Appendix F

Boring and Monitoring Well Logs and Forms, and Geotechnical Test Reports

- F1 Drilling Locations 1 through 11
- F2 Drilling Locations 105 through 126
- F3 Drilling Locations 212 through 233
- F4 Wisconsin Well Information Form 4400-089

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

			<u>Rc</u>	oute To:	Watershed/				Manag	geme	ent	\boxtimes							
					Remediatio	n/Redevelop	pment \square	Other											
																Pag	_	of	4
Facilit				. ~	_			License	/Permit	/Moi	nito	ring N	ımber		Boring	, Numb			
				Site No	o. 3 ief (first, last)	1.5		N/A	.11. C		1		Ь	ite Drilli		1 / 1	B-1		
_	tt Klu	•	Name o	i crew ch	iei (first, last)	and Firm		Date Dr	ung S	tarte	ea		Da	ite Drilli	ing Coi	npieted		Dril	ling Method
			neering	g Servic	es				2/1.	/202	22				2/1/2	.022		Н	SA 2.25 ID
WI Ur	ique W	ell No).		Vell ID No.	Common	n Well Name	Final St						e Eleva	tion		Во		Diameter
	a 11 a			<u> </u>				86	3.7 Fe	et N	MS	L		875.0				6.0	inches
Local		rıgın			2,168,43		10n ⊠ /C/N	$ $ $_{\rm L}$	at	0		•	"	Local (irid Lo		_		
NE		of S		,05 111, 1/4 of Sect			N, R 10 E	Lor		0		1	**		Fee	□ N t □ S			☐ E Feet ☐ W
Facilit		01 0			County	- '	1,10 10 1	County C		Civ	il T	own/Ci	ty/ or	Village	100				
113	45048	30			Dane			13		M	adi	son							
San	nple														Soil	Prop	erties		
	(E) &	83	et		Soil	Rock Desci	ription							ပ					
r Se	Att.	onu	n Fe		And (Geologic Or	igin For		l s			l g		essiv h	e _		<u>5</u>		unts
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet		Е	ach Major U	Unit		SCS	Graphic	- - -	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid	Plasticity Index	200	RQD/ Comments
Nu	Ler Re	Blc	De						n s	Ğr	Log	Well Diagr	II.	Str	<u>දී වී</u>	Lig ii	Plastic Index	P 2	\[\frac{\omega}{\omega} \]
			-	Silt (N	ML), few cl vellowish b	ay, trace s	subangular	gravel,											
			E ₁	non-p	lastic, dry,	verv stiff	(loess/lacus	strine)											
			- 1	F	,,		(
			F ₂																
			_2																
			-																
			-3																
1	18	4	E											3.5					
SS	16	4 5	-4						ML										
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			<u>-</u> 7																
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			-8																
_			F								\prod								
$\frac{2}{SS}$	24 22	6	_9		Clay (CL),				CL					3.25					Wet soil noticed at
		7 8	þ í	\browi	n (10YR 4/0 tiff (loess/1	o), mgmy acustrine)	piastic, me	Jist,	'										8.5 feet
I۸		8	F 10		with silt an			rown											
/ \			10	(10YI	R 5/3), fine	to mediui			CD CI			:							
			-	mediu	ım dense (o	utwash)			SP-SN	/II: : :									
			-11									T							
			<u>-12</u>								·1•J*%	·]							
	-	ty that	the info	ormation o	on this form is	s true and co	l m		knowle	dge.									
Signat	ure	Lo	gas	n D	wyer			ra Tech 3 Excelsio	r Dr Su	ite 1	60	Madis	on, W	[53714					Tel: Fax:

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 be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Boring	g Numl	er	B-1	Use only as an attachment to Form 4400-	122.						Pag		of	4
San	nple									Soil	Prope	erties		
	. & (in)	ıts	eet	Soil/Rock Description					, e					
er pe	Att	Cour	In F	And Geologic Origin For	S	၁	=		essir	ır e		ity		ents
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Each Major Unit	SC	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
an N	Re L	B	Ď	C 1 11 11 1 1 (CD C) () 1	D	Grap	<u>`</u> ≅		<u> ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~</u>	≱ ర	<u> </u>	F F	<u> </u>	<u> </u>
				Sand with silt and gravel (SP-SM), brown (10YR 5/3), fine to medium grained, wet,										
			-13	medium dense (outwash) (continued)										
3 🗔	24	4	E	yellowish brown (10YR 5/4)										
$\frac{3}{SS}$	18	6	14	yellowish blown (10 f K 3/4)						14.3			7.9	Lab
		7 9	-							14.5			'	classified as SP-SM
/\			_15											Screen zone
			-											bag sample S7 - 14-16ft
			16											
			-17											
			-18											
4 SS	24 20	7	E	fine sand, coarse sand seem 19.2-19.5ft, very										
SS	20	8	- 19	loose										
$ \dot{\rangle}$		8	L											
/\			_20											
					SP-SM	4								
			-21											
			- 22											
			_22											
			_ 23											
			- ²³											
5 SS \	24 13	10 10	- -24	few subangular gravel, yellowish brown										
		10 13		(10YR 5/6), medium										
		15	_ 25											
			E											
			-26											
			E											
			_27											
			-											
			_28											
6 П	24	11	-											
6 SS \	19	17 17	29											
		14	E	Silt (ML), trace fine sand, yellowish brown										
/\			-30	(10YR 5/4), non-plastic, moist, soft					0.5					
			E	(glacio-lacustrine)	ML									
			_31											
			<u> </u>											
			-32			1,,,								

	g Numb	er	B-1	Use only as an attachment to Form 4400-1	122.	1	-		1	Soi	age 3 perties	of	4
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength	1	Plasticity Darker Index	P 200	RQD/ Comments
			33	Silt (ML), trace fine sand, yellowish brown (10YR 5/4), non-plastic, moist, soft (glacio-lacustrine) (continued)	ML								
7 SS	24 12	8 13 19 22	-34 -35 -36 -37	Poorly graded fine sand (SP), few silt, yellowish brown (10YR 5/6), wet, dense (outwash)									
8 SS	24 19	16 19 22 29	-38 -39 -40 -41	some silt trace silt	SP								
9 SS	24 14	16 18 21 22	-43 -44 -45 -46	Poorly (SP-SM) Well graded sand (SW), few dolomite fragments, few silt, yellowish brown (10YR 5/4), medium and coarse sand, wet, dense (outwash) SP-SM	SW								Driller encountered cobbles and gravel while drilling
10 SS	17 15	37 48 15	-48 -49 -50 -51	Highly Weathered Dolomite, some dolomite fragments, few coarse sand, light yellowish brown (10YR 6/4), wet (formation indeterminable due to limited sample) (Possible boulder.)									

Sample	-										Soil	Prope	erties		
and Type Length Att. & Recovered (in)	Blow Counts	DIOW COUNTS	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	uscs	-Graphic Log	Well	Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/
24 18	22222	7	-53 -54 -55 -56 -57 -58 -60	Poorly with silt (SP-SM) Well graded sand (SW), few subangular gravel, trace silt, yellowish brown (10YR 5/6), coarse and medium sand, very dense, wet (outwash) SP-SM End of boring 60' (bottom elevation 815ft MSL) SCS edits (in red) based on review of soil samples 8/15/2023.	SW										

B-1

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015) Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information. Route to DNR Bureau: **Drinking Water** Watershed/Wastewater Remediation/Redevelopment Verification Only of Fill and Seal Waste Management Other: 2. Facility / Owner Information 1. Well Location Information County WI Unique Well # of Facility Name Hicap # Removed Well Dane County Dept of Waste and Renewables Dane Facility ID (FID or PWS) Latitude / Longitude (see instructions) Format Code Method Code 113450480 GPS008 379853.7 DD Ν License/Permit/Monitoring # SCR002 2168431.86 DDM W N/A OTH001 1/4 / 1/4 Section Township Range Original Well Owner NE 1/4 SF 1/4 ✓ E or Gov't Lot # 7 25 10 W Present Well Owner Well Street Address Yahara Hills Golf Course 6701 US-12, Madison, WI 53718 Mailing Address of Present Owner Well ZIP Code Well City, Village or Town Madison, WI 53718 City of Present Owner State ZIP Code Subdivision Name Lot # 4. Pump, Liner, Screen, Casing & Sealing Material Reason for Removal from Service WI Unique Well # of Replacement Well Pump and piping removed? Yes No Sample Only Liner(s) removed? Yes Nο 3. Filled & Sealed Well / Drillhole / Borehole Information Liner(s) perforated? Yes Nο Original Construction Date (mm/dd/yyyy) Monitoring Well Yes Screen removed? 2/1/2022 Water Well Casing left in place? If a Well Construction Report is available, ✓ Borehole / Drillhole Was casing cut off below surface? nlease attach Did sealing material rise to surface? ✓ Yes Construction Type: Did material settle after 24 hours? Yes ✓ Drilled Driven (Sandpoint) Dug If yes, was hole retopped? N/A Yes Other (specify): If bentonite chips were used, were they hydrated Formation Type: ✓ Yes with water from a known safe source? ✓ Unconsolidated Formation Required Method of Placing Sealing Material **Bedrock** Conductor Pipe-Gravity Conductor Pipe-Pumped Total Well Depth From Ground Surface (ft.) Casing Diameter (in.) Screened & Poured (Bentonite Chips) Other (Explain): 60 ft. Lower Drillhole Diameter (in.) Casing Depth (ft.) Sealing Materials **Neat Cement Grout** Concrete 6 in. Sand-Cement (Concrete) Grout Bentonite Chips Was well annular space grouted? Yes No Unknown For Monitoring Wells and Monitoring Well Boreholes Only: If yes, to what depth (feet)? Depth to Water (feet) Bentonite Chips Bentonite - Cement Grout 11.3 ft. Granular Bentonite Bentonite - Sand Slurry No. Yards, Sacks Sealant or 5. Material Used to Fill Well / Drillhole From (ft.) To (ft.) olume (circle one) Surface 10.7 200 lbs 3/8" Bentonite Chips Haliburton Granular Bentonite Slurry 10.7 48 55 Gallons 28lbs/55gal Collapsed Formation - sand and gravel 48 60 6. Comments Boring B-1 7. Supervision of Work **DNR Use Only** Name of Person or Firm Doing Filling & Sealing Date of Filling & Sealing or Verification Date Received Noted By License # Scott Klumb - SES Madison (mm/dd/yyyy) 2/1/2022 Street or Route Telephone Number Comments 1102 Stewart St. (608) 274-7600 City ZIP Code Signature of Person Doing Work State Date Signed WI Madison 53713 4/14/2022

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

			Ro		⁷ astewater □ Redevelopment □	Waste 1	_	ement								
														ge 1	of	1
•	/Projec			1 C!4- NI- 2		License/	Permit/	Monito	ring Nu	ımber		Boring	Numbe		V- 1	
				1 Site No. 3 f crew chief (first, last) a	nd Firm	N/A Date Dri	illing S	tarted		D	ate Drilli	ng Con	npleted			ling Method
_	tt Klu	-					8					8	-F			
Soil	s and	Engi		g Services				/2022				2/21/2	2022			SA 4.25 ID
WI Un	ique W	vell No A434		DNR Well ID No. 101	Common Well Name	Final Sta					ce Elevat		/CI	Bo		Diameter
Local (☐ (es	timated: or Bor	MW-1	803	6.6 Fe	et MS	L		875.5] Local C			-	8.0	inches
State I		0		,849 N, 2,168,438		La	at	<u> </u>	<u>'</u> —				□N			□Е
NE		of S	E 1	/4 of Section 25,	т 7 N, R 10 E	Lon		0	-0	"		Feet	\Box s			Feet W
Facility	7 ID 45048	20		County		County Co	ode			ty/ or	Village					
San	_	50		Dane		13	T	Madi	SOII		T	Soil	Prope	artios		_
Sau			3.4.24	C '1/D	- 1 D 1 41-						-		Flope	lies		
	tt. & d (in	unts	Feet		lock Description cologic Origin For						ive					503
ber	th Ai	Co	l In		ch Major Unit		S	nic	l mg	l E	ores:	hure	- e	city		nent
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Lac	in Major Omi		USC	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
2 8	<u> </u>		-	See boring log "B	-1" for soil descrip	otions	+ -	H			S	20		<u> </u>		20
			1 2 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Kh = 4.50E-03 cm/s End of boing 23 (borehole bottom)	3 feet - well set at 2 n elevation 852.5ft	22 feet MSL)	ML CL SP-SM					14.3	NV	NP	7.9	Lab classified as SP-SM Screen zone bag sample S7 - 14-16ft from boring B-1
I hereb	y certif	fy that	the info	rmation on this form is t	rue and correct to the bo	est of my ki	nowled	ge.								
Signati	ıre		Log	gan Dwyer		tra Tech 3 Excelsion	Dr Su	ite 160	Madiec	n W	[5371 <i>4</i>					Tel: Fax:
					1 041	2 LACCISIUI	שט ועו	100	14100150	, W.	23/14					Tax.

