REI
CIVIL & ENVIRONMENTAL ENGINEERING, SURVEYING

January 29, 2019

Wisconsin Department of Natural Resources
Attn: Ms. Gina Keenan
1300 W Clairemont Avenue
Eau Claire, WI 54701

Subject:

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

Dear Ms. Keenan:

Enclosed is the Update Report for the above-mentioned site. REI has completed three (3) of the four (4) approved post soil excavation groundwater sample events. Groundwater analytical trends are decreasing following the soil excavation and if additional groundwater sampling remains consistent this investigation should be reviewed for case closure consideration prior to the July 2020 sunsetting of the PECFA program.

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
Owen, WI 54853

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 54853

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

JANUARY 2019

UPDATE REPORT

OW SPORTS & LIQUOR
107 CENTRAL AVENUE
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BRRTS #03-10-182097
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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."

D. N. Larsen — 1-29-19

Hydrogeologist — 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."

B. J. Bailey — 1-29-19

Environmental Scientist — Date

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OW SPORTS & LIQUOR
107 CENTRAL AVENUE
OWEN, WI 54853

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

REI #1687

1.0 INTRODUCTION

1.1 Purpose

This report presents 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 Monitoring Well Installation

On April 30, 2018, REI was on site to oversee the installation of monitoring wells MW3R, MW4R, MW7 and MW8. Gestra Engineering, Inc. of Milwaukee, WI was subcontracted to complete the well installation. Monitoring wells MW3 and MW4 were abandoned prior to the November 2017 soil excavation. Abandonment forms are included in Appendix A. Replacement monitoring wells MW3R and MW4R were blind drilled to a depth of fifteen (15) feet below land surface (bls) and completed

with a ten (10) foot screen length. Monitoring wells MW7 and MW8 were also drilled to fifteen (15) feet bls and completed with a ten (10) foot screen, but the soil profiles were logged. All wells were completed as flushmount construction wells.

The completed Soil Boring Log (WDNR Form 4400-122), Monitoring Well Construction Form (WDNR Form 4400-133A) and Monitoring Well Development Form (WDNR Form 4400-133B) are included in Appendix A. Investigative waste disposal, specific to proper disposal of soil cuttings, is included in Appendix B.

3.2 Groundwater Monitoring and Analytical Results

REI personnel collected groundwater samples from the existing well network on April 30, May 9, July 17 and November 19, 2018. 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 C. Groundwater analytical results are summarized in Tables 2a-k. A groundwater contour map from November 19, 2018 is included in Figure 3. Groundwater is depicted flowing from the northeast to the southwest and is consistent with the historical groundwater flow directions.

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 MW7 had detectable concentrations greater than the NR 140.10 PAL limits for naphthalene on the November 19, 2018 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 completion of the approved quarterly groundwater sampling for PVOC and naphthalene compounds. If contaminant concentrations remain consistent, REI should be able to recommend this investigation be reviewed and closed prior to the sunsetting of the PECFA program in June 2020.

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

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	5.46	6.65	6.72		6.61		6.42	5.80		
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

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
GRO			µg/l		NA		NA			NA
VOC Parameters										
Benzene	5	0.5	µg/l		< 0.40		< 0.31			< 0.31
Toluene	800	160	µg/l		< 0.39		< 0.49			< 0.49
Ethylbenzene	700	140	µg/l		< 0.39		< 0.33			< 0.33
Xylenes (mixed isomers)	2,000	400	µg/l		< 0.80		< 0.66			< 0.66
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l		< 0.48		< 0.32			< 0.32
Trimethylbenzenes (mixed isomers)	480	96	µg/l		< 0.42		< 0.34			< 0.34
Naphthalene	100	10	µg/l		< 0.42		< 0.51			< 0.51
Methylene Chloride	5	0.5	µg/l		NA		NA			NA
sec-Butylbenzene			µg/l		NA		NA			NA
n-Propylbenzene			µg/l	Project Stalled	NA	Soil Excavation Completed	NA	Well Not Sampled	Well Not Sampled	NA
Isopropyl Ether			µg/l		NA		NA			NA
p-Isopropyl toluene			µg/l		NA		NA			NA
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		45.97		NA			51.6
Conductivity			µS/cm		165		NA			55.9
Dissolved Oxygen			mg/l		10.33		NA			6.69
pH					6.76		NA			6.38
Redox Potential			mV		248.4		NA			194.9

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 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
GRO			µg/l		NA		NA			NA
VOC Parameters										
Benzene	5	0.5	µg/l		< 0.40		< 0.31			< 0.31
Toluene	800	160	µg/l		< 0.39		< 0.49			< 0.49
Ethylbenzene	700	140	µg/l		< 0.39		< 0.33			< 0.33
Xylenes (mixed isomers)	2,000	400	µg/l		< 0.80		< 0.66			< 0.66
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l		< 0.48		< 0.32			< 0.32
Trimethylbenzenes (mixed isomers)	480	96	µg/l		< 0.42		< 0.34			< 0.34
Naphthalene	100	10	µg/l		< 0.42		< 0.51			< 0.51
Methylene Chloride	5	0.5	µg/l		NA		NA			NA
sec-Butylbenzene			µg/l		NA		NA			NA
n-Propylbenzene			µg/l	Project Stalled	NA	Soil Excavation Completed	NA	Well Not Sampled	Well Not Sampled	NA
Isopropyl Ether			µg/l		NA		NA			NA
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		49.4		NA			53.9
Conductivity			µS/cm		753		NA			915
Dissolved Oxygen			mg/l		10.61		NA			5.12
pH					7.12		NA			6.92
Redox Potential			mV		222.2		NA			202

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
VOC Parameters				Well Not Sampled			
Benzene	5	0.5	µg/l		**1,130**	**645**	**16.3**
Toluene	800	160	µg/l		11.8*	4.7*	< 0.49
Ethylbenzene	700	140	µg/l		*151*	10.2	3.5
Xylenes (mixed isomers)	2,000	400	µg/l		216.9	12.7*	1.4*
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l		5.3*	3.3*	< 0.32
Trimethylbenzenes (mixed isomers)	480	96	µg/l		*136.4*	5.7	1.3
Naphthalene	100	10	µg/l		*34.1*	*21.2*	1.3*
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		47.95	57.52	51.4
Conductivity			µS/cm		379	489	429
Dissolved Oxygen			mg/l		3.37	Bad Sensor	3.39
pH					6.82	Bad Sensor	6.27
Redox Potential			mV		142.7	Bad Sensor	173.2

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
VOC Parameters				Well Not Sampled			
Benzene	5	0.5	µg/l		**14.1**	**26.3**	*0.80**
Toluene	800	160	µg/l		36.7	109	0.91*
Ethylbenzene	700	140	µg/l		*54.2*	229	9.4
Xylenes (mixed isomers)	2,000	400	µg/l		339.6	*1,137*	19.8
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l		< 1.3	1.7*	< 0.32
Trimethylbenzenes (mixed isomers)	480	96	µg/l		*419*	*392.4*	23.3
Naphthalene	100	10	µg/l		*26.8*	*86*	4.0
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		45.42	57.50	49.6
Conductivity			µS/cm		528	383	303.4
Dissolved Oxygen			mg/l		1.55	Bad Sensor	2.55
pH					6.61	Bad Sensor	6.90
Redox Potential			mV		159.1	Bad Sensor	56.4

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 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
GRO			µg/l	NA		NA			NA
VOC Parameters									
Benzene	5	0.5	µg/l	< 0.40		< 0.31			< 0.31
Toluene	800	160	µg/l	< 0.39		< 0.49			< 0.49
Ethylbenzene	700	140	µg/l	< 0.39		< 0.33			< 0.33
Xylenes (mixed isomers)	2,000	400	µg/l	< 0.80		< 0.66			< 0.66
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.48		< 0.32			< 0.32
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.42		< 0.34			< 0.34
Naphthalene	100	10	µg/l	< 0.42		< 0.51			< 0.51
Methylene Chloride	5	0.5	µg/l	NA		NA			NA
sec-Butylbenzene			µg/l	NA		NA			NA
n-Propylbenzene			µg/l	NA	Soil Excavation Completed	NA	Well Not Sampled	Well Not Sampled	NA
Isopropylbenzene			µg/l	NA		NA			NA
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	48.93		NA			52.1
Conductivity			µS/cm	257		NA			289.6
Dissolved Oxygen			mg/l	1.77		NA			4.9
pH				6.48		NA			6.25
Redox Potential			mV	92.0		NA			180.4

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
VOC Parameters					Well Not Sampled	Well Not Sampled	
Benzene	5	0.5	µg/l	< 0.31			< 0.31
Toluene	800	160	µg/l	< 0.49			< 0.49
Ethylbenzene	700	140	µg/l	< 0.33			< 0.33
Xylenes (mixed isomers)	2,000	400	µg/l	< 0.66			< 0.66
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.32			< 0.32
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.34			< 0.34
Naphthalene	100	10	µg/l	< 0.51			< 0.51
Inorganics							
Lead	15	1.5	µg/l	NA			NA
Nitrate+Nitrite (as N)	10	2	mg/l	NA			NA
Sulfate	250	125	mg/l	NA			NA
Iron (filtered)	0.3	0.15	mg/l	NA			NA
Field Measurements							
Temperature			°F	NA			52.7
Conductivity			µS/cm	NA			546
Dissolved Oxygen			mg/l	NA			4.43
pH				NA			6.15
Redox Potential			mV	NA			236.7

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
VOC Parameters				Well Not Sampled			
Benzene	5	0.5	µg/l		< 0.31	< 0.31	< 0.31
Toluene	800	160	µg/l		< 0.49	< 0.49	< 0.49
Ethylbenzene	700	140	µg/l		4.6	8.6	7.3
Xylenes (mixed isomers)	2,000	400	µg/l		16	21.1	18.8
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l		<0.32	<0.32	<0.32
Trimethylbenzenes (mixed isomers)	480	96	µg/l		55.4	44.3	56.5
Naphthalene	100	10	µg/l		*10.8*	*14.6*	*14.4*
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		50.82	62.36	54.7
Conductivity			µS/cm		1,133	787	570.1
Dissolved Oxygen			mg/l		2.44	Bad Sensor	3.5
pH					7.19	Bad Sensor	6.73
Redox Potential			mV		161.9	Bad Sensor	144.9

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 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
VOC Parameters				Well Not Sampled			
Benzene	5	0.5	µg/l		*2.5*	< 0.31	< 0.31
Toluene	800	160	µg/l		0.73*	< 0.49	< 0.49
Ethylbenzene	700	140	µg/l		0.38*	< 0.33	< 0.33
Xylenes (mixed isomers)	2,000	400	µg/l		1.5*	< 0.66	< 0.66
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l		0.35*	< 0.32	< 0.32
Trimethylbenzenes (mixed isomers)	480	96	µg/l		1.5	< 0.34	< 0.34
Naphthalene	100	10	µg/l		< 0.51	< 0.51	< 0.51
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		49.14	54.08	51.9
Conductivity			µS/cm		125	84	152.8
Dissolved Oxygen			mg/l		2.64	Bad Sensor	2.61
pH					6.22	Bad Sensor	6.18
Redox Potential			mV		338.3	Bad Sensor	193.6

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)

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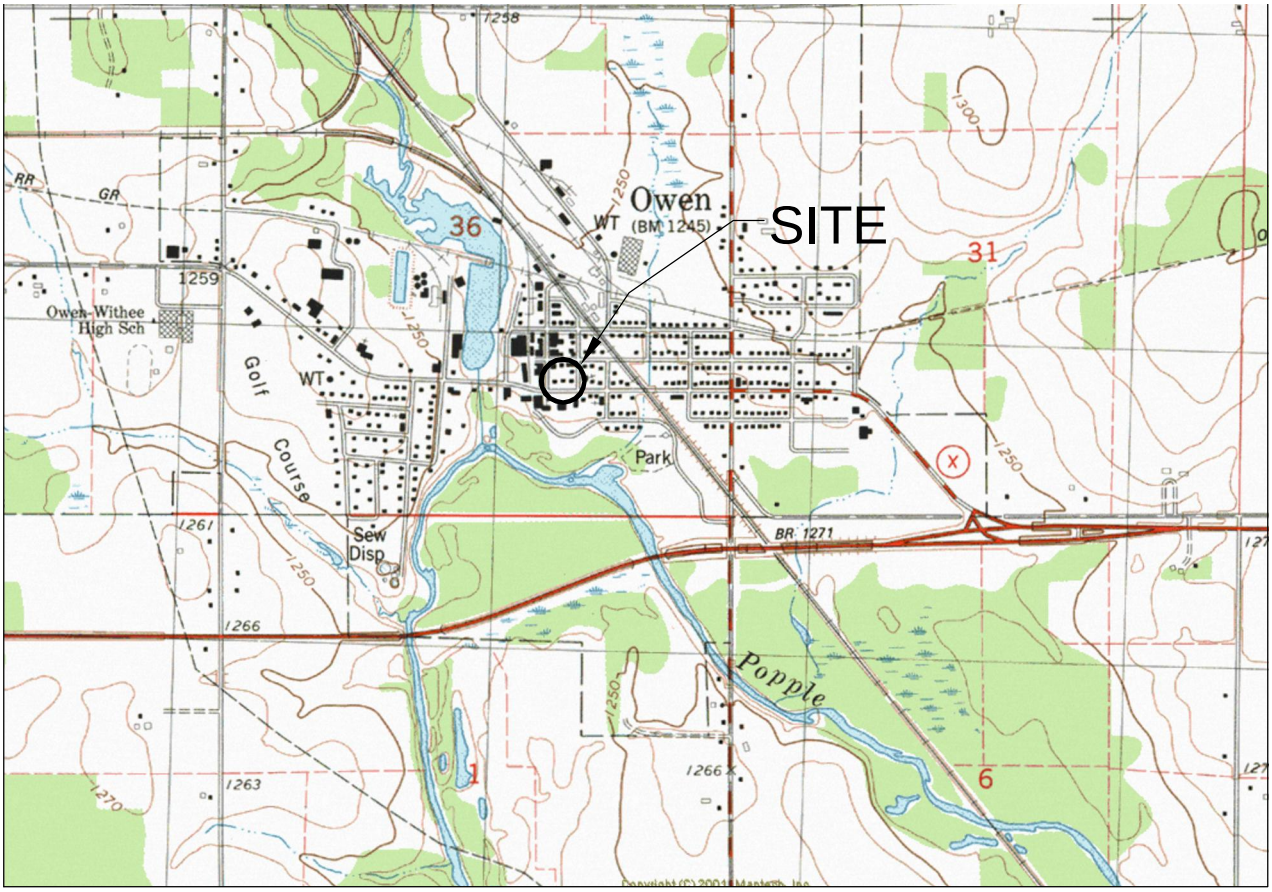


