PSI
PHOENIX SURVEYS, INC.

HIGH RESOLUTION INDUCTION

Company
Well
Field
County
State/Prv

Company	Noble Energy Inc.
Well	Boulter PC G11-33D
Field	Wattenberg
County	Weld
State/Province	Colorado

Location
SHL: 446' FSL & 1154' FWL SW SW
BHL: 1219' FSL & 61' FWL SW SW
Sec - 11, Twp - 4N, Rge - 65W

Other Services
Density
Neutron
Micrology

Permanent Datum	GL	Elevation	4683
Log Measured From	KB		
Drilling Measured From	KB		

Elevation
K.B. 4697
D.F. 4697
G.L. 4683

Date	January 4, 2012		
Run Number	1		
Depth Driller	7380		
Depth Logger	7372		
Bottom Logged Interval	7372		
Top Log Interval	Casing		
Casing Driller	744		
Casing Logger	744		
Bit Size	7-7/8"		
Type Fluid in Hole	Chem Gel		
Density / Viscosity	9.4 / 37		
pH / Fluid Loss	9.0 / 7.2		
Source of Sample	Flowline		
Rm @ Meas. Temp	3.30 @ 79 F		
Rmf @ Meas. Temp	2.10 @ 79 F		
Rmc @ Meas. Temp	4.70 @ 79 F		
Source of Rmf / Rmc	Measure / Calc		
Rm @ BHT	0.88 @ 211 F		
Time Circulation Stopped	1100		
Time Logger on Bottom	1710		
Maximum Recorded Temperature	211 F		
Equipment Number	52		
Location	Brighton, CO		
Recorded By	Randy Conley		
Witnessed By	Shane Heard		

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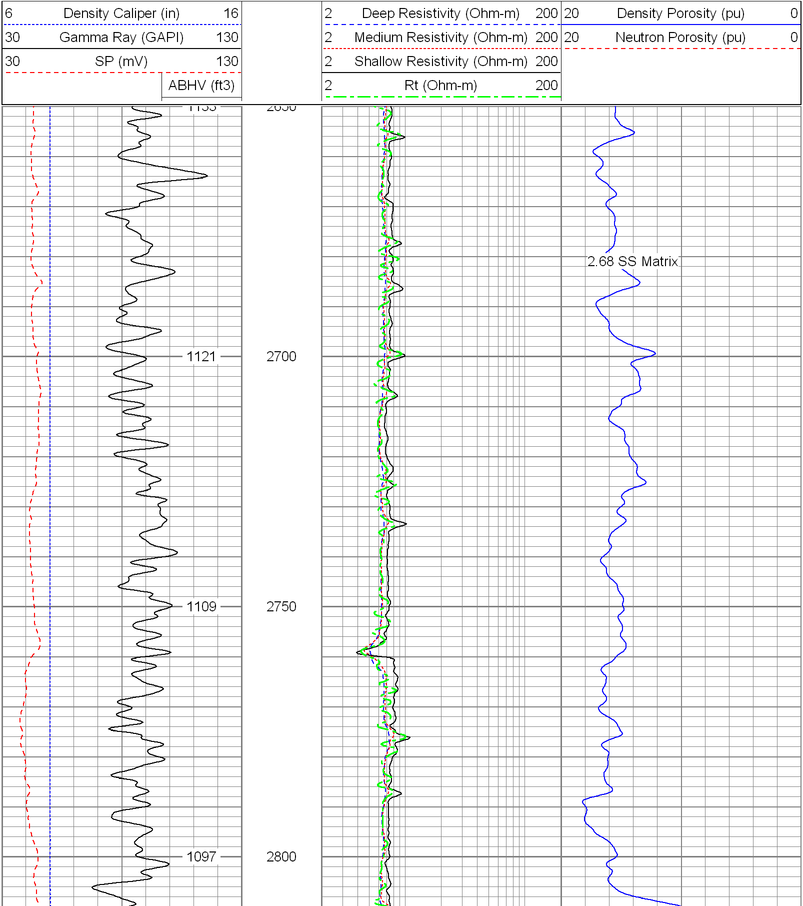
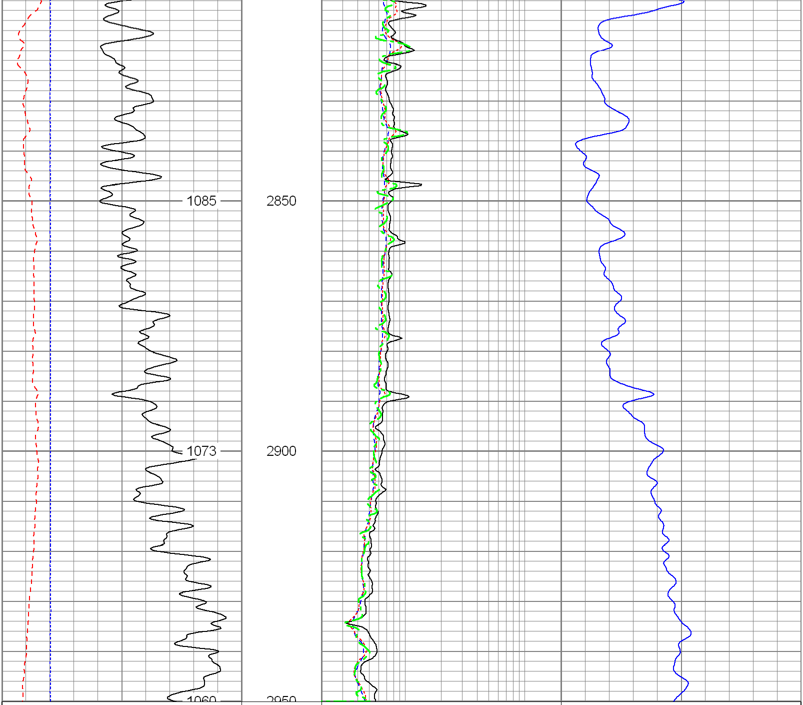
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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
Saxon Drilling Rig 144
Thank you for using Phoenix Surveys!!
API #: 05-123-33611-00

