



Pioneer Energy Services

## Dual Compensated Porosity Log

15-101-22,439-00-00

API No.

Company **Larson Engineering, Inc.**  
 Well **Riley Unit #1-10**  
 Field **Wildcat**  
 County **Lane** State **Kansas**

Location **NW NE NE SE  
 2573' FSL & 517' FEL**  
 Sec: **10** Twp: **18S** Rge: **29W**

Other Services  
 DIL  
 MEL

Permanent Datum **Ground Level** Elevation **2786**  
 Log Measured From **Kelly Bushing** 7 Ft. Above Perm. Datum  
 Drilling Measured From **Kelly Bushing**

Elevation  
 K.B. 2793  
 D.F.  
 G.L. 2786

Date	5/14/2013	
Run Number	One	
Type Log	CNL / CDL	
Depth Driller	4635	
Depth Logger	4637	
Bottom Logged Interval	4616	
Top Logged Interval	3600	
Type Fluid In Hole	Chemical	
Salinity, PPM CL	3,700	
Density	9.3	
Level	Full	
Max. Rec. Temp. F	122	
Operating Rig Time	5 Hours	
Equipment -- Location	17 Hays	
Recorded By	C. Desaire	
Witnessed By	Vern Schrag	

Borehole Record				Casing Record			
Run No.	Bit	From	To	Size	Wgt.	From	To
1	12.25	00	273	8.625	24#	00	273
2	7.875	273	4635				

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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**

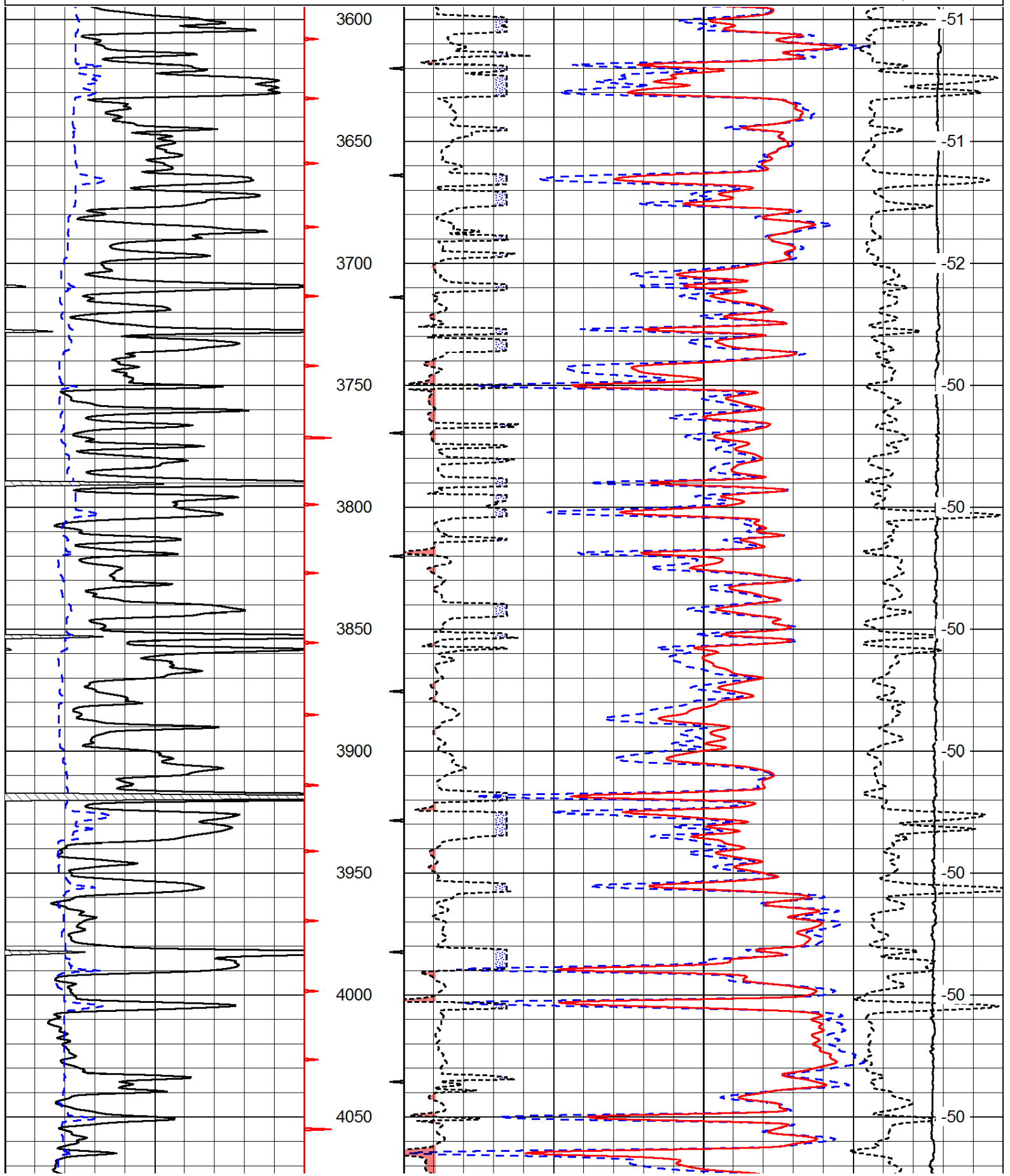
Thank you for using Pioneer Energy Services  
[www.pioneerenergy.com](http://www.pioneerenergy.com)  
 785 625 3858