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 be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

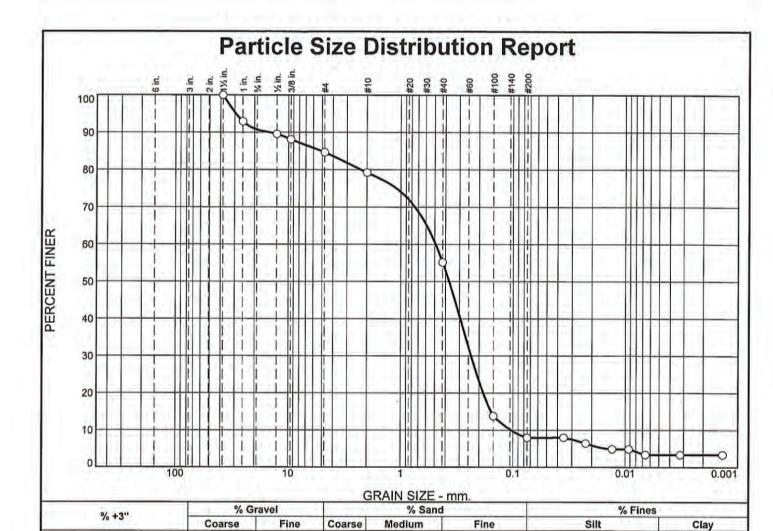
State of Wisconsin Department of Natural Reso	ources				~	MONTEODING	CONCEDI	UCTION
Department of Natural Rese	Route To:		Vastewater \[\begin{aligned} \lambda \text{Redevelopment} \Boxed{}		agement 🛚	MONITORING WELL Form 4400-113A	L CONSTRU Rev. 7-98	
Facility/Project Name		Local Grid Lo	cation of Well			Well Name		
Dane County Lar	ndfill Site No. 3		ft. □ N. igin □ (estimated	ft.	□ E. □ W.	MV	V-1	
Facility License, Permit of	or Monitoring No.	Local Grid Or	igin (estimated	l: 🗌) or W	ell Location 🖂	Wis. Unique Well No.	DNR Well N	lumber
N/.	A	Lat°	<u>"</u> Lo	ong	or	WA434	101	1
Facility ID			379,849 ft. N,	2,168,438	ft. E. S/C/N	Date Well Installed		
Type of Well	0480	Section Locati	ion of Waste/Source		ME	Well Installed By: (Pers		. 1 E:)
	11/	<u>NE</u> 1/4 of	SE_ 1/4 of Sec	25 , T7	N, R. <u>10</u> □ W			na Firm)
Well Code Distance from Waste/	Enf. Stds.		ell Relative to Waste	/Source Sidegradient	Gov. Lot Number	Scott I	Clumb	
Course	ft. Apply	u □ Upgra	ngradient n 🖂 🛚	_		Soils and Engin	eering Servic	es
A. Protective pipe, top el		8.27 ft. MSL		1.	. Cap and lock?	1	⊠ Yes	s □ No
B. Well casing, top eleva	tion 87	8.17 ft. MSL		2.	Protective cover p a. Inside diameter	_		4.0 in
		75.5 ft. MSL			b. Length:	:	_	6.0 ft
C. Land surface elevation					c. Material:		Steel	n
D. Surface seal, bottom	875.5_ ft. MSL	or 1	ft. 200				Other	
12. USCS classification			Mil Mil Mile	- Nicoricoit	d. Additional prot	ection?	☐ Yes	⊠ No
GP □ GM □		V □ SP ⊠			If yes, describe	:		
SM ⊠ SC □ Bedrock □	ML MH C	_ CH □		3.	Surface seal:		Bentonite	_
13. Sieve analysis attach	ned? ⊠ Ye	s 🗆 No					Concrete	
14. Drilling method use		_ y □50			Material between	well casing and protective		
The British and the discussion and the	Hollow Stem Aug			×			Bentonite	
	Oth				F	Red Flint #40	Other	
						l: a. Granular/Chippe		
15. Drilling fluid used:	Water $\square 0.2$ A ing Mud $\square 0.3$ Nor	ir □01				nud weight Bentonite		
Dilli	ing Mud 🗆 0 5 Noi	C 🖾 🤊 🤊			cLbs/gal m l% Benton	nud weight Ben		
16. Drilling additives us	sed?	s 🛮 No				volume added for any of	the above	□ 30
				1	f. How installed:			□ 01
Describe						Tre	emie pumped	□ 02
17. Source of water (atta	ach analysis, if required):					Gravity	⊠ 08
			╛	6.	Bentonite seal:		nite granules	
	975.0	0.5					ntonite chips	
E. Bentonite seal, top	875.0 ft. MSL	or	ft.	₩ / 7		l: Manufacturer, product		
F. Fine sand, top	871.5 ft. MSL	or 4.0	ft.	7.	a	Red Flint #15	name & mes	
, I					b. Volume added	ft	3	
G. Filter pack, top	870.5 ft. MSL	or5.0	ft.	8.	Filter pack materia	al: Manufacturer, produc	t name & me	sh size
	979 5	7.0			a	Red Flint #40		
H. Screen joint, top	868.5 ft. MSL	or	ft.	\square / .	b. Volume added			FI 22
I. Well bottom	<u>853.5</u> ft. MSL	22.0		9.	Well casing:	Flush threaded PVC Flush threaded PVC		
1. Well bottom	II. WISL	JI				Flush tilleaded FVC	Other	
J. Filter pack, bottom	852.5 ft. MSL	or23.0	ft.	10.	Screen material:	PVC		
1 /					a. Screen Type:		Factory cut	□ 11
K. Borehole, bottom	852.5 ft. MSL	or23.0	ft.			Cor	ntinuous slot	
	0.0					Hala Duadwata Hala	Other	
L. Borehole, diameter	8.0 in.		<i>\(\frac{\pi}{2}\)\).</i>		b. Manufacturer	Hole Products - John		0.010 in
M O D well easing	2.38_ in.				c. Slot size:d. Slotted length:		_	15.0 ft
M. O.D. well casing	2.38 in.			11.	. Backfill material (below filter pack):	None	n
N. I.D. well casing	2.00 in.						Other	
I hereby certify that the i	information on this form	is true and co	i	y knowledge.				
Signature	Logan Dwyer		Firm Tetra Tech	D. C. '- 160	Madison, WI 5371	4		Tel: Fax:
			1 04 L3 EXCEISI	огти эшне то0	iviauison, WI 55/14	+		Lax.

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

	d/Wastewat		Waste Management				
	tion/Redeve	lopment	Other				
Facility/Project Name		County		Well Name			
Dane County Landfill Site No.	3		Dane			W-1	
Facility License, Permit or Monitoring Number		County Code	Wis. Unique Well Nur		DNR Wel		
N/A		13	WA43	34		101	
1. Can this well be purged dry?	□ Ye	s 🛮 No	11. Depth to Water	Before De	evelopment	After De	evelopment
2. Well development method: surged with bailer and bailed		1	(from top of well casing)	a.	14.60 ft.		14.68 ft.
surged with bailer and pumped surged with block and bailed surged with block and pumped	□ 4 □ 6	2 2	Date	b. 2/2	23/2022	2/	/24/2022
surged with block, bailed, and pumped compressed air bailed only	□ 2	0 0 0	Time	c.	08:40 □ 1	n.m. o.m.	⊠ a.m. 10:05 □ p.m.
pumped only pumped slowly	□ 5 □ 5	1 0	12. Sediment in well bottom		0.0 inches		0.0 inches
other			13. Water clarity	Clear □ Turbid ⊠	1 0 1 5	Clear ⊠ Turbid □	2 0 2 5
3. Time spent developing well		60 min.		(Describe) Tan/bro	wn	(Describe) Clear	
4. Depth of well (from top of well casing)	2	24.7 ft.					
5. Inside diameter of well	2	2.00 in.					
6. Volume of water in filter pack and well casing		8.1 gal.					
7. Volume of water removed from well	11	0.0 gal.	Fill in if drilling fluids 14. Total suspended	were used and	l well is at sol mg/l	id waste faci	3.6 mg/l
8. Volume of water added (if any)		0.0 gal.	solids				
9. Source of water added			15. COD		mg/l		mg/l
			16. Well developed by:	Person's Nan	ne and Firm		
10. Analysis performed on water added?	☐ Ye	s 🗆 No	Jeff Prio	or			
(If yes, attach results)				Engineerin	g Services		
17. Additional comments on development: Purged 10 gallons with bailer, then	pumped (@ 2.5 gal/mir	1 8:55AM-9:35AM	on 2/24/202	2		
Facility Address or Owner/Responsible Party Ad	dress		I hereby certify that th	e above inforn	nation is true a	and correct to	the best of my
Name: Robert Regan			knowledge.				
Firm: Dane County Dept of Waste	& Renewa	ables	Signature:	ogas	n Do	vye	٤
Street: 7102 US-12			Print Name: Logan	Dwyer		U	
City/State/Zip: Madison, Wisconsin 5	3718		Firm: Tetra	Tech			

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



SIEVE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1.0	92.9		
0.5	89.6		
0.375	88.1		
#4	84.7		
#10	79.2		
#40	55.2		
#100	13.8		
#200	7.9		
	277		
	-		

9.2

6.1

5.5

24.0

THE RESERVE OF THE PARTY OF THE	Material Description	The Reservoir
brown	AND GRAVEL, fine to	medium grained,
PL= NP	Atterberg Limits LL= NV	PI= NP
D ₉₀ = 14.5733 D ₅₀ = 0.3724 D ₁₀ = 0.1040	Coefficients D85= 5.0489 D30= 0.2365 Cu= 4.72	D ₆₀ = 0.4908 D ₁₅ = 0.1572 C _c = 1.10
USCS= SP-SM	Classification AASHTO)= A-3
Munsell Color Co Location: Monito		

4.6

* (no specification provided)

0.0

Source of Sample: Monitoring Wells Sample Number: MW1 S7

Depth: 14.0'-16.0'

Date: 2/18/2022

3.3

Tetra Tech 2679 Continental Drive Green Bay, WI 54311 Client: Dane County

Project: Yahara Hills Geotechnical Investigation

Project No: Figure

47.3

Tested By: MAB Checked By: JJN

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

			Ro		Watershed/W Remediation/l	astewater Redevelopment [Waste I	_	ement	\boxtimes							
															Pag		of	3
	y/Proje			11 C' N	2			License/I	Permit/	Monito	ring N	umbei	•	Boring	Numb		.	
Dar Boring	ne Col	d By	Langiii	Il Site No). 3 f (first, last) ar	nd Firm		N/A Date Dri	lling St	arted		D	ate Drill	ing Con	nnleted	B-2		ling Method
	tt Klu	-	i varrie o	r ere w errie	(11154, 1456) 41			Duic Bii	iiiig o	.ui toa			ate Biiii	ing con	пристеч			mg memou
Soi	ls and	Engi		g Service	es					/2022				2/21/2	2022		H	SA 4.25 ID
WI Ut	nique W	Vell No).	DNR We	ell ID No.	Common Well N	ame	Final Sta				Surfa	ce Eleva			Во		Diameter
T 1	0:10			4	7) D			887	.8 Fe	et MS	L		892.3				8.0	inches
State	Grid O: Plane	rigin			$\boxed{}$) or Bori $2,169,372$			La	t	0	1	,	Local	Grid Lo		r		
SE		of S		./4 of Sectio		T 7 N, R 10) E	Long)	0	,	,		Feet	□ N S □ :			☐ E Feet ☐ W
Facilit		01 0			ounty	1 / 11,1010		County Co		Civil T	own/C	ity/ or	Village	1000				
113	45048	80		D	ane			13		Madi	ison							
San	nple													Soil	Prope	erties		
	(ii)	, s	et		Soil/R	ock Description							ပ					
. e	Att.	ount	n Fe		And Ge	ologic Origin For							SSiv	o		8.		nts
nber Tyr	Length Att. & Recovered (in)	Blow Counts	Depth In Feet		Eac	h Major Unit			CS	Graphic Log	II	PID/FID	Compressive Strength	Moisture Content	uid it	sticit ex	0 0	RQD/ Comments
Number and Type	Len	Blo	Dep						Ω	Grap Log	Well Diagram	PID	Compress Strength	Cor	Liquid Limit	Plasticity Index	P 200	RQD/ Comm
1 SS	24 14 14	3 5 12 10 14 17 17 18		brown fine gra	(10YR 7/3) ained, mois	evel (SM), very , coarse to me t, medium den	dium se (ti	to ll)	SM		_							Shelby tube ST-3 - 5.5-6.67ft
I herel	v certi	l fy that	⊢12 the info	rmation on	this form is tr	ue and correct to the	he best	t of my kr	owled	pe.								
Signat				95	Dwyer	lr:		a Tech		ə - -								Tel:
			-	y wir i	- uge			Excelsior	Dr Sui	te 160	Madis	on, W	I 53714					Fax:

