



Pioneer Energy Services

Dual Compensated Porosity Log

API No.	15-189-22,827-00-00		
Company	Palmer Oil, Inc.		
Well	Laura #21-4		
Field	Gentzler North		
County	Stevens		
State	Kansas		
Location	SW SE NE SE 1600' FSL & 500' FEL		
Sec: 21	Twp: 32S	Rge: 37W	
Other Services	DILMEL		

Permanent Datum	Ground Level	Elevation 3141
Log Measured From	Kelly Bushing	13 Ft. Above Perm. Datum
Drilling Measured From	Kelly Bushing	
Date	12/31/2013	

Run Number	One
Type Log	CNL / CDL
Depth Driller	6500
Depth Logger	6486
Bottom Logged Interval	6465
Top Logged Interval	4700
Type Fluid In Hole	Chemical
Salinity, PPM CL	2400
Density	9.35
Level	Full
Max. Rec. Temp. F	141
Operating Rig Time	5 1/2 Hours
Equipment -- Location	15 Hays
Recorded By	D Kerr
Witnessed By	Wyatt Urban

Borehole Record				Casing Record			
Run No.	Bit	From	To	Size	Wgt.	From	To
One	12.25	00	1755	8.625	23#	00	1755
Two	7.875	1755	TD				

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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 Log-Tech, Inc.
(785) 625-3858

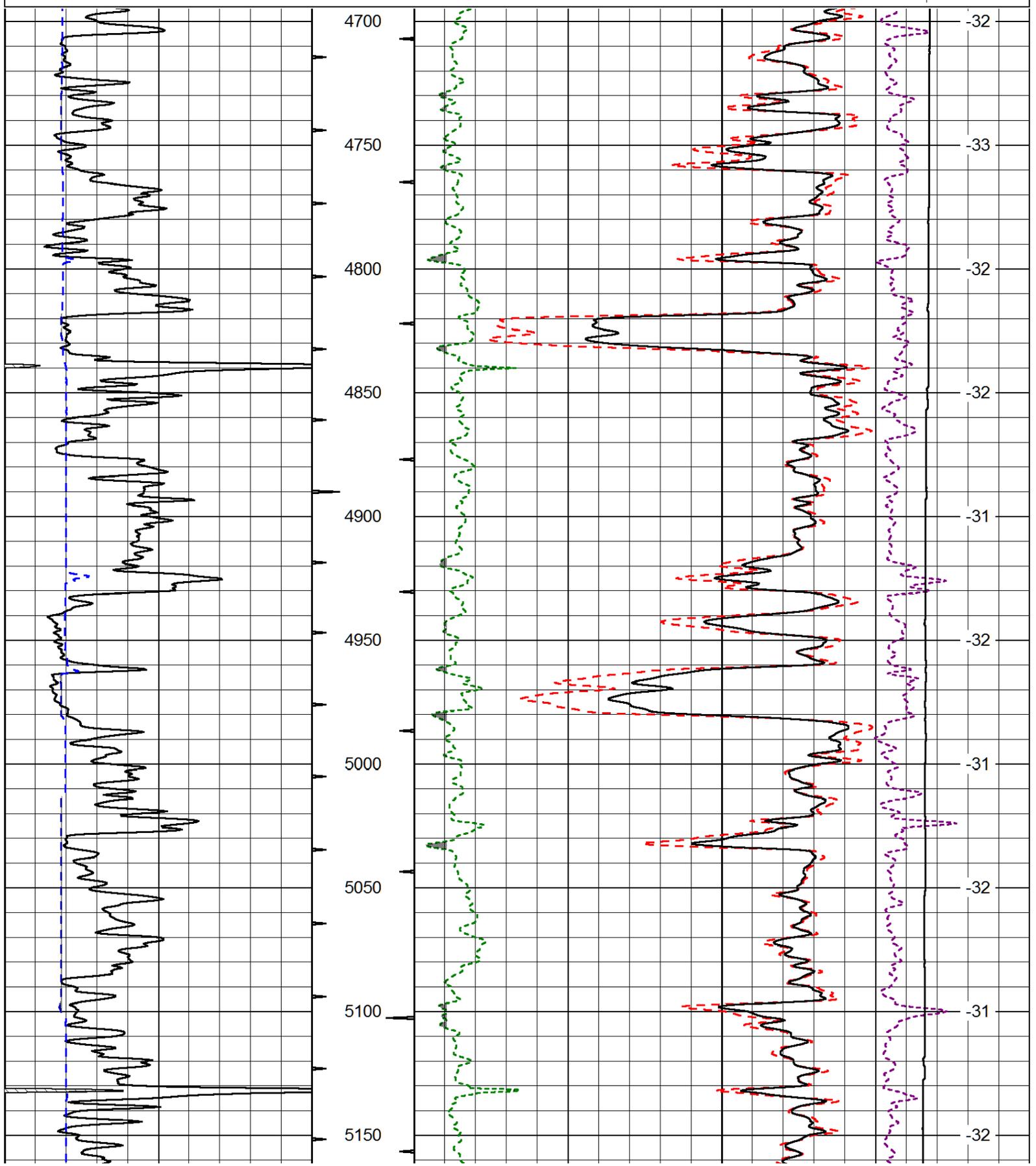
Hugoton KS, 3 North,
1/2 West, North/East Into

