



Pioneer Energy Services

Dual Compensated Porosity Log

15-145-21,707-00-00

API No.

Company **Apollo Energies, Inc.**
 Well **Hutchinson "A" #1**
 Field **Garfield Pool**
 County **Pawnee** State **Kansas**

Location **E/2 SE
1320' FSL & 660' FEL**
 Sec: **9** Twp: **23S** Rge: **17W**

Ground Level **Elevation 2093**
 Log Measured From **Kelly Bushing** 12 Ft. Above Perm. Datum
 Drilling Measured From **Kelly Bushing**

Other Services
DIL
 Elevation
K.B. 2105
D.F. 2093
G.L. 2093

Date	2/9/2013	
Run Number	One	
Type Log	CNL / CDL	
Depth Driller	4385	
Depth Logger	4390	
Bottom Logged Interval	4369	
Top Logged Interval	3500	
Type Fluid In Hole	Chemical	
Salinity, PPM CL	9,200	
Density Level	8.9	
Level	Full	
Max. Rec. Temp. F	120	
Operating Rig Time	2 1/2 Hours	
Equipment -- Location	15 Hays	
Recorded By	C. Desaire	
Witnessed By	Scott Alberg	

Borehole Record			Casing Record				
Run No.	Bit	From	To	Size	Wgt.	From	To
1	12.25	00	330	8.625	24#	00	330
2	7.875	330	4385				

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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

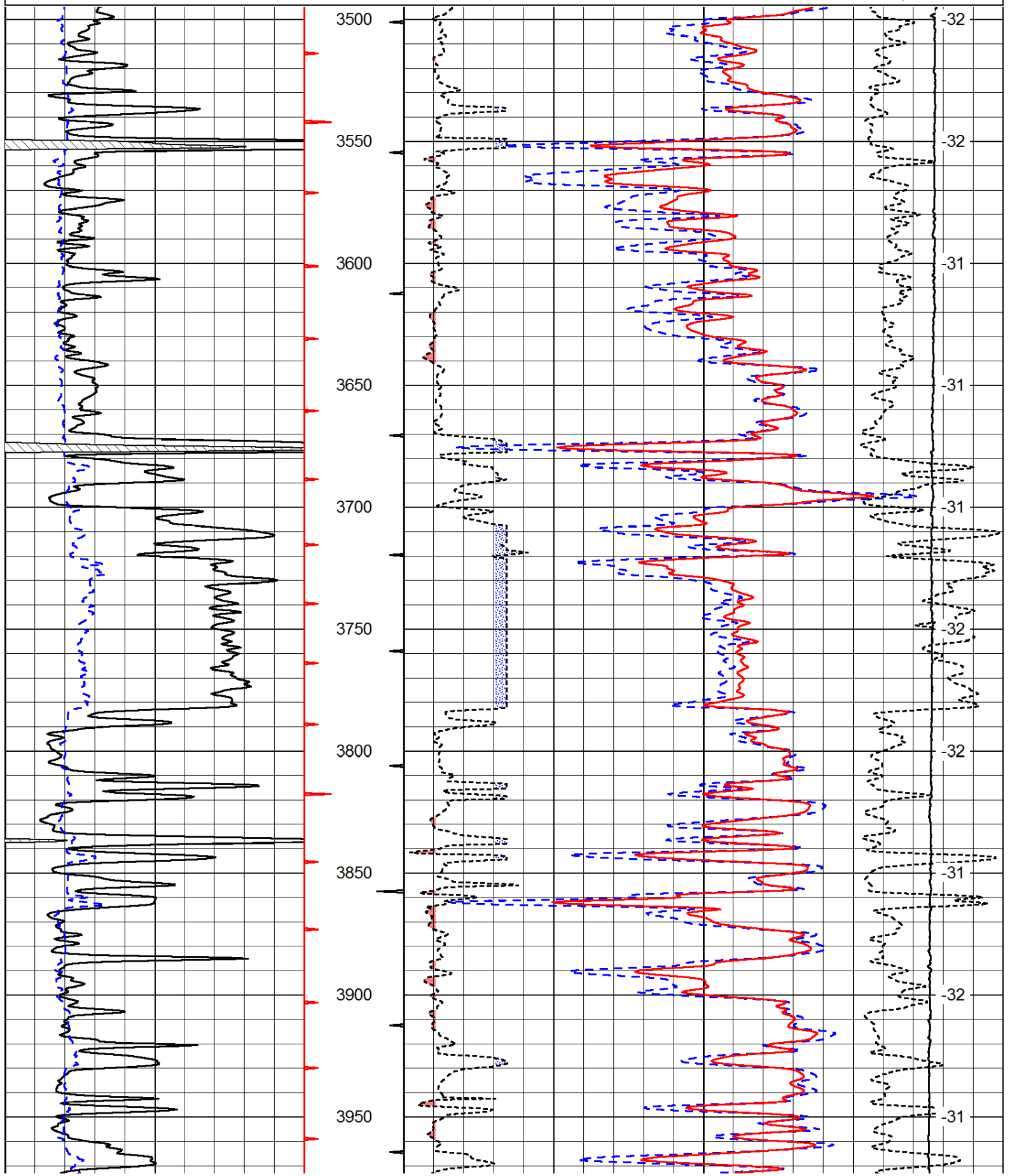
Thank you for using Pioneer Energy Services
www.pioneerenergy.com
 785 625 3858

