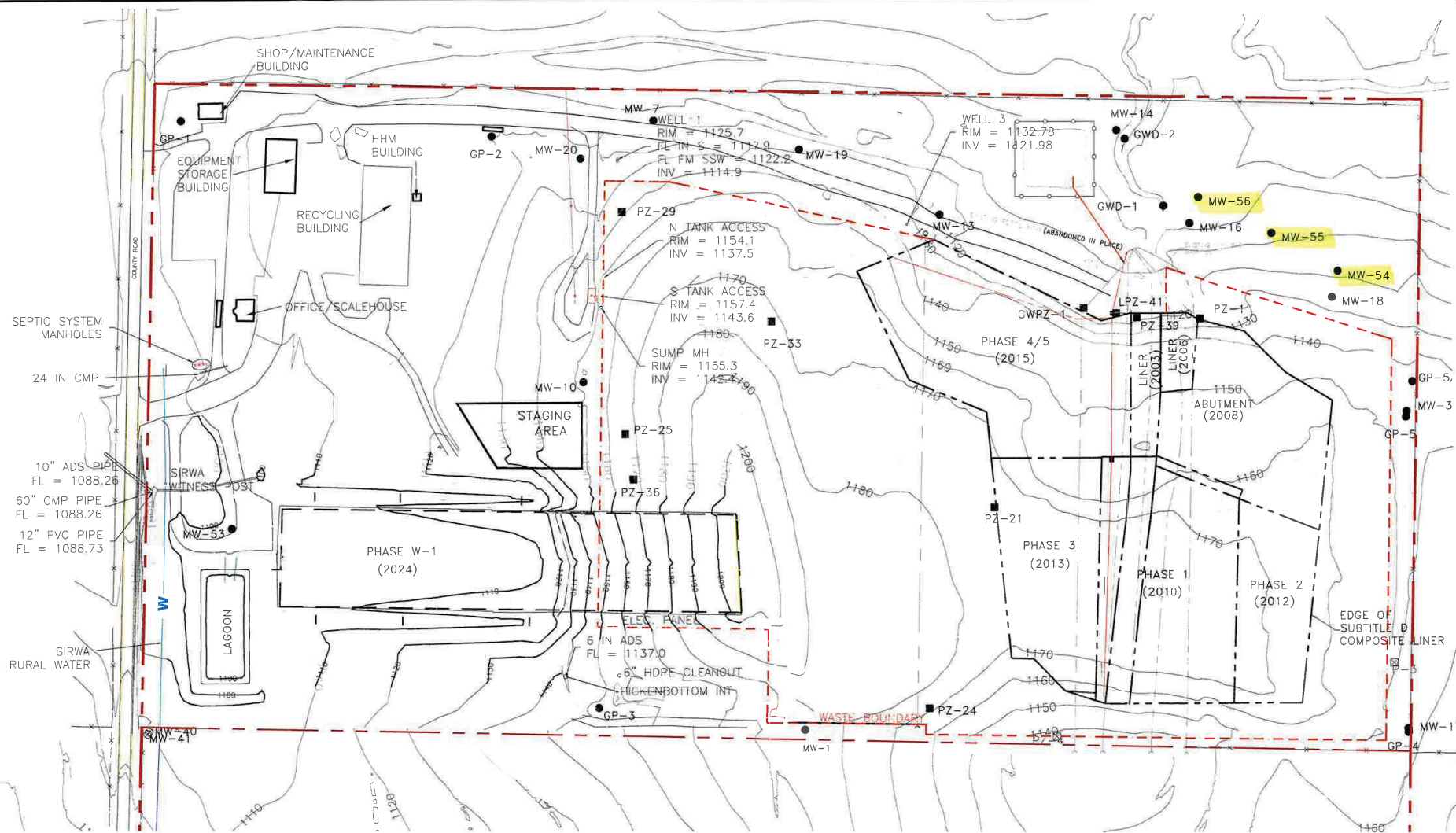




NOTES:
 1. RECORD CONTOURS IN WEST DEVELOPMENT AREA FROM FIELD SURVEY COMPLETED ON AUGUST 1, 2024.

