



CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING



January 24, 2018

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 contains the updated data tables containing the historic soil and groundwater analytical results and a geologic cross-section as one was not included as part of the original site investigation report.

Based on the historic analytical results and the recent Geoprobe soil boring project, the contamination present on the subject property 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 mmichalski@reiengineering.com.

Sincerely,
REI Engineering, Inc.

Matthew C. Michalski
Hydrogeologist

Enclosures

CC: Mr. Robert Anderson, 10531 STH 70, Siren, WI 54872 (e-copy)



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715-675-9784 REIengineering.com

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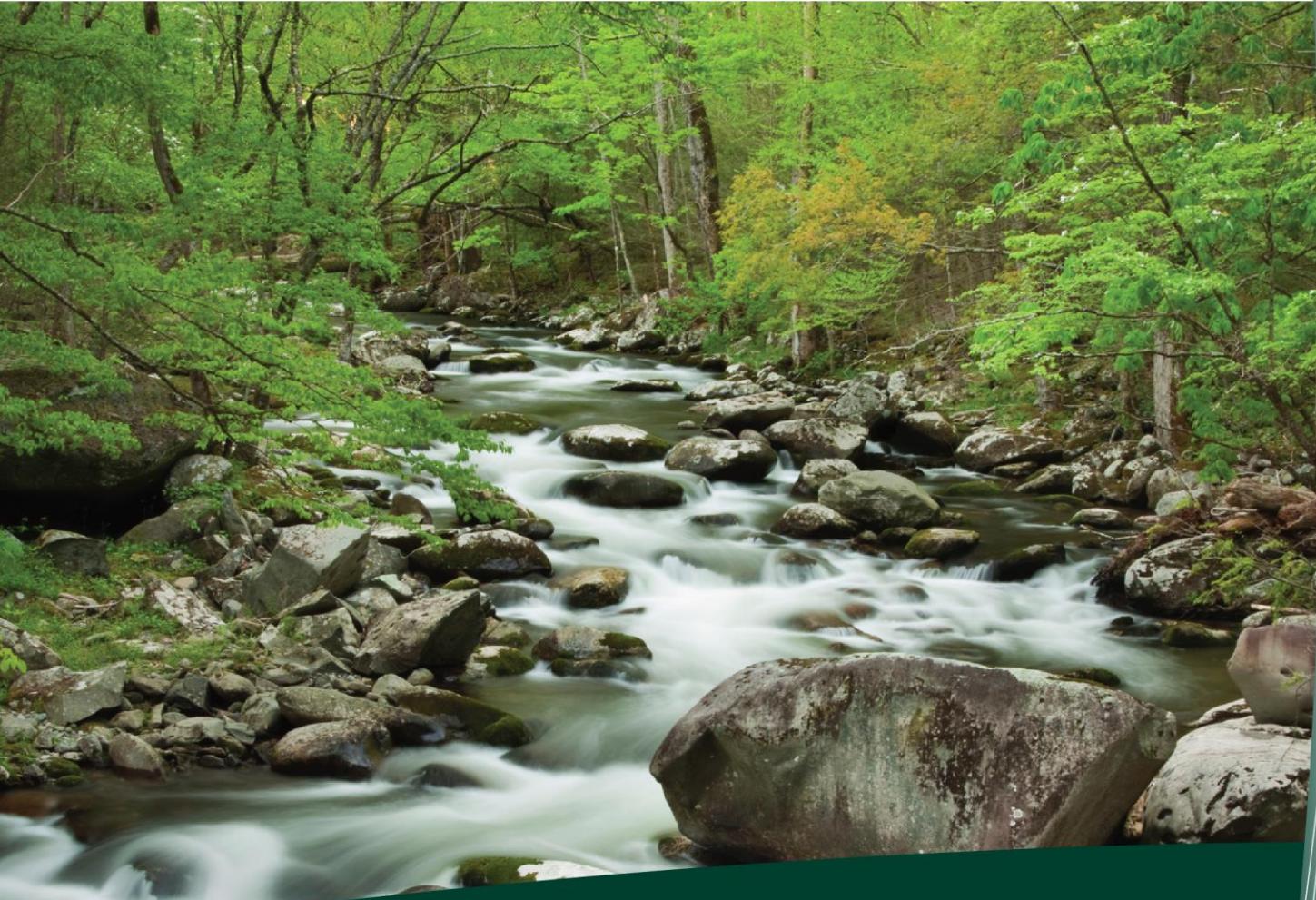


CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING

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**

JANUARY 2018

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, Matthew Michalski, 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."

