PHOENIX SURVEYS, INC.

HIGH RESOLUTION INDUCTION
COMPENSATED DENSITY
COMPENSATED NEUTRON

Company Great Western Oil & Gas Co. LLC
Well H-Y 20-23-18
Field Wattenberg
County Weld State/Province Colorado

Location
SHL: 724' FNL & 1934' FWL NENW Sec. 29
BHL: 1355' FSL & 2624' FWL NESW
Sec 20, Twp - 6N, Rge - 67W

Other Services
None

Elevation
K.B. 4798
D.F. 4797
G.L. 4784

Company
Well
Field
County
State/Prv

Permanent Datum GL Elevation 4784
Log Measured From KB
Drilling Measured From KB

Date	June 20, 2012		
Run Number	1		
Depth Driller	7779		
Depth Logger	7774		
Bottom Logged Interval	7774		
Top Log Interval	Casing		
Casing Driller	875		
Casing Logger	875		
Bit Size	7+7/8"		
Type Fluid in Hole	Chem Gel		
Density / Viscosity	9.2 / 54		
pH / Fluid Loss	8.0 / 10.0		
Source of Sample	Flowline		
Rm @ Meas. Temp	2.60 @ 78 F		
Rmf @ Meas. Temp	2.00 @ 78 F		
Rmc @ Meas. Temp	3.40 @ 78 F		
Source of Rmf / Rmc	Measure / Calc		
Rm @ BHT	0.98 @ 208 F		
Time Circulation Stopped	0030		
Time Logger on Bottom	0845		
Maximum Recorded Temperature	208 F		
Equipment Number	52		
Location	Brighton, CO		
Recorded By	Schuman		
Witnessed By	Armstrong	Scanniello	

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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

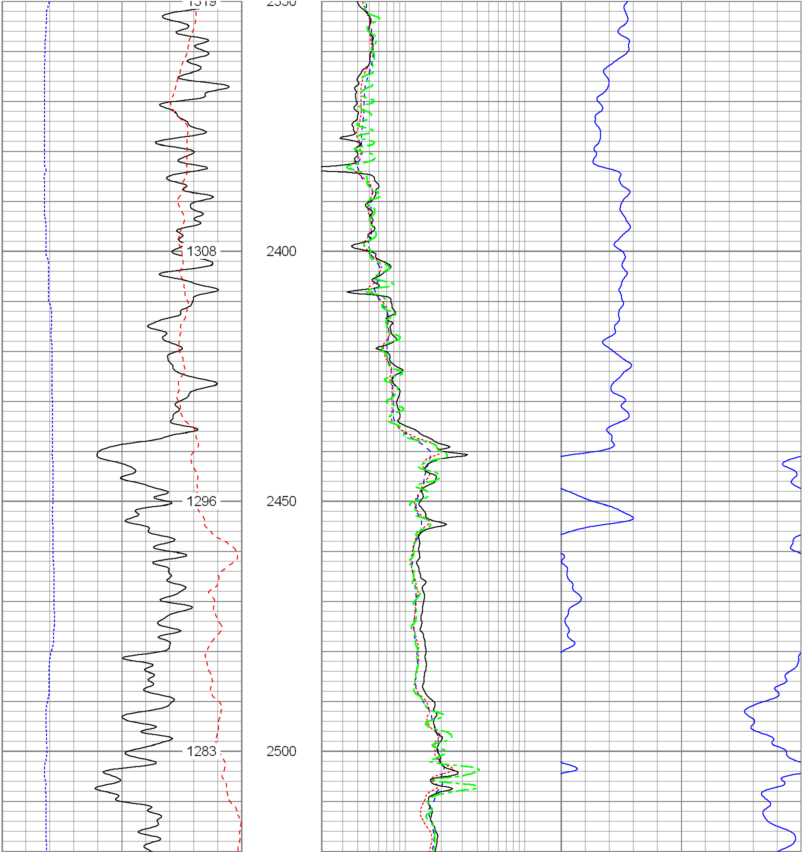
Annular volume calculated for 4.5" casing
Cade Drilling Rig 25
Thank you for using Phoenix Surveys.
API #: 05-123-35430
No repeat due to hole conditions.

