

Thomas J. Funk
Petroleum Geologist

Geologists Report
Drilling Time and Sample Log

OPERATOR **Murfin Drilling Co., Inc**

LEASE **Heier-Racette** WELL NO #1-34
FIELD **Wildcat** API **45-09-21257**
LOCATION **1900' FSL & 660' FEL**
SEC. **34** TWP **12S** RGE **33W**
COUNTY **Logan** STATE **Kansas**

ELEVATION
KB **3105'**
DF
GL **3094'**
Measurements Are All From **KB**

CASING RECORD
SURFACE
8 5/8" at 225' KB w/1655x
RTD 4800'

CONTRACTOR **Murfin Dring Co** Reg #22
COMM 3/5/2014 COMP 3/15/14
RTD 4800' LOG TD 4800'

SAMPLES SAVED FROM 3680' TO 4800'
DRILLING TIME KEPT FROM 3680' TO 4800'
SAMPLES EXAMINED FROM 3680' TO 4800'
GEOLOGICAL SUPERVISION FROM 3760' TO 4800'
MUD UP 3400' TYPE MUD **Chemical**

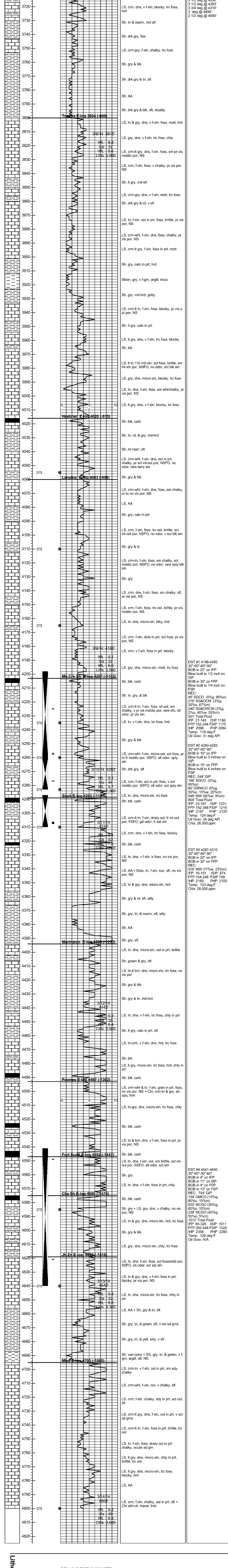
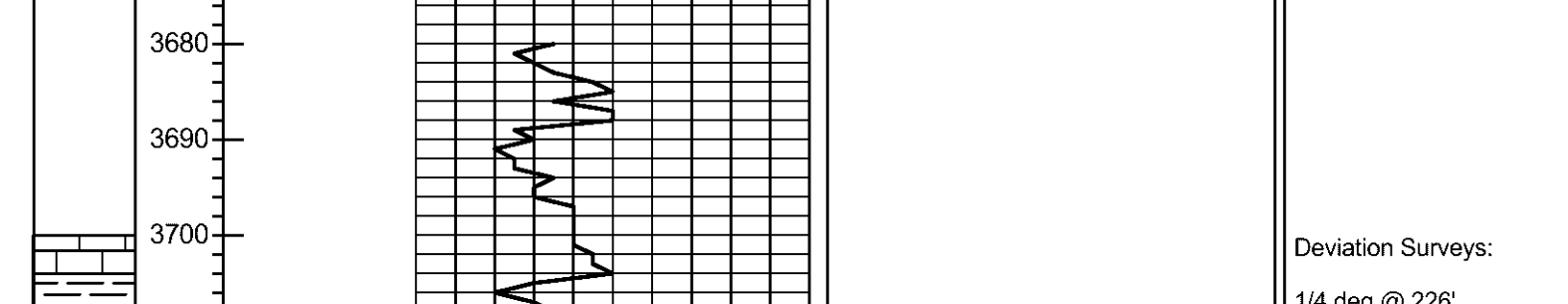
FORMATION LOG SAMPLE
TOP DATUM TOP DATUM
Anhydrite 2835 (+320) 2894 (+321)
Barhydrite 2806 (+489) 2806 (+489)
Toppekka 3804 (+699) 3800 (+695)
Heeberer Sh 4020 (-915) 4016 (-911)
Lansing 4063 (-958) 4060 (-955)
Maurice Creek 4207 (-1102) 4203 (-1098)
Start Sh 4297 (-1187) 4294 (-1184)
Marmaton 4395 (-1233) 4394 (-1233)
Pawnee 4497 (-1382) 4493 (-1388)
Cherokee Sh 4580 (-1475) 4575 (-1470)
Johnson Zone 4623 (-1518) 4619 (-1514)
Mississippian 4700 (-1595) 4695 (-1590)

ELECTRICAL SURVEYS
Pioneer Energy Services
DIL
MEL
DUOP
BHCS

Date	Progress	NO. Size	Make	Tag	Bit Record	Depth	Hours
3/5/14	Spud	1	12 1/4" HTC	RR	226	226	3
3/6/14		500'					
3/7/14		2840'	7 7/8" HTC	DI-5096F	2650	3424	39
3/8/14		3725'	7 7/8" HTC	GX20c	4280	610	33
3/9/14		4120'	7 7/8" HTC	GX20c	4800	540	54

Remarks And Recommendations:
Based upon log analysis, DST recovery, and sample examination, it was decided to seal production casing on the #1-34 Heier-Racette.
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LEGEND



COMPANY Murfin Drilling Co., Inc **ELEVATION** 3105' **KB**
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COUNTY Logan **STATE** Kansas