CIVIL & ENVIRONMENTAL ENGINEERING, SURVEYING

October 7, 2019

Wisconsin Department of Natural Resources
Attn: Dee Lance
473 Griffith Avenue
Wisconsin Rapids, WI 54494-7859

Subject:

Update Report
OW Sports & Liquor
107 Central Avenue
Owen, WI
BRRTS #03-10-182097
PECFA #54460-0147-07

Dear Ms. Lance:

Enclosed is the Update Report for the above-mentioned site. REI has completed the final approved post soil excavation groundwater sample event. Groundwater analytical trends are decreasing following the soil excavation and REI is recommending the investigation be routed through the WDNR Case Closure review process.

Please call me with questions or comments toll free at 877-734-7745 or contact me electronically at dlarsen@reiengineering.com.

Sincerely,
REI Engineering, Inc.

David N. Larsen, P.G.
Senior Hydrogeologist

Enclosure

CC: Jackie Reinke, OW Sport & Liquor, PO Box 147, Owen, WI 54460

REI

CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING

Update Report
OW Sports & Liquor
107 Central Avenue
Owen, WI 54460

BRRTS #03-10-182097
PECFA #54460-0147-07
REI Project #1687

COMPREHENSIVE SERVICES WITH PRACTICAL SOLUTIONS

UPDATE REPORT

OW SPORTS & LIQUOR
107 CENTRAL AVENUE
OWEN, WI 54460

BRRTS #03-10-182097
PECFA #54460-0147-07

REI #1687

PREPARED FOR:

OW Sports & Liquor
Attn: Ms. Jackie Reinke
PO Box 147
Owen, WI 54460

OCTOBER 2019

UPDATE REPORT

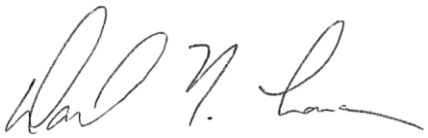
OW SPORTS & LIQUOR
107 CENTRAL AVENUE
OWEN, WI 54460

BRRTS #03-10-182097
PECFA #54460-0147-07

REI #1687

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, David N. Larsen, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Admn. Code, and that to the best of my knowledge, all 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."



Hydrogeologist — October 7, 2019 (Date)

"I, Brian J. Bailey, 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 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 — October 7, 2019 (Date)

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107 CENTRAL AVENUE
OWEN, WI 54460

BRRTS #03-10-182097
PECFA #54460-0147-07

REI #1687

1.0 INTRODUCTION

1.1 Purpose

This report presents the results of the final groundwater sampling event following the completion of an excavation to remove petroleum impacted soil from the OW Sports & Liquor site located at 107 Central Avenue, Owen, Wisconsin. The site location is shown on Figure 1.

2.0 SITE BACKGROUND AND HISTORY

The OW Sports & Liquor site is located in the NW ¼ of the SE ¼ of Section 36, Township 29 North, Range 02 West, in the City of Owen, Clark County, Wisconsin (Figure 1). The site address is 107 Central Avenue, Owen, Wisconsin 54460. Wisconsin Transverse Mercator (WTM) coordinates are 475504, 497314. Previous site work included the installation of six (6) monitoring wells and numerous soil borings. A site map documenting previous site work is included in Figure 2.

3.0 SUMMARY OF WORK

3.1 Groundwater Monitoring and Analytical Results

REI personnel collected groundwater samples from the existing well network on June 6, 2019. Water elevation measurements were collected at each well during the sampling event and the recorded depth to groundwater data is presented in Table 1.

Free floating product was historically observed at MW4 prior to the November 2017 soil excavation. Free product has not been observed in any of the monitoring wells following the completion of the soil excavation.

Groundwater samples were submitted to Pace Analytical, Green Bay, Wisconsin for analysis of PVOC and naphthalene compounds. The complete laboratory analytical reports are included as Appendix A. Groundwater analytical results are summarized in Tables 2a-k.

Analysis of the groundwater samples for these events indicated the presence of petroleum compounds above NR 140.10 Groundwater Quality Enforcement Standards (ES) and/or Preventive Action Limits (PAL). Laboratory analytical results for monitoring wells MW3R had detectable concentrations greater than the NR 140.10 ES limits for benzene and MW4R had detectable concentrations greater than the NR 140.10 PAL limits for benzene on the June 6, 2019 sampling event.

All purge water generated during this scope of services was temporarily stored in 55-gallon WDOT approved drums until final disposal arrangements were completed with the City of Wausau Waste Water Treatment Facility.

4.0 CONCLUSION AND RECOMMENDATIONS

The groundwater contaminant plume has been adequately defined following the installation of monitoring wells MW7 and MW8. The soil excavation completed in 2017 appears to have adequately addressed the residual petroleum contamination beneath the O&W Sports & Liquor site. Free product is no longer reported in the groundwater monitoring well network and groundwater contaminant concentrations have been decreasing following the soil excavation.

REI is recommending the investigation be routed through the case closure process for case closure consideration. If the investigation is closed by the WDNR, REI will return to properly abandon the groundwater monitoring wells.

Table 1
Depth to Water and Water Table Elevations
O-W Sports and Liquor
Owen, WI

Depth to Water (feet) below Reference Elevation

Date	MW1	MW2	MW3	MW3R	MW4	MW4R	MW5	MW6	MW7	MW8
12/7/2000	9.57	7.10	7.04		7.43		7.21	6.59		
4/17/2001	6.32	5.62	5.68				5.72	4.35		
7/17/2001	8.54	6.84	6.94				7.10	5.91		
10/17/2001	8.03	6.71	6.76				6.88	5.26		
2/15/2002	9.59	7.17	7.22				7.36	7.23		
5/21/2002	6.82	5.92	5.98				6.06	4.89		
10/2/2002	7.98	6.66	6.71				6.86	5.23		
4/5/2004	6.45	6.22	6.23				6.14	5.13		
4/9/2008	6.09	5.55	5.31		5.90		5.24	4.80		
4/25/2017	6.19	4.81	5.20		5.22		4.02	4.10		
4/30/2018	6.52	5.51					4.80	4.76		
5/9/2018			Well	5.30	Well	4.81			5.80	6.04
7/17/2018			Abandoned	6.46	Abandoned	6.36			6.94	7.04
11/19/2018	6.80	5.89		5.68		4.83	5.02	5.31	6.12	6.40
6/6/2019	6.69	5.58		5.09		4.34	4.77	4.93	5.83	6.07

Measuring Point Elevations

Elevations referenced to an onsite benchmark

Initial Survey	102.67	99.32	99.14		98.99		98.64	99.02		
Resurvey (4-9-08)			99.08		98.98			99.13		
Resurvey (4-25-17)	1244.59	1241.16	1241.02		1240.70		1240.66	1240.75		
Resurvey (5-9-18)	1244.61	1241.40	N/A	1240.76	N/A	1240.63	1240.55	1240.60	1240.60	1240.42

Ground Surface Elevation

Initial Survey	100.72	99.80	99.55		99.42		99.03	99.52		
Resurvey (4-25-17)	1242.10	1241.56	1241.37		1241.14		1240.83	1241.11		
Resurvey (5-9-18)	1242.12	1241.57		1241.14		1241.04	1240.83	1241.12	1241.07	1240.89

Depth to Water (feet) below Ground Surface

Average	5.40	6.60	6.72		6.61		6.33	5.77		
Maximum	7.64	7.65	7.63		7.86		7.75	7.73		
Minimum	4.14	5.29	5.61		5.65		4.41	4.60		
Range	3.50	2.36	2.02		2.21		3.34	3.13		

Water Level Elevation (feet MSL)

Date	MW1	MW2	MW3	MW3R	MW4	MW4R	MW5	MW6	MW7	MW8
12/7/2000	93.10	92.22	92.10		91.56		91.43	92.43		
4/17/2001	96.35	93.70	93.46				92.92	94.67		
7/17/2001	94.13	92.48	92.20				91.54	93.11		
10/17/2001	94.64	92.61	92.38				91.76	93.76		
2/15/2002	93.08	92.15	91.92				91.28	91.79		
5/21/2002	95.85	93.40	93.16				92.58	94.13		
10/2/2002	94.69	92.66	92.43				91.78	93.79		
4/5/2004	96.22	93.10	92.91				92.50	93.89		
4/9/2008	96.58	93.77	93.77		93.08		93.40	94.33		
4/25/2017	1238.40	1236.35	1235.82		1235.48		1236.64	1236.65		
4/30/2018	1238.07	1235.65					1235.86	1235.99		
5/9/2018				1235.46		1235.82			1234.80	1234.38
7/17/2018				1234.30		1234.27			1233.66	1233.38
11/19/2018	1237.81	1235.51		1235.08		1235.80	1235.53	1235.29	1234.48	1234.02
6/6/2019	1237.92	1235.82		1235.67		1236.29	1235.78	1235.67	1234.77	1234.35

