



PIONEER

Pioneer Energy Services

Dual Compensated Porosity Log

API No.

15-145-21694-00-00

Company Mid-Con Operating, LLC

Well Hagerman #13-10

Field Oro

County Pawnee

State Kansas

Location 2310' FNL & 990' FWL

Sec: 10 Twp: 20S Rge: 19W

Permanent Datum Ground Level Elevation 2234
Log Measured From Kelly Bushing 13 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Other Services
DIL/MEL

Elevation
K.B. 2247
D.F. 2234
G.L. 2234

Date 10/23/2012

Run Number One

Type Log CNL / CDL

Depth Driller 4509

Depth Logger 4508

Bottom Logged Interval 4487

Top Logged Interval 3000

Type Fluid In Hole Chemical

Salinity, PPM CL 3000

Density 9.2

Level Full

Max. Rec. Temp. F 123

Operating Rig Time 5 Hours

Equipment -- Location 91 Hays

Recorded By D. Schmidt

Witnessed By Chris Bean

Borehole Record

Casing Record

Run No

Bit

From

To

Size

Wgt.

From

To

One

12.25

00

507

8.625

23#

00

507

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.

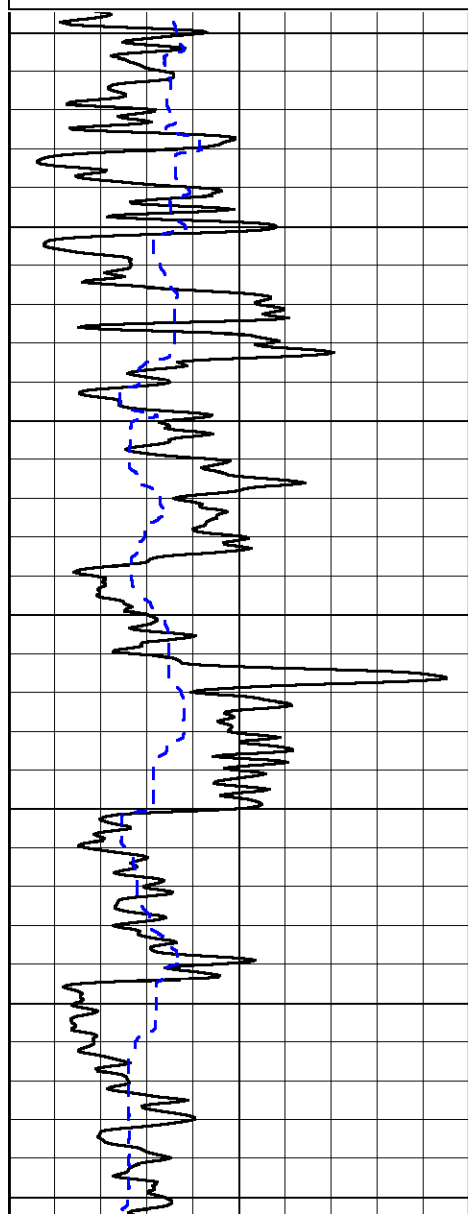
Comments

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

Rush Center,
10 South to Pawnee County X Rd, 6 West, 1/2 North,
East into

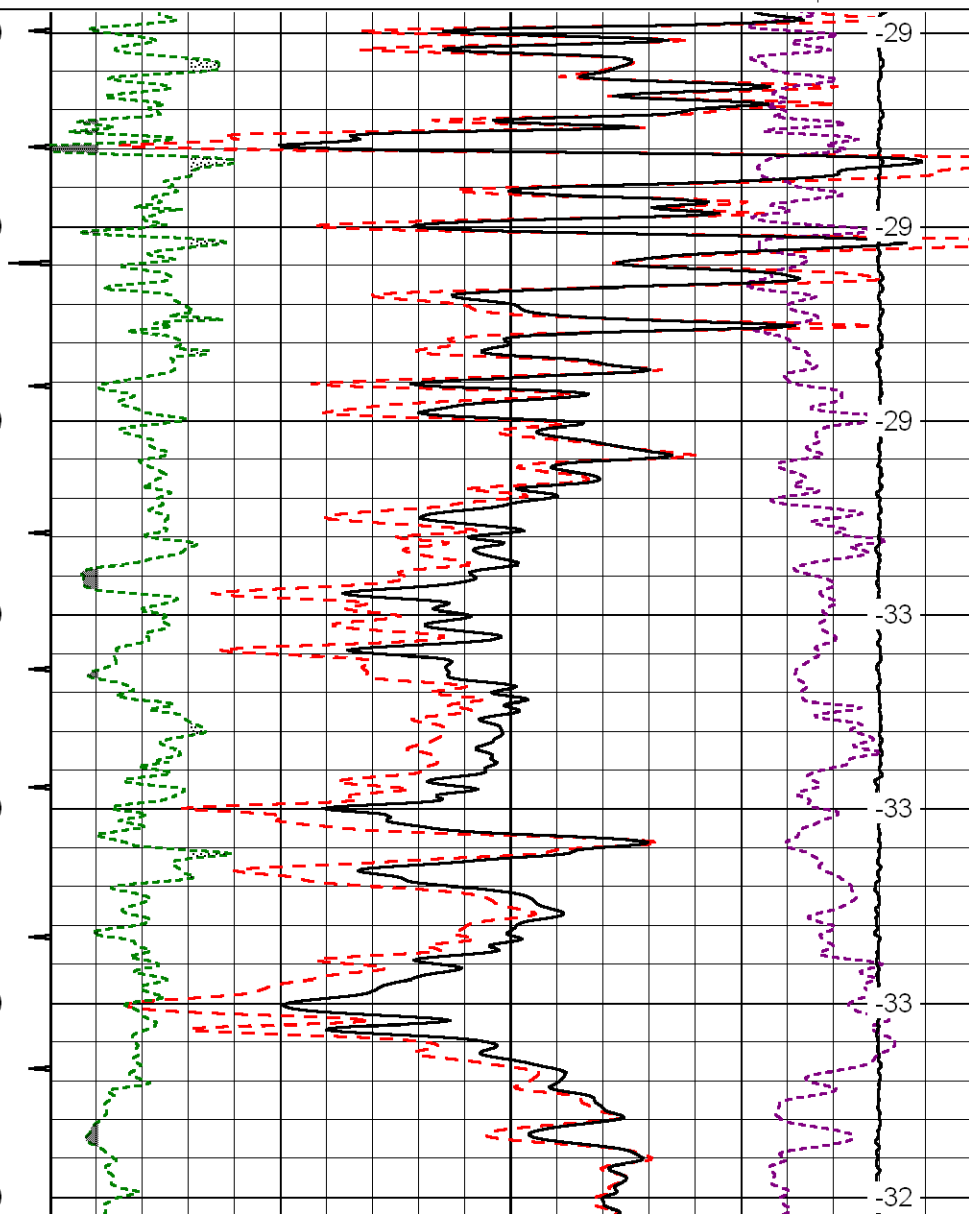
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Dataset Pathname: dil/mcstack
Presentation Format: cdl
Dataset Creation: Wed Oct 24 00:33:48 2012
Charted by: Depth in Feet scaled 1:600

0	Gamma Ray	150
6	Caliper (GAPI)	16



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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			

