

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

WELL LOG  
Lakeshore Operating, LLC  
Sturdivan 3 LOI-2

July 28, 2016

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>	
3.00	Soil	3.00	
3.00	Clay	6.00	
3.00	Shale	9.00	
4.00	Lime	13.00	
24.00	Shale	37.00	
7.00	Lime	44.00	
134.00	Shale	178.00	
474.00	Lime	652.00	
210.00	Shale	862.00	
8.00	Lime	870.00	
30.00	Shale	900.00	
6.00	Lime	906.00	
70.00	Shale	976.00	
6.00	Lime	982.00	
16.00	Shale	998.00	
1.00	Lime	999.00	
5.00	Shale	1,004.00	
1.00	Lime	1,005.00	
10.00	Shale	1,015.00	
6.00	Top oil sand	1,021.00	
36.00	Shale	1,057.00	
8.00	Top oil sand	1,065.00	
21.00	Shale	1,086.00	
1.00	Lime	1,087.00	
5.00	Shale	1,092.00	TD

Drilled a 9 7/8" hole to 39'7"

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 8/1/16

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