



MIDWEST WIRELINE

# DUAL COMP POROSITY LOG

Company Griffin Management LLC  
 Well Marla #1  
 Field Moffett Northwest  
 County Barber  
 State Kansas

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 Field Moffett Northwest  
 County Barber State Kansas

Location: API #: 15-007-24397-00-00  
 2557 FSL 40 FEL  
 SEC 5 TWP 30S RGE 15W  
 Permanent Datum Ground Level Elevation 2002  
 Log Measured From Kelly Bushing  
 Drilling Measured From Kelly Bushing  
 Other Services  
 DIL/MEL  
 K.B. 2007  
 D.F. G.L. 2002

Date	12/5/2021						
Run Number	One						
Type Log	CNL/CDL						
Depth Driller	4880						
Depth Logger	4879						
Bottom Logged Interval	4850						
Top Logged Interval	2800						
Type Fluid In Hole	Chemical						
Salinity, PPM CL	4400						
Density	9.05						
Level	Full						
Max. Rec. Temp. F	125						
Operating Rig Time	3 Hours						
Equipment -- Location	P-24 Hays						
Recorded By	D. Schmidt						
Witnessed By	Charles Griffin						
Borehole Record							
Run No.	Bit	From	To	Size	Wgt.	From	To
One	12.25	0	264	8.625	23	0	264
Two	7.875	264	TD				
Casing Record							

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

Croft,  
 South to County Line, South to the Y,  
 East and North to location

Log Measured From: Kelly Bushing 5 Ft. Above Permanent Datum

THANK YOU FOR USING MIDWEST WIRELINE LLC  
 785-625-3858

Your Midwest Wireline Crew		This Log Record Was Witnessed By	
Engineer: D. Schmidt	Operator:	Primary Witness: Charles Griffin	Secondary Witness:
Operator:	Operator:	Secondary Witness:	Secondary Witness:
Operator:		Secondary Witness:	

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.33		GR-M&W (233-M&W)	3.00	3.50	50.00
CNLSC CNSSC	37.23 36.48		CNT-M&W (207-MW)	5.00	3.50	100.00
LSD DCAL SSD	28.18 28.17 27.68		CDL-M&W (934-226)	8.50	4.00	250.00
MCAL MI MN	19.58 19.58 19.58		ML-PSIML (PSI-01) GO Micro log tools converted to Simplec electronics	7.58	4.00	65.00
RLL3F RLL3	15.50 15.50		DIL-PSI HIGH TEMP (952-828)	18.25	3.50	220.00
CILD	8.33					
CILM	4.50					
SP	0.20					

Dataset: griffin\_marla 1.db: field/well/stkml/pass3.2  
 Total length: 42.33 ft  
 Total weight: 685.00 lb  
 O.D.: 4.00 in

# Log Variables

DatabaseC:\ProgramData\Warrior\Data\griffin\_marla 1.db  
 Dataset field/well/stkml/pass3.2/\_vars\_

## Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	125	5.5	0	1	2	2.71
NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	0	0	0	170	70	Off	4879

## Variable Description

A : Cement Factor (a)  
 BOREID : Borehole I.D.  
 BOTTEMP : Bottom Hole Temperature  
 CASEOD : Casing O.D.  
 CASETHCK : Casing Thickness  
 FLUIDDEN : Fluid Density  
 M : Cement Exp (m)  
 MATRXDEN : Matrix Density

NPORSEL : Neutron Porosity Curve Select  
 PERFS : Perforation Flag  
 SNDERR : Deep Sonde Error Correction  
 SNDERRM : Medium Sonde Error Correction  
 SPSHIFT : S.P. Baseline Offset  
 SRFTEMP : Surface Temperature  
 SZCOR : CN Size Cor. ?  
 TDEPTH : Total Depth



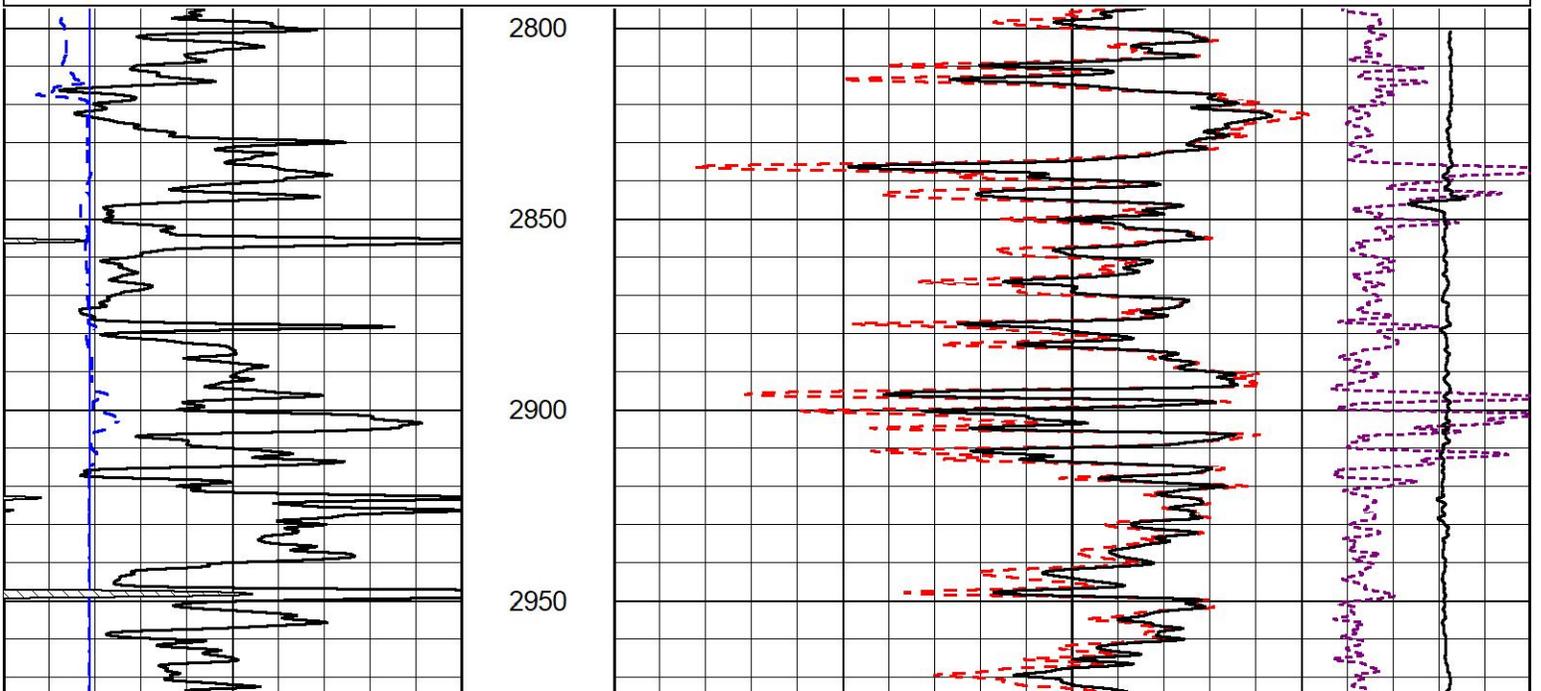
## 2" SCALE BULK DENSITY

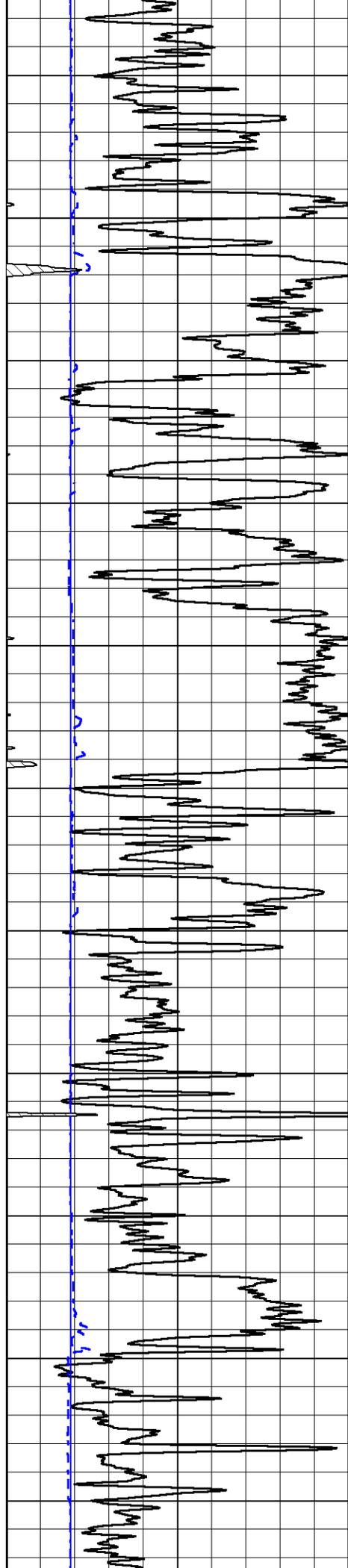
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 Dataset Pathname stkml/pass4.1  
 Presentation Format \_cdl  
 Dataset Creation Sun Dec 05 17:21:10 2021  
 Charted by Depth in Feet scaled 1:600

