Rel Ioli3/11 Put on BRRTS Ioli3/11 (29)

PHASE II ENVIRONMENTAL SITE ASSESSMENT ADDENDUM

FOR

FORMER THOMAS SERVICE STATION 55 WISCONSIN AVENUE MONTREAL, IRON COUNTY, WISCONSIN OCTOBER 2011



Coleman Engineering

Civil Engineering • Environmental Engineering Geotechnical Engineering • Land Surveying • Test Drilling Construction Quality Control • Materials Laboratory Testing

PHASE II ENVIRONMENTAL SITE ASSESSMENT ADDENDUM

FOR

FORMER THOMAS SERVICE STATION 55 WISCONSIN AVENUE MONTREAL, IRON COUNTY, WISCONSIN

OCTOBER 2011

COLEMAN ENGINEERING COMPANY 635 Circle Drive Iron Mountain, MI 49801

CEC Project #EE-10201A

TABLE OF CONTENTS

Page No.

1.0	INTRODUCTION	1
2.0	PHASE II ADDENDUM PROCEDURES	2
3.0	GROUNDWATER CONDITIONS	3
4.0	CONCLUSION AND RECOMMENDATIONS	5
5.0	LIMITATIONS	5
6.0	REFERENCES	5

APPENDICES

APPENDIX A – FIGURES

Figure 1 – Project Location Map Figure 2 – Well Location Map Figure 3 – Groundwater Contour Map Figure 4 – Groundwater Impact Area

APPENDIX B – BORING LOGS AND WELL REPORTS

APPENDIX C – LABORATORY REPORTS

APPENDIX D – INVESTIGATIVE WASTE DISPOSAL DOCUMENTATION

APPENDIX E – LIMITATIONS

PHASE II ENVIRONMENTAL SITE ASSESSMENT ADDENDUM FOR FORMER THOMAS SERVICE STATION 55 WISCONSIN AVENUE MONTREAL, WISCONSIN

1.0 INTRODUCTION

In the early 1990's the Wisconsin Department of Transportation (WisDOT) planned to reconstruct State Highway 77 (Wisconsin Avenue) through Montreal, Wisconsin. As part of the pre-construction planning, WisDOT identified the former Thomas Service Station, 55 Wisconsin Avenue, Montreal, Wisconsin (Subject Property) as a place of potential environmental contamination. WisDOT contracted Enviroscience, Inc. of Eau Claire, Wisconsin to perform a Phase II Environmental Site Assessment (ESA) along State Highway 77 including in the right-of-way at the Subject Property. The Enviroscience Phase II ESA found impacted soil on the Subject Property and the State Highway 77 right-of-way. This finding resulted with the June 1994 listing of the Subject Property as a Wisconsin Department of Natural Resources (DNR) Leaking Underground Storage Tank (LUST) site. The LUST site has the DNR BRRTS #03-26-000788. Figure 1, Appendix A displays the site location.

In October 2009 ownership of the Subject Property was obtained by Iron County through tax default.

In June 2010 Coleman Engineering Company (CEC) was retained by Iron County to conduct a Phase I ESA in accordance with American Society for Testing and Materials E 1527-05 Standard Practice for Environmental Site Assessments. The Phase I ESA resulted in the identification of several recognized environmental conditions (RECs) regarding the property at the former Subject Property. The RECs are as follows:

- The Subject Property is listed by the DNR as a LUST Site (BRRTS #03-26-000788). This indicates the Subject Property is a source of a release of a hazardous substance(s) to the environment and is, therefore, considered a REC.
- Underground storage tanks (USTs) were reported and observed on the Subject Property. The presence of a petroleum retailer indicates large quantities of hazardous materials had been stored on the Subject Property in USTs and aboveground storage tanks (ASTs). The presence of these USTs containing fluid presents evidence for the potential of a release of a possible petroleum product and a material threat of a release of a petroleum product to the environment at the Subject Property and is, therefore, considered a REC.
- The Subject Property was an operating service station from the 1940s (or before) to the mid-1980s. The disposal of automotive fluids at service stations of the 1940s through the 1960s was often via on-site land application. The presence of this historic former service station site presents evidence for the potential of a release of possible petroleum products to the environment at the Subject Property and is, therefore, considered a REC.

Coleman Engineering Company

1

• The wastewater discharge from the service station was reportedly directly into the West Branch of the Montreal River until the station closed in the 1980s. This indicates the Subject Property was a source of a release of potentially hazardous substance(s) to the environment and is, therefore, considered a REC.

In August 2010, Iron County retained CEC to oversee removal of the UST remaining on the Subject Property and to perform further site assessment work of the release associated with the LUST site.

CEC contracted SGS Environmental Contracting, LLC of Merrill, Wisconsin, to remove the USTs and provide disposal and/or treatment of all associated wastes. On September 15th, 2010, SGS mobilized to the Subject Property to perform the tank removal. A UST site assessment (as per Department of Commerce COMM 10) was not performed as the Subject Property was already a DNR listed LUST site with a BRRTS identification number (#03-26-000788); however, soil and groundwater samples were collected and analyzed as part of the Phase II ESA. The tank removal activities were fully documented in the March 2011 Phase II ESA Report.

In November 2010 CEC performed Phase II ESA activities associated with the LUST site at the Subject Property. The November 2010 Phase II ESA field efforts defined the degree and extent of petroleum impact to soil exceeding Wisconsin Administrative Code (WAC) NR 720 Residual Contaminant Levels (RCLs). The soil impact appeared to be limited to the area around the former pump island/former UST location to a depth of approximately 5 feet below ground surface (BGS). A preliminary definition of impact to groundwater was also part of the Phase II ESA efforts through installation/sampling of temporary wells and laboratory analysis of the samples and found impacted groundwater in the same area as the impacted soil. The September 2010 UST removal and November 2010 site assessment activities are further documented in a March 2011 Phase II ESA report.

To further assess the groundwater impact associated with the LUST site on the Subject Property, Phase II ESA Addendum field activities were conducted in September 2011. This report is intended to document the Phase II ESA Addendum activities and findings regarding groundwater impact.

2.0 PHASE II ADDENDUM PROCEDURES

Field Procedure Summary

Coleman Engineering Company (CEC) mobilized on September 19, 2011 to install permanent groundwater monitoring wells at the Subject Property. Prior to mobilization, Diggers Hotline was contacted for a utilities clearance of the Subject Property. The only underground utility identified was a fiber optic communications cable lying under the sidewalk along State Highway 77. Due to shallow bedrock, approximately 5 feet BGS, and shallow groundwater, approximately 4 feet BGS, Mr. Phil Richard, DNR Hydrogeologist, Park Falls office, was contacted prior to mobilization regarding well installation. It was determined that the boring would be advanced to 8 feet BGS (if possible) and a 5-foot well screen utilized, no sand pack

Coleman Engineering Company

Phase II ESA Addendum Former Thomas Service Montreal, Wisconsin October 2011 above the top of screen and bentonite chips to the ground surface or bottom of the flush mount well protector.

A total of four (4) borings were advanced at the Subject Property on September 20, 2011 using a Diedrich D-50 drilling rig mounted on a tracked carrier. Borings were advanced to bedrock refusal using 4 ¼ inch hollow stem augers. Soil cuttings from the boring in the previously identified soil impact area were collected and containerized in a 55-gallon drum. Auger refusal in all borings was generally around 8 feet BGS. The wells were constructed as per discussions with Mr. Richard. All wells were constructed using 2-inch PVC screen and riser. Three (3) of four (4) wells installed utilized flush mount well protectors. The wells were developed on September 20, 2011 using surge/purge bailing methods.

Purge water was collected and containerized in a 55-gallon drum. Disposal of the two (2) drums of investigative waste was performed by Wausau Chemical of Wausau, Wisconsin. Disposal documentation is provided in Appendix D.

3.0 GROUNDWATER CONDITIONS

Soil conditions encountered were varied from fill materials to native peat and till. The till is red, silty sand with varying amounts of gravel and clay. Sand and gravel fill was found from ground surface to 1 to 2 feet BGS. Peat was found underlying the sand and gravel to 3 to 4 feet BGS with till underlying the peat. Advancement of the borehole was difficult when rock conditions were encountered in all boreholes at 5 to 6 feet BGS due to assumed bedrock (Tyler Formation). Auger refusal was encountered in all borings at approximately 8 to 9 feet BGS. Groundwater was encountered at approximately 4 to 6 feet BGS in all borings. The wells were surveyed for elevation referenced to an on-site benchmark of 100.00. Depth to water was measured on September 21, 2011 using an electric water level indicator. The following table summarizes elevational data:

WELL ID	GROUND ELEVATION	WELL ELEVATION	WELL BOTTOM	TOP OF SCREEN	DEPTH TO WATER	WATER ELEVATION
MW-1	100.47	103.38	92.63	97.63	7.18	96.2
MW-2	99.41	98.99	91.44	96.44	4.33	94.66
MW-3	100.01	99.71	91.61	96.61	5.29	94.42
MW-4	100.13	99.86	91.91	96.91	4.11	95.75

ALL ELEVATIONS REFERENCED TO AN ON SITE BENCHMARK OF 100.00 DEPTH TO WATER FROM SEPT. 21, 2011

The well and groundwater elevational data was used to generate a groundwater contour map, included in Appendix A as Figure 3. The groundwater contours shown on Figure 3 indicate groundwater flows west-northwest toward the West Branch of the Montreal River approximately 200 feet away. Well MW-4 was placed within the area of impacted soil and groundwater defined in the previous Phase II ESA efforts; well MW-2 lays directly downgradient of the impacted soil/groundwater area.

