



**CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING**

February 1, 2018

Wisconsin Department of Natural Resources

Attn: Ms. Gina Keenan
1300 W Clairemont Avenue
Eau Claire, WI 54701



Subject:

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

Dear Ms. Keenan:

Enclosed is the Soil Excavation Report for the above-mentioned site. REI has completed the approved soil excavation scope of services and removed the underground petroleum tank system.

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



RESPONSIVE. EFFICIENT. INNOVATIVE.

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

p:\1600-1699\1687-ow-sports-liquor\reports\soil excavation\1687seal2.docx



REI

**CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING**

**SOIL EXCAVATION REPORT
OW SPORT & LIQUOR
OWEN, WISCONSIN**

**WDNR BRRTS #03-4910-182097
PECFA #54460-0147-07**

REI PROJECT #71687



**COMPREHENSIVE
SERVICES WITH
PRACTICAL
SOLUTIONS**



SOIL EXCAVATION REPORT

**OW SPORT & 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**

FEBRUARY 2018

SOIL EXCAVATION REPORT

**OW SPORT & LIQUOR
107 CENTRAL AVENUE
OWEN, WI 54853**

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

REI #1687

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

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



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

Scott J. Blado
Environmental Scientist

2/1/18
Date

TABLE OF CONTENTS

- 1.0 Introduction
 - 1.1 Purpose
- 2.0 Site Background and History
- 3.0 Summary of Work
 - 3.1 Excavation and Removal of Contaminated Soils
 - 3.2 Confirmatory Soil Analytical Results
 - 3.3 Underground Storage Tank System Removal
- 4.0 Conclusion and Recommendations

LIST OF TABLES

- | | |
|---------|---|
| Table 1 | Summary of Soil Excavation Analytical Results |
|---------|---|

LIST OF FIGURES

- | | |
|----------|-----------------------------------|
| Figure 1 | Site Vicinity Map |
| Figure 2 | Site Map |
| Figure 3 | Area of Completed Soil Excavation |

LIST OF APPENDICES

- | | |
|------------|---|
| Appendix A | Monitoring Well Abandonment Forms |
| Appendix B | Landfill Disposal Documentation |
| Appendix C | Site Photographs |
| Appendix D | Soil Analytical Report |
| Appendix E | Tank System Site Assessment Documentation |

SOIL EXCAVATION REPORT

**OW SPORT & 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 Sport & 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 Sport & Liquor site is located in the NW $\frac{1}{4}$ of the SE $\frac{1}{4}$ 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 Excavation and Removal of Contaminated Soils

On November 20-22, 2017, REI was on site to oversee the excavation of petroleum impacted soils from the OW Sport & Liquor site. The soil excavation was intended to remove the majority of the petroleum impacted soil reported at the site, reduce the potential of vapor migration into the structures on the subject property and reduce contaminant loading from the soil to the groundwater through source removal. SGS Environmental Contracting, LLC of Merrill, WI was subcontracted to complete the

excavation and hauling. The existing retail petroleum system was also removed during the soil excavation activities. The WDNR project manager, Ms. Gina Keenan, was also onsite on Monday, November 20, 2017 to observe the soil excavation activities and the removal of the petroleum system. Documentation specific to the removal of the tank system will be detailed in later sections of this report.

The measured depth to groundwater in the monitoring wells at the site during the excavation activities was approximately five (5) feet bls. During the excavation, the hole remained dry to a depth of approximately twelve (12) feet. The excavation was completed to a depth of approximately twelve (12) feet Bgs.

Monitoring wells MW3 and MW4 were abandoned and removed during the soil excavation activities. The abandonment forms for monitoring wells MW3 and MW4 are included in Appendix A. To protect the integrity of the structure, the soil excavation did not extend to the frost wall of the building but terminated approximately three feet from the foundation. The area of the completed soil excavation is presented in Figure 3. A total of 1,131.35 tons of petroleum impacted soil was removed from the site and hauled to the Veolia Seven Mile Landfill in Eau Claire, WI for treatment. A copy of the landfill scale data documenting soil disposal is included in Appendix B.

Completion of the soil excavation was complicated by both unstable excavation sidewalls and the concrete foundation and floor of the former building. The current building was constructed over a portion of the former building. The concrete floor and walls from the former building foundation were slowly chipped away to expose the impacted soil beneath the concrete. The completed soil excavation was backfilled with granular material and compacted to a depth of approximately eight (8) inches bls. Gravel was used as final cover over the entire are of the soil excavation. Photos of the soil excavation are included in Appendix C.

3.2 Confirmatory Soil Analytical Results

During the excavation activities, soil samples were field screened with a RAE photo ionization detector (PID) with a 10.6 eV lamp for the presence of total organic vapors.

Twenty-two (22) soil samples were collected from the sidewalls and base of the excavation for field screening with the PID. A total of seventeen (17) select soil samples were collected and analyzed for Petroleum Volatile Organic Compounds (PVOC's) and naphthalene at Pace Laboratories, Green Bay, Wisconsin. Figure 3 documents the locations of the confirmatory soil samples taken during the excavation.

Photo-ionization detector (PID) results aided in determining the actual extent and depth of the completed soil excavation. Following the completion of the soil excavation, residual soil contamination concentrations remain in excess of the allowable NR 140 Groundwater Pathway Protection, with a dilution factor of 2, established for petroleum compounds. Table 1 summarizes the laboratory analytical results from the seventeen (17) soil samples collected for laboratory analysis during the soil excavation activities. The soil laboratory analytical reports from the soil excavation are presented in Appendix D.

3.3 Underground Storage Tank System Removal

On November 20, 2017, REI was on site to oversee removal of the existing retail petroleum system. SGS Environmental Contracting LLC, Merrill, WI performed the purge cut and clean responsibilities. The single 6,000-gallon unleaded gasoline UST and dispenser was removed without issue. A copy of the Tank System Site Assessment is included in Appendix E. The completion of the soil excavation removed all the soil around the former UST.

4.0 CONCLUSION AND RECOMMENDATIONS

Based on the results of the soil samples collected during the completion of the soil excavation activities, the majority of the residual petroleum related soil contamination has been removed.

REI will install replacement wells for MW3 and MW4 along with two (2) additional wells in the spring of 2018. REI will also conduct the approved groundwater sampling and reporting with recommendations for site closure by June 2020.

Table 1
Summary of Soil Excavation Analytical Results
OW Sports & Liquor
107 Central Avenue
Owen, WI

Sample Location		CSS#1	CSS#2	CSS#3	CSS#4	CSS#5	CSS#6	CSS#7	CSS#8
Date		11/20/2017	11/20/2017	11/21/2017	11/21/2017	11/21/2017	11/21/2017	11/21/2017	11/21/2017
Depth (ft)		12	12	12	3	5	5	3	3
Saturated/Unsaturated		Saturated	Saturated	Saturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated
PID Result (PID Units)		104.7	126.2	83	0.0	0.0	0.0	0.0	0.0
NR 140 Groundwater Pathway Protection (DF=2)									
VOC Parameters (µg/kg)	Non-Industrial Not-To-Exceed DC RCL								
	Benzene	1,600	5.1	1,790	1,250	< 29.4	< 23	< 23	< 23
	Ethylbenzene	8,020	1,570	1,760	144	< 29.4	< 25	< 25	< 25
	Toluene	818,000	1,107.20	3,380	< 23	< 29.4	< 23	< 23	< 23
	Xylenes (mixed isomers)	260,000	3,940	6,680	< 50	< 58.8	< 50	< 50	< 50
	Methyl tert-Butyl Ether (MTBE)	63,800	27	< 23	< 23	< 29.4	< 23	< 23	< 23
	1,2,4-Trimethylbenzenes	219,000		1,590	< 25	< 29.4	< 25	< 25	< 25
	1,3,5-Trimethylbenzenes	182,000		981	< 23	< 29.4	< 23	< 23	< 23
	Trimethylbenzenes (Total)		1,379.30	2,571	< 25	< 29.4	< 25	< 25	< 25
	Naphthalene	5,520	658.7	641	81.2	< 29.4	< 25	< 25	< 25

Sample Location		CSS#9	CSS#10	CSS#11	CSS#12	CSS#13
Date		11/21/2017	11/21/2017	11/21/2017	11/21/2017	11/21/2017
Depth (ft)		3	3	5	5	3
Saturated/Unsaturated		Unsaturated	Unsaturated	Unsaturated	Unsaturated	Unsaturated
PID Result (PID Units)		0.0	7.8	11.6	6.8	3.8
NR 140 Groundwater Pathway Protection (DF=2)						
VOC Parameters (µg/kg)	Non-Industrial Not-To-Exceed DC RCL					
	Benzene	1,600	5.1	< 26.2	< 25	< 25
	Ethylbenzene	8,020	1,570	< 26.2	< 25	< 25
	Toluene	818,000	1,107.20	< 26.2	< 25	< 25
	Xylenes (mixed isomers)	260,000	3,940	< 53.2	< 50	< 50
	Methyl tert-Butyl Ether (MTBE)	63,800	27	< 26.2	< 25	< 25
	1,2,4-Trimethylbenzenes	219,000		< 26.2	< 25	< 25
	1,3,5-Trimethylbenzenes	182,000		< 26.2	< 25	< 25
	Trimethylbenzenes (Total)		1,379.30	< 26.2	< 25	< 25
	Naphthalene	5,520	658.7	< 26.2	< 25	< 25

Notes:

NR120 Standards Obtained From WDNr Online Excel Database
RCL - NR 720 Soil Residual Contaminant Level