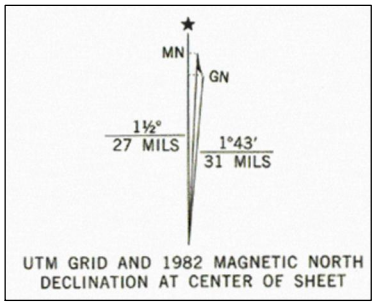
SCALE 1:24 000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

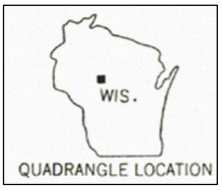
1 .5 0 1 KILOMETER

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

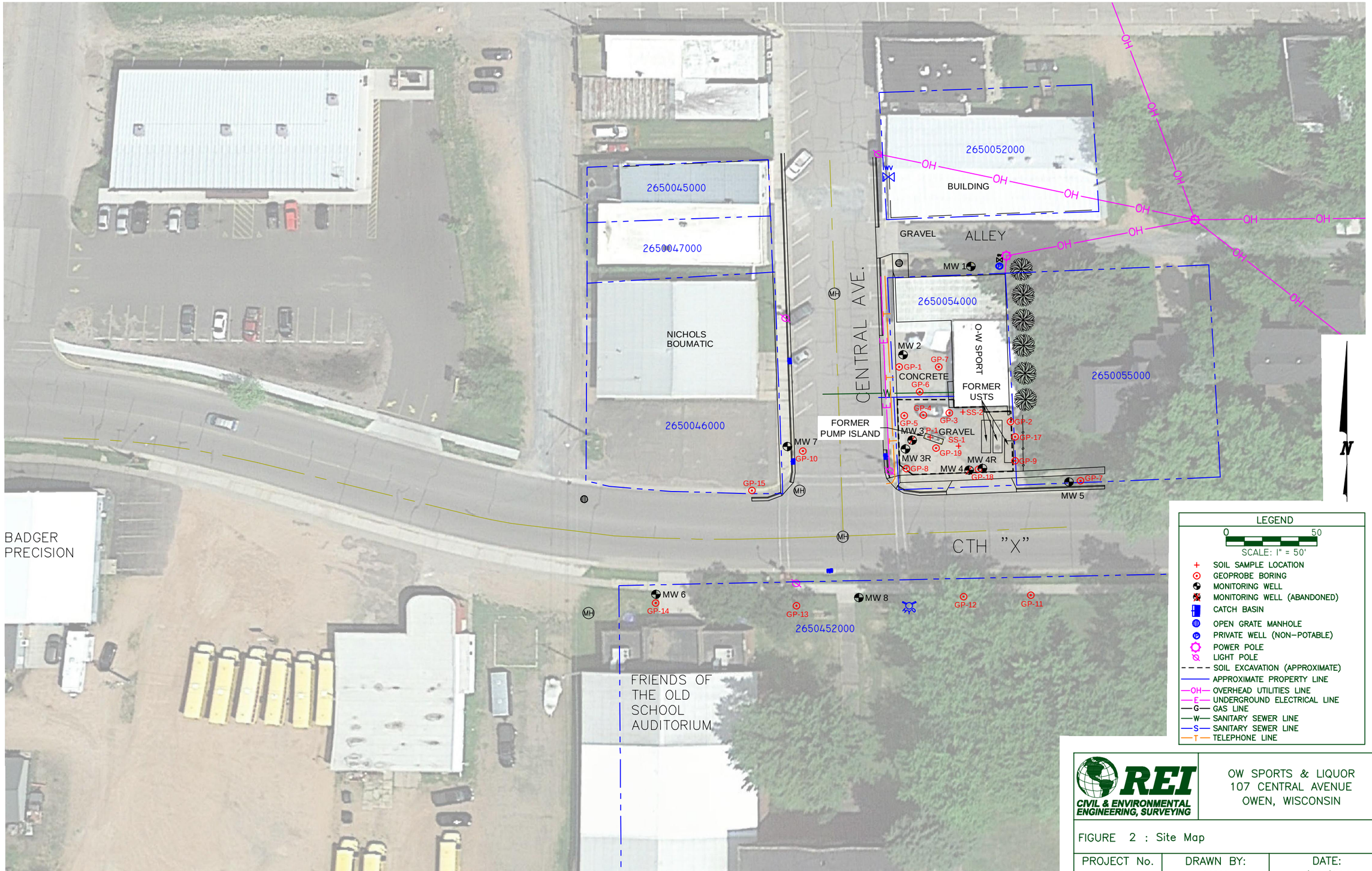


QUADRANGLE LOCATION

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

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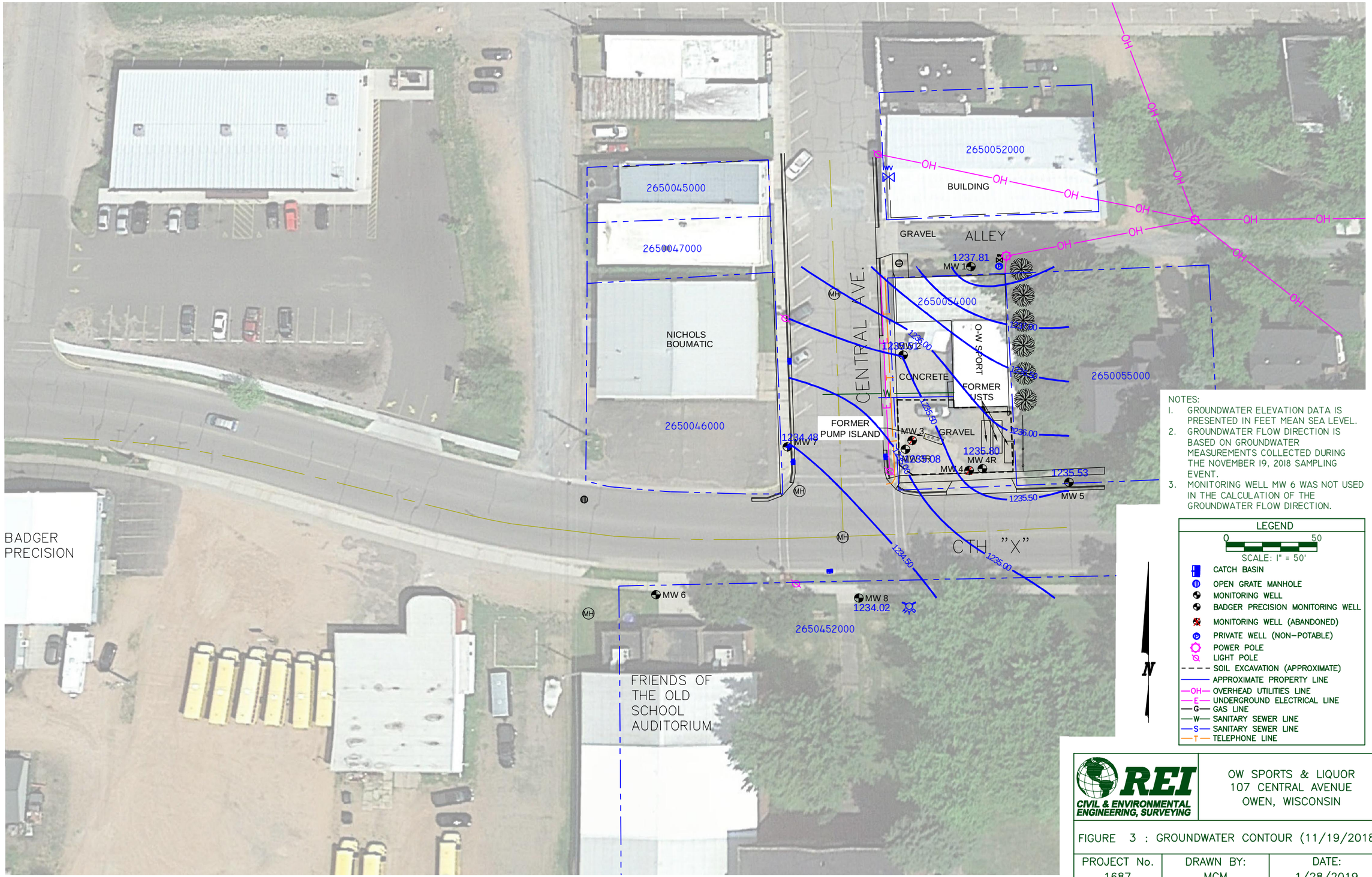
OW SPORTS & LIQUOR
107 CENTRAL AVENUE
OWEN, WISCONSIN

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



NOTES:
1. GROUNDWATER ELEVATION DATA IS PRESENTED IN FEET MEAN SEA LEVEL.
2. GROUNDWATER FLOW DIRECTION IS BASED ON GROUNDWATER MEASUREMENTS COLLECTED DURING THE NOVEMBER 19, 2018 SAMPLING EVENT.
3. MONITORING WELL MW 6 WAS NOT USED IN THE CALCULATION OF THE GROUNDWATER FLOW DIRECTION.

LEGEND

0 50
SCALE: 1" = 50'

- CATCH BASIN
- OPEN GRATE MANHOLE
- MONITORING WELL
- BADGER PRECISION MONITORING WELL
- MONITORING WELL (ABANDONED)
- PRIVATE WELL (NON-POTABLE)
- POWER POLE
- LIGHT POLE
- SOIL EXCAVATION (APPROXIMATE)
- APPROXIMATE PROPERTY LINE
- OH — OVERHEAD UTILITIES LINE
- E — UNDERGROUND ELECTRICAL LINE
- G — GAS LINE
- W — SANITARY SEWER LINE
- S — SANITARY SEWER LINE
- T — TELEPHONE LINE

REI CIVIL & ENVIRONMENTAL ENGINEERING, SURVEYING

OW SPORTS & LIQUOR
107 CENTRAL AVENUE
OWEN, WISCONSIN

FIGURE 3 : GROUNDWATER CONTOUR (11/19/2018)

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

DRAWING FILE: P:\1600-1699\1687-OW-Sports-Liquor\dwg\1687GW Flow 111918.dwg LAYOUT: Site PLOTTED: Jan 28, 2019 - 2:17pm PLOTTED BY: MattM

APPENDIX A

WELL ABANDONMENT FORMS, SOIL BORING LOGS, WELL CONSTRUCTION FORMS AND WELL DEVELOPMENT FORMS

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☑ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Clark	MW3	

Latitude / Longitude (see instructions): _____ N _____ W
Format Code: ☐ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 107 Central Avenue

Well City, Village or Town	Well ZIP Code
Owen	54460

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Soil Excavation	

2. Facility / Owner Information

Facility Name: OW Sports & Liquor
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner: OW Sports & Liquor
Present Well Owner: OW Sports & Liquor
Mailing Address of Present Owner: PO Box 147

City of Present Owner	State	ZIP Code
Owen	WI	54460

3. Filled & Sealed Well / Drillhole / Borehole Information

☑ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 12/04/2000

If a Well Construction Report is available, please attach.

Construction Type:
☑ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (specify): _____

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
15	2

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
	5

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☑ N/A
Liner(s) removed?	☐ Yes	☐ No	☑ N/A
Liner(s) perforated?	☐ Yes	☐ No	☑ N/A
Screen removed?	☐ Yes	☑ No	☐ N/A
Casing left in place?	☐ Yes	☑ No	☐ N/A
Was casing cut off below surface?	☑ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☑ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☑ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☑ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☑ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☑ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☑ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ 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
3/8" Bentonite Holeplug	Surface	15	1/2 bag	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
REI Engineering, Inc		11/20/2017

Street or Route	Telephone Number
4080 N. 20th Avenue	(715) 675-9784

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Wausau	WI	54401		1-21-19

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☑ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Clark	MW4	

Latitude / Longitude (see instructions) _____ N _____ W | Format Code: ☐ DD ☐ DDM | Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 107 Central Avenue

Well City, Village or Town	Well ZIP Code
Owen	54460

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Soil Excavation	

2. Facility / Owner Information

Facility Name: OW Sports & Liquor

Facility ID (FID or PWS):

License/Permit/Monitoring #:

Original Well Owner: OW Sports & Liquor

Present Well Owner: OW Sports & Liquor

Mailing Address of Present Owner: PO Box 147

City of Present Owner	State	ZIP Code
Owen	WI	54460

3. Filled & Sealed Well / Drillhole / Borehole Information

☑ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 12/04/2000

If a Well Construction Report is available, please attach.

Construction Type:
☑ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (specify): _____

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
15	2

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
	5

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☑ N/A
Liner(s) removed?	☐ Yes	☐ No	☑ N/A
Liner(s) perforated?	☐ Yes	☐ No	☑ N/A
Screen removed?	☐ Yes	☑ No	☐ N/A
Casing left in place?	☐ Yes	☑ No	☐ N/A
Was casing cut off below surface?	☑ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☑ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☑ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☑ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☑ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☑ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☑ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ 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
3/8" Bentonite Holeplug	Surface	15	1/2 bag	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
REI Engineering, Inc		11/20/2017

Street or Route	Telephone Number
4080 N. 20th Avenue	(715) 675-9784

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Wausau	WI	54401		1-21-19

DNR Use Only

Date Received	Noted By

Comments:

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

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

Facility/Project Name OW Sports & Liquor	**License/Permit/Monitoring Number** BRRTS #03-10-182097	**Boring Number** MW-3R

Boring Drilled By: Name of crew chief (first, last) and Firm Gestra (Mitch Panfil)			**Date Drilling Started** 4/30/18	**Date Drilling Completed** 4/30/18	**Drilling Method** Hollow Stem Auger
WI Unique Well No.	**DNR Well ID No.**	**Common Well Name** MW-3R	**Final Static Water Level**	**Surface Elevation** 0	**Borehole Diameter** 8.25In

Local Grid Orgin ☐ (estimated) ☐ or Boring Location ☑ **State Plane**	**Lat** **Long**	**Local Grid Location** N ☐ E ☐ S ☐ W ☐

Facility ID FID #610068580	**County** Clark	**County Code** 10	**Civil Town/City/or Village** Owen

Sample Number	Sample Type	Sample 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: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1				1–5	**BLIND DRILL** Blind Drill to 15' BLS										
2				5–10											
3				10–15											
				15	**EOB** EOB @15' BLS										
				16–20											

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

Signature Jed Kosch RET	**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 thes 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.

