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

Route To:

Watershed/Wastewater

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Remediation	Redevelopment \square	Other										
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Signat	ure	Lo	gai	n Dwyer		tra Tech 3 Excelsion	Dr Sui	ite 160	Madie	n W/I	53714					Tel: Fax:
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Waste Management

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-5	Use only as an attachment to Form 4400-1	22.					Coil	Pag Prope		of	2
Number and Type	Length Att. & dd 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 4	1 3 3 3	13 -14 -15 -16 -17	very soft	SM				0.1					
4 SS	1 1	60	-19 -20	(Weathered Dolomite) light gray (10YR 7/1) (Galena-Platteville Fm) See log B-5A.			4							Driller indicated hard drilling
5 SS	1 1	60		End of boring 21.1 - drilling refusal - bedrock (bottom elevation 862.0ft MSL) SCS edits (in red) based on review of soil and rock samples 8/10/2023.										

B-5

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) 113450480 Latitude / Longitude (see instructions) Format Code Method Code GPS008 379624.15 DD Ν License/Permit/Monitoring # SCR002 2169376.06 DDM W OTH001 N/A 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 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? 2/22/2022 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** Total Well Depth From Ground Surface (ft.) Casing Diameter (in.) Conductor Pipe-Gravity Conductor Pipe-Pumped Screened & Poured (Bentonite Chips) 21 ft. 1 in. 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? 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 8.5 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 200 lbs 3/8" Bentonite Chips 17 Time release coated 3/8" bentonite chips 17 21' 1" 40 lbs 6. Comments Boring B-5 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) 2/22/2022 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

TETRA TECH

2679 Continental Drive Green Bay, WI 54311 (920) 465-3911 Client: Dane County

Project: Yahara Hills Geotechnical Investigation

Prepared by: Justin J. Naumann

Date: 5/4/22

Checked by: Robert R Rouse

Date: 5/5/22

REPORT OF:

FALLING HEAD PERMEABILITY TEST

ASTM: D5084

GENERAL DATA:

Sample Location:

Sample Number:

Date Sampled:

Date Received:

Boring 5

B5 ST4

2/22/22

4/22/22

PROJECT SPECIFICATIONS

LABORATORY DATA:

Method of Test: Flex Wall - Undisturbed

Length of Sample (inches): 3.822 Diameter of Sample (inches): 2.848

Dates Tested: April 27-May 4, 2022

Moisture Content (%) 8.0
Dry Density (pcf): 132.7

% Compaction:

Soil Classification: SILTY SAND W/GRAVEL,

fine grained, dark yellowish brown

(SM)

Max. Head Differential (ft.) 6.0
Confining Pressure (Effective psi): 2.0
Hydraulic Gradient: 16-18
Trial No.: 6-9
Water Temperature: 21°C
Coefficient of Permeability (cm/sec): 1.21E-06

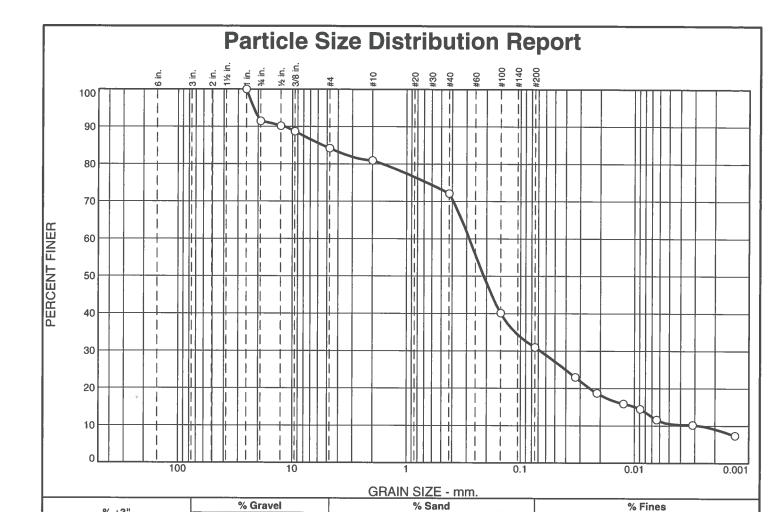
REMARKS:

TETRA TECH – GREEN BAY

Engineering – Surveying – Material Testing

TRANSMITTAL

TO:	Deb Nelson	n	FROM:	Bob Rouse / Justin Naumann
	SCS Engin	eers		Tetra Tech – Green Bay
				2679 Continental Drive
				Green Bay, WI 54311
			PHONE:	(920) 465-3911
			DATE:	February 13, 2023
RE:	Lab Test R	Result Reports	PROJECT:	Dane County - Yahara Hills Project 2022
WE AR	E SENDING	YOU:		
X	ATTACHE	ED	UNDER SEPARATE COVE	ER VIA
	DRAWING	GS \square	SPECIFICATIONS	CD/DVD
	DOCUME	NTS	COPY OF LETTER	
		1	<u></u>	
QUA	NTITY		DESCRI	PTION
	1	Lab Test Result Rep	orts - Sieves, Atterberg Limits,	Moisture
		B5 – ST4 and B8 – 3	ST2	
		MATERIAL DECE	VED IO NOT A CLI IOTED DI I	CASE NOTIFY HIS AT ONOR
	Ir	'MATERIAL RECEI	VED IS NOT AS LISTED, PLE	EASE NOTIFY US AT ONCE.
REM	IARKS:			
COI	PY TO:			



Coarse

3.3

Fine

7.3

Medium

8.8

Fine

41.1

ı				
	SIEVE	PERCENT	SPEC.*	PASS?
	SIZE	FINER	PERCENT	(X=NO)
	1.0	100.0		
	0.75	91.5		
	0.5	90.2		
	0.375	88.7		
	#4	84.2		
	#10	80.9		
	#40	72.1		
	#100	40.1		
	#200	31.0		
1				

Coarse

8.5

	Atterberg Limits	
PL= NP	LL= NV	PI= NP
D ₉₀ = 11.7721 D ₅₀ = 0.2118 D ₁₀ = 0.0028	Coefficients D ₈₅ = 5.4365 D ₃₀ = 0.0674 C _u = 103.15	D ₆₀ = 0.2842 D ₁₅ = 0.0098 C _c = 5.80
USCS= SM	Classification AASHTO	O= A-2-4(0)

Silt

20.5

Clay

10.5

(no specification provided)

Source of Sample: Borings Sample Number: B5 ST-4

0.0

Depth: 5.5'-7.0'

Dopin: 3.5 7.0

Tetra Tech 2679 Continental Drive Green Bay, WI 54311

Client: Dane County

Project: Yahara Hills Geotechnical Investigation

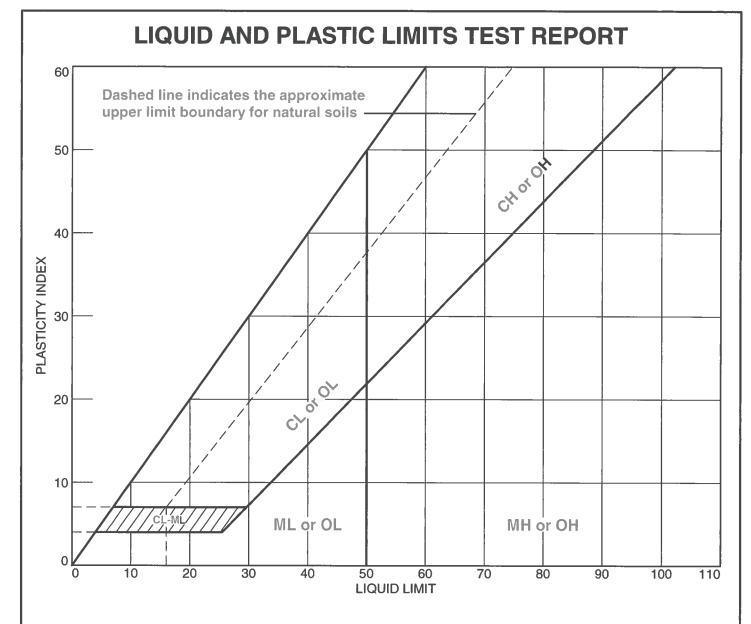
Project No:

Figure

Date: 2/2/2022

Tested By: MRG

Checked By: JJN



				SOIL DATA	\			
SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	uscs
•	Borings	B5 ST-4	5.5'-7.0'	9.7	NP	NV	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: RRR

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

			Ro	ute To:	Watershed/V Remediation	Vastewater \[\square \] \[\lambda \] \[\text{Redevelopment } \square \]	Waste Other	Manag	ement	: [2	\preceq							
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Soils	s and	Engi	neerin	g Servio	ces				/2022					3/2/2	022			SA 4.25 ID
WI Un:	ique W	ell No	•	DNR W	Vell ID No.	Common Well Nan		atic Wa 4.1 Fe					e Elevat 383.1		/SI	Bo		Diameter inches
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Sam	•													Soil	Prope	erties		
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Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet		Ea	ch Major Unit		ISC	Graphic	Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
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Signatu	ıre	1	uca	1 Si	reckete		Cetra Tech 413 Excelsio	r Dr Su	ite 160) N	_ 	n 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.

	g Numb	er	B-5	A Use only as an attachment to Form 4400-	122.		_	_					ge 2	of	3
San	nple & (Ξ)	įς.	et	Soil/Rock Description						o	Soil	Prop	erties		
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	And Geologic Origin For Each Major Unit	USCS	Graphic	Well	Diagram	PID/FID	Compressive Strength	Moisture	Liquid	Plasticity Index	P 200	RQD/ Comments
			-13 -14 -15 -16 -17	Blind drill to 19 feet - see boring log "B-5" for soil descriptions (continued) (Sinnipee Group)	SM										
1 RC	84 84		-19 -20 -21 -22 -23	Gray (10YR 6/1) fossiliferous dolomite, few horizontal fractures (Galena-Platteville Fm) (DL2) Light gray (10YR 7/2) Gray (10YR 6/1) Light gray (10YR 7/2)	DL2										HQ rock core run 1: RQD= 82% (good); recovery 100% FF= 2.3
2 RC	120 120		-25 -26 -27 -28 -30 -31	Gray (10YR 6/1) and light gray (10YR 7/2), small silt seam <1", more vertical fractures 25.5-26' Light gray (10YR 7/2) Gray (10YR 6/1) Light gray (10YR 7/2) Gray (10YR 6/1)											HQ rock core run 2: RQD= 85% (good); recovery 100% FF= 3.4
			-31 -32	Gray (10YR 6/1)			I								

Boring Number	B-5	A Use only as an attachment to Form 4400-	-122.						Pag	e 3	of	3
Sample								Soil	Prope	rties		
(in) &	set	Soil/Rock Description					e/					
pe Att.	In Fe	And Geologic Origin For	N N	ွ	 E		essiv h	e t		ty		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
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II	E											
II	33		DL2									
					-							
	-34											
II	E a a											
II	-35				-							
Ц	36											
		End of boring 36 feet (bottom elevation 847.1ft MSL)										
		SCS edits (in red) based on review of rock core 1/24/2023.										

