PSI
PHOENIX SURVEYS, INC.

COMPENSATED DENSITY
COMPENSATED NEUTRON
GAMMA RAY

Company
Well
Field
County
State/Prv

Company	Great Western Oil & Gas LLC
Well	Harrell 4-12
Field	Wattenberg
County	Weld
State/Province	Colorado
Location	1873' FNL & 805' FWL SW NW Sec 4, Twp - 5N, Rge - 65W

Other Services
Induction

Elevation
K.B. 4669
D.F. 4668
G.L. 4653

Permanent Datum	GL	Elevation	4653
Log Measured From	KB		
Drilling Measured From	KB		

Date	June 01, 2008		
Run Number	1		
Depth Driller	7210		
Depth Logger	7221		
Bottom Logged Interval	7201		
Top Log Interval	3650		
Casing Driller	425		
Casing Logger	Not Logged		
Bit Size	7-7/8"		
Type Fluid in Hole	Chem Gel		
Density / Viscosity	9.7 / 45		
pH / Fluid Loss	8.0 / 8.8		
Source of Sample	Flowline		
Rm @ Meas. Temp	3.25 @ 76° F		
Rmf @ Meas. Temp	2.60 @ 76° F		
Rmc @ Meas. Temp	3.90 @ 76° F		
Source of Rmf / Rmc	Measure / Calc		
Rm @ BHT	1.17 @ 202° F		
Time Circulation Stopped	1015		
Time Logger on Bottom	1715		
Maximum Recorded Temperature	202° F		
Equipment Number	4800		
Location	Brighton, CO		
Recorded By	Randy Conley		
Witnessed By	Tim Musgrave	Mark Scanniello	

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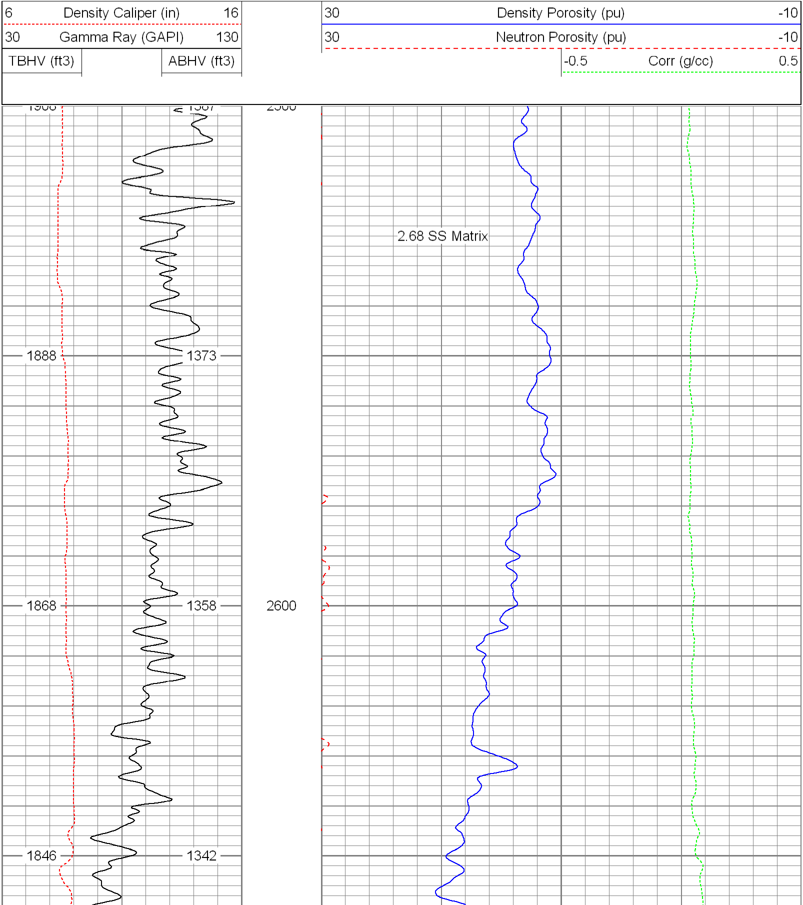
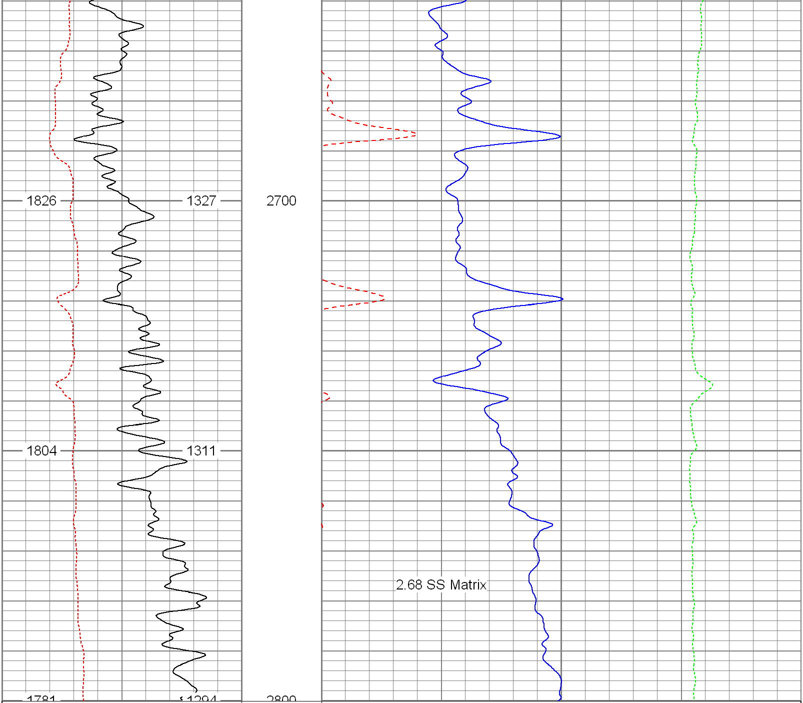
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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
Ensign Drilling Rig 7
Thank you for using Phoenix Surveys.
API #: 05-123-25918-00

