



Pioneer Energy Services

Dual Compensated Porosity Log

15-095-22,292-00-00

API No.

Company **Messenger Petroleum, Inc.**

Well **Merven #1**

Field **Willowdale**

County **Kingman** State **Kansas**

Location **660' FNL & 1320' FWL**

Sec: **15** Twp: **29S** Rge: **9W**

Other Services
DIL
MEL

Elevation

K.B. 1700
D.F. 1691
G.L. 1691

Elevation 1691
9 Ft. Above Perm. Datum

Ground Level
Kelly Bushing

Log Measured From
Kelly Bushing

Drilling Measured From
Kelly Bushing

Date **1/7/2015**

Run Number **One**

Type Log **CNL / CDL**

Depth Driller **4568**

Depth Logger **4571**

Bottom Logged Interval **4550**

Top Logged Interval **2300**

Type Fluid In Hole **Chemical**

Salinity, PPM CL **4000**

Density **9.3**

Level **Full**

Max. Rec. Temp. F **122**

Operating Rig Time **4 Hours**

Equipment -- Location **108 | Hays**

Recorded By **D. Fischer**

Witnessed By **Jon F. Messenger**

Recorded By **Jon F. Messenger**

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Borehole Record

Casing Record

Run No	Bit	From	To	Size	Wgt.	From	To
1	12.25	00	223	8.625	24#	00	223
2	7.875	223	4568				

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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

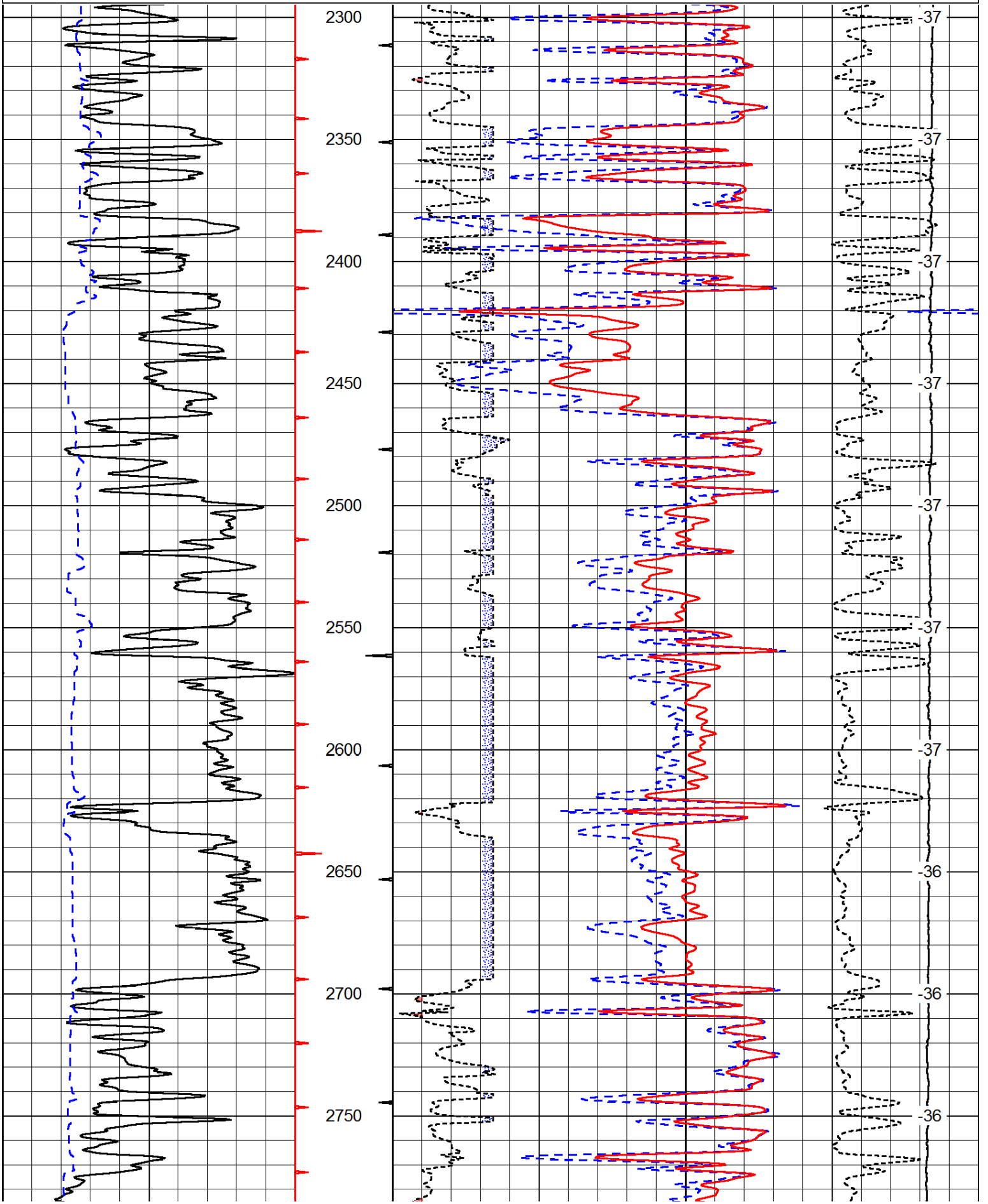
Thank you for using Pioneer Energy Services
www.pioneeres.com
 785 625 3858

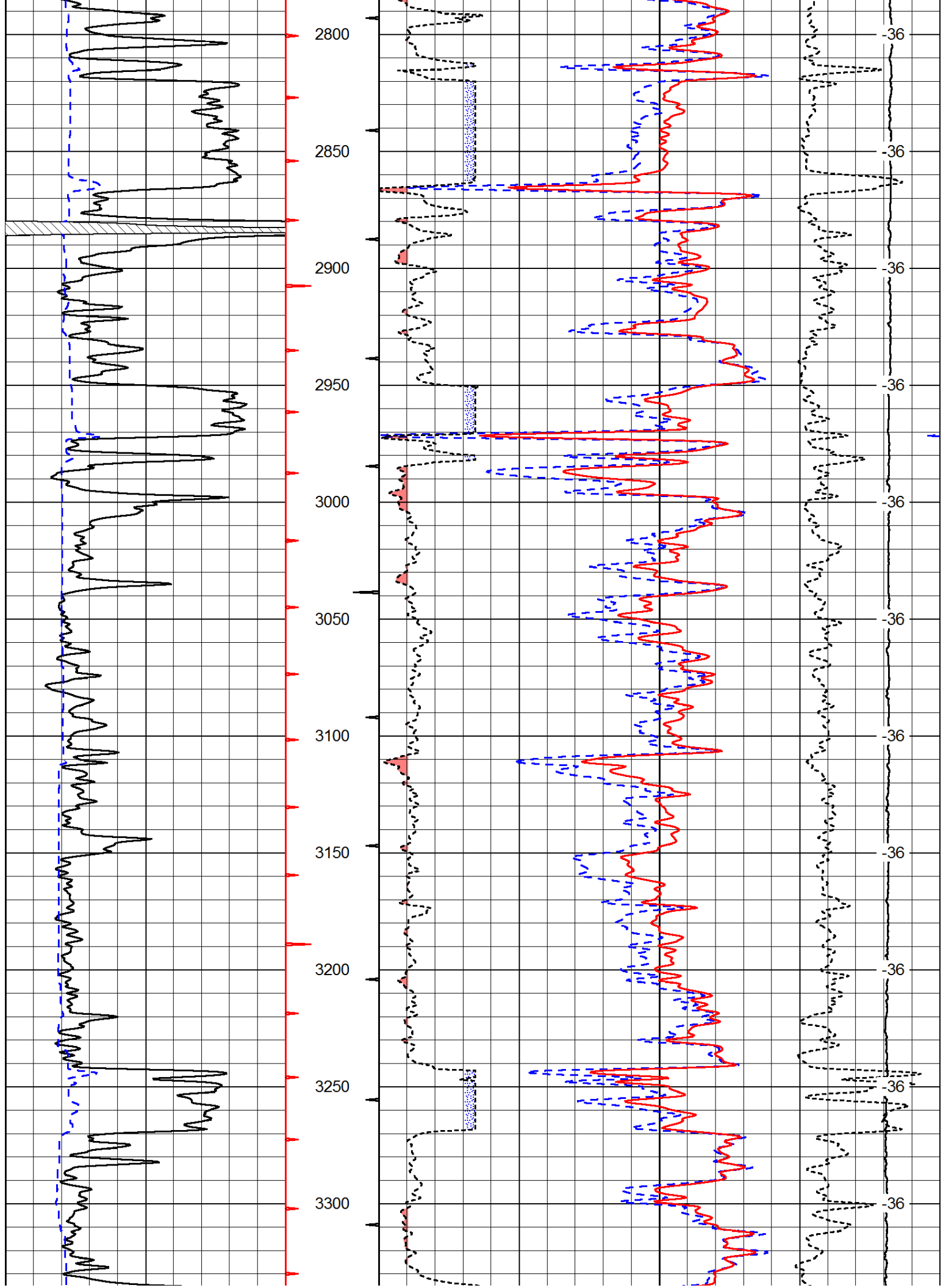
Hwy. 400 & Zenda Black Top, 8 South, 3/4 West, South Into.

