

KCS DR

WATER WELL RECORD Form WWC-5

Division of Water Resources App. No. [] Well ID A11MW006

Original Record Correction Change in Well Use

1 LOCATION OF WATER WELL: County: Johnson Fraction N 1/4 NW 1/4 NW 1/4 NW 1/4 Section Number 19 Township Number T 13 S Range Number R 22 E W

2 WELL OWNER: Last Name: Sunflower First: AAP Business: US Army Corp of Engineers - KCD Address: 635 Federal Building 601 East 12th Street City: Kansas City State: MO ZIP: 61406 Street or Rural Address where well is located: Sunflower Redevelopment, LLC 105345 W. 103rd Street, DeSoto, KS66019

3 LOCATE WELL WITH 'X' IN SECTION BOX: N W E S

4 DEPTH OF COMPLETED WELL: 100 ft. Depth(s) Groundwater Encountered: 1) 60.15 ft. 2) N/A ft. 3) N/A ft. or 4) Dry Well WELL'S STATIC WATER LEVEL: 67.70 ft. below land surface, measured on (mo-day-yr) 5/2/2022 Pump test data: Well water was N/A ft. after N/A hours pumping N/A gpm Well water was N/A ft. after N/A hours pumping N/A gpm Estimated Yield: N/A gpm Bore Hole Diameter: 11.875 in. to 27.5 ft. and 6.0 in. to 100 ft.

5 Latitude: 38.91243 (decimal degrees) Longitude: -95.01882 (decimal degrees) Horizontal Datum: WGS 84 NAD 83 NAD 27 Source for Latitude/Longitude: GPS (unit make/model:) (WAAS enabled? Yes No) Land Survey Topographic Map Online Mapper: Google Earth

6 Elevation: 924.23 ft. Ground Level TOC Source: Land Survey GPS Topographic Map Other Google Earth

7 WELL WATER TO BE USED AS: 1. Domestic: Household Lawn & Garden Livestock Irrigation Feedlot Industrial 5. Public Water Supply: well ID 6. Dewatering: how many wells? 7. Aquifer Recharge: well ID 8. Monitoring: well ID A11MW006 9. Environmental Remediation: well ID Air Sparge Soil Vapor Extraction Recovery Injection 10. Oil Field Water Supply: lease 11. Test Hole: well ID Cased Uncased Geotechnical 12. Geothermal: how many bores? a) Closed Loop Horizontal Vertical b) Open Loop Surface Discharge Inj. of Water 13. Other (specify):

Was a chemical/bacteriological sample submitted to KDHE? Yes No If yes, date sample was submitted: Water well disinfected? Yes No

8 TYPE OF CASING USED: Steel PVC Other CASING JOINTS: Glued Clamped Welded Threaded Casing diameter 2 in. to 90.0 ft., Diameter N/A in. to N/A ft., Diameter N/A in. to N/A ft. Casing height above land surface 30 in. Weight N/A lbs./ft. Wall thickness or gauge No. Sch. 40

TYPE OF SCREEN OR PERFORATION MATERIAL: Steel Stainless Steel Fiberglass PVC Other (Specify) Brass Galvanized Steel Concrete tile None used (open hole)

SCREEN OR PERFORATION OPENINGS ARE: Continuous Slot Mill Slot Gauze Wrapped Torch Cut Drilled Holes Other (Specify) Louvered Shutter Key Punched Wire Wrapped Saw Cut None (Open Hole)


SCREEN-PERFORATED INTERVALS: From 90.0 ft. to 100.0 ft., From N/A ft. to N/A ft., From N/A ft. to N/A ft. GRAVEL PACK INTERVALS: From 87.0 ft. to 100.0 ft., From N/A ft. to N/A ft., From N/A ft. to N/A ft.

9 GROUT MATERIAL: Neat cement Cement grout Bentonite Other Concrete 0 to 2 Grout Intervals: From 2 ft. to 87.0 ft., From N/A ft. to N/A ft., From N/A ft. to N/A ft.

Nearest source of possible contamination: Septic Tank Lateral Lines Pit Privy Livestock Pens Insecticide Storage Sewer Lines Cess Pool Sewage Lagoon Fuel Storage Abandoned Water Well Watertight Sewer Lines Seepage Pit Feedyard Fertilizer Storage Oil Well/Gas Well Other (Specify) Direction from well? Distance from well? ft.