- EXISTING WASTE BOUNDARY
- EXISTING COMPOSITE LINED BOUNDARY
- PROPERTY BOUNDARY
- PROPOSED WASTE BOUNDARY
- PROPOSED TOP OF LINER
- PROPOSED LEACHATE PIPING

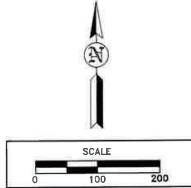


FIGURE:	2	
	NO.	DATE
REVISION		
	DRAWN	PROJECT NO.
	JGH	6047-26A
		DATE
		3/06/26

SITE PLAN
 PAGE COUNTY SANITARY LANDFILL
 PAGE COUNTY, IOWA

HLW Engineering Group
 204 West Broad Street, P.O. Box 314
 Story City, Iowa 50248
 Phone: (515) 733-4144
 FAX: (515) 733-4146





HLW Engineering Group
204 West Broad Street, P.O. Box 314
Story City, Iowa 50248

Telephone: (515) 733-4144
Fax: (515) 733-4146

HLW Engineering Group

LOG OF TEST BORING

Drillers Team Services -Jerome Hobson Boring No. MW 54 HLW Observer JGH
HLW Project No. 6047-26A

Date Drilled 3/04/26 Project Page County SLF
Surface Elevation 1117.6 ft 75-SDP-01-75P
Depth Drilled 33 ft MW 16 & MW 18 ACM
Drilling Method 7 1/4" HOLLOW STEM AUGER
Depth to Water Dry ft @ completion (▽), Dry ft @ 20 hrs.(▼), _____ ft @ _____ hrs.

DEPTH FT	WELL DETAIL	SAMPLE		COLOR	MC %	CONSISTENCY	ELEV	SOIL DESCRIPTION
		NO.	TYPE					
0								
5		1	CS	Brown	Damp	Firm	4	Clay Till
10		2	CS	Brown & Gray				Clay Till - Some Stones and Lime Striations
15		3	CS				14	
20		4	CS	Gray			17.5	Clay Till
25		5	CS	Brown			21.5	
30		6	CS	Dark Gray				
35		7	CS					
40								

E.O.B @ 33'

MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: Page County Sanitary Landfill Permit No.: 73-SDP-01-75P
Well/Piezometer No.: MW-54 Date Started: 3/04/26 Date Completed: 3/04/26
Applicable Requirements¹: ☒ 567 IAC 113 ☐ 567 IAC 115 ☐ Site Permit
☐ 567 IAC 114 ☐ 567 IAC 139 ☐ Other: _____

A. SURVEYED LOCATION² AND ELEVATION OF POINT

Elevations (MSL): Ground Surface: 1117.6 Top of Protective Casing: 1120.27
Top of Well Casing: 1120.11
Site Coordinates: Northing: 278,223.95 Easting: 1,194,562.46
World Coordinates: Latitude: _____ Longitude: _____
Elevation and Coordinate Systems: State Plane, Iowa South

B. SOIL BORING INFORMATION

Certified Well Contractor Team Services, Inc
Address 717 Se 6th Street City, State, Zip Code Des Moines, IA 50309
Name of driller Jerome Hobson Cert No. 9062
Drilling method HSA Drilling fluid None Bore hole diameter 7.25 in
Soil sampling method Continuous Sampler Depth of boring 33.0 ft

C. MONITORING WELL INSTALLATION

Casing material: <u>PVC - SCH 40</u>	Placement method: <u>Poured</u>
Length of casing: <u>24.45 ft</u>	Quantity: <u>1.0 cu ft</u>
Casing diameter: <u>2"</u>	Backfill (if different from seal): _____
Casing joint type: <u>Threaded</u>	Material: <u>Bentonite Grout</u>
Casing/screen joint type: <u>Threaded</u>	Placement method: <u>Tremied</u>
Screen material: <u>PVC - SCH 40</u>	Quantity: <u>2.3 cu ft</u>
Screen opening size: <u>0.006 in</u>	Surface seal design: <u>Concrete</u>
Screen length: <u>10 ft</u>	Material of protective casing: <u>Steel</u>
	Material of grout between
	protective casing and well casing: <u>Concrete</u>
Depth of Well: <u>34.45 ft</u>	Protective cap: <u>Yes</u>
Filter Pack: _____	Material: <u>Steel</u>
Material: <u>Silica Sand</u>	Vented?: ☒ Y ☐ N Locking?: ☒ Y ☐ N
Grain Size: <u>0.02 to 0.03 effective size</u>	
Quantity: <u>3.5 cu ft</u>	Well cap: <u>Yes</u>
Seal (minimum 3 ft. length above filter pack): _____	Material: <u>PVC</u>
Material: <u>Bentonite Chips</u>	Vented?: ☒ Y ☐ N

