PHOENIX SURVEYS, INC.

HIGH RESOLUTION INDUCTION

Company
Well
Field
County
State/Prv

Company Noble Energy Inc.
Well Camp H30-29D
Field Wattenberg
County Weld **State/Province** Colorado
Location SHL: 1669' FSL & 969' FWL NWSW
BHL: 131' FSL & 1322' FWL SWSW
Sec. 19, Twp. 3N, Rge. 65W

Other Services
Density
Neutron
Microlog

Permanent Datum GL Elevation 4990
Log Measured From KB
Drilling Measured From KB

Elevation
K.B. 5005
D.F. 5004
G.L. 4990

Date	March 19, 2011			
Run Number	1			
Depth Driller	8315			
Depth Logger	8318			
Bottom Logged Interval	8318			
Top Log Interval	Casing			
Casing Driller	723			
Casing Logger	723			
Bit Size	7+7/8"			
Type Fluid in Hole	Chem Gel			
Density / Viscosity	9.3 / 52			
pH / Fluid Loss	9.0 / 9.5			
Source of Sample	Flowline			
Rm @ Meas. Temp	3.20 @ 85 F			
Rmf @ Meas. Temp	2.50 @ 85 F			
Rmc @ Meas. Temp	4.10 @ 85 F			
Source of Rmf / Rmc	Measure / Calc			
Rm @ BHT	1.18 @ 230 F			
Time Circulation Stopped	1800			
Time Logger on Bottom	2245			
Maximum Recorded Temperature	230 F			
Equipment Number	50			
Location	Brighton, CO			
Recorded By	Schuman			
Witnessed By	Frank			

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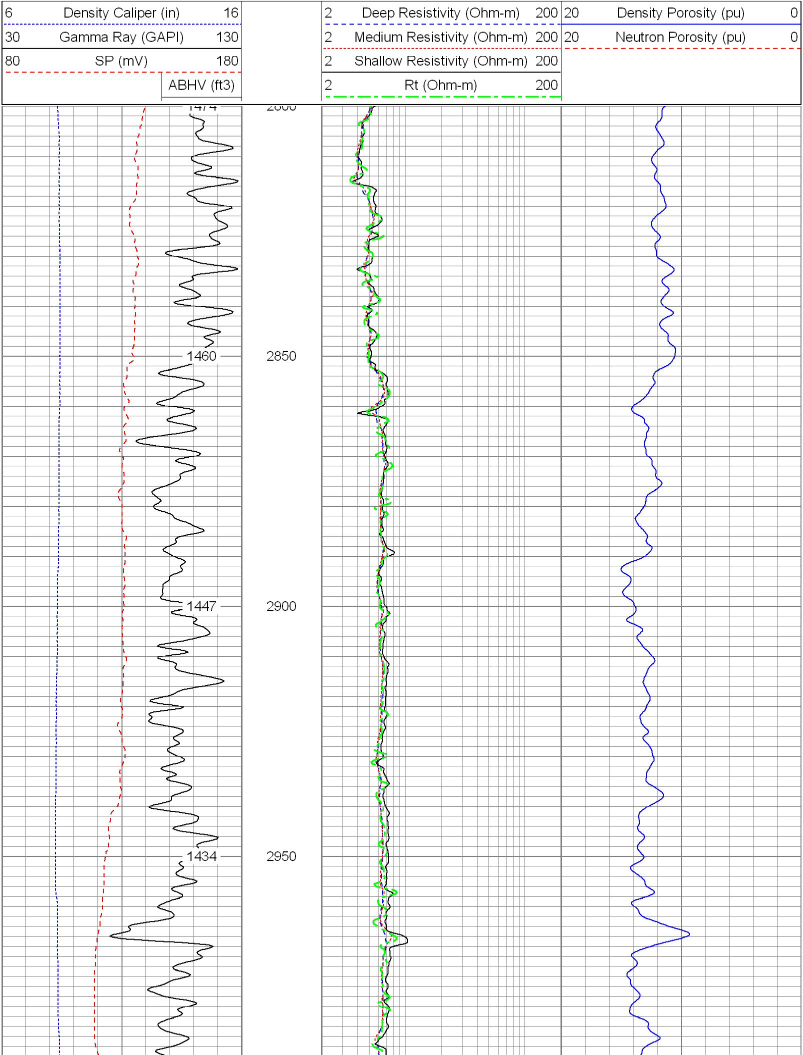
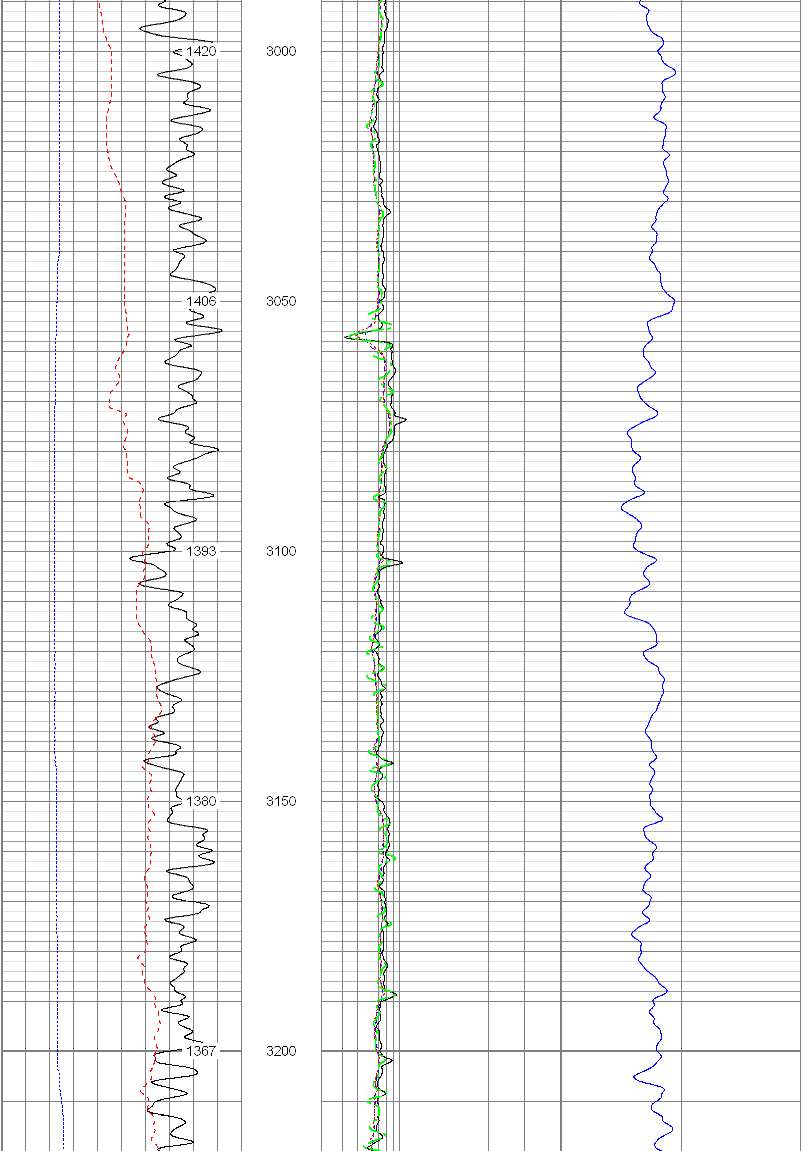
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

