PHOENIX SURVEYS, INC.

HIGH RESOLUTION INDUCTION
COMPENSATED DENSITY
COMPENSATED NEUTRON

Company Well Field County State/Prv

Company **Great Western Oil & Gas Co. LLC**
Well **Fritzler 21-22-14**
Field **Bracewell**
County **Weld** State/Province **Colorado**

Location
SHL: 1702' FNL & 583' FWL SWNW
BHL: 2695' FNL & 1309' FWL NWSW
Sec. 21, Twp. 6N, Rge. 66W

Other Services
None

Elevation
K.B. 4762
D.F. 4761
G.L. 4746

Permanent Datum GL Elevation 4746
Log Measured From KB
Drilling Measured From KB

Date	April 3, 2012		
Run Number	1		
Depth Driller	7473		
Depth Logger	7456		
Bottom Logged Interval	7456		
Top Log Interval	Casing		
Casing Driller	732		
Casing Logger	732		
Bit Size	7-7/8"		
Type Fluid in Hole	Chem Gel		
Density / Viscosity	9.3 / 55		
pH / Fluid Loss	8.0 / 9.0		
Source of Sample	Mudpit		
Rm @ Meas. Temp	3.70 @ 60 F		
Rmf @ Meas. Temp	2.50 @ 60 F		
Rmc @ Meas. Temp	4.50 @ 60 F		
Source of Rmf / Rmc	Measure / Calc		
Rm @ BHT	1.08 @ 206 F		
Time Circulation Stopped	0030		
Time Logger on Bottom	1130		
Maximum Recorded Temperature	206 F		
Equipment Number	50		
Location	Brighton, CO		
Recorded By	Shaun Schuman		
Witnessed By	Shawn Armstrong		

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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

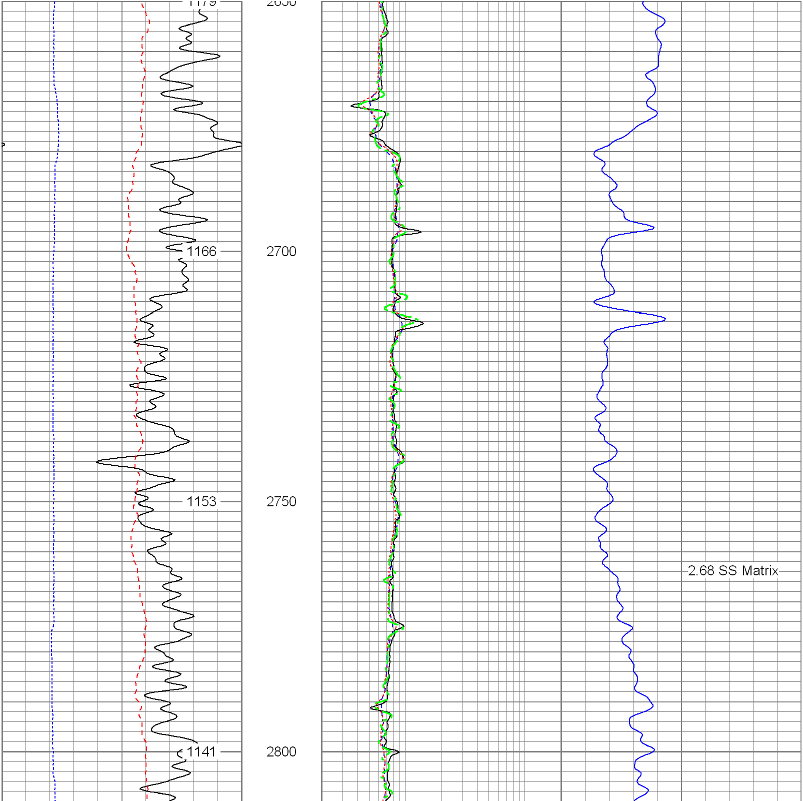
Annular volume calculated for 4-1/2" casing
Cade Drilling Rig 22
Thank you for using Phoenix Surveys!!
API #: 05-123-35234
No repeat pass due to hole conditions.
Logs did not reach bottom due to bridge.
Several tight spots are labelled on the log.