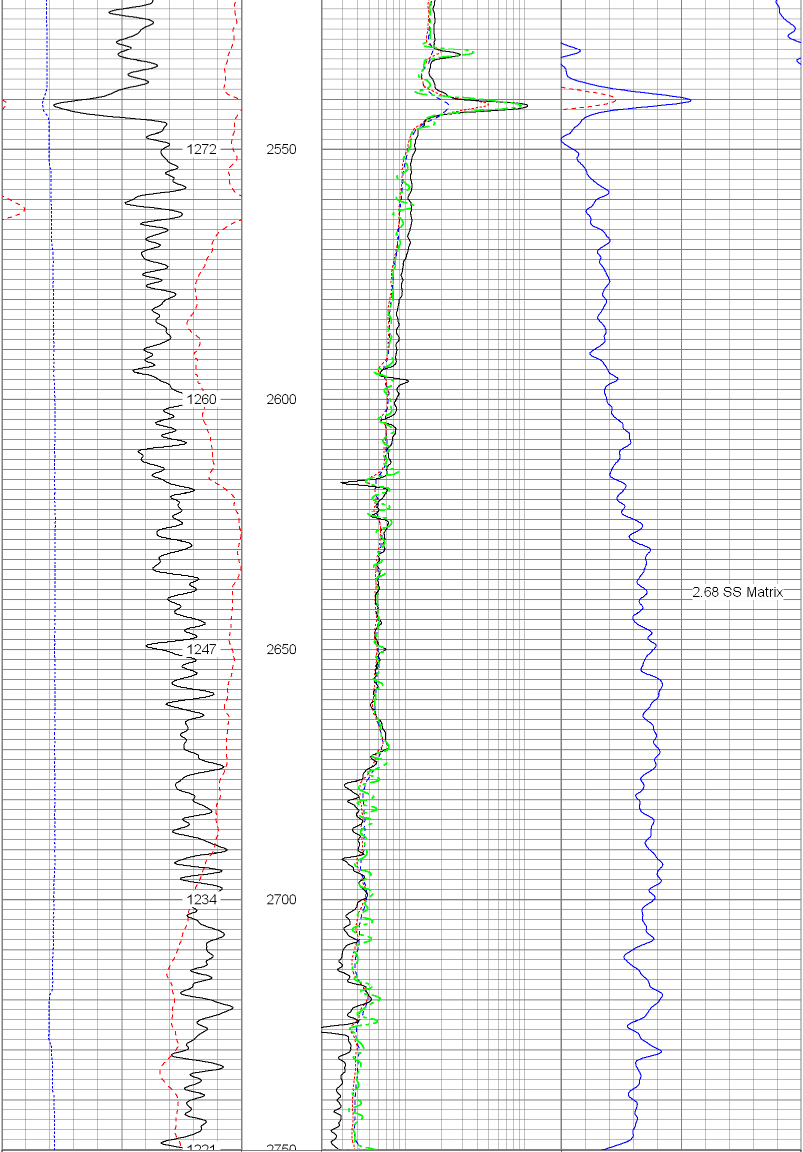
Database File:	12994.db
Dataset Pathname:	main
Presentation Format:	pdc1
Dataset Creation:	Wed Jun 20 10:03:17 2012
Charted by:	Depth in Feet scaled 1:240