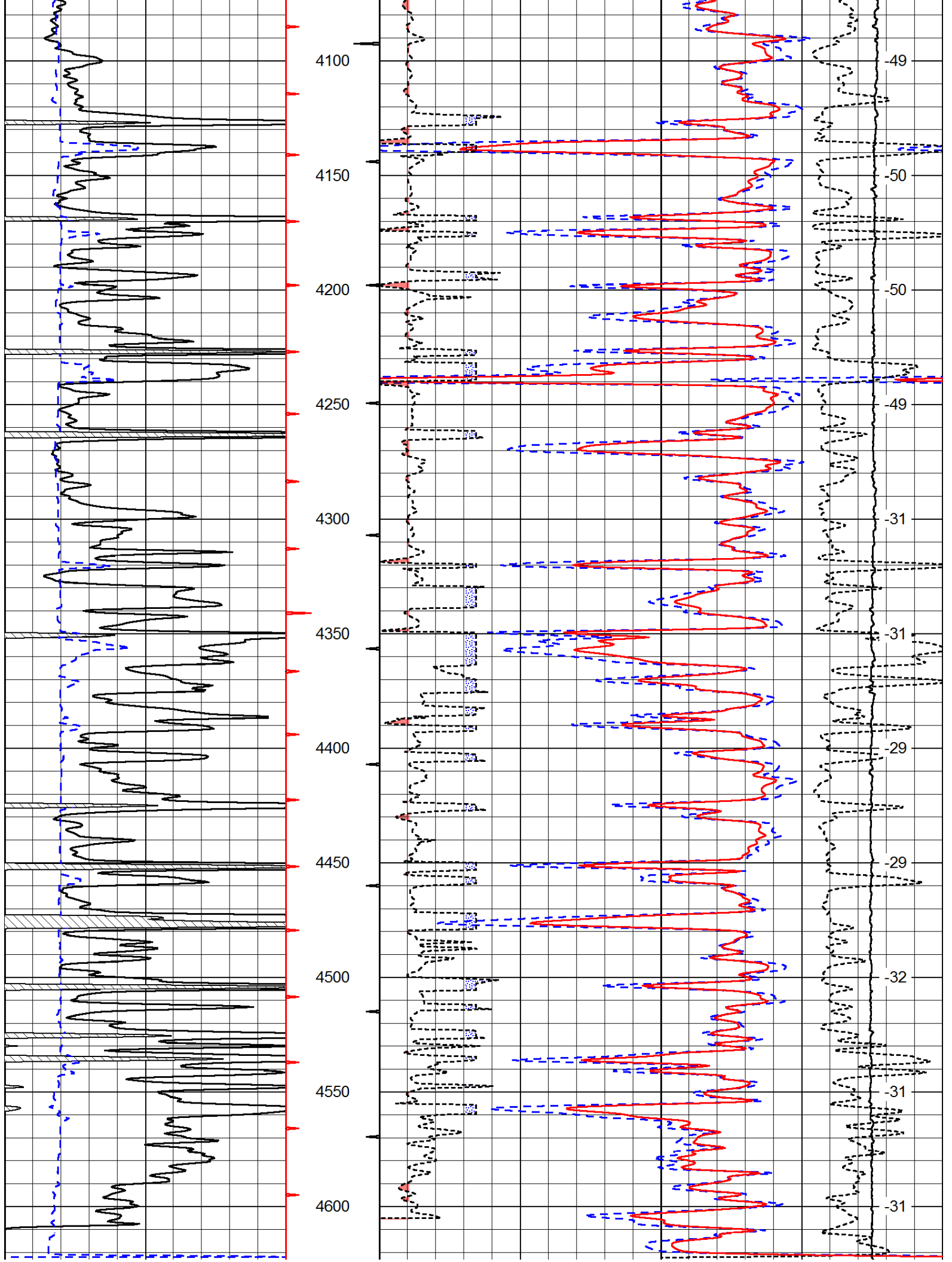
Dighton KS, 2 W to Jagger Rd,  
 1 1/2 N, W Into