Database File:	12552.db
Dataset Pathname:	final
Presentation Format:	pdc1
Dataset Creation:	Wed Jan 04 17:32:06 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
30 SP (mV) 130		2 Shallow Resistivity (Ohm-m) 200	
ABHV (ft3)		2 Rt (Ohm-m) 200	

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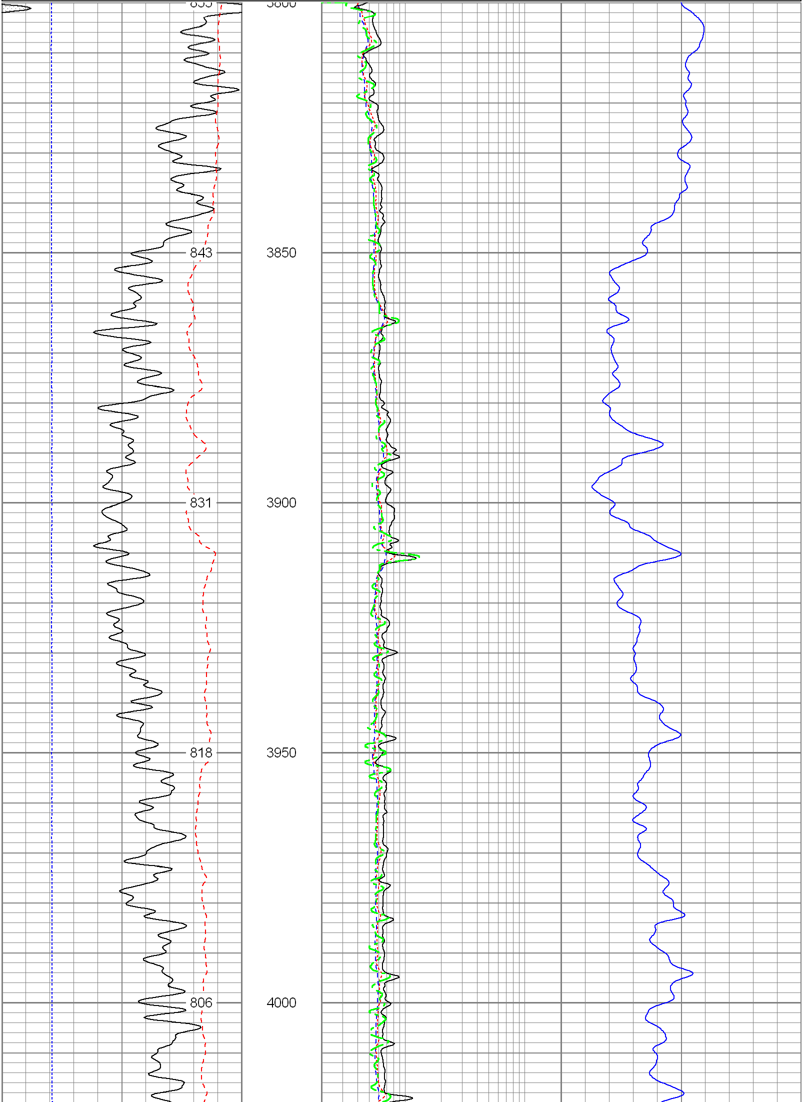