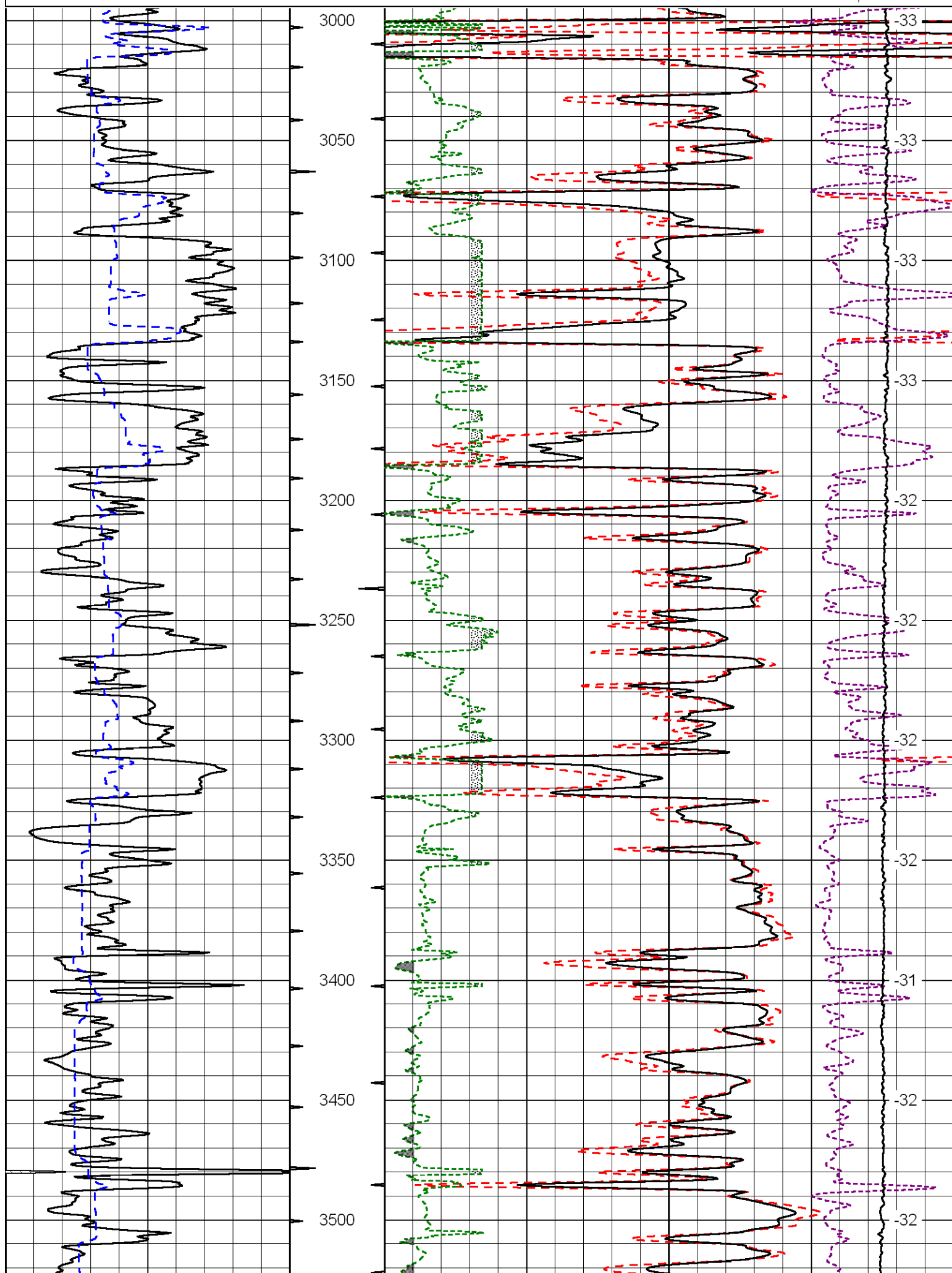


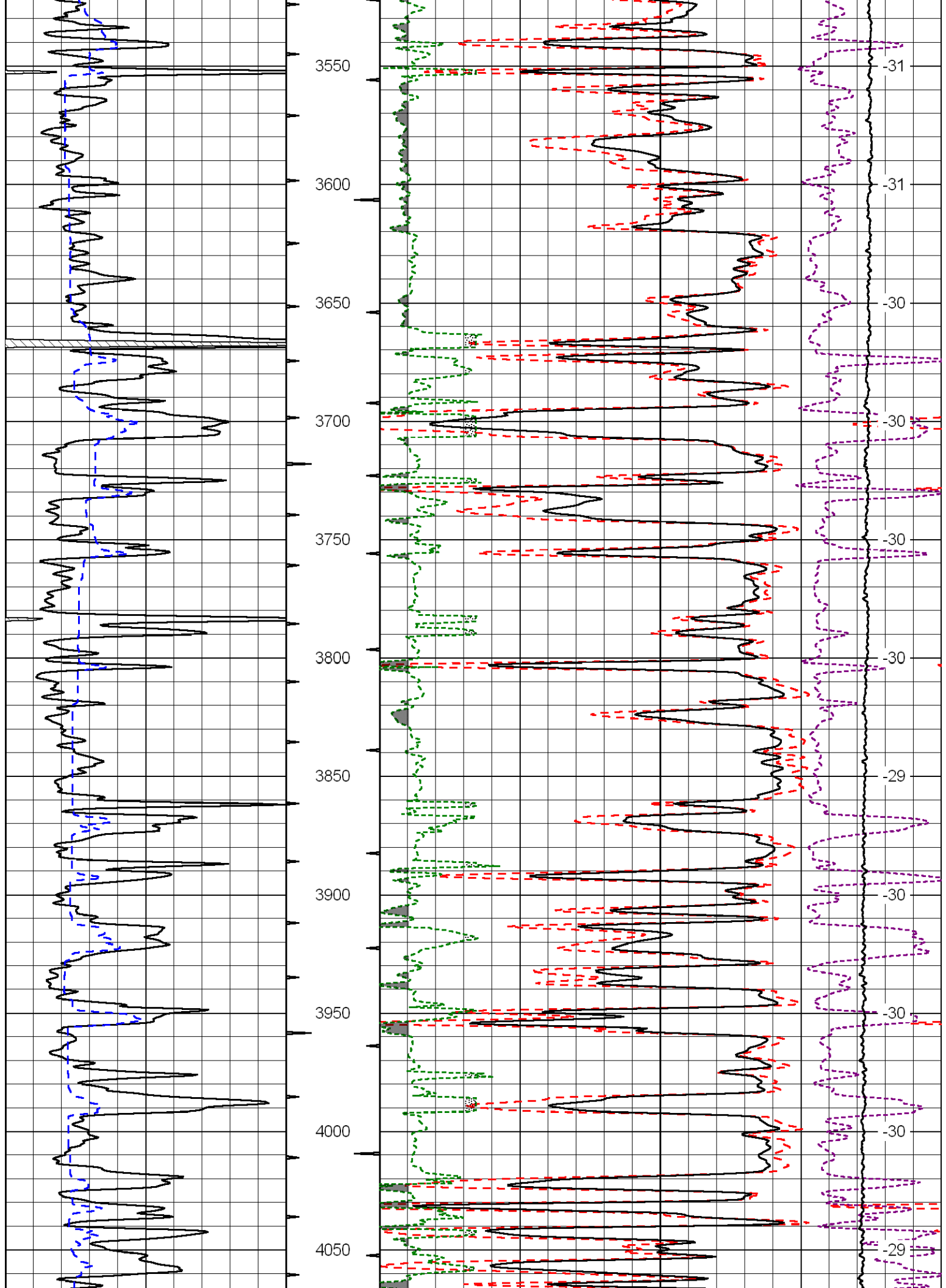
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15000	Line Tension		0
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		Correction	0.25
LSPD			

