



Meridian Environmental Consulting, LLC

February 28, 2019

Carrie Stoltz
Wisconsin Department of Natural Resources
107 Sutliffe Avenue
Rhineland, Wisconsin 54501-3349

Subject: **PROGRESS REPORT:**

- **Results of 2018 Ground Water Sampling**
 - **Hydraulic Conductivity Testing**
 - **Recommendations**
- Webster Pig Farm
Gilman, Wisconsin
PECFA No. 54433-9429-94
DNR BRRTS Nos. 03-61-000650
Meridian No. 05F784

Dear Carrie:

This letter report presents the results of recent work at the site including:

- Ground Water Sampling (quarterly – 2018)
- Hydraulic Conductivity Testing (slug tests – MW-)

Based on the results of this work, we recommend:

- Abandon the former water well at 16653 CTH M
- Assess vapor intrusion potential by installing a vapor port in the basement of the residence located at 16653 CTH M
- Sample the monitoring wells twice during vapor intrusion sampling
- Prepare Letter Report

A Change Order for this work will be provided upon request.

The remainder of this letter report summarizes the work completed and our recommendations.

RECENT WORK

This letter report provides a summary of recent work and references earlier work described in file reports. The reader is referred to file reports for further information regarding the site.

Quarterly Ground Water Sampling

The monitoring well network and the private water supply at the residence known as 16653 CTH M (former Diamond residence) was sampled quarterly during 2018. The laboratory reports are provided in Appendix A and summarized in Table 1. Figure 1 illustrates the monitoring well network.

Ground water levels were measured during each sampling event; the results are summarized in Table 2.

Natural attenuation parameters were measured in the field; the results are summarized in Table 3.

Hydraulic Conductivity Testing

The hydraulic conductivity at the site was measured by conducting slug tests October 5, 2018. Appendix B contains the results of the slug tests and subsequent analysis. Table 4 summarizes the results of the hydraulic conductivity testing.

DATA EVALUATION

Hydrogeology

Figure 2 is a cross-section based on the soil boring and potable well logs. About 50 feet of glacial sediments overly granite bedrock. The glacial sediments consist of approximately 30 – 40 feet of silty, fine-grained sand with sand and clay lenses overlying a coarser sand layer resting on top of granite bedrock.

Ground water is found within 10 feet of the land surface. Based on the most recent measurements (December 15, 2018), ground water flow is southwesterly (Figures 3a & 3b).

The horizontal hydraulic gradient is relatively flat in the monitoring wells and in the piezometers. The recent water level data from the well nests (e.g., MW-200/PZ-200, etc) did not measure a significant vertical gradient.

The hydraulic conductivity tests indicate the deeper piezometers are screened in more permeable sediments whereas the shallow water table wells are screened in lower permeability sediments.

Extent of Impacted Soil

All accessible impacted soil has been removed by the remedial excavation(s). There is a limited volume of impacted soil in the former pump island area between the road edge and the buried telephone wire. We recommend this impacted soil be left in place and documented with GIS Registry.

Extent of Impacted Ground Water

Figure 4 illustrates the estimated horizontal extent of impacted ground water. The estimated vertical extent of impacted ground water is illustrated on Figure 2.

The ground water sampling data indicates a plume of impacted ground water extends from the property known as W16640 CTH M (aka former "Webster Pig Farm") (Figure 1) southwest beneath the property known as W16653 CTH M (former Diamond residence). The downgradient extent appears to be near MW-400/P-400 nest based on the concentrations in Table 1. Appendix C contains graphs which illustrate the concentrations of benzene and naphthalene over time in PZ-100, PZ-400, MW-600, PZ-600.

The natural attenuation data (Table 2) supports this interpreted extent. For example, the dissolved oxygen concentrations in MW-400 tend to be lower suggesting biological depletion (of dissolved oxygen).

The hydraulic conductivity tests indicate the deeper piezometers are screened in more permeable sediments whereas the shallow water table wells are screened in lower permeability sediments. This affects the contaminant transport as the contaminant plume migrated at depth beneath the property known as W16653 CTH M (former Diamond residence).

This can be illustrated by using the simple relationship

$$V = K \cdot i / n$$

Where

V = average linear ground water flow velocity

K = hydraulic conductivity

I = horizontal hydraulic gradient

N = porosity (use typical value of 0.3)

Using this relationship and the ground water measurements from December 15, 2018 and the average hydraulic conductivity measurements (Table 4) for each geologic unit, the average linear ground water flow velocity in the shallow sediments and the deeper sediments is estimated as

MW-600 to MW-900: V = 6.1 ft/yr

PZ-600 to PZ-900: V = 18.48 ft/yr

This simple analysis illustrates the ground water flow rate is faster at depth and explains the downgradient transport of impacted ground water in the more permeable sediments at depth.

Vapor Intrusion Evaluation

The potential for vapors from the petroleum contaminated soil and ground water was evaluated by completing an initial evaluation of screening criteria and potential vapor receptors. This evaluation is summarized below. Refer to Figure 1 for reference.

Potential vapor receptors

- Source Property (W16640 CTH M)

There are no buildings or other structures on this property. The former building structure has been demolished.

- Town Hall

There is a building on this property. It is located over 150 feet from the contaminated soil and ground water and is not considered a potential vapor receptor.

- Residence at W16653 CTH M (former Diamond residence)

The house at this property has a basement (depth is approximately 5 feet below grade). The house is occupied by a family with children.

The house is located over the ground water contamination plume and is considered a potential vapor receptor.

There is a garage located along the south property line. It is unknown if the garage has a cement floor or dirt floor. The garage is in older condition. The garage is located away from the contaminated soil and ground water and is not considered a potential vapor receptor.

The septic system is located south of the house and is not considered a potential vapor receptor.

Vapor Intrusion Screening Criteria Evaluation – House at W16653 CTH M

- *Free-phase product that has the potential for off-gassing vapors underlies a building or is within 30 feet, horizontally or vertically, of a building foundation*

No free-product has been measured at this site.

- *Petroleum contaminated soils with the potential for off-gassing vapors are within 5 feet or less of a building foundation*

No unsaturated petroleum contaminated soils is within 5 feet of any building foundation.

- *Ground water contaminated with petroleum product above NR140 PAL is entering a building or in contact with the building's foundation, or is in water intercepted by the building's foundation drain system, including sumps.*

No ground water with PAL exceedances is in contact with any building foundations.

- Petroleum vapors are present that may migrate from the petroleum source and move through preferential pathways (sewer lines, fractured bedrock, etc.) into the building.

The ground water contaminant plume is interpreted to extend beneath the house at W16653. The impacts appear to be at depth in PZ-100.

Soil Vapor Sampling

Based on the screening criteria, there is a potential for petroleum soil vapors at the house located at W16653. Therefore, we recommend a vapor sampling port be installed through the floor in the basement of the house and at least two air samples (summer & winter) be collected.

A PID and LEL meter will be used to measure the soil vapor for LEL, VOCs, and oxygen concentration. A Summa canister (6 liter with 30 minute flow valve) will be connected to the vapor port using PVC tubing and a soil vapor sample collected. The Summa canister will then be shipped to the lab (Pace) and the soil vapor air sample analyzed for PVOC+Naphthalene using method TO-15.

CONCLUSIONS AND RECOMMENDATIONS

The replacement well is providing a good water supply for the property known as W16653 CTH M (former Diamond residence). The old water supply well should be abandoned per NR141.

We recommend potential vapor intrusion impacts be tested in the house located at W16653 CTH M by installing a vapor pin/port through the floor of the basement. Two samples will be collected (summer and winter).

We recommend the monitoring wells and house water supply be sampled (twice) during the vapor port testing.

A Change Order for this work will be provided upon request.

Please contact me with any comments or questions.

Sincerely,
MERIDIAN ENVIRONMENTAL CONSULTING, LLC

Kenneth Shimko, PG
Project Manager

C: Gary Gilbert - PE

TABLES

Table 1: Ground Water Analytical

Webster Pig Farm

Meridian No. 05F784

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Well	Date	Benzene	Ethyl Benzene	Toluene	Total Xylenes	1,2,4 - TMB	1,3,5 - TMB	Total TMBs	MTBE	Naphthalene
NR140 ES		5	700	800	2000	-	-	480	60	100
NR140 PAL Units		0.5 ug/l	140 ug/l	160 ug/l	400 ug/l			96 ug/l	12 UG/L	10 ug/l
MW-100	Installed December 6, 1996									
	1/9/1997	<.2	<.3	<.2	<1	<.4	<.3	<.4	<.1	<.4
	4/18/1997	<.4	<.5	<.4	<1.2	<.5	<.5	<.5	<.1	-
	6/20/1997	<.1	<.1	<.1	<.2	-	-	-	-	-
	August 2000	Well Abandoned								
MW-200	Installed December 5, 1996									
	1/9/1997	<.2	<.3	<.2	<1	<.4	<.3	<.4	<.1	<.4
	4/18/1997	13	1.1	11	3.4	<.5	<.5	<.5	<.1	-
	6/20/1997	<.1	<.1	<.1	<.2	-	-	-	-	-
	12/20/2006	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	4/11/2007	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	7/25/2007	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	10/23/2007	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	1/9/2008	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	5/6/2008	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	7/29/2008	<.25	<.22	<.25	<.39	<.25	<.19	<.25	<.23	<.25
	8/29/2012	<.39	<.41	<.42	<1.3	<.43	<.4	<.43	<.38	<.4
	9/9/2015	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	12/9/2015	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	3/31/2016	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	6/21/2016	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	4/28/2017	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	10/30/2017	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	3/29/2018	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	6/22/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	9/26/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	12/5/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
MW-300	Installed December 5, 1996									
	1/9/1997	<.2	<.3	<.2	<1	<.4	<.3	<.4	<.1	<.4
	4/18/1997	<.4	<.5	<.4	<1.2	<.5	<.5	<.5	<.1	-
	6/20/1997	<.1	<.1	<.1	0.2	-	-	-	-	-
	12/20/2006	<.2	<.5	<.2	<.5	<.2	<.2	<.2	.33	<.25
	4/11/2007	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	5/6/2008	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	7/29/2008	<.25	<.22	<.25	<.39	<.25	<.19	<.25	<.23	<.25
	8/29/2012	<.39	<.41	<.42	<1.3	<.43	<.4	<.43	<.38	<4
	9/9/2015	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	12/9/2015	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	3/31/2016	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	6/21/2016	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
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	3/29/2018	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	6/22/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	9/26/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	12/5/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
MW-400	Installed December 4, 1996									
	1/9/1997	<.2	<.3	<.2	<1	<.4	<.3	<.4	<.1	<.4
	4/18/1997	0.8	<.5	<.4	1.2	<.5	0.7	0.7	0.9	-
	6/20/1997	<.1	<.1	<.1	<.2	-	-	-	-	-
	12/20/2006	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	0.67
	4/11/2007	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	7/25/2007	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	10/23/2007	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	1/9/2008	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	5/6/2008	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	7/29/2008	<.25	<.22	<.25	<.39	<.25	<.19	<.25	<.23	<.25
	8/29/2012	<.39	<.41	<.42	<1.3	<.43	<.4	<.43	<.38	<.4
	9/9/2015	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	12/9/2015	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
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	3/29/2018	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42

12 BOLD - Concentration exceeds NR140 Enforcement Standard (ES)
 12 Italic - Concentration exceeds NR140 Preventative Action Limit (PAL)

Table 1: Ground Water Analytical
 Webster Pig Farm
 Meridian No. 05F784
 Page 2 of 5

Well	Date	Benzene	Ethyl Benzene	Toluene	Total Xylenes	1,2,4 - TMB	1,3,5 - TMB	Total TMBs	MTBE	Naphthalene
NR140 ES		5	700	800	2000	-	-	480	60	100
NR140 PAL Units		0.5	140	160	400			96	12	10
		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	UG/L	ug/l
	6/22/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	9/26/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	12/5/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
MW-500	Installed December 6, 1996									
	1/9/1997	<.2	<.3	0.3	<1	<.4	<.3	<.4	<.1	<.4
	4/18/1997	<.4	<.5	<.4	<1.2	<.5	<.5	<.5	<.1	-
	6/20/1997	<.1	<.1	<.1	<.2	-	-	-	-	-
	12/20/2006	4	<.5	<.2	<.5	<.2	<.2	<.2	<.5	0.31
	4/11/2007	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	7/25/2007	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	5/6/2008	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	7/29/2008	<.25	<.22	<.25	<.39	<.25	<.19	<.25	<.23	<.25
	8/29/2012	<.39	<.41	<.42	<1.3	<.43	<.4	<.43	<.38	<.4
	9/9/2015	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	12/9/2015	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	3/31/2016	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
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	9/26/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	12/5/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
MW-600	Installed April 14, 1997									
	4/18/1997	3090	554	2900	2066	293	82	375	<3.6	130
	6/20/1997	1200	1330	8290	6730	-	-	-	-	-
	5/6/2008	2100	1100	1500	3400	950	270	1220	<20	360
	7/29/2008	790	670	1000	2600	930	330	1260	<23	390
	8/29/2012	111	118	117	354	196	170	366	6.2	130
	8/8/2014	181	237	179	446	180	91.7	271.7	7.8	154
	11/18/2014	107	135	67.3	306	127	83.5	210.5	12.4	102
	9/9/2015	71	100	46.5	292	116	120	236	8.4	107
	12/9/2015	75.7	93.5	39.3	259	74.2	65.2	139.4	3	121
	3/31/2016	85.6	144	87.5	482	122	181	303	5.2	195
	6/21/2016	55.7	85.5	61.8	372	81	137	218	6.1	162
	4/28/2017	22.1	71.1	52.7	399	41.7	116	157.7	8.5	179
	10/30/2017	63.2	505	9.3	860	375	201	576	9.3	334
	3/29/2018	74.1	584	180	891	318	158	476	12.8	315
	6/22/2018	27.5	351	151	676	213	133	346	7.1	247
	9/26/2018	4.6J	47.1	17	188	47	72.8	119.8	3.3J	83.2
	12/5/2018	5	34.3	12.6	175	28.9	60.8	89.7	1.9J	89
MW-700	Installed April 15, 1997									
	4/18/1997	<.3	<.4	1.2	<1.4	<.5	<.4	<.5	<.2	<.4
	6/20/1997	<.1	<.1	<.1	<.2	-	-	-	-	-
	12/20/2006	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	4/11/2007	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	7/25/2007	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
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	5/6/2008	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	7/29/2008	<.25	<.22	<.25	<.39	<.25	<.19	<.25	<.23	<.25
	8/29/2012	<.39	<.41	<.42	<1.3	<.43	<.4	<.43	<.38	<.4
	9/9/2015	Not Sampled								
	12/9/2015	Not Sampled								
	4/28/2017	Not Sampled								
	10/30/2017	Not Sampled								
MW-800	Installed June 10, 1997 (this well is now sampled as part of Donald Store work)									
	6/20/1997	<.2	<.4	<.5	<1.4	<.5	<.4	<.5	<.2	<.4
	4/11/2007	<.2	<.5	<.2	<.5	<.5	<.4	<.5	<.5	<.25
	7/25/2007	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	10/23/2007	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	5/6/2008	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	7/29/2008	<.25	<.22	<.25	<.39	<.25	<.19	<.25	<.23	<.25
	8/29/2012	<.39	<.41	<.42	<1.3	<.43	<.4	<.43	<.38	<.4
	9/9/2015	Not Sampled								
	12/9/2015	Not Sampled								
	4/28/2017	Well sampled as part of Donald Store site								

12 BOLD - Concentration exceeds NR140 Enforcement Standard (ES)
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Table 1: Ground Water Analytical

Webster Pig Farm

Meridian No. 05F784

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NR140 PAL Units		<i>0.5</i>	<i>140</i>	<i>160</i>	<i>400</i>			<i>96</i>	<i>12</i>	<i>10</i>
		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	UG/L	ug/l
	10/30/2017	Well sampled as part of Donald Store site								
MW-900	Installed June 10, 1997									
	6/20/1997	<.2	<.4	<.5	<1.4	<.5	<.4	<.5	<.2	<.4
	12/20/2006	<.8	<2	<.8	<2	<.8	<.8	<.8	<2	<1
	4/11/2007	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	7/25/2007	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	5/6/2008	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	7/29/2008	<.25	<.22	<.25	<.39	<.25	<.19	<.25	<.23	<.25
	8/29/2012	<.39	<.41	<.42	<1.3	<.43	<.4	<.43	<.38	<.4
	9/9/2015	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	12/9/2015	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	3/31/2016	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	6/21/2016	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	4/28/2017	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	10/30/2017	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	3/29/2018	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	6/22/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	9/26/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	12/5/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
PZ-100	Installed December 18, 1996									
	1/9/1997	3840	<7.4	169	809	95	34	129	<3.1	38
	4/18/1997	3500	<9.8	118	430	43	12	55	<4.5	25
	6/20/1997	3660	<1	97	410	-	-	-	-	-
	12/20/2006	3300	<2	17	50	22	3.8	25.8	<2	28
	4/11/2007	0.64	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	7/25/2007	1000	21	9	16	9.8	12	21.8	<10	27
	10/23/2007	7.8	<2	<.8	<2	<.8	<.8	<.8	<2	<1
	1/9/2008	330	<5	5.7	10	2.6	<2	2.6	<5	5.6
	5/6/2008	280	<.5	6.2	5.9	2.2	0.5	2.7	<.5	6.1
	7/29/2008	1100	0	14	12	1.5	0.4	1.9	<4.6	<5
	8/29/2012	849	<2.1	4.7	<6.3	<2.2	<2	<2.2	<1.9	2.3
	8/8/2014	1.3	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	11/18/2014	6.5	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	9/9/2015	6380	<19.8	52.7	<62.4	<20.9	<20.8	<20.9	<24.2	123
	12/9/2015	7810	<19.6	56.4	<62.4	<20.9	<20.8	<20.9	<24.2	71.2
	3/31/2016	5470	<19.6	30.7	<62.4	<20.9	<20.8	<20.9	<24.2	<21.2
	6/21/2016	4100	<15.7	29.7	<49.9	<16.7	<16.6	<16.7	<19.4	<17
	4/28/2017	2350	<9.8	27.3	<31.2	<10.4	<10.4	<10.4	<12.1	<10.6
	10/30/2017	122	<.79	1.8J	<2.5	<.84	<.83	<.84	<.97	2.3
	3/29/2018	1510	<3.9	22.5	<12.5	<4.2	<4.2	<8.4	<4.8	6.1J
	6/22/2018	2680	<8.2	46	26.3J	<8.6	<8.2	<16.8	<8	44.9
	9/26/2018	3220	<16.4	72.1J	51.0J	<17.1	<16.4	<33.5	<16	73.9J
	12/5/2018	2710	<8.2	65	56.9J	<8.6	<8.2	<16.8	<8	82.8
PZ-200	Installed December 17, 1996									
	1/9/1997	0.5	<.3	0.5	<1	<.4	<.3	<.4	<.1	<.4
	4/18/1997	3	<.4	<.5	<1.4	<.5	<.4	<.5	<2	0.7
	6/20/1997	<.1	<.1	<.1	<.2	-	-	-	-	-
	5/6/2008	<.2	<.5	<.2	<.5	<.2	<.2	<.2	0.5	<.25
	7/29/2008	<.25	<.22	<.25	<.39	<.25	<.19	<.25	<.23	<.25
	8/29/2012	<.39	<.41	<.42	<1.3	<.43	<.4	<.43	<.38	<.4
	9/9/2015	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	12/9/2015	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	3/31/2016	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	6/21/2016	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	4/28/2017	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	10/30/2017	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	3/29/2018	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	6/22/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	9/26/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	12/5/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
PZ-300	Installed December 17, 1996									
	1/9/1997	12	<.3	1.9	<1	<.4	<.3	<.4	<.1	<.4
	4/18/1997	3	<.4	<.5	<1.4	<.5	<.4	<.5	<2	<.4
	6/20/1997	5.3	<1	<.1	<.2	-	-	-	-	-
	5/6/2008	<.2	<.5	<.2	<.5	<.2	<.2	<.2	24	<.25
	7/29/2008	<.25	<.22	<.25	<.39	<.25	<.19	<.25	21	<.25

Table 1: Ground Water Analytical
 Webster Pig Farm
 Meridian No. 05F784
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Well	Date	Benzene	Ethyl Benzene	Toluene	Total Xylenes	1,2,4 - TMB	1,3,5 - TMB	Total TMBs	MTBE	Naphthalene
NR140 ES		5	700	800	2000	-	-	480	60	100
NR140 PAL Units		0.5	140	160	400			96	12	10
		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	UG/L	ug/l
	8/29/2012	<.39	<.41	<.42	<1.3	<.43	<.4	<.43	1.6	<.4
	9/9/2015	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	0.57	<.42
	12/9/2015	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	3/31/2016	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	6/21/2016	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	0.67	<.42
	4/28/2017	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	10/30/2017	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	3/29/2018	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	6/22/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	9/26/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	12/5/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
PZ-400	Installed December 3, 1996									
	1/9/1997	<.2	<.3	1.1	<1	<.4	<.3	<.4	<.1	<.4
	4/18/1997	<.3	<.4	<.5	<1.4	<.5	<.4	<.5	<.2	<.4
	6/20/1997	<.1	<.1	<.1	<2	-	-	-	-	-
	5/6/2008	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	7/29/2008	<.25	<.22	<.25	<.39	<.25	<.19	<.25	<.23	<.25
	8/29/2012	7.6	<.41	0.93	<1.3	<.43	<.4	<.43	<.38	<.4
	8/8/2014	0.5	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	11/18/2014	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	9/9/2015	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	12/9/2015	0.92	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	3/31/2016	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	6/21/2016	3.3	0.5	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	4/28/2017	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	10/30/2017	28.6	<.39	.79J	<1.2	<.42	<.42	<.42	<.48	<.42
	3/29/2018	3	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	6/22/2018	3	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	9/26/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	12/5/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
PZ-600	Installed April 14, 1997									
	4/18/1997	<.3	<.4	<.5	<1.4	<.5	<.4	<.4	<.2	<.4
	6/20/1997	114	<.1	2.1	12.4	-	-	-	-	-
	5/6/2008	6300	37	200	920	160	46	206	<10	40
	7/29/2008	520	17	60	220	60	18	78	<2.3	17
	8/29/2012	175	126	223	489	177	87.1	264.1	18	156
	8/8/2014	190	156	323	583	217	137	354	<2.4	198
	11/18/2014	6.1	<.39	3.8	7.5	1.8	0.87	2.67	<.48	2.7
	9/9/2015	98.2	131	230	346	129	120	249	16.6	200
	12/9/2015	110	133	269	417	126	131	257	<1.9	203
	3/31/2016	240	32.7	290	395	93.6	124	217.6	<2.4	104
	6/21/2016	434	104	384	534	172	158	330	<4.8	232
	4/28/2017	215	5.9	102	68.4	11.4	15.6	27	<.48	10
	10/30/2017	544	98.8	241	403	128	136	264	12.5	204
	3/29/2018	434	97.2	146	167	30.5	118	148.5	<2.4	223
	6/22/2018	349	102	116	194	48.1	119	167.1	<1.3	161
	9/26/2018	68.7	25.4	18.3	37.5	9.7	31.3	41	1.9	51.4
	12/5/2018	314	99.1	121	195	46.2	140	186.2	10.9	273
PZ-700	Installed April 15, 1997									
	4/18/1997	<.3	<.4	<.5	<1.4	<.5	<.4	<.5	<.2	<.4
	6/20/1997	<.1	<.1	<.1	<.2	-	-	-	-	-
	5/6/2008	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	7/29/2008	<.25	<.22	<.25	<.39	<.25	<.19	<.25	<.23	<.25
	8/29/2012	<.39	<.41	<.42	<1.3	<.43	<.4	<.43	<.38	<.4
	9/9/2015	Not Sampled								
	12/9/2015	Not Sampled								
	4/28/2017	Not Sampled								
	10/30/2017	Not Sampled								
PZ-800	Installed June 10, 1997 (this well is now sampled as part of Donald Store work)									
	6/20/1997	0.3	<.4	<.5	<1.4	<.5	<4	<.5	<2	<4
	8/29/2012	<.39	<.41	<.42	<1.3	<.43	<4	<.43	<.38	<4
	9/9/2015	Not Sampled								
	12/9/2015	Not Sampled								
	4/28/2017	Well sampled as part of Donald Store site								
	10/30/2017	Well sampled as part of Donald Store site								

12 BOLD - Concentration exceeds NR140 Enforcement Standard (ES)
 12 Italic - Concentration exceeds NR140 Preventative Action Limit (PAL)