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 be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Form 4400-122A

Borin	g Numl	er	B - 2	Use only as an attachment to Form 4400-1	22.								ge 2	of	3
San	nple										Soil	Prop	erties		-
	Length Att. & Recovered (in)	ıts	eet	Soil/Rock Description						, e					
r pe	Att	Jour	In F	And Geologic Origin For	S	ွ		Е	Q	essiv	r re		<u>.</u>		ents
Number and Type	ngth cove	Blow Counts	Depth In Feet	Each Major Unit	SC	Graphic Log	Well	Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	200	RQD/ Comments
Nu anc	Le	BIG			Ď	Grap		Dig		S ₹	≱ చ	<u> </u>	Pla	P 2	N 0 N
			-13												
2 🗆	24	2.1	_												
$\frac{3}{SS}$	24 9	31 31	14	trace coarse sand, trace medium sand, some cobbles, dry, very dense											
I)		19 25													
/\			15												
			-		SM										
			_16												
			-												
			17												Driller
															indicated hard drilling
			18												and cobbles present
4 SS	1 1	60		(Weathered Dolomite bedrock), dolomite		1/	1								17-18ft
SS	1		- 19	fragments, few silt, yellowish brown (NYR 5/4), wet (Galena-Platteville Fm)			I								
			-				I								
			20	See B-2A log.			1								
			- -21				#								
				/			† †								
			F -22				I								
							I								
			23	As a result of the moor recovery a second			I								
			_	As a result of the poor recovery a second core was performed adjacent to the original			I								
1 П	120		24	borehole at Boring B-2A. Refer to Boring			$\frac{1}{2}$								HQ rock
RC	60		E	B-2A for detailed bedrock description. Dolomite, highly fractured, near vertical,			I								core run 1: RQD= 16%
			25	silty layers present, trace day layers, light gray (GLEY1 7/N), (Galena-Platteville Fm)			I								(very poor) Recovery
				gray (GLEY1 //N), (Garena-Platteville Fm)			Į								50%
			-26				I								FF= Indeterminable
			E				1								due to disaggregated
			27				#								sample
			- 20				#								
			-28				#								
							Ī								
			F 29	Limited recovery - highly fractured, gray (5Y 3/1)		H	\exists								
							4								
			Ė			H	4								
			-31 /		\	井	I								
			E/				I								
Ш			-32				4								

Form 4400-122A

Boring Number	B-2	Use only as an attachment to Form 4400-	122.						Pa	ge 3	of	3
Sample				/				Soil	Prop	erties		
. & (in) uts	eet	Soil/Rock Description	/				ve					
er 7pe 1. Att. ered	In Fe	And Geologic Origin For	S	. <u>.</u> 2	l H	Ω	ressiv	ıre		ity		ents
Number and Type Length Att. & Recovered (in) Blow Counts	Depth In Feet	Each Major Unit	SC	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
B R L R Z					<u>≽</u> ∩	PI	2 2	Σŭ		F F	Ь	<u> </u>
	_											
	_33				-							
					1							
"	-34	End of boring 34 feet (bottom elevation										
		858.3ft MSL)										
		SCS edits (in red) based on review										
		of rock core 8/15/2023.										
				1								

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015) Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information. Route to DNR Bureau: **Drinking Water** Watershed/Wastewater Remediation/Redevelopment Verification Only of Fill and Seal Waste Management Other: 2. Facility / Owner Information 1. Well Location Information County WI Unique Well # of Facility Name Hicap # Removed Well Dane County Dept of Waste and Renewables Dane Facility ID (FID or PWS) Latitude / Longitude (see instructions) Format Code Method Code 113450480 GPS008 378835.51 Ν License/Permit/Monitoring # SCR002 2169372.39 DDM W N/A OTH001 1/4 / 1/4 Section Township Range Original Well Owner SE 1/4 SF 1/4 ✓ E or Gov't Lot # 7 25 10 W Present Well Owner Well Street Address Yahara Hills Golf Course 6701 US-12, Madison, WI 53718 Mailing Address of Present Owner Well City, Village or Town Well ZIP Code Madison, WI 53718 City of Present Owner State ZIP Code Subdivision Name Lot # 4. Pump, Liner, Screen, Casing & Sealing Material Reason for Removal from Service WI Unique Well # of Replacement Well Pump and piping removed? Yes No Sample Only Liner(s) removed? Yes No 3. Filled & Sealed Well / Drillhole / Borehole Information Liner(s) perforated? Yes Nο Original Construction Date (mm/dd/vvvv) Monitoring Well Yes Screen removed? 2/21/2022 Water Well Casing left in place? If a Well Construction Report is available, ✓ Borehole / Drillhole Was casing cut off below surface? nlease attach Did sealing material rise to surface? √ Yes Construction Type: No Did material settle after 24 hours? Yes No ✓ Drilled Driven (Sandpoint) Dug If yes, was hole retopped? Yes Other (specify): If bentonite chips were used, were they hydrated Formation Type: ✓ Yes with water from a known safe source? ✓ Unconsolidated Formation Required Method of Placing Sealing Material **Bedrock** Conductor Pipe-Pumped Total Well Depth From Ground Surface (ft.) Casing Diameter (in.) Conductor Pipe-Gravity Screened & Poured (Bentonite Chips) 34 ft. Other (Explain): Lower Drillhole Diameter (in.) Casing Depth (ft.) Sealing Materials **Neat Cement Grout** Concrete 3.75 in. Sand-Cement (Concrete) Grout Bentonite Chips Was well annular space grouted? No Unknown For Monitoring Wells and Monitoring Well Boreholes Only: If yes, to what depth (feet)? Depth to Water (feet) Bentonite Chips Bentonite - Cement Grout 4.52 Granular Bentonite Bentonite - Sand Slurry No. Yards, Sacks Sealant or 5. Material Used to Fill Well / Drillhole From (ft.) To (ft.) olume (circle one) Surface 34 525 lbs 3/8" Bentonite Chips 6. Comments Boring B-2: 8" hole to bedrock at 24ft, then 3.75" to 34 ft in bedrock - filled with chips to surface 7. Supervision of Work **DNR Use Only** Name of Person or Firm Doing Filling & Sealing Date of Filling & Sealing or Verification Date Received Noted By License # Scott Klumb - SES Madison (mm/dd/yyyy) 2/21/2022 Street or Route Telephone Number Comments 1102 Stewart St. (608) 274-7600 City ZIP Code Signature of Person Doing Work State Date Signed WI Madison 53713 4/14/2022

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

			<u>Ro</u>		Vastewater □ /Redevelopment □	Waste :	_	ement								
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	y/Proje					License/	Permit	/Monito	ring Nu	umber		Boring	Numbe			
Dar	e Cou	Inty I	Jandti Name o	11 Site No. 3 f crew chief (first, last) a	and Firm	N/A Date Dri	illing S	tarted		D	ate Drilli	ng Con	nleted	B-2		ing Method
	tt Klu		variie o	r crew ciner (mst, iast)	uid I iiiii	Date Dil	illing 3	tarted			ate Dilli	ng Con	ipicicu			ing Method
Soil	s and	Engi	neerin	g Services				3/2022				3/1/2	022			SA 4.25 ID
WI Ur	ique W	ell No		DNR Well ID No.	Common Well Name						ce Elevat		ACT.	Во		Diameter
Local	Grid Oı	rigin	(es	stimated: or Bo	ring Location	886	5.3 Fe	et MS	L		892.3]				8.0	inches
State				,839 N, 2,169,372		La	at				2000		□ N			□Е
SE		of S	E 1	/4 of Section 25,	т 7 N, R 10 E	Lon		<u> </u>				Feet	\Box s			Feet W
Facilit	y ID 45048	20		County		County Co	ode	Civil T Madi		ity/ or	Village					
San				Dane		13	Τ	Madi	Ison	Ι		Soil	Prope	ortios		1
San				Co:1//	Pagls Decemention							3011	Тторс	rtics		
	tt. & d (in	ınts	Feet		Rock Description eologic Origin For						ive					SS.
er ype	th A	Cor	ı In		ch Major Unit		S S	nic	am.	l e	oress gth	ture	ਰ	city		/ nent
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	La	en major emit		USC	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
<u> </u>	1 4		-	Blind drill to 19 f	eet - see boring log	g "B-2"	+ -					20		1 1		1
				for soil description			SM		¥							
		fy that	the info	ormation on this form is t		est of my kı	nowled	ge.								
Signat	ure	uc	as	Specketer		tra Tech 3 Excelsior	Dr Su	ite 160	Madis	on, W	I 53714					Tel: Fax:

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 be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

	g Numb	er	B-2	A Use only as an attachment to Form 4400-	122.					Soil	Prop	ge 2 erties	OI	J
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/EID	Compressive Strength			ži.	P 200	RQD/ Comments
		TO M. M. M. M.	13 14 15 16	Blind drill to 19 feet - see boring log "B-2" for soil descriptions (continued)	SM							9		Weathered bedrock noticed by driller @ 14.5 feet
1 RC	84 81		-18 -19 -20 -21 -22	Silty Gravel (GM) (Weathered Dolomite) Fractured dolomite, light gray (GLEY1 7/N) (Galena-Platteville Fm) (Prairie du Chien Group, Oneota Formation)	GM DL-4									HQ rock core run 1: RQD= 75% (good); recovery 96% FF= 3.1
2 RC	60 54		-23 -24 -25 -26 -27	Weathered dolomite, light gray (GLEY1 X 7/N), interbedded sandy clay (glauconite) (Galena-Platteville Fm) Highly fractured dolomite, light gray (GLEY1 7/N), some blue green clay interbedding (glauconite), iron concentration at 28 feet with pyrite (Galena-Platteville Fm)	X									HQ rock core run 2: RQD= 37% (poor); recovery 90% FF= Indetermina due to disaggregat
3 CC	60 49		-30 -31 -32	X	X									sample

Form 4400-122A

	g Numb	er	B-2	A Use only as an attachment to Form 4400-1	22.					Soil	Pag Prope		of	3
Number and Type	t. &	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content		Plasticity Index	P 200	RQD/ Comments
				Highly fractured gray dolomite, light gray (GLEY1 7/N), interbedded with blue-green limestone (vertical fractures) (Galena-Platteville Fm) (continued) Highly fractured dolomite, light gray (10YR 7/1) (Galena-Platteville Fm) End of boring 36 feet (bottom elevation 856.3ft MSL) SCS edits (in red) based on review of rock core 1/24/2023.	DL4									HQ rock core rum 3: RQD= 55% (fair); recovery 82% FF= 4.2

