



MIDWEST WIRELINE

DUAL COMP POROSITY LOG

Company Griffin Management, LLC
 Well Whitley #4
 Field Moffett West
 County Barber
 State Kansas

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 Well Whitley #4
 Field Moffett West
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Location: API #: 15-007-24452-00-00
 900 FNL & 2635 FEL
 SEC 8 TWP 30S RGE 15W
 Permanent Datum Ground Level Elevation 1936
 Log Measured From Kelly Bushing
 Drilling Measured From Kelly Bushing
 Other Services
 DIL/MEL
 K.B. 1941
 D.F.
 G.L. 1936

Date	11/20/2022						
Run Number	One						
Type Log	CNL/CDL						
Depth Driller	4875						
Depth Logger	4873						
Bottom Logged Interval	4844						
Top Logged Interval	2800						
Type Fluid In Hole	Chemical						
Salinity, PPM CL	5000						
Density	9.5						
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	260	8.625	23	0	260
Two	7.875	260	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 110, East to 130,
 South 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

Engineer: D. Schmidt
 Operator:
 Operator:
 Operator:

This Log Record Was Witnessed By

Primary Witness: Charles Griffin
 Secondary Witness: Eli Felts
 Secondary Witness:
 Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.33		GR-M&W (106)	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 (305-24)	8.50	4.00	250.00
MCAL MI MN	19.58 19.58 19.58		ML-PSIML (401)	7.58	4.00	65.00
RLL3F RLL3	15.50 15.50					
CILD	8.33		DIL-M&W (502 HT)	18.25	3.50	220.00
CILM	4.50					
SP	0.20					

Dataset: griffin_whitley 4.db: field/well/stkml/pass4.11
 Total length: 42.33 ft
 Total weight: 685.00 lb
 O.D.: 4.00 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\griffin_whitley 4.db
Dataset field/well/stkml/pass4.11/_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	280	40	Off	4873

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



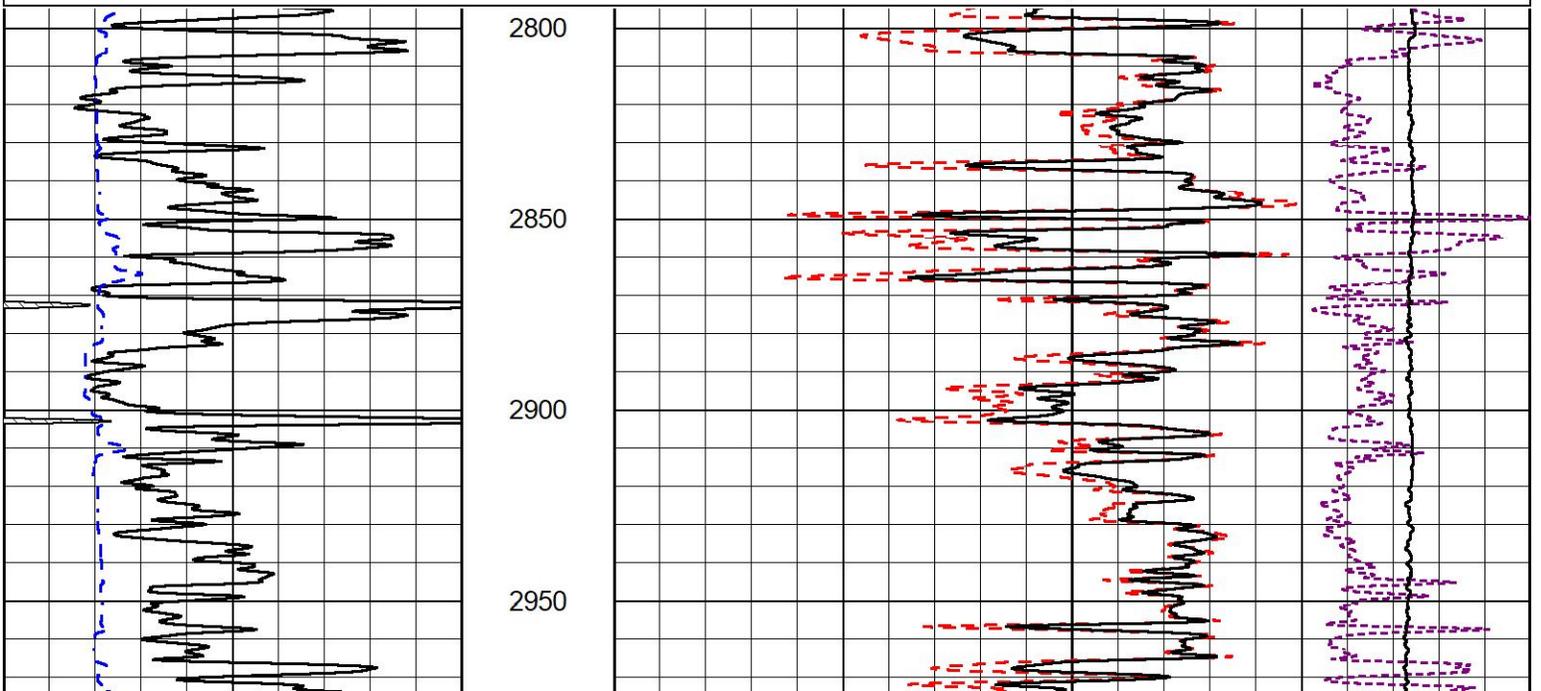
2" SCALE BULK DENSITY

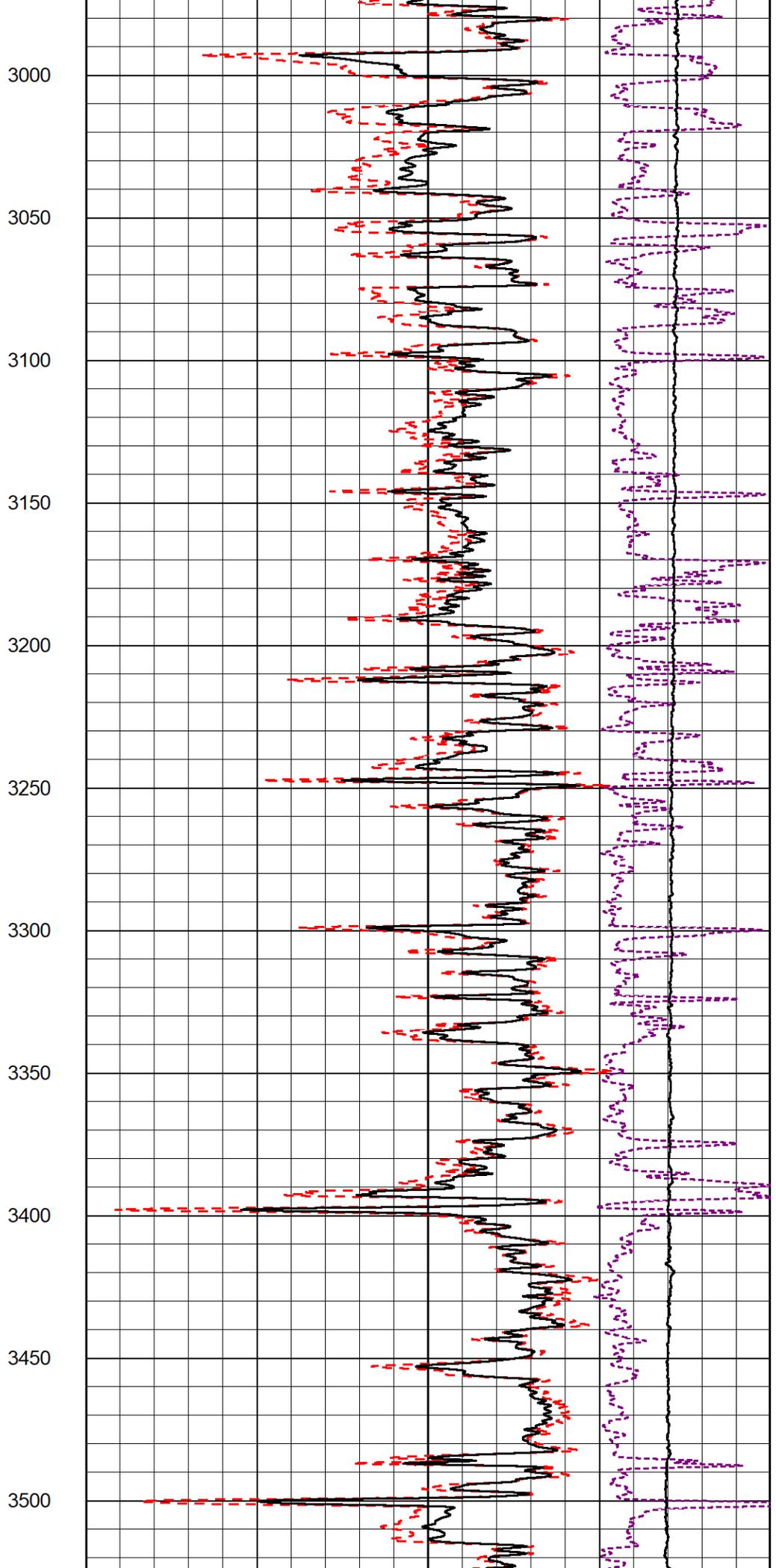
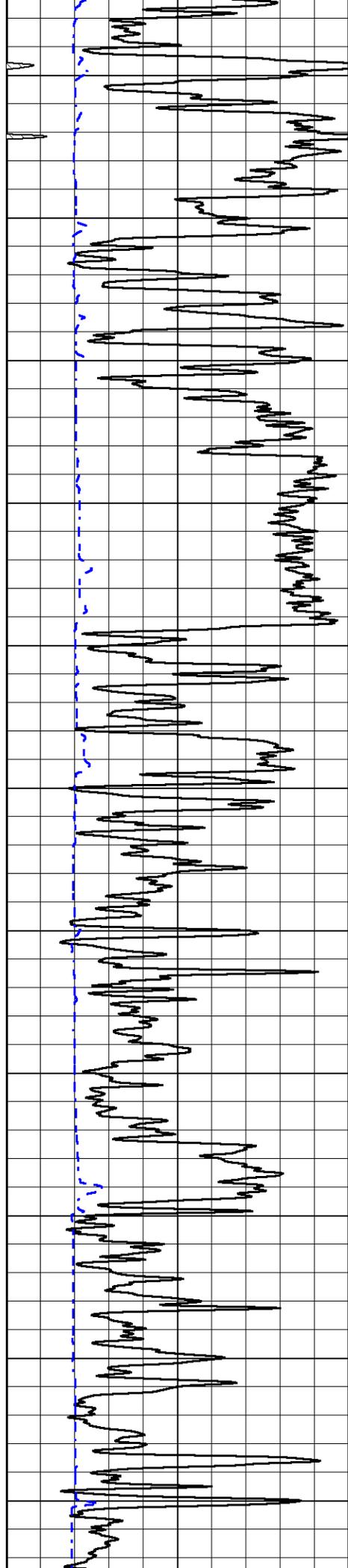
MAIN PASS

