



Dual Compensated Porosity Log

Pioneer Energy Services

API No.

15-017-20,918-00-00

Company Range Oil Company, Inc.
Well Madden A Unit No.1
Field Panther Ranch SW
County Chase State Kansas

Location 330' FNL & 2190' FWL

Sec: 31 Twp: 19S Rge: 6E

Permanent Datum Ground Level Elevation 1452
Log Measured From Kelly Bushing 6 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Other Services
DIL/MEL
Elevation
K.B. 1458
D.F.
G.L. 1452

Date 10/13/2014

Run Number One

Type Log CNL / CDL

Depth Driller 2315

Depth Logger 2313

Bottom Logged Interval 2311

Top Logged Interval 1300

Type Fluid In Hole Chemical

Salinity, PPM CL 900

Density 9.2

Level Full

Max. Rec. Temp. F 99

Operating Rig Time 3 1/2 Hours

Equipment -- Location 10 Hays

Recorded By C. Desaire

Witnessed By Ken Wallace

Borehole Record

Run No Bit From To Size Wgt. From To

One 12.25 00 220 8.625 23# 00 220

Two 7.875 220 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

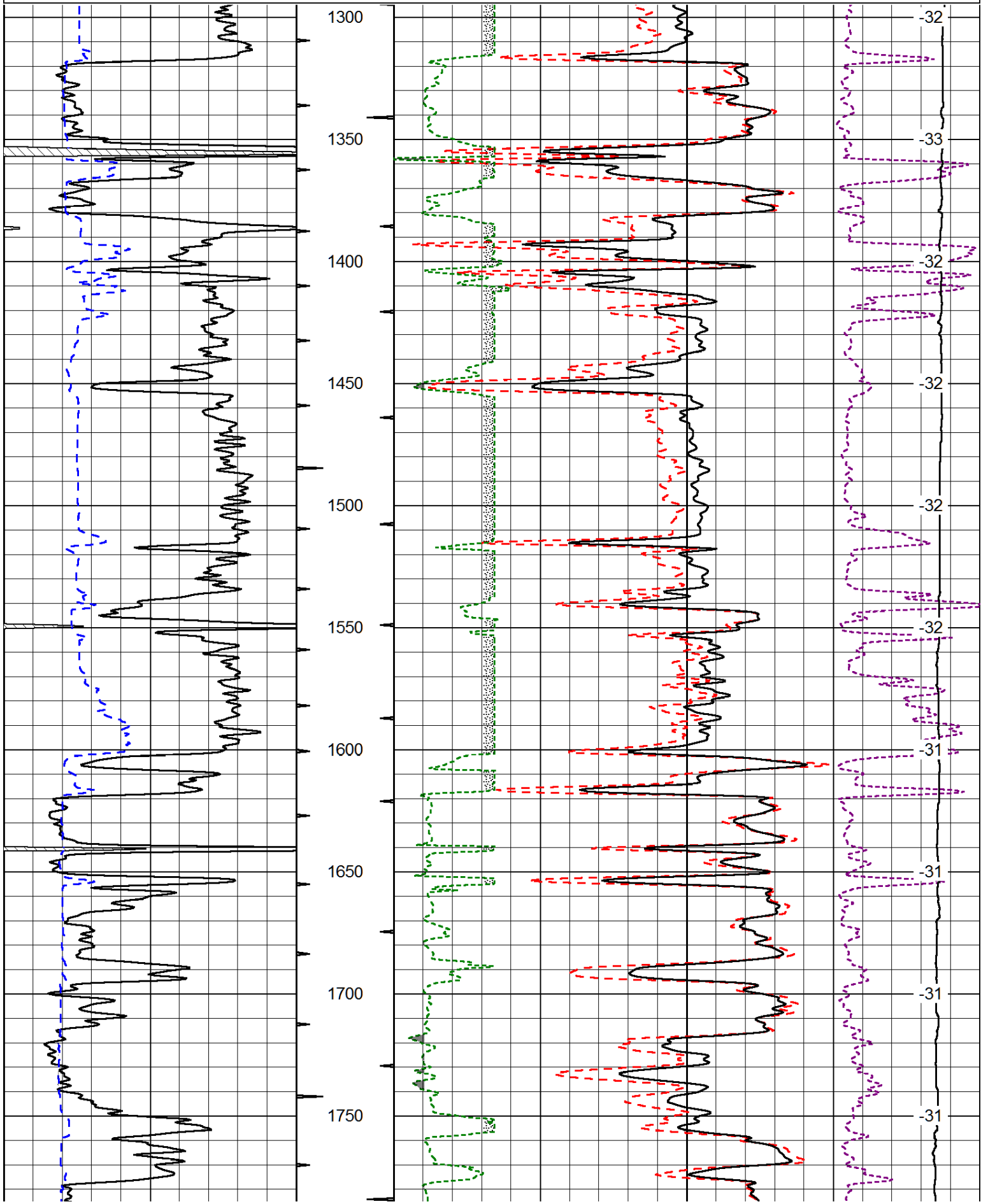
Thank you for using Log-Tech, Inc.
(785) 625-3858