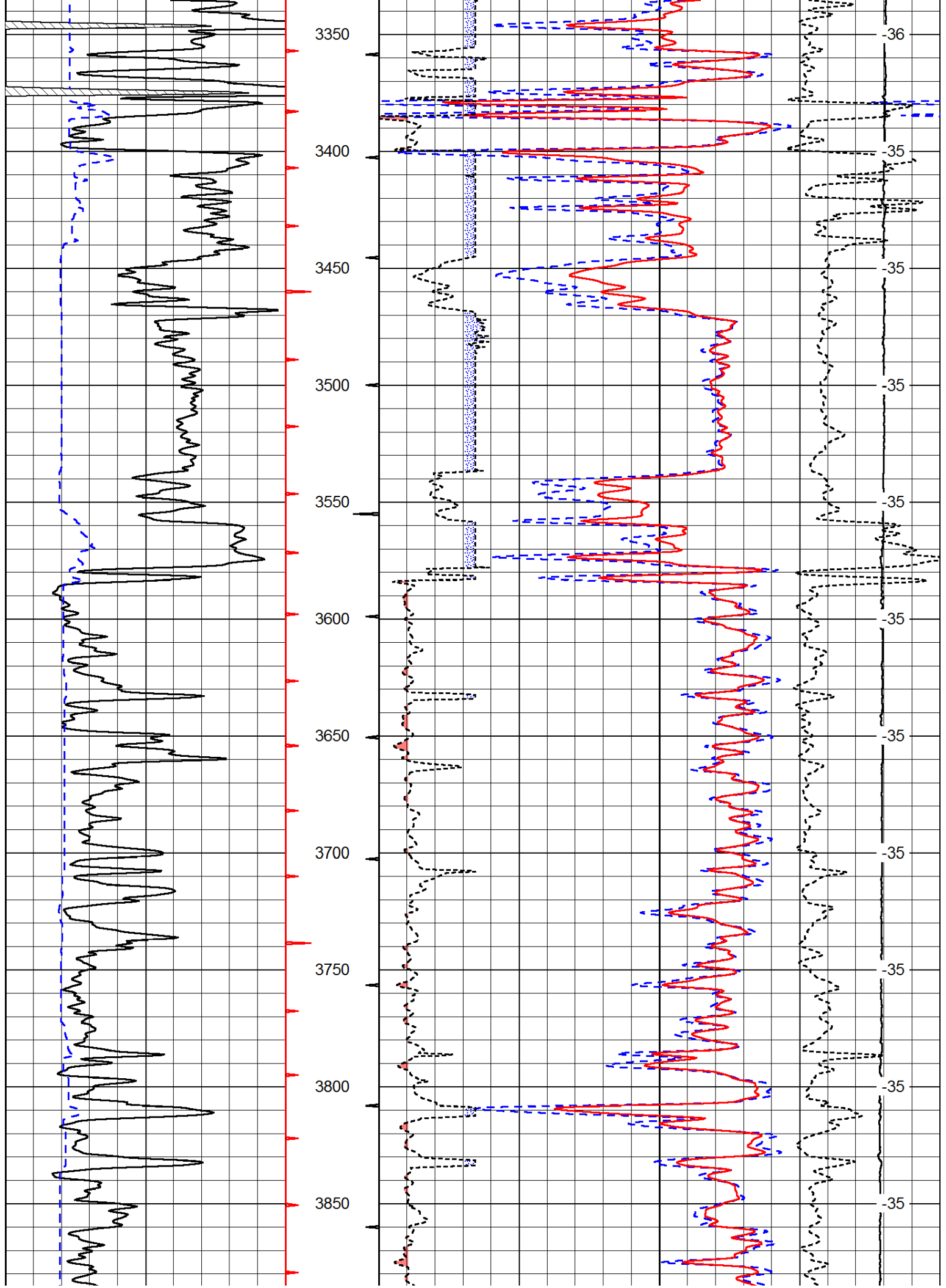
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 Presentation Format: cdl
 Dataset Creation: Wed Jan 07 07:12:25 2015
 Charted by: Depth in Feet scaled 1:600