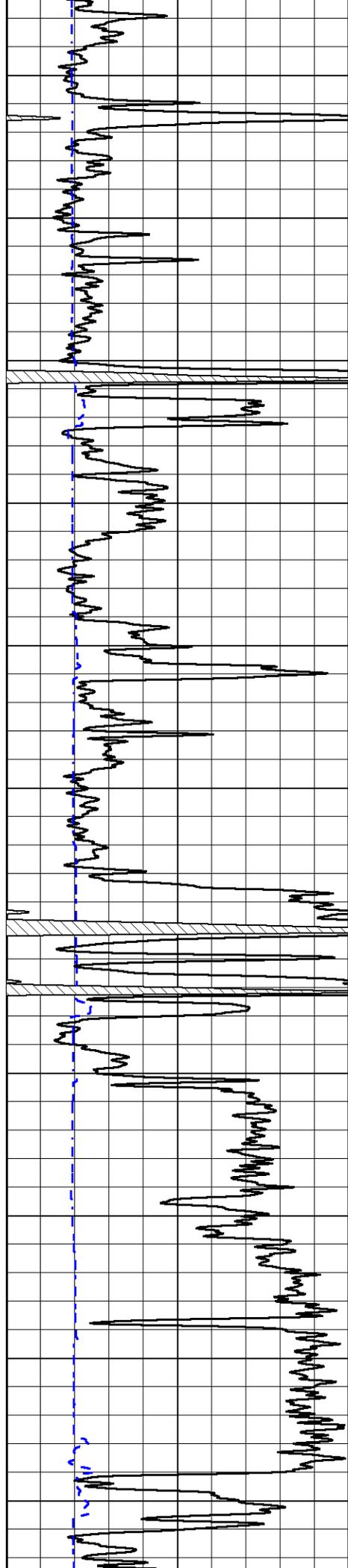
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Presentation Format _cdl
Dataset Creation Sun Nov 20 23:37:36 2022
Charted by Depth in Feet scaled 1:600

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

30	Compensated Density (pu)	-10
2	Bulk Density (g/cc)	3
10000	Line Tension (lb)	0
-0.25	Correction (g/cc)	0.25







3550

3600

3650

3700

3750

3800

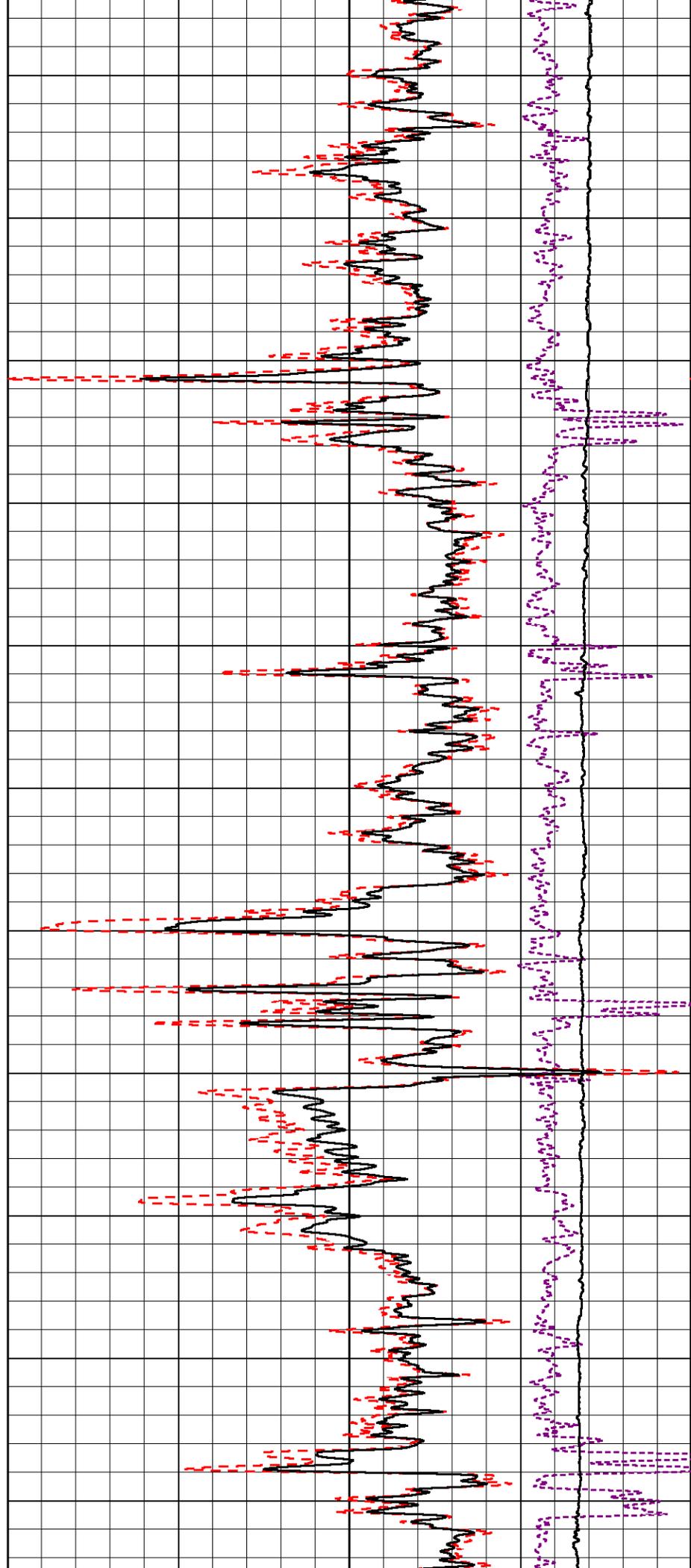
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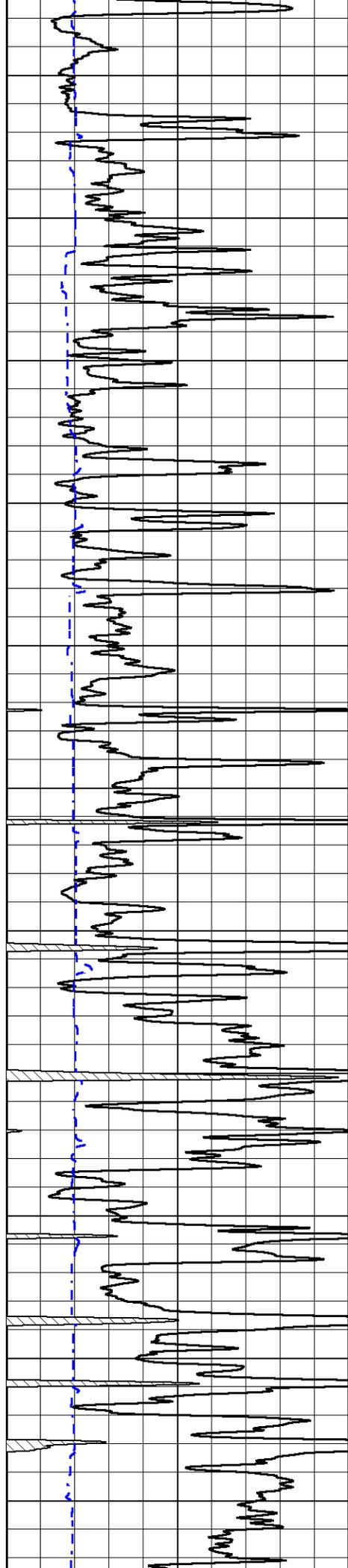
3900

