PHOENIX SURVEYS, INC.

COMPENSATED DENSITY
COMPENSATED NEUTRON
MICROLOG
HIGH RESOLUTION INDUCTION

Company
Well
Field
County
State/Prv

Company	**Noble Energy Inc.**
Well	**Donovan D02-30**
Field	**Wattenberg**
County	**Weld**
State/Province	**Colorado**
Location	155' FSL & 183' FEL SESE Sec - 34, Twp - 4N, Rge - 64W

Other Services
none

Permanent Datum	GL	Elevation	4696
Log Measured From	KB		
Drilling Measured From	KB		

Elevation
K.B. 4709
D.F. 4709
G.L. 4696

Date	February 28, 2012			
Run Number	1			
Depth Driller	7004			
Depth Logger	7014			
Bottom Logged Interval	7014			
Top Log Interval	Casing			
Casing Driller	707			
Casing Logger	707			
Bit Size	7+7/8"			
Type Fluid in Hole	Chem Gel			
Density / Viscosity	9.6 / 37			
pH / Fluid Loss	8.0 / 12.0			
Source of Sample	Flowline			
Rm @ Meas. Temp	3.38 @ 72 F			
Rmf @ Meas. Temp	2.70 @ 72 F			
Rmc @ Meas. Temp	4.06 @ 72 F			
Source of Rmf / Rmc	Measure / Calc			
Rm @ BHT	1.18 @ 206 F			
Time Circulation Stopped	0700			
Time Logger on Bottom	1545			
Maximum Recorded Temperature	206 F			
Equipment Number	52			
Location	Brighton, CO			
Recorded By	Kelly Keever			
Witnessed By	Devin Roberts			

