Preliminary Site Investigation (PSI)

Poplar Grove Road Bridge
Boone County, Illinois

IDOT Section No. 17-00093-00-BR

Prepared for:
Boone County

and

Illinois Department of Transportation

Prepared by:
Hanson Professional Services Inc.
6775 Fincham Drive
Rockford, Illinois 61108

August 2019

HANSON
Engineering | Planning | Allied Services

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Glossary of Acronyms

The following acronyms may be used in this report.

Preliminary Site Investigation (PSI) Acronyms

PSI	Preliminary Site Investigation
VOC	Volatile Organic Compounds
SVOC	Semivolatile Organic Compounds
SRO	Soil Remediation Objective(s)
TACO	Tiered Approach to Corrective Action Objectives
TCLP	Toxicity Characteristic Leachate Procedure

Preliminary Environmental Site Assessment (PESA) Acronyms

ACM	Asbestos Containing Material
AIRS	Air Inventory Listing
AST	Above-Ground Storage Tank
ASTM	American Society for Testing and Materials
BOL	Bureau of Land
CESQG	Conditionally Exempt Small Quantity Generator
ECHO	Enforcement and Compliance History Information
EDR	Environmental Data Resources, Inc.
ENG CONTROL	Site with an Engineering Control
ERNS	Emergency Response Notification System
FEMA	Federal Emergency Management Agency
FINDS	Facility Index System
FIRM	Flood Insurance Rate Map
IDOT	Illinois Department of Transportation
INST CONTROL	Site with an Institutional Control
ISGS	Illinois State Geological Survey
LUST	Leaking Underground Storage Tank
MGP	Manufactured Gas Plant
Non-Gen	Non-Generator – No longer regulated as a hazardous waste generator
NPDES	National Pollutant Discharge Elimination System
PESA	Preliminary Environmental Site Assessment
REC	Recognized Environmental Condition
RCRA	Resource Conservation and Recovery Act
RMP	Risk Management Plans
SPILLS	State Spills
SRP	Site Remediation Program
TIER 2	Sites that submit a chemical inventory report
TSCA	Toxic Substances Control Act
UST	Underground Storage Tank

1. Executive Summary

Hanson Professional Services Inc. (Hanson) conducted a Preliminary Site Investigation (PSI) of certain properties that may be disturbed during construction of the Poplar Grove Road bridge project located in Belvidere, Boone County, Illinois. The proposed project involves bridge replacement, approach roadway improvements, and curb, gutter, storm sewer and sidewalk improvements.

The project limits are located along Poplar Grove Road where it crosses the Kishwaukee River. Figure 1 shows the project location. The PSI addresses recognized environmental conditions (RECs) identified in a March 2018 Preliminary Environmental Site Assessment (PESA) performed by Hanson for the project limits. Hanson conducted the PSI field investigation on July 3, 2019. Soil samples were collected from four soil borings and analyzed to determine if the investigated RECs could have impacted the project construction limits.

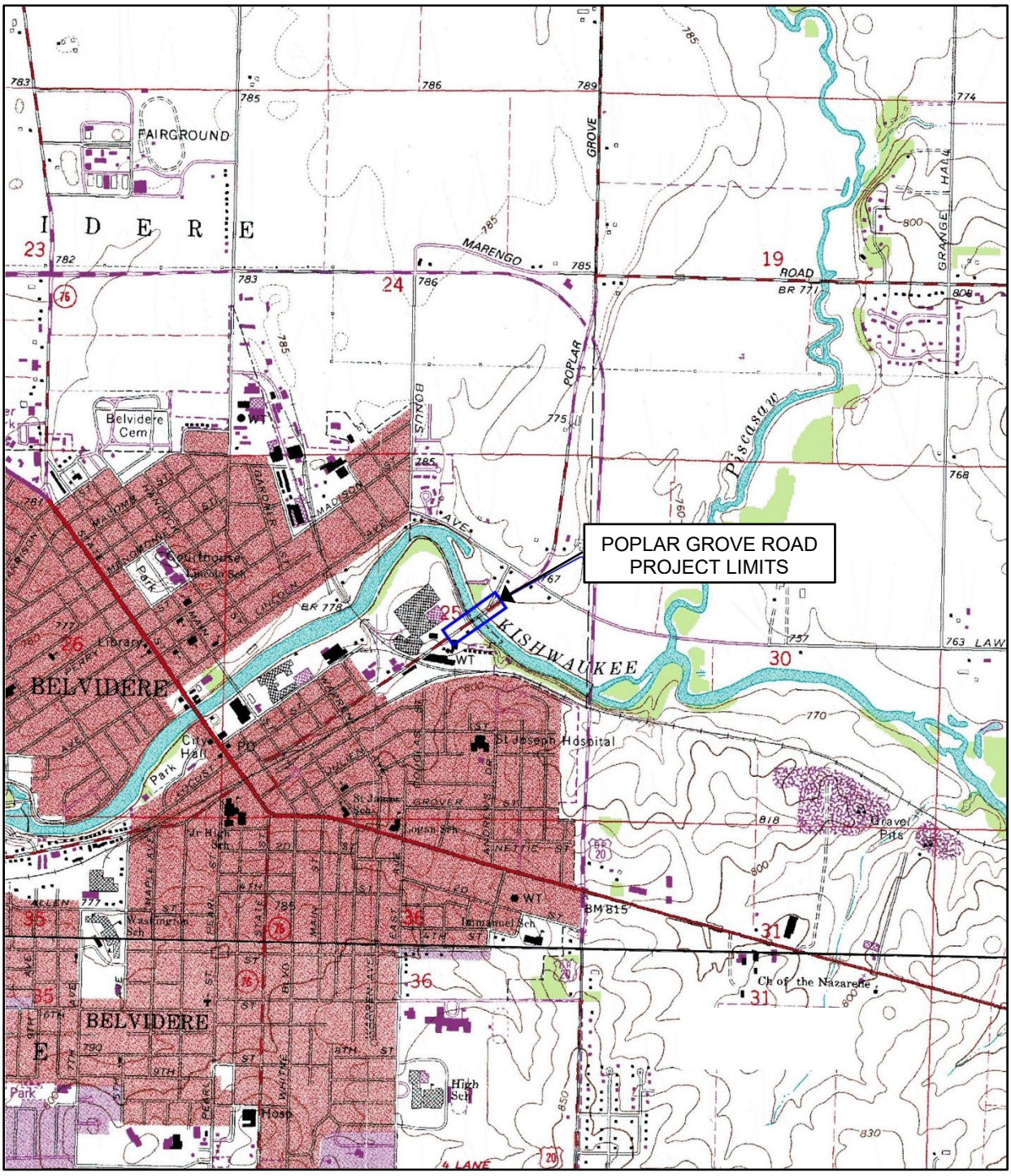
The PSI results indicate soil contamination is unlikely to be encountered during construction within the project limits near three of the four soil sampling locations that would require environmental remediation, construction worker protection, or special management of excavated materials. These conclusions are based on soil sample results collected at specific locations and may not be representative for all construction activities in these specific project areas. If apparent or suspected contaminants are encountered during construction they should be evaluated and characterized.

The PSI results indicated soil contamination may be encountered within the project limits near one soil sample location identified below. If soil excavation is required near the location of Soil Boring B1, excavated materials should be monitored and field screened by an environmental firm to determine if additional evaluation is needed.

Soil Boring B1
The reported concentration of benzo(a)pyrene in the soil sample from Soil Boring B1 exceeded the Residential Ingestion Soil Remediation Objective (SRO) but was below the Industrial/Commercial and Construction Worker SROs. Numerous other volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) were also detected in the soil sample from Boring B1. All other detected compounds were below all applicable SROs. A light petroleum odor and slightly elevated field screening detections of organic vapors were also observed during the sampling of Soil Boring B1.

The information contained in this report is confidential in nature. This report is exclusively for the use and benefit of Boone County and Illinois Department of Transportation (IDOT) and is not for the use or benefit of, nor may it be relied upon by, any other person or entity without the written consent of Hanson.

Figure 1 – PSI Location Map



Note: The callout shown above is intended to show the general location of the subject property and does not represent actual property boundaries.

Source: Belvidere North and Belvidere South, Illinois 7.5 Minute United States Geological Service (USGS) Quadrangle Topographic Maps

2. Limitations of the PSI

This report presents the results of a PSI conducted to investigate potential soil contamination in certain areas of the Poplar Grove Road Bridge project where RECs were identified. Data on conditions at the site may vary, depending upon when and where obtained, resulting in possible uncertainty with respect to the interpretation of actual conditions at the site. Hanson can offer no assurances and assumes no responsibility for site conditions or activities that were outside the scope of the inquiry requested by Boone County per IDOT requirements.

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3. Recognized Environmental Condition (REC) Background

The October 2016 PESA identified one REC site within the Poplar Grove Road Bridge project limits. Figure 2 shows the REC location. Details related to the REC site investigated in this PSI are listed below.

