REI
CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING

April 20, 2017

Wisconsin Department of Natural Resources
Attn: Gena Keenan
1300 W Clairemont Ave.
Eau Claire, WI 54702

Subject:

Update Report
Former Schlinsog Dairy
N7701 Pelsdorf Avenue
Loyal, WI
BRRTS #03-10-554767
PECFA #54446-8368-01-A

Dear Ms. Keenan:

Enclosed please find a copy of the above mentioned Update Report. This report documents the completion of the recently approved scope of services which included a single round of groundwater sampling at select wells.

If you have any questions or comments, please contact our office at (715) 675-9784.

Sincerely,
REI Engineering, Inc.

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

CC: Mr. Steven Kautzer, N7701 Pelsdorf Avenue, Loyal, WI 54446

REI

CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING

UPDATE REPORT
FORMER SCHLINSOG DAIRY
N7701 PELSDORF AVENUE
LOYAL, WI 54446

BRRTS #03-10-554767

PECFA #54446-8368-01

REI PROJECT #5357

COMPREHENSIVE SERVICES WITH PRACTICAL SOLUTIONS

UPDATE REPORT

FORMER SCHLINSOG DAIRY
N7701 PELSDORF AVENUE
LOYAL, WI 54446
BRRTS#03-10-554767

PECFA#54446-8368-01
REI #5357

PREPARED FOR:

Steven Kautzer
N7701 Pelsdorf Avenue
Loyal, WI 54446

APRIL 2017

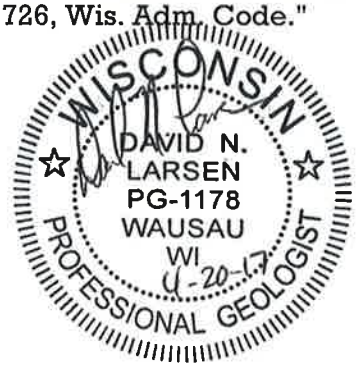
UPDATE REPORT

FORMER SCHLINSOG DAIRY
N7701 PELSDORF AVENUE
LOYAL, WI 54446
BRRTS#03-10-554767

PECFA#54446-8368-01
REI #5357

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

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



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

Scott J. Blado — 4/20/17

Scott J. Blado — Date

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UPDATE REPORT

FORMER SCHLINSOG DAIRY
N7701 PELSDORF AVENUE
LOYAL, WI 54446
BRRTS#03-10-554767

PECFA#54446-8368-01
REI #5357

1.0 WORK PERFORMED THIS PERIOD

REI is submitting an Update Report covering the site activities that have taken place at the above referenced location. Events that have taken place during this period include a single groundwater sampling event at select environmental monitoring wells, the on-site potable and neighboring potable water supply wells. The location of the site is shown on Figure 1. The location of the monitoring wells are presented in Figure 2.

2.0 SUMMARY OF WORK

The Former Schlinsog Dairy site is located at the intersection of Mann Road and Pelsdorf Avenue in the SE¼ of the SE ¼ of Section 27, Township 26 North, Range 01 West, Town of Loyal, Clark County, Wisconsin (Figure 1). Site investigation activities began in 2010, a remedial excavation was completed in May 2011 and the engineered remedial system (groundwater pump and treat) was started in August 2013. The system operated until November 2013 when it was retrofitted and operated as a soil vapor extraction system until August 2014. Prior to system operation free product was observed in PW1 and MW2. Figure 2 presents the locations of the monitoring well network and site boundaries.

2.1 Groundwater Monitoring and Analytical Results

Following the submittal of the last report, a single groundwater sampling event (at select wells) was completed by REI personnel on April 13, 2017. An excess of four (4) well volumes was removed from each well prior to sampling by REI personnel.

All purge water waste generated during this scope of services was temporarily stored in 55-gallon WDOT approved drums before final disposal at the City of Wausau waste water treatment facility. No free product has been reported in the wells following the operation of the remedial system. The former on-site potable well (PW2) was not sampled as the power to the well has been permanently disconnected.

Water elevation measurements from the REI sampling events are presented in Table 1. Water levels were recorded at an all-time high level during the April 13, 2017 sample event. Figure 3 presents a groundwater contour map from the data collected on April 13, 2017. Groundwater is depicted flowing from the northeast to the southwest and is consistent with historical flow directions. Groundwater samples were submitted to a state certified laboratory for analysis. Groundwater analytical results are summarized in Tables 2a-j. The complete laboratory analytical reports are included as Appendix A.

The results from the groundwater sampling events are summarized below for each monitoring well.

MW1: Analytical results had dropped significantly during system operation and initially rebounded, but have continued to decrease over time.

MW2: Analytical results had dropped significantly during system operation and have rebounded to less than initial concentrations. Additionally, free product has not been observed in the well following system operation.

MW3: Analytical results were sporadic during system operation and have decreased over time following system operation

MW4: Analytical results have been historically non-detect, but well was not sampled in 2016 or 2017.

MW5: Analytical results have been historically non-detect, but well was not sampled in 2016 or 2017.

MW6: Analytical results had dropped significantly during system operation and have continued to decrease over time.

PZ1: Analytical results have been historically non-detect, but well was not sampled in 2016 or 2017.

PZ2: Low level analytical detections were reported in 2013 and the subsequent sample events were non-detect for all analyzed parameters.

PW1: Analytical results had dropped significantly during system operation and have rebounded to less than initial concentrations. Additionally, free product has not been observed in the well following system operation. This well is not to be used for drinking water purposes, well was not sampled in 2017.

PW2: Well has not been sampled since 2010 as well was disconnected from service.

PW3: Current water supply well for Kautzer residence. Well has been non-detect for all analyzed parameters since install with the exception of the low-level toluene detections, which have been noted in other new well installations.

Hubing Well: The Hubing well produces very little yield and is rumored to have a cracked casing and has substantially filled with sediment. REI personnel sampled the well on April 13, 2017. While the water has laboratory qualified detections of 1,2-Dichloroethane there is a reverse osmosis system in place to treat the water.

3.0 CONCLUSIONS AND RECOMMENDATIONS

The groundwater contaminant concentrations appear to be decreasing and free product has not been reported in any of the monitoring wells after the September 19, 2013 sampling date. Water levels in 2017 were recorded at all time high levels. If significant smear zone contamination existed, the groundwater analytical results should be substantially higher. While the analytical data suggests that the contaminant concentrations in the downgradient wells (MW3, MW6 and PZ2) is decreasing, additional sampling data will be required to document the decreasing contaminant trend.

REI is recommending additional groundwater sampling from select wells. REI is recommending that the wells be analyzed for PVOC, naphthalene and 1,2-DCA. REI will continue to work with the WDNR project manager to complete the investigation with the limited PECFA funding remaining.

Table 1
Depth to Water and Water Table Elevations
Former Schlinsog Dairy
Loyal, Wisconsin

Depth to Water (feet) below Reference Elevation

Date	MW1	MW2	MW3	MW4	MW5	MW6	PZ1	PZ2	PW1
7/8/2010	49.03	48.98							
8/18/2010	47.82	48.12	47.73						
8/19/2010	47.61	47.83	47.56						
1/3/2011	45.32	46.61		44.37	43.84		64.31		
5/13/2011		45.09*	43.86						
5/31/2011	43.95	45.32*	43.96	43.15	42.75		64.21		45.27
10/7/2011	44.47	45.99*	44.55	43.00	42.65		65.25		46.47*
2/16/2012	45.86	48.8*	45.85	44.20	43.37		66.45		
8/27/2013	48.42	50.05*	47.66	45.99	45.98		67.69		
5/20/2014	46.04	46.66	47.06	45.73	46.04	45.50	64.74	44.81	
8/20/2014	46.24	46.54	46.38	44.87	45.13	45.01	70.70	45.54	
5/5/2016	40.52	40.61	40.73			39.42		40.13	42.39
4/13/2017	35.62	36.74	37.15			35.87		36.78	

Measuring Point Elevations

Initial Survey (8-18-10)	99.99	100.24	99.26	97.76	100.30		99.98		99.98
Re-survey 5-20-14)						97.86		97.20	

