



Pioneer Energy Services

Dual Compensated Porosity Log

15-179-21,322-00-00

API No.

Company **Dan Haffner**

Well **Haffner No.2-18**

Field

County **Sheridan**

State **Kansas**

Location

2125' FSL & 1170' FWL

Sec: **18**

Twp: **9S**

Rge: **27W**

Other Services
DIL
MEL

Permanent Datum Ground Level Elevation 2756

Log Measured From Kelly Bushing 8 Ft. Above Perm. Datum

Elevation
K.B. 2764
D.F.
G.L. 2756

Date 12/11/2012

Run Number One

Type Log CNL / CDL

Depth Driller 4491

Depth Logger 4494

Bottom Logged Interval 4473

Top Logged Interval 3500

Type Fluid In Hole Chemical

Salinity, PPM CL 1100

Density 9.6

Level Full

Max. Rec. Temp. F 121

Operating Rig Time 4 Hours

Equipment -- Location 15 Days

Recorded By D Kerr

Witnessed By Richard Bell

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
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1	12.25	00	264	8.625	24#	00	264
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2	7.875	264	4491				
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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

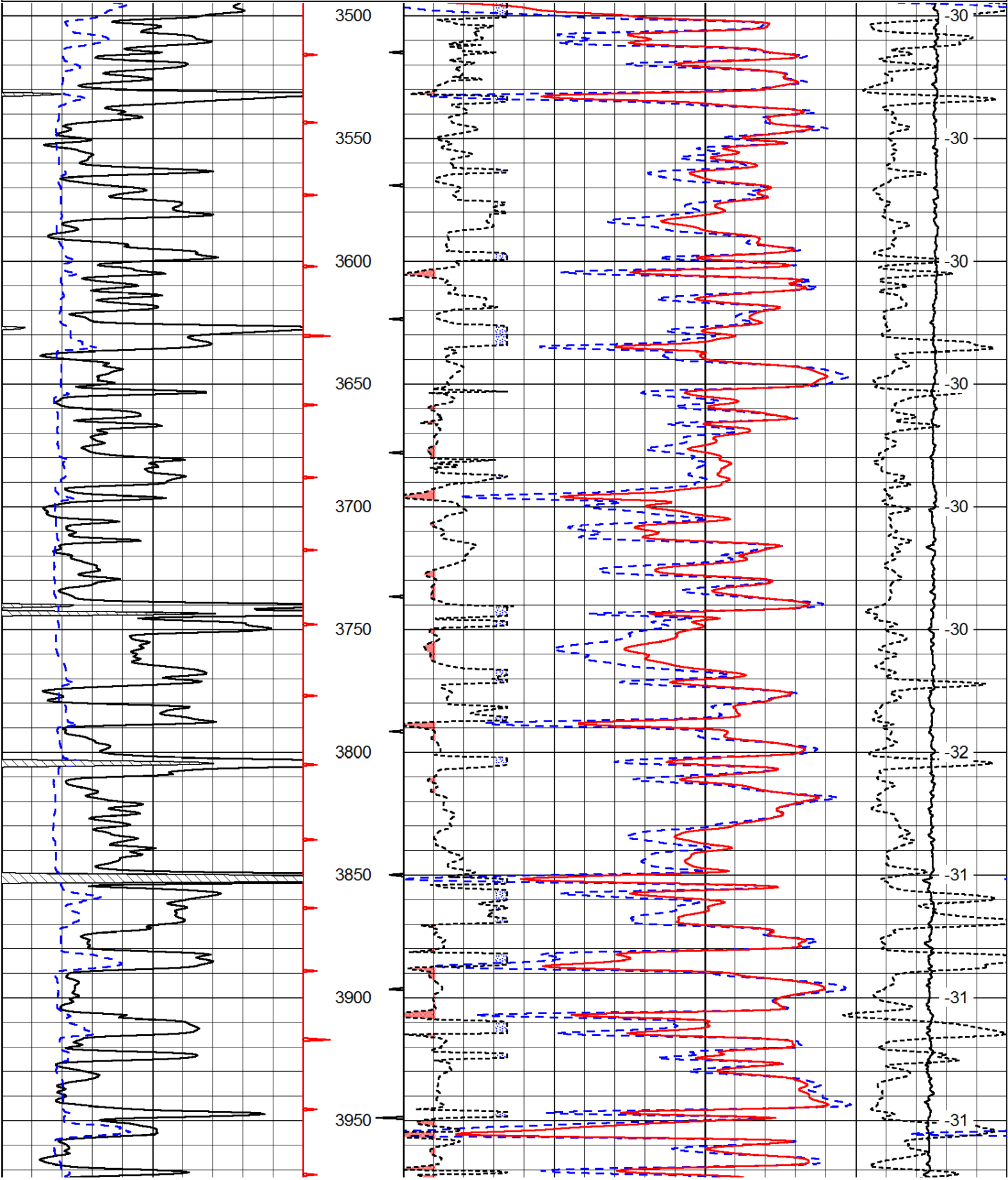
Thank you for using Pioneer Energy Services
www.pioneerres.com
785 625 3858

