



DUAL COMP POROSITY LOG

Company RITCHEE EXPLORATION, INC.
 Well D. SCHUMACHER #1
 Field UNKNOWN
 County LOGAN
 State KANSAS

Company RITCHEE EXPLORATION, INC.
 Well D. SCHUMACHER #1
 Field UNKNOWN
 County LOGAN State KANSAS

Location: API #: 15-109-21428-00-00
 1830' FNL & 1020' FWL
 SEC 23 TWP 15S RGE 36W
 Permanent Datum GROUND LEVEL Elevation 3294
 Log Measured From KELLY BUSHING
 Drilling Measured From KELLY BUSHING
 Other Services DIL
 Elevation K.B. 3305
 D.F. N/A
 G.L. 3294

Date	8/12/2015
Run Number	ONE
Type Log	CNL/CDL/ML/DIL
Depth Driller	4910
Depth Logger	4909
Bottom Logged Interval	4888
Top Logged Interval	3600
Type Fluid In Hole	CHEMICAL
Salinity, PPM CL	5000
Density	9.3
Level	FULL
Max. Rec. Temp. F	125
Operating Rig Time	3 HOURS
Equipment -- Location	91 Hays
Recorded By	D. SCHMIDT
Witnessed By	JOHN GOLDSMITH

Run No.	Bit	Borehole Record		Casing Record	
		From	To	From	To
ONE	12.25	00	212	8.625	23#
TWO	7.875	212	TD		

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not 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.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

RUSSELL SPRINGS,
 SOUTH ON HWY 25 TO DAKOTA RD,
 4 EAST TO 200 RD, 1/2 SOUTH,
 EAST INTO

Log Measured From: KELLY BUSHING 11 Ft. Above Permanent Datum

THANK YOU FOR USING PIONEER ENERGY SERVICES
www.pioneerenergy.com 785-625-3858

Your Pioneer Energy Services Crew

Engineer: D. SCHMIDT
 Operator:
 Operator:
 Operator:

This Log Record Was Witnessed By

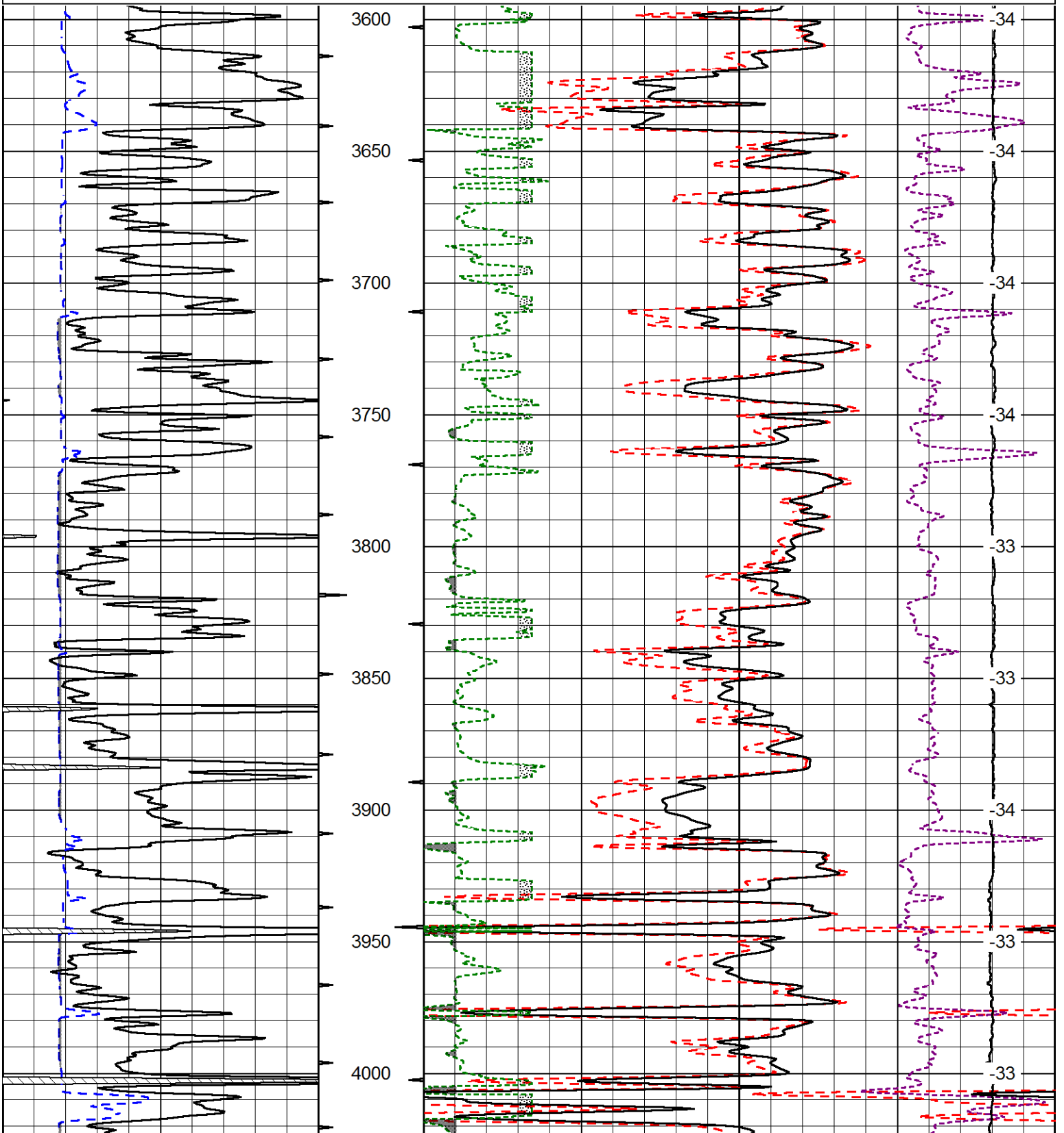
Primary Witness: JOHN GOLDSMITH
 Secondary Witness:
 Secondary Witness:
 Secondary Witness:

