WATER WELL RECORD (WWC-5)

Constructed

KOLAR DOC ID 1844716 WELL ID 027MW025

✓ Original Record ☐ Correction ☐ Change in Well Use

LOCATION OF WATER WELL

Latitude	38.930342	Longitude	-95.030855	Section	12	Township	13	Range	21 ✓E ☐W	Fraction	NW ¼ SE ¼ SW ¼
Datum	WGS84	Elevation	913	County	Johnson						

WATER WELL OWNER

Name	
Business	Former Sunflower Army
Address	Ammunition Plant SWMU 27 DeSoto Kans 66019
Well location ☐ at owner's address	Sunflower Redevelopment , LLC 10345 West 103rd Street DeSoto, KS 66019

CONSTRUCTION

Borehole interval: from 0 to 14.5 ft. from ____ to ____ ft.

Borehole diameter: 7.25 in. ____ in.

Casing height above land surface: 30 in.

If casing height is less than 12 in. has a variance been approved?* ☐ Yes ✓ No

*variance not required for monitoring or environmental remediation wells

Casing type: ThermalPlastic

Blank casing interval: 0 ft. to 9.5 ft.

Blank casing diameter: 2 in.

Casing joints: Threaded

Weight: ____ lbs/ft.

Wall thickness or gauge no.: 40

Blank casing interval: ____ ft. to ____ ft.

Blank casing diameter: ____ in.

Casing joints: ____

Weight: ____ lbs/ft.

Wall thickness or gauge no.: ____

Grout interval: 2 ft. to 6 ft.

Grout material: Bentonite

Grout interval: ____ ft. to ____ ft.

Grout material: ____

Screen / perforation material: PVC

Screen / perforation openings: Mill slot

Screen / perforation intervals:

From 9.5 ft. to 14.5 ft.

Slot size .01 unit inches

From ____ ft. to ____ ft.

Slot size ____ unit ____

Gravel pack intervals:

Gravel pack not used: ☐ Gravel size ____ in

From 6 ft. to 14.5 ft.

Gravel pack not used: ☐ Gravel size ____ in

From ____ ft. to ____ ft.

WELL WATER USE

Environmental Remediation / Monitoring Mc

COMPLETION

Depth of completed well: 14.5 ft.

Depth(s) groundwater encountered:

(1) 13 ft.; (2) ____ ft.;

(3) ____ ft.; (4) ☐ dry well

Static water level in well: 13.0 ft.

✓ measured below land surface on (mm/dd/yy): 09/26/2024

☐ measured above land surface on (mm/dd/yy): ____

Estimated yield: ____ gpm

Water level was: ____ ft. after ____ hours pumping ____ gpm

Pump installed? ☐ Yes ✓ No

Water well disinfected? ☐ Yes ☐ No

Date disinfected (mm/dd/yy): ____

Aquifer, if known:

NEAREST SOURCE OF POTENTIAL CONTAMINATION

Source: ____

Distance from well: ____ Direction from well: ____

Source description: ____

Source: ____

Distance from well: ____ Direction from well: ____

Source description: ____

☐ No potential source of contamination within 100 feet.

PERMIT & ID NUMBERS (AS REQUIRED)

DWR Application No.: ____

KDHE / EPA Project Code: C404671030

Site Name: SWMU 27

KDHE UIC Class V Form Completed: ☐ Yes ✓ No

County Permit: ☐ Yes ✓ No Permit ID: ____

Lease Name & Well #: ____

# of boreholes: ____ # of dewatering wells: ____

LITHOLOGIC LOG

FROM	TO	LITHOLOGY INTERVALS
0	14.5	other,See Attached Log

COMMENTS

CONTRACTOR'S OR LANDOWNERS CERTIFICATION

This water well was constructed ✓ reconstructed ☐ pursuant to the stated water well contractor's license and was completed on 9/26/2024. I certify that this record is true to the best of my knowledge and belief. This water well record was completed on 05/25/2025 under the business name of Razek Environmental, LLC, Kansas Water Well Contractor's License No. 759 under the authority of the designated person as defined in K.A.R. 28-30-2(j) and signed and certified by the electronic signature of the designated person at its submittal: Anthony Poulter.

Send one copy to WATER WELL OWNER and retain one for your records. Fee of $5.00 for each constructed well.