Matthew C. Michalski
Hydrogeologist

1/24/2018
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 is 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 completed the advancement of ten (10) Geoprobe borings at the site to determine the degree and extent of the residual contamination and prepare a follow-up report which was submitted in August 2017.

Following the submittal of the August 2017 Update Report REI received approval to update the historic soil and groundwater analytical results to the current standards and develop a geologic cross-section.

2.0 SUMMARY OF ACTIVITIES

2.1 Historic Analytical Results

REI engineering personnel updated the historic analytical results associated with the Bob's Service LUST site to the current NR720 and NR140 standards. Soil and/or groundwater samples were submitted for laboratory analysis as part of the DOT Environmental Site Assessment, DOT Phase III Environmental Site Assessment, Tank System Site Assessment, and Site Investigation Report. Historic sample locations are presented on Figure 2. Soil analytical results are presented in Tables 1.a through 1.e. Groundwater analytical results are presented in Tables 2.a through 2.e.

2.2 Geologic Cross-Section

REI engineering prepared a geologic cross-section based on the recent Geoprobe soil borings and the historic soil boring logs. The geologic cross-section is presented on Figure 3.

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 LUST site. Boring locations BS-2, B-2, B-3, and B1 and Test pit location TP-3 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. Test pit locations TP-1b, and TP-2 showed NR720 Groundwater Protection Pathway RCL exceedances for benzene. However, soil and groundwater samples collected during the recent Geoprobe project showed no exceedances of the WDNR standards in either soil or groundwater.

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. REI recommends that the Bob's Service site should be submitted for closure.

Table 1a
Summary of Groundwater Analytical Results - Environmental Site Assessment & Phase III
Bob's Service
10545 STH 70, Falun, WI

		Sampled by -->		Aqua-Tech		
		Sample Location	Date	WS-1	WS-2	WSB-1
		ES	PAL	Units		
Total Petroleum Hydrocarbons (Gasoline)	NS	NS		µg/l	NA	NA
VOC Parameters						
Benzene	5	0.5		µg/l	<1.0	4.3
Toluene	800	160		µg/l	<1.0	<1.0
Ethylbenzene	700	140		µg/l	<1.0	5.2
Xylenes (mixed isomers)	2,000	400		µg/l	<1.0	5.0
					<1.0	11,450

Notes:

ES = NR140.10 Enforcement Standards

PAL = NR140.10 Preventive Action Limits

NS = No Standard

NA = Not Analyzed

Enforcement Standard exceeded

Preventive Action Limit exceeded

* = Analytical results may be biased, sample was collected in 1 liter jar with headspace.

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

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Table 1b
Summary of Groundwater Analytical Results - TSSA
Bob's Service
10545 STH 70, Falun, WI

		Sampled by -->		Cooper	
		Sample Location	Date	#1	#2
		ES	PAL	Units	Units
Gasoline Range Organics	NS	NS	µg/l	300,000	78,000
VOC Parameters					
Benzene	5	0.5	µg/l	NA	25,000
Toluene	800	160	µg/l	NA	31,000
Ethylbenzene	700	140	µg/l	NA	2,300
Xylenes (mixed isomers)	2,000	400	µg/l	NA	11,000
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	NA	<100
Trimethylbenzenes (mixed isomers)	480	96	µg/l	NA	1,960

Notes:

Groundwater Sample #2 was collected from drummed water stored on the subject property.

ES = NR140.10 Enforcement Standards

PAL = NR140.10 Preventive Action Limits

NS = No Standard

NA = Not Analyzed

Enforcement Standard exceeded

Preventive Action Limit exceeded

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

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<i>Italics</i>

Table 1c
Summary of Groundwater Analytical Results - Soil Boring
Bob's Service
10545 STH 70, Falun, WI

			Sampled by -->	Ayres
			Sample Location	B/W-1
			Date	10/30/1995
Gasoline Range Organics		ES	PAL	
VOC Parameters	NS	NS	µg/l	<50
Benzene	5	0.5	µg/l	<0.2
Toluene	800	160	µg/l	<0.2
Ethylbenzene	700	140	µg/l	<0.2
Xylenes (mixed isomers)	2,000	400	µg/l	<0.6
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	<0.2
Trimethylbenzenes (mixed isomers)	480	96	µg/l	<0.7

Notes:

