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

MW-121

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Dane County Landfill No. 3 (Proposed) SCS#: 25222268.00		MW-121

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Scott Klumb Soils & Engineering Services, Inc.	1/20/2023	1/20/2023	HSA, 4.25" ID

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
WD845	--	MW-121	900.6 Feet MSL	903.6 Feet MSL	8.3"

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 377,615 N, 2,168,256 E S / C / N
NW 1/4 of NE 1/4 of Section 36, T 7 N, R 10 E
Lat ° ' "
Long ° ' "
Local Grid Location Feet ☐ N ☐ S Feet ☐ E ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Dane	13	City of Madison

Sample 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	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
S1	24	3 3 3 4	1 2 3	SILT (ML), very dark grayish brown (10YR 3/2), organic rich, with roots. (Topsoil) LEAN CLAY (CL), light olive brown (2.5Y 5/4), mostly silt with clay, some fine sand, soft, cohesive, uniform, massive, trace roots. (Loess)	ML CL				1.0 1.5	M				
S2	15	2 4 4	4 5	SILTY SAND (SM), strong brown (7.5YR 5/6), mostly fine sand with medium to coarse sand and some clay, fine to coarse gravel (mostly dolomite), uniform, massive. (Till) (Holy Hill Formation, Horicon Member)	SM					W				Depth to water at ~3' bgs.
S3	14	7 9 8	6 7 8	SILTY SAND (SM), olive yellow (10YR 6/6, mostly fine sand with medium and coarse sand, with trace fine gravel and green (glauconite) clay, massive. (Sandstone Bedrock) (SS2) (Ancell Group, St. Peter Formation, Tonti Member)						W				
S4	14	5 6 7	9 10	Kh = 4.52E-04 cm/s	SS2				4.0	W				
S5	14	50 50/1.5"	11 12	At 11' to 12.5', SILTY SAND (SM) % g-s-si+-cl = 3-69-28						W				Hard drilling from 12.5' to 14.5' bgs.
S6	1	60/<1"	13 14 15	DOLOMITE (DL4). (Weathered Dolomite Bedrock) (Prairie du Chien Group, Oneota Formation) (See B-121C log for rock core description)	DL4					W				

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Adam Watson Firm SCS Engineers
2830 Dairy Drive, Madison, WI 53718

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 Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-121 Use only as an attachment to Form 4400-122.

Sample									Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			16	DOLOMITE (DL4). (Weathered Dolomite Bedrock) (Prairie du Chien Group, Oneota Formation) (See B-121C log for rock core description)	DL4									
				End of boring at 16' bgs in dolomite. Constructed well from 15.3' bgs.										

SCS # 25222268.00

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name Dane County Landfill Site No. 3 (Proposed)	**Local Grid Location of Well** ☐ ft. ☐ N. ☐ S. ☐ ft. ☐ E. ☐ W.	**Well Name** MW-121
Facility License, Permit or Monitoring No. --	**Local Grid Origin** ☐ (estimated: ☐) or **Well Location** ☐ Lat. ° ' " Long. ° ' " or	**Wis. Unique Well No.** WD845
Facility ID --	**St. Plane** 377615.26 ft. N, 2168255.68 ft. E. S/C/N	**DNR Well ID No.** --
Type of Well Well Code 11 / MW	**Section Location of Waste/Source** NW 1/4 of NE 1/4 of Sec. 36, T. 7 N, R. 10 ☒ E ☐ W	**Date Well Installed** 01 / 20 / 2023 (m m d d y y y y)
Distance from Waste/ Source ft. / **Enf. Stds. Apply** ☒	**Location of Well Relative to Waste/Source** u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	**Gov. Lot Number**
		Well Installed By: Name (first, last) and Firm Scott Klumb Soils & Engineering Services, Inc.

A. Protective pipe, top elevation 905.98 ft. MSL

B. Well casing, top elevation 905.97 ft. MSL

C. Land surface elevation 903.6 ft. MSL

D. Surface seal, bottom 899.1 ft. MSL or 4.5 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☒

13. Sieve analysis performed? ☒ Yes ☐ No

14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
Other ☐

15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe N/A

17. Source of water (attach analysis, if required):
N/A

E. Bentonite seal, top 903.6 ft. MSL or 0 ft.

F. Fine sand, top 899.1 ft. MSL or 4.5 ft.

G. Filter pack, top 899.15 ft. MSL or 4.45 ft.

H. Screen joint, top 893.6 ft. MSL or 5 ft.

I. Well bottom 888.3 ft. MSL or 15.3 ft.

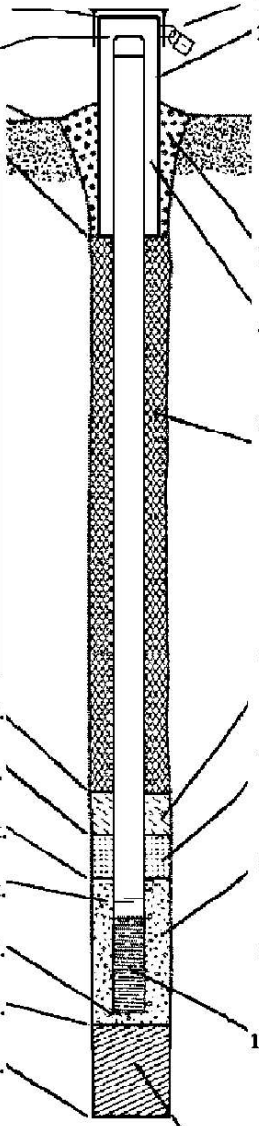
J. Filter pack, bottom 887.6 ft. MSL or 16 ft.

K. Borehole, bottom 887.6 ft. MSL or 16 ft.

L. Borehole, diameter 8.3 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 2.07 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe:

3. Surface seal: Bentonite ☒ 30 Concrete ☐ 01 Other ☐

4. Material between well casing and protective pipe:
Filter Sand
Bentonite ☐ 30 Other ☒

5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. ____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. ____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. 2.07 Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01 Tremie pumped ☐ 02 Gravity ☒ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c. ____ Other ☐

7. Fine sand material: Manufacturer, product name & mesh size
a. Red Flint #15 ☒
b. Volume added 0.15 ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #40 ☒
b. Volume added 2.5 ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
Other ☐

10. Screen material: Sch. 40 PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐
b. Manufacturer Campbell (Monoflex)
c. Slot size: 0.01 in.
d. Slotted length: 10 ft.

11. Backfill material (below filter pack): None ☐ 14 Other ☒

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
	SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

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.

stitch up height is ~2.50

SCS # 25222268.00

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐ _____

Facility/Project Name	County Name	Well Name
Dane County Landfill No. 3 (Proposed)	Dane	MW-121

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
--	13	WD845	--

1. Can this well be purged dry? ☐ Yes ☒ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☒ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

3. Time spent developing well 82 min.

4. Depth of well (from top of well casisng) 17.3 ft.

5. Inside diameter of well 2.07 in.

6. Volume of water in filter pack and well casing 12.9 gal.

7. Volume of water removed from well 94.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☒ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 3.34 ft.	3.46 ft.
Date	b. 01/27/2023	01/27/2023
Time	c. 12:45 ☐ a.m. ☒ p.m.	2:07 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	1.0 inches	<1.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☒ 20 Turbid ☐ 25
(Describe)	light brown color, no odor	clear, no odor
14. Total suspended solids	---.- mg/l	1,100.0 mg/l
15. COD	---.- mg/l	---.- mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Ethan Last Name: Schaefer
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

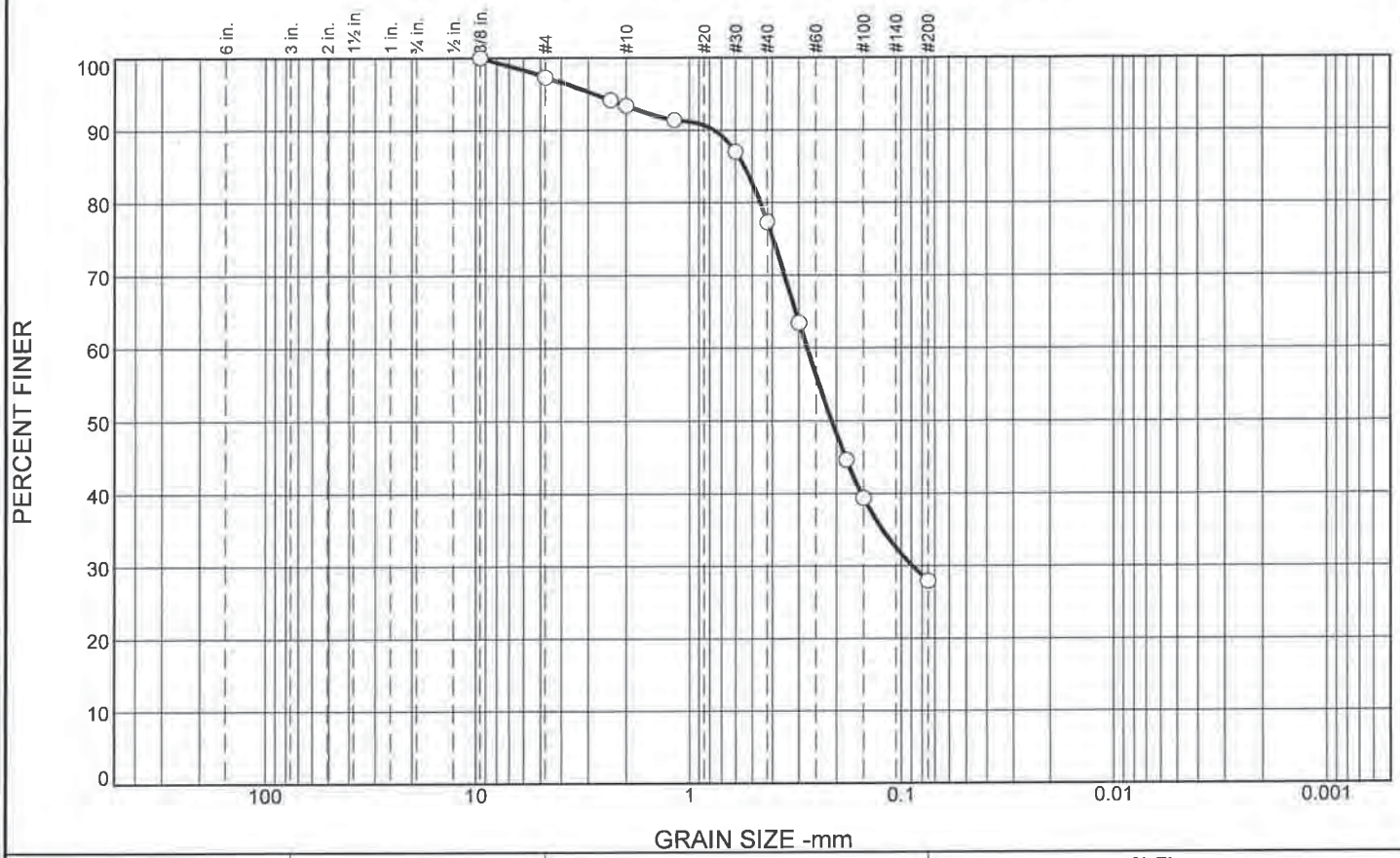
17. Additional comments on development:
- Surged and purged 30 minutes, 19 gallons purged
- 10 well volume: 129 gallons
- Water purged clear after 75 gallons purged with monsoon pump

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Allison Last Name: Rathsack
Facility/Firm: Dane County Dpt. of Waste & Renewables
Street: 1919 Alliant Energy Center Way
City/State/Zip: Madison, WI 53713

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Ethan Schaefer
Print Name: Ethan Schaefer
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

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

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	2.6	4.0	16.0	49.4	28.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8	100.0		
#4	97.4		
#8	94.2		
#10	93.4		
#16	91.4		
#30	87.0		
#40	77.4		
#50	63.4		
#80	44.6		
#100	39.4		
#200	28.0		

* (no specification provided)

Material Description

Tan Fine to Medium Sand, Some Silt, Trace Gravel

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{90}= 0.7566 D_{85}= 0.5454 D_{60}= 0.2756
D_{50}= 0.2113 D_{30}= 0.0887 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= SM AASHTO= A-2-4(0)

Remarks

NP= Non-Plastic

Sample Number: MW121 **Depth:** 11'-12.5'

Date: 3/21/23

CGC, Inc.

Client: SCS Engineers
Project: Dane County Yahara Hills
Project No: C22011-8 **Figure**

Tested By: JFS **Checked By:** KJS

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Dane County Landfill No. 3 (Proposed) SCS#: 25222268.00		B-122

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Scott Klumb Soils & Engineering Services, Inc.	2/20/2023	2/20/2023	HSA 4.25" ID

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
--	--	--	--	910.0 Feet MSL	8.3"

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 377,548 N, 2,169,046 E S / C / N
NE 1/4 of NE 1/4 of Section 36, T 7 N, R 10 E
Lat ° ' "
Long ° ' "
Local Grid Location Feet ☐ N ☐ S Feet ☐ E ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Dane	13	City of Madison

Sample Number and Type	Sample 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	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	Blind drilled to 16' bgs. (See MW-122 log for lithology from 0' to 15' bgs).										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Jackie Rennebohm, PG	SCS Engineers 2830 Dairy Drive, Madison, WI 53718

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 Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number B-122 Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample 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	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			16											
S1	7.5	39 61/3"	17	SANDSTONE (SS3), light gray (10YR 7/1) and yellow (10YR 7/6) fine to coarse sand with layers of clay, clay is green/glauconitic, trace angular pieces of dolomite. (Ancell Group, St. Peter Formation) (Readstown Member)						M				
			18											
S2	7	100/1.5"	19		SS3					W				
			20											
			21											
			22											
			23	SILTY GRAVEL (GM), very pale brown (10YR 8/3), fine to coarse grained, trace sand. (Dolomite Bedrock) (Prairie du Chien Group)										
S3	7	100/3"	24							W				
			25											
			26											
			27											
			28											
S4	5.5	100/4"	29							W				
			30											
			31		DL5									
			32											
			33											
			34	Gray (10YR 5/1).										
S5	3.5	100/1.5"	35							W				
			36											
			37											
			38											
			39											
S6	5	100/2"	40							W				

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number B-122 Use only as an attachment to Form 4400-122.

Sample									Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			41											
S7	7		42	Light brownish gray (10YR 6/2).	DL5					W				
			43	End of boring at 43' bgs in dolomite. Abandoned boring with bentonite grout and bentonite chips.										