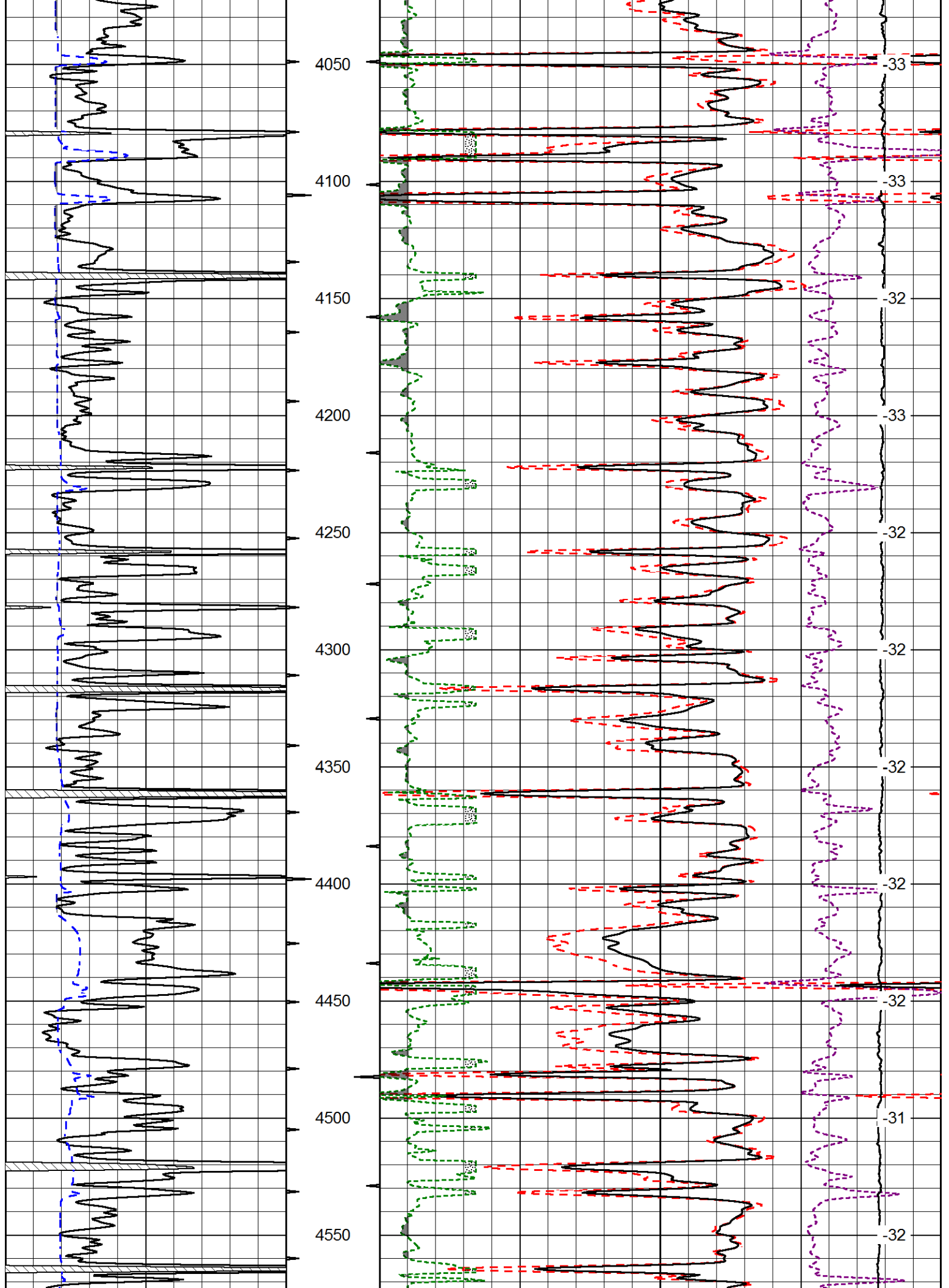
Database File ritchie_d schumacher_1hd.db
 Dataset Pathname DIL/ristack
 Presentation Format cdl
 Dataset Creation Wed Aug 12 19:14:35 2015
 Charted by Depth in Feet scaled 1:600