ES = NRI 40.10 Enforcement Standards

PAL = NRI 40.10 Preventive Action Limits

NS = No Standard

NA = Not Analyzed

Enforcement Standard exceeded

Preventive Action Limit exceeded

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

BOLD
<i>Italics</i>

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

		Sampled by -->		REI Engineering, Inc.			
		Sample Location		B1	B2	B6	B7
VOC Parameters	ES	PAL	Units	Date	5/22/2017	5/22/2017	5/22/2017
Benzene	5	0.5	µg/l	1,100	<0.40	<0.40	<0.40
Toluene	800	160	µg/l	648	0.43J	<0.39	<0.39
Ethylbenzene	700	140	µg/l	553	<0.39	<0.39	0.84J
Xylenes (mixed isomers)	2,000	400	µg/l	1,928	<0.80	<0.80	22.7
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	12.1	<0.48	<0.48	<0.48
Trimethylbenzenes (mixed isomers)	480	96	µg/l	380.8	<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

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

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

PARAMETER	Potable		
	ES	PAL	5/22/17
Detected VOC's (ug/L)			
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.a
Summary of Soil Analytical Results - Environmental Site Assessment and Phase III
Bob's Service
10545 STH 70, Falun, WI

		Sampled by -->		Aqua-Tech	
		Date -->	11/7/1989	Date -->	6/7/1990
		Sample ID -->	B-2	Sample ID -->	BS-2
		Sample Depth -->	12-14	Sample Depth -->	6-8
Saturated (S) vs Unsaturated (U) -->		S	S	S	S
		Units	Non-Industrial Not-To-Exceed <u>DC RCL</u>	NR 140 Groundwater Pathway <u>(DF=2)</u>	
Total Petroleum Hydrocarbons (Gasoline)		mg/kg	NS	NS	NA
Total Petroleum Hydrocarbons (Diesel)		mg/kg	NS	NS	20
Petroleum VOC's					
Benzene	mg/kg	1.60	0.0051	NA	163
Ethylbenzene	mg/kg	8.02	1.57	NA	2.7
Toluene	mg/kg	818	1.1072	NA	11.2
Xylenes (Total)	mg/kg	260	3.96	NA	22
Number of Individual Exceedances (DC)-->		1	NS	0	1
Cumulative Hazard Index (DC)-->		1.0	NS	NA	0.0589
Cumulative Cancer Risk (DC)-->		1.0E-05	NS	NA	2.30E-06

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

NA - Not Analyzed

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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Table 2.b
Summary of Soil Analytical Results - TSSA
Bob's Service
10545 STH 70, Falun, WI

			Sampled by -->	Cooper Engineering
			Date -->	7/16/1993
			Sample ID -->	#6
			Sample Depth -->	3
Saturated (S) vs Unsaturated (U) -->			U	U
	Units	Non-Industrial Not To-Exceed DC RCL	NR140 <u>Groundwater Pathway Protection (DF=2)</u>	
Gasoline Range Organics (GRO)	mg/kg	NS	NS	<10
Number of Individual Exceedances (DC)-->		1	NS	0
Cumulative Hazard Index (DC)-->		1.0	NS	NA
Cumulative Cancer Risk (DC)-->		1.0E-05	NS	NA

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

NA - Not Analyzed

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
 Exceeds NR140 Groundwater Pathway Protection RCL
 Exceeds NR140 Groundwater Pathway Protection RCL

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Table 2.c
Summary of Soil Analytical Results - Test Pits
Bob's Service
10545 STH 70, Falun, WI

