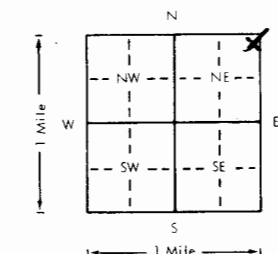


1 LOCATION OF WATER WELL		Fraction		Section Number		Township Number		Range Number	
County: Pratt		NE 1/4 NE 1/4 NE 1/4		6		T 29 S		R 11 EW	
Distance and direction from nearest town or city? 6 mi S of Cairo				Street address of well if located within city?					
2 WATER WELL OWNER: KGS/GWMD#5									
RR#, St. Address, Box # :				Board of Agriculture, Division of Water Resources					
City, State, ZIP Code :				Application Number:					
3 DEPTH OF COMPLETED WELL: 199 ft. Bore Hole Diameter: 9-7/8 in. to 199 ft., and in. to ft.									
Well Water to be used as:									
1 Domestic 3 Feedlot 5 Public water supply 8 Air conditioning 11 Injection well									
2 Irrigation 4 Industrial 6 Oil field water supply 9 Dewatering 12 Other (Specify below)									
7 Lawn and garden only 10 Observation well									
Well's static water level: 49.7 ft. below land surface measured on January 27 month 27 day 1983 year									
Pump Test Data: Well water was ft. after hours pumping gpm									
Est. Yield gpm: Well water was ft. after hours pumping gpm									
4 TYPE OF BLANK CASING USED:									
1 Steel 3 RMP (SR) 5 Wrought iron 8 Concrete tile Casing Joints: Glued Clamped									
2 PVC 4 ABS 7 Fiberglass 9 Other (specify below) Welded									
Blank casing dia: 5 in. to 194 ft., Dia in. to ft., Dia in. to ft.									
Casing height above land surface: 16 in., weight lbs./ft. Wall thickness or gauge No SDR 21									
TYPE OF SCREEN OR PERFORATION MATERIAL:									
1 Steel 3 Stainless steel 5 Fiberglass 8 RMP (SR) 10 Asbestos-cement									
2 Brass 4 Galvanized steel 6 Concrete tile 9 ABS 11 Other (specify)									
12 None used (open hole)									
Screen or Perforation Openings Are:									
1 Continuous slot 3 Mill slot 5 Gauzed wrapped 8 Saw cut 11 None (open hole)									
2 Louvered shutter 4 Key punched 6 Wire wrapped 9 Drilled holes									
7 Torch cut 10 Other (specify)									
Screen-Perforation Dia: 5 in. to 199 ft., Dia in. to ft., Dia in. to ft.									
Screen-Perforated Intervals: From 194 ft. to 199 ft., From ft. to ft. to ft.									
Gravel Pack Intervals: From 192 ft. to 199 ft., From ft. to ft. to ft.									
5 GROUT MATERIAL:									
1 Neat cement 2 Cement grout 3 Bentonite 4 Other									
Grouted Intervals: From 79 ft. to 192 ft., From 0 ft. to 10 ft., From ft. to ft.									
What is the nearest source of possible contamination:									
1 Septic tank 4 Cess pool 7 Sewage lagoon 10 Fuel storage 14 Abandoned water well									
2 Sewer lines 5 Seepage pit 8 Feed yard 11 Fertilizer storage 15 Oil well/Gas well									
3 Lateral lines 6 Pit privy 9 Livestock pens 12 Insecticide storage 16 Other (specify below)									
13 Watertight sewer lines									
Direction from well: How many feet? Water Well Disinfected? Yes No									
Was a chemical/bacteriological sample submitted to Department? Yes No If yes, date sample									
was submitted month day year Pump Installed? Yes No									
If Yes: Pump Manufacturer's name Model No. HP Volts									
Depth of Pump Intake ft. Pumps Capacity rated at gal./min.									
Type of pump: 1 Submersible 2 Turbine 3 Jet 4 Centrifugal 5 Reciprocating 6 Other									
6 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was									
completed on September month 15 day 1982 year									
and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No.									
This Water Well Record was completed on March month 27 day 1983 year under the business									
name of by (signature) Patrick McElh									
7 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:									
									
