

**SITE INVESTIGATION  
RATH PROPERTY (BRRTS 03-22-563937)  
1304 SAINT ROSE ROAD  
CUBA CITY, WISCONSIN 53807**

PREPARED FOR:

JANET DIMAGGIO  
WISCONSIN DEPARTMENT OF NATURAL RESOURCES  
3911 FISH HATCHERY ROAD  
FITCHBURG, WISCONSIN 53711

RICH RATH/RISU LLC  
303 SOUTH JACKSON STREET  
CUBA CITY, WISCONSIN 53807

JULY 2019

**SEYMOUR ENVIRONMENTAL SERVICES, INC.**

P.O. Box 398, 2531 Dyreson Road, McFarland, Wisconsin 53558

## TABLE OF CONTENTS

1.0	INTRODUCTION .....	1
1.1	Site and Consultant Information.....	1
1.2	Description of Surrounding Area .....	1
1.3	Site History and Usage .....	1
1.4	Summary Previous Environmental Activities .....	2
1.5	Geologic Setting.....	2
2.0	SITE INVESTIGATION ACTIVITIES.....	2
2.1	Soil Sampling .....	2
2.2	Private Well Sampling.....	3
3.0	DISCUSSION OF RESULTS.....	3
4.0	RECOMMENDATIONS.....	4

### FIGURES

- 1 Site Location
- 2 Site Layout
- 3 Site Layout / Sampling Locations

### TABLES

- 1 Summary of Soil Analytical Data from Tank Closure
- 2 Summary of Geoprobe Soil Analytical Data
- 3 Summary of Water Supply Well Groundwater Analytical Data

### APPENDIX

- A Analytical Reports
- B Boring Logs

## **1.0 INTRODUCTION**

A site investigation with a Geoprobe™ was conducted at the RISU LLC property. The objective of this phase of the work was to characterize the levels and extent of the soil contamination that was identified during tank closure sampling. Additionally, the depth distribution of the contamination was evaluated to determine whether investigation of the groundwater would be required.

During the assessment soil contamination exceeding WDNR standards was identified in soils beneath the former USTs. The contaminated soil extends from approximately 6 feet to 10 feet below grade where bedrock is encountered. The accessible soil contamination at the site should be removed since it represents a potential long-term threat to the surrounding private water-supply wells.

### **1.1 Site and Consultant Information**

Site Location: RISU LLC  
1304 Saint Rose Road  
Cuba City, Wisconsin 53807  
Grant County – Town of Smelser  
SE ¼ SE ¼ Section 21, Township 02 North, Range 01 West  
WTM: X-480214, Y-239217 (parcel center)

Owner: Mr. Rich Rath  
303 South Jackson Street  
Cuba City, Wisconsin 53807

Consultant: Seymour Environmental Services, Inc.  
2531 Dyreson Road  
McFarland, Wisconsin 53558  
Contact: Robyn Seymour (608) 838-9120

Geoprobe/Driller: Badger State Drilling  
360 Business Park Circle  
Stoughton, Wisconsin 53589  
Contact: Mark Garwick (608) 877-9770

Laboratory: Pace Analytical  
1241 Bellevue Street, Suite 9  
Green Bay, Wisconsin 54302  
Contact: Dan Milewsky (920) 469-2436

### **1.2 Description of Surrounding Area**

The site is a former general store located at the intersection of Saint Rose Road and County Road D in Grant County (Figure 1). The subject parcel (PN: 054-00540-000) is less than 1 acre in size and is owned by RISU LLC. Properties in the area are rural properties and mostly homes; a farm is located east of the site across County Highway D. Water at the site is provided by a private well which is located slightly to the northwest of the building at the property.

### **1.3 Site History and Usage**

The property has been owned by RISU LLC since 2009. A single building is present which was the former general store (Figure 2). Three underground storage tanks (UST) were present near the southeast corner of the property for petroleum resale.

## **1.4 Summary Previous Environmental Activities**

In September of 2010 Seymour collected a sample from the water supply well at the site. The sample was analyzed for PVOCs+naphthalene. No compounds were detected.

Richard Rath had the three 500-gallon leaded gasoline USTs removed from the site in 2014. A tank closure assessment was conducted by Jon Heller, the tank remover. A single soil sample was collected below each of the USTs and analyzed for PVOCs+naphthalene. Contamination exceeding WDNR RCLs was detected in the soil sample from beneath one of the two tanks on the south side of the building and the soil beneath the tank on the east side of the building (Table 1). Mr. Heller reportedly attempted to dig deep enough to find clean soil samples but was not able to do so. The samples indicated that a release had occurred and the site was reported to the WDNR. in July of 2015.

## **1.5 Geologic Setting**

### Topography

Cuba City is located in the driftless area of southwestern Wisconsin. This area is characterized by rugged steep-walled valleys and high relief. Drainage patterns are typically dendritic where streams that have cut deeply into the flat bedrock. The surface elevation at the site is ~990 ft msl. The ground surface generally slopes toward the northeast. Surface water at the site drains to the east and into the roadside ditches located along County Highway D.

### Soil and Geology

Soils at the site are mapped as Tama Silt Loam. These soils are characterized as silty clays, which develop from the weathering of the carbonate bedrock. Soil encountered during drilling at the site was generally clay with slight silt. Bedrock at the site is present around 10 feet below grade. Bedrock underlying the site is the Decorah-Platteville Formation. This formation is a thinly bedded carbonate.

The water table is typically present within Decorah-Platteville Formation at a depth of 65-75 feet below grade. The Decorah-Platteville carbonates are modest producers of groundwater.

## **2.0 SITE INVESTIGATION ACTIVITIES**

### **2.1 Soil Sampling**

Seymour and Badger State Drilling met at the site on June 7, 2019 to conduct the soil sampling. During the work seven borings were installed at the site. Refusal was encountered from ~9 to 15 feet below the surface. Based on local water-supply well logs we believe that the refusal encountered was at the top of bedrock. The boring locations are shown on Figure 3.

During drilling soil samples were collected continuously through the sample column. Soil samples were described in the field. Additionally, soil samples were field screened for organic vapors using a photoionization detector equipped with a 10.6 eV lamp. Based on field observations and organic vapor screening soil samples were selected for laboratory analysis. Those samples were sent to Pace Analytical, a WDNR-certified laboratory, to be analyzed for PVOC+naphthalene. Additionally, select samples were analyzed for lead, DRO, and GRO. Soil analytical data is summarized in Table 2 and boring logs and laboratory report are included in the Appendices. Information from each of the seven borings is discussed below.

The first boring, B-1, was installed at the location of the former underground gasoline tanks (UST) south of the building (Tank 2). Soil sampling was conducted until refusal was encountered at 9 feet below the surface. Based on local geology we believe that refusal occurred at bedrock. Soils at the boring were comprised of sandy fill to a depth of ~7 feet. Stained soil with a hydrocarbon odor was encountered at around 8 feet. The analytical results show that compounds are present in both the 7 and 9 foot sample.

The next boring (B-2) was installed at the location of a former UST located on the east side of the building (tank 3). Stained soil with a hydrocarbon odor was present starting around 8 feet but dissipated by 12 feet. The boring extended to a total depth of 15'4". Unfortunately, no soil was recovered in the sample interval from 12 to 15.3 feet. The analytical results indicate that the contamination is shallow and does not extend to bedrock at this location.

Two more borings were installed near the eastern tank. Boring B-3 was installed as a step out boring to the southeast and past an underground utility line. No evidence of contamination was found at this location. Boring B-4 was to the north. Again, no evidence of petroleum was noted, and the analytical results confirm this.

Additional borings were then installed near the southern tank bed. Borings B-5 and B-6 were installed to the south of B-1 and tank 2 where soil contamination had been noted previously. Contamination exceeding the RCLs was noted in the soil at B-5 which is located about 6 feet south of the former UST. No soil contamination was noted at B-6 which is ~14 feet south of the former tank. Boring B-7 was installed to the west of the southern tank bed. No soil contamination was noted at B-7. The data from the borings around the south tank bed indicate that the soil contamination is limited to soils within about 10 feet of the former tank. This contaminated soil extends from approximately 6 feet below grade to bedrock at a depth of ~10 feet.

## **2.2 Private Well Sampling**

Water samples were collected from the water-supply located to the northwest of the building on two occasions, once in 2010 and again in June 2019. The sample from 2010 was analyzed for PVOCS+naphthalene and the sample from 2019 was analyzed for VOCs. No compounds were detected during either sampling event. Results of the water-supply sampling are summarized in Table 3.

## **3.0 DISCUSSION OF RESULTS**

Petroleum related compounds were present in soil samples from three of the six borings at concentrations that exceed WDNR groundwater pathway RCLs. In the source area (former UST bed) soil exceeding groundwater pathway RCLs extended to the bedrock surface. An estimated 300 cubic yards of contaminated soil is present.

#### 4.0 RECOMMENDATIONS

The former UST and soil contamination are in an area with private water supply wells. We recommend excavation of the accessible contaminated soil to prevent future migration of the release to the groundwater. We expect that ~450 tons of soil would require removal.

Questions should be directed to Robyn Seymour or Mark Fryman at (608) 838-9120.

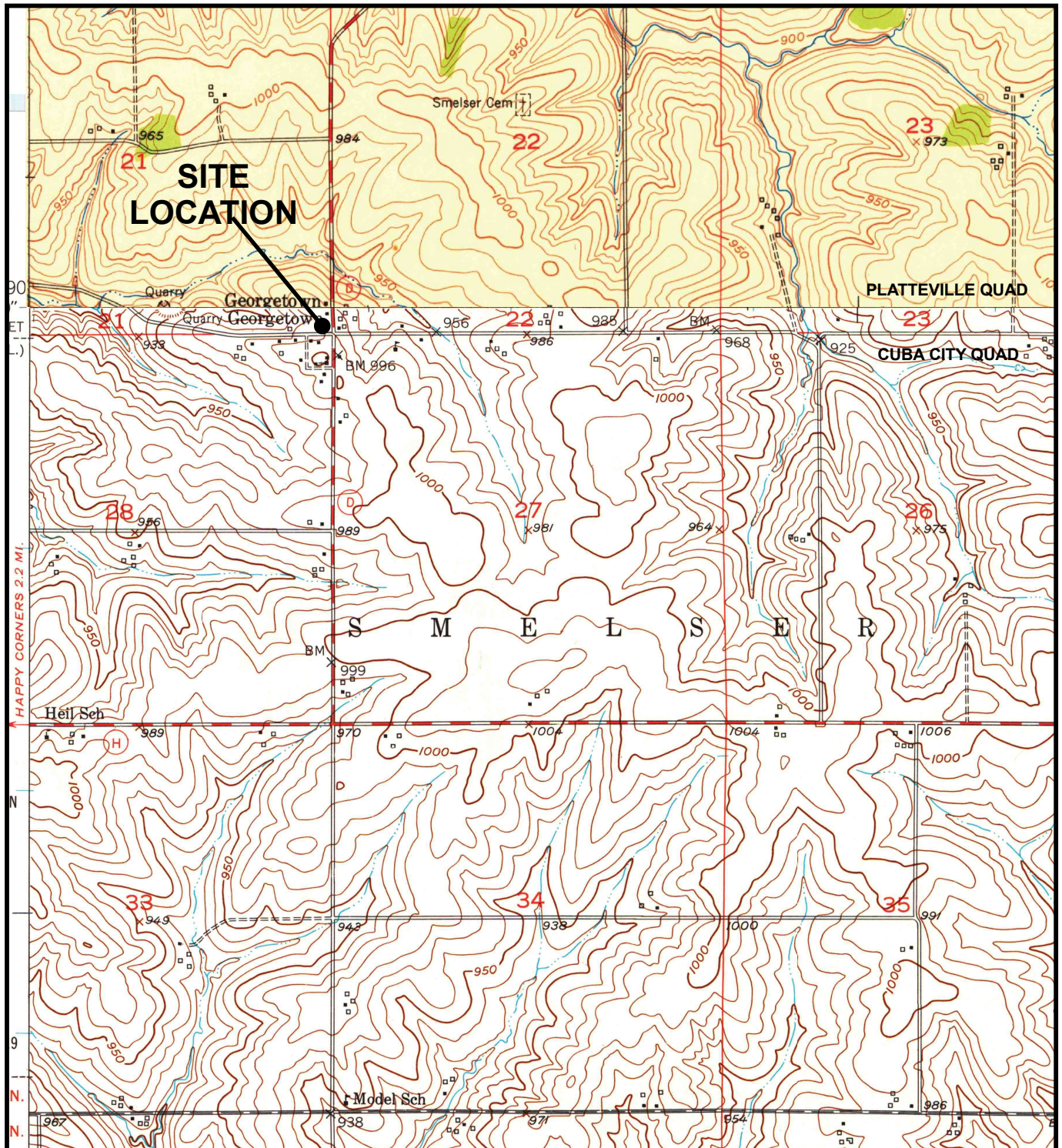
Sincerely,  
**Seymour Environmental Services, Inc.**

A handwritten signature in cursive script that reads "Robyn Seymour".

