

WATER WELL RECORD

Form WWC-5

Division of Water Resources App. No.

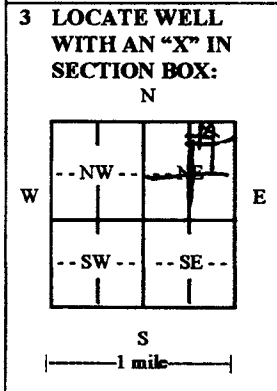
AMW-12

| | | | | |
|--|--|-----------------------------|-------------------------------|--|
| 1 LOCATION OF WATER WELL: County: Meade | Fraction NE 1/4 NE 1/4 NW 1/4 NE 1/4 | Section Number 11 | Township No. T 32 S | Range Number R 28 <input type="checkbox"/> E <input checked="" type="checkbox"/> W |
|--|--|-----------------------------|-------------------------------|--|

Street/Rural Address of Well Location; if unknown, distance & direction from nearest town or intersection: If at owner's address, check here **Carthage & State Street**

Global Positioning System (GPS) information:
 Latitude: **37.285310** (in decimal degrees)
 Longitude: **100.331831** (in decimal degrees)
 Elevation:
 Datum: WGS 84, NAD 83, NAD 27
 Collection Method:
 GPS unit (Make/Model: **Google Earth**)
 Digital Map/Photo, Topographic Map, Land Survey
 Est. Accuracy: <3 m, 3-5 m, 5-15 m, >15 m

2 WATER WELL OWNER: City of Meade
 RR#, Street Address, Box #: **132 S. Fowler**
 City, State, ZIP Code : **Meade, KS 67864**



4 DEPTH OF COMPLETED WELL 35.0' ft.
 Depth(s) Groundwater Encountered (1)..... ft. (2)..... ft. (3)..... ft.
 WELL'S STATIC WATER LEVEL **18.62'** ft. below land surface measured on mo/day/yr. **12/15**
 Pump test data: Well water was..... ft. after..... hours pumping..... gpm
 EST. YIELD..... gpm. Well water was..... ft. after..... hours pumping..... gpm
 Bore Hole Diameter **8.5'** in. to **35.0'** ft., and..... in. to..... ft.
 WELL WATER TO BE USED AS: Public water supply Geothermal Injection well
 Domestic Feedlot Oil field water supply Dewatering Other (Specify below)
 Irrigation Industrial Domestic-lawn & garden Monitoring well
 Was a chemical/bacteriological sample submitted to Department? Yes No
 If yes, mo/day/yr sample was submitted.....
 Water well disinfected? Yes No

5 TYPE OF CASING USED: Steel PVC Other
 CASING JOINTS: Glued Clamped Welded Threaded
 Casing diameter **2.0"** in. to **10.0'** ft., Diameter..... in. to..... ft., Diameter..... in. to..... ft.
 Casing height above land surface **Flush** in., Weight..... lbs./ft., Wall thickness or gauge No. **Sch. 40**
 TYPE OF SCREEN OR PERFORATION MATERIAL:
 Steel Stainless Steel PVC Other (Specify).....
 Brass Galvanized Steel None used (open hole)
 SCREEN OR PERFORATION OPENINGS ARE:
 Continuous slot Mill slot Gauze wrapped Torch cut Drilled holes None (open hole)
 Louvered shutter Key punched Wire wrapped Saw cut Other (specify).....
 SCREEN-PERFORATED INTERVALS: From **10.0'** ft. to **35.0'** ft., From..... ft. to..... ft.
 GRAVEL PACK INTERVALS: From **8.0'** ft. to **35.0'** ft., From..... ft. to..... ft.
 From..... ft. to..... ft., From..... ft. to..... ft.

6 GROUT MATERIAL: Neat cement Cement grout Bentonite Other
 Grout Intervals: From **0** ft. to **1.0'** ft., From **1.0'** ft. to **8.0'** ft., From..... ft. to..... ft.
 What is the nearest source of possible contamination:
 Septic tank Lateral lines Pit privy Livestock pens Insecticide storage Other (specify below)
 Sewer lines Cesspool Sewage lagoon Fuel storage Abandoned water well
 Watertight sewer lines Seepage pit Feedyard Fertilizer storage Oil well/gas well
 Direction from well Distance from well

| FROM | TO | LITHOLOGIC LOG | FROM | TO | LITHO. LOG (cont.) or PLUGGING INTERVALS |
|------|----|----------------|------|----|--|
| | | See Boring Log | | | |
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7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was constructed, reconstructed, or plugged under my jurisdiction and was completed on (mo/day/year) **12/16/2015** and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. **606** This Water Well Record was completed on (mo/day/year) **01/27/2016** under the business name of **PSA Environmental Services, LLC** by (signature).....

INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRESS FIRMLY and PRINT clearly. Please fill in blanks and check the correct answers. Send three copies (white, blue, pink) to Kansas Department of Health and Environment, Bureau of Water, Geology Section, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367. Telephone 785-296-5522. Send one copy to WATER WELL OWNER and retain one for your records. Include fee of \$5.00 for each constructed well. Visit us at <http://www.kdheks.gov/waterwell/index.html>.