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

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

Facility/Project Name OW Sports & Liquor	**License/Permit/Monitoring Number** BRRTS #03-10-182097	**Boring Number** MW-4R

Boring Drilled By: Name of crew chief (first, last) and Firm Gestra (Mitch Panfil)	**Date Drilling Started** 4/30/18	**Date Drilling Completed** 4/30/18	**Drilling Method** Hollow Stem Auger

WI Unique Well No.	**DNR Well ID No.**	**Common Well Name** MW-4R	**Final Static Water Level**	**Surface Elevation** 0	**Borehole Diameter** 8.25In

Local Grid Orgin ☐ (estimated) ☐ or Boring Location ☑ **State Plane** | **Lat** **Long** | **Local Grid Location** N ☐ S ☐ E ☐ W ☐

Facility ID FID #610068580	**County** Clark	**County Code** 10	**Civil Town/City/or Village** Owen

Sample Number	Sample Type	Sample 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: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1				1–5	**BLIND DRILL** Blind Drill to 15' BLS										
2				5–10											
3				10–15											
				15	**EOB** EOB @15' BLS										
				16–20											

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

Signature (Jeff Koch REI) **Firm** **REI Engineering, Inc.** 4080 North 20th Avenue, Wausau, WI

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

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

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
OW Sports & Liquor	BRRTS #03-10-182097	MW-7

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Gestra (Mitch Panfil)	4/30/18	4/30/18	Hollow Stem Auger

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		MW-7		0	8.25In

Local Grid Orgin ☐ (estimated) ☐ or Boring Location ☑ | Lat / Long | Local Grid Location N ☐ S ☐ E ☐ W ☐
State Plane

Facility ID	County	County Code	Civil Town/City/or Village
FID #610068580	Clark	10	Owen

Sample Number	Sample Type	Sample 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: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1				1	**CONCRETE** 4" Concrete	SW									
				2	**SAND** Brown sand (F-M)										
				3	**CLAY** Brown/grey mottled clay	CL									
				4											
2				5	**SAND** Brown sand (F-C) with silt -Wet with odor										
				6											
				7											
				8		SM									
				9	**SAND** Grey sand layer -Petro odor										
3				10	**SAND** Brown sand (F-C) with silt										
				11											
				12											
				13											
				14	**CLAY** Brown/grey silty clay	OL									
				15											
				16	**EOB** EOB @15' BLS										
				17											
				18											
				19											
				20											

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

Signature	Firm
Jeel Gestra (Jeel Gestra KEI)	REI Engineering, Inc. 4080 North 20th Avenue, Wausau, WI

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

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

Facility/Project Name OW Sports & Liquor	**License/Permit/Monitoring Number** BRRTS #03-10-182097	**Boring Number** MW-8

Boring Drilled By: Name of crew chief (first, last) and Firm Gestra (Mitch Panfil)	**Date Drilling Started** 4/30/18	**Date Drilling Completed** 4/30/18	**Drilling Method** Hollow Stem Auger

WI Unique Well No.	**DNR Well ID No.**	**Common Well Name** MW-8	**Final Static Water Level**	**Surface Elevation** 0	**Borehole Diameter** 8.25In

Local Grid Orgin ☐ (estimated) ☐ or **Boring Location** ☑ | **Lat** | **Long** | **Local Grid Location** N ☐ S ☐ E ☐ W ☐

State Plane

Facility ID FID #610068580	**County** Clark	**County Code** 10	**Civil Town/City/or Village** Owen

Sample Number	Sample Type	Sample 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: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1				1–5	**TOPSOIL** 4" grass/topsoil **SAND** Light brown silty sand (F-C) with crush rock **CLAY** Grey mottled clay with fine sand	SW CL									
2				5–9	**SAND** Dark brown sand (F-C) with silt	SM									
3				9–15	**CLAY** Silty grey clay **CLAY** Tight grey clay **EOB** EOB @15' BLS	OL									

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

Signature Ted Koch (Ted Koch REI) **Firm** REI Engineering, Inc. 4080 North 20th Avenue, Wausau, WI

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State of Wisconsin
Department of Natural Resources

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4.90

Route To Solid Haste ☐ Haz. Haste ☐ Wastewater ☐
Env. Response & Repair ☒ Underground Tanks ☐ Other ☐ _____

Facility/Project Name	Local Grid Location of Well	Well Name
OW Sports & Liquor	___ Feet S. ___ Feet W ___ Feet N. ___ Feet E	MW-3R
Facility License Permit or Monitoring Number	**Grid Origin Location**	**Wis. Unique Well Number** / **DNR Well Number**
BRRTS# 03-10-182097		
Type of Well Water Table Observation Well ☒ 11		**Date Well Installed**
Piezometer ☐ 12	**Section Location of Waste/Source** ☐ E	4/30/18
Distance Well Is From Waste/Source Boundary Ft.	___ 1/4 of ___ 1/4 of Sec. ___, T. ___ N; R. ___ ☐ W	**Well Installed By (Person's Name and Firm)**
Is Well A Point of Enforcement Std. Application ☐ Yes ☐ No	**Location of Well Relative to Waste/Source** u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gestra Engineering (Mitch Panfill)

A. Protective pipe, top elevation _____ ft. MSL
B. Well casing, top elevation _____ ft. MSL
C. Land surface elevation _____ ft. MSL
D. Surface seal, bottom 1 ft. MSL or _____ ft.

12. USCS Classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

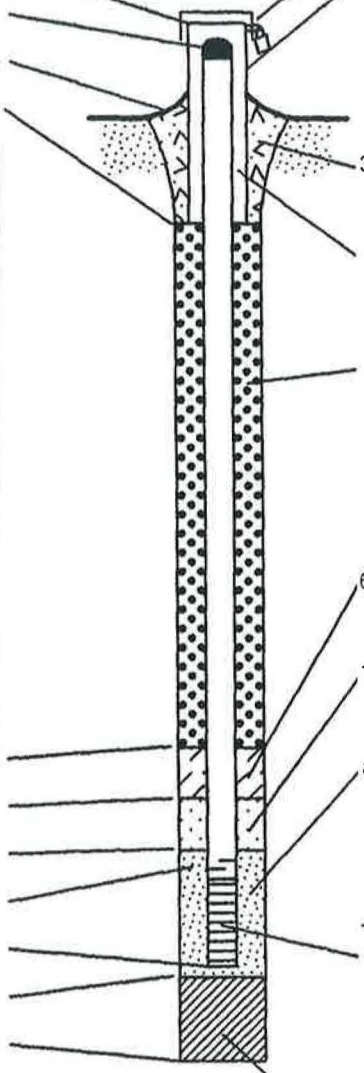
14. Drilling method used
Rotary ☐ 50
Hollow Stem Auger ☒ 41
_____ Other ☐

15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☐ No
Describe _____

17. Source of water (attach analysis):
_____

E. Bentonite seal, top _____ ft. MSL or 1 ft.
F. Fine sand, top _____ ft. MSL or 4 ft.
G. Filter pack, top _____ ft. MSL or 4.5 ft.
H. Screen joint, top _____ ft. MSL or 5 ft.
1. Well bottom _____ ft. MSL or 15 ft.
J. Filter pack, bottom _____ ft. MSL or 5 ft.
K. Borehole, bottom _____ ft. MSL or 15 ft.
L. Borehole, diameter 8.25 in.
M. O.D. well casing 2.32 in.
N. I.D. well casing 2.07 in.



1. Cap and lock? ☐ Yes ☒ No
2. Protective cover pipe:
a. Inside diameter: ___ in.
b. Length: ___ ft.
c. Material: _____ Steel ☐ 04 Other ☐
d. Additional protection? ☐ Yes ☐ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30 Concrete ☒ 01 _____ Other ☐
4. Material between well casing and protective pipe: Bentonite ☒ 30 Annular space seal ☐ _____ Other ☐
5. Annular space seal: a. Granular Bentonite ☒ 33
b. ___ Lbs/gal mud weight ---- Bentonite-sand slurry ☐ 35
c. ___ Lbs/gal mud weight ---- Bentonite slurry ☐ 31
d. ___ %Bentonite ---- Bentonite-cement grout ☐ 50
e. 0.76 ft³ Volume added for any of the above
f. How installed: Tremie ☐ 01 Tremie pumped ☐ 02 Gravity ☒ 08
6. Bentonite seal: a. Bentonite Granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☒ 32
c. _____ Other ☐
7. Fine sand material Manufacturer, product name and mesh size
a. #15
b. Volume added _____ ft³
8. Filter pack material: Manufacturer, product name and mesh size
a. #40
b. Volume added _____ ft³
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 Flush threaded PVC schedule 80 ☐ 24 _____ Other ☐
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 _____ Other ☐
b. Manufacturer Johnson Screen
c. Slot size: 0.10 in.
d. Slotted length: 10 ft.
11. Backfill material (below filter Pack): None ☒ 14 _____ Other ☐

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

Signature	Firm
Joel Kosch (Joel Kosch REI)	REI Engineering, Inc. 4080 N. 20th Ave. Wausau, WI 5440'

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144,147 and 160 Wis. Stats. and ch NR 141, Wis. Ad. Code. In accordance with ch. 144 Wis. Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5000 for each day of violation. In accordance with ch. 147 Wis. Stats., failure to tile this form may result in a forfeiture of not more than $10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. see instructions for more information including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4.90

Route To Solid Haste ☐ Haz. Haste ☐ Wastewater ☐
Env. Response & Repair ☒ Underground Tanks ☐ Other ☐ _____

Facility/Project Name OW Sports & Liquor	**Local Grid Location of Well** _____ ___ Feet S. ___ Feet W ___ Feet N. ___ Feet E	**Well Name** MW-4R
Facility License Permit or Monitoring Number BRRTS# 03-10-182097	**Grid Origin Location**	**Wis. Unique Well Number** **DNR Well Number**
Type of Well Water Table Observation Well ☒ 11 Piezometer ☐ 12	**Section Location of Waste/Source** ☐ E ___ 1/4 of ___ 1/4 of Sec. ___, T. ___ N; R. ___ ☐ W	**Date Well Installed** 4/30/18
Distance Well Is From Waste/Source Boundary Ft.	**Location of Well Relative to Waste/Source** u ☐ *Upgradient* s ☐ *Sidegradient* d ☐ *Downgradient* n ☐ *Not Known*	**Well Installed By (Person's Name and Firm)** Gestra Engineering (Mitch Panfill)
Is Well A Point of Enforcement Std. Application ☐ Yes ☐ No		

A. Protective pipe, top elevation _____ ft. MSL

B. Well casing, top elevation _____ ft. MSL

C. Land surface elevation _____ ft. MSL

D. Surface seal, bottom 1 ft. MSL or _____ ft.

12. USCS Classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used
Rotary ☐ 50
Hollow Stem Auger ☒ 41
_____ Other ☐

15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☐ No
Describe _____

17. Source of water (attach analysis):
_____

E. Bentonite seal, top _____ ft. MSL or 1 ft.

F. Fine sand, top _____ ft. MSL or 4 ft.

G. Filter pack, top _____ ft. MSL or 4.5 ft.

H. Screen joint, top _____ ft. MSL or 5 ft.

I. Well bottom _____ ft. MSL or 15 ft.

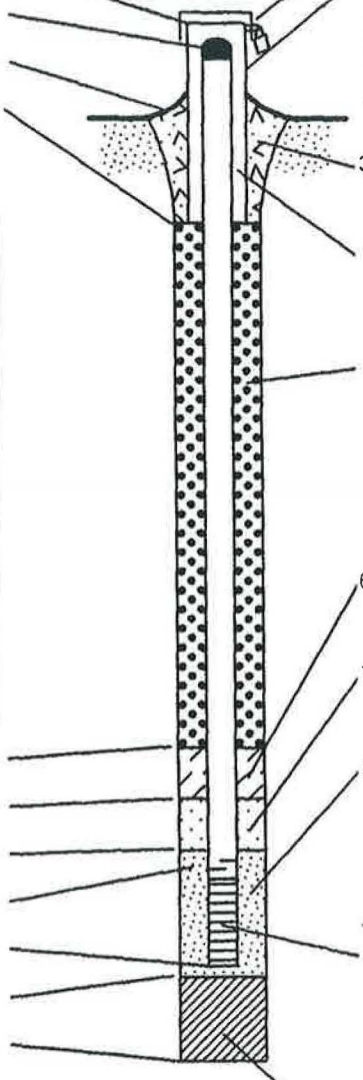
J. Filter pack, bottom _____ ft. MSL or 5 ft.

K. Borehole, bottom _____ ft. MSL or 15 ft.

L. Borehole, diameter 8.25 in.

M. O.D. well casing 2.32 in.

N. I.D. well casing 2.07 in.



1. Cap and lock? ☐ Yes ☒ No

2. Protective cover pipe:
a. Inside diameter: ___ in.
b. Length: ___ ft.
c. Material: _____ Steel ☐ 04
Other ☐
d. Additional protection? ☐ Yes ☐ No
If yes, describe: _____

3. Surface seal: Bentonite ☐ 30
Concrete ☒ 01
_____ Other ☐

4. Material between well casing and protective pipe:
Bentonite ☒ 30
Annular space seal ☐
_____ Other ☐

5. Annular space seal: a. Granular Bentonite ☒ 33
b. ___ Lbs/gal mud weight ---- Bentonite-sand slurry ☐ 35
c. ___ Lbs/gal mud weight ---- Bentonite slurry ☐ 31
d. ___ %Bentonite ---- Bentonite-cement grout ☐ 50
e. 0.76 ft³ Volume added for any of the above
f. How installed: Tremie ☐ 01
Tremie pumped ☐ 02
Gravity ☒ 08

6. Bentonite seal: a. Bentonite Granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☒ 32
c. _____ Other ☐

7. Fine sand material Manufacturer, product name and mesh size
a. #15
b. Volume added _____ ft³

8. Filter pack material: Manufacturer, product name and mesh size
a. #40
b. Volume added _____ ft³

9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
_____ Other ☐

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11
Continuous slot ☐ 01
_____ Other ☐
b. Manufacturer Johnson Screen
c. Slot size: 0.10 in.
d. Slotted length: 10 ft.