State of Wis., Dept. of Natural Resources SCS No. 25222268.00
dnr.wi.gov

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.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☐ Remediation/Redevelopment
☒ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Dane	_ _ _ _ _	B-122

Latitude / Longitude (see instructions) _____ N _____ W
Format Code: ☐ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼ NE	¼ NE	Section	Township	Range
or Gov't Lot #		36	7 N	10 ☒ E ☐ W

Well Street Address: 7101 US Highway 12 & 18

Well City, Village or Town	Well ZIP Code
Madison, WI	53718

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary Borehole	_ _ _ _ _

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 02/20/2023

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (specify): _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
43	NA

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
8.3	NA

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
43	~7.5

2. Facility / Owner Information

Facility Name: Dane County Landfill No.3 (Proposed)
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner: Dane County Department of Waste and Renewables
Present Well Owner: Dane County Department of Waste and Renewables
Mailing Address of Present Owner: 1919 Alliant Energy Center Way

City of Present Owner	State	ZIP Code
Madison	WI	53713

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☒ Yes	☐ No	☐ N/A
If yes, was hole retopped?	☒ Yes	☐ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☒ Bentonite Grout
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips	Surface	5.7	100 lbs	dry mix
Bentonite Grout	5.7	43	24-gallons	2lbs/gal

6. Comments

Boring B-122

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Soils & Engineering Services, Inc		02/20/2023

Street or Route	Telephone Number
1102 Stewart St	(608)274-7600

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Madison	WI	53713	Bridget Arnold	02/20/2023

DNR Use Only

Date Received	Noted By

Comments:

MW-122

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Dane County Landfill No. 3 (Proposed) SCS#: 25222268.00		MW-122

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Scott Klumb Soils & Engineering Services, Inc.	1/27/2023	1/27/2023	HSA, 4.25" ID

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
WD863	--	MW-122	906.0 Feet MSL	910.0 Feet MSL	8.3"

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 377,548 N, 2,169,046 E S / C / N
NE 1/4 of NE 1/4 of Section 36, T 7 N, R 10 E
Lat ° ' "
Long ° ' "
Local Grid Location Feet ☐ N ☐ S Feet ☐ E ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Dane	13	City of Madison

Sample Number and Type	Sample 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	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
S1	17	1 3 3 3	1	ORGANIC SILT (OL), very dark grayish brown (10YR 3/2), with roots. (Topsoil)	OL									
			2	LEAN CLAY (CL), light yellowish brown (10YR 6/4), mostly silt with clay, some fine sand, soft, cohesive, uniform, massive, trace roots. (Loess)	CL				2.0	M				
			3											
S2	18	2 2 2 2	4	SILTY SAND (SM), yellowish brown (10YR 5/4), mostly fine sand with medium to coarse sand and some clay, fine to coarse gravel (mostly dolomite), uniform, massive. (Till) (Holy Hill Formation, Horicon Member)	SM				0.5	M+				Depth to water at ~4' bgs.
			5											
			6	At 6' to 7.5', SILTY SAND (SM) % g-s-si-cl = 4-65-17-14										
S3	18	1 2 1	7							W				
			8											
S4	11	2 3 3	9	Pale brown (10YR 6/3).						W				
			10	Kh = 1.10E-04 cm/s										
S5	10		11							W				
			12											
			13											
S6	18	2 1 1	14							W				
			15											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Jackie Rennebohm, PG	SCS Engineers 2830 Dairy Drive, Madison, WI 53718

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-122 Use only as an attachment to Form 4400-122.

Sample									Soil Properties						
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				SILTY SAND (SM), yellowish brown (10YR 5/4), mostly fine sand with medium to coarse sand and some clay, fine to coarse gravel (mostly dolomite), uniform, massive. (Till) (Holy Hill Formation, Horicon Member)	SM									
				End of boring at 15.3' bgs in till. Constructed well from 15.3' bgs.										

SCS # 25222268.00

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☒ Remediation/Redevelopment ☐ Other ☐

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name Dane County Landfill Site No. 3 (Proposed)	**Local Grid Location of Well** ☐ ft. ☐ N. ☐ S. ☐ ft. ☐ E. ☐ W.	**Well Name** MW-122
Facility License, Permit or Monitoring No. --	**Local Grid Origin** ☐ (estimated: ☐) or **Well Location** ☐ Lat. ° ' " Long. ° ' " or	**Wis. Unique Well No.** WD863
Facility ID --	**St. Plane** 377547.66 ft. N, 2169046.46 ft. E. S/C/N	**DNR Well ID No.** --
Type of Well Well Code 11 / MW	**Section Location of Waste/Source** NE 1/4 of NE 1/4 of Sec. 36, T. 7 N, R. 10 ☒ E ☐ W	**Date Well Installed** 01 / 27 / 2023 (m m d d y y y y)
Distance from Waste/ Source ft. **Enf. Stds. Apply** ☒	**Location of Well Relative to Waste/Source** u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	**Gov. Lot Number**
		Well Installed By: Name (first, last) and Firm Scott Klumb Soils & Engineering Services, Inc.

A. Protective pipe, top elevation 912.41 ft. MSL

B. Well casing, top elevation 912.42 ft. MSL

C. Land surface elevation 910.0 ft. MSL

D. Surface seal, bottom 906.0 ft. MSL or 4 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☒ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis performed? ☒ Yes ☐ No

14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
Other ☐

15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe N/A

17. Source of water (attach analysis, if required):
N/A

E. Bentonite seal, top 910.0 ft. MSL or 0 ft.

F. Fine sand, top 906.0 ft. MSL or 4.0 ft.

G. Filter pack, top 905.5 ft. MSL or 4.5 ft.

H. Screen joint, top 905.0 ft. MSL or 5 ft.

I. Well bottom 894.7 ft. MSL or 15.3 ft.

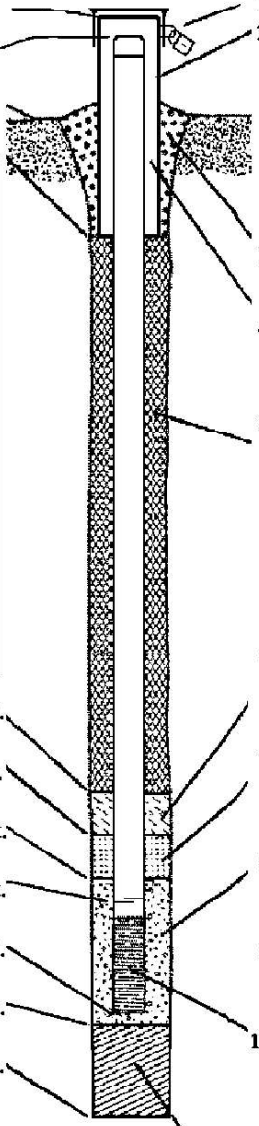
J. Filter pack, bottom 894.7 ft. MSL or 15.3 ft.

K. Borehole, bottom 894.7 ft. MSL or 15.3 ft.

L. Borehole, diameter 8.3 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 2.07 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe:

3. Surface seal: Bentonite ☒ 30 Concrete ☐ 01 Other ☐

4. Material between well casing and protective pipe:
Filter Sand
Bentonite ☐ 30 Other ☒

5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. ____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. ____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. 2.07 Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01 Tremie pumped ☐ 02 Gravity ☒ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c. ____ Other ☐

7. Fine sand material: Manufacturer, product name & mesh size
a. Red Flint #15 ☒
b. Volume added 0.5 ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #40 ☒
b. Volume added 2.0 ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
Other ☐

10. Screen material: Sch. 40 PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐
b. Manufacturer Campbell (Monoflex)
c. Slot size: 0.01 in.
d. Slotted length: 10 ft.

11. Backfill material (below filter pack): None ☒ 14 Other ☐

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
	SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

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.

SCS # 25222268.00

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐ _____

Facility/Project Name	County Name	Well Name
Dane County Landfill No. 3 (Proposed)	Dane	MW-122

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
--	13	WD863	--

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☒ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

3. Time spent developing well 40 min.

4. Depth of well (from top of well casisng) 18.1 ft.

5. Inside diameter of well 2.07 in.

6. Volume of water in filter pack and well casing 6.2 gal.

7. Volume of water removed from well 7.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☒ No

	Before Development	After Development
11. Depth to Water (from top of well casing) a.	11.44 ft.	14.46 ft.
Date b. (m m / d d / y y y y)	02/02/2023	02/02/2023
Time c.	11:05 ☒ a.m. ☐ p.m.	11:45 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	1.0 inches	1.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 20 Turbid ☒ 25
(Describe)	light brown color; no odor	light brown color; no odor
14. Total suspended solids	---.- mg/l	3,960.0 mg/l
15. COD	---.- mg/l	---.- mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Ethan Last Name: Schaefer
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

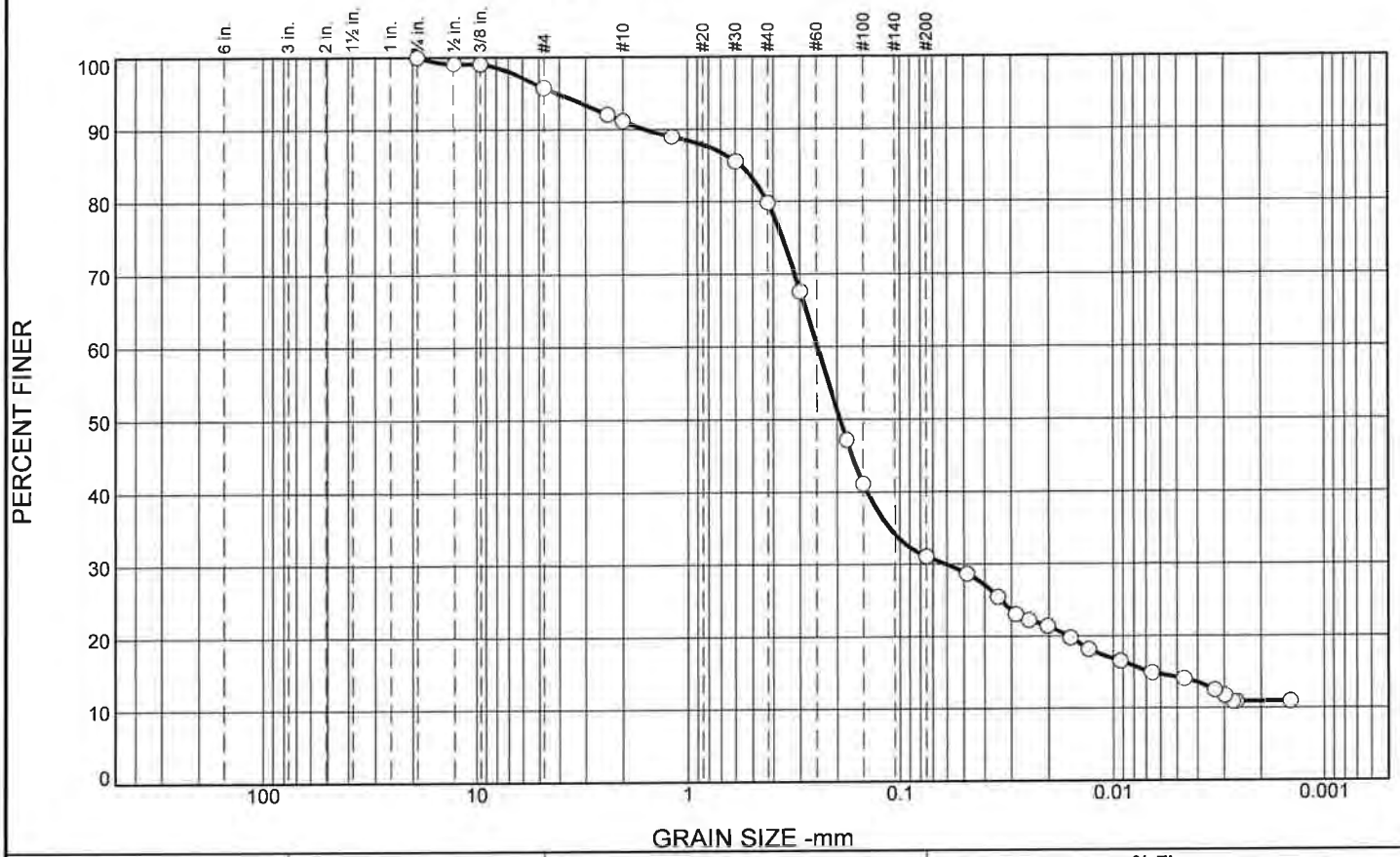
17. Additional comments on development:
- Surged and purged 30 minutes
- Purged dry 3 times
- Total of 7 gallons purged

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Allison Last Name: Rathsack
Facility/Firm: Dane County Dpt. of Waste & Renewables
Street: 1919 Alliant Energy Center Way
City/State/Zip: Madison, WI 53713

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Ethan Schaefer
Print Name: Ethan Schaefer
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

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

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	4.2	4.7	11.3	48.7	16.8	14.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4	100.0		
1/2	99.1		
3/8	99.1		
#4	95.8		
#8	92.1		
#10	91.1		
#16	88.9		
#30	85.5		
#40	79.8		
#50	67.6		
#80	47.2		
#100	41.1		
#200	31.1		

* (no specification provided)

Material Description

Brown Fine to Medium Sand, Some Silt, Trace Gravel

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{90}= 1.5751 D_{85}= 0.5706 D_{60}= 0.2492
D_{50}= 0.1942 D_{30}= 0.0611 D_{15}= 0.0067
D_{10}= C_u= C_c=

Classification

USCS= SM AASHTO= A-2-4(0)

Remarks

NP= Non-Plastic

Sample Number: MW122 **Depth:** 6'-7.5'

Date: 3/21/23

CGC, Inc.