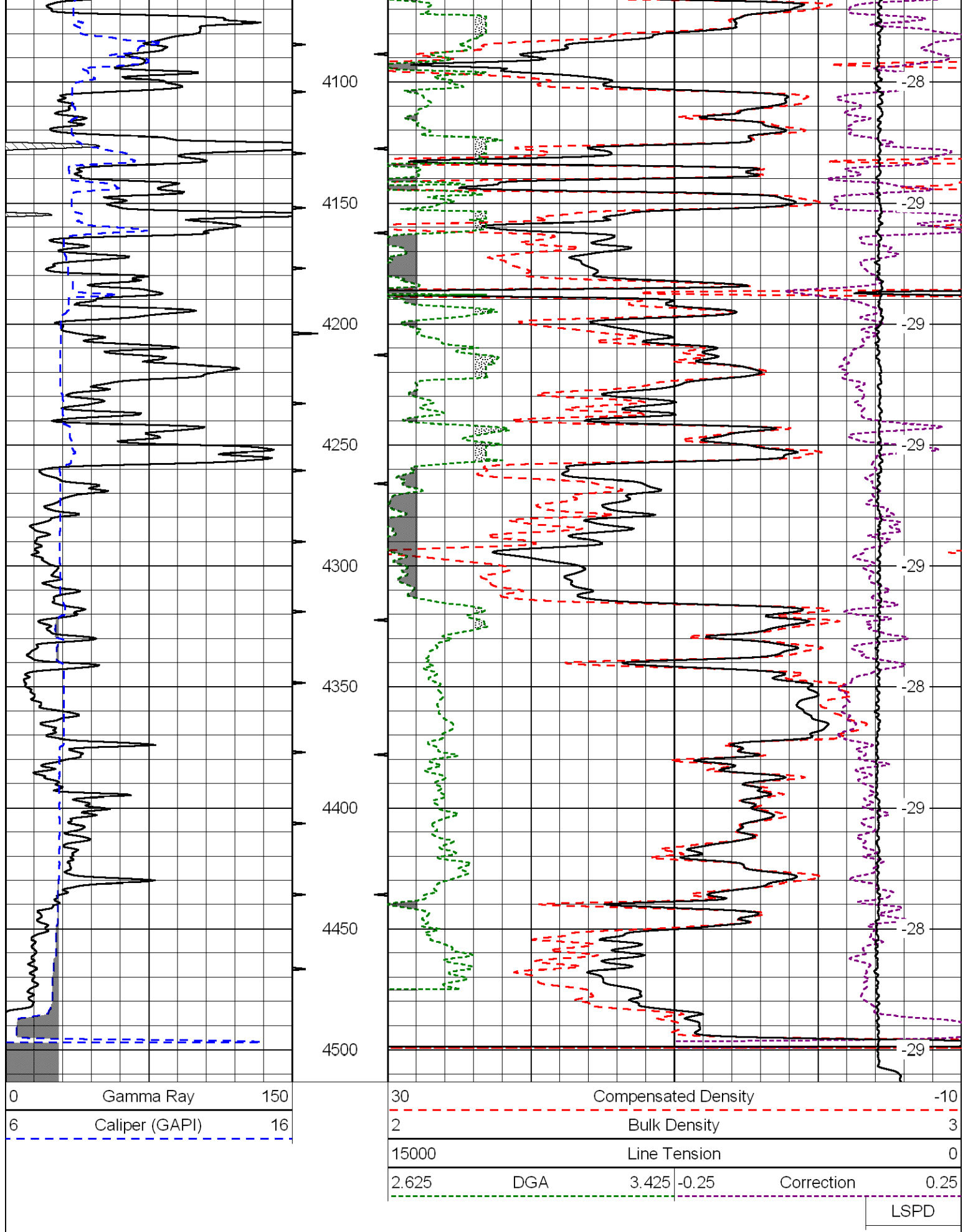
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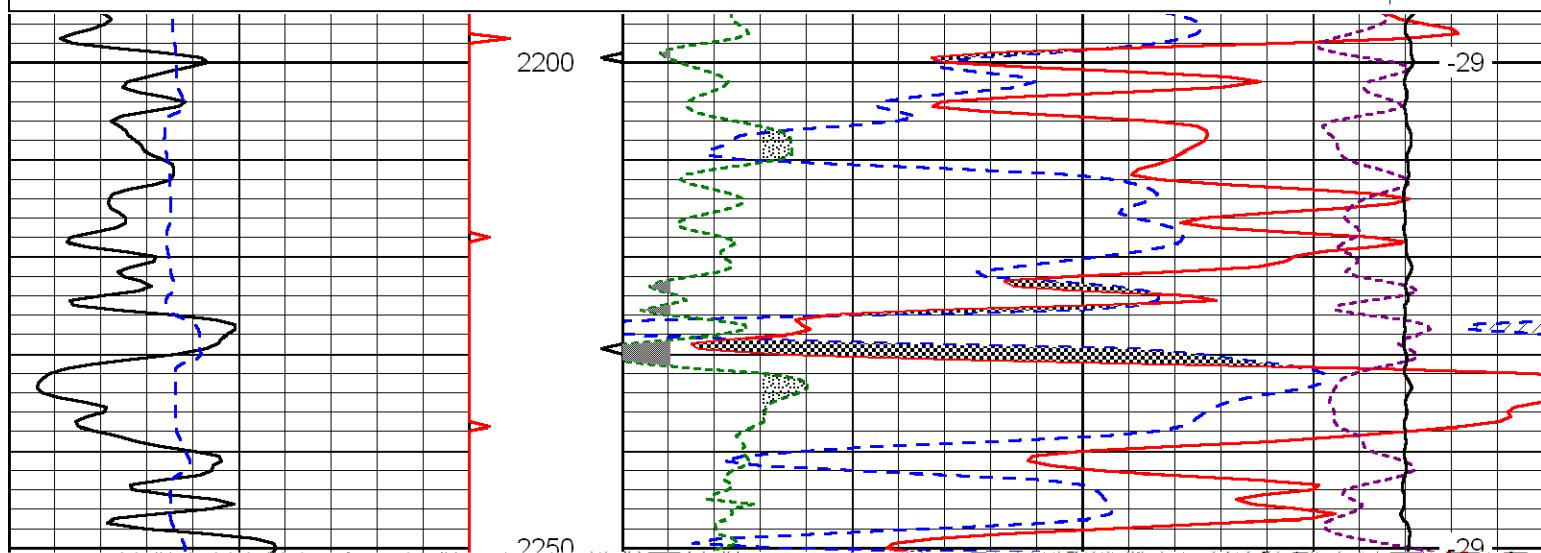