LNAPL in the well

Table 2a
Summary of Groundwater Analytical Results
Geoprobes
O-W Sports and Liquor
107 Central Avenue
Owen, WI

Parameter	ES	PAL	Units	GP1	GP2	GP5	GP8	GP9	GP10
			Date	10/25/2000	10/25/2000	10/25/2000	10/25/2000	10/25/2000	10/25/2000
GRO				< 50	< 50	71,300	3,190	54,600	9,710
VOC Parameters									
Benzene	5	0.5	µg/l	< 0.15	< 0.15	**18,600**	**155**	**5,360**	**63.5**
Toluene	800	160	µg/l	< 0.4	< 0.4	**13,300**	*183*	**19,500**	**1,290**
Ethylbenzene	700	140	µg/l	0.562 *	< 0.5	**3,080**	111	**4,620**	553
Xylenes (mixed isomers)	2,000	400	µg/l	0.750 *	< 0.55	**11,410**	*450*	**24,640**	**3,330**
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.3	< 0.3	< 600	< 6	< 300	< 30
Trimethylbenzenes (mixed isomers)	480	96	µg/l	2.37	< 0.55	**3,259**	*242.1*	**9,960**	**1,371**
Naphthalene	100	10	µg/l	1.80 *	< 0.8	< 1,600	*29.5*	**2,750**	**415**
n-Butylbenzene			µg/l	2.69	< 0.15	< 300	< 3	< 150	< 15
sec-Butlybenzene			µg/l	0.578	< 0.15	< 300	17.1	419	56.5
tert-Butylbenzene			µg/l	0.203 *	< 0.15	< 300	< 3	< 150	< 15
Isopropylbenzene			µg/l	< 0.15	< 0.15	< 300	23.2	401	60.7
n-Propylbenzene			µg/l	< 0.15	< 0.15	< 300	41	1,330	151
1,2-Dichloroethane	5	0.5	µg/l	< 0.15	< 0.15	< 300	**5.66**	< 150	< 15

Parameter	ES	PAL	Unit	GP11	GP12	GP13	GP14	GP15	GP16
			Date	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000	11/27/2000
VOC Parameters									
Benzene	5	0.5	µg/l	< 0.15	< 0.15	< 0.15	**420**	**108**	0.175 *
Toluene	800	160	µg/l	< 0.4	0.481*	< 0.4	94.8	152	0.527 *
Ethylbenzene	700	140	µg/l	< 0.5	< 0.5	< 0.5	**1,390**	**407**	< 0.5
Xylenes (mixed isomers)	2,000	400	µg/l	< 0.55	< 0.55	< 0.55	**3,758.8**	*1,380*	0.984 *
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.3	< 0.3	< 0.3	< 6	< 30	< 0.3
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.55	< 0.55	< 0.55	**3,918**	**781**	1.748 *

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
NA = Not Analyzed
Enforcement Standard exceeded **BOLD**
Preventive Action Limit exceeded *Italics*
* = Result between laboratory Limit of Detection and Limit of Quantitation (consider an estimated value)

Table 2b
Summary of Groundwater Analytical Results
MW1
O-W Sports and Liquor
107 Central Avenue
Owen, WI

Parameter	ES	PAL	Units	12/7/2000	4/17/2001	7/17/2001	10/17/2001	2/5/2002	5/21/2002	10/2/2002	4/5/2004	4/9/2008
GRO			µg/l	< 50	NA	NA	NA	NA	NA	NA	NA	NA
VOC Parameters												
Benzene	5	0.5	µg/l	< 0.15	< 0.15	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.14	< 0.31
Toluene	800	160	µg/l	< 0.4	< 0.4	< 0.68	< 0.68	< 0.68	< 0.68	< 0.68	< 0.36	< 0.30
Ethylbenzene	700	140	µg/l	0.575 *	< 0.5	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.40	< 0.50
Xylenes (mixed isomers)	2,000	400	µg/l	0.948 *	< 0.55	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 0.74	< 0.62
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.3	< 0.3	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.36	< 0.30
Trimethylbenzenes (mixed isomers)	480	96	µg/l	1.33 *	< 0.55	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.40	< 0.40
Naphthalene	100	10	µg/l	< 0.8	NA	NA	NA	NA	NA	NA	< 0.47	< 0.80
Methylene Chloride	5	0.5	µg/l	< 0.39	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene			µg/l	< 0.15	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene			µg/l	< 0.15	NA	NA	NA	NA	NA	NA	NA	NA
Isopropyl Ether			µg/l	< 0.25	NA	NA	NA	NA	NA	NA	NA	NA
p-Isopropyl toluene			µg/l	0.212 *	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics												
Lead	15	1.5	µg/l	< 1.0	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate+Nitrite (as N)	10	2	mg/l	1.21	1.17	0.97	NA	0.99	1.1	NA	NA	NA
Sulfate	250	125	mg/l	20.1	47.6	24	NA	26	56	NA	NA	NA
Iron (filtered)	0.3	0.15	mg/l	**0.759**	0.05	NA	NA	0.049	NA	NA	NA	NA
Field Measurements												
Temperature			°F	NA	40.26	57.86	NA	47.51	NA	NA	NA	NA
Conductivity			µS/cm	NA	253	375	NA	165	NA	NA	NA	NA
Dissolved Oxygen			mg/l	NA	9.39	9.16	NA	6.38	NA	NA	NA	NA
pH				NA	6.47	7.74	NA	8.29	NA	NA	NA	NA
Redox Potential			mV	NA	244.6	1.2	NA	44.7	NA	NA	NA	NA

Parameter	ES	PAL	Units		4/25/2017	11/2017	4/30/2018	5/9/2018	7/17/2018	11/19/2018	6/6/2019
GRO			µg/l		NA		NA			NA	NA
VOC Parameters											
Benzene	5	0.5	µg/l		< 0.40		< 0.31			< 0.31	< 0.25
Toluene	800	160	µg/l		< 0.39		< 0.49			< 0.49	< 0.17
Ethylbenzene	700	140	µg/l		< 0.39		< 0.33			< 0.33	< 0.22
Xylenes (mixed isomers)	2,000	400	µg/l		< 0.80		< 0.66			< 0.66	< 0.47
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l		< 0.48		< 0.32			< 0.32	< 1.2
Trimethylbenzenes (mixed isomers)	480	96	µg/l		< 0.42		< 0.34			< 0.34	< 0.87
Naphthalene	100	10	µg/l		< 0.42		< 0.51			< 0.51	< 1.2
Methylene Chloride	5	0.5	µg/l		NA		NA			NA	NA
sec-Butylbenzene			µg/l		NA		NA			NA	NA
n-Propylbenzene			µg/l	Project	NA	Soil	NA	Well Not	Well Not	NA	NA
Isopropyl Ether			µg/l	Stalled	NA	Excavation	NA	Sampled	Sampled	NA	NA
p-Isopropyl toluene			µg/l		NA	Completed	NA			NA	NA
Inorganics											
Lead	15	1.5	µg/l		NA		NA			NA	NA
Nitrate+Nitrite (as N)	10	2	mg/l		NA		NA			NA	NA
Sulfate	250	125	mg/l		NA		NA			NA	NA
Iron (filtered)	0.3	0.15	mg/l		NA		NA			NA	NA
Field Measurements											
Temperature			°F		45.97		NA			51.6	50.3
Conductivity			µS/cm		165		NA			55.9	465.4
Dissolved Oxygen			mg/l		10.33		NA			6.69	5.33
pH					6.76		NA			6.38	6.81
Redox Potential			mV		248.4		NA			194.9	204.1

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
NA = Not Analyzed
Enforcement Standard exceeded **BOLD**
Preventive Action Limit exceeded *Italics*
* = Result between laboratory Limit of Detection and Limit of Quantitation (consider an estimated value)

Table 2c
Summary of Groundwater Analytical Results
MW2
O-W Sports and Liquor
107 Central Avenue
Owen, WI