		Sampled by -->		Aryes Associates									
		Date -->	7/25/1994	7/25/1994	7/25/1994	7/25/1994	7/25/1994	7/25/1994	7/25/1994	7/25/1994	7/25/1994	7/25/1994	7/25/1994
		Sample ID -->	TP-1a	TP-1a	TP-1b	TP-2	TP-2	TP-3	TP-4	TP-4	TP-5	TP-5	TP-5
		Sample Depth -->	5.7	10-12	5-7	10-12	5-7	10-12	5.7	10-12	5.7	10-12	2.5-4.5
		Saturated (S) vs Unsaturated (U) -->	S	S	S	S	S	S	S	S	S	S	1.5-9.5
		Saturated (S) vs Unsaturated (U) -->	S	S	S	S	S	S	S	S	S	S	S
		Units	Background Threshold Non-Industrial Not-To-Exceed DC RCL	NR 140 Groundwater Pathway Protection (DF=2)									
		Gasoline Range Organics (GRO)	mg/kg	NS	23.6	<5.8	10.2	<6.9	<6.8	52.8	<7.1	<7.4	<7.6
		Total Lead	mg/kg	52	400	27	3.49	3.22	5.9	14.6	16.1	12.9	14.8
Petroleum VOC's		Benzene	mg/kg	1.60	0.0061	<0.006	<0.001	0.0138	<0.0027	0.0065	<0.0026	0.0585	<0.0028
		Ethylbenzene	mg/kg	8.02	1.57	<0.006	<0.001	0.0225	<0.0027	0.0023	<0.0026	0.147	<0.0028
		Toluene	mg/kg	818	1.1072	<0.006	<0.001	0.0465	<0.0027	0.0023	<0.0065	<0.0028	<0.0028
		Xylenes (Total)	mg/kg	260	3.96	7.4-13.4	<0.001	0.283	<0.0027	0.0023	<0.0026	<0.0065	<0.0028
		Methyl tert Butyl Ether	mg/kg	63.8	0.027	<0.006	<0.001	<0.0066	<0.0027	<0.0023	<0.0026	<0.0065	<0.0028
		1,2,4-Trimethylbenzene	mg/kg	219	NS	0.0797	<0.002	0.186	<0.0054	<0.0046	<0.0053	<0.0130	<0.0056
		1,3,5-Trimethylbenzene	mg/kg	182	NS	0.282	<0.001	0.0387	<0.0027	<0.0023	<0.0026	0.0083	<0.0028
		Trimethylbenzenes (Total)	mg/kg	NS	1.3821	0.3617	<0.003	0.1947	<0.0081	<0.0069	<0.0079	0.0083-0.0213	<0.0084
		Naphthalene	mg/kg	5.52	0.6882	<0.012	<0.002	0.085	<0.0054	<0.0046	<0.0053	0.0147	<0.0056
Other VOC's		o-Butylbenzene	mg/kg	108	NS	0.193	<0.001	<0.0066	<0.0027	<0.0023	<0.0026	0.213	<0.0028
		sec-Butylbenzene	mg/kg	145	NS	0.0704	<0.001	<0.0066	<0.0027	<0.0023	<0.0026	0.0868	<0.0028
		Dichloromethane	mg/kg	NS	NS	<0.006	<0.001	<0.0066	<0.0027	<0.0023	<0.0026	<0.0065	<0.0033
		Isopropylbenzene	mg/kg	NS	NS	0.0069	<0.001	<0.0066	<0.0027	<0.0023	<0.0026	0.13	<0.0028
		p-Isopropyltoluene	mg/kg	162	NS	0.133	<0.001	<0.0066	<0.0027	<0.0023	<0.0026	<0.0065	<0.0028
		m-Propylbenzene	mg/kg	264	NS	0.028	<0.001	0.0118	<0.0027	<0.0023	<0.0026	0.306	<0.0028
		Number of Individual Exceedances (DC) -->	1	NS	0	0	0	0	0	0	0	0	0
		Cumulative Hazard Index (DC) -->	1.0	NS	0.0175	0	0	0.0013	0	0.0001	0	0	0
		Cumulative Cancer Risk (DC) -->	1.0E-05	NS	0	0	2.1E-03	0	4.1E-09	0	5.8E-08	0	0
<i>Notes:</i>		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											
		NA - Not Analyzed											
		J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.											
		Exceeds NR140 Groundwater Pathway Protection RCL											
		Exceeds non-industrial not to exceed DC RCL											
		Exceeds NR140 Groundwater Pathway Protection RCL											
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		<i>italic</i>											

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

NA - Not Analyzed

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

Exceeds NR140 Groundwater Pathway Protection RCL

Exceeds non-industrial not to exceed DC RCL

Exceeds NR140 Groundwater Pathway Protection RCL

Table 2.d
Summary of Soil Analytical Results - Soil Borings
Bob's Service
10545 STH 70, Falun, WI