Ground Surface Elevation

Initial Survey (8-18-10)	100.45	100.62	99.60	98.38	101.05		100.61		100.61
Re-survey 5-20-14)						98.17		97.36	

Depth to Water (feet) below Ground Surface

Average	45.54	45.64	45.11	45.09	45.00		66.82		44.46
Maximum	49.49	49.36	48.07	46.61	46.79		71.33		45.90
Minimum	36.08	37.12	37.49	43.62	43.40		64.84		43.02
Range	13.41	12.24	10.58	2.99	3.39		6.49		2.88

Water Level Elevation (feet MSL)

Date	MW1	MW2	MW3	MW4	MW5	MW6	PZ1	PZ2	PW1
7/8/2010	50.96	51.26							
8/18/2010	52.17	52.12	51.53						
8/19/2010	52.38	52.41	51.70						
1/3/2011	54.67	53.63		53.39	56.46		35.67		
5/13/2011		55.15*	55.40						
5/31/2011	56.04	54.92*	55.30	54.61	57.55		35.77		54.71
10/7/2011	55.52	54.25*	54.71	54.76	57.65		34.73		53.51*
2/16/2012	54.13	51.44*	53.41	53.56	56.93		33.53		
8/27/2013	51.57	50.19	51.60	51.77	54.32		32.29		
5/20/2014	53.95	53.58	52.20	52.03	54.26	52.36	35.24	52.39	
8/20/2014	53.75	53.70	52.88	52.89	55.17	52.85	29.28	51.66	99.98
5/5/2016	59.47	59.63	58.53			58.44		57.07	57.59
4/13/2017	64.37	63.50	62.11			61.99		60.42	

Witness Mark as benchmark (assume 100')

Table 2a
Summary of Groundwater Analytical Results
MW1
Former Schlinsog Dairy
Loyal, WI

	ES	PAL	Units	7/7/2010	1/3/2011	5/31/2011	10/7/2011	2/16/2012	8/14/2013	8/27/2013	11/20/2013
VOC Parameters											
Benzene	5	0.5	µg/l	**1,750**	**23,500**	**15,800**	**9,620**	**24,000**	**Initiate groundwater extraction system at PW1**	**18,500**	**Convert remedial system to SVE at MW1 and MW2**
Toluene	800	160	µg/l	**2,040**	**28,800**	**19,500**	**12,200**	**28,000**		**19,200**	
Ethylbenzene	700	140	µg/l	*200*	**1,440**	**1,360**	**1,190**	**2,300**		**1,670**	
Xylenes (mixed isomers)	2,000	400	µg/l	*1,001*	**9,730**	**6,320**	**5,690**	**10,000**		**8,120**	
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 15.2	< 152	< 152	< 47.6	< 18		< 46.4	
Trimethylbenzenes (mixed isomers)	480	96	µg/l	*198.3*	**618**	**625**	**1,180**	**1,770**		**1,451**	
Naphthalene	100	10	µg/l	< 22.2	< 222	< 222	**262**	**810**		**260**	
1,2-Dibromoethane	0.05	0.005	µg/l	**38.2**	**872**	**672**	NA	NA		NA	
1,2-Dichloroethane	5	0.5	µg/l	**204**	**3,210**	< 90	NA	NA		NA	
n-Propylbenzene			µg/l	23*	< 202	< 202	NA	NA		NA	

	ES	PAL	Units	5/20/2014	8/20/2014	8/20/2014	5/5/2016	4/13/2017
VOC Parameters								
Benzene	5	0.5	µg/l	**2,510**	**Remove SVE system from MW1 and MW2**	**13,400**	**8,990**	**1,490**
Toluene	800	160	µg/l	**3,010**		**15,500**	**13,400**	**2,980**
Ethylbenzene	700	140	µg/l	*333*		**1,770**	*597*	*284*
Xylenes (mixed isomers)	2,000	400	µg/l	**4,110**		**13,110**	**5,720**	*1,813*
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 4.8		< 60.6	< 34.8	< 8.7
Trimethylbenzenes (mixed isomers)	480	96	µg/l	**1,781**		**2,851**	**1,304**	*286.3*
Naphthalene	100	10	µg/l	**431**		**491**	< 500	NA
1,2-Dibromoethane	0.05	0.005	µg/l	NA		NA	NA	NA
1,2-Dichloroethane	5	0.5	µg/l	NA		NA	**746**	**136**
n-Propylbenzene			µg/l	NA		NA	NA	NA

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
NA = Not Analyzed
* = Estimated value, concentration between the Limit of Detection and the Limit of Quantitation

Enforcement Standard exceeded	**BOLD**
Preventive Action Limit exceeded	*Italics*

p:\5300-5399\5357-former_schlinsog\reports\update 3\[5357u3t2 and fig 4.xls]mw1

Table 2b
Summary of Groundwater Analytical Results
MW2
Former Schlinsog Dairy
Loyal, WI

	ES	PAL	Units	7/7/2010	1/3/2011**	5/31/2011**	10/7/2011**	2/16/2012**	8/14/2013	8/27/2013**	11/20/2013
VOC Parameters											
Benzene	5	0.5	µg/l	**1,650**	**Free**	**11,500**	**11,700**	**12,000**		**6,820**	
Toluene	800	160	µg/l	**1,430**	**Product**	**22,700**	**20,600**	**21,000**		**9,830**	
Ethylbenzene	700	140	µg/l	*158*		**2,650**	**2,770**	**3,000**		**2,270**	
Xylenes (mixed isomers)	2,000	400	µg/l	*805*	**Not**	**12,740**	**12,440**	**14,000**		**10,200**	
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 6.1	**Sampled**	< 122	< 47.6	< 18		< 18.6	
Trimethylbenzenes (mixed isomers)	480	96	µg/l	*139.7*		**2,199**	**2,370**	**2,620**		**2,627**	
Naphthalene	100	10	µg/l	*25.7**		**425***	**526**	**920**		**511**	
1,2-Dibromoethane	0.05	0.005	µg/l	**38.2**		**290**	NA	NA		NA	
1,2-Dichloroethane	5	0.5	µg/l	**141**		< 72	NA	NA		NA	
n-Propylbenzene			µg/l	18.4		236	NA	NA		NA	

Initiate groundwater extraction system at PW1

Convert remedial system to SVE at MW1 and MW2

	ES	PAL	Units	5/20/2014	8/20/2014	8/20/2014	5/5/2016	4/13/2017
VOC Parameters								
Benzene	5	0.5	µg/l	**2,620**		**7,580**	**7,030**	**8,530**
Toluene	800	160	µg/l	**5,140**		**11,700**	**15,100**	**12,200**
Ethylbenzene	700	140	µg/l	**769**		**2,140**	**2,550**	**2,720**
Xylenes (mixed isomers)	2,000	400	µg/l	**7,280**		**11,560**	**12,450**	**12,300**
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 48.5		*30.8**	< 34.8	< 17.4
Trimethylbenzenes (mixed isomers)	480	96	µg/l	**2,130**		**3,085**	**1,784**	**2,374**
Naphthalene	100	10	µg/l	**271**		**533**	**< 500**	NA
1,2-Dibromoethane	0.05	0.005	µg/l	NA		NA	NA	NA
1,2-Dichloroethane	5	0.5	µg/l	NA		NA	**323**	**409**
n-Propylbenzene			µg/l	NA		NA	NA	NA

Remove SVE system from MW1 and MW2

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
NA = Not Analyzed
* = Estimated value, concentration between the Limit of Detection and the Limit of Quantitation

Enforcement Standard exceeded	**BOLD**
Preventive Action Limit exceeded	*Italics*

** = Free product in well - removed prior to sampling

Table 2c
Summary of Groundwater Analytical Results
MW3
Former Schlinsog Dairy
Loyal, WI