Robyn Seymour

## **FIGURES**





0 2000' 4000'

1 INCH = 2000 FEET  
SCALE IS APPROXIMATE



FILE/PATH: D:\PROJECTS\IRATH\Location\USGS-Rath.cdr

DATE: 07/23/2019

PREPARED: MDF APPROVED:

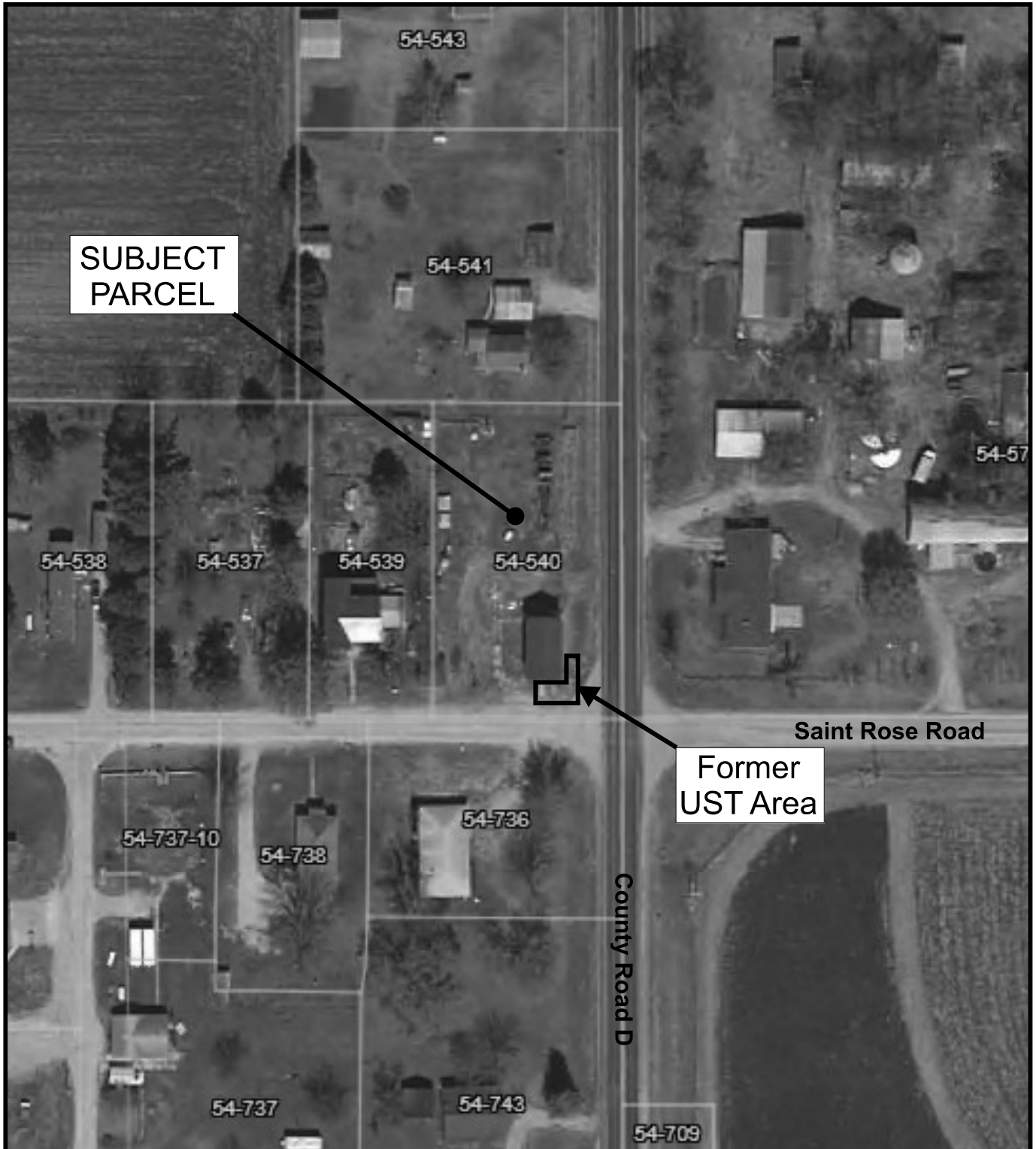
SOURCE:  
USGS 7.5 Quadrangle Minute Series - Platteville, WI (1952)  
USGS 7.5 Quadrangle Minute Series - Cuba City, WI (1952)

SEYMOUR  
ENVIRONMENTAL  
SERVICES, INC.

SITE LOCATION  
RATH PROPERTY  
1304 Saint Rose Road  
Cuba City, Wisconsin

FIGURE  
**1**



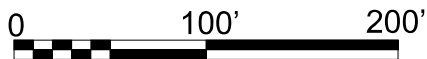


SUBJECT  
PARCEL

Former  
UST Area

Saint Rose Road

County Road D



1 INCH = 100 FEET  
SCALE IS APPROXIMATE

FILE/PATH: D:\PROJECTS\RATH\  
Layout-aerial.cdr

DATE: 07/23/2019

PREPARED: MDF APPROVED:

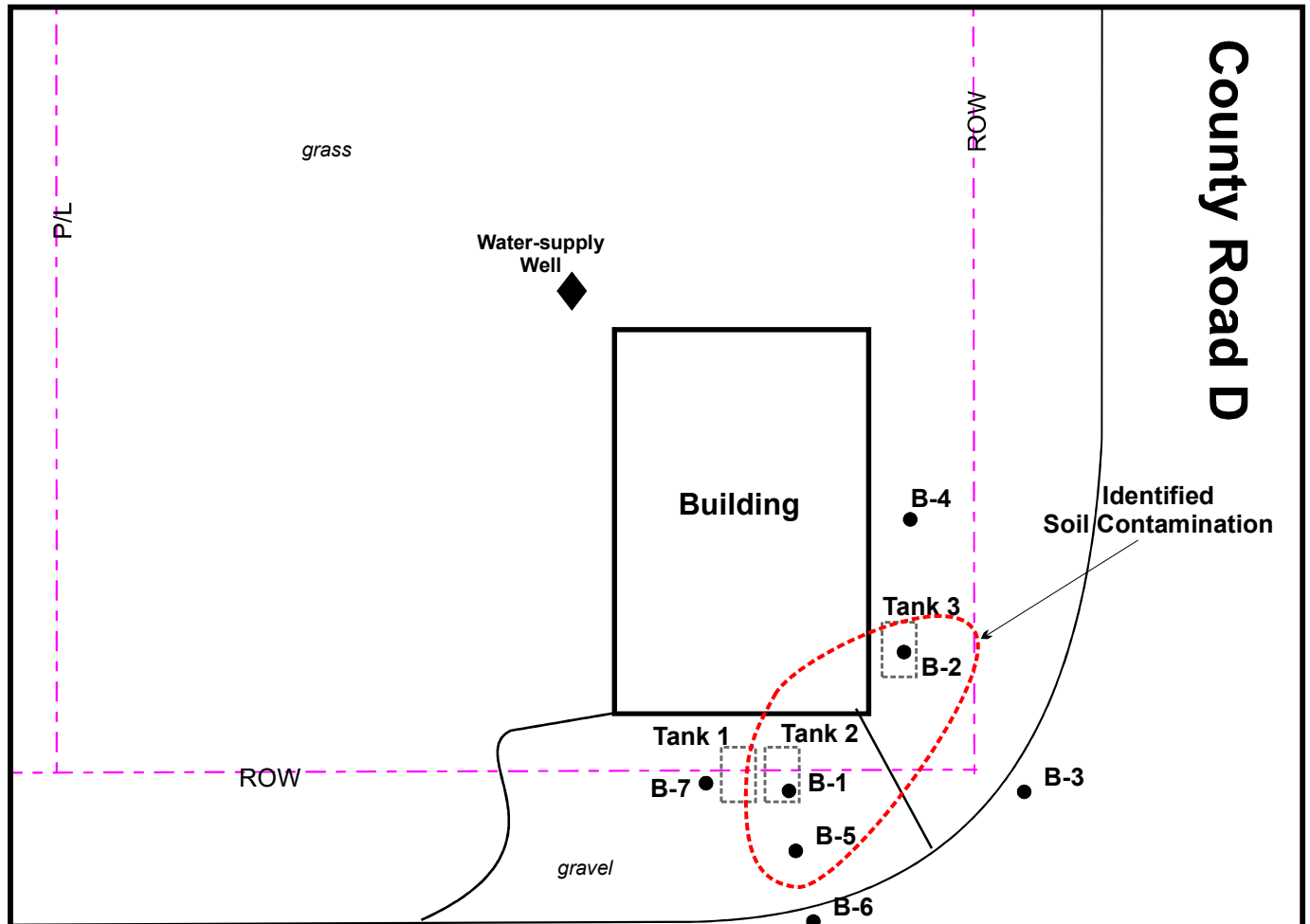
SOURCE:  
Grant County Public Mapping  
Field Measurements

SEYMOUR  
ENVIRONMENTAL  
SERVICES, INC.

SITE LAYOUT  
RATH PROPERTY  
1304 Saint Rose Road  
Cuba City, Wisconsin

FIGURE

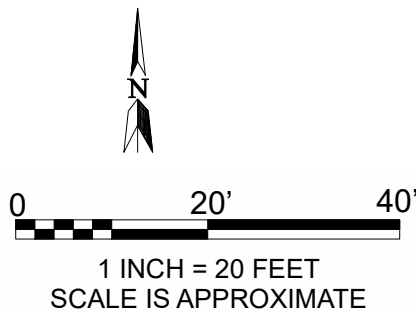
2



## Saint Rose Road

**LEGEND**

- B-1** ● - Geoprobe Boring (June 2019)
- ◆ - Water Supply Well



FILE/PATH: D:\PROJECTS\RATH\  
Layout-samples.cdr  
DATE: 07/23/2019  
PREPARED: MDF APPROVED:  
SOURCE:  
Grant County Public Mapping  
Field Measurements

**SEYMOUR  
ENVIRONMENTAL  
SERVICES, INC.**

**SITE LAYOUT / SAMPLING LOCATIONS  
RATH PROPERTY  
1304 Saint Rose Road  
Cuba City, Wisconsin**

**FIGURE**

**3**

## **TABLES**

TABLE 1  
SUMMARY OF SOIL ANALYTICAL DATA FROM TANK CLOSURE (10/08/2014)  
Rath Property  
1304 Saint Rose Road - Cuba City, Wisconsin

SAMPLE	Depth (ft)	GRO	DRO	Benzene	Ethylbenzene	Methyl-tert-butyl ether	Toluene	1,3,5 Trimethylbenzene	1,2,4 Trimethylbenzene	Total Trimethylbenzenes	Total Xylenes	Naphthalene	Lead
Tank 1	8	na	na	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0	<25.0	11.3
Tank 2	11	na	na	<312	<b>10100</b>	<b>1040</b>	<b>5280</b>	21200	59000	<b>80200</b>	<b>56700</b>	<b>16100</b>	15.1
Tank 3	11	na	na	<200	<200	<200	<200	2710	6670	<b>9380</b>	2587	<b>8320</b>	8.7
Groundwater Pathway RCLs		ns	ns	5.1	1570	27	1170	ns	ns	1379	3940	658.7	27
Direct Contact RCLs		ns	ns	1600	8020	63800	818000	182000	219000	ns	260000	5520	400

- GRO, DRO and Lead results are in mg/kg  
- PVOcs are reported in ug/kg  
- ns = no standard established  
- na = not analyzed

- Groundwater Pathway RCL (exceedances bold)  
- Direct Contact RCL for non-industrial properties (exceedances underlined)  
- Soil standards from R&R Calculator using Wisconsin defaults

TABLE 2  
SUMMARY OF GEOPROBE SOIL ANALYTICAL DATA (06/07/2019)  
Rath Property  
1304 Saint Rose Road - Cuba City, Wisconsin

SAMPLE	Depth (ft)	GRO	DRO	Benzene	Ethylbenzene	Methyl-tert-butyl ether	Toluene	1,3,5 Trimethylbenzene	1,2,4 Trimethylbenzene	Total Trimethylbenzenes	Total Xylenes	Naphthalene	Lead
B-1	7	na	na	<b>18900</b>	<b>54000</b>	<625	<b>168000</b>	54700	171000	<b>225700</b>	<b>329100</b>	<b>19400</b>	na
B-1	9	1470	na	<b>3910</b>	<b>30100</b>	<b>1570</b>	<b>59400</b>	21400	67300	<b>88700</b>	<b>134800</b>	<b>11900</b>	na
B-2	8	na	na	<200	<200	<200	<200	2550	4570	<b>7120</b>	<600	<b>1580</b>	na
B-2	12	na	<1.5	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0	<40.0	2.8
B-2	15	na	na	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0	<40.0	2.3
B-3	8	na	na	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0	<40.0	na
B-3	11	na	na	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0	<40.0	na
B-4	10	na	na	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0	<40.0	na
B-5	8	na	na	<b>120</b>	124	<25.0	136	171	405	576	372.3	73.6 (J)	na
B-5	10	na	na	<b>16000</b>	<b>67700</b>	<1000	<b>165000</b>	55400	189000	<b>244400</b>	<b>362200</b>	<b>20700</b>	na
B-6	8	na	na	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0	<40.0	na
B-6	9.5	na	na	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0	<40.0	na
B-7	8	na	na	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0	<40.0	na
B-7	9.5	na	na	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<50.0	<75.0	<40.0	na
Groundwater Pathway RCLs		ns	ns	5.1	1570	27	1170	ns	ns	1379	3940	658.7	27
Direct Contact RCLs		ns	ns	1600	8020	63800	818000	182000	219000	ns	260000	5520	400

- GRO, DRO, and Lead results are in mg/kg  
- PVOCs are reported in ug/kg  
- ns = no standard established  
- na = not analyzed

- Groundwater Pathway RCL (exceedances bold)  
- Direct Contact RCL for non-industrial properties (exceedances underlined)  
- Soil standards from R&R Calculator using Wisconsin defaults

TABLE 3  
SUMMARY OF WATER-SUPPLY WELL GROUNDWATER ANALYTICAL DATA  
Rath Property  
1304 Saint Rose Road - Cuba City, WI

Sample I.D.	Water Well		NR140		
	Date	09/09/10	06/07/19	ES	PAL
Select VOCs					
Benzene	<0.39	<0.25	<b>5</b>	<u>0.5</u>	
1,2 Dichloroethane	na	<0.28	<b>5</b>	<u>0.5</u>	
Ethylbenzene	<0.41	<0.22	<b>700</b>	<u>140</u>	
Methyl-tert-butyl ether	<0.38	<1.2	<b>60</b>	<u>12</u>	
Toluene	<0.42	<0.17	<b>800</b>	<u>160</u>	
1,3,5 Trimethylbenzene	<0.40	<0.87	ns	ns	
1,2,4 Trimethylbenzene	<0.43	<0.84	ns	ns	
Total Trimethylbenzenes	<0.83	<1.71	<b>480</b>	<u>96</u>	
Xylenes, -m, -p	<0.87	<0.47	ns	ns	
Xylene, -o	<0.38	<0.26	ns	ns	
Total Xylenes	<1.25	<0.73	<b>2000</b>	<u>400</u>	
Naphthalene	<0.40	<1.2	<b>100</b>	<u>10</u>	
n-Butylbenzene	na	<0.71	ns	ns	
s-Butylbenzene	na	<0.85	ns	ns	
Isopropylbenzene	na	<0.39	ns	ns	
p-Isopropyltoluene	na	<0.80	ns	ns	
n-Propylbenzene	na	<0.81	ns	ns	