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





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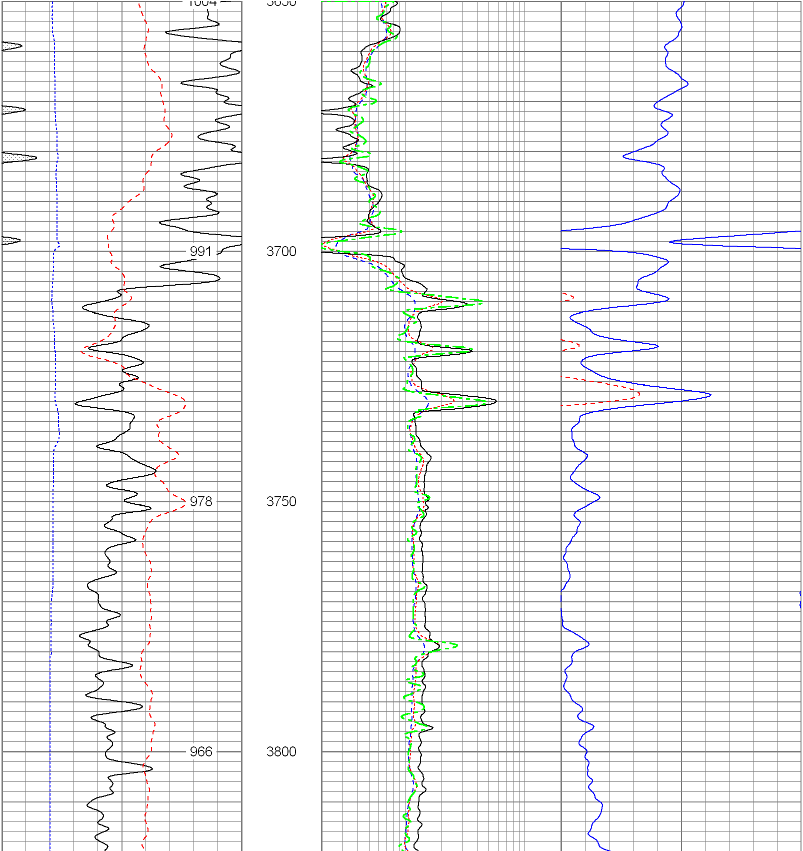

