WATER WELL RECORD (WWC-5)

Constructed

KOLAR DOC ID 1809113 WELL ID 045MW016

✓ Original Record ☐ Correction ☐ Change in Well Use

LOCATION OF WATER WELL

Latitude	38.936047	Longitude	-95.020605	Section	12	Township	13	Range	21 ✓E ☐W	Fraction	SE ¼ SE ¼ NE ¼
Datum	WGS84	Elevation	950	County	Johnson						

WATER WELL OWNER

Name	
Business	Sunflower Redevelopment, LL(
Address	10345 West 103rd St. DeSoto Kans 66019
Well location ☐ at owner's address	Former Sunflower Army Ammunition Plant SWMU 45 DeSoto, Kansas

WELL WATER USE

Environmental Remediation / Monitoring Mc

COMPLETION

Depth of completed well: 37 ft.

Depth(s) groundwater encountered:

(1) 28 ft.; (2) _____ ft.;

(3) _____ ft.; (4) ☐ dry well

Static water level in well: 29.0 ft.

✓ measured below land surface on (mm/dd/yy): 06/19/2024

☐ 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: C404671048

Site Name: SWMU 45

KDHE UIC Class V Form Completed: ☐ Yes ✓ No

County Permit: ☐ Yes ✓ No Permit ID: _____

Lease Name & Well #: _____

# of boreholes: _____ # of dewatering wells: _____

CONSTRUCTION

Borehole interval: from 0 to 37 ft.

Borehole diameter: 7.25 in.

from _____ to _____ ft. _____ 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 27 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 24 ft.

Grout material: Bentonite

Grout interval: _____ ft. to _____ ft.

Grout material: _____

Screen / perforation material: PVC

Screen / perforation openings: Mill slot

Screen / perforation intervals:

From 27 ft. to 37 ft.

Slot size .01 unit inches

From _____ ft. to _____ ft.

Slot size _____ unit _____

Gravel pack intervals:

Gravel pack not used: ☐ Gravel size _____ in

From 24 ft. to 37 ft.

Gravel pack not used: ☐ Gravel size _____ in

From _____ ft. to _____ ft.

LITHOLOGIC LOG

FROM	TO	LITHOLOGY INTERVALS
0	37	other,See Attached Lithologic 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 10/28/2024. I certify that this record is true to the best of my knowledge and belief. This water well record was completed on 01/12/2025 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. 045MW016

1. COMPANY NAME: Burns & McDonnell	2. DRILLING SUBCONTRACTOR: RAZEK ENV., Inc.	SHEET 1 OF 5 SHEETS
3. PROJECT: SFAAP	4. LOCATION: SWMU 45	
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: 2159682.6760 N: 233453.5430	
	9. SURFACE ELEVATION: 950.02 ft amsl	
	10. DATE STARTED: 10/28/24	11. DATE COMPLETED: 10/28/24
12. OVERBURDEN THICKNESS: 37.0 ft	15. DEPTH GROUNDWATER ENCOUNTERED: NA	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: 10/28/24 29.0 ft btoc	
14. TOTAL DEPTH OF HOLE: 37.0 ft	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)	

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
		045MW016		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, CL, very dark grayish brown (10YR 3/2), damp, hard consistency, trace plasticity.	BZ = 0.0 PID LEL = 0 O_2 = 20.9 0.0	NA	NA	Recovery	DP @ 0829 HSA @ 0858
	1	SILT, trace clay, CL, light gray (10YR 7/1), damp, hard consistency, trace plasticity, friable, trace oxidation reddish brown (5YR 5/3).	0.0				
	2		0.0			4/5	
	3		0.0				
	4		0.0				

HTW DRILLING LOG

HOLE NO. 045MW016

PROJECT SFAAP - SWMU 45 | INSPECTOR S. Woodland | SHEET 2 OF 5 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
		SILT, trace clay, ML, light gray (10YR 7/1), damp, hard consistency, trace plasticity, friable, trace oxidation reddish brown (5YR 5/3).	BZ = 0.0 PID LEL = 0 O_2 = 20.9 0.0	NA	NA	Recovery	0831 0903
	6	CLAY, CH, light gray (10YR 7/1), moist, very stiff consistency, high plasticity, trace oxidation reddish brown (5YR 5/3).	0.0				
		gray (10YR 6/1)					
	7		0.0			5/5	
	8		0.0				
	9		0.0				
	10	trace very fine sand, damp	BZ = 0.0 LEL = 0 O_2 = 20.9 0.0				0835 0905
	11		0.0				
	12		0.0			5/5	
	13		0.0				

HTW DRILLING LOG

HOLE NO. 045MW016

PROJECT SFAAP - SWMU 45 | INSPECTOR S. Woodland | SHEET 3 OF 5 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, CH, gray (10YR 6/1), damp, very stiff consistency, high plasticity, trace oxidation reddish brown (5YR 5/3).	BZ = 0.0 PID LEL = 0 O_2 = 20.9	NA	NA	Recovery	
	14	trace very fine to fine sand	0.0			5/5	
	15		BZ = 0.0 LEL = 0 O_2 = 20.9 0.0				0838 0913
	16	SAND, trace fines, SP, yellowish gray (5Y 7/2), poorly sorted, fine to very fine sand, moist, trace oxidation reddish brown (5YR 5/3).	0.0				
	17		0.0			5/5	
	18		0.0				
	19	medium sand	0.0				
	20		BZ = 0.0 LEL = 0 O_2 = 20.9 0.0				0847 0921
	21		0.0			4.5/4.5	