FROM TO LITHOLOGIC LOG FROM TO LITHOLOGIC LOG									
0 4 red-black clay (t.soil) 114 115 pink clay									
4 11 gray & tan silty clay w/ caliche 115 122 sand & grvl w/clay lenses									
11 13 white, orange, tan, pink clay 122 136 tan clay w/sand									
13 44 sand w/clay & caliche 136 143 sand & gravel									
44 49 clay, lt. brn - white 143 144 tan clay									
49 91 sand & grvl w/clay & caliche near top 144 164 grvl, sand w/some clay									
91 92 tan clay & caliche 164 179 pnk clay w/sand & grvl									
92 114 sand & grvl w/some clay 179 202 red beds; silty-sandy									
ELEVATION: & caliche									
Depth(s) Groundwater Encountered 1. ft. 2. ft. 3. ft. 4. ft. (Use a second sheet if needed)									
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, Division of Environment, Water Well Contractors, Topeka, KS 66620. Send one to WATER WELL OWNER and retain one for your records.									

BIG BEND GMD#5-KGS
WATER QUALITY
OBSERVATION WELL
NETWORK

SITE NUMBER : 46
SITE LOCATION: NE NE NE

LEGAL LOCATION: 6-29-11W
COUNTY : PRATT

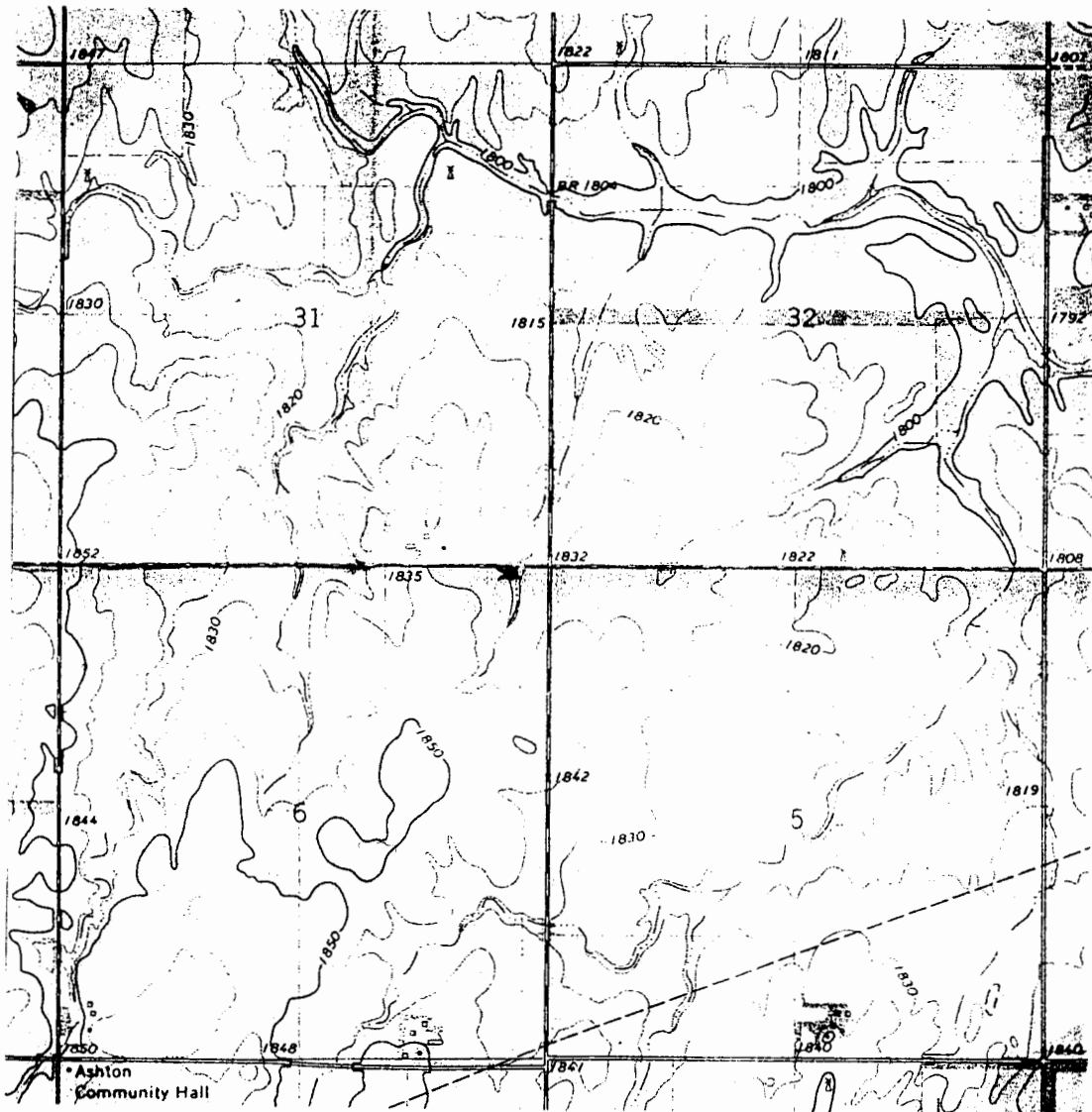
WELL LOG

FROM	TO	LITHOLOGIC LOG	OWNER: ARMISTEAD/BRANT
0	1	black topsoil	
1	3	reddish tan clay	
3	4	black silty clay	
4	8	tan clay with silt and caliche	
