PHOENIX SURVEYS, INC.

HIGH RESOLUTION INDUCTION

Company
Well
Field
County
State/Prv

Company	Noble Energy Inc.
Well	Hanscome G 12-31
Field	Wattenberg
County	Weld
State/Province	Colorado

Location
1365' FNL & 197' FWL
SW NW
Sec. 12, Twp. 4N, Rge. 65W

Other Services
Density
Neutron
Micro Log

Permanent Datum	GL	Elevation	4741
Log Measured From	KB		
Drilling Measured From	KB		

Elevation
K.B. 4754
D.F. 4754
G.L. 4741

Date	January 6, 2011		
Run Number	1		
Depth Driller	7247		
Depth Logger	7250		
Bottom Logged Interval	7250		
Top Log Interval	Casing		
Casing Driller	571		
Casing Logger	571		
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	2.73 @ 61 F		
Rmf @ Meas. Temp	2.18 @ 61 F		
Rmc @ Meas. Temp	3.28 @ 61 F		
Source of Rmf / Rmc	Measure / Calc		
Rm @ BHT	1.11 @ 207 F		
Time Circulation Stopped	1815 1/5		
Time Logger on Bottom	0045		
Maximum Recorded Temperature	207 F		
Equipment Number	49		
Location	Brighton, CO		
Recorded By	Matt Gill		
Witnessed By	Roger Foster		

