

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

WELL LOG
Lakeshore Operating, LLC
Sturdivan 3 LOI-4

August 2, 2016

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>	
3.00	Soil	3.00	
8.00	Clay	11.00	
5.00	Lime	16.00	
7.00	Limestone	23.00	
13.00	Shale	36.00	
6.00	Lime	42.00	
138.00	Shale	180.00	
24.00	Lime	204.00	
19.00	Sandstone	223.00	
189.00	Lime	412.00	
119.00	Shale	531.00	
34.00	Lime	565.00	
10.00	Shale	575.00	
13.00	Lime	588.00	
26.00	Shale	614.00	
14.00	Lime	628.00	
186.00	Shale	814.00	
8.00	Lime	822.00	
56.00	Shale	878.00	
21.00	Lime	899.00	
104.00	Shale	1,003.00	
1.00	Lime	1,004.00	
4.00	Shale	1,008.00	
5.00	Top oil sand	1,013.00	
25.00	Shale	1,038.00	
1.00	Lime	1,039.00	
3.00	Shale	1,042.00	
7.00	Top oil sand	1,049.00	
37.00	Shale	1,086.00	
3.00	Lime	1,089.00	
3.00	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 8/4/16

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