



MIDWEST WIRELINE

DUAL COMP POROSITY LOG

Company Griffin Management LLC
 Well Harper #2
 Field Wildcat
 County Barber State Kansas

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 Field Wildcat
 County Barber
 State Kansas

Location: API #: 15-007-24385-00-00
 1320 FNL & 2589 FEL
 SEC 4 TWP 30S RGE 15W
 Permanent Datum Ground Level Elevation 1991
 Log Measured From Kelly Bushing
 Drilling Measured From Kelly Bushing
 Other Services
 DIL
 MEL
 K.B. 1996
 D.F.
 G.L. 1991

Date	12/12/2021						
Run Number	One						
Type Log	CNL/CDL						
Depth Driller	4798						
Depth Logger	4794						
Bottom Logged Interval	4765						
Top Logged Interval	2800						
Type Fluid In Hole	Chemical						
Salinity, PPM CL	7000						
Density	9.4						
Level	Full						
Max. Rec. Temp. F	124						
Operating Rig Time	2 Hours						
Equipment -- Location	P-108 HAYS						
Recorded By	J. Henrickson						
Witnessed By	Eli Felts						
Borehole Record							
Run No.	Bit	From	To	Size	Wgt.	From	To
One	12.25	0	263	8.625	24	0	263
Two	7.875	263	TD				
Casing Record							

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

Haviland Kansas
 East to 140th, 10 South to 110th, 1 East,
 North Into

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

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

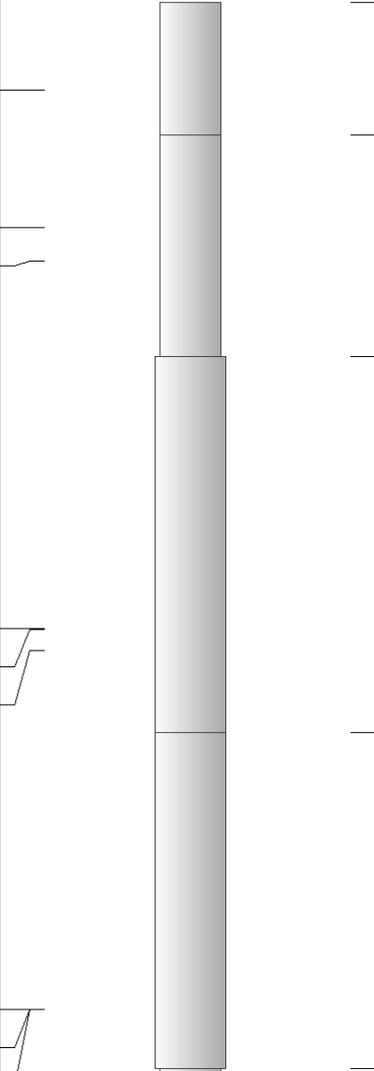
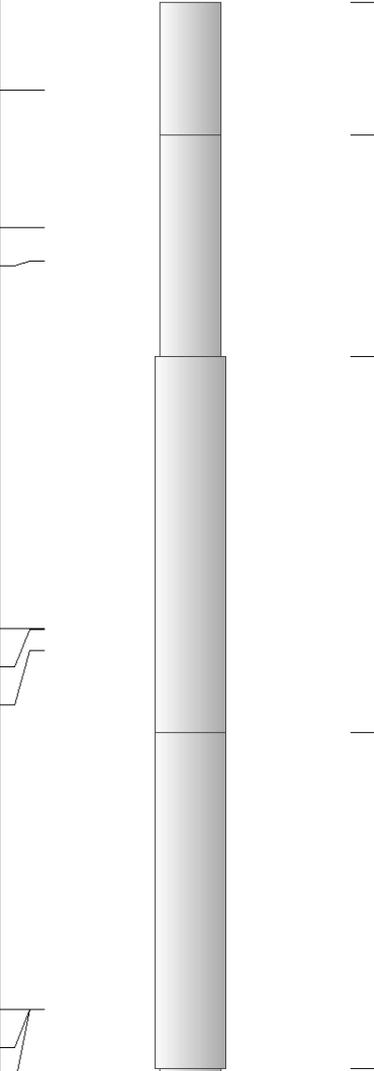
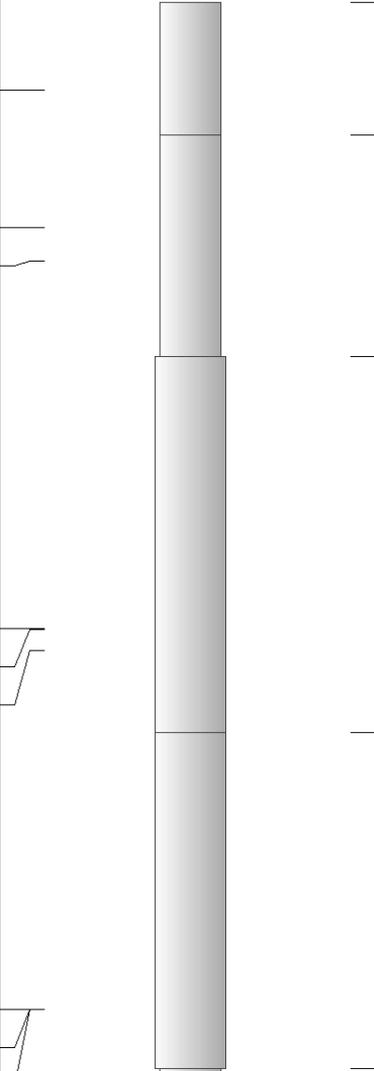
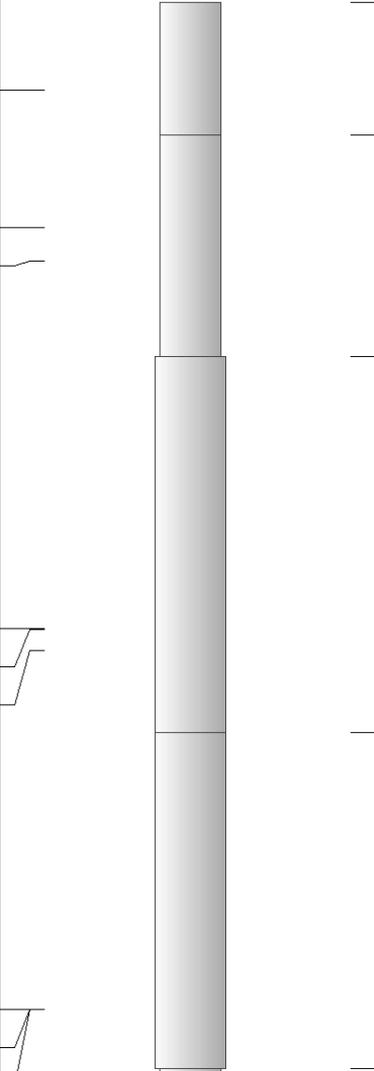
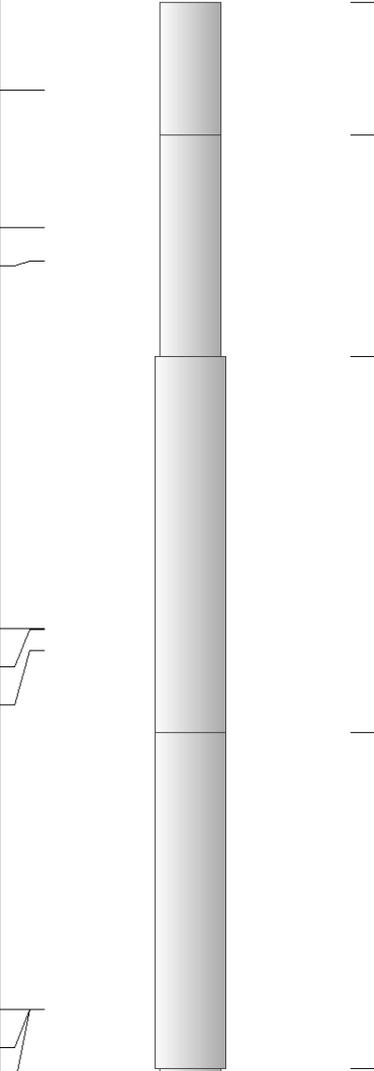
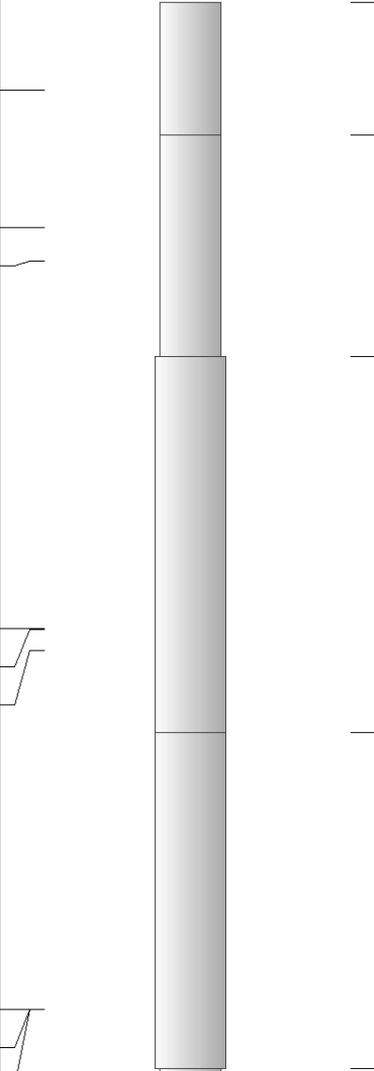
Your Midwest Wireline Crew		This Log Record Was Witnessed By	
Engineer: J. Henrickson	Operator:	Primary Witness: Eli Felts	Secondary Witness:
Operator:	Operator:	Secondary Witness:	Secondary Witness:
Operator:		Secondary Witness:	

Log Variables

DatabaseC:\ProgramData\Warrior\Data\griffin_harper_2.db
 Dataset field/well/stackml/pass4.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	124	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	575	50	Off	4794

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.33		GR-M&W (89-M&W)	3.00	3.50	50.00
CNLSC CNSSC	37.23 36.48		CNT-M&W (tk10-MW)	5.00	3.50	100.00
LSD DCAL SSD	28.18 28.17 27.68		CDL-M&W (915-956)	8.50	4.00	250.00
MCAL MI MN	19.58 19.58 19.58		ML-PSI STKBL ML (PSI-02)	7.58	4.00	65.00
RLL3F RLL3	15.50 15.50					
CILD	8.33		DIL-PSI HIGH TEMP (959-1032)	18.25	3.50	220.00

