HIGH RESOLUTION INDUCTION

PHOENIX SURVEYS, INC.

Company	Noble Energy Inc.
Well	Strohauer PC G 05-28 D
Field	Wattenberg
County	Weld
State/Province	Colorado
Location	SHL: 523' FNL & 694' FEL NENE Sec - 5, Twp - 4N, Rge - 65W BHL: 70' FSL & 2607' FEL SWSE Sec - 32, Twp - 5N, Rge - 65W
Other Services	Density Neutron Microlog
Elevation	K.B. 4688 D.F. 4687 G.L. 4675

Permanent Datum	GL	Elevation 4675
Log Measured From	KB	
Drilling Measured From	KB	

Date	February 15, 2012			
Run Number	1			
Depth Driller	7652			
Depth Logger	7643			
Bottom Logged Interval	7643			
Top Log Interval	Casing			
Casing Driller	681			
Casing Logger	687			
Bit Size	7-7/8"			
Type Fluid in Hole	Chem Gel			
Density / Viscosity	10.5 / 61			
pH / Fluid Loss	8.0 / 10.2			
Source of Sample	Flowline			
Rm @ Meas. Temp	3.45 @ 70 F			
Rmf @ Meas. Temp	2.76 @ 70 F			
Rmc @ Meas. Temp	4.14 @ 70 F			
Source of Rmf / Rmc	Measure / Calc			
Rm @ BHT	1.01 @ 210 F			
Time Circulation Stopped	1800 2/14			
Time Logger on Bottom	0050			
Maximum Recorded Temperature	210 F			
Equipment Number	52			
Location	Brighton, CO			
Recorded By	Matt Gill			
Witnessed By	Bob Frank			

Company
Well
Field
County
State/Prv

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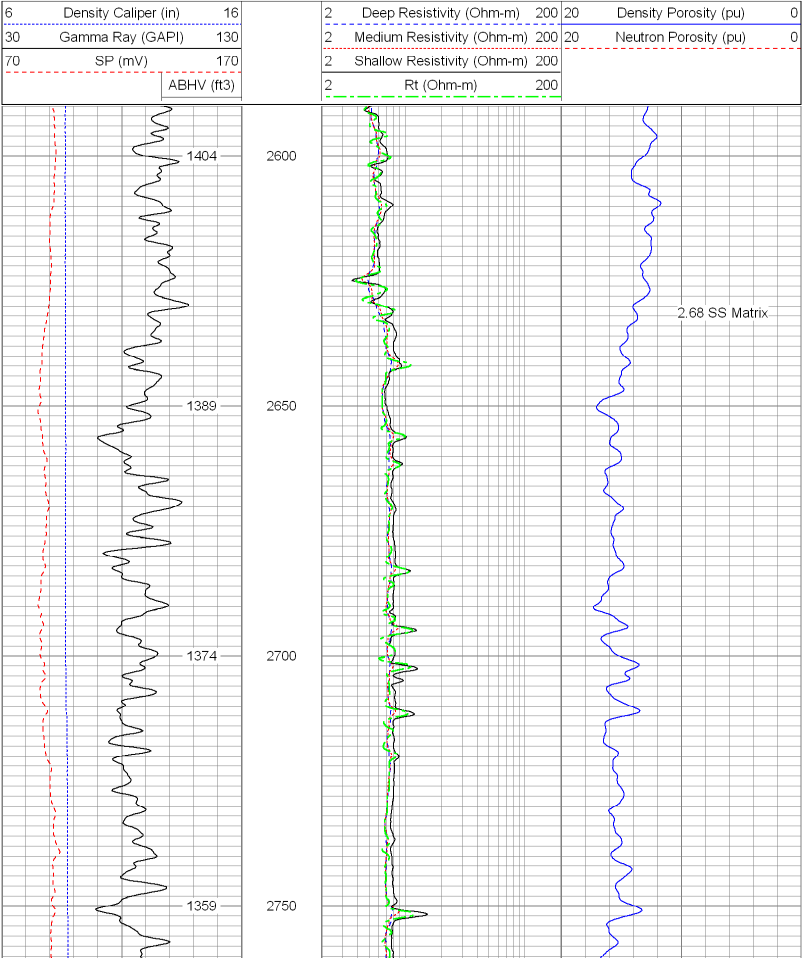
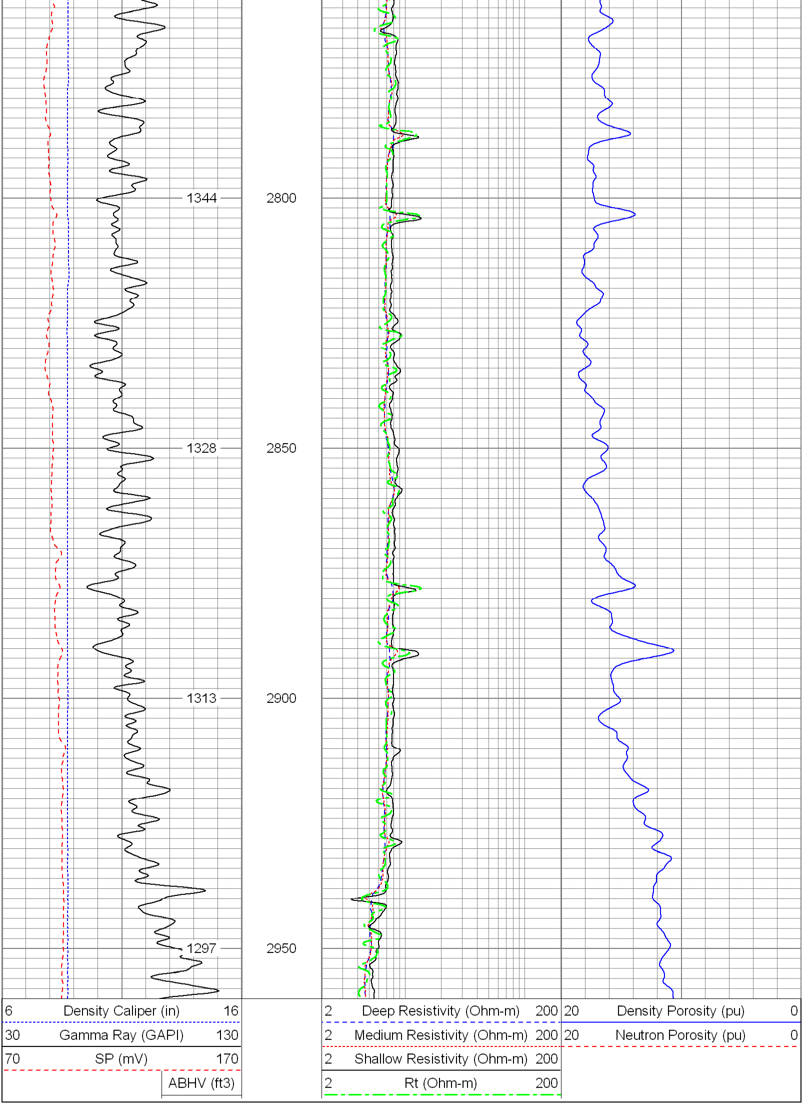
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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 126
Thank you for using Phoenix Surveys!!
API #: 05-123-34769-00
No Repeat Due to Hole Conditions