Table 1: Ground Water Analytical

Webster Pig Farm

Meridian No. 05F784

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Well	Date	Benzene	Ethyl Benzene	Toluene	Total Xylenes	1,2,4 - TMB	1,3,5 - TMB	Total TMBs	MTBE	Naphthalene
NR140 ES		5	700	800	2000	-	-	480	60	100
NR140 PAL Units		0.5 ug/l	140 ug/l	160 ug/l	400 ug/l			96 ug/l	12 UG/L	10 ug/l
PZ-900	Installed June 11, 1997									
	6/20/1997	1.3	<.4	<.5	<1.4	<.5	<.4	<.5	<.2	<.4
	5/6/2008	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	7/29/2008	<.25	<.22	<.25	<.39	<.25	<.19	<.25	<.23	<.25
	8/29/2012	<.39	<.41	<.42	<1.3	<.43	<.4	<.43	<.38	<.4
	9/9/2015	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	12/9/2015	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	3/31/2016	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	6/21/2016	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	4/28/2017	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	10/30/2017	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	3/29/2018	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	6/22/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	9/26/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	12/5/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
Krizan (fka Ruth Diamond property) (W16653 CTH M)(installed 1998)										
	7/25/2007	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	1/9/2008	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	7/29/2008	<.2	<.5	<.2	<.5	<.2	<.2	<.2	<.5	<.25
	8/29/2012	<.39	<.41	<.42	<1.3	<.43	<.4	<.43	<.38	<.4
	8/8/2014	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	11/18/2014	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	9/9/2015	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	12/9/2015	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	3/31/2016	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	6/21/2016	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
Replacement Well Installed October 2016										
	10/7/2016	<.5	<.5	<.5	<1	<.5	<.5	<1	<.17	<2.5
	10/8/2016	<.5	<.5	<.5	<1	<.5	<.5	<1	<.17	<2.5
	1/24/2017	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	4/28/2017	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	7/19/2017	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	10/30/2017	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	3/29/2018	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	6/22/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	9/26/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
	12/5/2018	<.31	<.33	<.49	<.97	<.34	<.33	<.67	<.32	<.51
Pig Farm well (grab sample from top of water column due to pipe in well)										
	8/8/2014	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
	11/18/2014	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
(yield test)	2/16/2016	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
Old Church Well										
	8/29/2012	<.39	<.41	<.42	<1.3	<.43	<.4	<.43	<.38	<.4
(yield test)	2/16/2016	<.4	<.39	.98J	<1.2	<.42	<.42	<.42	<.48	<.42
Town Hall well (outside faucet)										
	10/26/2012	<.39	<.41	<.42	<1.3	<.43	<.4	<.43	<.38	<.4
(yield test)	2/16/2016	<.4	<.39	<.39	<1.2	<.42	<.42	<.42	<.48	<.42
T-1	Installed 10/18/12									
	10/26/2012	6.1	322	<2.1	1130	654	205	859	18.4	168
	Abandoned 8/4/14 due to excavation									
T-2	Installed 10/18/12									
	10/26/2012	2990	1740	5820	6950	875	257	1132	38	349
	Abandoned 8/4/14 due to excavation									
T-3	Installed 10/18/12									
	10/26/2012	10.2	<.41	1.6	<1.3	<.43	0.85	0.85	<.38	4

Table 2: Ground Water Elevations
Webster Pig Farm
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(MW-100 abandoned)

PZ-100		MW-200		PZ-200		1200.3	
Surface Elevation (ft)	1201.0	Surface Elevation (ft)	1200.5	Surface Elevation (ft)	1200.5	Top of Casing elevation (ft)	1200.3
Top of Casing elevation (ft)	1201.33	Top of Casing elevation (ft)	1200.3	Top of Casing elevation (ft)	1200.3	Top of Screen Elevation (ft)*	1200.34
Top of Screen Elevation (ft)*	1171.5	Top of Screen Elevation (ft)*	1193.5	Top of Screen Elevation (ft)*	1193.5	Bottom of Screen Elevation (ft)	1171.5
Bottom of Screen Elevation (ft)	1166.5	Bottom of Screen Elevation (ft)	1183.5	Bottom of Screen Elevation (ft)	1183.5	Well Diameter	1166.5
Well Diameter	2-inch	Well Diameter	2-inch	Well Diameter	2-inch	2-inch	2-inch
Installed	12/18/1996	Installed	12/5/1996	Installed	12/5/1996	Installed	12/17/1996
Meas. Date	Depth to Water (ft)	Elevation (ft)	Meas. Date	Depth to Water (ft)	Elevation (ft)	Meas. Date	Depth to Water (ft)
8/29/2012	12.31	1189.02	8/29/2012	11.38	1188.92	8/29/2012	11.44
8/8/2014	9.65	1191.78	8/8/2014	NM	NM	8/8/2014	NM
11/18/2014	8.73	1192.60	11/18/2014	NM	NM	11/18/2014	NM
9/9/2015	9.96	1191.37	9/9/2015	9.97	1190.33	9/9/2015	9.03
12/9/2015	9.52	1191.81	12/9/2015	6.93	1193.37	12/9/2015	6.98
3/31/2016	8.83	1192.50	3/31/2016	5.9	1194.40	3/31/2016	5.97
6/21/2016	7.95	1193.38	6/21/2016	6.89	1193.41	6/21/2016	7.01
4/28/2017	5.96	1195.37	4/28/2017	5.06	1195.24	4/28/2017	5.15
10/30/2017	9.7	1191.63	10/30/2017	8.11	1192.19	10/30/2017	8.14
3/29/2018	9.43	1191.90	3/29/2018	10.29	1190.01	3/29/2018	10.07
6/22/2018	9.1	1192.23	6/22/2018	7.45	1192.85	6/22/2018	7.45
9/26/2018	9.9	1191.43	9/26/2018	8.78	1191.52	9/26/2018	8.85
12/5/2018	8.68	1192.65	12/5/2018	7.68	1192.62	12/5/2018	7.75

MW-300		PZ-300		MW-400		PZ-400					
Surface Elevation (ft)	1200.75	Surface Elevation (ft)		Surface Elevation (ft)	1200.5	Surface Elevation (ft)					
Top of Casing elevation (ft)	1200.59	Top of Casing elevation (ft)		Top of Casing elevation (ft)	1200.45	Top of Casing elevation (ft)					
Top of Screen Elevation (ft)*	1194.75	Top of Screen Elevation (ft)*		Top of Screen Elevation (ft)*	1170.1	Top of Screen Elevation (ft)*					
Bottom of Screen Elevation (ft)	1184.75	Bottom of Screen Elevation (ft)		Bottom of Screen Elevation (ft)	1165.1	Bottom of Screen Elevation (ft)					
Well Diameter	2-inch	Well Diameter		Well Diameter	2-inch	Well Diameter					
Installed	12/5/1996	Installed		Installed	12/17/1996	Installed					
Meas. Date	Depth to Water (ft)	Elevation (ft)	Meas. Date	Depth to Water (ft)	Elevation (ft)	Meas. Date	Depth to Water (ft)	Elevation (ft)	Meas. Date	Depth to Water (ft)	Elevation (ft)
8/29/2012	11.93	1188.66	8/29/2012	11.83	1188.62	8/29/2012	11.23	1188.55	8/29/2012	11.28	1188.61
8/8/2014	NM	NM	8/8/2014	NM	NM	8/8/2014	NM	NM	8/8/2014	8.61	1191.28
11/18/2014	NM	NM	11/18/2014	NM	NM	11/18/2014	NM	NM	11/18/2014	7.88	1192.01
9/9/2015	9.6	1190.99	9/9/2015	9.47	1190.98	9/9/2015	9.11	1190.67	9/9/2015	9.18	1190.71
12/9/2015	7.38	1193.21	12/9/2015	7.23	1193.22	12/9/2015	7.23	1192.55	12/9/2015	7.3	1192.59
3/31/2016	6.43	1194.16	3/31/2016	6.03	1194.42	3/31/2016	5.74	1194.04	3/31/2016	5.75	1194.14
6/21/2016	7.57	1193.02	6/21/2016	7.41	1193.04	6/21/2016	7.11	1192.67	6/21/2016	7.22	1192.67
4/28/2017	5.89	1194.70	4/28/2017	5.61	1194.84	4/28/2017	5.21	1194.57	4/28/2017	5.06	1194.83
10/30/2017	8.73	1191.86	10/30/2017	8.45	1192.00	10/30/2017	8.39	1191.39	10/30/2017	8.45	1191.44
3/29/2018	11	1189.59	3/29/2018	10.74	1189.71	3/29/2018	10.52	1189.26	3/29/2018	10.59	1189.30
6/22/2018	8.17	1192.42	6/22/2018	7.91	1192.54	6/22/2018	8.04	1191.74	6/22/2018	8.08	1191.81
9/26/2018	9.59	1191.00	9/26/2018	9.37	1191.08	9/26/2018	9.2	1190.58	9/26/2018	9.28	1190.61
12/5/2018	8.44	1192.15	12/5/2018	8.25	1192.20	12/5/2018	7.84	1191.94	12/5/2018	7.93	1191.96

Table 2: Ground Water Elevations
 Webster Pig Farm
 Page 2 of 2

MW-500		MW-600		PZ-600	
Surface Elevation (ft)		Surface Elevation (ft)		Surface Elevation (ft)	
Top of Casing elevation (ft)	1200.96	Top of Casing elevation (ft)	1201.96	Top of Casing elevation (ft)	1201.75
Top of Screen Elevation (ft)*	1196	Top of Screen Elevation (ft)*	1195.5	Top of Screen Elevation (ft)*	1170.75
Bottom of Screen Elevation (ft)	1186	Bottom of Screen Elevation (ft)	1185.5	Bottom of Screen Elevation (ft)	1165.75
Well Diameter	2-inch	Well Diameter	2-inch	Well Diameter	2-inch
Installed	12/6/1996	Installed	4/14/1997	Installed	4/14/1997
Meas. Date	Depth to Water (ft)	Elevation (ft)	Meas. Date	Depth to Water (ft)	Elevation (ft)
8/29/2012	12	1188.96	8/29/2012	12.57	1189.39
8/8/2014	NM	NM	8/8/2014	10.29	1191.67
11/18/2014	NM	NM	11/18/2014	9.17	1192.79
9/9/2015	9.7	1191.26	9/9/2015	10.42	1191.54
12/9/2015	7.78	1193.18	12/9/2015	8.65	1193.31
3/31/2016	6.68	1194.28	3/31/2016	7.3	1194.66
6/21/2016	7.63	1193.33	6/21/2016	8.35	1193.61
4/28/2017	5.72	1195.24	4/28/2017	6.47	1195.49
10/30/2017	9.03	1191.93	10/30/2017	9.94	1192.02
3/29/2018	11.17	1189.79	3/29/2018	12.14	1189.82
6/22/2018	8.47	1192.49	6/22/2018	8.82	1193.14
9/26/2018	9.67	1191.29	9/26/2018	10.55	1191.41
12/5/2018	8.47	1192.49	12/5/2018	9.45	1192.51

MW-700		PZ-700		MW-800		PZ-800	
Surface Elevation (ft)		Surface Elevation (ft)		Surface Elevation (ft)		Surface Elevation (ft)	
Top of Casing elevation (ft)	1204.72	Top of Casing elevation (ft)	1203.36	Top of Casing elevation (ft)	1200.25	Top of Casing elevation (ft)	1199
Top of Screen Elevation (ft)*	1200	Top of Screen Elevation (ft)*	1170.5	Top of Screen Elevation (ft)*	1200.03	Top of Screen Elevation (ft)*	1198.99
Bottom of Screen Elevation (ft)	1190	Bottom of Screen Elevation (ft)	1165.5	Bottom of Screen Elevation (ft)	1195.25	Bottom of Screen Elevation (ft)	1168
Well Diameter	2-inch	Well Diameter	2-inch	Well Diameter	1186.25	Well Diameter	1163
Installed	4/15/1997	Installed	4/15/1997	Installed	6/10/1997	Installed	6/10/1997
Meas. Date	Depth to Water (ft)	Elevation (ft)	Meas. Date	Depth to Water (ft)	Elevation (ft)	Meas. Date	Depth to Water (ft)
8/29/2012	15.26	1189.46	8/29/2012	14.02	1189.34	8/29/2012	11.18
8/8/2014	NM	NM	8/8/2014	NM	NM	8/8/2014	NM
11/18/2014	NM	NM	11/18/2014	NM	NM	11/18/2014	NM
9/9/2015	NM	NM	9/9/2015	NM	NM	9/9/2015	7.51
12/9/2015	NM	NM	12/9/2015	NM	NM	12/9/2015	NM
3/31/2016	NM	NM	3/31/2016	NM	NM	3/31/2016	NM
6/21/2016	10.9	1193.82	6/21/2016	9.5	1193.86	6/21/2016	6.06
4/28/2017	NM	NM	4/28/2017	NM	NM	4/28/2017	NM
10/30/2017	NM	NM	10/30/2017	NM	NM	10/30/2017	NM
3/29/2018	NM	NM	3/29/2018	NM	NM	3/29/2018	NM
6/22/2018	NM	NM	6/22/2018	NM	NM	6/22/2018	NM
9/26/2018	NM	NM	9/26/2018	NM	NM	9/26/2018	NM
12/5/2018	NM	NM	12/5/2018	NM	NM	12/5/2018	NM

MW-800 and PZ-800 transferred to Donald Store site

MW-900		PZ-900	
Surface Elevation (ft)		Surface Elevation (ft)	
Top of Casing elevation (ft)	1199	Top of Casing elevation (ft)	1199
Top of Screen Elevation (ft)*	1198.9	Top of Screen Elevation (ft)*	1198.82
Bottom of Screen Elevation (ft)	1195.5	Bottom of Screen Elevation (ft)*	1170
Well Diameter	2-inch	Well Diameter	2-inch
Installed	6/10/1997	Installed	6/11/1997
Meas. Date	Depth to Water (ft)	Elevation (ft)	Meas. Date
8/29/2012	10.59	1188.31	8/29/2012
8/8/2014	NM	NM	8/8/2014
11/18/2014	NM	NM	11/18/2014
9/9/2015	8.4	1190.50	9/9/2015
12/9/2015	6.17	1192.73	12/9/2015
3/31/2016	3.51	1195.39	3/31/2016
6/21/2016	6.34	1192.56	6/21/2016
4/28/2017	3.28	1195.62	4/28/2017
10/30/2017	7.43	1191.47	10/30/2017
3/29/2018	7.13	1191.77	3/29/2018
6/22/2018	7.09	1191.81	6/22/2018
9/26/2018	8.47	1190.43	9/26/2018
12/5/2018	7.03	1191.87	12/5/2018

Table 3: Natural Attenuation Data
 Webster Pig Farm
 Meridian No. 05F784

Well	DO	pH	Temp	Conductivity	ORP
Units	mg/l		C	uS	
MW-200					
9/9/2015	2	7.3	16.9	661	204
12/9/2015	2	7.37	9.3	461	55
3/31/2016	4	7.4	7.1	445	9
6/21/2016	3	8.31	13.5	467	43
4/28/2017	3	7.9	9.2	400	-85
10/30/2017	3	7.02	10.6	380	-60
3/29/2018	2	8.04	8.1	694	-129
6/22/2018	4	7.9	14.8	609	119
9/26/2018	3	6.96	14.1	386	161
12/5/2018	2	7.08	6.3	480	-173
MW-300					
9/9/2015	1	7.4	13.6	1054	181
12/9/2015	4	7.7	8.7	710	57
3/31/2016	2	7.72	5.7	788	41
6/21/2016	4	7.71	13.6	892	47
4/28/2017	2	7.88	7.4	747	-41
10/30/2017	0	7.68	9.1	520	-82
3/29/2018	1	8.08	6	460	-127
6/22/2018	1	7.73	11.7	489	-109
9/26/2018	1	7.36	12.8	463	150
12/5/2018	<1	7.19	6.7	602	154
MW-400					
9/9/2015	<1	7.27	14.1	694	16
12/9/2015	1	7.74	8.9	834	17
3/31/2016	2	7.56	5.9	761	40
6/21/2016	<1	8.24	14.9	604	-26
4/28/2017	3	8.17	8.6	375	-53
10/30/2017	2	7.68	8.8	595	-83
3/29/2018	2	8.22	7.5	560	-169
6/22/2018	2	8.03	11.3	651	-86
9/26/2018	1	7.67	13.2	689	107
12/5/2018	<1	7.25	7.8	464	-155
MW-500					
9/9/2015	2	7.89	15.5	505	160
12/9/2015	3	8.03	8.9	549	13
3/31/2016	3	7.92	6.8	538	2
6/21/2016	3	8.65	12.6	511	18
4/28/2017	3	8.38	9.6	449	-75
10/30/2017	3	7.34	10.2	405	-57
3/29/2018	3	8.21	7.4	397	-139
6/22/2018	5	7.8	14	394	-100
9/26/2018	2	7.75	13.7	398	25
12/5/2018	4	7.18	7.3	437	-219
MW-600					
11/18/2014	1	6.75	11	118.3	NM
9/9/2015	<1	7.1	17.5	636	-42
12/9/2015	0	7.21	10.1	881	-48
3/31/2016	0	7.64	6.1	793	-3
6/21/2016	<1	8.07	14.4	692	44
4/28/2017	<1	7.73	8.8	570	-33
10/30/2017	0	6.96	11.8	566	-60
3/29/2018	<<1	8.21	8.3	621	-171
6/22/2018	<<1	7.6	11.5	529	-35
9/26/2018	0	7.66	15.3	307	-73
12/5/2018	0	7.32	8.3	506	-187
MW-900					
9/9/2015	1	7.22	14.3	707	49
12/9/2015	2	7.8	8.7	554	11
3/31/2016	4	8.37	5.5	381	15
6/21/2016	1	8.86	16.3	494	6
4/28/2017	4	7.85	9.7	820	-44
10/30/2017	<1	7.75	9.6	412	-81
3/29/2018	4	8.2	6.5	234	-129
6/22/2018	4	8.3	13.5	244	113
9/26/2018	1	7.77	14.3	306	98
12/5/2018	1	6.97	7.7	340	-168

DO measured using colometric ampules (Chemetric)
 pH, conductivity, temperature, ORP measured in field with Oakton Multiparameter Testr 35 and YSI Ecosense ORP 15A
 NM - not measured

Table 3: Natural Attenuation Data
 Webster Pig Farm
 Meridian No. 05F784

Well	DO	pH	Temp	Conductivity	ORP
Units	mg/l		C	uS	
PZ-100					
11/18/2014	3	6.85	9.7	201.4	NM
9/9/2015	2	7.44	11	809	57
12/9/2015	0	7.76	8.7	847	-40
3/31/2016	1	7.55	7.6	848	30
6/21/2016	1	7.93	12.9	867	44
4/28/2017	<1	7.57	9.9	704	-66
10/30/2017	3	7.37	8.5	178.2	-73
3/29/2018	3	7.81	8.8	562	-148
6/22/2018	<1	7.47	11.8	625	-180
9/26/2018	1	7.69	11.6	691	NM
12/5/2018	<<1	7.27	7.8	698	-284
P-200					
9/9/2015	3	7.94	16.2	738	147
12/9/2015	3	7.44	8.9	989	32
3/31/2016	2	7.41	7.2	718	24
6/21/2016	2	8.15	12.4	702	37
4/28/2017	6	8.03	10.4	211	-64
10/30/2017	5	7.05	9.6	238	-57
3/29/2018	5	8.4	9.5	338	-124
6/22/2018	5	7.97	13.4	292	-120
9/26/2018	2	6.84	13.5	623	120
12/5/2018	5	6.95	7.5	644	134
P-300					
9/9/2015	3	7.56	12.5	1350	176
12/9/2015	2	7.66	7.9	1575	50
3/31/2016	3	7.63	6.9	1622	37
6/21/2016	2	7.96	12.7	1680	37
4/28/2017	3	7.4	9.3	1172	-43
10/30/2017	1	7.11	8	1287	-70
3/29/2018	2	7.6	8.5	1212	-141
6/22/2018	1	7.6	12	1165	-80
9/26/2018	1	7.35	12	1128	133
12/5/2018	3	7.22	7	1179	-161
PZ-400					
11/18/2014	1	7.79	9.3	1276	NM
9/9/2015	3	7.9	12.4	1230	163
12/9/2015	1	7.81	8	1235	1
3/31/2016	2	7.83	7.7	1165	NM
6/21/2016	4	8.28	14.6	1189	-27
4/28/2017	3	8.19	10.1	141	-65
10/30/2017	1	7.1	7.6	878	-72
3/29/2018	3	8.27	9.1	1025	-136
6/22/2018	2	8.09	12.2	957	98
9/26/2018	2	7.68	13	979	133
12/5/2018	5	7.26	6.9	941	-23
PZ-600					
11/18/2014	1	7.12	11.8	115.4	NM
9/9/2015	1	8.2	15.1	650	73
12/9/2015	<<1	7.45	9.4	625	-54
3/31/2016	<1	7.3	7.8	665	60
6/21/2016	1	8.12	13.2	681	-31
4/28/2017	<1	7.78	10.2	601	-54
10/30/2017	<1	7.06	8.8	772	-52
3/29/2018	<<1	8.02	10.5	831	-147
6/22/2018	<<1	7.62	12.3	807	-28
9/26/2018	1	7.78	13.4	523	-95
12/5/2018	4	7.29	8.1	872	-205
P-900					
9/9/2015	4	7.83	12.7	1316	122
12/9/2015	2	7.27	8.5	1691	-32
3/31/2016	3	8.12	8	1423	31
6/21/2016	4	8.47	14.4	1438	5
4/28/2017	2	7.75	10.1	863	-49
10/30/2017	3	7.45	7.7	1188	-32
3/29/2018	2	8.1	9	817	-146
6/22/2018	2	8.06	13.4	807	96
9/26/2018	2	7.64	13	826	102
12/5/2018	2	7.15	6.8	878	146
Pig Farm Well					
11/18/2014	2	8.85	9.4	184.3	NM

DO measured using colometric ampules (Chemetric)
 pH, conductivity, temperature, ORP measured in field with Oakton Multiparameter Testr 35 and YSI Ecosense ORP 15A
 NM - not measured

Table 4: Hydraulic Conductivity Testing Results

Webster Pig Farm

Donald, Wisconsin

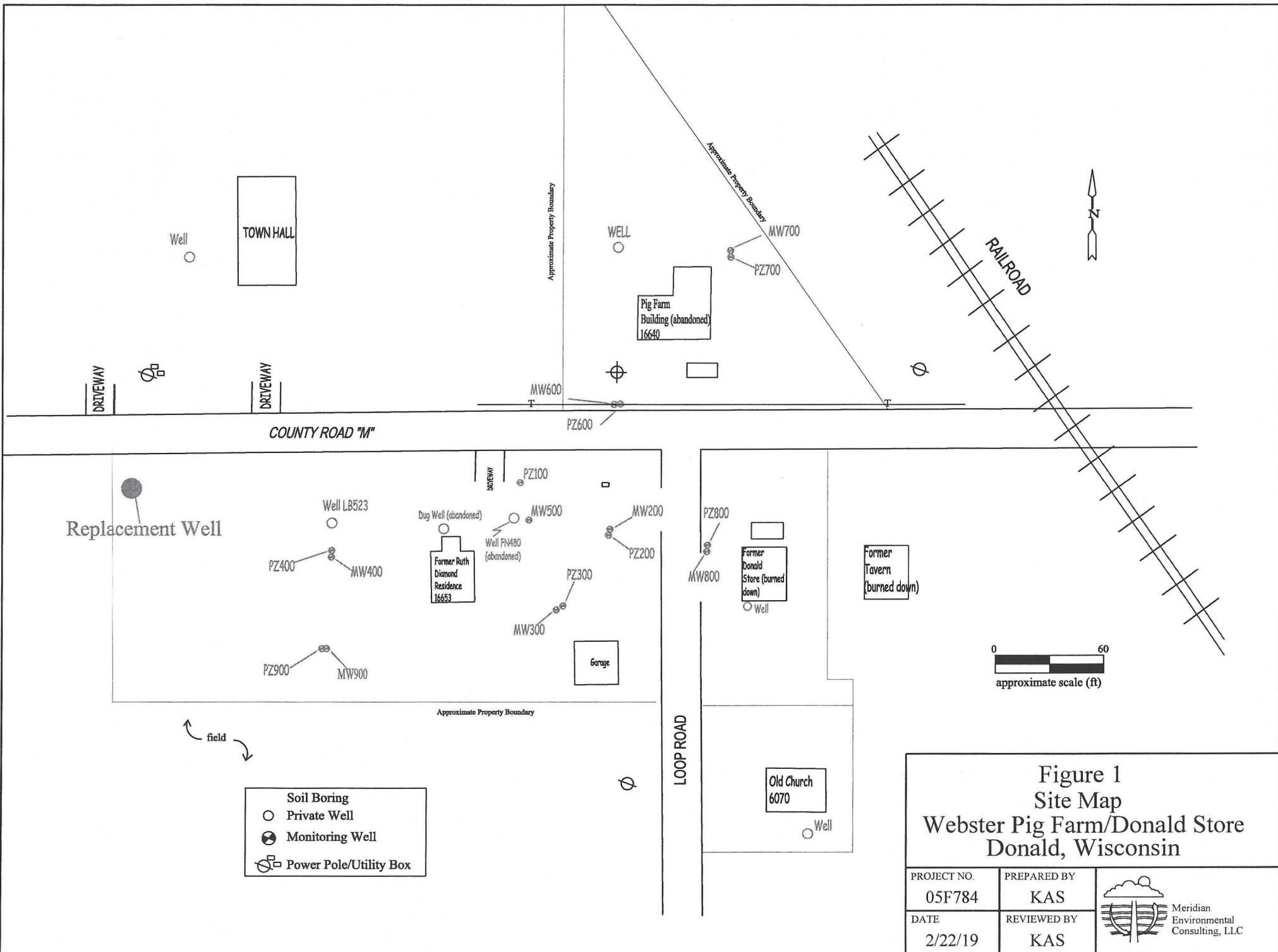
Meridian No. 05F784

Well	Hydraulic Conductivity	
	(cm/sec)	(ft/year)
MW-300	8.50E-04	879.4
PZ-300	9.20E-04	951.9
MW-400	5.30E-04	548.4
PZ-400	1.30E-03	1345.0
MW-600	4.30E-04	444.9
PZ-600	1.20E-03	1241.6

