PHOENIX SURVEYS, INC.

HIGH RESOLUTION INDUCTION

Company
Well
Field
County
State/Prv

Company	Noble Energy Inc.
Well	Dinner PC G01-22
Field	Wattenberg
County	Weld
State/Province	Colorado
Location	2550' FSL & 1320' FEL NW SE Sec. 1, Twp. 4N, Rge. 65W

Other Services
Density
Neutron
Microlog

Permanent Datum	GL	Elevation 4801
Log Measured From	KB	
Drilling Measured From	KB	

Elevation
K.B. 4814
D.F. 4814
G.L. 4801

Date	January 9, 2011		
Run Number	1		
Depth Driller	7273		
Depth Logger	7263		
Bottom Logged Interval	7263		
Top Log Interval	Casing		
Casing Driller	696		
Casing Logger	696		
Bit Size	7-7/8"		
Type Fluid in Hole	Chem Gel		
Density / Viscosity	9.6 / 45		
pH / Fluid Loss	8.0 / 8.0		
Source of Sample	Flowline		
Rm @ Meas. Temp	3.29 @ 64 F		
Rmf @ Meas. Temp	2.41 @ 64 F		
Rmc @ Meas. Temp	4.07 @ 64 F		
Source of Rmf / Rmc	Measure / Calc		
Rm @ BHT	1.19 @ 205 F		
Time Circulation Stopped	0015		
Time Logger on Bottom	0545		
Maximum Recorded Temperature	205 F		
Equipment Number	50		
Location	Brighton, CO		
Recorded By	Randy Conley		
Witnessed By	Roger Foster		

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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 126
Thank you for using Phoenix Surveys!!
API #: 05-123-32478-00

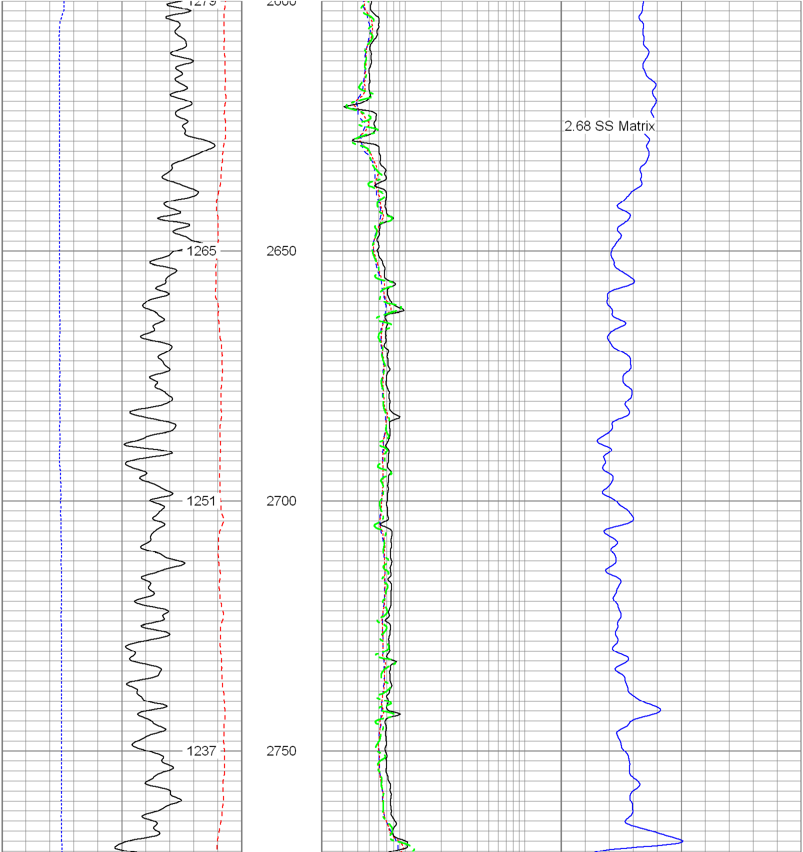
No repeat due to hole conditions.