- All results are reported in ug/l
- Sample from 2010 analyzed for PVOCs+naphthalene
- Sample from 2019 analyzed for VOCs (EPA 8260)
- All detected compounds are included in table
- na = not analyzed
- ns = no standard established
- (J) = Detected below limit of quantitation
- NR140 PAL = Preventative action limit (exceedances underlined)
- NR140 ES = Enforcement standard (exceedances bold)

## **APPENDIX A**

### **LABORATORY REPORTS**



June 24, 2019

Robyn Seymour  
Seymour Environmental Services, INC.  
2531 Dyreson Road  
Mc Farland, WI 53558

RE: Project: RATH PROPERTY  
Pace Project No.: 40189323

Dear Robyn Seymour:

Enclosed are the analytical results for sample(s) received by the laboratory on June 12, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Dan Milewsky  
dan.milewsky@pacelabs.com  
(920)469-2436  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: RATH PROPERTY

Pace Project No.: 40189323

---

### Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: RATH PROPERTY

Pace Project No.: 40189323

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40189323001	B-1, 7'	Solid	06/07/19 10:00	06/12/19 09:55
40189323002	B-1, 9'	Solid	06/07/19 10:10	06/12/19 09:55
40189323003	B-2, 8'	Solid	06/07/19 10:18	06/12/19 09:55
40189323004	B-2, 12'	Solid	06/07/19 10:20	06/12/19 09:55
40189323005	B-2, 15'	Solid	06/07/19 10:25	06/12/19 09:55
40189323006	B-3, 8'	Solid	06/07/19 10:40	06/12/19 09:55
40189323007	B-3, 11'	Solid	06/07/19 10:45	06/12/19 09:55
40189323008	B-4, 10'	Solid	06/07/19 11:00	06/12/19 09:55
40189323009	B-5, 8'	Solid	06/07/19 11:15	06/12/19 09:55
40189323010	B-6, 8'	Solid	06/07/19 11:45	06/12/19 09:55
40189323011	B-6, 9.5'	Solid	06/07/19 11:50	06/12/19 09:55
40189323012	B-5, 10'	Solid	06/07/19 11:20	06/12/19 09:55
40189323013	B-7, 8'	Solid	06/07/19 12:00	06/12/19 09:55
40189323014	B-7, 9.5'	Solid	06/07/19 12:10	06/12/19 09:55
40189323015	WATER WELL	Water	06/07/19 13:00	06/12/19 09:55

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: RATH PROPERTY

Pace Project No.: 40189323

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40189323001	B-1, 7'	EPA 8260	MDS	12
		ASTM D2974-87	JEV	1
40189323002	B-1, 9'	WI MOD GRO	ALD	11
		EPA 6010	TXW	1
40189323003	B-2, 8'	ASTM D2974-87	JEV	1
		EPA 8260	MDS	12
40189323004	B-2, 12'	ASTM D2974-87	JEV	1
		WI MOD DRO	MRN	1
40189323005	B-2, 15'	EPA 6010	TXW	1
		EPA 8260	MDS	12
		ASTM D2974-87	JEV	1
		EPA 6010	TXW	1
40189323006	B-3, 8'	EPA 8260	MDS	12
		ASTM D2974-87	JEV	1
40189323007	B-3, 11'	EPA 8260	MDS	12
		ASTM D2974-87	JEV	1
40189323008	B-4, 10'	EPA 8260	MDS	12
		ASTM D2974-87	JEV	1
40189323009	B-5, 8'	EPA 8260	MDS	12
		ASTM D2974-87	JEV	1
40189323010	B-6, 8'	EPA 8260	MDS	12
		ASTM D2974-87	PCG	1
40189323011	B-6, 9.5'	EPA 8260	MDS	12
		ASTM D2974-87	JEV	1
40189323012	B-5, 10'	EPA 8260	MDS	12
		ASTM D2974-87	PCG	1
40189323013	B-7, 8'	EPA 8260	MDS	12
		ASTM D2974-87	PCG	1
40189323014	B-7, 9.5'	EPA 8260	MDS	12
		ASTM D2974-87	PCG	1
40189323015	WATER WELL	EPA 8260	HNW	64

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: RATH PROPERTY

Pace Project No.: 40189323

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>40189323001</b>	<b>B-1, 7'</b>					
EPA 8260	Benzene	18900	ug/kg	1930	06/18/19 04:41	
EPA 8260	Ethylbenzene	54000	ug/kg	1930	06/18/19 04:41	
EPA 8260	Naphthalene	19400	ug/kg	8060	06/18/19 04:41	
EPA 8260	Toluene	168000	ug/kg	1930	06/18/19 04:41	
EPA 8260	1,2,4-Trimethylbenzene	171000	ug/kg	1930	06/18/19 04:41	
EPA 8260	1,3,5-Trimethylbenzene	54700	ug/kg	1930	06/18/19 04:41	
EPA 8260	m&p-Xylene	242000	ug/kg	3870	06/18/19 04:41	
EPA 8260	o-Xylene	87100	ug/kg	1930	06/18/19 04:41	
ASTM D2974-87	Percent Moisture	22.5	%	0.10	06/13/19 16:33	
<b>40189323002</b>	<b>B-1, 9'</b>					
WI MOD GRO	Benzene	3910	ug/kg	1130	06/13/19 15:20	
WI MOD GRO	Ethylbenzene	30100	ug/kg	1130	06/13/19 15:20	
WI MOD GRO	Gasoline Range Organics	1470	mg/kg	113	06/13/19 15:20	GO
WI MOD GRO	Methyl-tert-butyl ether	1570	ug/kg	1130	06/13/19 15:20	
WI MOD GRO	Naphthalene	11900	ug/kg	1130	06/13/19 15:20	
WI MOD GRO	Toluene	59400	ug/kg	1130	06/13/19 15:20	
WI MOD GRO	1,2,4-Trimethylbenzene	67300	ug/kg	1130	06/13/19 15:20	
WI MOD GRO	1,3,5-Trimethylbenzene	21400	ug/kg	1130	06/13/19 15:20	
WI MOD GRO	m&p-Xylene	100000	ug/kg	2260	06/13/19 15:20	
WI MOD GRO	o-Xylene	34800	ug/kg	1130	06/13/19 15:20	
EPA 6010	Lead	5.1	mg/kg	2.2	06/13/19 20:32	
ASTM D2974-87	Percent Moisture	11.6	%	0.10	06/13/19 16:33	
<b>40189323003</b>	<b>B-2, 8'</b>					
EPA 8260	Naphthalene	1580J	ug/kg	2560	06/17/19 14:59	
EPA 8260	1,2,4-Trimethylbenzene	4570	ug/kg	614	06/17/19 14:59	
EPA 8260	1,3,5-Trimethylbenzene	2550	ug/kg	614	06/17/19 14:59	
ASTM D2974-87	Percent Moisture	21.8	%	0.10	06/13/19 16:33	
<b>40189323004</b>	<b>B-2, 12'</b>					
EPA 6010	Lead	2.8	mg/kg	2.2	06/13/19 20:40	
ASTM D2974-87	Percent Moisture	11.2	%	0.10	06/13/19 16:33	
<b>40189323005</b>	<b>B-2, 15'</b>					
EPA 6010	Lead	2.3	mg/kg	2.1	06/13/19 20:42	
ASTM D2974-87	Percent Moisture	7.4	%	0.10	06/13/19 16:34	
<b>40189323006</b>	<b>B-3, 8'</b>					
ASTM D2974-87	Percent Moisture	24.2	%	0.10	06/13/19 16:34	
<b>40189323007</b>	<b>B-3, 11'</b>					
ASTM D2974-87	Percent Moisture	8.7	%	0.10	06/13/19 16:34	
<b>40189323008</b>	<b>B-4, 10'</b>					
ASTM D2974-87	Percent Moisture	8.8	%	0.10	06/13/19 16:34	
<b>40189323009</b>	<b>B-5, 8'</b>					
EPA 8260	Benzene	120	ug/kg	78.4	06/18/19 03:54	
EPA 8260	Ethylbenzene	124	ug/kg	78.4	06/18/19 03:54	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: RATH PROPERTY

Pace Project No.: 40189323

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>40189323009</b>	<b>B-5, 8'</b>					
EPA 8260	Naphthalene	73.6J	ug/kg	327	06/18/19 03:54	
EPA 8260	Toluene	136	ug/kg	78.4	06/18/19 03:54	
EPA 8260	1,2,4-Trimethylbenzene	405	ug/kg	78.4	06/18/19 03:54	
EPA 8260	1,3,5-Trimethylbenzene	171	ug/kg	78.4	06/18/19 03:54	
EPA 8260	m&p-Xylene	317	ug/kg	157	06/18/19 03:54	
EPA 8260	o-Xylene	55.3J	ug/kg	78.4	06/18/19 03:54	
ASTM D2974-87	Percent Moisture	23.5	%	0.10	06/13/19 16:34	
<b>40189323010</b>	<b>B-6, 8'</b>					
ASTM D2974-87	Percent Moisture	24.0	%	0.10	06/12/19 15:40	
<b>40189323011</b>	<b>B-6, 9.5'</b>					
ASTM D2974-87	Percent Moisture	10.0	%	0.10	06/13/19 16:34	
<b>40189323012</b>	<b>B-5, 10'</b>					
EPA 8260	Benzene	16000	ug/kg	2650	06/18/19 04:17	
EPA 8260	Ethylbenzene	67700	ug/kg	2650	06/18/19 04:17	
EPA 8260	Naphthalene	20700	ug/kg	11000	06/18/19 04:17	
EPA 8260	Toluene	165000	ug/kg	2650	06/18/19 04:17	
EPA 8260	1,2,4-Trimethylbenzene	189000	ug/kg	2650	06/18/19 04:17	
EPA 8260	1,3,5-Trimethylbenzene	55400	ug/kg	2650	06/18/19 04:17	
EPA 8260	m&p-Xylene	264000	ug/kg	5290	06/18/19 04:17	
EPA 8260	o-Xylene	98200	ug/kg	2650	06/18/19 04:17	
ASTM D2974-87	Percent Moisture	9.3	%	0.10	06/14/19 11:15	
<b>40189323013</b>	<b>B-7, 8'</b>					
ASTM D2974-87	Percent Moisture	22.7	%	0.10	06/12/19 16:39	
<b>40189323014</b>	<b>B-7, 9.5'</b>					
ASTM D2974-87	Percent Moisture	8.7	%	0.10	06/14/19 11:15	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: RATH PROPERTY  
Pace Project No.: 40189323

**Sample: B-1, 7'**      **Lab ID: 40189323001**      Collected: 06/07/19 10:00      Received: 06/12/19 09:55      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Short List</b>									
Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B									
Benzene	18900	ug/kg	1930	806	25	06/14/19 08:45	06/18/19 04:41	71-43-2	
Ethylbenzene	54000	ug/kg	1930	806	25	06/14/19 08:45	06/18/19 04:41	100-41-4	
Methyl-tert-butyl ether	<625	ug/kg	1500	625	25	06/14/19 08:45	06/18/19 04:41	1634-04-4	W
Naphthalene	19400	ug/kg	8060	1290	25	06/14/19 08:45	06/18/19 04:41	91-20-3	
Toluene	168000	ug/kg	1930	806	25	06/14/19 08:45	06/18/19 04:41	108-88-3	
1,2,4-Trimethylbenzene	171000	ug/kg	1930	806	25	06/14/19 08:45	06/18/19 04:41	95-63-6	
1,3,5-Trimethylbenzene	54700	ug/kg	1930	806	25	06/14/19 08:45	06/18/19 04:41	108-67-8	
m&p-Xylene	242000	ug/kg	3870	1610	25	06/14/19 08:45	06/18/19 04:41	179601-23-1	
o-Xylene	87100	ug/kg	1930	806	25	06/14/19 08:45	06/18/19 04:41	95-47-6	
<b>Surrogates</b>									
Dibromofluoromethane (S)	0	%	57-146		25	06/14/19 08:45	06/18/19 04:41	1868-53-7	S4
4-Bromofluorobenzene (S)	0	%	54-126		25	06/14/19 08:45	06/18/19 04:41	460-00-4	S4
Toluene-d8 (S)	0	%	64-134		25	06/14/19 08:45	06/18/19 04:41	2037-26-5	S4
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	22.5	%	0.10	0.10	1		06/13/19 16:33		

**Sample: B-1, 9'**      **Lab ID: 40189323002**      Collected: 06/07/19 10:10      Received: 06/12/19 09:55      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>									
Analytical Method: WI MOD GRO    Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	3910	ug/kg	1130	565	20	06/13/19 08:00	06/13/19 15:20	71-43-2	
Ethylbenzene	30100	ug/kg	1130	565	20	06/13/19 08:00	06/13/19 15:20	100-41-4	
Gasoline Range Organics	1470	mg/kg	113	56.5	20	06/13/19 08:00	06/13/19 15:20		GO
Methyl-tert-butyl ether	1570	ug/kg	1130	565	20	06/13/19 08:00	06/13/19 15:20	1634-04-4	
Naphthalene	11900	ug/kg	1130	565	20	06/13/19 08:00	06/13/19 15:20	91-20-3	
Toluene	59400	ug/kg	1130	565	20	06/13/19 08:00	06/13/19 15:20	108-88-3	
1,2,4-Trimethylbenzene	67300	ug/kg	1130	565	20	06/13/19 08:00	06/13/19 15:20	95-63-6	
1,3,5-Trimethylbenzene	21400	ug/kg	1130	565	20	06/13/19 08:00	06/13/19 15:20	108-67-8	
m&p-Xylene	100000	ug/kg	2260	1130	20	06/13/19 08:00	06/13/19 15:20	179601-23-1	
o-Xylene	34800	ug/kg	1130	565	20	06/13/19 08:00	06/13/19 15:20	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	99	%	80-120		20	06/13/19 08:00	06/13/19 15:20	98-08-8	
<b>6010 MET ICP</b>									
Analytical Method: EPA 6010    Preparation Method: EPA 3050									
Lead	5.1	mg/kg	2.2	0.67	1	06/13/19 08:33	06/13/19 20:32	7439-92-1	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	11.6	%	0.10	0.10	1		06/13/19 16:33		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: RATH PROPERTY  
Pace Project No.: 40189323