Database File: 8714.db
Dataset Pathname: final
Presentation Format: poro1
Dataset Creation: Sun Jun 01 17:40:19 2008
Charted by: Depth in Feet scaled 1:240





6	Density Caliper (in)	16
30	Gamma Ray (GAPI)	130
TBHV (ft3)		ABHV (ft3)

30	Density Porosity (pu)	-10
30	Neutron Porosity (pu)	-10
-0.5	Corr (g/cc)	0.5

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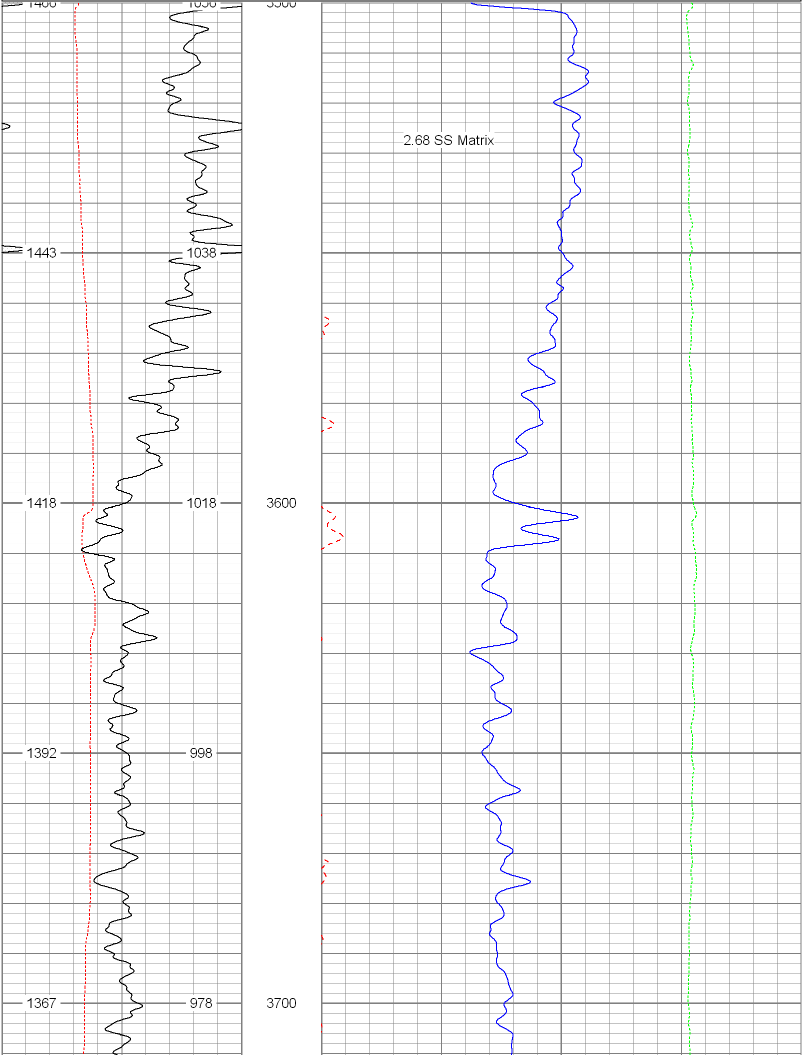

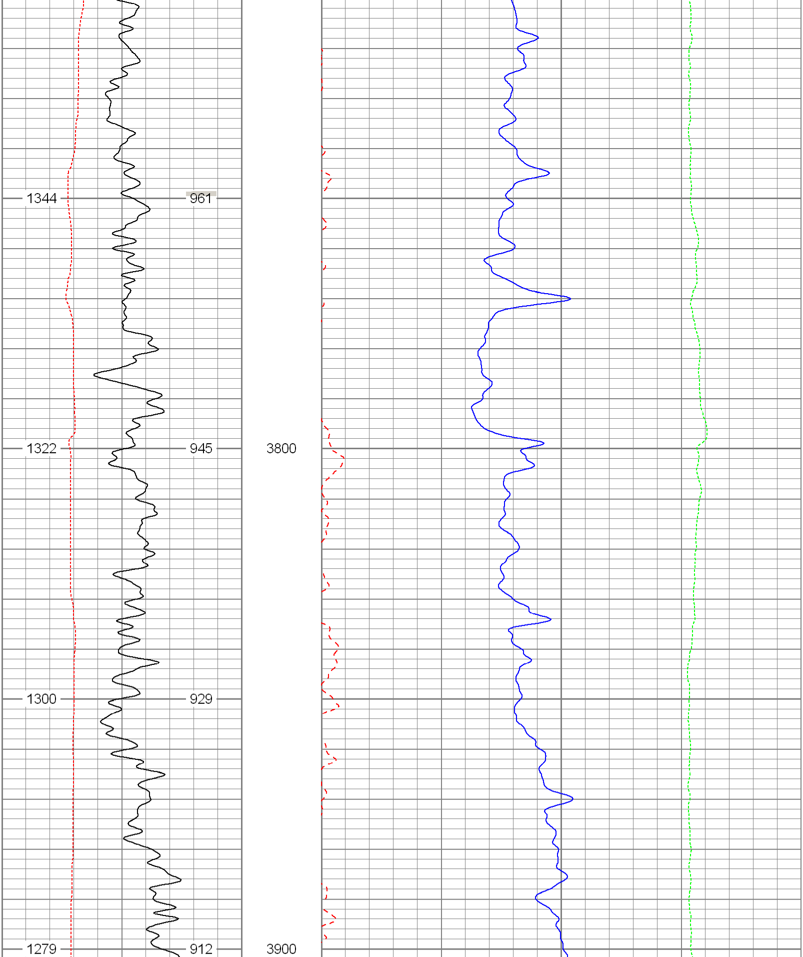

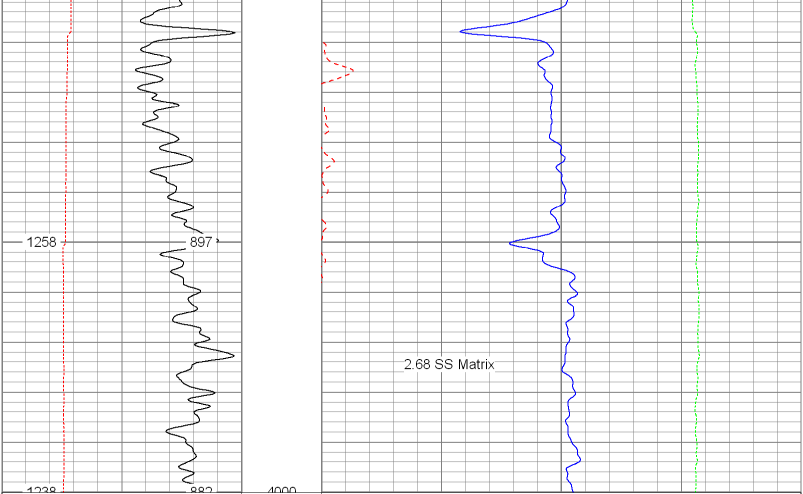

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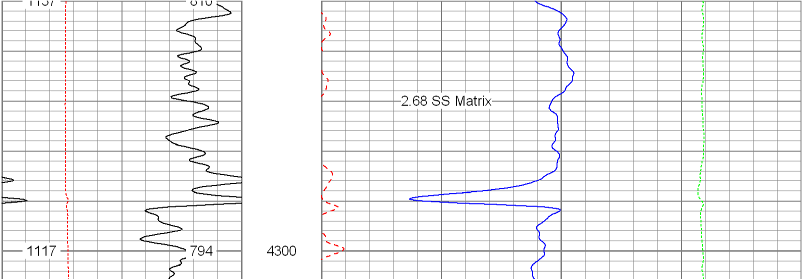

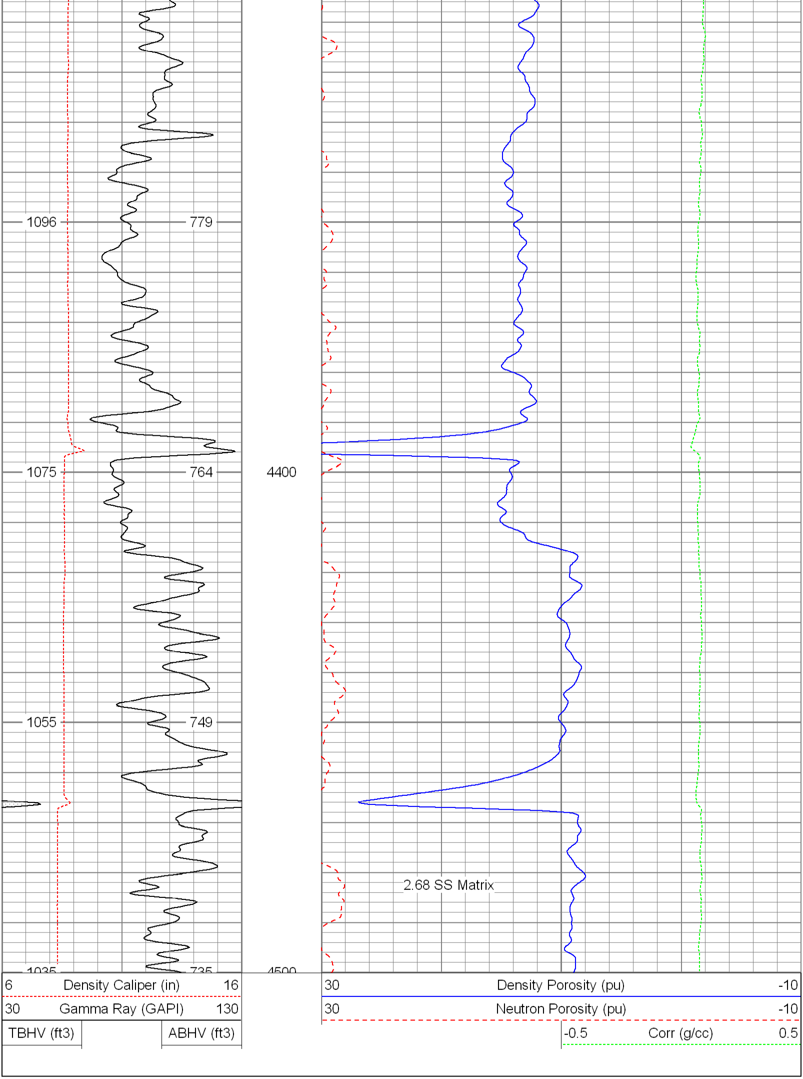

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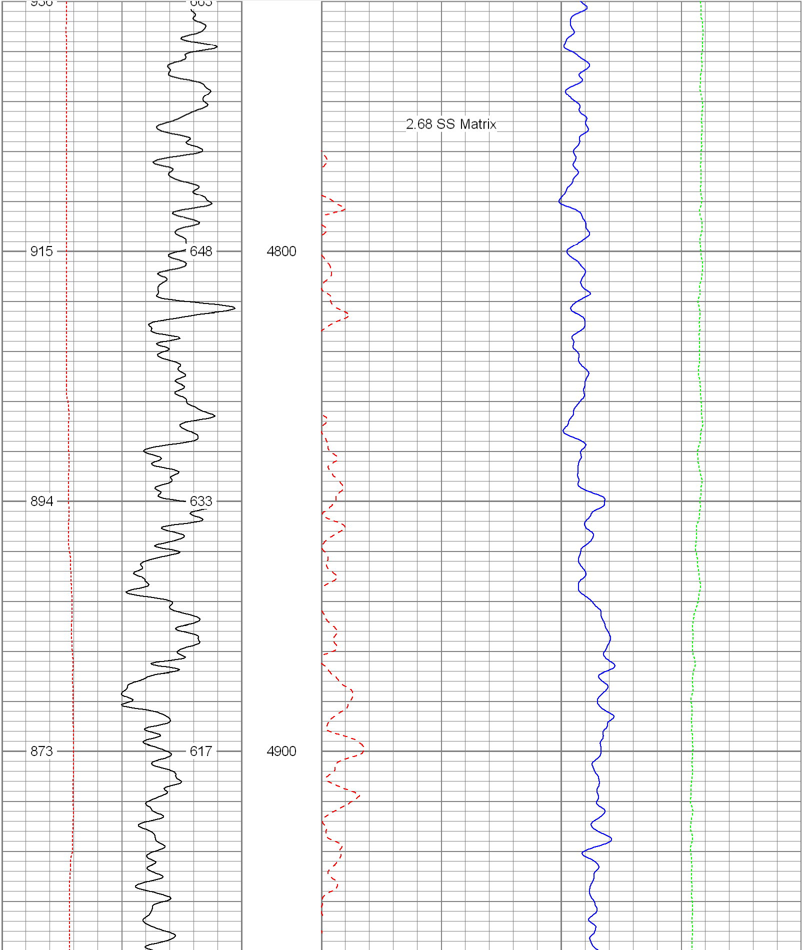

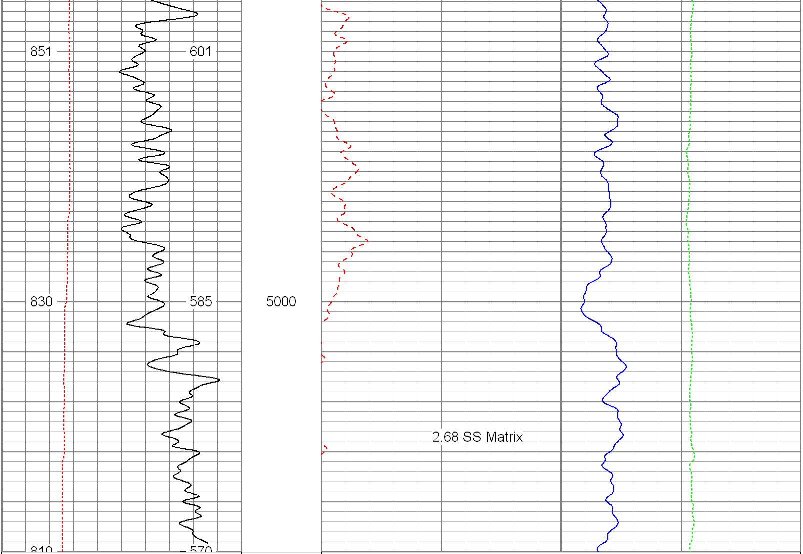

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Presentation Format: poro
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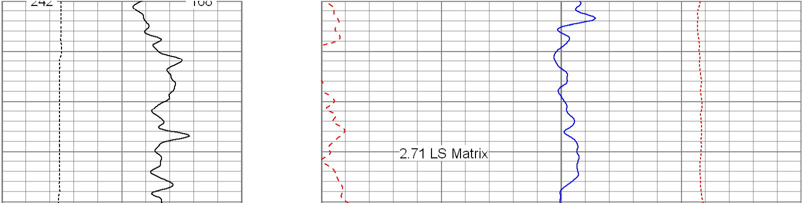
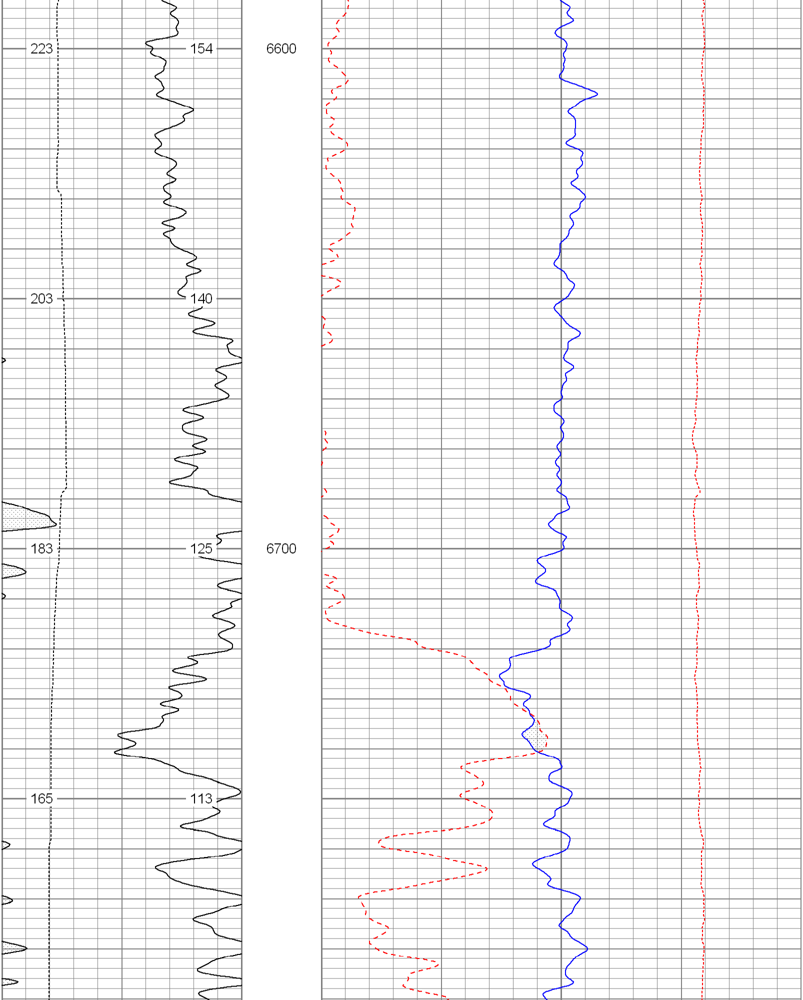
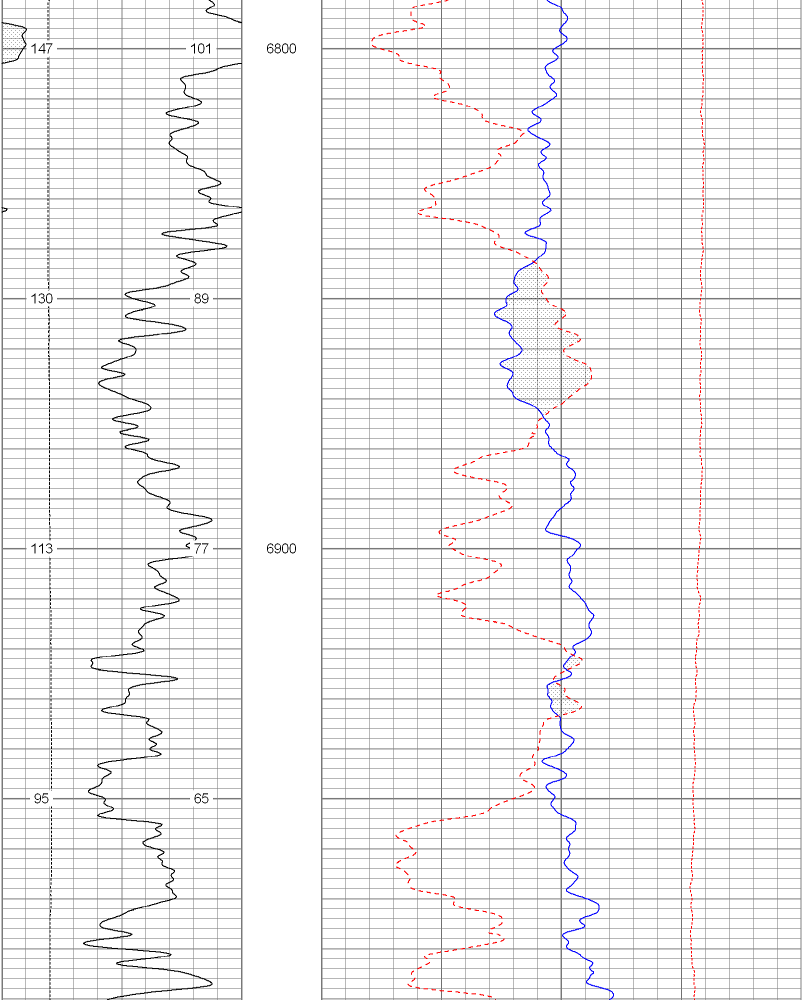
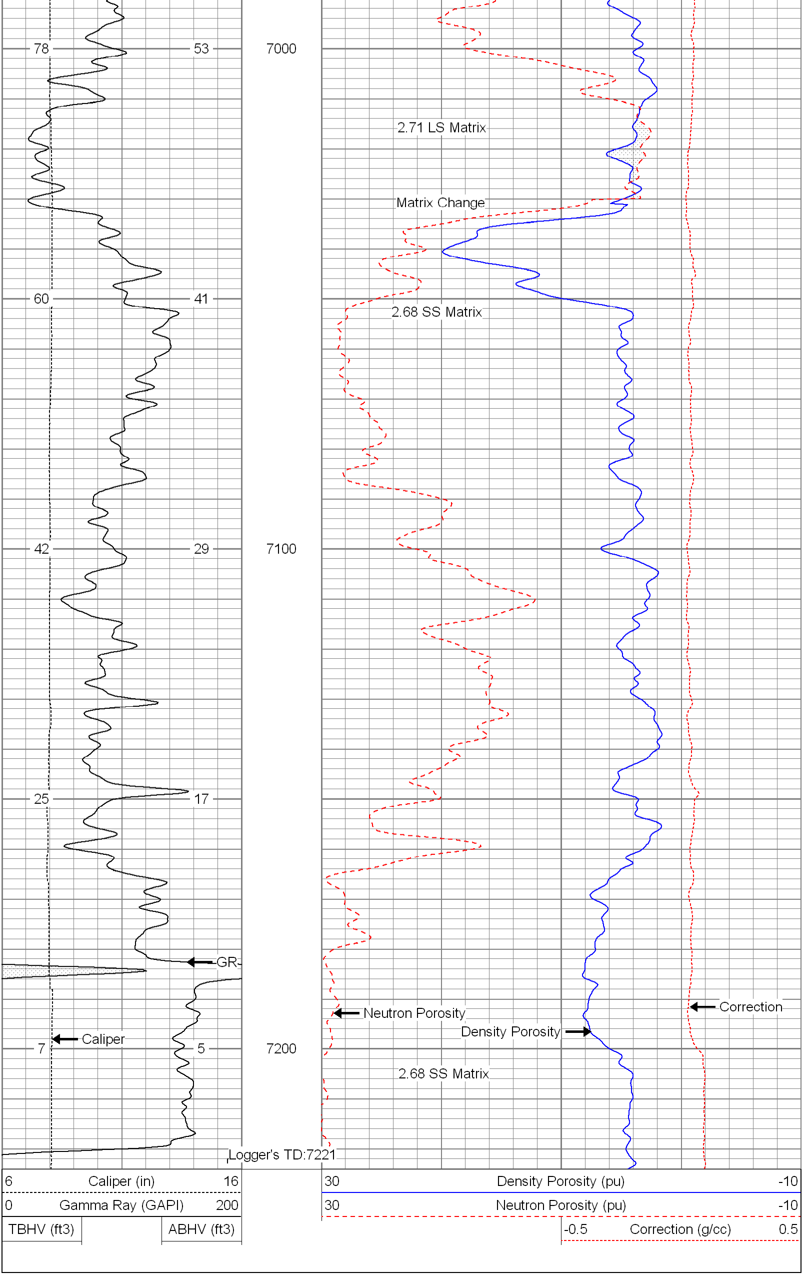
Charted by: Depth in Feet scaled 1:240

6 Caliper (in) 16
0 Gamma Ray (GAPI) 200
TBHV (ft3) ABHV (ft3)

30 Density Porosity (pu) -10
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