CILM 4.50

SP 0.20

Dataset: griffin_harper_2.db: field/well/stackml/pass4.1
 Total length: 42.33 ft
 Total weight: 685.00 lb
 O.D.: 4.00 in



MIDWEST WIRELINE

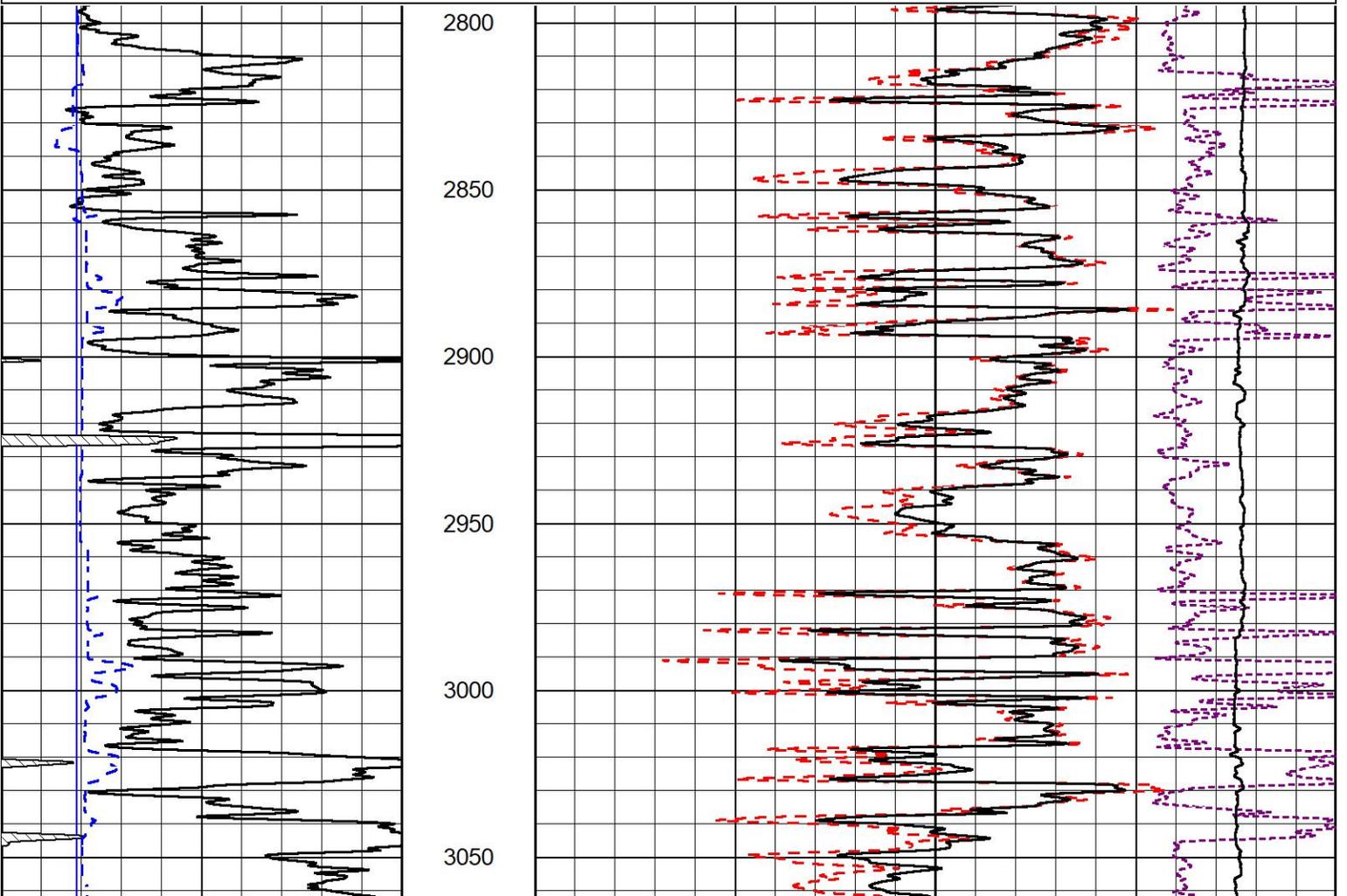
2" SCALE BULK DENSITY

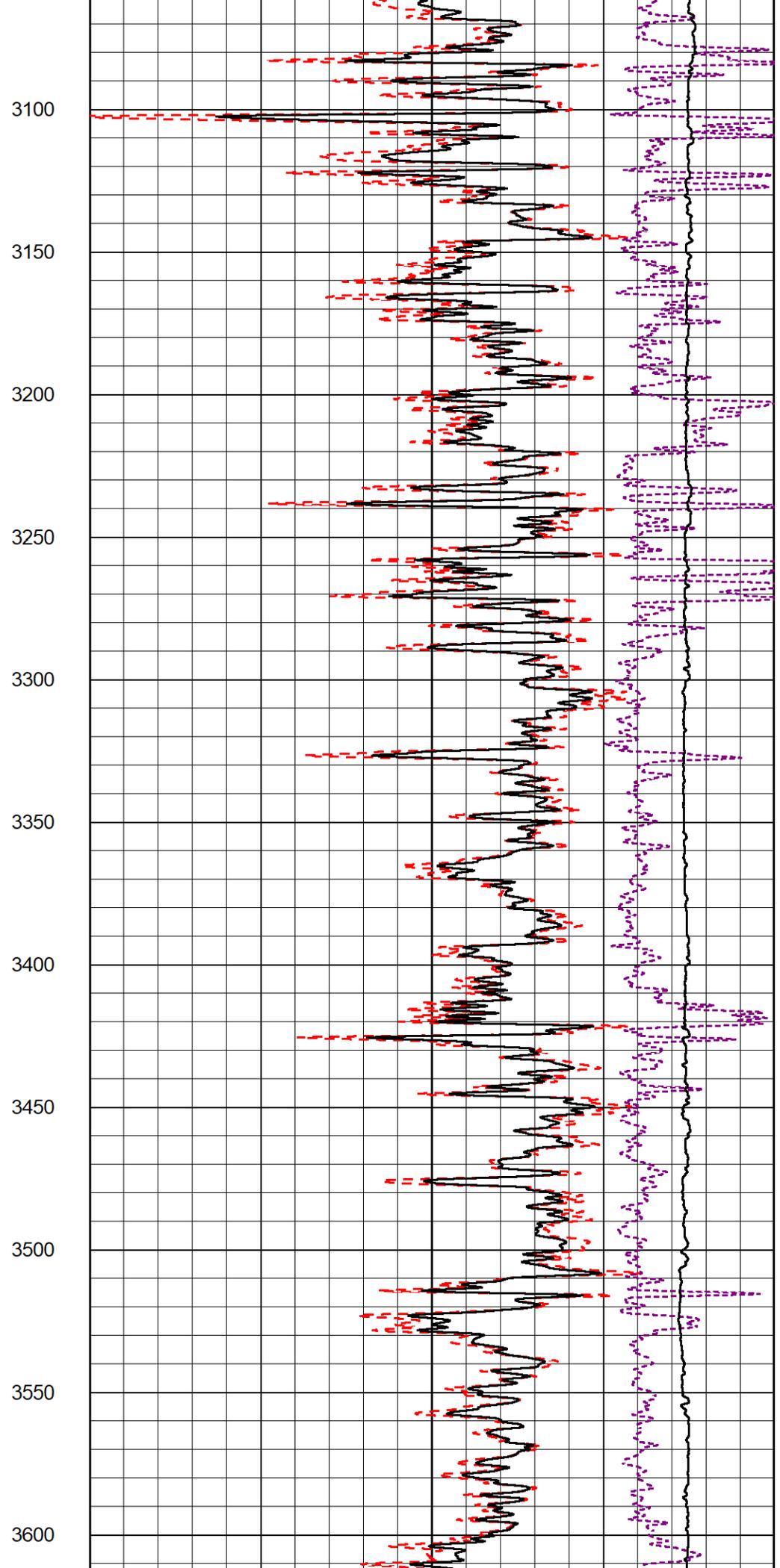
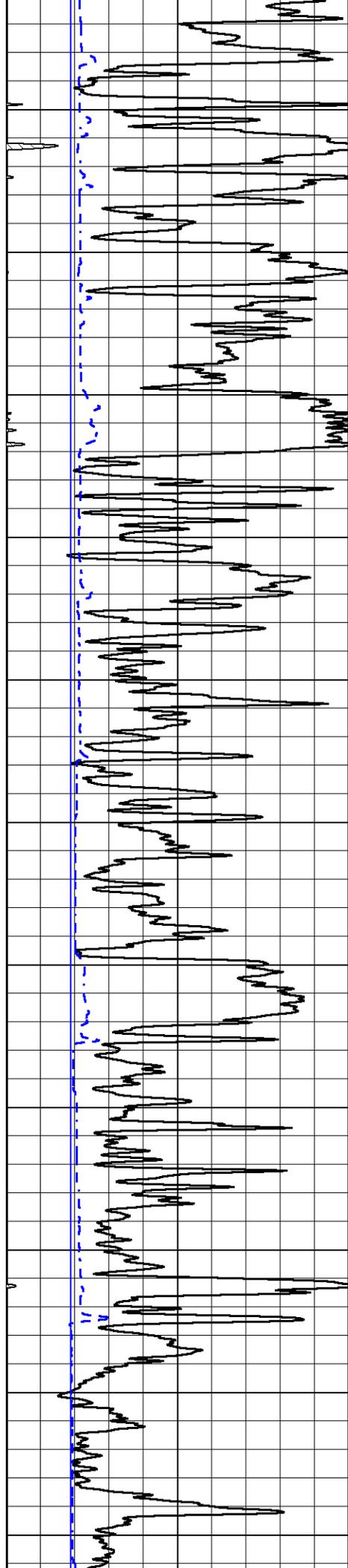
MAIN PASS

