



CIVIL & ENVIRONMENTAL  
ENGINEERING, SURVEYING



August 17, 2017

Wisconsin Department of Natural Resources

Attn: Mr. Ralph Smith  
101 S. Webster Street  
PO Box 7921  
Madison, WI 53707-7921

**Subject:**

Update Report  
Hedlund DX  
10557 State Highway 70  
Falun, WI  
BRRTS #03-07-000151  
PECFA #54840-9999-00

**Dear Mr. Smith:**

Enclosed is the Update Report for the above-mentioned site. REI identified additional soil and groundwater contamination associated with the Hedlund DX release on the neighboring property. REI recommends a soil excavation with quarterly groundwater sampling to bring this investigation to closure.

Please call me with questions or comments toll free at 877-734-7745 or contact me electronically at [dlarsen@reiengineering.com](mailto:dlarsen@reiengineering.com).

Sincerely,  
REI Engineering, Inc.

David N. Larsen, P.G.  
Hydrogeologist/Project Manager

Enclosure

CC: Burnett County, Attn: Mr. Nathan Ehalt, 7410 County Road K, #116, Webster, WI 54872



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4080 N. 20th Avenue Wausau, WI 54401  
715-675-9784 [REIengineering.com](http://REIengineering.com)

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CIVIL & ENVIRONMENTAL  
ENGINEERING, SURVEYING

UPDATE REPORT  
HEDLUND DX  
FALUN, WISCONSIN

WDNR BRRTS #03-07-000151  
PECFA #54840-9999-00  
REI PROJECT #7367



COMPREHENSIVE  
SERVICES WITH  
PRACTICAL  
SOLUTIONS

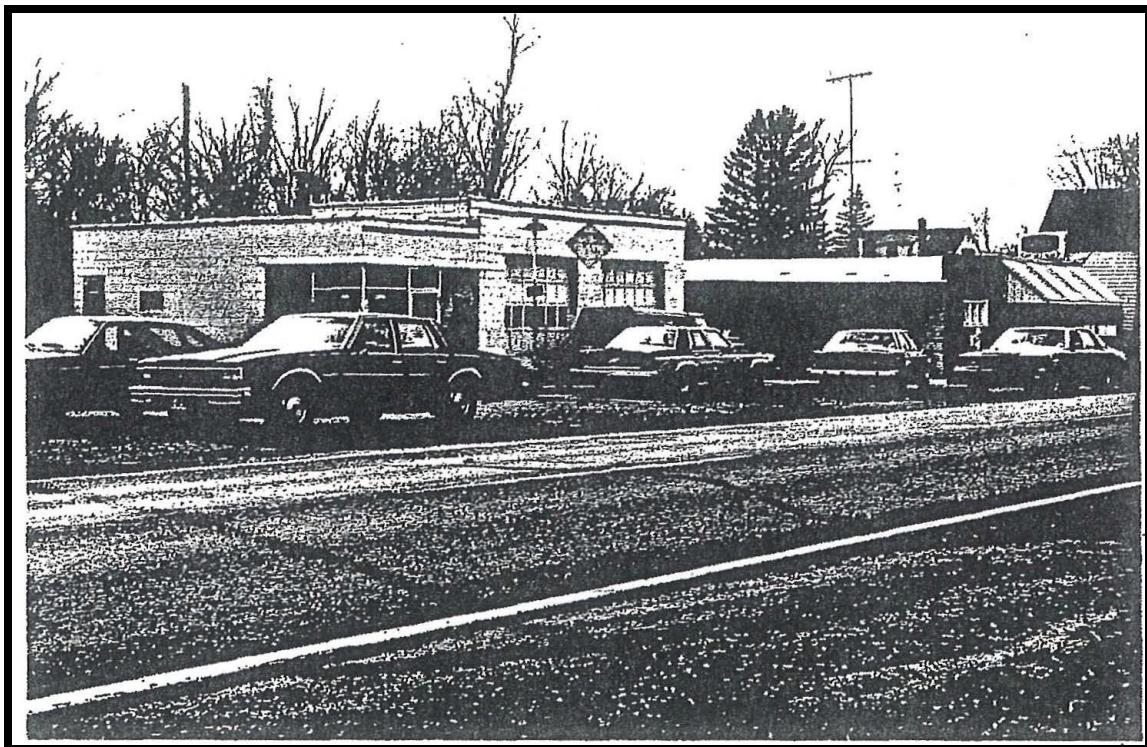


## **UPDATE REPORT**

**HEDLUND DX  
10557 STATE HIGHWAY 70  
FALUN, WI**

**BRRTS #03-07-000151  
PECFA #54840-9999-00**

**REI #7367**



### **PREPARED FOR:**

**Burnett County  
Attn: Mr. Nathan Ehalt  
7410 Cty Road K, #116  
Siren, WI 54872**

**AUGUST 2017**

## UPDATE REPORT

**HEDLUND DX  
10557 STATE HIGHWAY 70  
FALUN, WI**

**BRRTS #03-07-000151  
PECFA #54840-9999-00**

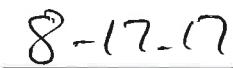
**REI #7367**

The recommendations contained in this report are based on the information obtained from our study of the site and were arrived at in accordance with accepted hydrogeologic and engineering practices at this time and location.

"I, Scott Blado, hereby certify that I am a scientist as that term is defined in s. NR 712.03 (3), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."



Environmental Scientist



Date

"I, David N. Larsen, hereby certify that I am a registered Professional Geologist in the state of Wisconsin as defined in Wisconsin Statutes Chapter 470.01. I also certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."



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## **UPDATE REPORT**

**HEDLUND DX  
10557 STATE HIGHWAY 70  
FALUN, WI**

**BRRTS #03-07-000151  
PECFA #54840-9999-00**

**REI #7367**

### **1.0 INTRODUCTION**

The Hedlund DX site is located in the NW  $\frac{1}{4}$  of the NW  $\frac{1}{4}$  of Section 19, Township 38 North, Range 17 West, in the Town of Daniels, Burnett County, Wisconsin (Figure 1). The site address is 10557 State Highway 70, Falun, Wisconsin 54840. Wisconsin Transverse Mercator (WTM) coordinates are 323585, 591806.

During the completion of the approved scope of services, it was determined that the Hedlund DX release had migrated beyond the property boundary and impacted the neighboring property to the east. The property to the east, Bob's Service (BRRTS #03-07-000148) is currently undergoing an environmental investigation.

### **2.0 SUMMARY OF ACTIVITIES**

#### **2.1 Geoprobe Borings**

REI was on-site to oversee the advancement of four (4) Geoprobe push borings (GP8-GP11) on May 22, 2017. Gestra Engineering, Inc., Milwaukee, WI was subcontracted to complete the Geoprobe advancement. All borings were advanced to a depth of fifteen (15) feet bls . Field work for the Bob's Service investigation (Geoprobe soil and groundwater sampling) was conducted during the May 22, 2017 mobilization. A copy of the Bob's Service Update Report is included in Appendix A.

The borings were placed on the neighboring property to the east (Bob's Service). Two (2) of the borings were advanced in the location of the former Hedlund DX 1,000-gallon UST that was installed on the Bob's Service property. Two (2) additional borings were advanced in the northwest corner of the Bob's Service property that also appear to have been impacted from the Hedlund DX release.

Figure 2 documents the locations of the soil borings advanced during the site investigation. Soil Boring Logs (WDNR Form 4400-122) and Borehole Abandonment Forms (WDNR Form 3300-5) are included in Appendix B. Methods and Procedures are included in Appendix C. Investigative waste disposal is included in Appendix D.

A total of seven (7) soil samples and two (2) groundwater samples were collected and submitted for laboratory analysis during this scope of services. Soil samples were obtained to describe the lateral and vertical extent of the petroleum contamination in the subsurface. Analytical results were directly compared against the State of Wisconsin's cleanup criteria listed in the Chapter NR720. Numerous soil sample locations document the presence of petroleum compounds exceeding the NR720.09 (04) Residual Contaminant Level (RCL). Soil analytical results are summarized on Table 1.

The soil borings performed during the Hedlund DX investigation indicate the site geology consists mainly of gravel and sand fill material overlying clay to a depth of approximately fourteen (14) feet below land surface (bls) to encounter of saturated fine to medium grained sands.

Soil samples at soil borings GP8 and GP9 were not significantly impacted, but both groundwater samples documented elevated petroleum impacts. Soil boring GP8 appears to have been advanced adjacent to the former 1,000-gallon UST and GP9 appears to have been advanced directly into the backfill of the former UST location. The soil samples collected at sample locations GP10 and GP11 documented significant petroleum impacts to the unsaturated soil and were likely a result of releases associated with the Hedlund DX dispenser location. Figure 3 presents the estimated extent of petroleum related soil contamination.

Groundwater samples were also collected from Borings GP8 and GP9. A groundwater sample was attempted from GP11, but yield was insufficient to allow sample to be collected. Groundwater analytical results revealed impact exceeding NR 140 enforcements standards at both Geoprobe boring locations. Geoprobe groundwater analytical results are included in Table 2. Locations of the completed Geoprobe borings are included in Figure 2. Laboratory analytical results are included in Appendix E.

### **3.0 Conclusion**

REI is recommending the completion of a soil excavation at the Hedlund DX site to remove the known contaminant mass and limit further contaminant loading to groundwater. Due to artesian conditions, groundwater will need to be dewatered and treated to allow the excavation to reach the intended depth of approximately fourteen (14) feet. REI is also recommending quarterly groundwater sampling be completed during the investigation. Groundwater samples should, at a minimum, be sampled for PVOC and naphthalene compounds and the neighboring potable wells be sampled for VOC's using EPA method 524.4.

**Table 1**  
**Summary of Soil Analytical Results**  
**Geoprobe Borings**  
**Hedlund DX**  
**Falun, Wisconsin**

Petroleum VOC's ( $\mu\text{g}/\text{kg}$ )	Date -->		5/22/2017		5/22/2017		5/22/2017		
	Sample ID -->		GP8		GP9		GP10		
	Sample Depth (Feet) -->		2-4		12-13		2-4		
Percent Moisture -->		29.6%		30.5%		13.5%		27.0%	
Lead (mg/kg)	400	13.5	BTV @52	20.4	14.7	9.7	15.7	18.2	
Non-Industrial Not-To-Exceed DC RCL		NR 140 Groundwater Pathway Protection (DF=2)							
Benzene	1,490	5.1	< 29.4	149	< 39.7	902	4,140	<b>6,360</b>	19,000
Ethylbenzene	7,470	1,570	< 29.4	343	< 39.7	450	3,770	<b>17,700</b>	24,800
Toluene	818,000	1,107	< 29.4	< 26.9	< 39.7	107	1,620	22,000	44,500
Xylenes (Total)	258,000	3,940	< 58.8	475	< 79.4	284	9,843	74,900	87,400
Methyl tert Butyl Ether	59,400	27	< 29.4	< 26.9	< 39.7	< 25	41.8 <sup>j</sup>	797	1,180
1,2,4-Trimethylbenzene	89,800	NS	< 29.4	< 26.9	< 39.7	60.9 <sup>j</sup>	4,270	42,100	35,600
1,3,5-Trimethylbenzene	182,000	NS	< 29.4	< 26.9	< 39.7	131	1,230	15,900	14,000
Trimethylbenzenes (Total)	NS	1,379	< 29.4	< 26.9	< 39.7	192	5,500	58,000	49,600
Naphthalene	5,150	658.7	< 29.4	< 26.9	< 39.7	166	883	<b>6,720</b>	8,390

**Notes:**

NR720 Standards Obtained From WDNR Online Excel Database  
RCL - NR 720 Proposed Soil Residual Contaminant Level

DC - Direct Contact

Background Threshold Value

Exceeds Non-Industrial Not-To-Exceed DC RCL

Exceeds NR 140 Groundwater Pathway Protection

NS - No Standard

<sup>j</sup> - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

< - Concentration below listed laboratory detection limit

NA - Not Analyzed

**Table 2**  
**Summary of Groundwater Analytical Results**  
**Geoprobe Borings**  
**Hedlund DX**  
**Falun, Wisconsin**

Detected VOC Parameters	Sample Location ->			GP8	GP9
	ES	PAL	Date ->	5/22/2017	5/22/2017
Benzene	5	0.5	µg/l	<b>158</b>	<b>932</b>
Ethylbenzene	700	140	µg/l	125	<b>794</b>
Toluene	800	160	µg/l	25.3	166
Xylenes (mixed isomers)	2,000	400	µg/l	320.5	1,415.9
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	2.3	16.5
Trimethylbenzenes (mixed isomers)	480	96	µg/l	83	<b>772</b>
Naphthalene	100	10	µg/l	11.0	<b>119</b>

*Notes:*

ES = NR140.10 Enforcement Standards

PAL = NR140.10 Preventive Action Limits

Enforcement Standard exceeded

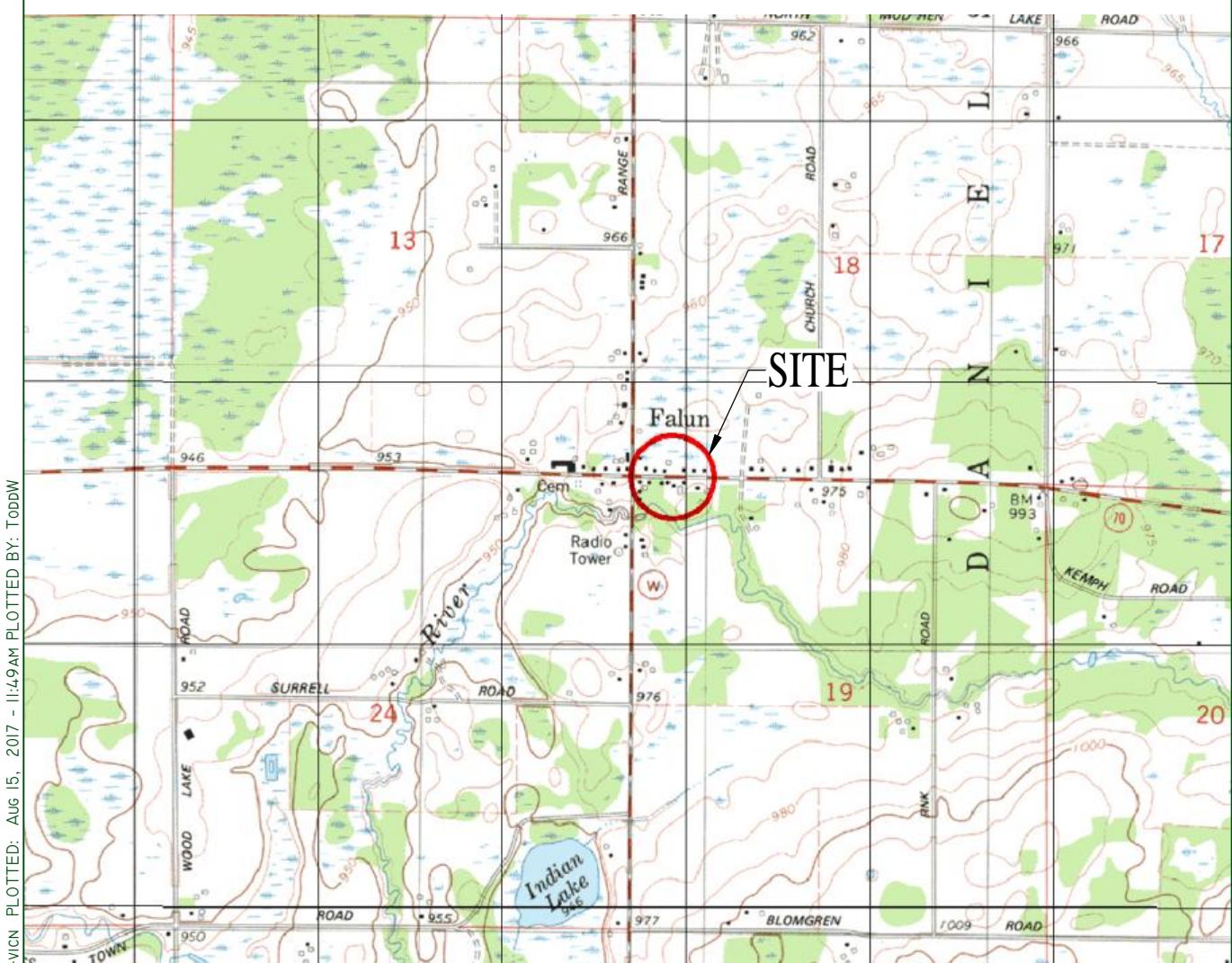
Preventive Action Limit exceeded

NA = Not Analyzed

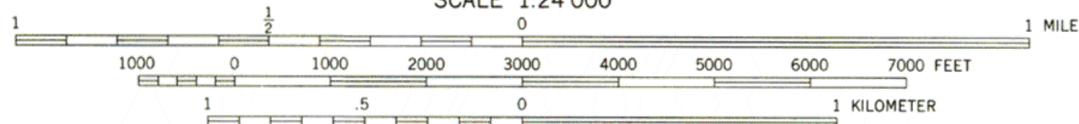
NS = Not Sampled

J = Estimated value, concentration between the Limit of Detection and the Limit of Quantitation

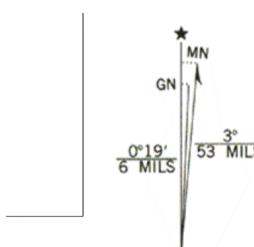
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CONTOUR INTERVAL 10 FEET  
 DOTTED LINES REPRESENT 5-FOOT CONTOURS  
 NATIONAL GEODETIC VERTICAL DATUM OF 1929



UTM GRID AND 1982 MAGNETIC NORTH  
 DECLINATION AT CENTER OF SHEET

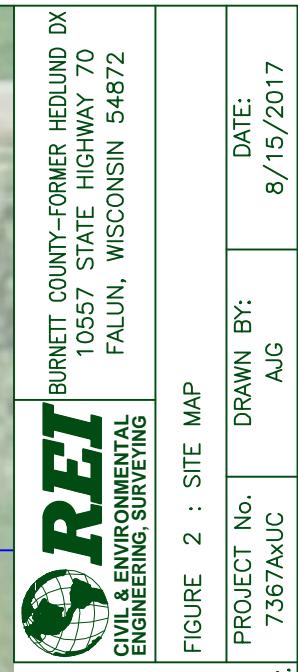
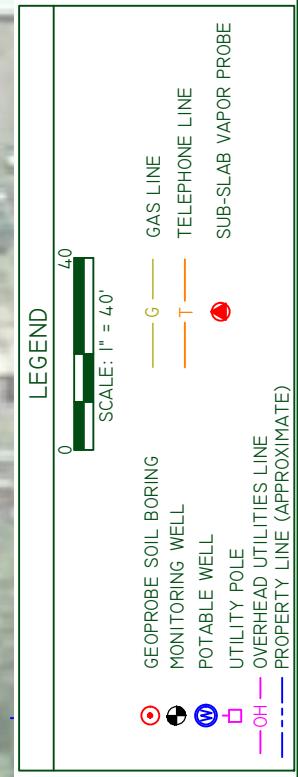
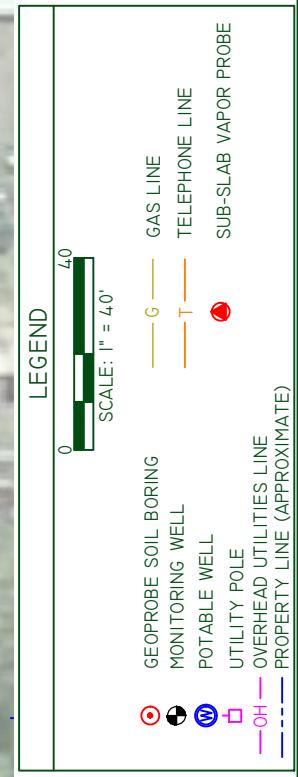
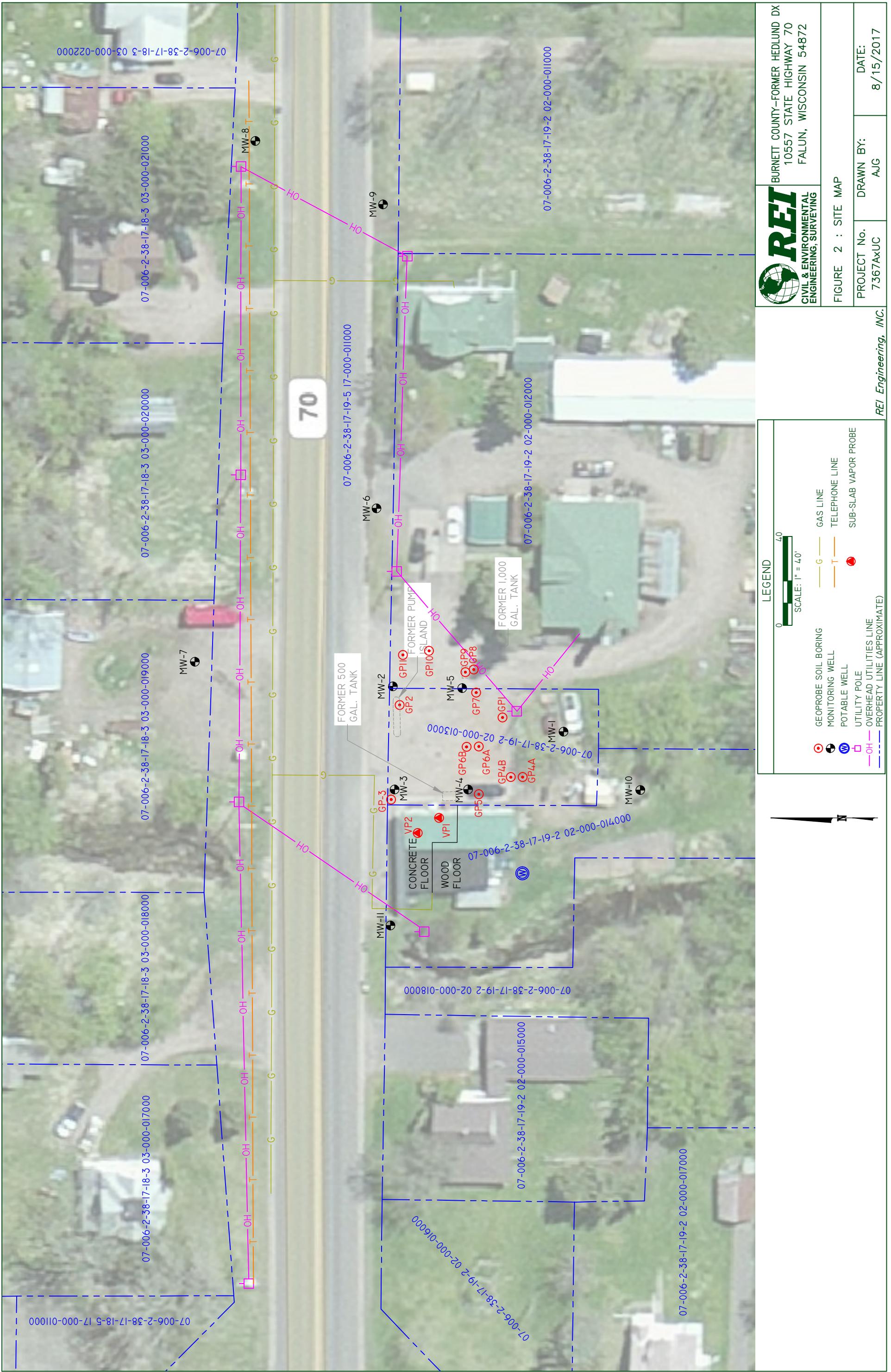
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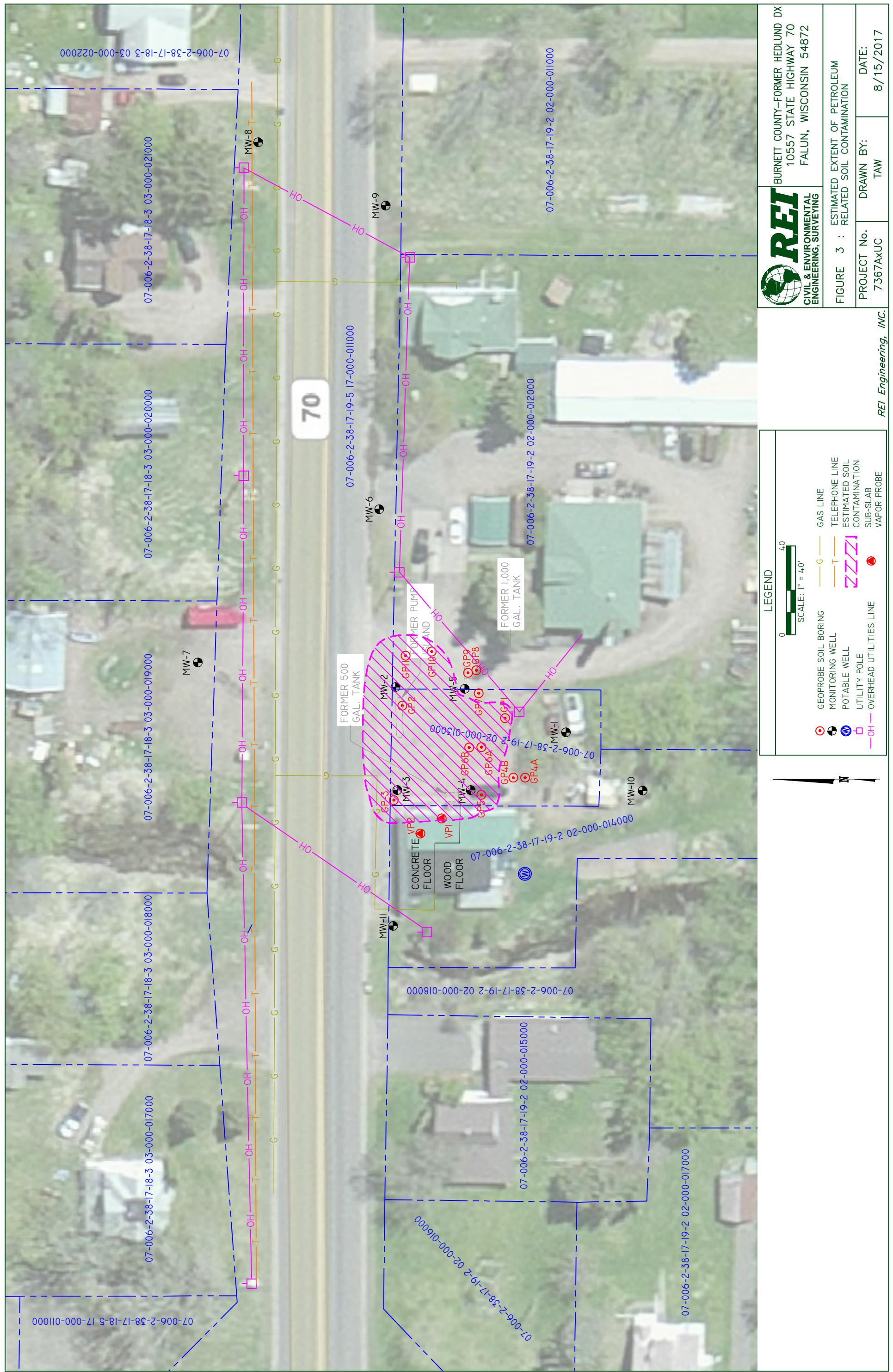
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*REI Engineering, Inc.*

BURNETT COUNTY—FORMER HEDLUND DX 10557 STATE HIGHWAY 70 FALUN, WISCONSIN 54872	FIGURE 1 : SITE VICINITY MAP		
PROJECT NO.	7367AxUC	DRAWN BY:	TAW

DATE:  
 8/15/2017





DRAWING FILE: P:\13300-7399\7367 - HELDNU ND DX\DWG\7367-SOIL-CONTAM.DWG LAYOUT: SOIL-CONTAM.PLT

## **APPENDIX A**

### **BOB'S SERVICE UPDATE REPORT**





August 9, 2017

Wisconsin Department of Natural Resources

Attn: Mr. Ralph Smith  
101 S. Webster Street  
PO Box 7921  
Madison, WI 53707



**Subject:**

Update Report  
Bob's Service  
10545 STH 70  
Falun, WI 54840  
BRRTS #03-07-000148  
PECFA #54872-8522-31

**Dear Mr. Smith:**

Enclosed is the Update Report for the above-mentioned site. This report documents the completion of the soil and groundwater sampling via Geoprobe at the subject property. Minimal soil and groundwater contamination was encountered during the advancement of Geoprobe borings at the site.