8	11	gray and tan silty clay with caliche	
11	13	white, orange, tan, and pink clay with fine to very fine sand; heavy caliche at 12'	
13	17	sand with orange clay, some caliche	
17	20	sand with pinkish clay and caliche	
20	37	sand, 0.5-1.0 mm	
37	44	sand (1.0 mm), some caliche	
44	49	clay, light brown to white, hard; some caliche	
49	56	sand (0.5 mm) yellow clay and caliche	
56	62	same, very hard drilling at 59'	
62	77	sand (0.5-1.5 mm)	
77	91	sand (1.0-2.5 mm) pebbles, cobbles	
91	92	tan clay and caliche	
92	98	coarse sand, fine gravel (1.5-3.0 mm), caliche	
98	114	sand (0.5-2.0 mm) white and tan clay, caliche	
114	115	pink clay	
115	122	sand and gravel (1.0-3.0 mm); clay lenses at 118-118.5' and 120-122'	
122	136	clay, tan with sand	
136	143	sand and gravel (0.5-2.5 mm), tan clay	
143	144	tan clay	
144	148	sand (1.0-1.5 mm), trace of clay	
148	149	cobbles or caliche	
149	152	sand (1.0-2.0 mm) trace of red clay	
152	157½	sand and gravel (1.0-3.0 mm) pink clay	
157½	158	cobbles or heavy caliche	
158	161	sand and gravel (1.0-3.0 mm)	
161	162	cobbles or heavy caliche	
162	164	gravel (3.0 mm)	
164	179 177	pink clay with sand and gravel	
179	202	red beds, silty to sandy Permian	

TD=199'	TD=166'	TD=23'
195'/5'	164'/5'	72'/5'