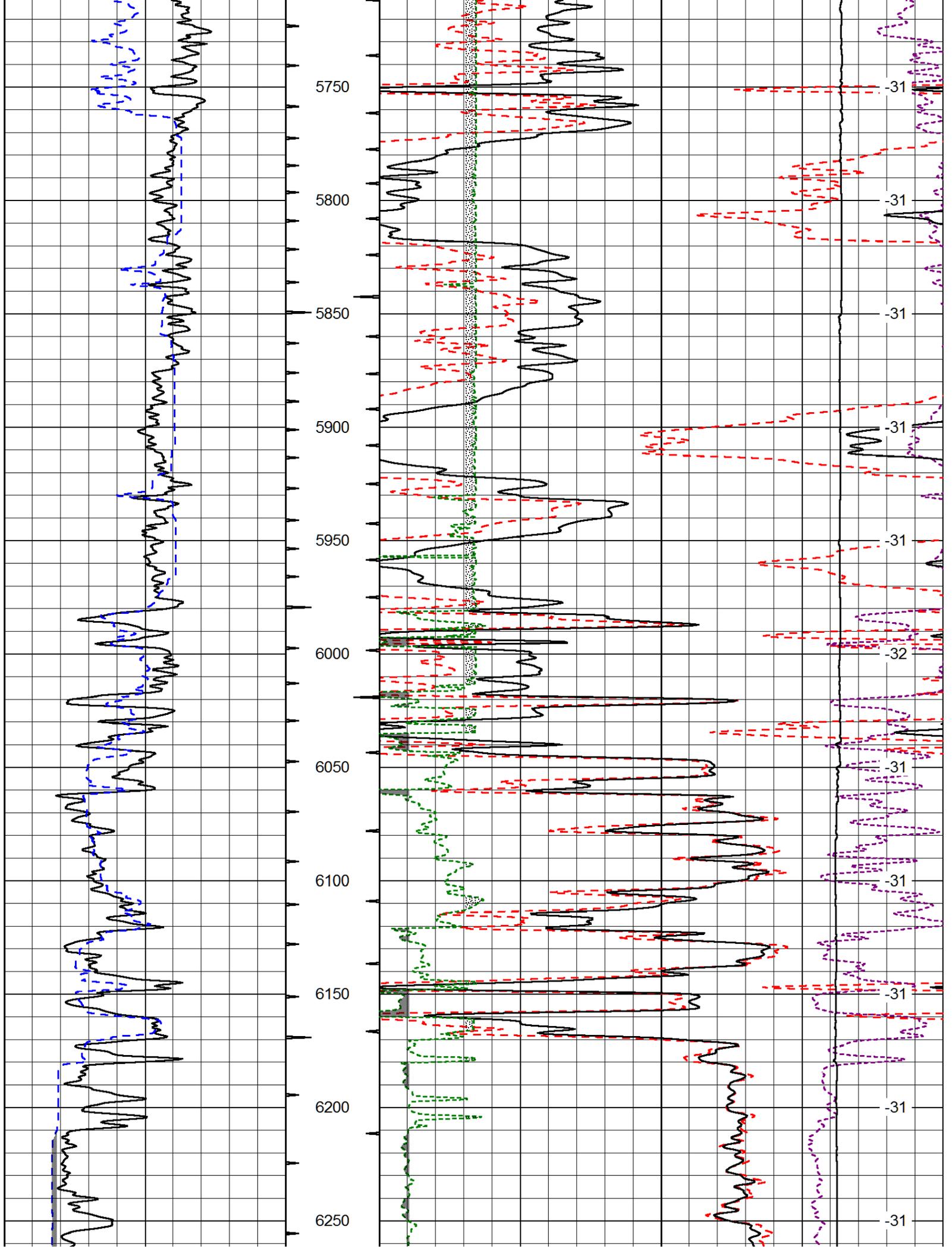
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 Charted by: Depth in Feet scaled 1:600

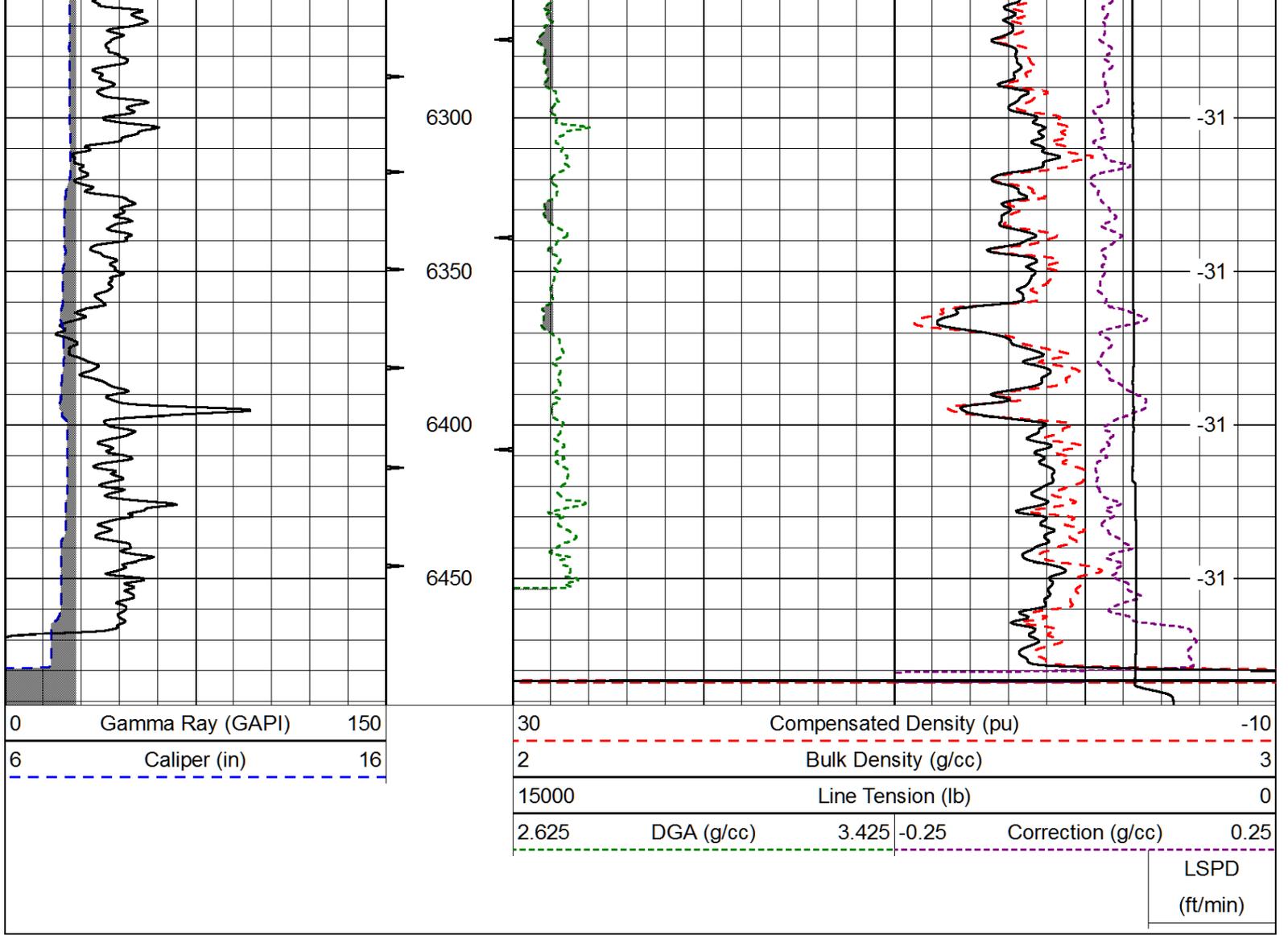
0	Gamma Ray (GAPI)	150
6	Caliper (in)	16