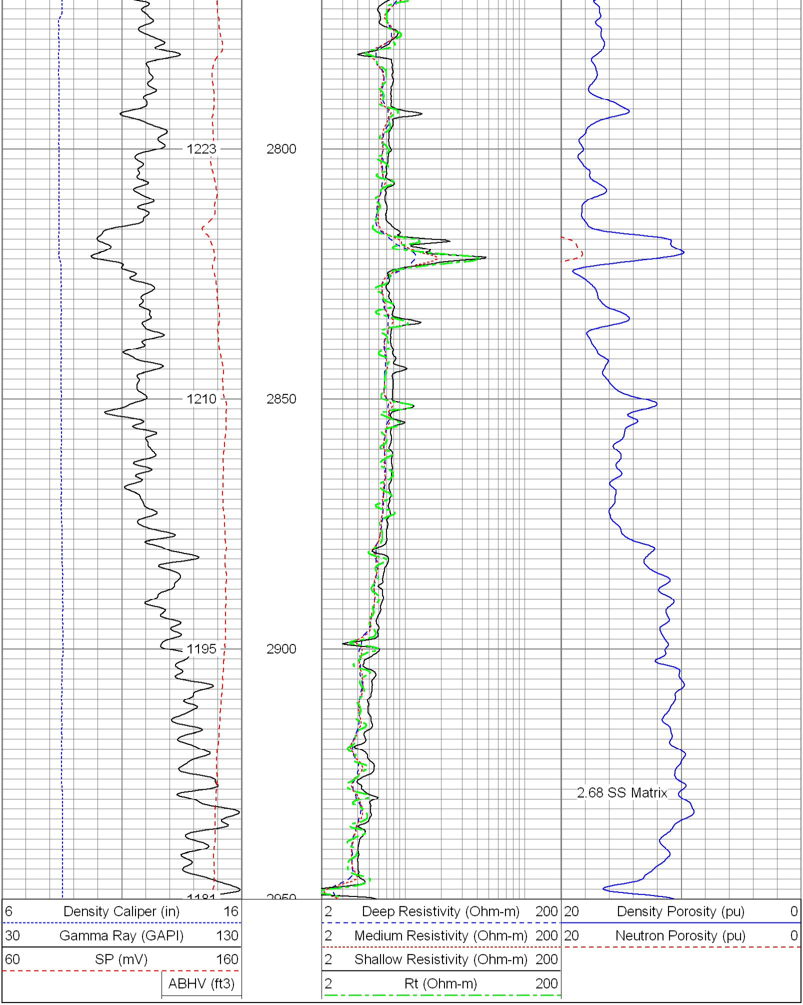
Database File:	11345.db
Dataset Pathname:	final
Presentation Format:	pdc1
Dataset Creation:	Sun Jan 09 06:08:29 2011
Charted by:	Depth in Feet scaled 1:240

6 Density Caliper (in) 16
30 Gamma Ray (GAPI) 130
60 SP (mV) 160
ABHV (ft3)

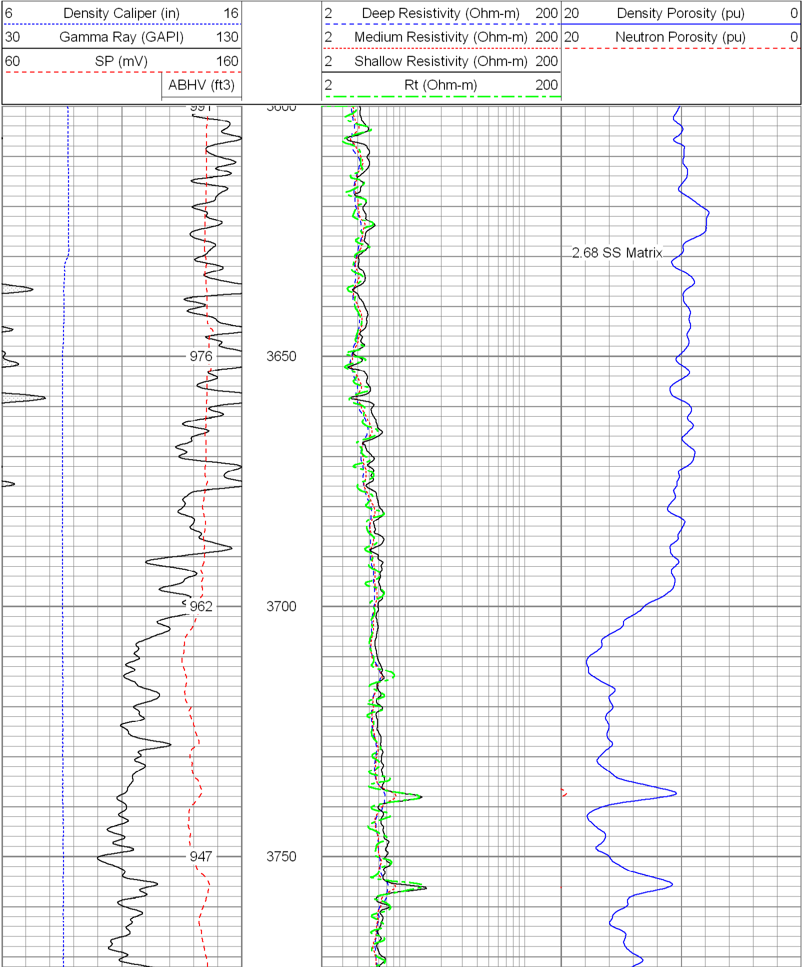
2 Deep Resistivity (Ohm-m) 200
2 Medium Resistivity (Ohm-m) 200
2 Shallow Resistivity (Ohm-m) 200
2 Rt (Ohm-m) 200