HTW DRILLING LOG

HOLE NO. 027MW025

1. COMPANY NAME: Burns & McDonnell	2. DRILLING SUBCONTRACTOR: RAZEK ENV., Inc.	SHEET 1 OF 3 SHEETS
3. PROJECT: SFAAP	4. LOCATION: SWMU 27	
5. NAME OF DRILLER: T. Poulter	6. MANUFACTURER'S DESIGNATION OF DRILL: GeoProbe 7822 DT	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 2-inch MacroCore Sampler; 7.25 HSA	8. HOLE LOCATION: E: 2156840.88' N: 231281.40'	
	9. SURFACE ELEVATION: 913.22'	
	10. DATE STARTED: 9/26/24	11. DATE COMPLETED: 9/26/24
12. OVERBURDEN THICKNESS: 13.0 ft	15. DEPTH GROUNDWATER ENCOUNTERED: 13.0 ft bgs	
13. DEPTH DRILLED INTO ROCK: 1.5 ft	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA	
14. TOTAL DEPTH OF HOLE: 14.5 ft	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA	

18. GEOTECHNICAL SAMPLES	DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES
NA			NA

20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY
NA						NA %

22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR
		X		S. Woodland

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
	0	CLAY, with silt, CH, very dark grayish brown (10YR 3/2), damp, very stiff consistency, high plasticity.	BZ = 0.0 PID LEL = 0 O_2 = 20.9 0.0	NA	NA	Recovery	Begin @ 0844
	1		0.0				
	2	CLAY, trace very fine sand, CH, dark grayish brown (10YR 4/2), damp, hard consistency, high plasticity, trace oxidation reddish brown (5YR 5/3).	0.0			4/5	
	3		0.0				
	4	grayish brown (10YR 5/2), moist, stiff consistency	0.0				

HTW DRILLING LOG

HOLE NO. 027MW025

PROJECT SFAAP - SWMU 27 | INSPECTOR S. Woodland | SHEET 2 OF 3 SHEETS

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
		CLAY, trace very fine sand, CH, grayish brown (10YR 5/2), moist, stiff consistency, high plasticity, trace oxidation reddish brown (5YR 5/3).	PID	NA	NA	Recovery	
	5		BZ = 0.0 LEL = 0 O_2 = 20.9 0.0				0846
	6		0.0				
	7		0.0			5/5	
	8		0.0				
	9		0.0				
	10		BZ = 0.0 LEL = 0 O_2 = 20.9 0.0				0849
	11	with very fine sand, gray (10YR 5/1)	0.0			4.5/4.5	
	12	SAND with fines, SM, gray (10YR 5/1), very fine to fine sand, poorly graded, trace oxidation reddish brown (5YR 5/3)	0.0				

HTW DRILLING LOG

HOLE NO. 027MW025

PROJECT SFAAP - AOC 17 | INSPECTOR S. Woodland | SHEET 3 OF 3 SHEETS

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
	13	SAND with fines, SM, gray (10YR 5/1), very fine to fine sand, poorly graded, trace oxidation reddish brown (5YR 5/3).	PID 0.0	NA	NA	Recovery 4.5/4.5	▽
	14	SHALE, medium light gray (N6), wet, trace mottle yellowish brown (10YR 5/4). moist					0910
		HSA Refusal @ 14.5 ft					DP Refusal @ 14.5 ft 0854 Begin HSA Drilling Construct Temporary Piezometer 027BMPZ001
	15						
	16						
	17						
	18						
	19						
	20						

Monitoring Well Construction Diagram

Project Number:	138163	**Monitoring Well ID:**	027BMPZ001 / 027MW025
Project Name:	SFAAP	**Property Owner:**	SRL
Geologist:	S. Woodland	Northing:	231281.40
Drilling Company:	RAZEK Environmental	Easting:	2156840.88
Driller:	T. Poulter	Survey Datum: Kansas State Plane North Zone / NAVD 1988	

Drilling Method: HSA
Borehole Diameter: 7.25"

Elevations (amsl)	
Top of Casing (TOC)	915.46
Ground Surface (GS)	913.22
Reference Point (RP)	TOC

