	ND		1.0		ug/L			09/03/16 02:10	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/03/16 02:10	1
1,2-Dichloroethane	ND		1.0		ug/L			09/03/16 02:10	1
1,2-Dichloropropane	ND		1.0		ug/L			09/03/16 02:10	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/03/16 02:10	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/03/16 02:10	1
1,4-Dichlorobenzene	ND		1.0		ug/L			09/03/16 02:10	1
2-Butanone (MEK)	ND		10		ug/L			09/03/16 02:10	1
2-Hexanone	ND		5.0		ug/L			09/03/16 02:10	1
4-Isopropyltoluene	ND		1.0		ug/L			09/03/16 02:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			09/03/16 02:10	1
Acetone	ND		10		ug/L			09/03/16 02:10	1
Benzene	ND		1.0		ug/L			09/03/16 02:10	1
Bromodichloromethane	ND		1.0		ug/L			09/03/16 02:10	1
Bromoform	ND		1.0		ug/L			09/03/16 02:10	1
Bromomethane	ND		1.0		ug/L			09/03/16 02:10	1
Carbon disulfide	ND		1.0		ug/L			09/03/16 02:10	1
Carbon tetrachloride	ND		1.0		ug/L			09/03/16 02:10	1
Chlorobenzene	ND		1.0		ug/L			09/03/16 02:10	1
Chloroethane	ND		1.0		ug/L			09/03/16 02:10	1
Chloroform	ND		1.0		ug/L			09/03/16 02:10	1
Chloromethane	ND		1.0		ug/L			09/03/16 02:10	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/03/16 02:10	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/03/16 02:10	1
Cyclohexane	ND		1.0		ug/L			09/03/16 02:10	1
Dibromochloromethane	ND		1.0		ug/L			09/03/16 02:10	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/03/16 02:10	1
Ethylbenzene	ND		1.0		ug/L			09/03/16 02:10	1
Isopropylbenzene	ND		1.0		ug/L			09/03/16 02:10	1
Methyl acetate	ND		2.5		ug/L			09/03/16 02:10	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/03/16 02:10	1
Methylcyclohexane	ND		1.0		ug/L			09/03/16 02:10	1
Methylene Chloride	ND		1.0		ug/L			09/03/16 02:10	1
Naphthalene	ND		1.0		ug/L			09/03/16 02:10	1
n-Butylbenzene	ND		1.0		ug/L			09/03/16 02:10	1
n-Propylbenzene	ND		1.0		ug/L			09/03/16 02:10	1
sec-Butylbenzene	ND		1.0		ug/L			09/03/16 02:10	1
Styrene	ND		1.0		ug/L			09/03/16 02:10	1
tert-Butylbenzene	ND		1.0		ug/L			09/03/16 02:10	1
Tetrachloroethene	ND		1.0		ug/L			09/03/16 02:10	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-1

Lab Sample ID: 480-105374-1

Date Collected: 09/01/16 08:10

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.0		ug/L			09/03/16 02:10	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			09/03/16 02:10	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/03/16 02:10	1
Trichloroethene	ND		1.0		ug/L			09/03/16 02:10	1
Trichlorofluoromethane	ND		1.0		ug/L			09/03/16 02:10	1
Vinyl chloride	ND		1.0		ug/L			09/03/16 02:10	1
Xylenes, Total	ND		2.0		ug/L			09/03/16 02:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		09/03/16 02:10	1
4-Bromofluorobenzene (Surr)	105		73 - 120		09/03/16 02:10	1
Dibromofluoromethane (Surr)	106		75 - 123		09/03/16 02:10	1
Toluene-d8 (Surr)	100		80 - 120		09/03/16 02:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
2,4,6-Trichlorophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
2,4-Dichlorophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
2,4-Dimethylphenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
2,4-Dinitrophenol	ND	F1	10		ug/L		09/07/16 14:25	09/08/16 16:03	1
2,4-Dinitrotoluene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
2,6-Dinitrotoluene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
2-Chloronaphthalene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
2-Chlorophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
2-Methylnaphthalene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
2-Methylphenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
2-Nitroaniline	ND		10		ug/L		09/07/16 14:25	09/08/16 16:03	1
2-Nitrophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
3,3'-Dichlorobenzidine	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
3-Nitroaniline	ND		10		ug/L		09/07/16 14:25	09/08/16 16:03	1
4,6-Dinitro-2-methylphenol	ND		10		ug/L		09/07/16 14:25	09/08/16 16:03	1
4-Bromophenyl phenyl ether	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
4-Chloro-3-methylphenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
4-Chloroaniline	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
4-Chlorophenyl phenyl ether	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
4-Methylphenol	ND		10		ug/L		09/07/16 14:25	09/08/16 16:03	1
4-Nitroaniline	ND		10		ug/L		09/07/16 14:25	09/08/16 16:03	1
4-Nitrophenol	ND	F1	10		ug/L		09/07/16 14:25	09/08/16 16:03	1
Acenaphthene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Acenaphthylene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Acetophenone	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Anthracene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Atrazine	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Benzaldehyde	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Benzo[a]anthracene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Benzo[a]pyrene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Benzo[b]fluoranthene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Benzo[g,h,i]perylene	ND	F1	5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Benzo[k]fluoranthene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-1

Lab Sample ID: 480-105374-1

Date Collected: 09/01/16 08:10

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
bis (2-chloroisopropyl) ether	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Bis(2-chloroethoxy)methane	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Bis(2-chloroethyl)ether	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Bis(2-ethylhexyl) phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Butyl benzyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Caprolactam	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Carbazole	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Chrysene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Dibenz(a,h)anthracene	ND	F1	5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Dibenzofuran	ND		10		ug/L		09/07/16 14:25	09/08/16 16:03	1
Diethyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Dimethyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Di-n-butyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Di-n-octyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Fluoranthene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Fluorene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Hexachlorobenzene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Hexachlorobutadiene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Hexachlorocyclopentadiene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Hexachloroethane	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Indeno[1,2,3-cd]pyrene	ND	F1	5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Isophorone	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Naphthalene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Nitrobenzene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
N-Nitrosodi-n-propylamine	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
N-Nitrosodiphenylamine	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Pentachlorophenol	ND		10		ug/L		09/07/16 14:25	09/08/16 16:03	1
Phenanthrene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Phenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1
Pyrene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	95		52 - 132	09/07/16 14:25	09/08/16 16:03	1
2-Fluorobiphenyl	78		48 - 120	09/07/16 14:25	09/08/16 16:03	1
2-Fluorophenol (Surr)	55		20 - 120	09/07/16 14:25	09/08/16 16:03	1
Nitrobenzene-d5 (Surr)	80		46 - 120	09/07/16 14:25	09/08/16 16:03	1
Phenol-d5 (Surr)	39		16 - 120	09/07/16 14:25	09/08/16 16:03	1
p-Terphenyl-d14 (Surr)	96		67 - 150	09/07/16 14:25	09/08/16 16:03	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50		ug/L		09/07/16 07:29	09/09/16 02:09	1
PCB-1221	ND		0.50		ug/L		09/07/16 07:29	09/09/16 02:09	1
PCB-1232	ND		0.50		ug/L		09/07/16 07:29	09/09/16 02:09	1
PCB-1242	ND		0.50		ug/L		09/07/16 07:29	09/09/16 02:09	1
PCB-1248	ND		0.50		ug/L		09/07/16 07:29	09/09/16 02:09	1
PCB-1254	ND		0.50		ug/L		09/07/16 07:29	09/09/16 02:09	1
PCB-1260	ND		0.50		ug/L		09/07/16 07:29	09/09/16 02:09	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-1

Lab Sample ID: 480-105374-1

Date Collected: 09/01/16 08:10

Matrix: Water

Date Received: 09/02/16 01:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	81		39 - 121	09/07/16 07:29	09/09/16 02:09	1
DCB Decachlorobiphenyl	59		19 - 120	09/07/16 07:29	09/09/16 02:09	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20		mg/L		09/02/16 09:00	09/06/16 15:24	1
Antimony	ND		0.020		mg/L		09/02/16 09:00	09/06/16 15:24	1
Arsenic	ND		0.015		mg/L		09/02/16 09:00	09/06/16 15:24	1
Barium	1.3		0.0020		mg/L		09/02/16 09:00	09/06/16 15:24	1
Beryllium	ND		0.0020		mg/L		09/02/16 09:00	09/06/16 15:24	1
Cadmium	ND		0.0020		mg/L		09/02/16 09:00	09/06/16 15:24	1
Calcium	190		0.50		mg/L		09/02/16 09:00	09/06/16 15:24	1
Chromium	ND		0.0040		mg/L		09/02/16 09:00	09/06/16 15:24	1
Cobalt	ND		0.0040		mg/L		09/02/16 09:00	09/06/16 15:24	1
Copper	ND		0.010		mg/L		09/02/16 09:00	09/06/16 15:24	1
Iron	6.3		0.050		mg/L		09/02/16 09:00	09/06/16 15:24	1
Lead	ND		0.010		mg/L		09/02/16 09:00	09/06/16 15:24	1
Magnesium	50.8		0.20		mg/L		09/02/16 09:00	09/06/16 15:24	1
Manganese	0.054		0.0030		mg/L		09/02/16 09:00	09/06/16 15:24	1
Nickel	ND		0.010		mg/L		09/02/16 09:00	09/06/16 15:24	1
Potassium	5.2		0.50		mg/L		09/02/16 09:00	09/06/16 15:24	1
Selenium	ND		0.025		mg/L		09/02/16 09:00	09/06/16 15:24	1
Silver	ND		0.0060		mg/L		09/02/16 09:00	09/06/16 15:24	1
Sodium	215		1.0		mg/L		09/02/16 09:00	09/06/16 15:24	1
Thallium	ND		0.020		mg/L		09/02/16 09:00	09/06/16 15:24	1
Vanadium	ND		0.0050		mg/L		09/02/16 09:00	09/06/16 15:24	1
Zinc	ND		0.010		mg/L		09/02/16 09:00	09/06/16 15:24	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		09/02/16 09:50	09/02/16 15:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND	H F1	0.10		mg/L			09/02/16 08:20	10
Cyanide, Total	ND		0.010		mg/L		09/02/16 18:45	09/05/16 10:14	1

Client Sample ID: MW-7

Lab Sample ID: 480-105374-2

Date Collected: 09/01/16 09:25

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			09/03/16 02:33	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/03/16 02:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			09/03/16 02:33	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/03/16 02:33	1
1,1-Dichloroethane	ND		1.0		ug/L			09/03/16 02:33	1
1,1-Dichloroethene	ND		1.0		ug/L			09/03/16 02:33	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/03/16 02:33	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/03/16 02:33	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-7

Lab Sample ID: 480-105374-2

Date Collected: 09/01/16 09:25

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			09/03/16 02:33	1
1,2-Dibromoethane	ND		1.0		ug/L			09/03/16 02:33	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/03/16 02:33	1
1,2-Dichloroethane	ND		1.0		ug/L			09/03/16 02:33	1
1,2-Dichloropropane	ND		1.0		ug/L			09/03/16 02:33	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/03/16 02:33	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/03/16 02:33	1
1,4-Dichlorobenzene	ND		1.0		ug/L			09/03/16 02:33	1
2-Butanone (MEK)	ND		10		ug/L			09/03/16 02:33	1
2-Hexanone	ND		5.0		ug/L			09/03/16 02:33	1
4-Isopropyltoluene	ND		1.0		ug/L			09/03/16 02:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			09/03/16 02:33	1
Acetone	ND		10		ug/L			09/03/16 02:33	1
Benzene	ND		1.0		ug/L			09/03/16 02:33	1
Bromodichloromethane	ND		1.0		ug/L			09/03/16 02:33	1
Bromoform	ND		1.0		ug/L			09/03/16 02:33	1
Bromomethane	ND		1.0		ug/L			09/03/16 02:33	1
Carbon disulfide	ND		1.0		ug/L			09/03/16 02:33	1
Carbon tetrachloride	ND		1.0		ug/L			09/03/16 02:33	1
Chlorobenzene	ND		1.0		ug/L			09/03/16 02:33	1
Chloroethane	ND		1.0		ug/L			09/03/16 02:33	1
Chloroform	ND		1.0		ug/L			09/03/16 02:33	1
Chloromethane	ND		1.0		ug/L			09/03/16 02:33	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/03/16 02:33	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/03/16 02:33	1
Cyclohexane	ND		1.0		ug/L			09/03/16 02:33	1
Dibromochloromethane	ND		1.0		ug/L			09/03/16 02:33	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/03/16 02:33	1
Ethylbenzene	ND		1.0		ug/L			09/03/16 02:33	1
Isopropylbenzene	ND		1.0		ug/L			09/03/16 02:33	1
Methyl acetate	ND		2.5		ug/L			09/03/16 02:33	1
Methyl tert-butyl ether	1.2		1.0		ug/L			09/03/16 02:33	1
Methylcyclohexane	ND		1.0		ug/L			09/03/16 02:33	1
Methylene Chloride	ND		1.0		ug/L			09/03/16 02:33	1
Naphthalene	ND		1.0		ug/L			09/03/16 02:33	1
n-Butylbenzene	ND		1.0		ug/L			09/03/16 02:33	1
n-Propylbenzene	ND		1.0		ug/L			09/03/16 02:33	1
sec-Butylbenzene	ND		1.0		ug/L			09/03/16 02:33	1
Styrene	ND		1.0		ug/L			09/03/16 02:33	1
tert-Butylbenzene	ND		1.0		ug/L			09/03/16 02:33	1
Tetrachloroethene	ND		1.0		ug/L			09/03/16 02:33	1
Toluene	ND		1.0		ug/L			09/03/16 02:33	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			09/03/16 02:33	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/03/16 02:33	1
Trichloroethene	ND		1.0		ug/L			09/03/16 02:33	1
Trichlorofluoromethane	ND		1.0		ug/L			09/03/16 02:33	1
Vinyl chloride	ND		1.0		ug/L			09/03/16 02:33	1
Xylenes, Total	ND		2.0		ug/L			09/03/16 02:33	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-7

Lab Sample ID: 480-105374-2

Date Collected: 09/01/16 09:25

Matrix: Water

Date Received: 09/02/16 01:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		77 - 120		09/03/16 02:33	1
4-Bromofluorobenzene (Surr)	101		73 - 120		09/03/16 02:33	1
Dibromofluoromethane (Surr)	109		75 - 123		09/03/16 02:33	1
Toluene-d8 (Surr)	102		80 - 120		09/03/16 02:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
2,4,6-Trichlorophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
2,4-Dichlorophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
2,4-Dimethylphenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
2,4-Dinitrophenol	ND		10		ug/L		09/07/16 14:25	09/08/16 16:33	1
2,4-Dinitrotoluene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
2,6-Dinitrotoluene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
2-Chloronaphthalene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
2-Chlorophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
2-Methylnaphthalene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
2-Methylphenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
2-Nitroaniline	ND		10		ug/L		09/07/16 14:25	09/08/16 16:33	1
2-Nitrophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
3,3'-Dichlorobenzidine	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
3-Nitroaniline	ND		10		ug/L		09/07/16 14:25	09/08/16 16:33	1
4,6-Dinitro-2-methylphenol	ND		10		ug/L		09/07/16 14:25	09/08/16 16:33	1
4-Bromophenyl phenyl ether	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
4-Chloro-3-methylphenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
4-Chloroaniline	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
4-Chlorophenyl phenyl ether	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
4-Methylphenol	ND		10		ug/L		09/07/16 14:25	09/08/16 16:33	1
4-Nitroaniline	ND		10		ug/L		09/07/16 14:25	09/08/16 16:33	1
4-Nitrophenol	ND		10		ug/L		09/07/16 14:25	09/08/16 16:33	1
Acenaphthene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Acenaphthylene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Acetophenone	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Anthracene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Atrazine	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Benzaldehyde	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Benzo[a]anthracene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Benzo[a]pyrene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Benzo[b]fluoranthene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Benzo[g,h,i]perylene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Benzo[k]fluoranthene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Biphenyl	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
bis (2-chloroisopropyl) ether	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Bis(2-chloroethoxy)methane	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Bis(2-chloroethyl)ether	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Bis(2-ethylhexyl) phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Butyl benzyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Caprolactam	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Carbazole	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Chrysene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-7

Lab Sample ID: 480-105374-2

Date Collected: 09/01/16 09:25

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Dibenzofuran	ND		10		ug/L		09/07/16 14:25	09/08/16 16:33	1
Diethyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Dimethyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Di-n-butyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Di-n-octyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Fluoranthene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Fluorene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Hexachlorobenzene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Hexachlorobutadiene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Hexachlorocyclopentadiene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Hexachloroethane	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Indeno[1,2,3-cd]pyrene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Isophorone	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Naphthalene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Nitrobenzene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
N-Nitrosodi-n-propylamine	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
N-Nitrosodiphenylamine	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Pentachlorophenol	ND		10		ug/L		09/07/16 14:25	09/08/16 16:33	1
Phenanthrene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Phenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1
Pyrene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 16:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	118		52 - 132	09/07/16 14:25	09/08/16 16:33	1
2-Fluorobiphenyl	89		48 - 120	09/07/16 14:25	09/08/16 16:33	1
2-Fluorophenol (Surr)	66		20 - 120	09/07/16 14:25	09/08/16 16:33	1
Nitrobenzene-d5 (Surr)	92		46 - 120	09/07/16 14:25	09/08/16 16:33	1
Phenol-d5 (Surr)	46		16 - 120	09/07/16 14:25	09/08/16 16:33	1
p-Terphenyl-d14 (Surr)	104		67 - 150	09/07/16 14:25	09/08/16 16:33	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.51		ug/L		09/07/16 07:29	09/09/16 02:25	1
PCB-1221	ND		0.51		ug/L		09/07/16 07:29	09/09/16 02:25	1
PCB-1232	ND		0.51		ug/L		09/07/16 07:29	09/09/16 02:25	1
PCB-1242	ND		0.51		ug/L		09/07/16 07:29	09/09/16 02:25	1
PCB-1248	ND		0.51		ug/L		09/07/16 07:29	09/09/16 02:25	1
PCB-1254	ND		0.51		ug/L		09/07/16 07:29	09/09/16 02:25	1
PCB-1260	ND		0.51		ug/L		09/07/16 07:29	09/09/16 02:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	72		39 - 121	09/07/16 07:29	09/09/16 02:25	1
DCB Decachlorobiphenyl	51		19 - 120	09/07/16 07:29	09/09/16 02:25	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20		mg/L		09/02/16 09:00	09/06/16 15:53	1
Antimony	ND		0.020		mg/L		09/02/16 09:00	09/06/16 15:53	1
Arsenic	0.063		0.015		mg/L		09/02/16 09:00	09/06/16 15:53	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-7

Lab Sample ID: 480-105374-2

Date Collected: 09/01/16 09:25

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.49		0.0020		mg/L		09/02/16 09:00	09/06/16 15:53	1
Beryllium	ND		0.0020		mg/L		09/02/16 09:00	09/06/16 15:53	1
Cadmium	ND		0.0020		mg/L		09/02/16 09:00	09/06/16 15:53	1
Calcium	143		0.50		mg/L		09/02/16 09:00	09/06/16 15:53	1
Chromium	ND		0.0040		mg/L		09/02/16 09:00	09/06/16 15:53	1
Cobalt	ND		0.0040		mg/L		09/02/16 09:00	09/06/16 15:53	1
Copper	ND		0.010		mg/L		09/02/16 09:00	09/06/16 15:53	1
Iron	13.0		0.050		mg/L		09/02/16 09:00	09/06/16 15:53	1
Lead	ND		0.010		mg/L		09/02/16 09:00	09/06/16 15:53	1
Magnesium	28.4		0.20		mg/L		09/02/16 09:00	09/06/16 15:53	1
Manganese	0.37		0.0030		mg/L		09/02/16 09:00	09/06/16 15:53	1
Nickel	ND		0.010		mg/L		09/02/16 09:00	09/06/16 15:53	1
Potassium	10.9		0.50		mg/L		09/02/16 09:00	09/06/16 15:53	1
Selenium	ND		0.025		mg/L		09/02/16 09:00	09/06/16 15:53	1
Silver	ND		0.0060		mg/L		09/02/16 09:00	09/06/16 15:53	1
Sodium	241		1.0		mg/L		09/02/16 09:00	09/06/16 15:53	1
Thallium	ND		0.020		mg/L		09/02/16 09:00	09/06/16 15:53	1
Vanadium	ND		0.0050		mg/L		09/02/16 09:00	09/06/16 15:53	1
Zinc	0.010		0.010		mg/L		09/02/16 09:00	09/06/16 15:53	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		09/02/16 09:50	09/02/16 15:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010		mg/L			09/02/16 08:20	1
Cyanide, Total	ND		0.010		mg/L		09/02/16 18:45	09/05/16 09:58	1

Client Sample ID: MW-2

Lab Sample ID: 480-105374-3

Date Collected: 09/01/16 10:40

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			09/03/16 02:56	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/03/16 02:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			09/03/16 02:56	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/03/16 02:56	1
1,1-Dichloroethane	ND		1.0		ug/L			09/03/16 02:56	1
1,1-Dichloroethene	ND		1.0		ug/L			09/03/16 02:56	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/03/16 02:56	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/03/16 02:56	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			09/03/16 02:56	1
1,2-Dibromoethane	ND		1.0		ug/L			09/03/16 02:56	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/03/16 02:56	1
1,2-Dichloroethane	ND		1.0		ug/L			09/03/16 02:56	1
1,2-Dichloropropane	ND		1.0		ug/L			09/03/16 02:56	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/03/16 02:56	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/03/16 02:56	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-2

Lab Sample ID: 480-105374-3

Date Collected: 09/01/16 10:40

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		1.0		ug/L			09/03/16 02:56	1
2-Butanone (MEK)	ND		10		ug/L			09/03/16 02:56	1
2-Hexanone	ND		5.0		ug/L			09/03/16 02:56	1
4-Isopropyltoluene	ND		1.0		ug/L			09/03/16 02:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			09/03/16 02:56	1
Acetone	ND		10		ug/L			09/03/16 02:56	1
Benzene	ND		1.0		ug/L			09/03/16 02:56	1
Bromodichloromethane	ND		1.0		ug/L			09/03/16 02:56	1
Bromoform	ND		1.0		ug/L			09/03/16 02:56	1
Bromomethane	ND		1.0		ug/L			09/03/16 02:56	1
Carbon disulfide	ND		1.0		ug/L			09/03/16 02:56	1
Carbon tetrachloride	ND		1.0		ug/L			09/03/16 02:56	1
Chlorobenzene	ND		1.0		ug/L			09/03/16 02:56	1
Chloroethane	ND		1.0		ug/L			09/03/16 02:56	1
Chloroform	ND		1.0		ug/L			09/03/16 02:56	1
Chloromethane	ND		1.0		ug/L			09/03/16 02:56	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/03/16 02:56	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/03/16 02:56	1
Cyclohexane	ND		1.0		ug/L			09/03/16 02:56	1
Dibromochloromethane	ND		1.0		ug/L			09/03/16 02:56	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/03/16 02:56	1
Ethylbenzene	ND		1.0		ug/L			09/03/16 02:56	1
Isopropylbenzene	ND		1.0		ug/L			09/03/16 02:56	1
Methyl acetate	ND		2.5		ug/L			09/03/16 02:56	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/03/16 02:56	1
Methylcyclohexane	ND		1.0		ug/L			09/03/16 02:56	1
Methylene Chloride	ND		1.0		ug/L			09/03/16 02:56	1
Naphthalene	ND		1.0		ug/L			09/03/16 02:56	1
n-Butylbenzene	ND		1.0		ug/L			09/03/16 02:56	1
n-Propylbenzene	ND		1.0		ug/L			09/03/16 02:56	1
sec-Butylbenzene	ND		1.0		ug/L			09/03/16 02:56	1
Styrene	ND		1.0		ug/L			09/03/16 02:56	1
tert-Butylbenzene	ND		1.0		ug/L			09/03/16 02:56	1
Tetrachloroethene	ND		1.0		ug/L			09/03/16 02:56	1
Toluene	ND		1.0		ug/L			09/03/16 02:56	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			09/03/16 02:56	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/03/16 02:56	1
Trichloroethene	ND		1.0		ug/L			09/03/16 02:56	1
Trichlorofluoromethane	ND		1.0		ug/L			09/03/16 02:56	1
Vinyl chloride	ND		1.0		ug/L			09/03/16 02:56	1
Xylenes, Total	ND		2.0		ug/L			09/03/16 02:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		09/03/16 02:56	1
4-Bromofluorobenzene (Surr)	101		73 - 120		09/03/16 02:56	1
Dibromofluoromethane (Surr)	104		75 - 123		09/03/16 02:56	1
Toluene-d8 (Surr)	102		80 - 120		09/03/16 02:56	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-2

Lab Sample ID: 480-105374-3

Date Collected: 09/01/16 10:40

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
2,4,6-Trichlorophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
2,4-Dichlorophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
2,4-Dimethylphenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
2,4-Dinitrophenol	ND		10		ug/L		09/07/16 14:25	09/08/16 17:02	1
2,4-Dinitrotoluene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
2,6-Dinitrotoluene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
2-Chloronaphthalene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
2-Chlorophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
2-Methylnaphthalene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
2-Methylphenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
2-Nitroaniline	ND		10		ug/L		09/07/16 14:25	09/08/16 17:02	1
2-Nitrophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
3,3'-Dichlorobenzidine	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
3-Nitroaniline	ND		10		ug/L		09/07/16 14:25	09/08/16 17:02	1
4,6-Dinitro-2-methylphenol	ND		10		ug/L		09/07/16 14:25	09/08/16 17:02	1
4-Bromophenyl phenyl ether	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
4-Chloro-3-methylphenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
4-Chloroaniline	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
4-Chlorophenyl phenyl ether	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
4-Methylphenol	ND		10		ug/L		09/07/16 14:25	09/08/16 17:02	1
4-Nitroaniline	ND		10		ug/L		09/07/16 14:25	09/08/16 17:02	1
4-Nitrophenol	ND		10		ug/L		09/07/16 14:25	09/08/16 17:02	1
Acenaphthene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Acenaphthylene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Acetophenone	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Anthracene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Atrazine	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Benzaldehyde	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Benzo[a]anthracene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Benzo[a]pyrene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Benzo[b]fluoranthene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Benzo[g,h,i]perylene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Benzo[k]fluoranthene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Biphenyl	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
bis (2-chloroisopropyl) ether	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Bis(2-chloroethoxy)methane	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Bis(2-chloroethyl)ether	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Bis(2-ethylhexyl) phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Butyl benzyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Caprolactam	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Carbazole	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Chrysene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Dibenz(a,h)anthracene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Dibenzofuran	ND		10		ug/L		09/07/16 14:25	09/08/16 17:02	1
Diethyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Dimethyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Di-n-butyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Di-n-octyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-2

Lab Sample ID: 480-105374-3

Date Collected: 09/01/16 10:40

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Fluorene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Hexachlorobenzene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Hexachlorobutadiene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Hexachlorocyclopentadiene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Hexachloroethane	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Indeno[1,2,3-cd]pyrene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Isophorone	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Naphthalene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Nitrobenzene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
N-Nitrosodi-n-propylamine	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
N-Nitrosodiphenylamine	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Pentachlorophenol	ND		10		ug/L		09/07/16 14:25	09/08/16 17:02	1
Phenanthrene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Phenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1
Pyrene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 17:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	107		52 - 132	09/07/16 14:25	09/08/16 17:02	1
2-Fluorobiphenyl	91		48 - 120	09/07/16 14:25	09/08/16 17:02	1
2-Fluorophenol (Surr)	66		20 - 120	09/07/16 14:25	09/08/16 17:02	1
Nitrobenzene-d5 (Surr)	94		46 - 120	09/07/16 14:25	09/08/16 17:02	1
Phenol-d5 (Surr)	47		16 - 120	09/07/16 14:25	09/08/16 17:02	1
p-Terphenyl-d14 (Surr)	107		67 - 150	09/07/16 14:25	09/08/16 17:02	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.49		ug/L		09/07/16 07:29	09/09/16 02:41	1
PCB-1221	ND		0.49		ug/L		09/07/16 07:29	09/09/16 02:41	1
PCB-1232	ND		0.49		ug/L		09/07/16 07:29	09/09/16 02:41	1
PCB-1242	ND		0.49		ug/L		09/07/16 07:29	09/09/16 02:41	1
PCB-1248	ND		0.49		ug/L		09/07/16 07:29	09/09/16 02:41	1
PCB-1254	ND		0.49		ug/L		09/07/16 07:29	09/09/16 02:41	1
PCB-1260	ND		0.49		ug/L		09/07/16 07:29	09/09/16 02:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	75		39 - 121	09/07/16 07:29	09/09/16 02:41	1
DCB Decachlorobiphenyl	61		19 - 120	09/07/16 07:29	09/09/16 02:41	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5.0		0.20		mg/L		09/02/16 09:00	09/06/16 15:57	1
Antimony	ND		0.020		mg/L		09/02/16 09:00	09/06/16 15:57	1
Arsenic	ND		0.015		mg/L		09/02/16 09:00	09/06/16 15:57	1
Barium	0.43		0.0020		mg/L		09/02/16 09:00	09/06/16 15:57	1
Beryllium	ND		0.0020		mg/L		09/02/16 09:00	09/06/16 15:57	1
Cadmium	ND		0.0020		mg/L		09/02/16 09:00	09/06/16 15:57	1
Calcium	291		0.50		mg/L		09/02/16 09:00	09/06/16 15:57	1
Chromium	0.010		0.0040		mg/L		09/02/16 09:00	09/06/16 15:57	1
Cobalt	ND		0.0040		mg/L		09/02/16 09:00	09/06/16 15:57	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-2

