WATER WELL RECORD (WWC-5)

Constructed

KOLAR DOC ID 1810561 WELL ID 047MW047

✓ Original Record ☐ Correction ☐ Change in Well Use

LOCATION OF WATER WELL

Latitude	38.937197	Longitude	-95.026438	Section	12	Township	13	Range	21 ✓E ☐W	Fraction	NW ¼ SW ¼ NE ¼
Datum	WGS84	Elevation	940	County	Johnson						

WATER WELL OWNER

Name	
Business	Sunflower Redevelopment
Address	10345 W. 103rd St. De Soto Kans 66019
Well location ☐ at owner's address	Sunflower Army Ammunition Plant - SWMU 47 De Soto, Kansas

CONSTRUCTION

Borehole interval: from 0 to 34.5 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 24.5 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 21 ft.

Grout material: Bentonite

Grout interval: ____ ft. to ____ ft.

Grout material: ____

Screen / perforation material: PVC

Screen / perforation openings: Mill slot

Screen / perforation intervals:

From 24.5 ft. to 34.5 ft.

Slot size .01 unit inches

From ____ ft. to ____ ft.

Slot size ____ unit ____

Gravel pack intervals:

Gravel pack not used: ☐ Gravel size ____ in

From 21 ft. to 34.5 ft.

Gravel pack not used: ☐ Gravel size ____ in

From ____ ft. to ____ ft.

WELL WATER USE

Environmental Remediation / Monitoring Mc

COMPLETION

Depth of completed well: 34.5 ft.

Depth(s) groundwater encountered:

(1) 14 ft.; (2) ____ ft.;

(3) ____ ft.; (4) ☐ dry well

Static water level in well: 13.99 ft.

✓ measured below land surface on (mm/dd/yy): 10/28/2024

☐ 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: C404671050

Site Name: SWMU 47

KDHE UIC Class V Form Completed: ☐ Yes ✓ No

County Permit: ☐ Yes ✓ No Permit ID: ____

Lease Name & Well #: ____

# of boreholes: ____ # of dewatering wells: ____

LITHOLOGIC LOG

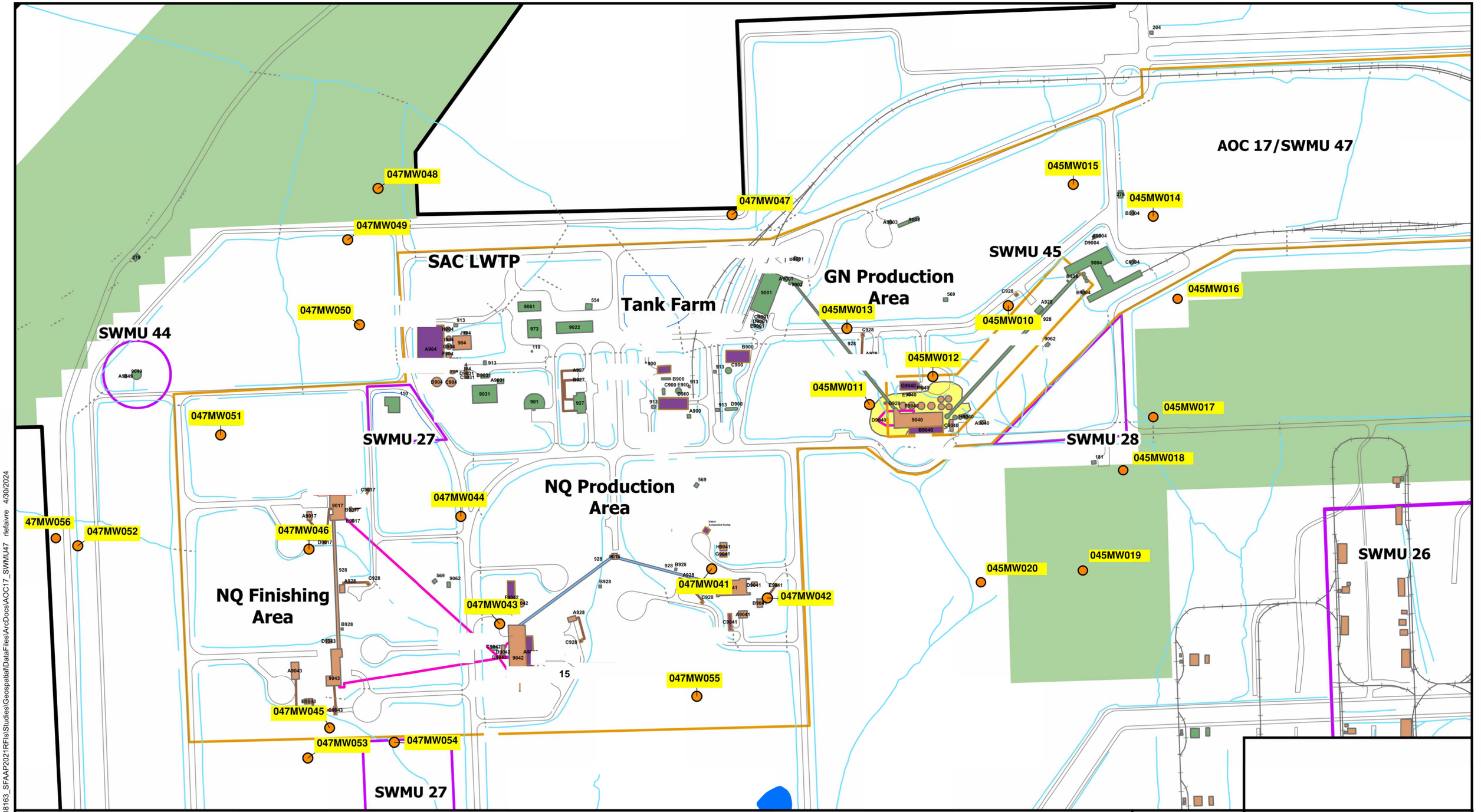
FROM	TO	LITHOLOGY INTERVALS
0	34.5	other,See Attached

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.