DC - Direct Contact

Background Threshold Value

Exceeds Non-Industrial Not-To-Exceed DC RCL

Exceeds NR 140 Groundwater Pathway Protection

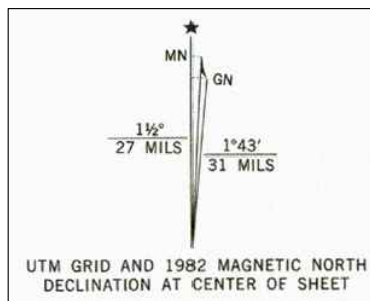
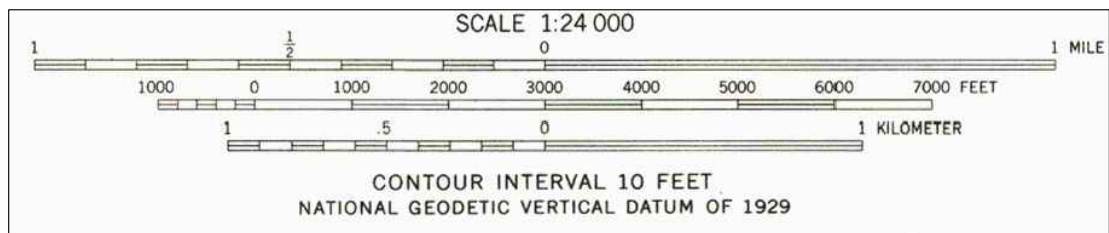
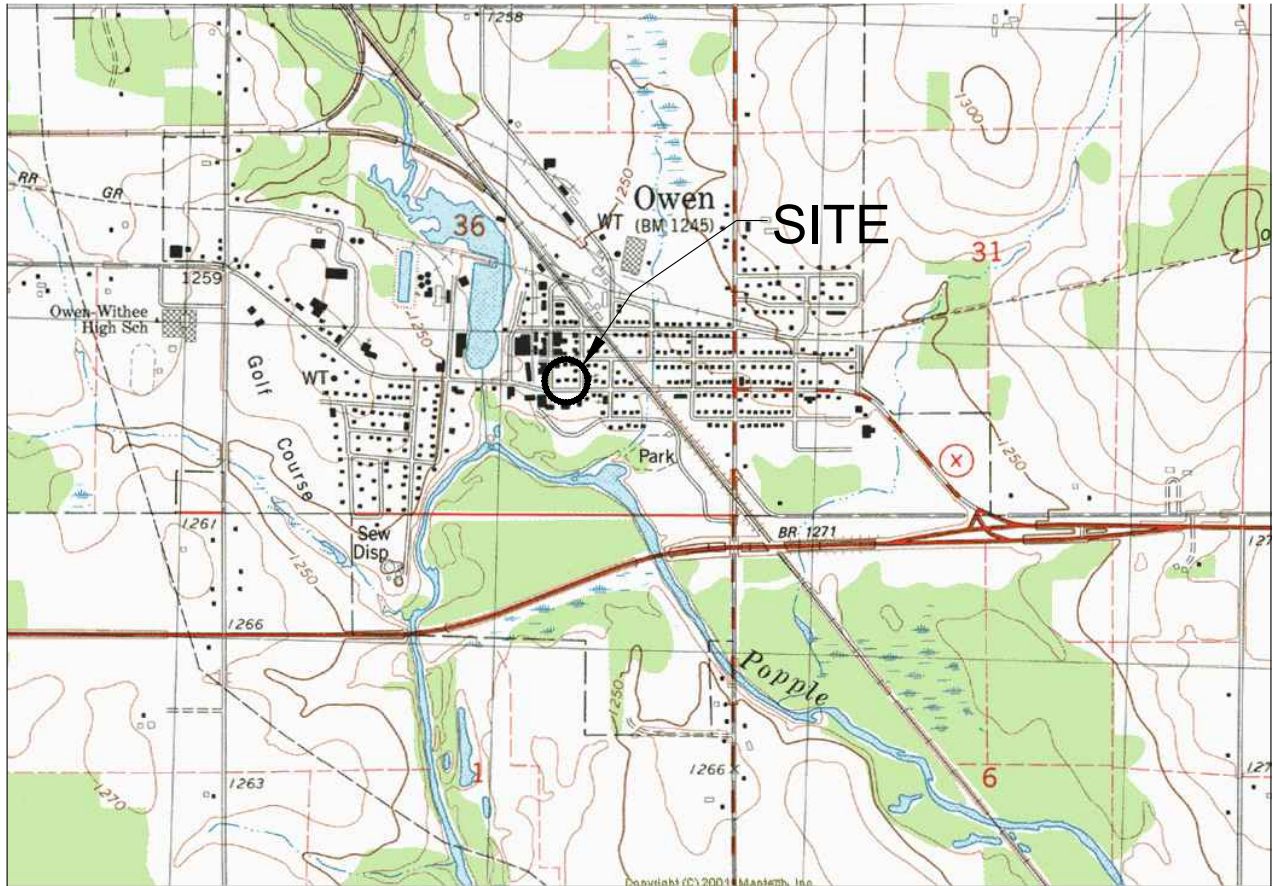
NS - No Standard

¹ - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

< - Concentration below listed laboratory detection limit

NA - Not Analyzed

Bold
<i>Italic</i>



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



REI Engineering, INC.

OW SPORT
107 CENTRAL AVE
OWEN, WISCONSIN

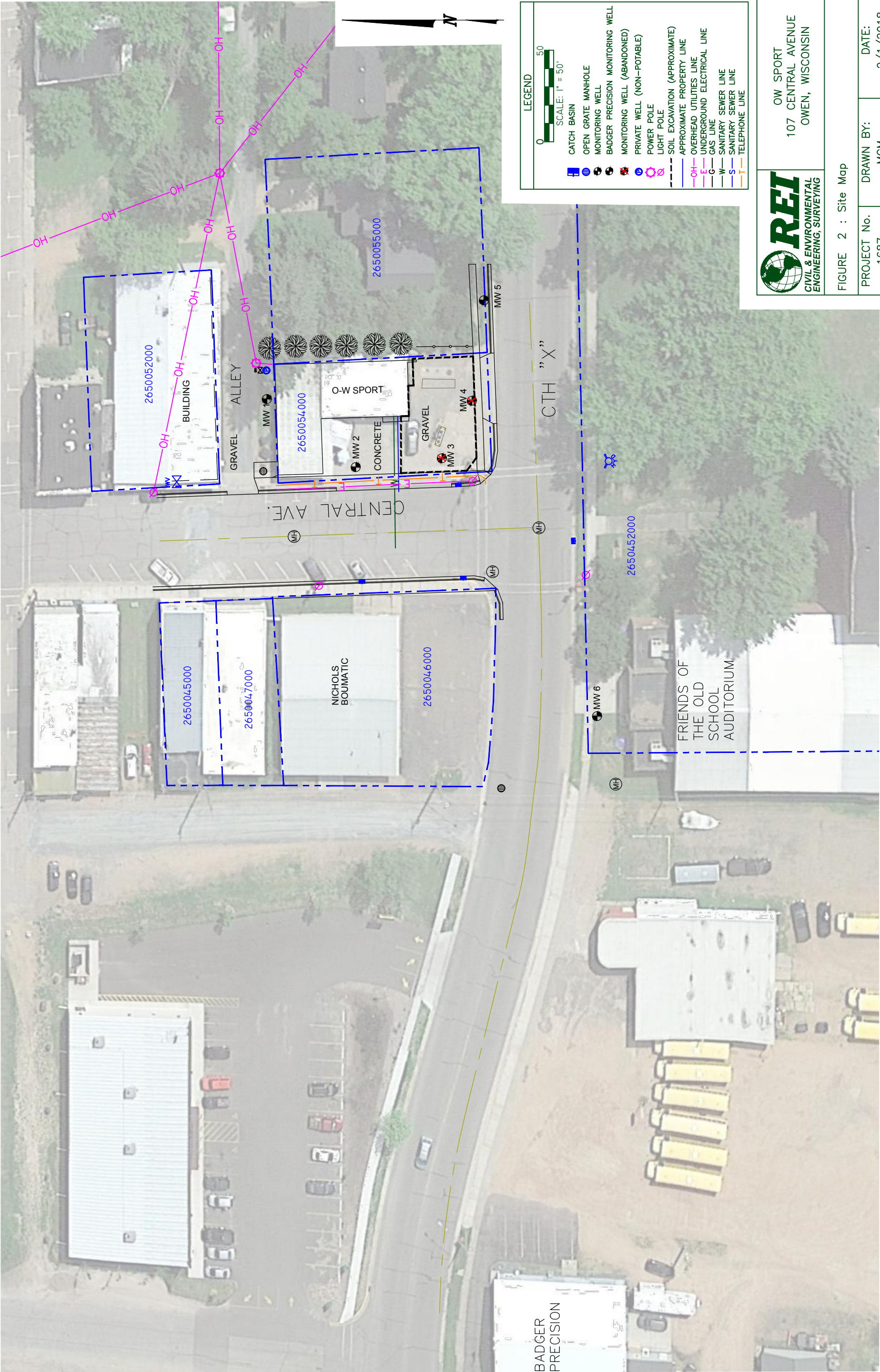
FIGURE 1 : SITE VICINITY MAP

PROJECT NO.

1687

DRAWN BY:
AJG

DATE:
5/3/2017



OW SPORT
107 CENTRAL AVENUE
OWEN, WISCONSIN

FIGURE 2 : Site Map

PROJECT No. 1687	DRAWN BY: MCM	DATE: 2/1/2018
---------------------	------------------	-------------------

APPENDIX A

MONITORING WELL ABANDONMENT FORMS



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

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

1/4 / 1/4: _____
or Gov't Lot #: _____
Section: _____ Township: _____ Range: ☐ E ☐ W

Well Street Address: 107 Central Avenue

Well City, Village or Town: Owen
Well ZIP Code: 54460

Subdivision Name: _____ Lot #: _____

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

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.): 15
Casing Diameter (in.): 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): _____

5. Material Used to Fill Well / Drillhole

3/8" Bentonite Holeplug

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: Owen
State: WI ZIP Code: 54460

City of Present Owner: Owen
State: WI ZIP Code: 54460

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

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

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

7. Supervision of Work

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

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

City: Wausau
State: WI ZIP Code: 54401

Signature of Person Doing Work: _____ Date Signed: 1-31-18

DNR Use Only

Date Received: _____ Noted By: _____

Comments: _____

Comments: _____

Comments: _____

Comments: _____

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 Clark	WI Unique Well # of Removed Well MW4	Hicap #
Latitude / Longitude (see instructions) ____ N ____ W	Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM	Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001
1/4 / 1/4 or Gov't Lot #	Section	Township N
Well Street Address 107 Central Avenue	Well ZIP Code 54460	Range <input type="checkbox"/> E <input type="checkbox"/> W
Well City, Village or Town Owen	Subdivision Name	Lot #
Reason for Removal from Service Soil Excavation	WI Unique Well # of Replacement Well	

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 Owen	State WI	ZIP Code 54460

3. Filled & Sealed Well / Drillhole / Borehole Information

<input checked="" type="checkbox"/> Monitoring Well	Original Construction Date (mm/dd/yyyy) 12/04/2000
<input type="checkbox"/> Water Well	If a Well Construction Report is available, please attach.
<input type="checkbox"/> Borehole / Drillhole	
Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (specify): _____	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock	
Total Well Depth From Ground Surface (ft.) 15	Casing Diameter (in.) 2
Lower Drillhole Diameter (in.)	Casing Depth (ft.) 5
Was well annular space grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
If yes, to what depth (feet)?	Depth to Water (feet)

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

Pump and piping removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Liner(s) removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Liner(s) perforated?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Screen removed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
Casing left in place?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
Was casing cut off below surface?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Did sealing material rise to surface?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Did material settle after 24 hours?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
If yes, was hole retopped?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
Required Method of Placing Sealing Material	
<input type="checkbox"/> Conductor Pipe-Gravity	<input type="checkbox"/> Conductor Pipe-Pumped
<input checked="" type="checkbox"/> Screened & Poured (Bentonite Chips)	<input type="checkbox"/> Other (Explain): _____
Sealing Materials	
<input type="checkbox"/> Neat Cement Grout	<input type="checkbox"/> Concrete
<input type="checkbox"/> Sand-Cement (Concrete) Grout	<input type="checkbox"/> Bentonite Chips
For Monitoring Wells and Monitoring Well Boreholes Only:	
<input checked="" type="checkbox"/> Bentonite Chips	<input type="checkbox"/> Bentonite - Cement Grout
<input type="checkbox"/> Granular Bentonite	<input type="checkbox"/> Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Surface	15	1/2 bag	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing REI Engineering, Inc	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) 11/20/2017	DNR Use Only	
Street or Route 4080 N. 20th Avenue	Telephone Number (715) 675-9784	Comments	Date Received	Noted By
City Wausau	State WI	ZIP Code 54401	Signature of Person Doing Work 	Date Signed 1-31-18

Facility/Project Name <i>O-W Sports and Liquor</i>	Local Grid Location of Well Feet S, Feet W	Well Name <i>MW-3</i>
Facility License, Permit or Monitoring Number	Grid Origin Location	Wis. Unique Well Number DNR Well Number
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	Section Location of Waste/Source	Date Well Installed <i>12/04/00</i>
Distance Well is From Waste/Source Boundary	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Well Installed By: (Person's Name and Firm) <i>Joe Black MES</i>
Is Well A Point of Enforcement Std. Application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

A. Protective pipe, top elevation 99.55 ft. MSL

B. Well casing, top elevation 99.14 ft. MSL

C. Land surface elevation 99.55 ft. MSL

D. Surface seal, bottom 98.55 ft. MSL or 1.0 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 98.55 ft. MSL or 1.0 ft.