30	Compensated Density (pu)			-10	
2	Bulk Density (g/cc)			3	
15000	Line Tension (lb)			0	
2.625	DGA (g/cc)	3.425	-0.25	Correction (g/cc)	0.25

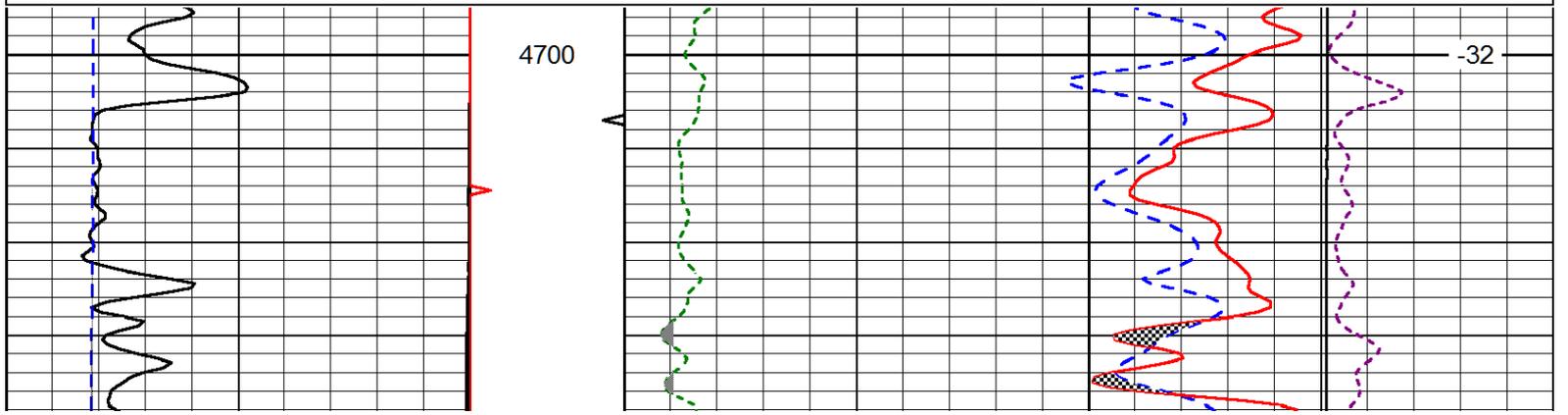
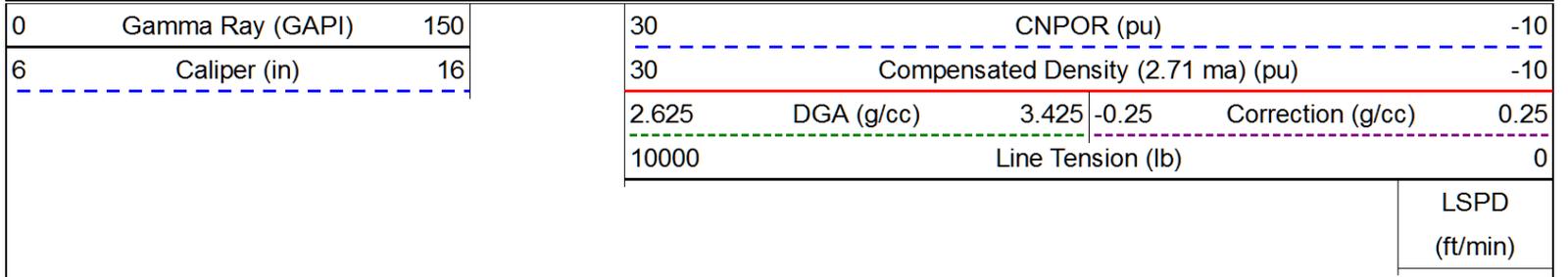
LSPD
(ft/min)