11. Backfill material (below filter Pack): None ☒ 14
_____ Other ☐

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

Signature	Firm
Ted Koch (Jed Koch REI)	REI Engineering, Inc. 4080 N. 20th Ave. Wausau, WI 5440'

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144,147 and 160 Wis. Stats. and ch NR 141, Wis. Ad. Code. In accordance with ch. 144 Wis. Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5000 for each day of violation. In accordance with ch. 147 Wis. Stats., failure to tile this form may result in a forfeiture of not more than $10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. see instructions for more information including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4.90

Route To Solid Haste ☐ Haz. Haste ☐ Wastewater ☐
Env. Response & Repair ☒ Underground Tanks ☐ Other ☐ _____

Facility/Project Name OW Sports & Liquor	**Local Grid Location of Well** _____ ___ Feet S. ___ Feet W ___ Feet N. ___ Feet E	**Well Name** MW-7
Facility License Permit or Monitoring Number BRRTS# 03-10-182097	**Grid Origin Location**	**Wis. Unique Well Number** **DNR Well Number**
Type of Well Water Table Observation Well ☒ 11 Piezometer ☐ 12	**Section Location of Waste/Source** ☐ E ___ 1/4 of ___ 1/4 of Sec. ___, T. ___ N; R. ___ ☐ W	**Date Well Installed** 4/30/18
Distance Well Is From Waste/Source Boundary Ft.	**Location of Well Relative to Waste/Source** u ☐ *Upgradient* s ☐ *Sidegradient* d ☐ *Downgradient* n ☐ *Not Known*	**Well Installed By (Person's Name and Firm)** Gestra Engineering (Mitch Panfill)
Is Well A Point of Enforcement Std. Application ☐ Yes ☐ No		

A. Protective pipe, top elevation _____ ft. MSL
B. Well casing, top elevation _____ ft. MSL
C. Land surface elevation _____ ft. MSL
D. Surface seal, bottom 1 ft. MSL or _____ ft.

12. USCS Classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

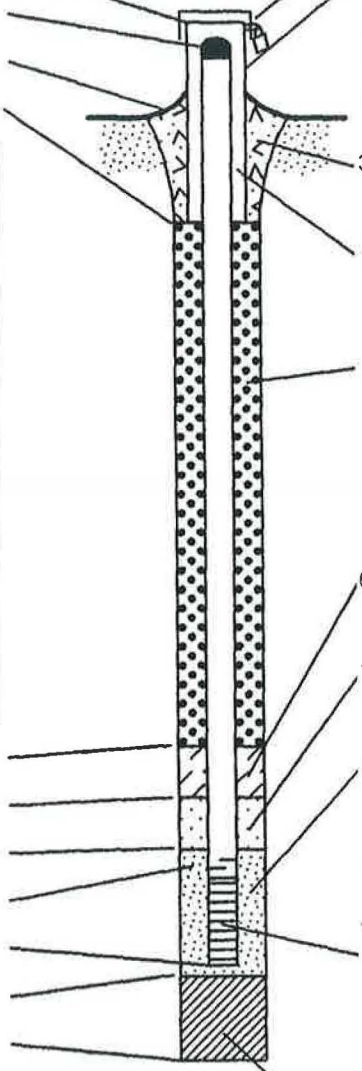
14. Drilling method used
Rotary ☐ 50
Hollow Stem Auger ☒ 41
_____ Other ☐

15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☐ No
Describe _____

17. Source of water (attach analysis):
_____

E. Bentonite seal, top _____ ft. MSL or 1 ft.
F. Fine sand, top _____ ft. MSL or 4 ft.
G. Filter pack, top _____ ft. MSL or 4.5 ft.
H. Screen joint, top _____ ft. MSL or 5 ft.
I. Well bottom _____ ft. MSL or 15 ft.
J. Filter pack, bottom _____ ft. MSL or 5 ft.
K. Borehole, bottom _____ ft. MSL or 15 ft.
L. Borehole, diameter 8.25 in.
M. O.D. well casing 2.32 in.
N. I.D. well casing 2.07 in.



1. Cap and lock? ☐ Yes ☒ No
2. Protective cover pipe:
a. Inside diameter: _____ in.
b. Length: _____ ft.
c. Material: _____ Steel ☐ 04 Other ☐
d. Additional protection? ☐ Yes ☐ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30 Concrete ☒ 01 _____ Other ☐
4. Material between well casing and protective pipe: Bentonite ☒ 30 Annular space seal ☐ _____ Other ☐
5. Annular space seal: a. Granular Bentonite ☒ 33
b. ___ Lbs/gal mud weight ---- Bentonite-sand slurry ☐ 35
c. ___ Lbs/gal mud weight ---- Bentonite slurry ☐ 31
d. ___ %Bentonite ---- Bentonite-cement grout ☐ 50
e. 0.76 ft³ Volume added for any of the above
f. How installed: Tremie ☐ 01 Tremie pumped ☐ 02 Gravity ☒ 08
6. Bentonite seal: a. Bentonite Granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☒ 32
c. _____ Other ☐
7. Fine sand material Manufacturer, product name and mesh size
a. #15
b. Volume added _____ ft³
8. Filter pack material: Manufacturer, product name and mesh size
a. #40
b. Volume added _____ ft³
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 Flush threaded PVC schedule 80 ☐ 24 _____ Other ☐
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 _____ Other ☐
b. Manufacturer Johnson Screen
c. Slot size: 0.10 in.
d. Slotted length: 10 ft.
11. Backfill material (below filter Pack): None ☒ 14 _____ Other ☐

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

Signature	Firm
(Jed Kosch REI)	REI Engineering, Inc. 4080 N. 20th Ave. Wausau, WI 5440'

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144,147 and 160 Wis. Stats. and ch NR 141, Wis. Ad. Code. In accordance with ch. 144 Wis. Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5000 for each day of violation. In accordance with ch. 147 Wis. Stats., failure to tile this form may result in a forfeiture of not more than $10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. see instructions for more information including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4.90

Route To Solid Haste ☐ Haz. Haste ☐ Wastewater ☐
Env. Response & Repair ☒ Underground Tanks ☐ Other ☐ _____

Facility/Project Name	Local Grid Location of Well	Well Name
OW Sports & Liquor	___ Feet S. ___ Feet W ___ Feet N. ___ Feet E	MW-8
Facility License Permit or Monitoring Number	**Grid Origin Location**	**Wis. Unique Well Number** / **DNR Well Number**
BRRTS# 03-10-182097		
Type of Well Water Table Observation Well ☒ 11 Piezometer ☐ 12	**Section Location of Waste/Source** ☐ E	**Date Well Installed** 4/30/18
Distance Well Is From Waste/Source Boundary Ft.	___ 1/4 of ___ 1/4 of Sec. ___, T. ___ N; R. ___ ☐ W	**Well Installed By (Person's Name and Firm)** Gestra Engineering (Mitch Panfill)
Is Well A Point of Enforcement Std. Application ☐ Yes ☐ No	**Location of Well Relative to Waste/Source** u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	

A. Protective pipe, top elevation _____ ft. MSL
B. Well casing, top elevation _____ ft. MSL
C. Land surface elevation _____ ft. MSL
D. Surface seal, bottom 1 ft. MSL or _____ ft.

12. USCS Classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

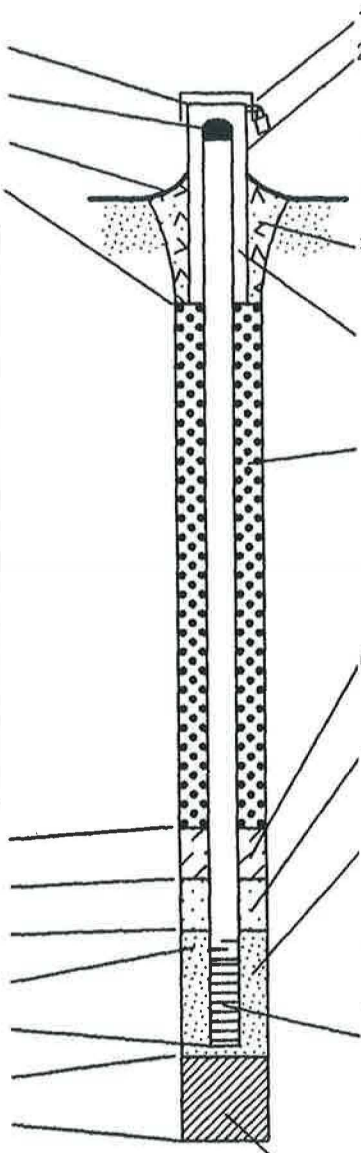
14. Drilling method used: Rotary ☐ 50; Hollow Stem Auger ☒ 41; _____ Other ☐

15. Drilling fluid used: Water ☐ 02 Air ☐ 01 Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☐ No
Describe _____

17. Source of water (attach analysis):
_____

E. Bentonite seal, top _____ ft. MSL or 1 ft.
F. Fine sand, top _____ ft. MSL or 4 ft.
G. Filter pack, top _____ ft. MSL or 4.5 ft.
H. Screen joint, top _____ ft. MSL or 5 ft.
I. Well bottom _____ ft. MSL or 15 ft.
J. Filter pack, bottom _____ ft. MSL or 5 ft.
K. Borehole, bottom _____ ft. MSL or 15 ft.
L. Borehole, diameter 8.25 in.
M. O.D. well casing 2.32 in.
N. I.D. well casing 2.07 in.



1. Cap and lock? ☐ Yes ☒ No
2. Protective cover pipe:
a. Inside diameter: ___ in.
b. Length: ___ ft.
c. Material: _____ Steel ☐ 04 Other ☐
d. Additional protection? ☐ Yes ☐ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30 Concrete ☒ 01 _____ Other ☐
4. Material between well casing and protective pipe: Bentonite ☒ 30 Annular space seal ☐ _____ Other ☐
5. Annular space seal: a. Granular Bentonite ☒ 33
b. ___ Lbs/gal mud weight ... Bentonite-sand slurry ☐ 35
c. ___ Lbs/gal mud weight ... Bentonite slurry ☐ 31
d. ___ %Bentonite ... Bentonite-cement grout ☐ 50
e. 0.76 ft³ Volume added for any of the above
f. How installed: Tremie ☐ 01 Tremie pumped ☐ 02 Gravity ☒ 08
6. Bentonite seal: a. Bentonite Granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☒ 32
c. _____ Other ☐
7. Fine sand material Manufacturer, product name and mesh size
a. #15
b. Volume added _____ ft³
8. Filter pack material: Manufacturer, product name and mesh size
a. #40
b. Volume added _____ ft³
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 Flush threaded PVC schedule 80 ☐ 24 _____ Other ☐
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 _____ Other ☐
b. Manufacturer Johnson Screen
c. Slot size: 0.10 in.
d. Slotted length: 10 ft.
11. Backfill material (below filter Pack): None ☒ 14 _____ Other ☐

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

Signature	Firm
(Jed Kosch REI)	REI Engineering, Inc. 4080 N. 20th Ave. Wausau, WI 5440'

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144,147 and 160 Wis. Stats. and ch NR 141, Wis. Ad. Code. In accordance with ch. 144 Wis. Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5000 for each day of violation. In accordance with ch. 147 Wis. Stats., failure to tile this form may result in a forfeiture of not more than $10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. see instructions for more information including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

Route To: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL DEVELOPMENT
Form 4400-113B Rev. 4.90

Facility/Project Name	County Name	Well Name	
O-W Sports and Liquor	Clark	MW-3R	
Facility Licence, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well Number**
Facility ID#610068580	10		

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐	41
surged with bailer and pumped	☒	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed and pumped	☐	70
compressed air	☐	20
bailed only	☐	10
pumped only	☐	51
pumped slowly	☐	50
Other _____	☐	

3. Time spent developing well 15 *min.*

4. Depth of well (from top of Casing) 14.67 *ft.*

5. Inside diameter of well 2.07 *in.*

6. Volume of water in filter pack and well casing 8.9 *gal.*

7. Volume of water removed from well 10 *gal.*

8. Volume of water added (If any) *gal.*

9. Source of water added _____

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes. attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 5.30 *ft.*	13.20 *ft.*
Data *mm/dd/yy*	b. 5/9/18	5/9/18
Time	c. 11:55 ☐ p.m. ☒ a.m.	12:10 ☒ p.m. ☐ a.m.
12. Sediment in well bottom	1 *inches*	0 *inches*
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 10 Turbid ☒ 15
(Describe)		

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	*mg/l*	*mg/l*
15. COD	*mg/l*	*mg/l*

16. Additional comments on development:
Well pumped dry multiple times

Well developed by: Person's Name and Firm

Name: Jed Kosch (REI)

Firm: REI Engineering, Inc.
4020 N 20th Ave.
Wausau, WI 54401

I hereby certify that the above Information is true and correct to the best of my knowledge.

Signature: _____

Print Initials: — — —

Firm: REI Engineering, Inc.

NOTE: Shaded areas are for DNR use only. See instructions for more Information Including a list of county codes.

State of Wisconsin
Department of Natural Resources

Route To: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL DEVELOPMENT
Form 4400-113B Rev. 4.90

Facility/Project Name	County Name	Well Name	
O-W Sports and Liquor	Clark	MW-4R	
Facility Licence, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well Number**
Facility ID#610068580	10		

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐	41
surged with bailer and pumped	☒	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed and pumped	☐	70
compressed air	☐	20
bailed only	☐	10
pumped only	☐	51
pumped slowly	☐	50
Other _____	☐	

3. Time spent developing well 21 *min.*

4. Depth of well (from top of Casing) 14.45 *ft.*

5. Inside diameter of well 2.07 *in.*

6. Volume of water in filter pack and well casing 9.2 *gal.*

7. Volume of water removed from well 10 *gal.*

8. Volume of water added (If any) *gal.*

9. Source of water added _____

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes. attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 4.81 *ft.*	13.35 *ft.*
Data *mm/dd/yy*	b. 5/9/18	5/9/18
Time	c. 12:14 ☒ p.m. ☐ a.m.	12:35 ☒ p.m. ☐ a.m.
12. Sediment in well bottom	1 *inches*	0 *inches*
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe)	Clear ☐ 10 Turbid ☒ 15 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	*mg/l*	*mg/l*
15. COD	*mg/l*	*mg/l*

16. Additional comments on development:
Well pumped dry multiple times

Well developed by: Person's Name and Firm

Name: Jed Kosch (REI)

Firm: REI Engineering, Inc.
4020 N 20th Ave.
Wausau, WI 54401

I hereby certify that the above Information is true and correct to the best of my knowledge.

Signature: _____

Print Initials: — — —

Firm: REI Engineering, Inc.

NOTE: Shaded areas are for DNR use only. See instructions for more Information Including a list of county codes.

