



Pioneer Energy Services

Dual Compensated Porosity Log

Company Culbreath Oil & Gas Company, Inc.
Well Ostmeyer #1-20
Field Wildcat
County Thomas **State** Kansas
Location 850' FNL & 1220' FWL
Other Services DIL MEI/BHCS

API No. 15-193-20889-00-00
Sec: 20 **Twp:** 10S **Rge:** 31W

Permanent Datum Ground Level **Elevation** 2970
Log Measured From Kelly Bushing **10 Ft. Above Perm. Datum**
Drilling Measured From Kelly Bushing
Date 4/14/2013
Elevation K.B. 2980 D.F. G.L. 2970

Run Number	One
Type Log	CNL / CDL
Depth Driller	4676
Depth Logger	4676
Bottom Logged Interval	4655
Top Logged Interval	3600
Type Fluid In Hole	Chemical
Salinity, PPM CL	2000
Density	9.3
Level	Full
Max. Rec. Temp. F	125
Operating Rig Time	5 Hours
Equipment -- Location	91 Hays
Recorded By	D. Schmidt
Witnessed By	Steve Murphy

Borehole Record		Casing Record				
Run No.	Bit From	To	Size	Wgt.	From	To
One	12.25	00	310	8.625	23#	00
Two	7.875	310	TD			310

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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

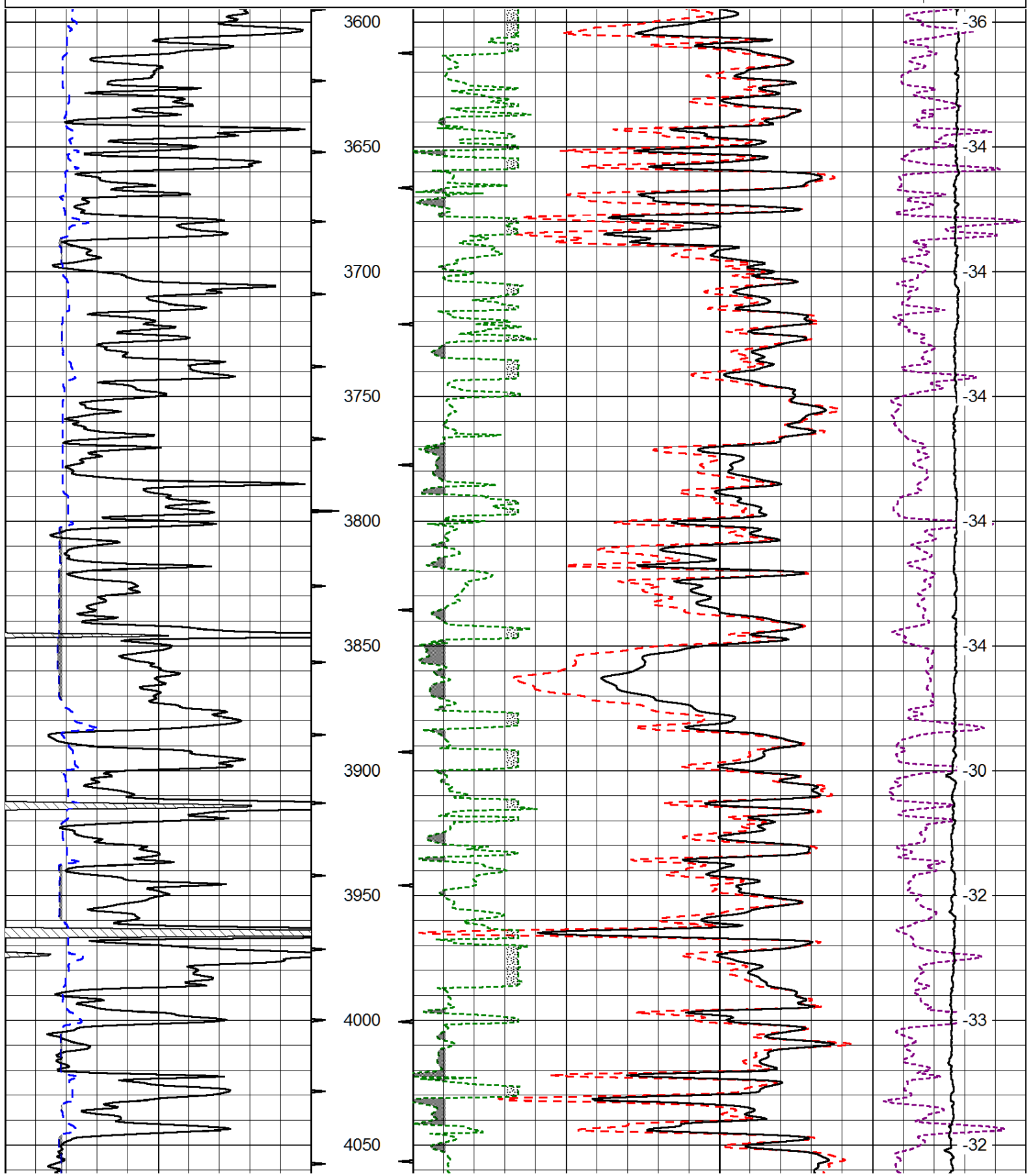
Thank you for using Log-Tech, Inc.
 (785) 625-3858
 Oakley (Mittens),
 1 1/2 West on Old Hwy 40 to 450 Rd, 1 North to the T,
 1 East to 460 Rd, 2 1/2 North,
 East & North into