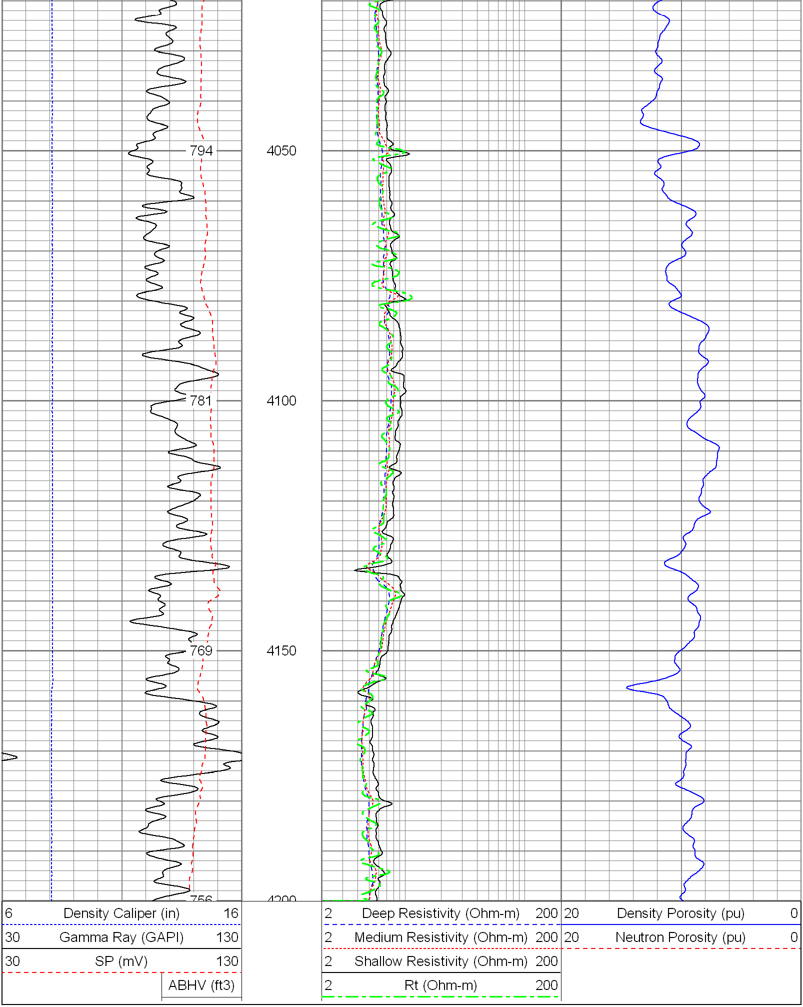

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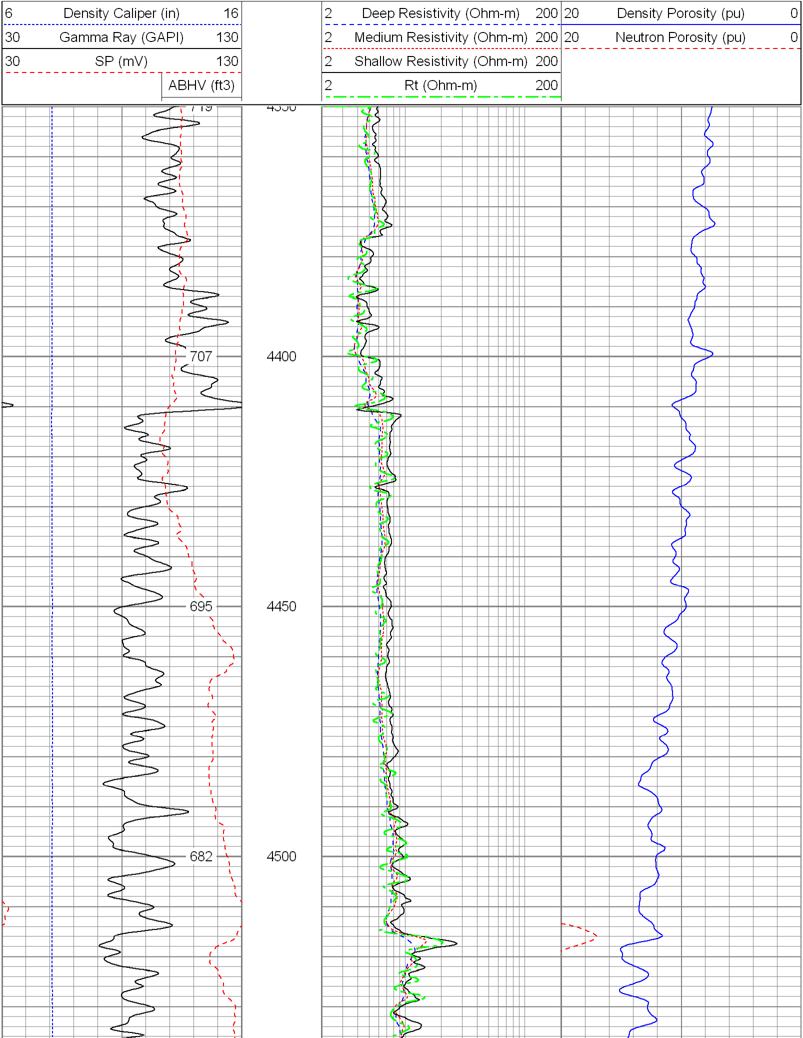