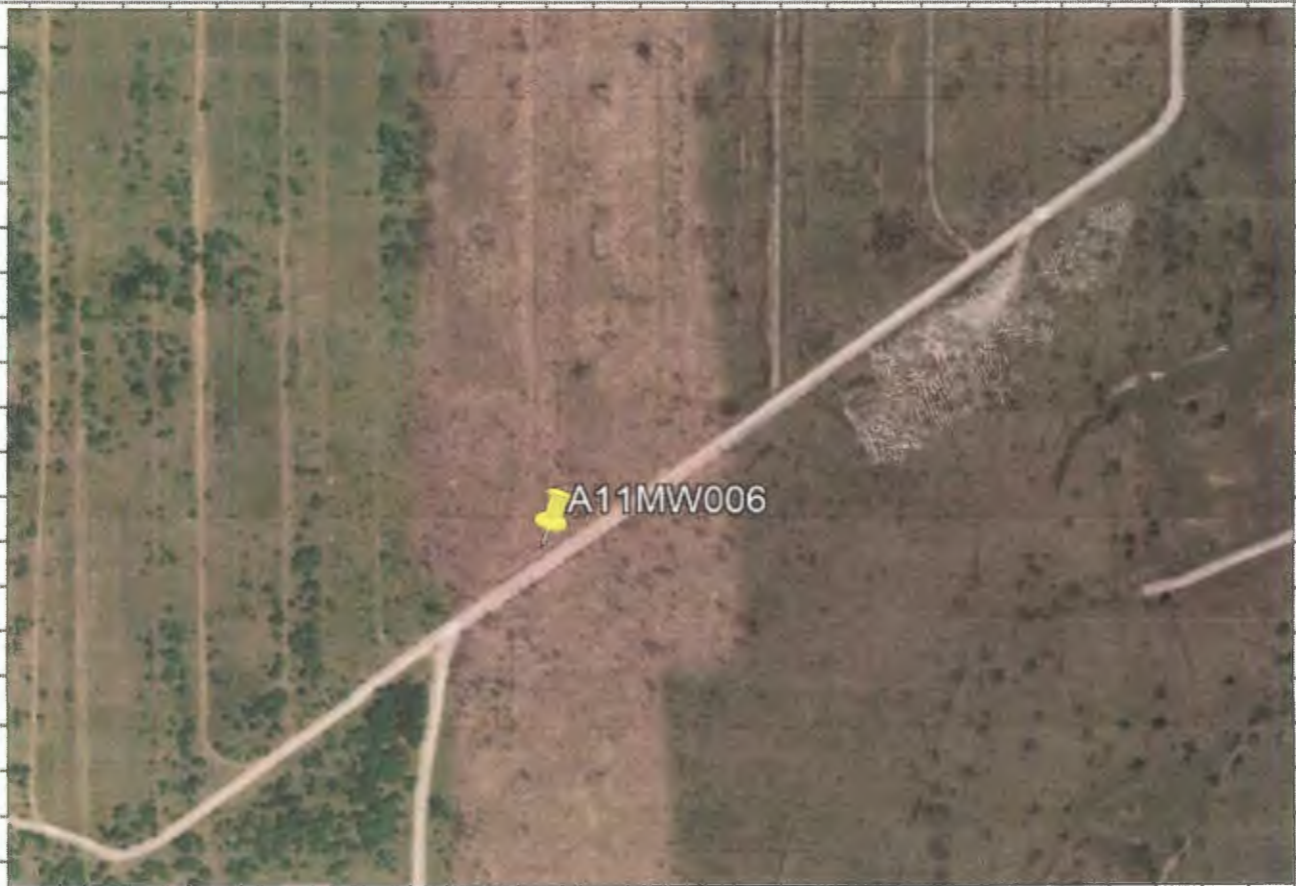
Table with 6 columns: 10 FROM, TO, LITHOLOGIC LOG, FROM, TO, LITHO. LOG (cont.) or PLUGGING INTERVALS. Content: Detailed boring logs attached, Notes:

11 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was constructed, reconstructed, or plugged under my jurisdiction and was completed on (mo-day-year) 2/25/2022. Kansas Water Well Contractor's License No. 759. This Water Well Record was completed on (mo-day-year) 5/6/2022 under the business name of RAZEK Environmental, LLC. Signature []