	ES	PAL	Units	8/18/2010	1/3/2011	5/31/2011	10/7/2011	2/16/2012	8/14/2013	8/27/2013	11/20/2013
VOC Parameters											
Benzene	5	0.5	µg/l	**2,310**	**Under 6'**	**86.8**	**125**	**340**	**Initiate groundwater extraction system at PW1**	**512**	**Convert remedial system to SVE at MW1 and MW2**
Toluene	800	160	µg/l	*230*	**Snow & Ice**	7.9	31	66		73.9	
Ethylbenzene	700	140	µg/l	*346*		3	72.3	*180*		*358*	
Xylenes (mixed isomers)	2,000	400	µg/l	*748*	**Not**	50.5	150.3	380		*479*	
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 6.1	**Sampled**	< 0.61	4.2	< 0.23		7.7*	
Trimethylbenzenes (mixed isomers)	480	96	µg/l	*401*		22.2	*108.5*	*243*		**605**	
Naphthalene	100	10	µg/l	*70.6*		7.7	*23.2*	*53*		**117**	
1,2-Dibromoethane	0.05	0.005	µg/l	**8.3***		< 0.56	NA	NA		NA	
1,2-Dichloroethane	5	0.5	µg/l	**251**		**14.3**	NA	NA		NA	
n-Propylbenzene			µg/l	40.2		1.2	NA	NA		NA	

	ES	PAL	Units	5/20/2014	8/20/2014	8/20/2014	5/5/2016	4/13/2017
VOC Parameters								
Benzene	5	0.5	µg/l	**2,070**	**Remove SVE system from MW1 and MW2**	**1,230**	*3.8*	**20.4**
Toluene	800	160	µg/l	*407*		41.9	4.1	2.3
Ethylbenzene	700	140	µg/l	*158*		108	35.0	37.4
Xylenes (mixed isomers)	2,000	400	µg/l	387.5		119	67.2	31.1
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	4.6*		< 4.8	< 0.35	< 0.35
Trimethylbenzenes (mixed isomers)	480	96	µg/l	*164.1*		*100.2*	22.8	23.4
Naphthalene	100	10	µg/l	*60.1*		*39.9*	7.4*	NA
1,2-Dibromoethane	0.05	0.005	µg/l	NA		NA	NA	NA
1,2-Dichloroethane	5	0.5	µg/l	NA		NA	*3.8*	1.3*
n-Propylbenzene			µg/l	NA		NA	NA	NA

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
NA = Not Analyzed
* = Estimated value, concentration between the Limit of Detection and the Limit of Quantitation

Enforcement Standard exceeded	**BOLD**
Preventive Action Limit exceeded	*Italics*

Table 2d
Summary of Groundwater Analytical Results
MW4
Former Schlinsog Dairy
Loyal, WI

	ES	PAL	Units	1/3/2011	5/31/2011	10/7/2011	2/16/2012	8/14/2013	8/27/2013	11/20/2013
VOC Parameters										
Benzene	5	0.5	µg/l	< 0.41	< 0.41	< 0.39	< 0.25	**Initiate groundwater extraction system at PW1**	< 0.34	**Convert remedial system to SVE at MW1 and MW2**
Toluene	800	160	µg/l	< 0.67	< 0.67	< 0.42	< 0.25		< 0.34	
Ethylbenzene	700	140	µg/l	< 0.54	< 0.54	< 0.41	0.37*		< 0.34	
Xylenes (mixed isomers)	2,000	400	µg/l	< 1.8	< 1.8	< 0.87	0.72*		< 0.71	
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.61	< 0.61	< 0.38	< 0.23		< 0.37	
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.97	< 0.97	< 0.43	0.87*		< 0.36	
Naphthalene	100	10	µg/l	< 0.89	< 0.89	< 0.40	3.8		< 0.37	
1,2-Dibromoethane	0.05	0.005	µg/l	< 0.56	< 0.56	NA	NA		NA	
1,2-Dichloroethane	5	0.5	µg/l	< 0.57	< 0.57	NA	NA		NA	
n-Propylbenzene			µg/l	< 0.81	< 0.81	NA	NA		NA	

	ES	PAL	Units	5/20/2014	8/20/2014	8/20/2014	5/5/2016	4/13/2017
VOC Parameters								
Benzene	5	0.5	µg/l	< 0.40	**Remove SVE system from MW1 and MW2**	< 0.40	**Not Sampled**	**Not Sampled**
Toluene	800	160	µg/l	< 0.39		< 0.39		
Ethylbenzene	700	140	µg/l	< 0.39		< 0.39		
Xylenes (mixed isomers)	2,000	400	µg/l	< 0.80		< 0.80		
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.48		< 0.48		
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.42		< 0.42		
Naphthalene	100	10	µg/l	< 0.42		< 0.42		
1,2-Dibromoethane	0.05	0.005	µg/l	NA		NA		
1,2-Dichloroethane	5	0.5	µg/l	NA		NA		
n-Propylbenzene			µg/l	NA		NA		

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
NA = Not Analyzed
* = Estimated value, concentration between the Limit of Detection and the Limit of Quantitation

Enforcement Standard exceeded	**BOLD**
Preventive Action Limit exceeded	*Italics*

Table 2e
Summary of Groundwater Analytical Results
MW5
Former Schlinsog Dairy
Loyal, WI

	ES	PAL	Units	1/3/2011	5/31/2011	10/7/2011	2/16/2012	8/14/2013	8/27/2013	11/20/2013
VOC Parameters										
Benzene	5	0.5	µg/l	< 0.41	< 0.41	< 0.39	< 0.25	**Initiate groundwater extraction system at PW1**	< 0.34	**Convert remedial system to SVE at MW1 and MW2**
Toluene	800	160	µg/l	< 0.67	< 0.67	< 0.42	< 0.25		< 0.34	
Ethylbenzene	700	140	µg/l	< 0.54	< 0.54	< 0.41	< 0.22		< 0.34	
Xylenes (mixed isomers)	2,000	400	µg/l	< 1.8	< 1.8	< 0.87	< 0.39		< 0.71	
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.61	< 0.61	< 0.38	< 0.23		< 0.37	
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.97	< 0.97	< 0.43	< 0.25		< 0.36	
Naphthalene	100	10	µg/l	< 0.89	< 0.89	< 0.40	0.59*		< 0.37	
1,2-Dibromoethane	0.05	0.005	µg/l	< 0.56	< 0.56	NA	NA		NA	
1,2-Dichloroethane	5	0.5	µg/l	< 0.57	< 0.57	NA	NA		NA	
n-Propylbenzene			µg/l	< 0.81	< 0.81	NA	NA		NA	

	ES	PAL	Units	5/20/2014	8/20/2014	8/20/2014	5/5/2016	4/13/2017
VOC Parameters								
Benzene	5	0.5	µg/l	< 0.40	**Remove SVE system from MW1 and MW2**	< 0.40	**Not Sampled**	**Not Sampled**
Toluene	800	160	µg/l	< 0.39		< 0.39		
Ethylbenzene	700	140	µg/l	< 0.39		< 0.39		
Xylenes (mixed isomers)	2,000	400	µg/l	< 0.80		< 0.80		
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.48		< 0.48		
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.42		< 0.42		
Naphthalene	100	10	µg/l	< 0.42		< 0.42		
1,2-Dibromoethane	0.05	0.005	µg/l	NA		NA		
1,2-Dichloroethane	5	0.5	µg/l	NA		NA		
n-Propylbenzene			µg/l	NA		NA		

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
NA = Not Analyzed
* = Estimated value, concentration between the Limit of Detection and the Limit of Quantitation

Enforcement Standard exceeded	**BOLD**
Preventive Action Limit exceeded	*Italics*

Table 2f
Summary of Groundwater Analytical Results
MW6
Former Schlinsog Dairy
Loyal, WI

	ES	PAL	Units	11/20/2013	5/20/2014	8/20/2014	8/20/2014	5/5/2016	4/13/2017
VOC Parameters									
Benzene	5	0.5	µg/l	**Convert remedial system to SVE at MW1 and MW2**	**4,350**	**Remove SVE system from MW1 and MW2**	**1,510**	**8.9**	**1.8**
Toluene	800	160	µg/l		**3,440**		**2,830**	2.3	< 0.50
Ethylbenzene	700	140	µg/l		**1,510**		**979**	< 0.50	< 0.50
Xylenes (mixed isomers)	2,000	400	µg/l		**4,880**		**7,220**	5.2	< 1.5
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l		< 7.0		< 4.4	< 0.17	< 0.17
Trimethylbenzenes (mixed isomers)	480	96	µg/l		**1,358**		**903**	5.2	< 0.50
Naphthalene	100	10	µg/l		**265**		NA	3.5*	NA
1,2-Dichloroethane	5	0.5	µg/l		**194**		**94.4**	0.36*	< 0.17

