MIDWEST WIRELINE

DUAL COMP POROSITY LOG

Company Griffin Management LLC
Well Kamber #1
Field Lion West
County Pratt
State Kansas

Location: API # : 15-151-22564-00-00
NW SW SE NE
2169 FNL & 1264 FEL
SEC 30 TWP 27S RGE 11W

Other Services
DIL/MEL

Elevation
K.B. 1762
D.F.
G.L. 1757

Permanent Datum Ground Level Elevation 1757
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing

Company	Griffin Management LLC
Well	Kamber #1
Field	Lion West
County	Pratt
State	Kansas
Date	3/7/2023
Run Number	One
Type Log	CNL/CDL
Depth Driller	4485
Depth Logger	4486
Bottom Logged Interval	4457
Top Logged Interval	1800
Type Fluid In Hole	Chemical
Salinity, PPM CL	5000
Density	9.4
Level	Full
Max. Rec. Temp. F	121
Operating Rig Time	2.5 Hours
Equipment -- Location	P-24 | Hays
Recorded By	T. Martin
Witnessed By	Eli Felts

Borehole Record

Run No.	Bit	From	To
One	12.25	00	260
Two	7.875	260	TD

Casing Record

Size	Wgt.	From	To
8.625	23	00	260

<<< Fold Here >>>

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.

Pratt, KS, 8.5 E to 100th Ave,
1 N, W at CG, NW to locatoin

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: T. Martin	Primary Witness: Eli Felts
Operator:	Secondary Witness:
Operator:	Secondary Witness:
Operator:	Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb

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	37.23		CNT-M&W (207-MW)	5.00	3.50	100.00
CNSSC	36.48					
			CDL-M&W (307-08)	8.50	4.00	250.00
LSD	28.18					
DCAL	28.17					
SSD	27.68					
			ML-PSIML (401)	7.58	4.00	65.00
MCAL	19.58					
MI	19.58					
MN	19.58					
RLL3F	15.50					
RLL3	15.50					
			DIL-M&W (501 HT)	18.25	3.50	220.00
CILD	8.33					
CILM	4.50					
SP	0.20					

Dataset:	griffin_kamber #1.db: field/well/StkMl/pass3.1
Total length:	42.33 ft
Total weight:	685.00 lb
O.D.:	4.00 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\griffin_kamber #1.db
Dataset field/well/StkMl/pass3.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	121	5.5	0	1	2	2.71

NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	No	0	0	30	40	Off	4486

Variable Description

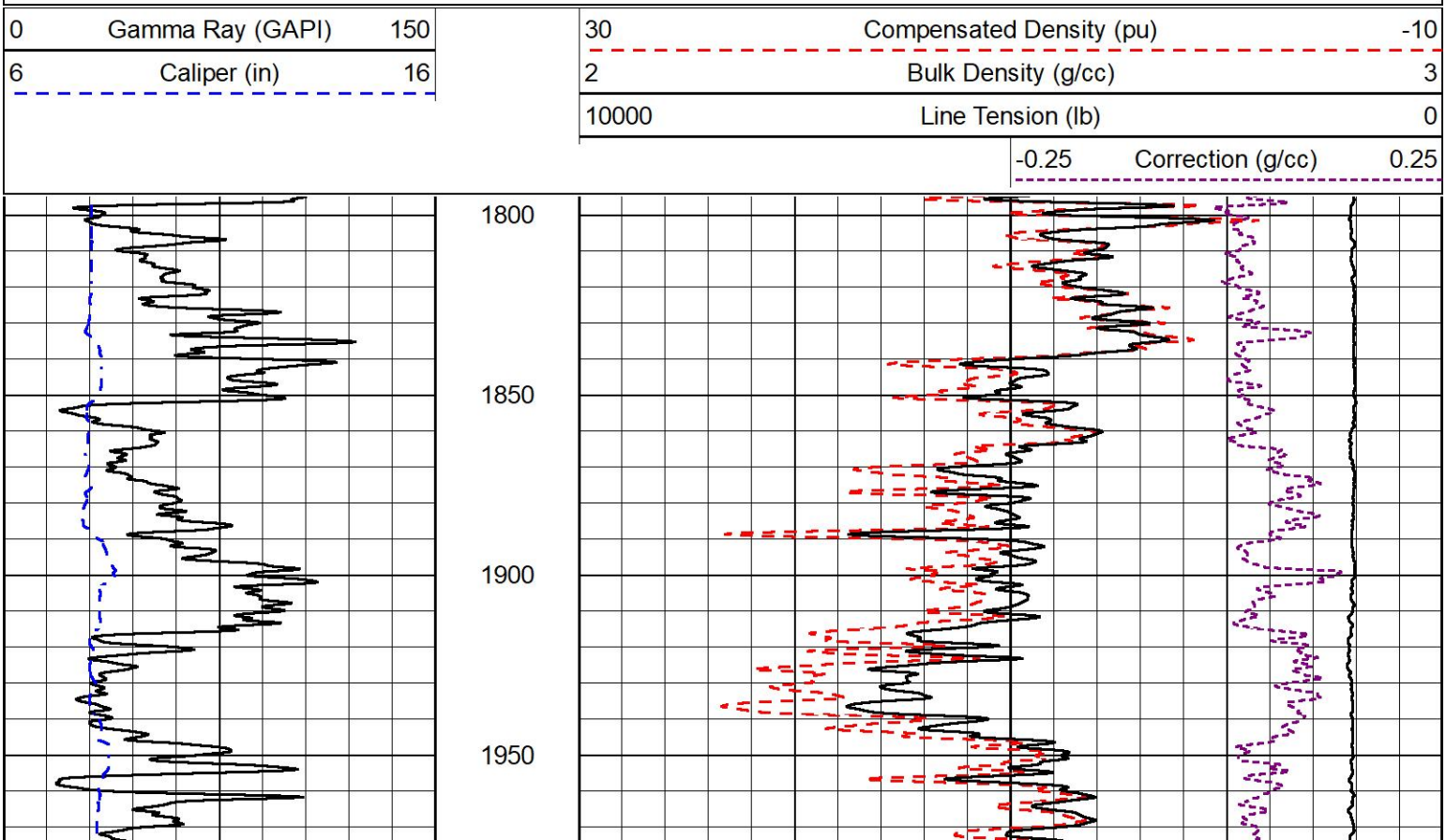
A : Cement Factor (a)
BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
FLUIDDEN : Fluid Density
M : Cement Exp (m)
MATRXDEN : Matrix Density
NPORSEL : Neutron Porosity Curve Select
PERFS : Perforation Flag
SNDERR : Deep Sonde Error Correction
SNDERRM : Medium Sonde Error Correction
SPSHIFT : S.P. Baseline Offset
SRFTEMP : Surface Temperature
SZCOR : CN Size Cor. ?
TDEPTH : Total Depth