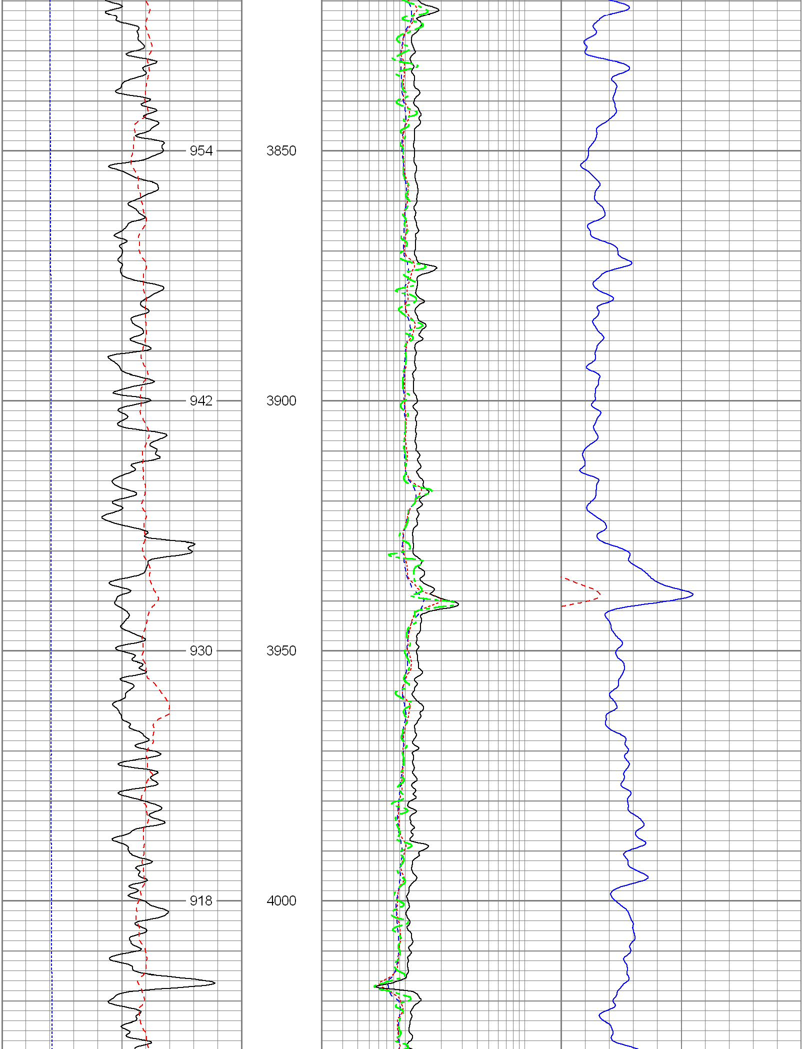

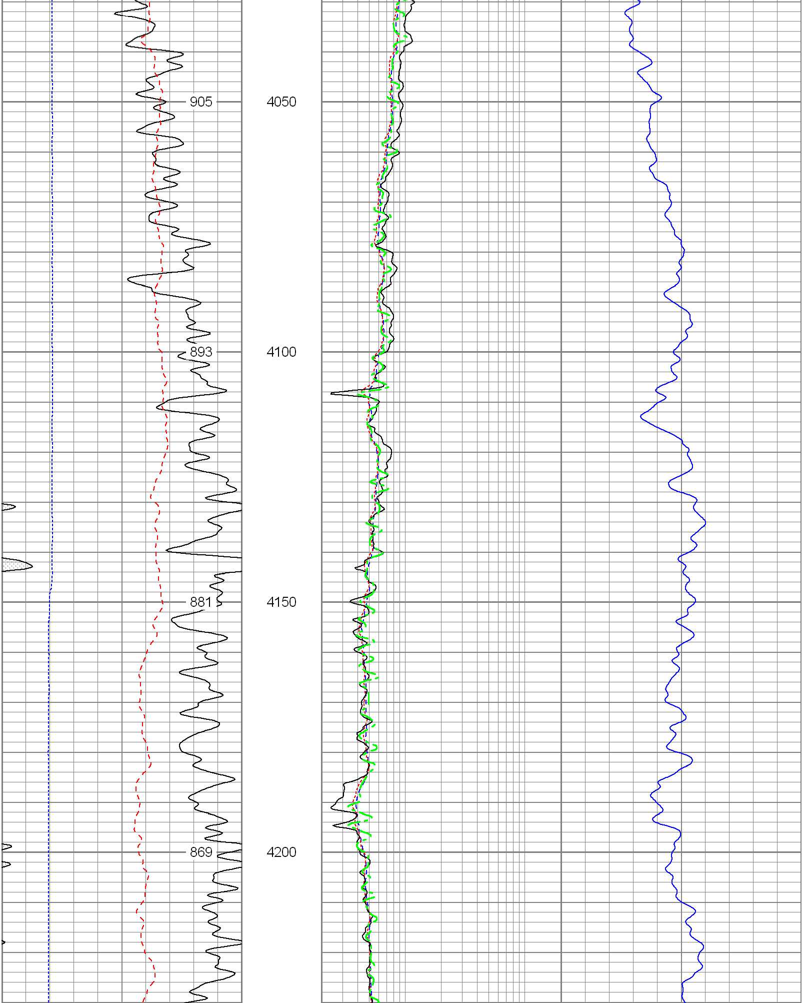