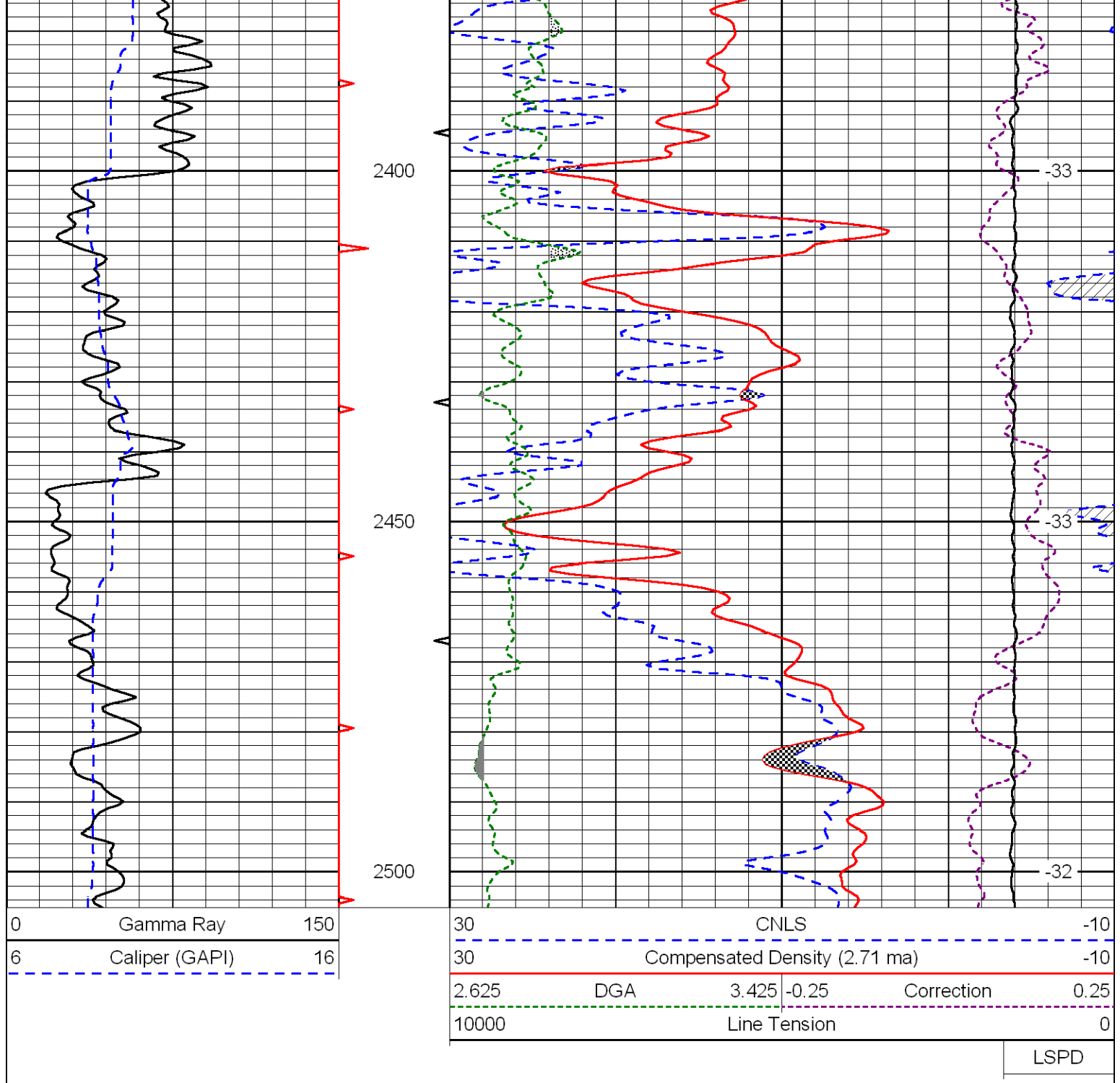
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Dataset Creation: Wed Oct 24 00:33:48 2012
Charted by: Depth in Feet scaled 1:240

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6	Caliper (GAPI)	16

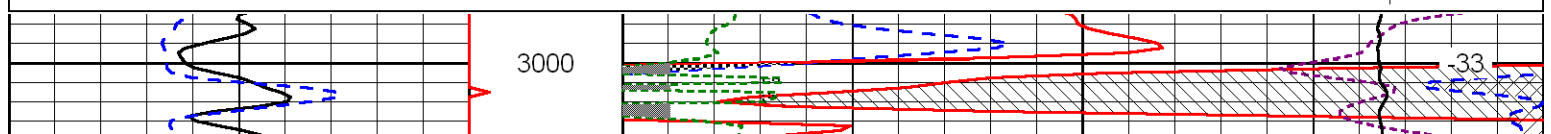
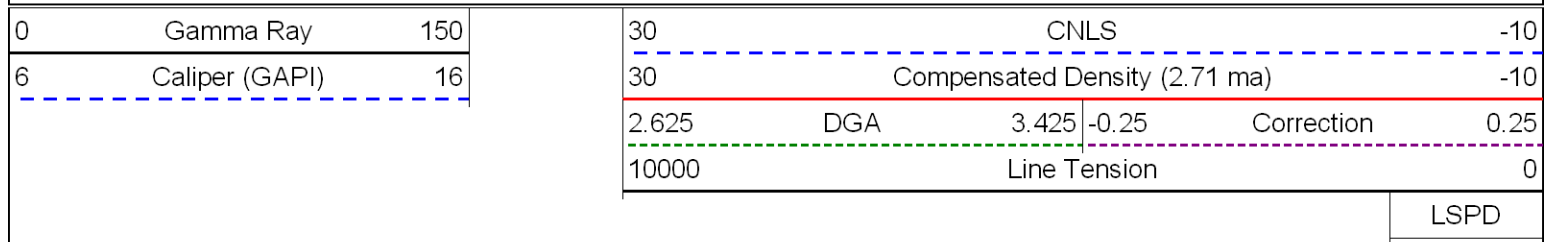
30	CNLS			-10
30	Compensated Density (2.71 ma)			-10
2.625	DGA	3.425	-0.25	Correction 0.25
10000	Line Tension			0

