PHOENIX SURVEYS, INC.

DUAL INDUCTION
GUARD LOG
GAMMA RAY

Company
Well
Field
County
State/Prv

Company	**Noble Energy Inc.**
Well	**Wells Ranch AF 07-02**
Field	**Wattenberg**
County	**Weld**
State/Province	**Colorado**

Location
795' FNL & 1890' FEL
NW NE
Sec. 7, Twp. 5N, Rge. 62W

Other Services
Density
Neutron
MicrSolog

Elevation
K.B. 4656
D.F. 4655
G.L. 4642

Permanent Datum	GL	Elevation	4642
Log Measured From	KB		
Drilling Measured From	KB		

Date	October 18, 2010		
Run Number	1		
Depth Driller	6695		
Depth Logger	6695		
Bottom Logged Interval	6695		
Top Log Interval	Casing		
Casing Driller	556		
Casing Logger	556		
Bit Size	7-7/8"		
Type Fluid in Hole	Chem Gel		
Density / Viscosity	8.9 / 32		
pH / Fluid Loss	9.0 / NC		
Source of Sample	Flowline		
Rm @ Meas. Temp	2.51 @ 74 F		
Rmf @ Meas. Temp	2.01 @ 74 F		
Rmc @ Meas. Temp	3.01 @ 74 F		
Source of Rmf / Rmc	Measure / Calc		
Rm @ BHT	1.12 @ 202 F		
Time Circulation Stopped	0700		
Time Logger on Bottom	1630		
Maximum Recorded Temperature	202 F		
Equipment Number	50		
Location	Brighton, CO		
Recorded By	Matt Gill		
Witnessed By	Jim Turner		

<<< 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

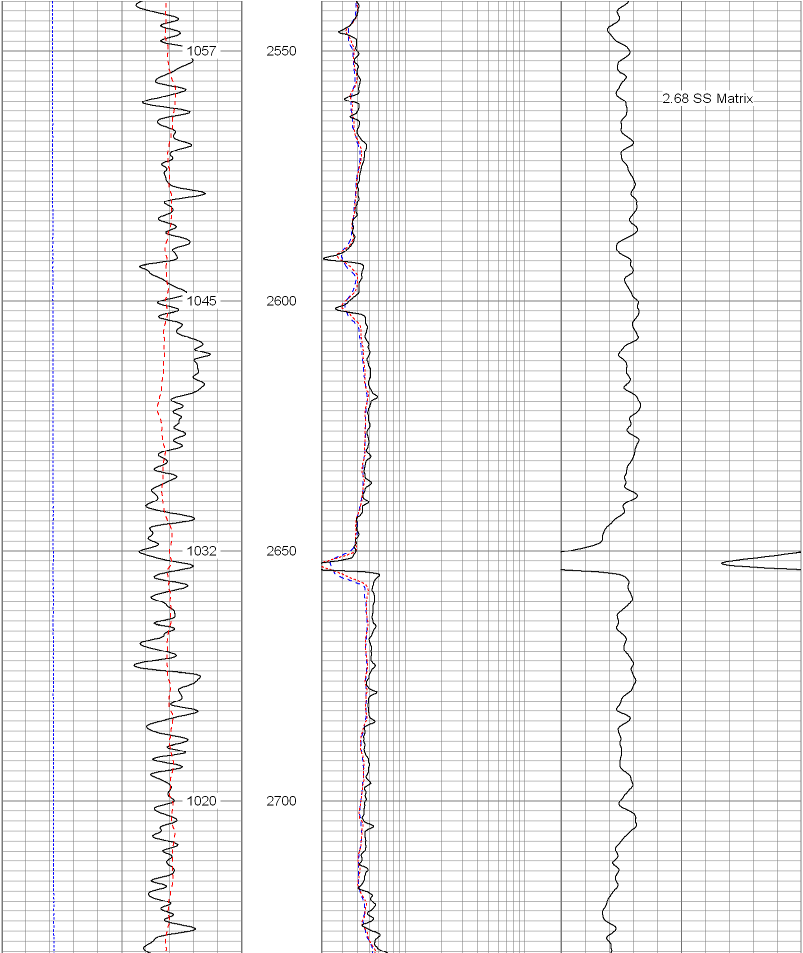
Annular volume calculated for 4.5" casing
Cade Drilling Rig 22
Thank you for using Phoenix Surveys!!
API #: 05-123-31618-00