State of Wisconsin
Department of Natural Resources

Route To: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐ _____

MONITORING WELL DEVELOPMENT
Form 4400-113B Rev. 4.90

Facility/Project Name	County Name	Well Name	
O-W Sports and Liquor	Clark	MW-7	
Facility Licence, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well Number**
Facility ID#610068580	10		

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☒ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

		Before Development	After Development
11. Depth to Water (from top of well casing	a.	5.80 ft.	13.05 ft.
Data *mm/dd/yy*	b.	5/9/18	5/9/18
Time	c.	11:27 ☐ p.m. ☒ a.m.	11:50 ☐ p.m. ☒ a.m.
12. Sediment in well bottom		1 *inches*	0 *inches*
13. Water clarity		Clear ☐ 10 Turbid ☒ 15 (Describe)	Clear ☐ 10 Turbid ☒ 15 (Describe)

3. Time spent developing well	23 *min.*	
4. Depth of well (from top of Casing)	14.76 *ft.*	
5. Inside diameter of well	2.07 *in.*	
6. Volume of water in filter pack and well casing	8.5 *gal.*	
7. Volume of water removed from well	10 *gal.*	
8. Volume of water added (If any)	*gal.*	
9. Source of water added _____		
10. Analysis performed on water added? (If yes. attach results) ☐ Yes ☐ No		

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	*mg/l*	*mg/l*
15. COD	*mg/l*	*mg/l*

16. Additional comments on development:
Well pumped dry multiple times

Well developed by: Person's Name and Firm

Name: Jed Kosch (REI)

Firm: REI Engineering, Inc.
4020 N 20th Ave.
Wausau, WI 54401

I hereby certify that the above Information is true and correct to the best of my knowledge.

Signature: _____

Print Initials: _ _ _

Firm: REI Engineering, Inc.

NOTE: Shaded areas are for DNR use only. See instructions for more Information Including a list of county codes.

State of Wisconsin
Department of Natural Resources

Route To: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☐ Other ☐

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 4.90

Facility/Project Name	County Name	Well Name	
O-W Sports and Liquor	Clark	MW-8	
Facility Licence, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well Number**
Facility ID#610068580	10		

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☒ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 6.04 *ft.*	13.82 *ft.*
Data *mm/dd/yy*	b. 5/9/18	5/9/18
Time	c. 10:59 ☐ p.m. ☒ a.m.	11:14 ☐ p.m. ☒ a.m.
12. Sediment in well bottom	1 *inches*	0 *inches*
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe)	Clear ☒ 10 Turbid ☐ 15 (Describe)

3. Time spent developing well 15 *min.*

4. Depth of well (from top of Casing) 14.50 *ft.*

5. Inside diameter of well 2.07 *in.*

6. Volume of water in filter pack and well casing 8.0 *gal.*

7. Volume of water removed from well 10 *gal.*

8. Volume of water added (If any) *gal.*

9. Source of water added _____

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	*mg/l*	*mg/l*
15. COD	*mg/l*	*mg/l*

16. Additional comments on development:
Well pumped dry multiple times

Well developed by: Person's Name and Firm

Name: Jed Kosch (REI)

Firm: REI Engineering, Inc.
4020 N 20th Ave.
Wausau, WI 54401

I hereby certify that the above Information is true and correct to the best of my knowledge.

Signature: _____

Print Initials: _ _ _

Firm: REI Engineering, Inc.

NOTE: Shaded areas are for DNR use only. See instructions for more Information Including a list of county codes.

APPENDIX B

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: 5/14/2018 TICKET #: 245534 Vehicle #:
Time In: 01:58 PM Time Out: 02:03 PM

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

JOB : 18 - 21 B - REI #1687 OW Sport, Owen
PO# : REI job #1687

$23.00 ton exempt (CON31) 1.57 tn
Gross: 14840 Tare: 11700 Net Weight: 3140

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 C

GROUNDWATER ANALYTICAL REPORTS

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

July 30, 2018

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

RE: Project: 1687 OW SPORT
Pace Project No.: 40172822

Dear DAVID LARSEN:
Enclosed are the analytical results for sample(s) received by the laboratory on July 20, 2018. 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

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

CERTIFICATIONS

Project: 1687 OW SPORT
Pace Project No.: 40172822

Green Bay Certification IDs

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: 1687 OW SPORT
Pace Project No.: 40172822

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40172822001	**MW3R**	Water	07/17/18 08:15	07/20/18 08:50
40172822002	**MW4R**	Water	07/17/18 08:30	07/20/18 08:50
40172822003	**MW7**	Water	07/17/18 08:45	07/20/18 08:50
40172822004	**MW8**	Water	07/17/18 09:00	07/20/18 08:50

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SAMPLE ANALYTE COUNT

Project: 1687 OW SPORT
Pace Project No.: 40172822

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40172822001	**MW3R**	WI MOD GRO	ALD	10
40172822002	**MW4R**	WI MOD GRO	ALD	10
40172822003	**MW7**	WI MOD GRO	ALD	10
40172822004	**MW8**	WI MOD GRO	ALD	10

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ANALYTICAL RESULTS

Project: 1687 OW SPORT
Pace Project No.: 40172822

Sample: MW3R **Lab ID: 40172822001** Collected: 07/17/18 08:15 Received: 07/20/18 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**645**	ug/L	5.1	1.5	5		07/27/18 10:01	71-43-2	
Ethylbenzene	**10.2**	ug/L	5.5	1.6	5		07/27/18 10:01	100-41-4	
Methyl-tert-butyl ether	**3.3J**	ug/L	5.4	1.6	5		07/27/18 10:01	1634-04-4	
Naphthalene	**21.2**	ug/L	8.4	2.5	5		07/27/18 10:01	91-20-3	
Toluene	**4.7J**	ug/L	8.2	2.4	5		07/27/18 10:01	108-88-3	
1,2,4-Trimethylbenzene	**5.7**	ug/L	5.7	1.7	5		07/27/18 10:01	95-63-6	
1,3,5-Trimethylbenzene	**2.9J**	ug/L	5.4	1.6	5		07/27/18 10:01	108-67-8	
m&p-Xylene	**10.6J**	ug/L	10.9	3.3	5		07/27/18 10:01	179601-23-1	
o-Xylene	**2.1J**	ug/L	5.2	1.6	5		07/27/18 10:01	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	103	%	80-120		5		07/27/18 10:01	98-08-8	

Sample: MW4R **Lab ID: 40172822002** Collected: 07/17/18 08:30 Received: 07/20/18 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**26.3**	ug/L	5.1	1.5	5		07/26/18 17:26	71-43-2	
Ethylbenzene	**229**	ug/L	5.5	1.6	5		07/26/18 17:26	100-41-4	
Methyl-tert-butyl ether	**1.7J**	ug/L	5.4	1.6	5		07/26/18 17:26	1634-04-4	
Naphthalene	**86.0**	ug/L	8.4	2.5	5		07/26/18 17:26	91-20-3	
Toluene	**109**	ug/L	8.2	2.4	5		07/26/18 17:26	108-88-3	
1,2,4-Trimethylbenzene	**306**	ug/L	5.7	1.7	5		07/26/18 17:26	95-63-6	
1,3,5-Trimethylbenzene	**86.4**	ug/L	5.4	1.6	5		07/26/18 17:26	108-67-8	
m&p-Xylene	**754**	ug/L	10.9	3.3	5		07/26/18 17:26	179601-23-1	
o-Xylene	**383**	ug/L	5.2	1.6	5		07/26/18 17:26	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	102	%	80-120		5		07/26/18 17:26	98-08-8	

Sample: MW7 **Lab ID: 40172822003** Collected: 07/17/18 08:45 Received: 07/20/18 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**<0.31**	ug/L	1.0	0.31	1		07/26/18 17:52	71-43-2	
Ethylbenzene	**8.6**	ug/L	1.1	0.33	1		07/26/18 17:52	100-41-4	
Methyl-tert-butyl ether	**<0.32**	ug/L	1.1	0.32	1		07/26/18 17:52	1634-04-4	
Naphthalene	**14.6**	ug/L	1.7	0.51	1		07/26/18 17:52	91-20-3	
Toluene	**<0.49**	ug/L	1.6	0.49	1		07/26/18 17:52	108-88-3	
1,2,4-Trimethylbenzene	**40.4**	ug/L	1.1	0.34	1		07/26/18 17:52	95-63-6	
1,3,5-Trimethylbenzene	**28.7**	ug/L	1.1	0.33	1		07/26/18 17:52	108-67-8	
m&p-Xylene	**15.6**	ug/L	2.2	0.66	1		07/26/18 17:52	179601-23-1	
o-Xylene	**5.5**	ug/L	1.0	0.32	1		07/26/18 17:52	95-47-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 1687 OW SPORT
Pace Project No.: 40172822

Sample: MW7 **Lab ID: 40172822003** Collected: 07/17/18 08:45 Received: 07/20/18 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Surrogates									
a,a,a-Trifluorotoluene (S)	107	%	80-120		1		07/26/18 17:52	98-08-8	

Sample: MW8 **Lab ID: 40172822004** Collected: 07/17/18 09:00 Received: 07/20/18 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**<0.31**	ug/L	1.0	0.31	1		07/26/18 10:37	71-43-2	
Ethylbenzene	**<0.33**	ug/L	1.1	0.33	1		07/26/18 10:37	100-41-4	
Methyl-tert-butyl ether	**<0.32**	ug/L	1.1	0.32	1		07/26/18 10:37	1634-04-4	
Naphthalene	**<0.51**	ug/L	1.7	0.51	1		07/26/18 10:37	91-20-3	
Toluene	**<0.49**	ug/L	1.6	0.49	1		07/26/18 10:37	108-88-3	
1,2,4-Trimethylbenzene	**<0.34**	ug/L	1.1	0.34	1		07/26/18 10:37	95-63-6	
1,3,5-Trimethylbenzene	**<0.33**	ug/L	1.1	0.33	1		07/26/18 10:37	108-67-8	
m&p-Xylene	**<0.66**	ug/L	2.2	0.66	1		07/26/18 10:37	179601-23-1	
o-Xylene	**<0.32**	ug/L	1.0	0.32	1		07/26/18 10:37	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1		07/26/18 10:37	98-08-8	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 1687 OW SPORT
Pace Project No.: 40172822

QC Batch: 295512 Analysis Method: WI MOD GRO
QC Batch Method: WI MOD GRO Analysis Description: WIGRO GCV Water
Associated Lab Samples: 40172822001, 40172822002, 40172822003, 40172822004

METHOD BLANK: 1727507 Matrix: Water
Associated Lab Samples: 40172822001, 40172822002, 40172822003, 40172822004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.34	1.1	07/26/18 08:55	
1,3,5-Trimethylbenzene	ug/L	<0.33	1.1	07/26/18 08:55	
Benzene	ug/L	<0.31	1.0	07/26/18 08:55	
Ethylbenzene	ug/L	<0.33	1.1	07/26/18 08:55	
m&p-Xylene	ug/L	<0.66	2.2	07/26/18 08:55	
Methyl-tert-butyl ether	ug/L	<0.32	1.1	07/26/18 08:55	
Naphthalene	ug/L	<0.51	1.7	07/26/18 08:55	
o-Xylene	ug/L	<0.32	1.0	07/26/18 08:55	
Toluene	ug/L	<0.49	1.6	07/26/18 08:55	
a,a,a-Trifluorotoluene (S)	%	102	80-120	07/26/18 08:55	

LABORATORY CONTROL SAMPLE & LCSD: 1727508 1727509

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	19.7	20.4	99	102	80-120	3	20	
1,3,5-Trimethylbenzene	ug/L	20	19.1	19.7	95	99	80-120	3	20	
Benzene	ug/L	20	20.2	19.9	101	100	80-120	1	20	
Ethylbenzene	ug/L	20	19.9	20.1	99	100	80-120	1	20	
m&p-Xylene	ug/L	40	39.1	39.8	98	99	80-120	2	20	
Methyl-tert-butyl ether	ug/L	20	19.8	20.5	99	103	80-120	4	20	
Naphthalene	ug/L	20	18.3	20.4	92	102	80-120	11	20	
o-Xylene	ug/L	20	19.9	20.2	99	101	80-120	2	20	
Toluene	ug/L	20	20.2	20.1	101	101	80-120	0	20	
a,a,a-Trifluorotoluene (S)	%				101	102	80-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1727973 1727974

Parameter	Units	40172842003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	<0.34	20	20	21.8	22.3	109	111	51-160	2	20	
1,3,5-Trimethylbenzene	ug/L	<0.33	20	20	21.1	21.5	105	108	56-146	2	20	
Benzene	ug/L	<0.31	20	20	21.4	21.4	107	107	71-137	0	20	
Ethylbenzene	ug/L	<0.33	20	20	21.9	22.0	110	110	71-141	0	20	
m&p-Xylene	ug/L	<0.66	40	40	43.2	43.5	108	109	66-141	1	20	
Methyl-tert-butyl ether	ug/L	0.70J	20	20	20.6	21.5	100	104	80-120	4	20	
Naphthalene	ug/L	<0.51	20	20	20.4	21.9	102	110	67-138	7	20	
o-Xylene	ug/L	<0.32	20	20	21.7	21.9	109	110	75-133	1	20	
Toluene	ug/L	<0.49	20	20	21.9	21.9	109	109	76-134	0	20	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
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QUALITY CONTROL DATA

Project: 1687 OW SPORT
Pace Project No.: 40172822

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1727973 1727974

Parameter	Units	40172842003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
a,a,a-Trifluorotoluene (S)	%						101	101	80-120			

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALIFIERS

Project: 1687 OW SPORT
Pace Project No.: 40172822

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.