Lab Sample ID: 480-105374-3

Date Collected: 09/01/16 10:40

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.011		0.010		mg/L		09/02/16 09:00	09/06/16 15:57	1
Iron	15.3		0.050		mg/L		09/02/16 09:00	09/06/16 15:57	1
Lead	0.012		0.010		mg/L		09/02/16 09:00	09/06/16 15:57	1
Magnesium	101		0.20		mg/L		09/02/16 09:00	09/06/16 15:57	1
Manganese	0.60		0.0030		mg/L		09/02/16 09:00	09/06/16 15:57	1
Nickel	0.018		0.010		mg/L		09/02/16 09:00	09/06/16 15:57	1
Potassium	6.8		0.50		mg/L		09/02/16 09:00	09/06/16 15:57	1
Selenium	ND		0.025		mg/L		09/02/16 09:00	09/06/16 15:57	1
Silver	ND		0.0060		mg/L		09/02/16 09:00	09/06/16 15:57	1
Sodium	200		1.0		mg/L		09/02/16 09:00	09/06/16 15:57	1
Thallium	ND		0.020		mg/L		09/02/16 09:00	09/06/16 15:57	1
Vanadium	0.013		0.0050		mg/L		09/02/16 09:00	09/06/16 15:57	1
Zinc	0.016		0.010		mg/L		09/02/16 09:00	09/06/16 15:57	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		09/02/16 09:50	09/02/16 15:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010		mg/L			09/02/16 08:20	1
Cyanide, Total	ND		0.010		mg/L		09/02/16 18:45	09/05/16 10:01	1

Client Sample ID: MW-5

Lab Sample ID: 480-105374-4

Date Collected: 09/01/16 11:45

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			09/03/16 03:19	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/03/16 03:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			09/03/16 03:19	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/03/16 03:19	1
1,1-Dichloroethane	ND		1.0		ug/L			09/03/16 03:19	1
1,1-Dichloroethene	ND		1.0		ug/L			09/03/16 03:19	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/03/16 03:19	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/03/16 03:19	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			09/03/16 03:19	1
1,2-Dibromoethane	ND		1.0		ug/L			09/03/16 03:19	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/03/16 03:19	1
1,2-Dichloroethane	ND		1.0		ug/L			09/03/16 03:19	1
1,2-Dichloropropane	ND		1.0		ug/L			09/03/16 03:19	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/03/16 03:19	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/03/16 03:19	1
1,4-Dichlorobenzene	ND		1.0		ug/L			09/03/16 03:19	1
2-Butanone (MEK)	ND		10		ug/L			09/03/16 03:19	1
2-Hexanone	ND		5.0		ug/L			09/03/16 03:19	1
4-Isopropyltoluene	ND		1.0		ug/L			09/03/16 03:19	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			09/03/16 03:19	1
Acetone	ND		10		ug/L			09/03/16 03:19	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-5

Lab Sample ID: 480-105374-4

Date Collected: 09/01/16 11:45

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			09/03/16 03:19	1
Bromodichloromethane	ND		1.0		ug/L			09/03/16 03:19	1
Bromoform	ND		1.0		ug/L			09/03/16 03:19	1
Bromomethane	ND		1.0		ug/L			09/03/16 03:19	1
Carbon disulfide	ND		1.0		ug/L			09/03/16 03:19	1
Carbon tetrachloride	ND		1.0		ug/L			09/03/16 03:19	1
Chlorobenzene	ND		1.0		ug/L			09/03/16 03:19	1
Chloroethane	ND		1.0		ug/L			09/03/16 03:19	1
Chloroform	ND		1.0		ug/L			09/03/16 03:19	1
Chloromethane	ND		1.0		ug/L			09/03/16 03:19	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/03/16 03:19	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/03/16 03:19	1
Cyclohexane	ND		1.0		ug/L			09/03/16 03:19	1
Dibromochloromethane	ND		1.0		ug/L			09/03/16 03:19	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/03/16 03:19	1
Ethylbenzene	ND		1.0		ug/L			09/03/16 03:19	1
Isopropylbenzene	ND		1.0		ug/L			09/03/16 03:19	1
Methyl acetate	ND		2.5		ug/L			09/03/16 03:19	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/03/16 03:19	1
Methylcyclohexane	ND		1.0		ug/L			09/03/16 03:19	1
Methylene Chloride	ND		1.0		ug/L			09/03/16 03:19	1
Naphthalene	ND		1.0		ug/L			09/03/16 03:19	1
n-Butylbenzene	ND		1.0		ug/L			09/03/16 03:19	1
n-Propylbenzene	ND		1.0		ug/L			09/03/16 03:19	1
sec-Butylbenzene	ND		1.0		ug/L			09/03/16 03:19	1
Styrene	ND		1.0		ug/L			09/03/16 03:19	1
tert-Butylbenzene	ND		1.0		ug/L			09/03/16 03:19	1
Tetrachloroethene	ND		1.0		ug/L			09/03/16 03:19	1
Toluene	ND		1.0		ug/L			09/03/16 03:19	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			09/03/16 03:19	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/03/16 03:19	1
Trichloroethene	ND		1.0		ug/L			09/03/16 03:19	1
Trichlorofluoromethane	ND		1.0		ug/L			09/03/16 03:19	1
Vinyl chloride	ND		1.0		ug/L			09/03/16 03:19	1
Xylenes, Total	ND		2.0		ug/L			09/03/16 03:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		77 - 120					09/03/16 03:19	1
4-Bromofluorobenzene (Surr)	104		73 - 120					09/03/16 03:19	1
Dibromofluoromethane (Surr)	103		75 - 123					09/03/16 03:19	1
Toluene-d8 (Surr)	103		80 - 120					09/03/16 03:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
2,4,6-Trichlorophenol	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
2,4-Dichlorophenol	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
2,4-Dimethylphenol	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
2,4-Dinitrophenol	ND		9.6		ug/L		09/07/16 14:25	09/08/16 17:32	1
2,4-Dinitrotoluene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-5

Lab Sample ID: 480-105374-4

Date Collected: 09/01/16 11:45

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
2-Chloronaphthalene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
2-Chlorophenol	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
2-Methylnaphthalene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
2-Methylphenol	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
2-Nitroaniline	ND		9.6		ug/L		09/07/16 14:25	09/08/16 17:32	1
2-Nitrophenol	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
3,3'-Dichlorobenzidine	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
3-Nitroaniline	ND		9.6		ug/L		09/07/16 14:25	09/08/16 17:32	1
4,6-Dinitro-2-methylphenol	ND		9.6		ug/L		09/07/16 14:25	09/08/16 17:32	1
4-Bromophenyl phenyl ether	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
4-Chloro-3-methylphenol	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
4-Chloroaniline	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
4-Chlorophenyl phenyl ether	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
4-Methylphenol	ND		9.6		ug/L		09/07/16 14:25	09/08/16 17:32	1
4-Nitroaniline	ND		9.6		ug/L		09/07/16 14:25	09/08/16 17:32	1
4-Nitrophenol	ND		9.6		ug/L		09/07/16 14:25	09/08/16 17:32	1
Acenaphthene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Acenaphthylene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Acetophenone	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Anthracene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Atrazine	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Benzaldehyde	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Benzo[a]anthracene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Benzo[a]pyrene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Benzo[b]fluoranthene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Benzo[g,h,i]perylene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Benzo[k]fluoranthene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Biphenyl	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
bis (2-chloroisopropyl) ether	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Bis(2-chloroethoxy)methane	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Bis(2-chloroethyl)ether	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Bis(2-ethylhexyl) phthalate	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Butyl benzyl phthalate	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Caprolactam	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Carbazole	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Chrysene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Dibenz(a,h)anthracene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Dibenzofuran	ND		9.6		ug/L		09/07/16 14:25	09/08/16 17:32	1
Diethyl phthalate	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Dimethyl phthalate	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Di-n-butyl phthalate	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Di-n-octyl phthalate	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Fluoranthene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Fluorene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Hexachlorobenzene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Hexachlorobutadiene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Hexachlorocyclopentadiene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Hexachloroethane	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-5

Lab Sample ID: 480-105374-4

Date Collected: 09/01/16 11:45

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Isophorone	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Naphthalene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Nitrobenzene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
N-Nitrosodi-n-propylamine	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
N-Nitrosodiphenylamine	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Pentachlorophenol	ND		9.6		ug/L		09/07/16 14:25	09/08/16 17:32	1
Phenanthrene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Phenol	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1
Pyrene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 17:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	125		52 - 132	09/07/16 14:25	09/08/16 17:32	1
2-Fluorobiphenyl	107		48 - 120	09/07/16 14:25	09/08/16 17:32	1
2-Fluorophenol (Surr)	78		20 - 120	09/07/16 14:25	09/08/16 17:32	1
Nitrobenzene-d5 (Surr)	112		46 - 120	09/07/16 14:25	09/08/16 17:32	1
Phenol-d5 (Surr)	51		16 - 120	09/07/16 14:25	09/08/16 17:32	1
p-Terphenyl-d14 (Surr)	129		67 - 150	09/07/16 14:25	09/08/16 17:32	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.49		ug/L		09/07/16 07:29	09/09/16 02:57	1
PCB-1221	ND		0.49		ug/L		09/07/16 07:29	09/09/16 02:57	1
PCB-1232	ND		0.49		ug/L		09/07/16 07:29	09/09/16 02:57	1
PCB-1242	ND		0.49		ug/L		09/07/16 07:29	09/09/16 02:57	1
PCB-1248	ND		0.49		ug/L		09/07/16 07:29	09/09/16 02:57	1
PCB-1254	ND		0.49		ug/L		09/07/16 07:29	09/09/16 02:57	1
PCB-1260	ND		0.49		ug/L		09/07/16 07:29	09/09/16 02:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		39 - 121	09/07/16 07:29	09/09/16 02:57	1
DCB Decachlorobiphenyl	64		19 - 120	09/07/16 07:29	09/09/16 02:57	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.71		0.20		mg/L		09/02/16 09:00	09/06/16 16:00	1
Antimony	ND		0.020		mg/L		09/02/16 09:00	09/06/16 16:00	1
Arsenic	0.022		0.015		mg/L		09/02/16 09:00	09/06/16 16:00	1
Barium	0.091		0.0020		mg/L		09/02/16 09:00	09/06/16 16:00	1
Beryllium	ND		0.0020		mg/L		09/02/16 09:00	09/06/16 16:00	1
Cadmium	ND		0.0020		mg/L		09/02/16 09:00	09/06/16 16:00	1
Calcium	112		0.50		mg/L		09/02/16 09:00	09/06/16 16:00	1
Chromium	ND		0.0040		mg/L		09/02/16 09:00	09/06/16 16:00	1
Cobalt	ND		0.0040		mg/L		09/02/16 09:00	09/06/16 16:00	1
Copper	ND		0.010		mg/L		09/02/16 09:00	09/06/16 16:00	1
Iron	3.6		0.050		mg/L		09/02/16 09:00	09/06/16 16:00	1
Lead	ND		0.010		mg/L		09/02/16 09:00	09/06/16 16:00	1
Magnesium	28.5		0.20		mg/L		09/02/16 09:00	09/06/16 16:00	1
Manganese	0.069		0.0030		mg/L		09/02/16 09:00	09/06/16 16:00	1
Nickel	ND		0.010		mg/L		09/02/16 09:00	09/06/16 16:00	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-5

Lab Sample ID: 480-105374-4

Date Collected: 09/01/16 11:45

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	4.0		0.50		mg/L		09/02/16 09:00	09/06/16 16:00	1
Selenium	ND		0.025		mg/L		09/02/16 09:00	09/06/16 16:00	1
Silver	ND		0.0060		mg/L		09/02/16 09:00	09/06/16 16:00	1
Sodium	319		1.0		mg/L		09/02/16 09:00	09/06/16 16:00	1
Thallium	ND		0.020		mg/L		09/02/16 09:00	09/06/16 16:00	1
Vanadium	ND		0.0050		mg/L		09/02/16 09:00	09/06/16 16:00	1
Zinc	ND		0.010		mg/L		09/02/16 09:00	09/06/16 16:00	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		09/02/16 09:50	09/02/16 15:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010		mg/L			09/02/16 08:20	1
Cyanide, Total	ND		0.010		mg/L		09/07/16 16:25	09/08/16 10:03	1

Client Sample ID: MW-8

Lab Sample ID: 480-105374-5

Date Collected: 09/01/16 13:10

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			09/03/16 03:42	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/03/16 03:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			09/03/16 03:42	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/03/16 03:42	1
1,1-Dichloroethane	ND		1.0		ug/L			09/03/16 03:42	1
1,1-Dichloroethene	ND		1.0		ug/L			09/03/16 03:42	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/03/16 03:42	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/03/16 03:42	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			09/03/16 03:42	1
1,2-Dibromoethane	ND		1.0		ug/L			09/03/16 03:42	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/03/16 03:42	1
1,2-Dichloroethane	ND		1.0		ug/L			09/03/16 03:42	1
1,2-Dichloropropane	ND		1.0		ug/L			09/03/16 03:42	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/03/16 03:42	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/03/16 03:42	1
1,4-Dichlorobenzene	ND		1.0		ug/L			09/03/16 03:42	1
2-Butanone (MEK)	ND		10		ug/L			09/03/16 03:42	1
2-Hexanone	ND		5.0		ug/L			09/03/16 03:42	1
4-Isopropyltoluene	ND		1.0		ug/L			09/03/16 03:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			09/03/16 03:42	1
Acetone	ND		10		ug/L			09/03/16 03:42	1
Benzene	ND		1.0		ug/L			09/03/16 03:42	1
Bromodichloromethane	ND		1.0		ug/L			09/03/16 03:42	1
Bromoform	ND		1.0		ug/L			09/03/16 03:42	1
Bromomethane	ND		1.0		ug/L			09/03/16 03:42	1
Carbon disulfide	ND		1.0		ug/L			09/03/16 03:42	1
Carbon tetrachloride	ND		1.0		ug/L			09/03/16 03:42	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-8

Lab Sample ID: 480-105374-5

Date Collected: 09/01/16 13:10

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0		ug/L			09/03/16 03:42	1
Chloroethane	ND		1.0		ug/L			09/03/16 03:42	1
Chloroform	ND		1.0		ug/L			09/03/16 03:42	1
Chloromethane	ND		1.0		ug/L			09/03/16 03:42	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/03/16 03:42	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/03/16 03:42	1
Cyclohexane	ND		1.0		ug/L			09/03/16 03:42	1
Dibromochloromethane	ND		1.0		ug/L			09/03/16 03:42	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/03/16 03:42	1
Ethylbenzene	ND		1.0		ug/L			09/03/16 03:42	1
Isopropylbenzene	ND		1.0		ug/L			09/03/16 03:42	1
Methyl acetate	ND		2.5		ug/L			09/03/16 03:42	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/03/16 03:42	1
Methylcyclohexane	ND		1.0		ug/L			09/03/16 03:42	1
Methylene Chloride	ND		1.0		ug/L			09/03/16 03:42	1
Naphthalene	ND		1.0		ug/L			09/03/16 03:42	1
n-Butylbenzene	ND		1.0		ug/L			09/03/16 03:42	1
n-Propylbenzene	ND		1.0		ug/L			09/03/16 03:42	1
sec-Butylbenzene	ND		1.0		ug/L			09/03/16 03:42	1
Styrene	ND		1.0		ug/L			09/03/16 03:42	1
tert-Butylbenzene	ND		1.0		ug/L			09/03/16 03:42	1
Tetrachloroethene	ND		1.0		ug/L			09/03/16 03:42	1
Toluene	ND		1.0		ug/L			09/03/16 03:42	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			09/03/16 03:42	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/03/16 03:42	1
Trichloroethene	ND		1.0		ug/L			09/03/16 03:42	1
Trichlorofluoromethane	ND		1.0		ug/L			09/03/16 03:42	1
Vinyl chloride	ND		1.0		ug/L			09/03/16 03:42	1
Xylenes, Total	ND		2.0		ug/L			09/03/16 03:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		77 - 120					09/03/16 03:42	1
4-Bromofluorobenzene (Surr)	102		73 - 120					09/03/16 03:42	1
Dibromofluoromethane (Surr)	107		75 - 123					09/03/16 03:42	1
Toluene-d8 (Surr)	99		80 - 120					09/03/16 03:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
2,4,6-Trichlorophenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
2,4-Dichlorophenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
2,4-Dimethylphenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
2,4-Dinitrophenol	ND		9.8		ug/L		09/07/16 14:25	09/08/16 18:01	1
2,4-Dinitrotoluene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
2,6-Dinitrotoluene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
2-Chloronaphthalene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
2-Chlorophenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
2-Methylnaphthalene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
2-Methylphenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
2-Nitroaniline	ND		9.8		ug/L		09/07/16 14:25	09/08/16 18:01	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-8

Lab Sample ID: 480-105374-5

Date Collected: 09/01/16 13:10

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
3,3'-Dichlorobenzidine	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
3-Nitroaniline	ND		9.8		ug/L		09/07/16 14:25	09/08/16 18:01	1
4,6-Dinitro-2-methylphenol	ND		9.8		ug/L		09/07/16 14:25	09/08/16 18:01	1
4-Bromophenyl phenyl ether	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
4-Chloro-3-methylphenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
4-Chloroaniline	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
4-Chlorophenyl phenyl ether	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
4-Methylphenol	ND		9.8		ug/L		09/07/16 14:25	09/08/16 18:01	1
4-Nitroaniline	ND		9.8		ug/L		09/07/16 14:25	09/08/16 18:01	1
4-Nitrophenol	ND		9.8		ug/L		09/07/16 14:25	09/08/16 18:01	1
Acenaphthene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Acenaphthylene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Acetophenone	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Anthracene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Atrazine	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Benzaldehyde	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Benzo[a]anthracene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Benzo[a]pyrene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Benzo[b]fluoranthene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Benzo[g,h,i]perylene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Benzo[k]fluoranthene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Biphenyl	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
bis (2-chloroisopropyl) ether	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Bis(2-chloroethoxy)methane	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Bis(2-chloroethyl)ether	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Bis(2-ethylhexyl) phthalate	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Butyl benzyl phthalate	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Caprolactam	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Carbazole	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Chrysene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Dibenz(a,h)anthracene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Dibenzofuran	ND		9.8		ug/L		09/07/16 14:25	09/08/16 18:01	1
Diethyl phthalate	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Dimethyl phthalate	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Di-n-butyl phthalate	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Di-n-octyl phthalate	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Fluoranthene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Fluorene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Hexachlorobenzene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Hexachlorobutadiene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Hexachlorocyclopentadiene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Hexachloroethane	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Indeno[1,2,3-cd]pyrene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Isophorone	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Naphthalene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Nitrobenzene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
N-Nitrosodi-n-propylamine	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
N-Nitrosodiphenylamine	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-8

Lab Sample ID: 480-105374-5

Date Collected: 09/01/16 13:10

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		9.8		ug/L		09/07/16 14:25	09/08/16 18:01	1
Phenanthrene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Phenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1
Pyrene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	117		52 - 132	09/07/16 14:25	09/08/16 18:01	1
2-Fluorobiphenyl	93		48 - 120	09/07/16 14:25	09/08/16 18:01	1
2-Fluorophenol (Surr)	65		20 - 120	09/07/16 14:25	09/08/16 18:01	1
Nitrobenzene-d5 (Surr)	92		46 - 120	09/07/16 14:25	09/08/16 18:01	1
Phenol-d5 (Surr)	47		16 - 120	09/07/16 14:25	09/08/16 18:01	1
p-Terphenyl-d14 (Surr)	112		67 - 150	09/07/16 14:25	09/08/16 18:01	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:13	1
PCB-1221	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:13	1
PCB-1232	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:13	1
PCB-1242	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:13	1
PCB-1248	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:13	1
PCB-1254	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:13	1
PCB-1260	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		39 - 121	09/07/16 07:29	09/09/16 03:13	1
DCB Decachlorobiphenyl	53		19 - 120	09/07/16 07:29	09/09/16 03:13	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	1.0		0.20		mg/L		09/02/16 09:00	09/06/16 16:04	1
Antimony	ND		0.020		mg/L		09/02/16 09:00	09/06/16 16:04	1
Arsenic	ND		0.015		mg/L		09/02/16 09:00	09/06/16 16:04	1
Barium	0.27		0.0020		mg/L		09/02/16 09:00	09/06/16 16:04	1
Beryllium	ND		0.0020		mg/L		09/02/16 09:00	09/06/16 16:04	1
Cadmium	ND		0.0020		mg/L		09/02/16 09:00	09/06/16 16:04	1
Calcium	215		0.50		mg/L		09/02/16 09:00	09/06/16 16:04	1
Chromium	ND		0.0040		mg/L		09/02/16 09:00	09/06/16 16:04	1
Cobalt	ND		0.0040		mg/L		09/02/16 09:00	09/06/16 16:04	1
Copper	ND		0.010		mg/L		09/02/16 09:00	09/06/16 16:04	1
Iron	7.6		0.050		mg/L		09/02/16 09:00	09/06/16 16:04	1
Lead	ND		0.010		mg/L		09/02/16 09:00	09/06/16 16:04	1
Magnesium	51.2		0.20		mg/L		09/02/16 09:00	09/06/16 16:04	1
Manganese	0.21		0.0030		mg/L		09/02/16 09:00	09/06/16 16:04	1
Nickel	ND		0.010		mg/L		09/02/16 09:00	09/06/16 16:04	1
Potassium	2.6		0.50		mg/L		09/02/16 09:00	09/06/16 16:04	1
Selenium	ND		0.025		mg/L		09/02/16 09:00	09/06/16 16:04	1
Silver	ND		0.0060		mg/L		09/02/16 09:00	09/06/16 16:04	1
Sodium	94.5		1.0		mg/L		09/02/16 09:00	09/06/16 16:04	1
Thallium	ND		0.020		mg/L		09/02/16 09:00	09/06/16 16:04	1
Vanadium	ND		0.0050		mg/L		09/02/16 09:00	09/06/16 16:04	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-8

Date Collected: 09/01/16 13:10

Date Received: 09/02/16 01:30

Lab Sample ID: 480-105374-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010		mg/L		09/02/16 09:00	09/06/16 16:04	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		09/02/16 09:50	09/02/16 15:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010		mg/L			09/02/16 08:20	1
Cyanide, Total	ND		0.010		mg/L		09/02/16 18:45	09/05/16 10:05	1

Client Sample ID: MW-4

Date Collected: 09/01/16 14:40

Date Received: 09/02/16 01:30

Lab Sample ID: 480-105374-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			09/03/16 04:05	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/03/16 04:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			09/03/16 04:05	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/03/16 04:05	1
1,1-Dichloroethane	ND		1.0		ug/L			09/03/16 04:05	1
1,1-Dichloroethene	ND		1.0		ug/L			09/03/16 04:05	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/03/16 04:05	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/03/16 04:05	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			09/03/16 04:05	1
1,2-Dibromoethane	ND		1.0		ug/L			09/03/16 04:05	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/03/16 04:05	1
1,2-Dichloroethane	ND		1.0		ug/L			09/03/16 04:05	1
1,2-Dichloropropane	ND		1.0		ug/L			09/03/16 04:05	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/03/16 04:05	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/03/16 04:05	1
1,4-Dichlorobenzene	ND		1.0		ug/L			09/03/16 04:05	1
2-Butanone (MEK)	ND		10		ug/L			09/03/16 04:05	1
2-Hexanone	ND		5.0		ug/L			09/03/16 04:05	1
4-Isopropyltoluene	ND		1.0		ug/L			09/03/16 04:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			09/03/16 04:05	1
Acetone	ND		10		ug/L			09/03/16 04:05	1
Benzene	ND		1.0		ug/L			09/03/16 04:05	1
Bromodichloromethane	ND		1.0		ug/L			09/03/16 04:05	1
Bromoform	ND		1.0		ug/L			09/03/16 04:05	1
Bromomethane	ND		1.0		ug/L			09/03/16 04:05	1
Carbon disulfide	ND		1.0		ug/L			09/03/16 04:05	1
Carbon tetrachloride	ND		1.0		ug/L			09/03/16 04:05	1
Chlorobenzene	ND		1.0		ug/L			09/03/16 04:05	1
Chloroethane	ND		1.0		ug/L			09/03/16 04:05	1
Chloroform	ND		1.0		ug/L			09/03/16 04:05	1
Chloromethane	ND		1.0		ug/L			09/03/16 04:05	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/03/16 04:05	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/03/16 04:05	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-4

Lab Sample ID: 480-105374-6

Date Collected: 09/01/16 14:40

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		1.0		ug/L			09/03/16 04:05	1
Dibromochloromethane	ND		1.0		ug/L			09/03/16 04:05	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/03/16 04:05	1
Ethylbenzene	ND		1.0		ug/L			09/03/16 04:05	1
Isopropylbenzene	ND		1.0		ug/L			09/03/16 04:05	1
Methyl acetate	ND		2.5		ug/L			09/03/16 04:05	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/03/16 04:05	1
Methylcyclohexane	ND		1.0		ug/L			09/03/16 04:05	1
Methylene Chloride	ND		1.0		ug/L			09/03/16 04:05	1
Naphthalene	ND		1.0		ug/L			09/03/16 04:05	1
n-Butylbenzene	ND		1.0		ug/L			09/03/16 04:05	1
n-Propylbenzene	ND		1.0		ug/L			09/03/16 04:05	1
sec-Butylbenzene	ND		1.0		ug/L			09/03/16 04:05	1
Styrene	ND		1.0		ug/L			09/03/16 04:05	1
tert-Butylbenzene	ND		1.0		ug/L			09/03/16 04:05	1
Tetrachloroethene	ND		1.0		ug/L			09/03/16 04:05	1
Toluene	ND		1.0		ug/L			09/03/16 04:05	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			09/03/16 04:05	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/03/16 04:05	1
Trichloroethene	ND		1.0		ug/L			09/03/16 04:05	1
Trichlorofluoromethane	ND		1.0		ug/L			09/03/16 04:05	1
Vinyl chloride	ND		1.0		ug/L			09/03/16 04:05	1
Xylenes, Total	ND		2.0		ug/L			09/03/16 04:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		77 - 120		09/03/16 04:05	1
4-Bromofluorobenzene (Surr)	102		73 - 120		09/03/16 04:05	1
Dibromofluoromethane (Surr)	105		75 - 123		09/03/16 04:05	1
Toluene-d8 (Surr)	100		80 - 120		09/03/16 04:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
2,4,6-Trichlorophenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
2,4-Dichlorophenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
2,4-Dimethylphenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
2,4-Dinitrophenol	ND		9.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
2,4-Dinitrotoluene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
2,6-Dinitrotoluene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
2-Chloronaphthalene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
2-Chlorophenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
2-Methylnaphthalene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
2-Methylphenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
2-Nitroaniline	ND		9.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
2-Nitrophenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
3,3'-Dichlorobenzidine	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
3-Nitroaniline	ND		9.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
4,6-Dinitro-2-methylphenol	ND		9.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
4-Bromophenyl phenyl ether	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
4-Chloro-3-methylphenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-4

Lab Sample ID: 480-105374-6

Date Collected: 09/01/16 14:40

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
4-Chlorophenyl phenyl ether	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
4-Methylphenol	ND		9.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
4-Nitroaniline	ND		9.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
4-Nitrophenol	ND		9.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Acenaphthene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Acenaphthylene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Acetophenone	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Anthracene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Atrazine	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Benzaldehyde	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Benzo[a]anthracene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Benzo[a]pyrene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Benzo[b]fluoranthene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Benzo[g,h,i]perylene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Benzo[k]fluoranthene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Biphenyl	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
bis (2-chloroisopropyl) ether	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Bis(2-chloroethoxy)methane	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Bis(2-chloroethyl)ether	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Bis(2-ethylhexyl) phthalate	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Butyl benzyl phthalate	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Caprolactam	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Carbazole	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Chrysene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Dibenz(a,h)anthracene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Dibenzofuran	ND		9.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Diethyl phthalate	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Dimethyl phthalate	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Di-n-butyl phthalate	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Di-n-octyl phthalate	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Fluoranthene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Fluorene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Hexachlorobenzene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Hexachlorobutadiene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Hexachlorocyclopentadiene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Hexachloroethane	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Indeno[1,2,3-cd]pyrene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Isophorone	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Naphthalene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Nitrobenzene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
N-Nitrosodi-n-propylamine	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
N-Nitrosodiphenylamine	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Pentachlorophenol	ND		9.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Phenanthrene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Phenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1
Pyrene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 18:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	132		52 - 132	09/07/16 14:25	09/08/16 18:31	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-4