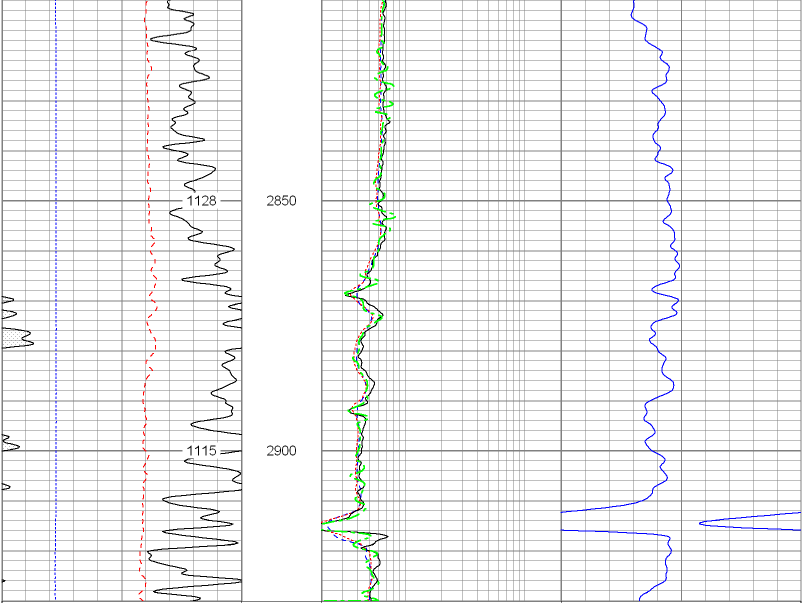
Database File:	12853.db
Dataset Pathname:	main
Presentation Format:	pdc1
Dataset Creation:	Tue Apr 03 12:27:45 2012
Charted by:	Depth in Feet scaled 1:240

6	Density Caliper (in)	16
30	Gamma Ray (GAPI)	130
0	SP (mV)	100
	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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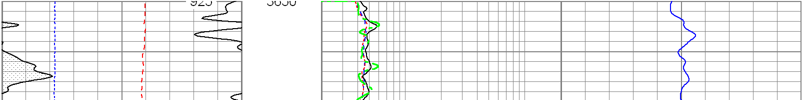

