

June 8, 2017

Mr. Larry M. Thomas
Senior Engineering Geologist
New York State Department of Environmental Conservation
Division of Solid and Hazardous Materials
Bureau of Hazardous and Remediation Management, 9th Floor
Albany, New York 12233-9025

Attn: Mr. Larry Thomas

VIA e-mail: "Larry Thomas" <lxthomas@gw.dec.state.ny.us>

Re: Semi-Annual Groundwater Sampling
Implementation of Annual Soil Management Plan Requirements
Former Borden Resins Facility
Bainbridge, New York
NYSDEC Registry # 709001
NYSDEC Consent Order Index # A7-0121087-09
PSI Project No.: 0836852-1

Dear Mr. Thomas:

Professional Service Industries (PSI) recently conducted the first of two rounds of groundwater sampling for 2017 as per the requirements of New York State Department of Environmental Conservation (NYSDEC) Department of Environmental Remediation (DER) Site Management Plan (SMP) at the former Borden's facility in Bainbridge, New York (the Site). The Site Location Map is shown on **Figure 1**. The Site Map is presented on **Figures 2 and 3**. The report presented below is a summary of observations and analytical data collected during this groundwater sampling event.

Authorization

Columbus Real Estate, LLC (CRE) authorized PSI to commence work by signing PSI Proposal #0836-195367, dated December 2, 2016. The Contractual Agreement between PSI and CRE was signed by Mr. S.H. Fogleman, III, President of CRE, on December 9, 2016. The scope of work is a result of PSI's review of the above referenced SMP.

Scope of Work & Site Activities

Monitoring Well Measurements

PSI collected depth to water level measurements from twelve (12) monitoring wells (MW-2B, MW-15, MW-16, MW-17, MW-19, MW-21, MW-27, MW-28, MW-30, OW-10R, MW-35R and OW-35R) as required by the SMP during the May 16, 2017 sampling event. Monitoring well locations are presented on **Figures 4 and 4A**. Monitoring well MW-35R was re-installed previously on March 28, 2014 as indicated on **Figure 4**.

Groundwater level measurements were collected using an electronic water level indicator and recorded to an accuracy of 0.01 feet. The water level indicator probe and tape was washed with a Liquinox® solution and rinsed with distilled water between measurements. Depths to water measurements were used to calculate ground water elevations for the Site as presented on **Table 1**. A groundwater elevation contour map for the Phenol Recovery Area (PRA) was drafted from these data and presented as **Figure 5**. As shown on **Figure 5**, groundwater appears to flow generally in a southeasterly component under the Site toward Beatty Creek. Beatty Creek then continues southeast for approximately 1-mile and flows into the Susquehanna River.

Ground Water Sampling

During the sampling event, water samples were obtained from twelve (12) monitoring wells as required by the NYSDEC. In addition, a water sample was collected from Beatty Creek just east of the railroad bridge from a running portion of the creek as a “grab” sample.

The monitoring wells were purged and sampled in accordance with the United States Environmental Protection Agency’s (USEPA) low-flow well purging/sample collection techniques. PSI used calibrated YSI 650XL meters equipped with flow-through cells with probes and meters for measuring ground water quality parameters such as pH, temperature, specific conductivity, dissolved oxygen and oxidation/ reduction potential. Wells were purged until ground water parameters stabilized for three consecutive readings at five-minute intervals. A sample was then collected from each well. The purge water was collected in pails and then disposed on the ground adjacent to the well where the sample was obtained.

The samples were placed in a pre-chilled thermally insulated container containing ice prior to pick-up by courier for delivery to the analytical laboratory, ALS Environmental (ALS) of Rochester, New York under chain of custody (COC) protocol. ALS is a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP) approved laboratory. The samples were analyzed according to the matrix presented in **Table 2**. Groundwater quality parameters, pH, temperature, specific conductivity, dissolved oxygen (DO) and oxidation/reduction potential (ORP) are summarized and presented on **Table 3**.

Analytical Results

Ten (10) of the thirteen (13) samples were analyzed for phenolics by USEPA Method 8270. As shown on **Table 4**, phenolics were detected above the NYSDEC Part 703.5 Standard of 1.0 microgram per liter (µg/l) in samples collected from MW-15, MW-27, MW-28, OW-10R, OW-35R and Beatty Creek. The concentrations were 29,000 micrograms per liter (µg/l), 2.7 µg/l, 4.8 µg/l, 4,300 µg/l, 3.4 µg/l and 3.9 µg/l, respectively. Phenolics were not detected above the project laboratory reporting limit (of 1.0 µg/l) in the remaining four (4) samples. The concentrations of phenolics detected in the May 2017 sampling are lower (in five (5) of the ten (10) well locations) than the May 2016 sampling event as

shown on **Table 5**. In addition, the detection of 2.7 µg/l in MW-27 is the fourth May sampling event in a row that phenolics have appeared at this off-site location since May 2009. The May 2017 concentration of 4,300 µg/l for phenolics in OW-10R is more than two orders of magnitude greater than the detected concentration of 17.9 in the May 2016 sampling event.

Benzene, toluene, ethylbenzene and xylene (BTEX) compounds analyzed during the May 16, 2017 sampling event are summarized on **Table 4**. Benzene was reported at or above the NYSDEC Part 703.5 Standard of 1.0 µg/l in MW-15, MW-27, MW-28, OW-10R and OW-35R. The results from these five (5) wells ranged from 1.2 µg/l in MW-27 to 13 µg/l in MW-15. Ethylbenzene was detected in four (4) wells (MW-15, MW-27, OW-10R and OW-35R). The concentration of Ethylbenzene was above the NYSDEC Part 703.5 Standard of 5.0 µg/l in only MW-15 at a concentration of 5.1 µg/l. Toluene was reported above the NYSDEC Part 703.5 Standard of 5.0 µg/l in MW-15 and OW-10R. The May 2017 results from MW-15 (980 µg/l) and OW-10R (530) are greater than the May 2016 results from MW-15 (330 µg/l) and OW-10R (1.4 µg/l). Xylenes were detected in MW-28 and OW-10R but the concentrations of total xylenes were below the NYSDEC Part 703.5 Standard of 5.0 µg/l.

Polychlorinated bi-phenols (PCBs) were analyzed in three (MW-2B, MW-17 and MW-21) monitoring well locations. Test Results indicate that PCBs were detected at concentrations above the NYSDEC Part 703.5 Standard of 0.09 µg/l in samples from MW-2B (0.36 µg/l) and MW-17 (0.15 µg/l) as shown in **Table 4**. These detections were slightly less than the concentrations detected during the May 2016 sampling event. The May 2016 results were less than the May 2015 sampling events. A decreasing trend of the PCBs is occurring.

Formaldehyde was analyzed in three (MW-16, MW-27 and OW-10R) monitoring well locations. Test Results indicate that formaldehyde was detected in the three samples at concentrations of 55 µg/l, 140 µg/l, and 140 µg/l, respectively, which is above the NYSDEC Part 703.5 Standard of 8.0 µg/l as shown in **Table 4**. These concentrations are all higher than the May 2016 sampling event.

A copy of the analytical data and laboratory report with associated QA/QC are included as **Attachment A**.

Continued Monitoring

The next ground water sampling event will occur in November 2017. As per NYSDEC requirements, the November 2017 sampling event will include the sampling locations and analyses as specified for semi-annually in **Table 2**. In addition, the yearly NYSDEC required Period Review Report (PRR) will be completed and data associated with the November 2017 semi-annual groundwater sampling event will be incorporated into the PRR.

Warranty

The information provided in this Semi-Annual Groundwater Sampling Report, prepared by PSI under Project Number 083852-1 is intended exclusively for CRE as they pertain to the Former Borden Facility located in Bainbridge, New York. The professional services provided have been performed in accordance with practices generally accepted by other appropriate environmental professionals, geologists, engineers, and environmental scientists practicing in this field. No other warranty, either expressed or implied, is made.

PSI is not an insurer and makes no guarantee or warranty that the services supplied will avert or mitigate occurrences, or the consequences of occurrences, that the services are designed to prevent or ameliorate. This report is issued with the understanding that the Client is responsible for ensuring that the information contained in this report is brought to the attention of the owner and/or tenants.

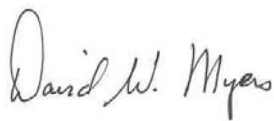
Use by Third Parties

This report was prepared pursuant to the contract PSI has with CRE, and that contractual relationship included an exchange of information about the subject property that was unique and between PSI and its client and serves as the basis upon which this report was prepared. Because of the importance of the communication between PSI and its client, reliance or any use of this report by anyone other than CRE and the State Regulator (the NYSDEC) for whom it was prepared, is prohibited and therefore not foreseeable to PSI.

Please call with any questions you may have regarding this May 2016 Semi-Annual Groundwater Sampling Event.

Respectfully Submitted

PROFESSIONAL SERVICE INDUSTRIES INC.