Database File: 12613.db
Dataset Pathname: final
Presentation Format: pdc1
Dataset Creation: Wed Feb 15 01:36:10 2012
Charted by: Depth in Feet scaled 1:240





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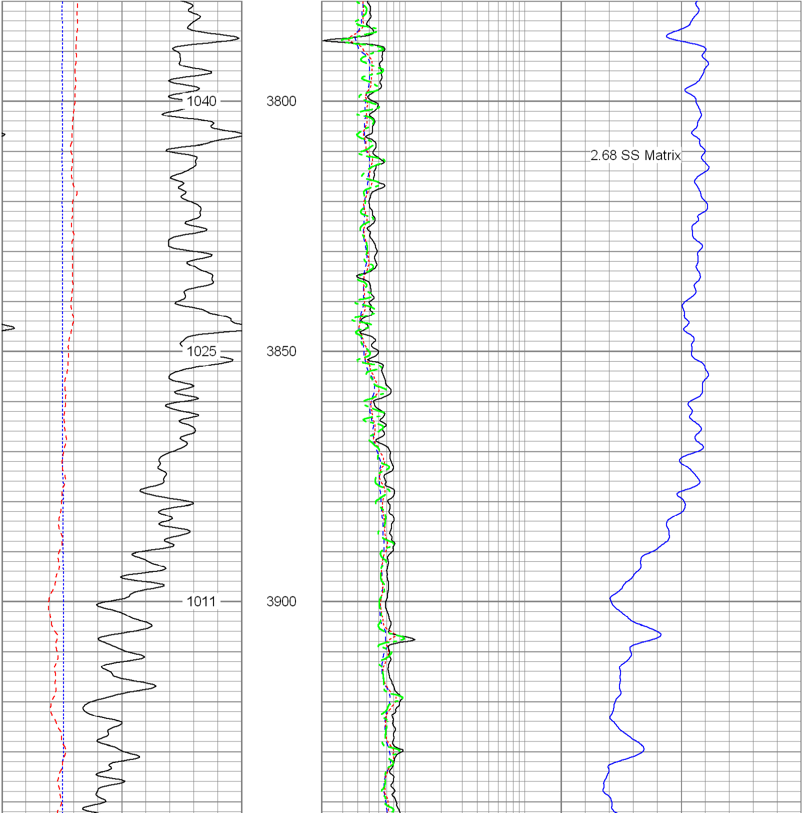
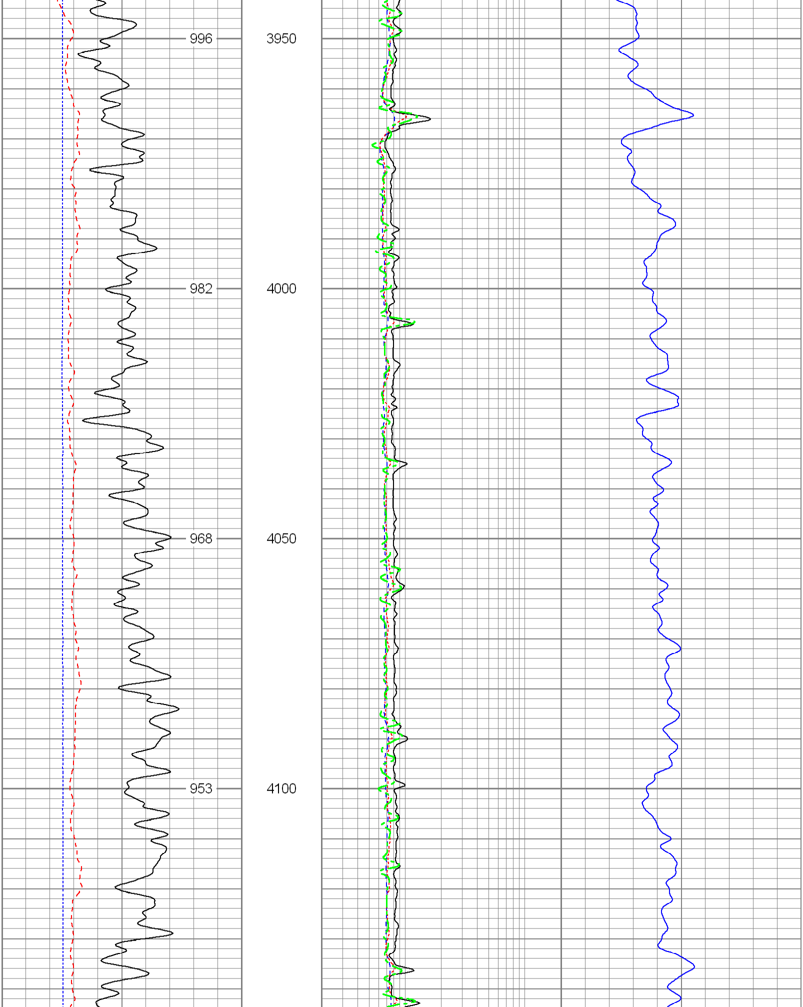
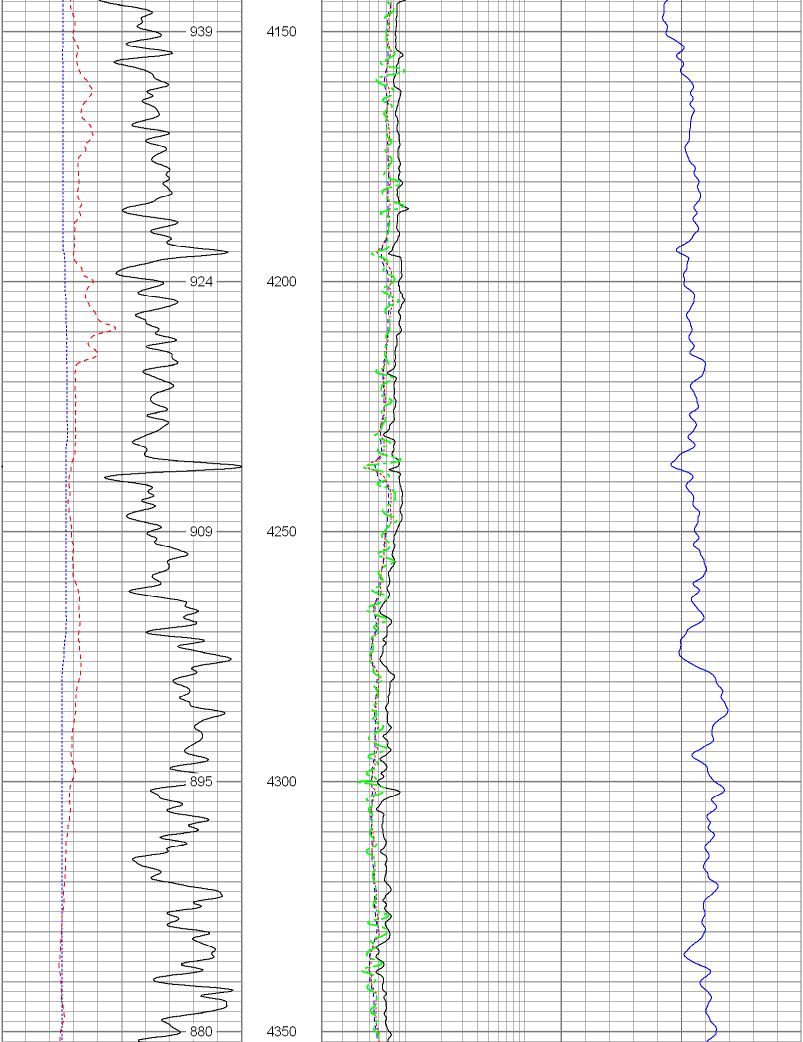
6 Density Caliper (in) 16
30 Gamma Ray (GAPI) 130
70 SP (mV) 170
ABHV (ft3)