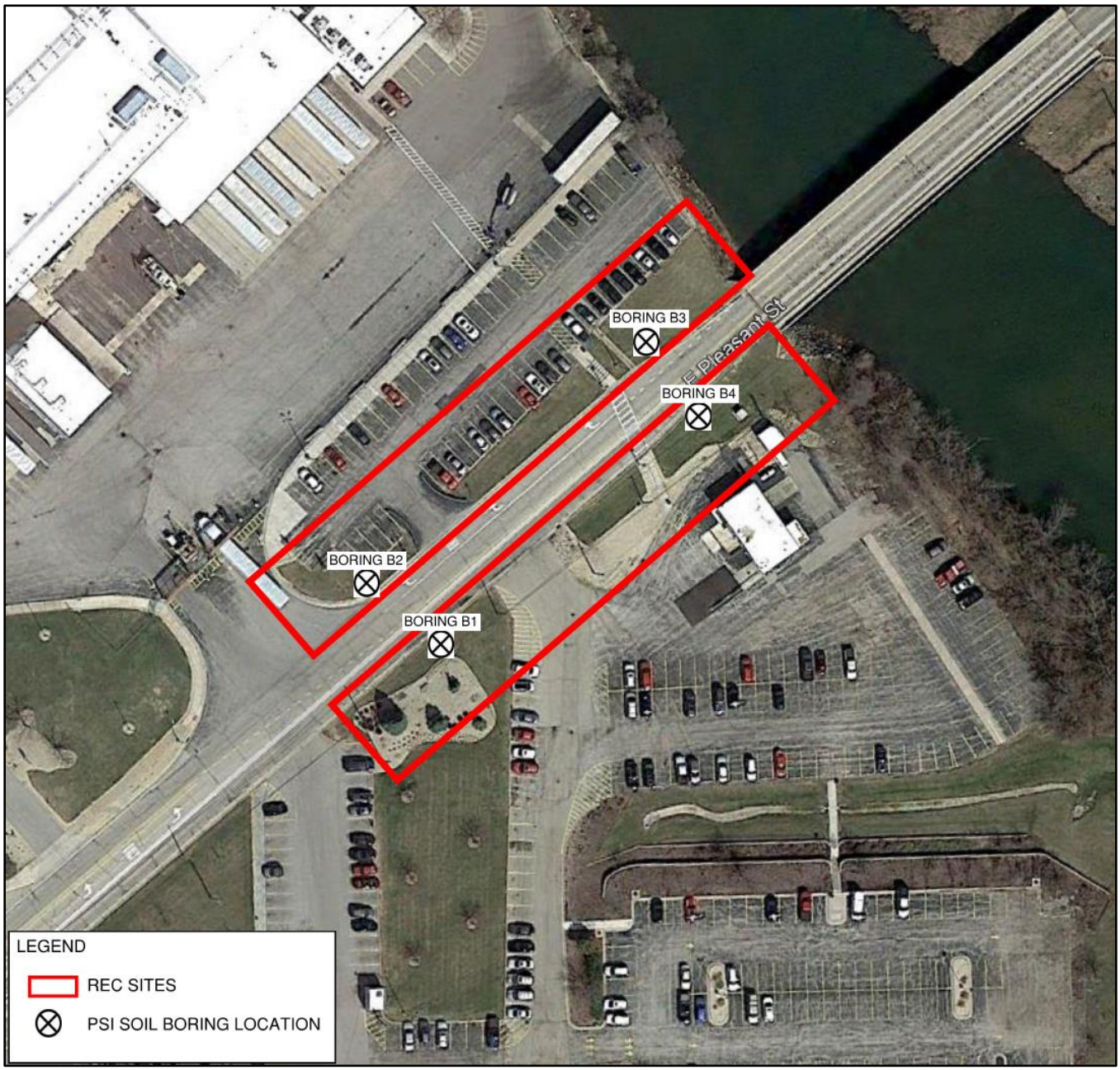
Site #1 – 915 East Pleasant Street, Belvidere, Property (REC site)

General Mills Operations Inc. and Pillsbury Green Giant Co. were both listed under the 915 East Pleasant Street address. Poplar Grove Road is known as East Pleasant Street south of the Kishwaukee River. The address was listed in the LUST, UST, SPILLS, NPDES, RCRA-CESQG, AIRS and ERNS database listings. The UST database listing indicates two 1,000-gallon gasoline USTs, two 2,000-gallon diesel fuel USTs and two 10,000-gallon diesel fuel USTs have been removed from the property. Illinois EPA LUST incident numbers 890650 (fuel oil release) and 922747 (fuel oil release) were both listed under this property address. An NFR letter was issued for incident number 890650 in May 2016 and for incident number 9222747 in March 2011. The RCRA-CESQG status lists ignitable waste, corrosive waste, reactive waste, barium, chromium and methyl ethyl ketone as waste produced at this property and indicates no violations have been reported. The SPILLS database indicates two spills were reported for the property. One SPILL was reported in March 1987 and assigned incident ID NL870314 and another was reported in August 2015 and assigned incident ID 20150903. No other information was available for the two reported SPILLS. The AIR listing reported a facility registry ID of 110000436369. The NPDES permit ID for the facility is IL0003450 and the Kishwaukee River is listed as the facility receiving water. The property is currently in industrial uses and the associated industrial property adjoins the project limits on the east and west sides of Poplar Grove Road. Based on past and current industrial uses and the documented releases that have occurred on the property, the potential for releases onto the project limits is considered a recognized environmental condition.

4. Soil Sampling

Based on the review of the identified RECs and site reconnaissance, the PSI investigation was planned to include subsurface soil samples collected from four soil borings within the project limits. Figure 2 illustrates the soil boring locations.

Figure 2 – Soil Boring Location Map



Testing Service Corporation (TSC), under subcontract to Hanson, completed the soil borings on July 3, 2019 using a direct-push Geoprobe. Soil borings were advanced to about 8 feet below ground surface (bgs) to screen through the maximum expected excavation depths for the proposed project. Groundwater was not encountered in the borings. The borings were continuously sampled with four-foot acrylic sample liners. The recovered soil samples were placed into plastic zip lock bags for headspace screening. After sampling, the borings were filled with bentonite chips and topped with earth or pea gravel to match the existing surface.

A Hanson environmental scientist screened the headspace of recovered soil samples for organic vapors using a photoionization detector (PID) to help determine the potential presence of VOCs and identify soil samples for laboratory analyses. Soil samples with elevated PID readings would be selected for laboratory analysis. Table 1 summarizes the PID readings and field observations from the soil samples. Slightly elevated PID readings were observed in the samples from Borings B1 and B2. A light petroleum odor was observed in the samples from Boring B1. No odors or visual indications of soil contamination were observed in the samples from Borings B2, B3, or B4.

One soil sample was collected for laboratory analysis from each soil boring. Samples were collected from approximately 3 ft bgs from Borings B1 and B2, where elevated PID readings were observed. Soil samples were also collected from approximately 3 ft bgs from Borings B3 and B4, although no elevated PID readings, odors, or visual indications of soil contamination were observed in those borings.

The samples were placed into containers provided by the analytical laboratory, labeled, and placed on ice until delivery to the laboratory later on July 3, 2019. A chain of custody document was prepared to identify the samples and analyses to be conducted.

Table 1 – Summary of Field Observations
PSI Soil Samples

Soil Boring	Depth (Ft bgs)	Field Observation	PID Reading (ppm)	Sample Collection Depth (Ft bgs)
B1	0-4 4-8	Petroleum odor Slight odor	60 40	3
B2	0-4 4-8	No odor No odor	14 1	3
B3	0-4 4-8	No odor No odor	0 0	3
B4	0-4 4-8	No odor No odor	0 0	3

5. Analytical Results

Hanson delivered the soil samples to PDC Laboratories, Inc. in Springfield, Illinois on July 3, 2019. The soil samples were analyzed for VOCs; SVOCs, which include polynuclear aromatic hydrocarbons, or PNAs; total metals and Toxicity Characteristic Leaching Procedure (TCLP) metals; and pH. Hanson selected these analyses to investigate organic compounds and metals generally associated with petroleum products and industrial land uses. The TCLP metals concentrations and pH are used to

determine if soil represented by the samples would be required to be managed as hazardous waste. PDC Laboratories, Inc. is accredited by the Illinois Environmental Laboratory Accreditation Program (IL ELAP) to conduct the analyses performed for this PSI.

2-Butanone was detected in the soil samples from Borings B1, B2, B3, and B4. Benzene, toluene and xylenes were detected in the soil sample from Boring B1. No additional VOCs were detected in the other soil samples. Several SVOCs were detected in the soil samples from Boring B1. No SVOCs were detected in the other soil samples. Various metals were detected in all of the soil samples. Table 2 shows the analytes detected in the soil samples. The analytical laboratory report, which shows the complete lists of analytes and the reporting limits, is included in Appendix A.

6. Discussion of Results

Table 1 compares the analytical results of the analytes detected in the soil samples to the Illinois EPA TACO Tier 1 SROs and statistical area background concentrations as listed in 35 Illinois Administrative Code (IAC) Part 742. The TACO regulation establishes risk-based procedures for use in seeking Illinois EPA's approval of baseline and site-specific remediation objectives for impacted soil. The TACO Tier 1 SROs are based on the land use at the site (residential or industrial/commercial), as well as potential exposures to construction workers. A Tier 1 evaluation assesses the applicability of exposure routes (inhalation, ingestion, and migration to potable or non-potable groundwater), and compares the concentrations of contaminants of concern detected at a site to baseline (or default) SROs.

Although the TACO Tier 1 SROs are not intended to be used to determine if a release to the environment has occurred, the TACO procedure may be used to evaluate the general risk of a site to human health. The analytical results were compared to the TACO Tier 1 Residential, Industrial/Commercial and Construction Worker Ingestion and Inhalation SROs and TACO statistical area background concentrations to determine if environmental concerns may be encountered during construction activities of the Poplar Grove Road Bridge project. If the concentration of a substance is less than the statistical area background concentration or the Tier 1 Residential SROs, then that substance is excluded from further consideration.

2-Butanone was detected in the soil samples from Borings B1, B2, B3, and B4; the reported concentrations did not exceed the most stringent SROs. These 2-Butanone detections appear to be randomly distributed and not associated with any particular source. Benzene, toluene, and xylenes were detected in the soil sample from Boring B1. These VOCs are typically associated with petroleum products and may be in connection with the LUST incidents or past and present industrial uses at REC Site #1. The reported concentrations did not exceed the most stringent SROs. No additional VOCs were detected in the other soil samples.

Several SVOCs were detected in the soil samples from Borings B1. The reported concentrations of benzo(a)pyrene in the soil sample from Borings B1 exceeded the Residential Ingestion SRO. The reported concentrations of other SVOCs did not exceed the most stringent SROs.

Various metals were detected in all of the soil samples. The concentrations of metals detected appear to be in the ranges of naturally-occurring background concentrations and do not exceed Residential, Industrial/Commercial or Construction Worker Ingestion or Inhalation SROs.

Table 2. Soil Analytical Results

Note: This table shows only the detected compounds and metals. The complete lists of analytes and reporting limits are shown in the laboratory report.
BOLD type indicates exceedance of one or more TACO Tier 1 Soil Remediation Objective(s).