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Green Bay, WI 54302
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1687 OW SPORT
Pace Project No.: 40172822

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40172822001	**MW3R**	WI MOD GRO	295512		
40172822002	**MW4R**	WI MOD GRO	295512		
40172822003	**MW7**	WI MOD GRO	295512		
40172822004	**MW8**	WI MOD GRO	295512		

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www.pacelabs.com

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

Page 1 of

40172822

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:	RET
Branch/Location:	
Project Contact:	David Larsen
Phone:	715-605-9764
Project Number:	1687
Project Name:	OW Sport
Project State:	WI
Sampled By (Print):	David Larsen
Sampled By (Sign):	
PO #:	
Regulatory Program:	RCRA

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
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: RMC/N	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	MW3R	7/17/18	8:15	GW		X				
002	MW4R	"	8:30	"		X				
003	MW7	"	8:45	"		X				
004	MW8	"	9:00	"		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:
	7/19/18		
Relinquished By: WALTCO	Date/Time: 7/20/18 0850	Received By:	Date/Time: 7/20/18 0850
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.: 40172822
Receipt Temp = 1.0 °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal Present / Not Present
Intact / Not Intact

C019a(27Jun2006)
Version 6.0 06/14/06
ORIGINAL

Client Name: REI

Sample Preservation Receipt Form

Project # 40172822

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

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

Lab Lot# of pH paper:

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

Initial when completed:

Date/ Time:

Pace Lab #	Glass							Plastic							Vials						Jars			General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN							
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																																	2.5 / 5 / 10
007																																	2.5 / 5 / 10
008																																	2.5 / 5 / 10
009																																	2.5 / 5 / 10
010																																	2.5 / 5 / 10
011																																	2.5 / 5 / 10
012																																	2.5 / 5 / 10
013																																	2.5 / 5 / 10
014																																	2.5 / 5 / 10
015																																	2.5 / 5 / 10
016																																	2.5 / 5 / 10
017																																	2.5 / 5 / 10
018																																	2.5 / 5 / 10
019																																	2.5 / 5 / 10
020																																	2.5 / 5 / 10

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

AG1U	1 liter amber glass
AG1H	1 liter amber glass HCL
AG4S	125 mL amber glass H2SO4
AG4U	120 mL amber glass unpres
AG5U	100 mL amber glass unpres
AG2S	500 mL amber glass H2SO4
BG3U	250 mL clear glass unpres

BP1U	1 liter plastic unpres
BP2N	500 mL plastic HNO3
BP2Z	500 mL plastic NaOH, Znact
BP3U	250 mL plastic unpres
BP3C	250 mL plastic NaOH
BP3N	250 mL plastic HNO3
BP3S	250 mL plastic H2SO4

DG9A	40 mL amber ascorbic
DG9T	40 mL amber Na Thio
VG9U	40 mL clear vial unpres
VG9H	40 mL clear vial HCL
VG9M	40 mL clear vial MeOH
VG9D	40 mL clear vial DI

JGFU	4 oz amber jar unpres
WGFU	4 oz clear jar unpres
WPFU	4 oz plastic jar unpres

SP5T	120 mL plastic Na Thiosulfate
ZPLC	ziploc bag
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)

Client Name: RGI

Project #: **WO#: 40172822**

40172822

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

Tracking #: 178 0087

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

Cooler Temperature Uncorr: 1.0 /Corr: 1.0

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

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

Person examining contents:
Date: 7/19/18
Initials: JM

Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☐Yes ☒No ☐N/A	2. pkg #, mail/invoice info JM 7/20/18
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:		8.
For Analysis: ☒Yes ☐No MS/MSD:	☐Yes ☒No ☐N/A	
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:	☐Yes ☒No ☐N/A	12. ID:002 (2 of 3) have collect time of "8:15"
-Includes date/time/ID/Analysis Matrix:	W	JM 7/20/18
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:
Person Contacted: Date/Time:
Comments/ Resolution:
If checked, see attached form for additional comments ☐

Project Manager Review: Date: 7-20-18

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

May 14, 2018

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

RE: Project: 1687 OW SPORTS
Pace Project No.: 40168596

Dear DAVID LARSEN:
Enclosed are the analytical results for sample(s) received by the laboratory on May 04, 2018. 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

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

CERTIFICATIONS

Project: 1687 OW SPORTS
Pace Project No.: 40168596

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 SPORTS
Pace Project No.: 40168596

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40168596001	**MW-1**	Water	04/30/18 11:20	05/04/18 08:50
40168596002	**MW-2**	Water	04/30/18 11:50	05/04/18 08:50
40168596003	**MW-5**	Water	04/30/18 13:35	05/04/18 08:50
40168596004	**MW-6**	Water	04/30/18 14:00	05/04/18 08:50

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: 1687 OW SPORTS
Pace Project No.: 40168596

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40168596001	**MW-1**	WI MOD GRO	ALD	10
40168596002	**MW-2**	WI MOD GRO	ALD	10
40168596003	**MW-5**	WI MOD GRO	ALD	10
40168596004	**MW-6**	WI MOD GRO	ALD	10

REPORT OF LABORATORY ANALYSIS

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(920)469-2436

ANALYTICAL RESULTS

Project: 1687 OW SPORTS
Pace Project No.: 40168596

Sample: MW-1 **Lab ID: 40168596001** Collected: 04/30/18 11:20 Received: 05/04/18 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**<0.31**	ug/L	1.0	0.31	1		05/09/18 14:00	71-43-2	
Ethylbenzene	**<0.33**	ug/L	1.1	0.33	1		05/09/18 14:00	100-41-4	
Methyl-tert-butyl ether	**<0.32**	ug/L	1.1	0.32	1		05/09/18 14:00	1634-04-4	
Naphthalene	**<0.51**	ug/L	1.7	0.51	1		05/09/18 14:00	91-20-3	
Toluene	**<0.49**	ug/L	1.6	0.49	1		05/09/18 14:00	108-88-3	
1,2,4-Trimethylbenzene	**<0.34**	ug/L	1.1	0.34	1		05/09/18 14:00	95-63-6	
1,3,5-Trimethylbenzene	**<0.33**	ug/L	1.1	0.33	1		05/09/18 14:00	108-67-8	
m&p-Xylene	**<0.66**	ug/L	2.2	0.66	1		05/09/18 14:00	179601-23-1	
o-Xylene	**<0.32**	ug/L	1.0	0.32	1		05/09/18 14:00	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	98	%	80-120		1		05/09/18 14:00	98-08-8	

Sample: MW-2 **Lab ID: 40168596002** Collected: 04/30/18 11:50 Received: 05/04/18 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**<0.31**	ug/L	1.0	0.31	1		05/09/18 14:26	71-43-2	
Ethylbenzene	**<0.33**	ug/L	1.1	0.33	1		05/09/18 14:26	100-41-4	
Methyl-tert-butyl ether	**<0.32**	ug/L	1.1	0.32	1		05/09/18 14:26	1634-04-4	
Naphthalene	**<0.51**	ug/L	1.7	0.51	1		05/09/18 14:26	91-20-3	
Toluene	**<0.49**	ug/L	1.6	0.49	1		05/09/18 14:26	108-88-3	
1,2,4-Trimethylbenzene	**<0.34**	ug/L	1.1	0.34	1		05/09/18 14:26	95-63-6	
1,3,5-Trimethylbenzene	**<0.33**	ug/L	1.1	0.33	1		05/09/18 14:26	108-67-8	
m&p-Xylene	**<0.66**	ug/L	2.2	0.66	1		05/09/18 14:26	179601-23-1	
o-Xylene	**<0.32**	ug/L	1.0	0.32	1		05/09/18 14:26	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		05/09/18 14:26	98-08-8	

Sample: MW-5 **Lab ID: 40168596003** Collected: 04/30/18 13:35 Received: 05/04/18 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**<0.31**	ug/L	1.0	0.31	1		05/09/18 14:51	71-43-2	
Ethylbenzene	**<0.33**	ug/L	1.1	0.33	1		05/09/18 14:51	100-41-4	
Methyl-tert-butyl ether	**<0.32**	ug/L	1.1	0.32	1		05/09/18 14:51	1634-04-4	
Naphthalene	**<0.51**	ug/L	1.7	0.51	1		05/09/18 14:51	91-20-3	
Toluene	**<0.49**	ug/L	1.6	0.49	1		05/09/18 14:51	108-88-3	
1,2,4-Trimethylbenzene	**<0.34**	ug/L	1.1	0.34	1		05/09/18 14:51	95-63-6	
1,3,5-Trimethylbenzene	**<0.33**	ug/L	1.1	0.33	1		05/09/18 14:51	108-67-8	
m&p-Xylene	**<0.66**	ug/L	2.2	0.66	1		05/09/18 14:51	179601-23-1	
o-Xylene	**<0.32**	ug/L	1.0	0.32	1		05/09/18 14:51	95-47-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 1687 OW SPORTS
Pace Project No.: 40168596

Sample: MW-5 **Lab ID: 40168596003** Collected: 04/30/18 13:35 Received: 05/04/18 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		05/09/18 14:51	98-08-8	

Sample: MW-6 **Lab ID: 40168596004** Collected: 04/30/18 14:00 Received: 05/04/18 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**<0.31**	ug/L	1.0	0.31	1		05/09/18 15:17	71-43-2	
Ethylbenzene	**<0.33**	ug/L	1.1	0.33	1		05/09/18 15:17	100-41-4	
Methyl-tert-butyl ether	**<0.32**	ug/L	1.1	0.32	1		05/09/18 15:17	1634-04-4	
Naphthalene	**<0.51**	ug/L	1.7	0.51	1		05/09/18 15:17	91-20-3	
Toluene	**<0.49**	ug/L	1.6	0.49	1		05/09/18 15:17	108-88-3	
1,2,4-Trimethylbenzene	**<0.34**	ug/L	1.1	0.34	1		05/09/18 15:17	95-63-6	
1,3,5-Trimethylbenzene	**<0.33**	ug/L	1.1	0.33	1		05/09/18 15:17	108-67-8	
m&p-Xylene	**<0.66**	ug/L	2.2	0.66	1		05/09/18 15:17	179601-23-1	
o-Xylene	**<0.32**	ug/L	1.0	0.32	1		05/09/18 15:17	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		05/09/18 15:17	98-08-8	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 1687 OW SPORTS
Pace Project No.: 40168596

QC Batch: 288256 Analysis Method: WI MOD GRO
QC Batch Method: WI MOD GRO Analysis Description: WIGRO GCV Water
Associated Lab Samples: 40168596001, 40168596002, 40168596003, 40168596004

METHOD BLANK: 1686609 Matrix: Water
Associated Lab Samples: 40168596001, 40168596002, 40168596003, 40168596004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.34	1.1	05/09/18 08:50	
1,3,5-Trimethylbenzene	ug/L	<0.33	1.1	05/09/18 08:50	
Benzene	ug/L	<0.31	1.0	05/09/18 08:50	
Ethylbenzene	ug/L	<0.33	1.1	05/09/18 08:50	
m&p-Xylene	ug/L	<0.66	2.2	05/09/18 08:50	
Methyl-tert-butyl ether	ug/L	<0.32	1.1	05/09/18 08:50	
Naphthalene	ug/L	<0.51	1.7	05/09/18 08:50	
o-Xylene	ug/L	<0.32	1.0	05/09/18 08:50	
Toluene	ug/L	<0.49	1.6	05/09/18 08:50	
a,a,a-Trifluorotoluene (S)	%	98	80-120	05/09/18 08:50	

LABORATORY CONTROL SAMPLE & LCSD: 1686610 1686611

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	20.7	21.2	104	106	80-120	2	20	
1,3,5-Trimethylbenzene	ug/L	20	20.1	20.5	101	103	80-120	2	20	
Benzene	ug/L	20	20.1	20.1	101	101	80-120	0	20	
Ethylbenzene	ug/L	20	20.7	20.9	103	104	80-120	1	20	
m&p-Xylene	ug/L	40	40.7	41.3	102	103	80-120	2	20	
Methyl-tert-butyl ether	ug/L	20	19.0	18.9	95	94	80-120	1	20	
Naphthalene	ug/L	20	20.2	21.2	101	106	80-120	5	20	
o-Xylene	ug/L	20	20.3	20.6	101	103	80-120	2	20	
Toluene	ug/L	20	20.3	20.4	102	102	80-120	0	20	
a,a,a-Trifluorotoluene (S)	%				100	100	80-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1686753 1686754

Parameter	Units	40168699007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	1490	400	400	2030	2040	134	137	11-200	1	20	
1,3,5-Trimethylbenzene	ug/L	372	400	400	797	801	106	107	54-142	1	20	
Benzene	ug/L	7.0J	400	400	394	387	97	95	66-140	2	20	
Ethylbenzene	ug/L	1200	400	400	1700	1700	125	124	66-143	0	20	
m&p-Xylene	ug/L	3170	800	800	4190	4210	128	130	60-141	0	20	
Methyl-tert-butyl ether	ug/L	10.8J	400	400	388	392	94	95	70-129	1	20	
Naphthalene	ug/L	444	400	400	853	898	102	113	64-129	5	20	
o-Xylene	ug/L	1140	400	400	1620	1620	120	121	68-132	0	20	
Toluene	ug/L	58.4	400	400	461	447	101	97	76-130	3	20	

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 1687 OW SPORTS
Pace Project No.: 40168596

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1686753 1686754

Parameter	Units	40168699007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
a,a,a-Trifluorotoluene (S)	%						100	100	80-120			

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

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 1687 OW SPORTS
Pace Project No.: 40168596

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1687 OW SPORTS
Pace Project No.: 40168596

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40168596001	**MW-1**	WI MOD GRO	288256		
40168596002	**MW-2**	WI MOD GRO	288256		
40168596003	**MW-5**	WI MOD GRO	288256		
40168596004	**MW-6**	WI MOD GRO	288256		

Pace Analytical®
www.pacelabs.com

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

401685 96

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 Lasen
Phone:	715 675 9784
Project Number:	1687
Project Name:	OW Sports
Project State:	WI
Sampled By (Print):	Joel Kasch
Sampled By (Sign):	
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	Dave Lasen
Mail To Company:	REI
Mail To Address:	DLasen@reiengineering.com
Invoice To Contact:	SAME
Invoice To Company:	
Invoice To Address:	
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
SI = Sludge	WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
					N	B	PIOC+N			
001	MW-1	4/30/18	11:20	GW						
002	MW-2	"	11:50	"						
003	MW-5	"	1:35	"						
004	MW-6	"	2:00	"						

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:
Jeff Blad	5/3/18 3:30		
Walt CO	5/4/18 0850	Allied Pace	5/4/18 0850

PACE Project No.
401685 96

Receipt Temp = RO1 °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 # 40168596

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):

	Glass							Plastic							Vials						Jars			General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
Pace Lab #	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN						
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																																2.5 / 5 / 10
006																																2.5 / 5 / 10
007																																2.5 / 5 / 10
008																																2.5 / 5 / 10
009																																2.5 / 5 / 10
010																																2.5 / 5 / 10
011																																2.5 / 5 / 10
012																																2.5 / 5 / 10
013																																2.5 / 5 / 10
014																																2.5 / 5 / 10
015																																2.5 / 5 / 10
016																																2.5 / 5 / 10
017																																2.5 / 5 / 10
018																																2.5 / 5 / 10
019																																2.5 / 5 / 10
020																																2.5 / 5 / 10

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

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact	VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL		
AG5U	100 mL amber glass unpres	BP3C	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#: 40168596

Client Name: REI

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

Tracking #: 1709827

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

Cooler Temperature Uncorr: /Corr: R01

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

Person examining contents: Date: 4/5/18 Initials: CMG

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:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: WW		
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:** 5/4/18

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

May 17, 2018

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

RE: Project: 1687 OW SPORT
Pace Project No.: 40168901

Dear DAVID LARSEN:
Enclosed are the analytical results for sample(s) received by the laboratory on May 10, 2018. 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

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

CERTIFICATIONS

Project: 1687 OW SPORT
Pace Project No.: 40168901

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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Green Bay, WI 54302
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SAMPLE SUMMARY

Project: 1687 OW SPORT
Pace Project No.: 40168901

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40168901001	**MW-3R**	Water	05/09/18 12:00	05/10/18 08:45
40168901002	**MW-4R**	Water	05/09/18 12:31	05/10/18 08:45
40168901003	**MW-7**	Water	05/09/18 11:43	05/10/18 08:45
40168901004	**MW-8**	Water	05/09/18 11:14	05/10/18 08:45