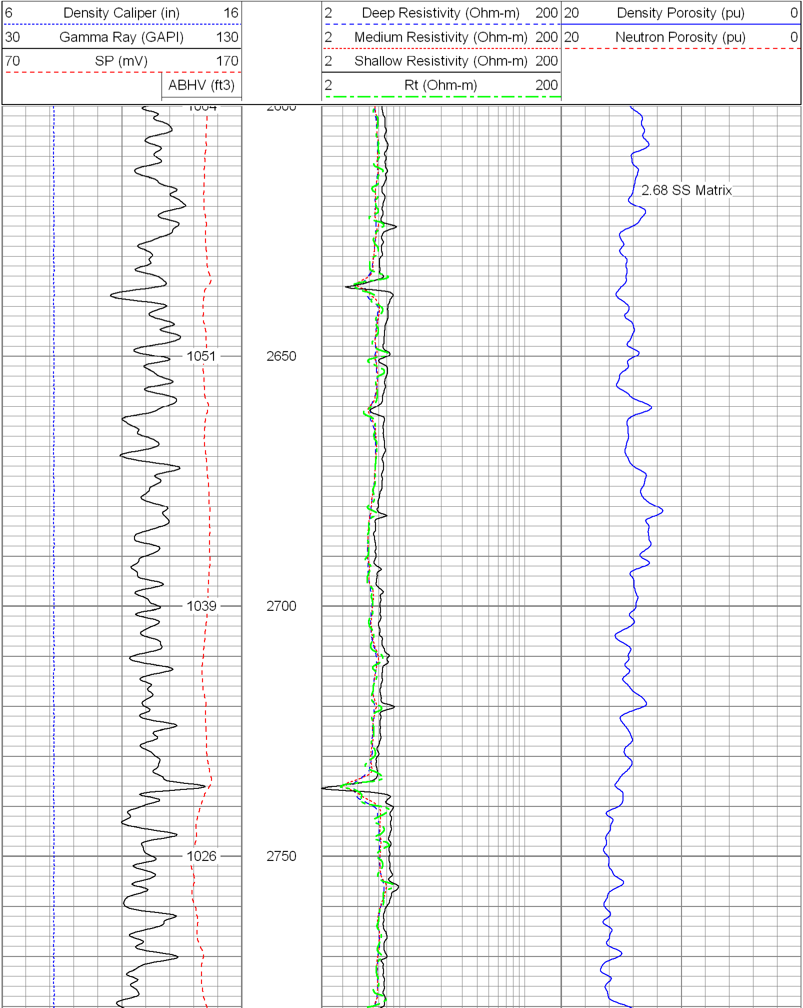
<<< Fold Here >>>

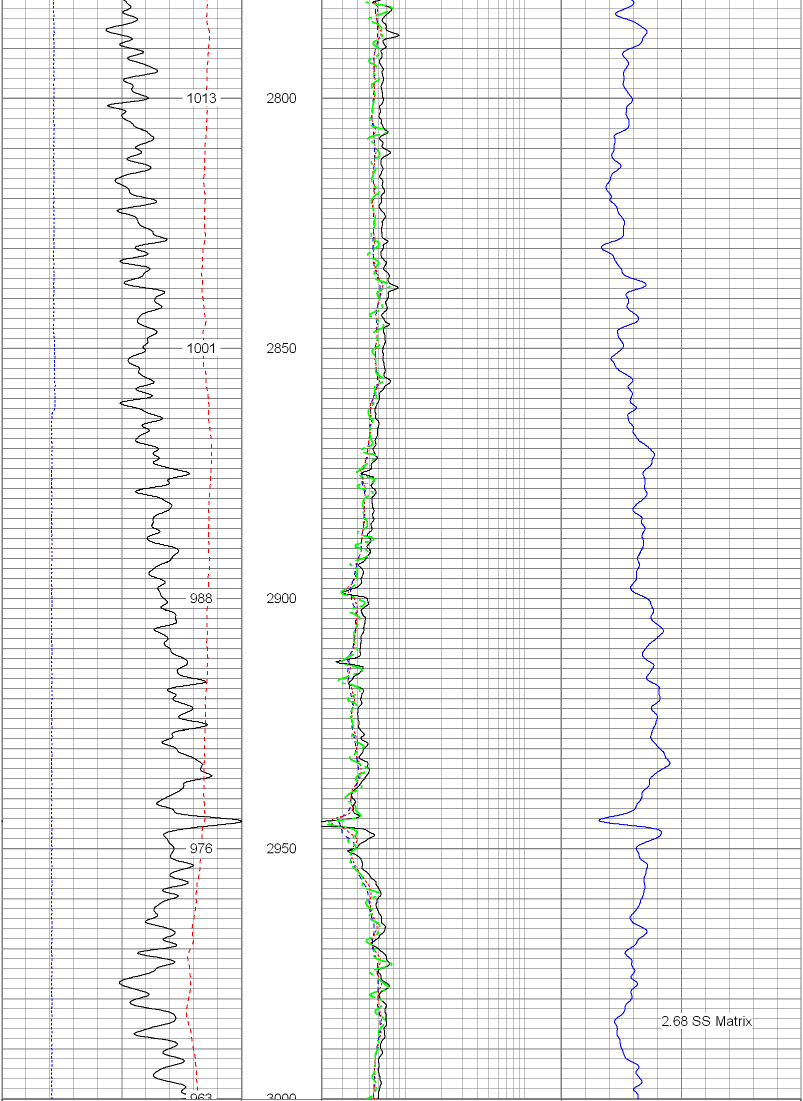
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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 #: 05-123-31847

Database File:	12626.db
Dataset Pathname:	final
Presentation Format:	pdc1
Dataset Creation:	Tue Feb 28 17:18:28 2012
Charted by:	Depth in Feet scaled 1:240

