PHOENIX SURVEYS, INC.

HIGH RESOLUTION INDUCTION

Company Well Field County State/Prv

Company	Great Western Oil & Gas LLC
Well	Binder 2-4-20
Field	Wattenberg
County	Weld
State/Province	Colorado

Location
SHL: 2479' FSL & 2262' FWL NE SW
BHL: 2572' FSL & 1220' FWL NE SW
Sec - 20, Twp - 4N, Rge - 67W

Other Services
Density
Neutron

Permanent Datum	GL	Elevation	4902
Log Measured From	KB		
Drilling Measured From	KB		

Elevation
K.B. 4916
D.F. 4915
G.L. 4902

Date	January 17, 2012		
Run Number	1		
Depth Driller	7535		
Depth Logger	7530		
Bottom Logged Interval	7530		
Top Log Interval	Casing		
Casing Driller	520		
Casing Logger	520		
Bit Size	7-7/8"		
Type Fluid in Hole	Chem Gel		
Density / Viscosity	9.2 / 48		
pH / Fluid Loss	8.0 / 12		
Source of Sample	Flowline		
Rm @ Meas. Temp	2.8 @ 69 F		
Rmf @ Meas. Temp	2.1 @ 69 F		
Rmc @ Meas. Temp	4.2 @ 69 F		
Source of Rmf / Rmc	Measure / Calc		
Rm @ BHT	0.91 @ 213 F		
Time Circulation Stopped	1545		
Time Logger on Bottom	2330		
Maximum Recorded Temperature	213 F		
Equipment Number	52		
Location	Brighton, CO		
Recorded By	Randy Conley	Kelly Keever	
Witnessed By	Jay Pade		