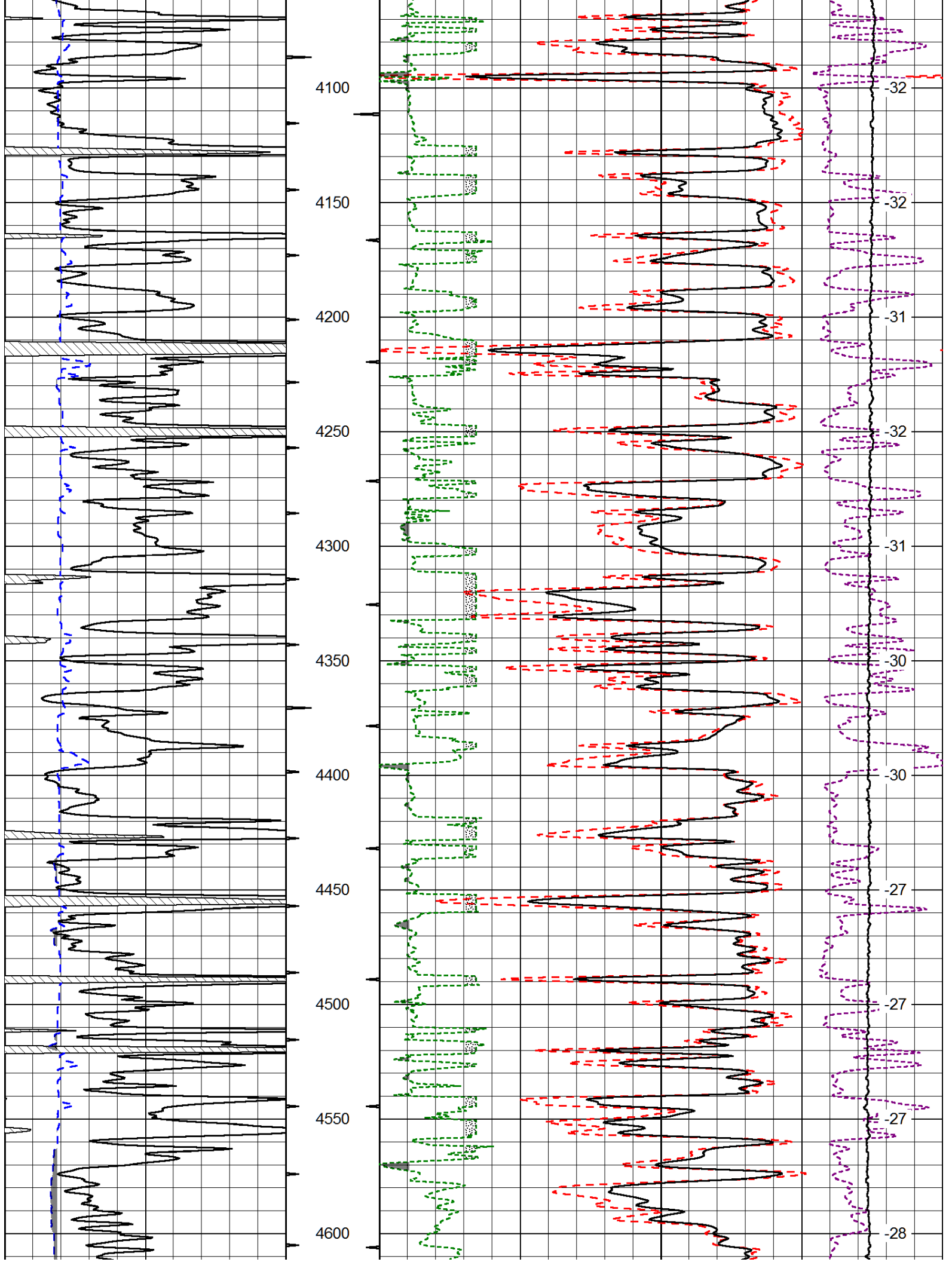
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 Presentation Format: cdl
 Dataset Creation: Sun Apr 14 21:23:00 2013
 Charted by: Depth in Feet scaled 1:600