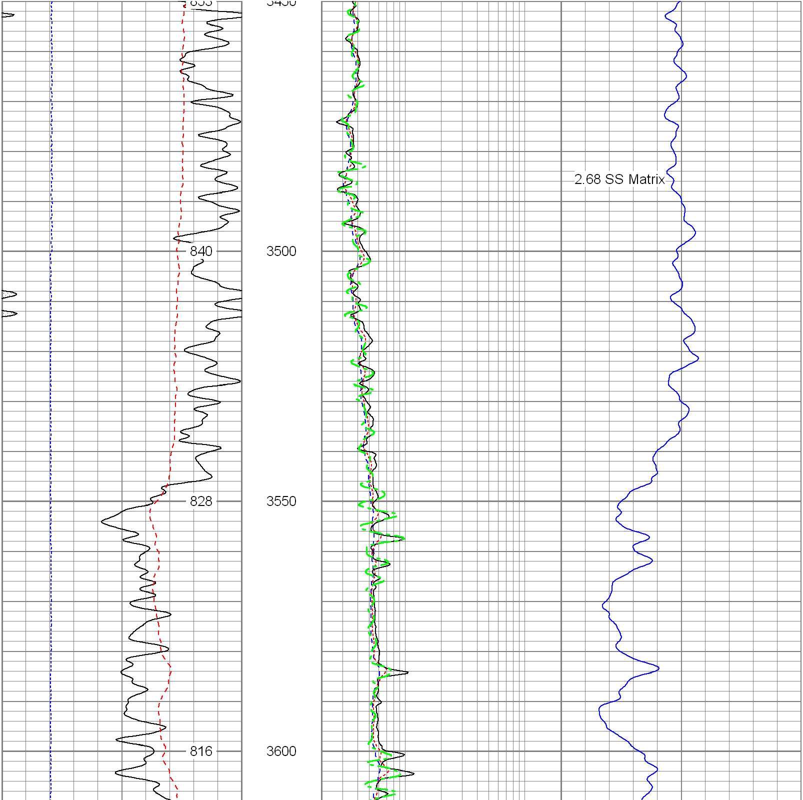


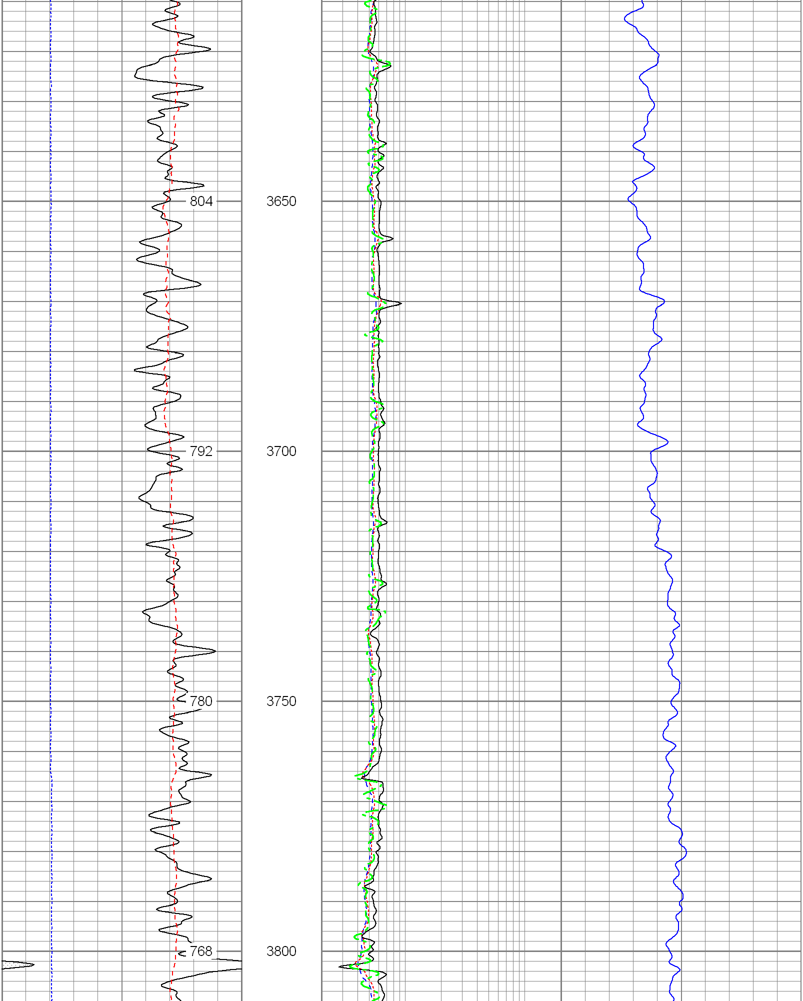


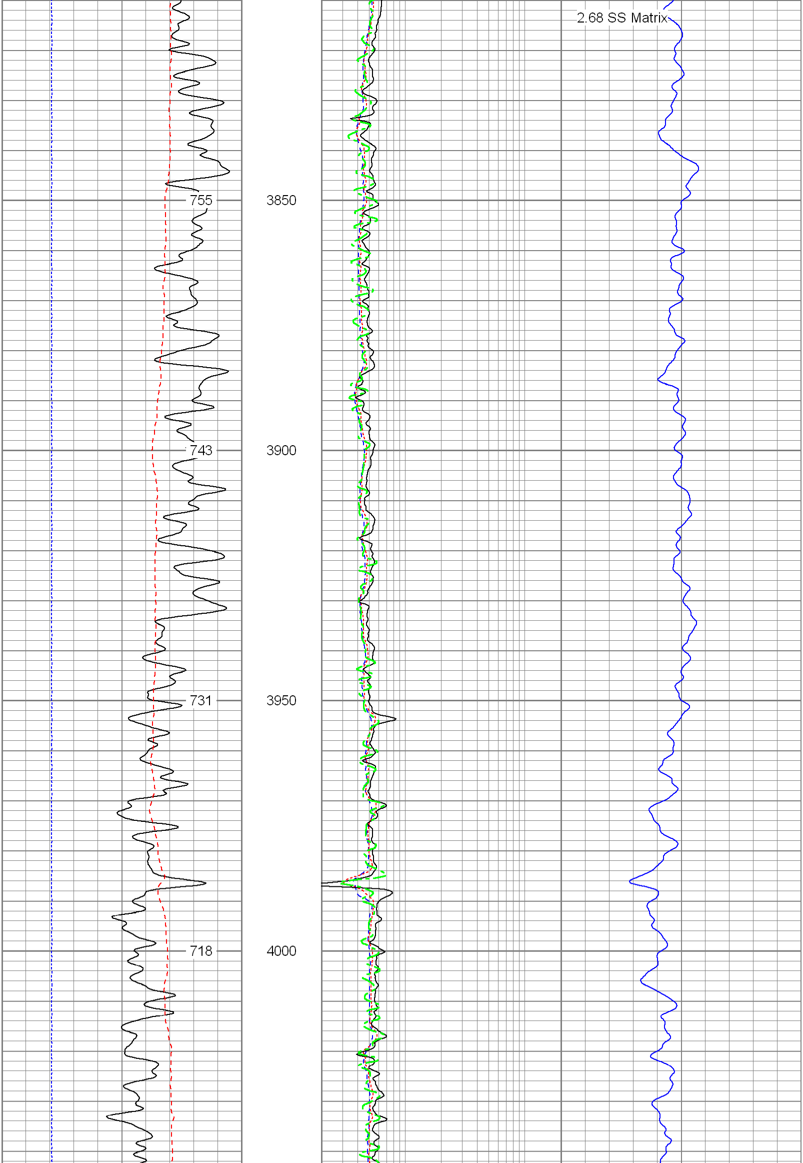
6 Density Caliper (in) 16	2 Deep Resistivity (Ohm-m) 200	20 Density Porosity (pu) 0
30 Gamma Ray (GAPI) 130	2 Medium Resistivity (Ohm-m) 200	20 Neutron Porosity (pu) 0
70 SP (mV) 170	2 Shallow Resistivity (Ohm-m) 200	
ABHV (ft3)	2 Rt (Ohm-m) 200	

