



Pioneer Energy Services

Dual Compensated Porosity Log

Company Indian Oil Company
Well Blackstock No.1
Field Stranathan
County Barber
State Kansas

Location S/2 SW NW NW
 1155' FNL & 330' FWL
 Sec: 12 Twp: 35S Rge: 12W

Permanent Datum Ground Level Elevation 1395
Log Measured From Kelly Bushing 11 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Other Services
 DIL
Elevation
 K.B. 1406
 D.F. 1395
 G.L. 1395

API No. 15-007-23,991-00-00

Date	3/13/2013	
Run Number	One	
Type Log	CNL / CDL	
Depth Driller	5275	
Depth Logger	5277	
Bottom Logged Interval	5256	
Top Logged Interval	4300	
Type Fluid In Hole	Chemical	
Salinity, PPM CL	4,500	
Density	9.4	
Level	Full	
Max. Rec. Temp. F	129	
Operating Rig Time	2 1/2 Hours	
Equipment -- Location	17 Hays	
Recorded By	C. Desaire	
Witnessed By	Scott Alberg	

Borehole Record			Casing Record				
Run No.	Bit	From	To	Size	Wgt.	From	To
One	12.25	00	764	8.625	23#	00	764
Two	7.875	764	TD				

<<< Fold Here >>>

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

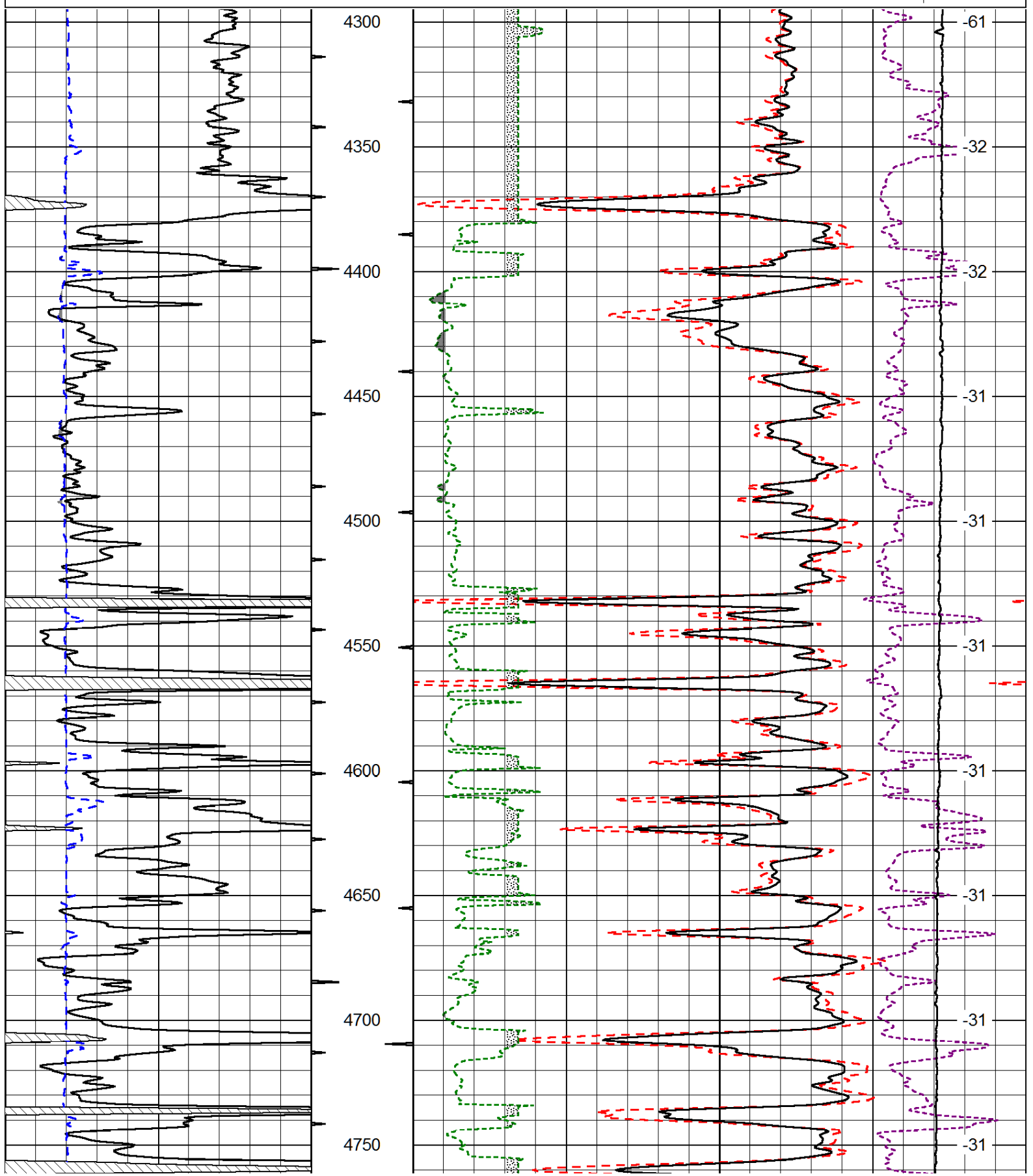
 Hardtner KS, 3 E to Claremont Rd,
 1/2 N, E Into