David W. Myers C. G.
Senior Environmental Scientist



Paul Misiashuk CHMM
Principal Consultant &
Environmental Specialist

CC: Oliver Pau – Columbus Real Estate

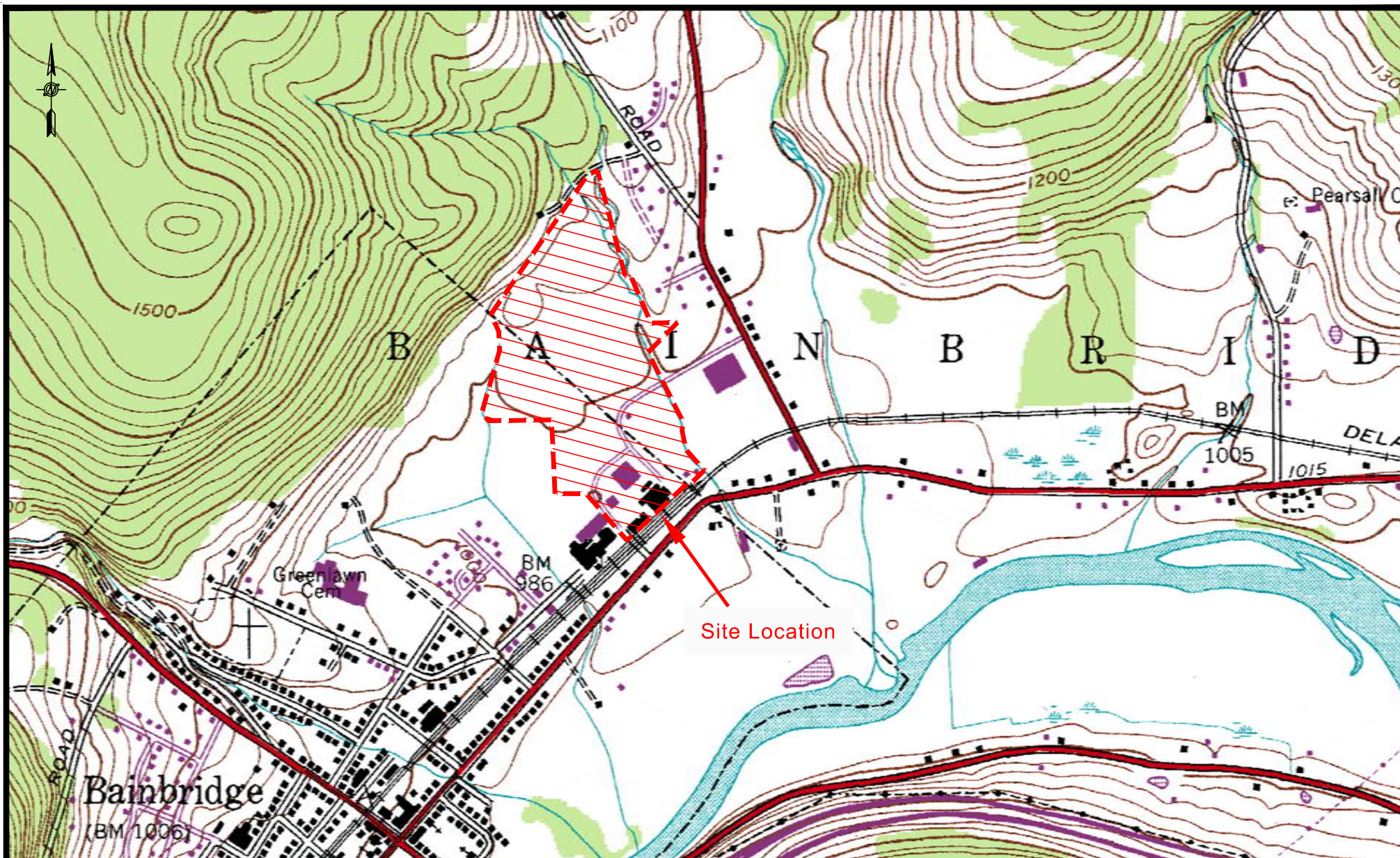
Enclosures

Figures

Tables

Attachment A

FIGURES



ALL LOCATIONS ARE APPROXIMATE

IMAGE SOURCE:
U.S.G.S. TOPOGRAPHIC MAP
SIDNEY, NEW YORK

SW/4 UNADILLA 15' QUADRANGLE
PHOTOREVISED 1982

0 1,200'
GRAPHIC SCALE

intertek **psi**
Total Quality. Assured.

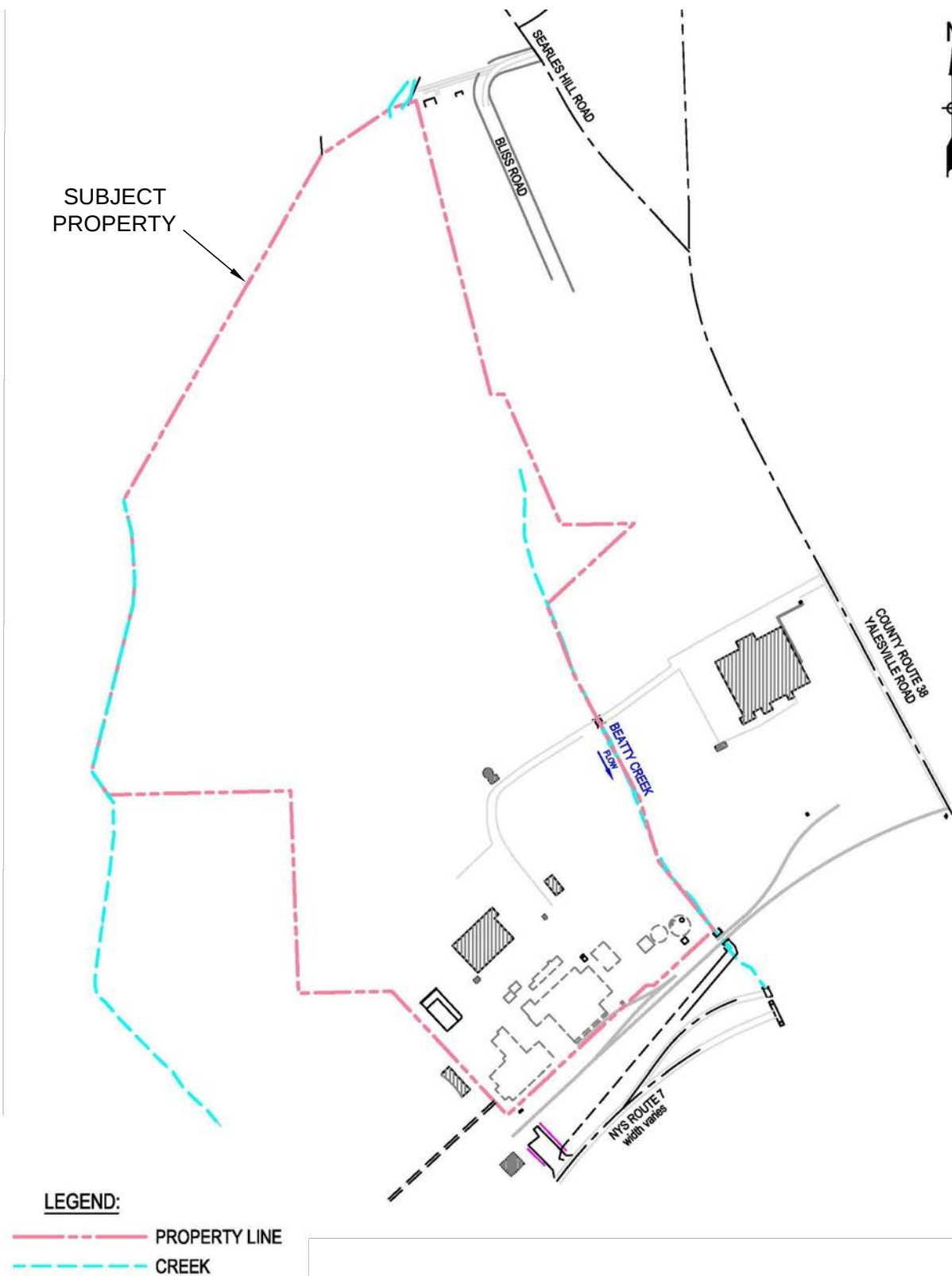
Environmental Services

104 Erie Boulevard, Suite 1
Schenectady, NY 12305
(518) 377-9841 (518) 377-9847 fax

Site Location Topographic Map

Former Borden Resins Facility
108-112 North Main Street
Bainbridge, New York 13733

Checked: D. Myers	Scale: 1" = 1,200'	Date: May 16, 2017	Figure: 1
Drawn: C. Moran 0836852-1 2017-05 Fig 1.dwg		Project Number: 0836852	



SUBJECT
PROPERTY

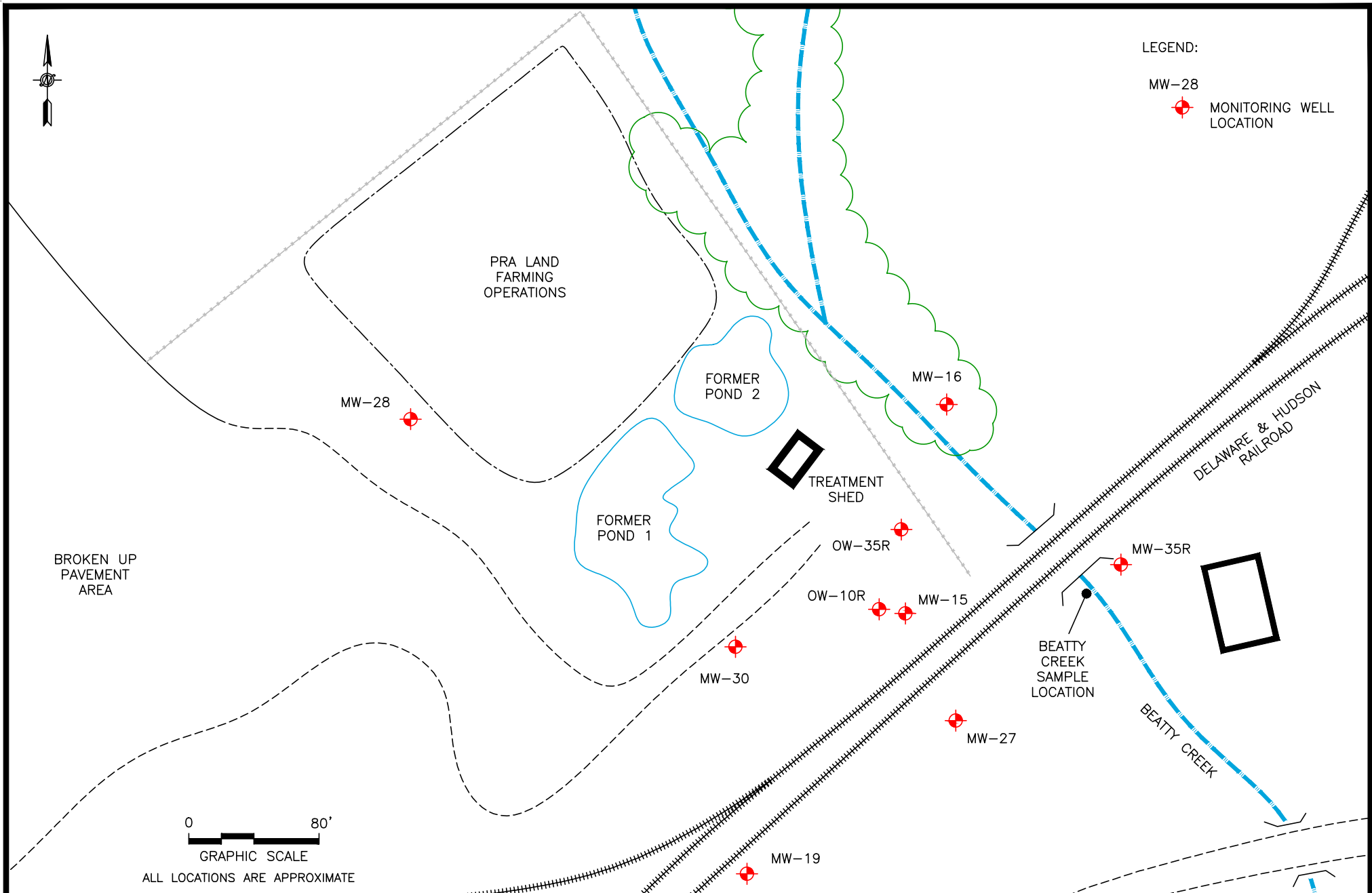


LEGEND:

- PROPERTY LINE
- CREEK
- SOLID WASTE MANAGEMENT UNIT



ALL LOCATIONS ARE APPROXIMATE



Environmental Services

104 Erie Boulevard, Suite 1
Schenectady, NY 12305
(518) 377-9841 (518) 377-9847 fax

PRA Area and Monitoring Well Locations

Former Borden Resins Facility
108-112 North Main Street
Bainbridge, New York 13733

Checked: D. Myers	Scale: None	Date: May 16, 2017	Figure: 4
Drawn: C. Moran 0836852-1 2017-05 Fig 4-5.dwg		Project Number: 0836852	