Groundwater samples were collected on September 21, 2011 from each of the four (4) wells installed at the site. Disposable bailers were utilized at each well for well purging and sample collection. The groundwater samples were submitted to Pace Analytical, Green Bay, Wisconsin for analysis of petroleum volatile organics and naphthalene (PVOC/NAP). The following table summarizes laboratory results. The tables also compare the analytical results WAC NR 140 Preventive Action Limits (PALs) and Enforcement Standard (ES) for groundwater.

Sample Identification	MW-1	MW-2	MW-3	MW-4	NR 140
Sample Date	09/21/11	09/21/11	09/21/11	09/21/11	PAL/ES
Benzene	1.6	< 0.39	< 0.39	18.8	0.5/5
Ethylbenzene	0.54J	<0.41	< 0.41	99.5	140/700
Methyl-tert-butyl ether	< 0.38	< 0.38	< 0.38	7.1	12/60
Toluene	1.9	<0.40	<0.40	6.3	200/1000
1,2,4 Trimethylbenzene	3.3	<0.43	< 0.43	358	14/70
1,3,5 Trimethylbenzene	0.64J	< 0.40	< 0.40	122	na
Total Xylene	1.9	< 0.87	< 0.87	505	1000/10000
Naphthalene	0.99J	<0.40	< 0.40	36.3	10/100

GROUNDWATER SAMPLE ANALYSIS RESUL

NOTES:

All concentrations in micrograms per kilogram ($\mu g/kg$) for soil and micrograms per liter ($\mu g/l$) for water

na- not available

J-laboratory footnote concentration estimated

NR 720 RCL- Residual Contaminant Level from WI Administrative Code NR 720.11 from WI Administrative Code NR 141

NR 141 PAL/ES - Preventive Action Level/Enforcement Standard from WI Administrative Code NR 140.10 Table 1.

BOLD results indicate regulatory standard exceedance

The groundwater sample analysis results indicate the groundwater impact is limited to the area around well MW-4, which is located within the area of soil impact. The MW-4 sample results show exceedances of NR 140 Enforcement Standards (ES) for benzene, 1,2,4 trimethylbenzene and naphthalene. Well MW-1 does display a NR 140 Preventive Action Level exceedance of benzene. Downgradient wells MW-2 and MW-3 sample results were all non-detect for the PVOC/NAP and no NR 140 ES/PAL exceedances indicating impact to groundwater is limited to the area around MW-4/soil impact area. Figure 4 in Appendix A displays the estimated area of groundwater impact exceeding WAC NR 140 ES.

4.0 CONCLUSION AND RECOMMENDATIONS

The purpose of the Phase II ESA Addendum was to document the assessment of groundwater conditions associated with the LUST site on the Subject Property. The previous Phase II ESA work defined soil impact exceeding WAC NR 720 RCLs to be limited to around the former pump island/UST location, from near ground surface to approximately 5 to 6 feet BGS. The Phase II ESA Addendum efforts have defined groundwater impact exceeding WAC NR 140 ES to the same area as the soil impact.

It is recommended to perform a limited source reduction by removing and disposing of the most impacted soil on the Subject Property. This area is approximately 30 feet by 30 feet by 5 to 6 feet deep, estimated to be approximately 500 tons of soil. After source reduction, groundwater monitoring should be performed to verify the effectiveness of the removal of impacted soil to groundwater.

5.0 LIMITATIONS

There are limitations inherent to the environmental investigation process. No environmental investigation can wholly eliminate uncertainty regarding actual environmental conditions of the subject study area(s). This is because when dealing with existing conditions that are hidden from view, affected by time, changes in state and other limitations, it would require a substantial level of financial and technical effort in order to remove all of the uncertainty associated with a Subject Property evaluation.

It must be understood that the laboratory results and the conclusions drawn from the results have inherent limitations and uncertainty. The limitations and uncertainty exist when Subject Property samples are collected and laboratory analyzed for the purpose of representing existing Subject Property conditions. Although special care is taken in the field to assure adequate sampling, the laboratory analytical results of those samples are most representative of the exact location of where the samples were collected. The results, however, are used as a basis for demonstrating existing conditions, when in fact the overall actual conditions may be different. Additional limitations are included as Appendix E of this report.

6.0 **REFERENCES**

Phase I Environmental Site Assessment Report prepared by Coleman Engineering Company dated July 2010.

Phase II Environmental Site Assessment Report prepared by Coleman Engineering Company dated March 2011.

F:\Data\10000\10201 - Iron County WI - Thomas Service Phase 1 ESA\Phase II ESA\Phase II Addendum\Phase II ESA Addendum Thomas Site final.doc

APPENDIX A

FIGURES

Figure 1 – Project Location Map Figure 2 – Well Location Map Figure 3 – Groundwater Contour Map Figure 4 – Groundwater Impact Area









[.]

BOBING FOCS VND MEFF BEFORTS

VPPENDIX B

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

Route To: Watershed/Wastewater 🗋 Waste Management 🔲 Remediation/Revelopment 🔽 Other 🗋 _____

																Page		_ of	<u> </u>
Facilit	y/Proje	ct Nar	ne		Ct und in a co		Lic	ens	e/Petr	nit/M	lon	itorin	g Num	iber	Boring	Num	ber /		
Poring	HIGT	<u>161</u>	Nome	Ar.S	26RVICO	last) and Firm	Dat	- D		51			Data T		111	\mathcal{U}			
Pirst N	ame: Ci	ZAI	11anu 4	Last		NER	Dat	с D 9.	. 2 A	; Jiai . 77 .	100 10	, ,	ale L	. 7.A	. 7 A	/ /		A A	NDCI
Firm	Loi	Eng	<u>s</u>	E	NC INEE	RING	m	<u></u> "	<u>a</u> <u>a</u>	- y -	ý ť	y y	<u>m m</u>	a d	y y	y y	#:	>,4	
WIUn	ique W	/ell No	».	DNR	Well ID No.	Well Name	Fin	al S	static	Water	r La	evel	Surfac	e Elev	ation		Boreh	ole Dia	imeter
Local	<u></u>		<u> </u>	timater	t []) or Be	/VIW -				Feet	M	SL	-	Cell	_Feet I	MSL		<u> </u>	iches
State P	lane _				_N,	E		L	at	• 		"	Licear	Old L		N			DR
<u>SE</u>	1/4 of	<u>502</u>	1/4 of	Sectio	m <u>21, T 4</u>	<u>t6 N. R 2 (</u>	s li	on	g	o 	•	" 		F	eet 🗖	<u>s</u>		Feet	
Facilit	y ID		007	0.01	County		County	C C	ode	Civi	IT.	'awn/	City/ o	r Villa	ge				
_03	- 26	-00	201	88	LIZON		<u> </u>		<u></u>		\mathcal{A}	101	<u>1 1 5</u>	-E'A	و ل ـــــ	0			
	al C		lie Lie		0-1100					ļ					2011	rope	rtieş		
	ЧЧ, ЧЧ, ЧЧ, ЧЧ,	tint	E Foc		Sou/Ko	logic Origin For					ļ			ive					5
ber Vper	H S	δ	hi in an		Eacl	1 Major Unit			cs	ġ	1		ED 1	arcss 18th		3.4	icity		u/ men
un v	E S	Blow	Į į						US	ł	쓍	Nel Sig	Ĩ	iten i	je je	ê ê	last	50	D II
			I	12.				••••	-	0.	╇		~	0.,	40		1		
				101															
i					TILL														
					/1														
				ł											[
															[1		
			1			+ c/									[
					JLATE :	- 5				l						Į	1		
	i							ļ					1				1		
					REFUSA	- <u>L</u>								[l l	
				E	OB ±	8,5 FEE	7-												
			1								1		}]]	
													1		1		}		
																	}		
																1			
																			1
																		I.	
	1	l	ļ						Į.					ł				l	
		ł																1	
									1										
										1						1		l	l
		1		1					1					1	1	1	1		
																			ľ
				1													1		
I here	by cer	tify th	at the	infor	mation on this	s form is true and	correct	lo t	he be	st of		v kno	wled		- H			•	
Signa	ure 、	" /ĵ		1		1	Fit	m											
-	<u> </u>	y Le		<u></u>	1	1	C	Ð	E	<u>m.</u>	٨	N	En	1/21	ME	-6-6	11	6	

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.

