



DUAL COMPENSATED POROSITY

MIDWEST WIRELINE

Company Griffin Manangement LLC
Well Hope #3X
Field Turkey Creek East
County Barber State Kansas

Location: API #: 15-007-24474-00-00

Other Services

SEC 16 TWP 30S RGE 15W
S2 SW NE NE
1120 FNL & 990 FEL

DIL/MEL

Permanent Datum Ground Level Elevation 1937
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing

K.B. 1942
D.F.
G.L. 1937

Date 6/21/2023

Run Number One

Type Log CNL/CDL

Depth Driller 4773

Depth Logger 4773

Bottom Logged Interval 4744

Top Logged Interval 2800

Type Fluid In Hole Chemical

Salinity, PPM CL 8000

Density 9.1

Level 250

Max. Rec. Temp. F 124

Operating Rig Time 3.5 Hours

Equipment -- Location P-24 Hays

Recorded By T. Martin

Witnessed By Eli Felts

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
One	17.5	00	46	13.375	54	00	46
Two	12.25	46	977	8.625	23	00	977
Three	7.875	977	TD				

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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 Blktp and SW 110, 1 E, S 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

Engineer: T. Martin
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: Eli Felts
Secondary Witness:
Secondary Witness:
Secondary Witness:

Sensor	Offset (ft)	Schematic		Description	Length (ft)	O.D. (in)	Weight (lb)				
GR	40.33			GR-M&W (105)	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			CDL-M&W (307-11)	8.50	4.00	250.00				
	28.17			ML-PSIML (401)	7.58	4.00	65.00				
	27.68										
MCAL MI MN	19.58										
	19.58										
	19.58										
RLL3F RLL3	15.50 15.50			DIL-M&W (507)	18.25	3.50	220.00				
CILD	8.33										
	4.50										
CILM	4.50										
SP	0.20										
Dataset: griffin_hope #3x.db: field/well/StkMI/pass3.1											
Total length: 42.33 ft											
Total weight: 685.00 lb											
O.D.: 4.00 in											

Log Variables

DatabaseC:\ProgramData\Warrior\Data\griffin_hope #3x.db
Dataset field/well/StkMI/pass3.1/_vars_

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in	degF	in	in	g/cc	2	g/cc
	7.875	124	5.5	0	1		2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	No	mmho/m	mmho/m	mV	degF	Off	ft
		-1	-3	470	80		4773

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



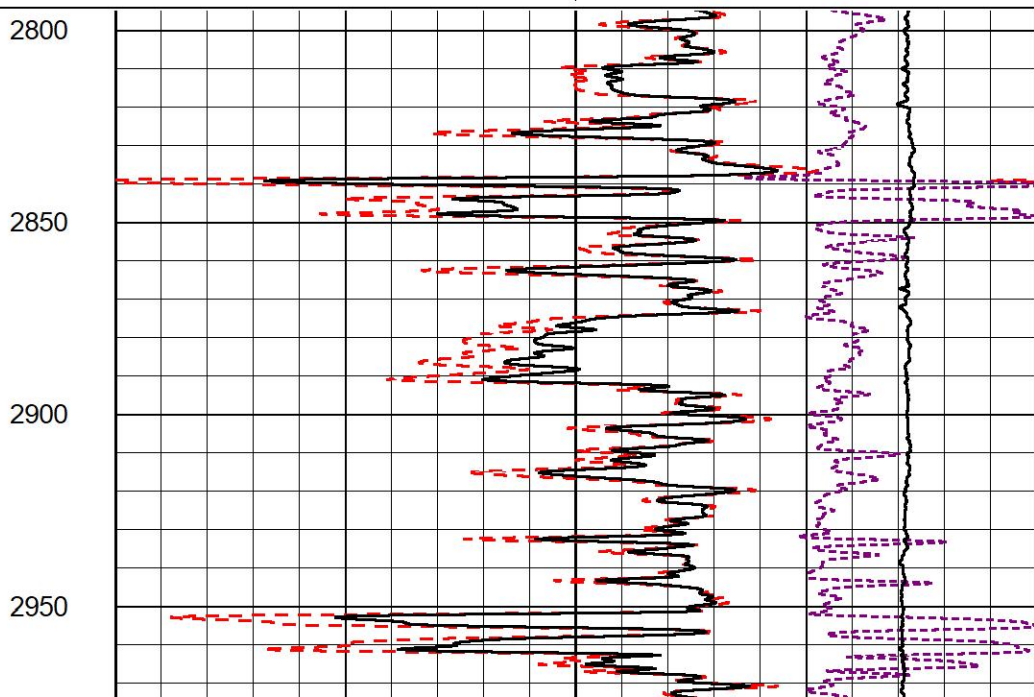
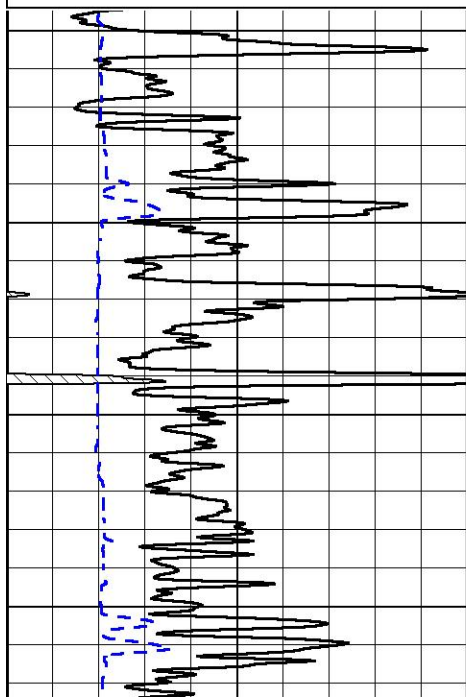
2" SCALE BULK DENSITY

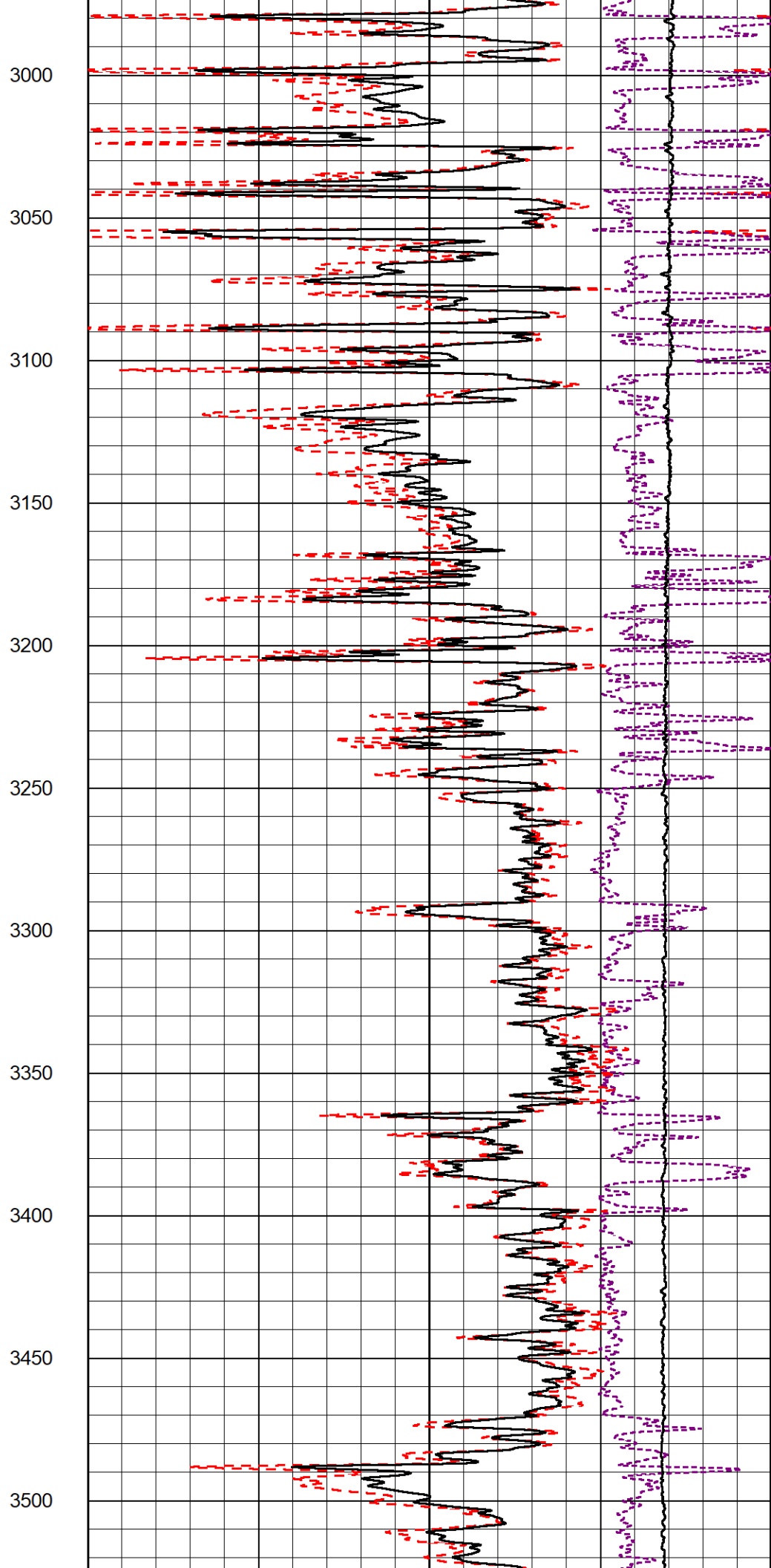
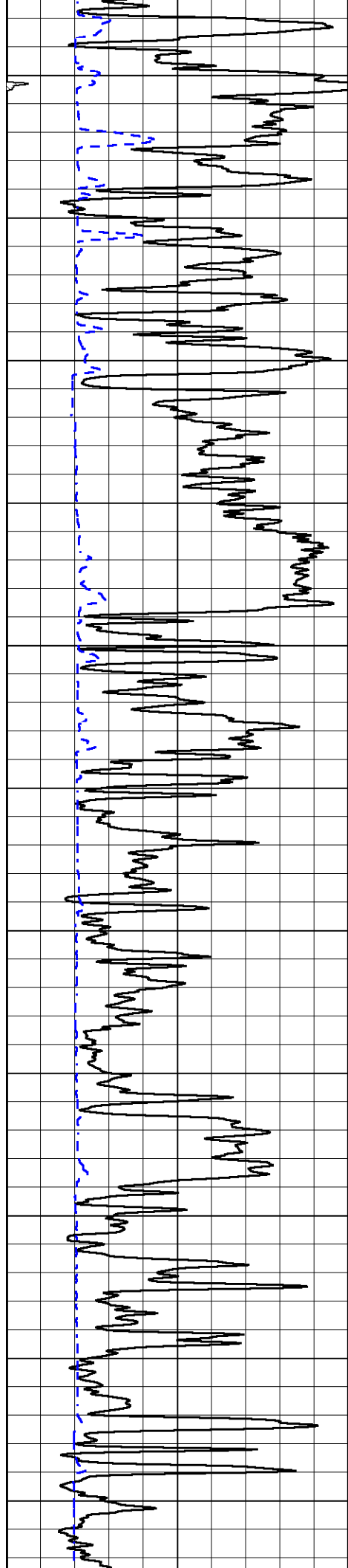
MAIN PASS