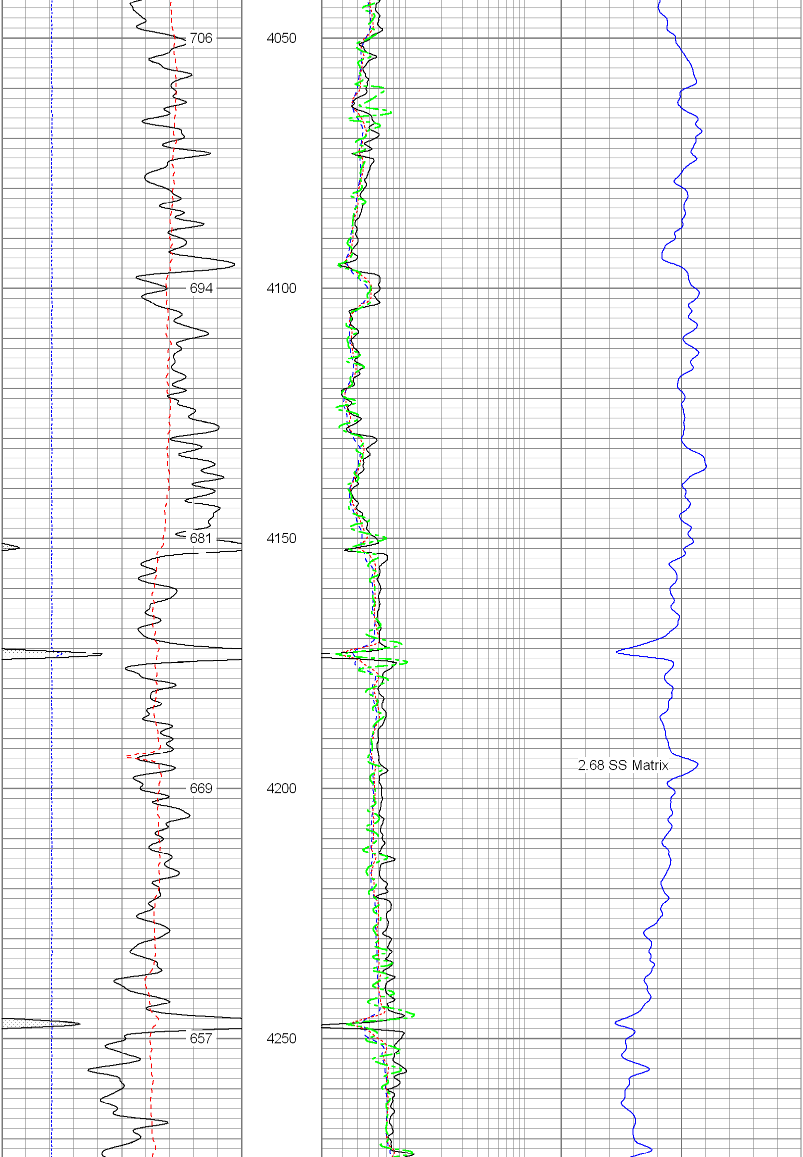
Database File:	12626.db
Dataset Pathname:	final
Presentation Format:	pdc1
Dataset Creation:	Tue Feb 28 17:18:28 2012
Charted by:	Depth in Feet scaled 1:240

