

Meridian Environmental Consulting, LLC

September 15, 2014

Carrie Stoltz Wisconsin Department of Natural Resources 107 Sutliff Avenue Rhinelander, Wisconsin 54501

RECEIVED

SEP 1 9 2014

Dept of Natural Resources Rhinelander Service Center

Subject:

Results of Recent Work and Change Order

- Excavation
- Install Monitoring Wells MW-8A/B, -9A/B
- Ground Water Sampling

Jim and Cindy's Bar W14764 Highway 73 Jump River, Wisconsin PECFA No. 54433-9769-64 DNR BRRTS No. 03-61-000116 Meridian No. 05F781

Dear Carrie:

Enclosed are the results of work completed at this site during the past year.

The work included:

- Excavate 938 tons of contaminated soil from the source area
- Install 4 monitoring wells (MW-8A, MW-8B, MW-9A, MW-9B)
- Survey monitoring well elevation and location
- Sample monitoring well network (December 2013 and April 2014)
- Private Well Sampling

The excavation removed most of the source soils. Some residual soil impacts remain at the water table ("smear zone"). No further action is recommended with respect to impacted soil.

The ground water sampling documented impacted ground water to the south and southeast. We recommend a monitoring well nest followed by 3 more sampling events to document the ground water plume is stable. If the results are favorable, the site should be submitted for Closure with GIS Notification for Soil and Ground Water.

BACKGROUND INFORMATION

The reader is referred to the project file for a more thorough description of the site history. A brief summary is provided below.

The site is a small tavern located in Jump River, Wisconsin (Figure 1). Gasoline was sold at the site until the tanks were removed in 1993. Petroleum impacts were measured in the soil when the tanks were removed. No site investigation work was completed until 2011. Soil borings and monitoring wells (MW-1 thru MW-7) were installed and sampled. The results indicated the soil and ground water was significantly impacted with petroleum. Due to the presence of private wells across the road from the property (within 100 feet), removal of the source soils was recommended. Additional monitoring wells to further define the extent of impacted ground water was recommended. The remainder of this letter presents the results of this recent work as well as our recommendations to achieve Closure.

RECENT WORK

Soil Excavation

In October 2013, approximately 938 tons of petroleum impacted soil were excavated from the former pump and tank area (Figure 2). The soils were disposed at the Seven Mile Creek landfill near Eau Claire.

The excavation extended to about 20 feet depth. Confirmation samples were collected from the perimeter of the excavation. The analytical report is provided in Appendix A and summarized in Table 1.

The excavation removed accessible impacted soils from the surface to the water table (about 20 feet). Residual petroleum impacts remain around the perimeter of the excavation at the "smear zone".

MW-4 was abandoned prior to the excavation. The abandonment form is provided in Appendix B

Install Monitoring Wells

Monitoring wells MW-8A, MW-8B, MW-9A, MW-9B were installed in late October in the locations shown in Figure 2. The boring logs and well forms are provided in Appendix B.

The monitoring wells' elevations and locations were surveyed relative to local datum.

Ground Water Sampling

Ground water samples were collected from the monitoring wells twice (December 2013 and April 2014). The analytical reports are provided in Appendix A and summarized in Table 2. The ground water levels are summarized in Table 3.

Private Well Sampling

Area residents rely on private wells for their water supply. Figure 3 is a map showing the location of residences near the site with private wells.

The private wells at the following properties were sampled.

Site Well ("Bar")

- · W14789 Hwy. 73 (rental property)
- · W14767 Hwy. 73 (Lyne residence)
- 'N8910 Elm Street (Mason residence)

Community Center

- W14778 River Street (Malam residence)
- N8890 Bridge Road (McVicker residence)
- N8887 Bridge Road (rental)
- N8891 Bridge Street (new convenience store)

The analytical report is provided in Appendix A and summarized in Table 2.

DATA EVALUATION

Regional Geology

The site is located in the Jump River valley. The Jump River flows westerly about 800 feet south of the site (Figure 1). The elevation of the site is approximately 20 feet higher than the normal water level of the river.

The surrounding area is relatively flat with some hills south of Jump River. Swamps are common in the region indicative of low permeability soils and poor drainage.

Residents in the area rely on private wells for their water supply. The well logs indicate the area is underlain by approximately 50 feet of "hardpan" (heterogeneous silt/sand/clay matrix with gravel and rocks) overlying a sand and gravel aquifer. Bedrock is typically about 100 feet below grade in the region.

Potable wells in the area are typically 50 to 75 feet deep. The potable wells draw from the sand and gravel aquifer.

Site Hydrogeology

Figure 4 is a cross-section illustrating the soils at the site. The soil borings encountered fine-grained soils (silt with clay) to about 10 feet depth. Beneath these fine-grained soils is a layer of coarse sand with gravel and cobbles to about 25 feet below grade. Below this coarse sediment layer are fine-grained soils described locally as "hardpan" which is a poorly sorted soil layer of silty sand with clay and gravel. Another layer of sand and gravel is found about 50 to 60 feet below grade. The private wells are typically screened in this deeper coarse sediment layer.

Ground water is found about 17 feet below grade which is about the same elevation as the Jump River. Various factors (e.g., seasonal fluctuations (Figure 5), Jump River stage, downward

vertical gradient (Table 3)) compounded with a relatively small horizontal gradient make it difficult to interpret the ground water flow direction. However, based on field measurements and ground water chemistry, we interpret ground water flow is southerly toward the Jump River. More ground water level measurements are needed to confirm ground water flow direction.

Extent of Impacted Soil

The excavation removed accessible impacted soil. Confirmation samples were collected from the perimeter of the excavation about 3 feet below grade. The sidewall samples were clean with the exception of a sample from the northeast corner of the excavation which had residual concentrations.

The "smear zone" is impacted with petroleum away from the excavation.

No further investigation is recommended with respect to defining or remediating the extent of impacted soil.

Extent of Impacted Ground Water

NR140 Enforcement Standard exceedances were measured in MW-1, -2, -3, -5, -6, and MW-7. Based on the sampling results, there appears to be a contaminant plume extending southerly from the site (Figure 6).

We recommend a downgradient well nest be installed as shown on Figure 6. The well nest should consist of a water table well screened 15 to 25 feet below grade and a piezometer screened 35 to 40 feet below grade.

The data from the private wells will continue to be used to define the extent of petroleum impacts in the sand and gravel aquifer.

Private Well Sampling

MTBE has been measured (below PAL) in several private wells including 8910 Elm Street (once), 14789 Hwy. 73, 8887 Bridge St (once), 8890 Bridge St, and the new well at 8891 Bridge St.

Benzene has also been measured in 14789 Hwy. 73, 8890 Bridge St (once), and 8891 Bridge St. (once).

The source of the private well impacts is not entirely clear. In addition to the former tanks at the site, underground tanks were located across the road at 14767 Hwy. 73 as well as the property west of the site (14789 Hwy. 73).

The well at 14789 Hwy. 73 appears to be a sand point and may be impacted from the former tanks located on that property. This conclusion is supported by the clean samples from MW-8A and MW-8B.

The former tanks at 14789 Hwy. 73 may have also impacted the other private wells (e.g., 8887 Bridge St., 8890 Bridge St, 8891 Bridge St, and 14778 River Street). However, it is also possible the Jim's Bar tanks impacted the sand and gravel aquifer.

In summary, there may be multiple sources of impacts to the sand and gravel aquifer. Fortunately, the impacts appear to be within NR140 PALs. Additional sampling should be conducted to confirm these results.

Vapor Intrusion

Petroleum impacted soil and ground water can produce vapors which may enter subsurface structures (e.g., basements, sewers). The site building (bar/home) has a basement which extends an estimated 8 feet below grade. The silty clay layer and the proximity of the house to the impacted soil and ground water may allow petroleum vapors to migrate to the basement area. The basement was inspected and no petroleum odors were detected.

Removal of the source soils will help remove potential vapor intrusion sources.

SUMMARY

- Approximately 938 tons of impacted source soil were removed. No further work is recommended with respect to soil contamination.
- Petroleum impacted ground water was measured in the ground water. The extent appears to extend to the south and east. We recommend a monitoring well nest to confirm downgradient extent especially with respect to downgradient private water supply wells.
- Additional ground water sampling and water level measurements are needed to confirm the recent results.

RECOMMENDATIONS

Based on the results of the work completed to date, we recommend the following work:

- A downgradient monitoring well nest should be installed in the location shown in Figure 6.
- All of the monitoring wells should be sampled three times (quarterly) for PVOC+naphthalene.
- The onsite and adjacent private wells should be sampled three times (quarterly) for PVOC+naphthalene.
- A report will be prepared which will document the work completed. The report will include updated site maps and tables, updated ground water flow maps, and our recommendations regarding work needed to achieve Closure with GIS Registry for Soil and Ground Water.

A Change Order for the proposed Scope of Work is included with this Letter Report.

Sincerely,

MERIDIAN ENVIRONMENTAL CONSULTING, LLC

Kenneth Shinko, PG Project Manager

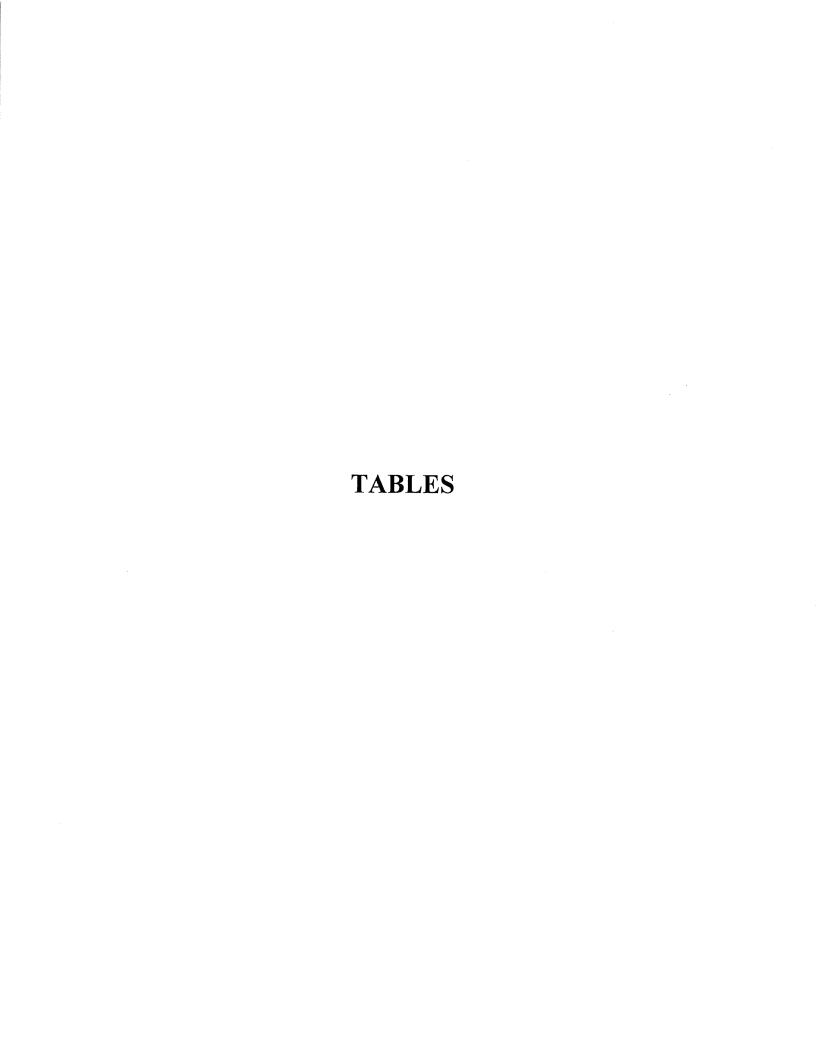


Table 1: Soil Analytical Data

Jim and Cindy's Bar Jump River, Wisconsin Meridian No. 05F781

Sample	Depth	PID	1,2,4-TMB	1,3,5-TMB	Benzene	Ethylbenzene	m&p-Xylene	o-Xylene	Total Xylenes	MTBE	Naphthalene	Toluene	GRO
Units	ft	iu	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tank Closu	ure Soil Sa	mpling (Au	igust 18, 199	93)									
T1	12	"pegged"	22	7.2	3.7	1.5			22	<.5		7.9	340
T2	9	"pegged"	39	22	10	21		-	77	4.6		34	1500
Geoprobe	Borings (C	October 3, 2	2011)										
GP-1: 3-4	3-4	50	495	161	73.2	179	928	328	1256	<5.07	81.1	728	8610
GP-1: 7-8	7-8	70	42.8	16	13.2	21.1	90.6	30.3	120.9	2.78	7.81	90.5	
GP-2: 3-4	3-4	60	18.9	7.21	0.648	1.88	14.8	6.09	20.89	<.24	4.15	4.36	
GP-2: 7-8	7-8	110	189	67.4	4.91	23.1	159	68	227	<.514	31.6	50	
GP-3: 3-4	3-4	3	0.141	0.079	0.197	0.172	0.593	0.204	0.797	<.025	<.019	0.882	
GP-3: 7-8	7-8	1	0.1	0.062	0.202	0.143	0.47	0.157	0.627	<.026	<.019	0.87	
GP-4: 3-4	3-4	1	<.013	<.018	0.109	0.067	0.182	0.08	0.262	<.024	<.018	0.224	
GP-4: 7-8	7-8	0	0.072	<.019	0.18	0.1	0.246	0.129	0.375	<.025	<.019	0.464	
GP-5: 3-4	3-4	1	0.13	0.066	0.105	0.124	0.448	0.163	0.611	<.024	<.018	0.477	
GP-5: 7-8	7-8	1	<.013	<.018	0.095	0.074	0.163	0.07	0.233	<.024	<.018	0.24	
GP-6: 3-4	3-4	0	0.124	<.018	0.076	0.092	0.321	0.121	0.442	<.024	<.018	0.267	
GP-6: 7-8	7-8	3	2.68	1.15	0.782	1.04	4.18	1.39	5.57	<.13	0.681	1.98	
GP-7: 3-4	3-4	50	413	141	46.1	138	721	255	976	<5.11	65.3	558	
GP-7: 7-8	7-8	100	58.6	20.2	5.42	20.2	94.3	36.4	130.7	<.24	9.14	60.4	
Excavation	n Confirma	tion Samp	les (10/24/13	3)									
NE	3		<.025	<.025	<.025	<.025	<.05	<.025	<.075	<.025	<.025	<.025	
NW	3		<.025	<.025	<.025	<.025	<.05	<.025	<.075	<.025	<.025	<.025	
EN	3		0.2	0.149	0.0764	0.249	0.776	0.121	0.896	<.0253	<.0253	0.0403	
ES	3		<.025	<.025	<.025	<.025	<.05	<.025	<.075	<.025	<.025	<.025	
SE	3		<.025	<.025	<.025	<.025	<.05	<.025	<.075	<.025	<.025	<.025	
s w	3		<.025	<.025	<.025	<.025	<.05	<.025	<.075	<.025	<.025	<.025	
WN	3		0.0324	<.025	<.025	<.025	<.05	<.025	<.075	<.025	<.025	<.025	
WS	3		0.0318	<.025	<.025	<.025	<.05	<.025	<.075	<.025	<.025	<.025	

Regulatory Standards

NR720			0.0055	2.9		4.1		1.5	100
NR746 Table 1	83	11	8.5	4.6		42	2.7	38	
NR746 Table 2			1.1						

For soils need lesty's toble: RCL spread sheet (macro-enabled)



Table 1: Soil Analytical Data

Jim and Cindy's Bar Jump River, Wisconsin Meridian No. 05F781



nc kcl = 111 Dc = 1.49	ACRCL=4220 D.C. = 7 47		У	11c RcL = 890 D.c. = 258	1) C R C C = 43,8 D. C. = 59 y	10 RcL=188 20. = 5.15	10 Rel=5300 D.C. = 818	
Benzene	Ethylbenzene	m&p-Xylene	o-Xvlene	Total Xvlenes	MTBE	Naphthalene	Toluene	GRO

Sample	Depth	PID	1,2,4-TMB	1,3,5-TMB	Benzene	Ethylbenzene	m&p-Xylene	o-Xylene	Total Xylenes	MTBE	Naphthalene	Toluene	GRO
Units	ft	iu	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Tank Closi	ure Soil Sa	mpling (Au	igust 18, 199	93)									
T1	12	"pegged"	22	7.2	3.7 ·	1.5			22	<.5		7.9	340
T2	9	"pegged"	39	22	10	21			77	4.6		34	1500
					DIA.								
Geoprobe				The Contract of the Contract o	Alle				1000				
GP-1: 3-4	3-4	50	495	161	73.2	179	928	328	1256	<5.07	81.1	728	8610
GP-1: 7-8	7-8	70	42.8	16	13.2	21.1	90.6	30.3	120.9	2.78	7.81	90.5	
GP-2: 3-4	3-4	60	18.9	7.21	0.648	1.88	14.8	6.09	20.89	<.24	4.15	4.36	
GP-2: 7-8	7-8	110	189	67.4	4.91	23.1	159	68	227	<.514	31.6	50	
GP-3: 3-4	3-4	3	0.141	0.079	0.197	0.172	0.593	0.204	0.797	<.025	<.019	0.882	
GP-3: 7-8	7-8	1	0.1	0.062	0.202	0.143	0.47	0.157	0.627	<.026	<.019	0.87	-
GP-4: 3-4	3-4	1	<.013	<.018	0.109	0.067	0.182	0.08	0.262	<.024	<.018	0.224	
GP-4: 7-8	7-8	0	0.072	<.019	0.18	0.1	0.246	0.129	0.375	<.025	<.019	0.464	
GP-5: 3-4	3-4	1	0.13	0.066	0.105	0.124	0.448	0.163	0.611	<.024	<.018	0.477	
GP-5: 7-8	7-8	1	<.013	<.018	0.095	0.074	0.163	0.07	0.233	<.024	<.018	0.24	
GP-6: 3-4	3-4	0	0.124	<.018	0.076	0.092	0.321	0.121	0.442	<.024	<.018	0.267	
GP-6: 7-8	7-8	3	2.68	1.15	0.782	1.04	4.18	1.39	5.57	<.13	0.681	1.98	
GP-7: 3-4	3-4	50	413	141	46.1	138	721	255	976	<5.11	65.3	558	
GP-7: 7-8	7-8	100	58.6	20.2	5.42	20.2	94.3	36.4	130.7	<.24	9.14	60.4	
							×						
		ation Samp	les (10/24/13										
NE	3		<.025	<.025	<.025	<.025	<.05	<.025	<.075	<.025	<.025	<.025	
NW	3		<.025	<.025	<.025	<.025	<.05	<.025	<.075	<.025	<.025	<.025	
ΕN	3		0.2	0.149	0.0764	0.249	0.776	0.121	0.896	<.0253	<.0253	0.0403	
ES	3		<.025	<.025	<.025	<.025	<.05	<.025	<.075	<.025	<.025	<.025	
SE	3		<.025	<.025	<.025	<.025	<.05	<.025	<.075	<.025	<.025	<.025	
SW	3		<.025	<.025	<.025	<.025	<.05	<.025	<.075	<.025	<.025	<.025	
WN	3		0.0324	<.025	<.025	<.025	<.05	<.025	<.075	<.025	<.025	<.025	
WS	3		0.0318	<.025	<.025	<.025	<.05	<.025	<.075	<.025	<.025	<.025	

Regulatory Standards

ricgulatory otaliaaras								
NR720			0.0055	2.9	4.1		1.5	100
NR746 Table 1	83	11	8.5	4.6	42	2.7	38	
NR746 Table 2			1.1					

Concentration exceeds regulatory standard

FOL SOILS Med Nesty's Tobble: RCL Spread Sheet (Macro-enabled). I used Non-Industrial Standards



RCL Spread sheet - non Industrial Soil Standards

Comparison / Hazard Index / C

Residential setting. Not-To-Exceed D-C RCLs from web-calculator at: http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search (Chicago as climatic zone). Exceed D-C RCL defaults to 100,000 mg/kg if web-calculator result or Csat exceeds 10% by weight (the ceiling limit concentration defined in EPA RSL Users Guide). Basis: ca = cancer; nc = non-cancer; Csat = soil saturation concentration; ceiling = 10%.

Background threshold values are non-outlier trace element maximum levels in Wisconsin surface soils from the USGS Report at: http://pubs.usgs.gov/sir/2011/5202.

- 1. Enter data in yellow cells. Numeric-only values under "INPUT Site Data." For ND, use detection limit. Do not type '-', 'NA' nor 'space bar.' Leave purple cells "as is."
- 2. After completing data entry, click "Get Summary" in Row 872.

(Contaminants not in the provided list can be added starting at Row 860.)									
Find Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	Background Threshold Value (mg/kg)	INPUT Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data
Benzene	71-43-2	111.	1.49	1.49	ca	14.45 (9/1.9)	(1119/119)	Exceedance.	Holli Bata
Ethylbenzene	100-41-4	4,220.	7.47	7.47	ca	-			
Toluene	108-88-3	5,300.	- 1.47	818.	Csat				
Xylenes	1330-20-7	890.	-	258.	Csat				
Methyl tert-Butyl Ether (MTBE)	1634-04-4	23,800.	59.4	59.4	ca				
Dichloroethane, 1,2-	107-06-2	46.7	0.608		ca	-		E CALLES	
Dibromoethane, 1,2-	106-93-4	107.	0.047		ca	-		Service of the servic	MARKET STATE
Trichloroethylene	79-01-6	6.05	1.26	1.26	ca				
Tetrachloroethylene	127-18-4	115.	30.7	30.7	ca				
Vinyl Chloride	75-01-4	93.3	0.067	0.067	ca				
Dichloroethylene, 1,1-	75-35-4	342.	-	342.	nc				
Dichloroethylene, 1,2-trans-	156-60-5	1,560.	-	1,560.	nc				
Dichloroethylene, 1,2-cis-	156-59-2	156.	-	156.	nc				
Trichloroethane, 1,1,1-	71-55-6	12,300.	-	640.	Csat		*		
Carbon Tetrachloride	56-23-5	137.	0.854	0.854	ca				
Trimethylbenzene, 1,2,4-	95-63-6	89.8	-	89.8	nc				
Trimethylbenzene, 1,3,5-	108-67-8	782.	-	182.	Csat				
Naphthalene	91-20-3	188.	5.15	5.15	ca				
Benzo[a]pyrene	50-32-8	-	0.015	0.015	ca				
Acenaphthene	83-32-9	3,440.	-	3,440.	nc				
Acenaphthylene	208-96-8	-	-						Zahili Cichi diku
Anthracene	120-12-7	17,200.	-	17,200.	nc				
Benz[a]anthracene	56-55-3	-	0.148	0.148	ca				
Benzo(j)fluoranthene	205-82-3	-	0.377	0.377	ca				
Benzo[b]fluoranthene	205-99-2		0.148	0.148	ca				
Benzo[g,h,i]perylene	191-24-2	-	-					100	

Table 2: Ground Water Analytical Data

Jim and Cindy's Bar Jump River, Wisconsin Meridian No. 05F781

Well	Date	1,2,4-TMB	1,3,5-TMB	Total TMB	Benzene	Ethylbenzene	m&p-xylene	o-xylene	Total Xylenes	MTBE	Naphthalene	Toluene
Units		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
NR140 Enfo	rcement Stand			480	5	700	ugii	ug.	2000	60	100	800
	Well Sampling											
		gricounio										
MW-1	installed 10/1	11/11										
	10/14/2011	2670	850	3520	1250	2080	4660	1900	6560	182	553	7110
	6/23/2012	1230	388	1618	682	619	1,000	.000	3870	17.2J	157	2590
	5/14/2013	1480	436	1916	348	880			3850	14.3J	311	1650
	12/3/2013	382	66.2	448.2	278	367			608	8.7	62.6	476
	4/15/2014	648	145	793	219	439			1440	11.2	101	842
	W. COLEGIA		140	100		400			1.110		101	
MW-2	installed 10/1	1/11										
	10/14/2011	1810	619	2429	94.5	680	2350	251	2601	87.4	292	278
	6/23/2012	634	153	787	5.4	164	2000	201	497	15.5	79.9	44.6
	5/14/2013	733	273	1006	39.3	234			753	11.9	114	95.8
	12/3/2013	203	60.2	263.2	68.3	127			276	12.7	53.6	75.8
	4/15/2014	617	194	811	72.3	295			750	16.4	119	175
-	1/10/2014	017	104	011	72.0	200			700	10.4	110	11.0
MW-3	installed 10/1	1/11										
	10/14/2011	3980	1260	5240	1560	2910	10200	2280	12480	169	856	9780
	6/23/2012	3340	993	4333	742	2560	10200	2200	11200	<38.1	632	7910
	5/14/2013	3130	944	4074	978	2230			9720	<38.1	606	7450
	12/3/2013	3270	998	4268	662	2300			9720	<37.1	577	6850
	4/15/2014	2870	888	3758	663	2200			9100	<48.5	567	5520
	4/10/2014	2010	000	0700	000	2200			0100	140.0		
MW-4	installed 10/1	11/11										
1000	10/14/2011	2420	711	3131	1400	2380	6980	1890	8870	98.8	589	7460
	6/23/2012	3020	866	3886	1360	2370	0300	1000	10800	<19	686	7720
	5/14/2013	2770	809	3579	1660	2230			12300	<38.1	651	8760
			ed due to exca		1000	2230			12500	300.1	001	0,00
	10/22/2013	well aballuoli	eu uue lo exca	avalion								
MW-5	installed 5/6/	13										
WW-5	5/14/2013	3090	919	4009	88.8	1120			4040	<19	655	387
	12/3/2013	2460	720	3180	103	770			2050	<9.3	450	223
-	4/15/2014	3200	968	4168	82.5	890			2330	<12.1	501	201
 	4/13/2014	3200	300	4100	02.0	030			2000	112.1		
MW-6	installed 5/6/	13										
11111-0	5/14/2013	2430	781	3211	44.6	1280			6470	16.1J	446	1810
	12/3/2013	2050	661	2711	41.5	747			2490	10.7	282	557
	4/15/2014	1080	336	1416	20.4	343			1280	<9.7	103	430
	4/15/2014	1000	000	1410	20.4	040						
MW-7	installed 5/7/	13										
	5/14/2013	275	147	422	26.8	92.3			135	6.7J	41.4	29.2
	12/3/2013	116	33.4	149.4	18.8	85.6			131	6.7	33.2	19.7
-	4/15/2014	80.7	30.9	111.6	12.4	53.4			69.8	9.3	19.8	13.5
	11.10/2014	55.7	55.0		,-3,-							
MW-8A	installed 10/2	28/13										
	12/3/2013	<.33	<.36	<.36	<.34	<.34			<1	<.37	<.37	<.34
016	4/15/2014	<.42	<.42	<.42	<.4	<.39			<1.2	3.4	<.42	<.39
	17,072014	.72	.72	.74								
MW-8B	installed 10/2	28/13										
	12/3/2013	<.33	<.36	<.36	<.34	<.34			<1	<.37	<.37	<.34
ot	4/15/2014	<.42	<.42	<.42	<.4	<.39			<1.2	<.48	<.42	<.39
					· · · ·							
MW-9A	installed 10/2	28/13										
	12/3/2013	<.33	<.36	<.36	1.9	<.34			<1	1.7	<.37	<.34
al	4/15/2014	<.42	<.42	<.42	<.4	0.97			<1.2	2	<.42	<.39
-	7/10/2014	72	74	.74	3-1	2.01			1020			
MW-9B	installed 10/2	28/13					7					
1	12/3/2013	<.33	<.36	<.36	2.7	<.34			<1	<.37	1.1	<.34
			<.42	<.42	2.1	<.39			<1.2	0.56	<.42	<.39
016	4/15/2014	<.42										

