157 8726 Site 3 OBGMD-3

WATER WELL RECORD

Corrected Copy
Form WWC-5

Division of Water Resources; App. No.

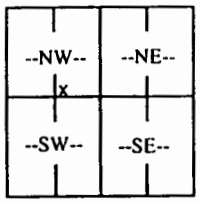
1 LOCATION OF WATER WELL: County: Haskell | Fraction: SW 1/4 SE 1/4 NW 1/4 | Section Number: 36 | Township Number: T 27 S | Range Number: R 31 E (W)

Distance and direction from nearest town or city street address of well if located within city? Approximately 11 1/2 miles west and 4 miles north of Montezuma

Global Positioning Systems (decimal degrees, min. of 4 digits)
Latitude: 37.657017
Longitude: -100.664848
Elevation: Unknown
Datum: NAD83
Data Collection Method: WAAS GPS Unit

2 WATER WELL OWNER: ~~University of Kansas~~ Center for Research, Inc.
RR#, St. Address, Box #: ~~2385 Irving Hill Road~~ Kansas Geological Survey 1930 Constant Ave.
City, State, ZIP Code: ~~Lawrence, KS 66045-7563~~ Lawrence, KS 66045

3 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:



4 DEPTH OF COMPLETED WELL 432 ft.

Depth(s) Groundwater Encountered (1) ..... ft. (2) ..... ft. (3) ..... ft.

WELL'S STATIC WATER LEVEL 317.65 ft. below land surface measured on mo/day/yr 06-20-07

Pump test data: Well water was Not checked ft. after ..... hours pumping ..... gpm

Est. Yield Unknown gpm: Well water was ..... ft. after ..... hours pumping ..... gpm

WELL WATER TO BE USED AS: 5 Public water supply 8 Air conditioning 11 Injection well
1 Domestic 3 Feedlot 6 Oil field water supply 9 Dewatering (12) Other (Specify below)
2 Irrigation 4 Industrial 7 Domestic (lawn & garden) 10 Monitoring well Observation

Was a chemical/bacteriological sample submitted to Department? Yes ..... No ✓ If yes, mo/day/yrs

Sample was submitted ..... Water well disinfected? Yes ..... No ✓

5 TYPE OF CASING USED: 5 Wrought Iron 8 Concrete tile CASING JOINTS: Glued ✓ Clamped .....
1 Steel 3 RMP (SR) 6 Asbestos-Cement 9 Other (specify below) ..... Welded .....
(2) PVC 4 ABS 7 Fiberglass ..... Threaded .....

Blank casing diameter 2 1/2 in. to 420 ft., Diameter ..... in. to ..... ft., Diameter ..... in. to ..... ft.

Casing height above land surface 24 in., weight 1.45 lbs./ft. Wall thickness or gauge No. .276

TYPE OF SCREEN OR PERFORATION MATERIAL:
1 Steel 3 Stainless Steel 5 Fiberglass (7) PVC 9 ABS 11 Other (Specify) .....
2 Brass 4 Galvanized Steel 6 Concrete tile 8 RM (SR) 10 Asbestos-Cement 12 None used (open hole)

SCREEN OR PERFORATION OPENINGS ARE:
1 Continuous slot (3) Mill slot 5 Gauzed wrapped 7 Torch cut 9 Drilled holes 11 None (open hole)
2 Louvered shutter 4 Key punched 6 Wire wrapped 8 Saw Cut 10 Other (Specify) .....

SCREEN-PERFORATED INTERVALS: From 420 ft. to 430 ft., From ..... ft. to ..... ft.
From ..... ft. to ..... ft., From ..... ft. to ..... ft.

GRAVEL PACK INTERVALS: From 325 ft. to 435 ft., From ..... ft. to ..... ft.
From 435 ft. to 460 ft., From ..... ft. to ..... ft.

6 GROUT MATERIAL: (1) Neat Cement 2 Cement grout 3 Bentonite (4) Other Bentonite Holeplug

Grout Intervals: From 4 ft. to 325 ft., From ..... ft. to ..... ft., From 0 ft. to 4 ft.

What is the nearest source of possible contamination:
1 Septic tank 4 Lateral lines 7 Pit privy 10 Livestock pens 13 Insecticide Storage (16) Other (specify below)
2 Sewer lines 5 Cess pool 8 Sewage lagoon 11 Fuel storage 14 Abandoned water well None known
3 Watertight sewer lines 6 Seepage pit 9 Feedyard 12 Fertilizer Storage 15 Oil well/gas well

Direction from well? ..... How many feet? .....