D. GROUNDWATER MEASUREMENT (± 0.01 foot below top of inner well casing)

Water level Dry Stabilization time 20 hrs
Well development method N/A
Average depth of frost line 40 in

¹ Refer to the site's permit to determine applicable requirements. Note that some sites may only be regulated by their permit versus current landfill chapters. If the permit and rule are silent regarding applicable requirements, then 567 IAC Chapter 39 shall apply, which requires use of the Well Log (Well Record) Form, not this form. If the applicable requirements have been modified and approved by the DNR, then note under Other.

² The location does not need to be surveyed by a licensed surveyor. A handheld GPS reading accurate to ± 30 feet is acceptable when an aerial photograph showing the location (pin) is included with this form. The site coordinates should be the same coordinate system currently used for survey control and mapping of the site.

MW-54

Well and Boring Logs

Elevations: ± 0.01 ft. MSL

Depths: ± 0.1 ft from Ground Surface

Top of protective casing (TOP)

Elevation C 1120.27

Top of Well Casing (TOC)

Elevation B 1120.11

Ground surface (GS)

Elevation A 1117.6

Depth Use 0

Top of backfill

Base of concrete plug and bentonite grout

Elevation A-W 1113.6

Depth W 4.0

Base of Protective Casing

Elevation C-A = 1112.27

Depth PC-C-A = 5.5

Base of Backfill, Top of Seal

Elevation A-X = 1102.6

Depth X 15.0

Top of Filter Pack, Base of Seal

Elevation A-Y = 1098.0

Depth Y 19.0

Top of Screen (TOS)

Elevation B-TD-S-WP = 1095.86

Depth A-TOS^{elev} = 21.7 24

Bottom of Screen (BOS)

Elevation B-TD-WP = 1085.86

Depth A-BOS^{elev} = 31.7 34

Bottom of Well

Elevation 1085.66

Depth 34.45

Bottom of Filter Pack

Elevation A-Z = 1084.6

Depth Z 33.0

Required Data:

- Elevations for A, B, and C shall be surveyed.
- Depths for W, X, Y, and Z shall be field measured following completion of each item.
- Lengths of the Protective Casing (PC), Screen (S), and Well Point (WP) shall be field measured prior to installation of each item.
- The total Depth (TD) from the Top of Well Casing to the Bottom of Well Point shall be field measured following installation.

PC: 8.0 ft

S: 10 ft

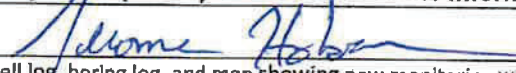
WP: 0.25 ft

TD: 34.45 ft

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature



Certification #

9062

Date

3-10-24

Note: Attach well log, boring log, and map showing new monitoring well/piezometer location in relation to existing wells or piezometers.

Complete one form for each well plugged and submit within 30 days to the local county agent, DNR project officer, and Erik Day with the DNR's Water Supply Section at erik.day@dnr.iowa.gov. DNR prefers that the forms be completed and submitted electronically.

MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: Page County Sanitary Landfill Permit No.: 73-SDP-01-75P
Well/Piezometer No.: MW-55 Date Started: 3/04/26 Date Completed: 3/04/26
Applicable Requirements: ☒ 567 IAC 113 ☐ 567 IAC 115 ☐ Site Permit
☐ 567 IAC 114 ☐ 567 IAC 139 ☐ Other: _____

A. SURVEYED LOCATION² AND ELEVATION OF POINT

Elevations (MSL): Ground Surface: 1106.2 Top of Protective Casing: 1109.05
Top of Well Casing: 1108.84
Site Coordinates: Northing: 278,301.36 Easting: 1,194,427.68
World Coordinates: Latitude: _____ Longitude: _____
Elevation and Coordinate Systems: State Plane, Iowa South

B. SOIL BORING INFORMATION

Certified Well Contractor Team Services, Inc
Address 717 Se 6th Street City, State, Zip Code Des Moines, IA 50309
Name of driller Jerome Hobson Cert No. 9062
Drilling method HSA Drilling fluid None Bore hole diameter 7.25 in
Soil sampling method Continuous Sampler Depth of boring 31.5 ft