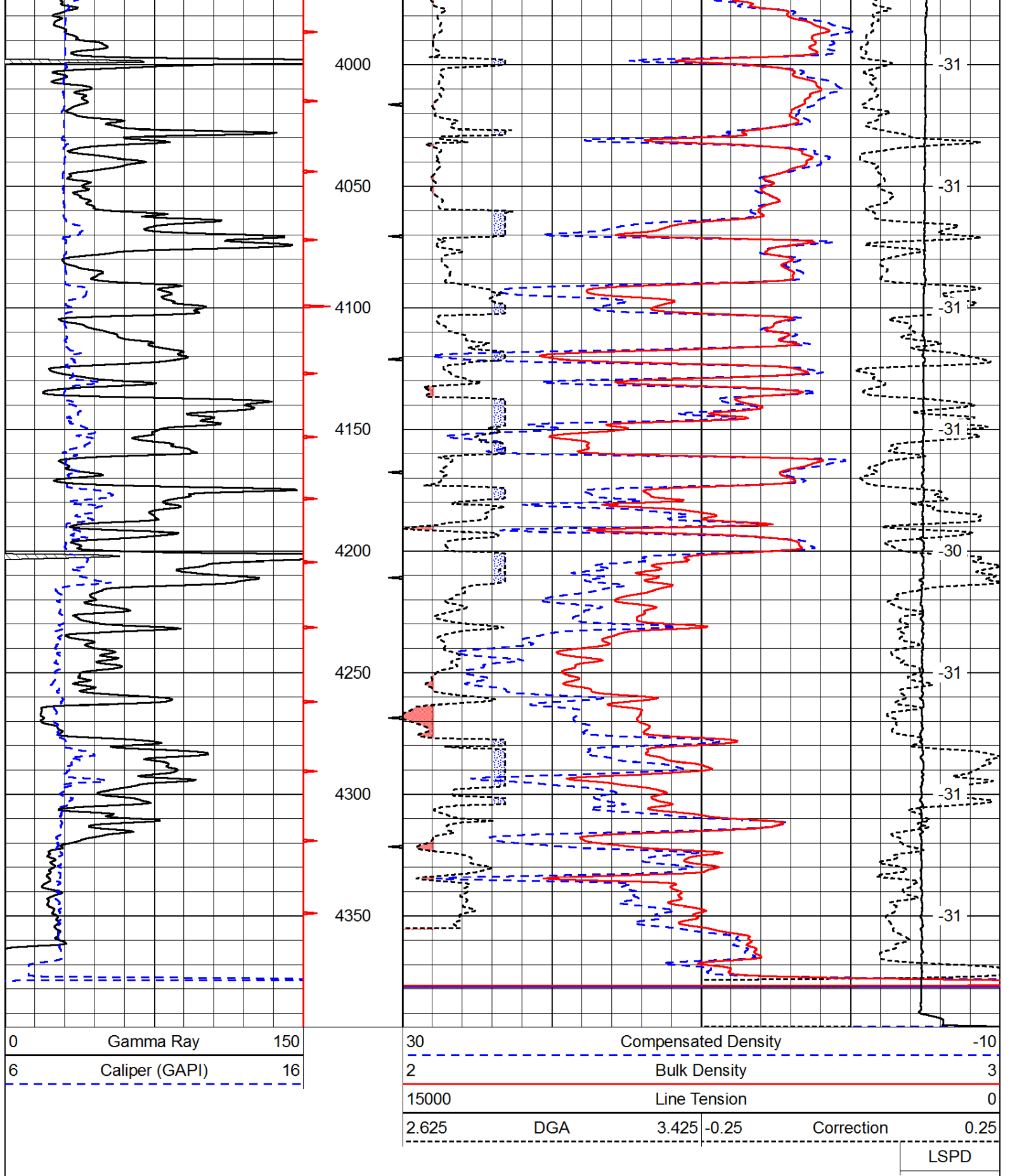
Garfield KS, E Edge,
 2 1/2 S to D Rd, 2 E to 160 Ave, 1 1/4 N, W Into