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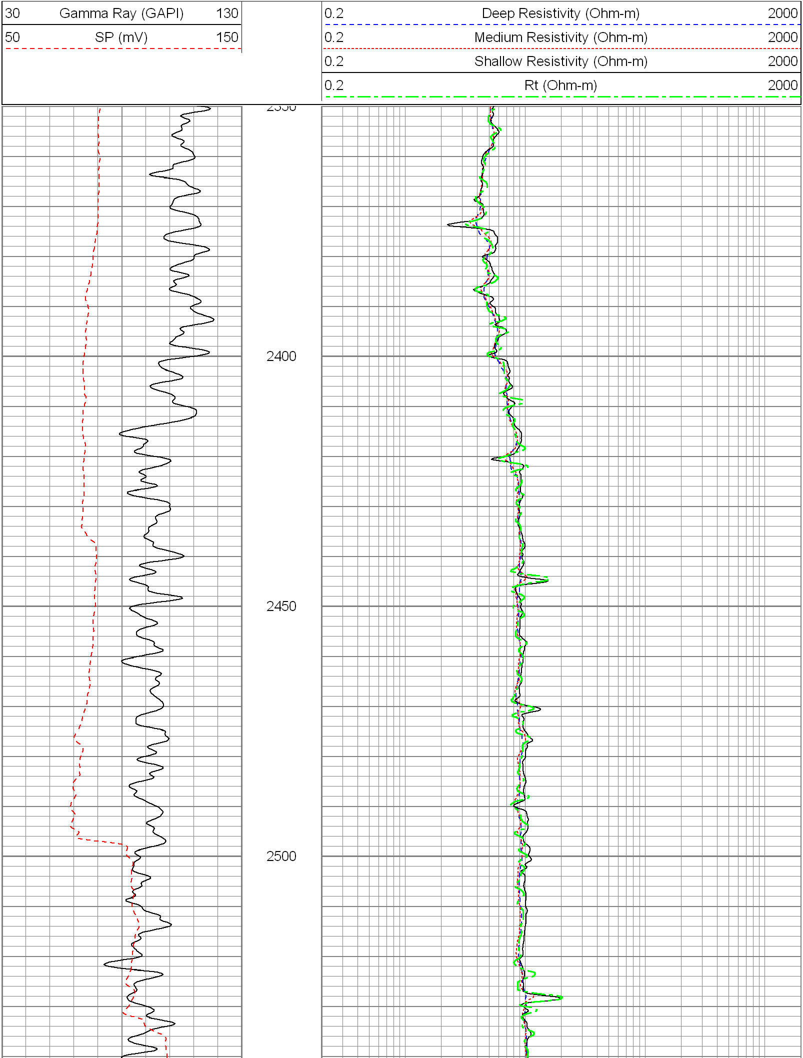
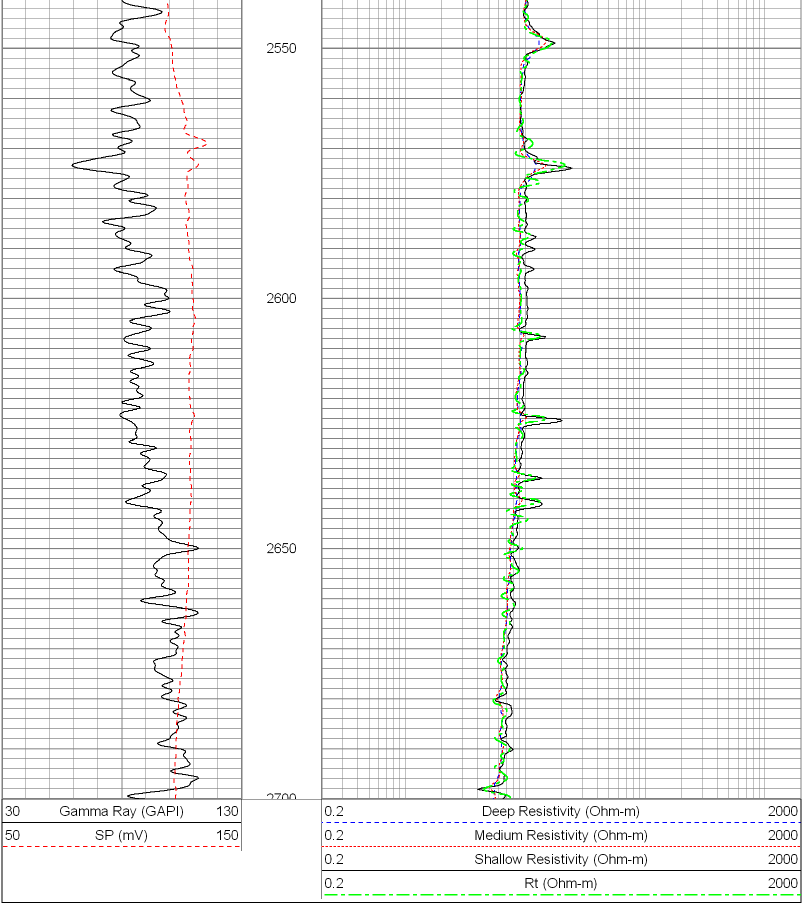
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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
Cade Drilling Rig 22
Thank you for using Phoenix Surveys!!
API #: 05-123-32968

Database File: 12565.db
Dataset Pathname: final
Presentation Format: dil1
Dataset Creation: Wed Jan 18 00:52:07 2012
Charted by: Depth in Feet scaled 1:240