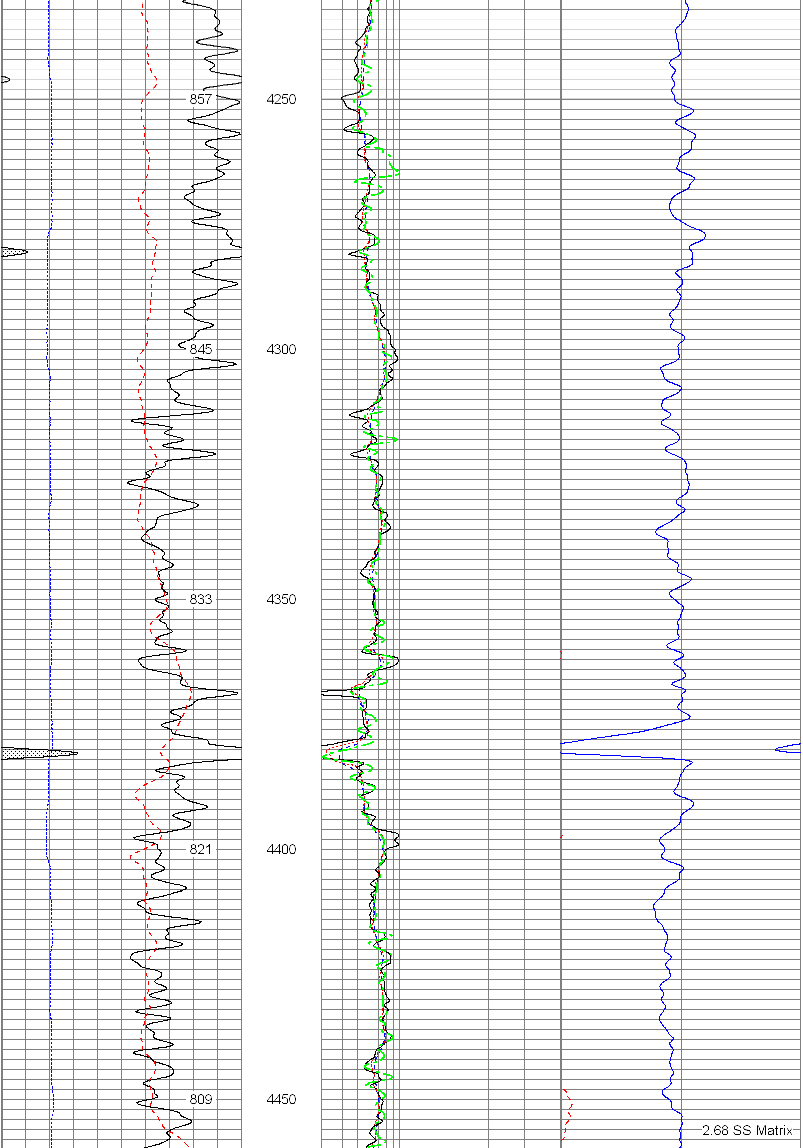

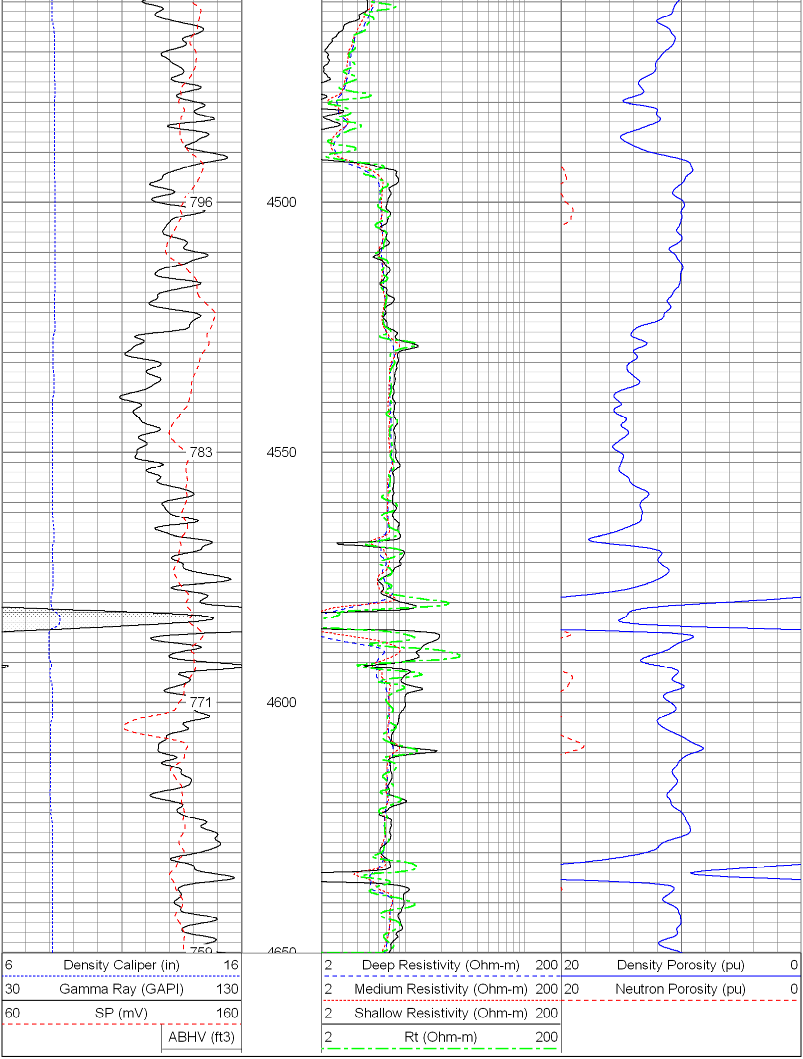

