HIGH RESOLUTION INDUCTION

PSI
PHOENIX SURVEYS, INC.

Company	Noble Energy Inc.
Well	Moser H 28-29
Field	Wattenberg
County	Weld
State/Province	Colorado
Location	161' FNL & 1223' FWL NW NW Sec - 28, Twp - 3N, Rge - 65W

Other Services
Density
Neutron
Microlog

Permanent Datum	GL	Elevation 4843
Log Measured From	KB	
Drilling Measured From	KB	

Elevation
K.B. 4856
D.F. 4855
G.L. 4843

Date	January 20, 2012
Run Number	1
Depth Driller	7800
Depth Logger	7793
Bottom Logged Interval	7793
Top Log Interval	Casing
Casing Driller	738
Casing Logger	738
Bit Size	7-7/8"
Type Fluid in Hole	Chem Gel
Density / Viscosity	9.4 / 36
pH / Fluid Loss	9.0 / 8.0
Source of Sample	Flowline
Rm @ Meas. Temp	1.68 @ 75 F
Rmf @ Meas. Temp	1.34 @ 75 F
Rmc @ Meas. Temp	2.02 @ 75 F
Source of Rmf / Rmc	Measure / Calc
Rm @ BHT	0.85 @ 236 F
Time Circulation Stopped	1245
Time Logger on Bottom	1940
Maximum Recorded Temperature	236 F
Equipment Number	52
Location	Brighton, CO
Recorded By	Matt Gill
Witnessed By	Mike Sitten

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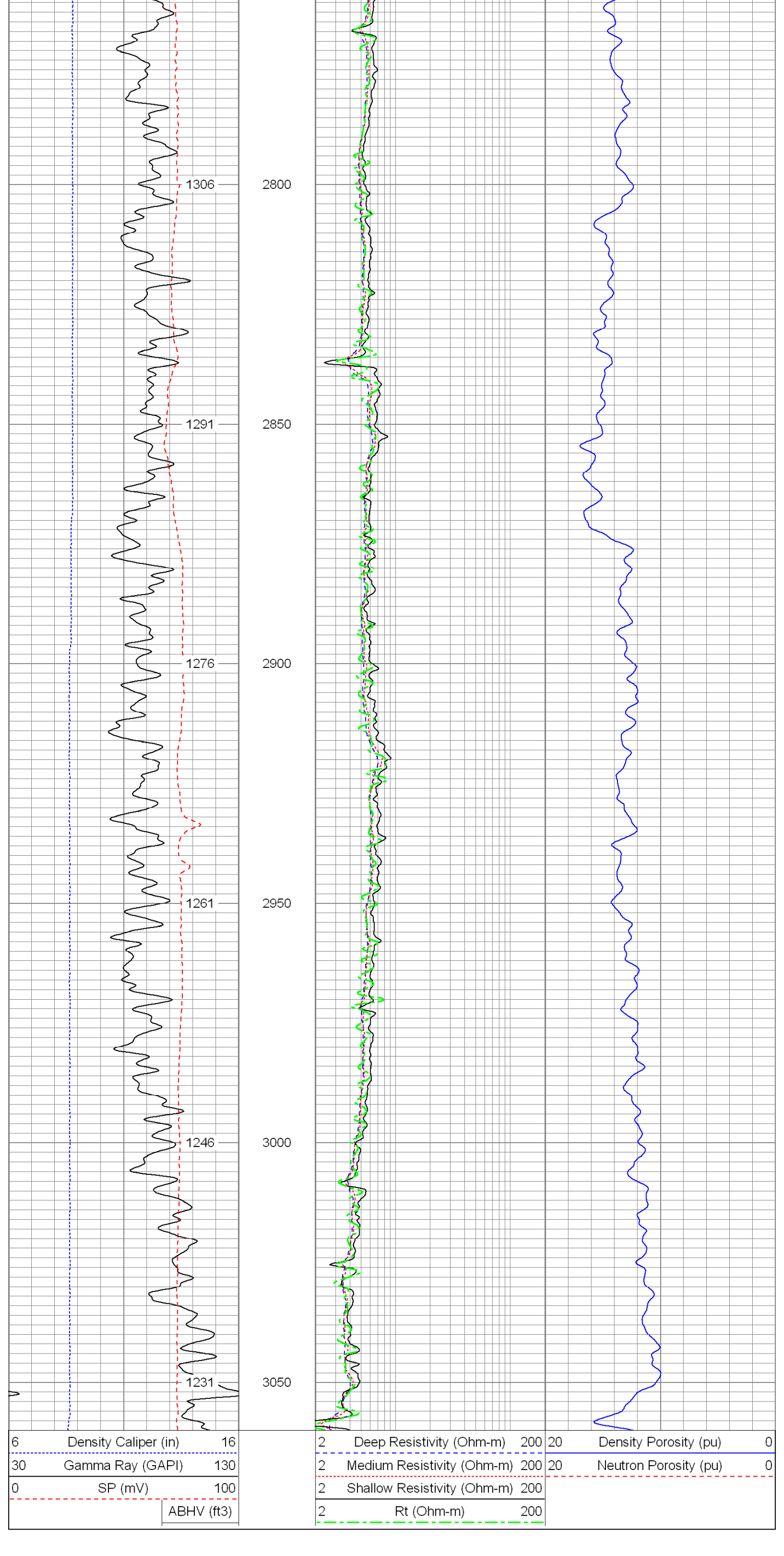
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

Annular volume calculated for 4.5" casing
Ensign Drilling Rig 21
Thank you for using Phoenix Surveys!!
API #: 05-123-31769-00

Database File: 12567.db
Dataset Pathname: final
Presentation Format: pdc1
Dataset Creation: Fri Jan 20 20:39:23 2012
Charted by: Depth in Feet scaled 1:240

6 Density Caliper (in) 16		2 Deep Resistivity (Ohm-m) 200	20 Density Porosity (pu) 0
30 Gamma Ray (GAPI) 130		2 Medium Resistivity (Ohm-m) 200	20 Neutron Porosity (pu) 0
0 SP (mV) 100		2 Shallow Resistivity (Ohm-m) 200	
ABHV (ft3)		2 Rt (Ohm-m) 200	



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