Lab Sample ID: 480-105374-6

Date Collected: 09/01/16 14:40

Matrix: Water

Date Received: 09/02/16 01:30

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	95		48 - 120	09/07/16 14:25	09/08/16 18:31	1
2-Fluorophenol (Surr)	64		20 - 120	09/07/16 14:25	09/08/16 18:31	1
Nitrobenzene-d5 (Surr)	93		46 - 120	09/07/16 14:25	09/08/16 18:31	1
Phenol-d5 (Surr)	46		16 - 120	09/07/16 14:25	09/08/16 18:31	1
p-Terphenyl-d14 (Surr)	112		67 - 150	09/07/16 14:25	09/08/16 18:31	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:29	1
PCB-1221	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:29	1
PCB-1232	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:29	1
PCB-1242	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:29	1
PCB-1248	4.6		0.49		ug/L		09/07/16 07:29	09/09/16 03:29	1
PCB-1254	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:29	1
PCB-1260	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	67		39 - 121	09/07/16 07:29	09/09/16 03:29	1
DCB Decachlorobiphenyl	42		19 - 120	09/07/16 07:29	09/09/16 03:29	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.48		0.20		mg/L		09/02/16 09:00	09/06/16 16:08	1
Antimony	ND		0.020		mg/L		09/02/16 09:00	09/06/16 16:08	1
Arsenic	ND		0.015		mg/L		09/02/16 09:00	09/06/16 16:08	1
Barium	1.4		0.0020		mg/L		09/02/16 09:00	09/06/16 16:08	1
Beryllium	ND		0.0020		mg/L		09/02/16 09:00	09/06/16 16:08	1
Cadmium	ND		0.0020		mg/L		09/02/16 09:00	09/06/16 16:08	1
Calcium	205		0.50		mg/L		09/02/16 09:00	09/06/16 16:08	1
Chromium	0.0054		0.0040		mg/L		09/02/16 09:00	09/06/16 16:08	1
Cobalt	ND		0.0040		mg/L		09/02/16 09:00	09/06/16 16:08	1
Copper	0.034		0.010		mg/L		09/02/16 09:00	09/06/16 16:08	1
Iron	4.2		0.050		mg/L		09/02/16 09:00	09/06/16 16:08	1
Lead	ND		0.010		mg/L		09/02/16 09:00	09/06/16 16:08	1
Magnesium	32.5		0.20		mg/L		09/02/16 09:00	09/06/16 16:08	1
Manganese	0.50		0.0030		mg/L		09/02/16 09:00	09/06/16 16:08	1
Nickel	0.68		0.010		mg/L		09/02/16 09:00	09/06/16 16:08	1
Potassium	6.3		0.50		mg/L		09/02/16 09:00	09/06/16 16:08	1
Selenium	ND		0.025		mg/L		09/02/16 09:00	09/06/16 16:08	1
Silver	ND		0.0060		mg/L		09/02/16 09:00	09/06/16 16:08	1
Sodium	258		1.0		mg/L		09/02/16 09:00	09/06/16 16:08	1
Thallium	ND		0.020		mg/L		09/02/16 09:00	09/06/16 16:08	1
Vanadium	ND		0.0050		mg/L		09/02/16 09:00	09/06/16 16:08	1
Zinc	ND		0.010		mg/L		09/02/16 09:00	09/06/16 16:08	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		09/02/16 09:50	09/02/16 15:47	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-4

Date Collected: 09/01/16 14:40

Date Received: 09/02/16 01:30

Lab Sample ID: 480-105374-6

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010		mg/L			09/02/16 08:20	1
Cyanide, Total	ND		0.010		mg/L		09/02/16 18:45	09/05/16 10:02	1

Client Sample ID: MW-3

Date Collected: 09/01/16 15:40

Date Received: 09/02/16 01:30

Lab Sample ID: 480-105374-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			09/03/16 04:28	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/03/16 04:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			09/03/16 04:28	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/03/16 04:28	1
1,1-Dichloroethane	ND		1.0		ug/L			09/03/16 04:28	1
1,1-Dichloroethene	ND		1.0		ug/L			09/03/16 04:28	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/03/16 04:28	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/03/16 04:28	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			09/03/16 04:28	1
1,2-Dibromoethane	ND		1.0		ug/L			09/03/16 04:28	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/03/16 04:28	1
1,2-Dichloroethane	ND		1.0		ug/L			09/03/16 04:28	1
1,2-Dichloropropane	ND		1.0		ug/L			09/03/16 04:28	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/03/16 04:28	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/03/16 04:28	1
1,4-Dichlorobenzene	ND		1.0		ug/L			09/03/16 04:28	1
2-Butanone (MEK)	ND		10		ug/L			09/03/16 04:28	1
2-Hexanone	ND		5.0		ug/L			09/03/16 04:28	1
4-Isopropyltoluene	ND		1.0		ug/L			09/03/16 04:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			09/03/16 04:28	1
Acetone	ND		10		ug/L			09/03/16 04:28	1
Benzene	ND		1.0		ug/L			09/03/16 04:28	1
Bromodichloromethane	ND		1.0		ug/L			09/03/16 04:28	1
Bromoform	ND		1.0		ug/L			09/03/16 04:28	1
Bromomethane	ND		1.0		ug/L			09/03/16 04:28	1
Carbon disulfide	ND		1.0		ug/L			09/03/16 04:28	1
Carbon tetrachloride	ND		1.0		ug/L			09/03/16 04:28	1
Chlorobenzene	ND		1.0		ug/L			09/03/16 04:28	1
Chloroethane	ND		1.0		ug/L			09/03/16 04:28	1
Chloroform	ND		1.0		ug/L			09/03/16 04:28	1
Chloromethane	ND		1.0		ug/L			09/03/16 04:28	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/03/16 04:28	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/03/16 04:28	1
Cyclohexane	ND		1.0		ug/L			09/03/16 04:28	1
Dibromochloromethane	ND		1.0		ug/L			09/03/16 04:28	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/03/16 04:28	1
Ethylbenzene	ND		1.0		ug/L			09/03/16 04:28	1
Isopropylbenzene	ND		1.0		ug/L			09/03/16 04:28	1
Methyl acetate	ND		2.5		ug/L			09/03/16 04:28	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/03/16 04:28	1
Methylcyclohexane	ND		1.0		ug/L			09/03/16 04:28	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-3

Lab Sample ID: 480-105374-7

Date Collected: 09/01/16 15:40

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		1.0		ug/L			09/03/16 04:28	1
Naphthalene	ND		1.0		ug/L			09/03/16 04:28	1
n-Butylbenzene	ND		1.0		ug/L			09/03/16 04:28	1
n-Propylbenzene	ND		1.0		ug/L			09/03/16 04:28	1
sec-Butylbenzene	ND		1.0		ug/L			09/03/16 04:28	1
Styrene	ND		1.0		ug/L			09/03/16 04:28	1
tert-Butylbenzene	ND		1.0		ug/L			09/03/16 04:28	1
Tetrachloroethene	ND		1.0		ug/L			09/03/16 04:28	1
Toluene	ND		1.0		ug/L			09/03/16 04:28	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			09/03/16 04:28	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/03/16 04:28	1
Trichloroethene	ND		1.0		ug/L			09/03/16 04:28	1
Trichlorofluoromethane	ND		1.0		ug/L			09/03/16 04:28	1
Vinyl chloride	ND		1.0		ug/L			09/03/16 04:28	1
Xylenes, Total	ND		2.0		ug/L			09/03/16 04:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		77 - 120		09/03/16 04:28	1
4-Bromofluorobenzene (Surr)	104		73 - 120		09/03/16 04:28	1
Dibromofluoromethane (Surr)	104		75 - 123		09/03/16 04:28	1
Toluene-d8 (Surr)	101		80 - 120		09/03/16 04:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
2,4,6-Trichlorophenol	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
2,4-Dichlorophenol	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
2,4-Dimethylphenol	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
2,4-Dinitrophenol	ND		9.7		ug/L		09/07/16 14:25	09/08/16 19:00	1
2,4-Dinitrotoluene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
2,6-Dinitrotoluene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
2-Chloronaphthalene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
2-Chlorophenol	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
2-Methylnaphthalene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
2-Methylphenol	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
2-Nitroaniline	ND		9.7		ug/L		09/07/16 14:25	09/08/16 19:00	1
2-Nitrophenol	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
3,3'-Dichlorobenzidine	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
3-Nitroaniline	ND		9.7		ug/L		09/07/16 14:25	09/08/16 19:00	1
4,6-Dinitro-2-methylphenol	ND		9.7		ug/L		09/07/16 14:25	09/08/16 19:00	1
4-Bromophenyl phenyl ether	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
4-Chloro-3-methylphenol	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
4-Chloroaniline	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
4-Chlorophenyl phenyl ether	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
4-Methylphenol	ND		9.7		ug/L		09/07/16 14:25	09/08/16 19:00	1
4-Nitroaniline	ND		9.7		ug/L		09/07/16 14:25	09/08/16 19:00	1
4-Nitrophenol	ND		9.7		ug/L		09/07/16 14:25	09/08/16 19:00	1
Acenaphthene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Acenaphthylene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Acetophenone	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-3

Lab Sample ID: 480-105374-7

Date Collected: 09/01/16 15:40

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Atrazine	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Benzaldehyde	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Benzo[a]anthracene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Benzo[a]pyrene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Benzo[b]fluoranthene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Benzo[g,h,i]perylene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Benzo[k]fluoranthene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Biphenyl	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
bis (2-chloroisopropyl) ether	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Bis(2-chloroethoxy)methane	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Bis(2-chloroethyl)ether	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Bis(2-ethylhexyl) phthalate	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Butyl benzyl phthalate	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Caprolactam	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Carbazole	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Chrysene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Dibenz(a,h)anthracene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Dibenzofuran	ND		9.7		ug/L		09/07/16 14:25	09/08/16 19:00	1
Diethyl phthalate	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Dimethyl phthalate	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Di-n-butyl phthalate	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Di-n-octyl phthalate	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Fluoranthene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Fluorene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Hexachlorobenzene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Hexachlorobutadiene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Hexachlorocyclopentadiene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Hexachloroethane	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Indeno[1,2,3-cd]pyrene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Isophorone	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Naphthalene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Nitrobenzene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
N-Nitrosodi-n-propylamine	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
N-Nitrosodiphenylamine	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Pentachlorophenol	ND		9.7		ug/L		09/07/16 14:25	09/08/16 19:00	1
Phenanthrene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Phenol	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1
Pyrene	ND		4.8		ug/L		09/07/16 14:25	09/08/16 19:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	112		52 - 132	09/07/16 14:25	09/08/16 19:00	1
2-Fluorobiphenyl	85		48 - 120	09/07/16 14:25	09/08/16 19:00	1
2-Fluorophenol (Surr)	57		20 - 120	09/07/16 14:25	09/08/16 19:00	1
Nitrobenzene-d5 (Surr)	86		46 - 120	09/07/16 14:25	09/08/16 19:00	1
Phenol-d5 (Surr)	40		16 - 120	09/07/16 14:25	09/08/16 19:00	1
p-Terphenyl-d14 (Surr)	96		67 - 150	09/07/16 14:25	09/08/16 19:00	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-3

Lab Sample ID: 480-105374-7

Date Collected: 09/01/16 15:40

Matrix: Water

Date Received: 09/02/16 01:30

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:45	1
PCB-1221	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:45	1
PCB-1232	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:45	1
PCB-1242	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:45	1
PCB-1248	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:45	1
PCB-1254	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:45	1
PCB-1260	ND		0.49		ug/L		09/07/16 07:29	09/09/16 03:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	83		39 - 121	09/07/16 07:29	09/09/16 03:45	1
DCB Decachlorobiphenyl	62		19 - 120	09/07/16 07:29	09/09/16 03:45	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20		mg/L		09/02/16 09:00	09/06/16 16:11	1
Antimony	ND		0.020		mg/L		09/02/16 09:00	09/06/16 16:11	1
Arsenic	ND		0.015		mg/L		09/02/16 09:00	09/06/16 16:11	1
Barium	0.22		0.0020		mg/L		09/02/16 09:00	09/06/16 16:11	1
Beryllium	ND		0.0020		mg/L		09/02/16 09:00	09/06/16 16:11	1
Cadmium	ND		0.0020		mg/L		09/02/16 09:00	09/06/16 16:11	1
Calcium	219		0.50		mg/L		09/02/16 09:00	09/06/16 16:11	1
Chromium	ND		0.0040		mg/L		09/02/16 09:00	09/06/16 16:11	1
Cobalt	ND		0.0040		mg/L		09/02/16 09:00	09/06/16 16:11	1
Copper	ND		0.010		mg/L		09/02/16 09:00	09/06/16 16:11	1
Iron	7.4		0.050		mg/L		09/02/16 09:00	09/06/16 16:11	1
Lead	ND		0.010		mg/L		09/02/16 09:00	09/06/16 16:11	1
Magnesium	54.4		0.20		mg/L		09/02/16 09:00	09/06/16 16:11	1
Manganese	1.2		0.0030		mg/L		09/02/16 09:00	09/06/16 16:11	1
Nickel	0.16		0.010		mg/L		09/02/16 09:00	09/06/16 16:11	1
Potassium	3.4		0.50		mg/L		09/02/16 09:00	09/06/16 16:11	1
Selenium	ND		0.025		mg/L		09/02/16 09:00	09/06/16 16:11	1
Silver	ND		0.0060		mg/L		09/02/16 09:00	09/06/16 16:11	1
Sodium	211		1.0		mg/L		09/02/16 09:00	09/06/16 16:11	1
Thallium	ND		0.020		mg/L		09/02/16 09:00	09/06/16 16:11	1
Vanadium	ND		0.0050		mg/L		09/02/16 09:00	09/06/16 16:11	1
Zinc	ND		0.010		mg/L		09/02/16 09:00	09/06/16 16:11	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		09/02/16 09:50	09/02/16 15:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010		mg/L			09/02/16 08:20	1
Cyanide, Total	ND		0.010		mg/L		09/02/16 18:45	09/05/16 10:11	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: DUPLICATE

Lab Sample ID: 480-105374-8

Date Collected: 09/01/16 00:00

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			09/03/16 04:51	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/03/16 04:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			09/03/16 04:51	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/03/16 04:51	1
1,1-Dichloroethane	ND		1.0		ug/L			09/03/16 04:51	1
1,1-Dichloroethene	ND		1.0		ug/L			09/03/16 04:51	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/03/16 04:51	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/03/16 04:51	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			09/03/16 04:51	1
1,2-Dibromoethane	ND		1.0		ug/L			09/03/16 04:51	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/03/16 04:51	1
1,2-Dichloroethane	ND		1.0		ug/L			09/03/16 04:51	1
1,2-Dichloropropane	ND		1.0		ug/L			09/03/16 04:51	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/03/16 04:51	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/03/16 04:51	1
1,4-Dichlorobenzene	ND		1.0		ug/L			09/03/16 04:51	1
2-Butanone (MEK)	ND		10		ug/L			09/03/16 04:51	1
2-Hexanone	ND		5.0		ug/L			09/03/16 04:51	1
4-Isopropyltoluene	ND		1.0		ug/L			09/03/16 04:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			09/03/16 04:51	1
Acetone	ND		10		ug/L			09/03/16 04:51	1
Benzene	ND		1.0		ug/L			09/03/16 04:51	1
Bromodichloromethane	ND		1.0		ug/L			09/03/16 04:51	1
Bromoform	ND		1.0		ug/L			09/03/16 04:51	1
Bromomethane	ND		1.0		ug/L			09/03/16 04:51	1
Carbon disulfide	ND		1.0		ug/L			09/03/16 04:51	1
Carbon tetrachloride	ND		1.0		ug/L			09/03/16 04:51	1
Chlorobenzene	ND		1.0		ug/L			09/03/16 04:51	1
Chloroethane	ND		1.0		ug/L			09/03/16 04:51	1
Chloroform	ND		1.0		ug/L			09/03/16 04:51	1
Chloromethane	ND		1.0		ug/L			09/03/16 04:51	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/03/16 04:51	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/03/16 04:51	1
Cyclohexane	ND		1.0		ug/L			09/03/16 04:51	1
Dibromochloromethane	ND		1.0		ug/L			09/03/16 04:51	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/03/16 04:51	1
Ethylbenzene	ND		1.0		ug/L			09/03/16 04:51	1
Isopropylbenzene	ND		1.0		ug/L			09/03/16 04:51	1
Methyl acetate	ND		2.5		ug/L			09/03/16 04:51	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/03/16 04:51	1
Methylcyclohexane	ND		1.0		ug/L			09/03/16 04:51	1
Methylene Chloride	ND		1.0		ug/L			09/03/16 04:51	1
Naphthalene	ND		1.0		ug/L			09/03/16 04:51	1
n-Butylbenzene	ND		1.0		ug/L			09/03/16 04:51	1
n-Propylbenzene	ND		1.0		ug/L			09/03/16 04:51	1
sec-Butylbenzene	ND		1.0		ug/L			09/03/16 04:51	1
Styrene	ND		1.0		ug/L			09/03/16 04:51	1
tert-Butylbenzene	ND		1.0		ug/L			09/03/16 04:51	1
Tetrachloroethene	ND		1.0		ug/L			09/03/16 04:51	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: DUPLICATE

Lab Sample ID: 480-105374-8

Date Collected: 09/01/16 00:00

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.0		ug/L			09/03/16 04:51	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			09/03/16 04:51	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/03/16 04:51	1
Trichloroethene	ND		1.0		ug/L			09/03/16 04:51	1
Trichlorofluoromethane	ND		1.0		ug/L			09/03/16 04:51	1
Vinyl chloride	ND		1.0		ug/L			09/03/16 04:51	1
Xylenes, Total	ND		2.0		ug/L			09/03/16 04:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		77 - 120		09/03/16 04:51	1
4-Bromofluorobenzene (Surr)	103		73 - 120		09/03/16 04:51	1
Dibromofluoromethane (Surr)	107		75 - 123		09/03/16 04:51	1
Toluene-d8 (Surr)	100		80 - 120		09/03/16 04:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
2,4,6-Trichlorophenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
2,4-Dichlorophenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
2,4-Dimethylphenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
2,4-Dinitrophenol	ND		9.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
2,4-Dinitrotoluene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
2,6-Dinitrotoluene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
2-Chloronaphthalene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
2-Chlorophenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
2-Methylnaphthalene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
2-Methylphenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
2-Nitroaniline	ND		9.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
2-Nitrophenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
3,3'-Dichlorobenzidine	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
3-Nitroaniline	ND		9.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
4,6-Dinitro-2-methylphenol	ND		9.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
4-Bromophenyl phenyl ether	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
4-Chloro-3-methylphenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
4-Chloroaniline	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
4-Chlorophenyl phenyl ether	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
4-Methylphenol	ND		9.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
4-Nitroaniline	ND		9.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
4-Nitrophenol	ND		9.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Acenaphthene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Acenaphthylene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Acetophenone	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Anthracene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Atrazine	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Benzaldehyde	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Benzo[a]anthracene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Benzo[a]pyrene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Benzo[b]fluoranthene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Benzo[g,h,i]perylene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Benzo[k]fluoranthene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: DUPLICATE

Lab Sample ID: 480-105374-8

Date Collected: 09/01/16 00:00

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
bis (2-chloroisopropyl) ether	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Bis(2-chloroethoxy)methane	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Bis(2-chloroethyl)ether	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Bis(2-ethylhexyl) phthalate	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Butyl benzyl phthalate	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Caprolactam	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Carbazole	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Chrysene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Dibenz(a,h)anthracene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Dibenzofuran	ND		9.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Diethyl phthalate	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Dimethyl phthalate	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Di-n-butyl phthalate	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Di-n-octyl phthalate	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Fluoranthene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Fluorene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Hexachlorobenzene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Hexachlorobutadiene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Hexachlorocyclopentadiene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Hexachloroethane	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Indeno[1,2,3-cd]pyrene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Isophorone	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Naphthalene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Nitrobenzene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
N-Nitrosodi-n-propylamine	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
N-Nitrosodiphenylamine	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Pentachlorophenol	ND		9.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Phenanthrene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Phenol	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1
Pyrene	ND		4.9		ug/L		09/07/16 14:25	09/08/16 23:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	122		52 - 132	09/07/16 14:25	09/08/16 23:20	1
2-Fluorobiphenyl	102		48 - 120	09/07/16 14:25	09/08/16 23:20	1
2-Fluorophenol (Surr)	81		20 - 120	09/07/16 14:25	09/08/16 23:20	1
Nitrobenzene-d5 (Surr)	107		46 - 120	09/07/16 14:25	09/08/16 23:20	1
Phenol-d5 (Surr)	57		16 - 120	09/07/16 14:25	09/08/16 23:20	1
p-Terphenyl-d14 (Surr)	107		67 - 150	09/07/16 14:25	09/08/16 23:20	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50		ug/L		09/07/16 07:29	09/09/16 04:01	1
PCB-1221	ND		0.50		ug/L		09/07/16 07:29	09/09/16 04:01	1
PCB-1232	ND		0.50		ug/L		09/07/16 07:29	09/09/16 04:01	1
PCB-1242	ND		0.50		ug/L		09/07/16 07:29	09/09/16 04:01	1
PCB-1248	ND		0.50		ug/L		09/07/16 07:29	09/09/16 04:01	1
PCB-1254	ND		0.50		ug/L		09/07/16 07:29	09/09/16 04:01	1
PCB-1260	ND		0.50		ug/L		09/07/16 07:29	09/09/16 04:01	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: DUPLICATE

Lab Sample ID: 480-105374-8

Date Collected: 09/01/16 00:00

Matrix: Water

Date Received: 09/02/16 01:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		39 - 121	09/07/16 07:29	09/09/16 04:01	1
DCB Decachlorobiphenyl	52		19 - 120	09/07/16 07:29	09/09/16 04:01	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20		mg/L		09/02/16 09:00	09/06/16 16:15	1
Antimony	ND		0.020		mg/L		09/02/16 09:00	09/06/16 16:15	1
Arsenic	ND		0.015		mg/L		09/02/16 09:00	09/06/16 16:15	1
Barium	0.22		0.0020		mg/L		09/02/16 09:00	09/06/16 16:15	1
Beryllium	ND		0.0020		mg/L		09/02/16 09:00	09/06/16 16:15	1
Cadmium	ND		0.0020		mg/L		09/02/16 09:00	09/06/16 16:15	1
Calcium	219		0.50		mg/L		09/02/16 09:00	09/06/16 16:15	1
Chromium	ND		0.0040		mg/L		09/02/16 09:00	09/06/16 16:15	1
Cobalt	ND		0.0040		mg/L		09/02/16 09:00	09/06/16 16:15	1
Copper	ND		0.010		mg/L		09/02/16 09:00	09/06/16 16:15	1
Iron	7.4		0.050		mg/L		09/02/16 09:00	09/06/16 16:15	1
Lead	ND		0.010		mg/L		09/02/16 09:00	09/06/16 16:15	1
Magnesium	54.3		0.20		mg/L		09/02/16 09:00	09/06/16 16:15	1
Manganese	1.2		0.0030		mg/L		09/02/16 09:00	09/06/16 16:15	1
Nickel	0.16		0.010		mg/L		09/02/16 09:00	09/06/16 16:15	1
Potassium	3.5		0.50		mg/L		09/02/16 09:00	09/06/16 16:15	1
Selenium	ND		0.025		mg/L		09/02/16 09:00	09/06/16 16:15	1
Silver	ND		0.0060		mg/L		09/02/16 09:00	09/06/16 16:15	1
Sodium	213		1.0		mg/L		09/02/16 09:00	09/06/16 16:15	1
Thallium	ND		0.020		mg/L		09/02/16 09:00	09/06/16 16:15	1
Vanadium	ND		0.0050		mg/L		09/02/16 09:00	09/06/16 16:15	1
Zinc	ND		0.010		mg/L		09/02/16 09:00	09/06/16 16:15	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		09/02/16 09:50	09/02/16 15:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND	H	0.010		mg/L			09/02/16 08:20	1
Cyanide, Total	ND		0.010		mg/L		09/02/16 18:45	09/05/16 10:04	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-105374-9

Date Collected: 09/01/16 00:00

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			09/02/16 21:26	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/02/16 21:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			09/02/16 21:26	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/02/16 21:26	1
1,1-Dichloroethane	ND		1.0		ug/L			09/02/16 21:26	1
1,1-Dichloroethene	ND		1.0		ug/L			09/02/16 21:26	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/02/16 21:26	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/02/16 21:26	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-105374-9

Date Collected: 09/01/16 00:00

Matrix: Water

Date Received: 09/02/16 01:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			09/02/16 21:26	1
1,2-Dibromoethane	ND		1.0		ug/L			09/02/16 21:26	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/02/16 21:26	1
1,2-Dichloroethane	ND		1.0		ug/L			09/02/16 21:26	1
1,2-Dichloropropane	ND		1.0		ug/L			09/02/16 21:26	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/02/16 21:26	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/02/16 21:26	1
1,4-Dichlorobenzene	ND		1.0		ug/L			09/02/16 21:26	1
2-Butanone (MEK)	ND		10		ug/L			09/02/16 21:26	1
2-Hexanone	ND		5.0		ug/L			09/02/16 21:26	1
4-Isopropyltoluene	ND		1.0		ug/L			09/02/16 21:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			09/02/16 21:26	1
Acetone	ND		10		ug/L			09/02/16 21:26	1
Benzene	ND		1.0		ug/L			09/02/16 21:26	1
Bromodichloromethane	ND		1.0		ug/L			09/02/16 21:26	1
Bromoform	ND		1.0		ug/L			09/02/16 21:26	1
Bromomethane	ND		1.0		ug/L			09/02/16 21:26	1
Carbon disulfide	ND		1.0		ug/L			09/02/16 21:26	1
Carbon tetrachloride	ND		1.0		ug/L			09/02/16 21:26	1
Chlorobenzene	ND		1.0		ug/L			09/02/16 21:26	1
Chloroethane	ND		1.0		ug/L			09/02/16 21:26	1
Chloroform	ND		1.0		ug/L			09/02/16 21:26	1
Chloromethane	ND		1.0		ug/L			09/02/16 21:26	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/02/16 21:26	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/02/16 21:26	1
Cyclohexane	ND		1.0		ug/L			09/02/16 21:26	1
Dibromochloromethane	ND		1.0		ug/L			09/02/16 21:26	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/02/16 21:26	1
Ethylbenzene	ND		1.0		ug/L			09/02/16 21:26	1
Isopropylbenzene	ND		1.0		ug/L			09/02/16 21:26	1
Methyl acetate	ND		2.5		ug/L			09/02/16 21:26	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/02/16 21:26	1
Methylcyclohexane	ND		1.0		ug/L			09/02/16 21:26	1
Methylene Chloride	ND		1.0		ug/L			09/02/16 21:26	1
Naphthalene	ND		1.0		ug/L			09/02/16 21:26	1
n-Butylbenzene	ND		1.0		ug/L			09/02/16 21:26	1
n-Propylbenzene	ND		1.0		ug/L			09/02/16 21:26	1
sec-Butylbenzene	ND		1.0		ug/L			09/02/16 21:26	1
Styrene	ND		1.0		ug/L			09/02/16 21:26	1
tert-Butylbenzene	ND		1.0		ug/L			09/02/16 21:26	1
Tetrachloroethene	ND		1.0		ug/L			09/02/16 21:26	1
Toluene	ND		1.0		ug/L			09/02/16 21:26	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			09/02/16 21:26	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/02/16 21:26	1
Trichloroethene	ND		1.0		ug/L			09/02/16 21:26	1
Trichlorofluoromethane	ND		1.0		ug/L			09/02/16 21:26	1
Vinyl chloride	ND		1.0		ug/L			09/02/16 21:26	1
Xylenes, Total	ND		2.0		ug/L			09/02/16 21:26	1

TestAmerica Buffalo

Client Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-105374-9

Date Collected: 09/01/16 00:00

Matrix: Water

Date Received: 09/02/16 01:30

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	107		77 - 120		09/02/16 21:26	1
4-Bromofluorobenzene (Surr)	102		73 - 120		09/02/16 21:26	1
Dibromofluoromethane (Surr)	105		75 - 123		09/02/16 21:26	1
Toluene-d8 (Surr)	99		80 - 120		09/02/16 21:26	1

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (77-120)	BFB (73-120)	DBFM (75-123)	TOL (80-120)
480-105374-1	MW-1	104	105	106	100
480-105374-1 MS	MW-1MS	102	105	107	101
480-105374-1 MSD	MW-1MSD	106	105	105	103
480-105374-2	MW-7	105	101	109	102
480-105374-3	MW-2	100	101	104	102
480-105374-4	MW-5	98	104	103	103
480-105374-5	MW-8	106	102	107	99
480-105374-6	MW-4	105	102	105	100
480-105374-7	MW-3	106	104	104	101
480-105374-8	DUPLICATE	109	103	107	100
480-105374-9	TRIP BLANK	107	102	105	99
LCS 480-318890/5	Lab Control Sample	104	104	103	101
LCS 480-318895/5	Lab Control Sample	102	103	104	100
MB 480-318890/7	Method Blank	104	102	103	101
MB 480-318895/7	Method Blank	112	99	106	99

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (52-132)	FBP (48-120)	2FP (20-120)	NBZ (46-120)	PHL (16-120)	TPH (67-150)
480-105374-1	MW-1	95	78	55	80	39	96
480-105374-1 MS	MW-1MS	123	106	80	103	60	76
480-105374-1 MSD	MW-1MSD	124	99	75	98	57	77
480-105374-2	MW-7	118	89	66	92	46	104
480-105374-3	MW-2	107	91	66	94	47	107
480-105374-4	MW-5	125	107	78	112	51	129
480-105374-5	MW-8	117	93	65	92	47	112
480-105374-6	MW-4	132	95	64	93	46	112
480-105374-7	MW-3	112	85	57	86	40	96
480-105374-8	DUPLICATE	122	102	81	107	57	107
LCS 480-319263/2-A	Lab Control Sample	98	84	66	83	50	93
MB 480-319263/1-A	Method Blank	113	102	75	106	52	124

Surrogate Legend

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

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)

TPH = p-Terphenyl-d14 (Surr)

TestAmerica Buffalo

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX1 (39-121)	DCB1 (19-120)
480-105374-1	MW-1	81	59
480-105374-1 MS	MW-1MS	81	46
480-105374-1 MSD	MW-1MSD	71	40
480-105374-2	MW-7	72	51
480-105374-3	MW-2	75	61
480-105374-4	MW-5	76	64
480-105374-5	MW-8	76	53
480-105374-6	MW-4	67	42
480-105374-7	MW-3	83	62
480-105374-8	DUPLICATE	76	52
LCS 480-319150/2-A	Lab Control Sample	69	31
MB 480-319150/1-A	Method Blank	66	53