The contamination does not appear to have originated at this property. The adjacent property to the west, open LUST site Hedlund DX (BRRTS#03-07-000151), appears to be responsible for the majority of the contamination observed at the Bob's Service site.

Please call me with questions or comments toll free at 877-734-7745 or contact me electronically at [sblado@reiengineering.com](mailto:sblado@reiengineering.com).

Sincerely,  
REI Engineering, Inc.

Scott J. Blado  
Environmental Scientist

Enclosures

CC: Mr. Robert Anderson, 10531 STH 70, Siren, WI 54872



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4080 N. 20th Avenue Wausau, WI 54401  
715-675-9784 REIengineering.com

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CIVIL & ENVIRONMENTAL  
ENGINEERING, SURVEYING

## UPDATE REPORT

BOB'S SERVICE  
10545 STH 70  
FALUN, WI 54840

BRRTS#03-07-000148  
PECFA#54872-8522-31



**COMPREHENSIVE  
SERVICES WITH  
PRACTICAL  
SOLUTIONS**



## **UPDATE REPORT**

**BOB'S SERVICE  
10545 STH 70  
FALUN, WI 54840  
BRRTS #03-07-000148**

**PECFA#54872-8522-31  
REI #7679**



### **PREPARED FOR:**

**Bob's Service  
Mr. Robert Anderson  
10531 STH 70  
Siren, WI 54872**

**AUGUST 2017**

## **UPDATE REPORT**

**BOB'S SERVICE  
10545 STH 70  
FALUN, WI 54840  
BRRTS #03-07-000148**

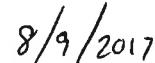
**PECFA#54872-8522-31  
REI #7679**

The recommendations contained in this report are based on the information obtained from our study of the site and were arrived at in accordance with accepted hydrogeologic and engineering practices at this time and location.

"I, Scott Blado, hereby certify that I am a scientist as that term is defined in s. NR 712.03 (3), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."



Environmental Scientist



Date

"I, David N. Larsen, hereby certify that I am a registered Professional Geologist in the State of Wisconsin as defined in the Wisconsin Statutes Chapter 470.01. I am also a hydrogeologist as that term is defined in s. NR 712.03 (3), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."



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## **UPDATE REPORT**

**BOB'S SERVICE  
10545 STH 70  
FALUN, WI 54840  
BRRTS #03-07-000148**

**PECFA#54872-8522-31  
REI #7679**

### **1.0 INTRODUCTION**

The Bob's Service property is located at 10545 STH 70, in the NW  $\frac{1}{4}$  of the NW  $\frac{1}{4}$  of Section 19 Township 38 North, Range 17 West, Town of Daniels, Burnett County, Wisconsin (Figure 1).

The Wisconsin Department of Natural Resources (WDNR) was notified of the release in 1990 following reconstruction of State Highway 70. The retail petroleum system was removed in 1993 and an environmental site investigation was initiated. A Site Investigation Report was submitted to the WDNR in 1996. The majority of the contamination identified on site was observed in the soil at a depth of five (5) to nine (9) feet and may have been related to groundwater impact rather than soil impacts. Additionally, the greatest soil impact was observed at TP3 from 7.5-9.5-foot depth and returned a benzene detection of 58.5 ppb. The neighboring Hedlund DX site, located immediately west of Bob's Service, is also a known petroleum impacted site and it was very probable that the Bob's Service site was being impacted from the release at the Hedlund DX site. Site work on Bob's Service stalled until the investigation at the Hedlund site was initiated. REI Engineering, Inc. (REI) was retained to complete the environmental investigation at the Hedlund DX site in 2015.

REI was retained to complete the Bob's Service investigation in 2017 and had approval for the advancement of ten (10) Geoprobe borings at the site to determine the degree and extent of the residual contamination and the preparation of a follow-up report.

## **2.0 SUMMARY OF ACTIVITIES**

### **2.1 Geoprobe Boring Advancement**

A total of ten (10) Geoprobe borings were advanced during the investigation. Two (2) soil samples were collected from each Geoprobe boring location. Groundwater samples were collected from five (5) locations where temporary monitoring wells were placed. Locations of the borings are presented on Figure 2.

Geoprosbes were advanced based on estimated locations of former underground storage tanks and dispenser systems. A summary of groundwater analytical results is presented in Table 1 and a summary of soil sample analytical results are presented in Table 2. Investigative waste disposal documentation is included in Appendix A. Groundwater and soil samples were collected and submitted to a State certified laboratory for chemical analysis. Copies of the complete analytical chemistry reports are presented in Appendix B.

### **2.2 Discussion**

Soil contamination exceeding NR140 Groundwater Pathway Protection levels was discovered in boring "B1" at a depth of eight to nine (8-9) feet. Boring location B3 also revealed a detection of benzene in soil exceeding the NR140 Groundwater Pathway Protection level. This detection was noted with a lab qualifier ( J ), meaning it was between the limit of detection (LOD) and the limit of quantification (LOQ) and should be considered an estimate.

In addition, groundwater contamination exceeding NR720 Enforcement Standards and Preventative Action Levels was observed in boring B1. These boring locations are located near the northern property boundary of the Bob's Service site. Aside from the groundwater sample from B10 which had detections of petroleum related compounds below all standards, all other boring locations were non-detect for all soil and groundwater parameters analyzed. Boring locations are depicted on Figure 2.

Open LUST site, Hedlund DX (BRRTS#03-07-000151) exist immediately adjacent to the Bob's Service site to the west. Extensive contamination has been documented at

the Hedlund DX site, and the limited identified soil contamination at the Bob's Service site is likely attributable to the release at the Hedlund DX site. Information specific to the Hedlund DX release has been provided to the WDNR and is publicly available for review.

### **3.0 CONCLUSION AND RECOMMENDATIONS**

Based on soil and groundwater sampling results, it appears that the limited contamination identified at the Bob's Service site is attributable to the adjacent Hedlund DX open LUSTR site. Boring location B1 revealed levels of soil and groundwater contamination exceeding WDNR standards. Based on the vicinity of the identified contamination in relation to the adjacent site, it is likely that the contaminant source is the same for both properties.

It is the opinion of REI Engineering, Inc. that no further investigation is warranted into the Bob's Service site. Soil and groundwater sampling near the former UST basin and dispensers has indicated that identified contamination at the site is not resultant of the Bob's Service petroleum system. Soil and groundwater data collected during this investigation and the historical investigation scopes should be utilized to aid in defining the degree and extent of the contamination originating from the Hedlund DX site, adjacent to the west. REI recommends that the Bob's Service site should be submitted for closure.

**Table 1a**  
**Summary of Groundwater Analytical Results - Geoprosbes**  
**Bob's Service**  
**10545 STH 70, Falun, WI**

<b>VOC Parameters</b>			Sample Location	B1	B2	B6	B7	B10
	ES	PAL						
Benzene	5	0.5	Units					
Toluene	800	160	µg/l	<b>1,100</b>	<0.40	<0.40	<0.40	<0.40
Ethylbenzene	700	140	µg/l	648	0.431	<0.39	<0.39	<0.39
Xylenes (mixed isomers)	2,000	400	µg/l	553	<0.39	<0.39	<0.39	0.84]
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	1,928	<0.80	<0.80	<0.80	22.7
Trimethylbenzenes (mixed isomers)	480	96	µg/l	12.1	<0.48	<0.48	<0.48	<0.48
				380.8	<0.42	<0.42	<0.42	19.4

Notes:

ES = NR140.10 Enforcement Standards  
 PAL = NR140.10 Preventive Action Limits

NA = Not Analyzed

Enforcement Standard exceeded  
 Preventive Action Limit exceeded

<b>BOLD</b>
<i>Italics</i>

J = Estimated value, concentration between the Limit of Detection and the Limit of Quantitation

**Table 1b**  
**Summary of Potable Water Analytical Results**  
**Bob's Service**  
**10545 STH 70, Falun, WI**

PARAMETER	Potable		
	ES	PAL	5/22/17
<b>Detected VOC's (ug/L)</b>			
Benzene	5	0.5	<0.086
Bromobenzene			<0.081
Bromoform			<0.16
Bromochloromethane			<0.090
Bromodichloromethane	0.6	0.06	<0.23
Bromomethane	10	1	<0.20
n-Butylbenzene			<0.081
sec-Butylbenzene			<0.063
tert-Butylbenzene			<0.097
Carbon Tetrachloride	5	0.5	<0.076
Chlorobenzene			<0.068
Chloroethane	400	80	<0.18
Chloroform	6	0.6	<0.10
Chloromethane	30	3	<0.21
2-Chlorotoluene			<0.11
4-Chlorotoluene			<0.10
1,2-Dibromo-3-chloropropane	0.2	0.02	<0.18
Dibrochloromethane	60	6	<0.13
1,2-Dibromoethane (EDB)	0.05	0.005	<0.091
Dibromomethane			<0.098
1,2-Dichlorobenzene	600	60	<0.10
1,3-Dichlorobenzene	600	120	<0.082
1,4-Dichlorobenzene	75	15	<0.075
Dichlorodifluoromethane	1,000	200	<0.16
1,1-Dichloroethane	850	85	<0.088
1,2-Dichloroethane	5	0.5	<0.092
1,1-Dichloroethene	7	0.7	<0.089
cis-1,2-Dichloroethene	70	7	<0.085
trans-1,2-Dichloroethene	100	20	<0.11
1,2-Dichloropropane	5	0.5	<0.084
1,3-Dichloropropane			<0.094
2,2-Dichloropropane			<0.097
1,1-Dichloropropene			<0.080
cis-1,3-Dichloropropene	0.4	0.04	<0.071
trans-1,3-Dichloropropene	0.4	0.04	<0.055
Ethylbenzene	700	140	<0.051
Hexachloro(1,3)butadiene			<0.11
Isopropylbenzene			<0.11
p-Isopropyltoluene			<0.083
Methylene Chloride	5	0.5	<0.20
Naphthalene	100	10	<0.064
n-Propylbenzene			<0.096
Styrene	100	10	<0.075
1,1,1,2 - Tetrachloroethane	70	7	<0.062
1,1,2,2-Tetrachloroethane	0.2	0.02	<0.11
Tetrachloroethene	5	0.5	<0.12
Toluene	800	160	<0.080
1,2,3-Trichlorobenzene			<0.10
1,2,4-Trichlorobenzene	70	14	<0.12
1,1,1-Trichloroethane	200	40	<0.10
1,1,2-Trichloroethane	5	0.5	<0.098
Trichloroethene	5	0.5	<0.044
Trichlorofluoromethane	3,490	698	<0.13
1,2,3-Trichloropropane	60	12	<0.073
Total Trimethylbenzenes	480	96	<0.083
Vinyl Chloride	0.2	0.02	<0.098
Total Xylenes	2,000	400	<0.073

PAL = Preventive Action Limit

ES = Enforcement Standards

Exceeds Enforcement Standard

Exceeds Preventative Action Limit

NA - Not Analyzed

< - Concentration less than listed detection limit

J - Estimated Value between detection limit and quantification limit

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**Table 2**  
**Summary of Soil Analytical Results - Geoprosbes**  
**Bob's Service**  
**10545 STH 70, Falun, WI**

		Date -->	5/22/17	B1	B1	B2	B2	B3	B3	B4	B4	B5	B5
		Sample ID -->											
		Sample Depth -->	2.4	8.9	2.4	13.14	2.4	13.14	2.4	8.9	2.4	8.9	2.4
		Percent Moisture -->	9.2	29.1	27.3	22.2	17.1	30.5	11.9	22.8	11.6	30.3	30.3
Petroleum VOC's (mg/kg)	Non-Industrial Not-To-Exceed DC RCL	NR 140 Groundwater Pathway Protection (DF=2)											
Benzene	1.49	0.0051	<0.0263	11.8	<0.0250	<0.0250	0.0824	<0.0250	<0.0373	<0.0250	<0.0250	<0.0250	
Ethylbenzene	7.47	1.57	<0.0263	5.91	<0.0250	<0.0250	<0.0250	<0.0250	<0.0373	<0.0250	<0.0250	<0.0250	
Toluene	818	1.1072	<0.0263	8.11	<0.0250	<0.0250	<0.0250	<0.0250	<0.0373	<0.0250	<0.0250	<0.0250	
Xylenes (Total)	258	3.9400	<0.0526	21.090	<0.050	<0.050	<0.050	<0.050	<0.0746	<0.050	<0.050	<0.050	
Methyl tert Butyl Ether	59.4	0.027	<0.0263	0.120f	<0.0250	<0.0250	<0.0250	<0.0250	<0.0373	<0.0250	<0.0250	<0.0250	
1,2,4-Trimethylbenzene	89.8	NS	<0.0263	7.62	<0.0250	<0.0250	<0.0250	<0.0250	<0.0373	<0.0250	<0.0250	<0.0250	
1,3,5-Trimethylbenzene	182	NS	<0.0263	2.43	<0.0250	<0.0250	<0.0250	<0.0250	<0.0373	<0.0250	<0.0250	<0.0250	
Trimethylbenzenes (Total)	NS	1.3738	<0.0263	10.05	<0.0500	<0.0500	<0.0500	<0.0500	<0.0373	<0.0500	<0.0500	<0.0500	
Naphthalene	5.16	0.6587	<0.0263	2.15	<0.0250	<0.0250	<0.0250	<0.0250	<0.0373	<0.0250	<0.0250	<0.0250	
		Date -->	5/22/17	B6	B6	B7	B7	B8	B8	B9	B9	B10	B10
		Sample ID -->											
		Sample Depth -->	2.4	13.14	2.4	12.14	2.4	11.13	2.4	8.9	2.4	8.9	2.4
		Percent Moisture -->	15.6	27.3	11.2	30.6	12.0	30.4	19.6	15.3	19.7	15.3	19.7
Petroleum VOC's (mg/kg)	Non-Industrial Not-To-Exceed DC RCL	NR 140 Groundwater Pathway Protection (DF=2)											
Benzene	1.49	0.0051	<0.0263	<0.0250	<0.0250	<0.0250	<0.0263	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	
Ethylbenzene	7.47	1.57	<0.0263	<0.0250	<0.0250	<0.0250	<0.0263	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	
Toluene	818	1.1072	<0.0263	<0.0250	<0.0250	<0.0250	<0.0263	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	
Xylenes (Total)	258	3.9400	<0.0526	0.050	<0.050	<0.050	<0.0526	<0.050	<0.050	<0.050	<0.050	<0.050	
Methyl tert Butyl Ether	59.4	0.027	<0.0263	0.120f	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	
1,2,4-Trimethylbenzene	89.8	NS	<0.0263	2.43	<0.0250	<0.0250	<0.0263	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	
1,3,5-Trimethylbenzene	182	NS	<0.0263	10.05	<0.0500	<0.0500	<0.0500	<0.0500	<0.0373	<0.0500	<0.0500	<0.0500	
Trimethylbenzenes (Total)	NS	1.3738	<0.0263	2.15	<0.0250	<0.0250	<0.0250	<0.0250	<0.0373	<0.0250	<0.0250	<0.0250	
Naphthalene	5.16	0.6587	<0.0263	<0.0250	<0.0250	<0.0250	<0.0263	<0.0250	<0.0373	<0.0250	<0.0250	<0.0250	

Notes:

NR720 Standards Obtained From WDNR Online Excel Database

RCL - NR 720 Soil Residual Contaminant Level

DC - Direct Contact

< - Concentration below listed laboratory detection limit

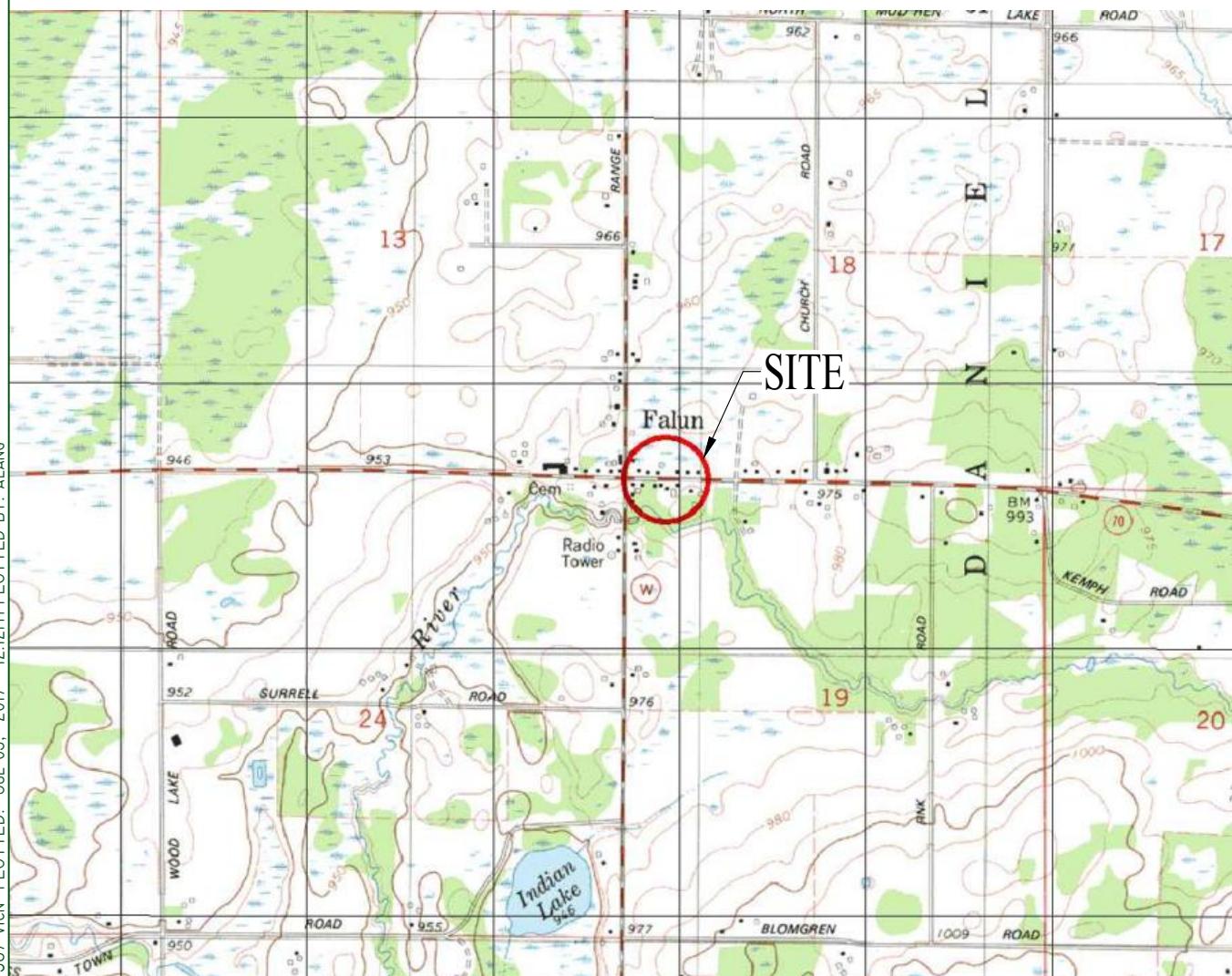
NS - No Standard

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

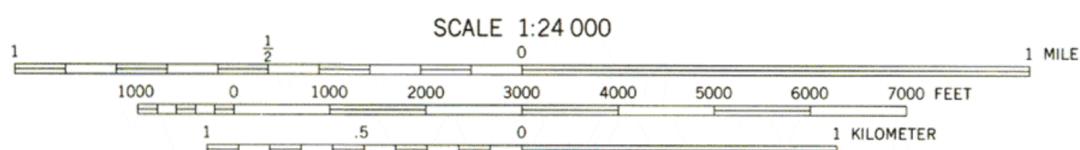
Exceeds non-industrial not to exceed DC RCL

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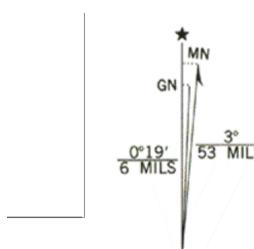