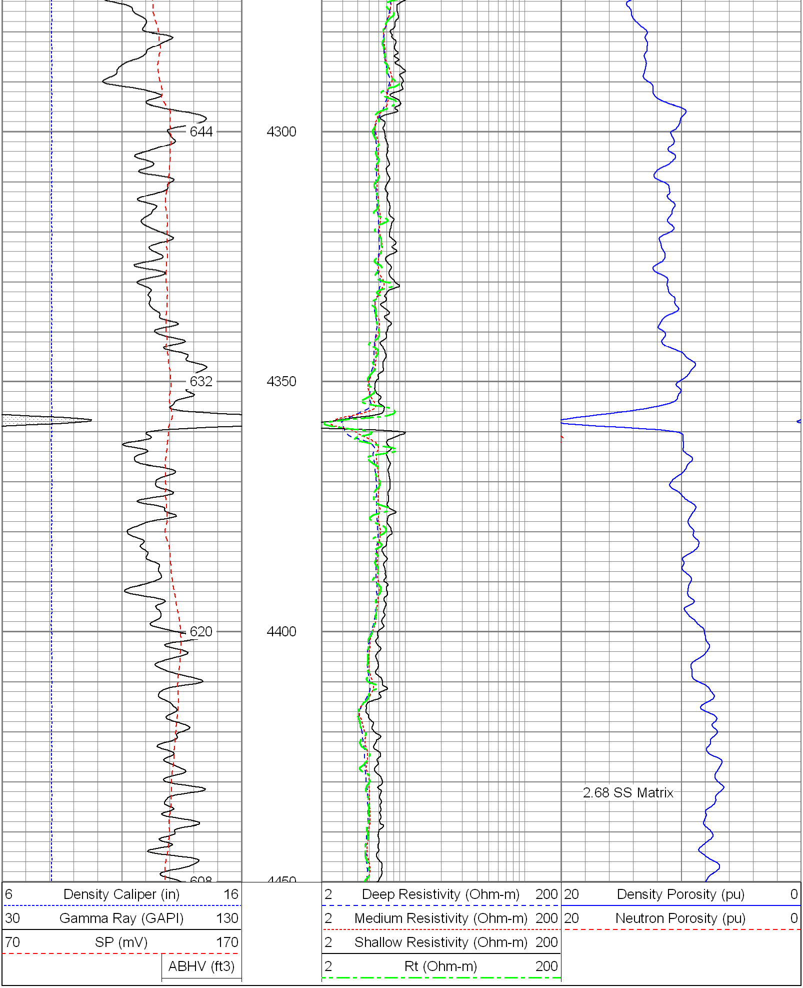
6 Density Caliper (in) 16	2 Deep Resistivity (Ohm-m) 200	20 Density Porosity (pu) 0
30 Gamma Ray (GAPI) 130	2 Medium Resistivity (Ohm-m) 200	20 Neutron Porosity (pu) 0
70 SP (mV) 170	2 Shallow Resistivity (Ohm-m) 200	
ABHV (ft3)	2 Rt (Ohm-m) 200	











Database File:	12626.db
Dataset Pathname:	final
Presentation Format:	pdc1
Dataset Creation:	Tue Feb 28 17:18:28 2012
Charted by:	Depth in Feet scaled 1:240

6 Density Caliper (in) 16

30 Gamma Ray (GAPI) 130

70 SP (mV) 170

ABHV (ft3)