F. Fine sand, top 96.05 ft. MSL or 3.5 ft.

G. Filter pack, top 95.55 ft. MSL or 4.0 ft.

H. Screen joint, top 94.55 ft. MSL or 5.0 ft.

I. Well bottom 84.55 ft. MSL or 15.0 ft.

J. Filter pack, bottom 84.55 ft. MSL or 15.0 ft.

K. Borehole, bottom 84.55 ft. MSL or 15.0 ft.

L. Borehole, diameter 8.25 in.

M. O.D. well casing 2.375 in.

N. I.D. well casing 2.067 in.

1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 9.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 04
Other ☐

d. Additional protection? ☒ Yes ☐ No
If yes, describe: Flushmount

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

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

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. 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. Badger BB #7
b. Volume added ft³

8. Filter pack material: Manufacturer, product name and mesh size
a. American Materials Flint #30
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 Northern Air

c. Slot size: 0.010 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

Remedial Engineering, Inc.
4080 N. 20th Ave.
Wausau, WI 54401

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 file 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.

Facility/Project Name O-W Sports and Liquor	Local Grid Location of Well Feet S, Feet W	Well Name MW-4
Facility License, Permit or Monitoring Number	Grid Origin Location	Wis. Unique Well Number DNR Well Number
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	Section Location of Waste/Source	Date Well Installed 12/04/00
Distance Well is From Waste/Source Boundary	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Well Installed By: (Person's Name and Firm) Joe Black MES
Is Well A Point of Enforcement Std. Application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

<p>A. Protective pipe, top elevation <u>99.42</u> ft. MSL</p> <p>B. Well casing, top elevation <u>98.99</u> ft. MSL</p> <p>C. Land surface elevation <u>99.42</u> ft. MSL</p> <p>D. Surface seal, bottom <u>98.42</u> ft. MSL or <u>1.0</u> ft.</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>12. USCS Classification of soil near screen:</p> <p>GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input checked="" type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/></p> <p>13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/></p> <p>15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99</p> <p>16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____</p> <p>17. Source of water (attach analysis): _____</p> </div> <p>E. Bentonite seal, top <u>98.42</u> ft. MSL or <u>1.0</u> ft.</p> <p>F. Fine sand, top <u>95.92</u> ft. MSL or <u>3.5</u> ft.</p> <p>G. Filter pack, top <u>95.42</u> ft. MSL or <u>4.0</u> ft.</p> <p>H. Screen joint, top <u>94.42</u> ft. MSL or <u>5.0</u> ft.</p> <p>I. Well bottom <u>84.42</u> ft. MSL or <u>15.0</u> ft.</p> <p>J. Filter pack, bottom <u>84.42</u> ft. MSL or <u>15.0</u> ft.</p> <p>K. Borehole, bottom <u>84.42</u> ft. MSL or <u>15.0</u> ft.</p> <p>L. Borehole, diameter <u>8.25</u> in.</p> <p>M. O.D. well casing <u>2.375</u> in.</p> <p>N. I.D. well casing <u>2.067</u> in.</p>	<p>1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>2. Protective cover pipe: a. Inside diameter: <u>9.0</u> in. b. Length: <u>1.0</u> ft. c. Material: Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/></p> <p>d. Additional protection? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe: Flushmount</p> <p>3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/></p> <p>4. Material between well casing and protective pipe: Bentonite <input checked="" type="checkbox"/> 30 Annular space seal <input type="checkbox"/> Other <input type="checkbox"/></p> <p>5. Annular space seal: a. Granular Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft³ volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08</p> <p>6. Bentonite seal: a. Bentonite Granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input checked="" type="checkbox"/> 32 c. _____ Other <input type="checkbox"/></p> <p>7. Fine sand material: Manufacturer, product name and mesh size a. <u>Badger BB #7</u> b. Volume added _____ ft³</p> <p>8. Filter pack material: Manufacturer, product name and mesh size a. <u>American Materials Flint #30</u> b. Volume added _____ ft³</p> <p>9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/></p> <p>10. Screen material: <u>PVC</u> a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/> b. Manufacturer <u>Northern Air</u> c. Slot size: <u>0.010</u> in. d. Slotted length: <u>10</u> ft.</p> <p>11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/></p>
--	--

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

Signature

Firm

Remedial Engineering, Inc.
4080 N. 20th Ave.
Wausau, WI 54401

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 file 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.

APPENDIX B

LANDFILL DISPOSAL DOCUMENTATION



All Ticket Types
History Tickets Only

Detail Customer Activity Report

November 20, 2017 to November 21, 2017

Specific Customer(s) : 1055

All Facilities

001055- SGS ENVIROMENTAL

Ticket Date	Facility & Ticket Number	Contract	Truck #	Container	Material	M
11/20/2017 I	G3 740747	OWSPORTS/17121BIO@	HAAS274		33B@ EX C-Soil/Pet-Unld (\$
11/20/2017 I	G3 740747	OWSPORTS/17121BIO@	HAAS274		Profile Fee EX	\$
11/20/2017 I	G3 740752	OWSPORTS/17121BIO@	HAAS286		33B@ EX C-Soil/Pet-Unld (\$
11/20/2017 I	G3 740754	OWSPORTS/17121BIO@	DKS40		33B@ EX C-Soil/Pet-Unld (\$
11/20/2017 I	G3 740765	OWSPORTS/17121BIO@	SGS207		33B@ EX C-Soil/Pet-Unld (\$
11/20/2017 I	G3 740782	OWSPORTS/17121BIO@	HAAS274		33B@ EX C-Soil/Pet-Unld (\$
11/20/2017 I	G3 740784	OWSPORTS/17121BIO@	HAAS286		33B@ EX C-Soil/Pet-Unld (\$
11/20/2017 I	G3 740789	OWSPORTS/17121BIO@	DKS40		33B@ EX C-Soil/Pet-Unld (\$
11/20/2017 I	G3 740791	OWSPORTS/17121BIO@	SGS216		33B@ EX C-Soil/Pet-Unld (\$
11/20/2017 I	G3 740829	OWSPORTS/17121BIO@	HAAS274		33B@ EX C-Soil/Pet-Unld (\$
11/20/2017 I	G3 740833	OWSPORTS/17121BIO@	HAAS286		33B@ EX C-Soil/Pet-Unld (\$
11/20/2017 I	G3 740835	OWSPORTS/17121BIO@	DKS40		33B@ EX C-Soil/Pet-Unld (\$
11/20/2017 I	G3 740837	OWSPORTS/17121BIO@	SGS216		33B@ EX C-Soil/Pet-Unld (\$
11/20/2017 I	G3 740840	OWSPORTS/17121BIO@	SGS207		33B@ EX C-Soil/Pet-Unld (\$
11/20/2017 I	G3 740873	OWSPORTS/17121BIO@	DKS40		33B@ EX C-Soil/Pet-Unld (\$
11/20/2017 I	G3 740874	OWSPORTS/17121BIO@	SGS216		33B@ EX C-Soil/Pet-Unld (\$
11/20/2017 I	G3 740875	OWSPORTS/17121BIO@	HAAS274		33B@ EX C-Soil/Pet-Unld (\$
11/20/2017 I	G3 740877	OWSPORTS/17121BIO@	HAAS286		33B@ EX C-Soil/Pet-Unld (\$

Tickets Reported: 17 Items Reported: 18

Material Summary	Weight			Volume			Count	
	Inbound	Outbound		Inbound	Outbound		Inbound	Outbound
ES - 33B@ EX C-Soil/Pet-Unld Gs-ADC	388.53	0.00	TN	0.00	0.00	YD	0.00	0.00
PS - Profile Fee EX	0.00	0.00	TN	0.00	0.00	YD	1.00	0.00

Tickets Reported: 17 Items Reported: 18

Material Summary	Weight			Volume			Count	
	Inbound	Outbound		Inbound	Outbound		Inbound	Outbound
33B@ EX C-Soil/Pet-Unld Gs-ADC	388.53	0.00	TN	0.00	0.00	YD	0.00	0.00
Profile Fee EX	0.00	0.00	TN	0.00	0.00	YD	1.00	0.00

RLBECKER 11/21/2017 9:22 AM

G3 SEVEN MILE CREEK LANDFILL LLC

Detail Customer Activity Report

November 21, 2017 to November 21, 2017

Specific Customer(s) : 1055

All Facilities

All Ticket Types
History Tickets Only

001055- SGS ENVIROMENTAL

Ticket Date	Facility & Ticket Number	Contract	Truck #	Container	Material
11/21/2017 I	G3 740899	OWSPORTS/17121BIO@	SGS207		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740900	OWSPORTS/17121BIO@	HAAS201		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740901	OWSPORTS/17121BIO@	HAAS290		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740904	OWSPORTS/17121BIO@	HAAS248		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740909	OWSPORTS/17121BIO@	HAAS183		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740910	OWSPORTS/17121BIO@	HAAS182		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740917	OWSPORTS/17121BIO@	DKS40		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740923	OWSPORTS/17121BIO@	HAAS272		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740927	OWSPORTS/17121BIO@	HAAS245		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740944	OWSPORTS/17121BIO@	HAAS201		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740947	OWSPORTS/17121BIO@	HAAS290		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740949	OWSPORTS/17121BIO@	SGS207		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740951	OWSPORTS/17121BIO@	HAAS183		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740952	OWSPORTS/17121BIO@	HAAS182		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740959	OWSPORTS/17121BIO@	HAAS248		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740960	OWSPORTS/17121BIO@	DKS40		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740962	OWSPORTS/17121BIO@	HAAS272		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740965	OWSPORTS/17121BIO@	HAAS245		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740983	OWSPORTS/17121BIO@	HAAS201		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740988	OWSPORTS/17121BIO@	HAAS290		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740993	OWSPORTS/17121BIO@	SGS207		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740994	OWSPORTS/17121BIO@	HAAS183		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740996	OWSPORTS/17121BIO@	HAAS182		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 740999	OWSPORTS/17121BIO@	HAAS248		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 741004	OWSPORTS/17121BIO@	DKS40		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 741006	OWSPORTS/17121BIO@	HAAS272		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 741009	OWSPORTS/17121BIO@	HAAS245		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 741029	OWSPORTS/17121BIO@	HAAS201		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 741032	OWSPORTS/17121BIO@	AMERICAN10		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 741046	OWSPORTS/17121BIO@	HAAS290		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 741048	OWSPORTS/17121BIO@	HAAS183		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 741049	OWSPORTS/17121BIO@	HAAS182		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 741050	OWSPORTS/17121BIO@	HAAS248		33B@ EX C-Soil/Pet-Unld (
11/21/2017 I	G3 741056	OWSPORTS/17121BIO@	DKS40		33B@ EX C-Soil/Pet-Unld (