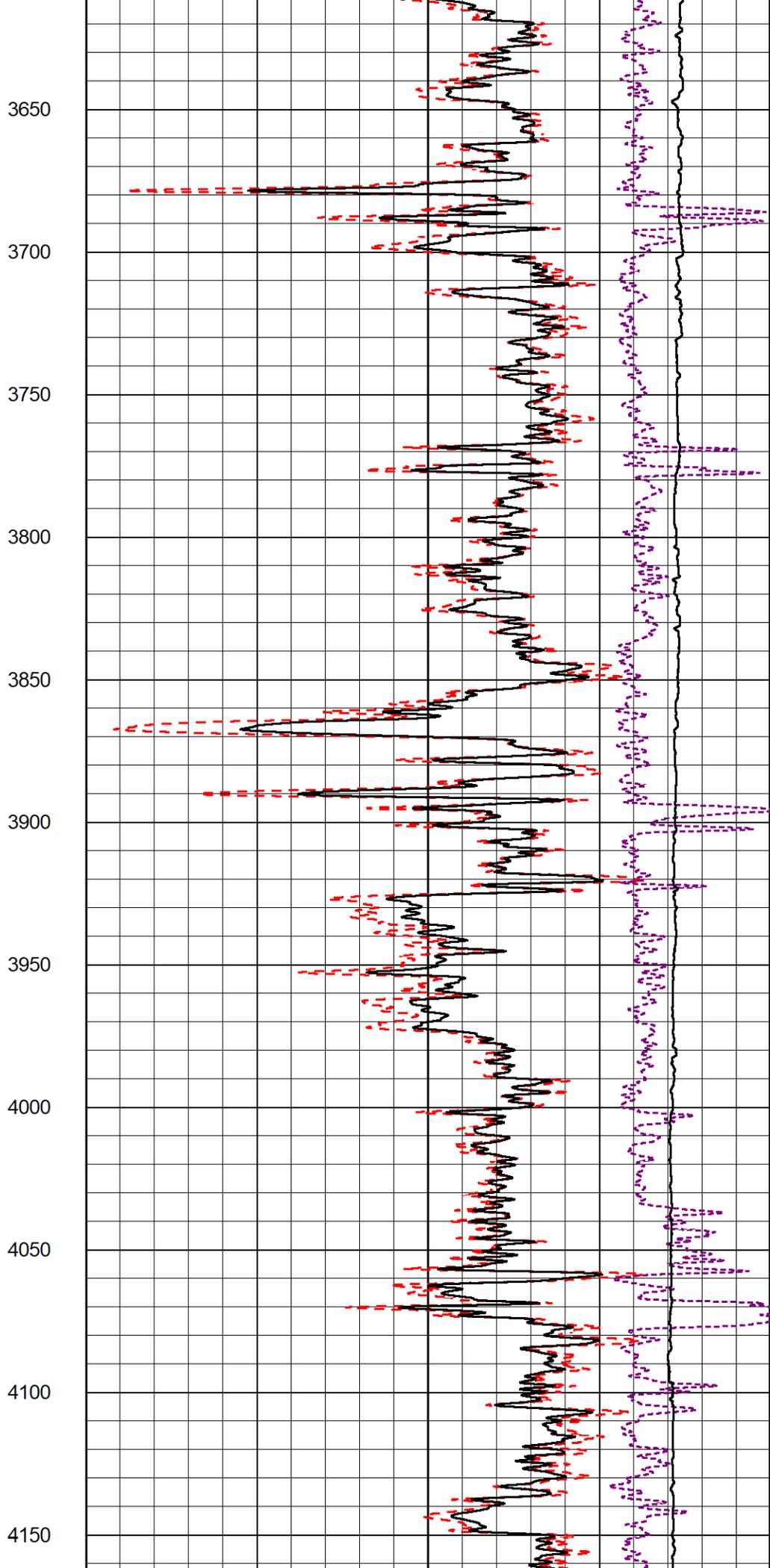
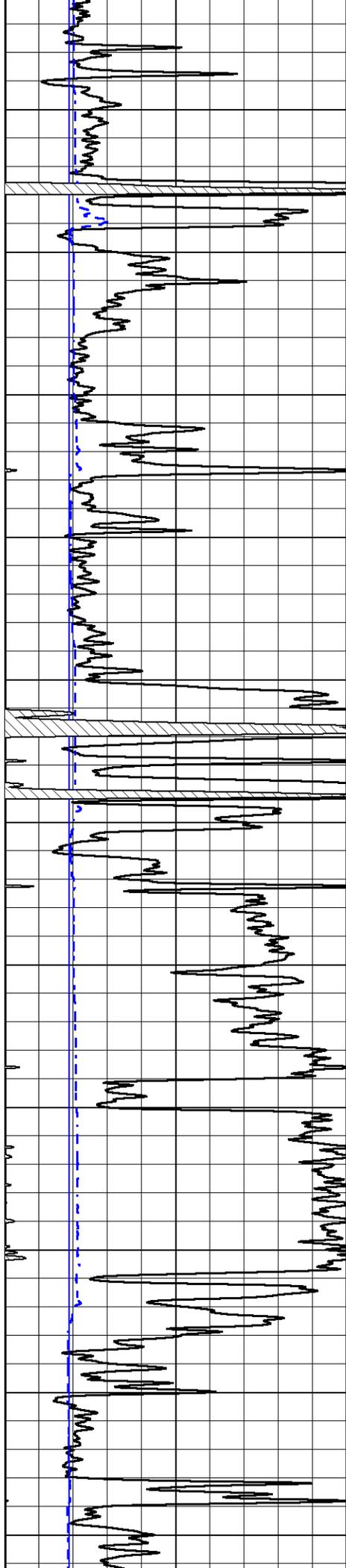
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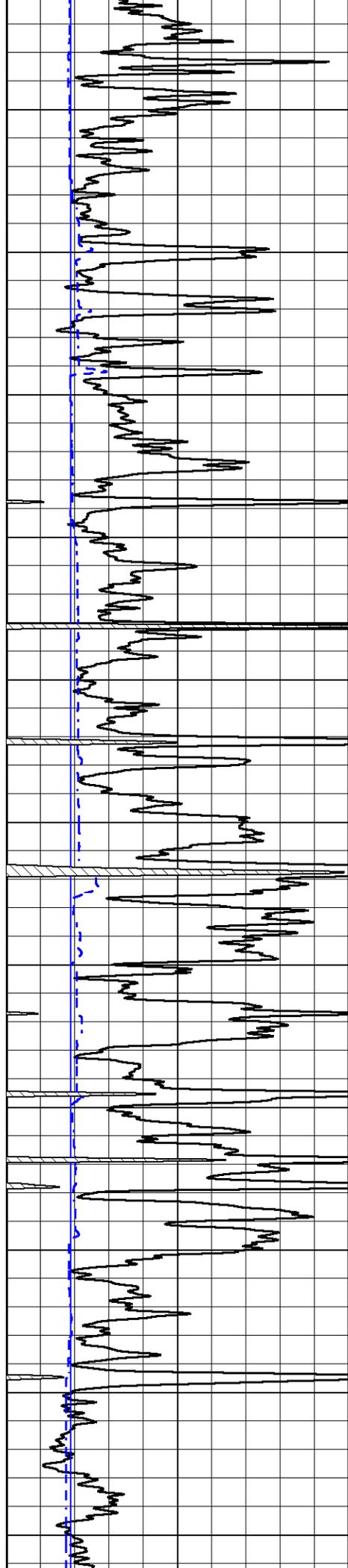
0	Gamma Ray (GAPI)	150
6	Caliper (in)	16

