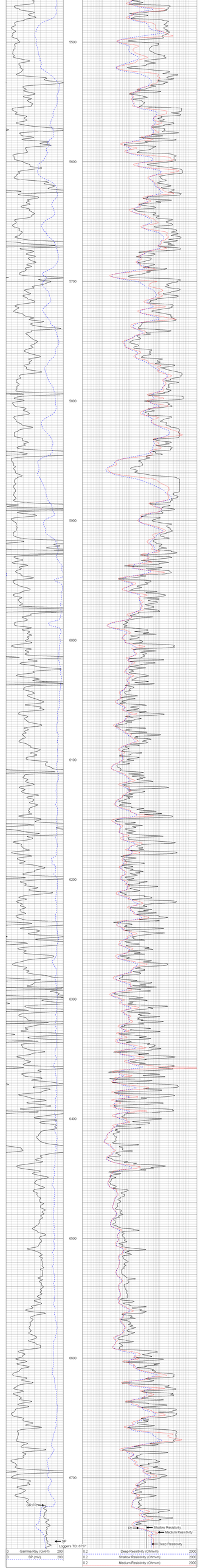

Company Western Operating Co.
Well Cullen Boyero 1-30
Field Wildcat
County Lincoln
State Colorado

PIONEER
Pioneer Energy Services

HIGH RESOLUTION INDUCTION

Company Western Operating Co.
Well Cullen Boyero 1-30
Field Wildcat
County Lincoln State Colorado

API # : 05-073-06485-0000

Location: 1200' FNL & 1885' FEL
NWNE

SEC 30 TWP 12S RGE 52W

Other Services
Density
Neutron

Permanent Datum	GL
Log Measured From	KB
Drilling Measured From	KB

Elevation 4810

Elevation
K.B. 4823
D.F. 4822
G.L. 4810

Date	December 16, 2012		
Run Number	1		
Depth Driller	6765		
Depth Logger	6757		
Bottom Logged Interval	6757		
Top Log Interval	Casing		
Casing Driller	475		
Casing Logger	475		
Bit Size	7+7/8"		
Type Fluid in Hole	Chem Gel		
Density / Viscosity	9.2 / 65		
pH / Fluid Loss	8.5 / 8.5		
Source of Sample	Flowline		
Rm @ Meas. Temp	3.25 @ 60°F		
Rmf @ Meas. Temp	2.00 @ 60°F		
Rmc @ Meas. Temp	4.35 @ 60°F		
Source of Rmf / Rmc	Measure / Calc		
Rm @ BHT	1.38 @ 141°F		
Time Circulation Stopped	1800 12/15		
Time Logger on Bottom	0130		
Maximum Recorded Temperature	141 F		
Equipment Number	49		
Location	Brighton, CO		
Recorded By	Shaun Schuman		
Witnessed By	Gary Doke	Cliff Nolte	

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees.

Comments

Annular volume calculated for 5.5" casing
Murfin Rig 25
Thank you for using Pioneer Energy Services!

Database File:	13251.db
Dataset Pathname:	main
Presentation Format:	dil
Dataset Creation:	Sun Dec 16 04:12:56 2012
Charted by:	Depth in Feet scaled 1:240

5500
5600
5700
5800
5900
6000
6100
6200
6300
6400
6500
6600
6700
GR FR
SP
Logger's TD: 6757'
Rt
Shallow Resistivity
Medium Resistivity
Deep Resistivity
0 Gamma Ray (GAPI) 200
0 SP (mV) 200
0.2 Deep Resistivity (Ohm-m) 2000
0.2 Shallow Resistivity (Ohm-m) 2000
0.2 Medium Resistivity (Ohm-m) 2000