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

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

Lab Sample ID: MB 480-318890/7

Matrix: Water

Analysis Batch: 318890

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			09/02/16 21:03	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/02/16 21:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			09/02/16 21:03	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/02/16 21:03	1
1,1-Dichloroethane	ND		1.0		ug/L			09/02/16 21:03	1
1,1-Dichloroethene	ND		1.0		ug/L			09/02/16 21:03	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/02/16 21:03	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/02/16 21:03	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			09/02/16 21:03	1
1,2-Dibromoethane	ND		1.0		ug/L			09/02/16 21:03	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/02/16 21:03	1
1,2-Dichloroethane	ND		1.0		ug/L			09/02/16 21:03	1
1,2-Dichloropropane	ND		1.0		ug/L			09/02/16 21:03	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/02/16 21:03	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/02/16 21:03	1
1,4-Dichlorobenzene	ND		1.0		ug/L			09/02/16 21:03	1
2-Butanone (MEK)	ND		10		ug/L			09/02/16 21:03	1
2-Hexanone	ND		5.0		ug/L			09/02/16 21:03	1
4-Isopropyltoluene	ND		1.0		ug/L			09/02/16 21:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			09/02/16 21:03	1
Acetone	ND		10		ug/L			09/02/16 21:03	1
Benzene	ND		1.0		ug/L			09/02/16 21:03	1
Bromodichloromethane	ND		1.0		ug/L			09/02/16 21:03	1
Bromoform	ND		1.0		ug/L			09/02/16 21:03	1
Bromomethane	ND		1.0		ug/L			09/02/16 21:03	1
Carbon disulfide	ND		1.0		ug/L			09/02/16 21:03	1
Carbon tetrachloride	ND		1.0		ug/L			09/02/16 21:03	1
Chlorobenzene	ND		1.0		ug/L			09/02/16 21:03	1
Chloroethane	ND		1.0		ug/L			09/02/16 21:03	1
Chloroform	ND		1.0		ug/L			09/02/16 21:03	1
Chloromethane	ND		1.0		ug/L			09/02/16 21:03	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/02/16 21:03	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/02/16 21:03	1
Cyclohexane	ND		1.0		ug/L			09/02/16 21:03	1
Dibromochloromethane	ND		1.0		ug/L			09/02/16 21:03	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/02/16 21:03	1
Ethylbenzene	ND		1.0		ug/L			09/02/16 21:03	1
Isopropylbenzene	ND		1.0		ug/L			09/02/16 21:03	1
Methyl acetate	ND		2.5		ug/L			09/02/16 21:03	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/02/16 21:03	1
Methylcyclohexane	ND		1.0		ug/L			09/02/16 21:03	1
Methylene Chloride	ND		1.0		ug/L			09/02/16 21:03	1
Naphthalene	ND		1.0		ug/L			09/02/16 21:03	1
n-Butylbenzene	ND		1.0		ug/L			09/02/16 21:03	1
n-Propylbenzene	ND		1.0		ug/L			09/02/16 21:03	1
sec-Butylbenzene	ND		1.0		ug/L			09/02/16 21:03	1
Styrene	ND		1.0		ug/L			09/02/16 21:03	1
tert-Butylbenzene	ND		1.0		ug/L			09/02/16 21:03	1

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

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

Lab Sample ID: MB 480-318890/7

Matrix: Water

Analysis Batch: 318890

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0		ug/L			09/02/16 21:03	1
Toluene	ND		1.0		ug/L			09/02/16 21:03	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			09/02/16 21:03	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/02/16 21:03	1
Trichloroethene	ND		1.0		ug/L			09/02/16 21:03	1
Trichlorofluoromethane	ND		1.0		ug/L			09/02/16 21:03	1
Vinyl chloride	ND		1.0		ug/L			09/02/16 21:03	1
Xylenes, Total	ND		2.0		ug/L			09/02/16 21:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		09/02/16 21:03	1
4-Bromofluorobenzene (Surr)	102		73 - 120		09/02/16 21:03	1
Dibromofluoromethane (Surr)	103		75 - 123		09/02/16 21:03	1
Toluene-d8 (Surr)	101		80 - 120		09/02/16 21:03	1

Lab Sample ID: LCS 480-318890/5

Matrix: Water

Analysis Batch: 318890

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	26.8		ug/L		107	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.4		ug/L		97	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.3		ug/L		109	61 - 148
1,1,2-Trichloroethane	25.0	26.7		ug/L		107	76 - 122
1,1-Dichloroethane	25.0	25.7		ug/L		103	77 - 120
1,1-Dichloroethene	25.0	25.0		ug/L		100	66 - 127
1,2,4-Trichlorobenzene	25.0	22.7		ug/L		91	79 - 122
1,2,4-Trimethylbenzene	25.0	24.1		ug/L		97	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	21.1		ug/L		85	56 - 134
1,2-Dibromoethane	25.0	25.9		ug/L		104	77 - 120
1,2-Dichlorobenzene	25.0	24.4		ug/L		98	80 - 124
1,2-Dichloroethane	25.0	25.0		ug/L		100	75 - 120
1,2-Dichloropropane	25.0	24.1		ug/L		97	76 - 120
1,3,5-Trimethylbenzene	25.0	24.3		ug/L		97	77 - 121
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	77 - 120
1,4-Dichlorobenzene	25.0	24.2		ug/L		97	80 - 120
2-Butanone (MEK)	125	143		ug/L		114	57 - 140
2-Hexanone	125	144		ug/L		115	65 - 127
4-Isopropyltoluene	25.0	23.9		ug/L		96	73 - 120
4-Methyl-2-pentanone (MIBK)	125	135		ug/L		108	71 - 125
Acetone	125	152		ug/L		121	56 - 142
Benzene	25.0	25.4		ug/L		102	71 - 124
Bromodichloromethane	25.0	24.2		ug/L		97	80 - 122
Bromoform	25.0	24.4		ug/L		98	61 - 132
Bromomethane	25.0	23.7		ug/L		95	55 - 144
Carbon disulfide	25.0	29.0		ug/L		116	59 - 134
Carbon tetrachloride	25.0	27.2		ug/L		109	72 - 134

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

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

Lab Sample ID: LCS 480-318890/5

Matrix: Water

Analysis Batch: 318890

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	25.0	26.5		ug/L		106	80 - 120
Chloroethane	25.0	21.8		ug/L		87	69 - 136
Chloroform	25.0	25.3		ug/L		101	73 - 127
Chloromethane	25.0	25.8		ug/L		103	68 - 124
cis-1,2-Dichloroethene	25.0	24.8		ug/L		99	74 - 124
cis-1,3-Dichloropropene	25.0	23.8		ug/L		95	74 - 124
Cyclohexane	25.0	27.4		ug/L		109	59 - 135
Dibromochloromethane	25.0	25.3		ug/L		101	75 - 125
Dichlorodifluoromethane	25.0	24.5		ug/L		98	59 - 135
Ethylbenzene	25.0	26.0		ug/L		104	77 - 123
Isopropylbenzene	25.0	24.7		ug/L		99	77 - 122
Methyl acetate	125	133		ug/L		106	74 - 133
Methyl tert-butyl ether	25.0	24.5		ug/L		98	77 - 120
Methylcyclohexane	25.0	27.6		ug/L		110	68 - 134
Methylene Chloride	25.0	27.4		ug/L		110	75 - 124
Naphthalene	25.0	23.3		ug/L		93	66 - 125
n-Butylbenzene	25.0	23.8		ug/L		95	71 - 128
n-Propylbenzene	25.0	24.4		ug/L		97	75 - 127
sec-Butylbenzene	25.0	24.7		ug/L		99	74 - 127
Styrene	25.0	25.3		ug/L		101	80 - 120
tert-Butylbenzene	25.0	24.3		ug/L		97	75 - 123
Tetrachloroethene	25.0	26.5		ug/L		106	74 - 122
Toluene	25.0	25.6		ug/L		102	80 - 122
trans-1,2-Dichloroethene	25.0	24.8		ug/L		99	73 - 127
trans-1,3-Dichloropropene	25.0	24.4		ug/L		98	80 - 120
Trichloroethene	25.0	24.8		ug/L		99	74 - 123
Trichlorofluoromethane	25.0	28.6		ug/L		114	62 - 150
Vinyl chloride	25.0	25.0		ug/L		100	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		77 - 120
4-Bromofluorobenzene (Surr)	104		73 - 120
Dibromofluoromethane (Surr)	103		75 - 123
Toluene-d8 (Surr)	101		80 - 120

Lab Sample ID: 480-105374-1 MS

Matrix: Water

Analysis Batch: 318890

Client Sample ID: MW-1MS

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		25.0	23.5		ug/L		94	73 - 126
1,1,1,2,2-Tetrachloroethane	ND		25.0	22.1		ug/L		88	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	22.1		ug/L		88	61 - 148
1,1,2-Trichloroethane	ND		25.0	24.0		ug/L		96	76 - 122
1,1-Dichloroethane	ND		25.0	23.7		ug/L		95	77 - 120
1,1-Dichloroethene	ND		25.0	21.7		ug/L		87	66 - 127
1,2,4-Trichlorobenzene	ND		25.0	22.4		ug/L		90	79 - 122

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

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

Lab Sample ID: 480-105374-1 MS

Matrix: Water

Analysis Batch: 318890

Client Sample ID: MW-1MS

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	ND		25.0	21.7		ug/L		87	76 - 121
1,2-Dibromo-3-Chloropropane	ND		25.0	18.6		ug/L		74	56 - 134
1,2-Dibromoethane	ND		25.0	23.3		ug/L		93	77 - 120
1,2-Dichlorobenzene	ND		25.0	22.8		ug/L		91	80 - 124
1,2-Dichloroethane	ND		25.0	23.6		ug/L		95	75 - 120
1,2-Dichloropropane	ND		25.0	23.2		ug/L		93	76 - 120
1,3,5-Trimethylbenzene	ND		25.0	21.4		ug/L		86	77 - 121
1,3-Dichlorobenzene	ND		25.0	22.5		ug/L		90	77 - 120
1,4-Dichlorobenzene	ND		25.0	22.6		ug/L		90	78 - 124
2-Butanone (MEK)	ND		125	121		ug/L		97	57 - 140
2-Hexanone	ND		125	123		ug/L		98	65 - 127
4-Isopropyltoluene	ND		25.0	21.6		ug/L		86	73 - 120
4-Methyl-2-pentanone (MIBK)	ND		125	119		ug/L		95	71 - 125
Acetone	ND		125	121		ug/L		97	56 - 142
Benzene	ND		25.0	23.2		ug/L		93	71 - 124
Bromodichloromethane	ND		25.0	23.3		ug/L		93	80 - 122
Bromoform	ND		25.0	22.9		ug/L		92	61 - 132
Bromomethane	ND		25.0	23.3		ug/L		93	55 - 144
Carbon disulfide	ND		25.0	22.9		ug/L		91	59 - 134
Carbon tetrachloride	ND		25.0	22.0		ug/L		88	72 - 134
Chlorobenzene	ND		25.0	24.4		ug/L		98	80 - 120
Chloroethane	ND		25.0	22.4		ug/L		89	69 - 136
Chloroform	ND		25.0	23.2		ug/L		93	73 - 127
Chloromethane	ND		25.0	25.2		ug/L		101	68 - 124
cis-1,2-Dichloroethene	ND		25.0	22.7		ug/L		91	74 - 124
cis-1,3-Dichloropropene	ND		25.0	21.3		ug/L		85	74 - 124
Cyclohexane	ND		25.0	20.8		ug/L		83	59 - 135
Dibromochloromethane	ND		25.0	23.0		ug/L		92	75 - 125
Dichlorodifluoromethane	ND		25.0	19.7		ug/L		79	59 - 135
Ethylbenzene	ND		25.0	23.0		ug/L		92	77 - 123
Isopropylbenzene	ND		25.0	21.2		ug/L		85	77 - 122
Methyl acetate	ND		125	117		ug/L		94	74 - 133
Methyl tert-butyl ether	ND		25.0	22.8		ug/L		90	77 - 120
Methylcyclohexane	ND		25.0	21.5		ug/L		86	68 - 134
Methylene Chloride	ND		25.0	24.7		ug/L		99	75 - 124
Naphthalene	ND		25.0	22.3		ug/L		89	66 - 125
n-Butylbenzene	ND		25.0	21.5		ug/L		86	71 - 128
n-Propylbenzene	ND		25.0	21.0		ug/L		84	75 - 127
sec-Butylbenzene	ND		25.0	21.3		ug/L		85	74 - 127
Styrene	ND		25.0	21.7		ug/L		87	80 - 120
tert-Butylbenzene	ND		25.0	20.3		ug/L		81	75 - 123
Tetrachloroethene	ND		25.0	22.7		ug/L		91	74 - 122
Toluene	ND		25.0	22.6		ug/L		90	80 - 122
trans-1,2-Dichloroethene	ND		25.0	22.8		ug/L		91	73 - 127
trans-1,3-Dichloropropene	ND		25.0	21.5		ug/L		86	80 - 120
Trichloroethene	ND		25.0	21.7		ug/L		87	74 - 123
Trichlorofluoromethane	ND		25.0	25.2		ug/L		101	62 - 150
Vinyl chloride	ND		25.0	22.7		ug/L		91	65 - 133

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

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

Lab Sample ID: 480-105374-1 MS

Matrix: Water

Analysis Batch: 318890

Client Sample ID: MW-1MS

Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		77 - 120
4-Bromofluorobenzene (Surr)	105		73 - 120
Dibromofluoromethane (Surr)	107		75 - 123
Toluene-d8 (Surr)	101		80 - 120

Lab Sample ID: 480-105374-1 MSD

Matrix: Water

Analysis Batch: 318890

Client Sample ID: MW-1MSD

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		25.0	22.0		ug/L		88	73 - 126	6	15
1,1,2,2-Tetrachloroethane	ND		25.0	22.4		ug/L		90	76 - 120	1	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	23.3		ug/L		93	61 - 148	5	20
1,1,2-Trichloroethane	ND		25.0	24.4		ug/L		98	76 - 122	2	15
1,1-Dichloroethane	ND		25.0	23.7		ug/L		95	77 - 120	0	20
1,1-Dichloroethene	ND		25.0	21.0		ug/L		84	66 - 127	3	16
1,2,4-Trichlorobenzene	ND		25.0	22.6		ug/L		90	79 - 122	1	20
1,2,4-Trimethylbenzene	ND		25.0	21.4		ug/L		86	76 - 121	1	20
1,2-Dibromo-3-Chloropropane	ND		25.0	20.9		ug/L		83	56 - 134	12	15
1,2-Dibromoethane	ND		25.0	23.4		ug/L		94	77 - 120	1	15
1,2-Dichlorobenzene	ND		25.0	22.5		ug/L		90	80 - 124	1	20
1,2-Dichloroethane	ND		25.0	23.7		ug/L		95	75 - 120	0	20
1,2-Dichloropropane	ND		25.0	23.4		ug/L		94	76 - 120	1	20
1,3,5-Trimethylbenzene	ND		25.0	20.9		ug/L		84	77 - 121	2	20
1,3-Dichlorobenzene	ND		25.0	22.7		ug/L		91	77 - 120	1	20
1,4-Dichlorobenzene	ND		25.0	22.5		ug/L		90	78 - 124	0	20
2-Butanone (MEK)	ND		125	123		ug/L		99	57 - 140	2	20
2-Hexanone	ND		125	126		ug/L		100	65 - 127	2	15
4-Isopropyltoluene	ND		25.0	21.5		ug/L		86	73 - 120	0	20
4-Methyl-2-pentanone (MIBK)	ND		125	124		ug/L		100	71 - 125	5	35
Acetone	ND		125	124		ug/L		99	56 - 142	3	15
Benzene	ND		25.0	23.4		ug/L		93	71 - 124	1	13
Bromodichloromethane	ND		25.0	23.5		ug/L		94	80 - 122	1	15
Bromoform	ND		25.0	23.2		ug/L		93	61 - 132	1	15
Bromomethane	ND		25.0	23.1		ug/L		93	55 - 144	1	15
Carbon disulfide	ND		25.0	23.1		ug/L		92	59 - 134	1	15
Carbon tetrachloride	ND		25.0	22.0		ug/L		88	72 - 134	0	15
Chlorobenzene	ND		25.0	24.2		ug/L		97	80 - 120	1	25
Chloroethane	ND		25.0	21.2		ug/L		85	69 - 136	5	15
Chloroform	ND		25.0	23.7		ug/L		95	73 - 127	2	20
Chloromethane	ND		25.0	25.5		ug/L		102	68 - 124	1	15
cis-1,2-Dichloroethene	ND		25.0	23.3		ug/L		93	74 - 124	3	15
cis-1,3-Dichloropropene	ND		25.0	22.1		ug/L		89	74 - 124	4	15
Cyclohexane	ND		25.0	21.4		ug/L		85	59 - 135	3	20
Dibromochloromethane	ND		25.0	24.2		ug/L		97	75 - 125	5	15
Dichlorodifluoromethane	ND		25.0	21.0		ug/L		84	59 - 135	6	20
Ethylbenzene	ND		25.0	23.2		ug/L		93	77 - 123	1	15

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

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

Lab Sample ID: 480-105374-1 MSD

Matrix: Water

Analysis Batch: 318890

Client Sample ID: MW-1MSD

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Isopropylbenzene	ND		25.0	20.9		ug/L		84	77 - 122	1	20
Methyl acetate	ND		125	118		ug/L		94	74 - 133	0	20
Methyl tert-butyl ether	ND		25.0	24.1		ug/L		95	77 - 120	6	37
Methylcyclohexane	ND		25.0	22.3		ug/L		89	68 - 134	4	20
Methylene Chloride	ND		25.0	25.8		ug/L		103	75 - 124	4	15
Naphthalene	ND		25.0	21.7		ug/L		87	66 - 125	3	20
n-Butylbenzene	ND		25.0	20.9		ug/L		84	71 - 128	3	15
n-Propylbenzene	ND		25.0	21.2		ug/L		85	75 - 127	1	15
sec-Butylbenzene	ND		25.0	21.5		ug/L		86	74 - 127	1	15
Styrene	ND		25.0	22.0		ug/L		88	80 - 120	1	20
tert-Butylbenzene	ND		25.0	21.5		ug/L		86	75 - 123	6	15
Tetrachloroethene	ND		25.0	23.3		ug/L		93	74 - 122	2	20
Toluene	ND		25.0	22.6		ug/L		91	80 - 122	0	15
trans-1,2-Dichloroethene	ND		25.0	22.5		ug/L		90	73 - 127	1	20
trans-1,3-Dichloropropene	ND		25.0	22.0		ug/L		88	80 - 120	2	15
Trichloroethene	ND		25.0	22.3		ug/L		89	74 - 123	2	16
Trichlorofluoromethane	ND		25.0	26.1		ug/L		104	62 - 150	3	20
Vinyl chloride	ND		25.0	23.0		ug/L		92	65 - 133	1	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		77 - 120
4-Bromofluorobenzene (Surr)	105		73 - 120
Dibromofluoromethane (Surr)	105		75 - 123
Toluene-d8 (Surr)	103		80 - 120

Lab Sample ID: MB 480-318895/7

Matrix: Water

Analysis Batch: 318895

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			09/02/16 20:48	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/02/16 20:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			09/02/16 20:48	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/02/16 20:48	1
1,1-Dichloroethane	ND		1.0		ug/L			09/02/16 20:48	1
1,1-Dichloroethene	ND		1.0		ug/L			09/02/16 20:48	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/02/16 20:48	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/02/16 20:48	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			09/02/16 20:48	1
1,2-Dibromoethane	ND		1.0		ug/L			09/02/16 20:48	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/02/16 20:48	1
1,2-Dichloroethane	ND		1.0		ug/L			09/02/16 20:48	1
1,2-Dichloropropane	ND		1.0		ug/L			09/02/16 20:48	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/02/16 20:48	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/02/16 20:48	1
1,4-Dichlorobenzene	ND		1.0		ug/L			09/02/16 20:48	1
2-Butanone (MEK)	ND		10		ug/L			09/02/16 20:48	1
2-Hexanone	ND		5.0		ug/L			09/02/16 20:48	1

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

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

Lab Sample ID: MB 480-318895/7

Matrix: Water

Analysis Batch: 318895

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	ND		1.0		ug/L			09/02/16 20:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			09/02/16 20:48	1
Acetone	ND		10		ug/L			09/02/16 20:48	1
Benzene	ND		1.0		ug/L			09/02/16 20:48	1
Bromodichloromethane	ND		1.0		ug/L			09/02/16 20:48	1
Bromoform	ND		1.0		ug/L			09/02/16 20:48	1
Bromomethane	ND		1.0		ug/L			09/02/16 20:48	1
Carbon disulfide	ND		1.0		ug/L			09/02/16 20:48	1
Carbon tetrachloride	ND		1.0		ug/L			09/02/16 20:48	1
Chlorobenzene	ND		1.0		ug/L			09/02/16 20:48	1
Chloroethane	ND		1.0		ug/L			09/02/16 20:48	1
Chloroform	ND		1.0		ug/L			09/02/16 20:48	1
Chloromethane	ND		1.0		ug/L			09/02/16 20:48	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/02/16 20:48	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/02/16 20:48	1
Cyclohexane	ND		1.0		ug/L			09/02/16 20:48	1
Dibromochloromethane	ND		1.0		ug/L			09/02/16 20:48	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/02/16 20:48	1
Ethylbenzene	ND		1.0		ug/L			09/02/16 20:48	1
Isopropylbenzene	ND		1.0		ug/L			09/02/16 20:48	1
Methyl acetate	ND		2.5		ug/L			09/02/16 20:48	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/02/16 20:48	1
Methylcyclohexane	ND		1.0		ug/L			09/02/16 20:48	1
Methylene Chloride	ND		1.0		ug/L			09/02/16 20:48	1
Naphthalene	ND		1.0		ug/L			09/02/16 20:48	1
n-Butylbenzene	ND		1.0		ug/L			09/02/16 20:48	1
n-Propylbenzene	ND		1.0		ug/L			09/02/16 20:48	1
sec-Butylbenzene	ND		1.0		ug/L			09/02/16 20:48	1
Styrene	ND		1.0		ug/L			09/02/16 20:48	1
tert-Butylbenzene	ND		1.0		ug/L			09/02/16 20:48	1
Tetrachloroethene	ND		1.0		ug/L			09/02/16 20:48	1
Toluene	ND		1.0		ug/L			09/02/16 20:48	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			09/02/16 20:48	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/02/16 20:48	1
Trichloroethene	ND		1.0		ug/L			09/02/16 20:48	1
Trichlorofluoromethane	ND		1.0		ug/L			09/02/16 20:48	1
Vinyl chloride	ND		1.0		ug/L			09/02/16 20:48	1
Xylenes, Total	ND		2.0		ug/L			09/02/16 20:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		77 - 120		09/02/16 20:48	1
4-Bromofluorobenzene (Surr)	99		73 - 120		09/02/16 20:48	1
Dibromofluoromethane (Surr)	106		75 - 123		09/02/16 20:48	1
Toluene-d8 (Surr)	99		80 - 120		09/02/16 20:48	1

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

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

Lab Sample ID: LCS 480-318895/5

Matrix: Water

Analysis Batch: 318895

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	23.8		ug/L		95	73 - 126
1,1,1,2-Tetrachloroethane	25.0	24.4		ug/L		97	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.1		ug/L		93	61 - 148
1,1,2-Trichloroethane	25.0	24.2		ug/L		97	76 - 122
1,1-Dichloroethane	25.0	23.6		ug/L		95	77 - 120
1,1-Dichloroethene	25.0	22.8		ug/L		91	66 - 127
1,2,4-Trichlorobenzene	25.0	23.1		ug/L		92	79 - 122
1,2,4-Trimethylbenzene	25.0	23.3		ug/L		93	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	22.5		ug/L		90	56 - 134
1,2-Dibromoethane	25.0	24.7		ug/L		99	77 - 120
1,2-Dichlorobenzene	25.0	23.2		ug/L		93	80 - 124
1,2-Dichloroethane	25.0	23.7		ug/L		95	75 - 120
1,2-Dichloropropane	25.0	23.2		ug/L		93	76 - 120
1,3,5-Trimethylbenzene	25.0	23.8		ug/L		95	77 - 121
1,3-Dichlorobenzene	25.0	22.8		ug/L		91	77 - 120
1,4-Dichlorobenzene	25.0	23.2		ug/L		93	80 - 120
2-Butanone (MEK)	125	127		ug/L		102	57 - 140
2-Hexanone	125	129		ug/L		103	65 - 127
4-Isopropyltoluene	25.0	23.4		ug/L		94	73 - 120
4-Methyl-2-pentanone (MIBK)	125	124		ug/L		100	71 - 125
Acetone	125	126		ug/L		100	56 - 142
Benzene	25.0	23.3		ug/L		93	71 - 124
Bromodichloromethane	25.0	24.4		ug/L		98	80 - 122
Bromoform	25.0	24.4		ug/L		98	61 - 132
Bromomethane	25.0	24.7		ug/L		99	55 - 144
Carbon disulfide	25.0	22.8		ug/L		91	59 - 134
Carbon tetrachloride	25.0	24.1		ug/L		96	72 - 134
Chlorobenzene	25.0	23.8		ug/L		95	80 - 120
Chloroethane	25.0	25.1		ug/L		100	69 - 136
Chloroform	25.0	22.8		ug/L		91	73 - 127
Chloromethane	25.0	21.4		ug/L		85	68 - 124
cis-1,2-Dichloroethene	25.0	23.5		ug/L		94	74 - 124
cis-1,3-Dichloropropene	25.0	24.1		ug/L		97	74 - 124
Cyclohexane	25.0	22.9		ug/L		92	59 - 135
Dibromochloromethane	25.0	25.1		ug/L		101	75 - 125
Dichlorodifluoromethane	25.0	20.1		ug/L		80	59 - 135
Ethylbenzene	25.0	23.4		ug/L		94	77 - 123
Isopropylbenzene	25.0	22.9		ug/L		91	77 - 122
Methyl acetate	125	118		ug/L		95	74 - 133
Methyl tert-butyl ether	25.0	24.5		ug/L		98	77 - 120
Methylcyclohexane	25.0	23.3		ug/L		93	68 - 134
Methylene Chloride	25.0	24.6		ug/L		98	75 - 124
Naphthalene	25.0	24.0		ug/L		96	66 - 125
n-Butylbenzene	25.0	22.9		ug/L		92	71 - 128
n-Propylbenzene	25.0	23.1		ug/L		92	75 - 127
sec-Butylbenzene	25.0	22.8		ug/L		91	74 - 127
Styrene	25.0	24.4		ug/L		98	80 - 120

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

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

Lab Sample ID: LCS 480-318895/5

Matrix: Water

Analysis Batch: 318895

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
tert-Butylbenzene	25.0	22.9		ug/L		92	75 - 123
Tetrachloroethene	25.0	23.5		ug/L		94	74 - 122
Toluene	25.0	23.1		ug/L		93	80 - 122
trans-1,2-Dichloroethene	25.0	23.9		ug/L		96	73 - 127
trans-1,3-Dichloropropene	25.0	24.2		ug/L		97	80 - 120
Trichloroethene	25.0	23.2		ug/L		93	74 - 123
Trichlorofluoromethane	25.0	24.6		ug/L		99	62 - 150
Vinyl chloride	25.0	22.5		ug/L		90	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		77 - 120
4-Bromofluorobenzene (Surr)	103		73 - 120
Dibromofluoromethane (Surr)	104		75 - 123
Toluene-d8 (Surr)	100		80 - 120

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

Lab Sample ID: MB 480-319263/1-A

Matrix: Water

Analysis Batch: 319435

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 319263

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
2,4,6-Trichlorophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
2,4-Dichlorophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
2,4-Dimethylphenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
2,4-Dinitrophenol	ND		10		ug/L		09/07/16 14:25	09/08/16 14:05	1
2,4-Dinitrotoluene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
2,6-Dinitrotoluene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
2-Chloronaphthalene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
2-Chlorophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
2-Methylnaphthalene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
2-Methylphenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
2-Nitroaniline	ND		10		ug/L		09/07/16 14:25	09/08/16 14:05	1
2-Nitrophenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
3,3'-Dichlorobenzidine	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
3-Nitroaniline	ND		10		ug/L		09/07/16 14:25	09/08/16 14:05	1
4,6-Dinitro-2-methylphenol	ND		10		ug/L		09/07/16 14:25	09/08/16 14:05	1
4-Bromophenyl phenyl ether	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
4-Chloro-3-methylphenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
4-Chloroaniline	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
4-Chlorophenyl phenyl ether	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
4-Methylphenol	ND		10		ug/L		09/07/16 14:25	09/08/16 14:05	1
4-Nitroaniline	ND		10		ug/L		09/07/16 14:25	09/08/16 14:05	1
4-Nitrophenol	ND		10		ug/L		09/07/16 14:25	09/08/16 14:05	1
Acenaphthene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Acenaphthylene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Acetophenone	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

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

Lab Sample ID: MB 480-319263/1-A

Matrix: Water

Analysis Batch: 319435

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 319263

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Atrazine	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Benzaldehyde	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Benzo[a]anthracene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Benzo[a]pyrene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Benzo[b]fluoranthene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Benzo[g,h,i]perylene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Benzo[k]fluoranthene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Biphenyl	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
bis (2-chloroisopropyl) ether	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Bis(2-chloroethoxy)methane	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Bis(2-chloroethyl)ether	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Bis(2-ethylhexyl) phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Butyl benzyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Caprolactam	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Carbazole	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Chrysene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Dibenz(a,h)anthracene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Dibenzofuran	ND		10		ug/L		09/07/16 14:25	09/08/16 14:05	1
Diethyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Dimethyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Di-n-butyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Di-n-octyl phthalate	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Fluoranthene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Fluorene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Hexachlorobenzene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Hexachlorobutadiene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Hexachlorocyclopentadiene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Hexachloroethane	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Indeno[1,2,3-cd]pyrene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Isophorone	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Naphthalene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Nitrobenzene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
N-Nitrosodi-n-propylamine	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
N-Nitrosodiphenylamine	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Pentachlorophenol	ND		10		ug/L		09/07/16 14:25	09/08/16 14:05	1
Phenanthrene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Phenol	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1
Pyrene	ND		5.0		ug/L		09/07/16 14:25	09/08/16 14:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	113		52 - 132	09/07/16 14:25	09/08/16 14:05	1
2-Fluorobiphenyl	102		48 - 120	09/07/16 14:25	09/08/16 14:05	1
2-Fluorophenol (Surr)	75		20 - 120	09/07/16 14:25	09/08/16 14:05	1
Nitrobenzene-d5 (Surr)	106		46 - 120	09/07/16 14:25	09/08/16 14:05	1
Phenol-d5 (Surr)	52		16 - 120	09/07/16 14:25	09/08/16 14:05	1
p-Terphenyl-d14 (Surr)	124		67 - 150	09/07/16 14:25	09/08/16 14:05	1