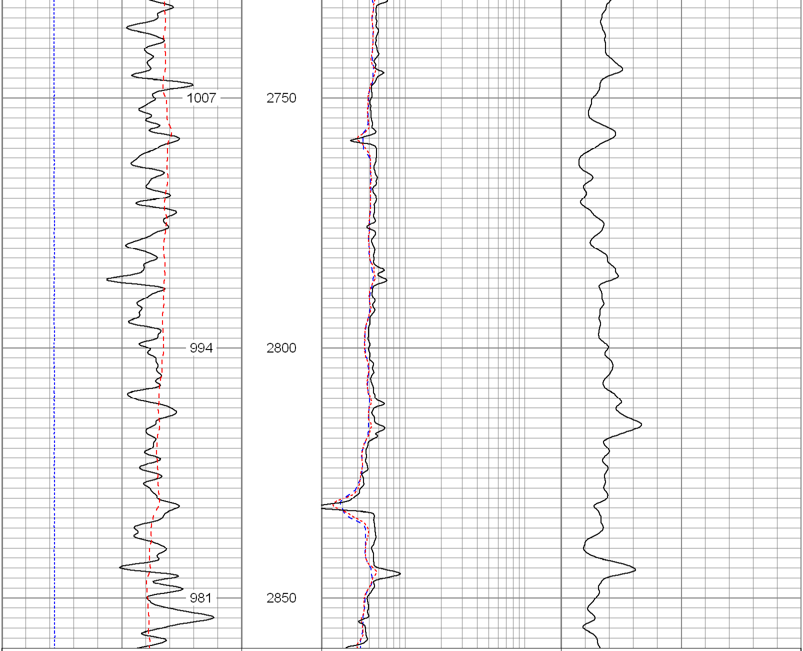
Database File: 11153.db
Dataset Pathname: final
Presentation Format: pdc1
Dataset Creation: Mon Oct 18 17:05:03 2010
Charted by: Depth in Feet scaled 1:240

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

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





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

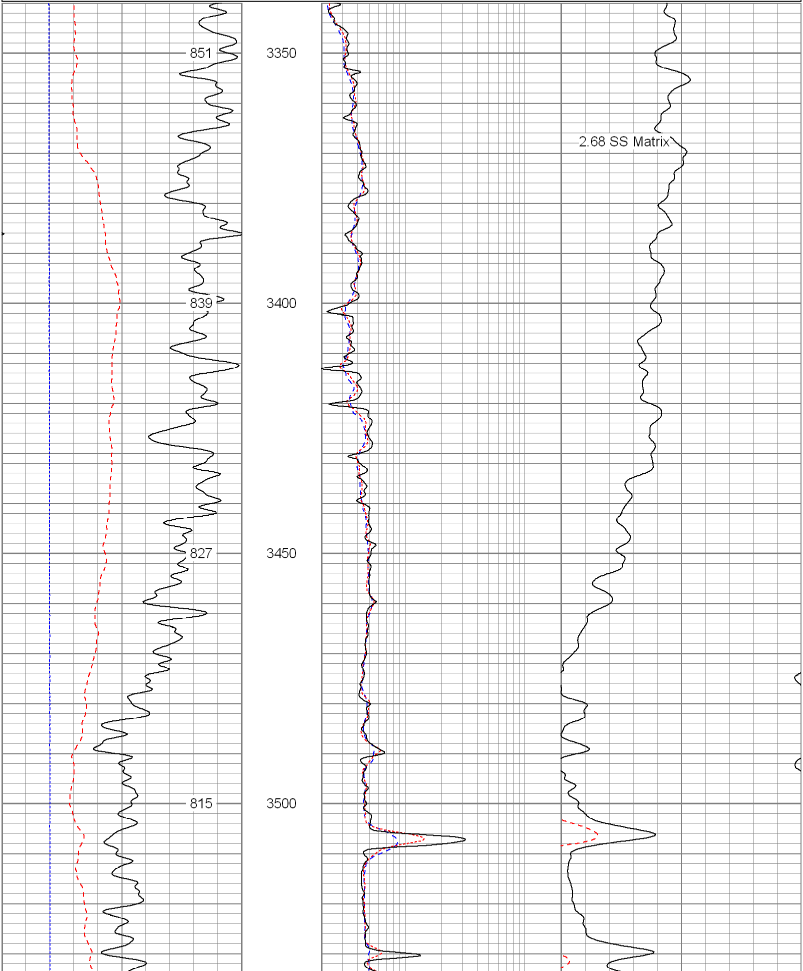
20 Density Porosity (pu) 0
20 Neutron Porosity (pu) 0