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
NA = Not Analyzed
* = Estimated value, concentration between the Limit of Detection and the Limit of Quantitation

Enforcement Standard exceeded	**BOLD**
Preventive Action Limit exceeded	*Italics*

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Table 2g
Summary of Groundwater Analytical Results
PZ1
Former Schlinsog Dairy
Loyal, WI

	ES	PAL	Units	1/3/2011	5/31/2011	10/7/2011	2/16/2012	8/14/2013	8/27/2013	11/20/2013
VOC Parameters										
Benzene	5	0.5	µg/l	< 0.41	< 0.41	< 0.39	< 0.25	**Initiate groundwater extraction system at PW1**	< 0.34	**Convert remedial system to SVE at MW1 and MW2**
Toluene	1,000	200	µg/l	< 0.67	< 0.67	< 0.42	< 0.25		< 0.34	
Ethylbenzene	700	140	µg/l	< 0.54	< 0.54	< 0.41	< 0.22		< 0.34	
Xylenes (mixed isomers)	10,000	1,000	µg/l	< 1.8	< 1.8	< 0.87	< 0.39		< 0.71	
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.61	< 0.61	< 0.38	0.38*		< 0.37	
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.97	< 0.97	< 0.43	< 0.25		< 0.36	
Naphthalene	100	10	µg/l	< 0.89	< 0.89	< 0.40	< 0.50		< 0.37	
1,2-Dibromoethane	0.05	0.005	µg/l	< 0.56	< 0.56	NA	NA		NA	
1,2-Dichloroethane	5	0.5	µg/l	< 0.57	< 0.57	NA	NA		NA	
n-Propylbenzene			µg/l	< 0.81	< 0.81	NA	NA		NA	

	ES	PAL	Units	5/20/2014	8/20/2014	8/20/2014	5/5/2016	4/13/2017
VOC Parameters								
Benzene	5	0.5	µg/l	< 0.40	**Remove SVE system from MW1 and MW2**	< 0.40	**Not Sampled**	**Not Sampled**
Toluene	800	160	µg/l	< 0.39		< 0.39		
Ethylbenzene	700	140	µg/l	< 0.39		< 0.39		
Xylenes (mixed isomers)	2,000	400	µg/l	< 0.80		< 0.80		
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.48		< 0.48		
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.42		< 0.42		
Naphthalene	100	10	µg/l	< 0.42		< 0.42		
1,2-Dibromoethane	0.05	0.005	µg/l	NA		NA		
1,2-Dichloroethane	5	0.5	µg/l	NA		NA		
n-Propylbenzene			µg/l	NA		NA		

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
NA = Not Analyzed
* = Estimated value, concentration between the Limit of Detection and the Limit of Quantitation

Enforcement Standard exceeded	**BOLD**
Preventive Action Limit exceeded	*Italics*

Table 2h
Summary of Groundwater Analytical Results
PZ2
Former Schlinsog Dairy
Loyal, WI

	ES	PAL	Units	11/20/2013	5/20/2014	8/20/2014	8/20/2014	5/5/2016	4/13/2017
VOC Parameters									
Benzene	5	0.5	µg/l	**Convert remedial system to SVE at MW1 and MW2**	**16.5**	**Remove SVE system from MW1 and MW2**	< 0.50	< 0.50	< 0.50
Toluene	800	160	µg/l		43.9		< 0.50	< 0.50	< 0.50
Ethylbenzene	700	140	µg/l		4.5		< 0.50	< 0.50	< 0.50
Xylenes (mixed isomers)	2,000	400	µg/l		15.8		< 1.5	< 1.5	< 1.5
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l		< 0.17		< 0.17	< 0.17	< 0.17
Trimethylbenzenes (mixed isomers)	480	96	µg/l		< 0.55		< 0.50	< 0.50	< 0.50
Naphthalene	100	10	µg/l		< 2.5		< 2.5	< 2.5	NA
1,2-Dichloroethane	5	0.5	µg/l		0.84*		< 0.17	< 0.17	< 0.17

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
NA = Not Analyzed
* = Estimated value, concentration between the Limit of Detection and the Limit of Quantitation

Enforcement Standard exceeded	**BOLD**
Preventive Action Limit exceeded	*Italics*

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Table 2i
Summary of Groundwater Analytical Results
Potable Wells
Former Schlinsog Dairy
Loyal, WI

Parameter	ES	PAL	Units	PW1							
				8/18/2010	2/16/2012	8/14/2013	8/15/2013	8/19/2013	8/20/2013	8/27/2013	9/5/2013
VOC Parameters				*during pump test*							
Benzene	5	0.5	µg/l	**522**	**4,300**	**Initiate groundwater extraction system at PW1**	**881**	**581**	**633**	**366**	**137**
Toluene	800	160	µg/l	*399*	**2,600**		**220**	**172**	**266**	**294**	**56**
Ethylbenzene	700	140	µg/l	113	*560*		*52.1*	*42*	*65.7*	*55.3*	*10.9*
Xylenes (mixed isomers)	2,000	400	µg/l	*692*	**4,600**		**228**	**198**	**328**	**543**	**139**
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	3.6*	< 2.3		< 2.5	< 2.5	< 2.5	< 2.5	< 0.49
Trimethylbenzenes (mixed isomers)	480	96	µg/l	*255.5*	**3,120**		**142.9**	**36.2**	**219.2**	**737**	**138.8**
Naphthalene	100	10	µg/l	*31.5*	**1,100**		**19.2**	**0.0**	**24.7**	**41.3**	**10.4**
1,2-Dibromoethane	0.05	0.005	µg/l	NA	NA		NA	NA	NA	NA	NA
1,2-Dichloroethane	5	0.5	µg/l	NA	NA		NA	NA	NA	NA	NA

Parameter	ES	PAL	Units	PW1						
				9/19/2013	10/15/2013	11/20/2013	8/20/2014	8/20/2014	5/5/2016	4/13/2017
VOC Parameters										
Benzene	5	0.5	µg/l	**116**	**116**	**Convert remedial system to SVE at MW1 and MW2**	**Remove SVE system from MW1 and MW2**	**Not Sampled**	**2,660**	**Not Sampled**
Toluene	800	160	µg/l	**32.7**	**29**				**897**	
Ethylbenzene	700	140	µg/l	*4.9*	*4.9*				*145*	
Xylenes (mixed isomers)	2,000	400	µg/l	**49.6**	**43.3**				*1,020*	
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.49	< 0.49				< 7.0	
Trimethylbenzenes (mixed isomers)	480	96	µg/l	**16.2**	**14.3**				**479**	
Naphthalene	100	10	µg/l	NA	**3.9**				*< 100*	
1,2-Dibromoethane	0.05	0.005	µg/l	NA	NA				NA	
1,2-Dichloroethane	5	0.5	µg/l	NA	NA				**111**	

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
Italicized PAH limits are non-enforceable guidance limits only
NA = Not Analyzed
* = Estimated value, concentration between the Limit of Detection and the Limit of Quantitation

Enforcement Standard exceeded	**BOLD**
Preventive Action Limit exceeded	***Italics***

*** = samples collected and reported by WDNR

Table 2j
Summary of Groundwater Analytical Results
Potable Wells
Former Schlinsog Dairy
Loyal, WI

Parameter	ES	PAL	Units	PW2	Hubing		
				3/8/2010	***	2/16/2012	4/13/2017
VOC Parameters							
Benzene	5	0.5	µg/l	**14.4**	*0.77*	*2.30*	< 0.50
Toluene	800	160	µg/l	0.44*		< 0.50	< 0.50
Ethylbenzene	700	140	µg/l	*1.75*		< 0.50	< 0.50
Xylenes (mixed isomers)	2,000	400	µg/l	3.51		< 0.50	< 1.5
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.50		< 0.50	< 0.17
Trimethylbenzenes (mixed isomers)	480	96	µg/l	3.37		< 0.20	< 0.50
Naphthalene	100	10	µg/l	< 1.0		< 0.25	NA
1,2-Dibromoethane	0.05	0.005	µg/l	< 0.80		< 0.20	NA
1,2-Dichloroethane	5	0.5	µg/l	*1.34*	*0.56*	*0.63**	0.36*