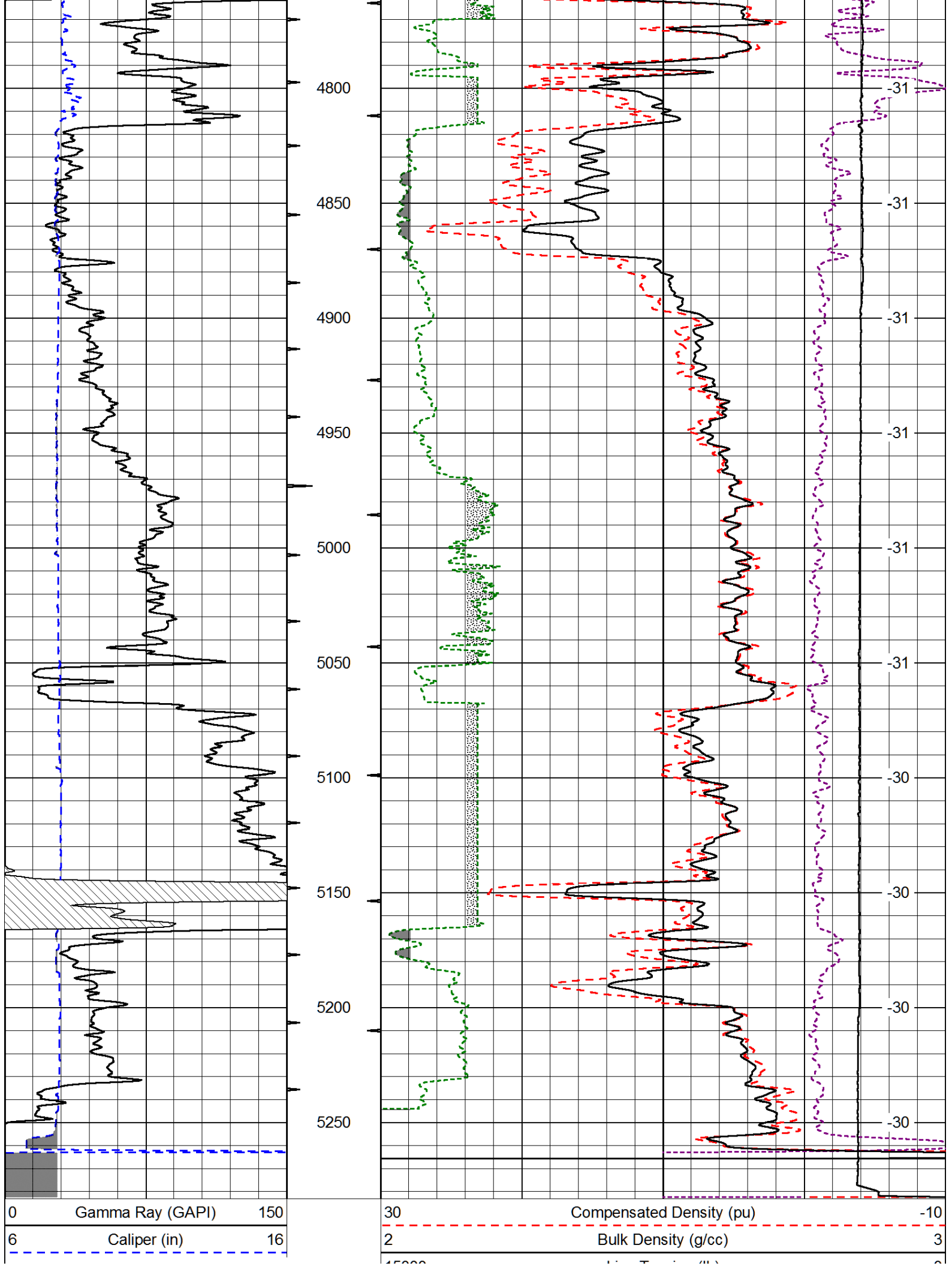
Database File: indianhd.db
 Dataset Pathname: dil/indnstk
 Presentation Format: cdl
 Dataset Creation: Wed Mar 13 07:47:59 2013
 Charted by: Depth in Feet scaled 1:600