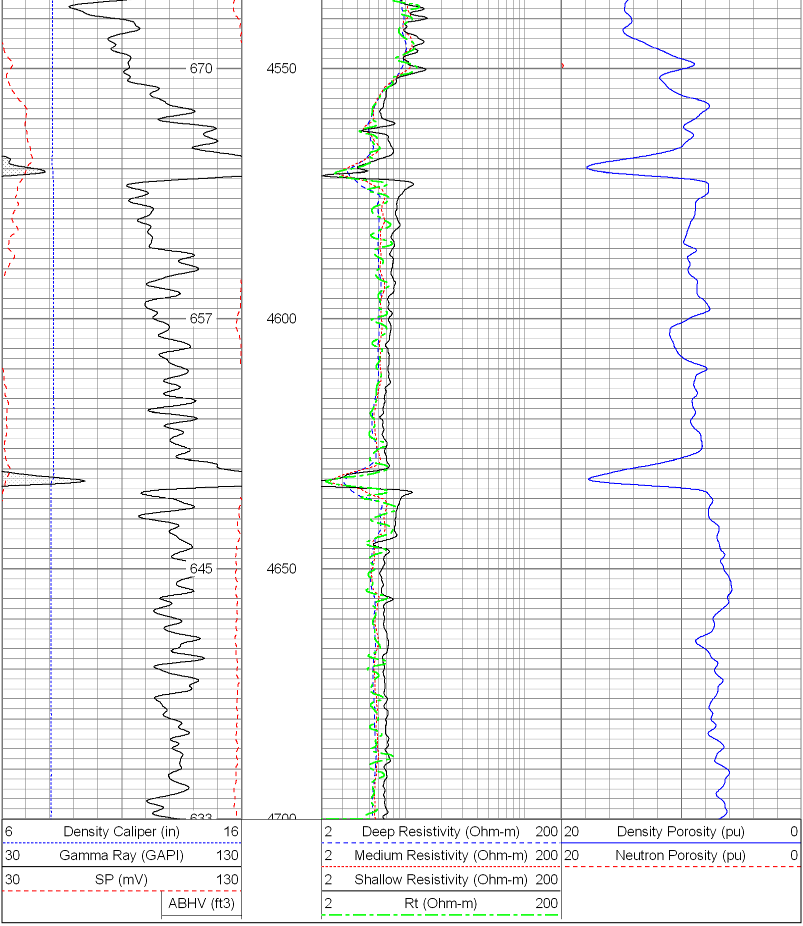

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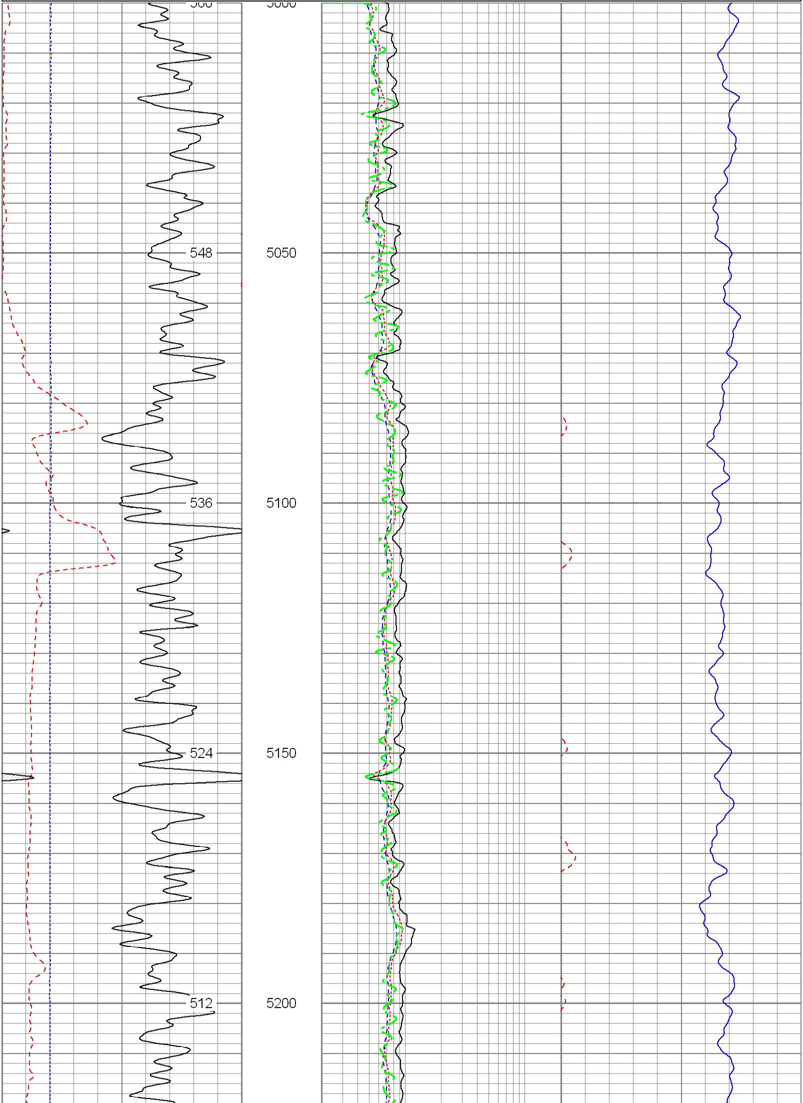