SCALE 1:24 000



1 MILE  
1 KILOMETER

CONTOUR INTERVAL 10 FEET  
DOTTED LINES REPRESENT 5-FOOT CONTOURS  
NATIONAL GEODETIC VERTICAL DATUM OF 1929

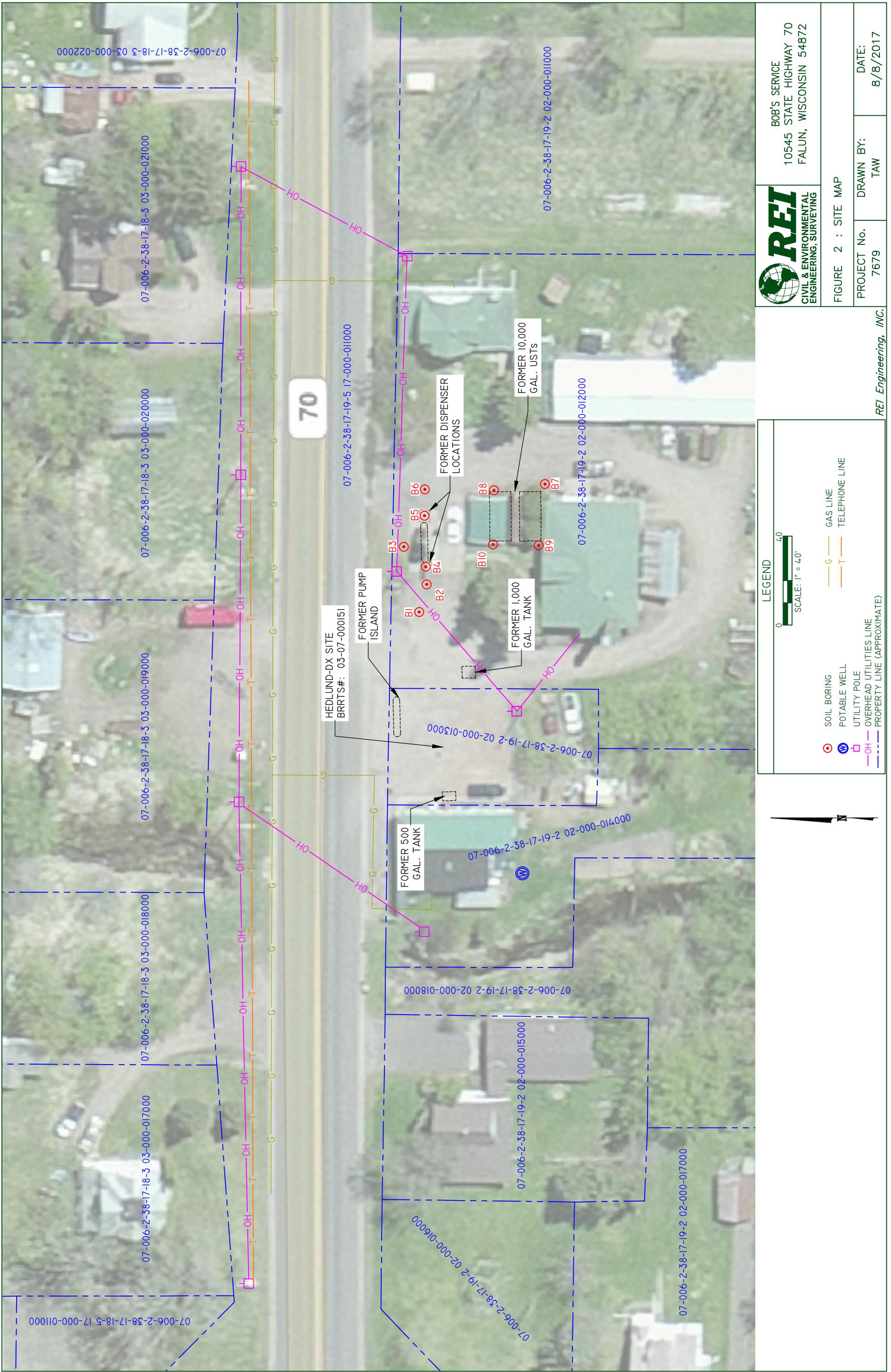


UTM GRID AND 1982 MAGNETIC NORTH  
DECLINATION AT CENTER OF SHEET

FALUN, WIS.  
SE/4 GRANTSBURG 15' QUADRANGLE  
N4545-W9230/7.5

1982  
DMA 2475 I SE-SERIES V861





## **APPENDIX A**

### **INVESTIGATIVE WASTE DISPOSAL DOCUMENTATION**



**LINCOLN COUNTY LANDFILL 715-536-9636**  
Site: N4750 Landfill Lane, Merrill, WI 54452  
Mailing: 801 N Sales St, Ste 201, Merrill, WI 54452  
**OPERATING HOURS:**  
Monday-Friday  
SUMMER (May 1 - Sept. 30) 7:00 am - 4:00 pm  
WINTER (Oct. 1 - Apr. 30) 8:00 am - 4:00 pm  
1st and 3rd Sat. 8:00 am - Noon

DATE: 5/31/2017                    TICKET #: 230390                    Vehicle #:  
Time In: 08:54 AM                    Time Out: 08:54 AM

BILL TO: R.E.I.  
HAULER : R.E.I.

JOB : 17 - 3 B - RE #7367axuc Hedlund DX, Falun  
PO# : REI job #7367axuc

Contaminated soil \$150 minimum (CON MIN)                    1 un  
Gross: 1                              Tare: 0                              Net Weight: 1

Scale Notes:                              Charge Transaction

HAVE A NICE DAY!

Customer Signature \_\_\_\_\_  
Weighed By: Administrator

I certify that the waste in this vehicle complies with the Wisconsin Recycling law and the landfill bans. I also agree to pay 1.5% per month Late payment charge after 30 days.

## **APPENDIX B**

### **SOIL BORING LOGS AND ABANDONMENT FORMS**



June 02, 2017

DAVID LARSEN  
REI  
4080 NORTH 20TH AVENUE  
Wausau, WI 54401

RE: Project: 7679 BOB'S SERVICE  
Pace Project No.: 40150524

Dear DAVID LARSEN:

Enclosed are the analytical results for sample(s) received by the laboratory on May 24, 2017. 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,



Brian Basten  
brian.basten@pacelabs.com  
(920)469-2436  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

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### **Minnesota Certification IDs**

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414	Minnesota Certification #: 027-053-137
A2LA Certification #: 2926.01	Mississippi Certification #: MN00064
Alabama Certification #: 40770	Montana Certification #: CERT0092
Alaska Contaminated Sites Certification #: UST-078	Nebraska Certification #: NE-OS-18-06
Alaska DW Certification #: MN00064	Nevada Certification #: MN00064
Arizona Certification #: AZ0014	New Hampshire Certification #: 2081
Arkansas Certification #: 88-0680	New Jersey Certification #: MN002
California Certification #: MN00064	New York Certification #: 11647
CNMI Saipan Certification #: MP0003	North Carolina DW Certification #: 27700
Colorado Certification #: MN00064	North Carolina WW Certification #: 530
Connecticut Certification #: PH-0256	North Dakota Certification #: R-036
EPA Region 8 Certification #: 8TMS-L	Ohio DW Certification #: 41244
Florida Certification #: E87605	Ohio VAP Certification #: CL101
Georgia Certification #: 959	Oklahoma Certification #: 9507
Guam EPA Certification #: MN00064	Oregon NwTPH Certification #: MN300001
Hawaii Certification #: MN00064	Oregon Secondary Certification #: MN200001
Idaho Certification #: MN00064	Pennsylvania Certification #: 68-00563
Illinois Certification #: 200011	Puerto Rico Certification #: MN00064
Indiana Certification #: C-MN-01	South Carolina Certification #: 74003001
Iowa Certification #: 368	Tennessee Certification #: TN02818
Kansas Certification #: E-10167	Texas Certification #: T104704192
Kentucky DW Certification #: 90062	Utah Certification #: MN00064
Kentucky WW Certification #: 90062	Virginia Certification #: 460163
Louisiana DEQ Certification #: 03086	Washington Certification #: C486
Louisiana DW Certification #: MN00064	West Virginia DW Certification #: 9952 C
Maine Certification #: MN00064	West Virginia WW Certification #: 382
Maryland Certification #: 322	Wisconsin Certification #: 999407970
Michigan Certification #: 9909	Wyoming via EPA Region 8 Certification #: 8TMS-L

### **Green Bay Certification IDs**

1241 Bellevue Street, Green Bay, WI 54302	Virginia VELAP ID: 460263
Florida/NELAP Certification #: E87948	South Carolina Certification #: 83006001
Illinois Certification #: 200050	Texas Certification #: T104704529-14-1
Kentucky UST Certification #: 82	Wisconsin Certification #: 405132750
Louisiana Certification #: 04168	Wisconsin DATCP Certification #: 105-444
Minnesota Certification #: 055-999-334	USDA Soil Permit #: P330-16-00157
New York Certification #: 12064	Federal Fish & Wildlife Permit #: LE51774A-0
North Dakota Certification #: R-150	

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 7679 BOB'S SERVICE  
Pace Project No.: 40150524

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40150524001	B1	Water	05/22/17 15:35	05/24/17 09:00
40150524002	B2	Water	05/22/17 15:55	05/24/17 09:00
40150524003	B6	Water	05/22/17 17:35	05/24/17 09:00
40150524004	B7	Water	05/22/17 17:55	05/24/17 09:00
40150524005	B10	Water	05/22/17 19:00	05/24/17 09:00
40150524006	B1 @ 2-4'	Solid	05/22/17 14:38	05/24/17 09:00
40150524007	B1 @ 8-9'	Solid	05/22/17 14:44	05/24/17 09:00
40150524008	B2 @ 2-4'	Solid	05/22/17 15:09	05/24/17 09:00
40150524009	B2 @ 13-14'	Solid	05/22/17 15:18	05/24/17 09:00
40150524010	B3 @ 2-4'	Solid	05/22/17 15:40	05/24/17 09:00
40150524011	B3 @ 13-14'	Solid	05/22/17 15:45	05/24/17 09:00
40150524012	B4 @ 2-4'	Solid	05/22/17 16:02	05/24/17 09:00
40150524013	B4 @ 8-9'	Solid	05/22/17 16:08	05/24/17 09:00
40150524014	B5 @ 2-4'	Solid	05/22/17 16:30	05/24/17 09:00
40150524015	B5 @ 12-14'	Solid	05/22/17 16:35	05/24/17 09:00
40150524016	B6 @ 2-4'	Solid	05/22/17 16:55	05/24/17 09:00
40150524017	B6 @ 13-14'	Solid	05/22/17 17:05	05/24/17 09:00
40150524018	B7 @ 2-4'	Solid	05/22/17 17:26	05/24/17 09:00
40150524019	B7 @ 12-14'	Solid	05/22/17 17:34	05/24/17 09:00
40150524020	B8 @ 2-4'	Solid	05/22/17 17:44	05/24/17 09:00
40150524021	B8 @ 11-13'	Solid	05/22/17 18:00	05/24/17 09:00
40150524022	B9 @ 2-4'	Solid	05/22/17 18:20	05/24/17 09:00
40150524023	B9 @ 8-9'	Solid	05/22/17 18:25	05/24/17 09:00
40150524024	B10 @ 2-4'	Solid	05/22/17 18:38	05/24/17 09:00
40150524025	B10 @ 11-13'	Solid	05/22/17 18:47	05/24/17 09:00
40150524026	POTABLE	Water	05/22/17 16:10	05/24/17 09:00

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: 7679 BOB'S SERVICE  
Pace Project No.: 40150524

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40150524001	B1	WI MOD GRO	ALD	10	PASI-G
40150524002	B2	WI MOD GRO	ALD	10	PASI-G
40150524003	B6	WI MOD GRO	ALD	10	PASI-G
40150524004	B7	WI MOD GRO	ALD	10	PASI-G
40150524005	B10	WI MOD GRO	ALD	10	PASI-G
40150524006	B1 @ 2-4'	WI MOD GRO EPA 6010 ASTM D2974-87	PMS DLB KTS	10 1 1	PASI-G
40150524007	B1 @ 8-9'	WI MOD GRO EPA 6010 ASTM D2974-87	PMS DLB KTS	10 1 1	PASI-G
40150524008	B2 @ 2-4'	WI MOD GRO EPA 6010 ASTM D2974-87	PMS DLB KTS	10 1 1	PASI-G
40150524009	B2 @ 13-14'	WI MOD GRO EPA 6010 ASTM D2974-87	PMS DLB KTS	10 1 1	PASI-G
40150524010	B3 @ 2-4'	WI MOD GRO EPA 6010 ASTM D2974-87	PMS DLB KTS	10 1 1	PASI-G
40150524011	B3 @ 13-14'	WI MOD GRO EPA 6010 ASTM D2974-87	PMS DLB KTS	10 1 1	PASI-G
40150524012	B4 @ 2-4'	WI MOD GRO EPA 6010 ASTM D2974-87	PMS DLB KTS	10 1 1	PASI-G
40150524013	B4 @ 8-9'	WI MOD GRO EPA 6010 ASTM D2974-87	PMS DLB KTS	10 1 1	PASI-G
40150524014	B5 @ 2-4'	WI MOD GRO EPA 6010 ASTM D2974-87	PMS DLB KTS	10 1 1	PASI-G
40150524015	B5 @ 12-14'	WI MOD GRO EPA 6010 ASTM D2974-87	PMS DLB KTS	10 1 1	PASI-G
40150524016	B6 @ 2-4'	WI MOD GRO EPA 6010	PMS DLB	10 1	PASI-G

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: 7679 BOB'S SERVICE  
Pace Project No.: 40150524

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40150524017	<b>B6 @ 13-14'</b>	ASTM D2974-87	KTS	1	PASI-G
		WI MOD GRO	PMS	10	PASI-G
		EPA 6010	DLB	1	PASI-G
40150524018	<b>B7 @ 2-4'</b>	ASTM D2974-87	KTS	1	PASI-G
		WI MOD GRO	PMS	10	PASI-G
		EPA 6010	DLB	1	PASI-G
40150524019	<b>B7 @ 12-14'</b>	ASTM D2974-87	KTS	1	PASI-G
		WI MOD GRO	PMS	10	PASI-G
		EPA 6010	DLB	1	PASI-G
40150524020	<b>B8 @ 2-4'</b>	ASTM D2974-87	KTS	1	PASI-G
		WI MOD GRO	PMS	10	PASI-G
		EPA 6010	DLB	1	PASI-G
40150524021	<b>B8 @ 11-13'</b>	ASTM D2974-87	KTS	1	PASI-G
		WI MOD GRO	PMS	10	PASI-G
		EPA 6010	DLB	1	PASI-G
40150524022	<b>B9 @ 2-4'</b>	ASTM D2974-87	KTS	1	PASI-G
		WI MOD GRO	PMS	10	PASI-G
		EPA 6010	DLB	1	PASI-G
40150524023	<b>B9 @ 8-9'</b>	ASTM D2974-87	KTS	1	PASI-G
		WI MOD GRO	PMS	10	PASI-G
		EPA 6010	DLB	1	PASI-G
40150524024	<b>B10 @ 2-4'</b>	ASTM D2974-87	KTS	1	PASI-G
		WI MOD GRO	PMS	10	PASI-G
		EPA 6010	DLB	1	PASI-G
40150524025	<b>B10 @ 11-13'</b>	ASTM D2974-87	KTS	1	PASI-G
		WI MOD GRO	ALD	10	PASI-G
		EPA 6010	DLB	1	PASI-G
40150524026	<b>POTABLE</b>	ASTM D2974-87	KTS	1	PASI-G
		EPA 524.2	DJB	63	PASI-M

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

Sample: B1	Lab ID: 40150524001	Collected: 05/22/17 15:35	Received: 05/24/17 09:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>	Analytical Method: WI MOD GRO								
Benzene	1100	ug/L	10.0	4.0	10		05/30/17 22:08	71-43-2	
Ethylbenzene	553	ug/L	10.0	3.9	10		05/30/17 22:08	100-41-4	
Methyl-tert-butyl ether	12.1	ug/L	10.0	4.8	10		05/30/17 22:08	1634-04-4	
Naphthalene	77.6	ug/L	10.0	4.2	10		05/30/17 22:08	91-20-3	
Toluene	648	ug/L	10.0	3.9	10		05/30/17 22:08	108-88-3	
1,2,4-Trimethylbenzene	307	ug/L	10.0	4.2	10		05/30/17 22:08	95-63-6	
1,3,5-Trimethylbenzene	73.8	ug/L	10.0	4.2	10		05/30/17 22:08	108-67-8	
m&p-Xylene	1380	ug/L	20.0	8.0	10		05/30/17 22:08	179601-23-1	
o-Xylene	548	ug/L	10.0	4.5	10		05/30/17 22:08	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	103	%	80-120		10		05/30/17 22:08	98-08-8	
Sample: B2	Lab ID: 40150524002	Collected: 05/22/17 15:55	Received: 05/24/17 09:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>	Analytical Method: WI MOD GRO								
Benzene	<0.40	ug/L	1.0	0.40	1		05/26/17 18:59	71-43-2	
Ethylbenzene	<0.39	ug/L	1.0	0.39	1		05/26/17 18:59	100-41-4	
Methyl-tert-butyl ether	<0.48	ug/L	1.0	0.48	1		05/26/17 18:59	1634-04-4	
Naphthalene	<0.42	ug/L	1.0	0.42	1		05/26/17 18:59	91-20-3	
Toluene	0.43J	ug/L	1.0	0.39	1		05/26/17 18:59	108-88-3	
1,2,4-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		05/26/17 18:59	95-63-6	
1,3,5-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		05/26/17 18:59	108-67-8	
m&p-Xylene	<0.80	ug/L	2.0	0.80	1		05/26/17 18:59	179601-23-1	
o-Xylene	<0.45	ug/L	1.0	0.45	1		05/26/17 18:59	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1		05/26/17 18:59	98-08-8	
Sample: B6	Lab ID: 40150524003	Collected: 05/22/17 17:35	Received: 05/24/17 09:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>	Analytical Method: WI MOD GRO								
Benzene	<0.40	ug/L	1.0	0.40	1		05/26/17 19:25	71-43-2	
Ethylbenzene	<0.39	ug/L	1.0	0.39	1		05/26/17 19:25	100-41-4	
Methyl-tert-butyl ether	<0.48	ug/L	1.0	0.48	1		05/26/17 19:25	1634-04-4	
Naphthalene	<0.42	ug/L	1.0	0.42	1		05/26/17 19:25	91-20-3	
Toluene	<0.39	ug/L	1.0	0.39	1		05/26/17 19:25	108-88-3	
1,2,4-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		05/26/17 19:25	95-63-6	
1,3,5-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		05/26/17 19:25	108-67-8	
m&p-Xylene	<0.80	ug/L	2.0	0.80	1		05/26/17 19:25	179601-23-1	
o-Xylene	<0.45	ug/L	1.0	0.45	1		05/26/17 19:25	95-47-6	

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## ANALYTICAL RESULTS

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

**Sample: B6**      Lab ID: **40150524003**      Collected: 05/22/17 17:35      Received: 05/24/17 09:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>	Analytical Method: WI MOD GRO								
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1		05/26/17 19:25	98-08-8	

**Sample: B7**      Lab ID: **40150524004**      Collected: 05/22/17 17:55      Received: 05/24/17 09:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>	Analytical Method: WI MOD GRO								
Benzene	<0.40	ug/L	1.0	0.40	1		05/26/17 19:50	71-43-2	
Ethylbenzene	<0.39	ug/L	1.0	0.39	1		05/26/17 19:50	100-41-4	
Methyl-tert-butyl ether	<0.48	ug/L	1.0	0.48	1		05/26/17 19:50	1634-04-4	
Naphthalene	<0.42	ug/L	1.0	0.42	1		05/26/17 19:50	91-20-3	
Toluene	<0.39	ug/L	1.0	0.39	1		05/26/17 19:50	108-88-3	
1,2,4-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		05/26/17 19:50	95-63-6	
1,3,5-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		05/26/17 19:50	108-67-8	
m&p-Xylene	<0.80	ug/L	2.0	0.80	1		05/26/17 19:50	179601-23-1	
o-Xylene	<0.45	ug/L	1.0	0.45	1		05/26/17 19:50	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1		05/26/17 19:50	98-08-8	

**Sample: B10**      Lab ID: **40150524005**      Collected: 05/22/17 19:00      Received: 05/24/17 09:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>	Analytical Method: WI MOD GRO								
Benzene	<0.40	ug/L	1.0	0.40	1		05/26/17 18:08	71-43-2	
Ethylbenzene	0.84J	ug/L	1.0	0.39	1		05/26/17 18:08	100-41-4	
Methyl-tert-butyl ether	<0.48	ug/L	1.0	0.48	1		05/26/17 18:08	1634-04-4	
Naphthalene	2.3	ug/L	1.0	0.42	1		05/26/17 18:08	91-20-3	
Toluene	<0.39	ug/L	1.0	0.39	1		05/26/17 18:08	108-88-3	
1,2,4-Trimethylbenzene	17.1	ug/L	1.0	0.42	1		05/26/17 18:08	95-63-6	
1,3,5-Trimethylbenzene	2.3	ug/L	1.0	0.42	1		05/26/17 18:08	108-67-8	
m&p-Xylene	18.5	ug/L	2.0	0.80	1		05/26/17 18:08	179601-23-1	
o-Xylene	4.2	ug/L	1.0	0.45	1		05/26/17 18:08	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	102	%	80-120		1		05/26/17 18:08	98-08-8	

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## ANALYTICAL RESULTS

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

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**Sample: B1 @ 2-4'**      Lab ID: **40150524006**      Collected: 05/22/17 14:38      Received: 05/24/17 09:00      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	<26.3	ug/kg	63.2	26.3	1	05/26/17 08:00	05/26/17 10:40	71-43-2	W
Ethylbenzene	<26.3	ug/kg	63.2	26.3	1	05/26/17 08:00	05/26/17 10:40	100-41-4	W
Methyl-tert-butyl ether	<26.3	ug/kg	63.2	26.3	1	05/26/17 08:00	05/26/17 10:40	1634-04-4	W
Naphthalene	<26.3	ug/kg	63.2	26.3	1	05/26/17 08:00	05/26/17 10:40	91-20-3	W
Toluene	<26.3	ug/kg	63.2	26.3	1	05/26/17 08:00	05/26/17 10:40	108-88-3	W
1,2,4-Trimethylbenzene	<26.3	ug/kg	63.2	26.3	1	05/26/17 08:00	05/26/17 10:40	95-63-6	W
1,3,5-Trimethylbenzene	<26.3	ug/kg	63.2	26.3	1	05/26/17 08:00	05/26/17 10:40	108-67-8	W
m&p-Xylene	<52.6	ug/kg	126	52.6	1	05/26/17 08:00	05/26/17 10:40	179601-23-1	W
o-Xylene	<26.3	ug/kg	63.2	26.3	1	05/26/17 08:00	05/26/17 10:40	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1	05/26/17 08:00	05/26/17 10:40	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	3.5	mg/kg	1.4	0.46	1	05/31/17 09:07	06/01/17 11:02	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	9.2	%	0.10	0.10	1			05/26/17 14:48	

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**Sample: B1 @ 8-9'**      Lab ID: **40150524007**      Collected: 05/22/17 14:44      Received: 05/24/17 09:00      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	11800	ug/kg	121	50.3	1	05/26/17 08:00	05/26/17 16:39	71-43-2	
Ethylbenzene	5910	ug/kg	121	50.3	1	05/26/17 08:00	05/26/17 16:39	100-41-4	
Methyl-tert-butyl ether	120J	ug/kg	121	50.3	1	05/26/17 08:00	05/26/17 16:39	1634-04-4	
Naphthalene	2150	ug/kg	121	50.3	1	05/26/17 08:00	05/26/17 16:39	91-20-3	
Toluene	8110	ug/kg	121	50.3	1	05/26/17 08:00	05/26/17 16:39	108-88-3	
1,2,4-Trimethylbenzene	7620	ug/kg	121	50.3	1	05/26/17 08:00	05/26/17 16:39	95-63-6	
1,3,5-Trimethylbenzene	2430	ug/kg	121	50.3	1	05/26/17 08:00	05/26/17 16:39	108-67-8	
m&p-Xylene	16200	ug/kg	242	101	1	05/26/17 08:00	05/26/17 16:39	179601-23-1	
o-Xylene	4890	ug/kg	121	50.3	1	05/26/17 08:00	05/26/17 16:39	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	97	%	80-120		1	05/26/17 08:00	05/26/17 16:39	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	14.4	mg/kg	1.8	0.61	1	05/31/17 09:07	06/01/17 11:09	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	29.1	%	0.10	0.10	1			05/26/17 15:36	

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## ANALYTICAL RESULTS

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

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**Sample: B2 @ 2-4'**      Lab ID: **40150524008**      Collected: 05/22/17 15:09      Received: 05/24/17 09:00      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	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:06	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:06	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:06	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:06	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:06	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:06	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:06	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/26/17 08:00	05/26/17 11:06	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:06	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	05/26/17 08:00	05/26/17 11:06	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	10	mg/kg	1.7	0.58	1	05/31/17 09:07	06/01/17 11:12	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	27.3	%	0.10	0.10	1			05/26/17 15:36	

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**Sample: B2 @ 13-14'**      Lab ID: **40150524009**      Collected: 05/22/17 15:18      Received: 05/24/17 09:00      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	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:32	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:32	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:32	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:32	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:32	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:32	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:32	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/26/17 08:00	05/26/17 11:32	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:32	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	05/26/17 08:00	05/26/17 11:32	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	11.8	mg/kg	1.7	0.55	1	05/31/17 09:07	06/01/17 11:14	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	22.2	%	0.10	0.10	1			05/26/17 15:37	

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## ANALYTICAL RESULTS

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

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**Sample: B3 @ 2-4'**      Lab ID: 40150524010      Collected: 05/22/17 15:40      Received: 05/24/17 09:00      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	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:57	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:57	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:57	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:57	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:57	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:57	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:57	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/26/17 08:00	05/26/17 11:57	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 11:57	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	102	%	80-120		1	05/26/17 08:00	05/26/17 11:57	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	6.7	mg/kg	1.5	0.50	1	05/31/17 09:07	06/01/17 11:17	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	17.1	%	0.10	0.10	1			05/26/17 15:37	