AOC 17/SWMU 47
SWMU 45
SWMU 44
SWMU 27
SWMU 28
SWMU 26
SWMU 27
SAC LWTP
Tank Farm
GN Production Area
NQ Production Area
NQ Finishing Area
047MW048
047MW047
047MW049
047MW050
047MW051
047MW056
047MW052
047MW046
047MW044
047MW043
047MW041
047MW042
047MW045
047MW053
047MW054
047MW055
045MW015
045MW014
045MW016
045MW013
045MW010
045MW012
045MW011
045MW017
045MW018
045MW019
045MW020
Legend
Monitoring Well
NORTH
300 150 0 300
Scale in Feet
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_SFAAP2021RFIs\Studies\Geospatial\DataFiles\ArcDocs\AOC17_SWMU47 rlefaivre 4/30/2024

HTW DRILLING LOG

HOLE NO. 047MW047

1. COMPANY NAME: Burns & McDonnell	2. DRILLING SUBCONTRACTOR: RAZEK ENV., Inc.	SHEET 1 OF 5 SHEETS
3. PROJECT: SFAAP	4. LOCATION: SWMU 47	
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: 2158010.5310 N: 233817.4810	
	9. SURFACE ELEVATION: 940.22 ft amsl	
	10. DATE STARTED: 5/15/24	11. DATE COMPLETED: 5/15/24
12. OVERBURDEN THICKNESS: 23.0 ft	15. DEPTH GROUNDWATER ENCOUNTERED: NA	
13. DEPTH DRILLED INTO ROCK: NA	16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: 5/15/24 NFW	
14. TOTAL DEPTH OF HOLE: 23.0 ft	17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): 6/17/24 13.99 ft btoc	

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
		047MW047	A17BMPZ026	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, trace very fine to fine sand, CL, light brownish gray (10YR 6/2), moist, very soft consistency, trace plasticity.	BZ = 0.0 PID LEL = 0 O_2 = 20.9 0.0	NA	NA	Recovery	DP @ 0920 HSA @ 0952
	1		0.0				
	2	CLAY, trace silt, CL, very dark gray (10YR 3/1), moist, hard consistency, trace plasticity.	0.0			5/5	
	3		0.0				
	4	with silt to very fine sand, gray (10YR 5/1), moist, stiff consistency, medium plasticity	0.0				

HTW DRILLING LOG

HOLE NO. 047MW047

PROJECT SFAAP - SWMU 47 | 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
		CLAY, with silt to very fine sand, CL, gray (10YR 5/1), moist, very stiff consistency, trace plasticity.	BZ = 0.0 PID LEL = 0 O_2 = 20.9 0.0	NA	NA	Recovery	0922 0955
	6		0.0			5/5	
	7	trace oxidation reddish brown (5YR 5/3)	0.0				
	8		0.0				
	9	CLAY, trace silt to fine sand, CH, light brownish gray (10YR 6/2), stiff consistency, high plasticity, trace oxidation reddish brown (5YR 5/3).	0.0				
	10		BZ = 0.0 LEL = 0 O_2 = 20.9 0.0				0925 0958
	11		0.0				
	12		0.0			5/5	
	13		0.0				

HTW DRILLING LOG

HOLE NO. 047MW047

PROJECT SFAAP - SWMU 47 | 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
	14	CLAY, trace silt to fine sand, CH, light brownish gray (10YR 6/2), moist, stiff consistency, high plasticity, trace oxidation reddish brown (5YR 5/3).	BZ = 0.0 PID LEL = 0 O_2 = 20.9 0.0	NA	NA	Recovery 5/5	
	15	light gray (10YR 7/1), hard consistency	BZ = 0.0 LEL = 0 O_2 = 20.9 0.0				0930 1002
	16		0.0				
	17		0.0				
	18		0.0			5/5	
	19	SHALE, light yellowish brown (10YR 6/4), moist, thinly laminated.	0.0				
	20		BZ = 0.0 LEL = 0 O_2 = 20.9 0.0				0936 1008
	21		0.0			3/3	

HTW DRILLING LOG

HOLE NO. 047MW047

PROJECT SFAAP - SWMU 47 | 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
	22	SHALE, light yellowish brown (10YR 6/4), moist, thinly laminated.	BZ = 0.0 PID LEL = 0 O_2 = 20.9 0.0	NA	NA	Recovery 3/3	DP Refusal @ 23.0 ft
	23		BZ = 0.0 LEL = 0 O_2 = 20.9				0952 Begin HSA Drilling Log Form Cuttings
	24						
	25		BZ = 0.0 LEL = 0 O_2 = 20.9				1015
	26						
	27	CLAY, light yellowish brown (10YR 6/4)				NA	
	28						
	29						

HTW DRILLING LOG

HOLE NO. 047MW047

PROJECT SFAAP - SWMU 47 | 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	CLAY, light yellowish brown (10YR 6/4)	BZ = 0.0 PID LEL = 0 O_2 = 20.9	NA	NA	Recovery NA	1022
	32						
	33						
	34						1025
		HSA Refusal @ 34.0 ft					Construct Temporary Piezometer
	35						
	36						
	37						
	38						