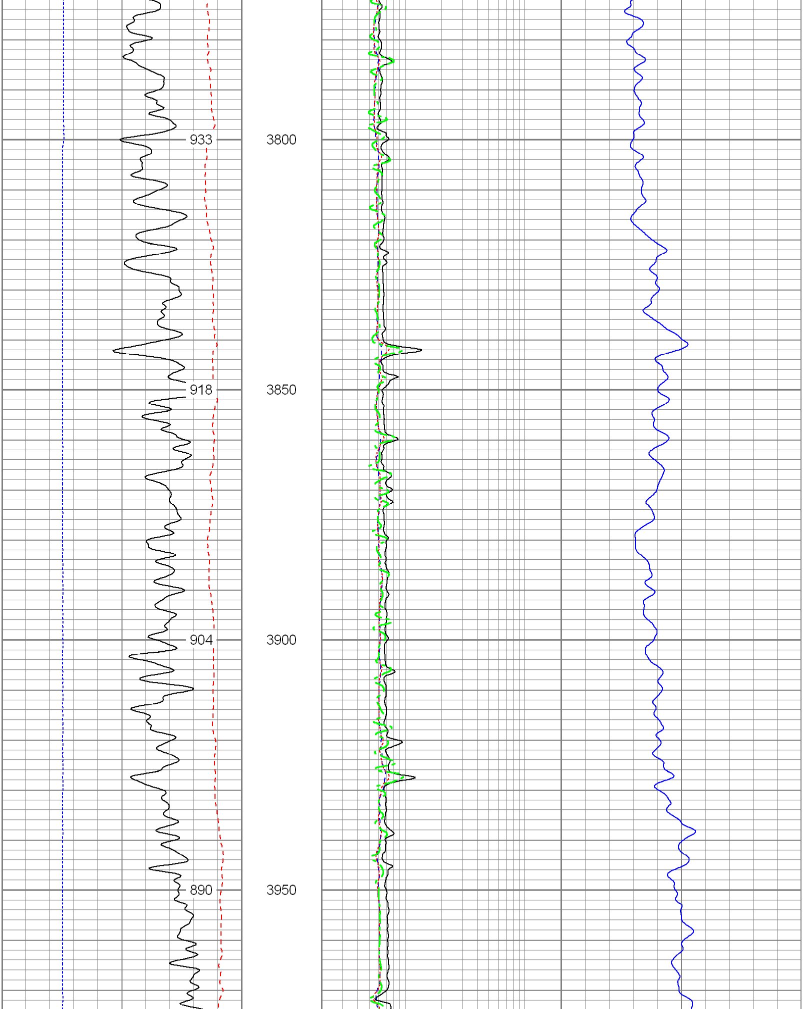
20 Density Porosity (pu) 0
20 Neutron Porosity (pu) 0