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**Sample: B3 @ 13-14'**      Lab ID: 40150524011      Collected: 05/22/17 15:45      Received: 05/24/17 09:00      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	82.4J	ug/kg	86.4	36.0	1	05/26/17 08:00	05/26/17 12:23	71-43-2	
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 12:23	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 12:23	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 12:23	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 12:23	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 12:23	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 12:23	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/26/17 08:00	05/26/17 12:23	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 12:23	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	05/26/17 08:00	05/26/17 12:23	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	15.4	mg/kg	1.8	0.60	1	05/31/17 09:07	06/01/17 11:19	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	30.5	%	0.10	0.10	1			05/26/17 15:37	

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## ANALYTICAL RESULTS

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

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**Sample: B4 @ 2-4'**      Lab ID: 40150524012      Collected: 05/22/17 16:02      Received: 05/24/17 09:00      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	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 12:48	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 12:48	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 12:48	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 12:48	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 12:48	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 12:48	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 12:48	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/26/17 08:00	05/26/17 12:48	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 12:48	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	05/26/17 08:00	05/26/17 12:48	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	1.9	mg/kg	1.5	0.49	1	05/31/17 09:07	06/01/17 10:56	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	11.9	%	0.10	0.10	1			05/26/17 15:37	

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**Sample: B4 @ 8-9'**      Lab ID: 40150524013      Collected: 05/22/17 16:08      Received: 05/24/17 09:00      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	<37.3	ug/kg	89.6	37.3	1	05/26/17 08:00	05/26/17 13:14	71-43-2	W
Ethylbenzene	<37.3	ug/kg	89.6	37.3	1	05/26/17 08:00	05/26/17 13:14	100-41-4	W
Methyl-tert-butyl ether	<37.3	ug/kg	89.6	37.3	1	05/26/17 08:00	05/26/17 13:14	1634-04-4	W
Naphthalene	<37.3	ug/kg	89.6	37.3	1	05/26/17 08:00	05/26/17 13:14	91-20-3	W
Toluene	<37.3	ug/kg	89.6	37.3	1	05/26/17 08:00	05/26/17 13:14	108-88-3	W
1,2,4-Trimethylbenzene	<37.3	ug/kg	89.6	37.3	1	05/26/17 08:00	05/26/17 13:14	95-63-6	W
1,3,5-Trimethylbenzene	<37.3	ug/kg	89.6	37.3	1	05/26/17 08:00	05/26/17 13:14	108-67-8	W
m&p-Xylene	<74.6	ug/kg	179	74.6	1	05/26/17 08:00	05/26/17 13:14	179601-23-1	W
o-Xylene	<37.3	ug/kg	89.6	37.3	1	05/26/17 08:00	05/26/17 13:14	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	05/26/17 08:00	05/26/17 13:14	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	2.2	mg/kg	1.5	0.50	1	05/31/17 09:07	06/01/17 11:21	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	22.8	%	0.10	0.10	1			05/26/17 15:37	

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## ANALYTICAL RESULTS

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

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**Sample: B5 @ 2-4'**      Lab ID: 40150524014      Collected: 05/22/17 16:30      Received: 05/24/17 09:00      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	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 13:40	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 13:40	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 13:40	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 13:40	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 13:40	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 13:40	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 13:40	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/26/17 08:00	05/26/17 13:40	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 13:40	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1	05/26/17 08:00	05/26/17 13:40	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	5.8	mg/kg	1.5	0.48	1	05/31/17 09:07	06/01/17 11:24	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	11.6	%	0.10	0.10	1			05/26/17 15:37	

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**Sample: B5 @ 12-14'**      Lab ID: 40150524015      Collected: 05/22/17 16:35      Received: 05/24/17 09:00      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	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 14:05	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 14:05	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 14:05	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 14:05	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 14:05	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 14:05	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 14:05	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/26/17 08:00	05/26/17 14:05	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 14:05	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	05/26/17 08:00	05/26/17 14:05	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	14.4	mg/kg	1.6	0.55	1	05/31/17 09:07	06/01/17 11:26	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	30.3	%	0.10	0.10	1			05/26/17 15:37	

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## ANALYTICAL RESULTS

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

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**Sample: B6 @ 2-4'**      Lab ID: 40150524016      Collected: 05/22/17 16:55      Received: 05/24/17 09:00      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	<26.3	ug/kg	63.2	26.3	1	05/26/17 08:00	05/26/17 20:03	71-43-2	W
Ethylbenzene	<26.3	ug/kg	63.2	26.3	1	05/26/17 08:00	05/26/17 20:03	100-41-4	W
Methyl-tert-butyl ether	<26.3	ug/kg	63.2	26.3	1	05/26/17 08:00	05/26/17 20:03	1634-04-4	W
Naphthalene	<26.3	ug/kg	63.2	26.3	1	05/26/17 08:00	05/26/17 20:03	91-20-3	W
Toluene	<26.3	ug/kg	63.2	26.3	1	05/26/17 08:00	05/26/17 20:03	108-88-3	W
1,2,4-Trimethylbenzene	<26.3	ug/kg	63.2	26.3	1	05/26/17 08:00	05/26/17 20:03	95-63-6	W
1,3,5-Trimethylbenzene	<26.3	ug/kg	63.2	26.3	1	05/26/17 08:00	05/26/17 20:03	108-67-8	W
m&p-Xylene	<52.6	ug/kg	126	52.6	1	05/26/17 08:00	05/26/17 20:03	179601-23-1	W
o-Xylene	<26.3	ug/kg	63.2	26.3	1	05/26/17 08:00	05/26/17 20:03	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	05/26/17 08:00	05/26/17 20:03	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	3.7	mg/kg	1.5	0.50	1	05/31/17 09:07	06/01/17 11:28	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	15.6	%	0.10	0.10	1			05/26/17 15:37	

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**Sample: B6 @ 13-14'**      Lab ID: 40150524017      Collected: 05/22/17 17:05      Received: 05/24/17 09:00      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	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 20:29	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 20:29	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 20:29	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 20:29	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 20:29	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 20:29	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 20:29	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/26/17 08:00	05/26/17 20:29	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 20:29	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	05/26/17 08:00	05/26/17 20:29	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	14.0	mg/kg	1.7	0.58	1	05/31/17 09:07	06/01/17 11:31	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	27.3	%	0.10	0.10	1			05/26/17 15:37	

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## ANALYTICAL RESULTS

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

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**Sample: B7 @ 2-4'**      Lab ID: 40150524018      Collected: 05/22/17 17:26      Received: 05/24/17 09:00      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	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 20:54	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 20:54	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 20:54	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 20:54	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 20:54	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 20:54	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 20:54	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/26/17 08:00	05/26/17 20:54	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/26/17 08:00	05/26/17 20:54	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1	05/26/17 08:00	05/26/17 20:54	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	3.7	mg/kg	1.3	0.43	1	05/31/17 09:07	06/01/17 11:38	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	11.2	%	0.10	0.10	1			05/26/17 15:37	

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**Sample: B7 @ 12-14'**      Lab ID: 40150524019      Collected: 05/22/17 17:34      Received: 05/24/17 09:00      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	<26.3	ug/kg	63.2	26.3	1	05/30/17 08:00	05/30/17 11:20	71-43-2	W
Ethylbenzene	<26.3	ug/kg	63.2	26.3	1	05/30/17 08:00	05/30/17 11:20	100-41-4	W
Methyl-tert-butyl ether	<26.3	ug/kg	63.2	26.3	1	05/30/17 08:00	05/30/17 11:20	1634-04-4	W
Naphthalene	<26.3	ug/kg	63.2	26.3	1	05/30/17 08:00	05/30/17 11:20	91-20-3	W
Toluene	<26.3	ug/kg	63.2	26.3	1	05/30/17 08:00	05/30/17 11:20	108-88-3	W
1,2,4-Trimethylbenzene	<26.3	ug/kg	63.2	26.3	1	05/30/17 08:00	05/30/17 11:20	95-63-6	W
1,3,5-Trimethylbenzene	<26.3	ug/kg	63.2	26.3	1	05/30/17 08:00	05/30/17 11:20	108-67-8	W
m&p-Xylene	<52.6	ug/kg	126	52.6	1	05/30/17 08:00	05/30/17 11:20	179601-23-1	W
o-Xylene	<26.3	ug/kg	63.2	26.3	1	05/30/17 08:00	05/30/17 11:20	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	05/30/17 08:00	05/30/17 11:20	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	14.9	mg/kg	1.7	0.57	1	05/31/17 09:07	06/01/17 11:40	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	30.6	%	0.10	0.10	1			05/26/17 15:37	

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## ANALYTICAL RESULTS

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

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**Sample: B8 @ 2-4'**      Lab ID: **40150524020**      Collected: 05/22/17 17:44      Received: 05/24/17 09:00      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	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 11:45	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 11:45	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 11:45	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 11:45	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 11:45	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 11:45	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 11:45	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/30/17 08:00	05/30/17 11:45	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 11:45	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1	05/30/17 08:00	05/30/17 11:45	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	2.6	mg/kg	1.3	0.43	1	05/31/17 09:07	06/01/17 11:43	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	12.0	%	0.10	0.10	1			05/26/17 15:37	

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**Sample: B8 @ 11-13'**      Lab ID: **40150524021**      Collected: 05/22/17 18:00      Received: 05/24/17 09:00      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	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 12:11	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 12:11	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 12:11	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 12:11	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 12:11	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 12:11	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 12:11	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/30/17 08:00	05/30/17 12:11	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 12:11	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1	05/30/17 08:00	05/30/17 12:11	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	14.6	mg/kg	1.7	0.57	1	05/31/17 09:07	06/01/17 11:45	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	30.4	%	0.10	0.10	1			05/26/17 15:37	

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## ANALYTICAL RESULTS

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

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**Sample: B9 @ 2-4'**      Lab ID: **40150524022**      Collected: 05/22/17 18:20      Received: 05/24/17 09:00      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	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 12:37	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 12:37	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 12:37	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 12:37	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 12:37	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 12:37	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 12:37	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/30/17 08:00	05/30/17 12:37	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 12:37	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1	05/30/17 08:00	05/30/17 12:37	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	6.1	mg/kg	1.5	0.49	1	05/31/17 09:07	06/01/17 11:47	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	19.6	%	0.10	0.10	1			05/26/17 15:37	

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**Sample: B9 @ 8-9'**      Lab ID: **40150524023**      Collected: 05/22/17 18:25      Received: 05/24/17 09:00      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	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 13:02	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 13:02	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 13:02	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 13:02	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 13:02	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 13:02	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 13:02	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/30/17 08:00	05/30/17 13:02	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 13:02	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1	05/30/17 08:00	05/30/17 13:02	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	2.3	mg/kg	1.5	0.50	1	05/31/17 09:07	06/01/17 11:50	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	15.3	%	0.10	0.10	1			05/26/17 15:38	

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## ANALYTICAL RESULTS

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

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**Sample: B10 @ 2-4'**      Lab ID: **40150524024**      Collected: 05/22/17 18:38      Received: 05/24/17 09:00      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	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 13:28	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 13:28	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 13:28	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 13:28	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 13:28	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 13:28	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 13:28	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/30/17 08:00	05/30/17 13:28	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/30/17 08:00	05/30/17 13:28	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1	05/30/17 08:00	05/30/17 13:28	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	9.1	mg/kg	1.5	0.49	1	05/31/17 09:07	06/01/17 11:52	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	19.7	%	0.10	0.10	1			05/26/17 14:48	

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**Sample: B10 @ 11-13'**      Lab ID: **40150524025**      Collected: 05/22/17 18:47      Received: 05/24/17 09:00      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	<25.0	ug/kg	60.0	25.0	1	05/31/17 07:30	05/31/17 13:23	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/31/17 07:30	05/31/17 13:23	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	05/31/17 07:30	05/31/17 13:23	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	05/31/17 07:30	05/31/17 13:23	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	05/31/17 07:30	05/31/17 13:23	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/31/17 07:30	05/31/17 13:23	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	05/31/17 07:30	05/31/17 13:23	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	05/31/17 07:30	05/31/17 13:23	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	05/31/17 07:30	05/31/17 13:23	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	98	%	80-120		1	05/31/17 07:30	05/31/17 13:23	98-08-8	1q,P4
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	14.1	mg/kg	1.7	0.57	1	05/31/17 09:07	06/01/17 11:54	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	26.5	%	0.10	0.10	1			05/26/17 15:38	

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## ANALYTICAL RESULTS

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

Sample: POTABLE	Lab ID: 40150524026	Collected: 05/22/17 16:10	Received: 05/24/17 09:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>524.2 MSV</b>	Analytical Method: EPA 524.2								
Benzene	<0.086	ug/L	0.50	0.086	1		05/31/17 05:02	71-43-2	
Bromobenzene	<0.081	ug/L	0.50	0.081	1		05/31/17 05:02	108-86-1	
Bromo(chloromethane)	<0.16	ug/L	1.0	0.16	1		05/31/17 05:02	74-97-5	
Bromodichloromethane	<0.090	ug/L	1.0	0.090	1		05/31/17 05:02	75-27-4	
Bromoform	<0.23	ug/L	4.0	0.23	1		05/31/17 05:02	75-25-2	
Bromomethane	<0.20	ug/L	4.0	0.20	1		05/31/17 05:02	74-83-9	
n-Butylbenzene	<0.081	ug/L	0.50	0.081	1		05/31/17 05:02	104-51-8	
sec-Butylbenzene	<0.063	ug/L	0.50	0.063	1		05/31/17 05:02	135-98-8	
tert-Butylbenzene	<0.097	ug/L	0.50	0.097	1		05/31/17 05:02	98-06-6	
Carbon tetrachloride	<0.076	ug/L	1.0	0.076	1		05/31/17 05:02	56-23-5	
Chlorobenzene	<0.068	ug/L	0.50	0.068	1		05/31/17 05:02	108-90-7	
Chloroethane	<0.18	ug/L	1.0	0.18	1		05/31/17 05:02	75-00-3	
Chloroform	<0.10	ug/L	1.0	0.10	1		05/31/17 05:02	67-66-3	
Chloromethane	<0.21	ug/L	4.0	0.21	1		05/31/17 05:02	74-87-3	L3
2-Chlorotoluene	<0.11	ug/L	0.50	0.11	1		05/31/17 05:02	95-49-8	
4-Chlorotoluene	<0.10	ug/L	0.50	0.10	1		05/31/17 05:02	106-43-4	
1,2-Dibromo-3-chloropropane	<0.18	ug/L	4.0	0.18	1		05/31/17 05:02	96-12-8	
Dibromochloromethane	<0.13	ug/L	0.50	0.13	1		05/31/17 05:02	124-48-1	
1,2-Dibromoethane (EDB)	<0.091	ug/L	0.50	0.091	1		05/31/17 05:02	106-93-4	
Dibromomethane	<0.098	ug/L	1.0	0.098	1		05/31/17 05:02	74-95-3	
1,2-Dichlorobenzene	<0.10	ug/L	0.50	0.10	1		05/31/17 05:02	95-50-1	
1,3-Dichlorobenzene	<0.082	ug/L	0.50	0.082	1		05/31/17 05:02	541-73-1	
1,4-Dichlorobenzene	<0.075	ug/L	0.50	0.075	1		05/31/17 05:02	106-46-7	
Dichlorodifluoromethane	<0.16	ug/L	1.0	0.16	1		05/31/17 05:02	75-71-8	
1,1-Dichloroethane	<0.088	ug/L	0.50	0.088	1		05/31/17 05:02	75-34-3	
1,2-Dichloroethane	<0.092	ug/L	0.50	0.092	1		05/31/17 05:02	107-06-2	
1,1-Dichloroethene	<0.089	ug/L	0.50	0.089	1		05/31/17 05:02	75-35-4	
cis-1,2-Dichloroethene	<0.085	ug/L	0.50	0.085	1		05/31/17 05:02	156-59-2	
trans-1,2-Dichloroethene	<0.11	ug/L	0.50	0.11	1		05/31/17 05:02	156-60-5	
1,2-Dichloropropane	<0.084	ug/L	4.0	0.084	1		05/31/17 05:02	78-87-5	
1,3-Dichloropropane	<0.094	ug/L	0.50	0.094	1		05/31/17 05:02	142-28-9	
2,2-Dichloropropane	<0.097	ug/L	1.0	0.097	1		05/31/17 05:02	594-20-7	
1,1-Dichloropropene	<0.080	ug/L	0.50	0.080	1		05/31/17 05:02	563-58-6	
cis-1,3-Dichloropropene	<0.071	ug/L	0.50	0.071	1		05/31/17 05:02	10061-01-5	
trans-1,3-Dichloropropene	<0.055	ug/L	0.50	0.055	1		05/31/17 05:02	10061-02-6	
Ethylbenzene	<0.051	ug/L	0.50	0.051	1		05/31/17 05:02	100-41-4	
Hexachloro-1,3-butadiene	<0.11	ug/L	1.0	0.11	1		05/31/17 05:02	87-68-3	
Isopropylbenzene (Cumene)	<0.11	ug/L	0.50	0.11	1		05/31/17 05:02	98-82-8	
p-Isopropyltoluene	<0.083	ug/L	0.50	0.083	1		05/31/17 05:02	99-87-6	
Methylene Chloride	<0.20	ug/L	4.0	0.20	1		05/31/17 05:02	75-09-2	
Naphthalene	<0.064	ug/L	1.0	0.064	1		05/31/17 05:02	91-20-3	
n-Propylbenzene	<0.096	ug/L	0.50	0.096	1		05/31/17 05:02	103-65-1	
Styrene	<0.075	ug/L	0.50	0.075	1		05/31/17 05:02	100-42-5	
1,1,1,2-Tetrachloroethane	<0.062	ug/L	0.50	0.062	1		05/31/17 05:02	630-20-6	
1,1,2,2-Tetrachloroethane	<0.11	ug/L	0.50	0.11	1		05/31/17 05:02	79-34-5	
Tetrachloroethene	<0.12	ug/L	0.50	0.12	1		05/31/17 05:02	127-18-4	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 7679 BOB'S SERVICE  
Pace Project No.: 40150524

Sample: POTABLE	Lab ID: 40150524026	Collected: 05/22/17 16:10	Received: 05/24/17 09:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>524.2 MSV</b>	Analytical Method: EPA 524.2								
Toluene	<0.080	ug/L	0.50	0.080	1		05/31/17 05:02	108-88-3	
1,2,3-Trichlorobenzene	<0.10	ug/L	0.50	0.10	1		05/31/17 05:02	87-61-6	
1,2,4-Trichlorobenzene	<0.12	ug/L	0.50	0.12	1		05/31/17 05:02	120-82-1	
1,1,1-Trichloroethane	<0.10	ug/L	0.50	0.10	1		05/31/17 05:02	71-55-6	
1,1,2-Trichloroethane	<0.098	ug/L	0.50	0.098	1		05/31/17 05:02	79-00-5	
Trichloroethene	<0.044	ug/L	0.40	0.044	1		05/31/17 05:02	79-01-6	
Trichlorofluoromethane	<0.13	ug/L	0.50	0.13	1		05/31/17 05:02	75-69-4	
1,2,3-Trichloropropane	<0.073	ug/L	4.0	0.073	1		05/31/17 05:02	96-18-4	
1,2,4-Trimethylbenzene	<0.083	ug/L	0.50	0.083	1		05/31/17 05:02	95-63-6	
1,3,5-Trimethylbenzene	<0.078	ug/L	0.50	0.078	1		05/31/17 05:02	108-67-8	
Vinyl chloride	<0.098	ug/L	0.20	0.098	1		05/31/17 05:02	75-01-4	
Xylene (Total)	<0.073	ug/L	1.5	0.073	1		05/31/17 05:02	1330-20-7	
m&p-Xylene	<0.073	ug/L	1.0	0.073	1		05/31/17 05:02	179601-23-1	
o-Xylene	<0.073	ug/L	0.50	0.073	1		05/31/17 05:02	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	102	%.	75-125		1		05/31/17 05:02	460-00-4	
Toluene-d8 (S)	102	%.	75-125		1		05/31/17 05:02	2037-26-5	
1,2-Dichloroethane-d4 (S)	107	%.	75-125		1		05/31/17 05:02	17060-07-0	

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

QC Batch: 256860 Analysis Method: WI MOD GRO

QC Batch Method: TPH GRO/PVOC WI ext. Analysis Description: WIGRO Solid GCV

Associated Lab Samples: 40150524006, 40150524007, 40150524008, 40150524009, 40150524010, 40150524011, 40150524012,  
40150524013, 40150524014, 40150524015, 40150524016, 40150524017, 40150524018

METHOD BLANK: 1513856 Matrix: Solid

Associated Lab Samples: 40150524006, 40150524007, 40150524008, 40150524009, 40150524010, 40150524011, 40150524012,  
40150524013, 40150524014, 40150524015, 40150524016, 40150524017, 40150524018

Parameter	Units	Blank		Reporting		Qualifiers
		Result	Limit	Analyzed		
1,2,4-Trimethylbenzene	ug/kg	<25.0	50.0	05/26/17 08:58		
1,3,5-Trimethylbenzene	ug/kg	<25.0	50.0	05/26/17 08:58		
Benzene	ug/kg	<25.0	50.0	05/26/17 08:58		
Ethylbenzene	ug/kg	<25.0	50.0	05/26/17 08:58		
m&p-Xylene	ug/kg	<50.0	100	05/26/17 08:58		
Methyl-tert-butyl ether	ug/kg	<25.0	50.0	05/26/17 08:58		
Naphthalene	ug/kg	<25.0	50.0	05/26/17 08:58		
o-Xylene	ug/kg	<25.0	50.0	05/26/17 08:58		
Toluene	ug/kg	<25.0	50.0	05/26/17 08:58		
a,a,a-Trifluorotoluene (S)	%	100	80-120	05/26/17 08:58		

LABORATORY CONTROL SAMPLE &amp; LCSD: 1513857 1513858

Parameter	Units	Spike	LCS	LCSD	LCS	LCSD	% Rec	RPD	Max RPD	Qualifiers
		Conc.	Result	Result	% Rec	% Rec	Limits			
1,2,4-Trimethylbenzene	ug/kg	1000	1090	1080	109	108	80-120	1	20	
1,3,5-Trimethylbenzene	ug/kg	1000	1070	1050	107	105	80-120	1	20	
Benzene	ug/kg	1000	1030	1020	103	102	80-120	1	20	
Ethylbenzene	ug/kg	1000	1060	1040	106	104	80-120	2	20	
m&p-Xylene	ug/kg	2000	2120	2080	106	104	80-120	2	20	
Methyl-tert-butyl ether	ug/kg	1000	991	998	99	100	80-120	1	20	
Naphthalene	ug/kg	1000	1080	1140	108	114	80-120	6	20	
o-Xylene	ug/kg	1000	1060	1040	106	104	80-120	1	20	
Toluene	ug/kg	1000	1040	1030	104	103	80-120	1	20	
a,a,a-Trifluorotoluene (S)	%				102	103	80-120			

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## QUALITY CONTROL DATA

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

QC Batch: 256994 Analysis Method: WI MOD GRO

QC Batch Method: TPH GRO/PVOC WI ext. Analysis Description: WIGRO Solid GCV

Associated Lab Samples: 40150524019, 40150524020, 40150524021, 40150524022, 40150524023, 40150524024

METHOD BLANK: 1514829 Matrix: Solid

Associated Lab Samples: 40150524019, 40150524020, 40150524021, 40150524022, 40150524023, 40150524024

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
1,2,4-Trimethylbenzene	ug/kg	<25.0	50.0	05/30/17 09:16	
1,3,5-Trimethylbenzene	ug/kg	<25.0	50.0	05/30/17 09:16	
Benzene	ug/kg	<25.0	50.0	05/30/17 09:16	
Ethylbenzene	ug/kg	<25.0	50.0	05/30/17 09:16	
m&p-Xylene	ug/kg	<50.0	100	05/30/17 09:16	
Methyl-tert-butyl ether	ug/kg	<25.0	50.0	05/30/17 09:16	
Naphthalene	ug/kg	<25.0	50.0	05/30/17 09:16	
o-Xylene	ug/kg	<25.0	50.0	05/30/17 09:16	
Toluene	ug/kg	<25.0	50.0	05/30/17 09:16	
a,a,a-Trifluorotoluene (S)	%	100	80-120	05/30/17 09:16	

LABORATORY CONTROL SAMPLE &amp; LCSD: 1514830

1514831

Parameter	Units	Spike	LCS	LCSD	LCS	LCSD	% Rec	RPD	Max RPD	Qualifiers
		Conc.	Result	Result	% Rec	% Rec	Limits			
1,2,4-Trimethylbenzene	ug/kg	1000	1080	1060	108	106	80-120	2	20	
1,3,5-Trimethylbenzene	ug/kg	1000	1060	1040	106	104	80-120	2	20	
Benzene	ug/kg	1000	1010	990	101	99	80-120	2	20	
Ethylbenzene	ug/kg	1000	1050	1030	105	103	80-120	2	20	
m&p-Xylene	ug/kg	2000	2100	2060	105	103	80-120	2	20	
Methyl-tert-butyl ether	ug/kg	1000	999	964	100	96	80-120	4	20	
Naphthalene	ug/kg	1000	1110	1070	111	107	80-120	3	20	
o-Xylene	ug/kg	1000	1050	1030	105	103	80-120	2	20	
Toluene	ug/kg	1000	1030	1010	103	101	80-120	2	20	
a,a,a-Trifluorotoluene (S)	%				102	102	80-120			