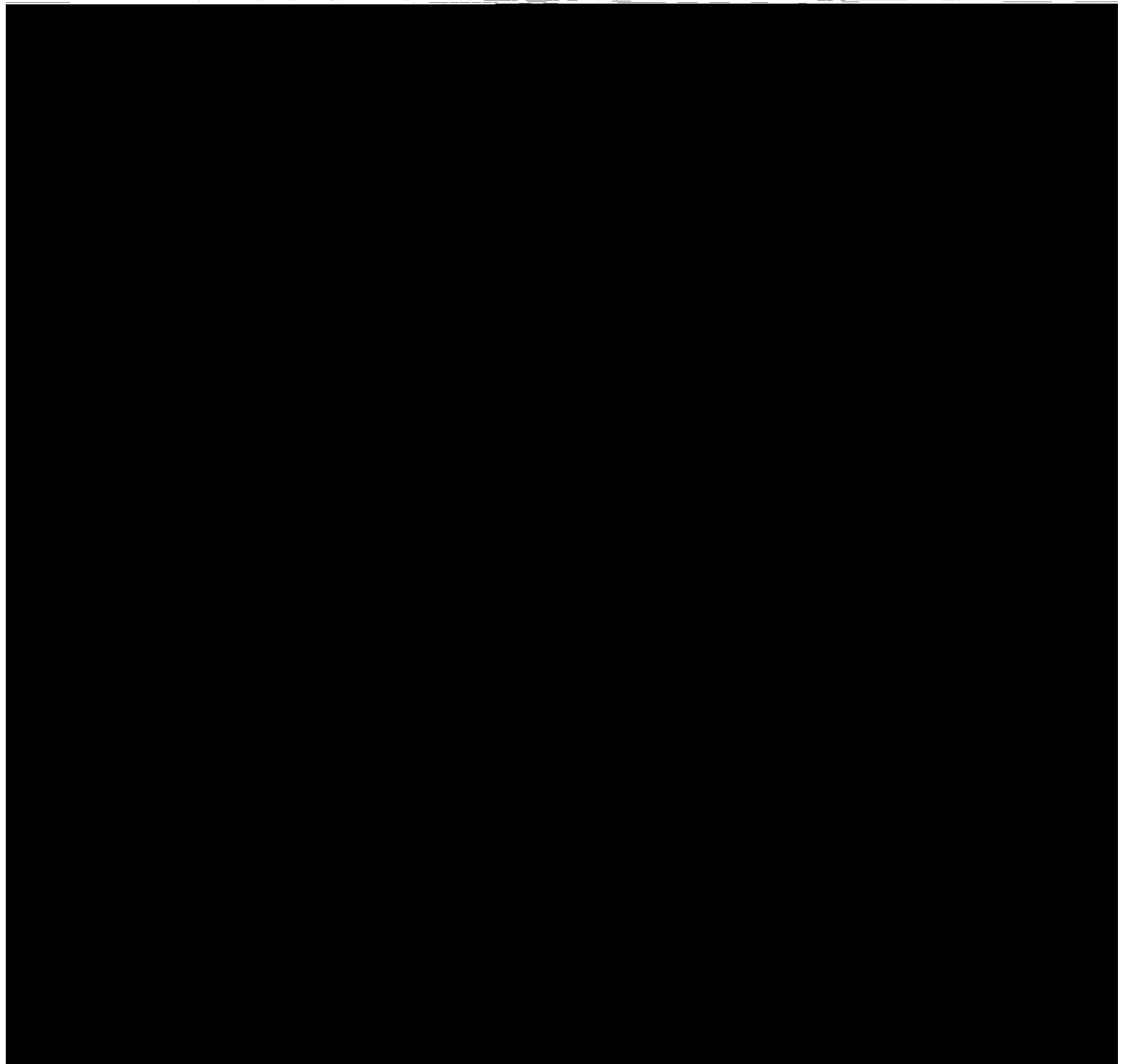
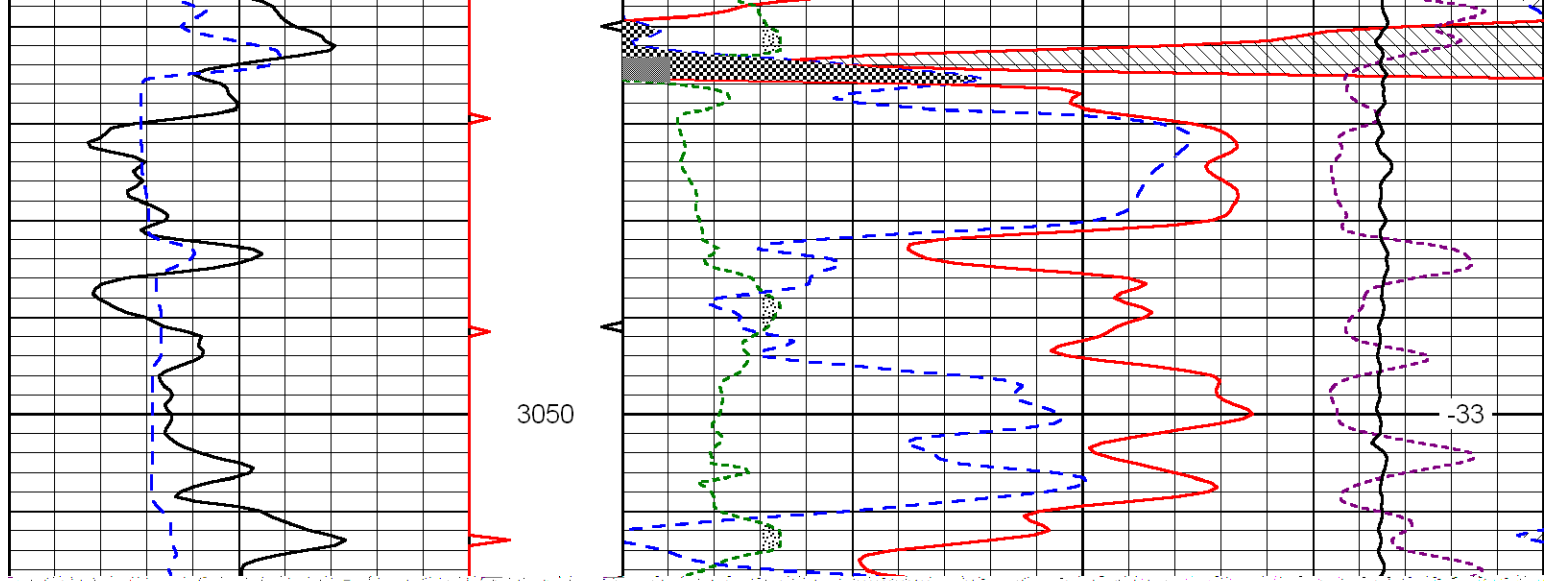
LSPD