3950

4000

4050





4100

4150

4200

4250

4300

4350

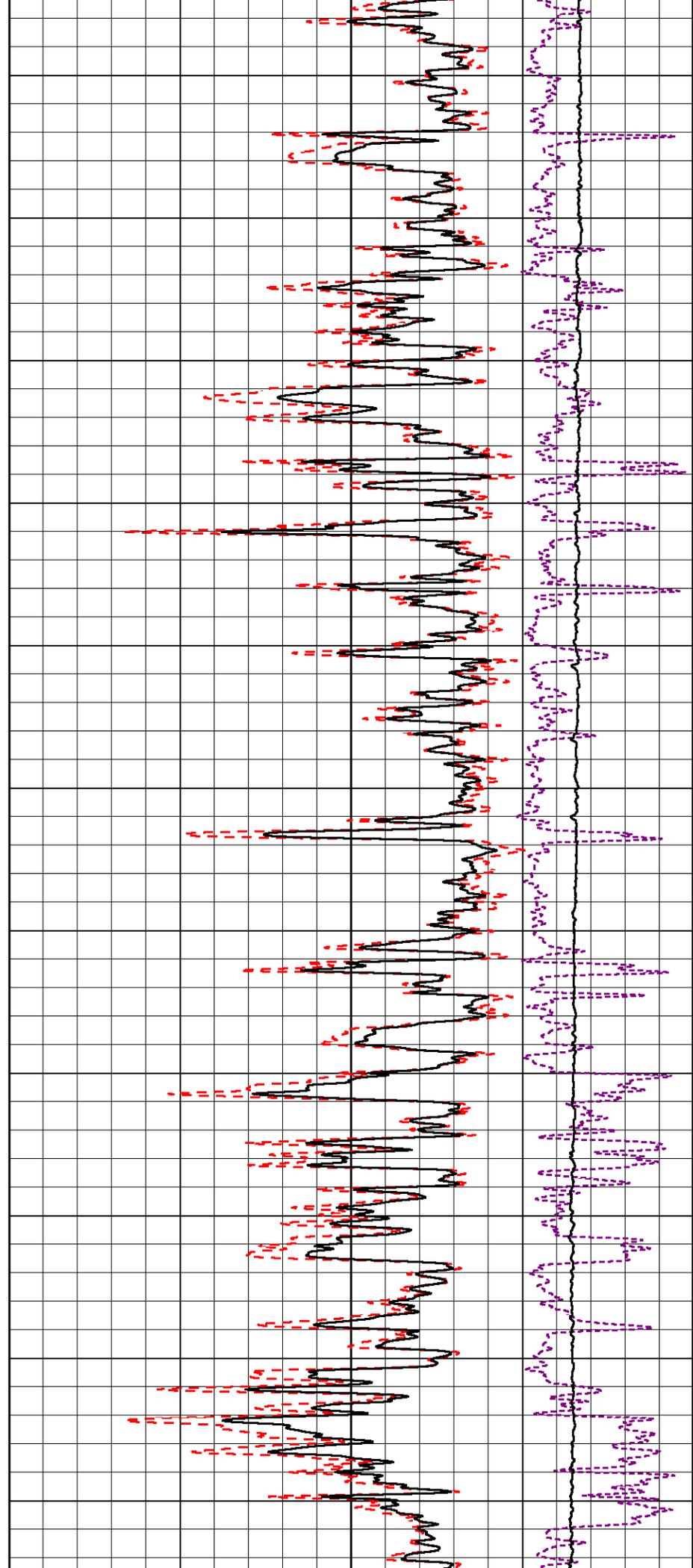
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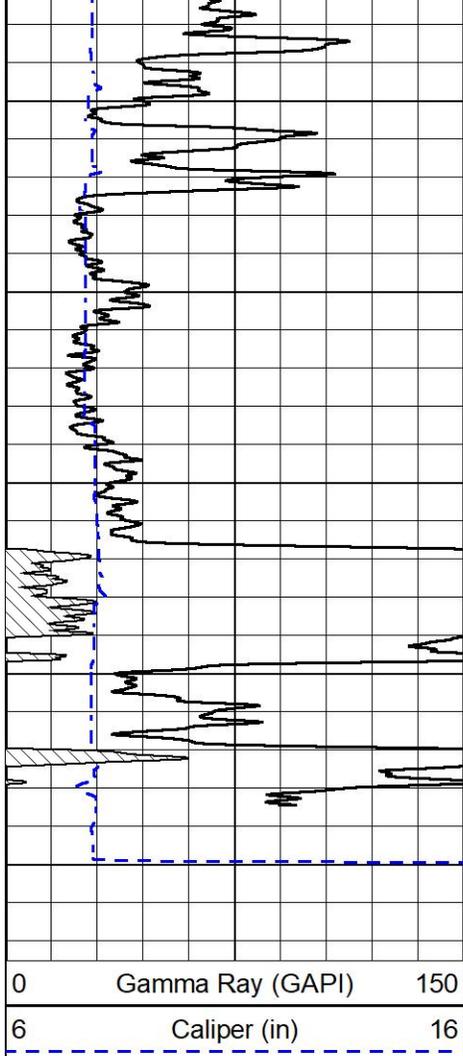
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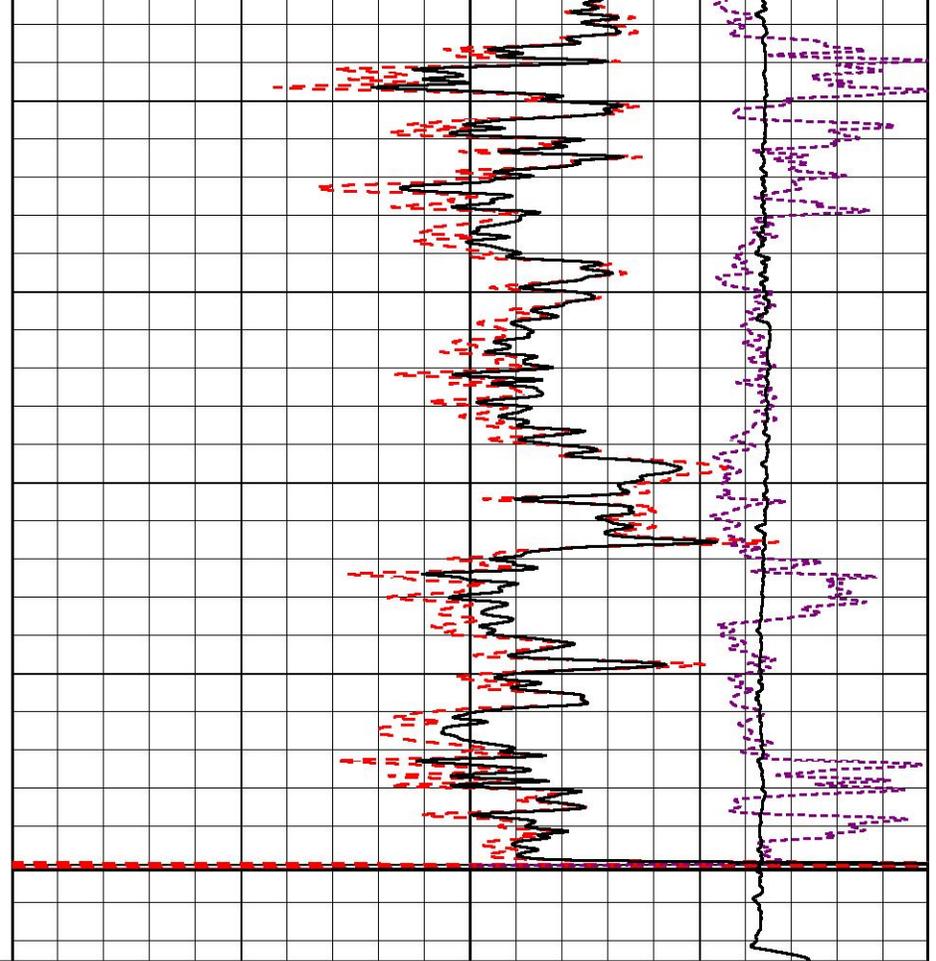
4550