LEGEND:

MW-2B



MONITORING WELL
LOCATION



BONE YARD
AREA

WAREHOUSE

BROKEN UP
PAVEMENT
AREA

MW-2B



PUMP
HOUSE

MW-17



CONCRETE
PAD &
BERM

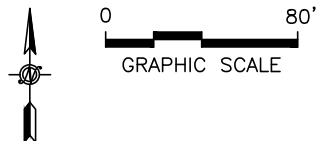
FORMER
BUILDING
FOUNDATION
ONLY

MW-21



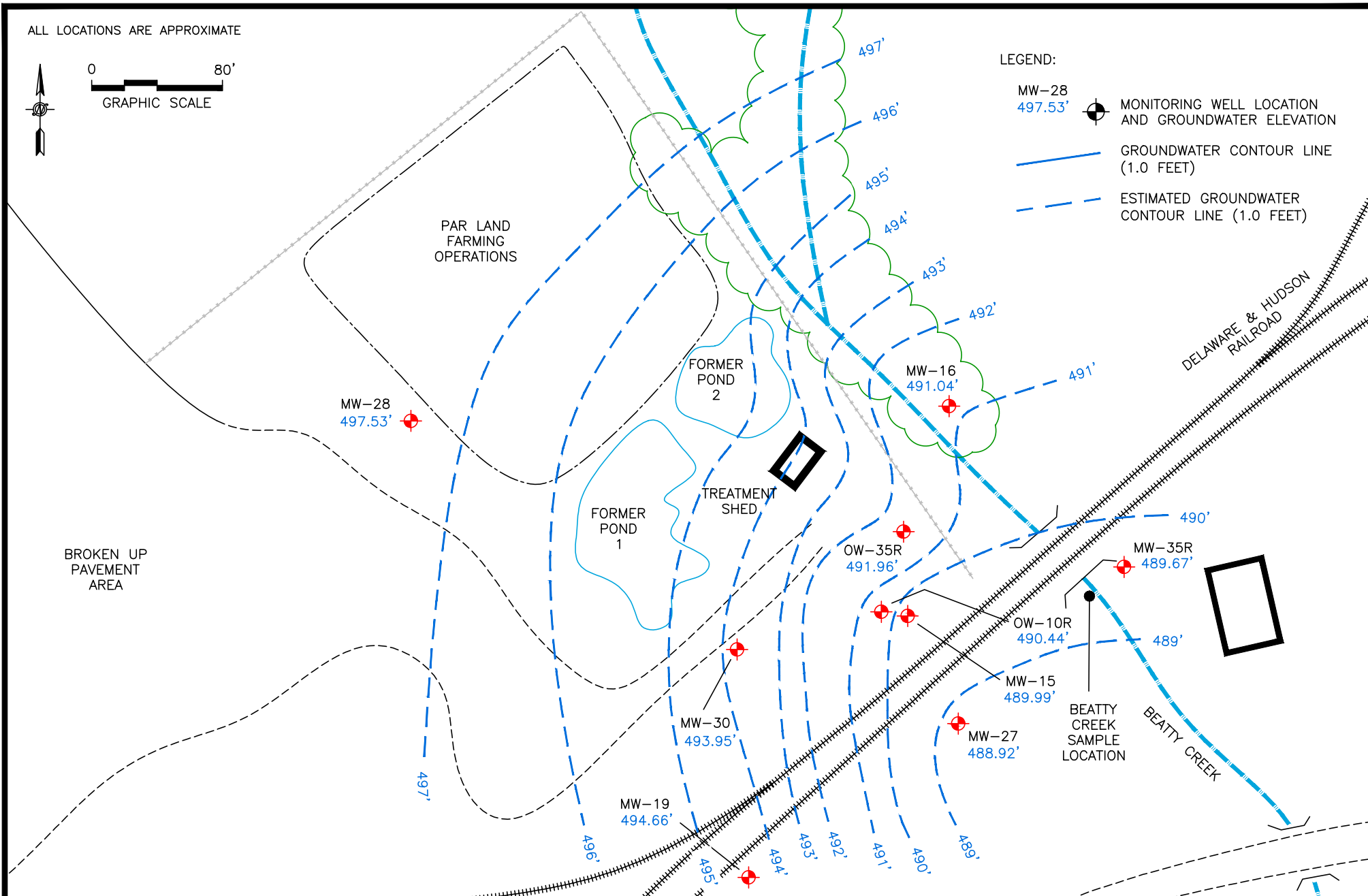
ALL LOCATIONS ARE APPROXIMATE

ALL LOCATIONS ARE APPROXIMATE



LEGEND:

- MW-28 497.53' MONITORING WELL LOCATION AND GROUNDWATER ELEVATION
- GROUNDWATER CONTOUR LINE (1.0 FEET)
- ESTIMATED GROUNDWATER CONTOUR LINE (1.0 FEET)



Environmental Services

104 Erie Boulevard, Suite 1
Schenectady, NY 12305
(518) 377-9841 (518) 377-9847 fax

Estimated Groundwater Contour Map - May 2017

Former Borden Resins Facility
108-112 North Main Street
Bainbridge, New York 13733

Checked: D. Myers	Scale: None	Date: Nov 10, 2016	Figure: 5
Drawn: C. Moran 0836852-1 2017-05 Fig 4-5.dwg	Project Number: 0836852		

TABLES

Table 1 - "Ground Water Elevations - Present and Historic"

Former Borden Resins Facility

Bainbridge, New York

PSI Project No.: 0836852-1

NYSDEC Site No. 709001

Monitoring Well ID	Reference Elevation (feet)*	3-Nov-15		18-May-16		8-Nov-16		16-May-17	
		Depth to Water	Water Elevation	Depth to Water	Water Elevation	Depth to Water	Water Elevation	Depth to Water	Water Elevation
MW-2B	505.40	NA	NA	5.02	500.38	NA	NA	4.55	500.85
MW-15	501.02	11.39	489.63	10.9	490.12	11.16	489.86	11.03	489.99
MW-16	496.32	5.48	490.84	5.25	491.07	5.36	490.96	5.28	491.04
MW-17	506.43	NA	NA	5.56	500.87	NA	NA	5.70	500.73
MW-19	504.04	10.69	493.35	9.78	494.26	10.21	493.83	9.38	494.66
MW-21	505.29	NA	NA	6.46	498.83	NA	NA	6.02	499.27
MW-27	493.65	5.11	488.54	4.69	488.96	5.11	488.54	4.73	488.92
MW-28	502.28	6.24	496.04	5.15	497.13	5.40	496.88	4.75	497.53
MW-30	502.29	10.30	491.99	8.46	493.83	9.59	492.70	8.34	493.95
MW-35R	494.44	5.05	489.39	4.65	489.79	4.97	489.47	4.77	489.67
OW-10R	502.49	12.60	489.89	11.96	490.53	12.25	490.24	12.05	490.44
OW-35R	502.04	10.97	491.07	10.53	491.51	10.80	491.24	10.08	491.96

* - Elevations based on new topo obtained from Kaatskill Mountain Surveyors on 28 April 2011.

NA = Not Applicable - Not measured or sampled during the November sampling event

NM = Not Measured

Note - MW-35R re- installed on March 28, 2014. Unable to find original MW-35 monitoring well in November 2013.

Table 2 - "Sampling Matrix"

Former Borden Resins Facility

Bainbridge, New York

PSI Project No.: 0836852-1

NYSDEC Site No. 709001

Well/ Monitoring Point	Phenols by USEPA Method 8270	BTEX	Formaldehyde	PCBs
Beatty Creek	Semi-annually	Semi-annually	N/A	N/A
MW-2B	N/A	N/A	N/A	Annually
MW-15	Semi-annually	Semi-annually	N/A	N/A
MW-16	Semi-annually	Semi-annually	Annually	N/A
MW-17	N/A	N/A	N/A	Annually
MW-19	Semi-annually	Semi-annually	N/A	N/A
MW-22	N/A	N/A	N/A	Annually
MW-27	Semi-annually	Semi-annually	Annually	N/A
MW-28	Semi-annually	Semi-annually	N/A	N/A
MW-30	Semi-annually	Semi-annually	N/A	N/A
MW-35R	Semi-annually	Semi-annually	N/A	N/A
OW-10R	Semi-annually	Semi-annually	Annually	N/A
OW-35R	Semi-annually	Semi-annually	N/A	N/A

Semi-annually = May and November

Annually = May

N/A = Not Applicable

Table 3 - "Field Results" - Natural Attenuation Parameters

Former Borden Resins Facility

Bainbridge, NY

PSI Project No.: 0836852-1

		May 16, 2017												
Parameters	NYSDEC Guidance Value or Standard	MW-2B	MW-15	MW-16	MW-17	MW-19	MW-21	MW-27	MW-28	MW-30	MW-35R	OW-10R	OW-35R	Beatty Creek
Temperature (°C)	NS	8.20	8.86	7.62	10.24	7.60	8.41	8.69	8.02	7.94	10.09	9.30	7.56	NA
Specific Conductivity (µS/cm)	NS	316	581	181	387	358	374	414	402	315	91	558	540	NA
DO (mg/l)	NS	0.61	0.20	3.98	0.46	3.71	1.37	0.35	1.55	5.02	4.30	0.19	1.37	NA
pH	NS	6.08	7.45	6.98	7.29	6.31	6.41	6.99	6.66	6.58	6.85	7.28	6.51	NA
Turbidity (NTUs)	NS	1.8	19.30	9.20	6.2	50.20	17.9	2.50	0.00	0.90	3.70	2.40	4.90	NA
ORP (mV)	NS	31.6	-154.0	-181	-131.6	-20.3	19.9	-143.0	0.6	57.0	-56.1	-126.9	-78.1	NA

Note:

NS: no standard

NA: not analyzed -

Note: MW-35R re- installed March 28, 2014.

Table 4 - "Analytical Results - BTEX-Formaldehyde-Phenols-PCBs"

Former Borden Resins Facility

Bainbridge, NY

PSI Project No.: 0836852-1

May 16, 2017															
Analyte (µg/L)	NYSDEC Standards TOGS 1.1.1 (µg/L)	MW-2B	MW-15	MW-16	MW-17	MW-19	MW-21	MW-27	MW-28	MW-30	MW-35R	OW-10R	OW-035R	Duplicate	Beatty Creek
Benzene	1	NA	13J	BRL	NA	0.29J	NA	1.2J	4.4J	BRL	BRL	6.3J	2.1J	2.0J	BRL
Ethylbenzene	5	NA	5.1J	BRL	NA	BRL	NA	0.37J	BRL	BRL	BRL	3.3J	0.72J	0.64J	BRL
Toluene	5	NA	980D	BRL	NA	BRL	NA	1.0J	0.59J	0.22J	BRL	530	1.1J	0.91J	BRL
Xylenes - Total	5 ¹	NA	BRL	BRL	NA	BRL	NA	BRL	0.37J	BRL	BRL	BRL	1.19J	1.11J	BRL
Formaldehyde	8	NA	NA	55	NA	NA	NA	140	NA	NA	NA	140	NA	NA	NA
Phenols	1	NA	29,000	BRL	NA	BRL	NA	2.7J	4.8J	BRL	BRL	4,300	3.4J	4.1J	3.9J
PCB 1242*	0.09 ²	0.36	NA	NA	0.15	NA	BRL	NA	NA	NA	NA	NA	NA	NA	NA

Note:

BRL: Below Reporting Limit (see analytical report for reporting limits.)

