

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

WELL LOG
Kansas Resource Exploration & Development, LLC
Cartwright KR-9

September 16, 2014

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>	
15.00	soil/clay	15.00	
19.00	lime	34.00	
22.00	shale	56.00	
4.00	lime	60.00	
40.00	shale	100.00	
16.00	lime	116.00	
10.00	shale	126.00	
28.00	lime	154.00	
7.00	shale	161.00	
44.00	lime	205.00	
140.00	shale	345.00	
1.00	lime	346.00	
6.00	grey sand	352.00	
4.00	sandy shale	356.00	
12.00	shale	368.00	
10.00	lime	378.00	
6.00	grey sand	384.00	
11.00	sandy shale	395.00	
22.00	shale	417.00	
1.00	coal	418.00	
9.00	shale	427.00	
5.00	lime	432.00	
13.00	shale	445.00	
3.00	lime	448.00	
1.00	coal	449.00	
11.00	shale	460.00	
16.00	lime	476.00	
11.00	shale	487.00	
2.00	lime	489.00	
2.00	shale	491.00	
2.50	lime	493.50	
1.00	lime/sand	494.50	med. Bleed

2.50	lime	497.00	light gas smell
5.50	shale	502.50	
0.50	brokensand/75%shale	503.00	med. Bleed
1.00	brokensand/95%shale	504.00	no bleed
3.50	oil sand	507.50	good bleed
2.50	broken sand	510.00	good bleed
3.50	broken sand	513.50	no bleed
2.50	broken sand	516.00	good bleed
2.00	very broken sand	518.00	light bleed
6.00	grey sand	524.00	
56.00	shale	580.00	TD

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

Drilled a 5 7/8" hole to 580'

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

Set 571.25' of 2 7/8" round upset tubing. Baffle @ 539.65'

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