PSI
PHOENIX SURVEYS, INC.

HIGH RESOLUTION INDUCTION
COMPENSATED DENSITY
COMPENSATED NEUTRON

Company
Well
Field
County
State/Prv

Company	Bonanza Creek Energy Inc.
Well	Antelope 21-31
Field	Wattenberg
County	Weld
State/Province	Colorado
Location	SHL: 1515' FNL & 1200' FWL SE NW BHL: 677' FNL & 2026' FWL NE NW Sec - 31, Twp - 5N, Rge - 62W
Other Services	None

Permanent Datum	GL	Elevation	4589
Log Measured From	KB		
Drilling Measured From	KB		

Elevation
K.B. 4599
D.F. 4598
G.L. 4589

Date	June 3, 2011		
Run Number	1		
Depth Driller	6817		
Depth Logger	6817		
Bottom Logged Interval	6817		
Top Log Interval	Casing		
Casing Driller	432		
Casing Logger	432		
Bit Size	7-7/8"		
Type Fluid in Hole	Polymer Gel		
Density / Viscosity	9.1 / 55		
pH / Fluid Loss	9.0 / 10.4		
Source of Sample	Flowline		
Rm @ Meas. Temp	3.85 @ 68 F		
Rmf @ Meas. Temp	3.08 @ 68 F		
Rmc @ Meas. Temp	4.62 @ 68 F		
Source of Rmf / Rmc	Measure / Calc		
Rm @ BHT	1.21 @ 198 F		
Time Circulation Stopped	1100		
Time Logger on Bottom	1830		
Maximum Recorded Temperature	198 F		
Equipment Number	52		
Location	Brighton, CO		
Recorded By	Matt Gill		
Witnessed By	Brian Cunningham	Robin Brackman	Gene Hudson

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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

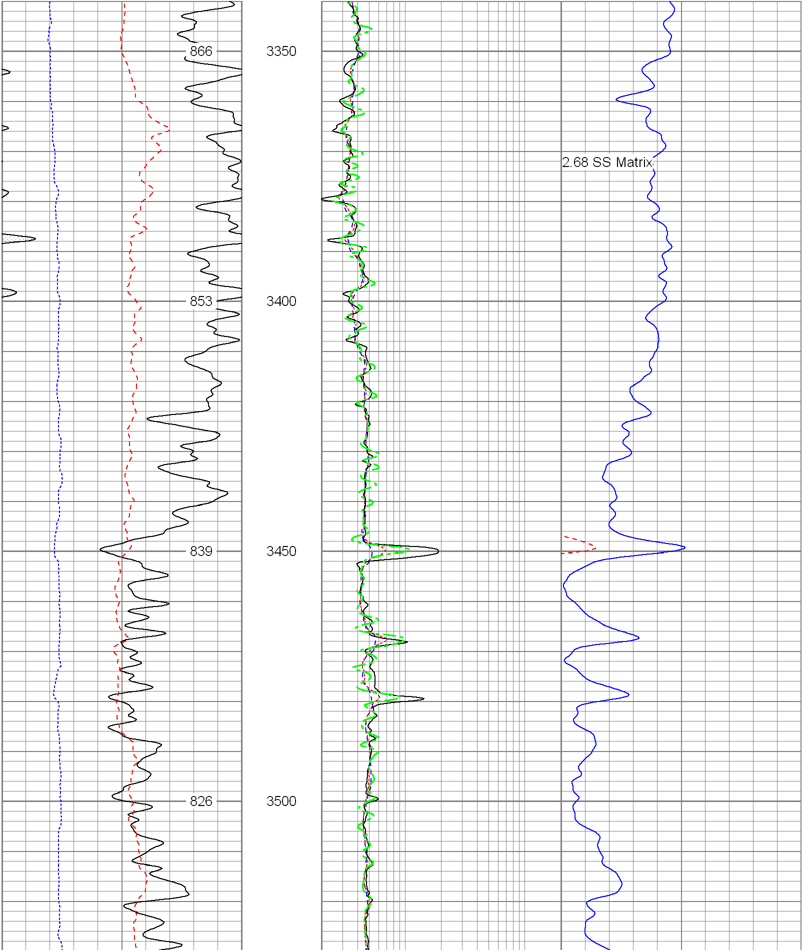
Annular volume calculated for 4.5" casing
Mid Continent Rig 1
Thank you for using Phoenix Surveys!!
API #: 05-123-32842-00

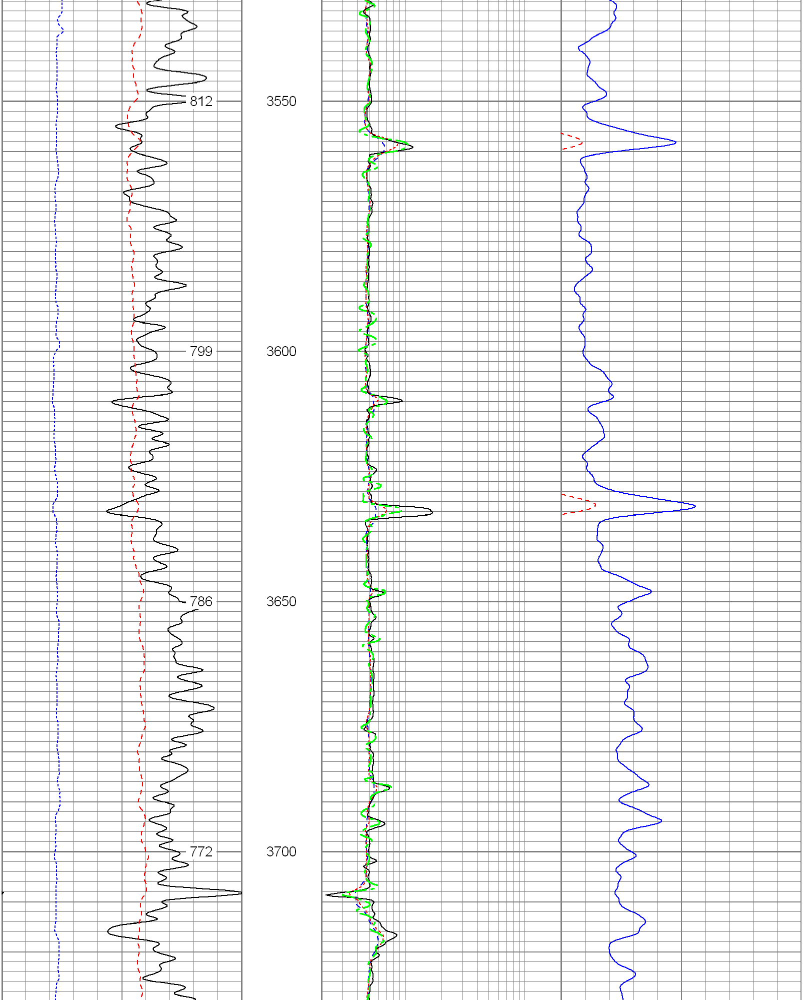
Database File:	11749.db
Dataset Pathname:	final
Presentation Format:	pdc1
Dataset Creation:	Thu Jun 02 19:18:11 2011
Charted by:	Depth in Feet scaled 1:240

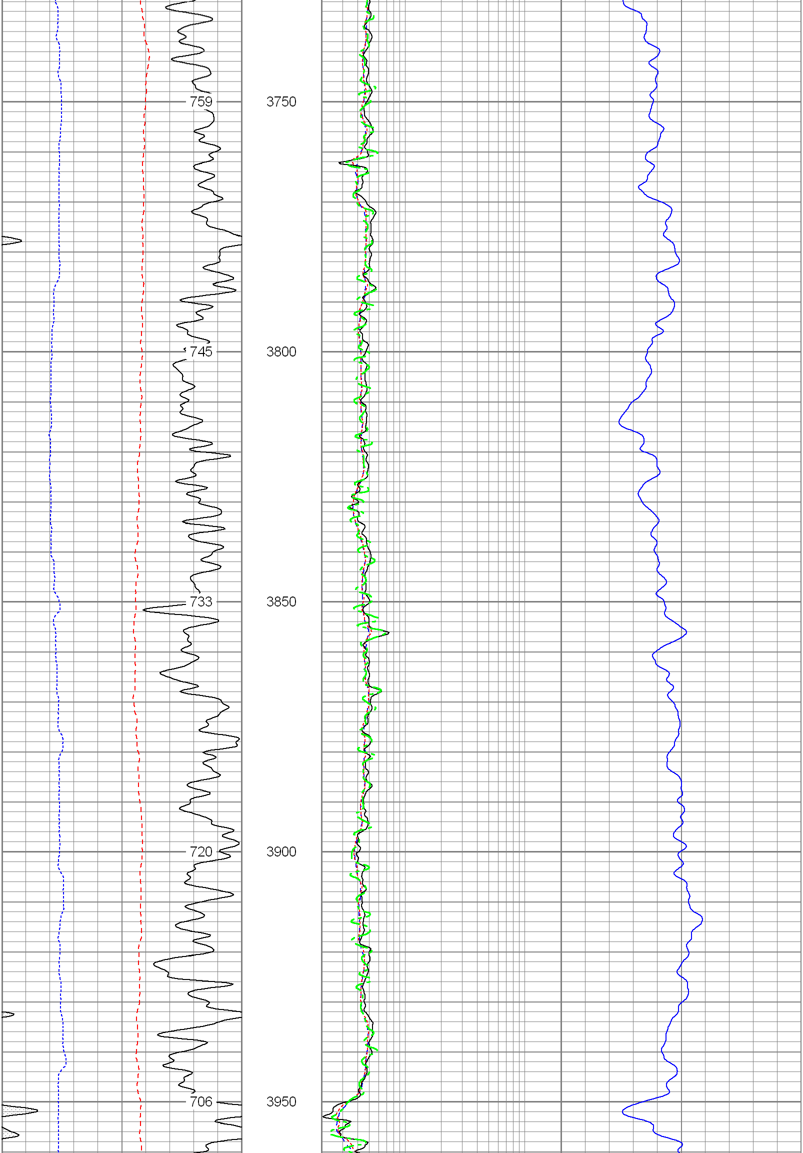
6 Density Caliper (in) 16
30 Gamma Ray (GAPI) 130
90 SP (mV) 190
ABHV (ft3)

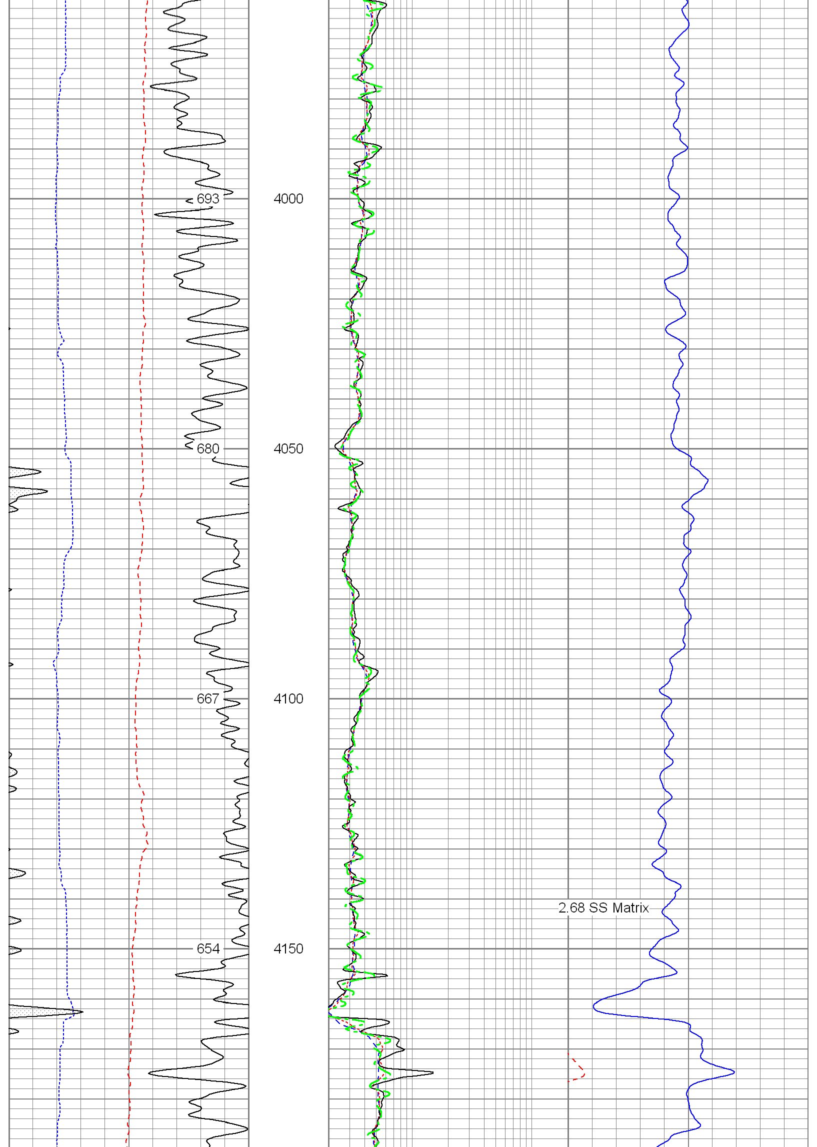
2 Deep Resistivity (Ohm-m) 200
2 Medium Resistivity (Ohm-m) 200
2 Shallow Resistivity (Ohm-m) 200
2 Rt (Ohm-m) 200

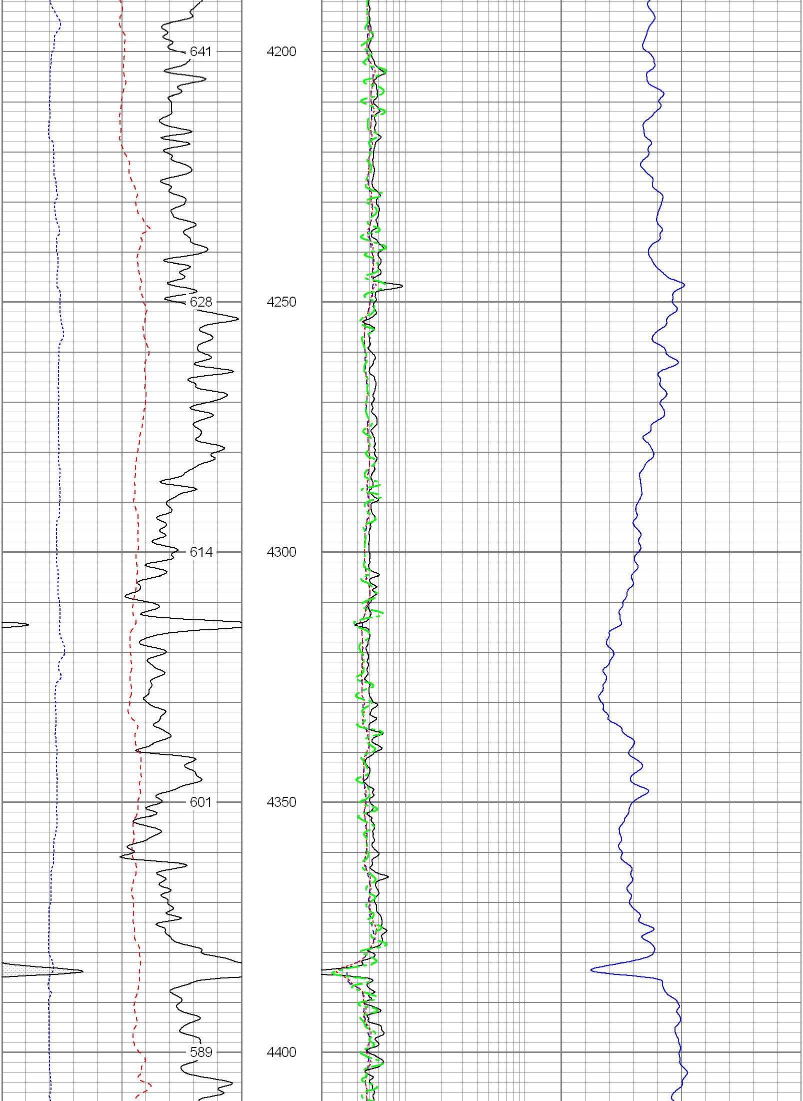
20 Density Porosity (pu) 0
20 Neutron Porosity (pu) 0

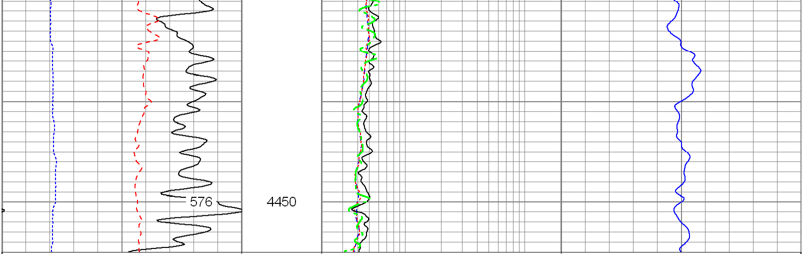












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ABHV (ft3)	2 Rt (Ohm-m) 200	

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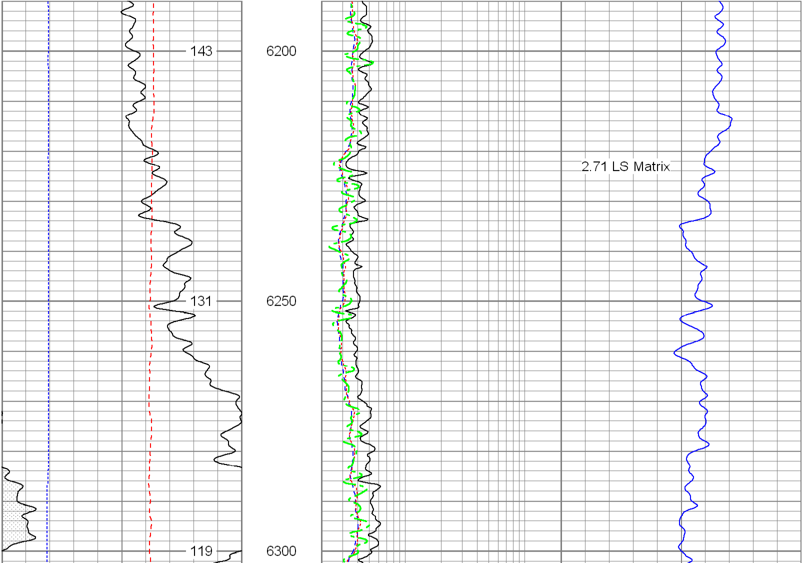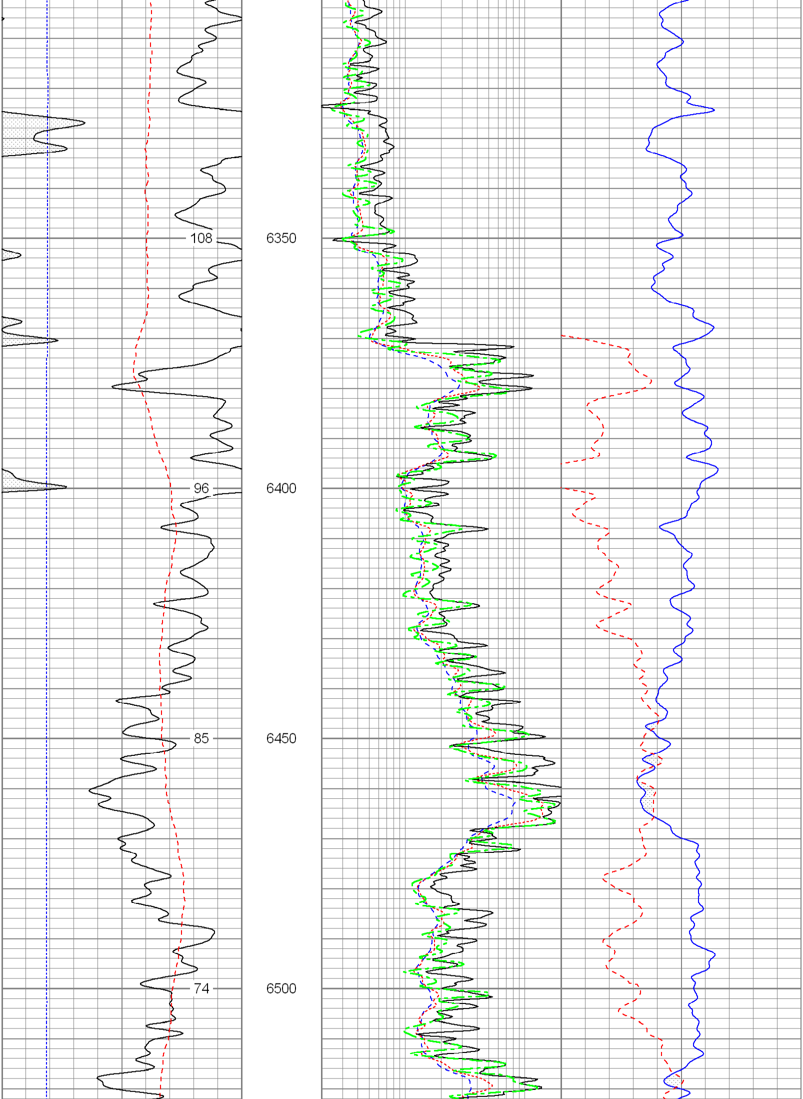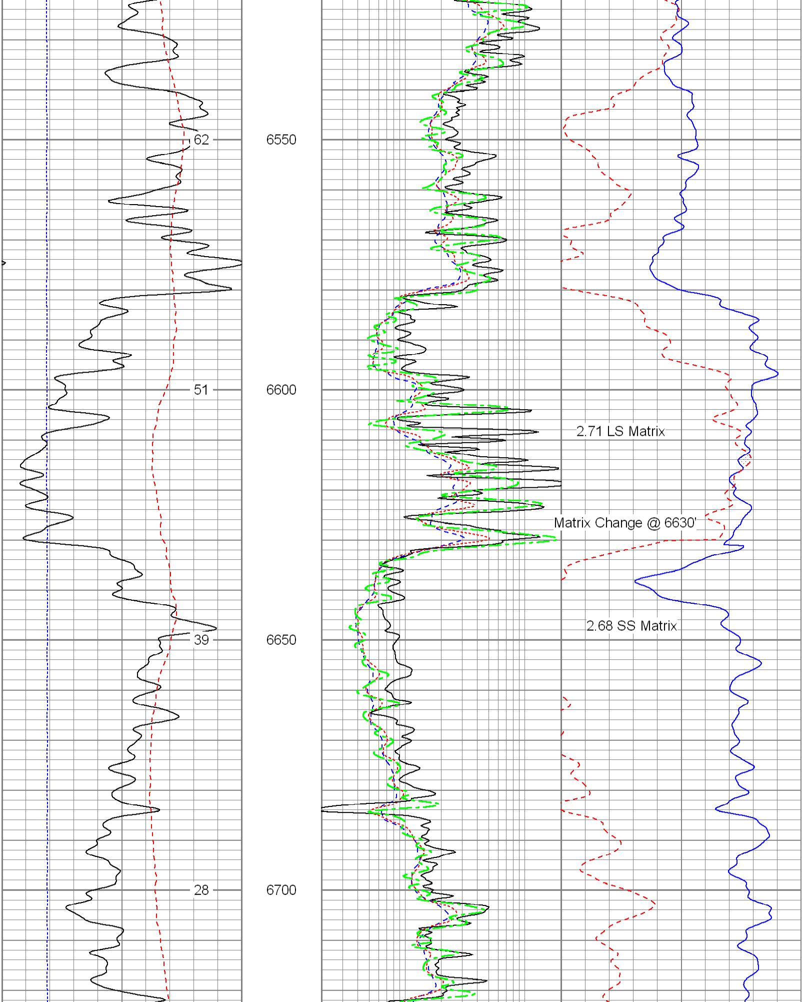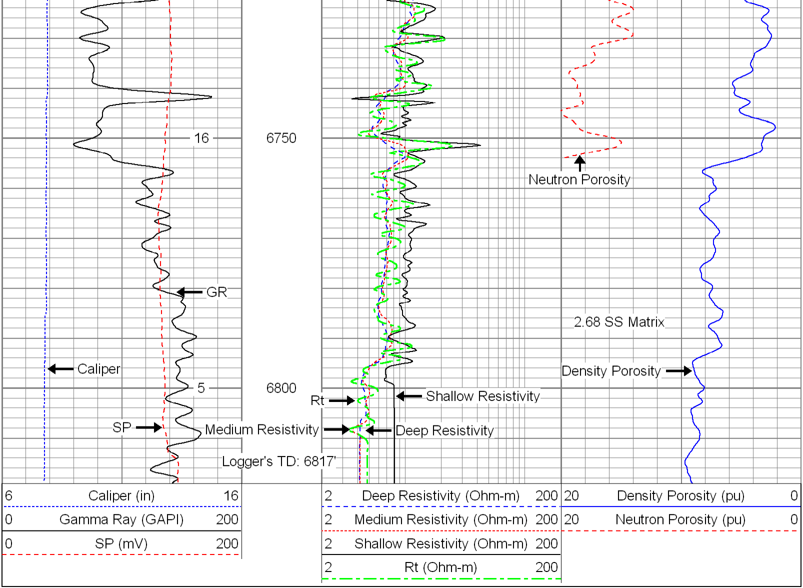6 Caliper (in) 16	2 Deep Resistivity (Ohm-m) 200	20 Density Porosity (pu) 0
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