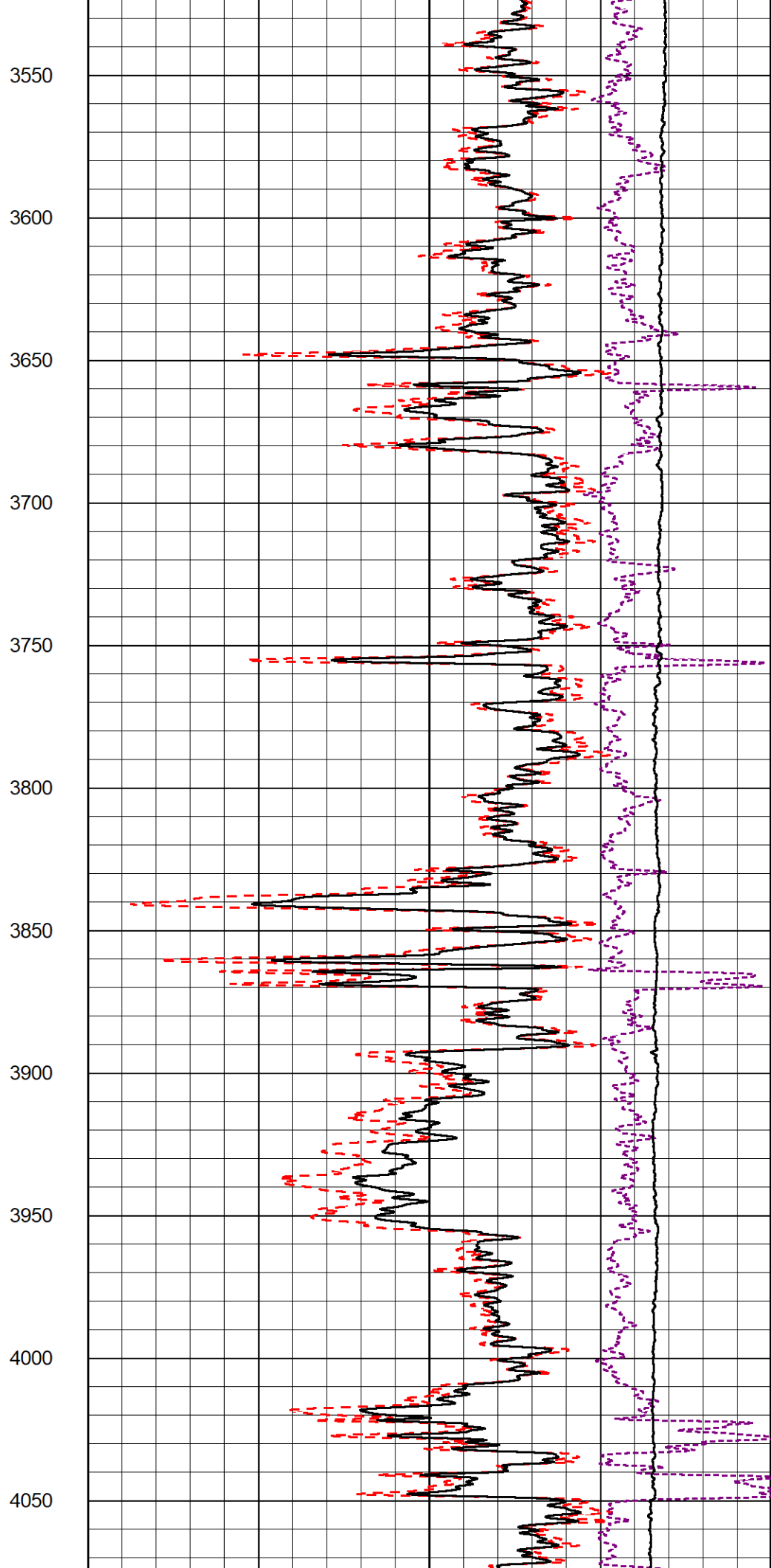
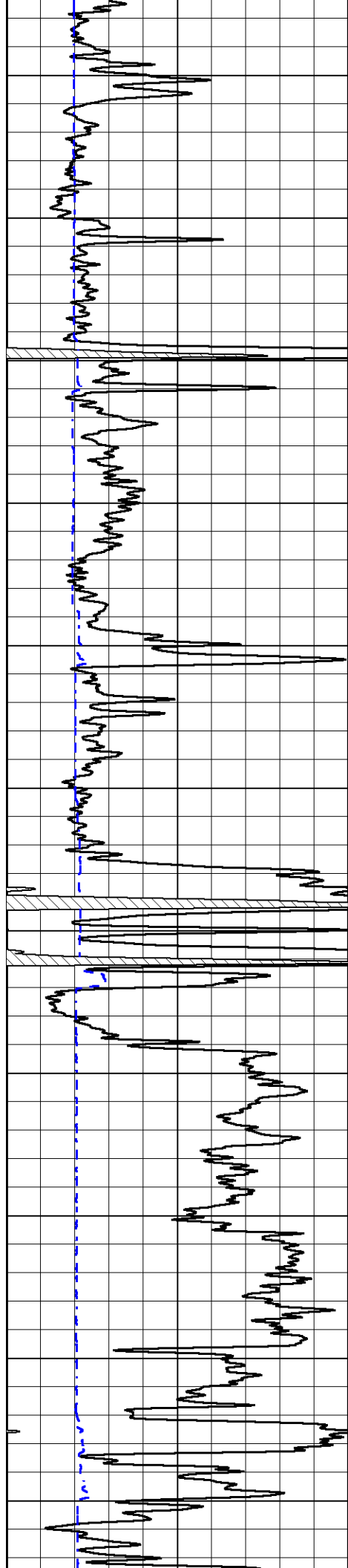
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Presentation Format _cdl
Dataset Creation Wed Jun 21 05:25:29 2023
Charted by Depth in Feet scaled 1:600

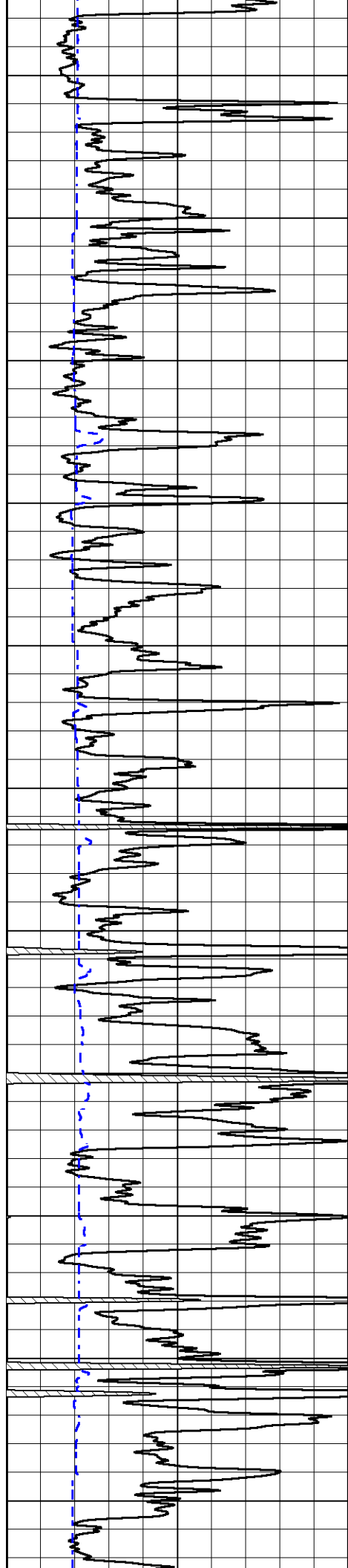
0	Gamma Ray (GAPI)	150
6	Caliper (in)	16