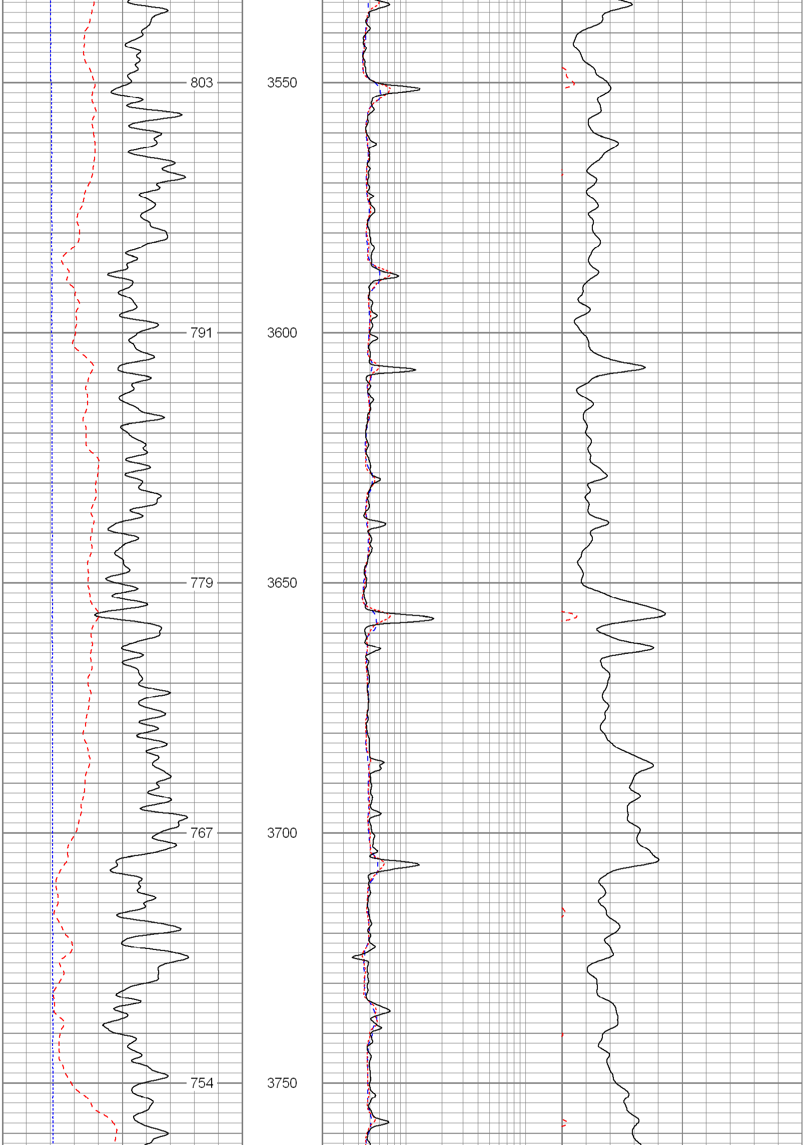
Database File: 11153.db
Dataset Pathname: final
Presentation Format: pdc1
Dataset Creation: Mon Oct 18 17:05:03 2010
Charted by: Depth in Feet scaled 1:240