Sampled by -->		Ayres Associates									
		Date -->	10/30/1995	10/30/1995	10/30/1995	10/30/1995	10/30/1995	10/30/1995	10/30/1995	10/30/1995	10/30/1995
Sample ID -->		B/W-1	B/W-1	B-2	B-2	B-3	B-3	B-4	B-4	B-5	B-5
Sample Depth -->		7.5-9.5	12.5-14.5	2.5-4.5	15-17	10-12	12.5-14.5	10-12	12.5-14.5	10-12	12.5-14.5
Saturated (S) vs Unsaturated (U) -->		S	S	U	S	S	S	S	S	S	S
	Units	Non-Industrial Not-To-Exceed DC RCL	NR140 Groundwater Pathway Protection (DF=2)								
Gasoline Range Organics (GRO)	mg/kg	NS	<1.0	<1.0	1,400	1.9	2.8	1.6	<1.0	<1.0	<1.0
Petroleum VOC's											
Benzene	mg/kg	1.60	0.0051	<0.025	17	<0.025	0.050	<0.025	<0.025	<0.025	<0.025
Ethylbenzene	mg/kg	8.02	1.57	<0.025	14	<0.025	0.047	0.029J	<0.025	<0.025	<0.025
Toluene	mg/kg	818	1.1072	<0.025	25	<0.025	0.034	<0.0025	<0.025	<0.025	<0.025
Xylenes (Total)	mg/kg	260	3.96	<0.025	72	<0.025	0.237	0.180	<0.025	<0.025	<0.025
Methyl tert Butyl Ether	mg/kg	63.8	0.0277	<0.025	<1.2	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
1,2,4-Trimethylbenzene	mg/kg	219	NS	<0.025	36	<0.025	0.092	0.18	<0.025	<0.025	<0.025
1,3,5-Trimethylbenzene	mg/kg	182	NS	<0.025	8.6	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Trimethylbenzenes (Total)	mg/kg	NS	1.3821	<0.050	44.6	<0.050	0.092-0.117	0.18-0.205	<0.050	<0.050	<0.050
Naphthalene	mg/kg	5.52	0.6882	<0.025	2.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Other VOC's											
n-Butylbenzene	mg/kg	108	NS	<0.025	10	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
n-Propylbenzene	mg/kg	264	NS	<0.025	<0.025	3.6	<0.025	<0.025	<0.025	<0.025	<0.025
Diisopropylether	mg/kg	2260	NS	<0.025	5.7	<0.025	0.042	<0.025	<0.025	<0.025	<0.025
Number of Individual Exceedances (DC) -->		1	NS	0	0	2	0	0	0	0	0
Cumulative Hazard Index (DC) -->		1.0	NS	NA	NA	0.7881	NA	0.001	0.0007	NA	NA
Cumulative Cancer Risk (DC) -->		1.0E-05	NS	NA	2.5E-05	NA	3.7E-08	3.6E-09	NA	NA	NA

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
 NA - Not Analyzed

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

Exceeds non-industrial not to exceed DC RCL
 Exceeds NR140 Groundwater Pathway Protection RCL

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Table 2.e
Summary of Soil Analytical Results - Geoprosbes
Bob's Service
10545 STH 70, Fallin, WI

		REI Engineering, Inc.									
Sampled by -->		5/22/17		5/22/17		5/22/17		5/22/17		5/22/17	
Date -->	Sample ID -->	B1	B1	B2	B2	B3	B3	B4	B4	B5	B5
Sample Depth -->	2.4	8.9	2.4	1.3-14	2.4	1.3-14	2.4	8.9	2.4	12-14	
Percent Moisture (%) -->	9.2	29.1	27.3	22.2	17.1	30.5	11.9	22.8	11.6	30.3	
Saturated (S) vs Unsaturated (U) -->	U	S	U	S	U	S	U	S	U	S	
Petroleum VOC's (mg/kg)	NR 140										
	Non-Industrial Not-To-Exceed DC RCL	Groundwater Pathway Protection (DF=2)									
Benzene	1.60	0.0051	<0.0263	11.8	<0.0250	<0.0250	0.0324*	<0.0250	<0.0373	<0.0250	<0.0250
Ethylbenzene	8.02	1.57	<0.0263	5.91	<0.0250	<0.0250	<0.0250	<0.0250	<0.0373	<0.0250	<0.0250
Toluene	8.18	1.1072	<0.0263	8.11	<0.0250	<0.0250	<0.0250	<0.0250	<0.0373	<0.0250	<0.0250
Xylenes (Total)	260	3.96	<0.02626	21.050	<0.050	<0.050	<0.050	<0.050	<0.0746	<0.050	<0.050
Methyl tert Butyl Ether	63.8	0.027	<0.0263	0.120	<0.0250	<0.0250	<0.0250	<0.0250	<0.0373	<0.0250	<0.0250
1,2,4-Trimethylbenzene	219	NS	<0.0263	7.62	<0.0250	<0.0250	<0.0250	<0.0250	<0.0373	<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
Trimethylbenzenes (Total)	NS	1.3821	<0.0263	10.05	<0.0500	<0.0500	<0.0500	<0.0500	<0.0373	<0.0500	<0.0500
Naphthalene	5.52	0.6582	<0.0263	2.15	<0.0250	<0.0250	<0.0250	<0.0250	<0.0373	<0.0250	<0.0250
Number of Individual Exceedances (DC) -->	1.00	NS	0	1	0	0	0	0	0	0	0
Cumulative Hazard Index (DC) -->	1.0	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cumulative Cancer Risk (DC) -->	1.0E-05	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA

		REI Engineering, Inc.									
Date -->		5/22/17		5/22/17		5/22/17		5/22/17		5/22/17	
Date ID -->	B6	B6	B7	B7	B8	B8	B9	B9	B10	B10	
Sample Depth -->	2.4	13.14	2.4	12.14	2.4	11.13	2.4	8.9	2.4	11.13	
Percent Moisture (%) -->	15.6	27.3	11.2	30.6	12.0	30.4	19.6	15.3	19.7	26.5	
Saturated (S) vs Unsaturated (U) -->	U	S	U	S	U	S	U	S	U	S	
Petroleum VOC's	Units	Non-Industrial Not-To-Exceed DC RCL	Groundwater Pathway Protection (DF=2)								
	mg/kg	1.60	0.0051	<0.0263	<0.0250	<0.0250	<0.0253	<0.0250	<0.0250	<0.0250	<0.0250
Benzene	mg/kg	8.02	1.57	<0.0263	<0.0250	<0.0250	<0.0263	<0.0250	<0.0250	<0.0250	<0.0250
Ethylbenzene	mg/kg	8.18	1.1072	<0.0263	<0.0250	<0.0250	<0.0263	<0.0250	<0.0250	<0.0250	<0.0250
Toluene	mg/kg	260	3.96	<0.0263	<0.050	<0.050	<0.0526	<0.050	<0.050	<0.050	<0.050
Xylenes (Total)	mg/kg	63.8	0.027	<0.0263	<0.0250	<0.0250	<0.0263	<0.0250	<0.0250	<0.0250	<0.0250
Methyl tert Butyl Ether	mg/kg	219	NS	<0.0263	<0.0250	<0.0250	<0.0263	<0.0250	<0.0250	<0.0250	<0.0250
1,2,4-Trimethylbenzene	mg/kg	182	NS	<0.0263	<0.0250	<0.0500	<0.0500	<0.0500	<0.0250	<0.0250	<0.0250
1,3,5-Trimethylbenzene	mg/kg	NS	1.3821	<0.0263	<0.0250	<0.0250	<0.0263	<0.0250	<0.0500	<0.0500	<0.0500
Trimethylbenzenes (Total)	mg/kg	5.52	0.6582	<0.0263	<0.0250	<0.0250	<0.0263	<0.0250	<0.0250	<0.0250	<0.0250
Naphthalene	mg/kg	1	NS	0	0	0	0	0	0	0	0
Number of Individual Exceedances (DC) -->	1.0	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cumulative Hazard Index (DC) -->	1.0E-05	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cumulative Cancer Risk (DC) -->											

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

NA - No Standard

NA - Not Analyzed

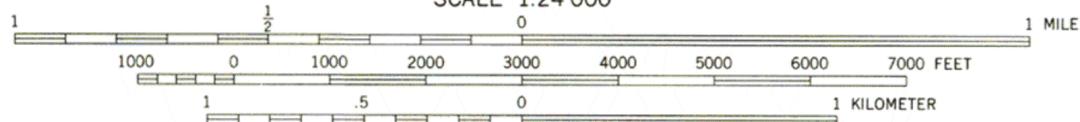
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
Exceeds non-industrial not to exceed DC RCL

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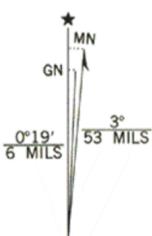
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SCALE 1:24 000



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



REI Engineering, INC.

BOB'S SERVICE 10545 STATE HIGHWAY 70 FALUN, WISCONSIN 54872	FIGURE 1 : SITE VICINITY MAP		
	PROJECT NO. 7679	DRAWN BY: AJG	DATE: 7/5/2017