C. MONITORING WELL INSTALLATION

Casing material: <u>PVC - SCH 40</u>	Placement method: <u>Poured</u>
Length of casing: <u>22.45 ft</u>	Quantity: <u>1.1 cu ft</u>
Casing diameter: <u>2"</u>	Backfill (if different from seal): _____
Casing joint type: <u>Threaded</u>	Material: <u>Bentonite Grout</u>
Casing/screen joint type: <u>Threaded</u>	Placement method: <u>Tremied</u>
Screen material: <u>PVC - SCH 40</u>	Quantity: <u>2.4 cu ft</u>
Screen opening size: <u>0.006 in</u>	Surface seal design: <u>Concrete</u>
Screen length: <u>10 ft</u>	Material of protective casing: <u>Steel</u>
Depth of Well: <u>32.45 ft</u>	Material of grout between protective casing and well casing: <u>Concrete</u>
Filter Pack: _____	Protective cap: <u>Yes</u>
Material: <u>Silica Sand</u>	Material: <u>Steel</u>
Grain Size: <u>0.02 to 0.03 effective size</u>	Vented?: ☒ Y ☐ N Locking?: ☐ Y ☐ N
Quantity: <u>3.6 cu ft</u>	Well cap: <u>Yes</u>
Seal (minimum 3 ft. length above filter pack): _____	Material: <u>PVC</u>
Material: <u>Bentonite Chips</u>	Vented?: ☒ Y ☐ N

D. GROUNDWATER MEASUREMENT (± 0.01 foot below top of inner well casing)

Water level Dry Stabilization time 20 hrs
Well development method N/A
Average depth of frost line 40 in

¹ Refer to the site's permit to determine applicable requirements. Note that some sites may only be regulated by their permit versus current landfill chapters. If the permit and rule are silent regarding applicable requirements, then 567 IAC Chapter 39 shall apply, which requires use of the Well Log (Well Record) Form, not this form. If the applicable requirements have been modified and approved by the DNR, then note under Other.

² The location does not need to be surveyed by a licensed surveyor. A handheld GPS reading accurate to +/- 30 feet is acceptable when an aerial photograph showing the location (pin) is included with this form. The site coordinates should be the same coordinate system currently used for survey control and mapping of the site.