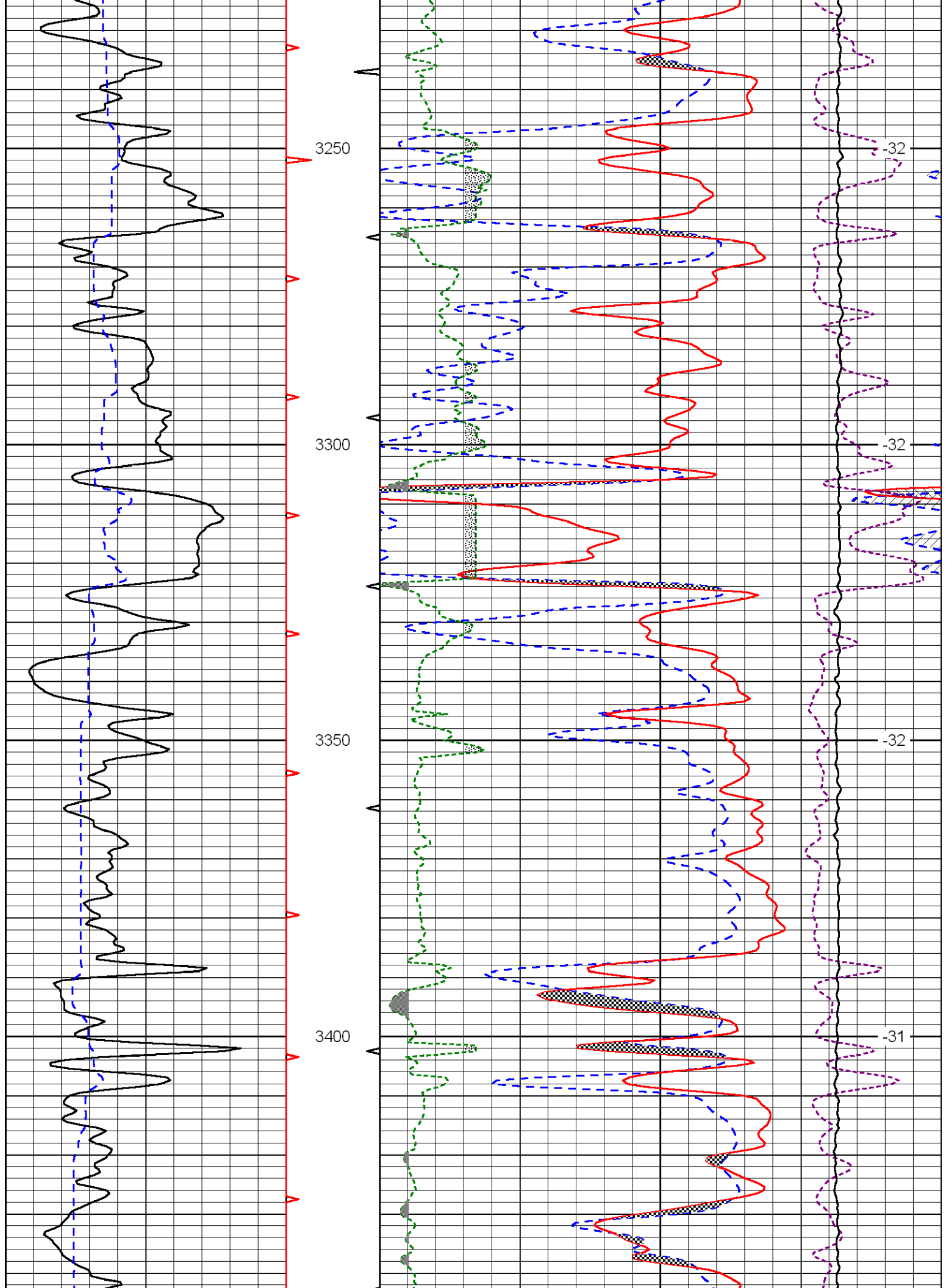


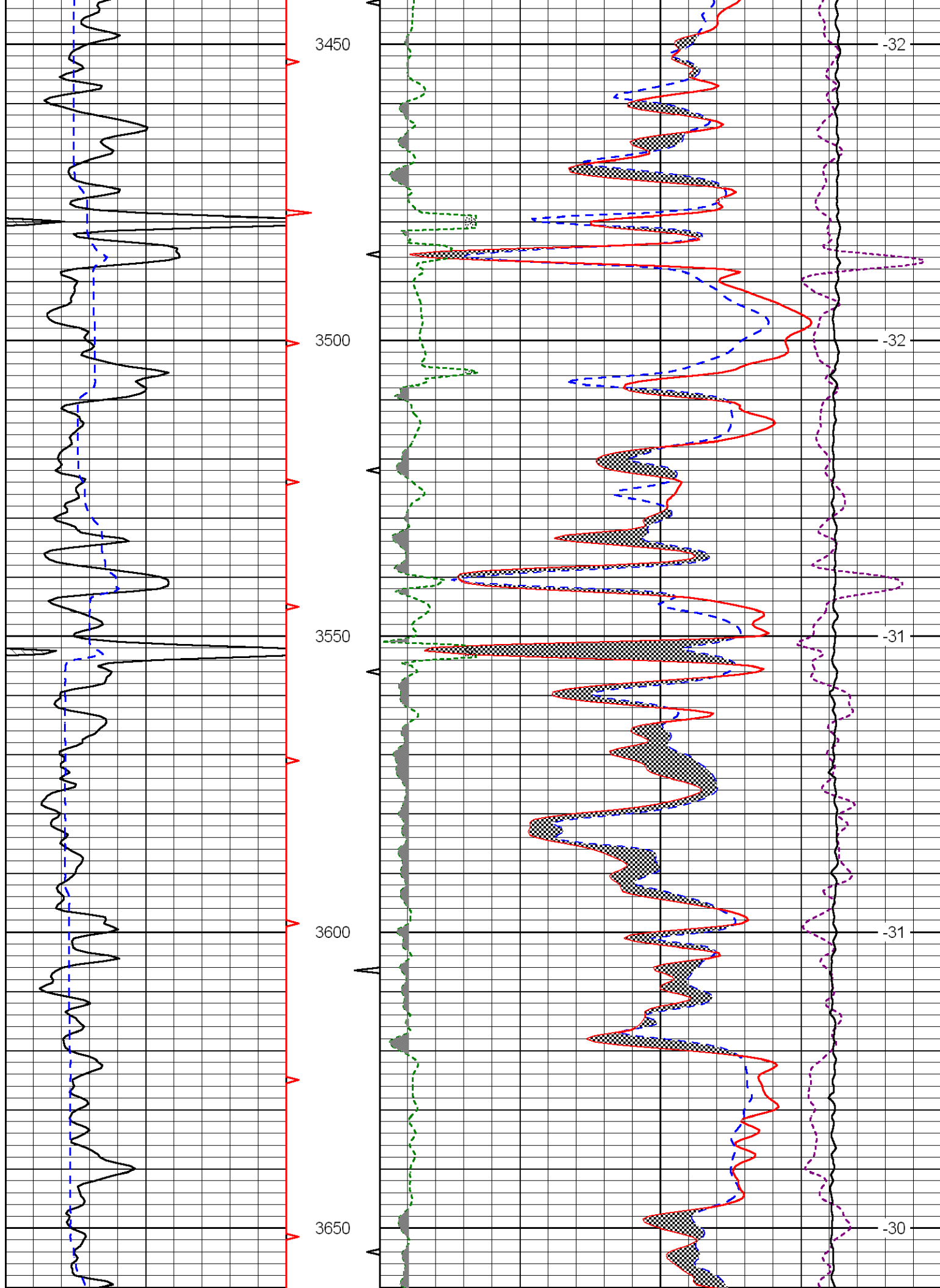


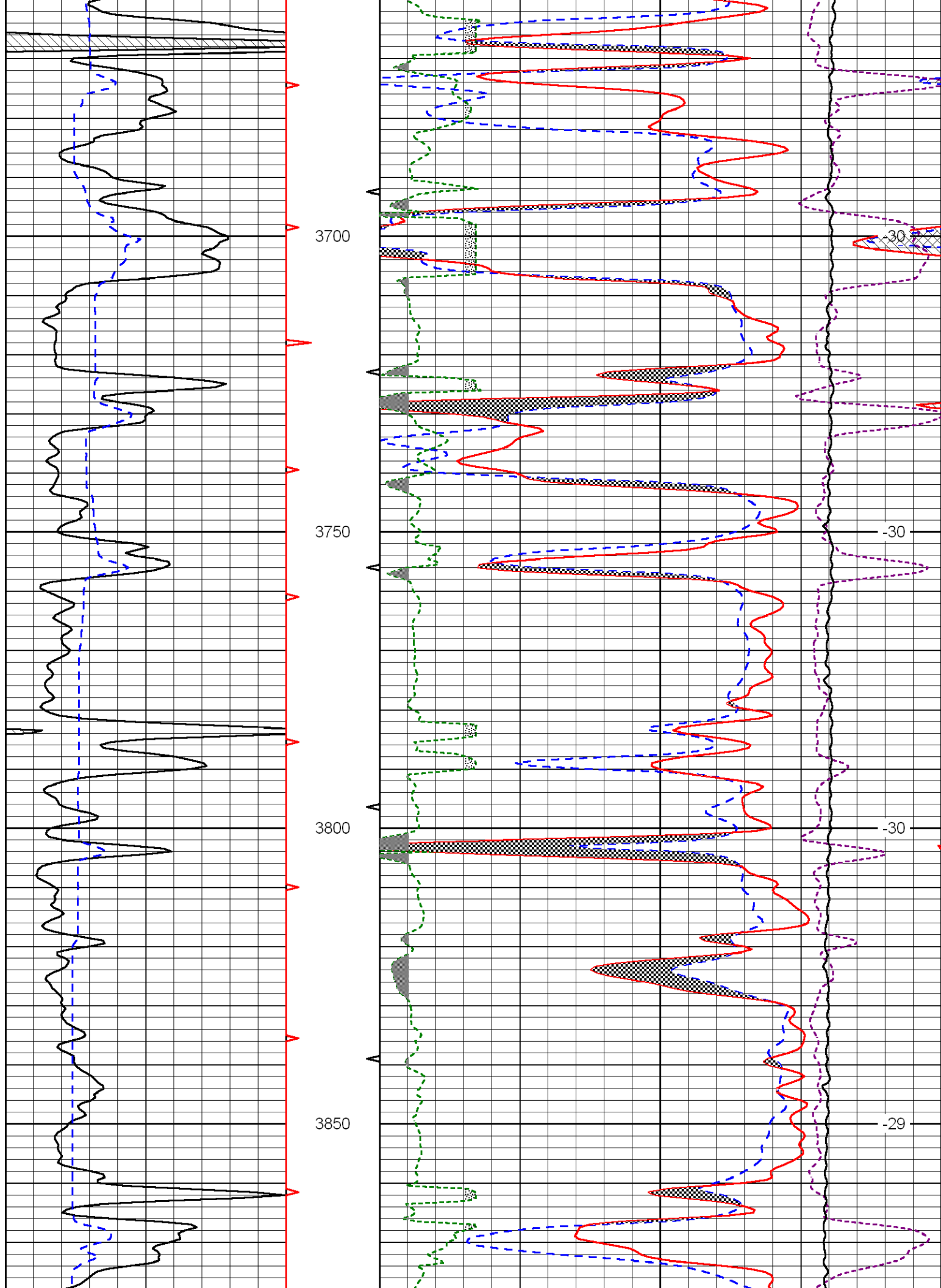
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Dataset Creation: Wed Oct 24 00:33:48 2012
Charted by: Depth in Feet scaled 1:240