Average of MW-300, MW-400, MW-600: **6.0E-04** cm/sec

Average of PZ-300, PZ-400, PZ-600: **1.1E-03** cm/sec

FIGURES



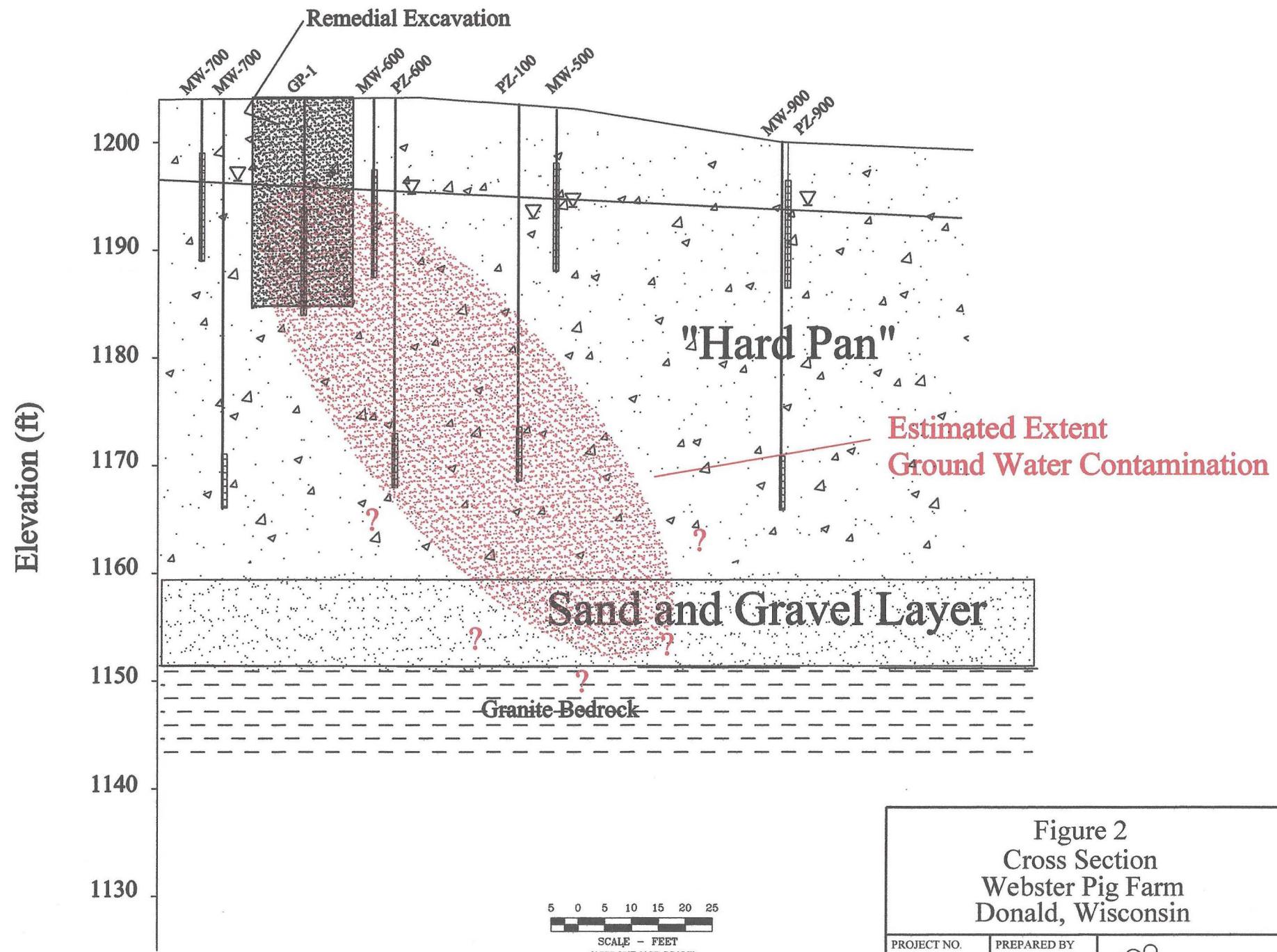
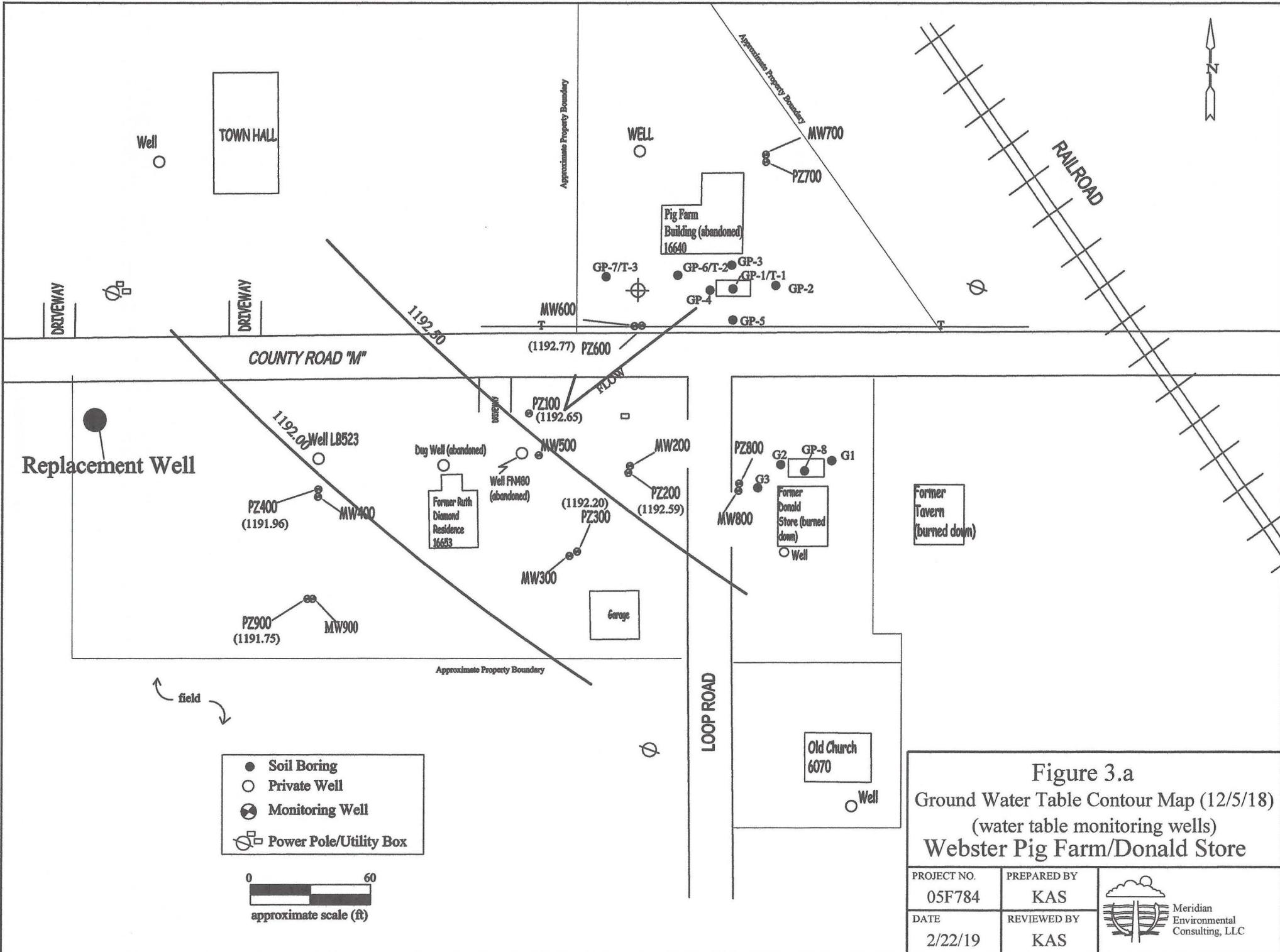
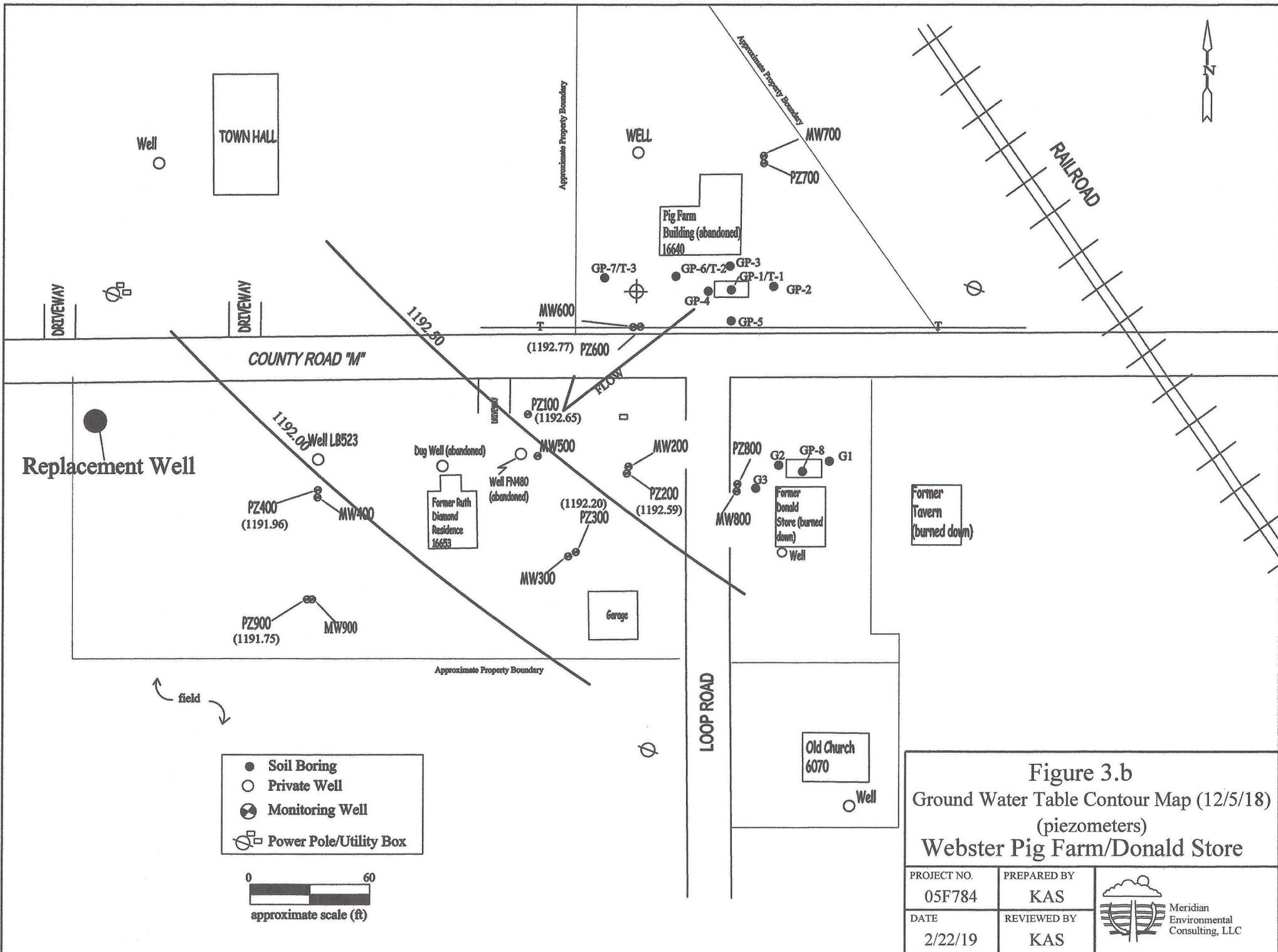
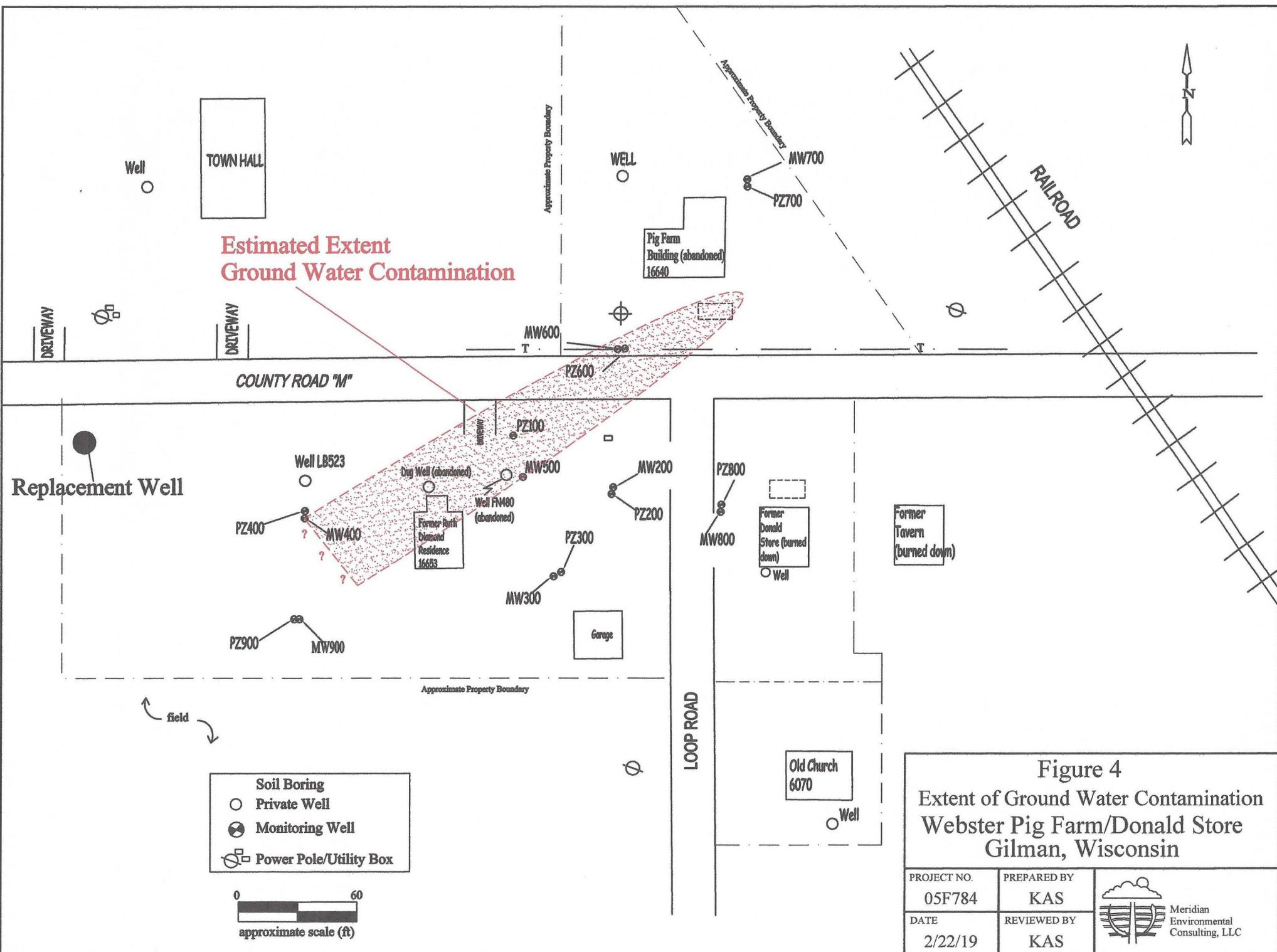


Figure 2
Cross Section
Webster Pig Farm
Donald, Wisconsin

PROJECT NO. 05F784	PREPARED BY KAS	Meridian Environmental Consulting, LLC
DATE 2/27/19	REVIEWED BY KAS	







APPENDIX A

Analytical Reports

April 05, 2018

Kenneth Shimko
Meridian Environmental Consulting, LLC
2711 North Elco Rd
Fall Creek, WI 54742

RE: Project: WEBSTER PIG FARM
Pace Project No.: 40166862

Dear Kenneth Shimko:

Enclosed are the analytical results for sample(s) received by the laboratory on April 03, 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



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: WEBSTER PIG FARM
Pace Project No.: 40166862

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

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SAMPLE SUMMARY

Project: WEBSTER PIG FARM
Pace Project No.: 40166862

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40166862001	P100	Water	03/29/18 00:00	04/03/18 10:30
40166862002	M500	Water	03/29/18 00:00	04/03/18 10:30
40166862003	P200	Water	03/29/18 00:00	04/03/18 10:30
40166862004	M200	Water	03/29/18 00:00	04/03/18 10:30
40166862005	P300	Water	03/29/18 00:00	04/03/18 10:30
40166862006	M300	Water	03/29/18 00:00	04/03/18 10:30
40166862007	P400	Water	03/29/18 00:00	04/03/18 10:30
40166862008	M400	Water	03/29/18 00:00	04/03/18 10:30
40166862009	P600	Water	03/29/18 00:00	04/03/18 10:30
40166862010	M600	Water	03/29/18 00:00	04/03/18 10:30
40166862011	P900	Water	03/29/18 00:00	04/03/18 10:30
40166862012	M900	Water	03/29/18 00:00	04/03/18 10:30
40166862013	HOUSE	Water	03/29/18 00:00	04/03/18 10:30
40166862014	TRIP BLANK	Water	03/29/18 00:00	04/03/18 10:30

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SAMPLE ANALYTE COUNT

Project: WEBSTER PIG FARM
Pace Project No.: 40166862

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40166862001	P100	WI MOD GRO	ALD	9	PASI-G
40166862002	M500	WI MOD GRO	ALD	9	PASI-G
40166862003	P200	WI MOD GRO	ALD	9	PASI-G
40166862004	M200	WI MOD GRO	ALD	9	PASI-G
40166862005	P300	WI MOD GRO	ALD	9	PASI-G
40166862006	M300	WI MOD GRO	ALD	9	PASI-G
40166862007	P400	WI MOD GRO	ALD	9	PASI-G
40166862008	M400	WI MOD GRO	ALD	9	PASI-G
40166862009	P600	WI MOD GRO	ALD	9	PASI-G
40166862010	M600	WI MOD GRO	ALD	9	PASI-G
40166862011	P900	WI MOD GRO	ALD	9	PASI-G
40166862012	M900	WI MOD GRO	ALD	9	PASI-G
40166862013	HOUSE	WI MOD GRO	ALD	9	PASI-G
40166862014	TRIP BLANK	WI MOD GRO	ALD	9	PASI-G

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PROJECT NARRATIVE

Project: WEBSTER PIG FARM
Pace Project No.: 40166862

Method: WI MOD GRO
Description: WIGRO GCV
Client: Meridian Environmental Consulting, LLC
Date: April 05, 2018

General Information:

14 samples were analyzed for WI MOD GRO. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 285078

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40166862002

R1: RPD value was outside control limits.

- MSD (Lab ID: 1668588)
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WEBSTER PIG FARM
Pace Project No.: 40166862

Sample: P100	Lab ID: 40166862001	Collected: 03/29/18 00:00	Received: 04/03/18 10:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	1510	ug/L	10.0	4.0	10		04/04/18 15:54	71-43-2	
Ethylbenzene	<3.9	ug/L	10.0	3.9	10		04/04/18 15:54	100-41-4	
Methyl-tert-butyl ether	<4.8	ug/L	10.0	4.8	10		04/04/18 15:54	1634-04-4	
Naphthalene	6.1J	ug/L	10.0	4.2	10		04/04/18 15:54	91-20-3	
Toluene	22.5	ug/L	10.0	3.9	10		04/04/18 15:54	108-88-3	
1,2,4-Trimethylbenzene	<4.2	ug/L	10.0	4.2	10		04/04/18 15:54	95-63-6	
1,3,5-Trimethylbenzene	<4.2	ug/L	10.0	4.2	10		04/04/18 15:54	108-67-8	
Xylene (Total)	<12.5	ug/L	30.0	12.5	10		04/04/18 15:54	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		10		04/04/18 15:54	98-08-8	
<hr/>									
Sample: M500	Lab ID: 40166862002	Collected: 03/29/18 00:00	Received: 04/03/18 10:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.40	ug/L	1.0	0.40	1		04/04/18 10:45	71-43-2	
Ethylbenzene	<0.39	ug/L	1.0	0.39	1		04/04/18 10:45	100-41-4	
Methyl-tert-butyl ether	<0.48	ug/L	1.0	0.48	1		04/04/18 10:45	1634-04-4	
Naphthalene	<0.42	ug/L	1.0	0.42	1		04/04/18 10:45	91-20-3	
Toluene	<0.39	ug/L	1.0	0.39	1		04/04/18 10:45	108-88-3	
1,2,4-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 10:45	95-63-6	R1
1,3,5-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 10:45	108-67-8	R1
Xylene (Total)	<1.2	ug/L	3.0	1.2	1		04/04/18 10:45	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	104	%	80-120		1		04/04/18 10:45	98-08-8	
<hr/>									
Sample: P200	Lab ID: 40166862003	Collected: 03/29/18 00:00	Received: 04/03/18 10:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.40	ug/L	1.0	0.40	1		04/04/18 11:11	71-43-2	
Ethylbenzene	<0.39	ug/L	1.0	0.39	1		04/04/18 11:11	100-41-4	
Methyl-tert-butyl ether	<0.48	ug/L	1.0	0.48	1		04/04/18 11:11	1634-04-4	
Naphthalene	<0.42	ug/L	1.0	0.42	1		04/04/18 11:11	91-20-3	
Toluene	<0.39	ug/L	1.0	0.39	1		04/04/18 11:11	108-88-3	
1,2,4-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 11:11	95-63-6	
1,3,5-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 11:11	108-67-8	
Xylene (Total)	<1.2	ug/L	3.0	1.2	1		04/04/18 11:11	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	104	%	80-120		1		04/04/18 11:11	98-08-8	

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ANALYTICAL RESULTS

Project: WEBSTER PIG FARM
Pace Project No.: 40166862

Sample: M200	Lab ID: 40166862004	Collected: 03/29/18 00:00	Received: 04/03/18 10:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.40	ug/L	1.0	0.40	1		04/04/18 11:36	71-43-2	
Ethylbenzene	<0.39	ug/L	1.0	0.39	1		04/04/18 11:36	100-41-4	
Methyl-tert-butyl ether	<0.48	ug/L	1.0	0.48	1		04/04/18 11:36	1634-04-4	
Naphthalene	<0.42	ug/L	1.0	0.42	1		04/04/18 11:36	91-20-3	
Toluene	<0.39	ug/L	1.0	0.39	1		04/04/18 11:36	108-88-3	
1,2,4-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 11:36	95-63-6	
1,3,5-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 11:36	108-67-8	
Xylene (Total)	<1.2	ug/L	3.0	1.2	1		04/04/18 11:36	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	106	%	80-120		1		04/04/18 11:36	98-08-8	
<hr/>									
Sample: P300	Lab ID: 40166862005	Collected: 03/29/18 00:00	Received: 04/03/18 10:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.40	ug/L	1.0	0.40	1		04/04/18 12:02	71-43-2	
Ethylbenzene	<0.39	ug/L	1.0	0.39	1		04/04/18 12:02	100-41-4	
Methyl-tert-butyl ether	<0.48	ug/L	1.0	0.48	1		04/04/18 12:02	1634-04-4	
Naphthalene	<0.42	ug/L	1.0	0.42	1		04/04/18 12:02	91-20-3	
Toluene	<0.39	ug/L	1.0	0.39	1		04/04/18 12:02	108-88-3	
1,2,4-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 12:02	95-63-6	
1,3,5-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 12:02	108-67-8	
Xylene (Total)	<1.2	ug/L	3.0	1.2	1		04/04/18 12:02	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	106	%	80-120		1		04/04/18 12:02	98-08-8	
<hr/>									
Sample: M300	Lab ID: 40166862006	Collected: 03/29/18 00:00	Received: 04/03/18 10:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.40	ug/L	1.0	0.40	1		04/04/18 12:28	71-43-2	
Ethylbenzene	<0.39	ug/L	1.0	0.39	1		04/04/18 12:28	100-41-4	
Methyl-tert-butyl ether	<0.48	ug/L	1.0	0.48	1		04/04/18 12:28	1634-04-4	
Naphthalene	<0.42	ug/L	1.0	0.42	1		04/04/18 12:28	91-20-3	
Toluene	<0.39	ug/L	1.0	0.39	1		04/04/18 12:28	108-88-3	
1,2,4-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 12:28	95-63-6	
1,3,5-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 12:28	108-67-8	
Xylene (Total)	<1.2	ug/L	3.0	1.2	1		04/04/18 12:28	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	104	%	80-120		1		04/04/18 12:28	98-08-8	