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

B-5A

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 379624.15 DD Ν License/Permit/Monitoring # SCR002 2169376.06 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? 3/02/2022 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) 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? 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 9 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 475 lbs 3/8" Bentonite Chips 36 6. Comments B-5A: Poured bentonite chips as casing was 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 Scott Klumb - SES Madison (mm/dd/yyyy) 3/02/2022 Street or Route Telephone Number Comments (608) 274-7600 1102 Stewart St. City ZIP Code Signature of Person Doing Work State Date Signed WI ucas Specketer Madison 4/14/2022

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Wat	tershed/Wastewater	Waste I	_	ement	\boxtimes							
Ren	mediation/Redevelopment	Other										
									Pag	e 1	of	2
Facility/Project Name		License/I	Permit/	Monito	ring Nı	ımber		Boring				
Dane County Landfill Site No. 3		N/A								B-6)	
Boring Drilled By: Name of crew chief (fir	est, last) and Firm	Date Dri	lling St	arted		Da	te Drilli	ng Con	npleted		Drill	ing Method
Scott Klumb Soils and Engineering Services			2/2/	2022				2/2/2	022		H!	SA 2.25 ID
WI Unique Well No. DNR Well II	O No. Common Well Name	1			el		e Elevat			Во		Diameter
			Feet 1	MSL			382.3				6.0	inches
	or Boring Location	La	t	0	,	"	Local C	irid Loc				
State Plane 379,082 N, 2,1					,	**		ъ.				□ E
SW 1/4 of SE 1/4 of Section Facility ID County	25, T 7 N, R 10 E	Long County Co		Civil T	own/Ci	ty/or	Village	Feet	□ s			Feet W
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Sample		13		Ividai	3011			Soil	Prope	rtiec		
	G 11/D 1 D 1 d								Порс	lucs		_
(in %	Soil/Rock Description						Ne					
Ppe Cour In F	And Geologic Origin For		\sigma	္က	日		essi	it is		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
De Bke			b	Grap Log	N N	III	Str	క రి	Ë Ë	Pla	P 2	≥ 3
	(SM), little subangular gra	avel,										
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hereby certify that the information on this	form is true and correct to the be	est of my kn	owled	ge.								
Signature /	Firm To	tra Tech										Tel:
Logan Dwy	100	3 Excelsion	Dr Sui	te 160	Madiso	on, WI	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.

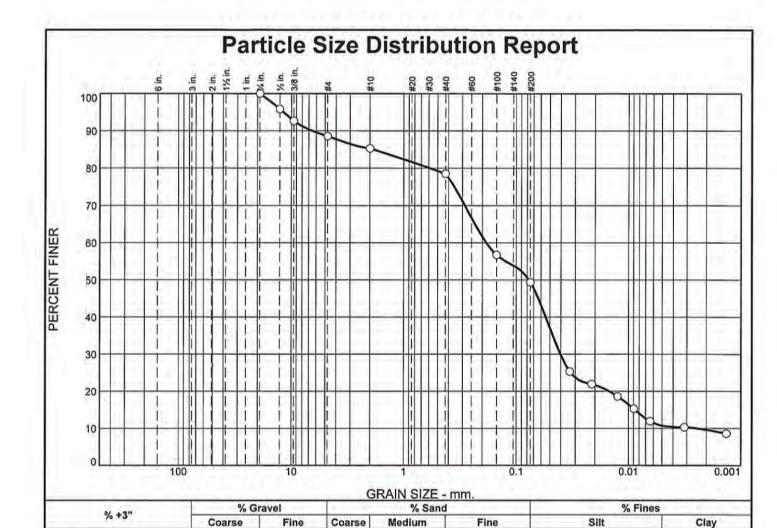
Borin	g Numl	oer	B-6	Use only as an attachment to Form 4400-	122.						ge 2	of	2
San	nple								Soil	Prope	rties		
	& (in)	ts	et	Soil/Rock Description				့်					
e r	Att.	uno	n Fe	And Geologic Origin For		_ E		sssiv	e _		Es.		nts
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Each Major Unit	CS	Graphic Log Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	00	RQD/ Comments
Nun	Ler Rec	Blo	Del		ΩS	Grapl Log Well Diagr	PIE	Cor	Mo	Liquid Limit	Plastic Index	P 200	Cor RQ
			-										
			- 12		CM								
			-13		SM								
$\frac{3}{SS}$	24 24	14											
33	24	21 35	 14	Poorly graded fine sand, few coarse sand,									
lλ		43	-	few silt, very pale brown (10YR 7/3), dry, very dense (outwash)									
/\			15	very defise (outwash)									
			-										
			- 16		SP								
			- . <u>.</u>										
			<u> </u>										
			-										
			18										
4 SS	$\begin{bmatrix} 1 \\ 0 \end{bmatrix}$	60		End of boring 18.6 ft - drilling refusal -		<u> </u>							
33				bedrock (bottom elevation 863.7ft MSL)									
						•							

B-6

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) 113450480 Latitude / Longitude (see instructions) Format Code Method Code GPS008 379082.08 DD Ν License/Permit/Monitoring# SCR002 2167735.04 DDM W N/A OTH001 1/4 / 1/4 Section Township Range Original Well Owner SW 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/vvvv) Monitoring Well Yes Screen removed? 2/2/2022 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? 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) 18 ft. 7 in. 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? 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 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 18' 7" 200 lbs 3/8" Bentonite Chips 6. Comments Boring B-6 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) 2/2/2022 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



SIEVE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
0.75	100.0	1 - 1 - 1 - 1 - 1	
0.5	95.9		
0.375	92.7		
#4	88.6	1 6	
#10	85.3		
#40	78.5		
#100	56.7		
#200	49.3		
	755		
		A 90000 /	

0.0

38.6

10.7

Date: 2/2/2022

Figure

* (no specification provided)

Source of Sample: Borings Sample Number: B6 S4

0.0

Depth: 8.5'-10.5'

11.4

3.3

6.8

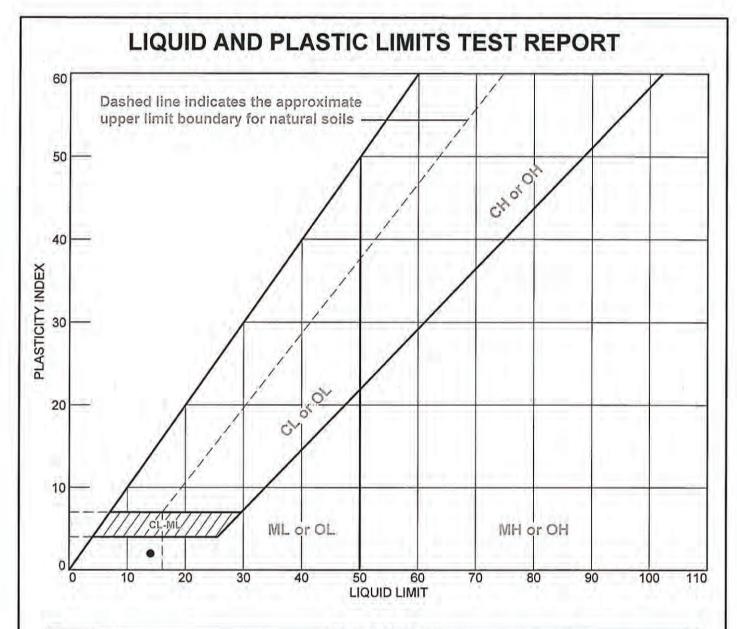
29.2

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

Project: Yahara Hills Geotechnical Investigation

Project No:

Tested By: MAB Checked By: JJN



				SOIL DATA	\			
SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	uscs
•	Borings	B6 S4	8.5'-10.5'	8.6	12	14	2	SM
			11 - 6	1	16-60			

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>100</u>	<u>ute 10.</u>		Redevelopment		other	_	emem									
Es ailit	y/Projec	at Mana					т:	cense/F)amai+/	Monit	to	ing Ni	una la cu		Boring	Pag		of	3
				ll Site N	Io. 3			vense/f N/A	ermit/	Monn	tor	ing Ni	ımber		Boring	Numbe	er B -6	6A	
					ief (first, last) a	nd Firm		ate Dril	ling St	tarted			Da	te Drilli	ng Con	npleted			ing Method
	tt Klu			- C:					2/20	/202	2				2/20/2	1022		111	CA 405 ID
SO11 WI Ur	s and ique W	Engi: Vell No	neerin	g Servic	ces Vell ID No.	Common Well Name	Fi	nal Stat	2/28			1	Surfac	e Elevai	2/28/2 tion	2022	Bo		SA 4.25 ID Diameter
	aque								Feet I					382.3		ISL			inches
	Grid Oı	rigin				ing Location 🖂		Lot	<u>+</u>	0		,	11	Local C	irid Loc				
State:		c C I			2,167,735			Lat				,	***		г.			-	Е
SW Facilit		of S	C 1	/4 of Sect	tion 25,	T 7 N, R 10 E	Cou	Long		Civil	То	wn/Ci	ty/ or `	Village	Feet	<u> </u>		-	Feet W
	45048	30		I .	Dane		13	-		Mac			-	C					
San	nple														Soil	Prope	erties		
	(ii)	Si	et		Soil/R	ock Description								e					
r Se	Att. red (ount	n Fe		And Go	ologic Origin For						п		sssiv	e _		25		unts
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet		Eac	h Major Unit			SCS	Graphic	50	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	00	RQD/ Comments
Nu	Ler	Blc	Deg						S	Gre	Fog	Well Diagr	PII	Col	Ŝ Ō	Liquic Limit	Pla Ind	P 200	
				Blind "B-6"	for soil des	feet - see boring leriptions	log												
			- 1			r													
			E																
			-2																
			_3																
			E																
			-4																
			E																
			5																
			E																
			-6						SM										
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			Ė																
			-10																
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			-11																
			Ē																
			- -12																
	-	fy that	the info	rmation of	n this form is t	rue and correct to the bo	est of	my kn	owled	ge.									
Signat	ure	10	ans	2 Di	wyer		tra T		D 0				****	5051 t					Tel:
	-	-	1	0	1	841	5 Exe	celsior	Dr Sui	ite 160	JI	viadisc	on, WI	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.