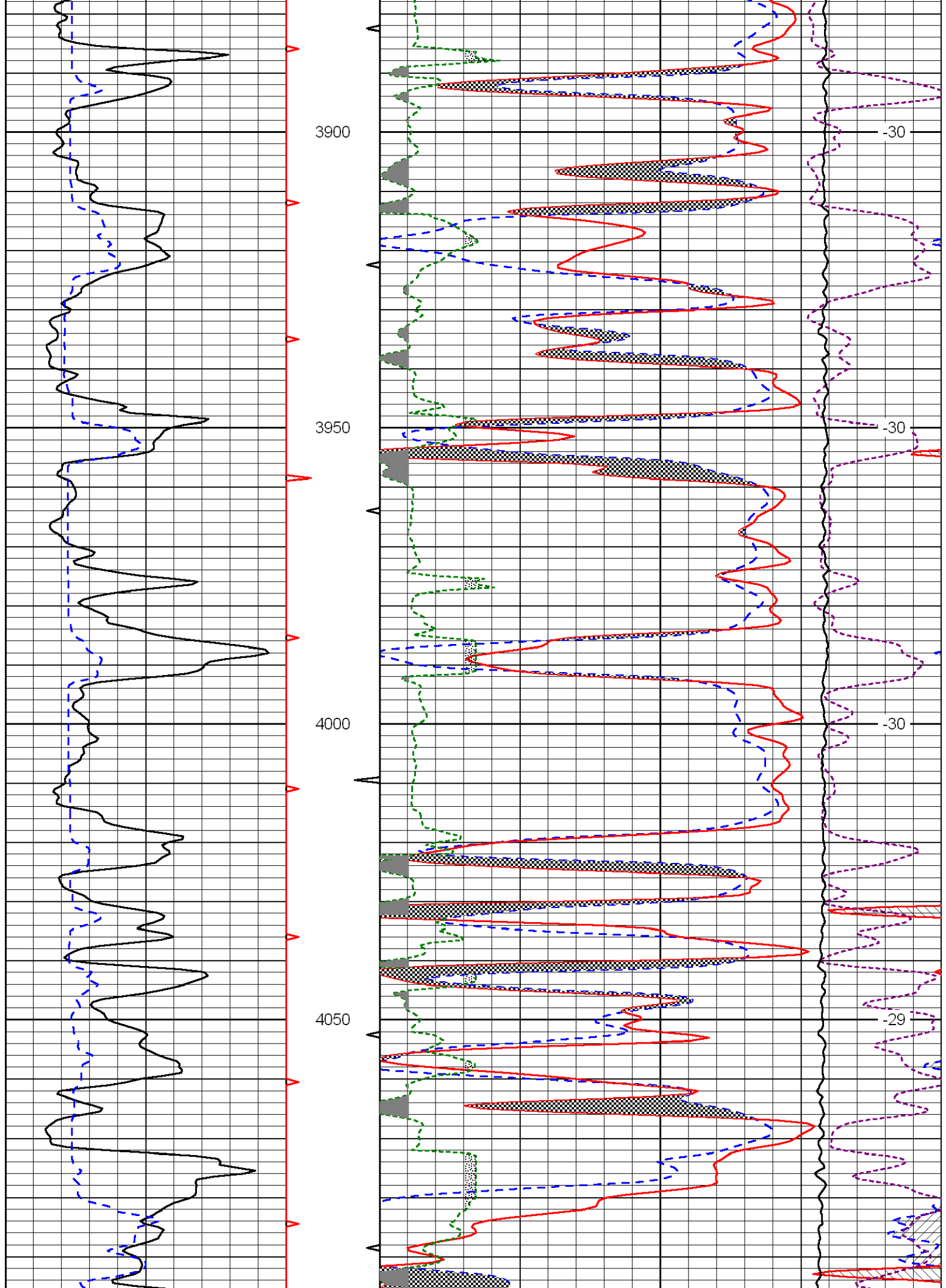


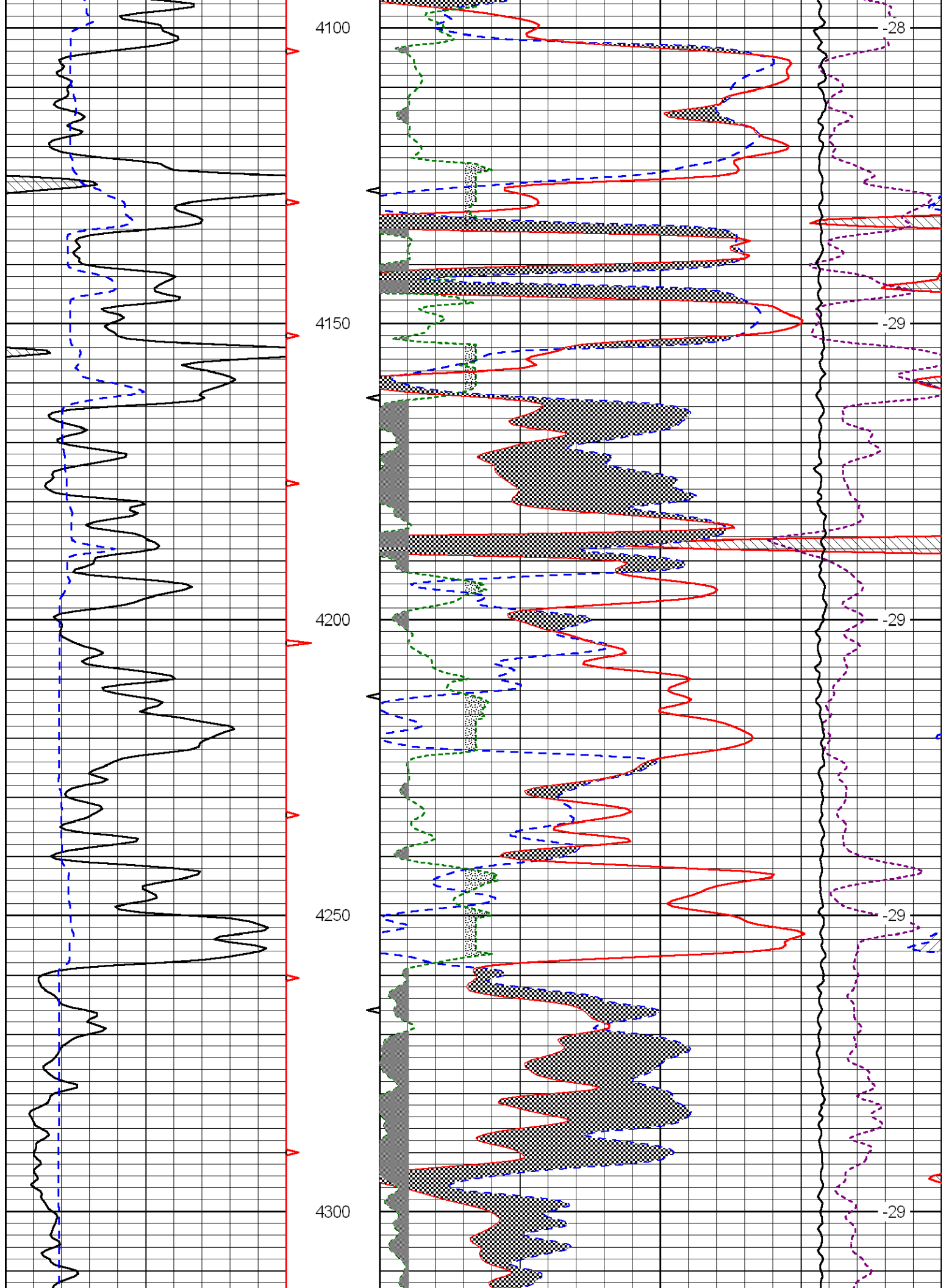


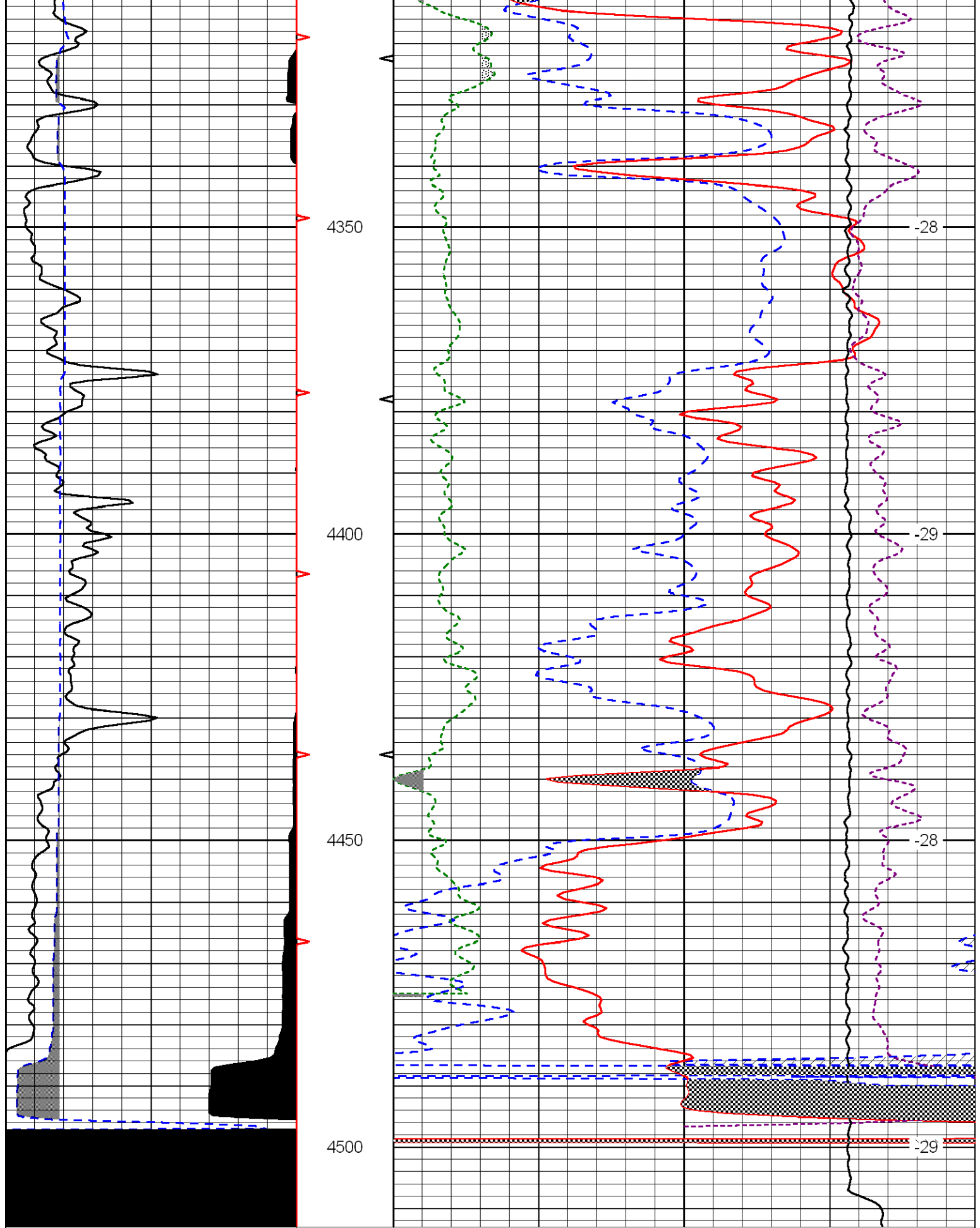












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6	Caliper (GAPI)	16

30	CNLS	-10
30	Compensated Density (2.71 ma)	-10

2.625	DGA	3.425	-0.25	Correction	0.25
10000	Line Tension				0



Pioneer Energy Services

Sandstone Matrix (2.68)

Database File: midcon_102312hd.db
Dataset Pathname: dil/mc268
Presentation Format: cndlss
Dataset Creation: Wed Oct 24 01:09:29 2012
Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
6	Caliper (GAPI)	16

30	cnpor		-10
30	Compensated Density (2.65 pma)		-10
2.625	DGA	3.425	-0.25
Correction		0.25	
15000	Line Tension		0

LSPD