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: 1687 OW SPORT
Pace Project No.: 40168901

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40168901001	**MW-3R**	WI MOD GRO	ALD	10
40168901002	**MW-4R**	WI MOD GRO	ALD	10
40168901003	**MW-7**	WI MOD GRO	ALD	10
40168901004	**MW-8**	WI MOD GRO	ALD	10

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ANALYTICAL RESULTS

Project: 1687 OW SPORT
Pace Project No.: 40168901

Sample: MW-3R **Lab ID: 40168901001** Collected: 05/09/18 12:00 Received: 05/10/18 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**1130**	ug/L	10.2	3.1	10		05/16/18 17:56	71-43-2	
Ethylbenzene	**151**	ug/L	11.0	3.3	10		05/16/18 17:56	100-41-4	
Methyl-tert-butyl ether	**5.3J**	ug/L	10.7	3.2	10		05/16/18 17:56	1634-04-4	
Naphthalene	**34.1**	ug/L	16.8	5.1	10		05/16/18 17:56	91-20-3	
Toluene	**11.8J**	ug/L	16.3	4.9	10		05/16/18 17:56	108-88-3	
1,2,4-Trimethylbenzene	**97.9**	ug/L	11.4	3.4	10		05/16/18 17:56	95-63-6	
1,3,5-Trimethylbenzene	**38.5**	ug/L	10.9	3.3	10		05/16/18 17:56	108-67-8	
m&p-Xylene	**197**	ug/L	21.8	6.6	10		05/16/18 17:56	179601-23-1	
o-Xylene	**19.9**	ug/L	10.5	3.2	10		05/16/18 17:56	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	102	%	80-120		10		05/16/18 17:56	98-08-8	

Sample: MW-4R **Lab ID: 40168901002** Collected: 05/09/18 12:31 Received: 05/10/18 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**14.1**	ug/L	4.1	1.2	4		05/16/18 18:21	71-43-2	
Ethylbenzene	**54.2**	ug/L	4.4	1.3	4		05/16/18 18:21	100-41-4	
Methyl-tert-butyl ether	**<1.3**	ug/L	4.3	1.3	4		05/16/18 18:21	1634-04-4	
Naphthalene	**26.8**	ug/L	6.7	2.0	4		05/16/18 18:21	91-20-3	
Toluene	**36.7**	ug/L	6.5	2.0	4		05/16/18 18:21	108-88-3	
1,2,4-Trimethylbenzene	**297**	ug/L	4.6	1.4	4		05/16/18 18:21	95-63-6	
1,3,5-Trimethylbenzene	**122**	ug/L	4.4	1.3	4		05/16/18 18:21	108-67-8	
m&p-Xylene	**241**	ug/L	8.7	2.6	4		05/16/18 18:21	179601-23-1	
o-Xylene	**98.6**	ug/L	4.2	1.3	4		05/16/18 18:21	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	102	%	80-120		4		05/16/18 18:21	98-08-8	

Sample: MW-7 **Lab ID: 40168901003** Collected: 05/09/18 11:43 Received: 05/10/18 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**<0.31**	ug/L	1.0	0.31	1		05/16/18 19:38	71-43-2	
Ethylbenzene	**4.6**	ug/L	1.1	0.33	1		05/16/18 19:38	100-41-4	
Methyl-tert-butyl ether	**<0.32**	ug/L	1.1	0.32	1		05/16/18 19:38	1634-04-4	
Naphthalene	**10.8**	ug/L	1.7	0.51	1		05/16/18 19:38	91-20-3	
Toluene	**<0.49**	ug/L	1.6	0.49	1		05/16/18 19:38	108-88-3	
1,2,4-Trimethylbenzene	**35.4**	ug/L	1.1	0.34	1		05/16/18 19:38	95-63-6	
1,3,5-Trimethylbenzene	**20.0**	ug/L	1.1	0.33	1		05/16/18 19:38	108-67-8	
m&p-Xylene	**13.4**	ug/L	2.2	0.66	1		05/16/18 19:38	179601-23-1	
o-Xylene	**2.6**	ug/L	1.0	0.32	1		05/16/18 19:38	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.: 40168901

Sample: MW-7 **Lab ID: 40168901003** Collected: 05/09/18 11:43 Received: 05/10/18 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Surrogates									
a,a,a-Trifluorotoluene (S)	106	%	80-120		1		05/16/18 19:38	98-08-8	

Sample: MW-8 **Lab ID: 40168901004** Collected: 05/09/18 11:14 Received: 05/10/18 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**2.5**	ug/L	1.0	0.31	1		05/16/18 11:05	71-43-2	
Ethylbenzene	**0.38J**	ug/L	1.1	0.33	1		05/16/18 11:05	100-41-4	
Methyl-tert-butyl ether	**0.35J**	ug/L	1.1	0.32	1		05/16/18 11:05	1634-04-4	
Naphthalene	**<0.51**	ug/L	1.7	0.51	1		05/16/18 11:05	91-20-3	
Toluene	**0.73J**	ug/L	1.6	0.49	1		05/16/18 11:05	108-88-3	
1,2,4-Trimethylbenzene	**1.5**	ug/L	1.1	0.34	1		05/16/18 11:05	95-63-6	
1,3,5-Trimethylbenzene	**0.55J**	ug/L	1.1	0.33	1		05/16/18 11:05	108-67-8	
m&p-Xylene	**1.5J**	ug/L	2.2	0.66	1		05/16/18 11:05	179601-23-1	
o-Xylene	**1.0J**	ug/L	1.0	0.32	1		05/16/18 11:05	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1		05/16/18 11:05	98-08-8	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 1687 OW SPORT
Pace Project No.: 40168901

QC Batch: 289030 Analysis Method: WI MOD GRO
QC Batch Method: WI MOD GRO Analysis Description: WIGRO GCV Water
Associated Lab Samples: 40168901001, 40168901002, 40168901003, 40168901004

METHOD BLANK: 1691012 Matrix: Water
Associated Lab Samples: 40168901001, 40168901002, 40168901003, 40168901004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.34	1.1	05/16/18 08:57	
1,3,5-Trimethylbenzene	ug/L	<0.33	1.1	05/16/18 08:57	
Benzene	ug/L	<0.31	1.0	05/16/18 08:57	
Ethylbenzene	ug/L	<0.33	1.1	05/16/18 08:57	
m&p-Xylene	ug/L	<0.66	2.2	05/16/18 08:57	
Methyl-tert-butyl ether	ug/L	<0.32	1.1	05/16/18 08:57	
Naphthalene	ug/L	<0.51	1.7	05/16/18 08:57	
o-Xylene	ug/L	<0.32	1.0	05/16/18 08:57	
Toluene	ug/L	<0.49	1.6	05/16/18 08:57	
a,a,a-Trifluorotoluene (S)	%	101	80-120	05/16/18 08:57	

LABORATORY CONTROL SAMPLE & LCSD: 1691013 1691014

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	21.0	21.5	105	108	80-120	3	20	
1,3,5-Trimethylbenzene	ug/L	20	20.3	20.9	102	104	80-120	3	20	
Benzene	ug/L	20	20.7	20.7	104	104	80-120	0	20	
Ethylbenzene	ug/L	20	20.8	21.1	104	105	80-120	1	20	
m&p-Xylene	ug/L	40	41.2	41.7	103	104	80-120	1	20	
Methyl-tert-butyl ether	ug/L	20	20.0	20.5	100	102	80-120	3	20	
Naphthalene	ug/L	20	19.3	21.2	97	106	80-120	9	20	
o-Xylene	ug/L	20	20.8	21.0	104	105	80-120	1	20	
Toluene	ug/L	20	20.9	21.0	104	105	80-120	1	20	
a,a,a-Trifluorotoluene (S)	%				101	102	80-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1691234 1691235

Parameter	Units	40168900004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	<0.34	20	20	21.5	21.5	107	108	11-200	0	20	
1,3,5-Trimethylbenzene	ug/L	<0.33	20	20	20.8	20.9	104	105	54-142	1	20	
Benzene	ug/L	<0.31	20	20	21.1	21.3	105	106	66-140	1	20	
Ethylbenzene	ug/L	<0.33	20	20	21.6	21.6	108	108	66-143	0	20	
m&p-Xylene	ug/L	<0.66	40	40	42.3	42.5	106	106	60-141	0	20	
Methyl-tert-butyl ether	ug/L	<0.32	20	20	19.9	19.8	99	99	70-129	0	20	
Naphthalene	ug/L	<0.51	20	20	19.6	19.8	98	99	64-129	1	20	
o-Xylene	ug/L	<0.32	20	20	21.0	21.2	105	106	68-132	1	20	
Toluene	ug/L	<0.49	20	20	21.3	21.6	107	108	76-130	1	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1687 OW SPORT
Pace Project No.: 40168901

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1691234 1691235

Parameter	Units	40168900004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
a,a,a-Trifluorotoluene (S)	%						101	101	80-120			

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(920)469-2436

QUALIFIERS

Project: 1687 OW SPORT
Pace Project No.: 40168901

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1687 OW SPORT
Pace Project No.: 40168901

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40168901001	**MW-3R**	WI MOD GRO	289030		
40168901002	**MW-4R**	WI MOD GRO	289030		
40168901003	**MW-7**	WI MOD GRO	289030		
40168901004	**MW-8**	WI MOD GRO	289030		

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

Pace Analytical®
www.pacelabs.com

CHAIN OF CUSTODY

4016890 1

*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:	David Lamson
Phone:	(715) 675-9784
Project Number:	1687
Project Name:	Ow spoil
Project State:	WI
Sampled By (Print):	Jed Koch
Sampled By (Sign):	Jed Koch
PO #:	
Regulatory Program:	PECFA

Quote #:	
Mail To Contact:	Dave Lamson
Mail To Company:	REI
Mail To Address:	DLamson@reiengineering.com
Invoice To Contact:	SAT
Invoice To Company:	
Invoice To Address:	
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
SI = 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+N	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	MW-3R	5/9/18	12:00	GW	N	B	1	Wells labeled on 5/10/18 but was sampled 5/9/18		
002	MW-4R	"	12:31	"	"	"	1			
003	MW-7	"	11:43	"	"	"	1			
004	MW-8	"	11:14	"	"	"	1			

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:
	5/9/18 3:30		
Wyatt CO	5/10/18 0845		5/10/18 0845

PACE Project No.: 4016890 1

Receipt Temp = R01 °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 # 40116890 1

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):

	Glass							Plastic							Vials						Jars			General							
Pace Lab #	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	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																																	2.5 / 5 / 10
002																																	2.5 / 5 / 10
003																																	2.5 / 5 / 10
004																																	2.5 / 5 / 10
005																																	2.5 / 5 / 10
006																																	2.5 / 5 / 10
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014																																	2.5 / 5 / 10
015																																	2.5 / 5 / 10
016																																	2.5 / 5 / 10
017																																	2.5 / 5 / 10
018																																	2.5 / 5 / 10
019																																	2.5 / 5 / 10
020																																	2.5 / 5 / 10

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

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact	VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL		
AG5U	100 mL amber glass unpres	BP3C	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#: 40168901

40168901

Client Name: REI

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

Tracking #: 1715673

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 - NA **Type of Ice:** Wet (Blue) Dry None ~~F~~ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: /Corr: RD1

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

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

Person examining contents:
Date: 5/10/18
Initials: DAS

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:	☐Yes ☑No ☐N/A	12. all dates 5/10/18 DAS 5/10/18
-Includes date/time/ID/Analysis Matrix: W		
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: 5-11-18

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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November 26, 2018

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

RE: Project: 1687 O-W SPORTS
Pace Project No.: 40179786

Dear DAVID LARSEN:
Enclosed are the analytical results for sample(s) received by the laboratory on November 16, 2018. 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

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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CERTIFICATIONS

Project: 1687 O-W SPORTS
Pace Project No.: 40179786

Green Bay Certification IDs

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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SAMPLE SUMMARY

Project: 1687 O-W SPORTS
Pace Project No.: 40179786

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40179786001	**MW-1**	Water	11/14/18 10:45	11/16/18 09:00
40179786002	**MW-2**	Water	11/14/18 11:15	11/16/18 09:00
40179786003	**MW-3R**	Water	11/14/18 11:35	11/16/18 09:00
40179786004	**MW-4R**	Water	11/14/18 11:50	11/16/18 09:00
40179786005	**MW-5**	Water	11/14/18 12:15	11/16/18 09:00
40179786006	**MW-7**	Water	11/14/18 12:40	11/16/18 09:00
40179786007	**MW-8**	Water	11/14/18 13:00	11/16/18 09:00
40179786008	**MW-6**	Water	11/14/18 13:15	11/16/18 09:00

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SAMPLE ANALYTE COUNT

Project: 1687 O-W SPORTS
Pace Project No.: 40179786

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40179786001	**MW-1**	WI MOD GRO	ALD	10
40179786002	**MW-2**	WI MOD GRO	ALD	10
40179786003	**MW-3R**	WI MOD GRO	ALD	10
40179786004	**MW-4R**	WI MOD GRO	ALD	10
40179786005	**MW-5**	WI MOD GRO	ALD	10
40179786006	**MW-7**	WI MOD GRO	ALD	10
40179786007	**MW-8**	WI MOD GRO	ALD	10
40179786008	**MW-6**	WI MOD GRO	ALD	10

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ANALYTICAL RESULTS

Project: 1687 O-W SPORTS
Pace Project No.: 40179786

Sample: MW-1 **Lab ID: 40179786001** Collected: 11/14/18 10:45 Received: 11/16/18 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**<0.31**	ug/L	1.0	0.31	1		11/19/18 09:39	71-43-2	
Ethylbenzene	**<0.33**	ug/L	1.1	0.33	1		11/19/18 09:39	100-41-4	
Methyl-tert-butyl ether	**<0.32**	ug/L	1.1	0.32	1		11/19/18 09:39	1634-04-4	
Naphthalene	**<0.51**	ug/L	1.7	0.51	1		11/19/18 09:39	91-20-3	
Toluene	**<0.49**	ug/L	1.6	0.49	1		11/19/18 09:39	108-88-3	
1,2,4-Trimethylbenzene	**<0.34**	ug/L	1.1	0.34	1		11/19/18 09:39	95-63-6	
1,3,5-Trimethylbenzene	**<0.33**	ug/L	1.1	0.33	1		11/19/18 09:39	108-67-8	
m&p-Xylene	**<0.66**	ug/L	2.2	0.66	1		11/19/18 09:39	179601-23-1	
o-Xylene	**<0.32**	ug/L	1.0	0.32	1		11/19/18 09:39	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1		11/19/18 09:39	98-08-8	