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





3000

3050

3100

3150

3200

3250

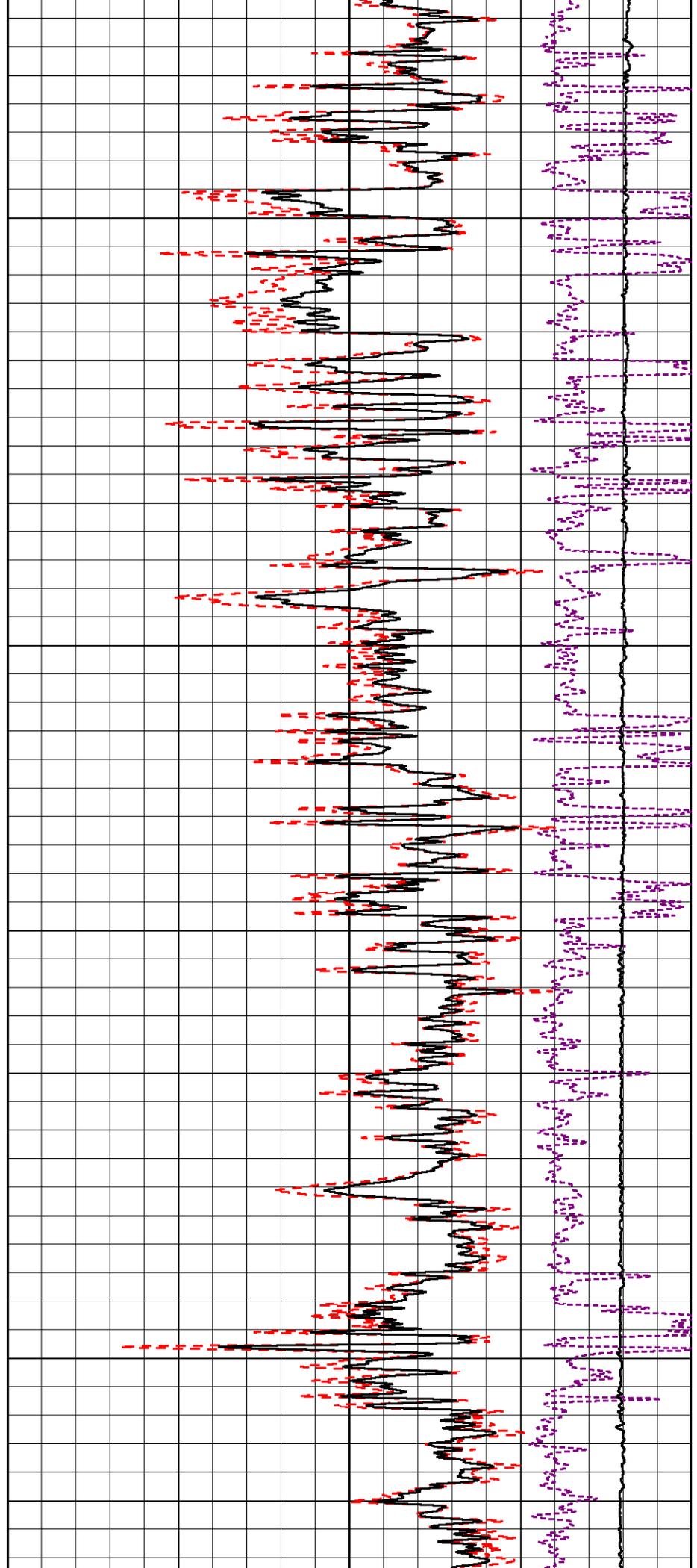
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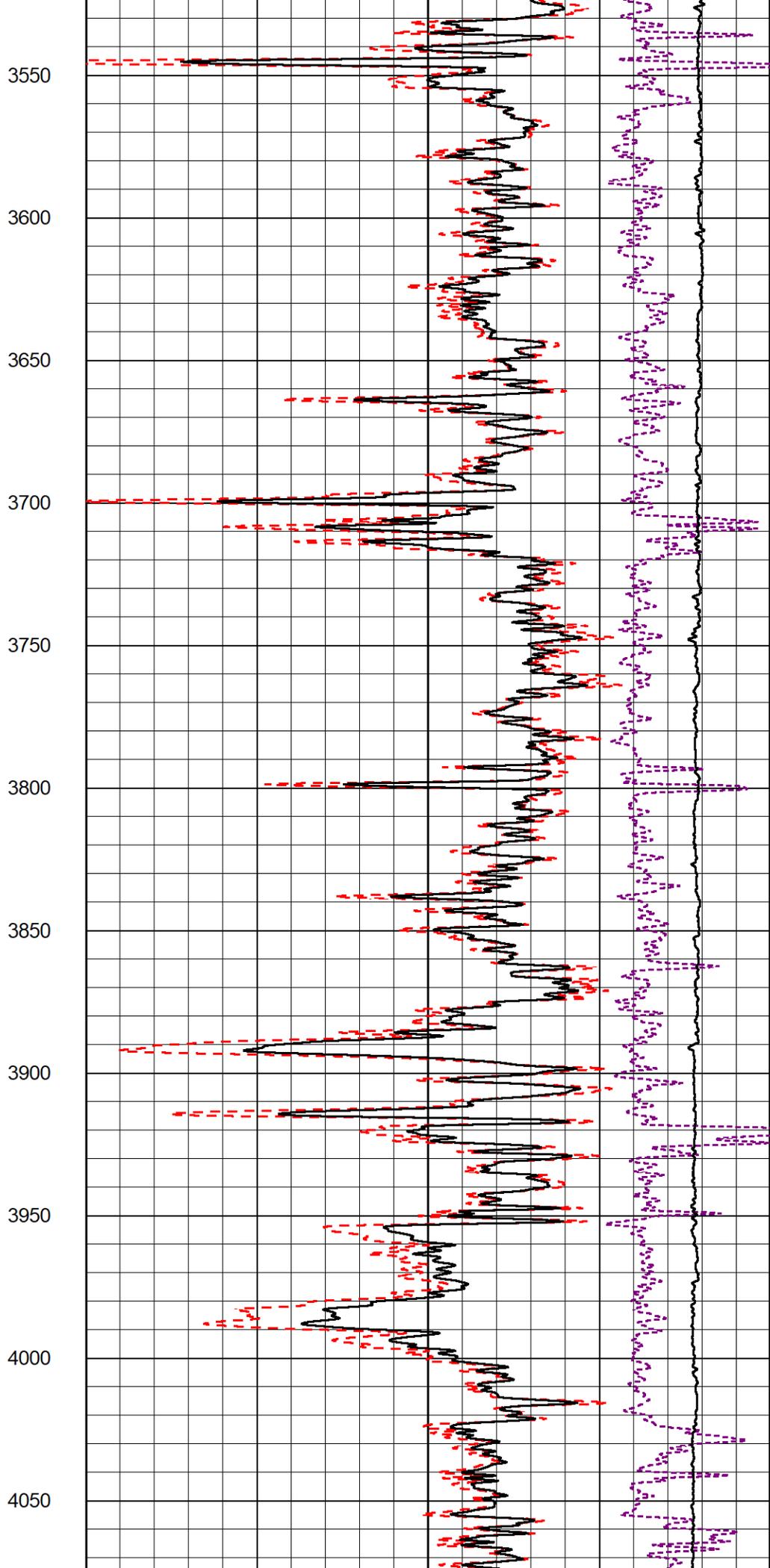
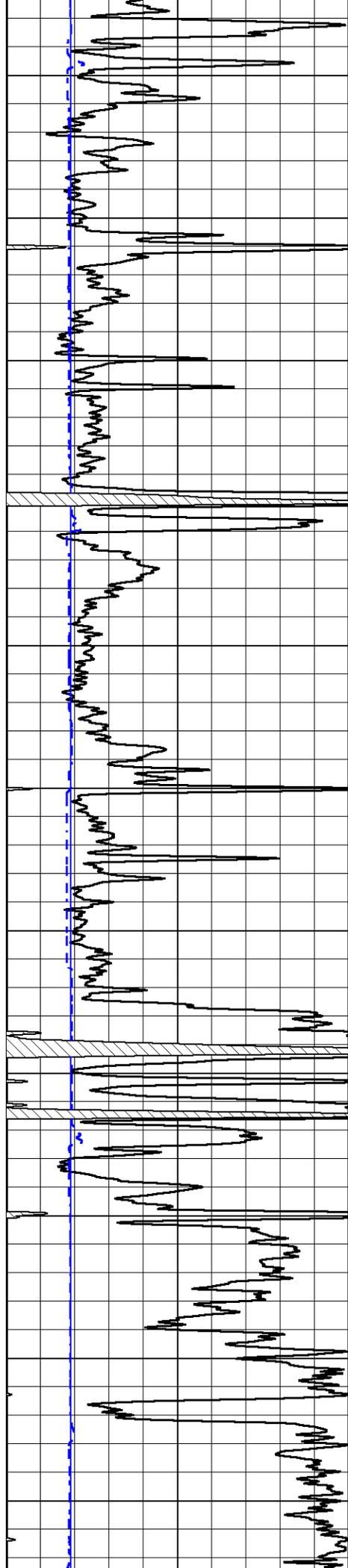
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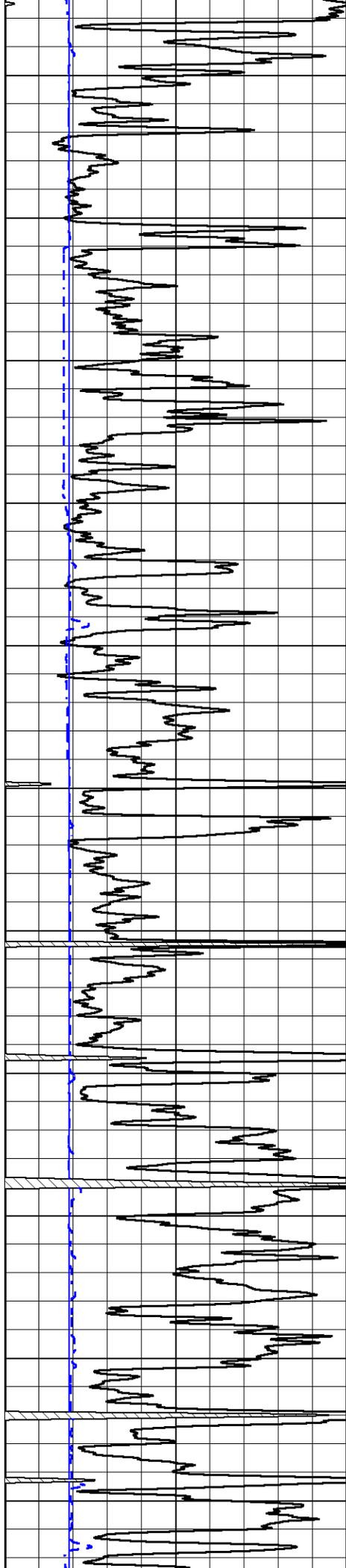
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3450

