



Dual Compensated Porosity Log

Pioneer Energy Services

API No.

15-171-21,100-00-00

Company Ritchie Exploration, Inc.

Well Huseman 20A No.1

Field Michigan North

County Scott

State Kansas

Location

Sec: 20

Twp: 16S

E/2 NE/4
1175' FNL & 770' FEL

Rge: 31W

Other Services
DIL

Permanent Datum Ground Level Elevation 2932

Log Measured From Kelly Bushing 5 Ft. Above Perm. Datum

K.B. 2937
D.F.
G.L. 2932

Date 10/23/2014

Run Number One

Type Log CNL / CDL

Depth Driller 4723

Depth Logger 4725

Bottom Logged Interval 4704

Top Logged Interval 3500

Type Fluid In Hole Chemical

Salinity, PPM CL 2,500

Density 9.1

Level Full

Max. Rec. Temp. F 123

Operating Rig Time 2 Hours

Equipment -- Location 10 Hays

Recorded By C. Desaire

Witnessed By Mike Engelbrecht

Borehole Record

From

To

Size

Wgt.

From

To

222

00

8.625

23#

222

00

222

Comments

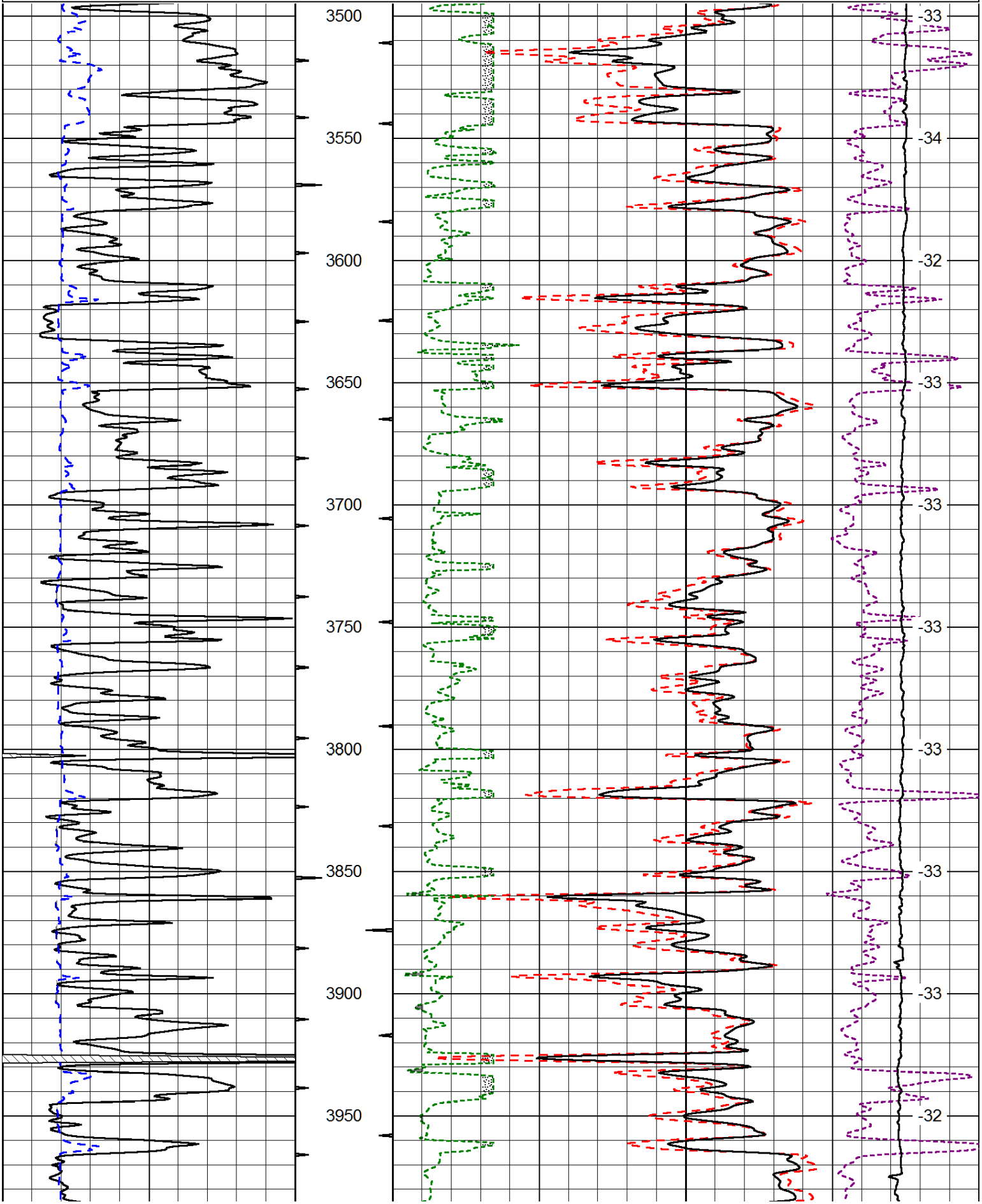
Thank you for using Log-Tech, Inc.
(785) 625-3858