Parameter	ES	PAL	Units	12/7/2000	4/17/2001	7/17/2001	10/17/2001	2/5/2002	5/21/2002	10/2/2002	4/5/2004	4/9/2008
GRO			µg/l	< 50	NA	NA	NA	NA	NA	NA	NA	NA
VOC Parameters												
Benzene	5	0.5	µg/l	< 0.15	< 0.15	< 0.45	< 0.45	< 0.45	< 0.45	< 0.45	< 0.14	< 0.31
Toluene	800	160	µg/l	< 0.4	< 0.4	< 0.68	< 0.68	< 0.68	< 0.68	< 0.68	< 0.36	< 0.30
Ethylbenzene	700	140	µg/l	< 0.5	< 0.5	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.40	< 0.50
Xylenes (mixed isomers)	2,000	400	µg/l	0.579 *	< 0.55	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 0.74	< 0.62
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.3	< 0.3	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.36	< 0.30
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.820 *	< 0.55	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.40	< 0.40
Naphthalene	100	10	µg/l	< 0.8	NA	NA	NA	NA	NA	NA	< 0.47	< 0.80
Methylene Chloride	5	0.5	µg/l	< 0.39	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene			µg/l	< 0.15	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene			µg/l	< 0.2	NA	NA	NA	NA	NA	NA	NA	NA
Isopropyl Ether			µg/l	< 0.25	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics												
Lead	15	1.5	µg/l	< 1.0	NA	NA	NA	NA	NA	NA	NA	NA
Nitrate+Nitrite (as N)	10	2	mg/l	0.526	*3.63*	NA	NA	3.1	6.3	NA	NA	NA
Sulfate	250	125	mg/l	41.2	43.7	NA	NA	35	54	NA	NA	NA
Iron (filtered)	0.3	0.15	mg/l	*0.759*	0.035	NA	NA	0.099	NA	NA	NA	NA
Field Measurements												
Temperature			°F	NA	44.46	55.22	NA	49.13	NA	NA	NA	NA
Conductivity			µS/cm	NA	717	484	NA	488	NA	NA	NA	NA
Dissolved Oxygen			mg/l	NA	5.6	5.36	NA	6.1	NA	NA	NA	NA
pH				NA	6.13	8.49	NA	8.12	NA	NA	NA	NA
Redox Potential			mV	NA	254.3	60.5	NA	35.7	NA	NA	NA	NA

Parameter	ES	PAL	Units		4/25/2017	11/2017	4/30/2018	5/9/2018	7/17/2018	11/19/2018	6/6/2019
GRO			µg/l		NA		NA			NA	NA
VOC Parameters											
Benzene	5	0.5	µg/l		< 0.40		< 0.31			< 0.31	< 0.25
Toluene	800	160	µg/l		< 0.39		< 0.49			< 0.49	< 0.17
Ethylbenzene	700	140	µg/l		< 0.39		< 0.33			< 0.33	< 0.22
Xylenes (mixed isomers)	2,000	400	µg/l		< 0.80		< 0.66			< 0.66	< 0.47
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l		< 0.48		< 0.32			< 0.32	< 1.2
Trimethylbenzenes (mixed isomers)	480	96	µg/l		< 0.42		< 0.34			< 0.34	< 0.87
Naphthalene	100	10	µg/l		< 0.42		< 0.51			< 0.51	< 1.2
Methylene Chloride	5	0.5	µg/l		NA		NA			NA	NA
sec-Butylbenzene			µg/l		NA		NA			NA	NA
n-Propylbenzene			µg/l	Project Stalled	NA	Soil Excavation Completed	NA	Well Not Sampled	Well Not Sampled	NA	NA
Isopropyl Ether			µg/l		NA		NA			NA	NA
Inorganics											
Lead	15	1.5	µg/l		NA		NA			NA	NA
Nitrate+Nitrite (as N)	10	2	mg/l		NA		NA			NA	NA
Sulfate	250	125	mg/l		NA		NA			NA	NA
Iron (filtered)	0.3	0.15	mg/l		NA		NA			NA	NA
Field Measurements											
Temperature			°F		49.4		NA			53.9	52.8
Conductivity			µS/cm		753		NA			915	752
Dissolved Oxygen			mg/l		10.61		NA			5.12	6.46
pH					7.12		NA			6.92	6.92
Redox Potential			mV		222.2		NA			202	139.9

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
NA = Not Analyzed
Enforcement Standard exceeded **BOLD**
Preventive Action Limit exceeded *Italics*
* = Result between laboratory Limit of Detection and Limit of Quantitation (consider an estimated value)

Table 2d
Summary of Groundwater Analytical Results
MW3
O-W Sports and Liquor
107 Central Avenue
Owen, WI

Parameter	ES	PAL	Units	12/7/2000	4/17/2001	7/17/2001	10/17/2001	2/5/2002	5/21/2002	10/2/2002	4/5/2004	4/9/2008		4/25/2017	11/2017
GRO			µg/l	2,370				NA	NA	NA				NA	
VOC Parameters															
Benzene	5	0.5	µg/l	**1,190**	**6,530**	**11,000**	**9,600**	**9,800**	**11,000**	**10,000**	**9,500**	**3,070**		**3,240**	
Toluene	800	160	µg/l	< 80	*561*	*420*	*170*	*230*	*190*	*290*	*330*	46.8		111	
Ethylbenzene	700	140	µg/l	*140*	*424*	**710**	*660*	*610*	**920**	**750**	**710**	*254*		*354*	
Xylenes (mixed isomers)	2,000	400	µg/l	89.3	*1,315*	*1,290*	*761*	*1,028*	*1,980*	*1,110*	*1,120*	257.3		*565*	
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 60	< 30	**61**	**72**	< 22	**88***	< 43	36*	< 3.0		< 19.4	
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 110	*416*	*430*	*320*	*440*	**910**	**490**	*440*	*153.5*		*279.8*	
Naphthalene	100	10	µg/l	< 160	NA	NA	NA	NA	NA	NA	**180**	NA		*64.5*	
Methylene Chloride	5	0.5	µg/l	< 78	NA	NA	NA	NA	NA	NA	NA	NA		NA	
sec-Butylbenzene			µg/l	< 30	NA	NA	NA	NA	NA	NA	NA	NA		NA	Well
n-Propylbenzene			µg/l	< 30	NA	NA	NA	NA	NA	NA	NA	NA	Project	NA	Abandoned
Isopropyl Ether			µg/l	< 50	NA	NA	NA	NA	NA	NA	NA	NA	Stalled	NA	and Soil
1,2-Dichloroethane	5	0.5	µg/l	**47.8**	NA	NA	NA	NA	NA	NA	NA	NA		NA	Excavation
Inorganics															Completed
Lead	15	1.5	µg/l	< 1.0	NA	NA	NA	NA	NA	NA	NA	NA		NA	
Nitrate+Nitrite (as N)	10	2	mg/l	< 0.3	< 0.3	NA	NA	NA	1.1	NA	NA	NA		NA	
Sulfate	250	125	mg/l	33.2	27.2	NA	NA	NA	56	NA	NA	NA		NA	
Iron (filtered)	0.3	0.15	mg/l	**4.23**	**0.409**	NA	NA	**5.7**	NA	NA	NA	NA		NA	
Field Measurements															
Temperature			°F	NA	43.66	57.59	NA	NA	NA	NA	NA	NA		48.35	
Conductivity			µS/cm	NA	198	1026	NA	NA	NA	NA	NA	NA		388	
Dissolved Oxygen			mg/l	NA	7.62	3.34	NA	NA	NA	NA	NA	NA		0.82	
pH				NA	7.09	7.23	NA	NA	NA	NA	NA	NA		6.18	
Redox Potential			mV	NA	236.3	98.3	NA	NA	NA	NA	NA	NA		80.6	

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
NA = Not Analyzed
Enforcement Standard exceeded **BOLD**
Preventive Action Limit exceeded *Italics*
* = Result between laboratory Limit of Detection and Limit of Quantitation (consider an estimated value)

Table 2e
Summary of Groundwater Analytical Results
MW3R
O-W Sports and Liquor
107 Central Avenue
Owen, WI