Sample ID	Units	Tier 1 Soil Remediation Objectives (SROs) [1]							B1	B2	B3	B4
Sample Depth (ft)		Soil Saturation	Residential		Industrial		Construction Worker		3.0	3.0	3.0	3.0
Sample Date		Limit	Ingestion	Inhalation	Ingestion	Inhalation	Ingestion	Inhalation	7/3/2019	7/3/2019	7/3/2019	7/3/2019
pH and Moisture												
pH	%	-	-	-	-	-	-	-	7.93	9.01	8.36	8.09
% Solids, total solids (TS)	%	-	-	-	-	-	-	-	91.0	92.0	89.0	88.0
8260B Volatile Organic Compounds												
Acetone	mg/Kg		7,800	100,000		100,000		100,000	0.0858			
2-Butanone (MEK)	mg/Kg		-	-	-	-	-	-	0.0116	0.016	0.0224	0.0222
Toluene	mg/Kg	650	16,000	650	410,000	650	410,000	42	0.0042			
Xylenes (total)	mg/Kg	320	160,000	320	1,000,000	320	410,000	320	0.0154			
8270C Semi-Volatile Organic Compounds Including Polynuclear Aromatic Hydrocarbons												
Benzo (a) anthracene	mg/Kg		0.9	-	8	-	170	-	0.763			
Benzo (b) fluoranthene	mg/Kg		0.9	-	8	-	170	-	0.887			
Benzo (k) fluoranthene	mg/Kg		9	-	78	-	1,700	-	0.817			
Benzo (g,h,i) perylene	mg/Kg		-	-	-	-	-	-	0.540			
Benzo (a) pyrene	mg/Kg		**0.09**	-	0.8	-	17	-	**0.691**			
Chrysene	mg/Kg		88	-	780	-	17,000	-	1.93			
Fluoranthene	mg/Kg		3,100	-	82,000	-	82,000	-	2.40			
Indeno (1,2,3-cd) pyrene	mg/Kg		0.9	-	8	-	170	-	0.570			
Phenanthrene	mg/Kg		-	-	-	-	-	-	0.862			
Pyrene	mg/Kg		2,300	-	61,000	-	61,000	-	2.19			
Total Metals		**Background [2]**										
Arsenic	mg/Kg	13	13	75	13	1,200	61	25,000			2.11	4.98
Barium	mg/Kg	110	5500	690,000	140,000	910,000	14,000	870,000	238	20.8	22.8	26.6
Chromium	mg/Kg	16.2	230	270	6,100	420	4,100	690	11	7.08	7.08	7.76
Lead	mg/Kg	36	400	-	800	-	700		137	14.7	9.80	5.49
TCLP Metals		**Toxicity Characteristic [3]**										
Barium	mg/L	100.0							1.63	0.953	1.29	1.07
Lead	mg/L	5.0							0.0173			

Notes:

[1] Source: 35 IAC Part 742, Appendix B, Tables A and B (TACO Tier 1 SROs for Residential and Industrial/Commercial Properties

[2] Source: 35 IAC Part 742, Appendix A, Table G (Concentrations of Inorganic Chemicals in Background Soils - Metropolitan Statistical Areas.)

[3] Source: 35 IAC Part 721.124

The TCLP metals concentrations are less than the maximum concentrations for the soils to be considered hazardous waste by the toxicity characteristic, according to 35 IAC Section 721.124 and 40 Code of Federal Regulations (CFR) Section 261.24.

7. Conclusions

The PSI results indicate soil contamination is unlikely to be encountered during construction within the project limits that would require environmental remediation, construction worker protection, or special management of excavated materials except near Soil Boring B1 described below. These conclusions are based on soil sample results collected at specific locations and may not be representative for all construction activities in these specific project areas. If apparent or suspected contaminants are encountered during construction they should be evaluated and characterized.

The PSI results indicated soil contamination may be encountered within the project limits near Soil Boring B1. If soil excavation is required near the location of Soil Boring B1, excavated materials should be monitored and field screened by an environmental firm to determine if additional evaluation is needed.

Soil Boring B1
The reported concentration of benzo(a)pyrene in the soil sample from Soil Boring B1 exceeded the Residential Ingestion SRO but was below the Industrial/Commercial and Construction Worker SROs. Numerous other VOCs and SVOCs were also detected in the soil samples from Boring B1. All other detected compounds were below all applicable SROs. A light petroleum odor and slightly elevated field screening of organic vapors were also observed during the sampling of Soil Boring B1.

8. References

Hanson Professional Services Inc. (March 2018). Preliminary Environmental Site Assessment of the Poplar Grove Road Bridge.

IDOT, Bureau of Local Roads and Streets Manual, Section 20-12, Special Waste Procedures, July 2013.

IDOT, Bureau of Design and Environment Manual, Section 27-3, Special Waste Procedures, October 2015.

35 Illinois Administrative Code Part 742, Tiered Approach to Corrective Action Objectives (TACO).

35 Illinois Administrative Code Part 721.124, Toxicity Characteristic.

40 Code of Federal Regulations Section 261.24, Toxicity Characteristic.

Appendix A
Analytical Laboratory Report

PDC Laboratories, Inc.

Thursday, August 8, 2019

Doug Dorsey
Hanson Professional Services, Inc.
1525 South Sixth Street
Springfield, IL 62703-2886
TEL: (217) 747-2450
FAX: (217) 788-2503

RE: 16L0504B Belvidere PDC WO: 9070881

PDC Laboratories, Inc. received 4 sample(s) on 7/3/2019 for the analyses presented in the following report.

All applicable quality control procedures met method specific acceptance criteria unless otherwise noted.

If you have any questions, please feel free to contact me at (217) 753- 1148.

Respectfully submitted,

Kristen A Potter
Project Manager

Certifications: NELAP/NELAC - IL #100323

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881
Client Sample ID: B-1 **Lab ID:** 9070881-01
Collection Date: 7/3/19 8:10 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Arsenic	U	13.7		mg/kg dry	50	7/11/19 8:11	7/15/19 21:02	SW6020A R1	Whitn
***Barium**	**238**	2.74		mg/kg dry	10	7/11/19 8:11	7/12/19 18:41	SW6020A R1	Whitn
*Cadmium	U	2.74		mg/kg dry	10	7/11/19 8:11	7/12/19 18:41	SW6020A R1	Whitn
***Chromium**	**11.0**	2.74		mg/kg dry	10	7/11/19 8:11	7/12/19 18:41	SW6020A R1	Whitn
***Lead**	**137**	2.74		mg/kg dry	10	7/11/19 8:11	7/12/19 18:41	SW6020A R1	Whitn
*Mercury	U	0.547	X	mg/kg dry	10	7/11/19 8:11	7/12/19 18:41	SW6020A R1	Whitn
*Selenium	U	1.09		mg/kg dry	10	7/11/19 8:11	7/12/19 18:41	SW6020A R1	Whitn
*Silver	U	13.7		mg/kg dry	50	7/11/19 8:11	7/15/19 21:02	SW6020A R1	Whitn
General Chemistry									
pH	**7.93**	0.0100		pH Units	1	8/8/19 9:56	8/8/19 13:24	SW 9045	clh
Solids - total solids (TS)	**91**	0.050		%	1	7/5/19 11:23	7/8/19 11:36	SM 2540G	JMH
TCLP Metals									
*Mercury	U	0.0020		mg/L	1	7/23/19 13:00	7/23/19 17:15	SW 7470	JW
*Arsenic	U	0.0250		mg/L	5	7/11/19 8:40	7/12/19 18:12	SW6020A R1	Whitn
***Barium**	**1.63**	0.0500		mg/L	5	7/11/19 8:40	7/12/19 18:12	SW6020A R1	Whitn
*Cadmium	U	0.0100		mg/L	5	7/11/19 8:40	7/12/19 18:12	SW6020A R1	Whitn
*Chromium	U	0.0250		mg/L	5	7/11/19 8:40	7/12/19 18:12	SW6020A R1	Whitn
***Lead**	**0.0173**	0.0100		mg/L	5	7/11/19 8:40	7/12/19 18:12	SW6020A R1	Whitn
*Selenium	U	0.0250		mg/L	5	7/11/19 8:40	7/12/19 18:12	SW6020A R1	Whitn
*Silver	U	0.0250		mg/L	5	7/11/19 8:40	7/12/19 18:12	SW6020A R1	Whitn
Volatile Organics									
***Acetone**	**0.0858**	0.0416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*Benzene	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*Bromodichloromethane	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*Bromoform	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
Bromomethane	U	0.00832		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
***2-Butanone**	**0.0116**	0.00832		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*Carbon disulfide	U	0.00832		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*Carbon tetrachloride	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*Chlorobenzene	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*Chloroethane	U	0.00832		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*Chloroform	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*Chloromethane	U	0.00832		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*Dibromochloromethane	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*1,1-Dichloroethane	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*1,2-Dichloroethane	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*1,1-Dichloroethene	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*cis-1,2-Dichloroethene	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*trans-1,2-Dichloroethene	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*1,2-Dichloropropane	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
cis-1,3-Dichloropropene	U	0.00249		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
trans-1,3-Dichloropropene	U	0.00249		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*Ethylbenzene	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*2-Hexanone	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*MTBE	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881
Client Sample ID: B-1 **Lab ID:** 9070881-01
Collection Date: 7/3/19 8:10 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*4-Methyl-2-pentanone (MIBK)	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*Methylene chloride	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*Styrene	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*1,1,2,2-Tetrachloroethane	U	0.00166		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*Tetrachloroethene	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
***Toluene**	**0.00420**	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*1,1,1-Trichloroethane	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*1,1,2-Trichloroethane	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*Trichloroethene	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
*Vinyl chloride	U	0.00416		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
***Xylenes- Total**	**0.0154**	0.0125		mg/kg dry	1	7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
Surrogate: 4-Bromofluorobenzene		*84 %*		*75-120*		7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
Surrogate: 1,2-Dichloroethane-d4		*116 %*		*75-119*		7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
Surrogate: Toluene-d8		*79 %*		*78-114*		7/10/19 9:23	7/10/19 15:49	SW 8260B	CDM
Semivolatile Organics									
*Acenaphthene	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Acenaphthylene	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Anthracene	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
***Benzo(a)anthracene**	**0.763**	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
***Benzo(b)fluoranthene**	**0.887**	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
***Benzo(k)fluoranthene**	**0.817**	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
***Benzo(g,h,i)perylene**	**0.540**	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
***Benzo(a)pyrene**	**0.691**	0.0657		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Bis(2-chloroethoxy) methane	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Bis(2-chloroethyl) ether	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Bis(2-chloroisopropyl) ether	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Bis(2-ethylhexyl) phthalate	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*4-Bromophenyl phenyl ether	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Butyl benzyl phthalate	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Carbazole	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*4-Chloro-3-methylphenol	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*4-Chloroaniline	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*2-Chloronaphthalene	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*2-Chlorophenol	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*4-Chlorophenylphenyl ether	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
***Chrysene**	**1.93**	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Di-n-butyl phthalate	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Di-n-octyl phthalate	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Dibenzo(a,h)anthracene	U	0.0657		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Dibenzofuran	U	1.82		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*1,2-Dichlorobenzene	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*1,3-Dichlorobenzene	U	0.109		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*1,4-Dichlorobenzene	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*3,3'-Dichlorobenzidine	U	0.00547		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*2,4-Dichlorophenol	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Diethyl phthalate	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Dimethyl phthalate	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*2,4-Dimethylphenol	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*4,6-Dinitro-2-methylphenol	U	0.0248	Mrl	mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881
Client Sample ID: B-1 **Lab ID:** 9070881-01
Collection Date: 7/3/19 8:10 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*2,4-Dinitrophenol	U	0.109		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*2,4-Dinitrotoluene	U	0.109		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*2,6-Dinitrotoluene	U	0.109		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
***Fluoranthene**	**2.40**	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Fluorene	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Hexachlorobenzene	U	0.109		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Hexachlorobutadiene	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Hexachlorocyclopentadiene	U	0.729		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Hexachloroethane	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
***Indeno(1,2,3-cd)pyrene**	**0.570**	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Isophorone	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*2-Methylnaphthalene	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*2-Methylphenol	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*3- & 4-Methylphenol	U	0.109		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Naphthalene	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*2-Nitroaniline	U	0.109		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*3-Nitroaniline	U	0.00547		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*4-Nitroaniline	U	0.0657		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Nitrobenzene	U	0.0657		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*2-Nitrophenol	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*4-Nitrophenol	U	1.82		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*N-Nitrosodi-n-propylamine	U	0.000653	Mrl	mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*N-Nitrosodiphenylamine	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Pentachlorophenol	U	0.0109		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
***Phenanthrene**	**0.862**	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*Phenol	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
***Pyrene**	**2.19**	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*1,2,4-Trichlorobenzene	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*2,4,5-Trichlorophenol	U	0.364		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
*2,4,6-Trichlorophenol	U	0.109		mg/kg dry	1	7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
Surrogate: 2-Fluorobiphenyl		*90 %*		*40-120*		7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
Surrogate: 2-Fluorophenol		*53 %*		*20-115*		7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
Surrogate: Nitrobenzene-d5		*96 %*		*45-135*		7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
Surrogate: Phenol-d6		*68 %*		*20-100*		7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
Surrogate: 4-Terphenyl-d14		*67 %*		*60-130*		7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA
Surrogate: 2,4,6-Tribromophenol		*60 %*		*30-100*		7/9/19 14:53	7/11/19 0:55	SW 8270C	JKA

