



Pioneer Energy Services

Dual Compensated Porosity Log

15-109-21,354-00-00

API No.

Company **Black Tea Oil, LLC**
 Well **Pahls 'E' #2**
 Field **N/A**
 County **Logan** State **Kansas**

Location
1500' FSL & 770' FWL

Sec: **21** Twp: **13S** Rge: **34W**

Other Services
 DIL
 MEL/BHCS

Permanent Datum **Ground Level** Elevation **2944**
 Log Measured From **Kelly Bushing** 12 Ft. Above Perm. Datum
 Drilling Measured From **Kelly Bushing**

Elevation
 K.B. 2956
 D.F. G.I.L. 2944

Date **10/19/2014**

Run Number **One**

Type Log **CNL / CDL**

Depth Driller **4745**

Depth Logger **4748**

Bottom Logged Interval **4727**

Top Logged Interval **3000**

Type Fluid In Hole **Chemical**

Salinity, PPM CL **8000**

Density **9.2**

Level **Full**

Max. Rec. Temp. F **123**

Operating Rig Time **5 Hours**

Equipment -- Location **15 Hays**

Recorded By **D.Kerr**

Witnessed By **Richard Thomasson**

Borehole Record		Casing Record					
Run No	Bit	From	To	Size	Wgt.	From	To
1	12.25	00	266	8.625	24#	00	266
2	7.875	266	4745				

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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

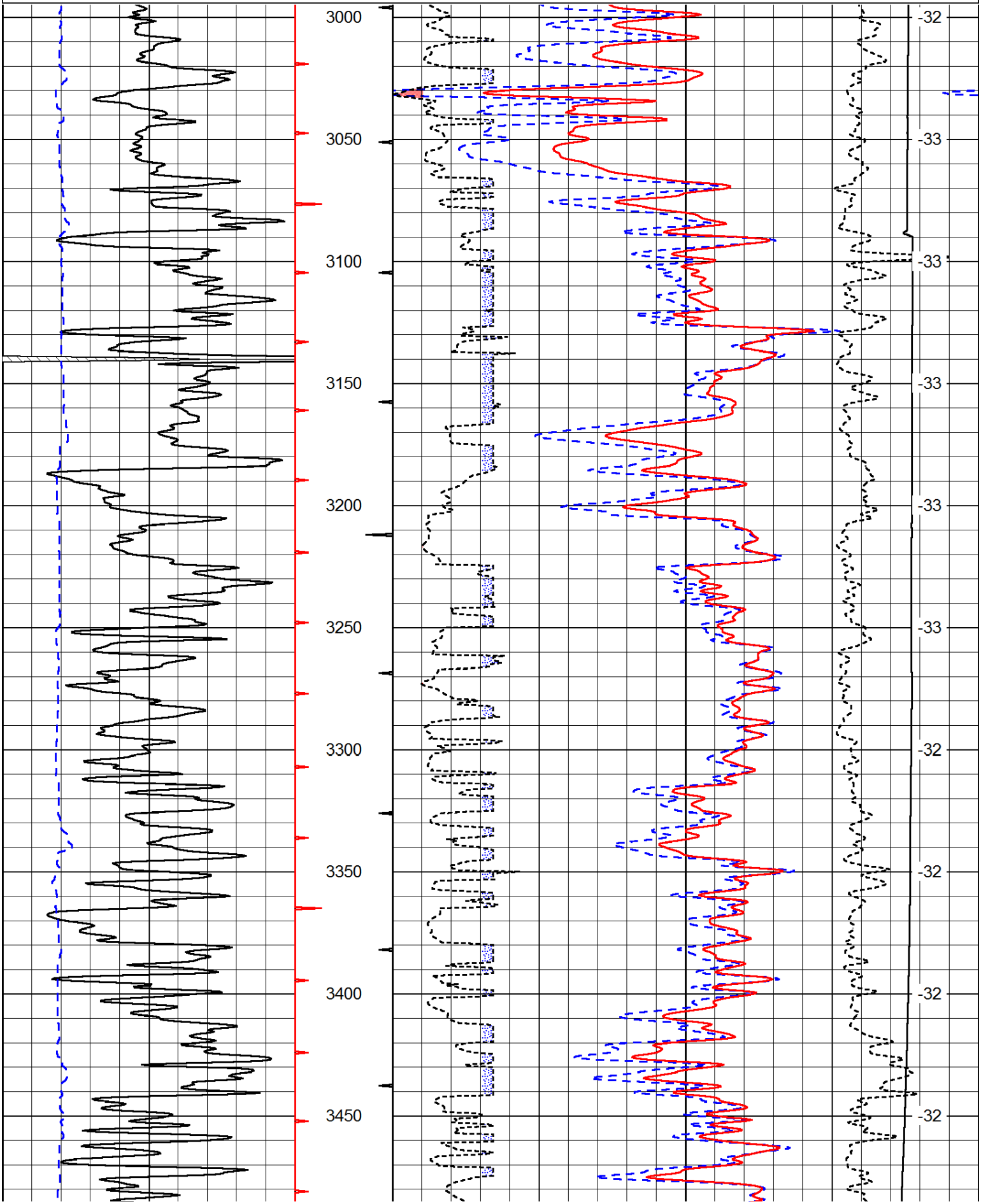
Thank you for using Pioneer Energy Services
www.pioneer.com
 785 625 3858

