



CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING

March 3, 2020

Wisconsin Department of Natural Resources

Attn: Ms. Carrie Stoltz
107 Sutliff Avenue
Rhineland, WI 54501



Subject:

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

Dear Ms. Stoltz:

Enclosed is the Update Report for the above-mentioned site. This report is specific to the completion of additional groundwater sampling followed by an update report. Based on current site conditions, REI is recommending that this investigation be directed to the WDNR case closure review process for final case closure determination.

If upon review of this report you have any comments, questions and/or require additional information please contact our office at (715) 675-9784.

Sincerely,
REI Engineering, Inc.

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

Enclosure (A/S)

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



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**CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING**

UPDATE REPORT

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

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



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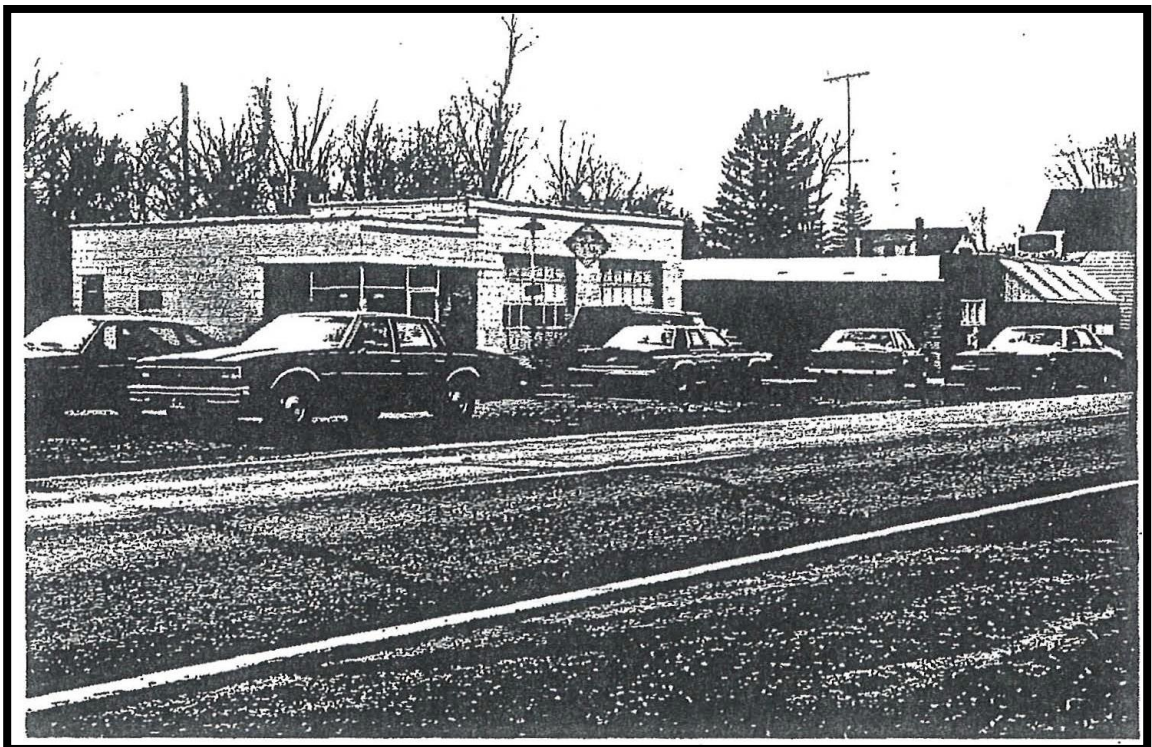


UPDATE REPORT

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

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

REI #7367



PREPARED FOR:

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

MARCH 2020

UPDATE REPORT

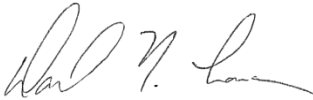
HEDLUND DX
10557 STATE HIGHWAY 70
FALUN, WI

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

REI #7367

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

"I, David N. Larsen, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of Ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of Ch. GHSS 3, Wis. Admn. Code, and that to the best of my knowledge, all the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."



Hydrogeologist

March 3, 2020

Date

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



Environmental Scientist

March 3, 2020

Date

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UPDATE REPORT

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

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

REI #7367

1.0 INTRODUCTION

1.1 Purpose

This report presents the completion of one (1) additional round of groundwater sampling at the former Hedlund DX site. Following the completion of the 2018 soil excavation, groundwater analytical results have remained relatively consistent with pre-excavation concentrations. This is due to the fact that the soil excavation did not extend to groundwater and the smear zone was not removed.

The soil excavation did not extend to the groundwater table at approximately fourteen feet, rather it was terminated at a depth of approximately eight (8) feet below land surface (bls). Site soil conditions are clay soils overlying saturated sands at a depth of approximately fourteen feet bls. Had the excavation extended to the water table, the groundwater would have entered the excavation and likely risen to the potentiometric surface of less than three (3) feet bls.

2.0 SITE LOCATION

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

3.0 SUMMARY OF WORK

3.1 Groundwater Monitoring and Analytical Results

The groundwater monitoring well network was sampled on February 12, 2020. MW6 was not sampled due to a large snow pile over the well and the groundwater was froze in the well casing of MW7 and a sample could not be collected.

Depth to groundwater was measured in each well prior to sampling. Table 1 presents the depth to groundwater and groundwater elevations for this investigation. All purge water was containerized and disposed of at the City of Wausau waste water treatment facility. Groundwater samples were collected and submitted to Pace Analytical, Green Bay, WI for analysis of PVOC and naphthalene compounds. Groundwater analytical results are summarized in Tables 2a-o. The complete laboratory analytical report is included as Appendix A.

3.2 Potable Well Sampling

REI collected samples from the Backwoods Bait and Tackle, 10561 State Hwy 70 potable well and from Bob's Service, 10531 State Hwy 70 potable well during the February 12, 2020 sample event. The potable well samples were submitted to a state certified lab and analyzed for drinking water VOCs (EPA Method 524.2). The potable well samples analyzed revealed no VOC impact to the potable water supply well at Backwoods Bait and Tackle, and a lab qualified detection for benzene and a detectable concentration of toluene at Bob's Service. The February 12, 2020 sampling event at Bob's Service was through a garden hose, where the previous sample events were with the hose disconnected. Analytical results are summarized in Table 2n and 2o and copies of the laboratory analytical reports are included in Appendix A.

4.0 CONCLUSION AND RECOMMENDATIONS

While groundwater analytical results remain near pre-excavation levels, the soil excavation did not extend into the smear zone. Artesian conditions limited the depth of the excavation from approximately fourteen (14) feet to eight (8) feet bgs. Vapor intrusion sampling has ruled out vapor migration pathways into the Backwoods Bait and Tackle, 10561 State Hwy 70 property. Additional investigative work is not warranted at this time and REI is recommending that the former Hedlund DX investigation be directed to the WDNR case closure review process.

Table 1
Depth to Water and Water Table Elevations
Hedlund DX
Falun, Wisconsin

Depth to Water (feet) below Reference Elevation

Date	<u>MW1</u>	<u>MW2</u>	<u>MW2R</u>	<u>MW3</u>	<u>MW3R</u>	<u>MW4</u>	<u>MW4R</u>	<u>MW5</u>	<u>MW5R</u>	<u>MW6</u>	<u>MW7</u>	<u>MW8</u>	<u>MW9</u>	<u>MW10</u>	<u>MW11</u>
9/14/2016	5.23	2.02		1.74		2.18		2.46		2.50	0.97				
1/12/2017	5.86	Froze		2.11		2.66		2.67		2.79	1.04	4.59	3.35	5.83	2.63
1/26/2018	4.34	Froze		2.10		3.95		Froze		2.62	Froze	4.33	3.03	5.45	Froze
5/16/2018	5.54	2.85		2.17		2.61		3.04		3.09	1.60	4.89	3.56	6.10	2.89
9/25/2018	5.08	Abandoned	2.94	Abandoned	2.18	Abandoned	4.72	Abandoned	3.00	3.51	1.62	4.64	3.77	6.12	2.97
12/12/2018	4.68		2.94		2.48		3.41		3.46	3.12	1.42	4.91	3.63	3.54	2.81
6/4/2019	5.81		1.47		1.87		2.34		2.48	2.71	1.27	4.55	3.27	5.68	2.38
9/6/2019	5.72		2.89		2.41		3.13		3.29		1.68	5.08	3.85	6.30	2.98
2/12/2020	5.78		2.76		2.25		3.07		3.32		Froze	4.74	3.45	6.41	2.49

Measuring Point Elevations

Elevations referenced to a U.S.G.S. Benchmark (feet MSL)

Top of Casing Elevation

Initial Survey	961.15	958.40		957.79		958.04		958.69		958.97	957.21	960.68	959.39	961.41	958.33
9/28/2018			958.39		958.05		958.55		959.02						

Ground Surface Elevation

Initial Survey	959.18	958.79		958.30		958.57		959.00		959.55	957.76	961.02	959.78	958.25	958.92
9/28/2018			958.74		958.10		958.89		959.27						

Depth to Water (feet) below Ground Surface

Average	3.37	2.82	2.95	2.54	2.29	3.38	3.67	3.03	3.36	3.49	1.92	5.06	3.88	2.52	3.33
Maximum	3.89	3.23	3.29	2.68	2.53	4.48	5.06	3.35	3.71	4.09	2.23	5.42	4.24	3.25	3.57
Minimum	2.37	2.40	1.82	2.25	1.92	2.71	2.68	2.77	2.73	3.08	1.52	4.67	3.42	0.38	2.97
Range	1.52	0.83	1.47	0.43	0.61	1.77	2.38	0.58	0.98	1.01	0.71	0.75	0.82	2.87	0.60

Water Level Elevation (feet MSL)

Date	<u>MW1</u>	<u>MW2</u>	<u>MW2R</u>	<u>MW3</u>	<u>MW3R</u>	<u>MW4</u>	<u>MW4R</u>	<u>MW5</u>	<u>MW5R</u>	<u>MW6</u>	<u>MW7</u>	<u>MW8</u>	<u>MW9</u>	<u>MW10</u>	<u>MW11</u>
9/14/2016	955.92	956.38		956.05		955.86		956.23		956.47	956.24				
1/12/2017	955.29			955.68		955.38		956.02		956.18	956.17	956.09	956.04	955.58	955.70
1/26/2018	956.81			955.69		954.09				956.35		956.35	956.36	955.96	
5/16/2018	955.61	955.55		955.62		955.43		955.65		955.88	955.61	955.79	955.83	955.31	955.44
9/25/2018	956.07	Abandoned	955.45	Abandoned	955.87	Abandoned	953.83	Abandoned	956.02	955.46	955.59	956.04	955.62	955.29	955.36
12/12/2018	956.47		955.45		955.57		955.14		955.56	955.85	955.79	955.77	955.76	957.87	955.52
6/4/2019	955.34		956.92		956.18		956.21		956.54	956.26	955.94	956.13	956.12	955.73	955.95
9/6/2019	955.43		955.50		955.64		955.42		955.73		955.53	955.60	955.54	955.11	955.35
2/12/2020	955.37		955.63		955.80		955.48		955.70			955.94	955.94	955.00	955.84

Table 2a
Summary of Groundwater Analytical Results
WDOT Investigation
Hedlund DX
Falun, Wisconsin

Sample Location ->				WDX-1	WDX-3	WDX-5
Date ->				11/7/1989	6/7/1990	6/7/1990
Detected VOC Parameters	ES	PAL	Units			
Benzene	5	0.5	µg/l	120	224	690
Toluene	800	160	µg/l	140	<i>180</i>	18
Ethylbenzene	700	140	µg/l	58	19	5.9
Xylenes (mixed isomers)	2,000	400	µg/l	140	117	<i>810</i>
1,2-DCA	5	0.5	µg/l	11	NA	NA

Notes:

ES = NR140.10 Enforcement Standards

PAL = NR140.10 Preventive Action Limits

Enforcement Standard exceeded

Preventive Action Limit exceeded

NA = Not Analyzed

NS = Not Sampled

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

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Table 2b
Summary of Groundwater Analytical Results
Foth & Van Dyke Investigation
Hedlund DX
Falun, Wisconsin

				MW1		MW3		MW4	
Date ->				12/31/1990	3/21/1991	12/31/1990	3/21/1991	12/31/1990	3/21/1991
Detected VOC Parameters	ES	PAL	Units						
TPH as Gasoline			µg/l	60	78	870	27,000	70	120,000
Benzene	5	0.5	µg/l	< 1.0	< 1.0	6	1,700	< 1.0	6,900
Toluene	800	160	µg/l	< 1.0	< 1.0	26	890	< 1.1	2,000
Ethylbenzene	700	140	µg/l	< 1.0	< 1.0	9	<i>450</i>	< 1.0	1,600
Xylenes (mixed isomers)	2,000	400	µg/l	< 3.0	9.3	49	1,600	< 1.0	7,800
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 4.0	< 4.0	< 4.0	88	< 4.0	< 4.0
Lead	15	1.5	µg/l	200	< 1.0	< 1.0	< 1.0	400	40

Notes:

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Table 2c
Summary of Groundwater Analytical Results
MW1
Hedlund DX
Falun, Wisconsin

