CIVIL & ENVIRONMENTAL ENGINEERING, SURVEYING

February 7, 2019

Wisconsin Department of Natural Resources
Attn: Mr. Ralph Smith
101 S. Webster Street
PO Box 7921
Madison, WI 53707-7921

Subject:

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

Dear Mr. Smith:

Enclosed is the Construction Documentation Report for the above-mentioned site. This report documents the excavation of 1,346.01 tons of contaminated soil from the site. As previously recommended, REI is proceeding with monitoring well replacement and additional quarterly groundwater sampling. The results will be submitted in subsequent reports.

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

Sincerely,
REI Engineering, Inc.

Andrew R. Delforge, P.G.
Senior Hydrogeologist

Enclosure

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

REI

CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING

Construction Documentation Report
Hedlund DX
Falun, Wisconsin

WDNR BRRTS #03-07-000151
PECFA #54840-9999-00
REI Project #7367

COMPREHENSIVE
SERVICES WITH
PRACTICAL
SOLUTIONS

CONSTRUCTION DOCUMENTATION REPORT

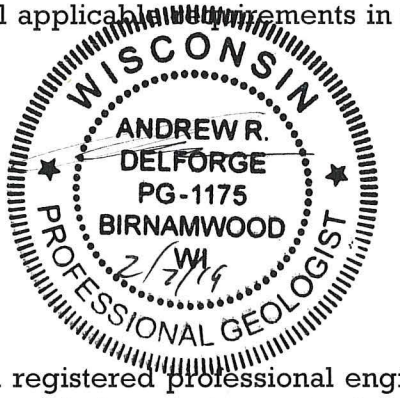
HEDLUND DX
10557 STATE HIGHWAY 70
FALUN, WI

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

REI #7367

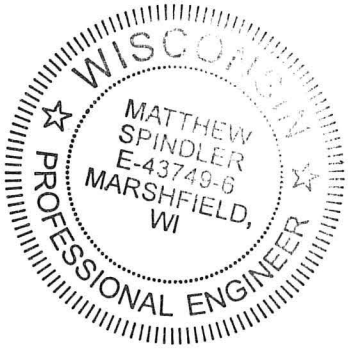
The recommendations contained in this report are based on the information obtained from our study of the site and were arrived at in accordance with accepted hydrogeologic and engineering practices at this time and location.

"I, Andrew R. Delforge, 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 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, Matthew Spindler, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A–E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A–E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

Matthew Spindler



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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

FEBRUARY 2019

CONSTRUCTION DOCUMENTATION REPORT

HEDLUND DX
10557 STATE HIGHWAY 70
FALUN, WI

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

REI #7367

1.0 INTRODUCTION

The Hedlund DX site is located in the NW ¼ of the NW ¼ 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, 591807.

The Site Investigation Report was submitted April 5, 2017, with an update report dated August 17, 2017. Based on the results of the investigation, REI recommended excavation of the source area followed by long term monitoring of the groundwater. Soil boring and monitoring well locations are shown on Figure 2. Soil data from the investigation is summarized on Tables 1a and 1b.

Costs to abandon monitoring wells MW2-MW5, excavate contaminated soils, and replace MW2-MW5 were approved by the Department on April 16, 2018. The site layout is shown on Figure 2.

2.0 SUMMARY OF ACTIVITIES

2.1 Monitoring Well Abandonment

Prior to excavation, monitoring wells MW2, MW3, MW4, and MW5 were filled with 3/8" bentonite chips. During excavation, the casings were broken off at the bottom

of the excavation at a depth of approximately eight (8) feet below land surface (bls). Abandonment forms are included in Appendix A.

2.2 Excavation of Contaminated Soils

The estimated volume of contaminated soil to be excavated was 1,400 tons. John S. Olynick, Inc., of Gilman, WI was retained to complete the excavation, hauling and backfill. Construction was completed from September 17-19, 2018. REI was on site to direct the excavation based on site investigation data and field screening. The excavation was limited to the west by the Back Woods Beer and Bait building, to the north by Highway 70, to the east by a natural gas line, and to the south by a power pole and a wooded area. The excavation proceeded to a depth of eight (8) feet bls in order to avoid penetrating the surficial clay and encountering saturated sand at the water table. A small area in the southwest corner of the excavation was removed to a depth of four (4) feet bls in order to remove soils impacted by total lead. The area of excavation is shown on Figure 3.

Significant areas of concrete rubble and former building foundations were encountered during excavation. An in-ground hoist was also discovered and removed. The concrete and steel were separated from the contaminated soil for recycling by the backfill provider. Photographs are included as Appendix B.

A total of 1346.01 tons of contaminated soil were excavated and transported to the Republic Services Lake Area Landfill in Sarona, WI for biopile treatment on September 17 & 18, 2018. Disposal documentation is included in Appendix C.

2.3 Confirmation Soil Sampling

Following excavation, soil samples were collected from the sidewalls at depths of four (4) and seven (7) feet bls, and from the bottom of the excavation at eight (8) feet bls. Samples were submitted to Pace Analtyical, of Green Bay, WI for Petroleum Volatile Organic Compounds (PVOCs) and naphthalene. Sample PB1, collected from the lead impacted area excavation, was analyzed for total lead only. Methods and procedures for soil sampling are included in Appendix D.

A total of twenty-two (22) samples were collected from the sidewalls of the excavation (11 at 4 feet, and 11 at 7 feet). Five (5) samples were collected from the bottom of the excavation at eight (8) feet bls. One (1) sample was collected from the bottom of the lead excavation at a depth of four (4) feet. A summary of the results of confirmation soil sampling is as follows:

- Sample PB1 was below the NR 720 Groundwater Pathway standard for total lead.
- Sample S1 in the southwest corner of the excavation was below the Groundwater Pathway standard at four (4) feet bls, and exceeded the Groundwater Pathway standard at seven (7) feet bls.
- Samples S2, S3, and S4 were collected adjacent to the Back Woods Beer and Bait building (western sidewall). All three (3) of these samples were above the NR 720 Non-Industrial Direct Contact standard at four (4) feet bls, and above the Groundwater Pathway standard at seven (7) feet bls.
- Samples S5, S6, and S7 were collected along Highway 70 (northern sidewall). All three (3) of these samples were above the NR 720 Non-Industrial Direct Contact standard at four (4) feet bls, and above the Groundwater Pathway standard at seven (7) feet bls.
- Sample S8 was collected on the eastern sidewall on the Bob's Service property. This sample exceeded the Direct Contact standard at four (4) feet bls and the Groundwater Pathway standard at seven (7) feet bls.
- Sample S9 collected on the southern sidewall, and was below the Groundwater Pathway standard at four (4) feet bls, but exceeded the Groundwater Pathway standard at seven (7) feet bls.
- Samples S10 was collected from the southern sidewall adjacent to the power pole. This sample exceeded the Direct Contact standard at four (4) feet bls, and the Groundwater Pathway standard at seven (7) feet bls.
- Sample S11 was collected from the southern central sidewall adjacent to the wooded area, and exceeded the Direct Contact Standard at four (4) feet bls, but was non-detect for PVOC and naphthalene at seven (7) feet bls.
- Samples B1, B2, B3, and B4, collected from the bottom of the excavation at eight (8) feet bls, all exceeded the Groundwater Pathway standard.

- Sample B5, from the southeast bottom of the excavation, was non-detect for PVOCs and naphthalene.

Confirmation sample results are summarized on Table 3. The area of excavation, confirmation sample locations, and residual soil contamination are shown on Figure 3.

3.0 Conclusion and Recommendations

A large portion of the contaminated soil was excavated from the site. Soil contamination above the NR 720 Direct Contact and Groundwater Pathway standards, however the majority is inaccessible for excavation. The removal of a significant volume of the contaminant mass is expected to reduce contaminant loading to the groundwater.

REI recommends continued quarterly sampling of the monitoring well network and neighboring potable wells until a stable or decreasing trend can be established.

Table 1a
Summary of Soil Analytical Results
Geoprobe Borings
Hedlund DX
Falun, Wisconsin

				Date -->	8/8/2016		8/8/2016		8/8/2016		8/8/2016	8/8/2016		8/8/2016
				Sample ID -->	GP1		GP2		GP3		GP4b	GP5		GP6b
				Sample Depth (Feet) -->	2-4	14-14.5	2-4	12-13	2-4	13-14	2-4	3-4	14-15	3-4
				Percent Moisture -->	27.5%	31.4%	15.9%	35.2%	15.9%	31.0%	22.0%	22.1%	33.0%	22.0%
Lead (mg/kg)	400	13.5	BTV @52		8.4	13.2	11.4	12.1	**63.4**	12.9	**982**	18.7	13.5	6.2
Petroleum VOC's (µg/kg)	Non-Industrial Not-To-Exceed DC RCL	NR 140 Groundwater Pathway Protection (DF=2)												
Benzene	1,490	5.1			< 340	*472*	*934*	*1,210*	< 1,250	< 26.9	< 27.8	< 160	*417*	< 658
Ethylbenzene	7,470	1,570			**22,700**	284	**10,100**	797	**113,000**	< 26.9	< 27.8	*2,380*	73.5[J]	**55,900**
Toluene	818,000	1,107			< 340	38.9[J]	*15,200*	244	*18,300*	< 26.9	< 27.8	< 160	< 35.2	*5,410*
Xylenes (Total)	258,000	3,940			*68,070*	559	*39,200*	2,101	**587,000**	< 58.3	< 55.6	*10,560*	326	*236,160*
Methly tert Butyl Ether	59,400	27			829[J]	< 26.3	*663*	< 25	*3,290*	< 26.9	< 27.8	*657*	< 35.2	*2,500*
1,2,4-Trimethylbenzene	89,800	NS			60,400	< 26.3	15,800	112	**235,000**	< 26.9	36.6[J]	23,500	247	**140,000**
1,3,5-Trimethylbenzene	182,000	NS			25,600	< 26.3	5,990	< 25	84,500	< 26.9	< 27.8	12,000	87[J]	52,000
Trimethylbenzenes (Total)	NS	1,379			*86,000*	< 26.3	*21,790*	112	*319,500*	< 26.9	< 27.8	*35,500*	334	*192,000*
Naphthalene	5,150	658.7			**8,210**	< 26.3	*3,090*	< 25	**44,700**	< 26.9	< 27.8	*2,610*	< 35.2	**27,200**

				Date -->	8/8/2016	8/8/2016		5/22/2017		5/22/2017	5/22/2017		5/22/2017	
				Sample ID -->	GP6b	GP7		GP8		GP9	GP10		GP11	
				Sample Depth (Feet) -->	14-14.5	2-4	14-14.5	2-4	12-13	2-4	2-4	8-9	2-4	7-8
				Percent Moisture -->	29.3%	19.7%	31.2%	29.6%	30.5%	13.5%	27.0%	30.5%	17.7%	28.5%
Lead (mg/kg)	400	13.5	BTV @52		12.3	18.3	12.5	20.4	14.7	9.7	15.7	18.2	8.4	18.4
Petroleum VOC's (µg/kg)	Non-Industrial Not-To-Exceed DC RCL	NR 140 Groundwater Pathway Protection (DF=2)												
Benzene	1,490	5.1			*306*	< 40.3	*688*	< 29.4	*149*	< 39.7	*902*	*4,140*	**6,360**	*19,000*
Ethylbenzene	7,470	1,570			< 39.1	161	1,160	< 29.4	343	< 39.7	450	*3,770*	**17,700**	*24,800*
Toluene	818,000	1,107			< 39.1	< 40.3	214	< 29.4	< 26.9	< 39.7	107	*1,620*	*22,000*	*44,500*
Xylenes (Total)	258,000	3,940			< 78.1	464	3,815	< 58.8	475	< 79.4	284	*9,843*	*74,900*	*87,400*
Methly tert Butyl Ether	59,400	27			< 39.1	< 40.3	< 25.3	< 29.4	< 26.9	< 39.7	< 25	*41.8[J]*	*797*	*1,180*
1,2,4-Trimethylbenzene	89,800	NS			< 39.1	323	602	< 29.4	< 26.9	< 39.7	60.9[J]	4,270	42,100	35,600
1,3,5-Trimethylbenzene	182,000	NS			< 39.1	90.8[J]	153	< 29.4	< 26.9	< 39.7	131	1,230	15,900	14,000
Trimethylbenzenes (Total)	NS	1,379			< 39.1	414	755	< 29.4	< 26.9	< 39.7	192	*5,500*	*58,000*	*49,600*
Naphthalene	5,150	658.7			< 39.1	63.2[J]	86.6	< 29.4	< 26.9	< 39.7	166	*883*	**6,720**	*8,390*

Notes:

NR720 Standards Obtained From WDNR Online Excel Database
RCL - NR 720 Proposed Soil Residual Contaminant Level
DC - Direct Contact
Background Threshold Value
Exceeds Non-Industrial Not-To-Exceed DC RCL — **Bold**
Exceeds NR 140 Groundwater Pathway Protection — *Italic*
NS - No Standard
[J] - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
< - Concentration below listed laboratory detection limit
NA - Not Analyzed

Table 1b
Summary of Soil Analytical Results
Monitoring Wells
Hedlund DX
Falun, Wisconsin

