



Dual Compensated Porosity Log

Pioneer Energy Services

API No.

15-051-26,364-00-00

Company Hertel Oil Company, LLC
Well Legleiter-Stecklein Unit No. 1
Field Engel West
County Ellis State Kansas

Location

SE NW SW
1,725' FSL & 900' FWL

Sec: 33

Twp: 14S

Rge: 18W

Other Services
DIL/MEL

Permanent Datum Ground Level Elevation 2037
Log Measured From Kelly Bushing 8 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

K.B. 2045
D.F.
G.L. 2037

Date

8/21/2012

Run Number

One

Type Log

CNL / CDL

Depth Driller

3750

Depth Logger

3751

Bottom Logged Interval

3730

Top Logged Interval

2900

Type Fluid In Hole

Chemical

Salinity, PPM CL

12700

Density

9.0

Level

Full

Max. Rec. Temp. F

114

Operating Rig Time

4 Hours

Equipment -- Location

108 Hays

Recorded By

J. Long

Witnessed By

Herb Deines

Borehole Record

Casing Record

Run No

Bit

From

To

Size

Wgt.

From

To

One

12.25

00

221

8.625

23#

00

221

Two

7.875

221

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

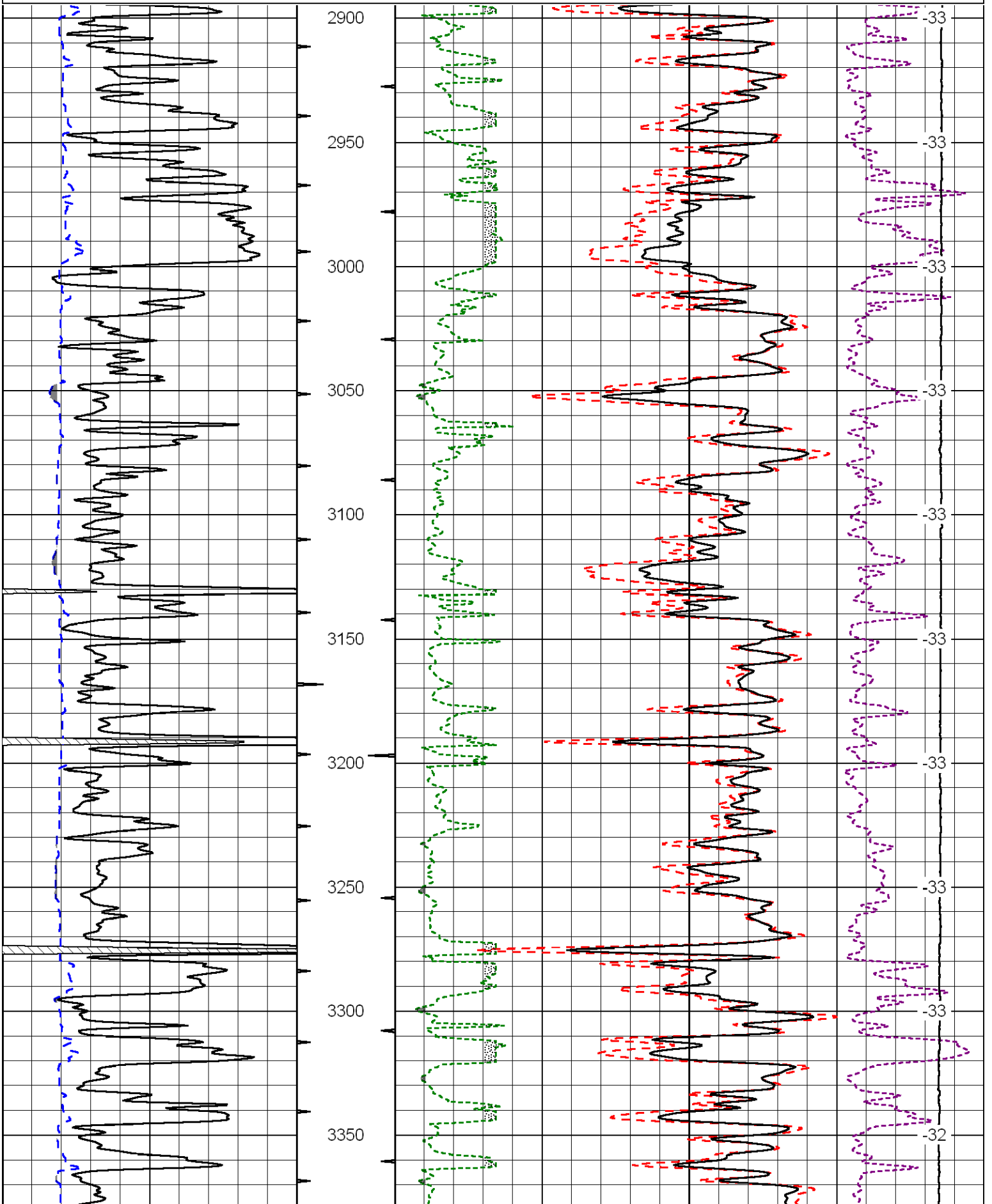
Thank you for using Log-Tech, Inc.
(785) 625-3858