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









4100

4150

4200

4250

4300

4350

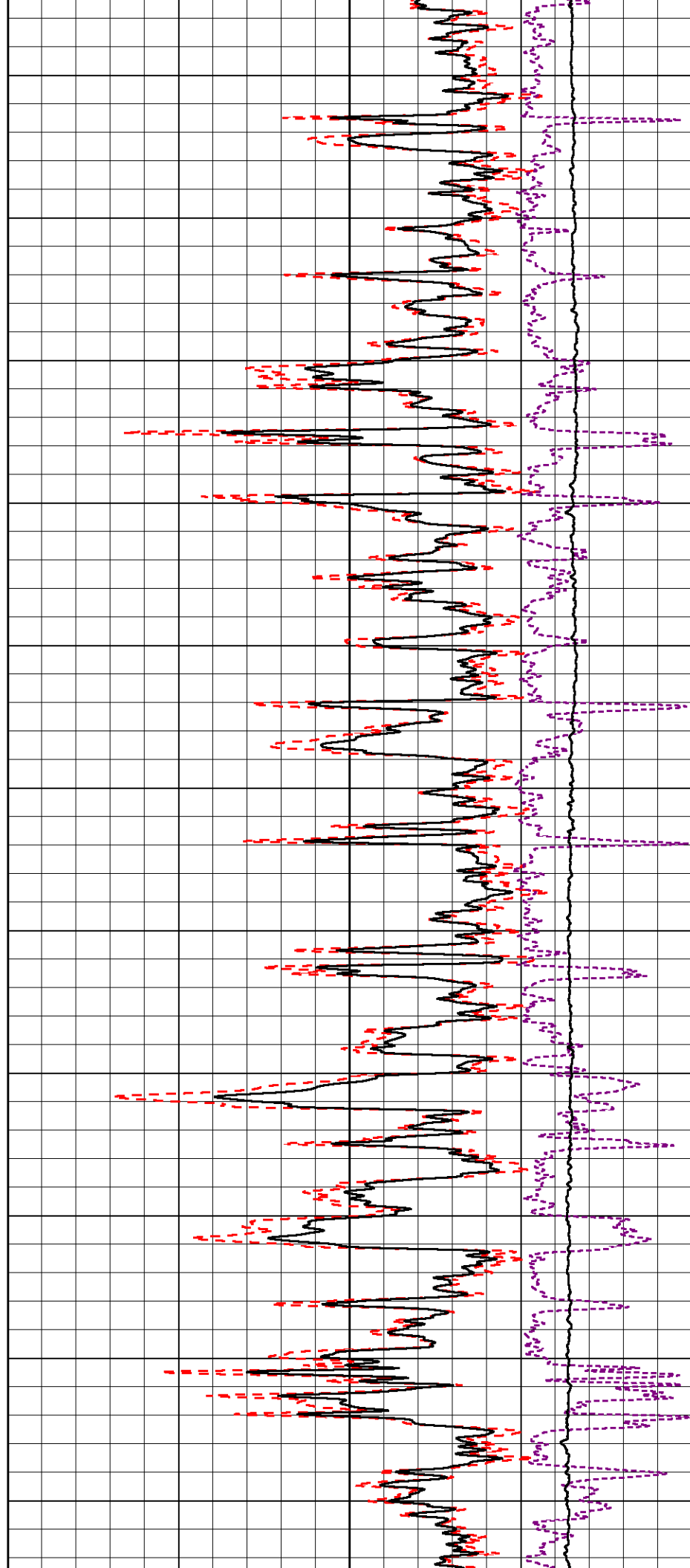
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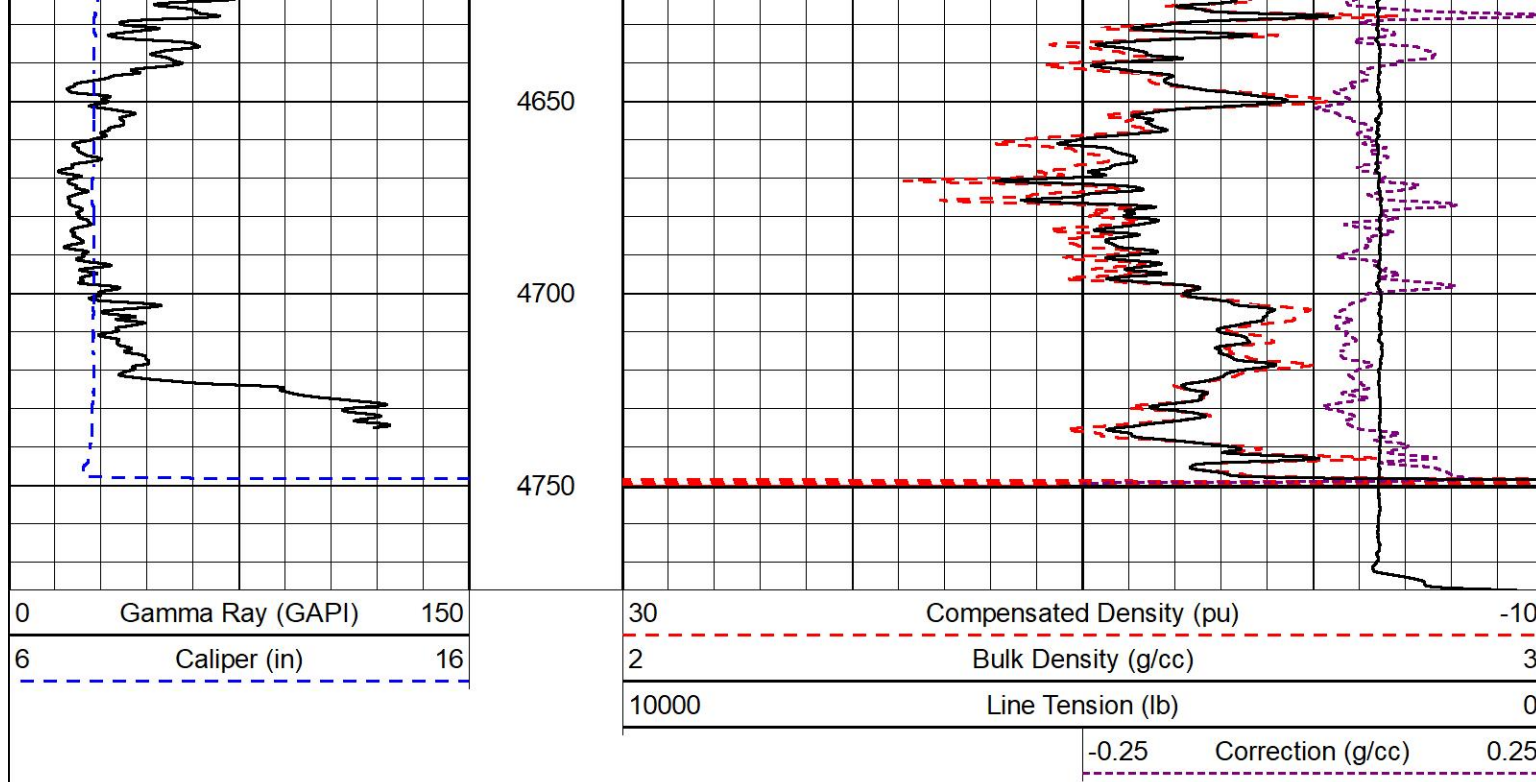
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4500