San	y Numb		B-6	A Use only as an attachment to Form 4400	-122.					Soil		ge 2 erties	UI	
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	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			-13 -14	Blind drill to 25.4 feet - see boring log "B-6" for soil descriptions (continued)	SM									
			-15 -16 -17 -18		SP									
1 ×	1 0	60	-20 -21 -22 -23	Highly weathered dolomite (Galena-Platteville Fm) Blind drilled. Drilled until competent rock reached for rock core					<u> </u>					
C	120 49		25 26 27 28 29 30	Highly weathered dolomite, near vertical fractures, pale brown (10YR 6/3) (Galena-Platteville Fm) (Sinnipee Group,	DL2									HQ rock core run 1: RQD = 15% (very poor); recovery 41% FF= Indetermination to disaggregate sample

Boring Number	B-6	Use only as an attachment to Form 4400-1	22.						Pag		of	3
Sample								Soil	Prope	rties		
(in) &	eet	Soil/Rock Description					e e					
r pe Att.	ln Fe	And Geologic Origin For	\sigma		Е	Q	essiv h	re t		ty.		ents
Number and Type Length Att. & Recovered (in) Blow Counts	Depth In Feet	Each Major Unit	SC	Graphic Log Well	wen Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
Nu and Let Re Bld Bld	De		Ď.	Grapl Log Well	Ď	PII	St.	<u> </u>	Lir	Pla Inc	P 2	2 S S
	_33											
	E		DL2									
	-34											
	E											
	-35											
$2 \times 2.5 \mid 100$	E	\split spoon attempted given the highly										
$\begin{array}{c c} 2 & \times & 2.5 \\ SS & 2.25 & 100 \end{array}$		weathered bedrock										
		End of boring 35.5 feet (bottom elevation										
		846.75ft MSL)										
		SCS edits (in red) based on review of soil and rock samples 1/24/2023.										
		son and fock samples 1/24/2025.										
1 1	ſ	1	1	1 1	ı		1	'	1	1		1

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

B-6A

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

4/14/2022

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 379082.08 DD Ν License/Permit/Monitoring # SCR002 2167735.04 DDM N/A W OTH001 1/4 / 1/4 Township Range Original Well Owner Section SW 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 Nο 3. Filled & Sealed Well / Drillhole / Borehole Information Liner(s) perforated? Yes Nο Original Construction Date (mm/dd/yyyy) Monitoring Well Yes Screen removed? 2/28/2022 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 No ✓ Drilled Driven (Sandpoint) Dug If yes, was hole retopped? Yes Other (specify): If bentonite chips were used, were they hydrated Formation Type: with water from a known safe source? Required Method of Placing Sealing Material Unconsolidated Formation **Bedrock** Conductor Pipe-Pumped Total Well Depth From Ground Surface (ft.) Casing Diameter (in.) Conductor Pipe-Gravity Screened & Poured (Bentonite Chips) 35.6 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? 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 NE 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 35.6 350 lbs 3/8" Bentonite Chips 6. Comments Boring B-6A: Poured bentonite chips after casing was pulled (confirmed total depth) 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 Scott Klumb - SES Madison (mm/dd/yyyy) 2/28/2022 Street or Route Telephone Number Comments 1102 Stewart St. (608) 274-7600 City ZIP Code Signature of Person Doing Work State Date Signed

WI

53713

Madison

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

			<u>Ro</u>		Wastewater n/Redevelopment	Waste Other	_	gement	\boxtimes							
													Pag	ъе 1	of	3
	y/Proje						/Permit	/Monito	ring Nu	ımber		Boring		er		
				Site No. 3	1.17	N/A	.11. C	1		ID	+ D :II.		1 (1	B-7		· M.d. 1
	tt Klu		Name o	f crew chief (first, last)	and Firm	Date Dr	ung S	tarted		Da	ite Drilli	ng Con	npietea		Drill	ing Method
Soil	s and	Engi	neerin	g Services			2/2	/2022				2/2/2	022		HS	SA 2.25 ID
WI Ur	ique W	ell No).	DNR Well ID No.	Common Well Name	l l					e Elevat			Bo		Diameter
Local	Grid Oı	igin		stimated:) or Bo	oring Location 🖂	88	2.8 Fe	et MS	L		901.3 Local C				6.0	inches
State		ıgııı		5,831 N, 2,168,30		L	at	°	<u> </u>	"	Local C	IIIQ LO		ī		□Е
SW		of S		1/4 of Section 25,	т 7 N, R 10 E	Lor	ng	o 	<u>'</u>	"		Feet			-	Feet W
Facilit		20		County		County C	ode	Civil To		ty/ or `	Village					
	45048	50		Dane		13	T	Madi	son		<u> </u>	Cail	Prope			
Sai	nple			G-:11	/Dl- D:ti							5011	Гюре	rues		
	tt. & d (in	ınts	Feet		Rock Description Geologic Origin For						sive					23
ber 「ype	th A vere	, Coi	h In		ach Major Unit		CS	hic	ram	EID	press gth	ture	. id	icity		men.
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet		J		O S (Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			E	(Fill) silt, 2 feet of			1	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			0 02					
			-	topographic varia	ations from 1961(proph) to 2017	e golf		17.31.19	}							
			F 1	course construction	011) to 2017		ML	1, 1, 1,								
			+ 2					11/2 1/2								
			_2													
			3	Lean clay (CL), s	some sand, very dark	ζ										
_				grayish brown (1)	0YR 3/2), highly plocoarse sand, moist.	astic,	CL									
$\frac{1}{SS}$	24 18	5 2 3	<u>-</u> 4	medium stiff (loe		,					0.75					
\		3 8	F '													
/		o	_5													
			F		little gravel, brown	(7.5YR										
			E_6	5/4), fine grained	l, moist, loose (till)											
			F_7													
			E													
			-8													
2 [24	2	E		'.1 1 (5VD 4/6)	1*	SM									
$\frac{2}{\text{SS}}$	24 24	3 5	<u>_</u> 9	dense	ish red (5YR 4/6), n	nedium										
I V		6 7														
/\			_10													
			-11													
			E													
			-12													
	-	fy that	the info	ormation on this form is	s true and correct to the l		knowle	dge.								
Signat	ure	Lo	gas	n Dwyer		tra Tech	r Dr Su	ite 160	Madie	on W/I	53714					Tel:

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.

8413 Excelsior Dr Suite 160 Madison, WI 53714

	g Numb	er	B-7	Use only as an attachment to Form 4400	-122. 		-		Coil	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			sity	P 200	RQD/ Comments
3 SS	24 24	12 13 14 14	13	trace gravel, few silt, strong brown (7.5YR 5/6)									
4 SSS	7 24 24	15 21 26 26	17 	trace coarse and medium sand, yellowish brown (10YR 5/4), wet, dense	SM	▼							ST attempino recover
5 SS	24 24	17 35 40 41	-22 -23 -24 -25 -26	few cobbles, few coarse sand, yellowish brown (10YR 5/6), very dense									
6 SS	18 18	19 50 72	27 -28 -29 -30 -31	Silt (ML), few coarse sand, few clay, trace oxidized iron, very dark grayish brown (10YR 3/2), low-plastic, moist, hard (glacio-lacustrine) (Paleosol in diamict; Readstown Member)	ML			4	10.6	NV	NP	37.7	Lab classified a SM

ample										Soil	Prope	ge 3 erties		
and 1 ype 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/ Comments
18 18	26 50 33		Silt (ML), few coarse sand, few clay, trace oxidized iron, very dark grayish brown (10YR 3/2), low-plastic, moist, hard (glacio-lacustrine) (continued) little gravel, very pale brown (10YR 7/3), dry, Silt (ML) and Silty Sand (SM). At 33.5' to 35.5', SILT (ML) % g-s-si-cl = 5-31-44-20 (Ancell Group, St. Peter Formation, Readstown Member)	SS3 ML					4	8.5	18	1	64	Lab Classified a ML
≥ 2.5 2.5	100	-38 -39 -40 -41 -42	Weathered dolomite fragments (formation indeterminable due to limited sample) Possible dolomite or clasts in Readstown Member.	SS3										Driller indicated dense drilling fro 38-41.5 fe
		-43	End of boring 43.5 feet - drilling refusal - bedrock (bottom elevation 857.8ft MSL) SCS edits (in red) based on review of soil and rock samples 8/10/2023.			I								

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

Boring 7

Well / Drillhole / Borehole Filling & Sealing Report

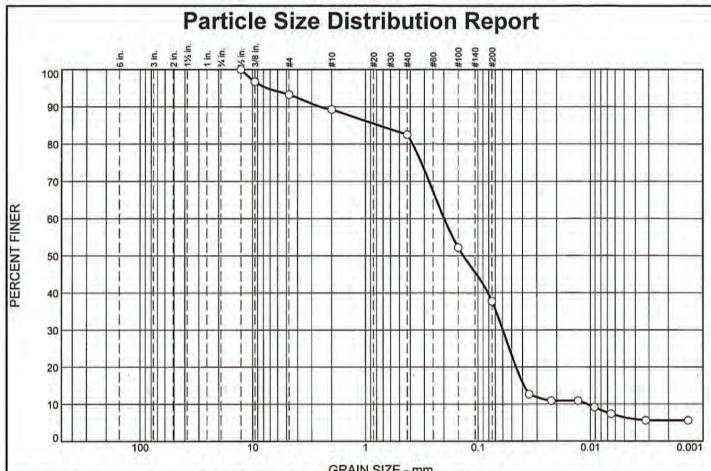
Form 3300-005 (R 4/2015)

Page 1 of 2

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:

✓ Verificat	ion Only	y of Fill	and Sea	1		Orinking W	/ater	=	Watershed/W	astewater	Remedi	ation/Redevelopment
					Ŭ V	Waste Mar	nageme		Other:			
1. Well Loca	ition Info		10/-11 # -		lines #				Owner Inf	ormation		
County		Remove	ue Well # o	or I	Hicap #			Facility Name		Golf Cours		
Dane		11.43		0.00				Facility ID (F		Golf (0015		
Latitude / Long	itude (see	Instruction	s) N	Format (S008		11345048			
			w				R002 H001		mit/Monitoring	#		
1/4/1/4	1/4		Section	Town	nship	Range	E	Original West	and the second second second			
or Gov't Lot#		8			N		W	Present West	y of Ma	d1501		
Well Street Add	dress							Cit	y of M			
Well City, Villag		n			Well	ZIP Code	1	Mailing Addr	ess of Presen	t Owner		
Subdivision Na		_			Lot #	#		City of Prese	ent Owner		State	ZIP Code
									disin		WI	
Reason for Re	moval from	n Service	WI Unio	que Well	# of Re	eplacemen	nt Well			n, Casing & Sea	ling Mate	
Geotechar	cal So	ampling							piping remov	red?		Yes No N/A
3. Filled & S	ealed W						200	Liner(s) re				Yes No N/A
Monitorin	na Well	0	Original Co	nstructio	n Date	(mm/dd/y	ууу)	Liner(s) pe				Yes No X N/A
☐ Water W	-							Screen re	moved? It in place?			Yes No X N/A
			If a Well C	onstructi	on Rep	ort is avai	ilable,	7.00				Yes No N/A
4	e / Drillhole		please atta	ach.				The second second	ng cut off belo			Yes No N/A
Construction T	ype:								g material rise		X	Yes No N/A
✓ Drilled		Driven (S	andpoint)		Di Di	19		1000	ial settle after			Yes No N/A
Other (sp	pecify):						_		, was hole reto	opped? used, were they hyd	leated	Yes No N/A
Formation Typ	e:									n safe source?	X	Yes No N/A
X Unconsol	lidated For	rmation	- [Bedro	ck			Required Me	ethod of Placin	ng Sealing Material		
Total Wett Dep	oth From G	Bround Sur	face (ft.)	Casing [Diamete	er (in.)		Condu	ctor Pipe-Gra	vity Conductor	Pipe-Pum	ped
43,5					VIA				ned & Poured	Other (Exp	olain):	
Lower Drillhole		r(in)	-	Casing I	Depth (ft \		Sealing Mate	nite Chips)	(A () ()		
Lower Dillinois	e Diameter	/		Cusing t		(6.)			Cement Grout		Concrete	
		4		/	VA				Cement (Cond	rete) Grout	Bentonite	
Was well annu	lar space	grouted? A	1/4	Yes	No	UI U	nknown			Monitoring Well Bor		
If yes, to what			1/1	to Wate	er (feet)	_	Bentor			onite - Cem	
		7	7.75	191		,		_	lar Bentonite	= -	onite - San	
Filtranspare				-	0					No. Yards, Sacks	CANAL ELECTRICA	The state of the s
5. Material L	Used to	Fill Well /	Drillnoie	9				From (ft.)	To (ft.)	Volume (circle		Mud Weight
	Soil							Surface	1.0			
	Benton	nite ch	ips					100	43,5	12 bags		
C Comme	16											
6. Commen	its											
7. Supervis								-6X.0			DNR Use	
Name of Pers				ng Lic	ense #	_		illing & Sealing		on Date Received		Noted By
Soils & Eng		g Service	es, Inc.			(r	mm/dd/y		2022			
Street or Rout							J	elephone Nun		Comments		
1102 Stew	art Stree	et		I Ct. t.	[an	0.0-4-	(608) 274		a Morle	To	ata Clausel
City				State		P Code			Person Doing		1	ate Signed 3/24/2022
Madison				WI		53713		1 lan	E Bre	ally	- 4	17/1022