7ES- Total TMBS, Benzene, naphthalene

100-2 - total TMB's, Benzene, naphthalene

MW-3 7ES - YOHAL YMB's, Benzene, Ethylbenzene, total xylenes, naphytalene + toluene - Hot! MW-4 7ES - total TMBIS, Benzere, Ethylbenzere, total xylenes, Maphthalene +

toluene - Hot! taband - excavation

unstable

7ES- total Tmb's, Denzene, Ethylbenzene, total xylenes, naphthalene

Multo 785- total Tmb's, Benzene, Naphthalene

MW-7 7ES-Denzene

Private Well	Sampling Re	esults										
Well	Date	1,2,4-TMB	1,3,5-TMB	Total TMB	Benzene	Ethylbenzene	m&p-xylene	o-xylene	Total Xylenes	MTBE	Naphthalene	Toluene
Units		ug/l	ug/l	ug/l	ug/l	ug/l	ug/I	ug/l	ug/l	ug/l	ug/l	ug/l
NR140 Enfor	cement Stand	dard		480	5	700		g	2000	60	100	800
				1000								
Bar (onsite v	vell)											
(basement)	10/14/2011	<.4	<.44	<.44	<.31	<.5	<.62	<.77	<.77	<.3	<2	<.37
(outside)	6/23/2012	<.05	<.086	<.086	<.047	<.078	<.15	<.12	<.27	<.048	<.11	<.065
	5/14/2013	<.43	<.4	<.43	<.39	<.41			<1.3	<.38	<.4	<.42
	12/3/2013	<.33	<.36	<.36	<.34	<.34			<1	<.37	<.37	<.34
	4/15/2014	<.42	<.42	<.42	<.4	<.39			<1.2	<.48	<.42	<.39
Lyne (14767												
	6/23/2012	<.05	<.086	<.086	<.047	<.078	<.15	<.12	<.27	<.048	<.11	<.065
	5/14/2013	<.43	<.4	<.43	<.39	<.41			<1.3	<.38	<.4	<.42
	12/3/2013	<.33	<.36	<.36	<.34	<.34			<1	<.37	<.37	·<.34
	4/15/2014	<.42	<.42	<.42	<.4	<.39			<1.2	<.48	<.42	<.39
8910 (Mike N												
	6/23/2012	<.05	<.086	<.086	.075J	<.078	<.15	<.12	<.27	.18J	<.11	<.065
	5/14/2013	<.43	<.4	<.43	<.39	<.41			<1.3	<.38	<.4	<.42
	12/3/2013	<.33	<.36	<.36	<.34	<.34			<1	<.37	<.37	<.34
	4/15/2014	<.42	<.42	<.42	<.4	<.39			<1.2	<.48	<.42	<.39
14789 State												
	6/23/2012	<.05	<.086	<.086	6	<.078	<.15	<.12	<.27	1.6	<.11	<.065
	5/14/2013	<.43	<.4	<.43	5.7	<.41			<1.3	1.3	<.4	<.42
	12/3/2013	<.33	<.36	<.36	0.4	<.34			<1	1	<.37	<.34
	4/15/2014	<.42	<.42	<.42	<.4	<.39			<1.2	0.99	<.42	<.39
14778 River												
	5/14/2013	<.57	<2.5	<2.5	<.5	<.5	<.82	<.5	<.82	<.49	<2.5	<.44
		Inaccessible										
	4/15/2014	<.42	<.42	<.42	<.4	<.39			<1.2	<.48	<.42	<.39
Community										- 10		
	5/14/2013	<.57	<2.5	<2.5	<.5	<.5	<.82	<.5	<.82	<.49	<2.5	<.44
	12/3/2013	<.33	<.36	<.36	<.34	<.34			<1	<.37	<.37	<.34 <.39
	4/15/2014	<.42	<.42	<.42	<.4	<.39			<1.2	<.48	<.42	<.39
0007 5 11	C4								*			
8887 Bridge		. 57	40 F	40 F			4.00		< 02	<.49	<2.5	<.44
	5/14/2013	<.57	<2.5	<2.5	<.5	<.5 <.34	<.82	<.5	<.82 <1	<.37	<.37	<.34
	12/3/2013	<.33	<.36	<.36	<.34				<1.2	0.55	<.42	<.39
-	4/15/2014	<.42	<.42	<.42	<.4	<.39			\1.2	0.00	7.42	
0000 Dain	CA											
8890 Bridge		. 57	40 F	40.5			< 00	- E	<.82	.71J	<2.5	<.44
1	5/14/2013	<.57	<2.5	<2.5	<.5 <.34	<.5 <.34	<.82	<.5	<.82	0.97	<.37	<.34
	12/3/2013	<.33	<.36	<.36					<1.2	1	<.42	<.39
	4/15/2014	<.42	<.42	<.42	0.55	<.39			₹1.Z	-	\.4Z	1.00
0004 P. 14	Ct (many	-4) X									
8891 Bridge		at new store		100	_	* 04			<1	1.4	<.37	0.42
1	12/3/2013	<.33	<.36	<.36	2	<.34			<1.2	1.4	<.42	<.39
/	4/15/2014	<.42	<.42	<.42	<.4	<.39			<1.Z	1.0	\.4 2	٠.٥٥
/	I				I	_						

10 Concentration exceeds NR140 Enforcement Standard

Lab reports "estimated concentration above the adjusted method detection limit and below the adjusted reporting limit"

Benzene ES - 5 PALS - 0.5

Maph Halene Es-100 PALS-10

Toluene Es-800 PALS-160

Table 3: Ground Water Level Measurements

Jim and Cindy's Bar Jump River, Wisconsin Meridian No. 05F781

(26.251)

(36.251)

6	6	6.	5	-

			6					
MW-1 (installed 10/11/11)			MW-2 (installed 10/11/11)			MW-3 (installed 10/11/11)		
Surface Elevation (ft)		100.25	Surface Elevation (ft)		100.25	Surface Elevation (ft)		100.75
Top of Casing elevation (ft)		100	Top of Casing elevation (ft)		100.01	Top of Casing elevation (ft)		100.54
Top of Screen Elevation (ft)		84	Top of Screen Elevation (ft)		84	Top of Screen Elevation (ft)		84.5
Bottom of Screen Elevation (ft)		74	Bottom of Screen Elevation (ft)		74	Bottom of Screen Elevation (ft)		74.5
Measurement Date	DTW (ft)	GW Elev (ft)	Measurement Date	DTW (ft)	GW Elev (ft)	Measurement Date	DTW (ft)	GW Elev (ft)
10/14/2011	17.05	82.95	10/14/2011	16.98	83.03	10/14/2011	17.6	82.94
10/28/2011	17.2	82.8	10/28/2011	17.19	82.82	10/28/2011	17.78	82.76
6/23/2012	16.88	83.12	6/23/2012	16.83	83.18	6/23/2012	17.46	83.08
5/14/2013	16.14	83.86	5/14/2013	16.11	83.9	5/14/2013	16.72	83.82
12/3/2013	NM	NM	12/3/2013	17.48	82.53	12/3/2013	18.07	82.47
Resurvey April 15, 2014		100			100.01			100.54
4/15/2014 16.16 83.		83.84	4/15/2014	16.19	83.82	4/15/2014	16.78	83.76
				1				

251) 26.501 MW-4 (installed 10/11/11) MW-5 (installed 5/6/13) MW-6 (installed 5/6/13) Surface Elevation (ft) Surface Elevation (ft) Surface Elevation (ft) 100 Top of Casing elevation (ft) 100.35 Top of Casing elevation (ft) 99.85 100.5 Top of Casing elevation (ft) Top of Screen Elevation (ft) 84.25 Top of Screen Elevation (ft)
74.25 Bottom of Screen Elevation (ft) Top of Screen Elevation (ft) 85 84.5 Bottom of Screen Elevation (ft) 74.5 Bottom of Screen Elevation (ft) Measurement Date DTW (ft) GW Elev (ft) Measurement Date DTW (ft) GW Elev (ft) Measurement Date DTW (ft) GW Elev (ft) 10/14/2011 17.45 82.9 10/28/2011 17.61 82.74 6/23/2012 17.3 83.05 15.95 5/14/2013 16.68 83.82 5/14/2013 83.9 5/14/2013 16.55 83.8 Well abandoned 10/22/13 17.33 12/3/2013 18.02 82.48 12/3/2013 82 52 Resurvey April 15, 2014 100.53 99.86 15.98 4/15/2014 16.73 83.8 4/15/2014 83.88

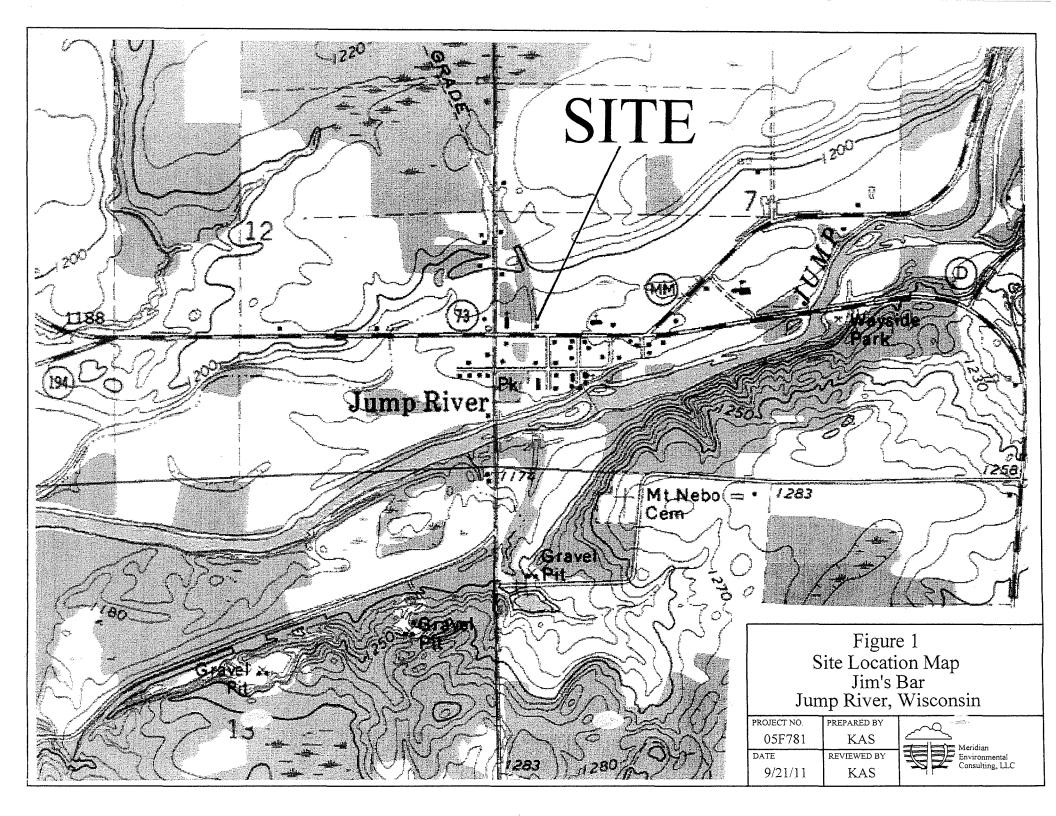
(24,501) 40' 25' MW-8B (installed 10/28/13) MW-7 (installed 5/7/13) MW-8A (installed 10/28/13) Surface Elevation (ft) 100.5 Surface Elevation (ft) 99.75 Surface Elevation (ft) 99 7 99 49 Top of Casing elevation (ft) 100.14 Top of Casing elevation (ft) 99.54 Top of Casing elevation (ft) Top of Screen Elevation (ft) Top of Screen Elevation (ft) 84.75 Top of Screen Elevation (ft) 64.7 74.75 Bottom of Screen Elevation (ft) 59.7 Bottom of Screen Elevation (ft) 76 Bottom of Screen Elevation (ft) GW Elev (ft) DTW (ft) GW Elev (ft) Measurement Date DTW (ft) Measurement Date DTW (ft) GW Elev (ft) Measurement Date 5/14/2013 83.84 16.3 12/3/2013 12/3/2013 17.06 82.48 12/3/2013 18.51 80.98 17 65 82 49 99.49 99.54 Resurvey April 15, 2014 100.21 4/15/2014 4/15/2014 16.21 83.28 4/15/2014 15.37 84.17 16.37 83.84

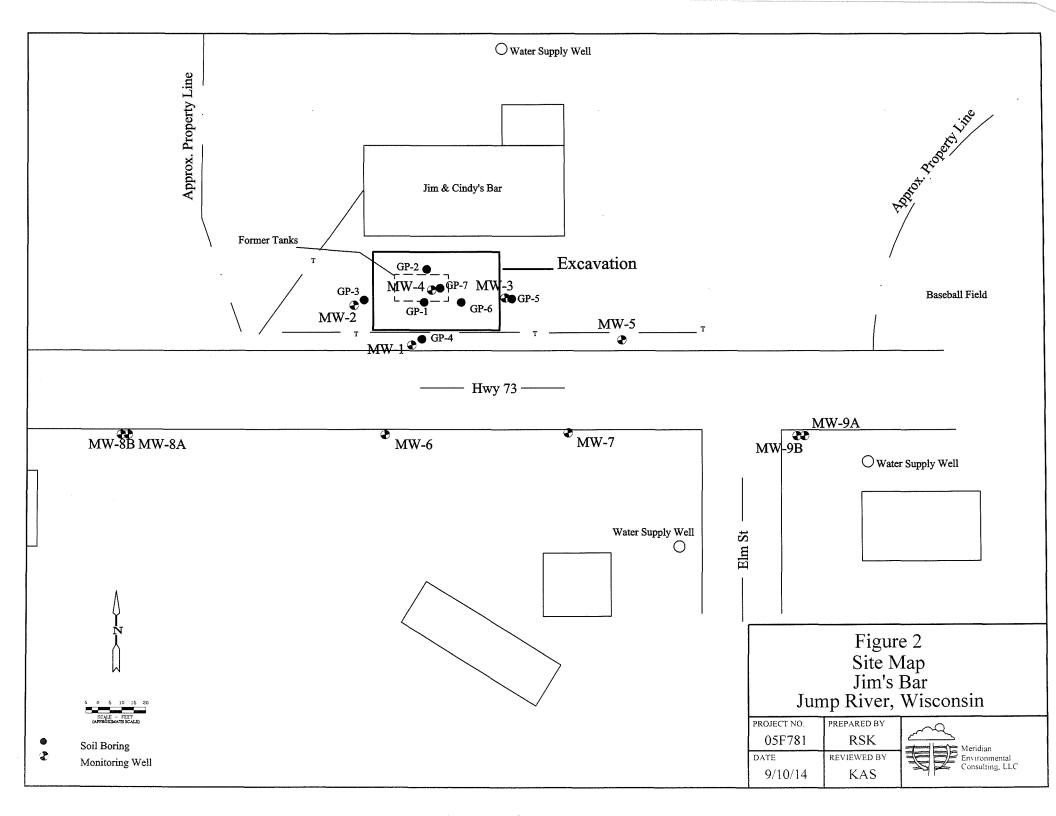
251 (401 MW-9A (installed 10/28/13) MW-9B (installed 10/28/13) 100.5 Surface Elevation (ft) 101 Surface Elevation (ft) Top of Casing elevation (ft) 100.95 Top of Casing elevation (ft) 100 44 Top of Screen Elevation (ft) 86 Top of Screen Elevation (ft) 65.5 Bottom of Screen Elevation (ft) 76 Bottom of Screen Elevation (ft) 60.5 DTW (ft) GW Elev (ft) DTW (ft) GW Elev (ft) Measurement Date Measurement Date 12/3/2013 18.98 81.46 12/3/2013 18.5 Resurvey April 15, 2014 100.44 100.95 4/15/2014 17.11 83.84 4/15/2014 18 82.44

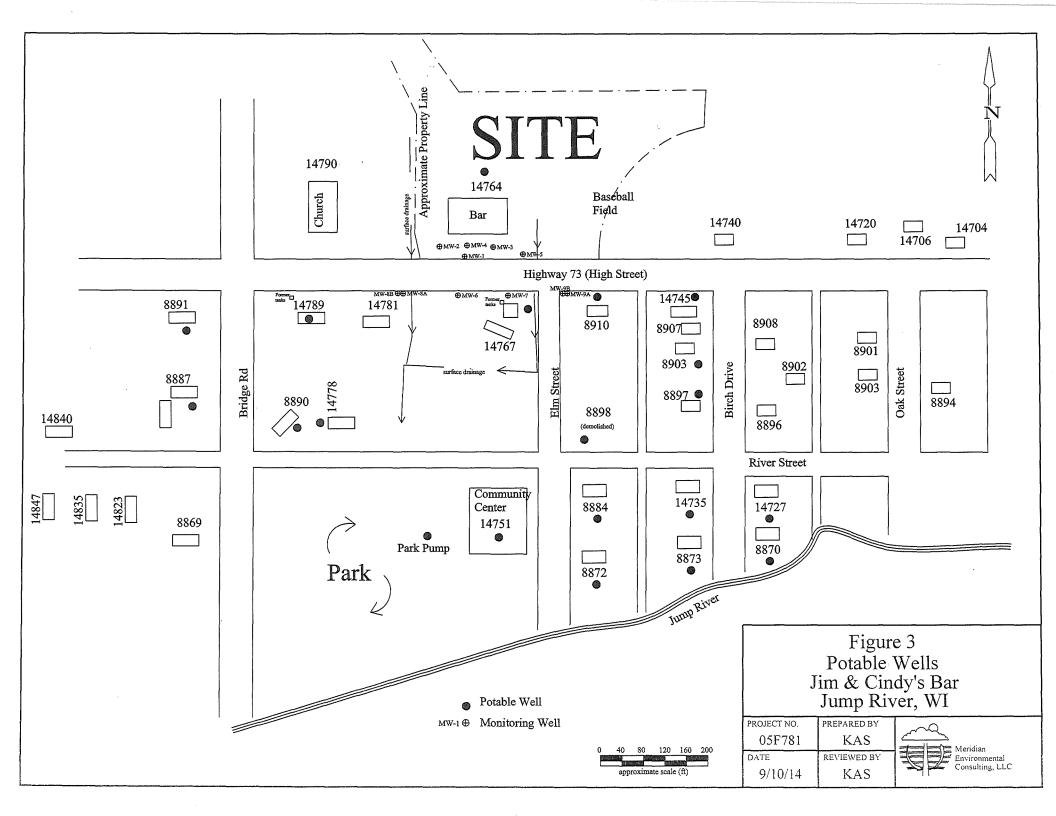
Vertical Gradient

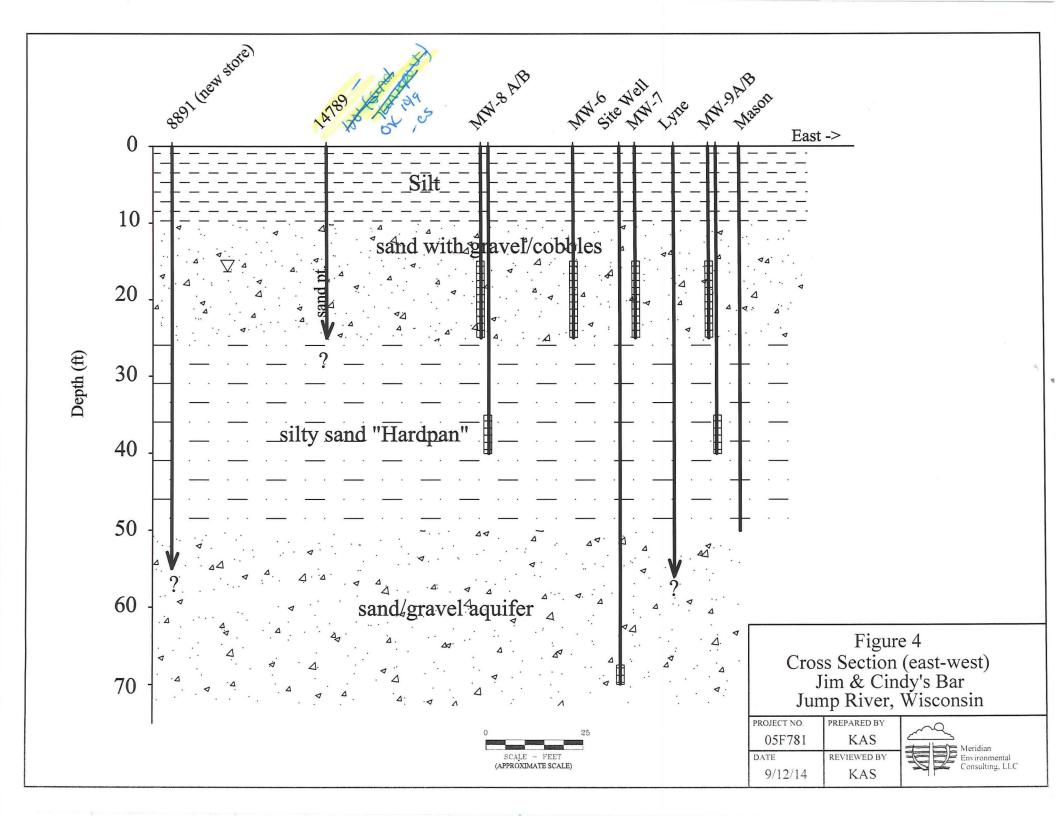
Date	MW-8A	MW-8B	Gradient (negative downward)	9A	9B	Gradient (negative downward)
December 3, 2013	82.48	80.98	-1.5	82.45	81.46	-0.99
April 5, 2014	84.17	83.28	-0.89	83.84	82.44	-1.4

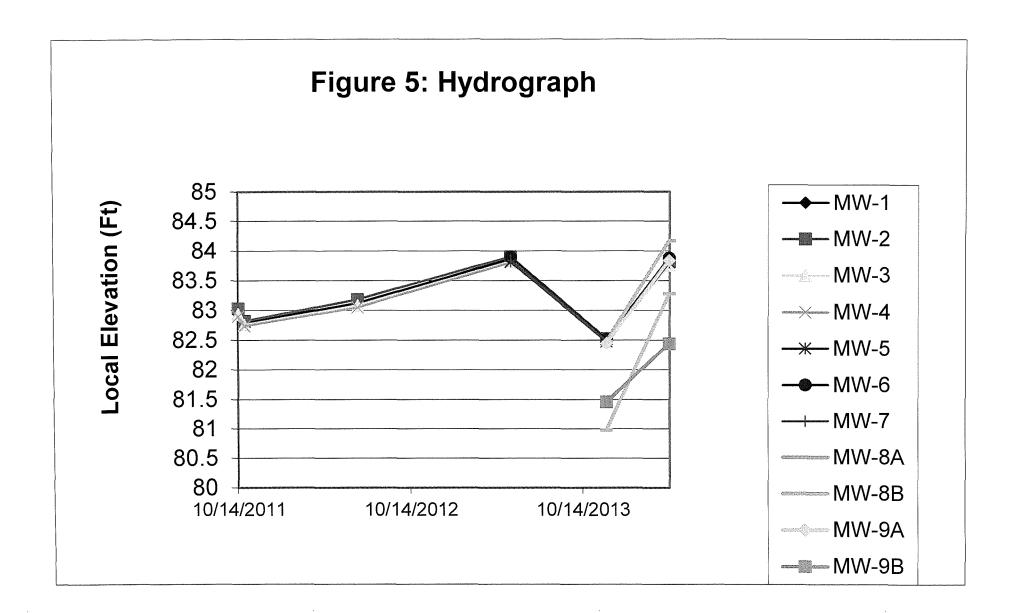
FIGURES

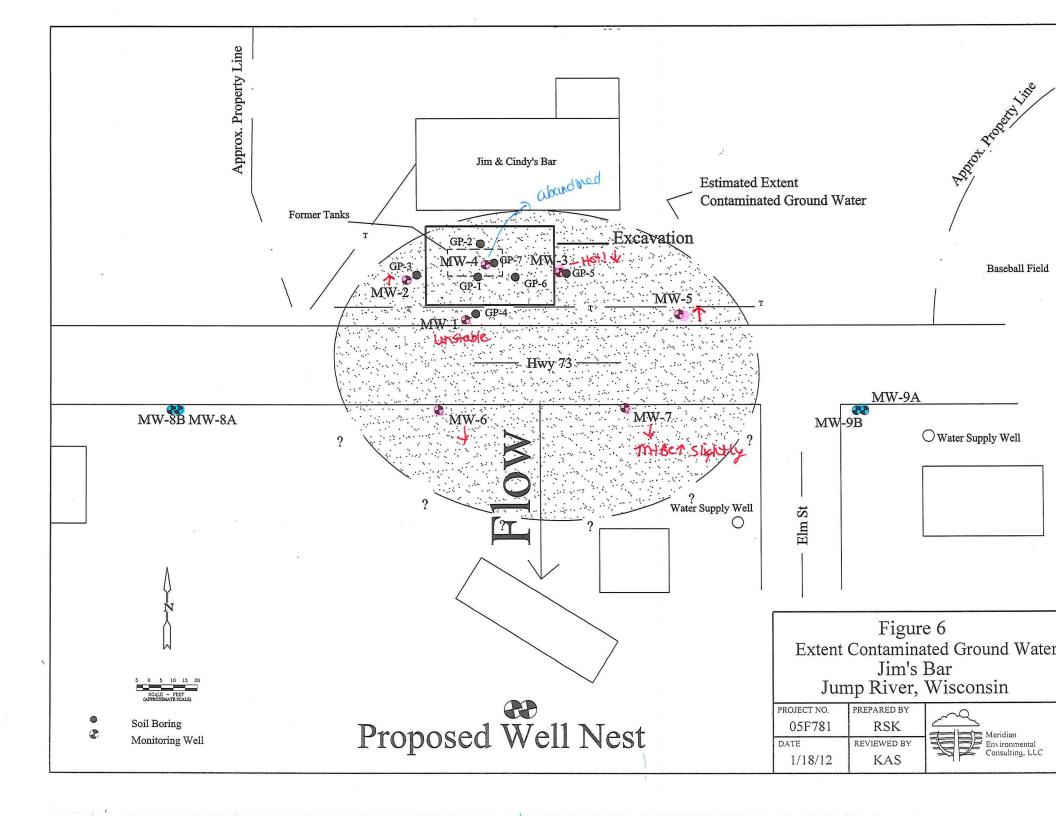












APPENDIX A ANALYTICAL REPORTS





October 31, 2013



Kennith Shimko Meridain Environmental Consulting, LLC 2711 North Elco Rd Fall Creek, WI 54742

RE: Project: JUMP RIVER

Pace Project No.: 4087472

Dear Kennith Shimko:

Enclosed are the analytical results for sample(s) received by the laboratory on October 29, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI 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

Project Manager

Enclosures





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

CERTIFICATIONS

Project:

JUMP RIVER

Pace Project No.: 4087472

Green Bay Certification IDs
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334

New York Certification #: 11888 North Dakota Certification #: R-150 South Carolina Certification #: 83006001 US Dept of Agriculture #: S-76505 Wisconsin Certification #: 405132750



SAMPLE SUMMARY

Project:

JUMP RIVER

Pace Project No.:

4087472

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4087472001	NE	Solid	10/24/13 00:00	10/29/13 07:45
4087472002	ΝW	Solid	10/24/13 00:00	10/29/13 07:45
4087472003	E N	Solid	10/24/13 00:00	10/29/13 07:45
4087472004	ES	Solid	10/24/13 00:00	10/29/13 07:45
4087472005	SE	Solid	10/24/13 00:00	10/29/13 07:45
4087472006	s w	Solid	10/24/13 00:00	10/29/13 07:45
4087472007	WN	Solid	10/24/13 00:00	10/29/13 07:45
4087472008	ws	Solid	10/24/13 00:00	10/29/13 07:45
4087472009	TRIP BLANK	Solid	10/24/13 00:00	10/29/13 07:45



SAMPLE ANALYTE COUNT

Project:

JUMP RIVER

Pace Project No.:

4087472

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
4087472001	ΝE	WI MOD GRO	LCF	12	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
4087472002	N W	WI MOD GRO	LCF	12	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
4087472003	EN	WI MOD GRO	LCF	12	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
4087472004	ES	WI MOD GRO	LCF	12	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
4087472005	SE	WI MOD GRO	LCF	12	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
4087472006	sw	WI MOD GRO	LCF	12	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
4087472007	WN	WI MOD GRO	LCF	12	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
4087472008	ws	WI MOD GRO	LCF	12	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
4087472009	TRIP BLANK	WI MOD GRO	LCF	12	PASI-G





PROJECT NARRATIVE

Project:

JUMP RIVER

Pace Project No.:

4087472

Method:

WI MOD GRO Description: WIGRO GCV

Client:

Meridian Environmental Consulting, LLC

Date:

October 31, 2013

General Information:

9 samples were analyzed for WI MOD GRO. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

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

Sample Preparation:

The samples were prepared in accordance with TPH GRO/PVOC WI ext. 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.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

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.