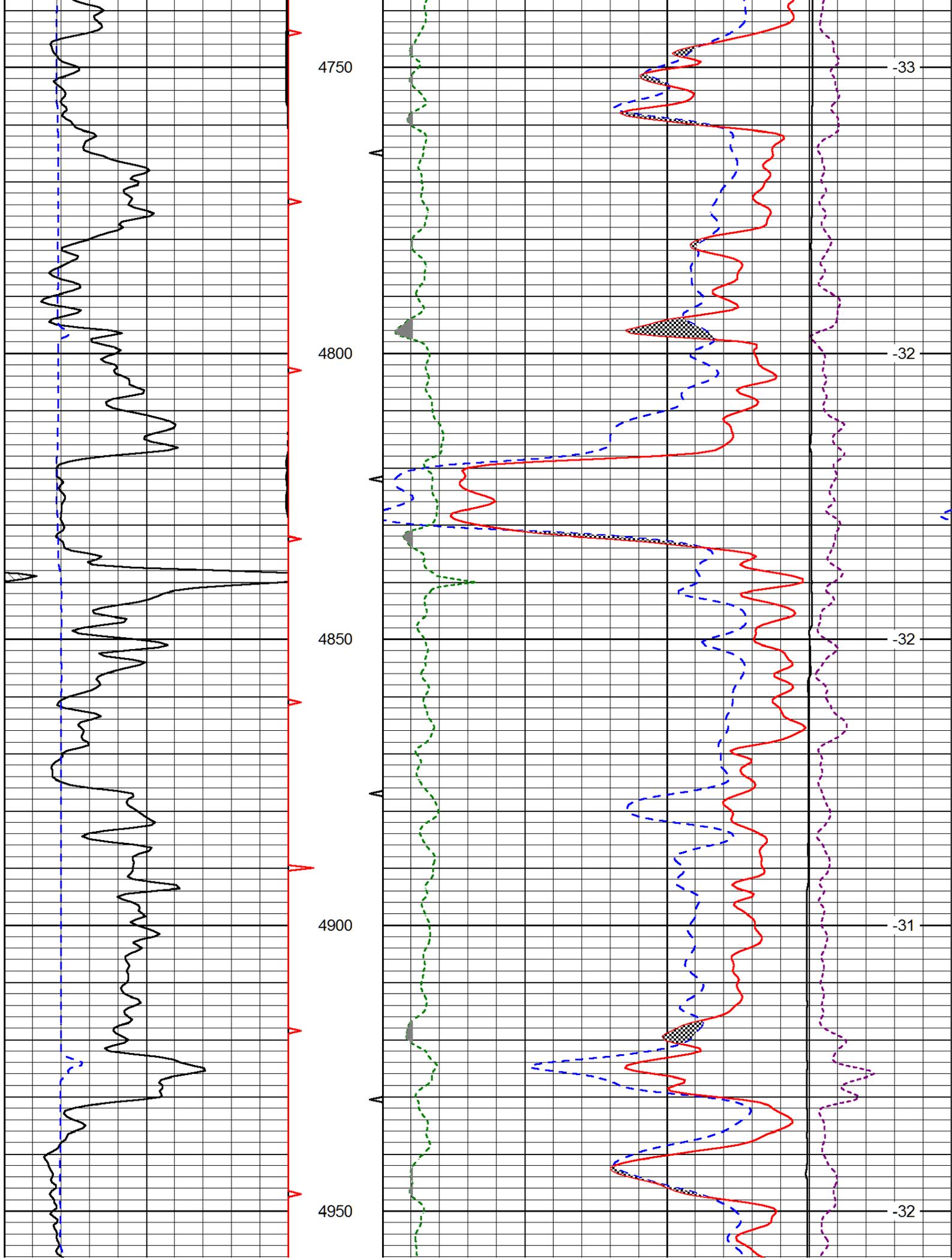


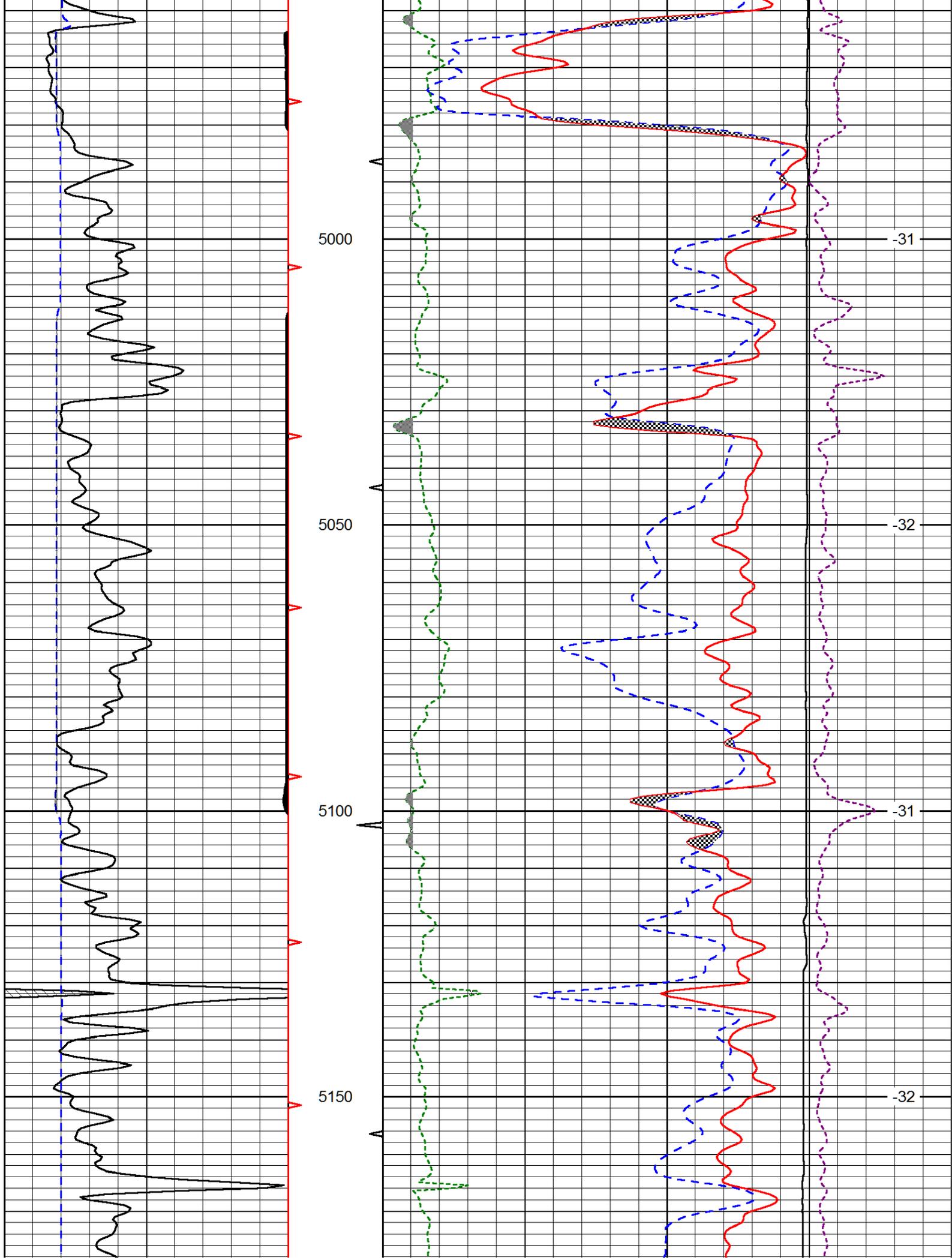