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

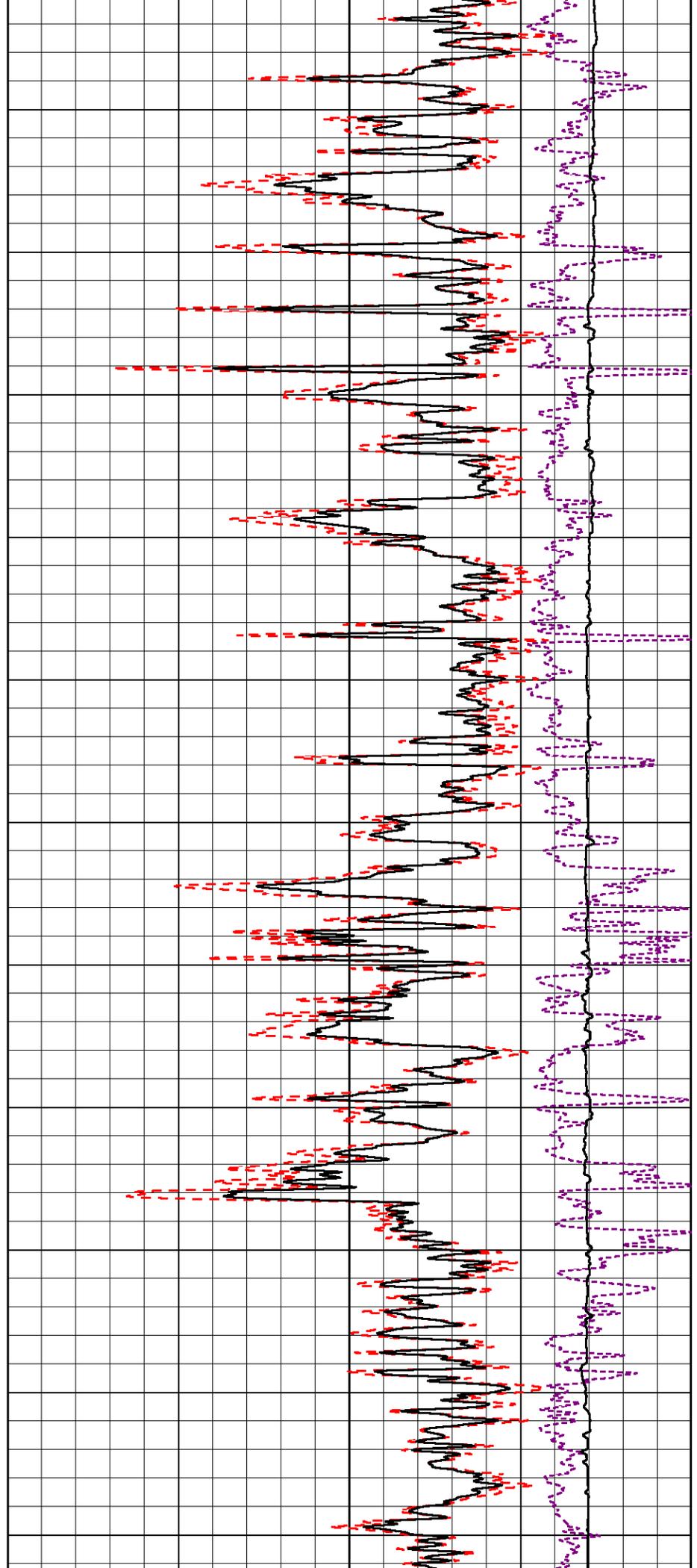


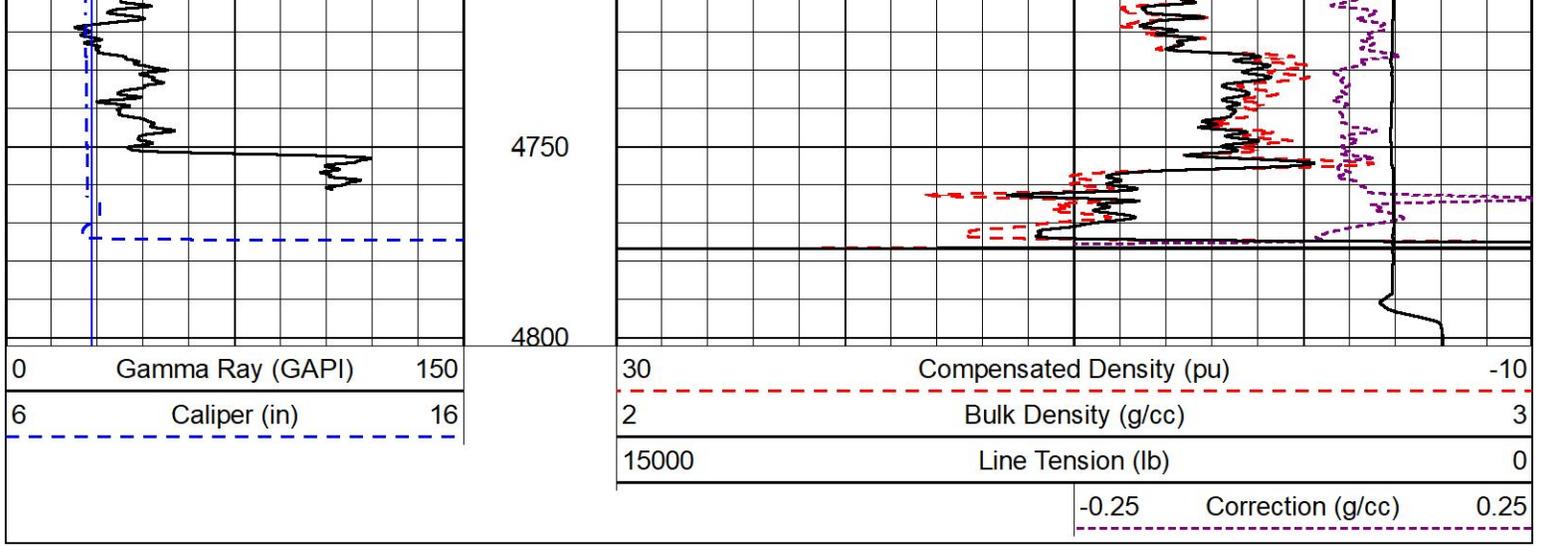






4200
4250
4300
4350
4400
4450
4500
4550
4600
4650
4700



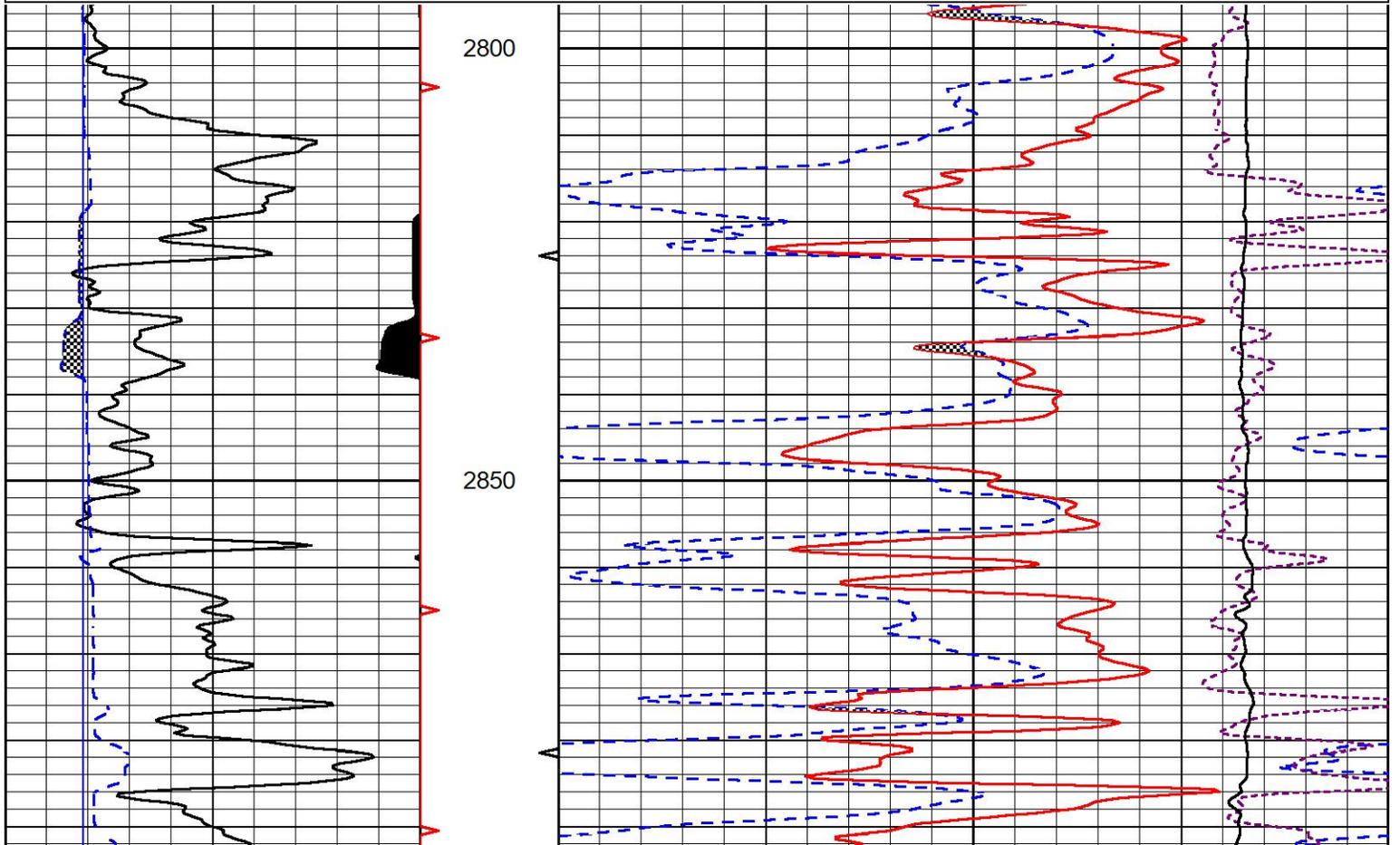
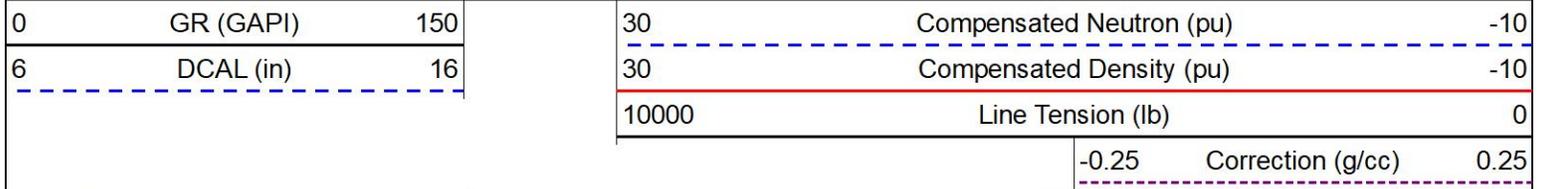


