



PIONEER

Pioneer Energy Services

DUAL COMP POROSITY LOG

Company		R&B OIL & GAS					
Well		NEWMAN 'A' NO.1 SWD					
Field		N/A					
County		BARBER					
State		KANSAS					
Location:		API #: 15-007-24246-00-01					
Permanent Datum		GROUND LEVEL					
Log Measured From		KELLY BUSHING					
Drilling Measured From		KELLY BUSHING					
SEC 27 TWP 32S RGE 11W		DIL					
4980' FSL & 4980' FEL		Elevation					
		K.B. 1522'					
		D.F. N/A					
		G.L. 1517'					
Date		12/30/2017					
Run Number		ONE					
Type Log		CNL/CDL					
Depth Driller		5279'					
Depth Logger		5281'					
Bottom Logged Interval		5260'					
Top Logged Interval		2500'					
Type Fluid In Hole		CHEMICAL					
Salinity, PPM CL		6000					
Density		8.6					
Level		FULL					
Max. Rec. Temp. F		129 DEG/F					
Operating Rig Time		3 HOURS					
Equipment -- Location		108 HAYS					
Recorded By		J. HENRICKSON					
Witnessed By		TIM PIERCE					
Borehole Record		Casing Record					
Run No.	Bit	From	To	Size	Wgt.	From	To
ONE	12.25"	0	247'	8.625"	23#	0	247'
TWO	7.875"	247'	TD				

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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.

MEDICINE LODGE KANSAS

5 EAST TO PIXLEY ROAD, 1.1 SOUTH EAST INTO

Log Measured From: KELLY BUSHING 5 Ft. Above Permanent Datum

THANK YOU FOR USING PIONEER ENERGY SERVICES

www.pioneerenergy.com 785-625-3858

Your Pioneer Energy Services Crew		This Log Record Was Witnessed By	
Engineer: J. HENRICKSON		Primary Witness: TIM PIERCE	
Operator:		Secondary Witness:	
Operator:		Secondary Witness:	
Operator:		Secondary Witness:	

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in 7.875	degF 129	in 5.5	in 0	g/cc 1	2	g/cc 2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	0	mmho/m 0	mmho/m 0	mV -310	degF 18	Off	ft 5281

Sensor	Offset (ft)	Schematic		Description	Length (ft)	O.D. (in)	Weight (lb)
GR	33.00			GR-M&W (89-M&W)	3.00	3.50	50.00
CNLSC CNSSC	29.90			CNT-M&W (tk10-MW)	5.50	3.50	100.00
	29.15						
LSD DCAL SSD	20.85 20.83 20.35			CDL-M&W (168-986)	8.50	4.00	250.00
RLL3 RLL3F	15.80 15.79			DIL-M&W (PSI 978)	18.50	3.50	220.00
CILD	8.00						

CILM 4.70

SP 0.20

Dataset: r&b_newman_a_1_swd.db: field/well/stack/pass3.1
Total length: 35.50 ft
Total weight: 620.00 lb
O.D.: 4.00 in

