

RECEIVED APR 28 2014

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

WELL LOG
Kansas Resource Exploration & Development, LLC
Hays KR-16

April 22, 2014

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>	
2	soil/clay	2	
26	lime	28	
41	shale	69	
1	lime	70	
4	shale	74	
16	lime	90	
9	shale	99	
31	lime	130	
8	shale	138	
22	lime	160	
6	shale	166	
3	lime	169	
3	shale	172	
7	lime	179	
165	shale	344	
16	lime	360	
3	sand	363	light bleed/gas
4	gray sand	367	
28	shale	395	
5	lime	400	
16	shale	416	
4	lime	420	
1	coal	421	
13	shale	434	
14	lime	448	
13	shale	461	
1	lime	462	
6	shale	468	
5	lime	473	
6	shale	479	
1	oil sand	480	good bleed
1	lime	481	

2	shale	483	
1	broken sand	484	good bleed
1	oil sand	485	good bleed
3	broken sand	488	medium bleed
1	broken sand	489	light bleed
17	sandy shale	506	TD

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

Drilled a 5 7/8" hole to 506'

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

No pipe ran

Hays KR-16