PHOENIX SURVEYS, INC.

HIGH RESOLUTION INDUCTION

Company	Noble Energy Inc.
Well	Cannon H 35-22
Field	Wattenberg
County	Weld
State/Province	Colorado
Location	2492' FSL & 1320' FEL NWSE Sec. 35, Twp. 3N, Rge. 65W
Other Services	Density Neutron Microlog

Permanent Datum	GL	Elevation	4839
Log Measured From	KB		
Drilling Measured From	KB		

Elevation	
K.B.	4852
D.F.	4851
G.L.	4839

Company
Well
Field
County
State/Prv

Date	July 25, 2011
Run Number	1
Depth Driller	7766
Depth Logger	7765
Bottom Logged Interval	7765
Top Log Interval	Casing
Casing Driller	772
Casing Logger	772
Bit Size	7-7/8"
Type Fluid in Hole	Chem Gel
Density / Viscosity	9.2 / 36
pH / Fluid Loss	8.5 / 11.2
Source of Sample	Flowline
Rm @ Meas. Temp	3.35 @ 80 F
Rmf @ Meas. Temp	2.68 @ 80 F
Rmc @ Meas. Temp	4.02 @ 80 F
Source of Rmf / Rmc	Measure / Calc
Rm @ BHT	1.07 @ 230 F
Time Circulation Stopped	1515 7/15
Time Logger on Bottom	0040
Maximum Recorded Temperature	230 F
Equipment Number	50
Location	Brighton, CO
Recorded By	Matt Gill
Witnessed By	Brody Hansen

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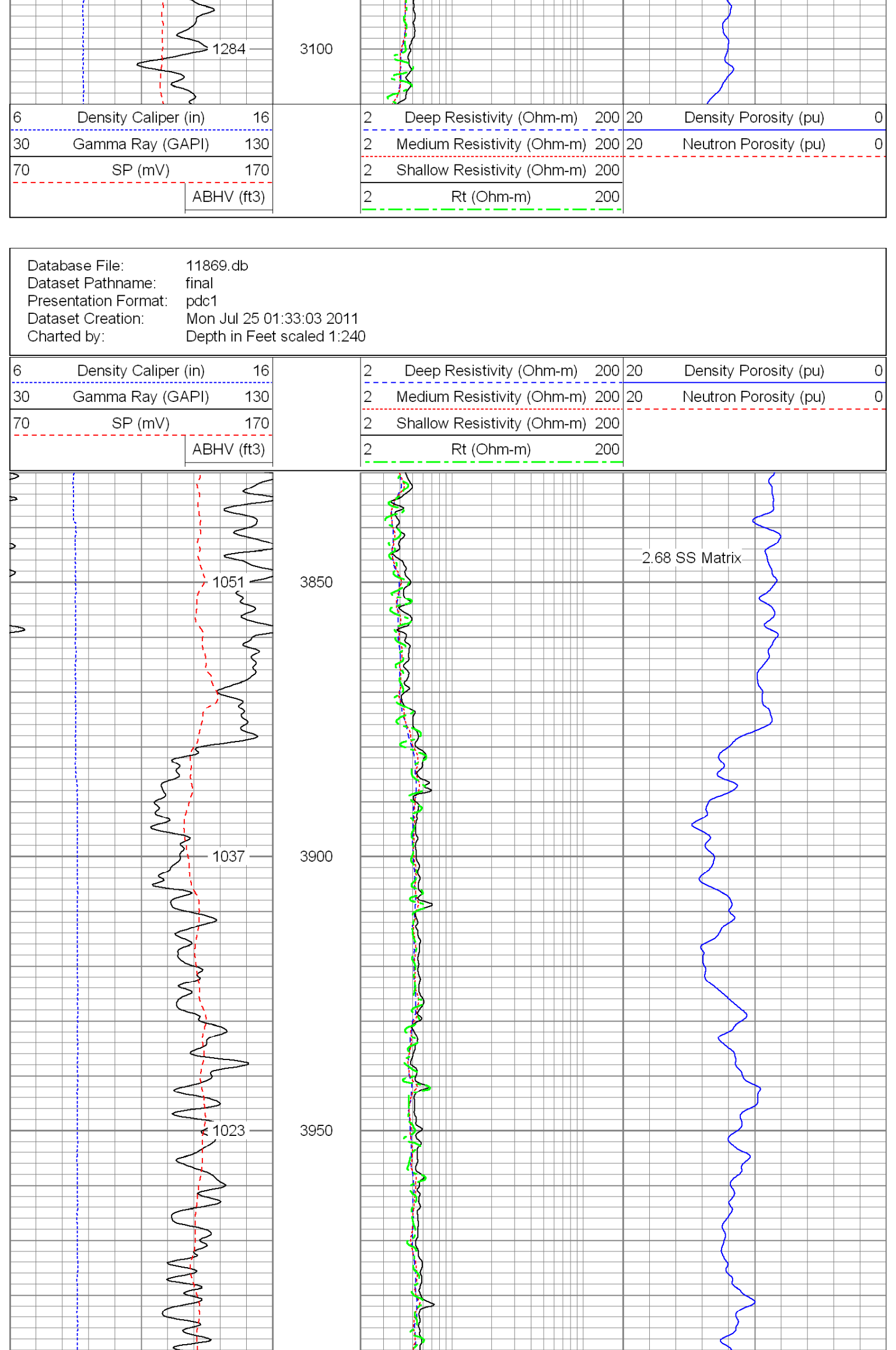
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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
Cade Rig 21
Thank you for using Phoenix Surveys!!
API #: 05-123-31866-00

Database File: 11869.db
Dataset Pathname: final
Presentation Format: pdc1
Dataset Creation: Mon Jul 25 01:33:03 2011
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
70 SP (mV) 170	2 Shallow Resistivity (Ohm-m) 200	
ABHV (ft3)	2 Rt (Ohm-m) 200	



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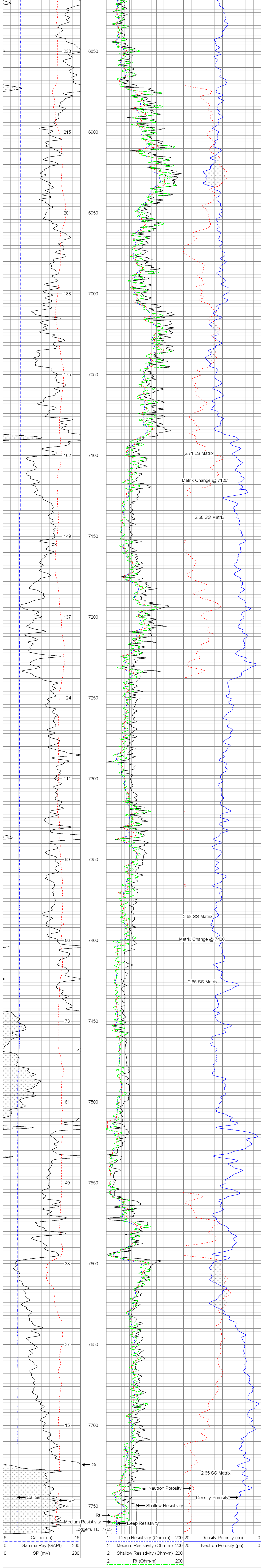

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