4600





4650
4700
4750
4800
4850



30	Compensated Density (pu)	-10
2	Bulk Density (g/cc)	3
10000	Line Tension (lb)	0
-0.25	Correction (g/cc)	0.25



MIDWEST WIRELINE

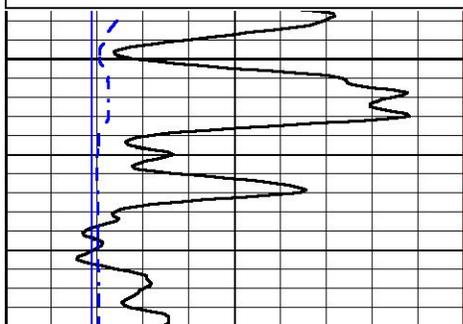
DETAIL SECTION

MAIN PASS

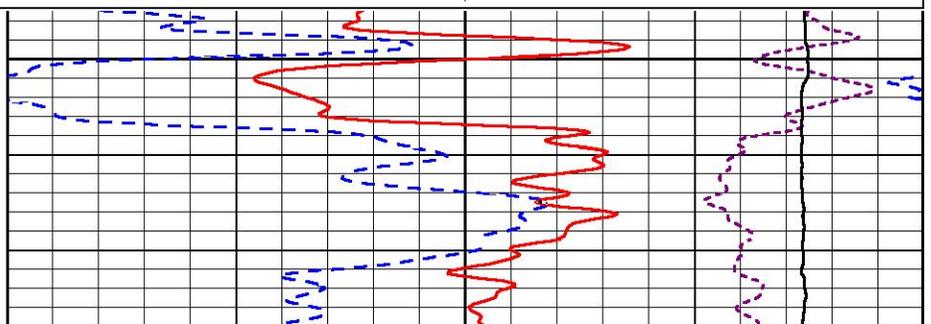
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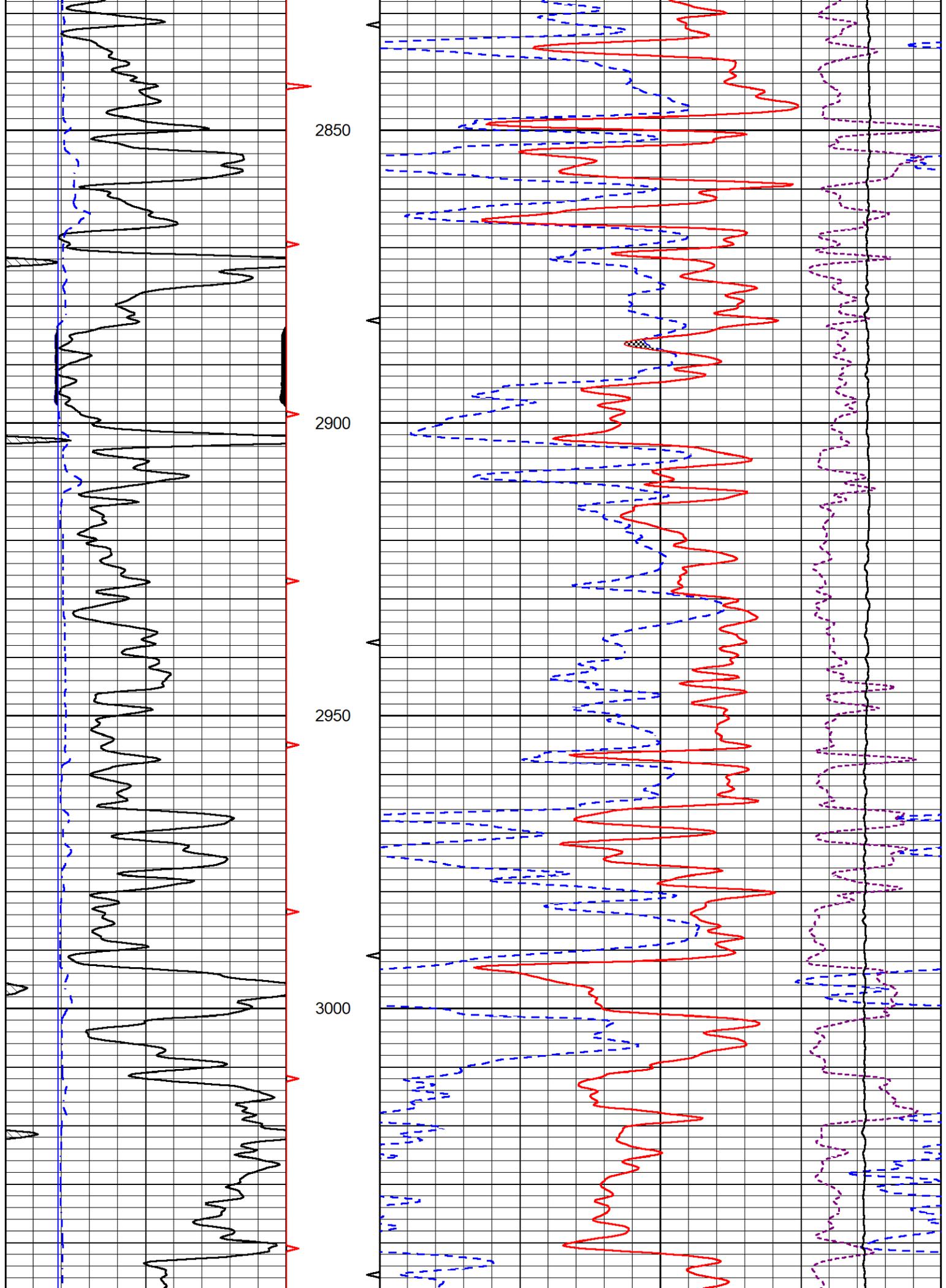
0	Gamma Ray (GAPI)	150
6	Caliper (in)	16
2.875	DCAL (in)	7.875

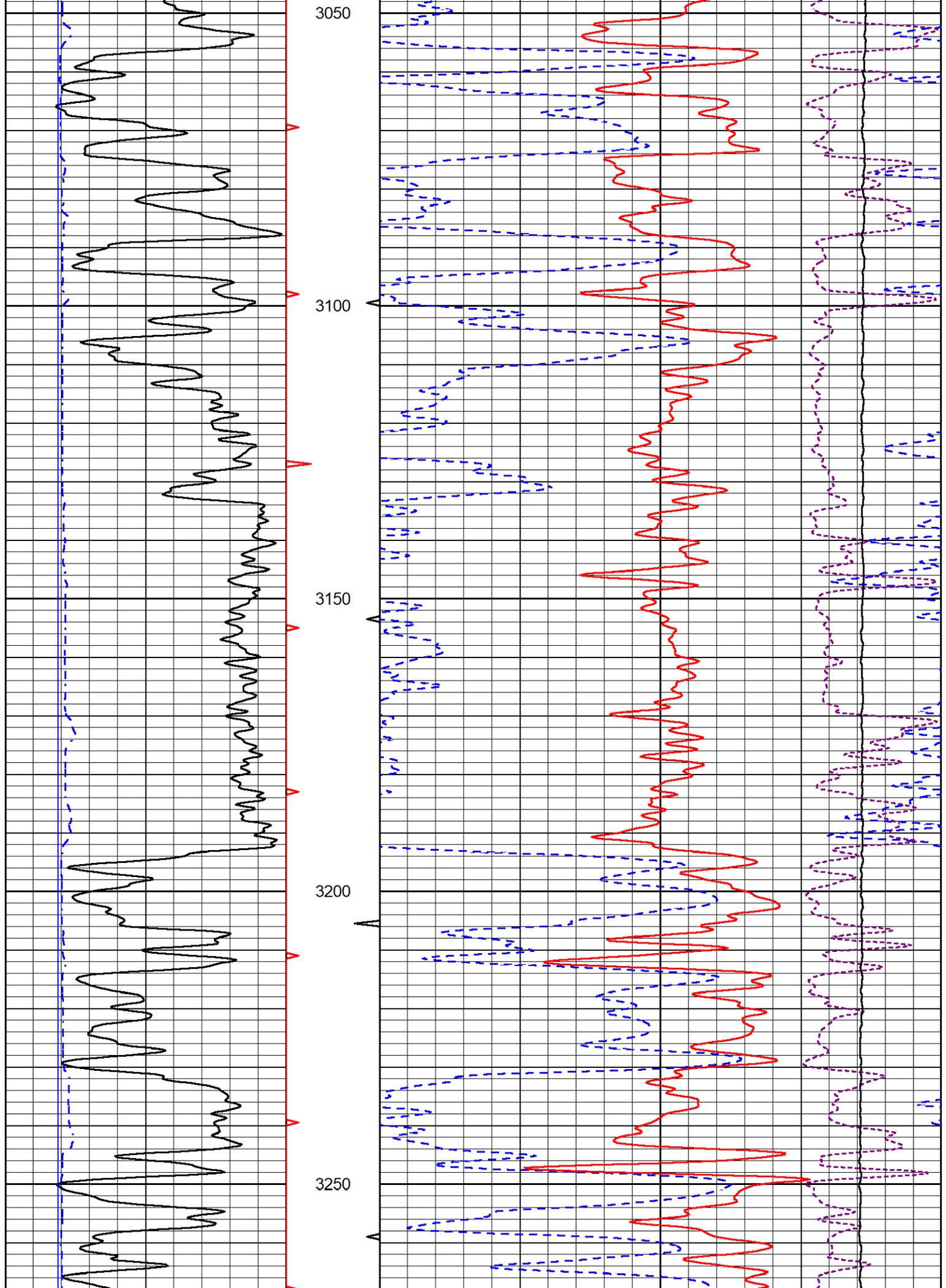
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30	Compensated Density (pu)	-10
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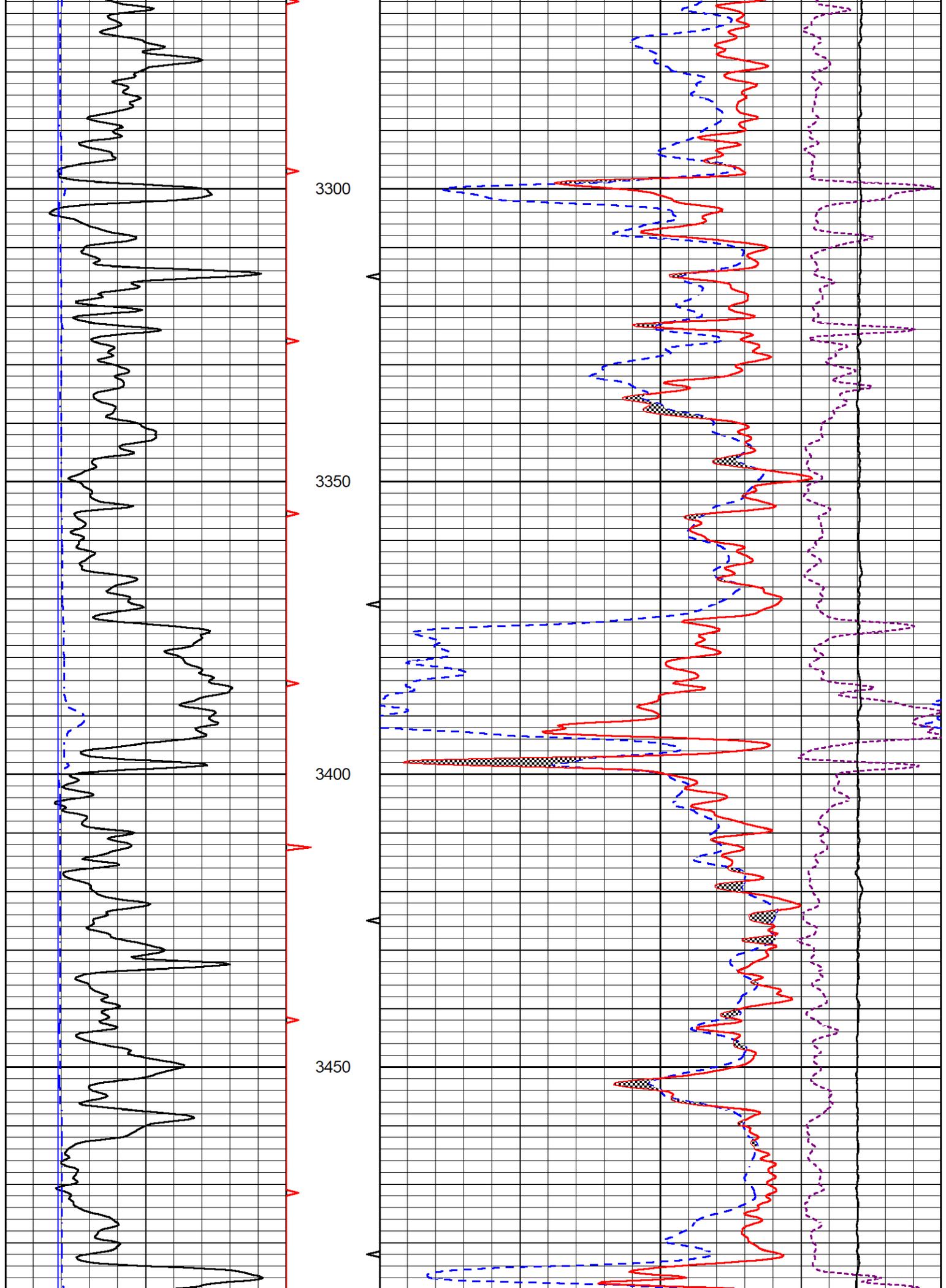