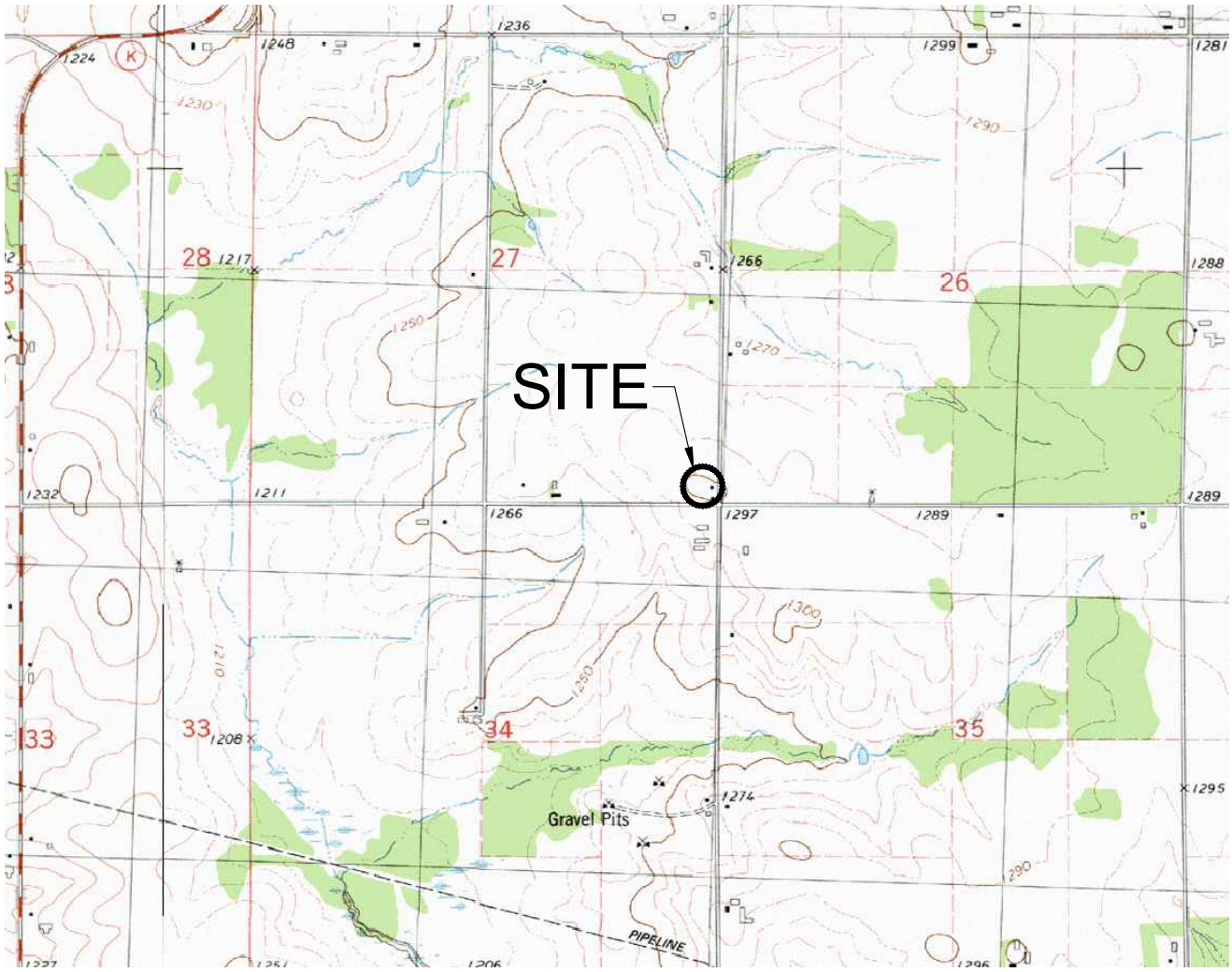
Parameter	ES	PAL	Units	PW3 (current potable well)					
				1/3/2011	5/31/2011	10/7/2011	2/16/2012	8/27/2013	4/13/2017
VOC Parameters									
Benzene	5	0.5	µg/l	< 0.41	< 0.41	< 0.39	< 0.20	< 0.50	< 0.50
Toluene	800	160	µg/l	6.70	3.00	1.5	< 0.50	< 0.44	< 0.50
Ethylbenzene	700	140	µg/l	< 0.54	< 0.54	< 0.41	< 0.50	< 0.50	< 0.50
Xylenes (mixed isomers)	2,000	400	µg/l	< 1.8	< 1.8	< 0.87	< 0.50	< 0.82	< 1.5
Methyl tert-Butyl Ether (MTBE)	60	12	µg/l	< 0.61	< 0.61	< 0.38	< 0.50	< 0.49	< 0.17
Trimethylbenzenes (mixed isomers)	480	96	µg/l	< 0.97	< 0.97	< 0.43	< 0.20	< 2.5	< 0.50
Naphthalene	100	10	µg/l	< 0.89	< 0.89	< 0.40	< 0.25	< 2.5	NA
1,2-Dibromoethane	0.05	0.005	µg/l	< 0.56	< 0.56	NA	< 0.20	< 0.38	NA
1,2-Dichloroethane	5	0.5	µg/l	< 0.57	< 0.57	NA	< 0.50	< 0.28	< 0.17

Notes:
ES = NR140.10 Enforcement Standards
PAL = NR140.10 Preventive Action Limits
Italicized PAH limits are non-enforceable guidance limits only
NA = Not Analyzed
* = Estimated value, concentration between the Limit of Detection and the Limit of Quantitation

Enforcement Standard exceeded	**BOLD**
Preventive Action Limit exceeded	***Italics***

*** = samples collected and reported by WDNR

REI
CIVIL & ENVIRONMENTAL
ENGINEERING, SURVEYING



SCALE 1:24 000

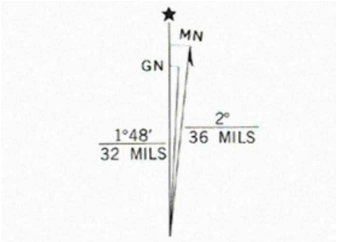
1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

QUADRANGLE LOCATION



UTM GRID AND 1979 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

LOYAL EAST, WIS.
NW/4 GRANTON 15' QUADRANGLE
N4437.5–W9022.5/7.5
1979
DMA 2973 III NW–SERIES V861

REI Engineering, INC.

FORMER SCHLINSOG DAIRY N7701 PELSDORF AVENUE LOYAL, WI 54446	FIGURE 1 : SITE VICINITY MAP		
	PROJECT NO. 5357	DRAWN BY: AJG	DATE: 4/20/2017

DRAWING FILE: P:\5300-5399\5357-FORMER_SCHLINSOG\DWG\5357-VICINITY.DWG LAYOUT: VICN PLOTTED: APR 20, 2017 - 10:25AM PLOTTED BY: ALANG