Client: SCS Engineers
Project: Dane County Yahara Hills

Project No: C22011-8 **Figure**

Tested By: _____

MW-123

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Dane County Landfill No. 3 (Proposed) SCS#: 25222268.00		MW-123

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Scott Klumb Soils & Engineering Services, Inc.	1/19/2023	3/7/2023	HSA, 4.25" ID & Air Rotary

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
WD857	--	MW-123	--	930.4 Feet MSL	8.3" & 6"

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 377,598 N, 2,169,698 E S / C / N
NE 1/4 of NE 1/4 of Section 36, T 7 N, R 10 E
Lat ° ' "
Long ° ' "
Local Grid Location Feet ☐ N ☐ S Feet ☐ E ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Dane	13	City of Madison

Sample 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	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
S1	12	3 4 3	1	SILT (ML), very dark grayish brown (10YR 3/2), with organics and roots. (Topsoil)	ML									
			2	LEAN CLAY (CL), dark yellowish brown (10YR 4/4) and black mottling, mostly silt with clay, some fine sand, soft, cohesive, uniform, massive. (Loess)	CL				1.25 1.0	M				
			3											
S2	12	4 4 5	4	SILTY SAND (SM), strong brown (7.5YR 4/6), mostly fine sand with medium to coarse sand, some clay, fine to coarse gravel (mostly dolomite), uniform, massive. (Till) (Holy Hill Formation, Horicon Member)	SM					M				
			5											
			6											
S3	16	33 47 20/2"	7	POORLY GRADED SAND (SP), yellow (10YR 8/8) and orange, fine to medium sand, well sorted, massive, friable. (Sandstone Bedrock) (SS2) (Ancell Group, St. Peter Formation, Tonti Member)						M				
			8											
S4		22 34 46	9							M				
			10		SS2									
			11											
S5	3	100/3"	12							M				
			13											
S6	3	100/3"	14							M				
			15											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Adam Watson	SCS Engineers 2830 Dairy Drive, Madison, WI 53718

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-123 Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample 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	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			16	POORLY GRADED SAND (SP), yellow (10YR 8/8) and orange, fine to medium sand, well sorted, massive, friable. (Sandstone Bedrock) (SS2) (Ancell Group, St. Peter Formation, Tonti Member)										
			17											
			18											
S7	3	100/3"	19	Yellowish brown (10YR 5/6).						M				
			20											
			21											
			22											
			23											
S8	3	100/2.5"	24	Yellow (10YR 8/6), with trace white and greenish blue (glauconite) clay.						M				
			25											
			26											
			27											
			28		SS2									
S9	3	100/2.5"	29	White (10YR 8/1).						M				
			30											
			31											
			32											
			33											
S10	2	100/1.5"	34	Yellow (10YR 8/8) and orange.						M				
			35											
			36											
			37											
			38											
S11	2	100/1.5" 60/<1"	39							M				
			40											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-123 Use only as an attachment to Form 4400-122.

Sample									Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			41	POORLY GRADED SAND (SP), yellow (10YR 8/8) and orange, fine to medium sand, well sorted, massive, friable. (Sandstone Bedrock) (SS2)	SS2									
				(Ancell Group, St. Peter Formation, Tonti Member)										
			42	Blind drilled from 41.1' to 52.7' bgs.										
			43	Kh = 2.36E-04 cm/s										
			44											
			45											
			46											
			47											
			48											
			49											
			50											
			51											
			52											
				End of boring at 52.7' bgs in sandstone. Drilled with HSA to 41.1' bgs on 1/19/2023. Reamed hole to 6" diameter using air rotary. Blind drilled from 41.1' to 52.7' bgs on 3/7/2023 and set well MW-123 to 51.3' bgs. (See MW-123A log from 35' to 52.7' bgs for lithology.)										

SCS # 25222268.00

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☒ Remediation/Redevelopment ☐ Other ☐

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name Dane County Landfill Site No. 3 (Proposed)	**Local Grid Location of Well** ☐ ft. ☐ N. ☐ S. ☐ ft. ☐ E. ☐ W.	**Well Name** MW-123
Facility License, Permit or Monitoring No. --	**Local Grid Origin** ☐ (estimated: ☐) or **Well Location** ☐ Lat. ° ' " Long. ° ' " or	**Wis. Unique Well No.** WD857
Facility ID --	**St. Plane** 377597.91 ft. N, 2169698.22 ft. E. S/C/N	**DNR Well ID No.** --
Type of Well Well Code 11 / MW	**Section Location of Waste/Source** NE 1/4 of NE 1/4 of Sec. 36, T. 7 N, R. 10 ☒ E ☐ W	**Date Well Installed** 03 / 07 / 2023 (m m d d y y y y)
Distance from Waste/ Source ft. / **Enf. Stds. Apply** ☒	**Location of Well Relative to Waste/Source** u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	**Gov. Lot Number**
		Well Installed By: Name (first, last) and Firm Scott Klumb Soils & Engineering Services, Inc.

A. Protective pipe, top elevation 933.01 ft. MSL

B. Well casing, top elevation 933.02 ft. MSL

C. Land surface elevation 930.4 ft. MSL

D. Surface seal, bottom 894.6 ft. MSL or 35.8 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☒

13. Sieve analysis performed? ☐ Yes ☒ No

14. Drilling method used: Rotary ☒ 50 / Hollow Stem Auger ☐ 41 / Other ☐

15. Drilling fluid used: Water ☐ 02 / Air ☒ 01 / Drilling Mud ☐ 03 / None ☐ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe N/A

17. Source of water (attach analysis, if required):
N/A

E. Bentonite seal, top 930.4 ft. MSL or 0 ft.

F. Fine sand, top 894.6 ft. MSL or 35.8 ft.

G. Filter pack, top 892.0 ft. MSL or 38.4 ft.

H. Screen joint, top 889.4 ft. MSL or 41 ft.

I. Well bottom 879.1 ft. MSL or 51.3 ft.

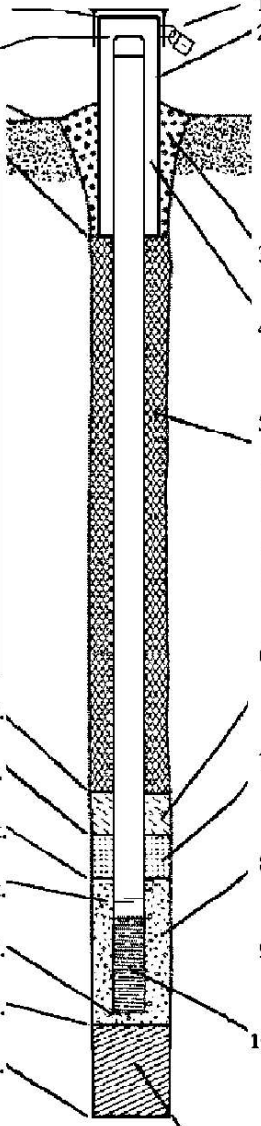
J. Filter pack, bottom 877.7 ft. MSL or 52.7 ft.

K. Borehole, bottom 877.7 ft. MSL or 52.7 ft.

L. Borehole, diameter 6.0 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 2.07 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 / Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe:

3. Surface seal: Bentonite ☒ 30 / Concrete ☐ 01 / Other ☐

4. Material between well casing and protective pipe:
Filter Sand
Bentonite ☐ 30 / Other ☒

5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. ____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. ____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. 10.9 Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01 / Tremie pumped ☐ 02 / Gravity ☒ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c. ____ Other ☐

7. Fine sand material: Manufacturer, product name & mesh size
a. RW Sidley #15 ☒
b. Volume added 0.5 ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. RW Sidley #40 ☒
b. Volume added 3.0 ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / Other ☐

10. Screen material: Sch. 40 PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐
b. Manufacturer Campbell (Monoflex)
c. Slot size: 0.01 in.
d. Slotted length: 10 ft.

11. Backfill material (below filter pack): None ☒ 14 / Other ☐

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
	SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

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.

SCS # 25222268.00

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐ _____

Facility/Project Name	County Name	Well Name
Dane County Landfill No. 3 (Proposed)	Dane	MW-123

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	13	WD857	

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☒ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ __

3. Time spent developing well 40 min.

4. Depth of well (from top of well casisng) 54.05 ft.

5. Inside diameter of well 2.07 in.

6. Volume of water in filter pack and well casing 2.0 gal.

7. Volume of water removed from well 30.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☒ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 50.38 ft.	52.95 ft.
Date	b. 05/30/2023 (m m d d y y y y)	05/30/2023
Time	c. 12:00 ☐ a.m. ☒ p.m.	12:40 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	2.0 inches	1.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 20 Turbid ☒ 25
(Describe)	tan, no odor	tan, no odor
14. Total suspended solids	---.- mg/l	205.0 mg/l
15. COD	---.- mg/l	---.- mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Bri Last Name: Salome
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

17. Additional comments on development:
- surged and purged for 30 minutes. Last two purges resulted in dry well.
- purged dry 3 times, waited 10 minutes to take samples
- sampled @ 12:50pm

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Allison Last Name: Ratlsak
Facility/Firm: Dane County Dpt. Waste & Renewables
Street: 1919 Alliant Energy Center Way
City/State/Zip: Madison, WI 53713

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: [signature]
Print Name: Bri Salome
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

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

MW-123A

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Dane County Landfill No. 3 (Proposed) SCS#: 25222268.00		MW-123A

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
John Wagner, Subsurface Exploration Services Scott Klumb, Soils & Engineering Services, Inc.	2/23/2023	3/7/2023	HSA, 4.25" ID & Air Rotary

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
WD836	--	MW-123A	--	930.5 Feet MSL	8.3" & 6"

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 377,591 N, 2,169,697 E S / C / N
NE 1/4 of NE 1/4 of Section 36, T 7 N, R 10 E
Lat ° ' "
Long ° ' "
Local Grid Location Feet ☐ N ☐ S Feet ☐ E ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Dane	13	City of Madison

Sample Number and Type	Sample 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	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	Blind drilled to 35' bgs. (See MW-123 log from 0' to 35' bgs for lithology.) Subsurface Exploration Services cored hole from 35' to 93' bgs on 2/23-24/2023. Soils & Engineering Services, Inc. reamed hole to 6" diameter using air rotary on 3/7/2023 and set well MW-123A to 80.8' bgs.										
			2											
			3											
			4											
			5											
			6											
			7											
			8											
			9											
			10											
			11											
			12											
			13											
			14											
			15											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Adam Watson	SCS Engineers 2830 Dairy Drive, Madison, WI 53718

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-123A Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample 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	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			16	Blind drilled to 35' bgs. (See MW-123 log from 0' to 35' bgs for lithology.) Subsurface Exploration Services cored hole from 35' to 93' bgs on 2/23-24/2023. Soils & Engineering Services, Inc. reamed hole to 6" diameter using air rotary on 3/7/2023 and set well MW-123A to 80.8' bgs.										
			17											
			18											
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			28											
			29											
			30											
			31											
			32											
			33											
			34											
			35	SANDSTONE (SS2), yellow (10YR 8/8), brownish yellow (10YR 6/8), and red (2.5YR 4/8), fine to medium sand, well sorted, massive to planar bedded, with iron staining. (Ancell Group, St. Peter Formation, Tonti Member)										
Run 1	36		36											
			37		SS2									Drill stopped progressing at 38' bgs. FF=2.3/ft Percent Recovery=100% RQD=53%, fair
			38	Red (2.5YR 4/8) with iron inclusions and staining.										
			39											
Run 2	25		40											FF=2/ft Percent Recovery=80% RQD=58%, fair

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-123A Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample 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	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			41	SANDSTONE (SS2), yellow (10YR 8/8), brownish yellow (10YR 6/8), and red (2.5YR 4/8), fine to medium sand, well sorted, massive to planar bedded, with iron staining. (Ancell Group, St. Peter Formation, Tonti Member)										
			42	Pale brown (2.5Y 7/3) and red (2.5YR 4/8), with low-angle cross-bedding.										
Run 3	51		43	From 43' to 45' bgs, planar bedded.										FF=0.94/ft Percent Recovery=94% RQD=70%, fair
			44											
Run 4	8		45	Massive.										FF=1.5/ft Percent Recovery=67% RQD=63%, fair
			46	Pale brown (2.5Y 7/3), planar bedded, with iron and sulfides (pyrite).	SS2									
			47											
Run 5	60		48											FF=1.2/ft Percent Recovery=100% RQD=80%, good
			49											
			50											
			51											
			52											
Run 6	54		53	VARIABLE LITHOLOGY (SS3), gray (2.5Y 6/1), fine to coarse sand, poorly sorted, massive to wavy planar to cross-bedding, with dark olive brown (2.5Y 3/3) clay, dolomitic zones. (Ancell Group, St. Peter Formation, Readstown Member)										FF=2/ft Percent Recovery=90% RQD=71%, fair
			54											
			55	At 55' to 57' bgs, Layered white and reddish brown sandstone.										
			56											
			57	At 57' to 58.5' bgs, Shale, dark reddish brown with chert pieces, laminated.										
Run 7	30		58											FF=3.6/ft Percent Recovery=50% RQD=23%, very poor
			59		SS3									
			60	Well Cemented Sandstone.										
			61	Pale brown (2.5Y 8/2), sandstone with planar to low-angle planar bedding.										
			62											
Run 8	41		63											FF=1.16/ft Percent Recovery=68.75% RQD=59%, fair
			64	Low-angle cross-bedding.										
			65											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-123A Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample 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	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			66	SANDSTONE (SS), gray (2.5Y 6/1), fine to coarse grained, poorly sorted, massive to wavy planar to cross-bedding, with dark olive brown (2.5Y 3/3) clay, dolomitic zones. (Ancell Group, St. Peter Formation, Readstown Member)	SS3									
Run 9	21		67	DOLOMITE (DOL), white (10YR 8/1) and light gray (2.5Y 7/1), cherty and sandy, massive to planar to cross-bedded, light brown clay within some fractures. (Prairie du Chien Group, Shakopee Formation, Willow River Member)	DL3									FF=3.43/ft Percent Recovery=70% RQD=0%, very poor
			68											
Run 10	30		69	SANDSTONE (SS), white (2.5Y 8/1) and light gray (2.5Y 7/1), fine to coarse sand, poorly sorted, dolomitic, massive. (Prairie du Chien Group, Shakopee Formation, New Richmond Member)										FF=1.5/ft Percent Recovery=100% RQD=89%, good
			70											
			71											
			72											
Run 11	56		73	Kh = 7.96E-06 cm/s										FF=1.7/ft Percent Recovery=93% RQD=63%, fair
			74											
			75	From approximately 75' to 85.5' bgs, cherty zone, highly weathered. Chert is intermixed with sandstone, dolomite, and greenish blue (Gley1 7/5G/2) (glauconite) clay.										
			76											
			77		DL3									
Run 12	48		78											FF=5/ft Percent Recovery=80% RQD=25%, very poor
			79											
			80											
			81											
			82											
Run 13	32		83											FF=4.5/ft Percent Recovery=53% RQD=0%, very poor
			84											
			85											
			86	DOLOMITE (DOL), gray (2.5Y 5/1), light brownish gray (2.5Y 6/2), and yellow (2.5Y 7/6 and 7/8), sandy, massive, with round, oval, and elongated vugs, and dendrites. (Prairie du Chien Group, Oneota Formation)										
			87		DL4									
Run 14	57		88											FF=1.47/ft Percent Recovery=95% RQD=67%, fair
			89											
			90											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-123A Use only as an attachment to Form 4400-122.