Parameter	ES	PAL	Units	4/30/2018	5/9/2018	7/17/2018	11/19/2018	6/6/2019
VOC Parameters				Well Not Sampled				
Benzene	5	0.5	µg/l		**1,130**	**645**	**16.3**	**13.2**
Toluene	800	160	µg/l		11.8*	4.7*	< 0.49	0.47*
Ethylbenzene	700	140	µg/l		*151*	10.2	3.5	6.9
Xylenes (mixed isomers)	2,000	400	µg/l		216.9	12.7*	1.4*	3.7
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l		5.3*	3.3*	< 0.32	< 1.2
Trimethylbenzenes (mixed isomers)	480	96	µg/l		*136.4*	5.7	1.3	2.5*
Naphthalene	100	10	µg/l		*34.1*	*21.2*	1.3*	2.0*
Inorganics								
Lead	15	1.5	µg/l		NA	NA	NA	NA
Nitrate+Nitrite (as N)	10	2	mg/l		NA	NA	NA	NA
Sulfate	250	125	mg/l		NA	NA	NA	NA
Iron (filtered)	0.3	0.15	mg/l		NA	NA	NA	NA
Field Measurements								
Temperature			°F		47.95	57.52	51.4	50.1
Conductivity			µS/cm		379	489	429	746
Dissolved Oxygen			mg/l		3.37	Bad Sensor	3.39	6.15
pH					6.82	Bad Sensor	6.27	6.3
Redox Potential			mV		142.7	Bad Sensor	173.2	195.4

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
NA = Not Analyzed
Enforcement Standard exceeded — **BOLD**
Preventive Action Limit exceeded — *Italics*
* = Result between laboratory Limit of Detection and Limit of Quantitation (consider an estimated value)

Table 2f
Summary of Groundwater Analytical Results
MW4
O-W Sports and Liquor
107 Central Avenue
Owen, WI

Parameter	ES	PAL	Units	12/7/2000	4/17/2001	7/17/2001	10/17/2001	2/5/2002	05/21/02	10/02/02	4/5/2004	4/9/2008		4/25/2017	11/2017
GRO			µg/l	27,900					NA			NA		NA	
VOC Parameters															
Benzene	5	0.5	µg/l	**1,450**	**Not**	**Not**	**Not**	**Not**	**1,200**	**Not**	**Not**	**592**		**71.5**	
Toluene	800	160	µg/l	**3,150**	**Sampled**	**Sampled**	**Sampled**	**Sampled**	**1,100**	**Sampled**	**Sampled**	*784*		85.3	
Ethylbenzene	700	140	µg/l	**1,370**					**1,300**			**1,090**		**631**	
Xylenes (mixed isomers)	2,000	400	µg/l	**6,910**	**Free**	**Free**	**Free**	**Free**	**5,700**	**Free**	**Free**	**6,710**		**2,826**	
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 150	**Product**	**Product**	**Product**	**Product**	*43*	**Product**	**Product**	< 30		< 9.7	
Trimethylbenzenes (mixed isomers)	480	96	µg/l	**1,553**					**2,050**			**3,950**		**2,333**	
Naphthalene	100	10	µg/l	< 400					NA			**524**		**460**	
Methylene Chloride	5	0.5	µg/l	< 195					NA			NA		NA	
sec-Butylbenzene			µg/l	< 75					NA			NA		NA	
n-Propylbenzene			µg/l	282					NA			NA		NA	
Isopropylbenzene			µg/l	75.6					NA			NA		NA	
n-Butylbenzene			µg/l	196					NA			NA		NA	
Inorganics															
Lead	15	1.5	µg/l	**22.2**					NA			NA		NA	
Nitrate+Nitrite (as N)	10	2	mg/l	< 0.3					NA			NA		NA	
Sulfate	250	125	mg/l	7.94					NA			NA		NA	
Iron (filtered)	0.3	0.15	mg/l	**3.73**					NA			NA		NA	
Field Measurements															
Temperature			°F	NA					NA			NA		**Not**	
Conductivity			µS/cm	NA					NA			NA		**Sampled**	
Dissolved Oxygen			mg/l	NA					NA			NA			
pH				NA					NA			NA		**Free**	
Redox Potential			mV	NA					NA			NA		**Product**	

Project Stalled

Well Abandoned and Soil Excavation Completed

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
NA = Not Analyzed
Enforcement Standard exceeded **BOLD**
Preventive Action Limit exceeded *Italics*
* = Result between laboratory Limit of Detection and Limit of Quantitation (consider an estimated value)

Table 2g
Summary of Groundwater Analytical Results
MW4R
O-W Sports and Liquor
107 Central Avenue
Owen, WI

Parameter	ES	PAL	Units	4/30/2018	5/9/2018	7/17/2018	11/19/2018	6/6/2019
VOC Parameters				Well Not Sampled				
Benzene	5	0.5	µg/l		**14.1**	**26.3**	*0.80**	*1.5*
Toluene	800	160	µg/l		36.7	109	0.91*	1.7*
Ethylbenzene	700	140	µg/l		*54.2*	229	9.4	11.5
Xylenes (mixed isomers)	2,000	400	µg/l		339.6	*1,137*	19.8	24.8
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l		< 1.3	1.7*	< 0.32	< 1.2
Trimethylbenzenes (mixed isomers)	480	96	µg/l		*419*	*392.4*	23.3	30.6
Naphthalene	100	10	µg/l		*26.8*	*86*	4.0	6.7
Inorganics								
Lead	15	1.5	µg/l		NA	NA	NA	NA
Nitrate+Nitrite (as N)	10	2	mg/l		NA	NA	NA	NA
Sulfate	250	125	mg/l		NA	NA	NA	NA
Iron (filtered)	0.3	0.15	mg/l		NA	NA	NA	NA
Field Measurements								
Temperature			°F		45.42	57.50	49.6	59.4
Conductivity			µS/cm		528	383	303.4	313.6
Dissolved Oxygen			mg/l		1.55	Bad Sensor	2.55	0.33
pH					6.61	Bad Sensor	6.90	6.95
Redox Potential			mV		159.1	Bad Sensor	56.4	71.9

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
NA = Not Analyzed
Enforcement Standard exceeded — **BOLD**
Preventive Action Limit exceeded — *Italics*
* = Result between laboratory Limit of Detection and Limit of Quantitation (consider an estimated value)

Table 2h
Summary of Groundwater Analytical Results
MW5
O-W Sports and Liquor
107 Central Avenue
Owen, WI

Parameter	ES	PAL	Units	12/7/2000	4/17/2001	7/17/2001	10/17/2001	2/5/2002	5/21/2002	10/2/2002	4/5/2004	4/9/2008	
GRO			µg/l	< 50	NA	NA	NA	NA	NA	NA	NA	NA	
VOC Parameters													
Benzene	5	0.5	µg/l	< 0.412 *	< 0.15	< 0.45	< 0.45	0.62 *	< 0.45	0.82 *	< 0.14	< 0.31	
Toluene	800	160	µg/l	< 0.4	< 0.4	< 0.68	< 0.68	< 0.68	< 0.68	< 0.68	< 0.36	< 0.30	
Ethylbenzene	700	140	µg/l	< 0.5	< 0.5	< 0.82	< 0.82	< 0.82	< 0.82	< 0.82	< 0.40	< 0.50	
Xylenes (mixed isomers)	2,000	400	µg/l	< 0.55	< 0.55	< 1.7	< 1.7	< 1.7	< 1.7	< 1.7	< 0.74	< 0.62	
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.3	< 0.3	< 0.43	< 0.43	< 0.43	< 0.43	< 0.43	< 0.36	< 0.30	
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.55	< 0.55	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.40	< 0.40	
Naphthalene	100	10	µg/l	< 0.8	NA	NA	NA	NA	NA	NA	< 0.47	< 0.80	
Methylene Chloride	5	0.5	µg/l	< 0.39	NA	NA	NA	NA	NA	NA	NA	NA	
sec-Butylbenzene			µg/l	< 0.15	NA	NA	NA	NA	NA	NA	NA	NA	Project Stalled
n-Propylbenzene			µg/l	< 0.15	NA	NA	NA	NA	NA	NA	NA	NA	
Isopropylbenzene			µg/l	< 0.15	NA	NA	NA	NA	NA	NA	NA	NA	
Inorganics													
Lead	15	1.5	µg/l	< 1.00	NA	NA	NA	NA	NA	NA	NA	NA	
Nitrate+Nitrite (as N)	10	2	mg/l	< 0.3	1.19	0.48	NA	0.23	NA	NA	NA	NA	
Sulfate	250	125	mg/l	30.2	18.8	68	NA	22	NA	NA	NA	NA	
Iron (filtered)	0.3	0.15	mg/l	**3.5**	0.053	NA	NA	0.061	NA	NA	NA	NA	
Field Measurements													
Temperature			°F	NA	43.26	56.94	NA	47.6	NA	NA	NA	NA	
Conductivity			µS/cm	NA	198	177	NA	151	NA	NA	NA	NA	
Dissolved Oxygen			mg/l	NA	7.62	4.19	NA	5.17	NA	NA	NA	NA	
pH				NA	7.09	8.39	NA	7.25	NA	NA	NA	NA	
Redox Potential			mV	NA	236.3	69.3	NA	-5.1	NA	NA	NA	NA	