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4600



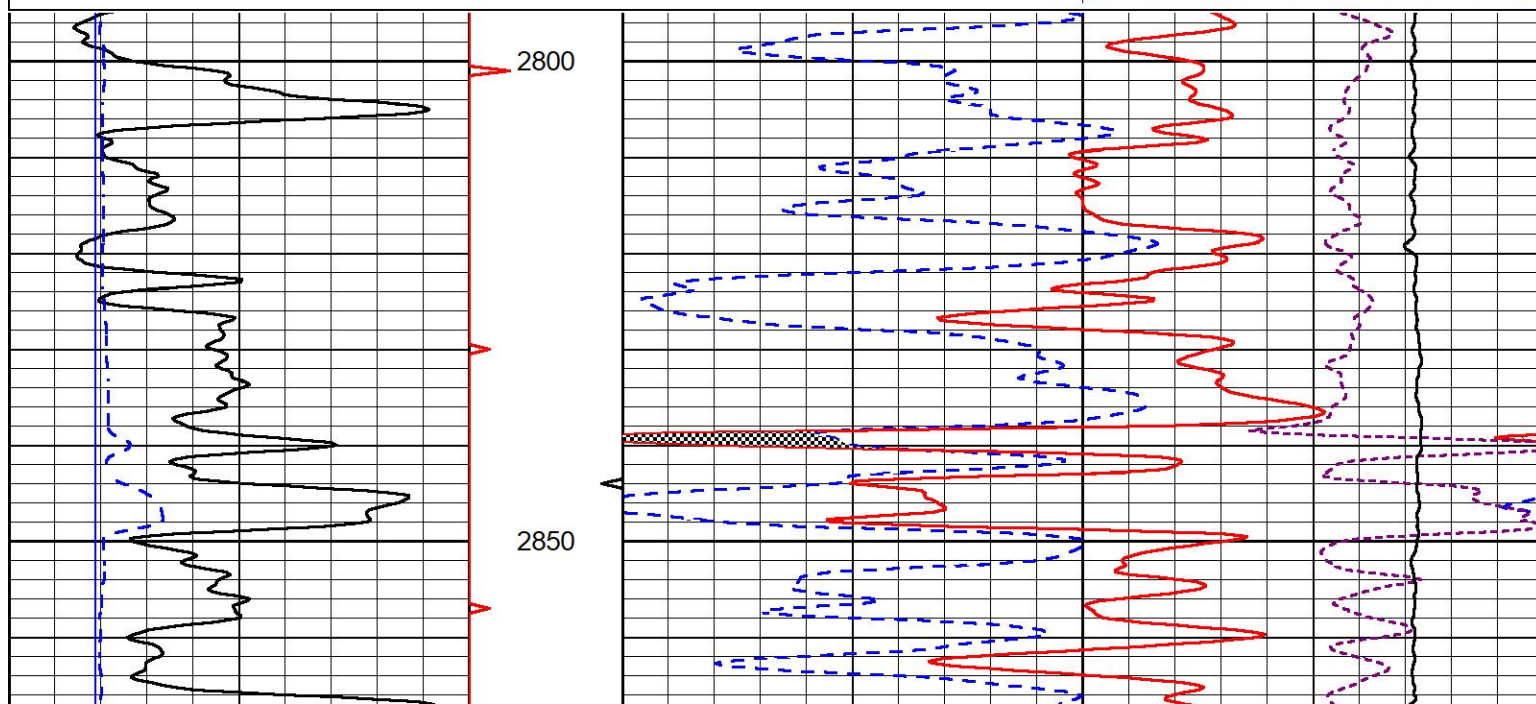
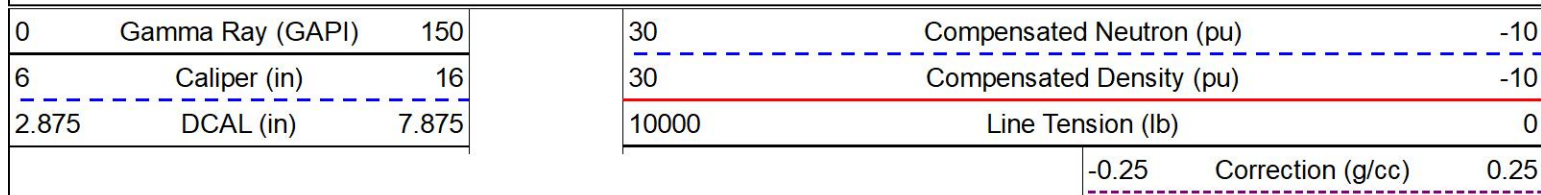