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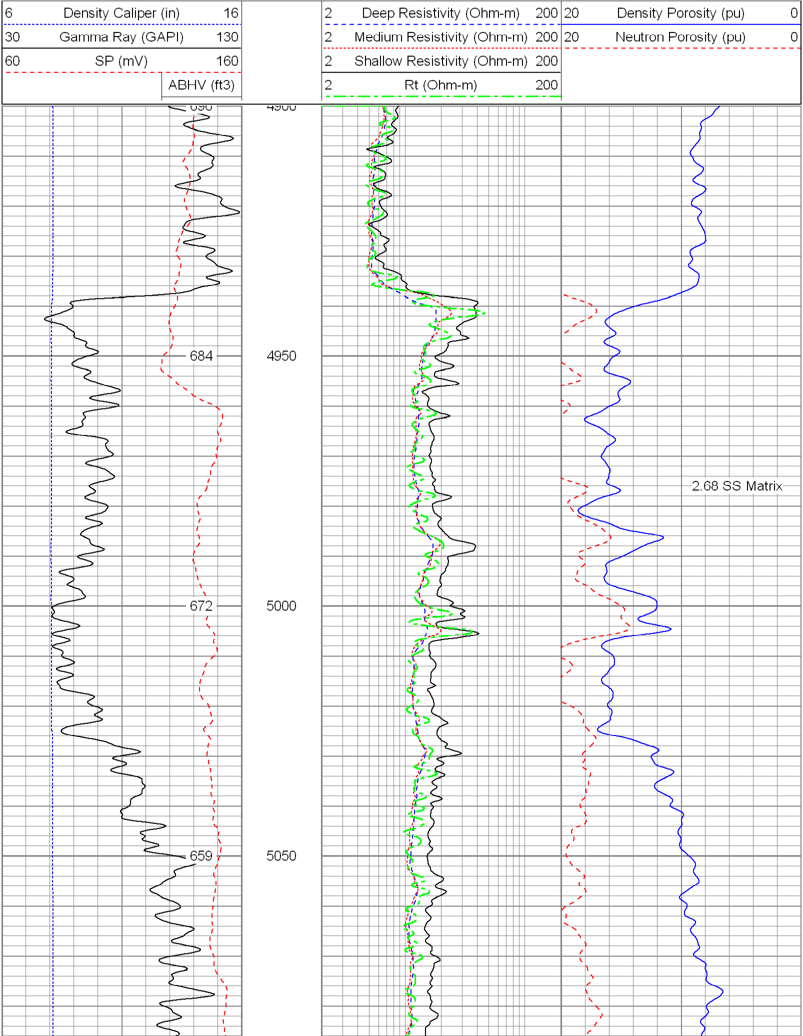