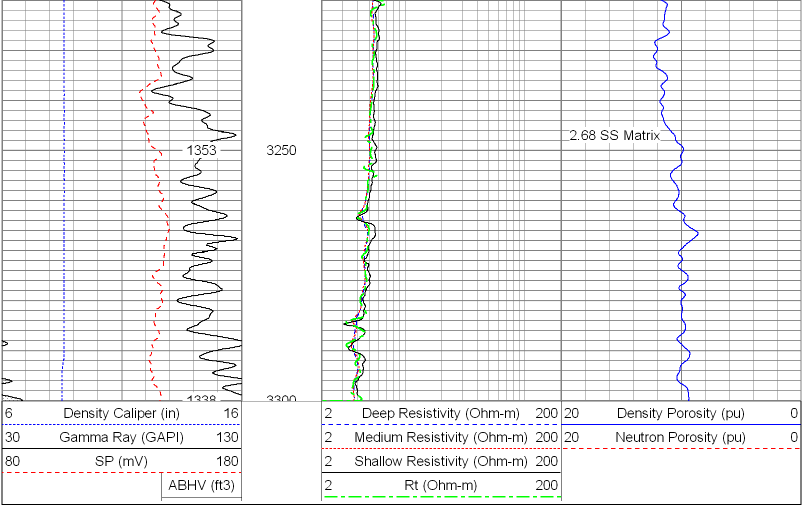
Comments

Annular volume calculated for 4.5" casing
Ensign Rig 128
Thank you for using Phoenix Surveys!!
API #: 05-123-31414

Database File:	11522.db
Dataset Pathname:	main
Presentation Format:	pdc1
Dataset Creation:	Sun Mar 20 02:04:28 2011
Charted by:	Depth in Feet scaled 1:240







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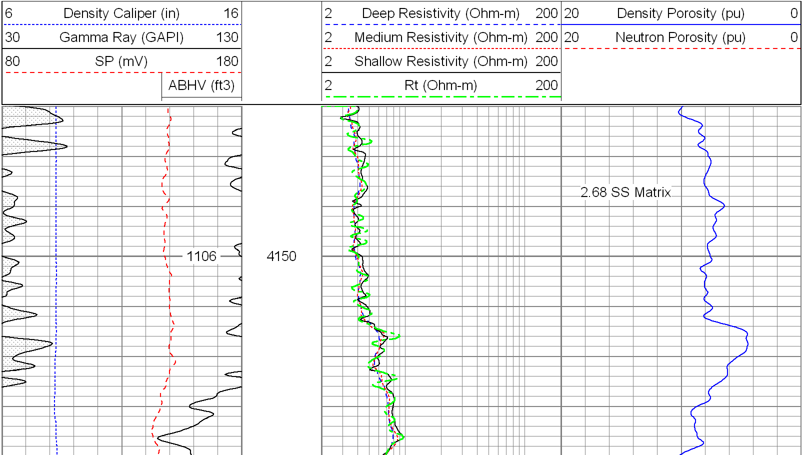