SITE NUMBER : 46
SITE LOCATION : NE NE NE
LEGAL LOCATION: 6-29-11W
COUNTY : PRATT

LANDOWNER: DALE ARMISTEAD
ADDRESS : c/o DARRELL BRANT
ISABEL, KS 67065
PHONE NO.: (316)-739-4545



WELL LOCATION ✱

Owner -----

NE 1/4 NE 1/4 NE 1/4 sec. 6 T. 29 R. 11

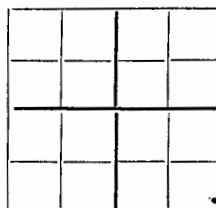
County Prott Date 15 Sept 82

Static Water Level -----

Topo. Sheet ----- Elev. -----

Depth 202' Yield -----

Location -----

46 Well #1

Formation Record

ft.	From	To	Description
K	0	1	top soil
	1	3	reddish tan clay
	3	4	black silty clay
	4	8	tan clay with silt & caliche
	8	11	gray tan silty clay with caliche
	11	13	whitish orange tan, pink clay with fine to very fine sand
			very caliche @ 12'
1	13	17	sand fine, orange, with orange clay (.5mm) some caliche
	17	20	sand, fine - very fine, reddish clay caliche
2	20	37	sand fine to med with caliche
	37	49	sand medium (1mm) some caliche
3	49	47	clay, light brown to white, hard, some caliche
	47	49	same
	49	56	sand, fine (.5mm) yellow clay, caliche
4	56	62	same very hard @ 59' some 1mm sand
	62	77	sand < 1mm coarse 69-65
			fine sand < .5 mm
	77	89	sample shows mud to coarse sand - mud loss
			locates coarse material's, recovered 5 cm
			caliche from bit
	89	91	same
5	91	92	tan clay & caliche

Owner -----

----- 1/4 ----- 1/4 ----- 1/4 sec. ----- T. ----- R. -----

County ----- Date -----

Static Water Level -----

Topo. Sheet ----- Elev. -----

Depth ----- Yield -----

Location -----

Formation Record

St.	From	To	Description	
	92	98	fine gravel, coarse sand, some caliche (1-2.5 mm)	
	98	100	sand ($\frac{1}{2}$ to 2 mm) some tan clay caliche	
	100	104	sand ($\frac{1}{2}$ mm), clay	
7	104	107	sand ($\frac{1}{2}$ mm), white clay some 1 mm sand, trace caliche	
	107	114	sand (1-2 mm), fine gravel > 2 mm, < 3 mm	
	114	115	pink clay	
	115	122	sand ($\frac{1}{2}$ mm), sand (2 mm), gravel (3 mm), caliche	
			clay @ 118, pink to gray tan clay 120-122	
8	122	128	tan clay with fine sand & caliche	
	128	136	sand, < $\frac{1}{2}$ to > 2 mm tan clay	
9	136	137	sand < $\frac{1}{2}$ to > 1 mm, fine gravel	
	137	143	fine to med sand, some clay very coarse @ 142'	
	143	144	clay, tan	
	144	148	sand 1-1 $\frac{1}{2}$ mm with trace of clay	
	148	149	cobbles or heavy caliche	
10	149	152	sand (1-2 mm), trace of red clay	
	152	157 $\frac{1}{2}$	sand (1-2 $\frac{1}{2}$ mm), some gravel (> 2 $\frac{1}{2}$ mm) pink clay	
	157 $\frac{1}{2}$	158	cobbles or caliche	
	158	161	sand / gravel	
	161	162	cobbles or caliche	
	162	164	fine gravel (3 mm)	
1	164	167	pink clay some fine gravel	

Owner	1111 E 70 & 2nd
County	gravel @ 74
Date	

----- 1/4 ----- 1/4 ----- 1/4 sec. ----- T. ----- R. -----

Static Water Level -----

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Topo. Sheet	Elev.
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Depth	Yield
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Location -----

Formation Record

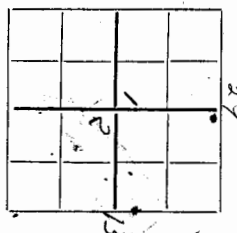
No.	From	To	Description	
	167	169	clay, pink, fine sand	
	169	179	sand/gravel very	coarse @ 169 1/2, 171 1/2,
			pink clay	
	179	181	dark red clay	(unweathered red bed)
12	181	182	unweathered red	siltstone
13	182	197	same	
	197	202	same	
			TD = 202	
			5' screen (5")	(cap on bottom)
			200' blank 5"	
			cored depth = 199	land surface to cap
			gravelled interval	199 - 192
			29 sacks portland	as 360 gal mat
			caved to 41 feet	next day (Sept 16)
			10 1/2 bags gel	2 quick trials