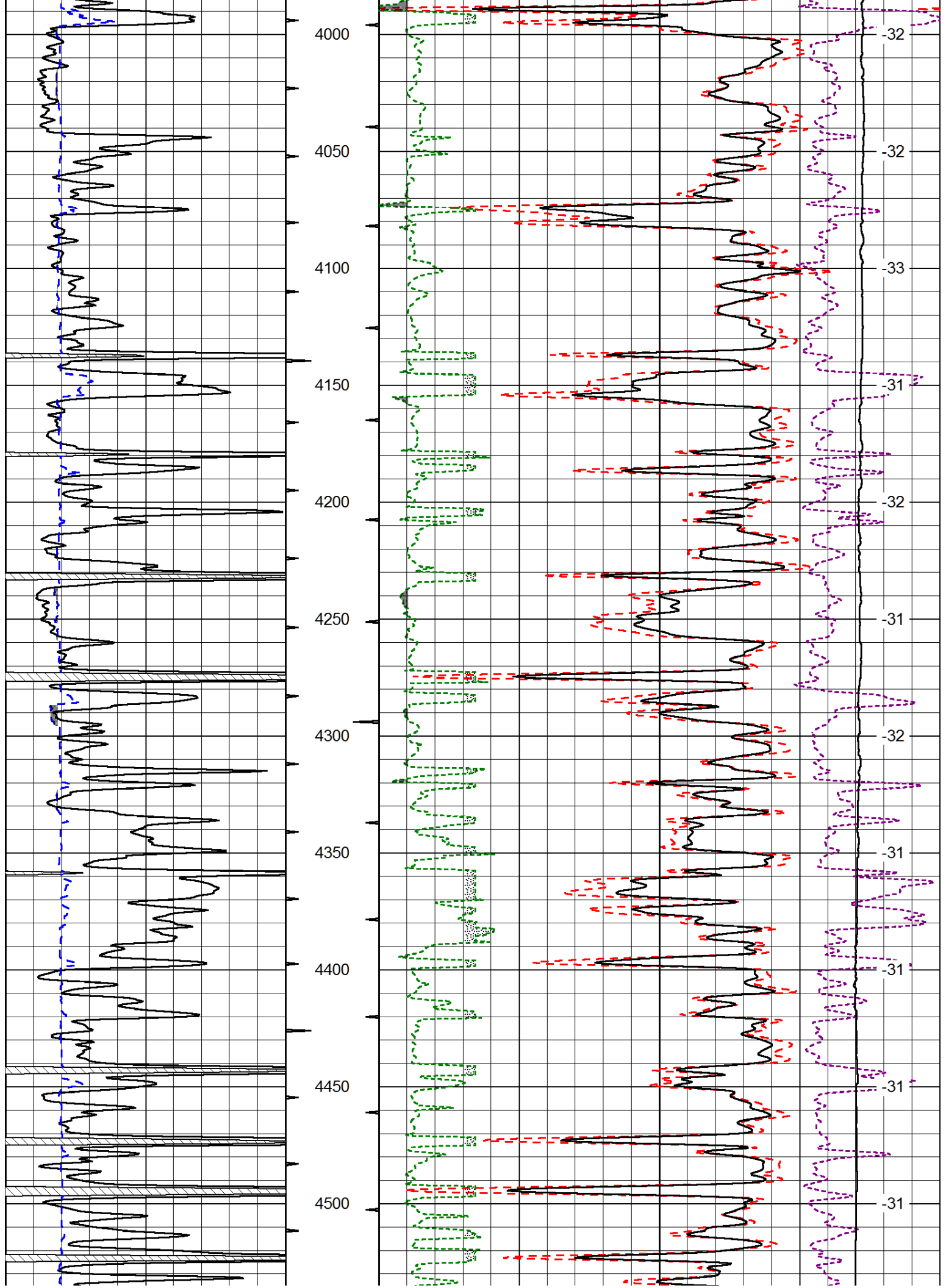
Healy KS, W to Taos Rd,
3 3/4 N, W Into

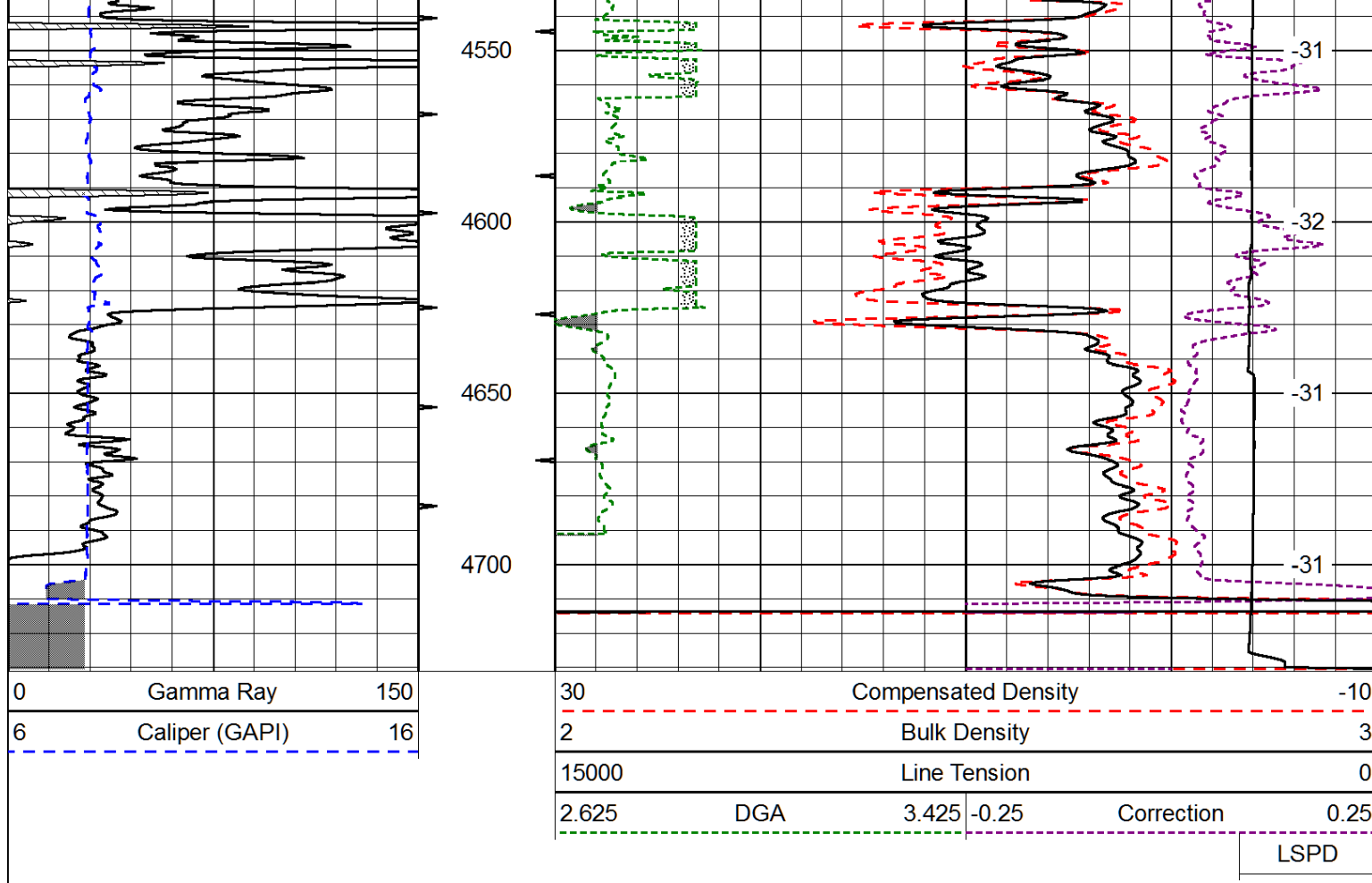
Database File: ritchhd.db
Dataset Pathname: dil/ritchstk2
Presentation Format: cdl
Dataset Creation: Thu Oct 23 17:18:10 2014
Charted by: Depth in Feet scaled 1:600