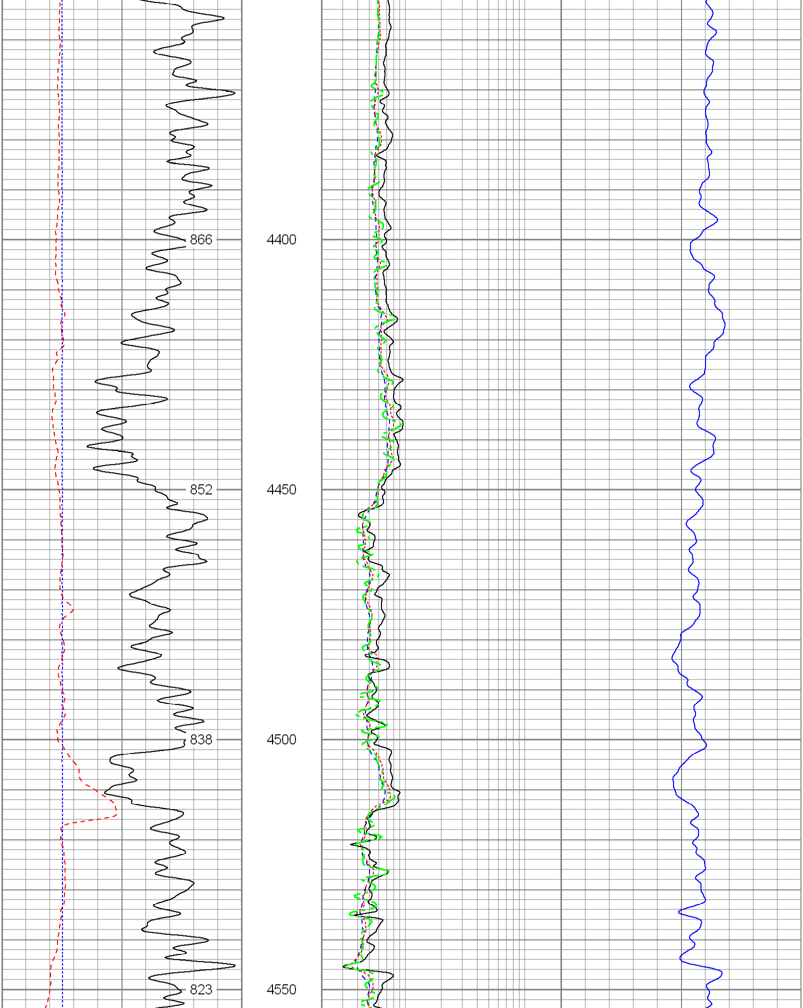
2 Deep Resistivity (Ohm-m) 200
2 Medium Resistivity (Ohm-m) 200
2 Shallow Resistivity (Ohm-m) 200
2 Rt (Ohm-m) 200