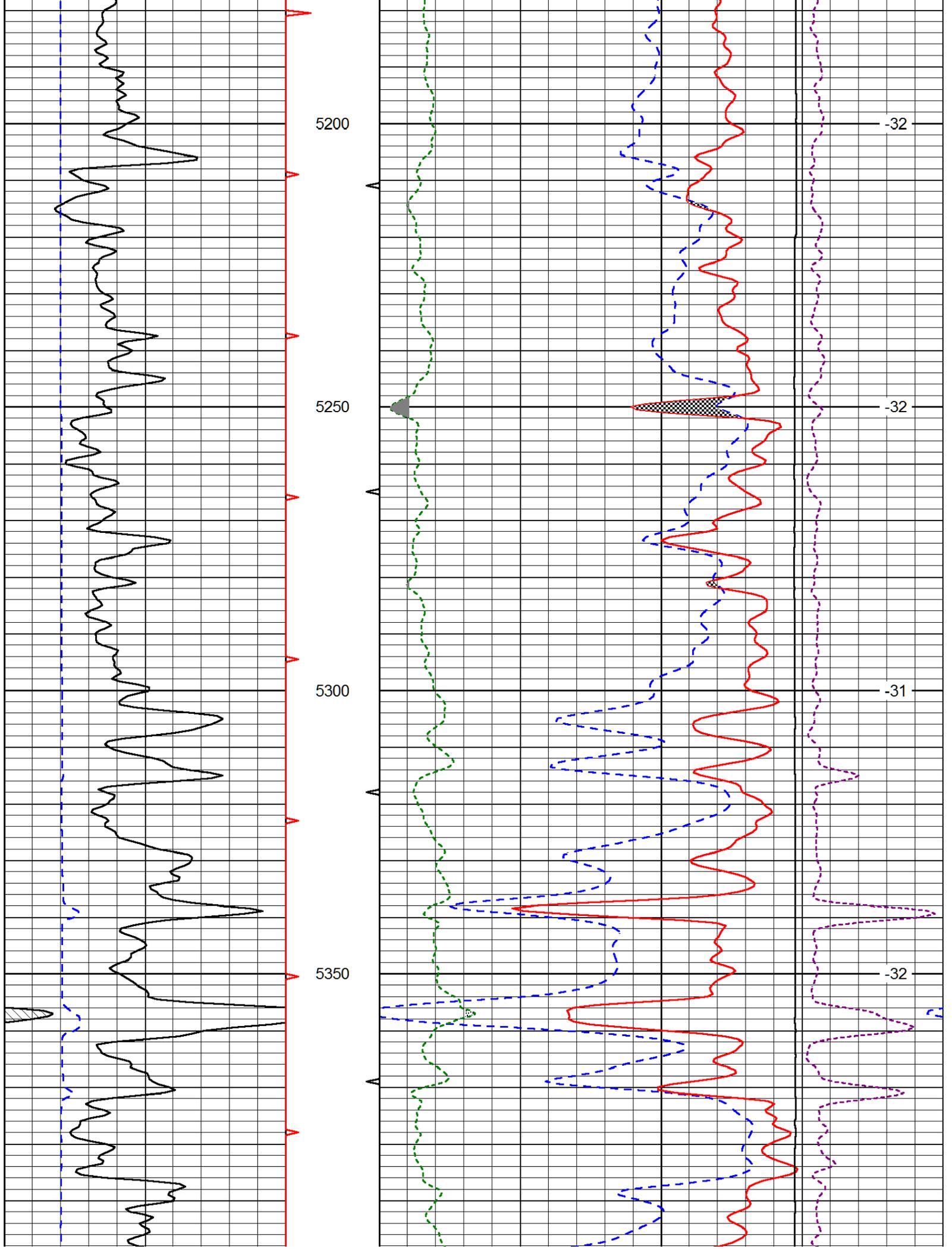


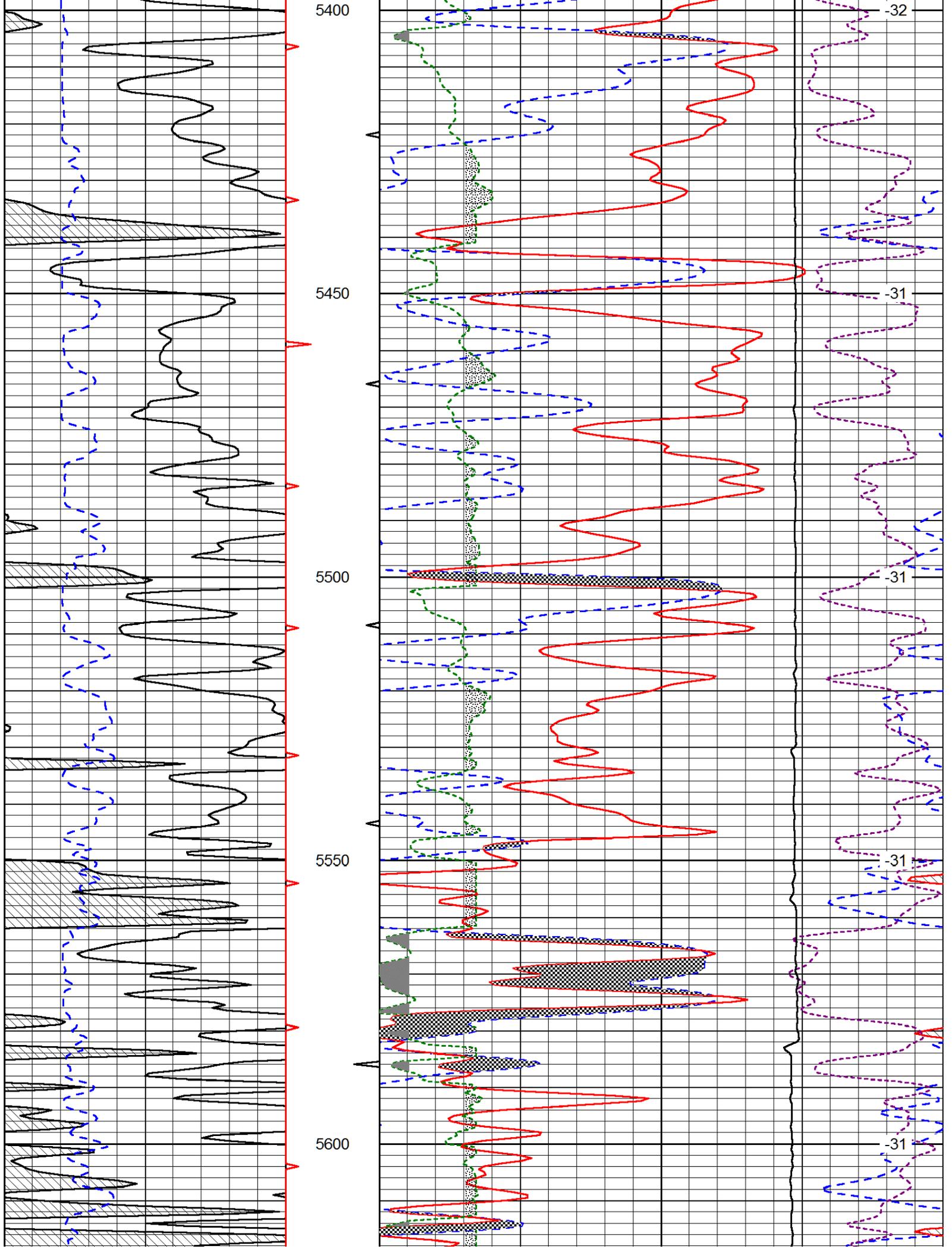