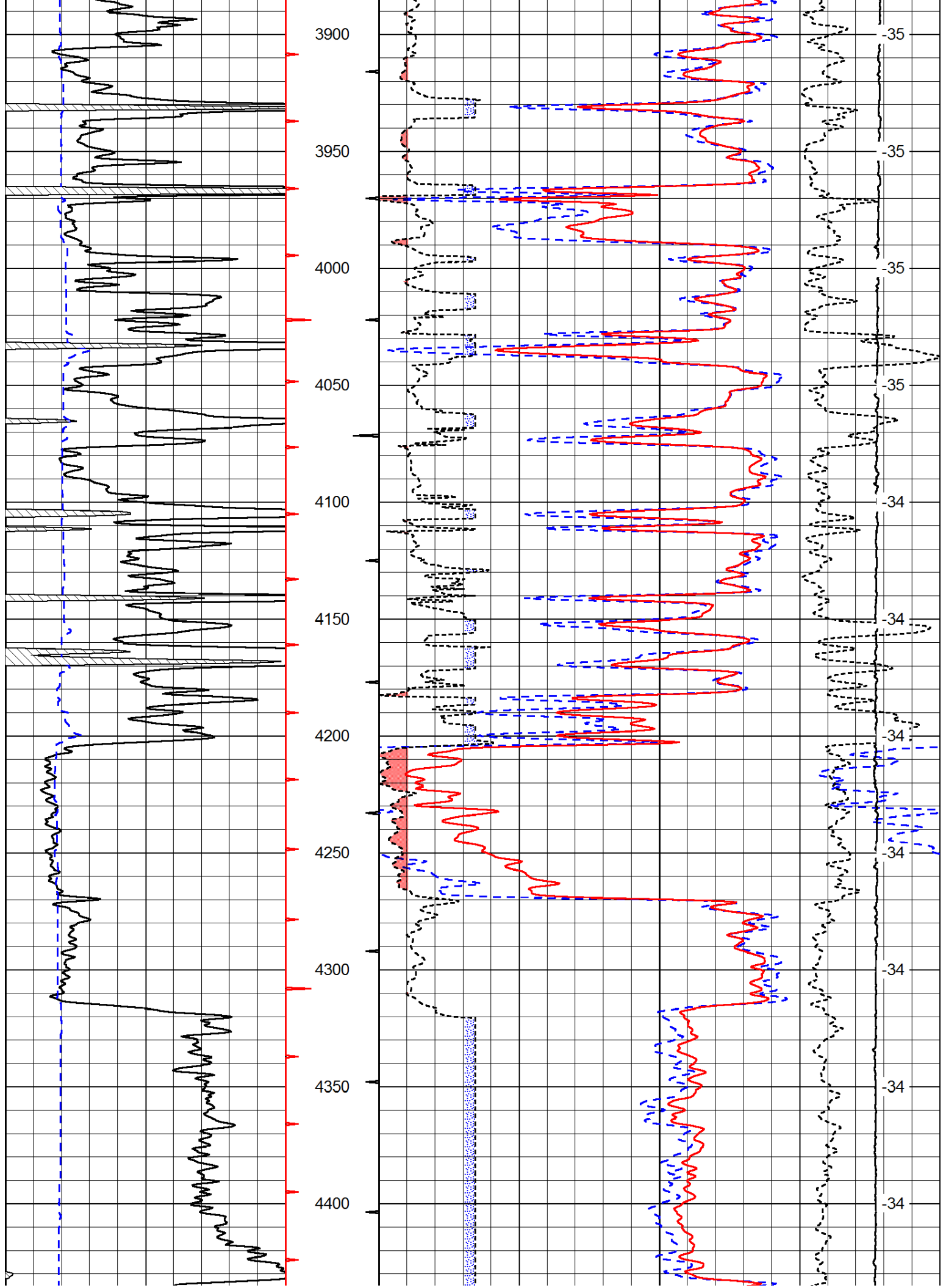
0	Gamma Ray	150
6	Caliper (GAPI)	16

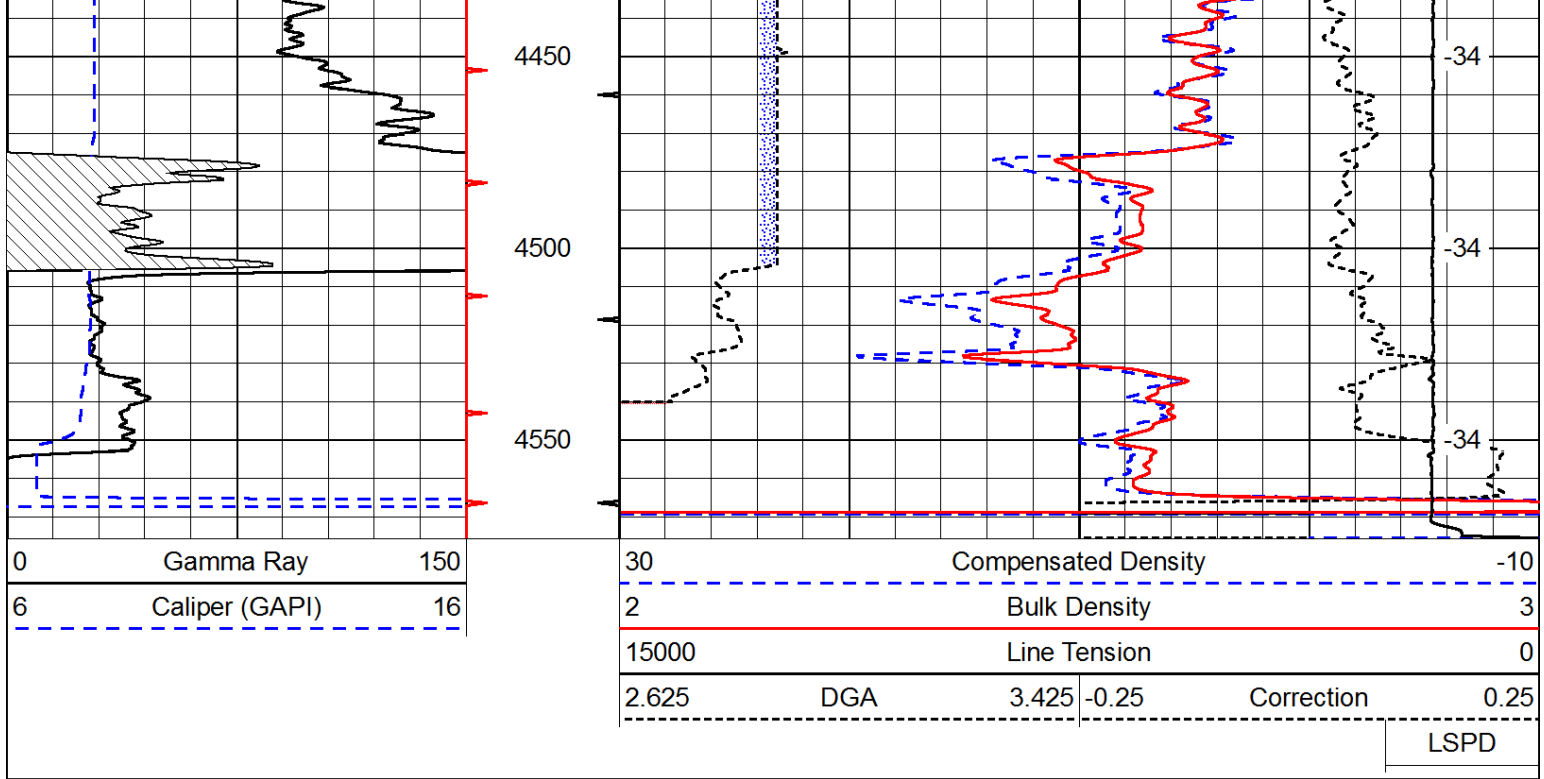
30	Compensated Density		-10
2	Bulk Density		3