Tickets Reported: 34 Items Reported: 34

RLBECKER 11/22/2017 8:39 AM

G3 SEVEN MILE CREEK LANDFILL LLC

Detail Customer Activity Report

November 21, 2017 to November 21, 2017

Specific Customer(s) : 1055

All Facilities

All Ticket Types
History Tickets Only

Material Summary	Weight			Volume			Count		Billing Quantity
	Inbound	Outbound		Inbound	Outbound		Inbound	Outbound	
ES - 33B@ EX C-Soil/Pet-Unld Gs-ADC	742.82	0.00	TN	0.00	0.00	YD	0.00	0.00	742.82 TI

Tickets Reported: 34 Items Reported: 34

Cash
Invoice
Report

Material Summary	Weight			Volume			Count		Billing Quantity
	Inbound	Outbound		Inbound	Outbound		Inbound	Outbound	
33B@ EX C-Soil/Pet-Unld Gs-ADC	742.82	0.00	TN	0.00	0.00	YD	0.00	0.00	742.82 TI

RLBECKER 11/22/2017 8:39 AM

G3 SEVEN MILE CREEK LANDFILL LLC

APPENDIX C

SITE PHOTOGRAPHS





Foundation (wall and floor) of
former building - 12" thick



Removal of 6,000 gallon UST





APPENDIX D

SOIL ANALYTICAL REPORT



December 11, 2017

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

RE: Project: 1687 OW SPOUT
Pace Project No.: 40161505

Dear DAVID LARSEN:

Enclosed are the analytical results for sample(s) received by the laboratory on November 29, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: 1687 OW SPOUT

Pace Project No.: 40161505

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: 1687 OW SPOUT

Pace Project No.: 40161505

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40161505001	CSS#1 @ 12'	Solid	11/20/17 12:40	11/29/17 08:50
40161505002	CSS#2 @ 12'	Solid	11/21/17 10:20	11/29/17 08:50
40161505003	CSS#3 @ 12'	Solid	11/21/17 10:30	11/29/17 08:50
40161505004	CSS#4 @ 3'	Solid	11/21/17 13:00	11/29/17 08:50
40161505005	CSS#5 @ 5'	Solid	11/21/17 13:07	11/29/17 08:50
40161505006	CSS#6 @ 5'	Solid	11/21/17 13:10	11/29/17 08:50
40161505007	CSS#7 @ 3'	Solid	11/21/17 13:13	11/29/17 08:50
40161505008	CSS#7 @ 5'	Solid	11/21/17 13:15	11/29/17 08:50
40161505009	CSS#8 @ 3'	Solid	11/21/17 13:18	11/29/17 08:50
40161505010	CSS#9 @ 3'	Solid	11/21/17 13:30	11/29/17 08:50
40161505011	CSS#9 @ 5'	Solid	11/21/17 13:33	11/29/17 08:50
40161505012	CSS#10 @ 3'	Solid	11/21/17 13:40	11/29/17 08:50
40161505013	CSS#10 @ 5'	Solid	11/21/17 13:42	11/29/17 08:50
40161505014	CSS#11 @ 3'	Solid	11/21/17 13:45	11/29/17 08:50
40161505015	CSS#11 @ 5'	Solid	11/21/17 13:48	11/29/17 08:50
40161505016	CSS#12 @ 5'	Solid	11/21/17 13:52	11/29/17 08:50
40161505017	CSS#13 @ 3'	Solid	11/21/17 13:55	11/29/17 08:50

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: 1687 OW SPOUT

Pace Project No.: 40161505

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40161505001	CSS#1 @ 12'	WI MOD GRO	ALD	10
		ASTM D2974-87	KTS	1
40161505002	CSS#2 @ 12'	WI MOD GRO	ALD	10
		ASTM D2974-87	KTS	1
40161505003	CSS#3 @ 12'	WI MOD GRO	ALD	10
		ASTM D2974-87	KTS	1
40161505004	CSS#4 @ 3'	WI MOD GRO	ALD	10
		ASTM D2974-87	KTS	1
40161505005	CSS#5 @ 5'	WI MOD GRO	ALD	10
		ASTM D2974-87	KTS	1
40161505006	CSS#6 @ 5'	WI MOD GRO	ALD	10
		ASTM D2974-87	KTS	1
40161505007	CSS#7 @ 3'	WI MOD GRO	ALD	10
		ASTM D2974-87	KTS	1
40161505008	CSS#7 @ 5'	WI MOD GRO	ALD	10
		ASTM D2974-87	KTS	1
40161505009	CSS#8 @ 3'	WI MOD GRO	ALD	10
		ASTM D2974-87	KTS	1
40161505010	CSS#9 @ 3'	WI MOD GRO	ALD	10
		ASTM D2974-87	KTS	1
40161505011	CSS#9 @ 5'	WI MOD GRO	ALD	10
		ASTM D2974-87	KTS	1
40161505012	CSS#10 @ 3'	WI MOD GRO	ALD	10
		ASTM D2974-87	KTS	1
40161505013	CSS#10 @ 5'	WI MOD GRO	ALD	10
		ASTM D2974-87	KTS	1
40161505014	CSS#11 @ 3'	WI MOD GRO	ALD	10
		ASTM D2974-87	KTS	1
40161505015	CSS#11 @ 5'	WI MOD GRO	ALD	10
		ASTM D2974-87	KTS	1
40161505016	CSS#12 @ 5'	WI MOD GRO	ALD	10
		ASTM D2974-87	KTS	1
40161505017	CSS#13 @ 3'	WI MOD GRO	ALD	10
		ASTM D2974-87	KTS	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1687 OW SPOUT
Pace Project No.: 40161505

Sample: CSS#1 @ 12' **Lab ID: 40161505001** Collected: 11/20/17 12:40 Received: 11/29/17 08:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 16:42	71-43-2	W
Ethylbenzene	2630	ug/kg	57.0	28.5	1	11/30/17 07:30	11/30/17 16:42	100-41-4	
Methyl-tert-butyl ether	53.7J	ug/kg	57.0	28.5	1	11/30/17 07:30	11/30/17 16:42	1634-04-4	
Naphthalene	2910	ug/kg	57.0	28.5	1	11/30/17 07:30	11/30/17 16:42	91-20-3	
Toluene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 16:42	108-88-3	W
1,2,4-Trimethylbenzene	8890	ug/kg	57.0	28.5	1	11/30/17 07:30	11/30/17 16:42	95-63-6	
1,3,5-Trimethylbenzene	3350	ug/kg	57.0	28.5	1	11/30/17 07:30	11/30/17 16:42	108-67-8	
m&p-Xylene	7820	ug/kg	114	57.0	1	11/30/17 07:30	11/30/17 16:42	179601-23-1	
o-Xylene	524	ug/kg	57.0	28.5	1	11/30/17 07:30	11/30/17 16:42	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	90	%	80-120		1	11/30/17 07:30	11/30/17 16:42	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	12.3	%	0.10	0.10	1		12/08/17 11:08		

Sample: CSS#2 @ 12' **Lab ID: 40161505002** Collected: 11/21/17 10:20 Received: 11/29/17 08:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	1790	ug/kg	60.0	30.0	1	11/30/17 07:30	11/30/17 16:16	71-43-2	
Ethylbenzene	1760	ug/kg	60.0	30.0	1	11/30/17 07:30	11/30/17 16:16	100-41-4	
Methyl-tert-butyl ether	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 16:16	1634-04-4	W
Naphthalene	641	ug/kg	60.0	30.0	1	11/30/17 07:30	11/30/17 16:16	91-20-3	
Toluene	3380	ug/kg	60.0	30.0	1	11/30/17 07:30	11/30/17 16:16	108-88-3	
1,2,4-Trimethylbenzene	1590	ug/kg	60.0	30.0	1	11/30/17 07:30	11/30/17 16:16	95-63-6	
1,3,5-Trimethylbenzene	981	ug/kg	60.0	30.0	1	11/30/17 07:30	11/30/17 16:16	108-67-8	
m&p-Xylene	5010	ug/kg	120	60.0	1	11/30/17 07:30	11/30/17 16:16	179601-23-1	
o-Xylene	1670	ug/kg	60.0	30.0	1	11/30/17 07:30	11/30/17 16:16	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1	11/30/17 07:30	11/30/17 16:16	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	16.7	%	0.10	0.10	1		12/08/17 11:08		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1687 OW SPOUT
Pace Project No.: 40161505

Sample: CSS#3 @ 12' **Lab ID: 40161505003** Collected: 11/21/17 10:30 Received: 11/29/17 08:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	1250	ug/kg	61.1	30.5	1	11/30/17 07:30	11/30/17 19:43	71-43-2	
Ethylbenzene	144	ug/kg	61.1	30.5	1	11/30/17 07:30	11/30/17 19:43	100-41-4	
Methyl-tert-butyl ether	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 19:43	1634-04-4	W
Naphthalene	81.2	ug/kg	61.1	30.5	1	11/30/17 07:30	11/30/17 19:43	91-20-3	
Toluene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 19:43	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 19:43	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 19:43	108-67-8	W
m&p-Xylene	<50.0	ug/kg	100	50.0	1	11/30/17 07:30	11/30/17 19:43	179601-23-1	W
o-Xylene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 19:43	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	97	%	80-120		1	11/30/17 07:30	11/30/17 19:43	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	18.1	%	0.10	0.10	1		12/08/17 11:08		

Sample: CSS#4 @ 3' **Lab ID: 40161505004** Collected: 11/21/17 13:00 Received: 11/29/17 08:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 20:09	71-43-2	W
Ethylbenzene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 20:09	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 20:09	1634-04-4	W
Naphthalene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 20:09	91-20-3	W
Toluene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 20:09	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 20:09	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 20:09	108-67-8	W
m&p-Xylene	<50.0	ug/kg	100	50.0	1	11/30/17 07:30	11/30/17 20:09	179601-23-1	W
o-Xylene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 20:09	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	96	%	80-120		1	11/30/17 07:30	11/30/17 20:09	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	6.6	%	0.10	0.10	1		12/08/17 11:08		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1687 OW SPOUT
Pace Project No.: 40161505