			Date ->	8/8/2016	9/13/2016	1/11/2017	1/26/2018	5/16/2018	September 17-18, 2018	9/25/2018	12/12/2018	6/4/2019	9/6/2019	2/12/2020
Detected VOC Parameters	ES	PAL	Units						Soil Excavation Completed					
Benzene	5	0.5	µg/l	< 0.40	< 0.40	< 0.40	< 0.40	< 0.31		< 0.31	< 0.31	< 0.25	< 0.25	< 0.25
Toluene	800	160	µg/l	< 0.39	< 0.39	< 0.39	< 0.39	< 0.49		< 0.49	< 0.49	< 0.17	< 0.17	< 0.17
Ethylbenzene	700	140	µg/l	< 0.39	< 0.39	< 0.39	< 0.39	< 0.33		< 0.33	< 0.33	< 0.22	< 0.22	< 0.22
Xylenes (mixed isomers)	2,000	400	µg/l	< 0.80	< 0.80	< 0.80	< 0.80	0.67 ^J		< 0.66	< 0.66	< 0.47	< 0.47	< 0.47
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.48	< 0.48	< 0.48	< 0.48	< 0.32		< 0.32	< 0.32	< 1.2	< 1.2	< 1.2
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.42	< 0.42	< 0.42	< 0.42	0.42 ^J		< 0.34	< 0.34	< 0.87	< 0.87	< 0.87
Naphthalene	100	10	µg/l	< 0.42	< 0.42	< 0.42	< 0.42	< 0.51		< 0.51	< 0.51	< 1.2	< 1.2	< 1.2
Field Measurements														
Temperature			°F	NA	NA	NA	40.72	NA		60.3	47.2	49.1	59.5	40.7
Conductivity			ms/cm	NA	NA	NA	294	NA		520.8	702	532.8	595.3	643.8
Dissolved Oxygen			mg/L	NA	NA	NA	2.00	NA		0.52	0.29	0.58	1.1	1.33
pH				NA	NA	NA	7.45	NA		6.74	7.35	7.03	6.75	6.85
Redox Potential			mV	NA	NA	NA	-127.8	NA		-103.1	-36.5	-52.1	-49.6	44.7

Notes:

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Table 2d
Summary of Groundwater Analytical Results
MW2/MW2R
Hedlund DX
Falun, Wisconsin

			MW2				September 17-18, 2018	MW2R				
		Date ->	9/13/2016	1/11/2017	1/26/2018	5/16/2018		9/25/2018	12/12/2018	6/4/2019	9/6/2019	2/12/2020
Detected VOC Parameters	ES	PAL	Units									
Benzene	5	0.5	µg/l	32.7	Water Froze in Well - Not Sampled	Water Froze in Well - Not Sampled		16.7	45.6	76.3	48.1	32.4
Toluene	800	160	µg/l	9.1				1.3 ^J	2.7	7.4	2.4 ^J	4.5 ^J
Ethylbenzene	700	140	µg/l	19				3.6	11.3	24.5	25.7	17
Xylenes (mixed isomers)	2,000	400	µg/l	52.1				9.4	24.1	57.1	16.5	36.4
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	0.95 ^J				< 0.32	0.39 ^J	< 1.2	< 1.2	< 1.2
Trimethylbenzenes (mixed isomers)	480	96	µg/l	10.1				2.1	6.6	16.9	9.6	12.8
Naphthalene	100	10	µg/l	3.5				0.53 ^J	1.8	3.5 ^J	2.4 ^J	2.3 ^J
Field Measurements												
Temperature			°F	NA								
Conductivity			ms/cm	NA				NA	45.9	52.5	64.6	42.1
Dissolved Oxygen			mg/L	NA				NA	502.9	482.2	500.7	453
pH				NA				NA	0.77	0.92	0.58	0.58
Redox Potential			mV	NA				NA	7.27	7.02	7.24	7.64
								NA	11.1	-17.7	-96	-87.4

Notes:

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Enforcement Standard exceeded

Preventive Action Limit exceeded

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Table 2e
Summary of Groundwater Analytical Results
MW3/MW3R
Hedlund DX
Falun, Wisconsin

			MW3				September 17-18, 2018	MW3R				
Date ->			9/13/2016	1/11/2017	1/26/2018	5/16/2018		9/25/2018	12/12/2018	6/4/2019	9/6/2019	2/12/2020
Detected VOC Parameters	ES	PAL	Units				Soil Excavation Completed					
Benzene	5	0.5	µg/l	165	44.6	< 0.40		112	121	29.3	30.0	<i>1.4</i>
Toluene	800	160	µg/l	36.1	0.79 ^J	< 0.39		4.9	< 0.98	1.1 ^J	0.25 ^J	< 0.17
Ethylbenzene	700	140	µg/l	<i>146</i>	12.3	< 0.39		20.7	3.9	18.8	0.99 ^J	< 0.22
Xylenes (mixed isomers)	2,000	400	µg/l	<i>720</i>	14.4	< 0.80		33.6	< 1.3	20.1	1.8 ^J	< 0.47
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 1.2	1.0	< 0.48		< 0.64	< 0.64	< 2.5	< 1.2	0.59 ^J
Trimethylbenzenes (mixed isomers)	480	96	µg/l	<i>183.1</i>	12.0	< 0.42	MW3 Abandoned Replaced with MW3R	12.2	< 0.68	19.9	1.0 ^J	< 0.87
Naphthalene	100	10	µg/l	44.9	5.0	< 0.42		5.1	< 1.0	6.3 ^J	< 1.2	< 1.2
Field Measurements												
Temperature			°F	NA	NA	NA		NA	44.6	56.6	64.5	39.7
Conductivity			ms/cm	NA	NA	NA		NA	518.3	502.7	511.2	491.5
Dissolved Oxygen			mg/L	NA	NA	NA		NA	0.08	0.36	0.40	0.22
pH				NA	NA	NA		NA	7.31	6.20	7.26	7.30
Redox Potential			mV	NA	NA	NA		NA	-36.2	-91.9	-108.1	59.1

Notes:

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Table 2f
Summary of Groundwater Analytical Results
MW4/MW4R
Hedlund DX
Falun, Wisconsin

				MW4				September 17-18, 2018	MW4R				
Date ->				9/13/2016	1/11/2017	1/26/2018	5/16/2018		9/25/2018	12/12/2018	6/4/2019	9/6/2019	2/12/2020
Detected VOC Parameters	ES	PAL	Units					Soil Excavation Completed					
Benzene	5	0.5	µg/l	1,130	659	460	884		1,600	835	198	267	478
Toluene	800	160	µg/l	<i>301</i>	18.7	11.6	43.7		924	<i>262</i>	71.4	35.8	<i>303</i>
Ethylbenzene	700	140	µg/l	<i>395</i>	<i>146</i>	99.2	<i>154</i>		890	<i>264</i>	<i>170</i>	93.1	<i>312</i>
Xylenes (mixed isomers)	2,000	400	µg/l	11,504	160	65	236.4		5,180	2,770	<i>725</i>	396	<i>1,963</i>
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 2.4	< 4.8	< 4.8	< 6.4		< 8.0	9.4 ^J	< 12.5	< 6.2	< 6.2
Trimethylbenzenes (mixed isomers)	480	96	µg/l	<i>322.7</i>	49.3	21.2	<i>100.4</i>		1,029	898	630	587	1,050
Naphthalene	100	10	µg/l	<i>74.7</i>	<i>13.9</i>	<i>7.8^J</i>	<i>22.6^J</i>	MW4 Abandoned Replaced with MW4R	280	174	<i>94.2</i>	147	221
Field Measurements													
Temperature			°F	NA	NA	42.3	NA		NA	NA	NA	63.1	40.2
Conductivity			ms/cm	NA	NA	33.7	NA		NA	NA	NA	2,778	1,098
Dissolved Oxygen			mg/L	NA	NA	0.97	NA		NA	NA	NA	0.41	0.19
pH				NA	NA	7.3	NA		NA	NA	NA	6.75	7.07
Redox Potential			mV	NA	NA	-212.8	NA		NA	NA	NA	-54.7	-67.1

Notes:

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Table 2g
Summary of Groundwater Analytical Results
MW5/MW5R
Hedlund DX
Falun, Wisconsin

				MW5					MW5R				
			Date ->	9/13/2016	1/11/2017	1/26/2018	5/16/2018	September 17-18, 2018	9/25/2018	12/12/2018	6/4/2019	9/6/2019	2/12/2020
Detected VOC Parameters	ES	PAL	Units										
Benzene	5	0.5	µg/l	119	77.9		175		247	146	10.3	40	109
Toluene	800	160	µg/l	24	11.7		69.2		57.8	37.2	3.0 ^J	12.8	21.1
Ethylbenzene	700	140	µg/l	109	65.1		381		267	365	50.2	227	105
Xylenes (mixed isomers)	2,000	400	µg/l	285	102		608.4		637.5	562.9	99.9	446.2	219.9
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	2.0	1.3		7.3 ^J		3.5 ^J	4.9 ^J	< 2.5	< 1.2	< 1.2
Trimethylbenzenes (mixed isomers)	480	96	µg/l	79.3	32.8		545		441	528	123.4	568	157.3
Naphthalene	100	10	µg/l	17.2	10.6		91.7		56.7	95.9	13.3	81.3	24.2
Field Measurements													
Temperature			°F	NA	NA		NA		NA	46.5	51.6	68.2	41.6
Conductivity			ms/cm	NA	NA		NA		NA	768	678	1,142	561
Dissolved Oxygen			mg/L	NA	NA		NA		NA	0.16	0.3	0.36	0.13
pH				NA	NA		NA		NA	7.26	6.78	6.87	7.26
Redox Potential			mV	NA	NA		NA		NA	-40.3	-121.7	-116	-95

Notes:

ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
Enforcement Standard exceeded
Preventive Action Limit exceeded

BOLD
<i>Italics</i>

NA = Not Analyzed

NS = Not Sampled

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

Table 2h
Summary of Groundwater Analytical Results
MW6
Hedlund DX
Falun, Wisconsin

			Date ->	9/13/2016	1/11/2017	1/26/2018	5/16/2018	September 17-18, 2018	9/25/2018	12/12/2018	6/4/2019	9/6/2019	2/12/2020
Detected VOC Parameters	ES	PAL	Units										
Benzene	5	0.5	µg/l	3.5	23.1	6.5	1.6	Soil Excavation Completed	3.6	2.9	7.9	Not Sampled Truck Parked over Well	Not Sampled Buried Under Large Snow Pile
Toluene	800	160	µg/l	0.88 ^J	< 0.39	< 0.39	< 0.49		< 0.49	< 0.49	< 0.17		
Ethylbenzene	700	140	µg/l	2.8	3.9	0.62 ^J	< 0.33		< 0.33	< 0.33	1.3		
Xylenes (mixed isomers)	2,000	400	µg/l	6.4	< 0.80	< 0.80	< 0.66		< 0.66	0.69 ^J	3.3		
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.48	< 0.48	< 0.48	< 0.32		< 0.32	< 0.32	< 1.2		
Trimethylbenzenes (mixed isomers)	480	96	µg/l	1.3	< 0.42	0.50 ^J	< 0.34		0.40 ^J	0.44 ^J	< 0.87		
Naphthalene	100	10	µg/l	0.46 ^J	< 0.42	< 0.42	< 0.51		< 0.51	< 0.51	< 1.2		
Field Measurements													
Temperature			°F	NA	NA	41.8	NA		63.9	45.5	49.8		
Conductivity			ms/cm	NA	NA	303	NA		529	966	772		
Dissolved Oxygen			mg/L	NA	NA	3.43	NA		3.03	0.51	0.70		
pH				NA	NA	7.32	NA		6.74	7.16	5.90		
Redox Potential			mV	NA	NA	-162.9	NA		123.5	85.6	21.6		

Notes:

ES = NR140.10 Enforcement Standards

PAL = NR140.10 Preventive Action Limits

Enforcement Standard exceeded

Preventive Action Limit exceeded

NA = Not Analyzed

NS = Not Sampled

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

BOLD

Italics

Table 2i
Summary of Groundwater Analytical Results
MW7
Hedlund DX
Falun, Wisconsin

	ES	PAL	Units	9/21/2016	1/11/2017	1/26/2018	5/16/2018	September 17-18, 2018	9/25/2018	12/12/2018	6/4/2019	9/6/2019	2/12/2020
Dissolved Lead	15	1.5	µg/l	< 3.0	NA	NA	NA		NA	NA	NA	NA	NA
Detected VOC Parameters													
Benzene	5	0.5	µg/l	< 0.40	< 0.40	Water Froze in Well - Not Sampled	< 0.31	Soil Excavation Completed	< 0.31	< 0.31	< 0.25	< 0.25	Water Froze in Well - Not Sampled
Toluene	800	160	µg/l	< 0.39	< 0.39		< 0.49		< 0.49	< 0.49	< 0.17	< 0.17	
Ethylbenzene	700	140	µg/l	< 0.39	< 0.39		< 0.33		< 0.33	< 0.33	< 0.22	< 0.22	
Xylenes (mixed isomers)	2,000	400	µg/l	< 0.80	< 0.80		< 0.66		< 0.66	< 0.66	< 0.47	< 0.47	
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.48	< 0.48		< 0.32		< 0.32	< 0.32	< 1.2	< 1.2	
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.42	< 0.42		< 0.34		< 0.34	< 0.34	< 0.87	< 0.87	
Naphthalene	100	10	µg/l	< 0.42	< 0.42		< 0.51		< 0.51	< 0.51	< 1.2	< 1.2	
Field Measurements													
Temperature			°F	NA	NA		NA		66.2	41.4	47.7	61.5	
Conductivity			ms/cm	NA	NA		NA		475.5	455.7	325.6	410.3	
Dissolved Oxygen			mg/L	NA	NA		NA		2.57	0.54	2.12	0.76	
pH				NA	NA		NA		7.17	7.29	7.21	8.00	
Redox Potential			mV	NA	NA		NA		-47.5	162.2	112.8	-141	