Sample									Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
Run 15	30		91 92 93	DOLOMITE (DOL), gray (2.5Y 5/1), light brownish gray (2.5Y 6/2), and yellow (2.5Y 7/6 and 7/8), sandy, massive, with round, oval, and elongated vugs, and dendrites. (Prairie du Chien Group, Oneota Formation)	DL4									FF=2.8/ft Percent Recovery=100% RQD=50%, fair
				End of boring at 93' bgs in dolomite. Reamed well to 6" diameter using air rotary and constructed well from 80.8' bgs.										

SCS # 25222268.00

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☒ Remediation/Redevelopment ☐ Other ☐

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Dane County Landfill Site No. 3 (Proposed)	Local Grid Location of Well: ___ ft. ☐N. ☐S. ___ ft. ☐E. ☐W.	Well Name: MW-123A
Facility License, Permit or Monitoring No.: --	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ___ ° ___ ' ___ " Long. ___ ° ___ ' ___ " or	Wis. Unique Well No.: WD836 / DNR Well ID No.: --
Facility ID: --	St. Plane 377590.64 ft. N, 2169697.70 ft. E. S/C/N	Date Well Installed: 03 / 07 / 2023 (m m d d y y y y)
Type of Well: Well Code 12 / PZ	Section Location of Waste/Source: NE 1/4 of NE 1/4 of Sec. 36, T. 7 N, R. 10 ☒E ☐W	Well Installed By: Name (first, last) and Firm: Scott Klumb; Soils & Engineering Services, Inc.
Distance from Waste/Source ___ ft. / Enf. Stds. Apply ☒	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number:

A. Protective pipe, top elevation 933.14 ft. MSL

B. Well casing, top elevation 933.15 ft. MSL

C. Land surface elevation 930.5 ft. MSL

D. Surface seal, bottom 860.6 ft. MSL or 69.9 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☒

13. Sieve analysis performed? ☐ Yes ☒ No

14. Drilling method used: Rotary ☒ 50 / Hollow Stem Auger ☐ 41 / Other ☐ ___

15. Drilling fluid used: Water ☐ 02 / Air ☒ 01 / Drilling Mud ☐ 03 / None ☐ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe N/A

17. Source of water (attach analysis, if required):
N/A

E. Bentonite seal, top 930.5 ft. MSL or 0 ft.

F. Fine sand, top 860.6 ft. MSL or 69.9 ft.

G. Filter pack, top 858.6 ft. MSL or 71.9 ft.

H. Screen joint, top 855.0 ft. MSL or 75.5 ft.

I. Well bottom 849.7 ft. MSL or 80.8 ft.

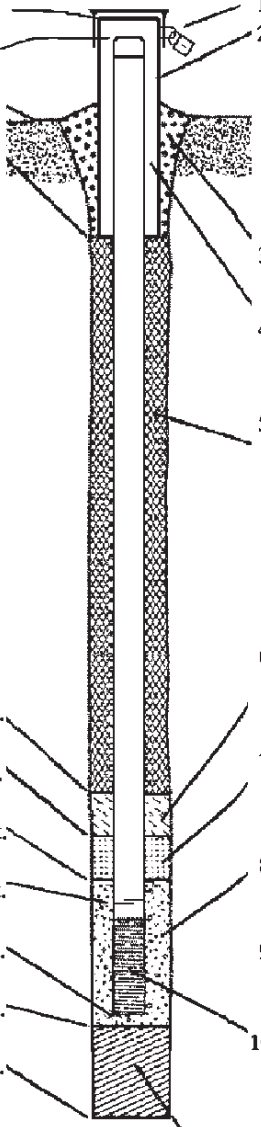
J. Filter pack, bottom 837.5 ft. MSL or 93 ft.

K. Borehole, bottom 837.5 ft. MSL or 93 ft.

L. Borehole, diameter 6.0 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 2.07 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 / Other ☐ ___
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ___

3. Surface seal: Bentonite ☒ 30 / Concrete ☐ 01 / Other ☐ ___

4. Material between well casing and protective pipe: Bentonite ☐ 30 / Other ☒ ___
Filter Sand

5. Annular space seal: a. Granular/Chipped Bentonite ☐ 33
b. ___ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. ___ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. 20 % Bentonite . . . . . Bentonite-cement grout ☒ 50
e. 20.6 Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01 / Tremie pumped ☒ 02 / Gravity ☐ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☒ 1/4 in. ☐ 3/8 in. ☐ 1/2 in. Bentonite chips ☐ 32
c. Pel-plug bentonite pellets Other ☒ ___

7. Fine sand material: Manufacturer, product name & mesh size ☒
a. RW Sidley #15
b. Volume added 0.5 ft^3

8. Filter pack material: Manufacturer, product name & mesh size ☒
a. RW Sidley #40
b. Volume added 1.5 ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / Other ☐ ___

10. Screen material: Sch. 40 PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ ___
b. Manufacturer Campbell (Monoflex)
c. Slot size: 0.01 in.
d. Slotted length: 5 ft.

11. Backfill material (below filter pack): None ☒ 14 / Other ☐ ___

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: [signature] Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

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.

SCS # 25222268.00

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelop ment ☐ Other ☐ _____

Facility/Project Name	County Name	Well Name
Dane County Landfill No. 3 (Proposed)	Dane	MW-123A
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
--	13	WD836 /

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☒ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

3. Time spent developing well 75 min.

4. Depth of well (from top of well casisng) 86.5 ft.

5. Inside diameter of well 2.07 in.

6. Volume of water in filter pack and well casing 10.2 gal.

7. Volume of water removed from well 80 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☒ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 60.1 ft.	80.49 ft.
Date	b. 03/16/2023 (m m d d y y y y)	03/16/2023 (m m d d y y y y)
Time	c. 9:10 ☒ a.m. ☐ p.m.	10:25 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	3.0 inches	0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 20 Turbid ☒ 25
(Describe)	orange/brown, no odor	orange/brown, no odor

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	---.- mg/l	15400.0 mg/l
15. COD	---.- mg/l	---.- mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Bri Last Name: Salome
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

17. Additional comments on development:

- 30 min surge/purge; removed 5 gallons, DTW 77.25ft
- Purged dry 3 times, 10 minute recharge in between each purge
- Total purge volume 3 gallons
- Slow recharge
- Sample time 1045
- 1 well volume 10.2 gal, 10 well volumes 102 gal

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Allison Last Name: Rathsack
Facility/Firm: Dane County Dpt. of Waste & Renewables
Street: 1919 Alliant Energy Center Way
City/State/Zip: Madison, WI 53713

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature:
Print Name: Bri Salome
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

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

MW-123B

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Dane County Landfill No. 3 (Proposed) SCS#: 25222268.00		MW-123B

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Scott Klumb Soils & Engineering Services, Inc.	5/19/2023	5/19/2023	HSA, 4.25" ID & Air Rotary

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
WD839	--	MW-123B	--	930.0 Feet MSL	10.3" & 6"

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 381,798 N, 2,197,338 E S / C / N
NE 1/4 of NE 1/4 of Section 36, T 7 N, R 10 E
Lat ° ' "
Long ° ' "
Local Grid Location Feet ☐ N ☐ S Feet ☐ E ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Dane	13	City of Madison

Sample Number and Type	Sample 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	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	Blind drilled to 66' bgs. (See MW-123 log from 0' to 40' bgs and MW-123A log 35' to 93' bgs. for lithology)										
			2											
			3											
			4											
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			10											
			11											
			12											
			13											
			14											
			15											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Adam Watson	SCS Engineers 2830 Dairy Drive, Madison, WI 53718

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 Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-123B Use only as an attachment to Form 4400-122.

Sample										Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			16											
			17											
			18											
			19											
			20											
			21											
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			35											
			36											
			37											
			38											
			39											
			40											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-123B Use only as an attachment to Form 4400-122.

Sample										Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID		Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			41												
			42												
			43												
			44												
			45												
			46												
			47												
			48												
			49												
			50												
			51												
			52												
			53												
			54												
			55												
			56												
			57												
			58												
			59	Kh = 5.37E-04 cm/s											
			60												
			61												
			62												
			63												
			64												
			65												

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-123B Use only as an attachment to Form 4400-122.

Sample										Soil Properties						
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID		Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			66	End of boring at 66' bgs in sandstone. Constructed well from 65.8' bgs.											

SCS # 25222268.00

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name Dane County Landfill Site No. 3 (Proposed)	**Local Grid Location of Well** ☐ N. ☐ S. ____ ft. ☐ E. ☐ W. ____ ft.	**Well Name** MW-123B
Facility License, Permit or Monitoring No. --	**Local Grid Origin** ☐ (estimated: ☐) or **Well Location** ☐ Lat. ° ' " Long. ° ' " or	**Wis. Unique Well No.** WD839
Facility ID --	**St. Plane** 377595.27 ft. N, 2169693.56 ft. E. S/C/N	**DNR Well ID No.** --
Type of Well Well Code 11 / MW	**Section Location of Waste/Source** NE 1/4 of NE 1/4 of Sec. 36, T. 7 N, R. 10 ☒ E ☐ W	**Date Well Installed** 05 / 19 / 2023 (m m d d y y y y)
Distance from Waste/ Source ____ ft. **Enf. Stds. Apply** ☒	**Location of Well Relative to Waste/Source** u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	**Gov. Lot Number** ____
		Well Installed By: Name (first, last) and Firm Scott Klumb Soils & Engineering Services, Inc.

A. Protective pipe, top elevation 933.18 ft. MSL

B. Well casing, top elevation 932.86 ft. MSL

C. Land surface elevation 930.0 ft. MSL

D. Surface seal, bottom 879.0 ft. MSL or 51 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☒

13. Sieve analysis performed? ☐ Yes ☒ No

14. Drilling method used: Rotary ☒ 50
Hollow Stem Auger ☒ 41
Other ☐

15. Drilling fluid used: Water ☐ 02 Air ☒ 01
Drilling Mud ☐ 03 None ☐ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe N/A

17. Source of water (attach analysis, if required):
N/A

E. Bentonite seal, top 930.0 ft. MSL or 0 ft.

F. Fine sand, top 879.0 ft. MSL or 51 ft.

G. Filter pack, top 877.0 ft. MSL or 53 ft.

H. Screen joint, top 874.5 ft. MSL or 55.5 ft.

I. Well bottom 864.2 ft. MSL or 65.8 ft.

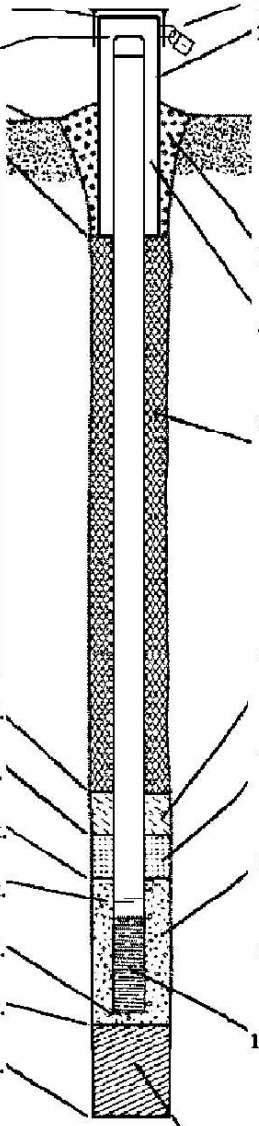
J. Filter pack, bottom 864.0 ft. MSL or 66 ft.

K. Borehole, bottom 864.0 ft. MSL or 66 ft.

L. Borehole, diameter 6.0 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 2.07 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____
3. Surface seal: Bentonite ☒ 30 Concrete ☐ 01 Other ☐
4. Material between well casing and protective pipe: Bentonite ☐ 30 Other ☒
Filter Sand
5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. ____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. ____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. 10 Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01 Tremie pumped ☐ 02 Gravity ☒ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☒ 1/4 in. ☐ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c. ____ Other ☐
7. Fine sand material: Manufacturer, product name & mesh size
a. RW Sidley #15 ☒
b. Volume added 0.5 ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. RW Sidley #40 ☒
b. Volume added 2 ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
Other ☐
10. Screen material: Sch. 40 PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐
b. Manufacturer Campbell (Monoflex)
c. Slot size: 0.01 in.
d. Slotted length: 10 ft.
11. Backfill material (below filter pack): None ☒ 14 Other ☐

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
	SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

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.

SCS # 25222268.00

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelop ment ☐ Other ☐ _____

Facility/Project Name	County Name	Well Name
Dane County Landfill No. 3 (Proposed)	Dane	MW-123B
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
	13	WD839 /

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☒ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

3. Time spent developing well 140 min.

4. Depth of well (from top of well casisng) 68.3 ft.

5. Inside diameter of well 2.07 in.

6. Volume of water in filter pack and well casing 7.8 gal.

7. Volume of water removed from well 380 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☒ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 49.72 ft.	64.10 ft.
Date	b. 05/30/2023 (m m d d y y y y)	05/30/2023 (m m d d y y y y)
Time	c. 9:30 ☒ a.m. ☐ p.m.	11:50 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	2.0 inches	0.2 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) tan, no odor	Clear ☒ 20 Turbid ☐ 25 (Describe) clear, no odor
14. Total suspended solids	---.- mg/l	815.0 mg/l
15. COD	---.- mg/l	---.- mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Bri Last Name: Salome
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

17. Additional comments on development:

- 30 min surge and purge. Removed 5 gallons, DTW was 55.1 ft after
- quick recharge but well could still be purged dry.
- water went clear during second purge, continued to purge
- 3 purges: 1) 10 gal purge 2) 7 gal purge 3) 16 gal purge
- 1 well volume = 7.845 gal; 0 well volume = 78.45 well volume
- 10 minutes into surge and purge bailer was dropped down well, continued after retrieving bailer - sampled @ 11:55am.