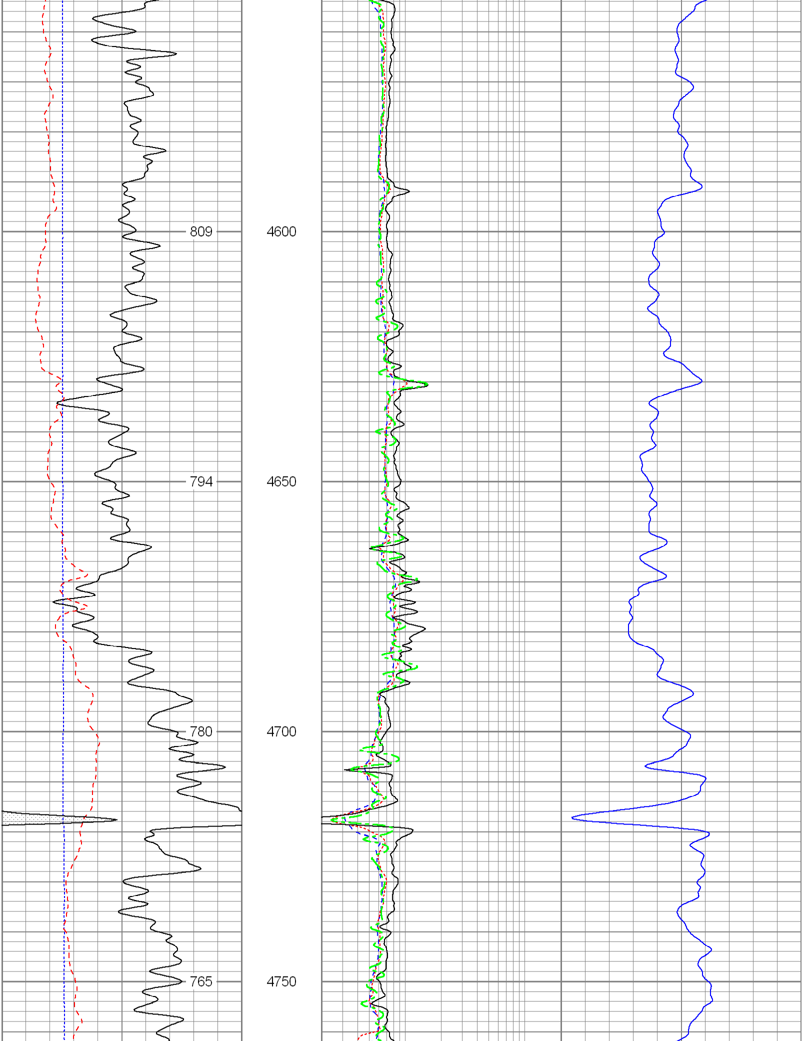
20 Density Porosity (pu) 0
20 Neutron Porosity (pu) 0