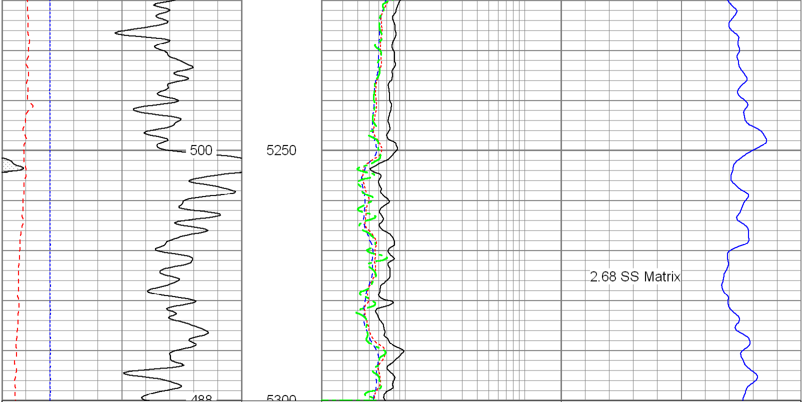

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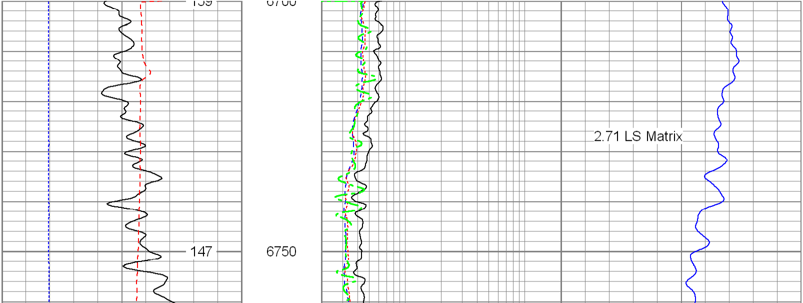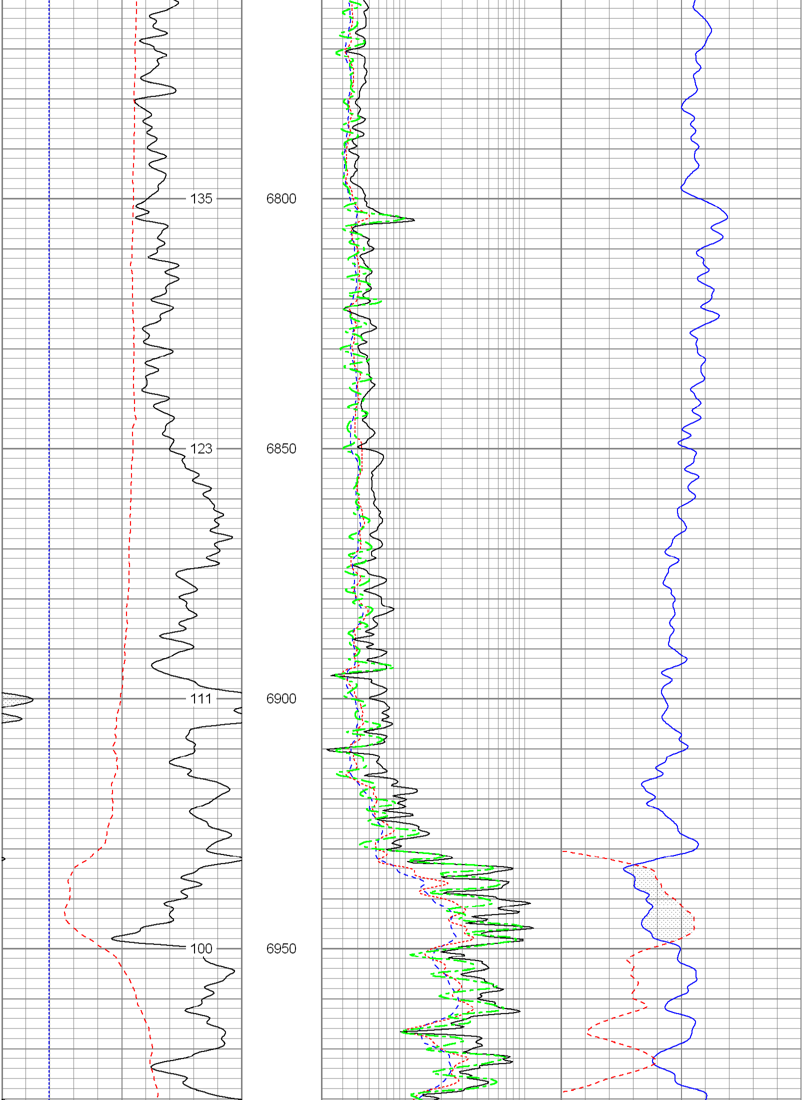