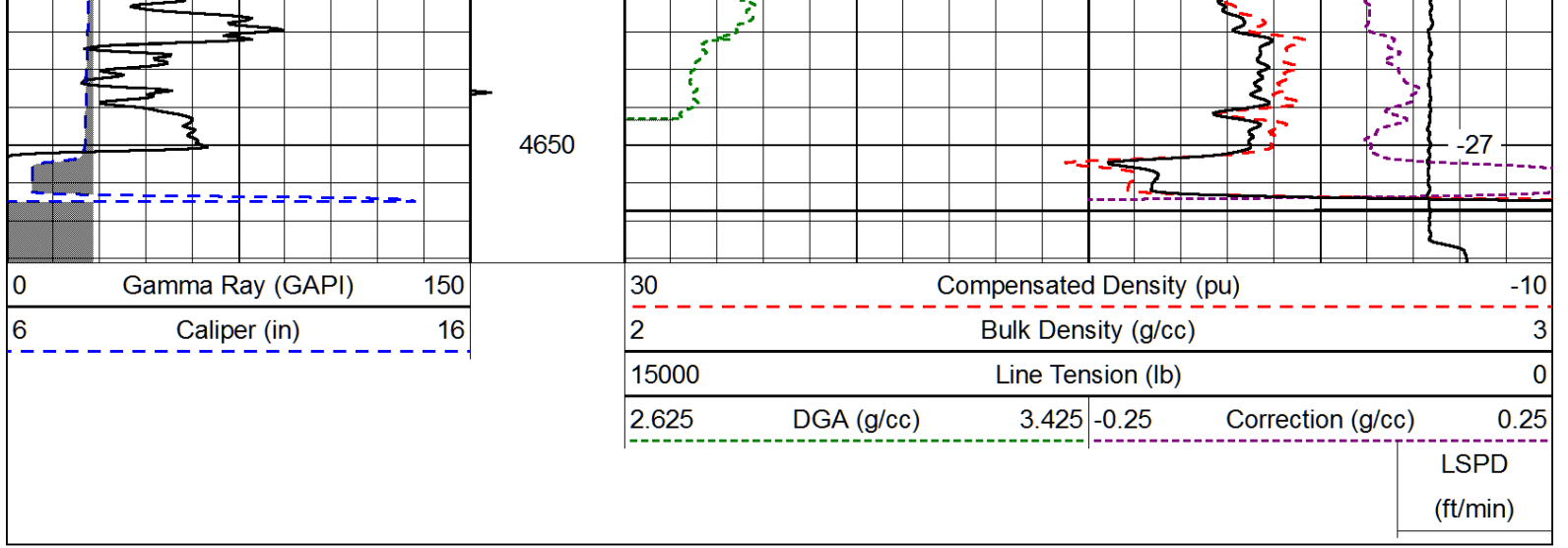
0	Gamma Ray (GAPI)	150
6	Caliper (in)	16