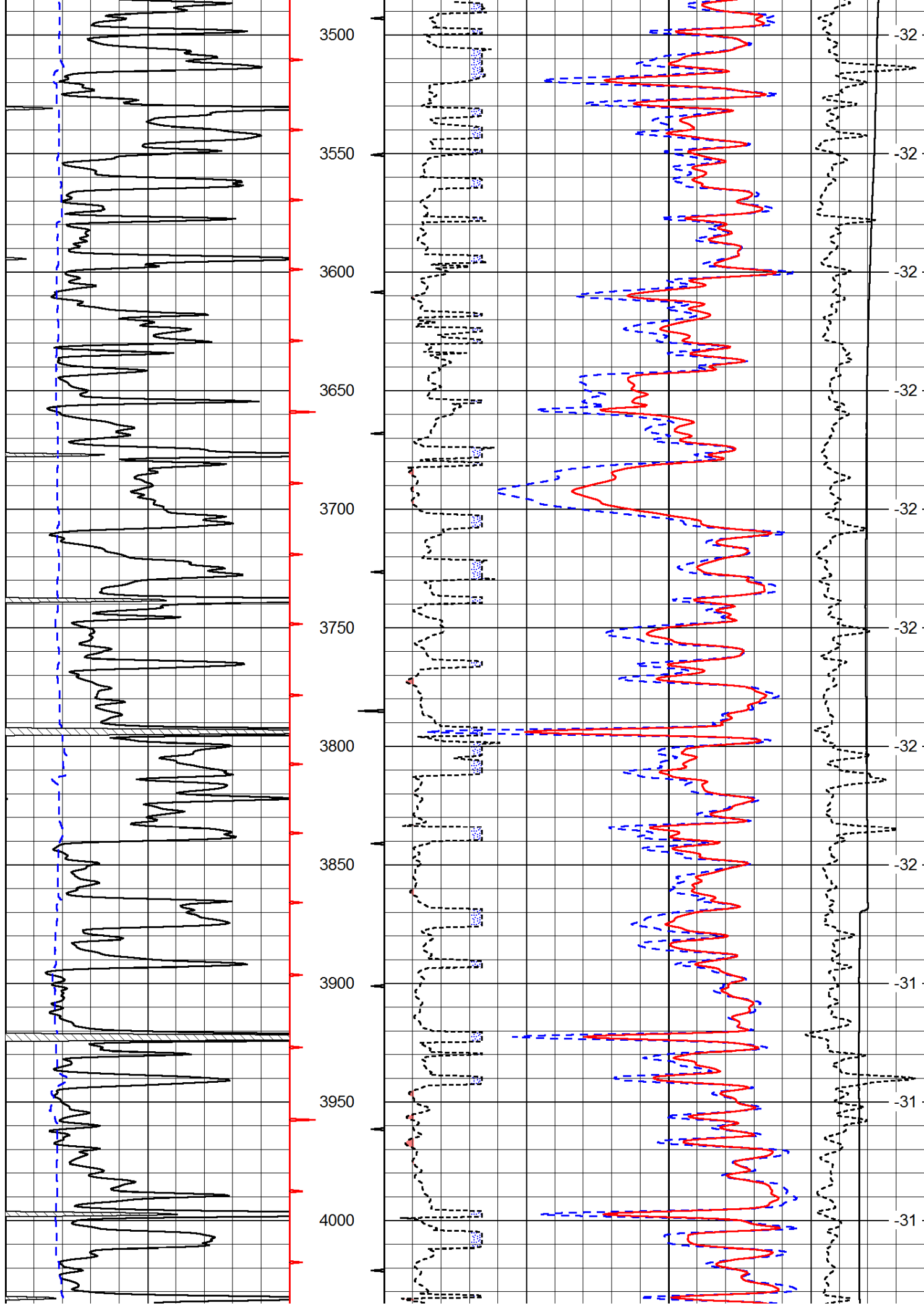
Russell Springs KS, East to 310 RD,
 1/2 South to Tanks, 3/4 West/ 1/4 South, West and North Into

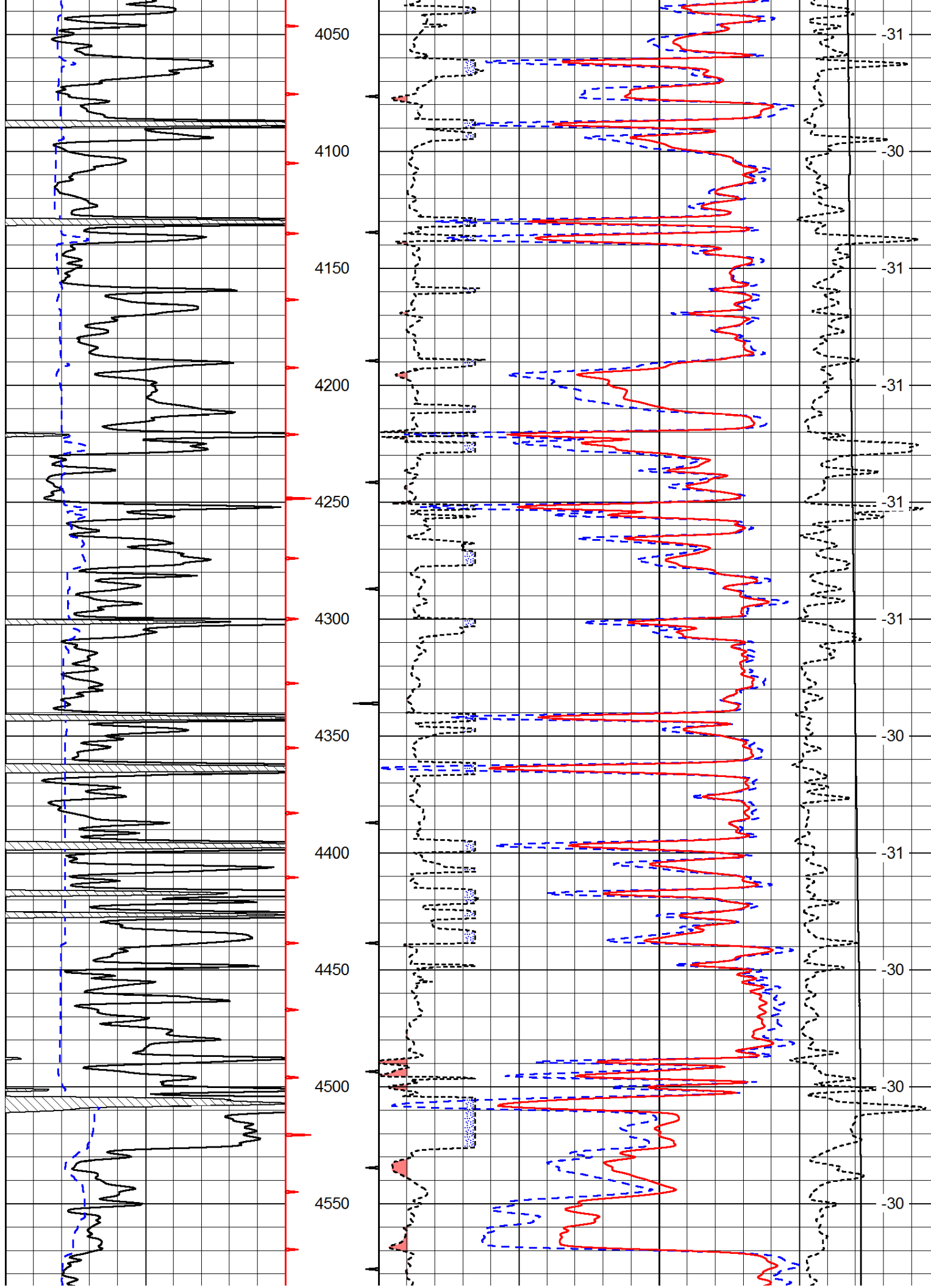
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 Charted by: Depth in Feet scaled 1:600