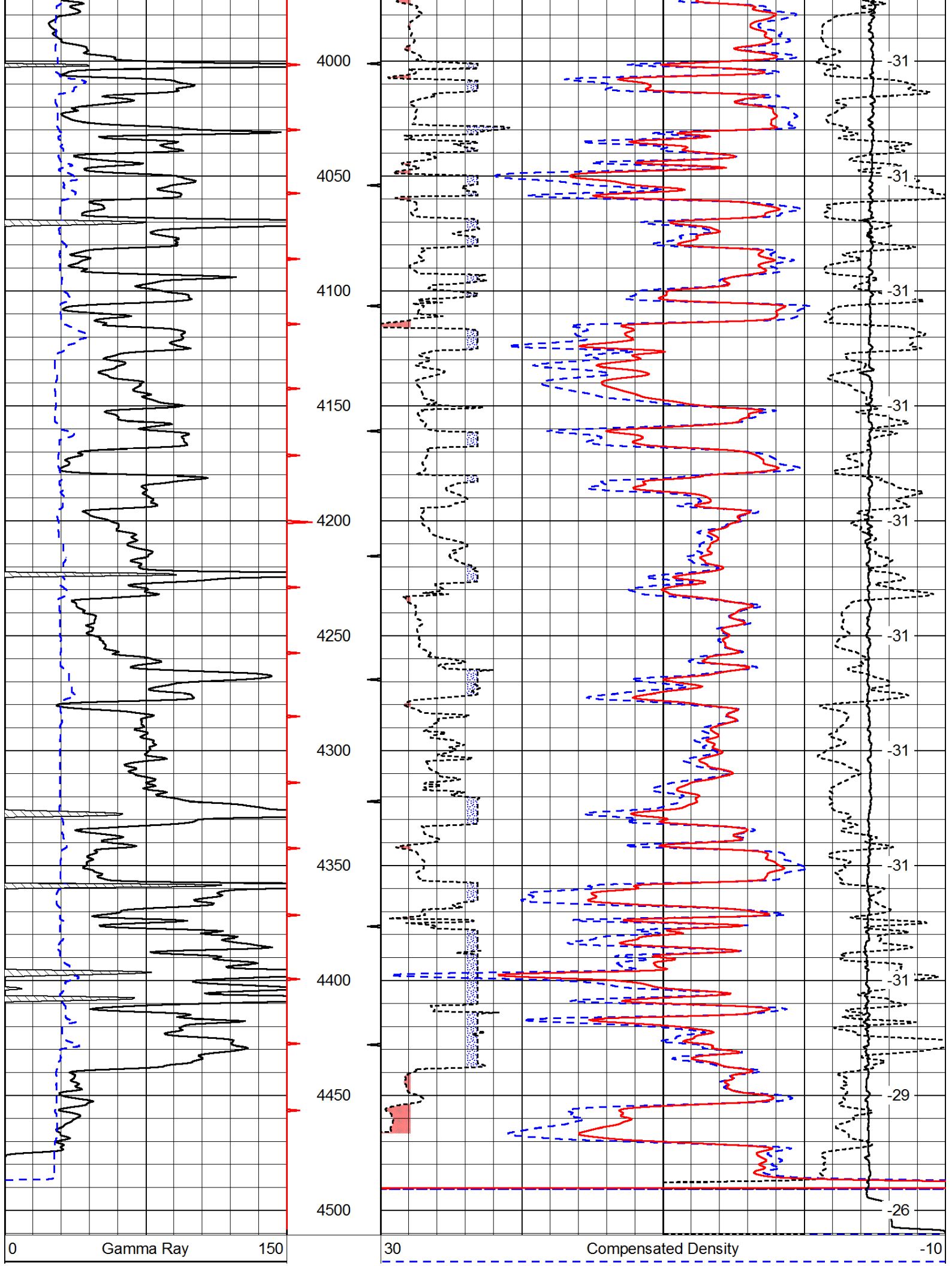
Hoxie Ks, 6 South to 406 RD (70 S RD),
3 1/2 East, North Into