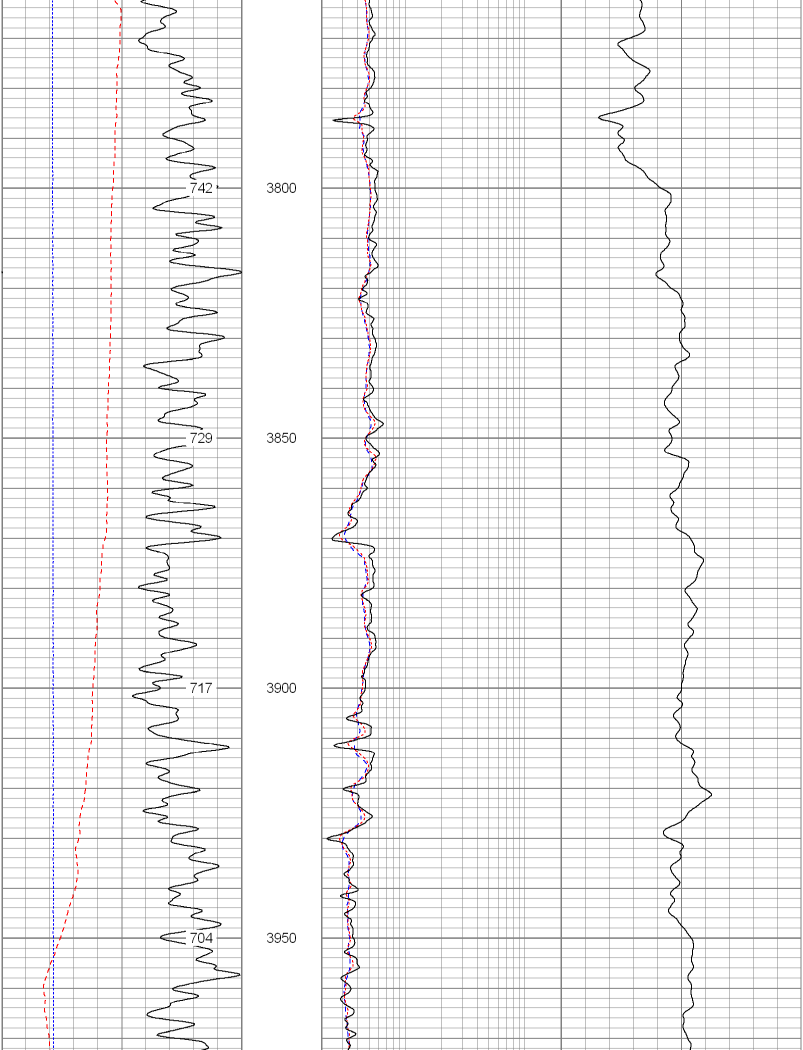
6 Density Caliper (in) 16
30 Gamma Ray (GAPI) 130
80 SP (mV) 180
ABHV (ft3)

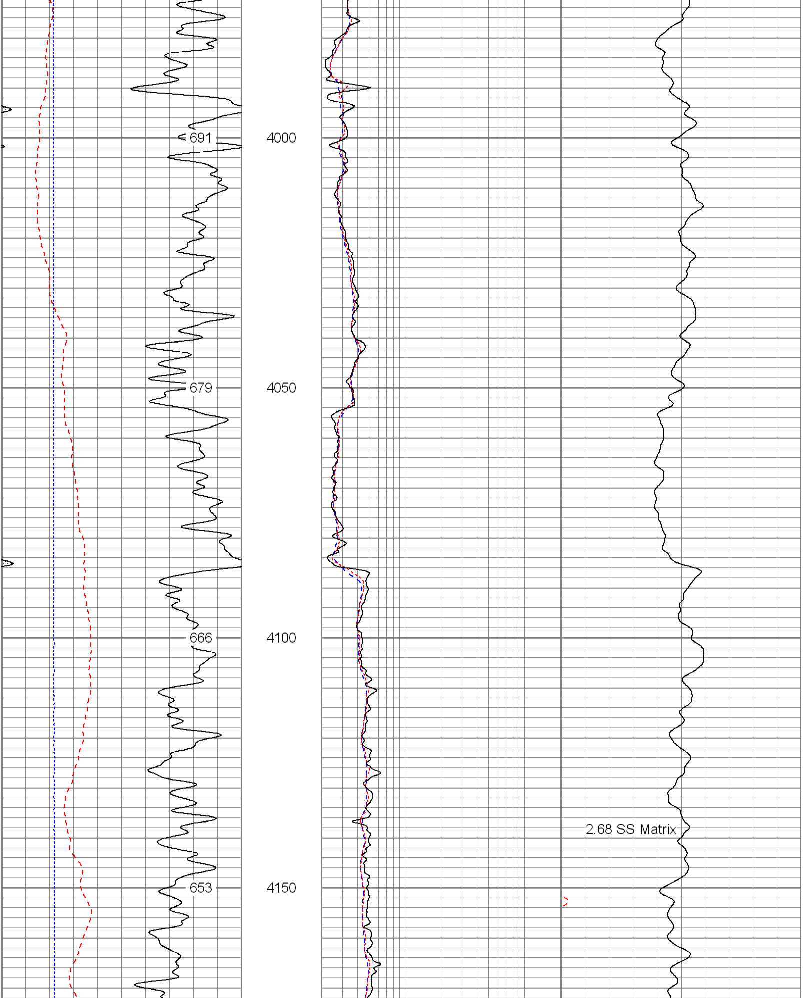
2 Deep Resistivity (Ohm-m) 200
2 Medium Resistivity (Ohm-m) 200
2 Shallow Resistivity (Ohm-m) 200