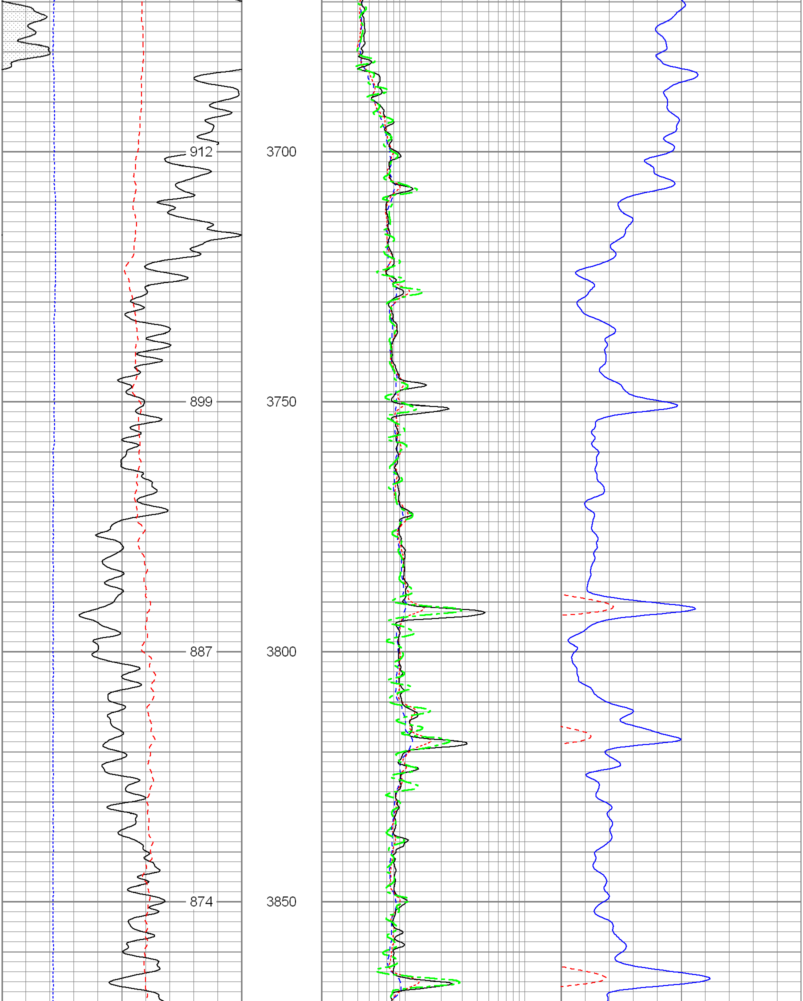

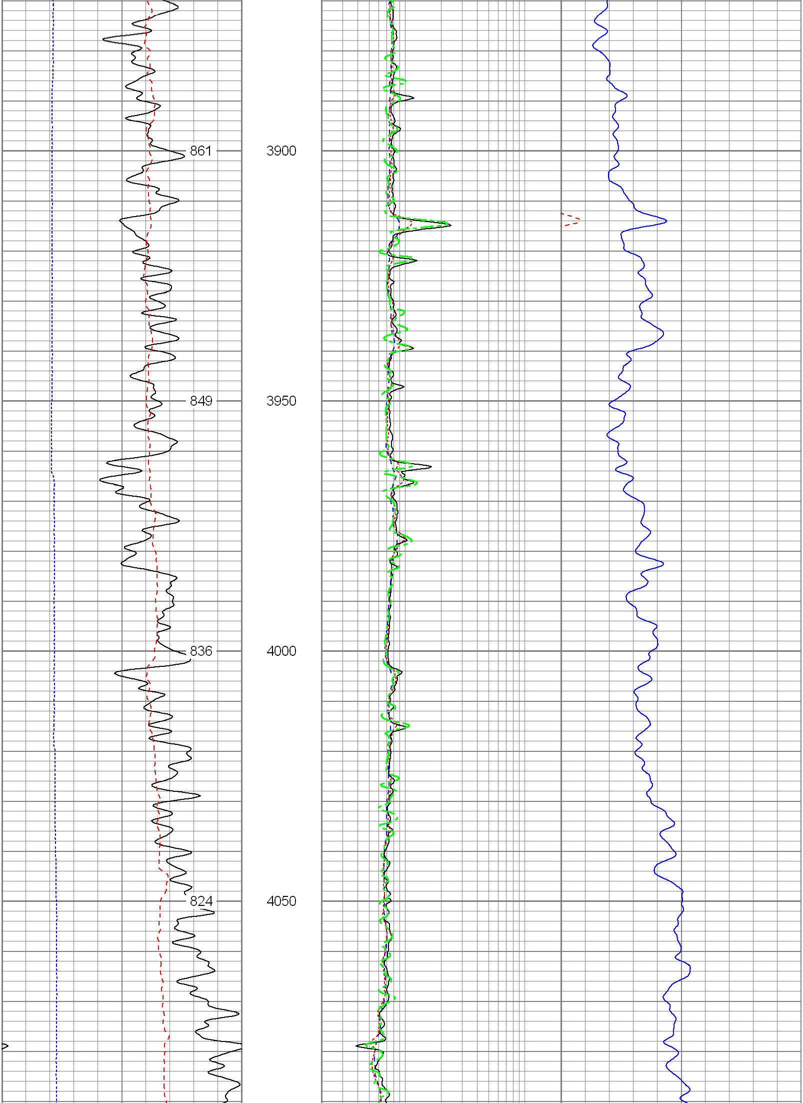