3500







4100

4150

4200

4250

4300

4350

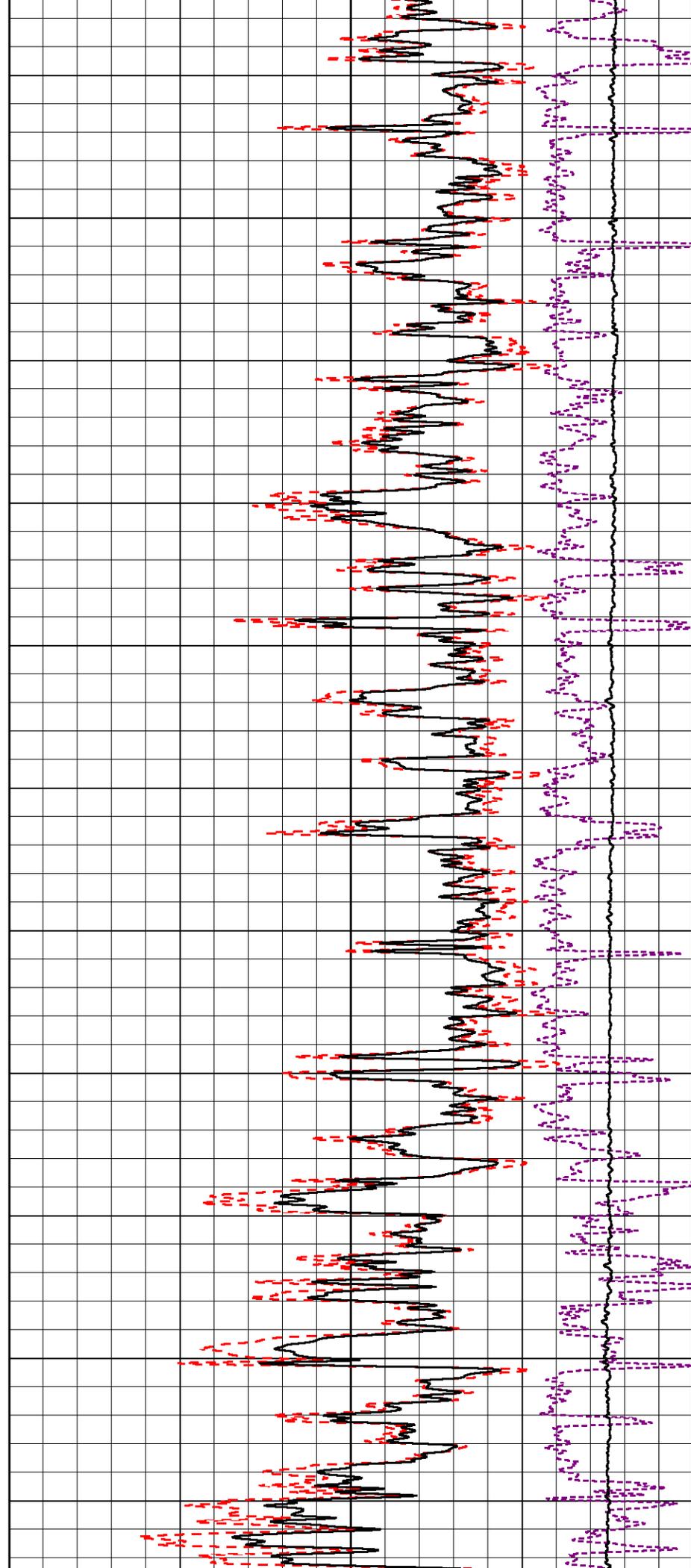
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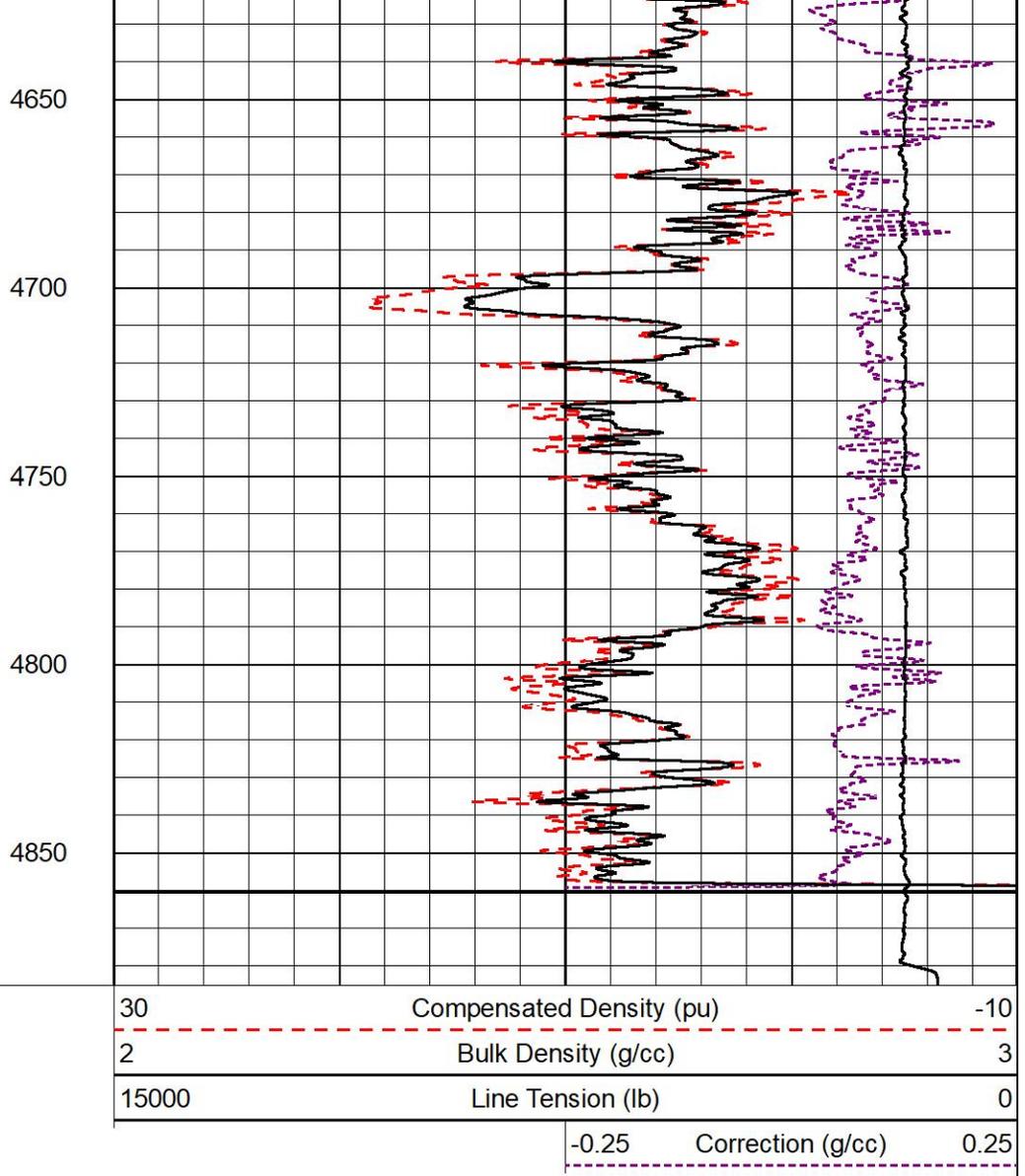
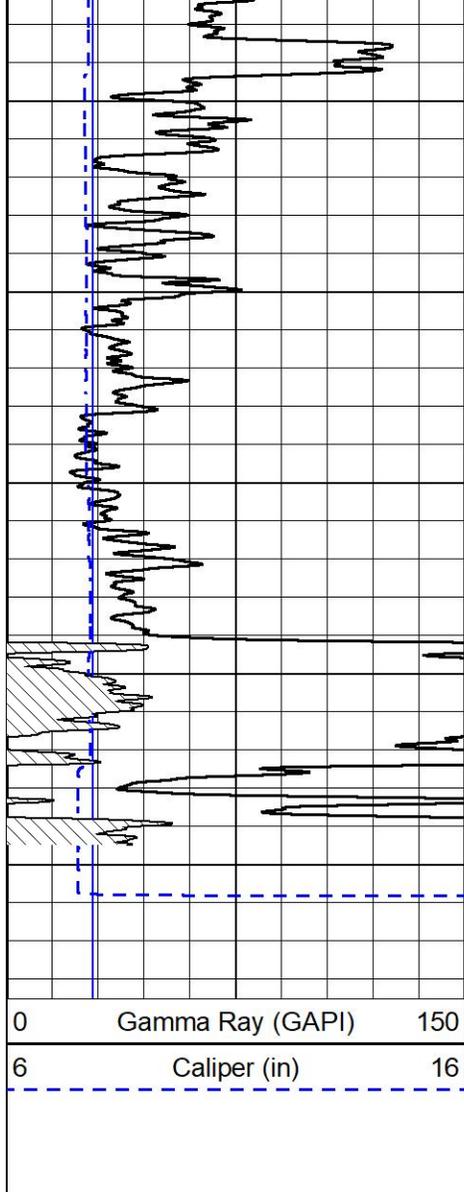
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4500

4550

4600

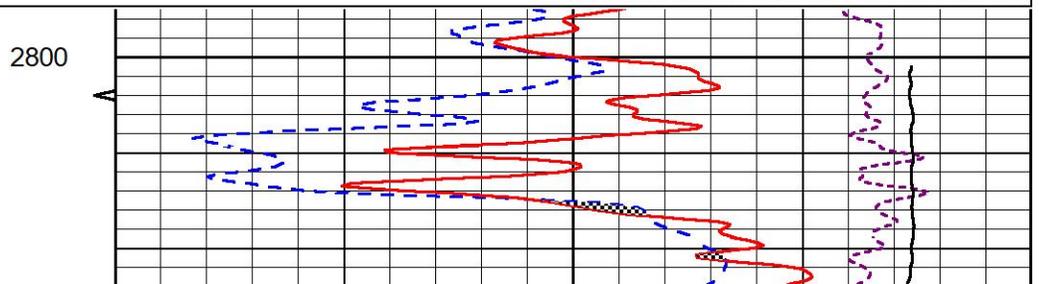
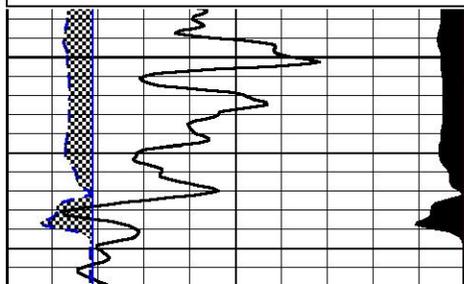
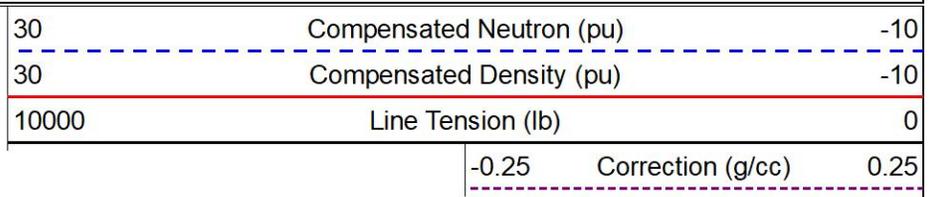
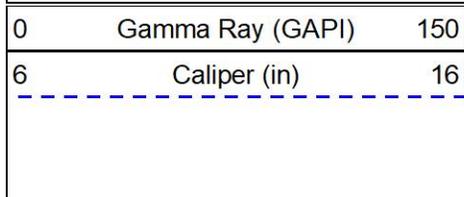