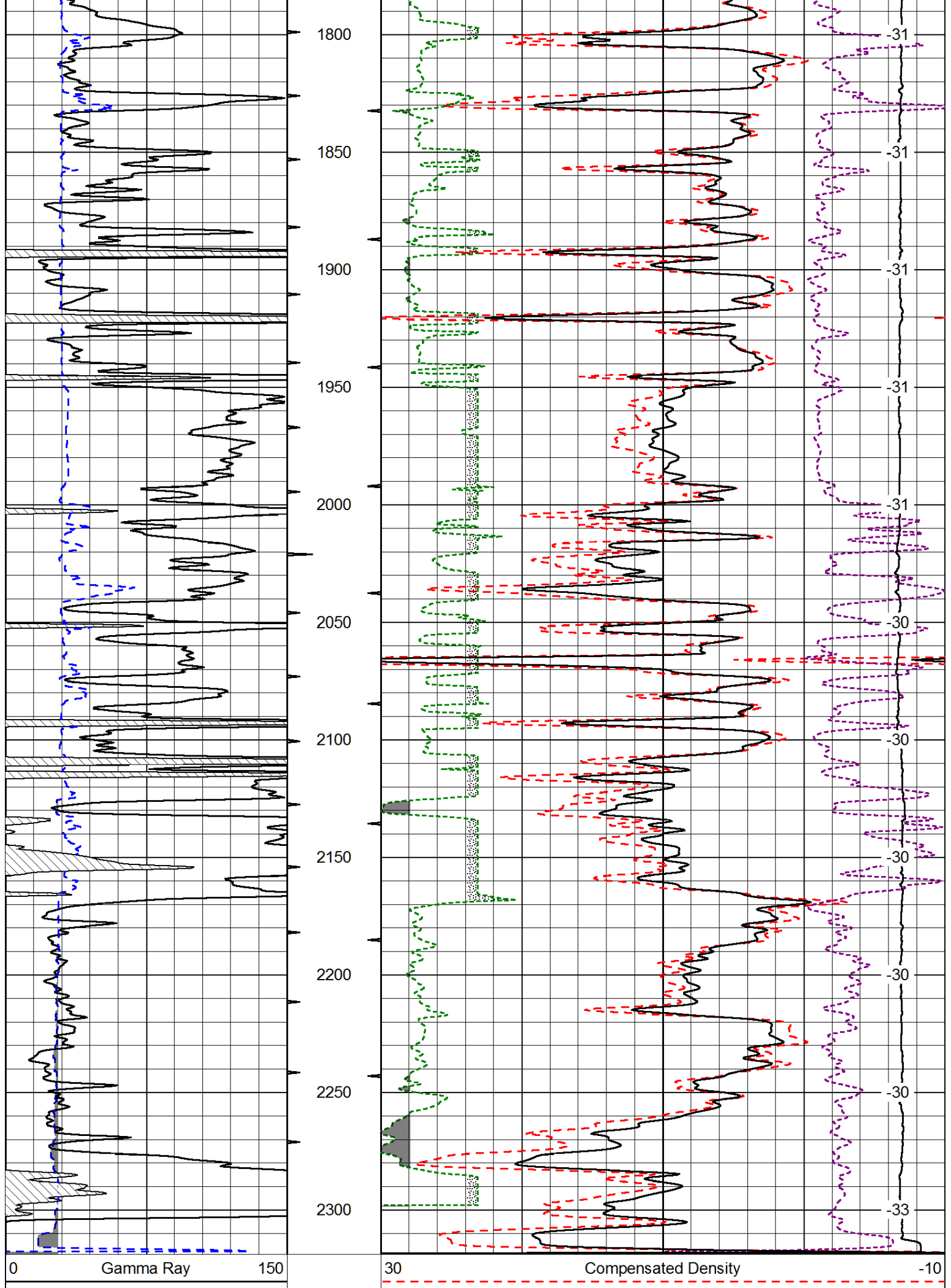
Marion KS, Hwy 77 & Hwy 50,
8 E, 200 yds S, E Into