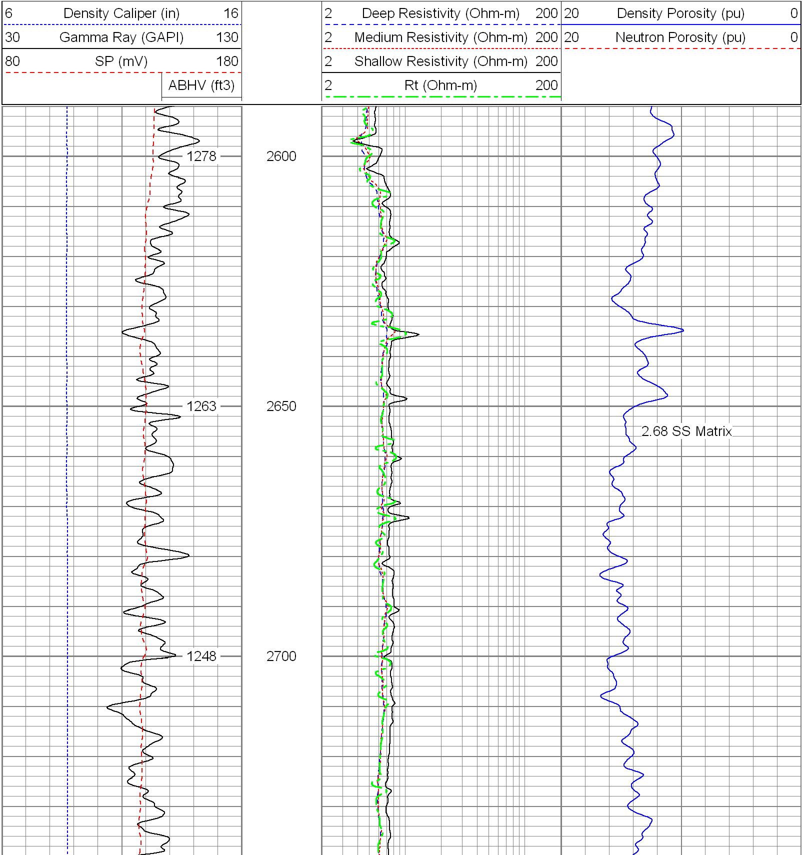
<<< Fold Here >>>

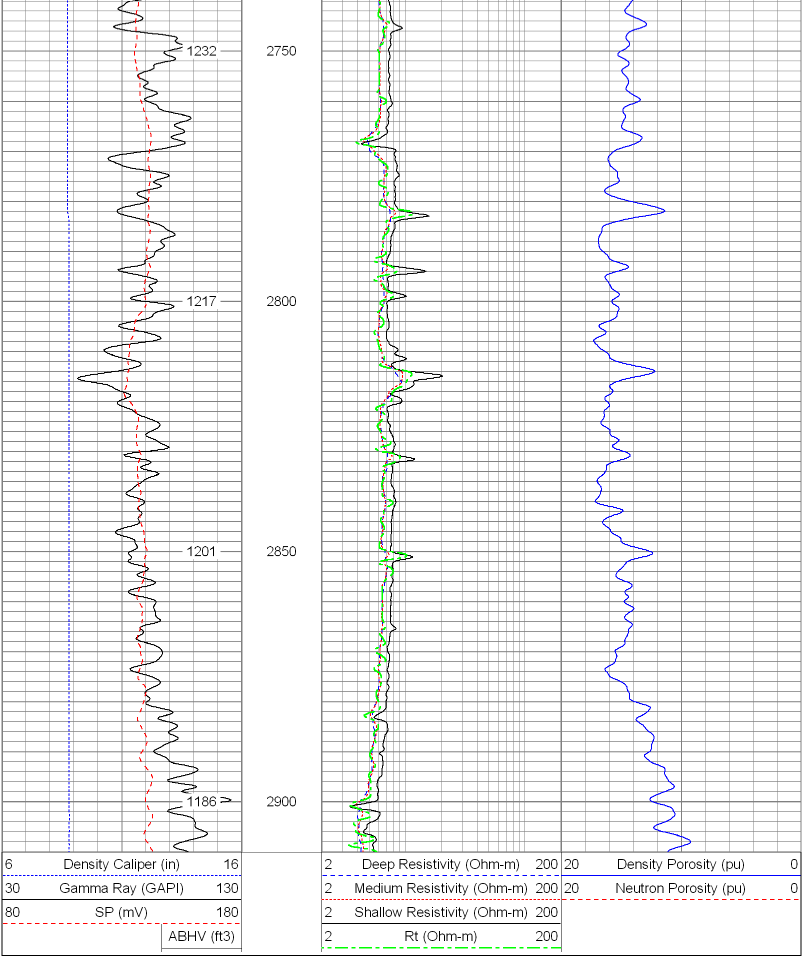
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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 #: 05-123-31405-00
No Repeat Due to Hole Conditions

Database File: 11305.db
Dataset Pathname: final
Presentation Format: pdc1
Dataset Creation: Thu Jan 06 01:39:12 2011
Charted by: Depth in Feet scaled 1:240