Database File: c:\warrior\data\dan haffner_haffner no.2-18\danhaffner_haffner_2_18hd.db
Dataset Pathname: DIL\hafstk
Presentation Format: cdl
Dataset Creation: Tue Dec 11 23:22:14 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			



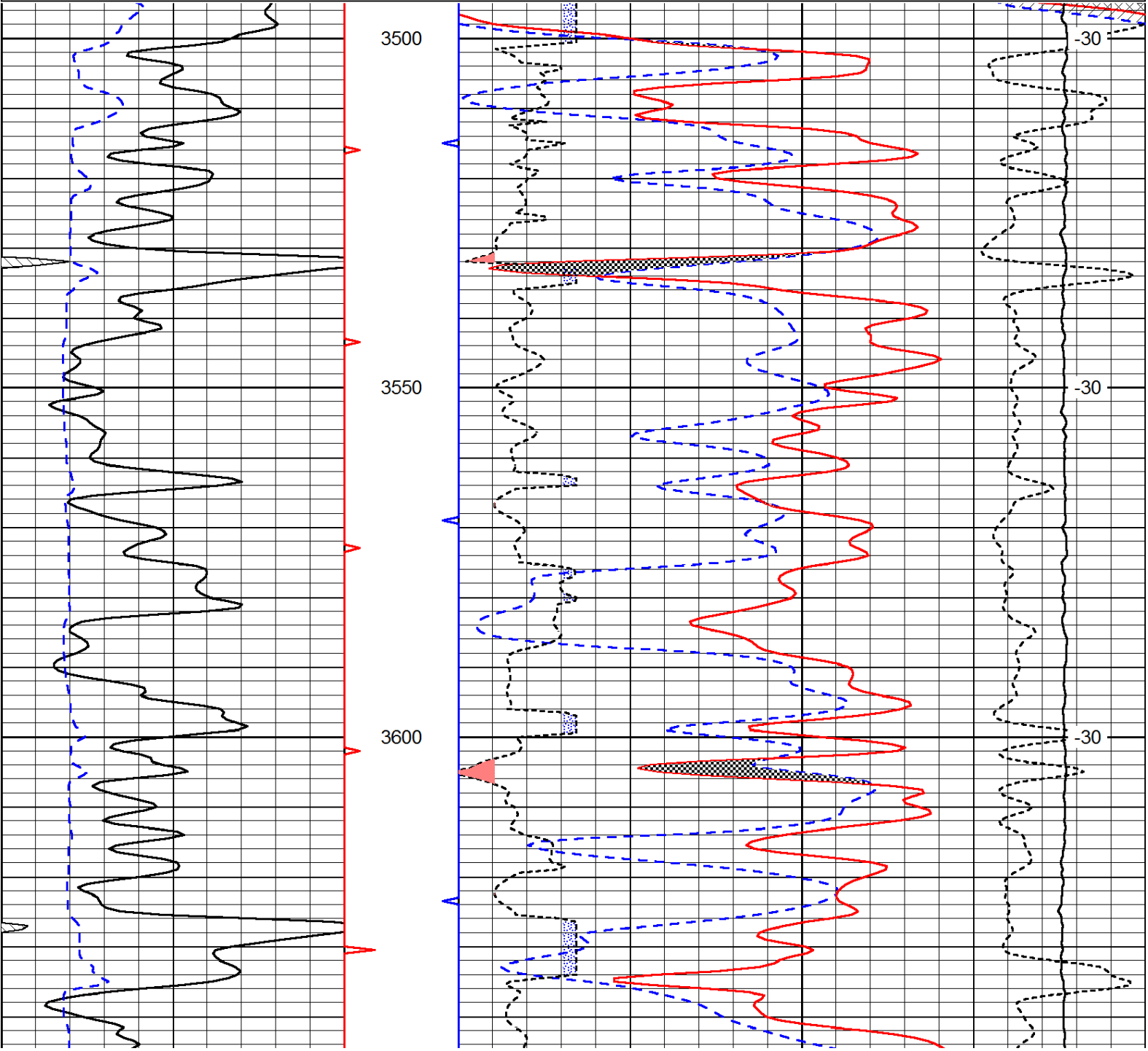


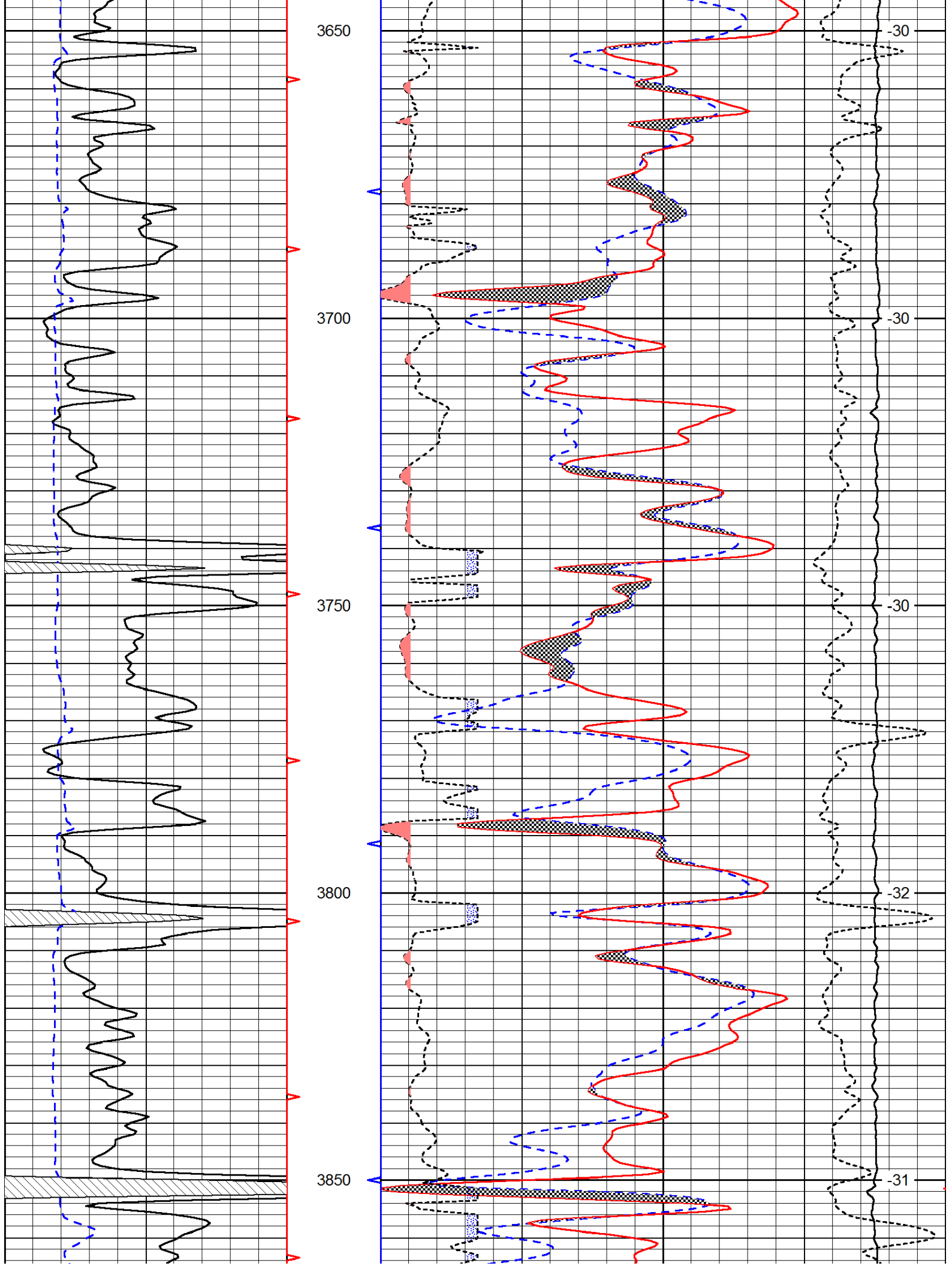
6	Caliper (GAPI)	16