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

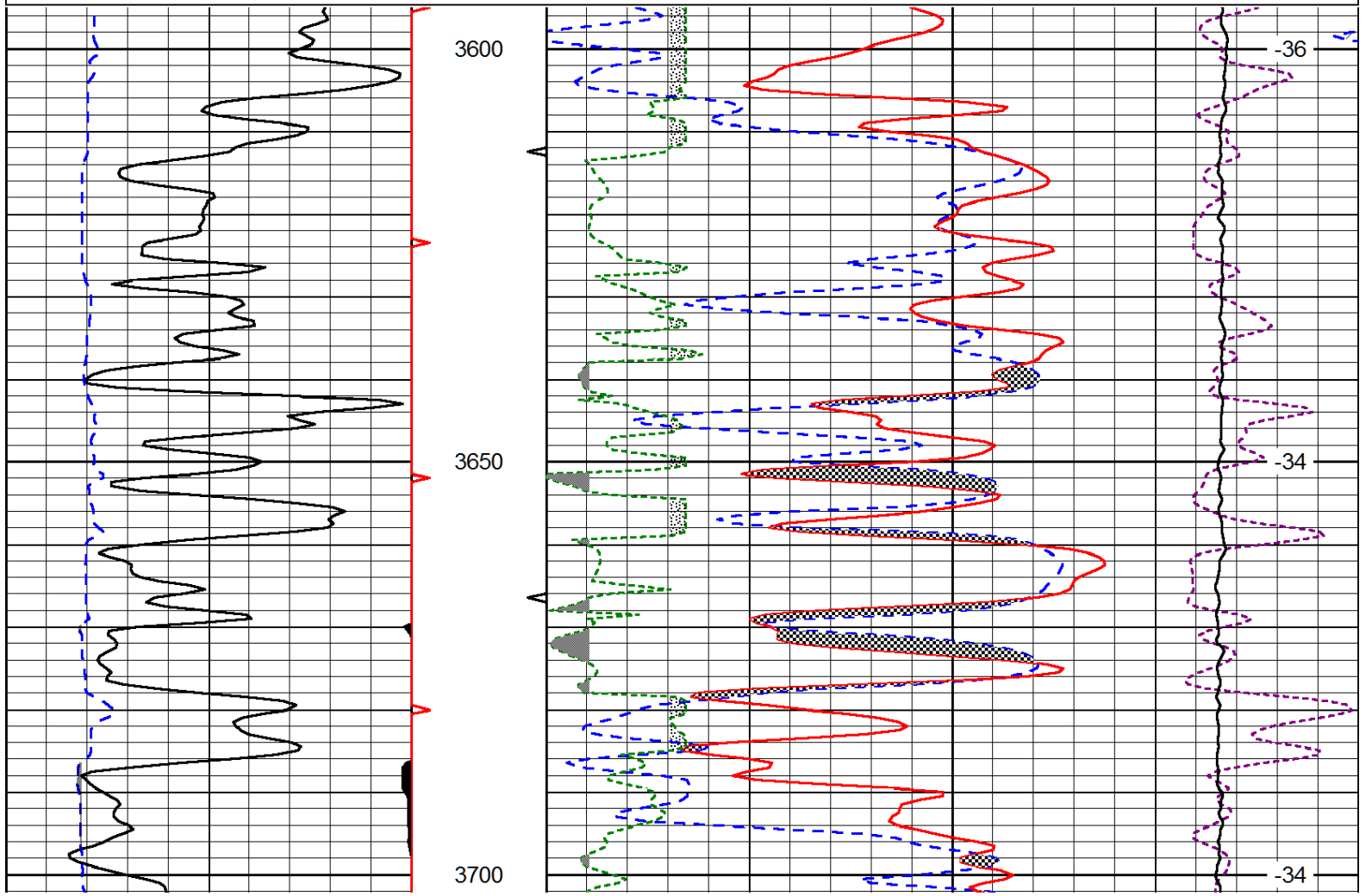
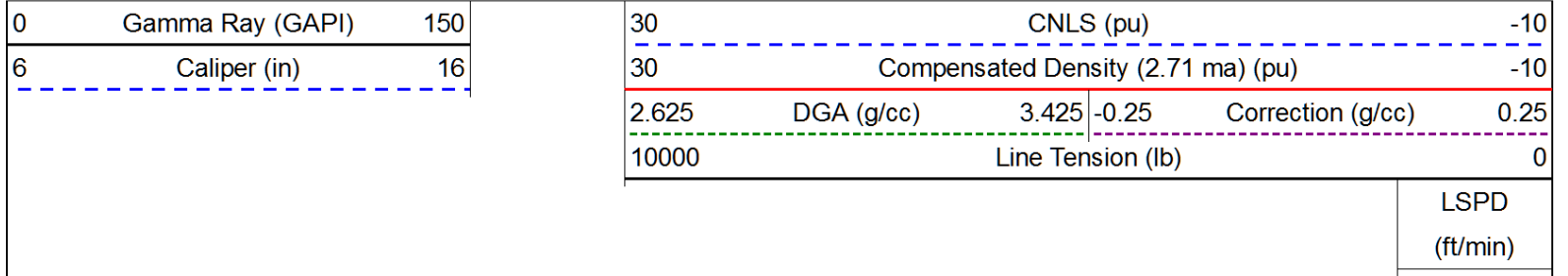
LSPD
(ft/min)