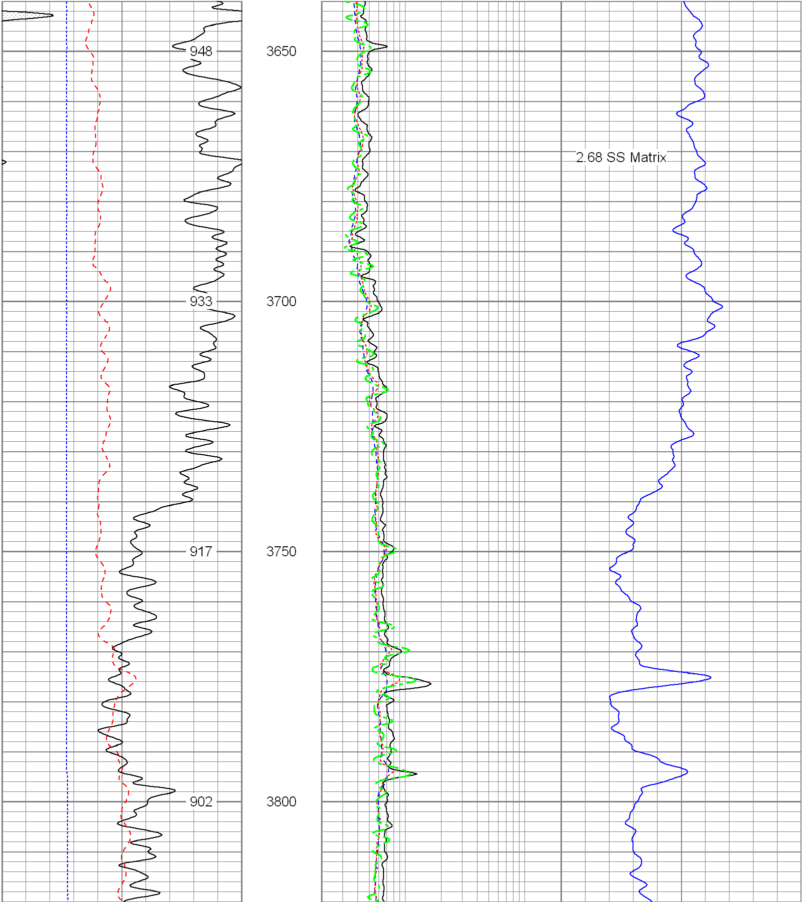


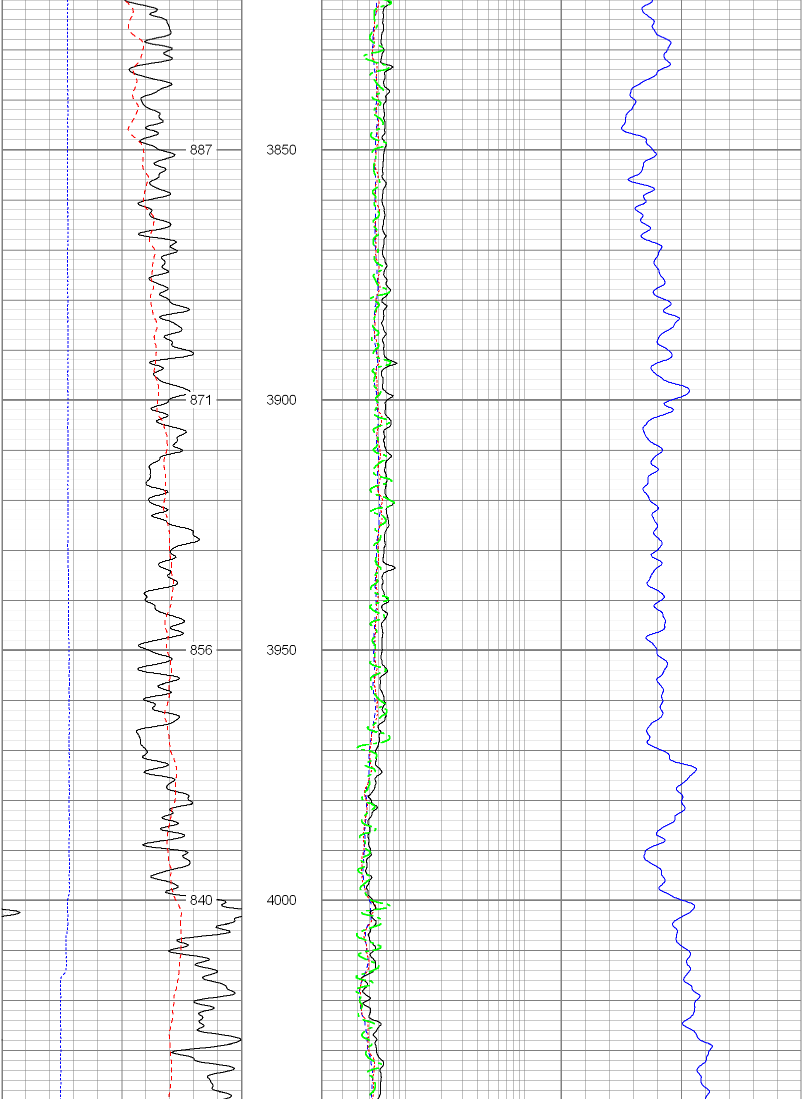
Database File:	11305.db
Dataset Pathname:	final
Presentation Format:	pdc1
Dataset Creation:	Thu Jan 06 01:39:12 2011
Charted by:	Depth in Feet scaled 1:240

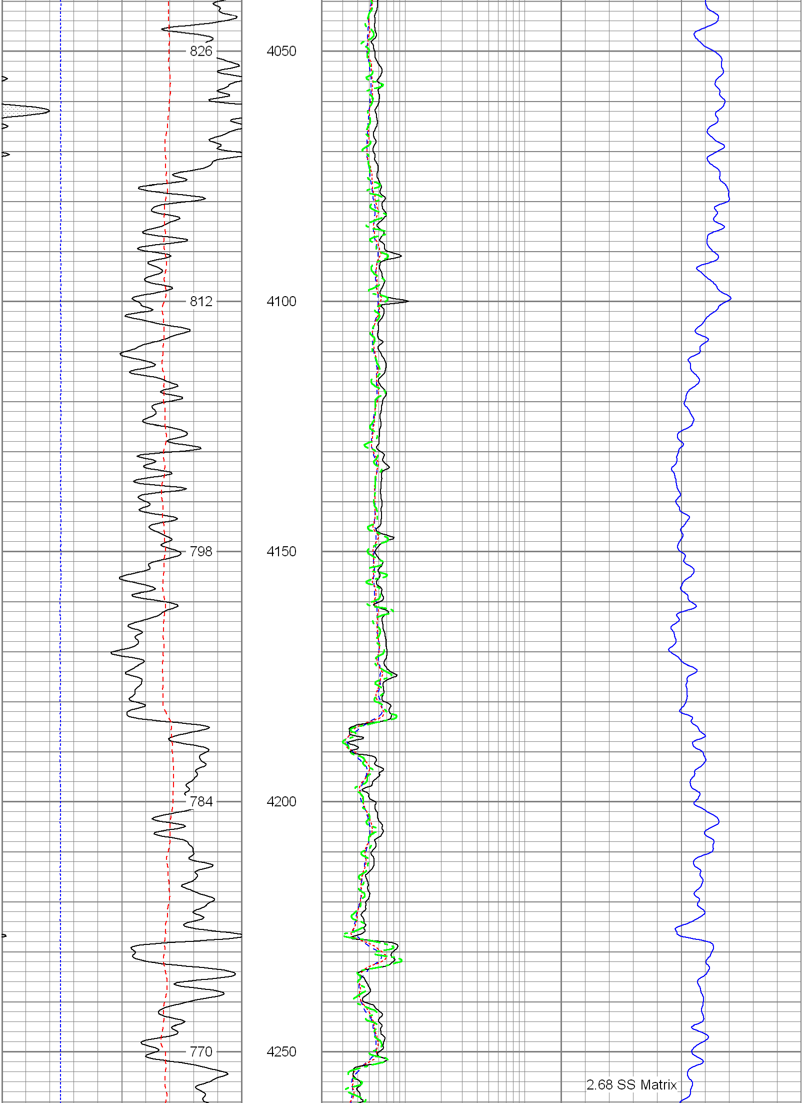
6 Density Caliper (in) 16
30 Gamma Ray (GAPI) 130
80 SP (mV) 180
ABHV (ft3)