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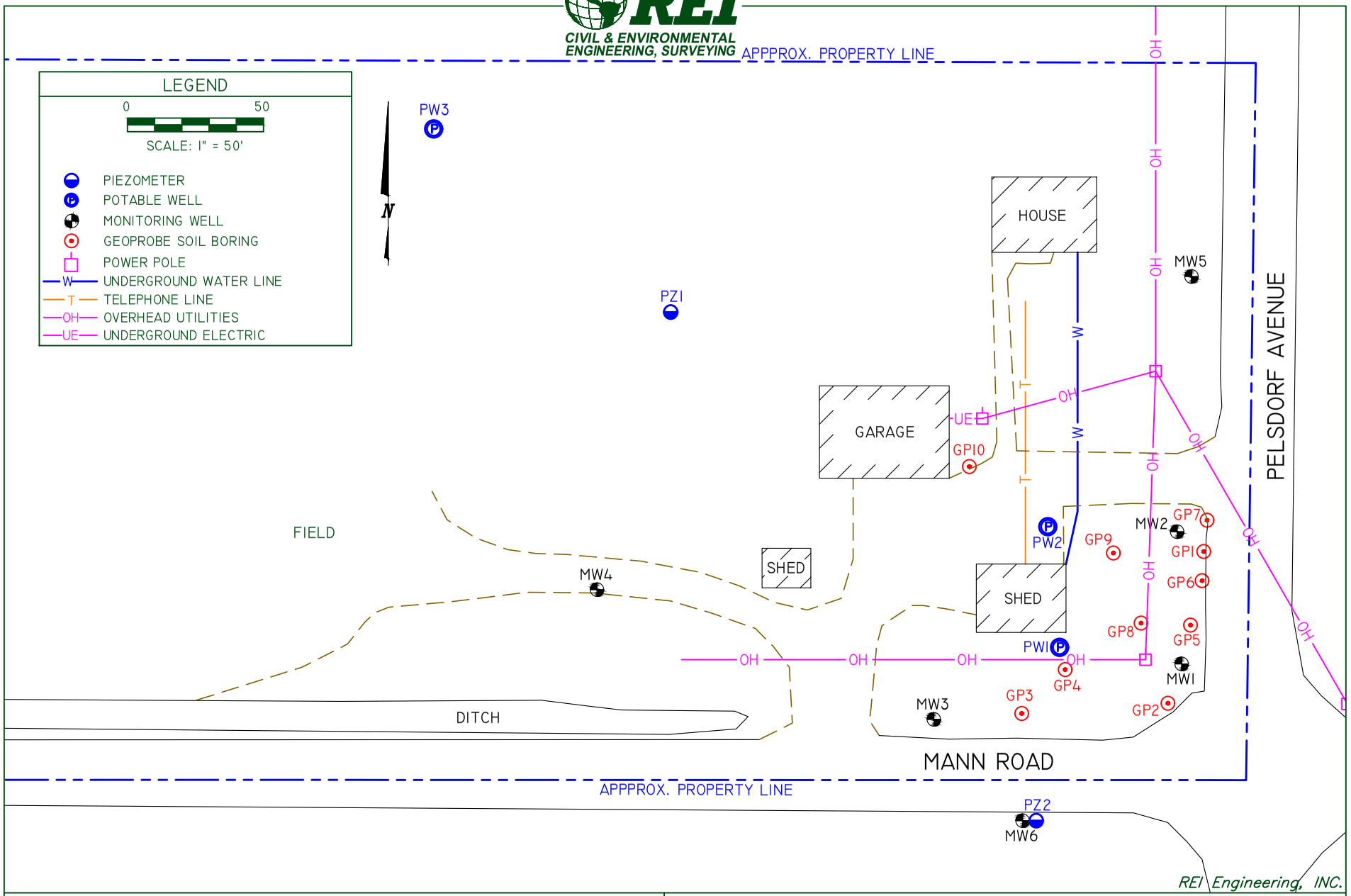


REI Engineering, INC.

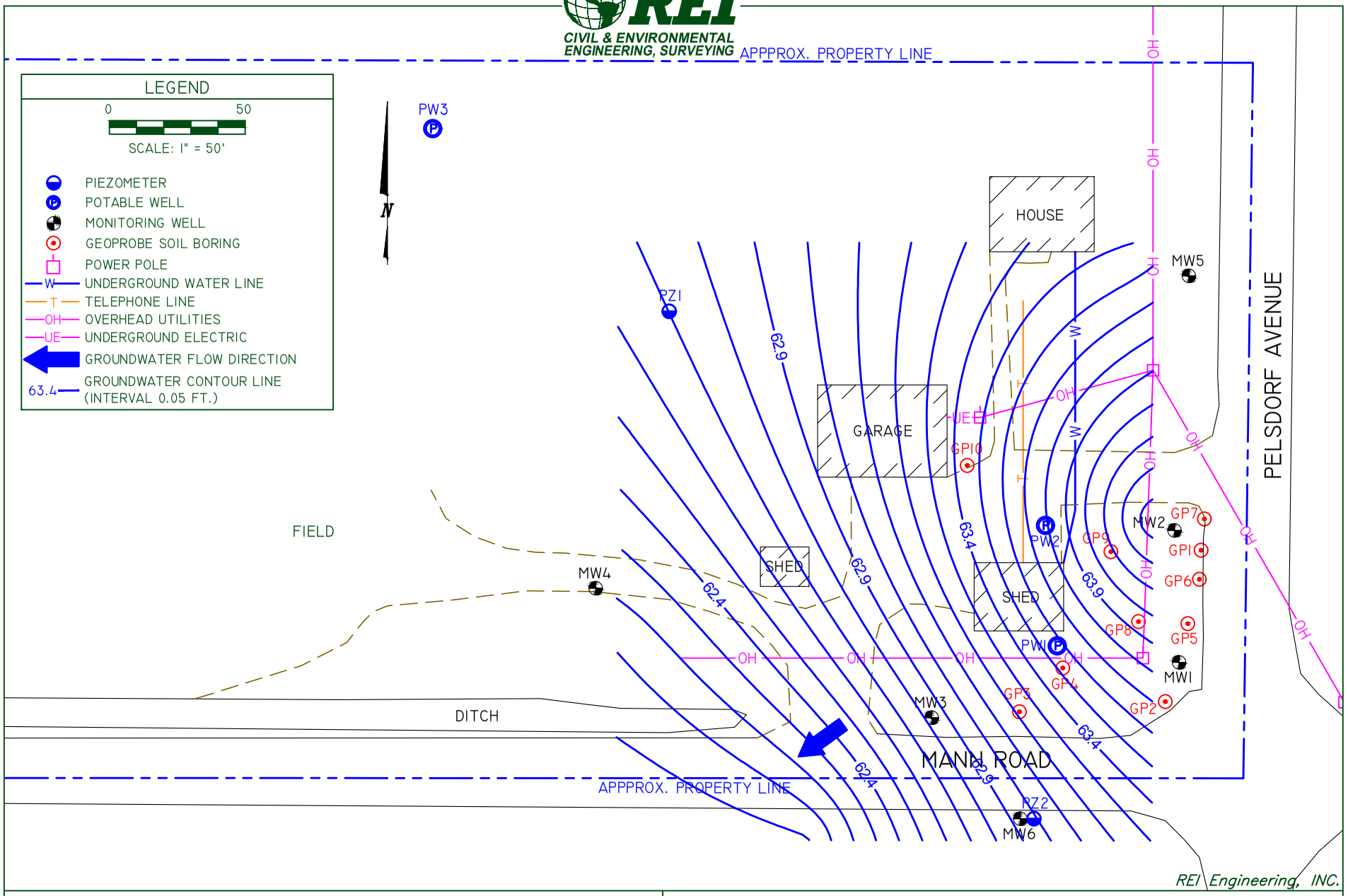
FORMER SCHLINSOG DAIRY
N7701 PELSDORF AVENUE
LOYAL, WISCONSIN 54446

FIGURE 2 :SITE MAP WITH UPDATED WELL LOCATIONS

PROJECT NO.	DRAWN BY:	DATE:
5357	AJG	4/20/2017

DRAWING FILE: P:\5300-5399\5357-FORMER SCHLINSOG\DWG\5357-SITE.DWG LAYOUT: SITE PLOTTED: APR 20, 2017 - 10:26AM PLOTTED BY: ALANG

REI
CIVIL & ENVIRONMENTAL ENGINEERING, SURVEYING



REI Engineering, INC.