Database File: c:\warrior\data\larson\_riley unit #1-10\larsonhd.db  
 Dataset Pathname: dil\larstk  
 Presentation Format: cdl  
 Dataset Creation: Tue May 14 00:43:39 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					

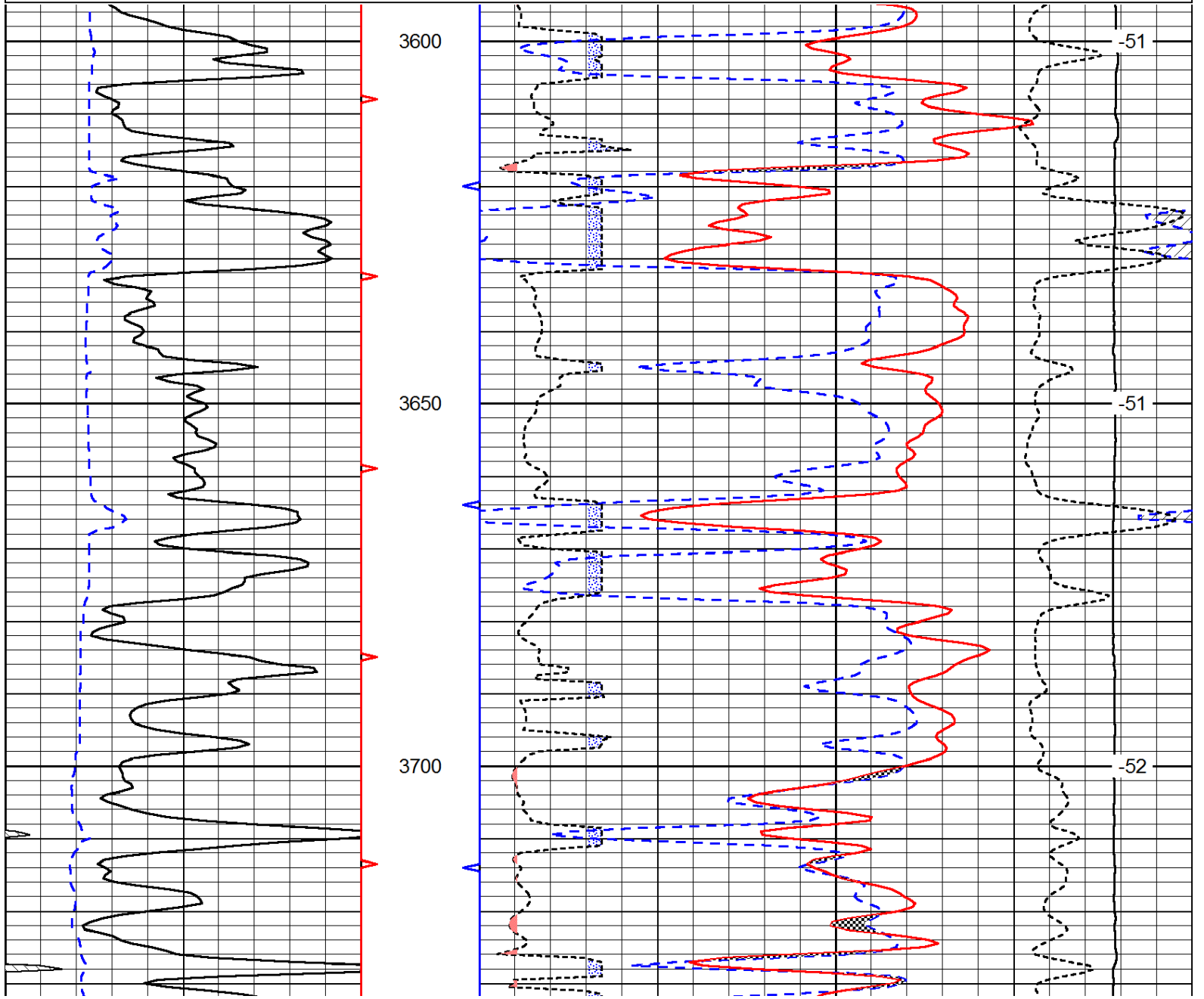


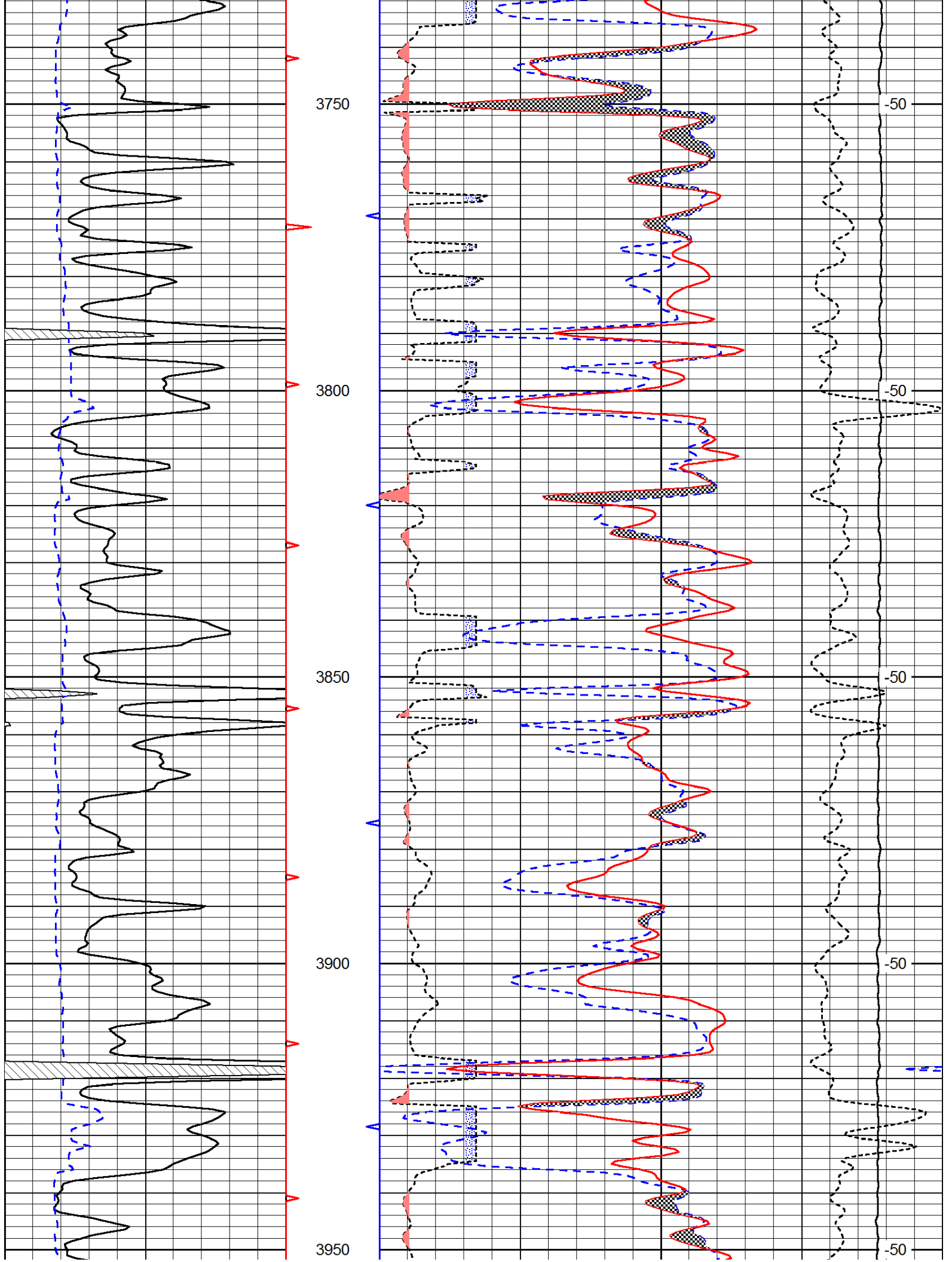


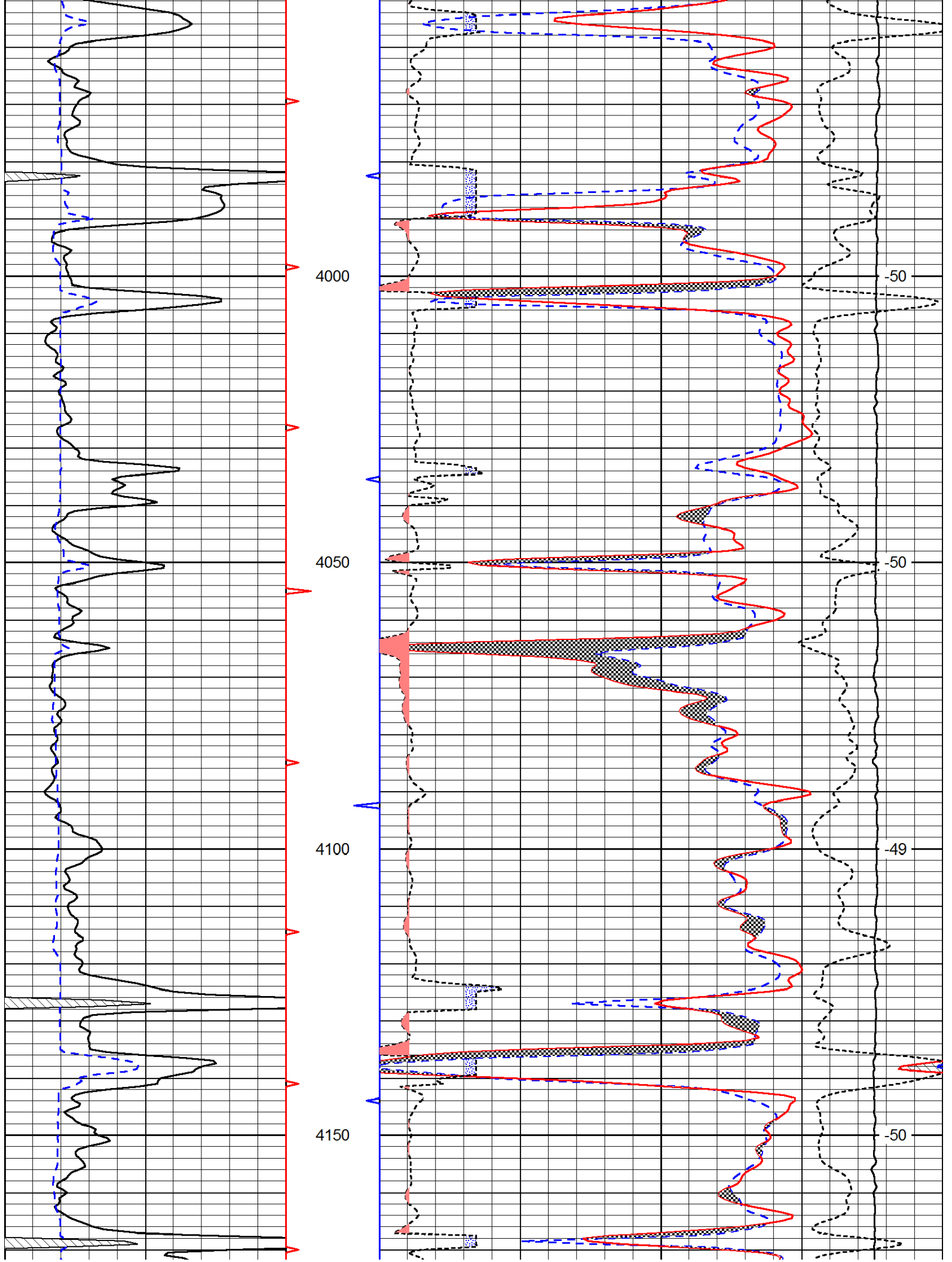
0	Gamma Ray	150	30	Compensated Density		-10
6	Caliper (GAPI)	16	2	Bulk Density		3
			15000	Line Tension		0
			2.625	DGA	3.425 -0.25	Correction 0.25
						LSPD