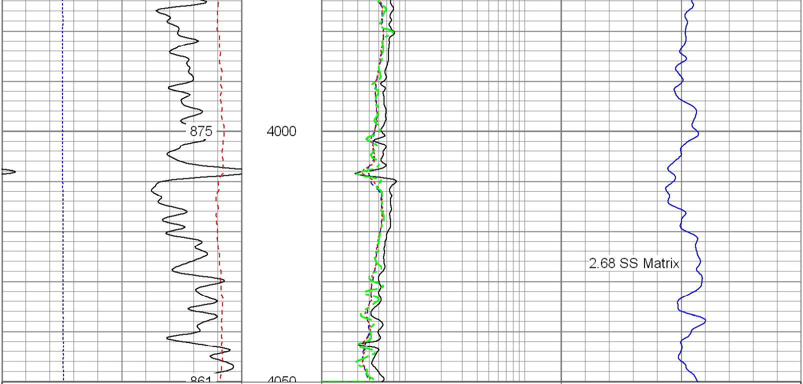




Database File: 11345.db
Dataset Pathname: final
Presentation Format: pdc1
Dataset Creation: Sun Jan 09 06:08:29 2011
Charted by: Depth in Feet scaled 1:240







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60	SP (mV)	160	2	Shallow Resistivity (Ohm-m)	200			
	ABHV (ft3)		2	Rt (Ohm-m)	200			

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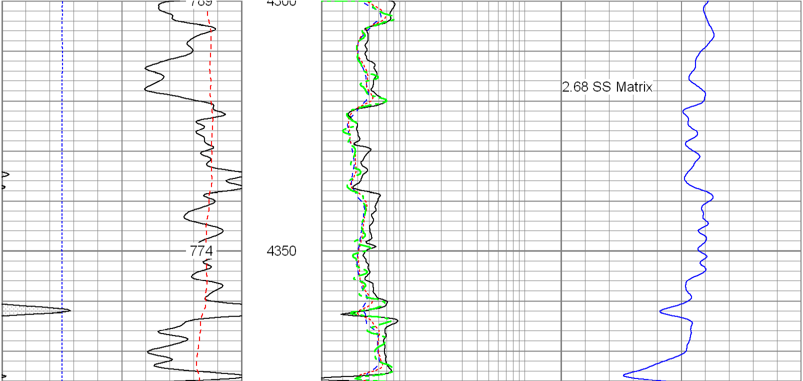