Parameter	ES	PAL	Units	4/25/2017	11/2017	4/30/2018	5/9/2018	7/17/2018	11/19/2018	6/6/2019
GRO			µg/l	NA		NA			NA	NA
VOC Parameters										
Benzene	5	0.5	µg/l	< 0.40		< 0.31			< 0.31	< 0.25
Toluene	800	160	µg/l	< 0.39		< 0.49			< 0.49	< 0.17
Ethylbenzene	700	140	µg/l	< 0.39		< 0.33			< 0.33	< 0.22
Xylenes (mixed isomers)	2,000	400	µg/l	< 0.80		< 0.66			< 0.66	< 0.47
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.48		< 0.32			< 0.32	< 1.2
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.42		< 0.34			< 0.34	< 0.87
Naphthalene	100	10	µg/l	< 0.42		< 0.51			< 0.51	< 1.2
Methylene Chloride	5	0.5	µg/l	NA		NA			NA	NA
sec-Butylbenzene			µg/l	NA		NA			NA	NA
n-Propylbenzene			µg/l	NA	Soil Excavation Completed	NA	Well Not Sampled	Well Not Sampled	NA	NA
Isopropylbenzene			µg/l	NA		NA			NA	NA
Inorganics										
Lead	15	1.5	µg/l	NA		NA			NA	NA
Nitrate+Nitrite (as N)	10	2	mg/l	NA		NA			NA	NA
Sulfate	250	125	mg/l	NA		NA			NA	NA
Iron (filtered)	0.3	0.15	mg/l	NA		NA			NA	NA
Field Measurements										
Temperature			°F	48.93		NA			52.1	57.2
Conductivity			µS/cm	257		NA			289.6	244.8
Dissolved Oxygen			mg/l	1.77		NA			4.9	0.63
pH				6.48		NA			6.25	6.11
Redox Potential			mV	92.0		NA			180.4	219.4

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
NA = Not Analyzed
Enforcement Standard exceeded **BOLD**
Preventive Action Limit exceeded *Italics*
* = Result between laboratory Limit of Detection and Limit of Quantitation (consider an estimated value)

Table 2i
Summary of Groundwater Analytical Results
MW6
O-W Sports and Liquor
107 Central Avenue
Owen, WI

Parameter	ES	PAL	Units	4/30/2018	5/9/2018	7/17/2018	11/19/2018	6/6/2019
VOC Parameters					Well Not Sampled	Well Not Sampled		
Benzene	5	0.5	µg/l	< 0.31			< 0.31	< 0.25
Toluene	800	160	µg/l	< 0.49			< 0.49	< 0.17
Ethylbenzene	700	140	µg/l	< 0.33			< 0.33	< 0.22
Xylenes (mixed isomers)	2,000	400	µg/l	< 0.66			< 0.66	< 0.47
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.32			< 0.32	< 1.2
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.34			< 0.34	< 0.87
Naphthalene	100	10	µg/l	< 0.51			< 0.51	< 1.2
Inorganics								
Lead	15	1.5	µg/l	NA			NA	NA
Nitrate+Nitrite (as N)	10	2	mg/l	NA			NA	NA
Sulfate	250	125	mg/l	NA			NA	NA
Iron (filtered)	0.3	0.15	mg/l	NA			NA	NA
Field Measurements								
Temperature			°F	NA			52.7	47.3
Conductivity			µS/cm	NA			546	681.3
Dissolved Oxygen			mg/l	NA			4.43	4.33
pH				NA			6.15	6.12
Redox Potential			mV	NA			236.7	229.4

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
NA = Not Analyzed
Enforcement Standard exceeded — **BOLD**
Preventive Action Limit exceeded — *Italics*
* = Result between laboratory Limit of Detection and Limit of Quantitation (consider an estimated value)

Table 2j
Summary of Groundwater Analytical Results
MW7
O-W Sports and Liquor
107 Central Avenue
Owen, WI

Parameter	ES	PAL	Units	4/30/2018	5/9/2018	7/17/2018	11/19/2018	6/6/2019
VOC Parameters								
Benzene	5	0.5	µg/l		< 0.31	< 0.31	< 0.31	< 0.25
Toluene	800	160	µg/l		< 0.49	< 0.49	< 0.49	< 0.17
Ethylbenzene	700	140	µg/l		4.6	8.6	7.3	< 0.22
Xylenes (mixed isomers)	2,000	400	µg/l		16	21.1	18.8	< 0.47
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l		<0.32	<0.32	<0.32	< 1.2
Trimethylbenzenes (mixed isomers)	480	96	µg/l		55.4	44.3	56.5	0.95*
Naphthalene	100	10	µg/l		*10.8*	*14.6*	*14.4*	< 1.2
Inorganics								
Lead	15	1.5	µg/l	Well Not Sampled	NA	NA	NA	NA
Nitrate+Nitrite (as N)	10	2	mg/l		NA	NA	NA	NA
Sulfate	250	125	mg/l		NA	NA	NA	NA
Iron (filtered)	0.3	0.15	mg/l		NA	NA	NA	NA
Field Measurements								
Temperature			°F		50.82	62.36	54.7	47.9
Conductivity			µS/cm		1,133	787	570.1	1,078
Dissolved Oxygen			mg/l		2.44	Bad Sensor	3.5	3.49
pH					7.19	Bad Sensor	6.73	6.39
Redox Potential			mV		161.9	Bad Sensor	144.9	212.1

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
NA = Not Analyzed
Enforcement Standard exceeded **BOLD**
Preventive Action Limit exceeded *Italics*
* = Result between laboratory Limit of Detection and Limit of Quantitation (consider an estimated value)

Table 2k
Summary of Groundwater Analytical Results
MW8
O-W Sports and Liquor
107 Central Avenue
Owen, WI

Parameter	ES	PAL	Units	4/30/2018	5/9/2018	7/17/2018	11/19/2018	6/6/2019
VOC Parameters				Well Not Sampled				
Benzene	5	0.5	µg/l		*2.5*	< 0.31	< 0.31	< 0.25
Toluene	800	160	µg/l		0.73*	< 0.49	< 0.49	< 0.17
Ethylbenzene	700	140	µg/l		0.38*	< 0.33	< 0.33	< 0.22
Xylenes (mixed isomers)	2,000	400	µg/l		1.5*	< 0.66	< 0.66	< 0.47
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l		0.35*	< 0.32	< 0.32	< 1.2
Trimethylbenzenes (mixed isomers)	480	96	µg/l		1.5	< 0.34	< 0.34	< 0.87
Naphthalene	100	10	µg/l		< 0.51	< 0.51	< 0.51	< 1.2
Inorganics								
Lead	15	1.5	µg/l		NA	NA	NA	NA
Nitrate+Nitrite (as N)	10	2	mg/l		NA	NA	NA	NA
Sulfate	250	125	mg/l		NA	NA	NA	NA
Iron (filtered)	0.3	0.15	mg/l		NA	NA	NA	NA
Field Measurements								
Temperature			°F		49.14	54.08	51.9	45.9
Conductivity			µS/cm		125	84	152.8	160.9
Dissolved Oxygen			mg/l		2.64	Bad Sensor	2.61	2.73
pH					6.22	Bad Sensor	6.18	6.19
Redox Potential			mV		338.3	Bad Sensor	193.6	220.0

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
NA = Not Analyzed
Enforcement Standard exceeded — **BOLD**
Preventive Action Limit exceeded — *Italics*
* = Result between laboratory Limit of Detection and Limit of Quantitation (consider an estimated value)