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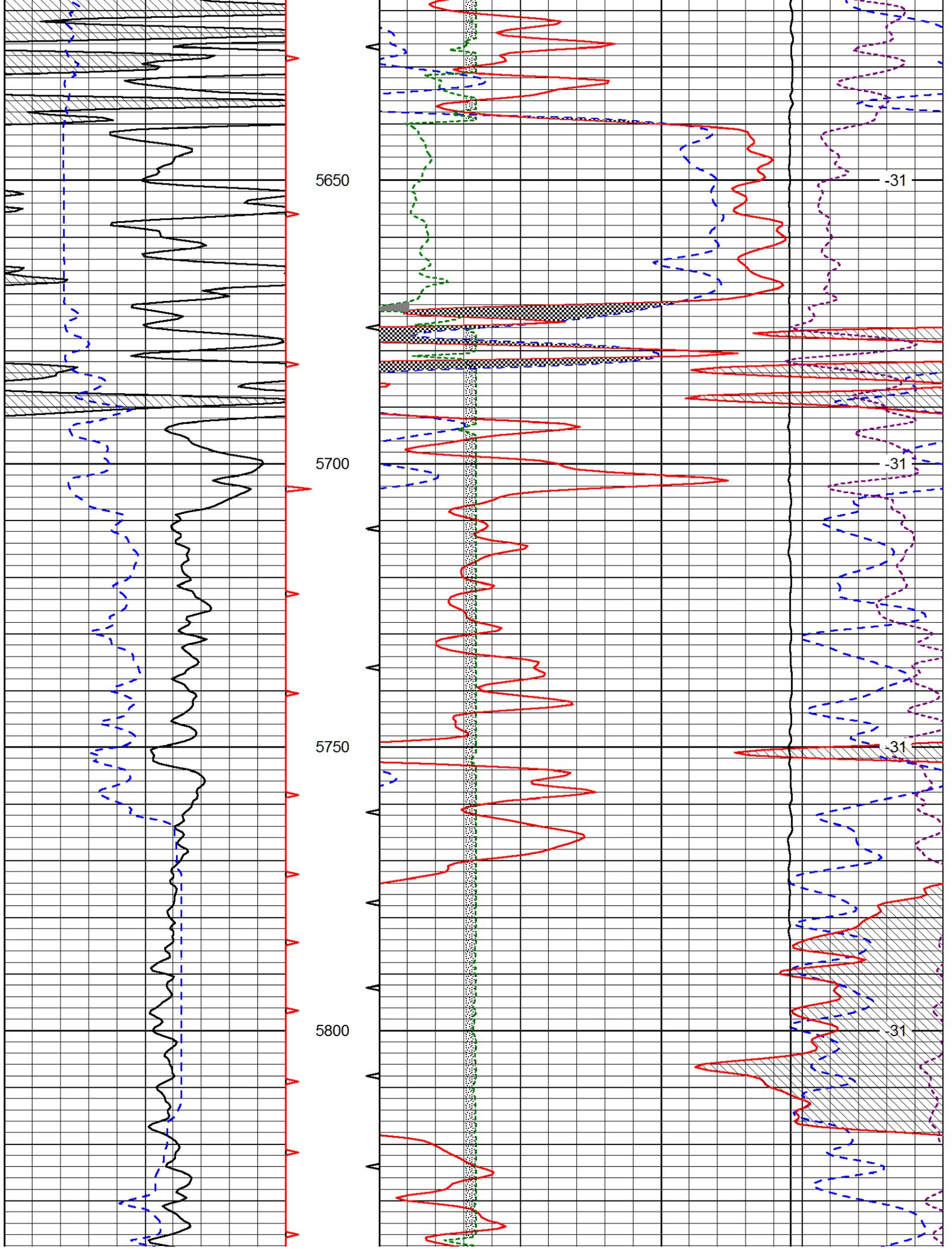