Project:

JUMP RIVER

Pace Project No.:

4087472

Sample: NE

Lab ID: 4087472001

Collected: 10/24/13 00:00 Received: 10/29/13 07:45

Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical	Method: WI	MOD GRO Pr	eparation I	Method	1: TPH GRO/PVO	C WI ext.		
Benzene	< 25.0 u	ıg/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 18:22	71-43-2	W
Ethylbenzene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 18:22	100-41-4	W
Methyl-tert-butyl ether	< 25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 18:22	1634-04-4	W
Naphthalene	<25.0 U	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 18:22	91-20-3	W
Toluene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 18:22	108-88-3	W
Total Trimethylbenzenes	< 50.0 u	g/kg	120	50.0	1	10/30/13 07:46	10/30/13 18:22		W
1,2,4-Trimethylbenzene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 18:22	95-63-6	W
1,3,5-Trimethylbenzene	<25.0 u		60.0	25.0	1	10/30/13 07:46	10/30/13 18:22	108-67-8	W
Xylene (Total)	< 75.0 u		180	75.0	1	10/30/13 07:46	10/30/13 18:22	1330-20-7	W
m&p-Xylene	<50.0 u	g/kg	120	50.0	1	10/30/13 07:46	10/30/13 18:22	179601-23-1	W
o-Xylene	<25.0 u		60.0	25.0	1	10/30/13 07:46	10/30/13 18:22	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	100 %	ó	80-120		1	10/30/13 07:46	10/30/13 18:22	98-08-8	
Percent Moisture	Analytical	Method: AST	M D2974-87						
Percent Moisture	8.7 %	ó	0.10	0.10	1		10/29/13 16:21		

Sample: N W

Lab ID: 4087472002

Collected: 10/24/13 00:00 Received: 10/29/13 07:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical	Method: WI	MOD GRO Pr	eparation N	/lethod	: TPH GRO/PVO	C WI ext.		
Benzene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 18:48	71-43-2	W
Ethylbenzene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 18:48	100-41-4	W
Methyl-tert-butyl ether	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 18:48	1634-04-4	W
Naphthalene	<25.0 u		60.0	25.0	1	10/30/13 07:46	10/30/13 18:48	91-20-3	W
Toluene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 18:48	108-88-3	W
Total Trimethylbenzenes	<50.0 u		120	50.0	1	10/30/13 07:46	10/30/13 18:48		W
1,2,4-Trimethylbenzene	<25.0 u		60.0	25.0	1	10/30/13 07:46	10/30/13 18:48	95-63-6	W
1,3,5-Trimethylbenzene	<25.0 u		60.0	25.0	1	10/30/13 07:46	10/30/13 18:48	108-67-8	W
Xylene (Total)	<75.0 us		180	75.0	1	10/30/13 07:46	10/30/13 18:48	1330-20-7	W
m&p-Xylene	< 50.0 ug	g/kg	120	50.0	1	10/30/13 07:46	10/30/13 18:48	179601-23-1	W
o-Xylene	<25.0 ug		60.0	25.0	1	10/30/13 07:46	10/30/13 18:48	95-47-6	W
Surrogates	·	-							
a,a,a-Trifluorotoluene (S)	100 %)	80-120		1	10/30/13 07:46	10/30/13 18:48	98-08-8	
Percent Moisture	Analytical	Method: AST	M D2974-87			en de la compete describer à la pressa de la compete de la competencia del la competencia de la competencia del la competencia de la competencia de la competencia de la competencia de la competencia del			
Percent Moisture	8.3 %	,	0.10	0.10	1		10/29/13 16:21		



Project:

JUMP RIVER

Pace Project No.:

4087472

_				
6.3	mr	ole:	=	N

Lab ID: 4087472003

Collected: 10/24/13 00:00 Received: 10/29/13 07:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qu
WIGRO GCV	Analytical	Method: WI	MOD GRO Pr	eparation N	∕lethod	: TPH GRO/PVO	C WI ext.		
Benzene	76.4 ug	g/kg	72.6	30.2	1	10/30/13 07:46	10/30/13 23:03	71-43-2	
Ethylbenzene	249 ug	g/kg	72.6	30.2	1	10/30/13 07:46	10/30/13 23:03	100-41-4	
Methyl-tert-butyl ether	<25.3 ug	g/kg	60.6	25.3	1	10/30/13 07:46	10/30/13 23:03	1634-04-4	W
Naphthalene	<25.3 ug	g/kg	60.6	25.3	1	10/30/13 07:46	10/30/13 23:03	91-20-3	W
Toluene	40.3 J ug	g/kg	72.6	30.2	1	10/30/13 07:46	10/30/13 23:03	108-88-3	
Total Trimethylbenzenes	349 uç	g/kg	145	60.5	1	10/30/13 07:46	10/30/13 23:03		
1,2,4-Trimethylbenzene	200 սզ	g/kg	72.6	30.2	1	10/30/13 07:46	10/30/13 23:03	95-63-6	
1,3,5-Trimethylbenzene	149 ug		72.6	30.2	1	10/30/13 07:46	10/30/13 23:03	108-67-8	
Xylene (Total)	896 uç		218	90.7	1	10/30/13 07:46	10/30/13 23:03	1330-20-7	
m&p-Xylene	776 uç		145	60.5	1	10/30/13 07:46	10/30/13 23:03	179601-23-1	
o-Xylene	121 uç		72.6	30.2	1	10/30/13 07:46	10/30/13 23:03	95-47-6	
Surrogates	`								
a,a,a-Trifluorotoluene (S)	105 %		80-120		1	10/30/13 07:46	10/30/13 23:03	98-08-8	
Percent Moisture	Analytical	Method: AST	M D2974-87						
Percent Moisture	16.5 %		0.10	0.10	1		10/29/13 16:21		
Sample: ES	Lab ID:	4087472004	Collected	10/24/13	00:00	Received: 10/	29/13 07:45 Ma	trix: Solid	

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical	Method: WI	MOD GRO Pr	eparation N	/lethod	1: TPH GRO/PVO	C WI ext.		
Benzene	<25.0 u	ıg/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 19:13	71-43-2	W
Ethylbenzene	<25,0 u	ıg/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 19:13	100-41-4	W
Methyl-tert-butyl ether	<25.0 u	ıg/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 19:13	1634-04-4	W
Naphthalene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 19:13	91-20-3	W
Toluene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 19:13	108-88-3	W
Total Trimethylbenzenes	< 50.0 u	g/kg	120	50.0	1	10/30/13 07:46	10/30/13 19:13	•	W
1,2,4-Trimethylbenzene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 19:13	95-63-6	W
1,3,5-Trimethylbenzene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 19:13	108-67-8	W
Xylene (Total)	< 75.0 u		180	75.0	1	10/30/13 07:46	10/30/13 19:13	1330-20-7	W
m&p-Xylene	<50,0 u	- •	120	50.0	1	10/30/13 07:46	10/30/13 19:13	179601-23-1	W
o-Xylene	<25,0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 19:13	95-47-6	W
Surrogates		0 0							
a,a,a-Trifluorotoluene (S)	102 %	ó	80-120		1	10/30/13 07:46	10/30/13 19:13	98-08-8	
Percent Moisture	Analytical	Method: AST	M D2974-87						
Percent Moisture	10.3 %	6	0.10	0.10	1		10/29/13 16:21		



Project:

JUMP RIVER

Pace Project No.:

4087472

Sample: S E

Lab ID: 4087472005

Collected: 10/24/13 00:00 Received: 10/29/13 07:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical N	/lethod: WI	MOD GRO Pi	eparation l	Method	: TPH GRO/PVO	C WI ext.		
Benzene	<25.0 ug	/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 19:39	71-43-2	W
Ethylbenzene	<25.0 ug	/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 19:39	100-41-4	W
Methyl-tert-butyl ether	<25.0 ug	/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 19:39	1634-04-4	W
Naphthalene	<25.0 ug	/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 19:39	91-20-3	W
Toluene	<25.0 ug	/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 19:39	108-88-3	W
Total Trimethylbenzenes	<50.0 ug	/kg	120	50.0	1	10/30/13 07:46	10/30/13 19:39		W
1,2,4-Trimethylbenzene	<25.0 ug	/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 19:39	95-63-6	W
1,3,5-Trimethylbenzene	<25.0 ug	/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 19:39	108-67-8	W
Xylene (Total)	<75.0 ug	/kg	180	75.0	1	10/30/13 07:46	10/30/13 19:39	1330-20-7	W
m&p-Xylene	< 50,0 ug.	/kg	120	50.0	1	10/30/13 07:46	10/30/13 19:39	179601-23-1	W
o-Xylene	<25.0 ug	/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 19:39	95-47-6	W
Surrogates	_								
a,a,a-Trifluorotoluene (S)	101 %		80-120		1	10/30/13 07:46	10/30/13 19:39	98-08-8	
Percent Moisture	Analytical N	1ethod: AST	M D2974-87						
Percent Moisture	10.8 %		0.10	0.10	1		10/29/13 16:21		
Sample: S W	Lab ID: 4	087472006	Collected	1: 10/24/13	3 00:00	Received: 10/	29/13 07:45 Ma	ntrix: Solid	
Results reported on a "dry-wei	iaht" həsis								

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
WIGRO GCV	Analytical	Method: WI	MOD GRO Pi	eparation M	/lethod	: TPH GRO/PVO	C WI ext.		
Benzene	<25.0 u	ıg/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:04	71-43-2	W
Ethylbenzene	<25,0 u	ıg/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:04	100-41-4	W
Methyl-tert-butyl ether	<25.0 u	ıg/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:04	1634-04-4	W
Naphthalene	<25.0 u	ıg/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:04	91-20-3	W
Toluene	<25.0 u	ıg/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:04	108-88-3	W
Total Trimethylbenzenes	<50.0 u	ıg/kg	120	50.0	1	10/30/13 07:46	10/30/13 20:04		W
1,2,4-Trimethylbenzene	<25.0 u	ıg/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:04	95-63-6	W
1,3,5-Trimethylbenzene	< 25.0 u	ıg/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:04	108-67-8	W
Xylene (Total)	<75.0 u	ıg/kg	180	75.0	1	10/30/13 07:46	10/30/13 20:04	1330-20-7	W
m&p-Xylene	<50.0 u	ıg/kg	120	50.0	1	10/30/13 07:46	10/30/13 20:04	179601-23-1	W
o-Xylene	<25.0 u	ıg/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:04	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	99 %	/o	80-120		1	10/30/13 07:46	10/30/13 20:04	98-08-8	
Percent Moisture	Analytical	Method: AST	M D2974-87						
Percent Moisture	6.0 %	6	0.10	0.10	1		10/29/13 16:21		



Project:

JUMP RIVER

Pace Project No.:

4087472

Sample: W N

Lab ID: 4087472007

Collected: 10/24/13 00:00

Received: 10/29/13 07:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
WIGRO GCV	Analytical	Method: WI	MOD GRO Pr	eparation i	Vethod	: TPH GRO/PVO	C WI ext.		
Benzene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:30	71-43-2	W
Ethylbenzene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:30	100-41-4	W
Methyl-tert-butyl ether	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:30	1634-04-4	W
Naphthalene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:30	91-20-3	W
Toluene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:30	108-88-3	W
Total Trimethylbenzenes	< 50.0 u	g/kg	120	50.0	1	10/30/13 07:46	10/30/13 20:30		W
1,2,4-Trimethylbenzene	32.4J u	g/kg	75.1	31.3	1	10/30/13 07:46	10/30/13 20:30	95-63-6	
1,3,5-Trimethylbenzene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:30	108-67-8	W
Xylene (Total)	< 75.0 u	g/kg	180	75.0	1	10/30/13 07:46	10/30/13 20:30	1330-20-7	W
m&p-Xylene	<50.0 u	g/kg	120	50.0	1	10/30/13 07:46	10/30/13 20:30	179601-23-1	W
o-Xylene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:30	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	102 %		80-120		1	10/30/13 07:46	10/30/13 20:30	98-08-8	
Percent Moisture	Analytical	Method: AST	M D2974-87						
Percent Moisture	20.1 %	•	0.10	0.10	1		10/29/13 16:21		
Sample: W S	Lab ID:	4087472008	Collected	10/24/13	00:00	Received: 10/	29/13 07:45 Ma	trix: Solid	
Results reported on a "dry-wei	iaht" hasis								

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical	Method: WI	MOD GRO Pr	eparation N	/lethod	: TPH GRO/PVO	C WI ext.		
Benzene	< 25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:56	71-43-2	W
Ethylbenzene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:56	100-41-4	W
Methyl-tert-butyl ether	<25.0 ug	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:56	1634-04-4	W
Naphthalene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:56	91-20-3	W
l'olu e ne	<25.0 ug	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:56	108-88-3	W
Total Trimethylbenzenes	< 50.0 ug	g/kg	120	50.0	.1	10/30/13 07:46	10/30/13 20:56		W
1,2,4-Trimethylbenzene	31.8 J ug	g/kg	75.6	31.5	1	10/30/13 07:46	10/30/13 20:56	95-63-6	
,3,5-Trimethylbenzene	< 25.0 ug	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:56	108-67-8	W
(Ylene (Total)	<75.0 ug	g/kg	180	75.0	1	10/30/13 07:46	10/30/13 20:56	1330-20-7	W
n&p-Xylene	<50. 0 นถู	g/kg	120	50.0	Í	10/30/13 07:46	10/30/13 20:56	179601-23-1	W
o-Xylene	<25.0 ug	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 20:56	95-47-6	W
Surrogates									
a,a,a-Trifluorotoluene (S)	101 %		80-120		1	10/30/13 07:46	10/30/13 20:56	98-08-8	
Percent Moisture	Analytical	Method: AST	M D2974-87				_		
Percent Moisture	20.6 %		0.10	0.10	1		10/29/13 16:21		

(920)469-2436



ANALYTICAL RESULTS

Project:

JUMP RIVER

Pace Project No.:

4087472

Sample: TRIP BLANK

Lab ID: 4087472009

Collected: 10/24/13 00:00 Received: 10/29/13 07:45

Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical	Method: WI I	MOD GRO P	reparation N	/lethod	I: TPH GRO/PVO	C WI ext.		
Benzene	< 25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 21:47	71-43-2	W
Ethylbenzene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 21:47	100-41-4	W
Methyl-tert-butyl ether	< 25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 21:47	1634-04-4	W
Naphthalene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 21:47	91-20-3	W
Toluene	<25.0 u	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 21:47	108-88-3	W
Total Trimethylbenzenes	< 50.0 ug	g/kg	120	50.0	1	10/30/13 07:46	10/30/13 21:47		W
1,2,4-Trimethylbenzene	<25.0 ug	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 21:47	95-63-6	W
1,3,5-Trimethylbenzene	<25.0 ug	g/kg	60.0	25.0	1	10/30/13 07:46	10/30/13 21:47	108-67-8	W
Xylene (Total)	<75.0 ug	g/kg	180	75.0	1	10/30/13 07:46	10/30/13 21:47	1330-20-7	W
m&p-Xylene	<50.0 ug	g/kg	120	50.0	1	10/30/13 07:46	10/30/13 21:47	179601-23-1	W
o-Xylene <i>Surrogates</i>	<25.0 uç		60.0	25.0	1	10/30/13 07:46	10/30/13 21:47	95-47-6	W
a,a,a-Trifluorotoluene (S)	100 %	•	80-120		1	10/30/13 07:46	10/30/13 21:47	98-08-8	

Page 10 of 16



QUALITY CONTROL DATA

Project:

JUMP RIVER

Pace Project No.:

4087472

QC Batch:

GCV/11326

Analysis Method:

WI MOD GRO

QC Batch Method:

TPH GRO/PVOC WI ext.

Analysis Description:

WIGRO Solid GCV

Associated Lab Samples:

4087472001, 4087472002, 4087472003, 4087472004, 4087472005, 4087472006, 4087472007, 4087472008,

4087472009

METHOD BLANK: 884593

Matrix: Solid

Associated Lab Samples:

4087472001, 4087472002, 4087472003, 4087472004, 4087472005, 4087472006, 4087472007, 4087472008,

4087472009

		Blank	Reporting		Qualifiers	
Parameter	Units	Result	Limît	Analyzed		
1,2,4-Trimethylbenzene	ug/kg	<25.0	60.0	10/30/13 16:40		
1,3,5-Trimethylbenzene	ug/kg	<25.0	60.0	10/30/13 16:40		
Benzene	ug/kg	<25.0	60.0	10/30/13 16:40		
Ethylbenzene	ug/kg	<25.0	60.0	10/30/13 16:40		
m&p-Xylene	ug/kg	<50.0	120	10/30/13 16:40		
Methyl-tert-butyl ether	ug/kg	<25.0	60.0	10/30/13 16:40		
Naphthalene	ug/kg	<25.0	60.0	10/30/13 16:40		
o-Xylene	ug/kg	<25.0	60.0	10/30/13 16:40		
Toluene	ug/kg	<25.0	60.0	10/30/13 16:40		
Total Trimethylbenzenes	ug/kg	<50.0	120	10/30/13 16:40		
Xylene (Total)	ug/kg	<75.0	180	10/30/13 16:40		
a,a,a-Trifluorotoluene (S)	%	101	80-120	10/30/13 16:40		

LABORATORY CONTROL SAMPLE & LCSD: 884594 884595										
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
										Quamero
1,2,4-Trimethylbenzene	ug/kg	1000	1050	1060	105	106	80-120	1	20	
1,3,5-Trimethylbenzene	ug/kg	1000	999	1010	100	101	80-120	1	20	
Benzene	ug/kg	1000	1020	1020	102	102	80-120	0	20	
Ethylbenzene	ug/kg	1000	1040	1050	104	105	80-120	1	20	
m&p-Xylene	ug/kg	2000	2070	2090	104	104	80-120	1	20	
Methyl-tert-butyl ether	ug/kg	1000	1030	1000	103	100	80-120	3	20	
Naphthalene	ug/kg	1000	995	1020	100	102	80-120	3	20	
o-Xylene	ug/kg	1000	1010	1020	101	102	80-120	1	20	
Toluene	ug/kg	1000	1010	1020	101	102	80-120	1	20	
Total Trimethylbenzenes	ug/kg	2000	2050	2080	103	104	80-120	1	20	
Xylene (Total)	ug/kg	3000	3080	3110	103	104	80-120	1	20	
a,a,a-Trifluorotoluene (S)	%				104	103	80-120			



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

QUALITY CONTROL DATA

Project:

JUMP RIVER

Pace Project No.:

4087472

QC Batch:

PMST/9084

Analysis Method:

ASTM D2974-87

QC Batch Method:

ASTM D2974-87

Analysis Description:

Dry Weight/Percent Moisture

Associated Lab Samples:

4087472001, 4087472002, 4087472003, 4087472004, 4087472005, 4087472006, 4087472007, 4087472008, 408747008, 408747008, 4087472008, 4087472008, 4087472008, 4087472008, 4087472008, 4087472008, 408747

SAMPLE DUPLICATE: 884442

Parameter

4087463003

Result

Dup Result

6.9

RPD

Max RPD

Qualifiers

Percent Moisture

%

Units

6.9

0

10



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

QUALIFIERS

Project:

JUMP RIVER

Pace Project No.:

4087472

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

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

W

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



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:

JUMP RIVER

Pace Project No.:

4087472

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4087472001	N E	TPH GRO/PVOC WI ext.	GCV/11326	WI MOD GRO	GCV/11327
4087472002	NW	TPH GRO/PVOC WI ext.	GCV/11326	WI MOD GRO	GCV/11327
4087472003	EN	TPH GRO/PVOC WI ext.	GCV/11326	WI MOD GRO	GCV/11327
4087472004	ES	TPH GRO/PVOC WI ext.	GCV/11326	WI MOD GRO	GCV/11327
4087472005	SE	TPH GRO/PVOC WI ext.	GCV/11326	WI MOD GRO	GCV/11327
4087472006	s w	TPH GRO/PVOC WI ext.	GCV/11326	WI MOD GRO	GCV/11327
1087472007	WN	TPH GRO/PVOC WI ext.	GCV/11326	WI MOD GRO	GCV/11327
1087472008	ws	TPH GRO/PVOC WI ext.	GCV/11326	WI MOD GRO	GCV/11327
1087472009	TRIP BLANK	TPH GRO/PVOC WI ext.	GCV/11326	WI MOD GRO	GCV/11327
1087472001	NE	ASTM D2974-87	PMST/9084		
1087472002	NW	ASTM D2974-87	PMST/9084		
1087472003	EN	ASTM D2974-87	PMST/9084		
4087472004	ES	ASTM D2974-87	PMST/9084		
1087472005	SE	ASTM D2974-87	PMST/9084		
1087472006	s w	ASTM D2974-87	PMST/9084		
1087472007	W N	ASTM D2974-87	PMST/9084		
1087472008	WS	ASTM D2974-87	PMST/9084		

(Please Print Clearly)			7	1 WO#:408/4/2							Page 1 of						
Company Na	me: Maridian	CONTRACTOR OF THE CONTRACTOR	- Terrane		P	J ace A	ana.	lvtic							Ag	40874	472 °
Project Conta				1-		W	rww.pa	celabs.c	or 4	0874	72		. W 1 W 2 W 3 W 1			100 1	ge . \M41
Phone:	715 579 07			l	C	HA	IN	OF	Cl	JS	ΤΟΙ	YC		Mail To Contact:		4 ME	
Project Numb				A=None	***************************************	L C=H2	-		tion Code	s	=Methano		юн	Mail To Company:			
Project Name	" Jump Bive	~~			m Bisulfat				n Thiosulfa		=Other			Mail To Address:			
Project State:	7			ILTERED (YES/NO		Y/N											
Sampled By ((Print): Key Shiruk	>	PRI	PRESERVATION (CODE)*		Pick Letter					·			Invoice To Contact:			
Sampled By (4							Invoice To Company:			
PO #:		Regulate Prograi			1	estec.	Naph							Invoice To Address:			
	age Options MS/MSD		Matrix Co				ナん								:		
☐ EP	A Level III (billable) B	= Air = Biota = Charcos = Oil	al GW ≕	/ater Drinking V Ground W Surface W	Vater	Analyses Requested	i							Invoice To Phone:	-		
PACE LAB#	Lever IV S	= Soil = Sludge	COLLECTION	Waste Wa		A	and							CLIENT COMMENTS	Į.	MMENTS se Only)	Profile #
[00]	NE	IDA:	TE TIM		5	180,000	¥_								1-402 pA		P
002	NW	i	- 7 (5)		7		<u></u>	ļ	<u> </u>						1 1086	- TOWE	
003	EN	+					\top	·			 						
004	E5						\top	<u> </u>									
005	SE	17			7		1								17		
006	SW						7								11		
007	WW	11					7			<u> </u>							
800	ws	1			V	137 37 1											
009	X-tripblank				,			"									
					A S												
	X received in Shipment	ade	ded ti	CX	0												
	by lab. MH 10/29/13				i i												
	urnaround Time Requested - Prelim TAT subject to approval/surcharge)		Relinquishe	d By:	クバ	•	30 2000 (vi ₁ juju		ate/Time;	7 /	Ova	Received	o By: Enheur	Date/Time: 10 28	13/2	PACE PI	roject No.
The District of the Land of the Land	Date Needed:		Relinquishe		,		is	, 0	ate/Time:			Received	d By:	Date/Time:		708	17/2
Fransmit Pre Email #1:			DUNN Relinquishe					2/25/	15 date/Time:	074	7	MG Received		PAUCH 10/29/13 Date/Time:	Receipt remp - [7/1]		PO1 °C
Email #2: Telephone:	#2:		0.11.	15					- 4 - 77"					Ph	Sample Receipt pH		!
Fax:	e: Relinquished By:			u By:				D	ate/Time:			Receive	а ну:	Date/Time:	Cooler Custody Seal		
	i		Relinquishe	Relinquished By: Date/Time: Received By: Date/Time					Date/Time:	Present Not Present Intact / Not Intact							
Sp	special pricing and release of liability									Version 6.0 06/14/06							



Sample Condition Upon Receipt

Client Name	3: Mendian		Project #	4087472
Courier: Fed Ex T UPS T USPS T	Client Comn	nercial Pace	Other Punhal	h
Tracking #: <u>(02%080</u>			,	
Custody Seal on Cooler/Box Present: Tyes				
Custody Seal on Samples Present:	no Se	als intact: yes	₽ no	
Packing Material: Bubble Wrap Bub	ble Bags I No	one Cother	Ziploc	
Thermometer Used Cooler Temperature Uncorr: 20 /Corr:		et <u>(Blue)</u> Dry None plogical Tissue is F		ice, cooling process has begun
Temp Blank Present: yes ino		•	no	Person examining contents:
Temp should be above freezing to 6°C for all sample exc Frozen Biota Samples should be received ≤ 0°C.	cept Biota.	Comments:		Date: 10/24/13 Initials: MH
Chain of Custody Present:	. ØYes □No □N			
Chain of Custody Filled Out:	-EYes □No □N	/A 2.		
Chain of Custody Relinquished:	ØŶes □No □N	/A 3.		
Sampler Name & Signature on COC:	.EYes □No. □N	/A 4.		
Samples Arrived within Hold Time:	ÆYes □No □N	/A 5.		
- VOA Samples frozen upon receipt	□Yes □No	Date/Time:		
Short Hold Time Analysis (<72hr):	□Yes ☑No □N	^A 6.		
Rush Turn Around Time Requested:	□Yes ☐No □N	'A 7.		
Sufficient Volume:	ØYes □No □N	A 8.		
Correct Containers Used:	. DYes □No □Ni	A 9.		
-Pace Containers Used:	∠PYes □No □N/	A		
-Pace IR Containers Used:	□Yes ⊅No □N/	A		•
Containers Intact:	☐fes ☐No ☐N/	A 10.		
iltered volume received for Dissolved tests	□Yes ☑tÑo □N/	A 11.		
Sample Labels match COC:	□Yes □No □N/	A 12.	·-·	
-Includes date/time/ID/Analysis Matrix:	5			
All containers needing preservation have been checked. Non-Compliance noted in 13.)	□Yes □No ⊅N/	13. THNO	3 TH2SO4 T	NaOH NaOH +ZnAct
All containers needing preservation are found to be in		-		. (
compliance with EPA recommendation. HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	□Yes □No □N/	4		
xceptions: VOA, coliform, TOC, TOX, TOH,		Initial when	Lab Std #ID of	Date/
D&G, WIDROW, Phenolics. OTHER:	□Yes □No	completed	preservative	Time:
leadspace in VOA Vials (>6mm):	□Yes □No □N//			
rip Blank Present:	□Yes □No □Nii			. £
rip Blank Custody Seals Present	□Yes □No ÆNII	1		
Pace Trip Blank Lot # (if purchased): Client Notification/ Resolution:			checked see affache	d form for additional comments
Person Contacted:	Date	:/Time:		
Comments/ Resolution: Y true hlank Yelle		,	dded to coc	by lab mit 10/29/15
ecceved 4 empty 4020 and 40m	W MH 10/29	113		J
J				
Project Manager Review:			Date:	10-29-13 Page 16 of 16





December 10, 2013

Kennith Shimko Meridain Environmental Consulting, LLC 2711 North Elco Rd Fall Creek, WI 54742

RE: Project: JUMP RIVER

Pace Project No.: 4089510

Dear Kennith Shimko:

Enclosed are the analytical results for sample(s) received by the laboratory on December 05, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI 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 Project Manager

Enclosures







CERTIFICATIONS

Project:

JUMP RIVER

Pace Project No.:

4089510

Green Bay Certification IDs 1241 Bellevue Street, Green Bay, WI 54302 Florida/NELAP Certification #: E87948 Illinois Certification #: 200050 Kentucky Certification #: 82 Louisiana Certification #: 04168 Minnesota Certification #: 055-999-334

New York Certification #: 11888 North Dakota Certification #: R-150 South Carolina Certification #: 83006001 US Dept of Agriculture #: S-76505 Wisconsin Certification #: 405132750



SAMPLE SUMMARY

Project:

JUMP RIVER

Pace Project No.:

4089510

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4089510001	MW-1	Water	12/03/13 00:00	12/05/13 08:00
4089510002	MW-2	Water	12/03/13 00:00	12/05/13 08:00
4089510003	MW-3	Water	12/03/13 00:00	12/05/13 08:00
4089510004	MW-5	Water	12/03/13 00:00	12/05/13 08:00
4089510005	MW-6	Water	12/03/13 00:00	12/05/13 08:00
4089510006	MW-7	Water	12/03/13 00:00	12/05/13 08:00
4089510007	MW-8A	Water	12/03/13 00:00	12/05/13 08:00
4089510008	MW-8B	Water	12/03/13 00:00	12/05/13 08:00
4089510009	MW-9A	Water	12/03/13 00:00	12/05/13 08:00
4089510010	MW-9B	Water	12/03/13 00:00	12/05/13 08:00
4089510011	8887 BRIDGE	Water	12/03/13 00:00	12/05/13 08:00
4089510012	MASON	Water	12/03/13 00:00	12/05/13 08:00
4089510013	BAR	Water	12/03/13 00:00	12/05/13 08:00
4089510014	14789	Water	12/03/13 00:00	12/05/13 08:00
4089510015	8891	Water	12/03/13 00:00	12/05/13 08:00
4089510016	14767	Water	12/03/13 00:00	12/05/13 08:00
4089510017	COMM CTR	Water	12/03/13 00:00	12/05/13 08:00
4089510018	8890 BRIDGE	Water	12/03/13 00:00	12/05/13 08:00
4089510019	TRIP BLANKS	Water	12/03/13 00:00	12/05/13 08:00



SAMPLE ANALYTE COUNT

Project:

JUMP RIVER

Pace Project No.:

4089510

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
4089510001	MW-1	WI MOD GRO	PMS	9	PASI-G
4089510002	MW-2	WI MOD GRO	PMS	9	PASI-G
4089510003	MW-3	WI MOD GRO	PMS	9	PASI-G
4089510004	MW-5	WI MOD GRO	PMS	9	PASI-G
4089510005	MW-6	WI MOD GRO	PMS	9	PASI-G
4089510006	MW-7	WI MOD GRO	PMS	9	PASI-G
4089510007	MW-8A	WI MOD GRO	PMS	9	PASI-G
4089510008	MW-8B	WI MOD GRO	PMS	9	PASI-G
4089510009	MW-9A	WI MOD GRO	PMS	9	PASI-G
4089510010	MW-9B	WI MOD GRO	PMS	9	PASI-G
4089510011	8887 BRIDGE	WI MOD GRO	PMS	9	PASI-G
4089510012	MASON	WI MOD GRO	PMS	9	PASI-G
4089510013	BAR	WI MOD GRO	PMS	9	PASI-G
4089510014	14789	WI MOD GRO	PMS	9	PASI-G
4089510015	8891	WI MOD GRO	PMS	9	PASI-G
4089510016	14767	WI MOD GRO	PMS	9	PASI-G
4089510017	COMM CTR	WI MOD GRO	PMS	9	PASI-G
4089510018	8890 BRIDGE	WI MOD GRO	PMS	9	PASI-G
4089510019	TRIP BLANKS	WI MOD GRO	PMS	9	PASI-G





PROJECT NARRATIVE

Project:

JUMP RIVER

Pace Project No.:

4089510

Method: Description: WIGRO GCV

WI MOD GRO

Client:

Meridian Environmental Consulting, LLC

Date:

December 10, 2013

General Information:

19 samples were analyzed for WI MOD GRO. All samples were received in acceptable condition with any exceptions noted below.