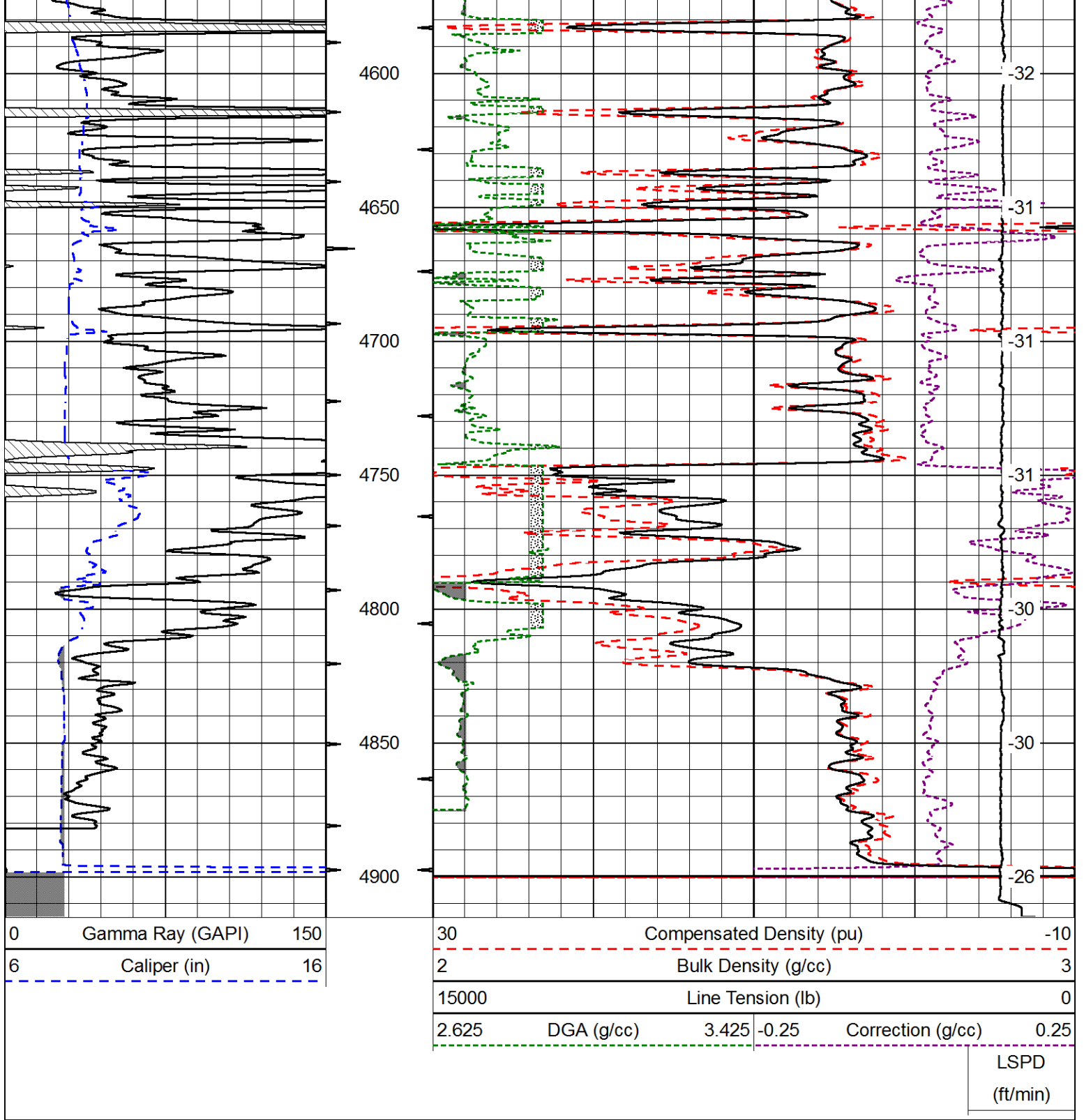
0	Gamma Ray (GAPI)	150
6	Caliper (in)	16

30	Compensated Density (pu)		-10
2	Bulk Density (g/cc)		3
15000	Line Tension (lb)		0
2.625	DGA (g/cc)	3.425	-0.25
	Correction (g/cc)		0.25