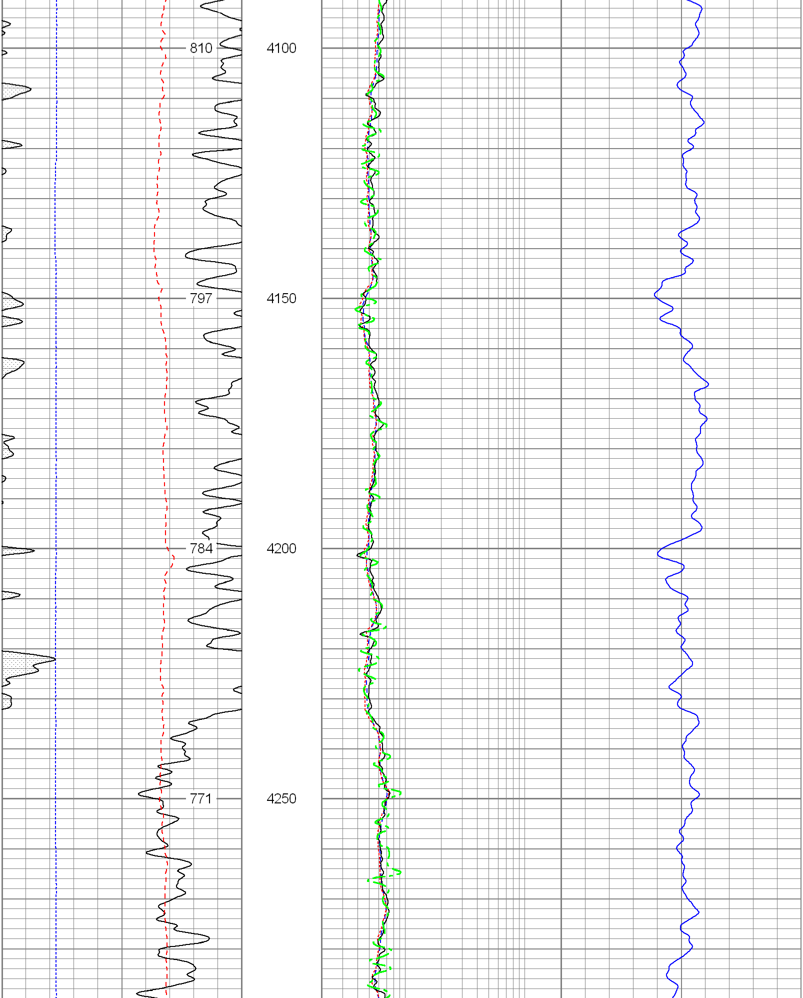

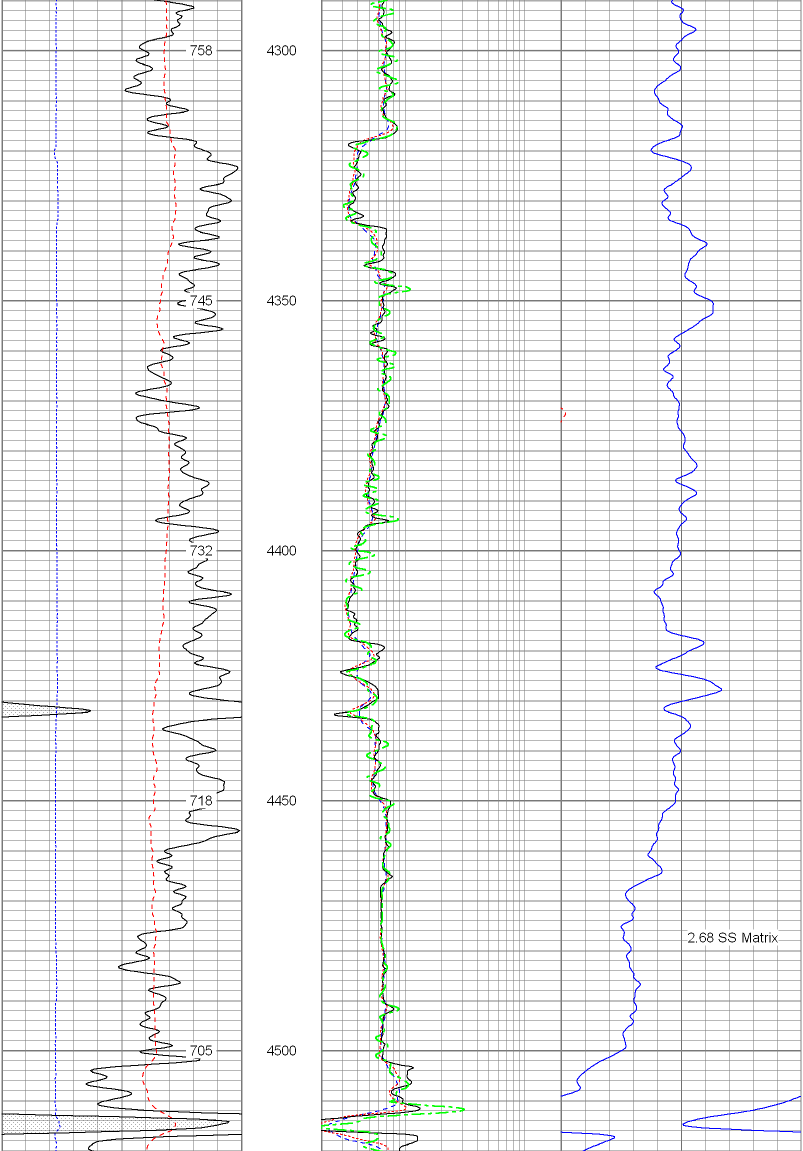

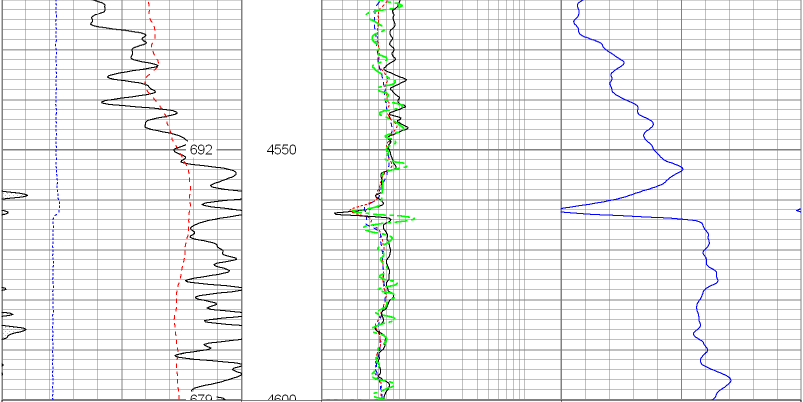

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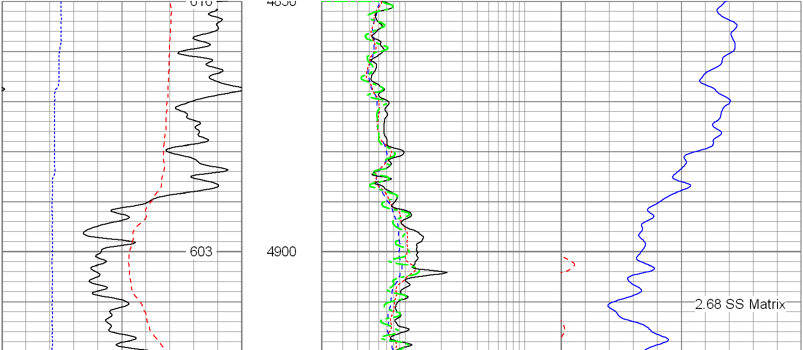