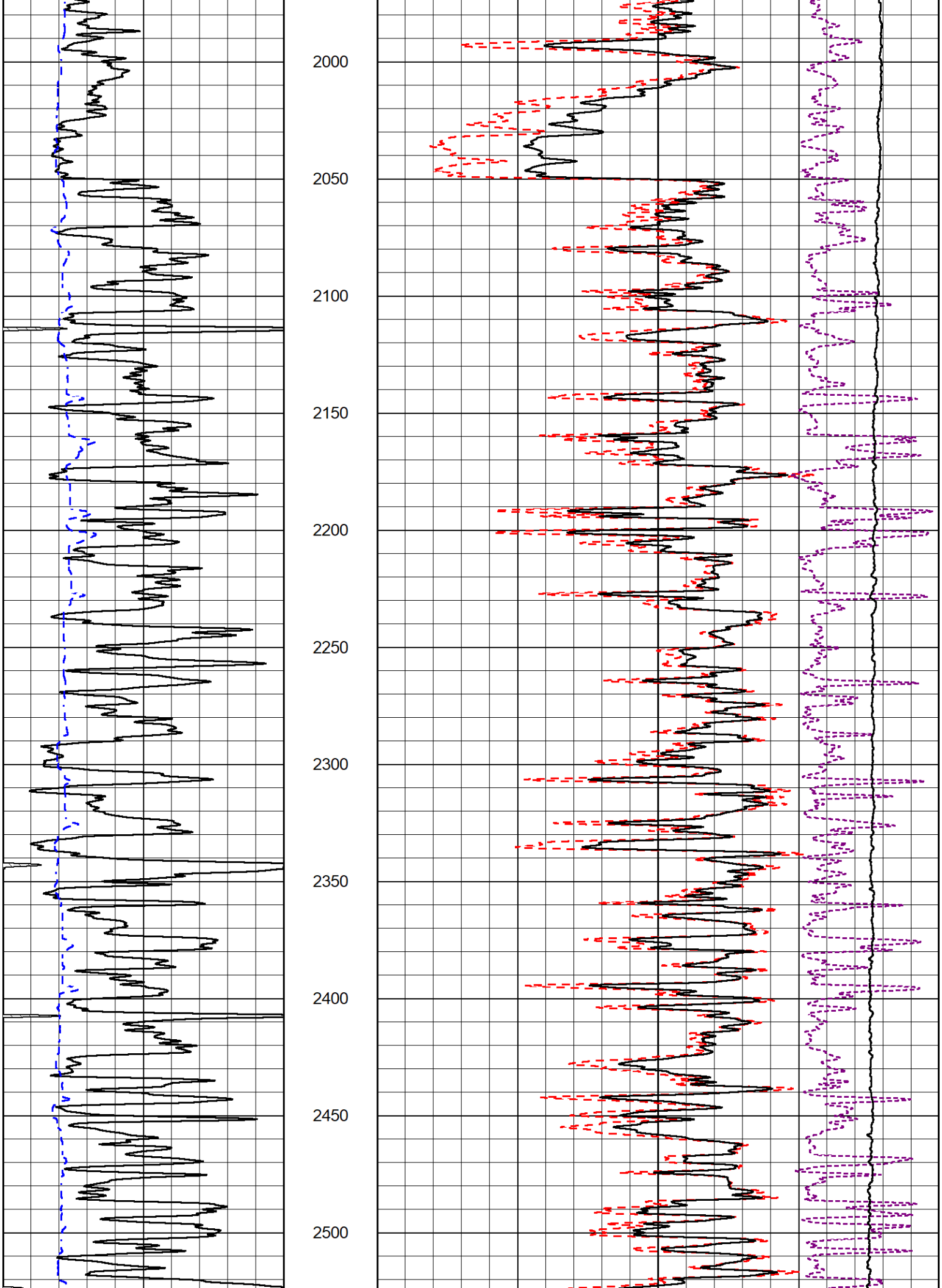
MIDWEST WIRELINE