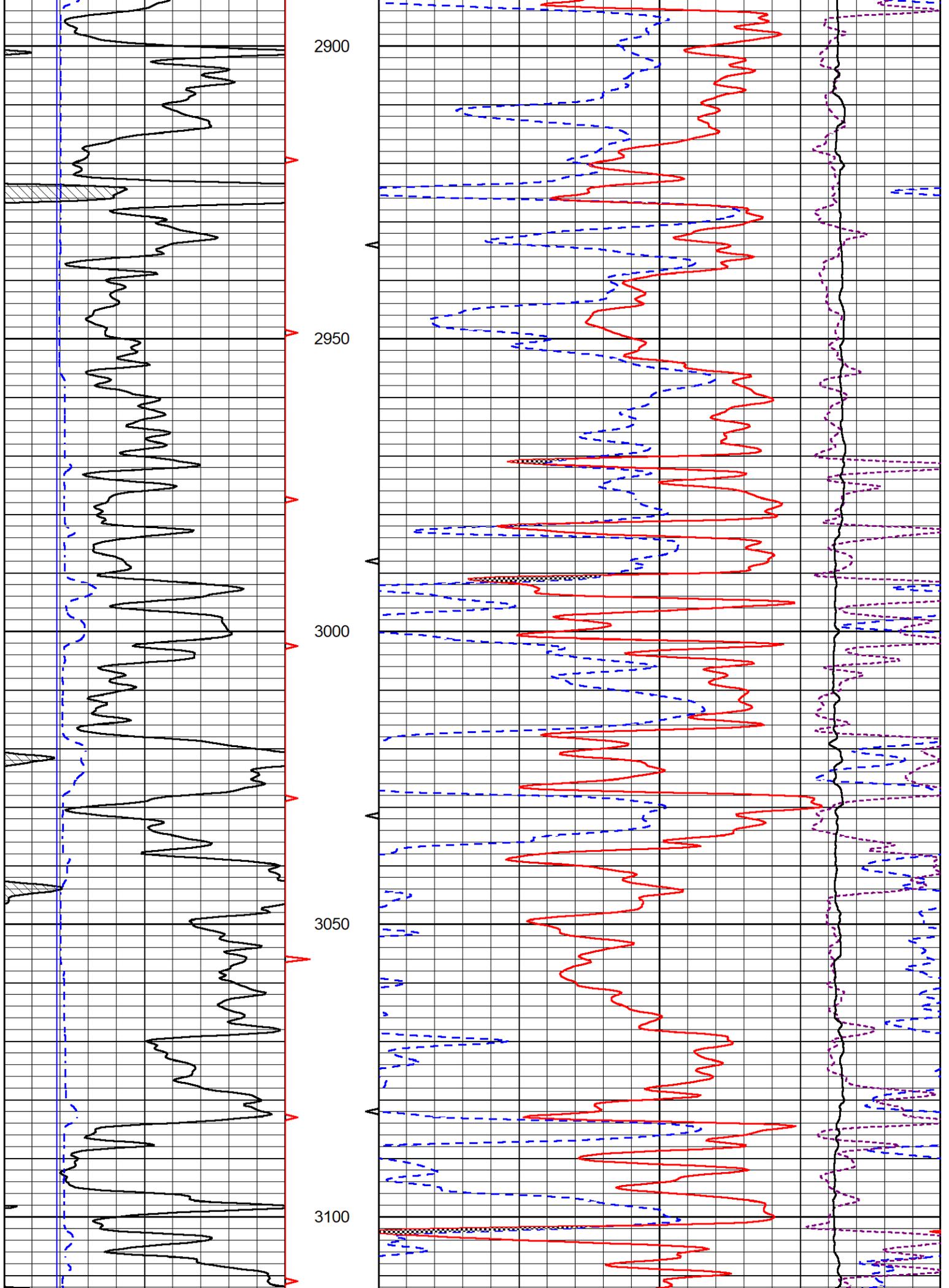
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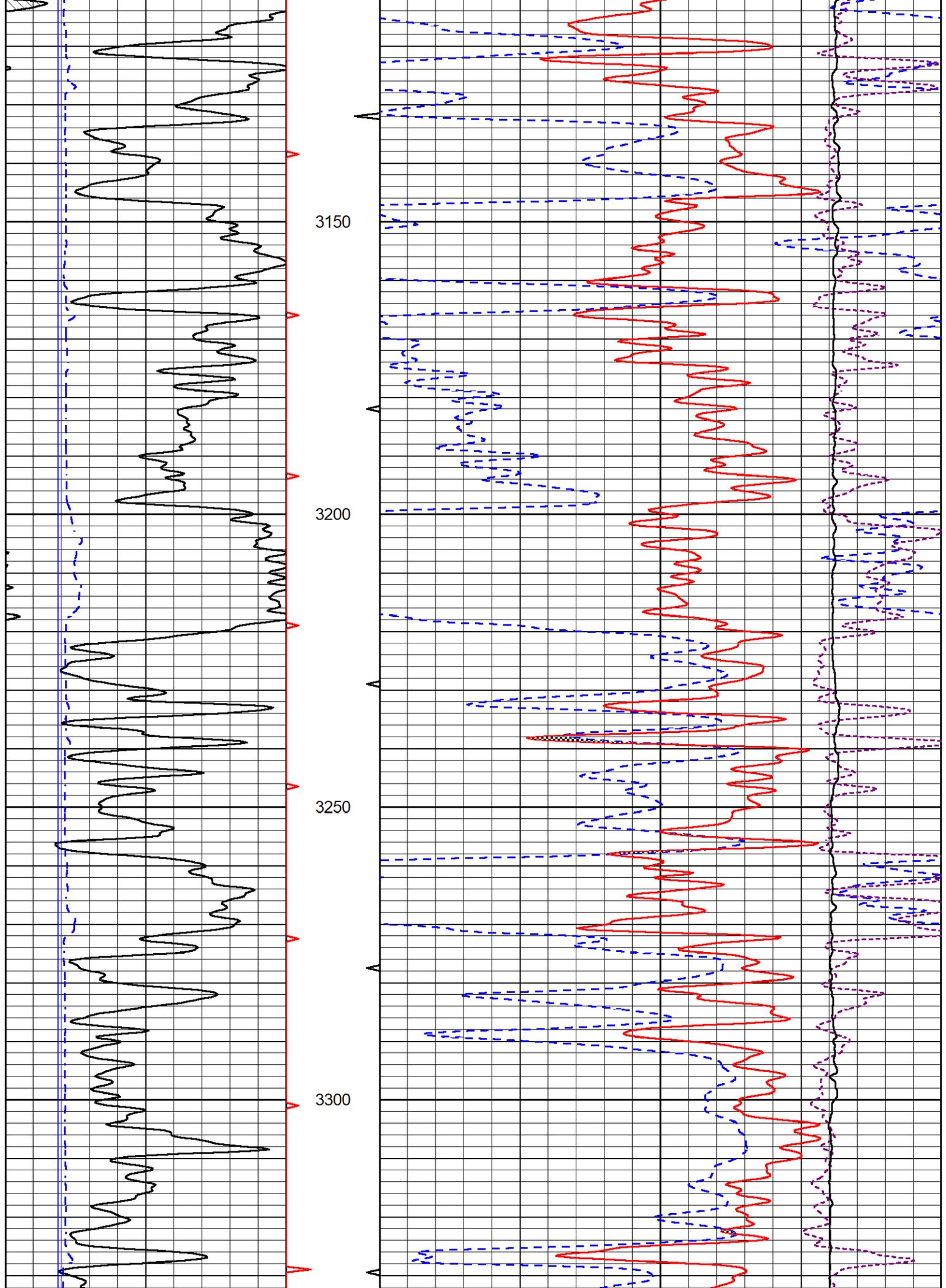
DETAIL SECTION