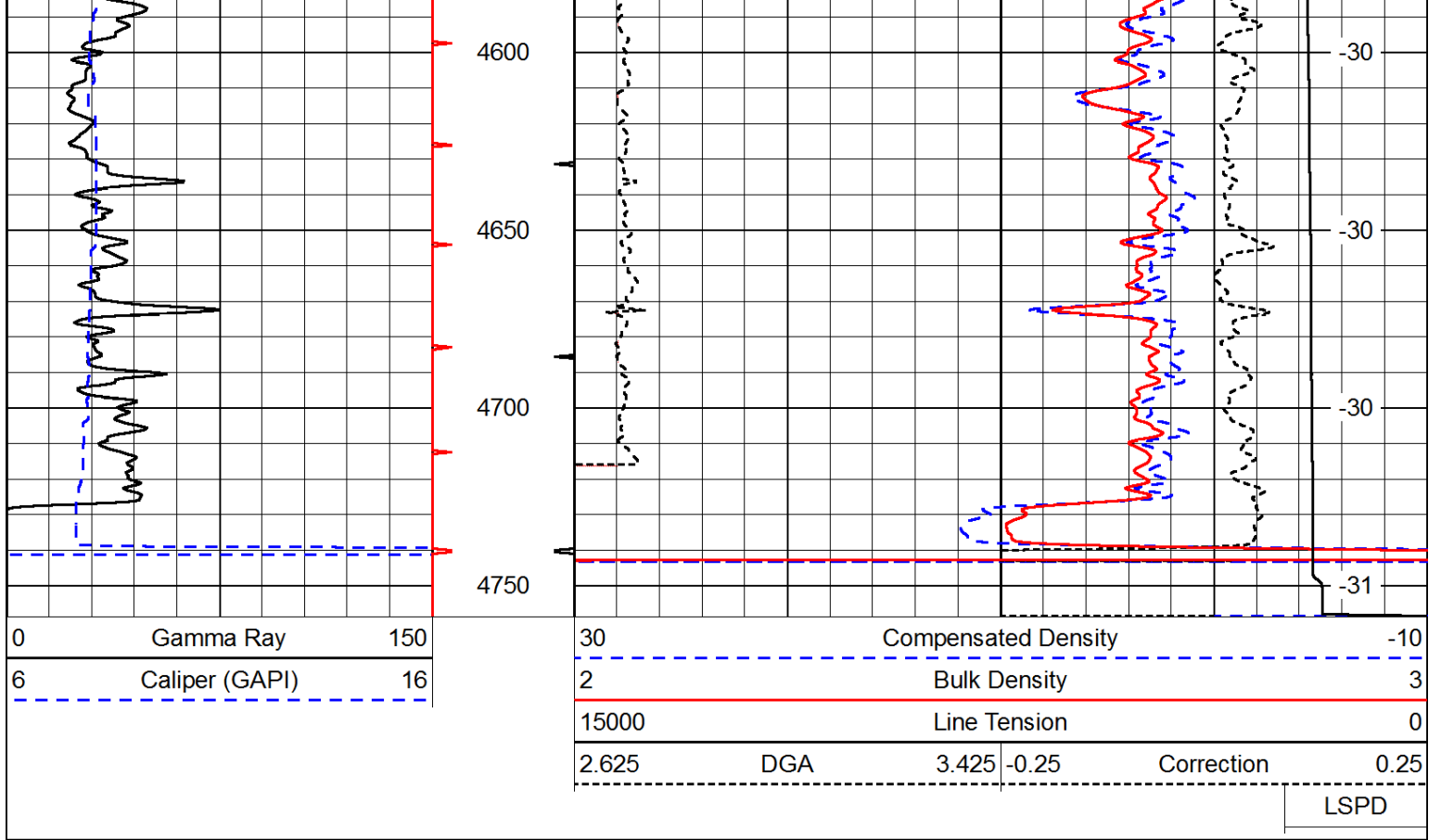
0	Gamma Ray	150
6	Caliper (GAPI)	16

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

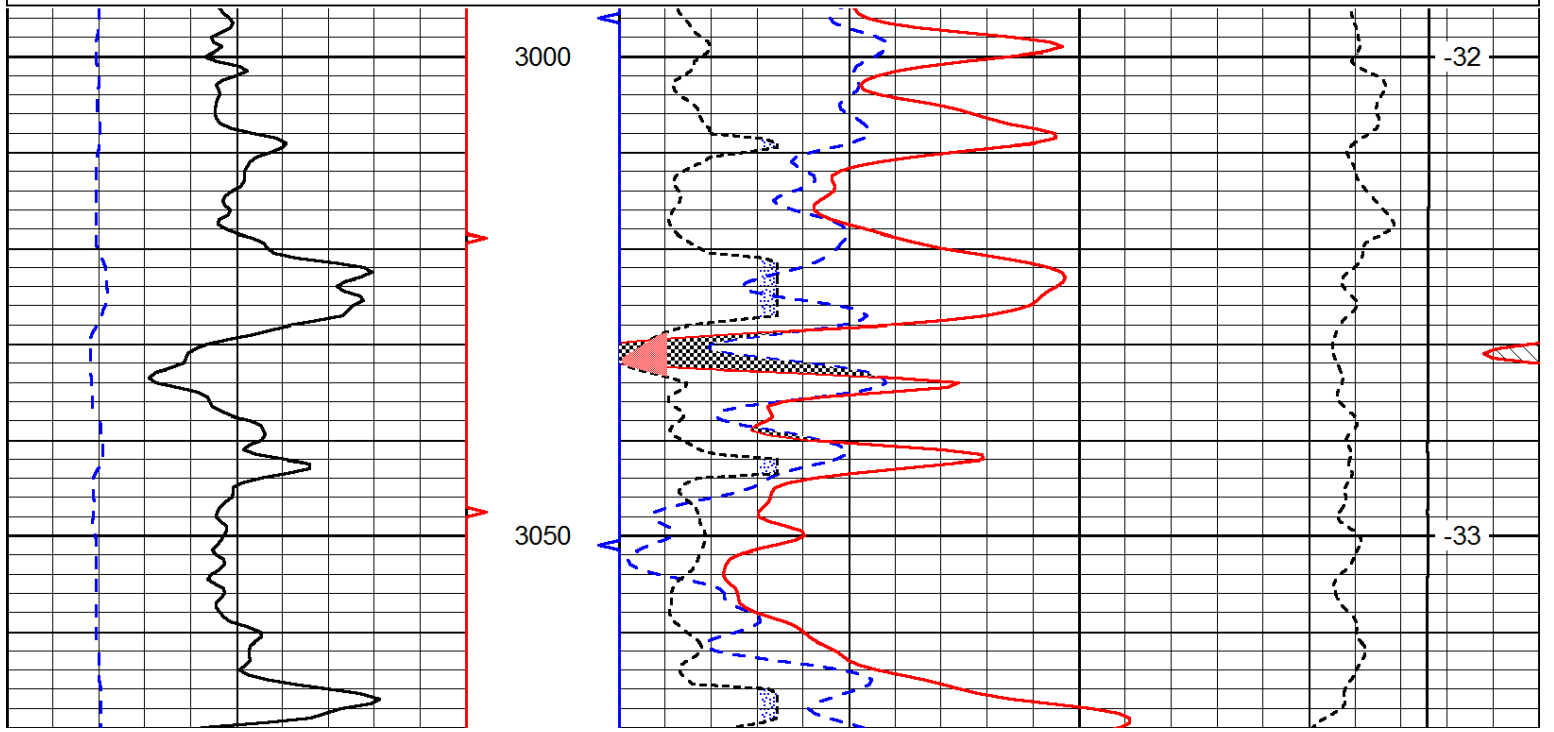
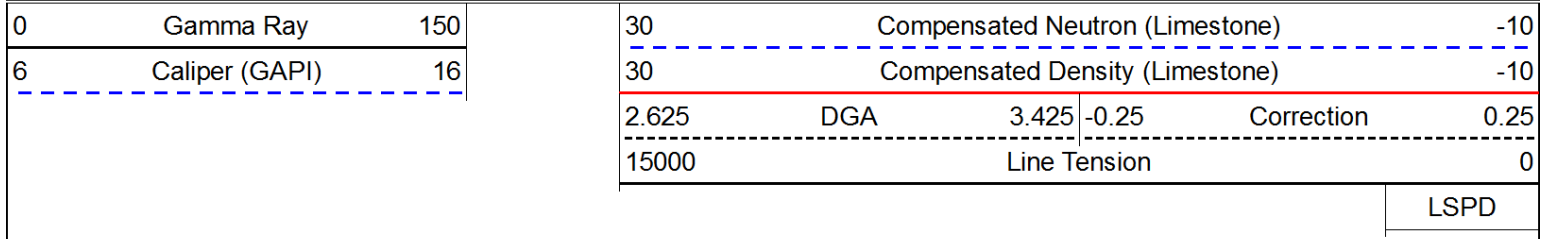