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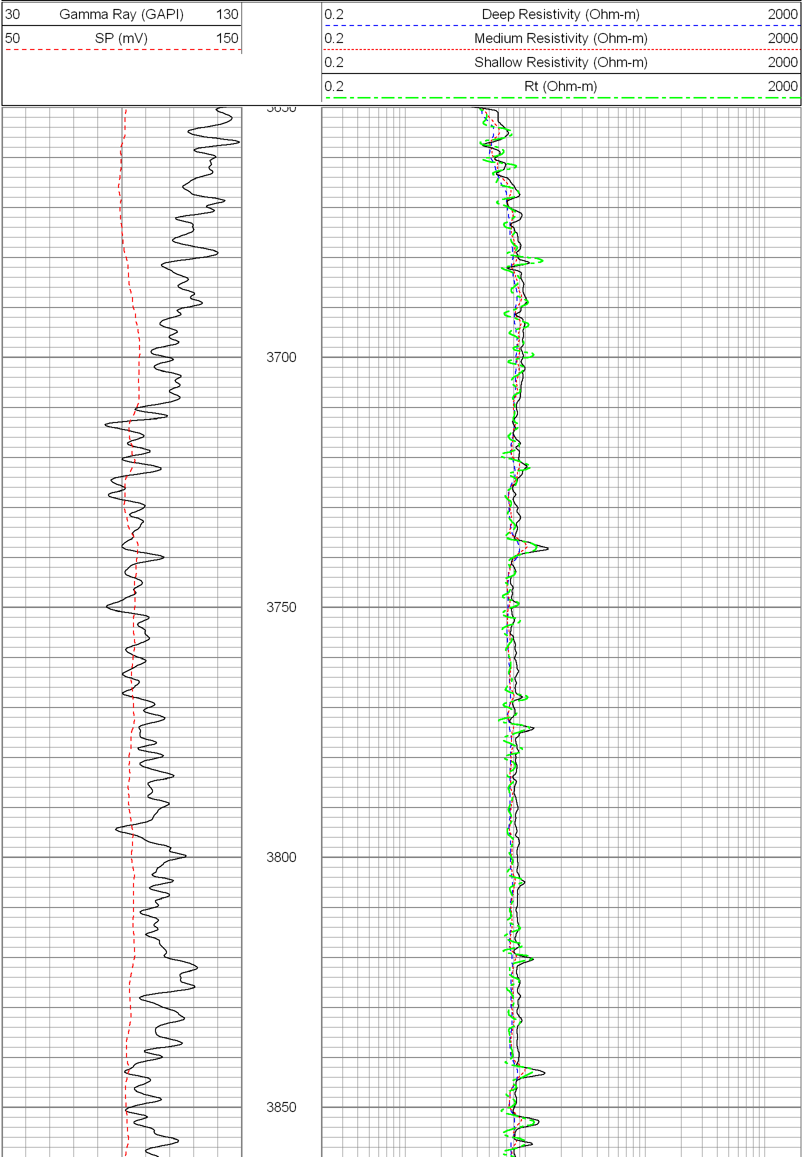