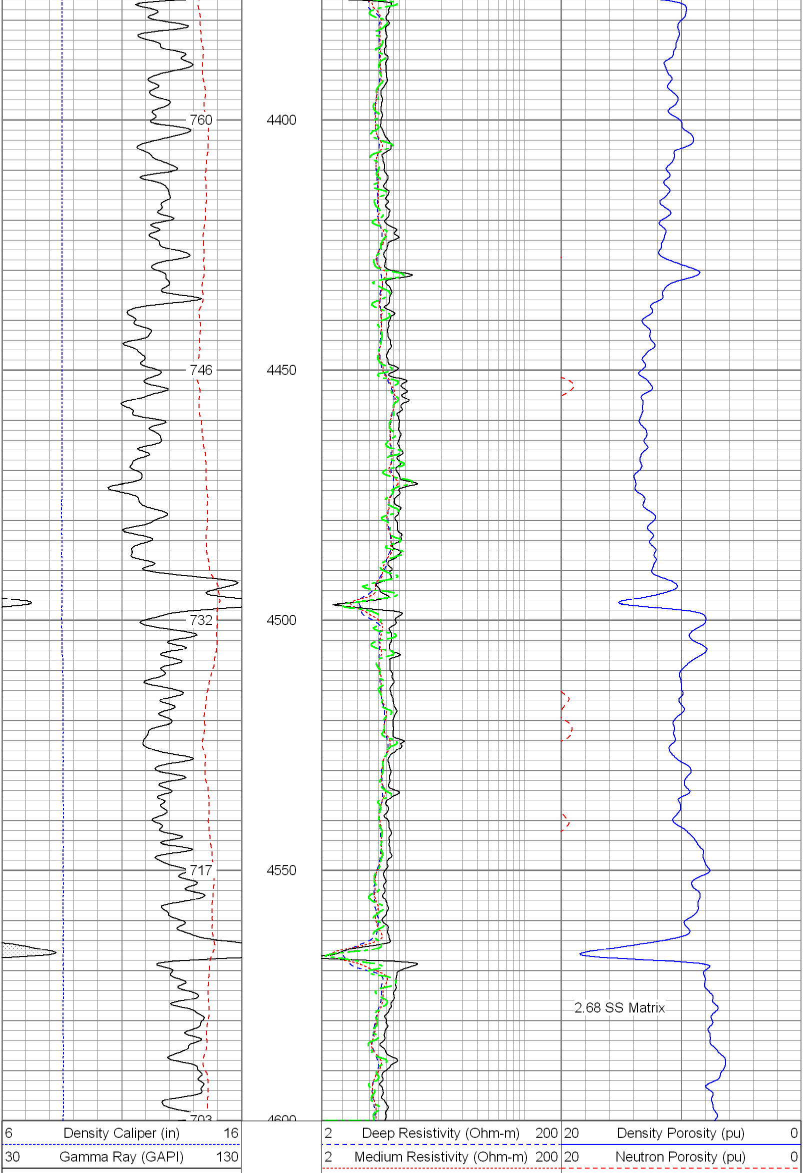

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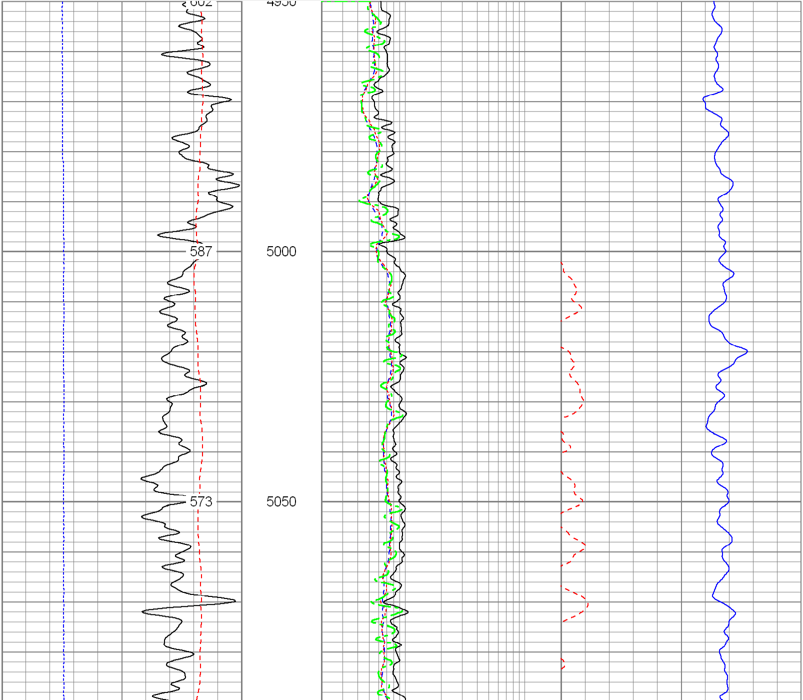