Duplicate - Collected from OW-35R.

* - other PCBs in analysis: 1016, 1221, 1232, 1248, 1254, 1260, 1262 and 1268.

¹ :value to total Xylene

²: Sum of all PCBs

J = Estimated value due to either a Tentatively Identified Compound (TIC) or that the concentration is between the Method Reporting Limit (MRL) and the Method Detection Limit (MDL).

D = Concentration is a result of a Dilution.

NA: not analyzed

MW-35R re-installed March 28, 2014.

Phenols analyzed by EPA 8270.

Formaldehyde analyzed by EPA Method 8315A

Bold: Above NYSDEC Referenced Standard

Table 5 - Historic "Analytical Results - Total Phenolics"

Former Borden Resins Facility
Bainbridge, New York
PSI Project No.: 0836852-1
NYSDEC Site No. 709001

	Total Phenolics (µg/L)										
Date	MW-15	MW-16	MW-19	MW-20	MW-27	MW-28	MW-30	MW-35R	OW-10R	OW-35R	Beatty Creek
16-May-17	29,000	BRL	BRL	Destroyed	2.7J	4.8J	BRL	BRL	4,300	3.4J	3.9J
8-Nov-16	42,200	2.8	22.6	Destroyed	2.4	11.3	30.1	BRL	2,620	11.4	BRL
18-May-16	102,452	BRL	11.3	Destroyed	14	1.8	11	1.4	17.9	3.4	BRL
3-Nov-15	121,407	BRL	6.0	Destroyed	BRL	BRL	24.0	BRL	12.0	88.0*	BRL
12-May-15	238,000	BRL	6.36	Destroyed	62.4	46.4	53.4	BRL	6,655	25.14	BRL
12-Nov-14	55,100	BRL	4.43	Destroyed	BRL	39.9	6.46	BRL	1,896	7.79	BRL
21-May-14	69,159	BRL	BRL	Destroyed	12.75	0.891	161	BRL	1,319	BRL	BRL
14-Nov-13	63,240J	BRL	8.1J	Destroyed	BRL	BRL	14	NS	44.3J	2.22J	BRL
28-Jun-13	177,010	BRL	9.46	Destroyed	BRL	BRL	BRL	NS	5,714	BRL	BRL
12-May-11	33,200	BRL	BRL	Destroyed	BRL	BRL	BRL	BRL	1,460	19	BRL
23-Feb-11	118	BRL	NS	Destroyed	BRL	BRL	BRL	BRL	15,700	166	BRL
4-Nov-10	379	BRL	BRL	Destroyed	BRL	BRL	BRL	BRL	3,842	14.1	BRL
26-Aug-10	4,640	BRL	NS	Destroyed	BRL	1.64 J	1.89 J	BRL	6,440	2.19 J	BRL
13-May-10	5,047	BRL	6.5	BRL	BRL	BRL	BRL	BRL	4,099	154	BRL
17-Feb-10	4,095	6.2	NS	BRL	BRL	BRL	BRL	BRL	2,371	2.1	BRL
10-Nov-09	4,657	BRL	BRL	BRL	BRL	BRL	BRL	BRL	8,730	BRL	BRL
4-Aug-09	635.5	BRL	NS	BRL	BRL	BRL	BRL	BRL	1,124	BRL	BRL
5-May-09	4,660	BRL	8.3	5.2	3.4	2.6	BRL	BRL	9,330	17.93	4
10-Feb-09	1,545	BRL	BRL	BRL	BRL	BRL	BRL	BRL	550	10.7	BRL
20-Nov-08	783	BRL	7.94	BRL	BRL	2.51	1.67	1.83	3,416	142.7	BRL
27-Aug-08	9.3	BRL	NS	BRL	BRL	BRL	BRL	BRL	19.8	BRL	BRL
8-May-08	959	BRL	3	BRL	BRL	BRL	BRL	BRL	--	--	BRL
26 Feb -08 ¹	42.3	BRL	NS	NS*	BRL	BRL	BRL	BRL	--	--	BRL
26-Feb-08	6,600	BRL	NS	NS*	BRL	BRL	BRL	BRL	--	--	BRL
20-Nov-07	220	18	25	BRL	150	BRL	BRL	BRL	--	--	BRL
15-Aug-07	43	BRL	NS	BRL	BRL	79	BRL	BRL	--	--	BRL
17-May-07	329	16	BRL	BRL	32	20	BRL	30	--	--	BRL
13-Feb-07	BRL	BRL	NS	BRL	BRL	20	986	BRL	--	--	BRL
28-Nov-06	560	NS	NS	NS	NS	NS	NS	NS	--	--	NS
23-Aug-06	ND	NS	NS	NS	NS	NS	NS	NS	--	--	NS
3-May-06	572	BRL	NS	NS	BRL	BRL	BRL	BRL	--	--	BRL

NYSDEC Ambient ground water standard (Part 703.5) for total phenolics is 1 µg/L. **Bold** Numbers indicate value is above cleanup standard.

BRL: Below Reporting Limit (see analytical report for reporting limits.)

88.0* - Indicates detection in Duplicate Sample but Sample OW-35R was 1.4 µg/L.

USEPA Method 8270 used during 26 Feb 08 sampling event and thereafter. Prior to February 2008, all results based on Total Recoverable Phenolics (TRP) analyses.

¹ = Samples analyzed by EPA Method 8270 as a comparison to TRP analysis.

-- Well not installed. NS= Well Not Sampled; NS'=Not Sampled because groundwater in well was "frozen".

J = Estimated value due to either a Tentatively Identified Compound (TIC) or that the concentration is between the Method Reporting Limit (MRL) and the Method Detection Limit (MDL).

MW-35R re-installed March 28, 2014.

ATTACHMENT A
LABORATORY ANALYTICAL DATA



May 26, 2017

Service Request No:R1704476

Mr. David Myers
Professional Service Industries (PSI)
104 Erie Boulevard, Suite 101
Schenectady, NY 12305

Laboratory Results for: Former Borden Facility

Dear Mr. Myers,

Enclosed are the results of the sample(s) submitted to our laboratory May 17, 2017
For your reference, these analyses have been assigned our service request number **R1704476**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Brady Kalkman
Project Manager

ADDRESS

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

PHONE +1 585 288 5380 | **FAX** +1 585 288 8475

ALS Group USA, Corp.

dba ALS Environmental



Narrative Documents

ALS Environmental—Rochester Laboratory

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

Phone (585) 288-5380 Fax (585) 288-8475

www.alsglobal.com

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Received: 5/17/17

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier I data deliverables. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Any parameters that are not included in the lab's NELAC accreditation are identified on a "Non-Certified Analytes" report in the Miscellaneous Forms Section of this report. Individual analytical results requiring further explanation are flagged with qualifiers and/or discussed below. The flags are explained in the Report Qualifiers and Definitions page in the Miscellaneous Forms section of this report.

Sample Receipt

Fifteen Water samples were received for analysis at ALS Environmental on 05/17/2017. Any discrepancies noted upon initial sample inspection are noted on the cooler receipt and preservation form included in this data package. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at $\leq 6^{\circ}\text{C}$ upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature.

Volatile Organic Analyses:

No significant anomalies were noted with this analysis.

Semi-Volatile Organic Analyses:

No significant anomalies were noted with this analysis.

Approved by  Date 5/26/2017



SAMPLE DETECTION SUMMARY

CLIENT ID: MW-19		Lab ID: R1704476-001				
Analyte	Results	Flag	MDL	PQL	Units	Method
Benzene	0.29	J	0.20	5.0	ug/L	8260C
CLIENT ID: MW-16		Lab ID: R1704476-002				
Analyte	Results	Flag	MDL	PQL	Units	Method
Formaldehyde	55		4.0	8.0	ug/L	8315A
CLIENT ID: MW-27		Lab ID: R1704476-004				
Analyte	Results	Flag	MDL	PQL	Units	Method
Benzene	1.2	J	0.20	5.0	ug/L	8260C
Ethylbenzene	0.37	J	0.20	5.0	ug/L	8260C
Toluene	1.0	J	0.20	5.0	ug/L	8260C
Phenol	2.7	J	1.0	9.4	ug/L	8270D
Formaldehyde	140		4.0	8.0	ug/L	8315A
CLIENT ID: Betty Creek		Lab ID: R1704476-005				
Analyte	Results	Flag	MDL	PQL	Units	Method
Phenol	3.9	J	1.0	9.4	ug/L	8270D
CLIENT ID: OW-35R		Lab ID: R1704476-006				
Analyte	Results	Flag	MDL	PQL	Units	Method
Benzene	2.1	J	0.20	5.0	ug/L	8260C
Ethylbenzene	0.72	J	0.20	5.0	ug/L	8260C
Toluene	1.1	J	0.20	5.0	ug/L	8260C
m,p-Xylenes	0.83	J	0.33	5.0	ug/L	8260C
o-Xylene	0.36	J	0.20	5.0	ug/L	8260C
Phenol	3.4	J	1.0	9.4	ug/L	8270D
CLIENT ID: Duplicate		Lab ID: R1704476-007				
Analyte	Results	Flag	MDL	PQL	Units	Method
Benzene	2.0	J	0.20	5.0	ug/L	8260C
Ethylbenzene	0.64	J	0.20	5.0	ug/L	8260C
Toluene	0.91	J	0.20	5.0	ug/L	8260C
m,p-Xylenes	0.82	J	0.33	5.0	ug/L	8260C
o-Xylene	0.29	J	0.20	5.0	ug/L	8260C
Phenol	4.1	J	1.0	9.4	ug/L	8270D
CLIENT ID: MW-15		Lab ID: R1704476-008				
Analyte	Results	Flag	MDL	PQL	Units	Method
Benzene	13	J	1.0	25	ug/L	8260C
Ethylbenzene	5.1	J	1.0	25	ug/L	8260C
Toluene	980	D	2.0	50	ug/L	8260C
Phenol	29000		200	1900	ug/L	8270D

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-28	Lab ID: R1704476-009
-------------------------	-----------------------------

Analyte	Results	Flag	MDL	PQL	Units	Method
Benzene	4.4	J	0.20	5.0	ug/L	8260C
Toluene	0.59	J	0.20	5.0	ug/L	8260C
m,p-Xylenes	0.37	J	0.33	5.0	ug/L	8260C
Phenol	4.8	J	1.0	9.4	ug/L	8270D

CLIENT ID: Trip Blank	Lab ID: R1704476-010
------------------------------	-----------------------------