Database File: rangehd.db
Dataset Pathname: dil/rngstk
Presentation Format: cdl
Dataset Creation: Mon Oct 13 08:23:59 2014
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
LSPD			

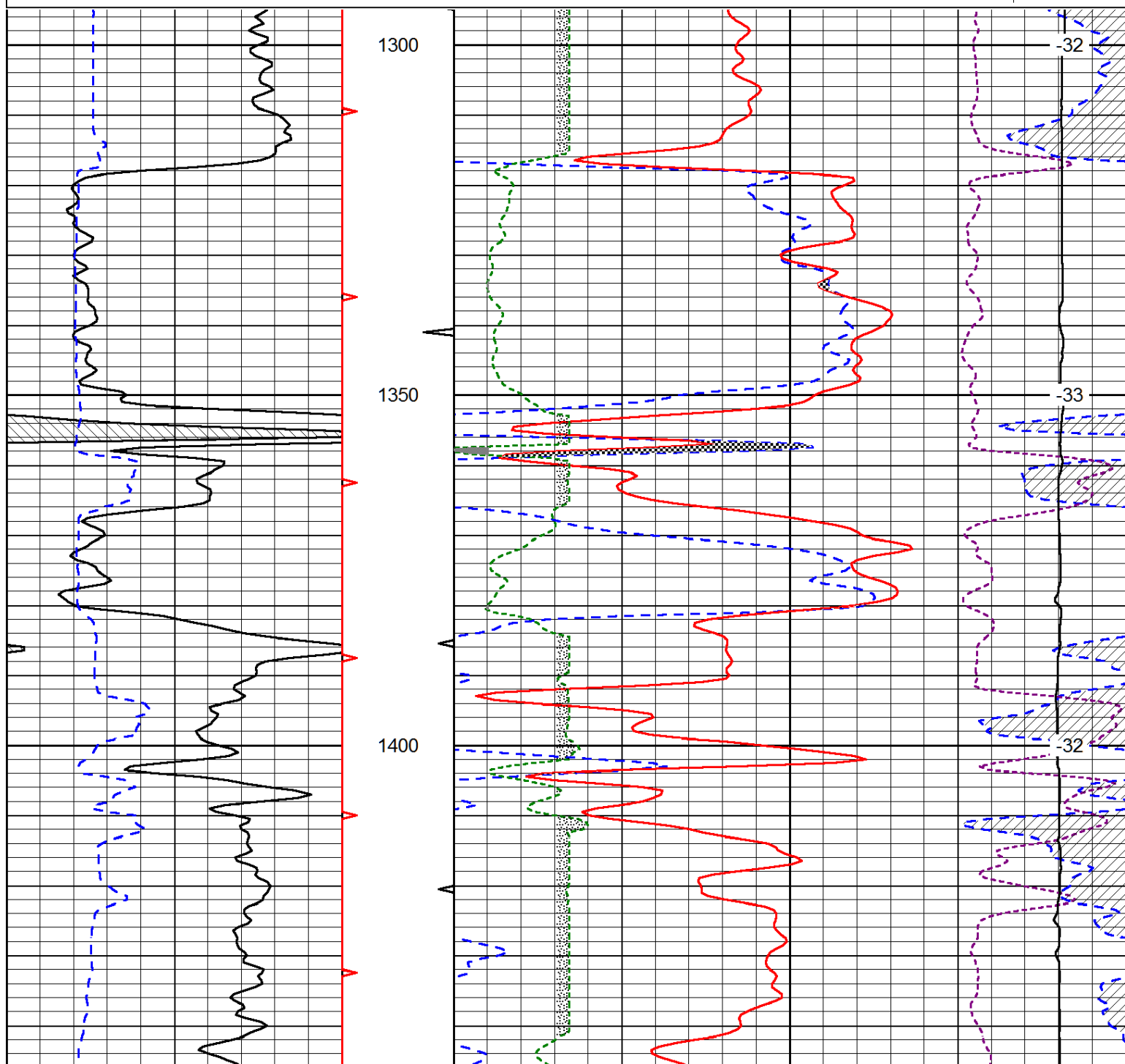


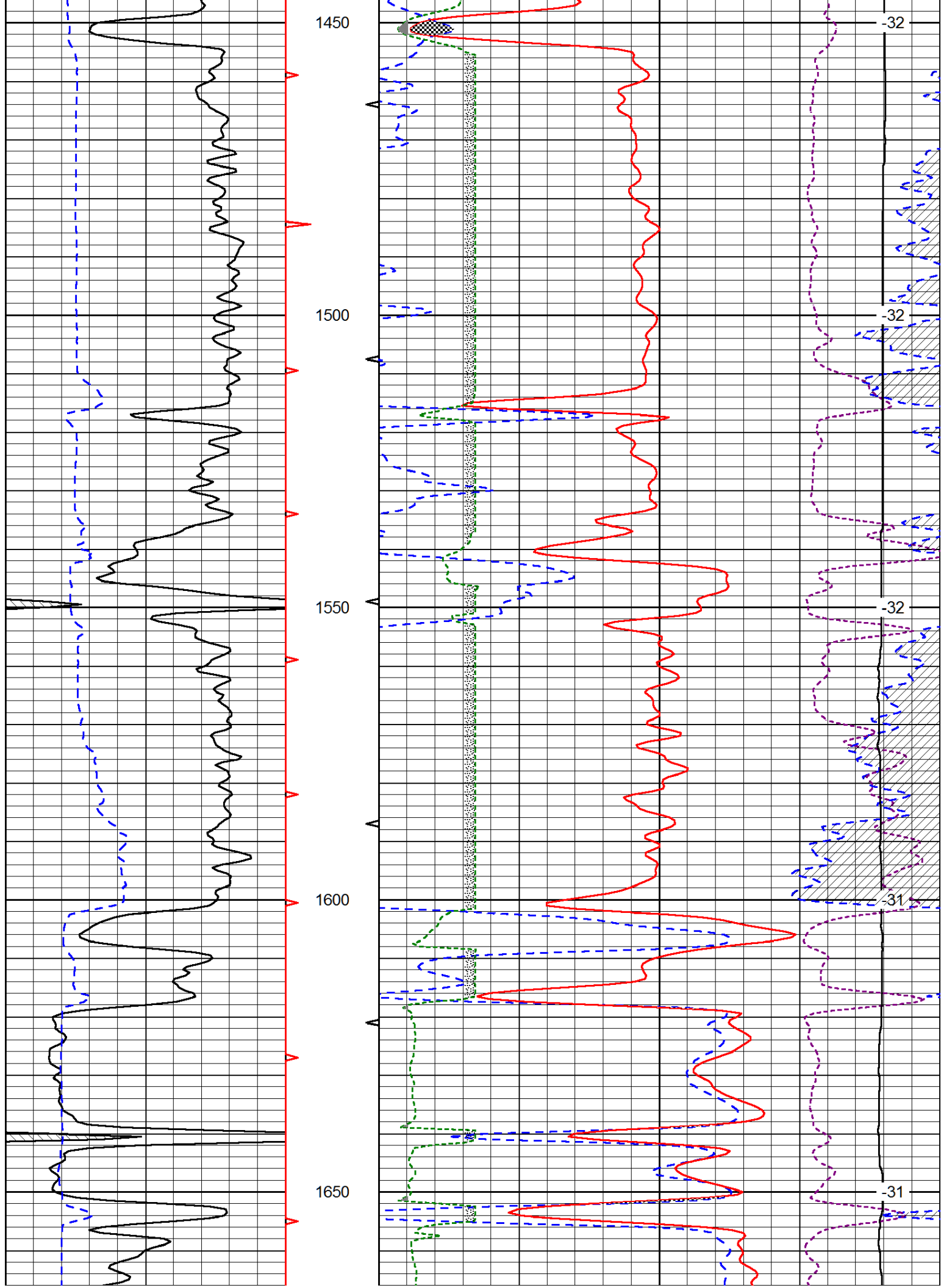