Sample: CSS#5 @ 5' **Lab ID: 40161505005** Collected: 11/21/17 13:07 Received: 11/29/17 08:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<29.4	ug/kg	58.8	29.4	1	11/30/17 07:30	11/30/17 20:34	71-43-2	W
Ethylbenzene	<29.4	ug/kg	58.8	29.4	1	11/30/17 07:30	11/30/17 20:34	100-41-4	W
Methyl-tert-butyl ether	<29.4	ug/kg	58.8	29.4	1	11/30/17 07:30	11/30/17 20:34	1634-04-4	W
Naphthalene	<29.4	ug/kg	58.8	29.4	1	11/30/17 07:30	11/30/17 20:34	91-20-3	W
Toluene	<29.4	ug/kg	58.8	29.4	1	11/30/17 07:30	11/30/17 20:34	108-88-3	W
1,2,4-Trimethylbenzene	<29.4	ug/kg	58.8	29.4	1	11/30/17 07:30	11/30/17 20:34	95-63-6	W
1,3,5-Trimethylbenzene	<29.4	ug/kg	58.8	29.4	1	11/30/17 07:30	11/30/17 20:34	108-67-8	W
m&p-Xylene	<58.8	ug/kg	118	58.8	1	11/30/17 07:30	11/30/17 20:34	179601-23-1	W
o-Xylene	<29.4	ug/kg	58.8	29.4	1	11/30/17 07:30	11/30/17 20:34	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	97	%	80-120		1	11/30/17 07:30	11/30/17 20:34	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	16.2	%	0.10	0.10	1		12/08/17 11:08		

Sample: CSS#6 @ 5' **Lab ID: 40161505006** Collected: 11/21/17 13:10 Received: 11/29/17 08:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 21:00	71-43-2	W
Ethylbenzene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 21:00	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 21:00	1634-04-4	W
Naphthalene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 21:00	91-20-3	W
Toluene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 21:00	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 21:00	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 21:00	108-67-8	W
m&p-Xylene	<50.0	ug/kg	100	50.0	1	11/30/17 07:30	11/30/17 21:00	179601-23-1	W
o-Xylene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 21:00	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	95	%	80-120		1	11/30/17 07:30	11/30/17 21:00	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	15.0	%	0.10	0.10	1		12/08/17 11:08		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1687 OW SPOUT
Pace Project No.: 40161505

Sample: CSS#7 @ 3' Lab ID: 40161505007 Collected: 11/21/17 13:13 Received: 11/29/17 08:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 21:26	71-43-2	W
Ethylbenzene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 21:26	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 21:26	1634-04-4	W
Naphthalene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 21:26	91-20-3	W
Toluene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 21:26	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 21:26	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 21:26	108-67-8	W
m&p-Xylene	<50.0	ug/kg	100	50.0	1	11/30/17 07:30	11/30/17 21:26	179601-23-1	W
o-Xylene	<25.0	ug/kg	50.0	25.0	1	11/30/17 07:30	11/30/17 21:26	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	97	%	80-120		1	11/30/17 07:30	11/30/17 21:26	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	15.5	%	0.10	0.10	1		12/08/17 11:08		

Sample: CSS#7 @ 5' Lab ID: 40161505008 Collected: 11/21/17 13:15 Received: 11/29/17 08:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 10:56	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 10:56	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 10:56	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 10:56	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 10:56	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 10:56	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 10:56	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/30/17 07:30	11/30/17 10:56	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 10:56	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	11/30/17 07:30	11/30/17 10:56	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	7.3	%	0.10	0.10	1		12/08/17 11:08		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1687 OW SPOUT

Pace Project No.: 40161505

Sample: CSS#8 @ 3' **Lab ID: 40161505009** Collected: 11/21/17 13:18 Received: 11/29/17 08:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 11:21	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 11:21	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 11:21	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 11:21	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 11:21	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 11:21	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 11:21	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/30/17 07:30	11/30/17 11:21	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 11:21	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	11/30/17 07:30	11/30/17 11:21	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	8.5	%	0.10	0.10	1		12/08/17 11:08		

Sample: CSS#9 @ 3' **Lab ID: 40161505010** Collected: 11/21/17 13:30 Received: 11/29/17 08:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 11:47	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 11:47	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 11:47	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 11:47	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 11:47	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 11:47	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 11:47	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/30/17 07:30	11/30/17 11:47	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 11:47	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	11/30/17 07:30	11/30/17 11:47	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	17.0	%	0.10	0.10	1		12/08/17 11:08		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1687 OW SPOUT
Pace Project No.: 40161505

Sample: CSS#9 @ 5' Lab ID: 40161505011 Collected: 11/21/17 13:33 Received: 11/29/17 08:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<26.6	ug/kg	63.8	26.6	1	11/30/17 07:30	11/30/17 12:13	71-43-2	W
Ethylbenzene	<26.6	ug/kg	63.8	26.6	1	11/30/17 07:30	11/30/17 12:13	100-41-4	W
Methyl-tert-butyl ether	<26.6	ug/kg	63.8	26.6	1	11/30/17 07:30	11/30/17 12:13	1634-04-4	W
Naphthalene	<26.6	ug/kg	63.8	26.6	1	11/30/17 07:30	11/30/17 12:13	91-20-3	W
Toluene	<26.6	ug/kg	63.8	26.6	1	11/30/17 07:30	11/30/17 12:13	108-88-3	W
1,2,4-Trimethylbenzene	<26.6	ug/kg	63.8	26.6	1	11/30/17 07:30	11/30/17 12:13	95-63-6	W
1,3,5-Trimethylbenzene	<26.6	ug/kg	63.8	26.6	1	11/30/17 07:30	11/30/17 12:13	108-67-8	W
m&p-Xylene	<53.2	ug/kg	128	53.2	1	11/30/17 07:30	11/30/17 12:13	179601-23-1	W
o-Xylene	<26.6	ug/kg	63.8	26.6	1	11/30/17 07:30	11/30/17 12:13	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1	11/30/17 07:30	11/30/17 12:13	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	5.3	%	0.10	0.10	1		12/08/17 11:08		

Sample: CSS#10 @ 3' Lab ID: 40161505012 Collected: 11/21/17 13:40 Received: 11/29/17 08:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 12:38	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 12:38	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 12:38	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 12:38	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 12:38	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 12:38	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 12:38	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/30/17 07:30	11/30/17 12:38	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 12:38	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	11/30/17 07:30	11/30/17 12:38	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	11.8	%	0.10	0.10	1		12/08/17 11:08		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1687 OW SPOUT
Pace Project No.: 40161505

Sample: CSS#10 @ 5' **Lab ID: 40161505013** Collected: 11/21/17 13:42 Received: 11/29/17 08:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<26.0	ug/kg	62.5	26.0	1	11/30/17 07:30	11/30/17 13:04	71-43-2	W
Ethylbenzene	<26.0	ug/kg	62.5	26.0	1	11/30/17 07:30	11/30/17 13:04	100-41-4	W
Methyl-tert-butyl ether	<26.0	ug/kg	62.5	26.0	1	11/30/17 07:30	11/30/17 13:04	1634-04-4	W
Naphthalene	<26.0	ug/kg	62.5	26.0	1	11/30/17 07:30	11/30/17 13:04	91-20-3	W
Toluene	<26.0	ug/kg	62.5	26.0	1	11/30/17 07:30	11/30/17 13:04	108-88-3	W
1,2,4-Trimethylbenzene	<26.0	ug/kg	62.5	26.0	1	11/30/17 07:30	11/30/17 13:04	95-63-6	W
1,3,5-Trimethylbenzene	<26.0	ug/kg	62.5	26.0	1	11/30/17 07:30	11/30/17 13:04	108-67-8	W
m&p-Xylene	<52.1	ug/kg	125	52.1	1	11/30/17 07:30	11/30/17 13:04	179601-23-1	W
o-Xylene	<26.0	ug/kg	62.5	26.0	1	11/30/17 07:30	11/30/17 13:04	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	11/30/17 07:30	11/30/17 13:04	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	10.6	%	0.10	0.10	1		12/08/17 11:08		

Sample: CSS#11 @ 3' **Lab ID: 40161505014** Collected: 11/21/17 13:45 Received: 11/29/17 08:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 13:29	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 13:29	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 13:29	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 13:29	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 13:29	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 13:29	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 13:29	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/30/17 07:30	11/30/17 13:29	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 13:29	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	102	%	80-120		1	11/30/17 07:30	11/30/17 13:29	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	9.7	%	0.10	0.10	1		12/08/17 11:08		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1687 OW SPOUT
Pace Project No.: 40161505

Sample: CSS#11 @ 5' **Lab ID: 40161505015** Collected: 11/21/17 13:48 Received: 11/29/17 08:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 13:55	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 13:55	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 13:55	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 13:55	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 13:55	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 13:55	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 13:55	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/30/17 07:30	11/30/17 13:55	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 13:55	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	11/30/17 07:30	11/30/17 13:55	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	11.1	%	0.10	0.10	1		12/08/17 11:08		

Sample: CSS#12 @ 5' **Lab ID: 40161505016** Collected: 11/21/17 13:52 Received: 11/29/17 08:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 14:21	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 14:21	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 14:21	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 14:21	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 14:21	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 14:21	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 14:21	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/30/17 07:30	11/30/17 14:21	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 14:21	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1	11/30/17 07:30	11/30/17 14:21	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	17.7	%	0.10	0.10	1		12/08/17 11:08		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1687 OW SPOUT

Pace Project No.: 40161505

Sample: CSS#13 @ 3' **Lab ID: 40161505017** Collected: 11/21/17 13:55 Received: 11/29/17 08:50 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext.									
Benzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 14:46	71-43-2	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 14:46	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 14:46	1634-04-4	W
Naphthalene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 14:46	91-20-3	W
Toluene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 14:46	108-88-3	W
1,2,4-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 14:46	95-63-6	W
1,3,5-Trimethylbenzene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 14:46	108-67-8	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	11/30/17 07:30	11/30/17 14:46	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	11/30/17 07:30	11/30/17 14:46	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1	11/30/17 07:30	11/30/17 14:46	98-08-8	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	11.8	%	0.10	0.10	1		12/08/17 11:08		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1687 OW SPOUT

Pace Project No.: 40161505

QC Batch: 275669 Analysis Method: WI MOD GRO
QC Batch Method: TPH GRO/PVOC WI ext. Analysis Description: WIGRO Solid GCV
Associated Lab Samples: 40161505001, 40161505002, 40161505003, 40161505004, 40161505005, 40161505006, 40161505007