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

B-2A

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information. Route to DNR Bureau: **Drinking Water** Watershed/Wastewater Remediation/Redevelopment Verification Only of Fill and Seal Waste Management Other: 2. Facility / Owner Information 1. Well Location Information County WI Unique Well # of Facility Name Hicap # Removed Well Dane County Dept of Waste and Renewables Dane Facility ID (FID or PWS) Latitude / Longitude (see instructions) Format Code Method Code 113450480 GPS008 378835.51 DD Ν License/Permit/Monitoring # SCR002 2169372.39 DDM W OTH001 N/A 1/4 / 1/4 Section Township Range Original Well Owner SE 1/4 SF 1/4 √ E or Gov't Lot # 7 25 10 W Present Well Owner Well Street Address Yahara Hills Golf Course 6701 US-12, Madison, WI 53718 Mailing Address of Present Owner Well ZIP Code Well City, Village or Town Madison, WI 53718 City of Present Owner State ZIP Code Subdivision Name Lot # 4. Pump, Liner, Screen, Casing & Sealing Material Reason for Removal from Service WI Unique Well # of Replacement Well Pump and piping removed? Yes No Sample Only Liner(s) removed? Yes No 3. Filled & Sealed Well / Drillhole / Borehole Information Liner(s) perforated? Yes Nο Original Construction Date (mm/dd/yyyy) Monitoring Well Yes Screen removed? 2/28/2022 Water Well Casing left in place? Yes If a Well Construction Report is available, ✓ Borehole / Drillhole Was casing cut off below surface? nlease attach Did sealing material rise to surface? √ Yes Construction Type: No Did material settle after 24 hours? Yes No ✓ Drilled Driven (Sandpoint) Dug If yes, was hole retopped? Yes Other (specify): If bentonite chips were used, were they hydrated Formation Type: ✓ Yes with water from a known safe source? ✓ Unconsolidated Formation Required Method of Placing Sealing Material **Bedrock** Total Well Depth From Ground Surface (ft.) Casing Diameter (in.) Conductor Pipe-Gravity Conductor Pipe-Pumped Screened & Poured (Bentonite Chips) 36 ft. Other (Explain): Lower Drillhole Diameter (in.) Casing Depth (ft.) Sealing Materials **Neat Cement Grout** Concrete 3.5 in. Sand-Cement (Concrete) Grout Bentonite Chips Was well annular space grouted? Yes No Unknown For Monitoring Wells and Monitoring Well Boreholes Only: If yes, to what depth (feet)? Depth to Water (feet) Bentonite Chips Bentonite - Cement Grout 6 ft Granular Bentonite Bentonite - Sand Slurry No. Yards, Sacks Sealant or 5. Material Used to Fill Well / Drillhole From (ft.) To (ft.) olume (circle one) Surface 36 550 lbs 3/8" Bentonite Chips 6. Comments Boring B-2A: Poured bentonite chips after augers were pulled 7. Supervision of Work **DNR Use Only** Name of Person or Firm Doing Filling & Sealing Date of Filling & Sealing or Verification Date Received Noted By License # Scott Klumb - SES Madison (mm/dd/yyyy) 3/1/2022 Street or Route Telephone Number Comments 1102 Stewart St. (608) 274-7600 City ZIP Code Signature of Person Doing Work State Date Signed WI pecketer Madison 53713 ucas c 4/14/2022

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

			Ro			Vastewater □ /Redevelopment □	Waste Other	_	ement	\boxtimes							
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Dar Borins	ne Cou	inty 1 1 By: 1	Lanum Name o	Il Site No. 3 f crew chief (fi	rst. last) a	and Firm	N/A Date Dri	illing S	tarted		D	ate Drilli	ng Con	npleted		W-2 Drill	ling Method
_	tt Klu	-	vaine o	i ciew ciner (ii	156, 1656) 6		Bute Bi	umig o	tui toa			511111	ng con	приссе			ing memou
Soil	ls and	Engi		g Services					/2022				2/21/2	2022			SA 4.25 ID
WI Ur	nique W		•	DNR Well II		Common Well Name						ce Elevat		ACT.	Bo		Diameter
Local	W A Grid Oı	1433	☐ (es	102		MW-2 ring Location ⊠	886).5 Fe	et MS	L		892.3] Local C				8.0	inches
State		18111		,836 N, 2,1			La	at	°			Boom	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		J		□Е
SE		of S	E 1	/4 of Section	25,	т 7 N, R 10 E	Lon	g	°	<u> </u>			Feet	\Box s		-	Feet W
Facilit		20		Count	-		County Co	ode	I		ty/ or	Village					
	45048	50		Dan	e		13	T	Madi	son		1	Cail	Duani			
San	nple				Q 11/7								5011	Prope	Tues		-
	t. & I (in)	nts	eet			Rock Description						ive					
er ype	h At erec	Cou	In I			eologic Origin For		S	i.	am		ress	ure	_	city		nent
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet		Ea	ch Major Unit		SC	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
Z ä	R	В		See horing	a log "F	3-2" for soil descri	ntions	n	9 7		Ъ	N C	20	7		<u> </u>	- × O
			-1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -		poring 1	cm/s 4 feet - well set at n elevation 878.3f		SM					15.4	NV	NP	19.7	Lab classified as SM Screen zone bag sample S11 - 5.5-6.67ft from boring B-2
I herel	y certif	fy that	the info	rmation on this	s form is t	rue and correct to the b	est of my k	nowled	ge.			-	1				
Signat	-			gan Di		Firm Te	tra Tech										Tel:
			0	/	1	84	13 Excelsion	Dr Su	ite 160	Madiso	on, W	53714					Fax:

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 be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

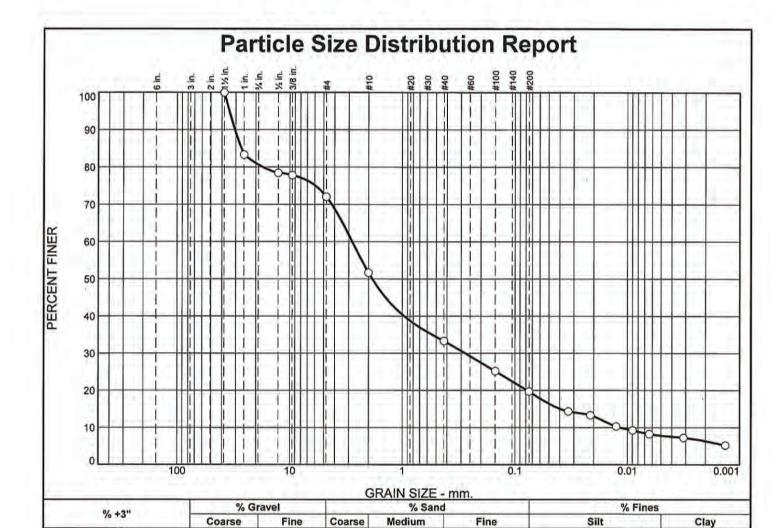
SCS edits (in red) based on review of soil &

State of Wisconsin Department of Natural Resources			MONTEODING WELL CONCED	LICTION
Route To:	Watershed/Wastewater Remediation/Redevelopment	Waste Management ☐ Other ☐	MONITORING WELL CONSTR Form 4400-113A Rev. 7-9	
Facility/Project Name	Local Grid Location of Well		Well Name	
Dane County Landfill Site No. 3	ft. N. Local Grid Origin (estimated:	ft. □ E.	MW-2	
Facility License, Permit or Monitoring No.	Local Grid Origin (estimated:	or Well Location	Wis. Unique Well No. DNR Well N	Number
N/A	Lat Lor	ng or	WA433 10	2
Facility ID	St. Plane378,836 ft. N,	2,169,374 ft. E. S/C/N	Date Well Installed	
113450480	Section Location of Waste/Source		02/21/2022	171
Type of Well	SE 1/4 of SE 1/4 of Sec. 2	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Well Installed By: (Person's Name a	nd Firm)
Well Code 11/mw Distance from Waste/ Enf. Stds.	Location of Well Relative to Waste/S	Source Gov. Lot Number	Scott Klumb	
Source ft. Apply	u □ Upgradient s □ S d □ Downgradient n ⊠ N	lidegradient	Soils and Engineering Service	ces
	95.18 ft. MSL	1. Cap and lock?		s 🗆 No
B. Well casing, top elevation	95.18 ft. MSL 95.14 ft. MSL	2. Protective cover p	-	4.0 in.
G, 1		a. Inside diameter: b. Length:	· _	5.0 ft.
	392.3 ft. MSL	c. Material:	Steel	n. □ □ 04
D. Surface seal, bottom892.3 ft. MSI	or <u>0.0</u> ft.		Other	
12. USCS classification of soil near screen:	PARTIE DA	d. Additional prote	ection?	s 🛭 No
	W□ SP□ \\	If yes, describe	:	_
$SM \boxtimes SC \square ML \square MH \square C$ Bedrock \square	L □ CH □	3. Surface seal:	Bentonite	⊠ 30
	¬N-	3. Surface sear.	Concrete	
	es 🗆 No	*	Other	
14. Drilling method used: Rota Hollow Stem Aug	ry □ 5 0	4. Material between	well casing and protective pipe: Bentonite	□ 30
Oth	KXXI K	F	Red Flint #40 Other	
		5. Annular space sea	l: a. Granular/Chipped Bentonite	⊠ 33
	ir □ 0 1		and weight Bentonite-sand slurry	
Drilling Mud □ 0 3 Nor	ıe ⊠99	cLbs/gal m	nud weight Bentonite slurry	□ 31
16. Drilling additives used? ☐ Ye	es ⊠ No		ite Bentonite-cement grout	5 0
10. Drining additives used:		XX	volume added for any of the above	
Describe		f. How installed:	Tremie Tremie pumped	01
17. Source of water (attach analysis, if required	ı):			$\boxtimes 08$
		6. Bentonite seal:	a. Bentonite granules	
		XXI /	$3/8$ in. \square $1/2$ in. Bentonite chips	
E. Bentonite seal, top891.8 ft. MSL	or0.5 ft. \	& / c	Other	
000.0	or2.5 ft.	7. Fine sand material a. b. Volume added	l: Manufacturer, product name & mes	sh size
F. Fine sand, top889.8 ft. MSL	or2.5 ft.	a	Red Flint #15 ft ³	
C Elles and the 889.8 & MCI	or2.5 ft.	b. Volume added	al: Manufacturer, product name & me	ach aire
G. Filter pack, top 889.8 ft. MSL	or n.		Red Flint #40	SII SIZE
H. Screen joint, top889.3 ft. MSL	or3.0 ft.	a b. Volume added		
J / 1		9. Well casing:	Flush threaded PVC schedule 40	⊠ 23
I. Well bottom 879.3 ft. MSL	or13.0 ft. \		Flush threaded PVC schedule 80	
			Other	
J. Filter pack, bottom 878.3 ft. MSL	or14.0 ft.	10. Screen material:		_
979.2	14.0	a. Screen Type:	Factory cut	
K. Borehole, bottom 8/8.3 ft. MSL	or14.0 ft.		Continuous slot Other	
L. Borehole, diameter8.0 in.		b. Manufacturer	Hole Products - Johnson	
L. Borenoie, diameter in.		c. Slot size:		0.010 in.
M. O.D. well casing 2.38 in.		d. Slotted length:		10.0 ft
		11. Backfill material (below filter pack): None	
N. I.D. well casing 2.00 in.			Other	
I hereby certify that the information on this formation Signature	Time	knowledge.		
Logan Dwyer	Firm Tetra Tech 8413 Excelsion	or Dr Suite 160 Madison, WI 53714	4	Tel: Fax:

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/V			Waste Management	3			
Remediation	1/Redeve		Other	777 11 3 7			
Facility/Project Name		County	_	Well Nam		TT / 0	
Dane County Landfill Site No. 3		0 1 0 1	Dane	1		W-2	
Facility License, Permit or Monitoring Number		County Code	Wis. Unique Well Nu		DNR Wel		
N/A		13	WA43	33		102	
1. Can this well be purged dry?	⊠ Ye	s 🗆 No	11. Depth to Water	Before De	evelopment	After De	velopment
Well development method: surged with bailer and bailed	⊠ 4	· 1	(from top of well casing)	a.	8.63 ft.		14.80 ft.
surged with bailer and pumped surged with block and bailed	□ 4	1 2	Date	b. 2/2	23/2022	2/2	24/2022
surged with block and pumped surged with block, bailed, and pumped compressed air bailed only	□ 7 □ 2	5 2 7 0 8 0 0	Time	c.	⊠ a 08:45 □ ₁	a.m. o.m.	⊠ a.m. 11:45 □ p.m.
pumped only pumped slowly	□ 5	1 0	12. Sediment in well bottom		0.0 inches		0.0 inches
other			13. Water clarity	Clear □ Turbid ⊠	1 0 1 5	Clear □ Turbid ⊠	2 0 2 5
3. Time spent developing well		150 min.		(Describe) Tan		(Describe) Slight, ta	an
4. Depth of well (from top of well casing)	1	15.8 ft.					
5. Inside diameter of well	2	2.00 in.					
Volume of water in filter pack and well casing		5.8 gal.					
7. Volume of water removed from well	1	11.0 gal.	Fill in if drilling fluids 14. Total suspended	s were used an	d well is at sol mg/l		ity: 304.0 mg/l
8. Volume of water added (if any)		0.0 gal.	solids		mg/i	•	70 1.0 mg/1
9. Source of water added			15. COD		mg/l		17.1 mg/l
			16. Well developed by:	: Person's Nar	ne and Firm		
10. Analysis performed on water added?	☐ Ye	s 🗆 No					
(If yes, attach results)			Jeff Prio	JI.			
			Soils &	Engineerin	g Services		
17. Additional comments on development: Purged dry on 2/23 twice (4 gals @ 1-10:25)	4:25 an	d 1 gal @ 15	:00), purged dry on 2	2/24 twice ((4 gals @ 8	:45 and 2 g	gals @
Facility Address or Owner/Responsible Party Addre Name: Robert Regan	ess		I hereby certify that th knowledge.	e above inforr	nation is true a	and correct to	the best of my
Name: Robert Regan Firm: Dane County Dept of Waste &	Renew	ables	Signature:	oon	n Do	wuon	
7102 LIS 12			Print Name: Logan	0		1	<u>1006</u>
	71 Q					(2 2)	
City/State/Zip: Madison, Wisconsin 537	10		Firm: Tetra	1 ech			