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)

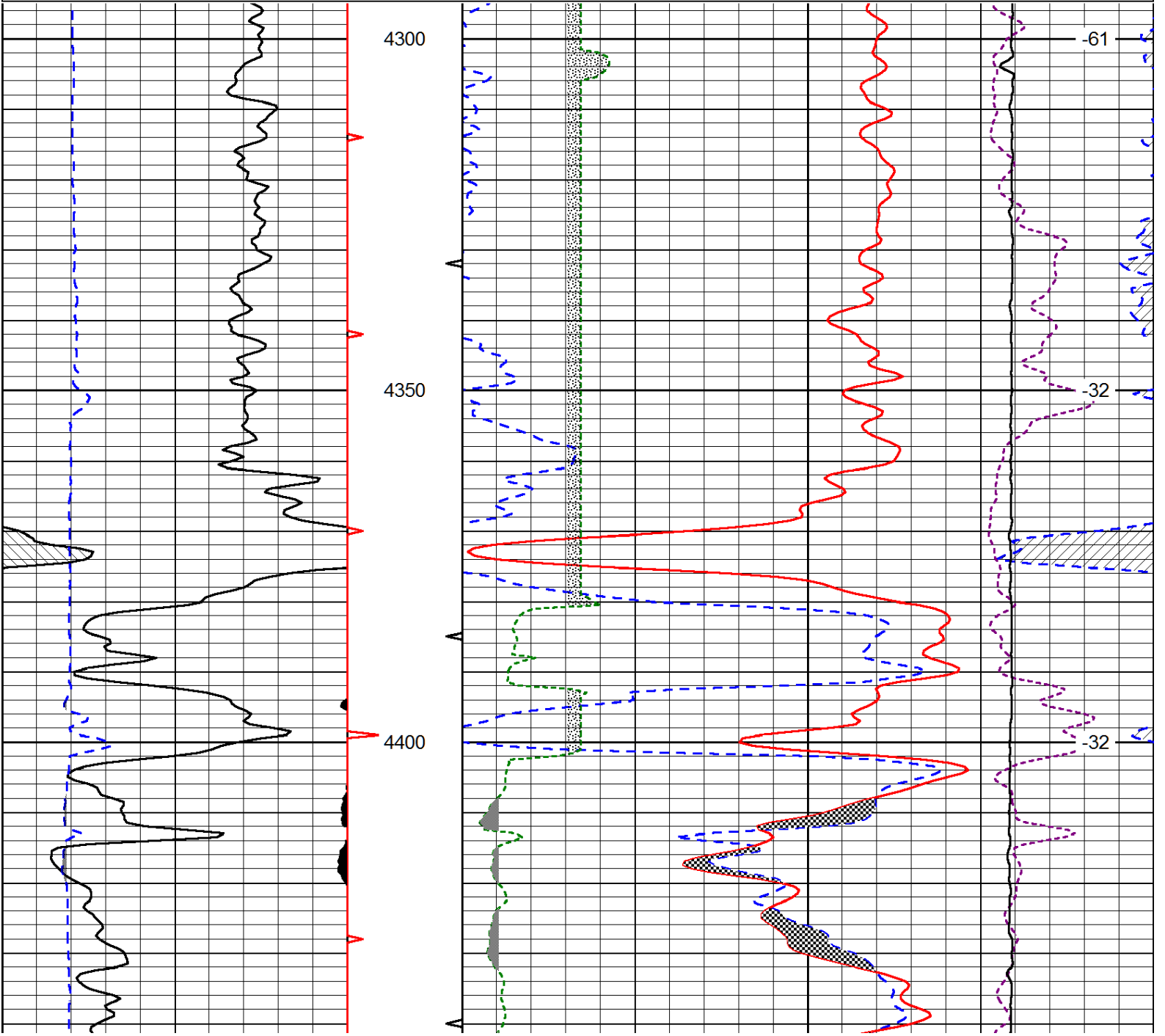