				KAIN SIZE -	DHU.		
9/ 1911	% Gr	avel		% Sand	7777	% Fine	es
% +3"	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	6.7	4.0	6.7	44.9	31.3	6.4

SIEVE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
0.5	100.0	CCC VALUE OF C	The same
0.375	96.7		
#4	93.3		
#10	89.3		
#40	82.6		
#100 #200	52.2 37.7		

CONTRACTOR	Material Description	
SILTY SAND, f	ine grained, a little grav	vel, brown
	Atterberg Limits	
PL= NP	LL= NV	PI= NP
D ₉₀ = 2.5248 D ₅₀ = 0.1353 D ₁₀ = 0.0106	Coefficients D ₈₅ = 0.7532 D ₃₀ = 0.0600 C _u = 18.77	D ₆₀ = 0.1994 D ₁₅ = 0.0391 C _c = 1.70
USCS= SM	Classification AASHT	O= A-4(0)
	Remarks	
Munsell Color C	ode: 7.5YR 5/4	
Location: Boring	g-7	

Source of Sample: Borings Sample Number: B7 S1 Depth: 28.5'-29.5'

Date: 2/2/2022

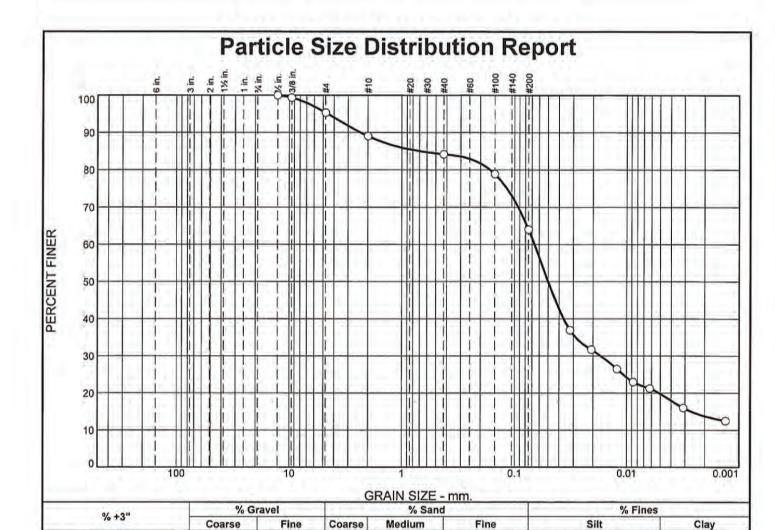
Tetra Tech 2679 Continental Drive Green Bay, WI 54311 Client: Dane County

Project: Yahara Hills Geotechnical Investigation

Project No: Figure

Tested By: MAB Checked By: JJN

⁽no specification provided)



100.0		
99.4		
95.4		
17.75		
78.9		
64.0		
	89.1 84.2 78.9	89.1 84.2 78.9

0.0

4.6

6.3

4.9

	Material Description little gravel, very pale	
PL= 17	Atterberg Limits LL= 18	PI= 1
D ₉₀ = 2.3138 D ₅₀ = 0.0501 D ₁₀ =	Coefficients D ₈₅ = 0.6780 D ₃₀ = 0.0171 C _u =	D ₆₀ = 0.0664 D ₁₅ = 0.0026 C _c =
USCS= ML	Classification AASHTC)= A-4(0)
Munsell Color C Location: Boring	550 SO 500 ST	

44.2

(no specification provided)

Source of Sample: Borings Sample Number: B7 S2

0.0

Depth: 33.5'-35.0'

Date: 2/2/2022

Figure

19.8

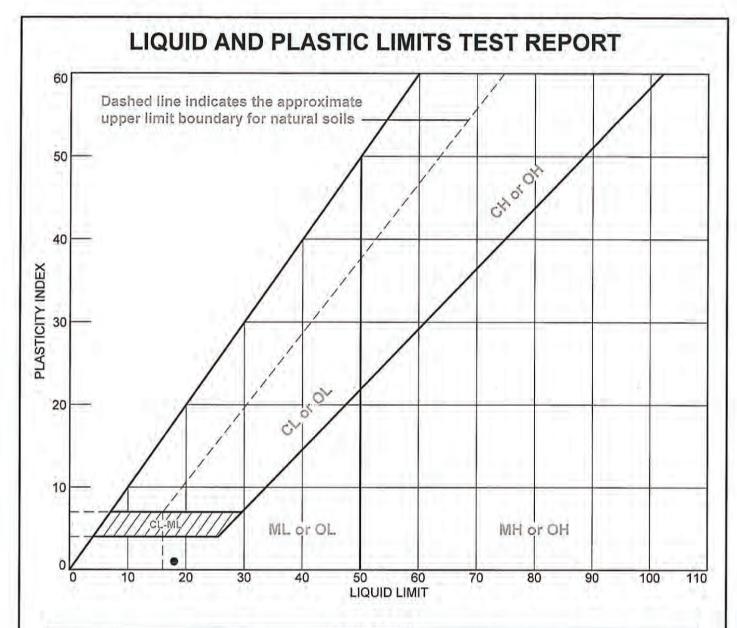
Tetra Tech 2679 Continental Drive Green Bay, WI 54311 Client: Dane County

Project: Yahara Hills Geotechnical Investigation

20.2

Project No:

Tested By: MAB Checked By: JJN



	SOIL DATA												
SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	uscs					
•	Borings	B7 S2	33.5'-35.0'	8.5	17	18	1	ML					
					1 21		- 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

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

			Ro		Vastewater □ /Redevelopment □	Waste 1	-	ement	\boxtimes								
													Pag	ge 1	of	2	
Facility/Project Name					License/Permit/Monitoring Number Boring Number												
Dane County Landfill Site No. 3 Boring Drilled By: Name of crew chief (first, last) and Firm					N/A B-8 Date Drilling Started Date Drilling Completed Dril								ling Method				
Scott Klumb Soils and Engineering Services					Date Bil	2/2/2022 2/2/2022									HSA 2.25 ID		
	ique W			DNR Well ID No.	Common Well Name								022	Diameter			
WI Offique Well 140. Brite Well 15 140. Common Well Hame					1		et MS			901.7 Feet MSL					6.0 inches		
Local State	Grid O	rigin		stimated: (1) or Bor ,946 N, 2,168,041		La	ıt	0	,	"	Local C	irid Lo				□Е	
SW		of S		/4 of Section 25,	T 7 N, R 10 E		Long ' "					□ N □ N Feet □ S Feet □					
Facilit	y ID			County	1 / 1,10 10	County Co		Civil To		ity/ or	Village	1000					
	45048	30		Dane		13		Madi	son			~				T	
San	nple											Soil	Prope	erties		_	
	t. & (ii)	nts	eet		Rock Description						ıxe.						
er ype	h At ered	Cou	In F		eologic Origin For ch Major Unit		S	ji.	am am		ressi	ure		sity		nents	
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Eas	en Major Onit		SC	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	200	RQD/ Comments	
<u>z a</u>	7 %	<u> </u>		Lean Clay (CL) g	rayish brown (10Y	R 5/2)		<u> </u>	> D	<u> </u>	0.8	20	7 7	P	Ь	2 2	
			_	highly plastic, moi	ist, medium stiff (lo	pess)											
			-1														
			-2														
			Ε.														
			-3														
1	24	1	Ε.								1						
ss V	18	3 4	-4				CL										
IΛ		3															
/\			<u>-5</u>														
			-														
			-6														
			_														
			<u> </u>														
			-														
			-8	Lean					T								
$\frac{2}{\text{SS}}$	24 24	0	-	Sandy, clay (CL), r	reddish brown (5Y)	R 5/4),			*		0.2					Wet	
33 N	24	0	<u>-9</u>	highly plastic, wet (glacio-lacustrine)	, very soft											beginning at at 8.5 feet	
IΛ		1	-	(gracio-racustrine)													
\ \			-10				CL										
			-														
			-11 -														
			- -12														
herel	v certi	fy that		l ormation on this form is t	rue and correct to the l	est of my k	nowle	dge.	<u> </u>				<u> </u>			1	
Signat	-	-		199900000	Int	tra Tech										Tel:	
-		1	ga	n Dwyer	10	.3 Excelsior	Dr Su	ite 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.