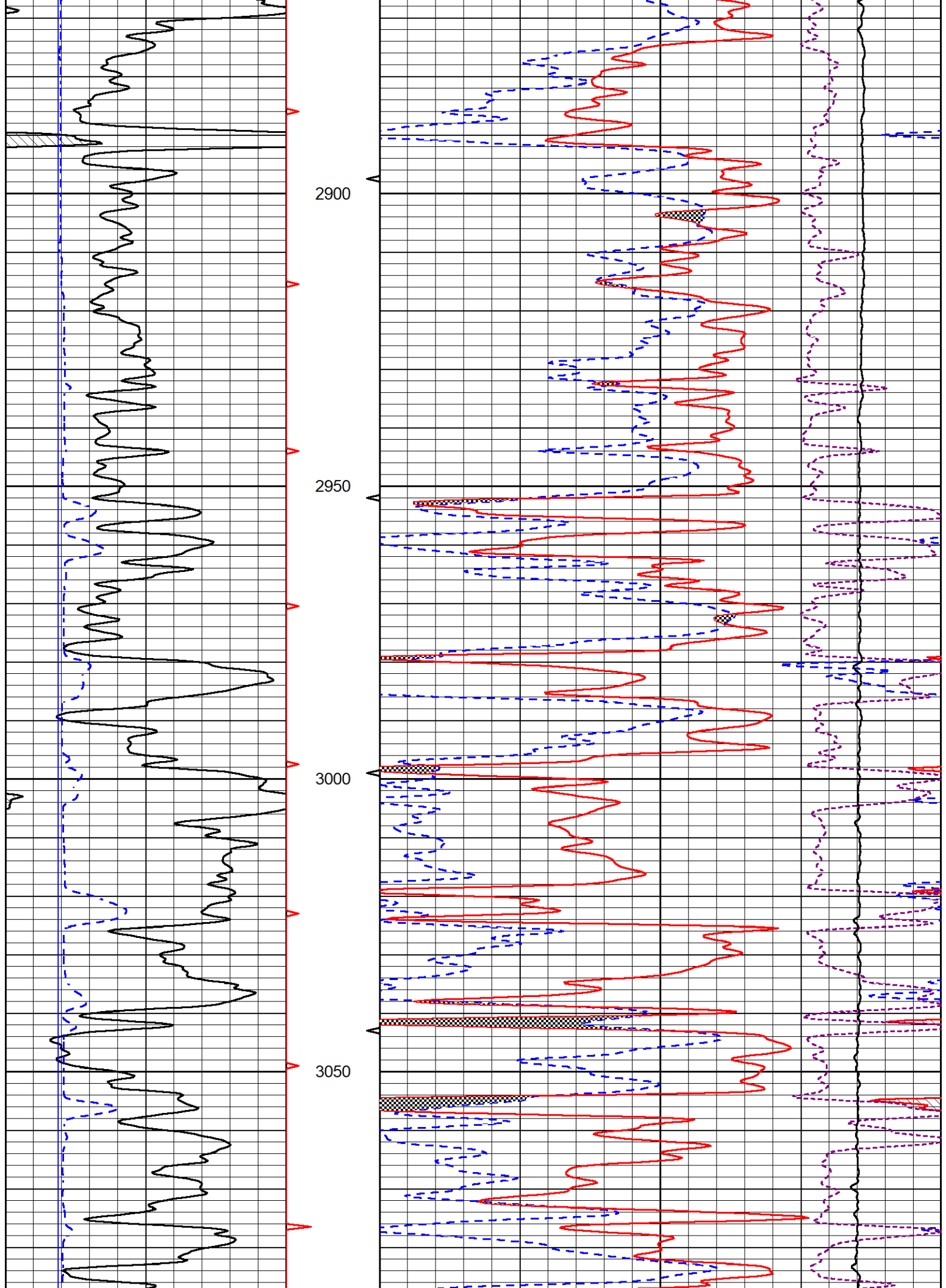
MIDWEST WIRELINE

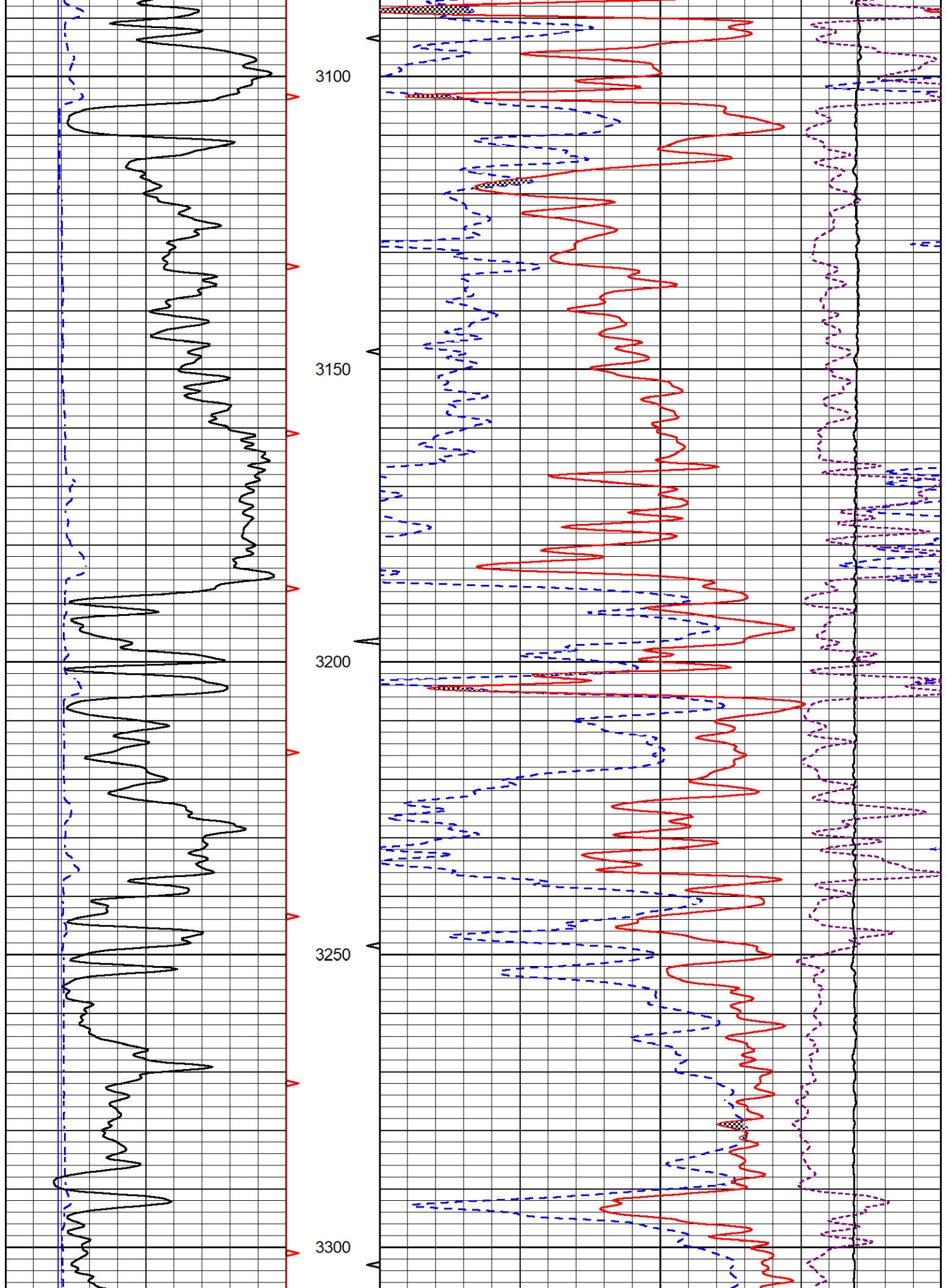
DETAIL SECTION

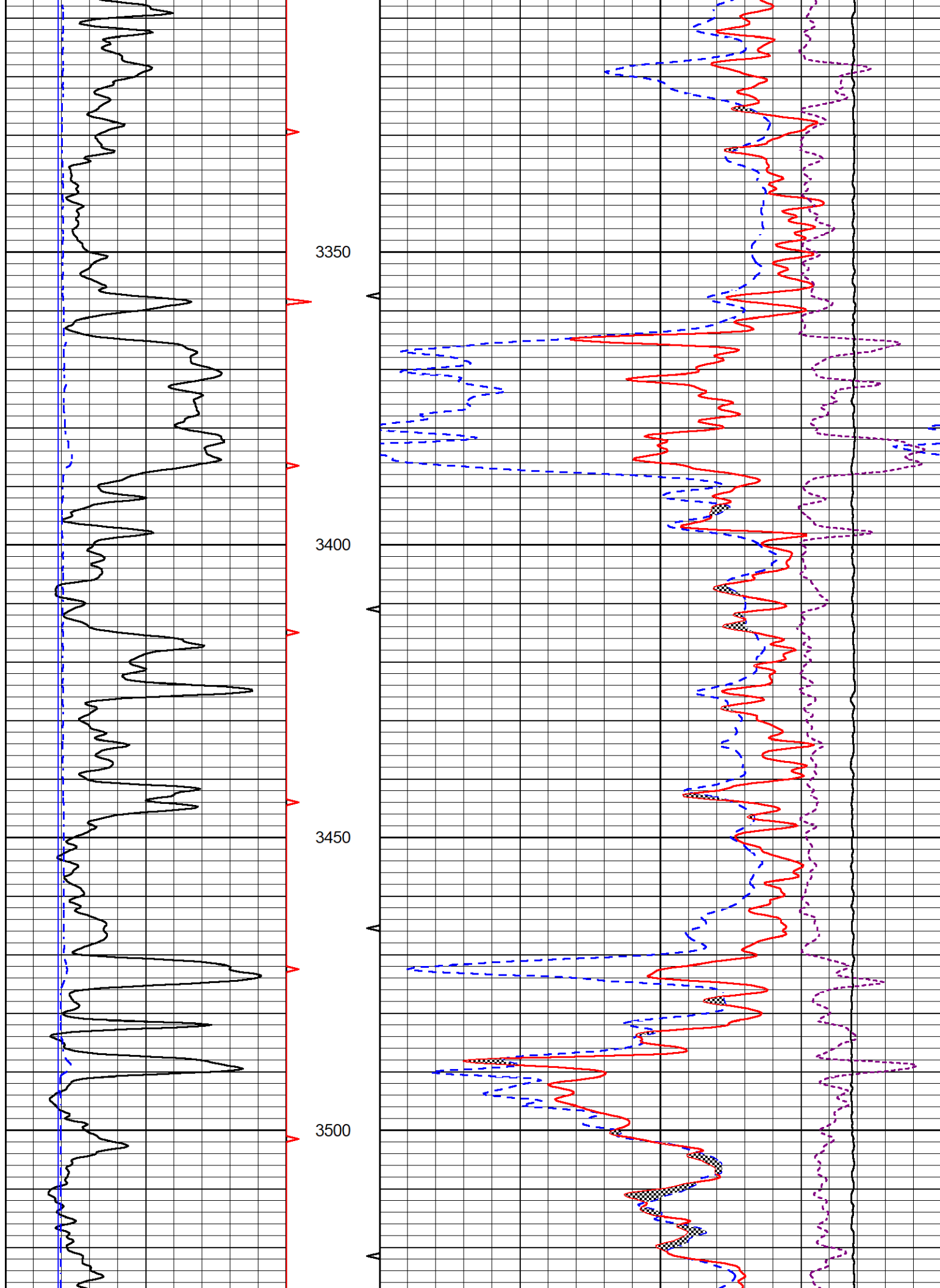
MAIN PASS

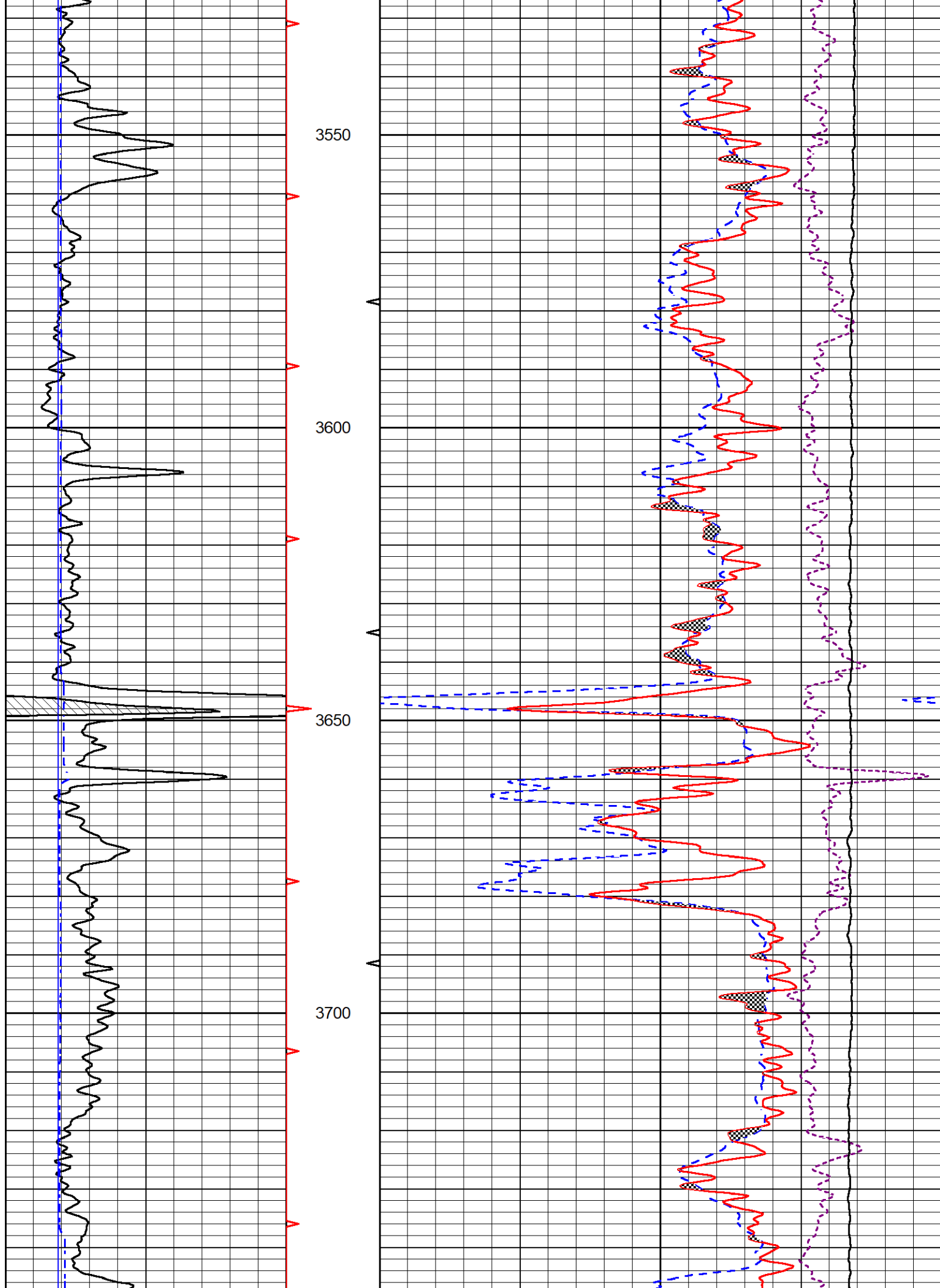
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 Charted by Depth in Feet scaled 1:240

