

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

WELL LOG
Lakeshore Operating, LLC
Sturdivan 3 LOI-6

August 5, 2016

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>	
3.00	Soil	3.00	
5.00	Clay	8.00	
4.00	Lime	12.00	
10.00	Broken lime	22.00	
15.00	Gray Shale	37.00	
6.00	Lime	43.00	
132.00	Shale	175.00	
36.00	Lime	211.00	
37.00	Sandstone	248.00	
152.00	Lime	400.00	
51.00	Shale	451.00	
37.00	Lime	488.00	
13.00	Shale	501.00	
17.00	Red Shale	518.00	
132.00	Lime	650.00	
300.00	Shale	950.00	
8.00	Lime	958.00	
45.00	Shale	1,003.00	
1.00	Lime	1,004.00	
4.00	Shale	1,008.00	
11.00	Oil sand	1,019.00	
20.00	Shale	1,039.00	
1.00	Lime	1,040.00	
5.00	Shale	1,045.00	
14.00	Oil sand	1,059.00	
27.00	Shale	1,086.00	
2.00	Lime	1,088.00	
4.00	Shale	1,092.00	TD

Drilled a 9 7/8" hole to 39.5'
Drilled a 5 7/8" hole to 1092'

Set 40' of 7" surface casing cemented with 10 sacks of portland cement
Ran 1085' of 2 7/8"
No cores
No seating nipple
Cemented on 8/12/16

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