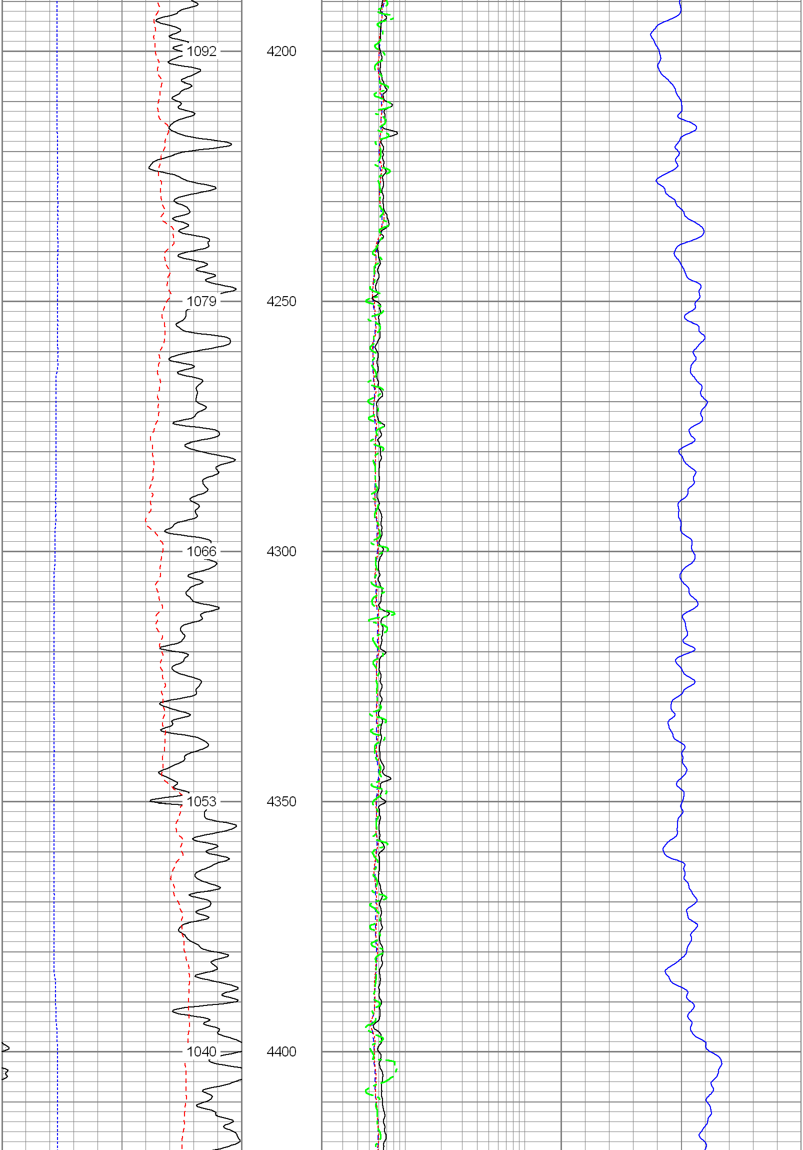

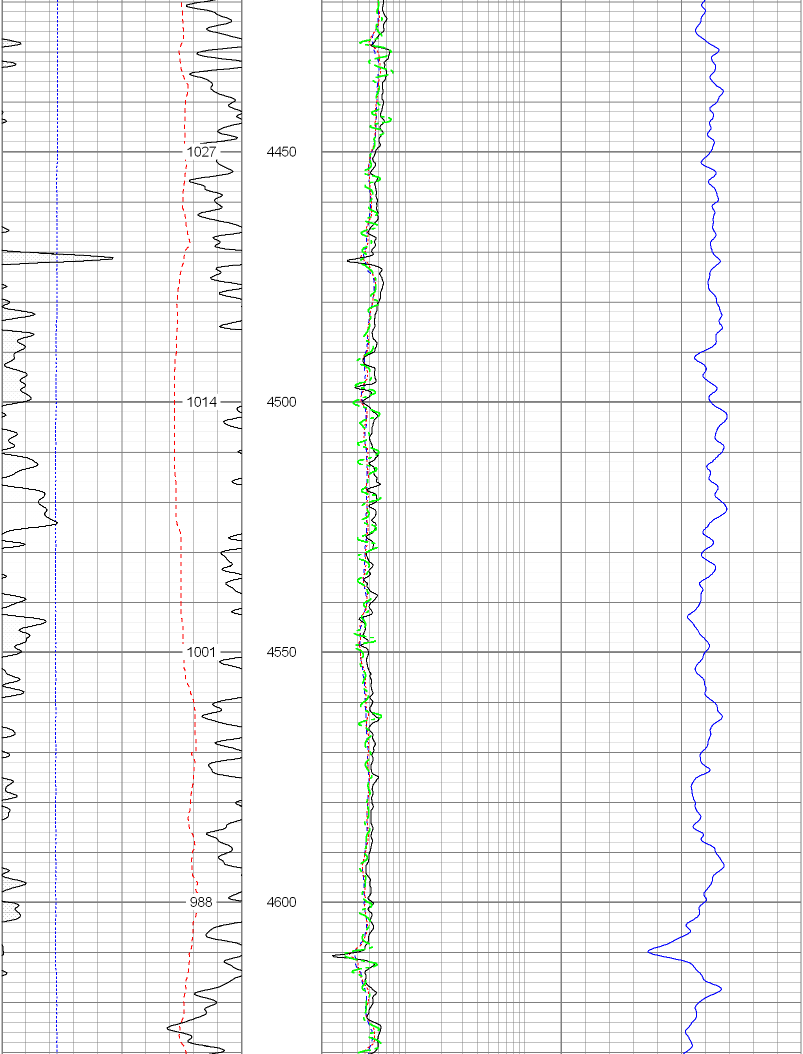

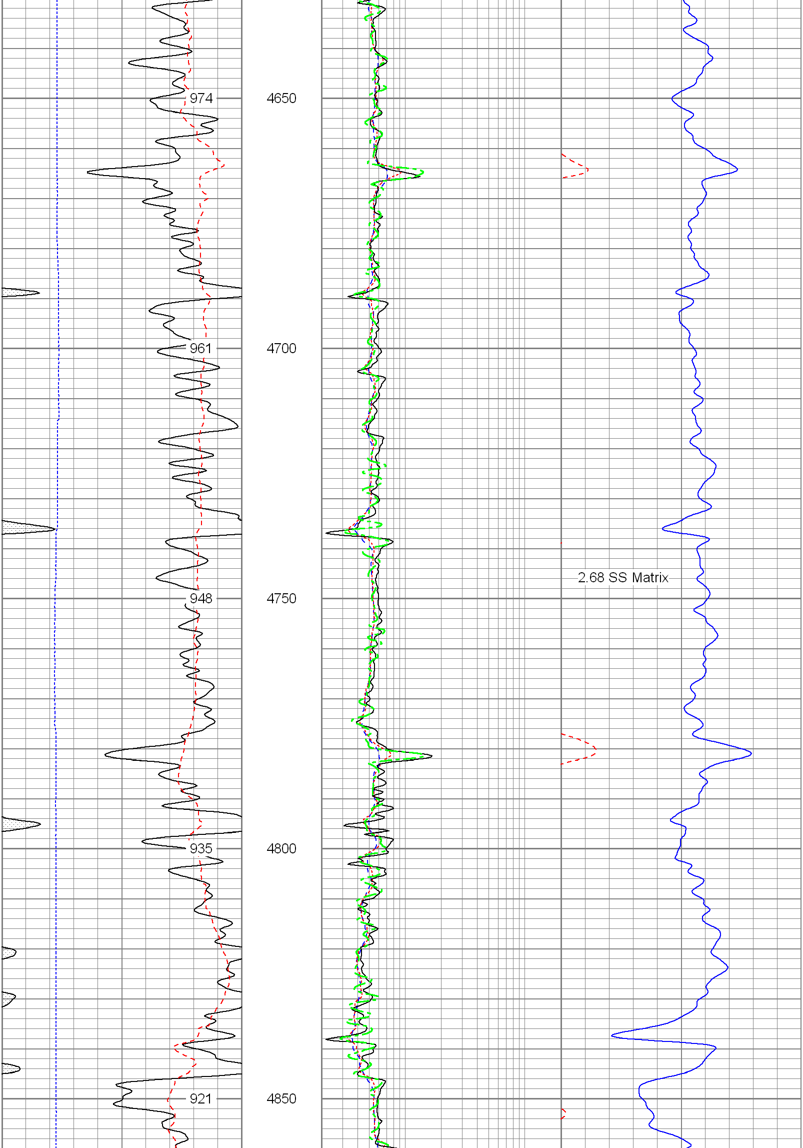

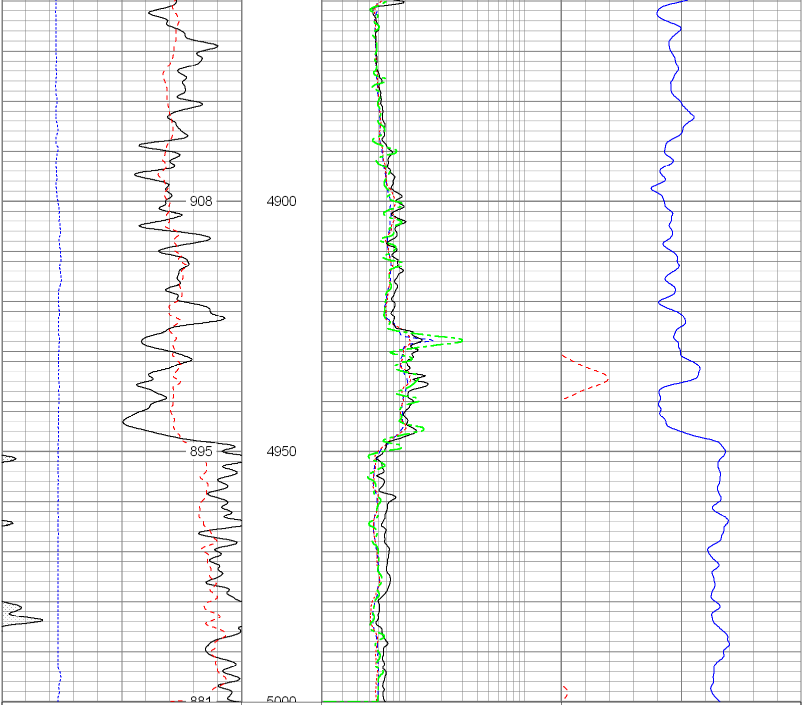