				Date -->	9/13/2016		9/13/2016		9/13/2016		9/14/2016		1/12/2017	1/12/2017		1/12/2017	
				Sample ID -->	MW3		MW4		MW6		MW7		MW9	MW10		MW11	
				Sample Depth (Feet) -->	0-2	10-12	2-4	10-12	2-4	10-12	2-4	12-14	2-4	3-4	13-14	2-4	15-16
				Percent Moisture -->	3.7%	31.8%	14.4%	30.4%	15.6%	28.5%	16.4%	13.7%	25.0%	23.5%	32.4%	7.8%	32.2%
Lead (mg/kg)	400	13.5	BTV @52		**195**	14.0	**82.1**	18.0	4.3	12.0	5.2	1.6	10.2	14.9	12.0	2.7	14.4
Petroleum VOC's (µg/kg)	Non-Industrial Not-To-Exceed DC RCL	NR 140 Groundwater Pathway Protection (DF=2)															
Benzene	1,490	5.1			*1,380*[J]	< 33.3	**6,850**	*139*	< 25	*447*	< 25	< 25	< 25	< 33.3	< 25	< 25	< 25
Ethylbenzene	7,470	1,570			**73,600**	85.0[J]	**84,700**	787	< 25	73.0[J]	< 25	< 25	< 25	< 33.3	< 25	< 25	< 25
Toluene	818,000	1,107			*9,030*	< 33.3	*68,600*	562	< 25	234	< 25	< 25	< 25	< 33.3	< 25	< 25	< 25
Xylenes (Total)	258,000	3,940			**341,000**	431	**354,000**	*4,960*	< 50	156[J]	< 50	< 50	< 50	< 33.7	< 50	< 50	< 50
Methly tert Butyl Ether	59,400	27			*2,290*[J]	< 33.3	*4,480*	< 25	< 25	< 25	< 25	< 25	< 25	< 33.3	< 25	< 25	< 25
1,2,4-Trimethylbenzene	89,800	NS			**186,000**	287	**192,000**	2,780	< 25	< 25	< 25	< 25	< 25	< 33.3	< 25	< 25	< 25
1,3,5-Trimethylbenzene	182,000	NS			66,300	126	67,000	1,190	< 25	< 25	< 25	< 25	< 25	< 33.3	< 25	< 25	< 25
Trimethylbenzenes (Total)	NS	1,379			*252,300*	413	*259,000*	*3,970*	< 25	< 25	< 25	< 25	< 25	< 33.3	< 25	< 25	< 25
Naphthalene	5,150	658.7			**32,400**	52.3[J]	**36,100**	*738*	< 25	< 25	< 25	< 25	< 25	< 33.3	< 25	< 25	< 25

Notes:

NR720 Standards Obtained From WDNR Online Excel Database
RCL - NR 720 Proposed Soil Residual Contaminant Level
DC - Direct Contact
Background Threshold Value
Exceeds Non-Industrial Not-To-Exceed DC RCL — **Bold**
Exceeds NR 140 Groundwater Pathway Protection — *Italic*
NS - No Standard
[J] - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
< - Concentration below listed laboratory detection limit
NA - Not Analyzed

Table 1c
Excavation Confirmation Soil Analytical Results
Monitoring Wells
Hedlund DX
Falun, Wisconsin

		Date -->	9/17/18	9/17/18	9/17/18	9/17/18	9/17/18	9/17/18	9/17/18	9/17/18	9/17/18	9/18/18	9/18/18	9/18/18	9/18/18	9/18/18
		Sample ID -->	PB1	S1A	S1B	S2A	S2B	B1	B2	S3A	S3B	S4A	S4B	S5A	S5B	S6A
		Sample Depth (Feet) -->	5	4	7	4	7	8	8	4	7	4	7	4	7	4
		Percent Moisture -->	28.5%	21.5%	25.3%	44.3%	22.1%	29.3%	27.1%	55.1%	26.0%	34.3%	20.6%	25.3%	23.3%	28.7%
Lead (mg/kg)	400	13.5	10.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Petroleum VOC's (µg/kg)	Non-Industrial Not-To-Exceed DC RCL	NR 140 Groundwater Pathway Protection (DF=2)														
Benzene	1,490	5.1	*NA*	<25.0	*146*[J]	**32,700**	*1,160*	*442*	*2,560*	**30,600**	*3,110*	**1,720**	*2,660*	**40,200**	*1,080*	**15,000**
Ethylbenzene	7,470	1,570	*NA*	73.4[J]	*2,120*	**264,000**	*7,900*	*3,330*	490	**25,500**	*42,000*	*2,720*	*62,400*	**96,400**	705	**31,300**
Toluene	818,000	1,107	*NA*	<25.0	*517*	**338,000**	*3,470*	*1,130*	280	153,000	*9,980*	352	*9,260*	**12,900**	108	*34,900*
Xylenes (Total)	258,000	3,940	*NA*	320	*8,510*	**1,123,000**	*35,600*	*11,740*	1,851	**1,067,000**	*176,500*	*28,640*	*180,800*	**296,300**	2,281	*133,700*
Methly tert Butyl Ether	59,400	27	*NA*	<25.0	*198*	**9,270**	*625*	*156*	<25.0	6,940	*2,140*	*137*	*3,850*	4,950	*37.1*[J]	*1,950*
1,2,4-Trimethylbenzene	89,800	NS	*NA*	296	*6,200*	**394,000**	*21,800*	*5,630*	150	**279,000**	86,200	9,790	140,000	**185,000**	1,440	62,200
1,3,5-Trimethylbenzene	182,000	NS	*NA*	91	*2,060*	**112,000**	*7,340*	*1,720*	49.0[J]	77,100	29,700	3,000	47,300	66,400	569	20,100
Trimethylbenzenes (Total)	NS	1,379	*NA*	387	*8,260*	**506,000**	*29,140*	*7,350*	199	*356,100*	*115,900*	*12,790*	*187,300*	*251,400*	*2,009*	*82,300*
Naphthalene	5,150	658.7	*NA*	66.1[J]	*1,480*	**109,000**	*3,770*	*1,190*	37.8[J]	**113,000**	*18,800*	*1,830*	*25,600*	**40,800**	*972*	**10,900**

		Date -->	9/18/18	9/18/18	9/18/18	9/18/18	9/18/18	9/18/18	9/18/18	9/18/18	9/18/18	9/18/18	9/18/18	9/18/18	9/18/18	9/18/18
		Sample ID -->	S6B	S7A	S7B	S8A	S8B	B3	B4	S9A	S9B	S10A	S10B	S11A	S11B	B5
		Sample Depth (Feet) -->	7	4	7	4	7	8	8	4	7	4	7	4	7	8
		Percent Moisture -->	29.6%	24.2%	29.3%	29.3%	27.9%	28.3%	18.0%	25.3%	26.4%	27.2%	27.6%	27.5%	20.6%	30.7%
Lead (mg/kg)	400	13.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Petroleum VOC's (µg/kg)	Non-Industrial Not-To-Exceed DC RCL	NR 140 Groundwater Pathway Protection (DF=2)														
Benzene	1,490	5.1	9,450	**3,680**	*7,150*	**10,400**	*3,410*	*7,060*	*281*	<25.0	*915*	**1,680**	*305*	<250	<25.0	<25.0
Ethylbenzene	7,470	1,570	6,310	*3,770*	*5,540*	**28,200**	*4,870*	*2,120*	257	75.2[J]	*4,690*	**22,200**	*2,630*	**12,400**	<25.0	<25.0
Toluene	818,000	1,107	*4,580*	*3,390*	*10,300*	*59,900*	*2,800*	852	<25.0	<25.0	1,110	*6,810*	267	<250	<25.0	<25.0
Xylenes (Total)	258,000	3,940	*20,150*	*17,650*	*20,210*	*131,200*	*15,570*	1,794	484	<75	*9,417*	*122,700*	*6,954*	*48,330*	<75	<75
Methly tert Butyl Ether	59,400	27	*338*	*120*[J]	*196*	*1,980*	*194*	*110*	<25.0	<25.0	*159*	*1,070*	*60.1*[J]	*441*[J]	<25.0	<25.0
1,2,4-Trimethylbenzene	89,800	NS	9,160	8,240	8,450	58,400	7,670	815	<25.0	35.8[J]	8,700	66,900	5,310	58,500	<25.0	<25.0
1,3,5-Trimethylbenzene	182,000	NS	3,020	2,540	2,840	18,600	2,640	960	54.3[J]	66.5[J]	2,770	22,200	1,650	21,000	<25.0	<25.0
Trimethylbenzenes (Total)	NS	1,379	*12,180*	*10,780*	*11,290*	*77,000*	*10,310*	*1,775*	54.3[J]	102	*11,470*	*89,100*	*6,960*	*79,500*	<50	<50
Naphthalene	5,150	658.7	3,570	*1,990*	*3,370*	**9,430**	*4,220*	586	54.2[J]	57.2[J]	*2,800*	**10,300**	*1,870*	**10,500**	<25.0	<25.0

Notes:

NR720 Standards Obtained From WDNR Online Excel Database
RCL - NR 720 Proposed Soil Residual Contaminant Level
DC - Direct Contact
Background Threshold Value
Exceeds Non-Industrial Not-To-Exceed DC RCL — **Bold**
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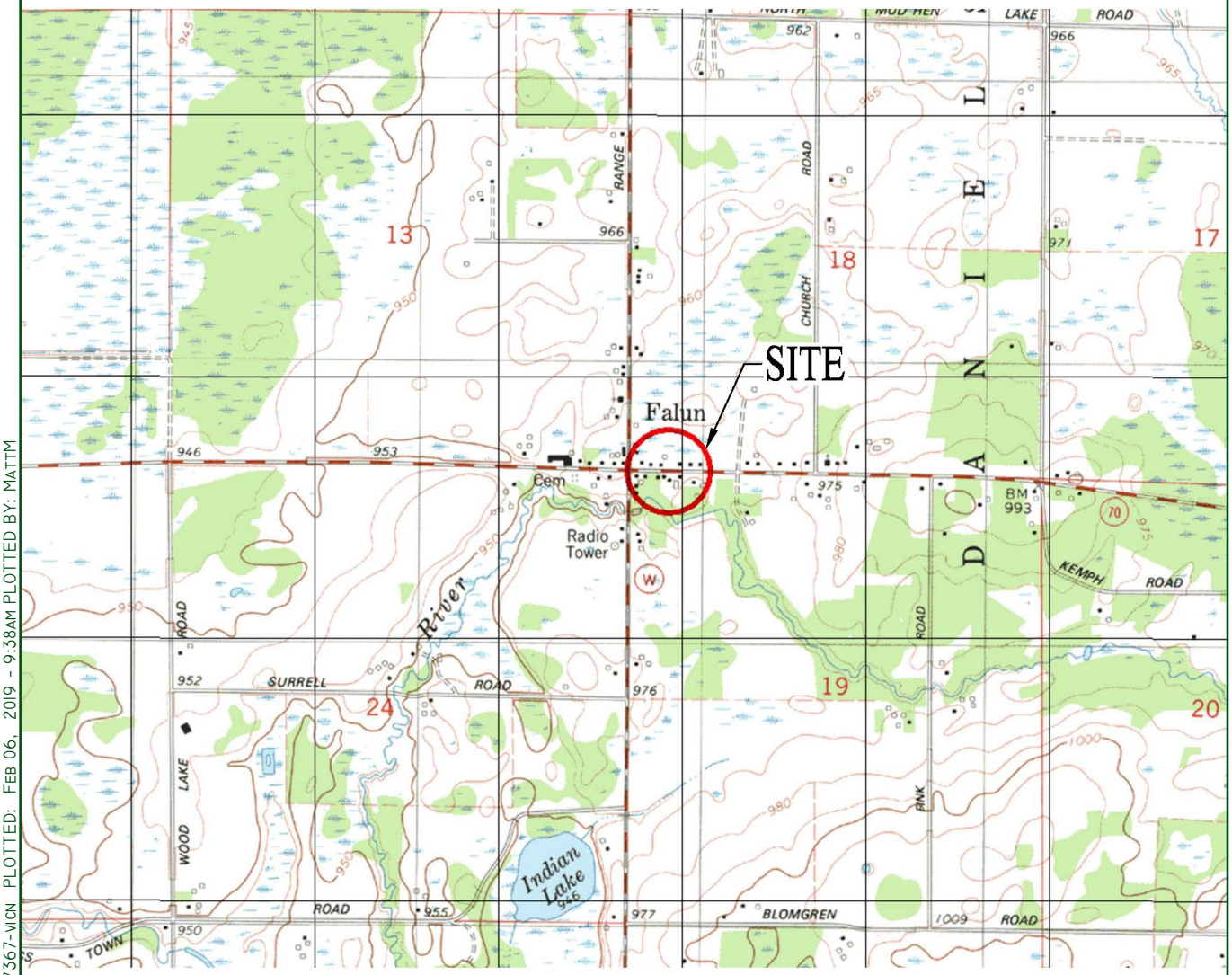
CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING



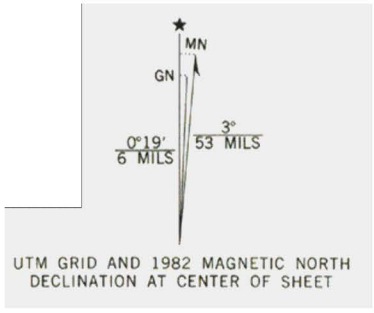
SCALE 1:24 000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET
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