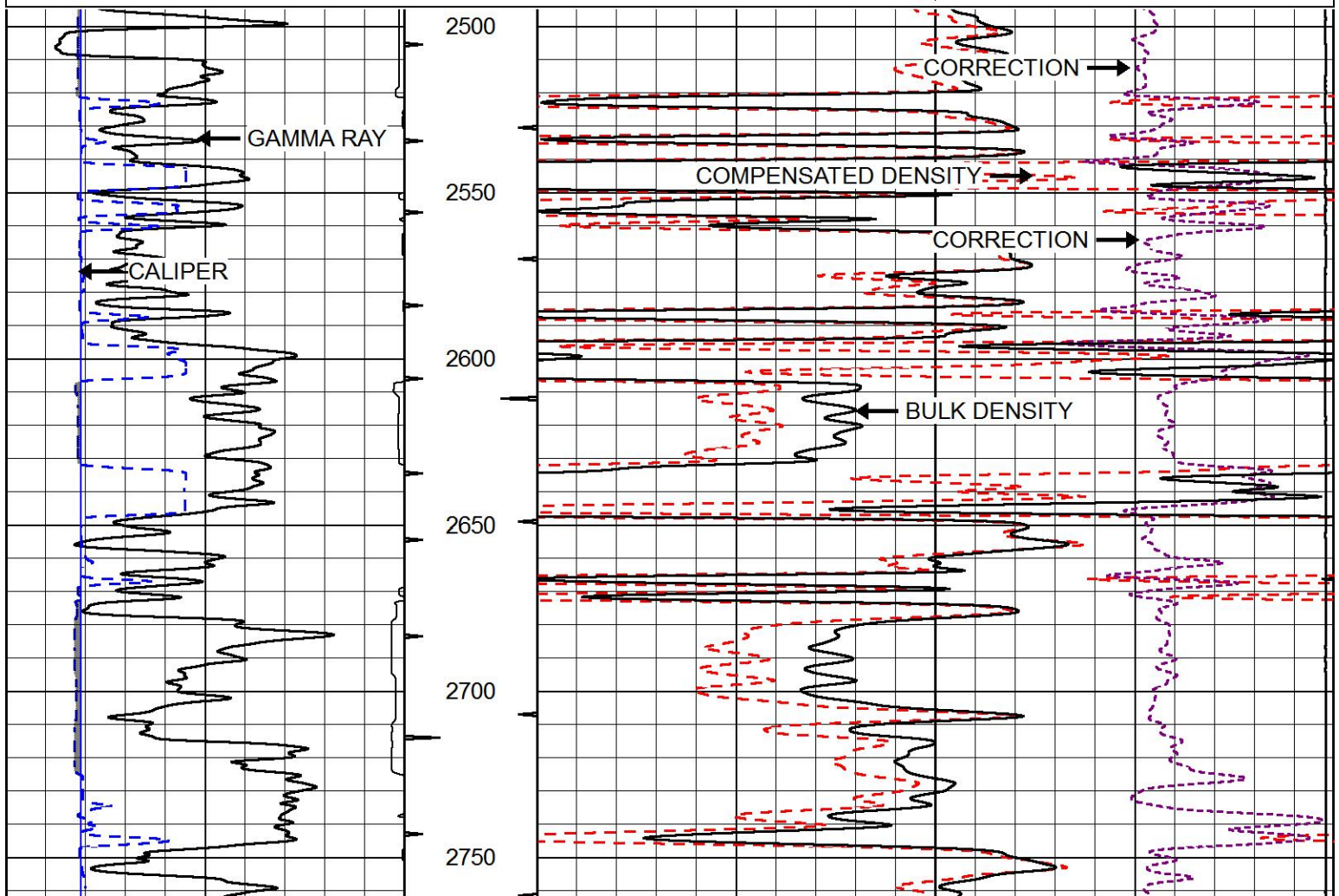


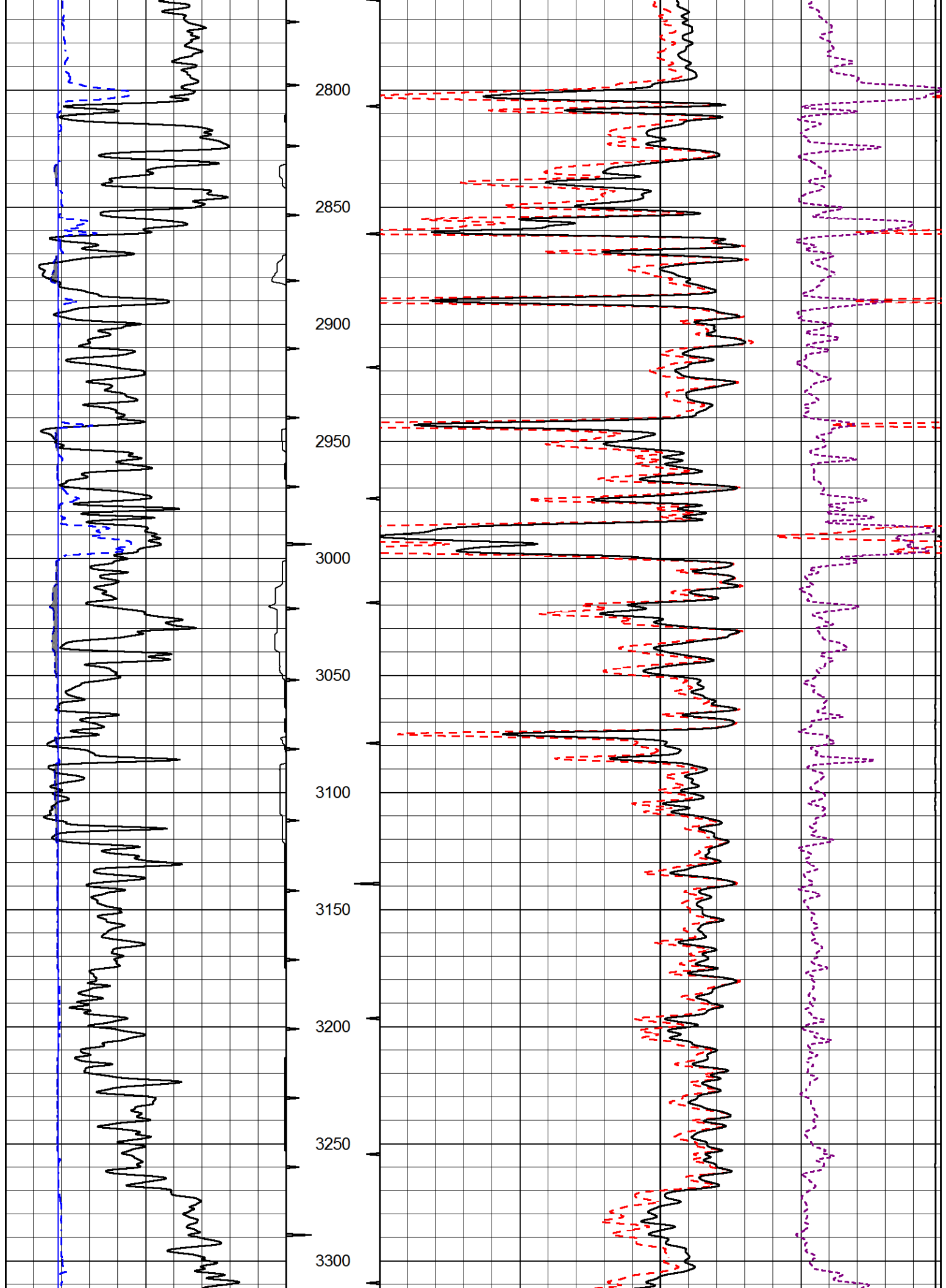
MAIN PASS

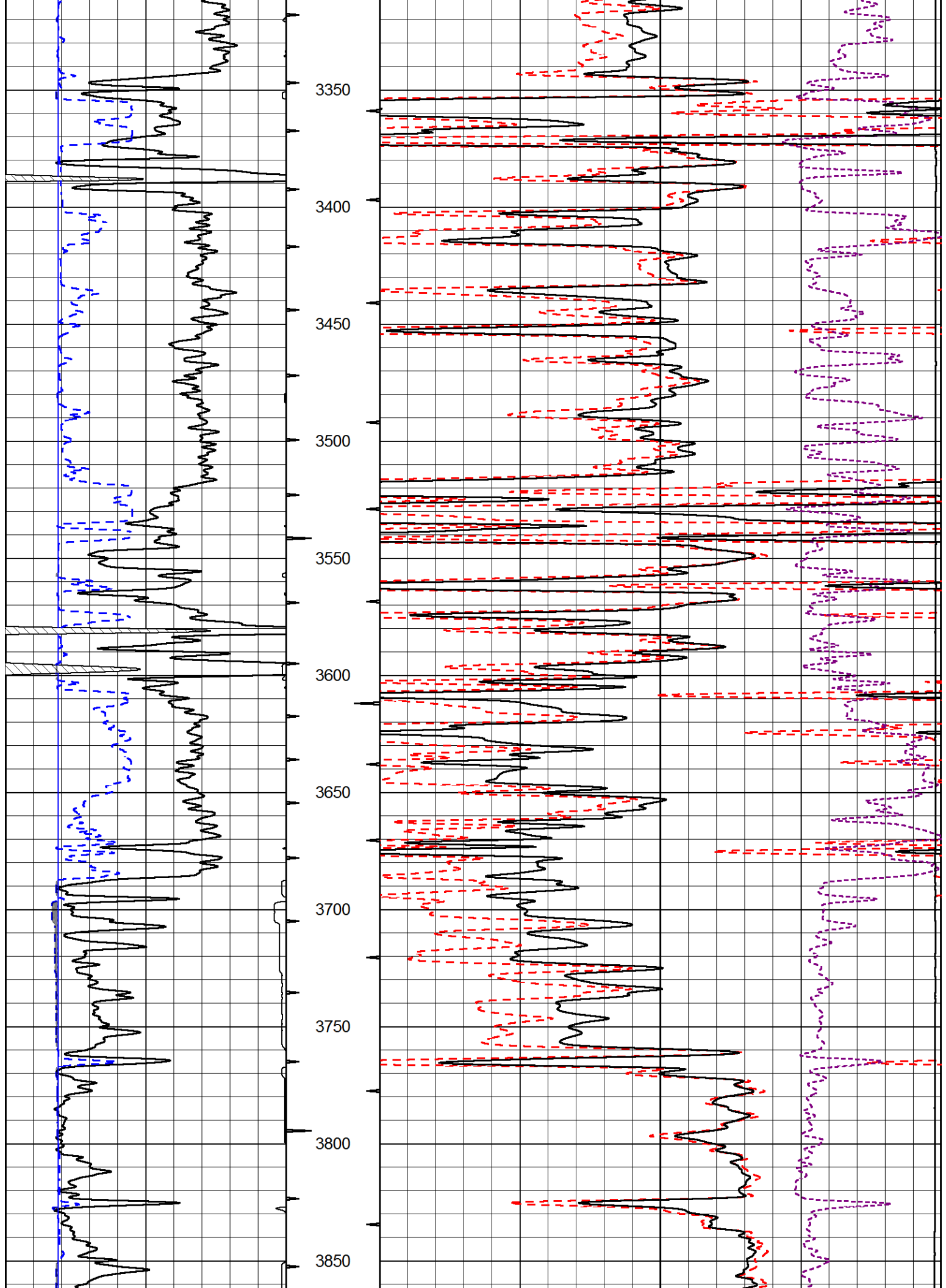
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Dataset Pathname stack/pass3.1
Presentation Format cdl
Dataset Creation Sat Dec 30 10:49:37 2017
Charted by Depth in Feet scaled 1:600

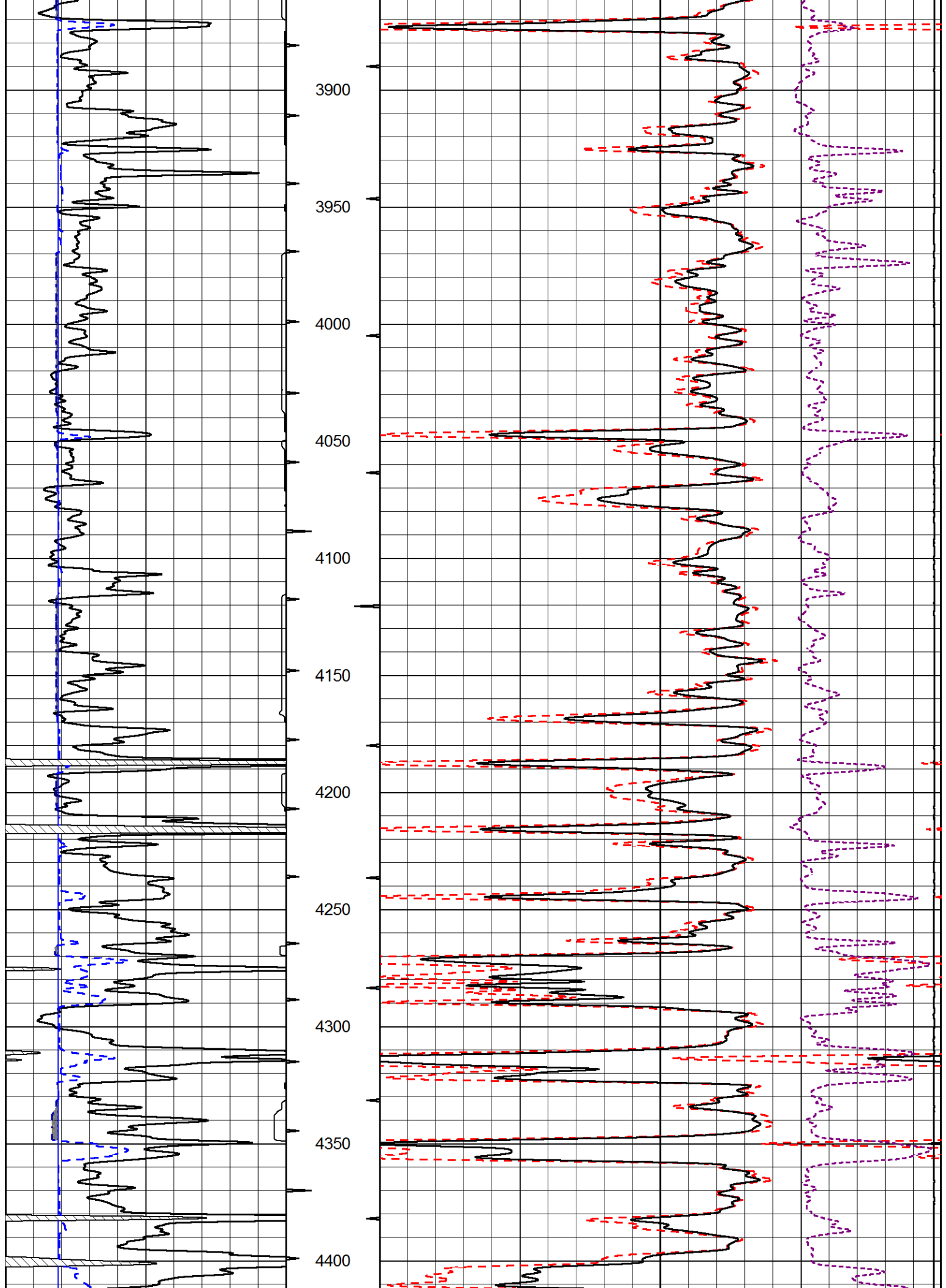
0 GAMMA RAY (GAPI) 150
6 CALIPER (in) 16

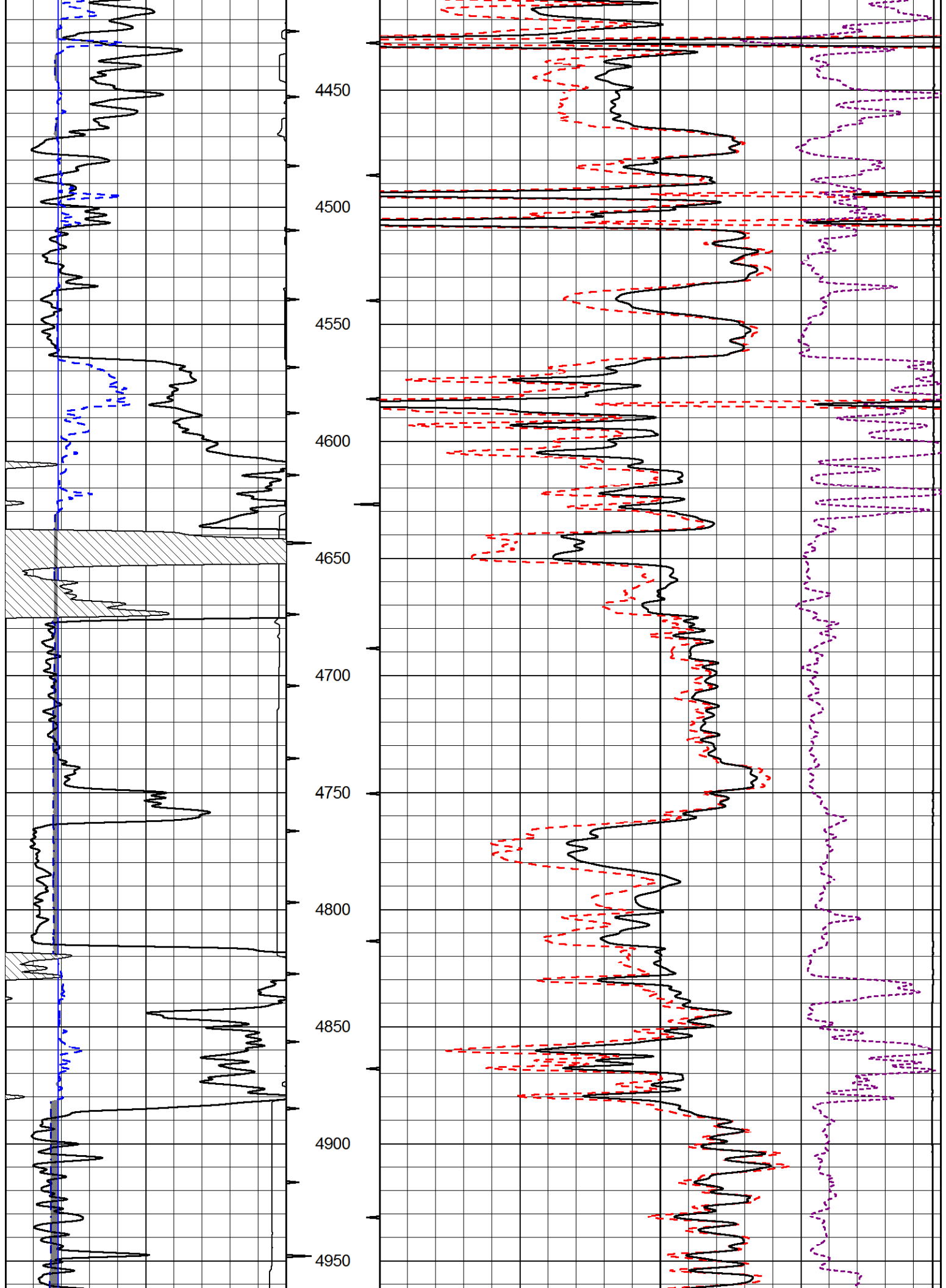
30 COMPENSATED DENSITY (pu) -10
2 BULK DENSITY (g/cc) 3
15000 LINE TENSION (lb) 0
-0.25 CORRECTION (g/cc) 0.25