Siste of Wisconsin Department of Neural Resources <u>Route to</u> ; Waters	hed/Wastewater	Waste Management	MONITORING WELL CONSTRUCTION Form 4400-113A Rev. 7-98
Facility/Project Name II.ocal	Grid Location of Well		Well Name
Ennon Tilans & LOTD USC 15	ft. HN		Mil
Facility License, Permit or Monitoring No. Local	Grid Origin 🗇 (estimated	d:) or Well Location	Wis. Unique Well No. DNR Well ID No.
[.at	"Lo	ng or	
Facility ID 03- 2.6-00078% St. Ph	ano ft. N,	ft. E. S/C/N	Date Well Installed 912012011
Section Section	on Location of Waste/Source		m m d d v v v v
Non Se	_1/4 of 36 1/4 of Sec. Z	<u>7. t. 46 n. r. 2</u>	RALLE Remaining and Firm
Distance from Worte/ Enf Stdg	tion of Well Relative to Was	te/Source Gov. Lot Number	LAND KLIDDER
Sourceft. Apply \Box d	Downgradient n D N	lot Known	COLEMAN ENDINEERING
A. Protective pipe, top elevation	_ ft	L 1. Cap and lock?	197 Yes 🔲 No
B. Well casing, top elevation _/_3_3	<u>г</u> п. меь — — — — — — — — — — — — — — — — — — —	2. Protective cover	pipe:
1	7	a. Histore dialetere	···m.
C. Land surface elevation	"_ R. MSL	O, Longui:	10
D. Surface seal, bottom 92,47 ft. MSL or	ft	National	
12 HSC'S classification of soil near screen:		d Additional an	
		If you describ	
SM 2 SC D MLD MHD CL D			Destusite E 3/1
Bedrock 3		3. Surface scal:	
13. Sieve analysis performed? 🔲 Yes	B No		
14 Drilling method used: Rotary		4. Material between	well casing and protective pipe:
Hollow Stem Auger			Bentonite F 30
Other		×	Other I
		5 Annular anaga g	al. a. Granular/Chinned Bentonite al. 3.3
15. Drilling fluid used: Water 0 0 2 Air I	🗆 01 🛛 👹	J. Thefast	mud wainht Bentonite-sand slurry [] 35
Drilling Mud 🗆 0 3 None	图 99 👹	D,Uosygal	mud weight Bentonite slower 4 31
		Benton	nite Bentonite-cement grout $\Box \leq 0$
16. Drilling additives used?	BE No	Ft Ft	³ volume added for any of the above
		t How installed	f: Tremie 🗆 01
Describe			Tremie pumped 🔲 0.2
17. Source of water (attach analysis, if required):		3	Gravity 🗗 08
		б. Bentonite scal:	a. Bentonite granules 🔲 33
		🞇 b, 🗆 1/4 in. 🜗	3/8 in. 1/2 in. Bentonite chips 🗗 32
E. Bentonite seal, topft. MSL or _	^{fl} 📈	C	Other 🛛 🎬
E Eine wand ton A/A ft MSI or		7. Fine sand materi	al: Manufacturer, product name & mesh size
P. File said, top _ 12 = _ 10 MSE or _			Δ 👘
G. Filter pack, top 97.62-ft. MSL or	_ 3 A \	h. Volume adde	d N/A 03
		. 8. Filter pack mate	rial: Manufacturer, product name & mesh size
H. Screen joint, top97.62 ft. MR or	a	BADGER	20/40
		b. Volume adde	:dft ³
I. Well bottom 2 2 ft MeL or	Kt/ ())	9. Well casing:	Flush threaded PVC schedule 40 📓 2.3
47 17			Flush threaded PVC schedule 80 🔲 24
J. Filter pack, bottom ft. MSL or	0_)_ft.		Other 🛛 🧱
K Theorem & MSI on	8,5 A.	10. Screen material	<i>FUC</i>
		a. Screen type:	Factory cut 1
Bankala diamatan 8		a,	
L. porchole, diameter _ Y _ M.			
V OD well easing 7. 1		D. Manufacturer	0.01 in
mi oʻibi mon casnik —— — — — IR,		d Slotted lengt	h: Sf.
N ID well casing		11. Backfill materia	I (below filter pack): None 🗍 1 4
To any non-casing his		SA	
I hereby certify that the information on this form	is true and correct to the be	st of my knowledge.	
Signaturo 1	Firm		
- Alm I munt	COLEMA	N ENGINEER	ZING

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Advo. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

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

Route to: Watershed/Wastewater	Waste Management
Remediation/Redevelopment	Other
Facility/Project Name County Name	Well Name
FURMER 14001.15 SERVICE (RO	Mat
Facility License, Permit or Monitoring Number County Code 2.6	Wis. Unique Well Number DNR Well ID Number
 Can this well be purged dry? Well development method 	11. Depth to Water (from top of $\frac{7}{8}$, $\frac{8}{6}$, $\frac{18}{7}$, $\frac{18}{6}$
surged with bailer and bailed 100 4 1 surged with bailer and pumped 6 1 surged with block and bailed 4 2 surged with block and pumped 6 2 surged with block, bailed and pumped 7 0 compressed air 2 0 bailed only 1 0	well casing) Date $b = \frac{\frac{9}{2}}{\frac{2}{d}} \frac{\frac{2}{2}}{\frac{2}{d}} \frac{\frac{9}{2}}{\frac{2}{d}} \frac{\frac{2}{2}}{\frac{2}{d}} \frac$
pumped slowly [] 50 Other []	bottom
3. Time spent developing well <u>70 min</u> .	$\frac{(\text{Describe})}{\mathcal{L} \in \mathcal{O}} \qquad \frac{(\text{Describe})}{\mathcal{L}^2 + \mathcal{L} + \mathcal{L}}$
4. Depth of well (from top of well casisng)ft.	V. TURBID TURBID
 5. Inside diameter of well in. 6. Volume of water in filter pack and well gal. 7. Volume of water removed from well gal. 8. Volume of water added (if any) MA gal. 9. Source of water added MA 	Fill in if drilling fluids were used and well is at solid waste facility: 14. Total suspended mg/1 mg/1 solids 15. CODA mg/1 mg/1
10. Analysis performed on water added? (If yes, attach results) 17. Additional comments on development:	First Name: JoHN Last Name: HUNY First Name: JoHN Last Name: HUNY Firm: Cole MAN ENGINEERING
PURGED DRY SEVERAL TIM	,€ <u></u> ,

Name and Address of Facility Contact/Owner/Responsible Party First Last Name: <u>Tom Name: BERLANAN</u>	I hereby certify that the above information is true and correct to the best of my knowledge.
Facility/Fim: 120N COUNTY Wisconsin	Signature:
Street: (ACON ITE)	
City/State/Zip: HURLEY WI 54534	Firm: CREMENCERING

NOTE: See instructions for more information including a list of county codes and well type codes.

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

Route To:	Watershed/Wastewater		Wa	ste Ma	nageme	ent 🗖
	Remediation/Revelopment	nt [K	Other		

											_	_		Page		_ of	
Facilit	y/Proje	ct Nar	ņe			***	Licen	se/Peri	nit/Mo	nitorit	ig Nun	nber	Borin	g Num	ber		
Boring	MET Drille	<u>र [/न</u> त By:	Name	A-5 700	VICE	ast) and Firm	Date 1	Jrillin	s Starte		Date	Drilling	///.			n Meil	hod
First N	ame: C	ZA L	ム ム	Last Name: p	215101		9	120	120	11	9	120	20	11	, / ,		
Firm:	Loi	EM	<u>~~</u>	1 ENC	1NEE	RING	ត ត	" d d	y y	y y	mm	व व	y y	УУ УУ	4	7,4	-
WI Un	ique V	Veli No	0.	DNR Well I	D No.	Well Name $M(1 - 2)$	Final	Static	Water Feet h	Level	Surfac	c Elev	ation Feet	MSI	Boreh	ole Dia 7	meter
Local	Grid Ö	rigin		timated: D)	or Bo	ring Location			0 1	1.512	Local	Grid L	ocatio	ส		2_11	icnes
State P	lanc_	-		N		E	_ 1	.at	<u> </u>					I N			ΒE
SC	1/4 of	Su	1/4 of	Section Z	<u>1, т 4</u>	<u>f6 N, R 2 0</u>		ng	ICS-31	Toum	Civil	F		<u>S</u>		Feet	
0 ²	5-26	- 00	007	88 IIZ	<u>on</u>			6	/	Nor		-EA	ور م				
Sam	ple		ince)				_		1	1			Soil	Prope	rties		
	1. 8 1 (in	unts	Fect		Soil/Ro	ck Description						2					9
ber	th A vere	ອິ	hin Boog	1	und Oco Each	Major Unit		CS	Ę.	E	E.	gth	a te		iti y	_	/ ment
L pu		No	Dept Below					Sn	de g	Nell Bell	Ì	lincin	Si Qi	e e	Just inde	50	
	- 4	щ		12			<u> </u>	<u> </u>				00	~~~	<u> ==</u>			
									1								
				TILL										1			
								1									
			{	5	- 0	+ 6		ļ		1	1	1		1			
				Jean	- 6	- F						l		1			
										1					1		
												}			1		
				REFU	SAL						l	ł					
				EOR	5 ± 1	9	and defining in the second state of the second state of the second state of the second state of the second state	-							1		
													ļ	{			
															1		
			L												l		
													l I				
			1					1		1			1		1		
	l	Į	Į												ļ	1	1
										1					1		
										1							
		l	l						ł					l	Į		
												1	Í		1		
																ŀ	
	<u> </u>	<u> </u>		l		form to tore 1		<u> </u>					<u> </u>	1	J	I	L
1 nere	oy cer	այ ա 	at the	intermation	on this	Torm is true and (IFirm	ine be	st or n	iy kno	wied	ge.					
orginal	1	al.	-n-		حسر	1	1/0				FA	1/ -1	A.16			1	