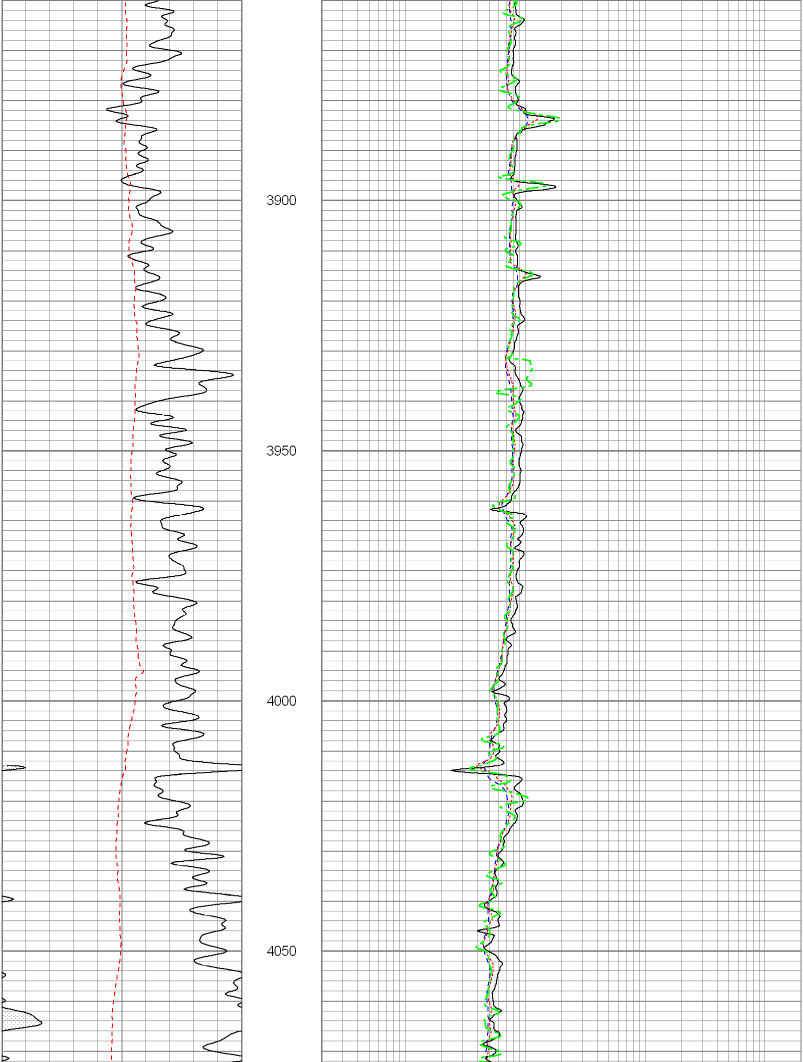

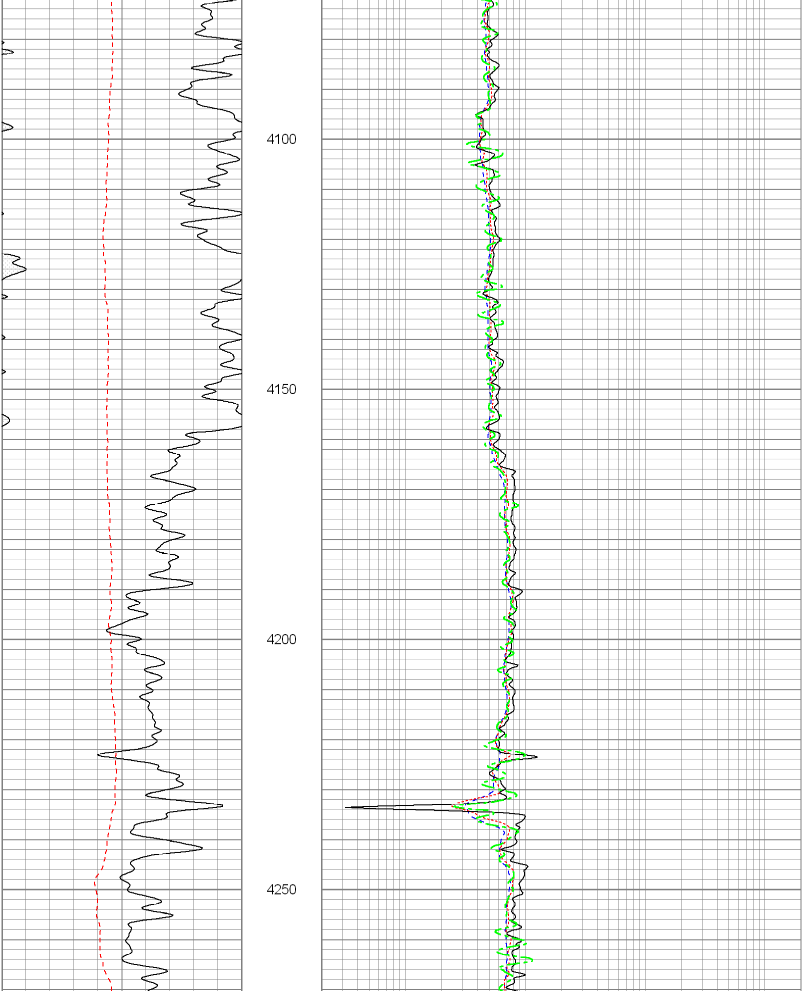

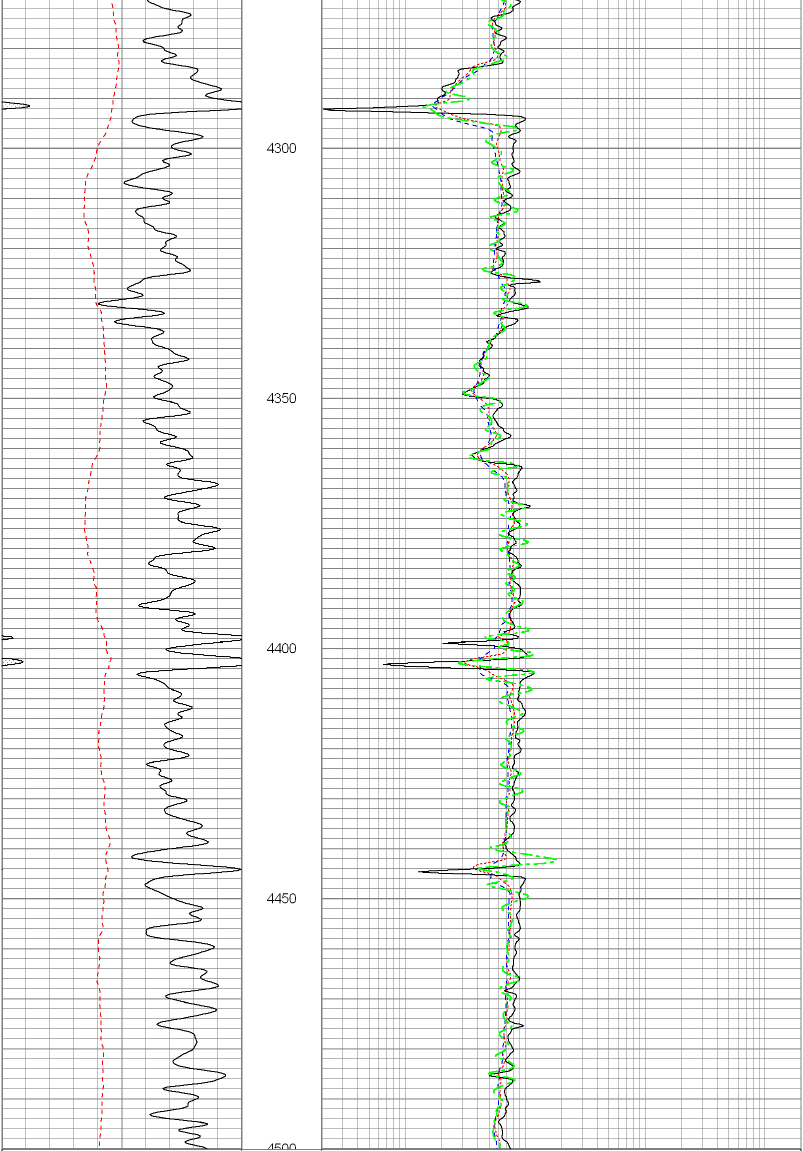

30 Gamma Ray (GAPI) 130
50 SP (mV) 150

0.2 Deep Resistivity (Ohm-m) 2000
0.2 Medium Resistivity (Ohm-m) 2000
0.2 Shallow Resistivity (Ohm-m) 2000
0.2 Rt (Ohm-m) 2000