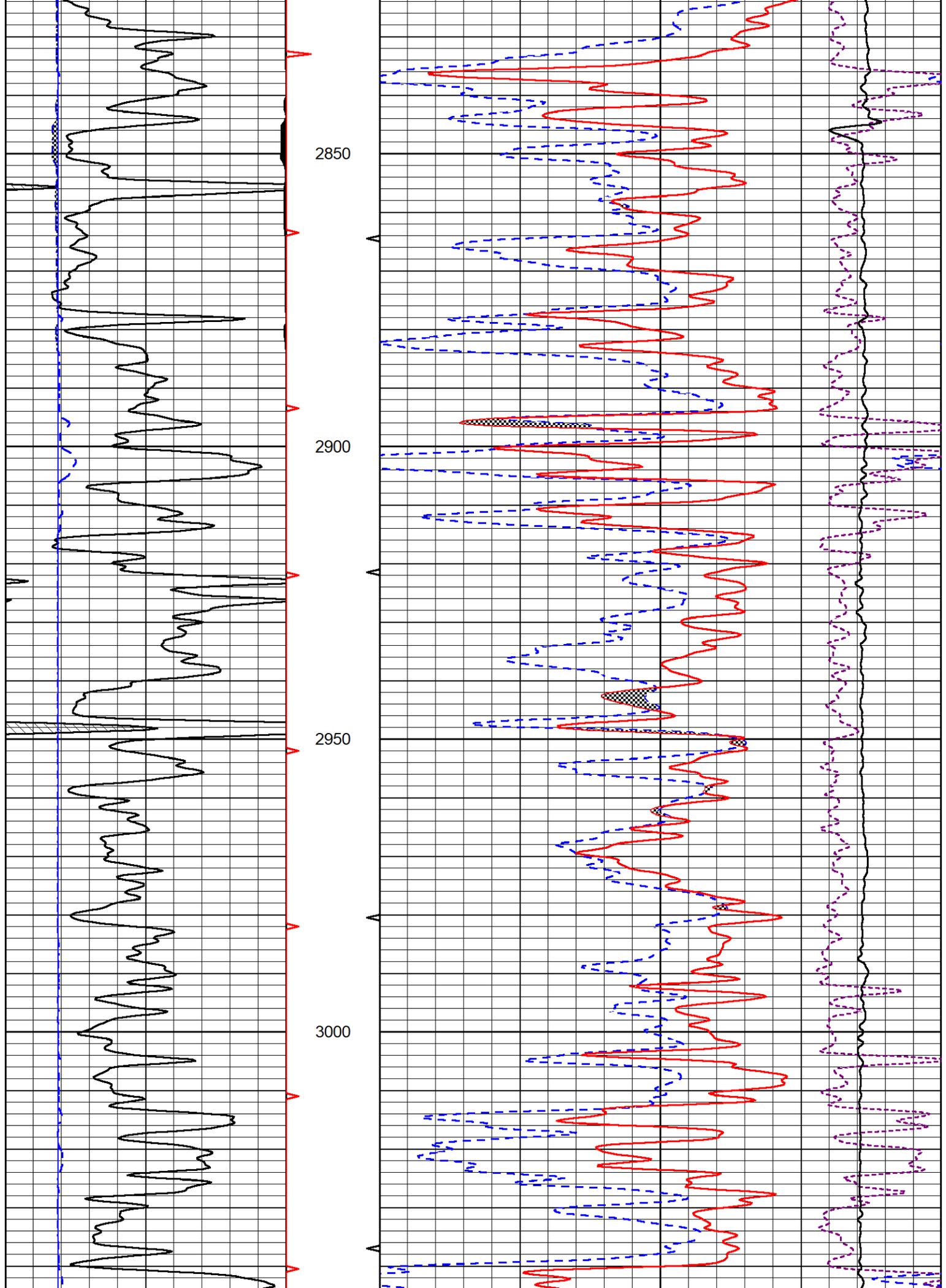


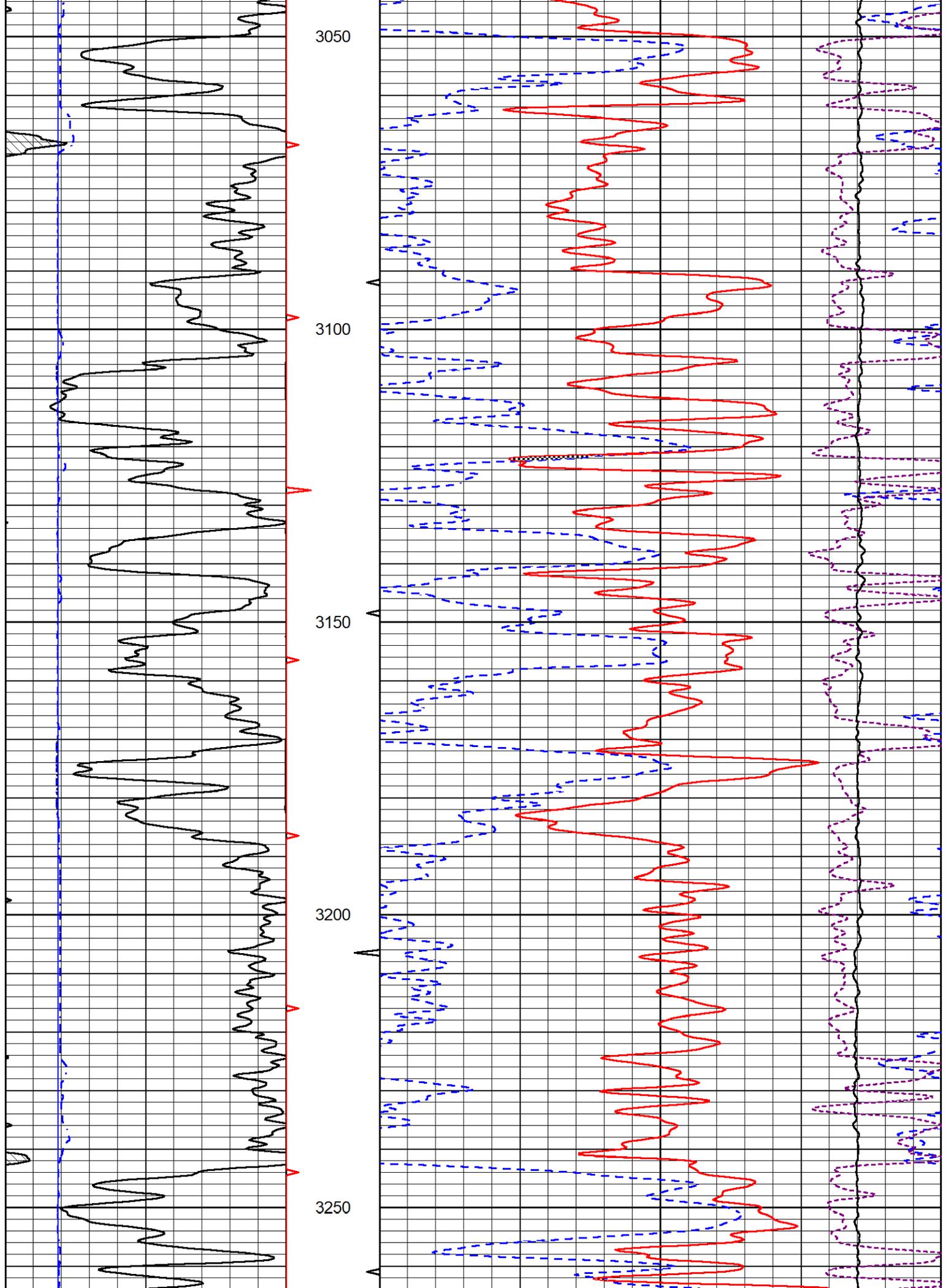
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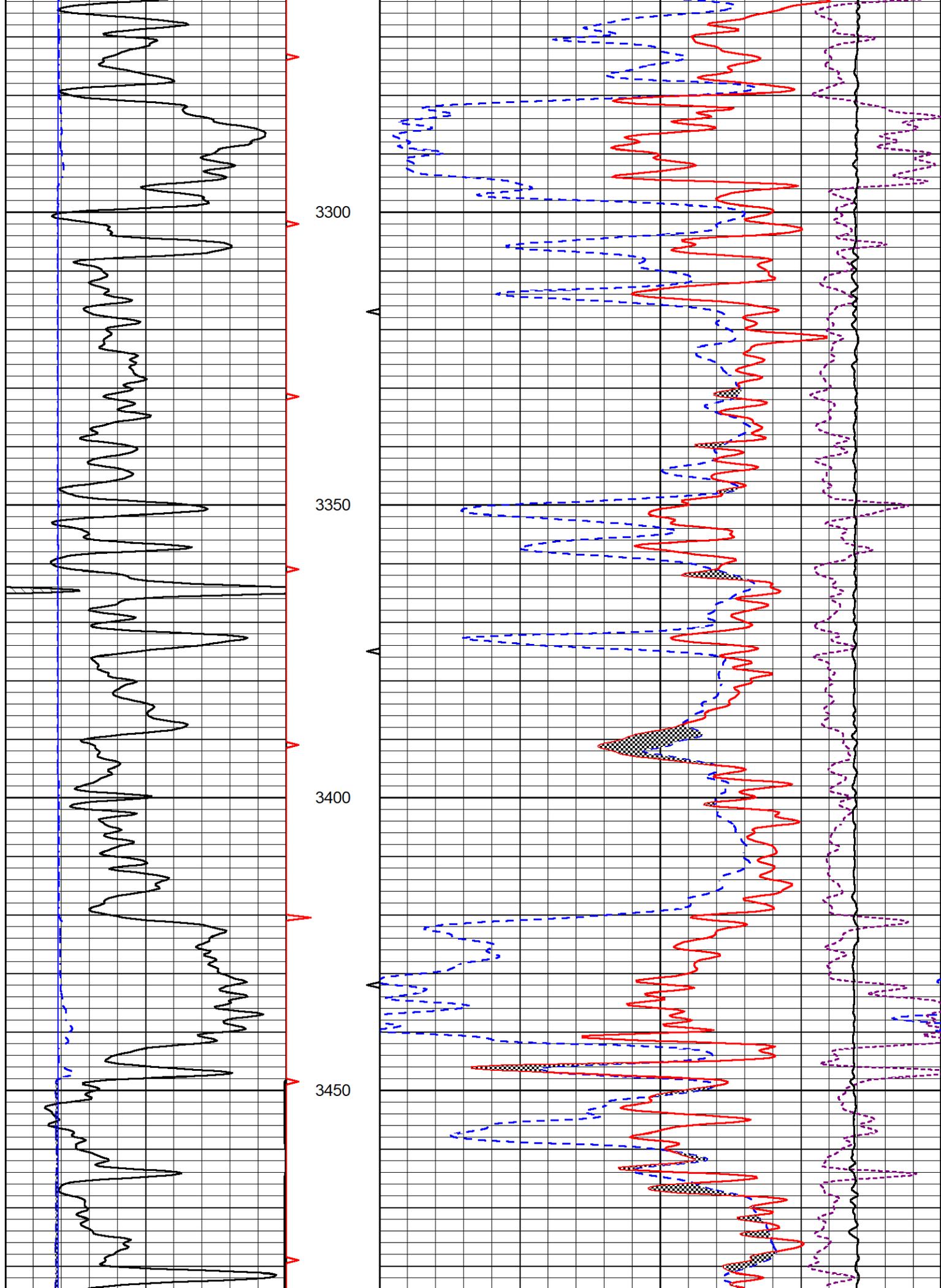
### MAIN PASS