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.

Internal Standards:

All internal standards were within QC limits 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.



Project:

JUMP RIVER

Pace Project No.:

4089510

Sample: MW-1	Lab ID:	4089510001	Collecte	d: 12/03/13	3 00:00	Received: 12/05/13 08:00 Matrix: Water				
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
WIGRO GCV	Analytica	l Method: WI Mo	OD GRO							
Benzene	278	ıg/L	10.0	3.4	10		12/09/13 11:01	71-43-2		
Ethylbenzene	367	ıg/L	10.0	3.4	10		12/09/13 11:01	100-41-4		
Methyl-tert-butyl ether	8.7J	ıg/L	10.0	3.7	10		12/09/13 11:01	1634-04-4		
Naphthalene	62.6	ıg/L	10.0	3.7	10		12/09/13 11:01	91-20-3		
Toluene	476	ıg/L	10.0	3.4	10		12/09/13 11:01	108-88-3		
1,2,4-Trimethylbenzene	382	ug/L	10.0	3.3	10		12/09/13 11:01			
1,3,5-Trimethylbenzene	66.2	•	10.0	3.6	10		12/09/13 11:01	108-67-8		
Xylene (Total)	608	ug/L	30.0	10.3	10		12/09/13 11:01	1330-20-7		
Surrogates										
a,a,a-Trifluorotoluene (S)	105	%	80-120		10		12/09/13 11:01	98-08-8		
Sample: MW-2	Lab ID:	4089510002	Collecte	d: 12/03/1	3 00:00	Received: 12	2/05/13 08:00 Ma	atrix: Water		
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
WIGRO GCV	Analytica	l Method: WI M	OD GRO							
Benzene	68.3	ua/L	5.0	1.7	5		12/06/13 17:24	71-43-2		
Ethylbenzene	127	-	5.0	1.7	5		12/06/13 17:24	100-41-4		
Methyl-tert-butyl ether	12.7	•	5.0	1.9	5		12/06/13 17:24	1634-04-4		
Naphthalene	53.6	-	5.0	1.9	5		12/06/13 17:24	91-20-3		
Toluene	75.8	ug/L	5.0	1.7	5		12/06/13 17:24	108-88-3		
1,2,4-Trimethylbenzene	203	ug/L	5.0	1.7	5		12/06/13 17:24	95-63-6		
1,3,5-Trimethylbenzene	60.2	ug/L	5.0	1.8	5		12/06/13 17:24	108-67-8		
Xylene (Total) Surrogates	276	ug/L	15.0	5.1	5		12/06/13 17:24	1330-20-7		
a,a,a-Trifluorotoluene (S)	109	%	80-120		5		12/06/13 17:24	98-08-8		
Sample: MW-3	Lab ID:	4089510003	Collecte	d: 12/03/1	3 00:00	Received: 12	2/05/13 08:00 M	atrix: Water		
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
WIGRO GCV	Analytica	l Method: WI Me	OD GRO							
Benzene	662	na/r	100	33.5	100		12/06/13 17:53	71-43-2		
Ethylbenzene	2300	-	100	34.0	100		12/06/13 17:53			
Methyl-tert-butyl ether	<37.1	-	100	37.1	100		12/06/13 17:53			
Naphthalene	577	-	100	37.1	100		12/06/13 17:53	91-20-3		
Toluene	5850	•	100	34.4	100		12/06/13 17:53			
1,2,4-Trimethylbenzene	3270	-	100	33.2	100		12/06/13 17:53			
1,3,5-Trimethylbenzene	998	-	100	35.6	100		12/06/13 17:53			
Xylene (Total)	9720	-	300	103	100		12/06/13 17:53	1330-20-7		
Surrogates a,a,a-Trifluorotoluene (S)	103	%	80-120		100		12/06/13 17:53	98-08-8		



Project:

JUMP RIVER

Pace Project No.:

4089510

Sample: MW-5	Lab ID: 408951000	4 Collected	d: 12/03/1	3 00:00	Received: 12/05/13 08:00 Matrix: Water				
Parameters	Results Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua	
WIGRO GCV	Analytical Method: WI	MOD GRO							
Benzene	103 ug/L	25.0	8.4	25		12/06/13 15:29	71-43-2		
Ethylbenzene	770 ug/L	25.0	8.5	25		12/06/13 15:29	100-41-4		
Methyl-tert-butyl ether	<9.3 ug/L	25.0	9.3	25		12/06/13 15:29	1634-04-4		
Naphthalene	450 ug/L	25.0	9.3	25		12/06/13 15:29	91-20-3		
Toluene	223 ug/L	25.0	8.6	25		12/06/13 15:29	108-88-3		
1,2,4-Trimethylbenzene	2460 ug/L	25.0	8.3	25		12/06/13 15:29	95-63-6		
1,3,5-Trimethylbenzene	720 ug/L	25.0	8.9	25		12/06/13 15:29	108-67-8		
Xylene (Total)	2050 ug/L	75.0	25.7	25		12/06/13 15:29	1330-20-7		
Surrogates									
a,a,a-Trifluorotoluene (S)	101 %	80-120		25		12/06/13 15:29	98-08-8		
Sample: MW-6	Lab ID: 408951000	5 Collecte	d: 12/03/1	3 00:00	Received: 12	2/05/13 08:00 M	latrix: Water		
Parameters	Results Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua	
WIGRO GCV	Analytical Method: WI	MOD GRO							
Benzene	41.5 ug/L	25.0	8.4	25		12/06/13 18:22	71-43-2		
Ethylbenzene	747 ug/L	25.0	8.5	25		12/06/13 18:22	100-41-4		
Methyl-tert-butyl ether	10.7J ug/L	25.0	9.3	25		12/06/13 18:22	1634-04-4		
Naphthalene	282 ug/L	25.0	9.3	25		12/06/13 18:22	91-20-3		
Toluene	557 ug/L	25.0	8.6	25		12/06/13 18:22	108-88-3		
1,2,4-Trimethylbenzene	2050 ug/L	25.0	8.3	25		12/06/13 18:22	95-63-6		
1,3,5-Trimethylbenzene	661 ug/L	25.0	8.9	25		12/06/13 18:22	108-67-8		
Xylene (Total)	2490 ug/L	75.0	25.7	25		12/06/13 18:22	1330-20-7		
Surrogates									
a,a,a-Trifluorotoluene (S)	101 %	80-120		25		12/06/13 18:22	98-08-8		
Sample: MW-7	Lab ID: 408951000	6 Collecte	d: 12/03/1	3 00:00	Received: 12	2/05/13 08:00 N	latrix: Water	<u></u>	
Parameters	Results Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua	
WIGRO GCV									
WIGKU GUV	Analytical Method: WI								
Benzene	18.8 ug/L	2.5	0.84	2.5		12/06/13 18:50			
Ethylbenzene	85.6 ug/L	2.5	0.85	2.5		12/06/13 18:50			
Methyl-tert-butyl ether	6.7 ug/L	2.5	0.93	2.5		12/06/13 18:50			
Naphthalene	33.2 ug/L	2.5	0.93	2.5		12/06/13 18:50			
Toluene	19.7 ug/L	2.5	0.86	2.5		12/06/13 18:50			
1,2,4-Trimethylbenzene	116 ug/L	2.5	0.83	2.5		12/06/13 18:50			
1,3,5-Trimethylbenzene	33.4 ug/L	2.5	0.89	2.5		12/06/13 18:50			
Xylene (Total) Surrogates	131 ug/L	7.5	2.6	2.5		12/06/13 18:50			
a,a,a-Trifluorotoluene (S)	116 %	80-120		2.5		12/06/13 18:50	98-08-8		



Project:

JUMP RIVER

Pace Project No.:

4089510

Sample: MW-8A	Lab ID:	Collected: 12/03/13 00:00			Received: 12/05/13 08:00 Matrix: Water				
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytica	l Method: WI Mo	DD GRO						
Benzene	<0.34	ug/L	1.0	0.34	1		12/06/13 19:19	71-43-2	
Ethylbenzene	< 0.34	ug/L	1.0	0.34	1		12/06/13 19:19	100-41-4	
Methyl-tert-butyl ether	<0.37	ug/L	1.0	0.37	1		12/06/13 19:19	1634-04-4	
Naphthalene	< 0.37	ug/L	1.0	0.37	1		12/06/13 19:19	91-20-3	
Toluene	<0.34	ug/L	1.0	0.34	1		12/06/13 19:19	108-88-3	
1,2,4-Trimethylbenzene	<0.33	ug/L	1.0	0.33	1		12/06/13 19:19	95-63-6	
1,3,5-Trimethylbenzene	< 0.36	ug/L	1.0	0.36	1		12/06/13 19:19	108-67-8	
Xylene (Total)	<1.0	ug/L	3.0	1.0	1		12/06/13 19:19	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	102	%	80-120		1		12/06/13 19:19	98-08-8	
Sample: MW-8B	Lab ID:	4089510008	Collected	d: 12/03/1	3 00:00	Received: 12	2/05/13 08:00 M	atrix: Water	-
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytica	l Method: WI M	DD GRO						
Benzene	<0.34	ug/L	1.0	0.34	1		12/06/13 19:47	71-43-2	
Ethylbenzene	<0.34	ug/L	1.0	0.34	1		12/06/13 19:47	100-41-4	
Methyl-tert-butyl ether	< 0.37	-	1.0	0.37	1		12/06/13 19:47	1634-04-4	
Naphthalene	< 0.37	ug/L	1.0	0.37	1		12/06/13 19:47	91-20-3	
Toluene	< 0.34	ug/L	1.0	0.34	1		12/06/13 19:47	108-88-3	
1,2,4-Trimethylbenzene	< 0.33	ug/L	1.0	0.33	1		12/06/13 19:47	95-63-6	
1,3,5-Trimethylbenzene	< 0.36	ug/L	1.0	0.36	1		12/06/13 19:47	108-67-8	
Xylene (Total) Surrogates	<1.0	ug/L	3.0	1.0	1		12/06/13 19:47	1330-20-7	
a,a,a-Trifluorotoluene (S)	101	%	80-120		1		12/06/13 19:47	98-08-8	
Sample: MW-9A	Lab ID:	4089510009	Collected	d: 12/03/1	3 00:00	Received: 12	2/05/13 08:00 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytica	il Method: WI Mo	OD GRO						
Benzene	1.9	ug/L	1.0	0.34	1		12/06/13 20:16	71-43-2	
Ethylbenzene	<0.34		1.0	0.34	1		12/06/13 20:16	100-41-4	
Methyl-tert-butyl ether	1.7	_	1.0	0.37	1		12/06/13 20:16	1634-04-4	
Naphthalene	<0.37	-	1.0	0.37	1		12/06/13 20:16	91-20-3	
Toluene	<0.34	ug/L	1.0	0.34	1		12/06/13 20:16		
1,2,4-Trimethylbenzene	<0.33	_	1.0	0.33	1		12/06/13 20:16	95-63-6	
1,3,5-Trimethylbenzene	<0.36		1.0	0.36	1		12/06/13 20:16		
Xylene (Total)	<1.0	-	3.0	1.0	1		12/06/13 20:16	1330-20-7	
Surrogates					,		40/00/40 00:40	00.00.0	
a,a,a-Trifluorotoluene (S)	109	%	80-120		1		12/06/13 20:16	90-00-0	



Project:

JUMP RIVER

Pace Project No.:

4089510

Sample: MW-9B	Lab ID:	4089510010	Collecte	d: 12/03/13	3 00:00	Received: 12/05/13 08:00 Matrix: Water				
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua	
WIGRO GCV	Analytica	Method: WI Mo	DD GRO							
Benzene	2.7 u	ıg/L	1.0	0.34	1		12/06/13 20:45	71-43-2		
Ethylbenzene	< 0.34 ∪	ıg/L	1.0	0.34	1		12/06/13 20:45	100-41-4		
Methyl-tert-butyl ether	<0.37 ∪	ıg/L	1.0	0.37	1		12/06/13 20:45	1634-04-4		
Naphthalene	1.1 ι	ıg/L	1.0	0.37	1		12/06/13 20:45	91-20-3		
Toluene	<0.34 ≀	ıg/L	1.0	0.34	1		12/06/13 20:45	108-88-3		
1,2,4-Trimethylbenzene	<0.33 t	ıg/L	1.0	0.33	1		12/06/13 20:45	95-63-6		
1,3,5-Trimethylbenzene	<0.36 ເ	ıg/L	1.0	0.36	1		12/06/13 20:45	108-67-8		
Xylene (Total)	<1.0 ∪	ıg/L	3.0	1.0	1		12/06/13 20:45	1330-20-7		
Surrogates										
a,a,a-Trifluorotoluene (S)	102 %	%	80-120		1		12/06/13 20:45	98-08-8		
Sample: 8887 BRIDGE	Lab ID:	4089510011	Collecte	d: 12/03/1	3 00:00	Received: 12	2/05/13 08:00 M	atrix: Water		
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua	
WIGRO GCV	Analytica	Method: WI M	DD GRO			-				
Benzene	<0.34 ug/L		1.0	0.34	1		12/06/13 10:42	71-43-2		
Ethylbenzene	<0.34 L	-	1.0	0.34	1		12/06/13 10:42			
Methyl-tert-butyl ether	<0.37	-	1.0	0.37	1		12/06/13 10:42	1634-04-4		
Naphthalene	<0.37 t	•	1.0	0.37	1		12/06/13 10:42			
Toluene	<0.34 L	•	1.0	0.34	1		12/06/13 10:42	108-88-3		
1,2,4-Trimethylbenzene	<0.33 €	-	1.0	0.33	1		12/06/13 10:42	95-63-6		
1,3,5-Trimethylbenzene	<0.36 €	-	1.0	0.36	1		12/06/13 10:42	108-67-8		
Xylene (Total)	<1.0 t	-	3.0	1.0	1		12/06/13 10:42	1330-20-7		
Surrogates										
a,a,a-Trifluorotoluene (S)	103 %	%	80-120		1		12/06/13 10:42	98-08-8		
Sample: MASON	Lab ID:	4089510012	Collecte	d: 12/03/1	3 00:00	Received: 12	2/05/13 08:00 M	atrix: Water		
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua	
WIGRO GCV	Analytica	I Method: WI Mo	OD GRO							
				0.24	4		12/06/13 11:11	71_43.2		
Benzene	<0.34 t	· ·	1.0	0.34	1 1		12/06/13 11:11			
Ethylbenzene	<0.34 t	_	1.0	0.34			12/06/13 11:11			
Methyl-tert-butyl ether	<0.37 t	-	1.0	0.37	1 1		12/06/13 11:11			
Naphthalene Talvana	<0.37 t	-	1.0	0.37 0.34	1		12/06/13 11:11			
Toluene	<0.34 (-	1.0		1		12/06/13 11:11			
4 O 4 Trime aller dla	<0.33 ≀	JU/L	1.0	0.33	1					
1,2,4-Trimethylbenzene		•	4.0	0.00	4		12/06/13 11:11	108-67-8		
1,3,5-Trimethylbenzene	<0.36 ≀	ıg/L	1.0	0.36	1		12/06/13 11:11			
		ıg/L	1.0 3.0	0.36 1.0	1		12/06/13 11:11 12/06/13 11:11			

(920)469-2436



ANALYTICAL RESULTS

Project:

JUMP RIVER

Pace Project No.:

4089510

Sample: BAR	Lab ID:	4089510013	Collecte	d: 12/03/10	3 00:00	Received: 12	2/05/13 08:00 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytica	l Method: WI Mo	DD GRO						
Benzene	<0.34	ug/L	1.0	0.34	1		12/06/13 11:40	71-43-2	
Ethylbenzene	<0.34	Jg/L	1.0	0.34	1		12/06/13 11:40	100-41-4	
Methyl-tert-butyl ether	<0.37	ug/L	1.0	0.37	1		12/06/13 11:40	1634-04-4	
Naphthalene	< 0.37	ıg/L	1.0	0.37	1		12/06/13 11:40	91-20-3	
Toluene	<0.34	ıg/L	1.0	0.34	1		12/06/13 11:40	108-88-3	
1,2,4-Trimethylbenzene	<0.33	ıg/L	1.0	0.33	1		12/06/13 11:40	95-63-6	
1,3,5-Trimethylbenzene	<0.36	ug/L	1.0	0.36	1		12/06/13 11:40	108-67-8	
Xylene (Total)	<1.0	ug/L	3.0	1.0	1		12/06/13 11:40	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	102	%	80-120		1		12/06/13 11:40	98-08-8	
Sample: 14789	Lab ID:	4089510014	Collecte	d: 12/03/1	3 00:00	Received: 12	2/05/13 08:00 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytica	I Method: WI Mo	DD GRO						
Benzene	0.40J	ug/L	1.0	0.34	1		12/06/13 12:08	71-43-2	
Ethylbenzene	<0.34 ug/L		1.0	0.34	1		12/06/13 12:08	100-41-4	
Methyl-tert-butyl ether	1.0	-	1.0	0.37	1		12/06/13 12:08	1634-04-4	
Naphthalene	< 0.37	-	1.0	0.37	1		12/06/13 12:08	91-20-3	
Toluene	< 0.34	ug/L	1.0	0.34	1		12/06/13 12:08	108-88-3	
1,2,4-Trimethylbenzene	<0.33	ug/L	1.0	0.33	1		12/06/13 12:08	95-63-6	
1,3,5-Trimethylbenzene	<0.36	ug/L	1.0	0.36	1		12/06/13 12:08	108-67-8	
Xylene (Total)	<1.0	ug/L	3.0	1.0	1		12/06/13 12:08	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	102	%	80-120		1		12/06/13 12:08	98-08-8	
Sample: 8891	Lab ID:	4089510015	Collecte	d: 12/03/10	3 00:00	Received: 12	2/05/13 08:00 N	latrix: Water	<u></u>
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytica	l Method: WI Mo	OD GRO						
Benzene	2.0	ug/L	1.0	0.34	1		12/06/13 12:37	71-43-2	
Ethylbenzene	<0.34	•	1.0	0.34	1		12/06/13 12:37		
Methyl-tert-butyl ether	1.4	-	1.0	0.37	1		12/06/13 12:37		
Naphthalene	<0.37	•	1.0	0.37	1		12/06/13 12:37	91-20-3	
Toluene	0.42J	-	1.0	0.34	1		12/06/13 12:37	108-88-3	
1,2,4-Trimethylbenzene	<0.33	_	1.0	0.33	1		12/06/13 12:37	95-63-6	
1,3,5-Trimethylbenzene	<0.36	•	1.0	0.36	1		12/06/13 12:37		
Xylene (Total)	<1.0	•	3.0	1.0	1		12/06/13 12:37	1330-20-7	
Surrogates		-							
	102						12/06/13 12:37		



Project:

JUMP RIVER

Pace Project No.:

4089510

Sample: 14767	Lab ID	: 4089510016	Collected	12/03/13	00:00	Received: 12/05/13 08:00 Matrix: Water				
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
WIGRO GCV	Analytica	al Method: WI M	OD GRO							
Benzene	<0.34	ug/L	1.0	0.34	1		12/06/13 13:06	71-43-2		
Ethylbenzene	< 0.34	ug/L	1.0	0.34	1		12/06/13 13:06	100-41-4		
Methyl-tert-butyl ether	< 0.37		1.0	0.37	1		12/06/13 13:06	1634-04-4		
Naphthalene	< 0.37	ug/L	1.0	0.37	1		12/06/13 13:06	91-20-3		
Toluene	<0.34	ug/L	1.0	0.34	1		12/06/13 13:06	108-88-3		
1,2,4-Trimethylbenzene	< 0.33	ug/L	1.0	0.33	1		12/06/13 13:06	95-63-6		
1,3,5-Trimethylbenzene	< 0.36		1.0	0.36	1		12/06/13 13:06	108-67-8		
Xylene (Total)	<1.0	ug/L	3.0	1.0	1		12/06/13 13:06	1330-20-7		
Surrogates	404	0/	90.400		4		12/06/12 12:06	00 00 0		
a,a,a-Trifluorotoluene (S)	101	70	80-120		1		12/06/13 13:06	96-06-8		
Sample: COMM CTR	Lab ID	: 4089510017	Collected	12/03/13	3 00:00	Received: 12	2/05/13 08:00 Ma	atrix: Water		
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
WIGRO GCV	Analytica	al Method: WI M	OD GRO							
Benzene	<0.34	ua/L	1.0	0.34	1		12/06/13 13:35	71-43-2		
Ethylbenzene	< 0.34	·	1.0	0.34	1		12/06/13 13:35	100-41-4		
Methyl-tert-butyl ether	<0.37	-	1.0	0.37	1		12/06/13 13:35	1634-04-4		
Naphthalene	<0.37	-	1.0	0.37	1		12/06/13 13:35	91-20-3		
Toluene	<0.34	-	1.0	0.34	1		12/06/13 13:35	108-88-3		
1,2,4-Trimethylbenzene	< 0.33	ug/L	1.0	0.33	1		12/06/13 13:35	95-63-6		
1,3,5-Trimethylbenzene	< 0.36	_	1.0	0.36	1		12/06/13 13:35	108-67-8		
Xylene (Total)	<1.0	-	3.0	1.0	1		12/06/13 13:35	1330-20-7		
Surrogates		-								
a,a,a-Trifluorotoluene (S)	101	%	80-120		1		12/06/13 13:35	98-08-8		
Sample: 8890 BRIDGE	Lab ID	: 4089510018	Collected	12/03/1	3 00:00	Received: 12	2/05/13 08:00 Ma	atrix: Water		
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
WIGRO GCV	Analytica	al Method: WI M	OD GRO							
	<0.34	ua/l	1.0	0.34	1		12/06/13 14:03	71-43-2		
Benzene	<0.34		1.0	0.34	1		12/06/13 14:03			
Ethylbenzene Methyl tert butyl ether	0.97J	-	1.0	0.37	1		12/06/13 14:03			
Methyl-tert-butyl ether Naphthalene	<0.37	-	1.0	0.37	1		12/06/13 14:03			
Toluene	<0.34	-	1.0	0.34	1		12/06/13 14:03			
1,2,4-Trimethylbenzene	<0.33	-	1.0	0.34	1		12/06/13 14:03			
• •	<0.36	-	1.0	0.36	1		12/06/13 14:03			
1,3,5-Trimethylbenzene Xylene (Total)	<1.0	-	3.0	1.0	1		12/06/13 14:03			
Surrogates		_		1.0	1		12/06/13 14:03			
a,a,a-Trifluorotoluene (S)	102	70	80-120		1		12/00/10 14.00	30 00 0		



Project:

JUMP RIVER

Pace Project No.:

4089510

Sample: TRIP BLANKS	Lab ID: 4089510019		Collected: 12/03/13 00:00			Received: 12	/05/13 08:00 Ma	trix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical Me	ethod: WI MC	D GRO						
Benzene	<0.34 ug/L		1.0	0.34	1		12/06/13 14:32	71-43-2	
Ethylbenzene	<0.34 ug/L		1.0	0.34	1		12/06/13 14:32	100-41-4	
Methyl-tert-butyl ether	<0.37 ug/L		1.0	0.37	1		12/06/13 14:32	1634-04-4	
Naphthalene	<0.37 ug/L		1.0	0.37	1		12/06/13 14:32	91-20-3	
Toluene	<0.34 ug/L		1.0	0.34	1		12/06/13 14:32	108-88-3	
1,2,4-Trimethylbenzene	<0.33 ug/L		1.0	0.33	1		12/06/13 14:32	95-63-6	
1,3,5-Trimethylbenzene	<0.36 ug/L		1.0	0.36	1		12/06/13 14:32	108-67-8	
Xylene (Total) Surrogates	<1.0 ug/L		3.0	1.0	1		12/06/13 14:32	1330-20-7	
a,a,a-Trifluorotoluene (S)	102 %		80-120		1		12/06/13 14:32	98-08-8	



QUALITY CONTROL DATA

Project:

JUMP RIVER

Pace Project No.:

4089510

QC Batch:

GCV/11576

Analysis Method:

WI MOD GRO

QC Batch Method:

WI MOD GRO

Analysis Description:

WIGRO GCV Water

Associated Lab Samples:

4089510001, 4089510002, 4089510003, 4089510004, 4089510005, 4089510006, 4089510007, 4089510008, 4089510009, 4089510010, 4089510011, 4089510012, 4089510013, 4089510014, 4089510015, 4089510016, 4089

4089510017, 4089510018, 4089510019

METHOD BLANK: 907199

Matrix: Water

Associated Lab Samples:

4089510017, 4089510018, 4089510019

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.33	1.0	12/06/13 09:16	
1,3,5-Trimethylbenzene	ug/L	< 0.36	1.0	12/06/13 09:16	
Benzene	ug/L	< 0.34	1.0	12/06/13 09:16	
Ethylbenzene	ug/L	< 0.34	1.0	12/06/13 09:16	
Methyl-tert-butyl ether	ug/L	< 0.37	1.0	12/06/13 09:16	
Naphthalene	ug/L	< 0.37	1.0	12/06/13 09:16	
Toluene	ug/L	< 0.34	1.0	12/06/13 09:16	
Xylene (Total)	ug/L	<1.0	3.0	12/06/13 09:16	
a,a,a-Trifluorotoluene (S)	%	102	80-120	12/06/13 09:16	

LABORATORY CONTROL SAM	PLE & LCSD: 907200		90	7201						
		Spike	LCS	LCSD	LCS	LCSD	% Rec		Max	
Parameter	Units	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qualifiers
1,2,4-Trimethylbenzene	 ug/L	20	19.8	19.9	99	100	80-120	1	20	
1,3,5-Trimethylbenzene	ug/L	20	19.8	19.9	99	99	80-120	1	20	
Benzene	ug/L	20	19.7	19.4	98	97	80-120	2	20	
Ethylbenzene	ug/L	20	19.8	19.7	99	99	80-120	1	20	
Methyl-tert-butyl ether	ug/L	20	18.7	19.1	94	95	80-120	2	20	
Naphthalene	ug/L	20	19.2	19.7	96	99	80-120	3	20	
Toluene	ug/L	20	19.7	19.4	98	97	80-120	1	20	
Xylene (Total)	ug/L	60	59.5	59.0	99	98	80-120	1	20	
a,a,a-Trifluorotoluene (S)	%				100	101	80-120			