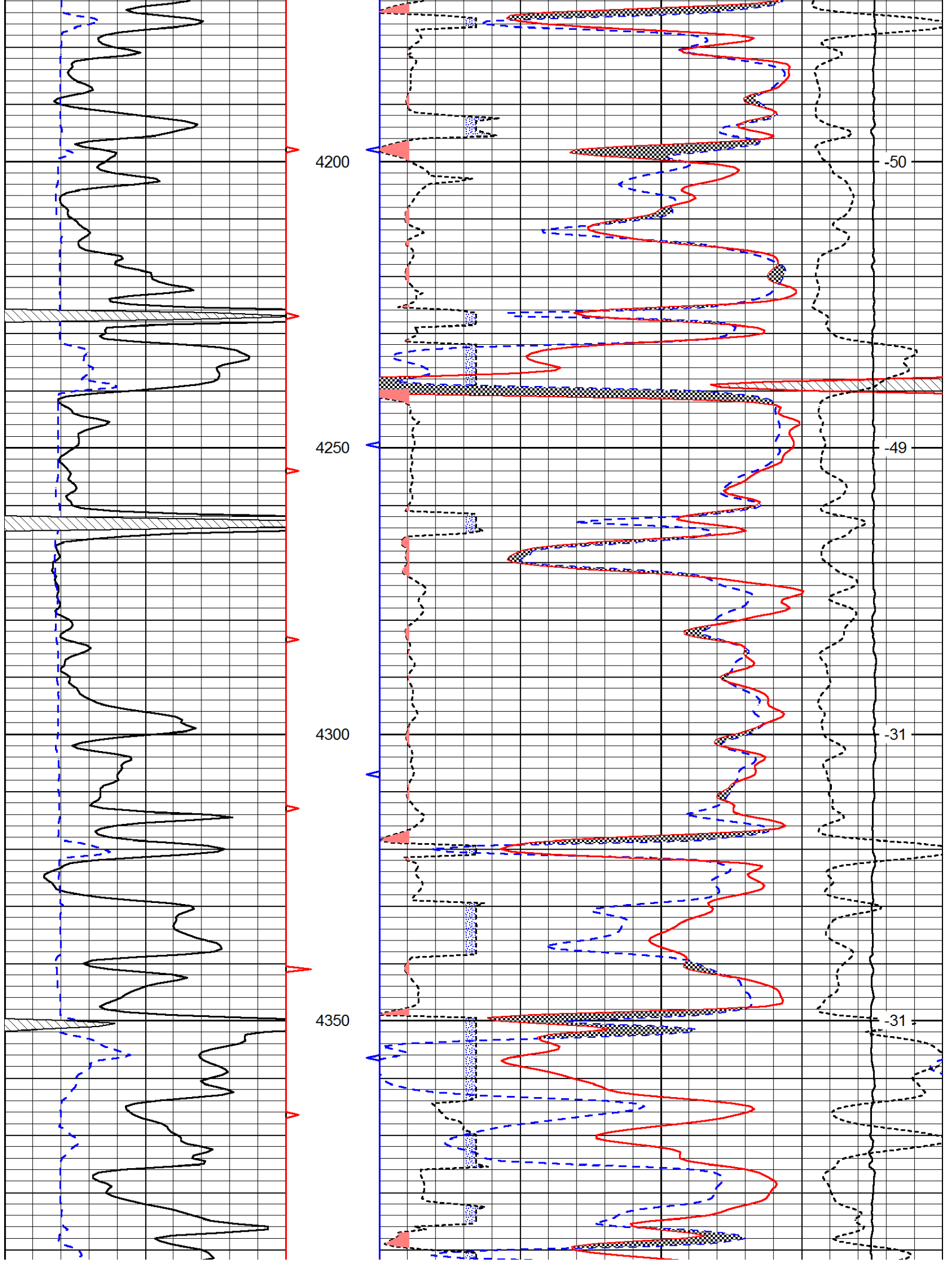
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 Dataset Creation: Tue May 14 00:43:39 2013  
 Charted by: Depth in Feet scaled 1:240