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Allison Last Name: Rathsack
Facility/Firm: Dane County Dpt. Waste & Renewables
Street: 1919 Alliant Energy Center Way
City/State/Zip: Madison, WI 53713

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature:
Print Name: Bri Salome
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

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

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Dane County Landfill No. 3 (Proposed) SCS#: 25222268.00		B-124C

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Scott Klumb Soils & Engineering Services, Inc.	2/24/2023	2/28/2023	HSA 4.25" ID & HQ Core

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
--	--	--	--	917.0 Feet MSL	8.3" & 3.8"

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 377,200 N, 2,167,823 E S/C/N
NW 1/4 of NE 1/4 of Section 36, T 7 N, R 10 E
Lat ° ' "
Long ° ' "
Local Grid Location Feet ☐ N ☐ S Feet ☐ E ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Dane	13	City of Madison

Sample Number and Type	Sample 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	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	Blind drilled to 9.3' bgs. (See MW-124 log for lithology from 0' to 23.5' bgs.)										
			2											
			3											
			4											
			5											
			6											
			7											
			8											
			9											
			10	DOLOMITE (DL4), yellow (10YR 8/6) and light gray (10YR 7/1), massive, sandy, with round to elongated vugs, chert, green clay (glauconite), aragonite, and dendrites. (Prairie du Chien Group, Oneota Formation)										
			11											
Run 1	27		12		DL4									FF=2.22/ft Percent Recovery=38.5% RQD=21%, very poor Drilling fluid is light tan
			13											
			14											
			15											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Jackie Rennebohm, PG	Firm	SCS Engineers 2830 Dairy Drive, Madison, WI 53718

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number B-124C Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample 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	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			16	DOLOMITE (DL4), yellow (10YR 8/6) and light gray (10YR 7/1), massive, sandy, with round to elongated vugs, chert, green clay (glauconite), aragonite, and dendrites. (Prairie du Chien Group, Oneota Formation)										
			17											
Run 2	60		18											FF=1.62/ft Percent Recovery=100% RQD=69%, fair
			19	From 18.8' to 20.08' bgs, no sand, planar bedded with abundant dendrites.										
			20											
			21											
			22											
Run 3	60		23											FF=1.2/ft Percent Recovery=100% RQD=65%, fair
			24											
			25											
			26	Abundant vugs.										
			27											
Run 4	59.5		28		DL4									FF=0.61/ft Percent Recovery=99% RQD=86%, good Drilling fluid is light tan/light gray
			29											
			30											
			31											
			32											
Run 5	56		33											FF=0.86/ft Percent Recovery=93.3% RQD=75%, fair
			34											
			35											
			36											
			37											
Run 6	57		38											FF=1.05/ft Percent Recovery=95% RQD=38%, poor
			39											
			40											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number B-124C Use only as an attachment to Form 4400-122.

Sample									Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
Run 7	14		41	DOLOMITE (DL4), yellow (10YR 8/6) and light gray (10YR 7/1), massive, sandy, with round to elongated vugs, chert, green clay (glauconite), aragonite, and dendrites. (Prairie du Chien Group, Oneota Formation)	DL4									FF=5.12/ft Percent Recovery=63.6% RQD=0%, very poor End of drill bit broke at 42' while drilling.
			42	End of boring at 42' bgs in dolomite. Abandoned borehole with bentonite grout and bentonite chips.										

State of Wis., Dept. of Natural Resources SCS No. 25222268.00
dnr.wi.gov

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.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☐ Remediation/Redevelopment
☒ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Dane	_ _ _ _ _	B-124C

Latitude / Longitude (see instructions) _____ N _____ W
Format Code: ☐ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼ NW	¼ NE	Section	Township	Range
or Gov't Lot #		36	7 N	10 ☒ E ☐ W

Well Street Address: 7101 US Highway 12 & 18

Well City, Village or Town	Well ZIP Code
Madison, WI	53718

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary Borehole	_ _ _ _ _

2. Facility / Owner Information

Facility Name: Dane County Landfill No.3 (Proposed)
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner: Dane County Department of Waste and Renewables
Present Well Owner: Dane County Department of Waste and Renewables
Mailing Address of Present Owner: 1919 Alliant Energy Center Way

City of Present Owner	State	ZIP Code
Madison	WI	53713

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 02/28/2023
If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (specify): _____

Formation Type:
☒ Unconsolidated Formation ☒ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
42	NA

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
8.3 to 3.8	NA

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
NA	~13.88

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☒ Yes	☐ No	☐ N/A
If yes, was hole retopped?	☒ Yes	☐ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☒ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☒ Bentonite Grout
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips	Surface	3	75 lbs	dry mix
Bentonite Grout	3	42	36-gallons	2lbs/gal

6. Comments

Boring B-124C. Attempted monitoring well installation.

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Soils & Engineering Services, Inc		02/28/2023

Street or Route	Telephone Number
1102 Stewart St	(608)274-7600

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Madison	WI	53713		02/28/2023

DNR Use Only

Date Received	Noted By

Comments:

MW-124

State of Wisconsin
Department of Natural Resources

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

Route To: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Dane County Landfill No. 3 (Proposed) SCS#: 25222268.00		MW-124

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Scott Klumb Soils & Engineering Services, Inc.	2/1/2023	2/2/2023	HSA, 4.25" ID

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
WD855	--	MW-124	--	917.2 Feet MSL	8.3"

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 377,200 N, 2,167,823 E S / C / N
NW 1/4 of NE 1/4 of Section 36, T 7 N, R 10 E
Lat ° ' "
Long ° ' "
Local Grid Location Feet ☐ N ☐ S Feet ☐ E ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Dane	13	City of Madison

Sample 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	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
S1	16	2 5 3 3	1	SILT (ML), very dark grayish brown (10YR 3/6), with roots. (Topsoil)	ML				2.5 3.25	M				
			2	LEAN CLAY (CL), yellowish brown (10YR 5/4), mostly silt with clay, some fine sand, soft, cohesive, uniform, massive. (Loess)	CL									
			3											
S2	14	2 2 2	4	CLAYEY SAND (SC), dark yellowish brown (10YR 3/6), fine sand, with trace sub-rounded gravel. (Till) (Holy Hill Formation, Horicon Member)	SC					M				
			5											
S3	13	58 42/3"	6	SILTY SAND WITH GRAVEL (SM), yellow (2.5Y 7/6) and gray (2.5Y 6/1), fine to coarse sand, with fine to coarse grained angular gravel (dolomite). (Weathered Dolomite Bedrock)	SM					M				
			7											
			8											
S4	3	60/1"	9							M				
			10											
S5	2	60/1"	11	At 11' to 12.5', SILTY SAND (SM) % g-s-si-cl = 12-62-26						M				
			12											
			13	Poor recovery, see B-124C log.										
S6	2	60/1"	14							M				
			15											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

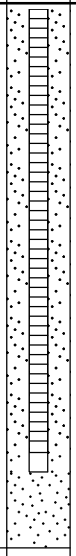
Signature	Adam Watson	Firm	SCS Engineers 2830 Dairy Drive, Madison, WI 53718

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 Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-124 Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample 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	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			16	Poor recovery, see B-124C log.										
			17											
			18	Kh = 1.08E-03 cm/s										
S7	2	60/<1"	19							M/W				
			20											
			21											
			22											
			23											
S8	1	60/<1"		End of boring at 23.5' bgs in dolomite. Constructed well from 22.3' bgs.						M				

SCS # 25222268.00

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name Dane County Landfill Site No. 3 (Proposed)	**Local Grid Location of Well** ☐ ft. ☐ N. ☐ S. ☐ ft. ☐ E. ☐ W.	**Well Name** MW-124
Facility License, Permit or Monitoring No. --	**Local Grid Origin** ☐ (estimated: ☐) or **Well Location** ☐ Lat. ° ' " Long. ° ' " or	**Wis. Unique Well No.** WD855
Facility ID --	**St. Plane** 377199.84 ft. N, 2167822.80 ft. E. S/C/N	**DNR Well ID No.** --
Type of Well Well Code 11 / MW	**Section Location of Waste/Source** NW 1/4 of NE 1/4 of Sec. 36, T. 7 N, R. 10 ☒ E ☐ W	**Date Well Installed** 02 / 02 / 2023 (m m d d y y y y)
Distance from Waste/ Source ft. / **Enf. Stds. Apply** ☒	**Location of Well Relative to Waste/Source** u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	**Gov. Lot Number**
		Well Installed By: Name (first, last) and Firm Scott Klumb Soils & Engineering Services, Inc.

A. Protective pipe, top elevation 919.73 ft. MSL

B. Well casing, top elevation 919.77 ft. MSL

C. Land surface elevation 917.2 ft. MSL

D. Surface seal, bottom 910.2 ft. MSL or 7 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☒
SM ☐ SC ☐ ML ☒ MH ☐ CL ☐ CH ☐
Bedrock ☒

13. Sieve analysis performed? ☒ Yes ☐ No

14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
Other ☐

15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe N/A

17. Source of water (attach analysis, if required):
N/A

E. Bentonite seal, top 917.2 ft. MSL or 0 ft.

F. Fine sand, top 910.2 ft. MSL or 7 ft.

G. Filter pack, top 908.2 ft. MSL or 9 ft.

H. Screen joint, top 906.2 ft. MSL or 11 ft.

I. Well bottom 895.9 ft. MSL or 22.3 ft.

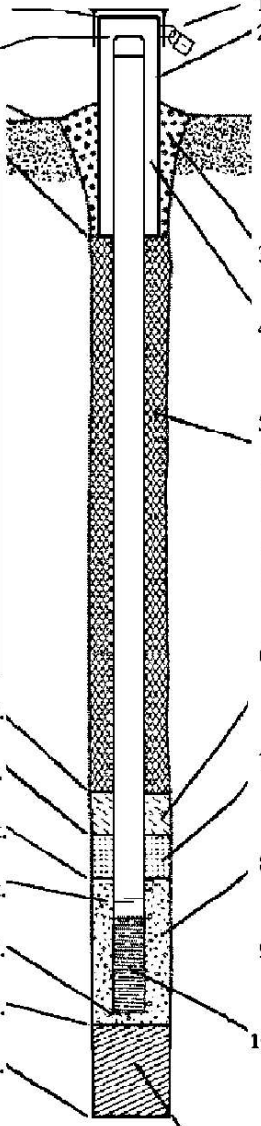
J. Filter pack, bottom 893.7 ft. MSL or 23.5 ft.

K. Borehole, bottom 893.7 ft. MSL or 23.5 ft.

L. Borehole, diameter 8.3 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 2.07 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe:

3. Surface seal: Bentonite ☒ 30 Concrete ☐ 01 Other ☐

4. Material between well casing and protective pipe:
Bentonite ☐ 30
Filter Sand Other ☒

5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. ____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. ____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. 4.14 Ft^3 volume added for any of the above
f. How installed: 2, 5016 bags
1ft^3/bag bentonite
0.5ft^3/sand bag
Tremie ☐ 01
Tremie pumped ☐ 02
Gravity ☒ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c. ____ Other ☐

7. Fine sand material: Manufacturer, product name & mesh size
a. RW Sidley #7 ☒
b. Volume added 0.5 ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. RW Sidley #5 ☒
b. Volume added 2.0 ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
Other ☐

10. Screen material: Sch. 40 PVC
a. Screen type: Factory cut ☒ 11
Continuous slot ☐ 01
Other ☐
b. Manufacturer Campbell (Monoflex)
c. Slot size: 0.01 in.
d. Slotted length: 10 ft.

11. Backfill material (below filter pack): None ☒ 14
Other ☐

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
	SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

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.

Stick-up height=2.8'

SCS # 25222268.00

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐ _____

Facility/Project Name	County Name	Well Name
Dane County Landfill No. 3 (Proposed)	Dane	MW-124

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
--	13	WD855	

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☒ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ --

3. Time spent developing well 90 min.

4. Depth of well (from top of well casisng) 25.6 ft.

5. Inside diameter of well 2.07 in.

6. Volume of water in filter pack and well casing 90.0 gal.

7. Volume of water removed from well 19.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☒ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 15.89 ft.	19.99 ft.
Date	b. 02/22/2023 (mm/dd/yyyy)	02/22/2023 (mm/dd/yyyy)
Time	c. 11:30 ☒ a.m. ☐ p.m.	1:00 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	1.0 inches	0.5 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) tan, no odor	Clear ☐ 20 Turbid ☒ 25 (Describe) tan, no odor

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	---.- mg/l	4,000.0 mg/l
15. COD	---.- mg/l	---.- mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Bri Last Name: Salome
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

17. Additional comments on development:

- Surged and purged for 30 minutes. DTW after: 20.23 ft, purged 8 gals
- Purged dry with monsoon at 5 gallons, switched back to bailer
- 10 minute recovery between each purge
- Purged dry 3 times
- Total purge volume 19 gallons
- Medium recovery

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Allison Last Name: Rathsack
Facility/Firm: Dane County Dpt. of Waste & Renewables
Street: 1919 Alliant Energy Center Way
City/State/Zip: Madison, WI 53713

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: [signature]
Print Name: Bri Salome
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

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

SCS # 25222268.00

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelop ment ☐ Other ☐ _____

Facility/Project Name	County Name	Well Name
Dane County Landfill No. 3 (Proposed)	Dane	MW-124
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
--	13	WD855 / --

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☒ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ --

3. Time spent developing well 75 min.

4. Depth of well (from top of well casisng) 25.6 ft.

5. Inside diameter of well 2.07 in.

6. Volume of water in filter pack and well casing 98. gal.

7. Volume of water removed from well 210. gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☒ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 15.03 ft.	21.95 ft.
Date	b. 03/15/2023	03/15/2023
Time	c. 1:50 ☐ a.m. ☒ p.m.	3:05 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	1.0 inches	0.5 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15	Clear ☐ 20 Turbid ☒ 25
(Describe)	light brown, no odor	light brown, no odor

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	-.- mg/l	1,190.0 mg/l
15. COD	-.- mg/l	-.- mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Bri Last Name: Salome
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