FORMER SCHLINSOG DAIRY N7701 PELSDORF AVENUE LOYAL, WISCONSIN 54446	FIGURE 3 :GROUNDWATER CONTOUR MAP (4/13/2017)		
	PROJECT NO. 5357	DRAWN BY: AJG	DATE: 4/20/2017

DRAWING FILE: P:\5300-5399\5357-FORMER SCHLINSOG\DWG\5357-GW-04I3I7.DWG LAYOUT: GW PLOTTED: APR 20, 2017 - 11:05AM PLOTTED BY: ALANG

APPENDIX A

GROUNDWATER ANALYTICAL RESULTS

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

April 19, 2017

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

RE: Project: 5357AXUC SCHLINSOG
Pace Project No.: 40148434

Dear DAVID LARSEN:
Enclosed are the analytical results for sample(s) received by the laboratory on April 15, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

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

Enclosures

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

CERTIFICATIONS

Project: 5357AXUC SCHLINSOG
Pace Project No.: 40148434

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: 5357AXUC SCHLINSOG
Pace Project No.: 40148434

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40148434001	**MW1**	Water	04/13/17 12:30	04/15/17 07:50
40148434002	**MW2**	Water	04/13/17 12:45	04/15/17 07:50
40148434003	**MW3**	Water	04/13/17 11:45	04/15/17 07:50
40148434004	**MW6**	Water	04/13/17 12:15	04/15/17 07:50
40148434005	**PZ2**	Water	04/13/17 12:00	04/15/17 07:50
40148434006	**KAMTZER**	Water	04/13/17 11:20	04/15/17 07:50
40148434007	**HUBING**	Water	04/13/17 11:50	04/15/17 07:50

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: 5357AXUC SCHLINSOG
Pace Project No.: 40148434

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40148434001	**MW1**	EPA 8260	MDS	13
40148434002	**MW2**	EPA 8260	MDS	13
40148434003	**MW3**	EPA 8260	MDS	13
40148434004	**MW6**	EPA 8260	MDS	13
40148434005	**PZ2**	EPA 8260	MDS	13
40148434006	**KAMTZER**	EPA 8260	MDS	13
40148434007	**HUBING**	EPA 8260	MDS	13

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

ANALYTICAL RESULTS

Project: 5357AXUC SCHLINSOG
Pace Project No.: 40148434

Sample: MW1 **Lab ID: 40148434001** Collected: 04/13/17 12:30 Received: 04/15/17 07:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**1490**	ug/L	50.0	25.0	50		04/19/17 11:31	71-43-2	
1,2-Dichloroethane	**136**	ug/L	50.0	8.4	50		04/19/17 11:31	107-06-2	
Ethylbenzene	**284**	ug/L	50.0	25.0	50		04/19/17 11:31	100-41-4	
Methyl-tert-butyl ether	**<8.7**	ug/L	50.0	8.7	50		04/19/17 11:31	1634-04-4	
Toluene	**2980**	ug/L	50.0	25.0	50		04/19/17 11:31	108-88-3	
1,2,4-Trimethylbenzene	**221**	ug/L	50.0	25.0	50		04/19/17 11:31	95-63-6	
1,3,5-Trimethylbenzene	**65.3**	ug/L	50.0	25.0	50		04/19/17 11:31	108-67-8	
Xylene (Total)	**1810**	ug/L	150	75.0	50		04/19/17 11:31	1330-20-7	
m&p-Xylene	**1220**	ug/L	100	50.0	50		04/19/17 11:31	179601-23-1	
o-Xylene	**593**	ug/L	50.0	25.0	50		04/19/17 11:31	95-47-6	
Surrogates									
Dibromofluoromethane (S)	112	%	70-130		50		04/19/17 11:31	1868-53-7	
Toluene-d8 (S)	91	%	70-130		50		04/19/17 11:31	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130		50		04/19/17 11:31	460-00-4	

Sample: MW2 **Lab ID: 40148434002** Collected: 04/13/17 12:45 Received: 04/15/17 07:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**8530**	ug/L	100	50.0	100		04/19/17 12:55	71-43-2	
1,2-Dichloroethane	**409**	ug/L	100	16.8	100		04/19/17 12:55	107-06-2	
Ethylbenzene	**2720**	ug/L	100	50.0	100		04/19/17 12:55	100-41-4	
Methyl-tert-butyl ether	**<17.4**	ug/L	100	17.4	100		04/19/17 12:55	1634-04-4	
Toluene	**12200**	ug/L	100	50.0	100		04/19/17 12:55	108-88-3	
1,2,4-Trimethylbenzene	**1890**	ug/L	100	50.0	100		04/19/17 12:55	95-63-6	
1,3,5-Trimethylbenzene	**484**	ug/L	100	50.0	100		04/19/17 12:55	108-67-8	
Xylene (Total)	**12300**	ug/L	300	150	100		04/19/17 12:55	1330-20-7	
m&p-Xylene	**9150**	ug/L	200	100	100		04/19/17 12:55	179601-23-1	
o-Xylene	**3170**	ug/L	100	50.0	100		04/19/17 12:55	95-47-6	
Surrogates									
Dibromofluoromethane (S)	111	%	70-130		100		04/19/17 12:55	1868-53-7	
Toluene-d8 (S)	92	%	70-130		100		04/19/17 12:55	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130		100		04/19/17 12:55	460-00-4	

Sample: MW3 **Lab ID: 40148434003** Collected: 04/13/17 11:45 Received: 04/15/17 07:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**20.4**	ug/L	2.0	1.0	2		04/18/17 18:46	71-43-2	
1,2-Dichloroethane	**1.3J**	ug/L	2.0	0.34	2		04/18/17 18:46	107-06-2	
Ethylbenzene	**37.4**	ug/L	2.0	1.0	2		04/18/17 18:46	100-41-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 5357AXUC SCHLINSOG
Pace Project No.: 40148434

Sample: MW3 **Lab ID: 40148434003** Collected: 04/13/17 11:45 Received: 04/15/17 07:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Methyl-tert-butyl ether	**<0.35**	ug/L	2.0	0.35	2		04/18/17 18:46	1634-04-4	
Toluene	**2.3**	ug/L	2.0	1.0	2		04/18/17 18:46	108-88-3	
1,2,4-Trimethylbenzene	**14.7**	ug/L	2.0	1.0	2		04/18/17 18:46	95-63-6	
1,3,5-Trimethylbenzene	**8.7**	ug/L	2.0	1.0	2		04/18/17 18:46	108-67-8	
Xylene (Total)	**31.1**	ug/L	6.0	3.0	2		04/18/17 18:46	1330-20-7	
m&p-Xylene	**31.1**	ug/L	4.0	2.0	2		04/18/17 18:46	179601-23-1	
o-Xylene	**<1.0**	ug/L	2.0	1.0	2		04/18/17 18:46	95-47-6	
Surrogates									
Dibromofluoromethane (S)	110	%	70-130		2		04/18/17 18:46	1868-53-7	D3
Toluene-d8 (S)	91	%	70-130		2		04/18/17 18:46	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		2		04/18/17 18:46	460-00-4	

Sample: MW6 **Lab ID: 40148434004** Collected: 04/13/17 12:15 Received: 04/15/17 07:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**1.8**	ug/L	1.0	0.50	1		04/19/17 11:09	71-43-2	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		04/19/17 11:09	107-06-2	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/19/17 11:09	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		04/19/17 11:09	1634-04-4	
Toluene	**<0.50**	ug/L	1.0	0.50	1		04/19/17 11:09	108-88-3	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/19/17 11:09	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/19/17 11:09	108-67-8	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/19/17 11:09	1330-20-7	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		04/19/17 11:09	179601-23-1	
o-Xylene	**1.1**	ug/L	1.0	0.50	1		04/19/17 11:09	95-47-6	
Surrogates									
Dibromofluoromethane (S)	109	%	70-130		1		04/19/17 11:09	1868-53-7	
Toluene-d8 (S)	93	%	70-130		1		04/19/17 11:09	2037-26-5	
4-Bromofluorobenzene (S)	95	%	70-130		1		04/19/17 11:09	460-00-4	

Sample: PZ2 **Lab ID: 40148434005** Collected: 04/13/17 12:00 Received: 04/15/17 07:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.50**	ug/L	1.0	0.50	1		04/18/17 14:28	71-43-2	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		04/18/17 14:28	107-06-2	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/18/17 14:28	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		04/18/17 14:28	1634-04-4	
Toluene	**<0.50**	ug/L	1.0	0.50	1		04/18/17 14:28	108-88-3	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/18/17 14:28	95-63-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 5357AXUC SCHLINSOG
Pace Project No.: 40148434

Sample: PZ2 **Lab ID: 40148434005** Collected: 04/13/17 12:00 Received: 04/15/17 07:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/18/17 14:28	108-67-8	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/18/17 14:28	1330-20-7	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		04/18/17 14:28	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		04/18/17 14:28	95-47-6	
Surrogates									
Dibromofluoromethane (S)	109	%	70-130		1		04/18/17 14:28	1868-53-7	
Toluene-d8 (S)	94	%	70-130		1		04/18/17 14:28	2037-26-5	
4-Bromofluorobenzene (S)	96	%	70-130		1		04/18/17 14:28	460-00-4	

