

RECEIVED MAR 1 1 2014
Jackman Oilfield Services
1 West Mulberry St.
Colony, KS 66015
620-852-3350

WELL LOG
Kansas Resource Exploration & Development, LLC
Cartwright KR-25

April 23, 2014

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>	
10	soil/clay	10	
20	lime	30	
18	shale	48	
5	lime	53	
40	shale	93	
46	lime	139	
15	shale	154	
38	lime	192	
20	shale	212	
1	lime	213	
122	shale	335	
2	lime	337	
21	shale	358	
11	lime	369	
3	shale	372	
3	lime	375	
12	gray sand	387	light gas smell
20	shale	407	
1	coal	408	
10	shale	418	
5	lime	423	
12	shale	435	
2	lime	437	
5	coal	442	
11	shale	453	
7	lime	460	
15	shale	475	
4	lime	479	
2	coal	481	
2	lime	483	
10	shale	493	
1.50	broken sand	494.50	no bleed

0.50	oil sand	495	good bleed
0.50	oil sand	495.50	good bleed
2	broken sand	497.50	heavy bleed
1.50	oil sand	499	heavy bleed
0.50	lime	499.50	
3.50	broken sand	503	heavy bleed
1.50	broken sand	504.50	light bleed
1.50	broken sand	506	medium bleed
6	sandy shale	512	
88	shale	600	TD

Drilled a 9 7/8" hole to 19'7"

Drilled a 5 7/8" hole to 600'

Set 20' of 7" surface casing cemented with 5 sacks of portland cement

Set 585.85' of 2 7/8" round upset tubing. Baffle @ 556.85'

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