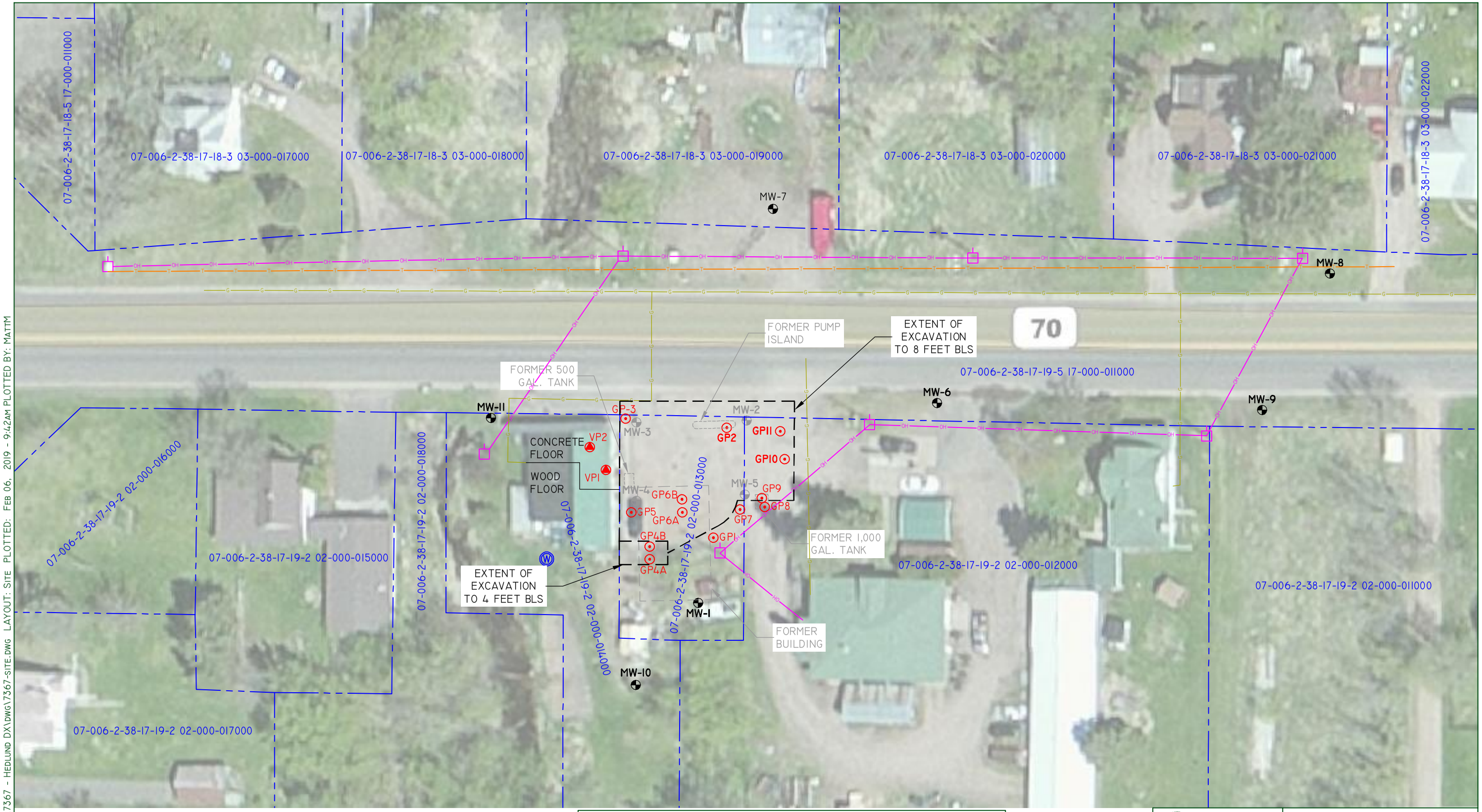
REI Engineering, INC.

HEDLUND DX
10557 STATE HIGHWAY 70
FALUN, WISCONSIN 54872

FIGURE 1 : SITE VICINITY MAP

PROJECT NO.	DRAWN BY:	DATE:
7367AxUC	MCM	2/6/2019

DRAWING FILE: P:\7300-7399\7367 - HEDLUND DX\DWG\7367-VICN.DWG LAYOUT: 7367-VICN PLOTTED: FEB 06, 2019 - 9:38AM PLOTTED BY: MATTM



DRAWING FILE: P:\7300-7399\7367 - HEDLUND DX\DWG\7367-SITE.DWG LAYOUT: SITE PLOTTED: FEB 06, 2019 - 9:42AM 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)

N

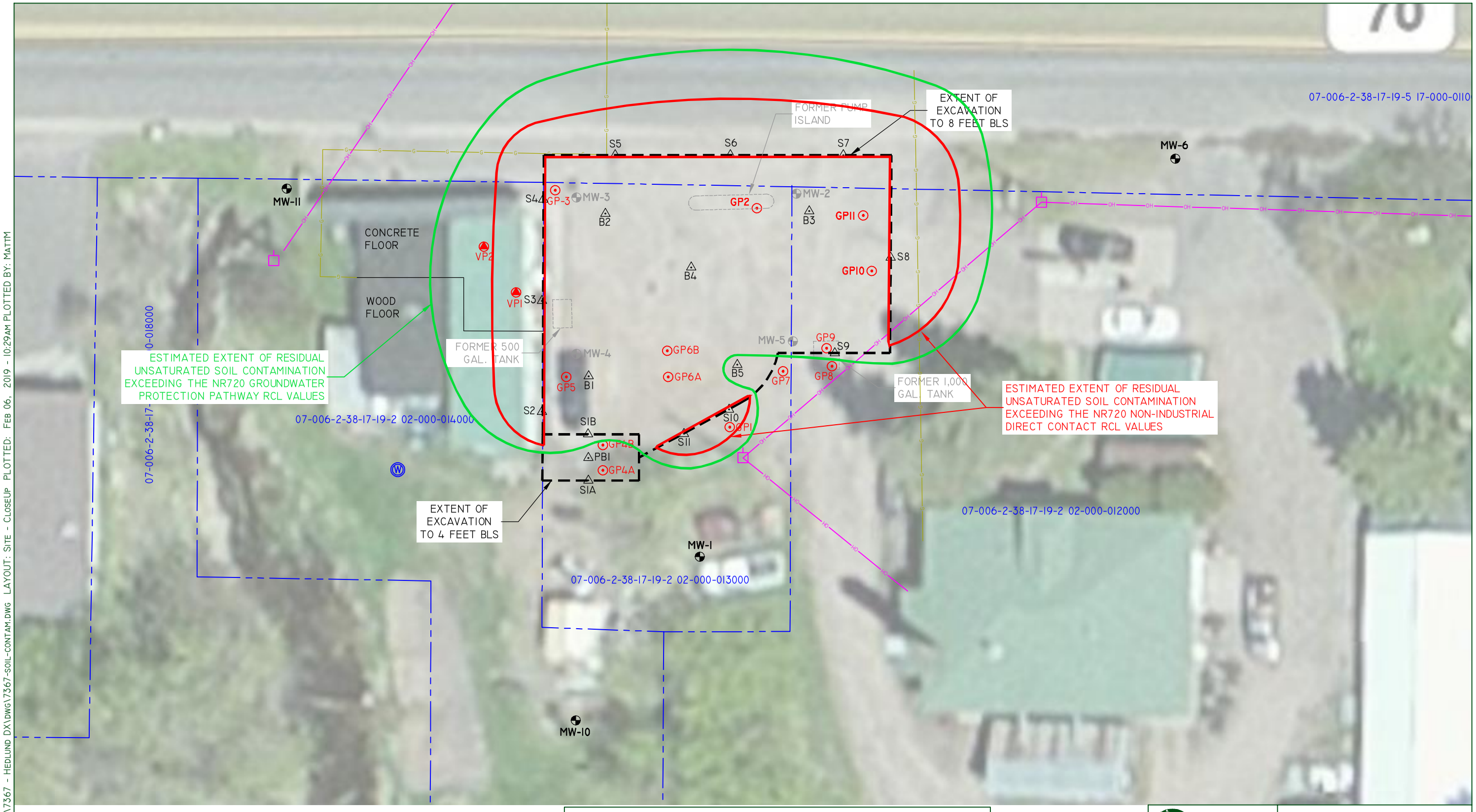
REI Engineering, INC.

REI CIVIL & ENVIRONMENTAL ENGINEERING, SURVEYING

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

FIGURE 2 : SITE MAP

PROJECT No.	DRAWN BY:	DATE:
7367AxUC	MCM	2/6/2019



DRAWING FILE: P:\7300-7399\7367 - HEDLUND DX\DWG\7367-SOIL-CONTAM.DWG LAYOUT: SITE - CLOSEUP PLOTTED: FEB 06, 2019 - 10:29AM PLOTTED BY: MATTM

LEGEND

0 20

SCALE: 1" = 20'

- GEOPROBE SOIL BORING
- MONITORING WELL
- MONITORING WELL (ABANDONED)
- SUB-SLAB VAPOR PROBE
- CONFIRMATION SOIL SAMPLE
- POTABLE WELL
- UTILITY POLE
- BURIED GAS LINE
- BURIED TELECOMMUNICATIONS LINE
- OVERHEAD UTILITIES LINE
- EXCAVATION BOUNDARIES (APPROXIMATE)
- PROPERTY BOUNDARIES (APPROXIMATE)

N

REI Engineering, INC.

REI CIVIL & ENVIRONMENTAL ENGINEERING, SURVEYING

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

FIGURE 3 : SOIL CONTAMINATION

PROJECT No.	DRAWN BY:	DATE:
7367AxUC	MCM	2/6/2019

APPENDIX A

MONITORING WELL ABANDONMENT FORMS

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

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Burnett	MW-2	

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

¼ / ¼ NW	¼ NW	Section	Township	Range
or Gov't Lot #		19	38 N	17 ☐ E ☑ W

Well Street Address: 10557 State Highway 70

Well City, Village or Town	Well ZIP Code
Town of Daniels	54840

Subdivision Name	Lot #

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

2. Facility / Owner Information

Facility Name: Hedlund DX
Facility ID (FID or PWS): 807049540
License/Permit/Monitoring #: 03-07-000151
Original Well Owner: Burnett County
Present Well Owner: Burnett County
Mailing Address of Present Owner: 10557 State Highway 70

City of Present Owner	State	ZIP Code
Town of Daniels	WI	54840

3. Filled & Sealed Well / Drillhole / Borehole Information

☑ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 9-13-2016

If a Well Construction Report is available, please attach.

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

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
18.5	2"
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
	8.5

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

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

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

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

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

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

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

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite chips	Surface	18.5	0.4 Bags	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
REI Engineering		9/17/18

Street or Route	Telephone Number
4080 N. 20th Avenue	(715) 675-9781

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Wausau	WI	54401		11-9-18

DNR Use Only

Date Received	Noted By

Comments:

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

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Burnett	MW-3	

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

¼ / ¼ NW or Gov't Lot #	¼ NW	Section	Township	Range
		19	38 N	17 ☐ E ☑ W

Well Street Address: 10557 State Highway 70

Well City, Village or Town	Well ZIP Code
Town of Daniels	54840

Subdivision Name	Lot #

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

2. Facility / Owner Information

Facility Name: Hedlund DX
Facility ID (FID or PWS): 807049540
License/Permit/Monitoring #: 03-07-000151
Original Well Owner: Burnett County
Present Well Owner: Burnett County
Mailing Address of Present Owner: 10557 State Highway 70

City of Present Owner	State	ZIP Code
Town of Daniels	WI	54840

3. Filled & Sealed Well / Drillhole / Borehole Information

☑ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 9-13-2016

If a Well Construction Report is available, please attach.

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

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
14	2"
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
	4

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

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

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

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

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

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

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

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite chips	Surface	14	0.4 Bags	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
REI Engineering		9/17/18

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

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Wausau	WI	54401		11-9-18

DNR Use Only

Date Received	Noted By
Comments	

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

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Burnett	MW-4	

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

¼ / ¼ NW or Gov't Lot #	¼ NW	Section	Township	Range
		19	38 N	17 ☐ E ☑ W

Well Street Address: 10557 State Highway 70

Well City, Village or Town	Well ZIP Code
Town of Daniels	54840

Subdivision Name	Lot #

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

2. Facility / Owner Information

Facility Name: Hedlund DX
Facility ID (FID or PWS): 807049540
License/Permit/Monitoring #: 03-07-000151
Original Well Owner: Burnett County
Present Well Owner: Burnett County
Mailing Address of Present Owner: 10557 State Highway 70

City of Present Owner	State	ZIP Code
Town of Daniels	WI	54840

3. Filled & Sealed Well / Drillhole / Borehole Information

☑ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 9-13-2016

If a Well Construction Report is available, please attach.

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

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
14.5	2"

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
	4.5

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

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

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

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

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

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

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

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite chips	Surface	14.5	0.5 Bags	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
REI Engineering		9/17/18

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

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Wausau	WI	54401		11-9-18

DNR Use Only

Date Received	Noted By

Comments:

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

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

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☐ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Burnett	MW-5	

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

¼ / ¼ NW	¼ NW	Section	Township	Range
or Gov't Lot #		19	38 N	17 ☐ E ☑ W

Well Street Address: 10557 State Highway 70

Well City, Village or Town	Well ZIP Code
Town of Daniels	54840

Subdivision Name	Lot #

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

2. Facility / Owner Information

Facility Name: Hedlund DX
Facility ID (FID or PWS): 807049540
License/Permit/Monitoring #: 03-07-000151
Original Well Owner: Burnett County
Present Well Owner: Burnett County
Mailing Address of Present Owner: 10557 State Highway 70

City of Present Owner	State	ZIP Code
Town of Daniels	WI	54840

3. Filled & Sealed Well / Drillhole / Borehole Information

☑ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 9-13-2016

If a Well Construction Report is available, please attach.