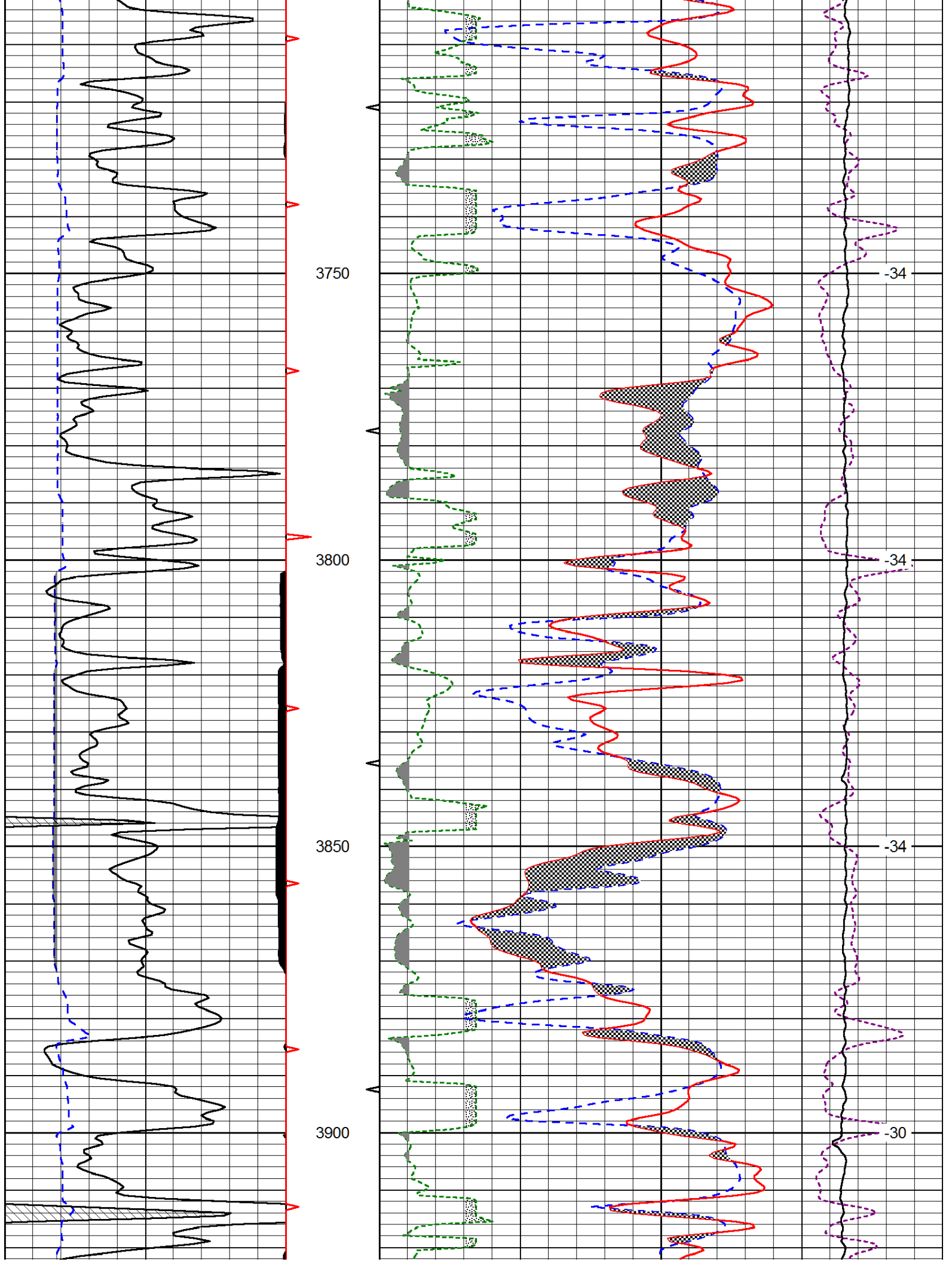


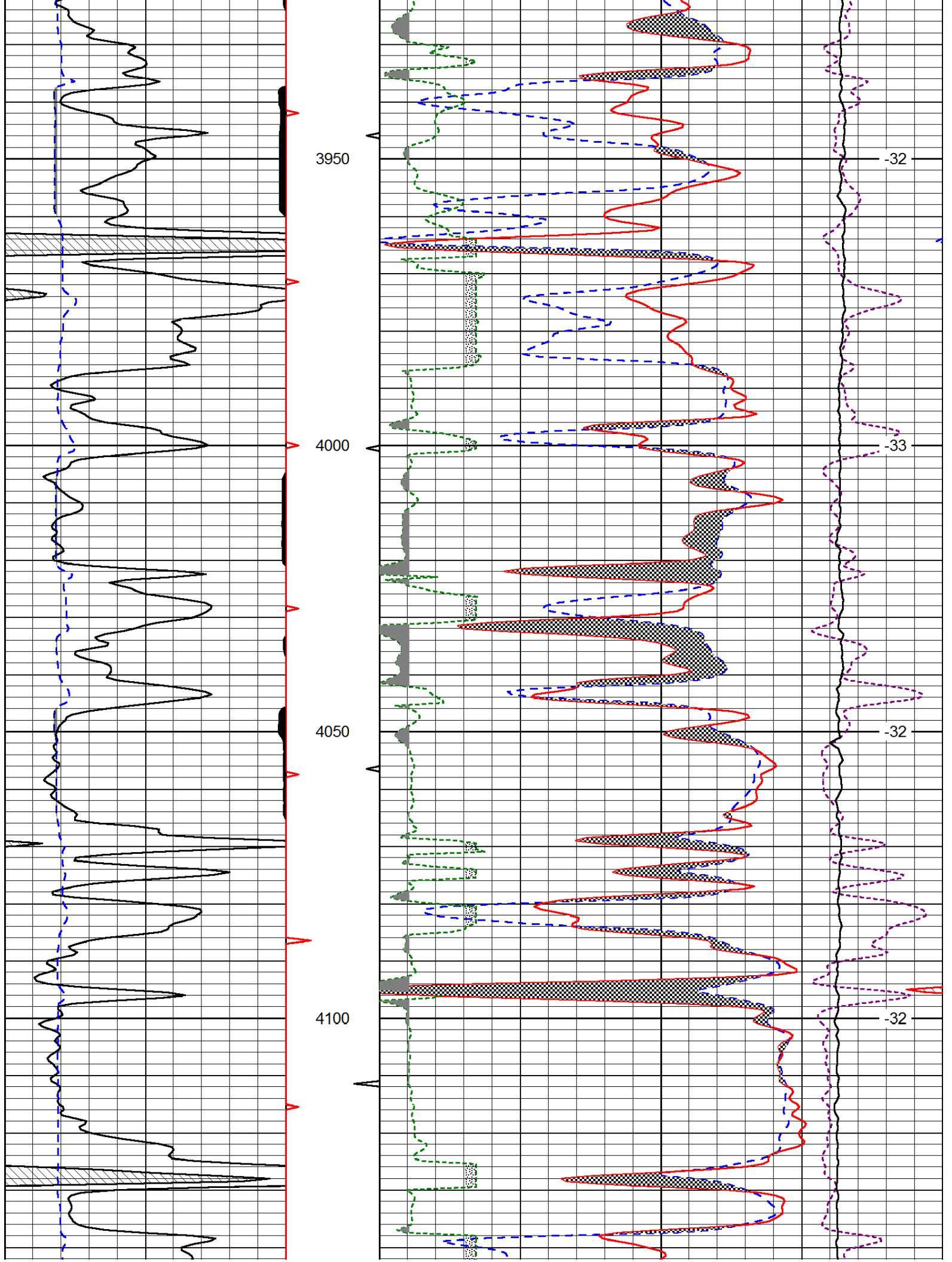