FROM	TO	LITHOLOGIC LOG	FROM	TO	PLUGGING INTERVALS
0	2	Topsoil	95	107	Sand, fine to coarse
2	28	Clay, tan, silty, some caliche	107	115	Clay, tan, white, sandy, with some caliche
28	34	Sand, fine to coarse	115	130	Sand, gravel, fine to medium
34	45	Clay, tan, white, silty	130	145	Sand, gravel, fine to coarse, with clay
45	56	Clay, red, brown, with caliche			streaks, thin, yellow
56	63	Sand, fine to very fine	145	245	Sand, gravel, fine to coarse
63	68	Clay, tan, white, with streaks of caliche and	245	250	Sand, gravel, fine to coarse, with clay, gray
		cemented sand, thin	250	280	Sand, gravel, fine to coarse, with clay
68	80	Sand, fine to very fine, silty			streaks, thin, yellow
80	95	Cemented sand, soft, with clay, brown, and	280	296	Sand, gravel, fine to medium, with clay
		caliche streaks			streaks, thin, yellow

CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was (1) (constructed) (2) reconstructed (3) plugged under my jurisdiction and was completed on (mo/day/year) 06-20-07 and this record is true to the best of my knowledge and belief.

Kansas Water Well Contractor's License No. 185 This Water Well Record was completed on (mo/day/year) 06-26-07

Under the business name of Clarke Well & Equipment, Inc. by (signature) James W. Clark

INSTRUCTIONS: Use typewriter or ball point pen. *PLEASE PRESS FIRMLY* and *PRINT* clearly. Please fill in blanks, underline or circle the correct answers. Send top three copies 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 to WATER WELL OWNER and retain one for your records. Fee of $5.00 for each constructed well.

158 8726 Site 3 OBGMD-3 (Cont'd) **Corrected Copy**

WATER WELL RECORD

Form WWC-5 Division of Water Resources; App. No.

1 LOCATION OF WATER WELL: County: Haskell | Fraction: SW 1/4 SE 1/4 NW 1/4 | Section Number: 36 | Township Number: T 27 S | Range Number: R 31 E (W)

Distance and direction from nearest town or city street address of well if located within city? Approximately 11 1/2 miles west and 4 miles north of Montezuma

Global Positioning Systems (decimal degrees, min. of 4 digits)
Latitude: 37.657017
Longitude: -100.664848
Elevation: Unknown
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Data Collection Method: WAAS GPS Unit

2 WATER WELL OWNER: ~~University of Kansas~~ Center for Research, Inc. 2385 Irving Hill Road Lawrence, KS 66045-7563
RR#, St. Address, Box #: Kansas Geological Survey 1930 Constant Ave.
City, State, ZIP Code: Lawrence, KS 66045

3 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX: N / W / E / S; --NW-- --NE-- --SW-- --SE-- (X in NW)

4 DEPTH OF COMPLETED WELL ..... ft.
Depth(s) Groundwater Encountered (1) ..... ft. (2) ..... ft. (3) ..... ft.
WELL'S STATIC WATER LEVEL ..... ft. below land surface measured on mo/day/yr .....
Pump test data: Well water was ..... ft. after ..... hours pumping ..... gpm
Est. Yield ..... gpm: Well water was ..... ft. after ..... hours pumping ..... gpm
WELL WATER TO BE USED AS: 5 Public water supply 8 Air conditioning 11 Injection well
1 Domestic 3 Feedlot 6 Oil field water supply 9 Dewatering 12 Other (Specify below)
2 Irrigation 4 Industrial 7 Domestic (lawn & garden) 10 Monitoring well
Was a chemical/bacteriological sample submitted to Department? Yes ..... No ..... If yes, mo/day/yrs
Sample was submitted ..... Water well disinfected? Yes ..... No .....

5 TYPE OF CASING USED: 5 Wrought Iron 8 Concrete tile CASING JOINTS: Glued ..... Clamped .....
1 Steel 3 RMP (SR) 6 Asbestos-Cement 9 Other (specify below) ..... Welded .....
2 PVC 4 ABS 7 Fiberglass ..... Threaded .....
Blank casing diameter ..... in. to ..... ft., Diameter ..... in. to ..... ft., Diameter ..... in. to ..... ft.
Casing height above land surface ..... in., weight ..... lbs./ft. Wall thickness or gauge No. .....

TYPE OF SCREEN OR PERFORATION MATERIAL:
1 Steel 3 Stainless Steel 5 Fiberglass 7 PVC 9 ABS 11 Other (Specify) .....
2 Brass 4 Galvanized Steel 6 Concrete tile 8 RM (SR) 10 Asbestos-Cement 12 None used (open hole)

SCREEN OR PERFORATION OPENINGS ARE:
1 Continuous slot 3 Mill slot 5 Gauzed wrapped 7 Torch cut 9 Drilled holes 11 None (open hole)
2 Louvered shutter 4 Key punched 6 Wire wrapped 8 Saw Cut 10 Other (Specify) .....

SCREEN-PERFORATED INTERVALS: From ..... ft. to ..... ft., From ..... ft. to ..... ft.
From ..... ft. to ..... ft., From ..... ft. to ..... ft.
GRAVEL PACK INTERVALS: From ..... ft. to ..... ft., From ..... ft. to ..... ft.
From ..... ft. to ..... ft., From ..... ft. to ..... ft.