Gamma Ray	150
Caliper (GAPI)	16

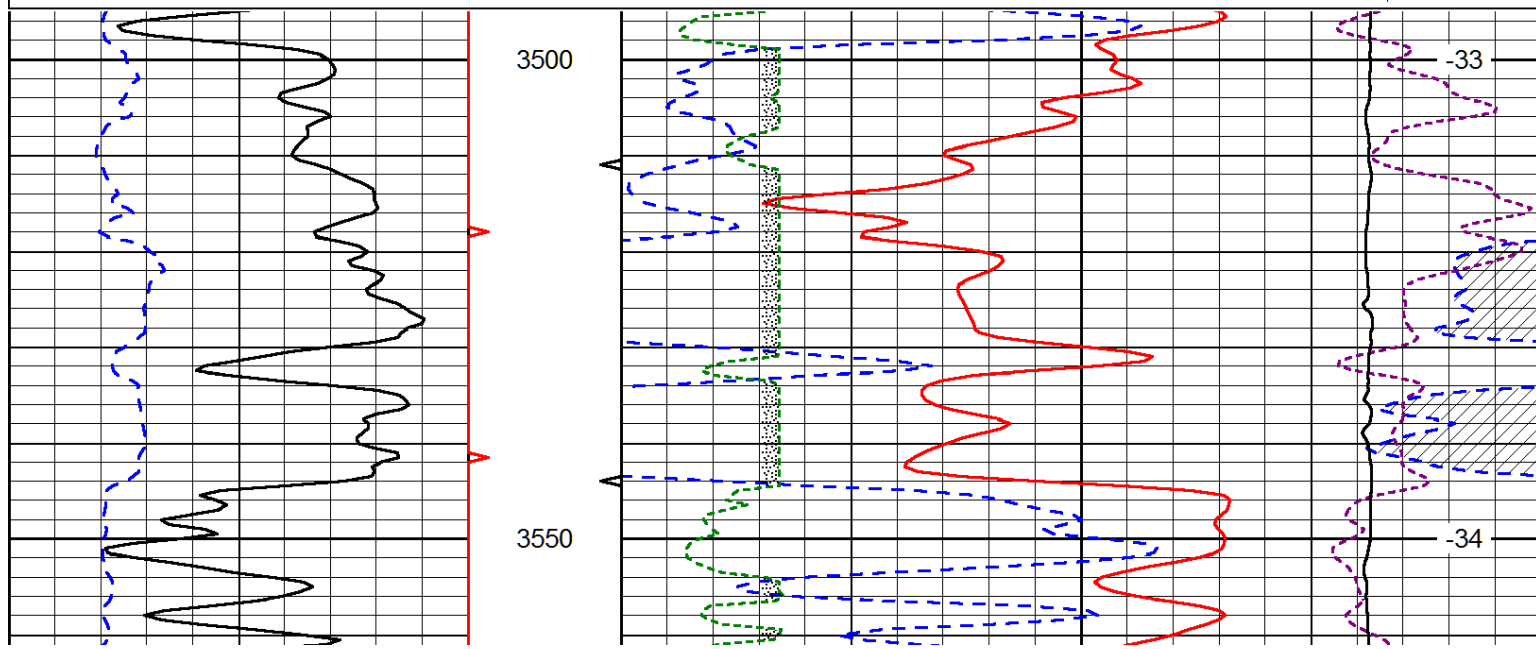
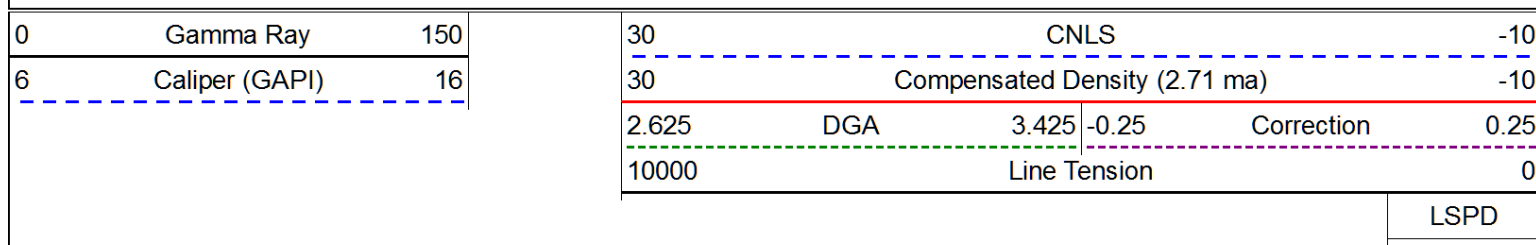
Compensated Density					-10
Bulk Density					3
Line Tension					0
2.625	DGA	3.425	-0.25	Correction	0.25
					LSPD