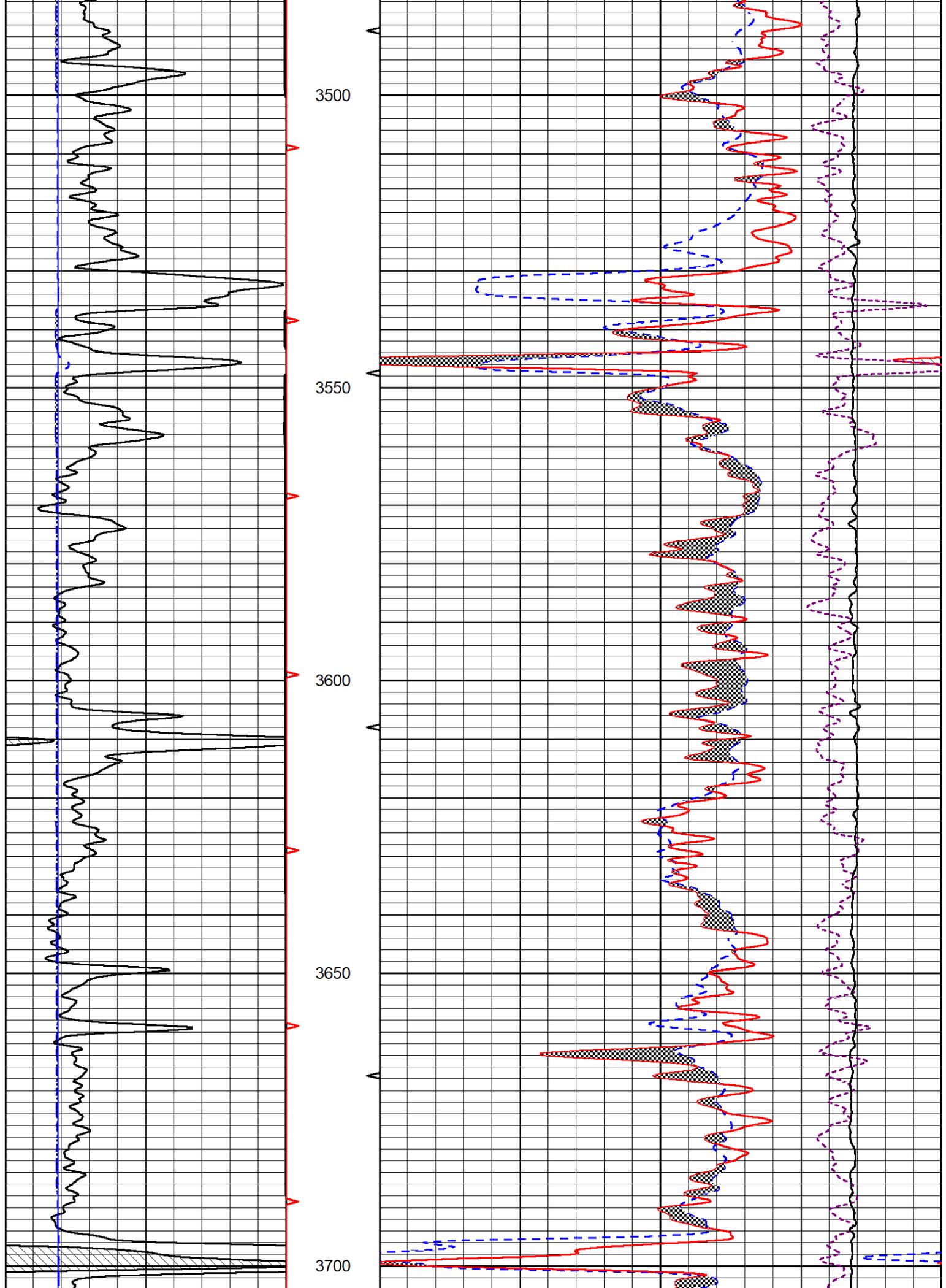
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 Presentation Format \_CNDLS~1  
 Dataset Creation Sun Dec 05 17:15:04 2021  
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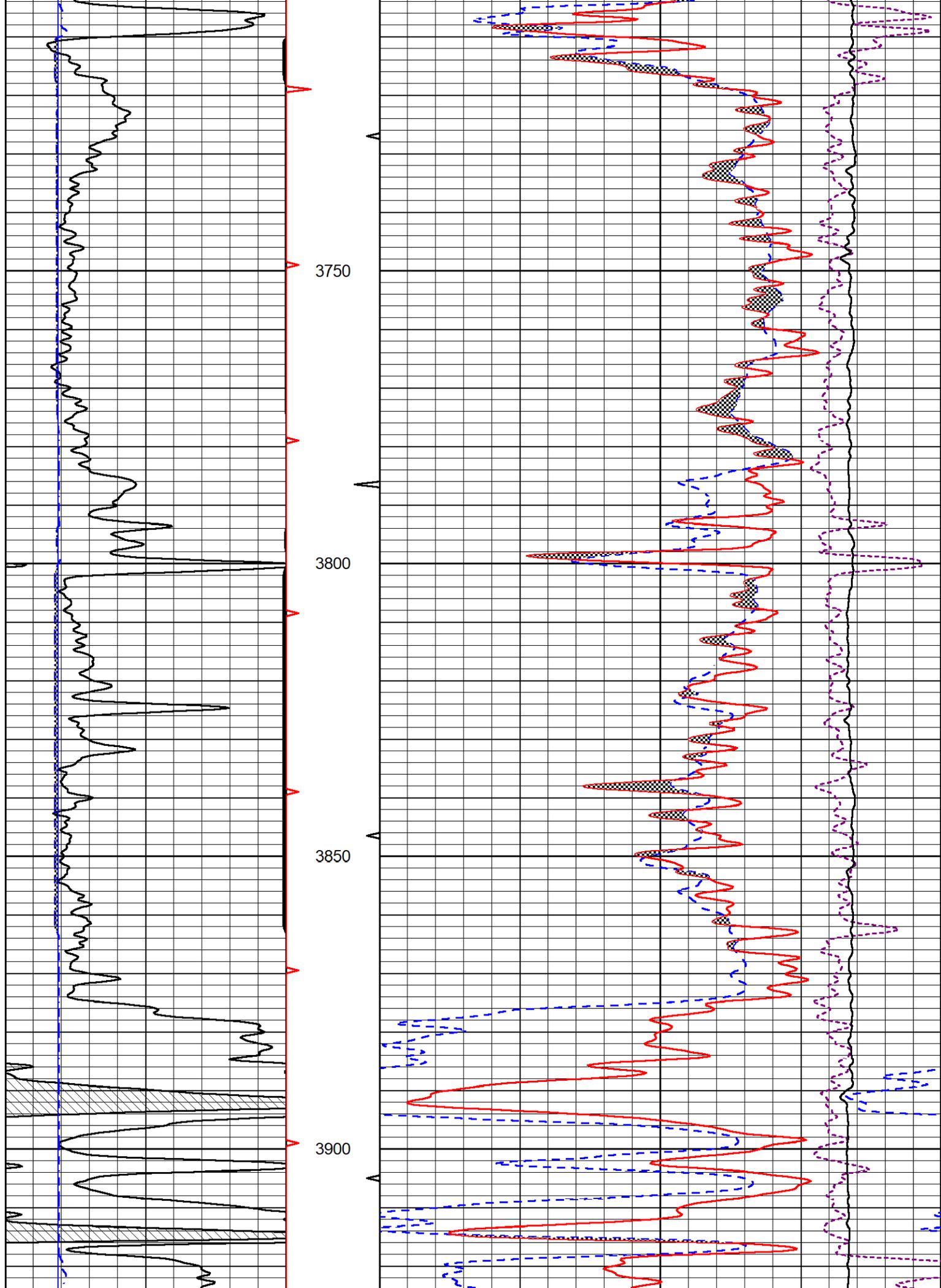