Sample: MW-2 **Lab ID: 40179786002** Collected: 11/14/18 11:15 Received: 11/16/18 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**<0.31**	ug/L	1.0	0.31	1		11/19/18 10:05	71-43-2	
Ethylbenzene	**<0.33**	ug/L	1.1	0.33	1		11/19/18 10:05	100-41-4	
Methyl-tert-butyl ether	**<0.32**	ug/L	1.1	0.32	1		11/19/18 10:05	1634-04-4	
Naphthalene	**<0.51**	ug/L	1.7	0.51	1		11/19/18 10:05	91-20-3	
Toluene	**<0.49**	ug/L	1.6	0.49	1		11/19/18 10:05	108-88-3	
1,2,4-Trimethylbenzene	**<0.34**	ug/L	1.1	0.34	1		11/19/18 10:05	95-63-6	
1,3,5-Trimethylbenzene	**<0.33**	ug/L	1.1	0.33	1		11/19/18 10:05	108-67-8	
m&p-Xylene	**<0.66**	ug/L	2.2	0.66	1		11/19/18 10:05	179601-23-1	
o-Xylene	**<0.32**	ug/L	1.0	0.32	1		11/19/18 10:05	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1		11/19/18 10:05	98-08-8	

Sample: MW-3R **Lab ID: 40179786003** Collected: 11/14/18 11:35 Received: 11/16/18 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**16.3**	ug/L	1.0	0.31	1		11/19/18 18:36	71-43-2	
Ethylbenzene	**3.5**	ug/L	1.1	0.33	1		11/19/18 18:36	100-41-4	
Methyl-tert-butyl ether	**<0.32**	ug/L	1.1	0.32	1		11/19/18 18:36	1634-04-4	
Naphthalene	**1.3J**	ug/L	1.7	0.51	1		11/19/18 18:36	91-20-3	
Toluene	**<0.49**	ug/L	1.6	0.49	1		11/19/18 18:36	108-88-3	
1,2,4-Trimethylbenzene	**1.3**	ug/L	1.1	0.34	1		11/19/18 18:36	95-63-6	
1,3,5-Trimethylbenzene	**0.49J**	ug/L	1.1	0.33	1		11/19/18 18:36	108-67-8	
m&p-Xylene	**1.4J**	ug/L	2.2	0.66	1		11/19/18 18:36	179601-23-1	
o-Xylene	**<0.32**	ug/L	1.0	0.32	1		11/19/18 18:36	95-47-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 1687 O-W SPORTS
Pace Project No.: 40179786

Sample: MW-3R **Lab ID: 40179786003** Collected: 11/14/18 11:35 Received: 11/16/18 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1		11/19/18 18:36	98-08-8	

Sample: MW-4R **Lab ID: 40179786004** Collected: 11/14/18 11:50 Received: 11/16/18 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**0.80J**	ug/L	1.0	0.31	1		11/19/18 19:02	71-43-2	
Ethylbenzene	**9.4**	ug/L	1.1	0.33	1		11/19/18 19:02	100-41-4	
Methyl-tert-butyl ether	**<0.32**	ug/L	1.1	0.32	1		11/19/18 19:02	1634-04-4	
Naphthalene	**4.0**	ug/L	1.7	0.51	1		11/19/18 19:02	91-20-3	
Toluene	**0.91J**	ug/L	1.6	0.49	1		11/19/18 19:02	108-88-3	
1,2,4-Trimethylbenzene	**18.5**	ug/L	1.1	0.34	1		11/19/18 19:02	95-63-6	
1,3,5-Trimethylbenzene	**4.8**	ug/L	1.1	0.33	1		11/19/18 19:02	108-67-8	
m&p-Xylene	**15.9**	ug/L	2.2	0.66	1		11/19/18 19:02	179601-23-1	
o-Xylene	**3.9**	ug/L	1.0	0.32	1		11/19/18 19:02	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	103	%	80-120		1		11/19/18 19:02	98-08-8	

Sample: MW-5 **Lab ID: 40179786005** Collected: 11/14/18 12:15 Received: 11/16/18 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**<0.31**	ug/L	1.0	0.31	1		11/19/18 10:30	71-43-2	
Ethylbenzene	**<0.33**	ug/L	1.1	0.33	1		11/19/18 10:30	100-41-4	
Methyl-tert-butyl ether	**<0.32**	ug/L	1.1	0.32	1		11/19/18 10:30	1634-04-4	
Naphthalene	**<0.51**	ug/L	1.7	0.51	1		11/19/18 10:30	91-20-3	
Toluene	**<0.49**	ug/L	1.6	0.49	1		11/19/18 10:30	108-88-3	
1,2,4-Trimethylbenzene	**<0.34**	ug/L	1.1	0.34	1		11/19/18 10:30	95-63-6	
1,3,5-Trimethylbenzene	**<0.33**	ug/L	1.1	0.33	1		11/19/18 10:30	108-67-8	
m&p-Xylene	**<0.66**	ug/L	2.2	0.66	1		11/19/18 10:30	179601-23-1	
o-Xylene	**<0.32**	ug/L	1.0	0.32	1		11/19/18 10:30	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1		11/19/18 10:30	98-08-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 1687 O-W SPORTS
Pace Project No.: 40179786

Sample: MW-7 **Lab ID: 40179786006** Collected: 11/14/18 12:40 Received: 11/16/18 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**<0.31**	ug/L	1.0	0.31	1		11/19/18 14:46	71-43-2	
Ethylbenzene	**7.3**	ug/L	1.1	0.33	1		11/19/18 14:46	100-41-4	
Methyl-tert-butyl ether	**<0.32**	ug/L	1.1	0.32	1		11/19/18 14:46	1634-04-4	
Naphthalene	**14.4**	ug/L	1.7	0.51	1		11/19/18 14:46	91-20-3	
Toluene	**<0.49**	ug/L	1.6	0.49	1		11/19/18 14:46	108-88-3	
1,2,4-Trimethylbenzene	**39.5**	ug/L	1.1	0.34	1		11/19/18 14:46	95-63-6	
1,3,5-Trimethylbenzene	**17.0**	ug/L	1.1	0.33	1		11/19/18 14:46	108-67-8	
m&p-Xylene	**14.9**	ug/L	2.2	0.66	1		11/19/18 14:46	179601-23-1	
o-Xylene	**3.9**	ug/L	1.0	0.32	1		11/19/18 14:46	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	104	%	80-120		1		11/19/18 14:46	98-08-8	

Sample: MW-8 **Lab ID: 40179786007** Collected: 11/14/18 13:00 Received: 11/16/18 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**<0.31**	ug/L	1.0	0.31	1		11/19/18 10:56	71-43-2	
Ethylbenzene	**<0.33**	ug/L	1.1	0.33	1		11/19/18 10:56	100-41-4	
Methyl-tert-butyl ether	**<0.32**	ug/L	1.1	0.32	1		11/19/18 10:56	1634-04-4	
Naphthalene	**<0.51**	ug/L	1.7	0.51	1		11/19/18 10:56	91-20-3	
Toluene	**<0.49**	ug/L	1.6	0.49	1		11/19/18 10:56	108-88-3	
1,2,4-Trimethylbenzene	**<0.34**	ug/L	1.1	0.34	1		11/19/18 10:56	95-63-6	
1,3,5-Trimethylbenzene	**<0.33**	ug/L	1.1	0.33	1		11/19/18 10:56	108-67-8	
m&p-Xylene	**<0.66**	ug/L	2.2	0.66	1		11/19/18 10:56	179601-23-1	
o-Xylene	**<0.32**	ug/L	1.0	0.32	1		11/19/18 10:56	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1		11/19/18 10:56	98-08-8	

Sample: MW-6 **Lab ID: 40179786008** Collected: 11/14/18 13:15 Received: 11/16/18 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	**<0.31**	ug/L	1.0	0.31	1		11/19/18 11:22	71-43-2	
Ethylbenzene	**<0.33**	ug/L	1.1	0.33	1		11/19/18 11:22	100-41-4	
Methyl-tert-butyl ether	**<0.32**	ug/L	1.1	0.32	1		11/19/18 11:22	1634-04-4	
Naphthalene	**<0.51**	ug/L	1.7	0.51	1		11/19/18 11:22	91-20-3	
Toluene	**<0.49**	ug/L	1.6	0.49	1		11/19/18 11:22	108-88-3	
1,2,4-Trimethylbenzene	**<0.34**	ug/L	1.1	0.34	1		11/19/18 11:22	95-63-6	
1,3,5-Trimethylbenzene	**<0.33**	ug/L	1.1	0.33	1		11/19/18 11:22	108-67-8	
m&p-Xylene	**<0.66**	ug/L	2.2	0.66	1		11/19/18 11:22	179601-23-1	
o-Xylene	**<0.32**	ug/L	1.0	0.32	1		11/19/18 11:22	95-47-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 1687 O-W SPORTS
Pace Project No.: 40179786

Sample: MW-6 **Lab ID: 40179786008** Collected: 11/14/18 13:15 Received: 11/16/18 09:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1		11/19/18 11:22	98-08-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 1687 O-W SPORTS
Pace Project No.: 40179786

QC Batch: 306949 Analysis Method: WI MOD GRO
QC Batch Method: WI MOD GRO Analysis Description: WIGRO GCV Water
Associated Lab Samples: 40179786001, 40179786002, 40179786003, 40179786004, 40179786005, 40179786006, 40179786007, 40179786008

METHOD BLANK: 1795333 Matrix: Water
Associated Lab Samples: 40179786001, 40179786002, 40179786003, 40179786004, 40179786005, 40179786006, 40179786007, 40179786008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.34	1.1	11/19/18 07:57	
1,3,5-Trimethylbenzene	ug/L	<0.33	1.1	11/19/18 07:57	
Benzene	ug/L	<0.31	1.0	11/19/18 07:57	
Ethylbenzene	ug/L	<0.33	1.1	11/19/18 07:57	
m&p-Xylene	ug/L	<0.66	2.2	11/19/18 07:57	
Methyl-tert-butyl ether	ug/L	<0.32	1.1	11/19/18 07:57	
Naphthalene	ug/L	<0.51	1.7	11/19/18 07:57	
o-Xylene	ug/L	<0.32	1.0	11/19/18 07:57	
Toluene	ug/L	<0.49	1.6	11/19/18 07:57	
a,a,a-Trifluorotoluene (S)	%	100	80-120	11/19/18 07:57	

LABORATORY CONTROL SAMPLE & LCSD: 1795334 1795335

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	21.2	21.6	106	108	80-120	2	20	
1,3,5-Trimethylbenzene	ug/L	20	20.7	21.1	103	106	80-120	2	20	
Benzene	ug/L	20	21.0	20.8	105	104	80-120	1	20	
Ethylbenzene	ug/L	20	21.2	21.4	106	107	80-120	1	20	
m&p-Xylene	ug/L	40	41.6	42.3	104	106	80-120	2	20	
Methyl-tert-butyl ether	ug/L	20	19.7	19.6	98	98	80-120	1	20	
Naphthalene	ug/L	20	19.7	20.3	99	102	80-120	3	20	
o-Xylene	ug/L	20	20.9	21.0	104	105	80-120	1	20	
Toluene	ug/L	20	21.2	21.2	106	106	80-120	0	20	
a,a,a-Trifluorotoluene (S)	%				102	102	80-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1795551 1795552

Parameter	Units	40179786001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	<0.34	20	20	21.1	21.2	105	106	51-160	1	20	
1,3,5-Trimethylbenzene	ug/L	<0.33	20	20	20.4	20.6	102	103	56-146	1	20	
Benzene	ug/L	<0.31	20	20	21.1	21.2	105	106	71-137	1	20	
Ethylbenzene	ug/L	<0.33	20	20	21.8	21.9	109	110	71-141	1	20	
m&p-Xylene	ug/L	<0.66	40	40	42.6	42.8	106	107	66-141	1	20	
Methyl-tert-butyl ether	ug/L	<0.32	20	20	20.4	20.3	102	101	80-120	1	20	
Naphthalene	ug/L	<0.51	20	20	20.4	20.6	102	103	67-138	1	20	
o-Xylene	ug/L	<0.32	20	20	21.1	21.2	105	106	75-133	1	20	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 1687 O-W SPORTS
Pace Project No.: 40179786

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1795551 1795552

Parameter	Units	40179786001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Toluene	ug/L	<0.49	20	20	21.6	21.8	108	109	76-134	1	20	
a,a,a-Trifluorotoluene (S)	%						103	104	80-120			

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

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 1687 O-W SPORTS
Pace Project No.: 40179786

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1687 O-W SPORTS
Pace Project No.: 40179786

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40179786001	**MW-1**	WI MOD GRO	306949		
40179786002	**MW-2**	WI MOD GRO	306949		
40179786003	**MW-3R**	WI MOD GRO	306949		
40179786004	**MW-4R**	WI MOD GRO	306949		
40179786005	**MW-5**	WI MOD GRO	306949		
40179786006	**MW-7**	WI MOD GRO	306949		
40179786007	**MW-8**	WI MOD GRO	306949		
40179786008	**MW-6**	WI MOD GRO	306949		

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

Pace Analytical®
www.pacelabs.com

CHAIN OF CUSTODY

40179786

*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 Engineering Inc
Branch/Location:	Wausau
Project Contact:	Dave Larsen
Phone:	715-675-2084
Project Number:	1687
Project Name:	O-W Sports
Project State:	WI
Sampled By (Print):	Ryan Rosch
Sampled By (Sign):	
PO #:	Regulatory Program: WDNR

Quote #:	
Mail To Contact:	Dave Larsen
Mail To Company:	REI Engineering Inc
Mail To Address:	DLarsen@reiengineering.com
Invoice To Contact:	SAA
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	715-675-9784

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
001	MW-1	11/14/18	10:45	GW	N	B	X
002	MW-2		11:15				X
003	MW-3R		11:35				X
004	MW-4R		11:50				X
005	MW-5		12:15				X
006	MW-7		12:40				X
007	MW-8		1:00				X
008	MW-6		1:15				X

CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #

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:
	11/15/18 7:30am		
Watco	11/16/18 0900		11/16/18 0900

PACE Project No.: 40179786

Receipt Temp = 2.0 °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 # 40179786

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							Plastic							Vials						Jars			General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN							
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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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	BP3C	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#: 40179786

Client Name: REI

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

Tracking #: 1898868

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 - NA **Type of Ice:** (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: /Corr: R01

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

Person examining contents: Date: 11/16/18 Initials: CMC

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:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
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: CMC **Date:** 11/16/18