Notes:

ES = NR140.10 Enforcement Standards

PAL = NR140.10 Preventive Action Limits

Enforcement Standard exceeded

Preventive Action Limit exceeded

NA = Not Analyzed

NS = Not Sampled

¹ = Estimated value, concentration between the Limit of Detection and the Limit of Quantitation

BOLD
<i>Italics</i>

Table 2j
Summary of Groundwater Analytical Results
MW8
Hedlund DX
Falun, Wisconsin

			Date ->	1/11/2017	1/26/2018	5/16/2018	September 17-18, 2018	9/25/2018	12/12/2018	6/4/2019	9/6/2019	2/12/2020
Detected VOC Parameters	ES	PAL	Units				Soil Excavation Completed					
Benzene	5	0.5	µg/l	< 0.50	< 0.40	< 0.31		< 0.31	< 0.31	< 0.25	< 0.25	< 0.25
Toluene	800	160	µg/l	< 0.50	< 0.39	< 0.49		< 0.49	< 0.49	< 0.17	< 0.17	< 0.17
Ethylbenzene	700	140	µg/l	< 0.50	< 0.39	< 0.33		< 0.33	< 0.33	< 0.22	< 0.22	< 0.22
Xylenes (mixed isomers)	2,000	400	µg/l	< 1.0	< 0.80	< 0.66		< 0.66	< 0.66	< 0.47	< 0.47	< 0.47
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.17	< 0.48	< 0.32		< 0.32	< 0.32	< 1.2	< 1.2	< 1.2
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.50	< 0.42	< 0.34		< 0.34	< 0.34	< 0.87	< 0.87	< 0.87
Naphthalene	100	10	µg/l	< 2.5	< 0.42	< 0.51		< 0.51	< 0.51	< 1.2	< 1.2	< 1.2
Tetrachloroethene	5	0.5	µg/l	<i>0.75^J</i>	NA	NA		NA	NA	NA	NA	NA
Inorganic Compounds												
Dissolved Iron	300	150	µg/l	4,670	NA	NA		NA	NA	NA	NA	NA
Dissolved Manganese	50	25	µg/l	1,190	NA	NA		NA	NA	NA	NA	NA
Field Measurements												
Temperature			°F	NA	46.98	NA		59.8	49.2	51.5	55.9	43.5
Conductivity			ms/cm	NA	784	NA		1,675	2,103	1,810	977	1,822
Dissolved Oxygen			mg/L	NA	3.41	NA		1.35	0.16	0.60	0.63	0.45
pH				NA	7.45	NA		6.86	7.08	6.87	7.02	7.23
Redox Potential			mV	NA	-31.1	NA		-0.5	42.6	-28.8	-75.8	11.8

Notes:

ES = NR140.10 Enforcement Standards

PAL = NR140.10 Preventive Action Limits

Enforcement Standard exceeded

Preventive Action Limit exceeded

NA = Not Analyzed

NS = Not Sampled

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

BOLD
<i>Italics</i>

Table 2k
Summary of Groundwater Analytical Results
MW9
Hedlund DX
Falun, Wisconsin

			Date ->	1/11/2017	1/26/2018	5/16/2018	September 17-18, 2018	9/25/2018	12/12/2018	6/4/2019	9/6/2019	2/12/2020
Detected VOC Parameters	ES	PAL	Units				Soil Excavation Completed					
Benzene	5	0.5	µg/l	< 0.50	< 0.40	< 0.31		< 0.31	< 0.31	< 0.25	< 0.25	< 0.25
Toluene	800	160	µg/l	< 0.50	< 0.39	< 0.49		< 0.49	< 0.49	< 0.17	< 0.17	< 0.17
Ethylbenzene	700	140	µg/l	< 0.50	< 0.39	< 0.33		< 0.33	< 0.33	< 0.22	< 0.22	< 0.22
Xylenes (mixed isomers)	2,000	400	µg/l	< 1.0	< 0.80	< 0.66		< 0.66	< 0.66	< 0.47	< 0.47	< 0.47
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.17	< 0.48	< 0.32		< 0.32	< 0.32	< 1.2	< 1.2	< 1.2
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.50	< 0.42	< 0.34		< 0.34	< 0.34	< 0.87	< 0.87	< 0.87
Naphthalene	100	10	µg/l	< 2.5	< 0.42	< 0.51		< 0.51	< 0.51	< 1.2	< 1.2	< 1.2
Tetrachloroethene	5	0.5	µg/l	<i>1.2</i>	NA	NA		NA	NA	NA	NA	NA
Inorganic Compounds												
Dissolved Iron	300	150	µg/l	2,370	NA	NA		NA	NA	NA	NA	NA
Dissolved Manganese	50	25	µg/l	394	NA	NA		NA	NA	NA	NA	NA
Field Measurements												
Temperature			°F	NA	42.87	NA		61.2	45.8	48.1	55.9	40.9
Conductivity			ms/cm	NA	339	NA		1,043	1,001	667	977	1,047
Dissolved Oxygen			mg/L	NA	2.1	NA		0.46	1.0	0.25	0.63	1.07
pH				NA	7.37	NA		7.02	7.3	6.14	7.02	7.64
Redox Potential			mV	NA	-86.3	NA		-70.0	-8.6	-82.8	-75.8	-4.0

Notes:

ES = NR140.10 Enforcement Standards

PAL = NR140.10 Preventive Action Limits

Enforcement Standard exceeded

Preventive Action Limit exceeded

NA = Not Analyzed

NS = Not Sampled

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

BOLD
<i>Italics</i>

Table 21
Summary of Groundwater Analytical Results
MW10
Hedlund DX
Falun, Wisconsin

			Date ->	1/11/2017	1/26/2018	5/16/2018	September 17-18, 2018	9/25/2018	12/12/2018	6/4/2019	9/6/2019	2/12/2020
Detected VOC Parameters	ES	PAL	Units				Soil Excavation Completed					
Benzene	5	0.5	µg/l	< 0.50	< 0.40	< 0.31		< 0.31	< 0.31	< 0.25	< 0.25	< 0.25
Toluene	800	160	µg/l	< 0.50	< 0.39	< 0.49		< 0.49	< 0.49	< 0.17	< 0.17	< 0.17
Ethylbenzene	700	140	µg/l	< 0.50	< 0.39	< 0.33		< 0.33	< 0.33	< 0.22	< 0.22	< 0.22
Xylenes (mixed isomers)	2,000	400	µg/l	< 1.0	< 0.80	< 0.66		< 0.66	< 0.66	< 0.47	< 0.47	< 0.47
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.17	< 0.48	< 0.32		< 0.32	< 0.32	< 1.2	< 1.2	< 1.2
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.50	< 0.42	< 0.34		< 0.34	< 0.34	< 0.87	< 0.87	< 0.87
Naphthalene	100	10	µg/l	< 2.5	< 0.42	< 0.51		< 0.51	< 0.51	< 1.2	< 1.2	< 1.2
Tetrachloroethene	5	0.5	µg/l	< 0.50	NA	NA		NA	NA	NA	NA	NA
Inorganic Compounds												
Dissolved Iron	300	150	µg/l	1,560	NA	NA		NA	NA	NA	NA	NA
Dissolved Manganese	50	25	µg/l	284	NA	NA		NA	NA	NA	NA	NA
Field Measurements												
Temperature			°F	NA	387.93	NA		58.1	45.9	51.8	55.0	44.1
Conductivity			ms/cm	NA	183	NA		392.4	406.3	413	421	413
Dissolved Oxygen			mg/L	NA	1.95	NA		0.63	1.49	0.49	0.73	0.55
pH				NA	7.87	NA		7.54	7.74	7.68	7.38	7.65
Redox Potential			mV	NA	-111.2	NA		-102.7	-58.7	-109.1	-100.8	-69.4

Notes:

ES = NR140.10 Enforcement Standards

PAL = NR140.10 Preventive Action Limits

Enforcement Standard exceeded

Preventive Action Limit exceeded

NA = Not Analyzed

NS = Not Sampled

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

BOLD
<i>Italics</i>

Table 2m
Summary of Groundwater Analytical Results
MW11
Hedlund DX
Falun, Wisconsin

			Date ->	1/11/2017	1/26/2018	5/16/2018	September 17-18, 2018	9/25/2018	12/12/2018	6/4/2019	9/6/2019	2/12/2020
Detected VOC Parameters	ES	PAL	Units									
Benzene	5	0.5	µg/l	< 0.50	Water Froze in Well - Not Sampled	< 0.31	Soil Excavation Completed	< 0.31	< 0.31	< 0.25	< 0.25	< 0.25
Toluene	800	160	µg/l	< 0.50		< 0.49		< 0.49	< 0.49	< 0.17	< 0.17	< 0.17
Ethylbenzene	700	140	µg/l	< 0.50		< 0.33		< 0.33	< 0.33	< 0.22	< 0.22	< 0.22
Xylenes (mixed isomers)	2,000	400	µg/l	< 1.0		< 0.66		< 0.66	< 0.66	< 0.47	< 0.47	< 0.47
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.17		< 0.32		< 0.32	< 0.32	< 1.2	< 1.2	< 1.2
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.50		< 0.34		< 0.34	< 0.34	< 0.87	< 0.87	< 0.87
Naphthalene	100	10	µg/l	< 2.5		< 0.51		< 0.51	< 0.51	< 1.2	< 1.2	< 1.2
Tetrachloroethene	5	0.5	µg/l	< 0.50		NA		NA	NA	NA	NA	NA
Inorganic Compounds												
Dissolved Iron	300	150	µg/l	468		NA		NA	NA	NA	NA	NA
Dissolved Manganese	50	25	µg/l	292		NA		NA	NA	NA	NA	NA
Field Measurements												
Temperature			°F	NA		NA		61.2	38.5	58.1	62.9	32.8
Conductivity			ms/cm	NA		NA		342.3	380.6	416	398	432
Dissolved Oxygen			mg/L	NA		NA		0.31	0.78	0.80	1.49	3.5
pH				NA		NA		7.72	8.01	7.82	7.77	7.93
Redox Potential			mV	NA		NA		31.4	-29.4	18.3	-19.5	21.2

Notes:

ES = NR140.10 Enforcement Standards

PAL = NR140.10 Preventive Action Limits

Enforcement Standard exceeded

Preventive Action Limit exceeded

NA = Not Analyzed

NS = Not Sampled

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

BOLD

Italics

Table 2n
Summary of Groundwater Analytical Results
10561 State Highway 70 - Potable Well
Hedlund DX
Falun, Wisconsin

	ES	PAL	Units	9/21/2016	1/11/2017	1/26/2018	5/16/2018	September 17-18, 2018	9/25/2018	12/12/2018	6/4/2019	9/26/2019	2/12/2020
Dissolved Lead	15	1.5	µg/l	< 3.0	NA	Well Not Sampled	NA	Soil Excavation Completed	NA	NA	NA	NA	NA
Detected VOC Parameters													
Benzene	5	0.5	µg/l	< 0.086	< 0.086		< 0.032		< 0.12	< 0.12	< 0.23	< 0.12	< 0.12
Toluene	800	160	µg/l	< 0.080	< 0.080		< 0.12		< 0.078	< 0.078	< 0.22	< 0.078	< 0.078
Ethylbenzene	700	140	µg/l	< 0.051	< 0.051		< 0.017		< 0.11	< 0.11	< 0.22	< 0.11	< 0.11
Xylenes (mixed isomers)	2,000	400	µg/l	< 0.073	< 0.073		< 0.03		< 0.30	< 0.30	< 0.48	< 0.30	< 0.30
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	NA	NA		< 0.016		< 0.17	< 0.17	< 0.29	< 0.17	< 0.17
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.083	< 0.083		< 0.025		< 0.23	< 0.23	< 0.22	< 0.23	< 0.23
Naphthalene	100	10	µg/l	< 0.064	< 0.064		< 0.022		< 0.18	< 0.18	< 0.23	< 0.18	< 0.18
Tetrachloroethene	5	0.5	µg/l	< 0.12	< 0.12		< 0.04		< 0.17	< 0.17	< 0.28	< 0.17	< 0.17

Notes:

ES = NR140.10 Enforcement Standards

PAL = NR140.10 Preventive Action Limits

Enforcement Standard exceeded

Preventive Action Limit exceeded

NA = Not Analyzed

NS = Not Sampled

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

BOLD
<i>Italics</i>

Table 2o
Summary of Groundwater Analytical Results
10531 State Highway 70 - Potable Well
Hedlund DX
Falun, Wisconsin