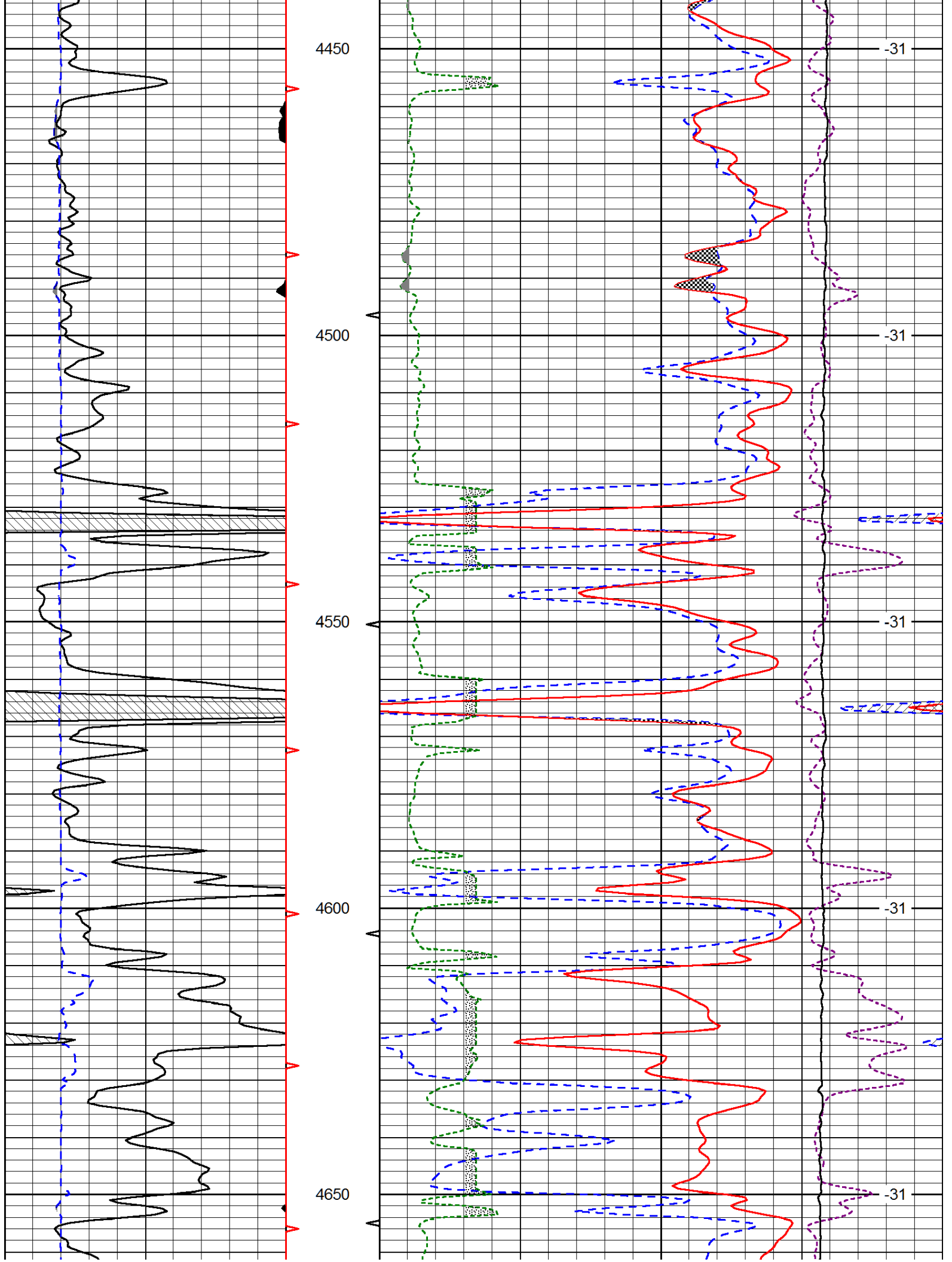


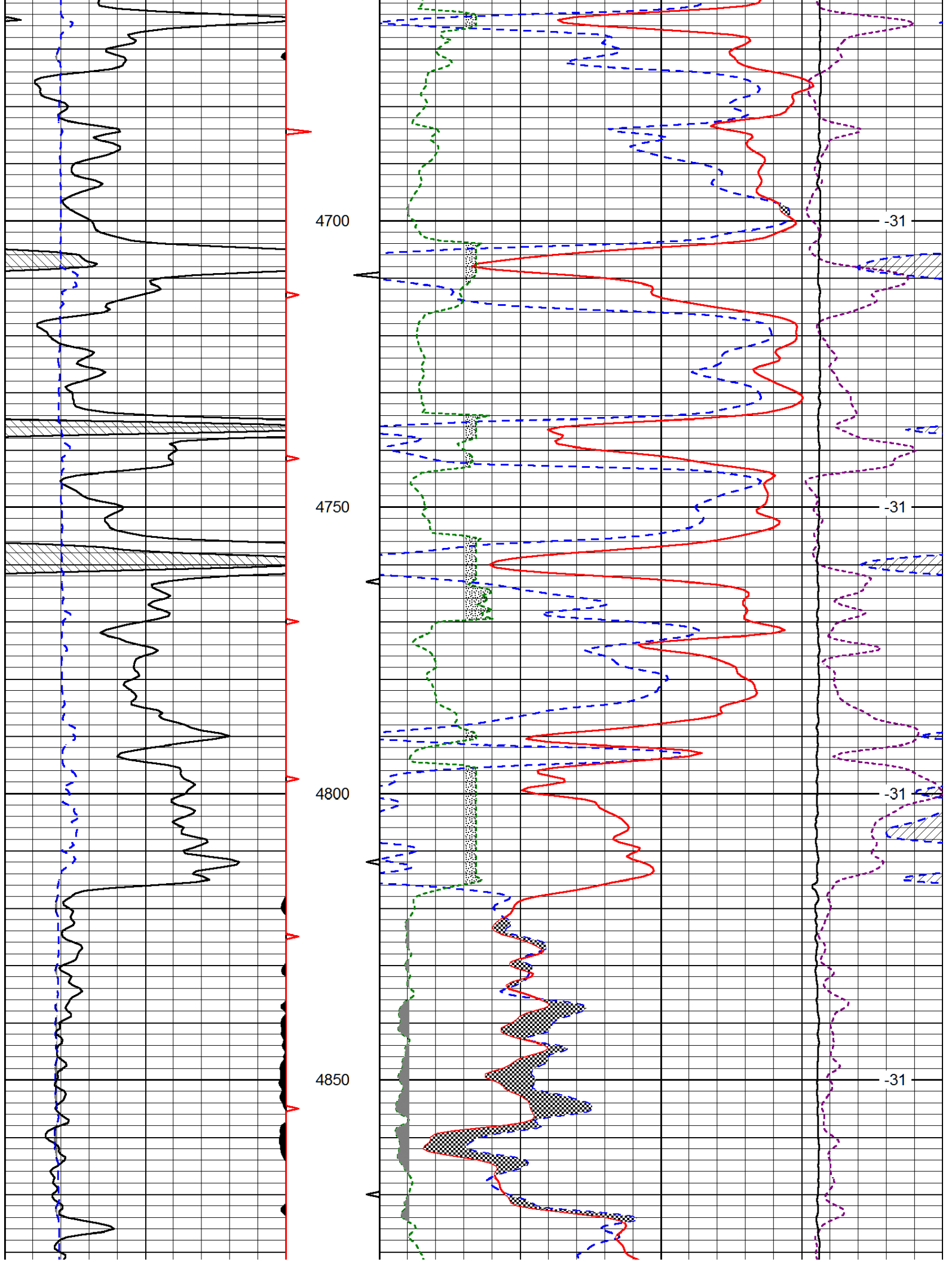
15000		Line Tension (lb)	0
2.625	DGA (g/cc)	3.425 -0.25	Correction (g/cc) 0.25
			LSPD (ft/min)