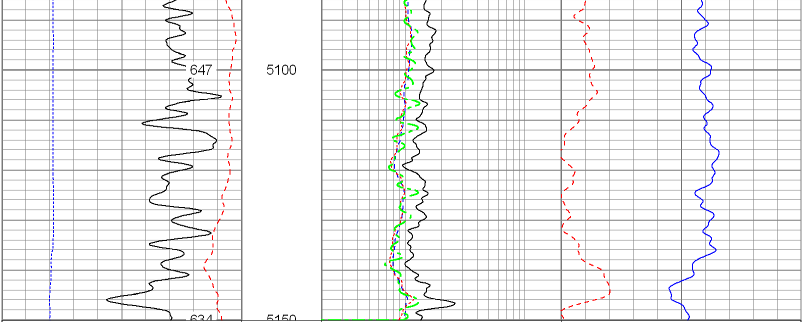

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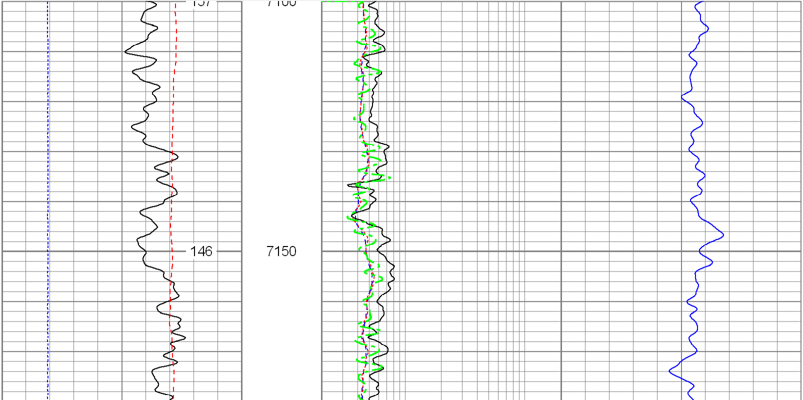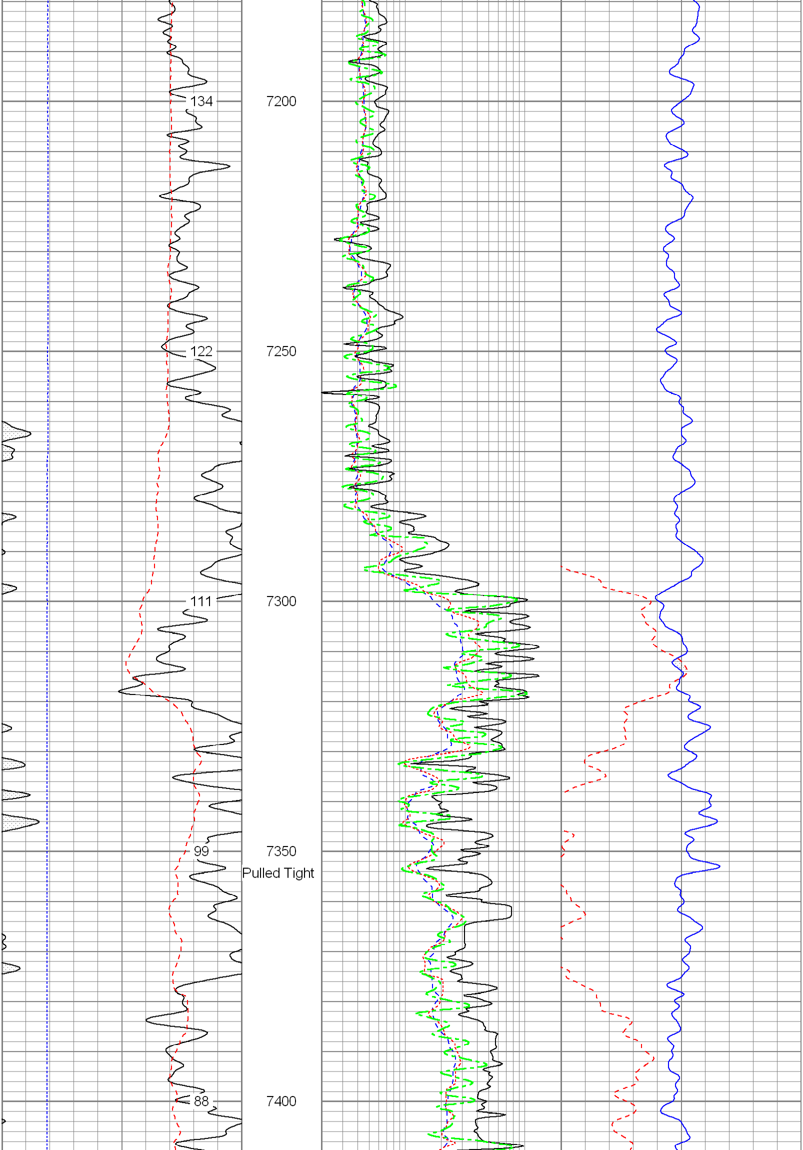