METHOD BLANK: 1621307 Matrix: Solid
Associated Lab Samples: 40161505001, 40161505002, 40161505003, 40161505004, 40161505005, 40161505006, 40161505007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<25.0	50.0	11/30/17 09:16	
1,3,5-Trimethylbenzene	ug/kg	<25.0	50.0	11/30/17 09:16	
Benzene	ug/kg	<25.0	50.0	11/30/17 09:16	
Ethylbenzene	ug/kg	<25.0	50.0	11/30/17 09:16	
m&p-Xylene	ug/kg	<50.0	100	11/30/17 09:16	
Methyl-tert-butyl ether	ug/kg	<25.0	50.0	11/30/17 09:16	
Naphthalene	ug/kg	<25.0	50.0	11/30/17 09:16	
o-Xylene	ug/kg	<25.0	50.0	11/30/17 09:16	
Toluene	ug/kg	<25.0	50.0	11/30/17 09:16	
a,a,a-Trifluorotoluene (S)	%	96	80-120	11/30/17 09:16	

LABORATORY CONTROL SAMPLE & LCSD: 1621308

1621309

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	1040	1060	104	106	80-120	2	20	
1,3,5-Trimethylbenzene	ug/kg	1000	1000	1030	100	103	80-120	2	20	
Benzene	ug/kg	1000	1010	1020	101	102	80-120	1	20	
Ethylbenzene	ug/kg	1000	989	1010	99	101	80-120	3	20	
m&p-Xylene	ug/kg	2000	1980	2020	99	101	80-120	2	20	
Methyl-tert-butyl ether	ug/kg	1000	974	993	97	99	80-120	2	20	
Naphthalene	ug/kg	1000	957	1000	96	100	80-120	4	20	
o-Xylene	ug/kg	1000	993	1010	99	101	80-120	2	20	
Toluene	ug/kg	1000	976	992	98	99	80-120	2	20	
a,a,a-Trifluorotoluene (S)	%				96	96	80-120			

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1687 OW SPOUT

Pace Project No.: 40161505

QC Batch:	275670	Analysis Method:	WI MOD GRO
QC Batch Method:	TPH GRO/PVOC WI ext.	Analysis Description:	WIGRO Solid GCV
Associated Lab Samples:	40161505008, 40161505009, 40161505010, 40161505011, 40161505012, 40161505013, 40161505014, 40161505015, 40161505016, 40161505017		

METHOD BLANK: 1621310 Matrix: Solid
Associated Lab Samples: 40161505008, 40161505009, 40161505010, 40161505011, 40161505012, 40161505013, 40161505014, 40161505015, 40161505016, 40161505017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<25.0	50.0	11/30/17 09:13	
1,3,5-Trimethylbenzene	ug/kg	<25.0	50.0	11/30/17 09:13	
Benzene	ug/kg	<25.0	50.0	11/30/17 09:13	
Ethylbenzene	ug/kg	<25.0	50.0	11/30/17 09:13	
m&p-Xylene	ug/kg	<50.0	100	11/30/17 09:13	
Methyl-tert-butyl ether	ug/kg	<25.0	50.0	11/30/17 09:13	
Naphthalene	ug/kg	<25.0	50.0	11/30/17 09:13	
o-Xylene	ug/kg	<25.0	50.0	11/30/17 09:13	
Toluene	ug/kg	<25.0	50.0	11/30/17 09:13	
a,a,a-Trifluorotoluene (S)	%	100	80-120	11/30/17 09:13	

LABORATORY CONTROL SAMPLE & LCSD: 1621311

LABORATORY CONTROL SAMPLE & LCSD: 1621311			1621312							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	1060	1130	106	113	80-120	6	20	
1,3,5-Trimethylbenzene	ug/kg	1000	1020	1080	102	108	80-120	6	20	
Benzene	ug/kg	1000	1050	1070	105	107	80-120	2	20	
Ethylbenzene	ug/kg	1000	1040	1090	104	109	80-120	4	20	
m&p-Xylene	ug/kg	2000	2050	2170	103	108	80-120	5	20	
Methyl-tert-butyl ether	ug/kg	1000	1010	1060	101	106	80-120	4	20	
Naphthalene	ug/kg	1000	1010	1140	101	114	80-120	12	20	
o-Xylene	ug/kg	1000	1030	1090	103	109	80-120	5	20	
Toluene	ug/kg	1000	1030	1070	103	107	80-120	4	20	
a.a.a-Trifluorotoluene (S)	%				100	102	80-120			

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1687 OW SPOUT

Pace Project No.: 40161505

QC Batch: 276623

Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 40161505001, 40161505002, 40161505003, 40161505004, 40161505005, 40161505006, 40161505007, 40161505008, 40161505009, 40161505010, 40161505011, 40161505012, 40161505013, 40161505014, 40161505015, 40161505016, 40161505017

SAMPLE DUPLICATE: 1626732

Parameter	Units	40161704006 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	17.3	16.5	4	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: 1687 OW SPOUT

Pace Project No.: 40161505

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1687 OW SPOUT
Pace Project No.: 40161505

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40161505001	CSS#1 @ 12'	TPH GRO/PVOC WI ext.	275669	WI MOD GRO	275671
40161505002	CSS#2 @ 12'	TPH GRO/PVOC WI ext.	275669	WI MOD GRO	275671
40161505003	CSS#3 @ 12'	TPH GRO/PVOC WI ext.	275669	WI MOD GRO	275671
40161505004	CSS#4 @ 3'	TPH GRO/PVOC WI ext.	275669	WI MOD GRO	275671
40161505005	CSS#5 @ 5'	TPH GRO/PVOC WI ext.	275669	WI MOD GRO	275671
40161505006	CSS#6 @ 5'	TPH GRO/PVOC WI ext.	275669	WI MOD GRO	275671
40161505007	CSS#7 @ 3'	TPH GRO/PVOC WI ext.	275669	WI MOD GRO	275671
40161505008	CSS#7 @ 5'	TPH GRO/PVOC WI ext.	275670	WI MOD GRO	275672
40161505009	CSS#8 @ 3'	TPH GRO/PVOC WI ext.	275670	WI MOD GRO	275672
40161505010	CSS#9 @ 3'	TPH GRO/PVOC WI ext.	275670	WI MOD GRO	275672
40161505011	CSS#9 @ 5'	TPH GRO/PVOC WI ext.	275670	WI MOD GRO	275672
40161505012	CSS#10 @ 3'	TPH GRO/PVOC WI ext.	275670	WI MOD GRO	275672
40161505013	CSS#10 @ 5'	TPH GRO/PVOC WI ext.	275670	WI MOD GRO	275672
40161505014	CSS#11 @ 3'	TPH GRO/PVOC WI ext.	275670	WI MOD GRO	275672
40161505015	CSS#11 @ 5'	TPH GRO/PVOC WI ext.	275670	WI MOD GRO	275672
40161505016	CSS#12 @ 5'	TPH GRO/PVOC WI ext.	275670	WI MOD GRO	275672
40161505017	CSS#13 @ 3'	TPH GRO/PVOC WI ext.	275670	WI MOD GRO	275672
40161505001	CSS#1 @ 12'	ASTM D2974-87	276623		
40161505002	CSS#2 @ 12'	ASTM D2974-87	276623		
40161505003	CSS#3 @ 12'	ASTM D2974-87	276623		
40161505004	CSS#4 @ 3'	ASTM D2974-87	276623		
40161505005	CSS#5 @ 5'	ASTM D2974-87	276623		
40161505006	CSS#6 @ 5'	ASTM D2974-87	276623		
40161505007	CSS#7 @ 3'	ASTM D2974-87	276623		
40161505008	CSS#7 @ 5'	ASTM D2974-87	276623		
40161505009	CSS#8 @ 3'	ASTM D2974-87	276623		
40161505010	CSS#9 @ 3'	ASTM D2974-87	276623		
40161505011	CSS#9 @ 5'	ASTM D2974-87	276623		
40161505012	CSS#10 @ 3'	ASTM D2974-87	276623		
40161505013	CSS#10 @ 5'	ASTM D2974-87	276623		
40161505014	CSS#11 @ 3'	ASTM D2974-87	276623		
40161505015	CSS#11 @ 5'	ASTM D2974-87	276623		
40161505016	CSS#12 @ 5'	ASTM D2974-87	276623		
40161505017	CSS#13 @ 3'	ASTM D2974-87	276623		

REPORT OF LABORATORY ANALYSIS

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

Page 20 of 21



Sample Condition Upon Receipt

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

Project #: **WO#: 40161505**

Client Name: Pei

Courier: ☐ Fed Ex ☐ UPS ☐ Client ☐ Pace Other: Walter

Tracking #: 1570088-1



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

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

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

Thermometer Used N/A Type of Ice: ☒ Wet ☐ Blue ☐ Dry ☐ None

Cooler Temperature Uncorr: RO / Corr: RO Biological Tissue is Frozen: ☐ yes ☒ no

Temp Blank Present: ☐ yes ☒ no

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C.

Person examining contents:

Date: 11/29/17

Initials: KRM

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8. <u>NO ms/msd</u> <u>11/29/17</u>
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
- Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
- Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>001 ID "CSS #1" 002 ID "CSS #2"</u> <u>003 ID "CSS #3" Client covered all seals with labels</u> <u>11/29/17</u>
- Includes date/time/ID/Analysis Matrix: <u>S</u>		
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO3 <input type="checkbox"/> H2SO4 <input type="checkbox"/> NaOH <input type="checkbox"/> NaOH + ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed
		Lab Std #ID of preservative
		Date/Time:
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Person Contacted:

Date/Time:

If checked, see attached form for additional comments ☐

Comments/ Resolution: ① OIS time 1345 11-29-17 KR

Project Manager Review:

Date: 11-29-17

APPENDIX E

TANK SYSTEM SITE ASSESSMENT DOCUMENTATION



SGS Environmental Contracting, LLC



UST / AST Removal

N2570 Daytona Drive
MERRILL, WI 54452
1-800-261-2803
715-539-2803
Fax 715-539-2661

Jay A. Schlueter
CELL (715) 218-1001

jay@sgs-env.com



REMEDIATION SYSTEM
CONSTRUCTION



CONTAMINATED SOIL
EXCAVATIONS



GEOPROBE SOIL BORING

CERTIFICATE OF UNDERGROUND STORAGE TANK DISPOSAL

On November 20th, 2017 SGS Environmental Contracting LLC completed the removal of (1) - Underground Storage Tank: (1) – 6,000 gallon Unleaded Gas UST for:

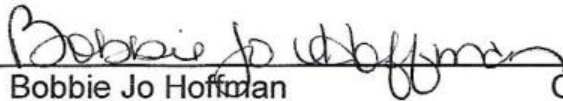
*O & W Sports & Liquor
107 Central Ave.
Owen WI 54460*

Sludge generated at the job site was barreled and disposed of at:

*Covanta Environmental Services
210 Tower Rd.
Winneconne WI 54986*

Tank was taken to:


*Don's Salvage
W9992 Highway 64
Withee WI 54498*



Bobbie Jo Hoffman

Office Manager

SGS Environmental Contracting LLC, N2570 Daytona Drive, Merrill, WI 54452
715.539.2803 Fax 715.539.2661 jay@sgs-env.com

	Wisconsin Department of Agriculture, Trade and Consumer Protection Bureau of Weights and Measures, Permits and Licensing P.O. Box 7837 Madison, WI 53707-7837 (608) 224-4942	FOR OFFICE USE ONLY Wis. Admin. Code §ATCP 93.560
	TANK SYSTEM SERVICE AND CLOSURE ASSESSMENT REPORT	

CHECK ONE: ☒ UNDERGROUND ☐ ABOVEGROUND

FOR PORTIONS OF THE FORM THAT DO NOT APPLY, CHECK THE 'N/A' BOX

Complete One Form for Each System Service Event

The information you provide may be used for purposes other than for which it was originally intended (s.15.04 (1) (m), Wis. Stats.).