6 Density Caliper (in) 16	2 Deep Resistivity (Ohm-m) 200	20 Density Porosity (pu) 0
30 Gamma Ray (GAPI) 130	2 Medium Resistivity (Ohm-m) 200	20 Neutron Porosity (pu) 0
80 SP (mV) 180	2 Shallow Resistivity (Ohm-m) 200	
ABHV (ft3)	2 Rt (Ohm-m) 200	

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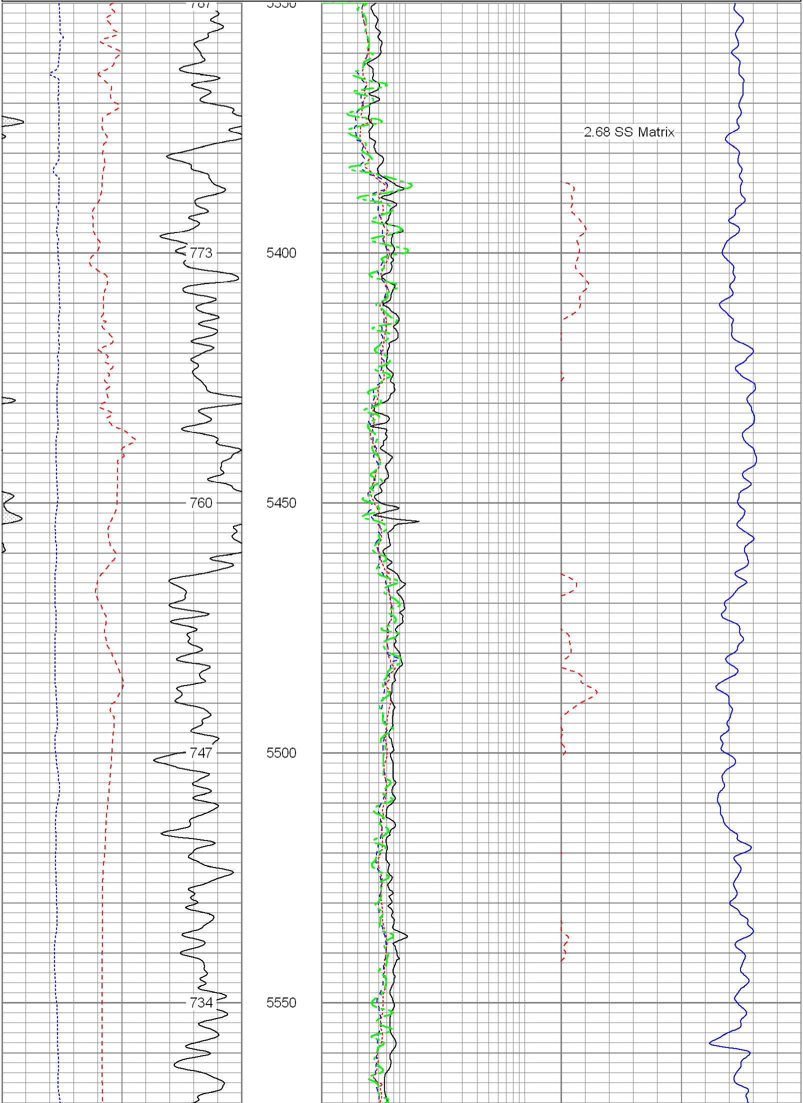