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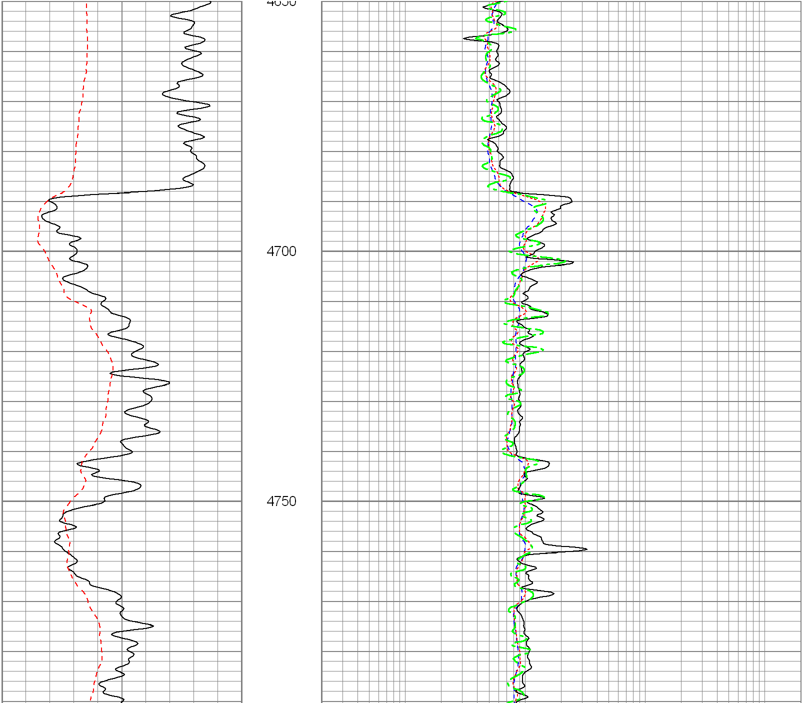