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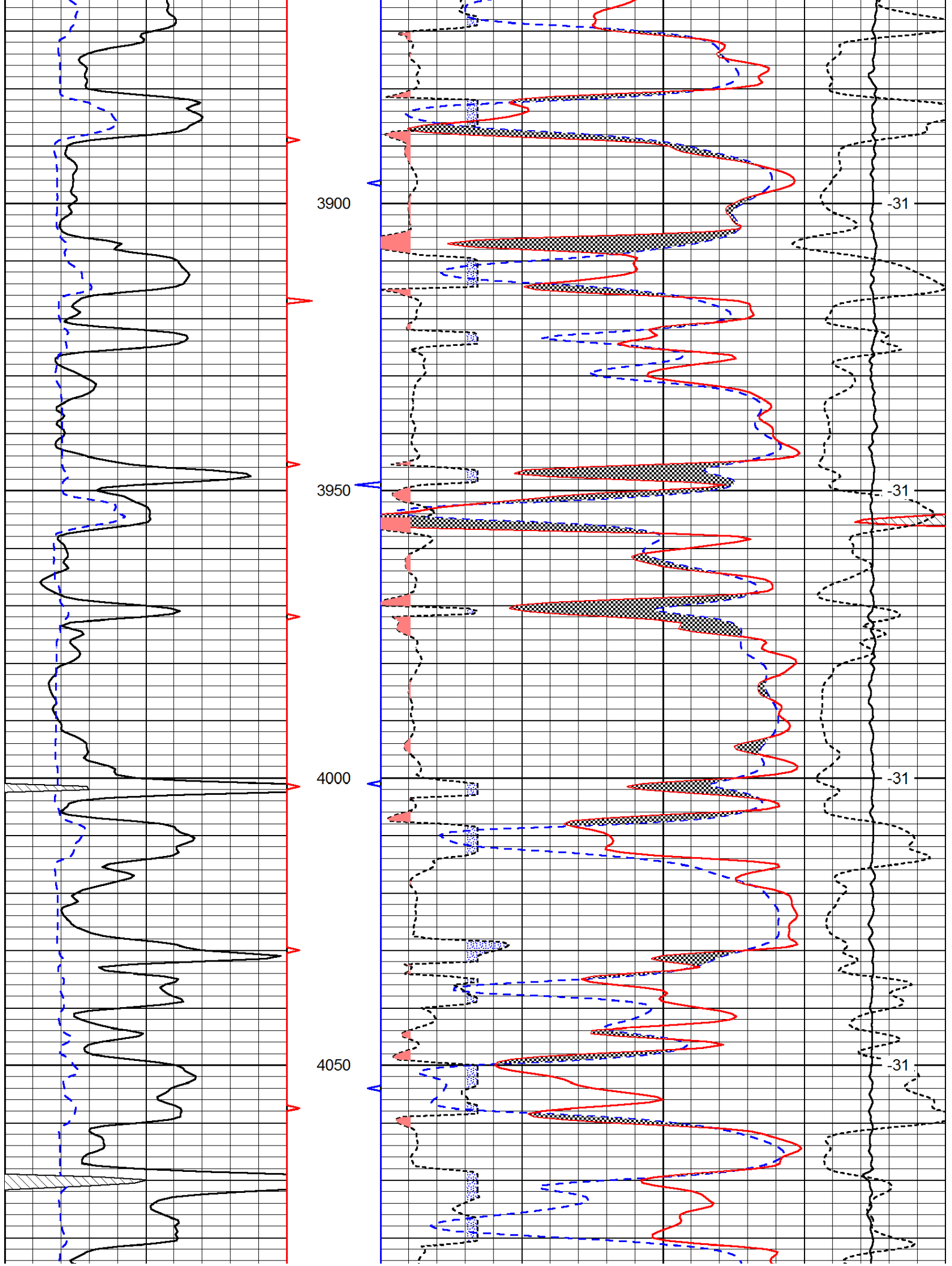
2	Bulk Density				3
15000	Line Tension				0
2.625	DGA	3.425	-0.25	Correction	0.25
					LSPD