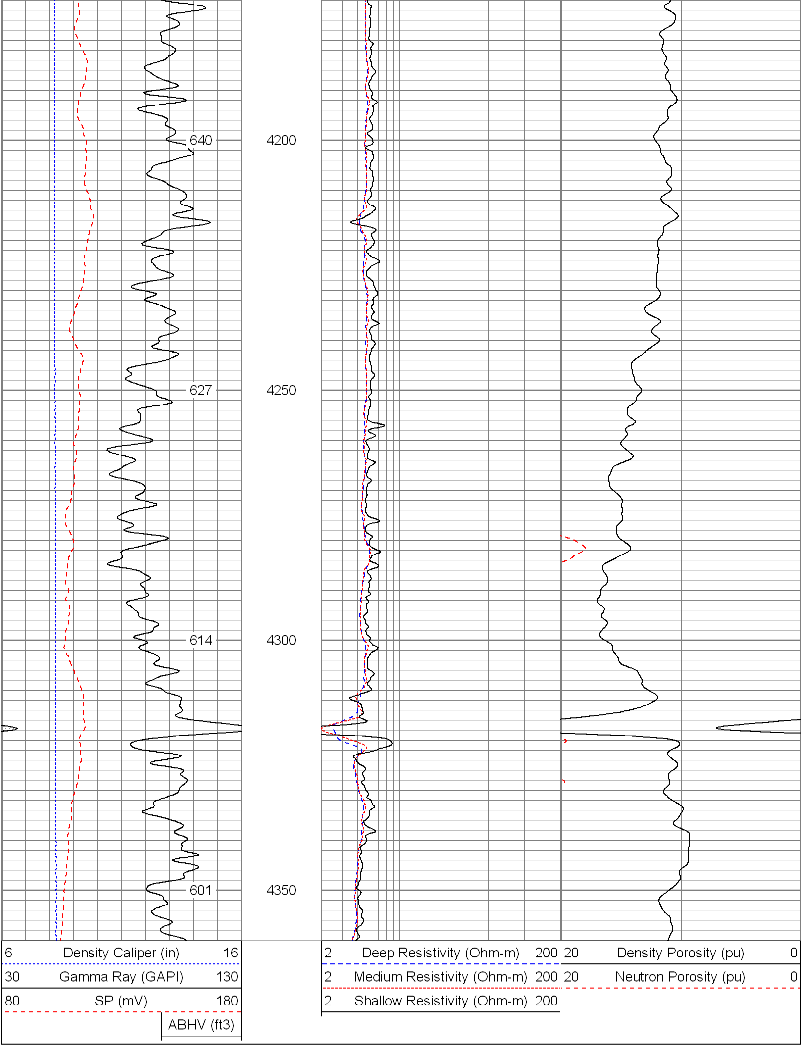
20 Density Porosity (pu) 0
20 Neutron Porosity (pu) 0