Boring Number Sample		B-8	Use only as an attachment to Form 4400-	122.					Soil	Pag Prope		of	2	
and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit Lean	USCS	Graphic	Well Diagram	PID/FID	Compressive Strength			ity	P 200	RQD/ Comments
3 SS \	24 24	2 6 12	-13 -14	Sandy, clay (CL), reddish brown (5YR 5/4), highly plastic, wet, very soft (glacio-lacustrine) (continued)	CL									
Т	6	10	-15 -16 -17	Silty sand (SM), trace gravel, yellowish brown (10YR 5/6), non-plastic, moist, very stiff (till)					4	12.8	NV	NP		Drilled to 15.5 ft for ST attemp Shelby tub ST-2 - 15'1'-15'7 Lab Classified SM
s S	24 23	10 11 7 8	-18 -19 -20 -21	reddish yellow (7.5YR 6/6), fine to medium sand, wet, medium dense Few subangular gravel, moist	SM									KV= 6.50E-06
S	24 24	14 15 20 26	-22 -23 -24	Poorly Graded ^Sand with silt (SP-SM), strong brown (7.5YR 5/6), fine to medium grained, dense, wet (till) (Readstown Member)	SP-SM	4				12.2	NV	NP	6.8	Lab classified SP-SM
			-25 -26 -27 -28	Weathered sandstone bedrock (bedrock formation indeterminable due to limited sample) White with tan streaks, very fine sand and silt, loose (Readstown Member)	SS3									
5 ⊠ S	3 3	100	-29 -30	few sandstone fragments, light greenish gray (GLEY1 7/10Y) glauconite and tan Silt, clay, shale laminae										
			, ,	End of boring 30 feet - drilling refusal - bedrock (bottom elevation 871.7ft MSL) SCS edits (in red) based on review of soil and rock samples 8/12/2023.	2									

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



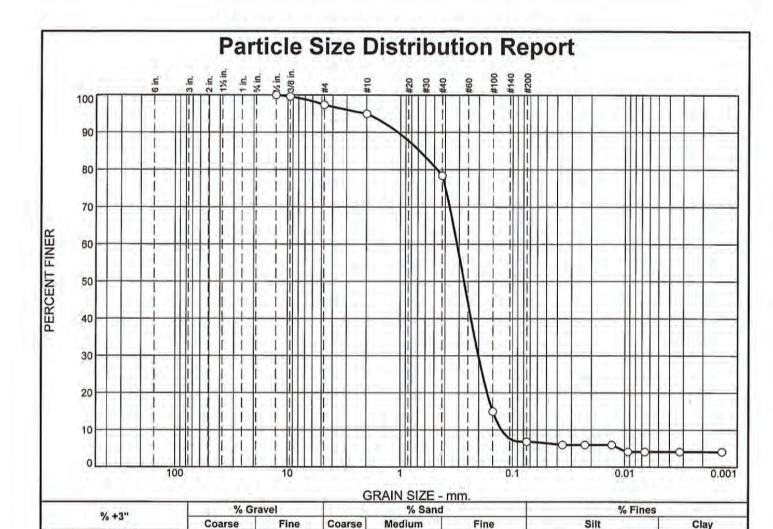
Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

age 1 of 2

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:				
✓ Verification Only	of Fill and Se	eal 🔲	Drinking Water		Watershed/Wa	astewater	Remediation/Redevelopment
			Waste Manageme	nt 🔲	Other:		
1. Well Location Infor					/ Owner Info	ormation	
County	WI Unique Well Removed Well	# of Hicap #	#	Facility Nam		1.11	
Dane	Tronio Toda Tyon					Golf Course	
Latitude / Longitude (see in	nstructions)	Format Code	Method Code		1D or PWS) 13450480		
	N	DD	GPS008		mit/Monitoring	#	
	M	/ DDM	OTH001	17			
1/4 1/4 1/4	Section	Township	Range E	Original A			
or Gov't Lot#		N	ı	Cot	y of Ma	dison	
Well Street Address				Present ##		1.5	~
					ty of Ma		
Well City, Village or Town		Wel	ZIP Code	Mailing Add	ress of Present	Owner	
Madison			н	City of Pres	ent Owner	Ist	ate ZIP Code
Subdivision Name		Lot	#		adison		VI COUG
Reason for Removal from	Service IWIII	Inique Well # of R	enlacement Well	V	104.0.0.0	n, Casing & Sealing	
Geotechnical san	CONTRACTOR OF THE PROPERTY OF	riique vveii ii oi i v	opiacement wen		d piping remove		Yes No X N/A
3. Filled & Sealed We		Borehole Inform	mation	Liner(s) n			Yes No No N/A
Monitoring Well		Construction Date		1000	erforated?		Yes No N/A
Water Well				Screen re			Yes No X N/A
	If a Well	Construction Rep	oort is available,	() The same of th	ft in place?		Yes No No N/A
★ Borehole / Drillhole	please a	ittach.			ng cut off belov		Yes No No N/A
Construction Type:	200.020.00	. —			ng material rise rial settle after:		Yes No N/A
	Driven (Sandpoin	t) Di	ng .	100000000000000000000000000000000000000	, was hole reto		Yes No No N/A
Other (specify):				100000000000000000000000000000000000000		used, were they hydrate	4
Formation Type:					r from a known		Yes No N/A
✓ Unconsolidated Form		Bedrock		The second second		g Sealing Material	
Total Wall Depth From Gr		Casing Diamet	er (in.)		ictor Pipe-Grav ned & Poured		
30'-0'		N	IA	(Bento	nite Chips)	Other (Explain);
Lower Drillhole Diameter ((in.)	Casing Depth (7	Sealing Mat			
6		N	1A		Cement Grout		oncrete
Was well annular space gr	routed? ALA [Yes No	Unknown	1 1	Cement (Conci		ntonite Chips
If yes, to what depth (feet)		pth to Water (feet		- 1 March 2010 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Monitoring Well Borehol	
if yes, to what deput (leet,),	8'3"	,	≱ Bento			- Cement Grout
					lar Bentonite	No. Yards, Sacks Sea	- Sand Slurry lant or Mix Ratio or
5. Material Used to Fi	ill Well / Drillho	ole	- i	From (ft.)	To (ft.)	Volume (circle on	e) Mud Weight
Soil				Surface	0,5		
Bentonte cl	nips			0,5	30	8 bags	
6. Comments							
o. oomments		~					
7. Supervision of Wo Name of Person or Firm D	ork Doing Filling & Ser	aling License #	Date of E	illing & Spalin	g or Verification		R Use Only Noted By
Soils & Engineering			(mm/dd/y	Carlotte and the second	24/2022	Date Neceived	Noted by
Street or Route	ng Cervices	, 11104	2	elephone Nur		Comments	
1102 Stewart Stre	eet			(608) 27			
City		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	□ Code	Signature o	f Person Doing	Work	Date Signed
Madison		WI	53713	17/1me	& Alex	dul	3/24/2022



SIEVE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
0.5	100.0	LENGEN	(11.0)
0.375	99.6	V	
#4	97.4		
#10	95.0		
#40	78.4		
#100	14.9		
#200	6.8		

0.0

2.6

2.4

16.6

2.7

(no specification provided)

Source of Sample: Borings Sample Number: B8 S3

0.0

Depth: 23.5'-25.0'

Date: 2/2/2022

4.1

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

Project: Yahara Hills Geotechnical Investigation

Project No: Figure

71.6

Tested By: MAB Checked By: JJN

TETRA TECH

2679 Continental Drive Green Bay, W.I. 54311 (920) 465-3911 Client: Dane County

Project: Yahara Hills Geotechnical Investigation

Prepared by: Justin J. Naumann

Date: 5/4/22

Checked by: Robert Rouse Date: 5/5/22

REPORT OF:

FALLING HEAD PERMEABILITY TEST

ASTM: D5084

GENERAL DATA:

Sample Location:

Sample Number:

Date Sampled:

Date Received:

Boring 8

B8 ST2

2/22/22

4/22/22

PROJECT SPECIFICATIONS

LABORATORY DATA:

Method of Test: Flex Wall - Undisturbed

Length of Sample (inches): 3.534 Diameter of Sample (inches): 2.837

Dates Tested: April 27- May 4, 2022

Moisture Content (%) 14.1
Dry Density (pcf): 127.3

% Compaction:

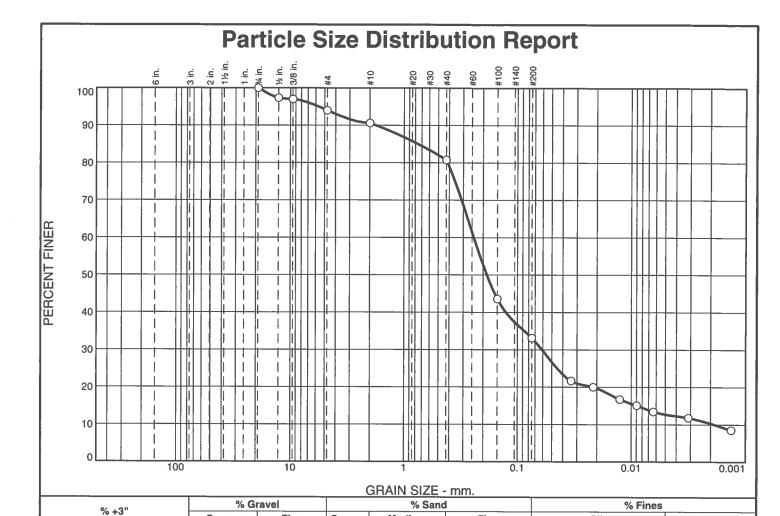
Soil Classification: SILTY SAND,

fine grained, a little gravel, yellowish brown

(SM)

Max. Head Differential (ft.) 6.0
Confining Pressure (Effective psi): 2.0
Hydraulic Gradient: 14-18
Trial No.: 6-9
Water Temperature: 21°C
Coefficient of Permeability (cm/sec): 6.50E-06

REMARKS:



SIEVE	PERCENT	SPEC.*	PASS?
SIZE	FINER	PERCENT	(X=NO)
0.75	100.0		
0.5	97.3		
0.375	97.0		
#4	94.0		
#10	90.6		
#40	80.7		
#100	43.6		
#200	33.1		
]	

Coarse

0.0

Fine

6.0

Coarse

3.4

Medium

9.9

Fine

47.6

	ne grained, a little gra	
PL= NP	Atterberg Limits LL= NV	PI= NP
D ₉₀ = 1.7642 D ₅₀ = 0.1855 D ₁₀ = 0.0019	Coefficients D ₈₅ = 0.7568 D ₃₀ = 0.0611 C _u = 130.21	D ₆₀ = 0.2417 D ₁₅ = 0.0088 C _c = 8.32
USCS= SM	Classification AASHT	O= A-2-4(0)
Munsell Color Co Location: Boring)

Silt

20.4

Clay

12.7

(no specification provided)

Source of Sample: Borings **Sample Number:** B8 ST-2

Tested By: MRG

0.0

Depth: 15.1'-15.7'

Client: Dane County

Project: Yahara Hills Geotechnical Investigation

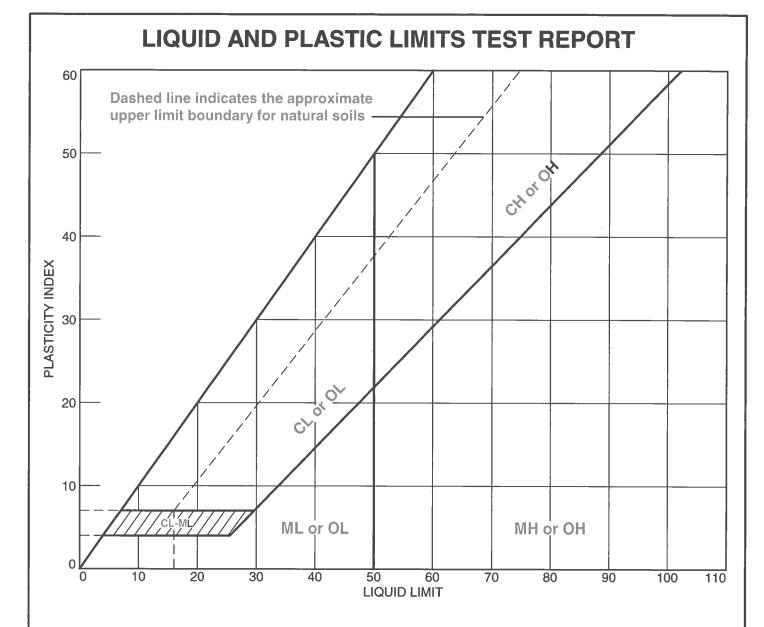
Project No:

Figure

Date: 2/2/2022

Tetra Tech 2679 Continental Drive Green Bay, WI 54311

Checked By: JJN



	SOIL DATA													
SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	uscs						
•	Borings	B8 ST-2	15.1'-15.7'	12.8	NP	NV	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: RRR

State of Wisconsin Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

			<u>Ro</u>		rastewater □ Redevelopment □	Waste M		ement	\boxtimes							
													Pag		of	2
-	/Projec			1 Sita Na 2		License/F	Permit/	Monito	ring N	umbe	er	Boring	Numb	er B- 9)	
				l Site No. 3 f crew chief (first, last) a	nd Firm	N/A Date Dril	ling St	arted		I	Date Dril	ling Cor	npleted			ling Method
_	t Klu	-		, , ,			J					C	1			C
Soil	s and	Engir	neering	g Services				/2022				2/16/2	2022			SA 2.25 ID
WI Un	ique W	ell No	•	DNR Well ID No.	Common Well Name		tic Wa Feet 1		el	Surf	ace Elev	ation Feet N	/CI	Bo		Diameter) inches
Local (Grid Oı	rigin	☐ (es	stimated:	ing Location 🖂	-	reet 1					Grid Lo			0.0	inches
State 1		U		,612 N, 2,166,186		La	t	o —						1		□Е
NE		of N	W 1	/4 of Section 36,	т 7 N, R 10 E	Long		o 	1		"					Feet W
Facility		20		County		County Co	de			ity/ o	r Village					
	45048	1		Dane		13		Madi	son	_		Cail.	Duos			
San				G 11/15	1.5							5011	Prope	erues		-
	Length Att. & Recovered (in)	nts	Geet		ock Description						ive					80
er ype	h At ere	Cou	<u> </u>		ologic Origin For h Major Unit		S	nic	am		ress	n te	-	city		nent
Number and Type	engt	Blow Counts	Depth In Feet	Lac	ii Major Omi		SC	Graphic Log	Well Diagram	PID/FID	Compressive	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
∠ ਜ਼	N N	<u> </u>					U			+-	, 00					<u> </u>
1 SSS 2 2 SSS 1	24 21 24 20	9 10 10 14 6 15 17 20	-1 -2 -3 -4 -5 -7 -8 -9 -10	Silty sand with grastrong brown (7.5° dry, trace cobbles, yellowish red (5Y)	YR 5/6), moist (til medium dense	ay, I)	SM					15.2	NV	NP	30	Lab classified as SM
1 h a · · · 1		C. 41 1	12 11 0 in 60			hast of 1	. a.r. 1 :	1240.465 122								
hereb Signat		-,		ormation on this form is t	l m		nowled	ige.								
ngnat		L	oga	n Dwyer	10	tra Tech	Dr Sui	ite 160	Madie	on V	WI 5371	1				Tel:

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.

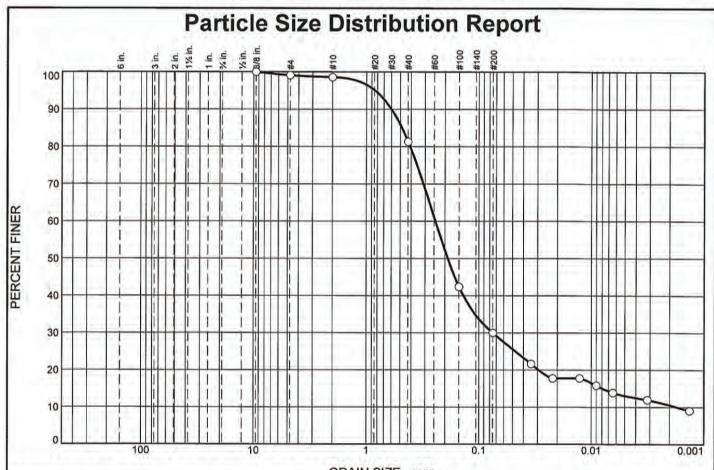
ber		Use only as an attachment to Form 4400-						Soil	Prop		of .	
Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/
80	-13 -14 -15 -16	Weathered sandstone, strong brown (7.5YR 5/6), (bedrock formation indeterminable due to limited sample) SILTY SAND (SM). (Till)	SM X									
15 60	-17 -18 -19 -20					,						
60	21 - 22 -	End of boring 22.9 feet - drilling refusal - bedrock (bottom elevation 878.8ft MSL) SCS edits (in red) based on review of soil samples 8/10/2023.										
	80	80 = 13 = -14 = -15 = -16 = -17 = -18 = -19 = -20 = -21 = -21	And Geologic Origin For Each Major Unit Weathered sandstone, strong brown (7.5YR 5/6), (bedrock formation indeterminable due to limited sample) SILTY SAND (SM). (Till) Weathered dolomite fragments (formation indeterminable due to limited sample) (DOL) To a sample recovery End of boring 22.9 feet - drilling refusal bedrock (bottom elevation 878.8ft MSL) SCS edits (in red) based on review	And Geologic Origin For Each Major Unit Solution Solut	And Geologic Origin For Each Major Unit Solution Services Service	And Geologic Origin For Each Major Unit 80 13 Weathered sandstone, strong brown (7.5YR 5/6), (bedrock formation indeterminable due to limited sample) SILTY SAND (SM). (Till) Weathered dolomite fragments (formation indeterminable due to limited sample) In the sample of the sam	And Geologic Origin For Each Major Unit Solution of Each Major Unit Solu	And Geologic Origin For Each Major Unit And Geologic Origin For Each Major Unit Solution of Each Majo	Soil/Rock Description And Geologic Origin For Each Major Unit 80 13 Weathered sandstone, strong brown (7.5YR 5/6), (bedrock formation indeterminable due to limited sample) SILTY SAND (SM). (Till) SM Weathered dolomite fragments (formation indeterminable due to limited sample) ODL 15 16 17 18 60 19 20 60 21 End of boring 22.9 feet - drilling refusal - bedrock (bottom elevation 878.8ft MSL) SCS edits (in red) based on review	Soil/Rock Description And Geologic Origin For Each Major Unit 80 13 Weathered sandstone, strong brown (7.5YR 5/6), (bedrock formation indeterminable due to limited sample) SILTY SAND (SM). (Till) SM Weathered dolomite fragments (formation indeterminable due to limited sample) SILTY SAND (SM). (Till) 15 16 17 18 60 20 60 21 End of boring 22.9 feet - drilling refusal - bedrock (bottom elevation 878.8ft MSL) SCS edits (in red) based on review	And Geologic Origin For Each Major Unit 80 13 Weathered sandstone, strong brown (7.5 YR 5/6), (bedrock formation indeterminable due to limited sample) SILTY SAND (SM). (Till) SM Weathered dolomite fragments (formation indeterminable due to limited sample) (DOL) 15 16 17 18 18 Weathered dolomite fragments (formation indeterminable due to limited sample) (DOL) 19 20 60 21 End of boring 22.9 feet - drilling refusal bedrock (bottom elevation 878.8ft MSL) SCS edits (in red) based on review	Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Origin For Each Major Unit Solid Soil/Rock Description And Geologic Transported Botton And Geologic Transported Botton And Geologic Transported Botton Bott

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Page 1 of 2

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 377611.69 DD Ν License/Permit/Monitoring # SCR002 2166186.48 DDM W OTH001 N/A 1/4 / 1/4 Section Township Range Original Well Owner NE 1/4 NW 1/4 ✓ E or Gov't Lot # 7 10 W 36 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/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: 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? Required Method of Placing Sealing Material Unconsolidated Formation **Bedrock** Conductor Pipe-Gravity Total Well Depth From Ground Surface (ft.) Casing Diameter (in.) Conductor Pipe-Pumped Screened & Poured (Bentonite Chips) 22.9 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? 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 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 22.9 250 lbs 3/8" Bentonite Chips 6. Comments Boring B-9 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 1102 Stewart St. (608) 274-7600 City ZIP Code Signature of Person Doing Work State Date Signed WI Madison 53713 4/14/2022



		-	G	RAIN SIZE -	mm.			
% +3"	% Gr	avel	441	% Sand		% Fines		
76 +3	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay	
0.0	0.0	0.9	0.5	17.3	51.3	17.0	13.0	

SIEVE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
0.375	100.0		
#4 #10	99.1 98.6		
#40	81.3		
#100 #200	42.3 30.0		
1-15	1 225		
		1000	

SILTY SAND, f	Material Description ine to medium grained,	Control of the Contro
PL=	Atterberg Limits	PI=
D ₉₀ = 0.5984 D ₅₀ = 0.1890 D ₁₀ = 0.0017	Coefficients D ₈₅ = 0.4822 D ₃₀ = 0.0751 C _u = 142.78	D ₆₀ = 0.2437 D ₁₅ = 0.0079 C _c = 13.55
USCS= SM	Classification AASHTO	
Munsell Color C Location: Boring Not enough samp		Limit

(no specification provided)

Source of Sample: Borings Sample Number: B9

Depth: 8.0'-10.0'

Date: 2/16/2022

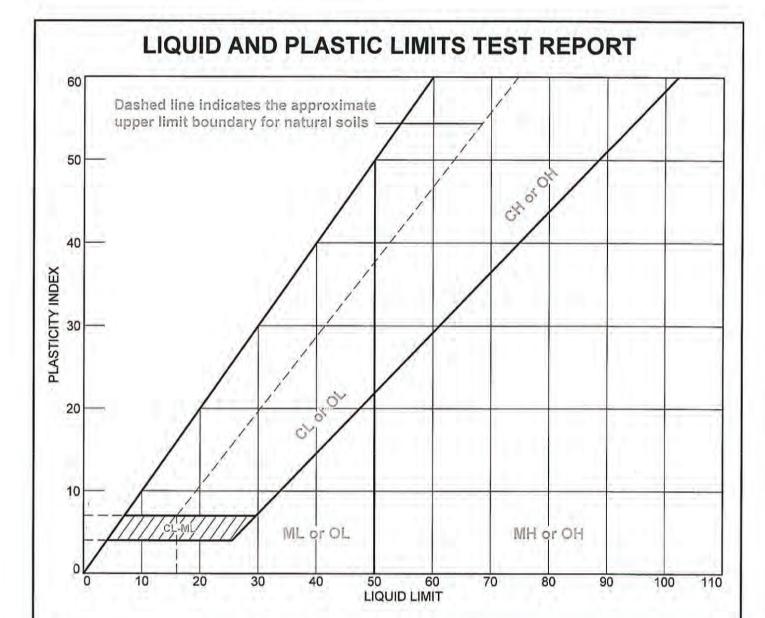
Tetra Tech 2679 Continental Drive Green Bay, WI 54311 Client: Dane County