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881
Client Sample ID: B-2 **Lab ID:** 9070881-02
Collection Date: 7/3/19 8:30 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP-MS									
*Arsenic	U	12.5		mg/kg dry	50	7/11/19 8:11	7/15/19 21:14	SW6020A R1	Whitn
***Barium**	**20.8**	2.49		mg/kg dry	10	7/11/19 8:11	7/12/19 18:45	SW6020A R1	Whitn
*Cadmium	U	2.49		mg/kg dry	10	7/11/19 8:11	7/12/19 18:45	SW6020A R1	Whitn
***Chromium**	**7.08**	2.49		mg/kg dry	10	7/11/19 8:11	7/12/19 18:45	SW6020A R1	Whitn
***Lead**	**14.7**	2.49		mg/kg dry	10	7/11/19 8:11	7/12/19 18:45	SW6020A R1	Whitn
*Mercury	U	0.499	X	mg/kg dry	10	7/11/19 8:11	7/12/19 18:45	SW6020A R1	Whitn
*Selenium	U	0.998		mg/kg dry	10	7/11/19 8:11	7/12/19 18:45	SW6020A R1	Whitn
*Silver	U	12.5		mg/kg dry	50	7/11/19 8:11	7/15/19 21:14	SW6020A R1	Whitn
General Chemistry									
pH	**9.01**	0.0100		pH Units	1	8/8/19 9:56	8/8/19 13:24	SW 9045	clh
Solids - total solids (TS)	**92**	0.050		%	1	7/5/19 11:23	7/8/19 11:36	SM 2540G	JMH
TCLP Metals									
*Mercury	U	0.0020		mg/L	1	7/23/19 13:00	7/23/19 17:15	SW 7470	JW
*Arsenic	U	0.0250		mg/L	5	7/11/19 8:40	7/12/19 18:16	SW6020A R1	Whitn
***Barium**	**0.953**	0.0500		mg/L	5	7/11/19 8:40	7/12/19 18:16	SW6020A R1	Whitn
*Cadmium	U	0.0100		mg/L	5	7/11/19 8:40	7/12/19 18:16	SW6020A R1	Whitn
*Chromium	U	0.0250		mg/L	5	7/11/19 8:40	7/12/19 18:16	SW6020A R1	Whitn
*Lead	U	0.0100		mg/L	5	7/11/19 8:40	7/12/19 18:16	SW6020A R1	Whitn
*Selenium	U	0.0250		mg/L	5	7/11/19 8:40	7/12/19 18:16	SW6020A R1	Whitn
*Silver	U	0.0250		mg/L	5	7/11/19 8:40	7/12/19 18:16	SW6020A R1	Whitn
Volatile Organics									
*Acetone	U	0.0860		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*Benzene	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*Bromodichloromethane	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*Bromoform	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
Bromomethane	U	0.00955		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
***2-Butanone**	**0.0160**	0.00955		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*Carbon disulfide	U	0.00955		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*Carbon tetrachloride	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*Chlorobenzene	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*Chloroethane	U	0.00955		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*Chloroform	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*Chloromethane	U	0.00955		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*Dibromochloromethane	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*1,1-Dichloroethane	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*1,2-Dichloroethane	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*1,1-Dichloroethene	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*cis-1,2-Dichloroethene	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*trans-1,2-Dichloroethene	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*1,2-Dichloropropane	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
cis-1,3-Dichloropropene	U	0.00287		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
trans-1,3-Dichloropropene	U	0.00287		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*Ethylbenzene	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*2-Hexanone	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*MTBE	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881
Client Sample ID: B-2 **Lab ID:** 9070881-02
Collection Date: 7/3/19 8:30 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*4-Methyl-2-pentanone (MIBK)	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*Methylene chloride	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*Styrene	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*1,1,2,2-Tetrachloroethane	U	0.00191		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*Tetrachloroethene	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*Toluene	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*1,1,1-Trichloroethane	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*1,1,2-Trichloroethane	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*Trichloroethene	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*Vinyl chloride	U	0.00478		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
*Xylenes- Total	U	0.0143		mg/kg dry	1	7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
Surrogate: 4-Bromofluorobenzene		*86 %*		*75-120*		7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
Surrogate: 1,2-Dichloroethane-d4		*116 %*		*75-119*		7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
Surrogate: Toluene-d8		*87 %*		*78-114*		7/9/19 8:55	7/9/19 15:00	SW 8260B	CDM
Semivolatile Organics									
*Acenaphthene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Acenaphthylene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Anthracene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Benzo(a)anthracene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Benzo(b)fluoranthene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Benzo(k)fluoranthene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Benzo(g,h,i)perylene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Benzo(a)pyrene	U	0.0610		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Bis(2-chloroethoxy) methane	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Bis(2-chloroethyl) ether	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Bis(2-chloroisopropyl) ether	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Bis(2-ethylhexyl) phthalate	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*4-Bromophenyl phenyl ether	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Butyl benzyl phthalate	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Carbazole	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*4-Chloro-3-methylphenol	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*4-Chloroaniline	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*2-Chloronaphthalene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*2-Chlorophenol	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*4-Chlorophenylphenyl ether	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Chrysene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Di-n-butyl phthalate	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Di-n-octyl phthalate	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Dibenzo(a,h)anthracene	U	0.0610		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Dibenzofuran	U	1.69		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*1,2-Dichlorobenzene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*1,3-Dichlorobenzene	U	0.102		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*1,4-Dichlorobenzene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*3,3'-Dichlorobenzidine	U	0.00508		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*2,4-Dichlorophenol	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Diethyl phthalate	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Dimethyl phthalate	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*2,4-Dimethylphenol	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*4,6-Dinitro-2-methylphenol	U	0.0230	Mrl	mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881
Client Sample ID: B-2 **Lab ID:** 9070881-02
Collection Date: 7/3/19 8:30 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*2,4-Dinitrophenol	U	0.102		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*2,4-Dinitrotoluene	U	0.102		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*2,6-Dinitrotoluene	U	0.102		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Fluoranthene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Fluorene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Hexachlorobenzene	U	0.102		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Hexachlorobutadiene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Hexachlorocyclopentadiene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Hexachloroethane	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Indeno(1,2,3-cd)pyrene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Isophorone	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*2-Methylnaphthalene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*2-Methylphenol	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*3- & 4-Methylphenol	U	0.102		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Naphthalene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*2-Nitroaniline	U	0.102		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*3-Nitroaniline	U	0.00508		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*4-Nitroaniline	U	0.0610		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Nitrobenzene	U	0.0610		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*2-Nitrophenol	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*4-Nitrophenol	U	1.69		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*N-Nitrosodi-n-propylamine	U	0.000606	Mrl	mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*N-Nitrosodiphenylamine	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Pentachlorophenol	U	0.0102		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Phenanthrene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Phenol	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*Pyrene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*1,2,4-Trichlorobenzene	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*2,4,5-Trichlorophenol	U	0.338		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
*2,4,6-Trichlorophenol	U	0.102		mg/kg dry	1	7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
Surrogate: 2-Fluorobiphenyl		*88 %*		*40-120*		7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
Surrogate: 2-Fluorophenol		*55 %*		*20-115*		7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
Surrogate: Nitrobenzene-d5		*90 %*		*45-135*		7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
Surrogate: Phenol-d6		*72 %*		*20-100*		7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
Surrogate: 4-Terphenyl-d14		*77 %*		*60-130*		7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA
Surrogate: 2,4,6-Tribromophenol		*57 %*		*30-100*		7/9/19 14:53	7/11/19 1:26	SW 8270C	JKA