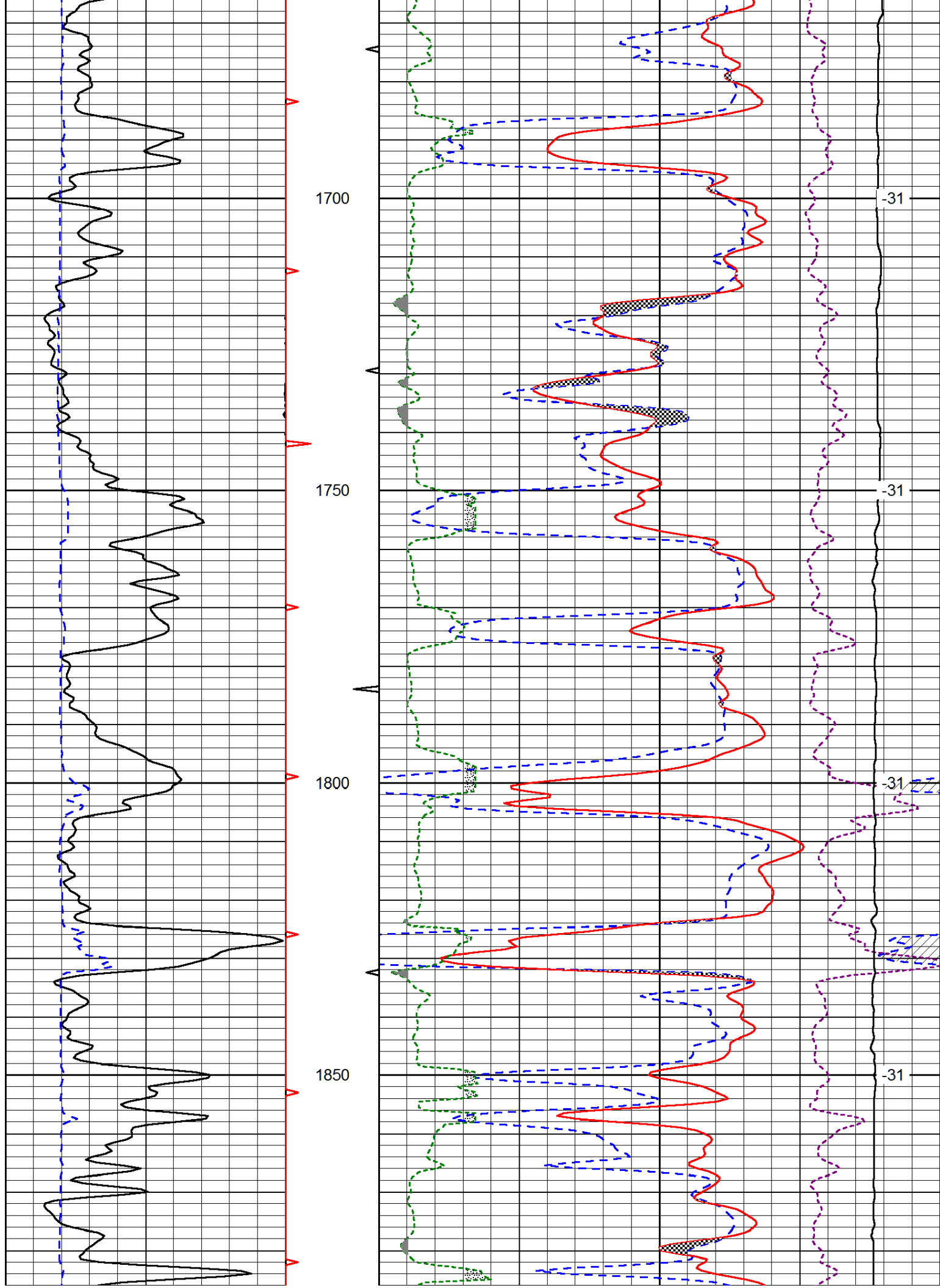
6	Caliper (GAPI)	16	2	Bulk Density	3
			15000	Line Tension	0
			2.625	DGA	3.425
				-0.25	Correction
					0.25
					LSPD