	ES	PAL	Units	9/21/2016	1/11/2017	1/26/2018	5/16/2018	September 17-18, 2018	9/25/2018	12/12/2018	6/4/2019	9/26/2019	2/12/2020
Dissolved Lead	15	1.5	µg/l	< 3.0	Well Not Sampled	Well Not Sampled	Well Not Sampled	Soil Excavation Completed	NA	NA	Well Not Sampled	NA	NA
Detected VOC Parameters													
Benzene	5	0.5	µg/l	< 0.086					< 0.12	< 0.12		< 0.12	0.24 ¹
Toluene	800	160	µg/l	< 0.080					< 0.078	< 0.078		< 0.078	1.1
Ethylbenzene	700	140	µg/l	< 0.051					< 0.11	< 0.11		< 0.11	< 0.11
Xylenes (mixed isomers)	2,000	400	µg/l	< 0.073					< 0.30	< 0.30		< 0.30	< 0.30
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	NA					< 0.17	< 0.17		< 0.17	< 0.17
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.083					< 0.23	< 0.23		< 0.23	< 0.23
Naphthalene	100	10	µg/l	< 0.064					< 0.18	< 0.18		< 0.18	< 0.18
Tetrachloroethene	5	0.5	µg/l	< 0.12					< 0.17	< 0.17		< 0.17	< 0.17

Notes:

ES = NR140.10 Enforcement Standards

PAL = NR140.10 Preventive Action Limits

Enforcement Standard exceeded

Preventive Action Limit exceeded

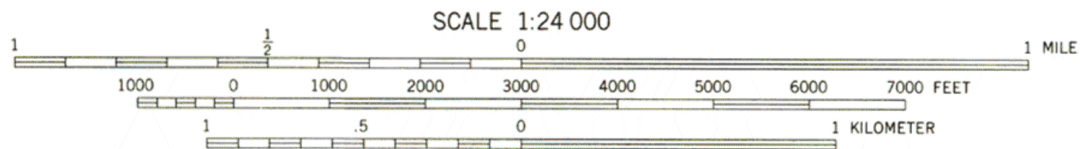
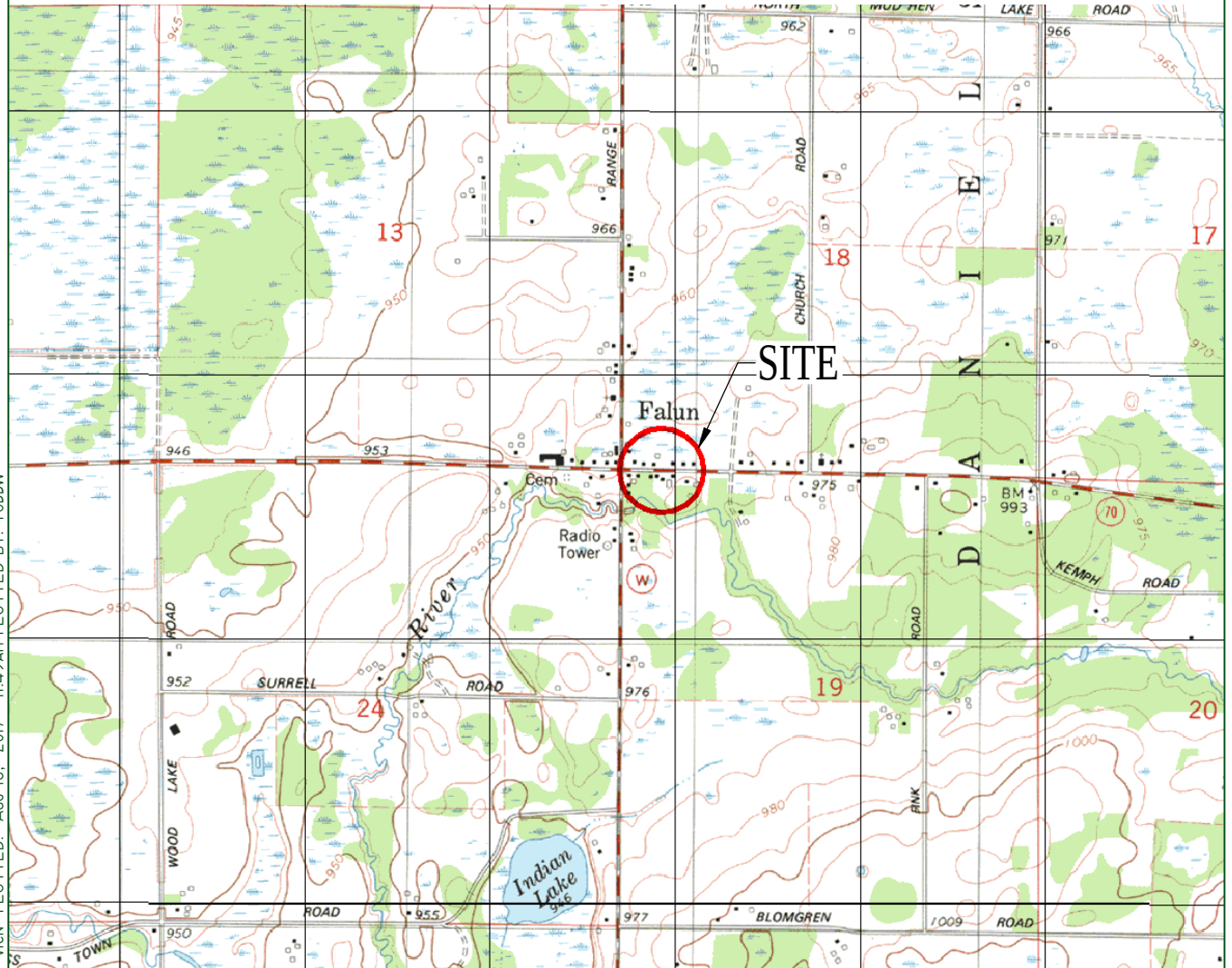
NA = Not Analyzed

NS = Not Sampled

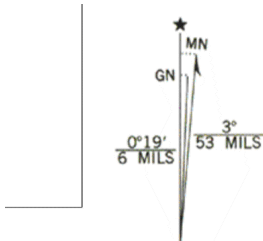
¹ = Estimated value, concentration between the Limit of Detection and the Limit of Quantitation

BOLD
<i>Italics</i>

DRAWING FILE: P:\17300-7399\7367 - HEDLUND DX\DWG\7367-VICN.DWG LAYOUT: 7367-VICN PLOTTED: Aug 15, 2017 - 11:49AM PLOTTED BY: ToddW



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



UTM GRID AND 1982 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

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

1982

DMA 2475 I SE-SERIES V861



QUADRANGLE LOCATION

REI Engineering, INC.

BURNETT COUNTY-FORMER HEDLUND DX
10557 STATE HIGHWAY 70
FALUN, WISCONSIN 54872

FIGURE 1 : SITE VICINITY MAP

PROJECT NO.

7367AxUC

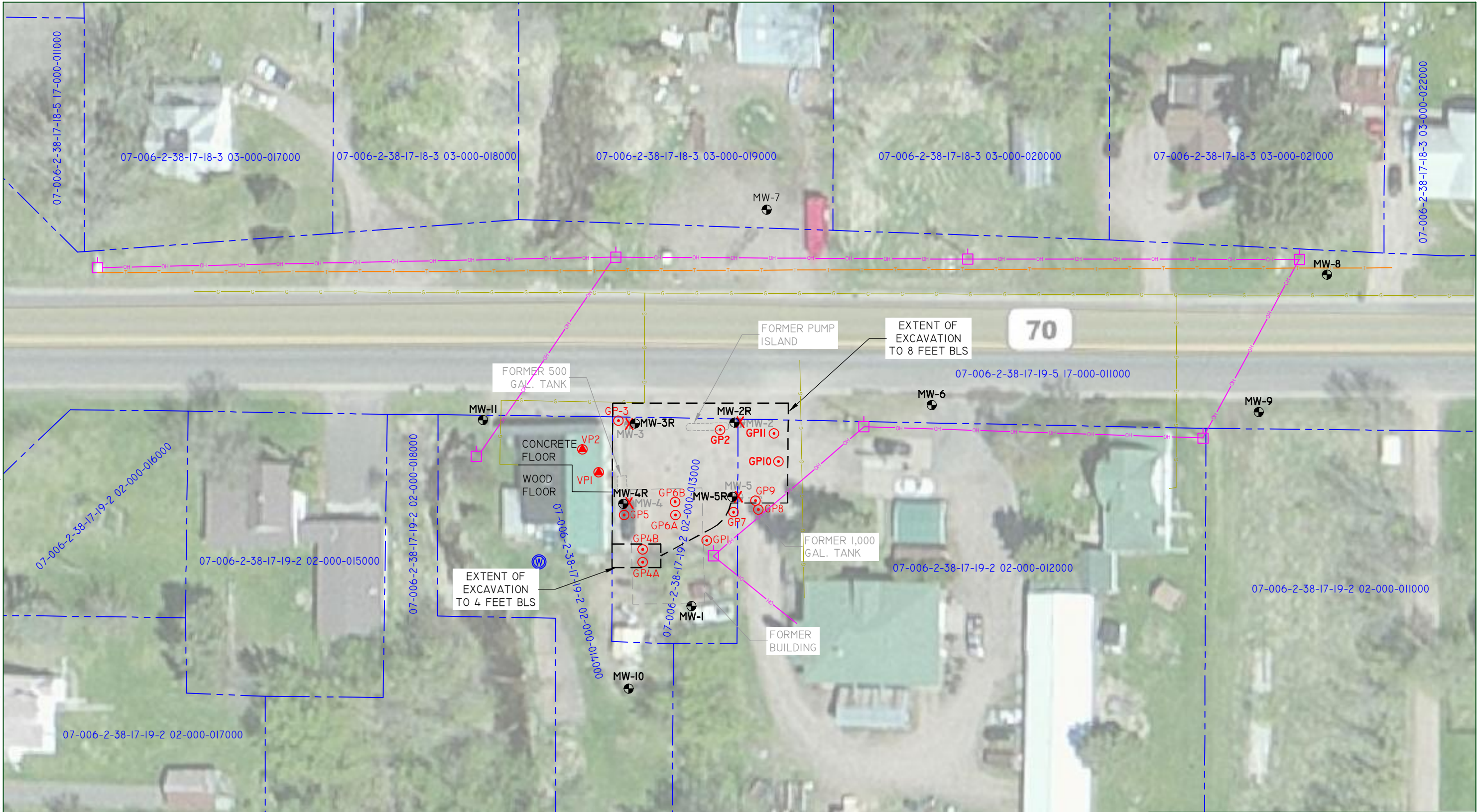
DRAWN BY:

TAW

DATE:

8/15/2017

DRAWING FILE: P:\7300-7399\7367 - HEDLUND DX\dwg\7367-site.dwg LAYOUT: SITE PLOTTED: MAY 29, 2019 - 9:22AM PLOTTED BY: MATTM



LEGEND	
0 40 SCALE: 1" = 40'	
	GEOPROBE SOIL BORING
	MONITORING WELL
	MONITORING WELL (ABANDONED)
	SUB-SLAB VAPOR PROBE
	POTABLE WELL
	UTILITY POLE
	BURIED GAS LINE
	BURIED TELECOMMUNICATIONS LINE
	OVERHEAD UTILITIES LINE
	EXCAVATION BOUNDARIES (APPROXIMATE)
	PROPERTY BOUNDARIES (APPROXIMATE)

REI Engineering, INC.

 CIVIL & ENVIRONMENTAL ENGINEERING, SURVEYING	BURNETT COUNTY-FORMER HEDLUND DX 10557 STATE HIGHWAY 70 FALUN, WISCONSIN 54872		
	FIGURE 2 : SITE MAP		
PROJECT No. 7367AxUC	DRAWN BY: MCM	DATE: 5/29/2019	

APPENDIX A

GROUNDWATER ANALYTICAL LABORATORY REPORTS



February 25, 2020

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

RE: Project: 7367 HEDLUND DX
Pace Project No.: 40203553

Dear DAVID LARSEN:

Enclosed are the analytical results for sample(s) received by the laboratory on February 19, 2020. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 7367 HEDLUND DX

Pace Project No.: 40203553

Pace Analytical Services Minneapolis

A2LA Certification #: 2926.01
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
CNMI Saipan Certification #: MP0003
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605
Georgia Certification #: 959
Guam EPA Certification #: MN00064
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064
Maryland Certification #: 322
Massachusetts Certification #: M-MN064
Massachusetts DWP Certification #: via MN 027-053-137
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137

Minnesota Dept of Ag Certification #: via MN 027-053-137
Minnesota Petrofund Certification #: 1240
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #: 74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Vermont Certification #: VT-027053137
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01

Pace Analytical Services Green Bay

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

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SAMPLE SUMMARY

Project: 7367 HEDLUND DX

Pace Project No.: 40203553

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40203553001	MW1	Water	02/12/20 07:30	02/19/20 09:25
40203553002	MW2R	Water	02/12/20 07:45	02/19/20 09:25
40203553003	MW3R	Water	02/12/20 08:00	02/19/20 09:25
40203553004	MW4R	Water	02/12/20 08:15	02/19/20 09:25
40203553005	MW5R	Water	02/12/20 08:30	02/19/20 09:25
40203553006	MW8	Water	02/12/20 09:15	02/19/20 09:25
40203553007	MW9	Water	02/12/20 09:30	02/19/20 09:25
40203553008	MW10	Water	02/12/20 09:45	02/19/20 09:25
40203553009	MW11	Water	02/12/20 10:00	02/19/20 09:25
40203553010	POTABLE 1	Water	02/12/20 11:15	02/19/20 09:25
40203553011	POTABLE 2	Water	02/12/20 11:30	02/19/20 09:25