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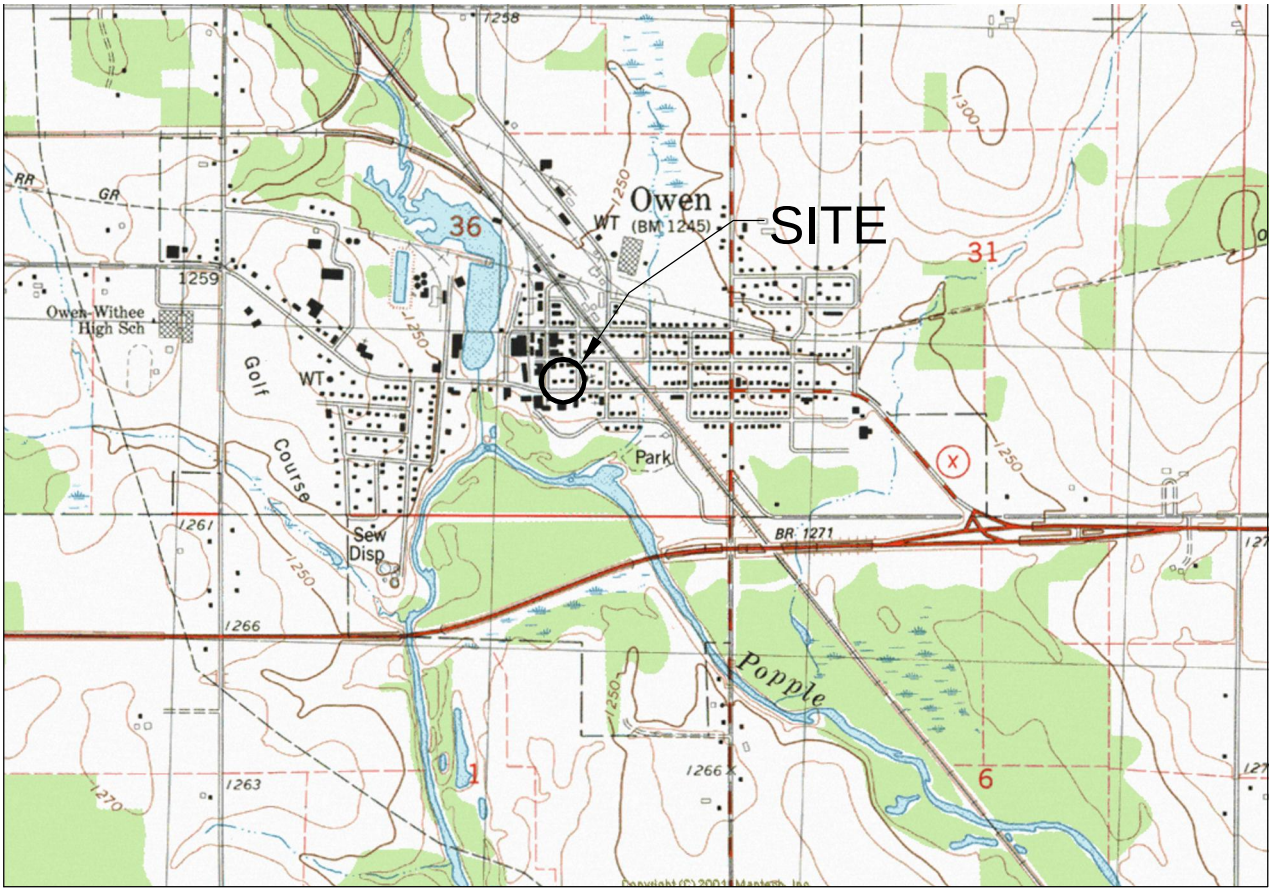
CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING



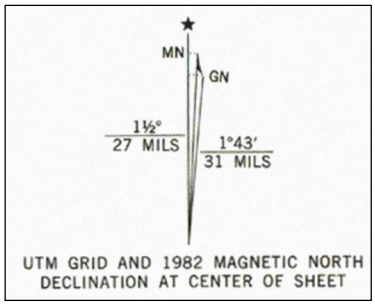
SCALE 1:24 000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

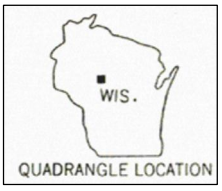
1 .5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929



UTM GRID AND 1982 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

OWEN, WIS.
NE/4 OWEN 15' QUADRANGLE
N4452.5–W9030/7.5
1982
DMA 2873 I NE–SERIES V861

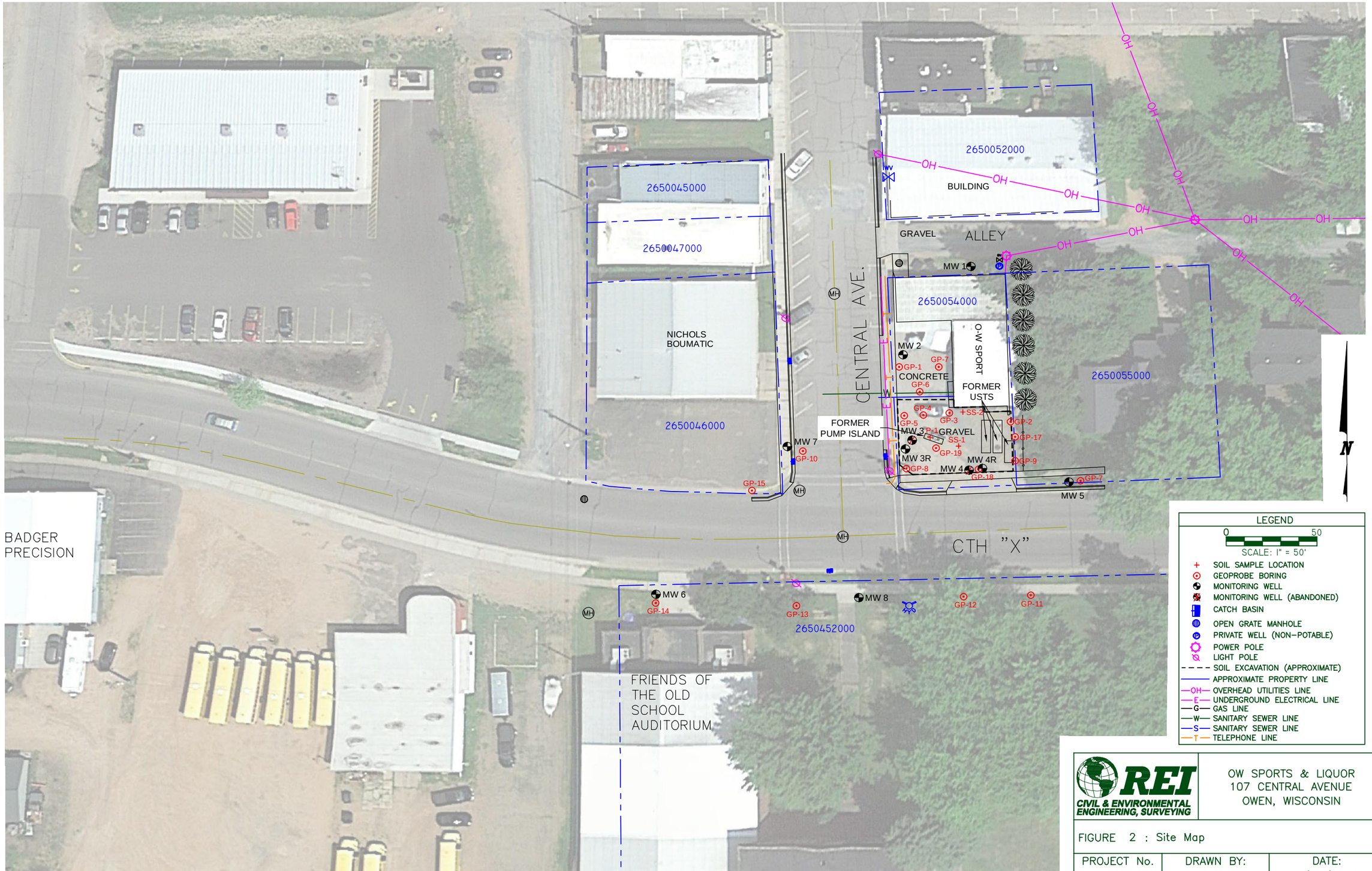


QUADRANGLE LOCATION

REI Engineering, INC.