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## QUALITY CONTROL DATA

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

QC Batch:	257157	Analysis Method:	WI MOD GRO
QC Batch Method:	TPH GRO/PVOC WI ext.	Analysis Description:	WIGRO Solid GCV
Associated Lab Samples:	40150524025		

METHOD BLANK: 1515331	Matrix: Solid
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Associated Lab Samples: 40150524025

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
1,2,4-Trimethylbenzene	ug/kg	<25.0	50.0	05/31/17 09:07	
1,3,5-Trimethylbenzene	ug/kg	<25.0	50.0	05/31/17 09:07	
Benzene	ug/kg	<25.0	50.0	05/31/17 09:07	
Ethylbenzene	ug/kg	<25.0	50.0	05/31/17 09:07	
m&p-Xylene	ug/kg	<50.0	100	05/31/17 09:07	
Methyl-tert-butyl ether	ug/kg	<25.0	50.0	05/31/17 09:07	
Naphthalene	ug/kg	<25.0	50.0	05/31/17 09:07	
o-Xylene	ug/kg	<25.0	50.0	05/31/17 09:07	
Toluene	ug/kg	<25.0	50.0	05/31/17 09:07	
a,a,a-Trifluorotoluene (S)	%	97	80-120	05/31/17 09:07	

LABORATORY CONTROL SAMPLE &amp; LCSD: 1515332      1515333

Parameter	Units	Spike	LCS	LCSD	LCS	LCSD	% Rec	RPD	Max RPD	Qualifiers
		Conc.	Result	Result	% Rec	% Rec	Limits			
1,2,4-Trimethylbenzene	ug/kg	1000	1080	1070	108	107	80-120	1	20	
1,3,5-Trimethylbenzene	ug/kg	1000	1050	1040	105	104	80-120	1	20	
Benzene	ug/kg	1000	989	1000	99	100	80-120	1	20	
Ethylbenzene	ug/kg	1000	1050	1040	105	104	80-120	0	20	
m&p-Xylene	ug/kg	2000	2080	2060	104	103	80-120	1	20	
Methyl-tert-butyl ether	ug/kg	1000	988	1010	99	101	80-120	2	20	
Naphthalene	ug/kg	1000	1140	1150	114	115	80-120	1	20	
o-Xylene	ug/kg	1000	1040	1040	104	104	80-120	1	20	
Toluene	ug/kg	1000	1010	1020	101	102	80-120	1	20	
a,a,a-Trifluorotoluene (S)	%				97	97	80-120			

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## QUALITY CONTROL DATA

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

QC Batch:	256856	Analysis Method:	WI MOD GRO
QC Batch Method:	WI MOD GRO	Analysis Description:	WIGRO GCV Water
Associated Lab Samples:	40150524001, 40150524002, 40150524003, 40150524004, 40150524005		

METHOD BLANK: 1513837                          Matrix: Water

Associated Lab Samples: 40150524001, 40150524002, 40150524003, 40150524004, 40150524005

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
1,2,4-Trimethylbenzene	ug/L	<0.42	1.0	05/26/17 08:39	
1,3,5-Trimethylbenzene	ug/L	<0.42	1.0	05/26/17 08:39	
Benzene	ug/L	<0.40	1.0	05/26/17 08:39	
Ethylbenzene	ug/L	<0.39	1.0	05/26/17 08:39	
m&p-Xylene	ug/L	<0.80	2.0	05/26/17 08:39	
Methyl-tert-butyl ether	ug/L	<0.48	1.0	05/26/17 08:39	
Naphthalene	ug/L	<0.42	1.0	05/26/17 08:39	
o-Xylene	ug/L	<0.45	1.0	05/26/17 08:39	
Toluene	ug/L	<0.39	1.0	05/26/17 08:39	
a,a,a-Trifluorotoluene (S)	%	101	80-120	05/26/17 08:39	

LABORATORY CONTROL SAMPLE & LCSD: 1513838                          1513839

Parameter	Units	Spike	LCS	LCSD	LCS	LCSD	% Rec	RPD	Max RPD	Qualifiers
		Conc.	Result	Result	% Rec	% Rec	Limits			
1,2,4-Trimethylbenzene	ug/L	20	21.3	21.5	106	107	80-120	1	20	
1,3,5-Trimethylbenzene	ug/L	20	20.6	20.8	103	104	80-120	1	20	
Benzene	ug/L	20	21.9	22.1	110	111	80-120	1	20	
Ethylbenzene	ug/L	20	22.1	22.3	110	111	80-120	1	20	
m&p-Xylene	ug/L	40	43.4	43.9	108	110	80-120	1	20	
Methyl-tert-butyl ether	ug/L	20	19.2	19.0	96	95	80-120	1	20	
Naphthalene	ug/L	20	21.6	22.0	108	110	80-120	2	20	
o-Xylene	ug/L	20	21.5	21.9	108	109	80-120	2	20	
Toluene	ug/L	20	21.7	21.9	109	110	80-120	1	20	
a,a,a-Trifluorotoluene (S)	%				100	101	80-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1514033                          1514034

Parameter	Units	MS		MSD		MS		MSD		% Rec	RPD	Max RPD	Qual
		40150522008	Result	Spike	Conc.	Result	MSD	Result	% Rec				
1,2,4-Trimethylbenzene	ug/L	440	200	200	719	717	139	138	11-200	0	20		
1,3,5-Trimethylbenzene	ug/L	123	200	200	359	364	118	120	54-142	1	20		
Benzene	ug/L	177	200	200	368	372	96	97	66-140	1	20		
Ethylbenzene	ug/L	497	200	200	710	708	107	105	66-143	0	20		
m&p-Xylene	ug/L	813	400	400	1280	1280	117	117	60-141	0	20		
Methyl-tert-butyl ether	ug/L	6.8J	200	200	187	193	90	93	70-129	3	20		
Naphthalene	ug/L	62.7	200	200	271	279	104	108	64-129	3	20		
o-Xylene	ug/L	128	200	200	335	339	104	106	68-132	1	20		
Toluene	ug/L	167	200	200	371	374	102	104	76-130	1	20		

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## QUALITY CONTROL DATA

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:			1514033	1514034								
Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD RPD	Max Qual	
a,a,a-Trifluorotoluene (S)	%	40150522008					101	104	80-120			

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## QUALITY CONTROL DATA

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

QC Batch: 256926 Analysis Method: EPA 6010

QC Batch Method: EPA 3050 Analysis Description: 6010 MET

Associated Lab Samples: 40150524006, 40150524007, 40150524008, 40150524009, 40150524010, 40150524011, 40150524012, 40150524013, 40150524014, 40150524015, 40150524016, 40150524017, 40150524018, 40150524019, 40150524020, 40150524021, 40150524022, 40150524023, 40150524024, 40150524025

METHOD BLANK: 1514232 Matrix: Solid

Associated Lab Samples: 40150524006, 40150524007, 40150524008, 40150524009, 40150524010, 40150524011, 40150524012, 40150524013, 40150524014, 40150524015, 40150524016, 40150524017, 40150524018, 40150524019, 40150524020, 40150524021, 40150524022, 40150524023, 40150524024, 40150524025

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Lead	mg/kg	<0.43	1.3	06/01/17 10:51	

LABORATORY CONTROL SAMPLE: 1514233

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Lead	mg/kg	50	49.2	98	80-120	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 1514234 1514235

Parameter	Units	40150524012	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		Result	Spike	Spike										
Lead	mg/kg	1.9	56.5	56.7	56.4	58.9	96	100	75-125	4	20			

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## QUALITY CONTROL DATA

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

QC Batch:	476839	Analysis Method:	EPA 524.2
QC Batch Method:	EPA 524.2	Analysis Description:	524.2 MSV
Associated Lab Samples:	40150524026		

METHOD BLANK: 2599376 Matrix: Water

Associated Lab Samples: 40150524026

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.062	0.50	05/31/17 01:24	
1,1,1-Trichloroethane	ug/L	<0.10	0.50	05/31/17 01:24	
1,1,2,2-Tetrachloroethane	ug/L	<0.11	0.50	05/31/17 01:24	
1,1,2-Trichloroethane	ug/L	<0.098	0.50	05/31/17 01:24	
1,1-Dichloroethane	ug/L	<0.088	0.50	05/31/17 01:24	
1,1-Dichloroethene	ug/L	<0.089	0.50	05/31/17 01:24	
1,1-Dichloropropene	ug/L	<0.080	0.50	05/31/17 01:24	
1,2,3-Trichlorobenzene	ug/L	<0.10	0.50	05/31/17 01:24	
1,2,3-Trichloropropane	ug/L	<0.073	4.0	05/31/17 01:24	
1,2,4-Trichlorobenzene	ug/L	<0.12	0.50	05/31/17 01:24	
1,2,4-Trimethylbenzene	ug/L	<0.083	0.50	05/31/17 01:24	
1,2-Dibromo-3-chloropropane	ug/L	<0.18	4.0	05/31/17 01:24	
1,2-Dibromoethane (EDB)	ug/L	<0.091	0.50	05/31/17 01:24	
1,2-Dichlorobenzene	ug/L	<0.10	0.50	05/31/17 01:24	
1,2-Dichloroethane	ug/L	<0.092	0.50	05/31/17 01:24	
1,2-Dichloropropane	ug/L	<0.084	4.0	05/31/17 01:24	
1,3,5-Trimethylbenzene	ug/L	<0.078	0.50	05/31/17 01:24	
1,3-Dichlorobenzene	ug/L	<0.082	0.50	05/31/17 01:24	
1,3-Dichloropropane	ug/L	<0.094	0.50	05/31/17 01:24	
1,4-Dichlorobenzene	ug/L	<0.075	0.50	05/31/17 01:24	
2,2-Dichloropropane	ug/L	<0.097	1.0	05/31/17 01:24	
2-Chlorotoluene	ug/L	<0.11	0.50	05/31/17 01:24	
4-Chlorotoluene	ug/L	<0.10	0.50	05/31/17 01:24	
Benzene	ug/L	<0.086	0.50	05/31/17 01:24	
Bromobenzene	ug/L	<0.081	0.50	05/31/17 01:24	
Bromochloromethane	ug/L	<0.16	1.0	05/31/17 01:24	
Bromodichloromethane	ug/L	<0.090	1.0	05/31/17 01:24	
Bromoform	ug/L	<0.23	4.0	05/31/17 01:24	
Bromomethane	ug/L	<0.20	4.0	05/31/17 01:24	
Carbon tetrachloride	ug/L	<0.076	1.0	05/31/17 01:24	
Chlorobenzene	ug/L	<0.068	0.50	05/31/17 01:24	
Chloroethane	ug/L	<0.18	1.0	05/31/17 01:24	
Chloroform	ug/L	<0.10	1.0	05/31/17 01:24	
Chloromethane	ug/L	<0.21	4.0	05/31/17 01:24	
cis-1,2-Dichloroethene	ug/L	<0.085	0.50	05/31/17 01:24	
cis-1,3-Dichloropropene	ug/L	<0.071	0.50	05/31/17 01:24	
Dibromochloromethane	ug/L	<0.13	0.50	05/31/17 01:24	
Dibromomethane	ug/L	<0.098	1.0	05/31/17 01:24	
Dichlorodifluoromethane	ug/L	<0.16	1.0	05/31/17 01:24	
Ethylbenzene	ug/L	<0.051	0.50	05/31/17 01:24	
Hexachloro-1,3-butadiene	ug/L	<0.11	1.0	05/31/17 01:24	

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## QUALITY CONTROL DATA

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

METHOD BLANK: 2599376

Matrix: Water

Associated Lab Samples: 40150524026

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Isopropylbenzene (Cumene)	ug/L	<0.11	0.50	05/31/17 01:24	
m&p-Xylene	ug/L	<0.073	1.0	05/31/17 01:24	
Methylene Chloride	ug/L	<0.20	4.0	05/31/17 01:24	
n-Butylbenzene	ug/L	<0.081	0.50	05/31/17 01:24	
n-Propylbenzene	ug/L	<0.096	0.50	05/31/17 01:24	
Naphthalene	ug/L	<0.064	1.0	05/31/17 01:24	
o-Xylene	ug/L	<0.073	0.50	05/31/17 01:24	
p-Isopropyltoluene	ug/L	<0.083	0.50	05/31/17 01:24	
sec-Butylbenzene	ug/L	<0.063	0.50	05/31/17 01:24	
Styrene	ug/L	<0.075	0.50	05/31/17 01:24	
tert-Butylbenzene	ug/L	<0.097	0.50	05/31/17 01:24	
Tetrachloroethene	ug/L	<0.12	0.50	05/31/17 01:24	
Toluene	ug/L	<0.080	0.50	05/31/17 01:24	
trans-1,2-Dichloroethene	ug/L	<0.11	0.50	05/31/17 01:24	
trans-1,3-Dichloropropene	ug/L	<0.055	0.50	05/31/17 01:24	
Trichloroethene	ug/L	<0.044	0.40	05/31/17 01:24	
Trichlorofluoromethane	ug/L	<0.13	0.50	05/31/17 01:24	
Vinyl chloride	ug/L	<0.098	0.20	05/31/17 01:24	
Xylene (Total)	ug/L	<0.073	1.5	05/31/17 01:24	
1,2-Dichloroethane-d4 (S)	%.	109	75-125	05/31/17 01:24	
4-Bromofluorobenzene (S)	%.	101	75-125	05/31/17 01:24	
Toluene-d8 (S)	%.	101	75-125	05/31/17 01:24	

LABORATORY CONTROL SAMPLE &amp; LCSD: 2599377

2599378

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	17.5	17.0	87	85	70-130	3	20	
1,1,1-Trichloroethane	ug/L	20	20.6	19.6	103	98	70-130	5	20	
1,1,2,2-Tetrachloroethane	ug/L	20	19.4	19.6	97	98	70-130	1	20	
1,1,2-Trichloroethane	ug/L	20	19.8	19.5	99	97	70-130	2	20	
1,1-Dichloroethane	ug/L	20	21.3	20.3	106	102	70-130	5	20	
1,1-Dichloroethene	ug/L	20	21.1	19.9	105	100	70-130	6	20	
1,1-Dichloropropene	ug/L	20	21.5	19.9	107	99	70-130	8	20	
1,2,3-Trichlorobenzene	ug/L	20	18.4	19.0	92	95	70-130	3	20	
1,2,3-Trichloropropane	ug/L	20	19.6	19.1	98	96	70-130	2	20	
1,2,4-Trichlorobenzene	ug/L	20	19.0	19.6	95	98	70-130	3	20	
1,2,4-Trimethylbenzene	ug/L	20	20.3	19.6	101	98	70-130	3	20	
1,2-Dibromo-3-chloropropane	ug/L	50	43.9	44.9	88	90	70-130	2	20	
1,2-Dibromoethane (EDB)	ug/L	20	19.3	19.3	96	96	70-130	0	20	
1,2-Dichlorobenzene	ug/L	20	20.2	19.8	101	99	70-130	2	20	
1,2-Dichloroethane	ug/L	20	19.4	18.9	97	95	70-130	2	20	
1,2-Dichloropropane	ug/L	20	19.9	19.4	99	97	70-130	2	20	
1,3,5-Trimethylbenzene	ug/L	20	20.0	19.6	100	98	70-130	2	20	
1,3-Dichlorobenzene	ug/L	20	20.0	19.5	100	97	70-130	3	20	

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## QUALITY CONTROL DATA

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

Parameter	Units	Spike	LCS	LCSD	LCS	LCSD	% Rec	RPD	Max	Qualifiers
		Conc.	Result	% Rec	% Rec	% Rec	Limits		RPD	
1,3-Dichloropropane	ug/L	20	20.0	19.3	100	97	70-130	3	20	
1,4-Dichlorobenzene	ug/L	20	18.8	18.8	94	94	70-130	0	20	
2,2-Dichloropropane	ug/L	20	17.9	17.0	90	85	70-130	5	20	
2-Chlorotoluene	ug/L	20	19.5	19.1	98	95	70-130	2	20	
4-Chlorotoluene	ug/L	20	19.9	19.5	99	97	70-130	2	20	
Benzene	ug/L	20	20.0	19.7	100	99	70-130	1	20	
Bromobenzene	ug/L	20	19.9	19.1	99	95	70-130	4	20	
Bromochloromethane	ug/L	20	21.9	21.3	110	106	70-130	3	20	
Bromodichloromethane	ug/L	20	17.8	17.1	89	85	70-130	4	20	
Bromoform	ug/L	20	14.4	14.3	72	71	70-130	1	20	
Bromomethane	ug/L	20	17.2	17.4	86	87	70-130	1	20	
Carbon tetrachloride	ug/L	20	16.3	15.9	82	80	70-130	2	20	
Chlorobenzene	ug/L	20	19.4	18.7	97	93	70-130	4	20	
Chloroethane	ug/L	20	22.3	21.2	111	106	70-130	5	20	
Chloroform	ug/L	20	20.9	19.9	105	100	70-130	5	20	
Chloromethane	ug/L	20	26.9	25.4	134	127	70-130	6	20	CH,L1
cis-1,2-Dichloroethene	ug/L	20	21.0	20.3	105	101	70-130	4	20	
cis-1,3-Dichloropropene	ug/L	20	18.1	17.6	91	88	70-130	3	20	
Dibromochloromethane	ug/L	20	16.9	16.9	85	85	70-130	0	20	
Dibromomethane	ug/L	20	19.8	19.9	99	99	70-130	0	20	
Dichlorodifluoromethane	ug/L	20	23.3	22.1	116	111	70-130	5	20	
Ethylbenzene	ug/L	20	19.5	18.5	98	92	70-130	5	20	
Hexachloro-1,3-butadiene	ug/L	20	19.5	19.5	97	97	70-130	0	20	
Isopropylbenzene (Cumene)	ug/L	20	20.3	19.5	102	98	70-130	4	20	
m&p-Xylene	ug/L	40	41.5	39.6	104	99	70-130	5	20	
Methylene Chloride	ug/L	20	20.4	19.6	102	98	70-130	4	20	
n-Butylbenzene	ug/L	20	20.3	19.9	101	99	70-130	2	20	
n-Propylbenzene	ug/L	20	19.7	19.3	98	96	70-130	2	20	
Naphthalene	ug/L	20	17.6	18.4	88	92	70-130	4	20	
o-Xylene	ug/L	20	20.5	19.6	103	98	70-130	4	20	
p-Isopropyltoluene	ug/L	20	20.1	19.7	101	98	70-130	3	20	
sec-Butylbenzene	ug/L	20	20.1	19.5	101	98	70-130	3	20	
Styrene	ug/L	20	20.9	20.2	105	101	70-130	3	20	
tert-Butylbenzene	ug/L	20	20.2	19.4	101	97	70-130	4	20	
Tetrachloroethene	ug/L	20	18.9	17.9	94	89	70-130	5	20	
Toluene	ug/L	20	19.2	18.2	96	91	70-130	6	20	
trans-1,2-Dichloroethene	ug/L	20	21.6	20.9	108	105	70-130	3	20	
trans-1,3-Dichloropropene	ug/L	20	16.2	15.9	81	80	70-130	2	20	
Trichloroethene	ug/L	20	18.9	18.1	94	91	70-130	4	20	
Trichlorofluoromethane	ug/L	20	21.1	20.2	106	101	70-130	5	20	
Vinyl chloride	ug/L	20	24.2	23.6	121	118	70-130	2	20	
Xylene (Total)	ug/L	60	62.0	59.2	103	99	70-130	5	20	
1,2-Dichloroethane-d4 (S)	%.				107	104	75-125			
4-Bromofluorobenzene (S)	%.				99	101	75-125			
Toluene-d8 (S)	%.				104	102	75-125			

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## QUALITY CONTROL DATA

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

MATRIX SPIKE SAMPLE:	2599379						
Parameter	Units	40150528001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.062	20	16.5	83	70-130	
1,1,1-Trichloroethane	ug/L	<0.10	20	21.3	107	70-130	
1,1,2,2-Tetrachloroethane	ug/L	<0.11	20	19.2	96	70-130	
1,1,2-Trichloroethane	ug/L	<0.098	20	19.3	97	70-130	
1,1-Dichloroethane	ug/L	<0.088	20	21.5	107	70-130	
1,1-Dichloroethene	ug/L	<0.089	20	22.5	113	70-130	
1,1-Dichloropropene	ug/L	<0.080	20	21.8	109	70-130	
1,2,3-Trichlorobenzene	ug/L	<0.10	20	18.6	93	70-130	
1,2,3-Trichloropropane	ug/L	<0.073	20	19.0	95	70-130	
1,2,4-Trichlorobenzene	ug/L	<0.12	20	18.9	94	70-130	
1,2,4-Trimethylbenzene	ug/L	<0.083	20	19.7	98	70-130	
1,2-Dibromo-3-chloropropane	ug/L	<0.18	50	44.8	90	70-130	
1,2-Dibromoethane (EDB)	ug/L	<0.091	20	19.0	95	70-130	
1,2-Dichlorobenzene	ug/L	<0.10	20	19.3	96	70-130	
1,2-Dichloroethane	ug/L	<0.092	20	19.1	95	70-130	
1,2-Dichloropropene	ug/L	<0.084	20	19.4	97	70-130	
1,3,5-Trimethylbenzene	ug/L	<0.078	20	19.3	97	70-130	
1,3-Dichlorobenzene	ug/L	<0.082	20	19.4	97	70-130	
1,3-Dichloropropane	ug/L	<0.094	20	19.3	97	70-130	
1,4-Dichlorobenzene	ug/L	<0.075	20	18.4	92	70-130	
2,2-Dichloropropane	ug/L	<0.097	20	18.5	93	70-130	
2-Chlorotoluene	ug/L	<0.11	20	19.0	95	70-130	
4-Chlorotoluene	ug/L	<0.10	20	19.1	96	70-130	
Benzene	ug/L	<0.086	20	20.5	103	70-130	
Bromobenzene	ug/L	<0.081	20	18.8	94	70-130	
Bromochloromethane	ug/L	<0.16	20	21.7	108	70-130	
Bromodichloromethane	ug/L	<0.090	20	17.1	85	70-130	
Bromoform	ug/L	<0.23	20	13.4	67	70-130	M1
Bromomethane	ug/L	<0.20	20	19.4	97	70-130	
Carbon tetrachloride	ug/L	<0.076	20	16.6	83	70-130	
Chlorobenzene	ug/L	<0.068	20	18.7	93	70-130	
Chloroethane	ug/L	<0.18	20	27.5	137	70-130	M1
Chloroform	ug/L	<0.10	20	20.8	104	70-130	
Chloromethane	ug/L	<0.21	20	28.5	143	70-130	CH,M0
cis-1,2-Dichloroethene	ug/L	<0.085	20	21.4	107	70-130	
cis-1,3-Dichloropropene	ug/L	<0.071	20	16.2	81	70-130	
Dibromochloromethane	ug/L	<0.13	20	15.7	78	70-130	
Dibromomethane	ug/L	<0.098	20	18.9	95	70-130	
Dichlorodifluoromethane	ug/L	<0.16	20	29.5	148	70-130	M1
Ethylbenzene	ug/L	<0.051	20	18.8	94	70-130	
Hexachloro-1,3-butadiene	ug/L	<0.11	20	20.5	103	70-130	
Isopropylbenzene (Cumene)	ug/L	<0.11	20	20.0	100	70-130	
m&p-Xylene	ug/L	<0.073	40	40.2	100	70-130	
Methylene Chloride	ug/L	<0.20	20	20.0	100	70-130	
n-Butylbenzene	ug/L	<0.081	20	20.2	101	70-130	
n-Propylbenzene	ug/L	<0.096	20	19.2	96	70-130	
Naphthalene	ug/L	<0.064	20	18.2	91	70-130	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

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**MATRIX SPIKE SAMPLE:** 2599379

Parameter	Units	40150528001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
o-Xylene	ug/L	<0.073	20	19.8	99	70-130	
p-Isopropyltoluene	ug/L	<0.083	20	20.0	100	70-130	
sec-Butylbenzene	ug/L	<0.063	20	19.8	99	70-130	
Styrene	ug/L	<0.075	20	20.1	100	70-130	
tert-Butylbenzene	ug/L	<0.097	20	19.5	97	70-130	
Tetrachloroethene	ug/L	<0.12	20	18.6	93	70-130	
Toluene	ug/L	<0.080	20	18.4	92	70-130	
trans-1,2-Dichloroethene	ug/L	<0.11	20	22.5	112	70-130	
trans-1,3-Dichloropropene	ug/L	<0.055	20	14.6	73	70-130	
Trichloroethene	ug/L	<0.044	20	18.4	92	70-130	
Trichlorofluoromethane	ug/L	<0.13	20	25.4	127	70-130	
Vinyl chloride	ug/L	<0.098	20	27.2	136	70-130	M1
Xylene (Total)	ug/L	<0.073	60	59.9	100	70-130	
1,2-Dichloroethane-d4 (S)	%.				106	75-125	
4-Bromofluorobenzene (S)	%.				101	75-125	
Toluene-d8 (S)	%.				103	75-125	