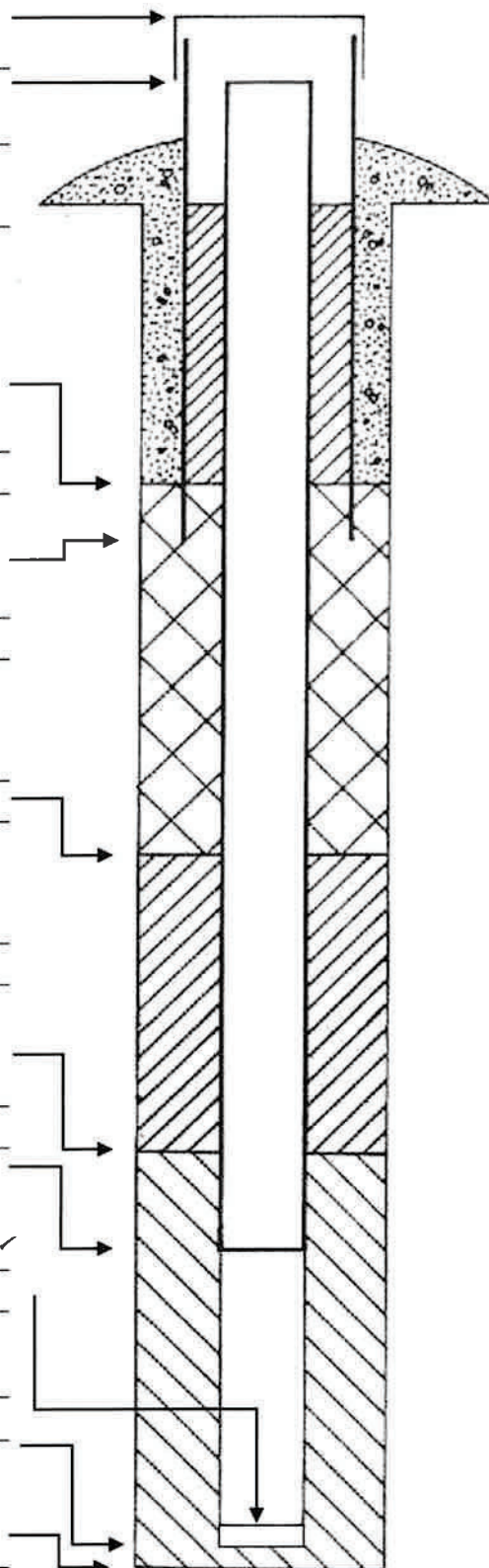
MW-55

Well and Boring Logs

Elevations: ± 0.01 ft. MSL

Depths: ± 0.1 ft from Ground Surface

Top of protective casing (TOP)	
Elevation	C 1109.05
Top of Well Casing (TOC)	
Elevation	B 1108.84
Ground surface (GS)	
Elevation	A 1106.2
Depth Use 0	
Top of backfill	
Base of concrete plug and bentonite grout	
Elevation	A-W 1102.2
Depth	W 4.0
Base of Protective Casing	
Elevation	C-A = 1103.7
Depth	PC-C-A = 5.3
Base of Backfill, Top of Seal	
Elevation	A-X = 1092.9
Depth	X 13.3
Top of Filter Pack, Base of Seal	
Elevation	A-Y = 1088.7
Depth	Y 17.5
Top of Screen (TOS)	
Elevation	B-TD-S-WP = 22.20
Depth	A-TOS ^{elev} = 1086.64
Bottom of Screen (BOS)	
Elevation	B-TD-WP = 1076.64 ✓
Depth	A-BOS ^{elev} = 32.20
Bottom of Well	
Elevation	1076.39
Depth	32.45
Bottom of Filter Pack	
Elevation	A-Z = 1074.7
Depth	Z 31.5



Required Data:

- Elevations for A, B, and C shall be surveyed.
- Depths for W, X, Y, and Z shall be field measured following completion of each item.
- Lengths of the Protective Casing (PC), Screen (S), and Well Point (WP) shall be field measured prior to installation of each item.
- The total Depth (TD) from the Top of Well Casing to the Bottom of Well Point shall be field measured following installation.

PC: 8.0 ft

S: 10 ft

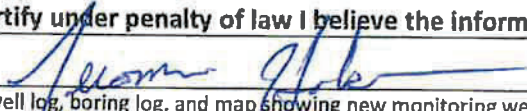
WP: 0.25 ft

TD: 32.45 ft

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature



Certification #

9062

Date

3-10-26

Note: Attach well log, boring log, and map showing new monitoring well/piezometer location in relation to existing wells or piezometers.

Complete one form for each well plugged and submit within 30 days to the local county agent, DNR project officer, and Erik Day with the DNR's Water Supply Section at erik.day@dnr.iowa.gov. DNR prefers that the forms be completed and submitted electronically.

MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: Page County Sanitary Landfill Permit No.: 73-SDP-01-75P
Well/Piezometer No.: MW-56 Date Started: 3/04/26 Date Completed: 3/05/26
Applicable Requirements¹: ☒ 567 IAC 113 ☐ 567 IAC 115 ☐ Site Permit
☐ 567 IAC 114 ☐ 567 IAC 139 ☐ Other: _____

A. SURVEYED LOCATION² AND ELEVATION OF POINT

Elevations (MSL): Ground Surface: 1092.0 Top of Protective Casing: 1095.11
Top of Well Casing: 1094.99
Site Coordinates: Northing: 278,374.89 Easting: 1,194,279.92
World Coordinates: Latitude: _____ Longitude: _____
Elevation and Coordinate Systems: State Plane, Iowa South

B. SOIL BORING INFORMATION

Certified Well Contractor Team Services, Inc
Address 717 Se 6th Street City, State, Zip Code Des Moines, IA 50309
Name of driller Jerome Hobson Cert No. 9062
Drilling method HSA Drilling fluid None Bore hole diameter 7.25 in
Soil sampling method Continuous Sampler Depth of boring 24.5 ft