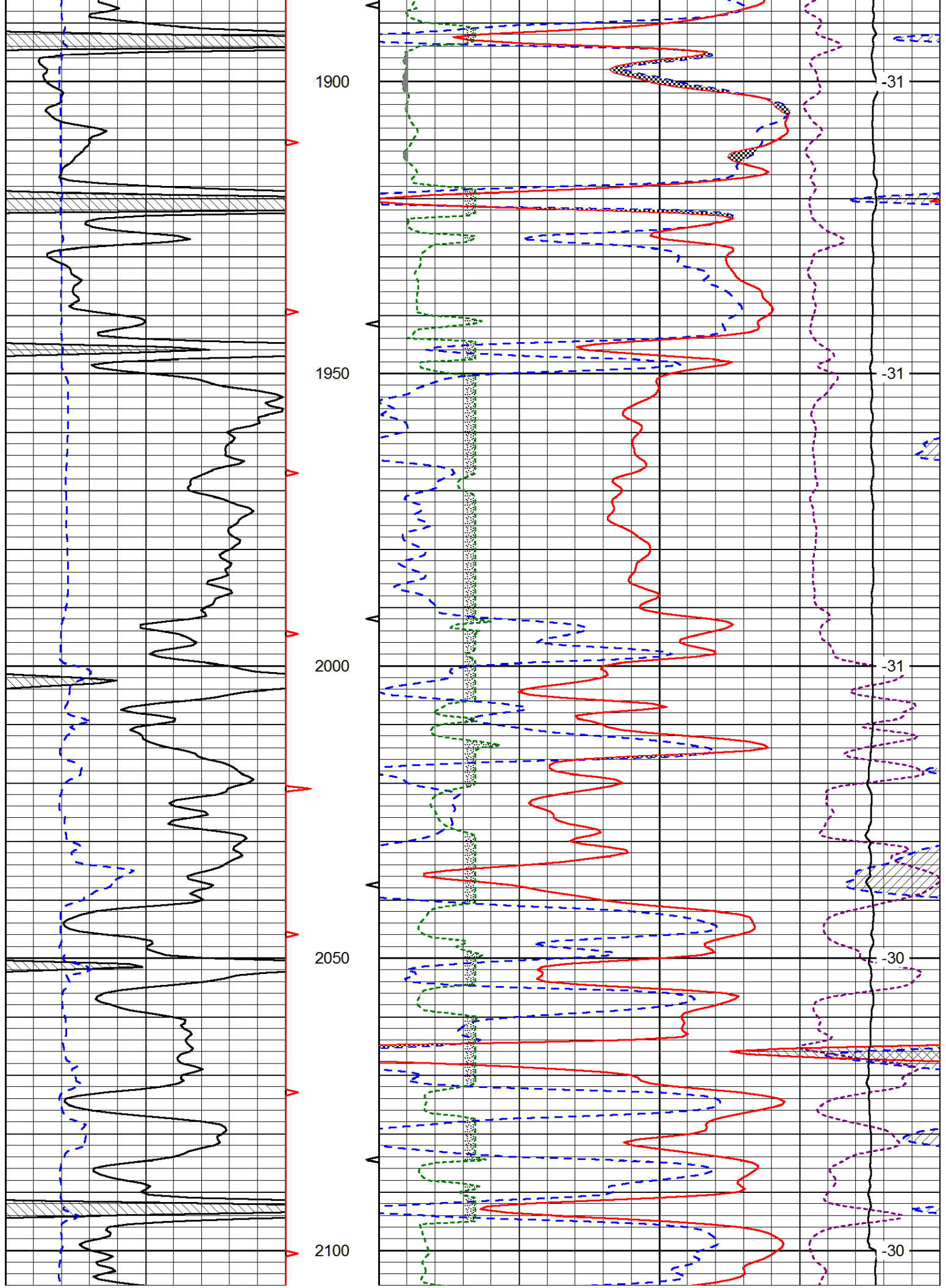
Database File: rangehd.db
 Dataset Pathname: dil/rngstk
 Presentation Format: cndlspec
 Dataset Creation: Mon Oct 13 08:23:59 2014
 Charted by: Depth in Feet scaled 1:240