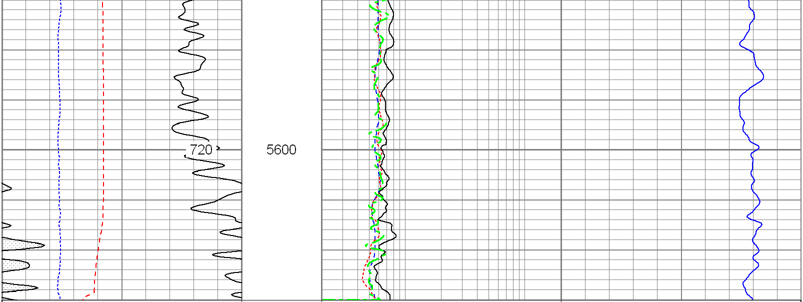

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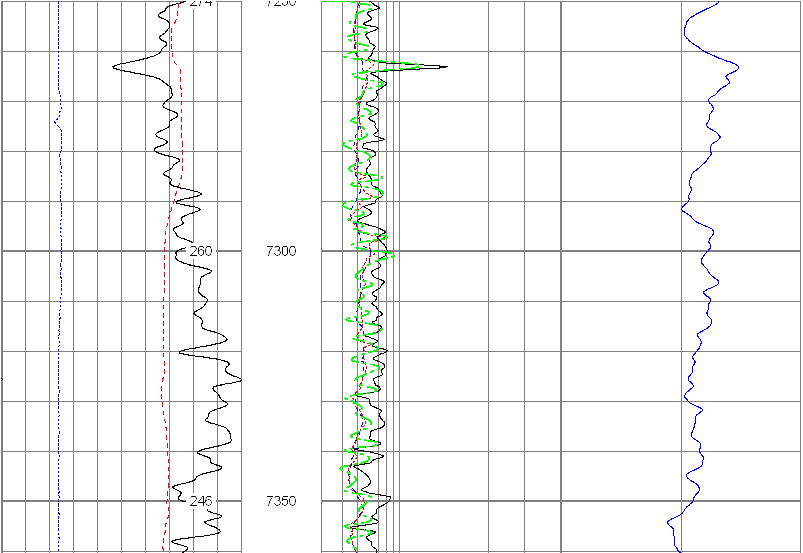