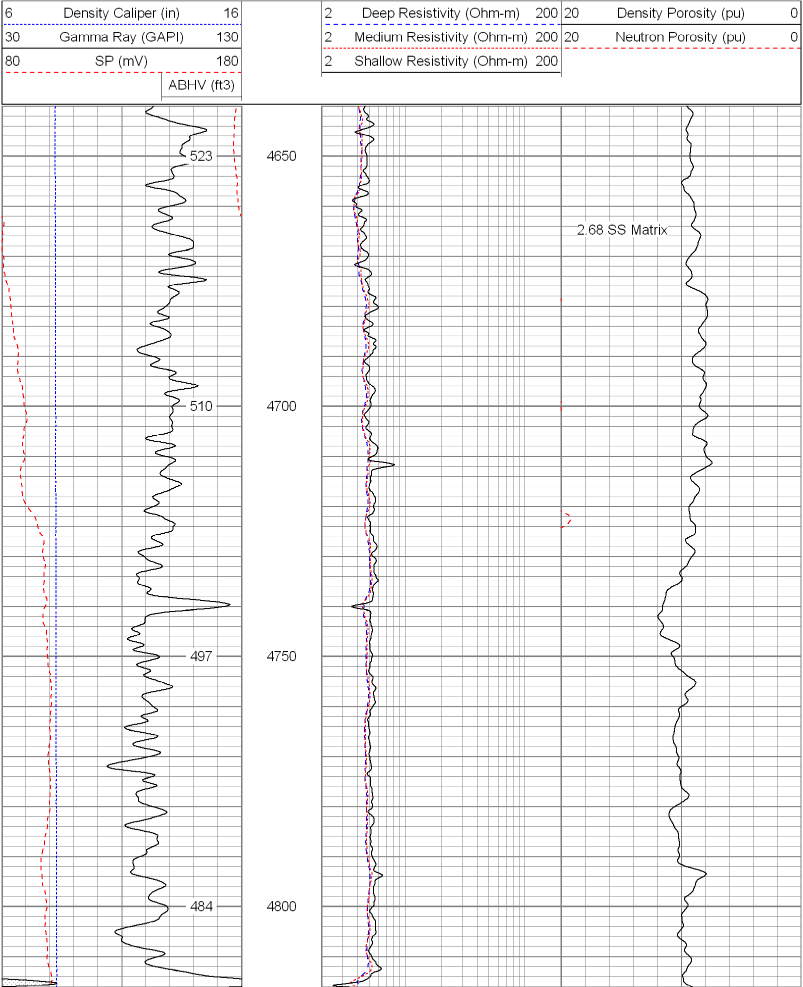


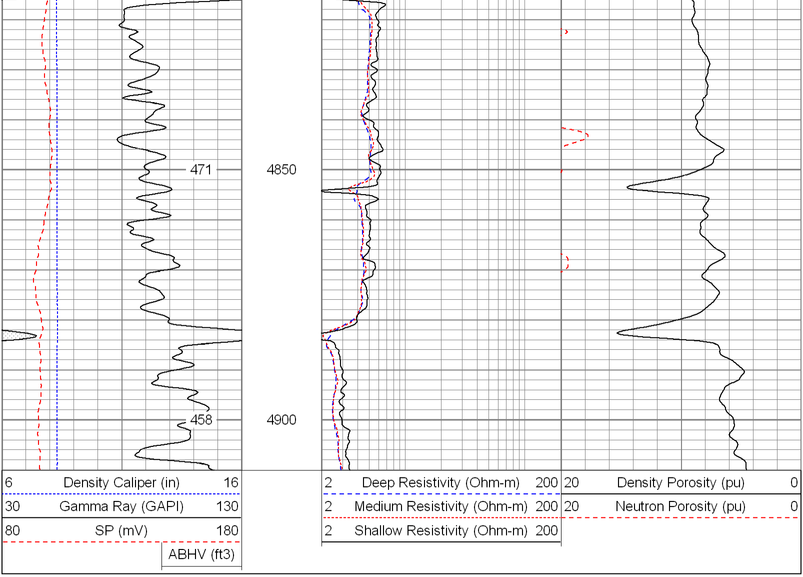




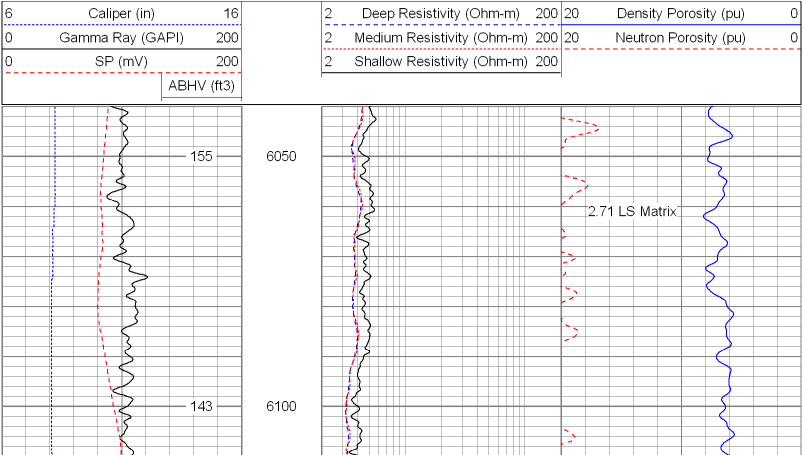
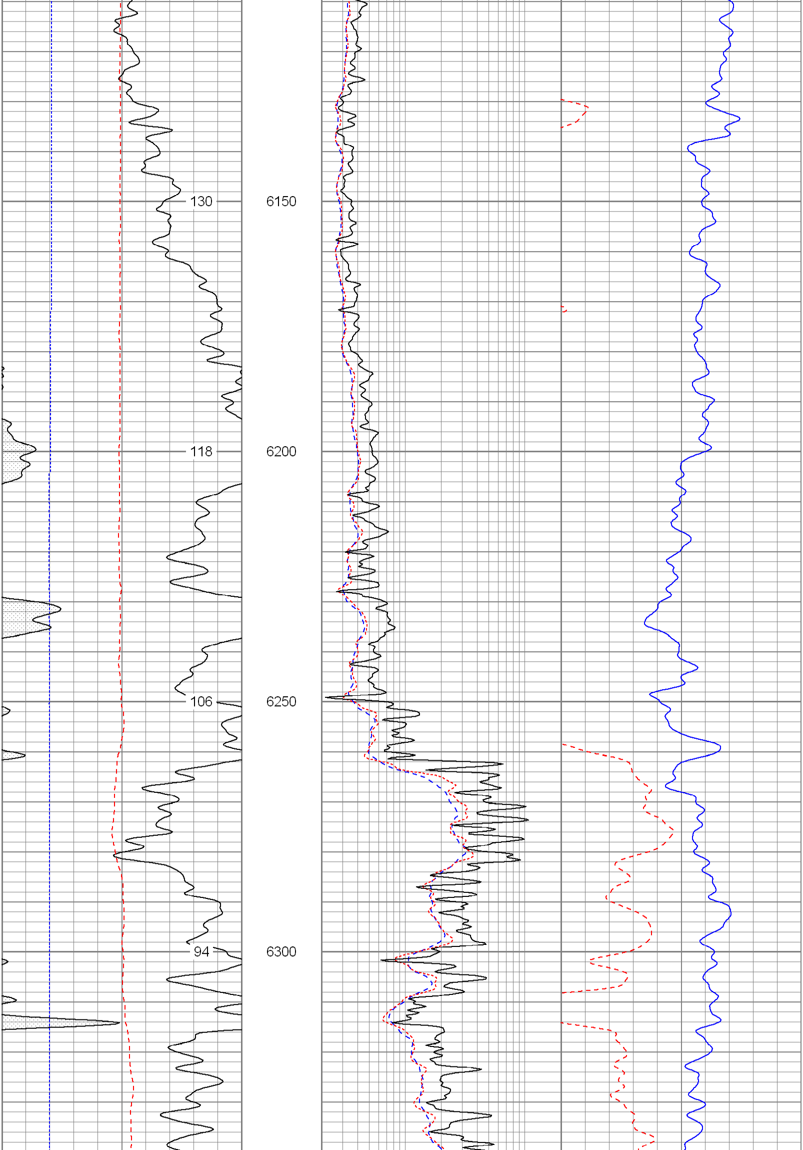
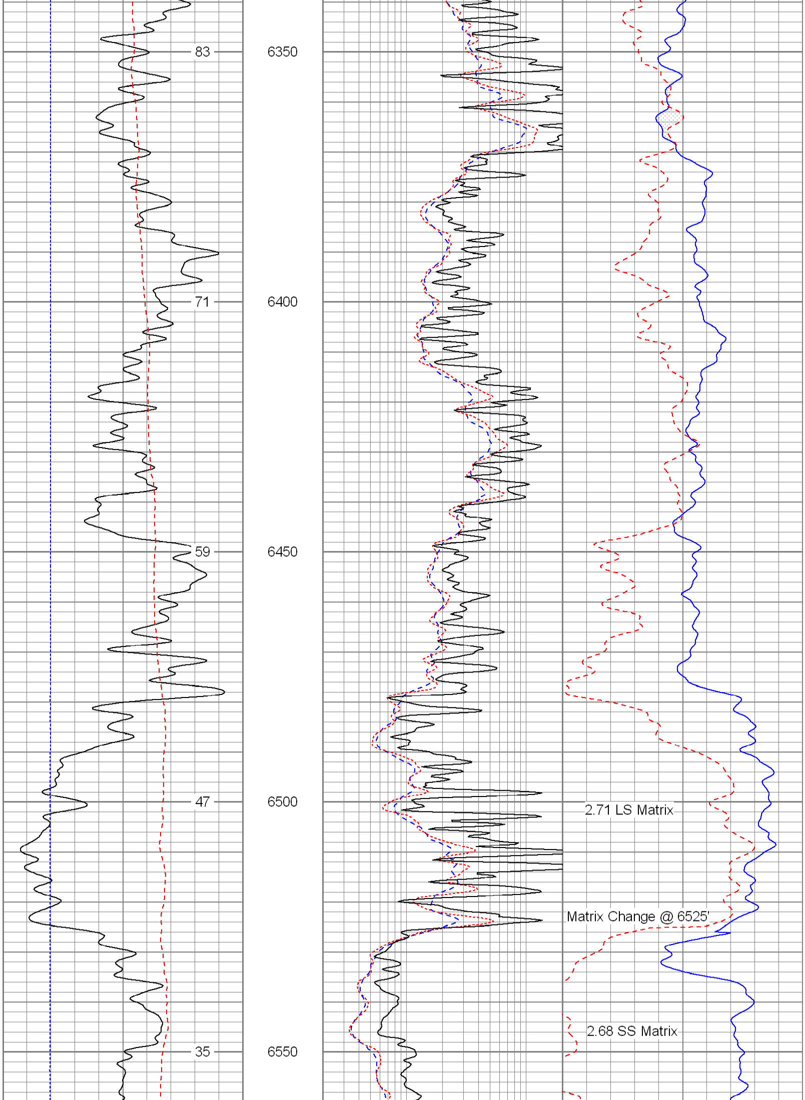
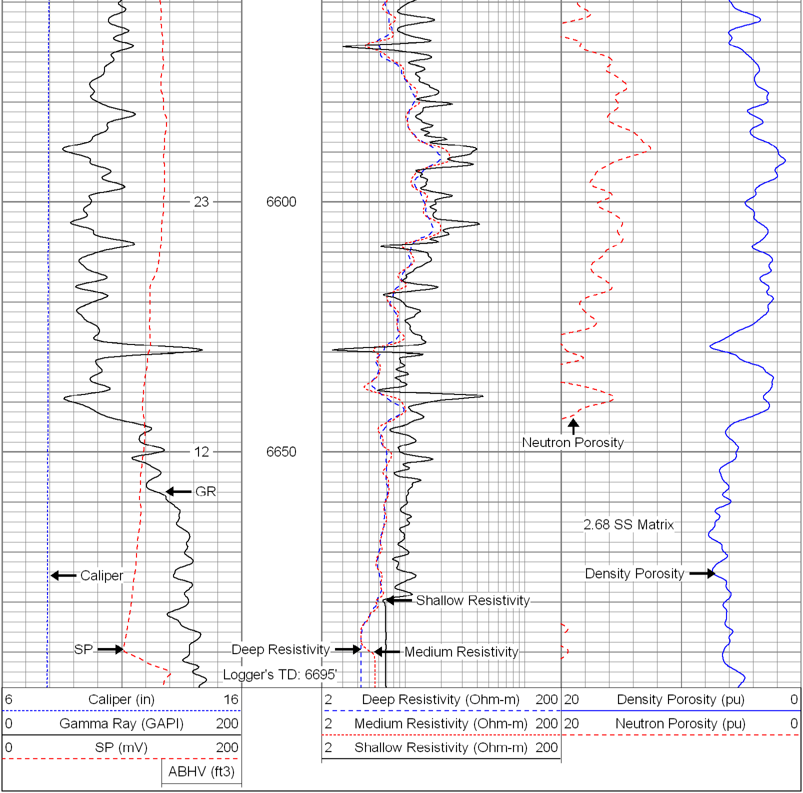


Database File:	11153.db
Dataset Pathname:	final
Presentation Format:	pdc1
Dataset Creation:	Mon Oct 18 17:05:03 2010
Charted by:	Depth in Feet scaled 1:240





Database File: 11153.db
Dataset Pathname: final
Presentation Format: pdc
Dataset Creation: Mon Oct 18 17:05:03 2010
Charted by: Depth in Feet scaled 1:240


6 Caliper (in) 16
0 Gamma Ray (GAPI) 200
0 SP (mV) 200
ABHV (ft3)
2 Deep Resistivity (Ohm-m) 200
2 Medium Resistivity (Ohm-m) 200
2 Shallow Resistivity (Ohm-m) 200
20 Density Porosity (pu) 0
20 Neutron Porosity (pu) 0
155
6050
2.71 LS Matrix
143
6100