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881
Client Sample ID: B-3 **Lab ID:** 9070881-03
Collection Date: 7/3/19 8:45 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP									
***Arsenic**	**2.11**	0.521		mg/kg dry	1	7/11/19 8:11	7/22/19 16:35	SW6010B R2	WPS
***Barium**	**22.8**	2.60		mg/kg dry	10	7/11/19 8:11	7/12/19 19:06	SW6020A R1	Whitn
*Cadmium	U	2.60		mg/kg dry	10	7/11/19 8:11	7/12/19 19:06	SW6020A R1	Whitn
***Chromium**	**7.08**	2.60		mg/kg dry	10	7/11/19 8:11	7/12/19 19:06	SW6020A R1	Whitn
***Lead**	**9.80**	2.60		mg/kg dry	10	7/11/19 8:11	7/12/19 19:06	SW6020A R1	Whitn
*Mercury	U	0.521	X	mg/kg dry	10	7/11/19 8:11	7/12/19 19:06	SW6020A R1	Whitn
*Selenium	U	1.04		mg/kg dry	10	7/11/19 8:11	7/12/19 19:06	SW6020A R1	Whitn
*Silver	U	0.521		mg/kg dry	1	7/11/19 8:11	7/22/19 16:35	SW6010B R2	WPS
General Chemistry									
Solids - total solids (TS)	**89**	0.050		%	1	7/5/19 11:23	7/8/19 11:36	SM 2540G	JMH
pH	**8.36**	0.0100		pH Units	1	8/8/19 9:56	8/8/19 13:24	SW 9045	clh
TCLP Metals									
*Mercury	U	0.0020		mg/L	1	7/23/19 13:00	7/23/19 17:15	SW 7470	JW
*Arsenic	U	0.0250		mg/L	5	7/11/19 8:40	7/12/19 18:20	SW6020A R1	Whitn
***Barium**	**1.29**	0.0500		mg/L	5	7/11/19 8:40	7/12/19 18:20	SW6020A R1	Whitn
*Cadmium	U	0.0100		mg/L	5	7/11/19 8:40	7/12/19 18:20	SW6020A R1	Whitn
*Chromium	U	0.0250		mg/L	5	7/11/19 8:40	7/12/19 18:20	SW6020A R1	Whitn
*Lead	U	0.0100		mg/L	5	7/11/19 8:40	7/12/19 18:20	SW6020A R1	Whitn
*Selenium	U	0.0250		mg/L	5	7/11/19 8:40	7/12/19 18:20	SW6020A R1	Whitn
*Silver	U	0.0250		mg/L	5	7/11/19 8:40	7/12/19 18:20	SW6020A R1	Whitn
Volatile Organics									
*Acetone	U	0.110		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*Benzene	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*Bromodichloromethane	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*Bromoform	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
Bromomethane	U	0.00917		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
***2-Butanone**	**0.0224**	0.00917		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*Carbon disulfide	U	0.00917		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*Carbon tetrachloride	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*Chlorobenzene	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*Chloroethane	U	0.00917		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*Chloroform	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*Chloromethane	U	0.00917		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*Dibromochloromethane	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*1,1-Dichloroethane	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*1,2-Dichloroethane	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*1,1-Dichloroethene	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*cis-1,2-Dichloroethene	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*trans-1,2-Dichloroethene	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*1,2-Dichloropropane	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
cis-1,3-Dichloropropene	U	0.00275		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
trans-1,3-Dichloropropene	U	0.00275		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*Ethylbenzene	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*2-Hexanone	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*MTBE	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881
Client Sample ID: B-3 **Lab ID:** 9070881-03
Collection Date: 7/3/19 8:45 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*4-Methyl-2-pentanone (MIBK)	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*Methylene chloride	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*Styrene	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*1,1,2,2-Tetrachloroethane	U	0.00183		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*Tetrachloroethene	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*Toluene	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*1,1,1-Trichloroethane	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*1,1,2-Trichloroethane	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*Trichloroethene	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*Vinyl chloride	U	0.00458		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
*Xylenes- Total	U	0.0138		mg/kg dry	1	7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
Surrogate: 4-Bromofluorobenzene		*96 %*		*75-120*		7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
Surrogate: 1,2-Dichloroethane-d4		*117 %*		*75-119*		7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
Surrogate: Toluene-d8		*90 %*		*78-114*		7/9/19 8:55	7/9/19 15:27	SW 8260B	CDM
Semivolatile Organics									
*Acenaphthene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Acenaphthylene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Anthracene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Benzo(a)anthracene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Benzo(b)fluoranthene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Benzo(k)fluoranthene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Benzo(g,h,i)perylene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Benzo(a)pyrene	U	0.0673		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Bis(2-chloroethoxy) methane	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Bis(2-chloroethyl) ether	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Bis(2-chloroisopropyl) ether	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Bis(2-ethylhexyl) phthalate	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*4-Bromophenyl phenyl ether	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Butyl benzyl phthalate	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Carbazole	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*4-Chloro-3-methylphenol	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*4-Chloroaniline	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*2-Chloronaphthalene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*2-Chlorophenol	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*4-Chlorophenylphenyl ether	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Chrysene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Di-n-butyl phthalate	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Di-n-octyl phthalate	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Dibenzo(a,h)anthracene	U	0.0673		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Dibenzofuran	U	1.87		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*1,2-Dichlorobenzene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*1,3-Dichlorobenzene	U	0.112		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*1,4-Dichlorobenzene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*3,3'-Dichlorobenzidine	U	0.00561		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*2,4-Dichlorophenol	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Diethyl phthalate	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Dimethyl phthalate	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*2,4-Dimethylphenol	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*4,6-Dinitro-2-methylphenol	U	0.0254	Mrl	mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881
Client Sample ID: B-3 **Lab ID:** 9070881-03
Collection Date: 7/3/19 8:45 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*2,4-Dinitrophenol	U	0.112		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*2,4-Dinitrotoluene	U	0.112		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*2,6-Dinitrotoluene	U	0.112		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Fluoranthene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Fluorene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Hexachlorobenzene	U	0.112		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Hexachlorobutadiene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Hexachlorocyclopentadiene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Hexachloroethane	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Indeno(1,2,3-cd)pyrene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Isophorone	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*2-Methylnaphthalene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*2-Methylphenol	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*3- & 4-Methylphenol	U	0.112		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Naphthalene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*2-Nitroaniline	U	0.112		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*3-Nitroaniline	U	0.00561		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*4-Nitroaniline	U	0.0673		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Nitrobenzene	U	0.0673		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*2-Nitrophenol	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*4-Nitrophenol	U	1.87		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*N-Nitrosodi-n-propylamine	U	0.000669	Mrl	mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*N-Nitrosodiphenylamine	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Pentachlorophenol	U	0.0112		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Phenanthrene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Phenol	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*Pyrene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*1,2,4-Trichlorobenzene	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*2,4,5-Trichlorophenol	U	0.374		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
*2,4,6-Trichlorophenol	U	0.112		mg/kg dry	1	7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
Surrogate: 2-Fluorobiphenyl		*82 %*		*40-120*		7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
Surrogate: 2-Fluorophenol		*40 %*		*20-115*		7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
Surrogate: Nitrobenzene-d5		*87 %*		*45-135*		7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
Surrogate: Phenol-d6		*67 %*		*20-100*		7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
Surrogate: 4-Terphenyl-d14		*68 %*		*60-130*		7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA
Surrogate: 2,4,6-Tribromophenol		*53 %*		*30-100*		7/9/19 14:53	7/11/19 1:57	SW 8270C	JKA

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881
Client Sample ID: B-4 **Lab ID:** 9070881-04
Collection Date: 7/3/19 9:00 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Metals by ICP									
***Arsenic**	**4.98**	0.569		mg/kg dry	1	7/11/19 8:11	7/22/19 16:39	SW6010B R2	WPS
***Barium**	**26.6**	2.84		mg/kg dry	10	7/11/19 8:11	7/12/19 19:10	SW6020A R1	Whitn
*Cadmium	U	2.84		mg/kg dry	10	7/11/19 8:11	7/12/19 19:10	SW6020A R1	Whitn
***Chromium**	**7.76**	2.84		mg/kg dry	10	7/11/19 8:11	7/12/19 19:10	SW6020A R1	Whitn
***Lead**	**5.49**	2.84		mg/kg dry	10	7/11/19 8:11	7/12/19 19:10	SW6020A R1	Whitn
*Mercury	U	0.569	X	mg/kg dry	10	7/11/19 8:11	7/12/19 19:10	SW6020A R1	Whitn
*Selenium	U	1.14		mg/kg dry	10	7/11/19 8:11	7/12/19 19:10	SW6020A R1	Whitn
*Silver	U	0.569		mg/kg dry	1	7/11/19 8:11	7/22/19 16:39	SW6010B R2	WPS
General Chemistry									
pH	**8.09**	0.0100		pH Units	1	8/8/19 9:56	8/8/19 13:24	SW 9045	clh
Solids - total solids (TS)	**88**	0.050		%	1	7/5/19 11:23	7/8/19 11:36	SM 2540G	JMH
TCLP Metals									
*Mercury	U	0.0020		mg/L	1	7/23/19 13:00	7/23/19 17:15	SW 7470	JW
*Arsenic	U	0.0250		mg/L	5	7/11/19 8:40	7/12/19 18:24	SW6020A R1	Whitn
***Barium**	**1.07**	0.0500	Q3	mg/L	5	7/11/19 8:40	7/12/19 18:24	SW6020A R1	Whitn
*Cadmium	U	0.0100		mg/L	5	7/11/19 8:40	7/12/19 18:24	SW6020A R1	Whitn
*Chromium	U	0.0250		mg/L	5	7/11/19 8:40	7/12/19 18:24	SW6020A R1	Whitn
*Lead	U	0.0100		mg/L	5	7/11/19 8:40	7/12/19 18:24	SW6020A R1	Whitn
*Selenium	U	0.0250		mg/L	5	7/11/19 8:40	7/12/19 18:24	SW6020A R1	Whitn
*Silver	U	0.0250		mg/L	5	7/11/19 8:40	7/12/19 18:24	SW6020A R1	Whitn
Volatile Organics									
*Acetone	U	0.115		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*Benzene	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*Bromodichloromethane	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*Bromoform	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
Bromomethane	U	0.00957		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
***2-Butanone**	**0.0222**	0.00957		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*Carbon disulfide	U	0.00957		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*Carbon tetrachloride	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*Chlorobenzene	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*Chloroethane	U	0.00957		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*Chloroform	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*Chloromethane	U	0.00957		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*Dibromochloromethane	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*1,1-Dichloroethane	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*1,2-Dichloroethane	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*1,1-Dichloroethene	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*cis-1,2-Dichloroethene	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*trans-1,2-Dichloroethene	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*1,2-Dichloropropane	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
cis-1,3-Dichloropropene	U	0.00287		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
trans-1,3-Dichloropropene	U	0.00287		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*Ethylbenzene	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*2-Hexanone	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*MTBE	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881
Client Sample ID: B-4 **Lab ID:** 9070881-04
Collection Date: 7/3/19 9:00 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*4-Methyl-2-pentanone (MIBK)	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*Methylene chloride	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*Styrene	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*1,1,2,2-Tetrachloroethane	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*Tetrachloroethene	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*Toluene	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*1,1,1-Trichloroethane	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*1,1,2-Trichloroethane	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*Trichloroethene	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*Vinyl chloride	U	0.00479		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
*Xylenes- Total	U	0.0144		mg/kg dry	1	7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
Surrogate: 4-Bromofluorobenzene		*94 %*		*75-120*		7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
Surrogate: 1,2-Dichloroethane-d4		*115 %*		*75-119*		7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
Surrogate: Toluene-d8		*89 %*		*78-114*		7/9/19 8:55	7/9/19 15:55	SW 8260B	CDM
Semivolatile Organics									
*Acenaphthene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Acenaphthylene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Anthracene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Benzo(a)anthracene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Benzo(b)fluoranthene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Benzo(k)fluoranthene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Benzo(g,h,i)perylene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Benzo(a)pyrene	U	0.0682		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Bis(2-chloroethoxy) methane	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Bis(2-chloroethyl) ether	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Bis(2-chloroisopropyl) ether	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Bis(2-ethylhexyl) phthalate	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*4-Bromophenyl phenyl ether	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Butyl benzyl phthalate	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Carbazole	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*4-Chloro-3-methylphenol	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*4-Chloroaniline	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*2-Chloronaphthalene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*2-Chlorophenol	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*4-Chlorophenylphenyl ether	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Chrysene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Di-n-butyl phthalate	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Di-n-octyl phthalate	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Dibenzo(a,h)anthracene	U	0.0682		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Dibenzofuran	U	1.89		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*1,2-Dichlorobenzene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*1,3-Dichlorobenzene	U	0.114		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*1,4-Dichlorobenzene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*3,3'-Dichlorobenzidine	U	0.00569		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*2,4-Dichlorophenol	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Diethyl phthalate	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Dimethyl phthalate	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*2,4-Dimethylphenol	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*4,6-Dinitro-2-methylphenol	U	0.0258	Mrl	mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881
Client Sample ID: B-4 **Lab ID:** 9070881-04
Collection Date: 7/3/19 9:00 **Matrix:** Solid