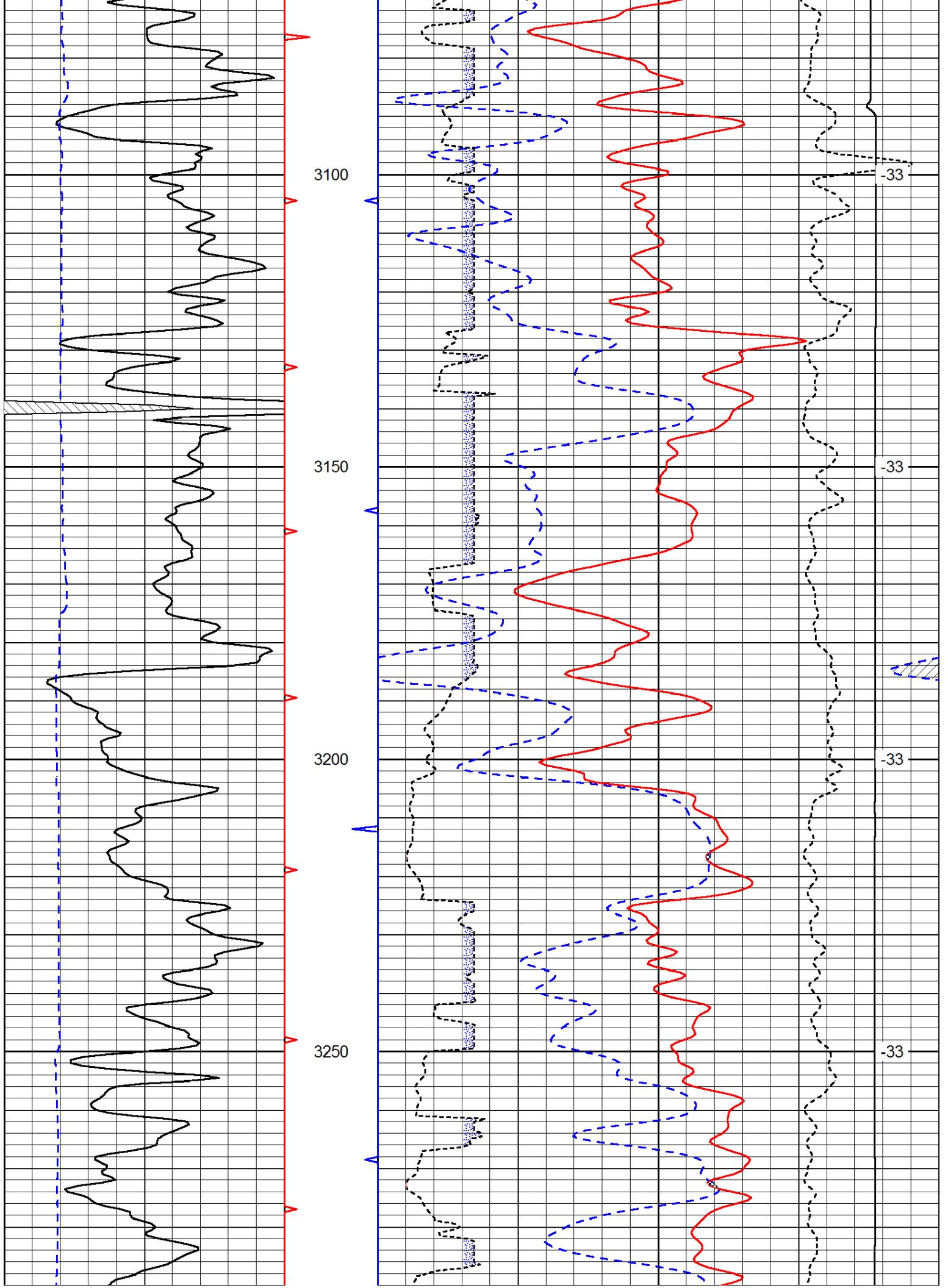


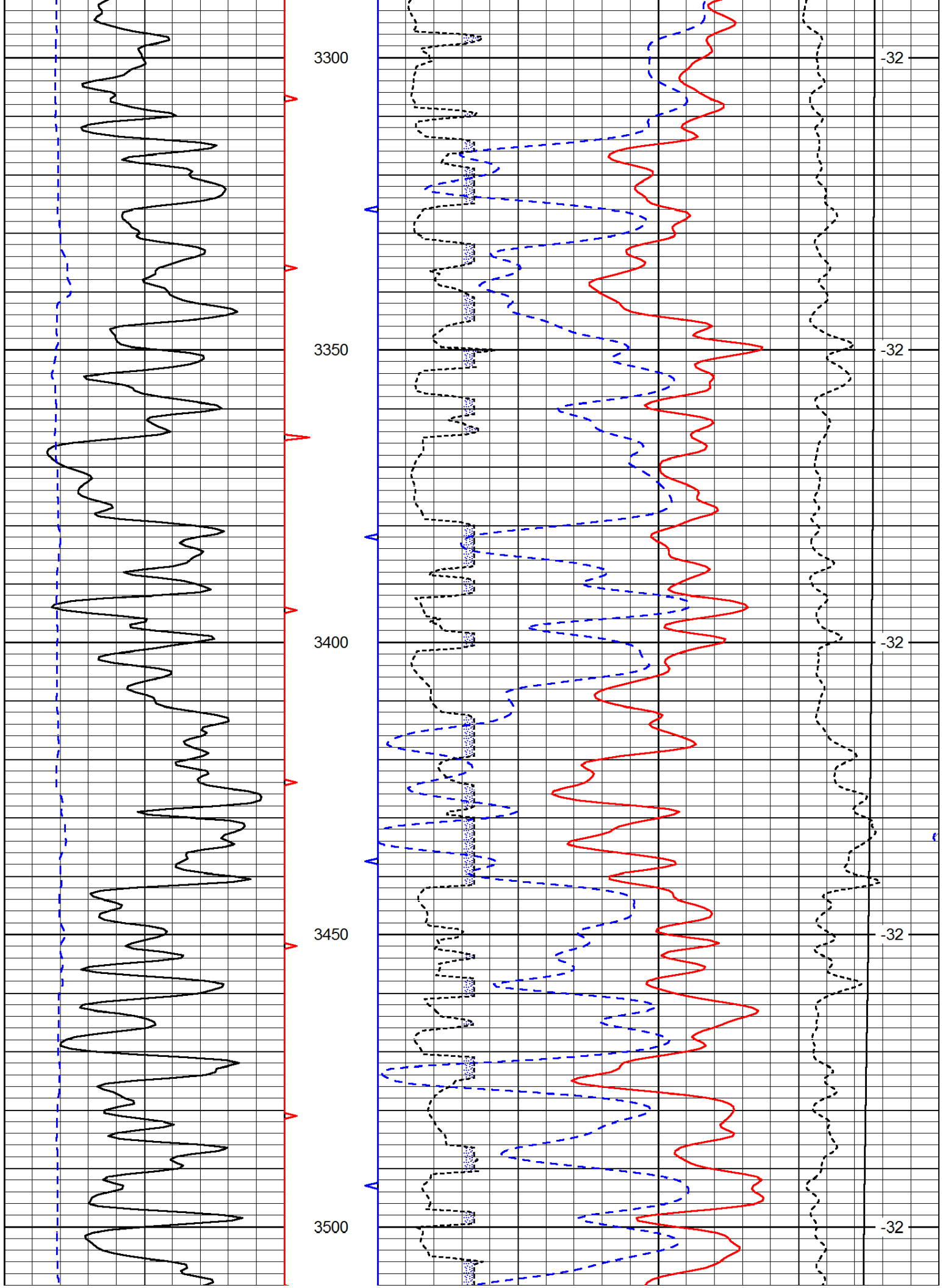