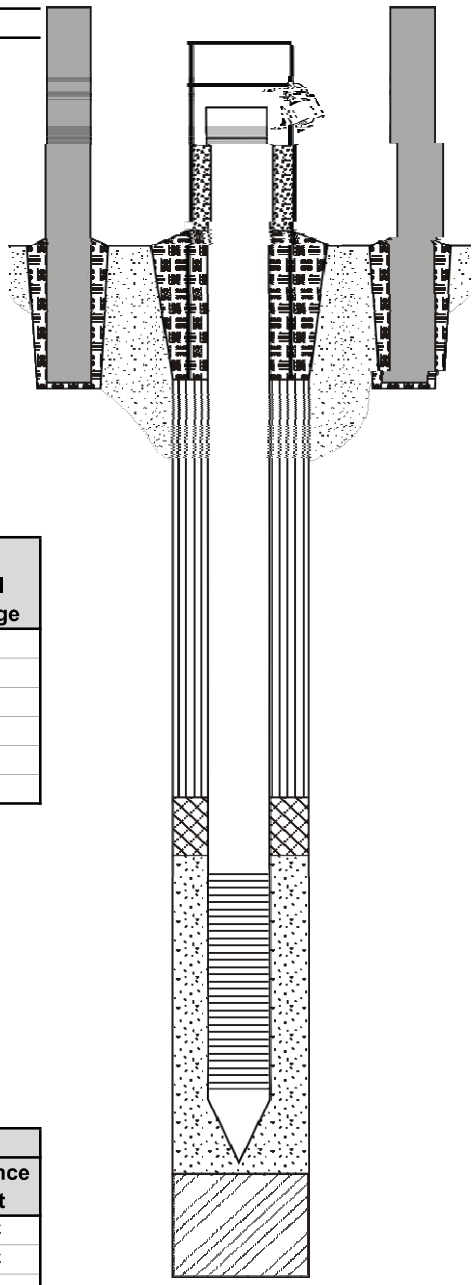
Dates	
Drilling/Installation Start	9/26/2024
Installation Complete	9/26/2024
Well Abandoned	NA
Development Start	NA
Development Complete	NA

Annular Material Measurements	Depth to Top from GS	Total Footage
Annular Seal		
Bentonite Seal	0	6.0
Secondary Filter Pack		
Filter Pack	6	8.5
Backfill		
Bottom of Borehole	14.5	NA

Casing Materials Measurements	Total Footage
Total Riser Installed	11.88
Total Riser Cutoff	0.00
Screen	5.00
Bottom Cap	0.10
Total Depth from TOC	16.98

Groundwater Levels		
Date	Depth	Reference Point
10/1/2024	NFW	TOC
3/25/2025	13.84	TOC

Comments: NA



Cap Type: J-Plug
Lock Keyed to:

Protective Cover:
- Material: Steel
- Size: 4" x 4"
- Length: 5 ft
- Pea Gravel (Y/N): N
- Weep Hole (Y/N): N
- Guage Mark (Y/N): Y

Bollards (# and type): 4 / Steel

Surface Pad:
- Dimensions: 2'x2'x1'
- Material: Concrete

Annular Seal:
- Type & Size: NA
- Manufacturer: NA
- Amount Used: NA

Bentonite Seal:
- Type & Size: 3/8 Chips
- Manufacturer: PDS
- Amount Used: 2 bags

Secondary Filter Pack:
- Type & Size: NA
- Manufacturer: NA
- Amount Used: NA

Primary Filter Pack:
- Type & Size: 12/20 Whole Grain
- Manufacturer: Gillibrand Co. Inc.
- Amount Used: 3 bags

Well Casing:
- Type: PVC
- Diameter: 2"
- Sch. or Weight: Sch. 40
- Manufacturer: EMI
- Screen Type: Factory Slotted
- Screen Slot Size: 0.010"
- Bottom Cap Type: PVC

Centralizers (Y/N): N
- Material: NA
- Number: NA
- Depth(s): NA

Backfill Material:
- Type & Size: NA
- Manufacturer: NA
- Amount Used: NA

Legend

- SWMU/AOC
- Road
- Monitoring Well

0 125 250

Feet

N

BURNS McDONNELL

SWMU 27
Monitoring Well Location Map

Former Sunflower Army Ammunition Plant
DeSoto, Kansas

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Source: ESRI and Burns & McDonnell Engineering.

Path: Z:\Clients\ENSUSCOE138163_SFAAP2021RFIs\Studies\Geospatial\Docs\SFAAP_map.mxd