Analyte	Results	Flag	MDL	PQL	Units	Method
Toluene	0.47	J	0.20	5.0	ug/L	8260C

CLIENT ID: OW-10R	Lab ID: R1704476-011
--------------------------	-----------------------------

Analyte	Results	Flag	MDL	PQL	Units	Method
Benzene	6.3	J	1.0	25	ug/L	8260C
Ethylbenzene	3.3	J	1.0	25	ug/L	8260C
Toluene	530		1.0	25	ug/L	8260C
Phenol	4300		50	470	ug/L	8270D
Formaldehyde	140		4.0	8.0	ug/L	8315A

CLIENT ID: MW-30	Lab ID: R1704476-015
-------------------------	-----------------------------

Analyte	Results	Flag	MDL	PQL	Units	Method
Toluene	0.22	J	0.20	5.0	ug/L	8260C



Sample Receipt Information

ALS Environmental—Rochester Laboratory

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

Phone (585) 288-5380 Fax (585) 288-8475

www.alsglobal.com

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1

Service Request:R1704476

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R1704476-001	MW-19	5/16/2017	0920
R1704476-002	MW-16	5/16/2017	1000
R1704476-003	MW-35	5/16/2017	1030
R1704476-004	MW-27	5/16/2017	0940
R1704476-005	Betty Creek	5/16/2017	1010
R1704476-006	OW-35R	5/16/2017	1130
R1704476-007	Duplicate	5/16/2017	
R1704476-008	MW-15	5/16/2017	1125
R1704476-009	MW-28	5/16/2017	1225
R1704476-010	Trip Blank	5/16/2017	
R1704476-011	OW-10R	5/16/2017	1220
R1704476-012	MW-17	5/16/2017	1300
R1704476-013	MW-2B	5/16/2017	1332
R1704476-014	MW-21	5/16/2017	1310
R1704476-015	MW-30	5/16/2017	1005



Cooler Receipt and Preservation Check Form

R1704476

Professional Service Industries (PSI)
Former Borden Facility

5



Project/Client PSI Folder Number _____

Cooler received on 5/17/17 by: SW

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	Y ☒ N
2	Custody papers properly completed (ink, signed)?	☒ N
3	Did all bottles arrive in good condition (unbroken)?	☒ N
4	Circle: Wet Ice Dry Ice Gel packs present?	☒ N

5a	Perchlorate samples have required headspace?	Y N ☒ NA
5b	Did VOA vials, Alk, or Sulfide have sig* bubbles?	Y ☒ N NA
6	Where did the bottles originate?	ALS/ROC CLIENT
7	Soil VOA received as:	Bulk Encore 5035set ☒ NA

8. Temperature Readings Date: 5/17/17 Time: 1839 ID: IR#7 IR#8 From: Temp Blank Sample Bottle

Observed Temp (°C)	5.5°	3.0°	1.3°	0.9°			
Correction Factor (°C)	10.0°	10.0°	10.0°	10.0°			
Corrected Temp (°C)	5.5°	3.0°	1.3°	0.9°			
Temp from: Type of bottle							
Within 0-6°C?	☒ N	☒ N	☒ N	☒ N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted _____ Poorly Packed _____ Same Day Rule _____

& Client Approval to Run Samples: _____ Standing Approval _____ Client aware at drop-off _____ Client notified by: _____

All samples held in storage location: Room by SW on 5/17/17 at 1839
5035 samples placed in storage location: _____ by _____ on _____ at _____

Cooler Breakdown: Date: 5-18-17 Time: 11:45 by: AL

9. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
10. Did all bottle labels and tags agree with custody papers? YES NO
11. Were correct containers used for the tests indicated? YES NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO
13. Air Samples: Cassettes / Tubes Intact _____ Canisters Pressurized _____ Tedlar® Bags Inflated N/A

pH	Lot of test paper	Reagent	Preserved?	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12		NaOH	Yes No						
≤2		HNO ₃							
≤2		H ₂ SO ₄							
<4		NaHSO ₄							
Residual Chlorine (-)		For CN Phenol and 522		If +, contact PM to add Na ₂ S ₂ O ₃ (CN), ascorbic (phenol).					
		Na ₂ S ₂ O ₃	- -						
		ZnAcetate	- -						
		HCl	** **	Client label					

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Bottle lot numbers: Client labels, 076615-1BLT, 082216-1BLT

Explain all Discrepancies/ Other Comments:

* MW-27; 1 voa vial has a broken cap. Aliquot lost.
Other 2 vials intact.
ME 5/18/17

CLRES	BULK
DO	FLDT
HPROD	HGFB
HTR	LL3541
PH	SUB
SO3	MARRS
ALS	REV

Labels secondary reviewed by: ME

PC Secondary Review: _____



Miscellaneous Forms

ALS Environmental—Rochester Laboratory

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REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.	+	Correlation coefficient for MSA is <0.995.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).	N	Inorganics- Matrix spike recovery was outside laboratory limits.
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.	N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.	S	Concentration has been determined using Method of Standard Additions (MSA).
E	Organics- Concentration has exceeded the calibration range for that specific analysis.	W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.	P	Concentration >40% (25% for CLP) difference between the two GC columns.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.	C	Confirmed by GC/MS
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.	Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (100% Difference between two GC columns).
#	Spike was diluted out.	X	See Case Narrative for discussion.
		MRL	Method Reporting Limit. Also known as:
		LOQ	Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
		MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
		LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
		ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.



Rochester Lab ID # for State Certifications¹

Connecticut ID # PH0556	Maine ID #NY0032	New Hampshire ID #
Delaware Accredited	Nebraska Accredited	294100 A/B
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047	North Carolina #676	Virginia #460167

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to <http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads>

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1

Service Request: R1704476

Sample Name: MW-19
Lab Code: R1704476-001
Sample Matrix: Water

Date Collected: 05/16/17
Date Received: 05/17/17

Analysis Method
8260C
8270D

Extracted/Digested By

DMURPHY

Analyzed By
FNAEGLER
JMISIUREWICZ

Sample Name: MW-16
Lab Code: R1704476-002
Sample Matrix: Water

Date Collected: 05/16/17
Date Received: 05/17/17

Analysis Method
8260C
8270D
8315A

Extracted/Digested By

DMURPHY
BALLGEIER

Analyzed By
FNAEGLER
JMISIUREWICZ
BALLGEIER

Sample Name: MW-35
Lab Code: R1704476-003
Sample Matrix: Water

Date Collected: 05/16/17
Date Received: 05/17/17

Analysis Method
8260C
8270D

Extracted/Digested By

DMURPHY

Analyzed By
FNAEGLER
JMISIUREWICZ

Sample Name: MW-27
Lab Code: R1704476-004
Sample Matrix: Water

Date Collected: 05/16/17
Date Received: 05/17/17

Analysis Method
8260C
8270D
8315A

Extracted/Digested By

DMURPHY
BALLGEIER

Analyzed By
FNAEGLER
JMISIUREWICZ
BALLGEIER

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1

Service Request: R1704476

Sample Name: Betty Creek
Lab Code: R1704476-005
Sample Matrix: Water

Date Collected: 05/16/17
Date Received: 05/17/17

Analysis Method
8260C
8270D

Extracted/Digested By

DMURPHY

Analyzed By
FNAEGLER
JMISIUREWICZ

Sample Name: OW-35R
Lab Code: R1704476-006
Sample Matrix: Water

Date Collected: 05/16/17
Date Received: 05/17/17

Analysis Method
8260C
8270D

Extracted/Digested By

DMURPHY

Analyzed By
FNAEGLER
JMISIUREWICZ

Sample Name: Duplicate
Lab Code: R1704476-007
Sample Matrix: Water

Date Collected: 05/16/17
Date Received: 05/17/17

Analysis Method
8260C
8270D

Extracted/Digested By

DMURPHY

Analyzed By
FNAEGLER
JMISIUREWICZ

Sample Name: MW-15
Lab Code: R1704476-008
Sample Matrix: Water

Date Collected: 05/16/17
Date Received: 05/17/17

Analysis Method
8260C
8270D

Extracted/Digested By

DMURPHY

Analyzed By
FNAEGLER
JMISIUREWICZ

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1

Service Request: R1704476

Sample Name: MW-28
Lab Code: R1704476-009
Sample Matrix: Water

Date Collected: 05/16/17
Date Received: 05/17/17

Analysis Method
8260C
8270D

Extracted/Digested By

DMURPHY

Analyzed By
FNAEGLER
JMISIUREWICZ

Sample Name: Trip Blank
Lab Code: R1704476-010
Sample Matrix: Water

Date Collected: 05/16/17
Date Received: 05/17/17

Analysis Method
8260C

Extracted/Digested By

Analyzed By
FNAEGLER

Sample Name: OW-10R
Lab Code: R1704476-011
Sample Matrix: Water

Date Collected: 05/16/17
Date Received: 05/17/17

Analysis Method
8260C
8270D
8315A

Extracted/Digested By

DMURPHY
BALLGEIER

Analyzed By
FNAEGLER
JMISIUREWICZ
BALLGEIER

Sample Name: MW-17
Lab Code: R1704476-012
Sample Matrix: Water

Date Collected: 05/16/17
Date Received: 05/17/17

Analysis Method
8082A

Extracted/Digested By
DMURPHY

Analyzed By
MPEDRO

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1

Service Request: R1704476

Sample Name: MW-2B
Lab Code: R1704476-013
Sample Matrix: Water

Date Collected: 05/16/17
Date Received: 05/17/17

Analysis Method
8082A

Extracted/Digested By
DMURPHY

Analyzed By
MPEDRO

Sample Name: MW-21
Lab Code: R1704476-014
Sample Matrix: Water

Date Collected: 05/16/17
Date Received: 05/17/17

Analysis Method
8082A

Extracted/Digested By
DMURPHY

Analyzed By
MPEDRO

Sample Name: MW-30
Lab Code: R1704476-015
Sample Matrix: Water

Date Collected: 05/16/17
Date Received: 05/17/17

Analysis Method
8260C
8270D

Extracted/Digested By
DMURPHY

Analyzed By
FNAEGLER
JMISIUREWICZ

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.



