



11 Lewis Drive

Paola, KS 66071

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

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WELL LOG

Kansas Resource Exploration & Development, LLC

Joeckel #KR-12

API # 15-121-30,060

April 29 - April 30, 2014

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
5	soil & clay	5
7	shale	12
16	lime	28
110	shale	138
20	lime	158
20	shale	178
6	lime	184
23	shale	207
24	lime	231
13	shale	244
26	lime	270
8	shale	278
18	lime	296
3	shale	299
3	lime	302
4	shale	306
11	lime	317 base of the Kansas City
31	shale	348
6	sand	354 hard, green sand
112	shale	466
3	limey sand	469 hard white & brown limey sand, good bleeding
1	oil sand	470 soft brown sand, good bleeding
3	limey sand	473 brown hard good bleeding
3	limey sand	476 brown & white, good bleeding
1	oil sand	477 soft brown, good bleeding
1	lime	478
3	shale	481
10	oil sand	491 slight hard brown, good bleeding and saturation
1	limey sand	492 mainly lime, light brown
8	oil sand	500 dark brown, very good bleeding
9	shale	509
7	lime	516
10	shale	526
4	lime	530
5	shale	535
1	coal	536
6	shale	542
10	lime	552
13	shale	565
2	lime	567

15	shale	582
2	lime	584
33	shale	617
3	lime	620
12	shale	632
1	coal	633
17	shale	650
5	silty shale	655
13	broken sand	668 20% brown sand, 80% shale, no oil
5	silty shale	673
20	broken sand	693 makes water, brown sand & shale
5	sand	698 light brown, no show
1	coal	699
15	shale	714
1	coal	715
9	silty shale	724
8	broken sand	732 20% brown sand, 80% shale, light bleeding
4	lime/sand/shale	736 5% sand, 10% lime, 85% shale
1.5	broken sand	737.5 90% sand, 10% shale, good bleeding
0.5	oil sand	738 brown, good bleeding
2	broken sand	740 90% brown sand 20% shale, good bleeding
0.5	shale	740.5
1.5	oil sand	742 good bleeding
0.5	limey sand	742.5 ok bleeding, hard
0.5	lime/sand/shale	743 5% sand 10% lime 85% shale, no show
8.5	shale	751.5
1.5	coal	753
57	shale	810 TD

Drilled a 9 7/8" hole to 22.8'

Drilled a 5 5/8" hole to 810'

Set 22.8' of 7" surface casing cemented with 5 sacks of cement

Set 800' of 2 7/8" 8 round upset tubing with 3 centralizers, 1 float shoe, 1 clamp and 1 baffle.

Baffle set 31.6' from bottom of tally.

Core Times

	<u>Minutes</u>	<u>Seconds</u>
738		57
739		38
740		43
741		38
742		41
743		54
744	1	14
745		54
746		42
747		48
748		47
749	1	4
750		57
751		46
752		32
753		36
754		47
755		50
756		44
757		34