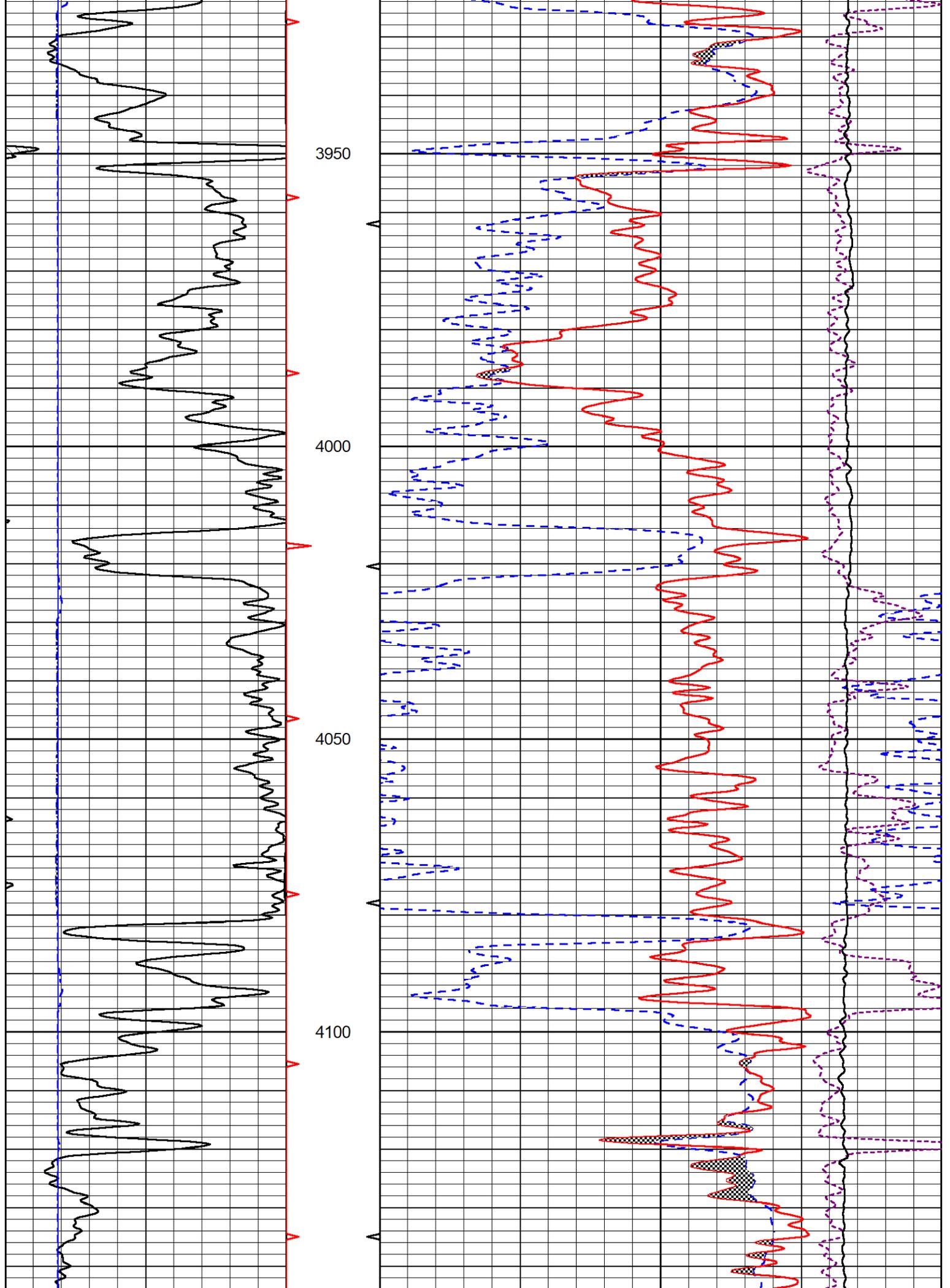


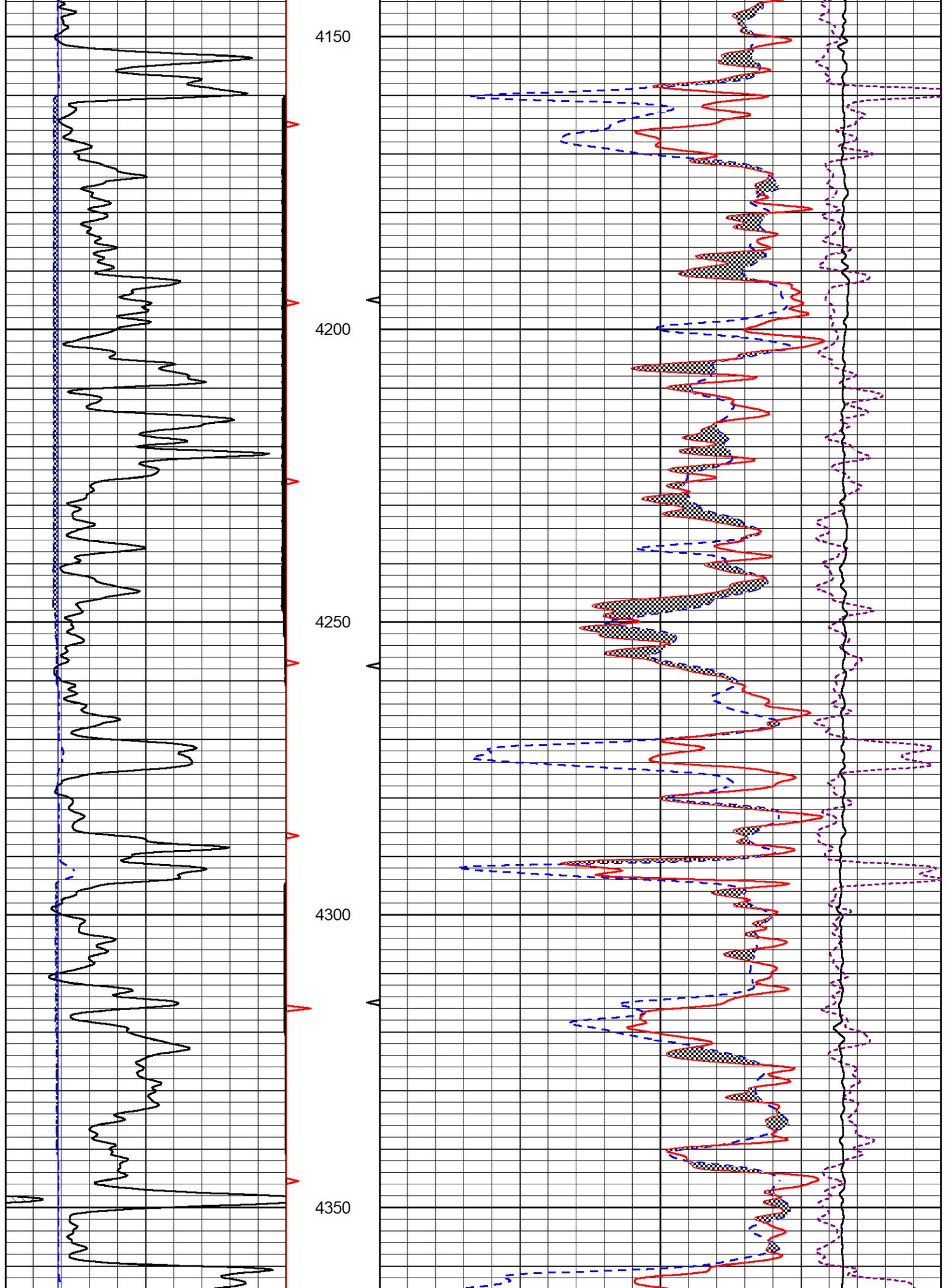


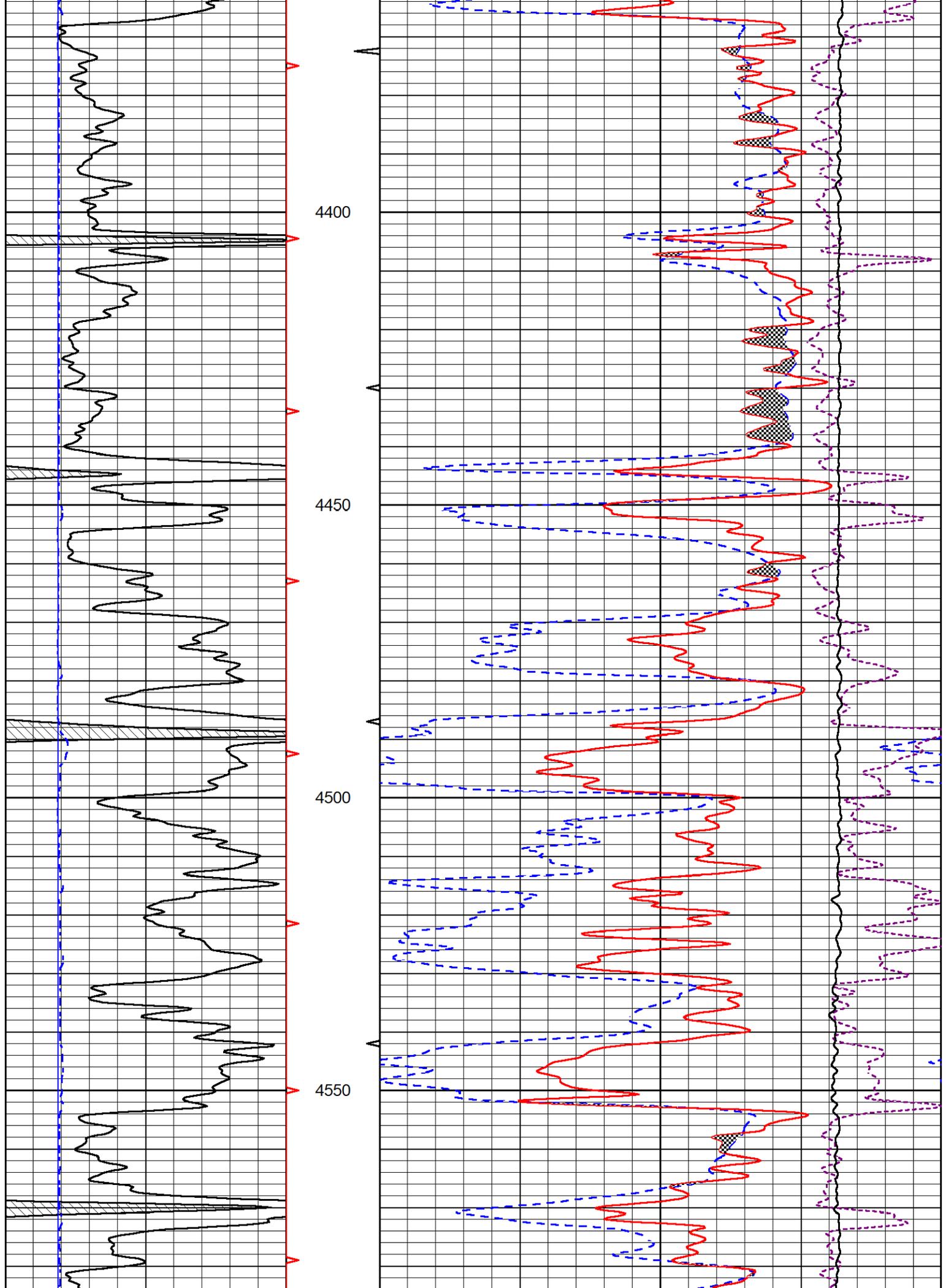


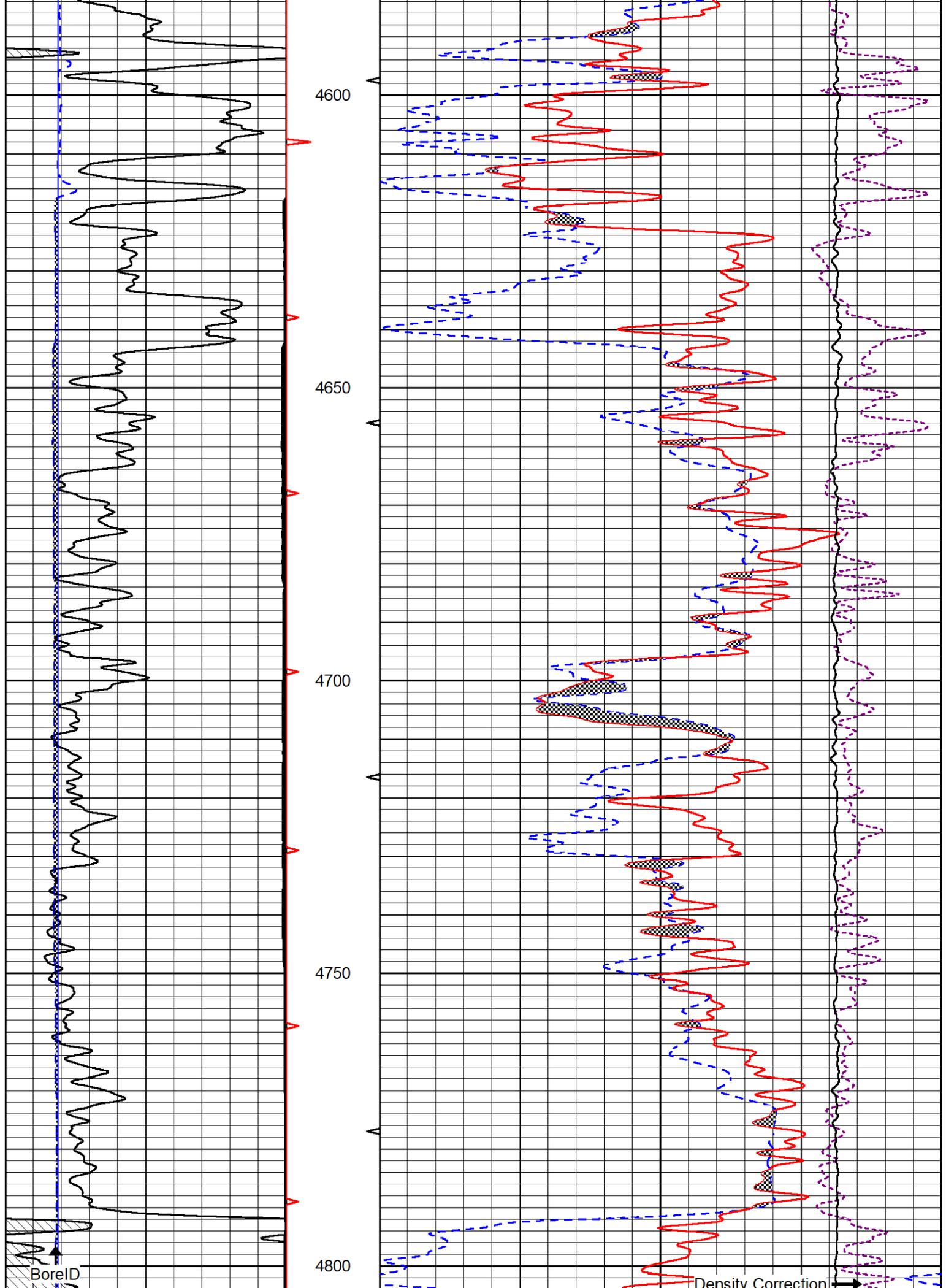