MATRIX SPIKE & MATRIX SF	PIKE DUPLICAT	E: 90738	_		907381							
Parameter	40 Units	089510004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	2460	500	500	3250	3160	157	140	26-200	3	20	
1,3,5-Trimethylbenzene	ug/L	720	500	500	1350	1330	126	121	70-160	2	20	
Benzene	ug/L	103	500	500	634	629	106	105	49-165	1	20	
Ethylbenzene	ug/L	770	500	500	1360	1340	119	115	59-156	2	20	
Methyl-tert-butyl ether	ug/L	<9.3	500	500	496	475	99	95	80-127	4	20	
Naphthalene	ug/L	450	500	500	1000	971	110	104	71-130	3	20	
Toluene	ug/L	223	500	500	764	761	108	108	80-135	0	20	
Xylene (Total)	ug/L	2050	1500	1500	3810	3750	117	113	48-165	2	20	
a,a,a-Trifluorotoluene (S)	%						102	100	80-120			





QUALIFIERS

Project:

JUMP RIVER

Pace Project No.:

4089510

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

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

Date: 12/10/2013 02:19 PM

Pace Analytical Services - Green Bay



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:

JUMP RIVER

Pace Project No.:

4089510

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
4089510001	MW-1	WI MOD GRO	GCV/11576		
4089510002	MW-2	WI MOD GRO	GCV/11576		
4089510003	MW-3	WI MOD GRO	GCV/11576		
4089510004	MW-5	WI MOD GRO	GCV/11576		
4089510005	MW-6	WI MOD GRO	GCV/11576		
4089510006	MW-7	WI MOD GRO	GCV/11576		
4089510007	MW-8A	WI MOD GRO	GCV/11576		
4089510008	MW-8B	WI MOD GRO	GCV/11576		
4089510009	MW-9A	WI MOD GRO	GCV/11576		
4089510010	MW-9B	WI MOD GRO	GCV/11576		
4089510011	8887 BRIDGE	WI MOD GRO	GCV/11576		
4089510012	MASON	WI MOD GRO	GCV/11576		
4089510013	BAR	WI MOD GRO	GCV/11576		
4089510014	14789	WI MOD GRO	GCV/11576		
4089510015	8891	WI MOD GRO	GCV/11576		
4089510016	14767	WI MOD GRO	GCV/11576		
4089510017	COMM CTR	WI MOD GRO	GCV/11576		
4089510018	8890 BRIDGE	WI MOD GRO	GCV/11576		
4089510019	TRIP BLANKS	WI MOD GRO	GCV/11576		

	(Please	e Print Clearly)											<u>UPPER</u>	MIDWEST R	EGION	(Page 1	of Z)
Company Na	me: M	evidian En	C1 .	14		J		_		. 👁			MN: 61	2-607-1700	WI: 920-469-2436			
Branch/Loca				-	/		Pace							ماند.			40895	010
Project Conta	act: K	en Shimke	\geq		/			www.p	acelabs.	com				JK1"	Quote #:			, ag
Phone:		5 579 07			{	(CHA	IN	OF	= CI	US'	TO	DY		Mail To Contact:	Ke	n Shì	neko a
Project Numb					A=No		=HCL C=			ation Cod	es	=Methan		юн	Mail To Company:	Men	idiech	
Project Name	»: -	Jung Riv	عہ		t 1		ulfate Solution			m Thiosulf		=Other			Mail To Address:	Z711	N. Floor	= 21
Project State	:	WI				RED? S/NO)	Y/N									Fall	l Creek	WI
Sampled By	(Print):	wif Ken Shim	K	١		RVATION DE)*	Pick Letter								Invoice To Contact:		54	742
Sampled By (Atr	·	,					,						Invoice To Company:			
PO #:		1 6	Regul Prog	-) ste	alk	4						Invoice To Address:			
Data Packa	ige Options	- I — L	A = Air	Mat	rix Codes W = Water	s	Requested	+ Was										
☐ EP/	A Level III	(billable)	A = Air B = Biota C = Char O = Oil		DW = Drinki GW = Groun SW = Surface	nd Water		して			j				Invoice To Phone:			
L EP	A Level IV	NOT fleeded on	S = Soil SI = Slud	ge	WW = Wast WP = Wipe		l Analyses	10							CLIENT	LAB C	OMMENTS	Profile #
PACE LAB#	CL	ENT FIELD ID			TIME	MATRO		Q							COMMENTS	(Lab l	Jse Only)	
100	Μω	- (12	3		M		X									3-40 ml	3
(D)3 (D)7	uw	- 2		Ì				1									<u> </u>	
W3	mu	3 - ق																
004	MU	J - 5				\prod												
002	ı	-6																
0000		-7																
(007)		~8A																
800		- BB																
009		, -9A																
010	V	-9B																
011	888	7 Bridge																
OIL	Ma	Son																
013		ar		(V		V	1								1	
		ime Requested - Prelin to approval/surcharge		Relino	quished By:				D	ate/Time:			Received	By:	Date/Time:		PACE Pro	•
(Rusii i	Date Nee		÷)	Relino	quished By:			-	D	ate/Time;			Received	By:	Date/Time:		4089	5/0
	lim Rush Resu	ilts by (complete what you w	/ant):	1_			\subseteq	3 63			<u>~</u>			Tu			Receipt Temp =	201 °C
Email #1: Email #2:				Relino	uished By:		J 4		D:	ate/Tinte:	7 -		Received	By:	Date/Time:		Sample R	
Telephone:				Relino	uished By:			······································	D	ate/Time:			Received	ву:	Date/Time:		OK / Ad	justed
Fax:	amples on UO	D are subject to		Rolina	uishęd By:				, n.	ate/Time:			Received	Die	DataTim		Cooler Cus Present N	
	-	I release of liability		$\prod_{i=1}^{n}$	unhed	m		14	5 13	08	<u> જ્યા</u>		M	200 MA	PULC 6 145/13	0800	Intact / N	/
														1			Version 6.0 06/14/06	

	(Please Print Clearly)		UPPER MIDWEST REGION							GION		Page Z	of Z				
Company Nan	ne:			95				_			MN: 61	2-607-1	700	WI: 920-469-2436			
Branch/Locati	ion:	<u> </u>	/		Pace.	Ana	lytic	al®								40	1895100
Project Conta	ct:		1 /			www.pa	ecelabs.c	00171						Quote #:			aŭe
Phone:			'		CHA	IN	OF	F CI	US'	TO	DY			Mail To Contact:			0.
Project Numb	er:		A=No			2SO4		ation Cod	0 \$	=Methan		ЮН		Mail To Company:			
Project Name:			H=Sc	odium Bisu	Ifate Solutio	n	I=Sodiu	m Thiosulf	ate J=	Other				Mail To Address:			
Project State:			FILTE (YES		Y/N												
Sampled By (Print):		PRESER (CO		Pick Letter									Invoice To Contact:		-	
Sampled By (Sign):		1			7								Invoice To Company:			
PO #:		egulatory rogram:			Requested	62								Invoice To Address:			
Data Packa	ge Options MS/MSD	Mat	rix Codes	3		ź											
(billa	l evel III Un your sample B=		W = Water DW = Drinki GW = Grour			CTNaph								Invoice To Phone:			
☐ EPA	Level IV NOT needed on S = S	Oil Soil	SW = Surfact	e Water	Analyses	10								CLIENT	LABC	OMMENTS	Profile #
PACE LAB#	CLIENT FIELD ID	Sludge COLLI DATE	WP = Wipe ECTION TIME	MATRIX	Ā	9								COMMENTS	ı	Jse Only)	110,000
014	14789	12/3	I I III L	W		*	<u> </u>								3-40ml	В	
014 015 016	8891	1				}				<u> </u>							
016	14767																
017	Comm Cfr					\top											
017	8890 Bon: See	7		V		V									1		
OW	X-tnp blanks														4-40n	nlB	
												_					
							P	HG	- 6		4	n	9 ()			
	·																
	K recieved in Shipment	, adde	ed to	coc													
	by lab mf 145/13				15 - 2 - VI			145									
	naround Time Requested - Prelims	Reline	quished By:	10	>		Da	ate/Time:	12/4	1/13	Received	By:		Date/Time:		PACE Pro	ject No.
(Rush I	AT subject to approval/surcharge) Date Needed:	Relin	uished By	J-	<u>~</u>		, Da	ate/Time:	L /º		Received	by:	_	Date/Time:	a an		
	m Rush Results by (complete what you want		unha	m		1.	2/5/1	<u>3</u> C	800				Apa	WEB 12/5/13 C	008	Receipt Temp = Y	201 %
Email #1;		Relino	quished By:				Da	ite/Time:			Received	B√		Date/Time:		Sample Re	ω_1
Email #2: Telephone:		Palia	quished By:		·			ite/Time:			Page in a	O.r.		Date/Time:		OK / Ad	
Fax:			quisited by:				Da	ner i ime.			Received	ъy.		Date/+ime:		Cooler Cus	
· · · · · · · · · · · · · · · · · · ·	mples on HOLD are subject to	Relino	quished By:				Da	ite/Time:			Received	Ву:		Date/Time:		Present (1)	
spec	ial pricing and release of liability											-				Intact / No Version 6.0 06/14/06	ot Intact

Sample Condition Upon Receipt

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

Pace Analytical[™]

/ Pace Arialytical						
				Project #:	MO# :	4089510
Client Name: Meridian En Ca		·· ·	-			
Courier: Fed Ex UPS Client Pac	e Other	: Da	nha	m		
Tracking #: <u>(6533104</u>					4089510	
Custody Seal on Cooler/Box Present: Tyes				: yes no		
Custody Seal on Samples Present: yes D				yes—no	ا المالة	٠.
Packing Material: Bubble Wrap Bub Thermometer Used				Blue Dry None		
Cooler Temperature Uncorr: \\(\mathcal{L}\epsilon\) /Corr:	Type	or ice:		gical Tissue is Froze	-	n ice, cooling process has begun
Temp Blank Present: Tyes Tho				.g.oa. 110000 10 1 102.	no [Person examining contents;
Temp should be above freezing to 6°C for all sample ex Frozen Biota Samples should be received ≤ 0°C.	cept Biota	3.		Comments:		Date: \2\\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Chain of Custody Present:	_ □Yes	□No	□N/A	1.		
Chain of Custody Filled Out:	,Yes	□No	□n/a	2. Only first pa	ge mH 12/	5/13
Chain of Custody Relinquished:	-⊒†°es	□No		3. Only second		
Sampler Name & Signature on COC:	√El∀es	□No		· ·	• /	
Samples Arrived within Hold Time;	Yes	□No	□N/A	5.		
- VOA Samples frozen upon receipt	□Yes	□No		Date/Time:		
Short Hold Time Analysis (<72hr):	□Yes_	₽N%	□N/A	6		
Rush Turn Around Time Requested:	□Yes.	.⊿N°	□N/A	7.		
Sufficient Volume:	∠Pes	□No	□N/A	8.		
Correct Containers Used:	.⊒Yes	□No	□n/a	9.		
-Pace Containers Used:	∠∀es	□№о	□n/a			
-Pace IR Containers Used:	□Yes	-DNo	□N/A			
Containers Intact:	₽Yes	□No	□N/A	10.		
Filtered volume received for Dissolved tests	□Yes		□N/A	 		
Sample Labels match COC:	ÆYes	□No	□n/a	12.00 N BY 10	NO Date	on samples
-Includes date/time/ID/Analysis Matrix:	W				70001 (-15)	
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	□Yes	□No	-⊟N/A	13. T. HNO3	T H2SO4 [NaOH NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation.	□Yes	Пио	-□N/A			
(HNO3, H2SO4 <2; NaOH+ZnAct ≥9, NaOH ≥12) exceptions (YOA, coliform, TOC, TOX, TOH,				Initial when La	b Std #ID of	Date/
O&G, WIDROW, Phenolics, OTHER:	₽Yes	□No	<u></u>	1 1	eservative	Time:
Headspace in VOA Vials (>6mm):	□Yes	.⊟No	□N/A	14.		
Trip Blank Present:	₽Ŷes	□No	□n/a	15.		
Trip Blank Custody Seals Present	DYes	□No	□N/A			
Pace Trip Blank Lot # (if purchased):313,315					1 1 15 15	and the second s
Client Notification/ Resolution: Person Contacted:			Date/		ecked, see attach	ed form for additional comments
	rigner	£, 0	dde		lab mitt	12/5/13
						
		<u>—</u>				15/M/7
Project Manager Review:		/			Date:	10/3/17
						.
F-GB-C-031-Rev.02 (28Oct2013) SCUR Form						1





April 21, 2014

Kennith Shimko Meridain Environmental Consulting, LLC 2711 North Elco Rd Fall Creek, WI 54742

RE: Project: JUMP RIVER

Pace Project No.: 4094908

Dear Kennith Shimko:

Enclosed are the analytical results for sample(s) received by the laboratory on April 17, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI 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

Project Manager

Enclosures







CERTIFICATIONS

Project:

JUMP RIVER

Pace Project No.:

4094908

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302 Florida/NELAP Certification #: E87948 Illinois Certification #: 200050 Kentucky Certification #: 82 Louisiana Certification #: 04168 Minnesota Certification #: 055-999-334 New York Certification #: 11888 North Dakota Certification #: R-150 South Carolina Certification #: 83006001 US Dept of Agriculture #: S-76505 Wisconsin Certification #: 405132750



SAMPLE SUMMARY

Project:

JUMP RIVER

Pace Project No.:

4094908

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4094908001			04/15/14 00:00	04/17/14 07:30
4094908002	MW-2	Water	04/15/14 00:00	04/17/14 07:30
4094908003	MW-3	Water	04/15/14 00:00	04/17/14 07:30
4094908004	MW-5	Water	04/15/14 00:00	04/17/14 07:30
4094908005	MW-6	Water	04/15/14 00:00	04/17/14 07:30
4094908006	MW-7	Water	04/15/14 00:00	04/17/14 07:30
4094908007	MW-8A	Water	04/15/14 00:00	04/17/14 07:30
4094908008	MW-8B	Water	04/15/14 00:00	04/17/14 07:30
4094908009	MW-9A	Water	04/15/14 00:00	04/17/14 07:30
4094908010	MW-9B	Water	04/15/14 00:00	04/17/14 07:30
4094908011	BAR	Water	04/15/14 00:00	04/17/14 07:30
4094908012	COM CTR	Water	04/15/14 00:00	04/17/14 07:30
4094908013	14767	Water	04/15/14 00:00	04/17/14 07:30
4094908014	14778	Water	04/15/14 00:00	04/17/14 07:30
4094908015	14789	Water	04/15/14 00:00	04/17/14 07:30
4094908016	8887	Water	04/15/14 00:00	04/17/14 07:30
4094908017	8890	Water	04/15/14 00:00	04/17/14 07:30
4094908018	8891	Water	04/15/14 00:00	04/17/14 07:30
4094908019	8910	Water	04/15/14 00:00	04/17/14 07:30
4094908020	TRIP BLANK	Water	04/15/14 00:00	04/17/14 07:30



SAMPLE ANALYTE COUNT

Project:

JUMP RIVER

Pace Project No.:

4094908

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
4094908001	MW-1	WI MOD GRO	LCF	9	PASI-G
4094908002	MW-2	WI MOD GRO	LCF	9	PASI-G
4094908003	MW-3	WI MOD GRO	LCF	9	PASI-G
4094908004	MVV-5	WI MOD GRO	LCF	9	PASI-G
4094908005	MW-6	WI MOD GRO	LCF	9	PASI-G
4094908006	MW-7	WI MOD GRO	LCF	9	PASI-G
4094908007	MW-8A	WI MOD GRO	LCF	9	PASI-G
4094908008	MW-8B	WI MOD GRO	LCF	9	PASI-G
4094908009	MW-9A	WI MOD GRO	LCF	9	PASI-G
4094908010	MW-9B	· WI MOD GRO	LCF	9	PASI-G
4094908011	BAR	WI MOD GRO	LCF	9	PASI-G
4094908012	COM CTR	WI MOD GRO	LCF	9	PASI-G
4094908013	14767	WI MOD GRO	LCF	9	PASI-G
4094908014	14778	WI MOD GRO	LCF	9	PASI-G
4094908015	14789	WI MOD GRO	LCF	9	PASI-G
4094908016	8887	WI MOD GRO	LCF	9	PASI-G
4094908017	8890	WI MOD GRO	LCF	9	PASI-G
4094908018	8891	WI MOD GRO	LCF	9	PASI-G
4094908019	8910	WI MOD GRO	LCF	9	PASI-G
4094908020	TRIP BLANK	WI MOD GRO	LCF	9	PASI-G





PROJECT NARRATIVE

Project:

JUMP RIVER

Pace Project No.:

4094908

Method:

WI MOD GRO Description: WIGRO GCV

Client:

Meridian Environmental Consulting, LLC

Date:

April 21, 2014

General Information:

20 samples were analyzed for WI MOD GRO. All samples were received in acceptable condition with any exceptions noted below.

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.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

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.



Project:

JUMP RIVER

Pace Project No.: 4094908

Date: 04/21/2014 02:59 PM

Sample: MW-1	Lab ID: 409490800°	1 Collecte	d: 04/15/1	4 00:00	Received: 04	4/17/14 07:30 N	/latrix: Water	
Parameters	Results Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
WIGRO GCV	Analytical Method: WI	MOD GRO						
Benzene	219 ug/L	10.0	4.0	10		04/18/14 21:3	5 71-43-2	
Ethylbenzene	439 ug/L	10.0	3.9	10		04/18/14 21:3	5 100-41-4	
Methyl-tert-butyl ether	11.2 ug/L	10.0	4.8	10		04/18/14 21:3	5 1634-04-4	
Naphthalene	101 ug/L	10.0	4.2	10		04/18/14 21:35	5 91-20-3	
Toluene	842 ug/L	10.0	3.9	10		04/18/14 21:3	5 108-88-3	
1,2,4-Trimethylbenzene	648 ug/L	10.0	4.2	10		04/18/14 21:35	5 95-63-6	
1,3,5-Trimethylbenzene	145 ug/L	10.0	4.2	10		04/18/14 21:3	5 108-67-8	
Xylene (Total)	1440 ug/L	30.0	12.5	10		04/18/14 21:35	5 1330-20-7	
Surrogates	·							
a,a,a-Trifluorotoluene (S)	106 %	80-120		10		04/18/14 21:35	5 98-08-8	
Sample: MW-2	Lab ID: 4094908002	2 Collecte	d: 04/15/1	4 00:00	Received: 04	1/17/14 07:30 M	latrix: Water	
Parameters	Results Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
WIGRO GCV	Analytical Method: Wi I	MOD GRO						
Benzene	72.3 ug/L	5.0	2.0	5		04/18/14 21:07	71-43-2	
Ethylbenzene	295 ug/L	5.0	2.0	5		04/18/14 21:07		
Methyl-tert-butyl ether	16.4 ug/L	5.0	2.4	5		04/18/14 21:07		
Naphthalene	119 ug/L	5.0	2.1	5		04/18/14 21:07		
Toluene	175 ug/L	5.0	1.9	5		04/18/14 21:07		
1,2,4-Trimethylbenzene	617 ug/L	5.0	2.1	5		04/18/14 21:07		
1,3,5-Trimethylbenzene	194 ug/L	5.0	2.1	5		04/18/14 21:07		
Xylene (Total)	750 ug/L	15.0	6.2	5		04/18/14 21:07		
Surrogates	, 00 agr.	10.0	0.2	Ü		0-1/10/11/21/01	1000 20 7	
a,a,a-Trifluorotoluene (S)	99 %	80-120		5		04/18/14 21:07	98-08-8	
Sample: MW-3	Lab ID: 4094908003	Collected	d: 04/15/1	1.00:00	Received: 04	/17/14 07:30 M	latrix: Water	
	EUD 15. 400700000	Concerce	a. 04/10/1-	+ 00.00	received. by	7 (7) 4 0 7 . 50	atiin. Water	
Parameters	Results Units	LOQ	LOD	DF_	Prepared	Analyzed	CAS No.	Qual
NIGRO GCV	Analytical Method: WI N	MOD GRO						
Benzene	663 ug/L	100	39.6	100		04/18/14 22:33	71-43-2	
Ethylbenzene	2200 ug/L	100	39.3	100		04/18/14 22:33	100-41-4	
Methyl-tert-butyl ether	<48.5 ug/L	100	48.5	100		04/18/14 22:33	1634-04-4	
Naphthalene	567 ug/L	100	42.4	100		04/18/14 22:33	91-20-3	
Toluene	5520 ug/L	100	38.8	100		04/18/14 22:33	108-88-3	
,2,4-Trimethylbenzene	2870 ug/L	100	41.8	100		04/18/14 22:33	95-63-6	
I,3,5-Trimethylbenzene	888 ug/L	100	41.6	100		04/18/14 22:33	108-67-8	
Kylene (Total) Surrogates	9100 ug/L	300	125	100		04/18/14 22:33	1330-20-7	
ı,a,a-Trifluorotoluene (S)	102 %	80-120		100		04/18/14 22:33	98-08-8	

REPORT OF LABORATORY ANALYSIS

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



Project:

JUMP RIVER

Pace Project No.: 4094908

Date: 04/21/2014 02:59 PM

Sample: MW-5	Lab ID:	4094908004	Collected	: 04/15/1	4 00:00	Received: 04	1/17/14 07:30 N	latrix: Water	*
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytica	l Method: WI M	OD GRO						
Benzene	82.5 u	ıg/L	25.0	9.9	25		04/18/14 22:04	71-43-2	
Ethylbenzene	890 ւ	ıg/L	25.0	9.8	25		04/18/14 22:04	100-41-4	
Methyl-tert-butyl ether	<12.1 ι	ıg/L	25.0	12.1	25		04/18/14 22:04	1634-04-4	
Naphthalene	501 ເ	ıg/L	25.0	10.6	25		04/18/14 22:04	91-20-3	
Toluene	201 t	ıg/L	25.0	9.7	25		04/18/14 22:04	108-88-3	
1,2,4-Trimethylbenzene	3200 t	ıg/L	25.0	10.4	25		04/18/14 22:04	95-63-6	
1,3,5-Trimethylbenzene	968 L	ıg/L	25.0	10,4	25		04/18/14 22:04	108-67-8	
Xylene (Total)	2330 ι	•	75.0	31.2	25		04/18/14 22:04	1330-20-7	
Surrogates		3							
a,a,a-Trifluorotoluene (S)	105 %	/ o	80-120		25		04/18/14 22:04	98-08-8	
Sample: MW-6	Lab ID:	4094908005	Collected	: 04/15/1	4 00:00	Received: 04	/17/14 07:30 M	latrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
						Toparoa		0,10.10.	
NIGRO GCV	Analytical	Method: WI MO	DD GRO		£ 1				
Benzene	20.4 u	a/L	20.0	7.9	20		04/18/14 18:43	71-43-2	
Ethylbenzene	343 u	_	20.0	7.9	20		04/18/14 18:43		
Methyl-tert-butyl ether	<9.7 u	-	20.0	9.7	20		04/18/14 18:43		
Naphthalene	103 u	•	20.0	8.5	20		04/18/14 18:43		
Toluene	430 u	-	20.0	7.8	20		04/18/14 18:43	108-88-3	
1,2,4-Trimethylbenzene	1080 u	•	20.0	8.4	20		04/18/14 18:43		
1,3,5-Trimethylbenzene	336 u	-	20.0	8.3	20		04/18/14 18:43		
Xylene (Total)	1280 u	-	60.0	24.9	20		04/18/14 18:43		
Surrogates		3 . –		•				,	
a,a,a-Trifluorotoluene (S)	102 %	D	80-120		20		04/18/14 18:43	98-08-8	
Sample: MW-7	Lab ID:	400400000	C-11-4-4-	DAMEM		Danii di 04	147144 D7:20 N	ation Mate	
sample. WW-1	Lab ID.	4094908006	Collected:	04/15/14	1 00:00	Received: 04	/1//14 U/:3U IVI	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
VIGRO GCV	Analytical	Method: WI MC	D GRO						
Benzene	12.4 u	g/L	2.5	0.99	2.5		04/18/14 20:38	71-43-2	
Ethylbenzene	53.4 u	g/L	2.5	0.98	2.5		04/18/14 20:38	100-41-4	
Methyl-tert-butyl ether	9.3 u	g/L	2.5	1.2	2.5		04/18/14 20:38		
laphthalene	19.8 ug		2.5	1.1	2.5		04/18/14 20:38	91-20-3	
oluene	13.5 ug		2.5	0.97	2.5		04/18/14 20:38		
,2,4-Trimethylbenzene	80.7 ug		2.5	1.0	2.5		04/18/14 20:38		
,3,5-Trimethylbenzene	30.9 ug		2.5	1.0	2.5		04/18/14 20:38	108-67-8	arrana manana a na agas
(ylene (Total)	69 .8 uç		7.5	3.1	2.5		04/18/14 20:38	1330-20-7	
Surrogates	·								
,a,a-Trifluorotoluene (S)	105 %		80-120		2.5		04/18/14 20:38		



Project:

Date: 04/21/2014 02:59 PM

JUMP RIVER

Pace Project No.: 4094908

Sample: MW-8A	Lab II	D: 4094908007	Collecte	d: 04/15/1	14 00:00	Received: 0)4/17/14 07:30	/latrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
WIGRO GCV	Analytic	al Method; WI M	OD GRO						
Benzene	<0.40	ug/L	1.0	0.40	1		04/18/14 12:5	9 71-43-2	
Ethylbenzene	<0.39	ug/L	1.0	0.39	1		04/18/14 12:59	3 100-41-4	
Methyl-tert-butyl ether	3.4	ug/L	1.0	0.48	1		04/18/14 12:59	1634-04-4	
Naphthalene	< 0.42		1.0	0.42	1		04/18/14 12:59	91-20-3	
Toluene	< 0.39	ug/L	1.0	0.39	1		04/18/14 12:59	108-88-3	
1,2,4-Trimethylbenzene	< 0.42	ug/L	1.0	0.42	1		04/18/14 12:59	95-63-6	
1,3,5-Trimethylbenzene	< 0.42	-	1.0	0.42	1		04/18/14 12:59		
Xylene (Total)	<1.2	-	3.0	1.2	1		04/18/14 12:59	1330-20-7	
Surrogates		9-					•		
a,a,a-Trifluorotoluene (S)	109	%	80-120		1		04/18/14 12:59	98-08-8	
Sample: MW-8B	Lab ID	: 4094908008	Collected	d: 04/15/1	4 00:00	Received: 04	4/17/14 07:30 N	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytica	ıl Method: WI MO	OD GRO						
	•			2.45			0.1404.40.00	74.40.0	
Benzene	<0.40	_	1.0	0.40	1		04/18/14 13:28		
Ethylbenzene	<0.39	-	1.0	0.39	1		04/18/14 13:28		
Methyl-tert-butyl ether	<0.48	-	1.0	0.48	1		04/18/14 13:28		
Naphthalene	<0.42	-	1.0	0.42	1		04/18/14 13:28		
Toluene	<0.39		1.0	0.39	1		04/18/14 13:28		
1,2,4-Trimethylbenzene	<0.42		1.0	0.42	1		04/18/14 13:28		
1,3,5-Trimethylbenzene	<0.42 ι	-	1.0	0.42	1		04/18/14 13:28		
Xylene (Total)	<1.2 (ug/L	3.0	1.2	1		04/18/14 13:28	1330-20-7	
Surrogates a,a,a-Trifluorotoluene (S)	100 9	%	80-120		1		04/18/14 13:28	98-08-8	
, ,									
Sample: MW-9A	Lab ID:	4094908009	Collected	: 04/15/14	00:00	Received: 04	/17/14 07:30 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
VIGRO GCV	Analytical	Method: WI MO	D GRO						
enzene	<0.40 u	ıg/L	1.0	0.40	1		04/18/14 13:57	71-43-2	
thylbenzene	0.97J u	-	1.0	0.39	1		04/18/14 13:57	100-41-4	
lethyl-tert-butyl ether	2.0 u	_	1.0	0.48	1		04/18/14 13:57		
aphthalene	<0.42 u	-	1.0	0.42	1		04/18/14 13:57		
oluene	<0.39 u		1.0	0.39	1		04/18/14 13:57		
2,4-Trimethylbenzene	<0.42 u	-	1.0	0.42	1		04/18/14 13:57		
3,5-Trimethylbenzene	< 0.42 u	_	1.0 1.0	0.42 			04/18/14 13:57		
		~	3.0	1.2	1		04/18/14 13:57		
vlene (Total)	<1 / H	O/3_	20	1.2					
ylene (Total) <i>urrogates</i>	<1.2 u	g/L	3.0	1.2	,		04/10/14 10:01	,000 20 ,	