HTRW DRILLING LOG		DISTRICT 1CC		HOLE NUMBER A11MW006	
1. COMPANY NAME AECOM		2. DRILLING SUBCONTRACTOR AZEK		SHEET 1 OF SHEETS 1	
3. PROJECT SAAP			4. LOCATION A11MW006		
5. NAME OF DRILLER Tony Poulter			6. MANUFACTURER'S DESIGNATION OF DRILL 7822 DT		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION		9. SURFACE ELEVATION	
Macro Core Barrel		A11MW006		TBD	
10" PDC Bit				10. DATE STARTED 12-13-21	
6" Air Bit				11. DATE COMPLETED	
12. OVERBURDEN THICKNESS 27.5			15. DEPTH GROUNDWATER ENCOUNTERED 9.3' ATD		
13. DEPTH DRILLED INTO ROCK 72.5			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING		
14. TOTAL DEPTH OF HOLE 100			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)		
18. GEOTECHNICAL SAMPLES		19. TOTAL NUMBER OF CORE BOXES		21. TOTAL CORE RECOVERY %	
DISTURBED		UNDISTURBED		NT	
20. SAMPLES FOR CHEMICAL		OTHER (SPECIFY)		OTHER (SPECIFY)	
VOC X		METALS X		Full suite	
22. DISPOSITION OF HOLE		OTHER (SPECIFY)		23. SIGNATURE OF INSPECTOR	
BACKFILLED		MONITORING WELL			

LOCATION SKETCH/COMMENTS

SCALE:



PROJECT SAAP	HOLE A11MW006
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HTRW DRILLING LOG

(CONTINUATION SHEET)

HOLE
A11M006

PROJECT

SAAP

Inspector

A. Excech

SHEET SHEETS
2 OF

ELEV.	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	BLOW COUNTS	REMARKS
a.	b.	c.	d.	e.	f.	g.	h.
	1	Lean Clay (CL), stiff, moist, AB Drill Bin	0.0 PPM	1.0	A11BMMW006-90-ER0001		Bring Adv mat w/ macro core barrel
	2	Lean Fat Clay (CH), stiff, moist, bng mottled Bin, w/ Iron oxide staining + manganese nodules	0.0 PPM	1.5	A11-AMW006-50-ER0001FD		
	3						
	4						
	5						
	6						
	7						
	8						
	9		0.0 PPM	4.5	A11-AMW006-50-ER0002		
	10			9.0			
	10	sand (SP), loose, moist, comp, med to fine grained					

Project

SAAP

HOLE NO.

A11M006

HTRW DRILLING LOG (CONTINUATION SHEET) HOLE A11M006

PROJECT SAAP Inspector A. Exceen SHEET OF SHEETS

ELEV.	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	BLOW COUNTS	REMARKS
a.	b.	c.	d.	e.	f.	g.	h.
	11	Sand (SP), med Dense, med , Gry, fine to med grain Fat Clay (CH), stiff, moist, Gray mottled Brn Iron oxide staining & Manganese nodules					
	12						
	13						
	14						
	15	Sand (SP), med Dense, moist, fine to med grain,					
	16						
	17						
	18		0.0 ppm	17.5 18.0			A11M006-50-EA0003
	19						Δ H ₂ O @ 19' ATD
	20						

Project SAAP HOLE NO. A11M006

HTRW DRILLING LOG

(CONTINUATION SHEET)

HOLE
All MW006

PROJECT
SAAP

Inspector
A. Eyleen

SHEET 4 OF SHEETS

ELEV.	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	GEO TECH SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	BLOW COUNTS	REMARKS
a.	b.	c.	d.	e.	f.	g.	h.
	21	Sand (SP), Med Dense, wet, fine to med grain					
	22						
	23						
	24						
	25						
	26						
	27						
	28	Limestone: Hard, Fresh, Gray (south Bend LS)					27.5 Refusal w/ Macro Core Barrel STOPPED 12-13-21
	29	Shale: M. Hard, BS. weathered, brnish gray w/ ss interbedded layers (Rock Lake)					28.5 Refusal 12-14-21 Reamed to 28.5 w/ 10 5/8" HSA5 Drilled to 28.5 w/ 10" PDC Bit set PVC 8" casing to 28.5'
	30						

Project
SAAP

HOLE NO.
All MW006

HTRW DRILLING LOG

(CONTINUATION SHEET)