C. MONITORING WELL INSTALLATION

Casing material: <u>PVC - SCH 40</u>	Placement method: <u>Poured through HSA</u>
Length of casing: <u>16.70 ft</u>	Quantity: <u>0.8 cu ft</u>
Casing diameter: <u>2"</u>	Backfill (if different from seal): _____
Casing joint type: <u>Threaded</u>	Material: <u>Bentonite Chips</u>
Casing/screen joint type: <u>Threaded</u>	Placement method: <u>Poured</u>
Screen material: <u>PVC - SCH 40</u>	Quantity: <u>1.0 ft</u>
Screen opening size: <u>0.006 in</u>	Surface seal design: <u>Concrete</u>
Screen length: <u>10 ft</u>	Material of protective casing: <u>Steel</u>
Depth of Well: <u>27.70 ft</u>	Material of grout between protective casing and well casing: <u>Concrete</u>
Filter Pack: _____	Protective cap: <u>Yes</u>
Material: <u>Silica Sand</u>	Material: <u>Steel</u>
Grain Size: <u>0.02 to 0.03 effective size</u>	Vented?: ☒ Y ☐ N Locking?: ☒ Y ☐ N
Quantity: <u>3.4 cu ft</u>	Well cap: <u>Yes</u>
Seal (minimum 3 ft. length above filter pack): _____	Material: <u>PVC</u>
Material: <u>Bentonite Chips</u>	Vented?: ☒ Y ☐ N

D. GROUNDWATER MEASUREMENT (± 0.01 foot below top of inner well casing)

Water level 9.00 ft Stabilization time 4 hrs
Well development method Over pump with Waterra Pump
Average depth of frost line 40 in

¹ Refer to the site's permit to determine applicable requirements. Note that some sites may only be regulated by their permit versus current landfill chapters. If the permit and rule are silent regarding applicable requirements, then 567 IAC Chapter 39 shall apply, which requires use of the Well Log (Well Record) Form, not this form. If the applicable requirements have been modified and approved by the DNR, then note under Other.

² The location does not need to be surveyed by a licensed surveyor. A handheld GPS reading accurate to +/- 30 feet is acceptable when an aerial photograph showing the location (pin) is included with this form. The site coordinates should be the same coordinate system currently used for survey control and mapping of the site.

MW - 56

Well and Boring Logs

Elevations: ± 0.01 ft. MSL

Depths: ± 0.1 ft from Ground Surface

Top of protective casing (TOP)

Elevation C 1095.11

Top of Well Casing (TOC)

Elevation B 1094.99

Ground surface (GS)

Elevation A 1092.0

Depth Use 0

Top of backfill

Base of concrete plug and
bentonite grout

Elevation A-W 1088.0

Depth W 4.0

Base of Protective Casing

Elevation C-A = 1087.1

Depth PC-C-A = 4.9

Base of Backfill, Top of Seal

Elevation A-X = 1084.0

Depth X 8.0

Top of Filter Pack, Base of Seal

Elevation A-Y = 1081.0

Depth Y 11.0

Top of Screen (TOS)

Elevation B-TD-S-WP = 1078.54

Depth A-TOS^{elev} = 13.5 ^{16.25}

Bottom of Screen (BOS)

Elevation B-TD-WP = 1068.54

Depth A-BOS^{elev} = 23.5 ^{26.25}

Bottom of Well

Elevation 1068.29

Depth 26.70 ✓

Bottom of Filter Pack

Elevation A-Z = 1067.5

Depth Z 24.5

Required Data:

- Elevations for A, B, and C shall be surveyed.
- Depths for W, X, Y, and Z shall be field measured following completion of each item.
- Lengths of the Protective Casing (PC), Screen (S), and Well Point (WP) shall be field measured prior to installation of each item.
- The total Depth (TD) from the Top of Well Casing to the Bottom of Well Point shall be field measured following installation.

PC: 8.0 ft

S: 10 ft

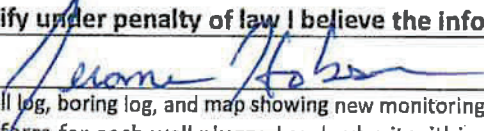
WP: 0.25 ft

TD: 26.70 ft

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature



Certification #

9062

Date

3-10-24

Note: Attach well log, boring log, and map showing new monitoring well/piezometer location in relation to existing wells or piezometers.

Complete one form for each well plugged and submit within 30 days to the local county agent, DNR project officer, and Erik Day with the DNR's Water Supply Section at erik.day@dnr.iowa.gov. DNR prefers that the forms be completed and submitted electronically.