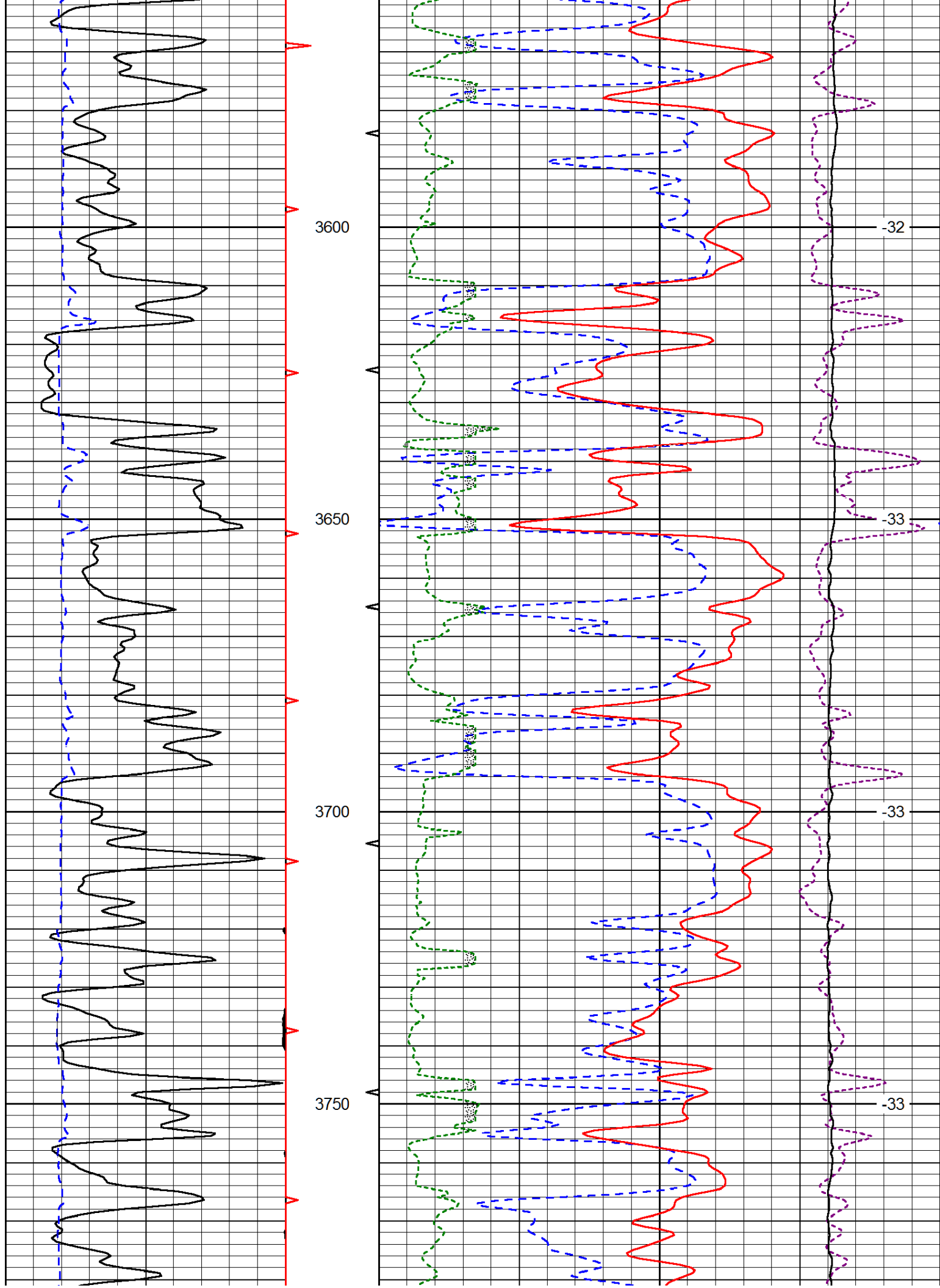


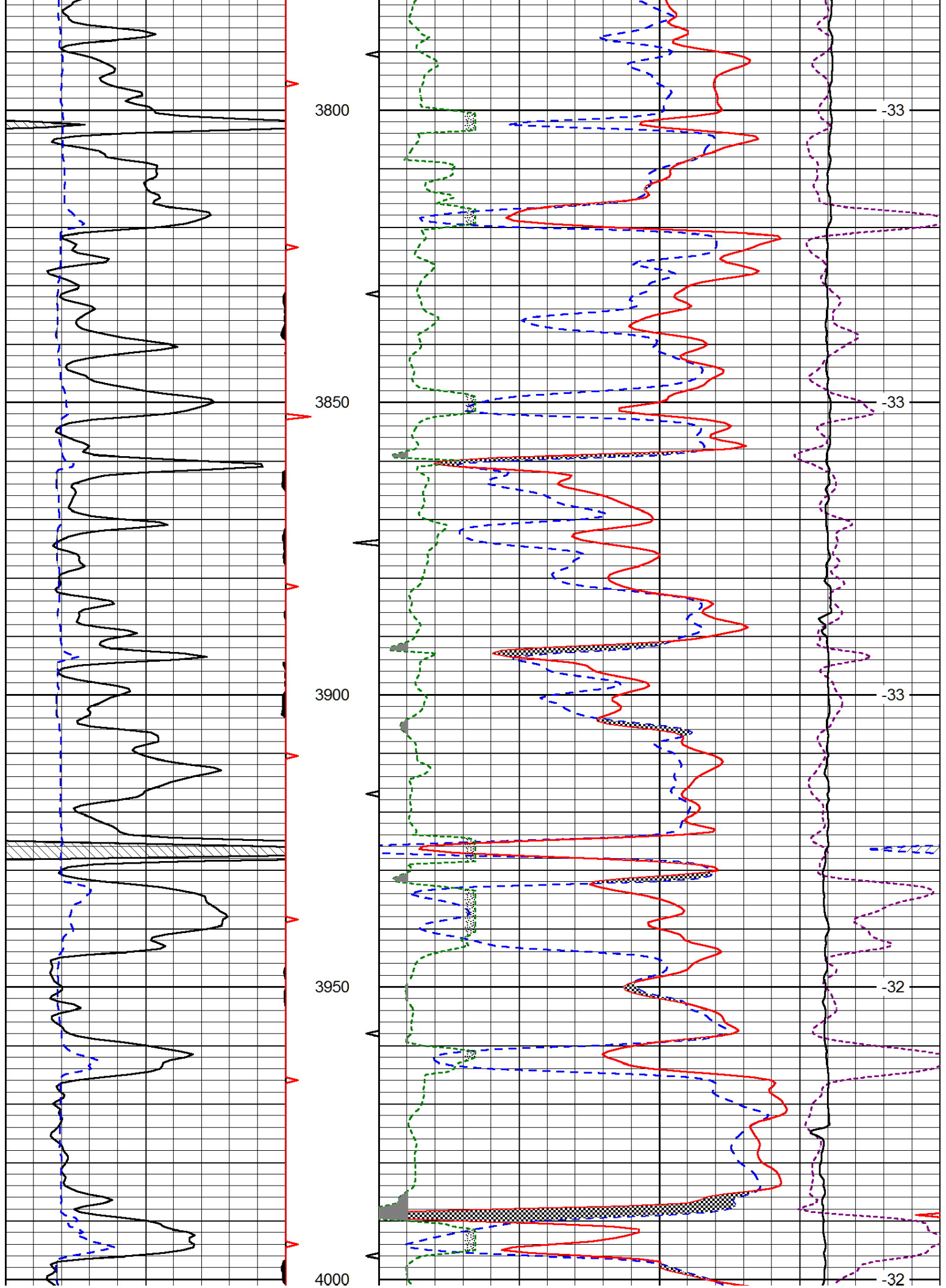


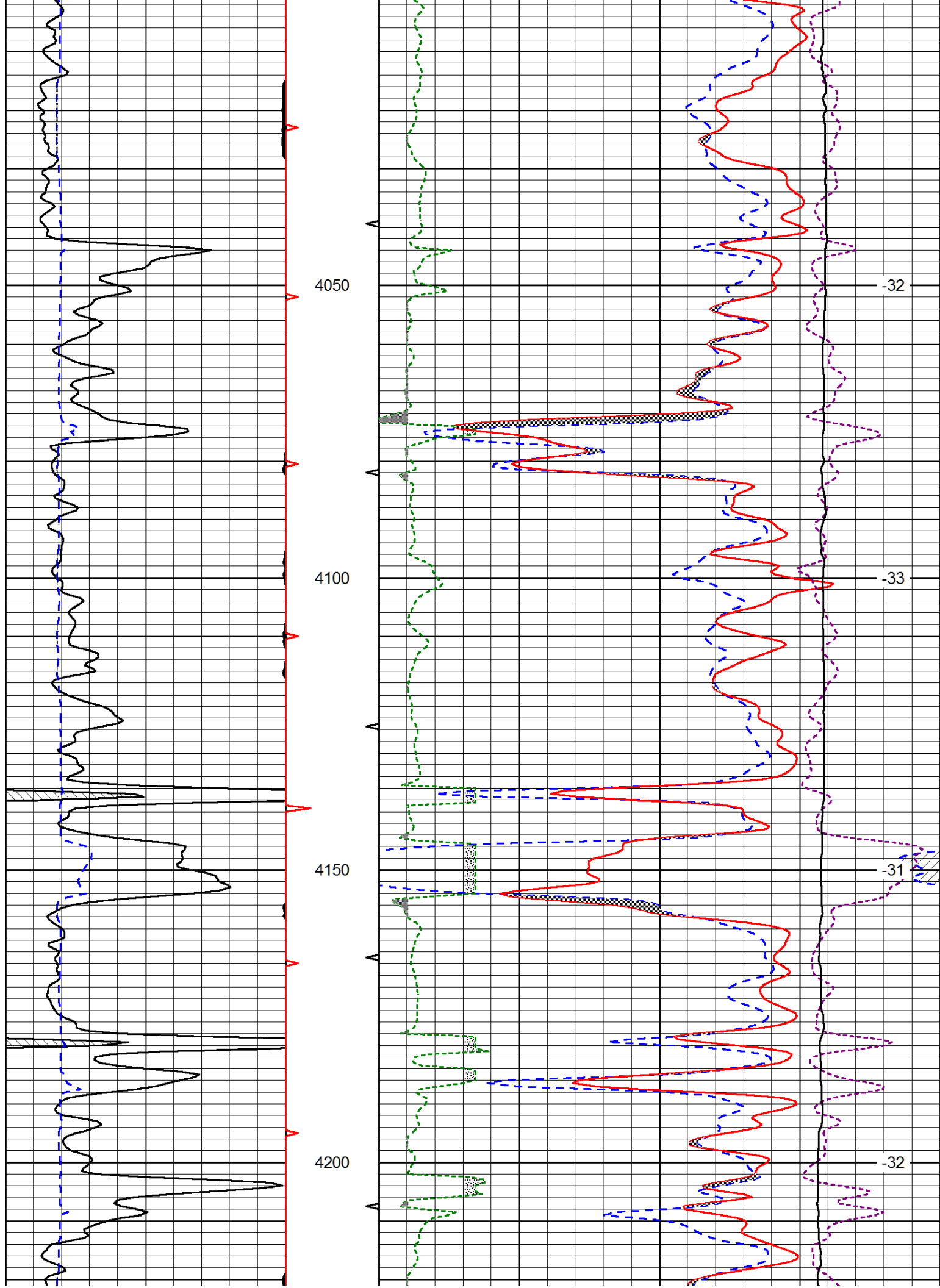