HTW DRILLING LOG

HOLE NO. 045MW016

PROJECT SFAAP - SWMU 45 | INSPECTOR S. Woodland | SHEET 4 OF 5 SHEETS

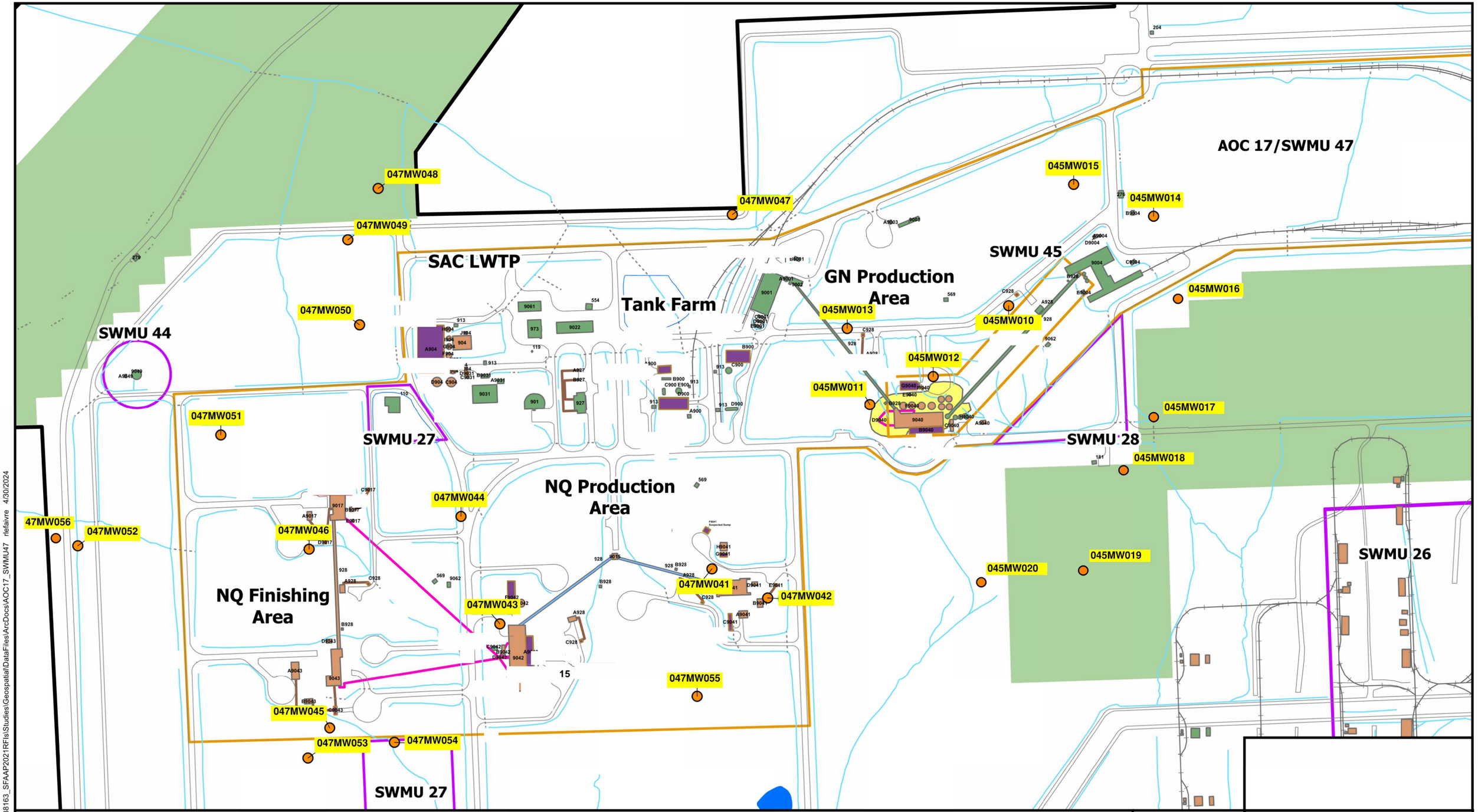
ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
		SAND, trace fines, SP, yellowish gray (5Y 7/2), poorly sorted, medium sand, moist, trace oxidation reddish brown (5YR 5/3).	BZ = 0.0 PID LEL = 0 O_2 = 20.9	NA	NA	Recovery	
	22		0.0				
						4.5/4.5	
	23	Trace staining black (23-23.5 ft)	0.0				
	24		0.0				DP Refusal @ 24.5 ft.
			BZ = 0.0 LEL = 0 O_2 = 20.9				
	25		BZ = 0.0 LEL = 0 O_2 = 20.9				0928 0858 Begin HSA Drilling Log Form Cuttings
	26						
	27	light brownish gray (2.5Y 6/2)					
	28						
	29						

HTW DRILLING LOG

HOLE NO. 045MW016

PROJECT SFAAP - SWMU 45 | INSPECTOR S. Woodland | SHEET 5 OF 5 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
	31	SAND, trace fines, SP, light brownish gray (2.5Y 6/2), poorly sorted, medium sand, moist, trace oxidation reddish brown (5YR 5/3).	BZ = 0.0 PID LEL = 0 O_2 = 20.9	NA	NA	Recovery	0938
	32						
	33						
	34						
	35		BZ = 0.0 LEL = 0 O_2 = 20.9				0943
	36						
	37						0947
		HSA Refusal @ 37.0 ft					Construct Monitoring Well
	38						



Legend

- Monitoring Well

BURNS McDONNELL

Monitoring Well Locations

AOC 17 / SWMUs 45 & 47 RFI Work Plan
Former Sunflower Army Ammunition Plant
De Soto, Kansas

Issued: 4/30/2024

Source: Burns & McDonnell Engineering

Path: Z:\Clients\ENS\USCOE\138163_SFAAP2021RFI\Studies\Geospatial\DataFiles\ArcDocs\AOC17_SWMU47 rlefaivre 4/30/2024