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 Wisconsia Department of Natural Resources <u>Route to:</u>	Watershod/Wastewater	Waste Management	MONITORING WELL CONSTRUCTION Form 4400-113A Roy. 7-98
Facility/Project Name	Local Grid Location of Well		Weil Name
FORMER THOMAS SERVICE	r. 🗄	Nft. 🖸	W. MW-L
Facility License, Permit or Monitoring No.	Local Grid Origin 🔲 (estimat	ed: 🗆) or Well Location	Wis. Unique Well No. DNR Well ID No.
	Lat, L	ong	or
03-26-000788	St. Plane ft. N,	ft. E. S/	C/N Date well installed 912012011
Type of Well	Section Location of Waste/Sour		E. Well Installed By: Name (first, last) and Firm
Well Code/	<u>56 1/4 of 500 1/4 of Sec.</u>	<u>-7. T. 46 N. R. 6</u>	W CRALL REIDNER
Distance from Waste/ Enf. Stds.	u Upgradient s	Sidegradient	
Sourceft. Apply	d 🗆 Downgradient n 🗆	Not Known	<u> </u>
A. Protective pipe, top elevation	ft. MSL	1. Cap and lock	? BY Yes 🗌 No
B. Well casing, top elevation	8,99 n. Mar	2. Protective co	ver pipe:
C. I and surface elevation QC	7.41 or homen	b. Length:	
		c. Material:	Steel 😰 04
D. Surface seal, bottom _ 1 2 : 12 ft. fd	1. or II.		Other 🗆 🎬
12. USCS classification of soil near scree		d. Additiona	1 protection?
		If yes, de:	icribe:
Bedrock		3, Surface seals	Bentonite 🔲 30
13. Sieve analysis performed?	Yes 😰 No		
14. Drilling method used: Ro	tary 🗖 50	4. Material bet	ween well casing and protective pipe:
Hollow Stem A	uger 🖉 4 1		Bentonite 🖬 30
C	ther 🗆 🎬	×	Other 🛛 🎆
15 Delling fluid used: Water Fl 0.2		5. Annular spa	ce seal: a. Granular/Chipped Bentonite @ 33
Drilling Mud D 0 3	None B 99	bLbs/	gal mud weight Bentonite-sand slurry [] 35
		$c_{\rm c}$ <u>Los</u> /	gai mud weight Benionite slurry \square 51 entonite
16. Drilling additives used?	Yes D No	G	_Ft ³ volume added for any of the above
Describe		f. How inst	alled: Tremie 🗆 01
17 Source of water (attach analysis, if rea	wired)		Tremie pumped 🔲 02
17. Doutou or white (anabit analysis) if ite			Gravity 🔟 08
		b. Bentonite se	al: a. Benuonite granules \square 33
E. Bantonite seal, top _ <u>98, 41</u> ft. MS	31 orft.	6. — 14/4 m	Other 🗆 💥
F. Fine sand, top $\mathcal{N}\mathcal{A}_{-}$ ft. MS	šL or ft.	7. Fine sand m	sterial: Manufacturer, product name & mesh size
G Filter pack top 94,41 ft MS	sLor 3 ft	a	
		8. Filter pack r	naterial: Manufacturer, product name & mesh size
H. Screen joint, top 96.44 ft. MS	sLor3ft.	BADGE	2 20/40
		b. Volume	added ft ³
I. Well boutom $\underline{77.41}$ ft Air	Lorn	9. Well casing	Flush threaded PVC schedule 40 🖾 2.3
J. Filter pack, bottom _ 20,41 fr. M	SL or _ 9ft.		Flush threaded PVC schedule 80 24
K Barrhala harrow 90,41 ft M	stor 9 ft	10. Screen mate	rial: $\frac{PVC}{P}$
K. Borchole, boltom		a. Screen y	/pc: Factory cut [2] I]
L. Borchole, diameter _ Z in,			
M. O.D. well easing in.		b. Manufact c. Slot size	$0. \frac{o!}{c!}$ in.
N ID well coving		L Backfill and	engun:
In the well taking M.			$\Delta \wedge \Delta$ Other \Box 300
I hereby certify that the information on thi	s form is true and correct to the b	est of my knowledge.	
Signature	Firm		
Ant un	T COLEM	AN CNGINE	EXING

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 292, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

:

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

Route to: Watershed/Wastewater	Wasie Management
Remediation/Redevelopment [72]-	Other
Facility/Project Name County Name FURMER THOMAS SERVICE (120	Well Name $M \omega - 2$
Facility License, Permit or Monitoring Number County Code	Wis. Unique Well Number DNR Well ID Number
1. Can this well be purged dry? Image: Yes Image: No 2. Well development method surged with bailer and bailed Image: Yes Image: No 2. Well development method surged with bailer and pumped Image: 61 Image: 70 surged with block and pumped Image: 62 Image: 70 Image: 70 surged with block, bailed and pumped Image: 70 Image: 70 Image: 70 bailed only Image: 10 Image: 70 Image: 70 Image: 70 pumped only Image: 70 Image: 70 Image: 70 Image: 70 compressed air Image: 20 Image: 70 Image: 70 Image: 70 pumped only Image: 70 Image: 70 Image: 70 Image: 70 Image: 70 compressed air Image: 70 Image: 70 Image: 70 Image: 70 Image: 70 pumped only Image: 70 Image: 70 Image: 70 Image: 70 Image: 70 pumped only Image: 70 Image: 70 Image: 70 Image: 70 Image: 70 pumped only Image: 70 Image: 70 Image: 70 Image: 70 Image: 70 pu	11. Depth to Water (from top of well casing) $ \begin{array}{ccccccccccccccccccccccccccccccccccc$
Other \Box 3. Time spent developing well \underline{ZO} min. 4. Depth of well (from top of well casisng) \underline{E} , \underline{ft} . 5. Inside diameter of well \underline{Z} , \underline{c} in.	13. Water clarity Clear \Box 10 Clear \Box 20 Turbid \Box 15 Turbid \Box 25 (Describe) (Describe) <u>ZED</u> <u>PINE</u> <u>V. TURBID</u> <u>TURBID</u>
 6. Volume of water in filter pack and well casing 7. Volume of water removed from well 8. Volume of water added (if any) MA gal. 	Fill in if drilling fluids were used and well is at solid waste facility: 14. Total suspended mg/l mg/l solids
9. Source of water addedA	15. COD <u>A</u> mg/lmg/l
10. Analysis performed on water added? (If yes, attach results)	First Name: JoHN Last Name: HUNT First: Cole MIAN ENGLINE TRING
17. Additional comments on development:	
PURGED DRY SEVERAL TIM	€S.

Name and Address of Facility Contact/Owner/Responsible Party First Last Name: Tom Name: BEELMAN	I hereby certify that the above information is true and correct to the best of my knowledge.
Facility/Fim: 180N COUNTY WISCONSIN Street: 300 TACONITE ST	Signature:
City/State/Zip: HURLEY WI 54534	Firm: CREMEN ENGINEERING

NOTE: See instructions for more information including a list of county codes and well type codes.

Í i

SOIL BORING LOG INFORMATION Form 4400-122

Rev. 7-98

Watershed/Wastewater 🔲 Waste Management 🔲 Route To: Remediation/Revelopment K Other

													<u></u>	Page		_ of	
Facilit	y/Proje	Ct Nar	nc I denta	4	Conner	M7	Licer	ise/Pen	niyMo	nitorin	ig Nun	iber	Boring M	z Numi			
Boring	Drille	d By:	Name	of cr	ew chief (first.	last) and Firm	Date	Drillin	Starte	d	Date I	Drilling	Com	oleted	Drillin	g Meil	nod
First N	Iome: C	CAL	4	Last	Name REIDI	VER	9	120	120	11	9	,20	20	11	11	< 1	
Firm:	Low	<u>em</u>	<u> </u>	E	NCINEE	RING	n m	<u>d</u> d	́УУ	у́у	mm	<u>d</u> d'	ÿ ÿ	УУ	4-4-	7,4	
WIUr	nique V	Cell No	D.	DNK	Well ID No.	M(1)-3	Final	Stauc	Water I Feet M	Level (SI	Surfac	e Elev	Ecct 1	visi.	Boreho	nle Dii 7 t.	imeter
Local	Grid O	rigin		timateo	d: 🗆) or Bo	ring Location			0 1	11	Local	Grid L	ocatio	n	<u> </u>	<u> </u>	iciids
State F	lane_				_N	E		Lat	<u> </u>			_		N			ΠE
<u>SC</u>	1/4 of	Su	21/4 of	Sectio	m <u>Z-1</u> , T_ <u>-</u>	<u>tle N, R_Z_</u> C		ng	Civil	Town	Cipilo	F		<u>s</u>		Feel	
0	5-26	- 00	007	88	TRON		2	6		10 WW			ge gemen				
Sarr	ple		Ĥ	<u> </u>				T	Í		<u> </u>		Soil	Prope	rties		
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth în Foet (Below ground surfs		Soil/Ro And G c o Each	ck Description logic Origin For 1 Major Unit		USCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				BL	IND D	RILL						1					
								l						l			
					Turk								1				1
					//0								1				
											Į	l					Į
	1												l I				
				.	SLATE	@ ± 6				ł					1		
													1		ł	ł	
	۱.													}			ļ
					KEFUSA	4-											
	1			E	OB \$ 8	,4'			ł								
	1								1	1]		1		
									1				1				
			1														[
									1	1	1				1		1
	1										1	1		1	1	1	1
				1											1		I
				1								1		}	1		ŀ
	1	1		1										1	1		
									1						1		
															1		
I here	t	1 tifv ti	1	infor	mation on this	form is true and c	orrent to	the be	st of n	J	wied		1	.t	_L	L	1
Signa	ture 、	7)		1			Fim			.,	- 17 LUAL	<u>.</u>					••••••••••••••••••••••••••••••••••••••
-	\Box	y li		<u>{</u>	1	1	_Ce	1E	MΔ	<u>~~</u>	Er	JLOI	ME	-E-E	LA	10	