2 Deep Resistivity (Ohm-m) 200

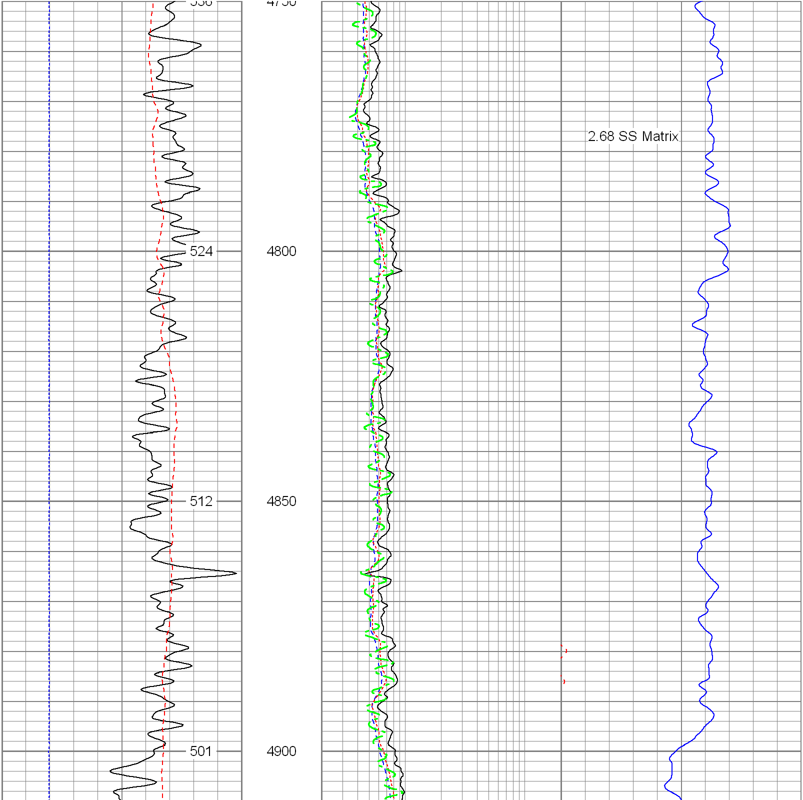
2 Medium Resistivity (Ohm-m) 200

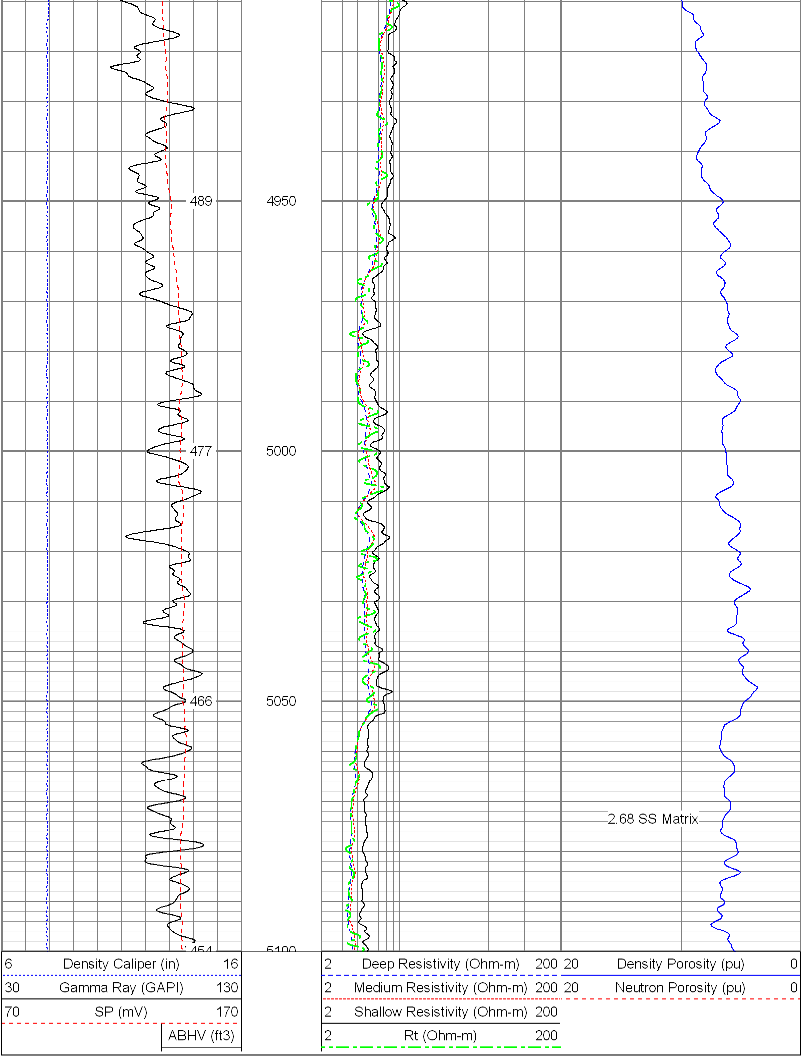
2 Shallow Resistivity (Ohm-m) 200

2 Rt (Ohm-m) 200

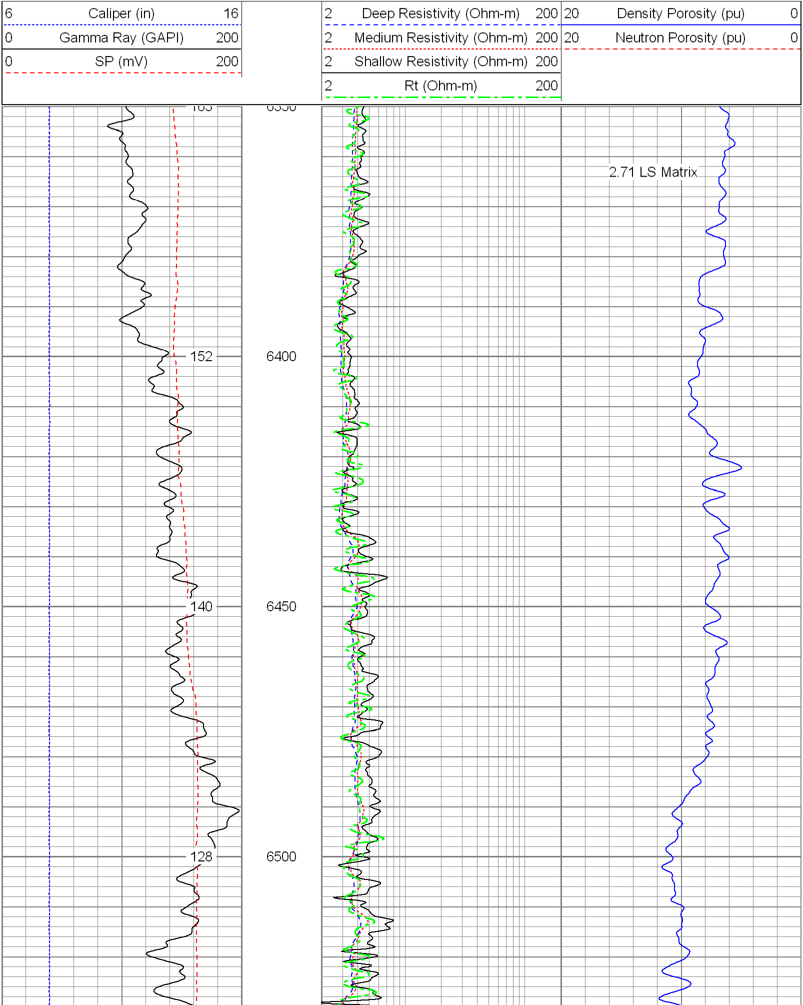
