

# Robert D. Hendrix

## Petroleum Geologist

### GEOLOGIST'S REPORT

#### DRILLING TIME AND SAMPLE LOG

COMPANY Murfin Drilling Company Inc. ELEVATIONS KB 3213'

LEASE Burk Trust D #1-23 FIELD East Fork DF \_\_\_\_\_

LOCATION 1980Tsl & 660Tfw1 SEC 23 TWP 1S RGE 36W COUNTY Rawlins STATE Kansas MEASUREMENTS ARE ALL FROM Kelly Bushing

CONTRACTOR Murfin Drilling Co. Inc. Rig #2 SPUD 12/26/2013 COMP 12/29/2013 RTD 4:50:37 LTD 4:50:57 CASING CONDUCTOR 3412' TYPE MUD Chemical SURFACE 8-5/8" at 296' MUD UP \_\_\_\_\_ PRODUCTION 5.112' @ 4500'

SAMPLES SAVED FROM 3500' TO TD

DRILLING TIME KEPT FROM 3500' TO TD

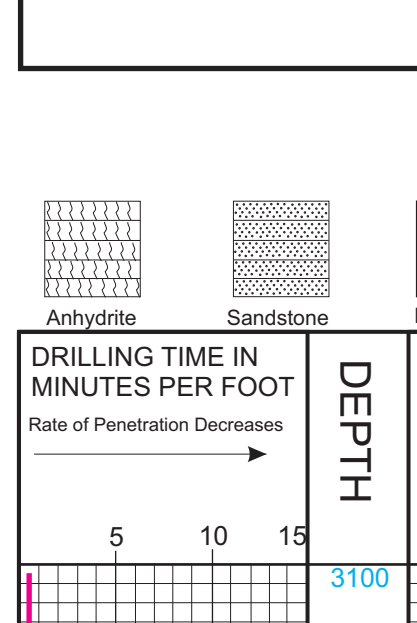
SAMPLES EXAMINED FROM 3500' TO TD

GEOLOGICAL SUPERVISION FROM 3106'

GEOLOGIST ON WELL Robert D. Hendrix

FORMERLY: Henderson, Allen, Sontz  
Pioneer Energy Services

FORMATION TOPS	ELECTRIC LOG	SAMPLE
Anhydrite	3116 (+97)	3114 (+99)
Neva	3604 (-391)	
Foraker	3712 (-499)	3700 (-487)
Topoka	3929 (-716)	
Oread	4041 (-828)	4027 (-814)
Lansing	4154 (-932)	4134 (-921)
Stark Shale	4365 (-1152)	4354 (-1141)
BKC	4412 (-1199)	



REMARKS:

DEPTH	LITHOLOGY	SAMPLE DESCRIPTION	REMARKS
3100			<b>Anhydrite 3114 (+99)</b>
3150			<b>Base Anhydrite 3148 (+65)</b>
3200			
3300			
3400			
3500			Geologist on location 3106' at 2:40 pm 12/28/2013
3550			wt 8.6, vis. 80, lcm 8# Morgan Mud, Dave Lines 8:00am, 12/28/2013
3600			
3600			<b>Neva 3604 (-391)</b>
3650			
3700			
3700			<b>Foraker 3712 (-499)</b>
3750			
3800			
3850			
3900			
3900			<b>Topoka 3929 (-716)</b>
3950			
4000			
4000			<b>Oread 4041 (-828)</b>
4050			5:25pm, Wiper Trip to clean hole
4100			
4100			<b>Lansing 4145 (-932)</b>
4150			
4200			
4200			<b>Stark Shale 4365 (-1152)</b>
4250			
4300			
4300			<b>BKC 4412 (-1199)</b>
4350			
4400			
4400			<b>RTD 4560 (-1292)</b>
4450			8:00am, 12/29/2013
4500			wt 9.4, vis. 64, lcm 8# Morgan Mud, Dave Lines

Murfin Drilling Co Inc  
Burk Trust D #1-23  
1980Tsl & 660Tfw1  
23-1-36W, Rawlins County, Kansas  
KB-3213' GL-3202'  
API: 15-153-20973

Geologist off location at 7:30pm, 12/29/2013