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

Formation Type:
☑ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
15	2"
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
	5

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

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

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

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

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

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

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

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Bentonite chips	Surface	15	0.5 Bags	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
REI Engineering		9/17/18

Street or Route	Telephone Number	City	State	ZIP Code
4080 N. 20th Avenue	(715) 675-9784	Wausau	WI	54401

Signature of Person Doing Work: _____ Date Signed: 11-9-18

DNR Use Only

Date Received	Noted By

Comments:

APPENDIX B

PHOTOGRAPHS

REI
CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING

Excavating southwest corner to 4 feet

Hoist discovered during excavation

Hoist

REI
CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING

Excavating area in southwest corner to 4 feet

Concrete discovered during excavation

Facing south along western edge of excavation

Southwest corner to 4 feet - complete

REI
CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING

Some groundwater infiltrating excavation, additional concrete rubble

Buried concrete

Water infiltrating from western sidewall

Facing south from Highway 70

REI
CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING

Water in excavation, west side

Excavation adjacent to catch basin in northwest corner

Catch basin

North side of excavation, adjacent to Highway 70

REI
CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING

Facing east along Highway 70

Proceding south along eastern edge of excavation

Backfilling as excavation proceeds

Additional concrete

REI
CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING

Additional concrete, approximate center of excavation

Additional concrete

Compacting backfill

Additional concrete

REI
CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING

Old foundation wall

Backfilling completed excavation,
additional concrete removed

Additional concrete

Compacting backfill, additional concrete

APPENDIX C

SOIL DISPOSAL DOCUMENTATION

REPUBLIC SERVICES / LAKE AREA LANDFILL -
W5987 Cty Hwy D
Sarona, WI 54870

REPUBLIC SERVICES

INVOICE

RECEIVED
OCT 09 2018

Invoice Date	09/30/2018
Invoice No	5134-000013152
Customer No	4-5134-0333365
Page No	1 of 4
Due Date	10/30/2018

L2RSMSDTBE 000166

REI Engineering, Inc.
4080 North 20th Avenue
Wausau, WI 54401 T# Republic 9/30/18
Date 9/30/18 GL# 5120
P# 1267AXX BG# 3
Approved By DL-Variance
promissory note

Current Charges	Total Amount Due
$22,209.32	$22,209.32

Please Pay Total Amount Due

Billing Questions? Call 715-234-8076

THANK YOU FOR YOUR BUSINESS
PLEASE SEND PAYMENT TO: REMIT TO ADDRESS ON INVOICE

Date	Code	Description	Reference	Rate	Quantity	Amount
08/31		Balance Forward				6,985.66
09/20		Payment 018310				-3,941.88
09/20		Payment 018314				-3,043.78
09/17	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045260	16.50	19.13 TN	315.65
09/17	VI	Reference: 128				
09/17	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045261	16.50	23.40 TN	386.10
09/17	VI	Reference: 122				
09/17	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045271	16.50	21.36 TN	352.44
09/17	VI	Reference: 131				
09/17	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045273	16.50	20.85 TN	344.03
09/17	VI	Reference: 125				
09/17	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045274	16.50	22.35 TN	368.78
09/17	VI	Reference: 129				
09/17	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045278	16.50	20.76 TN	342.54

ACCOUNT STATUS

Current	31-60 Days	61-90 Days	Over 90 Days	Total Amount Due
$22,209.32	0.00	0.00	0.00	$22,209.32

↓ ↓ Please return this portion below with your payment. Do not attach check to stub. ↓ ↓

REPUBLIC SERVICES / LAKE AREA LANDFILL -
W5987 Cty Hwy D
Sarona, WI 54870

Invoice Date	09/30/2018
Invoice No.	5134-000013152
Customer No.	4-5134-0333365
Current Charges:	$22,209.32
Total Amount Due:	$22,209.32
Amount Paid:	

☐ Please check if address has changed, and indicate change(s) on reverse side or call phone number above.

Please write your account number on your check and make payable to:

REPUBLIC SERVICES / LAKE AREA LANDFILL -
PO BOX 677839
DALLAS, TX 75267-7839

Please Return Payment To:

REI Engineering, Inc.
4080 North 20th Avenue
Wausau, WI 54401

L2RSMSDTBE 000166 1NNNNNNNNN NNN NNN 001 002 000845 20923376:1

4513403333650000000013152002220932002220932 7

Date	Code	Description	Reference	Rate	Quantity	Amount
09/17	VI	Reference: 126				
09/17	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045283	16.50	18.33 TN	302.45
09/17	VI	Reference: 124				
09/17	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045300	16.50	21.05 TN	347.33
09/17	VI	Reference: 128				
09/17	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045302	16.50	22.57 TN	372.41
09/17	VI	Reference: 122				
09/17	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045314	16.50	21.45 TN	353.93
09/17	VI	Reference: 131				
09/17	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045316	16.50	24.22 TN	399.63
09/17	VI	Reference: 125				
09/17	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045317	16.50	21.34 TN	352.11
09/17	VI	Reference: 129				
09/17	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045321	16.50	24.43 TN	403.10
09/17	VI	Reference: 126				
09/17	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045322	16.50	22.28 TN	367.62
09/17	VI	Reference: 124				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045340	16.50	21.76 TN	359.04
09/18	VI	Reference: 129				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045341	16.50	22.23 TN	366.80
09/18	VI	Reference: 131				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045342	16.50	24.38 TN	402.27
09/18	VI	Reference: 122				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045343	16.50	23.51 TN	387.92
09/18	VI	Reference: 128				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045344	16.50	23.80 TN	392.70
09/18	VI	Reference: 126				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045345	16.50	22.24 TN	366.96
09/18	VI	Reference: 124				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045346	16.50	20.68 TN	341.22
09/18	VI	Reference: 125				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045356	16.50	24.16 TN	398.64

000846

IF ANY OF THE FOLLOWING HAS CHANGED SINCE YOUR LAST STATEMENT, PLEASE INDICATE....

Your Name _____

Street _____ Home Phone _____

City _____ State _____ Zip _____

Other Information _____

_____

_____

REPUBLIC SERVICES / LAKE AREA LANDFILL -
W5987 Cty Hwy D
Sarona, WI 54870

REI Engineering, Inc.

REPUBLIC SERVICES

INVOICE (cont.)

Invoice Date	09/30/2018
Invoice No	5134-000013152
Customer No	4-5134-0333365
Page No	3 of 4
Due Date	10/30/2018

Date	Code	Description	Reference	Rate	Quantity	Amount
09/18	VI	Reference: 127				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045357	16.50	23.02 TN	379.83
09/18	VI	Reference: 109				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045359	16.50	20.81 TN	343.37
09/18	VI	Reference: 130				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045365	16.50	22.59 TN	372.74
09/18	VI	Reference: 94				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045366	16.50	23.34 TN	385.11
09/18	VI	Reference: 117				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045367	16.50	19.17 TN	316.31
09/18	VI	Reference: 110				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045370	16.50	20.86 TN	344.19
09/18	VI	Reference: 118				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045371	16.50	22.33 TN	368.45
09/18	VI	Reference: 129				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045374	16.50	24.11 TN	397.82
09/18	VI	Reference: 131				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045377	16.50	17.27 TN	284.96
09/18	VI	Reference: HOPKINS SAND				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045378	16.50	23.83 TN	393.20
09/18	VI	Reference: 122				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045380	16.50	20.31 TN	335.12
09/18	VI	Reference: 125				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045381	16.50	21.24 TN	350.46
09/18	VI	Reference: 124				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045385	16.50	21.08 TN	347.82
09/18	VI	Reference: 126				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045387	16.50	19.80 TN	326.70
09/18	VI	Reference: 128				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045396	16.50	21.10 TN	348.15
09/18	VI	Reference: 127				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045398	16.50	21.49 TN	354.59
09/18	VI	Reference: 109				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045400	16.50	22.97 TN	379.01
09/18	VI	Reference: 130				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045406	16.50	17.65 TN	291.23
09/18	VI	Reference: HOPKINS 94				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045409	16.50	20.60 TN	339.90
09/18	VI	Reference: 110				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045410	16.50	20.04 TN	330.66
09/18	VI	Reference: 117				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045416	16.50	20.87 TN	344.36
09/18	VI	Reference: 129				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045418	16.50	22.21 TN	366.47
09/18	VI	Reference: 131				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045420	16.50	23.61 TN	389.57

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Date	Code	Description	Reference	Rate	Quantity	Amount
09/18	VI	Reference: 122				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045421	16.50	24.61 TN	406.07
09/18	VI	Reference: 125				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045423	16.50	21.42 TN	353.43
09/18	VI	Reference: 124				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045431	16.50	20.05 TN	330.83
09/18	VI	Reference: 126				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045434	16.50	20.39 TN	336.44
09/18	VI	Reference: 128				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045440	16.50	21.80 TN	359.70
09/18	VI	Reference: 127				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045441	16.50	19.72 TN	325.38
09/18	VI	Reference: 109				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045442	16.50	17.60 TN	290.40
09/18	VI	Reference: 130				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045453	16.50	22.72 TN	374.88
09/18	VI	Reference: 129				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045455	16.50	22.07 TN	364.16
09/18	VI	Reference: 131				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045458	16.50	18.72 TN	308.88
09/18	VI	Reference: 122				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045462	16.50	16.68 TN	275.22
09/18	VI	Reference: hopkins				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045463	16.50	24.32 TN	401.28
09/18	VI	Reference: 125				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045465	16.50	21.17 TN	349.31
09/18	VI	Reference: 110				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045466	16.50	21.36 TN	352.44
09/18	VI	Reference: 117				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045467	16.50	16.24 TN	267.96
09/18	VI	Reference: 118				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045471	16.50	18.01 TN	297.17
09/18	VI	Reference: 124				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045473	16.50	20.60 TN	339.90
09/18	VI	Reference: 126				
09/18	VI	SW-CONT SOIL-ALT DAILY COVER	01 1045478	16.50	21.95 TN	362.18
09/18	VI	Reference: 128				
		---------- Material Summary ----------				
		SW-CONT SOIL-ALT DAILY COVER			1346.01	
					Total Current Charges ==========>	$22,209.32

APPENDIX D

METHODS AND PROCEDURES

METHODS AND PROCEDURES

FOR

SOIL SAMPLING FROM EXCAVATION

Soil Sampling was completed in accordance with the ***WDNR Soil Sampling Requirements for LUST Site Investigations and Excavations***. Soil samples were collected by hand directly from sidewalls and bottom of the open excavation. As the samples were obtained in the field, they were visually and manually classified by the field geologist/technician in accordance with **ASTM:D2488-84**. Representative portions of the samples were returned to the laboratory for further examination and for verification of the field classification. Records were taken indicating the depth and identification of the various strata, water level information and pertinent information regarding the method of collecting and maintaining samples.

Soil samples recovered were divided into two portions. One portion was prepared for laboratory analysis. The other portion was placed into a clean one quart Ziploc bag. A headspace analysis was then conducted on this latter portion.

HEADSPACE ANALYSIS

The soils were screened with a Mini-RAE photoionization detector equipped with a 11.7 eV lamp and calibrated for direct reading in units of Total Organic Vapors using an isobutylene standard. A Ziploc bag was filled two-thirds of the volume with the sample. The bags were sealed and shaken vigorously before headspace development. Headspace development is allowing the sample to rest for at least ten minutes before screening. When ambient temperatures were below 60 degrees F, soil samples were allowed to warm for a minimum of 10 minutes in a heated environment prior to headspace development. The Ziploc bag was punctured with the probe and a reading was taken.

SAMPLING AND CHAIN OF CUSTODY

Soil samples were collected by hand directly from the open excavation and placed in laboratory prepared glass vials and placed directly into a cooler pending delivery to the laboratory. Latex gloves were worn during all sample collection procedures.

APPENDIX E

LABORATORY ANALYTICAL REPORT

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

October 01, 2018

Andy Delforge
REI
4080 North 20th Avenue
Wausau, WI 54401

RE: Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Dear Andy Delforge:
Enclosed are the analytical results for sample(s) received by the laboratory on September 20, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

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

Enclosures

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

CERTIFICATIONS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Green Bay Certification IDs

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40176120001	**PB1**	Solid	09/17/18 12:00	09/20/18 08:45
40176120002	**S1A**	Solid	09/17/18 12:05	09/20/18 08:45
40176120003	**S1B**	Solid	09/17/18 12:10	09/20/18 08:45
40176120004	**S2A**	Solid	09/17/18 12:15	09/20/18 08:45
40176120005	**S2B**	Solid	09/17/18 12:20	09/20/18 08:45
40176120006	**B1**	Solid	09/17/18 12:25	09/20/18 08:45
40176120007	**B2**	Solid	09/17/18 12:30	09/20/18 08:45
40176120008	**S3A**	Solid	09/17/18 12:35	09/20/18 08:45
40176120009	**S3B**	Solid	09/17/18 12:40	09/20/18 08:45
40176120010	**S4A**	Solid	09/18/18 06:45	09/20/18 08:45
40176120011	**S4B**	Solid	09/18/18 06:50	09/20/18 08:45
40176120012	**S5A**	Solid	09/18/18 06:55	09/20/18 08:45
40176120013	**S5B**	Solid	09/18/18 07:00	09/20/18 08:45
40176120014	**S6A**	Solid	09/18/18 08:30	09/20/18 08:45
40176120015	**S6B**	Solid	09/18/18 08:35	09/20/18 08:45
40176120016	**S7A**	Solid	09/18/18 08:40	09/20/18 08:45
40176120017	**S7B**	Solid	09/18/18 08:45	09/20/18 08:45
40176120018	**S8A**	Solid	09/18/18 08:55	09/20/18 08:45
40176120019	**S8B**	Solid	09/18/18 09:00	09/20/18 08:45
40176120020	**B3**	Solid	09/18/18 09:30	09/20/18 08:45
40176120021	**B4**	Solid	09/18/18 11:20	09/20/18 08:45
40176120022	**S9A**	Solid	09/18/18 12:05	09/20/18 08:45
40176120023	**S9B**	Solid	09/18/18 12:10	09/20/18 08:45
40176120024	**S10A**	Solid	09/18/18 14:00	09/20/18 08:45
40176120025	**S10B**	Solid	09/18/18 14:05	09/20/18 08:45
40176120026	**S11A**	Solid	09/18/18 14:10	09/20/18 08:45
40176120027	**S11B**	Solid	09/18/18 14:15	09/20/18 08:45
40176120028	**B5**	Solid	09/18/18 14:20	09/20/18 08:45

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

SAMPLE ANALYTE COUNT

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40176120001	**PB1**	EPA 6010	TXW	1	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120002	**S1A**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120003	**S1B**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120004	**S2A**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120005	**S2B**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120006	**B1**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120007	**B2**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120008	**S3A**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120009	**S3B**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120010	**S4A**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120011	**S4B**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120012	**S5A**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120013	**S5B**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120014	**S6A**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120015	**S6B**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120016	**S7A**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120017	**S7B**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120018	**S8A**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120019	**S8B**	WI MOD GRO	PMS	10	PASI-G