Part A - To be completed by contractor performing repair or closure

A. TYPE OF SERVICE <input checked="" type="checkbox"/> CLOSURE <input type="checkbox"/> REPAIR/UPGRADE <input type="checkbox"/> CHANGE-IN-SERVICE Indicate portion of system being serviced if a <u>repair</u> , <u>upgrade</u> or <u>change-in-service</u> is being performed <input type="checkbox"/> Remote fill <input type="checkbox"/> Tank <input type="checkbox"/> Piping <input type="checkbox"/> Transition/containment sump <input type="checkbox"/> Spill bucket <input type="checkbox"/> Dispenser			
B. IDENTIFICATION (Please Print)			
1. Facility Name O & W Sports & Liquor		2. Owner Name Jacalyn Reinke	
Facility Street Address (not P.O. Box) 107 Central Ave.		3. Contact Name Job Title	
Municipality Owen		Mailing Address PO Box 147	
<input checked="" type="checkbox"/> City <input type="checkbox"/> Village <input type="checkbox"/> Town of:		Post Office Owen WI 54460	
Zip Code 54460	County Clark	County Clark	Telephone No. (include area code) ()
4. Primary Service Contractor Section A above SGS Environmental Contracting LLC		Service Contractor Street Address N2570 Daytona Dr.	
Service Contractor Telephone No. (include area code) (715) 539-2803		Service Contractor City, State, Zip Code Merrill WI 54452	

C. TANK SYSTEM DETAIL (Complete for all service activities)

a	b	c	d	e	f	g	h
Tank ID #	Type of Closure ¹	Tank Material of Construction	Piping Material of Construction	Tank Capacity (gallons)	Contents ²	Release - System Integrity Compromised (e.g. holes, cracks, loose connection, etc)?	If "Yes" to "g", Then Specify Source & Cause of Release ⁵
	P	Steel	flex	6000	UG	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	Source of Release ³ Cause of Release ⁴
						<input type="checkbox"/> Y <input type="checkbox"/> N	
						<input type="checkbox"/> Y <input type="checkbox"/> N	
						<input type="checkbox"/> Y <input type="checkbox"/> N	
						<input type="checkbox"/> Y <input type="checkbox"/> N	
						<input type="checkbox"/> Y <input type="checkbox"/> N	

1. Indicate type of closure: P = Permanent, TOS = Temporarily Out-of-Service, CIP = Closure In-Place

2. Indicate type of product: DL = Diesel, LG = Leaded Gasoline, UG = Unleaded Gasoline, FO = Fuel Oil, GH = Gasohol, AF = Aviation Fuel, K = Kerosene, PX = Premix, WO = Waste/Used Motor Oil, FCHZW = Flammable/Combustible Hazardous Waste, OC = Other Chemical (indicate the chemical name(s))

CAS number(s):

3. Source of release: T = tank, P = piping, D = dispenser, STP = submersible turbine pump, DP = delivery problem, O = other, UNK = Unknown

4. Cause of release: S = spill, O = overfill, POMD = physical or mechanical damage, C = corrosion, IP = installation problem, O = other, UNK = Unknown

5. Has release been reported to the Department of Natural Resources? ☒ Yes ☐ No ☐ Release not evident at this time

D. CLOSURES (Check applicable box at right in response to all statements in section D)

Written notification was provided to the local agent 5 days in advance of closure date.

☒ Y ☐ N

All local permits were obtained before beginning closure.

☒ Y ☐ N ☐ NA

☒ UST Form TR-WM-137 or ☐ AST Form TR-WM-118 filed by owner with the DATCP indicating closure.

☐ Y

☐ N ☐ NA

NOTE: TANK INVENTORY FORM TR-WM-137 or TR-WM-118 SIGNED BY THE OWNER MUST BE SUBMITTED WITH EACH CLOSURE or CHANGE-IN-SERVICE CHECKLIST

D.1 ☐ TEMPORARILY OUT-OF-SERVICE

1. Product removed.

**Remover
Verified**

**Inspector
Verified**

NA

a. Product lines drained into tank (or other container) and liquid removed, and

☐ Y ☐ N

☐ Y ☐ N

☐

b. All product removed to bottom of suction line, OR

☐ Y ☐ N

☐ Y ☐ N

☐

c. All product removed to within 1" of bottom.

☐ Y ☐ N

☐ Y ☐ N

☐

2. Fill pipe, gauge pipe, tank truck vapor recovery fittings, and vapor return lines capped.

☐ Y ☐ N

☐ Y ☐ N

☐

3. All product lines at the islands or pumps located elsewhere are removed and capped, OR

☐ Y ☐ N

☐ Y ☐ N

☐

4. Dispensers/pumps left in place but locked and power disconnected.

☐ Y ☐ N

☐ Y ☐ N

☐

5. Vent lines left open.

☐ Y ☐ N

☐ Y ☐ N

☐

6. Inventory form filed indicating temporarily out-of-service (TOS) closure.

☐ Y ☐ N

☐ Y ☐ N

☐

D.2. ☒ CLOSURE BY REMOVAL OR IN-PLACE

1. General Requirements

a. Product from piping drained into tank (or other container).

☒ Y ☐ N

☒ Y ☐ N

☐

b. Piping disconnected from tank and removed.

☒ Y ☐ N

☒ Y ☐ N

☐

c. All liquid and residue removed from tank using explosion-proof pumps or hand pumps.

☒ Y ☐ N

☒ Y ☐ N

☐

d. All pump motors and suction hoses bonded to tank or otherwise grounded.

☒ Y ☐ N

☒ Y ☐ N

☐

e. Fill pipes, gauge pipes, vapor recovery connections, submersible pumps and other fixtures removed.

☒ Y ☐ N

☒ Y ☐ N

☐

f. Vent lines left connected until tanks purged.

☒ Y ☐ N

☒ Y ☐ N

☐

g. Tank openings temporarily plugged so vapors exit through vent.

☐ Y ☐ N

☒ Y ☐ N

☒

h. Tank atmosphere reduced to 10% of the lower flammable range (LEL) - see Section E.

☒ Y ☐ N

☒ Y ☐ N

☐

2. Specific Closure-by-Removal Requirements

a. Tank removed from excavation after PURGING/INERTING; placed on level ground and blocked to prevent movement.

☒ Y ☐ N

☒ Y ☐ N

☐

b. Tank cleaned before being removed from site.

☒ Y ☐ N

☒ Y ☐ N

☐

c. Tank labeled in 2" high letters after removal but before being moved from site.

☒ Y ☐ N

☒ Y ☐ N

☐

NOTE: COMPLETE TANK LABELING SHOULD INCLUDE WARNING AGAINST REUSE; FORMER CONTENTS; VAPOR STATE; VAPOR FREEING TREATMENT; DATE.

d. Tank vent hole (1/8" in uppermost part of tank) installed prior to moving the tank from site.

☐ Y ☐ N

☐ Y ☐ N

☒

e. Site security is provided while the excavation is open.

☒ Y ☐ N

☒ Y ☐ N

☐

3. Specific Closure-In-Place Requirements

NOTE: CLOSURES IN-PLACE ARE ONLY ALLOWED WITH THE PRIOR WRITTEN APPROVAL OF THE DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION (DATCP) OR LOCAL AGENT.

a. Tank properly cleaned to remove all sludge and residue.

☐ Y ☐ N

☐ Y ☐ N

☐

b. Solid inert material (sand, cyclone boiler slag, or pea gravel recommended) introduced and tank filled.

☐ Y ☐ N

☐ Y ☐ N

☐

c. Vent line disconnected or removed.

☐ Y ☐ N

☐ Y ☐ N

☐

d. Inventory form filed by owner with the DATCP indicating closure in-place.

☐ Y ☐ N

☐ Y ☐ N

☐

E. ☐ REPAIR, UPGRADE OR CHANGE-IN-SERVICE

Written notification was provided to the local agent 5 days in advance of service date.

☐ Y ☐ N ☒ NA

All local permits were obtained before beginning service.

☐ Y ☐ N ☒ NA

Form TR-WM-137 or ☐ TR-WM-118 filed by owner with the DATCP indicating change-in-service.

☐ Y ☐ N ☒ NA

F. METHOD OF VAPOR FREEING OF TANK

☐ Displacement of vapors by eductor or diffused air blower.

Eductor driven by compressed air, bonded and drop tube left in place; vapors discharged minimum of 12 feet above ground.

Diffused air blower bonded and drop tube removed. Air pressure not exceeding 5 psig.

☐ Inert gas using dry ice or liquid carbon dioxide.

☒ Inert gas using CO₂ or N₂ **NOTE: INERT GASSES PRODUCE AN OXYGEN DEFICIENT ATMOSPHERE. LEL METERS MAY NOT FUNCTION ACCURATELY. THE TANK MAY NOT BE ENTERED IN THIS STATE WITHOUT SPECIAL EQUIPMENT.**

Gas introduced through a single opening at a point near the bottom of the tank at the end of the tank opposite the vent.

Gas introduced under low pressure not to exceed 5 psig to reduce static electricity. Gas introducing device grounded.

☒ Readings of 10% or less of the lower flammable range (LEL) or 0% oxygen obtained before removing tank from ground.

☒ Tank atmosphere monitored for flammable or combustible vapor levels prior to and during cleaning and cutting.

☐ Calibrate combustible gas indicator and/or oxygen meter prior to use. Drop tube removed prior to checking atmosphere. Tank space monitored at bottom, middle and upper portion of tank.

G. REMOVER/CLEANER INFORMATION

George Frick

Remover/Cleaner Name (print)

George Frick

Remover/Cleaner Signature

401700

Certification No.

11-20-17

Date Signed

I attest that the procedures and information which I have provided as the tank closure contractor are correct and comply with ATCP 93.

Company expected to perform soil contamination assessment

REL ENGINEERING INC. (401241) Exp 5/31/18

H. INSPECTOR INFORMATION

Rebecca Shervey

Inspector Name (print)

Rebecca Shervey

Inspector Signature

401401

Inspector Cert #

262008

LPO Agency #

1010

FDID # For Location Where Inspection Performed

715-829-4402

Inspector Telephone Number

11/20/17

Date Signed

Part B – To be completed by environmental professional

Submit original Part B to the WDNR along with a copy of Part A

I. TANK-SYSTEM SITE ASSESSMENT (TSSA)

Site Name: OW Sport & Liquor

Address: 107 Central Avenue, Owen, WI 54460

Note: Site name and address must match with Part A Section 1.