Project: Yahara Hills Geotechnical Investigation

Project No: Figure

Tested By: MAB

Checked By: RRR



				SOIL DATA	1			
SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	uscs
•	Borings	В9	8.0'-10.0'	15.2				SM
2.4								

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

State of Wisconsin Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

			Ro	oute To;	Watershed/W Remediation/I			Waste Other	-	gement	\boxtimes								
															Pag		of	4	
Facility/I				l C'r Ni	2			License/	Permit	/Monito	ring N	ımber		Boring	Numbe		10		
				Site No.	. 3 ef (first, last) ar	nd Firm		N/A Date Drilling Started Date Dri					ta Drilli	B-10 lling Completed Drilling Method					
Scott		-	Name o	i crew cine	n (msi, iasi) ai	IU FIIIII	Date Diffing Started Date Diffi					ing Completed 1				Drining Method			
			neering	g Service	s		2/22/2022						2/22/2	2022		HSA 2.25 ID			
WI Uniq					ell ID No.	Common	Well Name	Final Sta				Surfac	e Elevat			Bo	Borehole Diameter		
											916.9 Feet MSL				6.0 inches				
Local Gr		rigin			O 160 421		_ 1 _ 0 1 111				Local Grid Location								
State Pla					2,169,421		C/N								□ N			□Е	
NE Engilitari	I					T / N	I, R 10 E	Lon		[C:-:1 T	/C:		17:11	Feet	: S]	Feet W	
		20		I .	-			County Co	ode	Civil To Madi		ty/ or	village						
Samp	3450480 Dane							13	T	Iviaui	3011	ř –	T	Soil	Prope	ortics		1	
Samp					G 11/D									5011	Flope	rues		1	
	r. 8	nts	eet			ock Descrip							is e						
r be	ered	Cou	In F			ologic Orig			\ \omega	.2	E E	le	ressi	ıt le		ity		ents	
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet		Eacl	h Major Ur	nit		SC	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid	Plasticity Index	P 200	RQD/ Comments	
S a Z	R E	Bi	<u>D</u>						Ď	Grap	Ŋ Ü	딢	S 25	క రి	12 12	Pla	P 2	<u> </u>	
			F	Silty sa	and (SM), fe	w gravel,	, yellowis	h											
			E,	brown	(10YR 5/6),	, ary, 100	se (uii)												
			E'																
			F																
			- 2																
			Ε																
			- 3																
1	24	3	F																
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$\frac{2}{SS}$	15 15	12 32	F_9	Silty sa	and (SM), lit	ttle grave	l, yellowi	sh red			1								
		56	F 9	(SYK)	5/6), dry, der	nse (till)													
Ц			<u> </u>																
			-10						SM										
			F																
			<u>-</u> 11															Driller indicated	
			=	(0:		`			-	1.1.1.								hard drilling	
			-12	(Sinni)	pee Group)				H								@ 11.5 feet	
I hereby	certif	fy that	the info	rmation or	n this form is tr	ue and cor	rect to the h	pest of my 1	cnowle	dge.			-	•				-to	
Signatur							l'or	tra Tech		<i>3</i> · ·								Tal.	
<u> </u>		1	ga	nu	wyer		10	13 Excelsion	Dr Su	ite 160	Madis	on, W	I 53714					Tel: Fax:	
			~		$\overline{}$		-								$\overline{}$	$\overline{}$			

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 aple		B-1	Use only as an attachment to Form 4400-			1			Soil	Prop	ge 2 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		, ty	P 200	RQD/ Comments
3 S		60	-13 -14 -15	Highly weathered dolomite bedrock, silt with rock fragments, brownish yellow (10YR 6/6), dry (Galena-Platteville Fm) (continued) (Sinnipee Group). (DOL) Very poor recovery.	DOL									
s S	1	60	-17 -18 -19 -20											Driller indicated softer drilling 17-18 fee and hard drilling (18 feet
	1 1	60	-22 -23 -24 -25 -26											
; ⊠ S	2 2	75	-27 -28 -29 -30	Highly weathered shaly dolomite bedrock, gray (5Y 5/1), (Galena-Platteville Fm) (Ancell Group, Glenwood Formation) Shale "CL", laminated, plastic, moist.	SS1									

Form 4400-122A

Sam	ple									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	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			33	Highly weathered shaly dolomite bedrock, gray (5Y 5/1), (Galena-Platteville Fm) (continued) (Glenwood Fm)	SS1									Driller indicated easier
S 4 10	100	34 35 36	Weathered Sandstone, white (GLEY 1 8/N) (St. Peter Fm) Tonti Member, Ancell Group)										drilling (e 32.5 feet	
×	3.5 3.5	100	-37 -38 -39 -40	brownish yellow (10YR 6/8)	SS2		Y							
×	2 2	100	-42 -43 -44 -45	sandstone and dolomite fragments, few sand, white (GLEY1 8/N), wet			*			8.6	23	15	22.7	Bag sam S9 - 41-4 from aug flights Driller indicated hard dril @ 43.5
	3 3	100	-47 -48 -49 -50	Highly Weathered Dolomite, dolomite fragments, light brownish gray (10YR 6/2) (bedrock formation indeterminable due to limited sample) LEAN CLAY/FAT CLAY "CL CH", wea. residuum (Readstown Member) (SS3)	SS3									

SOIL BORING LOG INFORMATION SUPPLEMENT

Form 4400-122A

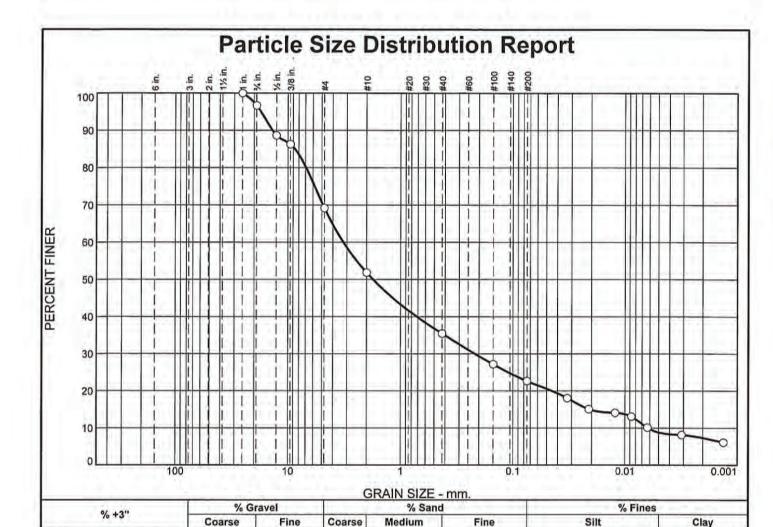
Boring Number	B-1	Use only as an attachment to Form 4400-	122.						Pag	ge 4	of ·	4
Sample								Soil	Prope	erties		
Number and Type Length Att. & Recovered (in) Blow Counts	eet	Soil/Rock Description					.ve					
er 1 Att ered	In F	And Geologic Origin For	\sigma	.c.	員	Ω	ressi th	ure nt	_	ity		ents
Number and Type Length Att. & Recovered (ir	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
			n		≥ □	[H	\(\frac{1}{2}\) \(\frac{1}{2}\)	Σŭ	33	P I	Ь	<u> </u>
	-		SS3									
	_53	glauconite and dolomite fragments										
11 🗷 1 60		\white (GLEY1 8/N)			-							
11 1 60 SS 1 1 60		End of boring 53.6 feet (bottom elevation										
		863.3ft MSL)										
		SCS edits (in red) based on review of										
		soil and rock samples 8/15/2023.										

B-10

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 377666.66 DD Ν License/Permit/Monitoring # SCR002 2169421.35 DDM W N/A OTH001 1/4 / 1/4 Section Township Original Well Owner NE 1/4 Range NF 1/4 ✓ E or Gov't Lot # 10 W 36 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? 2/22/2022 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** Total Well Depth From Ground Surface (ft.) Casing Diameter (in.) Conductor Pipe-Gravity Conductor Pipe-Pumped Screened & Poured (Bentonite Chips) 53 ft. 7 in. 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 41 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 300 lbs 3/8" Bentonite Chips 24 Time release coated 3/8" bentonite chips 24 53' 7" 360 lbs 6. Comments Boring B-10 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) 2/22/2022 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



SIEVE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.0 0.75 0.5 0.375 #4 #10 #40 #100 #200	100.0 96.7 88.7 86.3 69.1 51.8 35.5 27.2 22.7	, ENGERT	(X-No)

3.3

27.6

17.3

16.3

12.8

13.9

8.8

(no specification provided)

Source of Sample: Borings Sample Number: B10 S9

0.0

Depth: 41.0'-43.0'

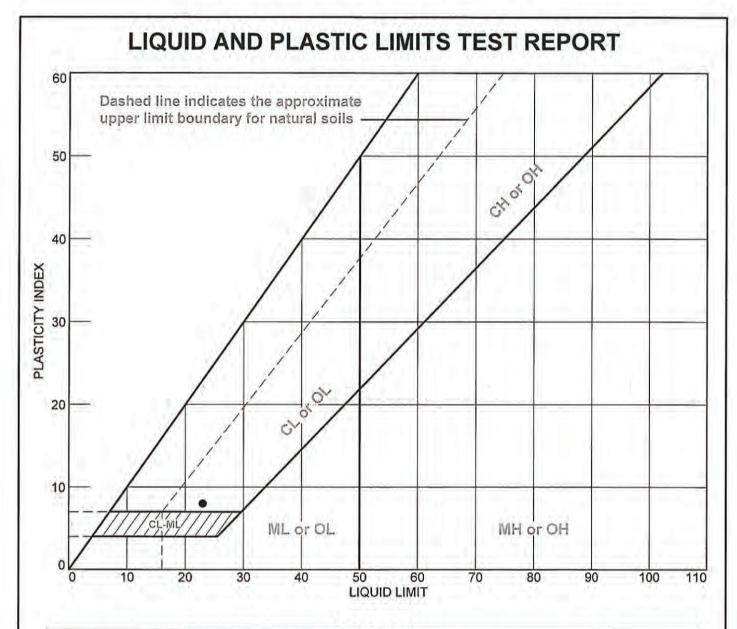
Date: 2/22/2022

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



			SOIL DATA			Garage A	
SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	uscs
Borings	B10 S9	41.0'-43.0'	12.9	15	23	8	SC
	100			- 2			
	A) (SWE	NO.	SOURCE SAMPLE DEPTH	SOURCE SAMPLE DEPTH WATER CONTENT (%)	SOURCE SAMPLE DEPTH WATER CONTENT LIMIT (%) (%)	SOURCE SAMPLE DEPTH WATER CONTENT LIMIT (%) (%)	SOURCE SAMPLE DEPTH WATER CONTENT LIMIT (%) (%) (%) PLASTICITY INDEX (%)