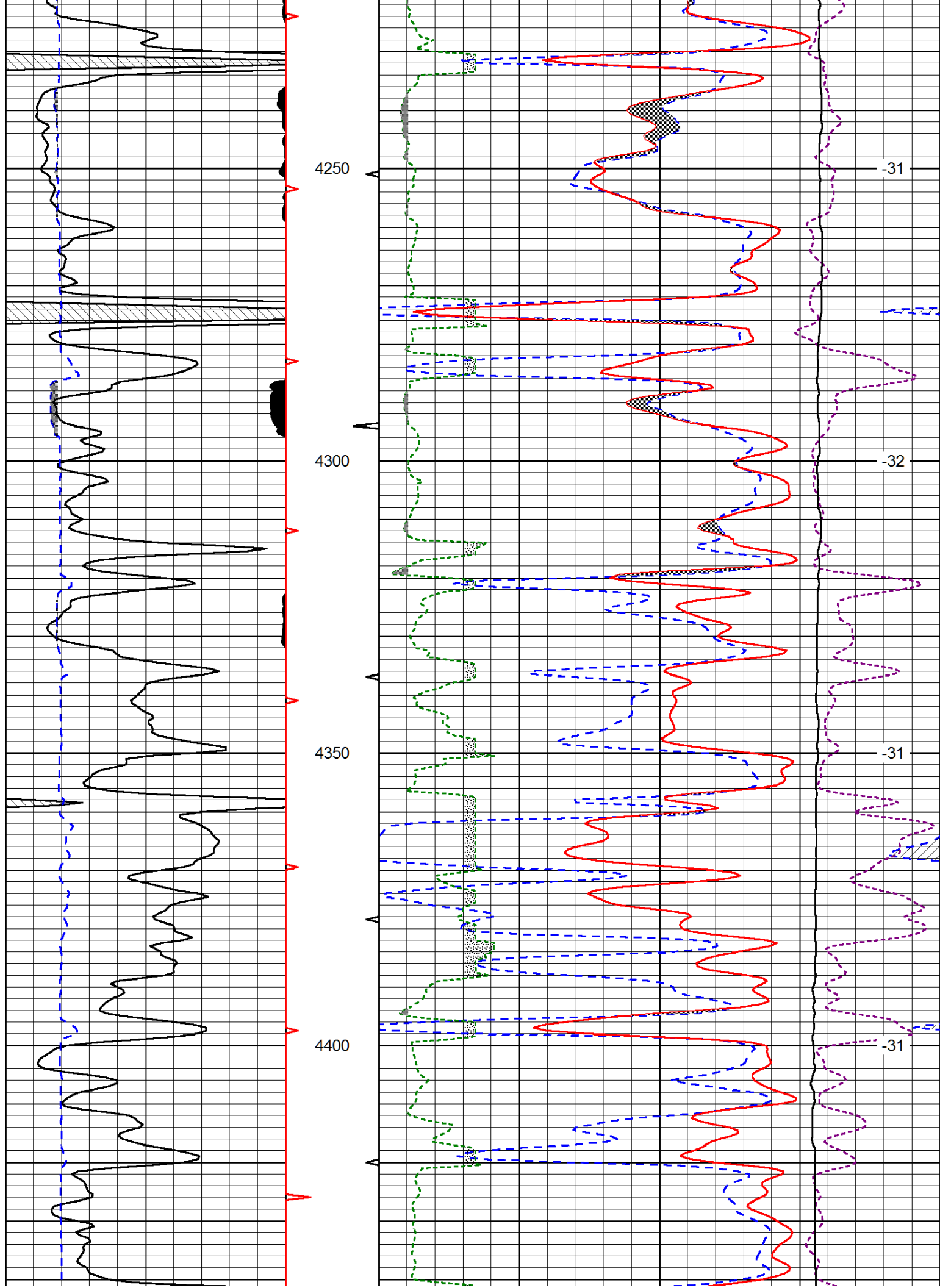
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Presentation Format: cndlspec
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Charted by: Depth in Feet scaled 1:240