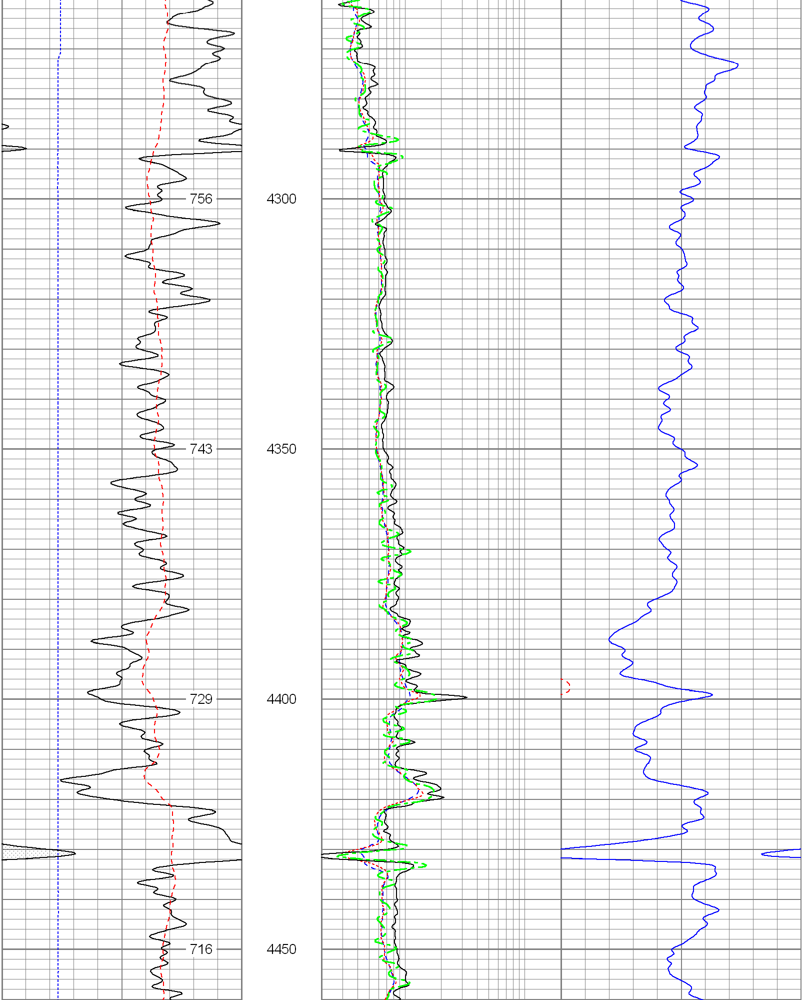
2 Deep Resistivity (Ohm-m) 200
2 Medium Resistivity (Ohm-m) 200
2 Shallow Resistivity (Ohm-m) 200
2 Rt (Ohm-m) 200