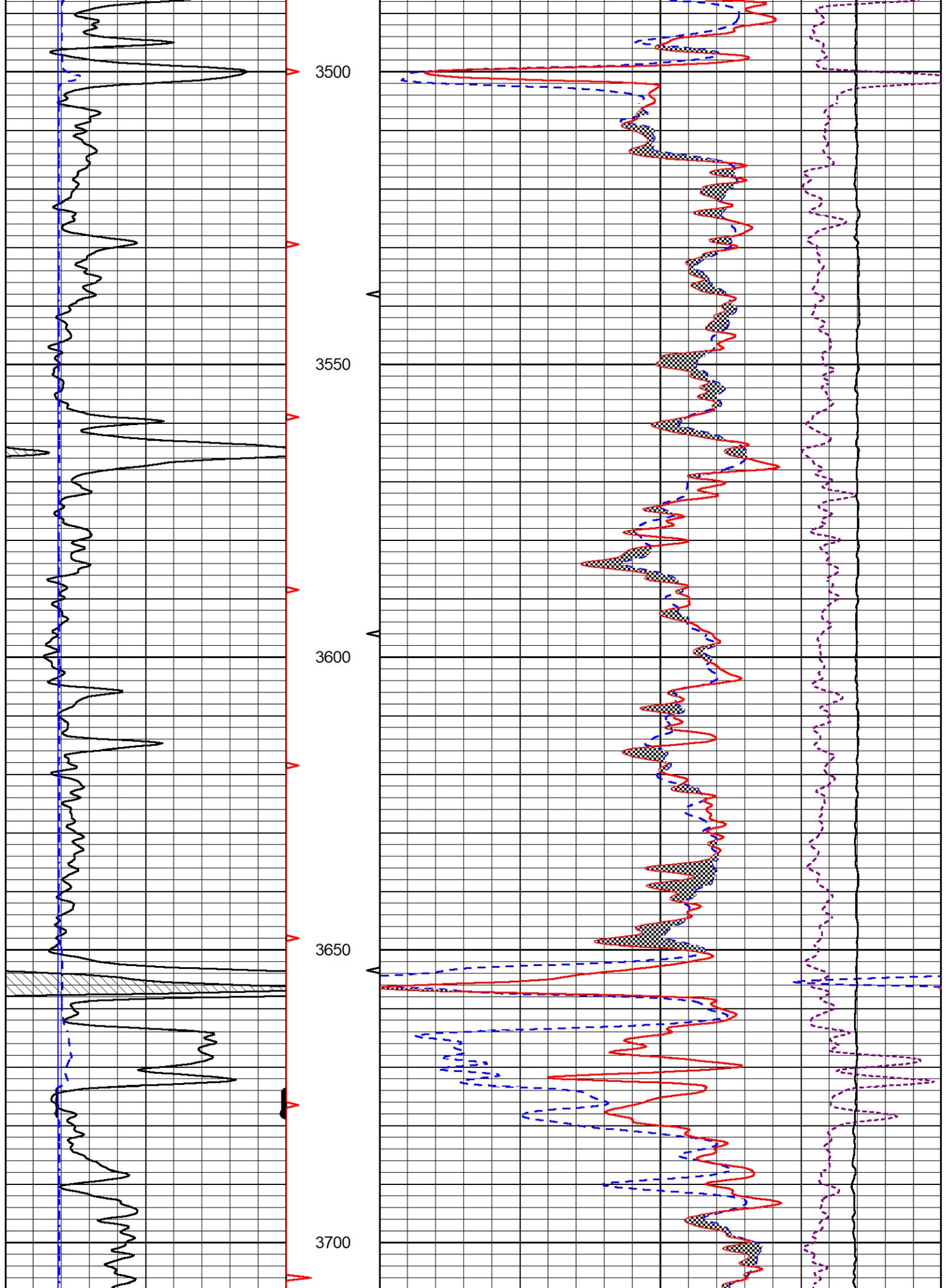
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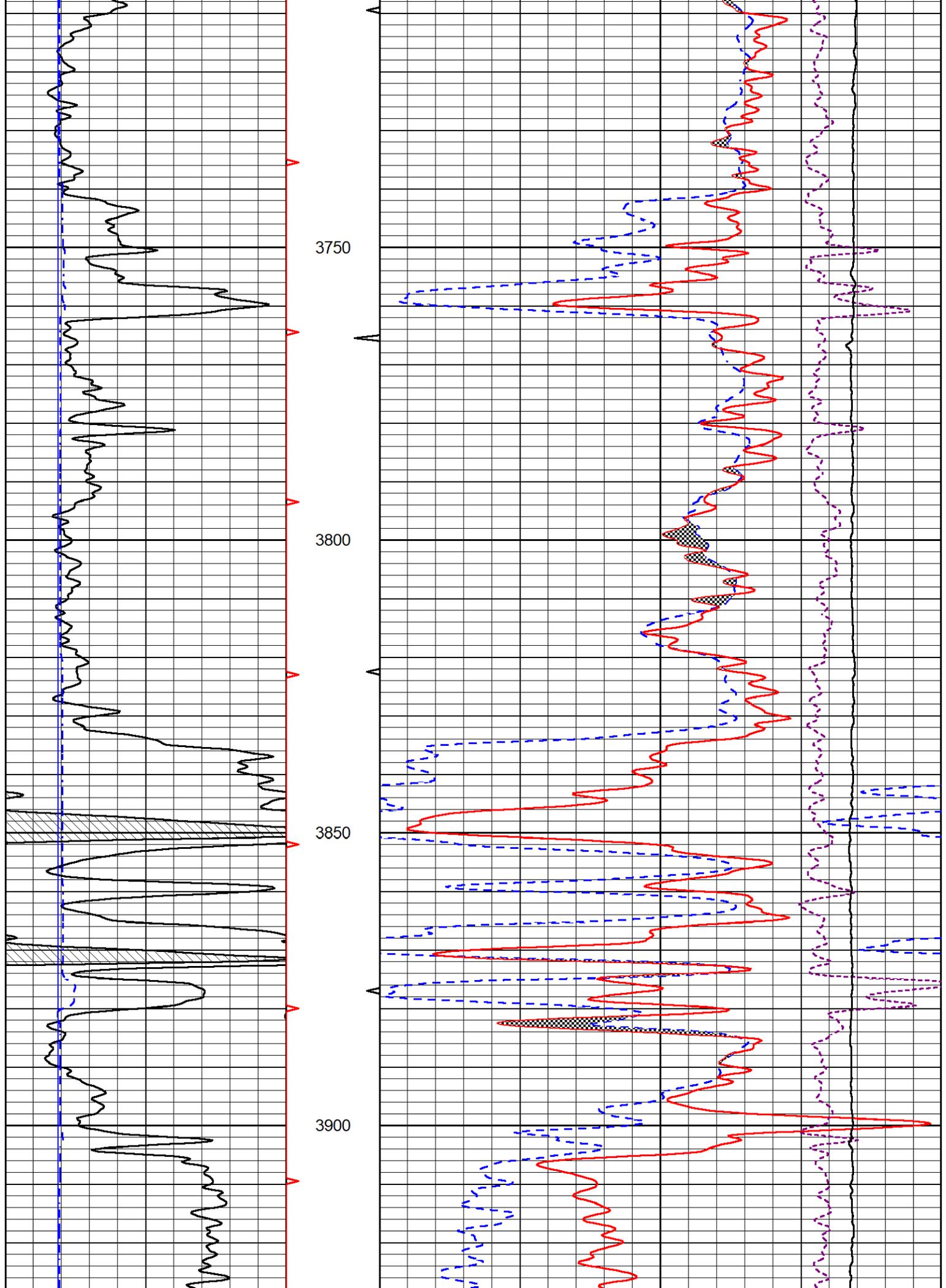