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

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

Lab Sample ID: LCS 480-319263/2-A

Matrix: Water

Analysis Batch: 319435

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 319263

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	16.0	16.1		ug/L		101	65 - 126
2,4,6-Trichlorophenol	16.0	14.4		ug/L		90	64 - 120
2,4-Dichlorophenol	16.0	12.5		ug/L		78	64 - 120
2,4-Dimethylphenol	16.0	11.9		ug/L		74	57 - 120
2,4-Dinitrophenol	32.0	33.2		ug/L		104	42 - 153
2,4-Dinitrotoluene	16.0	14.2		ug/L		89	65 - 154
2,6-Dinitrotoluene	16.0	14.0		ug/L		87	74 - 134
2-Chloronaphthalene	16.0	12.9		ug/L		81	41 - 124
2-Chlorophenol	16.0	11.9		ug/L		74	48 - 120
2-Methylnaphthalene	16.0	12.6		ug/L		79	34 - 122
2-Methylphenol	16.0	11.2		ug/L		70	39 - 120
2-Nitroaniline	16.0	13.9		ug/L		87	67 - 136
2-Nitrophenol	16.0	13.0		ug/L		81	59 - 120
3,3'-Dichlorobenzidine	32.0	34.5		ug/L		108	33 - 140
3-Nitroaniline	16.0	12.5		ug/L		78	28 - 130
4,6-Dinitro-2-methylphenol	32.0	34.7		ug/L		108	64 - 159
4-Bromophenyl phenyl ether	16.0	13.7		ug/L		86	71 - 126
4-Chloro-3-methylphenol	16.0	13.6		ug/L		85	64 - 120
4-Chloroaniline	16.0	10.5		ug/L		66	10 - 130
4-Chlorophenyl phenyl ether	16.0	14.0		ug/L		87	71 - 122
4-Methylphenol	16.0	11.2		ug/L		70	39 - 120
4-Nitroaniline	16.0	14.1		ug/L		88	47 - 130
4-Nitrophenol	32.0	33.9		ug/L		106	16 - 120
Acenaphthene	16.0	13.1		ug/L		82	60 - 120
Acenaphthylene	16.0	12.8		ug/L		80	63 - 120
Acetophenone	16.0	12.5		ug/L		78	45 - 120
Anthracene	16.0	13.4		ug/L		84	58 - 148
Atrazine	32.0	34.7		ug/L		108	56 - 179
Benzaldehyde	32.0	12.6		ug/L		39	30 - 140
Benzo[a]anthracene	16.0	14.1		ug/L		88	55 - 151
Benzo[a]pyrene	16.0	13.5		ug/L		84	60 - 145
Benzo[b]fluoranthene	16.0	15.1		ug/L		94	54 - 140
Benzo[g,h,i]perylene	16.0	15.2		ug/L		95	66 - 152
Benzo[k]fluoranthene	16.0	15.1		ug/L		95	51 - 153
Biphenyl	16.0	13.1		ug/L		82	30 - 140
bis (2-chloroisopropyl) ether	16.0	11.7		ug/L		73	28 - 136
Bis(2-chloroethoxy)methane	16.0	12.2		ug/L		76	50 - 128
Bis(2-chloroethyl)ether	16.0	11.8		ug/L		74	51 - 120
Bis(2-ethylhexyl) phthalate	16.0	16.0		ug/L		100	53 - 158
Butyl benzyl phthalate	16.0	14.5		ug/L		91	58 - 163
Caprolactam	32.0	10.2		ug/L		32	14 - 130
Carbazole	16.0	14.5		ug/L		91	59 - 148
Chrysene	16.0	14.4		ug/L		90	69 - 140
Dibenz(a,h)anthracene	16.0	14.0		ug/L		88	57 - 148
Dibenzofuran	16.0	13.5		ug/L		84	49 - 137
Diethyl phthalate	16.0	14.7		ug/L		92	59 - 146
Dimethyl phthalate	16.0	15.0		ug/L		93	59 - 141
Di-n-butyl phthalate	16.0	15.3		ug/L		96	58 - 149

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

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

Lab Sample ID: LCS 480-319263/2-A

Matrix: Water

Analysis Batch: 319435

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 319263

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Di-n-octyl phthalate	16.0	14.6		ug/L		91	55 - 167
Fluoranthene	16.0	14.8		ug/L		92	55 - 147
Fluorene	16.0	13.6		ug/L		85	55 - 143
Hexachlorobenzene	16.0	14.1		ug/L		88	14 - 130
Hexachlorobutadiene	16.0	12.8		ug/L		80	14 - 130
Hexachlorocyclopentadiene	16.0	9.98		ug/L		62	13 - 130
Hexachloroethane	16.0	11.8		ug/L		74	14 - 130
Indeno[1,2,3-cd]pyrene	16.0	14.4		ug/L		90	69 - 146
Isophorone	16.0	12.8		ug/L		80	48 - 133
Naphthalene	16.0	11.9		ug/L		75	35 - 130
Nitrobenzene	16.0	13.1		ug/L		82	45 - 123
N-Nitrosodi-n-propylamine	16.0	12.0		ug/L		75	56 - 120
N-Nitrosodiphenylamine	16.0	12.1		ug/L		76	25 - 125
Pentachlorophenol	32.0	24.9		ug/L		78	39 - 136
Phenanthrene	16.0	13.3		ug/L		83	57 - 147
Phenol	16.0	8.49		ug/L		53	17 - 120
Pyrene	16.0	13.5		ug/L		84	58 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	98		52 - 132
2-Fluorobiphenyl	84		48 - 120
2-Fluorophenol (Surr)	66		20 - 120
Nitrobenzene-d5 (Surr)	83		46 - 120
Phenol-d5 (Surr)	50		16 - 120
p-Terphenyl-d14 (Surr)	93		67 - 150

Lab Sample ID: 480-105374-1 MS

Matrix: Water

Analysis Batch: 319435

Client Sample ID: MW-1MS

Prep Type: Total/NA

Prep Batch: 319263

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	ND		16.0	19.7		ug/L		123	65 - 126
2,4,6-Trichlorophenol	ND		16.0	18.5		ug/L		116	64 - 120
2,4-Dichlorophenol	ND		16.0	15.7		ug/L		98	64 - 120
2,4-Dimethylphenol	ND		16.0	15.9		ug/L		99	57 - 120
2,4-Dinitrophenol	ND	F1	32.0	50.3	F1	ug/L		157	42 - 153
2,4-Dinitrotoluene	ND		16.0	17.4		ug/L		108	62 - 148
2,6-Dinitrotoluene	ND		16.0	17.3		ug/L		108	65 - 154
2-Chloronaphthalene	ND		16.0	15.9		ug/L		100	41 - 124
2-Chlorophenol	ND		16.0	14.7		ug/L		92	48 - 120
2-Methylnaphthalene	ND		16.0	15.7		ug/L		98	34 - 122
2-Methylphenol	ND		16.0	13.6		ug/L		85	39 - 120
2-Nitroaniline	ND		16.0	17.4		ug/L		109	67 - 136
2-Nitrophenol	ND		16.0	16.3		ug/L		102	59 - 120
3,3'-Dichlorobenzidine	ND		32.0	29.3		ug/L		91	33 - 140
3-Nitroaniline	ND		16.0	14.0		ug/L		88	69 - 129
4,6-Dinitro-2-methylphenol	ND		32.0	44.0		ug/L		138	64 - 159
4-Bromophenyl phenyl ether	ND		16.0	17.1		ug/L		107	71 - 126

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

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

Lab Sample ID: 480-105374-1 MS

Matrix: Water

Analysis Batch: 319435

Client Sample ID: MW-1MS

Prep Type: Total/NA

Prep Batch: 319263

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloro-3-methylphenol	ND		16.0	16.3		ug/L		102	64 - 120
4-Chloroaniline	ND		16.0	11.3		ug/L		71	60 - 124
4-Chlorophenyl phenyl ether	ND		16.0	17.5		ug/L		109	48 - 145
4-Methylphenol	ND		16.0	13.0		ug/L		81	36 - 120
4-Nitroaniline	ND		16.0	15.2		ug/L		95	64 - 135
4-Nitrophenol	ND	F1	32.0	45.1	F1	ug/L		141	16 - 120
Acenaphthene	ND		16.0	16.1		ug/L		100	60 - 120
Acenaphthylene	ND		16.0	15.6		ug/L		98	63 - 120
Acetophenone	ND		16.0	15.2		ug/L		95	45 - 120
Anthracene	ND		16.0	16.5		ug/L		103	58 - 148
Atrazine	ND		32.0	41.1		ug/L		128	56 - 179
Benzaldehyde	ND		32.0	15.3		ug/L		48	30 - 140
Benzo[a]anthracene	ND		16.0	14.0		ug/L		87	55 - 151
Benzo[a]pyrene	ND		16.0	10.3		ug/L		65	60 - 145
Benzo[b]fluoranthene	ND		16.0	11.6		ug/L		72	54 - 140
Benzo[g,h,i]perylene	ND	F1	16.0	10.0	F1	ug/L		63	66 - 152
Benzo[k]fluoranthene	ND		16.0	10.9		ug/L		68	51 - 153
Biphenyl	ND		16.0	16.5		ug/L		103	30 - 140
bis (2-chloroisopropyl) ether	ND		16.0	14.0		ug/L		87	28 - 136
Bis(2-chloroethoxy)methane	ND		16.0	15.0		ug/L		94	50 - 128
Bis(2-chloroethyl)ether	ND		16.0	14.5		ug/L		91	51 - 120
Bis(2-ethylhexyl) phthalate	ND		16.0	11.0		ug/L		68	53 - 158
Butyl benzyl phthalate	ND		16.0	15.9		ug/L		100	58 - 163
Caprolactam	ND		32.0	12.3		ug/L		38	30 - 140
Carbazole	ND		16.0	17.4		ug/L		109	59 - 148
Chrysene	ND		16.0	12.8		ug/L		80	69 - 140
Dibenz(a,h)anthracene	ND	F1	16.0	9.01	F1	ug/L		56	57 - 158
Dibenzofuran	ND		16.0	16.7		ug/L		105	49 - 137
Diethyl phthalate	ND		16.0	17.7		ug/L		110	59 - 146
Dimethyl phthalate	ND		16.0	18.5		ug/L		116	59 - 141
Di-n-butyl phthalate	ND		16.0	17.8		ug/L		111	58 - 149
Di-n-octyl phthalate	ND		16.0	9.94		ug/L		62	55 - 167
Fluoranthene	ND		16.0	17.3		ug/L		108	55 - 147
Fluorene	ND		16.0	17.0		ug/L		107	55 - 143
Hexachlorobenzene	ND		16.0	16.4		ug/L		103	38 - 131
Hexachlorobutadiene	ND		16.0	16.2		ug/L		101	14 - 130
Hexachlorocyclopentadiene	ND		16.0	13.1		ug/L		82	13 - 130
Hexachloroethane	ND		16.0	15.0		ug/L		94	14 - 130
Indeno[1,2,3-cd]pyrene	ND	F1	16.0	9.54	F1	ug/L		60	69 - 146
Isophorone	ND		16.0	16.0		ug/L		100	48 - 133
Naphthalene	ND		16.0	15.0		ug/L		94	35 - 130
Nitrobenzene	ND		16.0	16.0		ug/L		100	45 - 123
N-Nitrosodi-n-propylamine	ND		16.0	14.5		ug/L		90	56 - 120
N-Nitrosodiphenylamine	ND		16.0	15.9		ug/L		100	25 - 125
Pentachlorophenol	ND		32.0	35.4		ug/L		111	39 - 136
Phenanthrene	ND		16.0	16.1		ug/L		101	57 - 147
Phenol	ND		16.0	10.1		ug/L		63	17 - 120
Pyrene	ND		16.0	16.4		ug/L		103	58 - 136

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

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

Lab Sample ID: 480-105374-1 MS

Matrix: Water

Analysis Batch: 319435

Client Sample ID: MW-1MS

Prep Type: Total/NA

Prep Batch: 319263

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	123		52 - 132
2-Fluorobiphenyl	106		48 - 120
2-Fluorophenol (Surr)	80		20 - 120
Nitrobenzene-d5 (Surr)	103		46 - 120
Phenol-d5 (Surr)	60		16 - 120
p-Terphenyl-d14 (Surr)	76		67 - 150

Lab Sample ID: 480-105374-1 MSD

Matrix: Water

Analysis Batch: 319435

Client Sample ID: MW-1MSD

Prep Type: Total/NA

Prep Batch: 319263

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	ND		16.0	18.4		ug/L		115	65 - 126	7	18
2,4,6-Trichlorophenol	ND		16.0	17.7		ug/L		111	64 - 120	4	19
2,4-Dichlorophenol	ND		16.0	15.3		ug/L		95	64 - 120	3	19
2,4-Dimethylphenol	ND		16.0	15.3		ug/L		96	57 - 120	4	42
2,4-Dinitrophenol	ND	F1	32.0	50.1	F1	ug/L		156	42 - 153	0	22
2,4-Dinitrotoluene	ND		16.0	17.4		ug/L		109	62 - 148	0	20
2,6-Dinitrotoluene	ND		16.0	16.3		ug/L		102	65 - 154	6	15
2-Chloronaphthalene	ND		16.0	15.2		ug/L		95	41 - 124	5	21
2-Chlorophenol	ND		16.0	13.8		ug/L		86	48 - 120	6	25
2-Methylnaphthalene	ND		16.0	14.7		ug/L		92	34 - 122	7	21
2-Methylphenol	ND		16.0	13.1		ug/L		82	39 - 120	4	27
2-Nitroaniline	ND		16.0	16.4		ug/L		103	67 - 136	6	15
2-Nitrophenol	ND		16.0	15.6		ug/L		98	59 - 120	4	18
3,3'-Dichlorobenzidine	ND		32.0	24.6		ug/L		77	33 - 140	18	25
3-Nitroaniline	ND		16.0	13.1		ug/L		82	69 - 129	7	19
4,6-Dinitro-2-methylphenol	ND		32.0	43.8		ug/L		137	64 - 159	1	15
4-Bromophenyl phenyl ether	ND		16.0	16.8		ug/L		105	71 - 126	2	15
4-Chloro-3-methylphenol	ND		16.0	15.8		ug/L		99	64 - 120	3	27
4-Chloroaniline	ND		16.0	10.6		ug/L		66	60 - 124	6	22
4-Chlorophenyl phenyl ether	ND		16.0	16.5		ug/L		103	48 - 145	6	16
4-Methylphenol	ND		16.0	12.8		ug/L		80	36 - 120	2	24
4-Nitroaniline	ND		16.0	14.5		ug/L		91	64 - 135	5	24
4-Nitrophenol	ND	F1	32.0	42.1	F1	ug/L		132	16 - 120	7	48
Acenaphthene	ND		16.0	15.3		ug/L		96	60 - 120	5	24
Acenaphthylene	ND		16.0	14.9		ug/L		93	63 - 120	5	18
Acetophenone	ND		16.0	14.5		ug/L		90	45 - 120	5	20
Anthracene	ND		16.0	16.2		ug/L		101	58 - 148	2	15
Atrazine	ND		32.0	40.3		ug/L		126	56 - 179	2	20
Benzaldehyde	ND		32.0	14.9		ug/L		47	30 - 140	3	20
Benzo[a]anthracene	ND		16.0	14.0		ug/L		87	55 - 151	0	15
Benzo[a]pyrene	ND		16.0	10.2		ug/L		64	60 - 145	1	15
Benzo[b]fluoranthene	ND		16.0	11.7		ug/L		73	54 - 140	1	15
Benzo[g,h,i]perylene	ND	F1	16.0	9.91	F1	ug/L		62	66 - 152	1	15
Benzo[k]fluoranthene	ND		16.0	10.4		ug/L		65	51 - 153	5	22
Biphenyl	ND		16.0	15.3		ug/L		95	30 - 140	8	20
bis (2-chloroisopropyl) ether	ND		16.0	12.9		ug/L		81	28 - 136	8	24

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

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

Lab Sample ID: 480-105374-1 MSD

Matrix: Water

Analysis Batch: 319435

Client Sample ID: MW-1MSD

Prep Type: Total/NA

Prep Batch: 319263

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethoxy)methane	ND		16.0	14.4		ug/L		90	50 - 128	4	17
Bis(2-chloroethyl)ether	ND		16.0	13.3		ug/L		83	51 - 120	9	21
Bis(2-ethylhexyl) phthalate	ND		16.0	11.2		ug/L		70	53 - 158	2	15
Butyl benzyl phthalate	ND		16.0	16.4		ug/L		102	58 - 163	3	16
Caprolactam	ND		32.0	13.3		ug/L		42	30 - 140	8	20
Carbazole	ND		16.0	18.1		ug/L		113	59 - 148	4	20
Chrysene	ND		16.0	13.6		ug/L		85	69 - 140	6	15
Dibenz(a,h)anthracene	ND	F1	16.0	8.98	F1	ug/L		56	57 - 158	0	15
Dibenzofuran	ND		16.0	16.1		ug/L		100	49 - 137	4	15
Diethyl phthalate	ND		16.0	17.4		ug/L		109	59 - 146	1	15
Dimethyl phthalate	ND		16.0	18.5		ug/L		116	59 - 141	0	15
Di-n-butyl phthalate	ND		16.0	18.4		ug/L		115	58 - 149	3	15
Di-n-octyl phthalate	ND		16.0	10.3		ug/L		64	55 - 167	4	16
Fluoranthene	ND		16.0	17.8		ug/L		111	55 - 147	3	15
Fluorene	ND		16.0	16.3		ug/L		102	55 - 143	4	15
Hexachlorobenzene	ND		16.0	16.4		ug/L		103	38 - 131	0	15
Hexachlorobutadiene	ND		16.0	15.2		ug/L		95	14 - 130	7	44
Hexachlorocyclopentadiene	ND		16.0	12.1		ug/L		76	13 - 130	8	49
Hexachloroethane	ND		16.0	13.4		ug/L		84	14 - 130	12	46
Indeno[1,2,3-cd]pyrene	ND	F1	16.0	9.42	F1	ug/L		59	69 - 146	1	15
Isophorone	ND		16.0	15.1		ug/L		94	48 - 133	6	17
Naphthalene	ND		16.0	14.0		ug/L		87	35 - 130	7	29
Nitrobenzene	ND		16.0	15.2		ug/L		95	45 - 123	5	24
N-Nitrosodi-n-propylamine	ND		16.0	13.6		ug/L		85	56 - 120	6	31
N-Nitrosodiphenylamine	ND		16.0	15.9		ug/L		99	25 - 125	0	15
Pentachlorophenol	ND		32.0	35.1		ug/L		110	39 - 136	1	37
Phenanthrene	ND		16.0	16.6		ug/L		104	57 - 147	3	15
Phenol	ND		16.0	9.71		ug/L		61	17 - 120	4	34
Pyrene	ND		16.0	16.5		ug/L		103	58 - 136	0	19

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	124		52 - 132
2-Fluorobiphenyl	99		48 - 120
2-Fluorophenol (Surr)	75		20 - 120
Nitrobenzene-d5 (Surr)	98		46 - 120
Phenol-d5 (Surr)	57		16 - 120
p-Terphenyl-d14 (Surr)	77		67 - 150

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-319150/1-A

Matrix: Water

Analysis Batch: 319476

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 319150

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50		ug/L		09/07/16 07:29	09/08/16 21:40	1
PCB-1221	ND		0.50		ug/L		09/07/16 07:29	09/08/16 21:40	1
PCB-1232	ND		0.50		ug/L		09/07/16 07:29	09/08/16 21:40	1

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 480-319150/1-A

Matrix: Water

Analysis Batch: 319476

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 319150

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1242	ND		0.50		ug/L		09/07/16 07:29	09/08/16 21:40	1
PCB-1248	ND		0.50		ug/L		09/07/16 07:29	09/08/16 21:40	1
PCB-1254	ND		0.50		ug/L		09/07/16 07:29	09/08/16 21:40	1
PCB-1260	ND		0.50		ug/L		09/07/16 07:29	09/08/16 21:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	66		39 - 121	09/07/16 07:29	09/08/16 21:40	1
DCB Decachlorobiphenyl	53		19 - 120	09/07/16 07:29	09/08/16 21:40	1

Lab Sample ID: LCS 480-319150/2-A

Matrix: Water

Analysis Batch: 319476

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 319150

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	3.26		ug/L		82	62 - 130
PCB-1260	4.00	2.69		ug/L		67	56 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	69		39 - 121
DCB Decachlorobiphenyl	31		19 - 120

Lab Sample ID: 480-105374-1 MS

Matrix: Water

Analysis Batch: 319476

Client Sample ID: MW-1MS

Prep Type: Total/NA

Prep Batch: 319150

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		4.02	3.87		ug/L		96	28 - 150
PCB-1260	ND		4.02	2.83		ug/L		70	25 - 131

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	81		39 - 121
DCB Decachlorobiphenyl	46		19 - 120

Lab Sample ID: 480-105374-1 MSD

Matrix: Water

Analysis Batch: 319476

Client Sample ID: MW-1MSD

Prep Type: Total/NA

Prep Batch: 319150

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		3.96	3.35		ug/L		85	28 - 150	14	50
PCB-1260	ND		3.96	2.49		ug/L		63	25 - 131	13	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	71		39 - 121
DCB Decachlorobiphenyl	40		19 - 120

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-318792/1-A
Matrix: Water
Analysis Batch: 319182

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 318792

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20		mg/L		09/02/16 09:00	09/06/16 15:17	1
Antimony	ND		0.020		mg/L		09/02/16 09:00	09/06/16 15:17	1
Arsenic	ND		0.015		mg/L		09/02/16 09:00	09/06/16 15:17	1
Barium	ND		0.0020		mg/L		09/02/16 09:00	09/06/16 15:17	1
Beryllium	ND		0.0020		mg/L		09/02/16 09:00	09/06/16 15:17	1
Cadmium	ND		0.0020		mg/L		09/02/16 09:00	09/06/16 15:17	1
Calcium	ND		0.50		mg/L		09/02/16 09:00	09/06/16 15:17	1
Chromium	ND		0.0040		mg/L		09/02/16 09:00	09/06/16 15:17	1
Cobalt	ND		0.0040		mg/L		09/02/16 09:00	09/06/16 15:17	1
Copper	ND		0.010		mg/L		09/02/16 09:00	09/06/16 15:17	1
Iron	ND		0.050		mg/L		09/02/16 09:00	09/06/16 15:17	1
Lead	ND		0.010		mg/L		09/02/16 09:00	09/06/16 15:17	1
Magnesium	ND		0.20		mg/L		09/02/16 09:00	09/06/16 15:17	1
Manganese	ND		0.0030		mg/L		09/02/16 09:00	09/06/16 15:17	1
Nickel	ND		0.010		mg/L		09/02/16 09:00	09/06/16 15:17	1
Potassium	ND		0.50		mg/L		09/02/16 09:00	09/06/16 15:17	1
Selenium	ND		0.025		mg/L		09/02/16 09:00	09/06/16 15:17	1
Silver	ND		0.0060		mg/L		09/02/16 09:00	09/06/16 15:17	1
Sodium	ND		1.0		mg/L		09/02/16 09:00	09/06/16 15:17	1
Thallium	ND		0.020		mg/L		09/02/16 09:00	09/06/16 15:17	1
Vanadium	ND		0.0050		mg/L		09/02/16 09:00	09/06/16 15:17	1
Zinc	ND		0.010		mg/L		09/02/16 09:00	09/06/16 15:17	1

Lab Sample ID: LCS 480-318792/2-A
Matrix: Water
Analysis Batch: 319182

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 318792

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	9.69		mg/L		97	80 - 120
Antimony	0.200	0.197		mg/L		99	80 - 120
Arsenic	0.200	0.204		mg/L		102	80 - 120
Barium	0.200	0.206		mg/L		103	80 - 120
Beryllium	0.200	0.204		mg/L		102	80 - 120
Cadmium	0.200	0.196		mg/L		98	80 - 120
Calcium	10.0	9.62		mg/L		96	80 - 120
Chromium	0.200	0.201		mg/L		101	80 - 120
Cobalt	0.200	0.187		mg/L		94	80 - 120
Copper	0.200	0.203		mg/L		102	80 - 120
Iron	10.0	10.22		mg/L		102	80 - 120
Lead	0.200	0.202		mg/L		101	80 - 120
Magnesium	10.0	10.30		mg/L		103	80 - 120
Manganese	0.200	0.203		mg/L		102	80 - 120
Nickel	0.200	0.197		mg/L		99	80 - 120
Potassium	10.0	10.0		mg/L		100	80 - 120
Selenium	0.200	0.188		mg/L		94	80 - 120
Silver	0.0500	0.0501		mg/L		100	80 - 120
Sodium	10.0	9.71		mg/L		97	80 - 120
Thallium	0.200	0.198		mg/L		99	80 - 120

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

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

Lab Sample ID: LCS 480-318792/2-A

Matrix: Water

Analysis Batch: 319182

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 318792

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	0.200	0.198		mg/L		99	80 - 120
Zinc	0.200	0.196		mg/L		98	80 - 120

Lab Sample ID: 480-105374-1 MS

Matrix: Water

Analysis Batch: 319182

Client Sample ID: MW-1MS

Prep Type: Total/NA

Prep Batch: 318792

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	ND		10.0	9.94		mg/L		99	75 - 125
Antimony	ND		0.200	0.204		mg/L		102	75 - 125
Arsenic	ND		0.200	0.222		mg/L		107	75 - 125
Barium	1.3		0.200	1.51	4	mg/L		100	75 - 125
Beryllium	ND		0.200	0.207		mg/L		104	75 - 125
Cadmium	ND		0.200	0.202		mg/L		101	75 - 125
Calcium	190		10.0	197.4	4	mg/L		72	75 - 125
Chromium	ND		0.200	0.198		mg/L		98	75 - 125
Cobalt	ND		0.200	0.195		mg/L		97	75 - 125
Copper	ND		0.200	0.207		mg/L		103	75 - 125
Iron	6.3		10.0	16.31		mg/L		100	75 - 125
Lead	ND		0.200	0.214		mg/L		105	75 - 125
Magnesium	50.8		10.0	60.55	4	mg/L		98	75 - 125
Manganese	0.054		0.200	0.251		mg/L		98	75 - 125
Nickel	ND		0.200	0.207		mg/L		102	75 - 125
Potassium	5.2		10.0	15.44		mg/L		102	75 - 125
Selenium	ND		0.200	0.194		mg/L		97	75 - 125
Silver	ND		0.0500	0.0508		mg/L		102	75 - 125
Sodium	215		10.0	225.6	4	mg/L		104	75 - 125
Thallium	ND		0.200	0.195		mg/L		97	75 - 125
Vanadium	ND		0.200	0.200		mg/L		100	75 - 125
Zinc	ND		0.200	0.194		mg/L		95	75 - 125

Lab Sample ID: 480-105374-1 MSD

Matrix: Water

Analysis Batch: 319182

Client Sample ID: MW-1MSD

Prep Type: Total/NA

Prep Batch: 318792

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	ND		10.0	9.92		mg/L		98	75 - 125	0	20
Antimony	ND		0.200	0.202		mg/L		101	75 - 125	1	20
Arsenic	ND		0.200	0.221		mg/L		107	75 - 125	1	20
Barium	1.3		0.200	1.49	4	mg/L		91	75 - 125	1	20
Beryllium	ND		0.200	0.208		mg/L		104	75 - 125	0	20
Cadmium	ND		0.200	0.203		mg/L		101	75 - 125	0	20
Calcium	190		10.0	195.4	4	mg/L		52	75 - 125	1	20
Chromium	ND		0.200	0.201		mg/L		99	75 - 125	1	20
Cobalt	ND		0.200	0.195		mg/L		97	75 - 125	0	20
Copper	ND		0.200	0.206		mg/L		103	75 - 125	0	20
Iron	6.3		10.0	16.37		mg/L		100	75 - 125	0	20
Lead	ND		0.200	0.213		mg/L		104	75 - 125	1	20
Magnesium	50.8		10.0	59.84	4	mg/L		91	75 - 125	1	20

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

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

Lab Sample ID: 480-105374-1 MSD

Matrix: Water

Analysis Batch: 319182

Client Sample ID: MW-1MSD

Prep Type: Total/NA

Prep Batch: 318792

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	0.054		0.200	0.250		mg/L		98	75 - 125	0	20
Nickel	ND		0.200	0.207		mg/L		102	75 - 125	0	20
Potassium	5.2		10.0	15.40		mg/L		102	75 - 125	0	20
Selenium	ND		0.200	0.194		mg/L		97	75 - 125	0	20
Silver	ND		0.0500	0.0515		mg/L		103	75 - 125	1	20
Sodium	215		10.0	223.0	4	mg/L		78	75 - 125	1	20
Thallium	ND		0.200	0.196		mg/L		98	75 - 125	0	20
Vanadium	ND		0.200	0.200		mg/L		100	75 - 125	0	20
Zinc	ND		0.200	0.196		mg/L		96	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-318812/1-A

