PHOENIX SURVEYS, INC.

DUAL INDUCTION
GUARD LOG
GAMMA RAY

Company
Well
Field
County
State/Prv

Company	Noble Energy Inc.
Well	Kohlhoff USX AB 17-03P
Field	Wattenberg
County	Weld
State/Province	Colorado
Location	792' FNL & 1829' FWL NE NW Sec. 17, Twp. 7N, Rge. 64W

Other Services
Density
Neutron
Micrololg

Permanent Datum	GL	Elevation	4926	Elevation
Log Measured From	KB			K.B. 4939
Drilling Measured From	KB			D.F. 4939
				G.L. 4926

Date	July 13, 2010			
Run Number	1			
Depth Driller	7385			
Depth Logger	7383			
Bottom Logged Interval	7383			
Top Log Interval	Casing			
Casing Driller	851			
Casing Logger	861			
Bit Size	7-7/8"			
Type Fluid in Hole	Chem Gel			
Density / Viscosity	9.4 / 36.0			
pH / Fluid Loss	9.0 / 11.2			
Source of Sample	Flowline			
Rm @ Meas. Temp	3.68 @ 81° F			
Rmf @ Meas. Temp	2.74 @ 81° F			
Rmc @ Meas. Temp	4.57 @ 81° F			
Source of Rmf / Rmc	Measure / Calc			
Rm @ BHT	1.14 @ 203° F			
Time Circulation Stopped	0800			
Time Logger on Bottom	1515			
Maximum Recorded Temperature	203° F			
Equipment Number	52			
Location	Brighton, CO			
Recorded By	Randy Conley			
Witnessed By	Jeff Cihak			

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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 126
Thank you for using Phoenix Surveys!!
API #: 05-123-31167-00

Database File:	10782.db
Dataset Pathname:	final
Presentation Format:	pdc1
Dataset Creation:	Tue Jul 13 15:41:34 2010
Charted by:	Depth in Feet scaled 1:240

6 Density Caliper (in) 16

30 Gamma Ray (GAPI) 130

100 SP (mV) 200

ABHV (ft3)

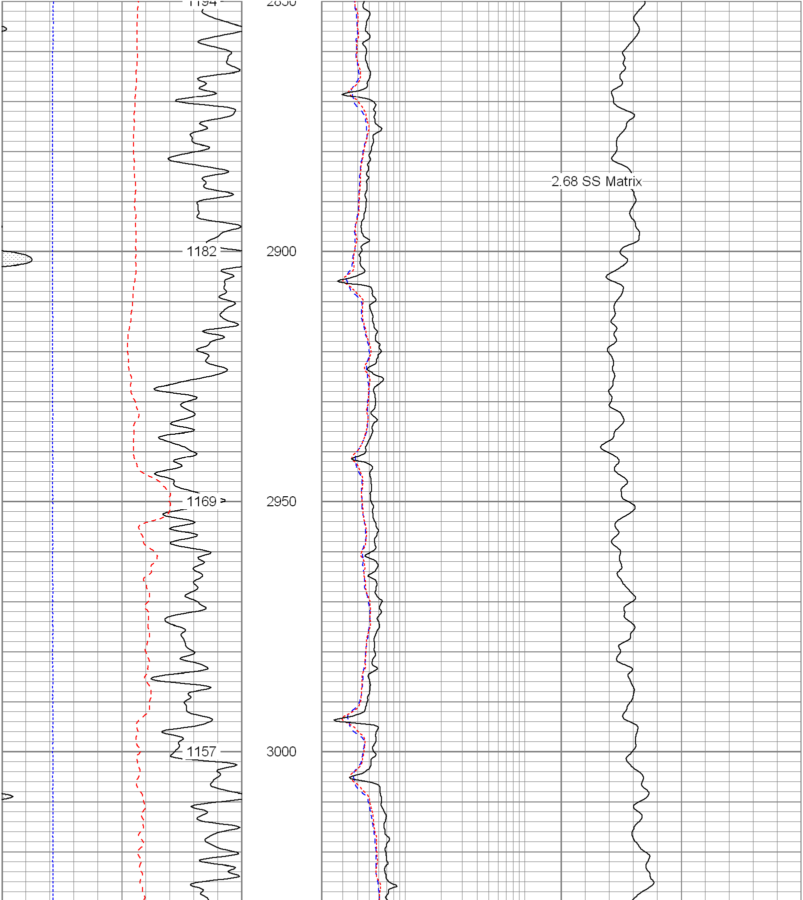
2 Deep Resistivity (Ohm-m) 200

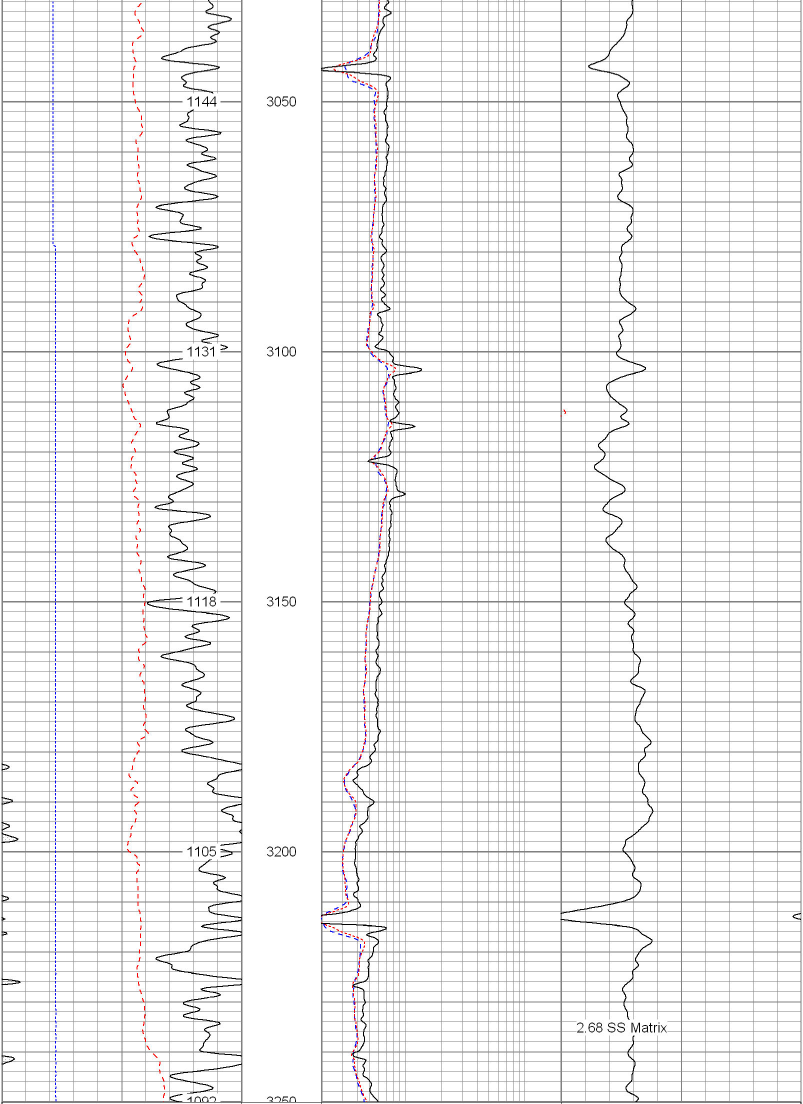
2 Medium Resistivity (Ohm-m) 200

2 Shallow Resistivity (Ohm-m) 200

20 Density Porosity (pu) 0

20 Neutron Porosity (pu) 0





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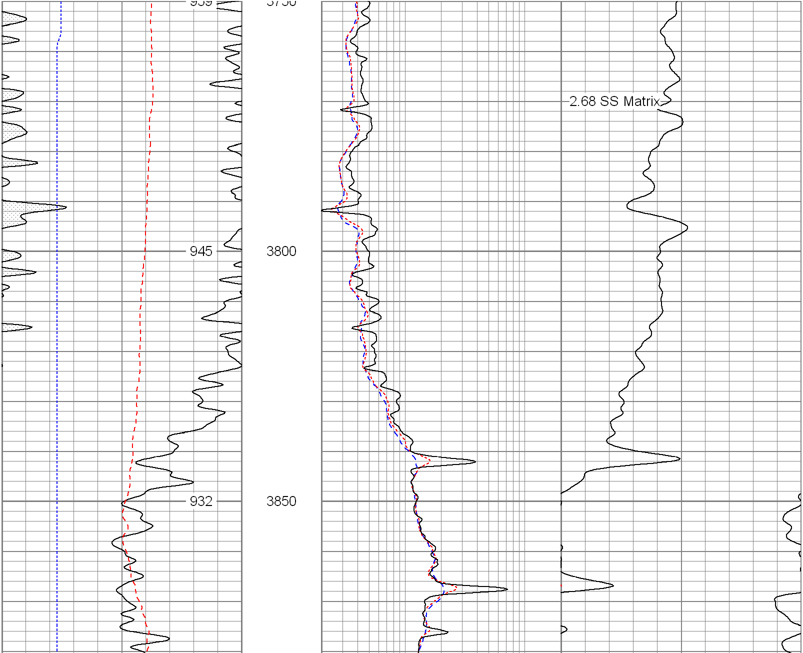

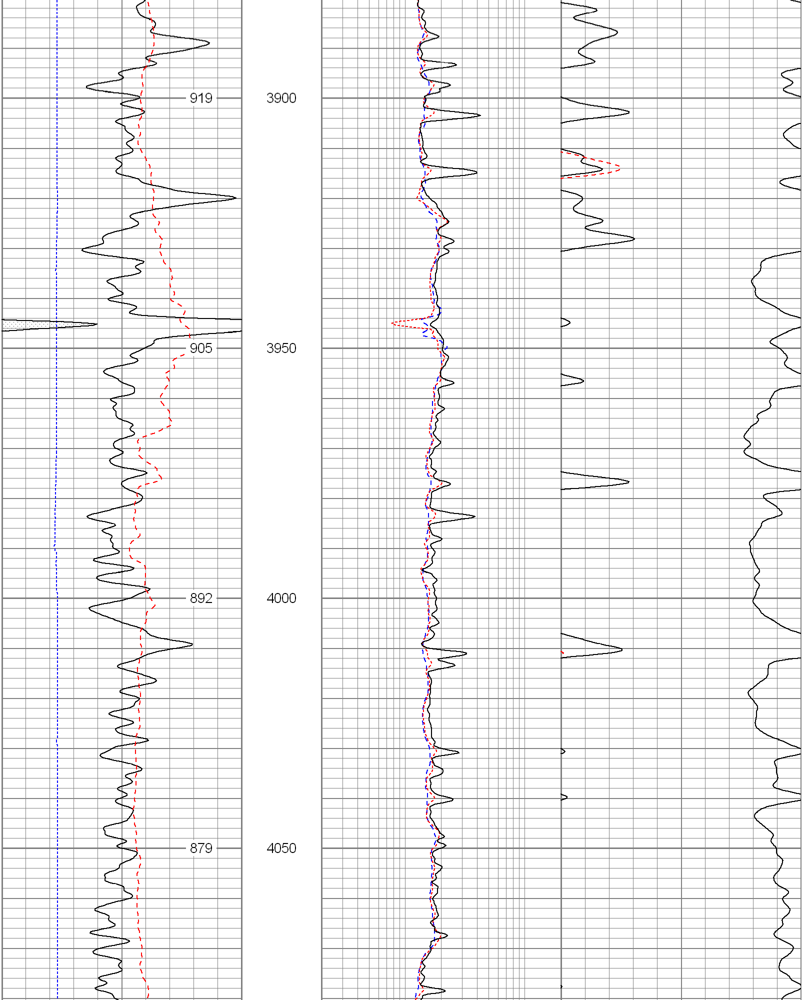

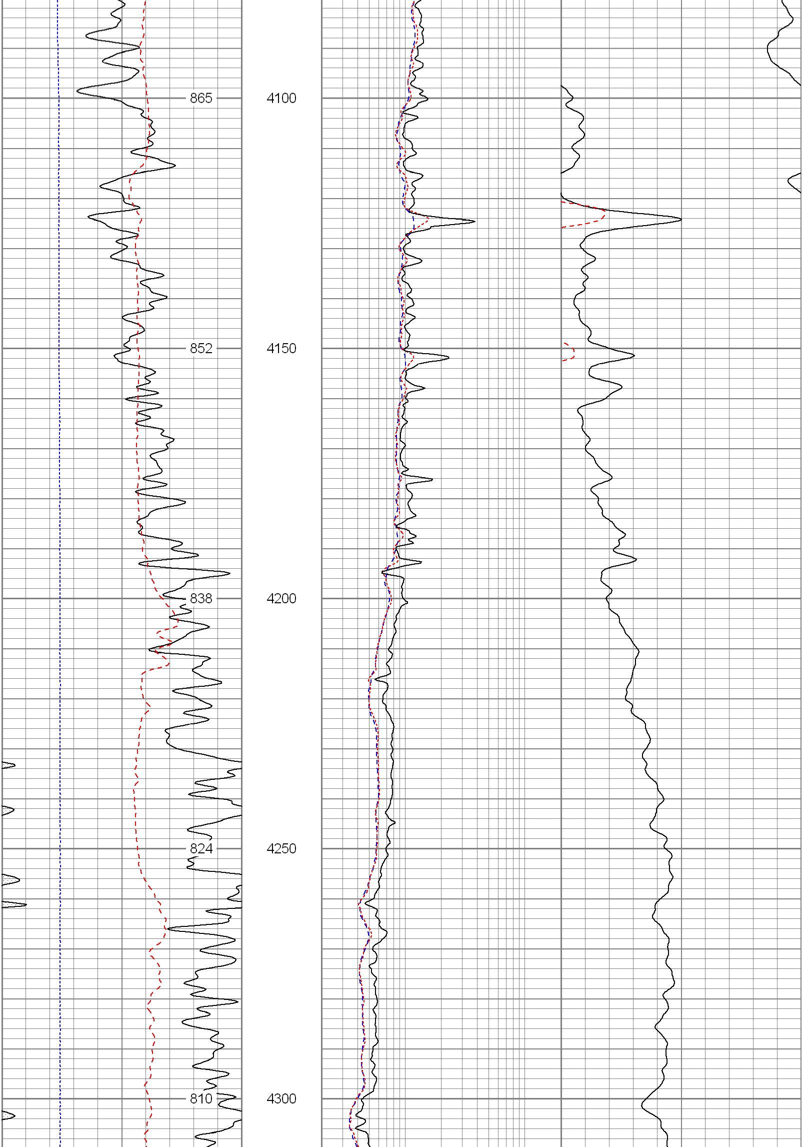

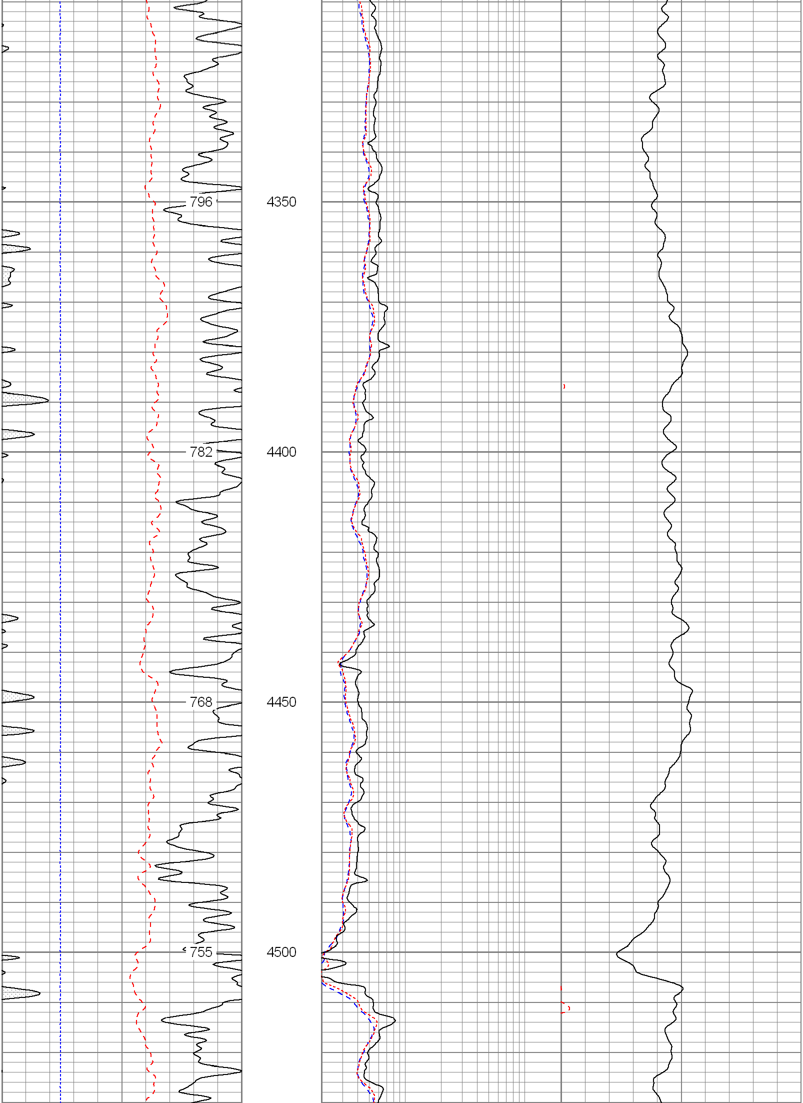

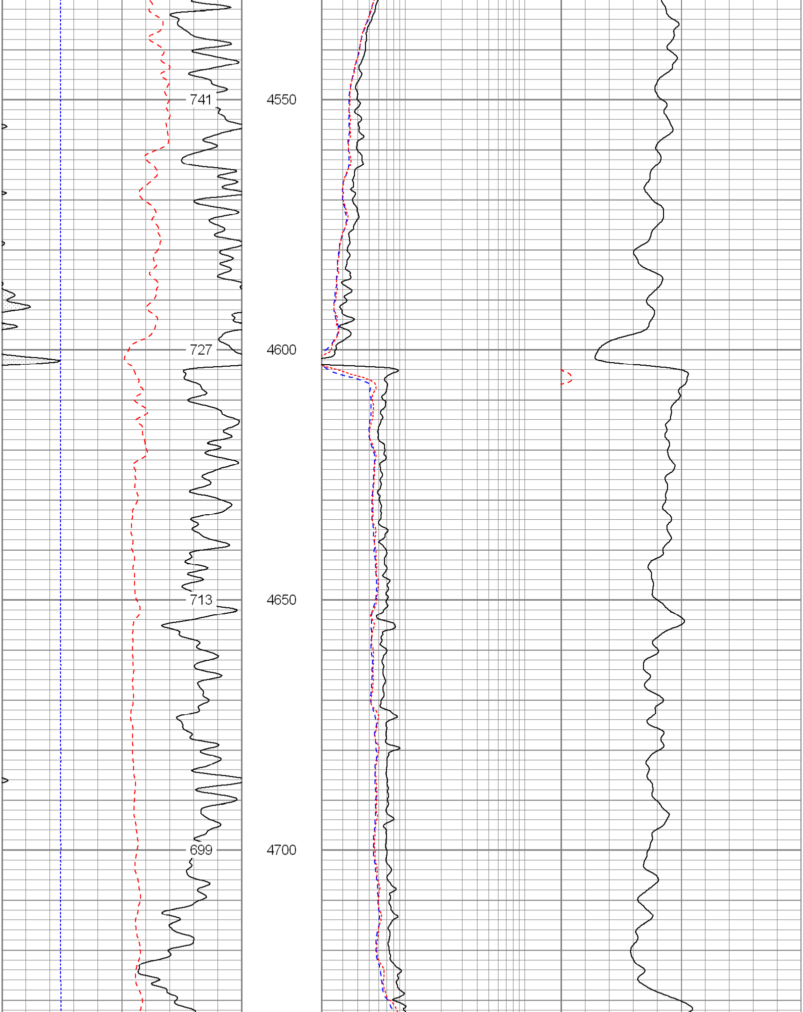

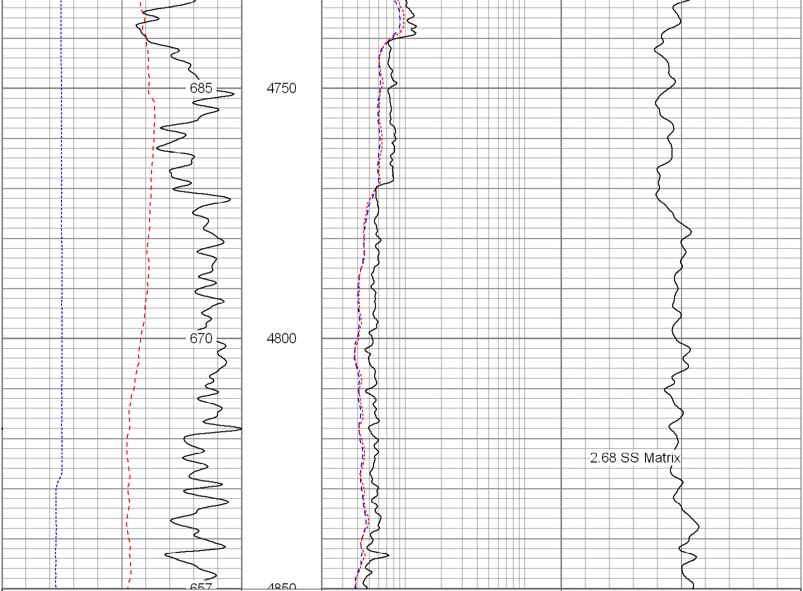

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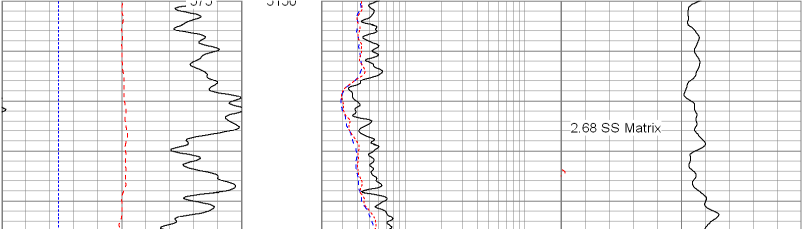

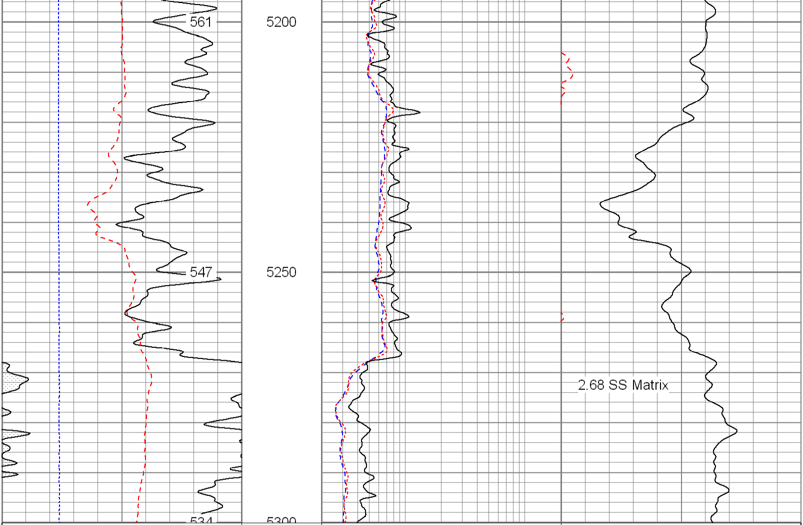

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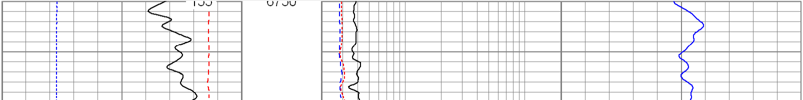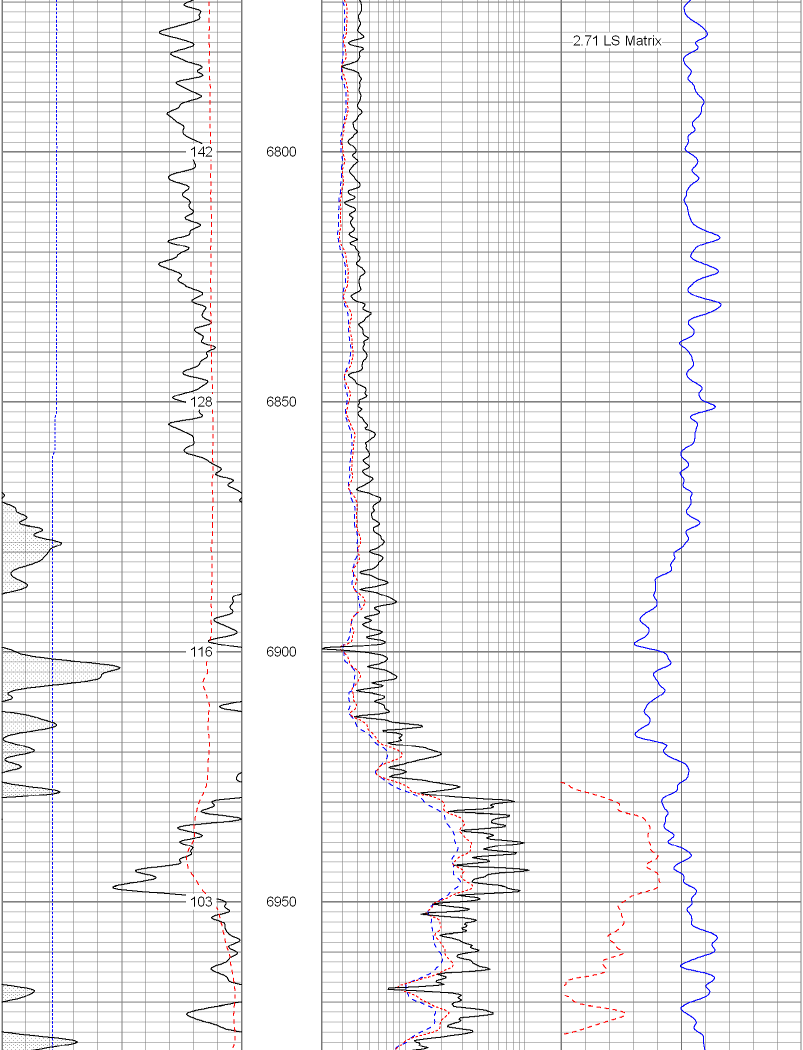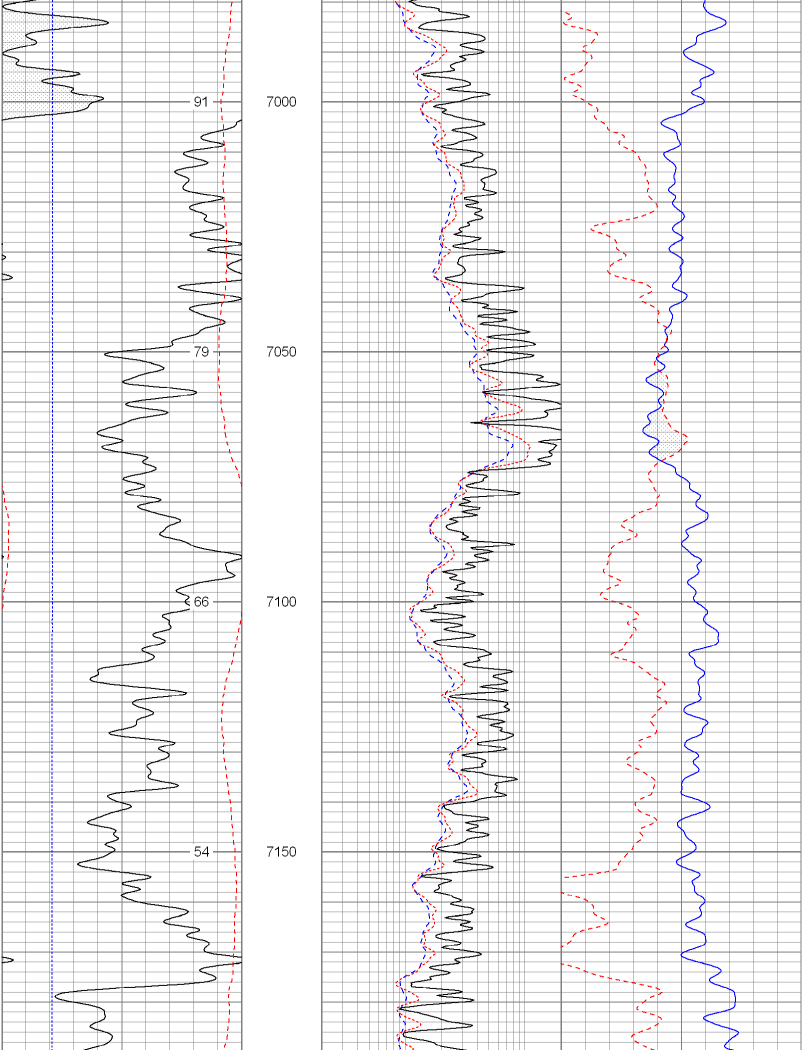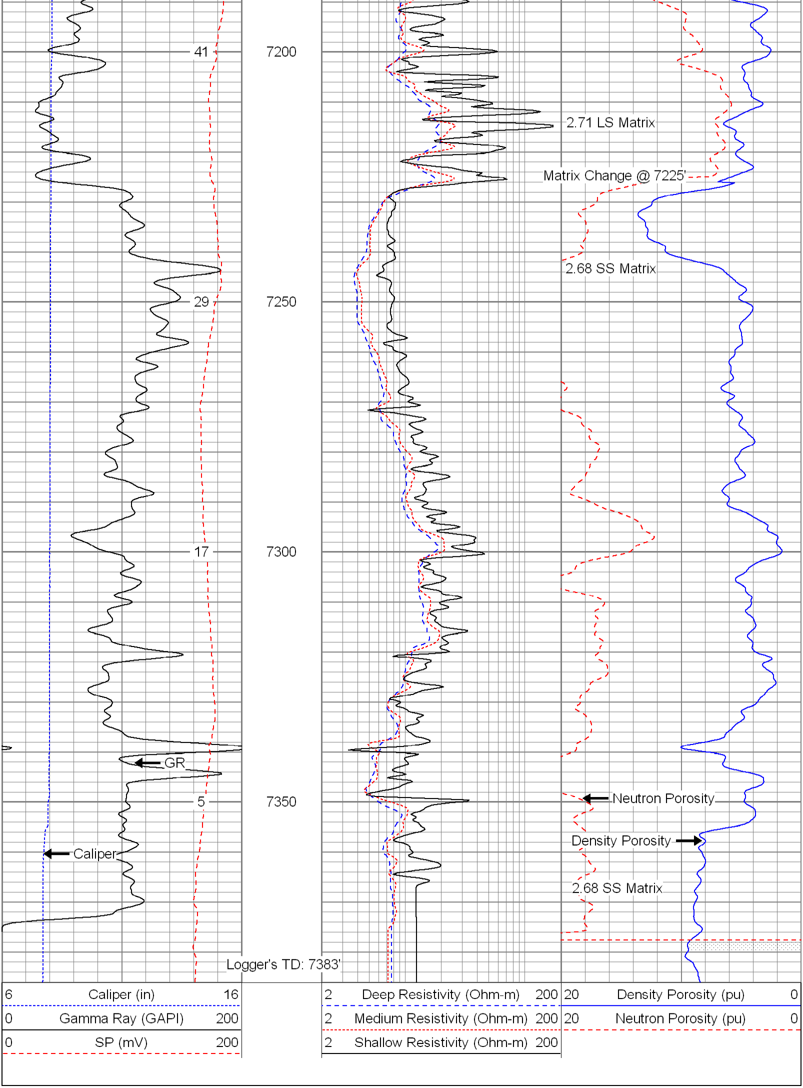6	Caliper (in)	16	2	Deep Resistivity (Ohm-m)	200	20	Density Porosity (pu)	0
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