

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

WELL LOG  
Lakeshore Operating, LLC  
Sturdivan 3 LOI-1

July 26, 2016

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>	
3.00	Soil	3.00	
8.00	Shale	11.00	
3.00	Lime	14.00	
23.00	Shale	37.00	
5.00	Lime	42.00	
136.00	Shale	178.00	
24.00	Lime	202.00	
14.00	Sandstone	216.00	
60.00	Lime	276.00	
12.00	Sandstone	288.00	
113.00	Lime	401.00	
108.00	Shale	509.00	
6.00	Lime	515.00	
35.00	Shale	550.00	
126.00	Lime	676.00	
156.00	Shale	832.00	
16.00	Lime	848.00	
87.00	Shale	935.00	
6.00	Lime	941.00	
68.00	Shale	1,009.00	
10.00	Top oil sand	1,019.00	
27.00	Shale	1,046.00	
15.00	Top oil sand	1,061.00	
25.00	Shale	1,086.00	
1.00	Lime	1,087.00	
5.00	Shale	1,092.00	TD

Drilled a 9 7/8" hole to 39.5'  
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 7/29/16

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