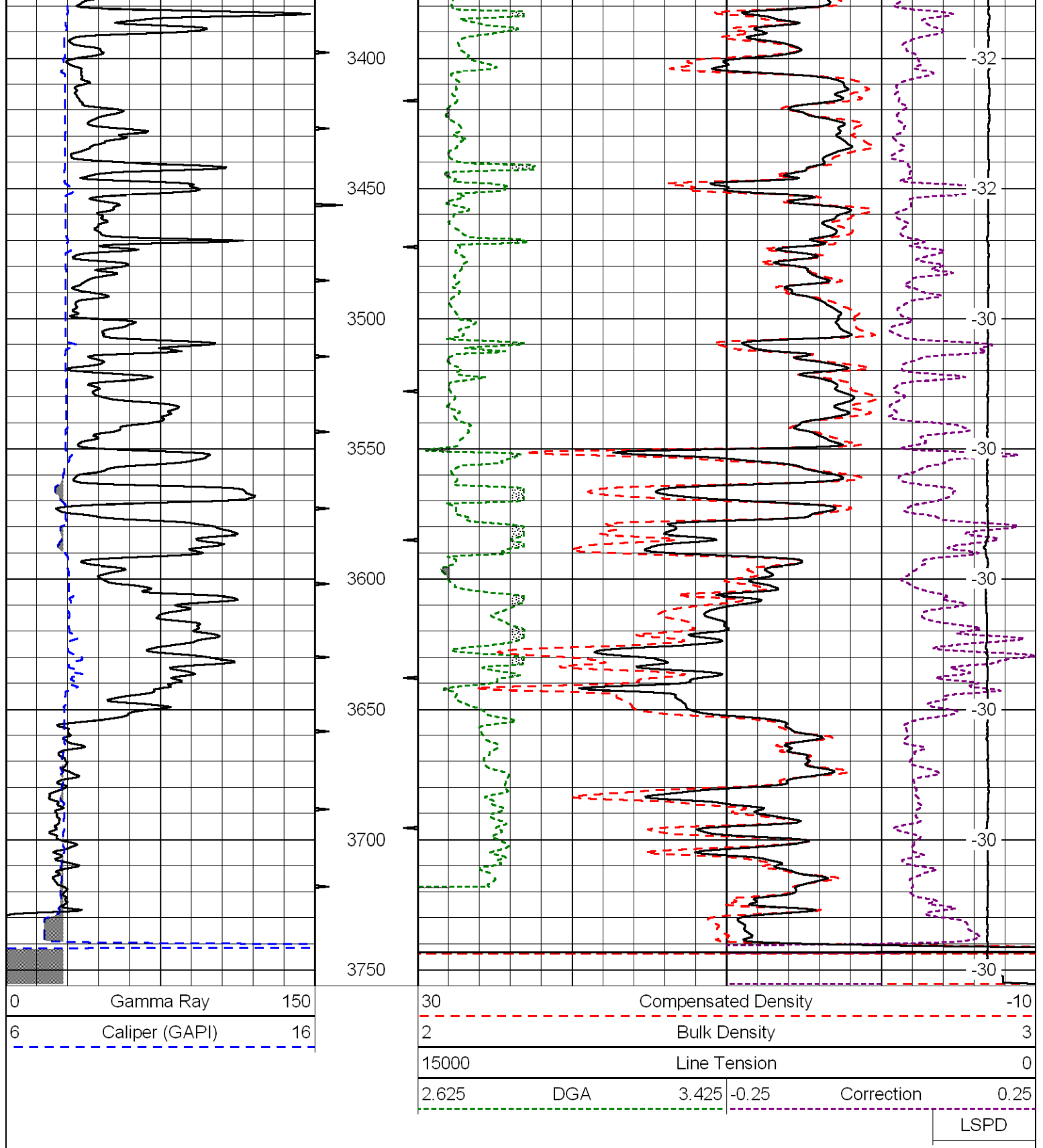
Hays, South to Antonino Blacktop, 1/2 West, North and West Into (At Tank Batteries)