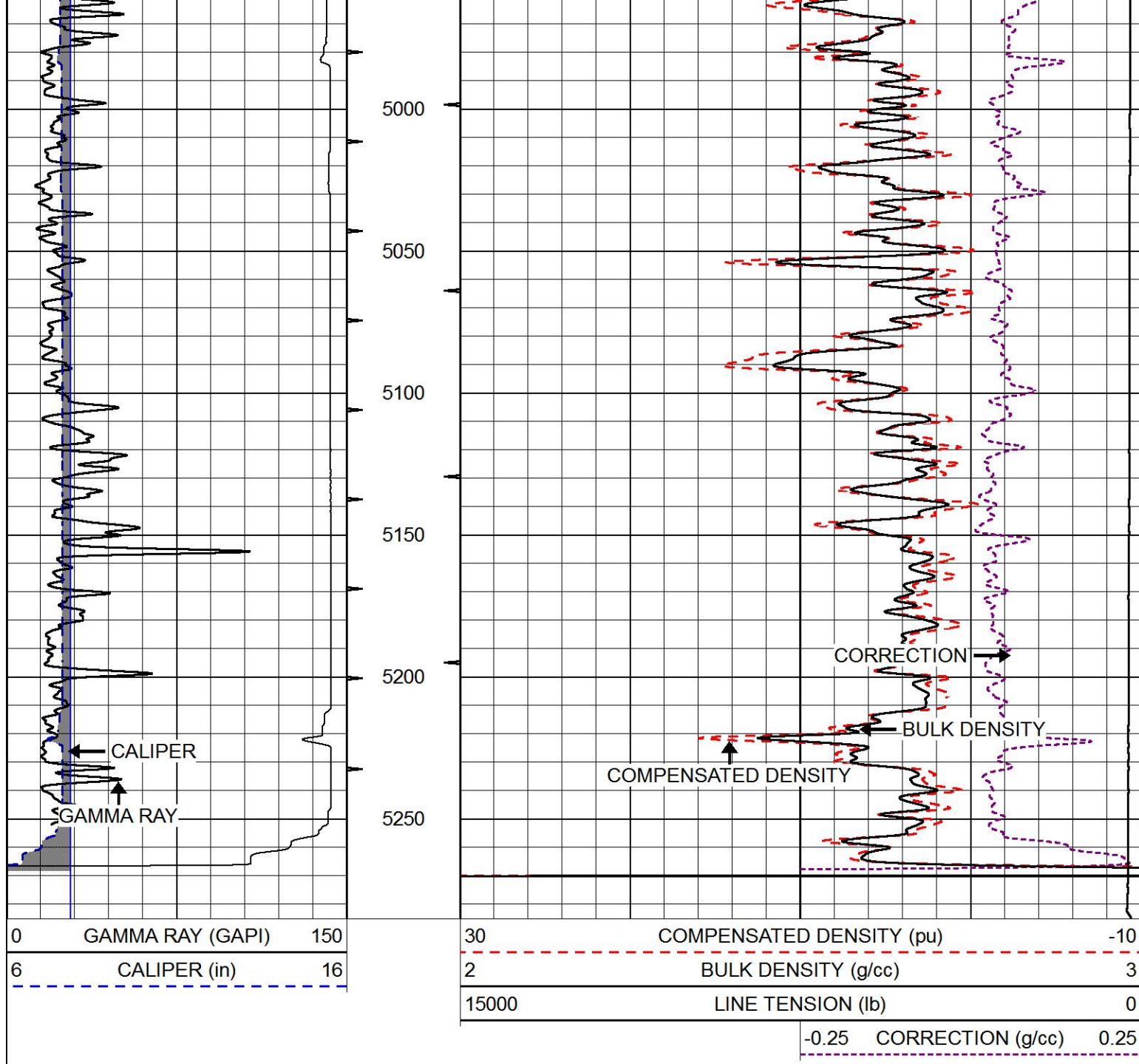














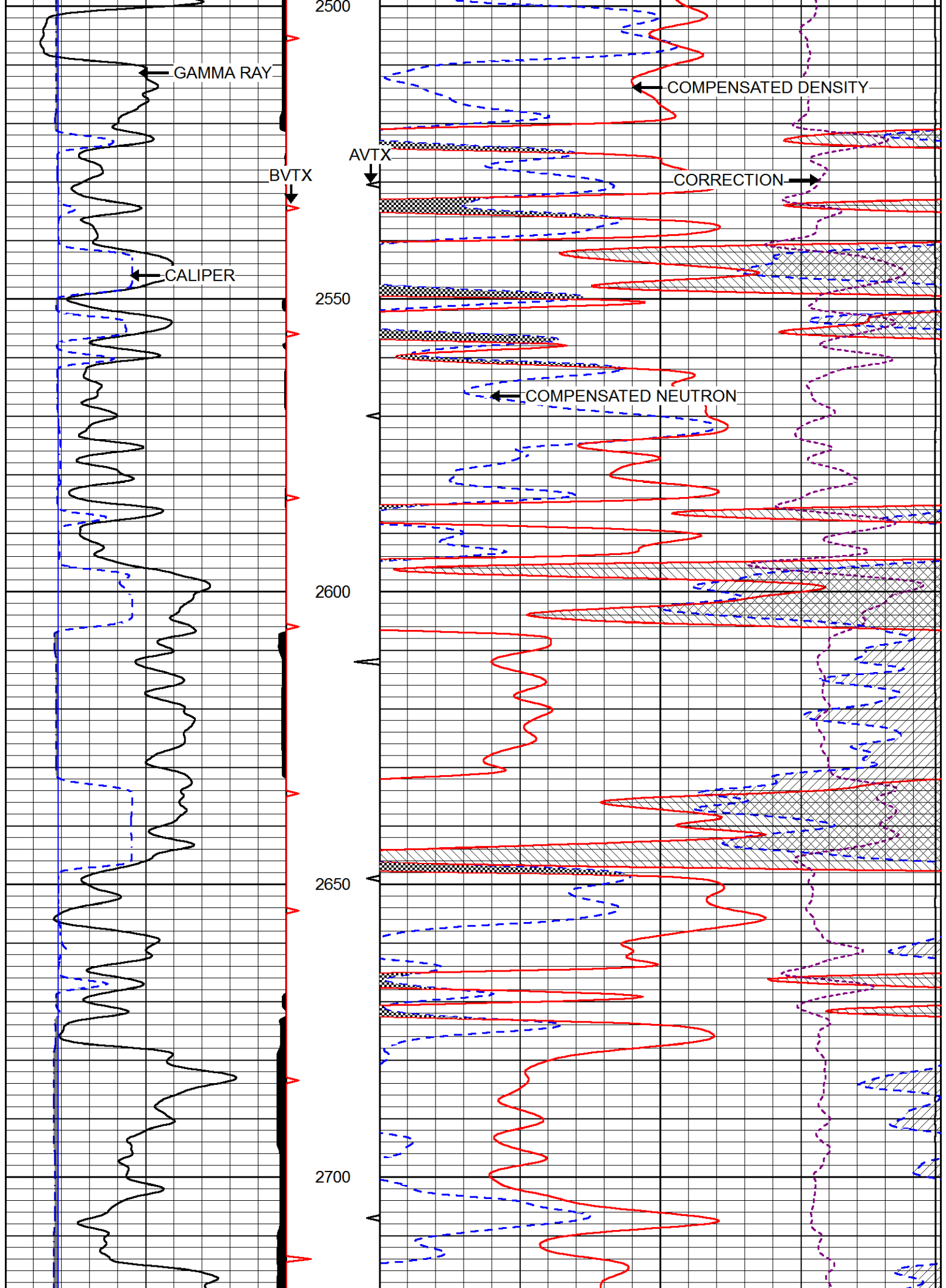
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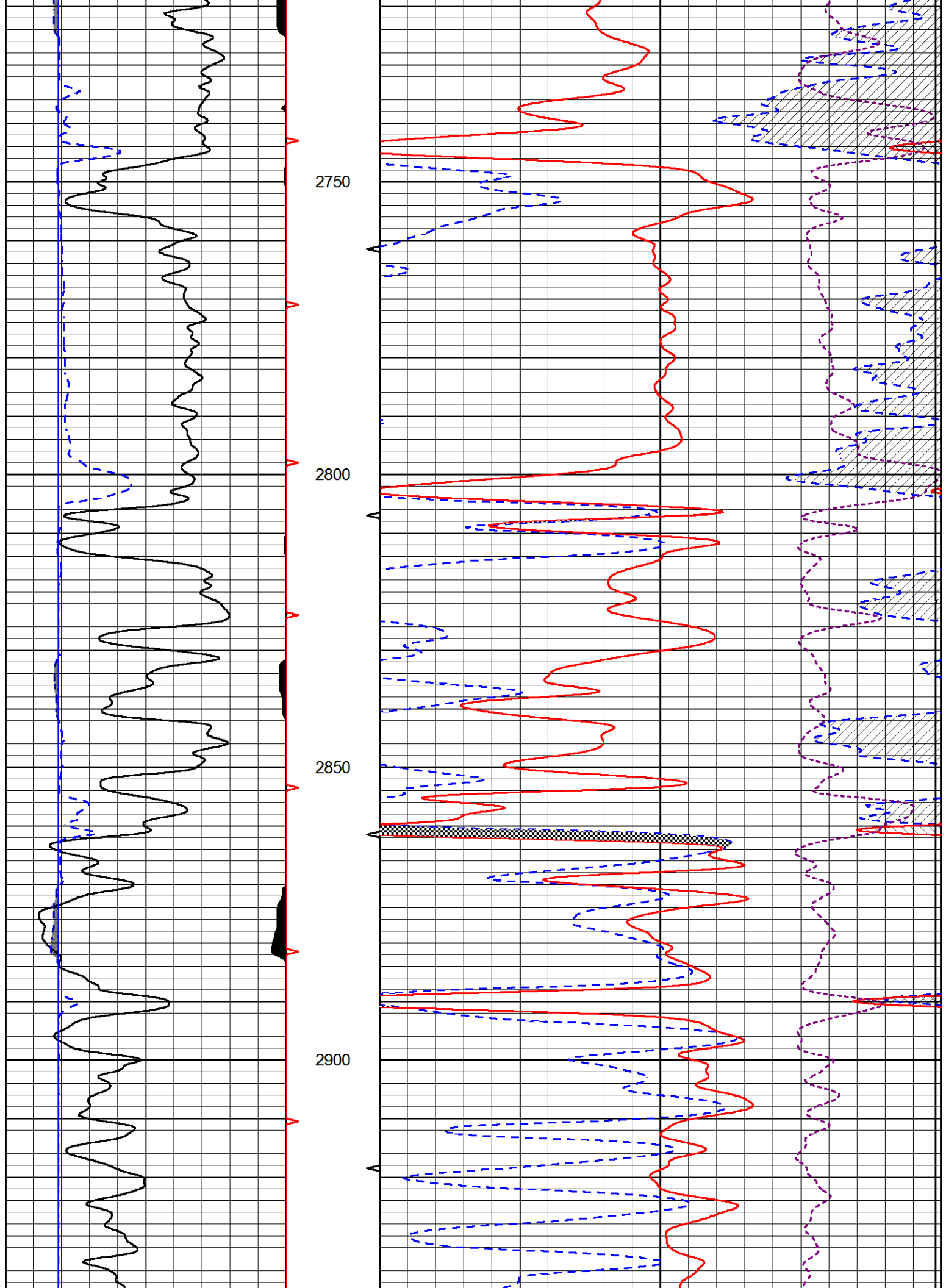
MAIN PASS