17. Additional comments on development:

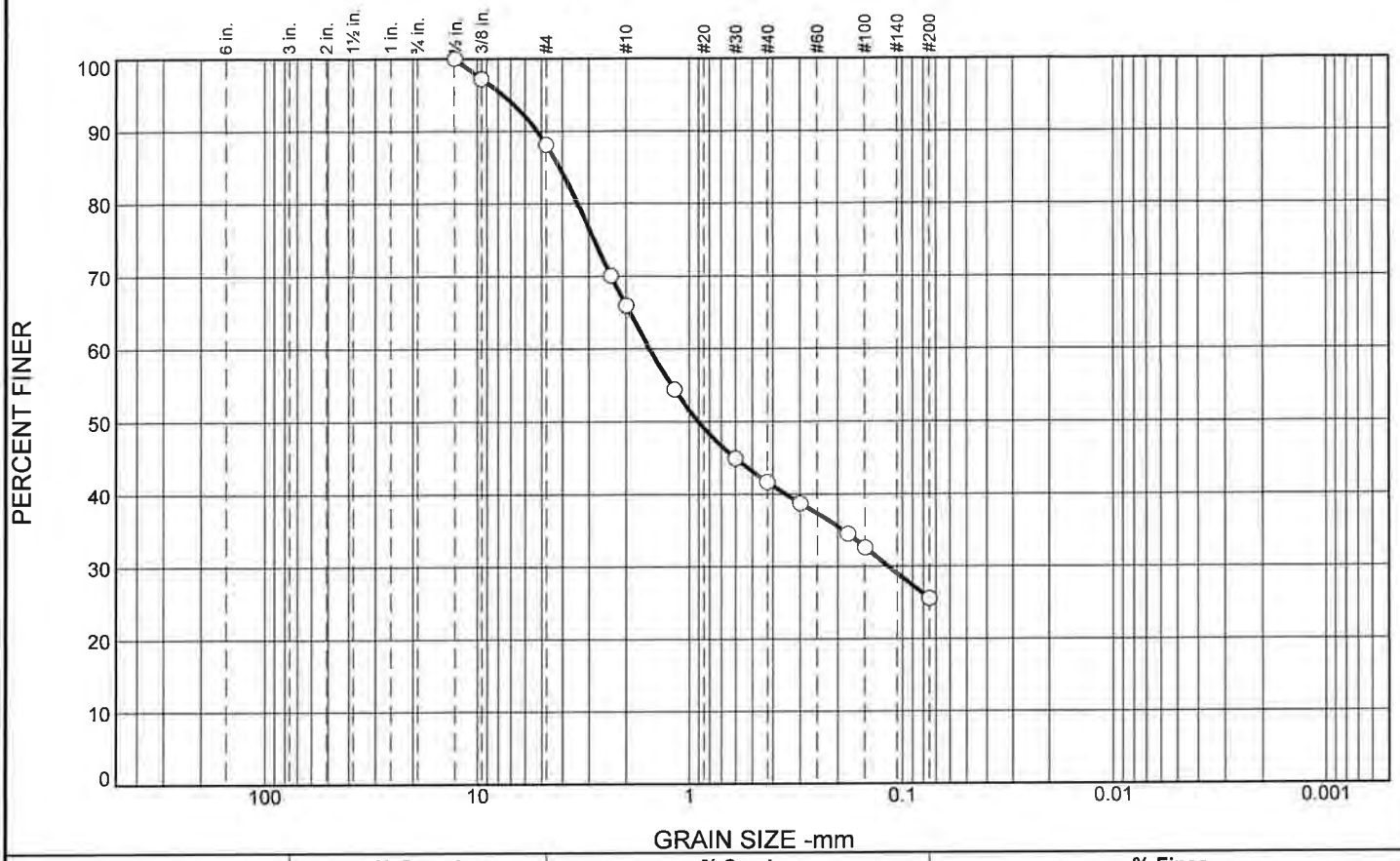
- Surge/purge 30 minutes; DTW after 20.5ft, removed 15 gal
- Purged dry 3 times w/ 10 minute recharge in between purges; 1st - 8 gal, 2nd - 6 gal, 3rd - 7 gal
- Fast recharge
-10 well volume 98 gal
- MW-124 was developed twice by mistake. The well was first developed on 02/22/2023.

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Allison Last Name: Rathsack
Facility/Firm: Dane County Dpt. of Waste & Renewables
Street: 1919 Alliant Energy Center Way
City/State/Zip: Madison, WI 53713

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature:
Print Name: Bri Salome
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

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

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	11.9	22.1	24.3	16.1	25.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2	100.0		
3/8	97.2		
#4	88.1		
#8	70.1		
#10	66.0		
#16	54.4		
#30	44.9		
#40	41.7		
#50	38.7		
#80	34.5		
#100	32.6		
#200	25.6		

* (no specification provided)

Material Description

Brown Fine to Coarse Sand, Some Silt and Gravel

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{90}= 5.2574 D_{85}= 4.1322 D_{60}= 1.5511
D_{50}= 0.9062 D_{30}= 0.1167 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= SM AASHTO= A-2-4(0)

Remarks

NP = Non-Plastic

Sample Number: MW124 **Depth:** 11'-12.5'

Date: 3/16/23

CGC, Inc.

Client: SCS Engineers
Project: Dane County Yahara Hills
Project No: C22011-8 **Figure**

Tested By: JFS **Checked By:** KJS

MW-124A

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Dane County Landfill No. 3 (Proposed) SCS#: 25222268.00		MW-124A

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Scott Klumb Soils & Engineering Services, Inc.	3/10/2023	3/10/2023	Air Rotary

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
WD838	--	MW-124A	--	917.0 Feet MSL	6.0"

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 377,202 N, 2,167,830 E S / C / N
NW 1/4 of NE 1/4 of Section 36, T 7 N, R 10 E
Lat ° ' "
Long ° ' "
Local Grid Location Feet ☐ N ☐ S Feet ☐ E ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Dane	13	City of Madison

Sample Number and Type	Sample 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	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	Blind drilled to 35' bgs. Collected samples at 5' intervals from 35' to 56' bgs and logged cuttings samples. (See MW-124 log from 0' to 23.5' bgs and B-124C log from 9' to 42' bgs for lithology.)										
			2											
			3											
			4											
			5											
			6											
			7											
			8											
			9											
			10											
			11											
			12											
			13											
			14											
			15											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
Adam Watson	SCS Engineers 2830 Dairy Drive, Madison, WI 53718

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 Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-124A Use only as an attachment to Form 4400-122.

Sample: Number and Type	Sample: Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			16	Blind drilled to 35' bgs. Collected samples at 5' intervals from 35' to 56' bgs and logged cuttings samples. (See MW-124 log from 0' to 23.5' bgs and B-124C log from 9' to 42' bgs for lithology.)										
			17											
			18											
			19											
			20											
			21											
			22											
			23											
			24											
			25											
			26											
			27											
			28											
			29											
			30											
			31											
			32											
			33											
			34											
			35	DOLOMITE (DL4), gray (10YR 6/1) and pale brown (10YR 6/3), sandy. Vugs, chert, glauconite, and dendrites visible in larger pieces of cuttings. (Prairie du Chien Group, Oneota Formation)										
			36											
			37											
S1			38		DL4									Collected drill cuttings from 35' to 40' bgs.
			39											
			40											

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-124A Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample 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	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			41	DOLOMITE (DL4), gray (10YR 6/1) and pale brown (10YR 6/3), sandy. Vugs, chert, glauconite, and dendrites visible in larger pieces of cuttings. (Prairie du Chien Group, Oneota Formation)										
			42											
S2			43											Collected drill cuttings from 40' to 45' bgs.
			44											
			45	Pale brown (2.5Y 7/4) and pale brown (10YR 6/3).										
			46											
			47											
S3			48		DL4									Collected drill cuttings from 45' to 50' bgs.
			49											
			50	Gray (10YR 6/1) and grayish brown (2.5Y 5/2).										
			51											
			52											
S4			53	Kh = 9.62E-05 cm/s										Collected drill cuttings from 50' to 56' bgs.
			54	Pale brown (2.5Y 7/4) yellow (2.5Y 7/6), and light brownish gray (2.5Y 6/2).										
			55											
			56											
				End of boring at 56.5' bgs in dolomite. Constructed well from 55.3' bgs.										

SCS # 25222268.00

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name Dane County Landfill Site No. 3 (Proposed)	**Local Grid Location of Well** ☐ N. ☐ S. ____ ft. ☐ E. ☐ W. ____ ft.	**Well Name** MW-124A
Facility License, Permit or Monitoring No. --	**Local Grid Origin** ☐ (estimated: ☐) or **Well Location** ☐ Lat. ° ' " Long. ° ' " or	**Wis. Unique Well No.** WD838
Facility ID --	**St. Plane** 377202.11 ft. N, 2167830.16 ft. E. S/C/N	**DNR Well ID No.** --
Type of Well Well Code 12 / PZ	**Section Location of Waste/Source** NW 1/4 of NE 1/4 of Sec. 36, T. 7 N, R. 10 ☒ E ☐ W	**Date Well Installed** 03 / 10 / 2023 (m m d d y y y y)
Distance from Waste/ Source ____ ft. **Enf. Stds. Apply** ☒	**Location of Well Relative to Waste/Source** u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	**Gov. Lot Number** ____
		Well Installed By: Name (first, last) and Firm Scott Klumb Soils & Engineering Services, Inc.

A. Protective pipe, top elevation 919.46 ft. MSL

B. Well casing, top elevation 919.52 ft. MSL

C. Land surface elevation 917.0 ft. MSL

D. Surface seal, bottom 871.0 ft. MSL or 46.0 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☒

13. Sieve analysis performed? ☐ Yes ☒ No

14. Drilling method used: Rotary ☒ 50
Hollow Stem Auger ☒ 41
Other ☐ ____

15. Drilling fluid used: Water ☒ 02 Air ☒ 01
Drilling Mud ☐ 03 None ☐ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe N/A

17. Source of water (attach analysis, if required):
Yahara Hills Private Wells

E. Bentonite seal, top 917.0 ft. MSL or 0 ft.

F. Fine sand, top 871.0 ft. MSL or 46 ft.

G. Filter pack, top 869.0 ft. MSL or 48 ft.

H. Screen joint, top 867.0 ft. MSL or 50 ft.

I. Well bottom 861.7 ft. MSL or 55.3 ft.

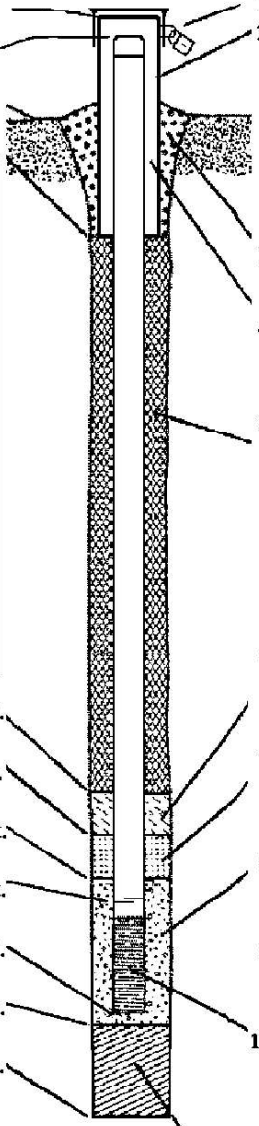
J. Filter pack, bottom 860.5 ft. MSL or 56.5 ft.

K. Borehole, bottom 860.5 ft. MSL or 56.5 ft.

L. Borehole, diameter 6.0 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 2.07 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 Other ☐ --
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____

3. Surface seal: Bentonite ☒ 30 Concrete ☐ 01 Other ☐ --

4. Material between well casing and protective pipe:
Filter Sand
Bentonite ☒ 30 Other ☒ --

5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. 2:1 Lbs/gal mud weight . . . Bentonite-sand slurry ☒ 35
c. ____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. ____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. 12.77 Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01 Tremie pumped ☒ 02 Gravity ☐ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☒ 1/4 in. ☐ 3/8 in. ☐ 1/2 in. Bentonite chips ☐ 32
c. Pell plug, Bentonite pellets Other ☒ --

7. Fine sand material: Manufacturer, product name & mesh size
a. Red Flint #15 ☒
b. Volume added 0.4 ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #40 ☒
b. Volume added 1.5 ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
Other ☐ --

10. Screen material: Sch. 40 PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐ --
b. Manufacturer Campbell (Monoflex)
c. Slot size: 0.01 in.
d. Slotted length: 5 ft.

11. Backfill material (below filter pack): None ☒ 14
Other ☐ --

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
	SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

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.

SCS # 25222268.00

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐ _____

Facility/Project Name	County Name	Well Name
Dane County Landfill No. 3 (Proposed)	Dane	MW-124A

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
--	13	WD838	--

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☒ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ --

3. Time spent developing well 75 min.

4. Depth of well (from top of well casisng) 58.9 ft.

5. Inside diameter of well 2.07 in.

6. Volume of water in filter pack and well casing 10.9 gal.

7. Volume of water removed from well 16.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☒ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 15.98 ft.	55.49 ft.
Date	b. 03/15/2023 (m m d d y y y y)	03/15/2023
Time	c. 11:55 ☒ a.m. ☐ p.m.	1:10 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	4.0 inches	1.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe)	Clear ☐ 20 Turbid ☒ 25 (Describe)
	clear at start of purge/surge	light brown
	turbid at end of purge/surge	no odor
	light brown	
	no odor	

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	-- mg/l	556.0 mg/l
15. COD	-- mg/l	-- mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Bri Last Name: Salome
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

17. Additional comments on development:
- Surge/purge 30 min; DTW 53.05ft, 11 gal purged
- Purged dry 3 times with 10 minute recharge in between purges, removed 5 gallons
- Sample time 1310
- 1 well volume 10.9 gal, 10 well volume 109 gal

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Allison Last Name: Rathsack
Facility/Firm: Dane County Dpt. of Waste & Renewables
Street: 1919 Alliant Energy Center Way
City/State/Zip: Madison, WI 53713

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: 
Print Name: Bri Salome
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

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

State of Wisconsin
Department of Natural Resources

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

Route To: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Dane County Landfill No. 3 (Proposed) SCS#: 25222268.00		MW-125

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Scott Klumb Soils & Engineering Services, Inc.	2/2/2023	2/6/2023	HSA, 4.25" ID

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
WD856	--	MW-125	--	914.7 Feet MSL	8.3"

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 377,275 N, 2,169,006 E S / C / N
NE 1/4 of NE 1/4 of Section 36, T 7 N, R 10 E
Lat ° ' "
Long ° ' "
Local Grid Location Feet ☐ N ☐ S Feet ☐ E ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Dane	13	City of Madison

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	Blind drilled to 29' bgs. (See boring log MW-125A from 0' to 58.7' bgs for lithology.)										
			2											
			3											
			4											
			5											
			6											
			7											
			8											
			9											
			10											
			11											
			12											
			13											
			14											
			15											

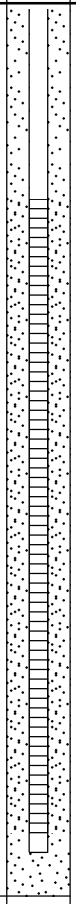
I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Jackie Rennebohm, PG	Firm	SCS Engineers 2830 Dairy Drive, Madison, WI 53718

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-125 Use only as an attachment to Form 4400-122.