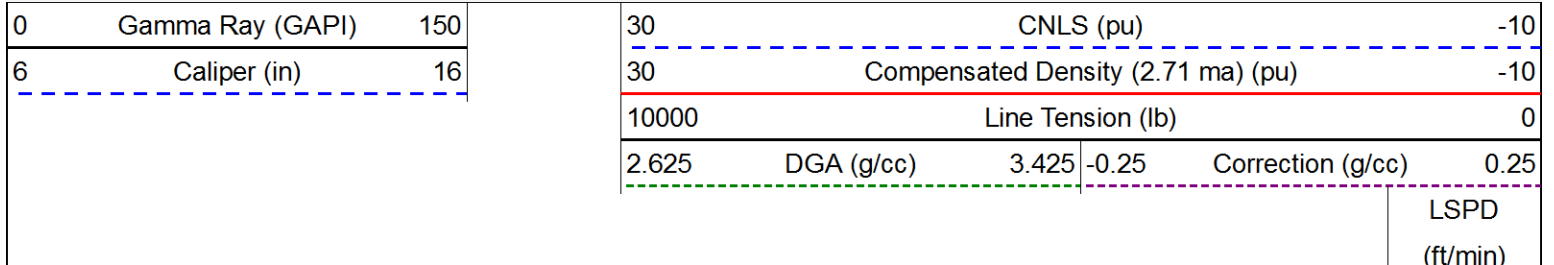
LSPD
(ft/min)