Project:

JUMP RIVER

Pace Project No.: 4

4094908

Sample: MW-9B	Lab ID:	4094908010	Collected	d: 04/15/1	4 00:00	Received: 0	4/1//14 U/:3U N	fatrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
WIGRO GCV	Analytica	l Method: WI Mo	OD GRO						
Benzene	2.1 ι	ug/L	1.0	0.40	1		04/18/14 14:26	71-43-2	
Ethylbenzene	<0.39 (ug/L	1.0	0.39	1		04/18/14 14:26	100-41-4	
Methyl-tert-butyl ether	0.56J t	ug/L	1.0	0.48	1		04/18/14 14:26	1634-04-4	
Naphthalene	<0.42 €	ıg/L	1.0	0.42	1		04/18/14 14:26	91-20-3	
Toluene	<0.39 t	ıg/L	1.0	0.39	1		04/18/14 14:26	108-88-3	
1,2,4-Trimethylbenzene	<0.42 t	ug/L	1.0	0.42	1		04/18/14 14:26	95-63-6	
1,3,5-Trimethylbenzene	<0.42 ≀	ıg/L	1.0	0.42	1		04/18/14 14:26	108-67-8	
Xylene (Total)	<1.2 t	ıg/L	3.0	1.2	1		04/18/14 14:26	1330-20-7	
Surrogates		· ·							
a,a,a-Trifluorotoluene (S)	101 9	%	80-120		1		04/18/14 14:26	98-08-8	
Sample: BAR	Lab ID:	4094908011	Collected	1: 04/15/14	1 00:00	Received: 04	1/17/14 07:30 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
,						.,.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
WIGRO GCV	Analytical	Method: WI MC	DD GRO						
Benzene	<0.40 u	ıg/L	1.0	0.40	1		04/18/14 14:54	71-43-2	
Ethylbenzene	<0.39 u	ıg/L	1.0	0.39	1		04/18/14 14:54	100-41-4	
Methyl-tert-butyl ether	<0.48 u		1.0	0.48	1		04/18/14 14:54	1634-04-4	
Naphthalene	<0.42 u	ıg/L	1.0	0.42	1		04/18/14 14:54	91-20-3	
Toluene	<0.39 u	ıg/L	1.0	0.39	1		04/18/14 14:54	108-88-3	
1,2,4-Trimethylbenzene	<0.42 u	ıg/L	1.0	0.42	1		04/18/14 14:54	95-63-6	
1,3,5-Trimethylbenzene	<0.42 u		1.0	0.42	1		04/18/14 14:54	108-67-8	
(ylene (Total)	<1.2 u	_	3.0	1.2	1		04/18/14 14:54	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	101 %	6	80-120		1		04/18/14 14:54	98-08-8	
Sample: COM CTR	Lab ID:	4094908012	Collected	: 04/15/14	00:00	Received: 04	/17/14 07:30 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
raianleters	— ———	Offits			<u></u> .	1 repared	- Thayeou		
VIGRO GCV	Analytical	Method: WI MO	D GRO						
Benzene	<0.40 u	g/L	1.0	0.40	1		04/18/14 15:23		
thylbenzene	<0.39 u	g/L	1.0	0.39	1		04/18/14 15:23		
Nethyl-tert-butyl ether	<0.48 u	g/L	1.0	0.48	1		04/18/14 15:23		
laphthalene	<0.42 u		1.0	0.42	1		04/18/14 15:23		
oluene	<0.39 u	g/L	1.0	0.39	1		04/18/14 15:23		
,2,4-Trimethylbenzene	<0,42 u	g/L	1.0	0.42	1		04/18/14 15:23		
,3,5-Trimethylbenzene	<0.42 ug	g/L	1.0	0.42	1		04/18/14 15:23		
ylene (Total) turrogates	<1.2 u	g/L	3.0	1.2	1		04/18/14 15:23	1330-20-7	
,a,a-Trifluorotoluene (S)	101 %)	80-120		1		04/18/14 15:23	98-08-8	



Project:

JUMP RIVER

Pace Project No.: 4094908

Date: 04/21/2014 02:59 PM

Sample: 14767	Lab ID:	4094908013	Collected	04/15/1	4 00:00	Received: 0	4/17/14 07:30 M	latrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
WIGRO GCV	Analytical I	Method: WI M	OD GRO						
Benzene	<0.40 ug	ı/L	1.0	0.40	1		04/18/14 15:51	71-43-2	
Ethylbenzene	<0.39 ug	1/L	1.0	0.39	1		04/18/14 15:51	100-41-4	
Methyl-tert-butyl ether	<0.48 ug/L		1.0	0.48	1		04/18/14 15:51	1634-04-4	
Naphthalene	•	<0.42 ug/L		0.42	1		04/18/14 15:51		
Toluene	<0.39 ug/L		1.0 1.0	0.39	1		04/18/14 15:51	108-88-3	
1,2,4-Trimethylbenzene	<0.42 ug/L		1.0	0.42	1		04/18/14 15:51	95-63-6	
1,3,5-Trimethylbenzene	<0.42 ug/L		1.0	0.42	1		04/18/14 15:51		
Xylene (Total)	<1.2 ug		3.0	1.2	1		04/18/14 15:51		
Surrogates	-1.2 ug	, <u> </u>	0.0	1.2			04/10/14 10:01	1000 20 7	
a,a,a-Trifluorotoluene (S)	101 %	80-120		1		04/18/14 15:51	98-08-8		
Sample: 14778	Lab ID:	4094908014	Collected:	04/15/1	4 00:00	Received: 0-	4/17/14 07:30 M	latrix: Water	
Parameters	Dogulto	limita	1.00	1.00	DE	Drawarad	Analyzad	CAS No.	Qua
raiameters	Results	Units -	LOQ _	LOD	DF	Prepared	Analyzed	CAS NO.	
WIGRO GCV	Analytical N	Method: WI MC	DD GRO						
Benzene	<0.40 ug	/L	1.0	0.40	1		04/19/14 00:27	71-43-2	
Ethylbenzene	<0.39 ug	/L	1.0	0.39	1		04/19/14 00:27	100-41-4	
Methyl-tert-butyl ether	<0.48 ug	/L	1.0	0.48	1		04/19/14 00:27	1634-04-4	
Naphthalene	<0.42 ug		1.0	0.42	1		04/19/14 00:27	91-20-3	
Toluene	<0.39 ug	/L	1.0	0.39	1		04/19/14 00:27	108-88-3	
1,2,4-Trimethylbenzene	<0.42 ug		1.0	0.42	1		04/19/14 00:27	95-63-6	
1,3,5-Trimethylbenzene	<0.42 ug		1.0	0.42	1		04/19/14 00:27	108-67-8	
Xylene (Total)	<1.2 ug		3.0	1.2	1		04/19/14 00:27	1330-20-7	
Surrogates									
a,a,a-Trifluorotoluene (S)	101 %		80-120		1		04/19/14 00:27	98-08-8	
Sample: 14789	Lab ID:	1094908015	Collected:	04/45/4	1.00-00	Received: 04	1/17/14 07:20 - 14	atrix: Water	
. 1470 5	Lab ID.	1034300013	Collected.	04/13/1-	00.00	Neceived. O	#/ 1// 14 07.30 M	atiix. VVatei	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
VIGRO GCV	Analytical N	/lethod: WI MC	DD GRO						
Benzene	<0.40 ug/		1.0	0.40	i		04/18/14 16:20		
Ethylbenzene	<0.39 ug/		1.0	0.39	1		04/18/14 16:20		
Methyl-tert-butyl ether	0.99J ug/		1.0	0.48	1		04/18/14 16:20		
Naphthalene	<0.42 ug/	′L	1.0	0.42	1		04/18/14 16:20	91-20-3	
oluene	<0.39 ug/	'L	1.0	0.39	1		04/18/14 16:20	108-88-3	
,2,4-Trimethylbenzene	<0.42 ug/		1.0	0.42	11		04/18/14 16:20	95-63-6	
,3,5-Trimethylbenzene	<0.42 ug/	L ·	1.0	0.42	1	, and proceedings and the second	04/18/14 16:20	108-67-8	
(ylene (Total)	<1.2 ug/	Ľ	3.0	1.2	1		04/18/14 16:20	1330-20-7	
Surrogates a.a.a-Trifluorotoluene (S) 101 %		80-120		1		04/18/14 16:20	98-08-8		



Project:

JUMP RIVER

Pace Project No.: 4

4094908

Sample: 8887	Lab ID:	4094908016	Collecte	ed: 04/15/1	4 00:00	Received: 04/17/14 07:30 Matrix: Water						
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual			
WIGRO GCV	Analytica	l Method: WI M	OD GRO		-							
Benzene	<0.40	ug/L	1.0	0.40	1		04/18/14 16:49	71-43-2				
Ethylbenzene	<0.39 t	ug/L	1.0	0.39	1		04/18/14 16:49	100-41-4				
Methyl-tert-butyl ether	0.55J t	ug/L	1.0	0.48	1		04/18/14 16:49	1634-04-4				
Naphthalene	<0.42	ug/L	1.0	0.42	1		04/18/14 16:49	91-20-3				
Toluene	<0.39	ug/L	1.0	0.39	1		04/18/14 16:49	108-88-3				
1,2,4-Trimethylbenzene	<0.42	ug/L	1.0	0.42	1		04/18/14 16:49	95-63-6				
1,3,5-Trimethylbenzene	<0.42 (ug/L	1.0	0.42	1		04/18/14 16:49	108-67-8				
Xylene (Total) <i>Surrogates</i>	<1.2 (<1.2 ug/L		1.2	1	٠.	04/18/14 16:49	1330-20-7				
a,a,a-Trifluorotoluene (S)	101 9	%	80-120		1		04/18/14 16:49	98-08-8				
Sample: 8890	Lab ID:	Lab ID: 4094908017			4 00:00	Received: 04						
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual			
WIGRO GCV	Analytical Method: WI MC							-				
Benzene	0.55J u	ıg/L	1.0	0.40	1		04/18/14 23:30	71-43-2				
Ethylbenzene	<0.39	-	1.0	0.39	1		04/18/14 23:30	100-41-4				
Methyl-tert-butyl ether	1.0J u	ig/L	1.0	0.48	1		04/18/14 23:30	1634-04-4				
Naphthalene	<0.42 u	ıa/L	1.0	0.42	1		04/18/14 23:30	91-20-3				
Toluene	<0.39 u	ıa/L	1.0	0.39	1		04/18/14 23:30	108-88-3				
1,2,4-Trimethylbenzene	<0.42 u	ıg/L	1.0	0.42	1		04/18/14 23:30					
1,3,5-Trimethylbenzene	<0.42 u	ıq/L	1.0	0.42	1		04/18/14 23:30	108-67-8				
Xylene (Total) Surrogates	<1.2 u	g/L	3.0	1.2	1		04/18/14 23:30	1330-20-7				
a,a,a-Trifluorotoluene (S)	101 %	6	80-120		1		04/18/14 23:30	98-08-8				
Sample: 8891	Lab ID:	4094908018	Collected	d: 04/15/14	1 00:00	Received: 04	/17/14 07:30 Ma	atrix: Water				
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual			
VIGRO GCV	Analytical	Method: WI MO	OD GRO									
Benzene	<0.40 u	g/L	1.0	0.40	1		04/18/14 23:58	71-43-2				
Ethylbenzene	<0.39 u		1.0	0.39	1		04/18/14 23:58					
Methyl-tert-butyl ether	1.6 u		1.0	0.48	1		04/18/14 23:58					
Vaphthalene	<0.42 u		1.0	0.42	1		04/18/14 23:58					
Toluene	<0.39 u		1.0	0.39	1		04/18/14 23:58					
2.4-Trimethylbenzene	<0.42 u		1.0	0.42	1		04/18/14 23:58					
,3,5-Trimethylbenzene	<0.42 u	-	1.0	0.42	1		04/18/14 23:58		Committee of the second second second second			
(ylene (Total)	<1.2 u	-	3.0	1.2	1		04/18/14 23:58					
Surrogates	0,				•							

REPORT OF LABORATORY ANALYSIS

80-120

102 %

04/18/14 23:58 98-08-8

a,a,a-Trifluorotoluene (S)



Project:

JUMP RIVER

Pace Project No.:

4094908

Sample: 8910	Lab ID:	4094908019	Collecte	d: 04/15/1	4 00:00	Received: 04	4/17/14 07:30 M	Received: 04/17/14 07:30 Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual				
WIGRO GCV	Analytical	Method: WI Me	DD GRO										
Benzene	<0.40 u	ıg/L	1.0	0.40	1		71-43-2						
Ethylbenzene	<0.39 u	ıg/L	1.0	0.39	1		04/19/14 00:56	100-41-4					
Methyl-tert-butyl ether	<0.48 u	ıg/L	1.0	0.48	1		04/19/14 00:56	1634-04-4					
Naphthalene [*]	<0.42 u	ıg/L	1.0	0.42	1		04/19/14 00:56	91-20-3					
Toluene	<0.39 u	ıg/L	1.0	0.39	1		04/19/14 00:56	108-88-3					
1,2,4-Trimethylbenzene	<0.42 u	<0.42 ug/L			1		04/19/14 00:56	95-63-6					
1,3,5-Trimethylbenzene	<0.42 u	1.0	0.42	1		04/19/14 00:56	108-67-8						
Xylene (Total)	<1.2 u	3.0	1.2	1		04/19/14 00:56	1330-20-7						
Surrogates	, , , , , , , , , , , , , , , , , , ,												
a a a Triflyanatalyana (C)	404.0	101 %			1		04/19/14 00:56	8-80-80					
a,a,a-Trifluorotoluene (S)	101 9	o .	80-120		'		04/19/14 00:00	30-00-0					
Sample: TRIP BLANK		4094908020		d: 04/15/14		Received: 04		atrix: Water					
				d: 04/15/14 LOD		Received: 04			Qual				
Sample: TRIP BLANK	Lab ID:	4094908020	Collected		1 00:00		1/17/14 07:30 Ma	atrix: Water	Qual				
Sample: TRIP BLANK Parameters	Lab ID:	4094908020 Units Method: WI MC	Collected		1 00:00		1/17/14 07:30 Ma	atrix: Water CAS No.	Qual				
Sample: TRIP BLANK Parameters WIGRO GCV Benzene	Lab ID: Results Analytical	4094908020 Units Method: WI MC	Collected LOQ DD GRO	LOD	DF		1/17/14 07:30 Ma	CAS No.	Qual				
Sample: TRIP BLANK Parameters WIGRO GCV Benzene Ethylbenzene	Lab ID: Results Analytical <0.40 u	4094908020 Units Method: WI MC	Collected LOQ DD GRO 1.0	LOD 0.40	DF		1/17/14 07:30 Ma Analyzed 04/18/14 17:17	CAS No. 71-43-2 100-41-4	Qual				
Sample: TRIP BLANK Parameters WIGRO GCV Benzene Ethylbenzene Wethyl-tert-butyl ether	Lab ID: Results Analytical <0.40 u <0.39 u	4094908020 Units Method: WI MC	Collected LOQ DD GRO 1.0 1.0	0.40 0.39	DF 1 1		A/17/14 07:30 Ma Analyzed 04/18/14 17:17 04/18/14 17:17	CAS No. 71-43-2 100-41-4 1634-04-4	Qual				
Sample: TRIP BLANK Parameters WIGRO GCV Benzene Ethylbenzene Wethyl-tert-butyl ether Naphthalene	Lab ID: Results Analytical <0.40 u <0.39 u <0.48 u	Units Method: WI MC g/L g/L g/L g/L	Collected LOQ DD GRO 1.0 1.0 1.0	0.40 0.39 0.48	DF 1 1 1 1		A/17/14 07:30 Ma Analyzed 04/18/14 17:17 04/18/14 17:17 04/18/14 17:17	CAS No. 71-43-2 100-41-4 1634-04-4 91-20-3	Qual				
Sample: TRIP BLANK Parameters WIGRO GCV Benzene Ethylbenzene Wethyl-tert-butyl ether Naphthalene Toluene	Lab ID: Results Analytical <0.40 u <0.39 u <0.48 u <0.42 u	Units Method: WI MC g/L g/L g/L g/L g/L	Collected LOQ DD GRO 1.0 1.0 1.0 1.0	0.40 0.39 0.48 0.42	DF 1 1 1 1 1		A/17/14 07:30 Ma Analyzed 04/18/14 17:17 04/18/14 17:17 04/18/14 17:17 04/18/14 17:17	CAS No. 71-43-2 100-41-4 1634-04-4 91-20-3 108-88-3	Qual				
Parameters WIGRO GCV Benzene Ethylbenzene Wethyl-tert-butyl ether Naphthalene Toluene 1,2,4-Trimethylbenzene	Analytical <0.40 u <0.39 u <0.48 u <0.42 u <0.39 u <0.48 u	Units Method: WI MC g/L g/L g/L g/L g/L g/L g/L	Collected LOQ DD GRO 1.0 1.0 1.0 1.0 1.0	0.40 0.39 0.48 0.42 0.39	DF 1 1 1 1 1 1 1 1		Analyzed O4/18/14 17:17 O4/18/14 17:17 O4/18/14 17:17 O4/18/14 17:17 O4/18/14 17:17	CAS No. 71-43-2 100-41-4 1634-04-4 91-20-3 108-88-3 95-63-6	Qual				
Sample: TRIP BLANK Parameters WIGRO GCV	Color Colo	Units Method: WI MC g/L g/L g/L g/L g/L g/L g/L g/L	Collected LOQ DD GRO 1.0 1.0 1.0 1.0 1.0 1.0 1.0	0.40 0.39 0.48 0.42 0.39 0.42	DF 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		04/18/14 17:17 04/18/14 17:17 04/18/14 17:17 04/18/14 17:17 04/18/14 17:17 04/18/14 17:17 04/18/14 17:17	CAS No. 71-43-2 100-41-4 1634-04-4 91-20-3 108-88-3 95-63-6 108-67-8	Qual				



QUALITY CONTROL DATA

Project:

JUMP RIVER

Pace Project No.:

4094908

QC Batch:

GCV/12215

Analysis Method:

WI MOD GRO

QC Batch Method:

WI MOD GRO

Analysis Description:

WIGRO GCV Water

Associated Lab Samples:

4094908001, 4094908002, 4094908003, 4094908004, 4094908005, 4094908006, 4094908007, 4094908008,

4094908009, 4094908010, 4094908011, 4094908012, 4094908013, 4094908014, 4094908015, 4094908016,

4094908017, 4094908018, 4094908019, 4094908020

METHOD BLANK: 957521

Matrix: Water

Associated Lab Samples:

4094908001, 4094908002, 4094908003, 4094908004, 4094908005, 4094908006, 4094908007, 4094908008, 409490808, 409490808, 409490808, 409490808, 409490808, 409490808, 409490808, 409490808, 409490808, 409490808, 409490808, 409490808, 409490808, 4094908, 4094908, 4094908, 4094908, 4094908, 4094908, 4094908, 4094908, 4094908, 4094908, 4094908, 4094908, 4094908, 40949

4094908009, 4094908010, 4094908011, 4094908012, 4094908013, 4094908014, 4094908015, 4094908016,

4094908017, 4094908018, 4094908019, 4094908020

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.42	1.0	04/18/14 11:05	
1,3,5-Trimethylbenzene	ug/L	< 0.42	1.0	04/18/14 11:05	
Benzene	ug/L	< 0.40	1.0	04/18/14 11:05	
Ethylbenzene	ug/L	< 0.39	1.0	04/18/14 11:05	
Methyl-tert-butyl ether	ug/L	<0.48	1.0	04/18/14 11:05	
Naphthalene	ug/L	< 0.42	1.0	04/18/14 11:05	
Toluene	ug/L	< 0.39	1.0	04/18/14 11:05	
Xylene (Total)	ug/L	<1.2	3.0	04/18/14 11:05	
a,a,a-Trifluorotoluene (S)	%	102	80-120	04/18/14 11:05	

LABORATORY CONTROL SAM	IPLE & LCSD: 957522		95	57523						
		Spike	LCS	LCSD	LCS	LCSD	% Rec		Max	
Parameter	Units	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	21.5	21.3	107	107	80-120	1	20	
1,3,5-Trimethylbenzene	ug/L	20	21.0	20.8	105	104	80-120	1	20	
Benzene	ug/L	20	20.9	20.5	105	103	80-120	2	20	
Ethylbenzene	ug/L	20	21.3	20.8	106	104	80-120	2	20	
Methyl-tert-butyl ether	ug/L	20	20.8	20.3	104	102	80-120	2	20	
Naphthalene	ug/L	20	20.2	20.6	101	103	80-120	2	20	
Toluene	ug/L	20	21.2	20.8	106	104	80-120	2	20	
Xylene (Total)	ug/L	60	63.0	61.8	105	103	80-120	2	20	
a,a,a-Trifluorotoluene (S)	%				101	101	80-120			

MATRIX SPIKE & MATRIX SI	PIKE DUPLICAT	E: 95752	4		957525							
Parameter Ui		094908005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/L	1080	400	400	1560	1620	122	135	26-200	3	20	
1,3,5-Trimethylbenzene	ug/L	336	400	400	805	832	117	124	70-160	3	20	
Benzene	ug/L	20.4	400	400	450	451	107	108	49-165	0	20	
Ethylbenzene	ug/L	343	400	400	794	803	113	115	59-156	1	20	
Methyl-tert-butyl ether	ug/L	<9.7	400	400	_ 412	417	103	104	80-127	1	20	
Naphthalene	ug/L	103	400	400	503	530	100	107	71-130	5	20	
Toluene	ug/L	430	400	400	874	877	111	112	80-135	0	20	
Xylene (Total)	ug/L	1280	1200	1200	2610	2660	111	115	48-165	2	20	
a,a,a-Trifluorotoluene (S)	%						100	100	80-120			





QUALIFIERS

Project:

JUMP RIVER

Pace Project No.:

4094908

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

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

Date: 04/21/2014 02:59 PM

Pace Analytical Services - Green Bay



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:

JUMP RIVER

Pace Project No.:

4094908

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4094908001	MW-1	WI MOD GRO	GCV/12215		
4094908002	MW-2	WI MOD GRO	GCV/12215		
4094908003	MW-3	WI MOD GRO	GCV/12215		
4094908004	MW-5	WI MOD GRO	GCV/12215		
4094908005	MW-6	WI MOD GRO	GCV/12215		
4094908006	MW-7	WI MOD GRO	GCV/12215		
4094908007	MW-8A	WI MOD GRO	GCV/12215		
4094908008	MW-8B	WI MOD GRO	GCV/12215		
4094908009	MW-9A	WI MOD GRO	GCV/12215		
4094908010	MW-9B	WI MOD GRO	GCV/12215		
4094908011	BAR	WI MOD GRO	GCV/12215		
1094908012	COM CTR	WI MOD GRO	GCV/12215		
4094908013	14767	WI MOD GRO	GCV/12215		
4094908014	14778	WI MOD GRO	GCV/12215		
4094908015	14789	WI MOD GRO	GCV/12215		
4094908016	8887	WI MOD GRO	GCV/12215		
4094908017	8890	WI MOD GRO	GCV/12215		
4094908018	8891	WI MOD GRO	GCV/12215		
4094908019	8910	WI MOD GRO	GCV/12215		
4094908020	TRIP BLANK	WI MOD GRO	GCV/12215		

(Please Print Clearly)												!	JPPER	MIDWES	TREG	MOL	4		Page 1	of <
Company Nan	ne: M	eridian Env.	Cs 1/2,	16)		A	مناسط	_10			MN : 61	2-607-170	00 W	1: 920-469-2436 \ (n)				of 18
Branch/Locat	I		0			1	ace A		I YUC icelabs.c						10000				4094	4908 9
Project Conta	ct: K	en Shimk 15-579-0	\sim				•	р.								Quote #:				
Phone:	7	15-579-0	723		•	C	:HA	IN	OF	CL	<u>JS7</u>	O	YC			Mail To Contact:	Ken Shimko			
Project Numb	er:				A=No:	ne B≕⊦	ICL C=H2	SO4		tion Codes E=DI W		Methano	l G=Na	он		Mail To Company:	Meridian Envilles			U-C) (tg.
Project Name	: 3	Tump River			H≈So	dium Bisul	fate Solution		=Sodium	Thiosulfat	te J≕(Other				Mail To Address:	2711 NU- EI CORP 1			
Project State:		Jump River			FILTER (YES/		Y/N										Fall Creek, WI			
Sampled By (Print):	1				PRESERVATION Pick In (CODE)* Lette:						Invoice To Contact:	Mer: dran Env-Olty. 2711 N- Elco RP Frell Creek, WI 54742							
Sampled By (,											Invoice To Company:				
PO #:			Regulat Progra					~								Invoice To Address:	(6			
Data Packa		s MS/MSD		Matr	ix Codes			ap.	}		.]									
(billa	able) A Level III	On your sample (billable)	A = Air B = Biota C = Charco		W = Water DW = Drinkir GW = Groun		Analyses Requested	+ Maph							-	Invoice To Phone:				
☐ EPA	A Level IV	NOT needed on	O = Oil S = Soil		SW = Surfac WW = Waste	e Water	alys	ナリ							-		1.4	P.CC	NARAENITO	Profile #
PACE LAB#	CL	your sample IENT FIELD ID		COLLE		MATRIX	&	PUBL								CLIENT COMMENTS	LAB COMMENTS Profi		Prome #	
100		w-1		S/14	TIME	610	ST OF CASE	×	 								1	10ml		
1	100	-2	- 17	1		1		<u> </u>	 	-						Contract Con		<u>IUM</u>		
002		-3		+-				\dashv		 		···								
<u>CO3</u>		<u> </u>		+		 		+								The state of the s		\vdash		
002 004		<u> </u>		1					+									1		
02/0		-7					727	\dashv	 							***************************************		-		*
000		-8A				 		-	 			··········						 	······	
008		-88				H		+	<u> </u>	1								-		
009		-9A	-					+										+		
010		-9B		,				\dashv	ļ								 	 		
011	ß)ar				\vdash		+	-			**************************************								
012		u Ctr	$\dashv \downarrow$	$\overline{}$		1	No Great Co.	\forall	+											
UZ	<u> </u>		\dashv			<u> </u>	100		-								-			
Rush Tu	irnaround T	Time Requested - Prel	lims	Relin	quished By:			***************************************	Da	ate/Time:			Received	By:		Date/Time:			PACE Pro	oject No.
9	TAT subjec	ct to approval/surcharg		<u></u>					A -			anniti .							Lings	4918
Transmit Pre	Date Ne	eded: sults by (complete what you	want);	Relin	quished By:	X	A			ate/Time:		654	ived	i By:		Date/Time:			[0]	1700
Email #1:				Relin	quished By:	V	-		Di	ate/	,		CHINGS.			Date/Time:			Receipt Temp = \	
Email #2: Telephone:				Relin	quished By:		J		Di	ate/Time:		•	. Ceceive	Ned By: Date/Time:			Sample R OK / Ac			
Fax:				_							Cooler Custody Seal									
Samples on HOLD are subject to special pricing and release of liability				Relin	quished By: JN NA	in			4/17	ate/Time:	073	S	Received	I By: UMM	APO	NUOB 41714	07	30		ot Present
				-		M. Paris MACCO Contract			Market Brown					()	YY-	and the second of the second o		-	Version 6.0 06/14/06	