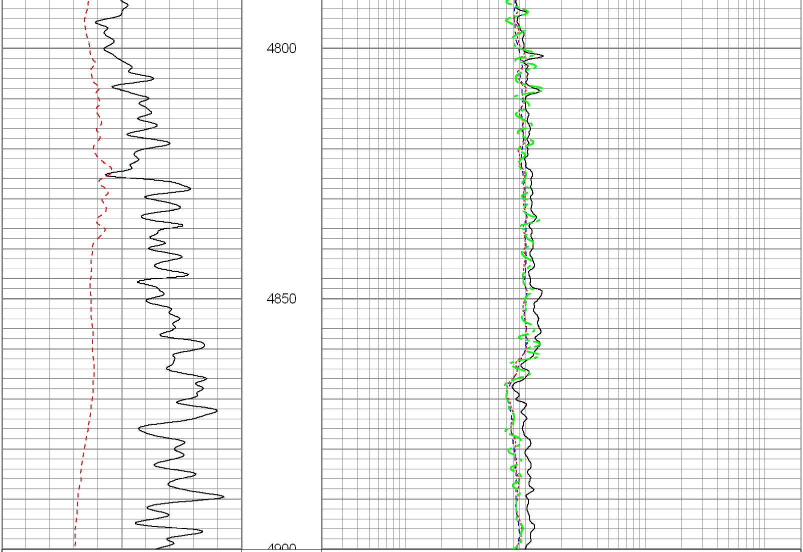

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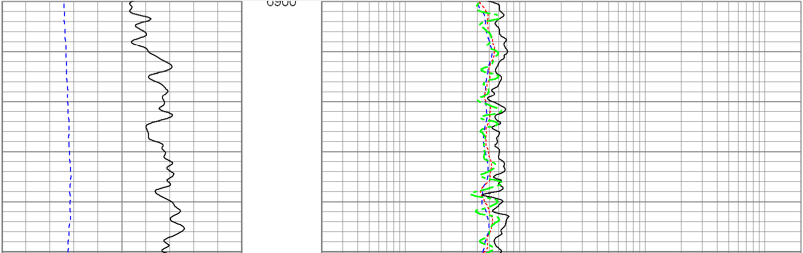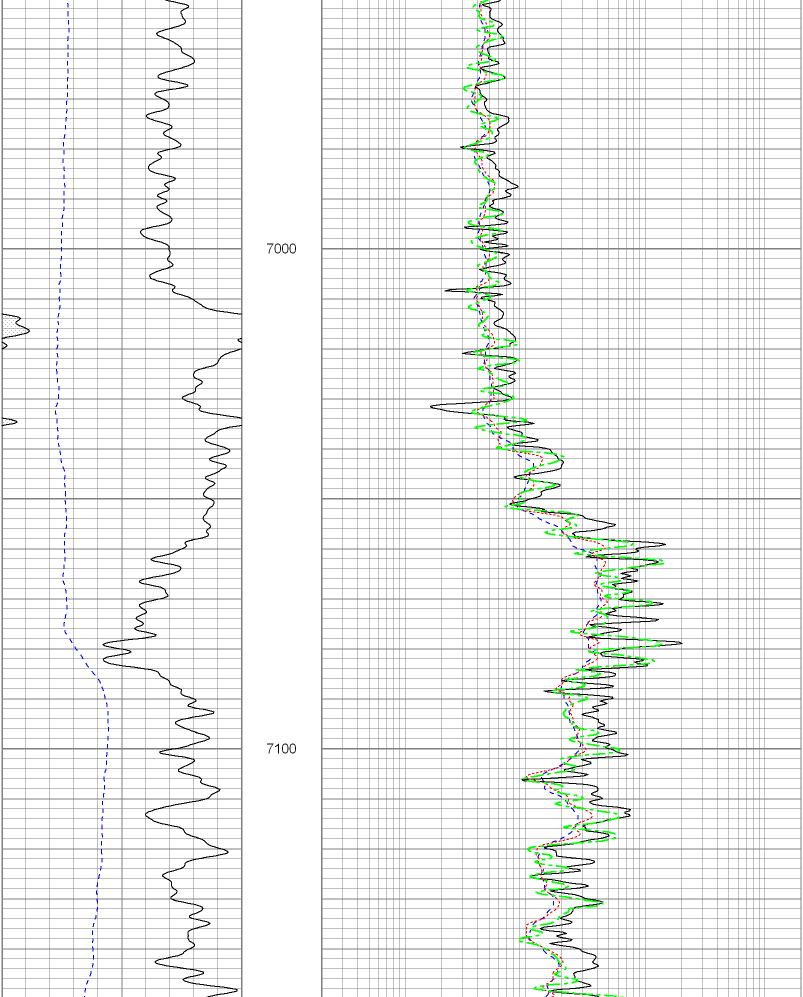