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SAMPLE ANALYTE COUNT

Project: 7367 HEDLUND DX

Pace Project No.: 40203553

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40203553001	MW1	EPA 8260	HNW	12	PASI-G
40203553002	MW2R	EPA 8260	HNW	12	PASI-G
40203553003	MW3R	EPA 8260	HNW	12	PASI-G
40203553004	MW4R	EPA 8260	HNW	12	PASI-G
40203553005	MW5R	EPA 8260	HNW	12	PASI-G
40203553006	MW8	EPA 8260	HNW	12	PASI-G
40203553007	MW9	EPA 8260	HNW	12	PASI-G
40203553008	MW10	EPA 8260	HNW	12	PASI-G
40203553009	MW11	EPA 8260	HNW	12	PASI-G
40203553010	POTABLE 1	EPA 524.2	DS2	62	PASI-M
40203553011	POTABLE 2	EPA 524.2	DS2	62	PASI-M

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40203553

Sample: MW1 Lab ID: 40203553001 Collected: 02/12/20 07:30 Received: 02/19/20 09:25 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST Analytical Method: EPA 8260									
Benzene	<0.25	ug/L	1.0	0.25	1		02/21/20 08:28	71-43-2	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		02/21/20 08:28	100-41-4	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		02/21/20 08:28	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		02/21/20 08:28	91-20-3	
Toluene	<0.17	ug/L	5.0	0.17	1		02/21/20 08:28	108-88-3	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		02/21/20 08:28	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		02/21/20 08:28	108-67-8	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		02/21/20 08:28	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		02/21/20 08:28	95-47-6	
Surrogates									
Dibromofluoromethane (S)	105	%	70-130		1		02/21/20 08:28	1868-53-7	
Toluene-d8 (S)	102	%	70-130		1		02/21/20 08:28	2037-26-5	
4-Bromofluorobenzene (S)	94	%	70-130		1		02/21/20 08:28	460-00-4	

Sample: MW2R Lab ID: 40203553002 Collected: 02/12/20 07:45 Received: 02/19/20 09:25 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST Analytical Method: EPA 8260									
Benzene	32.4	ug/L	1.0	0.25	1		02/20/20 13:49	71-43-2	
Ethylbenzene	17.0	ug/L	1.0	0.22	1		02/20/20 13:49	100-41-4	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		02/20/20 13:49	1634-04-4	
Naphthalene	2.3J	ug/L	5.0	1.2	1		02/20/20 13:49	91-20-3	
Toluene	4.5J	ug/L	5.0	0.17	1		02/20/20 13:49	108-88-3	
1,2,4-Trimethylbenzene	12.8	ug/L	2.8	0.84	1		02/20/20 13:49	95-63-6	
1,3,5-Trimethylbenzene	1.8J	ug/L	2.9	0.87	1		02/20/20 13:49	108-67-8	
m&p-Xylene	35.4	ug/L	2.0	0.47	1		02/20/20 13:49	179601-23-1	
o-Xylene	1.1	ug/L	1.0	0.26	1		02/20/20 13:49	95-47-6	
Surrogates									
Dibromofluoromethane (S)	102	%	70-130		1		02/20/20 13:49	1868-53-7	
Toluene-d8 (S)	102	%	70-130		1		02/20/20 13:49	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130		1		02/20/20 13:49	460-00-4	

Sample: MW3R Lab ID: 40203553003 Collected: 02/12/20 08:00 Received: 02/19/20 09:25 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST Analytical Method: EPA 8260									
Benzene	1.4	ug/L	1.0	0.25	1		02/20/20 15:19	71-43-2	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		02/20/20 15:19	100-41-4	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		02/20/20 15:19	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		02/20/20 15:19	91-20-3	
Toluene	<0.17	ug/L	5.0	0.17	1		02/20/20 15:19	108-88-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40203553

Sample: MW3R Lab ID: 40203553003 Collected: 02/12/20 08:00 Received: 02/19/20 09:25 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST Analytical Method: EPA 8260									
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		02/20/20 15:19	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		02/20/20 15:19	108-67-8	
m&p-Xylene	0.59J	ug/L	2.0	0.47	1		02/20/20 15:19	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		02/20/20 15:19	95-47-6	
Surrogates									
Dibromofluoromethane (S)	103	%	70-130		1		02/20/20 15:19	1868-53-7	
Toluene-d8 (S)	101	%	70-130		1		02/20/20 15:19	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		1		02/20/20 15:19	460-00-4	

Sample: MW4R Lab ID: 40203553004 Collected: 02/12/20 08:15 Received: 02/19/20 09:25 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST Analytical Method: EPA 8260									
Benzene	478	ug/L	5.0	1.2	5		02/20/20 14:34	71-43-2	
Ethylbenzene	312	ug/L	5.0	1.1	5		02/20/20 14:34	100-41-4	
Methyl-tert-butyl ether	<6.2	ug/L	20.8	6.2	5		02/20/20 14:34	1634-04-4	
Naphthalene	221	ug/L	25.0	5.9	5		02/20/20 14:34	91-20-3	
Toluene	303	ug/L	25.0	0.86	5		02/20/20 14:34	108-88-3	
1,2,4-Trimethylbenzene	779	ug/L	14.0	4.2	5		02/20/20 14:34	95-63-6	
1,3,5-Trimethylbenzene	271	ug/L	14.6	4.4	5		02/20/20 14:34	108-67-8	
m&p-Xylene	1460	ug/L	10.0	2.3	5		02/20/20 14:34	179601-23-1	
o-Xylene	503	ug/L	5.0	1.3	5		02/20/20 14:34	95-47-6	
Surrogates									
Dibromofluoromethane (S)	98	%	70-130		5		02/20/20 14:34	1868-53-7	
Toluene-d8 (S)	104	%	70-130		5		02/20/20 14:34	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130		5		02/20/20 14:34	460-00-4	

Sample: MW5R Lab ID: 40203553005 Collected: 02/12/20 08:30 Received: 02/19/20 09:25 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST Analytical Method: EPA 8260									
Benzene	109	ug/L	1.0	0.25	1		02/20/20 15:41	71-43-2	
Ethylbenzene	105	ug/L	1.0	0.22	1		02/20/20 15:41	100-41-4	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		02/20/20 15:41	1634-04-4	
Naphthalene	24.2	ug/L	5.0	1.2	1		02/20/20 15:41	91-20-3	
Toluene	21.1	ug/L	5.0	0.17	1		02/20/20 15:41	108-88-3	
1,2,4-Trimethylbenzene	133	ug/L	2.8	0.84	1		02/20/20 15:41	95-63-6	
1,3,5-Trimethylbenzene	24.3	ug/L	2.9	0.87	1		02/20/20 15:41	108-67-8	
m&p-Xylene	215	ug/L	2.0	0.47	1		02/20/20 15:41	179601-23-1	
o-Xylene	4.9	ug/L	1.0	0.26	1		02/20/20 15:41	95-47-6	

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40203553

Sample: MW5R		Lab ID: 40203553005		Collected: 02/12/20 08:30		Received: 02/19/20 09:25		Matrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST		Analytical Method: EPA 8260							
Surrogates									
Dibromofluoromethane (S)	100	%	70-130		1		02/20/20 15:41	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		02/20/20 15:41	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130		1		02/20/20 15:41	460-00-4	

Sample: MW8		Lab ID: 40203553006		Collected: 02/12/20 09:15		Received: 02/19/20 09:25		Matrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST		Analytical Method: EPA 8260							
Benzene	<0.25	ug/L	1.0	0.25	1		02/20/20 16:04	71-43-2	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		02/20/20 16:04	100-41-4	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		02/20/20 16:04	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		02/20/20 16:04	91-20-3	
Toluene	<0.17	ug/L	5.0	0.17	1		02/20/20 16:04	108-88-3	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		02/20/20 16:04	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		02/20/20 16:04	108-67-8	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		02/20/20 16:04	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		02/20/20 16:04	95-47-6	
Surrogates									
Dibromofluoromethane (S)	103	%	70-130		1		02/20/20 16:04	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		02/20/20 16:04	2037-26-5	
4-Bromofluorobenzene (S)	99	%	70-130		1		02/20/20 16:04	460-00-4	

Sample: MW9		Lab ID: 40203553007		Collected: 02/12/20 09:30		Received: 02/19/20 09:25		Matrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST		Analytical Method: EPA 8260							
Benzene	<0.25	ug/L	1.0	0.25	1		02/20/20 16:26	71-43-2	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		02/20/20 16:26	100-41-4	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		02/20/20 16:26	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		02/20/20 16:26	91-20-3	
Toluene	<0.17	ug/L	5.0	0.17	1		02/20/20 16:26	108-88-3	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		02/20/20 16:26	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		02/20/20 16:26	108-67-8	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		02/20/20 16:26	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		02/20/20 16:26	95-47-6	
Surrogates									
Dibromofluoromethane (S)	102	%	70-130		1		02/20/20 16:26	1868-53-7	
Toluene-d8 (S)	102	%	70-130		1		02/20/20 16:26	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130		1		02/20/20 16:26	460-00-4	

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40203553

Sample: MW10		Lab ID: 40203553008		Collected: 02/12/20 09:45		Received: 02/19/20 09:25		Matrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST		Analytical Method: EPA 8260							
Benzene	<0.25	ug/L	1.0	0.25	1		02/20/20 16:49	71-43-2	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		02/20/20 16:49	100-41-4	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		02/20/20 16:49	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		02/20/20 16:49	91-20-3	
Toluene	<0.17	ug/L	5.0	0.17	1		02/20/20 16:49	108-88-3	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		02/20/20 16:49	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		02/20/20 16:49	108-67-8	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		02/20/20 16:49	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		02/20/20 16:49	95-47-6	
Surrogates									
Dibromofluoromethane (S)	103	%	70-130		1		02/20/20 16:49	1868-53-7	
Toluene-d8 (S)	102	%	70-130		1		02/20/20 16:49	2037-26-5	
4-Bromofluorobenzene (S)	96	%	70-130		1		02/20/20 16:49	460-00-4	

Sample: MW11		Lab ID: 40203553009		Collected: 02/12/20 10:00		Received: 02/19/20 09:25		Matrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST		Analytical Method: EPA 8260							
Benzene	<0.25	ug/L	1.0	0.25	1		02/21/20 08:50	71-43-2	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		02/21/20 08:50	100-41-4	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		02/21/20 08:50	1634-04-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		02/21/20 08:50	91-20-3	
Toluene	<0.17	ug/L	5.0	0.17	1		02/21/20 08:50	108-88-3	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		02/21/20 08:50	95-63-6	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		02/21/20 08:50	108-67-8	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		02/21/20 08:50	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		02/21/20 08:50	95-47-6	
Surrogates									
Dibromofluoromethane (S)	104	%	70-130		1		02/21/20 08:50	1868-53-7	
Toluene-d8 (S)	101	%	70-130		1		02/21/20 08:50	2037-26-5	
4-Bromofluorobenzene (S)	95	%	70-130		1		02/21/20 08:50	460-00-4	

Sample: POTABLE 1		Lab ID: 40203553010		Collected: 02/12/20 11:15		Received: 02/19/20 09:25		Matrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
524.2 MSV		Analytical Method: EPA 524.2							
Benzene	<0.12	ug/L	0.41	0.12	1		02/24/20 14:05	71-43-2	
Bromobenzene	<0.23	ug/L	0.76	0.23	1		02/24/20 14:05	108-86-1	
Bromochloromethane	<0.30	ug/L	0.99	0.30	1		02/24/20 14:05	74-97-5	
Bromodichloromethane	<0.15	ug/L	0.50	0.15	1		02/24/20 14:05	75-27-4	
Bromoform	<0.45	ug/L	1.5	0.45	1		02/24/20 14:05	75-25-2	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX