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

SAMPLE ANALYTE COUNT

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		ASTM D2974-87	TEL	1	PASI-G
40176120020	**B3**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120021	**B4**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120022	**S9A**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120023	**S9B**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120024	**S10A**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120025	**S10B**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120026	**S11A**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120027	**S11B**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G
40176120028	**B5**	WI MOD GRO	PMS	10	PASI-G
		ASTM D2974-87	TEL	1	PASI-G

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

ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: PB1 **Lab ID: 40176120001** Collected: 09/17/18 12:00 Received: 09/20/18 08:45 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
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**10.7**	mg/kg	2.8	0.83	1	09/24/18 07:44	09/27/18 22:31	7439-92-1	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**28.5**	%	0.10	0.10	1		09/20/18 15:16		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S1A **Lab ID: 40176120002** Collected: 09/17/18 12:05 Received: 09/20/18 08:45 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	09/21/18 08:01	09/21/18 11:03	71-43-2	W
Ethylbenzene	**73.4J**	ug/kg	76.4	31.8	1	09/21/18 08:01	09/21/18 11:03	100-41-4	
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	09/21/18 08:01	09/21/18 11:03	1634-04-4	W
Naphthalene	**66.1J**	ug/kg	76.4	31.8	1	09/21/18 08:01	09/21/18 11:03	91-20-3	
Toluene	**<25.0**	ug/kg	60.0	25.0	1	09/21/18 08:01	09/21/18 11:03	108-88-3	W
1,2,4-Trimethylbenzene	**296**	ug/kg	76.4	31.8	1	09/21/18 08:01	09/21/18 11:03	95-63-6	
1,3,5-Trimethylbenzene	**90.7**	ug/kg	76.4	31.8	1	09/21/18 08:01	09/21/18 11:03	108-67-8	
m&p-Xylene	**261**	ug/kg	153	63.7	1	09/21/18 08:01	09/21/18 11:03	179601-23-1	
o-Xylene	**59.0J**	ug/kg	76.4	31.8	1	09/21/18 08:01	09/21/18 11:03	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	105	%	80-120		1	09/21/18 08:01	09/21/18 11:03	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**21.5**	%	0.10	0.10	1		09/20/18 15:16		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S1B **Lab ID: 40176120003** Collected: 09/17/18 12:10 Received: 09/20/18 08:45 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	**146J**	ug/kg	161	66.9	2	09/21/18 08:01	09/21/18 13:37	71-43-2	
Ethylbenzene	**2120**	ug/kg	161	66.9	2	09/21/18 08:01	09/21/18 13:37	100-41-4	
Methyl-tert-butyl ether	**198**	ug/kg	161	66.9	2	09/21/18 08:01	09/21/18 13:37	1634-04-4	
Naphthalene	**1480**	ug/kg	161	66.9	2	09/21/18 08:01	09/21/18 13:37	91-20-3	
Toluene	**517**	ug/kg	161	66.9	2	09/21/18 08:01	09/21/18 13:37	108-88-3	
1,2,4-Trimethylbenzene	**6200**	ug/kg	161	66.9	2	09/21/18 08:01	09/21/18 13:37	95-63-6	
1,3,5-Trimethylbenzene	**2060**	ug/kg	161	66.9	2	09/21/18 08:01	09/21/18 13:37	108-67-8	
m&p-Xylene	**6780**	ug/kg	321	134	2	09/21/18 08:01	09/21/18 13:37	179601-23-1	
o-Xylene	**1730**	ug/kg	161	66.9	2	09/21/18 08:01	09/21/18 13:37	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	105	%	80-120		2	09/21/18 08:01	09/21/18 13:37	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**25.3**	%	0.10	0.10	1		09/20/18 15:16		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S2A **Lab ID: 40176120004** Collected: 09/17/18 12:15 Received: 09/20/18 08:45 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	**32700**	ug/kg	5390	2240	50	09/21/18 08:01	09/21/18 18:43	71-43-2	
Ethylbenzene	**264000**	ug/kg	5390	2240	50	09/21/18 08:01	09/21/18 18:43	100-41-4	
Methyl-tert-butyl ether	**9270**	ug/kg	5390	2240	50	09/21/18 08:01	09/21/18 18:43	1634-04-4	
Naphthalene	**109000**	ug/kg	5390	2240	50	09/21/18 08:01	09/21/18 18:43	91-20-3	
Toluene	**338000**	ug/kg	5390	2240	50	09/21/18 08:01	09/21/18 18:43	108-88-3	
1,2,4-Trimethylbenzene	**394000**	ug/kg	5390	2240	50	09/21/18 08:01	09/21/18 18:43	95-63-6	
1,3,5-Trimethylbenzene	**112000**	ug/kg	5390	2240	50	09/21/18 08:01	09/21/18 18:43	108-67-8	
m&p-Xylene	**783000**	ug/kg	10800	4490	50	09/21/18 08:01	09/21/18 18:43	179601-23-1	
o-Xylene	**340000**	ug/kg	5390	2240	50	09/21/18 08:01	09/21/18 18:43	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	98	%	80-120		50	09/21/18 08:01	09/21/18 18:43	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**44.3**	%	0.10	0.10	1		09/20/18 15:16		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S2B **Lab ID: 40176120005** Collected: 09/17/18 12:20 Received: 09/20/18 08:45 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	**1160**	ug/kg	385	161	5	09/21/18 08:01	09/21/18 19:08	71-43-2	
Ethylbenzene	**7900**	ug/kg	385	161	5	09/21/18 08:01	09/21/18 19:08	100-41-4	
Methyl-tert-butyl ether	**625**	ug/kg	385	161	5	09/21/18 08:01	09/21/18 19:08	1634-04-4	
Naphthalene	**3770**	ug/kg	385	161	5	09/21/18 08:01	09/21/18 19:08	91-20-3	
Toluene	**3470**	ug/kg	385	161	5	09/21/18 08:01	09/21/18 19:08	108-88-3	
1,2,4-Trimethylbenzene	**21800**	ug/kg	385	161	5	09/21/18 08:01	09/21/18 19:08	95-63-6	
1,3,5-Trimethylbenzene	**7340**	ug/kg	385	161	5	09/21/18 08:01	09/21/18 19:08	108-67-8	
m&p-Xylene	**25500**	ug/kg	771	321	5	09/21/18 08:01	09/21/18 19:08	179601-23-1	
o-Xylene	**10100**	ug/kg	385	161	5	09/21/18 08:01	09/21/18 19:08	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	104	%	80-120		5	09/21/18 08:01	09/21/18 19:08	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**22.1**	%	0.10	0.10	1		09/20/18 15:16		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: B1 **Lab ID: 40176120006** Collected: 09/17/18 12:25 Received: 09/20/18 08:45 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	**442**	ug/kg	84.9	35.4	1	09/21/18 08:01	09/21/18 20:50	71-43-2	
Ethylbenzene	**3330**	ug/kg	84.9	35.4	1	09/21/18 08:01	09/21/18 20:50	100-41-4	
Methyl-tert-butyl ether	**156**	ug/kg	84.9	35.4	1	09/21/18 08:01	09/21/18 20:50	1634-04-4	
Naphthalene	**1190**	ug/kg	84.9	35.4	1	09/21/18 08:01	09/21/18 20:50	91-20-3	
Toluene	**1130**	ug/kg	84.9	35.4	1	09/21/18 08:01	09/21/18 20:50	108-88-3	
1,2,4-Trimethylbenzene	**5630**	ug/kg	84.9	35.4	1	09/21/18 08:01	09/21/18 20:50	95-63-6	
1,3,5-Trimethylbenzene	**1720**	ug/kg	84.9	35.4	1	09/21/18 08:01	09/21/18 20:50	108-67-8	
m&p-Xylene	**9660**	ug/kg	170	70.7	1	09/21/18 08:01	09/21/18 20:50	179601-23-1	
o-Xylene	**2080**	ug/kg	84.9	35.4	1	09/21/18 08:01	09/21/18 20:50	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	105	%	80-120		1	09/21/18 08:01	09/21/18 20:50	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**29.3**	%	0.10	0.10	1		09/20/18 15:16		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: B2 **Lab ID: 40176120007** Collected: 09/17/18 12:30 Received: 09/20/18 08:45 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	**2560**	ug/kg	82.3	34.3	1	09/21/18 08:01	09/21/18 11:29	71-43-2	
Ethylbenzene	**490**	ug/kg	82.3	34.3	1	09/21/18 08:01	09/21/18 11:29	100-41-4	
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	09/21/18 08:01	09/21/18 11:29	1634-04-4	W
Naphthalene	**37.8J**	ug/kg	82.3	34.3	1	09/21/18 08:01	09/21/18 11:29	91-20-3	
Toluene	**280**	ug/kg	82.3	34.3	1	09/21/18 08:01	09/21/18 11:29	108-88-3	
1,2,4-Trimethylbenzene	**150**	ug/kg	82.3	34.3	1	09/21/18 08:01	09/21/18 11:29	95-63-6	
1,3,5-Trimethylbenzene	**49.0J**	ug/kg	82.3	34.3	1	09/21/18 08:01	09/21/18 11:29	108-67-8	
m&p-Xylene	**1330**	ug/kg	165	68.6	1	09/21/18 08:01	09/21/18 11:29	179601-23-1	
o-Xylene	**521**	ug/kg	82.3	34.3	1	09/21/18 08:01	09/21/18 11:29	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	09/21/18 08:01	09/21/18 11:29	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**27.1**	%	0.10	0.10	1		09/20/18 15:16		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S3A **Lab ID: 40176120008** Collected: 09/17/18 12:35 Received: 09/20/18 08:45 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	**30600**	ug/kg	5350	2230	40	09/21/18 08:01	09/21/18 18:17	71-43-2	
Ethylbenzene	**255000**	ug/kg	5350	2230	40	09/21/18 08:01	09/21/18 18:17	100-41-4	
Methyl-tert-butyl ether	**6940**	ug/kg	5350	2230	40	09/21/18 08:01	09/21/18 18:17	1634-04-4	
Naphthalene	**113000**	ug/kg	5350	2230	40	09/21/18 08:01	09/21/18 18:17	91-20-3	
Toluene	**153000**	ug/kg	5350	2230	40	09/21/18 08:01	09/21/18 18:17	108-88-3	
1,2,4-Trimethylbenzene	**279000**	ug/kg	5350	2230	40	09/21/18 08:01	09/21/18 18:17	95-63-6	
1,3,5-Trimethylbenzene	**77100**	ug/kg	5350	2230	40	09/21/18 08:01	09/21/18 18:17	108-67-8	
m&p-Xylene	**740000**	ug/kg	10700	4460	40	09/21/18 08:01	09/21/18 18:17	179601-23-1	
o-Xylene	**327000**	ug/kg	5350	2230	40	09/21/18 08:01	09/21/18 18:17	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	103	%	80-120		40	09/21/18 08:01	09/21/18 18:17	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**55.1**	%	0.10	0.10	1		09/20/18 15:16		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S3B **Lab ID: 40176120009** Collected: 09/17/18 12:40 Received: 09/20/18 08:45 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	**3110**	ug/kg	1620	676	20	09/21/18 08:01	09/21/18 14:53	71-43-2	
Ethylbenzene	**42000**	ug/kg	1620	676	20	09/21/18 08:01	09/21/18 14:53	100-41-4	
Methyl-tert-butyl ether	**2140**	ug/kg	1620	676	20	09/21/18 08:01	09/21/18 14:53	1634-04-4	
Naphthalene	**18800**	ug/kg	1620	676	20	09/21/18 08:01	09/21/18 14:53	91-20-3	
Toluene	**9980**	ug/kg	1620	676	20	09/21/18 08:01	09/21/18 14:53	108-88-3	
1,2,4-Trimethylbenzene	**86200**	ug/kg	1620	676	20	09/21/18 08:01	09/21/18 14:53	95-63-6	
1,3,5-Trimethylbenzene	**29700**	ug/kg	1620	676	20	09/21/18 08:01	09/21/18 14:53	108-67-8	
m&p-Xylene	**128000**	ug/kg	3240	1350	20	09/21/18 08:01	09/21/18 14:53	179601-23-1	
o-Xylene	**48500**	ug/kg	1620	676	20	09/21/18 08:01	09/21/18 14:53	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	106	%	80-120		20	09/21/18 08:01	09/21/18 14:53	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**26.0**	%	0.10	0.10	1		09/20/18 15:17		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S4A **Lab ID: 40176120010** Collected: 09/18/18 06:45 Received: 09/20/18 08:45 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	**1720**	ug/kg	91.3	38.0	1	09/21/18 08:01	09/21/18 21:16	71-43-2	
Ethylbenzene	**2720**	ug/kg	91.3	38.0	1	09/21/18 08:01	09/21/18 21:16	100-41-4	
Methyl-tert-butyl ether	**137**	ug/kg	91.3	38.0	1	09/21/18 08:01	09/21/18 21:16	1634-04-4	
Naphthalene	**1830**	ug/kg	91.3	38.0	1	09/21/18 08:01	09/21/18 21:16	91-20-3	
Toluene	**352**	ug/kg	91.3	38.0	1	09/21/18 08:01	09/21/18 21:16	108-88-3	
1,2,4-Trimethylbenzene	**9790**	ug/kg	91.3	38.0	1	09/21/18 08:01	09/21/18 21:16	95-63-6	
1,3,5-Trimethylbenzene	**3000**	ug/kg	91.3	38.0	1	09/21/18 08:01	09/21/18 21:16	108-67-8	
m&p-Xylene	**27200**	ug/kg	183	76.1	1	09/21/18 08:01	09/21/18 21:16	179601-23-1	
o-Xylene	**1440**	ug/kg	91.3	38.0	1	09/21/18 08:01	09/21/18 21:16	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	107	%	80-120		1	09/21/18 08:01	09/21/18 21:16	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**34.3**	%	0.10	0.10	1		09/20/18 15:17		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S4B **Lab ID: 40176120011** Collected: 09/18/18 06:50 Received: 09/20/18 08:45 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	**2660**	ug/kg	1510	630	20	09/21/18 08:01	09/21/18 20:25	71-43-2	
Ethylbenzene	**62400**	ug/kg	1510	630	20	09/21/18 08:01	09/21/18 20:25	100-41-4	
Methyl-tert-butyl ether	**3850**	ug/kg	1510	630	20	09/21/18 08:01	09/21/18 20:25	1634-04-4	
Naphthalene	**25600**	ug/kg	1510	630	20	09/21/18 08:01	09/21/18 20:25	91-20-3	
Toluene	**9260**	ug/kg	1510	630	20	09/21/18 08:01	09/21/18 20:25	108-88-3	
1,2,4-Trimethylbenzene	**140000**	ug/kg	1510	630	20	09/21/18 08:01	09/21/18 20:25	95-63-6	
1,3,5-Trimethylbenzene	**47300**	ug/kg	1510	630	20	09/21/18 08:01	09/21/18 20:25	108-67-8	
m&p-Xylene	**167000**	ug/kg	3020	1260	20	09/21/18 08:01	09/21/18 20:25	179601-23-1	
o-Xylene	**13800**	ug/kg	1510	630	20	09/21/18 08:01	09/21/18 20:25	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	113	%	80-120		20	09/21/18 08:01	09/21/18 20:25	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**20.6**	%	0.10	0.10	1		09/20/18 15:17		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S5A **Lab ID: 40176120012** Collected: 09/18/18 06:55 Received: 09/20/18 08:45 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	**40200**	ug/kg	3210	1340	40	09/21/18 08:01	09/21/18 17:26	71-43-2	
Ethylbenzene	**96400**	ug/kg	3210	1340	40	09/21/18 08:01	09/21/18 17:26	100-41-4	
Methyl-tert-butyl ether	**4950**	ug/kg	3210	1340	40	09/21/18 08:01	09/21/18 17:26	1634-04-4	
Naphthalene	**40800**	ug/kg	3210	1340	40	09/21/18 08:01	09/21/18 17:26	91-20-3	
Toluene	**12900**	ug/kg	3210	1340	40	09/21/18 08:01	09/21/18 17:26	108-88-3	
1,2,4-Trimethylbenzene	**185000**	ug/kg	3210	1340	40	09/21/18 08:01	09/21/18 17:26	95-63-6	
1,3,5-Trimethylbenzene	**66400**	ug/kg	3210	1340	40	09/21/18 08:01	09/21/18 17:26	108-67-8	
m&p-Xylene	**276000**	ug/kg	6420	2680	40	09/21/18 08:01	09/21/18 17:26	179601-23-1	
o-Xylene	**20300**	ug/kg	3210	1340	40	09/21/18 08:01	09/21/18 17:26	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	108	%	80-120		40	09/21/18 08:01	09/21/18 17:26	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**25.3**	%	0.10	0.10	1		09/20/18 15:17		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S5B **Lab ID: 40176120013** Collected: 09/18/18 07:00 Received: 09/20/18 08:45 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	**1080**	ug/kg	78.3	32.6	1	09/21/18 08:01	09/21/18 12:46	71-43-2	
Ethylbenzene	**705**	ug/kg	78.3	32.6	1	09/21/18 08:01	09/21/18 12:46	100-41-4	
Methyl-tert-butyl ether	**37.1J**	ug/kg	78.3	32.6	1	09/21/18 08:01	09/21/18 12:46	1634-04-4	
Naphthalene	**972**	ug/kg	78.3	32.6	1	09/21/18 08:01	09/21/18 12:46	91-20-3	
Toluene	**108**	ug/kg	78.3	32.6	1	09/21/18 08:01	09/21/18 12:46	108-88-3	
1,2,4-Trimethylbenzene	**1440**	ug/kg	78.3	32.6	1	09/21/18 08:01	09/21/18 12:46	95-63-6	
1,3,5-Trimethylbenzene	**569**	ug/kg	78.3	32.6	1	09/21/18 08:01	09/21/18 12:46	108-67-8	
m&p-Xylene	**1990**	ug/kg	157	65.2	1	09/21/18 08:01	09/21/18 12:46	179601-23-1	
o-Xylene	**291**	ug/kg	78.3	32.6	1	09/21/18 08:01	09/21/18 12:46	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	110	%	80-120		1	09/21/18 08:01	09/21/18 12:46	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**23.3**	%	0.10	0.10	1		09/20/18 15:17		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S6A **Lab ID: 40176120014** Collected: 09/18/18 08:30 Received: 09/20/18 08:45 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	**15000**	ug/kg	1050	438	12.5	09/21/18 08:01	09/21/18 17:52	71-43-2	
Ethylbenzene	**31300**	ug/kg	1050	438	12.5	09/21/18 08:01	09/21/18 17:52	100-41-4	
Methyl-tert-butyl ether	**1950**	ug/kg	1050	438	12.5	09/21/18 08:01	09/21/18 17:52	1634-04-4	
Naphthalene	**10900**	ug/kg	1050	438	12.5	09/21/18 08:01	09/21/18 17:52	91-20-3	