Sample Results

ALS Environmental—Rochester Laboratory

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Volatile Organic Compounds by GC/MS

ALS Environmental—Rochester Laboratory

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Phone (585) 288-5380 Fax (585) 288-8475

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 09:20
Date Received: 05/17/17 18:25

Sample Name: MW-19
Lab Code: R1704476-001

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	0.29 J	5.0	0.20	1	05/19/17 17:27	
Ethylbenzene	0.20 U	5.0	0.20	1	05/19/17 17:27	
Toluene	0.20 U	5.0	0.20	1	05/19/17 17:27	
m,p-Xylenes	0.33 U	5.0	0.33	1	05/19/17 17:27	
o-Xylene	0.20 U	5.0	0.20	1	05/19/17 17:27	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	05/19/17 17:27	
Dibromofluoromethane	93	89 - 119	05/19/17 17:27	
Toluene-d8	96	87 - 121	05/19/17 17:27	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 10:00
Date Received: 05/17/17 18:25

Sample Name: MW-16
Lab Code: R1704476-002

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	0.20 U	5.0	0.20	1	05/19/17 17:49	
Ethylbenzene	0.20 U	5.0	0.20	1	05/19/17 17:49	
Toluene	0.20 U	5.0	0.20	1	05/19/17 17:49	
m,p-Xylenes	0.33 U	5.0	0.33	1	05/19/17 17:49	
o-Xylene	0.20 U	5.0	0.20	1	05/19/17 17:49	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	05/19/17 17:49	
Dibromofluoromethane	94	89 - 119	05/19/17 17:49	
Toluene-d8	99	87 - 121	05/19/17 17:49	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 10:30
Date Received: 05/17/17 18:25

Sample Name: MW-35
Lab Code: R1704476-003

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	0.20 U	5.0	0.20	1	05/19/17 18:11	
Ethylbenzene	0.20 U	5.0	0.20	1	05/19/17 18:11	
Toluene	0.20 U	5.0	0.20	1	05/19/17 18:11	
m,p-Xylenes	0.33 U	5.0	0.33	1	05/19/17 18:11	
o-Xylene	0.20 U	5.0	0.20	1	05/19/17 18:11	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	85 - 122	05/19/17 18:11	
Dibromofluoromethane	93	89 - 119	05/19/17 18:11	
Toluene-d8	97	87 - 121	05/19/17 18:11	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 09:40
Date Received: 05/17/17 18:25

Sample Name: MW-27
Lab Code: R1704476-004

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	1.2 J	5.0	0.20	1	05/19/17 18:33	
Ethylbenzene	0.37 J	5.0	0.20	1	05/19/17 18:33	
Toluene	1.0 J	5.0	0.20	1	05/19/17 18:33	
m,p-Xylenes	0.33 U	5.0	0.33	1	05/19/17 18:33	
o-Xylene	0.20 U	5.0	0.20	1	05/19/17 18:33	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	05/19/17 18:33	
Dibromofluoromethane	94	89 - 119	05/19/17 18:33	
Toluene-d8	99	87 - 121	05/19/17 18:33	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 10:10
Date Received: 05/17/17 18:25

Sample Name: Betty Creek
Lab Code: R1704476-005

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	0.20 U	5.0	0.20	1	05/19/17 18:55	
Ethylbenzene	0.20 U	5.0	0.20	1	05/19/17 18:55	
Toluene	0.20 U	5.0	0.20	1	05/19/17 18:55	
m,p-Xylenes	0.33 U	5.0	0.33	1	05/19/17 18:55	
o-Xylene	0.20 U	5.0	0.20	1	05/19/17 18:55	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	85 - 122	05/19/17 18:55	
Dibromofluoromethane	92	89 - 119	05/19/17 18:55	
Toluene-d8	95	87 - 121	05/19/17 18:55	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 11:30
Date Received: 05/17/17 18:25

Sample Name: OW-35R
Lab Code: R1704476-006

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	2.1 J	5.0	0.20	1	05/19/17 19:16	
Ethylbenzene	0.72 J	5.0	0.20	1	05/19/17 19:16	
Toluene	1.1 J	5.0	0.20	1	05/19/17 19:16	
m,p-Xylenes	0.83 J	5.0	0.33	1	05/19/17 19:16	
o-Xylene	0.36 J	5.0	0.20	1	05/19/17 19:16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	05/19/17 19:16	
Dibromofluoromethane	94	89 - 119	05/19/17 19:16	
Toluene-d8	100	87 - 121	05/19/17 19:16	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17
Date Received: 05/17/17 18:25

Sample Name: Duplicate
Lab Code: R1704476-007

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	2.0 J	5.0	0.20	1	05/19/17 17:05	
Ethylbenzene	0.64 J	5.0	0.20	1	05/19/17 17:05	
Toluene	0.91 J	5.0	0.20	1	05/19/17 17:05	
m,p-Xylenes	0.82 J	5.0	0.33	1	05/19/17 17:05	
o-Xylene	0.29 J	5.0	0.20	1	05/19/17 17:05	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	85 - 122	05/19/17 17:05	
Dibromofluoromethane	91	89 - 119	05/19/17 17:05	
Toluene-d8	98	87 - 121	05/19/17 17:05	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 11:25
Date Received: 05/17/17 18:25

Sample Name: MW-15
Lab Code: R1704476-008

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	13 J	25	1.0	5	05/19/17 19:38	
Ethylbenzene	5.1 J	25	1.0	5	05/19/17 19:38	
Toluene	980 D	50	2.0	10	05/21/17 19:23	
m,p-Xylenes	1.7 U	25	1.7	5	05/19/17 19:38	
o-Xylene	1.0 U	25	1.0	5	05/19/17 19:38	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	05/19/17 19:38	
Dibromofluoromethane	96	89 - 119	05/19/17 19:38	
Toluene-d8	98	87 - 121	05/19/17 19:38	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 12:25
Date Received: 05/17/17 18:25

Sample Name: MW-28
Lab Code: R1704476-009

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	4.4 J	5.0	0.20	1	05/19/17 20:00	
Ethylbenzene	0.20 U	5.0	0.20	1	05/19/17 20:00	
Toluene	0.59 J	5.0	0.20	1	05/19/17 20:00	
m,p-Xylenes	0.37 J	5.0	0.33	1	05/19/17 20:00	
o-Xylene	0.20 U	5.0	0.20	1	05/19/17 20:00	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	85 - 122	05/19/17 20:00	
Dibromofluoromethane	93	89 - 119	05/19/17 20:00	
Toluene-d8	99	87 - 121	05/19/17 20:00	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17
Date Received: 05/17/17 18:25

Sample Name: Trip Blank
Lab Code: R1704476-010

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	0.20 U	5.0	0.20	1	05/19/17 16:43	
Ethylbenzene	0.20 U	5.0	0.20	1	05/19/17 16:43	
Toluene	0.47 J	5.0	0.20	1	05/19/17 16:43	
m,p-Xylenes	0.33 U	5.0	0.33	1	05/19/17 16:43	
o-Xylene	0.20 U	5.0	0.20	1	05/19/17 16:43	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	05/19/17 16:43	
Dibromofluoromethane	95	89 - 119	05/19/17 16:43	
Toluene-d8	100	87 - 121	05/19/17 16:43	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 12:20
Date Received: 05/17/17 18:25

Sample Name: OW-10R
Lab Code: R1704476-011

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	6.3 J	25	1.0	5	05/19/17 20:22	
Ethylbenzene	3.3 J	25	1.0	5	05/19/17 20:22	
Toluene	530	25	1.0	5	05/19/17 20:22	
m,p-Xylenes	1.7 U	25	1.7	5	05/19/17 20:22	
o-Xylene	1.0 U	25	1.0	5	05/19/17 20:22	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	05/19/17 20:22	
Dibromofluoromethane	95	89 - 119	05/19/17 20:22	
Toluene-d8	99	87 - 121	05/19/17 20:22	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 10:05
Date Received: 05/17/17 18:25

Sample Name: MW-30
Lab Code: R1704476-015

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	0.20 U	5.0	0.20	1	05/19/17 20:44	
Ethylbenzene	0.20 U	5.0	0.20	1	05/19/17 20:44	
Toluene	0.22 J	5.0	0.20	1	05/19/17 20:44	
m,p-Xylenes	0.33 U	5.0	0.33	1	05/19/17 20:44	
o-Xylene	0.20 U	5.0	0.20	1	05/19/17 20:44	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	05/19/17 20:44	
Dibromofluoromethane	95	89 - 119	05/19/17 20:44	
Toluene-d8	99	87 - 121	05/19/17 20:44	



Semivolatile Organic Compounds by GC/MS

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 09:20
Date Received: 05/17/17 18:25

Sample Name: MW-19
Lab Code: R1704476-001

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Phenol	1.0 U	9.4	1.0	1	05/22/17 14:37	5/18/17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	61	35 - 141	05/22/17 14:37	
2-Fluorophenol	33	10 - 105	05/22/17 14:37	
Phenol-d6	25	10 - 107	05/22/17 14:37	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 10:00
Date Received: 05/17/17 18:25

Sample Name: MW-16
Lab Code: R1704476-002

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Phenol	1.0 U	9.4	1.0	1	05/22/17 15:06	5/18/17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	60	35 - 141	05/22/17 15:06	
2-Fluorophenol	29	10 - 105	05/22/17 15:06	
Phenol-d6	21	10 - 107	05/22/17 15:06	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 10:30
Date Received: 05/17/17 18:25

Sample Name: MW-35
Lab Code: R1704476-003

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Phenol	1.0 U	9.4	1.0	1	05/22/17 15:35	5/18/17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	65	35 - 141	05/22/17 15:35	
2-Fluorophenol	35	10 - 105	05/22/17 15:35	
Phenol-d6	26	10 - 107	05/22/17 15:35	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 09:40
Date Received: 05/17/17 18:25

Sample Name: MW-27
Lab Code: R1704476-004

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Phenol	2.7 J	9.4	1.0	1	05/22/17 16:04	5/18/17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	65	35 - 141	05/22/17 16:04	
2-Fluorophenol	32	10 - 105	05/22/17 16:04	
Phenol-d6	24	10 - 107	05/22/17 16:04	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 10:10
Date Received: 05/17/17 18:25

Sample Name: Betty Creek
Lab Code: R1704476-005

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Phenol	3.9 J	9.4	1.0	1	05/22/17 16:32	5/18/17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	62	35 - 141	05/22/17 16:32	
2-Fluorophenol	37	10 - 105	05/22/17 16:32	
Phenol-d6	29	10 - 107	05/22/17 16:32	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 11:30
Date Received: 05/17/17 18:25

Sample Name: OW-35R
Lab Code: R1704476-006

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Phenol	3.4 J	9.4	1.0	1	05/22/17 17:01	5/18/17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	65	35 - 141	05/22/17 17:01	
2-Fluorophenol	35	10 - 105	05/22/17 17:01	
Phenol-d6	26	10 - 107	05/22/17 17:01	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17
Date Received: 05/17/17 18:25

Sample Name: Duplicate
Lab Code: R1704476-007

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Phenol	4.1 J	9.4	1.0	1	05/22/17 17:29	5/18/17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	67	35 - 141	05/22/17 17:29	
2-Fluorophenol	34	10 - 105	05/22/17 17:29	
Phenol-d6	24	10 - 107	05/22/17 17:29	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 11:25
Date Received: 05/17/17 18:25

Sample Name: MW-15
Lab Code: R1704476-008

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Phenol	29000	1900	200	200	05/23/17 16:01	5/18/17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	0 *	35 - 141	05/23/17 16:01	D
2-Fluorophenol	0 *	10 - 105	05/23/17 16:01	D
Phenol-d6	0 *	10 - 107	05/23/17 16:01	D

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 12:25
Date Received: 05/17/17 18:25

Sample Name: MW-28
Lab Code: R1704476-009

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Phenol	4.8 J	9.4	1.0	1	05/22/17 18:27	5/18/17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	68	35 - 141	05/22/17 18:27	
2-Fluorophenol	33	10 - 105	05/22/17 18:27	
Phenol-d6	24	10 - 107	05/22/17 18:27	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 12:20
Date Received: 05/17/17 18:25