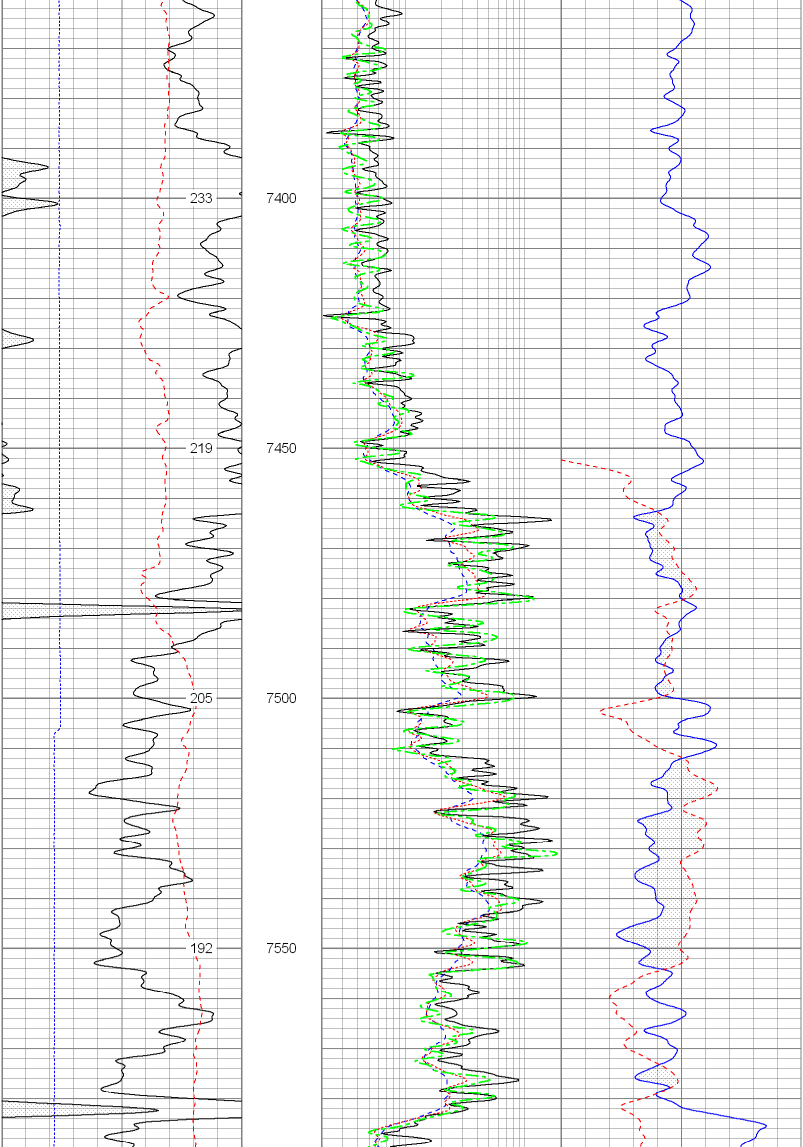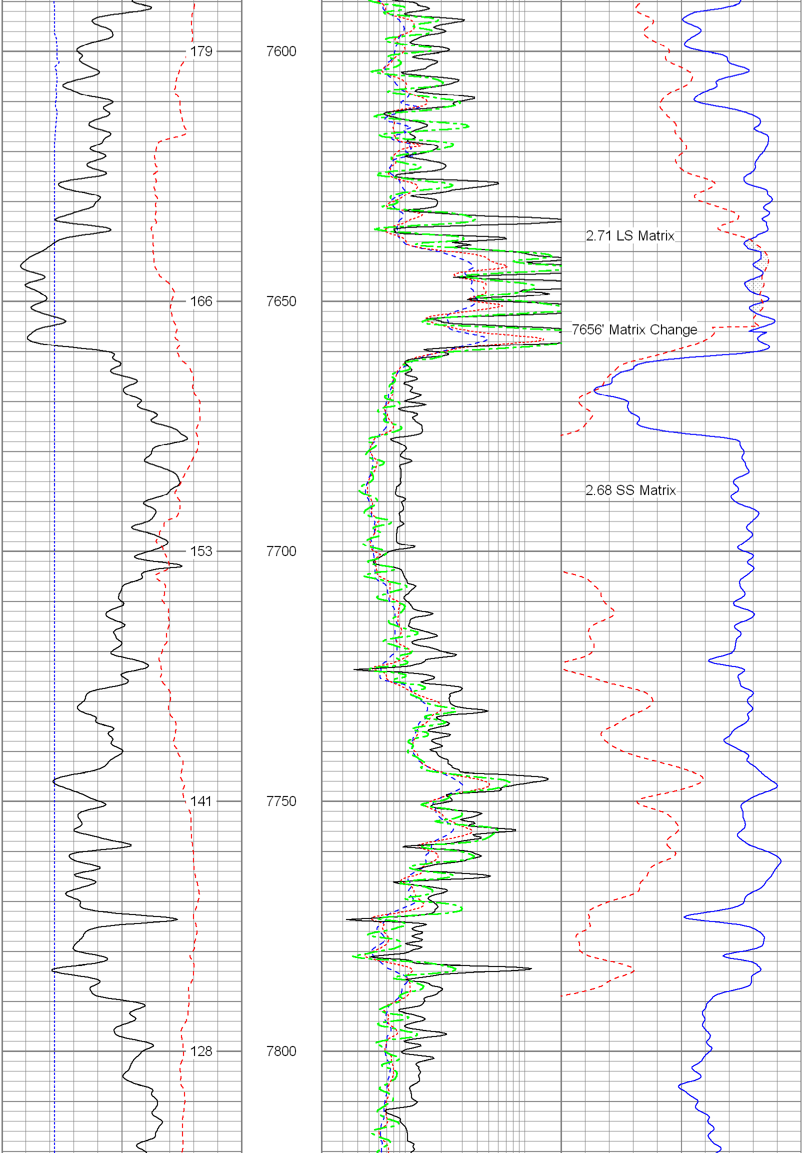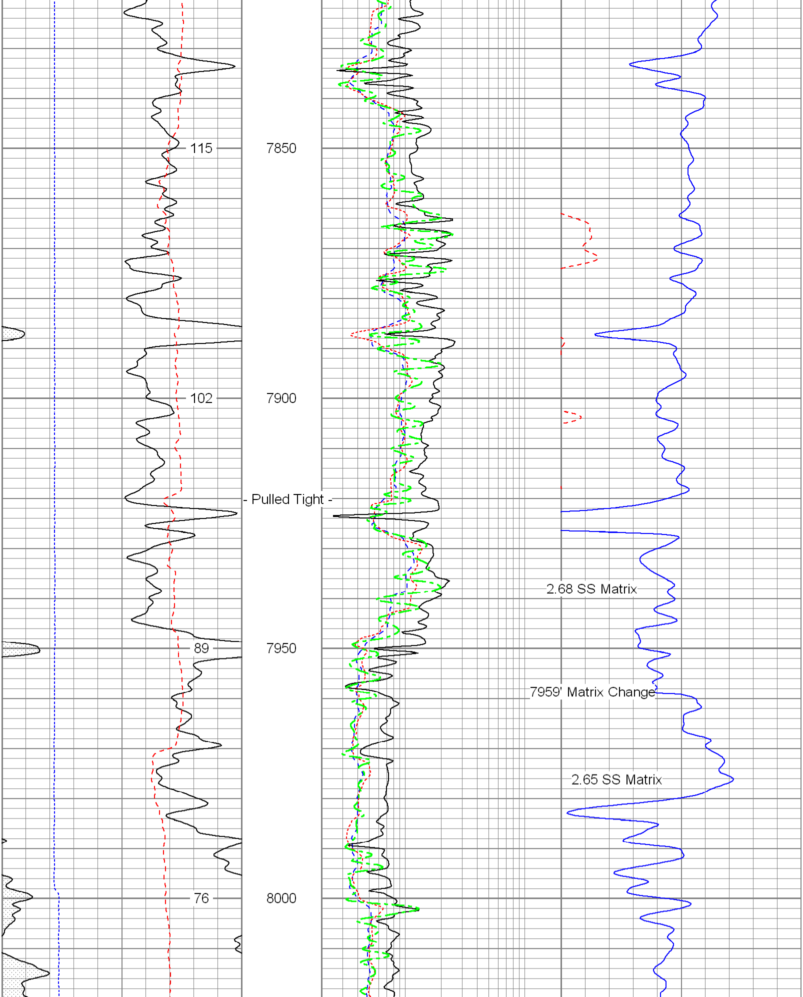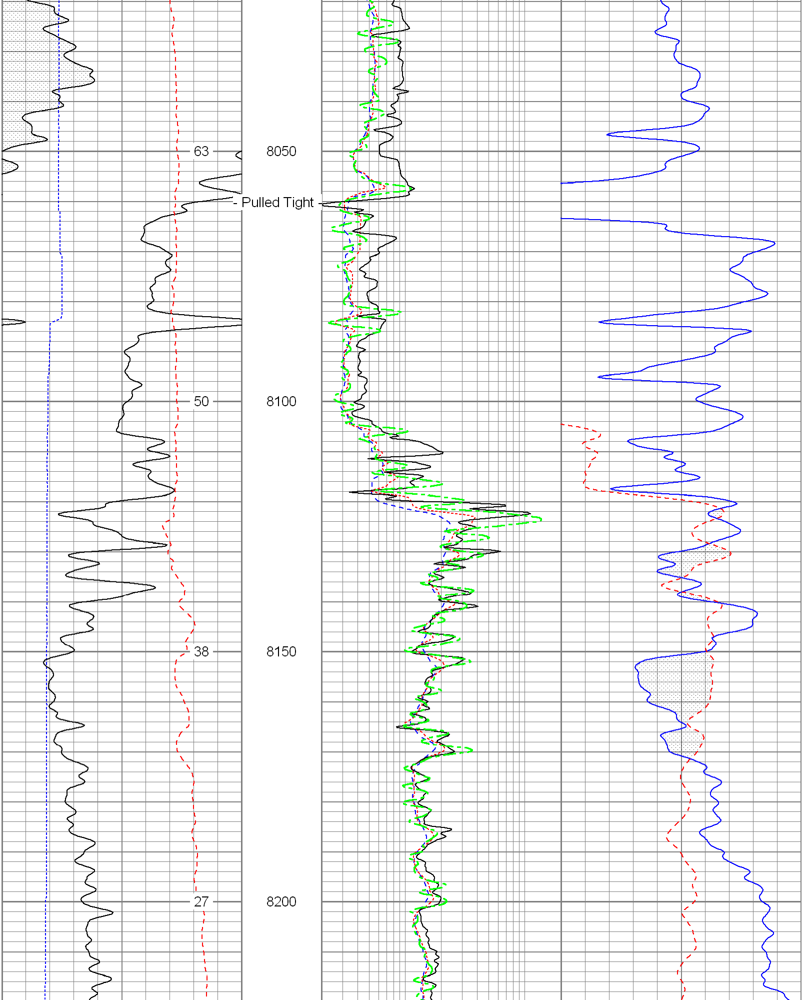