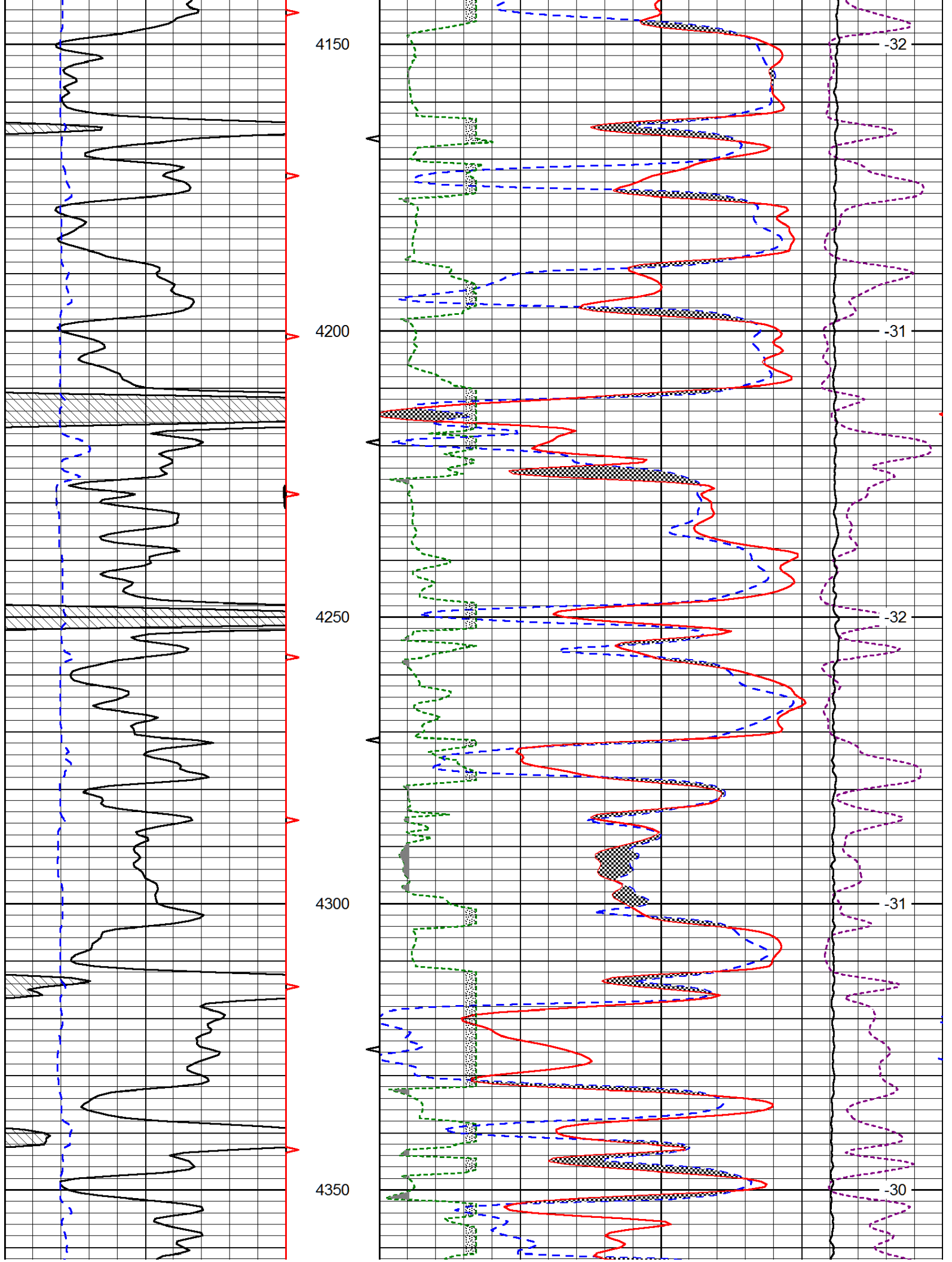


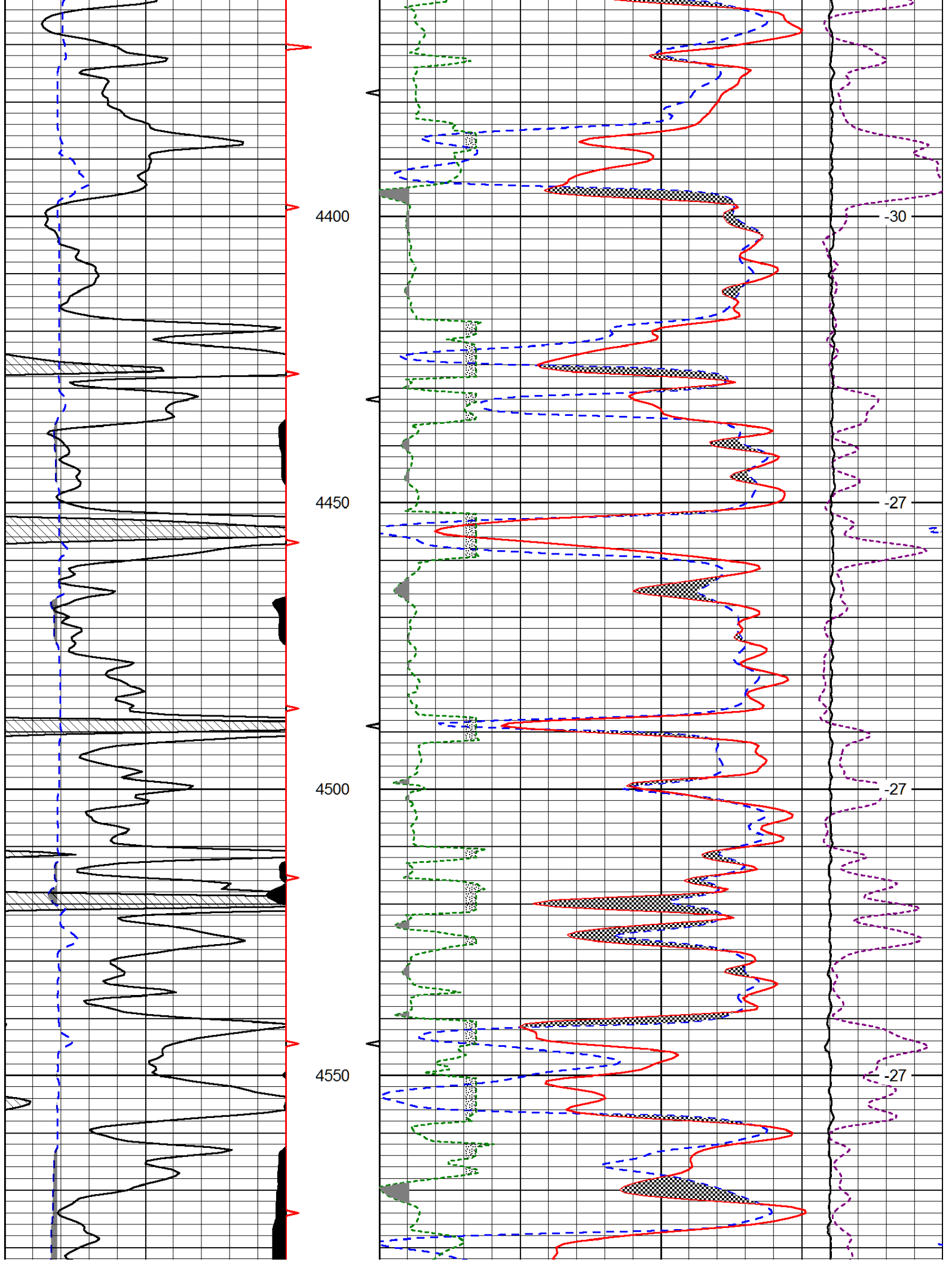