SIEVE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1.0	83.3		-
0.5	78.4		
0.375	77.8		
#4	72.1		
#10	51.7		
#40	33.3		
#100	25.2		
#200	19.7		
	0 4		
	D-40 - 0-4		10

19.3

	Material Description	1
SILTY SAND W. very pale brown	GRAVEL, coarse to r	nedium to fine grained,
PL= 12	Atterberg Limits LL= 11	PI= NP
D ₉₀ = 30.6373 D ₅₀ = 1.8527 D ₁₀ = 0.0117	Coefficients D85= 26.8391 D30= 0.2744 Cu= 239.52	D ₆₀ = 2.8011 D ₁₅ = 0.0395 C _c = 2.30
USCS= SM	Classification AASHTO	D= A-1-b
Munsell Color Co Location: Monito		

11.9

0.0

Source of Sample: Monitoring Wells Sample Number: MW2 S11

Depth: 5'6"-6'8"

20.4

18.4

13.6

8.6

Date: 2/18/2022

7.8

Tetra Tech 2679 Continental Drive Green Bay, WI 54311

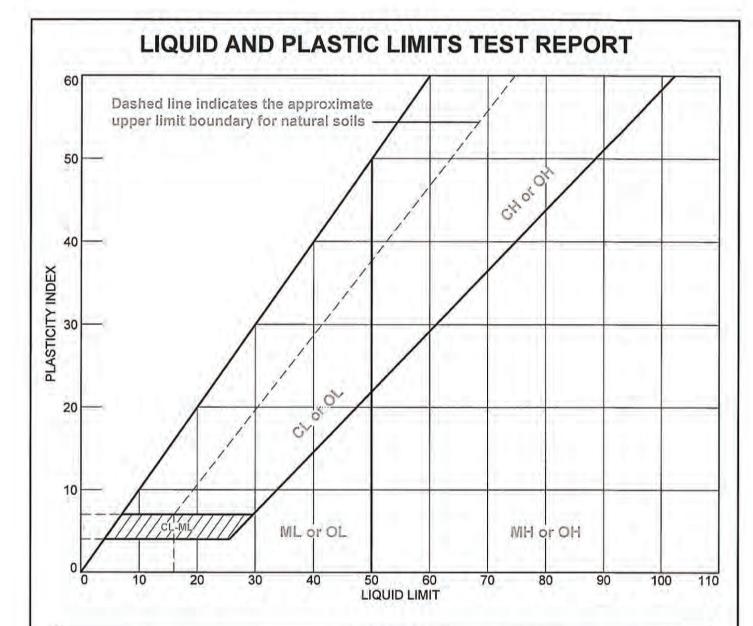
Client: Dane County

Project: Yahara Hills Geotechnical Investigation

Project No: Figure

Tested By: MAB Checked By: JJN

⁽no specification provided)



SYMBOL	SOURCE	SAMPLE NO.	DEPTH	SOIL DATA NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	uscs
*	Monitoring Wells	MW2 S11	5'6"-6'8"	15.4	12	11	NP	SM

Tetra Tech 2679 Continental Drive Green Bay, WI 54311

Client: Dane County

Project: Yahara Hills Geotechnical Investigation

Project No.:

Figure

Tested By: MAB

Checked By: JJN

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

			<u>Rc</u>	oute To:	Watershed/W Remediation/	astewater □ (Redevelopment □	Waste Other	_	ement					(1)	Not o	n lan	dfill	site.)
															Pag		of	3
	y/Projec				_		License	Permit	Monite!	ring N	umb	er	E	Boring	Numbe		$\overline{}$	
				ll Site N		1.5	N/A	.11. C	4 4 1		13	D + D	.11:		1 (1	B-3		. M. d. 1
		-	Name o	f crew ch	nief (first, last) a	nd Firm	Date Dr	illing S	tarted			Date D	rillin	ng Con	npleted		Drill	ling Method
	tt Klu s and		ineerin	ng Servi	ces			2/16	5/2022				2	2/16/2	022		H	SA 2.25 ID
	ique W				Well ID No.	Common Well Name	e Final Sta				Surf	face El			.022	Во		Diameter Diameter
									et MS					eet N	ISL			inches
Local	Grid Oı	rigin			or Bor		<u> </u>		0	,		" Loc	al G	rid Lo	cation			
State					, 2,166,911		La					_			\square N			□Е
SE		of S	W 1	1/4 of Sec		T 7 N, R 10 E	Lon				•. /	_		Feet				Feet W
Facilit	у ID 45048	20		I .	County Dane		County Co	ode	Civil T Mad		1ty/ (or Villa	age					
San			1		Dane		13		Iviau.	ISOH	Т			Cail	Prope			
San					a H/D									3011	Гюре	rues		-
	Length Att. & Recovered (in)	nts	eet			lock Description						\ e						
je pe	Atf	mo ₂	In F			eologic Origin For		S	ွ	H	_	essi	th th	re rt		ity		ents
Number and Type	Length Att. & Recovered (in	Blow Counts	Depth In Feet		Eac	ch Major Unit		SC	Graphic Log	Well Diagram		Compressive	Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
an S	Le	BĬ) õ					b	Grap Log	N W	5	<u> </u>	Str	≱్ రి	Li Ci	Pla	P 2	<u> </u>
			F	Silty	sand (SM), to	race angular grav R 4/6), dry, medi	el,											
			E ₁	dense	wisii ieu (5 i e (till)	K 4/0), dry, medi	uIII											
			- 1	a crise	, (6111)													
			-															
			-2															
			E															
1	24	7	-3															
ss \/	21	10	-															
I X		11 12	<u>-</u> 4															
Ι/\			E															
			E_5															
			F 3															
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			E															
			<u>-8</u>															
$\frac{2}{SS}$	24 24	14 12	F 0	few c	oarse sand, f	ew angular grave	1											
33	24	12	F .															
ΙÅ		12	- 9															
/\			E															
			10															
			-															
			-11															
			E							:								
			-12															
I herek	v certif	fy that		rmation c	on this form is to	rue and correct to the b	est of mv k	nowled	ge.	1								
Signat		.,			ka e ralesi	T.	etra Tech		~··									т.1
کارند کی			Lo	gan	Dwyer		tra Tecn 13 Excelsion	· Dr S11	ite 160	Madie	on V	WI 537	'14					Tel: Fax:

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 be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

SOIL BORING LOG INFORMATION SUPPLEMENT

Form 4400-122A

	nple	ber	B-3	Use only as an attachment to Form 4400-1	22.	-			-	Soil	Pag		of	3
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength			Plasticity Index	P 200	RQD/ Comments
3 SS	24 24	5 6 8 8	-13 -14	Silty sand (SM), trace angular gravel, yellowish red (5YR 4/6), dry, medium dense (till) (continued) few clay, moist										Moist soil noticed at 13.5 feet
4 SS	24 22	7 7 10 11	-16 -17 -18 -19 -20	fine to medium grained, reddish brown (5YR 5/4)	SM		Y			10.4	NV	NP	26.4	Lab classified as SM
5 SS	24 24	10 17 17 20	-22 -23 -24 -25 -26	Sandy lean clay (CL), little angular gravel, yellowish brown to dark brown (10YR 5/4 to 3/3), medium-plastic, hard, moist (glacio-lacustrine) (Paleosol)	CL				4	10	25	13	59.2	Lab classified a: CL
6 SS	24 16 24	7 9 10 13	-27 -28 -29 -30	little silt, wet, stiff Silty sand with gravel (SM), light brown (7.5YR 5/4), fine grained, angular gravel, wet, medium dense (outwash) SS6A (28.4 - 30') Silty Gravel/Silty Sand, Lt. gray (5YR 7/1) & pink gray (5YR 6/2, angular fine gravel & coarse sand with silt & clay) (Tonti Member)	GM/ SM				2	8.6	NV	NP	31.4	Bag sample S10 - 28-30ft fror boring MW-3 (SM)

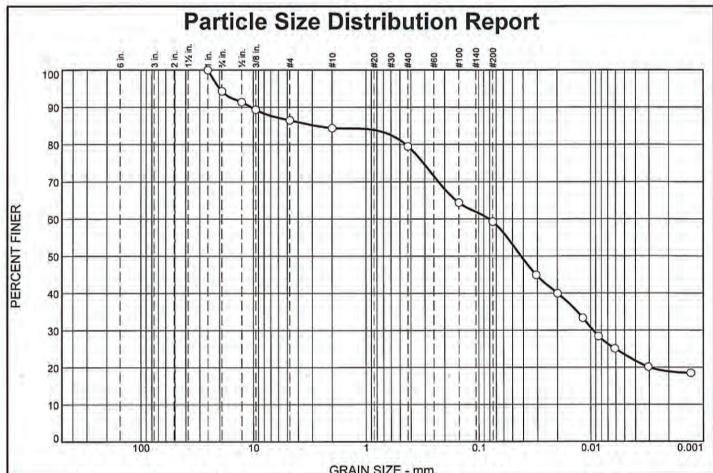
Form 4400-122A

	Numb	7	\equiv	Use only as an attachment to Form 4400-1						Soil	Prope	erties		
and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/
; 🛚	9 9	72 28	-33 -34 -35 -36	(SP-SM) Poorly graded fine sand (SP), white (GLEY1 8/N), wet, very dense (outwash) Poorly graded sand w/silt (SP-SM) Lt. gray, streaked with pale green (5G 6/2), rounded & angular, mostly quartz sand, fine, dense, cohesive, v. poorly cemented (sandstone) (Tonti Member)	SM SP- SM SS2									
			- 37	End of boring 37 feet - bedrock - split spoon refusal (bottom elevation 858.9ft MSL) SCS edits (in red) based on review of soil and rock samples 8/20/2023.										

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information. Route to DNR Bureau: **Drinking Water** Watershed/Wastewater Remediation/Redevelopment Verification Only of Fill and Seal Waste Management Other: 2. Facility / Owner Information 1. Well Location Information County WI Unique Well # of Facility Name Hicap # Removed Well Dane County Dept of Waste and Renewables Dane Facility ID (FID or PWS) Latitude / Longitude (see instructions) Format Code Method Code 113450480 GPS008 378224.92 DD Ν License/Permit/Monitoring# SCR002 2166911.22 DDM N/A W OTH001 1/4 / 1/4 Section Township Range Original Well Owner SE 1/4 SW 1/4 ✓ E or Gov't Lot # 7 25 10 W Present Well Owner Well Street Address Yahara Hills Golf Course 6701 US-12, Madison, WI 53718 Mailing Address of Present Owner Well ZIP Code Well City, Village or Town Madison, WI 53718 City of Present Owner State ZIP Code Subdivision Name Lot # 4. Pump, Liner, Screen, Casing & Sealing Material Reason for Removal from Service WI Unique Well # of Replacement Well Pump and piping removed? Yes No Sample Only Liner(s) removed? Yes No 3. Filled & Sealed Well / Drillhole / Borehole Information Liner(s) perforated? Yes Nο Original Construction Date (mm/dd/yyyy) Monitoring Well Yes Screen removed? 2/16/2022 Water Well Casing left in place? If a Well Construction Report is available, ✓ Borehole / Drillhole Was casing cut off below surface? nlease attach Did sealing material rise to surface? ✓ Yes Construction Type: No Did material settle after 24 hours? Yes No ✓ Drilled Driven (Sandpoint) Dug If yes, was hole retopped? Yes Other (specify): If bentonite chips were used, were they hydrated Formation Type: Yes with water from a known safe source? ✓ Unconsolidated Formation Required Method of Placing Sealing Material **Bedrock** Conductor Pipe-Gravity Total Well Depth From Ground Surface (ft.) Casing Diameter (in.) Conductor Pipe-Pumped Screened & Poured (Bentonite Chips) 37 ft. Other (Explain): Lower Drillhole Diameter (in.) Casing Depth (ft.) Sealing Materials **Neat Cement Grout** Concrete 6 in. Sand-Cement (Concrete) Grout Bentonite Chips Was well annular space grouted? No Unknown For Monitoring Wells and Monitoring Well Boreholes Only: If yes, to what depth (feet)? Depth to Water (feet) Bentonite Chips Bentonite - Cement Grout 20.85 ft. Granular Bentonite Bentonite - Sand Slurry No. Yards, Sacks Sealant or 5. Material Used to Fill Well / Drillhole From (ft.) To (ft.) olume (circle one) Surface 19 175 lbs 3/8" Bentonite Chips Time release coated 3/8" bentonite chips 19 37 4 buckets - 160 lbs 6. Comments Boring B-3 7. Supervision of Work **DNR Use Only** Name of Person or Firm Doing Filling & Sealing License # Date of Filling & Sealing or Verification Date Received Noted By Elliot Patterson - SES Madison (mm/dd/yyyy) 2/16/2022 Street or Route Telephone Number Comments (608) 274-7600 1102 Stewart St. City ZIP Code Signature of Person Doing Work State Date Signed WI Madison 53713 4/14/2022



ar dan	% Gr	avel		% Sand		% Fine	es
% +3"	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	5.7	7.8	2.1	4.9	20.3	35.8	23.4