15000	Line Tension		0
2.625	DGA	3.425	-0.25
Correction			0.25



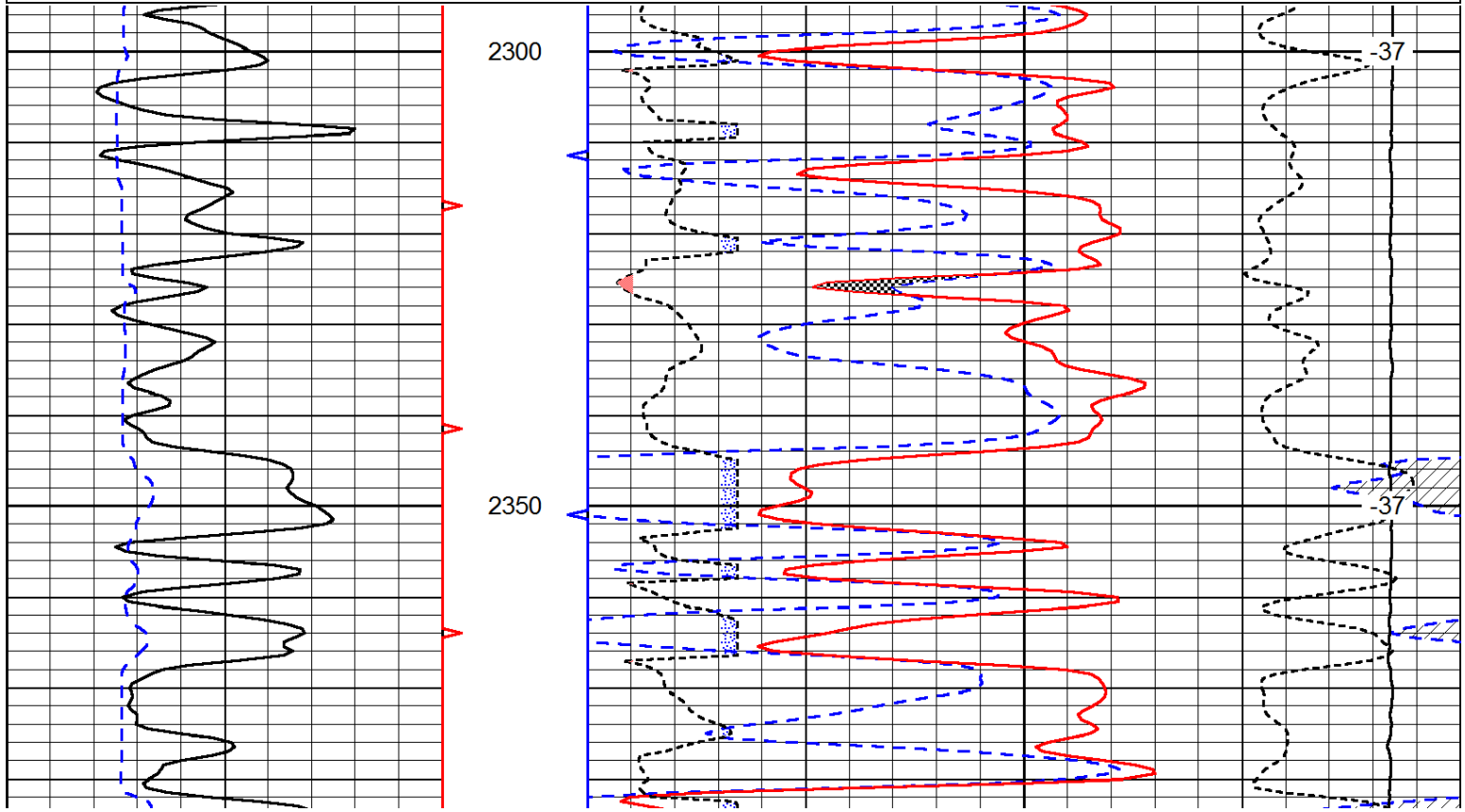
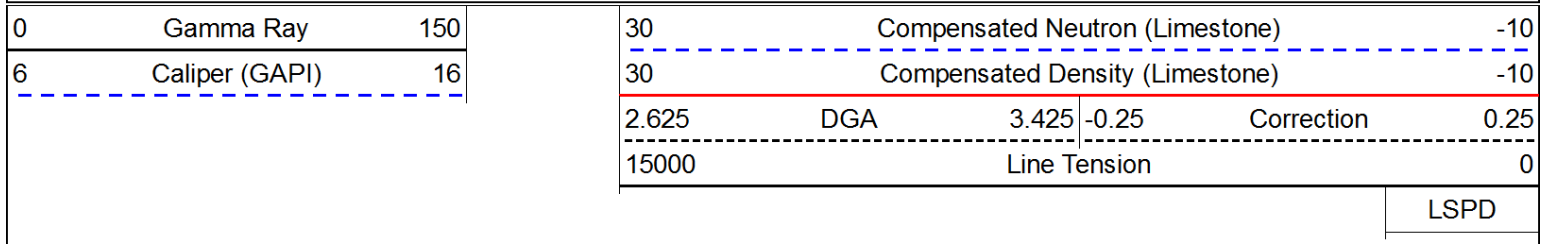