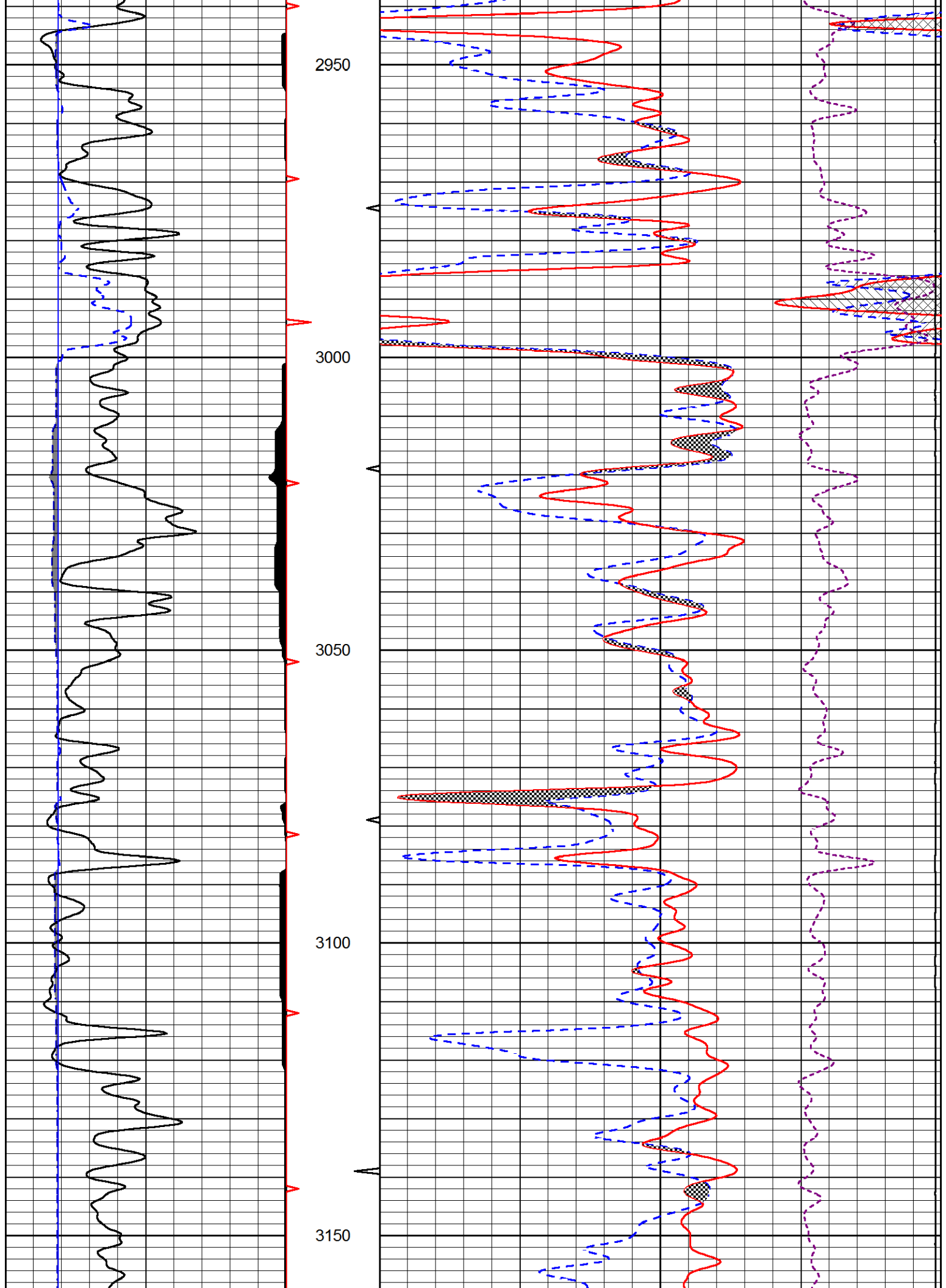
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Dataset Pathname		stack/pass3.1	
Presentation Format		cndlspec	
Dataset Creation		Sat Dec 30 10:49:37 2017	
Charted by		Depth in Feet scaled 1:240	

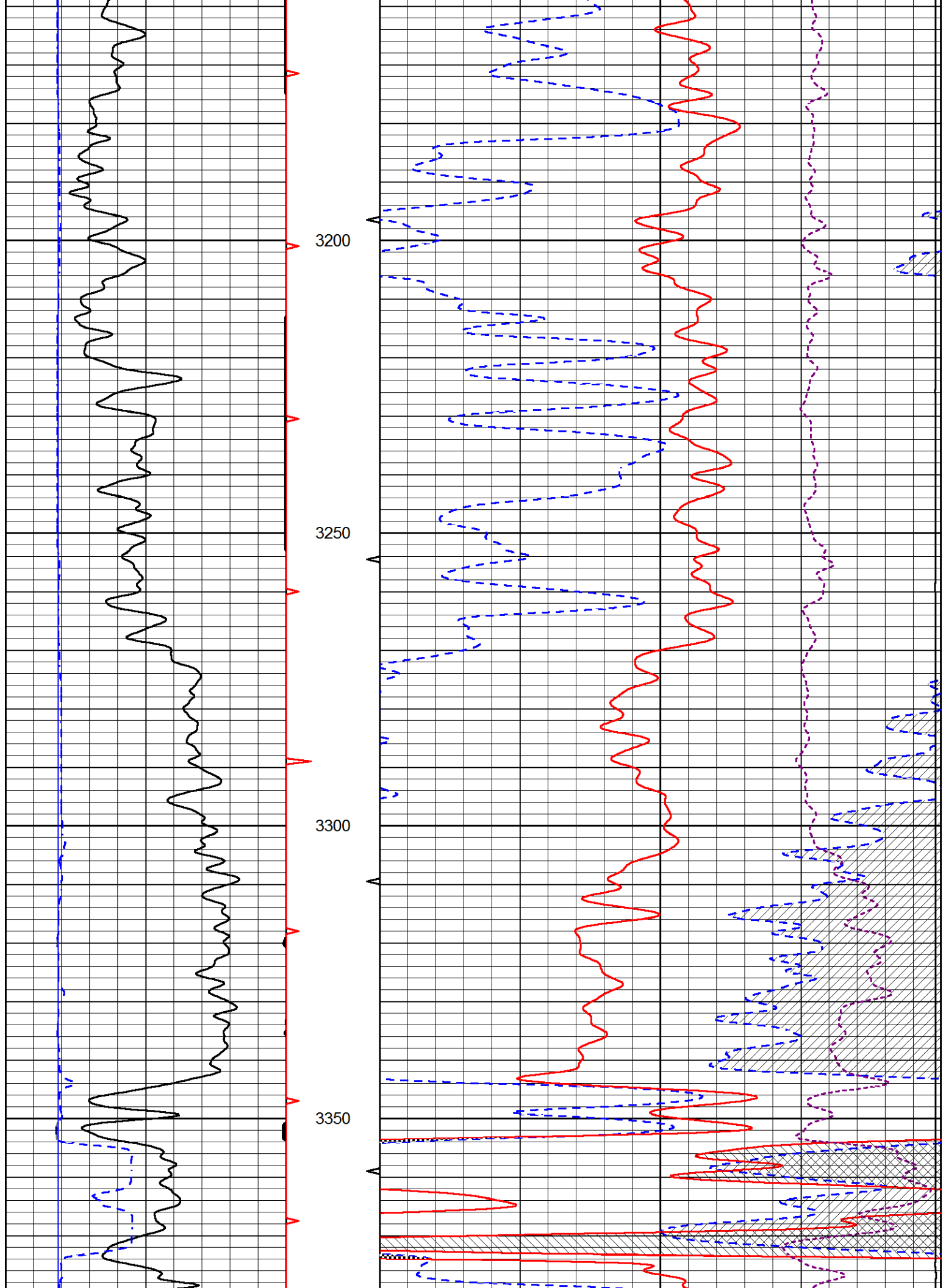
0	GAMMA RAY (GAPI)	150
6	dcal (in)	16
6	BIT SIZE (in)	16

