

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

WELL LOG
Lakeshore Operating, LLC
Sturdivan 3 LO-48

July 15, 2016

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>	
6.00	Soil	6.00	
2.00	Broken lime	8.00	
3.00	Shale	11.00	
3.00	Limestone	14.00	
22.00	Shale	36.00	
6.00	Lime	42.00	
133.00	Shale	175.00	
21.00	Lime	196.00	
28.00	Sandstone	224.00	
244.00	Lime	468.00	
33.00	Shale	501.00	
19.00	Red bed	520.00	
140.00	Lime	660.00	
168.00	Shale	828.00	
4.00	Lime	832.00	
26.00	Shale	858.00	
120.00	Lime	978.00	
19.00	Shale	997.00	
4.00	Lime	1,001.00	
12.00	Oil sand	1,013.00	
18.00	Shale	1,031.00	
9.00	Lime	1,040.00	
1.00	Shale	1,041.00	
3.00	Lime	1,044.00	
2.00	Oil sand	1,046.00	
15.00	Oil sand/shale	1,061.00	
31.00	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

Seating nipple @ 1042'

Cemented on 7/18/16

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