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ANALYTICAL RESULTS

Project: WEBSTER PIG FARM
Pace Project No.: 40166862

Sample: P400	Lab ID: 40166862007	Collected: 03/29/18 00:00	Received: 04/03/18 10:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.40	ug/L	1.0	0.40	1		04/04/18 12:54	71-43-2	
Ethylbenzene	<0.39	ug/L	1.0	0.39	1		04/04/18 12:54	100-41-4	
Methyl-tert-butyl ether	<0.48	ug/L	1.0	0.48	1		04/04/18 12:54	1634-04-4	
Naphthalene	<0.42	ug/L	1.0	0.42	1		04/04/18 12:54	91-20-3	
Toluene	<0.39	ug/L	1.0	0.39	1		04/04/18 12:54	108-88-3	
1,2,4-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 12:54	95-63-6	
1,3,5-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 12:54	108-67-8	
Xylene (Total)	<1.2	ug/L	3.0	1.2	1		04/04/18 12:54	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	105	%	80-120		1		04/04/18 12:54	98-08-8	
<hr/>									
Sample: M400	Lab ID: 40166862008	Collected: 03/29/18 00:00	Received: 04/03/18 10:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.40	ug/L	1.0	0.40	1		04/04/18 13:19	71-43-2	
Ethylbenzene	<0.39	ug/L	1.0	0.39	1		04/04/18 13:19	100-41-4	
Methyl-tert-butyl ether	<0.48	ug/L	1.0	0.48	1		04/04/18 13:19	1634-04-4	
Naphthalene	<0.42	ug/L	1.0	0.42	1		04/04/18 13:19	91-20-3	
Toluene	<0.39	ug/L	1.0	0.39	1		04/04/18 13:19	108-88-3	
1,2,4-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 13:19	95-63-6	
1,3,5-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 13:19	108-67-8	
Xylene (Total)	<1.2	ug/L	3.0	1.2	1		04/04/18 13:19	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	104	%	80-120		1		04/04/18 13:19	98-08-8	
<hr/>									
Sample: P600	Lab ID: 40166862009	Collected: 03/29/18 00:00	Received: 04/03/18 10:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	434	ug/L	5.0	2.0	5		04/04/18 16:19	71-43-2	
Ethylbenzene	97.2	ug/L	5.0	2.0	5		04/04/18 16:19	100-41-4	
Methyl-tert-butyl ether	<2.4	ug/L	5.0	2.4	5		04/04/18 16:19	1634-04-4	
Naphthalene	223	ug/L	5.0	2.1	5		04/04/18 16:19	91-20-3	
Toluene	146	ug/L	5.0	1.9	5		04/04/18 16:19	108-88-3	
1,2,4-Trimethylbenzene	30.5	ug/L	5.0	2.1	5		04/04/18 16:19	95-63-6	
1,3,5-Trimethylbenzene	118	ug/L	5.0	2.1	5		04/04/18 16:19	108-67-8	
Xylene (Total)	167	ug/L	15.0	6.2	5		04/04/18 16:19	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	109	%	80-120		5		04/04/18 16:19	98-08-8	

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ANALYTICAL RESULTS

Project: WEBSTER PIG FARM
Pace Project No.: 40166862

Sample: M600	Lab ID: 40166862010	Collected: 03/29/18 00:00	Received: 04/03/18 10:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	74.1	ug/L	5.0	2.0	5		04/04/18 16:45	71-43-2	
Ethylbenzene	584	ug/L	5.0	2.0	5		04/04/18 16:45	100-41-4	
Methyl-tert-butyl ether	12.8	ug/L	5.0	2.4	5		04/04/18 16:45	1634-04-4	
Naphthalene	315	ug/L	5.0	2.1	5		04/04/18 16:45	91-20-3	
Toluene	180	ug/L	5.0	1.9	5		04/04/18 16:45	108-88-3	
1,2,4-Trimethylbenzene	318	ug/L	5.0	2.1	5		04/04/18 16:45	95-63-6	
1,3,5-Trimethylbenzene	158	ug/L	5.0	2.1	5		04/04/18 16:45	108-67-8	
Xylene (Total)	891	ug/L	15.0	6.2	5		04/04/18 16:45	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	117	%	80-120		5		04/04/18 16:45	98-08-8	
<hr/>									
Sample: P900	Lab ID: 40166862011	Collected: 03/29/18 00:00	Received: 04/03/18 10:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.40	ug/L	1.0	0.40	1		04/04/18 13:45	71-43-2	
Ethylbenzene	<0.39	ug/L	1.0	0.39	1		04/04/18 13:45	100-41-4	
Methyl-tert-butyl ether	<0.48	ug/L	1.0	0.48	1		04/04/18 13:45	1634-04-4	
Naphthalene	<0.42	ug/L	1.0	0.42	1		04/04/18 13:45	91-20-3	
Toluene	<0.39	ug/L	1.0	0.39	1		04/04/18 13:45	108-88-3	
1,2,4-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 13:45	95-63-6	
1,3,5-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 13:45	108-67-8	
Xylene (Total)	<1.2	ug/L	3.0	1.2	1		04/04/18 13:45	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	104	%	80-120		1		04/04/18 13:45	98-08-8	
<hr/>									
Sample: M900	Lab ID: 40166862012	Collected: 03/29/18 00:00	Received: 04/03/18 10:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.40	ug/L	1.0	0.40	1		04/04/18 14:11	71-43-2	
Ethylbenzene	<0.39	ug/L	1.0	0.39	1		04/04/18 14:11	100-41-4	
Methyl-tert-butyl ether	<0.48	ug/L	1.0	0.48	1		04/04/18 14:11	1634-04-4	
Naphthalene	<0.42	ug/L	1.0	0.42	1		04/04/18 14:11	91-20-3	
Toluene	<0.39	ug/L	1.0	0.39	1		04/04/18 14:11	108-88-3	
1,2,4-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 14:11	95-63-6	
1,3,5-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 14:11	108-67-8	
Xylene (Total)	<1.2	ug/L	3.0	1.2	1		04/04/18 14:11	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	105	%	80-120		1		04/04/18 14:11	98-08-8	

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ANALYTICAL RESULTS

Project: WEBSTER PIG FARM
Pace Project No.: 40166862

Sample: HOUSE	Lab ID: 40166862013	Collected: 03/29/18 00:00	Received: 04/03/18 10:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.40	ug/L	1.0	0.40	1		04/04/18 17:36	71-43-2	
Ethylbenzene	<0.39	ug/L	1.0	0.39	1		04/04/18 17:36	100-41-4	
Methyl-tert-butyl ether	<0.48	ug/L	1.0	0.48	1		04/04/18 17:36	1634-04-4	
Naphthalene	<0.42	ug/L	1.0	0.42	1		04/04/18 17:36	91-20-3	
Toluene	<0.39	ug/L	1.0	0.39	1		04/04/18 17:36	108-88-3	
1,2,4-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 17:36	95-63-6	
1,3,5-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 17:36	108-67-8	
Xylene (Total)	<1.2	ug/L	3.0	1.2	1		04/04/18 17:36	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	104	%	80-120		1		04/04/18 17:36	98-08-8	HS
<hr/>									
Sample: TRIP BLANK	Lab ID: 40166862014	Collected: 03/29/18 00:00	Received: 04/03/18 10:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.40	ug/L	1.0	0.40	1		04/04/18 14:36	71-43-2	
Ethylbenzene	<0.39	ug/L	1.0	0.39	1		04/04/18 14:36	100-41-4	
Methyl-tert-butyl ether	<0.48	ug/L	1.0	0.48	1		04/04/18 14:36	1634-04-4	
Naphthalene	<0.42	ug/L	1.0	0.42	1		04/04/18 14:36	91-20-3	
Toluene	<0.39	ug/L	1.0	0.39	1		04/04/18 14:36	108-88-3	
1,2,4-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 14:36	95-63-6	
1,3,5-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/04/18 14:36	108-67-8	
Xylene (Total)	<1.2	ug/L	3.0	1.2	1		04/04/18 14:36	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	104	%	80-120		1		04/04/18 14:36	98-08-8	

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Project: WEBSTER PIG FARM

Pace Project No.: 40166862

QC Batch: 285078 Analysis Method: WI MOD GRO

QC Batch Method: WI MOD GRO Analysis Description: WIGRO GCV Water

Associated Lab Samples: 40166862001, 40166862002, 40166862003, 40166862004, 40166862005, 40166862006, 40166862007,
40166862008, 40166862009, 40166862010, 40166862011, 40166862012, 40166862013, 40166862014

METHOD BLANK: 1668410 Matrix: Water

Associated Lab Samples: 40166862001, 40166862002, 40166862003, 40166862004, 40166862005, 40166862006, 40166862007,
40166862008, 40166862009, 40166862010, 40166862011, 40166862012, 40166862013, 40166862014

Parameter	Units	Blank		Reporting		Qualifiers
		Result	Limit	Analyzed		
1,2,4-Trimethylbenzene	ug/L	<0.42	1.0	04/04/18 09:02		
1,3,5-Trimethylbenzene	ug/L	<0.42	1.0	04/04/18 09:02		
Benzene	ug/L	<0.40	1.0	04/04/18 09:02		
Ethylbenzene	ug/L	<0.39	1.0	04/04/18 09:02		
Methyl-tert-butyl ether	ug/L	<0.48	1.0	04/04/18 09:02		
Naphthalene	ug/L	<0.42	1.0	04/04/18 09:02		
Toluene	ug/L	<0.39	1.0	04/04/18 09:02		
Xylene (Total)	ug/L	<1.2	3.0	04/04/18 09:02		
a,a,a-Trifluorotoluene (S)	%	105	80-120	04/04/18 09:02		

LABORATORY CONTROL SAMPLE & LCSD: 1668411

1668412

Parameter	Units	Spike	LCS	LCS	LCS	% Rec	RPD	Max RPD	Qualifiers
		Conc.	Result	Result	% Rec	% Rec			
1,2,4-Trimethylbenzene	ug/L	20	20.3	20.6	102	103	80-120	1	20
1,3,5-Trimethylbenzene	ug/L	20	19.7	20.0	99	100	80-120	1	20
Benzene	ug/L	20	19.6	19.7	98	99	80-120	0	20
Ethylbenzene	ug/L	20	20.2	20.2	101	101	80-120	0	20
Methyl-tert-butyl ether	ug/L	20	20.2	19.6	101	98	80-120	3	20
Naphthalene	ug/L	20	21.3	20.9	107	105	80-120	2	20
Toluene	ug/L	20	19.9	20.1	100	101	80-120	1	20
Xylene (Total)	ug/L	60	59.5	60.3	99	100	80-120	1	20
a,a,a-Trifluorotoluene (S)	%				104	105	80-120		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1668587

1668588

Parameter	Units	MS		MSD		MS		MSD		% Rec	RPD	Max RPD	Qual
		40166862002	Spk Conc.	Spk Conc.	MS Result	MSD Result	% Rec	% Rec	MSD % Rec	% Rec Limits			
1,2,4-Trimethylbenzene	ug/L	<0.42	20	20	16.3	20.0	81	100	11-200	21	20	R1	
1,3,5-Trimethylbenzene	ug/L	<0.42	20	20	14.2	18.5	71	93	54-142	26	20	R1	
Benzene	ug/L	<0.40	20	20	22.4	22.7	112	114	66-140	1	20		
Ethylbenzene	ug/L	<0.39	20	20	21.9	22.9	110	114	66-143	4	20		
Methyl-tert-butyl ether	ug/L	<0.48	20	20	21.4	22.3	107	112	70-129	4	20		
Naphthalene	ug/L	<0.42	20	20	22.1	23.1	111	116	64-129	4	20		
Toluene	ug/L	<0.39	20	20	21.9	22.7	109	114	76-130	4	20		
Xylene (Total)	ug/L	<1.2	60	60	58.2	64.0	97	107	60-140	10	20		
a,a,a-Trifluorotoluene (S)	%						103	104	80-120				

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

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: WEBSTER PIG FARM
Pace Project No.: 40166862

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

HS Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).

R1 RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WEBSTER PIG FARM
Pace Project No.: 40166862

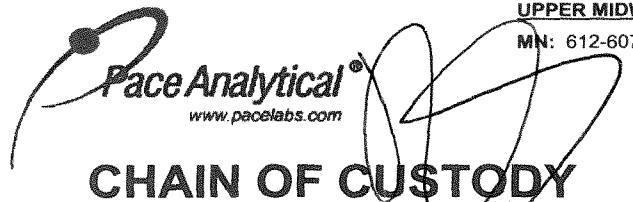
Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40166862001	P100	WI MOD GRO	285078		
40166862002	M500	WI MOD GRO	285078		
40166862003	P200	WI MOD GRO	285078		
40166862004	M200	WI MOD GRO	285078		
40166862005	P300	WI MOD GRO	285078		
40166862006	M300	WI MOD GRO	285078		
40166862007	P400	WI MOD GRO	285078		
40166862008	M400	WI MOD GRO	285078		
40166862009	P600	WI MOD GRO	285078		
40166862010	M600	WI MOD GRO	285078		
40166862011	P900	WI MOD GRO	285078		
40166862012	M900	WI MOD GRO	285078		
40166862013	HOUSE	WI MOD GRO	285078		
40166862014	TRIP BLANK	WI MOD GRO	285078		

REPORT OF LABORATORY ANALYSIS

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(Please Print Clearly)

(Please Print Clearly)	
Company Name:	Meridian Fm Co Ltd
Branch/Location:	
Project Contact:	Ken Shimko
Phone:	715-832-6608
Project Number:	
Project Name:	Wester Pig Farm
Project State:	WI
Sampled By (Print):	Ken Shimko
Sampled By (Sign):	
PO #:	
	Regulatory Program:



UPPER MIDWEST REGION

MN: 612-607-1700 WI: 920-469-2436

Page 1 of

40166862

Page 14 of 16

*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				

Released By: <i>977</i>	Date/Time: 4/2/18	Received By: <i>FBI Lab</i>	Date/Time: 4/2/18	PACE Project No. 40166862
Released By: <i>FBI Lab</i>	Date/Time: 4/3/18 1030	Received By: <i>John Pace</i>	Date/Time: 4/3/18 1030	Receipt Temp = <i>70.2</i> °C
Released By:	Date/Time:	Received By:	Date/Time:	Sample Receipt pH <i>OK / Adjusted</i>
Released By:	Date/Time:	Received By:	Date/Time:	Cooler Custody Seal <i>Present / Not Present</i>
Released By:	Date/Time:	Received By:	Date/Time:	Intact / Non-Intact <i>Intact</i>

Version 6.0 06/14/06

C019a(27Jun2006) 04 Trip Blanks

Client Name: Meridian

Sample Preservation Receipt Form

Project # 9066862

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

Lab Lot# of pH paper: 8

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

Initial when completed:

Date/
Time:

Pace Lab #	Glass						Plastic						Vials						Jars			General			VOA Vials (>6mm)*	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN						
001																3												2.5 / 5 / 10			
002																3												2.5 / 5 / 10			
003																3												2.5 / 5 / 10			
004																3												2.5 / 5 / 10			
005																3												2.5 / 5 / 10			
006																3												2.5 / 5 / 10			
007																3												2.5 / 5 / 10			
008																3												2.5 / 5 / 10			
009																3												2.5 / 5 / 10			
010																3												2.5 / 5 / 10			
011																3												2.5 / 5 / 10			
012																3												2.5 / 5 / 10			
013																3												2.5 / 5 / 10			
014																2												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:	

Page 1 of 2

Sample Condition Upon Receipt Form (SCUR)

Project #

Client Name: Meridian

WO# : 40166862

Courier: CS Logistics Fed Ex Speedee UPS Waltco

Client Pace Other:

Tracking #: 7803 3844 7361 7803 3844 7362



40166862

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 - N/A Type of Ice: Wet Blue Dry None Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 40.5 /Corr:

Temp Blank Present: yes no

Biological Tissue is Frozen: yes no

Person examining contents:

Date: 4/3/18

Initials: SJM

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. <u>No collect times</u> <u>①</u> <u>SSM 4/3/18</u>
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3. <u>No time</u> <u>SSM 4/3/18</u>
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: - VOA Samples frozen upon receipt	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5. Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A MS/MSD <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used: -Pace Containers Used: -Pace IR Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <u>W</u>	12. <u>No collect dates</u> <u>4/3/18</u>
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):	<u>394</u>	

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

Person Contacted:

Date/Time:

Comments/ Resolution:

① 014- TRIP Blanks - added to COC per P.M.
4/3/18

Project Manager Review:

Date: 4-2-18

June 28, 2018

Kenneth Shimko
Meridian Environmental Consulting, LLC
2711 North Elco Rd
Fall Creek, WI 54742

RE: Project: WEBSTER
Pace Project No.: 40171432

Dear Kenneth Shimko:

Enclosed are the analytical results for sample(s) received by the laboratory on June 26, 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



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: WEBSTER
Pace Project No.: 40171432

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

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SAMPLE SUMMARY

Project: WEBSTER
 Pace Project No.: 40171432

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40171432001	P-100	Water	06/22/18 00:00	06/26/18 09:30
40171432002	MW-200	Water	06/22/18 00:00	06/26/18 09:30
40171432003	P-200	Water	06/22/18 00:00	06/26/18 09:30
40171432004	MW-300	Water	06/22/18 00:00	06/26/18 09:30
40171432005	P-300	Water	06/22/18 00:00	06/26/18 09:30
40171432006	MW-400	Water	06/22/18 00:00	06/26/18 09:30
40171432007	P-400	Water	06/22/18 00:00	06/26/18 09:30
40171432008	MW-500	Water	06/22/18 00:00	06/26/18 09:30
40171432009	MW-600	Water	06/22/18 00:00	06/26/18 09:30
40171432010	P-600	Water	06/22/18 00:00	06/26/18 09:30
40171432011	MW-900	Water	06/22/18 00:00	06/26/18 09:30
40171432012	P-900	Water	06/22/18 00:00	06/26/18 09:30
40171432013	HOUSE	Water	06/22/18 00:00	06/26/18 09:30
40171432014	TB	Water	06/22/18 00:00	06/26/18 09:30

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WEBSTER
Pace Project No.: 40171432

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40171432001	P-100	WI MOD GRO	ALD	9	PASI-G
40171432002	MW-200	WI MOD GRO	ALD	9	PASI-G
40171432003	P-200	WI MOD GRO	ALD	9	PASI-G
40171432004	MW-300	WI MOD GRO	ALD	9	PASI-G
40171432005	P-300	WI MOD GRO	ALD	9	PASI-G
40171432006	MW-400	WI MOD GRO	ALD	9	PASI-G
40171432007	P-400	WI MOD GRO	ALD	9	PASI-G
40171432008	MW-500	WI MOD GRO	ALD	9	PASI-G
40171432009	MW-600	WI MOD GRO	ALD	9	PASI-G
40171432010	P-600	WI MOD GRO	ALD	9	PASI-G
40171432011	MW-900	WI MOD GRO	ALD	9	PASI-G
40171432012	P-900	WI MOD GRO	ALD	9	PASI-G
40171432013	HOUSE	WI MOD GRO	ALD	9	PASI-G
40171432014	TB	WI MOD GRO	ALD	9	PASI-G

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: WEBSTER
Pace Project No.: 40171432

Method: WI MOD GRO
Description: WIGRO GCV
Client: Meridian Environmental Consulting, LLC
Date: June 28, 2018

General Information:

14 samples were analyzed for WI MOD GRO. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WEBSTER
Pace Project No.: 40171432

Sample: P-100	Lab ID: 40171432001	Collected: 06/22/18 00:00	Received: 06/26/18 09:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	2680	ug/L	25.5	7.6	25		06/27/18 15:53	71-43-2	
Ethylbenzene	<8.2	ug/L	27.5	8.2	25		06/27/18 15:53	100-41-4	
Methyl-tert-butyl ether	<8.0	ug/L	26.8	8.0	25		06/27/18 15:53	1634-04-4	
Naphthalene	44.9	ug/L	42.0	12.6	25		06/27/18 15:53	91-20-3	
Toluene	46.0	ug/L	40.8	12.2	25		06/27/18 15:53	108-88-3	
1,2,4-Trimethylbenzene	<8.6	ug/L	28.5	8.6	25		06/27/18 15:53	95-63-6	
1,3,5-Trimethylbenzene	<8.2	ug/L	27.2	8.2	25		06/27/18 15:53	108-67-8	
Xylene (Total)	26.3J	ug/L	80.8	24.2	25		06/27/18 15:53	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	98	%	80-120		25		06/27/18 15:53	98-08-8	
Sample: MW-200	Lab ID: 40171432002	Collected: 06/22/18 00:00	Received: 06/26/18 09:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		06/27/18 12:27	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 12:27	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/27/18 12:27	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/27/18 12:27	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/27/18 12:27	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/27/18 12:27	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 12:27	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		06/27/18 12:27	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		06/27/18 12:27	98-08-8	
Sample: P-200	Lab ID: 40171432003	Collected: 06/22/18 00:00	Received: 06/26/18 09:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		06/27/18 12:53	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 12:53	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/27/18 12:53	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/27/18 12:53	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/27/18 12:53	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/27/18 12:53	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 12:53	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		06/27/18 12:53	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		06/27/18 12:53	98-08-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WEBSTER
Pace Project No.: 40171432

Sample: MW-300	Lab ID: 40171432004	Collected: 06/22/18 00:00	Received: 06/26/18 09:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		06/27/18 13:19	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 13:19	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/27/18 13:19	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/27/18 13:19	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/27/18 13:19	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/27/18 13:19	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 13:19	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		06/27/18 13:19	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		06/27/18 13:19	98-08-8	
<hr/>									
Sample: P-300	Lab ID: 40171432005	Collected: 06/22/18 00:00	Received: 06/26/18 09:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		06/27/18 13:45	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 13:45	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/27/18 13:45	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/27/18 13:45	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/27/18 13:45	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/27/18 13:45	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 13:45	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		06/27/18 13:45	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1		06/27/18 13:45	98-08-8	
<hr/>									
Sample: MW-400	Lab ID: 40171432006	Collected: 06/22/18 00:00	Received: 06/26/18 09:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		06/27/18 14:10	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 14:10	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/27/18 14:10	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/27/18 14:10	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/27/18 14:10	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/27/18 14:10	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 14:10	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		06/27/18 14:10	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		06/27/18 14:10	98-08-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WEBSTER
Pace Project No.: 40171432

Sample: P-400	Lab ID: 40171432007	Collected: 06/22/18 00:00	Received: 06/26/18 09:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	3.0	ug/L	1.0	0.31	1		06/27/18 18:03	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 18:03	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/27/18 18:03	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/27/18 18:03	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/27/18 18:03	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/27/18 18:03	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 18:03	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		06/27/18 18:03	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	98	%	80-120		1		06/27/18 18:03	98-08-8	
<hr/>									
Sample: MW-500	Lab ID: 40171432008	Collected: 06/22/18 00:00	Received: 06/26/18 09:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		06/27/18 18:28	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 18:28	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/27/18 18:28	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/27/18 18:28	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/27/18 18:28	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/27/18 18:28	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 18:28	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		06/27/18 18:28	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1		06/27/18 18:28	98-08-8	
<hr/>									
Sample: MW-600	Lab ID: 40171432009	Collected: 06/22/18 00:00	Received: 06/26/18 09:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	27.5	ug/L	5.1	1.5	5		06/27/18 16:45	71-43-2	
Ethylbenzene	351	ug/L	5.5	1.6	5		06/27/18 16:45	100-41-4	
Methyl-tert-butyl ether	7.1	ug/L	5.4	1.6	5		06/27/18 16:45	1634-04-4	
Naphthalene	247	ug/L	8.4	2.5	5		06/27/18 16:45	91-20-3	
Toluene	151	ug/L	8.2	2.4	5		06/27/18 16:45	108-88-3	
1,2,4-Trimethylbenzene	213	ug/L	5.7	1.7	5		06/27/18 16:45	95-63-6	
1,3,5-Trimethylbenzene	133	ug/L	5.4	1.6	5		06/27/18 16:45	108-67-8	
Xylene (Total)	676	ug/L	16.2	4.8	5		06/27/18 16:45	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	107	%	80-120		5		06/27/18 16:45	98-08-8	

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ANALYTICAL RESULTS

Project: WEBSTER
Pace Project No.: 40171432

Sample: P-600 Lab ID: 40171432010 Collected: 06/22/18 00:00 Received: 06/26/18 09:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	349	ug/L	4.1	1.2	4		06/28/18 10:02	71-43-2	
Ethylbenzene	102	ug/L	4.4	1.3	4		06/28/18 10:02	100-41-4	
Methyl-tert-butyl ether	<1.3	ug/L	4.3	1.3	4		06/28/18 10:02	1634-04-4	
Naphthalene	161	ug/L	6.7	2.0	4		06/28/18 10:02	91-20-3	
Toluene	116	ug/L	6.5	2.0	4		06/28/18 10:02	108-88-3	
1,2,4-Trimethylbenzene	48.1	ug/L	4.6	1.4	4		06/28/18 10:02	95-63-6	
1,3,5-Trimethylbenzene	119	ug/L	4.4	1.3	4		06/28/18 10:02	108-67-8	
Xylene (Total)	194	ug/L	12.9	3.9	4		06/28/18 10:02	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	103	%	80-120		4		06/28/18 10:02	98-08-8	

Sample: MW-900 Lab ID: 40171432011 Collected: 06/22/18 00:00 Received: 06/26/18 09:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		06/27/18 18:54	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 18:54	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/27/18 18:54	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/27/18 18:54	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/27/18 18:54	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/27/18 18:54	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 18:54	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		06/27/18 18:54	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		06/27/18 18:54	98-08-8	

Sample: P-900 Lab ID: 40171432012 Collected: 06/22/18 00:00 Received: 06/26/18 09:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		06/27/18 19:20	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 19:20	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/27/18 19:20	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/27/18 19:20	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/27/18 19:20	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/27/18 19:20	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 19:20	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		06/27/18 19:20	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		06/27/18 19:20	98-08-8	