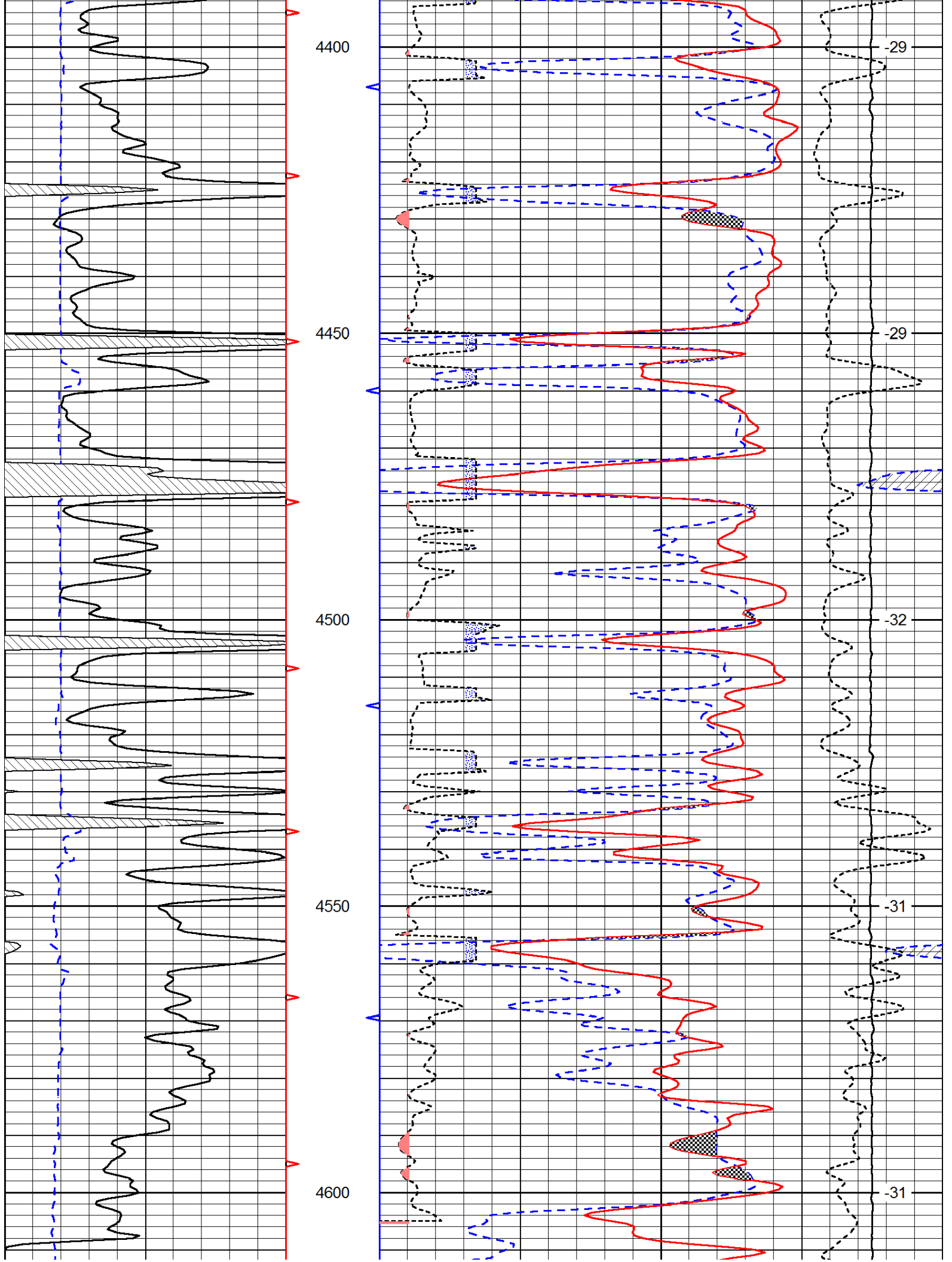
0	Gamma Ray	150	30	Compensated Neutron (Limestone)		-10
6	Caliper (GAPI)	16	30	Compensated Density (Limestone)		-10
			2.625	DGA	3.425 -0.25	Correction 0.25
			15000	Line Tension		0
						LSPD