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

State of Wisconsin Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

			<u>Ro</u>		astewater Redevelopment	Waste Other	_	ement	\boxtimes							
													Pag	ge 1	of	3
	y/Proje					License/	Permit/	Monito	ring Nu	ımber	3	Boring	Numbe	er		
				Site No. 3	1.77	N/A	1111			- In	D 1111		1 . 1	B-1		
_		-	Name o	f crew chief (first, last) a	nd Firm	Date Dri	illing Si	tarted		Da	te Drilli	ng Con	npleted		Drill	ing Method
	tt Klu s and		neering	g Services			3/1/	2022				3/1/2	022		H	SA 4.25 ID
	ique W			DNR Well ID No.	Common Well Name	Final Sta			ıl	Surfac	e Elevat			Bo		Diameter
						888	3.6 Fe	et MS			904.6				8.0	inches
	Grid O	rigin		stimated: (1) or Bor		La	nt.	0	1	,,	Local C	rid Lo	cation			
State :		c 5		,106 N, 2,169,439						-		Б.				Е
SE Facility		of S	E I	/4 of Section 25,	T 7 N, R 10 E	Long		Civil To	nwn/Cit	tv/ or V	/illage	Feet				Feet W
	, 15 45048	30		Dane		13	de	Madi		ty/ Of	v mage					
San	nple					1	Ī				Ī	Soil	Prope	erties		
	_			Soil/R	ock Description											1
45	tt. 8 d (i	unts	Fee		cologic Origin For						sive					ts
ber ſype	th A	ို ပိ	h In		h Major Unit		CS	hic	ram	Œ	pres gth	ture	ئ ق	icity		men
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet		3		OS O	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
_ B	I	H	-	Topsoil (loess)			+-	<u> </u>	1	Н	0 8	20	нн	1 1	- 1	<u> </u>
			F	Topson (10 c ss)				17.31.								
			<u>-</u> 1	Lean clay with son	ne silt (CL) dark		-	V/////								
			 	yellowish brown (plastic,										
			<u>-2</u>	moist, very stiff (la	custrine)											
			F	(loess)											
			-3				CL									
	10	_	E													
SS \	18 18	5 9 19	<u></u>								2.75	12.6	NV	NP	59.4	Lab classified as
ΙĂ		19	F.				_									CL/CL-ML
/\	ķ ē		F_5	Poorly cemented w	veathered sandston	e,		:::::								
			F	yellowish brown () poorly sorted, friat	10YR 5/8), fine gr	ained,										
			E_6	indeterminable due	to limited sample	e)										
			E.		St. Peter Forma	•		:::::								
			F_	Tont. Member)	(SS2)	icion,		:::::								
			⊢ 7													
			-					:::::								
			-8				SS2	:::::								
2 SS √	18	24	E	very dense												
SS	18	54 22	⊢ 9													
Λ			F													
	ė		- 10					:::::								
			F													
			<u></u> 11													
			E					:::::								
			<u>├</u> 12					:::::								
I hereb	y certi	fy that	the info	ormation on this form is t	rue and correct to the l	best of my k	cnowle	lge.		•						10)
Signat					I	tra Tech										Tel:
		1	uca	s Specketer		13 Excelsion	Dr Su	ite 160	Madiso	on WI	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

Boring	g Numb	er	B-1	1 Use only as an attachment to Form 4400-	122.						Pa	ge 2	of	3
San	nple									Soil	Prop	erties		
	. & (in)	ıts	set	Soil/Rock Description					e e					
er pe	Att	Coun	In Fe	And Geologic Origin For	\sim	၁	1		essiv	r ie		ity		ents
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Each Major Unit	\sim	Graphic Log	Well	PID/FID	Compressive Strength	Moisture Content	Liquid	Plasticity Index	P 200	RQD/ Comments
a Z	Le R Le	Bl	Ď		S D	Grap Log	≥ ċ		<u>2 2</u>	žŏ	<u> </u>	F E	Ъ	<u> </u>
			-											
			_13											
3 🔽	18	33 67	-	very pale brown (10YR 8/2)										
$\frac{3}{SS}$	18	67	-14	7 1										
\mathbb{N}														
			<u>- 15</u>			: : : : :								
			- -16				T							
			- 10				_							
			- -17		SS2									
					332									
			_18											
4 🗸	18	20	-	light gray (10YR 7/1), sandstone fragments										
$\begin{array}{c} 4 \\ SS \end{array}$	12	80	-19	ingit gray (1011t //1), salidatone nagments										
\mathbb{N}			-			: : : : :								
			20											
			- ₂₁											
			- 21											
			23											
5 🚺	18	60	-	Silty weathered dolomite, dolomite			4							
SS V	1		24	fragments, white (2.5YR 8/1)			4							
\mathbb{N}			- 25	(Ancell Group, St. Peter Formation, Readstown Member)										
			_25	Readstown Weinber)										
					SS3									
						H	4							
			27	Rock fragments in cuttings - dolomite light		H	4							
				gray (2.5 YR 7/1) and sandstone			9							
			E-28											
6 SS	18	100		Dolomite, gray (2.5YR 6/1), some fractures										
1 X	0 84		-29	(bedrock formation indeterminable due to										HQ rock core run 1:
RC	84			limited sample) (Prairie du Chien Group, Opeote			4							RQD= 68% (Fair);
			<u> </u>	(Prairie du Chien Group, Oneota Formation) (DL4)	DL4									recovery 100%
			31											FF: 2.7
			E	highly fractured		H	4							
11			-32			П	П							

Form 4400-122A

Borin	ıg Numl	er	B-1	1 Use only as an attachment to Form 4400-	122.						Pag		of	3
Sar	nple									Soil	Prope	erties		_
	Length Att. & Recovered (in)	nts	eet	Soil/Rock Description					ve					
er /pe	1 Att	Com	In F	And Geologic Origin For	\sigma	.c	 		ressi th	nt nt	_	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
Z E	l A	В			D		≱ <u>∩</u>	<u> </u>	O S	≥ 0	77	P H	Ь	<u> </u>
2 RC	60 60		-33 -34 -35 -36 -37 -38 -39 -40 -41	fractured highly fractured, chert at 38.5 feet Glauconite, blue green, very fractured (bedrock formation indeterminable due to limited sample) Dolomite, light gray (2.5YR 7/1), some fractures (bedrock formation indeterminable due to limited sample) End of boring 41 feet (bottom elevation 863.6ft MSL) SCS edits (in red) based on review of soil and rock samples on 6/18/2023 and 1/24/2023	DL4									HQ rock core run 2: RQD= 47% (poor); recovery 100% FF= 4.6

State

WI

53713

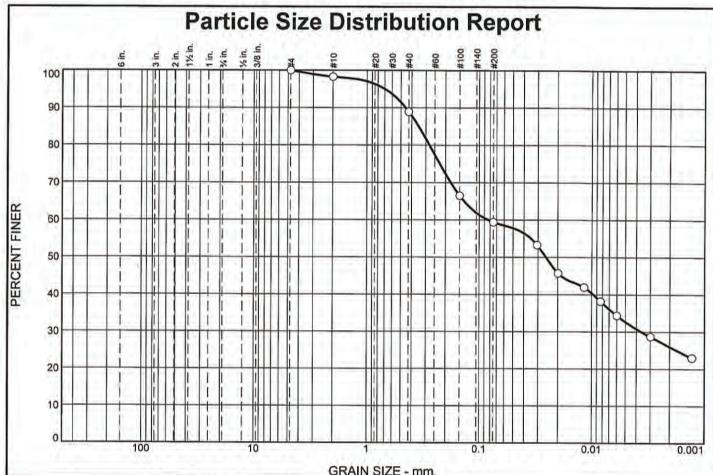
Madison

Well / Drillhole / Borehole Filling & Sealing Report

Date Signed

4/14/2022

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 378106.47 DD Ν License/Permit/Monitoring # SCR002 2169439.01 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 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? 3/01/2022 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? Required Method of Placing Sealing Material Unconsolidated Formation **Bedrock** Conductor Pipe-Pumped Total Well Depth From Ground Surface (ft.) Casing Diameter (in.) Conductor Pipe-Gravity Screened & Poured (Bentonite Chips) 41 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? 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 16 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 575 lbs 3/8" Bentonite Chips 41 6. Comments Boring B-11: Poured bentonite chips as casing was 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) 3/02/2022 Street or Route Telephone Number Comments 1102 Stewart St. (608) 274-7600 City ZIP Code Signature of Person Doing Work



% +3"		% Gr	avel		% Sand		% Fin	es
70 1.	*	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0		0.0	0.0	1.7	9.4	29.5	26.7	32.7
SIEVE	PERCENT	SPEC.	PAS	SS?		Materia	Description	

SIEVE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4 #10	100.0 98.3		
#40	88.9		
#100 #200	66.5 59.4		
		1 91	

(no specification provided)

Source of Sample: Borings Sample Number: B11

Depth: 3.5'-5.0'

Date: 3/1/2022

Tetra Tech 2679 Continental Drive Green Bay, WI 54311

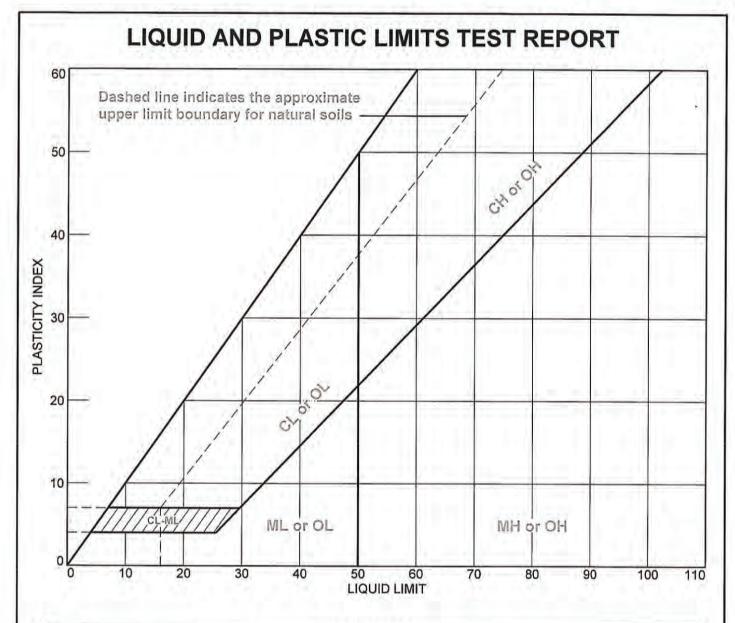
Client: Dane County

Project: Yahara Hills Geotechnical Investigation

Project No: Figure

Tested By: MAB

Checked By: RRR



	SOIL DATA													
SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	uscs						
•	Borings	B11	3.5'-5.0'	12.6				CL/CL-MI						

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