OW SPORTS & LIQUOR 107 CENTRAL AVE OWEN, WISCONSIN	FIGURE 1 : SITE VICINITY MAP		
	PROJECT NO. 1687	DRAWN BY: MCM	DATE: 1/28/2019

DRAWING FILE: P:\1600-1699\1687-OW-SPORTS-LIQUOR\DWG\1687-VICN.DWG LAYOUT: VICN PLOTTED: JAN 28, 2019 - 1:23PM PLOTTED BY: MATTM



LEGEND

0 50

SCALE: 1" = 50'

- SOIL SAMPLE LOCATION
- GEOPROBE BORING
- MONITORING WELL
- MONITORING WELL (ABANDONED)
- CATCH BASIN
- OPEN GRATE MANHOLE
- PRIVATE WELL (NON-POTABLE)
- POWER POLE
- LIGHT POLE
- SOIL EXCAVATION (APPROXIMATE)
- APPROXIMATE PROPERTY LINE
- OVERHEAD UTILITIES LINE
- UNDERGROUND ELECTRICAL LINE
- GAS LINE
- SANITARY SEWER LINE
- SANITARY SEWER LINE
- TELEPHONE LINE

REI CIVIL & ENVIRONMENTAL ENGINEERING, SURVEYING

OW SPORTS & LIQUOR
107 CENTRAL AVENUE
OWEN, WISCONSIN

FIGURE 2 : Site Map

PROJECT No.	DRAWN BY:	DATE:
1687	MCM	1/28/2019

DRAWING FILE: P:\1600-1699\1687-OW-Sports-Liquor\dwg\1687SITE.dwg LAYOUT: Site PLOTTED: Jan 28, 2019 - 2:16pm PLOTTED BY: MattM

APPENDIX A

GROUNDWATER ANALYTICAL REPORT

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

June 11, 2019

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

RE: Project: 1687 OW SPORT
Pace Project No.: 40189030

Dear DAVID LARSEN:
Enclosed are the analytical results for sample(s) received by the laboratory on June 07, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

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

Enclosures

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 1687 OW SPORT
Pace Project No.: 40189030

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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SAMPLE SUMMARY

Project: 1687 OW SPORT
Pace Project No.: 40189030

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40189030001	**MW1**	Water	06/06/19 07:30	06/07/19 09:15
40189030002	**MW2**	Water	06/06/19 09:00	06/07/19 09:15
40189030003	**MW3R**	Water	06/06/19 09:15	06/07/19 09:15
40189030004	**MW4R**	Water	06/06/19 09:30	06/07/19 09:15
40189030005	**MW5**	Water	06/06/19 07:55	06/07/19 09:15
40189030006	**MW6**	Water	06/06/19 08:45	06/07/19 09:15
40189030007	**MW7**	Water	06/06/19 08:15	06/07/19 09:15
40189030008	**MW8**	Water	06/06/19 08:30	06/07/19 09:15

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SAMPLE ANALYTE COUNT

Project: 1687 OW SPORT
Pace Project No.: 40189030

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40189030001	**MW1**	EPA 8260	LAP	12
40189030002	**MW2**	EPA 8260	LAP	12
40189030003	**MW3R**	EPA 8260	LAP	12
40189030004	**MW4R**	EPA 8260	LAP	12
40189030005	**MW5**	EPA 8260	LAP	12
40189030006	**MW6**	EPA 8260	LAP	12
40189030007	**MW7**	EPA 8260	LAP	12
40189030008	**MW8**	EPA 8260	LAP	12

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ANALYTICAL RESULTS

Project: 1687 OW SPORT
Pace Project No.: 40189030

Sample: MW1 **Lab ID: 40189030001** Collected: 06/06/19 07:30 Received: 06/07/19 09:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		06/11/19 06:42	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		06/11/19 06:42	100-41-4	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		06/11/19 06:42	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		06/11/19 06:42	91-20-3	
Toluene	**<0.17**	ug/L	5.0	0.17	1		06/11/19 06:42	108-88-3	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		06/11/19 06:42	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		06/11/19 06:42	108-67-8	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		06/11/19 06:42	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		06/11/19 06:42	95-47-6	
Surrogates									
Dibromofluoromethane (S)	110	%	70-130		1		06/11/19 06:42	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		06/11/19 06:42	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130		1		06/11/19 06:42	460-00-4	

Sample: MW2 **Lab ID: 40189030002** Collected: 06/06/19 09:00 Received: 06/07/19 09:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		06/10/19 21:58	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		06/10/19 21:58	100-41-4	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		06/10/19 21:58	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		06/10/19 21:58	91-20-3	
Toluene	**<0.17**	ug/L	5.0	0.17	1		06/10/19 21:58	108-88-3	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		06/10/19 21:58	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		06/10/19 21:58	108-67-8	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		06/10/19 21:58	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		06/10/19 21:58	95-47-6	
Surrogates									
Dibromofluoromethane (S)	104	%	70-130		1		06/10/19 21:58	1868-53-7	
Toluene-d8 (S)	97	%	70-130		1		06/10/19 21:58	2037-26-5	
4-Bromofluorobenzene (S)	106	%	70-130		1		06/10/19 21:58	460-00-4	

Sample: MW3R **Lab ID: 40189030003** Collected: 06/06/19 09:15 Received: 06/07/19 09:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**13.4**	ug/L	1.0	0.25	1		06/10/19 22:20	71-43-2	
Ethylbenzene	**6.9**	ug/L	1.0	0.22	1		06/10/19 22:20	100-41-4	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		06/10/19 22:20	1634-04-4	
Naphthalene	**2.0J**	ug/L	5.0	1.2	1		06/10/19 22:20	91-20-3	
Toluene	**0.47J**	ug/L	5.0	0.17	1		06/10/19 22:20	108-88-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(920)469-2436

ANALYTICAL RESULTS

Project: 1687 OW SPORT
Pace Project No.: 40189030

Sample: MW3R **Lab ID: 40189030003** Collected: 06/06/19 09:15 Received: 06/07/19 09:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
1,2,4-Trimethylbenzene	**2.5J**	ug/L	2.8	0.84	1		06/10/19 22:20	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		06/10/19 22:20	108-67-8	
m&p-Xylene	**3.7**	ug/L	2.0	0.47	1		06/10/19 22:20	179601-23-1	
o-Xylene	**0.48J**	ug/L	1.0	0.26	1		06/10/19 22:20	95-47-6	
Surrogates									
Dibromofluoromethane (S)	110	%	70-130		1		06/10/19 22:20	1868-53-7	
Toluene-d8 (S)	100	%	70-130		1		06/10/19 22:20	2037-26-5	
4-Bromofluorobenzene (S)	106	%	70-130		1		06/10/19 22:20	460-00-4	

Sample: MW4R **Lab ID: 40189030004** Collected: 06/06/19 09:30 Received: 06/07/19 09:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**1.5**	ug/L	1.0	0.25	1		06/10/19 22:43	71-43-2	
Ethylbenzene	**11.5**	ug/L	1.0	0.22	1		06/10/19 22:43	100-41-4	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		06/10/19 22:43	1634-04-4	
Naphthalene	**6.7**	ug/L	5.0	1.2	1		06/10/19 22:43	91-20-3	
Toluene	**1.7J**	ug/L	5.0	0.17	1		06/10/19 22:43	108-88-3	
1,2,4-Trimethylbenzene	**24.2**	ug/L	2.8	0.84	1		06/10/19 22:43	95-63-6	
1,3,5-Trimethylbenzene	**6.4**	ug/L	2.9	0.87	1		06/10/19 22:43	108-67-8	
m&p-Xylene	**22.8**	ug/L	2.0	0.47	1		06/10/19 22:43	179601-23-1	
o-Xylene	**2.0**	ug/L	1.0	0.26	1		06/10/19 22:43	95-47-6	
Surrogates									
Dibromofluoromethane (S)	112	%	70-130		1		06/10/19 22:43	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		06/10/19 22:43	2037-26-5	
4-Bromofluorobenzene (S)	109	%	70-130		1		06/10/19 22:43	460-00-4	

Sample: MW5 **Lab ID: 40189030005** Collected: 06/06/19 07:55 Received: 06/07/19 09:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		06/10/19 23:05	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		06/10/19 23:05	100-41-4	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		06/10/19 23:05	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		06/10/19 23:05	91-20-3	
Toluene	**<0.17**	ug/L	5.0	0.17	1		06/10/19 23:05	108-88-3	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		06/10/19 23:05	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		06/10/19 23:05	108-67-8	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		06/10/19 23:05	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		06/10/19 23:05	95-47-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 1687 OW SPORT
Pace Project No.: 40189030

Sample: MW5 **Lab ID: 40189030005** Collected: 06/06/19 07:55 Received: 06/07/19 09:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Surrogates									
Dibromofluoromethane (S)	116	%	70-130		1		06/10/19 23:05	1868-53-7	
Toluene-d8 (S)	96	%	70-130		1		06/10/19 23:05	2037-26-5	
4-Bromofluorobenzene (S)	108	%	70-130		1		06/10/19 23:05	460-00-4	