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*2,4-Dinitrophenol	U	0.114		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*2,4-Dinitrotoluene	U	0.114		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*2,6-Dinitrotoluene	U	0.114		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Fluoranthene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Fluorene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Hexachlorobenzene	U	0.114		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Hexachlorobutadiene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Hexachlorocyclopentadiene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Hexachloroethane	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Indeno(1,2,3-cd)pyrene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Isophorone	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*2-Methylnaphthalene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*2-Methylphenol	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*3- & 4-Methylphenol	U	0.114		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Naphthalene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*2-Nitroaniline	U	0.114		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*3-Nitroaniline	U	0.00569		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*4-Nitroaniline	U	0.0682		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Nitrobenzene	U	0.0682		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*2-Nitrophenol	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*4-Nitrophenol	U	1.89		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*N-Nitrosodi-n-propylamine	U	0.000678	Mrl	mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*N-Nitrosodiphenylamine	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Pentachlorophenol	U	0.0114		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Phenanthrene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Phenol	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*Pyrene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*1,2,4-Trichlorobenzene	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*2,4,5-Trichlorophenol	U	0.379		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
*2,4,6-Trichlorophenol	U	0.114		mg/kg dry	1	7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
Surrogate: 2-Fluorobiphenyl		*75 %*		*40-120*		7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
Surrogate: 2-Fluorophenol		*37 %*		*20-115*		7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
Surrogate: Nitrobenzene-d5		*77 %*		*45-135*		7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
Surrogate: Phenol-d6		*60 %*		*20-100*		7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
Surrogate: 4-Terphenyl-d14		*55 %*	Q5	*60-130*		7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA
Surrogate: 2,4,6-Tribromophenol		*51 %*		*30-100*		7/9/19 14:53	7/11/19 2:28	SW 8270C	JKA

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881

Metals by ICP-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B915132 - 06-SW 3050B Metals										
Blank (B915132-BLK1)				Prepared: 07/11/19 0 Analyzed: 07/11/19 1						
Arsenic	U	1.25	mg/kg wet							
Arsenic	U	0.500	mg/kg wet							
Barium	U	1.25	mg/kg wet							
Cadmium	U	1.25	mg/kg wet							
Chromium	U	1.25	mg/kg wet							
Lead	U	1.25	mg/kg wet							
Mercury	U	0.250	mg/kg wet							
Selenium	U	0.500	mg/kg wet							
Silver	U	1.25	mg/kg wet							
Silver	U	0.500	mg/kg wet							

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881

Metals by ICP - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B915132 - 06-SW 3050B Metals										
LCS (B915132-BS1)				Prepared: 07/11/19 0 Analyzed: 07/17/19 1						
Arsenic	25.2	0.500	mg/kg wet	25.00		101	80-120			
Arsenic	24.2	1.25	mg/kg wet	25.00		97	80-120			
Barium	25.2	1.25	mg/kg wet	25.00		101	80-120			
Cadmium	24.9	1.25	mg/kg wet	25.00		100	80-120			
Chromium	23.5	1.25	mg/kg wet	25.00		94	80-120			
Lead	25.6	1.25	mg/kg wet	25.00		102	80-120			
Mercury	1.23	0.250	mg/kg wet	0.1250		986	80-120			
Selenium	25.3	1.25	mg/kg wet	25.00		101	80-120			
Silver	2.01	1.25	mg/kg wet	2.500		80	80-120			
Silver	2.03	0.500	mg/kg wet	2.500		81	80-120			

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881

Metals by ICP - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B915132 - 06-SW 3050B Metals										
Matrix Spike (B915132-MS1)	**Source: 9071704-01**			Prepared: 07/11/19 0 Analyzed: 07/22/19 1						
Arsenic	31.2	0.614	mg/kg dry	30.50	2.94	93	75-125			
Barium	167	3.07	mg/kg dry	30.50	170	NR	75-125			
Cadmium	27.7	3.07	mg/kg dry	30.50	ND	91	75-125			
Chromium	45.3	3.07	mg/kg dry	30.50	16.8	93	75-125			
Lead	77.8	3.07	mg/kg dry	30.50	40.1	124	75-125			
Mercury	1.75	0.614	mg/kg dry	0.1525	ND	NR	75-125			
Selenium	9.57	3.07	mg/kg dry	30.50	0.527	30	75-125			
Silver	2.05	0.614	mg/kg dry	3.050	ND	67	75-125			Q3

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881

Metals by ICP - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B915132 - 06-SW 3050B Metals										
Matrix Spike Dup (B915132-MSD1)	**Source: 9071704-01**			Prepared: 07/11/19 0 Analyzed: 07/22/19 1						
Arsenic	30.7	0.614	mg/kg dry	30.44	2.94	91	75-125	1	20	
Barium	178	3.07	mg/kg dry	30.44	170	25	75-125	6	20	
Cadmium	25.2	3.07	mg/kg dry	30.44	ND	83	75-125	10	20	
Chromium	40.0	3.07	mg/kg dry	30.44	16.8	76	75-125	12	20	
Lead	85.1	3.07	mg/kg dry	30.44	40.1	148	75-125	9	20	
Mercury	1.73	0.614	mg/kg dry	0.1522	ND	NR	75-125	1	20	
Selenium	10.6	3.07	mg/kg dry	30.44	0.527	33	75-125	10	20	
Silver	2.02	0.614	mg/kg dry	3.044	ND	66	75-125	2	20	Q3

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881

Metals by ICP - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B914646 - 06-ASTM D2974 Solids										
Blank (B914646-BLK1)				Prepared: 07/05/19 1 Analyzed: 07/08/19 1						
Solids - total solids (TS)	U	0.050	%							
Duplicate (B914646-DUP1)		**Source: 9070825-42**		Prepared: 07/05/19 1 Analyzed: 07/08/19 1						
Solids - total solids (TS)	82.6	0.050	%		83.2			0.7	5	
Batch B917742 - 06-SW 9045C pH										
Duplicate (B917742-DUP1)		**Source: 9081151-01**		Prepared: 08/08/19 0 Analyzed: 08/08/19 1						
pH	8.52	0.0100	pH Units		8.47			0.6	5	

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881

TCLP Metals - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B915138 - 06-SW 1311 TCLP										
Blank (B915138-BLK1)				Prepared: 07/11/19 0 Analyzed: 07/12/19 1						
Arsenic	U	0.0250	mg/L							
Barium	U	0.0500	mg/L							
Cadmium	U	0.0100	mg/L							
Chromium	U	0.0250	mg/L							
Lead	U	0.0100	mg/L							
Selenium	U	0.0250	mg/L							
Silver	U	0.0250	mg/L							
LCS (B915138-BS1)				Prepared: 07/11/19 0 Analyzed: 07/12/19 1						
Arsenic	0.518	0.0250	mg/L	0.5000		104	80-120			
Barium	0.527	0.0500	mg/L	0.5000		105	80-120			
Cadmium	0.522	0.0100	mg/L	0.5000		104	80-120			
Chromium	0.506	0.0250	mg/L	0.5000		101	80-120			
Lead	0.527	0.0250	mg/L	0.5000		105	80-120			
Selenium	0.505	0.0250	mg/L	0.5000		101	80-120			
Silver	0.0416	0.0250	mg/L	0.05000		83	80-120			
Matrix Spike (B915138-MS1)	**Source: 9070881-04**			Prepared: 07/11/19 0 Analyzed: 07/12/19 1						
Arsenic	0.577	0.0250	mg/L	0.5000	ND	115	75-125			
Barium	1.52	0.0500	mg/L	0.5000	1.07	90	75-125			
Cadmium	0.501	0.0100	mg/L	0.5000	ND	100	75-125			
Chromium	0.534	0.0250	mg/L	0.5000	ND	107	75-125			
Lead	0.498	0.0250	mg/L	0.5000	ND	100	75-125			
Selenium	0.512	0.0250	mg/L	0.5000	ND	102	75-125			
Silver	0.0379	0.0250	mg/L	0.05000	ND	76	75-125			
Matrix Spike Dup (B915138-MSD1)	**Source: 9070881-04**			Prepared: 07/11/19 0 Analyzed: 07/12/19 1						
Arsenic	0.598	0.0250	mg/L	0.5000	ND	120	75-125	4	20	
Barium	1.26	0.0500	mg/L	0.5000	1.07	38	75-125	19	20	
Cadmium	0.505	0.0100	mg/L	0.5000	ND	101	75-125	0.8	20	
Chromium	0.554	0.0250	mg/L	0.5000	ND	111	75-125	4	20	
Lead	0.410	0.0250	mg/L	0.5000	ND	82	75-125	19	20	
Selenium	0.509	0.0250	mg/L	0.5000	ND	102	75-125	0.5	20	
Silver	0.0380	0.0250	mg/L	0.05000	ND	76	75-125	0.4	20	

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881

TCLP Metals - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B916287 - 04-SW 7470A/245.1										
Blank (B916287-BLK1)				Prepared & Analyzed: 07/23/19 1						
Mercury	U	0.0002	mg/L							
LCS (B916287-BS1)				Prepared & Analyzed: 07/23/19 1						
Mercury	0.00207	0.0002	mg/L	0.002000		104	80-120			
Matrix Spike (B916287-MS1)	**Source: 9070881-03**			Prepared & Analyzed: 07/23/19 1						
Mercury	0.0209	0.0020	mg/L	0.02000	ND	104	75-125			
Matrix Spike (B916287-MS2)	**Source: 9070881-04**			Prepared & Analyzed: 07/23/19 1						
Mercury	0.0201	0.0020	mg/L	0.02000	ND	100	75-125			
Matrix Spike (B916287-MS3)	**Source: 9070881-01**			Prepared & Analyzed: 07/23/19 1						
Mercury	0.0206	0.0020	mg/L	0.02000	ND	103	75-125			
Matrix Spike (B916287-MS4)	**Source: 9070881-02**			Prepared & Analyzed: 07/23/19 1						
Mercury	0.0209	0.0020	mg/L	0.02000	ND	104	75-125			
Matrix Spike Dup (B916287-MSD1)	**Source: 9070881-03**			Prepared & Analyzed: 07/23/19 1						
Mercury	0.0205	0.0020	mg/L	0.02000	ND	103	75-125	2	20	
Matrix Spike Dup (B916287-MSD2)	**Source: 9070881-04**			Prepared & Analyzed: 07/23/19 1						
Mercury	0.0208	0.0020	mg/L	0.02000	ND	104	75-125	4	20	