Toluene	**34900**	ug/kg	1050	438	12.5	09/21/18 08:01	09/21/18 17:52	108-88-3	
1,2,4-Trimethylbenzene	**62200**	ug/kg	1050	438	12.5	09/21/18 08:01	09/21/18 17:52	95-63-6	
1,3,5-Trimethylbenzene	**20100**	ug/kg	1050	438	12.5	09/21/18 08:01	09/21/18 17:52	108-67-8	
m&p-Xylene	**97500**	ug/kg	2100	876	12.5	09/21/18 08:01	09/21/18 17:52	179601-23-1	
o-Xylene	**36200**	ug/kg	1050	438	12.5	09/21/18 08:01	09/21/18 17:52	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	97	%	80-120		12.5	09/21/18 08:01	09/21/18 17:52	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**28.7**	%	0.10	0.10	1		09/20/18 15:41		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S6B **Lab ID: 40176120015** Collected: 09/18/18 08:35 Received: 09/20/18 08:45 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	**9450**	ug/kg	171	71.1	2	09/21/18 08:01	09/21/18 19:34	71-43-2	
Ethylbenzene	**6310**	ug/kg	171	71.1	2	09/21/18 08:01	09/21/18 19:34	100-41-4	
Methyl-tert-butyl ether	**338**	ug/kg	171	71.1	2	09/21/18 08:01	09/21/18 19:34	1634-04-4	
Naphthalene	**3570**	ug/kg	171	71.1	2	09/21/18 08:01	09/21/18 19:34	91-20-3	
Toluene	**4580**	ug/kg	171	71.1	2	09/21/18 08:01	09/21/18 19:34	108-88-3	
1,2,4-Trimethylbenzene	**9160**	ug/kg	171	71.1	2	09/21/18 08:01	09/21/18 19:34	95-63-6	
1,3,5-Trimethylbenzene	**3020**	ug/kg	171	71.1	2	09/21/18 08:01	09/21/18 19:34	108-67-8	
m&p-Xylene	**16400**	ug/kg	341	142	2	09/21/18 08:01	09/21/18 19:34	179601-23-1	
o-Xylene	**3750**	ug/kg	171	71.1	2	09/21/18 08:01	09/21/18 19:34	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		2	09/21/18 08:01	09/21/18 19:34	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**29.6**	%	0.10	0.10	1		09/20/18 15:41		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S7A **Lab ID: 40176120016** Collected: 09/18/18 08:40 Received: 09/20/18 08:45 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	**3680**	ug/kg	158	65.9	2	09/21/18 08:01	09/21/18 14:02	71-43-2	
Ethylbenzene	**3770**	ug/kg	158	65.9	2	09/21/18 08:01	09/21/18 14:02	100-41-4	
Methyl-tert-butyl ether	**120J**	ug/kg	158	65.9	2	09/21/18 08:01	09/21/18 14:02	1634-04-4	
Naphthalene	**1990**	ug/kg	158	65.9	2	09/21/18 08:01	09/21/18 14:02	91-20-3	
Toluene	**3390**	ug/kg	158	65.9	2	09/21/18 08:01	09/21/18 14:02	108-88-3	
1,2,4-Trimethylbenzene	**8240**	ug/kg	158	65.9	2	09/21/18 08:01	09/21/18 14:02	95-63-6	
1,3,5-Trimethylbenzene	**2540**	ug/kg	158	65.9	2	09/21/18 08:01	09/21/18 14:02	108-67-8	
m&p-Xylene	**12600**	ug/kg	316	132	2	09/21/18 08:01	09/21/18 14:02	179601-23-1	
o-Xylene	**5050**	ug/kg	158	65.9	2	09/21/18 08:01	09/21/18 14:02	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	98	%	80-120		2	09/21/18 08:01	09/21/18 14:02	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**24.2**	%	0.10	0.10	1		09/20/18 15:42		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S7B **Lab ID: 40176120017** Collected: 09/18/18 08:45 Received: 09/20/18 08:45 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	**7150**	ug/kg	170	70.7	2	09/21/18 08:01	09/21/18 13:11	71-43-2	
Ethylbenzene	**5540**	ug/kg	170	70.7	2	09/21/18 08:01	09/21/18 13:11	100-41-4	
Methyl-tert-butyl ether	**196**	ug/kg	170	70.7	2	09/21/18 08:01	09/21/18 13:11	1634-04-4	
Naphthalene	**3370**	ug/kg	170	70.7	2	09/21/18 08:01	09/21/18 13:11	91-20-3	
Toluene	**10300**	ug/kg	170	70.7	2	09/21/18 08:01	09/21/18 13:11	108-88-3	
1,2,4-Trimethylbenzene	**8450**	ug/kg	170	70.7	2	09/21/18 08:01	09/21/18 13:11	95-63-6	
1,3,5-Trimethylbenzene	**2840**	ug/kg	170	70.7	2	09/21/18 08:01	09/21/18 13:11	108-67-8	
m&p-Xylene	**15100**	ug/kg	339	141	2	09/21/18 08:01	09/21/18 13:11	179601-23-1	
o-Xylene	**5110**	ug/kg	170	70.7	2	09/21/18 08:01	09/21/18 13:11	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		2	09/21/18 08:01	09/21/18 13:11	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**29.3**	%	0.10	0.10	1		09/20/18 15:42		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S8A **Lab ID: 40176120018** Collected: 09/18/18 08:55 Received: 09/20/18 08:45 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	**10400**	ug/kg	994	414	12.5	09/21/18 08:01	09/21/18 19:59	71-43-2	
Ethylbenzene	**28200**	ug/kg	994	414	12.5	09/21/18 08:01	09/21/18 19:59	100-41-4	
Methyl-tert-butyl ether	**1980**	ug/kg	994	414	12.5	09/21/18 08:01	09/21/18 19:59	1634-04-4	
Naphthalene	**9430**	ug/kg	994	414	12.5	09/21/18 08:01	09/21/18 19:59	91-20-3	
Toluene	**59900**	ug/kg	994	414	12.5	09/21/18 08:01	09/21/18 19:59	108-88-3	
1,2,4-Trimethylbenzene	**58400**	ug/kg	994	414	12.5	09/21/18 08:01	09/21/18 19:59	95-63-6	
1,3,5-Trimethylbenzene	**18600**	ug/kg	994	414	12.5	09/21/18 08:01	09/21/18 19:59	108-67-8	
m&p-Xylene	**94500**	ug/kg	1990	829	12.5	09/21/18 08:01	09/21/18 19:59	179601-23-1	
o-Xylene	**36700**	ug/kg	994	414	12.5	09/21/18 08:01	09/21/18 19:59	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	93	%	80-120		12.5	09/21/18 08:01	09/21/18 19:59	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**24.6**	%	0.10	0.10	1		09/20/18 15:42		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S8B **Lab ID: 40176120019** Collected: 09/18/18 09:00 Received: 09/20/18 08:45 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	**3410**	ug/kg	167	69.4	2	09/21/18 08:01	09/21/18 14:28	71-43-2	
Ethylbenzene	**4870**	ug/kg	167	69.4	2	09/21/18 08:01	09/21/18 14:28	100-41-4	
Methyl-tert-butyl ether	**194**	ug/kg	167	69.4	2	09/21/18 08:01	09/21/18 14:28	1634-04-4	
Naphthalene	**4220**	ug/kg	167	69.4	2	09/21/18 08:01	09/21/18 14:28	91-20-3	
Toluene	**2800**	ug/kg	167	69.4	2	09/21/18 08:01	09/21/18 14:28	108-88-3	
1,2,4-Trimethylbenzene	**7670**	ug/kg	167	69.4	2	09/21/18 08:01	09/21/18 14:28	95-63-6	
1,3,5-Trimethylbenzene	**2640**	ug/kg	167	69.4	2	09/21/18 08:01	09/21/18 14:28	108-67-8	
m&p-Xylene	**13000**	ug/kg	333	139	2	09/21/18 08:01	09/21/18 14:28	179601-23-1	
o-Xylene	**2570**	ug/kg	167	69.4	2	09/21/18 08:01	09/21/18 14:28	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		2	09/21/18 08:01	09/21/18 14:28	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**27.9**	%	0.10	0.10	1		09/20/18 15:42		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: B3 **Lab ID: 40176120020** Collected: 09/18/18 09:30 Received: 09/20/18 08:45 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	**7060**	ug/kg	83.7	34.9	1	09/21/18 08:01	09/21/18 12:20	71-43-2	
Ethylbenzene	**2120**	ug/kg	83.7	34.9	1	09/21/18 08:01	09/21/18 12:20	100-41-4	
Methyl-tert-butyl ether	**110**	ug/kg	83.7	34.9	1	09/21/18 08:01	09/21/18 12:20	1634-04-4	
Naphthalene	**568**	ug/kg	83.7	34.9	1	09/21/18 08:01	09/21/18 12:20	91-20-3	
Toluene	**852**	ug/kg	83.7	34.9	1	09/21/18 08:01	09/21/18 12:20	108-88-3	
1,2,4-Trimethylbenzene	**815**	ug/kg	83.7	34.9	1	09/21/18 08:01	09/21/18 12:20	95-63-6	
1,3,5-Trimethylbenzene	**960**	ug/kg	83.7	34.9	1	09/21/18 08:01	09/21/18 12:20	108-67-8	
m&p-Xylene	**1410**	ug/kg	167	69.8	1	09/21/18 08:01	09/21/18 12:20	179601-23-1	
o-Xylene	**384**	ug/kg	83.7	34.9	1	09/21/18 08:01	09/21/18 12:20	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	105	%	80-120		1	09/21/18 08:01	09/21/18 12:20	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**28.3**	%	0.10	0.10	1		09/20/18 15:42		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: B4 **Lab ID: 40176120021** Collected: 09/18/18 11:20 Received: 09/20/18 08:45 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	**281**	ug/kg	73.2	30.5	1	09/21/18 08:01	09/21/18 11:54	71-43-2	
Ethylbenzene	**257**	ug/kg	73.2	30.5	1	09/21/18 08:01	09/21/18 11:54	100-41-4	
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	09/21/18 08:01	09/21/18 11:54	1634-04-4	W
Naphthalene	**54.2J**	ug/kg	73.2	30.5	1	09/21/18 08:01	09/21/18 11:54	91-20-3	
Toluene	**<25.0**	ug/kg	60.0	25.0	1	09/21/18 08:01	09/21/18 11:54	108-88-3	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	09/21/18 08:01	09/21/18 11:54	95-63-6	W
1,3,5-Trimethylbenzene	**54.3J**	ug/kg	73.2	30.5	1	09/21/18 08:01	09/21/18 11:54	108-67-8	
m&p-Xylene	**484**	ug/kg	146	61.0	1	09/21/18 08:01	09/21/18 11:54	179601-23-1	
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	09/21/18 08:01	09/21/18 11:54	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	102	%	80-120		1	09/21/18 08:01	09/21/18 11:54	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**18.0**	%	0.10	0.10	1		09/20/18 15:42		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S9A **Lab ID: 40176120022** Collected: 09/18/18 12:05 Received: 09/20/18 08:45 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	09/24/18 08:30	09/24/18 13:00	71-43-2	W
Ethylbenzene	**75.2J**	ug/kg	80.3	33.5	1	09/24/18 08:30	09/24/18 13:00	100-41-4	
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	09/24/18 08:30	09/24/18 13:00	1634-04-4	W
Naphthalene	**57.2J**	ug/kg	80.3	33.5	1	09/24/18 08:30	09/24/18 13:00	91-20-3	
Toluene	**<25.0**	ug/kg	60.0	25.0	1	09/24/18 08:30	09/24/18 13:00	108-88-3	W
1,2,4-Trimethylbenzene	**35.8J**	ug/kg	80.3	33.5	1	09/24/18 08:30	09/24/18 13:00	95-63-6	
1,3,5-Trimethylbenzene	**66.5J**	ug/kg	80.3	33.5	1	09/24/18 08:30	09/24/18 13:00	108-67-8	
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	09/24/18 08:30	09/24/18 13:00	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	09/24/18 08:30	09/24/18 13:00	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	09/24/18 08:30	09/24/18 13:00	98-08-8	P4
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**25.3**	%	0.10	0.10	1		09/20/18 15:42		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S9B **Lab ID: 40176120023** Collected: 09/18/18 12:10 Received: 09/20/18 08:45 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	**915**	ug/kg	81.6	34.0	1	09/24/18 08:30	09/24/18 19:31	71-43-2	
Ethylbenzene	**4690**	ug/kg	81.6	34.0	1	09/24/18 08:30	09/24/18 19:31	100-41-4	
Methyl-tert-butyl ether	**159**	ug/kg	81.6	34.0	1	09/24/18 08:30	09/24/18 19:31	1634-04-4	
Naphthalene	**2800**	ug/kg	81.6	34.0	1	09/24/18 08:30	09/24/18 19:31	91-20-3	
Toluene	**1110**	ug/kg	81.6	34.0	1	09/24/18 08:30	09/24/18 19:31	108-88-3	
1,2,4-Trimethylbenzene	**8700**	ug/kg	81.6	34.0	1	09/24/18 08:30	09/24/18 19:31	95-63-6	
1,3,5-Trimethylbenzene	**2770**	ug/kg	81.6	34.0	1	09/24/18 08:30	09/24/18 19:31	108-67-8	
m&p-Xylene	**8740**	ug/kg	163	68.0	1	09/24/18 08:30	09/24/18 19:31	179601-23-1	
o-Xylene	**677**	ug/kg	81.6	34.0	1	09/24/18 08:30	09/24/18 19:31	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	95	%	80-120		1	09/24/18 08:30	09/24/18 19:31	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**26.4**	%	0.10	0.10	1		09/20/18 15:42		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S10A **Lab ID: 40176120024** Collected: 09/18/18 14:00 Received: 09/20/18 08:45 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	**1680**	ug/kg	1030	430	12.5	09/24/18 08:30	09/24/18 18:39	71-43-2	
Ethylbenzene	**27200**	ug/kg	1030	430	12.5	09/24/18 08:30	09/24/18 18:39	100-41-4	
Methyl-tert-butyl ether	**1070**	ug/kg	1030	430	12.5	09/24/18 08:30	09/24/18 18:39	1634-04-4	
Naphthalene	**10300**	ug/kg	1030	430	12.5	09/24/18 08:30	09/24/18 18:39	91-20-3	
Toluene	**6810**	ug/kg	1030	430	12.5	09/24/18 08:30	09/24/18 18:39	108-88-3	
1,2,4-Trimethylbenzene	**66900**	ug/kg	1030	430	12.5	09/24/18 08:30	09/24/18 18:39	95-63-6	
1,3,5-Trimethylbenzene	**22200**	ug/kg	1030	430	12.5	09/24/18 08:30	09/24/18 18:39	108-67-8	
m&p-Xylene	**93600**	ug/kg	2060	859	12.5	09/24/18 08:30	09/24/18 18:39	179601-23-1	
o-Xylene	**29100**	ug/kg	1030	430	12.5	09/24/18 08:30	09/24/18 18:39	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	96	%	80-120		12.5	09/24/18 08:30	09/24/18 18:39	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**27.2**	%	0.10	0.10	1		09/20/18 15:42		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S10B **Lab ID: 40176120025** Collected: 09/18/18 14:05 Received: 09/20/18 08:45 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	**305**	ug/kg	82.9	34.5	1	09/24/18 08:30	09/24/18 19:05	71-43-2	
Ethylbenzene	**2630**	ug/kg	82.9	34.5	1	09/24/18 08:30	09/24/18 19:05	100-41-4	
Methyl-tert-butyl ether	**60.1J**	ug/kg	82.9	34.5	1	09/24/18 08:30	09/24/18 19:05	1634-04-4	
Naphthalene	**1870**	ug/kg	82.9	34.5	1	09/24/18 08:30	09/24/18 19:05	91-20-3	
Toluene	**267**	ug/kg	82.9	34.5	1	09/24/18 08:30	09/24/18 19:05	108-88-3	
1,2,4-Trimethylbenzene	**5310**	ug/kg	82.9	34.5	1	09/24/18 08:30	09/24/18 19:05	95-63-6	
1,3,5-Trimethylbenzene	**1650**	ug/kg	82.9	34.5	1	09/24/18 08:30	09/24/18 19:05	108-67-8	
m&p-Xylene	**6730**	ug/kg	166	69.1	1	09/24/18 08:30	09/24/18 19:05	179601-23-1	
o-Xylene	**224**	ug/kg	82.9	34.5	1	09/24/18 08:30	09/24/18 19:05	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1	09/24/18 08:30	09/24/18 19:05	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**27.6**	%	0.10	0.10	1		09/20/18 16:37		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S11A **Lab ID: 40176120026** Collected: 09/18/18 14:10 Received: 09/20/18 08:45 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	**<250**	ug/kg	600	250	10	09/24/18 08:30	09/24/18 18:14	71-43-2	W
Ethylbenzene	**12400**	ug/kg	827	345	10	09/24/18 08:30	09/24/18 18:14	100-41-4	
Methyl-tert-butyl ether	**441J**	ug/kg	827	345	10	09/24/18 08:30	09/24/18 18:14	1634-04-4	
Naphthalene	**10500**	ug/kg	827	345	10	09/24/18 08:30	09/24/18 18:14	91-20-3	
Toluene	**<250**	ug/kg	600	250	10	09/24/18 08:30	09/24/18 18:14	108-88-3	W
1,2,4-Trimethylbenzene	**58500**	ug/kg	827	345	10	09/24/18 08:30	09/24/18 18:14	95-63-6	
1,3,5-Trimethylbenzene	**21000**	ug/kg	827	345	10	09/24/18 08:30	09/24/18 18:14	108-67-8	
m&p-Xylene	**45600**	ug/kg	1650	689	10	09/24/18 08:30	09/24/18 18:14	179601-23-1	
o-Xylene	**2730**	ug/kg	827	345	10	09/24/18 08:30	09/24/18 18:14	95-47-6	
Surrogates									
a,a,a-Trifluorotoluene (S)	115	%	80-120		10	09/24/18 08:30	09/24/18 18:14	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**27.5**	%	0.10	0.10	1		09/20/18 16:37		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: S11B **Lab ID: 40176120027** Collected: 09/18/18 14:15 Received: 09/20/18 08:45 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	09/24/18 08:30	09/24/18 13:26	71-43-2	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	09/24/18 08:30	09/24/18 13:26	100-41-4	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	09/24/18 08:30	09/24/18 13:26	1634-04-4	W
Naphthalene	**<25.0**	ug/kg	60.0	25.0	1	09/24/18 08:30	09/24/18 13:26	91-20-3	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	09/24/18 08:30	09/24/18 13:26	108-88-3	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	09/24/18 08:30	09/24/18 13:26	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	09/24/18 08:30	09/24/18 13:26	108-67-8	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	09/24/18 08:30	09/24/18 13:26	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	09/24/18 08:30	09/24/18 13:26	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1	09/24/18 08:30	09/24/18 13:26	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**20.6**	%	0.10	0.10	1		09/20/18 16:37		