Sample: MW6 **Lab ID: 40189030006** Collected: 06/06/19 08:45 Received: 06/07/19 09:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		06/10/19 23:28	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		06/10/19 23:28	100-41-4	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		06/10/19 23:28	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		06/10/19 23:28	91-20-3	
Toluene	**<0.17**	ug/L	5.0	0.17	1		06/10/19 23:28	108-88-3	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		06/10/19 23:28	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		06/10/19 23:28	108-67-8	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		06/10/19 23:28	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		06/10/19 23:28	95-47-6	
Surrogates									
Dibromofluoromethane (S)	116	%	70-130		1		06/10/19 23:28	1868-53-7	
Toluene-d8 (S)	96	%	70-130		1		06/10/19 23:28	2037-26-5	
4-Bromofluorobenzene (S)	106	%	70-130		1		06/10/19 23:28	460-00-4	

Sample: MW7 **Lab ID: 40189030007** Collected: 06/06/19 08:15 Received: 06/07/19 09:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		06/11/19 02:50	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		06/11/19 02:50	100-41-4	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		06/11/19 02:50	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		06/11/19 02:50	91-20-3	
Toluene	**<0.17**	ug/L	5.0	0.17	1		06/11/19 02:50	108-88-3	
1,2,4-Trimethylbenzene	**0.95J**	ug/L	2.8	0.84	1		06/11/19 02:50	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		06/11/19 02:50	108-67-8	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		06/11/19 02:50	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		06/11/19 02:50	95-47-6	
Surrogates									
Dibromofluoromethane (S)	102	%	70-130		1		06/11/19 02:50	1868-53-7	
Toluene-d8 (S)	96	%	70-130		1		06/11/19 02:50	2037-26-5	
4-Bromofluorobenzene (S)	106	%	70-130		1		06/11/19 02:50	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 1687 OW SPORT
Pace Project No.: 40189030

Sample: MW8 **Lab ID: 40189030008** Collected: 06/06/19 08:30 Received: 06/07/19 09:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		06/10/19 23:50	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		06/10/19 23:50	100-41-4	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		06/10/19 23:50	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		06/10/19 23:50	91-20-3	
Toluene	**<0.17**	ug/L	5.0	0.17	1		06/10/19 23:50	108-88-3	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		06/10/19 23:50	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		06/10/19 23:50	108-67-8	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		06/10/19 23:50	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		06/10/19 23:50	95-47-6	
Surrogates									
Dibromofluoromethane (S)	114	%	70-130		1		06/10/19 23:50	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		06/10/19 23:50	2037-26-5	
4-Bromofluorobenzene (S)	103	%	70-130		1		06/10/19 23:50	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 1687 OW SPORT
Pace Project No.: 40189030

QC Batch: 323797 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 40189030001, 40189030002, 40189030003, 40189030004, 40189030005, 40189030006, 40189030007, 40189030008

METHOD BLANK: 1880602 Matrix: Water
Associated Lab Samples: 40189030001, 40189030002, 40189030003, 40189030004, 40189030005, 40189030006, 40189030007, 40189030008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	06/10/19 17:29	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	06/10/19 17:29	
Benzene	ug/L	<0.25	1.0	06/10/19 17:29	
Ethylbenzene	ug/L	<0.22	1.0	06/10/19 17:29	
m&p-Xylene	ug/L	<0.47	2.0	06/10/19 17:29	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	06/10/19 17:29	
Naphthalene	ug/L	<1.2	5.0	06/10/19 17:29	
o-Xylene	ug/L	<0.26	1.0	06/10/19 17:29	
Toluene	ug/L	<0.17	5.0	06/10/19 17:29	
4-Bromofluorobenzene (S)	%	105	70-130	06/10/19 17:29	
Dibromofluoromethane (S)	%	111	70-130	06/10/19 17:29	
Toluene-d8 (S)	%	102	70-130	06/10/19 17:29	

LABORATORY CONTROL SAMPLE: 1880603

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	55.0	110	70-130	
Ethylbenzene	ug/L	50	57.5	115	80-124	
m&p-Xylene	ug/L	100	109	109	70-130	
Methyl-tert-butyl ether	ug/L	50	47.5	95	54-137	
o-Xylene	ug/L	50	54.0	108	70-130	
Toluene	ug/L	50	53.3	107	80-126	
4-Bromofluorobenzene (S)	%			111	70-130	
Dibromofluoromethane (S)	%			107	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1881177 1881178

Parameter	Units	40189033003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	571	50	50	402	357	-338	-428	70-130	12	20	E,M1
Ethylbenzene	ug/L	30.8	50	50	76.0	68.2	90	75	80-125	11	20	M1
m&p-Xylene	ug/L	26.6	100	100	128	124	101	97	70-130	3	20	
Methyl-tert-butyl ether	ug/L	<1.2	50	50	56.1	57.2	112	114	51-145	2	20	
o-Xylene	ug/L	4.3	50	50	58.7	57.6	109	107	70-130	2	20	
Toluene	ug/L	12.7	50	50	61.4	58.9	97	92	80-131	4	20	
4-Bromofluorobenzene (S)	%						113	113	70-130			

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 1687 OW SPORT
Pace Project No.: 40189030

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1881177 1881178

Parameter	Units	40189033003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromofluoromethane (S)	%						113	115	70-130			
Toluene-d8 (S)	%						103	101	70-130			

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: 1687 OW SPORT
Pace Project No.: 40189030

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1687 OW SPORT
Pace Project No.: 40189030

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40189030001	**MW1**	EPA 8260	323797		
40189030002	**MW2**	EPA 8260	323797		
40189030003	**MW3R**	EPA 8260	323797		
40189030004	**MW4R**	EPA 8260	323797		
40189030005	**MW5**	EPA 8260	323797		
40189030006	**MW6**	EPA 8260	323797		
40189030007	**MW7**	EPA 8260	323797		
40189030008	**MW8**	EPA 8260	323797		

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

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40189030

Pace Analytical
www.pacelabs.com

CHAIN OF CUSTODY

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

(Please Print Clearly)	
Company Name:	REI
Branch/Location:	Wausau
Project Contact:	Dave Larsen
Phone:	715-675-9784
Project Number:	1687
Project Name:	OW Sport
Project State:	WI
Sampled By (Print):	Ryan Resch
Sampled By (Sign):	
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	Dave Larsen
Mail To Company:	REI
Mail To Address:	Dlarsen@reiengineering.com
Invoice To Contact:	SAA
Invoice To Company:	
Invoice To Address:	1
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes

A = Air	W = Water
B = Biota	DW = Drinking Water
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
Sl = Sludge	WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: PVOC + Naphthalene	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	MW 1	6/6/19	7:30	AW	N	B	X			
002	MW 2		9:00				X			
003	MW 3R		9:15				X			
004	MW 4R		9:30				X			
005	MW 5		7:55				X			
006	MW 6		8:45				X			
007	MW 7		8:15				X			
008	MW 8		8:30				X			

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
	6/6/19 3:30pm		
Walton	6-7-19 0915	Edward Kluck	6-7-19 0915
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:

PACE Project No. 40189030
Receipt Temp = RO I °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal Present / ~~Not Present~~ Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

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

Sample Preservation Receipt Form

Client Name: REI Project # 40189030

All containers needing preservation have been checked and noted below: ☐Yes ☐No ☒N/A Initial when completed: Date/ Time:

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

Pace Lab #	Glass: AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	Plastic: BP1U	BP2N	BP2Z	BP3U	BP3B	BP3N	BP3S	Vials: DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	Jars: JGFU	WGFU	WPFU	General: SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001																		3															2.5 / 5 / 10
002																		3															2.5 / 5 / 10
003																		3															2.5 / 5 / 10
004																		3															2.5 / 5 / 10
005																		3															2.5 / 5 / 10
006																		3															2.5 / 5 / 10
007																		3															2.5 / 5 / 10
008																		3															2.5 / 5 / 10
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016																																	2.5 / 5 / 10
017																																	2.5 / 5 / 10
018																																	2.5 / 5 / 10
019																																	2.5 / 5 / 10
020																																	2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : ☐Yes ☒No ☐N/A ***If yes look in headspace column**

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

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

Sample Condition Upon Receipt Form (SCUR)

Project #: WO#: 40189030

40189030

Client Name: REI

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☑ Waltco ☐ Client ☐ Pace Other:

Tracking #: 2078296

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

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☑ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

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

Cooler Temperature Uncorr: ROI /Corr:

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

Person examining contents: Date: 6-7-19 Initials: SCW

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

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD: ☐Yes ☑No ☐N/A		8.
Correct Containers Used:	☑Yes ☐No	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: W	☑Yes ☐No ☐N/A	12.
Trip Blank Present:	☐Yes ☑No ☐N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☑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: 6-7-19

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