HOLE
A11 MW 006

PROJECT
SAAP

Inspector
M. Exceen

SHEET
5 OF SHEETS

ELEV.	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	GEO TECH SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	BLOW COUNTS	REMARKS
a.	b.	c.	d.	e.	f.	g.	h.
	31	Shale: M Hard, Sp weathered British Cong, w/ interbedded SS layers					Resumed 12-16-21 continued w/ 6" Air Bit
	32						
	33	Limestone: Hard, Fresh, gray (Stoner LS)					
	34						
	35						
	36						
	37						
	38						
	39						
	40						

Project
SAAP

HOLE NO
A11 MW 006
(Prepared by: CEG/EE)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE
A11MWOOD6

PROJECT
SAAP

Inspector
A. Exceen

SHEET
6 OF SHEETS

ELEV. a.	DEPTH b.	DESCRIPTION OF MATERIALS c.	FIELD SCREENING RESULTS d.	GEO TECH SAMPLE OR CORE BOX NO. e.	ANALYTICAL SAMPLE NO. f.	BLOW COUNTS g.	REMARKS h.
	41	Limestone: Hmd, Fresh, Gray					
	42						
	43						
	44						
	45						
	46						
	47	Shale; Hard, Fresh, Gray (Eudora SH)					
	48						
	49	Becoming Black					
	50						

Project
SAAP

HOLE NO.
A11MWOOD6

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE
A11 MW006
 SHEET **7** OF SHEETS

PROJECT
SAAP

Inspector
A. Exceen

ELEV. a.	DEPTH b.	DESCRIPTION OF MATERIALS c.	FIELD SCREENING RESULTS d.	GEO TECH SAMPLE OR CORE BOX NO. e.	ANALYTICAL SAMPLE NO. f.	BLOW COUNTS g.	REMARKS h.
	51	Shale: Hard, Fresh, Black					
	52						
	53						
	54	-----					
	55	Limestone: Hard, Fresh, Gray (Captain CK US)					Added 5 gal water to clean out bore hole
	56						
	57						
	58						
	59						
	60						

Project
SAAP

HOLE NO.
A11 MW006
 (Proponent: CECW-EG)

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE
A11MWOOD6

PROJECT
SAAP

Inspector
A. Exceen

SHEET 8 OF SHEETS

ELEV.	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	GEO TECH SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	BLOW COUNTS	REMARKS
a.	b.	c.	d.	e.	f.	g.	h.
	61	limestone: Hard, Fresh, Gray					
	62	shale: Hard, Fresh, Gray (Vilas SH)					
	63						
	64						
	65						
	66						
	67						
	68						
	69						
	70						

Project SAAP

HOLE NO. A11MWOOD6

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE
A11 MW 006

PROJECT
SAAP

Inspector
A. Exceen

SHEET
9 OF 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.
	71	Line Shale: Hard, Fresh, Gray					
	72						
	73						
	74						
	75						
	76	Limestone: Hard, Fresh, Gray (Spring Hill LS)					
	77						
	78						
	79						
	80						

Project
SAAP

HOLE NO.
A11 MW 006

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE
A11MWOOD6

PROJECT
SAAP

Inspector
A. Exceen

SHEET 10 OF SHEETS

ELEV.	DEPTH	DESCRIPTION OF MATERIALS	FIELD SCREENING RESULTS	GEOTECH SAMPLE OR CORE BOX NO.	ANALYTICAL SAMPLE NO.	BLOW COUNTS	REMARKS
a.	b.	c.	d.	e.	f.	g.	h.
	81	Limestone: Hvd, Fresh, cony					
	82						
	83						
	84						
	85						
	86						
	87						
	88						
	89						
	90						

Project SAAP

HOLE NO. A11MWOOD6

HTRW DRILLING LOG (CONTINUATION SHEET)

HOLE
A11MWOOD6

PROJECT
SAAP

Inspector
M. Exceen

SHEET 11 OF SHEETS

ELEV. a.	DEPTH b.	DESCRIPTION OF MATERIALS c.	FIELD SCREENING RESULTS d.	GEO TECH SAMPLE OR CORE BOX NO. e.	ANALYTICAL SAMPLE NO. f.	BLOW COUNTS g.	REMARKS h.
	91	Limestone: Hard, Fresh, Gray					
	92						
	93						Δ H ₂ O 93' ATD
	94						
	95						
	96						
	97						
	98	Shale: Hard, Fresh Gray (Hickory Creek St)					
	99						
	100						BOB 100'

Project
SAAP

HOLE NO.
A11MWOOD6