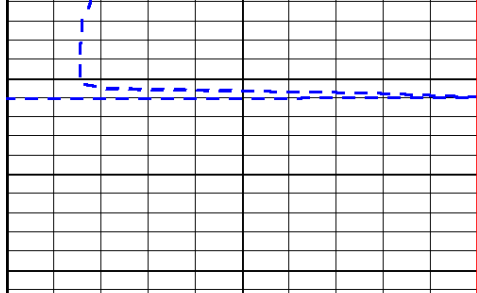




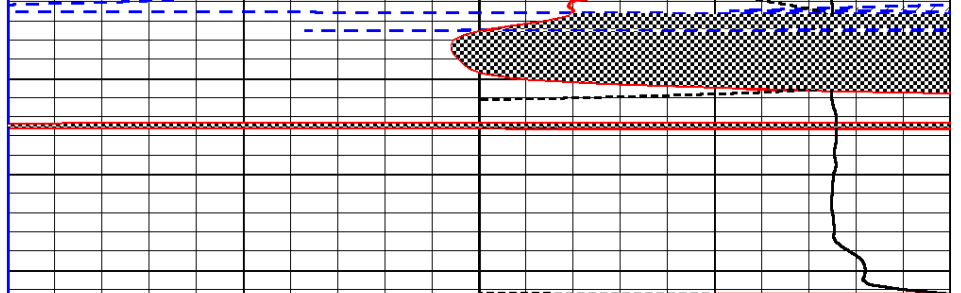








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2.625	DGA	3.425	-0.25	Correction	0.25
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LSPD