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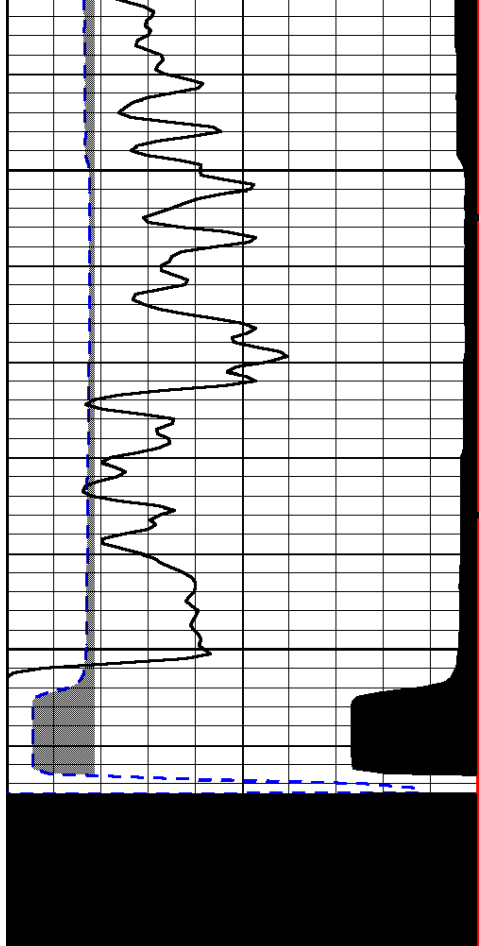