**Sample: B-2, 8'**      **Lab ID: 40189323003**      Collected: 06/07/19 10:18      Received: 06/12/19 09:55      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Short List</b>									
Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B									
Benzene	<200	ug/kg	480	200	8	06/13/19 08:15	06/17/19 14:59	71-43-2	W
Ethylbenzene	<200	ug/kg	480	200	8	06/13/19 08:15	06/17/19 14:59	100-41-4	W
Methyl-tert-butyl ether	<200	ug/kg	480	200	8	06/13/19 08:15	06/17/19 14:59	1634-04-4	W
Naphthalene	1580J	ug/kg	2560	410	8	06/13/19 08:15	06/17/19 14:59	91-20-3	
Toluene	<200	ug/kg	480	200	8	06/13/19 08:15	06/17/19 14:59	108-88-3	W
1,2,4-Trimethylbenzene	4570	ug/kg	614	256	8	06/13/19 08:15	06/17/19 14:59	95-63-6	
1,3,5-Trimethylbenzene	2550	ug/kg	614	256	8	06/13/19 08:15	06/17/19 14:59	108-67-8	
m&p-Xylene	<400	ug/kg	960	400	8	06/13/19 08:15	06/17/19 14:59	179601-23-1	W
o-Xylene	<200	ug/kg	480	200	8	06/13/19 08:15	06/17/19 14:59	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	93	%	57-146		8	06/13/19 08:15	06/17/19 14:59	1868-53-7	D3
4-Bromofluorobenzene (S)	103	%	54-126		8	06/13/19 08:15	06/17/19 14:59	460-00-4	
Toluene-d8 (S)	84	%	64-134		8	06/13/19 08:15	06/17/19 14:59	2037-26-5	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	21.8	%	0.10	0.10	1		06/13/19 16:33		

**Sample: B-2, 12'**      **Lab ID: 40189323004**      Collected: 06/07/19 10:20      Received: 06/12/19 09:55      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIDRO GCS</b>									
Analytical Method: WI MOD DRO    Preparation Method: WI MOD DRO									
Diesel Range Organics	<1.5	mg/kg	4.9	1.5	1	06/17/19 12:28	06/18/19 12:06		C4,D5
<b>6010 MET ICP</b>									
Analytical Method: EPA 6010    Preparation Method: EPA 3050									
Lead	2.8	mg/kg	2.2	0.67	1	06/13/19 08:33	06/13/19 20:40	7439-92-1	
<b>8260 MSV Med Level Short List</b>									
Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B									
Benzene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 12:17	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 12:17	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 12:17	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	06/13/19 08:15	06/17/19 12:17	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 12:17	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 12:17	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 12:17	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/13/19 08:15	06/17/19 12:17	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 12:17	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	96	%	57-146		1	06/13/19 08:15	06/17/19 12:17	1868-53-7	
4-Bromofluorobenzene (S)	104	%	54-126		1	06/13/19 08:15	06/17/19 12:17	460-00-4	
Toluene-d8 (S)	95	%	64-134		1	06/13/19 08:15	06/17/19 12:17	2037-26-5	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: RATH PROPERTY  
Pace Project No.: 40189323

**Sample: B-2, 12'**      **Lab ID: 40189323004**      Collected: 06/07/19 10:20      Received: 06/12/19 09:55      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	11.2	%	0.10	0.10	1		06/13/19 16:33		

**Sample: B-2, 15'**      **Lab ID: 40189323005**      Collected: 06/07/19 10:25      Received: 06/12/19 09:55      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b> Analytical Method: EPA 6010      Preparation Method: EPA 3050									
Lead	2.3	mg/kg	2.1	0.64	1	06/13/19 08:33	06/13/19 20:42	7439-92-1	
<b>8260 MSV Med Level Short List</b> Analytical Method: EPA 8260      Preparation Method: EPA 5035/5030B									
Benzene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 12:40	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 12:40	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 12:40	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	06/13/19 08:15	06/17/19 12:40	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 12:40	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 12:40	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 12:40	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/13/19 08:15	06/17/19 12:40	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 12:40	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	95	%	57-146		1	06/13/19 08:15	06/17/19 12:40	1868-53-7	
4-Bromofluorobenzene (S)	102	%	54-126		1	06/13/19 08:15	06/17/19 12:40	460-00-4	
Toluene-d8 (S)	96	%	64-134		1	06/13/19 08:15	06/17/19 12:40	2037-26-5	
<b>Percent Moisture</b> Analytical Method: ASTM D2974-87									
Percent Moisture	7.4	%	0.10	0.10	1		06/13/19 16:34		

**Sample: B-3, 8'**      **Lab ID: 40189323006**      Collected: 06/07/19 10:40      Received: 06/12/19 09:55      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Short List</b> Analytical Method: EPA 8260      Preparation Method: EPA 5035/5030B									
Benzene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 13:03	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 13:03	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 13:03	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	06/13/19 08:15	06/17/19 13:03	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 13:03	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 13:03	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 13:03	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/13/19 08:15	06/17/19 13:03	179601-23-1	W

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: RATH PROPERTY  
Pace Project No.: 40189323

Sample: B-3, 8' Lab ID: 40189323006 Collected: 06/07/19 10:40 Received: 06/12/19 09:55 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Short List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 13:03	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	93	%	57-146		1	06/13/19 08:15	06/17/19 13:03	1868-53-7	
4-Bromofluorobenzene (S)	100	%	54-126		1	06/13/19 08:15	06/17/19 13:03	460-00-4	
Toluene-d8 (S)	91	%	64-134		1	06/13/19 08:15	06/17/19 13:03	2037-26-5	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	24.2	%	0.10	0.10	1		06/13/19 16:34		

Sample: B-3, 11' Lab ID: 40189323007 Collected: 06/07/19 10:45 Received: 06/12/19 09:55 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Short List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Benzene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 13:26	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 13:26	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 13:26	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	06/13/19 08:15	06/17/19 13:26	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 13:26	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 13:26	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 13:26	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/13/19 08:15	06/17/19 13:26	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/13/19 08:15	06/17/19 13:26	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	98	%	57-146		1	06/13/19 08:15	06/17/19 13:26	1868-53-7	
4-Bromofluorobenzene (S)	108	%	54-126		1	06/13/19 08:15	06/17/19 13:26	460-00-4	
Toluene-d8 (S)	99	%	64-134		1	06/13/19 08:15	06/17/19 13:26	2037-26-5	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	8.7	%	0.10	0.10	1		06/13/19 16:34		

Sample: B-4, 10' Lab ID: 40189323008 Collected: 06/07/19 11:00 Received: 06/12/19 09:55 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Short List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Benzene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 03:31	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 03:31	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 03:31	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	06/14/19 08:45	06/18/19 03:31	91-20-3	W

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: RATH PROPERTY

Pace Project No.: 40189323

**Sample: B-4, 10'**      **Lab ID: 40189323008**      Collected: 06/07/19 11:00      Received: 06/12/19 09:55      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Short List</b>									
Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B									
Toluene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 03:31	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 03:31	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 03:31	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/14/19 08:45	06/18/19 03:31	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 03:31	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	101	%	57-146		1	06/14/19 08:45	06/18/19 03:31	1868-53-7	
4-Bromofluorobenzene (S)	108	%	54-126		1	06/14/19 08:45	06/18/19 03:31	460-00-4	
Toluene-d8 (S)	105	%	64-134		1	06/14/19 08:45	06/18/19 03:31	2037-26-5	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	8.8	%	0.10	0.10	1		06/13/19 16:34		

**Sample: B-5, 8'**      **Lab ID: 40189323009**      Collected: 06/07/19 11:15      Received: 06/12/19 09:55      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Short List</b>									
Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B									
Benzene	120	ug/kg	78.4	32.7	1	06/14/19 08:45	06/18/19 03:54	71-43-2	
Ethylbenzene	124	ug/kg	78.4	32.7	1	06/14/19 08:45	06/18/19 03:54	100-41-4	
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 03:54	1634-04-4	W
Naphthalene	73.6J	ug/kg	327	52.3	1	06/14/19 08:45	06/18/19 03:54	91-20-3	
Toluene	136	ug/kg	78.4	32.7	1	06/14/19 08:45	06/18/19 03:54	108-88-3	
1,2,4-Trimethylbenzene	405	ug/kg	78.4	32.7	1	06/14/19 08:45	06/18/19 03:54	95-63-6	
1,3,5-Trimethylbenzene	171	ug/kg	78.4	32.7	1	06/14/19 08:45	06/18/19 03:54	108-67-8	
m&p-Xylene	317	ug/kg	157	65.4	1	06/14/19 08:45	06/18/19 03:54	179601-23-1	
o-Xylene	55.3J	ug/kg	78.4	32.7	1	06/14/19 08:45	06/18/19 03:54	95-47-6	
<b>Surrogates</b>									
Dibromofluoromethane (S)	103	%	57-146		1	06/14/19 08:45	06/18/19 03:54	1868-53-7	
4-Bromofluorobenzene (S)	113	%	54-126		1	06/14/19 08:45	06/18/19 03:54	460-00-4	
Toluene-d8 (S)	104	%	64-134		1	06/14/19 08:45	06/18/19 03:54	2037-26-5	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	23.5	%	0.10	0.10	1		06/13/19 16:34		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: RATH PROPERTY  
Pace Project No.: 40189323

**Sample: B-6, 8'**      **Lab ID: 40189323010**      Collected: 06/07/19 11:45      Received: 06/12/19 09:55      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Short List</b>		Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:09	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:09	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:09	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	06/14/19 08:45	06/18/19 10:09	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:09	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:09	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:09	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/14/19 08:45	06/18/19 10:09	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:09	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	106	%	57-146		1	06/14/19 08:45	06/18/19 10:09	1868-53-7	
4-Bromofluorobenzene (S)	111	%	54-126		1	06/14/19 08:45	06/18/19 10:09	460-00-4	
Toluene-d8 (S)	106	%	64-134		1	06/14/19 08:45	06/18/19 10:09	2037-26-5	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87							
Percent Moisture	<b>24.0</b>	%	0.10	0.10	1		06/12/19 15:40		

**Sample: B-6, 9.5'**      **Lab ID: 40189323011**      Collected: 06/07/19 11:50      Received: 06/12/19 09:55      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Short List</b>		Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B							
Benzene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:32	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:32	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:32	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	06/14/19 08:45	06/18/19 10:32	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:32	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:32	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:32	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/14/19 08:45	06/18/19 10:32	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:32	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	104	%	57-146		1	06/14/19 08:45	06/18/19 10:32	1868-53-7	
4-Bromofluorobenzene (S)	107	%	54-126		1	06/14/19 08:45	06/18/19 10:32	460-00-4	
Toluene-d8 (S)	104	%	64-134		1	06/14/19 08:45	06/18/19 10:32	2037-26-5	
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87							
Percent Moisture	<b>10.0</b>	%	0.10	0.10	1		06/13/19 16:34		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: RATH PROPERTY

Pace Project No.: 40189323

**Sample: B-5, 10'**      **Lab ID: 40189323012**      Collected: 06/07/19 11:20      Received: 06/12/19 09:55      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Short List</b>									
Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B									
Benzene	<b>16000</b>	ug/kg	2650	1100	40	06/14/19 08:45	06/18/19 04:17	71-43-2	
Ethylbenzene	<b>67700</b>	ug/kg	2650	1100	40	06/14/19 08:45	06/18/19 04:17	100-41-4	
Methyl-tert-butyl ether	<b>&lt;1000</b>	ug/kg	2400	1000	40	06/14/19 08:45	06/18/19 04:17	1634-04-4	W
Naphthalene	<b>20700</b>	ug/kg	11000	1770	40	06/14/19 08:45	06/18/19 04:17	91-20-3	
Toluene	<b>165000</b>	ug/kg	2650	1100	40	06/14/19 08:45	06/18/19 04:17	108-88-3	
1,2,4-Trimethylbenzene	<b>189000</b>	ug/kg	2650	1100	40	06/14/19 08:45	06/18/19 04:17	95-63-6	
1,3,5-Trimethylbenzene	<b>55400</b>	ug/kg	2650	1100	40	06/14/19 08:45	06/18/19 04:17	108-67-8	
m&p-Xylene	<b>264000</b>	ug/kg	5290	2200	40	06/14/19 08:45	06/18/19 04:17	179601-23-1	
o-Xylene	<b>98200</b>	ug/kg	2650	1100	40	06/14/19 08:45	06/18/19 04:17	95-47-6	
<b>Surrogates</b>									
Dibromofluoromethane (S)	0	%	57-146		40	06/14/19 08:45	06/18/19 04:17	1868-53-7	S4
4-Bromofluorobenzene (S)	0	%	54-126		40	06/14/19 08:45	06/18/19 04:17	460-00-4	S4
Toluene-d8 (S)	0	%	64-134		40	06/14/19 08:45	06/18/19 04:17	2037-26-5	S4
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	<b>9.3</b>	%	0.10	0.10	1		06/14/19 11:15		

**Sample: B-7, 8'**      **Lab ID: 40189323013**      Collected: 06/07/19 12:00      Received: 06/12/19 09:55      Matrix: Solid

*Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.*

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Short List</b>									
Analytical Method: EPA 8260    Preparation Method: EPA 5035/5030B									
Benzene	<b>&lt;25.0</b>	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:55	71-43-2	W
Ethylbenzene	<b>&lt;25.0</b>	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:55	100-41-4	W
Methyl-tert-butyl ether	<b>&lt;25.0</b>	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:55	1634-04-4	W
Naphthalene	<b>&lt;40.0</b>	ug/kg	250	40.0	1	06/14/19 08:45	06/18/19 10:55	91-20-3	W
Toluene	<b>&lt;25.0</b>	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:55	108-88-3	W
1,2,4-Trimethylbenzene	<b>&lt;25.0</b>	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:55	95-63-6	W
1,3,5-Trimethylbenzene	<b>&lt;25.0</b>	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:55	108-67-8	W
m&p-Xylene	<b>&lt;50.0</b>	ug/kg	120	50.0	1	06/14/19 08:45	06/18/19 10:55	179601-23-1	W
o-Xylene	<b>&lt;25.0</b>	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 10:55	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	111	%	57-146		1	06/14/19 08:45	06/18/19 10:55	1868-53-7	
4-Bromofluorobenzene (S)	118	%	54-126		1	06/14/19 08:45	06/18/19 10:55	460-00-4	
Toluene-d8 (S)	114	%	64-134		1	06/14/19 08:45	06/18/19 10:55	2037-26-5	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	<b>22.7</b>	%	0.10	0.10	1		06/12/19 16:39		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: RATH PROPERTY

Pace Project No.: 40189323

Sample: B-7, 9.5' Lab ID: 40189323014 Collected: 06/07/19 12:10 Received: 06/12/19 09:55 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV Med Level Short List</b>									
Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B									
Benzene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 11:18	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 11:18	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 11:18	1634-04-4	W
Naphthalene	<40.0	ug/kg	250	40.0	1	06/14/19 08:45	06/18/19 11:18	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 11:18	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 11:18	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 11:18	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/14/19 08:45	06/18/19 11:18	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/14/19 08:45	06/18/19 11:18	95-47-6	W
<b>Surrogates</b>									
Dibromofluoromethane (S)	104	%	57-146		1	06/14/19 08:45	06/18/19 11:18	1868-53-7	
4-Bromofluorobenzene (S)	106	%	54-126		1	06/14/19 08:45	06/18/19 11:18	460-00-4	
Toluene-d8 (S)	103	%	64-134		1	06/14/19 08:45	06/18/19 11:18	2037-26-5	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	8.7	%	0.10	0.10	1		06/14/19 11:15		

Sample: WATER WELL Lab ID: 40189323015 Collected: 06/07/19 13:00 Received: 06/12/19 09:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Benzene	<0.25	ug/L	1.0	0.25	1		06/18/19 08:15	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		06/18/19 08:15	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		06/18/19 08:15	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		06/18/19 08:15	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		06/18/19 08:15	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		06/18/19 08:15	74-83-9	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		06/18/19 08:15	104-51-8	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		06/18/19 08:15	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		06/18/19 08:15	98-06-6	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		06/18/19 08:15	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		06/18/19 08:15	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		06/18/19 08:15	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		06/18/19 08:15	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		06/18/19 08:15	74-87-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		06/18/19 08:15	95-49-8	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		06/18/19 08:15	106-43-4	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		06/18/19 08:15	96-12-8	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		06/18/19 08:15	124-48-1	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		06/18/19 08:15	106-93-4	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		06/18/19 08:15	74-95-3	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		06/18/19 08:15	95-50-1	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: RATH PROPERTY

Pace Project No.: 40189323

**Sample: WATER WELL**      **Lab ID: 40189323015**      Collected: 06/07/19 13:00      Received: 06/12/19 09:55      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 8260									
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		06/18/19 08:15	541-73-1	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		06/18/19 08:15	106-46-7	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		06/18/19 08:15	75-71-8	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		06/18/19 08:15	75-34-3	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		06/18/19 08:15	107-06-2	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		06/18/19 08:15	75-35-4	
cis-1,2-Dichloroethene	<0.27	ug/L	1.0	0.27	1		06/18/19 08:15	156-59-2	
trans-1,2-Dichloroethene	<1.1	ug/L	3.6	1.1	1		06/18/19 08:15	156-60-5	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		06/18/19 08:15	78-87-5	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		06/18/19 08:15	142-28-9	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		06/18/19 08:15	594-20-7	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		06/18/19 08:15	563-58-6	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		06/18/19 08:15	10061-01-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		06/18/19 08:15	10061-02-6	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		06/18/19 08:15	108-20-3	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		06/18/19 08:15	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		06/18/19 08:15	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	5.0	0.39	1		06/18/19 08:15	98-82-8	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		06/18/19 08:15	99-87-6	
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		06/18/19 08:15	75-09-2	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		06/18/19 08:15	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		06/18/19 08:15	91-20-3	
n-Propylbenzene	<0.81	ug/L	5.0	0.81	1		06/18/19 08:15	103-65-1	
Styrene	<0.47	ug/L	1.6	0.47	1		06/18/19 08:15	100-42-5	
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		06/18/19 08:15	630-20-6	
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		06/18/19 08:15	79-34-5	
Tetrachloroethene	<0.33	ug/L	1.1	0.33	1		06/18/19 08:15	127-18-4	
Toluene	<0.17	ug/L	5.0	0.17	1		06/18/19 08:15	108-88-3	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		06/18/19 08:15	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		06/18/19 08:15	120-82-1	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		06/18/19 08:15	71-55-6	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		06/18/19 08:15	79-00-5	
Trichloroethene	<0.26	ug/L	1.0	0.26	1		06/18/19 08:15	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		06/18/19 08:15	75-69-4	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		06/18/19 08:15	96-18-4	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		06/18/19 08:15	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		06/18/19 08:15	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/18/19 08:15	75-01-4	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		06/18/19 08:15	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		06/18/19 08:15	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	95	%	70-130		1		06/18/19 08:15	460-00-4	HS
Dibromofluoromethane (S)	111	%	70-130		1		06/18/19 08:15	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		06/18/19 08:15	2037-26-5	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: RATH PROPERTY

Pace Project No.: 40189323

QC Batch:	324303	Analysis Method:	WI MOD GRO
QC Batch Method:	TPH GRO/PVOC WI ext.	Analysis Description:	WIGRO Solid GCV
Associated Lab Samples:	40189323002		

METHOD BLANK: 1883049 Matrix: Solid  
Associated Lab Samples: 40189323002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<25.0	50.0	06/13/19 08:52	
1,3,5-Trimethylbenzene	ug/kg	<25.0	50.0	06/13/19 08:52	
Benzene	ug/kg	<25.0	50.0	06/13/19 08:52	
Ethylbenzene	ug/kg	<25.0	50.0	06/13/19 08:52	
Gasoline Range Organics	mg/kg	<1.6	5.0	06/13/19 08:52	
m&p-Xylene	ug/kg	<50.0	100	06/13/19 08:52	
Methyl-tert-butyl ether	ug/kg	<25.0	50.0	06/13/19 08:52	
Naphthalene	ug/kg	<25.0	50.0	06/13/19 08:52	
o-Xylene	ug/kg	<25.0	50.0	06/13/19 08:52	
Toluene	ug/kg	<25.0	50.0	06/13/19 08:52	
a,a,a-Trifluorotoluene (S)	%	100	80-120	06/13/19 08:52	

LABORATORY CONTROL SAMPLE & LCSD: 1883050

1883051

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	990	1000	99	100	80-120	1	20	
1,3,5-Trimethylbenzene	ug/kg	1000	1000	1010	100	101	80-120	1	20	
Benzene	ug/kg	1000	1000	1000	100	100	80-120	0	20	
Ethylbenzene	ug/kg	1000	1010	1010	101	101	80-120	0	20	
Gasoline Range Organics	mg/kg	10	9.6	9.0	96	90	80-120	7	20	
m&p-Xylene	ug/kg	2000	2030	2020	101	101	80-120	0	20	
Methyl-tert-butyl ether	ug/kg	1000	1020	992	102	99	80-120	3	20	
Naphthalene	ug/kg	1000	924	920	92	92	80-120	0	20	
o-Xylene	ug/kg	1000	1010	1000	101	100	80-120	0	20	
Toluene	ug/kg	1000	1010	1010	101	101	80-120	1	20	
a,a,a-Trifluorotoluene (S)	%				101	100	80-120			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: RATH PROPERTY

Pace Project No.: 40189323

---

QC Batch: 324324 Analysis Method: EPA 6010  
 QC Batch Method: EPA 3050 Analysis Description: 6010 MET  
 Associated Lab Samples: 40189323002, 40189323004, 40189323005

---

METHOD BLANK: 1883104 Matrix: Solid  
 Associated Lab Samples: 40189323002, 40189323004, 40189323005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/kg	<0.60	2.0	06/13/19 19:32	

LABORATORY CONTROL SAMPLE: 1883105

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	50	49.6	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1883106 1883107

Parameter	Units	40189266001		1883107		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Lead	mg/kg	915	53.8	53.7	582	577	-620	-629	75-125	1	20	P6	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: RATH PROPERTY  
Pace Project No.: 40189323

QC Batch: 324367 Analysis Method: EPA 8260  
QC Batch Method: EPA 5035/5030B Analysis Description: 8260 MSV Med Level Short List  
Associated Lab Samples: 40189323003, 40189323004, 40189323005, 40189323006, 40189323007

METHOD BLANK: 1883340 Matrix: Solid  
Associated Lab Samples: 40189323003, 40189323004, 40189323005, 40189323006, 40189323007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<12.2	50.0	06/14/19 16:44	
1,3,5-Trimethylbenzene	ug/kg	<14.5	50.0	06/14/19 16:44	
Benzene	ug/kg	<9.2	20.0	06/14/19 16:44	
Ethylbenzene	ug/kg	<12.4	50.0	06/14/19 16:44	
m&p-Xylene	ug/kg	<34.4	100	06/14/19 16:44	
Methyl-tert-butyl ether	ug/kg	<12.7	50.0	06/14/19 16:44	
Naphthalene	ug/kg	<40.0	250	06/14/19 16:44	
o-Xylene	ug/kg	<14.0	50.0	06/14/19 16:44	
Toluene	ug/kg	<11.2	50.0	06/14/19 16:44	
4-Bromofluorobenzene (S)	%	105	54-126	06/14/19 16:44	
Dibromofluoromethane (S)	%	102	57-146	06/14/19 16:44	
Toluene-d8 (S)	%	96	64-134	06/14/19 16:44	

LABORATORY CONTROL SAMPLE: 1883341

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	2500	2510	101	70-130	
Ethylbenzene	ug/kg	2500	2390	96	82-122	
m&p-Xylene	ug/kg	5000	4900	98	70-130	
Methyl-tert-butyl ether	ug/kg	2500	2810	113	70-130	
o-Xylene	ug/kg	2500	2440	98	70-130	
Toluene	ug/kg	2500	2400	96	80-121	
4-Bromofluorobenzene (S)	%			109	54-126	
Dibromofluoromethane (S)	%			101	57-146	
Toluene-d8 (S)	%			97	64-134	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1883342 1883343

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		40189032003 Result	Spike Conc.	Spike Conc.	MS Result							MSD Result
Benzene	ug/kg	<25.0	1680	1680	1530	1670	91	99	70-130	9	20	
Ethylbenzene	ug/kg	<25.0	1680	1680	1500	1530	89	91	80-122	2	20	
m&p-Xylene	ug/kg	<50.0	3370	3370	3020	3090	90	92	70-130	2	20	
Methyl-tert-butyl ether	ug/kg	<25.0	1680	1680	1760	1870	105	111	70-130	6	20	
o-Xylene	ug/kg	<25.0	1680	1680	1500	1580	89	94	70-130	5	20	
Toluene	ug/kg	<25.0	1680	1680	1500	1560	89	92	80-121	4	20	
4-Bromofluorobenzene (S)	%						80	83	54-126			
Dibromofluoromethane (S)	%						73	73	57-146			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: RATH PROPERTY

Pace Project No.: 40189323

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1883342												1883343	
Parameter	Units	40189032003 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
			Spike Conc.	Spike Conc.									
Toluene-d8 (S)	%						72	75	64-134				

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: RATH PROPERTY  
Pace Project No.: 40189323

QC Batch: 324518 Analysis Method: EPA 8260  
QC Batch Method: EPA 5035/5030B Analysis Description: 8260 MSV Med Level Short List  
Associated Lab Samples: 40189323001, 40189323008, 40189323009, 40189323010, 40189323011, 40189323012, 40189323013, 40189323014

METHOD BLANK: 1883930 Matrix: Solid  
Associated Lab Samples: 40189323001, 40189323008, 40189323009, 40189323010, 40189323011, 40189323012, 40189323013, 40189323014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<12.2	50.0	06/17/19 17:53	
1,3,5-Trimethylbenzene	ug/kg	<14.5	50.0	06/17/19 17:53	
Benzene	ug/kg	<9.2	20.0	06/17/19 17:53	
Ethylbenzene	ug/kg	<12.4	50.0	06/17/19 17:53	
m&p-Xylene	ug/kg	<34.4	100	06/17/19 17:53	
Methyl-tert-butyl ether	ug/kg	<12.7	50.0	06/17/19 17:53	
Naphthalene	ug/kg	<40.0	250	06/17/19 17:53	
o-Xylene	ug/kg	<14.0	50.0	06/17/19 17:53	
Toluene	ug/kg	<11.2	50.0	06/17/19 17:53	
4-Bromofluorobenzene (S)	%	104	54-126	06/17/19 17:53	
Dibromofluoromethane (S)	%	97	57-146	06/17/19 17:53	
Toluene-d8 (S)	%	97	64-134	06/17/19 17:53	

LABORATORY CONTROL SAMPLE: 1883931

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	2500	2460	98	70-130	
Ethylbenzene	ug/kg	2500	2240	90	82-122	
m&p-Xylene	ug/kg	5000	4540	91	70-130	
Methyl-tert-butyl ether	ug/kg	2500	2550	102	70-130	
o-Xylene	ug/kg	2500	2260	90	70-130	
Toluene	ug/kg	2500	2270	91	80-121	
4-Bromofluorobenzene (S)	%			101	54-126	
Dibromofluoromethane (S)	%			94	57-146	
Toluene-d8 (S)	%			93	64-134	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1883932 1883933