Owner: Site # 414 NW 1/4 NE 1/4 NE 1/4 sec. 12 T. 29 R. 13 W

County: Date: Static Water Level: 29

Topo. Sheet: Elev. Depth: Yield:

Location: 4 mi north 1/2 west of Sawyer



Formation Record

From	To	Description
0 - 1 1/2		black clayey topsoil
1 1/2 - 6		tan clayey sand zone caliche @ 3' (1/2 mm m to coarse (2.5-28 mm) also gravel (2.5-5 mm)
6 - 10		sand (< 1 mm) minor clay yellow clay & gray clay
10 - 12		clay & gravel (1-4 mm) angular QA
12 - 17		sand & gravel (1-2 mm) clay lens @ 15'
17 - 19		sand 1-2 mm clay lens @ 15'
19 - 30		clay gray with sand < 1/2 mm some 1 mm sand caliche some gray yellow gray occasional coarse
30 - 32		sand / gravel 1-3 mm (lenses in above clay)
32 - 32		rounded 17-32 pure due to swelling clay
32 - 40		clay & caliche tan trace 1 mm sand angular
40 - 42		sand < 1/2 mm - 1 mm some fine clay
42 - 44		same 44' 6" gravel
44 - 47		tan clay with some sand 1/2 - 2 1/2 mm
47 - 52		clay, tan, with fine sand ~ .25 mm, caliche, some iron sand
52 - 55		sand 1 mm some yellow clay
55 - 62		sand & 1/2 - 2 mm yellow clay lenses
62 - 67		sand with 1/2 to 1 1/2 mm tan clay lenses some cobbles?
67 - 75		clay & sand mostly sand, 1 mm, tan clay some caliche

Owner -----

1/4 1/4 1/4 sec. T. R.

County ----- Date -----

Static Water Level -----

Topo. Sheet ----- Elev. -----

Depth ----- Yield -----

Location -----

Formation Record

t. From To		Description	
5	75	77	tan clay matrix, 4 white clay, (light grey) reds - sand (1-2 mm) calcite
			some fine gravel (1.5 mm) angular
	77	80	same
6	80	92	sand, gravel, cobbles, calcite, tan clay (1/4 - 3 mm)
			clay charged to grey near bottom
	92	104	sand/gravel (1/2 mm - 2 mm) calcite, tan clay, orange clay
7	104	107	clay, yellow, white, tan, with fine sand, thin gravel
			leaves, some calcite
3	add 107	109	sand (1-2 mm) tan clay matrix - calcite
			zone of pebbles + cobbles - some fine gravel
	109	119	sand/gravel (1/2 - 3 mm) coarse clay, tan, calcite
			cobbles zone of 119
	119	120	same as zone
3	120	124	sand (1.25 - 2 mm) mostly fine, some tan clay + calcite
8	124	139	sand (.5 - 2 mm) angular, some tan clay, some calcite, some white clay
			clay 129.5 - 139
			cobble zone 131 - 139
			same as zone 131 - 139
	139	141	same
	141	143	sand + clay, coarse, white
1	143	154	coarse sand, gravel, cobbles, some clay, clay calcite
			fine through coarse sand
			pink, brown, tan clay

----- 1/4 ----- 1/4 ----- 1/4 sec. ----- T. ----- R. -----

Static Water Level -----

Depth ----- **Yield** -----

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No.	From	To	Description
154	157	same	
561	157	165	very fine sand clay and gravel mostly clay, fine gravel, gray, tan, pinkish gray, tan to pinkish tan, white
165	169	170	also fine sand (< 1 mm) sand/gravel, cobbles
169	170 175	170 175	sand/gravel, cobbles 169-171, 174-175
170	184	reddish	
184	199	reddish - sandy siltstone, crumbly	
TD = 199			
1 cap			
1 collar			
5' hand sorted screen			
#3	dull to gl	fresh	