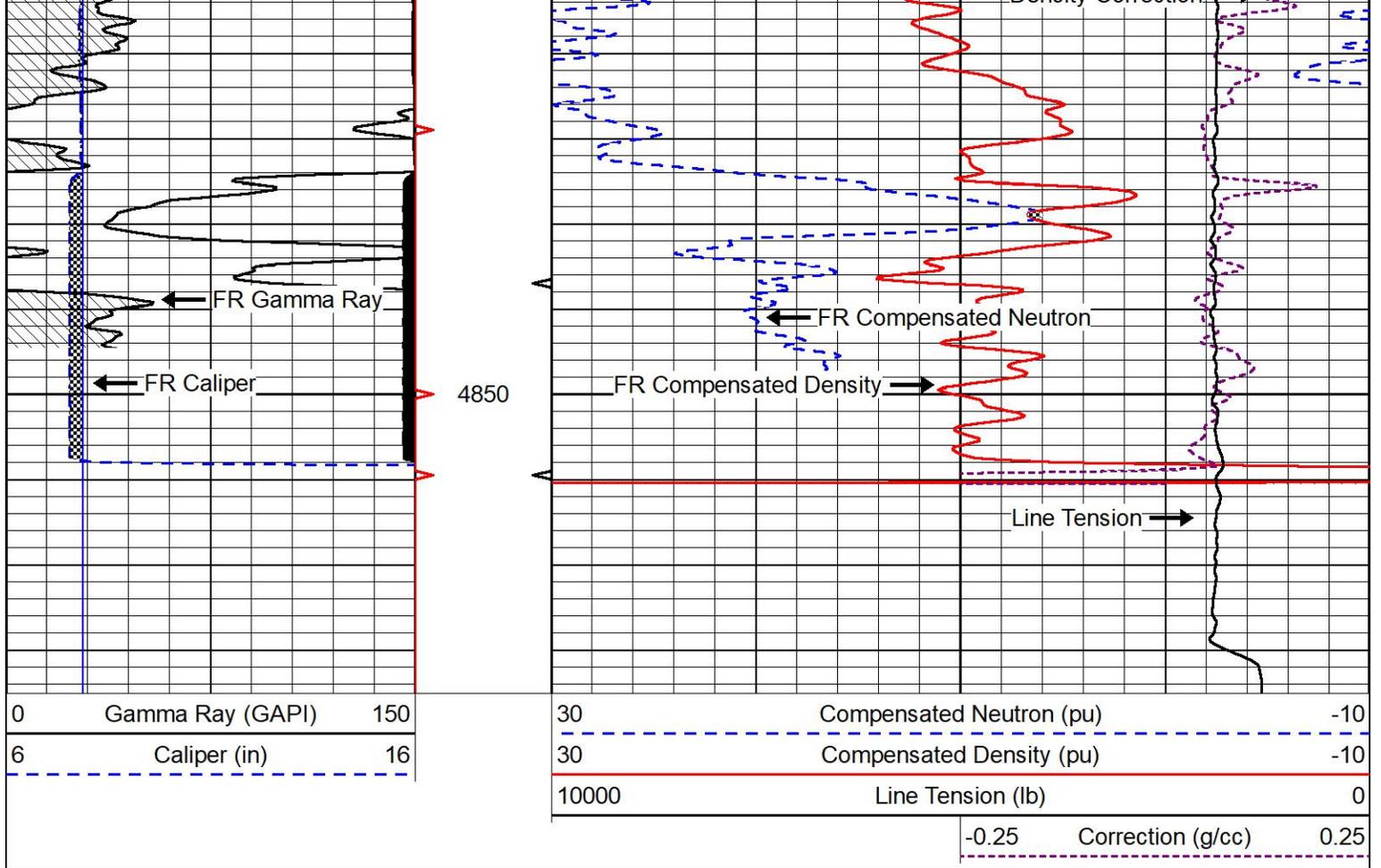








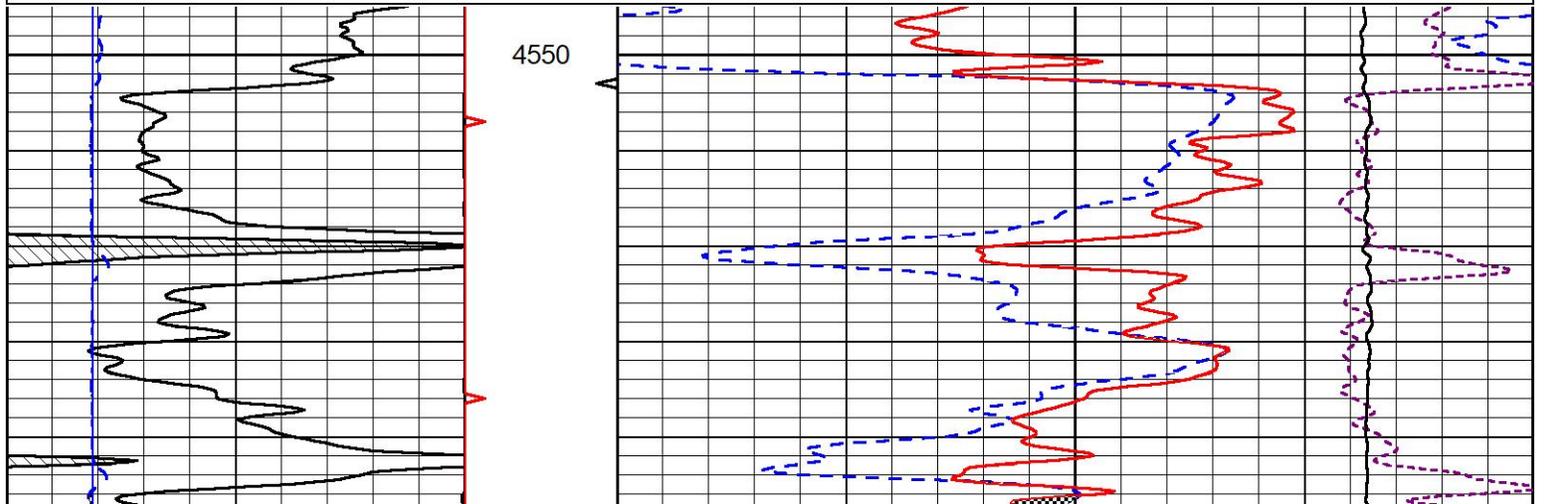
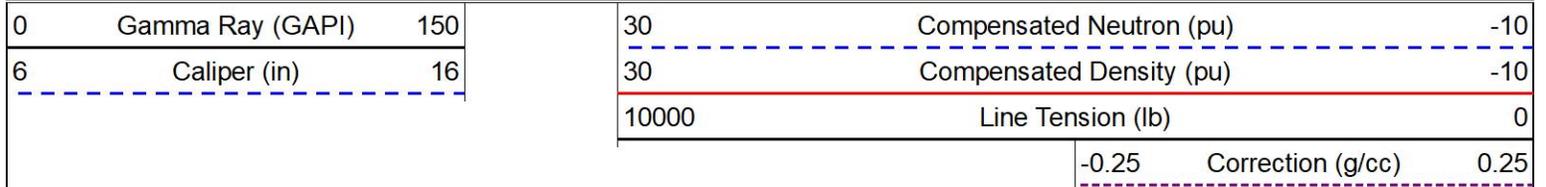