Pace Project No.: 40203553

Sample: POTABLE 1 **Lab ID: 40203553010** Collected: 02/12/20 11:15 Received: 02/19/20 09:25 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
524.2 MSV		Analytical Method: EPA 524.2							
Bromomethane	<0.62	ug/L	2.1	0.62	1		02/24/20 14:05	74-83-9	
n-Butylbenzene	<0.14	ug/L	0.47	0.14	1		02/24/20 14:05	104-51-8	
sec-Butylbenzene	<0.20	ug/L	0.68	0.20	1		02/24/20 14:05	135-98-8	
tert-Butylbenzene	<0.14	ug/L	0.46	0.14	1		02/24/20 14:05	98-06-6	
Carbon tetrachloride	<0.20	ug/L	0.67	0.20	1		02/24/20 14:05	56-23-5	
Chlorobenzene	<0.12	ug/L	0.40	0.12	1		02/24/20 14:05	108-90-7	
Chloroethane	<0.34	ug/L	1.1	0.34	1		02/24/20 14:05	75-00-3	
Chloroform	<0.39	ug/L	1.3	0.39	1		02/24/20 14:05	67-66-3	
Chloromethane	<0.15	ug/L	0.51	0.15	1		02/24/20 14:05	74-87-3	
2-Chlorotoluene	<0.086	ug/L	0.29	0.086	1		02/24/20 14:05	95-49-8	
4-Chlorotoluene	<0.093	ug/L	0.31	0.093	1		02/24/20 14:05	106-43-4	
1,2-Dibromo-3-chloropropane	<2.0	ug/L	6.5	2.0	1		02/24/20 14:05	96-12-8	N2
Dibromochloromethane	<0.24	ug/L	0.81	0.24	1		02/24/20 14:05	124-48-1	
1,2-Dibromoethane (EDB)	<0.17	ug/L	0.57	0.17	1		02/24/20 14:05	106-93-4	N2
Dibromomethane	<0.23	ug/L	0.76	0.23	1		02/24/20 14:05	74-95-3	
1,2-Dichlorobenzene	<0.18	ug/L	0.58	0.18	1		02/24/20 14:05	95-50-1	
1,3-Dichlorobenzene	<0.14	ug/L	0.46	0.14	1		02/24/20 14:05	541-73-1	
1,4-Dichlorobenzene	<0.086	ug/L	0.29	0.086	1		02/24/20 14:05	106-46-7	
Dichlorodifluoromethane	<0.26	ug/L	0.87	0.26	1		02/24/20 14:05	75-71-8	
1,1-Dichloroethane	<0.16	ug/L	0.55	0.16	1		02/24/20 14:05	75-34-3	
1,2-Dichloroethane	<0.13	ug/L	0.45	0.13	1		02/24/20 14:05	107-06-2	
1,1-Dichloroethene	<0.19	ug/L	0.62	0.19	1		02/24/20 14:05	75-35-4	
cis-1,2-Dichloroethene	<0.14	ug/L	0.46	0.14	1		02/24/20 14:05	156-59-2	
trans-1,2-Dichloroethene	<0.18	ug/L	0.59	0.18	1		02/24/20 14:05	156-60-5	
1,2-Dichloropropane	<0.19	ug/L	0.64	0.19	1		02/24/20 14:05	78-87-5	
1,3-Dichloropropane	<0.11	ug/L	0.35	0.11	1		02/24/20 14:05	142-28-9	N2
2,2-Dichloropropane	<0.16	ug/L	0.53	0.16	1		02/24/20 14:05	594-20-7	
1,1-Dichloropropene	<0.10	ug/L	0.35	0.10	1		02/24/20 14:05	563-58-6	
cis-1,3-Dichloropropene	<0.21	ug/L	0.69	0.21	1		02/24/20 14:05	10061-01-5	
trans-1,3-Dichloropropene	<0.24	ug/L	0.81	0.24	1		02/24/20 14:05	10061-02-6	
Ethylbenzene	<0.11	ug/L	0.36	0.11	1		02/24/20 14:05	100-41-4	
Hexachloro-1,3-butadiene	<0.28	ug/L	0.92	0.28	1		02/24/20 14:05	87-68-3	
Isopropylbenzene (Cumene)	<0.17	ug/L	0.57	0.17	1		02/24/20 14:05	98-82-8	
p-Isopropyltoluene	<0.21	ug/L	0.71	0.21	1		02/24/20 14:05	99-87-6	N2
Methylene Chloride	<0.46	ug/L	1.5	0.46	1		02/24/20 14:05	75-09-2	
Methyl-tert-butyl ether	<0.17	ug/L	0.56	0.17	1		02/24/20 14:05	1634-04-4	
Naphthalene	<0.32	ug/L	1.1	0.32	1		02/24/20 14:05	91-20-3	
n-Propylbenzene	<0.13	ug/L	0.44	0.13	1		02/24/20 14:05	103-65-1	
Styrene	<0.18	ug/L	0.59	0.18	1		02/24/20 14:05	100-42-5	
1,1,1,2-Tetrachloroethane	<0.12	ug/L	0.39	0.12	1		02/24/20 14:05	630-20-6	
1,1,2,2-Tetrachloroethane	<0.17	ug/L	0.56	0.17	1		02/24/20 14:05	79-34-5	
Tetrachloroethene	<0.17	ug/L	0.56	0.17	1		02/24/20 14:05	127-18-4	
Toluene	0.84	ug/L	0.26	0.078	1		02/24/20 14:05	108-88-3	
1,2,3-Trichlorobenzene	<0.25	ug/L	0.83	0.25	1		02/24/20 14:05	87-61-6	
1,2,4-Trichlorobenzene	<0.19	ug/L	0.64	0.19	1		02/24/20 14:05	120-82-1	
1,1,1-Trichloroethane	<0.19	ug/L	0.62	0.19	1		02/24/20 14:05	71-55-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40203553

Sample: POTABLE 1 Lab ID: 40203553010 Collected: 02/12/20 11:15 Received: 02/19/20 09:25 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
524.2 MSV Analytical Method: EPA 524.2									
1,1,2-Trichloroethane	<0.19	ug/L	0.62	0.19	1		02/24/20 14:05	79-00-5	
Trichloroethene	<0.12	ug/L	0.39	0.12	1		02/24/20 14:05	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	0.70	0.21	1		02/24/20 14:05	75-69-4	
1,2,3-Trichloropropane	<0.39	ug/L	1.3	0.39	1		02/24/20 14:05	96-18-4	
1,2,4-Trimethylbenzene	<0.23	ug/L	0.76	0.23	1		02/24/20 14:05	95-63-6	
1,3,5-Trimethylbenzene	<0.15	ug/L	0.49	0.15	1		02/24/20 14:05	108-67-8	N2
Vinyl chloride	<0.086	ug/L	0.29	0.086	1		02/24/20 14:05	75-01-4	
Xylene (Total)	<0.30	ug/L	1.0	0.30	1		02/24/20 14:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	75-125		1		02/24/20 14:05	460-00-4	
Toluene-d8 (S)	98	%	75-125		1		02/24/20 14:05	2037-26-5	
1,2-Dichloroethane-d4 (S)	86	%	75-125		1		02/24/20 14:05	17060-07-0	

Sample: POTABLE 2 Lab ID: 40203553011 Collected: 02/12/20 11:30 Received: 02/19/20 09:25 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
524.2 MSV Analytical Method: EPA 524.2									
Benzene	0.24J	ug/L	0.41	0.12	1		02/24/20 14:29	71-43-2	
Bromobenzene	<0.23	ug/L	0.76	0.23	1		02/24/20 14:29	108-86-1	
Bromochloromethane	<0.30	ug/L	0.99	0.30	1		02/24/20 14:29	74-97-5	
Bromodichloromethane	<0.15	ug/L	0.50	0.15	1		02/24/20 14:29	75-27-4	
Bromoform	<0.45	ug/L	1.5	0.45	1		02/24/20 14:29	75-25-2	
Bromomethane	<0.62	ug/L	2.1	0.62	1		02/24/20 14:29	74-83-9	
n-Butylbenzene	<0.14	ug/L	0.47	0.14	1		02/24/20 14:29	104-51-8	
sec-Butylbenzene	<0.20	ug/L	0.68	0.20	1		02/24/20 14:29	135-98-8	
tert-Butylbenzene	<0.14	ug/L	0.46	0.14	1		02/24/20 14:29	98-06-6	
Carbon tetrachloride	<0.20	ug/L	0.67	0.20	1		02/24/20 14:29	56-23-5	
Chlorobenzene	<0.12	ug/L	0.40	0.12	1		02/24/20 14:29	108-90-7	
Chloroethane	<0.34	ug/L	1.1	0.34	1		02/24/20 14:29	75-00-3	
Chloroform	<0.39	ug/L	1.3	0.39	1		02/24/20 14:29	67-66-3	
Chloromethane	<0.15	ug/L	0.51	0.15	1		02/24/20 14:29	74-87-3	
2-Chlorotoluene	<0.086	ug/L	0.29	0.086	1		02/24/20 14:29	95-49-8	
4-Chlorotoluene	<0.093	ug/L	0.31	0.093	1		02/24/20 14:29	106-43-4	
1,2-Dibromo-3-chloropropane	<2.0	ug/L	6.5	2.0	1		02/24/20 14:29	96-12-8	N2
Dibromochloromethane	<0.24	ug/L	0.81	0.24	1		02/24/20 14:29	124-48-1	
1,2-Dibromoethane (EDB)	<0.17	ug/L	0.57	0.17	1		02/24/20 14:29	106-93-4	N2
Dibromomethane	<0.23	ug/L	0.76	0.23	1		02/24/20 14:29	74-95-3	
1,2-Dichlorobenzene	<0.18	ug/L	0.58	0.18	1		02/24/20 14:29	95-50-1	
1,3-Dichlorobenzene	<0.14	ug/L	0.46	0.14	1		02/24/20 14:29	541-73-1	
1,4-Dichlorobenzene	<0.086	ug/L	0.29	0.086	1		02/24/20 14:29	106-46-7	
Dichlorodifluoromethane	<0.26	ug/L	0.87	0.26	1		02/24/20 14:29	75-71-8	
1,1-Dichloroethane	<0.16	ug/L	0.55	0.16	1		02/24/20 14:29	75-34-3	
1,2-Dichloroethane	<0.13	ug/L	0.45	0.13	1		02/24/20 14:29	107-06-2	

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX

Pace Project No.: 40203553

Sample: POTABLE 2 **Lab ID: 40203553011** Collected: 02/12/20 11:30 Received: 02/19/20 09:25 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
524.2 MSV		Analytical Method: EPA 524.2							
1,1-Dichloroethene	<0.19	ug/L	0.62	0.19	1		02/24/20 14:29	75-35-4	
cis-1,2-Dichloroethene	<0.14	ug/L	0.46	0.14	1		02/24/20 14:29	156-59-2	
trans-1,2-Dichloroethene	<0.18	ug/L	0.59	0.18	1		02/24/20 14:29	156-60-5	
1,2-Dichloropropane	<0.19	ug/L	0.64	0.19	1		02/24/20 14:29	78-87-5	
1,3-Dichloropropane	<0.11	ug/L	0.35	0.11	1		02/24/20 14:29	142-28-9	N2
2,2-Dichloropropane	<0.16	ug/L	0.53	0.16	1		02/24/20 14:29	594-20-7	
1,1-Dichloropropene	<0.10	ug/L	0.35	0.10	1		02/24/20 14:29	563-58-6	
cis-1,3-Dichloropropene	<0.21	ug/L	0.69	0.21	1		02/24/20 14:29	10061-01-5	
trans-1,3-Dichloropropene	<0.24	ug/L	0.81	0.24	1		02/24/20 14:29	10061-02-6	
Ethylbenzene	<0.11	ug/L	0.36	0.11	1		02/24/20 14:29	100-41-4	
Hexachloro-1,3-butadiene	<0.28	ug/L	0.92	0.28	1		02/24/20 14:29	87-68-3	
Isopropylbenzene (Cumene)	<0.17	ug/L	0.57	0.17	1		02/24/20 14:29	98-82-8	
p-Isopropyltoluene	<0.21	ug/L	0.71	0.21	1		02/24/20 14:29	99-87-6	N2
Methylene Chloride	<0.46	ug/L	1.5	0.46	1		02/24/20 14:29	75-09-2	
Methyl-tert-butyl ether	<0.17	ug/L	0.56	0.17	1		02/24/20 14:29	1634-04-4	
Naphthalene	<0.32	ug/L	1.1	0.32	1		02/24/20 14:29	91-20-3	
n-Propylbenzene	<0.13	ug/L	0.44	0.13	1		02/24/20 14:29	103-65-1	
Styrene	<0.18	ug/L	0.59	0.18	1		02/24/20 14:29	100-42-5	
1,1,1,2-Tetrachloroethane	<0.12	ug/L	0.39	0.12	1		02/24/20 14:29	630-20-6	
1,1,2,2-Tetrachloroethane	<0.17	ug/L	0.56	0.17	1		02/24/20 14:29	79-34-5	
Tetrachloroethene	<0.17	ug/L	0.56	0.17	1		02/24/20 14:29	127-18-4	
Toluene	1.1	ug/L	0.26	0.078	1		02/24/20 14:29	108-88-3	
1,2,3-Trichlorobenzene	<0.25	ug/L	0.83	0.25	1		02/24/20 14:29	87-61-6	
1,2,4-Trichlorobenzene	<0.19	ug/L	0.64	0.19	1		02/24/20 14:29	120-82-1	
1,1,1-Trichloroethane	<0.19	ug/L	0.62	0.19	1		02/24/20 14:29	71-55-6	
1,1,2-Trichloroethane	<0.19	ug/L	0.62	0.19	1		02/24/20 14:29	79-00-5	
Trichloroethene	<0.12	ug/L	0.39	0.12	1		02/24/20 14:29	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	0.70	0.21	1		02/24/20 14:29	75-69-4	
1,2,3-Trichloropropane	<0.39	ug/L	1.3	0.39	1		02/24/20 14:29	96-18-4	
1,2,4-Trimethylbenzene	0.26J	ug/L	0.76	0.23	1		02/24/20 14:29	95-63-6	
1,3,5-Trimethylbenzene	<0.15	ug/L	0.49	0.15	1		02/24/20 14:29	108-67-8	N2
Vinyl chloride	<0.086	ug/L	0.29	0.086	1		02/24/20 14:29	75-01-4	
Xylene (Total)	<0.30	ug/L	1.0	0.30	1		02/24/20 14:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	75-125		1		02/24/20 14:29	460-00-4	
Toluene-d8 (S)	98	%	75-125		1		02/24/20 14:29	2037-26-5	
1,2-Dichloroethane-d4 (S)	100	%	75-125		1		02/24/20 14:29	17060-07-0	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 7367 HEDLUND DX

Pace Project No.: 40203553

QC Batch:	661643	Analysis Method:	EPA 524.2
QC Batch Method:	EPA 524.2	Analysis Description:	524.2 MSV
Associated Lab Samples: 40203553010, 40203553011			