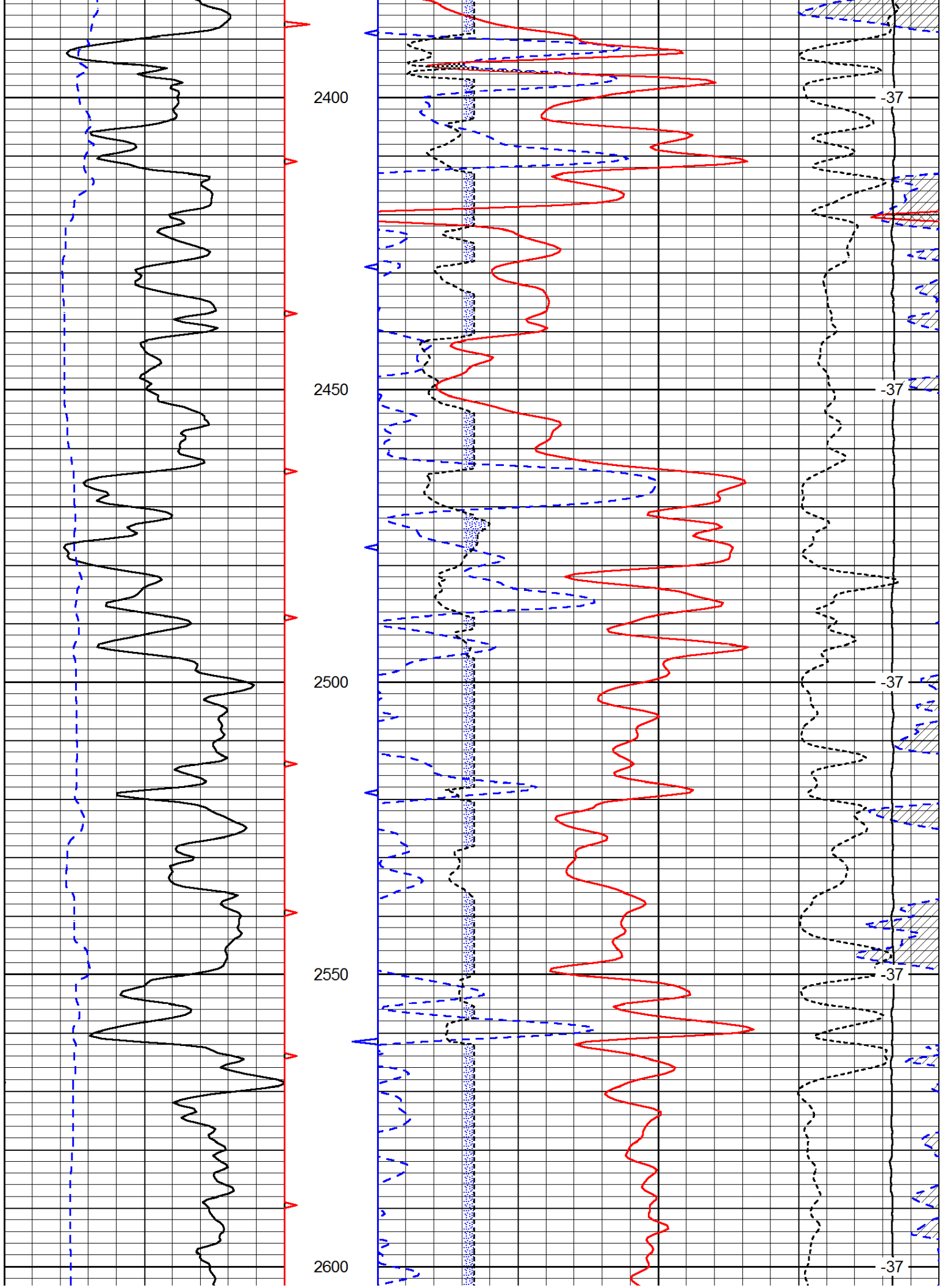


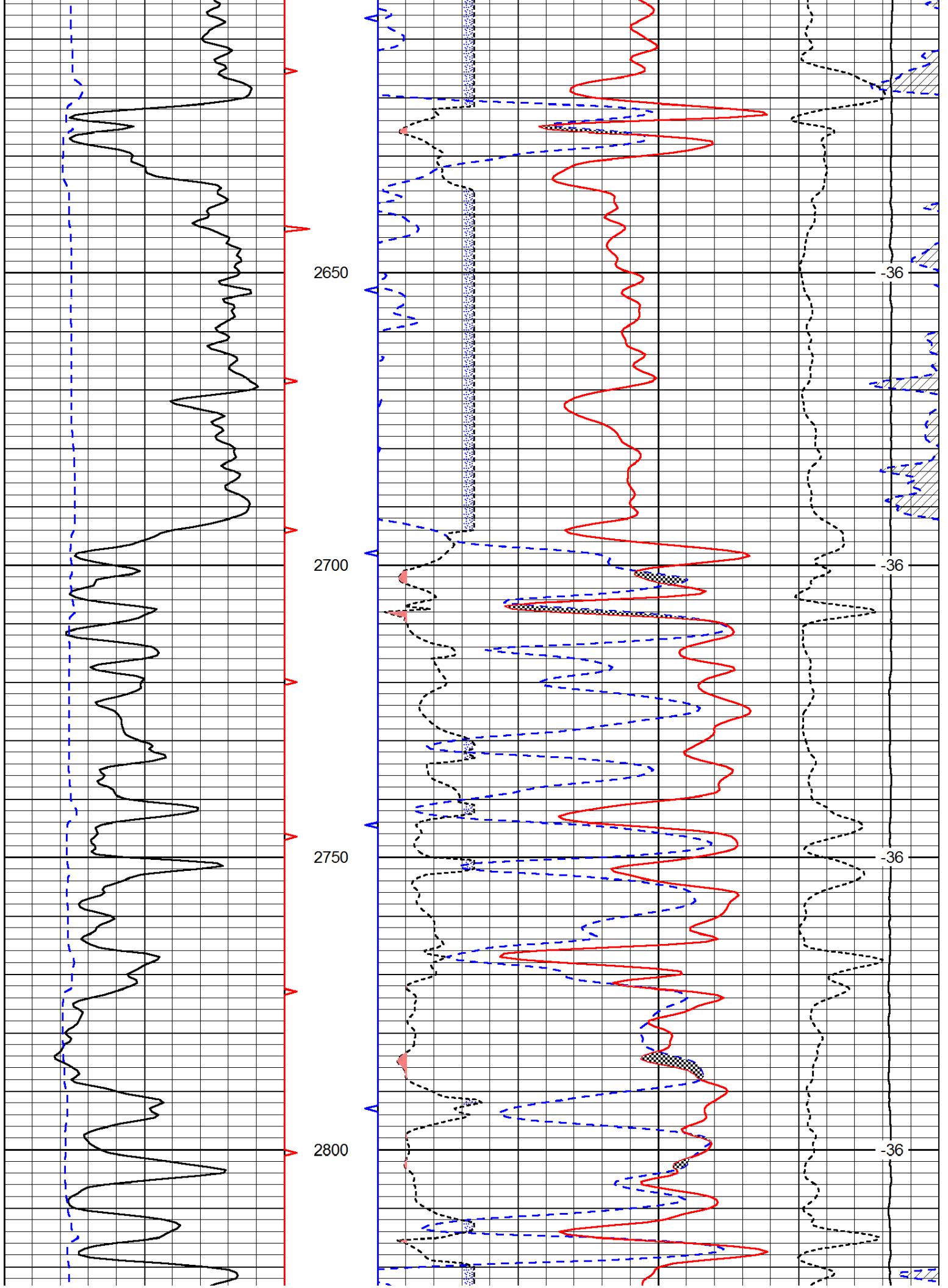


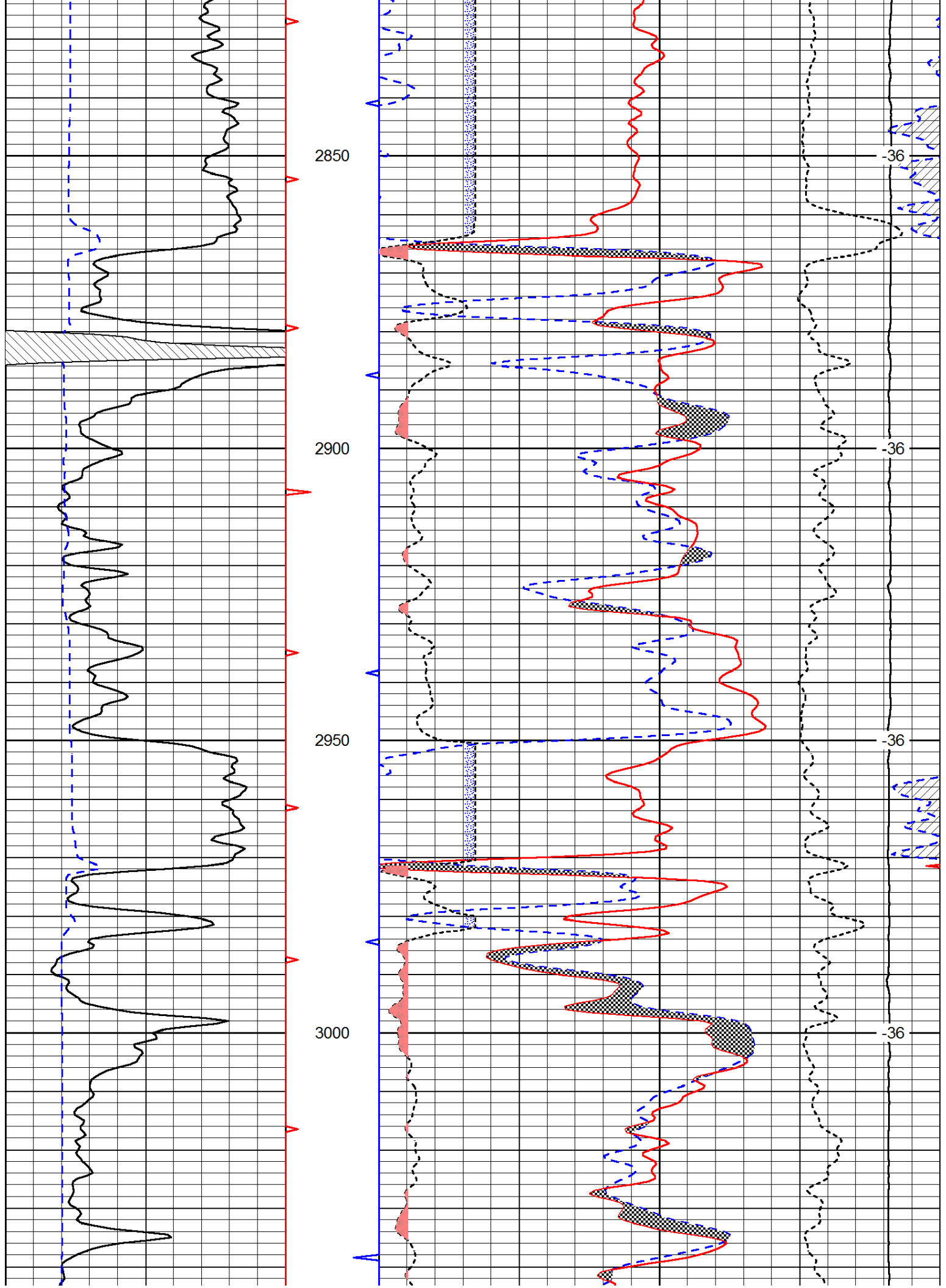