Database File: c:\warrior\data\apollo_hutchinson a #1\apollohd.db
 Dataset Pathname: dil/apolstk
 Presentation Format: cdl
 Dataset Creation: Sat Feb 09 18:20:19 2013
 Charted by: Depth in Feet scaled 1:600

0	Gamma Ray	150
6	Caliper (GAPI)	16

30	Compensated Density		-10
2	Bulk Density		3
15000	Line Tension		0
2.625	DGA	3.425 -0.25	Correction 0.25
LSPD			



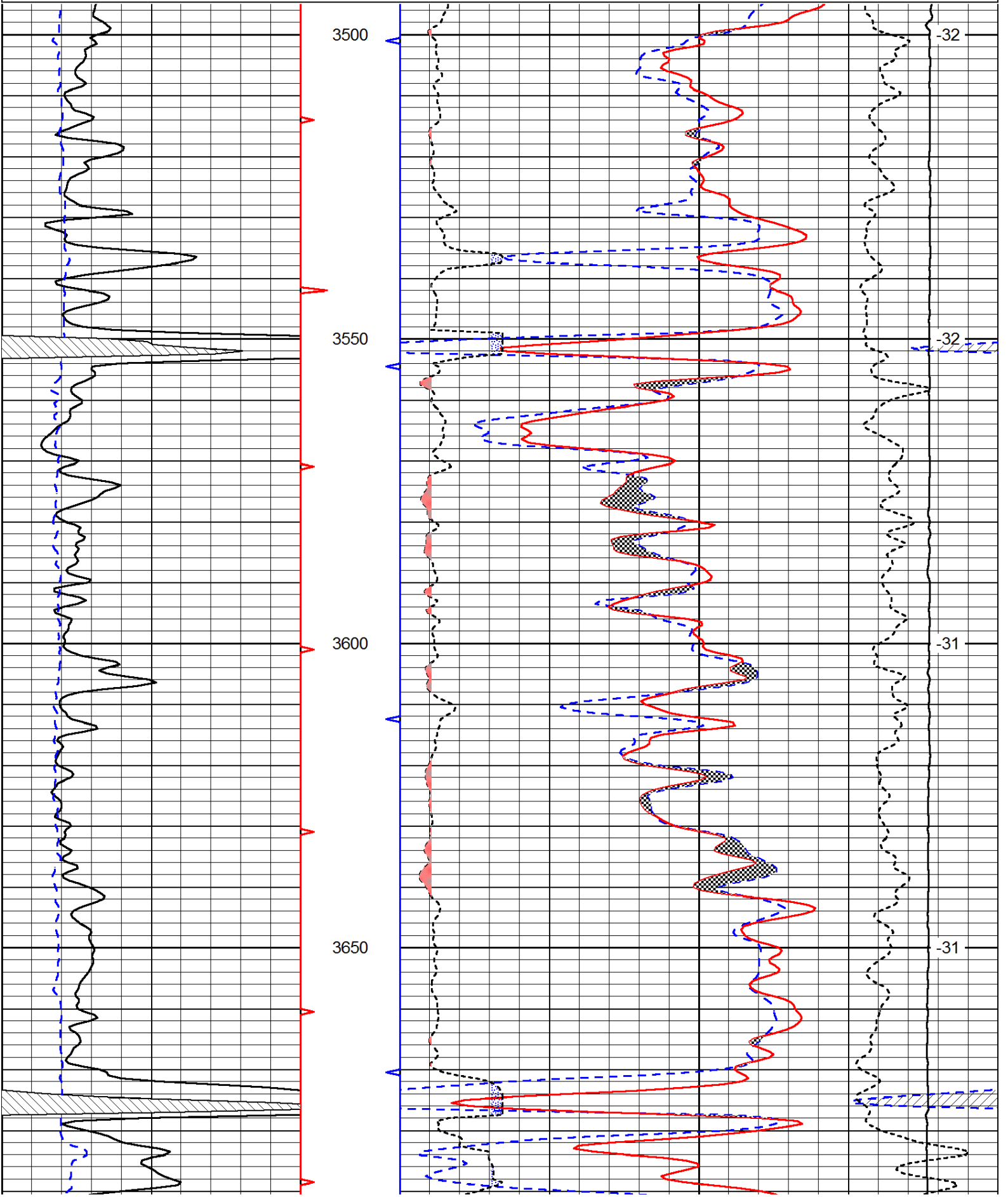


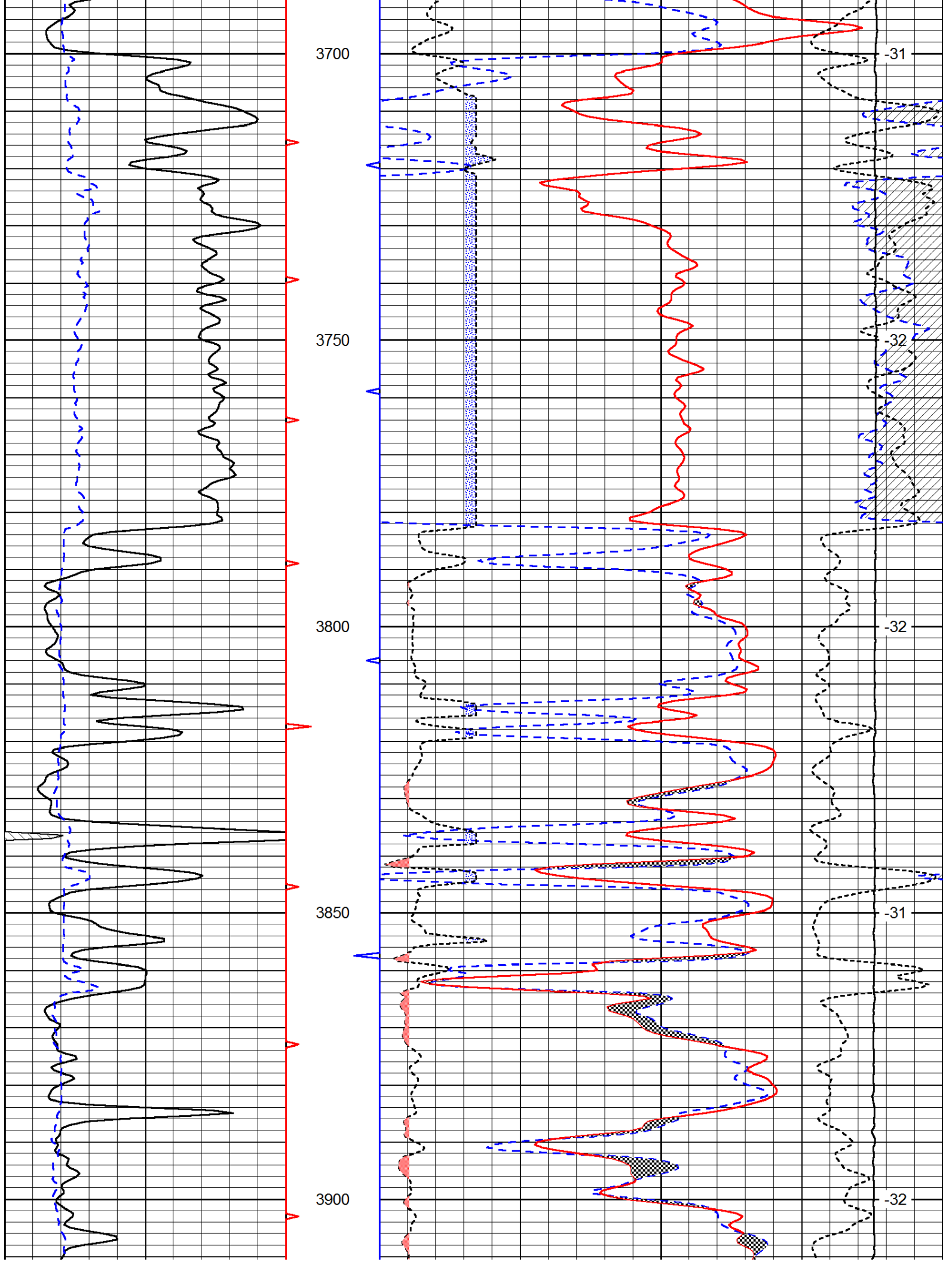
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 Dataset Pathname: dil/apolstk
 Presentation Format: cndlspec
 Dataset Creation: Sat Feb 09 18:20:19 2013
 Charted by: Depth in Feet scaled 1:240