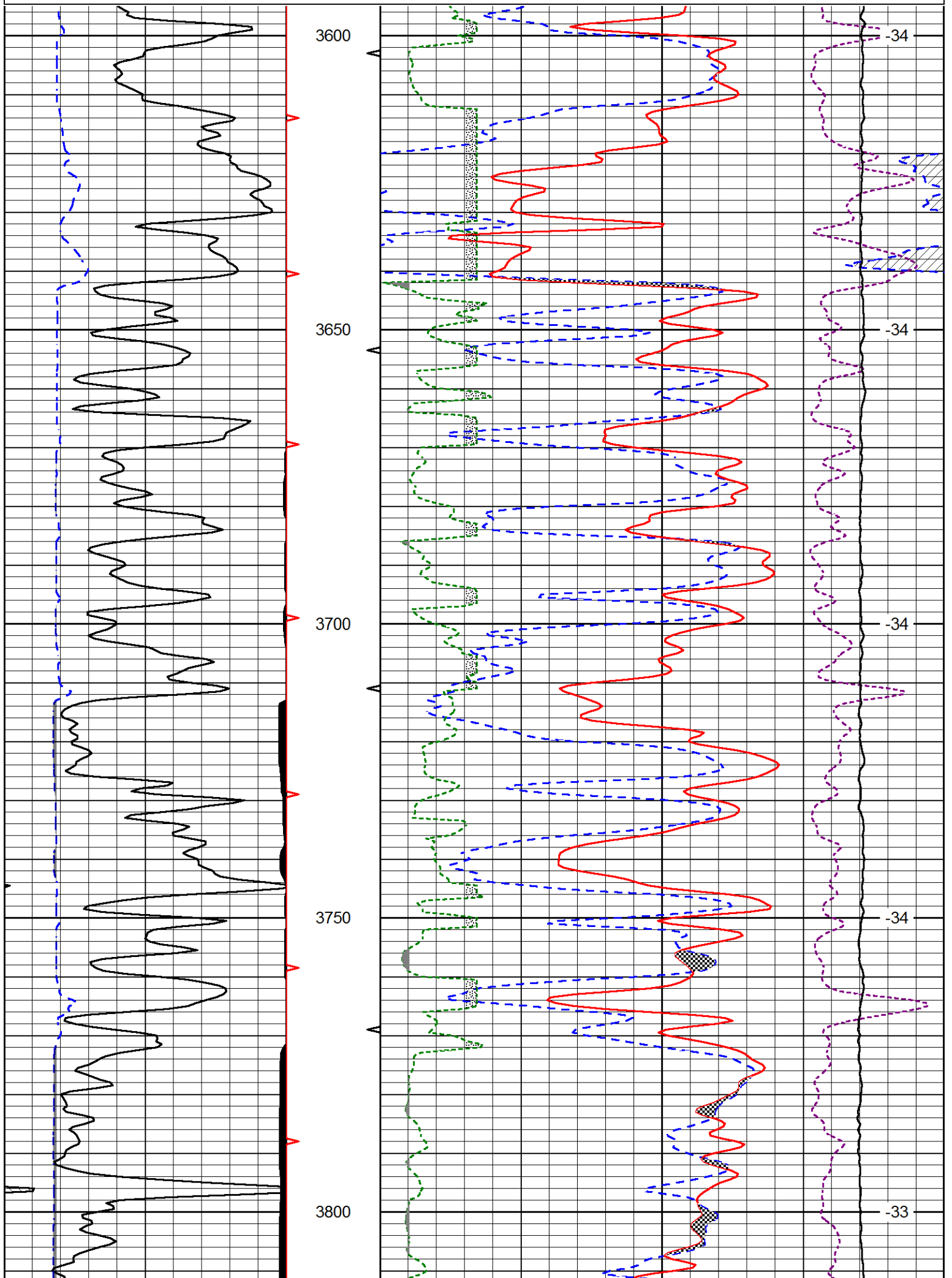


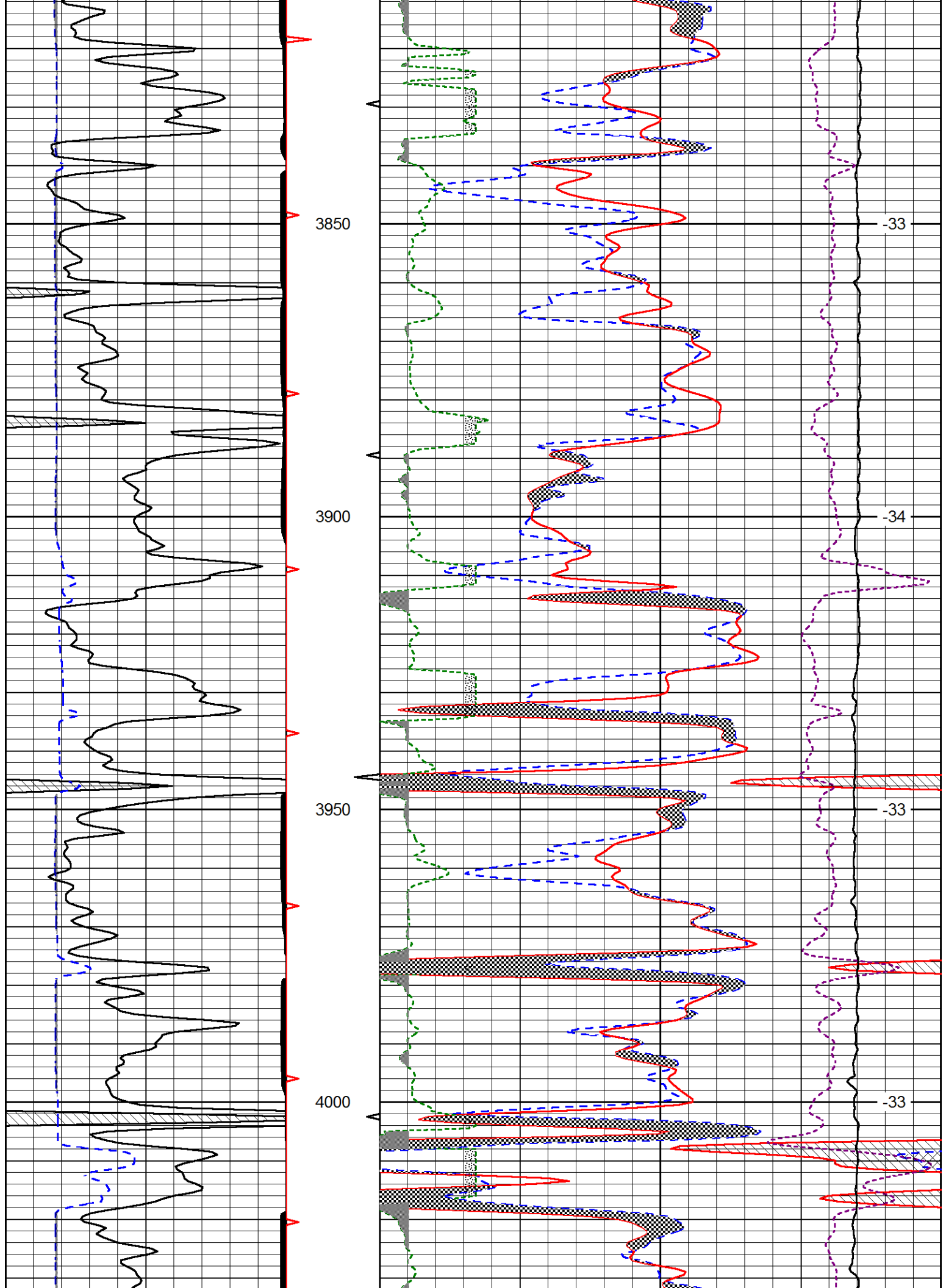


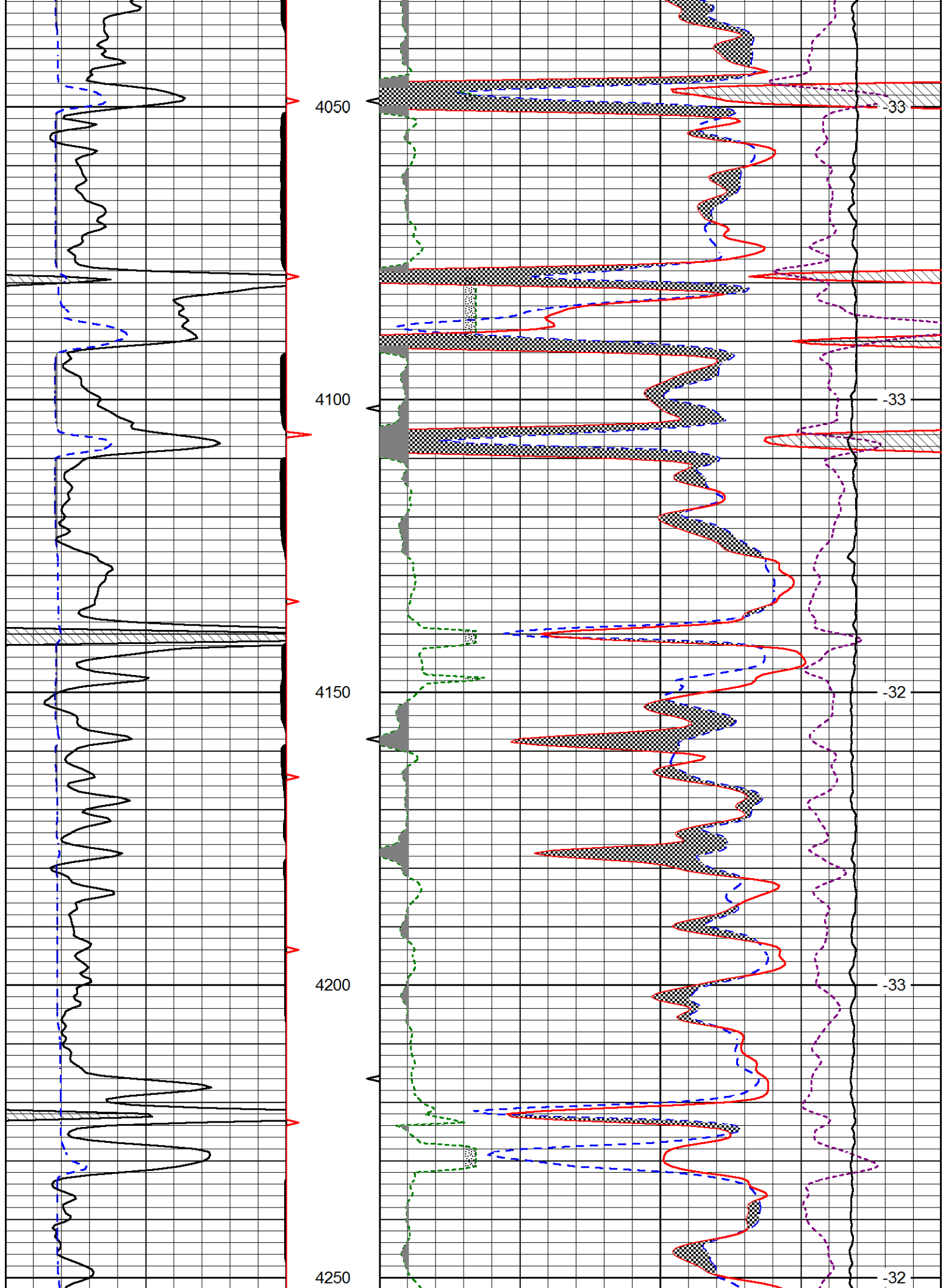