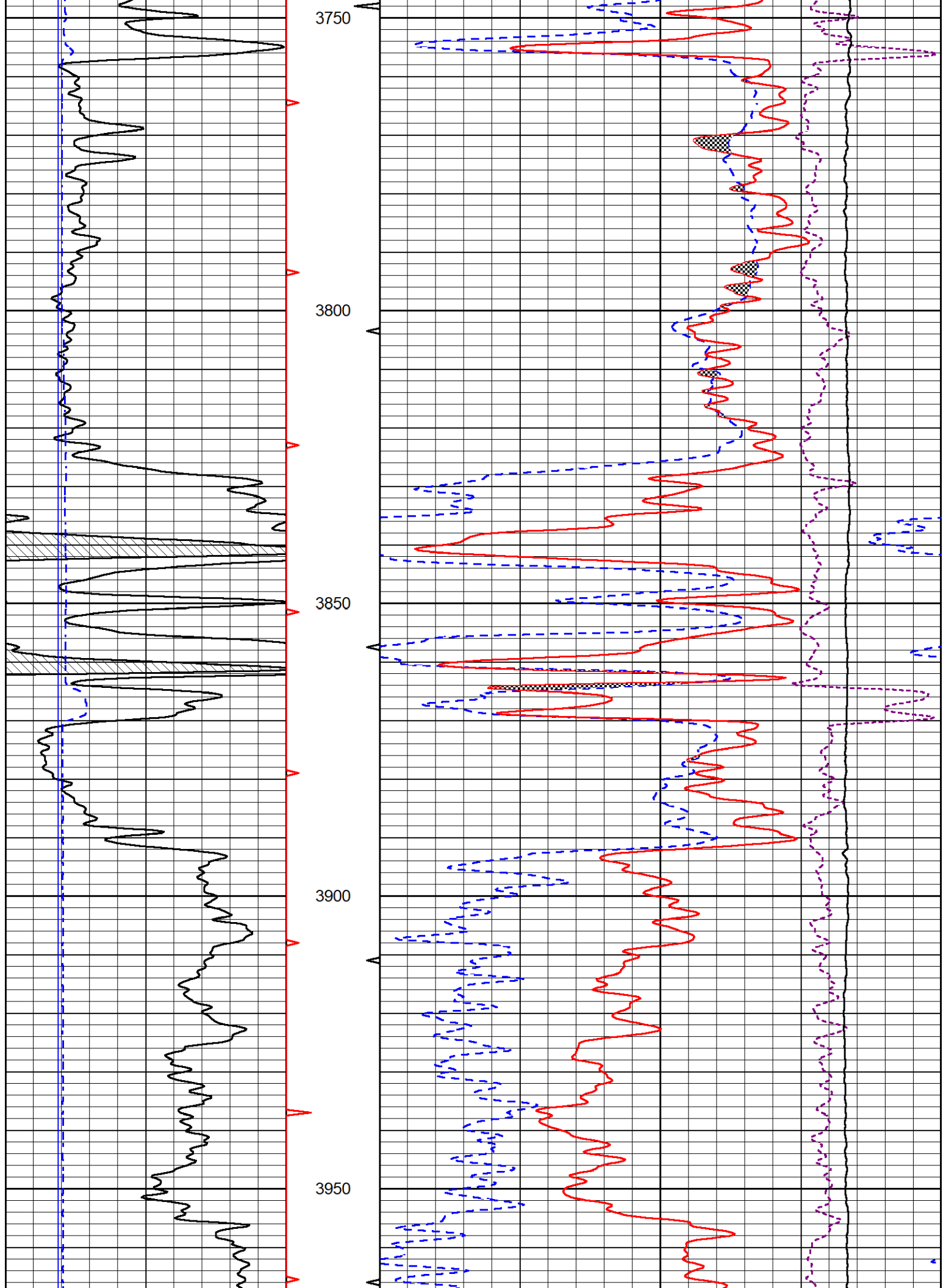


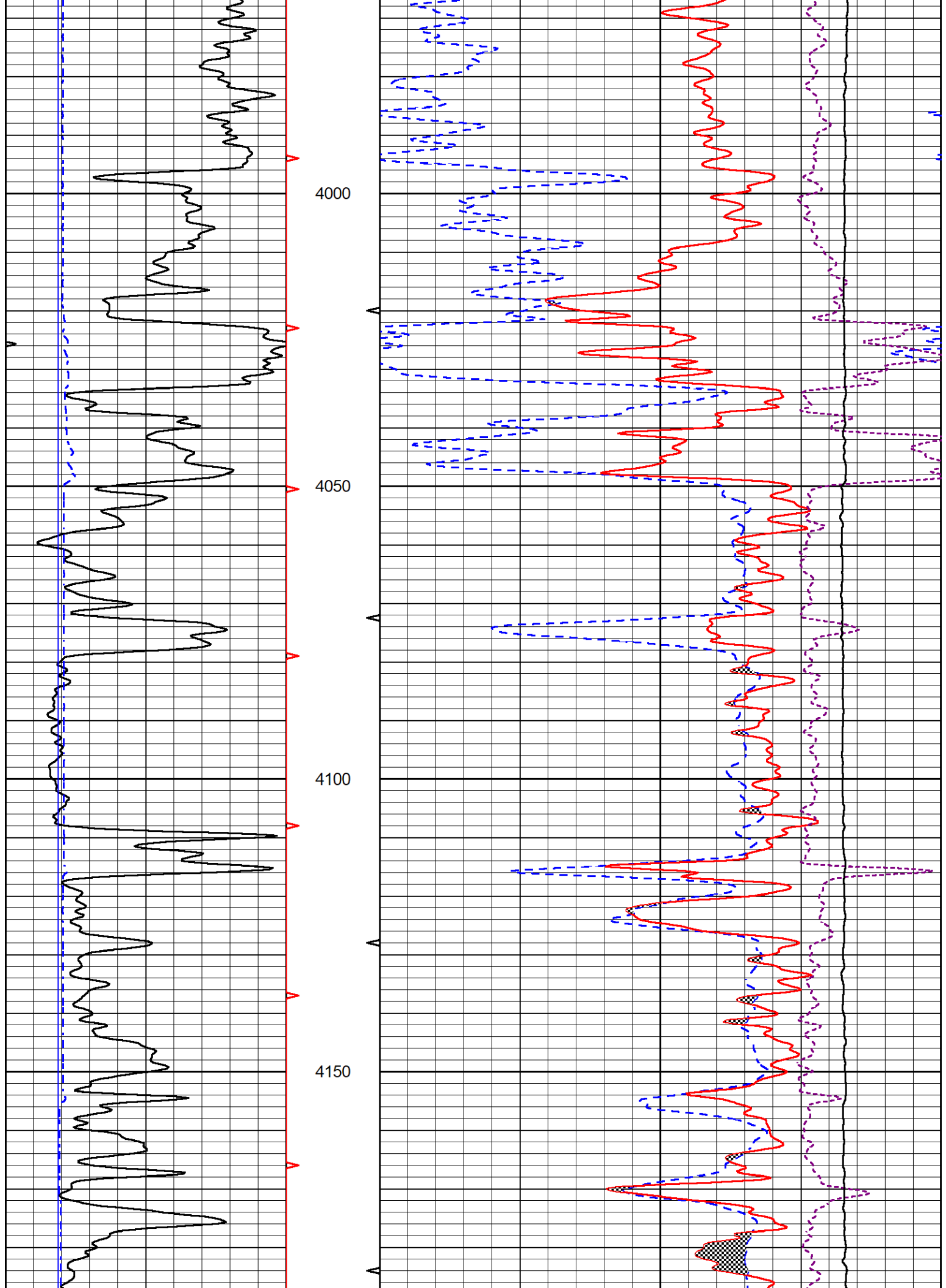


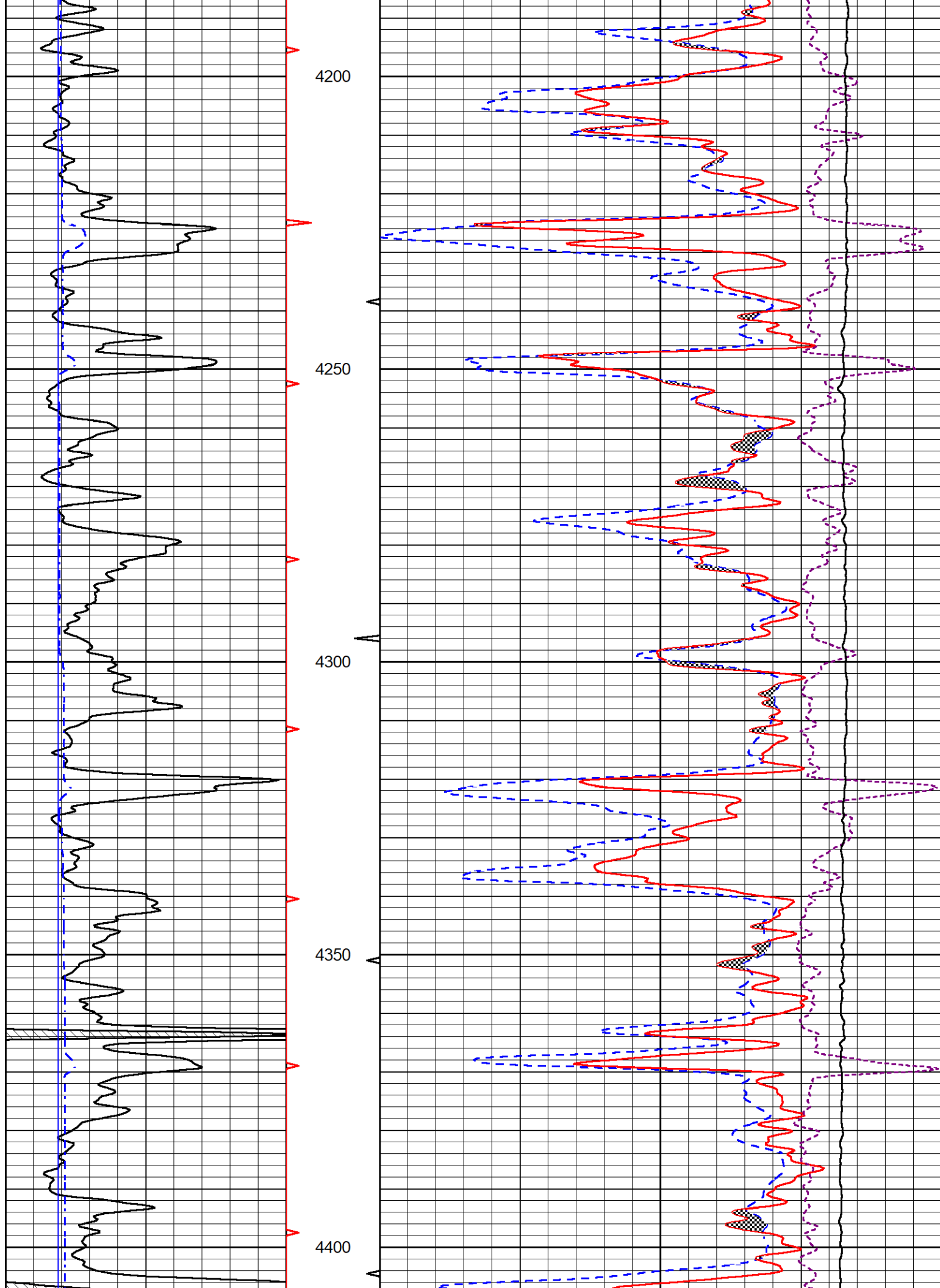


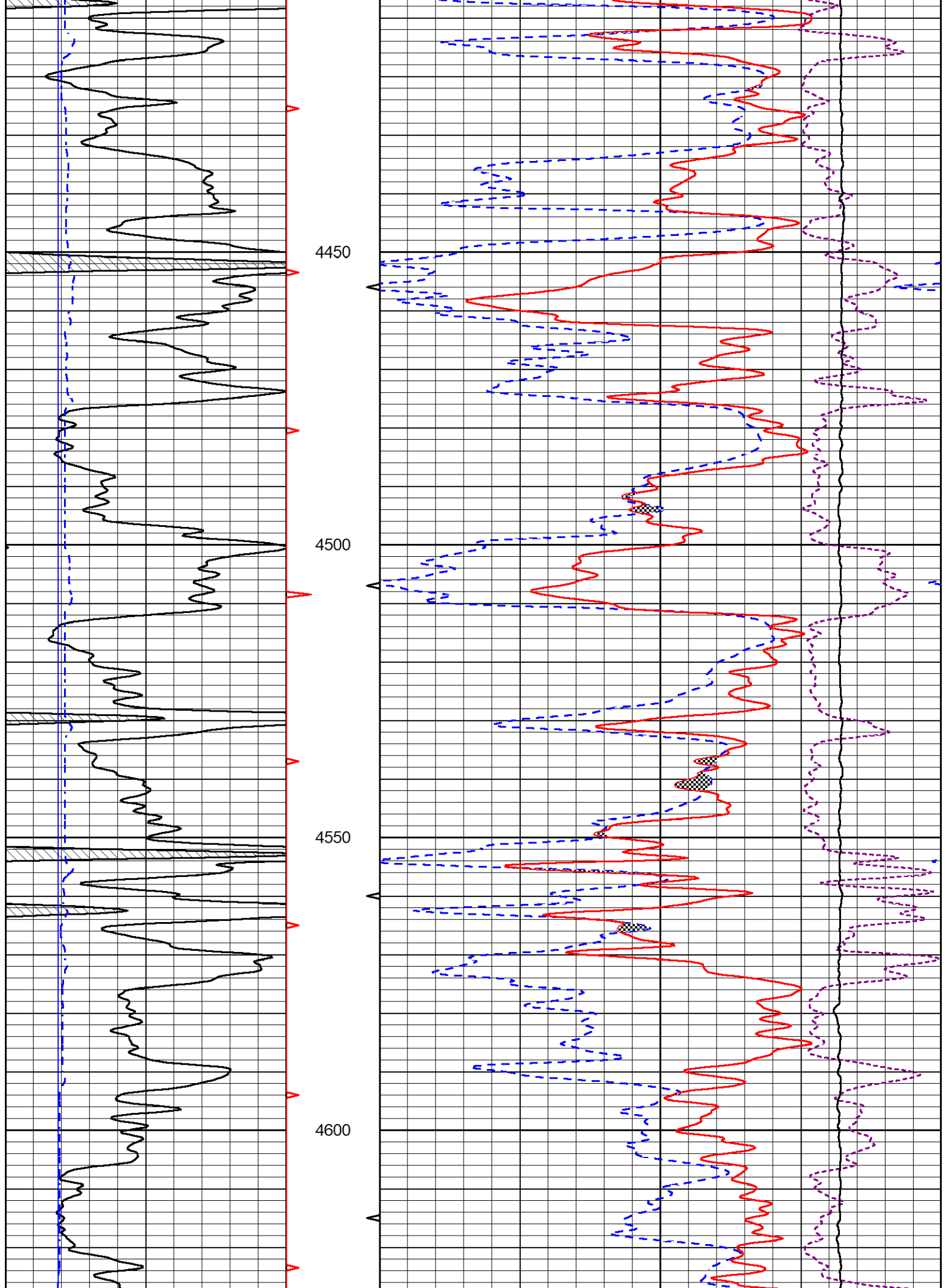


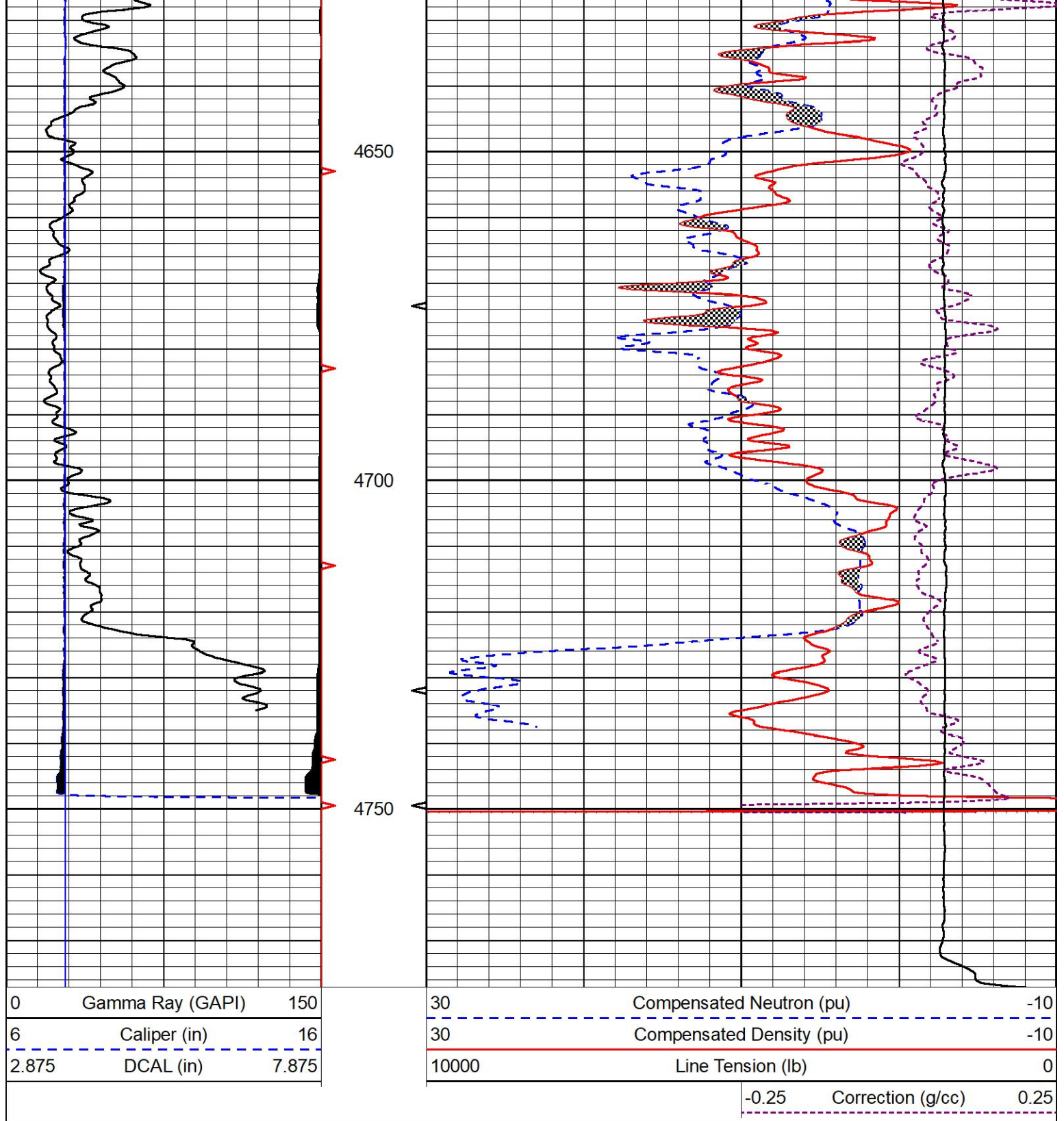












MIDWEST WIRELINE

REPEAT SECTION

REPEAT PASS

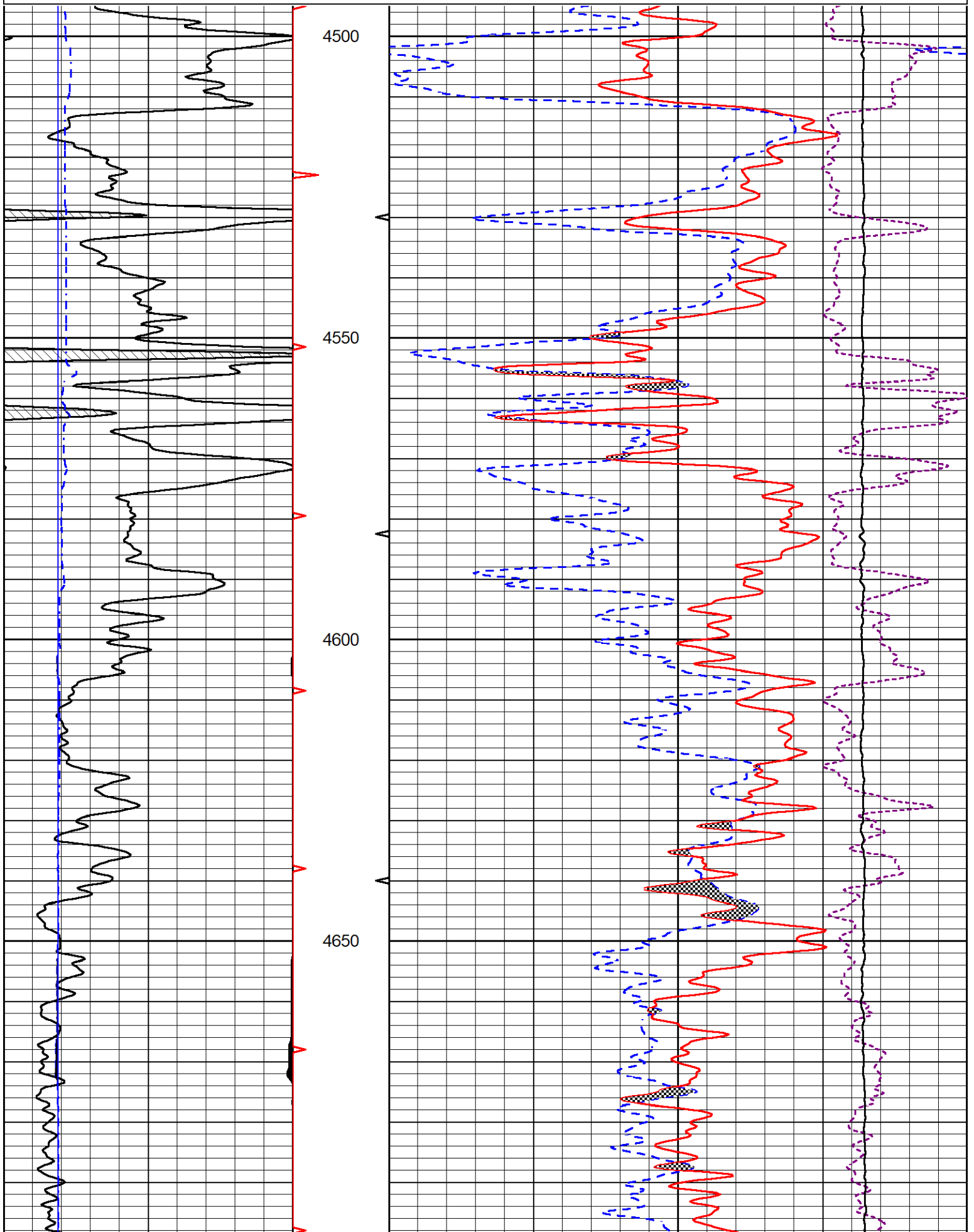
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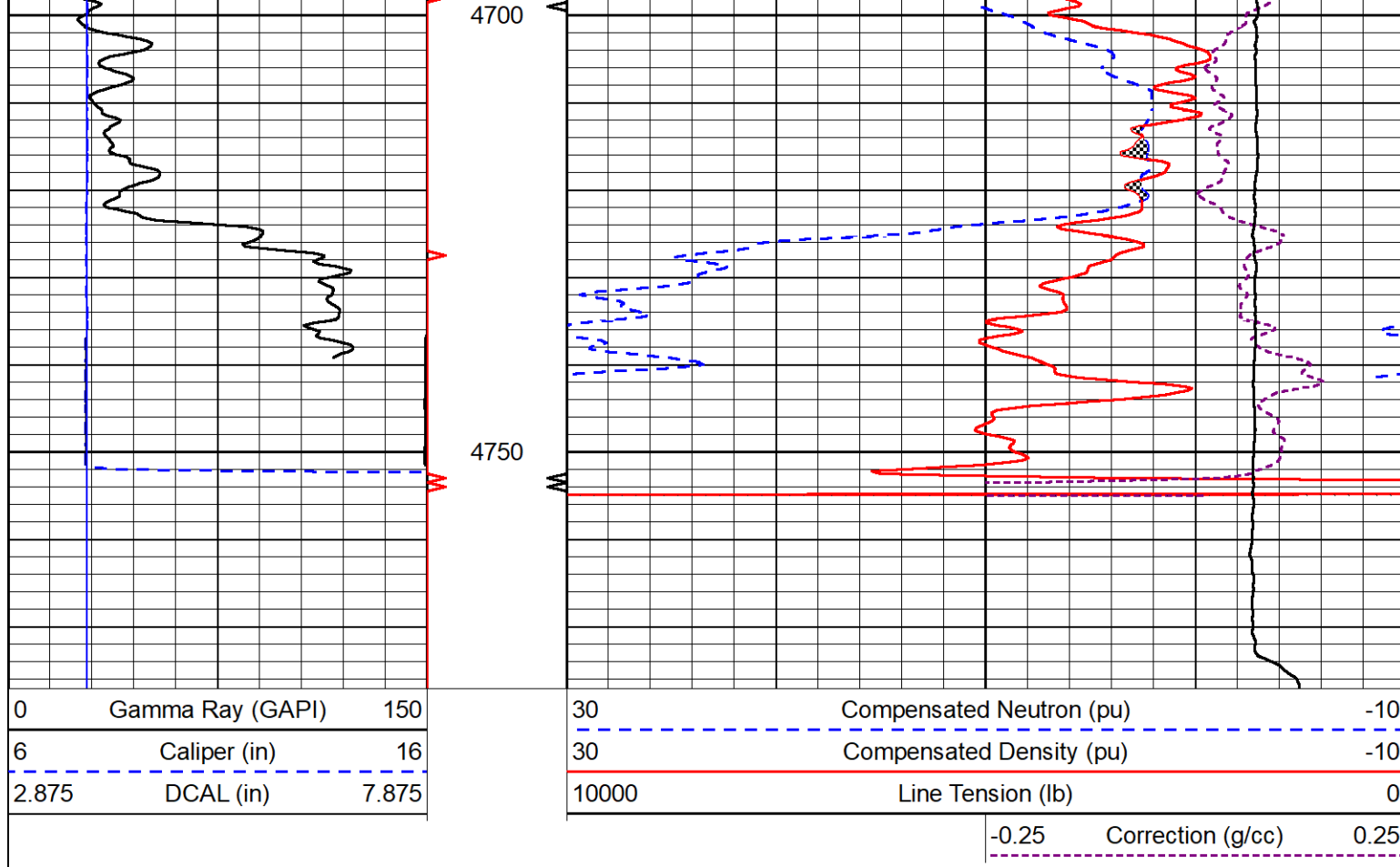


6	Caliper (in)	16
2.875	DCAL (in)	7.875

30	Compensated Density (pu)	-10
10000	Line Tension (lb)	0

-0.25	Correction (g/cc)	0.25
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Calibration Report								
Database File	griffin_hope #3x.db							
Dataset Pathname	StkMI/pass3.1							
Dataset Creation	Wed Jun 21 05:26:42 2023							