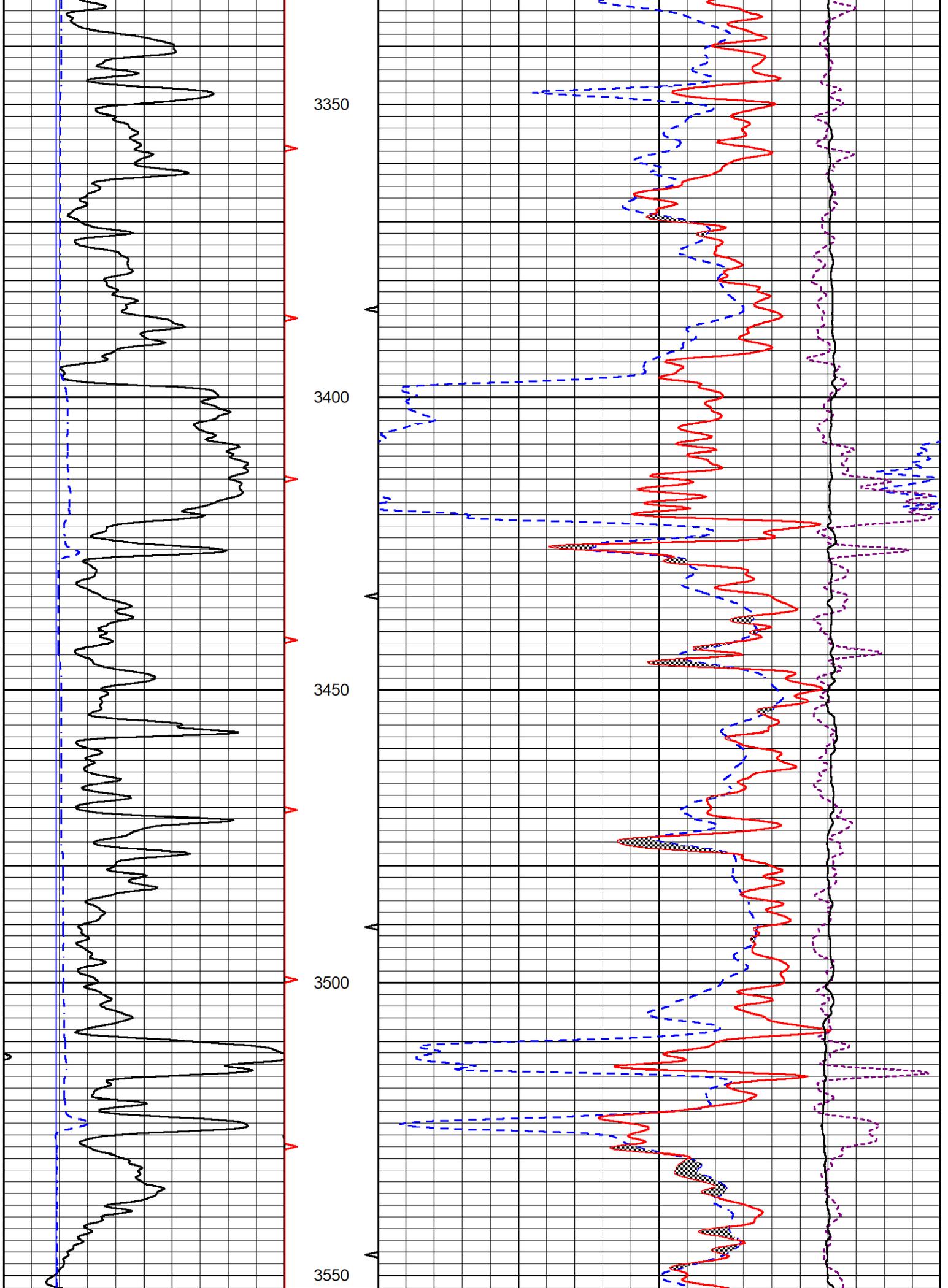
MAIN PASS

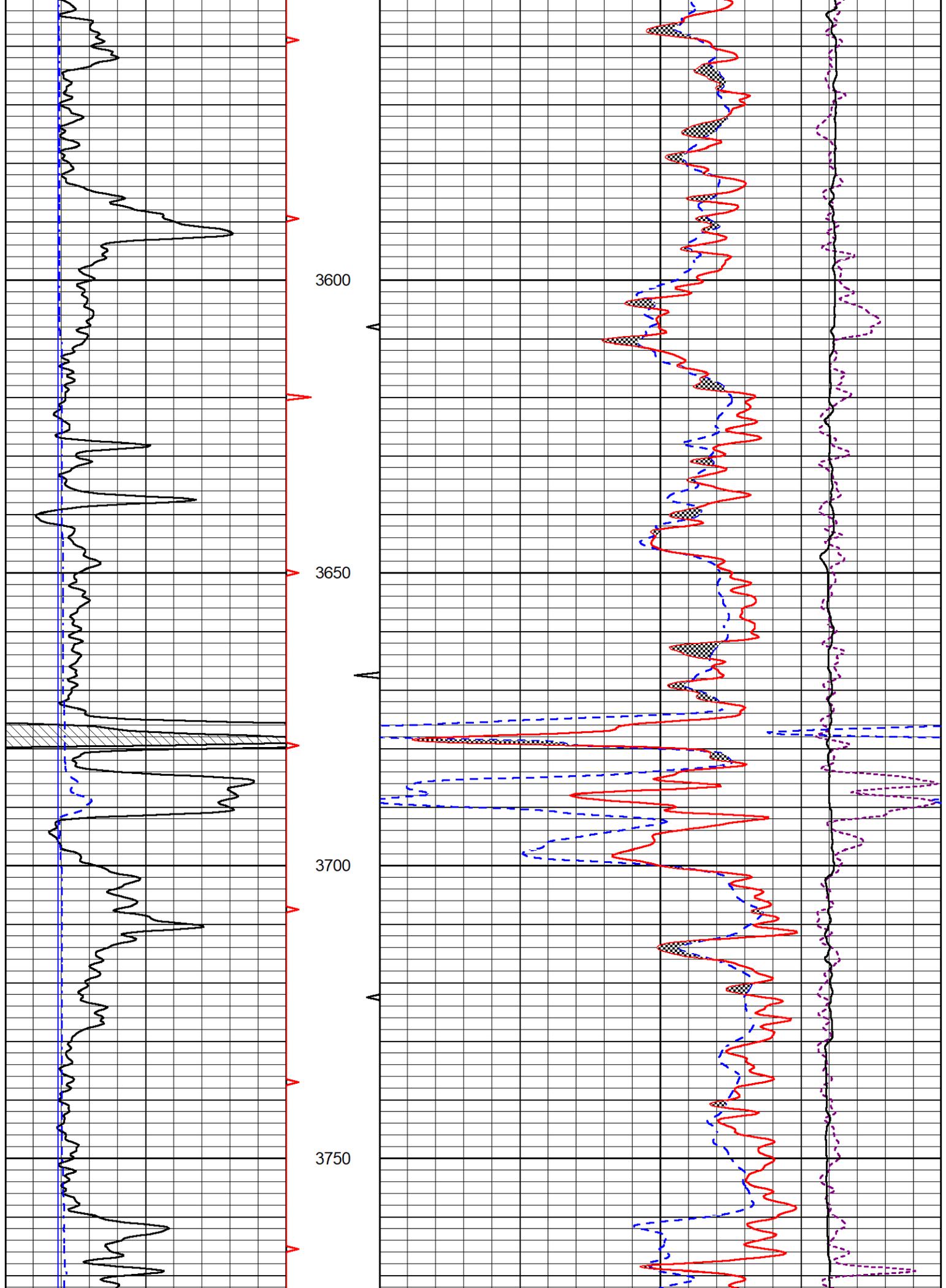
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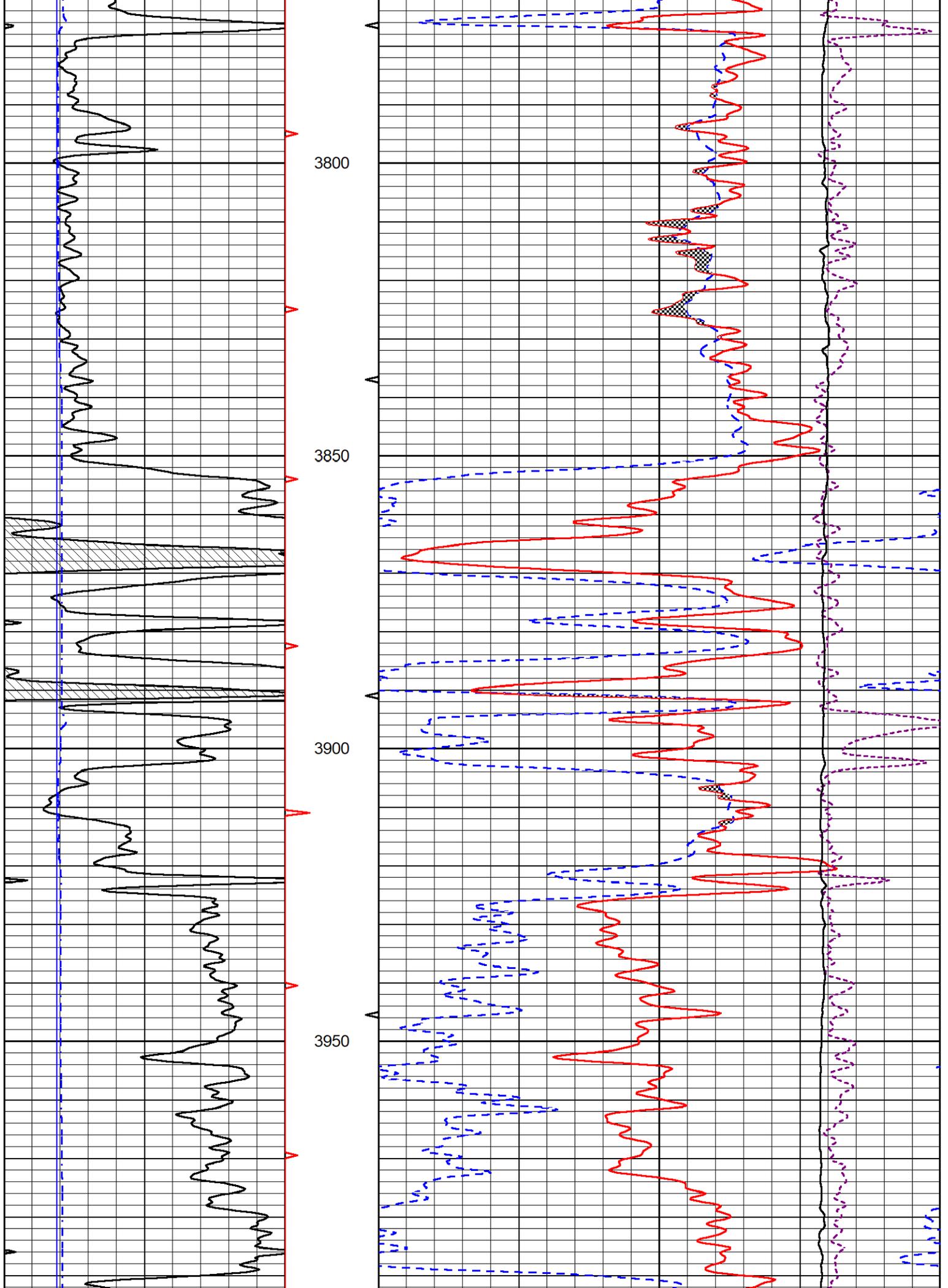