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ANALYTICAL RESULTS

Project: WEBSTER
Pace Project No.: 40171432

Sample: HOUSE	Lab ID: 40171432013	Collected: 06/22/18 00:00	Received: 06/26/18 09:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		06/27/18 19:46	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 19:46	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/27/18 19:46	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/27/18 19:46	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/27/18 19:46	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/27/18 19:46	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 19:46	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		06/27/18 19:46	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1		06/27/18 19:46	98-08-8	
<hr/>									
Sample: TB	Lab ID: 40171432014	Collected: 06/22/18 00:00	Received: 06/26/18 09:30	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		06/27/18 14:36	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 14:36	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		06/27/18 14:36	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		06/27/18 14:36	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		06/27/18 14:36	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		06/27/18 14:36	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		06/27/18 14:36	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		06/27/18 14:36	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		06/27/18 14:36	98-08-8	

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Project: WEBSTER

Pace Project No.: 40171432

QC Batch:	292965	Analysis Method:	WI MOD GRO
QC Batch Method:	WI MOD GRO	Analysis Description:	WIGRO GCV Water
Associated Lab Samples:	40171432001, 40171432002, 40171432003, 40171432004, 40171432005, 40171432006, 40171432007, 40171432008, 40171432009, 40171432010, 40171432011, 40171432012, 40171432013, 40171432014		

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
1,2,4-Trimethylbenzene	ug/L	<0.34	1.1	06/27/18 09:00	
1,3,5-Trimethylbenzene	ug/L	<0.33	1.1	06/27/18 09:00	
Benzene	ug/L	<0.31	1.0	06/27/18 09:00	
Ethylbenzene	ug/L	<0.33	1.1	06/27/18 09:00	
Methyl-tert-butyl ether	ug/L	<0.32	1.1	06/27/18 09:00	
Naphthalene	ug/L	<0.51	1.7	06/27/18 09:00	
Toluene	ug/L	<0.49	1.6	06/27/18 09:00	
Xylene (Total)	ug/L	<0.97	3.2	06/27/18 09:00	
a,a,a-Trifluorotoluene (S)	%	99	80-120	06/27/18 09:00	

Parameter	Units	1713031						Max RPD	Qualifiers
		Spike Conc.	LCS Result	LCSD % Rec	LCS % Rec	LCSD % Rec	% Rec Limits		
1,2,4-Trimethylbenzene	ug/L	20	20.5	20.1	103	100	80-120	2	20
1,3,5-Trimethylbenzene	ug/L	20	19.9	19.8	99	99	80-120	1	20
Benzene	ug/L	20	19.7	19.6	98	98	80-120	1	20
Ethylbenzene	ug/L	20	20.2	20.1	101	100	80-120	1	20
Methyl-tert-butyl ether	ug/L	20	20.4	19.9	102	100	80-120	2	20
Naphthalene	ug/L	20	20.5	20.6	102	103	80-120	1	20
Toluene	ug/L	20	20.0	19.7	100	99	80-120	2	20
Xylene (Total)	ug/L	60	59.8	59.1	100	98	80-120	1	20
a,a,a-Trifluorotoluene (S)	%				100	99	80-120		

Parameter	Units	1713273						Max RPD	Qual
		40171383009 Result	MS Spike Conc.	MS Spike Conc.	MS Result	MS Result	MS % Rec		
1,2,4-Trimethylbenzene	ug/L	<0.34	20	20	21.5	21.4	108	107	51-160
1,3,5-Trimethylbenzene	ug/L	<0.33	20	20	20.9	20.8	105	104	56-146
Benzene	ug/L	<0.31	20	20	20.5	20.6	103	103	71-137
Ethylbenzene	ug/L	<0.33	20	20	21.5	21.6	107	108	71-141
Methyl-tert-butyl ether	ug/L	<0.32	20	20	19.8	20.4	99	102	80-120
Naphthalene	ug/L	<0.51	20	20	20.6	22.0	103	110	67-138
Toluene	ug/L	<0.49	20	20	20.9	21.1	105	106	76-134
Xylene (Total)	ug/L	<0.97	60	60	63.2	63.2	105	105	69-138
a,a,a-Trifluorotoluene (S)	%					99	99	80-120	

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

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QUALIFIERS

Project: WEBSTER
Pace Project No.: 40171432

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WEBSTER
Pace Project No.: 40171432

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40171432001	P-100	WI MOD GRO	292965		
40171432002	MW-200	WI MOD GRO	292965		
40171432003	P-200	WI MOD GRO	292965		
40171432004	MW-300	WI MOD GRO	292965		
40171432005	P-300	WI MOD GRO	292965		
40171432006	MW-400	WI MOD GRO	292965		
40171432007	P-400	WI MOD GRO	292965		
40171432008	MW-500	WI MOD GRO	292965		
40171432009	MW-600	WI MOD GRO	292965		
40171432010	P-600	WI MOD GRO	292965		
40171432011	MW-900	WI MOD GRO	292965		
40171432012	P-900	WI MOD GRO	292965		
40171432013	HOUSE	WI MOD GRO	292965		
40171432014	TB	WI MOD GRO	292965		

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(Please Print Clearly)

Company Name:	Meridian EnvCtry	
Branch/Location:		
Project Contact:	Ken Shimko	
Phone:	715-832-6608	
Project Number:		
Project Name:	Webster	
Project State:	WI	
Sampled By (Print):	Ken Shimko	
Sampled By (Sign):		
PO #:		Regulatory Program:

Data Package Options**MS/MSD****Matrix Codes**

(billable)

 EPA Level III On your sample

A = Air W = Water

 EPA Level IV (billable)

B = Biota DW = Drinking Water

 NOT needed on

C = Charcoal GW = Ground Water

your sample

O = Oil SW = Surface Water

S = Soil WW = Waste Water

Sl = Sludge WP = Wipe

COLLECTION

MATRIX

DATE

TIME

PACE LAB #	CLIENT FIELD ID	Analyses Requested						CLIENT COMMENTS (Lab Use Only)	LAB COMMENTS (Lab Use Only)	Profile #
		X	Pesticides	PCPs	PCPs	PCPs	PCPs			
001	P-100	6/22	BW	X						
002	MW-200			X						
003	P-200			X						
004	MW-300			X						
005	P-300			X						
006	MW-400			X						
007	P-400			X						
008	MW-500			X						
009	MW-600			X						
010	P-600			X						
011	MW-900			X						
012	P-900			X						
013	HOUSE			X						

Rush Turnaround Time Requested - Prelims

(Rush TAT subject to approval/surcharge)

Date Needed:

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

Email #1:

Email #2:

Telephone:

Fax:

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

Relinquished By:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Received By:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

PACE Project No.

40171432

Receipt Temp = K01 °C

Sample Receipt pH

OK / Adjusted

Cooler Custody Seal

Present / Not Present

Intact / Not Intact



UPPER MIDWEST REGION

MN: 612-607-1700 WI: 920-469-2436

SSM

40171432

Page 1 of

(Please Print Clearly)

Company Name:		
Branch/Location:		
Project Contact:		
Phone:		
Project Number:		
Project Name:		
Project State:		
Sampled By (Print):		
Sampled By (Sign):		
PO #:		Regulatory Program:



UPPER MIDWEST REGION

MN: 612-607-1700 WI: 920-469-2436

Page 1 of

4017432

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				

Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge)	Relinquished By:	Date/Time:	Received By:	Date/Time:	PACE Project No.
Date Needed:					40171432
Transmit Prelim Rush Results by (complete what you want):	Relinquished By: FedEx	Date/Time: 12/16/18 0930	Received By: Robert Paul	Date/Time: 12/16/18 0930	Receipt Temp = K01 °C
II #1:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Sample Receipt pH
II #2:					OK / Adjusted
Phone:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Cooler Custody Seal
					Present / Not Present
Samples on HOLD are subject to special pricing and release of liability	Relinquished By:	Date/Time:	Received By:	Date/Time:	Intact / Not Intact

C019a(27Jun2006)

① lab added to α 1/26/18T

Pace Container Order #373046

40171932

Addresses

Order By :

Company Meridian Environmental Consulting,
 Contact Shimko, Kenneth
 Email kshimko.meridianenv@gmail.com
 Address 2711 North Elco Rd
 Address 2 _____
 City Fall Creek
 State WI Zip 54742
 Phone 715-579-0723

Ship To :

Company Meridian Environmental Consulting,
 Contact Shimko, Kenneth
 Email kshimko.meridianenv@gmail.com
 Address 2711 North Elco Rd
 Address 2 _____
 City Fall Creek
 State WI Zip 54742
 Phone 715-579-0723

Return To:

Company Pace Analytical Green Bay
 Contact Basten, Brian
 Email brian.basten@pacelabs.com
 Address 1241 Bellevue Street
 Address 2 Suite 9
 City Green Bay
 State WI Zip 54302
 Phone (920)469-2436

Info

Project Name Webster

Due Date 06/12/2018

Profile _____

Quote _____

Project Manager Basten, Brian

Return _____

Carrier Most Economical

Location WI

Trip Blanks

Include Trip Blanks

Bottle Labels

Blank
 Pre-Printed No Sample IDs
 Pre-Printed With Sample IDs

Bottles

Boxed Cases
 Individually Wrapped
 Grouped By Sample

Return Shipping Labels

No Shipper Number
 With Shipper Number

Misc

Sampling Instructions
 Custody Seal
 Temp. Blanks
 Coolers _____
 Syringes _____

Extra Bubble Wrap
 Short Hold/Rush Stickers
 DI Water Liter(s)
 USDA Regulated Soils

COC Options

Number of Blanks 2
 Pre-Printed

# of Samples	Matrix	Test	Container	Total	# of QC	Lot #	Notes
15	WT	PVOC + Nap	3-40mL glass vial w/ HCl	51	0	B-8-120-01VB	
1	WT	Trip BLANK	2-40mL HCL w/custody seal	2	0	B-8-034-01VB	

Hazard Shipping Placard In Place : NA

*Sample receiving hours are Monday through Friday 8:00 am to 6:00 pm and Saturday from 9:00 am to 12:00 pm unless special arrangements are made with your project manager.

*Pace Analytical reserves the right to return hazardous, toxic, or radioactive samples to you.

*Pace Analytical reserves the right to charge for unused bottles, as well as cost associated with sample storage and disposal.

*Payment term are net 30 days.

*Please include the proposal number on the chain of custody to insure proper billing.

Sample Notes

Ship Date :

Prepared By:

Verified By:

Sample Preservation Receipt Form

Project # 40171432

Client Name: mendian

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

Lab Lot# of pH paper:

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

Initial when completed:

Date/
Time:

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

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

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

Page 1 of 2

Sample Condition Upon Receipt Form (SCUR)

Project #:

Client Name: mendian

WO# : 40171432

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



40171432

Tracking #: 7815107482100

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: KO

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: 10/26/18
Initials: JL

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1. <i>original + copy</i>	<i>10/26/18</i>
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. <i>no invoice info, page #,</i>	<i>10/26/18 n</i>
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3. <i>no collect times</i>	
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.	
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:	
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.	
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.	
Sufficient Volume:		8.	
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A			
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.	
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.	
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <i>no 'W' in ID for 002, 004, 006, 008, 009, 011; no collect dates</i>	<i>10/26/18 n</i>
-Includes date/time/ID/Analysis Matrix:	<i>W</i>		
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	13. <i>1 tab added to COC, received in shipment - added second page of chain</i>	
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Pace Trip Blank Lot # (if purchased):	402		

Client Notification/ Resolution:

If checked, see attached form for additional comments

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: *10/26/18*

October 02, 2018

Kenneth Shimko
Meridian Environmental Consulting, LLC
2711 North Elco Rd
Fall Creek, WI 54742

RE: Project: WEBSTER
Pace Project No.: 40176708

Dear Kenneth Shimko:

Enclosed are the analytical results for sample(s) received by the laboratory on September 28, 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



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: WEBSTER
Pace Project No.: 40176708

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

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SAMPLE SUMMARY

Project: WEBSTER
Pace Project No.: 40176708

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40176708001	P100	Water	09/26/18 00:00	09/28/18 10:00
40176708002	M200	Water	09/26/18 00:00	09/28/18 10:00
40176708003	P200	Water	09/26/18 00:00	09/28/18 10:00
40176708004	M300	Water	09/26/18 00:00	09/28/18 10:00
40176708005	P300	Water	09/26/18 00:00	09/28/18 10:00
40176708006	M400	Water	09/26/18 00:00	09/28/18 10:00
40176708007	P400	Water	09/26/18 00:00	09/28/18 10:00
40176708008	M500	Water	09/26/18 00:00	09/28/18 10:00
40176708009	M600	Water	09/26/18 00:00	09/28/18 10:00
40176708010	P600	Water	09/26/18 00:00	09/28/18 10:00
40176708011	M900	Water	09/26/18 00:00	09/28/18 10:00
40176708012	P900	Water	09/26/18 00:00	09/28/18 10:00
40176708013	HOUSE	Water	09/26/18 00:00	09/28/18 10:00
40176708014	TB	Water	09/26/18 00:00	09/28/18 10:00

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WEBSTER
Pace Project No.: 40176708

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40176708001	P100	WI MOD GRO	ALD	9	PASI-G
40176708002	M200	WI MOD GRO	ALD	9	PASI-G
40176708003	P200	WI MOD GRO	ALD	9	PASI-G
40176708004	M300	WI MOD GRO	ALD	9	PASI-G
40176708005	P300	WI MOD GRO	ALD	9	PASI-G
40176708006	M400	WI MOD GRO	ALD	9	PASI-G
40176708007	P400	WI MOD GRO	ALD	9	PASI-G
40176708008	M500	WI MOD GRO	ALD	9	PASI-G
40176708009	M600	WI MOD GRO	ALD	9	PASI-G
40176708010	P600	WI MOD GRO	ALD	9	PASI-G
40176708011	M900	WI MOD GRO	ALD	9	PASI-G
40176708012	P900	WI MOD GRO	ALD	9	PASI-G
40176708013	HOUSE	WI MOD GRO	ALD	9	PASI-G
40176708014	TB	WI MOD GRO	ALD	9	PASI-G

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: WEBSTER
Pace Project No.: 40176708

Method: WI MOD GRO
Description: WIGRO GCV
Client: Meridian Environmental Consulting, LLC
Date: October 02, 2018

General Information:

14 samples were analyzed for WI MOD GRO. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 301680

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

- M600 (Lab ID: 40176708009)
- a,a,a-Trifluorotoluene (S)

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WEBSTER
Pace Project No.: 40176708

Sample: P100	Lab ID: 40176708001	Collected: 09/26/18 00:00	Received: 09/28/18 10:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	3220	ug/L	51.0	15.3	50		10/01/18 17:11	71-43-2	
Ethylbenzene	<16.4	ug/L	55.0	16.4	50		10/01/18 17:11	100-41-4	
Methyl-tert-butyl ether	<16.0	ug/L	53.5	16.0	50		10/01/18 17:11	1634-04-4	
Naphthalene	73.9J	ug/L	84.0	25.3	50		10/01/18 17:11	91-20-3	
Toluene	72.1J	ug/L	81.5	24.4	50		10/01/18 17:11	108-88-3	
1,2,4-Trimethylbenzene	<17.1	ug/L	57.0	17.1	50		10/01/18 17:11	95-63-6	
1,3,5-Trimethylbenzene	<16.4	ug/L	54.5	16.4	50		10/01/18 17:11	108-67-8	
Xylene (Total)	51.0J	ug/L	162	48.5	50		10/01/18 17:11	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		50		10/01/18 17:11	98-08-8	
<hr/>									
Sample: M200	Lab ID: 40176708002	Collected: 09/26/18 00:00	Received: 09/28/18 10:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		10/01/18 11:38	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 11:38	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		10/01/18 11:38	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		10/01/18 11:38	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		10/01/18 11:38	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		10/01/18 11:38	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 11:38	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		10/01/18 11:38	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		10/01/18 11:38	98-08-8	
<hr/>									
Sample: P200	Lab ID: 40176708003	Collected: 09/26/18 00:00	Received: 09/28/18 10:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		10/01/18 12:03	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 12:03	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		10/01/18 12:03	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		10/01/18 12:03	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		10/01/18 12:03	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		10/01/18 12:03	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 12:03	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		10/01/18 12:03	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1		10/01/18 12:03	98-08-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WEBSTER
Pace Project No.: 40176708

Sample: M300	Lab ID: 40176708004	Collected: 09/26/18 00:00	Received: 09/28/18 10:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		10/01/18 12:29	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 12:29	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		10/01/18 12:29	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		10/01/18 12:29	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		10/01/18 12:29	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		10/01/18 12:29	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 12:29	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		10/01/18 12:29	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		10/01/18 12:29	98-08-8	
<hr/>									
Sample: P300	Lab ID: 40176708005	Collected: 09/26/18 00:00	Received: 09/28/18 10:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		10/01/18 12:55	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 12:55	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		10/01/18 12:55	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		10/01/18 12:55	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		10/01/18 12:55	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		10/01/18 12:55	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 12:55	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		10/01/18 12:55	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1		10/01/18 12:55	98-08-8	
<hr/>									
Sample: M400	Lab ID: 40176708006	Collected: 09/26/18 00:00	Received: 09/28/18 10:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		10/01/18 13:20	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 13:20	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		10/01/18 13:20	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		10/01/18 13:20	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		10/01/18 13:20	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		10/01/18 13:20	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 13:20	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		10/01/18 13:20	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		10/01/18 13:20	98-08-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WEBSTER
Pace Project No.: 40176708

Sample: P400	Lab ID: 40176708007	Collected: 09/26/18 00:00	Received: 09/28/18 10:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		10/01/18 13:46	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 13:46	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		10/01/18 13:46	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		10/01/18 13:46	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		10/01/18 13:46	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		10/01/18 13:46	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 13:46	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		10/01/18 13:46	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1		10/01/18 13:46	98-08-8	
<hr/>									
Sample: M500	Lab ID: 40176708008	Collected: 09/26/18 00:00	Received: 09/28/18 10:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		10/01/18 14:11	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 14:11	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		10/01/18 14:11	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		10/01/18 14:11	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		10/01/18 14:11	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		10/01/18 14:11	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 14:11	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		10/01/18 14:11	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		10/01/18 14:11	98-08-8	
<hr/>									
Sample: M600	Lab ID: 40176708009	Collected: 09/26/18 00:00	Received: 09/28/18 10:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	4.6J	ug/L	5.1	1.5	5		10/01/18 17:36	71-43-2	
Ethylbenzene	47.1	ug/L	5.5	1.6	5		10/01/18 17:36	100-41-4	
Methyl-tert-butyl ether	3.3J	ug/L	5.4	1.6	5		10/01/18 17:36	1634-04-4	
Naphthalene	83.2	ug/L	8.4	2.5	5		10/01/18 17:36	91-20-3	
Toluene	17.0	ug/L	8.2	2.4	5		10/01/18 17:36	108-88-3	
1,2,4-Trimethylbenzene	47.0	ug/L	5.7	1.7	5		10/01/18 17:36	95-63-6	
1,3,5-Trimethylbenzene	72.8	ug/L	5.4	1.6	5		10/01/18 17:36	108-67-8	
Xylene (Total)	188	ug/L	16.2	4.8	5		10/01/18 17:36	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	104	%	80-120		5		10/01/18 17:36	98-08-8	D3

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WEBSTER
Pace Project No.: 40176708

Sample: P600	Lab ID: 40176708010	Collected: 09/26/18 00:00	Received: 09/28/18 10:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	68.7	ug/L	1.0	0.31	1		10/02/18 09:01	71-43-2	
Ethylbenzene	25.4	ug/L	1.1	0.33	1		10/02/18 09:01	100-41-4	
Methyl-tert-butyl ether	1.9	ug/L	1.1	0.32	1		10/02/18 09:01	1634-04-4	
Naphthalene	51.4	ug/L	1.7	0.51	1		10/02/18 09:01	91-20-3	
Toluene	18.3	ug/L	1.6	0.49	1		10/02/18 09:01	108-88-3	
1,2,4-Trimethylbenzene	9.7	ug/L	1.1	0.34	1		10/02/18 09:01	95-63-6	
1,3,5-Trimethylbenzene	31.3	ug/L	1.1	0.33	1		10/02/18 09:01	108-67-8	
Xylene (Total)	37.5	ug/L	3.2	0.97	1		10/02/18 09:01	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	102	%	80-120		1		10/02/18 09:01	98-08-8	
<hr/>									
Sample: M900	Lab ID: 40176708011	Collected: 09/26/18 00:00	Received: 09/28/18 10:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		10/01/18 14:37	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 14:37	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		10/01/18 14:37	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		10/01/18 14:37	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		10/01/18 14:37	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		10/01/18 14:37	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 14:37	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		10/01/18 14:37	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1		10/01/18 14:37	98-08-8	
<hr/>									
Sample: P900	Lab ID: 40176708012	Collected: 09/26/18 00:00	Received: 09/28/18 10:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		10/01/18 11:38	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 11:38	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		10/01/18 11:38	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		10/01/18 11:38	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		10/01/18 11:38	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		10/01/18 11:38	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 11:38	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		10/01/18 11:38	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	98	%	80-120		1		10/01/18 11:38	98-08-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WEBSTER
Pace Project No.: 40176708

Sample: HOUSE	Lab ID: 40176708013	Collected: 09/26/18 00:00	Received: 09/28/18 10:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		10/01/18 12:03	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 12:03	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		10/01/18 12:03	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		10/01/18 12:03	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		10/01/18 12:03	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		10/01/18 12:03	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 12:03	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		10/01/18 12:03	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1		10/01/18 12:03	98-08-8	
<hr/>									
Sample: TB	Lab ID: 40176708014	Collected: 09/26/18 00:00	Received: 09/28/18 10:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		10/01/18 15:28	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 15:28	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		10/01/18 15:28	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		10/01/18 15:28	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		10/01/18 15:28	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		10/01/18 15:28	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		10/01/18 15:28	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		10/01/18 15:28	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	99	%	80-120		1		10/01/18 15:28	98-08-8	

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Project: WEBSTER
Pace Project No.: 40176708

QC Batch:	301680	Analysis Method:	WI MOD GRO
QC Batch Method:	WI MOD GRO	Analysis Description:	WIGRO GCV Water
Associated Lab Samples:	40176708001, 40176708002, 40176708003, 40176708004, 40176708005, 40176708006, 40176708007, 40176708008, 40176708009, 40176708010, 40176708011		

METHOD BLANK: 1762561		Matrix: Water			
Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.34	1.1	10/01/18 09:55	
1,3,5-Trimethylbenzene	ug/L	<0.33	1.1	10/01/18 09:55	
Benzene	ug/L	<0.31	1.0	10/01/18 09:55	
Ethylbenzene	ug/L	<0.33	1.1	10/01/18 09:55	
Methyl-tert-butyl ether	ug/L	<0.32	1.1	10/01/18 09:55	
Naphthalene	ug/L	<0.51	1.7	10/01/18 09:55	
Toluene	ug/L	<0.49	1.6	10/01/18 09:55	
Xylene (Total)	ug/L	<0.97	3.2	10/01/18 09:55	
a,a,a-Trifluorotoluene (S)	%	100	80-120	10/01/18 09:55	

LABORATORY CONTROL SAMPLE & LCSD: 1762562		1762563								
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	20.2	21.0	101	105	80-120	4	20	
1,3,5-Trimethylbenzene	ug/L	20	19.8	20.6	99	103	80-120	4	20	
Benzene	ug/L	20	19.8	20.5	99	103	80-120	3	20	
Ethylbenzene	ug/L	20	20.2	20.9	101	104	80-120	3	20	
Methyl-tert-butyl ether	ug/L	20	19.0	19.1	95	96	80-120	1	20	
Naphthalene	ug/L	20	19.3	19.7	96	98	80-120	2	20	
Toluene	ug/L	20	20.3	20.9	101	104	80-120	3	20	
Xylene (Total)	ug/L	60	59.8	61.9	100	103	80-120	3	20	
a,a,a-Trifluorotoluene (S)	%				100	100	80-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1762945		1762946										
Parameter	Units	MS Result	MS Spike Conc.	MS Result	MS Spike Conc.	MS Result	MS % Rec	MS % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	<0.34	20	20	20.7	21.2	104	106	51-160	2	20	
1,3,5-Trimethylbenzene	ug/L	<0.33	20	20	20.4	20.8	102	104	56-146	2	20	
Benzene	ug/L	<0.31	20	20	20.4	20.2	102	101	71-137	1	20	
Ethylbenzene	ug/L	<0.33	20	20	21.3	21.7	107	108	71-141	2	20	
Methyl-tert-butyl ether	ug/L	<0.32	20	20	18.6	17.8	93	89	80-120	4	20	
Naphthalene	ug/L	<0.51	20	20	19.6	19.5	98	97	67-138	1	20	
Toluene	ug/L	<0.49	20	20	21.1	21.4	106	107	76-134	1	20	
Xylene (Total)	ug/L	<0.97	60	60	62.8	63.7	105	106	69-138	1	20	
a,a,a-Trifluorotoluene (S)	%						100	101	80-120			

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

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Project: WEBSTER

Pace Project No.: 40176708

QC Batch:	301683	Analysis Method:	WI MOD GRO
QC Batch Method:	WI MOD GRO	Analysis Description:	WIGRO GCV Water
Associated Lab Samples:	40176708012, 40176708013, 40176708014		