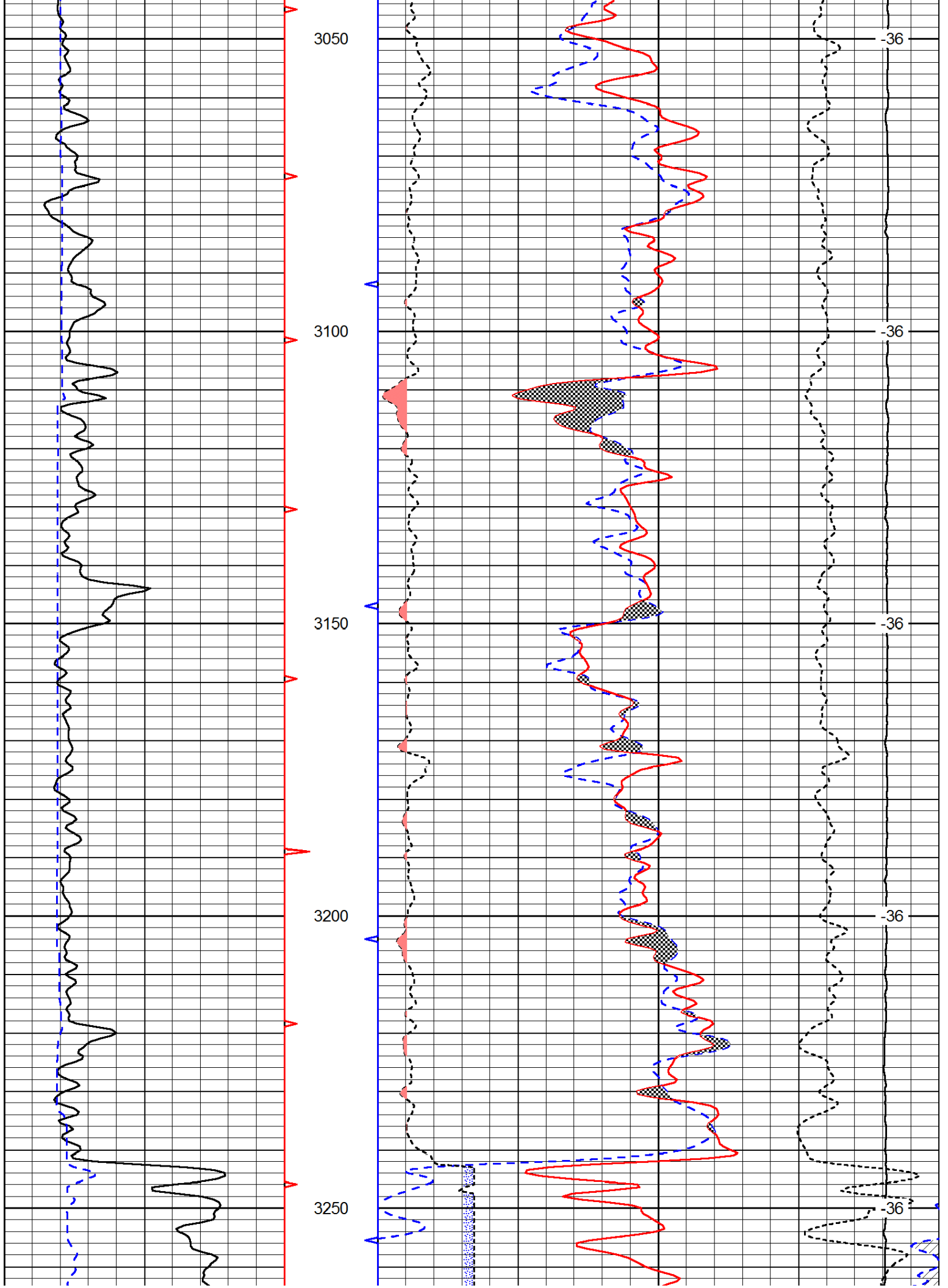
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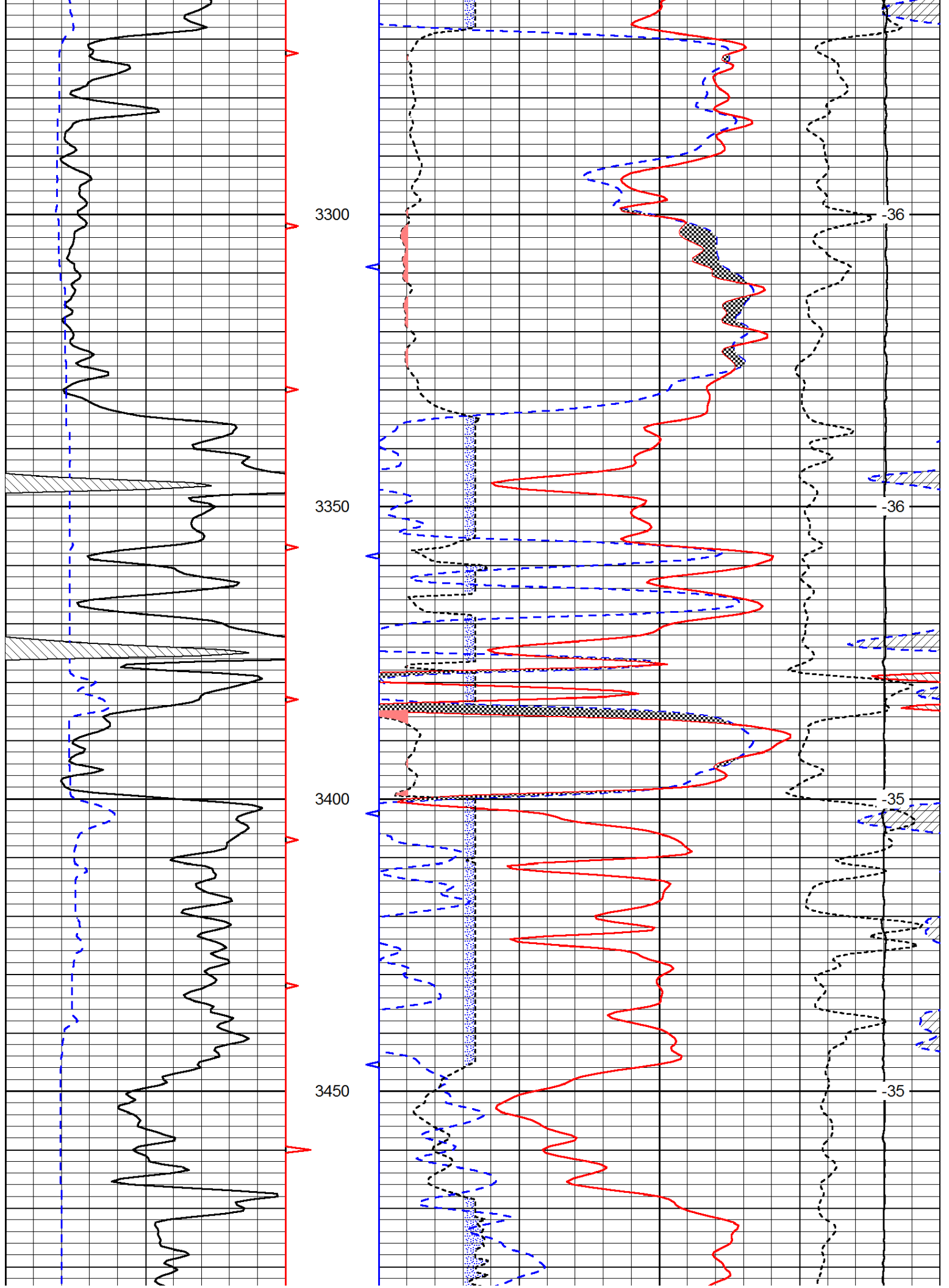