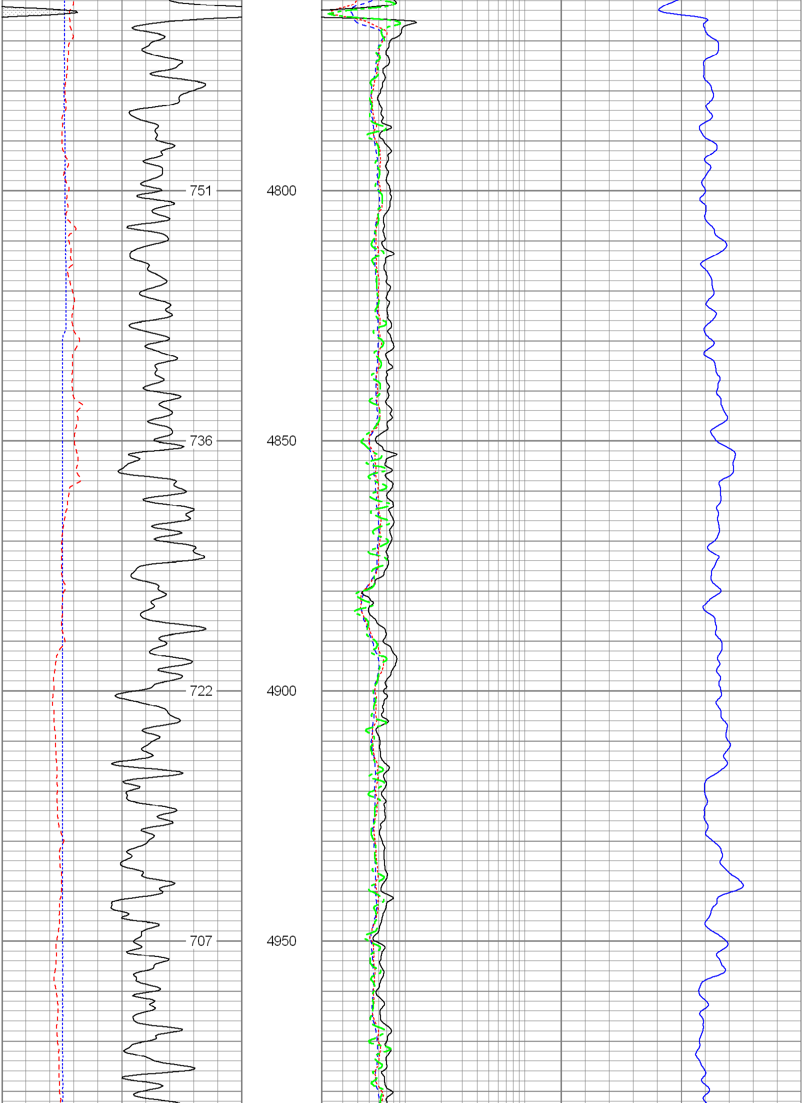


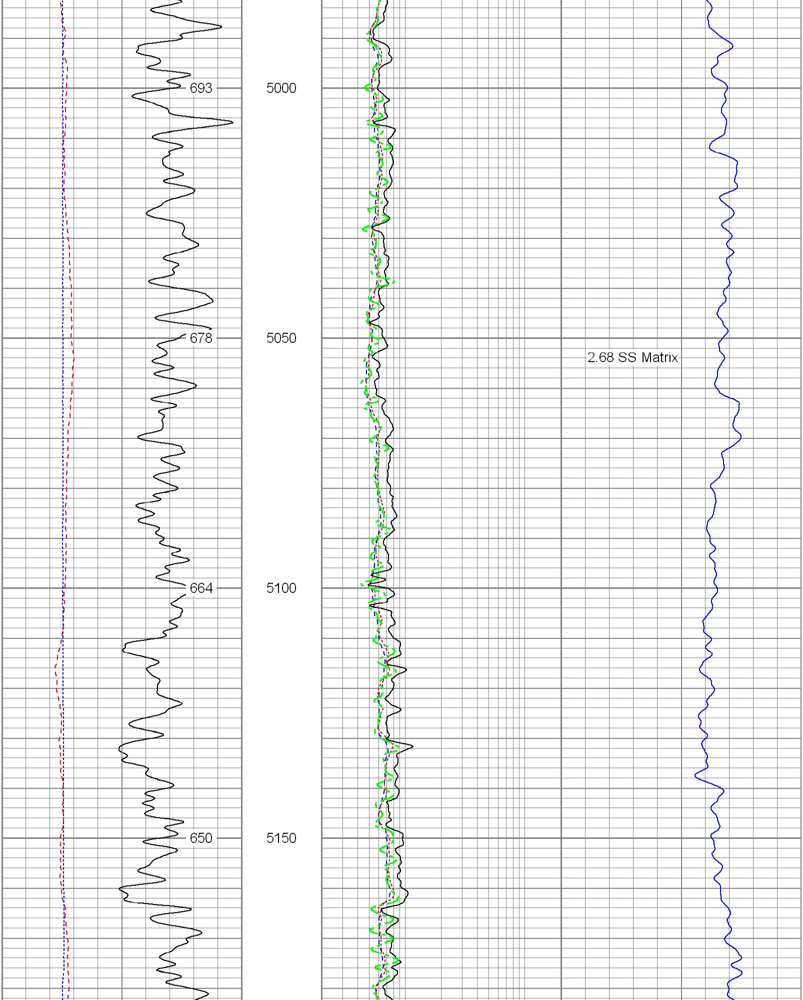


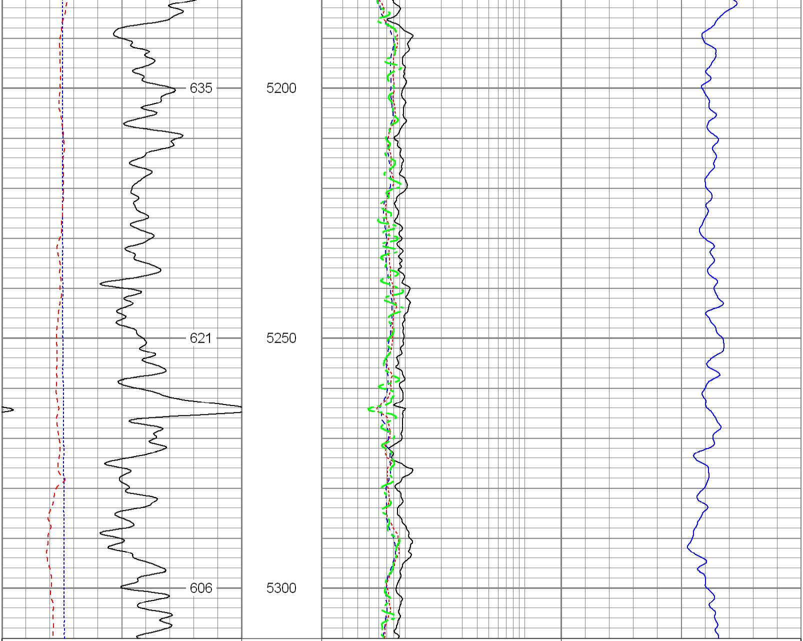












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ABHV (ft3)	2 Rt (Ohm-m) 200	

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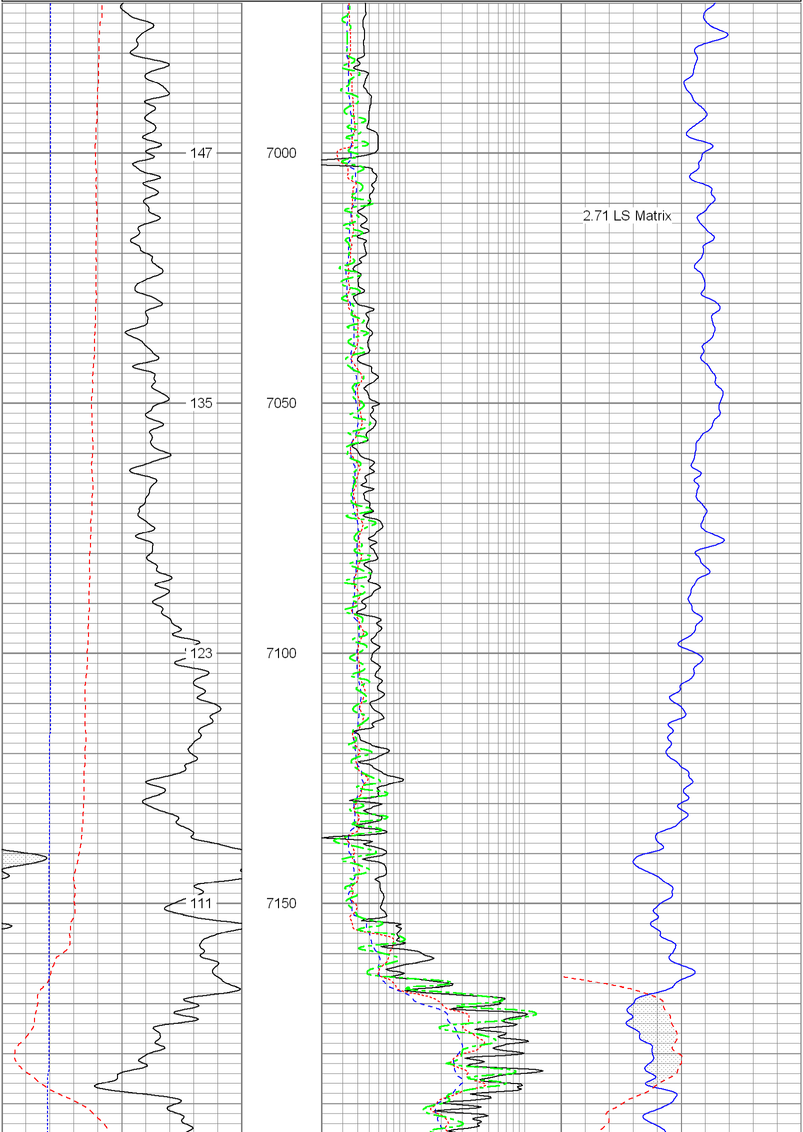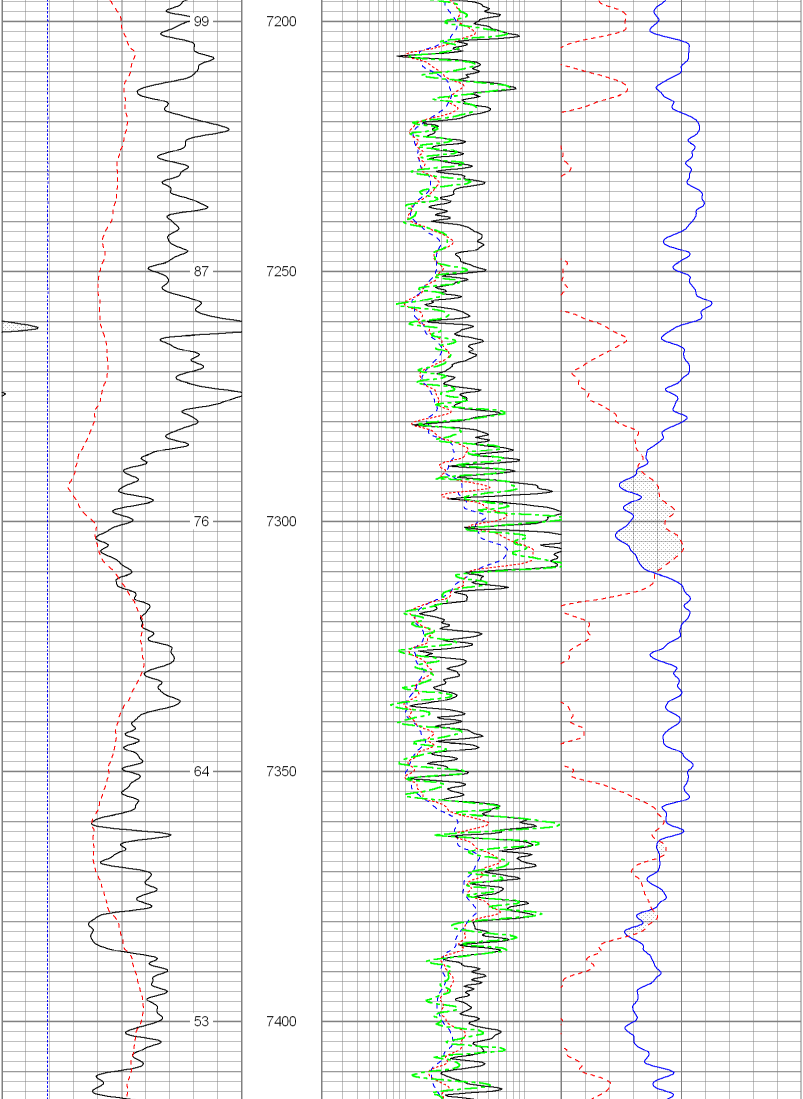