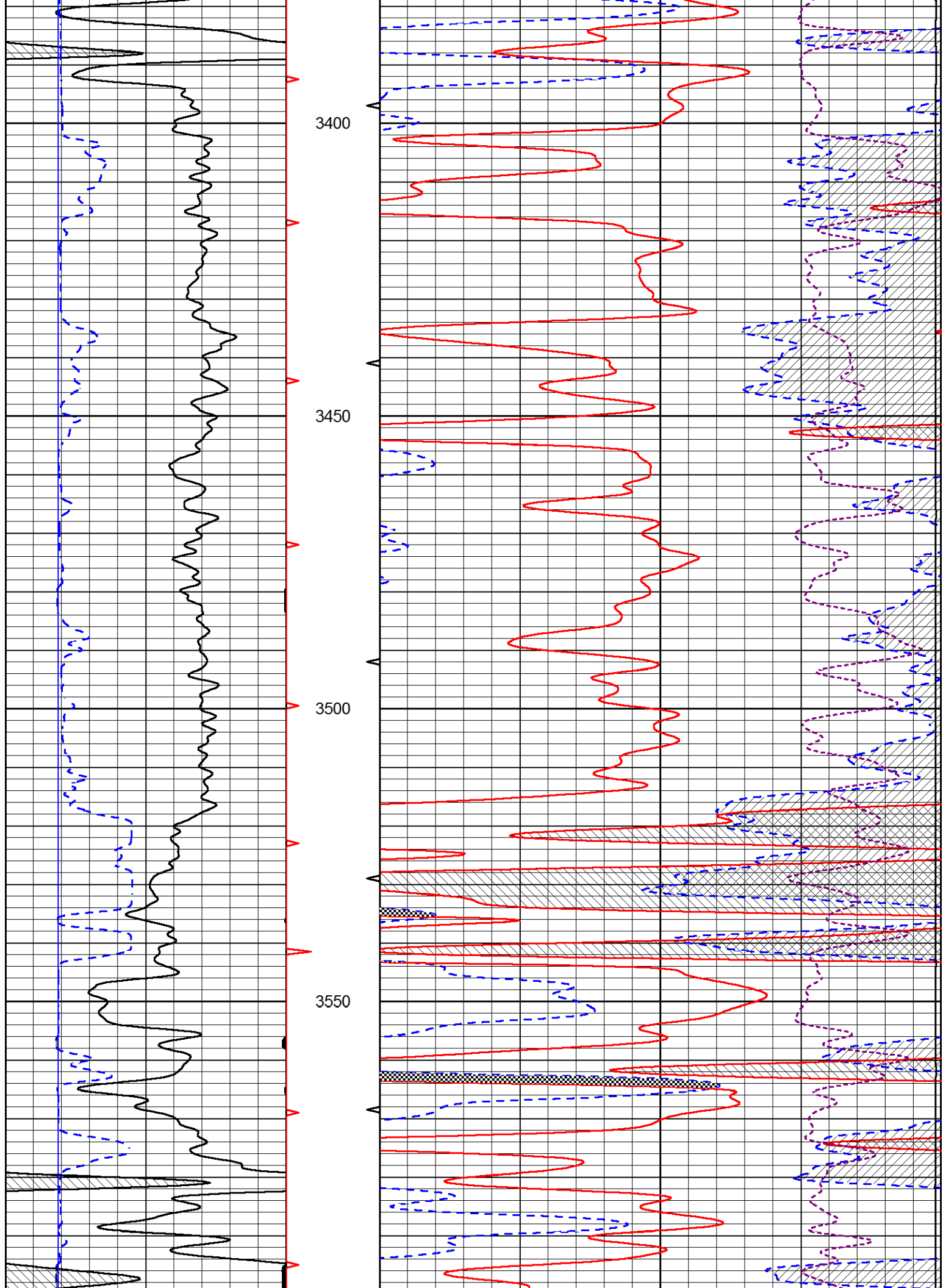
30	CNLS (pu)	-10
30	COMPENSATED DENSITY (2.71 ma) (pu)	-10
15000	LINE TENSION (lb)	0
-0.25	CORRECTION (g/cc)	0.25