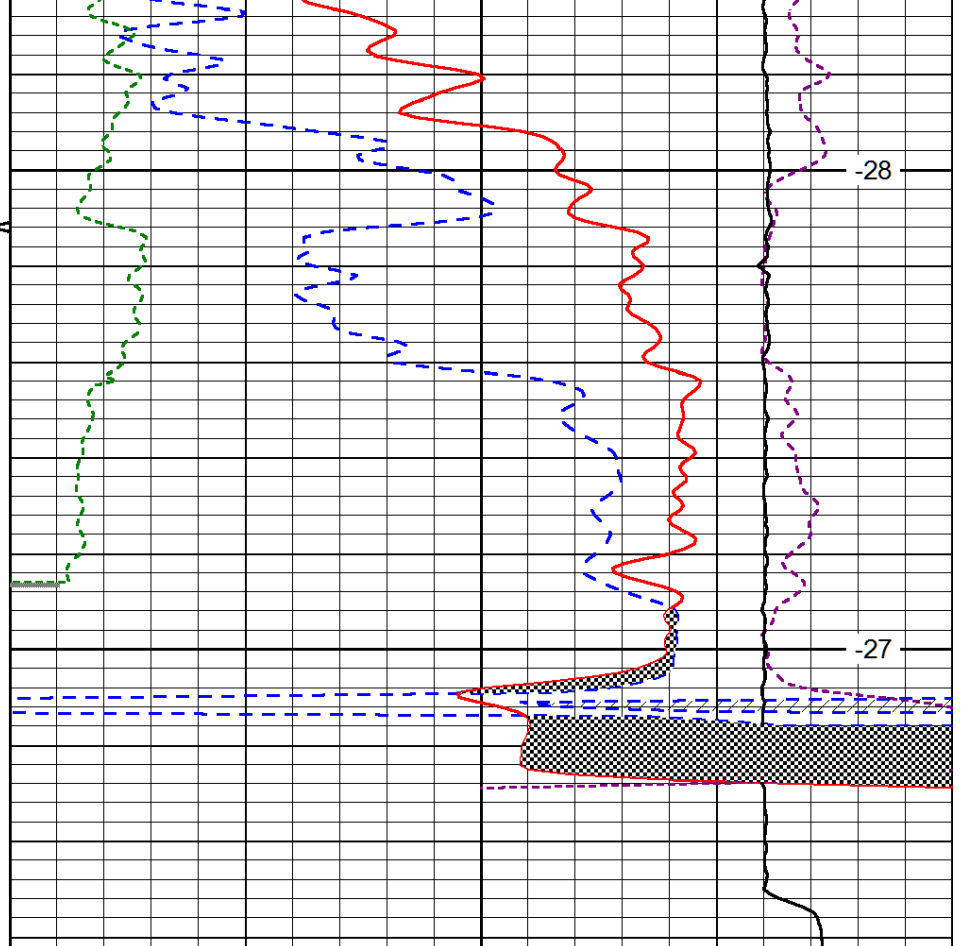






4600

4650



-28

-27

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

30	CNLS (pu)			-10	
30	Compensated Density (2.71 ma) (pu)			-10	
2.625	DGA (g/cc)	3.425	-0.25	Correction (g/cc)	0.25
10000	Line Tension (lb)			0	

LSPD
(ft/min)