To determine if a TSSA is required, see Comm 10 and section II part B of *ASSESSMENT AND REPORTING OF SUSPECTED AND OBVIOUS RELEASES FROM UNDERGROUND AND ABOVEGROUND STORAGE TANK SYSTEMS*.

If a TSSA is required, then follow the procedures detailed in *ASSESSMENT AND REPORTING OF SUSPECTED AND OBVIOUS RELEASES FROM UNDERGROUND AND ABOVEGROUND STORAGE TANK SYSTEMS*.

1. Site Information

a. Has there been a previously documented release at this site? ☒ Y ☐ N

If yes, provide the DSPS # _____, or DNR BRRT's # 03-10-182097.

b. Number of active tanks¹ at facility prior to completion of current services USTs 1 ASTs _____.

(NOTE 1: Do not include previously closed systems or system components.)

c. Excavation/trench dimensions (in feet). (Photos must be provided.)

EXCAVATION/TRENCH #	LENGTH	WIDTH	DEPTH

2. Visual Excavation/Trench Inspection (Photos must be provided for "Yes" responses, except item b.)

Do any of the following conditions exist in or about the excavation(s)?

a. Stained soils: ☒ Y ☐ N b. Petroleum odor: ☒ Y ☐ N c. Water in excavation/trench: ☒ Y ☐ N

d. Free product in the excavation/trench: ☐ Y ☐ N e. Sheen or free product on water: ☐ Y ☐ N

3. Geology/Hydrogeology

a. Depth to groundwater 5.5 feet b. Indicate type of geology² silt and clay

(Note 2: Use these symbols individually or in combination as appropriate: C = Clay, SLT = Silt, S = Sand, Gr = Gravel)

4. Receptors

a. Water supply well(s) within 250 feet of the facility? ☒ Y ☐ N If yes, specify Well for bait tank

b. Surface water(s) within 1000 feet of the facility? ☒ Y ☐ N If yes, specify Owen Mill Pond

5. Sampling

a. Follow the procedures detailed in *ASSESSMENT AND REPORTING OF SUSPECTED AND OBVIOUS RELEASES FROM UNDERGROUND AND ABOVEGROUND STORAGE TANK SYSTEMS*.

b. Complete Tables 1 and 2 as appropriate. (Attach chain-of-custody and laboratory analytical reports.)

c. Attach a detailed map of site features and sample locations.

J. NOTE RELEVANT OBSERVATIONS, SPECIFIC PROBLEMS OR CONCERNS BELOW

Petroleum system was removed during completion of an approved remedial soil excavation for the open environmental investigation.

Soil samples were collected along base of completed soil excavation and sidewalls. WDNR Project Manager on site during removal of petroleum system.

TABLE 1 SOIL FIELD SCREENING & GRO/DRO LABORATORY ANALYTICAL RESULTS-FOR PETROLEUM PRODUCTS

Sample ID #	Sample Location & Soil/Geologic Description	Sample Collection Method				Depth Below Tank/Piping (feet)	Field Screening Result (ppm)	GRO (mg/kg)	DRO (mg/kg)
		Grab	Shelby Tube	Direct Push	Split Spoon				
CSS-1	Tank Bed Below UST / Brown Clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3'	104.7		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

TABLE 2 SOIL LABORATORY ANALYTICAL RESULTS-FOR PETROLEUM PRODUCTS

Sample ID #	BENZENE	TOLUENE	ETHYLBENZENE	MTBE	TRIMETHYL - BENZENES (TOTAL)	XYLENES (TOTAL)	NAPHTHALENE
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
CSS-1	<25.0	<25.0	2,630	53.7	12,240	8,344	2,910

K. TANK-SYSTEM SITE ASSESSMENT INFORMATION

☐ As a tank-system site assessor certified under Wis. Admin. Code section Comm 5.83, it is my opinion that there is no indication of a release of a regulated substance to the environment.

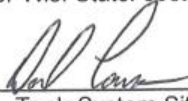
☒ Sampling at the site indicates there has been a release to the environment. Pursuant to Wis. Admin. Code section Comm 10.585 (2) (a) and Wis. Stats. section 292.11 (2) (a), the owner or operator or contractor performing work under chapter Comm 10 shall immediately report any release of a regulated substance to the Wisconsin Department of Natural Resources. Failure to do so may result in forfeitures of a minimum of \$10 and a maximum of \$5000 for each violation under Wis. Stats. section 101.09 (5). Each day of continued violation and each tank are treated as separate offenses.

David Larsen

Tank-System Site Assessor Name (print)

(715) 675-9784

Tank-System Site Assessor Telephone Number



Tank-System Site Assessor Signature

1-31-18

Date Signed

401241

Certification Number #

REI Engineering, Inc.

Company Name



Wisconsin Department of Agriculture, Trade and Consumer Protection
Bureau of Weights and Measures
PO Box 7837 Madison, WI 53707-7837
(608) 224-4942

FOR OFFICE USE ONLY

TDID#:

Reg Obj #:

Wis. Admin. Code §ATCP 93.140

UNDERGROUND FLAMMABLE/COMBUSTIBLE/HAZARDOUS LIQUID STORAGE TANK REGISTRATION

Personal information you provide may be used for purposes other than that for which it was originally collected (s. 15.04(1)(m) Wis. Stats.).

Underground tanks in Wisconsin that have stored or currently store petroleum or regulated substances must be registered. A separate form is needed for each tank. Send each completed form to the agency designated above. Have you previously registered this tank by submitting a form? ☐ Yes ☐ No

If yes, are you correcting/updating information only? ☐ Yes ☐ No

This registration applies to a tank status that is (check one):

- ☐ In Use
☐ Newly Installed
☐ Abandoned with Product
☐ Abandoned with Product
☐ Abandoned with Product
☐ Abandoned with Product (empty)
☐ Abandon with Water
☒ Closed - Tank Removed
☐ Closed - Filled with Inert Materials
☐ Ownership Change (Indicate new owner name in block 2 - attach deed)
☐ Temporarily Out of Service - Provide Date:

Fire Dept. providing fire coverage where tank is located: ☒ CITY ☐ TOWN ☐ VILLAGE Owen

IDENTIFICATION (Please Print)

1. TANK SITE NAME O & W Sports & Liquor		COUNTY Clark	PHONE () -	
SITE STREET ADDRESS 107 Central Ave.		<input checked="" type="checkbox"/> CITY <input type="checkbox"/> VILLAGE <input type="checkbox"/> TOWN OF: Owen	STATE WI	ZIP 54460
2. TANK OWNER LEGAL NAME Jacalyn Reinke		COUNTY Clark	PHONE: Check <input type="checkbox"/> CELL or <input type="checkbox"/> LAND () -	
MAILING ADDRESS PO Box 147		<input checked="" type="checkbox"/> CITY <input type="checkbox"/> VILLAGE <input type="checkbox"/> TOWN OF: Owen	STATE WI	ZIP 54460
3. PROPERTY OWNER NAME (if different from Tank Owner Legal Name #2)		COUNTY (if different from County #2)		
PROPERTY OWNER ADDRESS (if different from Site Street Address #1)		<input type="checkbox"/> CITY <input type="checkbox"/> VILLAGE <input type="checkbox"/> TOWN OF:	STATE WI	ZIP
4. CLASS A NAME	DOB	CERTIFICATION: (Attach certificate)		
5. CLASS B NAME	DOB	CERTIFICATION: (Attach certificate)		

SITE ID: FACILITY ID # 115042 CUSTOMER ID #

Tank Capacity (gallons): 6,000

Tank Age (age or date installed): 10/1/1984

Vehicle fueling: ☒ Yes ☐ No

LAND OWNER TYPE (check one) Refer to back

☐ County ☐ State ☐ Federal Leased ☐ Federal Owned ☐ Tribal Nation ☐ Municipal ☐ Other Government ☒ Private

OCCUPANCY TYPE (check one) Refer to back

☒ Retail Fuel Sales ☐ Mercantile/Commercial ☐ Industrial ☐ Residential ☐ School ☐ Utility ☐ Government Fleet
☐ Agricultural (crop or livestock production) ☐ Backup or Emergency Generator ☐ Other (specify):

TANK CONSTRUCTION:

☐ Bare Steel ☒ Coated Steel ☐ Steel - Fiberglass Reinforced Plastic Composite
☐ Fiberglass ☐ Unknown ☐ Other (specify): ☐ Lined (date):

Overfill Protection? ☒ Yes ☐ No
 Spill Containment? ☒ Yes ☐ No
 Tank Double Walled? ☐ Yes ☒ No

TANK CATHODIC PROTECTION: ☒ Sacrificial Anodes ☐ Impressed Current ☐ N/A

PRIMARY TANK LEAK DETECTION METHOD: ☐ Automatic tank gauging ☐ Interstitial monitoring ☒ Electronic ☐ Yes ☐ No ☐ Inventory control and tightness testing
☐ Manual tank gauging (only for tanks of 1,000 gallons or less) ☒ Statistical Inventory Reconciliation (SIR) ☐ Unknown

PIPING CONSTRUCTION: ☐ Single Wall ☒ Double Wall:

☐ Bare Steel ☐ Coated Steel ☐ Fiberglass ☒ Flexible ☐ Copper ☐ Unknown ☐ N/A ☐ Other:

PIPING CATHODIC PROTECTION: ☐ Sacrificial Anodes ☐ Impressed Current ☐ N/A

PRIMARY PIPING SYSTEM TYPE: ☐ Pressurized piping with ☒ A. Pump auto shutoff - ELLD ☐ B. Flow restrictor - MLLD ☐ Unknown

☐ Suction piping with check valve at tank ☐ Suction piping with check valve at pump and inspectable ☐ Not needed if waste oil

PIPING LEAK DETECTION METHOD: ☐ Interstitial monitoring ☒ Electronic ☐ Yes ☐ No ☒ Sump or cable sensor ☐ Yes ☐ No

☐ Tightness testing ☐ Electronic line monitor - ELLD ☐ SIR ☐ Not required ☐ Unknown

TANK CONTENTS (Current, or previous product (if tank now empty))

☐ Bio-Diesel: ___ % ☐ Aviation ☐ Premix ☐ Fuel Oil ☐ Kerosene ☒ Unleaded ☐ Gas-ethanol blend: ___ % ☐ Diesel
☐ Waste/Used Motor Oil ☒ Used for Heating ☐ Hazardous Waste/Interface* ☐ New Oil ☐ New oil - Flash point less than 200°F
☐ Other (specify): ☐ Chemical* Name ☐ Empty* ☐ Sand/Grave/Slurry* ☐ Unknown

* NOT PECFA eligible.

Geo Latitude:

Geo Longitude:

If Tank Closed, Abandoned or Out of Service: 11-20-17

Has a site assessment been completed? (see reverse side for details) ☒ Yes ☐ No

TANK OWNER LEGAL NAME (please print)

TANK OWNER E-MAIL

Jacalyn C Reinke

TANK OWNER SIGNATURE (Note: By signing, signer is accepting legal and financial responsibility for the storage tank system.)

DATE: 11-21-17

Note: Refer to comments on reverse side of form.