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**SAMPLE DUPLICATE:** 2599380

Parameter	Units	40150528002 Result	Dup Result	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.062	<0.062	20	
1,1,1-Trichloroethane	ug/L	<0.10	<0.10	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.11	<0.11	20	
1,1,2-Trichloroethane	ug/L	<0.098	<0.098	20	
1,1-Dichloroethane	ug/L	<0.088	<0.088	20	
1,1-Dichloroethene	ug/L	<0.089	<0.089	20	
1,1-Dichloropropene	ug/L	<0.080	<0.080	20	
1,2,3-Trichlorobenzene	ug/L	<0.10	<0.10	20	
1,2,3-Trichloropropane	ug/L	<0.073	<0.073	20	
1,2,4-Trichlorobenzene	ug/L	<0.12	<0.12	20	
1,2,4-Trimethylbenzene	ug/L	<0.083	<0.083	20	
1,2-Dibromo-3-chloropropane	ug/L	<0.18	<0.18	20	
1,2-Dibromoethane (EDB)	ug/L	<0.091	<0.091	20	
1,2-Dichlorobenzene	ug/L	<0.10	<0.10	20	
1,2-Dichloroethane	ug/L	<0.092	<0.092	20	
1,2-Dichloropropane	ug/L	<0.084	<0.084	20	
1,3,5-Trimethylbenzene	ug/L	<0.078	<0.078	20	
1,3-Dichlorobenzene	ug/L	<0.082	<0.082	20	
1,3-Dichloropropane	ug/L	<0.094	<0.094	20	
1,4-Dichlorobenzene	ug/L	<0.075	<0.075	20	
2,2-Dichloropropane	ug/L	<0.097	<0.097	20	
2-Chlorotoluene	ug/L	<0.11	<0.11	20	
4-Chlorotoluene	ug/L	<0.10	<0.10	20	
Benzene	ug/L	<0.086	<0.086	20	
Bromobenzene	ug/L	<0.081	<0.081	20	

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## QUALITY CONTROL DATA

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

SAMPLE DUPLICATE: 2599380

Parameter	Units	40150528002 Result	Dup Result	RPD	Max RPD	Qualifiers
Bromochloromethane	ug/L	<0.16	<0.16		20	
Bromodichloromethane	ug/L	3.0	3.2	6	20	
Bromoform	ug/L	<0.23	<0.23		20	
Bromomethane	ug/L	<0.20	<0.20		20	
Carbon tetrachloride	ug/L	<0.076	<0.076		20	
Chlorobenzene	ug/L	<0.068	<0.068		20	
Chloroethane	ug/L	<0.18	<0.18		20	
Chloroform	ug/L	19.8	21.2	7	20	
Chloromethane	ug/L	4.7	5.3	11	20	CH
cis-1,2-Dichloroethene	ug/L	<0.085	<0.085		20	
cis-1,3-Dichloropropene	ug/L	<0.071	<0.071		20	
Dibromochloromethane	ug/L	0.33J	0.38J		20	
Dibromomethane	ug/L	<0.098	<0.098		20	
Dichlorodifluoromethane	ug/L	<0.16	<0.16		20	
Ethylbenzene	ug/L	<0.051	<0.051		20	
Hexachloro-1,3-butadiene	ug/L	<0.11	<0.11		20	
Isopropylbenzene (Cumene)	ug/L	<0.11	<0.11		20	
m&p-Xylene	ug/L	<0.073	<0.073		20	
Methylene Chloride	ug/L	<0.20	<0.20		20	
n-Butylbenzene	ug/L	<0.081	<0.081		20	
n-Propylbenzene	ug/L	<0.096	<0.096		20	
Naphthalene	ug/L	<0.064	<0.064		20	
o-Xylene	ug/L	<0.073	<0.073		20	
p-Isopropyltoluene	ug/L	<0.083	<0.083		20	
sec-Butylbenzene	ug/L	<0.063	<0.063		20	
Styrene	ug/L	<0.075	<0.075		20	
tert-Butylbenzene	ug/L	<0.097	<0.097		20	
Tetrachloroethene	ug/L	<0.12	<0.12		20	
Toluene	ug/L	<0.080	<0.080		20	
trans-1,2-Dichloroethene	ug/L	<0.11	<0.11		20	
trans-1,3-Dichloropropene	ug/L	<0.055	<0.055		20	
Trichloroethene	ug/L	<0.044	<0.044		20	
Trichlorofluoromethane	ug/L	<0.13	<0.13		20	
Vinyl chloride	ug/L	<0.098	<0.098		20	
Xylene (Total)	ug/L	<0.073	<0.073		20	
1,2-Dichloroethane-d4 (S)	%.	107	109	1		
4-Bromofluorobenzene (S)	%.	100	100	1		
Toluene-d8 (S)	%.	102	103	1		

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## QUALITY CONTROL DATA

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

QC Batch: 256948 Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 40150524006, 40150524024

SAMPLE DUPLICATE: 1514324

Parameter	Units	40150524024 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.7	19.7	0	10	

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## QUALITY CONTROL DATA

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

QC Batch: 256956 Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 40150524007, 40150524008, 40150524009, 40150524010, 40150524011, 40150524012, 40150524013,  
40150524014, 40150524015, 40150524016, 40150524017, 40150524018, 40150524019, 40150524020,  
40150524021, 40150524022, 40150524023, 40150524025

SAMPLE DUPLICATE: 1514414

Parameter	Units	40150524007 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	29.1	29.0	0	10	

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## QUALIFIERS

Project: 7679 BOB'S SERVICE  
Pace Project No.: 40150524

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### 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 and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

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.

### LABORATORIES

PASI-G Pace Analytical Services - Green Bay

PASI-M Pace Analytical Services - Minneapolis

### BATCH QUALIFIERS

Batch: 476839

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

### ANALYTE QUALIFIERS

1q Results are from sample aliquot taken from a jar with head space and preserved with MeOH in the laboratory.

CH The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

L1 Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

P4 Sample field preservation does not meet EPA or method recommendations for this analysis.

W Non-detect results are reported on a wet weight basis.

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 7679 BOB'S SERVICE  
Pace Project No.: 40150524

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40150524006	B1 @ 2-4'	TPH GRO/PVOC WI ext.	256860	WI MOD GRO	256979
40150524007	B1 @ 8-9'	TPH GRO/PVOC WI ext.	256860	WI MOD GRO	256979
40150524008	B2 @ 2-4'	TPH GRO/PVOC WI ext.	256860	WI MOD GRO	256979
40150524009	B2 @ 13-14'	TPH GRO/PVOC WI ext.	256860	WI MOD GRO	256979
40150524010	B3 @ 2-4'	TPH GRO/PVOC WI ext.	256860	WI MOD GRO	256979
40150524011	B3 @ 13-14'	TPH GRO/PVOC WI ext.	256860	WI MOD GRO	256979
40150524012	B4 @ 2-4'	TPH GRO/PVOC WI ext.	256860	WI MOD GRO	256979
40150524013	B4 @ 8-9'	TPH GRO/PVOC WI ext.	256860	WI MOD GRO	256979
40150524014	B5 @ 2-4'	TPH GRO/PVOC WI ext.	256860	WI MOD GRO	256979
40150524015	B5 @ 12-14'	TPH GRO/PVOC WI ext.	256860	WI MOD GRO	256979
40150524016	B6 @ 2-4'	TPH GRO/PVOC WI ext.	256860	WI MOD GRO	256979
40150524017	B6 @ 13-14'	TPH GRO/PVOC WI ext.	256860	WI MOD GRO	256979
40150524018	B7 @ 2-4'	TPH GRO/PVOC WI ext.	256860	WI MOD GRO	256979
40150524019	B7 @ 12-14'	TPH GRO/PVOC WI ext.	256860	WI MOD GRO	256979
40150524020	B8 @ 2-4'	TPH GRO/PVOC WI ext.	256860	WI MOD GRO	256979
40150524021	B8 @ 11-13'	TPH GRO/PVOC WI ext.	256860	WI MOD GRO	256979
40150524022	B9 @ 2-4'	TPH GRO/PVOC WI ext.	256860	WI MOD GRO	256979
40150524023	B9 @ 8-9'	TPH GRO/PVOC WI ext.	256860	WI MOD GRO	256979
40150524024	B10 @ 2-4'	TPH GRO/PVOC WI ext.	256860	WI MOD GRO	256979
40150524025	B10 @ 11-13'	TPH GRO/PVOC WI ext.	257157	WI MOD GRO	257162
40150524001	B1	WI MOD GRO	256856		
40150524002	B2	WI MOD GRO	256856		
40150524003	B6	WI MOD GRO	256856		
40150524004	B7	WI MOD GRO	256856		
40150524005	B10	WI MOD GRO	256856		
40150524006	B1 @ 2-4'	EPA 3050	256926	EPA 6010	257251
40150524007	B1 @ 8-9'	EPA 3050	256926	EPA 6010	257251
40150524008	B2 @ 2-4'	EPA 3050	256926	EPA 6010	257251
40150524009	B2 @ 13-14'	EPA 3050	256926	EPA 6010	257251
40150524010	B3 @ 2-4'	EPA 3050	256926	EPA 6010	257251
40150524011	B3 @ 13-14'	EPA 3050	256926	EPA 6010	257251
40150524012	B4 @ 2-4'	EPA 3050	256926	EPA 6010	257251
40150524013	B4 @ 8-9'	EPA 3050	256926	EPA 6010	257251
40150524014	B5 @ 2-4'	EPA 3050	256926	EPA 6010	257251
40150524015	B5 @ 12-14'	EPA 3050	256926	EPA 6010	257251
40150524016	B6 @ 2-4'	EPA 3050	256926	EPA 6010	257251
40150524017	B6 @ 13-14'	EPA 3050	256926	EPA 6010	257251
40150524018	B7 @ 2-4'	EPA 3050	256926	EPA 6010	257251
40150524019	B7 @ 12-14'	EPA 3050	256926	EPA 6010	257251
40150524020	B8 @ 2-4'	EPA 3050	256926	EPA 6010	257251
40150524021	B8 @ 11-13'	EPA 3050	256926	EPA 6010	257251
40150524022	B9 @ 2-4'	EPA 3050	256926	EPA 6010	257251
40150524023	B9 @ 8-9'	EPA 3050	256926	EPA 6010	257251
40150524024	B10 @ 2-4'	EPA 3050	256926	EPA 6010	257251
40150524025	B10 @ 11-13'	EPA 3050	256926	EPA 6010	257251
40150524026	POTABLE	EPA 524.2	476839		

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 7679 BOB'S SERVICE

Pace Project No.: 40150524

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40150524006	B1 @ 2-4'	ASTM D2974-87	256948		
40150524007	B1 @ 8-9'	ASTM D2974-87	256956		
40150524008	B2 @ 2-4'	ASTM D2974-87	256956		
40150524009	B2 @ 13-14'	ASTM D2974-87	256956		
40150524010	B3 @ 2-4'	ASTM D2974-87	256956		
40150524011	B3 @ 13-14'	ASTM D2974-87	256956		
40150524012	B4 @ 2-4'	ASTM D2974-87	256956		
40150524013	B4 @ 8-9'	ASTM D2974-87	256956		
40150524014	B5 @ 2-4'	ASTM D2974-87	256956		
40150524015	B5 @ 12-14'	ASTM D2974-87	256956		
40150524016	B6 @ 2-4'	ASTM D2974-87	256956		
40150524017	B6 @ 13-14'	ASTM D2974-87	256956		
40150524018	B7 @ 2-4'	ASTM D2974-87	256956		
40150524019	B7 @ 12-14'	ASTM D2974-87	256956		
40150524020	B8 @ 2-4'	ASTM D2974-87	256956		
40150524021	B8 @ 11-13'	ASTM D2974-87	256956		
40150524022	B9 @ 2-4'	ASTM D2974-87	256956		
40150524023	B9 @ 8-9'	ASTM D2974-87	256956		
40150524024	B10 @ 2-4'	ASTM D2974-87	256948		
40150524025	B10 @ 11-13'	ASTM D2974-87	256956		

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# Sample Condition Upon Receipt

Pace Analytical Services, LLC. - Green Bay WI  
1241 Bellevue Street, Suite 9  
Green Bay, WI 54302

**Client Name:** REI

Project #:

Courier:  FedEx  UPS - Client  Pace Other: Waltco  
Tracking #: 138247

AFFIX WORKORDER LABEL HERE

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 N/A

Type of Ice: Wet Blue Dry None  Samples on ice, cooling process has begun

Cooler Temperature Uncorr: R01 /Corr: R01 Biological Tissue is Frozen:  yes  no

Temp Blank Present:  yes  no

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C.

Comments:

Person examining contents:

Date: 5/31/17

Initials: OB

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.		
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 <input type="checkbox"/> N/A	5.		
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:		
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.		
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.		
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	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 type="checkbox"/> N/A			
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.		
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.		
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.		
-Includes date/time/ID/Analysis Matrix:	<u>S</u>			
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13. <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> NaOH +ZnAct		
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A			
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed	Lab Std #ID of preservative	Date/Time:
Headspace in VOA Vials ( >6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.		
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.		
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input 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: Mean volume for previous project after 5/31/17

**Project Manager Review:**

# Sample Condition Upon Receipt

Pace Analytical Services, LLC. - Green Bay WI  
1241 Bellevue Street, Suite 9  
Green Bay, WI 54302



**Client Name:** REI

Project #:

AFFIX WORKORDER LABEL HERE

Courier:  FedEx  UPS Client  Pace Other: WATCO

Tracking #: 13780791

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 52-74 Type of Ice: Wet Blue Dry None  Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 2°C /Corr: 3°C Biological Tissue is Frozen:  yes  no

Temp Blank Present:  yes  no

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C.

Comments:

Person examining contents:

Date: 5/26/17

Initials: RMV

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.		
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 <input type="checkbox"/> N/A	5.		
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Date/Time:		
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.		
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	<u>BB@11-13 5/26/17 021</u>		
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8. <u>MISSING VOLUME VIAL 6910 807 SAMPLE 007</u>		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	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 <input type="checkbox"/> N/A	10.		
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.		
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12.		
-Includes date/time/ID/Analysis Matrix:	<u>S</u>			
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> NaOH + ZnAct		
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> ≥2; NaOH+ZnAct ≥9, NaOH ≥12)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
exceptions: VOA coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed	Lab Std #/ID of preservative	Date/Time:
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.		
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.		
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input 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: still missing vial for 025

Kf 5/26/17

Project Manager Review:

Date:

5-26-17



## Sample Condition Upon Receipt

Pace Analytical Services, Inc.  
1241 Bellevue Street, Suite 9  
Green Bay, WI 54302

Client Name: REI

Project #

WO# : 40150524



40150524

Courier:  FedEx  UPS  Client  Pace  Other: Waltco  
Tracking #: 137488-2

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yes  noCustody Seal on Samples Present:  yes  no Seals intact:  yes  noPacking Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer Used NA

Type of Ice:  Wet  Blue  Dry  NoneCooler Temperature Uncorr: /Corr: R01 Biological Tissue is Frozen:  yesTemp Blank Present:  yes  no

Temp should be above freezing to 6°C for all sample except Biota.

Frozen Biota Samples should be received ≤ 0°C.

			Comments:	Person examining contents: Date: 5/24/17 Initials: KP
Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.		
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. 026 added by lab per KT 5/24/17 PM		
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 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 <input type="checkbox"/> N/A	5.		
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:		
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.		
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7. KT 5/24/17		
Sufficient Volume:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8. 015+021, no vial volume received		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9. ① +025 KT 5/24/17		
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A			
-Pace IR Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A			
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	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. 009 vial ID B8@13-14'; 011 time 1547 all; 015 time 1640; 023 vial no time KT 5/24/17		
-Includes date/time/ID/Analysis Matrix:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A			
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO3 <input type="checkbox"/> H2SO4 <input type="checkbox"/> NaOH <input type="checkbox"/> NaOH +ZnAct		
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Initial when completed	Lab Std #/ID of preservative	Date/Time:
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.		
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.		
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: 015 vial ID G1P5@12-14, time 1640 placed by PM

KT 5/24/17

Project Manager Review:

Date: 5-25-17

## **APPENDIX B**

### **SOIL AND GROUNDWATER LABORATORY REPORTS**



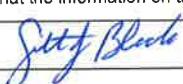
Route To: Watershed/Wastewater  Remediation/Redevelopment  Waste Management  Other

Page 1 of 1

Facility/Project Name Burnett County - Former Hedlund DX			License/Permit/Monitoring Number BRRTS # 03-07-000151			Boring Number GP-8											
Boring Drilled By: Name of crew chief (first, last) and Firm Mitch Panfil - Gestra Engineering			Date Drilling Started 5/22/2017	Date Drilling Completed 5/22/2017	Drilling Method Geoprobe												
WI Unique Well No.		DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation 0	Borehole Diameter 2.25"											
Local Grid Origin <input type="checkbox"/> (estimated) <input type="checkbox"/> or Boring Location GP-8 State Plane			Lat Long	Local Grid Location N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/>													
Facility ID 807049540		County Burnett		County Code 7	Civil Town/City or Village Town of Daniels												
Sample	Number	Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit			U.S.C.S.	Graphic	Well	PID/FID	Soil Properties				RQD/Comments
													Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200
1	SS	30					Sandy/gravelly fill material	GP				0.0		M			
2	SS	36					Gray clay w/ brown mottling	CH				0.0					
3	SS	48					Medium grained saturated sand	SP				0.0		W			
							EOB @ 15' Water sample collected										

I hereby certify that the information on this form is true and the correct to the best of my knowledge

Signature



Firm

REI Engineering, Inc.  
4080 North 20th Avenue, Wausau, WI

This form is authorized by Chapters 281,283,289,292,293,295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Route To: Watershed/Wastewater  Waste Management   
Remediation/Redevelopment  Other

Page 1 of 1

Facility/Project Name Burnett County - Former Hedlund DX			License/Permit/Monitoring Number BRRTS # 03-07-000151			Boring Number GP-9								
Boring Drilled By: Name of crew chief (first, last) and Firm Mitch Panfil - Gestra Engineering			Date Drilling Started 5/22/2017	Date Drilling Completed 5/22/2017	Drilling Method Geoprobe									
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation 0	Borehole Diameter 2.25"	2-9								
Local Grid Origin <input type="checkbox"/> (estimated) <input type="checkbox"/> or Boring Location GP-9			Lat	Local Grid Location N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W <input type="checkbox"/>										
State Plane			Long											
Facility ID 807049540		County Burnett	County Code 7	Civil Town/City or Village Town of Daniels										
Number	Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit			Well	PID/FID	Soil Properties				RQD/Comments
					U.S.C.S.	Graphic	Compressive Strength			Moisture Content	Liquid Limit	Plasticity Index	P 200	
1	SS	24		1	Sandy/gravelly fill material	GP		0.0	M					
				2	Gray clay w/ brown mottling w/ trace sand & cobble	GC								
				3	Medium to coarse brown sand	SP								
				4	No recovery									
				5										
2	SS	0		6										
				7										
				8										
3	SS	0		9										
				10										
				11										
				12										
				13										
				14										
				15	EOB @ 15'									
				16										
				17										

I hereby certify that the information on this form is true and the correct to the best of my knowledge

Signature

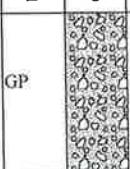
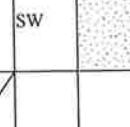
Firm

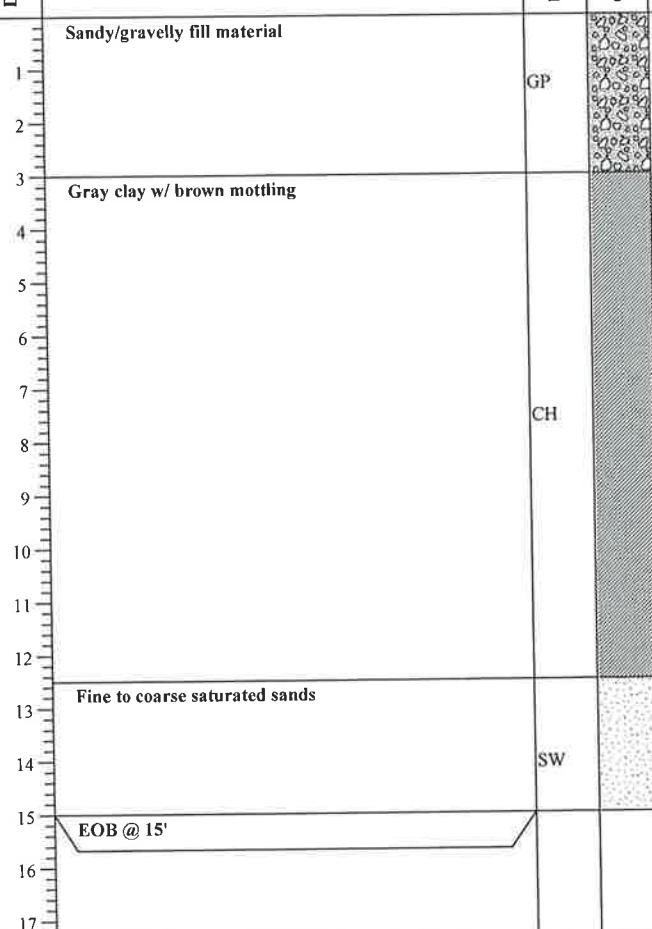
REI Engineering, Inc.  
4080 North 20th Avenue, Wausau, WI

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Route To: Watershed/Wastewater  Remediation/Redevelopment  Waste Management  Other

Page 1 of 1

Facility/Project Name Burnett County - Former Hedlund DX			License/Permit/Monitoring Number BRRTS # 03-07-000151			Boring Number GP-10									
Boring Drilled By: Name of crew chief (first, last) and Firm Mitch Panfil - Gestra Engineering			Date Drilling Started 5/22/2017	Date Drilling Completed 5/22/2017	Drilling Method Geoprobe										
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation 0	Borehole Diameter 2.25"	-10									
Local Grid Origin <input type="checkbox"/> (estimated) <input type="checkbox"/> or Boring Location GP-10			Lat	Local Grid Location											
State Plane			Long	N <input type="checkbox"/>	E <input type="checkbox"/>										
S <input type="checkbox"/>		W <input type="checkbox"/>													
Facility ID 807049540		County Burnett	County Code 7	Civil Town/City/Village Town of Daniels											
Sample Number	Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit		U.S.C.S.	Graphic	Well	P/D/FID	Soil Properties				RQD/ Comments
					Compressive Strength	Moisture Content					Liquid Limit	Plasticity Index	P 200		
1	SS	36		1	Sandy/gravelly fill material	GP		9.7	M						
2	SS	48		2	Gray clay w/ brown mottling	CH		5.9							
3	SS	36		3				3.3							
				4											
				5											
				6											
				7											
				8											
				9											
				10											
				11											
				12											
				13	Fine to coarse saturated sands	SW		W							
				14											
				15	EOB @ 15'										
				16											
				17											



I hereby certify that the information on this form is true and correct to the best of my knowledge

Signature



Firm

REI Engineering, Inc.  
4080 North 20th Avenue, Wausau, WI

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Route To: Watershed/Wastewater  Remediation/Redevelopment  Waste Management  Other

Page 1 of 1

Facility/Project Name Burnett County - Former Hedlund DX				License/Permit/Monitoring Number BRRTS # 03-07-000151				Boring Number GP-11				
Boring Drilled By: Name of crew chief (first, last) and Firm Mitch Panfil - Gestra Engineering				Date Drilling Started 5/22/2017		Date Drilling Completed 5/22/2017		Drilling Method Geoprobe				
WI Unique Well No.		DNR Well ID No.		Common Well Name		Final Static Water Level		Surface Elevation 0	Borehole Diameter 2.25"			
Local Grid Origin <input type="checkbox"/> (estimated) <input type="checkbox"/> or Boring Location GP-11 State Plane				Lat Long		Local Grid Location N <input type="checkbox"/> S <input type="checkbox"/>		E <input type="checkbox"/> W <input type="checkbox"/>				
Facility ID 807049540			County Burnett		County Code 7		Civil Town/City/or Village Town of Daniels					
Sample		Depth In Feet	Soil/ Rock Description And Geologic Origin For Each Major Unit			U.S.C.S.	Graphic	Soil Properties			RQD/Comments	
Number	Type		Length Att. & Recovered (in)	Blow Counts	Well			PID/FID	Compressive Strength	Moisture Content		Liquid Limit
1	SS	36		Sandy/gravelly/cobble base coarse	GP			M				
			1	Fine sand	SM							
			2	Gray/brown clay			866					
2	SS	36	3									
			4									
			5									
3	SS	36	6									
			7									
			8									
			9									
			10									
			11									
			12									
			13	Saturated fine to medium sand	SW							
			14									
			15	EOB @ 15' Water sample collected								
			16									
			17									

I hereby certify that the information on this form is true and the correct to the best of my knowledge

Signature

Firm

REI Engineering, Inc.  
4080 North 20th Avenue, Wausau, WI

This form is authorized by Chapters 281,283,289,292,293,295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

**Notice.** Please complete Form 3300-5 and return it to the appropriate DNR office and bureau. Completion of this report is required by chs. 160,281,283,289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141 Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10 and \$25, 000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See the instructions for more information.