Dual Induction Calibration Report								
Serial-Model:			507-M&W					
Surface Cal Performed:								
Loop:	Readings		References			Results		
	Air	Loop	Air	Loop		m	b	
Deep	67.445	566.296	0.000	255.800	mmho/m	0.450	-30.000	
Medium	192.026	839.715	0.000	255.800	mmho/m	0.420	-84.000	
Microlog Calibration Report								
Serial-Model:			401-PSIML					
Performed:			Mon Jun 5 16:37:07 2023					
	Readings		References			Results		
	Zero	Cal	Zero	Cal		m	b	
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	15000.0000	-1.0000	
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	15000.0000	-0.7500	
Caliper	1.0052	1.0858	5.0000	16.5000	in	142.7190	-138.9500	
Compensated Density Calibration Report								
Serial-Model:			307-11-M&W					

Master Calibration

	Density		Far Detector		Near Detector	
Magnesium	1.755	g/cc	3689.70		4749.82	cps
Aluminum	2.590	g/cc	822.19		3221.38	cps
Spine Angle = 75.50			Density/Spine Ratio = 0.538			
	Size		Reading			
Small Ring	6.00	in	1.16			
Large Ring	18.00	in	1.01			

Before Survey Verification

Target	Measured
g/cc	g/cc
g/cc	g/cc
g/cc	g/cc

After Survey Verification

Target	Measured
g/cc	g/cc
g/cc	g/cc
g/cc	g/cc

Compensated Neutron Calibration Report

Serial Number:
Tool Model:

207-MW
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 Long Space	cps cps	pu	pu
Gamma Ray Calibration Report				
Serial Number:		105		
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 Manangement LLC
	Well	Hope #3X
	Field	Turkey Creek East
	County	Barber
	State	Kansas