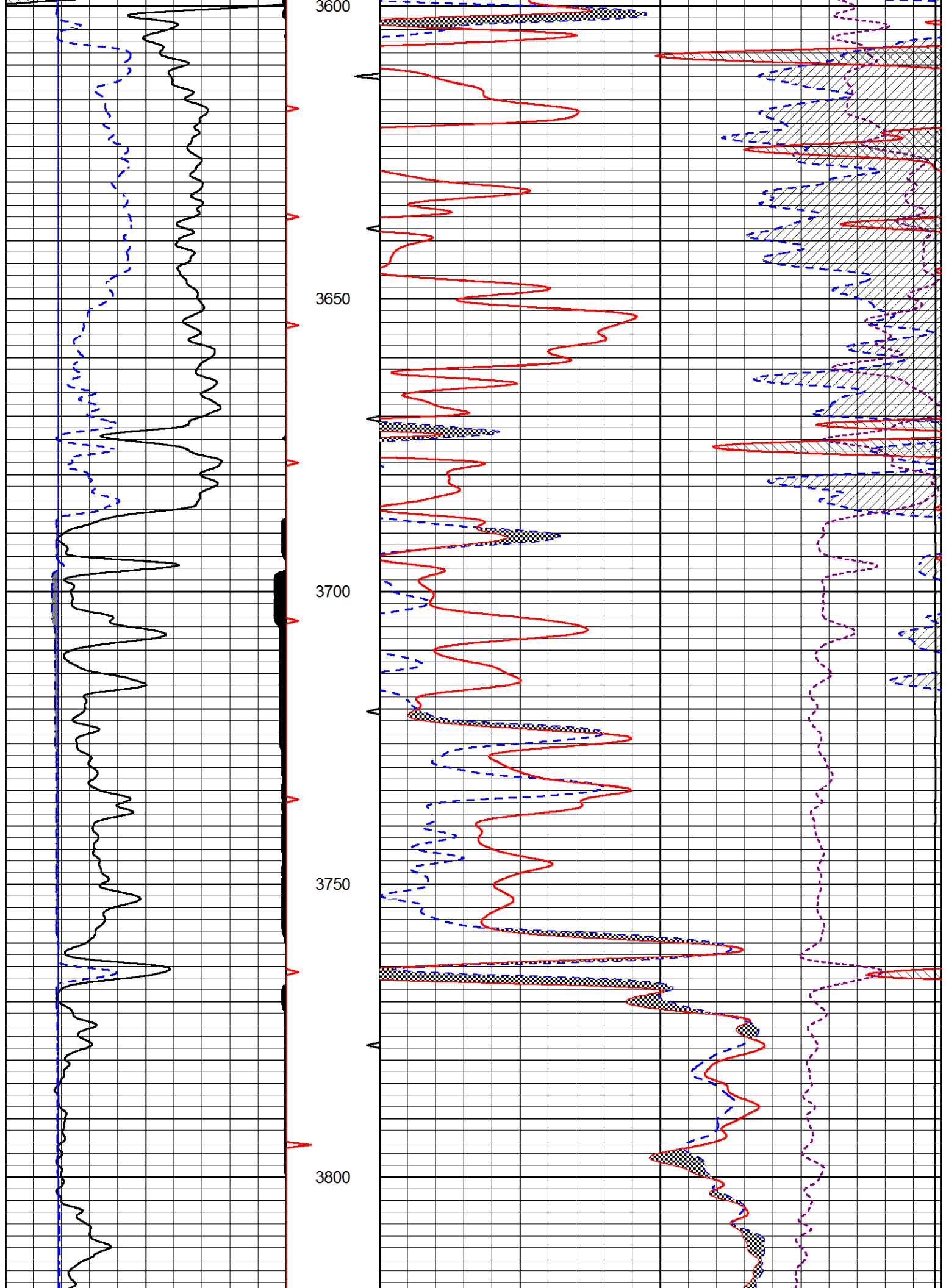


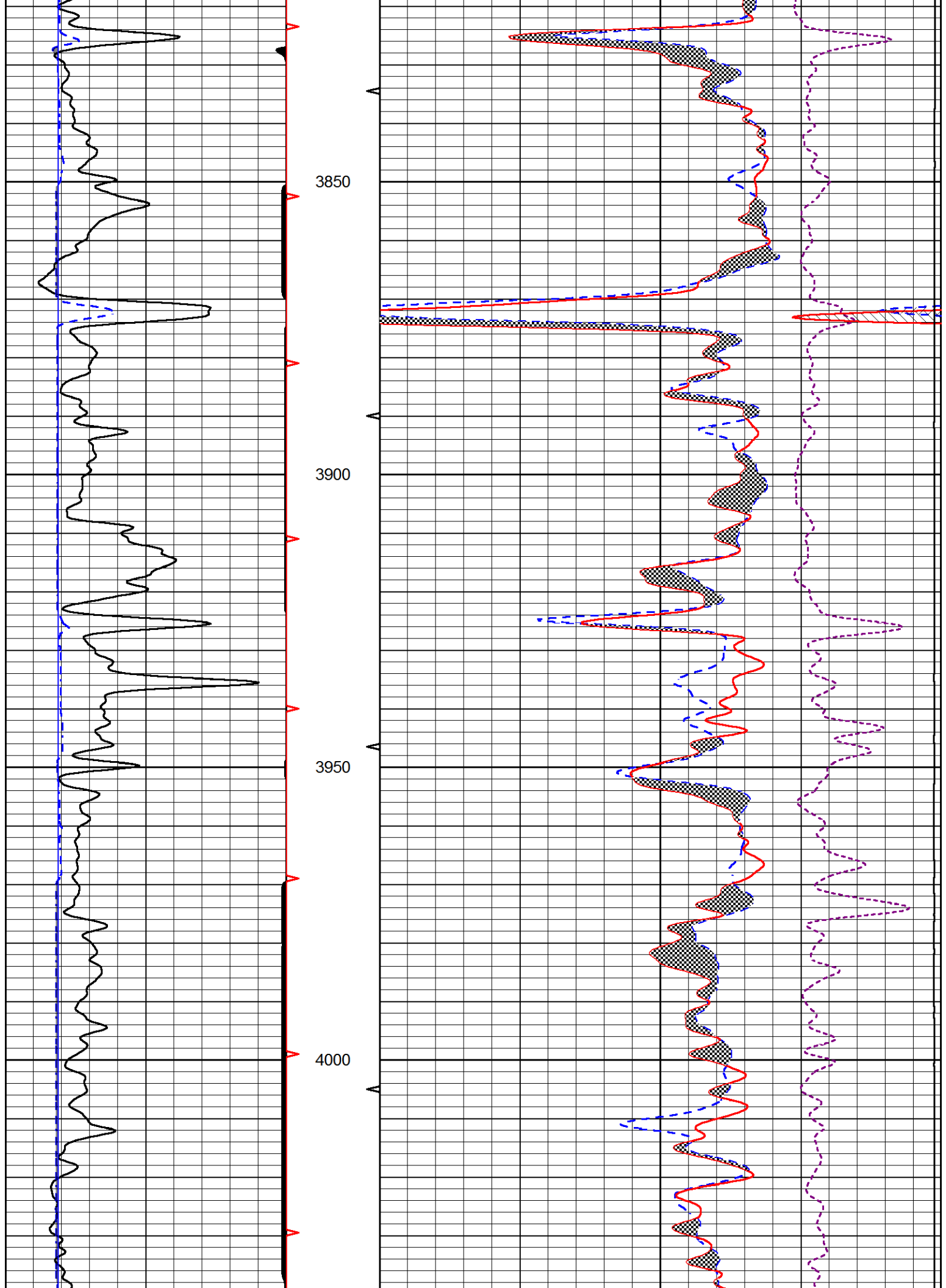


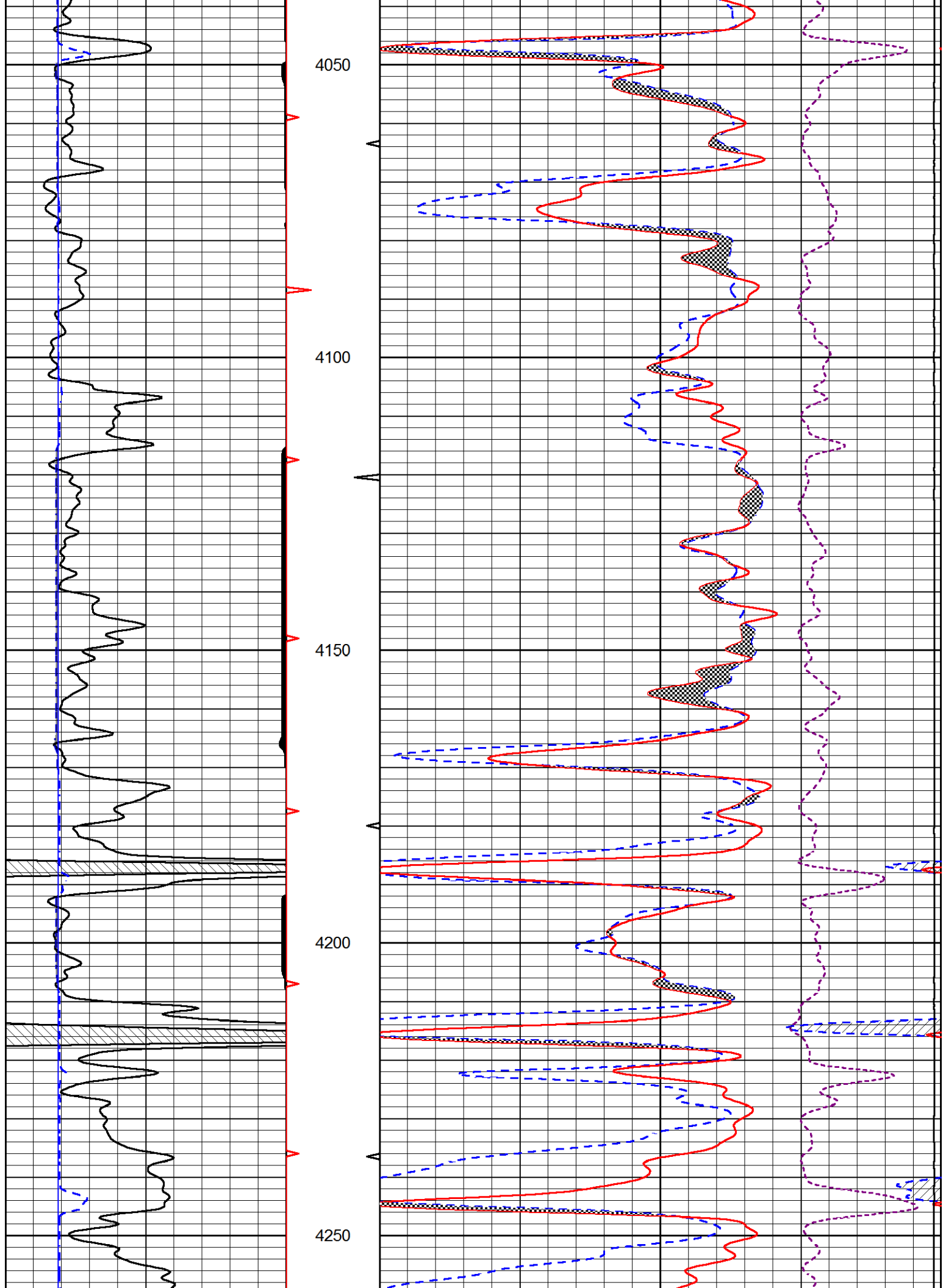


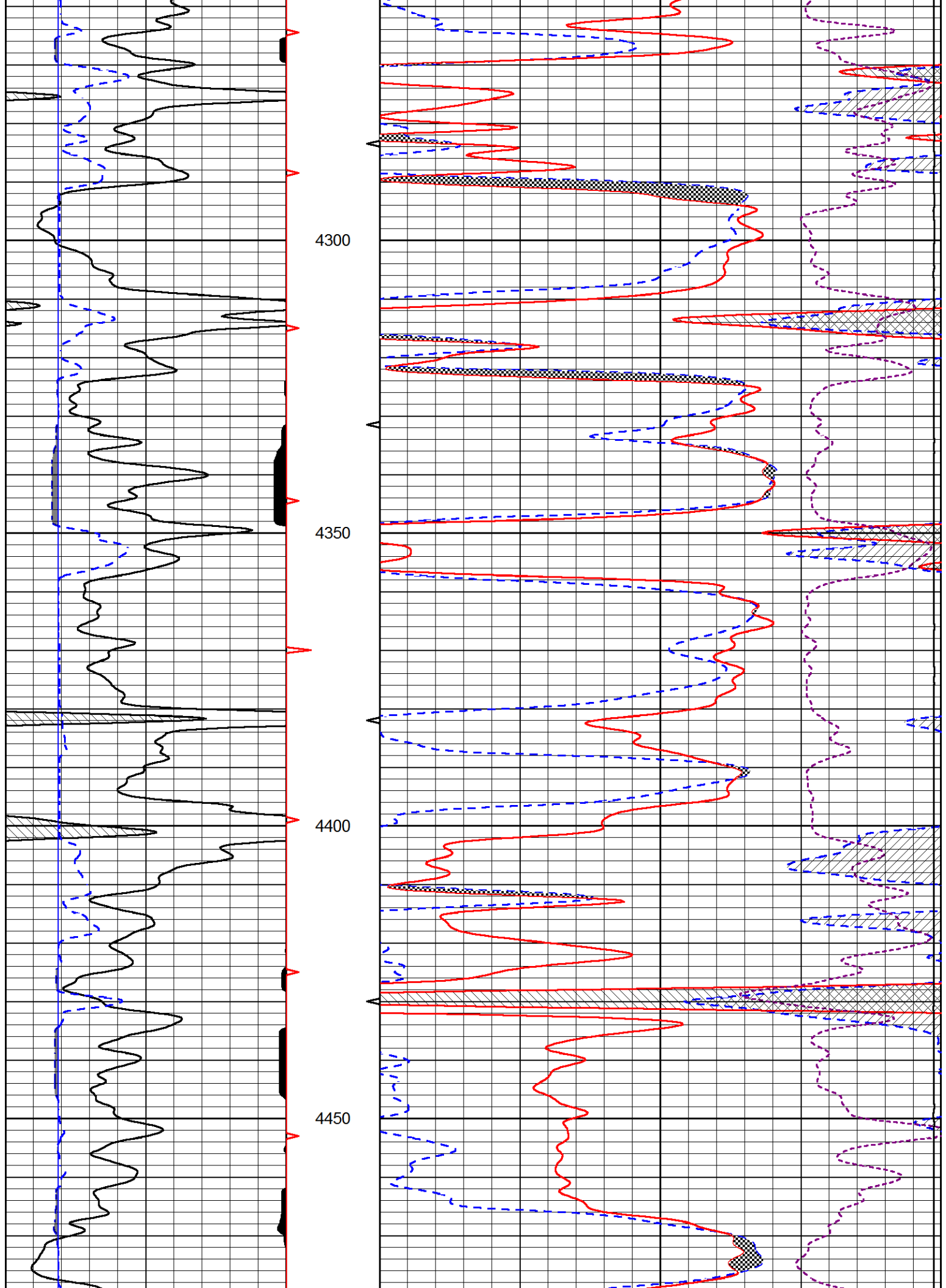


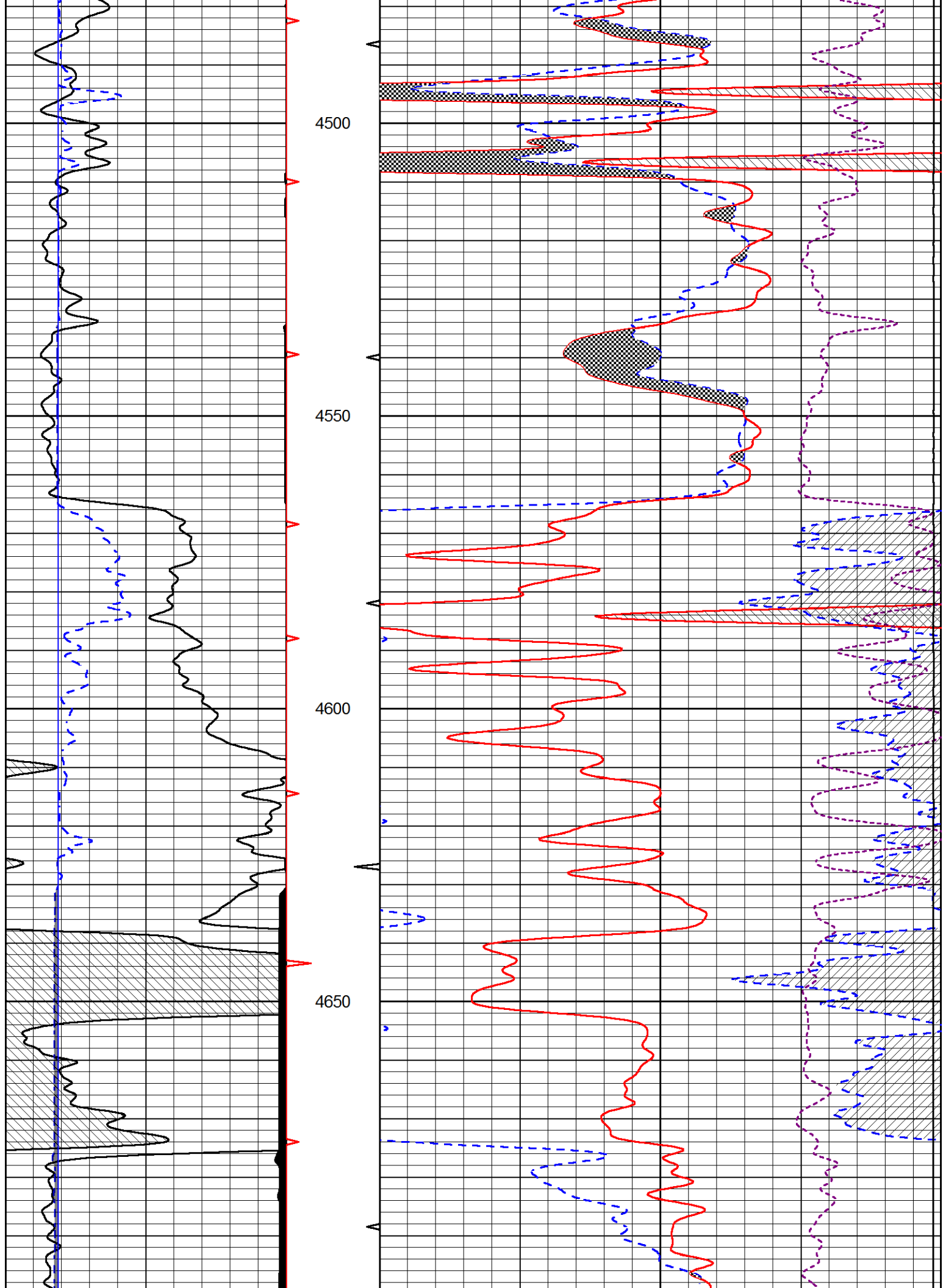


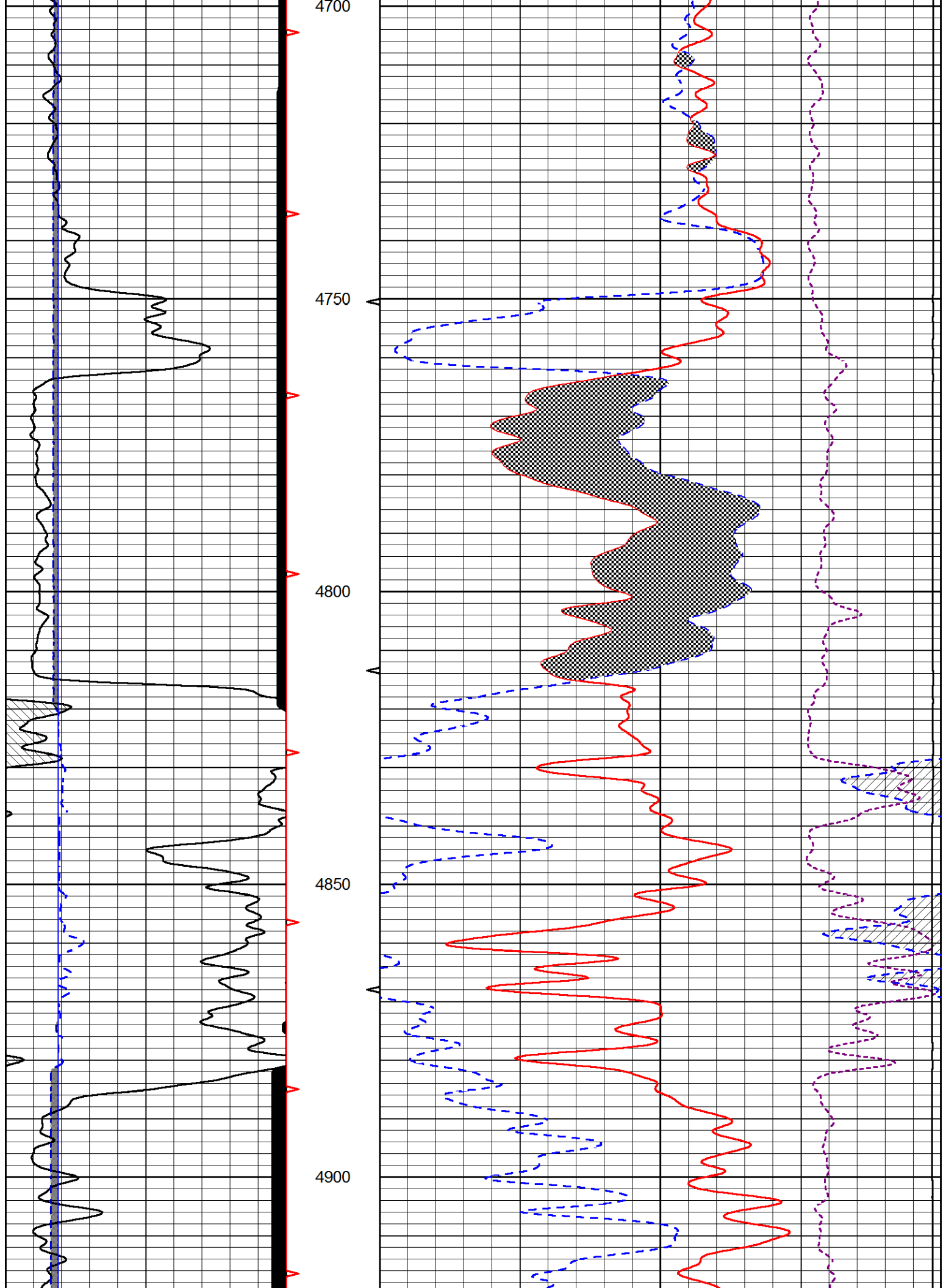


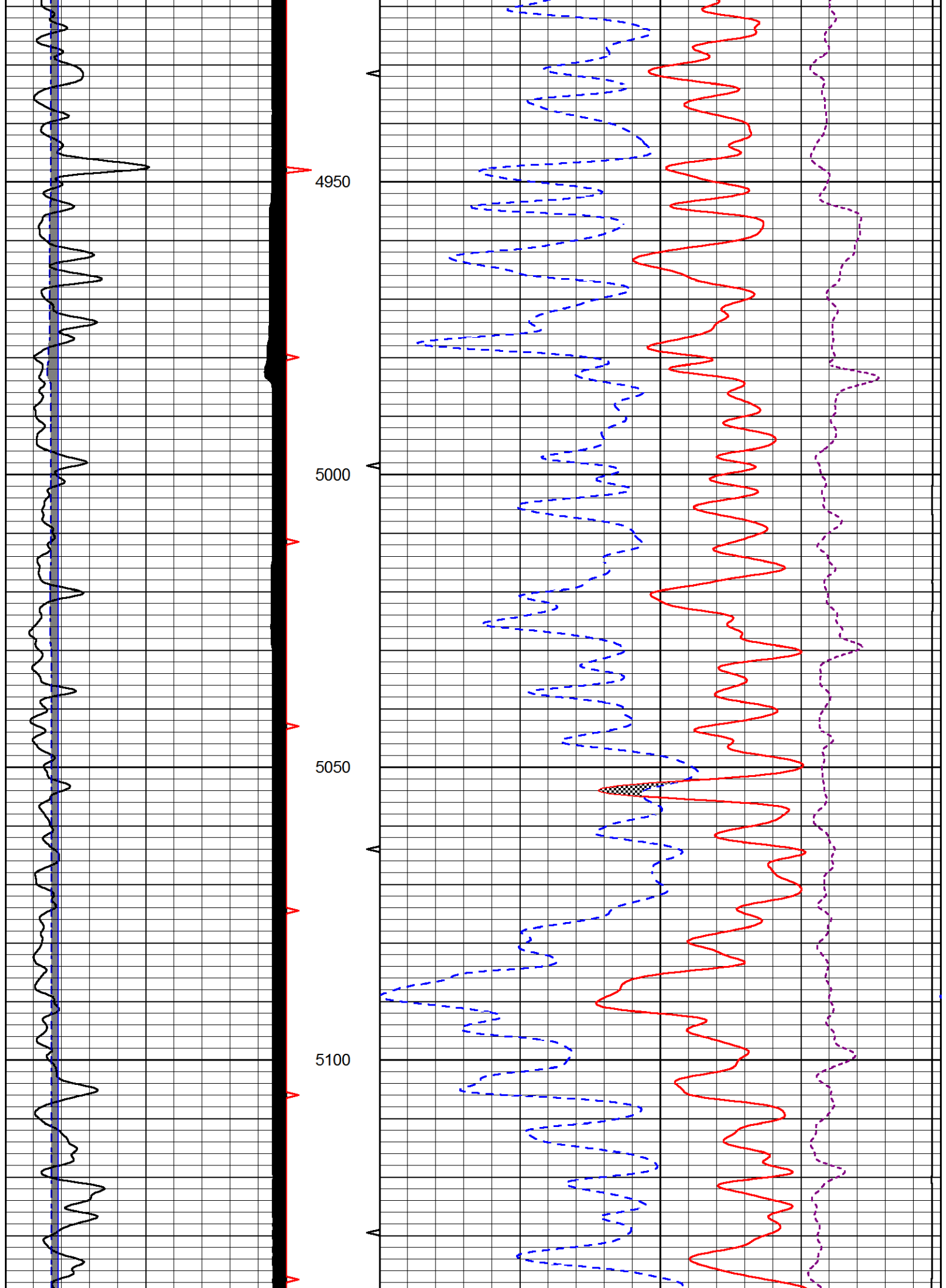


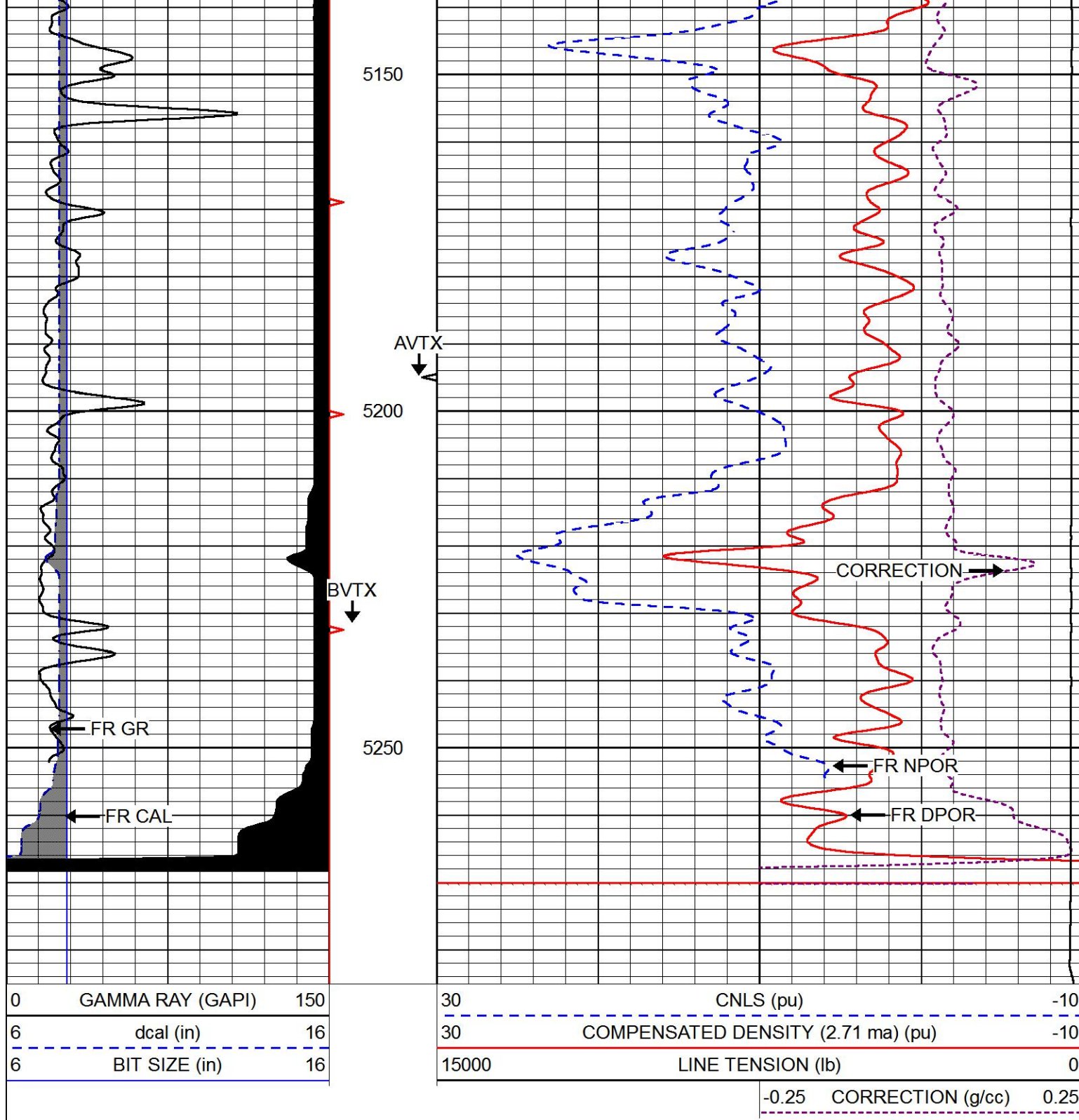












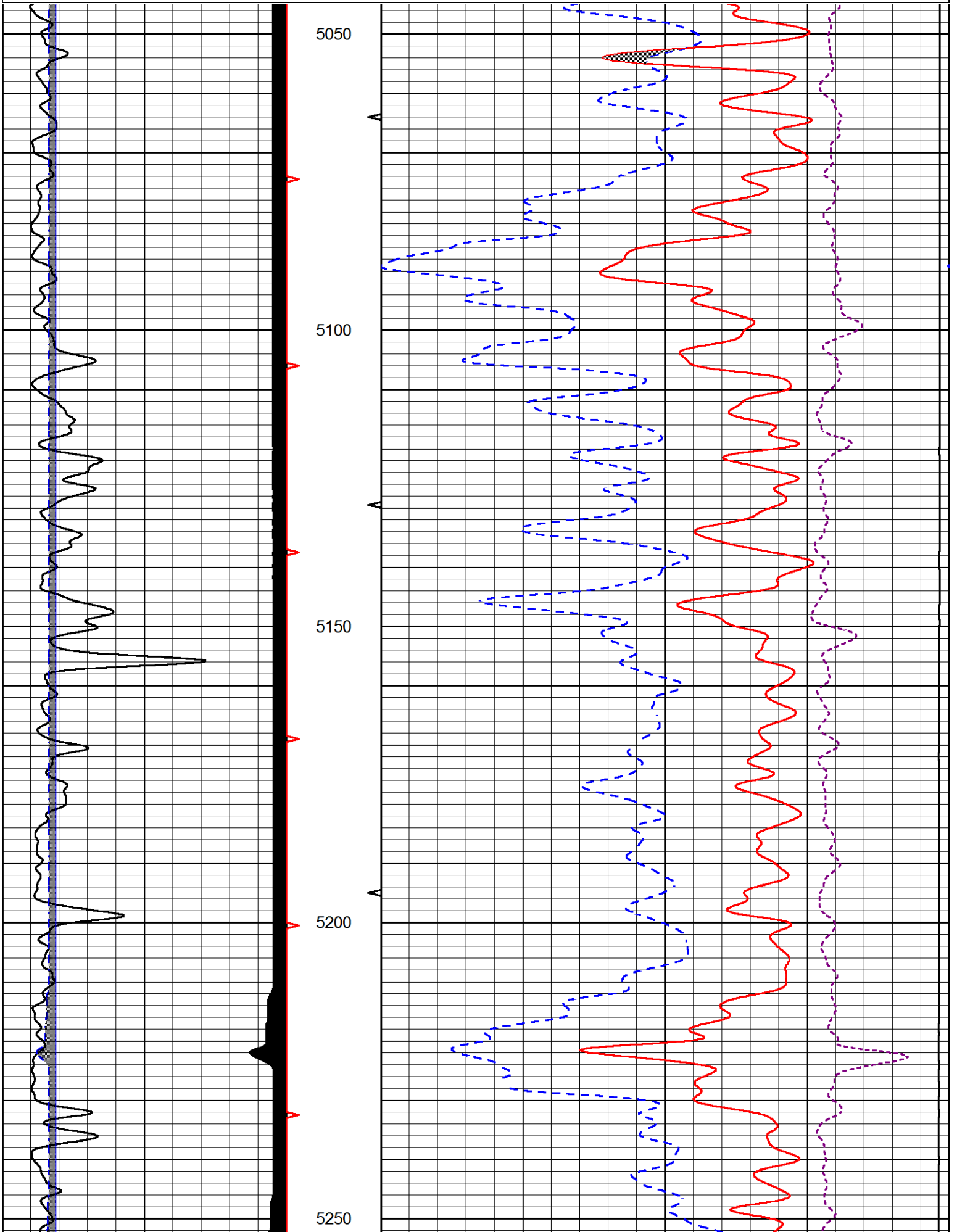


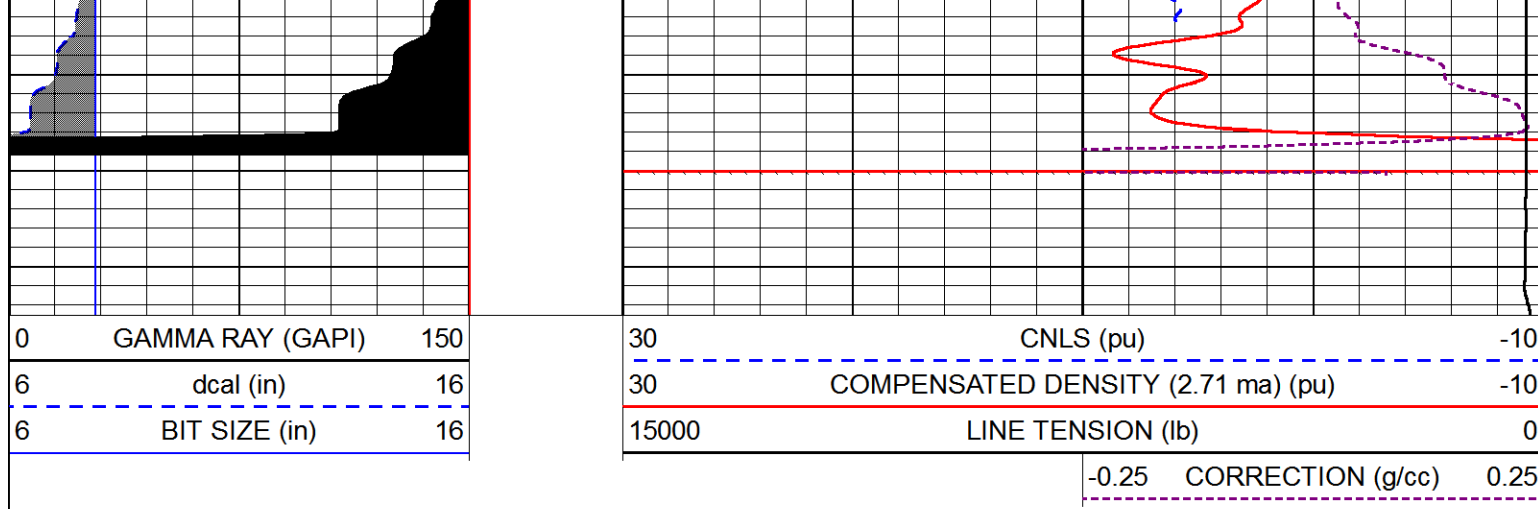
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REPEAT SECTION

Database File	r&b_newman_a_1_swd.db
Dataset Pathname	stack/pass2.1
Presentation Format	cnldspec
Dataset Creation	Sat Dec 30 10:49:49 2017
Charted by	Depth in Feet scaled 1:240







Calibration Report	
Database File	r&b_newman_a_1_swd.db