Sample									Soil Properties					
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			16	Blind drilled to 29' bgs. (See boring log MW-125A from 0' to 58.7' bgs for lithology.)										
			17											
			18											
			19											
			20											
			21											
			22	Kh = 2.56E-04 cm/s										
			23											
			24											
			25											
			26											
			27											
			28											
			29	End of boring at 29' bgs in dolomite. Constructed well from 28.3' bgs.										

SCS # 25222268.00

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name Dane County Landfill Site No. 3 (Proposed)	**Local Grid Location of Well** ☐ ft. ☐ N. ☐ S. ☐ ft. ☐ E. ☐ W.	**Well Name** MW-125
Facility License, Permit or Monitoring No. --	**Local Grid Origin** ☐ (estimated: ☐) or **Well Location** ☐ Lat. ° ' " Long. ° ' " or	**Wis. Unique Well No.** WD856
Facility ID --	**St. Plane** 377275.19 ft. N, 2169006.25 ft. E. S/C/N	**DNR Well ID No.** --
Type of Well Well Code 11 / MW	**Section Location of Waste/Source** NE 1/4 of NE 1/4 of Sec. 36, T. 7 N, R. 10 ☒ E ☐ W	**Date Well Installed** 02 / 06 / 2023 (m m d d y y y y)
Distance from Waste/ Source ft. / **Enf. Stds. Apply** ☒	**Location of Well Relative to Waste/Source** u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	**Gov. Lot Number**
		Well Installed By: Name (first, last) and Firm Scott Klumb Soils & Engineering Services, Inc.

A. Protective pipe, top elevation 918.14 ft. MSL

B. Well casing, top elevation 918.10 ft. MSL

C. Land surface elevation 914.7 ft. MSL

D. Surface seal, bottom 900.7 ft. MSL or 14 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☒
SM ☒ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis performed? ☒ Yes ☐ No

14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
Other ☐

15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe N/A

17. Source of water (attach analysis, if required):
N/A

E. Bentonite seal, top 914.7 ft. MSL or 0 ft.

F. Fine sand, top 900.7 ft. MSL or 14 ft.

G. Filter pack, top 898.7 ft. MSL or 16 ft.

H. Screen joint, top 896.7 ft. MSL or 18 ft.

I. Well bottom 886.4 ft. MSL or 28.3 ft.

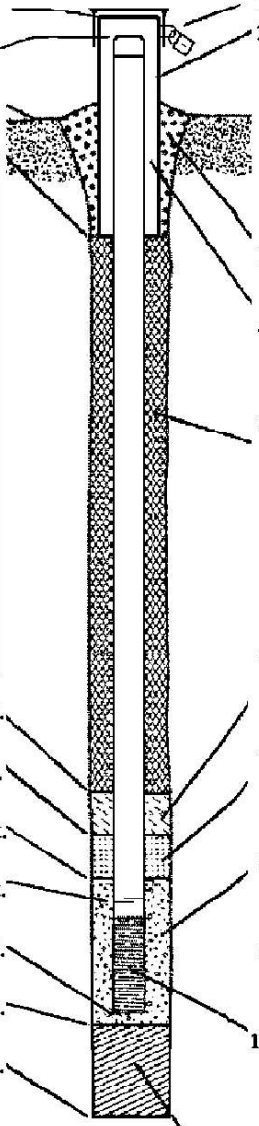
J. Filter pack, bottom 885.7 ft. MSL or 29 ft.

K. Borehole, bottom 885.7 ft. MSL or 29 ft.

L. Borehole, diameter 8.3 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 2.07 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe:

3. Surface seal: Bentonite ☒ 30 Concrete ☐ 01 Other ☐

4. Material between well casing and protective pipe:
Bentonite ☐ 30
Filter Sand Other ☒

5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. ____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. ____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. 3.22 Ft^3 volume added for any of the above
f. How installed: 2, 5016 bags Tremie ☐ 01
1ft^3/bag bentonite Tremie pumped ☐ 02
0.5ft^3/sand bag Gravity ☒ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c. Other ☐

7. Fine sand material: Manufacturer, product name & mesh size
a. Red Flint #7 ☒
b. Volume added 0.5 ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint #5 ☒
b. Volume added 2.0 ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
Other ☐

10. Screen material: Sch. 40 PVC
a. Screen type: Factory cut ☒ 11
Continuous slot ☐ 01
Other ☐
b. Manufacturer Campbell (Monoflex)
c. Slot size: 0.01 in.
d. Slotted length: 10 ft.

11. Backfill material (below filter pack): None ☒ 14
Other ☐

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
	SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

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.

Stick-up height=2.61'

SCS # 25222268.00

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelop ment ☐ Other ☐ _____

Facility/Project Name	County Name	Well Name
Dane County Landfill No. 3 (Proposed)	Dane	MW-125
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
--	13	WD856 / --

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☒ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ --

3. Time spent developing well 80 min.

4. Depth of well (from top of well casisng) 31.5 ft.

5. Inside diameter of well 2.07 in.

6. Volume of water in filter pack and well casing 9.1 gal.

7. Volume of water removed from well 10.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☒ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 21.67 ft.	26.75 ft.
Date	b. 02/22/2023 (m m d d y y y y)	02/22/2023 (m m d d y y y y)
Time	c. 1:30 ☐ a.m. ☒ p.m.	2:50 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	0.5 inches	0.3 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) light brown, no odor	Clear ☐ 20 Turbid ☒ 25 (Describe) light brown, no odor

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	--.-- mg/l	9,990.0 mg/l
15. COD	--.-- mg/l	--.-- mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Bri Last Name: Salome
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

17. Additional comments on development:
- Surged and purged for 30 minutes. purged 2 gallons
- Purged dry in 2 gallons
- Slow recovery
- Purged dry total of 3 times
- Total purge volume 10 gallons
- 15 minute wait between purges

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Allison Last Name: Rat sack
Facility/Firm: Dane County Dpt. of Waste & Renewables
Street: 1919 Alliant Energy Center Way
City/State/Zip: Madison, WI 53713

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature:
Print Name: Bri Salome
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

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

MW-125A

State of Wisconsin
Department of Natural Resources

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

Route To: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Dane County Landfill No. 3 (Proposed) SCS#: 25222268.00		MW-125A

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Scott Klumb Soils & Engineering Services, Inc.	2/1/2023	2/2/2023	HSA, 4.25" ID

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
WD854	--	MW-125A	896.6 Feet MSL	915.6 Feet MSL	8.3"

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 377,276 N, 2,169,010 E S / C / N
NE 1/4 of NE 1/4 of Section 36, T 7 N, R 10 E
Lat ° ' "
Long ° ' "
Local Grid Location Feet ☐ N ☐ S Feet ☐ E ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Dane	13	City of Madison

Sample Number and Type	Sample 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	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
S1	18	3 5 5 2	1	SILT (ML), very dark grayish brown (10YR 3/2), with roots. (Topsoil)	ML				0.75 4.5	M				
			2	LEAN CLAY (CL), yellowish brown (10YR 5/6), mostly silt with clay, sone fine sand, soft, cohesive, uniform, massive. (Loess)	CL									
			3											
S2	16	2 3 3	4	CLAYEY SAND (SC), yellowish brown (10YR 5/6), mostly fine sand with medium to coarse sand, trace fine to coarse gravel (mostly dolomite), uniform, massive. (Till) (Holy Hill Formation, Horicon Member)	SC-SM				3.5	M				
			5											
			6											
S3	14	9 12 11	7	SILTY SAND (SM), very pale brown (10YR 7/4) and yellowish brown (10YR 5/8), mostly fine sand, with medium to coarse sand, some clay, fine to coarse gravel (mostly dolomite), uniform, massive. (Till) (Holy Hill Formation, Horicon Member)						M				
			8											
S4	17	6 6 20	9							M				
			10		SM									
			11	Reddish brown (5YR 5/4).										
S5	18	10 12 13	12							M/W				
			13											
S6	12	8 30 15	14							M/W				
			15											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Adam Watson	Firm	SCS Engineers 2830 Dairy Drive, Madison, WI 53718

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 Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-125A Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample 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	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
S7	18	13 15 19	16–17	SILTY SAND (SM), very pale brown (10YR 7/4) and yellowish brown (10YR 5/8), mostly fine sand, with medium to coarse sand, some clay, fine to coarse gravel (mostly dolomite), uniform, massive. (Till) (Holy Hill Formation, Horicon Member)						M/W				
S8	18	10 9 12	18–20		SM					M/W				Depth to water at ~19' bgs.
S9	18	36 64 60/3"	23–25	SILTY SAND (SM), white (10YR 8/1), fine sand, with trace greenish gray (Gley 1 5GY 5/1) clay. (Sandstone Bedrock) (Ancell Group, St. Peter Formation, Readstown Member) At 23.5' to 25', SILTY SAND (SM) % g-s-si+cl = 16-57-27	SS3					M				
S10	11	100/4"	25–30	SILTY SAND (SM), yellow (2.5Y 8/6), fine sand, with trace angular to sub-angular gravel (mostly dolomite), and trace green (glauconite) clay. (Prairie du Chien Group)	DL5					M/W				
S11	2	100/2"	34–35	Very poor recovery.						M				
			36–37	Dolomite										
S12	2	100/1.5"	39–40	Very poor recovery.						M				

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number MW-125A Use only as an attachment to Form 4400-122.

Sample Number and Type	Sample 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	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			41	SILTY SAND (SM), yellow (2.5Y 8/6), fine sand, with trace angular to sub-angular gravel (mostly dolomite), and trace green (glauconite) clay. (Prairie du Chien Group)										
			42											
			43											
S13	2	100/2"	44	Very poor recovery. Powdered dolomite, with a few chips dolomite.						M				
			45											
			46											
			47											
			48											
S14	2	100/2"	49	At 48.5' to 50', SILTY SAND (SM) % g-s-si+cl = 2-59-39 NP	DL5					M				Collected soil sample off auger from 50' to 58.8' bgs.
			50	Kh = 3.24E-04 cm/s										
			51											
			52											
			53											
			54											
			55	Sampled off the augers.										
			56											
S15			57											
			58											
				End of boring at 58.7 feet below ground surface (bgs) in dolomite. Constructed well from 54.5 feet bgs.										

SCS # 25222268.00

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name Dane County Landfill Site No. 3 (Proposed)	**Local Grid Location of Well** ☐ ft. ☐ N. ☐ S. ☐ ft. ☐ E. ☐ W.	**Well Name** MW-125A
Facility License, Permit or Monitoring No. --	**Local Grid Origin** ☐ (estimated: ☐) or **Well Location** ☐ Lat. ° ' " Long. ° ' " or	**Wis. Unique Well No.** WD854
Facility ID --	**St. Plane** 377276.27 ft. N, 2169010.00 ft. E. S/C/N	**DNR Well ID No.** --
Type of Well Well Code 12 / PZ	**Section Location of Waste/Source** NE 1/4 of NE 1/4 of Sec. 36, T. 7 N, R. 10 ☒ E ☐ W	**Date Well Installed** 02 / 02 / 2023 (m m d d y y y y)
Distance from Waste/ Source ft. / **Enf. Stds. Apply** ☒	**Location of Well Relative to Waste/Source** u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	**Gov. Lot Number**
		Well Installed By: Name (first, last) and Firm Scott Klumb Soil & Engineering Services, Inc.

A. Protective pipe, top elevation 918.36 ft. MSL

B. Well casing, top elevation 918.36 ft. MSL

C. Land surface elevation 915.6 ft. MSL

D. Surface seal, bottom 870.0 ft. MSL or 45.6 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☒

13. Sieve analysis performed? ☒ Yes ☐ No

14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
Other ☐

15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe N/A

17. Source of water (attach analysis, if required):
N/A

E. Bentonite seal, top 915.6 ft. MSL or 0 ft.

F. Fine sand, top 870.0 ft. MSL or 45.6 ft.

G. Filter pack, top 868.0 ft. MSL or 47.6 ft.

H. Screen joint, top 866.1 ft. MSL or 49.5 ft.

I. Well bottom 860.8 ft. MSL or 54.8 ft.

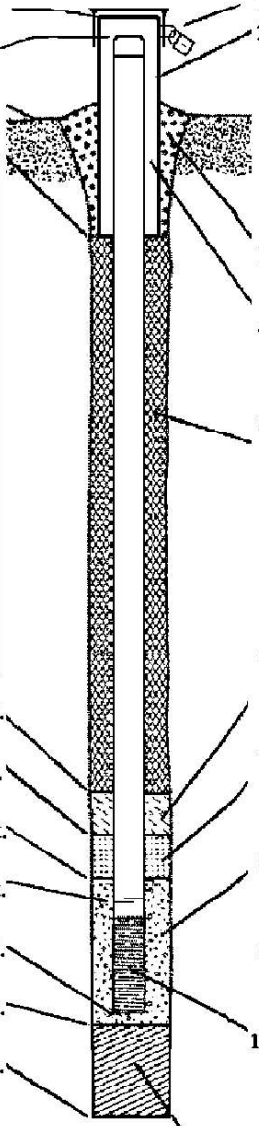
J. Filter pack, bottom 856.8 ft. MSL or 58.8 ft.

K. Borehole, bottom 856.8 ft. MSL or 58.8 ft.

L. Borehole, diameter 8.3 in.

M. O.D. well casing 2.38 in.

N. I.D. well casing 2.07 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4 in.
b. Length: 5 ft.
c. Material: Steel ☒ 04 Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe:
3. Surface seal: Bentonite ☒ 30 Concrete ☐ 01 Other ☐
4. Material between well casing and protective pipe: Bentonite ☐ 30
Filter Sand Other ☒
5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. ____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. ____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. 10.5 Ft^3 volume added for any of the above
f. How installed: 2, 5016 bags Tremie ☐ 01
1ft^3/bag bentonite Tremie pumped ☐ 02
0.5ft^3/sand bag Gravity ☒ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c. Other ☐
7. Fine sand material: Manufacturer, product name & mesh size
a. RW Sidley #7 ☒
b. Volume added 0.5 ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. RW Sidley #5 ☒
b. Volume added 2.0 ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
Other ☐
10. Screen material: Sch. 40 PVC
a. Screen type: Factory cut ☒ 11
Continuous slot ☐ 01
Other ☐
b. Manufacturer Campbell (Monoflex)
c. Slot size: 0.01 in.
d. Slotted length: 5 ft.
11. Backfill material (below filter pack): None ☒ 14
Other ☐

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
	SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

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.