Route to: <input type="checkbox"/> Drinking Water <input type="checkbox"/> Watershed/Wastewater <input type="checkbox"/> Waste Management <input type="checkbox"/> Remediation/Redevelopment <input type="checkbox"/> Other _____			
<b>(1) GENERAL INFORMATION</b>		<b>(2) FACILITY/ OWNER INFORMATION</b>	
WI Unique Well No.	DNR Well ID No.	County	Facility Name
		Burnett	Burnett County - Former Hedlund DX
Common Well Name <u>GP-8</u>		Gov't Lot (If applicable)	
_____ 1/4 of _____ 1/4 of Sec. _____, T. _____ N; R. _____		<input type="checkbox"/> E <input type="checkbox"/> W	Street Address of Well
Grid Location		City, Village, or Town Town of Daniels	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Well Location <input type="checkbox"/>		Present Well Owner <input type="checkbox"/> Original Owner Burnett County Same	
Lat. _____ Long _____ or St. Plane _____ ft. N. _____ ft. E. <u>SCN</u> Zone		Street Address or Route of Owner	
Reason For Abandonment		City, State, Zip Code	
Soil and groundwater sampling complete		of Replacement Well _____	
<b>(3) WELL/DRILLHOLE/BOREHOLE INFORMATION</b>			
Original Construction Date <u>5/22/2017</u>		Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Borehole / Drillhole		Liner(s) Removed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable	
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (Specify) <u>Hydraulic push</u>		Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	
Formation Type: <input type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		Casing Left in Place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Total Well Depth (ft.) <u>15.0</u> (From ground surface)		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Casing Diameter (in.) _____		Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> NO	
Casing Depth (ft.) _____		Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Lower Drillhole Diameter (in.) <u>2.25</u>		If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		Required Method of Placing Sealing Material	
If Yes, To What Depth? _____ Feet		<input checked="" type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped	
Depth to Water (Feet) <u>12.5</u>		<input type="checkbox"/> Screened & Poured (Bentonite Chips) <input type="checkbox"/> Other (Explain)	
<b>(5) Material Used To Fill Well/Drillhole</b>		Sealing Materials	
Granular bentonite		<input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.) <input type="checkbox"/> Bentonite-Sand Slurry " " <input type="checkbox"/> Bentonite Chips	
		From (Ft.)	To (Ft.)
		Surface	15
		No Yards Sacks Sealant or Volume	(Circle One)
		0.5 bags	Mix Ratio or Mud Weight
(6) Comments: _____			
<b>(7) Name of Person or Firm Doing Sealing Work</b>		Date of Abandonment	
Gestra Engineering/ REI - Scott Blado		5/22/2017	
Signature of Person Doing Work <i>Scott Blado</i>		Date Signed 6/13/2017	
Street or Route 4080 N. 20th Avenue, Wausau, WI		Telephone Number ( 715 ) 675-9784	
<b>FOR DNR OR COUNTY USE ONLY</b>			
Comments			

**Notice.** Please complete Form 3300-5 and return it to the appropriate DNR office and bureau. Completion of this report is required by chs. 160,281,283,289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141 Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10 and \$25, 000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See the instructions for more information.

Route to: <input type="checkbox"/> Drinking Water <input type="checkbox"/> Watershed/Wastewater <input type="checkbox"/> Waste Management <input type="checkbox"/> Remediation/Redevelopment <input type="checkbox"/> Other _____			
<b>(1) GENERAL INFORMATION</b>		<b>(2) FACILITY/ OWNER INFORMATION</b>	
WI Unique Well No.	DNR Well ID No.	County	Facility Name
		Burnett	Burnett County - Former Hedlund DX
Common Well Name	Gov't Lot (If applicable)		
GP-9			
Grid Location	1/4 of Sec. _____, T. _____ N; R. _____ Lat. _____ Long _____ or St. Plane _____ ft. N. _____ ft. E. _____ S.C.N. Zone _____		
Local Grid Origin <input type="checkbox"/>	(estimated: <input type="checkbox"/> ) or Well Location <input type="checkbox"/>		
Reason For Abandonment	WI Unique Well No.		
Soil and groundwater sampling complete _____ of Replacement Well _____			
<b>(3) WELL/DRILLHOLE/BOREHOLE INFORMATION</b>		<b>(4) PUMP, LINER, SCREEN, CASING, &amp; SEALING MATERIAL</b>	
Original Construction Date	5/22/2017		
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Borehole / Drillhole	If a Well Construction Report is available, please attach.		
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (Specify) <u>Hydraulic push</u>			
Formation Type: <input type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock			
Total Well Depth (ft.) <u>15.0</u> (From ground surface)	Casing Diameter (in.) _____	Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	
	Casing Depth (ft.) _____	Liner(s) Removed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable	
Lower Drillhole Diameter (in.) <u>2.25</u>		Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		Casing Left in Place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Applicable	
If Yes, To What Depth? _____ Feet		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Depth to Water (Feet) <u>12.5</u>		Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> NO	
<b>(5) Material Used To Fill Well/Drillhole</b>		Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Granular bentonite		From (Ft.)	To (Ft.)
		Surface	15
		No Yards Sacks Sealant or Volume	(Circle One)
		0.5 bags	Mix Ratio or Mud Weight
(6) Comments: _____			

(7) Name of Person or Firm Doing Sealing Work Gestra Engineering/ REI - Scott Blado		Date of Abandonment 5/22/2017
Signature of Person Doing Work 		Date Signed 6/13/2017
Street or Route 4080 N. 20th Avenue, Wausau, WI		Telephone Number ( 715 ) 675-9784
City, State, Zip Code		

FOR DNR OR COUNTY USE ONLY	
Date Received	Noted By
Comments	

**Notice.** Please complete Form 3300-5 and return it to the appropriate DNR office and bureau. Completion of this report is required by chs. 160,281,283,289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141 Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10 and \$25, 000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See the instructions for more information.

Route to:  Drinking Water  Watershed/Wastewater  Waste Management  Remediation/Redevelopment  Other \_\_\_\_\_

(1) GENERAL INFORMATION			(2) FACILITY/ OWNER INFORMATION	
WI Unique Well No.	DNR Well ID No.	County	Facility Name	
GP-10			Burnett County - Former Hedlund DX	
Common Well Name			Facility ID	License/Permit/Monitoring No.
Gov't Lot (If applicable)			807049540	BRRTS#03-07-000151
1/4 of _____ 1/4 of Sec _____, T. _____ N; R. _____			Street Address of Well	
Grid Location				
ft. <input type="checkbox"/> N. <input type="checkbox"/> S., ft. <input type="checkbox"/> E. <input type="checkbox"/> W.			City, Village, or Town	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Well Location <input type="checkbox"/>			Town of Daniels	
Lat. _____ Long _____ or			Present Well Owner	Original Owner
St. Plane	ft. N.	ft. E.	Burnett County	Same
Zone			Street Address or Route of Owner	
Reason For Abandonment			City, State, Zip Code	
Soil and groundwater sampling complete				
of Replacement Well _____				

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION			(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL	
Original Construction Date 5/22/2017			Pump & Piping Removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
<input type="checkbox"/> Monitoring Well			Liner(s) Removed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable
<input type="checkbox"/> Water Well			Screen Removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
<input checked="" type="checkbox"/> Borehole / Drillhole			Casing Left in Place?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Construction Type:			Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug			Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input checked="" type="checkbox"/> Other (Specify) <u>Hydraulic push</u>			Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Formation Type:			If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock			Required Method of Placing Sealing Material	
Total Well Depth (ft.) 15.0 (From groundsurface)			<input checked="" type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped	<input type="checkbox"/> Screened & Poured (Bentonite Chips) <input type="checkbox"/> Other (Explain)
Casing Diameter (in.) _____ Casing Depth (ft.) _____			Sealing Materials	
Lower Drillhole Diameter (in.) 2.25			<input type="checkbox"/> Neat Cement Grout	For monitoring wells and monitoring well boreholes only
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			<input type="checkbox"/> Sand-Cement (Concrete) Grout	<input type="checkbox"/> Bentonite Chips
If Yes, To What Depth? _____ Feet			<input type="checkbox"/> Concrete	<input checked="" type="checkbox"/> Granular Bentonite
Depth to Water (Feet) 12.5			<input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.)	<input type="checkbox"/> Bentonite - Cement Grout
			<input type="checkbox"/> Bentonite-Sand Slurry " "	<input type="checkbox"/> Bentonite - Sand Slurry
			<input type="checkbox"/> Bentonite Chips	

(5)	Material Used To Fill Well/Drillhole	From (Ft.)	To (Ft.)	Nd Yards Sacks Sealant or Volume	(Circle One)	Mix Ratio or Mud Weight
	Granular bentonite	Surface	15	0.5 bags		

(6) Comments: \_\_\_\_\_

(7) Name of Person or Firm Doing Sealing Work <b>Gestra Engineering/ REI - Scott Blado</b>		Date of Abandonment 5/22/2017	FOR DNR OR COUNTY USE ONLY	
Signature of Person Doing Work <i>Scott Blado</i>		Date Signed 6/13/2017	Date Received	Noted By
Street or Route 4080 N. 20th Avenue, Wausau, WI		Telephone Number ( 715 ) 675-9784	Comments	
City, State, Zip Code				

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Route to:  Drinking Water  Watershed/Wastewater  Waste Management  Remediation/Redevelopment  Other \_\_\_\_\_

<b>(1) GENERAL INFORMATION</b>			<b>(2) FACILITY/ OWNER INFORMATION</b>	
WI Unique Well No.	DNR Well ID No.	County	Facility Name	
GP-11			Burnett County - Former Hedlund DX	
Common Well Name Gov't Lot (If applicable)			Facility ID	License/Permit/Monitoring No.
			807049540	BRRTS#03-07-000151
Grid Location			Street Address of Well	
1/4 of _____ 1/4 of Sec. _____, T. _____ N; R. _____ ft. N. <input type="checkbox"/> S., ft. E. <input type="checkbox"/> W.			City, Village, or Town	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/> ) or Well Location <input type="checkbox"/>			Town of Daniels	
Lat. _____ Long _____ or St. Plane _____ ft. N. _____ ft. E. <input type="checkbox"/> S. <input type="checkbox"/> C. <input type="checkbox"/> N. Zone _____			Present Well Owner Original Owner	
Reason For Abandonment WI Unique Well No.			Street Address or Route of Owner	
Soil and groundwater sampling complete of Replacement Well _____			City, State, Zip Code	

<b>(3) WELL/DRILLHOLE/BOREHOLE INFORMATION</b>			<b>(4) PUMP, LINER, SCREEN, CASING, &amp; SEALING MATERIAL</b>	
Original Construction Date 5/22/2017			Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Borehole / Drillhole			Liner(s) Removed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable	
If a Well Construction Report is available, please attach.			Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (Specify) <u>Hydraulic push</u>			Casing Left in Place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Formation Type: <input type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock			Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Total Well Depth (ft.) 15.0 (From ground surface)			Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Casing Diameter (in.) _____ Casing Depth (ft.) _____			Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Lower Drillhole Diameter (in.) 2.25			If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			Required Method of Placing Sealing Material	
If Yes, To What Depth? _____ Feet			<input checked="" type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Screened & Poured (Bentonite Chips) <input type="checkbox"/> Other (Explain)	
Depth to Water (Feet) 12.5			Sealing Materials	
			<input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Bentonite Chips <input type="checkbox"/> Sand-Cement (Concrete) Grout <input checked="" type="checkbox"/> Granular Bentonite <input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite - Cement Grout <input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.) <input type="checkbox"/> Bentonite - Sand Slurry <input type="checkbox"/> Bentonite Chips <input type="checkbox"/> Bentonite - Sand Slurry	
			For monitoring wells and monitoring well boreholes only	
			<input type="checkbox"/> Bentonite Chips <input checked="" type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Cement Grout <input type="checkbox"/> Bentonite - Sand Slurry	

(5) Material Used To Fill Well/Drillhole			From (Ft.)	To (Ft.)	No Yards Sacks Sealant or Volume	(Circle One)	Mix Ratio or Mud Weight
Granular bentonite			Surface	15	0.5 bags		

(6) Comments: \_\_\_\_\_

(7) Name of Person or Firm Doing Sealing Work <b>Gestra Engineering/REI - Scott Blado</b>		Date of Abandonment 5/22/2017
Signature of Person Doing Work 		Date Signed 6/13/2017
Street or Route 4080 N. 20th Avenue, Wausau, WI		Telephone Number ( 715 ) 675-9784
City, State, Zip Code		

FOR DNR OR COUNTY USE ONLY	
Date Received	Noted By
Comments	

## **APPENDIX C**

### **METHODS AND PROCEDURES**



# **METHODS AND PROCEDURES**

## **FOR**

### **GEOPROBE SOIL SAMPLING**

The Geoprobe unit hydraulically advances threaded, two-inch diameter, four-foot long, steel rod sections into the subsurface. A four-foot sampler, consisting of a drive shoe, a steel tube with a clean acetate liner, and a drive-head retractable piston, is attached to the leading Geoprobe rod. The sampler is driven down to the top of the interval to be sampled. The stop-pin is removed to release the drive head piston, which retracts as the sampler is advanced. When the sampler has been advanced four feet, the rods are retracted from the hole and the soil in the acetate liner is recovered. The acetate liner is split open and the soil is visually and manually classified by the field geologist/technician in accordance with **ASTM:D2488-84**. Logs of the borings are filled out indicating the depth and identification of the various strata, water level information, and pertinent information regarding the method of maintaining and advancing the borings.

Immediately after identification, the soil is quickly divided into two portions. One portion is prepared for potential laboratory analysis. The other portion is placed into a clean one-quart Ziploc bag for field screening. See the section "Soil Headspace Analysis" for field screening procedures.

#### **HEADSPACE ANALYSIS**

The soils were screened with a Mini-RAE photoionization detector (PID) equipped with an 10.6 eV lamp. The detector was calibrated in instrument units for Total Organic Vapors using an isobutylene standard. The soil sample, sealed in a Ziploc bag, was shaken vigorously to promote volatilization of the contaminant into the headspace of the bag. The sample was allowed to rest for at least ten minutes and then shaken again before screening. When ambient temperatures were below 60 degrees F, soil samples were allowed to warm for a minimum of 10 minutes in a heated environment prior to headspace development. The Ziploc bag was punctured with the PID probe and the resulting meter reading was recorded.

### **SAMPLING AND CHAIN OF CUSTODY**

Soil samples for laboratory analysis were collected into laboratory prepared vials. Each vial was labeled and placed directly into a cooler pending delivery to the laboratory. Latex gloves were worn during all sample collection procedures.

An entry on a Chain of Custody log was completed as each sample was collected. The Chain of Custody included the following information: project name, work order number, shipped by, shipped to, sampling point, location, field ID number, date and time taken, sample type, number of containers, analysis required, sampler (s) signature (s), etc. As few people as possible handled the samples. The Chain of Custody log was sent to the laboratory with each cooler of samples.

### **DECONTAMINATION**

Sampling equipment was decontaminated prior to sampling. Steel rod sections were washed after every sample collected.

## **APPENDIX D**

### **SOIL DISPOSAL DOCUMENTATION**



LINCOLN COUNTY LANDFILL 715-536-9636

**Site: N4750 Landfill Lane, Merrill, WI 54452**  
**Mailing: 801 N Sales St, Ste 201, Merrill, WI 54452**

**OPERATING HOURS:**

Monday-Friday

SUMMER (May 1 - Sept. 30) 7:00 am - 4:00 pm

**WINTER (Oct. 1 - Apr. 30) 8:00 am - 4:00 pm**

1st and 3rd Sat. 8:00 am - Noon

DATE: 5/31/2017

Time In: 08:54 AM

TICKET #: 230390      Vehicle #:

Vehicle #:

BILL TO: R.E.I.

HAULER : R.E.I.

JOB : 17 - 3 B - RE #7367axuc Hedlund DX, Falun

PO# : REI job #7367axuc

Contaminated soil \$150 minimum (CON MIN) 1 un  
Gross: 1 Tare: 0 Net Weight: 1

### Scale Notes:

## Charge Transaction

HAVE A NICE DAY!

**Customer Signature**

Weighed By: Administrator

I certify that the waste in this vehicle complies with the Wisconsin Recycling law and the landfill bans. I also agree to pay 1.5% per month Late payment charge after 30 days.

## **APPENDIX E**

### **LABORATORY ANALYTICAL RESULTS**



May 31, 2017

DAVID LARSEN  
REI  
4080 NORTH 20TH AVENUE  
Wausau, WI 54401

RE: Project: 7367 AXUC HEDLUND DX  
Pace Project No.: 40150520

Dear DAVID LARSEN:

Enclosed are the analytical results for sample(s) received by the laboratory on May 24, 2017. 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,



Brian Basten  
brian.basten@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: 7367 AXUC HEDLUND DX  
Pace Project No.: 40150520

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### 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

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 7367 AXUC HEDLUND DX

Pace Project No.: 40150520

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40150520001	GP8	Water	05/22/17 15:30	05/24/17 09:00
40150520002	GP9	Water	05/22/17 15:20	05/24/17 09:00
40150520003	GP8 @ 2-4'	Solid	05/22/17 13:51	05/24/17 09:00
40150520004	GP8 @ 12-13'	Solid	05/22/17 14:02	05/24/17 09:00
40150520005	GP9 @ 2-4'	Solid	05/22/17 14:21	05/24/17 09:00
40150520006	GP10 @ 2-4'	Solid	05/22/17 06:56	05/24/17 09:00
40150520007	GP10 @ 8-9'	Solid	05/22/17 07:00	05/24/17 09:00
40150520008	GP11 @ 2-4'	Solid	05/22/17 07:12	05/24/17 09:00
40150520009	GP11 @ 7-8'	Solid	05/22/17 07:20	05/24/17 09:00

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: 7367 AXUC HEDLUND DX  
Pace Project No.: 40150520

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40150520001	GP8	WI MOD GRO	ALD	10
40150520002	GP9	WI MOD GRO	ALD	10
40150520003	GP8 @ 2-4'	WI MOD GRO EPA 6010 ASTM D2974-87	ALD DLB BTH	10 1 1
40150520004	GP8 @ 12-13'	WI MOD GRO EPA 6010 ASTM D2974-87	ALD DLB BTH	10 1 1
40150520005	GP9 @ 2-4'	WI MOD GRO EPA 6010 ASTM D2974-87	ALD DLB BTH	10 1 1
40150520006	GP10 @ 2-4'	WI MOD GRO EPA 6010 ASTM D2974-87	ALD DLB BTH	10 1 1
40150520007	GP10 @ 8-9'	WI MOD GRO EPA 6010 ASTM D2974-87	PMS DLB BTH	10 1 1
40150520008	GP11 @ 2-4'	WI MOD GRO EPA 6010 ASTM D2974-87	ALD DLB BTH	10 1 1
40150520009	GP11 @ 7-8'	WI MOD GRO EPA 6010 ASTM D2974-87	ALD DLB BTH	10 1 1

## REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 7367 AXUC HEDLUND DX

Pace Project No.: 40150520

Sample: GP8	Lab ID: 40150520001	Collected: 05/22/17 15:30	Received: 05/24/17 09:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>	Analytical Method: WI MOD GRO								
Benzene	158	ug/L	1.0	0.40	1		05/26/17 22:50	71-43-2	
Ethylbenzene	125	ug/L	1.0	0.39	1		05/26/17 22:50	100-41-4	
Methyl-tert-butyl ether	2.3	ug/L	1.0	0.48	1		05/26/17 22:50	1634-04-4	
Naphthalene	11.0	ug/L	1.0	0.42	1		05/26/17 22:50	91-20-3	
Toluene	25.3	ug/L	1.0	0.39	1		05/26/17 22:50	108-88-3	
1,2,4-Trimethylbenzene	67.5	ug/L	1.0	0.42	1		05/26/17 22:50	95-63-6	
1,3,5-Trimethylbenzene	15.5	ug/L	1.0	0.42	1		05/26/17 22:50	108-67-8	
m&p-Xylene	287	ug/L	2.0	0.80	1		05/26/17 22:50	179601-23-1	
o-Xylene	33.5	ug/L	1.0	0.45	1		05/26/17 22:50	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	104	%	80-120		1		05/26/17 22:50	98-08-8	
Sample: GP9	Lab ID: 40150520002	Collected: 05/22/17 15:20	Received: 05/24/17 09:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>WIGRO GCV</b>	Analytical Method: WI MOD GRO								
Benzene	932	ug/L	10.0	4.0	10		05/26/17 23:16	71-43-2	
Ethylbenzene	794	ug/L	10.0	3.9	10		05/26/17 23:16	100-41-4	
Methyl-tert-butyl ether	16.5	ug/L	10.0	4.8	10		05/26/17 23:16	1634-04-4	
Naphthalene	119	ug/L	10.0	4.2	10		05/26/17 23:16	91-20-3	
Toluene	166	ug/L	10.0	3.9	10		05/26/17 23:16	108-88-3	
1,2,4-Trimethylbenzene	610	ug/L	10.0	4.2	10		05/26/17 23:16	95-63-6	
1,3,5-Trimethylbenzene	162	ug/L	10.0	4.2	10		05/26/17 23:16	108-67-8	
m&p-Xylene	1330	ug/L	20.0	8.0	10		05/26/17 23:16	179601-23-1	
o-Xylene	85.9	ug/L	10.0	4.5	10		05/26/17 23:16	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	95	%	80-120		10		05/26/17 23:16	98-08-8	
Sample: GP8 @ 2-4'	Lab ID: 40150520003	Collected: 05/22/17 13:51	Received: 05/24/17 09:00	Matrix: Solid					
<i>Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.</i>									
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	<29.4	ug/kg	58.8	29.4	1	05/25/17 07:30	05/25/17 20:03	71-43-2	W
Ethylbenzene	<29.4	ug/kg	58.8	29.4	1	05/25/17 07:30	05/25/17 20:03	100-41-4	W
Methyl-tert-butyl ether	<29.4	ug/kg	58.8	29.4	1	05/25/17 07:30	05/25/17 20:03	1634-04-4	W
Naphthalene	<29.4	ug/kg	58.8	29.4	1	05/25/17 07:30	05/25/17 20:03	91-20-3	W
Toluene	<29.4	ug/kg	58.8	29.4	1	05/25/17 07:30	05/25/17 20:03	108-88-3	W
1,2,4-Trimethylbenzene	<29.4	ug/kg	58.8	29.4	1	05/25/17 07:30	05/25/17 20:03	95-63-6	W
1,3,5-Trimethylbenzene	<29.4	ug/kg	58.8	29.4	1	05/25/17 07:30	05/25/17 20:03	108-67-8	W
m&p-Xylene	<58.8	ug/kg	118	58.8	1	05/25/17 07:30	05/25/17 20:03	179601-23-1	W

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 7367 AXUC HEDLUND DX

Pace Project No.: 40150520

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**Sample: GP8 @ 2-4'**      Lab ID: 40150520003      Collected: 05/22/17 13:51      Received: 05/24/17 09:00      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.								
o-Xylene	<29.4	ug/kg	58.8	29.4	1	05/25/17 07:30	05/25/17 20:03	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	104	%	80-120		1	05/25/17 07:30	05/25/17 20:03	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	20.4	mg/kg	1.7	0.58	1	05/25/17 11:03	05/26/17 12:41	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	29.6	%	0.10	0.10	1			05/26/17 13:06	

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**Sample: GP8 @ 12-13'**      Lab ID: 40150520004      Collected: 05/22/17 14:02      Received: 05/24/17 09:00      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	149	ug/kg	77.4	38.7	1	05/25/17 07:30	05/25/17 20:29	71-43-2	
Ethylbenzene	343	ug/kg	77.4	38.7	1	05/25/17 07:30	05/25/17 20:29	100-41-4	
Methyl-tert-butyl ether	<26.9	ug/kg	53.8	26.9	1	05/25/17 07:30	05/25/17 20:29	1634-04-4	W
Naphthalene	<26.9	ug/kg	53.8	26.9	1	05/25/17 07:30	05/25/17 20:29	91-20-3	W
Toluene	<26.9	ug/kg	53.8	26.9	1	05/25/17 07:30	05/25/17 20:29	108-88-3	W
1,2,4-Trimethylbenzene	<26.9	ug/kg	53.8	26.9	1	05/25/17 07:30	05/25/17 20:29	95-63-6	W
1,3,5-Trimethylbenzene	<26.9	ug/kg	53.8	26.9	1	05/25/17 07:30	05/25/17 20:29	108-67-8	W
m,p-Xylene	396	ug/kg	155	77.4	1	05/25/17 07:30	05/25/17 20:29	179601-23-1	
o-Xylene	79.0	ug/kg	77.4	38.7	1	05/25/17 07:30	05/25/17 20:29	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	104	%	80-120		1	05/25/17 07:30	05/25/17 20:29	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	14.7	mg/kg	3.3	1.1	2	05/25/17 11:03	05/26/17 14:36	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	30.5	%	0.10	0.10	1			05/26/17 13:06	

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**Sample: GP9 @ 2-4'**      Lab ID: 40150520005      Collected: 05/22/17 14:21      Received: 05/24/17 09:00      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	<39.7	ug/kg	79.4	39.7	1	05/25/17 07:30	05/25/17 20:55	71-43-2	W

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## ANALYTICAL RESULTS

Project: 7367 AXUC HEDLUND DX

Pace Project No.: 40150520

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**Sample: GP9 @ 2-4'**      Lab ID: 40150520005      Collected: 05/22/17 14:21      Received: 05/24/17 09:00      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.								
Ethylbenzene	<39.7	ug/kg	79.4	39.7	1	05/25/17 07:30	05/25/17 20:55	100-41-4	W
Methyl-tert-butyl ether	<39.7	ug/kg	79.4	39.7	1	05/25/17 07:30	05/25/17 20:55	1634-04-4	W
Naphthalene	<39.7	ug/kg	79.4	39.7	1	05/25/17 07:30	05/25/17 20:55	91-20-3	W
Toluene	<39.7	ug/kg	79.4	39.7	1	05/25/17 07:30	05/25/17 20:55	108-88-3	W
1,2,4-Trimethylbenzene	<39.7	ug/kg	79.4	39.7	1	05/25/17 07:30	05/25/17 20:55	95-63-6	W
1,3,5-Trimethylbenzene	<39.7	ug/kg	79.4	39.7	1	05/25/17 07:30	05/25/17 20:55	108-67-8	W
m&p-Xylene	<79.4	ug/kg	159	79.4	1	05/25/17 07:30	05/25/17 20:55	179601-23-1	W
o-Xylene	<39.7	ug/kg	79.4	39.7	1	05/25/17 07:30	05/25/17 20:55	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	104	%	80-120		1	05/25/17 07:30	05/25/17 20:55	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	9.7	mg/kg	1.5	0.49	1	05/25/17 11:03	05/26/17 12:50	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	13.5	%	0.10	0.10	1			05/26/17 13:06	

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**Sample: GP10 @ 2-4'**      Lab ID: 40150520006      Collected: 05/22/17 06:56      Received: 05/24/17 09:00      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	902	ug/kg	68.5	34.2	1	05/25/17 07:30	05/25/17 21:20	71-43-2	
Ethylbenzene	450	ug/kg	68.5	34.2	1	05/25/17 07:30	05/25/17 21:20	100-41-4	
Methyl-tert-butyl ether	<25.0	ug/kg	50.0	25.0	1	05/25/17 07:30	05/25/17 21:20	1634-04-4	W
Naphthalene	166	ug/kg	68.5	34.2	1	05/25/17 07:30	05/25/17 21:20	91-20-3	
Toluene	107	ug/kg	68.5	34.2	1	05/25/17 07:30	05/25/17 21:20	108-88-3	
1,2,4-Trimethylbenzene	60.9J	ug/kg	68.5	34.2	1	05/25/17 07:30	05/25/17 21:20	95-63-6	
1,3,5-Trimethylbenzene	131	ug/kg	68.5	34.2	1	05/25/17 07:30	05/25/17 21:20	108-67-8	
m&p-Xylene	284	ug/kg	137	68.5	1	05/25/17 07:30	05/25/17 21:20	179601-23-1	
o-Xylene	<25.0	ug/kg	50.0	25.0	1	05/25/17 07:30	05/25/17 21:20	95-47-6	W
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	104	%	80-120		1	05/25/17 07:30	05/25/17 21:20	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	15.7	mg/kg	1.7	0.56	1	05/25/17 11:03	05/26/17 12:57	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	27.0	%	0.10	0.10	1			05/26/17 13:07	

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## ANALYTICAL RESULTS

Project: 7367 AXUC HEDLUND DX  
Pace Project No.: 40150520

**Sample: GP10 @ 8-9'**      Lab ID: **40150520007**      Collected: 05/22/17 07:00      Received: 05/24/17 09:00      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	<b>4140</b>	ug/kg	86.3	36.0	1	05/30/17 08:00	05/30/17 16:27	71-43-2	
Ethylbenzene	<b>3770</b>	ug/kg	86.3	36.0	1	05/30/17 08:00	05/30/17 16:27	100-41-4	
Methyl-tert-butyl ether	<b>41.8J</b>	ug/kg	86.3	36.0	1	05/30/17 08:00	05/30/17 16:27	1634-04-4	
Naphthalene	<b>883</b>	ug/kg	86.3	36.0	1	05/30/17 08:00	05/30/17 16:27	91-20-3	
Toluene	<b>1620</b>	ug/kg	86.3	36.0	1	05/30/17 08:00	05/30/17 16:27	108-88-3	
1,2,4-Trimethylbenzene	<b>4270</b>	ug/kg	86.3	36.0	1	05/30/17 08:00	05/30/17 16:27	95-63-6	
1,3,5-Trimethylbenzene	<b>1230</b>	ug/kg	86.3	36.0	1	05/30/17 08:00	05/30/17 16:27	108-67-8	
m&p-Xylene	<b>9390</b>	ug/kg	173	71.9	1	05/30/17 08:00	05/30/17 16:27	179601-23-1	
o-Xylene	<b>453</b>	ug/kg	86.3	36.0	1	05/30/17 08:00	05/30/17 16:27	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	98	%	80-120		1	05/30/17 08:00	05/30/17 16:27	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	<b>18.2</b>	mg/kg	3.3	1.1	2	05/25/17 11:03	05/26/17 14:39	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	<b>30.5</b>	%	0.10	0.10	1			05/26/17 13:07	

**Sample: GP11 @ 2-4'**      Lab ID: **40150520008**      Collected: 05/22/17 07:12      Received: 05/24/17 09:00      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	<b>6360</b>	ug/kg	607	304	10	05/25/17 07:30	05/25/17 17:28	71-43-2	
Ethylbenzene	<b>17700</b>	ug/kg	607	304	10	05/25/17 07:30	05/25/17 17:28	100-41-4	
Methyl-tert-butyl ether	<b>797</b>	ug/kg	607	304	10	05/25/17 07:30	05/25/17 17:28	1634-04-4	
Naphthalene	<b>6720</b>	ug/kg	607	304	10	05/25/17 07:30	05/25/17 17:28	91-20-3	
Toluene	<b>22000</b>	ug/kg	607	304	10	05/25/17 07:30	05/25/17 17:28	108-88-3	
1,2,4-Trimethylbenzene	<b>42100</b>	ug/kg	607	304	10	05/25/17 07:30	05/25/17 17:28	95-63-6	
1,3,5-Trimethylbenzene	<b>15900</b>	ug/kg	607	304	10	05/25/17 07:30	05/25/17 17:28	108-67-8	
m&p-Xylene	<b>55500</b>	ug/kg	1210	607	10	05/25/17 07:30	05/25/17 17:28	179601-23-1	
o-Xylene	<b>19400</b>	ug/kg	607	304	10	05/25/17 07:30	05/25/17 17:28	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	91	%	80-120		10	05/25/17 07:30	05/25/17 17:28	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	<b>8.4</b>	mg/kg	1.5	0.51	1	05/25/17 11:03	05/26/17 13:02	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	<b>17.7</b>	%	0.10	0.10	1			05/26/17 13:07	

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## ANALYTICAL RESULTS

Project: 7367 AXUC HEDLUND DX  
Pace Project No.: 40150520

Sample: GP11 @ 7-8' Lab ID: 40150520009 Collected: 05/22/17 07:20 Received: 05/24/17 09:00 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	<b>19000</b>	ug/kg	560	280	8	05/25/17 07:30	05/25/17 16:36	71-43-2	
Ethylbenzene	<b>24800</b>	ug/kg	560	280	8	05/25/17 07:30	05/25/17 16:36	100-41-4	
Methyl-tert-butyl ether	<b>1180</b>	ug/kg	560	280	8	05/25/17 07:30	05/25/17 16:36	1634-04-4	
Naphthalene	<b>8390</b>	ug/kg	560	280	8	05/25/17 07:30	05/25/17 16:36	91-20-3	
Toluene	<b>44500</b>	ug/kg	560	280	8	05/25/17 07:30	05/25/17 16:36	108-88-3	
1,2,4-Trimethylbenzene	<b>35600</b>	ug/kg	560	280	8	05/25/17 07:30	05/25/17 16:36	95-63-6	
1,3,5-Trimethylbenzene	<b>14000</b>	ug/kg	560	280	8	05/25/17 07:30	05/25/17 16:36	108-67-8	
m&p-Xylene	<b>66000</b>	ug/kg	1120	560	8	05/25/17 07:30	05/25/17 16:36	179601-23-1	
o-Xylene	<b>21400</b>	ug/kg	560	280	8	05/25/17 07:30	05/25/17 16:36	95-47-6	
<b>Surrogates</b>									
a,a,a-Trifluorotoluene (S)	93	%	80-120		8	05/25/17 07:30	05/25/17 16:36	98-08-8	
<b>6010 MET ICP</b>	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	<b>18.4</b>	mg/kg	1.7	0.55	1	05/25/17 11:03	05/26/17 13:04	7439-92-1	
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	<b>28.5</b>	%	0.10	0.10	1		05/26/17 13:07		

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## QUALITY CONTROL DATA

Project: 7367 AXUC HEDLUND DX

Pace Project No.: 40150520

QC Batch: 256748 Analysis Method: WI MOD GRO

QC Batch Method: TPH GRO/PVOC WI ext. Analysis Description: WIGRO Solid GCV

Associated Lab Samples: 40150520003, 40150520004, 40150520005, 40150520006, 40150520008, 40150520009

METHOD BLANK: 1513214 Matrix: Solid

Associated Lab Samples: 40150520003, 40150520004, 40150520005, 40150520006, 40150520008, 40150520009

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
1,2,4-Trimethylbenzene	ug/kg	<25.0	50.0	05/25/17 08:41	
1,3,5-Trimethylbenzene	ug/kg	<25.0	50.0	05/25/17 08:41	
Benzene	ug/kg	<25.0	50.0	05/25/17 08:41	
Ethylbenzene	ug/kg	<25.0	50.0	05/25/17 08:41	
m&p-Xylene	ug/kg	<50.0	100	05/25/17 08:41	
Methyl-tert-butyl ether	ug/kg	<25.0	50.0	05/25/17 08:41	
Naphthalene	ug/kg	<25.0	50.0	05/25/17 08:41	
o-Xylene	ug/kg	<25.0	50.0	05/25/17 08:41	
Toluene	ug/kg	<25.0	50.0	05/25/17 08:41	
a,a,a-Trifluorotoluene (S)	%	103	80-120	05/25/17 08:41	

LABORATORY CONTROL SAMPLE &amp; LCSD: 1513215

1513216

Parameter	Units	Spike	LCS	LCSD	LCS	LCSD	% Rec	RPD	Max RPD	Qualifiers
		Conc.	Result	Result	% Rec	% Rec	Limits			
1,2,4-Trimethylbenzene	ug/kg	1000	1050	1020	105	102	80-120	3	20	
1,3,5-Trimethylbenzene	ug/kg	1000	1030	999	103	100	80-120	3	20	
Benzene	ug/kg	1000	998	977	100	98	80-120	2	20	
Ethylbenzene	ug/kg	1000	1030	1000	103	100	80-120	3	20	
m&p-Xylene	ug/kg	2000	2020	1980	101	99	80-120	2	20	
Methyl-tert-butyl ether	ug/kg	1000	974	988	97	99	80-120	1	20	
Naphthalene	ug/kg	1000	977	1000	98	100	80-120	2	20	
o-Xylene	ug/kg	1000	1020	1000	102	100	80-120	2	20	
Toluene	ug/kg	1000	1000	985	100	99	80-120	2	20	
a,a,a-Trifluorotoluene (S)	%				103	104	80-120			

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## **QUALITY CONTROL DATA**

Project: 7367 AXUC HEDLUND DX

Pace Project No.: 40150520

QC Batch: 256994

QC Batch Method: TPH GRO/PVOC WI ext.

Associated Lab Samples: 40150520007

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METHOD BLANK: 1514829

## Matrix: Solid

Associated Lab Samples: 40150520007

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
1,2,4-Trimethylbenzene	ug/kg	<25.0	50.0	05/30/17 09:16	
1,3,5-Trimethylbenzene	ug/kg	<25.0	50.0	05/30/17 09:16	
Benzene	ug/kg	<25.0	50.0	05/30/17 09:16	
Ethylbenzene	ug/kg	<25.0	50.0	05/30/17 09:16	
m&p-Xylene	ug/kg	<50.0	100	05/30/17 09:16	
Methyl-tert-butyl ether	ug/kg	<25.0	50.0	05/30/17 09:16	
Naphthalene	ug/kg	<25.0	50.0	05/30/17 09:16	
o-Xylene	ug/kg	<25.0	50.0	05/30/17 09:16	
Toluene	ug/kg	<25.0	50.0	05/30/17 09:16	
a,a,a-Trifluorotoluene (S)	%	100	80-120	05/30/17 09:16	

LABORATORY CONTROL SAMPLE & LCSD: 1514830

1514831

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	1080	1060	108	106	80-120	2	20	
1,3,5-Trimethylbenzene	ug/kg	1000	1060	1040	106	104	80-120	2	20	
Benzene	ug/kg	1000	1010	990	101	99	80-120	2	20	
Ethylbenzene	ug/kg	1000	1050	1030	105	103	80-120	2	20	
m&p-Xylene	ug/kg	2000	2100	2060	105	103	80-120	2	20	
Methyl-tert-butyl ether	ug/kg	1000	999	964	100	96	80-120	4	20	
Naphthalene	ug/kg	1000	1110	1070	111	107	80-120	3	20	
o-Xylene	ug/kg	1000	1050	1030	105	103	80-120	2	20	
Toluene	ug/kg	1000	1030	1010	103	101	80-120	2	20	
a.a.a-Trifluorotoluene (S)	%				102	102	80-120			

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## QUALITY CONTROL DATA

Project: 7367 AXUC HEDLUND DX

Pace Project No.: 40150520

QC Batch:	256747	Analysis Method:	WI MOD GRO
QC Batch Method:	WI MOD GRO	Analysis Description:	WIGRO GCV Water
Associated Lab Samples:	40150520001, 40150520002		

METHOD BLANK: 1513211 Matrix: Water

Associated Lab Samples: 40150520001, 40150520002

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
1,2,4-Trimethylbenzene	ug/L	<0.42	1.0	05/25/17 08:34	
1,3,5-Trimethylbenzene	ug/L	<0.42	1.0	05/25/17 08:34	
Benzene	ug/L	<0.40	1.0	05/25/17 08:34	
Ethylbenzene	ug/L	<0.39	1.0	05/25/17 08:34	
m&p-Xylene	ug/L	<0.80	2.0	05/25/17 08:34	
Methyl-tert-butyl ether	ug/L	<0.48	1.0	05/25/17 08:34	
Naphthalene	ug/L	<0.42	1.0	05/25/17 08:34	
o-Xylene	ug/L	<0.45	1.0	05/25/17 08:34	
Toluene	ug/L	<0.39	1.0	05/25/17 08:34	
a,a,a-Trifluorotoluene (S)	%	100	80-120	05/25/17 08:34	

LABORATORY CONTROL SAMPLE &amp; LCSD: 1513212

1513213

Parameter	Units	Spike	LCS	LCSD	LCS	LCSD	% Rec	RPD	Max RPD	Qualifiers
		Conc.	Result	Result	% Rec	% Rec	Limits			
1,2,4-Trimethylbenzene	ug/L	20	20.5	20.7	102	103	80-120	1	20	
1,3,5-Trimethylbenzene	ug/L	20	19.7	19.9	99	99	80-120	1	20	
Benzene	ug/L	20	21.1	21.2	106	106	80-120	0	20	
Ethylbenzene	ug/L	20	21.1	21.1	105	105	80-120	0	20	
m&p-Xylene	ug/L	40	41.7	41.6	104	104	80-120	0	20	
Methyl-tert-butyl ether	ug/L	20	19.1	20.1	96	100	80-120	5	20	
Naphthalene	ug/L	20	21.3	22.9	107	115	80-120	7	20	
o-Xylene	ug/L	20	20.9	20.9	105	104	80-120	0	20	
Toluene	ug/L	20	20.7	20.8	103	104	80-120	0	20	
a,a,a-Trifluorotoluene (S)	%				100	100	80-120			

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 1513399

1513400

Parameter	Units	MS		MSD		MS		MSD		% Rec	RPD	Max RPD	Qual
		40150516004	Result	Spike	Conc.	MS	Result	MSD	Result				
1,2,4-Trimethylbenzene	ug/L	1340	500	500	1890	1870	110	106	11-200	1	20		
1,3,5-Trimethylbenzene	ug/L	353	500	500	856	848	101	99	54-142	1	20		
Benzene	ug/L	3120	500	500	3690	3660	114	107	66-140	1	20		
Ethylbenzene	ug/L	2420	500	500	3020	2970	119	110	66-143	2	20		
m&p-Xylene	ug/L	5850	1000	1000	7010	6910	117	106	60-141	1	20		
Methyl-tert-butyl ether	ug/L	284	500	500	758	737	95	91	70-129	3	20		
Naphthalene	ug/L	503	500	500	1020	1020	103	104	64-129	0	20		
o-Xylene	ug/L	1970	500	500	2510	2470	109	101	68-132	2	20		
Toluene	ug/L	4980	500	500	5650	5590	134	121	76-130	1	20	M1	

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

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## QUALITY CONTROL DATA

Project: 7367 AXUC HEDLUND DX

Pace Project No.: 40150520

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:			1513399	1513400								
Parameter	Units	Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	Spike Conc.								
a,a,a-Trifluorotoluene (S)	%	40150516004					99	100	80-120			

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 7367 AXUC HEDLUND DX

Pace Project No.: 40150520

QC Batch: 256780 Analysis Method: EPA 6010

QC Batch Method: EPA 3050 Analysis Description: 6010 MET

Associated Lab Samples: 40150520003, 40150520004, 40150520005, 40150520006, 40150520007, 40150520008, 40150520009

METHOD BLANK: 1513301 Matrix: Solid

Associated Lab Samples: 40150520003, 40150520004, 40150520005, 40150520006, 40150520007, 40150520008, 40150520009

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Lead	mg/kg	<0.43	1.3	05/26/17 12:03	

LABORATORY CONTROL SAMPLE: 1513302

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Lead	mg/kg	50	51.3	103	80-120	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 1513303 1513304

Parameter	Units	40150481001	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		Result	Spike	Spike										
Lead	mg/kg	3.1	53.4	53.3	56.5	50.9	100	90	75-125	10	20			

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 7367 AXUC HEDLUND DX

Pace Project No.: 40150520

QC Batch: 256927 Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 40150520003, 40150520004, 40150520005, 40150520006, 40150520007, 40150520008, 40150520009

SAMPLE DUPLICATE: 1514236

Parameter	Units	40150520007 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	30.5	30.5	0	10	

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## REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: 7367 AXUC HEDLUND DX  
Pace Project No.: 40150520

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### 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 and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

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

M1      Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.  
W      Non-detect results are reported on a wet weight basis.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 7367 AXUC HEDLUND DX  
Pace Project No.: 40150520

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40150520003	GP8 @ 2-4'	TPH GRO/PVOC WI ext.	256748	WI MOD GRO	256776
40150520004	GP8 @ 12-13'	TPH GRO/PVOC WI ext.	256748	WI MOD GRO	256776
40150520005	GP9 @ 2-4'	TPH GRO/PVOC WI ext.	256748	WI MOD GRO	256776
40150520006	GP10 @ 2-4'	TPH GRO/PVOC WI ext.	256748	WI MOD GRO	256776
40150520007	GP10 @ 8-9'	TPH GRO/PVOC WI ext.	256994	WI MOD GRO	257051
40150520008	GP11 @ 2-4'	TPH GRO/PVOC WI ext.	256748	WI MOD GRO	256776
40150520009	GP11 @ 7-8'	TPH GRO/PVOC WI ext.	256748	WI MOD GRO	256776
40150520001	GP8	WI MOD GRO	256747		
40150520002	GP9	WI MOD GRO	256747		
40150520003	GP8 @ 2-4'	EPA 3050	256780	EPA 6010	256864
40150520004	GP8 @ 12-13'	EPA 3050	256780	EPA 6010	256864
40150520005	GP9 @ 2-4'	EPA 3050	256780	EPA 6010	256864
40150520006	GP10 @ 2-4'	EPA 3050	256780	EPA 6010	256864
40150520007	GP10 @ 8-9'	EPA 3050	256780	EPA 6010	256864
40150520008	GP11 @ 2-4'	EPA 3050	256780	EPA 6010	256864
40150520009	GP11 @ 7-8'	EPA 3050	256780	EPA 6010	256864
40150520003	GP8 @ 2-4'	ASTM D2974-87	256927		
40150520004	GP8 @ 12-13'	ASTM D2974-87	256927		
40150520005	GP9 @ 2-4'	ASTM D2974-87	256927		
40150520006	GP10 @ 2-4'	ASTM D2974-87	256927		
40150520007	GP10 @ 8-9'	ASTM D2974-87	256927		
40150520008	GP11 @ 2-4'	ASTM D2974-87	256927		
40150520009	GP11 @ 7-8'	ASTM D2974-87	256927		

### REPORT OF LABORATORY ANALYSIS

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# Sample Condition Upon Receipt

Pace Analytical Services, LLC. - Green Bay WI  
1241 Bellevue Street, Suite 9  
Green Bay, WI 54302


**Pace Analytical**
**Client Name:** REI
**Project #:**

ATTACH WORKORDER LABEL HERE

**Courier:**  FedEx  UPS  Client  Pace Other: WALCO  
**Tracking #:** 13780791
**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** SL-74
**Type of Ice:** Wet Blue Dry None

 Samples on ice, cooling process has begun

**Cooler Temperature** Uncorr: 2°C /Corr: 3°C
**Biological Tissue is Frozen:**  yes  no

**Temp Blank Present:**  yes  no

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C.

**Comments:**
**Person examining contents:**  
 Date: 5/26/17  
 Initials: KMV

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
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: - VOA Samples frozen upon receipt	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5. Date/Time:	
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8. <u>MISSING VOLUME VIALS GPIO 8-9' SAMPLE AT 51%</u>	
Correct Containers Used: -Pace Containers Used: -Pace IR Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.	
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.	
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12.	
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	13. <input type="checkbox"/> HNO3 <input type="checkbox"/> H2SO4 <input type="checkbox"/> NaOH <input type="checkbox"/> NaOH +ZnAct	
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> ≥ 2; NaOH+ZnAct ≥ 9, NaOH ≥ 12) exceptions: <del>VOA</del> coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER: <u>5/26/17</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Initial when completed	Lab Std #ID of preservative
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Date/Time:	
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input 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:** \_\_\_\_\_

 Date: 5-26-17

*Pace Analytical*

# Sample Condition Upon Receipt

Pace Analytical Services, Inc.  
1241 Bellevue Street, Suite 9  
Green Bay, WI 54302

Client Name: REI

Project #: WO# : 40150520

Courier:  FedEx  UPS Client  Pace Other: Waltco  
Tracking #: 1374888-2



40150520

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: NA

Type of Ice: Wet Blue Dry None

Samples on ice, cooling process has begun

Cooler Temperature

Uncorr:

/Corr: ROI

Biological Tissue is Frozen:  yes

no

Person examining contents:

Date: 5/24/17

Initials: KF

Temp Blank Present:  yes  no

Temp should be above freezing to 6°C for all sample except Biota.

Frozen Biota Samples should be received ≤ 0°C.

## Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
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: - VOA Samples frozen upon receipt	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5. Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8. received no volume for GIP-11, KF-512-4117
Correct Containers Used: -Pace Containers Used: -Pace IR Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9. received no vial volume for 007 KF 5/24/17
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	13. <input type="checkbox"/> HNO3 <input type="checkbox"/> H2SO4 <input type="checkbox"/> NaOH <input type="checkbox"/> NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 <2; NaOH+ZnAct ≥9, NaOH ≥12) exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Initial when completed Lab Std #/ID of preservative Date/Time:
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

## Client Notification/ Resolution:

Person Contacted: \_\_\_\_\_

If checked, see attached form for additional comments

Comments/ Resolution: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Project Manager Review: \_\_\_\_\_

Date: 5-25-17