Sample: KAMTZER **Lab ID: 40148434006** Collected: 04/13/17 11:20 Received: 04/15/17 07:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.50**	ug/L	1.0	0.50	1		04/18/17 14:50	71-43-2	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		04/18/17 14:50	107-06-2	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/18/17 14:50	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		04/18/17 14:50	1634-04-4	
Toluene	**<0.50**	ug/L	1.0	0.50	1		04/18/17 14:50	108-88-3	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/18/17 14:50	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/18/17 14:50	108-67-8	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/18/17 14:50	1330-20-7	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		04/18/17 14:50	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		04/18/17 14:50	95-47-6	
Surrogates									
Dibromofluoromethane (S)	112	%	70-130		1		04/18/17 14:50	1868-53-7	
Toluene-d8 (S)	94	%	70-130		1		04/18/17 14:50	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130		1		04/18/17 14:50	460-00-4	

Sample: HUBING **Lab ID: 40148434007** Collected: 04/13/17 11:50 Received: 04/15/17 07:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.50**	ug/L	1.0	0.50	1		04/18/17 15:11	71-43-2	
1,2-Dichloroethane	**0.36J**	ug/L	1.0	0.17	1		04/18/17 15:11	107-06-2	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/18/17 15:11	100-41-4	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		04/18/17 15:11	1634-04-4	
Toluene	**<0.50**	ug/L	1.0	0.50	1		04/18/17 15:11	108-88-3	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/18/17 15:11	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		04/18/17 15:11	108-67-8	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/18/17 15:11	1330-20-7	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		04/18/17 15:11	179601-23-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 5357AXUC SCHLINSOG
Pace Project No.: 40148434

Sample: HUBING **Lab ID: 40148434007** Collected: 04/13/17 11:50 Received: 04/15/17 07:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		04/18/17 15:11	95-47-6	
Surrogates									
Dibromofluoromethane (S)	109	%	70-130		1		04/18/17 15:11	1868-53-7	
Toluene-d8 (S)	94	%	70-130		1		04/18/17 15:11	2037-26-5	
4-Bromofluorobenzene (S)	95	%	70-130		1		04/18/17 15:11	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
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QUALITY CONTROL DATA

Project: 5357AXUC SCHLINSOG
Pace Project No.: 40148434

QC Batch: 252889 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 40148434001, 40148434002, 40148434003, 40148434004, 40148434005, 40148434006, 40148434007

METHOD BLANK: 1492448 Matrix: Water
Associated Lab Samples: 40148434001, 40148434002, 40148434003, 40148434004, 40148434005, 40148434006, 40148434007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.50	1.0	04/18/17 10:08	
1,2-Dichloroethane	ug/L	<0.17	1.0	04/18/17 10:08	
1,3,5-Trimethylbenzene	ug/L	<0.50	1.0	04/18/17 10:08	
Benzene	ug/L	<0.50	1.0	04/18/17 10:08	
Ethylbenzene	ug/L	<0.50	1.0	04/18/17 10:08	
m&p-Xylene	ug/L	<1.0	2.0	04/18/17 10:08	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	04/18/17 10:08	
o-Xylene	ug/L	<0.50	1.0	04/18/17 10:08	
Toluene	ug/L	<0.50	1.0	04/18/17 10:08	
Xylene (Total)	ug/L	<1.5	3.0	04/18/17 10:08	
4-Bromofluorobenzene (S)	%	95	70-130	04/18/17 10:08	
Dibromofluoromethane (S)	%	108	70-130	04/18/17 10:08	
Toluene-d8 (S)	%	93	70-130	04/18/17 10:08	

LABORATORY CONTROL SAMPLE: 1492449

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	57.3	115	70-130	
Benzene	ug/L	50	63.6	127	60-135	
Ethylbenzene	ug/L	50	53.7	107	70-136	
m&p-Xylene	ug/L	100	109	109	70-138	
Methyl-tert-butyl ether	ug/L	50	54.7	109	66-138	
o-Xylene	ug/L	50	53.2	106	70-134	
Toluene	ug/L	50	53.7	107	70-130	
Xylene (Total)	ug/L	150	162	108	70-135	
4-Bromofluorobenzene (S)	%			99	70-130	
Dibromofluoromethane (S)	%			111	70-130	
Toluene-d8 (S)	%			94	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1492771 1492772

Parameter	Units	40148434005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	<0.17	50	50	57.6	58.8	115	118	70-130	2	20	
Benzene	ug/L	<0.50	50	50	63.9	65.7	128	131	57-138	3	20	
Ethylbenzene	ug/L	<0.50	50	50	53.3	55.2	107	110	70-138	3	20	
m&p-Xylene	ug/L	<1.0	100	100	107	112	107	112	70-140	4	20	
Methyl-tert-butyl ether	ug/L	<0.17	50	50	56.6	57.6	113	115	66-139	2	20	

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

REPORT OF LABORATORY ANALYSIS

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Green Bay, WI 54302
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QUALITY CONTROL DATA

Project: 5357AXUC SCHLINSOG
Pace Project No.: 40148434

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1492771 1492772

Parameter	Units	40148434005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
o-Xylene	ug/L	<0.50	50	50	53.2	54.7	106	109	70-134	3	20	
Toluene	ug/L	<0.50	50	50	53.8	55.1	108	110	70-130	2	20	
Xylene (Total)	ug/L	<1.5	150	150	160	166	107	111	70-135	4	20	
4-Bromofluorobenzene (S)	%						99	101	70-130			
Dibromofluoromethane (S)	%						111	112	70-130			
Toluene-d8 (S)	%						93	93	70-130			

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: 5357AXUC SCHLINSOG
Pace Project No.: 40148434

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 5357AXUC SCHLINSOG
Pace Project No.: 40148434

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40148434001	**MW1**	EPA 8260	252889		
40148434002	**MW2**	EPA 8260	252889		
40148434003	**MW3**	EPA 8260	252889		
40148434004	**MW6**	EPA 8260	252889		
40148434005	**PZ2**	EPA 8260	252889		
40148434006	**KAMTZER**	EPA 8260	252889		
40148434007	**HUBING**	EPA 8260	252889		

(Please Print Clearly)	
Company Name:	REI
Branch/Location:	Wausau
Project Contact:	Dave Larson
Phone:	715-675-9784
Project Number:	535 7axuc
Project Name:	Schlinsog
Project State:	WI
Sampled By (Print):	Jared Szews
Sampled By (Sign):	Jared Szews
PO #:	Regulatory Program:

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www.pacelabs.com

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

Page 1 of

40148434

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 Larson
Mail To Company:	REI
Mail To Address:	DlarsenBREIengineering.com
Invoice To Contact:	SAA
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

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

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

Matrix Codes

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

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: PVOC+1,2 DCA	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	MW1	4/13/17	12:30	GW	N	B	7		3-40mL vB	
002	MW2		12:45							
003	MW3		11:45							
004	MW6		12:15							
005	PZ2		12:00							
006	Kantzer		11:20							
007	Hubing		11:50				L			

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:
	4/14/17 - 9:30		
Relinquished By: Waltco	4/15/16 0750	Received By: Kimberly Rotzler Pace	4/15/17 0750
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:

PACE Project No.: 40148434
Receipt Temp = 2.0 °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal: Present / Not Present; Intact / Not Intact

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

Pace Analytical™

Sample Condition Upon Receipt

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

Client Name: REI

Project #: **WO#: 40148434**

40148434

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

Tracking #: 1337347-1 and -2

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

Cooler Temperature Uncorr: RO1 /Corr: **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp Blank Present: ☐ yes ☑ no

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

Person examining contents:
Date: 4-15-17
Initials: PR

		Comments:
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 ☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☐Yes ☐No ☑N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☐Yes ☐No ☑N/A	
exceptions: (VOA) coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☑Yes ☐No	Initial when completed / Lab Std #ID of preservative / Date/Time:
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	14.
Trip Blank Present:	☐Yes ☑No ☐N/A	15.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ If checked, see attached form for additional comments ☐

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 4-17-17

F-GB-C-031-Rev.03 (9April2015) SCUR Form