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881

Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B914933 - 06-SW 5035A VOA										
Blank (B914933-BLK1)				Prepared: 07/09/19 0 Analyzed: 07/09/19 1						
Acetone	U	0.0500	mg/kg wet							
Benzene	U	0.00500	mg/kg wet							
Bromodichloromethane	U	0.00500	mg/kg wet							
Bromoform	U	0.00500	mg/kg wet							
Bromomethane	U	0.0100	mg/kg wet							
2-Butanone	U	0.0100	mg/kg wet							
Carbon disulfide	U	0.0100	mg/kg wet							
Carbon tetrachloride	U	0.00500	mg/kg wet							
Chlorobenzene	U	0.00500	mg/kg wet							
Chloroethane	U	0.0100	mg/kg wet							
Chloroform	U	0.00500	mg/kg wet							
Chloromethane	U	0.0100	mg/kg wet							
Dibromochloromethane	U	0.00500	mg/kg wet							
1,1-Dichloroethane	U	0.00500	mg/kg wet							
1,2-Dichloroethane	U	0.00500	mg/kg wet							
1,1-Dichloroethene	U	0.00500	mg/kg wet							
cis-1,2-Dichloroethene	U	0.00500	mg/kg wet							
trans-1,2-Dichloroethene	U	0.00500	mg/kg wet							
1,2-Dichloropropane	U	0.00500	mg/kg wet							
cis-1,3-Dichloropropene	U	0.00300	mg/kg wet							
trans-1,3-Dichloropropene	U	0.00300	mg/kg wet							
Ethylbenzene	U	0.00500	mg/kg wet							
2-Hexanone	U	0.00500	mg/kg wet							
MTBE	U	0.00500	mg/kg wet							
4-Methyl-2-pentanone (MIBK)	U	0.00500	mg/kg wet							
Methylene chloride	U	0.00500	mg/kg wet							
Styrene	U	0.00500	mg/kg wet							
1,1,2,2-Tetrachloroethane	U	0.00200	mg/kg wet							
Tetrachloroethene	U	0.00500	mg/kg wet							
Toluene	U	0.00500	mg/kg wet							
1,1,1-Trichloroethane	U	0.00500	mg/kg wet							
1,1,2-Trichloroethane	U	0.00500	mg/kg wet							
Trichloroethene	U	0.00500	mg/kg wet							
Vinyl chloride	U	0.00500	mg/kg wet							
Xylenes- Total	U	0.0150	mg/kg wet							
Surrogate: 4-Bromofluorobenzene	*0.0487*		*mg/kg wet*	*0.05000*		*97*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0535*		*mg/kg wet*	*0.05000*		*107*	*75-119*			
Surrogate: Toluene-d8	*0.0460*		*mg/kg wet*	*0.05000*		*92*	*78-114*			

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881

Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B914933 - 06-SW 5035A VOA										
LCS (B914933-BS1)				Prepared: 07/09/19 0 Analyzed: 07/09/19 1						
Benzene	0.0461	0.00500	mg/kg wet	0.05000		92	80-130			
Chlorobenzene	0.0493	0.00500	mg/kg wet	0.05000		99	85-120			
1,1-Dichloroethene	0.0506	0.00500	mg/kg wet	0.05000		101	70-130			
Ethylbenzene	0.0530	0.00500	mg/kg wet	0.05000		106	77-132			
Toluene	0.0454	0.00500	mg/kg wet	0.05000		91	80-130			
Trichloroethene	0.0450	0.00500	mg/kg wet	0.05000		90	75-130			
Xylenes- Total	0.157	0.0150	mg/kg wet				80-130			
Surrogate: 4-Bromofluorobenzene	*0.0524*		*mg/kg wet*	*0.05000*		*105*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0520*		*mg/kg wet*	*0.05000*		*104*	*75-119*			
Surrogate: Toluene-d8	*0.0475*		*mg/kg wet*	*0.05000*		*95*	*78-114*			
Matrix Spike (B914933-MS1)		**Source: 9070825-31**		Prepared: 07/09/19 0 Analyzed: 07/09/19 1						
Benzene	0.0465	0.00640	mg/kg dry	0.06403	ND	73	50-140			
Chlorobenzene	0.0510	0.00640	mg/kg dry	0.06403	ND	80	60-130			
Toluene	0.0470	0.00640	mg/kg dry	0.06403	ND	73	55-130			
Trichloroethene	0.0566	0.00640	mg/kg dry	0.06403	0.00334	83	60-130			
Xylenes- Total	0.161	0.0192	mg/kg dry		ND		60-130			
Surrogate: 4-Bromofluorobenzene	*0.0606*		*mg/kg dry*	*0.06403*		*95*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0634*		*mg/kg dry*	*0.06403*		*99*	*75-119*			
Surrogate: Toluene-d8	*0.0596*		*mg/kg dry*	*0.06403*		*93*	*78-114*			
Matrix Spike Dup (B914933-MSD1)		**Source: 9070825-31**		Prepared: 07/09/19 0 Analyzed: 07/09/19 2						
Benzene	0.0209	0.00646	mg/kg dry	0.06460	ND	32	50-140	76	20	Q2, R
Chlorobenzene	0.0266	0.00646	mg/kg dry	0.06460	ND	41	60-130	63	20	Q2, R
Toluene	0.0220	0.00646	mg/kg dry	0.06460	ND	34	55-130	73	25	Q2, R
Trichloroethene	0.0234	0.00646	mg/kg dry	0.06460	0.00334	31	60-130	83	20	Q2, R
Xylenes- Total	0.0705	0.0194	mg/kg dry		ND		60-130	78	25	R
Surrogate: 4-Bromofluorobenzene	*0.0589*		*mg/kg dry*	*0.06460*		*91*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0695*		*mg/kg dry*	*0.06460*		*108*	*75-119*			
Surrogate: Toluene-d8	*0.0614*		*mg/kg dry*	*0.06460*		*95*	*78-114*			

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881

Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B915156 - 06-SW 5035A VOA										
Blank (B915156-BLK1)				Prepared & Analyzed: 07/10/19 0						
Acetone	U	0.0500	mg/kg wet							
Benzene	U	0.00500	mg/kg wet							
Bromodichloromethane	U	0.00500	mg/kg wet							
Bromoform	U	0.00500	mg/kg wet							
Bromomethane	U	0.0100	mg/kg wet							
2-Butanone	U	0.0100	mg/kg wet							
Carbon disulfide	U	0.0100	mg/kg wet							
Carbon tetrachloride	U	0.00500	mg/kg wet							
Chlorobenzene	U	0.00500	mg/kg wet							
Chloroethane	U	0.0100	mg/kg wet							
Chloroform	U	0.00500	mg/kg wet							
Chloromethane	U	0.0100	mg/kg wet							
Dibromochloromethane	U	0.00500	mg/kg wet							
1,1-Dichloroethane	U	0.00500	mg/kg wet							
1,2-Dichloroethane	U	0.00500	mg/kg wet							
1,1-Dichloroethene	U	0.00500	mg/kg wet							
cis-1,2-Dichloroethene	U	0.00500	mg/kg wet							
trans-1,2-Dichloroethene	U	0.00500	mg/kg wet							
1,2-Dichloropropane	U	0.00500	mg/kg wet							
cis-1,3-Dichloropropene	U	0.00300	mg/kg wet							
trans-1,3-Dichloropropene	U	0.00300	mg/kg wet							
Ethylbenzene	U	0.00500	mg/kg wet							
2-Hexanone	U	0.00500	mg/kg wet							
MTBE	U	0.00500	mg/kg wet							
4-Methyl-2-pentanone (MIBK)	U	0.00500	mg/kg wet							
Methylene chloride	U	0.00500	mg/kg wet							
Styrene	U	0.00500	mg/kg wet							
1,1,2,2-Tetrachloroethane	U	0.00200	mg/kg wet							
Tetrachloroethene	U	0.00500	mg/kg wet							
Toluene	U	0.00500	mg/kg wet							
1,1,1-Trichloroethane	U	0.00500	mg/kg wet							
1,1,2-Trichloroethane	U	0.00500	mg/kg wet							
Trichloroethene	U	0.00500	mg/kg wet							
Vinyl chloride	U	0.00500	mg/kg wet							
Xylenes- Total	U	0.0150	mg/kg wet							
Surrogate: 4-Bromofluorobenzene	*0.0535*		*mg/kg wet*	*0.05000*		*107*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0501*		*mg/kg wet*	*0.05000*		*100*	*75-119*			
Surrogate: Toluene-d8	*0.0459*		*mg/kg wet*	*0.05000*		*92*	*78-114*			

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881

Volatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B915156 - 06-SW 5035A VOA										
LCS (B915156-BS1)				Prepared & Analyzed: 07/10/19 0						
Benzene	0.0459	0.00500	mg/kg wet	0.05000		92	80-130			
Chlorobenzene	0.0503	0.00500	mg/kg wet	0.05000		101	85-120			
1,1-Dichloroethene	0.0529	0.00500	mg/kg wet	0.05000		106	70-130			
Ethylbenzene	0.0529	0.00500	mg/kg wet	0.05000		106	77-132			
Toluene	0.0460	0.00500	mg/kg wet	0.05000		92	80-130			
Trichloroethene	0.0468	0.00500	mg/kg wet	0.05000		94	75-130			
Xylenes- Total	0.156	0.0150	mg/kg wet				80-130			
Surrogate: 4-Bromofluorobenzene	*0.0480*		*mg/kg wet*	*0.05000*		*96*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0508*		*mg/kg wet*	*0.05000*		*102*	*75-119*			
Surrogate: Toluene-d8	*0.0471*		*mg/kg wet*	*0.05000*		*94*	*78-114*			
Matrix Spike (B915156-MS1)		**Source: 9070881-01RE1**		Prepared: 07/10/19 0 Analyzed: 07/10/19 1						
Benzene	0.0544	0.00632	mg/kg dry	0.06319	0.00215	83	50-140			
Chlorobenzene	0.0639	0.00632	mg/kg dry	0.06319	ND	101	60-130			
Toluene	0.0459	0.00632	mg/kg dry	0.06319	0.00420	66	55-130			
Trichloroethene	0.0489	0.00632	mg/kg dry	0.06319	ND	77	60-130			
Xylenes- Total	0.251	0.0190	mg/kg dry		0.0154		60-130			
Surrogate: 4-Bromofluorobenzene	*0.0592*		*mg/kg dry*	*0.06319*		*94*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0751*		*mg/kg dry*	*0.06319*		*119*	*75-119*			
Surrogate: Toluene-d8	*0.0468*		*mg/kg dry*	*0.06319*		*74*	*78-114*			*Q1*
Matrix Spike Dup (B915156-MSD1)		**Source: 9070881-01RE1**		Prepared: 07/10/19 0 Analyzed: 07/10/19 1						
Benzene	0.0524	0.00605	mg/kg dry	0.06053	0.00215	83	50-140	4	20	
Chlorobenzene	0.0643	0.00605	mg/kg dry	0.06053	ND	106	60-130	0.5	20	
Toluene	0.0455	0.00605	mg/kg dry	0.06053	0.00420	68	55-130	1	25	
Trichloroethene	0.0479	0.00605	mg/kg dry	0.06053	ND	79	60-130	2	20	
Xylenes- Total	0.238	0.0182	mg/kg dry		0.0154		60-130	6	25	
Surrogate: 4-Bromofluorobenzene	*0.0564*		*mg/kg dry*	*0.06053*		*93*	*75-120*			
Surrogate: 1,2-Dichloroethane-d4	*0.0692*		*mg/kg dry*	*0.06053*		*114*	*75-119*			
Surrogate: Toluene-d8	*0.0444*		*mg/kg dry*	*0.06053*		*73*	*78-114*			*Q2*