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		40189427001 Result	Spike Conc.	Spike Conc.	MS Result							MSD Result
Benzene	ug/kg	<25.0	1430	1430	1420	1480	100	103	70-130	4	20	
Ethylbenzene	ug/kg	<25.0	1430	1430	1280	1370	88	94	80-122	7	20	
m&p-Xylene	ug/kg	1310	2860	2860	4100	4380	98	107	70-130	7	20	
Methyl-tert-butyl ether	ug/kg	<25.0	1430	1430	1510	1540	106	108	70-130	2	20	
o-Xylene	ug/kg	294	1430	1430	1650	1760	95	102	70-130	6	20	
Toluene	ug/kg	<25.0	1430	1430	1290	1410	89	97	80-121	8	20	
4-Bromofluorobenzene (S)	%						102	107	54-126			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: RATH PROPERTY

Pace Project No.: 40189323

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1883932												1883933	
Parameter	Units	40189427001 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
			Spike Conc.	Spike Conc.									
Dibromofluoromethane (S)	%							99	100	57-146			
Toluene-d8 (S)	%							93	97	64-134			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: RATH PROPERTY  
Pace Project No.: 40189323

QC Batch: 324602      Analysis Method: EPA 8260  
QC Batch Method: EPA 8260      Analysis Description: 8260 MSV  
Associated Lab Samples: 40189323015

METHOD BLANK: 1884617      Matrix: Water  
Associated Lab Samples: 40189323015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.27	1.0	06/17/19 11:57	
1,1,1-Trichloroethane	ug/L	<0.24	1.0	06/17/19 11:57	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	1.0	06/17/19 11:57	
1,1,2-Trichloroethane	ug/L	<0.55	5.0	06/17/19 11:57	
1,1-Dichloroethane	ug/L	<0.27	1.0	06/17/19 11:57	
1,1-Dichloroethene	ug/L	<0.24	1.0	06/17/19 11:57	
1,1-Dichloropropene	ug/L	<0.54	1.8	06/17/19 11:57	
1,2,3-Trichlorobenzene	ug/L	<0.63	5.0	06/17/19 11:57	
1,2,3-Trichloropropane	ug/L	<0.59	5.0	06/17/19 11:57	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	06/17/19 11:57	
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	06/17/19 11:57	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	5.9	06/17/19 11:57	
1,2-Dibromoethane (EDB)	ug/L	<0.83	2.8	06/17/19 11:57	
1,2-Dichlorobenzene	ug/L	<0.71	2.4	06/17/19 11:57	
1,2-Dichloroethane	ug/L	<0.28	1.0	06/17/19 11:57	
1,2-Dichloropropane	ug/L	<0.28	1.0	06/17/19 11:57	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	06/17/19 11:57	
1,3-Dichlorobenzene	ug/L	<0.63	2.1	06/17/19 11:57	
1,3-Dichloropropane	ug/L	<0.83	2.8	06/17/19 11:57	
1,4-Dichlorobenzene	ug/L	<0.94	3.1	06/17/19 11:57	
2,2-Dichloropropane	ug/L	<2.3	7.6	06/17/19 11:57	
2-Chlorotoluene	ug/L	<0.93	5.0	06/17/19 11:57	
4-Chlorotoluene	ug/L	<0.76	2.5	06/17/19 11:57	
Benzene	ug/L	<0.25	1.0	06/17/19 11:57	
Bromobenzene	ug/L	<0.24	1.0	06/17/19 11:57	
Bromochloromethane	ug/L	<0.36	5.0	06/17/19 11:57	
Bromodichloromethane	ug/L	<0.36	1.2	06/17/19 11:57	
Bromoform	ug/L	<4.0	13.2	06/17/19 11:57	
Bromomethane	ug/L	<0.97	5.0	06/17/19 11:57	
Carbon tetrachloride	ug/L	<0.17	1.0	06/17/19 11:57	
Chlorobenzene	ug/L	<0.71	2.4	06/17/19 11:57	
Chloroethane	ug/L	<1.3	5.0	06/17/19 11:57	
Chloroform	ug/L	<1.3	5.0	06/17/19 11:57	
Chloromethane	ug/L	<2.2	7.3	06/17/19 11:57	
cis-1,2-Dichloroethene	ug/L	<0.27	1.0	06/17/19 11:57	
cis-1,3-Dichloropropene	ug/L	<3.6	12.1	06/17/19 11:57	
Dibromochloromethane	ug/L	<2.6	8.7	06/17/19 11:57	
Dibromomethane	ug/L	<0.94	3.1	06/17/19 11:57	
Dichlorodifluoromethane	ug/L	<0.50	5.0	06/17/19 11:57	
Diisopropyl ether	ug/L	<1.9	6.3	06/17/19 11:57	
Ethylbenzene	ug/L	<0.22	1.0	06/17/19 11:57	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: RATH PROPERTY

Pace Project No.: 40189323

METHOD BLANK: 1884617

Matrix: Water

Associated Lab Samples: 40189323015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<1.2	5.0	06/17/19 11:57	
Isopropylbenzene (Cumene)	ug/L	<0.39	5.0	06/17/19 11:57	
m&p-Xylene	ug/L	<0.47	2.0	06/17/19 11:57	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	06/17/19 11:57	
Methylene Chloride	ug/L	<0.58	5.0	06/17/19 11:57	
n-Butylbenzene	ug/L	<0.71	2.4	06/17/19 11:57	
n-Propylbenzene	ug/L	<0.81	5.0	06/17/19 11:57	
Naphthalene	ug/L	<1.2	5.0	06/17/19 11:57	
o-Xylene	ug/L	<0.26	1.0	06/17/19 11:57	
p-Isopropyltoluene	ug/L	<0.80	2.7	06/17/19 11:57	
sec-Butylbenzene	ug/L	<0.85	5.0	06/17/19 11:57	
Styrene	ug/L	<0.47	1.6	06/17/19 11:57	
tert-Butylbenzene	ug/L	<0.30	1.0	06/17/19 11:57	
Tetrachloroethene	ug/L	<0.33	1.1	06/17/19 11:57	
Toluene	ug/L	<0.17	5.0	06/17/19 11:57	
trans-1,2-Dichloroethene	ug/L	<1.1	3.6	06/17/19 11:57	
trans-1,3-Dichloropropene	ug/L	<4.4	14.6	06/17/19 11:57	
Trichloroethene	ug/L	<0.26	1.0	06/17/19 11:57	
Trichlorofluoromethane	ug/L	<0.21	1.0	06/17/19 11:57	
Vinyl chloride	ug/L	<0.17	1.0	06/17/19 11:57	
4-Bromofluorobenzene (S)	%	96	70-130	06/17/19 11:57	
Dibromofluoromethane (S)	%	109	70-130	06/17/19 11:57	
Toluene-d8 (S)	%	98	70-130	06/17/19 11:57	

LABORATORY CONTROL SAMPLE: 1884618

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	51.0	102	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	47.0	94	70-130	
1,1,2-Trichloroethane	ug/L	50	49.5	99	70-130	
1,1-Dichloroethane	ug/L	50	54.1	108	73-150	
1,1-Dichloroethene	ug/L	50	55.3	111	73-138	
1,2,4-Trichlorobenzene	ug/L	50	45.7	91	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	35.2	70	64-129	
1,2-Dibromoethane (EDB)	ug/L	50	46.5	93	70-130	
1,2-Dichlorobenzene	ug/L	50	48.7	97	70-130	
1,2-Dichloroethane	ug/L	50	52.8	106	75-140	
1,2-Dichloropropane	ug/L	50	53.3	107	73-135	
1,3-Dichlorobenzene	ug/L	50	49.0	98	70-130	
1,4-Dichlorobenzene	ug/L	50	49.3	99	70-130	
Benzene	ug/L	50	57.9	116	70-130	
Bromodichloromethane	ug/L	50	48.5	97	70-130	
Bromoform	ug/L	50	35.6	71	68-129	
Bromomethane	ug/L	50	36.2	72	18-159	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: RATH PROPERTY

Pace Project No.: 40189323

LABORATORY CONTROL SAMPLE: 1884618

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	50	48.8	98	70-130	
Chlorobenzene	ug/L	50	50.6	101	70-130	
Chloroethane	ug/L	50	50.7	101	53-147	
Chloroform	ug/L	50	53.4	107	74-136	
Chloromethane	ug/L	50	37.8	76	29-115	
cis-1,2-Dichloroethene	ug/L	50	62.3	125	70-130	
cis-1,3-Dichloropropene	ug/L	50	45.1	90	70-130	
Dibromochloromethane	ug/L	50	43.8	88	70-130	
Dichlorodifluoromethane	ug/L	50	37.1	74	10-130	
Ethylbenzene	ug/L	50	52.4	105	80-124	
Isopropylbenzene (Cumene)	ug/L	50	51.9	104	70-130	
m&p-Xylene	ug/L	100	105	105	70-130	
Methyl-tert-butyl ether	ug/L	50	44.1	88	54-137	
Methylene Chloride	ug/L	50	54.6	109	73-138	
o-Xylene	ug/L	50	50.8	102	70-130	
Styrene	ug/L	50	52.2	104	70-130	
Tetrachloroethene	ug/L	50	49.5	99	70-130	
Toluene	ug/L	50	51.7	103	80-126	
trans-1,2-Dichloroethene	ug/L	50	54.3	109	73-145	
trans-1,3-Dichloropropene	ug/L	50	40.0	80	70-130	
Trichloroethene	ug/L	50	53.3	107	70-130	
Trichlorofluoromethane	ug/L	50	54.8	110	76-147	
Vinyl chloride	ug/L	50	46.6	93	51-120	
4-Bromofluorobenzene (S)	%			99	70-130	
Dibromofluoromethane (S)	%			109	70-130	
Toluene-d8 (S)	%			98	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1884619 1884620

Parameter	Units	40189373002		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	Result	MSD Result	% Rec	% Rec					
1,1,1-Trichloroethane	ug/L	67.7	50	50	119	120	102	105	70-130	1	20		
1,1,2,2-Tetrachloroethane	ug/L	<0.28	50	50	47.4	50.5	95	101	70-130	6	20		
1,1,2-Trichloroethane	ug/L	<0.55	50	50	48.9	51.8	98	104	70-137	6	20		
1,1-Dichloroethane	ug/L	34.4	50	50	85.3	87.3	102	106	73-153	2	20		
1,1-Dichloroethene	ug/L	14.7	50	50	68.0	69.2	107	109	73-138	2	20		
1,2,4-Trichlorobenzene	ug/L	<0.95	50	50	45.7	49.8	91	99	70-130	9	20		
1,2-Dibromo-3-chloropropane	ug/L	<1.8	50	50	36.9	41.7	74	83	58-129	12	20		
1,2-Dibromoethane (EDB)	ug/L	<0.83	50	50	46.1	49.5	92	99	70-130	7	20		
1,2-Dichlorobenzene	ug/L	<0.71	50	50	47.6	49.7	95	99	70-130	4	20		
1,2-Dichloroethane	ug/L	<0.28	50	50	51.0	52.8	102	106	75-140	4	20		
1,2-Dichloropropane	ug/L	<0.28	50	50	51.6	52.9	103	106	71-138	3	20		
1,3-Dichlorobenzene	ug/L	<0.63	50	50	47.7	49.5	95	99	70-130	4	20		
1,4-Dichlorobenzene	ug/L	<0.94	50	50	48.2	50.0	96	100	70-130	4	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: RATH PROPERTY

Pace Project No.: 40189323

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1884619 1884620												
Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		40189373002 Result	Spike Conc.	Spike Conc.	MS Result							
Benzene	ug/L	<0.25	50	50	55.4	57.0	111	114	70-130	3	20	
Bromodichloromethane	ug/L	<0.36	50	50	47.4	49.5	95	99	70-130	4	20	
Bromoform	ug/L	<4.0	50	50	36.2	38.8	72	78	68-129	7	20	
Bromomethane	ug/L	<0.97	50	50	40.6	42.0	81	84	15-170	3	20	
Carbon tetrachloride	ug/L	<0.17	50	50	48.8	50.3	98	101	70-130	3	20	
Chlorobenzene	ug/L	<0.71	50	50	48.6	50.5	97	101	70-130	4	20	
Chloroethane	ug/L	<1.3	50	50	48.2	49.5	96	99	51-148	3	20	
Chloroform	ug/L	<1.3	50	50	51.9	52.8	103	105	74-136	2	20	
Chloromethane	ug/L	<2.2	50	50	37.5	37.5	75	75	23-115	0	20	
cis-1,2-Dichloroethene	ug/L	26.2	50	50	85.9	87.9	119	123	70-131	2	20	
cis-1,3-Dichloropropene	ug/L	<3.6	50	50	44.6	46.6	89	93	70-130	4	20	
Dibromochloromethane	ug/L	<2.6	50	50	43.7	46.1	87	92	70-130	5	20	
Dichlorodifluoromethane	ug/L	<0.50	50	50	33.0	33.8	66	68	10-132	3	20	
Ethylbenzene	ug/L	<0.22	50	50	50.6	52.6	101	105	80-125	4	20	
Isopropylbenzene (Cumene)	ug/L	<0.39	50	50	50.0	51.9	100	104	70-130	4	20	
m&p-Xylene	ug/L	<0.47	100	100	102	105	102	105	70-130	4	20	
Methyl-tert-butyl ether	ug/L	<1.2	50	50	44.0	46.1	88	92	51-145	5	20	
Methylene Chloride	ug/L	<0.58	50	50	52.7	54.0	105	108	73-140	2	20	
o-Xylene	ug/L	<0.26	50	50	49.2	51.5	98	103	70-130	5	20	
Styrene	ug/L	<0.47	50	50	50.3	52.5	101	105	70-130	4	20	
Tetrachloroethene	ug/L	150	50	50	203	205	106	110	70-130	1	20	
Toluene	ug/L	<0.17	50	50	50.2	51.8	100	104	80-131	3	20	
trans-1,2-Dichloroethene	ug/L	<1.1	50	50	52.4	54.1	104	108	73-148	3	20	
trans-1,3-Dichloropropene	ug/L	<4.4	50	50	40.2	42.6	80	85	70-130	6	20	
Trichloroethene	ug/L	9.8	50	50	61.6	63.5	103	107	70-130	3	20	
Trichlorofluoromethane	ug/L	<0.21	50	50	51.5	52.6	103	105	74-147	2	20	
Vinyl chloride	ug/L	<0.17	50	50	44.5	45.5	89	91	41-129	2	20	
4-Bromofluorobenzene (S)	%						99	100	70-130			
Dibromofluoromethane (S)	%						110	109	70-130			
Toluene-d8 (S)	%						98	100	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: RATH PROPERTY  
Pace Project No.: 40189323