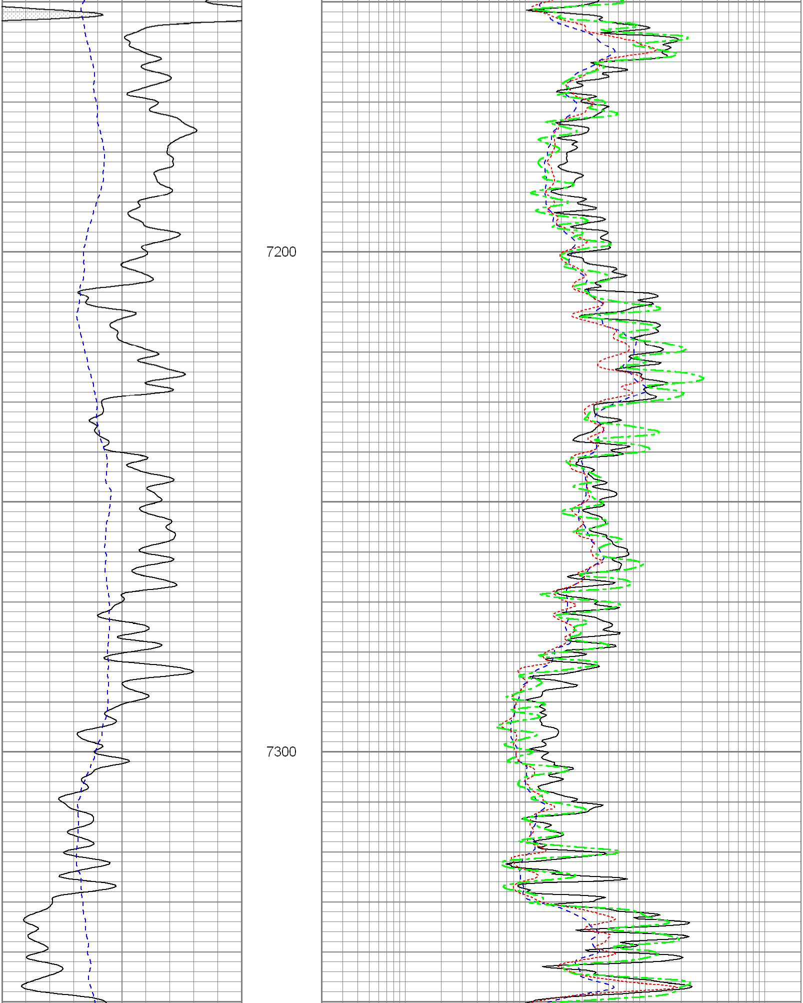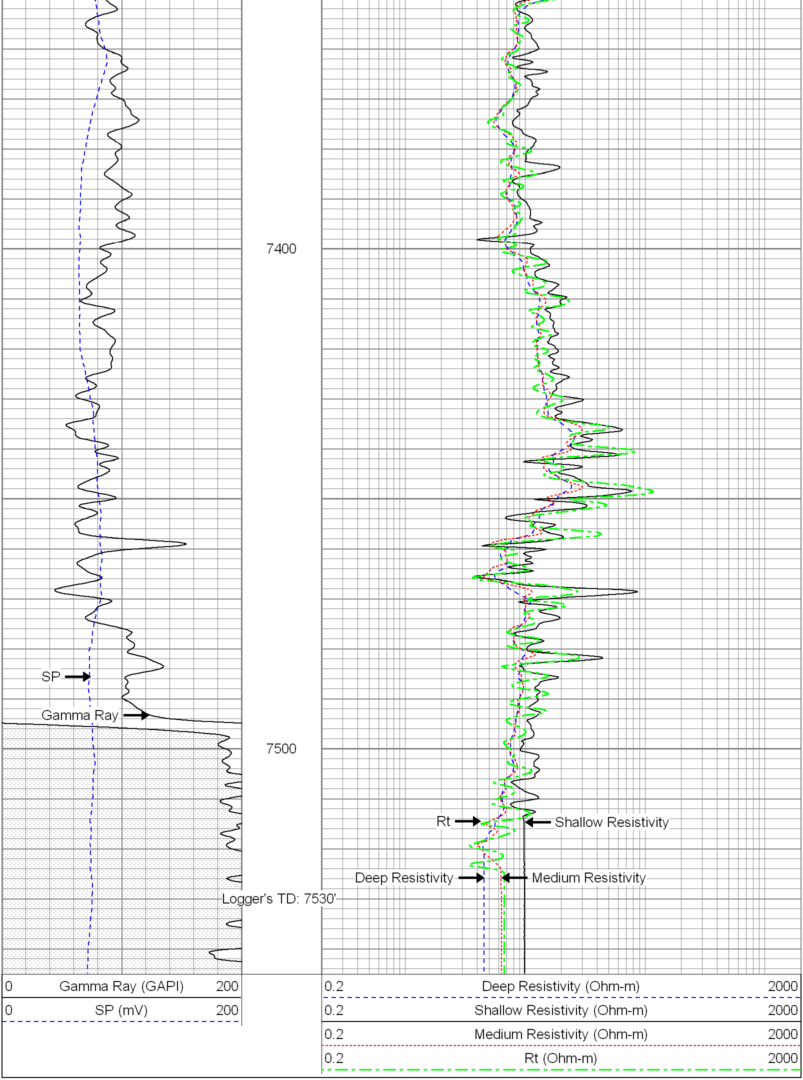0.2 Deep Resistivity (Ohm-m) 2000
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