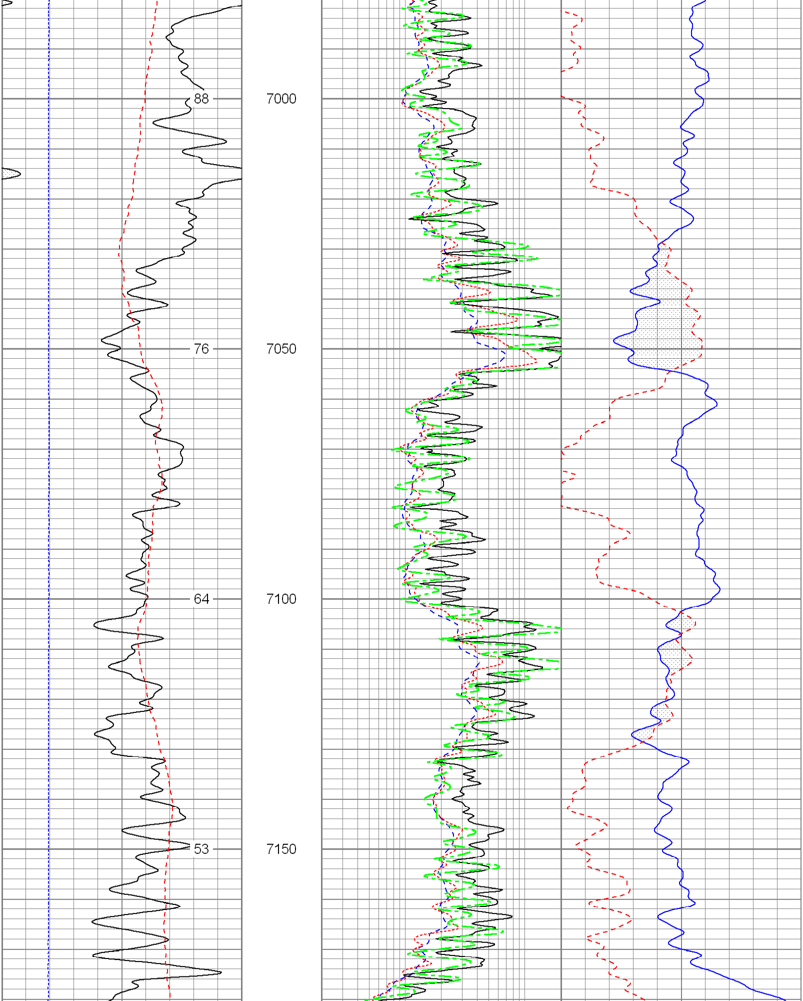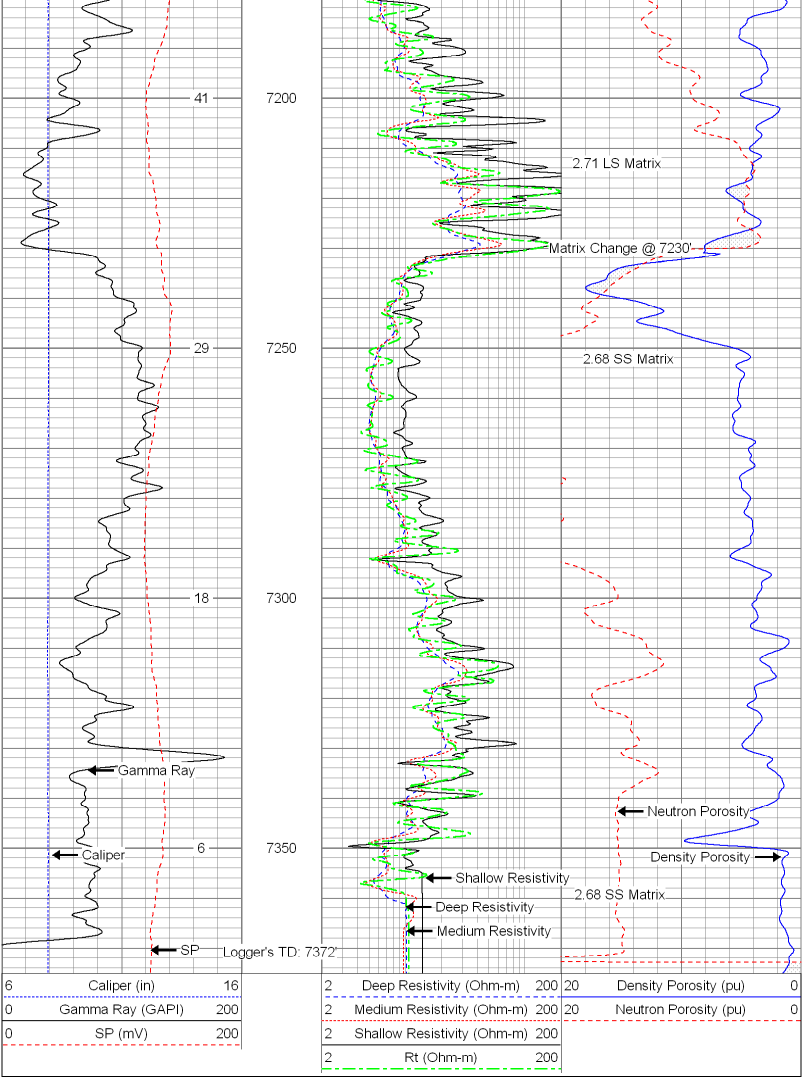6	Caliper (in)	16	2	Deep Resistivity (Ohm-m)	200	20	Density Porosity (pu)	0
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