Matrix: Water

Analysis Batch: 318931

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 318812

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		09/02/16 09:50	09/02/16 15:22	1

Lab Sample ID: LCS 480-318812/2-A

Matrix: Water

Analysis Batch: 318931

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 318812

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00667	0.00723		mg/L		108	80 - 120

Lab Sample ID: LCSD 480-318812/3-A

Matrix: Water

Analysis Batch: 318931

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 318812

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00667	0.00733		mg/L		110	80 - 120	1	20

Lab Sample ID: 480-105374-1 MS

Matrix: Water

Analysis Batch: 318931

Client Sample ID: MW-1MS

Prep Type: Total/NA

Prep Batch: 318812

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00667	0.00668		mg/L		100	80 - 120

Lab Sample ID: 480-105374-1 MSD

Matrix: Water

Analysis Batch: 318931

Client Sample ID: MW-1MSD

Prep Type: Total/NA

Prep Batch: 318812

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00667	0.00687		mg/L		103	80 - 120	3	20

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 480-318840/3

Matrix: Water

Analysis Batch: 318840

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		0.010		mg/L			09/02/16 08:20	1

Lab Sample ID: LCS 480-318840/4

Matrix: Water

Analysis Batch: 318840

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	0.0500	0.0516		mg/L		103	85 - 115

Lab Sample ID: 480-105374-1 MS

Matrix: Water

Analysis Batch: 318840

Client Sample ID: MW-1MS

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	ND	H F1	0.500	0.558	H	mg/L		112	85 - 115

Lab Sample ID: 480-105374-1 MSD

Matrix: Water

Analysis Batch: 318840

Client Sample ID: MW-1MSD

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, hexavalent	ND	H F1	0.500	0.541	H	mg/L		108	85 - 115	3	20

Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: MB 480-318900/1-A

Matrix: Water

Analysis Batch: 318950

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 318900

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010		mg/L		09/02/16 18:45	09/05/16 09:54	1

Lab Sample ID: LCS 480-318900/2-A

Matrix: Water

Analysis Batch: 318950

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 318900

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.250	0.250		mg/L		100	90 - 110

Lab Sample ID: 480-105374-1 MS

Matrix: Water

Analysis Batch: 318950

Client Sample ID: MW-1MS

Prep Type: Total/NA

Prep Batch: 318900

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	ND		0.100	0.0985		mg/L		99	90 - 110

TestAmerica Buffalo

QC Sample Results

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Method: 9012B - Cyanide, Total and/or Amenable (Continued)

Lab Sample ID: 480-105374-1 MSD

Matrix: Water

Analysis Batch: 318950

Client Sample ID: MW-1MSD

Prep Type: Total/NA

Prep Batch: 318900

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	ND		0.100	0.0965		mg/L		97	90 - 110	2	15

Lab Sample ID: 480-105374-2 MS

Matrix: Water

Analysis Batch: 318950

Client Sample ID: MW-7

Prep Type: Total/NA

Prep Batch: 318900

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	ND		0.100	0.103		mg/L		103	90 - 110		

Lab Sample ID: MB 480-319283/1-A

Matrix: Water

Analysis Batch: 319438

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 319283

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010		mg/L		09/07/16 16:25	09/08/16 09:44	1

Lab Sample ID: LCS 480-319283/2-A

Matrix: Water

Analysis Batch: 319438

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 319283

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	0.400	0.389		mg/L		97	90 - 110		

Lab Sample ID: LCS 480-319283/3-A

Matrix: Water

Analysis Batch: 319438

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 319283

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cyanide, Total	0.250	0.240		mg/L		96	90 - 110		

TestAmerica Buffalo

QC Association Summary

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

GC/MS VOA

Analysis Batch: 318890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-105374-1	MW-1	Total/NA	Water	8260C	
480-105374-2	MW-7	Total/NA	Water	8260C	
480-105374-3	MW-2	Total/NA	Water	8260C	
480-105374-4	MW-5	Total/NA	Water	8260C	
480-105374-5	MW-8	Total/NA	Water	8260C	
480-105374-6	MW-4	Total/NA	Water	8260C	
480-105374-7	MW-3	Total/NA	Water	8260C	
480-105374-8	DUPLICATE	Total/NA	Water	8260C	
MB 480-318890/7	Method Blank	Total/NA	Water	8260C	
LCS 480-318890/5	Lab Control Sample	Total/NA	Water	8260C	
480-105374-1 MS	MW-1MS	Total/NA	Water	8260C	
480-105374-1 MSD	MW-1MSD	Total/NA	Water	8260C	

Analysis Batch: 318895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-105374-9	TRIP BLANK	Total/NA	Water	8260C	
MB 480-318895/7	Method Blank	Total/NA	Water	8260C	
LCS 480-318895/5	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 319263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-105374-1	MW-1	Total/NA	Water	3510C	
480-105374-2	MW-7	Total/NA	Water	3510C	
480-105374-3	MW-2	Total/NA	Water	3510C	
480-105374-4	MW-5	Total/NA	Water	3510C	
480-105374-5	MW-8	Total/NA	Water	3510C	
480-105374-6	MW-4	Total/NA	Water	3510C	
480-105374-7	MW-3	Total/NA	Water	3510C	
480-105374-8	DUPLICATE	Total/NA	Water	3510C	
MB 480-319263/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-319263/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-105374-1 MS	MW-1MS	Total/NA	Water	3510C	
480-105374-1 MSD	MW-1MSD	Total/NA	Water	3510C	

Analysis Batch: 319435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-105374-1	MW-1	Total/NA	Water	8270D	319263
480-105374-2	MW-7	Total/NA	Water	8270D	319263
480-105374-3	MW-2	Total/NA	Water	8270D	319263
480-105374-4	MW-5	Total/NA	Water	8270D	319263
480-105374-5	MW-8	Total/NA	Water	8270D	319263
480-105374-6	MW-4	Total/NA	Water	8270D	319263
480-105374-7	MW-3	Total/NA	Water	8270D	319263
480-105374-8	DUPLICATE	Total/NA	Water	8270D	319263
MB 480-319263/1-A	Method Blank	Total/NA	Water	8270D	319263
LCS 480-319263/2-A	Lab Control Sample	Total/NA	Water	8270D	319263
480-105374-1 MS	MW-1MS	Total/NA	Water	8270D	319263
480-105374-1 MSD	MW-1MSD	Total/NA	Water	8270D	319263

TestAmerica Buffalo

QC Association Summary

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

GC Semi VOA

Prep Batch: 319150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-105374-1	MW-1	Total/NA	Water	3510C	
480-105374-2	MW-7	Total/NA	Water	3510C	
480-105374-3	MW-2	Total/NA	Water	3510C	
480-105374-4	MW-5	Total/NA	Water	3510C	
480-105374-5	MW-8	Total/NA	Water	3510C	
480-105374-6	MW-4	Total/NA	Water	3510C	
480-105374-7	MW-3	Total/NA	Water	3510C	
480-105374-8	DUPLICATE	Total/NA	Water	3510C	
MB 480-319150/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-319150/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-105374-1 MS	MW-1MS	Total/NA	Water	3510C	
480-105374-1 MSD	MW-1MSD	Total/NA	Water	3510C	

Analysis Batch: 319476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-105374-1	MW-1	Total/NA	Water	8082A	319150
480-105374-2	MW-7	Total/NA	Water	8082A	319150
480-105374-3	MW-2	Total/NA	Water	8082A	319150
480-105374-4	MW-5	Total/NA	Water	8082A	319150
480-105374-5	MW-8	Total/NA	Water	8082A	319150
480-105374-6	MW-4	Total/NA	Water	8082A	319150
480-105374-7	MW-3	Total/NA	Water	8082A	319150
480-105374-8	DUPLICATE	Total/NA	Water	8082A	319150
MB 480-319150/1-A	Method Blank	Total/NA	Water	8082A	319150
LCS 480-319150/2-A	Lab Control Sample	Total/NA	Water	8082A	319150
480-105374-1 MS	MW-1MS	Total/NA	Water	8082A	319150
480-105374-1 MSD	MW-1MSD	Total/NA	Water	8082A	319150

Metals

Prep Batch: 318792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-105374-1	MW-1	Total/NA	Water	3005A	
480-105374-2	MW-7	Total/NA	Water	3005A	
480-105374-3	MW-2	Total/NA	Water	3005A	
480-105374-4	MW-5	Total/NA	Water	3005A	
480-105374-5	MW-8	Total/NA	Water	3005A	
480-105374-6	MW-4	Total/NA	Water	3005A	
480-105374-7	MW-3	Total/NA	Water	3005A	
480-105374-8	DUPLICATE	Total/NA	Water	3005A	
MB 480-318792/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-318792/2-A	Lab Control Sample	Total/NA	Water	3005A	
480-105374-1 MS	MW-1MS	Total/NA	Water	3005A	
480-105374-1 MSD	MW-1MSD	Total/NA	Water	3005A	

Prep Batch: 318812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-105374-1	MW-1	Total/NA	Water	7470A	
480-105374-2	MW-7	Total/NA	Water	7470A	
480-105374-3	MW-2	Total/NA	Water	7470A	

TestAmerica Buffalo

QC Association Summary

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Metals (Continued)

Prep Batch: 318812 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-105374-4	MW-5	Total/NA	Water	7470A	
480-105374-5	MW-8	Total/NA	Water	7470A	
480-105374-6	MW-4	Total/NA	Water	7470A	
480-105374-7	MW-3	Total/NA	Water	7470A	
480-105374-8	DUPLICATE	Total/NA	Water	7470A	
MB 480-318812/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-318812/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 480-318812/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
480-105374-1 MS	MW-1MS	Total/NA	Water	7470A	
480-105374-1 MSD	MW-1MSD	Total/NA	Water	7470A	

Analysis Batch: 318931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-105374-1	MW-1	Total/NA	Water	7470A	318812
480-105374-2	MW-7	Total/NA	Water	7470A	318812
480-105374-3	MW-2	Total/NA	Water	7470A	318812
480-105374-4	MW-5	Total/NA	Water	7470A	318812
480-105374-5	MW-8	Total/NA	Water	7470A	318812
480-105374-6	MW-4	Total/NA	Water	7470A	318812
480-105374-7	MW-3	Total/NA	Water	7470A	318812
480-105374-8	DUPLICATE	Total/NA	Water	7470A	318812
MB 480-318812/1-A	Method Blank	Total/NA	Water	7470A	318812
LCS 480-318812/2-A	Lab Control Sample	Total/NA	Water	7470A	318812
LCSD 480-318812/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	318812
480-105374-1 MS	MW-1MS	Total/NA	Water	7470A	318812
480-105374-1 MSD	MW-1MSD	Total/NA	Water	7470A	318812

Analysis Batch: 319182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-105374-1	MW-1	Total/NA	Water	6010C	318792
480-105374-2	MW-7	Total/NA	Water	6010C	318792
480-105374-3	MW-2	Total/NA	Water	6010C	318792
480-105374-4	MW-5	Total/NA	Water	6010C	318792
480-105374-5	MW-8	Total/NA	Water	6010C	318792
480-105374-6	MW-4	Total/NA	Water	6010C	318792
480-105374-7	MW-3	Total/NA	Water	6010C	318792
480-105374-8	DUPLICATE	Total/NA	Water	6010C	318792
MB 480-318792/1-A	Method Blank	Total/NA	Water	6010C	318792
LCS 480-318792/2-A	Lab Control Sample	Total/NA	Water	6010C	318792
480-105374-1 MS	MW-1MS	Total/NA	Water	6010C	318792
480-105374-1 MSD	MW-1MSD	Total/NA	Water	6010C	318792

General Chemistry

Analysis Batch: 318840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-105374-1	MW-1	Total/NA	Water	7196A	
480-105374-2	MW-7	Total/NA	Water	7196A	
480-105374-3	MW-2	Total/NA	Water	7196A	
480-105374-4	MW-5	Total/NA	Water	7196A	

TestAmerica Buffalo

QC Association Summary

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

General Chemistry (Continued)

Analysis Batch: 318840 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-105374-5	MW-8	Total/NA	Water	7196A	
480-105374-6	MW-4	Total/NA	Water	7196A	
480-105374-7	MW-3	Total/NA	Water	7196A	
480-105374-8	DUPLICATE	Total/NA	Water	7196A	
MB 480-318840/3	Method Blank	Total/NA	Water	7196A	
LCS 480-318840/4	Lab Control Sample	Total/NA	Water	7196A	
480-105374-1 MS	MW-1MS	Total/NA	Water	7196A	
480-105374-1 MSD	MW-1MSD	Total/NA	Water	7196A	

Prep Batch: 318900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-105374-1	MW-1	Total/NA	Water	9012B	
480-105374-2	MW-7	Total/NA	Water	9012B	
480-105374-3	MW-2	Total/NA	Water	9012B	
480-105374-5	MW-8	Total/NA	Water	9012B	
480-105374-6	MW-4	Total/NA	Water	9012B	
480-105374-7	MW-3	Total/NA	Water	9012B	
480-105374-8	DUPLICATE	Total/NA	Water	9012B	
MB 480-318900/1-A	Method Blank	Total/NA	Water	9012B	
LCS 480-318900/2-A	Lab Control Sample	Total/NA	Water	9012B	
480-105374-1 MS	MW-1MS	Total/NA	Water	9012B	
480-105374-1 MSD	MW-1MSD	Total/NA	Water	9012B	
480-105374-2 MS	MW-7	Total/NA	Water	9012B	

Analysis Batch: 318950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-105374-1	MW-1	Total/NA	Water	9012B	318900
480-105374-2	MW-7	Total/NA	Water	9012B	318900
480-105374-3	MW-2	Total/NA	Water	9012B	318900
480-105374-5	MW-8	Total/NA	Water	9012B	318900
480-105374-6	MW-4	Total/NA	Water	9012B	318900
480-105374-7	MW-3	Total/NA	Water	9012B	318900
480-105374-8	DUPLICATE	Total/NA	Water	9012B	318900
MB 480-318900/1-A	Method Blank	Total/NA	Water	9012B	318900
LCS 480-318900/2-A	Lab Control Sample	Total/NA	Water	9012B	318900
480-105374-1 MS	MW-1MS	Total/NA	Water	9012B	318900
480-105374-1 MSD	MW-1MSD	Total/NA	Water	9012B	318900
480-105374-2 MS	MW-7	Total/NA	Water	9012B	318900

Prep Batch: 319283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-105374-4	MW-5	Total/NA	Water	9012B	
MB 480-319283/1-A	Method Blank	Total/NA	Water	9012B	
LCS 480-319283/2-A	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-319283/3-A	Lab Control Sample	Total/NA	Water	9012B	

Analysis Batch: 319438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-105374-4	MW-5	Total/NA	Water	9012B	319283
MB 480-319283/1-A	Method Blank	Total/NA	Water	9012B	319283
LCS 480-319283/2-A	Lab Control Sample	Total/NA	Water	9012B	319283

TestAmerica Buffalo

QC Association Summary

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

General Chemistry (Continued)

Analysis Batch: 319438 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-319283/3-A	Lab Control Sample	Total/NA	Water	9012B	319283

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-1

Date Collected: 09/01/16 08:10

Date Received: 09/02/16 01:30

Lab Sample ID: 480-105374-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	318890	09/03/16 02:10	JWG	TAL BUF
Total/NA	Prep	3510C			319263	09/07/16 14:25	ARS	TAL BUF
Total/NA	Analysis	8270D		1	319435	09/08/16 16:03	PJQ	TAL BUF
Total/NA	Prep	3510C			319150	09/07/16 07:29	SMP	TAL BUF
Total/NA	Analysis	8082A		1	319476	09/09/16 02:09	JMO	TAL BUF
Total/NA	Prep	3005A			318792	09/02/16 09:00	RMZ	TAL BUF
Total/NA	Analysis	6010C		1	319182	09/06/16 15:24	TRB	TAL BUF
Total/NA	Prep	7470A			318812	09/02/16 09:50	JRK	TAL BUF
Total/NA	Analysis	7470A		1	318931	09/02/16 15:30	JRK	TAL BUF
Total/NA	Analysis	7196A		10	318840	09/02/16 08:20	KMB	TAL BUF
Total/NA	Prep	9012B			318900	09/02/16 18:45	DJS	TAL BUF
Total/NA	Analysis	9012B		1	318950	09/05/16 10:14	MDL	TAL BUF

Client Sample ID: MW-7

Date Collected: 09/01/16 09:25

Date Received: 09/02/16 01:30

Lab Sample ID: 480-105374-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	318890	09/03/16 02:33	JWG	TAL BUF
Total/NA	Prep	3510C			319263	09/07/16 14:25	ARS	TAL BUF
Total/NA	Analysis	8270D		1	319435	09/08/16 16:33	PJQ	TAL BUF
Total/NA	Prep	3510C			319150	09/07/16 07:29	SMP	TAL BUF
Total/NA	Analysis	8082A		1	319476	09/09/16 02:25	JMO	TAL BUF
Total/NA	Prep	3005A			318792	09/02/16 09:00	RMZ	TAL BUF
Total/NA	Analysis	6010C		1	319182	09/06/16 15:53	TRB	TAL BUF
Total/NA	Prep	7470A			318812	09/02/16 09:50	JRK	TAL BUF
Total/NA	Analysis	7470A		1	318931	09/02/16 15:36	JRK	TAL BUF
Total/NA	Analysis	7196A		1	318840	09/02/16 08:20	KMB	TAL BUF
Total/NA	Prep	9012B			318900	09/02/16 18:45	DJS	TAL BUF
Total/NA	Analysis	9012B		1	318950	09/05/16 09:58	MDL	TAL BUF

Client Sample ID: MW-2

Date Collected: 09/01/16 10:40

Date Received: 09/02/16 01:30

Lab Sample ID: 480-105374-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	318890	09/03/16 02:56	JWG	TAL BUF
Total/NA	Prep	3510C			319263	09/07/16 14:25	ARS	TAL BUF
Total/NA	Analysis	8270D		1	319435	09/08/16 17:02	PJQ	TAL BUF
Total/NA	Prep	3510C			319150	09/07/16 07:29	SMP	TAL BUF
Total/NA	Analysis	8082A		1	319476	09/09/16 02:41	JMO	TAL BUF
Total/NA	Prep	3005A			318792	09/02/16 09:00	RMZ	TAL BUF
Total/NA	Analysis	6010C		1	319182	09/06/16 15:57	TRB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: GHD Services Inc.

TestAmerica Job ID: 480-105374-1

Project/Site: 3711082, GSP AOC1 -3 Remedial Action

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			318812	09/02/16 09:50	JRK	TAL BUF
Total/NA	Analysis	7470A		1	318931	09/02/16 15:38	JRK	TAL BUF
Total/NA	Analysis	7196A		1	318840	09/02/16 08:20	KMB	TAL BUF
Total/NA	Prep	9012B			318900	09/02/16 18:45	DJS	TAL BUF
Total/NA	Analysis	9012B		1	318950	09/05/16 10:01	MDL	TAL BUF

Client Sample ID: MW-5

Lab Sample ID: 480-105374-4

Date Collected: 09/01/16 11:45

Matrix: Water

Date Received: 09/02/16 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	318890	09/03/16 03:19	JWG	TAL BUF
Total/NA	Prep	3510C			319263	09/07/16 14:25	ARS	TAL BUF
Total/NA	Analysis	8270D		1	319435	09/08/16 17:32	PJQ	TAL BUF
Total/NA	Prep	3510C			319150	09/07/16 07:29	SMP	TAL BUF
Total/NA	Analysis	8082A		1	319476	09/09/16 02:57	JMO	TAL BUF
Total/NA	Prep	3005A			318792	09/02/16 09:00	RMZ	TAL BUF
Total/NA	Analysis	6010C		1	319182	09/06/16 16:00	TRB	TAL BUF
Total/NA	Prep	7470A			318812	09/02/16 09:50	JRK	TAL BUF
Total/NA	Analysis	7470A		1	318931	09/02/16 15:43	JRK	TAL BUF
Total/NA	Analysis	7196A		1	318840	09/02/16 08:20	KMB	TAL BUF
Total/NA	Prep	9012B			319283	09/07/16 16:25	DJS	TAL BUF
Total/NA	Analysis	9012B		1	319438	09/08/16 10:03	KMF	TAL BUF

Client Sample ID: MW-8

Lab Sample ID: 480-105374-5

Date Collected: 09/01/16 13:10

Matrix: Water

Date Received: 09/02/16 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	318890	09/03/16 03:42	JWG	TAL BUF
Total/NA	Prep	3510C			319263	09/07/16 14:25	ARS	TAL BUF
Total/NA	Analysis	8270D		1	319435	09/08/16 18:01	PJQ	TAL BUF
Total/NA	Prep	3510C			319150	09/07/16 07:29	SMP	TAL BUF
Total/NA	Analysis	8082A		1	319476	09/09/16 03:13	JMO	TAL BUF
Total/NA	Prep	3005A			318792	09/02/16 09:00	RMZ	TAL BUF
Total/NA	Analysis	6010C		1	319182	09/06/16 16:04	TRB	TAL BUF
Total/NA	Prep	7470A			318812	09/02/16 09:50	JRK	TAL BUF
Total/NA	Analysis	7470A		1	318931	09/02/16 15:45	JRK	TAL BUF
Total/NA	Analysis	7196A		1	318840	09/02/16 08:20	KMB	TAL BUF
Total/NA	Prep	9012B			318900	09/02/16 18:45	DJS	TAL BUF
Total/NA	Analysis	9012B		1	318950	09/05/16 10:05	MDL	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: MW-4

Lab Sample ID: 480-105374-6

Date Collected: 09/01/16 14:40

Matrix: Water

Date Received: 09/02/16 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	318890	09/03/16 04:05	JWG	TAL BUF
Total/NA	Prep	3510C			319263	09/07/16 14:25	ARS	TAL BUF
Total/NA	Analysis	8270D		1	319435	09/08/16 18:31	PJQ	TAL BUF
Total/NA	Prep	3510C			319150	09/07/16 07:29	SMP	TAL BUF
Total/NA	Analysis	8082A		1	319476	09/09/16 03:29	JMO	TAL BUF
Total/NA	Prep	3005A			318792	09/02/16 09:00	RMZ	TAL BUF
Total/NA	Analysis	6010C		1	319182	09/06/16 16:08	TRB	TAL BUF
Total/NA	Prep	7470A			318812	09/02/16 09:50	JRK	TAL BUF
Total/NA	Analysis	7470A		1	318931	09/02/16 15:47	JRK	TAL BUF
Total/NA	Analysis	7196A		1	318840	09/02/16 08:20	KMB	TAL BUF
Total/NA	Prep	9012B			318900	09/02/16 18:45	DJS	TAL BUF
Total/NA	Analysis	9012B		1	318950	09/05/16 10:02	MDL	TAL BUF

Client Sample ID: MW-3

Lab Sample ID: 480-105374-7

Date Collected: 09/01/16 15:40

Matrix: Water

Date Received: 09/02/16 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	318890	09/03/16 04:28	JWG	TAL BUF
Total/NA	Prep	3510C			319263	09/07/16 14:25	ARS	TAL BUF
Total/NA	Analysis	8270D		1	319435	09/08/16 19:00	PJQ	TAL BUF
Total/NA	Prep	3510C			319150	09/07/16 07:29	SMP	TAL BUF
Total/NA	Analysis	8082A		1	319476	09/09/16 03:45	JMO	TAL BUF
Total/NA	Prep	3005A			318792	09/02/16 09:00	RMZ	TAL BUF
Total/NA	Analysis	6010C		1	319182	09/06/16 16:11	TRB	TAL BUF
Total/NA	Prep	7470A			318812	09/02/16 09:50	JRK	TAL BUF
Total/NA	Analysis	7470A		1	318931	09/02/16 15:49	JRK	TAL BUF
Total/NA	Analysis	7196A		1	318840	09/02/16 08:20	KMB	TAL BUF
Total/NA	Prep	9012B			318900	09/02/16 18:45	DJS	TAL BUF
Total/NA	Analysis	9012B		1	318950	09/05/16 10:11	MDL	TAL BUF

Client Sample ID: DUPLICATE

Lab Sample ID: 480-105374-8

Date Collected: 09/01/16 00:00

Matrix: Water

Date Received: 09/02/16 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	318890	09/03/16 04:51	JWG	TAL BUF
Total/NA	Prep	3510C			319263	09/07/16 14:25	ARS	TAL BUF
Total/NA	Analysis	8270D		1	319435	09/08/16 23:20	PJQ	TAL BUF
Total/NA	Prep	3510C			319150	09/07/16 07:29	SMP	TAL BUF
Total/NA	Analysis	8082A		1	319476	09/09/16 04:01	JMO	TAL BUF
Total/NA	Prep	3005A			318792	09/02/16 09:00	RMZ	TAL BUF
Total/NA	Analysis	6010C		1	319182	09/06/16 16:15	TRB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Client Sample ID: DUPLICATE

Lab Sample ID: 480-105374-8

Date Collected: 09/01/16 00:00

Matrix: Water

Date Received: 09/02/16 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			318812	09/02/16 09:50	JRK	TAL BUF
Total/NA	Analysis	7470A		1	318931	09/02/16 15:51	JRK	TAL BUF
Total/NA	Analysis	7196A		1	318840	09/02/16 08:20	KMB	TAL BUF
Total/NA	Prep	9012B			318900	09/02/16 18:45	DJS	TAL BUF
Total/NA	Analysis	9012B		1	318950	09/05/16 10:04	MDL	TAL BUF

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-105374-9

Date Collected: 09/01/16 00:00

Matrix: Water

Date Received: 09/02/16 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	318895	09/02/16 21:26	GTG	TAL BUF

Laboratory References:

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

Certification Summary

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-17

Method Summary

Client: GHD Services Inc.
Project/Site: 3711082, GSP AOC1 -3 Remedial Action

TestAmerica Job ID: 480-105374-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL BUF
9012B	Cyanide, Total and/or Amenable	SW846	TAL BUF

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: GHD Services Inc.

TestAmerica Job ID: 480-105374-1

Project/Site: 3711082, GSP AOC1 -3 Remedial Action

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-105374-1	MW-1	Water	09/01/16 08:10	09/02/16 01:30
480-105374-2	MW-7	Water	09/01/16 09:25	09/02/16 01:30
480-105374-3	MW-2	Water	09/01/16 10:40	09/02/16 01:30
480-105374-4	MW-5	Water	09/01/16 11:45	09/02/16 01:30
480-105374-5	MW-8	Water	09/01/16 13:10	09/02/16 01:30
480-105374-6	MW-4	Water	09/01/16 14:40	09/02/16 01:30
480-105374-7	MW-3	Water	09/01/16 15:40	09/02/16 01:30
480-105374-8	DUPLICATE	Water	09/01/16 00:00	09/02/16 01:30
480-105374-9	TRIP BLANK	Water	09/01/16 00:00	09/02/16 01:30

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

THE LADDER IN ENVIRONMENTAL TESTING

[illegible]

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 480-105374-1

Login Number: 105374

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GHD
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

-
-

Attachment 4 Sediment Samples Laboratory Analytical Report



ANALYTICAL REPORT

Lab Number:	L1626453
Client:	GHD Inc One Remington Park Drive Cazenovia, NY 13035
ATTN:	Ian McNamara
Phone:	(315) 679-5800
Project Name:	CELI DRIVE BCP SITE
Project Number:	37-11082
Report Date:	08/30/16

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: CELI DRIVE BCP SITE

Project Number: 37-11082

Lab Number: L1626453

Report Date: 08/30/16

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1626453-01	BSS-SED1-COMP	SOIL	SYRACUSE, NY	08/23/16 08:00	08/23/16
L1626453-02	AOC4-SED4A	SOIL	SYRACUSE, NY	08/23/16 08:55	08/23/16
L1626453-03	AOC4-SED4B	SOIL	SYRACUSE, NY	08/23/16 09:05	08/23/16
L1626453-04	AOC4-SED4C	SOIL	SYRACUSE, NY	08/23/16 09:10	08/23/16
L1626453-05	AOC4-SED5A	SOIL	SYRACUSE, NY	08/23/16 09:25	08/23/16
L1626453-06	AOC4-SED5B	SOIL	SYRACUSE, NY	08/23/16 09:35	08/23/16
L1626453-07	AOC4-SED5C	SOIL	SYRACUSE, NY	08/23/16 09:45	08/23/16
L1626453-08	AOC4-SED6A	SOIL	SYRACUSE, NY	08/23/16 09:50	08/23/16
L1626453-09	AOC4-SED6B	SOIL	SYRACUSE, NY	08/23/16 10:00	08/23/16
L1626453-10	AOC4-SED6C	SOIL	SYRACUSE, NY	08/23/16 10:05	08/23/16
L1626453-11	AOC4-SED7A	SOIL	SYRACUSE, NY	08/23/16 10:15	08/23/16
L1626453-12	AOC4-SED7B	SOIL	SYRACUSE, NY	08/23/16 10:25	08/23/16
L1626453-13	AOC4-SED7C	SOIL	SYRACUSE, NY	08/23/16 10:35	08/23/16
L1626453-14	AOC4-SED3A	SOIL	SYRACUSE, NY	08/23/16 10:50	08/23/16
L1626453-15	AOC4-SED3B	SOIL	SYRACUSE, NY	08/23/16 11:00	08/23/16
L1626453-16	AOC4-SED3C	SOIL	SYRACUSE, NY	08/23/16 11:10	08/23/16
L1626453-17	AOC4-SED2A	SOIL	SYRACUSE, NY	08/23/16 11:15	08/23/16
L1626453-18	AOC4-SED2B	SOIL	SYRACUSE, NY	08/23/16 11:20	08/23/16
L1626453-19	AOC4-SED2C	SOIL	SYRACUSE, NY	08/23/16 11:30	08/23/16
L1626453-20	AOC4-SED1A	SOIL	SYRACUSE, NY	08/23/16 11:45	08/23/16
L1626453-21	AOC4-SED1B	SOIL	SYRACUSE, NY	08/23/16 11:55	08/23/16
L1626453-22	AOC4-SED1C	SOIL	SYRACUSE, NY	08/23/16 12:05	08/23/16
L1626453-23	DUPLICATE	SOIL	SYRACUSE, NY	08/23/16 00:00	08/23/16
L1626453-24	DCUPLICATE 2	SOIL	SYRACUSE, NY	08/23/16 00:00	08/23/16

Project Name: CELI DRIVE BCP SITE
Project Number: 37-11082

Lab Number: L1626453
Report Date: 08/30/16

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

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

Please contact Client Services at 800-624-9220 with any questions.