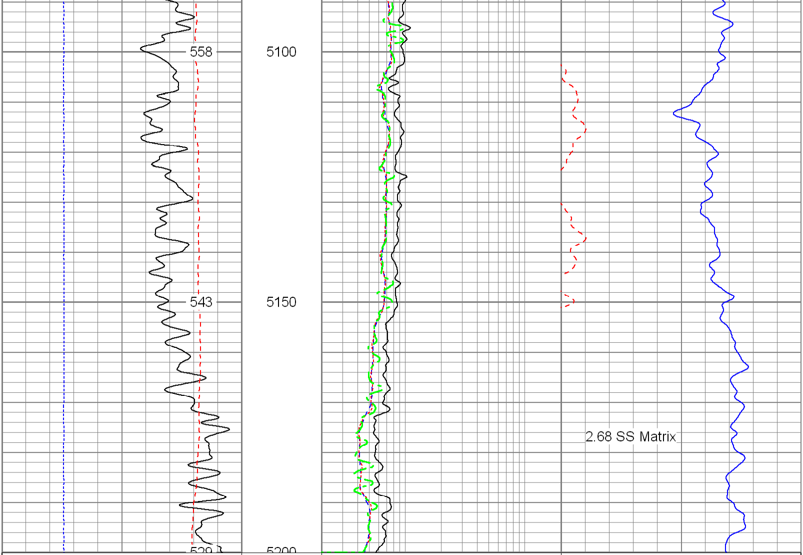

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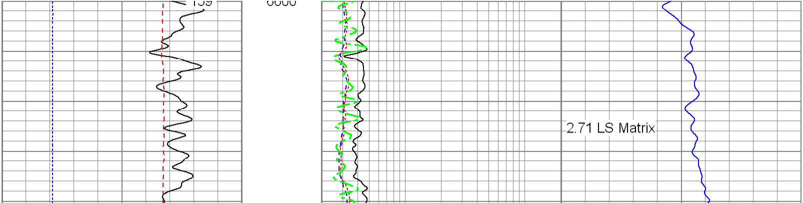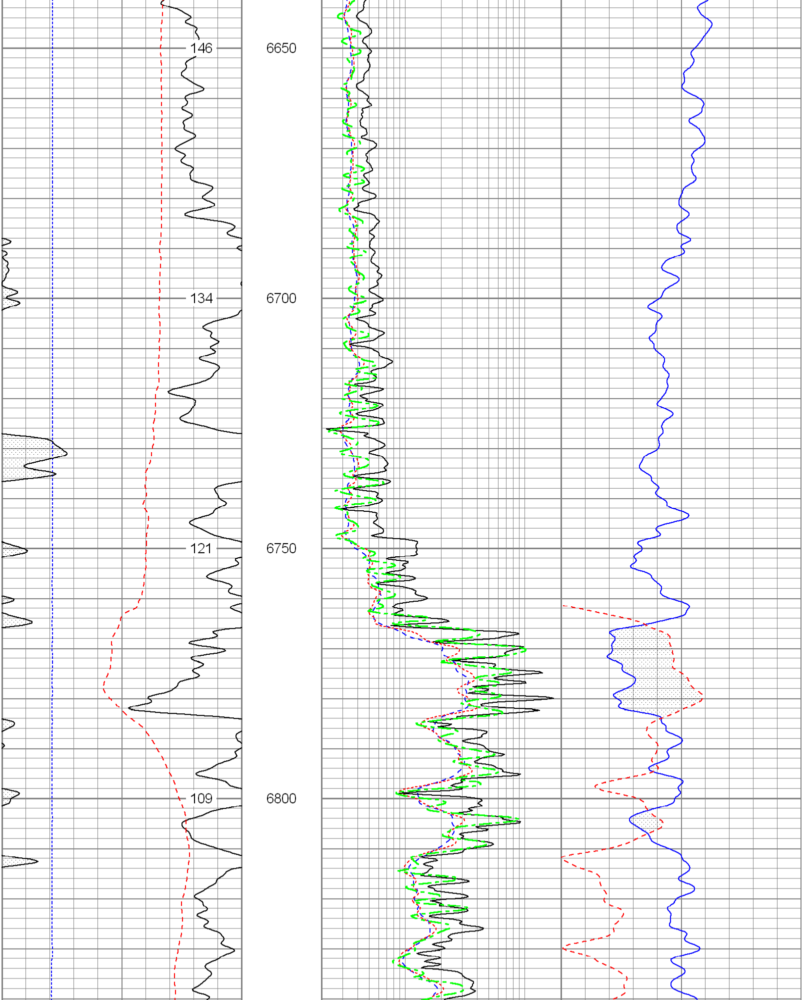