QC Batch: 324622 Analysis Method: WI MOD DRO  
QC Batch Method: WI MOD DRO Analysis Description: WIDRO GCS  
Associated Lab Samples: 40189323004

METHOD BLANK: 1884689 Matrix: Solid  
Associated Lab Samples: 40189323004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics	mg/kg	<1.3	4.4	06/18/19 08:47	

LABORATORY CONTROL SAMPLE & LCSD: 1884690 1884691

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Range Organics	mg/kg	40	36.3	39.4	91	98	70-120	8	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: RATH PROPERTY

Pace Project No.: 40189323

QC Batch: 324270

Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 40189323010

SAMPLE DUPLICATE: 1882605

Parameter	Units	40189323010 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	24.0	23.4	3	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: RATH PROPERTY

Pace Project No.: 40189323

QC Batch: 324278

Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 40189323013

SAMPLE DUPLICATE: 1882619

Parameter	Units	40189323013 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	22.7	22.8	1	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: RATH PROPERTY

Pace Project No.: 40189323

QC Batch: 324528

Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 40189323012, 40189323014

SAMPLE DUPLICATE: 1883974

Parameter	Units	40189327003 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.5	19.2	2	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## QUALIFIERS

Project: RATH PROPERTY

Pace Project No.: 40189323

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

- |    |                                                                                                                                        |
|----|----------------------------------------------------------------------------------------------------------------------------------------|
| C4 | Sample container did not meet EPA or method requirements.                                                                              |
| D3 | Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.                             |
| D5 | The sample was re-weighed into a new container because the sample weight in the original container exceeded the method specifications. |
| GO | Early and late peaks present outside the GRO window.                                                                                   |
| HS | Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).                            |
| P6 | Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.  |
| S4 | Surrogate recovery not evaluated against control limits due to sample dilution.                                                        |
| W  | Non-detect results are reported on a wet weight basis.                                                                                 |

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: RATH PROPERTY  
Pace Project No.: 40189323

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40189323004	B-2, 12'	WI MOD DRO	324622	WI MOD DRO	324725
40189323002	B-1, 9'	TPH GRO/PVOC WI ext.	324303	WI MOD GRO	324404
40189323002	B-1, 9'	EPA 3050	324324	EPA 6010	324435
40189323004	B-2, 12'	EPA 3050	324324	EPA 6010	324435
40189323005	B-2, 15'	EPA 3050	324324	EPA 6010	324435
40189323001	B-1, 7'	EPA 5035/5030B	324518	EPA 8260	324519
40189323003	B-2, 8'	EPA 5035/5030B	324367	EPA 8260	324368
40189323004	B-2, 12'	EPA 5035/5030B	324367	EPA 8260	324368
40189323005	B-2, 15'	EPA 5035/5030B	324367	EPA 8260	324368
40189323006	B-3, 8'	EPA 5035/5030B	324367	EPA 8260	324368
40189323007	B-3, 11'	EPA 5035/5030B	324367	EPA 8260	324368
40189323008	B-4, 10'	EPA 5035/5030B	324518	EPA 8260	324519
40189323009	B-5, 8'	EPA 5035/5030B	324518	EPA 8260	324519
40189323010	B-6, 8'	EPA 5035/5030B	324518	EPA 8260	324519
40189323011	B-6, 9.5'	EPA 5035/5030B	324518	EPA 8260	324519
40189323012	B-5, 10'	EPA 5035/5030B	324518	EPA 8260	324519
40189323013	B-7, 8'	EPA 5035/5030B	324518	EPA 8260	324519
40189323014	B-7, 9.5'	EPA 5035/5030B	324518	EPA 8260	324519
40189323015	<b>WATER WELL</b>	EPA 8260	324602		
40189323001	B-1, 7'	ASTM D2974-87	324431		
40189323002	B-1, 9'	ASTM D2974-87	324431		
40189323003	B-2, 8'	ASTM D2974-87	324431		
40189323004	B-2, 12'	ASTM D2974-87	324431		
40189323005	B-2, 15'	ASTM D2974-87	324431		
40189323006	B-3, 8'	ASTM D2974-87	324431		
40189323007	B-3, 11'	ASTM D2974-87	324431		
40189323008	B-4, 10'	ASTM D2974-87	324431		
40189323009	B-5, 8'	ASTM D2974-87	324431		
40189323010	B-6, 8'	ASTM D2974-87	324270		
40189323011	B-6, 9.5'	ASTM D2974-87	324431		
40189323012	B-5, 10'	ASTM D2974-87	324528		
40189323013	B-7, 8'	ASTM D2974-87	324278		
40189323014	B-7, 9.5'	ASTM D2974-87	324528		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

(Please Print Clearly)

Company Name: Seymour  
 Branch/location: Seymour  
 Project Contact: Rosemary Seymour  
 Phone: 608.225.9407  
 Project Number: 10082259407  
 Project Name: Rush Prelims  
 Project State: Wisconsin  
 Sampled By (Print): Rosemary Seymour  
 Sampled By (Sign): Rosemary Seymour  
 PO #: Regulatory Program



# CHAIN OF CUSTODY

Preservation Codes  
 A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH  
 H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Filtered? (YES/NO)  
 Preservation (CODE)\*

PAGE LAB #	CLIENT FIELD ID	COLLECTION DATE	TIME	MATRIX	Analyses Requested	
					V/N	Pick Letter
001	B-1, 1'	6/1	1000	5611	X	PVOC+MAD H
002	B-1, 9'		1010		X	GRO/AVOC - NaOH
003	B-2, 8'		1018		X	DRD
004	B-2, 12'		1020		X	Lead
005	B-2, 15'		1025		X	
006	B-3, 8'		1040		X	
007	B-3, 11'		1045		X	
008	B-4, 10'		1100		X	
009	B-5, 8'		1115		X	
010	B-6, 8'		1145		X	
011	B-6, 9'12"		1150		X	
012	B-5, 16'		1120		X	
013	B-7, 8'		1200		X	

Rush Turnaround Time Requested - Prelims  
 (Rush TAT subject to approval/surcharge)  
 Date Needed: \_\_\_\_\_  
 Transmit Prelim Rush Results by (complete what you want):  
 Email #1: \_\_\_\_\_  
 Email #2: \_\_\_\_\_  
 Telephone: \_\_\_\_\_  
 Fax: \_\_\_\_\_

Relinquished By: Rosemary Seymour Date/Time: 6/11/13 00  
 Relinquished By: Rosemary Seymour Date/Time: 6/12/13 0955  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Quote #: \_\_\_\_\_  
 Mail To Contact: Rosemary Seymour  
 Mail To Company: Seymour Env  
 Mail To Address: 2531 Duquesne Mt Pleasant, WI  
 Invoice To Contact: \_\_\_\_\_  
 Invoice To Company: \_\_\_\_\_  
 Invoice To Address: \_\_\_\_\_  
 Invoice To Phone: \_\_\_\_\_  
 CLIENT COMMENTS: out from work  
 LAB COMMENTS (Lab Use Only): \_\_\_\_\_  
 Profile #: \_\_\_\_\_

PAGE Project No. 40189323  
 Receipt Temp = 20.1 °C  
 Sample Receipt pH OK / Adjusted  
 Cooler Custody Seal Present / Not Present  
 Intact / Not Intact

UPPER MIDWEST REGION  
 MN: 612-607-1700 WI: 920-469-2436

Page 1 of 2  
 40189323





Client Name: Seymour

Sample Preservation Receipt Form

Project # 40180323

All containers needing preservation have been checked and noted below:  Yes  No  N/A

Lab Lot# of pH paper: \_\_\_\_\_ Lab Std #ID of preservation (if pH adjusted): \_\_\_\_\_

Initial when completed:

Date/Time:


Pace Analytical Services, LLC  
1241 Bellevue Street, Suite 505  
Green Bay, WI 54303  
Page 2 of 2

Pace Lab #	Glass						Plastic						Vials						Jars			General			VOA Vials (>6mm) *					Volume (mL)								
	AG1U	AG1H	AG4S	AG4U	AG5U	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3B	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2		pH after adjusted							
001																																						2.5 / 5 / 10
002																																						2.5 / 5 / 10
003																																						2.5 / 5 / 10
004																																						2.5 / 5 / 10
005																																						2.5 / 5 / 10
006																																						2.5 / 5 / 10
007																																						2.5 / 5 / 10
008																																						2.5 / 5 / 10
009																																						2.5 / 5 / 10
010																																						2.5 / 5 / 10
011																																						2.5 / 5 / 10
012																																						2.5 / 5 / 10
013																																						2.5 / 5 / 10
014																																						2.5 / 5 / 10
015																																						2.5 / 5 / 10
016																																						2.5 / 5 / 10
017																																						2.5 / 5 / 10
018																																						2.5 / 5 / 10
019																																						2.5 / 5 / 10
020																																						2.5 / 5 / 10

Exceptions to preservation check:  VOA Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: \_\_\_\_\_

Headspace in VOA Vials (>6mm):  Yes  No  N/A \*If yes look in headspace column

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact	VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL		
AG5U	100 mL amber glass unpres	BP3B	250 mL plastic NaOH	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres	BP3S	250 mL plastic H2SO4			GN:	

 1241 Bellevue Street, Green Bay, WI 54302	Document Name: <b>Sample Condition Upon Receipt (SCUR)</b>	Document Revised: 25Apr2018
	Document No.: <b>F-GB-C-031-Rev.07</b>	Issuing Authority: Pace Green Bay Quality Office

### Sample Condition Upon Receipt Form (SCUR)

**Client Name:** Seymour Env.

Project #: 
**WO#: 40189323**  
  
 40189323

**Courier:**  CS Logistics  Fed Ex  Speedee  UPS  Walco  
 Client  Pace Other: \_\_\_\_\_

**Tracking #:** 1995 061119

**Custody Seal on Cooler/Box Present:**  yes  no    **Seals intact:**  yes  no

**Custody Seal on Samples Present:**  yes  no    **Seals intact:**  yes  no

**Packing Material:**  Bubble Wrap  Bubble Bags  None  Other

**Thermometer Used** SR - N/A    **Type of Ice:**  Blue  Dry  None     Samples on ice, cooling process has begun

**Cooler Temperature**    **Uncorr:** RDI **Corr:** \_\_\_\_\_

**Temp Blank Present:**  yes  no    **Biological Tissue is Frozen:**  yes  no

<b>Person examining contents:</b> <b>Date:</b> <u>6-12-19</u> <b>Initials:</b> <u>SW</u>
------------------------------------------------------------------------------------------------

Temp should be above freezing to 6°C.  
 Biota Samples may be received at ≤ 0°C.

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1. <u>CC</u> <span style="float: right;"><u>6/12/19 SW</u></span>
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time: _____
<b>Short Hold Time Analysis (&lt;72hr):</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
<b>Rush Turn Around Time Requested:</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8. <u>No DRO container for .004.</u> <span style="float: right;"><u>6/12/19 SW</u></span>
For Analysis: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No    MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>011 - ID is 9/12; 012 - ID is B5 on 4oz poly and the vial ID is B5 8/12; 015 - ID is water supply</u>
-Includes date/time/ID/Analysis    Matrix: <u>SW</u>		
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. <span style="float: right;"><u>6/12/19 SW</u></span>
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

**Client Notification/ Resolution:**    If checked, see attached form for additional comments   
 Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Comments/ Resolution: \_\_\_\_\_

**Project Manager Review:** AL for DM    **Date:** 6/12/19

September 22, 2010

Robyn Seymour  
Seymour Environmental Services, INC.  
2531 Dyreson Road  
Mc Farland, WI 53558

RE: Project: WATER WELL  
Pace Project No.: 4037027

Dear Robyn Seymour:

Enclosed are the analytical results for sample(s) received by the laboratory on September 16, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Brian Basten

brian.basten@pacelabs.com  
Project Manager

Enclosures

**REPORT OF LABORATORY ANALYSIS**

Page 1 of 8

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## CERTIFICATIONS

Project: WATER WELL

Pace Project No.: 4037027

### Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302  
California Certification #: 09268CA  
Florida/NELAP Certification #: E87948  
Illinois Certification #: 200050  
Kentucky Certification #: 82  
Louisiana Certification #: 04168  
Minnesota Certification #: 055-999-334  
New York Certification #: 11888

New York Certification #: 11888  
North Carolina Certification #: 503  
North Dakota Certification #: R-150  
South Carolina Certification #: 83006001  
US Dept of Agriculture #: S-76505  
Wisconsin Certification #: 405132750  
Wisconsin DATCP Certification #: 105-444

---

## REPORT OF LABORATORY ANALYSIS

Page 2 of 8

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..