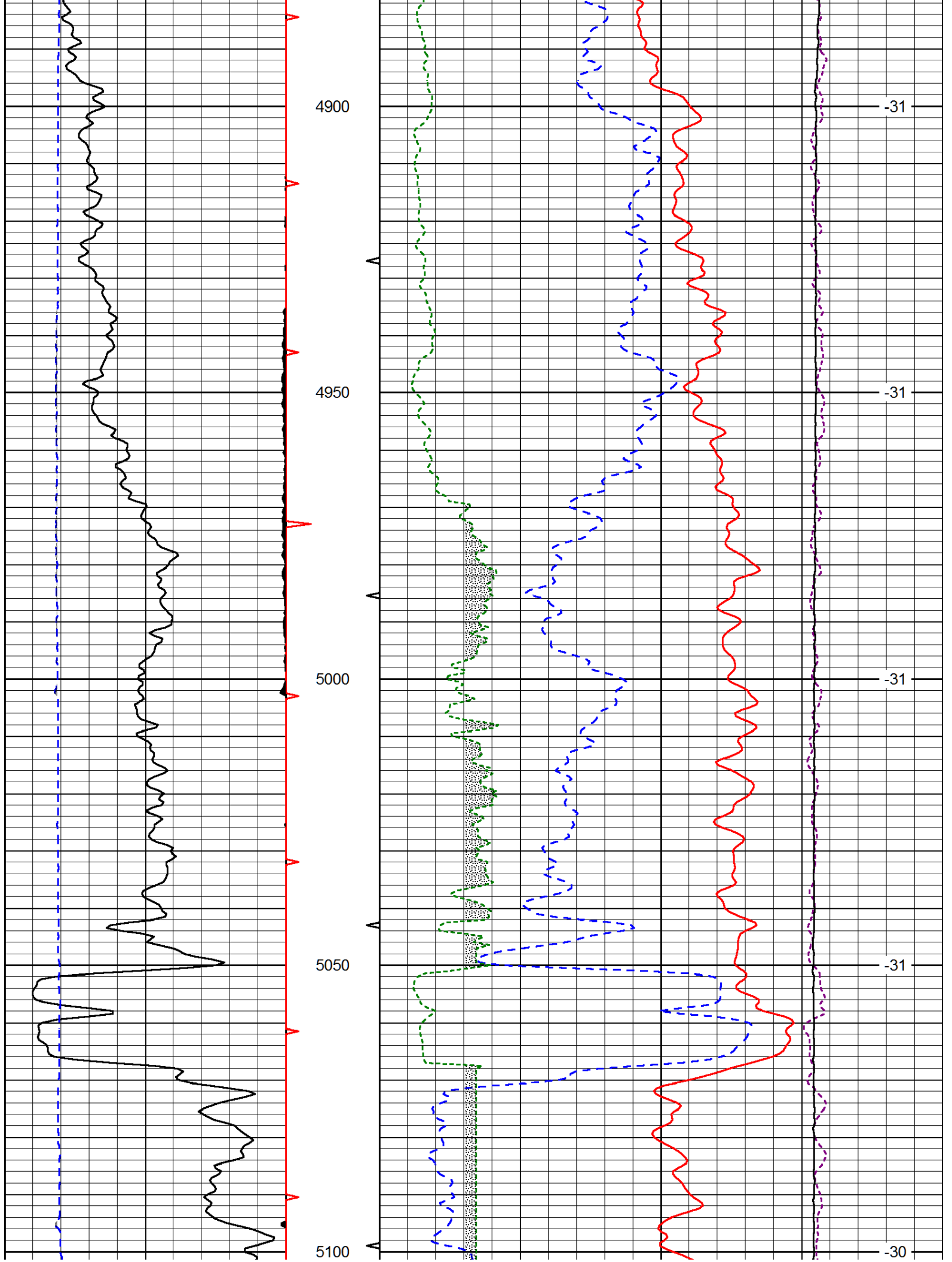
Database File: indianhd.db
 Dataset Pathname: dil/indnstk
 Presentation Format: cndlspec
 Dataset Creation: Wed Mar 13 07:47:59 2013
 Charted by: Depth in Feet scaled 1:240