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 Route to: Watershed/Wastewater Wastewater Kanagement Form 4400-113A Rev. 7-98
Remcolation/Redevelopment[2] Other [_] Weil Name
French Triang & Gord Hills 15 R. B. R. B. MIL - 3
Facility License, Permit or Monitoring No. Local Grid Origin (estimated:) or Well Location Wis. Unique Well No. DNR Well ID No.
Facility ID Cong. Cong.
Type of Well Installed By: Name (first, last) and Fin
Well Code / DC 1/4 of Sec. 27, T. 46 N, R. 20W CRALG REIDNER
Distance from Waste/ Enf. Stds. u [] Ungradient s [] Sidegradient
Source Apply [] d [] Downeradient n [] Not Known [] [COUSMAN ENGINEERIN
A. Protective pipe, top elevation ft. MSL I. Cap and lock?
B. Well casing, top elevation - 22.71 ft. MSL a. Inside diameter:
C. Land surface elevation $100/0/$ ft. Male b. Longth: ft.
99,0 (a visit or / the state of a visit of Material: Steel [2] 04
12. USCS classification of soil near screen:
SP L GM L GC L GW L SW L SP L L II Yes, describe:
Bedrock B
13 Sieve analysis nerformed?
14. Drilling method used: Rotary LI 50 100 100 4. Material between well casing and protective pipe:
15. Drilling fluid used: Water 0 0 2 Air 0 0 1
Drilling Mud [] 0.3 None [] 9.9
c_{1} cos/gat that weight Bentonite.comment or u_{1}
16. Drilling additives used?
$f = How installed; Tremit \Box 0$
Describe Tremie pumped 🗆 02
17. Source of water (attach analysis, if required):
6. Bentonite scal: a. Bentonite granules 🗆 3 3
b. $\Box 1/4$ in. $\Box 3/8$ in. $\Box 1/2$ in. Bentonite chips $\Box 32$
E. Bentonite seal, top -2^{-2} ft. MSL or -1^{-2} ft.
F. Fine sand, topft. MSL orft.
$g_{6/6}$ ft MSL or $3/4$ ft
O, Philot pack, top II =
H. Screen joint, ton 96,6 ft. MSL or 3,4 ft. Bir Bir Care 20/40
h Volume added ft ³
I. Well bottom 91.6 ft. MSL or 8. ft. 19. Well casing: Flush threaded PVC schedule 40 1 2:
Flush threaded PVC schedule 80 [] 24
J. Filter pack, bottom ft. MSL or ft. Other □
K Burtish have 9/16 to 1818 on 8.4 ft
K. Borchole, bottom Factory cut 12 11
L Rozebola dismater 8 in
b. Manufactorer
M. O.D. well casing in.
d. Slotted length:
N. I.D. well casing in. 11. Backfill material (below filter pack): None Ц 14 フィルム Other Ц 20
I hereby certify that the information on this form is true and correct to the best of my knowledge.
Signature 1 Firm
Alm Hunt COLEMAN ENGINEERING

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a 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 these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

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

Route to: Watershed/Wastewater	Waste Management
Remediation/Redevelopment	- Other
Facility/Project Name FURMER THOMAS SERVICE (RC	Well Name MW-3
Facility License, Permit or Monitoring Number County Code Z_L Z_L	Wis. Unique Well Number DNR Well ID Number
 Can this well be purged dry? Well development method surged with bailer and bailed surged with bailer and pumped 6 1 	11. Depth to Water (from top of well casing) $\frac{\text{Before Development After Development}}{a. \underline{5.21} \text{ ft. } \underline{)}\underline{\mathcal{R}}\underline{\mathcal{Y}} = \text{ ft.}$
surged with block and bailed 1 42 surged with block, and pumped 1 62 surged with block, bailed and pumped 70 compressed air 20 bailed only 10 pumped only 51 pumped slowly 50	Date $\begin{array}{c} D_{ate} & \begin{array}{c} 0 \\ m \\ m \\ m \\ d \\ d \\ y \\ y$
 3. Time spent developing well min. 4. Depth of well (from top of well casisng) ft. 5. Inside diameter of well in. 6. Volume of water in filter pack and well gal. 	Turbid III- 1.5 Turbid III- 2.5 (Describe) (Describe) <u>RED</u> <u>Pinnee</u> <u>Vi Turbid</u> <u>Turbid</u>
7. Volume of water removed from well $\frac{f}{f}$ gal. 8. Volume of water added (if any) $\frac{NA}{gal}$ gal.	Fill in if drilling fluids were used and well is at solid waste facility: 14. Total suspended mg/l mg/l solids
9. Source of water added	15. COD <u>A</u> mg/l mg/l
10. Analysis performed on water added?	First Name: John Last Name: Hun7 First: Court MAN ENGINEERING
17. Additional comments on development: PURGED DRY SEVERAL TIM	ē ج

Name and Address of Facility Contact/Owner/Responsible Party First Last Last Name: BERLAN	I hereby certify that the above information is true and correct to the best of my knowledge.
Facility/Firm: IRON COUNTY Wisconsin	Signature:
Street: <u>700 ACONITE SI</u>	Print Name: Dotto Luny
City/State/Zip: <u>HURLEY WI 54534</u>	Firm: CREMAN CAGINEERING

NOTE: See instructions for more information including a list of county codes and well type codes.

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

Route To:

Thereby certify that the information on this form is true and correct to the best of my knowledge. Identify that the information on this form is true and correct to the best of my knowledge.																Page		_ of	1
POLENCY HEPPLANS Deschift (Fish, kal) and Firmt Date Drilling Completed Drilling Method Print Drille Strated Lan Nome Ref 10 >> 472 Im in if a d if	Facility/Project Name					License/Permit/Monitoring Number													
Produce CRAIC Lankmer R.gr Doward η $\frac{2}{4} \sqrt{3} \sqrt{3} \sqrt{3} \sqrt{3}$ $\frac{1}{4} \sqrt{3} \sqrt{3} \sqrt{3} \sqrt{3}$ $\frac{1}{4} \sqrt{3} \sqrt{3} \sqrt{3} \sqrt{3} \sqrt{3}$ $\frac{1}{4} \sqrt{3} \sqrt{3} \sqrt{3} \sqrt{3} \sqrt{3}$ $\frac{1}{4} \sqrt{3} \sqrt{3} \sqrt{3} \sqrt{3}$ $\frac{1}{4} \sqrt{3} \sqrt{3} \sqrt{3} \sqrt{3} \sqrt{3} \sqrt{3}$ $\frac{1}{4} \sqrt{3} \sqrt{3} \sqrt{3} \sqrt{3} \sqrt{3} \sqrt{3}$ $\frac{1}{4} $	Boring Drilled By: Name of crew chief (first, last) and Firm						Date Drilling Started Date Drilling Completed Drilling Method												
Prime Concernance Concernance Concernance <thconcernance< th=""> Concernance <th< td=""><td colspan="6">First Name: CiCALA Last Name: RIEIDNET2</td><td>9</td><td>120</td><td>120</td><td>11</td><td>9</td><td>,20</td><td>20</td><td>11</td><td>,/,</td><td>< 1</td><td></td></th<></thconcernance<>	First Name: CiCALA Last Name: RIEIDNET2						9	120	120	11	9	,20	20	11	,/,	< 1			
We under weit VRG. Price Note: Price All Price Borrison Dimeter Section Dimeter Section Dimeter Section Dimeter Section Dimeter Section Dimeter Section Dimeter Dimeter Section Dimeter Dimet	Firm:	Low	EM	A-1-1		NLINE	ER.ING		n m	dd	y y	y y	mm	<u>d</u> d	уу	уу	++ .	7 A	
Line Ordit Chight II testinated: The or Boring Location II test phane Lat Image: Control ordit Location II	WIUn	uque v	/ell 140	».	DNK	Well ID No.	MIL - U	ľ	'inai i	Static	Water Feet N	Level ASL	Suriac	c Elev	Feet 1	MSL.	Boreh		uneter
State Plane N. B Lat Image: State Plane N Image: State Plane N Image: State Plane N Image: State Plane Peet Image: Peet Image: State Plane Peet Image: Peet Image: State Plane Peet Image: Peet Image: Peet Image: Peet Image: Peet Image: Peet Image: Plane Peet Image: Plane Peet Image: Plane Peet Image: Pee	Local	Grid O	rigin		timatec	l: 🗆) or	Boring Location				0	11	Local	Grid L	ocatio	n		· · · · ·	ienes
Sec 14 of 2020 Ha of Section 2:1, 1, 1 (4, N, R, Z, C Linding Linding <thlinding< th=""> Linding<td>State P</td><td>lanc</td><td></td><td></td><td></td><td>N,</td><td>E</td><td></td><td>l. ^L</td><td>ai</td><td>0,</td><td>18</td><td></td><td>-</td><td></td><td>N</td><td></td><td></td><td>DE</td></thlinding<>	State P	lanc				N,	E		l. ^L	ai	0,	18		-		N			DE
O 3-26 - DOD 7.85 IPON Sample Sout/Rock Description Sout/Rock Description And Ceologic Origin For Back Major Unit Sout/Rock Description And Ceologic Origin For Back Major Unit Sout/Rock Description Tile Tile Tile Sout/Rock Description Tile Sout/Rock Description Tile Sout/Rock Sout/Rock Sout/Rock Sout/Rock Sout/Rock Sout/Rock Sout/Rock Sout/Rock Back Major Data Colspan="2">Sout/Rock Data <t< td=""><td>Facilit</td><td><u>1/4 of </u> v ID</td><td>50</td><td>1/4 of</td><td>Sectio</td><td>m <u>41, T</u></td><td><u>-76 N. R_Z</u></td><td>C.</td><td>I Lor</td><td>lg</td><td>Civil</td><td>Town/</td><td>Cirt/ o</td><td>F</td><td>eet 🗆</td><td><u> </u></td><td></td><td>Feet</td><td></td></t<>	Facilit	<u>1/4 of </u> v ID	50	1/4 of	Sectio	m <u>41, T</u>	<u>-76 N. R_Z</u>	C.	I Lor	lg	Civil	Town/	Cirt/ o	F	eet 🗆	<u> </u>		Feet	
$\frac{Sample}{u_{0}}$ $\frac{Sample}{u_{0}}$ $\frac{Soil/Rock Description}{And Ceologic Origin For Each Major Unit}$ $\frac{Soil/Rock Description}{Bach Major Unit}$ $\frac{Soil/Rock Description}{Soil/Rock Description}$ $\frac{Soil/Rock Description}{Soil/Rock Descripti$	03	-26	- 00	007	88	IRON	L	2		6	/	Nor	2 7 10	-EA	و د				
$\frac{\operatorname{solut}_{\operatorname{reg}}}{\operatorname{solut}_{\operatorname{reg}}} = \frac{\operatorname{solut}_{\operatorname{reg}}}{\operatorname{solut}_{\operatorname{reg}}} = \frac{\operatorname{solut}_{\operatorname{reg}}}{solut$	Sam	ple		(j						Í					Soil	Prope	rties		
$\frac{1}{100000} \frac{1}{10000000000000000000000000000000000$		4 E	ta sta	i s		Soil/	Rock Description				1			ÿ					
$\frac{1}{12} \frac{1}{12} \frac$	r S	îh Al cred	ð	in f		And C Ea	cologic Origin For the Major Unit			S	.9	Ę	e	thesi	at the	-	żiy		- Tent
23 - 2 A B P $33 - 2$ A C C A A A A A B B D D D D A C C A	T P	Sus v	low	cpth						SC	de a	Vell	NG.		onte		lastà ndex	200	
Image: Sum S Define $Ticc$ $Ticc$ $Scare @ ± 5.5$ $ReFusac$ $EOB ± 8.5$ Image: Scare of the second sec	2.8	R	<u> </u>	<u>р</u> е				,		<u> </u>	6.2	<u> ~ 0</u>	<u> </u>	00	20		2.11	<u>д</u>	≈ Q
T_{1LL} $S_{LATE} \in \pm 5.5$ R_{EFusal} $EOB \pm 8.5$ Image: the information on this form is true and correct to the best of my knowledge.					150		DRILL												
$J_{LATE} @ ± 5.5$ R_{CFWSAL} $EOB ± 8.5$ Image: Second state information on this form is true and correct to the best of my knowledge.					7														
$S_{LATE} \in ± 5.5$ $ReFusal EOB = 28.5 Image: the information on this form is true and correct to the best of my knowledge. $																Į			
$\begin{array}{ $												ļ	Į						
REFUSAL EOB = 8.1° I hereby certify that the information on this form is true and correct to the best of my knowledge.					5		0 ± 5 5							1	Į				
REFUSAL EOB 38.1 I hereby certify that the information on this form is true and correct to the best of my knowledge.				ļ	/ /											1			
Refuse EOB 38.1 Interest certify that the information on this form is true and correct to the best of my knowledge.					[
REFUSAL EOB ± 8.1 Image: Second state information on this form is true and correct to the best of my knowledge.													1		{	{			
EOE 3.1 EOE 3.1 Interest certify that the information on this form is true and correct to the best of my knowledge,					1	REFUSA	LL	•									1		
I hereby certify that the information on this form is true and correct to the best of my knowledge.					Ē	OB	18.1		···	·		İ.	1				1		
I hereby certify that the information on this form is true and correct to the best of my knowledge.													1	Į			Į		
I hereby certify that the information on this form is true and correct to the best of my knowledge.				l					•					Í	[1		
I hereby certify that the information on this form is true and correct to the best of my knowledge.					1								1		1				
I hereby certify that the information on this form is true and correct to the best of my knowledge.																	1		
I hereby certify that the information on this form is true and correct to the best of my knowledge.					1							1							
I hereby certify that the information on this form is true and correct to the best of my knowledge.												1							
I hereby certify that the information on this form is true and correct to the best of my knowledge.		1			ļ										ļ				
I hereby certify that the information on this form is true and correct to the best of my knowledge.														ł					1
I hereby certify that the information on this form is true and correct to the best of my knowledge.											ļ		ļ						
I hereby certify that the information on this form is true and correct to the best of my knowledge.					1									1	1		1		
I hereby certify that the information on this form is true and correct to the best of my knowledge.																	1		
I hereby certify that the information on this form is true and correct to the best of my knowledge.			ł														1		
I hereby certify that the information on this form is true and correct to the best of my knowledge.		1		<u> </u>	<u> </u>							Ļ	<u> </u>			<u> </u>		<u> </u>	I
Cinnoluza / L	I here	by cer	tify th	nat the	infor	mation on t	his form is true and	correc	ct to (the be	st of r	ny kno	wled	ze.					
Adm H	orgina	-	el.	<u> </u>	4		-7		Co	E	MA	LA.	Er	1601	NE	EF	<u>11</u>	10	•

