



11 Lewis Drive

Paola, KS 66071

**Oil & Gas Well Drilling
Water Wells
Geo-Loop Installation**

Phone: 913-557-9083

Fax: 913-557-9084

WELL LOG

D & Z Exploration, Inc.

Cattle Track #4

API # 15-091-24,390

December 3 - December 4, 2014

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
14	soil & clay	14
4	shale	18
3	lime	21
6	shale	27
16	lime	43
7	shale	50
6	lime	56
12	shale	68
23	lime	91
48	shale	139
4	lime	143
6	shale	149
16	lime	165
32	shale	197
12	lime	209
11	shale	220
9	lime	229
21	shale	250
7	lime	257
3	shale	260
10	lime	270
47	shale	317
28	lime	345
5	shale	350
23	lime	373
3	shale	376
7	lime	383
2	shale	385
5	lime	390
178	shale	568
5	lime	573
13	shale	586
14	lime	600
23	shale	623
6	lime	629
109	shale	738
4	oil sand	742 brown, no oil show
21	shale	763
5	lime	768
89	shale	857

1.5	oil sand	858.5 black, 100% bleeding
1.5	limey sand	860 white, no oil
7	limey sand	867 black & white, 80% bleeding
5	broken sand	872 black & grey, no bleeding
68	shale	940 TD

Drilled a 9 7/8" hole to 24'

Drilled a 5 5/8" hole to 940'

Set 24' of 7" surface casing, cemented with 5 sacks of cement.

Set 914' of 2 7/8" 8 round upset tubing including 3 centralizers, 1 float shoe, 1 clamp

	<u>Minutes</u>	<u>Seconds</u>
858		34
859		34
860		26
861		23
862		42
863	1	5
864		30
865		25
866		32
867		32
868		30
869		36
870		33
871		35
872		35
873		35
874		36
875		38
876		40
877		36