METHOD BLANK: 3550698 Matrix: Water

Associated Lab Samples: 40203553010, 40203553011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.12	0.39	02/24/20 13:40	
1,1,1-Trichloroethane	ug/L	<0.19	0.62	02/24/20 13:40	
1,1,2,2-Tetrachloroethane	ug/L	<0.17	0.56	02/24/20 13:40	
1,1,2-Trichloroethane	ug/L	<0.19	0.62	02/24/20 13:40	
1,1-Dichloroethane	ug/L	<0.16	0.55	02/24/20 13:40	
1,1-Dichloroethene	ug/L	<0.19	0.62	02/24/20 13:40	
1,1-Dichloropropene	ug/L	<0.10	0.35	02/24/20 13:40	
1,2,3-Trichlorobenzene	ug/L	<0.25	0.83	02/24/20 13:40	
1,2,3-Trichloropropane	ug/L	<0.39	1.3	02/24/20 13:40	
1,2,4-Trichlorobenzene	ug/L	<0.19	0.64	02/24/20 13:40	
1,2,4-Trimethylbenzene	ug/L	<0.23	0.76	02/24/20 13:40	
1,2-Dibromo-3-chloropropane	ug/L	<2.0	6.5	02/24/20 13:40	N2
1,2-Dibromoethane (EDB)	ug/L	<0.17	0.57	02/24/20 13:40	N2
1,2-Dichlorobenzene	ug/L	<0.18	0.58	02/24/20 13:40	
1,2-Dichloroethane	ug/L	<0.13	0.45	02/24/20 13:40	
1,2-Dichloropropane	ug/L	<0.19	0.64	02/24/20 13:40	
1,3,5-Trimethylbenzene	ug/L	<0.15	0.49	02/24/20 13:40	N2
1,3-Dichlorobenzene	ug/L	<0.14	0.46	02/24/20 13:40	
1,3-Dichloropropane	ug/L	<0.11	0.35	02/24/20 13:40	N2
1,4-Dichlorobenzene	ug/L	<0.086	0.29	02/24/20 13:40	
2,2-Dichloropropane	ug/L	<0.16	0.53	02/24/20 13:40	
2-Chlorotoluene	ug/L	<0.086	0.29	02/24/20 13:40	
4-Chlorotoluene	ug/L	<0.093	0.31	02/24/20 13:40	
Benzene	ug/L	<0.12	0.41	02/24/20 13:40	
Bromobenzene	ug/L	<0.23	0.76	02/24/20 13:40	
Bromochloromethane	ug/L	<0.30	0.99	02/24/20 13:40	
Bromodichloromethane	ug/L	<0.15	0.50	02/24/20 13:40	
Bromoform	ug/L	<0.45	1.5	02/24/20 13:40	
Bromomethane	ug/L	<0.62	2.1	02/24/20 13:40	
Carbon tetrachloride	ug/L	<0.20	0.67	02/24/20 13:40	
Chlorobenzene	ug/L	<0.12	0.40	02/24/20 13:40	
Chloroethane	ug/L	<0.34	1.1	02/24/20 13:40	
Chloroform	ug/L	<0.39	1.3	02/24/20 13:40	
Chloromethane	ug/L	<0.15	0.51	02/24/20 13:40	
cis-1,2-Dichloroethene	ug/L	<0.14	0.46	02/24/20 13:40	
cis-1,3-Dichloropropene	ug/L	<0.21	0.69	02/24/20 13:40	
Dibromochloromethane	ug/L	<0.24	0.81	02/24/20 13:40	
Dibromomethane	ug/L	<0.23	0.76	02/24/20 13:40	
Dichlorodifluoromethane	ug/L	<0.26	0.87	02/24/20 13:40	
Ethylbenzene	ug/L	<0.11	0.36	02/24/20 13:40	
Hexachloro-1,3-butadiene	ug/L	<0.28	0.92	02/24/20 13:40	

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 7367 HEDLUND DX

Pace Project No.: 40203553

METHOD BLANK: 3550698

Matrix: Water

Associated Lab Samples: 40203553010, 40203553011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Isopropylbenzene (Cumene)	ug/L	<0.17	0.57	02/24/20 13:40	
Methyl-tert-butyl ether	ug/L	<0.17	0.56	02/24/20 13:40	
Methylene Chloride	ug/L	<0.46	1.5	02/24/20 13:40	
n-Butylbenzene	ug/L	<0.14	0.47	02/24/20 13:40	
n-Propylbenzene	ug/L	<0.13	0.44	02/24/20 13:40	
Naphthalene	ug/L	<0.32	1.1	02/24/20 13:40	
p-Isopropyltoluene	ug/L	<0.21	0.71	02/24/20 13:40	N2
sec-Butylbenzene	ug/L	<0.20	0.68	02/24/20 13:40	
Styrene	ug/L	<0.18	0.59	02/24/20 13:40	
tert-Butylbenzene	ug/L	<0.14	0.46	02/24/20 13:40	
Tetrachloroethene	ug/L	<0.17	0.56	02/24/20 13:40	
Toluene	ug/L	<0.078	0.26	02/24/20 13:40	
trans-1,2-Dichloroethene	ug/L	<0.18	0.59	02/24/20 13:40	
trans-1,3-Dichloropropene	ug/L	<0.24	0.81	02/24/20 13:40	
Trichloroethene	ug/L	<0.12	0.39	02/24/20 13:40	
Trichlorofluoromethane	ug/L	<0.21	0.70	02/24/20 13:40	
Vinyl chloride	ug/L	<0.086	0.29	02/24/20 13:40	
Xylene (Total)	ug/L	<0.30	1.0	02/24/20 13:40	
1,2-Dichloroethane-d4 (S)	%	96	75-125	02/24/20 13:40	
4-Bromofluorobenzene (S)	%	100	75-125	02/24/20 13:40	
Toluene-d8 (S)	%	97	75-125	02/24/20 13:40	

LABORATORY CONTROL SAMPLE: 3550699

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	20.6	103	70-130	
1,1,1-Trichloroethane	ug/L	20	22.4	112	70-130	
1,1,2,2-Tetrachloroethane	ug/L	20	18.8	94	70-130	
1,1,2-Trichloroethane	ug/L	20	19.2	96	70-130	
1,1-Dichloroethane	ug/L	20	21.2	106	70-130	
1,1-Dichloroethene	ug/L	20	22.5	113	70-130	
1,1-Dichloropropene	ug/L	20	22.0	110	70-130	
1,2,3-Trichlorobenzene	ug/L	20	20.3	102	70-130	
1,2,3-Trichloropropane	ug/L	20	18.9	95	70-130	
1,2,4-Trichlorobenzene	ug/L	20	20.7	104	70-130	
1,2,4-Trimethylbenzene	ug/L	20	20.3	101	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	50.7	101	70-130	N2
1,2-Dibromoethane (EDB)	ug/L	20	19.2	96	70-130	N2
1,2-Dichlorobenzene	ug/L	20	19.4	97	70-130	
1,2-Dichloroethane	ug/L	20	19.7	99	70-130	
1,2-Dichloropropane	ug/L	20	19.7	99	70-130	
1,3,5-Trimethylbenzene	ug/L	20	20.7	103	70-130	N2
1,3-Dichlorobenzene	ug/L	20	21.1	105	70-130	
1,3-Dichloropropane	ug/L	20	19.7	99	70-130	N2

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 7367 HEDLUND DX

Pace Project No.: 40203553

LABORATORY CONTROL SAMPLE: 3550699

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	20	20.4	102	70-130	
2,2-Dichloropropane	ug/L	20	21.8	109	70-130	
2-Chlorotoluene	ug/L	20	19.6	98	70-130	
4-Chlorotoluene	ug/L	20	19.5	97	70-130	
Benzene	ug/L	20	19.4	97	70-130	
Bromobenzene	ug/L	20	20.7	103	70-130	
Bromochloromethane	ug/L	20	21.1	106	70-130	
Bromodichloromethane	ug/L	20	19.9	99	70-130	
Bromoform	ug/L	20	22.2	111	70-130	
Bromomethane	ug/L	20	20.4	102	70-130	
Carbon tetrachloride	ug/L	20	23.9	119	70-130	
Chlorobenzene	ug/L	20	20.3	102	70-130	
Chloroethane	ug/L	20	22.0	110	70-130	
Chloroform	ug/L	20	20.7	104	70-130	
Chloromethane	ug/L	20	19.7	98	70-130	
cis-1,2-Dichloroethene	ug/L	20	20.2	101	70-130	
cis-1,3-Dichloropropene	ug/L	20	21.0	105	70-130	
Dibromochloromethane	ug/L	20	20.5	103	70-130	
Dibromomethane	ug/L	20	21.8	109	70-130	
Dichlorodifluoromethane	ug/L	20	20.2	101	70-130	
Ethylbenzene	ug/L	20	20.5	102	70-130	
Hexachloro-1,3-butadiene	ug/L	20	23.6	118	70-130	
Isopropylbenzene (Cumene)	ug/L	20	21.4	107	70-130	
Methyl-tert-butyl ether	ug/L	20	18.7	93	70-130	
Methylene Chloride	ug/L	20	19.6	98	70-130	
n-Butylbenzene	ug/L	20	22.1	111	70-130	
n-Propylbenzene	ug/L	20	20.6	103	70-130	
Naphthalene	ug/L	20	19.1	96	70-130	
p-Isopropyltoluene	ug/L	20	21.1	105	70-130	N2
sec-Butylbenzene	ug/L	20	21.9	109	70-130	
Styrene	ug/L	20	20.1	100	70-130	
tert-Butylbenzene	ug/L	20	21.2	106	70-130	
Tetrachloroethene	ug/L	20	23.4	117	70-130	
Toluene	ug/L	20	20.2	101	70-130	
trans-1,2-Dichloroethene	ug/L	20	22.0	110	70-130	
trans-1,3-Dichloropropene	ug/L	20	20.0	100	70-130	
Trichloroethene	ug/L	20	21.7	108	70-130	
Trichlorofluoromethane	ug/L	20	21.4	107	70-130	
Vinyl chloride	ug/L	20	19.4	97	70-130	
Xylene (Total)	ug/L	60	62.6	104	70-130	
1,2-Dichloroethane-d4 (S)	%			96	75-125	
4-Bromofluorobenzene (S)	%			100	75-125	
Toluene-d8 (S)	%			101	75-125	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 7367 HEDLUND DX

Pace Project No.: 40203553

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3550700				3550701								
		40203630010	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits		Max RPD	Qual
Parameter	Units	Result								RPD		
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	20.4	18.1	102	91	70-130	12	20	
1,1,1-Trichloroethane	ug/L	ND	20	20	22.0	24.0	110	120	70-130	9	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	18.2	14.1	91	71	70-130	25	20	R1
1,1,2-Trichloroethane	ug/L	ND	20	20	18.9	16.8	95	84	70-130	12	20	
1,1-Dichloroethane	ug/L	ND	20	20	23.2	23.1	116	116	70-130	1	20	
1,1-Dichloroethene	ug/L	ND	20	20	26.0	29.3	130	147	70-130	12	20	M1
1,1-Dichloropropene	ug/L	ND	20	20	23.0	22.0	115	110	70-130	4	20	
1,2,3-Trichlorobenzene	ug/L	ND	20	20	21.1	19.4	106	97	70-130	8	20	
1,2,3-Trichloropropane	ug/L	ND	20	20	18.9	14.9	95	74	70-130	24	20	R1
1,2,4-Trichlorobenzene	ug/L	ND	20	20	21.5	21.1	107	105	70-130	2	20	
1,2,4-Trimethylbenzene	ug/L	ND	20	20	21.4	23.2	107	116	70-130	8	20	
1,2-Dibromo-3-chloropropane	ug/L	ND	50	50	47.6	38.2	95	76	70-130	22	20	N2,R1
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	19.5	16.8	97	84	70-130	15	20	N2
1,2-Dichlorobenzene	ug/L	ND	20	20	19.7	21.1	98	105	70-130	7	20	
1,2-Dichloroethane	ug/L	ND	20	20	20.9	20.8	104	104	70-130	0	20	
1,2-Dichloropropane	ug/L	ND	20	20	19.8	19.1	99	95	70-130	4	20	
1,3,5-Trimethylbenzene	ug/L	ND	20	20	21.2	23.2	106	116	70-130	9	20	N2
1,3-Dichlorobenzene	ug/L	ND	20	20	22.6	23.2	113	116	70-130	3	20	
1,3-Dichloropropane	ug/L	ND	20	20	20.0	17.2	100	86	70-130	15	20	N2
1,4-Dichlorobenzene	ug/L	ND	20	20	20.6	21.9	103	109	70-130	6	20	
2,2-Dichloropropane	ug/L	ND	20	20	18.1	24.2	90	121	70-130	29	20	R1
2-Chlorotoluene	ug/L	ND	20	20	20.3	22.3	101	111	70-130	9	20	
4-Chlorotoluene	ug/L	ND	20	20	20.4	21.7	102	109	70-130	6	20	
Benzene	ug/L	ND	20	20	20.5	19.9	102	99	70-130	3	20	
Bromobenzene	ug/L	ND	20	20	21.5	21.0	107	105	70-130	2	20	
Bromochloromethane	ug/L	ND	20	20	19.7	24.8	99	124	70-130	23	20	R1
Bromodichloromethane	ug/L	ND	20	20	20.6	21.3	103	106	70-130	3	20	
Bromoform	ug/L	ND	20	20	20.0	17.6	100	88	70-130	13	20	
Bromomethane	ug/L	ND	20	20	22.8	24.5	114	123	70-130	7	20	
Carbon tetrachloride	ug/L	ND	20	20	22.0	27.2	110	136	70-130	21	20	M1,R1
Chlorobenzene	ug/L	ND	20	20	20.3	20.6	101	103	70-130	1	20	
Chloroethane	ug/L	ND	20	20	24.2	28.4	121	142	70-130	16	20	M1
Chloroform	ug/L	ND	20	20	18.6	22.5	93	112	70-130	19	20	
Chloromethane	ug/L	ND	20	20	19.4	22.0	97	110	70-130	13	20	
cis-1,2-Dichloroethene	ug/L	ND	20	20	17.8	22.5	89	112	70-130	23	20	R1
cis-1,3-Dichloropropene	ug/L	ND	20	20	20.6	19.0	103	95	70-130	8	20	
Dibromochloromethane	ug/L	ND	20	20	20.3	17.6	102	88	70-130	14	20	
Dibromomethane	ug/L	ND	20	20	21.8	23.3	109	117	70-130	7	20	
Dichlorodifluoromethane	ug/L	ND	20	20	20.9	24.4	105	122	70-130	15	20	
Ethylbenzene	ug/L	ND	20	20	21.5	22.4	107	112	70-130	4	20	
Hexachloro-1,3-butadiene	ug/L	ND	20	20	24.0	21.0	120	105	70-130	13	20	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	22.3	24.7	111	124	70-130	10	20	
Methyl-tert-butyl ether	ug/L	ND	20	20	20.3	17.5	102	87	70-130	15	20	
Methylene Chloride	ug/L	ND	20	20	20.6	24.9	103	125	70-130	19	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 7367 HEDLUND DX

