

# Timothy G. Pierce

## Petroleum Geologist

### GEOLOGIST'S REPORT DRILLING TIME AND SAMPLE LOG

COMPANY N-10 Exploration, LLC  
 LEASE Medicine River Ranch 'B' #13  
 FIELD Landis  
 LOCATION SW NW SW  
 SEC 15 TWP 34S RGE 11W  
 COUNTY Barber STATE Kansas  
 CONTRACTOR Hardt Drilling Rig #1  
 SPUD 10-25-2013 COMP 11-05-2013  
 RTD 5048 LTD 5048  
 MUD UP 3077 TYPE MUD Chemical  
 SAMPLES SAVED FROM 4000 TO RTD  
 DRILLING TIME KEPT FROM 4000 TO RTD  
 SAMPLES EXAMINED FROM 4000 TO RTD  
 GEOLOGICAL SUPERVISION FROM 4000 to RTD  
 GEOLOGIST ON WELL Tim Pierce

#### ELEVATIONS

KB 1341'  
 DF \_\_\_\_\_  
 GL 1331'  
 Measurements Are All  
 From Kelly Bushing

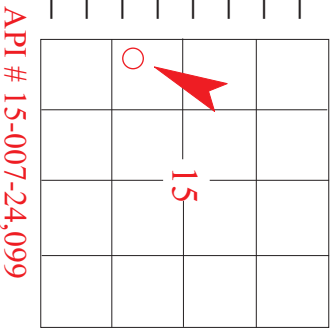
#### CASING

CONDUCTOR \_\_\_\_\_  
 SURFACE 8-5/8" at 265'  
 PRODUCTION 5-1/2" at 5035'

#### ELECTRICAL SURVEYS

DIL / CN-CD Pioneer

FORMATION TOPS	ELECTRIC LOG	SAMPLE
Heebner Sh.	3630 (-2289)	NA
Iatan LS.	4060 (-2719)	4055 (-2714)
Stark Sh.	4310 (-2969)	4310 (-2969)
Cherokee Sh.	4530 (-3189)	4533 (-3192)
Mississippi	4570 (-3229)	4578 (-3237)
Chattanooga Sh.	4862 (-3521)	4865 (-3524)
Viola	4922 (-3581)	4922 (-3581)
Simpson	5013 (-3672)	5011 (-3670)



**REMARKS** Samples and electric logs indicate probable production from the Mississippi from 4570'- 4650'.  
A slight show of gas and slt show of oil were observed in the Chattanooga Shale from 4862'- 4888'.  
A slight show of oil was observed in the Meisner Sand at 4888'-4890' however samples and electric logs indicate a tight zone of no commercial value.  
Electric logs indicate a possible zone in the Hertha LS at 4354'-4356', no sample shows were observed through this interval however there was a slight gas increase recorded.  
There were no other zones of interest indicated by samples or electric logs.

Timothy G. Pierce

### LEGEND

Anhydrite	Sandstone	Limestone	Shale	Carb Sh	Cherty LS	Chert	Dolomite

DRILLING TIME IN MINUTES PER FOOT Rate of Penetration Decreases 	DEPT	LITHOLG	GAS SCALE	SAMPLE DESCRIPTION	REMARKS
--	------	---------	-----------	--------------------	---------