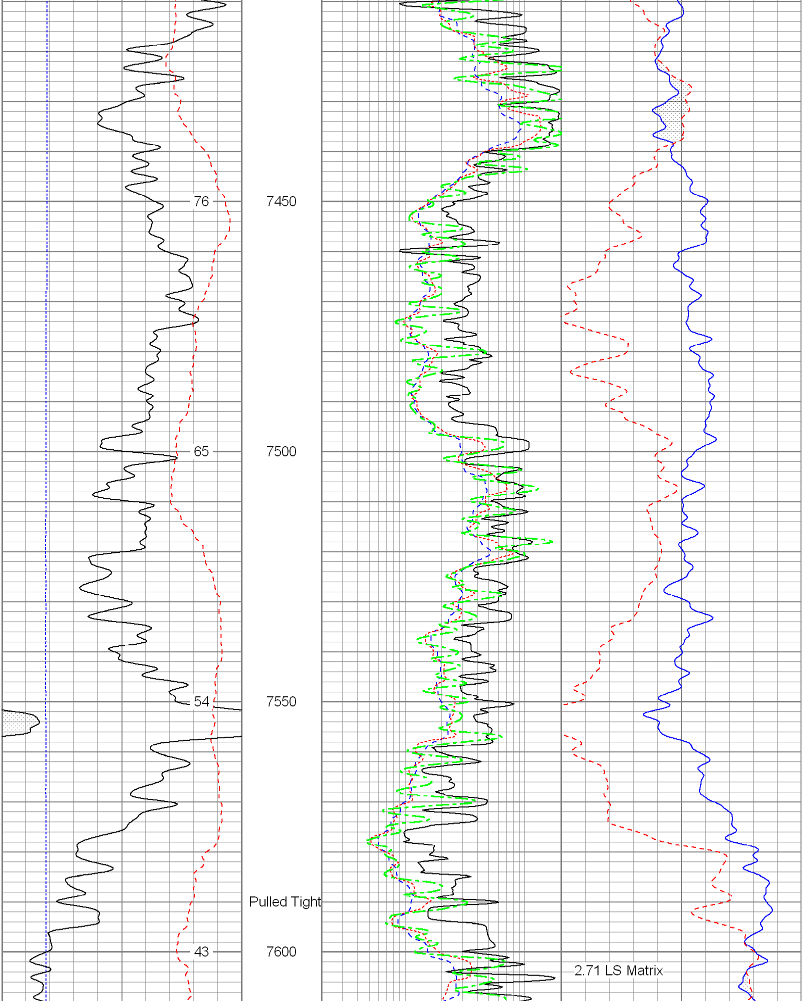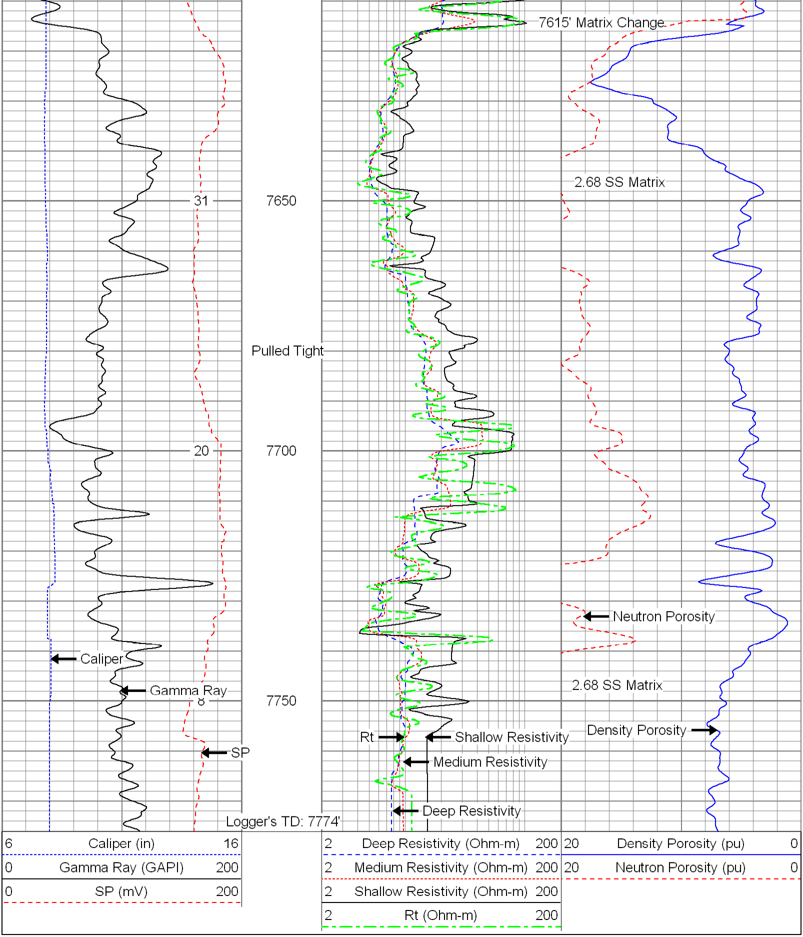6	Caliper (in)	16	2	Deep Resistivity (Ohm-m)	200	20	Density Porosity (pu)	0
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