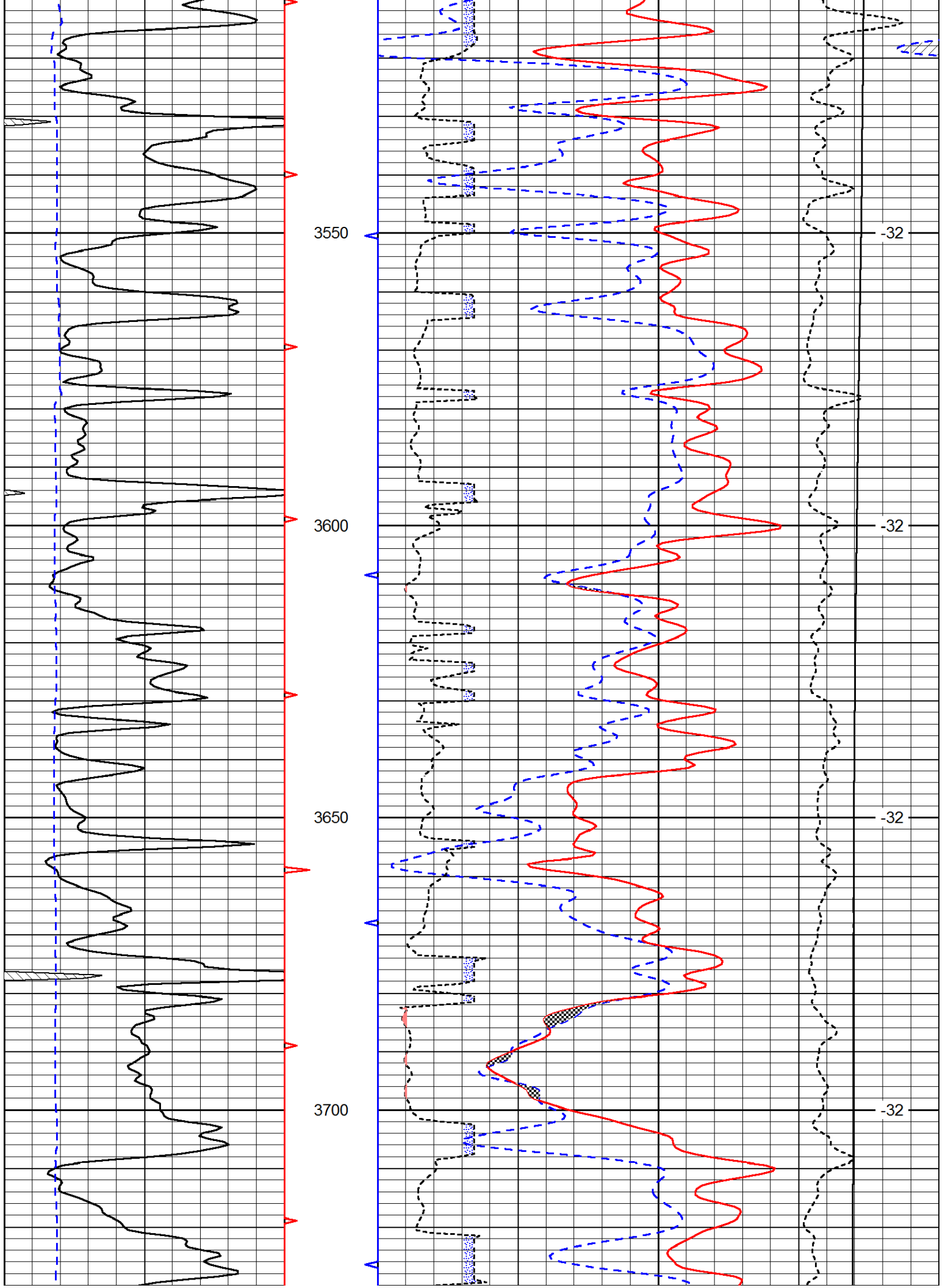


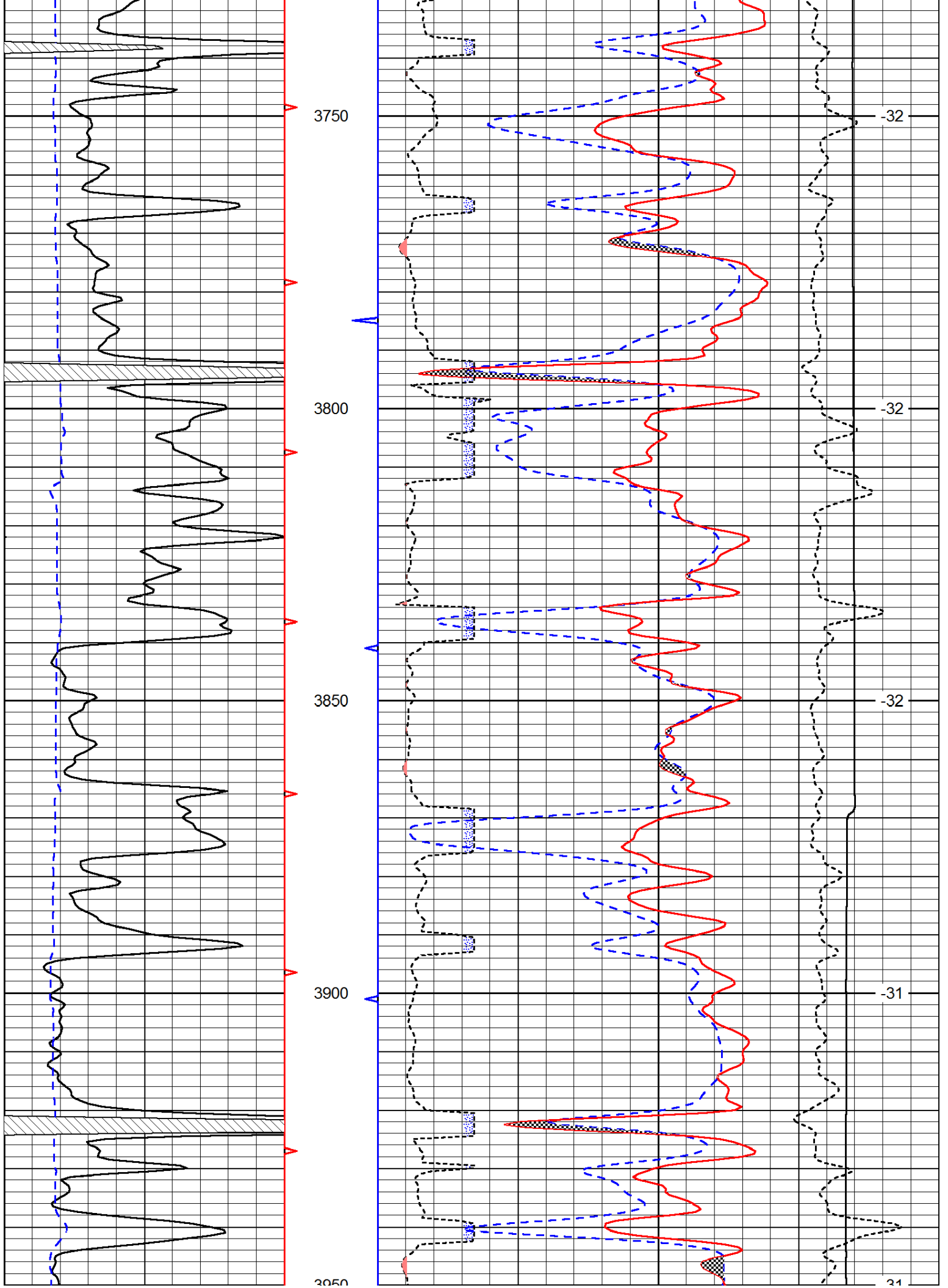