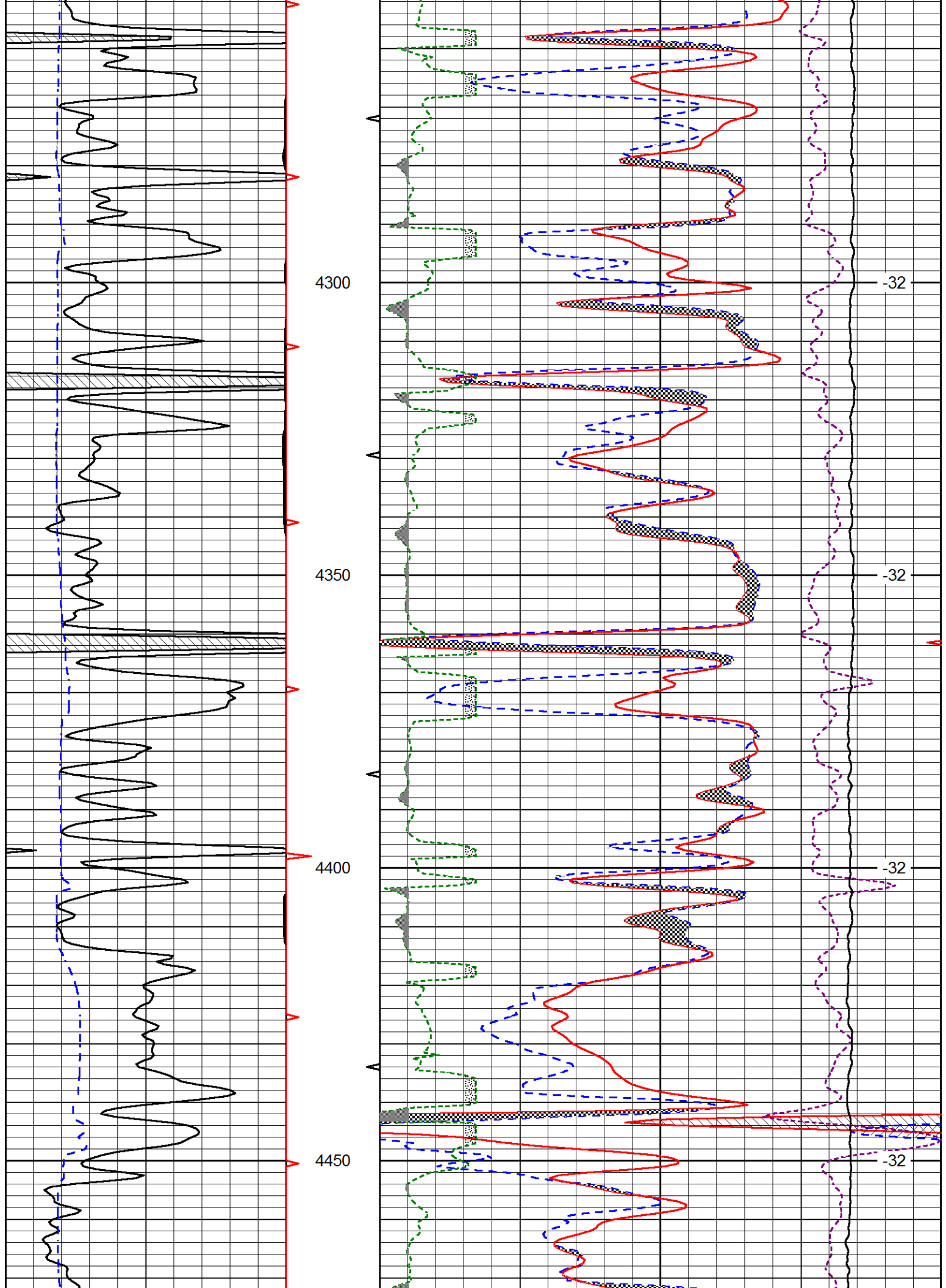
Database File	ritchie_d schumacher_1hd.db
Dataset Pathname	DIL/rystack
Presentation Format	cnlspec
Dataset Creation	Wed Aug 12 19:14:35 2015
Charted by	Depth in Feet scaled 1:240