	(Please Print Clearly)]	-							UPPER					Page 🗻	of <
Company Name:	Meridian Fer	-GH]	95		l	L _L!_	-18			MN: 61	2-607-	1700	WI: 920-469-2436		,	of 18
Branch/Location	ı: [*]] /		Pace P		I YTIC T celabs.c									409	14908 E
Project Contact:	Kenshink	7	1 + 1		W	ww.p.c	CCN01/3.C	Oin.						Quote #:			ade
Phone:	Ken Shimka 715.579.0	723]	(CHA	N	OF	Cl	JS7	ΓΟΙ	DY			Mail To Contact:	Kei	Shim	Ko
Project Number:			A=No		=HCL C=H2		D=HNO3	tion Code E=DI W	Vater F=	Methano	ol G=Na	юн		Mail To Company:	Mer	ichian i	E-C-
Project Name:	Jump Pir.	er	H=Sc	odium Bis	ulfate Solution		I=Sodium	n Thiosuifa	ite J=	Other]		Mail To Address:			
Project State:	WI		FILTE (YES		Y/N												
Sampled By (Pri	Jump Pris- WIT (nt): Ken Shimte		PRESER (CO		Pick Letter									Invoice To Contact:			
Sampled By (Sig	1 1 1 1				_	کـ								Invoice To Company:			
PO #:	7	Regulatory Program:			lested	4								Invoice To Address:			
Data Package			trix Codes	5	Red	-thagh											
(billable	evel III	A = Air B = Biota C = Charcoal	W = Water DW = Drinki GW ≈ Grour	nd Water	Ses R	Lt								Invoice To Phone:			
☐ EPA L	ever iv	O ≃ Oil S ≃ Soil SI ≃ Sludge	SW = Surfac WW = Wast WP = Wipe		Analyses	100								CLIENT	LABO	COMMENTS	Profile #
PACE LAB#	CLIENT FIELD ID		LECTION	MATRI		9								COMMENTS		Use Only)	
0/3	14767	4(15)		6 W		×									3-40	W/B	
014	14778	1	1	1		1 :	:	, A.J.			-					<u> </u>	
UIS	14789					1:		4.3.1			-			**			
010	8887		;		146 300/30								14				
UIT	8890															, , , , , , , , , , , , , , , , , , ,	
610	8891									~~~~			,	,			
019	8910			1		\bigvee								2-	1		
070 }	r trip blank									***************************************					2-400	11 B	
																	
¥	the blank added	the co	chill	him	Janak	Ĺ		 									
Λ.	THE DUTTE COUNTY	10 00				·		1	, .		 						
	around Time Requested - Preli		inquished By:		-		9	ate/Time:	Δ		Receive	By:		Date/Time:	^ -		Project No.
	T subject to approval/surcharg Date Needed:		inquished By:	1_				b/14 ate/Time:	7		Receive		an	4/16/14 Date/Time:	9 9 n	7	
	Rush Results by (complete what you		sunka		······································	4	17/1	1 0	730		M	MAN	Afra	WEB 4/17/14 0-	130	Receipt Temp =	RO1 °C
Email #1: Email #2:		Re	linquished By:				De	ate/Time:			Receive	д Ву:		Date/Time:			Receipt pH
Telephone:		Rel	linquished By:				Da	ate/Time:		******	Receive	d By:	····	Date/Time:		OK / /	Adjusted
Fax: Sam	ples on HOLD are subject to	Rel	linquished By:				Da	ate/Time:			Receive	d Bv:		Date/Time:			Not Present
ĺ	i pricing and release of liability					**********				-					SACCEMENT OF THE PROPERTY OF	Intact /	Not Intact
																Varsion 6.0 06/14/06	

Sample Condition Upon Receipt

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

Pace Analytical"

		Project#: INO# 2	1094908
Client Name: Meridian Env.		WOTT	TV343V0
Courier: Fed Ex TUPS Client Pa	ace Other: Nun Vi	ım III III	
Tracking #: 136266		4094908	
Custody Seal on Cooler/Box Present: Tyes	no Seals inta	ct: Tyesno	
Custody Seal on Samples Present: yes [ct: yes _no	
Packing Material: Bubble Wrap: Bu	bble Bags No	one Cother	
Thermometer Used NIA			n ice, cooling process has begun
Cooler Temperature Uncorr: RO / ICorr:	Bio	logical Tissue is Frozen: 🗔 yes	
Temp Blank Present: yes Fino		no .	Person examining contents:
Temp should be above freezing to 6°C for all sample ex Frozen Biota Samples should be received ≤ 0°C.	xcept Bìota.	Comments:	Date: 4 17 14 Initials: 6 +
Chain of Custody Present:	PYes ONO ON	A 1.	
Chain of Custody Filled Out:	Yes No N	A 2.	
Chain of Custody Relinquished:	ØYes □No □N/	A 3. Only record page mil	4/17/14
Sampler Name & Signature on COC:		A 4.	
Samples Arrived within Hold Time:	DYes □No □NA	A 5.	
- VOA Samples frozen upon receipt	□Yes □No	Date/Time:	
Short Hold Time Analysis (<72hr):	□Yes .☑¶o □N//	6.	
Rush Turn Around Time Requested:	□Yes ☑No □N//	7.	
Sufficient Volume:	. EYes □No □N//	8.	
Correct Containers Used:	.ÆYes □No □N/	9.	
-Pace Containers Used:	.☐Yes □No □N/A	\	
-Pace IR Containers Used:	□Yes □NO □N/A		
Containers Intact:	ØŶes □No □N/A	10.	
Filtered volume received for Dissolved tests	□Yes ZNO □N/A		
Sample Labels match COC:	.□Yes, No □N/A	12.001 -010 doesn't have	"mw" in front of
-Includes date/time/ID/Analysis Matrix:	W	number and no time dat	e on samples att allite
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	□Yes □No ☑M/A	FUNO2 FURCOA F	NaOH NaOH +ZnAct
All containers needing preservation are found to be in		113.	
compliance with EPA recommendation.	□Yes □NO ØNIA	and the second s	
(HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12) exceptions (VOA,)coliform, TOC, TOX, TOH,		Initial when Lab Std #ID of	Date/
D&G, WIDROW, Phendics, OTHER:	ØYes □No	completed preservative	Time:
Headspace in VOA Vials (>6mm):	OYes DNO ON/A	14.	
Гrip Blank Present:	-BYES DNO DN/A	I a liked los core los likes	الباداله
Гrip Blank Custody Seals Present	Pres DNO DNA	MARIEN TO COL MY WOOD	MU 211114
Pace Trip Blank Lot # (if purchased): 317		<u></u>	, এন
Client Notification/ Resolution:			d form for additional comments
Person Contacted:	Date/	Time:	•
Comments/ Resolution:			
Project Manager Review:	FK.	Date:	4-18-14
	///		

APPENDIX B

SOIL BORING LOGS AND MONITORING WELL FORMS

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

Well / Drillhole / Borehole Filling & Sealing Form 3300-005 (R 4/08) Page 1 or

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

form to the appropriate DNN blince and bute	· · · · · · · · · · · · · · · · · · ·	reverse for	more mor	mation.				
Verification Only of Fill and Se	1	g Water Manageme	nt [Watershed	i/Wastewater	Rem	ediation/Rede	velopmen
1. Well-Location information		1991 (E) 1991	b tan		Information	lega de terbo		STREET STREET
County WI Unique Well	# of Hicap #		Facility Na	The state of the s	плоянация		- PS - SE & T	70.00
Tayler Removed Well	— — noap ;;				nis_	Bar		· · · · · · · · · · · · · · · · · · ·
Lattitude / Longitude (Degrees and Minutes) Method Code (see in	structions)	Pacinty ID	(FID OI PVVS)			
° 'N			License/P	ermit/Monitori	ng #			···
7/4 1/4 Section	Township Range		Original W	lell Owner				
or Gov't Lot #		₽-	_					
Well Street Address	N N	W	Present W	ell Owner				
W14764 Ww	4.73							
Well City, Village or Town	Well ZIP Co	de	_	dress of Pres	ent Owner			
Jumo Kiver	_			sent Owner		State	ZIP Code	
Subdivision Name	Lot #			ino (River	w _I		
					en, Casing & S			
.	ue Well # of Replaceme	ent Well			***************************************		7 🗇	[4]
excauation			•	nd piping rem	oved?		JYes ∐No	, -,, ,
3. Well/Drillhole / Borehole Information		4-2-2-2-2-2-15-8-1-2-1-2-12-2-2-2-2-2-2-2-2-2-2-2-2-2-	, ,	removed?			Yes No	
Monitoring Well	nstruction Date (mm/dd	ן (צעצעיי		removed?		3		
Water Well		31-1-1-		eft in place?				
Borehole / Drillhole please attac	onstruction Report is ava ch.	mable,		ing cut off bel			Yes No	HNA
Construction Type:				•	se to surface?	<u> </u>	Yes No	∐N/A
Drilled Driven (Sandpoint)	· Dug			rial settle afte s, was hole re			1 🗂	∐N/A
Other (specify):			If bentonit	te chips were	used, were they i	wdrated) [□ N/A
Formation Type:		R			n safe source?		Yes ∐No	<u> </u>
Unconsolidated Formation	Bedrock			ctor Pipe-Grav		 tor Pipe-Pum	ped	
Total Well Depth From Ground Surface (ft.) Ca	· ,		Screen	ned & Poured nite Chips)	Other (E			
25 26	<u>Z</u>	s	ealing Mate	erials				
. , ,	asing Depth (ft.)		=	ement Grout			d Slurry (11 lb.	.,
8		إ		Cement (Conc			-Sand Slurry "	*
Was well annular space grouted?	es No Un	known L	Concre		ا Ionitoring Well Bo	Bentonite		
If yes, to what depth (feet)? Depth to	Water (feet)		Bentoni	-	·	ntonite - Ceme		
12	17-81		_	ar Bentonite		itonite - Sand		
5 Material Used To Fill Well/Drillhole		F	rom (fL)	To (ft.)=	No. Yards, Sac	ks Sealant	Mix Ratio	
	- 1 300	40 10 10 10 10 10 10 10 10 10 10 10 10 10	Surface	26	4 1 1	iccie one) === ===	Mud Wei	ght
bentonite	chips		Surface	40	7 1 20	3-		
6. Comments		1	1	<u>_</u>				-404°C
The state of the s		A CONTRACTOR						201200130
7. Supervision of Work		-u,≥ et il il Liste				DNR Use	Only .	
Name of Person or Firm Doing Filling & Sealing	1 . 1			(mm/dd/yyyy,	Date Received	Note:	ed By	
Meridian Env-Cs H, cc	1061	10/22			Comments			
Street or Route 2711 W. Elis Rd		71.S	one Numb	-6608	COMMENTO			
City	ate ZIP Code			erson Doing	Vork	Date	Signed	が記述
	ne cran.	_	1		<u> </u>		1-8-1	7

	lid Waste Haz. Waste		MONITORING WELL CONSTRUCT	
Department of Natural Resources Env. Response & Facility/Project Name	Repair Underground T Local Grid Location of Well	anks Other	Form 4400-113A Re Well Name	v. 4-90
Pacificy/1 Toject Name	Docar Grid Location of Well	□ E.	A CII IANIIC	
Jim & Cindy's Bar - Jump River, WI	ft. ☐ S.	n. 🗆 w.	MW-8A	
Facility License, Permit or Monitoring Number	Grid Origin Location		Wis: Unique Well Number DNR Well Num	ber
	Lat. Long	or		
Type of Well Water Table Observation Well 211	St. Plane ft. N.	ft. E.	Date Well Installed	
Piezometer	Section Location of Waste/Se		10-28-13	
		□ E.	Well Installed By: (Person's Name and Firm	1)
	NW 1/4 of SW of Sec. 7			
Is Well A Point of Enforcement Std. Applic. ?	Location of Well Relative to u Upgradient s U	Sidegradient	Joe Black	
	d Downgradient n		Midwest Engineering Services, Inc.	
	d C Downgradiont it C	TOT KHOWI	Mild work Displaceding Del victor, 1207	
A. Protective pipe, top elevation ft	MSL —	1. Cap and	i lock? Yes	☐ No
A A * • Supplement state and supplement state and		2. Protecti	ve cover pipe:	
B. Well casing, top elevation ft	. MSL	11	e diameter:	8.0 in.
	\wedge	b. Leng		1.0 ft.
C. Land surface elevation	. MSL	c. Mate		
D. C			Other	
D. Surface seal, bottom ft. MSL	or <u>1.0</u> ft		· · · · · · · · · · · · · · · · · · ·	⊠ No
12. USCS classification of soil near screen:	— <u> </u>	3. Surface	s, describe: Bentonite	□ 30
GP GM GC GW SW S	'P []	3. Surface	Concrete	
SM SC ML MH CL C				
Bedrock [4. Materia	between well casing and protective pipe:	
13. Sieve analysis attached? Yes N	lo 💮		Bentonite	
14. Drilling method used: Rotary 5	0		Annular space seal	
Hollow Stem Auger 🛛 4		_	Other Other	
Other 🗌 :		5. Annular	r space seal: a. Granular Bentonite	
	01	b	Lbs/gal mud wt. Bentonite-sand slurry	
Drilling Mud 03 None	× 99	1000	Lbs/gal mud weight Bentonite slurry	
16. Drilling additives used? Yes	⊠ No	d.	% Bentonite Bentonite-cement grout Ft ³ volume added for any of the above	L 30
Describe			installed: Tremie	□ 0 1
17. Source of water (attach analysis):		9000	tie pumped 0 2	
The second of th			Gravity	
			te seal: a. Bentonite granules	
E. Benionite seal, top n. MSL	or 1.0 1.	b. □1/4	4 in. ☐ 1/2 in. ☒ 3/8 in. Bentonite pellets	
		c	Other	
F. Fine sand, top ft. MSL	or <u>11.0</u> ft.		nd material:	·.·.·
C Elitornada ton	12.0. A		ted Flint No. 45-55	
G. Filter pack, top ft. MSL	or 11.0 ft. or 13.0 ft.	8. Filter pa		
H. Screen joint, top ft. MSL	or <u>15.0</u> ft.	a. R	led Flint No. 40 RFWS - 34	
ii. soleonjom, top it. Mil	or <u>19.0</u>		me added 3.9 ft ³	بديب
1. Well bottom ft. MSL	or 25.0 ft.	9. Well car		⊠ 23
THE PART THE THE THE THE THE THE THE THE THE TH			Flush threaded PVC schedule 80	□ 24
J. Filter pack, bottom ft. MSL	or <u>25.0</u> ft.		Other	
	\ \VE	10. Screen r	material: Sch. 40 PVC	122
K. Borehole, bottom ft. MSL	or <u>25.0</u> ft.	a. Scree		\boxtimes 11
T D 11 11	\ \		Continuous slot	
L. Borehole, diameter 8.0 in.	\ 1		Oher	
M. O.D. well casing 2.48 in.	\	b. Manu c. Slot s	refacturer Diedrich Drill vize: 0.010	in.
M. O.D. well casing 2.48 in.			ed length: 10.0	ft.
N. I.D. well casing <u>2.07</u> in.			material (below filter pack): None	
		///	Other	
I hereby certify that the information on this form is tr	ue and correct to the best of h	iy knowledge.		
Signature	Firm MIDV	VEST ENGINEERING SEI	RVICES, INC.	

Please complete both-dides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION Form 4400-122 Rev. 7-98

Facility/Project Name 3: w Roring Drilled Rv: N	t Cindy's Tame of crew chief (first, la	Sa-C	License/			-		1	ig Nun		۶ ۸	
First Name: Joe Firm: M. S	Lagi Namo: Black	K	10 /2	4/ <u>y</u>	DI3	LO m m	/ <u>28</u>	/_ Z \$	-	ŀ	15.	A
WI Unique Well No.	DNR Well ID No. (estimated:) or Borin	Well Name	Final Stat	Fcct	MSL		cc Ele	_Feet	MSL	Boren		iameter inches
State Plane1/4 of1/4	N	N, R	Lat_ Long_		1 . n	LOCAL			I N		_ Fee	□ E t□ W
facility ID	County Tay	700 C	ounty Code	Civil	Town	City/o		~~		ر احد		
Length Att. & and Type Blow Counts Depth in Feet	Soil/Rock And Geolog: Each Mi	Description ic Origin For ajor Unit	USCS	Oraphic Log	Well Diagram	PID/FID	Compressive Strength	T	Liquid Limit	Plasticity Di Index	P 200	RQD/ Comments
30,	EOB =				(111111) - Z"PUK-							

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Firm

MONITORING WELL DEVELOPMENT Form 4400-113B Rev. 7-98

	· · · · · · · · · · · · · · · · · · ·
Remediation/Redevelopment	
Facility/Project Name County N	
	7.15
Facility License, Permit of Monitoring Number County Co	Wis. Unique Well Number DNR Well ID Number
1. Can this well be purged dry? Yes D No	
2. Well development method	11. Depth to Water (from top of a _ (6 55 ft. 24 _ ft.
surged with baller and bailed 21 4 1	well casing)
surged with bailer and pumped	
surged with block and bailed 4 2	Date $\frac{1}{m} \frac{1}{m} \frac{20}{d} \frac{13}{y} \frac{u}{y} \frac{20}{m} \frac{1}{m} \frac{20}{d} \frac{1}{y} \frac{1}{y}$
surged with block and pumped 🔲 62	mm ddyyyy mm ddyy
surged with block, bailed and pumped 70	□ a.m. □ a.m.
compressed air	☐ a.m. ☐ a.m. Time c: ☐ p.m: ☐ p.m.
bailed only	
pumped only	12. Sediment in well inches inches
pumped slowly	bottom
Other	13. Water clarity Clear 10 Clear 120 Turbid 15 Turbid 125
Time spent developing well ^30 min.	(Describe) (Describe)
Depth of well (from top of well casisng) _ 25 ft.	
Inside diameter of well in.	
Volume of water in filter pack and well	
casing Z gal.	
Volume of water removed from well	Fill in if drilling fluids were used and well is at solid waste facility:
	14. Total suspended mg/l mg/l
/olume of water added (if any) gal.	solids
ource of water added	15. COD mg/l
	16. Well developed by: Name (first, last) and Firm
Analysis performed on water added? Yes No	First Name: Ken Last Name: Shimles
If yes, attach results)	1
	Firm: Maridian Env. Colty, 210
Additional comments on development:	
	•

Name and Address of Facility Contact /Owner/Responsible Party First Name: Last Name: Shimto	I hereby certify that the above information is true and correct to the best of my knowledge.
Facility/Firm: Meridian Env. C3 tz. U. Street: Z711 N. E/c- ad	Signature: At Shimko
City/State/Zip: Fall Creek, W.F.	Firm: Meridien Erwich 14, UC

0

		az. Waste	Wastewater [MONITORING W		
Department of Natural Resources Env. Response & Facility/Project Name	Local Grid Location	erground Tanks	Other _	Form 4400-113A Well Name	· · · · · · · · · · · · · · · · · · ·	v. 4-90
, a co g - coo to t] N.	□ E.		Ŋ	
Jim & Cindy's Bar - Jump River, WI	ft.		□ W.	MW-8B		
Facility License, Permit or Monitoring Number	Grid Origin Locati Lat.		or	Wis: Unique Well Number		
Type of Well Water Table Observation Well 11		1. N.	fl. E.	Date Well Installed		
	Section Location o			10-28-13		
Diamental Market			□ E.	Well Installed By: (Person	's Name and Firm	.)
Distance Well Is From Waste/Source Boundary ft.	NW 1/4 of SW of Location of Well R			Joe Black		
Is Well A Point of Enforcement Std. Applic. ?	u Upgradient			JOE DIACK		
☐ Yes ☐ No	d Downgradie			Midwest Engineering Servi	ces, Inc.	
	1.484		1 0		K71 v/	
A. Protective pipe, top elevation	t. MSL		1. Cap and	d lock? ive cover pipe:		☐ No
B. Well casing, top elevation f				e diameter:		8.0 in.
	\wedge		b. Leng			1.0 ft.
C. Land surface elevation	t, MSL		c. Mate	erial:		⊠ 04
D. Surface seal, bottom ft. MSL	or 1.0 ft.			tional protection?	Other ☐ Yes	□ ∴ ⊠ No
D. Surface seaf, conton	01 _1,0 _11.			s, describe:		2.3 110
12. USCS classification of soil near screen:			3. Surface	seal:	Bentonite	
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐					Concrete	
SM SC ML MH CL Bedrock	CH L		4 Motorio	l between well casing and pro	Other	
13. Sieve analysis attached? Yes	No		4, Materia	ir octween wen casing and pro	Bentonite	⊠ 30
14. Drilling method used: Rotary	50			A	nnular space seal	
Hollow Stem Auger	11		<u> </u>		Cither	
Other : 15. Drilling fluid used: Water : 02 Air	01				ranular Bentonite tonite-sand slurry	
Drilling Mud 0 3 None			0	Lbs/gal mud wt. Ben Lbs/gal mud weight	Bentonite slurry	
			d.	% Bentonite Benton	nite-cement grout	
16. Drilling additives used? Yes	⊠ No			Ft ³ volume added for any		57
Describe 17. Source of water (attach analysis):				installed: nie pumped	Tremie ☐ 02	Ø 01
17. Source of water (attach analysis):			I (CII	ne pumped	Gravity	⊠ 08
			6. Bentoni		entonite granules	33
E. Bentonite seal, top n. MSL	or 1.01 ft.					
F. Fine sand, top ft. MSL	or 30.0 ft.		C. 7 Fine car	nd material:	Other	
1. The said, top	01 _30.0 11.	\ /		ted Flint No. 45-55		:::::
G. Filter pack, top ft. MSL	or 33.0 ft.		b. Volu	me added 1.0 ft ³		~~
Tr. G				ack material:		
H. Screen joint, top fl. MSL	or <u>35.0</u> ft.			ted Flint No. 40 RFWS - 34 me added 2.3 ft ³		
I. Well bottom ft. MSL	or 40,0 ft.		9. Well ca		PVC schedule 40	⊠ 23
					PVC schedule 80	□ 2.4
J. Filter pack, bottom ft. MSL	or 40.0 ft.				Other	
K. Borehole, bottom . ft. MSL	ar 40.0 A	79 =11	10. Screen i	material: Sch. 40 PVC	Factory cut	⊠ 11
K. Borehole, bottom ft. MSL	or <u>40.0</u> ft.		a. Sciet	at type:	Continuous slot	
L. Borehole, diameter 8.0 in.	\	<i>Y</i>			Other	日題
	\			nfacturer Diedrich Drill		_
M. O.D. well casing 2.48 in.	·		c. Slots	size: ed length:	0,010 75.0	in. ft.
N. I.D. well casing 2.07 in.				ed rengin: material (below filter pack):		M. 14
				()	Other	
I hereby certify that the information on this form is t						
Signature Clarke	Firm	MIDWEST E	INGINEERING SE	RVICES, INC.		

Please complete both cities of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