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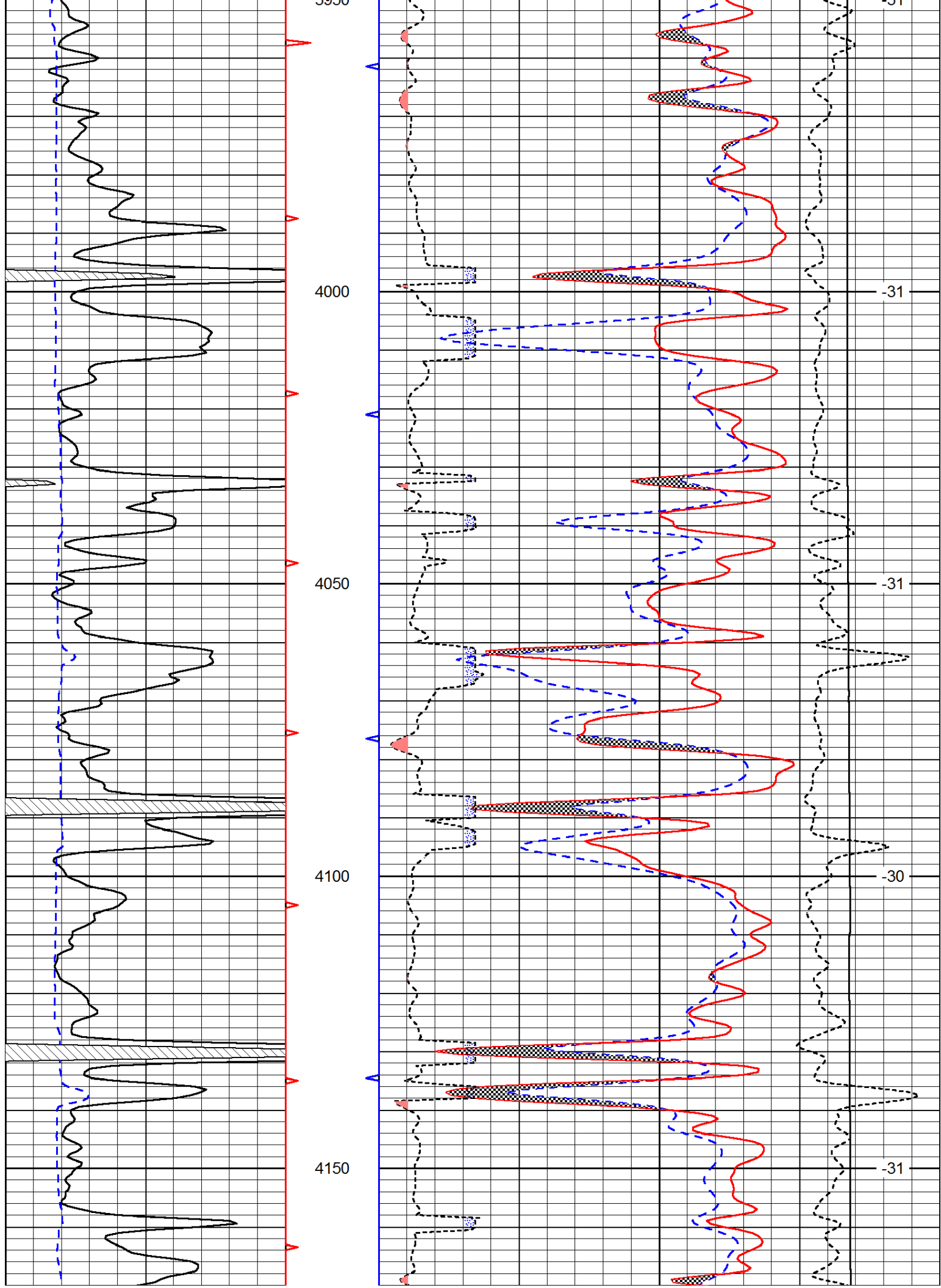