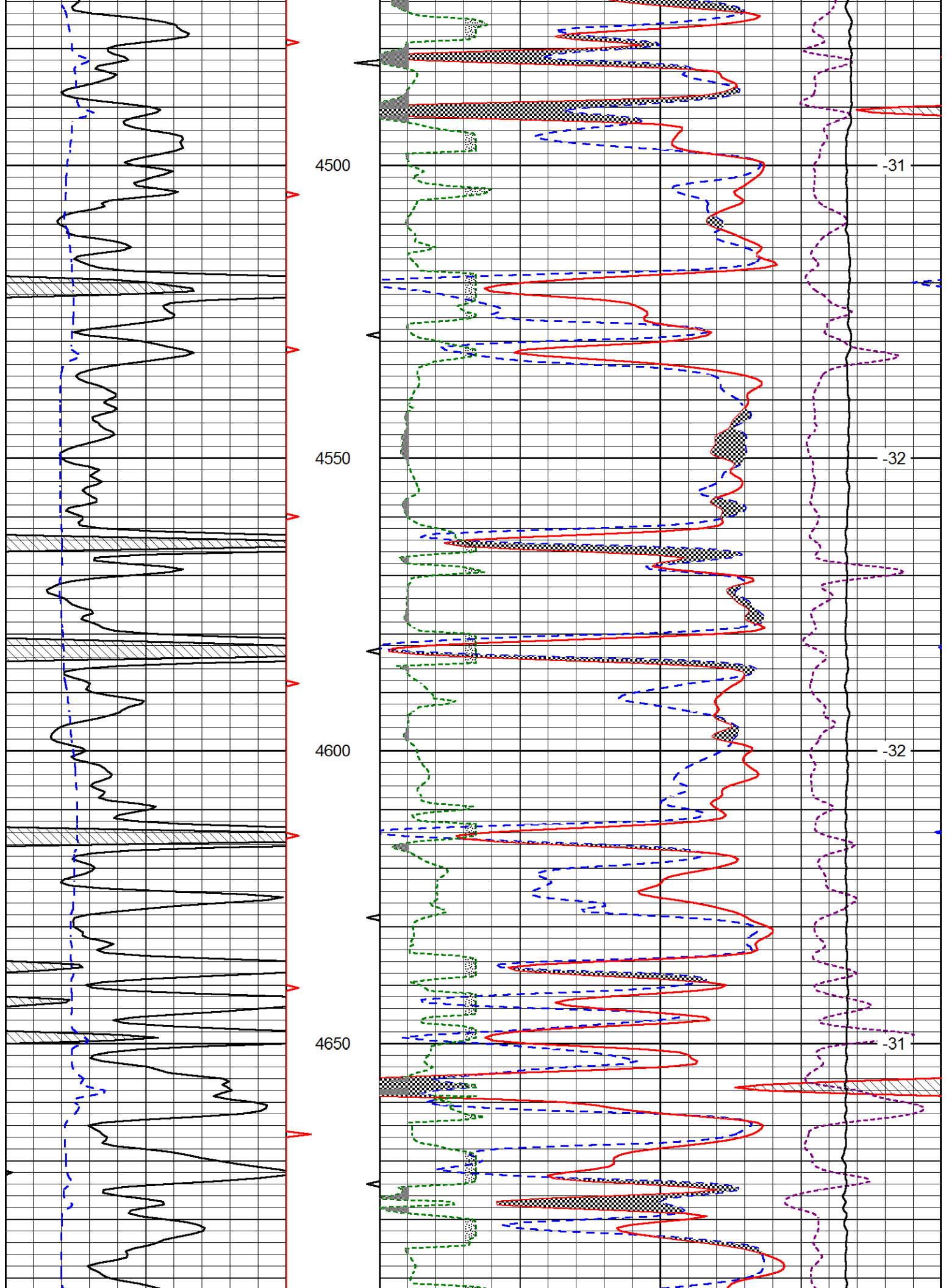


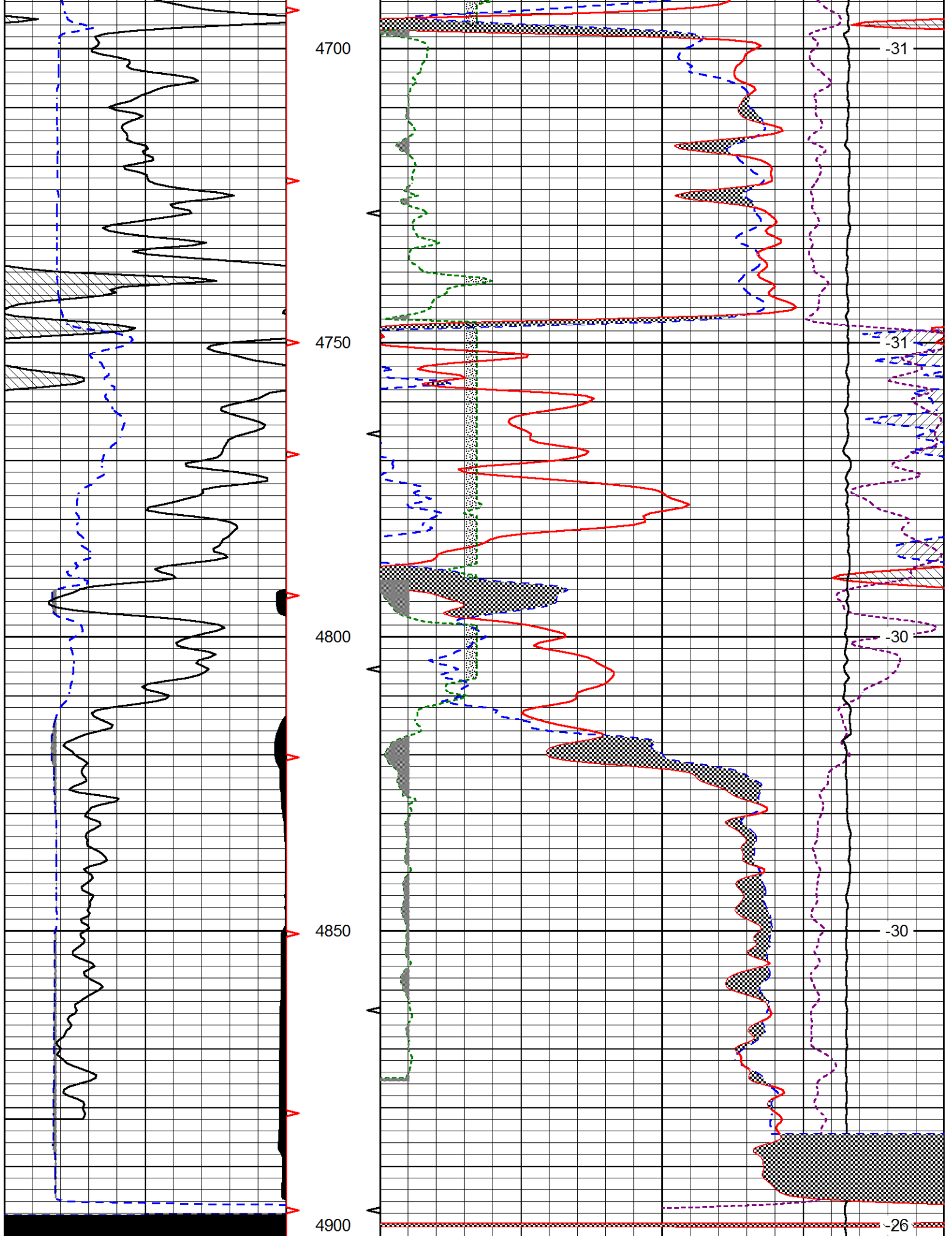












0	Gamma Ray (GAPI)	150
6	Caliper (in)	16

30	CNLS (pu)				-10
30	Compensated Density (2.71 ma) (pu)				-10
10000	Line Tension (lb)				0
2.625	DGA (g/cc)	3.425	-0.25	Correction (g/cc)	0.25
					LSPD (ft/min)