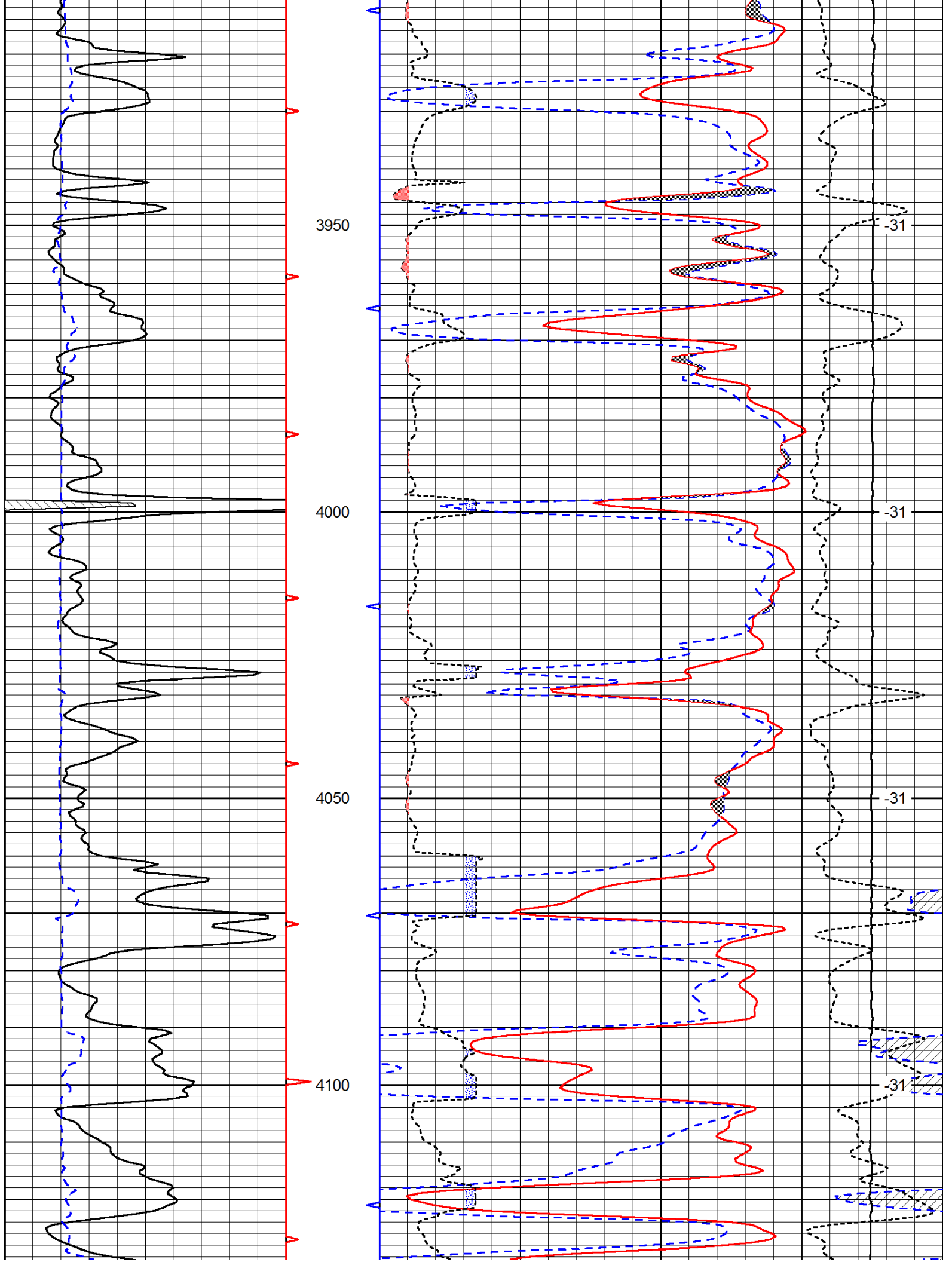
0	Gamma Ray	150
6	Caliper (GAPI)	16

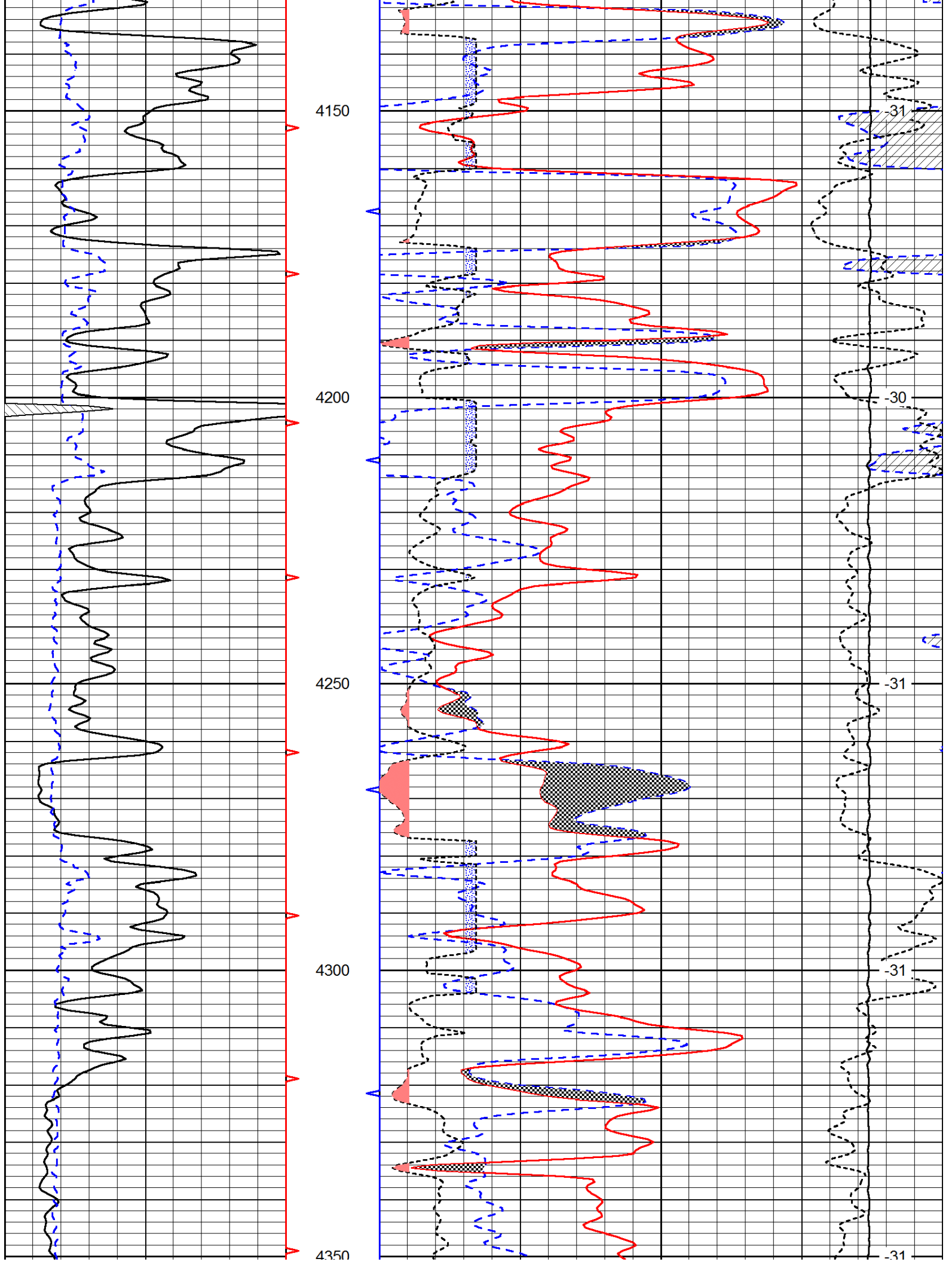
30	Compensated Neutron (Limestone)			-10	
30	Compensated Density (Limestone)			-10	
2.625	DGA	3.425	-0.25	Correction	0.25
15000	Line Tension			0	