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ANALYTICAL RESULTS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Sample: B5 **Lab ID: 40176120028** Collected: 09/18/18 14:20 Received: 09/20/18 08:45 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	09/24/18 08:30	09/24/18 13:57	71-43-2	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	09/24/18 08:30	09/24/18 13:57	100-41-4	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	09/24/18 08:30	09/24/18 13:57	1634-04-4	W
Naphthalene	**<25.0**	ug/kg	60.0	25.0	1	09/24/18 08:30	09/24/18 13:57	91-20-3	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	09/24/18 08:30	09/24/18 13:57	108-88-3	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	09/24/18 08:30	09/24/18 13:57	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	09/24/18 08:30	09/24/18 13:57	108-67-8	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	09/24/18 08:30	09/24/18 13:57	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	09/24/18 08:30	09/24/18 13:57	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1	09/24/18 08:30	09/24/18 13:57	98-08-8	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**30.7**	%	0.10	0.10	1		09/20/18 16:37		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

QC Batch: 300863 Analysis Method: WI MOD GRO
QC Batch Method: TPH GRO/PVOC WI ext. Analysis Description: WIGRO Solid GCV
Associated Lab Samples: 40176120002, 40176120003, 40176120004, 40176120005, 40176120006, 40176120007, 40176120008, 40176120009, 40176120010, 40176120011, 40176120012, 40176120013, 40176120014, 40176120015, 40176120016, 40176120017, 40176120018, 40176120019, 40176120020, 40176120021

METHOD BLANK: 1756953 Matrix: Solid
Associated Lab Samples: 40176120002, 40176120003, 40176120004, 40176120005, 40176120006, 40176120007, 40176120008, 40176120009, 40176120010, 40176120011, 40176120012, 40176120013, 40176120014, 40176120015, 40176120016, 40176120017, 40176120018, 40176120019, 40176120020, 40176120021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<25.0	50.0	09/21/18 08:59	
1,3,5-Trimethylbenzene	ug/kg	<25.0	50.0	09/21/18 08:59	
Benzene	ug/kg	<25.0	50.0	09/21/18 08:59	
Ethylbenzene	ug/kg	<25.0	50.0	09/21/18 08:59	
m&p-Xylene	ug/kg	<50.0	100	09/21/18 08:59	
Methyl-tert-butyl ether	ug/kg	<25.0	50.0	09/21/18 08:59	
Naphthalene	ug/kg	<25.0	50.0	09/21/18 08:59	
o-Xylene	ug/kg	<25.0	50.0	09/21/18 08:59	
Toluene	ug/kg	<25.0	50.0	09/21/18 08:59	
a,a,a-Trifluorotoluene (S)	%	99	80-120	09/21/18 08:59	

LABORATORY CONTROL SAMPLE & LCSD: 1756954 1756955

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	978	955	98	96	80-120	2	20	
1,3,5-Trimethylbenzene	ug/kg	1000	940	928	94	93	80-120	1	20	
Benzene	ug/kg	1000	1030	1030	103	103	80-120	0	20	
Ethylbenzene	ug/kg	1000	1030	1020	103	102	80-120	1	20	
m&p-Xylene	ug/kg	2000	2030	2010	102	100	80-120	1	20	
Methyl-tert-butyl ether	ug/kg	1000	1010	1020	101	102	80-120	1	20	
Naphthalene	ug/kg	1000	970	975	97	97	80-120	0	20	
o-Xylene	ug/kg	1000	1030	1010	103	101	80-120	2	20	
Toluene	ug/kg	1000	1060	1050	106	105	80-120	1	20	
a,a,a-Trifluorotoluene (S)	%				100	102	80-120			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