6 GROUT MATERIAL: 1 Neat Cement 2 Cement grout 3 Bentonite 4 Other .....

Grout Intervals: From ..... ft. to ..... ft., From ..... ft. to ..... ft., From ..... ft. to ..... ft.
What is the nearest source of possible contamination:
1 Septic tank 4 Lateral lines 7 Pit privy 10 Livestock pens 13 Insecticide Storage 16 Other (specify below)
2 Sewer lines 5 Cess pool 8 Sewage lagoon 11 Fuel storage 14 Abandoned water well .....
3 Watertight sewer lines 6 Seepage pit 9 Feedyard 12 Fertilizer Storage 15 Oil well/gas well
Direction from well? ..... How many feet? .....

FROM	TO	LITHOLOGIC LOG	FROM	TO	PLUGGING INTERVALS
296	370	Clay, tan, brown, yellow, with some			
		cemented sand, shale pieces, and caliche			
370	413	Clay, tan, brown, sandy, with caliche streaks			
413	433	Sand, gravel, fine to medium			
433	445	Weathered shale, yellow, black			
445	460	Clay, red, gray, white			

CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was (1) constructed (2) reconstructed (3) plugged under my jurisdiction and was completed on (mo/day/year) 06-20-07 and this record is true to the best of my knowledge and belief.
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Under the business name of Clarke Well & Equipment, Inc. by (signature)

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CLARKE WELL & EQUIPMENT, INC.
WELL RECORD

FORMATION TEST ONLY ☐
PLUGGED ☐

JOB NUMBER 8726

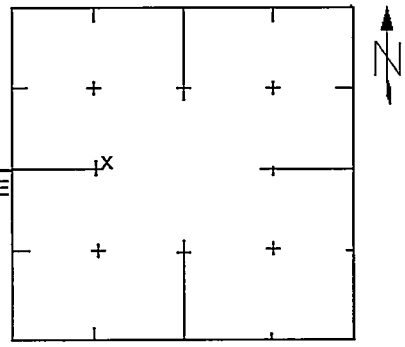
WELL OWNER University of Kansas Center for Research, Inc. WELL NO. Site 3 OBGMD-3

WELL USE Observation APPR. NO.

LEGAL SW 1/4 SE 1/4 NW 1/4 Sect 36 Twp 27 S Rng 31 W Haskell COUNTY KS STATE

FSL, FEL

GPS - 353182 E 4168857 N Zone 14 NAD 27



Formation Log SIZE HOLE 6 " DIA. Electric Log ☒ SWL 317.65' SECTION 36

FROM	TO	FEET	FORMATION / COMMENTS	SAMPLES TAKEN
0	2		Topsoil	
2	28		Clay, tan, silty, some caliche	
28	34		Sand, fine to coarse	
34	45		Clay, tan, white, silty	
45	56		Clay, red, brown, with caliche	
56	63		Sand, fine to very fine	
63	68		Clay, tan, white, with streaks of caliche and cemented sand, thin	
68	80		Sand, fine to very fine, silty	
80	95		Cemented sand, soft, with clay, brown, and caliche streaks	
95	107		Sand, fine to coarse	
107	115		Clay, tan, white, sandy, with some caliche	
115	130		Sand, gravel, fine to medium	
130	145		Sand, gravel, fine to coarse, with clay streaks, thin, yellow	
145	245		Sand, gravel, fine to coarse	
245	250		Sand, gravel, fine to coarse, with clay, gray	
250	280		Sand, gravel, fine to coarse, with clay streaks, thin, yellow	
280	296		Sand, gravel, fine to medium, with clay streaks, thin, yellow	
296	370		Clay, tan, brown, yellow, with some cemented sand, shale pieces, and caliche	
370	413		Clay, tan, brown, sandy, with caliche streaks	
413	433		Sand, gravel, fine to medium	
433	445		Weathered shale, yellow, black	
445	460		Clay, red, gray, white	

(Well Construction on Other Side) DRILLED BY Lew Raybern DATE 06-20-07

406332

WELL CONSTRUCTION

JOB # 8726 WELL OWNER University of Kansas Center for Research, Inc. WELL NO. Site 3 OBGMD-3

HOLE DIA. 6 " TD 460 ☐ REAMED OUT FROM _____ " DIA. HOLE DRILLING METHOD Mud Rotary

SIZE CASING 2 1/2 " DIA. .276 WALL; WT. 1.45 LBS/FT PVC MATERIAL

SIZE SCREEN 2 1/2 " DIA. .276 WALL; PVC MATERIAL

SCREEN TYPE Mill Slot

CASING AND SCREEN

DESCRIPTION	FROM	TO	FEET	OPENING
Casing	0	420	420	
Screen	420	430	10	.032

Casing left above ground	2
Total Casing and Screen	432

GRAVEL PACK / ANNULAR SEAL

MATERIAL	FROM	TO	FEET	QTY
Bentonite Holeplug	0	4	4	
Neat Cement	4	325	321	
Gravel Pack (Klotz)	325	435	110	
Gravel Pack (Larned)	435	460	25	

Water Samples

FROM	TO	Cl (ppm)	OTHER TESTS

Development

Method	Hours
Air	1 1/2

Disinfected with None Quantity _____

What is the nearest source of possible contamination? None known

Direction from well _____ How many feet _____

Water level measurement tube installed? ☐ Yes ☑ No Locking cap installed? ☐ Yes ☑ No

NOTE: All measurements are from ground level DESIGNED BY _____