Stick-up height=2.8'

SCS # 25222268.00

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelop ment ☐ Other ☐ _____

Facility/Project Name	County Name	Well Name
Dane County Landfill No. 3 (Proposed)	Dane	MW-125A
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number** / **DNR Well ID Number**
--	13	WD854 / --

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☒ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ --

3. Time spent developing well 130 min.

4. Depth of well (from top of well casisng) 57.6 ft.

5. Inside diameter of well 2.07 in.

6. Volume of water in filter pack and well casing 10.6 gal.

7. Volume of water removed from well 24.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added NA

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☒ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 21.00 ft.	52.30 ft.
Date	b. 02/22/2023 (mm/dd/yyyy)	02/22/2023 (mm/dd/yyyy)
Time	c. 3:40 ☐ a.m. ☒ p.m.	5:50 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	3.0 inches	1.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) light brown, no odor	Clear ☐ 20 Turbid ☒ 25 (Describe) light brown, no odor

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	--.- mg/l	14,900.0 mg/l
15. COD	--.- mg/l	--.- mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Bri Last Name: Salome
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

17. Additional comments on development:

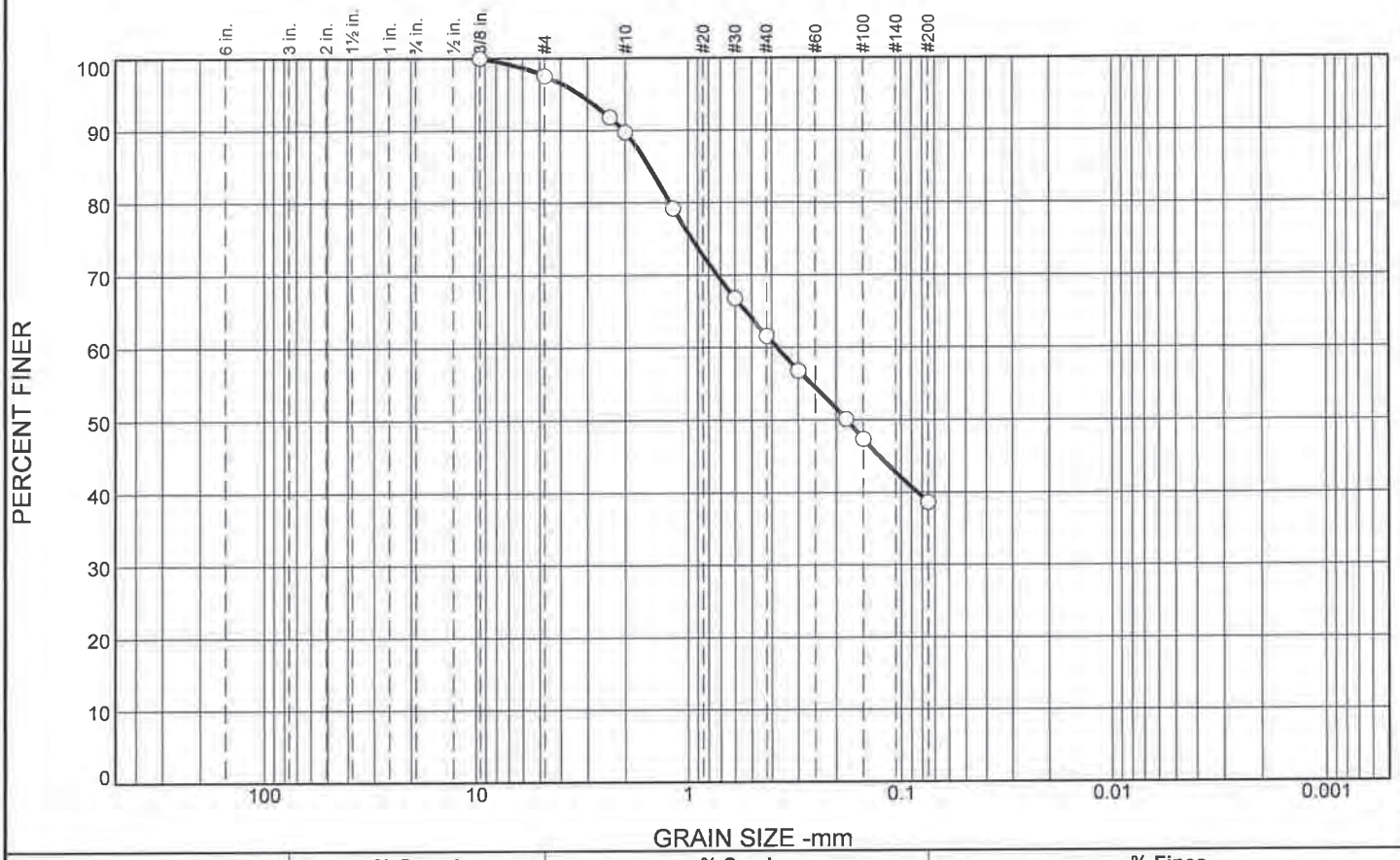
- Surged and purged for 30 minutes; DTW 41ft after; purged 7 gallons
- Purged dry at 7 gallons
- Recovery was 1ft/min
- Purged dry a total of 3 times
- Total purge volume 24 gallons

Name and Address of Facility Contact/Owner/Responsible Party
First Name: Allison Last Name: Ratsack
Facility/Firm: Dane County Dpt. of Waste & Renewables
Street: 1919 Alliant Energy Center Way
City/State/Zip: Madison, WI 53713

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature:
Print Name: Bri Salome
Firm: SCS ENGINEERS, 2830 Dairy Drive, Madison, WI 53718

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

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	2.4	7.9	28.0	23.1	38.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8	100.0		
#4	97.6		
#8	91.8		
#10	89.7		
#16	79.2		
#30	66.8		
#40	61.7		
#50	56.8		
#80	50.1		
#100	47.4		
#200	38.6		

* (no specification provided)

Material Description

Brown Silty Fine to Coarse Sand, Trace Gravel

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{90}= 2.0355 D_{85}= 1.5419 D_{60}= 0.3771
D_{50}= 0.1786 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= SM AASHTO= A-4(0)

Remarks

NP= Non-Plastic

Sample Number: MW125A **Depth:** 48.5'-50'

Date: 3/21/23

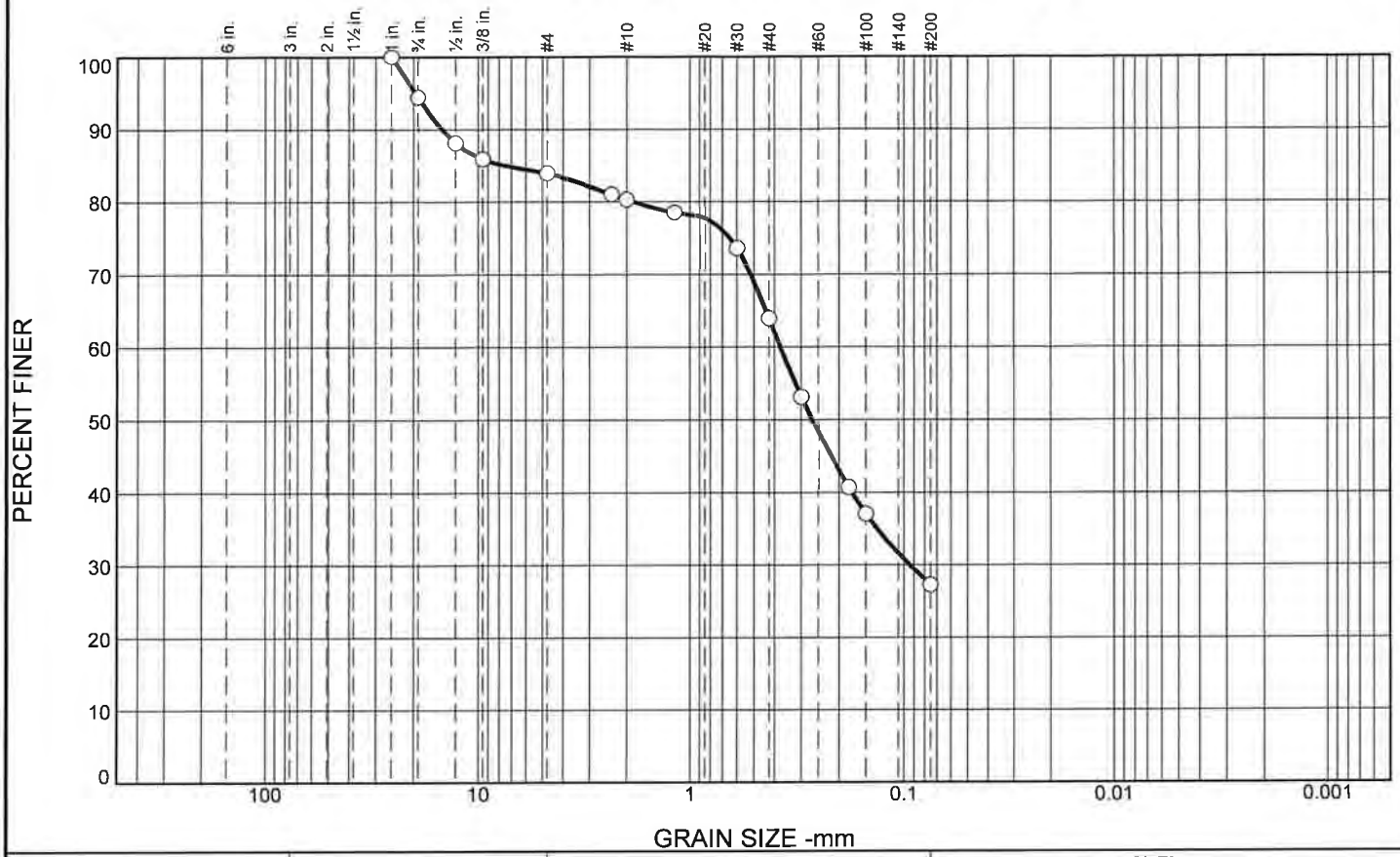
CGC,Inc.

Client: SCS Engineers
Project: Dane County Yahara Hills

Project No: C22011-8 **Figure**

Tested By: JFS **Checked By:** KJS

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	5.6	10.5	3.6	16.4	36.7	27.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
3/4	94.4		
1/2	88.0		
3/8	85.9		
#4	83.9		
#8	81.0		
#10	80.3		
#16	78.5		
#30	73.6		
#40	63.9		
#50	53.2		
#80	40.7		
#100	37.0		
#200	27.2		

* (no specification provided)

Material Description

Gray Fine to Medium Sand, Some Silt and Gravel

Atterberg Limits

PL= NP LL= NP PI= NP

Coefficients

D_{90}= 14.7309 D_{85}= 7.4700 D_{60}= 0.3756
D_{50}= 0.2675 D_{30}= 0.0941 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= SM AASHTO= A-2-4(0)

Remarks

NP = Non-Plastic

Sample Number: MW125A **Depth:** 23'-24.5'

Date: 3/16/23

CGC, Inc.

Client: SCS Engineers
Project: Dane County Yahara Hills

Project No: C22011-8 **Figure**

Tested By: JFS **Checked By:** KJS

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Dane County Landfill No. 3 (Proposed) SCS#: 25222268.00		B-126

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Scott Klumb Soils & Engineering Services, Inc.	3/8/2023	3/8/2023	Direct Push, 2"

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
--	--	--	--	880.3 Feet MSL	2.3"

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 378,795 N, 2,167,301 E S/C/N
SW 1/4 of SE 1/4 of Section 25, T 7 N, R 10 E
Lat ° ' "
Long ° ' "
Local Grid Location Feet ☐ N ☐ S Feet ☐ E ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Dane	13	City of Madison

Sample Number and Type	Sample 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	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				SILT (ML), dark brown (10YR 3/2), roots. (Topsoil)	ML									
S1	27		1-2	SILTY SAND (SM), reddish brown (5YR 4/6), mostly fine sand, with medium to coarse sand, some clay, and fine to coarse gravel (mostly dolomite), uniform, massive. (Till) (Holy Hill Formation, Horicon Member)	SM									
S2	11		3-5	SILT (ML), yellow (10YR 7/6 to 6/6), with fine to coarse gravel, trace fine sand. (Weathered Dolomite Bedrock)	ML									
				End of boring at 5' bgs in dolomite. Abandoned boring with bentonite chips.										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature		Firm
	Adam Watson	SCS Engineers 2830 Dairy Drive, Madison, WI 53718

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 Wis., Dept. of Natural Resources SCS No. 25222268.00
dnr.wi.gov

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.

☐ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☐ Remediation/Redevelopment
☒ Waste Management ☐ Other:

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Dane		B-126

Latitude / Longitude (see instructions) ____ N ____ W
Format Code: ☐ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼ SW	¼ SE	Section	Township	Range
or Gov't Lot #		25	7 N	10 ☒ E ☐ W

Well Street Address: 7101 US Highway 12 & 18

Well City, Village or Town	Well ZIP Code
Madison, WI	53718

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
Temporary Borehole	

2. Facility / Owner Information

Facility Name: Dane County Landfill No.3 (Proposed)
Facility ID (FID or PWS):
License/Permit/Monitoring #:
Original Well Owner: Dane County Department of Waste and Renewables
Present Well Owner: Dane County Department of Waste and Renewables
Mailing Address of Present Owner: 1919 Alliant Energy Center Way

City of Present Owner	State	ZIP Code
Madison	WI	53713

3. Filled & Sealed Well / Drillhole / Borehole Information

☐ Monitoring Well
☐ Water Well
☒ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 03/08/2023

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): Geoprobe

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
5	NA

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.3	NA

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
NA	--

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☐ No	☒ N/A
Casing left in place?	☐ Yes	☐ No	☒ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☒ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☒ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☒ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain):

Sealing Materials
☐ Neat Cement Grout ☐ Bentonite Grout
☐ Sand-Cement (Concrete) Grout ☒ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips	Surface	5	10 lbs	dry mix

6. Comments

Boring B-126

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
Soils & Engineering Services, Inc		03/08/2023

Street or Route	Telephone Number
1102 Stewart St	(608)274-7600

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Madison	WI	53713		03/08/2023

DNR Use Only

Date Received	Noted By

Comments: