PIONEER

Pioneer Energy Services

HIGH RESOLUTION INDUCTION
COMPENSATED DENSITY
COMPENSATED NEUTRON

Company	Sundance Energy Inc.
Well	MLD 23-22
Field	Wattenberg
County	Weld
State	Colorado

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Location: API # : 05123357120000

SHL: 1120' FSL & 830' FWL SW SW
BHL: 2022' FSL & 1964' FWL NE SW

SEC 22 TWP 4N RGE 68W

Permanent Datum	GL	Elevation	4920
Log Measured From	KB		
Drilling Measured From	KB		

Other Services

None

Elevation

K.B. 4936
D.F. 4935
G.L. 4920

Date	September 22, 2012		
Run Number	1		
Depth Driller	7500		
Depth Logger	7500		
Bottom Logged Interval	7500		
Top Log Interval	Casing		
Casing Driller	586		
Casing Logger	586		
Bit Size	7-7/8"		
Type Fluid in Hole	Chem Gel		
Density / Viscosity	9.5 / 56		
pH / Fluid Loss	8.0 / 8.4		
Source of Sample	Flowline		
Rm @ Meas. Temp	3.61 @ 72 F		
Rmf @ Meas. Temp	2.76 @ 72 F		
Rmc @ Meas. Temp	4.29 @ 72 F		
Source of Rmf / Rmc	Measure / Calc		
Rm @ BHT	1.14 @ 211 F		
Time Circulation Stopped	0600		
Time Logger on Bottom	1230		
Maximum Recorded Temperature	211 F		
Equipment Number	49		
Location	Brighton, CO		
Recorded By	Randy Conley		
Witnessed By	Gene Hudson	Harold Hudson	

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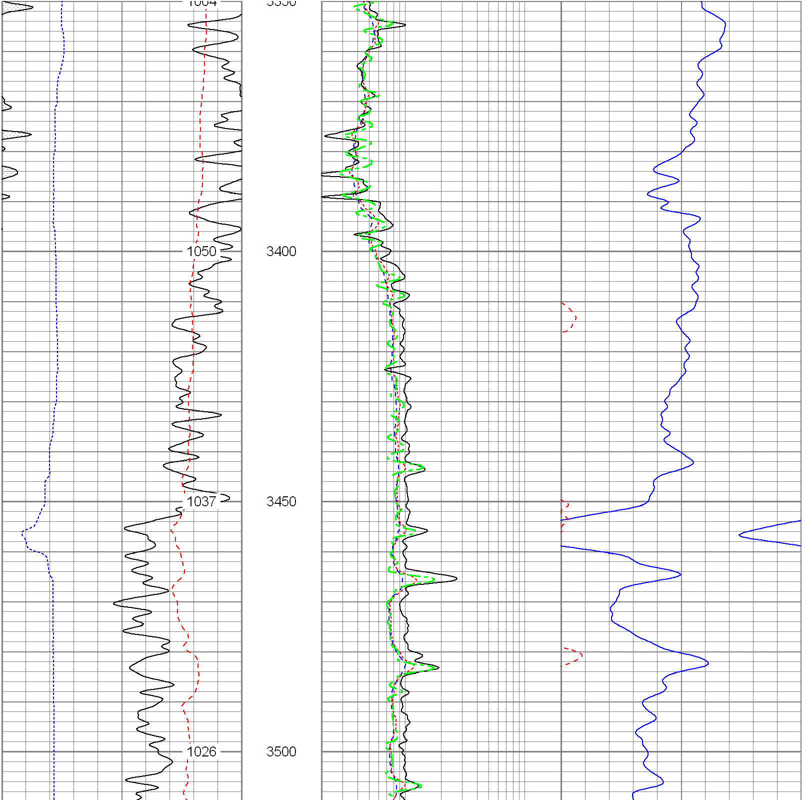
All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees.

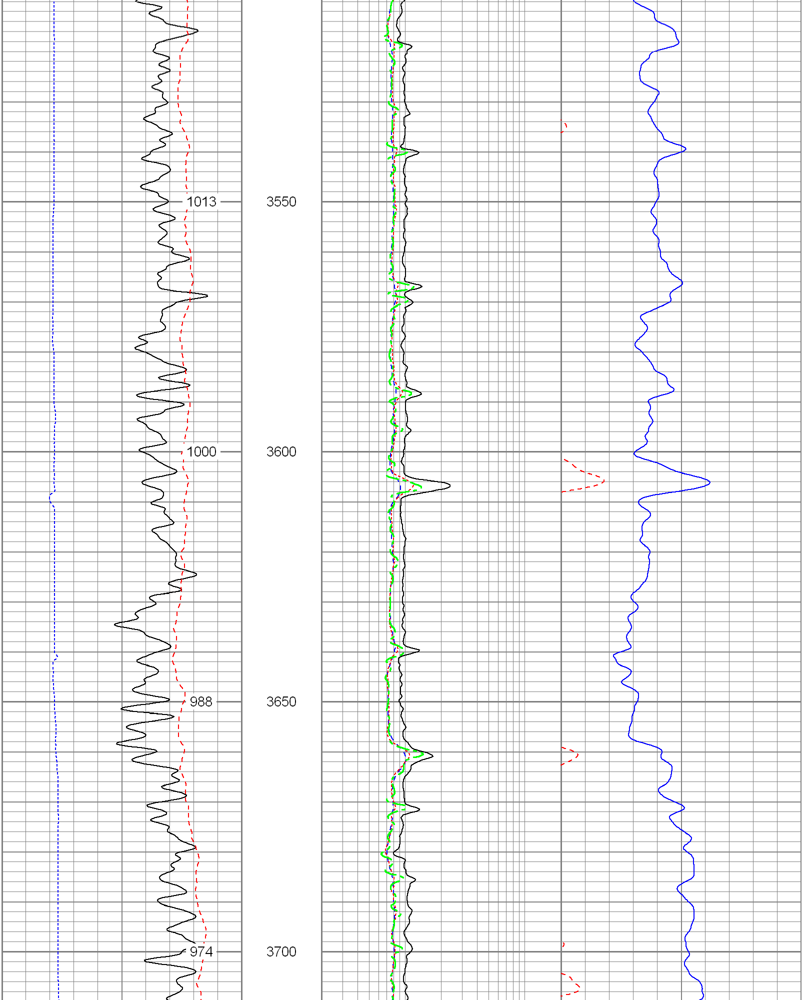
Comments

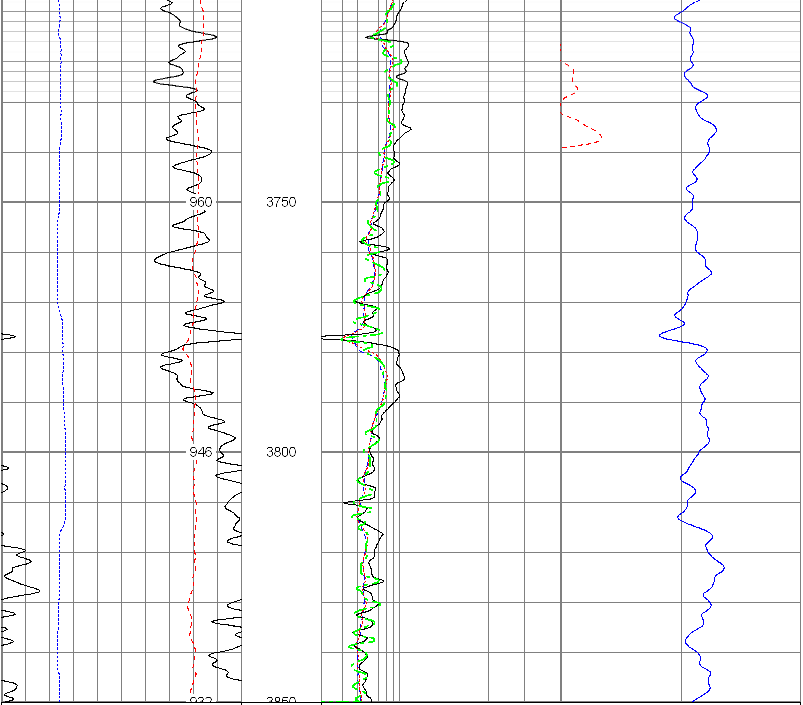
Annular volume calculated for 4.5" casing
Ensign Drilling Rig 55
Thank you for using Pioneer Energy Services.
API #: 05-123-35712-00

Database File: 13102.db
Dataset Pathname: final
Presentation Format: pdc1
Dataset Creation: Sat Sep 22 12:44:28 2012
Charted by: Depth in Feet scaled 1:240

6 Density Caliper (in) 16	2 Deep Resistivity (Ohm-m) 200	20 Density Porosity (pu) 0
30 Gamma Ray (GAPI) 130	2 Medium Resistivity (Ohm-m) 200	20 Neutron Porosity (pu) 0
80 SP (mV) 180	2 Shallow Resistivity (Ohm-m) 200	
ABHV (ft3)	2 Rt (Ohm-m) 200	







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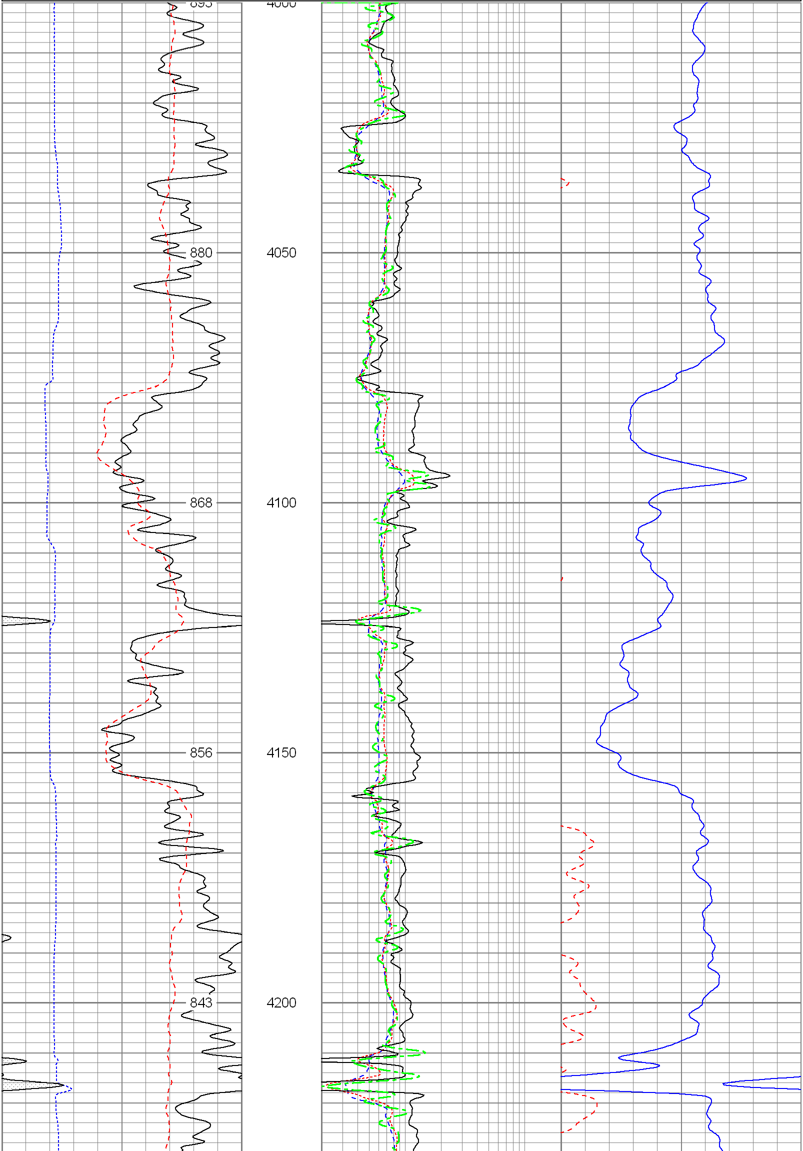

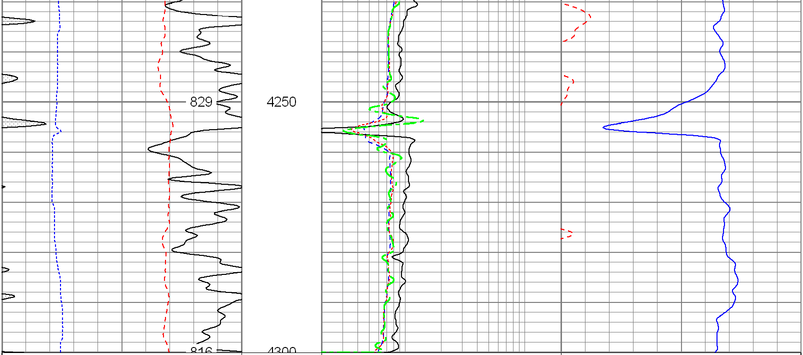

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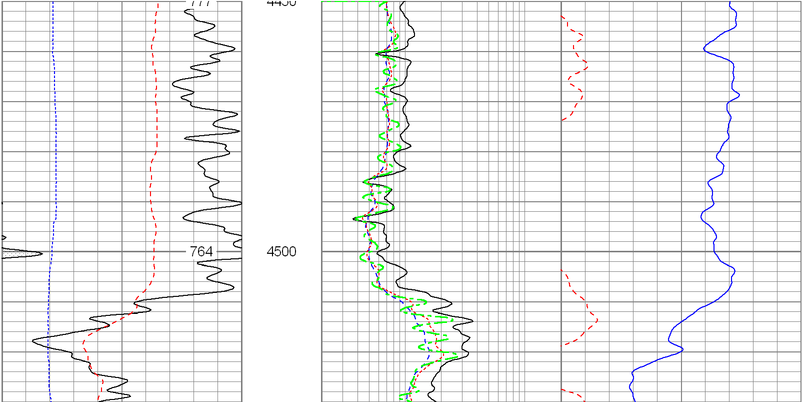

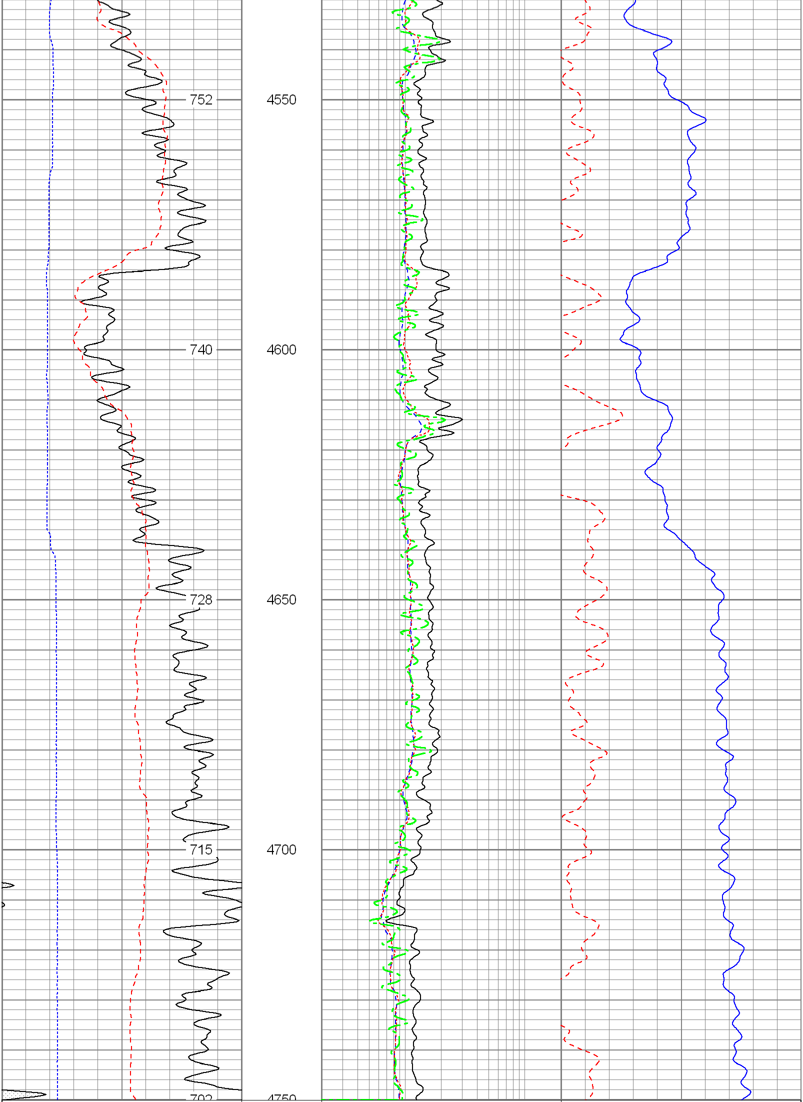

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80 SP (mV) 180
ABHV (ft3)

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0 SP (mV) 200

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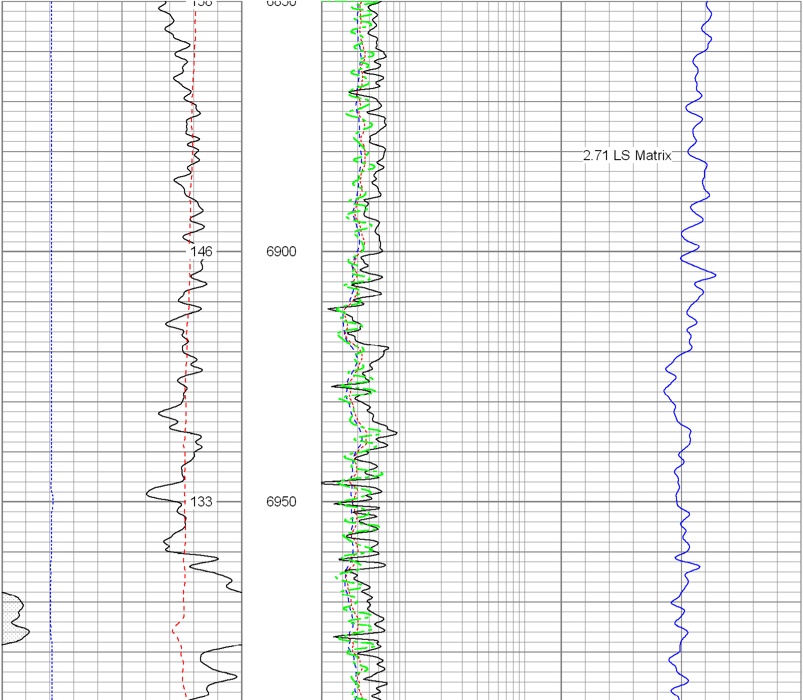
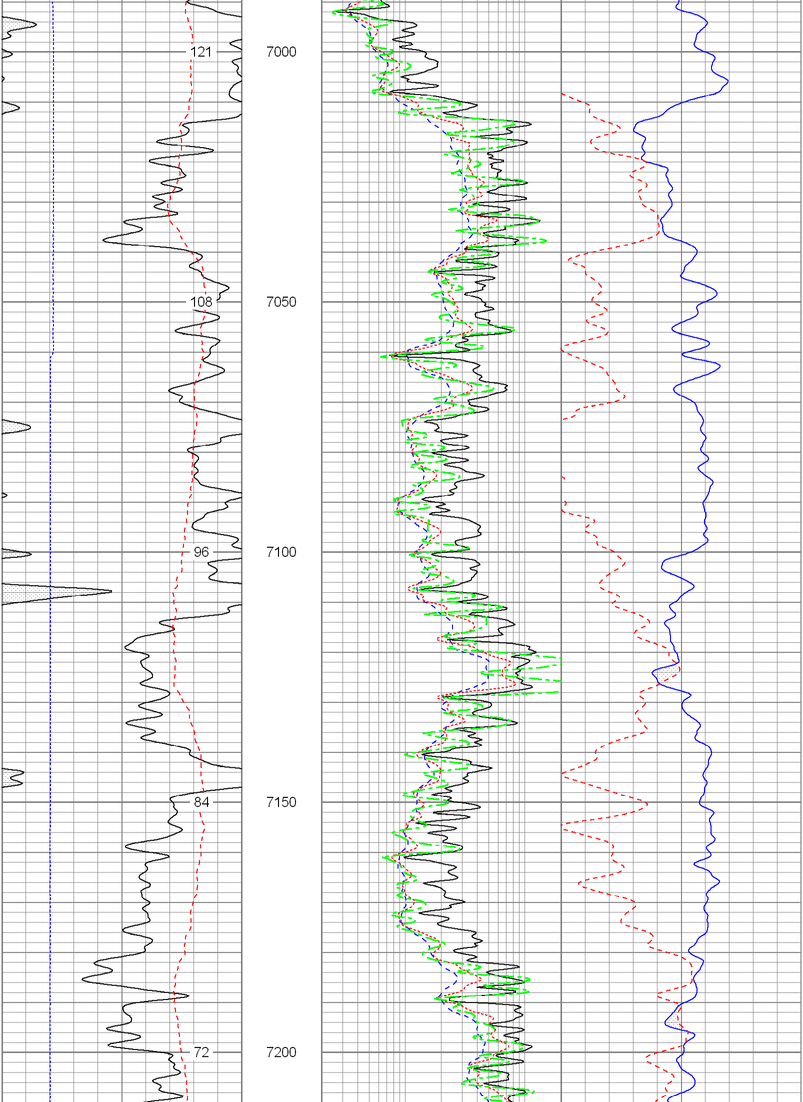
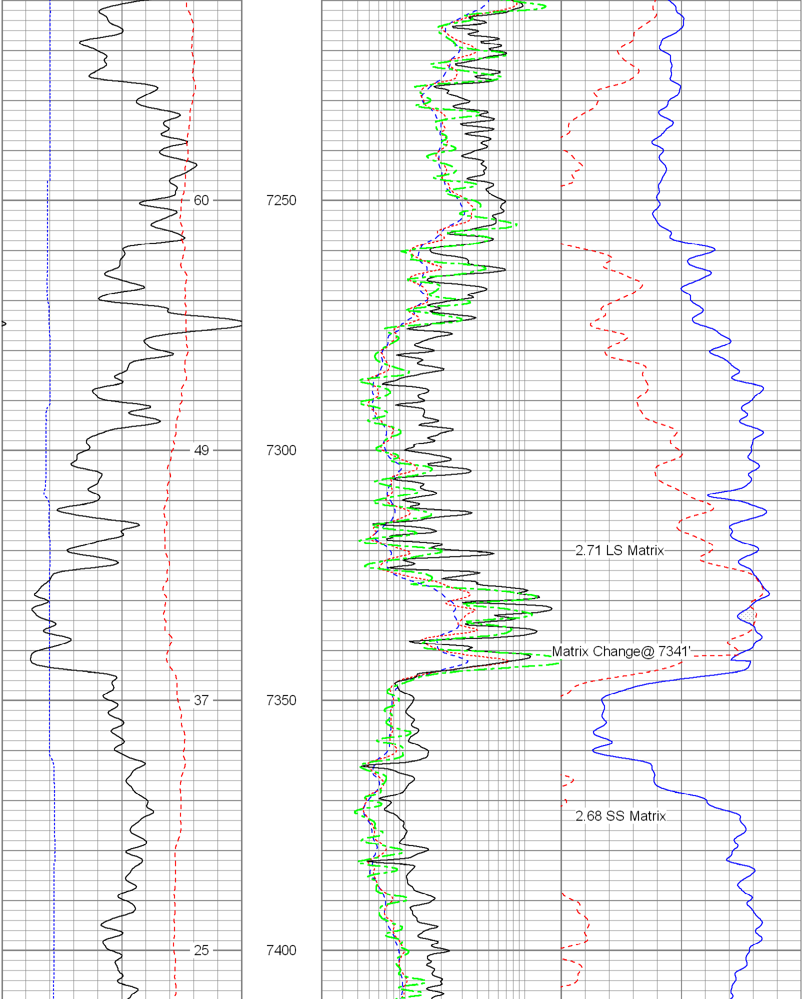
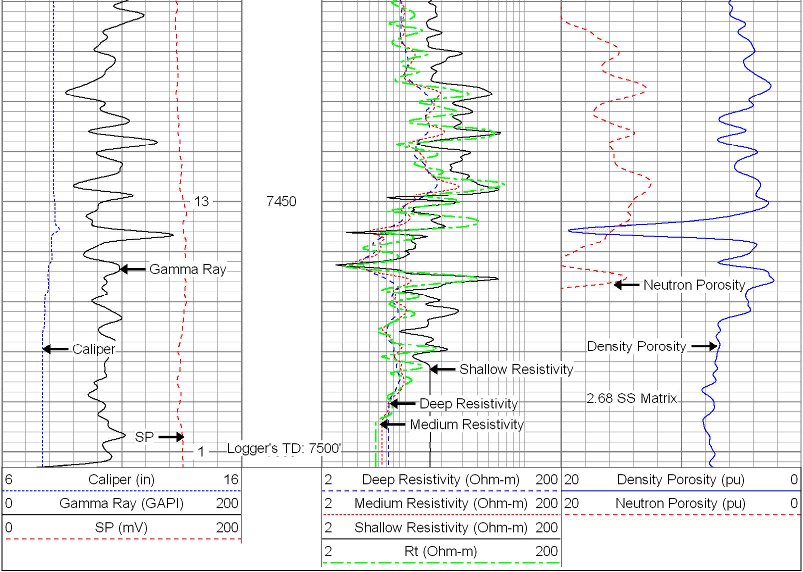
2 Rt (Ohm-m) 200

20 Density Porosity (pu) 0
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