



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**

Kansas Resource Exploration & Development, LLC

Guetterman #KRI-4

API # 15-091-23,951

April 3 - April 5, 2013

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
10	soil & clay	10
5	sandstone	15
3	shale	18
9	lime	27
6	shale	33
15	lime	48
9	shale	57
9	lime	66
9	shale	75
18	lime	93
18	shale	111
17	lime	128
7	shale	135
50	lime	185
25	shale	210
10	lime	220
14	shale	234
8	lime	242
5	shale	247
15	lime	262
2	shale	264
3	lime	267
20	shale	287
1	lime	288
12	shale	300
23	lime	323
10	shale	333
19	lime	352
4	shale	356
3	lime	359
6	shale	365
5	lime	370 base of the Kansas City
31	shale	401
6	grey sand	407
136	shale	543
5	lime	548
3	shale	551
3	lime	554

9	shale	563
5	lime	568
17	shale	585
3	lime	588
15	shale	603
1	lime	604
25	shale	629 red
1	lime	630
11	shale	641
4	lime	645 broken
63	shale	708
2	broken sand	710 brown & grey, ok bleeding (gassy)
4	oil sand	714 brown, bleeding good
4	broken sand	718 brown & grey, ok bleeding (gassy)
16	shale	734
1	coal	735
69	shale	804
1	coal	805
25	shale	830
1.5	broken sand	831.5 brown & white, good bleeding
1.5	oil sand	833 brown, good bleeding
2.5	broken sand	835.5 brown & grey, ok bleeding
12.5	shale	848
1.5	coal	849.5
46.5	shale	896 TD

Drilled a 9 7/8" hole to 22'  
 Drilled a 5 5/8" hole to 896'

Set 22' of 7" surface casing cemented with 6 sacks of cement

Set 8/81' of 2 7/8" 8 round upset tubing with 3 centralizers, 1 float shoe and 1 clamp.