



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 #KR-22
API # 15-091-23,943
December 13 - December 18, 2012

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
4	soil & clay	4
44	shale	48
5	lime	53
5	shale	58
2	lime	60
7	shale	67
14	lime	81
11	shale	92
8	lime	100
8	shale	108
17	lime	125
18	shale	143
15	lime	158
9	shale	167
50	lime	217
25	shale	242
9	lime	251
19	shale	270
6	lime	276
9	shale	285
7	lime	292
1	shale	293
5	lime	298
36	shale	334
25	lime	359
11	shale	370
20	lime	390
3	shale	393
4	lime	397
5	shale	402
4	lime	406 base of the Kansas City
174	shale	580
6	lime	586
4	shale	590
3	lime	593
1	shale	594
1	coal	595
6	shale	601
5	lime	606
17	shale	623
4	lime	627

4	shale	631
11	lime	642
23	shale	665
2	lime	667
3	shale	670
1	lime	671
53	shale	724
1	lime & shells	725
20	shale	745
4	oil sand	749 brown, ok bleeding
2	broken sand	751 brown & grey, ok bleeding, gassy
6	silty shale	757 brown & grey, minimal bleeding
15	shale	772
1	coal	773
4	shale	777
2	lime	779
63	shale	842
2	coal	844
21	shale	865
4.5	broken sand	869.5 brown & lime, minimal bleeding
1	broken sand	870.5 brown & white, good bleeding
1	oil sand	871.5 brown, good bleeding
1.5	broken sand	873 brown, good bleeding
1	lime	874
1	broken sand	875 brown & grey, light bleeding
50	shale	925 TD

Drilled a 9 7/8" hole to 18.9'

Drilled a 5 5/8" hole to 925'

Set ^{20'}~~18.9'~~ of 7" surface casing cemented with 6 sacks of cement

Set 915' of 2 7/8" 8 round upset tubing, with 3 centralizers, 1 float shoe, & 1 clamp.