Dataset Pathname	stack/pass3.1
Dataset Creation	Sat Dec 30 10:49:37 2017

Dual Induction Calibration Report	
Serial-Model:	PSI 978-M&W
Calibration Performed:	Wed Dec 13 12:45:09 2017

Readings			References			Results	
Loop:	Air	Loop	Air	Loop		Gain	Offset
Deep	178.615	710.235	0.000	255.800	mmho/m	0.570	-36.500
Medium	161.982	1441.110	0.000	255.800	mmho/m	0.420	-35.000

Compensated Density Calibration Report	
Serial-Model:	168-986-M&W
Source / Verifier:	/
Master Calibration Performed:	Tue Apr 11 17:07:47 2017

Master Calibration					
Density			Far Detector	Near Detector	
Magnesium	1.755	g/cc	4691.86	4818.19	cps
Aluminum	2.675	g/cc	859.57	3020.22	cps
Spine Angle = 74.61			Density/Spine Ratio = 0.523		
Size			Reading		
Small Ring	4.00	in	1.03		
Large Ring	14.00	in	1.23		

Compensated Neutron Calibration Report	
Serial Number:	tk10-MW
Tool Model:	M&W
Calibration Performed:	Wed Nov 16 11:21:36 2016

Detector	Readings	Target	Normalization
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Detector	Readings		Target		Normalization
Short Space	6240.00	cps	1000.00	cps	1.6025
Long Space	460.00	cps	1000.00	cps	1.9500

Gamma Ray Calibration Report

Serial Number:	89-M&W	
Tool Model:	M&W	
Calibration Performed:	Tue Apr 11 17:08:01 2017	
Calibrator Value:	1000.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	6.2	cps
Sensitivity:	0.5200	GAPI/cps

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	Well	NEWMAN 'A' NO.1 SWD
	Field	N/A
	County	BARBER
	State	KANSAS