SCS AQUATERRA

LOG OF BORING NO: **AMW-12**

SHEET NUMBER 1 of 2

7311 West 130th St, Overland Park, KS 66213

CLIENT: City of Meade

PROJECT NAME: Former Alley Oil

PROJECT NUMBER: 27215218.00

PROJECT LOCATION: Carthage and State Street

BORING LOCATION: 20' N of Building

AES PROJECT NO: 27215218.00

AES GEOLOGIST: Alex McCormick

START DATE: 12/16/15

FINISH DATE: 12/16/15

START TIME: 1545

FINISH TIME: 1700

DRILLING CONTRACTOR: PSA

DRILLER:

DRILLING RIG: GeoProbe

DRILLING METHOD: Hollow Stem Augers

SAMPLING METHOD: Grab

BORING DIAMETER: 8.5"

WELL DIAMETER: 2"

WELL COMPLETION: Flushmount

SURFACE ELEVATION: 2444.59

TOC ELEVATION: 2444.18

WATER LEVEL: 18.62

WATER ELEVATION: 2425.56

DATE:

WELL CONSTRUCTION DETAILS

MATERIAL: PVC

DIAMETER: 2 IN

WELL TOTAL DEPTH: 35 FT BGS

SCREEN LENGTH: 25 FT

RISER LENGTH: 10 FT

TOP OF SCREEN: 10 FT BGS

BOTTOM OF SCREEN: 35 FT BGS

SCREEN SLOT: 0.010 IN

TOP OF FILTER PACK: 8 FT BGS

TOP OF SEAL: 6 FT BGS

TYPE OF SEAL: Bentonite Chips

TYPE OF FILTER PACK: Silica Sand

| SAMPLE TYPE | SAMPLE DEPTH | PID (PPM) | RECOVERY (INCHES) | DEPTH IN FEET | USCS CLASS | C |
|-------------|--------------|-----------|-------------------|---------------|------------|---|
| | | | | 1 | | |
| | 0-5 | 0.4 | | 2 | | |
| | | | | 3 | | |
| | | | | 4 | | |
| | | | | 5 | | |
| | 5-10 | 1.1 | | 6 | | |
| | | | | 7 | | |
| | | | | 8 | | |
| | | | | 9 | | |
| | | | | 10 | | |
| | 10-15 | 1.7 | | 11 | | |
| | | | | 12 | | |
| | | | | 13 | | |
| | | | | 14 | | |
| | | | | 15 | | |
| | 15-20 | 14.3 | | 16 | | |
| | | | | 17 | | |
| | | | | 18 | | |
| | | | | 19 | | |
| | | | | 20 | | |

SOIL DESCRIPTION AND DRILLING CONDITIONS

NOTES AND WELL CONSTRUCTION

Concrete, gravel

CLAY, sandy, brown to dark brown, soft, moist

Moisture increasing with depth

SAND, gray, wet, coarse grained

Petro Odor

LEGEND:

SS - Split Spoon

CS - 5 foot CME Sampler

ST - Shelby Tube

PID - Photoionization Detector

PP - Pocket Penetrometer

HSA - Hollow Stem Augers

HA - Hand Auger

WB - Wash Bore

RB - Rock Bit

NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE

BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL

TRANSITIONS MAY BE GRADUAL

SCS AQUATERRA

LOG OF BORING NO.: **AMW-12**

SHEET NUMBER 2 of 2

7311 West 130th, Overland Park, KS 66213

GEOLOGIST: **Alex McCormick**

CLIENT: **City of Meade**

DATE:

PROJECT NAME: **Former Alley Oil**

PROJECT NUMBER: **27215218.00**

| SAMPLER TYPE | SAMPLE DEPTH | PID (PPM) | RECOVERY (INCHES) | DEPTH IN FEET | USCS CLASS | C I | SOIL DESCRIPTION AND DRILLING CONDITIONS | NOTES AND WELL CONSTRUCTION | | |
|--------------|--------------|-----------|-------------------|---------------|------------|-----|--|-----------------------------|----------------------|--|
| | 20-25 | 98.1 | | 21 | | | SAND, gray, wet, coarse grained | Petro Odor | | |
| | | | | 22 | | | | | | |
| | | | | 23 | | | | | | |
| | | | | 24 | | | | | | |
| | | | | 25 | | | | | | |
| | | | | 26 | | | | | | |
| | 25-30 | 77 | | 27 | | | | | | |
| | | | | 28 | | | | | | |
| | | | | 29 | | | | | | |
| | | | | 30 | | | | | | |
| | | | | 31 | | | | | | |
| | | | | 32 | | | | | | |
| | 30-35 | 43.2 | | 33 | | | | | | |
| | | | | 34 | | | | | | |
| | | | | 35 | | | | | | |
| | | | | 36 | | | | | | |
| | | | | 37 | | | | | | |
| | | | | 38 | | | | | | |
| | | | | 39 | | | | | | |
| | | | | 40 | | | | | | |
| | | | | 41 | | | | | | |
| | | | | 42 | | | | | | |
| | | | | 43 | | | | | | |
| | | | | 44 | | | | | | |
| | | | | 45 | | | | | | |
| | | | | | | | | | End of Boring at 35' | |

LEGEND:

- SS - Split Spoon
- CS - 5 foot CME Sampler
- ST - Shelby Tube
- PID - Photoionization Detector
- PP - Pocket Penetrometer
- HSA - Hollow Stem Augers
- HA - Hand Auger
- WB - Wash Bore
- RB - Rock Bit
- NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.