Sample Name: OW-10R
Lab Code: R1704476-011

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Phenol	4300	470	50	50	05/23/17 16:59	5/18/17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	0 *	35 - 141	05/23/17 16:59	D
2-Fluorophenol	0 *	10 - 105	05/23/17 16:59	D
Phenol-d6	0 *	10 - 107	05/23/17 16:59	D

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 10:05
Date Received: 05/17/17 18:25

Sample Name: MW-30
Lab Code: R1704476-015

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Phenol	1.0 U	9.4	1.0	1	05/23/17 11:49	5/22/17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	74	35 - 141	05/23/17 11:49	
2-Fluorophenol	34	10 - 105	05/23/17 11:49	
Phenol-d6	24	10 - 107	05/23/17 11:49	



Semivolatile Organic Compounds by GC

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 13:00
Date Received: 05/17/17 18:25

Sample Name: MW-17
Lab Code: R1704476-012

Units: ug/L
Basis: NA

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.50 U	0.94	0.50	1	05/23/17 18:19	5/19/17	
Aroclor 1221	1.0 U	1.9	1.0	1	05/23/17 18:19	5/19/17	
Aroclor 1232	0.50 U	0.94	0.50	1	05/23/17 18:19	5/19/17	
Aroclor 1242	0.50 U	0.94	0.50	1	05/23/17 18:19	5/19/17	
Aroclor 1248	0.50 U	0.94	0.50	1	05/23/17 18:19	5/19/17	
Aroclor 1254	0.50 U	0.94	0.50	1	05/23/17 18:19	5/19/17	
Aroclor 1260	0.50 U	0.94	0.50	1	05/23/17 18:19	5/19/17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	92	10 - 149	05/23/17 18:19	
Tetrachloro-m-xylene	77	15 - 131	05/23/17 18:19	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 13:32
Date Received: 05/17/17 18:25

Sample Name: MW-2B
Lab Code: R1704476-013

Units: ug/L
Basis: NA

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.50 U	0.94	0.50	1	05/23/17 18:39	5/19/17	
Aroclor 1221	1.0 U	1.9	1.0	1	05/23/17 18:39	5/19/17	
Aroclor 1232	0.50 U	0.94	0.50	1	05/23/17 18:39	5/19/17	
Aroclor 1242	0.50 U	0.94	0.50	1	05/23/17 18:39	5/19/17	
Aroclor 1248	0.50 U	0.94	0.50	1	05/23/17 18:39	5/19/17	
Aroclor 1254	0.50 U	0.94	0.50	1	05/23/17 18:39	5/19/17	
Aroclor 1260	0.50 U	0.94	0.50	1	05/23/17 18:39	5/19/17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	79	10 - 149	05/23/17 18:39	
Tetrachloro-m-xylene	63	15 - 131	05/23/17 18:39	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 13:10
Date Received: 05/17/17 18:25

Sample Name: MW-21
Lab Code: R1704476-014

Units: ug/L
Basis: NA

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.50 U	0.94	0.50	1	05/23/17 18:58	5/19/17	
Aroclor 1221	1.0 U	1.9	1.0	1	05/23/17 18:58	5/19/17	
Aroclor 1232	0.50 U	0.94	0.50	1	05/23/17 18:58	5/19/17	
Aroclor 1242	0.50 U	0.94	0.50	1	05/23/17 18:58	5/19/17	
Aroclor 1248	0.50 U	0.94	0.50	1	05/23/17 18:58	5/19/17	
Aroclor 1254	0.50 U	0.94	0.50	1	05/23/17 18:58	5/19/17	
Aroclor 1260	0.50 U	0.94	0.50	1	05/23/17 18:58	5/19/17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	47	10 - 149	05/23/17 18:58	
Tetrachloro-m-xylene	69	15 - 131	05/23/17 18:58	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 10:00
Date Received: 05/17/17 18:25

Sample Name: MW-16
Lab Code: R1704476-002

Units: ug/L
Basis: NA

Carbonyl Compounds by High Performance Liquid Chromatography (HPLC)

Analysis Method: 8315A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Formaldehyde	55	8.0	4.0	1	05/22/17 14:40	5/19/17	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 09:40
Date Received: 05/17/17 18:25

Sample Name: MW-27
Lab Code: R1704476-004

Units: ug/L
Basis: NA

Carbonyl Compounds by High Performance Liquid Chromatography (HPLC)

Analysis Method: 8315A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Formaldehyde	140	8.0	4.0	1	05/22/17 15:02	5/19/17	

ALS Group USA, Corp.
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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: 05/16/17 12:20
Date Received: 05/17/17 18:25

Sample Name: OW-10R
Lab Code: R1704476-011

Units: ug/L
Basis: NA

Carbonyl Compounds by High Performance Liquid Chromatography (HPLC)

Analysis Method: 8315A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Formaldehyde	140	8.0	4.0	1	05/22/17 15:24	5/19/17	



QC Summary Forms

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Volatile Organic Compounds by GC/MS

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ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: EPA 5030C

Sample Name	Lab Code	4-Bromofluorobenzene	Dibromofluoromethane	Toluene-d8
		85 - 122	89 - 119	87 - 121
MW-19	R1704476-001	96	93	96
MW-16	R1704476-002	97	94	99
MW-35	R1704476-003	96	93	97
MW-27	R1704476-004	98	94	99
Betty Creek	R1704476-005	95	92	95
OW-35R	R1704476-006	99	94	100
Duplicate	R1704476-007	94	91	98
MW-15	R1704476-008	97	96	98
MW-28	R1704476-009	99	93	99
Trip Blank	R1704476-010	98	95	100
OW-10R	R1704476-011	98	95	99
MW-30	R1704476-015	98	95	99
Lab Control Sample	RQ1704656-03	100	96	98
Method Blank	RQ1704656-04	98	93	99
Lab Control Sample	RQ1704704-03	103	97	101
Method Blank	RQ1704704-04	97	94	98
MW-15 MS	RQ1704704-05	102	99	100
MW-15 DMS	RQ1704704-06	99	99	99

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ1704656-04

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	0.20 U	5.0	0.20	1	05/19/17 14:31	
Ethylbenzene	0.20 U	5.0	0.20	1	05/19/17 14:31	
Toluene	0.20 U	5.0	0.20	1	05/19/17 14:31	
m,p-Xylenes	0.33 U	5.0	0.33	1	05/19/17 14:31	
o-Xylene	0.20 U	5.0	0.20	1	05/19/17 14:31	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	85 - 122	05/19/17 14:31	
Dibromofluoromethane	93	89 - 119	05/19/17 14:31	
Toluene-d8	99	87 - 121	05/19/17 14:31	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ1704704-04

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Benzene	0.20 U	5.0	0.20	1	05/21/17 12:01	
Ethylbenzene	0.20 U	5.0	0.20	1	05/21/17 12:01	
Toluene	0.20 U	5.0	0.20	1	05/21/17 12:01	
m,p-Xylenes	0.33 U	5.0	0.33	1	05/21/17 12:01	
o-Xylene	0.20 U	5.0	0.20	1	05/21/17 12:01	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	85 - 122	05/21/17 12:01	
Dibromofluoromethane	94	89 - 119	05/21/17 12:01	
Toluene-d8	98	87 - 121	05/21/17 12:01	



Semivolatile Organic Compounds by GC/MS

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dba ALS Environmental

QA/QC Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476

SURROGATE RECOVERY SUMMARY
Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Extraction Method: EPA 3510C

Sample Name	Lab Code	2,4,6-Tribromophenol	2-Fluorophenol	Phenol-d6
		35 - 141	10 - 105	10 - 107
MW-19	R1704476-001	61	33	25
MW-16	R1704476-002	60	29	21
MW-35	R1704476-003	65	35	26
MW-27	R1704476-004	65	32	24
Betty Creek	R1704476-005	62	37	29
OW-35R	R1704476-006	65	35	26
Duplicate	R1704476-007	67	34	24
MW-15	R1704476-008	0 *	0 *	0 *
MW-28	R1704476-009	68	33	24
OW-10R	R1704476-011	0 *	0 *	0 *
MW-30	R1704476-015	74	34	24
Method Blank	RQ1704451-01	62	39	29
Lab Control Sample	RQ1704451-02	69	41	31
Duplicate Lab Control Sample	RQ1704451-03	73	40	30
Method Blank	RQ1704555-01	80	38	27
Lab Control Sample	RQ1704555-02	70	42	31
Duplicate Lab Control Sample	RQ1704555-03	70	41	30

ALS Group USA, Corp.
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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ1704451-01

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Phenol	1.0 U	10	1.0	1	05/22/17 08:55	5/18/17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	62	35 - 141	05/22/17 08:55	
2-Fluorophenol	39	10 - 105	05/22/17 08:55	
Phenol-d6	29	10 - 107	05/22/17 08:55	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ1704555-01

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 8270D
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Phenol	1.0 U	10	1.0	1	05/23/17 10:25	5/22/17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	80	35 - 141	05/23/17 10:25	
2-Fluorophenol	38	10 - 105	05/23/17 10:25	
Phenol-d6	27	10 - 107	05/23/17 10:25	



Semivolatile Organic Compounds by GC

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QA/QC Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476

SURROGATE RECOVERY SUMMARY
Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Extraction Method: EPA 3510C

Sample Name	Lab Code	Decachlorobiphenyl	Tetrachloro-m-xylene
		10 - 149	15 - 131
MW-17	R1704476-012	92	77
MW-2B	R1704476-013	79	63
MW-21	R1704476-014	47	69
Method Blank	RQ1704491-01	84	81
Lab Control Sample	RQ1704491-02	77	80
Duplicate Lab Control Sample	RQ1704491-03	86	86

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ1704491-01

Units: ug/L
Basis: NA

Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.50 U	1.0	0.50	1	05/23/17 14:44	5/19/17	
Aroclor 1221	1.0 U	2.0	1.0	1	05/23/17 14:44	5/19/17	
Aroclor 1232	0.50 U	1.0	0.50	1	05/23/17 14:44	5/19/17	
Aroclor 1242	0.50 U	1.0	0.50	1	05/23/17 14:44	5/19/17	
Aroclor 1248	0.50 U	1.0	0.50	1	05/23/17 14:44	5/19/17	
Aroclor 1254	0.50 U	1.0	0.50	1	05/23/17 14:44	5/19/17	
Aroclor 1260	0.50 U	1.0	0.50	1	05/23/17 14:44	5/19/17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	84	10 - 149	05/23/17 14:44	
Tetrachloro-m-xylene	81	15 - 131	05/23/17 14:44	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704476
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ1704516-01

Units: ug/L
Basis: NA

Carbonyl Compounds by High Performance Liquid Chromatography (HPLC)

Analysis Method: 8315A
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Formaldehyde	4.0 U	8.0	4.0	1	05/22/17 12:27	5/19/17	



June 07, 2017

Service Request No:R1704835

Mr. David Myers
Professional Service Industries (PSI)
104 Erie Boulevard, Suite 101
Schenectady, NY 12305

Laboratory Results for: Former Borden Facility

Dear Mr.Myers,

Enclosed are the results of the sample(s) submitted to our laboratory May 17, 2017
For your reference, these analyses have been assigned our service request number **R1704835**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Brady Kalkman
Project Manager

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dba ALS Environmental



Narrative Documents

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Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704835
Date Received: 5/17/17

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier I data deliverables. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Any parameters that are not included in the lab's NELAC accreditation are identified on a "Non-Certified Analytes" report in the Miscellaneous Forms Section of this report. Individual analytical results requiring further explanation are flagged with qualifiers and/or discussed below. The flags are explained in the Report Qualifiers and Definitions page in the Miscellaneous Forms section of this report.