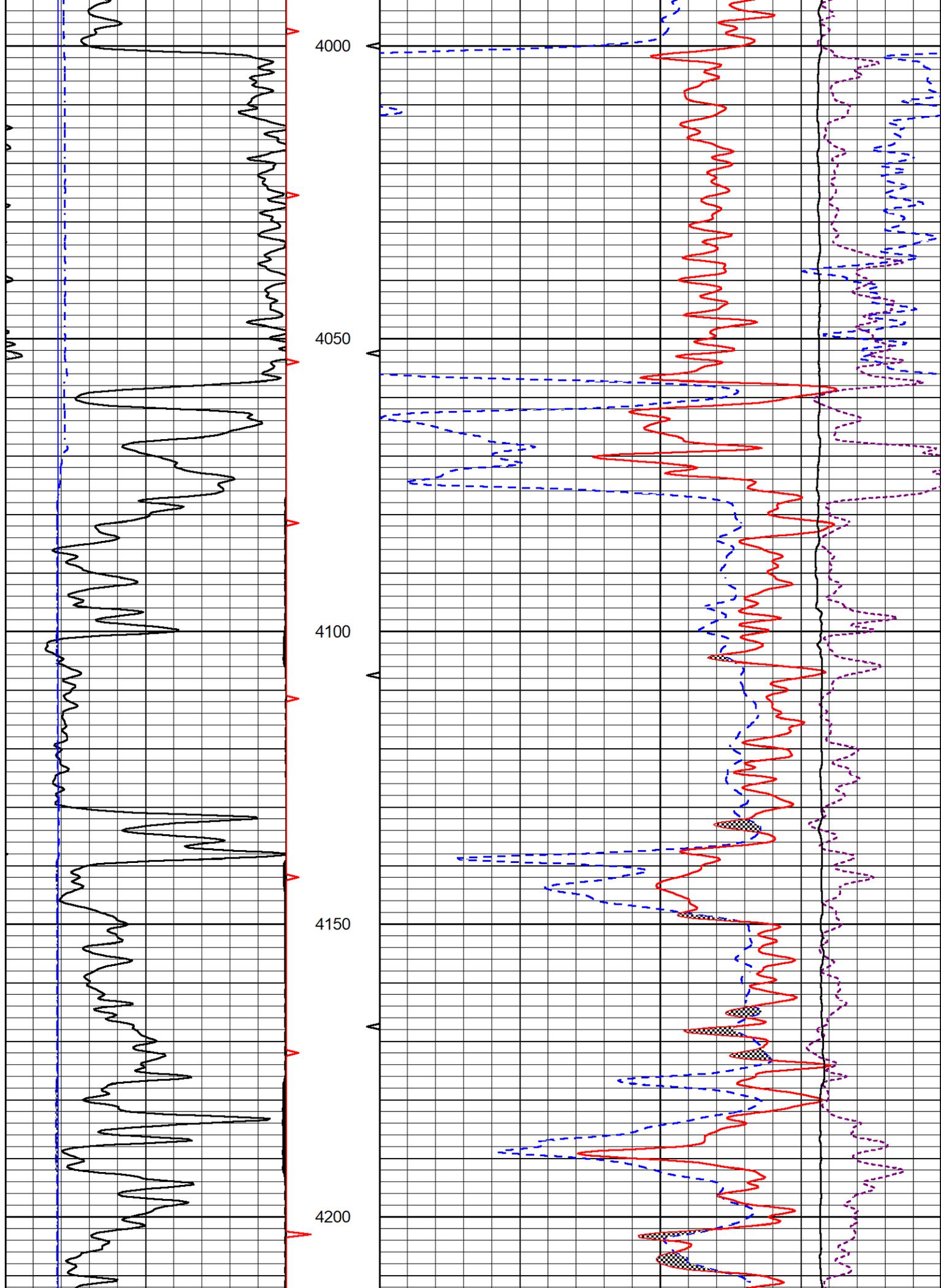


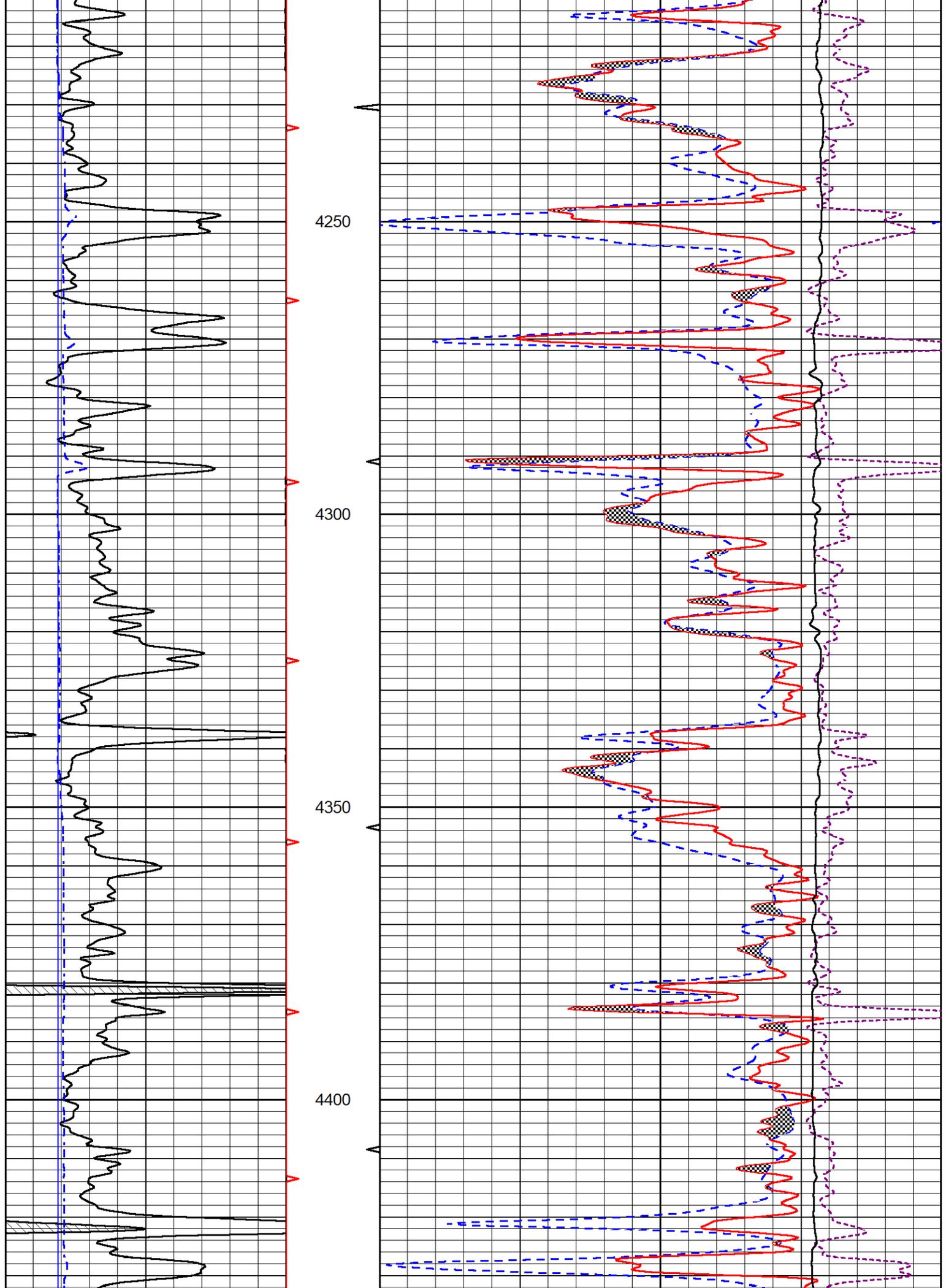


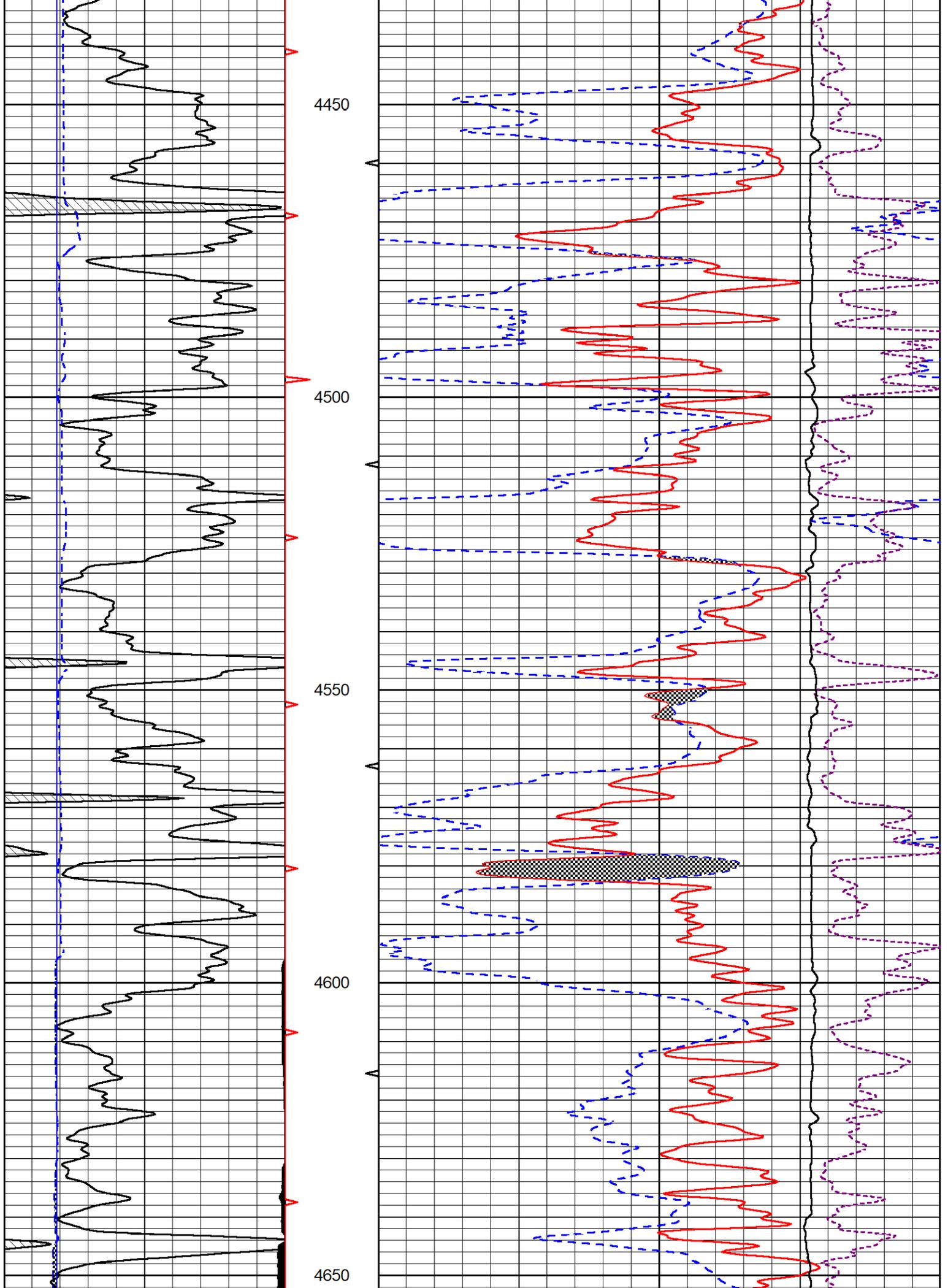


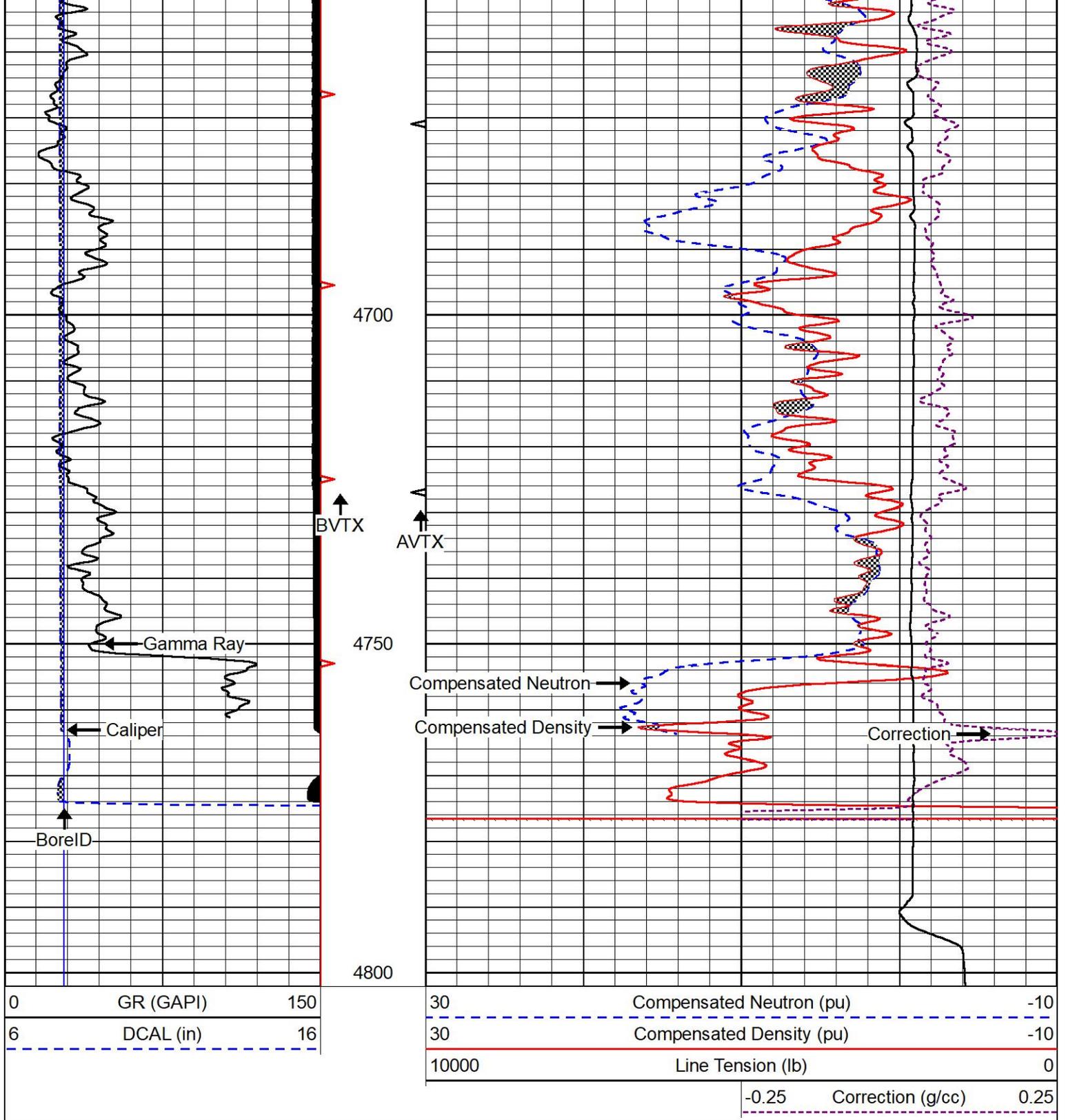












MIDWEST WIRELINE

REPEAT SECTION

REPEAT PASS

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 Presentation Format _CNDLS~1
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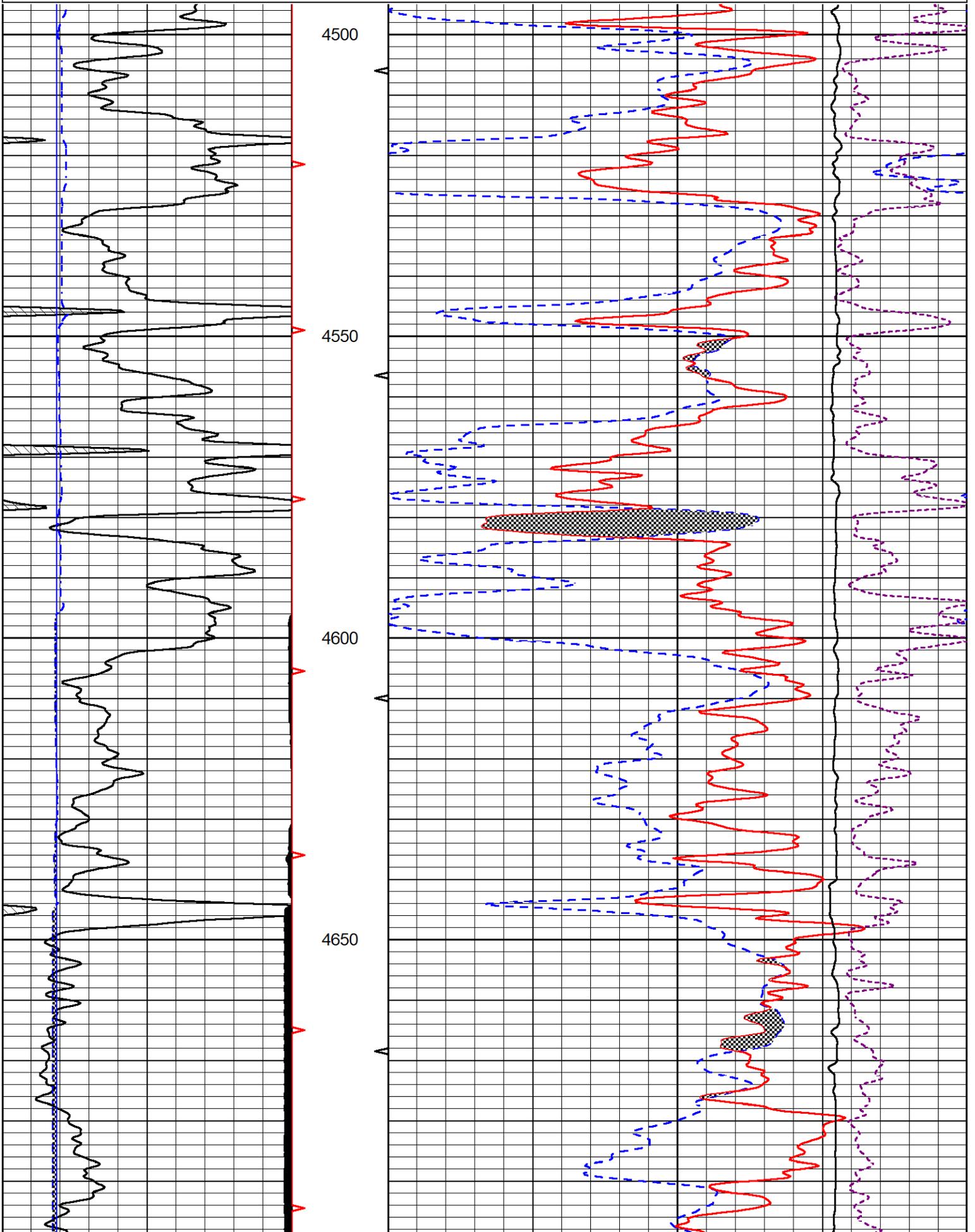
0	GR (GAPI)	150	30	Compensated Neutron (pu)	-10
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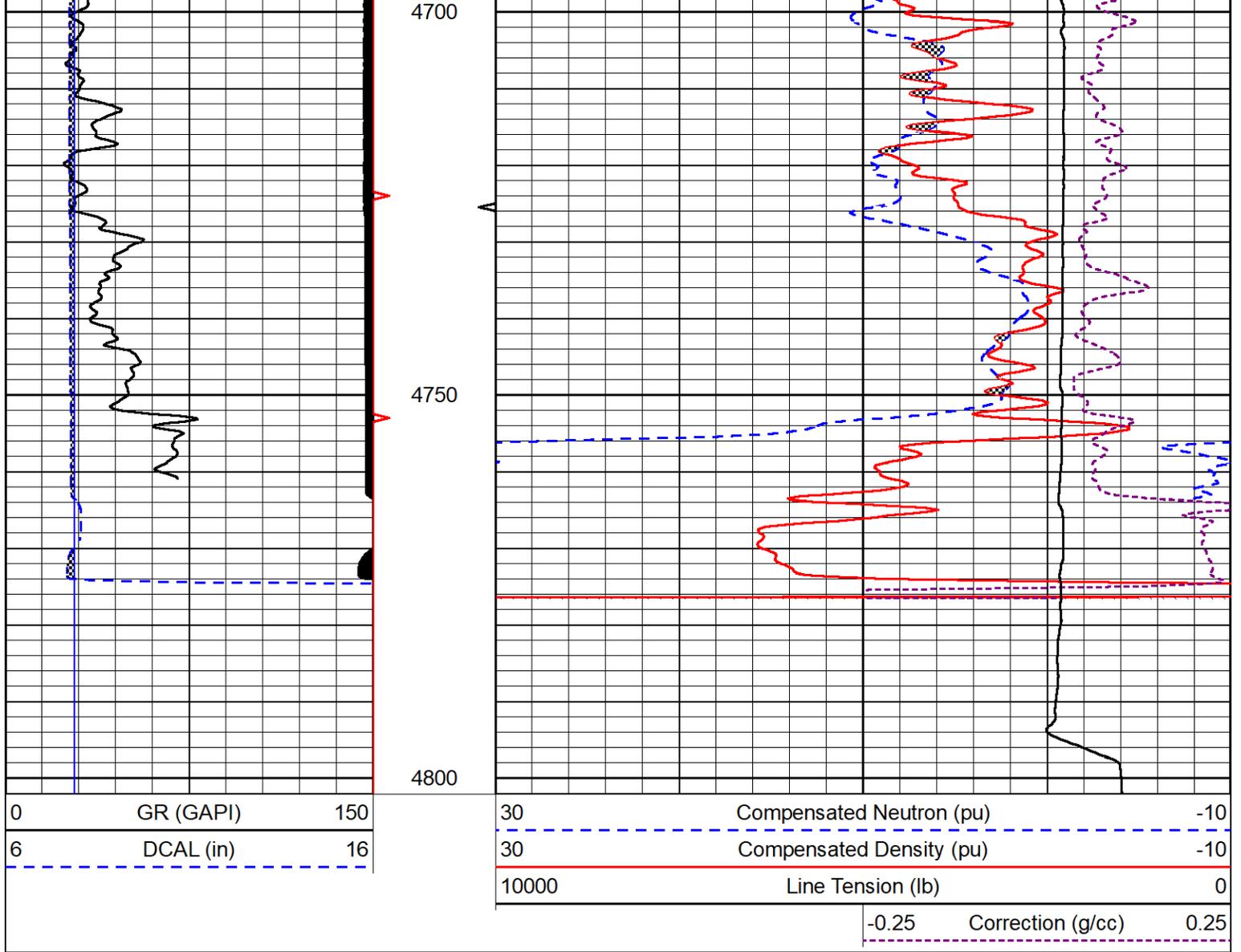
6 DCAL (in) 16

30 Compensated Density (pu) -10

10000 Line Tension (lb) 0

-0.25 Correction (g/cc) 0.25





Calibration Report

Database File griffin_harper_2.db
 Dataset Pathname stackml/pass4.1
 Dataset Creation Sun Dec 12 23:32:46 2021

Dual Induction Calibration Report

Serial-Model: 959-1032-PSI HIGH TEMP
 Surface Cal Performed: Mon Oct 25 13:13:32 2021

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop	mmho/m	m	b
Deep	178.615	710.235	0.000	255.800	mmho/m	0.650	-19.000
Medium	161.982	1441.110	0.000	255.800	mmho/m	0.450	-45.500

Microlog Calibration Report

