



**Operator:**  
Grand Mesa Operating Co.  
Wichita, KS

**Richards #12-3A**

Coffey Co., KS  
18-22S-17E  
API: 031-23866

<b>Spud Date:</b>	3/31/2014	<b>Surface Bit:</b>	11.0"
<b>Surface Casing:</b>	8.625"	<b>Drill Bit:</b>	6.75"
<b>Surface Length:</b>	42.60'	<b>Longstring:</b>	1105.85'
<b>Surface Cement:</b>	8 sx	<b>Longstring Date:</b>	4/4/2014
<b>Longstring:</b>	2 7/8" EUE - Used GMOC	<b>Seat Nipple:</b>	1008.4'

**Driller's Log**

Top	Bottom	Formation	Comments
0	18	Soil & clay	
18	21	Lime	
21	28	Shale	
28	38	Lime	
38	44	Sandy Lime	
44	229	Shale	
229	350	Lime	
350	396	Shale	
396	400	Lime	
400	418	Shale	
418	478	Lime	
478	517	Shale	
517	528	Lime	
528	537	Shale	
537	594	Lime	
594	596	Bl. Shale	
596	600	Lime	
600	609	Shale	
609	624	Lime	
624	630	Bl. Shale	
630	633	Lime	
633	644	Bl. Shale	
644	651	Lime	
651	808	Shale	

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808	811	Lime	Coffey Co., KS
811	832	Shale	
832	839	Lime	
839	893	Shale	
893	897	Lime	
897	899	Shale	
899	902	Lime	
902	925	Shale	
925	928	Bl. Shale	
928	933	Shale	
933	935	Lime	
935	971	Shale	
971	975	Lime	
975	979	Shale	
979	982	Lime	5'
982	1024	Shale	
1024	1029	Sand	Laminated sand, light oil show
1029	1049	Sand	Laminated sand, poor show at 1032,
1049	1122	Shale	
1122		TD	

Coring		
Run	Footage	Rec.
1	1016-1036	19'