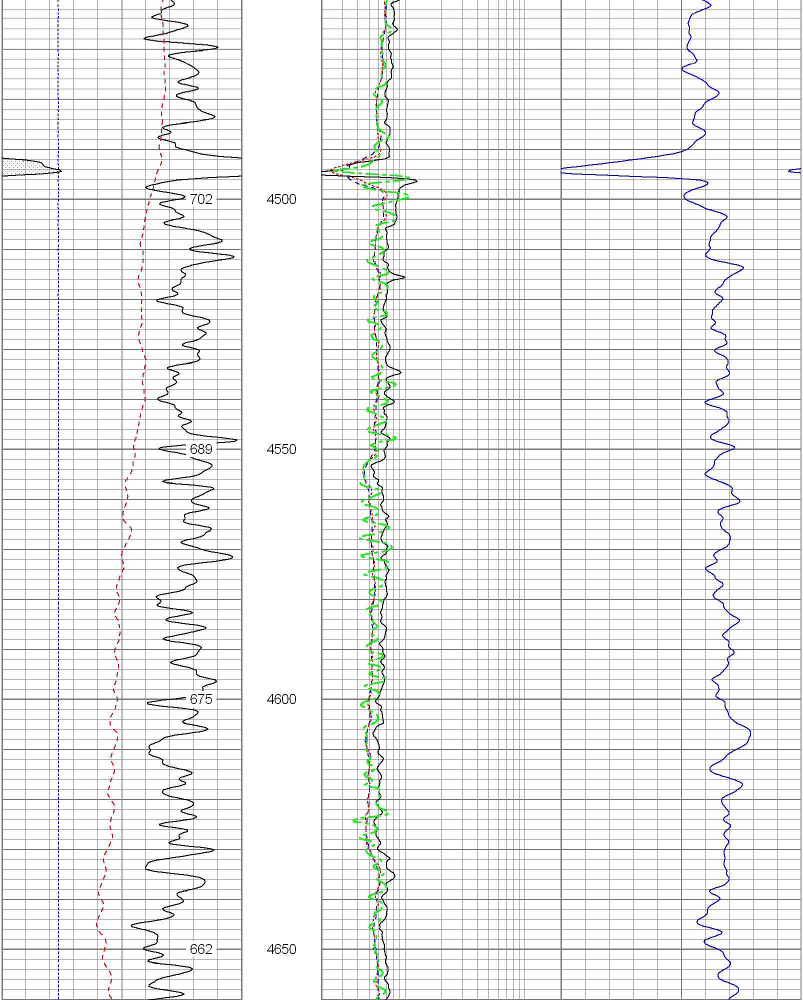
20 Density Porosity (pu) 0
20 Neutron Porosity (pu) 0