SIEVE	PERCENT FINER	SPEC.* PERCENT	PASS?
1.0	100.0		1111111
0.75	94.3		
0.5	91.4		
0.375	89.4		
#4	86.5		
#10	84.4		
#40	79.5		
#100	64.4		
#200	59.2		
	2.74		
			h

	Material Description	
SANDY LEAN C brown	LAY, a little gravel, ye	llowish brown to dark
PL= 12	Atterberg Limits LL= 25	PI= 13
D ₉₀ = 10.4072 D ₅₀ = 0.0420 D ₁₀ =	Coefficients D ₈₅ = 2.7546 D ₃₀ = 0.0095 C _u =	D ₆₀ = 0.0809 D ₁₅ = C _c =
USCS= CL	Classification AASHTO:	= A-6(4)
Munsell Color Co Location: Boring-	Remarks de: 10YR 5/4 to 3/3 3	

Source of Sample: Borings Sample Number: B3 S5

Depth: 23.5'-25.0'

Date: 2/16/2022

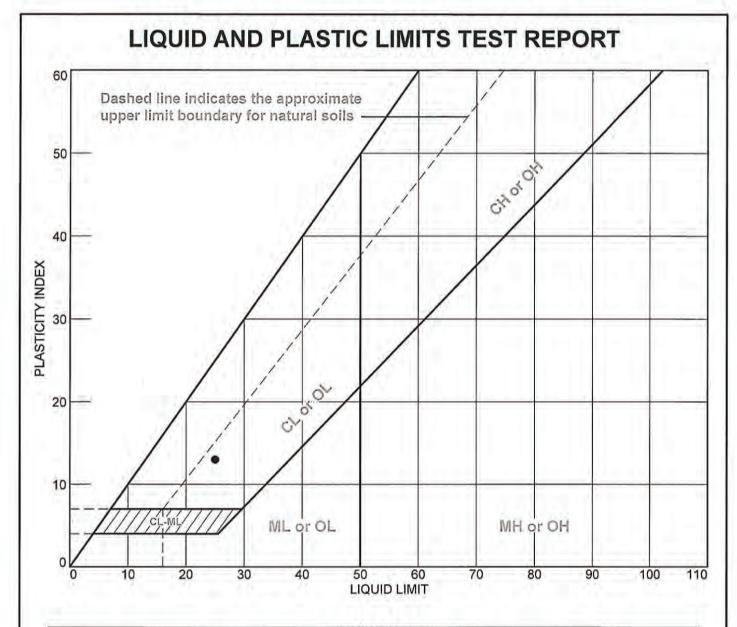
Tetra Tech 2679 Continental Drive Green Bay, WI 54311 Client: Dane County

Project: Yahara Hills Geotechnical Investigation

Project No: Figure

Tested By: MAB Checked By: JJN

⁽no specification provided)



			= 1	SOIL DATA	1			
SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	uscs
•	Borings	B3 S5	23.5'-25.0'	10.0	12	25	13	CL
- 6				4.04	4 4			

Tetra Tech 2679 Continental Drive Green Bay, WI 54311 Client: Dane County

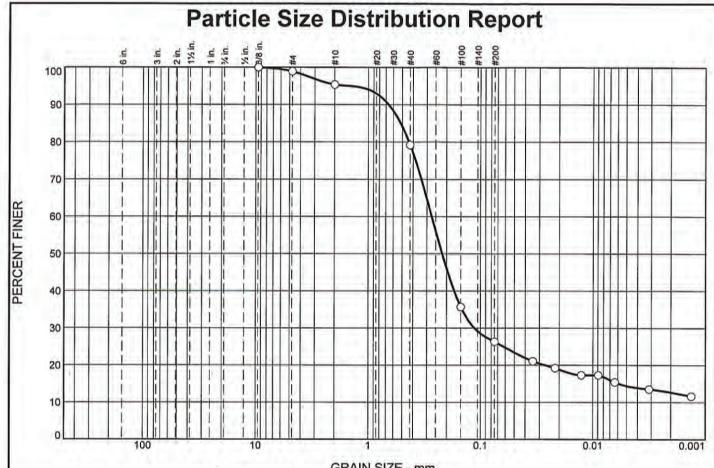
Project: Yahara Hills Geotechnical Investigation

Project No.:

Figure

Tested By: MAB

Checked By: JJN



			G	RAIN SIZE -	mm.		
% +3"	% Gr	avel		% Sand		% Fine	es
76 +3	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	1.1	3.5	16.2	52.8	12.0	14.4

SIEVE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
0.375	100.0		
#4 #10	98.9 95.4		
#40	79.2		
#100	35.7		
#200	26.4		

BARRY BURNS BARRY STORY	Material Description ine to medium grained	The Street of the United Street
PL= NP	Atterberg Limits	PI= NP
D ₉₀ = 0.6578 D ₅₀ = 0.2190 D ₁₀ =	Coefficients D ₈₅ = 0.5154 D ₃₀ = 0.1134 C _u =	D ₆₀ = 0.2717 D ₁₅ = 0.0059 C _c =
USCS= SM	Classification AASHT	O= A-2-4(0)
Munsell Color Co Location: Boring	Preferation for the form for the second	

(no specification provided)

Source of Sample: Borings Sample Number: B3 S12 Depth: 18.0'-20.0'

Date: 2/16/2022

Tetra Tech 2679 Continental Drive Green Bay, WI 54311 Client: Dane County

Project: Yahara Hills Geotechnical Investigation

Project No: Figure

Tested By: MAB Checked By: JJN

MW-3

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

			Ro		ned/Wastewater ation/Redevelopment		Waste M	_	ement								
														Pag		of	2
	//Projec						License/I	Permit/	Monito	ring Nı	ımber		Boring	Numbe			
				Site No. 3 Crew chief (first, 1	oat) and Firm		N/A Date Dri	lling C	tortad		De	ıte Drilli	na Con	anlatad	MV	W - 3	ling Method
	tt Klu		Name of	ciew cinei (ilist, i	ast) and Pilli		Date Dill	unig 3	iaricu		100	ile Dillii	ing Con	присиси			ing Method
Soil	s and	Engi	neerin	g Services				2/17	/2022				2/17/2	2022		H	SA 4.25 ID
WI Un	ique W	ell No.		DNR Well ID No		ame	Final Sta					e Eleva			Bo		Diameter
0001	W.A Grid Or	1432	☐ (ag	103	MW-3 Boring Location ⊠		884	.2 Fe	et MS	L		896.0 Local C				8.0	inches
State]		ıgın		218 N, 2,166,			La	t	o 	<u> </u>	***	Locar	mu Loc	cation	r		□Е
SE		of S		4 of Section 2:) Е	Long	g	°	1	***		Feet	\square S			Feet W
Facilit				County			County Co	de	Civil T		ity/ or	Village					
	45048	80		Dane			13		Madi	son			~	_			
San	iple												Soil	Prope	erties		_
	& (in)	ıts	eet		Soil/Rock Description							\ ve					
pe er	Att ered	Cour	In F	A	nd Geologic Origin For			S	္ခ	_ 		essi	ıre		ity		ents
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet		Each Major Unit			SC	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	200	RQD/ Comments
Z E	Le	BI	Ď	C - 1 1 - 1 -	g "B-3" for soil des	4	•	D	5 3	ĭ D M	PI	<u> </u>	Σŏ	<u> </u>	F F	<u> </u>	<u> </u>
			-1.5 -3.0 -4.5 -6.0 -7.5 -10.5 -13.5 -15.0 -16.5 -18.0	Kh = 1.57E	-03 cm/s			SM									
hereb	y certif	y that	the info	mation on this form	m is true and correct to the	he bes	st of my kn	owled	ge.			'		'			
Signat	ıre	: 1	Log	gan Dwg	yer Firm		ra Tech	Dr Su	ite 160	Madis	on, WI	53714					Tel: Fax:

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 be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Form 4400-122A

Borin	g Numl	er	MW	V-3 Use only as an attachment to Form 4400-1	22.						Pag		of	2
San	nple									Soil	Prope	erties		_
	. & (in)	ıts	eet	Soil/Rock Description					o, e					
er 'pe	n Att ered	Cour	In F	And Geologic Origin For	\sigma	<u>.</u> 2	ш		essi	er er		ity		ents
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Each Major Unit	SC	Graphic	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
Z ag	Le	B	Ď	See boring log "B-3" for soil descriptions	D	5 4	<u>≱ </u>	I-I	<u>2 22</u>	Σŏ	<u> </u>	P I		<u> </u>
			E -21.0											
			E		SM									
			22.5				目							
			-											
			24.0											
			□ □25.5											
			E 23.3		CL									
			27.0											
			-							0.6	2137	NID	21.4	Lab
			28.5		SM					8.6	NV	NP	31.4	classified as SM
			30.0											Bag sample
			30.0	End of boirng 30 feet - well set at 28 feet (borehole bottom 866ft MSL)										Bag sample S10 - 28-30ft
				(botenoie bottom 800it MSL)										
				SCS edits (in red) based on review of										
				soil & rock samples 8/12/2023.										