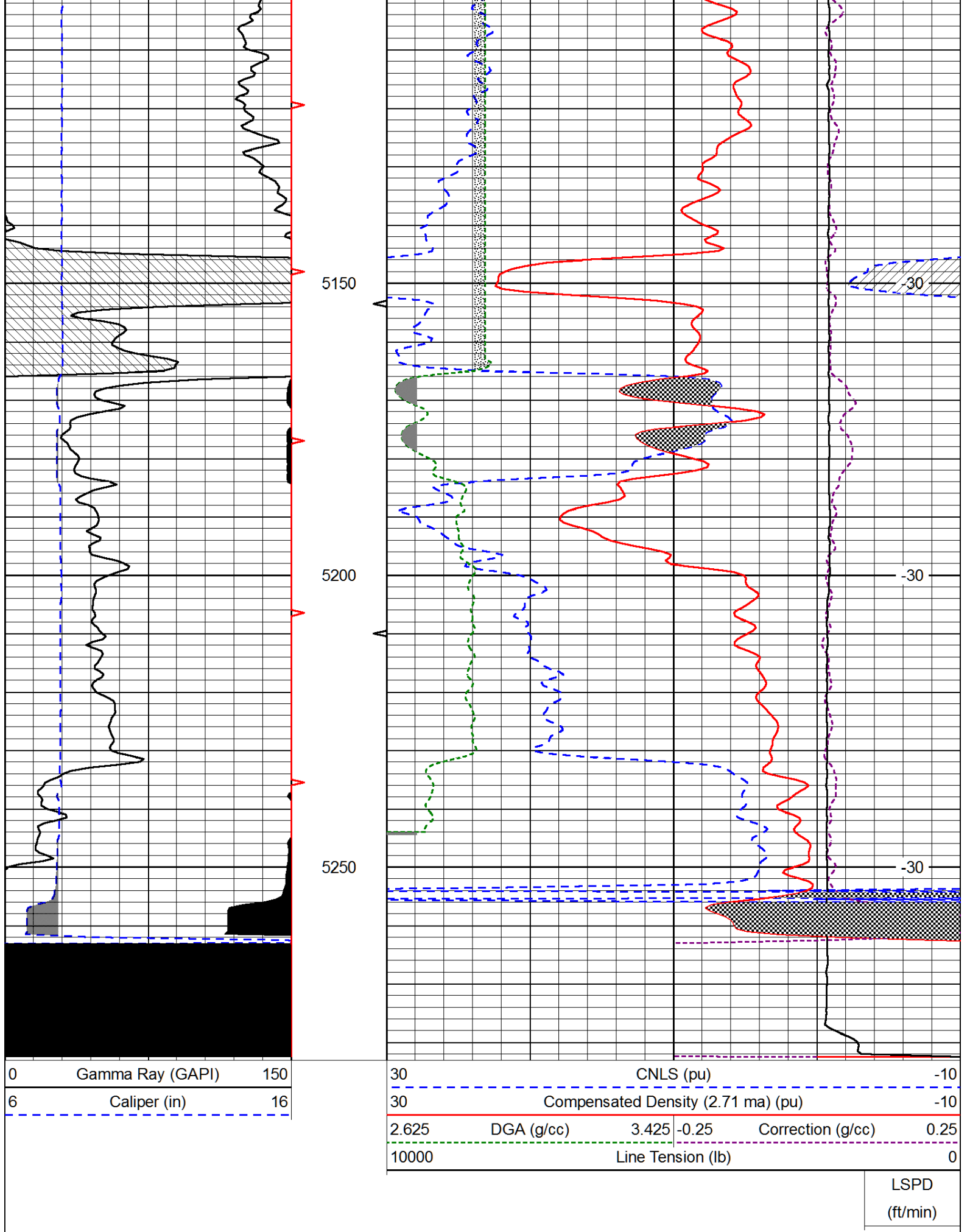
0	Gamma Ray (GAPI)	150	30	CNLS (pu)	-10
6	Caliper (in)	16	30	Compensated Density (2.71 ma) (pu)	-10
		2.625	DGA (g/cc)	3.425 -0.25	Correction (g/cc) 0.25
		10000	Line Tension (lb)		0
					LSPD (ft/min)











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)