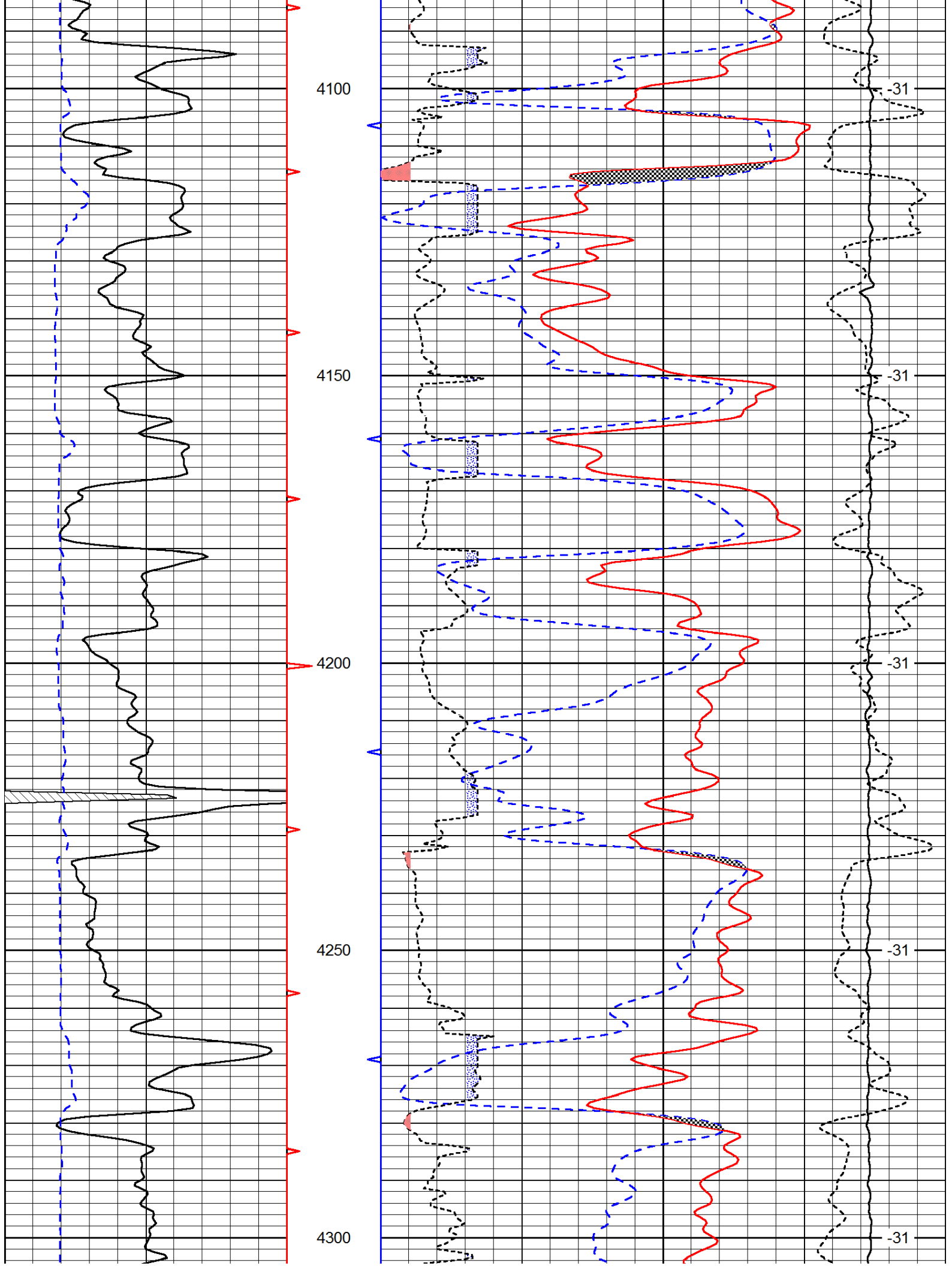
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Presentation Format: cndlspec									
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Charted by: Depth in Feet scaled 1:240									