Database File: hertel_legateiter-stecklein_1hd.db
Dataset Pathname: dil/hertstck
Presentation Format: cdl
Dataset Creation: Tue Aug 21 09:25:34 2012
Charted by: Depth in Feet scaled 1:600

0	Gamma Ray	150
6	Caliper (GAPI)	16

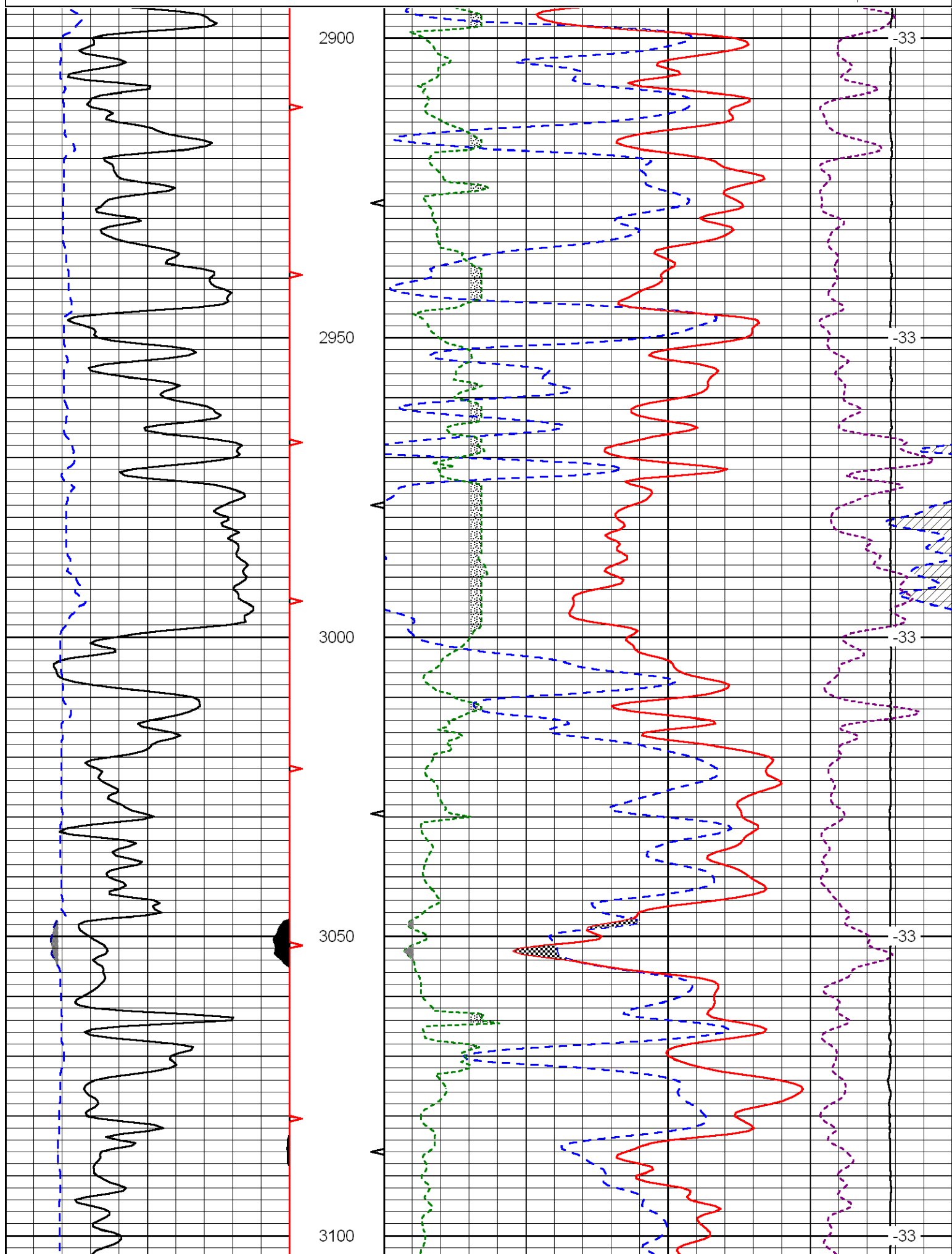
30	Compensated Density		-10
2	Bulk Density		3
15000	Line Tension		0
2.625	DGA	3.425	-0.25
			Correction
			0.25
			LSPD