State of Wisconsin Department of Natural Resources

MONITORING WELL DEVELOPMENT Form 4400-113B Rev. 7-98

0

14. Total suspended	Route to: Watershed/Wast	towator [Waste Managem	eant 🔲			•
Facility Licence, Permit of Monitoring Number County Code	Remediation/Rec	development [Other				
Facility License, Fermit of Monitoring Number County Code	Facility/Project Name	County Name		Well Name	0 1	 >	
1. Can this well be purged dry? 2. Well development method surged with baller and bailed surged with baller and bailed surged with baller and bailed surged with block and pumped 62 surged with block and pumped 62 surged with block and pumped 70 compressed air 920 billion 10 pumped only 151 bailed only 151 bottom 13. Water clarity Clear \$1.0 Clear 2.0 Turbidd 15 Turbidd 25 (Describe) 3. Time spent developing well 10 min. 4. Depth of well (from top of well casisng) 2 min. 4. Depth of well (from top of well casisng) 2 min. 5. Inside diameter of well 2 min. 6. Volume of water in filter pack and well satisfies 2 min. 6. Source of water added (if any) 2 gal. 7. Volume of water added (if any) 2 gal. 8. Volume of water added 15. COD mg/l mg/l mg/l filty film: Men from the above information is true and correct to 15 best of my knowledge. 5. Signature: 15 best of my knowl	Jim + Cindys Bar	Tayl			_		
2. Well development method surged with bailer and pumped 61 surged with bailer and pumped 62 surged with block and pumped 62 surged with	Pacility License, Permit or Monitoring Number	County Code	Wis. Unique Well	Number	DNR Wel	ID Number	
2. Well development method surged with bailer and pumped 61 surged with bailer and pumped 62 surged with block and pumped 62 surged with			<u> </u>		1		
2. Well development method surged with bailer and pumped 61 surged with bailer and pumped 62 surged with block and pumped 62 surged with							
2. Well development method surged with bailer and bailed 9 41 42 42 42 42 42 42 43 44 45 44 45 45 44 45	1. Can this well be purged dry?	cs j¥JNo			velopment	After Devel	opment
surged with baller and bailed surged with baller and pumped 61 surged with baller and pumped 62 surged with block balled and pumped 70 compressed air 20 balled only 10 pumped only 51 pumped slowly 51 pumped slowly 50 Other 3. Time spent developing well 6. Commin. 4. Depth of well (from top of well casing) 40 string diameter of well 7 5. Inside diameter of water in filter pack and well casing 7 7. Volume of water in filter pack and well casing 7 8. Volume of water added 7 9. Source of water added 7 9. Analysis performed on water added? 7 9. Additional comments on development: Steam 1		down		18	58 .	3 2 1	
surged with baller and pumped 61 surged with baller and pumped 62 surged with block and bailed 42 surged with block and pumped 62 surged with block and pumped 62 surged with block, bailed and pumped 70 compressed air 20 bailed only 10 pumped only 51 pumped only 51 pumped slowly 50 bottom 13. Water clarity Clear 10 Clear 20 C				a	<u></u>	_ =	
surged with block and pumped 62 surged with block and pumped 70 surged with			Won Casing)				
surged with block, bailed and pumped 70 70 20 20 20 20 20 20			D-4-	11 .00	. 13	11	70.17
surged with block, bailed and pumped 70 70 20 20 20 20 20 20	· · · · · · · · · · · · · · · · · · ·		Date	b. 11 / 22	7/	/-	
compressed air 20 10 10 10 10 10 10 10						•	
bailed only pumped only pumped slowly 5 50 50 Chor 6 50 Chor 6 50 Chor 6 50 Chor 7 Chor 6 50 Chor 7	—, ·		Time		□ a.m.	•	□ a.yn.
pumped only pumped slowly 51 50 50 51 50 50 50 50	_		Time	C ·	— ⊔ <i>Р</i> .зн.	·	- LJ P
bottom Some and Address of Facility Contact/Owner/Responsible Party St. Last Name; Shimks	-		112. Sediment in we	17	inches		inchec
Other 13. Water clarity Clear 2.0 Turbid 1.5 Turbig 2.5 3. Time spent developing well 26 min. (Describe) (Describe) 4. Depth of well (from top of well casisng) 2 in. (Describe) (Describe) 5. Inside diameter of well 2 in. (Describe) (Describe) 6. Volume of water in filter pack and well 2 gal. Fill in if drilling fluids were used and well is at solid waste facility: 7. Volume of water added (if any) gal. (14. Total suspended mg/l mg/l mg/l 8. Volume of water added 15. COD mg/l mg/l 9. Source of water added 15. COD mg/l mg/l 16. Well developed by: Name (first, last) and Firm First Name: Kell Last Name: Shirth 17. Additional comments on development: I hereby certify that the above information is true and correct to the best of my knowledge. 18. Water clarity Clear 2 0 Turbid 1 5 Turbig 2 5 (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (Describe) (De			1	··			_ Mones
3. Time spent developing well 4. Depth of well (from top of well easisng) 4. Depth of well (from top of well easisng) 5. Inside diameter of well 6. Volume of water in filter pack and well casing 7. Volume of water removed from well 8. Volume of water added (if any) 9. Source of water added (if any) 9. Source of water added 15. COD 16. Well developed by: Name (first, last) and Firm First Name: Ken Last Name: Shimk 16. Well developed by: Name (first, last) and Firm First Name: Ken Last Name: Shimk 7. Additional comments on development: 16. Well developed by: Name (first, last) and Firm First Name: Ken Last Name: Shimk Firm: Man. Last Name: Shimk Signature: 17. Additional comments is true and correct to has best of my knowledge. 18. Signature: 18. Volume of water added in a solid waste facility: 19. Thereby certify that the above information is true and correct to has best of my knowledge.	1700		•	Ölear KZ 1	0 (lear 🗆 20	
3. Time spent developing well 4. Depth of well (from top of well casisng) 4. Depth of well (from top of well casisng) 5. Inside diameter of well 6. Volume of water in filter pack and well 6. Volume of water removed from well 7. Volume of water added (if any) 8. Volume of water added (if any) 9. Source of water added 10. Analysis performed on water added? 11. Total suspended	Onlei Li		13. Water cruzing				
4. Depth of well (from top of well casisng)	3 Time great developing well	> .		(Describe)		•	
5. Inside diameter of well Casing Ca				(2-11-1-)	`		
5. Inside diameter of well Casing Ca	4 Depth of well (from ton of well casisne)	ft_					
6. Volume of water in filter pack and well casing 7. Volume of water removed from well 8. Volume of water added (if any) 9. Source of water added 15. COD 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 17. Additional comments on development: 18. Volume of water added 19. Source of water added 19. Source of water added 10. Analysis performed on water added? 10. Analysis performed on water added? 11. Total suspended 12. mg/l 13. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 18. Volume of water added 19. Source of						·	
6. Volume of water in filter pack and well casing 7. Volume of water removed from well 8. Volume of water added (if any) 9. Source of water added 15. COD 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 17. Additional comments on development: 18. Volume of water added 19. Source of water added 19. Source of water added 10. Analysis performed on water added? 10. Analysis performed on water added? 11. Total suspended 12. mg/l 13. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 18. Volume of water added 19. Source of	5. Inside diameter of well	in.					
reasing							
reasing Column of water removed from well Column of water added (if any) Fill in if drilling fluids were used and well is at solid waste facility: 14. Total suspended mg/l mg/l 15. COD mg/l mg/l 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 17. Additional comments on development: First Name: Ken Last Name: Shimb 18. Cod mg/l mg/l 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 17. Additional comments on development: Thereby certify that the above information is true and correct to the best of my knowledge. 18. Cod mg/l mg/l 19. Cod mg/l mg/l 10. Well developed by: Name (first, last) and Firm 18. Cod mg/l mg/l 19. Cod mg/l mg/l 10. Well developed by: Name (first, last) and Firm 18. Cod mg/l mg/l 19. Cod mg/l mg/l 10. Well developed by: Name (first, last) and Firm 18. Cod mg/l mg/l 19. Cod mg/l mg/l 10. Well developed by: Name (first, last) and Firm 18. Cod mg/l mg/l 19. Cod mg/l mg/l 10. Well developed by: Name (first, last) and Firm 18. Cod mg/l mg/l 19. Cod mg/l mg/l 10. Well developed by: Name (first, last) and Firm 18. Cod mg/l mg/l 19. Cod mg/l mg/l 10. Well developed by: Name (first, last) and Firm 18. Cod mg/l mg/l 19. Cod mg/l mg/l 19. Cod mg/l mg/l 10. Well developed by: Name (first, last) and Firm 10. Well developed by: Name (first, last) and Firm 10. Well developed by: Name (first, last) and Firm 10. Well developed by: Name (first, last) and Firm 10. Well developed by: Name (first, last) and Firm 10. Well developed by: Name (first, last) and Firm 10. Well developed by: Name (first, last) and Firm 10. Well developed by: Name (first, last) and Firm 10. Well developed by: Name (first, last) and Firm 10. Well developed by: Name (first	6. Volume of water in filter pack and well	j					
7. Volume of water removed from well	casing	gal.					
14. Total suspended			Fill in if drilling flui	ds were used an	d well is at s	olid waste faci	ility:
8. Volume of water added (if any) 9. Source of water added 15. COD 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 16. Well developed by: Name (first, last) and Firm 17. Additional comments on development: 18. COD 19. mg/l 16. Well developed by: Name (first, last) and Firm First Name: Ken Last Name: Shimks Firm: Men. List Name: Shimks 17. Additional comments on development: 18. Cod 19. Source of water added 19. Source of water added 10. Signature: Shimks 10. Signature: Shimks 10. Signature: Shimks 10. Signature: Sig	7. Volume of water removed from well						
2. Source of water added			14. Total suspended		mg/l		mg/l
16. Well developed by: Name (first, last) and Firm First Name: Ken Last Name: Shimts (If yes, attach results) 7. Additional comments on development: Incomments on development: I hereby certify that the above information is true and correct to the best of my knowledge. Signature: Signature: Signature:	8. Volume of water added (if any)	_ gal.	solids	<i>2</i>	•		
16. Well developed by: Name (first, last) and Firm First Name: Ken Last Name: Shimts (If yes, attach results) 7. Additional comments on development: Incomments on development: I hereby certify that the above information is true and correct to the best of my knowledge. Signature: Signature: Signature:		ŀ			*		
O. Analysis performed on water added? (If yes, attach results) First Name: Ken Last Name: Shimks Firm: Meridian Env. Colly, 216 7. Additional comments on development: I hereby certify that the above information is true and correct to the best of my knowledge. Signature: Signature:	O. Source of water added		15. COD		mg/l _		mg/l
O. Analysis performed on water added? Yes No First Name: Ken Last Name: Shimks (If yes, attach results) Firm: Meridian Env. Colly, 216 7. Additional comments on development: I hereby certify that the above information is true and correct to the best of my knowledge. Signature: Meridian Env. Colly, 216 Signature: Shimks First Name: Ken Last Name: Shimks First Name: Shimks First Name: Last Name: Shim		إ	C 117 11 - 1 . 1 . 1 . 1 . 1 . 1 . 1 . 1 . 1		. 151		
(If yes, attach results) Firm: Man. Like Env. Co Hy, 216 Additional comments on development: Thereby certify that the above information is true and correct to the best of my knowledge. Signature: Signature: Signature:		Į.				-1	
Fim: Mer. Live. C8/14, 226 7. Additional comments on development: Thereby certify that the above information is true and correct to the best of my knowledge. Signature: Signature:	• •	□ No					
7. Additional comments on development: ame and Address of Facility Contact /Owner/Responsible Party at Last Name: Shimts of my knowledge. Signature: Signature:	(If yes, altach results)	1	Elm. Me	- O > 44	Env.	Cs Hy.	215
ime and Address of Facility Contact/Owner/Responsible Party If hereby certify that the above information is true and correct to the best of my knowledge. Signature: Signature:	7. Additional comments on development		FILLL /	The terms of			
st Ken Last Shimts of my knowledge. Slighty/Firm: Meridian Enu. C3 4. UK Signature: Signature:	. Additional comments on development.						
st 1/24 Last Shimts of my knowledge. Slignature: Signature: Signature:							
st Ken Last Shimts of my knowledge. Signature: Signature:							
st Ken Last Shimts of my knowledge. Slighty/Firm: Meridian Enu. C3 4. W Signature: Signature:							
st Ken Last Shimts of my knowledge. Slighty/Firm: Meridian Enu. C3 4. W Signature: Signature:							
st Ken Last Shimts of my knowledge. Slighty/Firm: Meridian Enu. C3 4. W Signature: Signature:							
st IKen Last Shimts of my knowledge. Slighty/Firm: Mer. dien Enu. C. 5 Hr. W. Signature: Signature:	The state of February 11 and 1			·			
sility/Firm: Mer. Live Erw. C.5 ty. U. Signature:		arly	I hereby certify that	the above infor	mation is tru	e and correct (o las best
sility/Firm: Mer. dien Erw. C. 5 tz. uc Signature: Signature:		9	of my knowledge.				
Mity/Tilli.	A Nation			1 /		7	
	ollity/Pinn: Meridian Env. C34	z. uc si	gnature:	1			
y/State/Zip: Fall Creek, W.T. Firm: Mendier Enwich (1)				1-	16.	1,	
y/State/Zip: Fall Creek, W. F. Firm: Mendien Enw. Cs by, UC	cet: 2711 N. E/c- ad	Pı	int Name:	Ken	DNIN	160	
y/State/Zip: Nerdie En. Cs 14, UC	F.(1) 0 4 133	_		1 1	O	. 0 11	_
61743	y/State/Zip: + LL Creek, W.	- Fi	$m: \frac{\mu}{\mu}$	leridie	n En	1-45 14	LUC
3444	5474	2				0	•

State of Wisconsin	
Department of Natural Resources	

SOIL BORING LOG INFORMATION Form 4400-122 Rev. 7-98

Boring Drilled First Name: 5	ne 7	A			License/l	ermit/N	/lonitor	ing Nu	mber	Boris	ıg Nun	ber		·	
First Name: 3	Rv. Name o	Cindys	Sar t last) and Rirm		Date Dril	in a Char		lb	D.:11:-			Drilli			_
	BY: Name o	Last Name: Blo	· CK	İ	10, 2			LO	/28	' 소) 3	1 .	_		
W/I Unique W/e	47 due	NR Well ID No.	Well Name		mm'd Final Stat			m m	d d	уу	уу		1 2 V	iameter	
WI Unique We				1	rillai Siat		MSL	1 .		_Fcct	MSL	Boren		inches	
Local Grid Orig	in 🛘 (estim	ated: 🗆) or H	Boring Location D		Lat	0	1 . 1	Local	Grid I						
•		ction, T_	N. R		Long	0	1 11		F		1 N 1 S _		Fee	□E t□W	
acility ID		County	\- 0	Cou	nty Code	Civi			or Villa	ge C		'cr			
Sample		1 10	shion.				 	74	<u> </u>		Prope		<u> </u>	T	
1::-	Depth in Feet (Below ground surface)	Soil/R	ock Description							3011	riope	ues		1	
and Type Length Att. & Recovered (in) Blow Counts	n Fo	And Ge	ologic Origin For		S	1			Ssive	٤_		<u>4</u>		Shts	
and Type Length At Recovered	pth gwole	Eac	h Major Unit		SC	Graphic	Well Diagram	PID/FID	Compressi Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments	
도를 그 등 E					٥	8.5	≥点	E E	98	ຂັບິ	133	독교	<u> </u>	≅ ც	
	- 4	asphalt	ity day.	J	一十		1							ĺ	
	5	PORK	41 1-							m					
		Promur a	with clay.					0							
"															
	10-1	- NSW4 -	e dance so	سا	+	İ	11	Ð		۸.		.			
4		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	grave	حلأ						2					
	1 <u>S</u>		e o ark sa qrawi ul t qraw (cobbles)	-O				.5		0	.			I	
	64	parke sa	(robbles)				. 3			İ	1			
									- 1		-	-			
7	20 1	thurst 7.	- Sulting	- Nº	s rece	مع	k J		- 1	11	-				
L.			•		1		5	l							
	25	()	ayoy, si	14			F	5			1		1		
4	- 54	andy 1 Cl	48, 21	17-			3	, ,	ı		- 1				
	30						N	ام	- [1			
	750	eune au	more	بهار				. \$			1		- 1		
4				•			- 11		[11			ı		
	35	4 14					V	.5							
4						[3								
	40						Minn	ار							
	"- S &	ame. L	ess clay	Y.			=	. 5		W					

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Firm

	olid Waste Haz. Waste		MONITORING WELL CONSTRU	
Department of Natural Resources Env. Response Facility/Project Name	& Repair Underground 1 Local Grid Location of Well		Form 4400-113A F	lev. 4-90
1 Danis, 1 To Jeou I turne	□ N.	E.		
Jim & Cindy's Bar - Jump River, WI	ft. S.	ft. W.	MW-9A	
Facility License, Permit or Monitoring Number	Grid Origin Location Lat, Long		Wis. Unique Well Number: DNR Well Nu	mber
Type of Well Water Table Observation Well 211	St. Plane ft. N	g or . ft. E.	Date Well Installed	<u> </u>
	Section Location of Waste/S		10-29-13	
]	□ E.	Well Installed By: (Person's Name and Fin	rm)
Distance Well Is From Waste/Source Boundary	NW 1/4 of SW of Sec. 7			
Is Well A Point of Enforcement Std. Applic. ?	Location of Well Relative to u Upgradient s	Waste/Source Sidegradient	Joe Black	
Yes No	d Downgradient n		Midwest Engineering Services, Inc.	
		- 		
A. Protective pipe, top elevation	ft, MSL	1. Cap and		i □ No
D. Wall againg top alouation	9 VCI		ve cover pipe: e diameter:	8.0 in.
B. Well casing, top elevation	II. MSL	a. Insid b. Leng		1.0 ft.
C. Land surface elevation	n. MSL	c. Mate		
			Oth	
D. Surface seal, bottom ft. MSL	or 1.0 ft.		tional protection?	No 🛛 No
12. USCS classification of soil near screen:		3. Surface	s, describe: seal: Bentoni	te 🗌 30
GP GM GC GW SW	SP □	J. Suitace	Concre	
SM SC ML MH CL			Oth	
Bedrock		4. Materia	l between well casing and protective pipe:	F7 4 4
13. Sieve analysis attached? Yes			Bentoni	
14. Drilling method used: Rotary ☐ Hollow Stem Auger ☒			Annular space se Oth	
Other		5. Annular	r space seal: a. Granular Bentoni	te 🛛 33
15. Drilling fluid used: Water 0 2 Air	01	b	Lbs/gal mud wt. Bentonite-sand slun	
Drilling Mud 0 3 None	: 🛛 99 💮 💮		Lbs/gal mud weight Bentonite slum	
16. Drilling additives used?	M N	d	% Bentonite Bentonite-cement go Ft ³ volume added for any of the above	ut 🗌 50
16. Drilling additives used? Yes Describe	⊠ No		installed: Trem	ie 🗌 01
17. Source of water (attach analysis):			ie pumped 0	
			Gravi	
		6. Bentoni		
E. Bentonite seal, top ft. MSL	or <u>1.0</u> ft.	b. □1/-	4 in. ☐ 1/2 in. ☒ 3/8 in. Bentonite pelle Oth	ts 🛭 32
F. Fine sand, top ft. MSL	or <u>11.0</u> ft.		nd material:	O. (
		a. <u>R</u>	Led Flint No. 45-55	
G. Filter pack, top ft. MSL	or <u>13,0</u> ft.		me added 0.7 ft ³	
H. Screen joint, top, ft. MSL	or <u>15.0</u> ft.	8. Filter pa	ack material: led Flint No. 40 RFWS - 34	+1+1+1
Tr. Screen John, top It. MSL	01 13.0 11.		me added 3.9 ft ³	<u> </u>
I. Well bottom	or 25.0 ft.	9. Well ca		0 🛛 23
		34	Flush threaded PVC schedule 8	0 🔲 24
J. Filter pack, bottom ft. MSL	or <u>25.0</u> ft.		Othe	er 🔲 🚉
K. Borehole, bottom ft. MSL	or <u>25.0</u> ft.	a. Screen	material: Sch. 40 PVC on type: Factory co	it 🛛 🗓
K. Borenoie, bottom	01 23.0 11.	a. sciec	Continuous sle	
L. Borehole, diameter 8.0 in.	\ \	_	Otho	
	\	2000	ifacturer Diedrich Drill	_
M. O.D. well casing 2.48 in.		c. Slot s		
N. I.D. well casing 2.07 in.			ed length: 10. material (below filter pack): Nor	
			Othe	
I hereby certify that the information on this form is				
Signature	Firm MID	WEST ENGINEERING SEI	RVICES, INC.	

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

State of W		
Departmen	nt of Natural	Resources

SOIL BORING LOG INFORMATION Form 4400-122 Rev. 7-98

R		Wastewater Win/Revelopment			nt 🔲									
											e	of	1	
Facility/Project Name	- Cindy's	Bar	Lice	nse/Pe	rmit/M	lonitori	ng Nu	mber	Bori	ng Nun	nber ML	~ د	9A	
Boring Drilled By: Na First Name: 300	ume of crew chief (first, Last Name: B\a	last) and Firm		Drillir			Date	Drillin	g Con	pleted	Drilli			
Firm: M7& WI Unique Well No.		Well Name		/ d d				ce Ele		3 y y		1 <u>2</u>	iameter	À
				Stanc	Feet l	MSL			_Fcct	MSL	Bolei		inches	100
Local Grid Origin D (State Plane		ring Location D	1	at	0	1 . n	Local	Grid l		I N			ΠE	
1/4 of1/4 of	of Section, T	N, R	Lo. County C			Town/	City/ c	T Villa	eet [1 S _		_ Fee	t□ W	
	Ta	Ajor						wy	1-		اب	<u> </u>		
Sample 3	Soil/Roc	k Description					,	·	1	Prope	rues		1	
Anumber and Type and Type and Type Blow Counts Depth in Feet Blow anum and and anumber anumber anumber and anumber and anumber and anumber and anumber anumber and anumber and anumber and anumber and anumber and anumber and anumber and anumber and anumber and anumber and anumber anumber and anumber and anumber and anumber and anumber and anumber anumbe	And Geole Each	ogic Origin For Major Unit		CS	ပ္ခ	. E	Œ	Compressive Strength	E E	.e.	city		RQD/ Comments	
and Type Length A Recovered Blow Cou				N S	Graph	Well . Diagram	PID/FID	Comp	Moisture Content	Liquid Limit	Plasticity Index	P 200	CO M M	
	Earth	Brill												
						J								
	1 1					3								
(5)						=								
			j			N	Ì							
						=		1		l		1		
70						=				.				Å
						=								
						\equiv							•	
	EOB = 3	25 44			ŀ									
30									ŀ	.				
							.							
	<i>)</i>													
40												1		
		4 g - \$,	
aby partify that the int	formation on this form	o is true and some	t to the		f way b		daa							

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

State of Wisconsin Department of Natural Resources

MONITORING WELL DEVELOPMENT Form 4400-113B Rev. 7-98

Facility/Project Name	County Name		Well Name	0.1	
Jim + Cindy's Bar	Tayl			9 A	•
Pacility License, Permit or Monitoring Number	County Code	Wis. Unique Well I	Vumber	DNR Well ID N	umber
	_				· .
1. Can this well be purged dry?	es A No	D 4 - W		elopment Afte	Development
		11. Depth to Water	18	50 ft 1	8 53.
2. Well development method		(from top of well casing)	a	<u> </u>	- <u>-</u> n.
7	4 1	wen casing)			
	6 1	_	11 00	. 12	11 70 1
	4 2	Date	b. 11 / 28	<u> </u>	$\frac{1}{1}$ $\frac{1}{1}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$
	6 2			, , , ,	, ,
	7 0			a.m. p.m	🖸 a.m.
<u>-</u>	20	Time	c :	_ [] p.m	_: D.m.
	10	10 5 1 4			
, —, · ,	' 1	12. Sediment in well bottom		_inches _	inchés
	5.0		<u> </u>	- 01	
Other []		13. Water clarity	Clear 🔼 1 (□ 20 #1 25
Time spent developing well	min.		(Describe)	(Descri)E)
Depth of well (from top of well casispe) 25					
Depth of well (from top of well casisng)	IL	•			
Inside diameter of well	in.				
inside diameter of well	m.				
Volume of water in filter pack and well					
casing	gal.				
	i i	Fill in if drilling fluid	n ware week and		note facility
Volume of water removed from well	901	I III III II OI IIIIII II IIIIO	s were used and	Well is at solid w	asic racinty.
volune of water removed from wen		td::Takal madasalad		· ~~ a /l	' #I
Volume of water added (if any)	í	14. Total suspended solids		_ mg/i	
Volume of water added (if any)	- gai.	801108			
Source of water added	. 12	5. COD		mg/l	ma/l
vodroc or water added				_ 1116/1	· _ · IIIB/I
		6. Well developed by	: Name (first last)	and Firm	· · · · · · · · · · · · · · · · · · ·
Analysis performed on water added? Yes	4	First Name: Ke			· melso
If yes, attach results)	□ 140		•		
)	Firm: May	dian	Env. Cs	Hy, LLC

Name and Address of Facility Contact/Owner/Responsible Party First Last Name: Shimte	I hereby certify that the above information is true and correct to the best of my knowledge.
Facility/Firm: Meridian Env. C3 ty. UC	Signature:
Street: Z711 N. Elc- ad	Print Name: Ken Shimko
City/State/Zip: Fall Creek, W.F.	Firm: Meridien Erwich 14, 110
54742	

	olid Waste Haz. Waste		MONITORING WELL CONSTRU- Form 4400-113A Re	
Department of Natural Resources Env. Response & Facility/Project Name	Repair Underground Tail Local Grid Location of Well	nks U Other U	Well Name	ev. 4-90
	□ м.	☐ E.	, , , , , , , , , , , , , , , , , , ,	
Jim & Cindy's Bar - Jump River, WI	ft. S.	ft. 🗌 W.	MW-9B	
Facility License, Permit or Monitoring Number	Grid Origin Location		Wis. Unique Well Number: DNR Well Num	
Type of Well Water Table Observation Well 11	Lat. Long.	ft. E.	Date Well Installed	
	Section Location of Waste/Son		10-29-13	
		□ E.	Well Installed By: (Person's Name and Firm	n)
Distance Well Is From Waste/Source Boundary	<u>NW</u> 1/4 of <u>SW</u> of Sec. 7	, T <u>33</u> N, R. <u>3</u> 🛛 W.	`	
ft. Is Well A Point of Enforcement Std. Applic. ?	Location of Well Relative to V u Upgradient s	Vaste/Source Sidegradient	Joe Black	
Yes No	d Downgradient n		Midwest Engineering Services, Inc.	
A. Protective pipe, top elevation f	t. MSL	1. Cap and		☐ No
B. Well casing, top elevationf	1/(0)	2. Plotecti	ve cover pipe: e diameter:	8.0 in.
B. Well casing, top elevation	I. MSL	a. Insid b. Leng		8.0 in. 1.0 ft.
C. Land surface elevation f	t. MSL	c. Mate		
			Other	
D. Surface seal, bottom ft. MSL	or <u>1.0</u> ft. \	d. Addi	tional protection?	⊠ No
12. USCS classification of soil near screen:	— <u> </u>	3. Surface	s, describe:	□ 30
GP GM GC GW SW G	SP 🗇	3. Surface	Concrete	
SM SC MIL MH CL C			Other	
Bedrock		4. Materia	l between well casing and protective pipe:	
13. Sieve analysis attached? Yes 11.			Bentonite	
14. Drilling method used: Rotary ☐ 5 Hollow Stem Auger ☒ 4			Annular space seal Other	
Other 🔲		5. Annular	space seal: a. Granular Bentonite	$\boxtimes \overline{33}$
15. Drilling fluid used: Water 02 Air	01	b	Lbs/gal mud wt. Bentonite-sand slurry	
Drilling Mud 0 3 None	☑ 99		Lbs/gal mud weight Bentonite slurry	
16. Drilling additives used? Yes	N 11-	d	% Bentonite Bentonite-cement grout	50
16. Drilling additives used? Yes Describe	⊠ No		Ft ³ volume added for any of the above installed: Tremie	⊠ 01
17. Source of water (attach analysis):			ie pumped	
			Gravity	
		6. Bentoni		
E. Bentonite seal, top ft. MSL	or <u>1.0'</u> ft.	b. ∐1/4 c.	in. 1/2 in. 3/8 in. Bentonite pellets Other	⊠ 32
F. Fine sand, top ft. MSL	or 30.0 ft.	7. Fine san	nd material:	LJ (
			ed Flint No. 45-55	
G. Filter pack, top ft. MSL	or <u>33.0</u> ft.		me added 1.0 ft ³	
H. Screen joint, top . ft. MSL	or 35.0 A	8. Filter pa		,,,,,
H. Screen joint, top ft. MSL	or <u>35.0</u> ft.		ed Flint No. 40 RFWS - 34 ne added 2.8 ft ³	
I. Well bottom ft. MSL	or 40.5 ft.	9. Well cas		⊠ 23
		X	Flush threaded PVC schedule 80	2.4
J. Filter pack, bottom ft. MSL	or 40.5 ft.	_	Other	
V Borahola hottom A MCI		V-3	naterial: Sch. 40 PVC	57 13
K. Borehole, bottom ft. MSL	or <u>40.5</u> ft.	a. Scree	n type: Factory cut Continuous slot	
L. Borehole, diameter 8.0 in.	\ \ \		Other	
	\	b. Manu	facturer Diedrich Drill	
M. O.D. well casing 2.48 in.		c. Slot s		in.
N. I.D. well casing 2.07 in.		2 4	d length: 5.0 material (below filter pack): None	ft. I⊠I 14
A. A. Hou ousing Z.UI III.		TII. Dackiiii	Other	
I hereby certify that the information on this form is tr				
Signature		EST ENGINEERING SER	VICES, INC.	

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. No. 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

State of	Wisconsin	
Departm	ent of Natural	Resources

SOIL BORING LOG INFORMATION Form 4400-122 Rev. 7-98

<u> </u>		Vastewater ☐ V √Revelopment ☐			11 🔲									
	Konculation	West copined [, Office C	I						Pag	ا ۽	of	1	
Facility/Project Name	- Cindy's	12.	Licen	ise/Per	mit/M	lonitori	ng Nu	mber	Bori	ng Nun	her		9 [<u></u>
Boring Drilled By: Na	me of crew chief (first,	last) and Firm			g Star					pleted	Drilli	ng Me	thod	
First Name: Jse Firm: Mrd	Last Name: Black	ck			/ Z	いる 	LA	/ <u>2</u> 2	/2°	$\frac{3}{y}$	1	45,	A	
WI Unique Well No.	DNR Well ID No.	Well Name	Final			Level		ce Ele	vation	MSL		iole D	ameter	
Local Grid Origin State Plane	(estimated: □) or Bor N.	ing Location E	<u></u>	at			Local	Grid l					inches	ė
	of Section, T	E	Lon		0	1 11		F	⊒ Zeet⊑	1 N 1 S _		_ Fee	DE DW	•
Facility ID	County Ta	uler	County C	ode	Civil			r Villa	ige C	という	اب			
Sample	Congression									Prope				
Number and Type ward Type ward Type ward Type ward Length Att. & do ward ward (in) Blow Counts Depth in Feet Mains ward are	Soil/Rock And Geolo	C Description Ogic Origin For						sive					Slr	
Number and Type Length Att. 6 Recovered (in Blow Counts Depth in Feet	Each N	Anjor Unit		scs	Graphic Log	Well. Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments	
z § 7 § ā Δ §	CARL D -	a Days		'n	हैं डे	≱ ∺ੌ	IA	Str	≱రి	בֿבֿי	P. r.	P.	~ვ	
	gray cla			-						·				
4 5	gray cla	yen silt	.			1	0		m					
4		· V				11								
- 6	brown co	ane soul	+0				0		dry					
4									,					
L 12	dust coorse	saud +	green !		.	1	1		4			. [
	· d: FF: C	of grimb	·- CP }}	2		PUC			لم					
7 20	Lown san	It grave	ول ا			0	,		WO					
4		•				3		- 1				1		į
4 5	blow-up in to flush	augers.	Hail			N								
4	to flush	out, no	Sarry	۱ ا	ļ									
N 30_	brown clay	ear silt w	1 sauce				0			.				
4		r .												
F 35	same						0							
니					:									
- 40_	reddish boom	سر دلمر	عير عدا ا	-										
	ul sambter	and (the	("IF.	45					4					
	FoB=4						Ш.							

This form is authorized by chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Firm

State of Wisconsin Department of Natural Resources

MONITORING WELL DEVELOPMENT Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater	Waste Management
Remediation/Redevelopment	
Facility/Project Name County N	well Name 9 B
Facility License, Permit or Monitoring Number County Co	718
Pacific License, Perint of Montacing Municipal	Wis. Olique Wolf Addition
1. Can this well be purged dry? 1. Can this well be purged dry? 2. Well development method surged with bailer and bailed	Before Development After Development 11. Depth to Water (from top of well casing) Before Development After Development 12. Top to Water (from top of well casing)
surged with bailer and pumped	Date $ \frac{11}{m m} \frac{20}{d d} \frac{13}{y y y y} \frac{(1)}{m m} \frac{20}{d d} \frac{13}{y y y y} $ Time $ c. \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad \qquad$
compressed air \(\square 20 \) bailed only \(\square 10 \)	1 mic C [] p.m [] p.m.
bailed only 10 pumped only 51	12. Sediment in well inches inches
pumped slowly	bottom
Other	13. Water clarity Clear 10 Clear 120 Turbid 15 Turbid 25
3. Time spent developing well $\underline{\lambda b O}_{min}$	(Describe) (Describe)
4. Depth of well (from top of well easising)	
5. Inside diameter of well in.	
6. Volume of water in filter pack and well casing gal.	Fill in if drilling fluids were used and well is at solid waste facility:
7. Volume of water removed from well gal.	14. Total suspended mg/l mg/l
8. Volume of water added (if any) gal.	solids
9. Source of water added	15. COD mg/l mg/l
10. Analysis performed on water added? Yes No (If yes, attach results)	16. Well developed by: Name (first, last) and Firm First Name: Ken Last Name: Shimes Firm: Mendian Env. Colly, 210
17. Additional comments on development:	
	Ą
Name and Address of Facility Contact/Owner/Responsible Party First Name: Name	I hereby certify that the above information is true and correct to the best of my knowledge.
Facility/Firm: Meridian Env. C3 ty. U.	Signature:
Street: Z711 N. Ela ad	Print Name: Ken Shimko
City/State/Zip: Full Creek, W.F.	Firm: Mendier Erw. Cs 14, 110