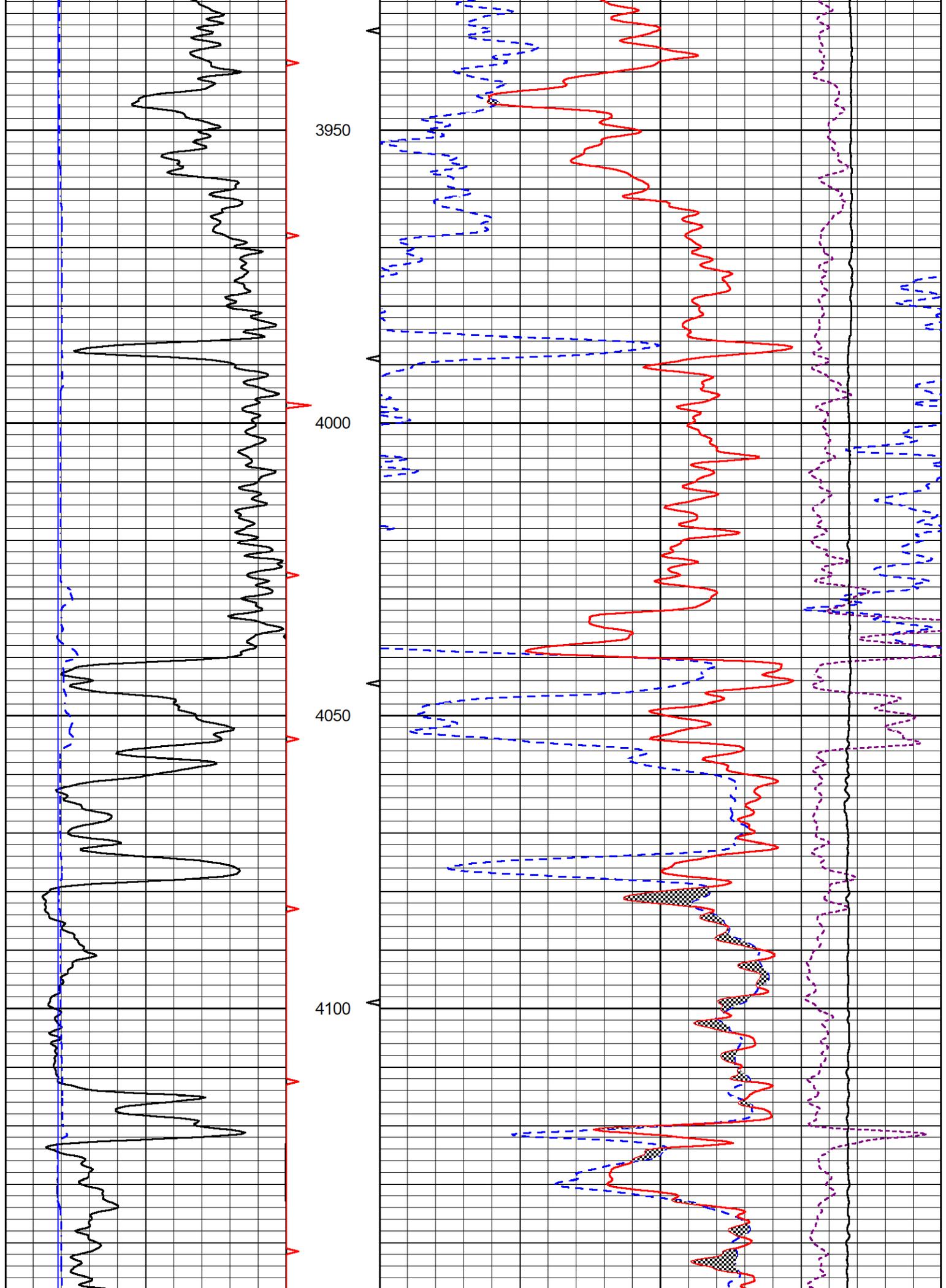


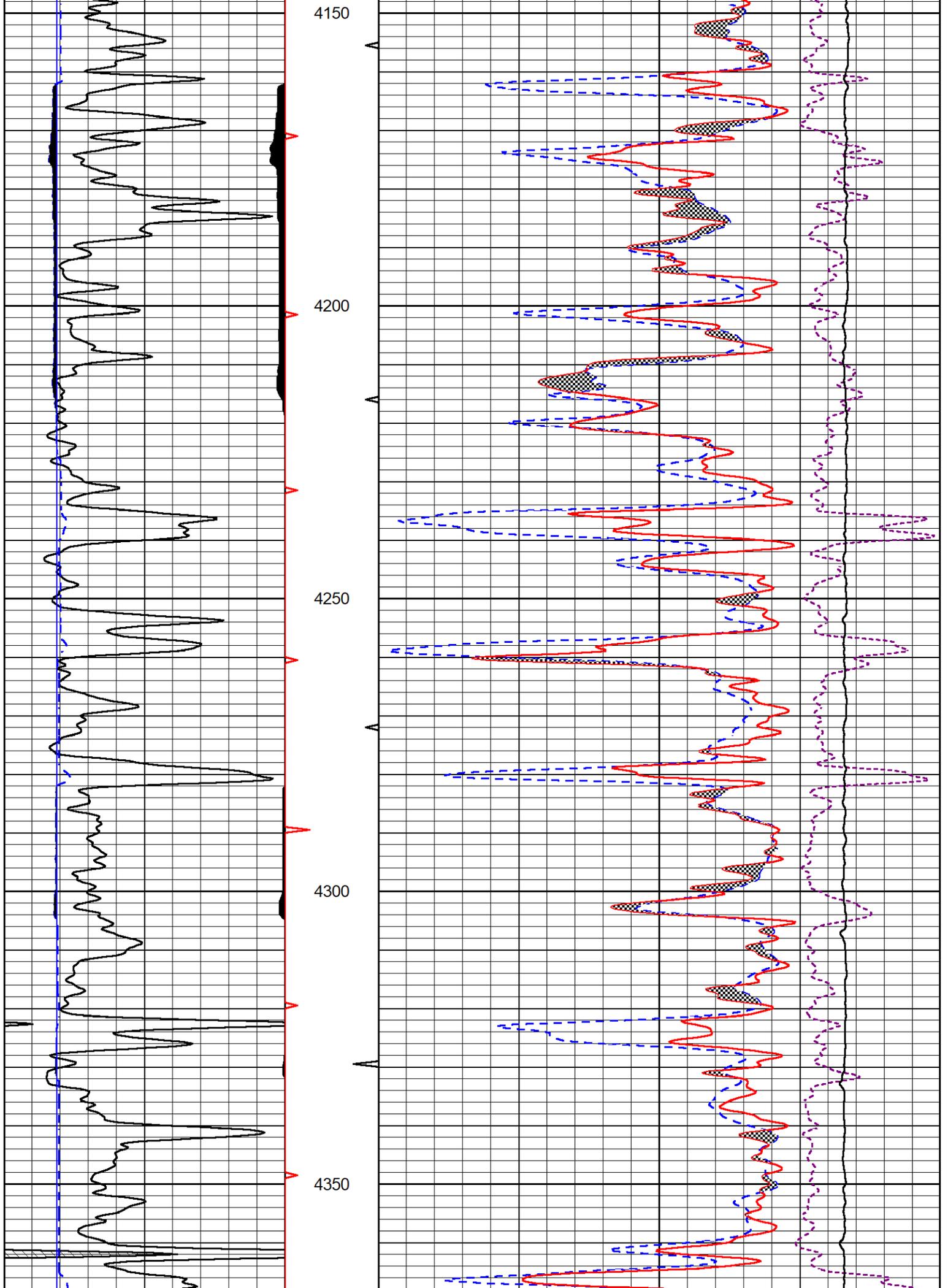


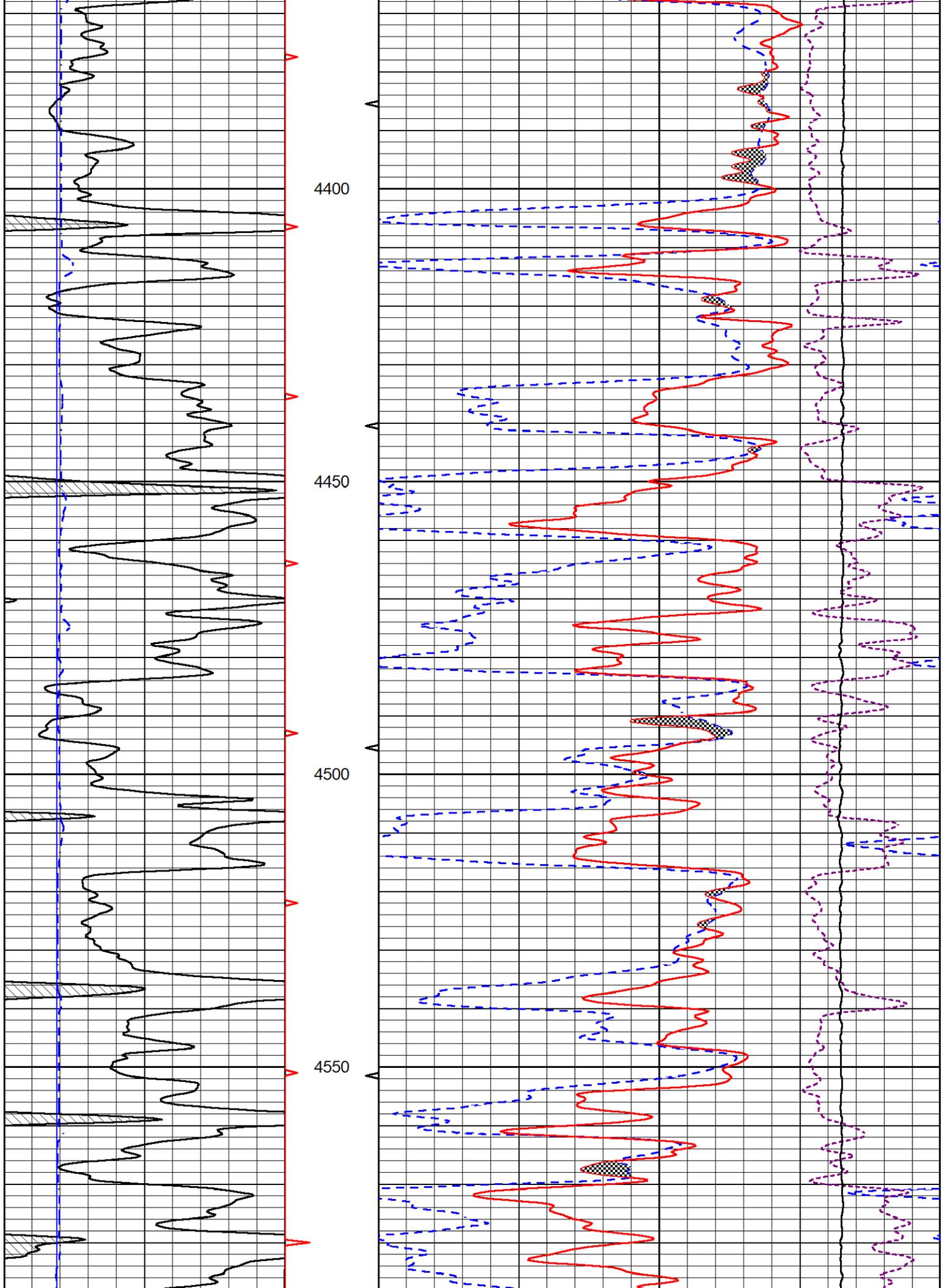


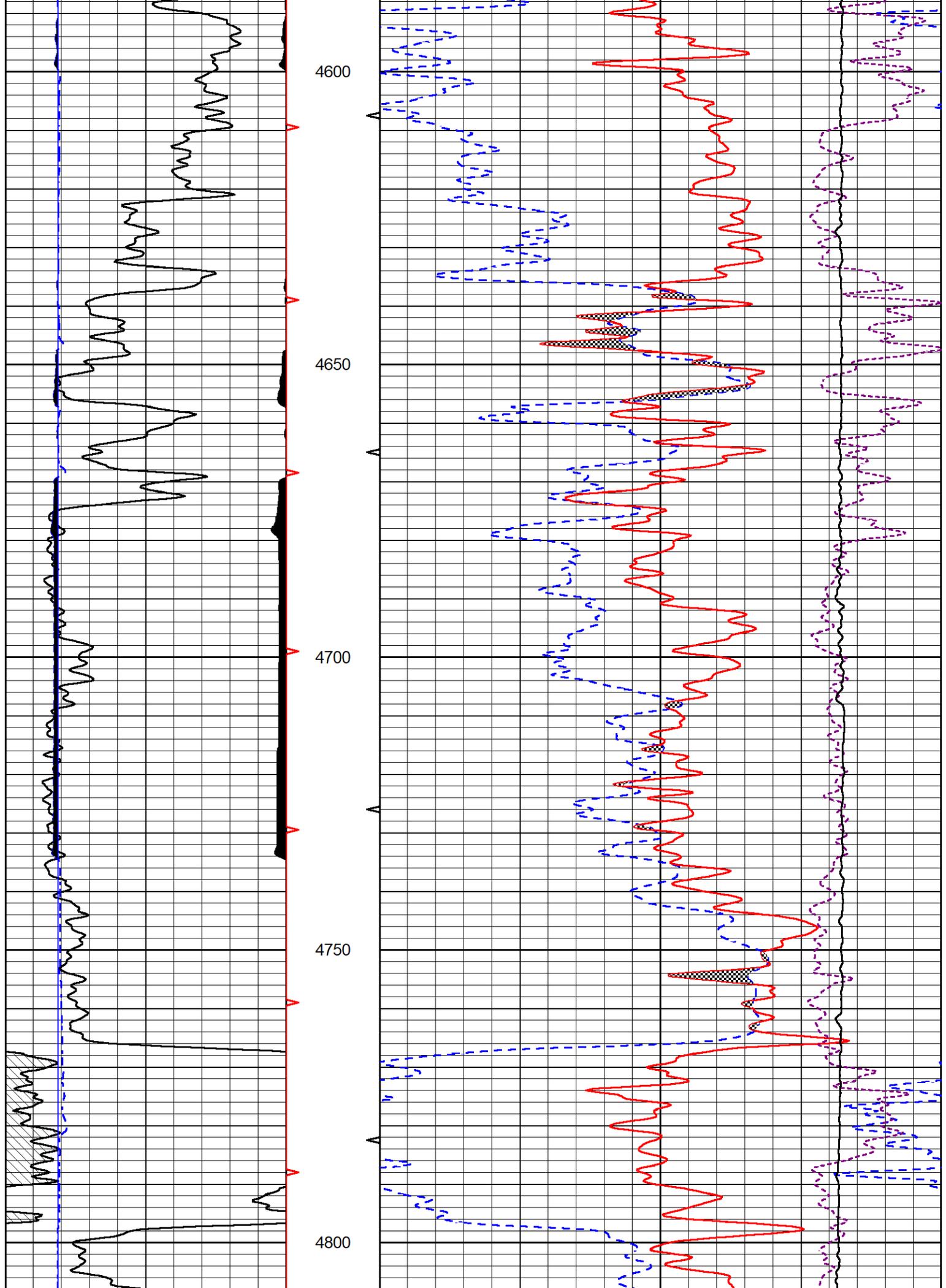


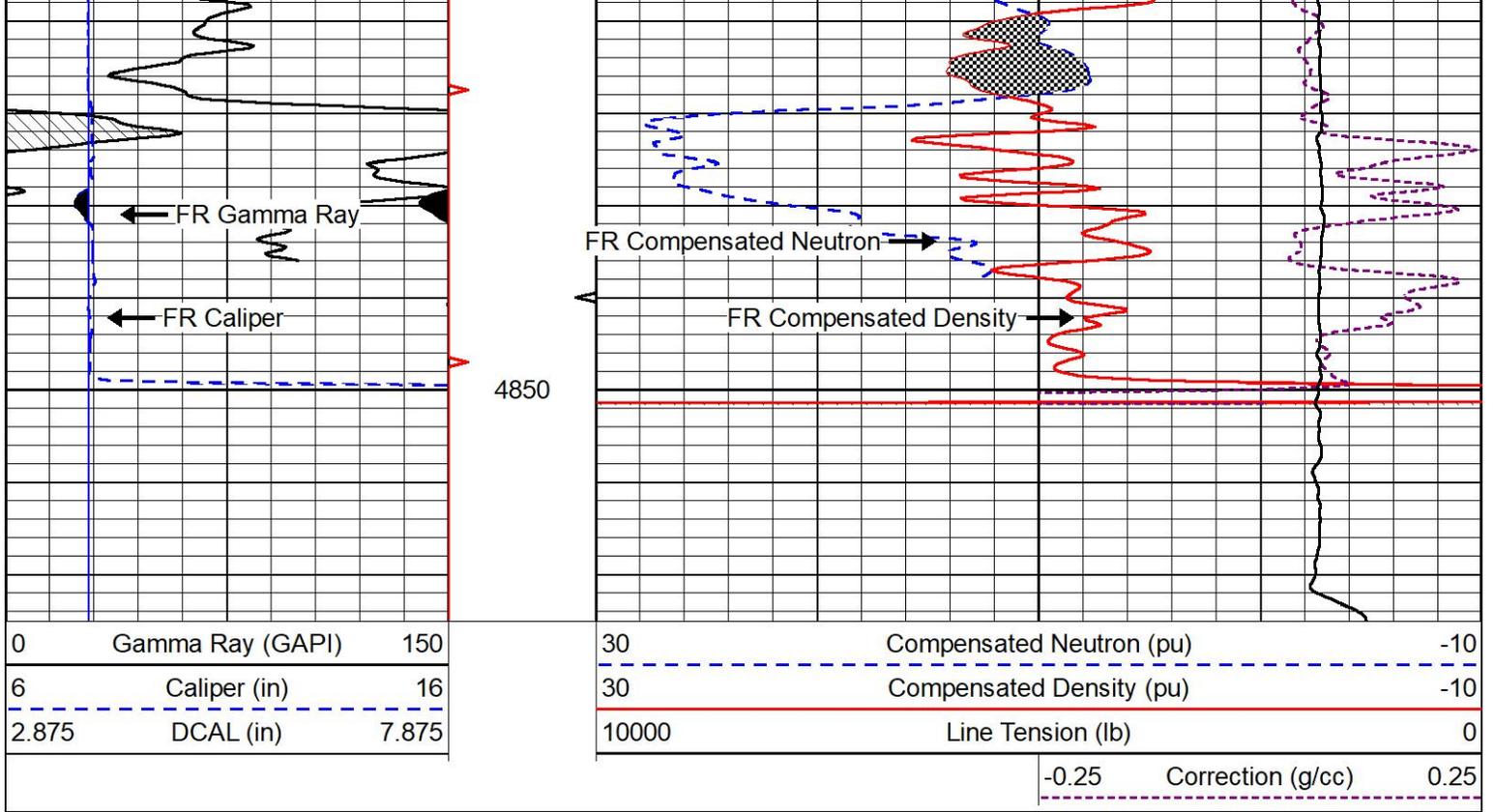








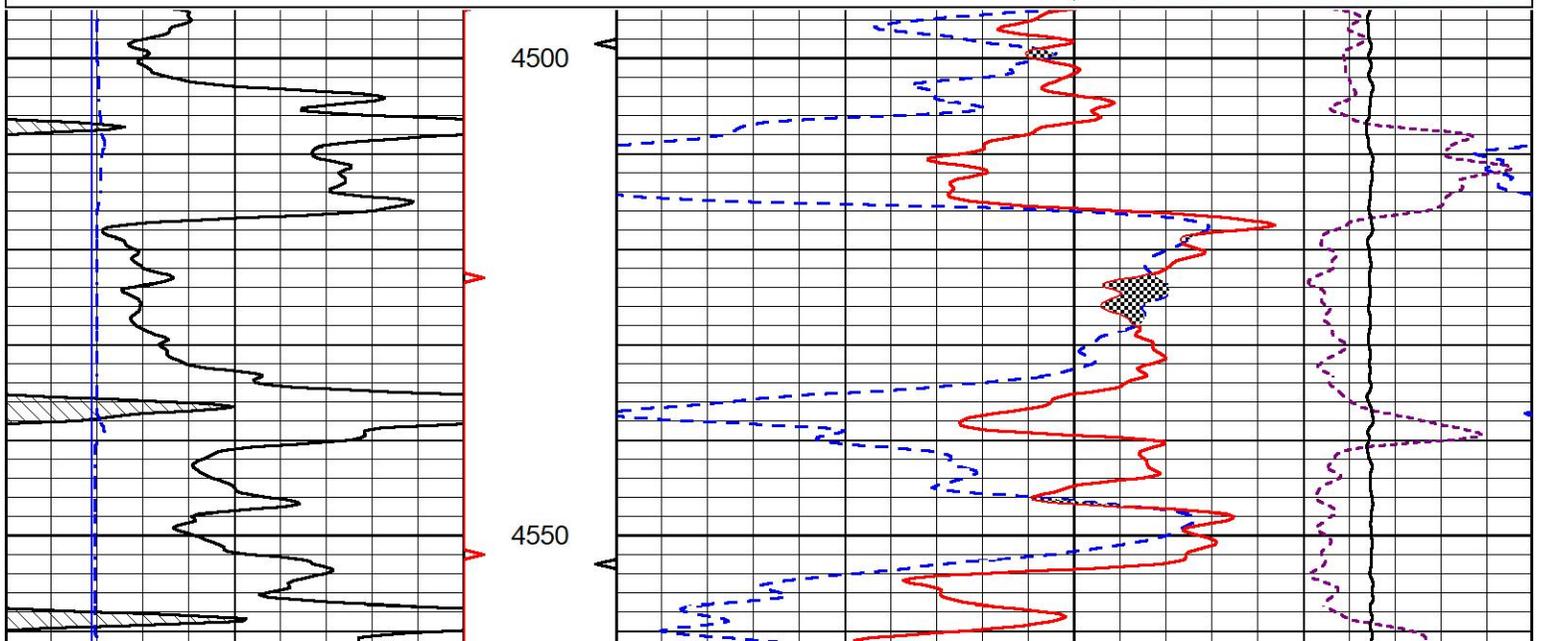
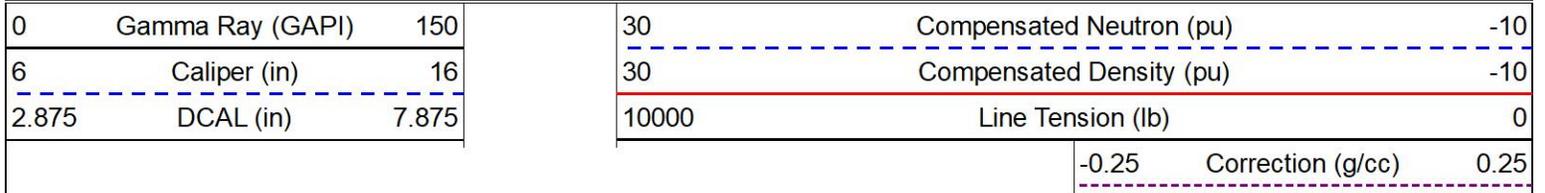


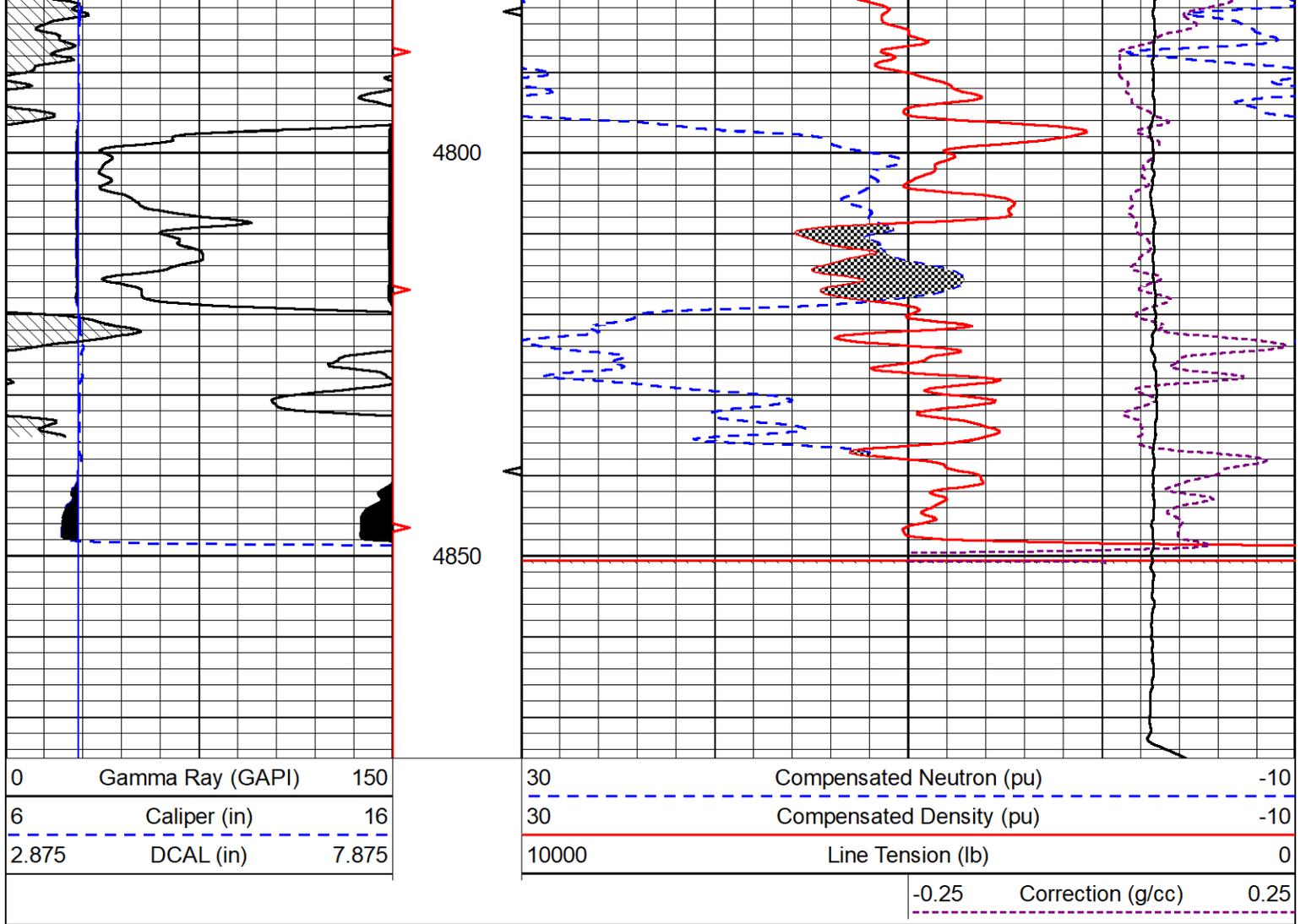


REPEAT SECTION

REPEAT PASS

Database File griffin_whitley 4.db
 Dataset Pathname stkml/pass2.1
 Presentation Format _CNDLS~1
 Dataset Creation Sun Nov 20 22:14:50 2022
 Charted by Depth in Feet scaled 1:240





Calibration Report

Database File griffin_whitley 4.db
 Dataset Pathname stkml/pass4.11
 Dataset Creation Sun Nov 20 22:33:32 2022

Dual Induction Calibration Report

Serial-Model: 502 HT-M&W
 Surface Cal Performed: Mon Nov 7 15:53:48 2022

Loop:	Readings		References		Results		