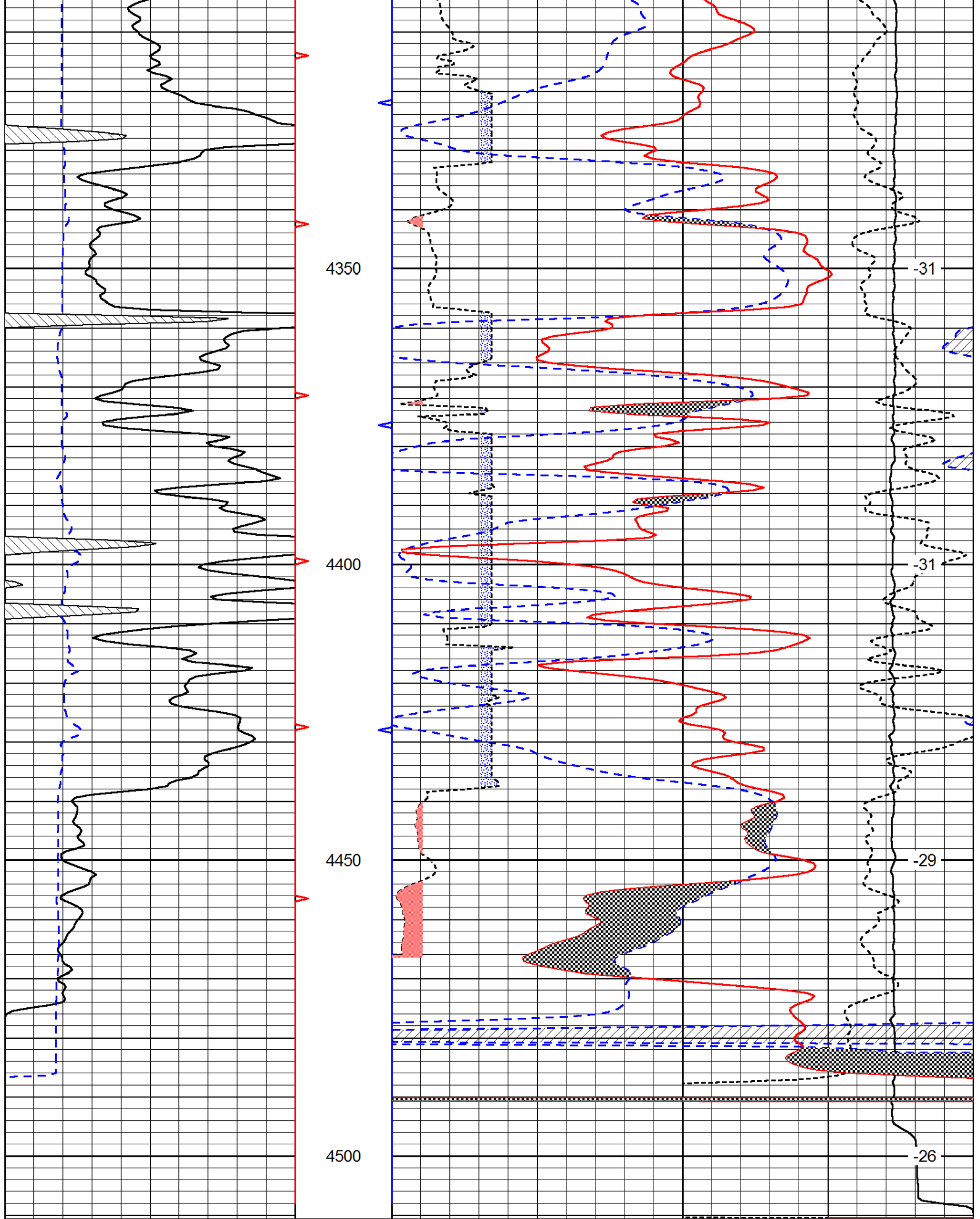
0	Gamma Ray	150							
6	Caliper (GAPI)	16							
			30	Compensated Neutron (Limestone)					-10
			30	Compensated Density (Limestone)					-10
			2.625	DGA	3.425	-0.25	Correction	0.25	
			15000	Line Tension					0
									LSPD











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-0.25	Correction	0.25

15000		Line Tension		0
			LSPD	