Pace Project No.: 40203553

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3550700 3550701												
		40203630010	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
n-Butylbenzene	ug/L	ND	20	20	23.6	23.8	118	119	70-130	1	20	
n-Propylbenzene	ug/L	ND	20	20	21.9	23.4	109	117	70-130	7	20	
Naphthalene	ug/L	ND	20	20	19.2	18.7	96	93	70-130	3	20	
p-Isopropyltoluene	ug/L	ND	20	20	23.2	23.6	116	118	70-130	2	20	N2
sec-Butylbenzene	ug/L	ND	20	20	23.5	23.7	117	119	70-130	1	20	
Styrene	ug/L	ND	20	20	20.6	21.8	103	109	70-130	6	20	
tert-Butylbenzene	ug/L	ND	20	20	22.1	23.6	111	118	70-130	6	20	
Tetrachloroethene	ug/L	ND	20	20	23.8	23.7	119	119	70-130	0	20	
Toluene	ug/L	ND	20	20	20.8	20.2	104	101	70-130	3	20	
trans-1,2-Dichloroethene	ug/L	ND	20	20	25.1	25.4	126	127	70-130	1	20	
trans-1,3-Dichloropropene	ug/L	ND	20	20	19.8	17.0	99	85	70-130	15	20	
Trichloroethene	ug/L	ND	20	20	22.8	21.9	114	110	70-130	4	20	
Trichlorofluoromethane	ug/L	ND	20	20	24.2	26.1	121	131	70-130	7	20	M1
Vinyl chloride	ug/L	ND	20	20	20.6	22.5	103	113	70-130	9	20	
Xylene (Total)	ug/L	ND	60	60	64.1	70.5	107	117	70-130	10	20	
1,2-Dichloroethane-d4 (S)	%						98	102	75-125			
4-Bromofluorobenzene (S)	%						98	95	75-125			
Toluene-d8 (S)	%						97	95	75-125			

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QUALITY CONTROL DATA

Project: 7367 HEDLUND DX
Pace Project No.: 40203553

QC Batch:	348154	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV UST-WATER
Associated Lab Samples:	40203553001, 40203553002, 40203553003, 40203553004, 40203553005, 40203553006, 40203553007, 40203553008, 40203553009		

METHOD BLANK: 2018400 Matrix: Water
Associated Lab Samples: 40203553001, 40203553002, 40203553003, 40203553004, 40203553005, 40203553006, 40203553007, 40203553008, 40203553009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	02/20/20 09:19	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	02/20/20 09:19	
Benzene	ug/L	<0.25	1.0	02/20/20 09:19	
Ethylbenzene	ug/L	<0.22	1.0	02/20/20 09:19	
m&p-Xylene	ug/L	<0.47	2.0	02/20/20 09:19	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	02/20/20 09:19	
Naphthalene	ug/L	<1.2	5.0	02/20/20 09:19	
o-Xylene	ug/L	<0.26	1.0	02/20/20 09:19	
Toluene	ug/L	<0.17	5.0	02/20/20 09:19	
4-Bromofluorobenzene (S)	%	95	70-130	02/20/20 09:19	
Dibromofluoromethane (S)	%	103	70-130	02/20/20 09:19	
Toluene-d8 (S)	%	101	70-130	02/20/20 09:19	

LABORATORY CONTROL SAMPLE: 2018401

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	53.2	106	70-130	
Ethylbenzene	ug/L	50	53.9	108	80-124	
m&p-Xylene	ug/L	100	105	105	70-130	
Methyl-tert-butyl ether	ug/L	50	44.5	89	54-137	
o-Xylene	ug/L	50	51.4	103	70-130	
Toluene	ug/L	50	52.3	105	80-126	
4-Bromofluorobenzene (S)	%			100	70-130	
Dibromofluoromethane (S)	%			103	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2018417 2018418

Parameter	Units	40203553002	MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual
		Result	Spike Conc.	Spike Conc.							
Benzene	ug/L	32.4	50	50	81.7	83.0	99	101	70-130	2	20
Ethylbenzene	ug/L	17.0	50	50	68.4	70.0	103	106	80-125	2	20
m&p-Xylene	ug/L	35.4	100	100	135	138	99	102	70-130	2	20
Methyl-tert-butyl ether	ug/L	<1.2	50	50	43.2	42.4	86	85	51-145	2	20
o-Xylene	ug/L	1.1	50	50	49.9	50.9	98	100	70-130	2	20
Toluene	ug/L	4.5J	50	50	53.9	55.4	99	102	80-131	3	20
4-Bromofluorobenzene (S)	%						101	100	70-130		

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QUALITY CONTROL DATA

Project: 7367 HEDLUND DX

Pace Project No.: 40203553

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:											
			2018417			2018418					
Parameter	Units	40203553002 Result	MS	MSD	MS	MSD	MS	MSD	% Rec	Limits	Max
			Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	RPD		
Dibromofluoromethane (S)	%						104	103	70-130		
Toluene-d8 (S)	%						101	102	70-130		

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QUALIFIERS

Project: 7367 HEDLUND DX
Pace Project No.: 40203553

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay
PASI-M Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2 The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
R1 RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 7367 HEDLUND DX

Pace Project No.: 40203553

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40203553010	POTABLE 1	EPA 524.2	661643		
40203553011	POTABLE 2	EPA 524.2	661643		
40203553001	MW1	EPA 8260	348154		
40203553002	MW2R	EPA 8260	348154		
40203553003	MW3R	EPA 8260	348154		
40203553004	MW4R	EPA 8260	348154		
40203553005	MW5R	EPA 8260	348154		
40203553006	MW8	EPA 8260	348154		
40203553007	MW9	EPA 8260	348154		
40203553008	MW10	EPA 8260	348154		
40203553009	MW11	EPA 8260	348154		

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(Please Print Clearly)

Company Name:	RET
Branch/Location:	Warsaw
Project Contact:	Dee Larson
Phone:	715-679-2411
Project Number:	7367
Project Name:	Hedlund PX
Project State:	WI
Sampled By (Print):	Paul Busher
Sampled By (Sign):	
PO #:	Regulatory

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CHAIN OF CUSTODY

***Preservation Codes**

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

Quote #:	
Mail To Contact:	Dan@REI.org
Mail To Company:	REI
Mail To Address:	SAA
Invoice To Contact:	SAA
Invoice To Company:	SAA
Invoice To Address:	SAA
Invoice To Phone:	

Data Package Options	MS/MSD	Matrix Codes
(billable)		A = Air
☐ EPA Level III	☐ On your sample	W = Water
	(billable)	BW = Drinking Water
☐ EPA Level IV	☐ NOT needed on	C = Charcoal
	your sample	GW = Ground Water
		O = Oil
		SW = Surface Water
		S = Soil
		WW = Waste Water
		SI = Sludge
		WP = Wipe

PCE LAB #	CLIENT FIELD ID	COLLECTION		MATRIX
		DATE	TIME	
001	MW1	2-12-20	7:30	GW
002	MW2R		7:45	
003	MW3R		8:00	
004	MW4R		8:15	
005	MW5R		8:30	
006	MW8		9:15	
007	MW9		9:30	
008	MW10		9:45	
009	MW11		10:00	SW
010	Potable 1		11:15	DW
011	Potable 2	SW	11:30	DW

Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge) Date Needed:		Relinquished By: <i>[Signature]</i> Date/Time: <i>2-18-2020 3:10pm</i>	Received By: _____ Date/Time: _____	PACE Project No. <i>40203553</i> Receipt Temp = <i>ROT</i> °C Sample Receipt pH OK / Adjusted Cooler Custody Seal Present / <u>Not Present</u> Intact / Not Intact
Transmit Prelim Rush Results by (complete what you want):		Relinquished By: <i>WATCO</i> Date/Time: <i>2-19-20 0925</i>	Received By: <i>Madelaine J. Nichols</i> Date/Time: <i>2-19-20 0925</i>	
Email #1:		Relinquished By: _____	Received By: _____	
Email #2:		Relinquished By: _____	Received By: _____	
Telephone:		Relinquished By: _____	Received By: _____	
Fax:		Relinquished By: _____	Received By: _____	
Samples on HOLD are subject to special pricing and release of liability		Relinquished By: _____	Received By: _____	

Sample Preservation Receipt Form

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

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Client Name: RED

Project # 40203553

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

Lab Lot# of pH paper:

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

Initial when completed:

Date/Time:

Pace Lab #	Glass							Plastic					Vials					Jars				General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T							
001																	3														2.5 / 5 / 10
002																	3														2.5 / 5 / 10
003																	3														2.5 / 5 / 10
004																	3														2.5 / 5 / 10
005																	3														2.5 / 5 / 10
006																	3														2.5 / 5 / 10
007																	3														2.5 / 5 / 10
008																	3														2.5 / 5 / 10
009																	3														2.5 / 5 / 10
010																										3					2.5 / 5 / 10
011																										3					2.5 / 5 / 10
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018																															2.5 / 5 / 10
019																															2.5 / 5 / 10
020																															2.5 / 5 / 10

MLH
2-19-20

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

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9A	40 mL clear ascorbic	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG5U	100 mL amber glass unpres			VG9D	40 mL clear vial DI	ZPLC	ziploc bag
AG2S	500 mL amber glass H2SO4					GN	40 mL amber vial ascorbic
BG3U	250 mL clear glass unpres						

MLH 2-19-20

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

Sample Condition Upon Receipt Form (SCUR)

Project #:

Client Name: RED

WO#: **40203553**

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☒ Walco

☐ Client ☐ Pace Other: _____

Tracking #: 2344113-1 MLR 2-19-20



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 packing paper

Thermometer Used SR - 71A Type of Ice: WB Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: ROD /Corr: ROD

Temp Blank Present: ☐ yes ☒ no MLR 2-19-20 Biological Tissue is Frozen: ☐ yes ☐ no

Person examining contents:

Date: 2-19-20

Initials: MLR

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

Chain of Custody Present:	☒ Yes ☐ No ☐ N/A	1.
Chain of Custody Filled Out:	☐ Yes ☒ No ☐ N/A	2. <u>PO#, page#, invoice to phone</u> <u>MLR 2-19-20</u>
Chain of Custody Relinquished:	☒ Yes ☐ No ☐ N/A	3.
Sampler Name & Signature on COC:	☒ Yes ☐ No ☐ N/A	4.
Samples Arrived within Hold Time:	☒ Yes ☐ No	5.
- VOA Samples frozen upon receipt	☐ Yes ☐ No	Date/Time:
Short Hold Time Analysis (<72hr):	☐ Yes ☒ No	6.
Rush Turn Around Time Requested:	☐ Yes ☒ No	7.
Sufficient Volume:		8.
For Analysis: ☒ Yes ☐ No MS/MSD: ☐ Yes ☒ No ☐ N/A		
Correct Containers Used:	☒ Yes ☐ No	9.
-Pace Containers Used:	☒ Yes ☐ No ☐ N/A	
-Pace IR Containers Used:	☐ Yes ☐ No ☒ N/A	
Containers Intact:	☒ Yes ☐ No	10.
Filtered volume received for Dissolved tests	☐ Yes ☐ No ☒ N/A	11.
Sample Labels match COC:	☐ Yes ☒ No ☐ N/A	12. <u>Collection dates on vials state 6-2019.</u> <u>MLR 2-19-20</u>
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
Trip Blank Present:	☐ Yes ☒ No ☐ N/A	13.
Trip Blank Custody Seals Present	☐ Yes ☐ No ☒ N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution:

no HCl capsule seen in OLO and oil vials MLR 2-19-20

Project Manager Review: _____

Date: 2-20-20