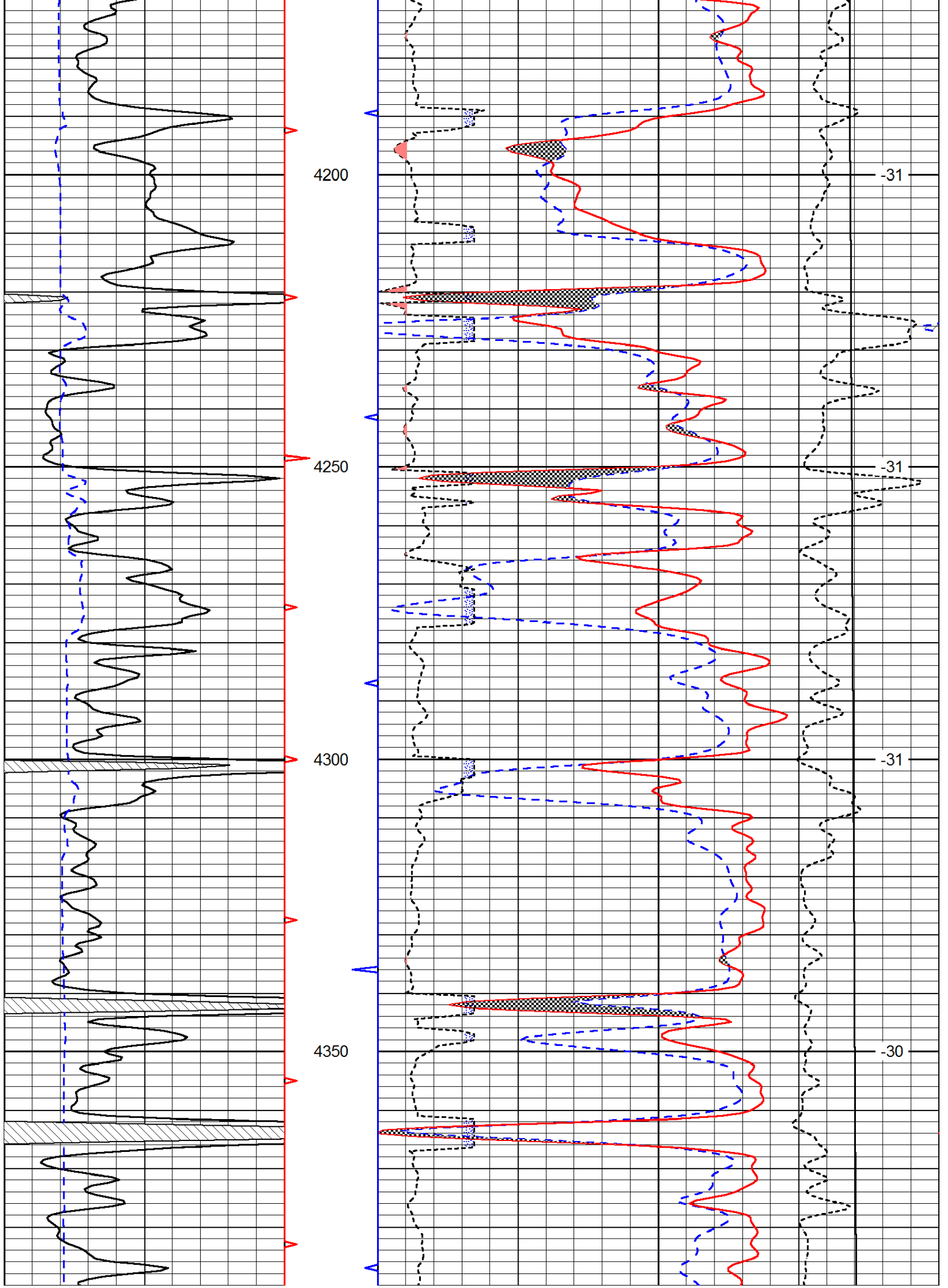


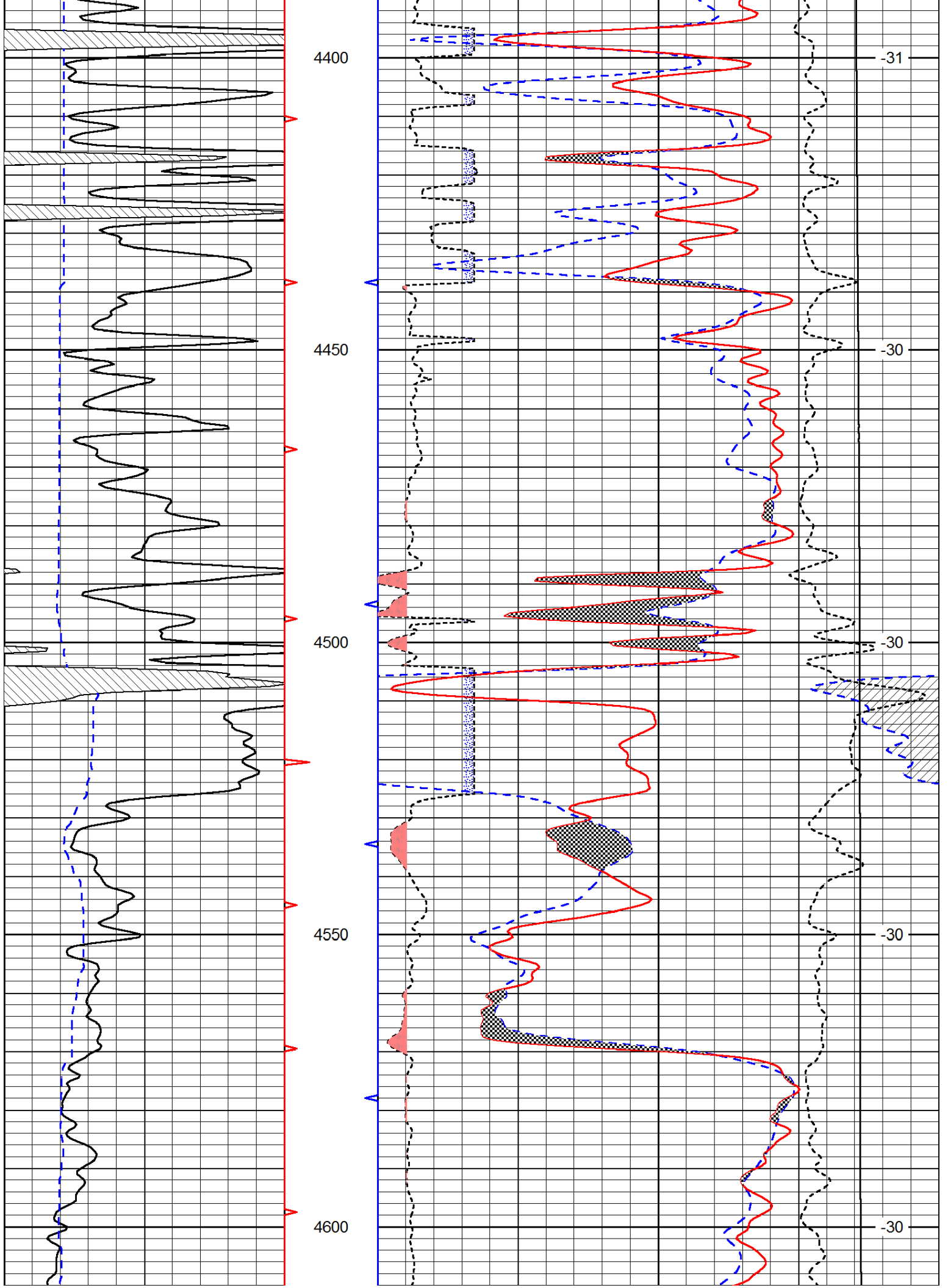


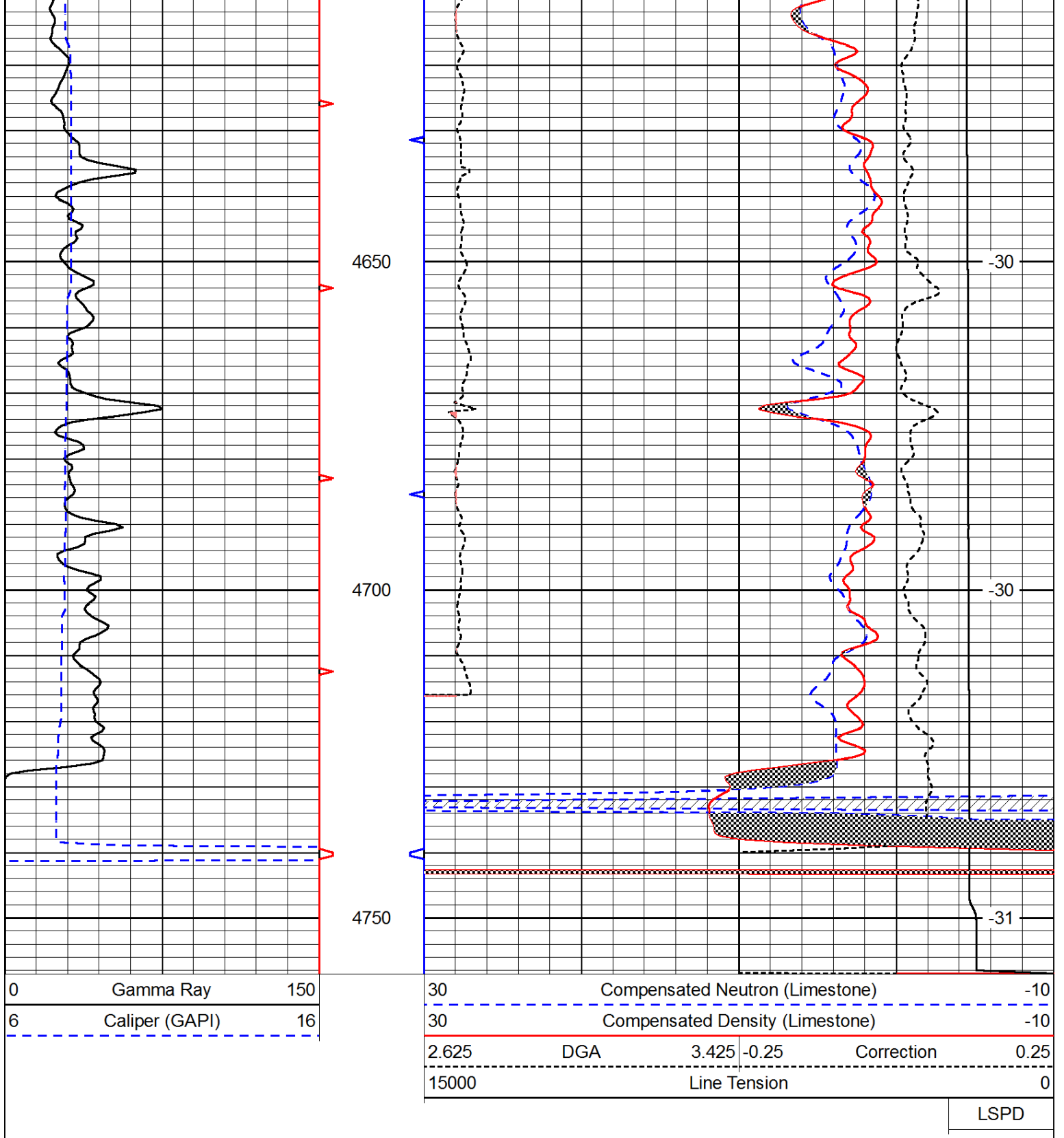












0	Gamma Ray	150
6	Caliper (GAPI)	16

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