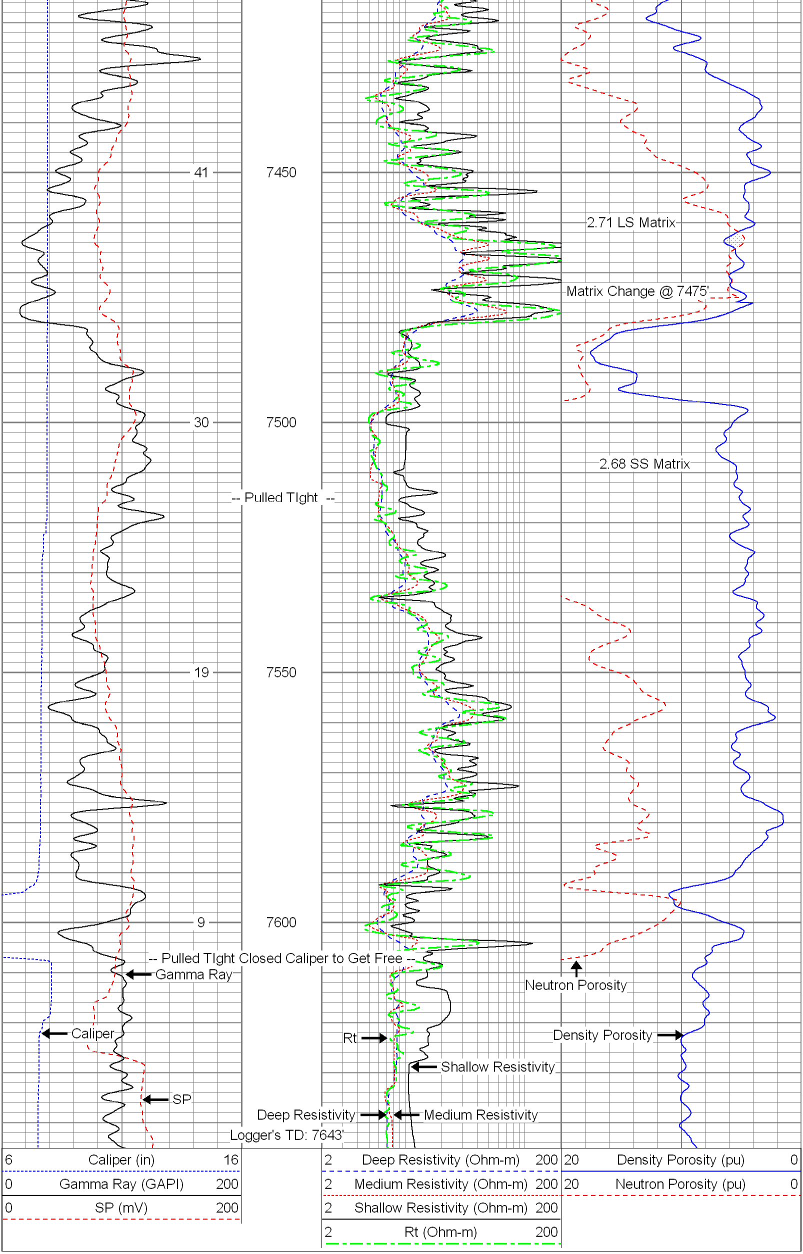6 Caliper (in) 16	2 Deep Resistivity (Ohm-m) 200	20 Density Porosity (pu) 0
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