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881

Semivolatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B914945 - 06-SW 3550B BNA										
Blank (B914945-BLK1)				Prepared: 07/09/19 1 Analyzed: 07/10/19 2						
Acenaphthene	U	333	mg/kg wet							
Acenaphthylene	U	333	mg/kg wet							
Anthracene	U	333	mg/kg wet							
Benzo(a)anthracene	U	333	mg/kg wet							
Benzo(b)fluoranthene	U	333	mg/kg wet							
Benzo(k)fluoranthene	U	333	mg/kg wet							
Benzo(g,h,i)perylene	U	333	mg/kg wet							
Benzo(a)pyrene	U	60.0	mg/kg wet							
Bis(2-chloroethoxy) methane	U	333	mg/kg wet							
Bis(2-chloroethyl) ether	U	333	mg/kg wet							
Bis(2-chloroisopropyl) ether	U	333	mg/kg wet							
Bis(2-ethylhexyl) phthalate	U	333	mg/kg wet							
4-Bromophenyl phenyl ether	U	333	mg/kg wet							
Butyl benzyl phthalate	U	333	mg/kg wet							
Carbazole	U	333	mg/kg wet							
4-Chloro-3-methylphenol	U	666	mg/kg wet							
4-Chloroaniline	U	333	mg/kg wet							
2-Chloronaphthalene	U	333	mg/kg wet							
2-Chlorophenol	U	333	mg/kg wet							
4-Chlorophenylphenyl ether	U	333	mg/kg wet							
Chrysene	U	333	mg/kg wet							
Di-n-butyl phthalate	U	333	mg/kg wet							
Di-n-octyl phthalate	U	333	mg/kg wet							
Dibenzo(a,h)anthracene	U	60.0	mg/kg wet							
Dibenzofuran	U	1660	mg/kg wet							
1,2-Dichlorobenzene	U	333	mg/kg wet							
1,3-Dichlorobenzene	U	100	mg/kg wet							
1,4-Dichlorobenzene	U	333	mg/kg wet							
3,3'-Dichlorobenzidine	U	5.00	mg/kg wet							
2,4-Dichlorophenol	U	333	mg/kg wet							
Diethyl phthalate	U	333	mg/kg wet							
Dimethyl phthalate	U	333	mg/kg wet							
2,4-Dimethylphenol	U	333	mg/kg wet							
4,6-Dinitro-2-methylphenol	U	1660	mg/kg wet							Mrl
2,4-Dinitrophenol	U	100	mg/kg wet							
2,4-Dinitrotoluene	U	100	mg/kg wet							
2,6-Dinitrotoluene	U	100	mg/kg wet							
Fluoranthene	U	333	mg/kg wet							
Fluorene	U	333	mg/kg wet							
Hexachlorobenzene	U	100	mg/kg wet							
Hexachlorobutadiene	U	333	mg/kg wet							
Hexachlorocyclopentadiene	U	666	mg/kg wet							
Hexachloroethane	U	333	mg/kg wet							
Indeno(1,2,3-cd)pyrene	U	333	mg/kg wet							

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881

Semivolatile Organics - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B914945 - 06-SW 3550B BNA										
Blank (B914945-BLK1)				Prepared: 07/09/19 1 Analyzed: 07/10/19 2						
Isophorone	U	333	mg/kg wet							
2-Methylnaphthalene	U	333	mg/kg wet							
2-Methylphenol	U	333	mg/kg wet							
3- & 4-Methylphenol	U	100	mg/kg wet							
Naphthalene	U	333	mg/kg wet							
2-Nitroaniline	U	100	mg/kg wet							
3-Nitroaniline	U	5.00	mg/kg wet							
4-Nitroaniline	U	60.0	mg/kg wet							
Nitrobenzene	U	60.0	mg/kg wet							
2-Nitrophenol	U	333	mg/kg wet							
4-Nitrophenol	U	1660	mg/kg wet							
N-Nitrosodi-n-propylamine	U	1.00	mg/kg wet							Mrl
N-Nitrosodiphenylamine	U	333	mg/kg wet							
Pentachlorophenol	U	10.0	mg/kg wet							
Phenanthrene	U	333	mg/kg wet							
Phenol	U	333	mg/kg wet							
Pyrene	U	333	mg/kg wet							
1,2,4-Trichlorobenzene	U	333	mg/kg wet							
2,4,5-Trichlorophenol	U	333	mg/kg wet							
2,4,6-Trichlorophenol	U	100	mg/kg wet							
Surrogate: 2-Fluorobiphenyl	*0.637*		*mg/kg wet*	*0.6667*		*96*	*40-120*			
Surrogate: 2-Fluorophenol	*0.500*		*mg/kg wet*	*1.000*		*50*	*20-115*			
Surrogate: Nitrobenzene-d5	*0.626*		*mg/kg wet*	*0.6667*		*94*	*45-135*			
Surrogate: Phenol-d6	*0.763*		*mg/kg wet*	*1.000*		*76*	*20-100*			
Surrogate: 4-Terphenyl-d14	*0.709*		*mg/kg wet*	*0.6667*		*106*	*60-130*			
Surrogate: 2,4,6-Tribromophenol	*0.587*		*mg/kg wet*	*1.000*		*59*	*30-100*			
LCS (B914945-BS1)				Prepared: 07/09/19 1 Analyzed: 07/10/19 2						
Acenaphthene	0.508	333	mg/kg wet	0.6667		76	30-140			
4-Chloro-3-methylphenol	1.19	666	mg/kg wet	1.333		89	30-180			
2-Chlorophenol	1.17	333	mg/kg wet	1.333		88	35-150			
1,4-Dichlorobenzene	0.567	333	mg/kg wet	0.6667		85	30-105			
2,4-Dinitrotoluene	0.603	100	mg/kg wet	0.6667		91	35-130			
4-Nitrophenol	2.54	1660	mg/kg wet	1.333		191	30-150			BS1
N-Nitrosodi-n-propylamine	0.586	1.00	mg/kg wet	0.6667		88	40-130			
Pentachlorophenol	1.24	10.0	mg/kg wet	1.333		93	40-190			
Phenol	1.20	333	mg/kg wet	1.333		90	30-190			
Pyrene	0.602	333	mg/kg wet	0.6667		90	35-140			
1,2,4-Trichlorobenzene	0.552	333	mg/kg wet	0.6667		83	40-115			
Surrogate: 2-Fluorobiphenyl	*0.585*		*mg/kg wet*	*0.6667*		*88*	*40-120*			
Surrogate: 2-Fluorophenol	*0.400*		*mg/kg wet*	*1.000*		*40*	*20-115*			
Surrogate: Nitrobenzene-d5	*0.532*		*mg/kg wet*	*0.6667*		*80*	*45-135*			
Surrogate: Phenol-d6	*0.658*		*mg/kg wet*	*1.000*		*66*	*20-100*			
Surrogate: 4-Terphenyl-d14	*0.677*		*mg/kg wet*	*0.6667*		*102*	*60-130*			
Surrogate: 2,4,6-Tribromophenol	*0.580*		*mg/kg wet*	*1.000*		*58*	*30-100*			

LABORATORY RESULTS

Client: Hanson Professional Services, Inc.
Project: 16L0504B Belvidere **Lab Order:** 9070881

Notes and Definitions

X	Blank Spike recovered high, sample non-detect.
R	Matrix Spike/Matrix Spike Duplicate Failed %Relative Percent Difference criterion.
Q5	Matrix interference present in sample. Result confirmed by reanalysis.
Q3	Matrix Spike/Matrix Spike Duplicate both failed % recovery acceptance limits. The associated blank spike recovery was acceptable.
Q2	Matrix Spike Duplicate failed % recovery acceptance limits. The associated blank spike recovery was acceptable.
Q1	Matrix Spike failed % recovry acceptance limits. The associated blank spike recovery was acceptable.
Mrl	Reporting limit set between LOQ and MDL
BS1	Blank Spike recovery exceeds the acceptance criteria. Sample result is less than the method reporting limit.
*	NELAC certified compound.
U	Analyte not detected (i.e. less than RL or MDL).

PDC Laboratories, Inc.
1210 Capital Airport Drive
Springfield, IL 62707

Chain of Custody Record

Phone (217) 753-1148
Fax (217) 753-1152

9070881

Client	Hanson Professional Services
Address	1525 S 6th St
City, State, Zip Code	Springfield, IL 62703
Phone / Facsimile	217-788-2450
Project Name / Number	16L0504B BELVIDERE
Project Location	BELVIDERE, IL
P.O. # or Invoice To	
Contact Person	Doug Dorsey ddorsey@hanson-inc.com

Reporting: TACO ☐ Resid ☒ Ind/Comm; CALM ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F; RISC ☐ Resid ☐ Indust

Sample Description	Sampling Date	Sampling Time	Matrix Code	Preserv Code	No. of Containers	Sample Type Comp	Sample Type Grab	VOCs	BNA	TCLP RCRA Metals	RCRA Metals	pH	Sampler Comments
B1	7/3/19	810	S		5		X	X	X	X	X	X	
B2	7/3/19	830	S		5		X	X	X	X	X	X	
B3	7/3/19	845	S		5		X	X	X	X	X	X	
B4	7/3/19	900	S		5		X	X	X	X	X	X	

Matrix Code	A - Aqueous	DW - Drinking Water	GW - Ground Water	NA - Non-Aqueous Liquid	S - Solid	O - Oil	X - Other (Specify)
Preserv Code	0 - None	1 - HCl	2 - H2SO4	3 - HNO3	4 - NaOH	5 - 5035 Kit	X - Other (Specify)

Relinquished By	Date	Time	Received By	Date	Time	Method of Shipment
DLS DS	7/3/19	1440				
				7-3-19	14:40	Hand

Special Instructions:

Turnaround Time: Standard ■ Rush ☐
Date Required:

QC Level: 1■ 2☐ 3☐ 4☐

On wet ice? Yes / No

Temperature (°C): 3.8

PAS COC Rev. 3

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Copies: White - Client / Yellow - PAS, Inc. / Pink - Sampler