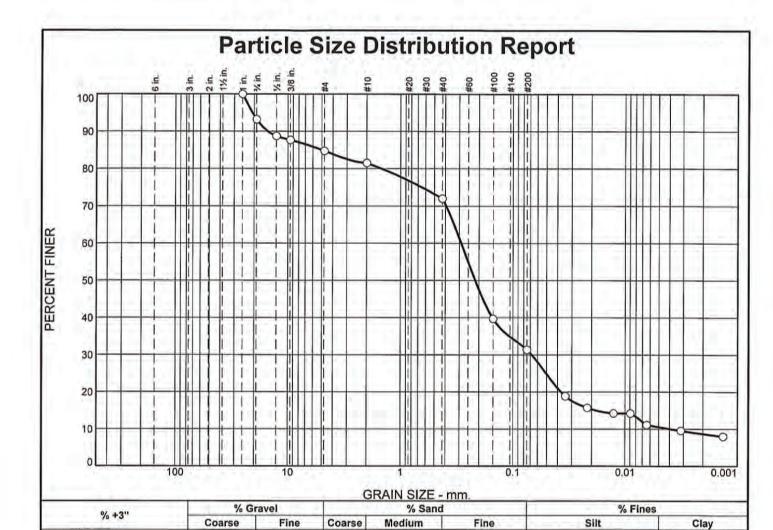
State of Wisconsin Department of Natural Res	ources					MONITODING WELL	LCONGEDI	UCTION
Department of Futural res	Route To:		Wastewater ☐ n/Redevelopment ☐	Waste Man Other	agement 🛚	MONITORING WELL Form 4400-113A	L CONSTRU Rev. 7-98	
Facility/Project Name		Local Grid Lo	cation of Well			Well Name		
Dane County La	andfill Site No. 3		ft. \square N rigin \square (estimated	ft.	□ E.	MV	N-3	
Facility License, Permit		Local Grid Or	rigin (estimated	: []) or W	ell Location 🖂	Wis. Unique Well No.	DNR Well N	lumber
N	/A	Lat		ong	or	WA432	103	3
Facility ID		St. Plane	378,218 ft. N,	2,166,911	ft. E. S/C/N	Date Well Installed		
11345	50480	Section Locat	ion of Waste/Source			02/17		
Type of Well		SE 1/4 of	SW 1/4 of Sec	25 . T. 7	N. R. 10 ⊠ E N. R. 10 □ W	Well Installed By: (Pers	son's Name ai	nd Firm)
Well Cod Distance from Waste/	de 11/mw Enf. Stds.	Location of W	ell Relative to Waste	Source	Gov. Lot Number	Scott I	Klumb	
Course	ft. Apply	u 🗆 Upgra	adient s □ S ngradient n ⊠ N	Sidegradient		Soils and Engin	neering Servic	es
A. Protective pipe, top e	_	98.68 ft. MSI	igradient ii 🖾 i	NOT KHOWII	. Cap and lock?			□ No
	.: 80	08 64 C MGI		2.	Protective cover p	_		
B. Well casing, top eleva		10. 10151	í I 🗆		a. Inside diameter	:	_	4.0 in
C. Land surface elevation	on	896.0 ft. MSL			b. Length:		_	7.0 ft
D. Surface seal, bottom	896.0 ft. MSI	or0.0	ft. 521521	16.216.21	c. Material:		Steel Other	□ 0 4 □
12. USCS classification				AIL DIE DIE	d. Additional prot	rection?	Officer ☐ Yes	
GP □ GM □		W□ SP □			If yes, describe	:		_
SM ⊠ SC □		L 🛛 CH 🗆					Bentonite	
Bedrock □					Surface seal:		Concrete	
13. Sieve analysis attac	ched?	es 🗆 No						
14. Drilling method use		y □ 5 0		`4.	. Material between	well casing and protective		
	Hollow Stem Aug Oth	er ⊠41 er □			I	Red Flint #40	Bentonite	
	Oui	21 L		5				
15. Drilling fluid used:	Water □ 0 2 A	ir 🗆 0 1				al: a. Granular/Chipp and weight Bentonite		
	ling Mud □ 0 3 Nor	ne ⊠99				nud weight Bentome		
					l% Bentor		cement grout	
16. Drilling additives u	sed?	es 🗵 No				volume added for any of		
Describe				1	f. How installed			□ 01
	tach analysis, if required):				Tre	emie pumped	
7,1,2,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,	,	,,-				_	Gravity	
			-	6.	Bentonite seal:		nite granules ntonite chips	
E. Bentonite seal, top	895.5 ft. MSL	or 0.5	6			3/8 III. □ 1/2 III. Bei	-	
E. Bentonne sear, top	It. WISE	01	\ KXX	X / ,7.		l: Manufacturer, product		
F. Fine sand, top	881.0 ft. MSL	or15.0	ft.	7.	a	Red Flint #15		
			/ 17		b. Volume added			
G. Filter pack, top	879.8 ft. MSL	or16.2	ft.	8.	Filter pack materi	al: Manufacturer, produc	t name & me	sh size
TT 0	979.0 0 2 707	18.0			a	Red Flint #40	2	
H. Screen joint, top	878.0_ ft. MSL	or18.0	It.		b. Volume added			⊠ 2.2
I. Well bottom	868.0 ft. MSL	or 28.0		9.	Well casing:	Flush threaded PVC Flush threaded PVC		
1. Well bottom	It. WISE	01	" \			Trush threaded 1 ve	Other	
J. Filter pack, bottom	866.0 ft. MSL	or30.0	ft.	10.	Screen material:	PVC		
-			7////		a. Screen Type:		Factory cut	⊠ 11
K. Borehole, bottom	866.0 ft. MSL	or30.0	ft.			Con	ntinuous slot	
	9.0				1 26 0	Hole Products - John	Other	
L. Borehole, diameter	8.0 in.		<u> </u>		b. Manufacturerc. Slot size:	Tiole Floducts - John		0.010 in
M. O.D. well casing	2.38_ in.				d. Slotted length:		_	10.0 ft
wii Casing	III.			11.	. Backfill material (None	
N. I.D. well casing	2.00 in.					- •	Other	
I hereby certify that the	information on this form	n is true and co	Eima	knowledge.				
Signature	Logan Dwyer		Firm Tetra Tech	on De Crista 160	Madison, WI 5371	4		Tel: Fax:
	V		1 OT LE EXCEISIO	л 171 энис 100	IVIAUISUIL VVI J 7 / I	T		Lax.

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

	d/Wastewate		Waste Management				
	ion/Redevel	opment \square	Other				
Facility/Project Name		County		Well Name			
Dane County Landfill Site No.	3		Dane			W-3	
Facility License, Permit or Monitoring Number		County Code	Wis. Unique Well Nur		DNR Wel		
N/A		13	WA43	32		103	
1. Can this well be purged dry?	☐ Yes	s 🛛 No	11. Depth to Water	Before De	evelopment	After De	evelopment
Well development method: surged with bailer and bailed	□ 4	1	(from top of well casing)	a.	14.41 ft.		14.95 ft.
surged with bailer and pumped surged with block and bailed surged with block and pumped		2	Date	b. 2/2	23/2022	2/	/23/2022
surged with block, bailed, and pumped compressed air	□ 7 □ 2	0	Time	c.	⊠ a 09:30 □ 1	a.m. p.m.	□ a.m. 12:00 ⊠ p.m.
bailed only pumped only	□ 1 □ 5	1	12. Sediment in well		0.0 inches		0.0 inches
pumped slowly other		0	bottom 13. Water clarity	Clear □ Turbid ⊠	1 0 1 5	Clear ⊠ Turbid □	2 0 2 5
3. Time spent developing well		60 min.		(Describe) Tan		(Describe) Clear	
4. Depth of well (from top of well casing)	3	0.6 ft.					
5. Inside diameter of well	2	.00 in.					
6. Volume of water in filter pack and well casing		8.8 gal.					
7. Volume of water removed from well	14	5.0 gal.	Fill in if drilling fluids 14. Total suspended	were used and	d well is at sol mg/l	id waste faci	11ty: 76.2 mg/l
8. Volume of water added (if any)		0.0 gal.	solids				
9. Source of water added			15. COD		mg/l		mg/l
			16. Well developed by:	Person's Nan	ne and Firm		
10. Analysis performed on water added?	☐ Yes	□ No	Jeff Prio	ar.			
(If yes, attach results)							
			Soils &	Engineerin	g Services		
17. Additional comments on development: Purged 10 gallons with bailer, then	pumped (3 gal/min f	from 10:00AM-10:4.	5AM			
Facility Address or Owner/Responsible Party Address	dress		I hereby certify that th	e above inforn	nation is true a	and correct to	the best of my
Name: Robert Regan			knowledge.				
Firm: Dane County Dept of Waste &	& Renewa	bles	Signature:	ogas	n Di	vye	٤
Street: 7102 US-12			Print Name: Logan	Dwyer		0	
City/State/Zip: Madison, Wisconsin 5	3718		Firm: Tetra	Tech			

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



9.5

40.6

SIEVE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.0 0.75 0.5 0.375 #4 #10 #40 #100 #200	100.0 93.2 88.8 87.7 84.8 81.5 72.0 39.7 31.4		(A-No)

6.8

8.4

3.3

	Material Description /GRAVEL, fine grains	The same of the sa
PL= NP	Atterberg Limits LL= NV	PI= NP
D ₉₀ = 15.0773 D ₅₀ = 0.2167 D ₁₀ = 0.0039	Coefficients D ₈₅ = 4.9756 D ₃₀ = 0.0679 C _u = 73.89	$D_{60} = 0.2891$ $D_{15} = 0.0181$ $C_{c} = 4.08$
USCS= SM	Classification AASHTO	D= A-2-4(0)
Munsell Color Co Location: Monito		

20.9

(no specification provided)

0.0

Source of Sample: Monitoring Wells Sample Number: MW3 S10

Depth: 28.0'-30.0'

Date: 2/17/2022

10.5

Tetra Tech 2679 Continental Drive Green Bay, WI 54311 Client: Dane County

Project: Yahara Hills Geotechnical Investigation

Project No: Figure

Tested By: MAB Checked By: JJN

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

			Ro	ute To:		astewater		Waste I	_	ement	\boxtimes							
					Remediation/	Redevelopment		Other										
7:124	-/D:-	-4 NI					Īī	:/T)i4/) (<u>:</u> 4	.i N	1	51	Boring	Pag		of	2
	y/Projectie e Cou			Site No	0. 3			icense/I N/A	ermit/	Monito	ring iv	umber		Boring	Numbe		V- 4	
					ief (first, last) aı	nd Firm		Date Dri	lling St	arted		Da	ate Drilli	ng Con	npleted			ing Method
	tt Klu		nooring	g Service	ec.				2/16	/2022				2/17/2	ກດວວ		l no	SA 4.25 ID
WI Un	ique W	ell No			Vell ID No.	Common Well Nam	ne F	inal Sta			el	Surfac	ce Elevat		2022	Во		Diameter
		4431			104	MW-4		895	.7 Fe	et MS	Ĺ		911.7				8.0	inches
Local (State)	Grid O1	rigin			2,168,283	ing Location 🛛 E S/C/N		La	t	0	1	п	Local C	Grid Lo	_			
NW		of N			2,108,285 tion 36,		3	Long		0	,	511		Feet	N □ S]	□ E Feet □ W
Facilit	y ID			C	County	1, 1,1110	Co	unty Co		Civil To		ity/ or	Village					
	45048	30			Dane		13	3		Madi	son		1					1
San													-	Soil	Prope	rties		ā
	t. & (in)	nts	eet			ock Description							ş					
er ype	h At rered	Con	In			ologic Origin For			S	jc			ressi	nt ure		sity		ıents
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet		Eac	h Major Unit			IS C	Graphic Log	Well	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
<u> </u>	I N	Щ	F	Lean	clav with san	d (CL), little san	d. fev	W	D					20		I I	<u>Д</u>	<u> </u>
			E	silt, tr	ace subangul	lar gravel, brown	(7.5)	YR	CL									
			-1	4/3), t	medium-plast o-lacustrine)	tic, moist, stiff												
			E	(Loess														
			-2															
			E .															
1 SS ∏	24 14	3	_3	Silty sa	and (SM)								2.75					
33	14	4	 	(Till)	()													
١٨		5	F-4															
/\			E.															
			<u>-5</u>															
			E ₆						SM E L									
			- 6															
			<u> </u>															
			 															
			E_8										51					
SS \	24 24	2 2	F		ım stiff sand (SM)								1					
Ŋ		2 2	E-9	(Till)	und (SIVI)													
Λ		_	= 1															
П	8		- -10						SM									
			E															
			-11															
			-															
			<u>12</u>							/////								,
		fy that	the info	rmation o	on this form is t	rue and correct to the	e best	of my k	nowled	lge.								
Signat	ure	1	00	an i	Dwge			Tech	D.C	1. 1.00			T 5051					Tel:
		53	1		1	82	413 E	xcelsior	Dr Su	ne 160	iviadis	son, W	1 55/14					Fax:

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 be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

MW-4 Page 2 of 2 Boring Number Use only as an attachment to Form 4400-122. Sample Soil Properties Length Att. & Recovered (in) Soil/Rock Description Compressive Strength Depth In Feet Blow Counts And Geologic Origin For Comments Moisture Content Diagram PID/FID Plasticity USCS Graphic Each Major Unit Liquid Limit P 200 Well Index Log CL 13 $\frac{3}{\text{SS}}$ 7 83 17 Highly Weathered Dolomite, fine grained, pale yellow (2.5YR 8/3), angular rock fragments, dry, very dense 15 -16 DOI Kh = 4.38E-02 cm/s-18 5 5 100 Water glauconite pockets, brownish yellow noticed in (10YR 6/6) samples @ 18 feet 20 Lab Dolomite rock fragments, brownish yellow 8.6 NP 16.4 classified as (10YR 6/6) GM 22 Screen zone MW-4 - Bag sample S6 - 21-23ft -23 5 ⊠ SS 2 60 25 26 2.7 28 6 SS Highly Weathered Rock, very pale brown 1 60 (10YR 7/3), medium to coarse to fine grained sand, some silt, wet, very dense 29 Lab 9.5 NP 24 classified as SM Bag sample S8 - 29-31ft -30 (from auger flights) -31

End of boring 31 feet - well set at 28ft (borehole bottom 880.7ft MSL)

SCS edits (in red) based on review of soil &

rock samples 8/12/2023.