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.

Siate of Wisconsin Department of Netural Resources <u>Route to:</u> V	Watershed/Wastewater	Waste Management	MONITORING WELL CONSTRUCTION Form 4400-113A Roy. 7-98
Facility/Project Name	Local Grid Location of Well		Well Name
FORMER THOMAS SERVICE	R H	ßſ. ∐₩	$M \omega - 4$
Facility License, Permit or Monitoring No.	Local Grid Origin 🔲 (estimat	ed:) or Well Location	Wis. Unique Well No. DNR Well ID No.
	Lat'L	ong,	or
Facility ID	St. Plane ft. N,	ft. E. S/C	/N Date Well Installed 9, 2012011
03-20-000100	Section Location of Waste/Sour	çe	mm d d v v v v
Type of Well	55 1/4 of 3W 1/4 of Sec. 7	27.T. 46 N.R. 2	Well installed By: Name (first, last) and Firm
	Location of Well Relative to Wa	stc/Source Gov. Lot Numbe	CRALL REYDNER
Distance from Waster Ent. Stus.	u 🗆 Upgradient s 🗆	Sidegradient	COLEMAN ENVIONEEDING
Source It, Apply	d Downgradient n	Not Known	
A. Protective pipe, top elevation	nt MSL	-2 Propertive con	le res 📋 140
B. Well casing, top elevation $-\frac{9}{2}$	P. 86 ft. MSL	Le Protective tov	er pipe: / Ø in
01.1.0.1.0.	0.17 6 100	h Length	
C. Land surface elevation	IL WISL	c. Material:	Steel 96 04
D. Surface seal, bottom _ 19113 ft. MS	SL or ft.	X	Other 🛛
12. USCS classification of soil near screen	n:	d. Additional	protection?
GP GM GM GC GW G S	sw 🗆 sp 🗆 🔪 🚺	If yes, desc	ribe;
SM BE SC D MLD MHD C			Bentonite 🗖 30
Bedrock [2]		5, Surface scal:	Concrete 🗰 01
13. Sieve analysis performed?	Yes De No	X	Other 🛛 🎆
14. Drilling method used: Ro	tary 🗆 50	 4. Material betw 	cen well casing and protective pipe:
Hollow Stem Au	ager 🖉 4 1		Bentonite 🔳 30
o	ther Li 🎆		Other 🗆 🎆
16 Delline Stuid weed. Water D 0.2		5. Annular space	scal: a. Granular/Chipped Bentonite 4 3 3
Drilling Mud Used: Water LI 0 2		bLbs/g	al mud weight Bentonite-send slurry 35
		cLbs/g	al mud weight Bentonite slurry 2 31
16. Drilling additives used?	Yes 🖬 No	d % Ben	tonite Bentonite-cement grout LI 50
		e	PI VOIUME added for any of the above
Describe	🔣	f. How instal	
17. Source of water (attach analysis, if requ	uired):		
		б. Bentonite seal	a. Bentomite granules \square 33
	X	b. □1/4 in.	\Box 3/8 in. \Box 1/2 in. Bentonite chins \Box 3.2
E. Bentonite seal, top? . /3 ft. MS	Lorfta	0 / c	Other 🛙 🗱
F. Fine sand, top $- N_4$ ft. MS	Lorft.	7. Fine sand mat	enal: Manufacturer, product name & mesh size
0/ 0/		aN	<u>A</u>
G. Filter pack, top $\underline{\gamma} \underline{\ell} \underline{1} \underline{1} \underline{\ell}$ ft. MS	$L \text{ or } \underline{Z} \underline{L} \underline{L} \underline{R}$	b. Volume ad	ded ft. ³
96.91	x 7 / a 1	8. Filter pack ma	aterial: Manufacturer, product name & mesh size
H. Screen joint, top $\underline{-} \underline{-} \underline{\psi} \underline{-} \underline{U}_{\underline{-}} \underline{U}_{\underline{-}}$ II. MS	$L \text{ or } = Z \angle L = 11$	A DADGER	20/40
7 Wall hower 91,9/ ft MS	a sila.	b. Volume ad	Ided ft?
$1. \text{ Well bottom} = \frac{1}{2}		9. Well casing:	Flush threaded PVC schedule 40 1 2.5
I Filter nack bottom 9/16 3 ft MS	stor 5.3 ft		
J. Philo pack, column			
K. Borehole, bottom 9163 ft MS	$Lor = \frac{8}{5} f.$	B Sorren tvn	er Factory cut 69 11
			Continuous slot 🗇 🗛
L. Borehole, diameter _ S_ in.			Other 🛛 💥
· · · · · · · · · · · · · · · · · · ·		b. Manufactur	
M. O.D. well casing $-\underline{\mathcal{L}}_{-}$ in.		c. Slot size:	0. <u>01</u> in.
		🔪 d. Slotted len	19th:ft.
N. 1.D. well casing in,		11. Backfill mate	tial (below filter pack): None 🗆 14
			Other 🗆 🎬
I hereby certify that the information on this	form is true and correct to the ba	est of my knowledge.	
Signature 1	Firm	<u>_</u>	a the second second
-ten + un	1 ICOLEMI	an unaince	the part to

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adv. Code. In accordance with chs. 281, 289, 291, 292, 293, 293, 295, and 299, Wis. Stats., and the NR 141, Wis. Adv. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., faiture to file these forms may result in a 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 these forms is not intended to be used for any other purpose. NOTH: See the instructions for more information, including where the completed forms should be sent.

.....