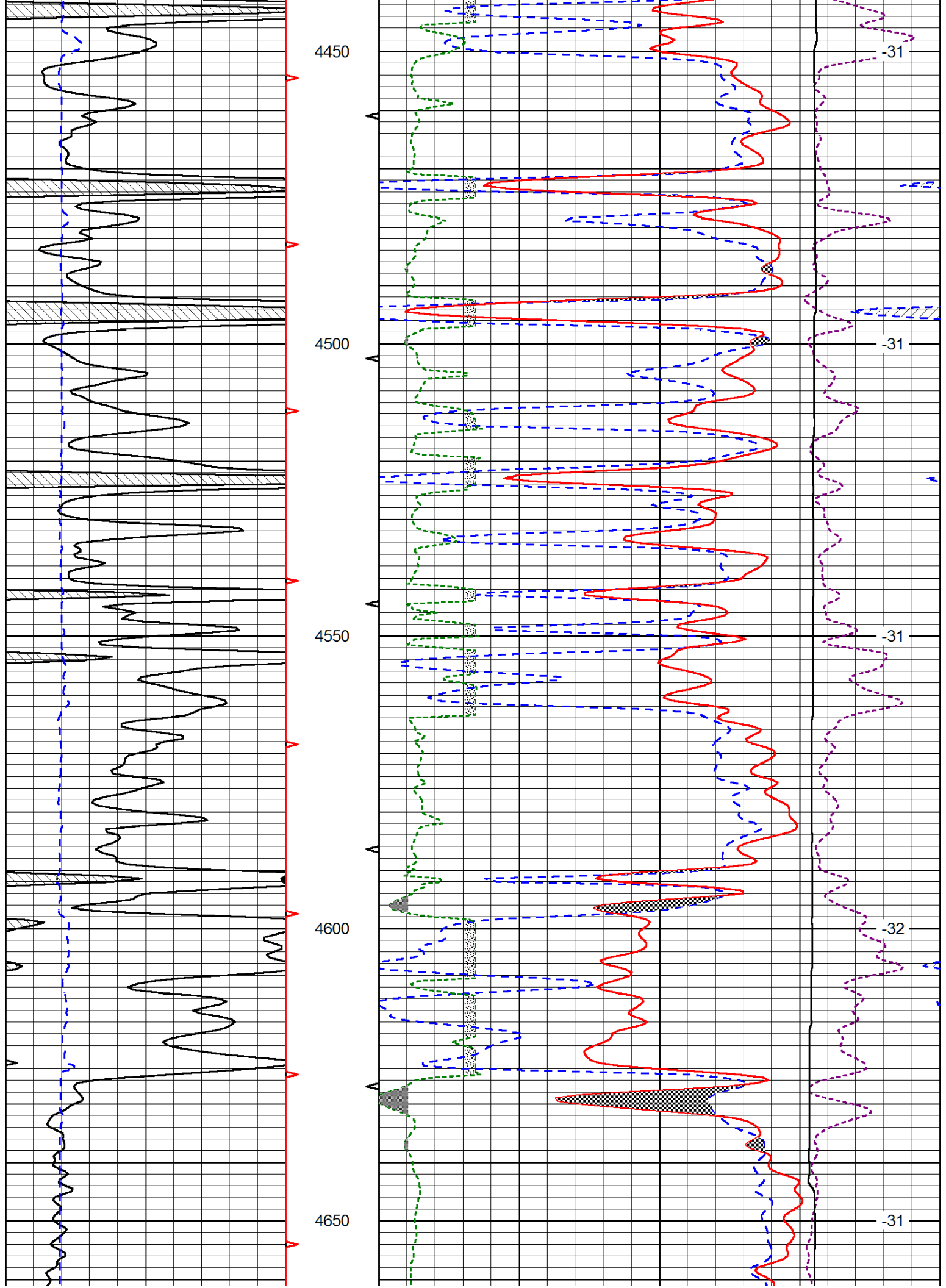


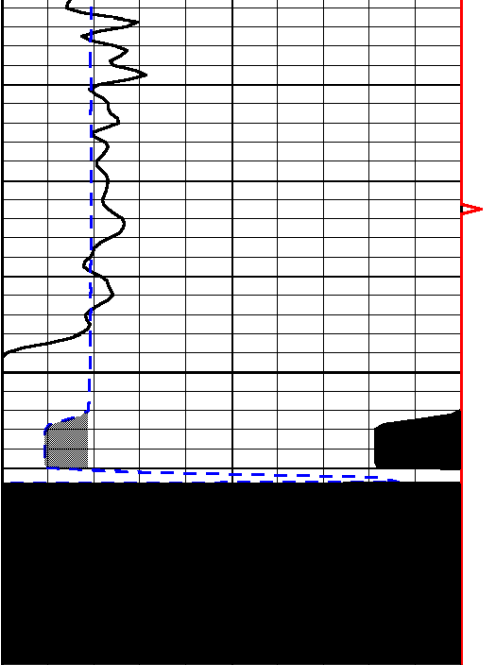






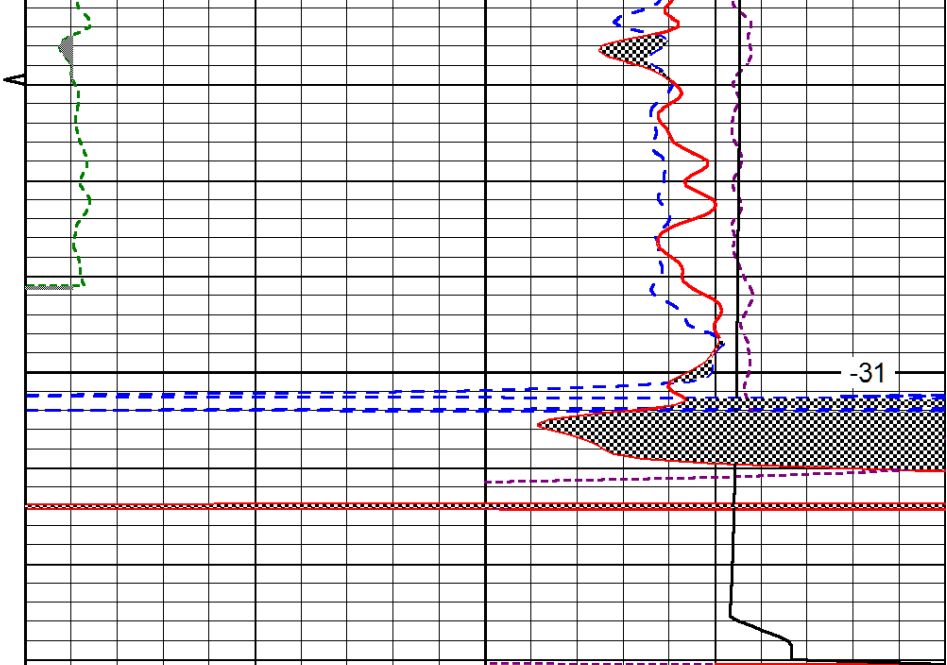






4700

0	Gamma Ray	150
6	Caliper (GAPI)	16



-31

30	CNLS				-10
30	Compensated Density (2.71 ma)				-10
2.625	DGA	3.425	-0.25	Correction	0.25
10000	Line Tension				0

LSPD