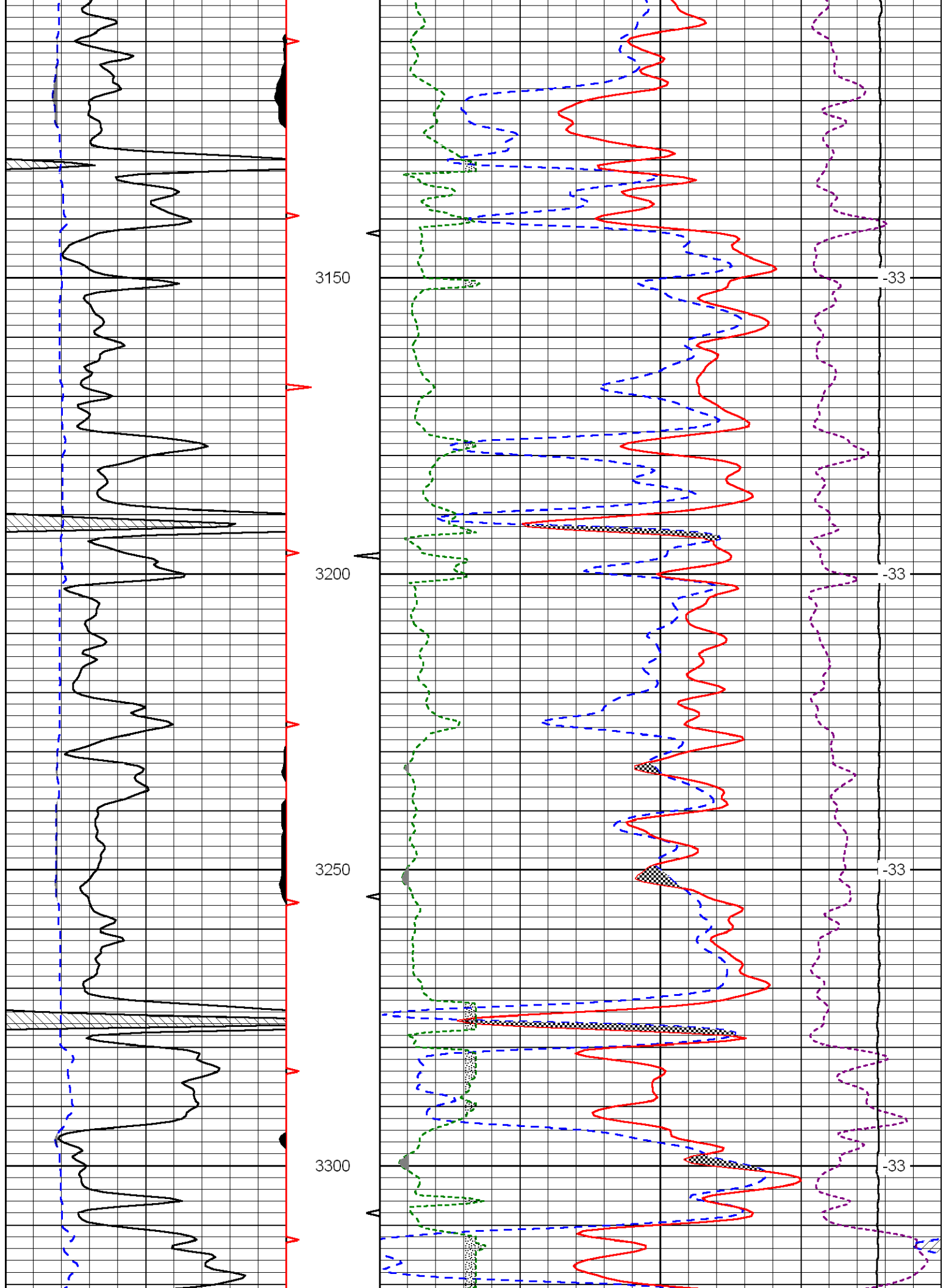


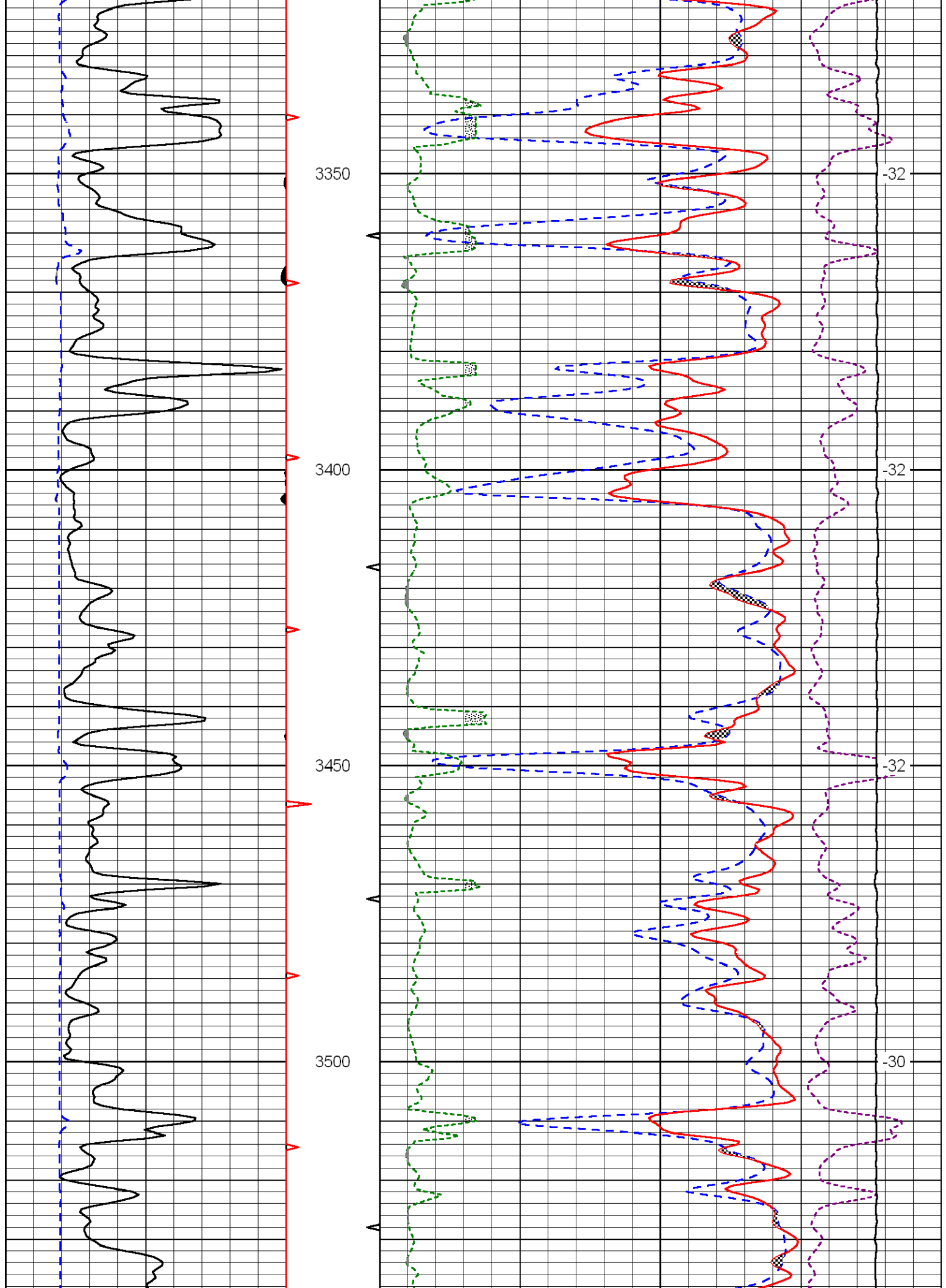


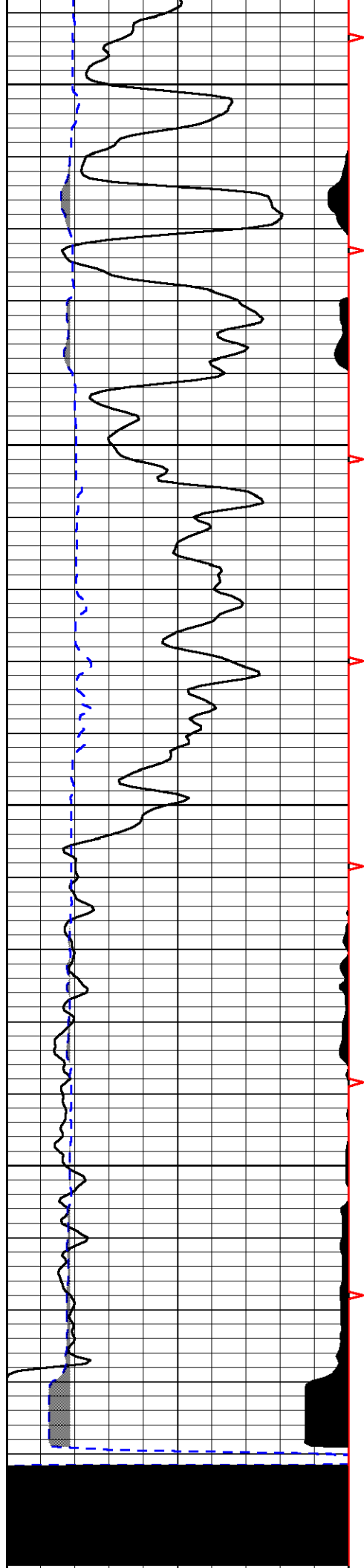
Database File: hertel_legeleiter-stecklein_1hd.db
 Dataset Pathname: dil/hertstock
 Presentation Format: cndlspec
 Dataset Creation: Tue Aug 21 09:25:34 2012
 Charted by: Depth in Feet scaled 1:240