	Air	Loop	Air	Loop	m	b	
Deep	83.639	487.104	0.000	255.800	mmho/m	0.454	-31.000
Medium	113.335	1585.690	0.000	255.800	mmho/m	0.350	-11.000

Microlog Calibration Report

Serial-Model: 401-PSIML
 Performed: Mon Nov 7 15:53:59 2022

	Readings		References		Results		
	Zero	Cal	Zero	Cal	m	b	
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	11500.0000	-0.6000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	9500.0000	0.0000
Caliper	1.0052	1.0858	5.0000	16.5000	in	98.0000	93.2200

Compensated Density Calibration Report

Serial-Model: 305-24-M&W
 Source #: 20762B
 Master Calibration Performed: Mon Jun 20 16:54:11 2022

Master Calibration

	Density			Far Detector		Near Detector
Magnesium	1.755	g/cc		4771.35		5494.27 cps
Aluminum	2.650	g/cc		908.54		3539.54 cps
	Spine Angle = 75.15			Density/Spine Ratio = 0.522		
	Size			Reading		
Small Ring	4.00	in		1.74		
Large Ring	14.00	in		1.38		

Compensated Neutron Calibration Report

Serial Number: 207-MW
 Tool Model: M&W

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

PRE-SURVEY VERIFICATION

	Detector	Readings	Measured	Target
1)	Short Space	cps		
	Long Space	cps	pu	pu
2)	Short Space	cps		
	Long Space	cps	pu	
3)	Short Space	cps		
	Long Space	cps	pu	

POST-SURVEY VERIFICATION

	Detector	Readings	Measured	Target
1)	Short Space	cps		
	Long Space	cps	pu	pu
2)	Short Space	cps		
	Long Space	cps	pu	pu
3)	Short Space	cps		
	Long Space	cps	pu	pu

Gamma Ray Calibration Report

Serial Number: 106
 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



MIDWEST WIRELINE

Company	Griffin Management, LLC
Well	Whitley #4
Field	Moffett West
County	Barber
State	Kansas