METHOD BLANK: 1762572 Matrix: Water

Associated Lab Samples: 40176708012, 40176708013, 40176708014

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
1,2,4-Trimethylbenzene	ug/L	<0.34	1.1	10/01/18 09:55	
1,3,5-Trimethylbenzene	ug/L	<0.33	1.1	10/01/18 09:55	
Benzene	ug/L	<0.31	1.0	10/01/18 09:55	
Ethylbenzene	ug/L	<0.33	1.1	10/01/18 09:55	
Methyl-tert-butyl ether	ug/L	<0.32	1.1	10/01/18 09:55	
Naphthalene	ug/L	<0.51	1.7	10/01/18 09:55	
Toluene	ug/L	<0.49	1.6	10/01/18 09:55	
Xylene (Total)	ug/L	<0.97	3.2	10/01/18 09:55	
a,a,a-Trifluorotoluene (S)	%	98	80-120	10/01/18 09:55	

LABORATORY CONTROL SAMPLE & LCSD: 1762573

1762574

Parameter	Units	Spike	LCS	LCSD	LCS	LCSD	% Rec	Max RPD	RPD	Qualifiers
		Conc.	Result	Result	% Rec	% Rec	Limits			
1,2,4-Trimethylbenzene	ug/L	20	19.6	18.4	98	92	80-120	6	20	
1,3,5-Trimethylbenzene	ug/L	20	18.9	17.8	95	89	80-120	6	20	
Benzene	ug/L	20	19.4	18.9	97	95	80-120	3	20	
Ethylbenzene	ug/L	20	19.4	18.4	97	92	80-120	5	20	
Methyl-tert-butyl ether	ug/L	20	19.7	18.9	98	94	80-120	4	20	
Naphthalene	ug/L	20	18.8	18.6	94	93	80-120	1	20	
Toluene	ug/L	20	19.6	18.9	98	94	80-120	4	20	
Xylene (Total)	ug/L	60	58.3	55.2	97	92	80-120	5	20	
a,a,a-Trifluorotoluene (S)	%			100	99	99	80-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1762947

1762948

Parameter	Units	MS		MSD		MS		MSD		% Rec	Max RPD	RPD	Qual
		40176708012	Spike	Spike	Conc.	MS	MSD	Result	% Rec				
1,2,4-Trimethylbenzene	ug/L	<0.34	20	20	20.6	18.9	103	95	51-160	9	20		
1,3,5-Trimethylbenzene	ug/L	<0.33	20	20	20.1	18.6	101	93	56-146	8	20		
Benzene	ug/L	<0.31	20	20	20.8	20.2	104	101	71-137	3	20		
Ethylbenzene	ug/L	<0.33	20	20	21.0	19.9	105	99	71-141	5	20		
Methyl-tert-butyl ether	ug/L	<0.32	20	20	19.6	19.0	98	95	80-120	3	20		
Naphthalene	ug/L	<0.51	20	20	18.5	17.9	92	90	67-138	3	20		
Toluene	ug/L	<0.49	20	20	21.1	20.2	106	101	76-134	4	20		
Xylene (Total)	ug/L	<0.97	60	60	62.5	58.7	104	98	69-138	6	20		
a,a,a-Trifluorotoluene (S)	%						99	99	80-120				

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: WEBSTER
Pace Project No.: 40176708

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

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WEBSTER
Pace Project No.: 40176708

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40176708001	P100	WI MOD GRO	301680		
40176708002	M200	WI MOD GRO	301680		
40176708003	P200	WI MOD GRO	301680		
40176708004	M300	WI MOD GRO	301680		
40176708005	P300	WI MOD GRO	301680		
40176708006	M400	WI MOD GRO	301680		
40176708007	P400	WI MOD GRO	301680		
40176708008	M500	WI MOD GRO	301680		
40176708009	M600	WI MOD GRO	301680		
40176708010	P600	WI MOD GRO	301680		
40176708011	M900	WI MOD GRO	301680		
40176708012	P900	WI MOD GRO	301683		
40176708013	HOUSE	WI MOD GRO	301683		
40176708014	TB	WI MOD GRO	301683		

REPORT OF LABORATORY ANALYSIS

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(Please Print Clearly)

Company Name:	Meridian Env. Co LLC	
Branch/Location:	Ken Shinko	
Project Contact:	Ken Shinko	
Phone:	715-832-6608	
Project Number:		
Project Name:	Webster	
Project State:	WI	
Sampled By (Print):	Ken Shinko	
Sampled By (Sign):		
PO #:		Regulatory Program:



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

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CHAIN OF CUSTODY

*Preservation Codes						
A=None	B=HCl	C=H ₂ SO ₄	D=HNO ₃	E=DI Water	F=Methanol	G=NaOH
H=Sodium Bisulfate Solution			I=Sodium Thiosulfate		J=Other	

FILTERED?
(YES/NO)

PRESERVATION
(CODE)*

Y/N

Pick
Letter

Analyses Requested

PJOL + Map h

Data Package Options (billable)	MS/MSD	Matrix Codes
<input type="checkbox"/> EPA Level III	<input type="checkbox"/> On your sample (billable)	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
<input type="checkbox"/> EPA Level IV	<input type="checkbox"/> NOT needed on your sample	

PACE LAB #	CLIENT FIELD ID	COLLECTION			MATRIX
		DATE	TIME		
001	P100	9/26		6:00	X
002	M200				
003	P200				
004	M300				
005	P300				
006	M400				
007	P400				
008	M500				
009	M600				
010	P600				
011	M900				
012	P900				
019	House				

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:

Relinquished By:

Relinquished By:

Relinquished By:

Relinquished By:

Relinquished By:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Received By:

Received By:

Received By:

Received By:

Received By:

Received By:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

PAGE Project No. 9/27/18

40176708 20

Receipt Temp = 20 °C

Sample Receipt pH

OK / Adjusted

Cooler Custody Seal

Present / Not Present

Intact / Not Intact

Version 6.0 06/14/06

ORIGINAL

Sample Preservation Receipt Form

Client Name: Mervin

Project # 40176708

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

Lab Lot# of pH paper:

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

Initial when completed:

Date/
Time:

Pace Lab #	Glass					Plastic					Vials					Jars			General			VOA Vials (>6mm)*	Volume (mL)			
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN
001																										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
012																										2.5 / 5 / 10
013																										2.5 / 5 / 10
014																										2.5 / 5 / 10
015																										2.5 / 5 / 10
016																										2.5 / 5 / 10
017																										2.5 / 5 / 10
018																										2.5 / 5 / 10
019																										2.5 / 5 / 10
020																										2.5 / 5 / 10

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

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



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# : 40176708

Client Name: *Mervin*

Courier: CS Logistics Fed Ex Speedee UPS Waltco

Client Pace Other:

Tracking #: 7829 7198 4780



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 - *N/A* Type of Ice: *Wet* Blue Dry None Samples on ice, cooling process has begun

Cooler Temperature Uncorr: *N/A* Corr:

Temp Blank Present: yes no

Biological Tissue is Frozen: yes no

Person examining contents:

Date: *9/28/18* *JL*
Initials: *JL*

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C.

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. <i>Ag#, collet time</i> <i>9/28/18</i>
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3. <i>10 fm</i> <i>9/28/18</i>
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: - VOA Samples frozen upon receipt	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used: -Pace Containers Used: -Pace IR Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Containers Intact:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <i>1Ds only</i> <i>9/28/18 JL</i>
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <i>407</i>		

Client Notification/ Resolution:

If checked, see attached form for additional comments

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: *JL*

Date: *9-28-18*

December 18, 2018

Kenneth Shimko
Meridian Environmental Consulting, LLC
2711 North Elco Rd
Fall Creek, WI 54742

RE: Project: WEBSTER
Pace Project No.: 40180655

Dear Kenneth Shimko:

Enclosed are the analytical results for sample(s) received by the laboratory on December 07, 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



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: WEBSTER
Pace Project No.: 40180655

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

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SAMPLE SUMMARY

Project: WEBSTER
Pace Project No.: 40180655

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40180655001	MW-200	Water	12/05/18 00:00	12/07/18 10:05
40180655002	MW-300	Water	12/05/18 00:00	12/07/18 10:05
40180655003	MW-400	Water	12/05/18 00:00	12/07/18 10:05
40180655004	MW-500	Water	12/05/18 00:00	12/07/18 10:05
40180655005	MW-600	Water	12/05/18 00:00	12/07/18 10:05
40180655006	MW-900	Water	12/05/18 00:00	12/07/18 10:05
40180655007	P-100	Water	12/05/18 00:00	12/07/18 10:05
40180655008	P-200	Water	12/05/18 00:00	12/07/18 10:05
40180655009	P-300	Water	12/05/18 00:00	12/07/18 10:05
40180655010	P-400	Water	12/05/18 00:00	12/07/18 10:05
40180655011	P-600	Water	12/05/18 00:00	12/07/18 10:05
40180655012	P-900	Water	12/05/18 00:00	12/07/18 10:05
40180655013	HOUSE	Water	12/05/18 00:00	12/07/18 10:05
40180655014	TB	Water	12/05/18 00:00	12/07/18 10:05

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WEBSTER
Pace Project No.: 40180655

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40180655001	MW-200	WI MOD GRO	ALD	9	PASI-G
40180655002	MW-300	WI MOD GRO	ALD	9	PASI-G
40180655003	MW-400	WI MOD GRO	ALD	9	PASI-G
40180655004	MW-500	WI MOD GRO	ALD	9	PASI-G
40180655005	MW-600	WI MOD GRO	ALD	9	PASI-G
40180655006	MW-900	WI MOD GRO	ALD	9	PASI-G
40180655007	P-100	WI MOD GRO	ALD	9	PASI-G
40180655008	P-200	WI MOD GRO	ALD	9	PASI-G
40180655009	P-300	WI MOD GRO	ALD	9	PASI-G
40180655010	P-400	WI MOD GRO	ALD	9	PASI-G
40180655011	P-600	WI MOD GRO	ALD	9	PASI-G
40180655012	P-900	WI MOD GRO	ALD	9	PASI-G
40180655013	HOUSE	WI MOD GRO	ALD	9	PASI-G
40180655014	TB	WI MOD GRO	ALD	9	PASI-G

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: WEBSTER
Pace Project No.: 40180655

Method: WI MOD GRO
Description: WIGRO GCV
Client: Meridian Environmental Consulting, LLC
Date: December 18, 2018

General Information:

14 samples were analyzed for WI MOD GRO. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 309084

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40180841005

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 1806072)
- 1,2,4-Trimethylbenzene

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WEBSTER
Pace Project No.: 40180655

Sample: MW-200	Lab ID: 40180655001	Collected: 12/05/18 00:00	Received: 12/07/18 10:05	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		12/11/18 14:57	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		12/11/18 14:57	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		12/11/18 14:57	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		12/11/18 14:57	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		12/11/18 14:57	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		12/11/18 14:57	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		12/11/18 14:57	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		12/11/18 14:57	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1		12/11/18 14:57	98-08-8	
<hr/>									
Sample: MW-300	Lab ID: 40180655002	Collected: 12/05/18 00:00	Received: 12/07/18 10:05	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		12/11/18 15:23	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		12/11/18 15:23	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		12/11/18 15:23	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		12/11/18 15:23	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		12/11/18 15:23	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		12/11/18 15:23	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		12/11/18 15:23	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		12/11/18 15:23	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1		12/11/18 15:23	98-08-8	
<hr/>									
Sample: MW-400	Lab ID: 40180655003	Collected: 12/05/18 00:00	Received: 12/07/18 10:05	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		12/11/18 15:48	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		12/11/18 15:48	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		12/11/18 15:48	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		12/11/18 15:48	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		12/11/18 15:48	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		12/11/18 15:48	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		12/11/18 15:48	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		12/11/18 15:48	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1		12/11/18 15:48	98-08-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WEBSTER
Pace Project No.: 40180655

Sample: MW-500	Lab ID: 40180655004	Collected: 12/05/18 00:00	Received: 12/07/18 10:05	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		12/11/18 16:14	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		12/11/18 16:14	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		12/11/18 16:14	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		12/11/18 16:14	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		12/11/18 16:14	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		12/11/18 16:14	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		12/11/18 16:14	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		12/11/18 16:14	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1		12/11/18 16:14	98-08-8	
<hr/>									
Sample: MW-600	Lab ID: 40180655005	Collected: 12/05/18 00:00	Received: 12/07/18 10:05	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	5.0	ug/L	2.0	0.61	2		12/11/18 19:38	71-43-2	
Ethylbenzene	34.3	ug/L	2.2	0.66	2		12/11/18 19:38	100-41-4	
Methyl-tert-butyl ether	1.9J	ug/L	2.1	0.64	2		12/11/18 19:38	1634-04-4	
Naphthalene	89.0	ug/L	3.4	1.0	2		12/11/18 19:38	91-20-3	
Toluene	12.6	ug/L	3.3	0.98	2		12/11/18 19:38	108-88-3	
1,2,4-Trimethylbenzene	28.9	ug/L	2.3	0.68	2		12/11/18 19:38	95-63-6	
1,3,5-Trimethylbenzene	60.8	ug/L	2.2	0.66	2		12/11/18 19:38	108-67-8	
Xylene (Total)	175	ug/L	6.5	1.9	2		12/11/18 19:38	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	109	%	80-120		2		12/11/18 19:38	98-08-8	
<hr/>									
Sample: MW-900	Lab ID: 40180655006	Collected: 12/05/18 00:00	Received: 12/07/18 10:05	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		12/11/18 16:39	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		12/11/18 16:39	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		12/11/18 16:39	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		12/11/18 16:39	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		12/11/18 16:39	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		12/11/18 16:39	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		12/11/18 16:39	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		12/11/18 16:39	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1		12/11/18 16:39	98-08-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WEBSTER
Pace Project No.: 40180655

Sample: P-100 Lab ID: **40180655007** Collected: 12/05/18 00:00 Received: 12/07/18 10:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	2710	ug/L	25.5	7.6	25		12/11/18 18:47	71-43-2	
Ethylbenzene	<8.2	ug/L	27.5	8.2	25		12/11/18 18:47	100-41-4	
Methyl-tert-butyl ether	<8.0	ug/L	26.8	8.0	25		12/11/18 18:47	1634-04-4	
Naphthalene	82.8	ug/L	42.0	12.6	25		12/11/18 18:47	91-20-3	
Toluene	65.0	ug/L	40.8	12.2	25		12/11/18 18:47	108-88-3	
1,2,4-Trimethylbenzene	<8.6	ug/L	28.5	8.6	25		12/11/18 18:47	95-63-6	
1,3,5-Trimethylbenzene	<8.2	ug/L	27.2	8.2	25		12/11/18 18:47	108-67-8	
Xylene (Total)	56.9J	ug/L	80.8	24.2	25		12/11/18 18:47	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	103	%	80-120		25		12/11/18 18:47	98-08-8	

Sample: P-200 Lab ID: **40180655008** Collected: 12/05/18 00:00 Received: 12/07/18 10:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		12/11/18 20:29	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		12/11/18 20:29	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		12/11/18 20:29	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		12/11/18 20:29	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		12/11/18 20:29	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		12/11/18 20:29	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		12/11/18 20:29	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		12/11/18 20:29	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%	80-120		1		12/11/18 20:29	98-08-8	

Sample: P-300 Lab ID: **40180655009** Collected: 12/05/18 00:00 Received: 12/07/18 10:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		12/11/18 20:55	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		12/11/18 20:55	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		12/11/18 20:55	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		12/11/18 20:55	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		12/11/18 20:55	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		12/11/18 20:55	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		12/11/18 20:55	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		12/11/18 20:55	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%	80-120		1		12/11/18 20:55	98-08-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WEBSTER
Pace Project No.: 40180655

Sample: P-400	Lab ID: 40180655010	Collected: 12/05/18 00:00	Received: 12/07/18 10:05	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		12/14/18 12:22	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		12/14/18 12:22	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		12/14/18 12:22	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		12/14/18 12:22	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		12/14/18 12:22	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		12/14/18 12:22	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		12/14/18 12:22	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		12/14/18 12:22	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	102	%	80-120		1		12/14/18 12:22	98-08-8	
<hr/>									
Sample: P-600	Lab ID: 40180655011	Collected: 12/05/18 00:00	Received: 12/07/18 10:05	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	314	ug/L	10.2	3.1	10		12/14/18 17:03	71-43-2	
Ethylbenzene	99.1	ug/L	11.0	3.3	10		12/14/18 17:03	100-41-4	
Methyl-tert-butyl ether	10.9	ug/L	10.7	3.2	10		12/14/18 17:03	1634-04-4	
Naphthalene	273	ug/L	16.8	5.1	10		12/14/18 17:03	91-20-3	
Toluene	121	ug/L	16.3	4.9	10		12/14/18 17:03	108-88-3	
1,2,4-Trimethylbenzene	46.2	ug/L	11.4	3.4	10		12/14/18 17:03	95-63-6	
1,3,5-Trimethylbenzene	140	ug/L	10.9	3.3	10		12/14/18 17:03	108-67-8	
Xylene (Total)	195	ug/L	32.3	9.7	10		12/14/18 17:03	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	104	%	80-120		10		12/14/18 17:03	98-08-8	
<hr/>									
Sample: P-900	Lab ID: 40180655012	Collected: 12/05/18 00:00	Received: 12/07/18 10:05	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		12/14/18 12:48	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		12/14/18 12:48	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		12/14/18 12:48	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		12/14/18 12:48	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		12/14/18 12:48	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		12/14/18 12:48	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		12/14/18 12:48	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		12/14/18 12:48	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	102	%	80-120		1		12/14/18 12:48	98-08-8	

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ANALYTICAL RESULTS

Project: WEBSTER
Pace Project No.: 40180655

Sample: HOUSE	Lab ID: 40180655013	Collected: 12/05/18 00:00	Received: 12/07/18 10:05	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		12/14/18 12:27	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		12/14/18 12:27	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		12/14/18 12:27	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		12/14/18 12:27	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		12/14/18 12:27	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		12/14/18 12:27	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		12/14/18 12:27	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		12/14/18 12:27	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	102	%	80-120		1		12/14/18 12:27	98-08-8	
<hr/>									
Sample: TB	Lab ID: 40180655014	Collected: 12/05/18 00:00	Received: 12/07/18 10:05	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Method: WI MOD GRO								
Benzene	<0.31	ug/L	1.0	0.31	1		12/14/18 16:21	71-43-2	
Ethylbenzene	<0.33	ug/L	1.1	0.33	1		12/14/18 16:21	100-41-4	
Methyl-tert-butyl ether	<0.32	ug/L	1.1	0.32	1		12/14/18 16:21	1634-04-4	
Naphthalene	<0.51	ug/L	1.7	0.51	1		12/14/18 16:21	91-20-3	
Toluene	<0.49	ug/L	1.6	0.49	1		12/14/18 16:21	108-88-3	
1,2,4-Trimethylbenzene	<0.34	ug/L	1.1	0.34	1		12/14/18 16:21	95-63-6	
1,3,5-Trimethylbenzene	<0.33	ug/L	1.1	0.33	1		12/14/18 16:21	108-67-8	
Xylene (Total)	<0.97	ug/L	3.2	0.97	1		12/14/18 16:21	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	102	%	80-120		1		12/14/18 16:21	98-08-8	

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Project: WEBSTER
Pace Project No.: 40180655

QC Batch:	308879	Analysis Method:	WI MOD GRO
QC Batch Method:	WI MOD GRO	Analysis Description:	WIGRO GCV Water
Associated Lab Samples:	40180655001, 40180655002, 40180655003, 40180655004, 40180655005, 40180655006, 40180655007, 40180655008, 40180655009		

METHOD BLANK: 1804376 Matrix: Water
Associated Lab Samples: 40180655001, 40180655002, 40180655003, 40180655004, 40180655005, 40180655006, 40180655007, 40180655008, 40180655009

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
1,2,4-Trimethylbenzene	ug/L	<0.34	1.1	12/11/18 11:32	
1,3,5-Trimethylbenzene	ug/L	<0.33	1.1	12/11/18 11:32	
Benzene	ug/L	<0.31	1.0	12/11/18 11:32	
Ethylbenzene	ug/L	<0.33	1.1	12/11/18 11:32	
Methyl-tert-butyl ether	ug/L	<0.32	1.1	12/11/18 11:32	
Naphthalene	ug/L	<0.51	1.7	12/11/18 11:32	
Toluene	ug/L	<0.49	1.6	12/11/18 11:32	
Xylene (Total)	ug/L	<0.97	3.2	12/11/18 11:32	
a,a,a-Trifluorotoluene (S)	%	101	80-120	12/11/18 11:32	

LABORATORY CONTROL SAMPLE & LCSD: 1804377		1804378								
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	20.9	20.0	105	100	80-120	4	20	
1,3,5-Trimethylbenzene	ug/L	20	20.2	19.4	101	97	80-120	4	20	
Benzene	ug/L	20	21.1	20.2	106	101	80-120	4	20	
Ethylbenzene	ug/L	20	21.1	20.3	105	102	80-120	3	20	
Methyl-tert-butyl ether	ug/L	20	21.1	20.5	105	102	80-120	3	20	
Naphthalene	ug/L	20	21.1	21.1	105	105	80-120	0	20	
Toluene	ug/L	20	21.1	20.4	106	102	80-120	4	20	
Xylene (Total)	ug/L	60	61.9	59.6	103	99	80-120	4	20	
a,a,a-Trifluorotoluene (S)	%				103	104	80-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1804781		1804782										
Parameter	Units	40180577013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
1,2,4-Trimethylbenzene	ug/L	<0.34	20	20	22.0	22.0	110	110	51-160	0	20	
1,3,5-Trimethylbenzene	ug/L	<0.33	20	20	21.5	21.5	108	107	56-146	0	20	
Benzene	ug/L	<0.31	20	20	22.4	22.5	112	113	71-137	0	20	
Ethylbenzene	ug/L	<0.33	20	20	22.6	22.6	113	113	71-141	0	20	
Methyl-tert-butyl ether	ug/L	<0.32	20	20	21.6	22.0	108	110	80-120	2	20	
Naphthalene	ug/L	<0.51	20	20	24.1	24.7	121	123	67-138	2	20	
Toluene	ug/L	<0.49	20	20	22.5	22.6	112	113	76-134	1	20	
Xylene (Total)	ug/L	<0.97	60	60	65.9	66.1	110	110	69-138	0	20	
a,a,a-Trifluorotoluene (S)	%						101	101	80-120			

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REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Project: WEBSTER

Pace Project No.: 40180655

QC Batch:	309083	Analysis Method:	WI MOD GRO
QC Batch Method:	WI MOD GRO	Analysis Description:	WIGRO GCV Water
Associated Lab Samples:	40180655010, 40180655011, 40180655012		

METHOD BLANK: 1805438 Matrix: Water

Associated Lab Samples: 40180655010, 40180655011, 40180655012

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
1,2,4-Trimethylbenzene	ug/L	<0.34	1.1	12/14/18 10:35	
1,3,5-Trimethylbenzene	ug/L	<0.33	1.1	12/14/18 10:35	
Benzene	ug/L	<0.31	1.0	12/14/18 10:35	
Ethylbenzene	ug/L	<0.33	1.1	12/14/18 10:35	
Methyl-tert-butyl ether	ug/L	<0.32	1.1	12/14/18 10:35	
Naphthalene	ug/L	<0.51	1.7	12/14/18 10:35	
Toluene	ug/L	<0.49	1.6	12/14/18 10:35	
Xylene (Total)	ug/L	<0.97	3.2	12/14/18 10:35	
a,a,a-Trifluorotoluene (S)	%	101	80-120	12/14/18 10:35	

LABORATORY CONTROL SAMPLE & LCSD: 1805439

1805440

Parameter	Units	Spike	LCS	LCSD	LCS	LCSD	% Rec	Max		Qualifiers
		Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	
1,2,4-Trimethylbenzene	ug/L	20	20.4	21.2	102	106	80-120	4	20	
1,3,5-Trimethylbenzene	ug/L	20	19.6	20.4	98	102	80-120	4	20	
Benzene	ug/L	20	20.4	20.5	102	103	80-120	1	20	
Ethylbenzene	ug/L	20	20.2	20.5	101	103	80-120	2	20	
Methyl-tert-butyl ether	ug/L	20	20.1	20.6	100	103	80-120	3	20	
Naphthalene	ug/L	20	19.2	20.8	96	104	80-120	8	20	
Toluene	ug/L	20	20.3	20.5	101	102	80-120	1	20	
Xylene (Total)	ug/L	60	59.9	61.1	100	102	80-120	2	20	
a,a,a-Trifluorotoluene (S)	%				101	101	80-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1805612

1805613

Parameter	Units	MS		MSD		MS		MSD		% Rec	Max	
		40180655010	Spike	Spike	Conc.	Result	MSD	Result	% Rec			Qual
1,2,4-Trimethylbenzene	ug/L	<0.34	20	20	21.2	21.5	106	107	51-160	1	20	
1,3,5-Trimethylbenzene	ug/L	<0.33	20	20	20.6	20.9	103	104	56-146	1	20	
Benzene	ug/L	<0.31	20	20	21.6	21.7	108	108	71-137	1	20	
Ethylbenzene	ug/L	<0.33	20	20	21.5	21.9	108	109	71-141	1	20	
Methyl-tert-butyl ether	ug/L	<0.32	20	20	20.6	20.5	103	103	80-120	0	20	
Naphthalene	ug/L	<0.51	20	20	20.3	20.9	101	104	67-138	3	20	
Toluene	ug/L	<0.49	20	20	21.4	21.7	107	108	76-134	1	20	
Xylene (Total)	ug/L	<0.97	60	60	63.3	64.2	106	107	69-138	1	20	
a,a,a-Trifluorotoluene (S)	%						102	102	80-120			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WEBSTER