Project Name: CELI DRIVE BCP SITE
Project Number: 37-11082

Lab Number: L1626453
Report Date: 08/30/16

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Metals

The WG926174-4 MS recoveries for chromium (299%) and copper (0%), performed on L1626453-21, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG926174-4 MS recovery, performed on L1626453-21, is outside the acceptance criteria for nickel (64%). A post digestion spike was performed and yielded an unacceptable recovery of 33%. This has been attributed to sample matrix.

The WG926175-4 MS recoveries, performed on L1626453-01, are outside the acceptance criteria for chromium (74%) and nickel (69%). A post digestion spike was performed and was within acceptance criteria.

Cyanide, Total

L1626453-02, -04, -10, -11, -17, -18, -22 and -24: The sample has an elevated detection limit due to the dilution required by the sample matrix.

The WG925493-2/-3 LCS/LCSD recoveries (130%/130%), associated with L1626453-21 through -24, are above our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

Chromium, Hexavalent

The WG925934-4 Insoluble MS recovery (60%), performed on L1626453-10, is below the acceptance criteria. The Soluble MS recovery (0%) was also below criteria. This has been attributed to matrix interference. A post-spike was performed with an acceptable recovery of 110%.

The WG925937-4 Insoluble MS recovery (71%), performed on L1626453-20, is below the acceptance criteria. The Soluble MS recovery (50%) was also below criteria. This has been attributed to matrix interference. A post-spike was performed with an acceptable recovery of 98%.

The WG927027-4 Insoluble MS recovery (51%), performed on L1626453-23, is below the acceptance criteria.

Project Name: CELI DRIVE BCP SITE
Project Number: 37-11082

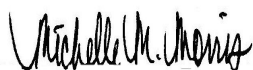
Lab Number: L1626453
Report Date: 08/30/16

Case Narrative (continued)

The Soluble MS recovery (26%) was also below criteria. This has been attributed to matrix interference. A post-spike was performed with an acceptable recovery of 90%.

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

Authorized Signature:



Michelle M. Morris

Title: Technical Director/Representative

Date: 08/30/16

METALS

Project Name: CELI DRIVE BCP SITE**Lab Number:** L1626453**Project Number:** 37-11082**Report Date:** 08/30/16**SAMPLE RESULTS**

Lab ID: L1626453-01

Date Collected: 08/23/16 08:00

Client ID: BSS-SED1-COMP

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 72%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	55		mg/kg	0.54	0.09	1	08/26/16 06:20	08/26/16 19:43	EPA 3050B	1,6010C	PS
Copper, Total	30		mg/kg	0.54	0.10	1	08/26/16 06:20	08/26/16 19:43	EPA 3050B	1,6010C	PS
Nickel, Total	17		mg/kg	1.3	0.21	1	08/26/16 06:20	08/26/16 19:43	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE**Lab Number:** L1626453**Project Number:** 37-11082**Report Date:** 08/30/16**SAMPLE RESULTS**

Lab ID: L1626453-02

Date Collected: 08/23/16 08:55

Client ID: AOC4-SED4A

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 49%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	75		mg/kg	0.82	0.14	1	08/26/16 06:20	08/26/16 19:59	EPA 3050B	1,6010C	PS
Copper, Total	230		mg/kg	0.82	0.15	1	08/26/16 06:20	08/26/16 19:59	EPA 3050B	1,6010C	PS
Nickel, Total	60		mg/kg	2.0	0.33	1	08/26/16 06:20	08/26/16 19:59	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-03

Date Collected: 08/23/16 09:05

Client ID: AOC4-SED4B

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 56%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	120		mg/kg	0.69	0.12	1	08/26/16 06:20	08/26/16 20:03	EPA 3050B	1,6010C	PS
Copper, Total	81		mg/kg	0.69	0.12	1	08/26/16 06:20	08/26/16 20:03	EPA 3050B	1,6010C	PS
Nickel, Total	34		mg/kg	1.7	0.28	1	08/26/16 06:20	08/26/16 20:03	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-04

Date Collected: 08/23/16 09:10

Client ID: AOC4-SED4C

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 58%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	160		mg/kg	0.68	0.12	1	08/26/16 06:20	08/26/16 20:07	EPA 3050B	1,6010C	PS
Copper, Total	440		mg/kg	0.68	0.12	1	08/26/16 06:20	08/26/16 20:07	EPA 3050B	1,6010C	PS
Nickel, Total	67		mg/kg	1.7	0.27	1	08/26/16 06:20	08/26/16 20:07	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-05

Date Collected: 08/23/16 09:25

Client ID: AOC4-SED5A

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 67%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	27		mg/kg	0.59	0.10	1	08/26/16 06:20	08/26/16 20:11	EPA 3050B	1,6010C	PS
Copper, Total	70		mg/kg	0.59	0.11	1	08/26/16 06:20	08/26/16 20:11	EPA 3050B	1,6010C	PS
Nickel, Total	34		mg/kg	1.5	0.24	1	08/26/16 06:20	08/26/16 20:11	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE**Lab Number:** L1626453**Project Number:** 37-11082**Report Date:** 08/30/16**SAMPLE RESULTS**

Lab ID: L1626453-06

Date Collected: 08/23/16 09:35

Client ID: AOC4-SED5B

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 37%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	170		mg/kg	1.1	0.18	1	08/26/16 06:20	08/26/16 20:15	EPA 3050B	1,6010C	PS
Copper, Total	410		mg/kg	1.1	0.19	1	08/26/16 06:20	08/26/16 20:15	EPA 3050B	1,6010C	PS
Nickel, Total	170		mg/kg	2.6	0.42	1	08/26/16 06:20	08/26/16 20:15	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE**Lab Number:** L1626453**Project Number:** 37-11082**Report Date:** 08/30/16**SAMPLE RESULTS**

Lab ID: L1626453-07

Date Collected: 08/23/16 09:45

Client ID: AOC4-SED5C

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 57%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	33		mg/kg	0.70	0.12	1	08/26/16 06:20	08/26/16 21:41	EPA 3050B	1,6010C	PS
Copper, Total	150		mg/kg	0.70	0.13	1	08/26/16 06:20	08/26/16 21:41	EPA 3050B	1,6010C	PS
Nickel, Total	340		mg/kg	1.8	0.28	1	08/26/16 06:20	08/26/16 21:41	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-08

Date Collected: 08/23/16 09:50

Client ID: AOC4-SED6A

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 52%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	51		mg/kg	0.74	0.13	1	08/26/16 06:20	08/26/16 21:45	EPA 3050B	1,6010C	PS
Copper, Total	120		mg/kg	0.74	0.13	1	08/26/16 06:20	08/26/16 21:45	EPA 3050B	1,6010C	PS
Nickel, Total	51		mg/kg	1.9	0.30	1	08/26/16 06:20	08/26/16 21:45	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-09

Date Collected: 08/23/16 10:00

Client ID: AOC4-SED6B

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 35%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	210		mg/kg	1.1	0.20	1	08/26/16 06:20	08/26/16 21:49	EPA 3050B	1,6010C	PS
Copper, Total	730		mg/kg	1.1	0.21	1	08/26/16 06:20	08/26/16 21:49	EPA 3050B	1,6010C	PS
Nickel, Total	200		mg/kg	2.9	0.46	1	08/26/16 06:20	08/26/16 21:49	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-10

Date Collected: 08/23/16 10:05

Client ID: AOC4-SED6C

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 64%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	220		mg/kg	0.62	0.10	1	08/26/16 06:20	08/26/16 21:53	EPA 3050B	1,6010C	PS
Copper, Total	500		mg/kg	0.62	0.11	1	08/26/16 06:20	08/26/16 21:53	EPA 3050B	1,6010C	PS
Nickel, Total	140		mg/kg	1.6	0.25	1	08/26/16 06:20	08/26/16 21:53	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE**Lab Number:** L1626453**Project Number:** 37-11082**Report Date:** 08/30/16**SAMPLE RESULTS****Lab ID:** L1626453-11**Date Collected:** 08/23/16 10:15**Client ID:** AOC4-SED7A**Date Received:** 08/23/16**Sample Location:** SYRACUSE, NY**Field Prep:** Not Specified**Matrix:** Soil**Percent Solids:** 45%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	290		mg/kg	0.87	0.15	1	08/26/16 06:20	08/26/16 21:57	EPA 3050B	1,6010C	PS
Copper, Total	980		mg/kg	0.87	0.16	1	08/26/16 06:20	08/26/16 21:57	EPA 3050B	1,6010C	PS
Nickel, Total	370		mg/kg	2.2	0.35	1	08/26/16 06:20	08/26/16 21:57	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE**Lab Number:** L1626453**Project Number:** 37-11082**Report Date:** 08/30/16**SAMPLE RESULTS**

Lab ID: L1626453-12

Date Collected: 08/23/16 10:25

Client ID: AOC4-SED7B

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 63%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	86		mg/kg	0.62	0.10	1	08/26/16 06:20	08/26/16 22:01	EPA 3050B	1,6010C	PS
Copper, Total	89		mg/kg	0.62	0.11	1	08/26/16 06:20	08/26/16 22:01	EPA 3050B	1,6010C	PS
Nickel, Total	56		mg/kg	1.6	0.25	1	08/26/16 06:20	08/26/16 22:01	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-13

Date Collected: 08/23/16 10:35

Client ID: AOC4-SED7C

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 47%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	35		mg/kg	0.86	0.15	1	08/26/16 06:20	08/26/16 22:05	EPA 3050B	1,6010C	PS
Copper, Total	70		mg/kg	0.86	0.15	1	08/26/16 06:20	08/26/16 22:05	EPA 3050B	1,6010C	PS
Nickel, Total	33		mg/kg	2.1	0.34	1	08/26/16 06:20	08/26/16 22:05	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-14

Date Collected: 08/23/16 10:50

Client ID: AOC4-SED3A

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 42%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	270		mg/kg	0.94	0.16	1	08/26/16 06:20	08/26/16 22:09	EPA 3050B	1,6010C	PS
Copper, Total	240		mg/kg	0.94	0.17	1	08/26/16 06:20	08/26/16 22:09	EPA 3050B	1,6010C	PS
Nickel, Total	59		mg/kg	2.3	0.37	1	08/26/16 06:20	08/26/16 22:09	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-15

Date Collected: 08/23/16 11:00

Client ID: AOC4-SED3B

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 38%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	62		mg/kg	1.0	0.17	1	08/26/16 06:20	08/26/16 22:13	EPA 3050B	1,6010C	PS
Copper, Total	150		mg/kg	1.0	0.18	1	08/26/16 06:20	08/26/16 22:13	EPA 3050B	1,6010C	PS
Nickel, Total	54		mg/kg	2.5	0.40	1	08/26/16 06:20	08/26/16 22:13	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE**Lab Number:** L1626453**Project Number:** 37-11082**Report Date:** 08/30/16**SAMPLE RESULTS**

Lab ID: L1626453-16

Date Collected: 08/23/16 11:10

Client ID: AOC4-SED3C

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 52%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	40		mg/kg	0.74	0.13	1	08/26/16 06:20	08/26/16 22:17	EPA 3050B	1,6010C	PS
Copper, Total	40		mg/kg	0.74	0.13	1	08/26/16 06:20	08/26/16 22:17	EPA 3050B	1,6010C	PS
Nickel, Total	27		mg/kg	1.8	0.30	1	08/26/16 06:20	08/26/16 22:17	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE**Lab Number:** L1626453**Project Number:** 37-11082**Report Date:** 08/30/16**SAMPLE RESULTS**

Lab ID: L1626453-17

Date Collected: 08/23/16 11:15

Client ID: AOC4-SED2A

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 51%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	130		mg/kg	0.78	0.13	1	08/26/16 06:20	08/26/16 22:50	EPA 3050B	1,6010C	PS
Copper, Total	220		mg/kg	0.78	0.14	1	08/26/16 06:20	08/26/16 22:50	EPA 3050B	1,6010C	PS
Nickel, Total	130		mg/kg	1.9	0.31	1	08/26/16 06:20	08/26/16 22:50	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-18

Date Collected: 08/23/16 11:20

Client ID: AOC4-SED2B

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 31%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	210		mg/kg	1.3	0.22	1	08/26/16 06:20	08/26/16 22:54	EPA 3050B	1,6010C	PS
Copper, Total	530		mg/kg	1.3	0.23	1	08/26/16 06:20	08/26/16 22:54	EPA 3050B	1,6010C	PS
Nickel, Total	140		mg/kg	3.2	0.51	1	08/26/16 06:20	08/26/16 22:54	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE**Lab Number:** L1626453**Project Number:** 37-11082**Report Date:** 08/30/16**SAMPLE RESULTS**

Lab ID: L1626453-19

Date Collected: 08/23/16 11:30

Client ID: AOC4-SED2C

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 40%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	190		mg/kg	0.99	0.17	1	08/26/16 06:20	08/26/16 22:58	EPA 3050B	1,6010C	PS
Copper, Total	66		mg/kg	0.99	0.18	1	08/26/16 06:20	08/26/16 22:58	EPA 3050B	1,6010C	PS
Nickel, Total	53		mg/kg	2.5	0.40	1	08/26/16 06:20	08/26/16 22:58	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE**Lab Number:** L1626453**Project Number:** 37-11082**Report Date:** 08/30/16**SAMPLE RESULTS**

Lab ID: L1626453-20

Date Collected: 08/23/16 11:45

Client ID: AOC4-SED1A

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 76%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	11		mg/kg	0.52	0.09	1	08/26/16 06:20	08/26/16 23:02	EPA 3050B	1,6010C	PS
Copper, Total	39		mg/kg	0.52	0.09	1	08/26/16 06:20	08/26/16 23:02	EPA 3050B	1,6010C	PS
Nickel, Total	14		mg/kg	1.3	0.21	1	08/26/16 06:20	08/26/16 23:02	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE**Lab Number:** L1626453**Project Number:** 37-11082**Report Date:** 08/30/16**SAMPLE RESULTS**

Lab ID: L1626453-21

Date Collected: 08/23/16 11:55

Client ID: AOC4-SED1B

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 59%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	140		mg/kg	0.66	0.11	1	08/26/16 05:50	08/26/16 14:19	EPA 3050B	1,6010C	PS
Copper, Total	170		mg/kg	0.66	0.12	1	08/26/16 05:50	08/26/16 14:19	EPA 3050B	1,6010C	PS
Nickel, Total	57		mg/kg	1.6	0.26	1	08/26/16 05:50	08/26/16 14:19	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-22

Date Collected: 08/23/16 12:05

Client ID: AOC4-SED1C

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 54%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	160		mg/kg	0.74	0.12	1	08/26/16 05:50	08/26/16 17:25	EPA 3050B	1,6010C	PS
Copper, Total	300		mg/kg	0.74	0.13	1	08/26/16 05:50	08/26/16 17:25	EPA 3050B	1,6010C	PS
Nickel, Total	140		mg/kg	1.8	0.29	1	08/26/16 05:50	08/26/16 17:25	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-23

Date Collected: 08/23/16 00:00

Client ID: DUPLICATE

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Percent Solids: 62%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	82		mg/kg	0.64	0.11	1	08/26/16 05:50	08/26/16 17:29	EPA 3050B	1,6010C	PS
Copper, Total	200		mg/kg	0.64	0.11	1	08/26/16 05:50	08/26/16 17:29	EPA 3050B	1,6010C	PS
Nickel, Total	59		mg/kg	1.6	0.25	1	08/26/16 05:50	08/26/16 17:29	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE**Lab Number:** L1626453**Project Number:** 37-11082**Report Date:** 08/30/16**SAMPLE RESULTS****Lab ID:** L1626453-24**Date Collected:** 08/23/16 00:00**Client ID:** DCUPLICATE 2**Date Received:** 08/23/16**Sample Location:** SYRACUSE, NY**Field Prep:** Not Specified**Matrix:** Soil**Percent Solids:** 51%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Chromium, Total	31		mg/kg	0.78	0.13	1	08/26/16 05:50	08/26/16 18:05	EPA 3050B	1,6010C	PS
Copper, Total	57		mg/kg	0.78	0.14	1	08/26/16 05:50	08/26/16 18:05	EPA 3050B	1,6010C	PS
Nickel, Total	27		mg/kg	1.9	0.31	1	08/26/16 05:50	08/26/16 18:05	EPA 3050B	1,6010C	PS



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 21-24 Batch: WG926174-1										
Chromium, Total	ND		mg/kg	0.40	0.07	1	08/26/16 05:50	08/26/16 14:11	1,6010C	PS
Copper, Total	ND		mg/kg	0.40	0.07	1	08/26/16 05:50	08/26/16 14:11	1,6010C	PS
Nickel, Total	ND		mg/kg	1.0	0.16	1	08/26/16 05:50	08/26/16 14:11	1,6010C	PS

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-20 Batch: WG926175-1										
Chromium, Total	ND		mg/kg	0.40	0.07	1	08/26/16 06:20	08/26/16 18:53	1,6010C	PS
Copper, Total	ND		mg/kg	0.40	0.07	1	08/26/16 06:20	08/26/16 18:53	1,6010C	PS
Nickel, Total	ND		mg/kg	1.0	0.16	1	08/26/16 06:20	08/26/16 18:53	1,6010C	PS

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: CELI DRIVE BCP SITE

Project Number: 37-11082

Lab Number: L1626453

Report Date: 08/30/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 21-24 Batch: WG926174-2 SRM Lot Number: D089-540								
Chromium, Total	102		-		79-121	-		
Copper, Total	107		-		80-119	-		
Nickel, Total	112		-		82-117	-		
Total Metals - Mansfield Lab Associated sample(s): 01-20 Batch: WG926175-2 SRM Lot Number: D089-540								
Chromium, Total	111		-		79-121	-		
Copper, Total	115		-		80-119	-		
Nickel, Total	101		-		82-117	-		

Matrix Spike Analysis

Batch Quality Control

Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 21-24 QC Batch ID: WG926174-4 QC Sample: L1626453-21 Client ID: AOC4-SED1B												
Chromium, Total	140	26.8	220	299	Q	-	-		75-125	-		20
Copper, Total	170	33.5	170	0	Q	-	-		75-125	-		20
Nickel, Total	57.	66.9	100	64	Q	-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-20 QC Batch ID: WG926175-4 QC Sample: L1626453-01 Client ID: BSS-SED1-COMP												
Chromium, Total	55.	21.5	71	74	Q	-	-		75-125	-		20
Copper, Total	30.	26.8	52	82		-	-		75-125	-		20
Nickel, Total	17.	53.7	54	69	Q	-	-		75-125	-		20

Lab Duplicate Analysis Batch Quality Control

Project Name: CELI DRIVE BCP SITE
Project Number: 37-11082

Lab Number: L1626453
Report Date: 08/30/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 21-24 QC Batch ID: WG926174-3 QC Sample: L1626453-21 Client ID: AOC4-SED1B						
Chromium, Total	140	120	mg/kg	15		20
Copper, Total	170	140	mg/kg	19		20
Nickel, Total	57.	50	mg/kg	13		20
Total Metals - Mansfield Lab Associated sample(s): 01-20 QC Batch ID: WG926175-3 QC Sample: L1626453-01 Client ID: BSS-SED1-COMP						
Chromium, Total	55.	63	mg/kg	14		20
Copper, Total	30.	31	mg/kg	3		20
Nickel, Total	17.	19	mg/kg	11		20

INORGANICS & MISCELLANEOUS

Project Name: CELI DRIVE BCP SITE

Project Number: 37-11082

Lab Number: L1626453

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-01
 Client ID: BSS-SED1-COMP
 Sample Location: SYRACUSE, NY
 Matrix: Soil

Date Collected: 08/23/16 08:00
 Date Received: 08/23/16
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	72.2		%	0.100	NA	1	-	08/24/16 14:52	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.3	0.21	1	08/24/16 15:25	08/24/16 21:16	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	1.1	0.22	1	08/25/16 11:13	08/29/16 14:24	1,7196A	AL



Project Name: CELI DRIVE BCP SITE

Project Number: 37-11082

Lab Number: L1626453

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-02

Client ID: AOC4-SED4A

Sample Location: SYRACUSE, NY

Matrix: Soil

Date Collected: 08/23/16 08:55

Date Received: 08/23/16

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	48.8		%	0.100	NA	1	-	08/24/16 14:52	121,2540G	RI
Cyanide, Total	1.1	J	mg/kg	4.0	0.67	2	08/24/16 15:25	08/24/16 21:22	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	1.6	0.33	1	08/25/16 11:13	08/29/16 14:25	1,7196A	AL



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-03

Date Collected: 08/23/16 09:05

Client ID: AOC4-SED4B

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	56.0		%	0.100	NA	1	-	08/24/16 14:52	121,2540G	RI
Cyanide, Total	16		mg/kg	1.8	0.29	1	08/24/16 15:25	08/24/16 20:55	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	1.4	0.28	1	08/25/16 11:13	08/29/16 14:25	1,7196A	AL



Project Name: CELI DRIVE BCP SITE

Project Number: 37-11082

Lab Number: L1626453

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-04

Client ID: AOC4-SED4C

Sample Location: SYRACUSE, NY

Matrix: Soil

Date Collected: 08/23/16 09:10

Date Received: 08/23/16

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	58.1		%	0.100	NA	1	-	08/24/16 14:52	121,2540G	RI
Cyanide, Total	1.2	J	mg/kg	3.3	0.55	2	08/24/16 15:25	08/24/16 21:25	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	1.4	0.28	1	08/25/16 11:13	08/29/16 14:26	1,7196A	AL



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-05

Date Collected: 08/23/16 09:25

Client ID: AOC4-SED5A

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	67.4		%	0.100	NA	1	-	08/24/16 14:52	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.4	0.24	1	08/24/16 15:25	08/24/16 20:58	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	1.2	0.24	1	08/25/16 11:13	08/29/16 14:26	1,7196A	AL



Project Name: CELI DRIVE BCP SITE
Project Number: 37-11082

Lab Number: L1626453
Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-06
Client ID: AOC4-SED5B
Sample Location: SYRACUSE, NY
Matrix: Soil

Date Collected: 08/23/16 09:35
Date Received: 08/23/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	36.7		%	0.100	NA	1	-	08/24/16 14:52	121,2540G	RI
Cyanide, Total	2.2	J	mg/kg	2.5	0.42	1	08/24/16 15:25	08/24/16 20:58	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	2.2	0.44	1	08/25/16 11:13	08/29/16 14:26	1,7196A	AL



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-07

Date Collected: 08/23/16 09:45

Client ID: AOC4-SED5C

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	56.5		%	0.100	NA	1	-	08/24/16 14:52	121,2540G	RI
Cyanide, Total	0.58	J	mg/kg	1.7	0.28	1	08/24/16 15:25	08/24/16 20:59	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	1.4	0.28	1	08/25/16 11:13	08/29/16 14:27	1,7196A	AL



Project Name: CELI DRIVE BCP SITE
Project Number: 37-11082

Lab Number: L1626453
Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-08
Client ID: AOC4-SED6A
Sample Location: SYRACUSE, NY
Matrix: Soil

Date Collected: 08/23/16 09:50
Date Received: 08/23/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	52.0		%	0.100	NA	1	-	08/24/16 14:52	121,2540G	RI
Cyanide, Total	0.33	J	mg/kg	1.8	0.29	1	08/24/16 15:25	08/24/16 21:00	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	1.5	0.31	1	08/25/16 11:13	08/29/16 14:27	1,7196A	AL



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-09

Date Collected: 08/23/16 10:00

Client ID: AOC4-SED6B

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	34.7		%	0.100	NA	1	-	08/24/16 14:52	121,2540G	RI
Cyanide, Total	1.7	J	mg/kg	2.7	0.45	1	08/24/16 15:25	08/24/16 21:19	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	2.3	0.46	1	08/25/16 11:13	08/29/16 14:28	1,7196A	AL



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-10

Date Collected: 08/23/16 10:05

Client ID: AOC4-SED6C

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	63.6		%	0.100	NA	1	-	08/24/16 14:52	121,2540G	RI
Cyanide, Total	0.70	J	mg/kg	2.9	0.48	2	08/24/16 15:25	08/24/16 21:26	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	1.2	0.25	1	08/25/16 11:13	08/29/16 14:28	1,7196A	AL



Project Name: CELI DRIVE BCP SITE

Project Number: 37-11082

Lab Number: L1626453

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-11

Client ID: AOC4-SED7A

Sample Location: SYRACUSE, NY

Matrix: Soil

Date Collected: 08/23/16 10:15

Date Received: 08/23/16

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	44.7		%	0.100	NA	1	-	08/24/16 14:52	121,2540G	RI
Cyanide, Total	0.74	J	mg/kg	4.2	0.69	2	08/24/16 15:25	08/24/16 21:26	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	1.8	0.36	1	08/25/16 11:13	08/29/16 14:43	1,7196A	AL



Project Name: CELI DRIVE BCP SITE

Project Number: 37-11082

Lab Number: L1626453

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-12

Client ID: AOC4-SED7B

Sample Location: SYRACUSE, NY

Matrix: Soil

Date Collected: 08/23/16 10:25

Date Received: 08/23/16

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	63.1		%	0.100	NA	1	-	08/24/16 14:52	121,2540G	RI
Cyanide, Total	1.4	J	mg/kg	1.5	0.24	1	08/24/16 15:25	08/24/16 21:06	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	1.3	0.25	1	08/25/16 11:13	08/29/16 14:43	1,7196A	AL



Project Name: CELI DRIVE BCP SITE

Project Number: 37-11082

Lab Number: L1626453

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-13

Client ID: AOC4-SED7C

Sample Location: SYRACUSE, NY

Matrix: Soil

Date Collected: 08/23/16 10:35

Date Received: 08/23/16

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	46.5		%	0.100	NA	1	-	08/24/16 14:52	121,2540G	RI
Cyanide, Total	1.2	J	mg/kg	2.1	0.34	1	08/24/16 15:25	08/24/16 21:07	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	1.7	0.34	1	08/25/16 11:13	08/29/16 14:43	1,7196A	AL



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-14

Date Collected: 08/23/16 10:50

Client ID: AOC4-SED3A

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	41.8		%	0.100	NA	1	-	08/24/16 14:52	121,2540G	RI
Cyanide, Total	1.4	J	mg/kg	2.3	0.39	1	08/24/16 15:25	08/24/16 21:08	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	1.9	0.38	1	08/25/16 11:13	08/29/16 14:43	1,7196A	AL



Project Name: CELI DRIVE BCP SITE
Project Number: 37-11082

Lab Number: L1626453
Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-15
Client ID: AOC4-SED3B
Sample Location: SYRACUSE, NY
Matrix: Soil

Date Collected: 08/23/16 11:00
Date Received: 08/23/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	38.4		%	0.100	NA	1	-	08/24/16 14:52	121,2540G	RI
Cyanide, Total	1.5	J	mg/kg	2.5	0.41	1	08/24/16 15:25	08/24/16 21:08	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	2.1	0.42	1	08/25/16 11:13	08/29/16 14:44	1,7196A	AL



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-16

Date Collected: 08/23/16 11:10

Client ID: AOC4-SED3C

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	51.8		%	0.100	NA	1	-	08/24/16 14:52	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.8	0.30	1	08/24/16 15:25	08/24/16 21:09	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	1.5	0.31	1	08/25/16 11:13	08/29/16 14:44	1,7196A	AL



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-17

Date Collected: 08/23/16 11:15

Client ID: AOC4-SED2A

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	51.0		%	0.100	NA	1	-	08/24/16 15:07	121,2540G	RI
Cyanide, Total	0.96	J	mg/kg	3.6	0.60	2	08/24/16 15:25	08/24/16 21:27	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	1.6	0.31	1	08/25/16 11:13	08/29/16 14:45	1,7196A	AL



Project Name: CELI DRIVE BCP SITE
Project Number: 37-11082

Lab Number: L1626453
Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-18
Client ID: AOC4-SED2B
Sample Location: SYRACUSE, NY
Matrix: Soil

Date Collected: 08/23/16 11:20
Date Received: 08/23/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	30.9		%	0.100	NA	1	-	08/24/16 15:07	121,2540G	RI
Cyanide, Total	2.8	J	mg/kg	6.1	1.0	2	08/24/16 15:25	08/24/16 21:28	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	2.6	0.52	1	08/25/16 11:13	08/29/16 14:45	1,7196A	AL



Project Name: CELI DRIVE BCP SITE

Project Number: 37-11082

Lab Number: L1626453

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-19

Client ID: AOC4-SED2C

Sample Location: SYRACUSE, NY

Matrix: Soil

Date Collected: 08/23/16 11:30

Date Received: 08/23/16

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	39.8		%	0.100	NA	1	-	08/24/16 15:07	121,2540G	RI
Cyanide, Total	1.6	J	mg/kg	2.4	0.40	1	08/24/16 15:25	08/24/16 21:13	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	2.0	0.40	1	08/25/16 11:13	08/29/16 14:46	1,7196A	AL



Project Name: CELI DRIVE BCP SITE
Project Number: 37-11082

Lab Number: L1626453
Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-20
Client ID: AOC4-SED1A
Sample Location: SYRACUSE, NY
Matrix: Soil