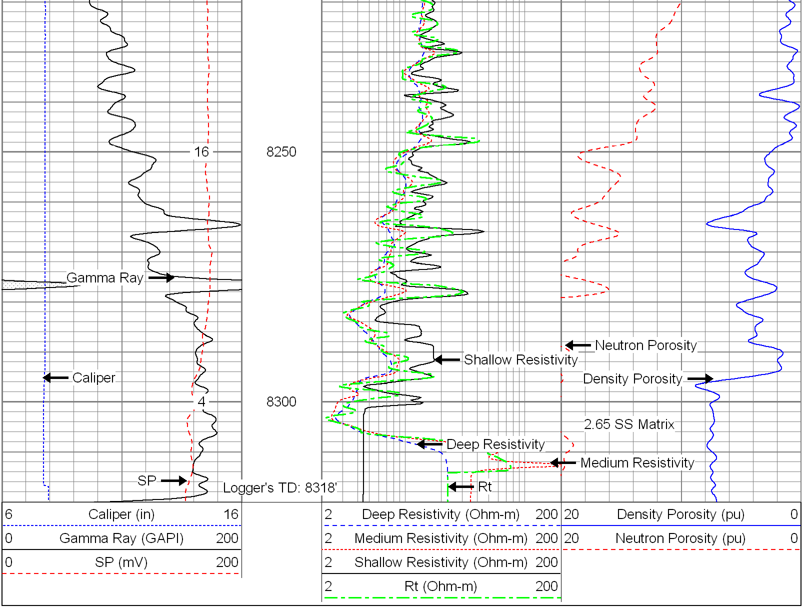6 Caliper (in) 16	2 Deep Resistivity (Ohm-m) 200	20 Density Porosity (pu) 0
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