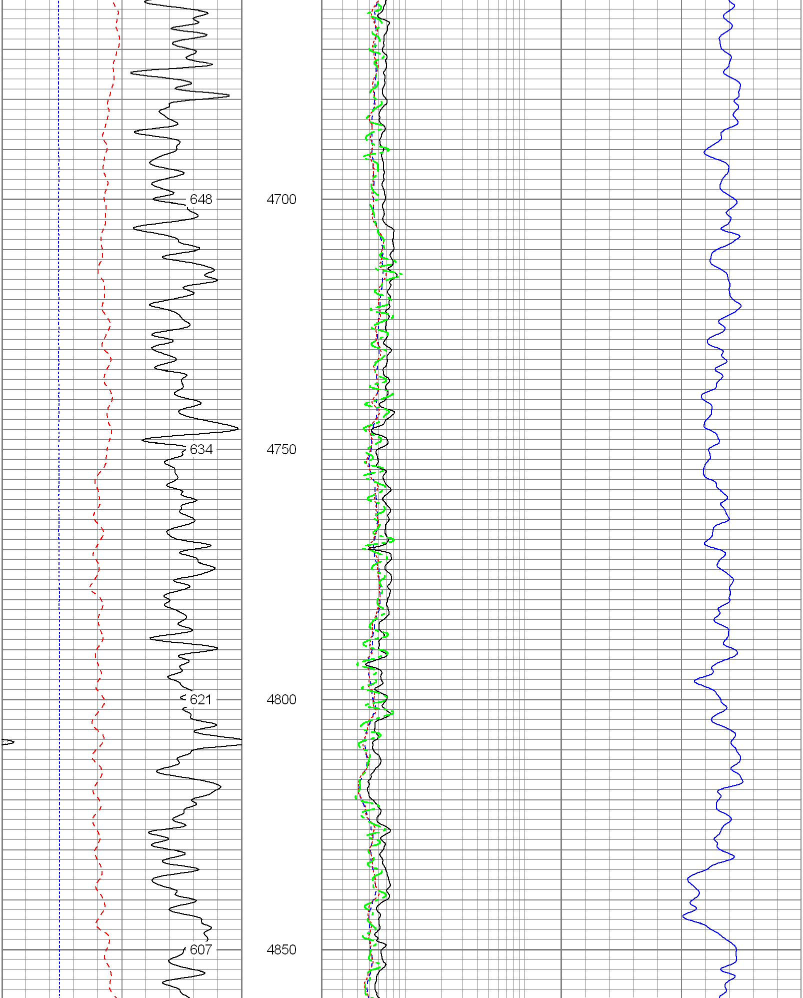


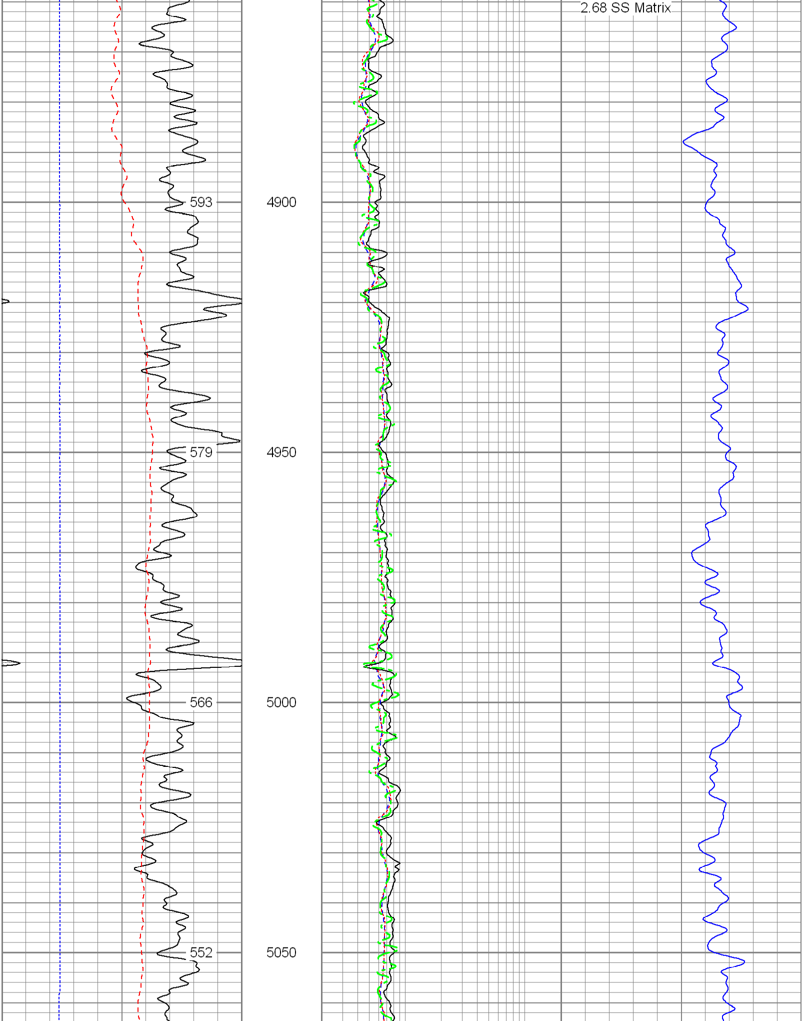


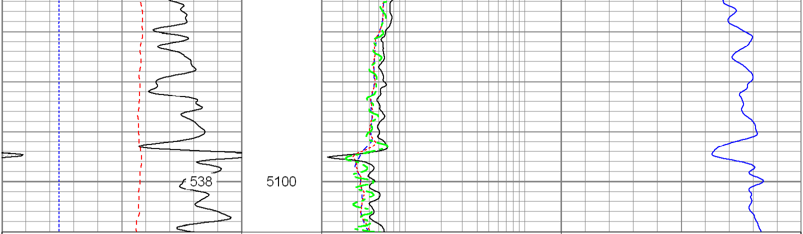






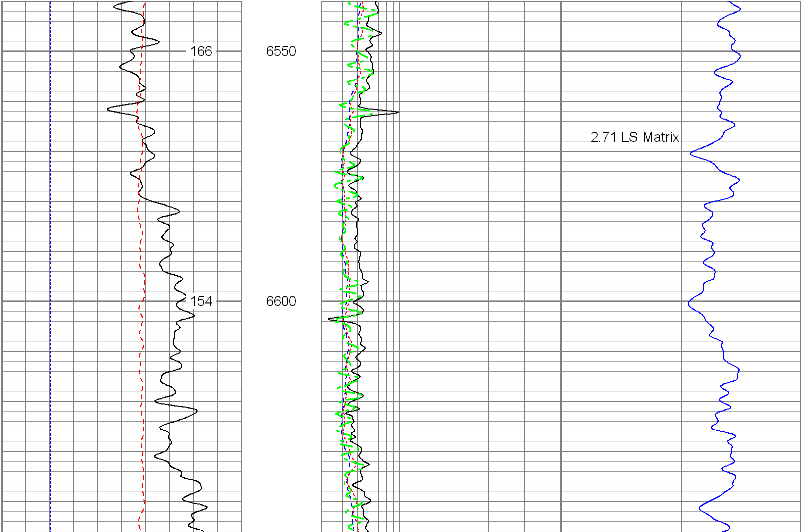
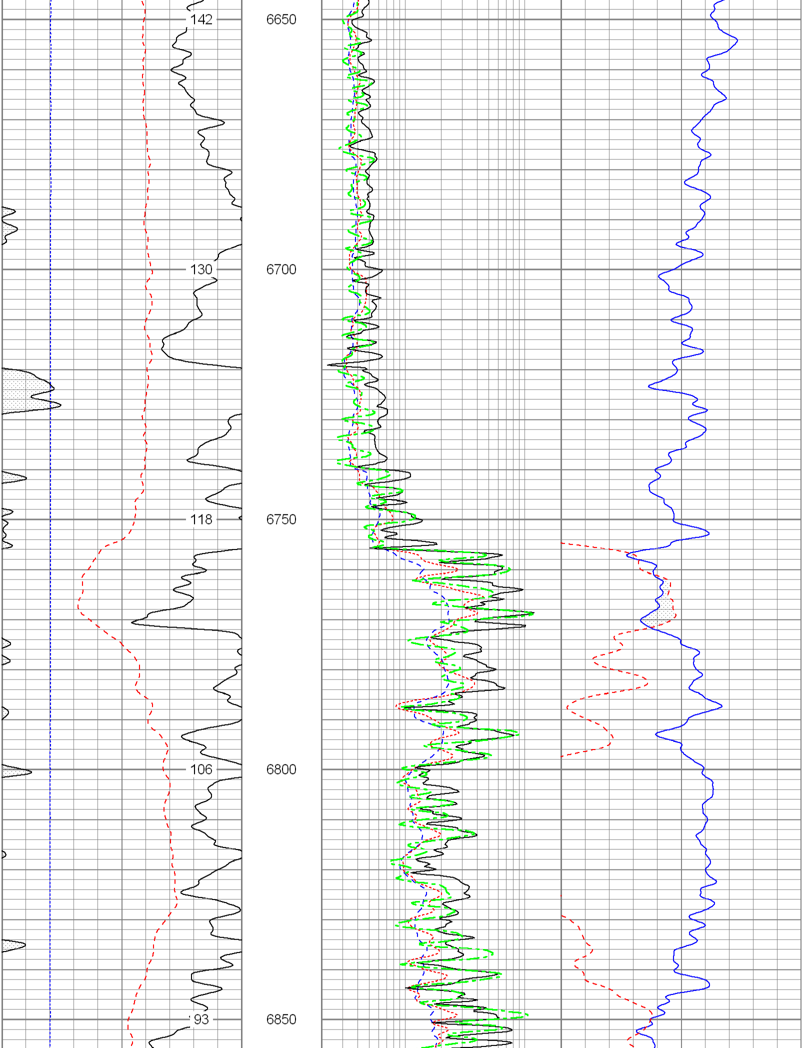
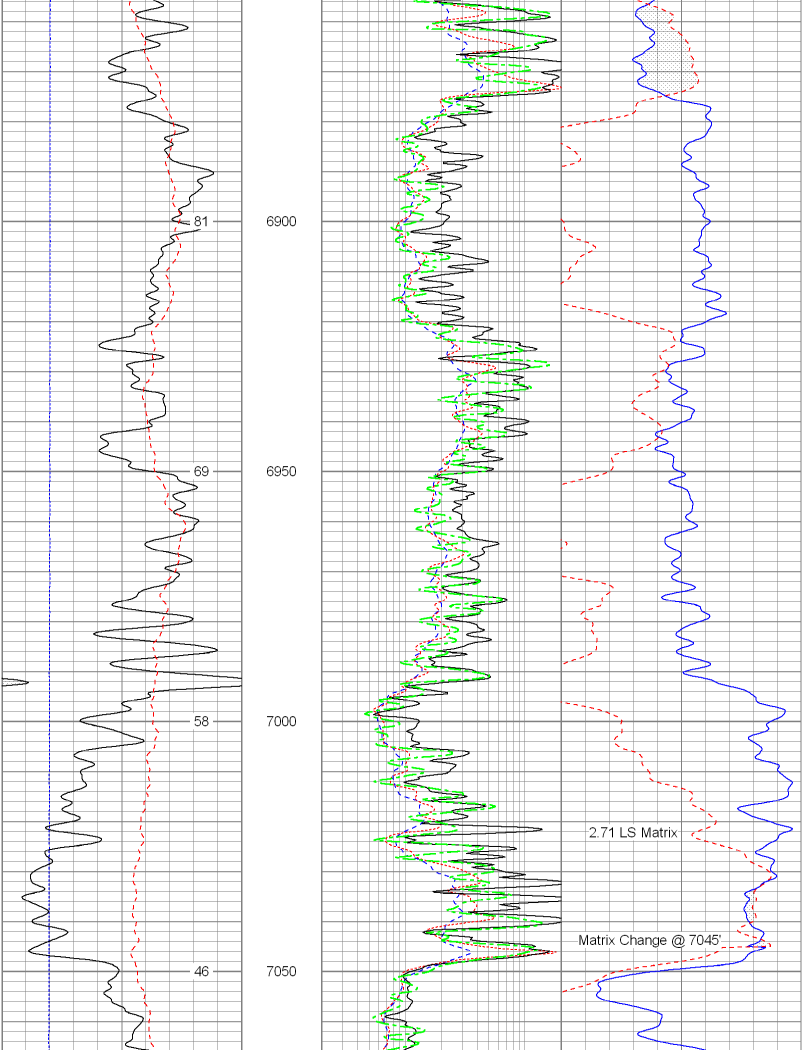
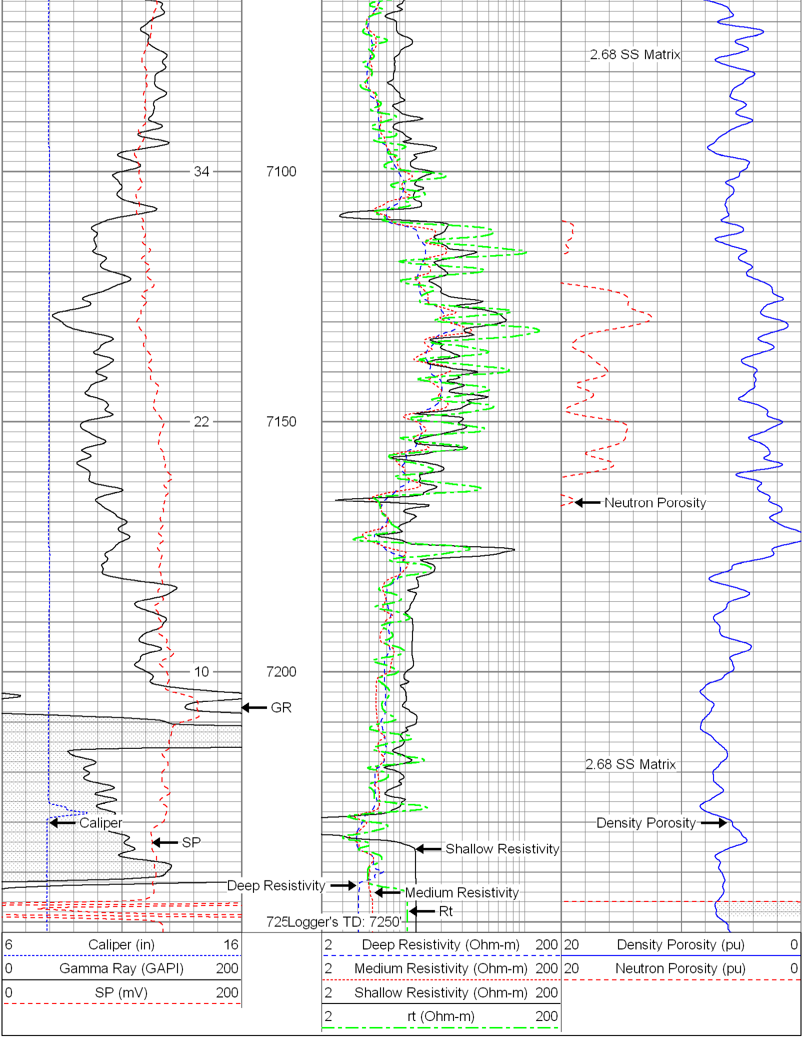






6 Density Caliper (in) 16	2 Deep Resistivity (Ohm-m) 200	20 Density Porosity (pu) 0
30 Gamma Ray (GAPI) 130	2 Medium Resistivity (Ohm-m) 200	20 Neutron Porosity (pu) 0
80 SP (mV) 180	2 Shallow Resistivity (Ohm-m) 200	
ABHV (ft3)	2 Rt (Ohm-m) 200	

Database File:	11305.db
Dataset Pathname:	final
Presentation Format:	pdc
Dataset Creation:	Thu Jan 06 01:39:12 2011
Charted by:	Depth in Feet scaled 1:240

6 Caliper (in) 16	2 Deep Resistivity (Ohm-m) 200	20 Density Porosity (pu) 0
0 Gamma Ray (GAPI) 200	2 Medium Resistivity (Ohm-m) 200	20 Neutron Porosity (pu) 0
0 SP (mV) 200	2 Shallow Resistivity (Ohm-m) 200	
	2 rt (Ohm-m) 200