### SAMPLE SUMMARY

Project: WATER WELL

Pace Project No.: 4037027

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4037027001	WATER WELL	Water	09/09/10 15:00	09/16/10 09:40

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

### SAMPLE ANALYTE COUNT

Project: WATER WELL  
Pace Project No.: 4037027

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
4037027001	WATER WELL	WI MOD GRO	SES	10	PASI-G

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

## PROJECT NARRATIVE

Project: WATER WELL  
Pace Project No.: 4037027

---

**Method:** WI MOD GRO  
**Description:** WIGRO GCV  
**Client:** SEYMOUR ENVIRONMENTAL SERVICES, INC.  
**Date:** September 22, 2010

**General Information:**

1 sample was analyzed for WI MOD GRO. All samples were received in acceptable condition with any exceptions noted below.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

Page 5 of 8

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: WATER WELL

Pace Project No.: 4037027

**Sample: WATER WELL**      **Lab ID: 4037027001**      Collected: 09/09/10 15:00      Received: 09/16/10 09:40      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>		Analytical Method: WI MOD GRO							
Benzene	<0.39	ug/L	1.0	0.39	1		09/20/10 11:52	71-43-2	
Ethylbenzene	<0.41	ug/L	1.0	0.41	1		09/20/10 11:52	100-41-4	
Methyl-tert-butyl ether	<0.38	ug/L	1.0	0.38	1		09/20/10 11:52	1634-04-4	
Naphthalene	<0.40	ug/L	1.0	0.40	1		09/20/10 11:52	91-20-3	
Toluene	<0.42	ug/L	1.0	0.42	1		09/20/10 11:52	108-88-3	
1,2,4-Trimethylbenzene	<0.43	ug/L	1.0	0.43	1		09/20/10 11:52	95-63-6	
1,3,5-Trimethylbenzene	<0.40	ug/L	1.0	0.40	1		09/20/10 11:52	108-67-8	
m&p-Xylene	<0.87	ug/L	2.0	0.87	1		09/20/10 11:52	179601-23-1	
o-Xylene	<0.38	ug/L	1.0	0.38	1		09/20/10 11:52	95-47-6	
a,a,a-Trifluorotoluene (S)	103	%	80-120		1		09/20/10 11:52	98-08-8	

### QUALITY CONTROL DATA

Project: WATER WELL  
Pace Project No.: 4037027

QC Batch: GCV/5612      Analysis Method: WI MOD GRO  
QC Batch Method: WI MOD GRO      Analysis Description: WIGRO GCV Water  
Associated Lab Samples: 4037027001

METHOD BLANK: 356975      Matrix: Water

Associated Lab Samples: 4037027001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.43	1.0	09/20/10 10:08	
1,3,5-Trimethylbenzene	ug/L	<0.40	1.0	09/20/10 10:08	
Benzene	ug/L	<0.39	1.0	09/20/10 10:08	
Ethylbenzene	ug/L	<0.41	1.0	09/20/10 10:08	
m&p-Xylene	ug/L	<0.87	2.0	09/20/10 10:08	
Methyl-tert-butyl ether	ug/L	<0.38	1.0	09/20/10 10:08	
Naphthalene	ug/L	<0.40	1.0	09/20/10 10:08	
o-Xylene	ug/L	<0.38	1.0	09/20/10 10:08	
Toluene	ug/L	<0.42	1.0	09/20/10 10:08	
a,a,a-Trifluorotoluene (S)	%	103	80-120	09/20/10 10:08	

LABORATORY CONTROL SAMPLE & LCSD: 356976      356977

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	20.4	20.2	102	101	80-120	.7	20	
1,3,5-Trimethylbenzene	ug/L	20	20.6	20.3	103	101	80-120	2	20	
Benzene	ug/L	20	20.7	20.6	104	103	80-120	.6	20	
Ethylbenzene	ug/L	20	20.8	20.5	104	103	80-120	1	20	
m&p-Xylene	ug/L	40	41.1	40.6	103	101	80-120	1	20	
Methyl-tert-butyl ether	ug/L	20	20.4	21.1	102	105	80-120	3	20	
Naphthalene	ug/L	20	20.1	20.6	101	103	80-120	2	20	
o-Xylene	ug/L	20	20.5	20.3	103	102	80-120	1	20	
Toluene	ug/L	20	20.7	20.5	104	103	80-120	.8	20	
a,a,a-Trifluorotoluene (S)	%				102	102	80-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 356978      356979

Parameter	Units	4036966009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	2090	1000	1000	3200	3150	111	106	31-178	2	20	
1,3,5-Trimethylbenzene	ug/L	597	1000	1000	1730	1710	114	111	66-145	2	20	
Benzene	ug/L	703	1000	1000	1800	1780	109	108	23-177	.7	20	
Ethylbenzene	ug/L	2350	1000	1000	3480	3430	113	108	63-144	1	20	
m&p-Xylene	ug/L	7320	2000	2000	9530	9420	110	105	39-172	1	20	
Methyl-tert-butyl ether	ug/L	<19.0	1000	1000	1040	1060	104	106	80-120	2	20	
Naphthalene	ug/L	747	1000	1000	1710	1750	96	100	63-140	2	20	
o-Xylene	ug/L	2100	1000	1000	3190	3160	109	106	60-150	1	20	
Toluene	ug/L	7020	1000	1000	8090	7950	107	93	53-164	2	20	
a,a,a-Trifluorotoluene (S)	%						103	103	80-120			

## QUALIFIERS

Project: WATER WELL  
Pace Project No.: 4037027

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

### LABORATORIES

PASI-G Pace Analytical Services - Green Bay

## **APPENDIX B**

### **BORING LOGS**

Facility/Project Name <b>RISU Property</b>				Seymour Project Number <b>10.00</b>			License/Permit/Monitoring Number <b>B-1</b>						
Boring Drilled by <b>Badger State Drilling (Jr. Garwick) Seymour Environmental (Robyn Seymour)</b>						Date Installed <b>June 7, 2019</b>							
Boring or Well Number    WI Unique Well Number (assigned by DNR) <b>B-1</b>				Borehole Diameter <b>2-inch</b>			Water Level    Surface Elevation <b>dry</b>						
___ ¼ of ___ ¼ of Section    T    N    R    E				Grid Location (if applicable)									
County    Grant		County Code    22			Civil Town    Smelser								
S A M P L E	R E C O V E R Y	D E P T H (ft)	SOIL/ROCK DESCRIPTION	D I U R A M	U R C S	R Q D	Stable O V M (vppm)	Soil Properties				Blow Count	
1	28	4	Grass Dark brown silty topsoil  Brown sandy clay (fill) No staining or odor			ML  CL	0						
2	32	8	Light yellow brown clayey silt			ML	0						
3	8	12	Color change to gray, odor Refusal at 9 ft			ML	560						
Signature:			<i>Robyn Seymour</i>		Firm: Seymour Environmental Services, Inc.								



Facility/Project Name <b>RISU Property</b>				Seymour Project Number <b>10.00</b>		License/Permit/Monitoring Number <b>B-2</b>									
Boring Drilled by <b>Badger State Drilling (Jr. Garwick) Seymour Environmental (Robyn Seymour)</b>						Date Installed <b>June 7, 2019</b>									
Boring or Well Number <b>B-2</b>			WI Unique Well Number (assigned by DNR)			Borehole Diameter <b>2-inch</b>		Water Level <b>dry</b>		Surface Elevation					
___ ¼ of ___ ¼ of Section ___ T ___ N ___ R ___ E						Grid Location (if applicable)									
County		Grant		County Code		22		Civil Town			Smelser				
S A M P L E	R E C O V E R Y	D E P T H (ft)	SOIL/ROCK DESCRIPTION			D I A M E T E R	U N D E R S I D E	R Q D	S T A B L E O V L U M E (vppm)	Soil Properties					B l o w C o u n t
										q	W	LL	PL	P200	
1	48	4	Grass Dark brown silty topsoil, wet			ML		0							
2		8	Gray silty clay, hc odor			CL		1280							
3		12	Gray silty clay  Change to silty sand with slight gravel			CL SW		1340  12							
	0	16	Very little recovery  Refusal at 15 ft 4 inches					0							
Signature:			<i>Robyn Seymour</i>			Firm: Seymour Environmental Services, Inc.									

Facility/Project Name <b>RISU Property</b>				Seymour Project Number <b>10.00</b>		License/Permit/Monitoring Number <b>B-3</b>									
Boring Drilled by <b>Badger State Drilling (Jr. Garwick) Seymour Environmental (Robyn Seymour)</b>						Date Installed <b>June 7, 2019</b>									
Boring or Well Number <b>B-3</b>			WI Unique Well Number (assigned by DNR)			Borehole Diameter <b>2-inch</b>		Water Level <b>dry</b>		Surface Elevation					
___ ¼ of ___ ¼ of Section ___ T ___ N ___ R ___ E						Grid Location (if applicable)									
County		Grant		County Code		22		Civil Town			Smelser				
S A M P L E	R E C O R D	D E P T H (ft)	SOIL/ROCK DESCRIPTION			D I A M E T E R	U N D E R S I D E	R Q D	S T A B L E O V L U M E (vppm)	Soil Properties					B l o w C o u n t
										q	W	LL	PL	P200	
1	48	4	Grass Gravel Dark brown clay					0							
2	32	8	Change to medium brown silty clay					0							
3	22	12	Slightly lithified silty sand  Refusal at 11 ft 4 inches					0							
Signature:			<i>Robyn Seymour</i>			Firm: Seymour Environmental Services, Inc.									

Facility/Project Name <b>RISU Property</b>				Seymour Project Number <b>10.00</b>		License/Permit/Monitoring Number <b>B-4</b>							
Boring Drilled by <b>Badger State Drilling (Jr. Garwick) Seymour Environmental (Robyn Seymour)</b>						Date Installed <b>June 7, 2019</b>							
Boring or Well Number <b>B-4</b>			WI Unique Well Number (assigned by DNR)			Borehole Diameter <b>2-inch</b>		Water Level <b>dry</b>		Surface Elevation			
___ ¼ of ___ ¼ of Section ___ T ___ N ___ R ___ E						Grid Location (if applicable)							
County		Grant		County Code		22		Civil Town			Smelser		
S A M P L E	R E C O V E R Y	D E P T H (ft)	SOIL/ROCK DESCRIPTION	D I A M E T E R	U S E S	R Q D	Stable O V E R M (vppm)	Soil Properties					Blow Count
								q	W	LL	PL	P200	
1	12	4	Grass Dark brown clay			GM CL	0						
2	22	8	Change to light brown silty clay moist, no odor or staining			CL	0						
3	12	12	Same as above  Refusal at 10 ft 4 inches			CL	0						
Signature:			<i>Robyn Seymour</i>			Firm: Seymour Environmental Services, Inc.							

Facility/Project Name <b>RISU Property</b>				Seymour Project Number <b>10.00</b>		License/Permit/Monitoring Number <b>B-5</b>							
Boring Drilled by <b>Badger State Drilling (Jr. Garwick) Seymour Environmental (Robyn Seymour)</b>						Date Installed <b>June 7, 2019</b>							
Boring or Well Number    WI Unique Well Number (assigned by DNR) <b>B-5</b>				Borehole Diameter <b>2-inch</b>		Water Level    Surface Elevation <b>dry</b>							
___ ¼ of ___ ¼ of Section    T    N    R    E				Grid Location (if applicable)									
County    Grant		County Code    22		Civil Town    Smelser									
S A M P L E	R E C O V E R Y	D E P T H (ft)	SOIL/ROCK DESCRIPTION	D I A M E T E R	U S E S	R Q D	S t a b l e O V M (vppm)	Soil Properties  q    W    LL    PL    P200		B l o w C o u n t			
1	28	4	Grass Dark brown silty clay topsoil			GM CL	0						
2	22	8	Change to light brown silty clay moist, no odor or staining  Slight odor and staining			CL	0  580						
3	12	12	Same as above-staining and hc Odor. Refusal at 9 ft 8 inches			CL	1980						
Signature:			<i>Robyn Seymour</i>		Firm: Seymour Environmental Services, Inc.								

Facility/Project Name <b>RISU Property</b>				Seymour Project Number <b>10.00</b>		License/Permit/Monitoring Number <b>B-6</b>							
Boring Drilled by <b>Badger State Drilling (Jr. Garwick) Seymour Environmental (Robyn Seymour)</b>						Date Installed <b>June 7, 2019</b>							
Boring or Well Number <b>B-6</b>			WI Unique Well Number (assigned by DNR)			Borehole Diameter <b>2-inch</b>		Water Level <b>dry</b>		Surface Elevation			
___ ¼ of ___ ¼ of Section ___ T ___ N ___ R ___ E						Grid Location (if applicable)							
County		Grant		County Code		22		Civil Town			Smelser		
S A M P L E	R E C O V E R Y	D E P T H (ft)	SOIL/ROCK DESCRIPTION	D I A M E T E R	U S E S	R Q D	Stable O V E R M (vppm)	Soil Properties					Blow Count
								q	W	LL	PL	P200	
1	12	4	Gravel Dark brown clay			GM CL	0						
2	22	8	Change to light brown silty clay moist, no odor or staining			CL	0						
3	12	12	Same as above Refusal at 9 ft 10 inches			CL	0						
Signature:			<i>Robyn Seymour</i>			Firm: Seymour Environmental Services, Inc.							

Facility/Project Name <b>RISU Property</b>				Seymour Project Number <b>10.00</b>		License/Permit/Monitoring Number <b>B-7</b>							
Boring Drilled by <b>Badger State Drilling (Jr. Garwick) Seymour Environmental (Robyn Seymour)</b>						Date Installed <b>June 7, 2019</b>							
Boring or Well Number <b>B-7</b>			WI Unique Well Number (assigned by DNR)			Borehole Diameter <b>2-inch</b>		Water Level <b>dry</b>		Surface Elevation			
___ ¼ of ___ ¼ of Section ___ T ___ N ___ R ___ E						Grid Location (if applicable)							
County		Grant		County Code		22		Civil Town			Smelser		
S A M P L E	R E C O V E R Y	D E P T H (ft)	SOIL/ROCK DESCRIPTION	D I A M E T E R	U N D E R S I D E	R Q D	S T A B L E O V L U M E (vppm)	Soil Properties					B l o w C o u n t
								q	W	LL	PL	P200	
1	26	4	Grass Dark brown clay				GM CL	0					
2	32	8	Change to light brown silty clay moist, no odor or staining				CL	0					
3	8	12	Same as above Refusal at 9 ft 7 inches				CL	0					
Signature:			<i>Robyn Seymour</i>			Firm: Seymour Environmental Services, Inc.							