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

•	Form 4400-115B Rev. 7-98
Route to: Watershed/Wastewater	Waste Management
Remediation/Redevelopment 🔀-	Other
Facility/Project Name County Name	Well Name / L
FORMER THOMAS SERVICE IRO	$N = M \omega - T$
Facility License, Permit or Monitoring Number County Code	Wis. Unique Well Number DNR Well ID Number
26	
1. Can this well be purged dry? Image: Provide the second sec	Before Development After Development 11. Depth to Water aft. $D = 0$ (from top of well casing) aft. $D = 0$ Date b. $\frac{9}{12} \frac{1}{2} \frac{20}{120} \frac{1}{9} \frac{9}{12} \frac{21}{120} \frac{1}{20} \frac{1}{120} \frac{1}$
 5. Volume of water in filter pack and well casing 7. Volume of water removed from well t gal. 	Fill in if drilling fluids were used and well is at solid waste facility:
8. Volume of water added (if any)	14. Total suspended mg/1 mg/1 mg/1
9. Source of water added	15. CODmg/lmg/l
10. Analysis performed on water added? (If yes, attach results) NA 17. Additional comments on development: TURGED DRY GEVERAL TIME	16. Well developed by: Name (first, last) and Firm First Name: JOHN Last Name: HUNT Firm: Court MAN ENGINEERING
Name and Address of Facility Contact/Owner/Responsible Party First Last Name: BEEL, M. J. A.	I hereby certify that the above information is true and correct to the best of my knowledge.

Name: 10m Name: BERGMAN	of my knowledge.
Facility/Firm: IRON COUNTY Wisconsin	Signature:
Street: 300 TACONITE ST	Print Name: Jos HAN Hunry
City/State/Zip: HURLEY WI 54534	Firm: CREMAN EAKINGERING

NOTE: See instructions for more information including a list of county codes and well type codes.

LABORATORY REPORTS

VPPENDIX C



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

September 27, 2011

John Hunt COLEMAN ENGINEERING 635 Circle Drive Iron Mountain, MI 49801

RE: Project: EE10201A IC THOMAS Pace Project No.: 4051162

Dear John Hunt:

Enclosed are the analytical results for sample(s) received by the laboratory on September 22, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

A-VA

Steven Mleczko

steve.mleczko@pacelabs.com Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.. Page 1 of 10



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

CERTIFICATIONS

Project: EE10201A IC THOMAS Pace Project No.: 4051162

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 Carolina Certification #: 503 North Dakota Certification #: R-150 South Carolina Certification #: 83006001 US Dept of Agriculture #: S-76505 Wisconsin Certification #: 405132750 Wisconsin DATCP Certification #: 105-444

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc., Page 2 of 10



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

SAMPLE SUMMARY

Project: EE10201A IC THOMAS Pace Project No.: 4051162

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4051162001	 MW-1	Water	09/21/11 10:15	09/22/11 08:30
4051162002	MW-2	Water	09/21/11 10:30	09/22/11 08:30
4051162003	MW-3	Water	09/21/11 10:45	09/22/11 08:30
4051162004	MW-4	Water	09/21/11 11:00	09/22/11 08:30

REPORT OF LABORATORY ANALYSIS

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

Page 3 of 10



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

SAMPLE ANALYTE COUNT

Project: EE10201A IC THOMAS Pace Project No.: 4051162

aboratory
PASI-G
PASI-G
PASI-G
PASI-G

REPORT OF LABORATORY ANALYSIS

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

Page 4 of 10



ANALYTICAL RESULTS

Project: EE10201A IC THOMAS

Pace Project No.: 4051162

Sample: MW-1	Lab ID:	4051162001	Collected: 09/21/11 10:15			Received: 09	0/22/11 08:30 M	atrix: Water	
Parameters	Results	Units		LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical	Method: WI M	DD GRO						
Benzene	1.6 u	g/L	1.0	0.39	1		09/26/11 17:11	71-43-2	
Ethylbenzene	0.54J u	g/L	1.0	0.41	1		09/26/11 17:11	100-41-4	
Methyl-tert-butyl ether	<0.38 u	g/L	1.0	0.38	1		09/26/11 17:11	1634-04-4	
Naphthalene	0.99J u	g/L	1.0	0.40	1		09/26/11 17:11	91-20-3	
Toluene	1.9 ug	g/L	1.0	0.42	1		09/26/11 17:11	108-88-3	
1,2,4-Trimethylbenzene	3.3 u	g/L	1.0	0.43	1		09/26/11 17:11	95-63-6	
1,3,5-Trimethylbenzene	0.64J u	g/L	1.0	0.40	1		09/26/11 17:11	108-67-8	
m&p-Xylene	<0.87 u	g/L	2.0	0.87	1		09/26/11 17:11	179601-23-1	
o-Xylene	0.83J u	g/L	1.0	0.38	1		09/26/11 17:11	95-47-6	
a,a,a-Trifluorotoluene (S)	104 %	D.	80-120		1		09/26/11 17:11	98-08-8	

Date: 09/27/2011 03:48 PM

REPORT OF LABORATORY ANALYSIS

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

Page 5 of 10



ANALYTICAL RESULTS

.

Project: EE10201A IC THOMAS

Pace Project No.: 4051162

Sample: MW-2	Lab ID:	Lab ID: 4051162002			10:30	Received: 09	9/22/11 08:30 Ma	atrix: Water	۶r
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical i	Method: WI M	od gro						
Benzene	< 0.39 uç	J/L	1.0	0.39	1		09/26/11 17:36	71-43-2	
Ethylbenzene	<0.41 ug	g/L	1.0	0.41	1		09/26/11 17:36	100-41-4	
Methyl-tert-butyl ether	<0.38 ug	g/L	1.0	0.38	1		09/26/11 17:36	1634-04-4	
Naphthalene	<0.40 ug	g/L	1.0	0.40	1		09/26/11 17:36	91-20-3	
Toluene	<0.42 ug	g/L	1.0	0.42	1		09/26/11 17:36	108-88-3	
1,2,4-Trimethylbenzene	<0.43 ug	g/L	1.0	0.43	1		09/26/11 17:36	95-63-6	
1,3,5-Trimethylbenzene	<0.40 ug	g/L	1.0	0,40	1		09/26/11 17:36	108-67-8	
m&p-Xylene	<0.87 Ug	g/L	2.0	0,87	1		09/26/11 17:36	179601-23-1	
o-Xylene	<0.38 ug]/L	1.0	0.38	1		09/26/11 17:36	95-47-6	
a,a,a-Trifluorotoluene (S)	109 %	1e	80-120		1		09/26/11 17:36	98-08-8	

Date: 09/27/2011 03:48 PM

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.. Page 6 of 10



ANALYTICAL RESULTS

Project: EE10201A IC THOMAS

Pace Project No.: 4051162

Sample: MW-3	Lab ID: 4051162003 Collected: 09/21/11 10:45 Received: 09/22/11 08:30 Ma						trix: Water		
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical	Method: WI M	DD GRO						
Benzene	<0.39 u	J/L	1.0	0.39	1		09/26/11 19:16	71-43-2	
Ethylbenzene	<0.41 u	g/L	1.0	0.41	1		09/26/11 19:1 6	100-41-4	
Methyl-tert-butyl ether	<0.38 u	g/L	1.0	0.38	1		09/26/11 19:16	1634-04-4	
Naphthalene	<0.40 u	g/L	1.0	0.40	1		09/26/11 19:16	91-20-3	
Toluene	<0.42 u	g/L	1.0	0.42	1		09/26/11 19:16	108-88-3	
1,2,4-Trimethylbenzene	<0.43 u	g/L.	1.0	0.43	1		09/26/11 19:16	95-63-6	
1,3,5-Trimethylbenzene	<0.40 u	g/L	1.0	0.40	1		09/26/11 19:16	108-67-8	
m&p-Xylene	<0.87 u	g/L	2.0	0.87	1		09/26/11 19:16	179601-23-1	
o-Xylene	<0.38 u	g/L	1.0	0.38	1		09/26/11 19:16	95-47-6	
a,a,a-Trifluorotoluene (S)	104 %		80-120		1		09/26/11 19:16	98-08-8	

Date: 09/27/2011 03:48 PM

REPORT OF LABORATORY ANALYSIS

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

Page 7 of 10



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

ANALYTICAL RESULTS

Project: EE10201A IC THOMAS

Pace Project No.: 4051162

Sample: MW-4	Lab ID:	Lab ID: 4051162004 Collect				Received: 09	9/22/11 08:30 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIGRO GCV	Analytical	Method: WI M	DD GRO						
Benzene	18.8 u	g/L	1.0	0.39	1		09/26/11 19:41	71-43-2	
Ethylbenzene	99.5 u	g/L	1.0	0.41	1		09/26/11 19:41	100-41-4	
Methyl-tert-butyl ether	7.1 u	g/L	1.0	0.38	1		09/26/11 19:41	1634-04-4	
Naphthalene	36.3 u	g/L	1.0	0.40	1		09/26/11 19:41	91-20-3	
Toluene	6.3 U	g/L	1.0	0,42	1		09/26/11 19:41	108-88-3	
1,2,4-Trimethylbenzene	358 u	g/L	1.0	0.43	1		09/26/11 19:41	95-63-6	
1,3,5-Trimethylbenzene	122 u	g/L	1.0	0.40	1		09/26/11 19:41	108-67-8	
m&p-Xylene	390 U	g/L	2.0	0.87	1		09/26/11 19:41	179601-23-1	
o-Xylene	115 u	g/L	1.0	0.38	1		09/26/11 19:41	95-47-6	
a,a,a-Trifluorotoluene (S)	110 %	b.	80-120		1		09/26/11 19:41	98-08-8	