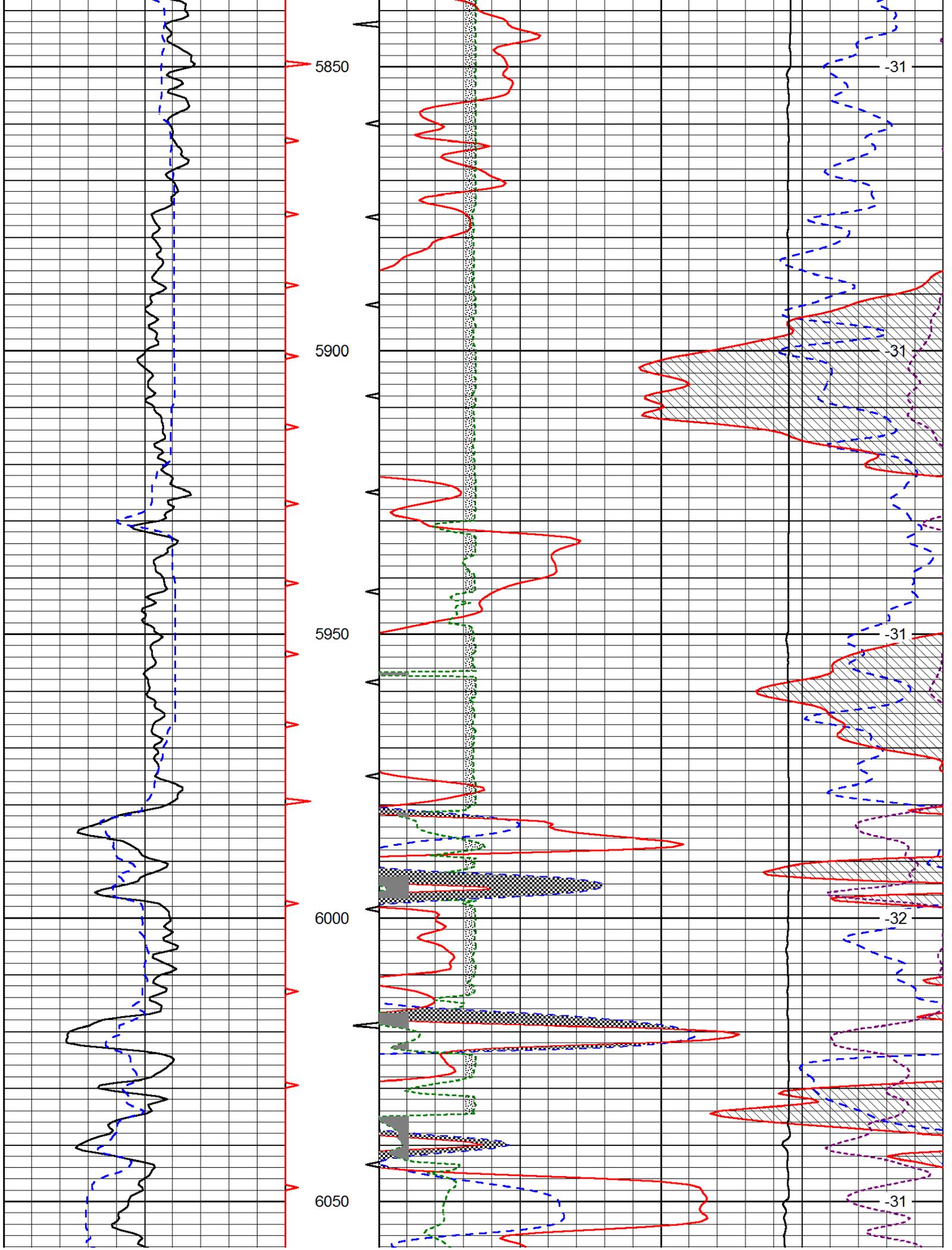


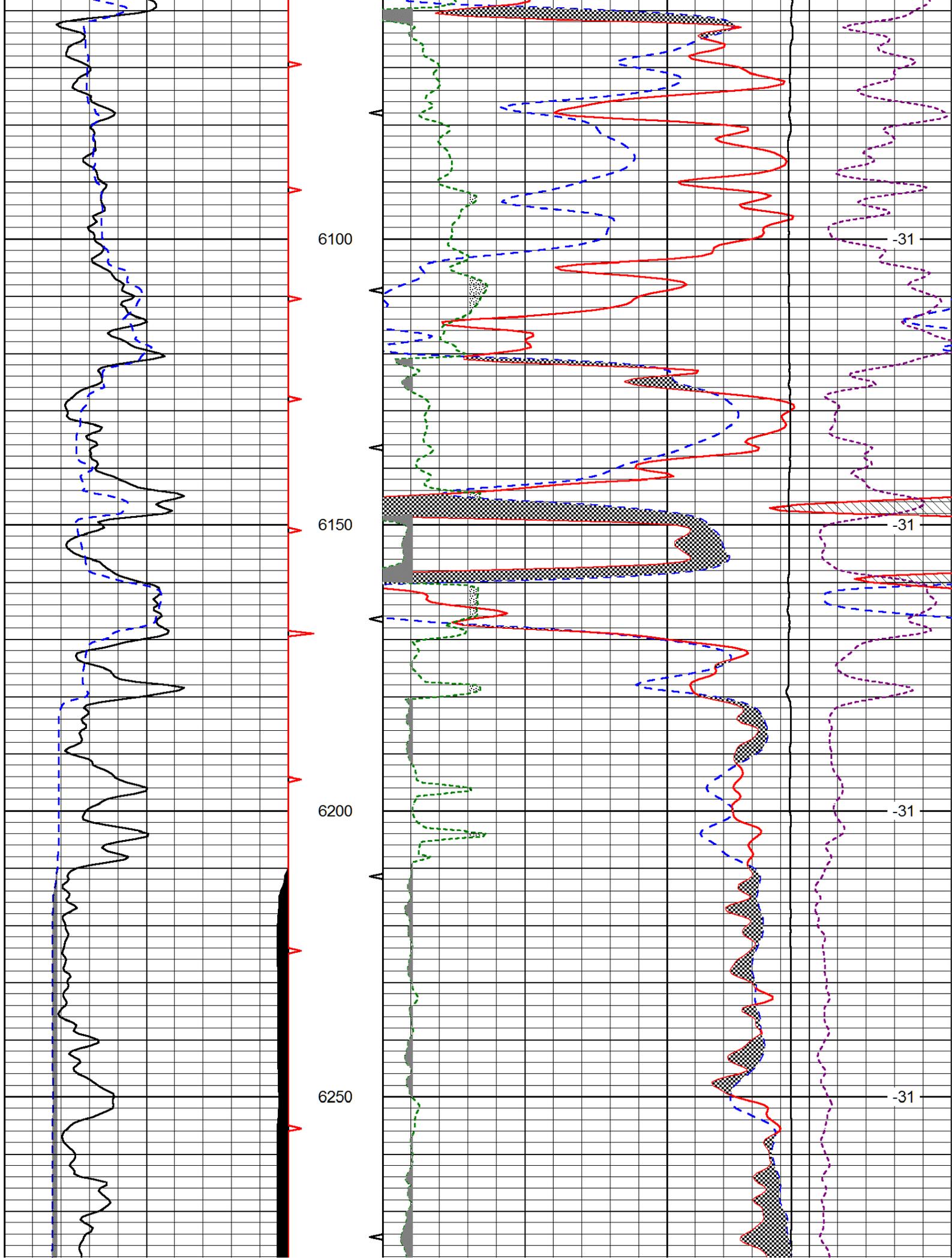


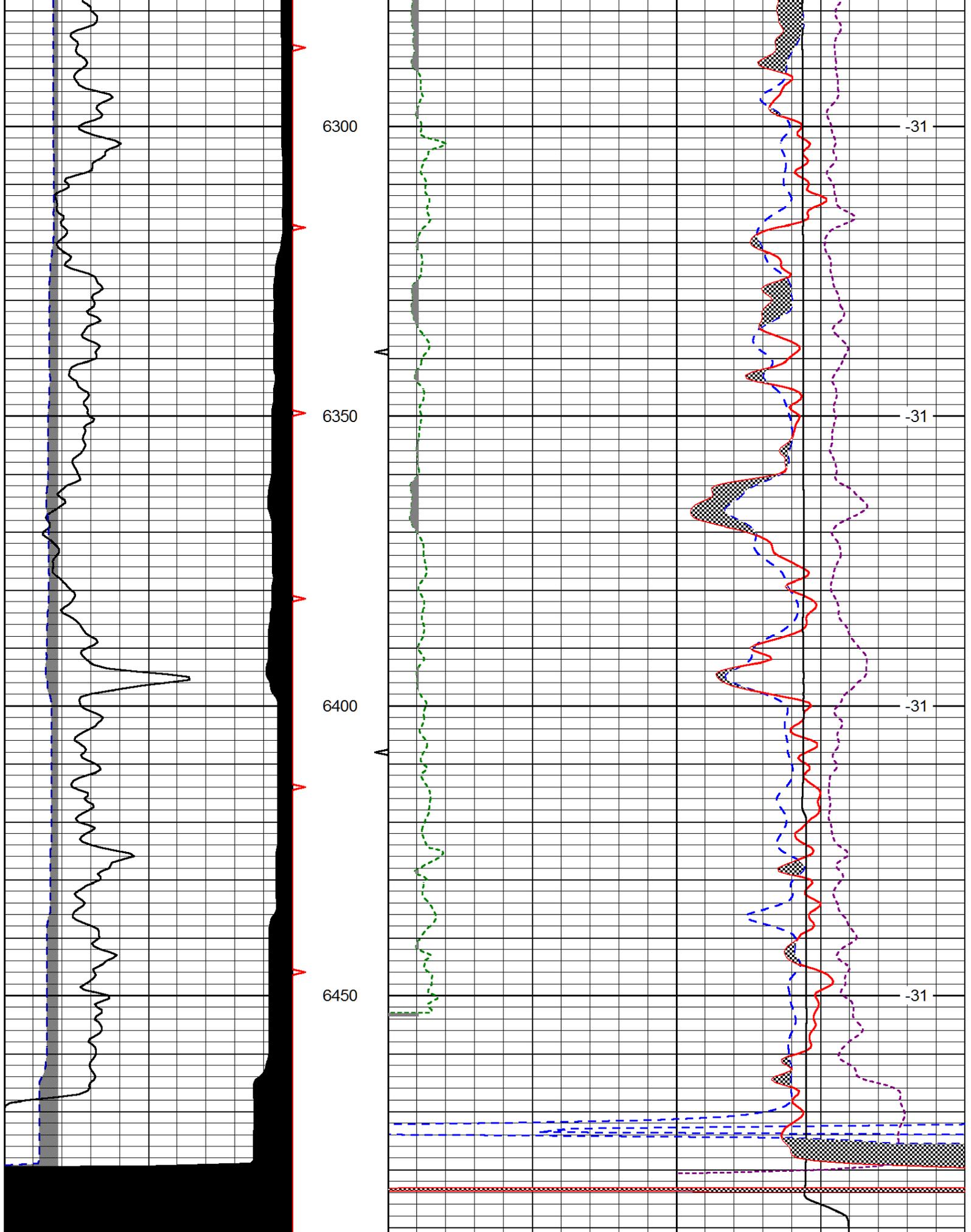












0 Gamma Ray (GAPI) 150

6 Caliper (in) 16

30 CNPOR (pu) -10

20 Compensated Density (2.71 gm/cc) (pu) 10

0	Caliper (in)	10
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50	Compensated Density (2.71 ma) (pu)		-10
2.625	DGA (g/cc)	3.425	-0.25
			Correction (g/cc)
0.25			0.25
10000	Line Tension (lb)		0
			LSPD
			(ft/min)