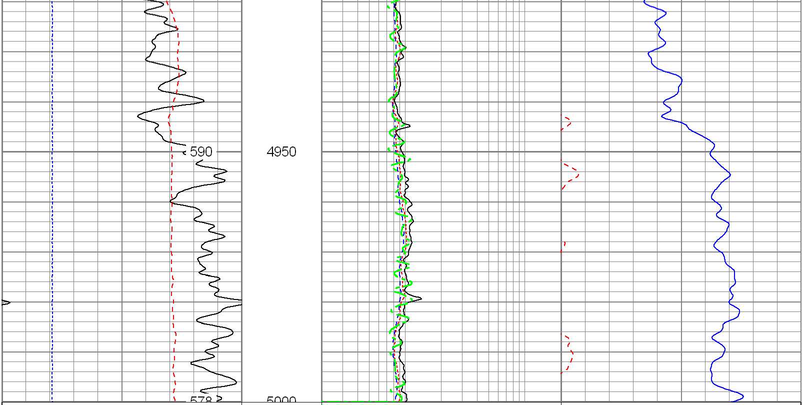

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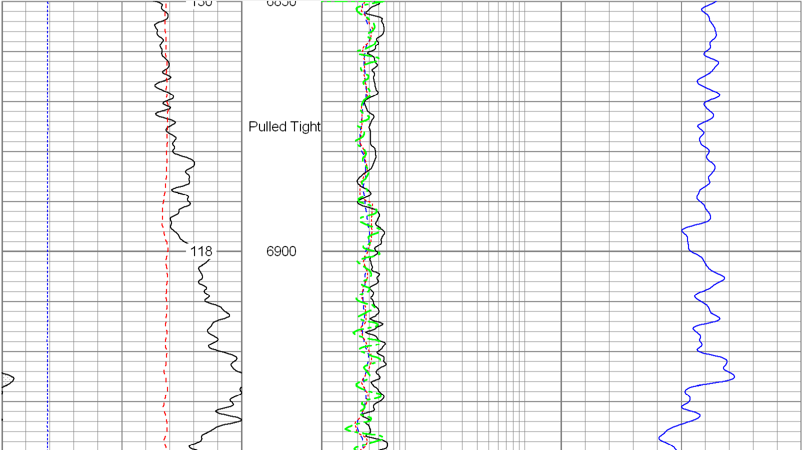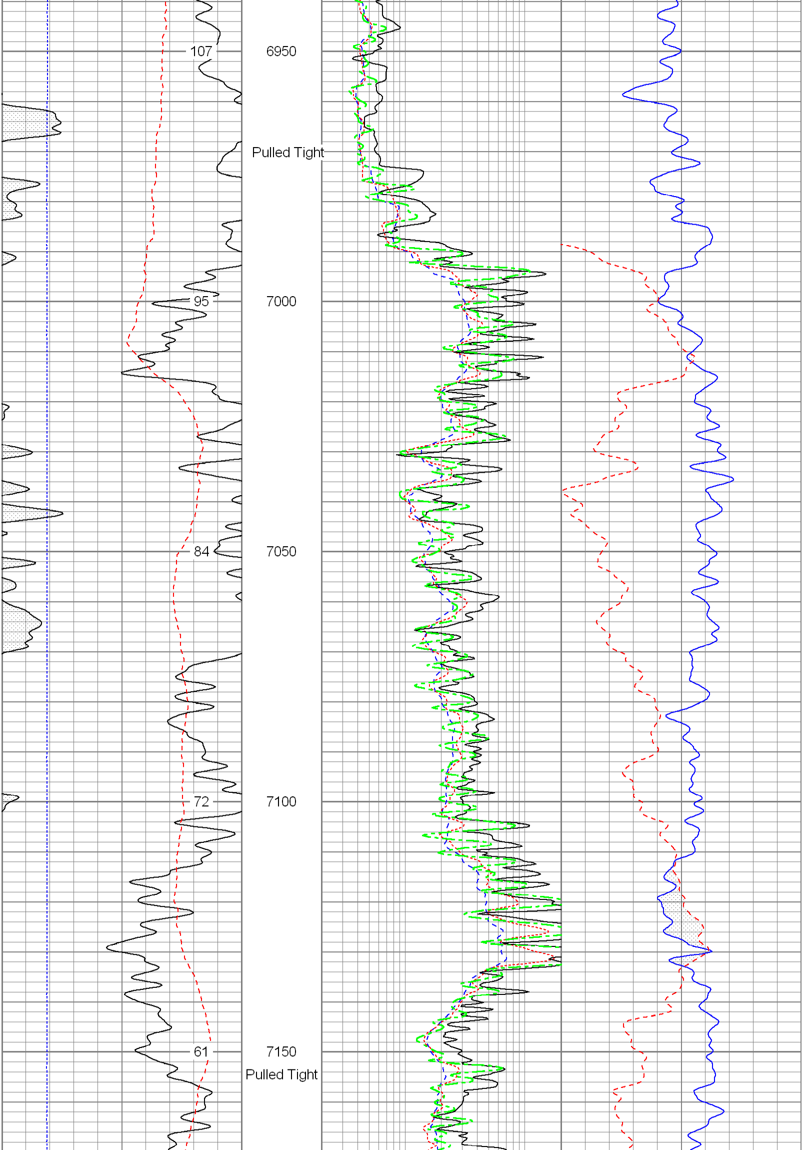