State of Wisconsin Department of Natural Resources		· · · · ·	W . M	. 57	MONITODING WELL	CONCTDI	UCTION
<u>R</u>		Vastewater \[\square \text{Redevelopment } \square \]	Waste Mana Other		MONITORING WELI Form 4400-113A	Rev. 7-98	
Facility/Project Name	Local Grid Lo	cation of Well		¬.	Well Name		
Dane County Landfill Site No	. 3	ft.	ft. [□ E. □ W.	MV	V-4	
Facility License, Permit or Monitoring	No. Local Grid Or	igin [(estimated:) or We	ell Location 🖂	Wis. Unique Well No.	DNR Well N	lumber
N/A Facility ID		Lor			WA431 Date Well Installed	104	4
•		377,202 ft. N, _	2,168,283	ft. E. S/C/N		/2022	
113450480 Type of Well		on of Waste/Source		⊠E	Well Installed By: (Pers		nd Firm)
Well Code 11/mw	<u>NW</u> 1/4 of .	NE 1/4 of Sec 3		N, R. <u>10</u> □ W	Scott k		ia i iiii)
Distance from Waste/ Enf. Std	Location of W u Upgra	Vell Relative to Waste/S	Source (degradient	Gov. Lot Number	Scott F	LIUIIIO	
Source ft. Apply	□ d □ Down	ngradient n ⊠ N	ot Known		Soils and Engine	eering Servic	es
A. Protective pipe, top elevation	914.37 ft. MSL		1.	Cap and lock?		⊠ Yes	□ No
B. Well casing, top elevation	914.34 ft. MSL	, — —	2.	Protective cover pi	_		4.0 in
C. Land surface elevation	911.7 ft. MSL			b. Length:		_	7.0 ft.
			<u></u>	c. Material:		Steel	⊠ 04
D. Surface seal, bottom 911.7	ft. MSL or f	t. 5/15/15	16.216.21 20.001 218.218.21			Other	
12. USCS classification of soil near s		<u> </u>	· Nicolegie	d. Additional prote	ection?	☐ Yes	⊠ No
	W□ SW□ SP□ IH□ CL□ CH□			If yes, describe:			
Bedrock			3.	Surface seal:		Bentonite	_
13. Sieve analysis attached?						Concrete	
14. Drilling method used:	Rotary 50		¾ 4.	Material between v	well casing and protective		
_	Stem Auger					Bentonite	
	Other			R	ed Flint #40	Other	
15 5					l: a. Granular/Chippe		
15. Drilling fluid used: Water ⊠	0 2 Air □ 0 1 0 3 None □ 9 9				ud weight Bentonite		
Drining Widd	03 None 199			Lbs/gal m % Benton	ud weight Ben		
16. Drilling additives used?	☐ Yes ☒ No		a.		volume added for any of	the above	□ 30
			f.				□ 01
Describe					Tre	mie pumped	□ 02
17. Source of water (attach analysis,	if required):					Gravity	⊠ 08
City of Mad	ison		XXI /	Bentonite seal:		nite granules	
011.2	0.5		\			ntonite chips	
E. Bentonite seal, top 911.2	ft. MSL or0.5	\ KX K	× / 7		: Manufacturer, product		
F. Fine sand, top 896.7	ft. MSL or15.0	ft.	7.	a	Red Flint #15	name & mesi	II SIZE
	- IW 11152 61			b. Volume added	ft ³	3	
G. Filter pack, top 895.7	ft. MSL or16.0	ft.	8.	Filter pack materia	l: Manufacturer, product	t name & me	sh size
	40.0			a	Red Flint #40		
H. Screen joint, top 893.7	ft. MSL or18.0	ft.	20 /	b. Volume added	ft ³		
892.7	28.0		9.	Well casing:	Flush threaded PVC		
I. Well bottom 883.7	ft. MSL or28.0	It. \			Flush threaded PVC	schedule 80 Other	
J. Filter pack, bottom 880.7	ft. MSL or31.0		10	Screen material:	PVC		
J. Their pack, obtain	It. MISE of	11.	77	a. Screen Type:		Factory cut	
K. Borehole, bottom 880.7	ft. MSL or31.0	ft. <			Cor		
						Other	
L. Borehole, diameter8.0	in.	V/////		b. Manufacturer	Hole Products - John		0.010
2.29				c. Slot size:		_	0.010 in 10.0 ft.
M. O.D. well casing 2.38	in.		11	d. Slotted length: Backfill material (helow filter nack)	None	
N. I.D. well casing 2.00	in.		11.		colon liner puek).	Other	
1.1.1.D. Well cashing							
I hereby certify that the information o	n this form is true and co	rrect to the best of my	knowledge.				
Signature Logan Dwyer	i	Firm Tetra Tech					Tel:
		8413 Excelsion	r Dr Suite 160 N	Madison, WI 53714	!		Fax:

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

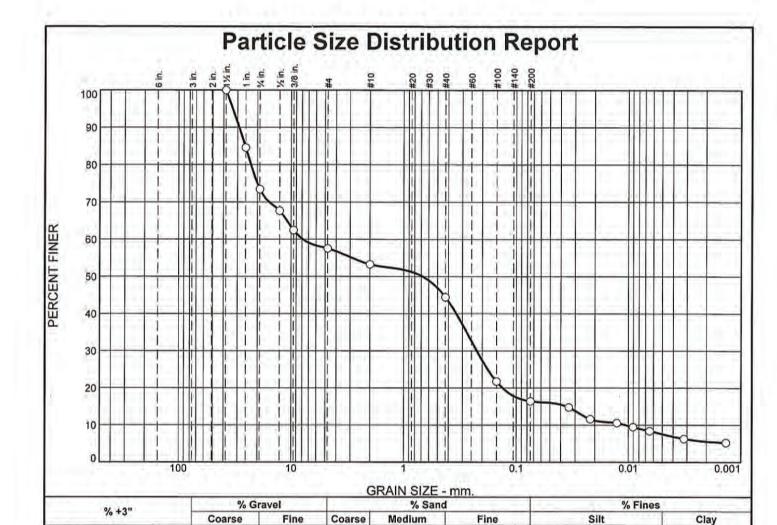
Route To: Watershed/V			Waste Management Other □						
Remediation			Other 🗆	337.11.3	т				
Facility/Project Name		County	D.	Well N	lame	1.1	XX 7 - A		
Dane County Landfill Site No. 3		1t C1-	Dane	1	-	DNR Well	W-4		
Facility License, Permit or Monitoring Number		County Code	Wis. Unique Well Nur			DNK Well			
N/A		13	WA43	31			104		
1. Can this well be purged dry?	□ Yes	⊠ No	11. Depth to Water	Before	Deve	lopment	After De	velopi	ment
Well development method: surged with bailer and bailed	□ 41		(from top of well casing)	a.	1	8.63 ft.		18.8	32 ft.
surged with bailer and pumped surged with block and bailed	 6 1 □ 4 2		Date	b.	2/23/2	2022	2/	23/202	22
surged with block and pumped surged with block, bailed, and pumped	□ 62 □ 70				1	⊠ a		01.7	☐ a.m.
compressed air	□ 2 0		Time	c.	I	1:25 □ p	o.m.	01:3	55 ⊠ p.m.
bailed only	□ 10				0.0			0.0	
pumped only	□ 5 1		12. Sediment in well		0.0) inches		0.0 i	nches
pumped slowly	□ 50		bottom						
other			13. Water clarity	Clear Turbid	□ 1 □ 1		Clear ⊠ Turbid □	2 0 2 5	
3. Time spent developing well	10	0 min.		(Describ Tan	be)		(Describe) Clear		
4. Depth of well (from top of well casing)	30.	6 ft.		<u>-1 an </u>			Cicai		
5. Inside diameter of well	2.0	0 in.							
Volume of water in filter pack and well casing	8.	0 gal.							
7. Volume of water removed from well	147.	5 gal.	Fill in if drilling fluids	were used	d and we			-	
8. Volume of water added (if any)	125	0 gal.	14. Total suspended solids			mg/l		620.0	mg/1
9. Source of water added City of Madison			15. COD			mg/l		19.3	mg/l
			16. Well developed by:	: Person's	Name a	nd Firm			
10. Analysis performed on water added?		□ No	Jeff Prio	~**					
(If yes, attach results)			Jen Pric	JI.					
			Soils &	Enginee	ering S	Services			
17. Additional comments on development:			1						
Purged 10 gallons with bailer, then pu	imped @	2.5 gal/min	13:00-13:55						
Facility Address or Owner/Responsible Party Addre	SS		I hereby certify that the	e above in	formatic	on is true a	nd correct to	the best	of my
Name: Robert Regan			knowledge.						
Firm: Dane County Dept of Waste & I	Renewab	les	Signature:	ogi	an	Do	vyer	ر ا	
Street:7102 US-12			Print Name: Logan				0		

Tetra Tech

Firm:

Madison, Wisconsin 53718

City/State/Zip:



SIEVE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0	1550 2000	CUTT /
1.0	84.6		
0.75	73.4		
0.5	67.7	1	
0.375	62.4		
#4	57.5		
#10	53.3		
#40	44.4		
#100	21.8		
#200	16.4		
	250.0		
		1 4 1	
		(

26.6

15.9

4.2

8.9

28.0

AND A PARTY AND THE AREA OF THE	Material Descriptio /GRAVEL, fine grain	the state of the s
PL= NP	Atterberg Limits LL= NV	PI= NP
D ₉₀ = 29.0492 D ₅₀ = 0.6774 D ₁₀ = 0.0105	Coefficients D85= 25.6505 D30= 0.2240 Cu= 749.91	D ₆₀ = 7.8930 D ₁₅ = 0.0355 C _c = 0.60
USCS= GM	Classification AASHT	O= A-1-b
Munsell Color Co Location: Monito	7774707E3700	

8.8

* (no specification provided)

Source of Sample: Monitoring Wells
Sample Number: MW4 S6

0.0

Depth: 21.0'-23.0'

Date: 2/16/2022

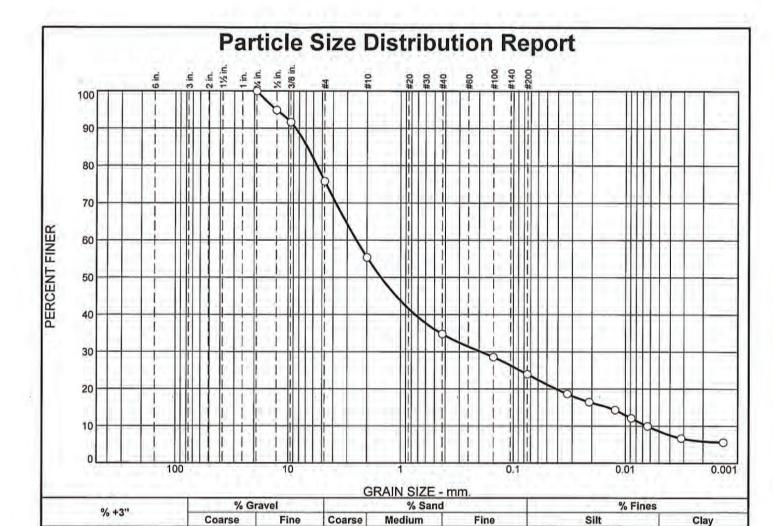
7.6

Tetra Tech 2679 Continental Drive Green Bay, WI 54311 Client: Dane County

Project: Yahara Hills Geotechnical Investigation

Project No: Figure

Tested By: MAB Checked By: JJN



SIEVE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
0.75 0.5 0.375 #4 #10 #40 #100 #200	100.0 94.9 91.6 75.8 55.4 34.8 28.6 24.0		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

0.0

24.2

20.4

20.6

10.8

Cart And States		
PL= NP	Atterberg Limits LL= NV	PI= NP
D ₉₀ = 8.6079 D ₅₀ = 1.4996 D ₁₀ = 0.0064	Coefficients D85= 6.7950 D30= 0.1925 Cu= 389.96	D ₆₀ = 2.4883 D ₁₅ = 0.0143 C _c = 2.33
USCS= SM	Classification AASHTO=	= A-1-b
USCS= SM	AASHTO= Remarks	= A-1-b

15.4

* (no specification provided)

Source of Sample: Monitoring Wells Sample Number: MW4 S8

Depth: 29.0'-31.0'

Date: 2/17/2022

8.6

Tetra Tech 2679 Continental Drive Green Bay, WI 54311 Client: Dane County

Project: Yahara Hills Geotechnical Investigation

Project No:

Figure

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0.0

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