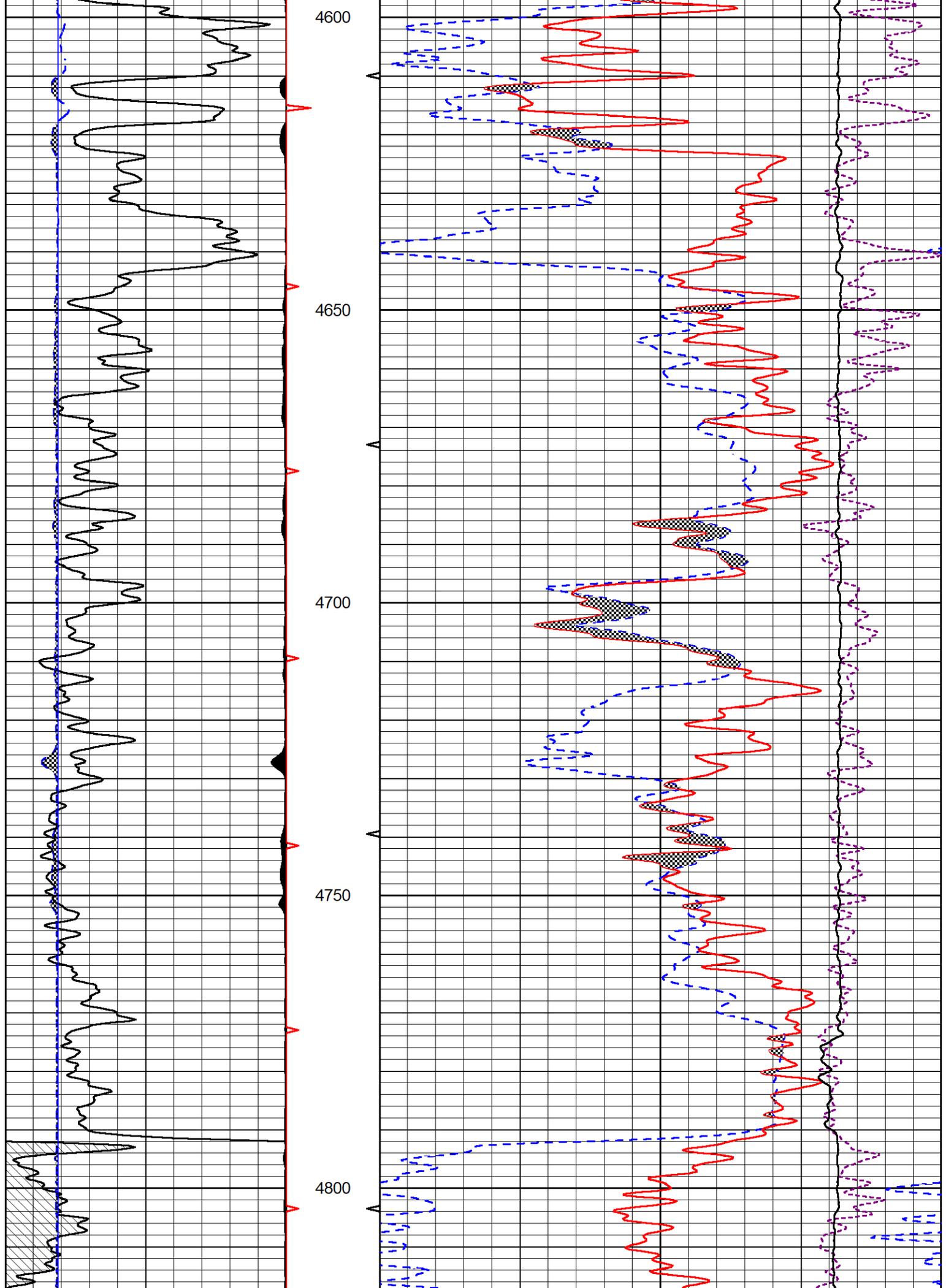


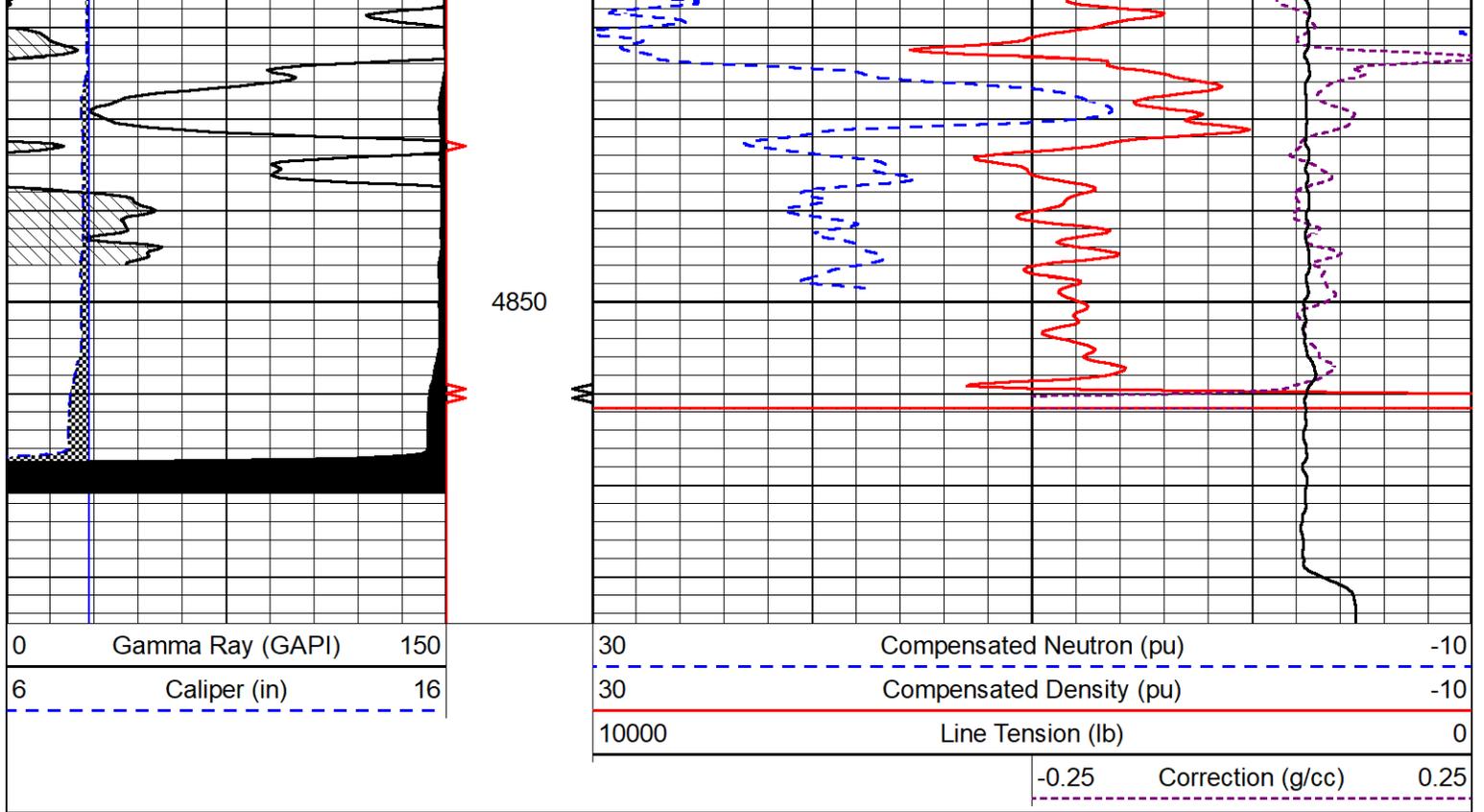
# REPEAT SECTION

## REPEAT PASS

Database File griffin\_marla 1.db  
 Dataset Pathname stkml/pass2.2  
 Presentation Format \_CNDLS~1  
 Dataset Creation Sun Dec 05 16:24:15 2021  
 Charted by Depth in Feet scaled 1:240







### Calibration Report

Database File griffin\_marla 1.db  
 Dataset Pathname stkml/pass3.2  
 Dataset Creation Sun Dec 05 16:38:37 2021

### Dual Induction Calibration Report

Serial-Model: 952-828-PSI HIGH TEMP  
 Surface Cal Performed: Thu Nov 18 18:13:13 2021

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop	mmho/m	m	b
Deep	83.639	487.104	0.000	183.000	mmho/m	0.435	-35.500
Medium	113.335	1585.690	0.000	442.000	mmho/m	0.300	-31.023

### Microlog Calibration Report

Serial-Model: PSI-01-PSIML  
 Performed: Wed Dec 1 16:06:14 2021

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	12000.0000	-0.5000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	9000.0000	0.0000
Caliper	1.0052	1.0858	5.0000	16.5000	in	142.7190	-139.1250

### Compensated Density Calibration Report

Serial-Model: 934-226-M&W  
 Source #: 20762B  
 Master Calibration Performed: Tue Nov 16 13:52:04 2021

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	3330.50	2332.69	cps
Aluminum	2.660	g/cc	627.41	1482.87	cps
Spine Angle = 74.82			Density/Spine Ratio = 0.523		
	Size		Reading		
Small Ring	8.00	in	1.16		
Large Ring	13.00	in	1.01		

Compensated Neutron Calibration Report

Serial-Model: 207-MW-M&W  
 Source #: 100046B  
 Master Calibration Performed: Mon Nov 29 15:06:24 2021

Master Calibration

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: 233-M&W  
 Tool Model: M&W  
 Performed: Fri Dec 3 15:10:46 2021

Calibrator Value: 500.0 GAPI

Background Reading: 24.0 cps  
 Calibrator Reading: 637.0 cps

Sensitivity: 0.5500 GAPI/cps



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