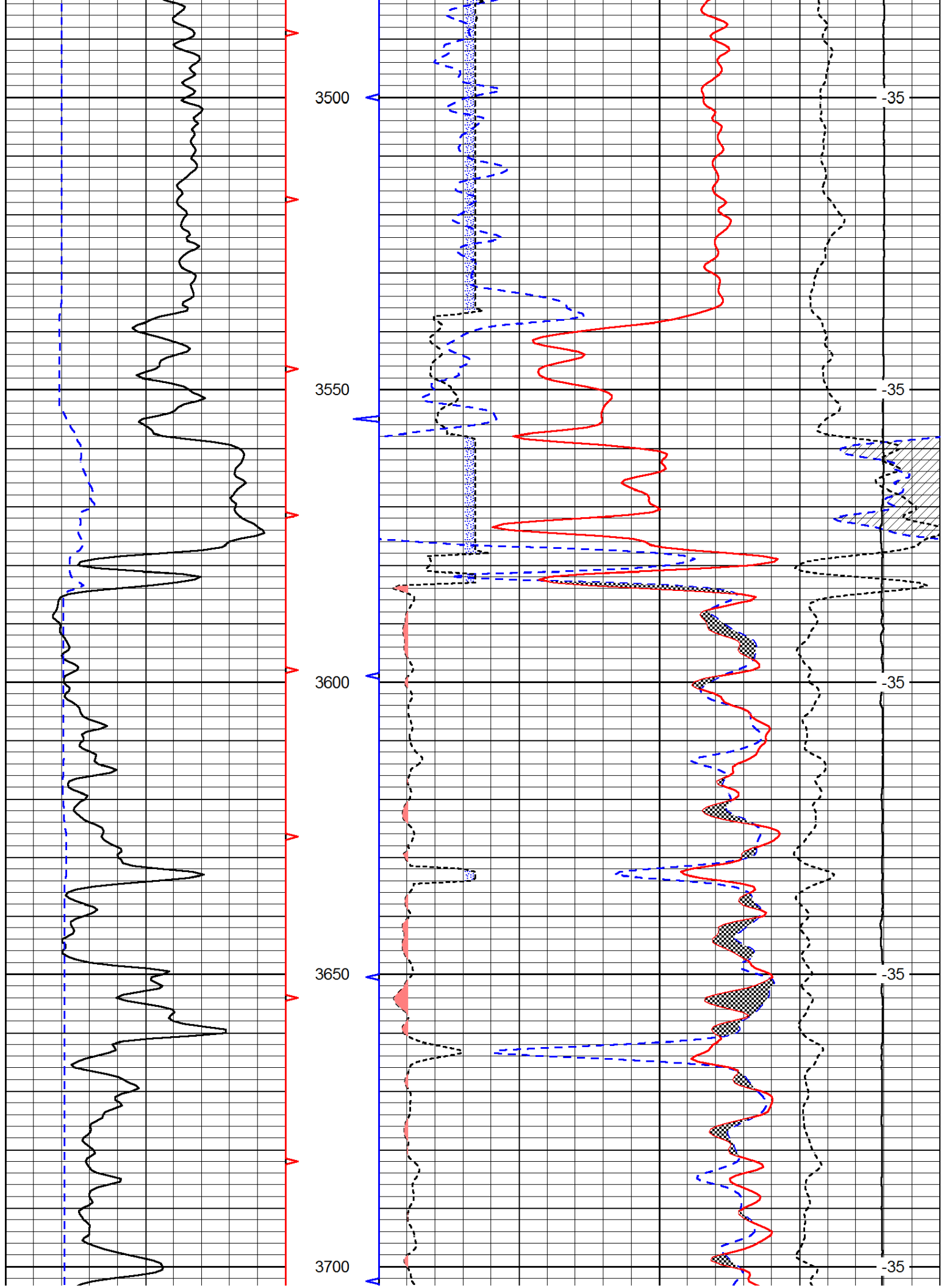


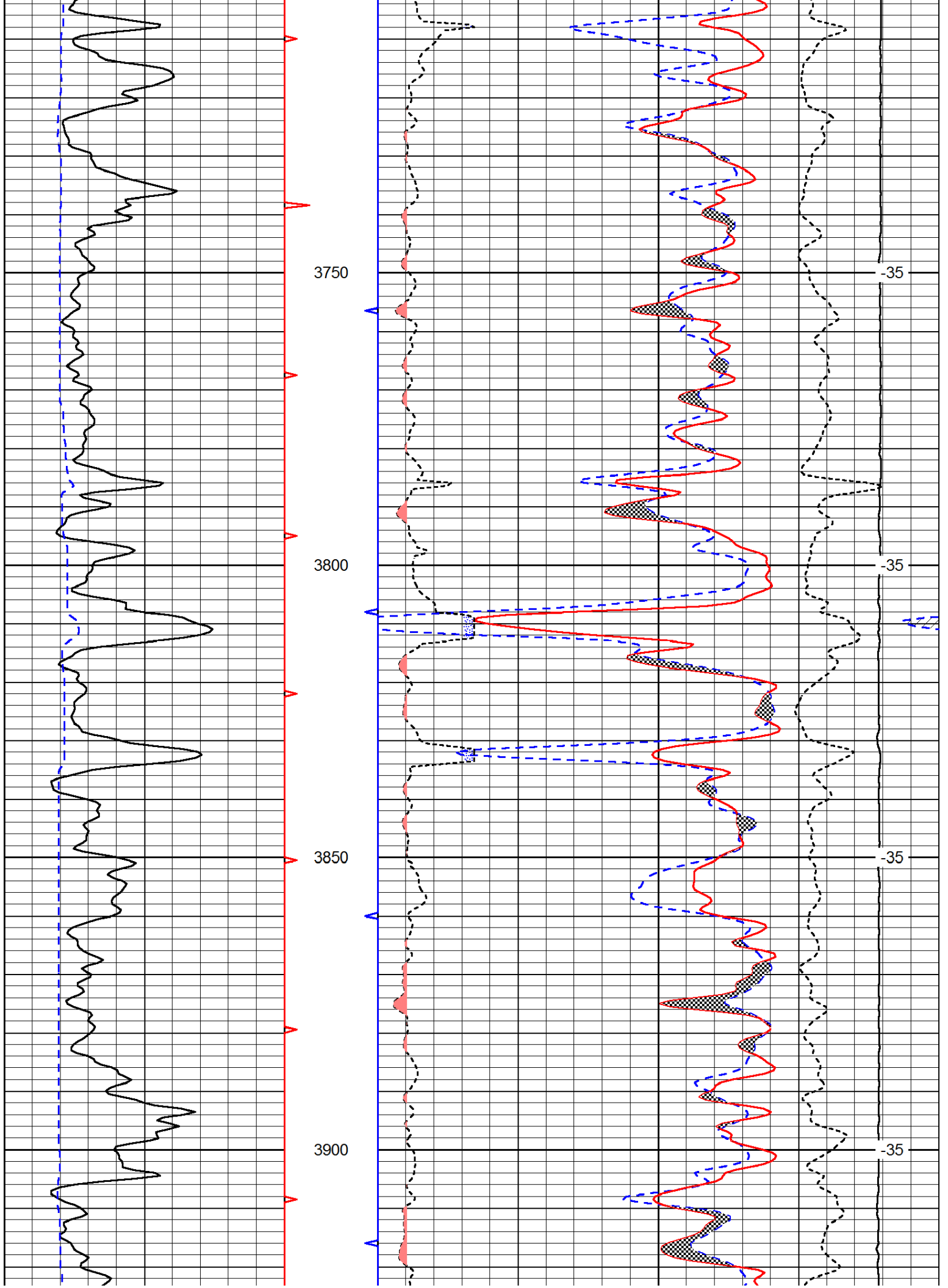


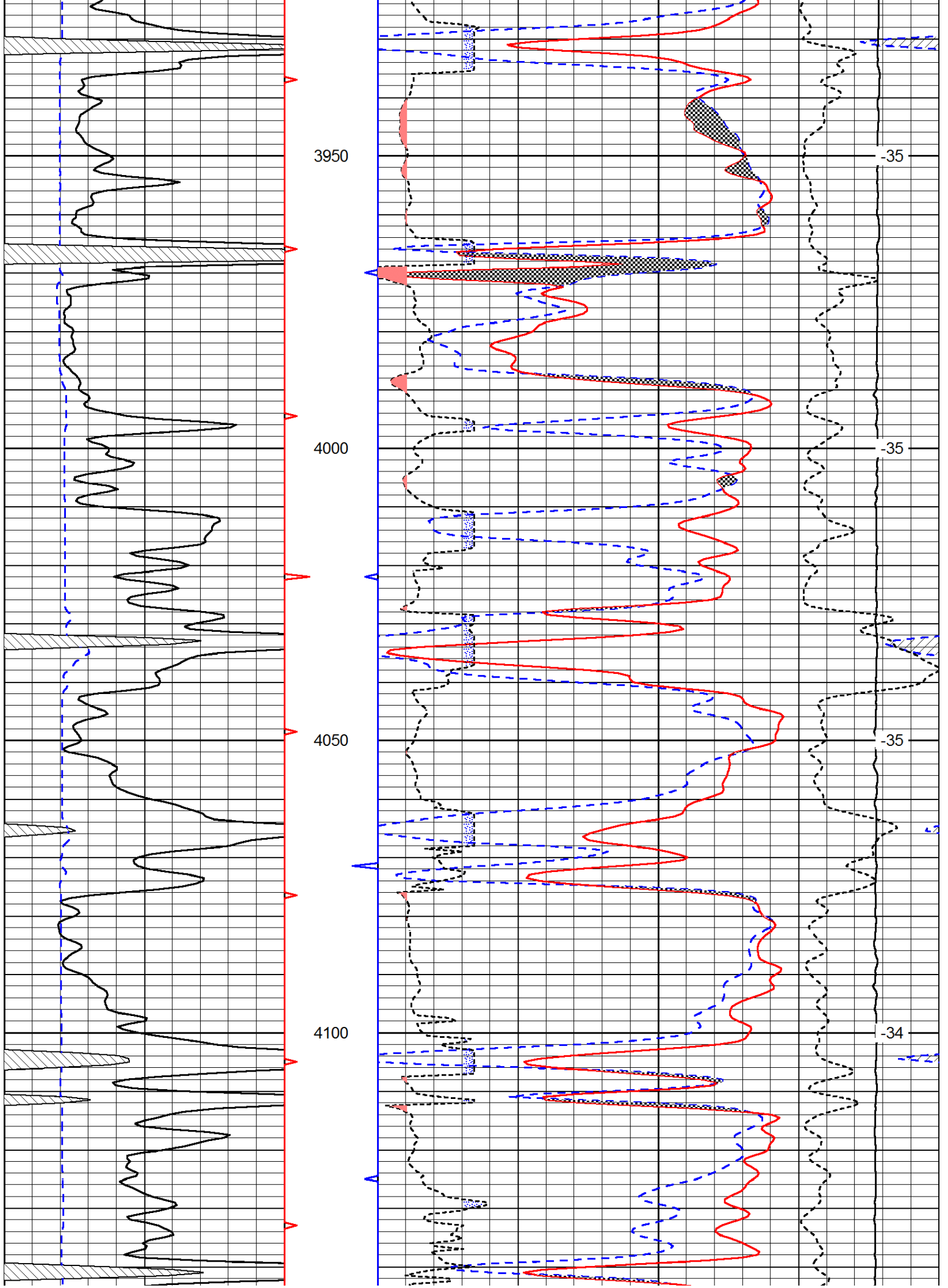


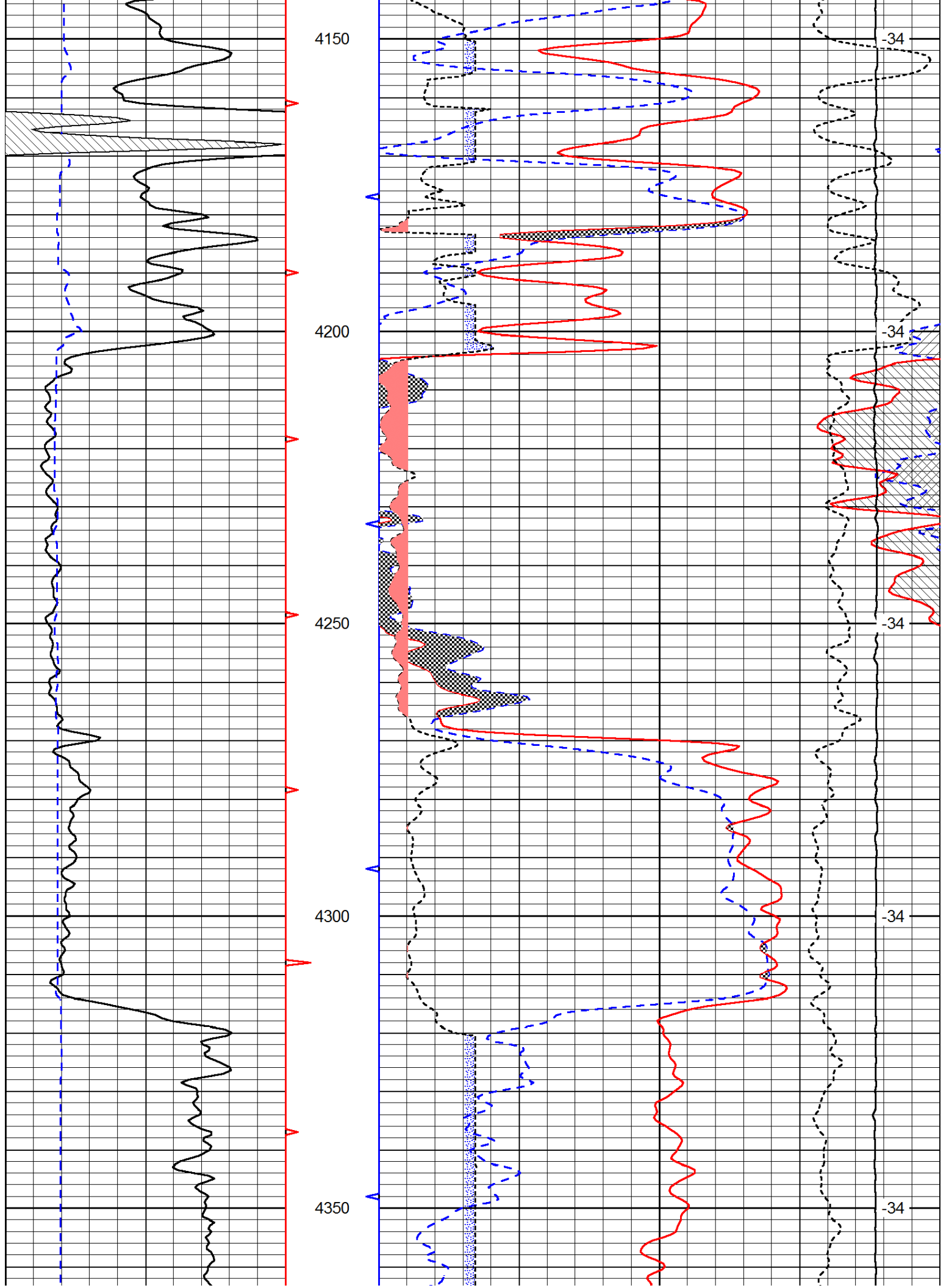