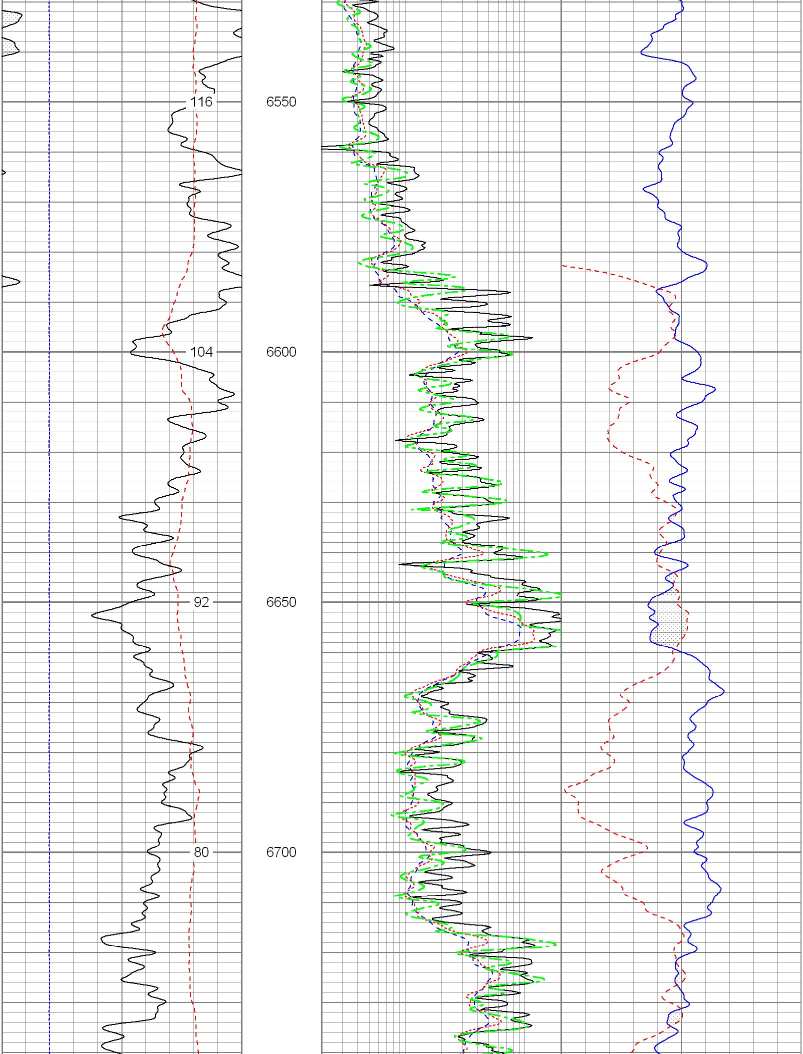
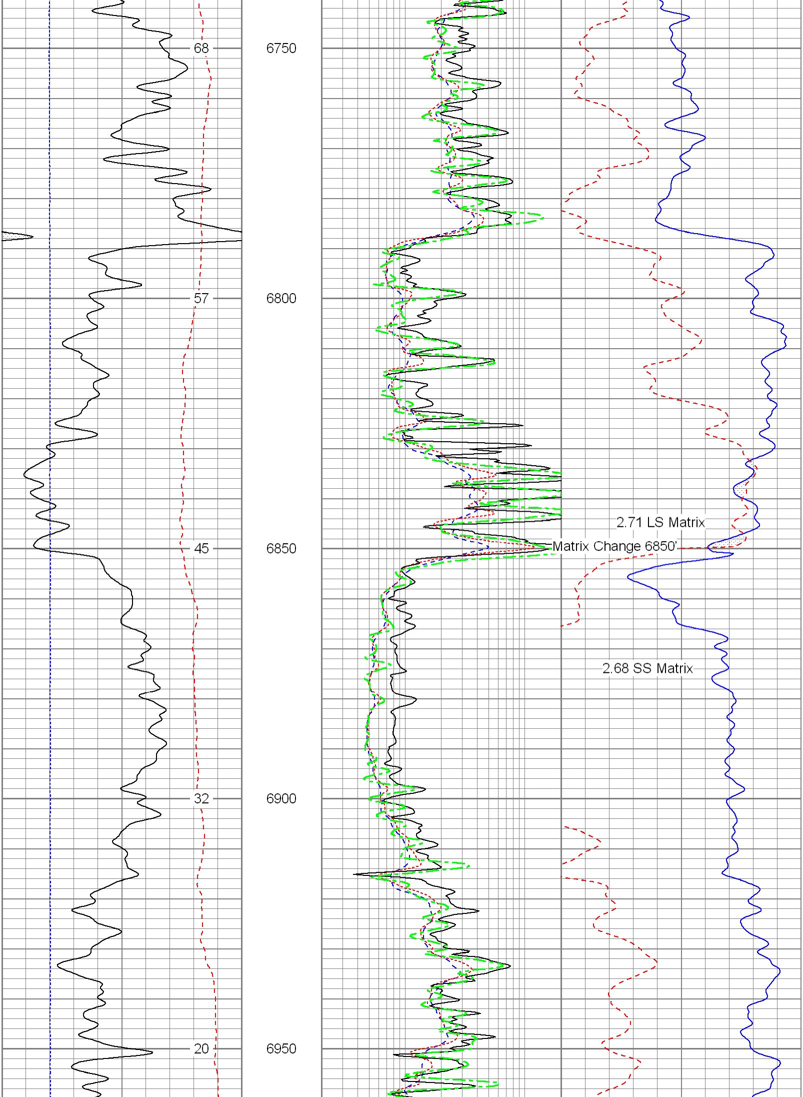
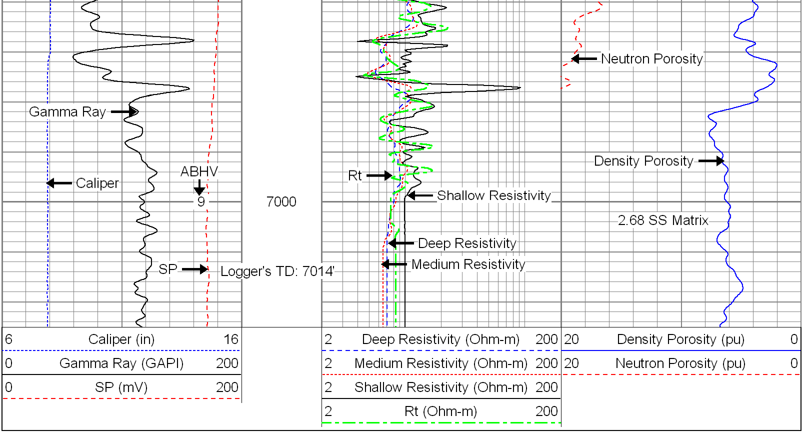
20 Density Porosity (pu) 0

20 Neutron Porosity (pu) 0





Database File:	12626.db
Dataset Pathname:	final
Presentation Format:	pdc
Dataset Creation:	Tue Feb 28 17:18:28 2012
Charted by:	Depth in Feet scaled 1:240


6 Caliper (in) 16
0 Gamma Ray (GAPI) 200
0 SP (mV) 200
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
152
6400
140
6450
128
6500
2.71 LS Matrix