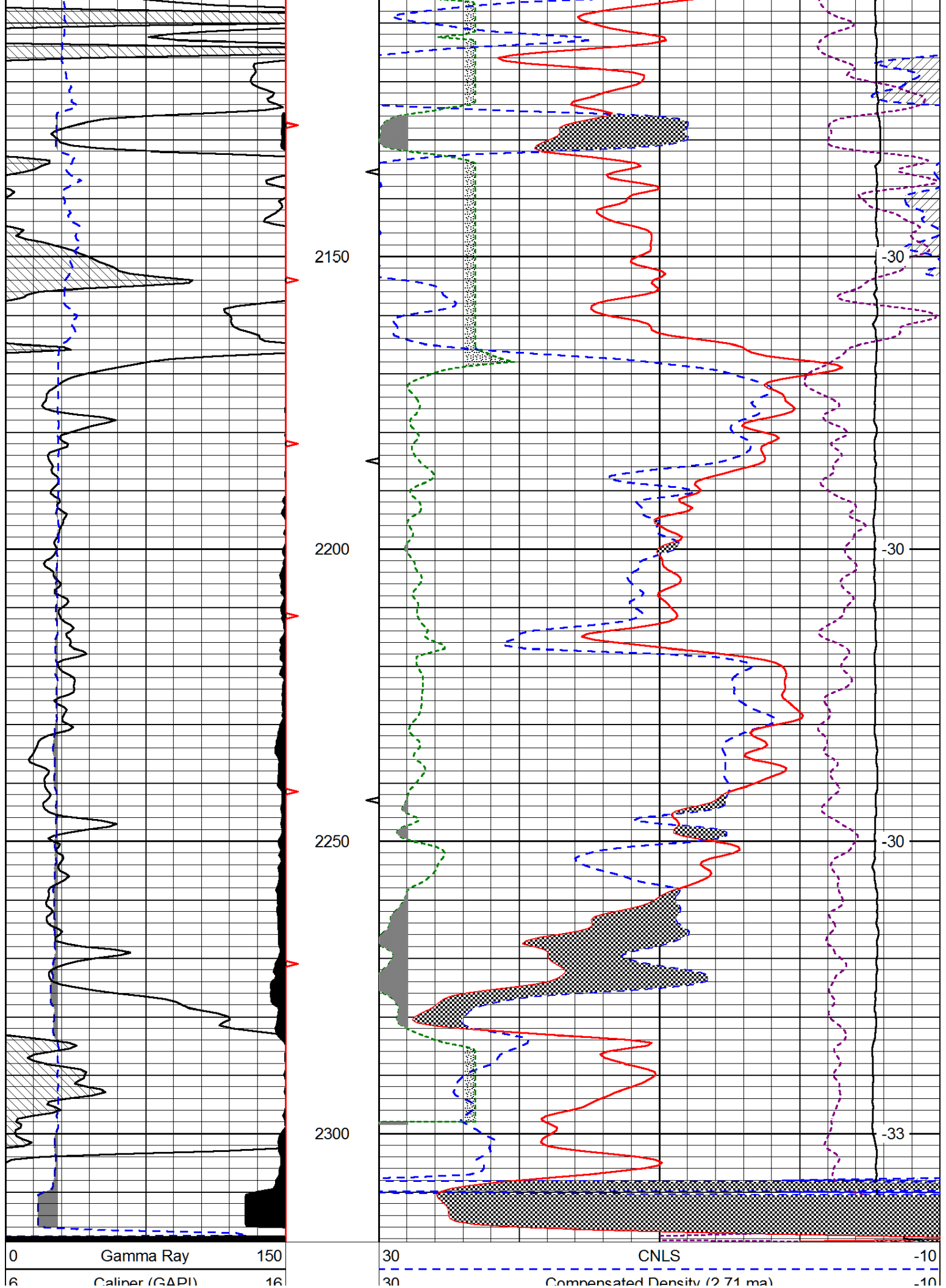
0	Gamma Ray	150	30	CNLS	-10
6	Caliper (GAPI)	16	30	Compensated Density (2.71 ma)	-10
			2.625	DGA	3.425
				-0.25	Correction
					0.25
			10000	Line Tension	0
					LSPD











6	Caliper (CA 117)	10

00		Compensated Density (2.71 t/m ³)		10	
2.625	DGA	3.425	-0.25	Correction	0.25
10000		Line Tension		0	
					LSPD