Date Collected: 08/23/16 11:45
Date Received: 08/23/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	76.1		%	0.100	NA	1	-	08/24/16 15:07	121,2540G	RI
Cyanide, Total	0.26	J	mg/kg	1.2	0.20	1	08/24/16 15:25	08/24/16 21:15	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	1.0	0.21	1	08/25/16 11:13	08/29/16 14:46	1,7196A	AL



Project Name: CELI DRIVE BCP SITE

Project Number: 37-11082

Lab Number: L1626453

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-21

Client ID: AOC4-SED1B

Sample Location: SYRACUSE, NY

Matrix: Soil

Date Collected: 08/23/16 11:55

Date Received: 08/23/16

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	59.1		%	0.100	NA	1	-	08/24/16 15:07	121,2540G	RI
Cyanide, Total	0.92	J	mg/kg	1.6	0.27	1	08/24/16 12:50	08/24/16 18:42	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	1.4	0.27	1	08/29/16 17:10	08/30/16 11:44	1,7196A	JT



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-22

Date Collected: 08/23/16 12:05

Client ID: AOC4-SED1C

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	54.2		%	0.100	NA	1	-	08/24/16 15:07	121,2540G	RI
Cyanide, Total	0.78	J	mg/kg	3.4	0.57	2	08/24/16 12:50	08/24/16 19:15	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	1.5	0.30	1	08/29/16 17:10	08/30/16 11:45	1,7196A	JT



Project Name: CELI DRIVE BCP SITE

Project Number: 37-11082

Lab Number: L1626453

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-23

Client ID: DUPLICATE

Sample Location: SYRACUSE, NY

Matrix: Soil

Date Collected: 08/23/16 00:00

Date Received: 08/23/16

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	62.1		%	0.100	NA	1	-	08/24/16 15:07	121,2540G	RI
Cyanide, Total	0.51	J	mg/kg	1.5	0.24	1	08/24/16 12:50	08/24/16 18:45	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	1.3	0.26	1	08/29/16 17:10	08/30/16 11:45	1,7196A	JT



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

SAMPLE RESULTS

Lab ID: L1626453-24

Date Collected: 08/23/16 00:00

Client ID: DCUPPLICATE 2

Date Received: 08/23/16

Sample Location: SYRACUSE, NY

Field Prep: Not Specified

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	50.7		%	0.100	NA	1	-	08/24/16 15:07	121,2540G	RI
Cyanide, Total	0.67	J	mg/kg	3.9	0.64	2	08/24/16 12:50	08/24/16 19:15	1,9010C/9012B	ML
Chromium, Hexavalent	ND		mg/kg	1.6	0.32	1	08/29/16 17:10	08/30/16 11:46	1,7196A	JT



Project Name: CELI DRIVE BCP SITE

Lab Number: L1626453

Project Number: 37-11082

Report Date: 08/30/16

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 21-24 Batch: WG925493-1										
Cyanide, Total	ND		mg/kg	0.94	0.16	1	08/24/16 12:50	08/24/16 18:35	1,9010C/9012B	ML
General Chemistry - Westborough Lab for sample(s): 01-10 Batch: WG925586-1										
Cyanide, Total	ND		mg/kg	0.84	0.14	1	08/24/16 15:25	08/24/16 20:48	1,9010C/9012B	ML
General Chemistry - Westborough Lab for sample(s): 11-20 Batch: WG925588-1										
Cyanide, Total	ND		mg/kg	0.84	0.14	1	08/24/16 15:25	08/24/16 20:48	1,9010C/9012B	ML
General Chemistry - Westborough Lab for sample(s): 01-10 Batch: WG925934-1										
Chromium, Hexavalent	ND		mg/kg	0.80	0.16	1	08/25/16 11:13	08/29/16 14:23	1,7196A	AL
General Chemistry - Westborough Lab for sample(s): 11-20 Batch: WG925937-1										
Chromium, Hexavalent	ND		mg/kg	0.80	0.16	1	08/25/16 11:13	08/29/16 14:37	1,7196A	AL
General Chemistry - Westborough Lab for sample(s): 21-24 Batch: WG927027-1										
Chromium, Hexavalent	ND		mg/kg	0.80	0.16	1	08/29/16 17:10	08/30/16 11:36	1,7196A	JT

Lab Control Sample Analysis

Batch Quality Control

Project Name: CELI DRIVE BCP SITE

Project Number: 37-11082

Lab Number: L1626453

Report Date: 08/30/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 21-24 Batch: WG925493-2 WG925493-3								
Cyanide, Total	130	Q	130	Q	80-120	0		35
General Chemistry - Westborough Lab Associated sample(s): 01-10 Batch: WG925586-2 WG925586-3								
Cyanide, Total	119		113		80-120	4		35
General Chemistry - Westborough Lab Associated sample(s): 11-20 Batch: WG925588-2 WG925588-3								
Cyanide, Total	119		114		80-120	3		35
General Chemistry - Westborough Lab Associated sample(s): 01-10 Batch: WG925934-2								
Chromium, Hexavalent	87		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 11-20 Batch: WG925937-2								
Chromium, Hexavalent	86		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 21-24 Batch: WG927027-2								
Chromium, Hexavalent	92		-		80-120	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: CELI DRIVE BCP SITE

Project Number: 37-11082

Lab Number: L1626453

Report Date: 08/30/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 21-24 QC Batch ID: WG925493-4 WG925493-5 QC Sample: L1626398-11 Client ID: MS Sample												
Cyanide, Total	0.39J	11	11	95		9.4	85		65-135	16		35
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG925586-4 WG925586-5 QC Sample: L1626453-08 Client ID: AOC4-SED6A												
Cyanide, Total	0.33J	19	14	72		16	84		65-135	13		35
General Chemistry - Westborough Lab Associated sample(s): 11-20 QC Batch ID: WG925588-4 WG925588-5 QC Sample: L1626453-16 Client ID: AOC4-SED3C												
Cyanide, Total	ND	19	15	80		17	90		65-135	13		35
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG925934-4 QC Sample: L1626453-10 Client ID: AOC4-SED6C												
Chromium, Hexavalent	ND	1490	900	60	Q	-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 11-20 QC Batch ID: WG925937-4 QC Sample: L1626453-20 Client ID: AOC4-SED1A												
Chromium, Hexavalent	ND	1410	1000	71	Q	-	-		75-125	-		20
General Chemistry - Westborough Lab Associated sample(s): 21-24 QC Batch ID: WG927027-4 QC Sample: L1626453-23 Client ID: DUPLICATE												
Chromium, Hexavalent	ND	1410	720	51	Q	-	-		75-125	-		20

Project Name: CELI DRIVE BCP SITE
Project Number: 37-11082

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1626453
Report Date: 08/30/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-16 QC Batch ID: WG925581-1 QC Sample: L1626453-01 Client ID: BSS-SED1-COMP						
Solids, Total	72.2	68.6	%	5		20
General Chemistry - Westborough Lab Associated sample(s): 17-24 QC Batch ID: WG925584-1 QC Sample: L1626453-17 Client ID: AOC4-SED2A						
Solids, Total	51.0	52.8	%	3		20
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG925934-6 QC Sample: L1626453-10 Client ID: AOC4-SED6C						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 11-20 QC Batch ID: WG925937-6 QC Sample: L1626453-20 Client ID: AOC4-SED1A						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 21-24 QC Batch ID: WG927027-6 QC Sample: L1626453-23 Client ID: DUPLICATE						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Project Name: CELI DRIVE BCP SITE

Project Number: 37-11082

Lab Number: L1626453

Report Date: 08/30/16

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1626453-01A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-01B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-01C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-02A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-02B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-02C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-03A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-03B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-03C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-04A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-04B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-04C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-05A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-05B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-05C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-06A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-06B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-06C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-07A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-07B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-07C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-08A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-08B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-08C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-09A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-09B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)

*Values in parentheses indicate holding time in days



Project Name: CELI DRIVE BCP SITE

Project Number: 37-11082

Lab Number: L1626453

Report Date: 08/30/16

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1626453-09C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-10A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-10B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-10C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-11A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-11B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-11C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-12A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-12B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-12C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-13A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-13B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-13C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-14A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-14B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-14C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-15A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-15B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-15C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-16A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-16B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-16C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-17A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-17B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-17C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-18A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-18B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-18C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-19A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-19B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-19C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)

*Values in parentheses indicate holding time in days



Project Name: CELI DRIVE BCP SITE**Project Number:** 37-11082**Lab Number:** L1626453**Report Date:** 08/30/16**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1626453-20A	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-20B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-20C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-21A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-21B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-21C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-22A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-22B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-22C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-23A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-23B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-23C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)
L1626453-24A	Glass 60mL/2oz unpreserved	A	N/A	2.6	Y	Absent	TCN-9010(14)
L1626453-24B	Glass 120ml/4oz unpreserved	A	N/A	2.6	Y	Absent	TS(7),HEXCR-7196(30)
L1626453-24C	Metals Only - Glass 60mL/2oz unp	A	N/A	2.6	Y	Absent	CR-TI(180),NI-TI(180),CU-TI(180)

*Values in parentheses indicate holding time in days

Project Name: CELI DRIVE BCP SITE
Project Number: 37-11082

Lab Number: L1626453
Report Date: 08/30/16

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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

Terms

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

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

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Report Format: DU Report with 'J' Qualifiers



Project Name: CELI DRIVE BCP SITE
Project Number: 37-11082

Lab Number: L1626453
Report Date: 08/30/16

Data Qualifiers

- reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: CELI DRIVE BCP SITE
Project Number: 37-11082

Lab Number: L1626453
Report Date: 08/30/16

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

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

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



Certification Information

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

Westborough Facility

EPA 624: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 300: DW: Bromide

EPA 6860: NPW and SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

EPA 9012B: NPW: Total Cyanide

EPA 9050A: NPW: Specific Conductance

SM3500: NPW: Ferrous Iron

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.

SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility

SM 2540D: TSS

EPA 3005A NPW

EPA 8082A: NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: **EPA 3050B**

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

Westborough Facility:

Drinking Water

EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**

EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.**

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, EPA 350.1: Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF.**

Mansfield Facility:

Drinking Water

EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1 Hg.**

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

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

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page 1 of 3		Date Rec'd in Lab 8/24/16		ALPHA Job # 11626453			
		Project Information Project Name: <u>CELL DRIVE BCP SITE</u> Project Location: <u>SYRACUSE, NY</u> Project # <u>37-11082</u> (Use Project name as Project #) ☐		Deliverables ☐ ASP-A ☐ EQUIS (1 File) ☐ Other ☒ ASP-B ☒ EQUIS (4 File)		Billing Information ☒ Same as Client Info PO # <u>37-11082</u>					
Client Information Client: <u>GHD</u> Address: <u>1 REMINGTON PARK DR.</u> <u>CARMOVA, NY 13035</u> Phone: <u>315-679-5732</u> Fax: <u>315-679-5801</u> Email: <u>ian.mcnamara@ghd.com</u>		Project Manager: <u>IAN MCNAMARA</u> ALPHAQuote #: Turn-Around Time Standard ☒ Due Date: Rush (only if pre approved) ☐ # of Days:		Regulatory Requirement ☐ NY TOGS ☐ AWQ Standards ☐ NY Restricted Use ☐ NY Unrestricted Use ☐ NYC Sewer Discharge ☒ NY Part 375 ☐ NY CP-51 ☐ Other		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: ☐ NJ ☐ NY ☐ Other:					
These samples have been previously analyzed by Alpha ☐ Other project specific requirements/comments: <u>CHROMIUM, COPPER, NICKEL</u> Please specify Metals or TAL.						ANALYSIS METALS (AS SPECIFIED) TOTAL CYANIDE HEX. CHROMIUM		Sample Filtration ☐ Done ☐ Lab to do Preservation ☐ Lab to do (Please Specify below)			
ALPHA Lab ID (Lab Use Only)		Sample ID		Collection Date Time		Sample Matrix		Sampler's Initials		Sample Specific Comments	
26453		BSS - SEDI - COMP		8-23-16 8:00		S		IEM		X X X	
02		AOC4 - SED4A		8:55							
03		AOC4 - SED4B		9:05							
04		AOC4 - SED4C		9:10							
05		AOC4 - SED5A		9:25							
06		AOC4 - SED5B		9:35							
07		AOC4 - SED5C		9:45							
08		AOC4 - SED6A		9:50							
09		AOC4 - SED6B		10:00							
10		AOC4 - SED6C		10:05							
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type A A A		Preservative A A A		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)	
Relinquished By: <u>IEM</u>		Date/Time: <u>8-23-16 17:20</u>		Received By: <u>Bel...</u>		Date/Time: <u>8/24/16 17:20</u>					
Form No: 01-25 HC (rev. 30-Sept-2013)											



GSP Holdings, Inc.
Celi Drive BCP Site
BCP Site #E734108
Dewitt, New York

Project No. 37-11082

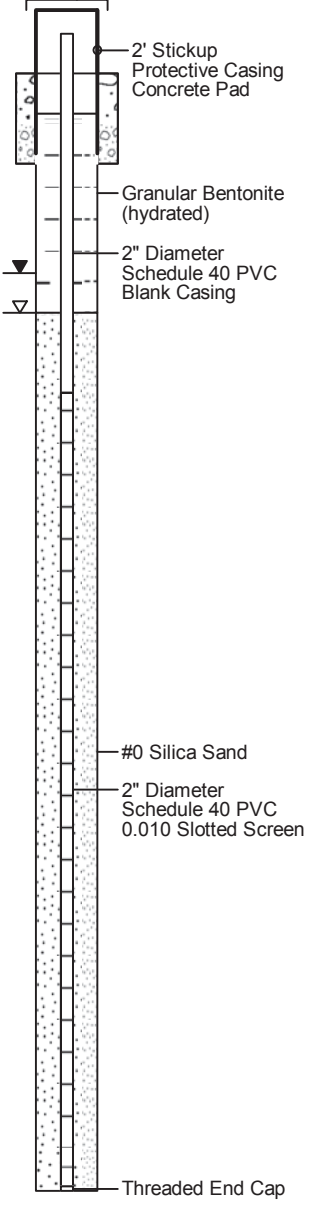
Depth of Boring : 14.0-feet bgs
Drilling Contractor : Parratt-Wolff
Driller : Mark Eaves
Drilling Method : Direct Push
Sample Equipment : DT-325
Field Geologist : Ian McNamara
Initial Depth to GW : 3.0'
Stable Depth to GW : 2.5'
Surveyed By : D.W. Hannig

LOG OF BORING MW-8

(Page 1 of 1)

Date Started : August 26, 2016
Date Completed : August 26, 2016

Northing/Latitude : 43.05008
Easting/Longitude : -76.06868
Surface Elevation : 412.8'

DEPTH (feet bgs)	Water Level ▼ After Completion ▽ During Drilling	SOIL DESCRIPTION	BLOW COUNT	RECOVERY (inches)	PID READING (ppm)	DEPTH (feet bgs)	
0		Asphalt millings, brick and concrete fragments, loose (fill)				0	
1						1	
2		Brown, CLAY and SILT with fine to medium grained SAND and fine GRAVEL, medium-stiff, moist to wet with depth	N/A	30	0.0	2	
3						3	
4						4	
5		Gray, CLAY and SILT, some fine to medium grained SAND, rusty orange mottling, medium-stiff to stiff, wet				5	
6		Decreasing clay with depth	N/A	42	0.1	6	
7						7	
8		Brown, SILT and fine to medium grained SAND, loose, wet				8	
9						9	
10		Brown, fine to coarse grained SAND, some fine GRAVEL and SILT, loose, wet	N/A	48	0.0	10	
11						11	
12		Reddish-brown, CLAY with SILT, medium-stiff, wet (dilatancy)				12	
13			N/A	24	0.1	13	
14		End of Boring at 14' bgs				14	
15						15	

NOTES:

BGS - Below Ground Surface

N/A - Not Applicable

ppm - Parts Per Million

LOG OF BORING MW-8

(Page 1 of 1)

Attachment 2

Data Usability Summary Report



Memorandum

September 23, 2016

To: Damian Vanetti

Ref. No.: 3711082

From: Jeffrey Cloud/eew/1-NF 

Tel: 206-914-3141

CC: Ian McNamara, Jesse Orth, Julie Lidstone

**Subject: Data Usability Summary Report (DUSR) – J105374
Groundwater Sampling
GSP Holdings, Inc. – GSP AOC1 -3 Remedial Action
East Syracuse, New York
September 2016**

1. Introduction

This document details a reduced validation of analytical results for groundwater samples collected in support of the Groundwater Sampling at the GSP AOC1 -3 Remedial Action site in East Syracuse, New York during September 2016. Samples were submitted to TestAmerica Laboratories, located in Buffalo, New York. A sample collection and analysis summary is presented in Table 1. A summary of the analytical methodology is presented in Table 2. The validated analytical results are summarized in Table 3.

This DUSR has been prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation "DER-10, Technical Guidance for Site Investigation and Remediation, Appendix 2B-Guidance for the Development of Data Usability Summary Reports", May 2010.

Standard GHD report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody form, finished report forms, method blank data, recovery data from surrogate spikes, laboratory control samples (LCS), matrix spikes (MS) and field QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 2 and applicable guidance from the documents entitled:

- "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review", USEPA 540-R-08-01, June 2008
- "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review", USEPA 540-R-10-011, January 2010

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 the methods. The sample chain of custody document and analytical report were used to determine sample holding times. All samples were prepared and analyzed within the required holding times with the exception of one sample for hexavalent chromium analysis. The associated sample result was qualified as estimated due to the implied low bias (see Table 4).

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

3. Laboratory Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

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

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

4. Surrogate Spike Recoveries - Organic Analyses

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

All samples submitted for volatile organic compound (VOC), semivolatile organic compound (SVOC) and polychlorinated biphenyl (PCB) analysis 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 associated control limits with the exception of semi-volatile organic compound (SVOC) analyses. According to the "Guidelines" for SVOC analyses, up to one outlying surrogate in the base/neutral or acid fractions is acceptable as long as the recovery is at least 10 percent.

Surrogate recoveries were assessed against the control limits. All surrogate recoveries met the associated criteria.



5. Laboratory Control Sample Analyses

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

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

Organic Analyses

The LCS contained all analytes of interest. All LCS recoveries were within associated control limits, demonstrating acceptable analytical accuracy.

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 (where applicable).

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

To evaluate the effects of sample matrices on the distillation process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS/MSD samples. The RPD between the MS and MSD is used to assess analytical precision. If the original sample concentration is significantly greater than the spike concentration, the recovery is not assessed. MS/MSD analyses were performed as specified in Table 1.

Organic Analyses

The MS/MSD samples were spiked with the analytes of interest. All percent recoveries and RPD values were within the associated control limits, demonstrating acceptable analytical accuracy and precision with a few exceptions. Where high recoveries were found the associated sample results were non-detect and would not have been impacted. Where low recoveries were found the associated sample results were qualified as estimated due to the implied low bias (see Table 5).

Inorganic Analyses

The MS/MSD samples were spiked with the analytes of interest, and the results were evaluated using the "Guidelines". All percent recoveries and RPD values were within the control limits, demonstrating acceptable analytical accuracy and precision.



7. Matrix Spike Analyses

To evaluate the effects of sample matrices on the preparation, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS samples. For this study, MS samples were prepared and analyzed by the laboratory as specified in Table 1. The MS result was evaluated per the "Guidelines".

The MS analysis performed was acceptable, demonstrating acceptable analytical accuracy.

8. Field QA/QC Samples

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

Trip Blank Sample Analysis

To evaluate contamination from sample collection, transportation, storage, and analytical activities, one trip blank was submitted to the laboratory for analysis. All results were non-detect for the analytes of interest.

Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, one field duplicate sample was collected and submitted "blind" to the laboratory, as specified in Table 1. The RPDs associated with these duplicate samples must be less than 50 percent. If the reported concentration in both the investigative sample and its duplicate are less than five times the reporting limit (RL), the evaluation criteria is one times the RL value.

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

9. Analyte Reporting

The laboratory did not report any detected concentrations below the laboratory's RL.

10. Conclusion

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

Table 1

Sample Collection and Analysis Summary
Groundwater Sampling
GSP AOC1 -3 Remedial Action
East Syracuse, New York
September 2016

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters							Comments
					Metals	Hexavalent Chromium	Mercury	PCBs	VOCs	SVOCs	Cyanide	
MW-1	MW-1	Water	09/01/2016	08:10	X	X	X	X	X	X	X	MS/MSD
MW-2	MW-2	Water	09/01/2016	10:40	X	X	X	X	X	X	X	
MW-3	MW-3	Water	09/01/2016	15:40	X	X	X	X	X	X	X	
DUPLICATE	MW-3	Water	09/01/2016	--	X	X	X	X	X	X	X	
MW-4	MW-4	Water	09/01/2016	14:40	X	X	X	X	X	X	X	MS
MW-5	MW-5	Water	09/01/2016	11:45	X	X	X	X	X	X	X	
MW-7	MW-7	Water	09/01/2016	09:25	X	X	X	X	X	X	X	
MW-8	MW-8	Water	09/01/2016	13:10	X	X	X	X	X	X	X	
TRIP BLANK	--	Water	09/01/2016	--					X			TRIP BLANK

Notes:

- FD - Field Duplicate sample of sample in parenthesis
- MS - Matrix Spike
- MS/MSD - Matrix Spike/Matrix Spike Duplicate
- VOCs - Volatile Organic Compounds
- SVOCs - Semi-volatile Organic Compounds
- PCBs - Polychlorinated Biphenyls
- - Not Applicable

Table 2

**Analytical Methods
Groundwater Sampling
GSP AOC1 -3 Remedial Action
East Syracuse, New York
September 2016**

Parameter	Method	Matrix
Volatile Organic Compounds (VOCs)	SW-846 8260C ⁽¹⁾	Water
Semivolatile Organic Compounds (SVOCs)	SW-846 8270D ⁽¹⁾	Water
Polychlorinated Biphenyls (PCBs)	SW-846 8082A ⁽¹⁾	Water
Metals	SW-846 6010C ⁽¹⁾	Water
Mercury	SW-846 7470A ⁽¹⁾	Water
Cyanide	SW-846 9012B ⁽¹⁾	Water
Hexavalent Chromium	SW-846 7196A ⁽¹⁾	Water

Notes:

- ⁽¹⁾ - SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions

Table 3

**Analytical Results Summary
Groundwater Sampling
GSP AOC1-3 Remedial Action
East Syracuse, New York
September 2016**

Location ID:	MW-1	MW-2	MW-3	MW-3	MW-4	MW-5	MW-7	MW-8
Sample Name:	MW-1	MW-2	MW-3	DUPLICATE	MW-4	MW-5	MW-7	MW-8
Sample Date:	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016
				Duplicate				

Parameters	Unit								
Volatile Organic Compounds									
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Phenylbutane (sec-Butylbenzene)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Table 3

**Analytical Results Summary
Groundwater Sampling
GSP AOC1-3 Remedial Action
East Syracuse, New York
September 2016**

Location ID:	MW-1	MW-2	MW-3	MW-3	MW-4	MW-5	MW-7	MW-8
Sample Name:	MW-1	MW-2	MW-3	DUPLICATE	MW-4	MW-5	MW-7	MW-8
Sample Date:	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016
				Duplicate				

Parameters	Unit								
Volatile Organic Compounds (Continued)									
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cymene (p-Isopropyltoluene)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	µg/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.2	1.0 U
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Butylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
N-Propylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Naphthalene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
tert-Butylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrchloroethane (CFC-113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Table 3

**Analytical Results Summary
Groundwater Sampling
GSP AOC1-3 Remedial Action
East Syracuse, New York
September 2016**

Location ID:	MW-1	MW-2	MW-3	MW-3	MW-4	MW-5	MW-7	MW-8
Sample Name:	MW-1	MW-2	MW-3	DUPLICATE	MW-4	MW-5	MW-7	MW-8
Sample Date:	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016
				Duplicate				

Parameters	Unit								
Semi-volatile Organic Compounds									
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2,4,6-Trichlorophenol	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2,4-Dichlorophenol	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2,4-Dimethylphenol	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2,4-Dinitrophenol	µg/L	10 U	10 U	9.7 U	9.9 U	9.9 U	9.6 U	10 U	9.8 U
2,4-Dinitrotoluene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2,6-Dinitrotoluene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2-Chloronaphthalene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2-Methylnaphthalene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2-Methylphenol	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
2-Nitroaniline	µg/L	10 U	10 U	9.7 U	9.9 U	9.9 U	9.6 U	10 U	9.8 U
2-Nitrophenol	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
3,3'-Dichlorobenzidine	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
3-Nitroaniline	µg/L	10 U	10 U	9.7 U	9.9 U	9.9 U	9.6 U	10 U	9.8 U
4,6-Dinitro-2-methylphenol	µg/L	10 U	10 U	9.7 U	9.9 U	9.9 U	9.6 U	10 U	9.8 U
4-Bromophenyl phenyl ether	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
4-Chloro-3-methylphenol	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
4-Chloroaniline	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
4-Chlorophenyl phenyl ether	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
4-Methylphenol	µg/L	10 U	10 U	9.7 U	9.9 U	9.9 U	9.6 U	10 U	9.8 U
4-Nitroaniline	µg/L	10 U	10 U	9.7 U	9.9 U	9.9 U	9.6 U	10 U	9.8 U
4-Nitrophenol	µg/L	10 U	10 U	9.7 U	9.9 U	9.9 U	9.6 U	10 U	9.8 U
Acenaphthene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Acenaphthylene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Acetophenone	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Anthracene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Atrazine	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Benzaldehyde	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U

Table 3

**Analytical Results Summary
Groundwater Sampling
GSP AOC1-3 Remedial Action
East Syracuse, New York
September 2016**

Location ID:	MW-1	MW-2	MW-3	MW-3	MW-4	MW-5	MW-7	MW-8
Sample Name:	MW-1	MW-2	MW-3	DUPLICATE	MW-4	MW-5	MW-7	MW-8
Sample Date:	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016
				Duplicate				

Parameters	Unit								
Semi-volatile Organic Compounds (Continued)									
Benzo(a)anthracene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Benzo(a)pyrene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Benzo(b)fluoranthene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Benzo(g,h,i)perylene	µg/L	5.0 UJ	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Benzo(k)fluoranthene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Biphenyl (1,1-Biphenyl)	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
bis(2-Chloroethoxy)methane	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
bis(2-Chloroethyl)ether	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Butyl benzylphthalate (BBP)	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Caprolactam	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Carbazole	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Chrysene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Di-n-butylphthalate (DBP)	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Di-n-octyl phthalate (DnOP)	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Dibenz(a,h)anthracene	µg/L	5.0 UJ	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Dibenzofuran	µg/L	10 U	10 U	9.7 U	9.9 U	9.9 U	9.6 U	10 U	9.8 U
Diethyl phthalate	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Dimethyl phthalate	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Fluoranthene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Fluorene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Hexachlorobenzene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Hexachlorobutadiene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Hexachlorocyclopentadiene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Hexachloroethane	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Indeno(1,2,3-cd)pyrene	µg/L	5.0 UJ	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Isophorone	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
N-Nitrosodi-n-propylamine	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
N-Nitrosodiphenylamine	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Naphthalene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U

Table 3

**Analytical Results Summary
Groundwater Sampling
GSP AOC1-3 Remedial Action
East Syracuse, New York
September 2016**

Location ID:	MW-1	MW-2	MW-3	MW-3	MW-4	MW-5	MW-7	MW-8
Sample Name:	MW-1	MW-2	MW-3	DUPLICATE	MW-4	MW-5	MW-7	MW-8
Sample Date:	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016	09/01/2016
				Duplicate				

Parameters	Unit								
Semi-volatile Organic Compounds (Continued)									
Nitrobenzene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Pentachlorophenol	µg/L	10 U	10 U	9.7 U	9.9 U	9.9 U	9.6 U	10 U	9.8 U
Phenanthrene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Phenol	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Pyrene	µg/L	5.0 U	5.0 U	4.8 U	4.9 U	4.9 U	4.8 U	5.0 U	4.9 U
Metals									
Aluminum	mg/L	0.20 U	5.0	0.20 U	0.20 U	0.48	0.71	0.20 U	1.0
Antimony	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Arsenic	mg/L	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.022	0.063	0.015 U
Barium	mg/L	1.3	0.43	0.22	0.22	1.4	0.091	0.49	0.27
Beryllium	mg/L	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U
Cadmium	mg/L	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U
Calcium	mg/L	190	291	219	219	205	112	143	215
Chromium	mg/L	0.0040 U	0.010	0.0040 U	0.0040 U	0.0054	0.0040 U	0.0040 U	0.0040 U
Chromium VI (hexavalent)	mg/L	0.10 UJ	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Cobalt	mg/L	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U	0.0040 U
Copper	mg/L	0.010 U	0.011	0.010 U	0.010 U	0.034	0.010 U	0.010 U	0.010 U
Iron	mg/L	6.3	15.3	7.4	7.4	4.2	3.6	13.0	7.6
Lead	mg/L	0.010 U	0.012	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Magnesium	mg/L	50.8	101	54.4	54.3	32.5	28.5	28.4	51.2
Manganese	mg/L	0.054	0.60	1.2	1.2	0.50	0.069	0.37	0.21
Mercury	mg/L	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00020 U
Nickel	mg/L	0.010 U	0.018	0.16	0.16	0.68	0.010 U	0.010 U	0.010 U
Potassium	mg/L	5.2	6.8	3.4	3.5	6.3	4.0	10.9	2.6
Selenium	mg/L	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U
Silver	mg/L	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.0060 U
Sodium	mg/L	215	200	211	213	258	319	241	94.5
Thallium	mg/L	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Vanadium	mg/L	0.0050 U	0.013	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Zinc	mg/L	0.010 U	0.016	0.010 U	0.010 U	0.010 U	0.010 U	0.010	0.010 U