Serial-Model: PSI-02-PSI STKBL ML
 Performed: Sat Apr 7 11:01:20 2018

Readings		References		Results	
Zero	Cal	Zero	Cal	m	b

Normal	0.0031	0.0043	0.0000	10.0000	Ohm-m	23000.0000	-1.0000
Inverse	0.0000	0.0013	0.0000	10.0000	Ohm-m	20000.0000	0.0000
Caliper	1.0020	1.0834	5.5000	16.5000	in	135.1560	-134.8000

Compensated Density Calibration Report

Serial-Model: 915-956-M&W
 Source #: 21170B
 Master Calibration Performed: Fri Dec 3 11:22:35 2021

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	3668.53	4669.61	cps
Aluminum	2.670	g/cc	710.88	3056.05	cps
Spine Angle = 75.51			Density/Spine Ratio = 0.540		
	Size		Reading		
Small Ring	4.00	in	1.17		
Large Ring	14.00	in	1.05		

Compensated Neutron Calibration Report

Serial-Model: tk10-MW-M&W
 Source #: N-1238
 Master Calibration Performed: Fri Dec 3 09:16:24 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: 89-M&W
 Tool Model: M&W
 Performed: Fri Dec 3 12:13:24 2021

Calibrator Value: 500.0 GAPI

Background Reading: 28.0 cps
 Calibrator Reading: 986.0 cps

Sensitivity: 0.5700 GAPI/cps



Company Griffin Management LLC
Well Harper #2
Field Wildcat
County Barber
State Kansas