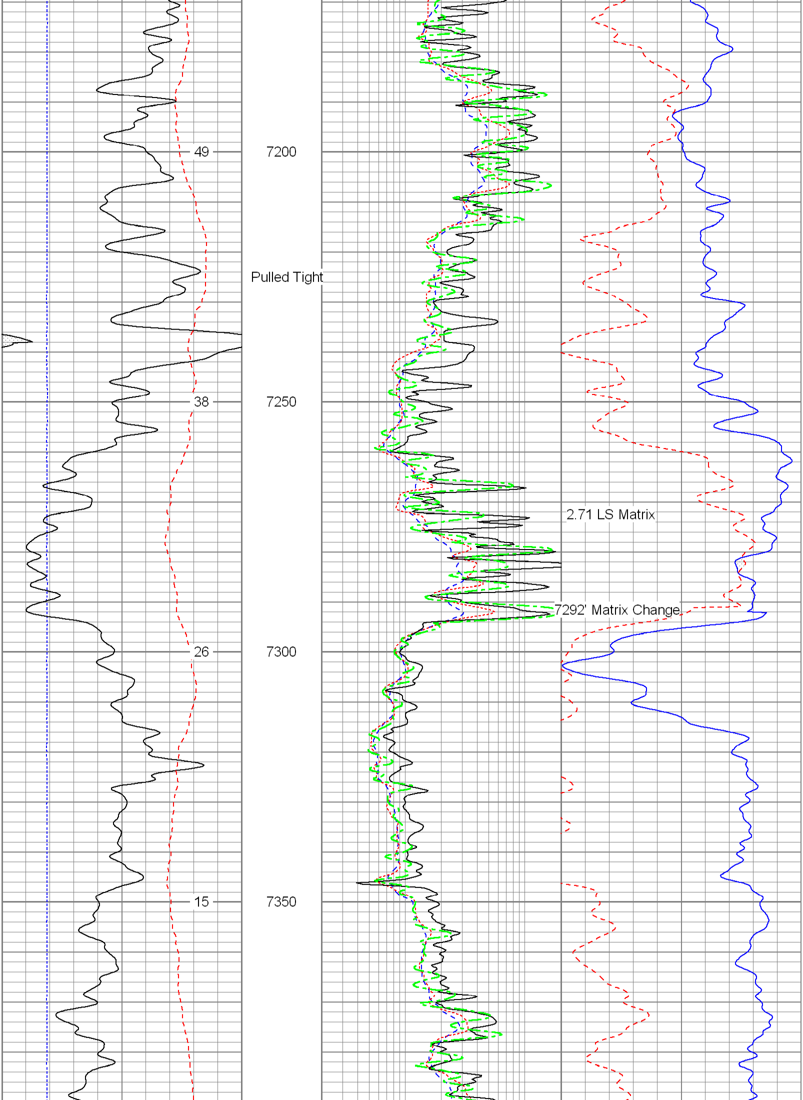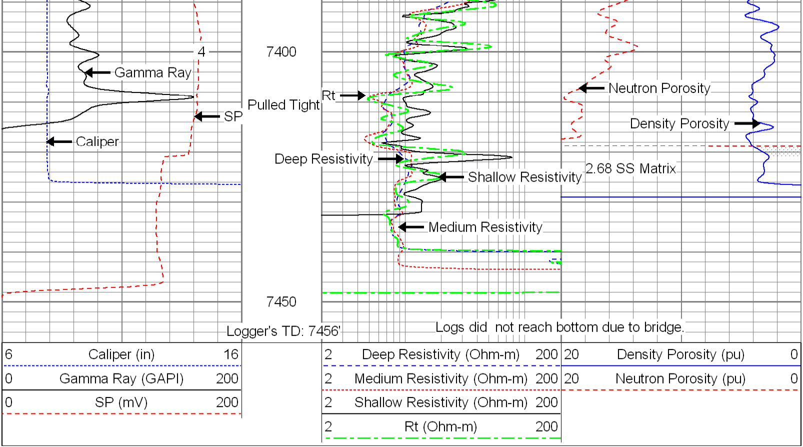6	Caliper (in)	16	2	Deep Resistivity (Ohm-m)	200	20	Density Porosity (pu)	0
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