Sample Receipt

Three Water samples were received for analysis at ALS Environmental on 05/17/2017. Any discrepancies noted upon initial sample inspection are noted on the cooler receipt and preservation form included in this data package. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at $\leq 6^{\circ}\text{C}$ upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature.

Semi-Volatile Organic Analyses:

No significant anomalies were noted with this analysis.

Approved by  Date 6/7/2017

SAMPLE DETECTION SUMMARY

CLIENT ID: MW-17		Lab ID: R1704835-001				
------------------	--	----------------------	--	--	--	--

Analyte	Results	Flag	MDL	PQL	Units	Method
Aroclor 1248	0.15		0.025	0.047	ug/L	8082A

CLIENT ID: MW-2B		Lab ID: R1704835-002				
------------------	--	----------------------	--	--	--	--

Analyte	Results	Flag	MDL	PQL	Units	Method
Aroclor 1248	0.36		0.025	0.047	ug/L	8082A



Sample Receipt Information

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Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1

Service Request:R1704835

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R1704835-001	MW-17	5/16/2017	1300
R1704835-002	MW-2B	5/16/2017	1332
R1704835-003	MW-21	5/16/2017	1310



Cooler Receipt and Preservation Check Form

R1704835

Professional Service Industries (PSI)
Former Borden Facility

5



Project/Client PSI Folder Number _____

Cooler received on 5/17/17 by: DM

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	Y ☒ N ☐	5a	Perchlorate samples have required headspace?	Y ☐ N ☒
2	Custody papers properly completed (ink, signed)?	☒ Y ☐ N	5b	Did VOA vials, Alk, or Sulfide have sig* bubbles?	Y ☒ N ☐ NA
3	Did all bottles arrive in good condition (unbroken)?	☒ Y ☐ N	6	Where did the bottles originate?	ALS/ROC CLIENT
4	Circle: Wet Ice Dry Ice Gel packs present?	☒ Y ☐ N	7	Soil VOA received as:	Bulk Encore 5035set ☒ NA

8. Temperature Readings Date: 5/17/17 Time: 1839 ID: IR#7 IR#8 From: Temp Blank Sample Bottle

Observed Temp (°C)	5.5°	3.0°	1.3°	0.9°			
Correction Factor (°C)	10.0°	10.0°	10.0°	10.0°			
Corrected Temp (°C)	5.5°	3.0°	1.3°	0.9°			
Temp from: Type of bottle							
Within 0-6°C?	☒ Y ☐ N	☒ Y ☐ N	☒ Y ☐ N	☒ Y ☐ N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted _____ Poorly Packed _____ Same Day Rule _____

& Client Approval to Run Samples: _____ Standing Approval _____ Client aware at drop-off _____ Client notified by: _____

All samples held in storage location: ROC by DM on 5/17/17 at 1839
5035 samples placed in storage location: _____ by _____ on _____ at _____

Cooler Breakdown: Date: 5-18-17 Time: 11:45 by: ME

9. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
10. Did all bottle labels and tags agree with custody papers? YES NO
11. Were correct containers used for the tests indicated? YES NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO
13. Air Samples: Cassettes / Tubes Intact _____ Canisters Pressurized _____ Tedlar® Bags Inflated N/A

pH	Lot of test paper	Reagent	Preserved?	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12		NaOH	Yes No						
≤2		HNO ₃							
≤2		H ₂ SO ₄							
<4		NaHSO ₄							
Residual Chlorine (-)		For CN Phenol and 522		If +, contact PM to add Na ₂ S ₂ O ₃ (CN), ascorbic (phenol).					
		Na ₂ S ₂ O ₃	- -						
		ZnAcetate	- -						
		HCl	** **	Client label					

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Bottle lot numbers: Client labels, 0766151BLT, 0822161BLT

Explain all Discrepancies/ Other Comments:

* MW-27; 1 voa vial has a broken cap. Aliquot lost.
Other 2 vials intact.
ME 5/18/17

CLRES	BULK
DO	FLDT
HPROD	HGFB
HTR	LL3541
PH	SUB
SO3	MARRS
ALS	REV

Labels secondary reviewed by: ME
PC Secondary Review: _____

*significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter

1/9/17



Miscellaneous Forms

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REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.	+	Correlation coefficient for MSA is <0.995.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).	N	Inorganics- Matrix spike recovery was outside laboratory limits.
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.	N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.	S	Concentration has been determined using Method of Standard Additions (MSA).
E	Organics- Concentration has exceeded the calibration range for that specific analysis.	W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.	P	Concentration >40% (25% for CLP) difference between the two GC columns.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.	C	Confirmed by GC/MS
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.	Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (100% Difference between two GC columns).
#	Spike was diluted out.	X	See Case Narrative for discussion.
		MRL	Method Reporting Limit. Also known as:
		LOQ	Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
		MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
		LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
		ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.



Rochester Lab ID # for State Certifications¹

Connecticut ID # PH0556	Maine ID #NY0032	New Hampshire ID #
Delaware Accredited	Nebraska Accredited	294100 A/B
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047	North Carolina #676	Virginia #460167

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to <http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads>

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

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Analyst Summary report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1

Service Request: R1704835

Sample Name: MW-17
Lab Code: R1704835-001
Sample Matrix: Water

Date Collected: 05/16/17
Date Received: 05/17/17

Analysis Method
8082A

Extracted/Digested By
DMURPHY

Analyzed By
MPEDRO

Sample Name: MW-2B
Lab Code: R1704835-002
Sample Matrix: Water

Date Collected: 05/16/17
Date Received: 05/17/17

Analysis Method
8082A

Extracted/Digested By
DMURPHY

Analyzed By
MPEDRO

Sample Name: MW-21
Lab Code: R1704835-003
Sample Matrix: Water

Date Collected: 05/16/17
Date Received: 05/17/17

Analysis Method
8082A

Extracted/Digested By
DMURPHY

Analyzed By
MPEDRO



INORGANIC PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.



Sample Results

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Semivolatile Organic Compounds by GC

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704835
Date Collected: 05/16/17 13:00
Date Received: 05/17/17 18:22

Sample Name: MW-17
Lab Code: R1704835-001

Units: ug/L
Basis: NA

Low Level Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.047 U	0.047	1	06/06/17 12:21	6/2/17	*
Aroclor 1221	0.047 U	0.047	1	06/06/17 12:21	6/2/17	*
Aroclor 1232	0.047 U	0.047	1	06/06/17 12:21	6/2/17	*
Aroclor 1242	0.047 U	0.047	1	06/06/17 12:21	6/2/17	*
Aroclor 1248	0.15	0.047	1	06/06/17 12:21	6/2/17	*
Aroclor 1254	0.047 U	0.047	1	06/06/17 12:21	6/2/17	*
Aroclor 1260	0.047 U	0.047	1	06/06/17 12:21	6/2/17	*

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	68	10 - 125	06/06/17 12:21	
Tetrachloro-m-xylene	69	18 - 126	06/06/17 12:21	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704835
Date Collected: 05/16/17 13:32
Date Received: 05/17/17 18:22

Sample Name: MW-2B
Lab Code: R1704835-002

Units: ug/L
Basis: NA

Low Level Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.047 U	0.047	1	06/06/17 12:40	6/2/17	*
Aroclor 1221	0.047 U	0.047	1	06/06/17 12:40	6/2/17	*
Aroclor 1232	0.047 U	0.047	1	06/06/17 12:40	6/2/17	*
Aroclor 1242	0.047 U	0.047	1	06/06/17 12:40	6/2/17	*
Aroclor 1248	0.36	0.047	1	06/06/17 12:40	6/2/17	*
Aroclor 1254	0.047 U	0.047	1	06/06/17 12:40	6/2/17	*
Aroclor 1260	0.047 U	0.047	1	06/06/17 12:40	6/2/17	*

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	64	10 - 125	06/06/17 12:40	
Tetrachloro-m-xylene	71	18 - 126	06/06/17 12:40	

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704835
Date Collected: 05/16/17 13:10
Date Received: 05/17/17 18:22

Sample Name: MW-21
Lab Code: R1704835-003

Units: ug/L
Basis: NA

Low Level Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.047 U	0.047	1	06/06/17 13:00	6/2/17	*
Aroclor 1221	0.047 U	0.047	1	06/06/17 13:00	6/2/17	*
Aroclor 1232	0.047 U	0.047	1	06/06/17 13:00	6/2/17	*
Aroclor 1242	0.047 U	0.047	1	06/06/17 13:00	6/2/17	*
Aroclor 1248	0.047 U	0.047	1	06/06/17 13:00	6/2/17	*
Aroclor 1254	0.047 U	0.047	1	06/06/17 13:00	6/2/17	*
Aroclor 1260	0.047 U	0.047	1	06/06/17 13:00	6/2/17	*

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	68	10 - 125	06/06/17 13:00	
Tetrachloro-m-xylene	82	18 - 126	06/06/17 13:00	



QC Summary Forms

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QA/QC Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704835

SURROGATE RECOVERY SUMMARY
Low Level Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Extraction Method: EPA 3510C

Sample Name	Lab Code	Decachlorobiphenyl	Tetrachloro-m-xylene
		10 - 125	18 - 126
MW-17	R1704835-001	68	69
MW-2B	R1704835-002	64	71
MW-21	R1704835-003	68	82
Method Blank	RQ1704994-01	69	70
Lab Control Sample	RQ1704994-02	77	71
Duplicate Lab Control Sample	RQ1704994-03	74	77

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Analytical Report

Client: Professional Service Industries (PSI) Schenectady, NY
Project: Former Borden Facility/0836852-1
Sample Matrix: Water

Service Request: R1704835
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: RQ1704994-01

Units: ug/L
Basis: NA

Low Level Polychlorinated Biphenyls (PCBs) by GC

Analysis Method: 8082A
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aroclor 1016	0.050 U	0.050	1	06/06/17 11:03	6/2/17	
Aroclor 1221	0.050 U	0.050	1	06/06/17 11:03	6/2/17	
Aroclor 1232	0.050 U	0.050	1	06/06/17 11:03	6/2/17	
Aroclor 1242	0.050 U	0.050	1	06/06/17 11:03	6/2/17	
Aroclor 1248	0.050 U	0.050	1	06/06/17 11:03	6/2/17	
Aroclor 1254	0.050 U	0.050	1	06/06/17 11:03	6/2/17	
Aroclor 1260	0.050 U	0.050	1	06/06/17 11:03	6/2/17	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	69	10 - 125	06/06/17 11:03	
Tetrachloro-m-xylene	70	18 - 126	06/06/17 11:03	