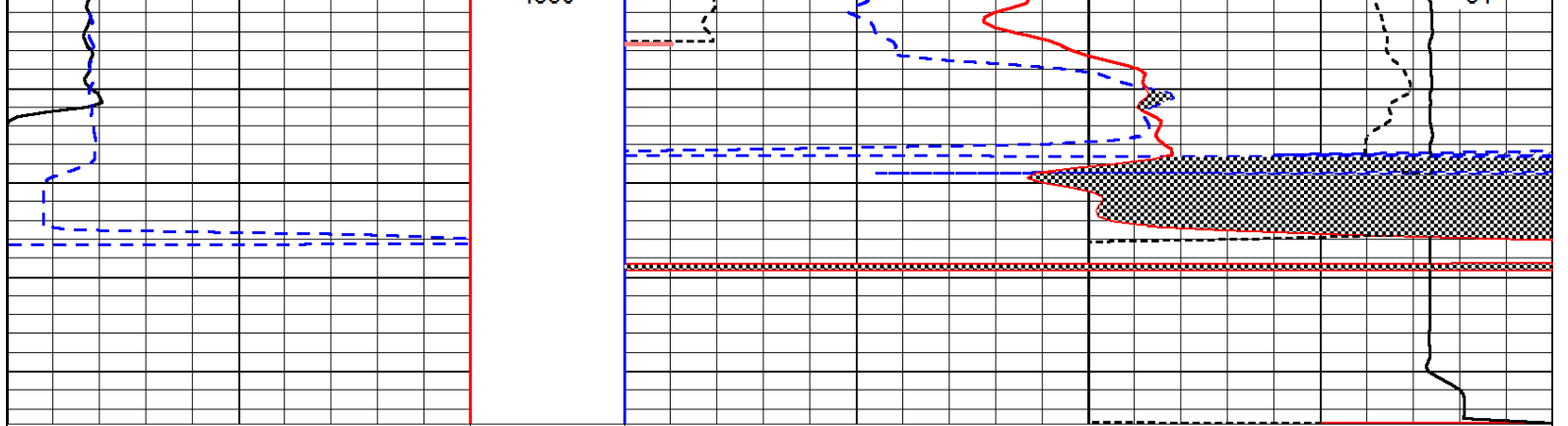
LSPD











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LSPD