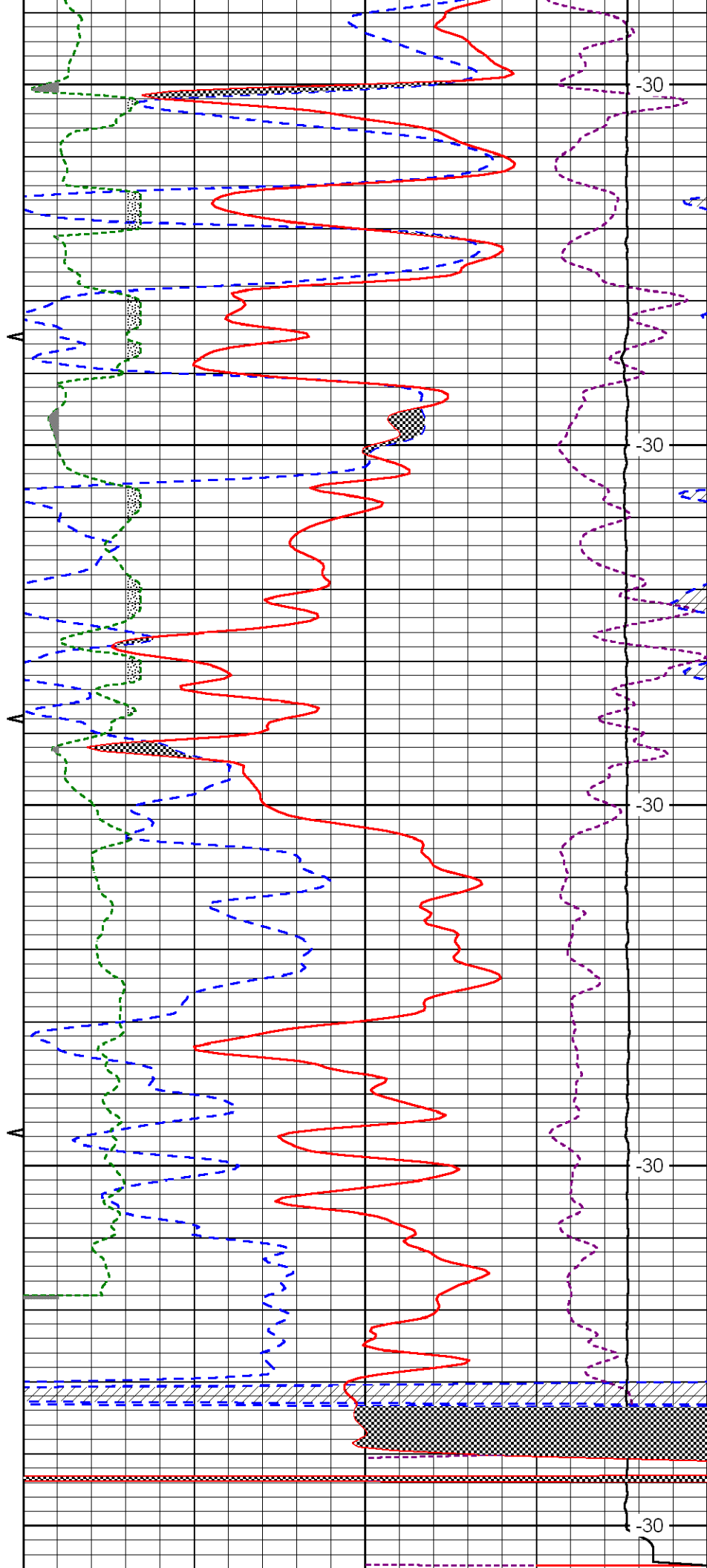
3550

3600

3650

3700

3750



-30

-30

-30

-30

-30

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