Date: 09/27/2011 03:48 PM

REPORT OF LABORATORY ANALYSIS

Page 8 of 10

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



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

QUALITY CONTROL DATA

Project:	EE10201A IC TH	OMAS									
Pace Project No.:	4051162										
QC Batch: GCV/7266			Analys	Analysis Method: WI MOD GRO							·····
QC Batch Method:	WI MOD GRO		Analysi	Analysis Description: WIGRO GCV Water			r				
Associated Lab Sam	ples: 4051162	001, 4051162002, 40	51162003,	40511620	004						
METHOD BLANK:	Matrix: Water										
Associated Lab Sam	ples: 4051162	001, 4051162002, 40	51162003.	40511620)04						
		, ,	Blank	R	teporting						
Param	eter	Units	Resul	t	Limit	Ana	lyzed	Qualifi	ers		
1,2,4-Trimethylbenze	ne	ug/L	<	0.43	1.0	09/26/	11 12:11				
1,3,5-Trimethylbenze	ene	ug/L	<	0.40	1.0	09/26/	11 12:11				
Benzene		ug/L	<0.39		1.0	09/26/11 12:11					
Ethylbenzene ug/L		ug/L	<0.41		1.0	09/26/11 12:11					
m&p-Xylene		ug/L	<	:0.87	2.0	09/26/	11 12:1 1				
Methyl-tert-butyl ethe	er	ug/L	<	0.38	1.0	09/26/	11 12:11				
Naphthalene		ug/L	<	0.40	1.0	09/26/	11 12:11				
o-Xylene		ug/L	<	0.38	1.0	09/26/	11 12:1 1				
Toluene		ug/L	<	0.42	1.0	09/26/	11 12:11				
a,a,a-Trifluorotoluene	e (S)	%.		104	80-120	09/26/	11 12:11				
LABORATORY CON	TROL SAMPLE	LCSD: 508063		{	508064				-		
			Spike	LCS	LCSD	LCS	LCSD	% Rec		Max	
Param	eter	Units	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qualifiers
1,2,4-Trimethylbenze	ne	 ug/L	20	20.0	22.2	100	111	80-120	10	20	
1,3,5-Trimethylbenze	ene	ug/L	20	19.7	21.8	99	109	80-120	10	20	
Benzene		ug/L	20	21.2	2 22.7	106	114	80-120	7	20	

20

40

20

20

20

20

20.1

39.7

20.9

19.3

20.0

20.5

22.0

43.5

21.6

20.8

21.8

22.0

101

99

105

97

100

102

105

110

109

108

104

109

110

104

80-120

80-120

80-120

80-120

80-120

80-120

80-120

9

9

3

7

9

7

20

20

20

20

20

20

Date: 09/27/2011 03:48 PM

Ethylbenzene

Methyl-tert-butyl ether

a,a,a-Trifluorotoluene (S)

m&p-Xylene

Naphthalene

o-Xylene

Toluene

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

%.

REPORT OF LABORATORY ANALYSIS

Page 9 of 10

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



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

QUALIFIERS

Project: EE10201A IC THOMAS

Pace Project No.: 4051162

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.

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.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

Date: 09/27/2011 03:48 PM

REPORT OF LABORATORY ANALYSIS

Page 10 of 10

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

APPENDIX D

INVESTIGATIVE WASTE DISPOSAL DOCUMENTATION

BILL OF LADING

WRR Environmental Services Co., Inc.

5200 Ryder Road, Eau Claire, WI 54701 (715) 834-9624 FAX (715) 836-8785

GENERATOR CLAIMING VERY SMALL QUANTITY										
Shippers #					Your P.O. No.					
(SIGNED)		All Infor	nformation must be typed or printed.							
1. Generator's Name and Mailing Address		A. Profile #								
- IRon Courty Pignning Land - Zor	S. Part									
2 Generator's Phone () thus, Montreal (ъ.	B. State Generator's ID								
3. Transporter 1 Company Name	mber	C. State Transporter's ID								
Whisan hermont Corporation	Marcono	121.0	YP 1	D. Tr	D. Transporter's Phone					
5. Transporter 2 Company Name	6. US EPA ID NL	mber		E, St	E. State Transporter's ID					
7. Designated Facility Name and Site Address	8. US EPA ID Nu	mber		F. Tr	ansporter's Pho ate Facility's ID	ne				
WRR Environmental Services Co., Inc.				0.00	ate i aonity 3 1D					
5200 Ryder Road Eau Claire, WI 54701	WID	990 829 478	5	H. Fa	cility's Phone	E 024 00	204			
9 US DOT Description (Including Proper Shipping Name, Hazard Class	ID Number and Pack	ing Group)	10. Con	ainers	/ I 11. Total	12.	1			
H.M.		ing croup,	No.	Туре	Quantity	Unit Wt/Vol	Waste No.			
a. Montarrande Martine	6.17	i., ``	1.11	AN/A	I BUOD	2	INR			
b.										
0.										
d,					9					
J. Additional Descriptions for Materials Listed Above				K, Ha	ndling Code for	Wastes	Listed Above			
a 30/1090144.4400304										
13. Special Handling Instructions and Additional Information										
14 Emergency Phonette Start Start Start										
	tents of this consis	nmont are f	ully and a	courate	v described abo	we by pr	oper			
shipping name and are classified, packed, marked, and labeled, to applicable international and national governmental regulations	and are in all resp	ects in prop	er conditi	on for tri	ansport by high	way acco	ording			
Resources.	s and according to	(no roquiro)	nome or t		onain Doparano		Date			
Printed/Typed Name & Position Title	Signature				Month Day Year					
T (DD) /MAK	I Goodd	Milly HOLLY								
Printed/Typed Name & Position Title	Signature	V					Month Day Year			
Toucketh dever	1 bl	1611								
17. TRANSPORTER 2 Acknowledgement of Receipt of Materials							Date			
Printed/Typed Name & Position Title	Signature	Signature								
18. Discrepancy Indication Space		Design of		A AN	a states					
19. FACILITY OWNER OR OPERATOR: Certification of receipt of hazardous materials covered by this document except							Data			
Printed/Typed Name & Position Title	Signature	Signature					Month Day Year			
Form 100 Copy Distribution: 1 - Facility retain 2 - Fac	ility send to Generator	3 - Transp	orter retain	4 -	Generator retain					

LIMITATIONS

LIMITATIONS FOR PHASE I & II ENVIRONMENTAL SITE ASSESSMENT REPORTS

- 1. In preparation of this report, Coleman Engineering Company (CEC) has relied on certain information provided by the parties referenced herein. Although there may have been some degree of overlap in the information provided by these various sources, we did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this site review.
- 2. Our conclusions regarding the site are based on observations of existing site conditions, our interpretation of available site history and site usage information. The findings are relevant to the dates of our site visit and should not be relied upon to represent conditions or information available at other dates. The findings and conclusions must be considered probabilities based on professional judgment concerning the significance of the limited data gathered during the course of the site review. Conclusions regarding the condition of the site do not represent a warranty that all areas within the site are of the same quality as may be inferred from observable site conditions and readily available site history and limited exploration program carried out as part of this review. Should additional information on environmental conditions at the site which is not contained in this report be obtained, such information should be brought to CEC's attention. We will evaluate such information and, on the basis of our evaluation, may modify the conclusions stated in the report.
- 3. Observations were made of the site and of structures on the site as indicated within the report. Where access to portions of the site or to structures on the site was unavailable or limited, CEC renders no opinion as to the presence of hazardous material or to the presence of indirect evidence relating to hazardous material in that portion of the site or structure. In addition, CEC renders no opinion as to the presence of hazardous material or to the presence of indirect evidence relating to hazardous material in that portion of the site or structure. In addition, CEC renders no opinion as to the presence of hazardous material or to the presence of indirect evidence relating to hazardous material where direct observation of interior walls, floor, or ceiling of a structure on the site was obstructed by objects or coverings on or over these surfaces.
- 4. CEC did not perform testing or analyses to determine the presence or concentration of asbestos, lead-based paints, or radon or other naturally occurring materials, nor did it include an evaluation of latent conditions at the site or in the environment at the site.
- 5. No specific attempt was made to check the compliance of present or past owners or operators of the site with federal, state, or local laws and regulations, environmental or otherwise.
- 6. The conclusions and recommendations contained in this report are based in part upon the data obtained from a limited number of soil and groundwater samples obtained from widely spaced subsurface explorations. The nature and extent of variations between these explorations may not become evident until further exploration. If various or other latent conditions then appear evident, it will be necessary to re-evaluate the conclusions and recommendations of this report.

- 7. Water level observations have been made in the borings and/or monitoring wells at the times and under the conditions stated on the boring logs. However, it must be noted that fluctuations in the level of groundwater may occur due to variations in rainfall and other factors different from those prevailing at the time measurements were made.
- 8. Where quantitative laboratory testing has been conducted by an outside laboratory, CEC has relied upon data provided, and has not conducted an independent evaluation of the reliability of these data.
- 9. The conclusions and recommendations contained in this report are based in part upon various types of chemical data and are continent upon their validity. These data have been reviewed and interpretations made in this report. It should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, these data should be reviewed by CEC and the conclusions and recommendations presented herein modified accordingly.
- 10. Chemical analyses have been performed for specific parameters during the course of this site review, as described in the text. However, it should be noted that additional chemical constituents not searched for during the current study may be present in soil and/or groundwater at the site.
- 11. This report has been prepared for, and is intended for the exclusive use of Iron County, Wisconsin. The contents of this report should not be relied upon by any other party without the express written consent of CEC. However, CEC acknowledges that the report may be conveyed to the owner and lending institution associated with the prospective sale and/or lease of the site.