Pace Project No.: 40180655

QC Batch:	309084	Analysis Method:	WI MOD GRO
QC Batch Method:	WI MOD GRO	Analysis Description:	WIGRO GCV Water
Associated Lab Samples:	40180655013, 40180655014		

METHOD BLANK: 1805444 Matrix: Water

Associated Lab Samples: 40180655013, 40180655014

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
1,2,4-Trimethylbenzene	ug/L	<0.34	1.1	12/14/18 10:41	
1,3,5-Trimethylbenzene	ug/L	<0.33	1.1	12/14/18 10:41	
Benzene	ug/L	<0.31	1.0	12/14/18 10:41	
Ethylbenzene	ug/L	<0.33	1.1	12/14/18 10:41	
Methyl-tert-butyl ether	ug/L	<0.32	1.1	12/14/18 10:41	
Naphthalene	ug/L	<0.51	1.7	12/14/18 10:41	
Toluene	ug/L	<0.49	1.6	12/14/18 10:41	
Xylene (Total)	ug/L	<0.97	3.2	12/14/18 10:41	
a,a,a-Trifluorotoluene (S)	%	102	80-120	12/14/18 10:41	

LABORATORY CONTROL SAMPLE & LCSD: 1805445

1805446

Parameter	Units	Spike	LCS	LCSD	LCS	LCSD	% Rec	Limits	RPD	Max RPD	Qualifiers
		Conc.	Result	Result	% Rec	% Rec					
1,2,4-Trimethylbenzene	ug/L	20	22.1	22.2	110	111	80-120	1	20		
1,3,5-Trimethylbenzene	ug/L	20	21.5	21.6	107	108	80-120	0	20		
Benzene	ug/L	20	21.6	21.5	108	107	80-120	1	20		
Ethylbenzene	ug/L	20	21.9	21.9	109	109	80-120	0	20		
Methyl-tert-butyl ether	ug/L	20	20.1	20.2	101	101	80-120	0	20		
Naphthalene	ug/L	20	20.7	21.0	104	105	80-120	1	20		
Toluene	ug/L	20	21.6	21.5	108	108	80-120	1	20		
Xylene (Total)	ug/L	60	64.1	64.4	107	107	80-120	0	20		
a,a,a-Trifluorotoluene (S)	%				101	101	80-120				

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1806071

1806072

Parameter	Units	MS		MSD		MS		MSD		% Rec	Limits	RPD	Max RPD	Qual
		40180841005	Spike	Spike	Conc.	Result	MSD	Result	% Rec					
1,2,4-Trimethylbenzene	ug/L	2110	400	400	2470	2130	90	6	51-160	15	20	M1		
1,3,5-Trimethylbenzene	ug/L	857	400	400	1250	1100	98	61	56-146	13	20			
Benzene	ug/L	37.1	400	400	438	446	100	102	71-137	2	20			
Ethylbenzene	ug/L	455	400	400	871	849	104	98	71-141	3	20			
Methyl-tert-butyl ether	ug/L	<6.4	400	400	401	403	100	101	80-120	0	20			
Naphthalene	ug/L	245	400	400	613	600	92	89	67-138	2	20			
Toluene	ug/L	569	400	400	980	969	103	100	76-134	1	20			
Xylene (Total)	ug/L	1810	1200	1200	3010	2930	100	93	69-138	3	20			
a,a,a-Trifluorotoluene (S)	%						104	102	80-120					

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QUALIFIERS

Project: WEBSTER
Pace Project No.: 40180655

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WEBSTER
Pace Project No.: 40180655

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40180655001	MW-200	WI MOD GRO	308879		
40180655002	MW-300	WI MOD GRO	308879		
40180655003	MW-400	WI MOD GRO	308879		
40180655004	MW-500	WI MOD GRO	308879		
40180655005	MW-600	WI MOD GRO	308879		
40180655006	MW-900	WI MOD GRO	308879		
40180655007	P-100	WI MOD GRO	308879		
40180655008	P-200	WI MOD GRO	308879		
40180655009	P-300	WI MOD GRO	308879		
40180655010	P-400	WI MOD GRO	309083		
40180655011	P-600	WI MOD GRO	309083		
40180655012	P-900	WI MOD GRO	309083		
40180655013	HOUSE	WI MOD GRO	309084		
40180655014	TB	WI MOD GRO	309084		

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.

(Please Print Clearly)

Company Name: Meridian Env. Ctr.
 Branch/Location:
 Project Contact: Ken Shinko
 Phone: 715 832 6608
 Project Number:
 Project Name: Webster
 Project State: WI
 Sampled By (Print): Ken Shinko
 Sampled By (Sign): *OTJ*
 PO #: *OTJ* Regulatory Program:

Data Package Options

(billable)

 EPA Level III EPA Level IV

MS/MSD

Matrix Codes

 On your sample

(billable)

 NOT needed on

your sample

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

PACE LAB

CLIENT FIELD ID

COLLECTION

DATE

TIME

MATRIX

001

MW-200

12/5

600

X

002

-300

|

003

-400

|

004

-500

|

005

-600

|

006

V-900

|

007

P-100

|

008

-200

|

009

-300

|

010

-400

|

011

-600

|

012

V-900

|

013

House

Relinquished By:

OTJ

Date/Time:

12/6/18

Received By:

OTJ

Date/Time:

12/6/18

PACE Project No.

U0180655

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:

OTJ

Date/Time:

12/7/18 1005

Received By:

OTJ

Date/Time:

12/7/18 1005

Receipt Temp = *70* °C

Sample Receipt pH

OK / Adjusted

Cooler Custody Seal

Present / Not Present

Intact / Not Intact

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

FILTERED?
(YES/NO)PRESERVATION
(CODE)*

Y/N

Pick
Letter

Analyses Requested

P VOL + WASH

Quote #:		
Mail To Contact:	Ken Shinko	
Mail To Company:	Meridian Env Ctr	
Mail To Address:	Z711 N. Elco Rd Fall Creek WP	
Invoice To Contact:	54742	
Invoice To Company:		
Invoice To Address:		
Invoice To Phone:		
CLIENT COMMENTS (Lab Use Only)	LAB COMMENTS (Lab Use Only)	Profile #

Pace Container Order #421069

40180655

Addresses

Order By :

Company Meridian Environmental Consulting,
 Contact Shimko, Kenneth
 Email kshimko.meridianenv@gmail.com
 Address 2711 North Elco Rd
 Address 2
 City Fall Creek
 State WI Zip 54742
 Phone 715-579-0723

Ship To :

Company Meridian Environmental Consulting,
 Contact Shimko, Kenneth
 Email kshimko.meridianenv@gmail.com
 Address 2711 North Elco Rd
 Address 2
 City Fall Creek
 State WI Zip 54742
 Phone 715-579-0723

Return To:

Company Pace Analytical Green Bay
 Contact Basten, Brian
 Email brian.basten@pacelabs.com
 Address 1241 Bellevue Street
 Address 2 Suite 9
 City Green Bay
 State WI Zip 54302
 Phone (920)469-2436

Info

Project Name Webster

Due Date 11/20/2018

Profile _____

Quote _____

Project Manager Basten, Brian

Return _____

Carrier Most Economical

Location WI

Trip Blanks

Include Trip Blanks

Bottle Labels

Blank
 Pre-Printed No Sample IDs
 Pre-Printed With Sample IDs

Bottles

Boxed Cases
 Individually Wrapped
 Grouped By Sample

Return Shipping Labels

No Shipper Number
 With Shipper Number

Misc

Sampling Instructions
 Custody Seal
 Temp. Blanks
 Coolers
 Syringes

Extra Bubble Wrap
 Short Hold/Rush Stickers
 DI Water Liter(s)
 USDA Regulated Soils

COC Options

Number of Blanks 2
 Pre-Printed

# of Samples	Matrix	Test	Container	Total	# of QC	Lot #	Notes
14	WT	PVOC	3-40mL glass vial w/ HCl	42	0	B-8-286-01VB	
1	WT	Trip BLANK	2-40mL HCL w/custody seal	2	0	B-8-141-01VB	

Hazard Shipping Placard In Place : NA

*Sample receiving hours are Monday through Friday 8:00 am to 6:00 pm and Saturday from 9:00 am to 12:00 pm unless special arrangements are made with your project manager.

*Pace Analytical reserves the right to return hazardous, toxic, or radioactive samples to you.

*Pace Analytical reserves the right to charge for unused bottles, as well as cost associated with sample storage and disposal.

*Payment term are net 30 days.

*Please include the proposal number on the chain of custody to insure proper billing.

Sample Notes

--

Ship Date :

11/15/2018

Prepared By:

Mai Yer Her

Verified By:

Sample Preservation Receipt Form

Client Name: Meridian

Project # 40180685

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

Lab Lot# of pH paper:

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

Initial when completed:

Date/
Time:

Pace Lab #	Glass					Plastic					Vials					Jars			General			VOA Vials (>6mm) *	Volume (mL)			
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN
001																										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
012																										2.5 / 5 / 10
013																										2.5 / 5 / 10
014																										2.5 / 5 / 10
015																										2.5 / 5 / 10
016																										2.5 / 5 / 10
017																										2.5 / 5 / 10
018																										2.5 / 5 / 10
019																										2.5 / 5 / 10
020																										2.5 / 5 / 10

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

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

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40180655

Client Name: Meridian

Courier: CS Logistics Fed Ex Speedee UPS Waltco

Client Pace Other:

Tracking #: 784228322140



40180655

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: 10 /Corr: RO

Temp Blank Present: yes no

Biological Tissue is Frozen: yes no

Person examining contents:

Date: 12/11/18

Initials: OB

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C.

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. time, project# <u>OB 12/11/18</u>
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3. no time <u>OB 12/11/18</u>
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:	8.	
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. ID only <u>OB 12/11/18</u>
-Includes date/time/ID/Analysis Matrix:	<u>W</u>	
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):	<u>410</u>	

Client Notification/ Resolution:

If checked, see attached form for additional comments

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

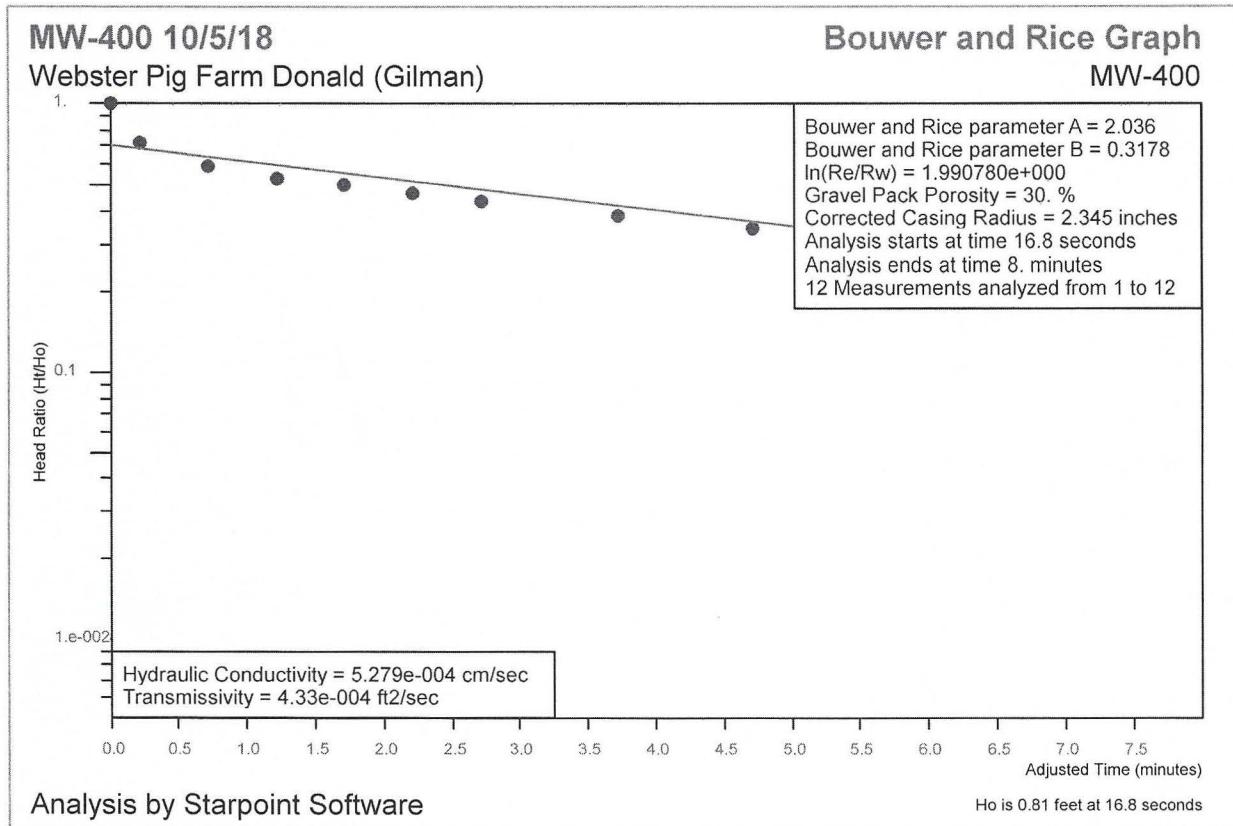
Project Manager Review:

Date: 12-7-18

APPENDIX B

Hydraulic Conductivity Testing Results

Webster Pig Farm



Webster Pig Farm

Bouwer and Rice Automatic Parameter Estimation**MW-400**

Site Name: Webster Pig Farm
 Location: Donald (Gilman)
 Test Date: 10/5/18

Well Label: MW-400
 Aquifer Thickness: 25. feet
 Screen Length: 10. feet
 Casing Radius: 1. inches
 Effective Radius: 4. inches
 Gravel Pack Porosity: 30. %
 Corrected Casing Radius: 2.345 inches
 Bouwer and Rice Parameter A 2.036
 Bouwer and Rice Parameter B 0.3178
 Radius of Influence of Test 2.44 feet

Trial	Adjusted Time (minutes)	Head (feet)	Head Ratio	Hyd. Con. (cm/sec)	Flow to Well (meters ³ /day)
1	0.	0.81	1.	--	
2	0.22	0.58	0.716	5.293e-003	7.777
3	0.72	0.48	0.5926	2.534e-003	3.081
4	1.22	0.43	0.5309	1.81e-003	1.971
5	1.72	0.41	0.5062	1.38e-003	1.433
6	2.22	0.38	0.4691	1.189e-003	1.144
7	2.72	0.35	0.4321	1.075e-003	0.9536
8	3.72	0.31	0.3827	9.001e-004	0.7069
9	4.72	0.28	0.3457	7.846e-004	0.5565
10	5.72	0.26	0.321	6.926e-004	0.4562
11	6.72	0.23	0.284	6.531e-004	0.3806
12	7.72	0.22	0.2716	5.886e-004	0.3281

Arithmetic Means:

Hydraulic Conductivity 1.536e-003 cm/sec
 Transmissivity 1.26e-003 ft²/sec

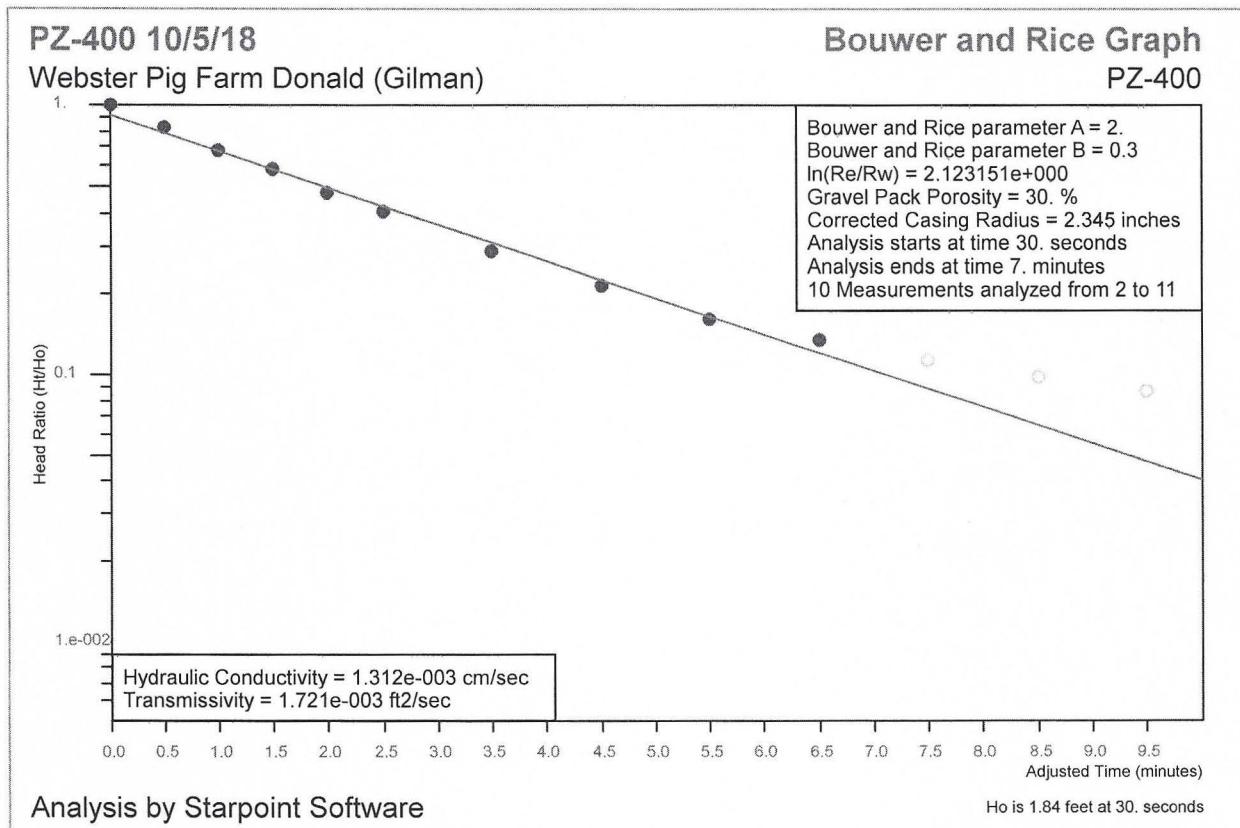
Geometric Means:

Hydraulic Conductivity 1.209e-003 cm/sec
 Transmissivity 9.914e-004 ft²/sec

Sensitivity Analysis:

Hydraulic Conductivity 9.871e-004 cm/sec
 Transmissivity 8.096e-004 ft²/sec

Webster Pig Farm



Webster Pig Farm

Bouwer and Rice Automatic Parameter Estimation

PZ-400

Site Name: Webster Pig Farm
 Location: Donald (Gilman)
 Test Date: 10/5/18

Well Label: PZ-400
 Aquifer Thickness: 40. feet
 Screen Length: 5. feet
 Casing Radius: 1. inches
 Effective Radius: 4. inches
 Gravel Pack Porosity: 30. %
 Corrected Casing Radius: 2.345 inches
 Bouwer and Rice Parameter A 2.
 Bouwer and Rice Parameter B 0.3
 Radius of Influence of Test 2.786 feet

Trial	Adjusted Time (minutes)	Head (feet)	Head Ratio	Hyd. Con. (cm/sec)	Flow to Well (meters ³ /day)
2	0.	1.84	1.	--	
3	0.5	1.52	0.8261	1.574e-003	2.842
4	1.	1.26	0.6848	1.56e-003	2.334
5	1.5	1.06	0.5761	1.515e-003	1.907
6	2.	0.88	0.4783	1.519e-003	1.588
7	2.5	0.75	0.4076	1.479e-003	1.317
8	3.5	0.53	0.288	1.465e-003	0.9222
9	4.5	0.4	0.2174	1.397e-003	0.6637
10	5.5	0.3	0.163	1.359e-003	0.4841
11	6.5	0.25	0.1359	1.265e-003	0.3756

Arithmetic Means:

Hydraulic Conductivity 1.459e-003 cm/sec
 Transmissivity 1.915e-003 ft²/sec

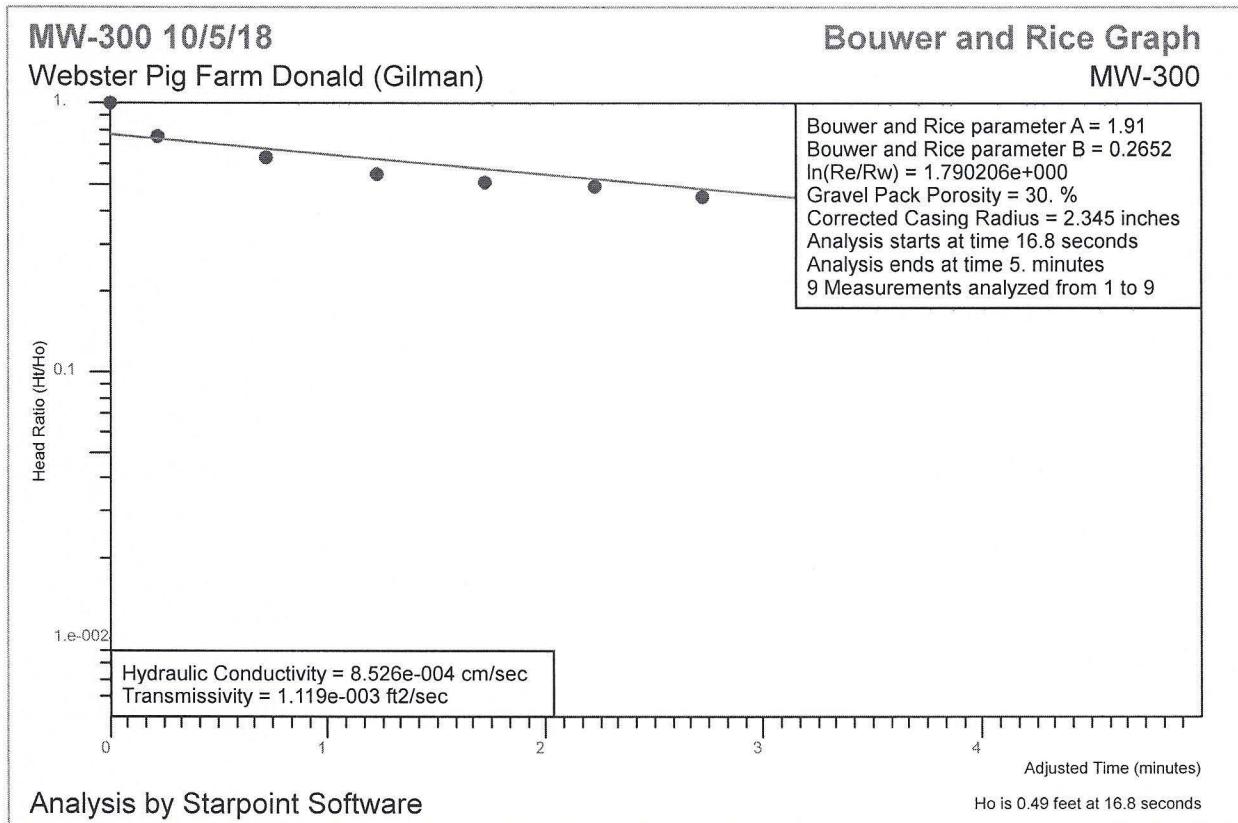
Geometric Means:

Hydraulic Conductivity 1.456e-003 cm/sec
 Transmissivity 1.911e-003 ft²/sec

Sensitivity Analysis:

Hydraulic Conductivity 1.456e-003 cm/sec
 Transmissivity 1.911e-003 ft²/sec

Webster Pig Farm



Webster Pig Farm

Bouwer and Rice Automatic Parameter Estimation**MW-300**

Site Name: Webster Pig Farm
 Location: Donald (Gilman)
 Test Date: 10/5/18

Well Label: MW-300
 Aquifer Thickness: 40. feet
 Screen Length: 10. feet
 Casing Radius: 1. inches
 Effective Radius: 4. inches
 Gravel Pack Porosity: 30. %
 Corrected Casing Radius: 2.345 inches
 Bouwer and Rice Parameter A 1.91
 Bouwer and Rice Parameter B 0.2652
 Radius of Influence of Test 1.997 feet

Trial	Adjusted Time (minutes)	Head (feet)	Head Ratio	Hyd. Con. (cm/sec)	Flow to Well (meters ³ /day)
1	0.	0.49	1.	--	
2	0.22	0.37	0.7551	5.882e-003	6.131
3	0.72	0.31	0.6327	2.929e-003	2.558
4	1.22	0.27	0.551	2.25e-003	1.712
5	1.72	0.25	0.5102	1.802e-003	1.269
6	2.22	0.24	0.4898	1.481e-003	1.001
7	2.72	0.22	0.449	1.356e-003	0.8406
8	3.72	0.2	0.4082	1.11e-003	0.6253
9	4.72	0.19	0.3878	9.247e-004	0.495

Arithmetic Means:

Hydraulic Conductivity 2.217e-003 cm/sec
 Transmissivity 2.909e-003 ft²/sec

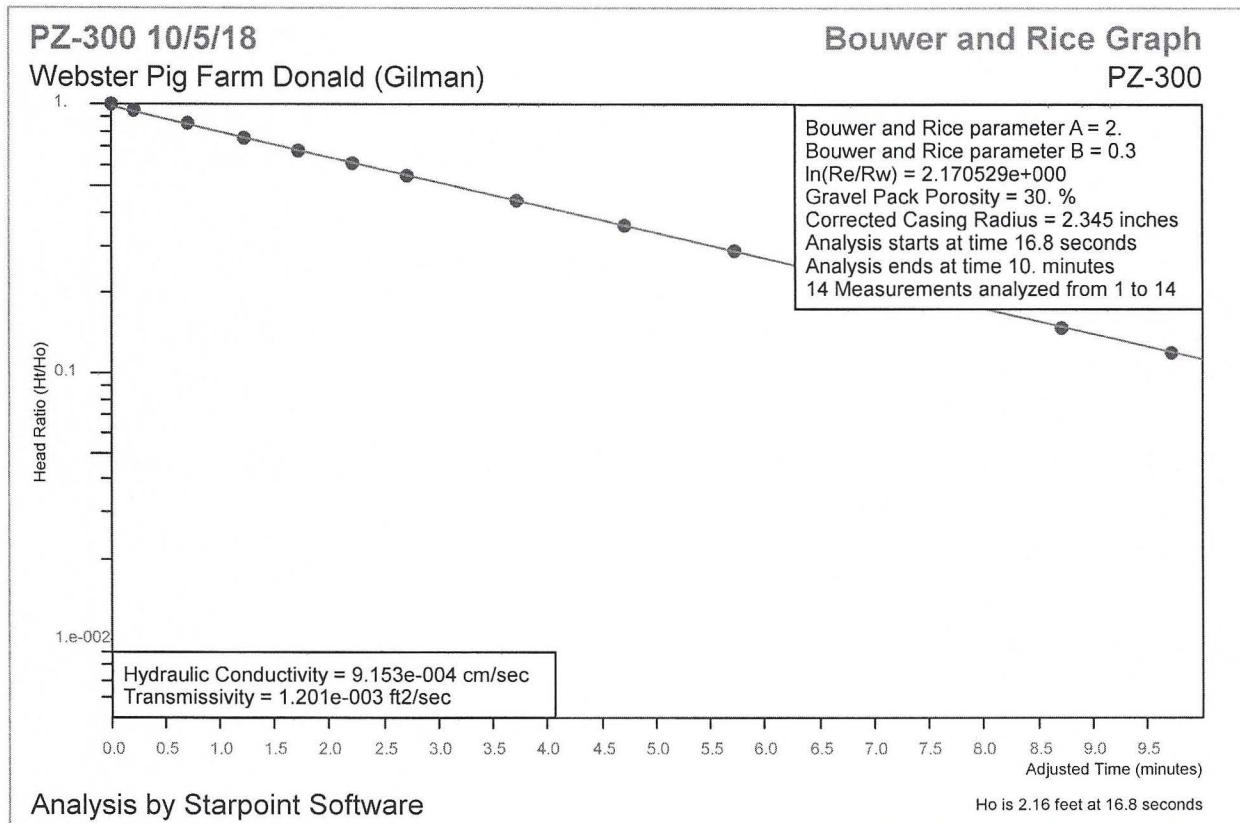
Geometric Means:

Hydraulic Conductivity 1.861e-003 cm/sec
 Transmissivity 2.443e-003 ft²/sec

Sensitivity Analysis:

Hydraulic Conductivity 1.454e-003 cm/sec
 Transmissivity 1.908e-003 ft²/sec

Webster Pig Farm



Webster Pig Farm

Bouwer and Rice Automatic Parameter Estimation**PZ-300**

Site Name: Webster Pig Farm
 Location: Donald (Gilman)
 Test Date: 10/5/18

Well Label: PZ-300
 Aquifer Thickness: 40. feet
 Screen Length: 5. feet
 Casing Radius: 1. inches
 Effective Radius: 4. inches
 Gravel Pack Porosity: 30. %
 Corrected Casing Radius: 2.345 inches
 Bouwer and Rice Parameter A 2.
 Bouwer and Rice Parameter B 0.3
 Radius of Influence of Test 2.921 feet

Trial	Adjusted Time (minutes)	Head (feet)	Head Ratio	Hyd. Con. (cm/sec)	Flow to Well (meters ³ /day)
1	0.	2.16	1.	--	
2	0.22	2.05	0.9491	1.001e-003	2.383
3	0.72	1.84	0.8519	9.379e-004	2.005
4	1.22	1.64	0.7593	9.507e-004	1.812
5	1.72	1.48	0.6852	9.257e-004	1.592
6	2.22	1.32	0.6111	9.343e-004	1.433
7	2.72	1.19	0.5509	9.23e-004	1.276
8	3.72	0.95	0.4398	9.299e-004	1.026
9	4.72	0.77	0.3565	9.203e-004	0.8233
10	5.72	0.62	0.287	9.19e-004	0.662
11	6.72	0.5	0.2315	9.17e-004	0.5327
12	7.72	0.41	0.1898	9.065e-004	0.4318
13	8.72	0.32	0.1481	9.222e-004	0.3429
14	9.72	0.26	0.1204	9.173e-004	0.2771

Arithmetic Means:

Hydraulic Conductivity 9.311e-004 cm/sec
 Transmissivity 1.222e-003 ft²/sec

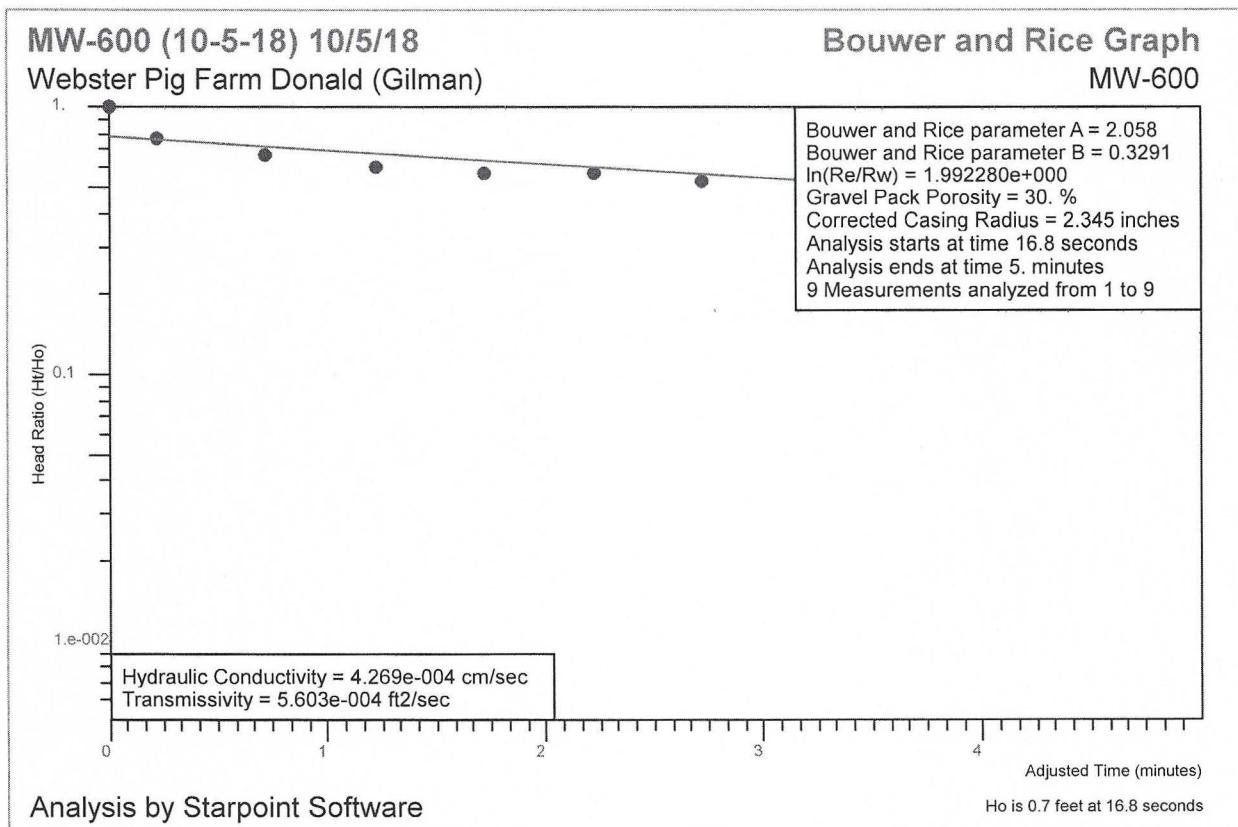
Geometric Means:

Hydraulic Conductivity 9.309e-004 cm/sec
 Transmissivity 1.222e-003 ft²/sec

Sensitivity Analysis:

Hydraulic Conductivity 9.231e-004 cm/sec
 Transmissivity 1.211e-003 ft²/sec

Webster Pig Farm



Webster Pig Farm

Bouwer and Rice Automatic Parameter Estimation**MW-600 (10-5-18)**

Site Name: Webster Pig Farm
 Location: Donald (Gilman)
 Test Date: 10/5/18

Well Label: MW-600
 Aquifer Thickness: 40. feet
 Screen Length: 10. feet
 Casing Radius: 1. inches
 Effective Radius: 4. inches
 Gravel Pack Porosity: 30. %
 Corrected Casing Radius: 2.345 inches
 Bouwer and Rice Parameter A 2.058
 Bouwer and Rice Parameter B 0.3291
 Radius of Influence of Test 2.444 feet

Trial	Adjusted Time (minutes)	Head (feet)	Head Ratio	Hyd. Con. (cm/sec)	Flow to Well (meters ³ /day)
1	0.	0.7	1.	--	
2	0.22	0.54	0.7714	3.858e-003	5.274
3	0.72	0.47	0.6714	1.809e-003	2.153
4	1.22	0.42	0.6	1.369e-003	1.456
5	1.72	0.4	0.5714	1.064e-003	1.077
6	2.22	0.4	0.5714	8.244e-004	0.8348
7	2.72	0.37	0.5286	7.666e-004	0.718
8	3.72	0.36	0.5143	5.846e-004	0.5328
9	4.72	0.34	0.4857	5.004e-004	0.4307

Arithmetic Means:

Hydraulic Conductivity 1.347e-003 cm/sec
 Transmissivity 1.768e-003 ft²/sec

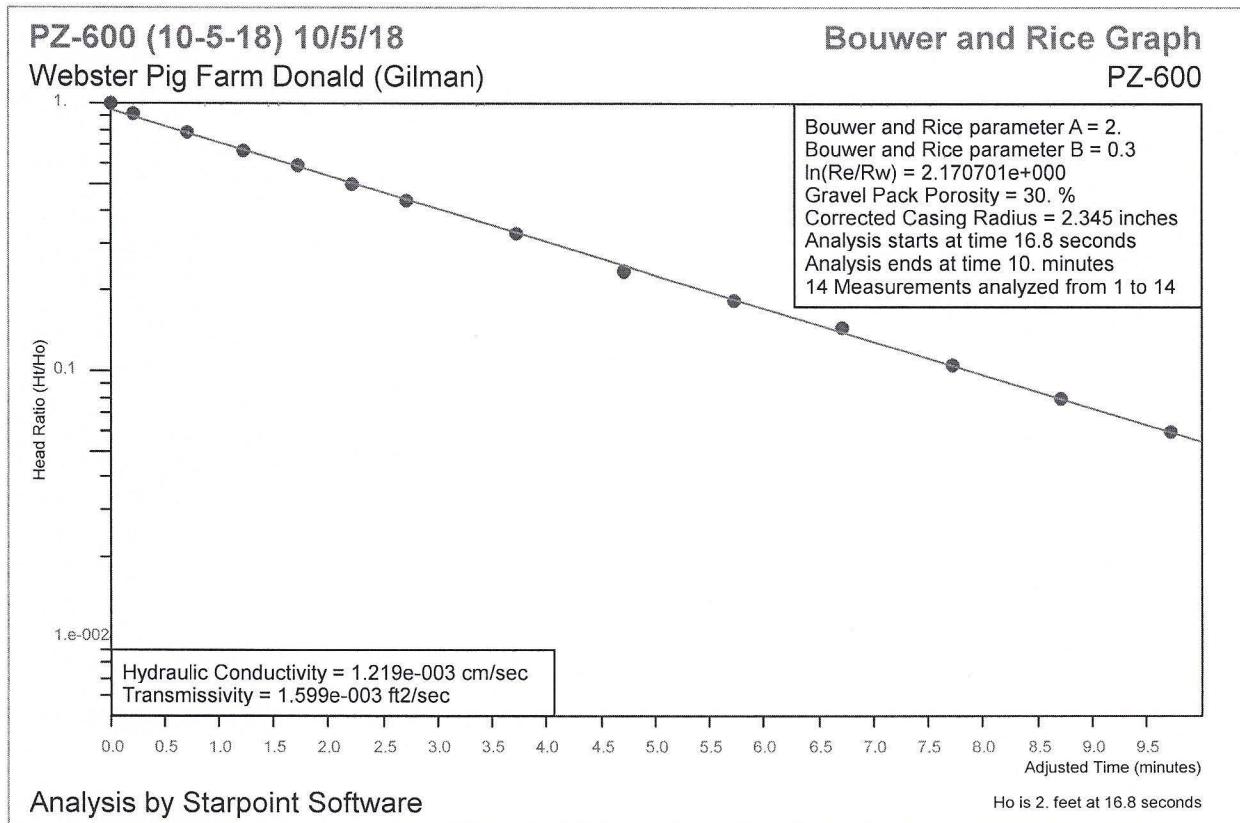
Geometric Means:

Hydraulic Conductivity 1.082e-003 cm/sec
 Transmissivity 1.42e-003 ft²/sec

Sensitivity Analysis:

Hydraulic Conductivity 7.769e-004 cm/sec
 Transmissivity 1.02e-003 ft²/sec

Webster Pig Farm



Webster Pig Farm

Bouwer and Rice Automatic Parameter Estimation

PZ-600 (10-5-18)

Site Name: Webster Pig Farm
 Location: Donald (Gilman)
 Test Date: 10/5/18

Well Label: PZ-600
 Aquifer Thickness: 40. feet
 Screen Length: 5. feet
 Casing Radius: 1. inches
 Effective Radius: 4. inches
 Gravel Pack Porosity: 30. %
 Corrected Casing Radius: 2.345 inches
 Bouwer and Rice Parameter A 2.
 Bouwer and Rice Parameter B 0.3
 Radius of Influence of Test 2.921 feet

Trial	Adjusted Time (minutes)	Head (feet)	Head Ratio	Hyd. Con. (cm/sec)	Flow to Well (meters ³ /day)
1	0.	2.	1.	--	
2	0.22	1.86	0.93	1.389e-003	3.002
3	0.72	1.58	0.79	1.379e-003	2.531
4	1.22	1.34	0.67	1.383e-003	2.152
5	1.72	1.17	0.585	1.313e-003	1.784
6	2.22	1.01	0.505	1.296e-003	1.521
7	2.72	0.87	0.435	1.289e-003	1.303
8	3.72	0.65	0.325	1.273e-003	0.9609
9	4.72	0.47	0.235	1.292e-003	0.7056
10	5.72	0.37	0.185	1.242e-003	0.5341
11	6.72	0.29	0.145	1.21e-003	0.4077
12	7.72	0.21	0.105	1.23e-003	0.3
13	8.72	0.16	8.e-002	1.22e-003	0.2268
14	9.72	0.12	6.e-002	1.219e-003	0.17

Arithmetic Means:

Hydraulic Conductivity 1.287e-003 cm/sec
 Transmissivity 1.689e-003 ft²/sec

Geometric Means:

Hydraulic Conductivity 1.286e-003 cm/sec
 Transmissivity 1.687e-003 ft²/sec

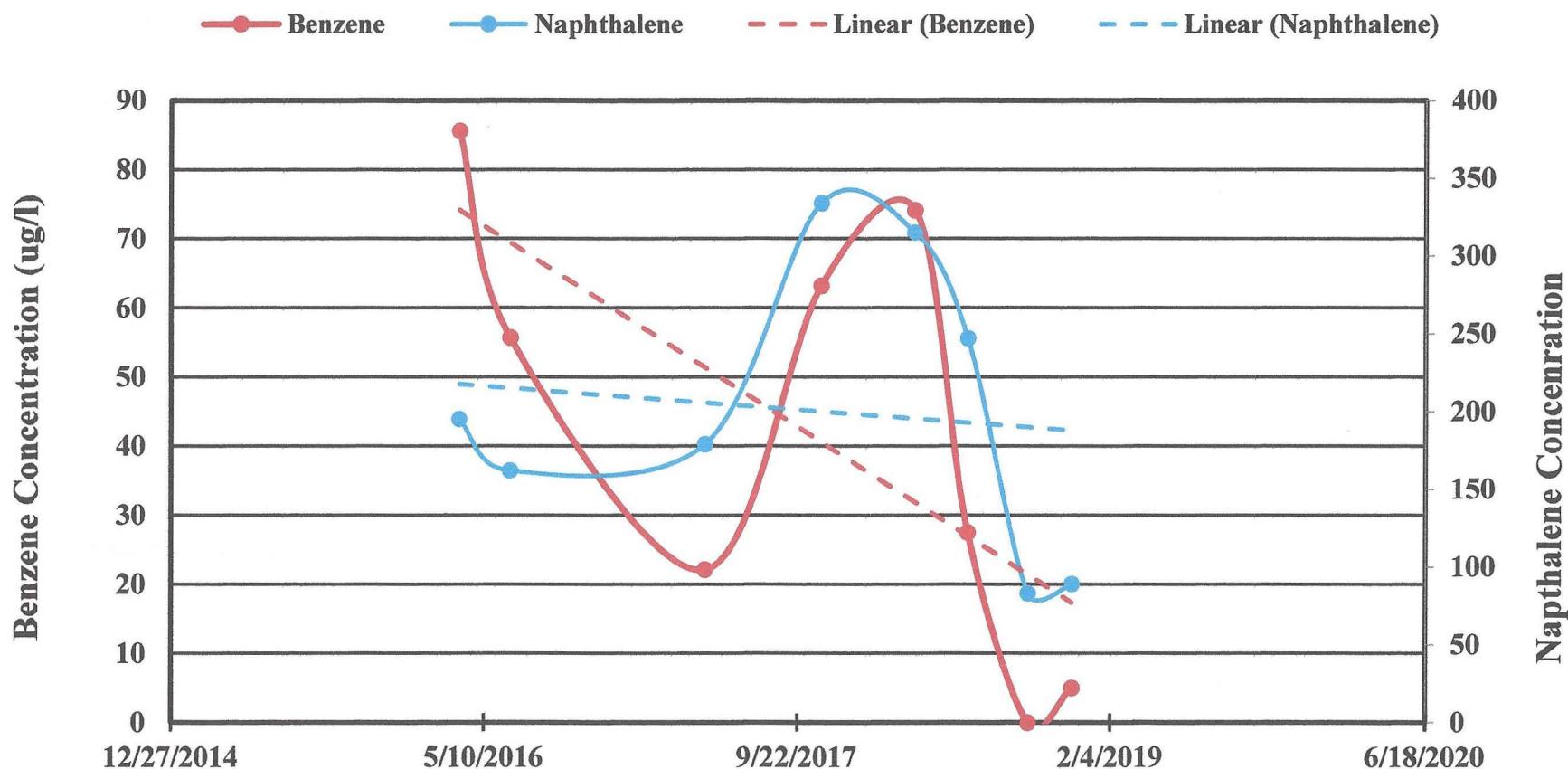
Sensitivity Analysis:

Hydraulic Conductivity 1.282e-003 cm/sec
 Transmissivity 1.682e-003 ft²/sec

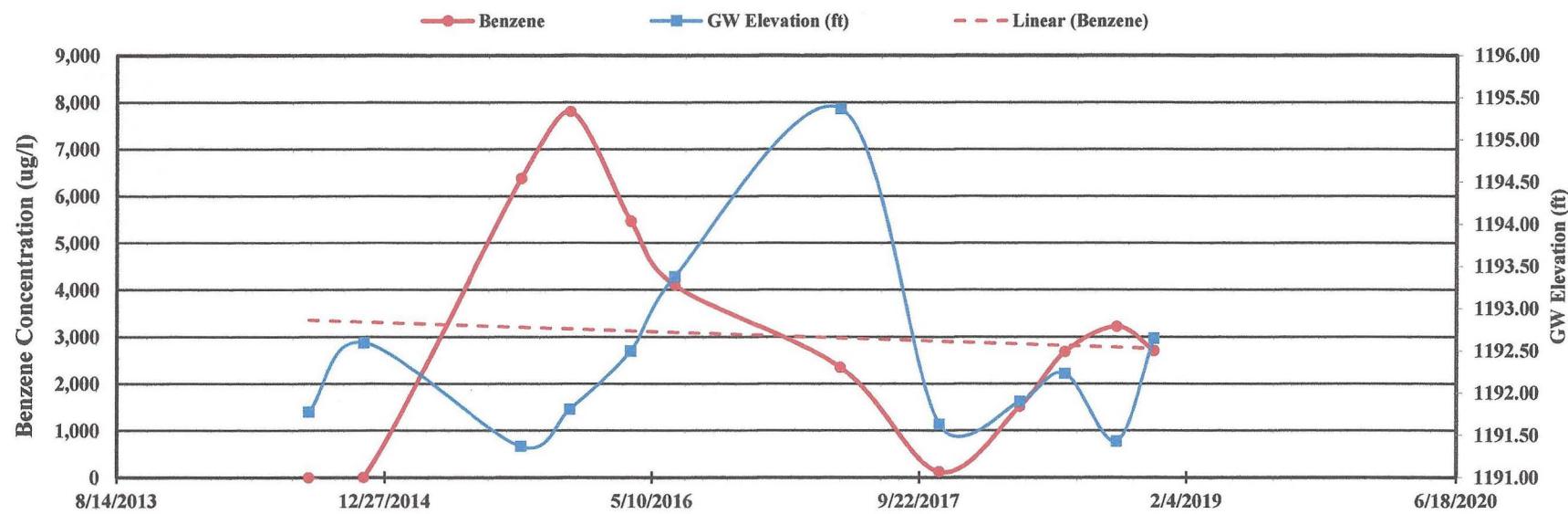
APPENDIX C

Graphs of Ground Water Concentrations Over Time

MW-600 (last 2 years)

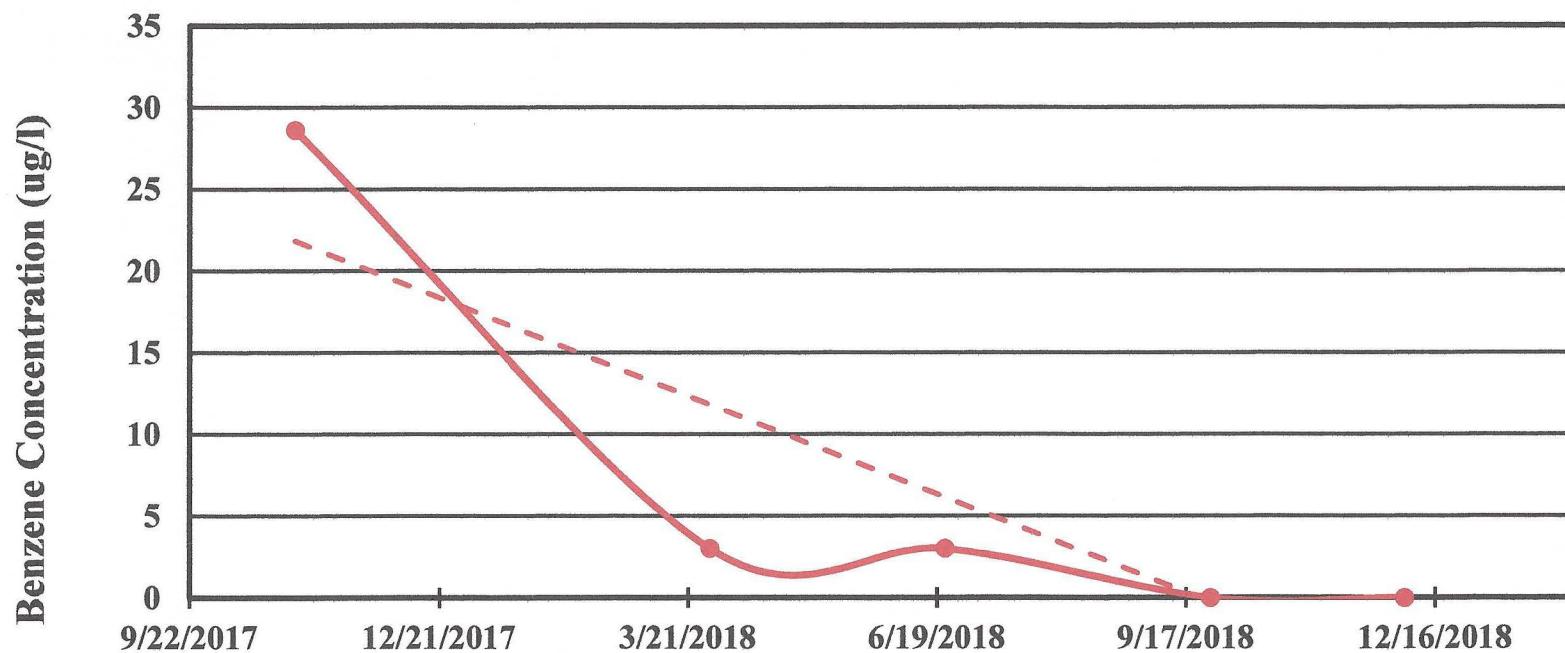


PZ-100 (since August 2014 Remedial Excavation)



PZ-400 (last 2 years)

—●— Benzene - - - Linear (Benzene)



PZ-600