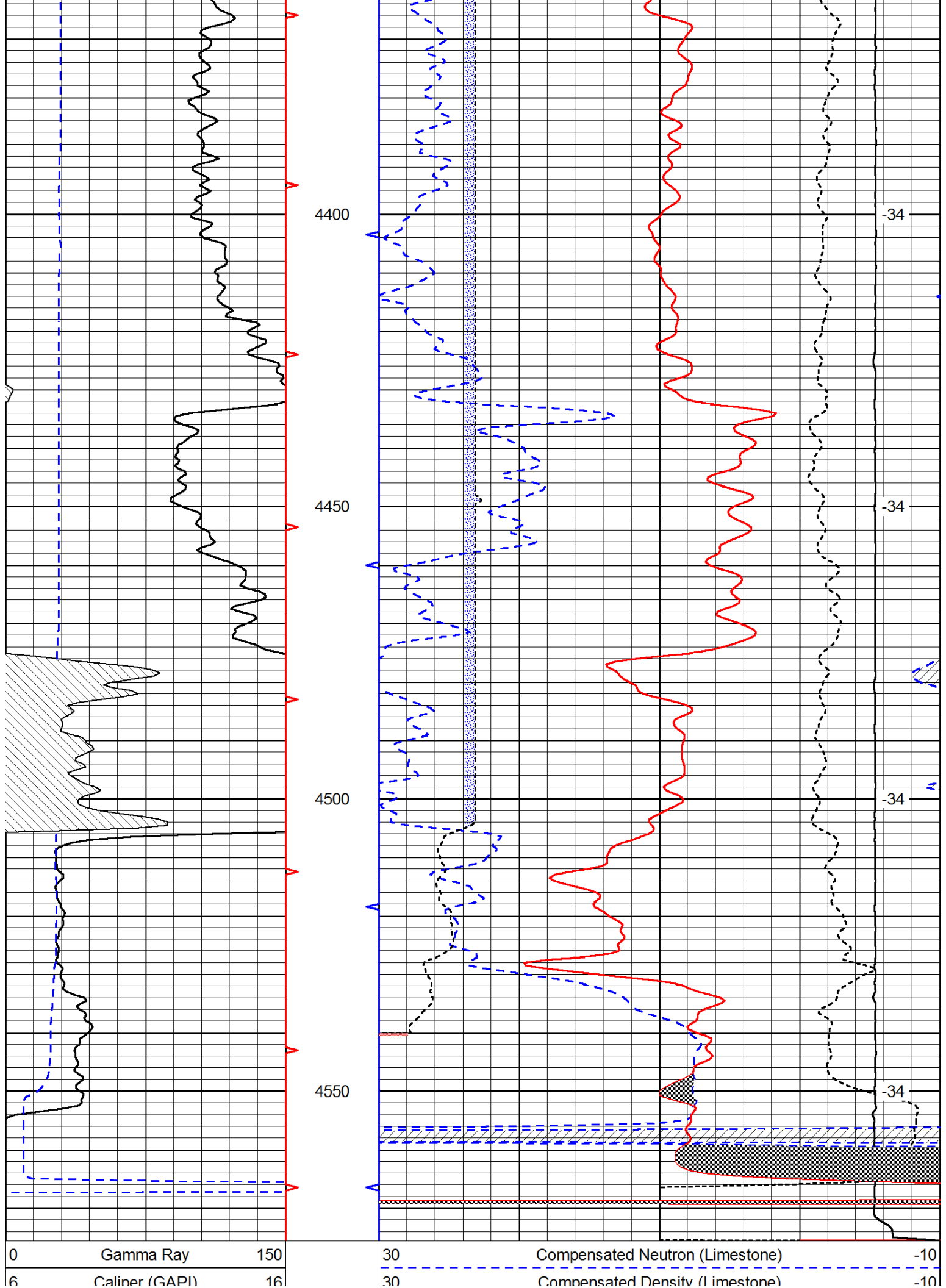












0 Gamma Ray 150
 6 Caliner (GAPI) 16

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	