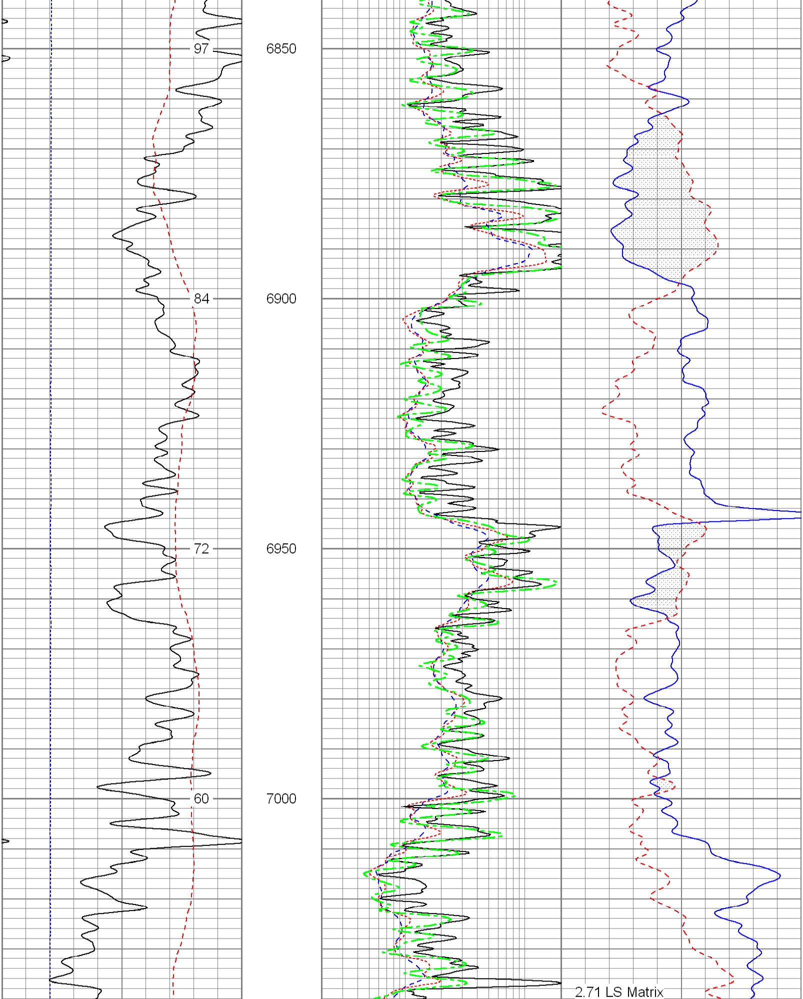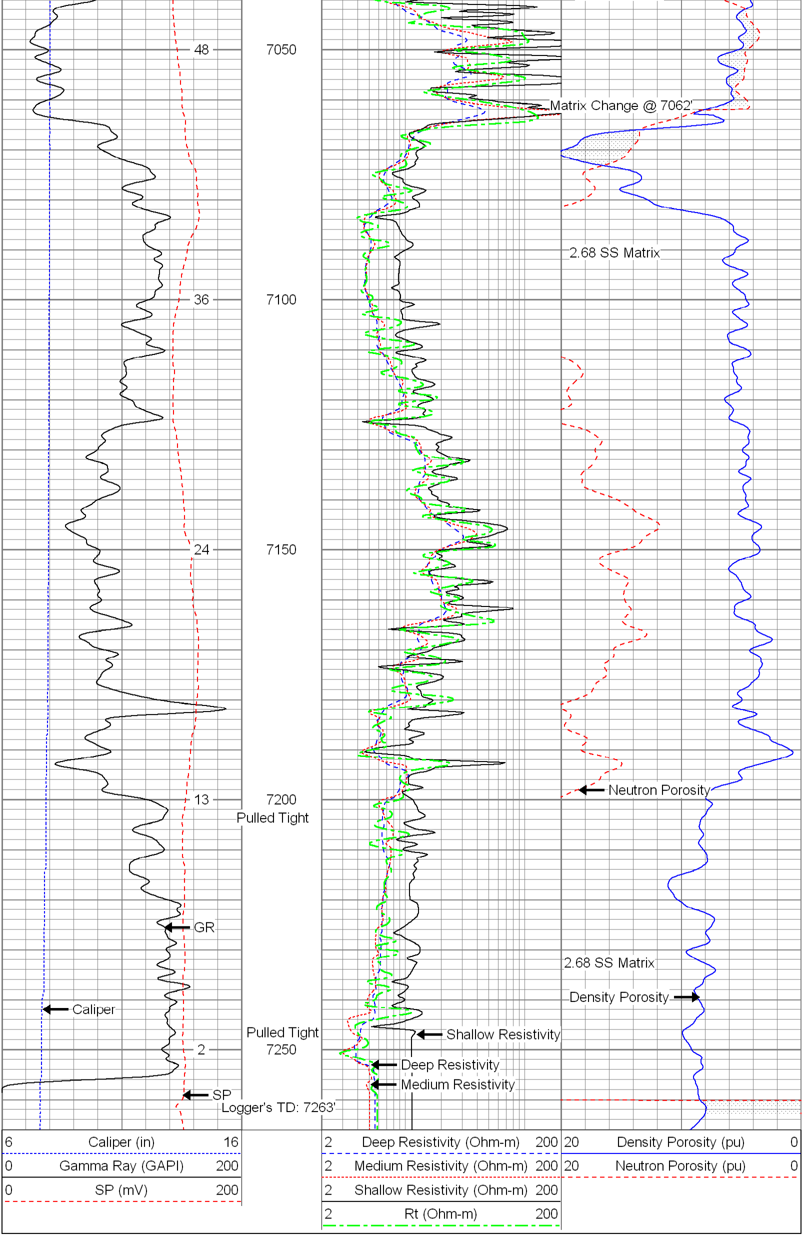6 Caliper (in) 16	2 Deep Resistivity (Ohm-m) 200	20 Density Porosity (pu) 0
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