QC Batch: 301008 Analysis Method: WI MOD GRO
QC Batch Method: TPH GRO/PVOC WI ext. Analysis Description: WIGRO Solid GCV
Associated Lab Samples: 40176120022, 40176120023, 40176120024, 40176120025, 40176120026, 40176120027, 40176120028

METHOD BLANK: 1758276 Matrix: Solid
Associated Lab Samples: 40176120022, 40176120023, 40176120024, 40176120025, 40176120026, 40176120027, 40176120028

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<25.0	50.0	09/24/18 09:50	
1,3,5-Trimethylbenzene	ug/kg	<25.0	50.0	09/24/18 09:50	
Benzene	ug/kg	<25.0	50.0	09/24/18 09:50	
Ethylbenzene	ug/kg	<25.0	50.0	09/24/18 09:50	
m&p-Xylene	ug/kg	<50.0	100	09/24/18 09:50	
Methyl-tert-butyl ether	ug/kg	<25.0	50.0	09/24/18 09:50	
Naphthalene	ug/kg	<25.0	50.0	09/24/18 09:50	
o-Xylene	ug/kg	<25.0	50.0	09/24/18 09:50	
Toluene	ug/kg	<25.0	50.0	09/24/18 09:50	
a,a,a-Trifluorotoluene (S)	%	100	80-120	09/24/18 09:50	

LABORATORY CONTROL SAMPLE & LCSD: 1758277 1758278

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	1020	104	102	80-120	2	20	
1,3,5-Trimethylbenzene	ug/kg	1000	995	991	100	99	80-120	0	20	
Benzene	ug/kg	1000	1040	1020	104	102	80-120	2	20	
Ethylbenzene	ug/kg	1000	1030	1020	103	102	80-120	1	20	
m&p-Xylene	ug/kg	2000	2020	2030	101	102	80-120	1	20	
Methyl-tert-butyl ether	ug/kg	1000	896	902	90	90	80-120	1	20	
Naphthalene	ug/kg	1000	961	968	96	97	80-120	1	20	
o-Xylene	ug/kg	1000	1020	1030	102	103	80-120	1	20	
Toluene	ug/kg	1000	1050	1030	105	103	80-120	2	20	
a,a,a-Trifluorotoluene (S)	%				99	98	80-120			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

QC Batch: 300908
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Associated Lab Samples: 40176120001

METHOD BLANK: 1757202
Matrix: Solid
Associated Lab Samples: 40176120001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/kg	<0.60	2.0	09/27/18 21:31	

LABORATORY CONTROL SAMPLE: 1757203

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	50	46.6	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1757204 1757205

Parameter	Units	40176156001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	mg/kg	262	90	89.8	435	347	192	95	75-125	22	20	M0,R1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

QC Batch: 300811 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 40176120001, 40176120002, 40176120003, 40176120004, 40176120005, 40176120006, 40176120007, 40176120008, 40176120009, 40176120010, 40176120011, 40176120012, 40176120013

SAMPLE DUPLICATE: 1756655

Parameter	Units	40176099014 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	16.5	16.9	3	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

QC Batch: 300821 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 40176120014, 40176120015, 40176120016, 40176120017, 40176120018, 40176120019, 40176120020, 40176120021, 40176120022, 40176120023, 40176120024

SAMPLE DUPLICATE: 1756707

Parameter	Units	40176120014 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	28.7	28.8	1	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

QC Batch: 300828 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 40176120025, 40176120026, 40176120027, 40176120028

SAMPLE DUPLICATE: 1756799

Parameter	Units	40176149006 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	23.0	23.0	0	10	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

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.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
P4	Sample field preservation does not meet EPA or method recommendations for this analysis.
R1	RPD value was outside control limits.
W	Non-detect results are reported on a wet weight basis.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40176120002	**S1A**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120003	**S1B**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120004	**S2A**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120005	**S2B**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120006	**B1**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120007	**B2**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120008	**S3A**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120009	**S3B**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120010	**S4A**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120011	**S4B**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120012	**S5A**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120013	**S5B**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120014	**S6A**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120015	**S6B**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120016	**S7A**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120017	**S7B**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120018	**S8A**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120019	**S8B**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120020	**B3**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120021	**B4**	TPH GRO/PVOC WI ext.	300863	WI MOD GRO	300874
40176120022	**S9A**	TPH GRO/PVOC WI ext.	301008	WI MOD GRO	301060
40176120023	**S9B**	TPH GRO/PVOC WI ext.	301008	WI MOD GRO	301060
40176120024	**S10A**	TPH GRO/PVOC WI ext.	301008	WI MOD GRO	301060
40176120025	**S10B**	TPH GRO/PVOC WI ext.	301008	WI MOD GRO	301060
40176120026	**S11A**	TPH GRO/PVOC WI ext.	301008	WI MOD GRO	301060
40176120027	**S11B**	TPH GRO/PVOC WI ext.	301008	WI MOD GRO	301060
40176120028	**B5**	TPH GRO/PVOC WI ext.	301008	WI MOD GRO	301060
40176120001	**PB1**	EPA 3050	300908	EPA 6010	301109
40176120001	**PB1**	ASTM D2974-87	300811		
40176120002	**S1A**	ASTM D2974-87	300811		
40176120003	**S1B**	ASTM D2974-87	300811		
40176120004	**S2A**	ASTM D2974-87	300811		
40176120005	**S2B**	ASTM D2974-87	300811		
40176120006	**B1**	ASTM D2974-87	300811		
40176120007	**B2**	ASTM D2974-87	300811		
40176120008	**S3A**	ASTM D2974-87	300811		
40176120009	**S3B**	ASTM D2974-87	300811		
40176120010	**S4A**	ASTM D2974-87	300811		
40176120011	**S4B**	ASTM D2974-87	300811		
40176120012	**S5A**	ASTM D2974-87	300811		
40176120013	**S5B**	ASTM D2974-87	300811		
40176120014	**S6A**	ASTM D2974-87	300821		
40176120015	**S6B**	ASTM D2974-87	300821		
40176120016	**S7A**	ASTM D2974-87	300821		
40176120017	**S7B**	ASTM D2974-87	300821		
40176120018	**S8A**	ASTM D2974-87	300821		
40176120019	**S8B**	ASTM D2974-87	300821		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 7367 HEDLUND DX
Pace Project No.: 40176120

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40176120020	**B3**	ASTM D2974-87	300821		
40176120021	**B4**	ASTM D2974-87	300821		
40176120022	**S9A**	ASTM D2974-87	300821		
40176120023	**S9B**	ASTM D2974-87	300821		
40176120024	**S10A**	ASTM D2974-87	300821		
40176120025	**S10B**	ASTM D2974-87	300828		
40176120026	**S11A**	ASTM D2974-87	300828		
40176120027	**S11B**	ASTM D2974-87	300828		
40176120028	**B5**	ASTM D2974-87	300828		

40176120

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

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www.pacelabs.com

CHAIN OF CUSTODY

(Please Print Clearly)	
Company Name:	REZ
Branch/Location:	Wausau
Project Contact:	Andy Delforge
Phone:	715-675-9784
Project Number:	7367
Project Name:	Holland Ax
Project State:	WI
Sampled By (Print):	Andy Delforge
Sampled By (Sign):	[signature]
PO #:	
Regulatory Program:	Pace WDC

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

Quote #:	
Mail To Contact:	Dave Larsen
Mail To Company:	REZ
Mail To Address:	
Invoice To Contact:	DL
Invoice To Company:	REZ
Invoice To Address:	
Invoice To Phone:	

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

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

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

FILTERED? (YES/NO) — Y/N: N | N
PRESERVATION (CODE)* — Pick Letter: A | F

Analyses Requested: Pb | PVOC+N

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Pb	PVOC+N							CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	Pb1	9/17/18	12:00	S	X	X									
002	S1A		12:05												
003	S1B		12:10												
004	S2A		12:15												
005	S2B		12:20												
006	B1		12:25												
007	B2		12:30												
008	S3A		12:35												
009	S3B		12:40												
010	S4A	9/18/18	6:45												
011	S4B		6:50												
012	S5A		6:55												
013	S5B		7:00												

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

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

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

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

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	9/18/18 1:00 PM		
Wausau	9/20/18 0845	[signature]	9/20/18 0845

PACE Project No. 40176120

Receipt Temp = ROI °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

4017612O

(Please Print Clearly)

Company Name:	REI
Branch/Location:	Wausau
Project Contact:	Dave Larsen
Phone:	715-675-9784
Project Number:	7367
Project Name:	Holland Dr
Project State:	WI
Sampled By (Print):	Andy Ackerman
Sampled By (Sign):	
PO #:	
Regulatory Program:	RECFHWC

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

CHAIN OF CUSTODY

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

Quote #:	
Mail To Contact:	Dave Larsen
Mail To Company:	REI
Mail To Address:	
Invoice To Contact:	DL
Invoice To Company:	REI
Invoice To Address:	
Invoice To Phone:	

FILTERED? (YES/NO) — Y/N: N
PRESERVATION (CODE)* — Pick Letter: F
Analyses Requested: PVOC

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

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

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

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	PVOC	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
014	S6A	9/18/18	8:30	S				
015	S6B		8:35					
016	S7A		8:40					
017	S7B		8:45					
018	S8A		8:55					
019	S8B		9:00					
020	B3		9:30					
021	B4		11:20					
022	S9A		12:05					
023	S9B		12:10					
024	S10A		2:00					
025	S10B		2:05					
026	S11A		2:10					

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

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

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

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

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	9/19/18 - 1:00 pm		
Waltzo	9/20/18 0845	[signature]	9/20/18 0845

PACE Project No. 40176120
Receipt Temp = ROI °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

ORIGINAL

(Please Print Clearly)

Company Name:	REI
Branch/Location:	Wausau
Project Contact:	Andy Delforge
Phone:	715-675-9784
Project Number:	7367
Project Name:	Hedlund Ox
Project State:	WI
Sampled By (Print):	Andy Delforge
Sampled By (Sign):	
PO #:	
Regulatory Program:	Pfeffer Ave

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www.pacelabs.com

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

40176120

CHAIN OF CUSTODY

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

Quote #:	
Mail To Contact:	Dave Larsen
Mail To Company:	REI
Mail To Address:	
Invoice To Contact:	DL
Invoice To Company:	REI
Invoice To Address:	
Invoice To Phone:	

FILTERED? (YES/NO) — Y/N: N
PRESERVATION (CODE)* — Pick Letter: F
Analyses Requested: Ivoc+n

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

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

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

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Ivoc+n	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
027	S11B	9/18/18	2:15	S	↓			
028	⊙ B5	↓	2:20	↓	↓			

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

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

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

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

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	9/19/18 - 1:00 Am		
Walter	9/20/18 0845	[signature]	9/20/18 0845

PACE Project No. 40176120
Receipt Temp = ROI °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal
Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

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

Sample Preservation Receipt Form

Client Name: REI Project # 40176120

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:

	Glass							Plastic							Vials						Jars			General								
Pace Lab #	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001																																	2.5 / 5 / 10
002																																	2.5 / 5 / 10
003																																	2.5 / 5 / 10
004																																	2.5 / 5 / 10
005																																	2.5 / 5 / 10
006																																	2.5 / 5 / 10
007																																	2.5 / 5 / 10
008																																	2.5 / 5 / 10
009																																	2.5 / 5 / 10
010																																	2.5 / 5 / 10
011																																	2.5 / 5 / 10
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013																																	2.5 / 5 / 10
014																																	2.5 / 5 / 10
015																																	2.5 / 5 / 10
016																																	2.5 / 5 / 10
017																																	2.5 / 5 / 10
018																																	2.5 / 5 / 10
019																																	2.5 / 5 / 10
020																																	2.5 / 5 / 10

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

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact	VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL		
AG5U	100 mL amber glass unpres	BP3C	250 mL plastic NaOH	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres	BP3S	250 mL plastic H2SO4			GN:	

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

Sample Preservation Receipt Form

Client Name: RFI

Project #: 40176120

	Glass							Plastic							Vials						Jars			General									
Pace Lab #	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
021																			1				1										2.5 / 5 / 10
022																			1				1										2.5 / 5 / 10
023																			1				1										2.5 / 5 / 10
024																			1				1										2.5 / 5 / 10
025																			1				1										2.5 / 5 / 10
026																			1				1										2.5 / 5 / 10
027																			1				1										2.5 / 5 / 10
028																			1				1										2.5 / 5 / 10
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																																	2.5 / 5 / 12
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																																	2.5 / 5 / 14
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																																	2.5 / 5 / 16
																																	2.5 / 5 / 17
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																																	2.5 / 5 / 19
																																	2.5 / 5 / 20
																																	2.5 / 5 / 21
																																	2.5 / 5 / 22
																																	2.5 / 5 / 23

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

Sample Condition Upon Receipt Form (SCUR)

Project #

WO#: 40176120

40176120

Client Name: REI

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

Tracking #: 1837993-1

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

Cooler Temperature Uncorr: /Corr: 2.01

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

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

Person examining contents:
Date: 9/20/18
Initials: TL

Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☒No	6.
Rush Turn Around Time Requested:	☐Yes ☒No	7.
Sufficient Volume: 9/20/18 TL For Analysis: ☐Yes ☒No MS/MSD: ☐Yes ☒No ☐N/A		8. 001 no vial volume received 9/20/18 TL
Correct Containers Used:	☒Yes ☐No	9. Not Needed per AD 9-20-18 SG
-Pace Containers Used:	☒Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☒N/A	
Containers Intact:	☒Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: S	☐Yes ☒No ☐N/A	12. 013 poly ID SAB placed by bagged w/ vial; 027 poly ID SIB placed by bagged w/ vial w/ correct time - vial ID was SIB
Trip Blank Present:	☐Yes ☒No ☐N/A	13. 023 vial no ID, date, time placed by bagged w/ poly; all Polys no collect date/time 9/20/18 TL
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: Date: 9-20-18