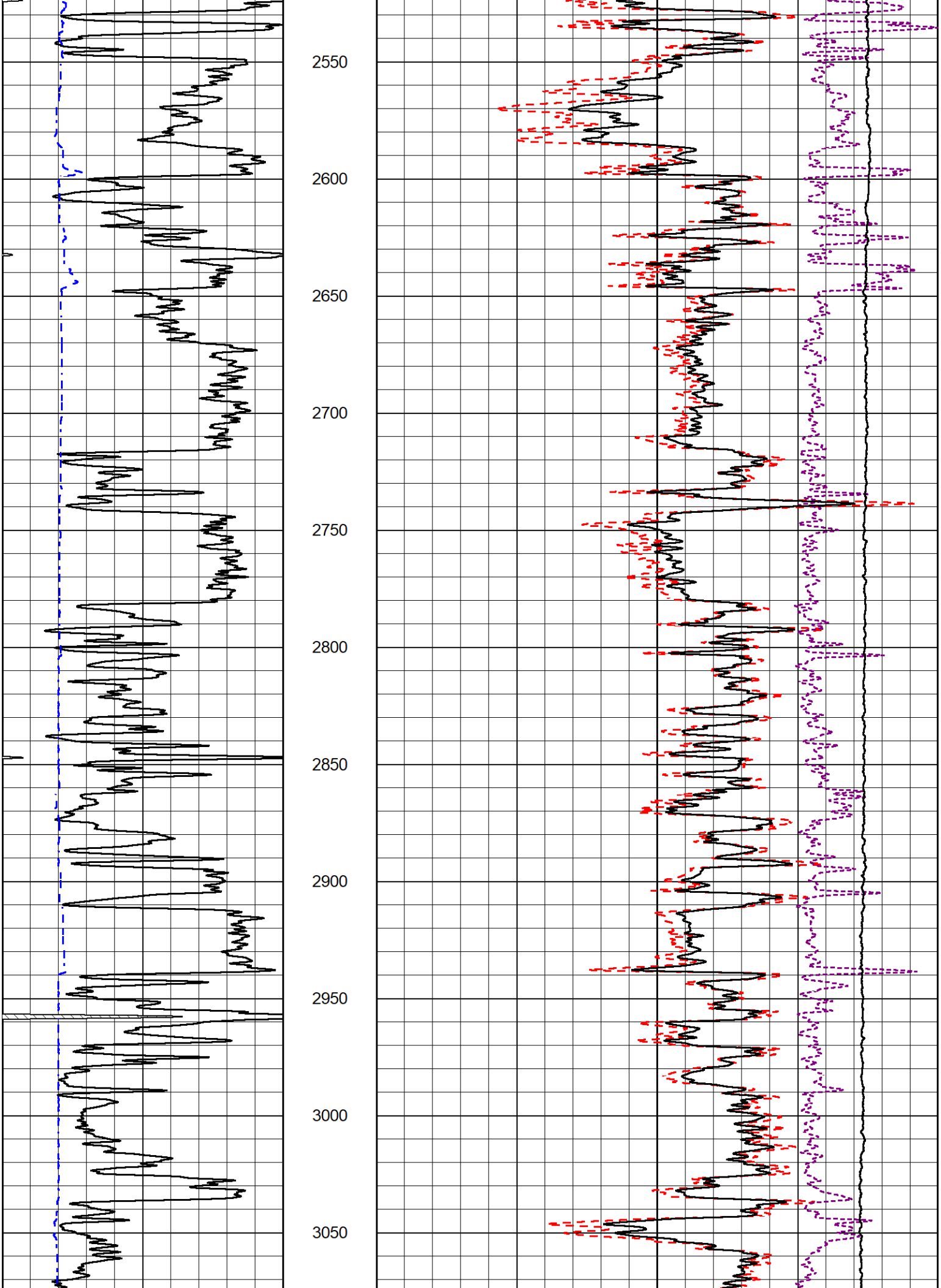
2" SCALE BULK DENSITY

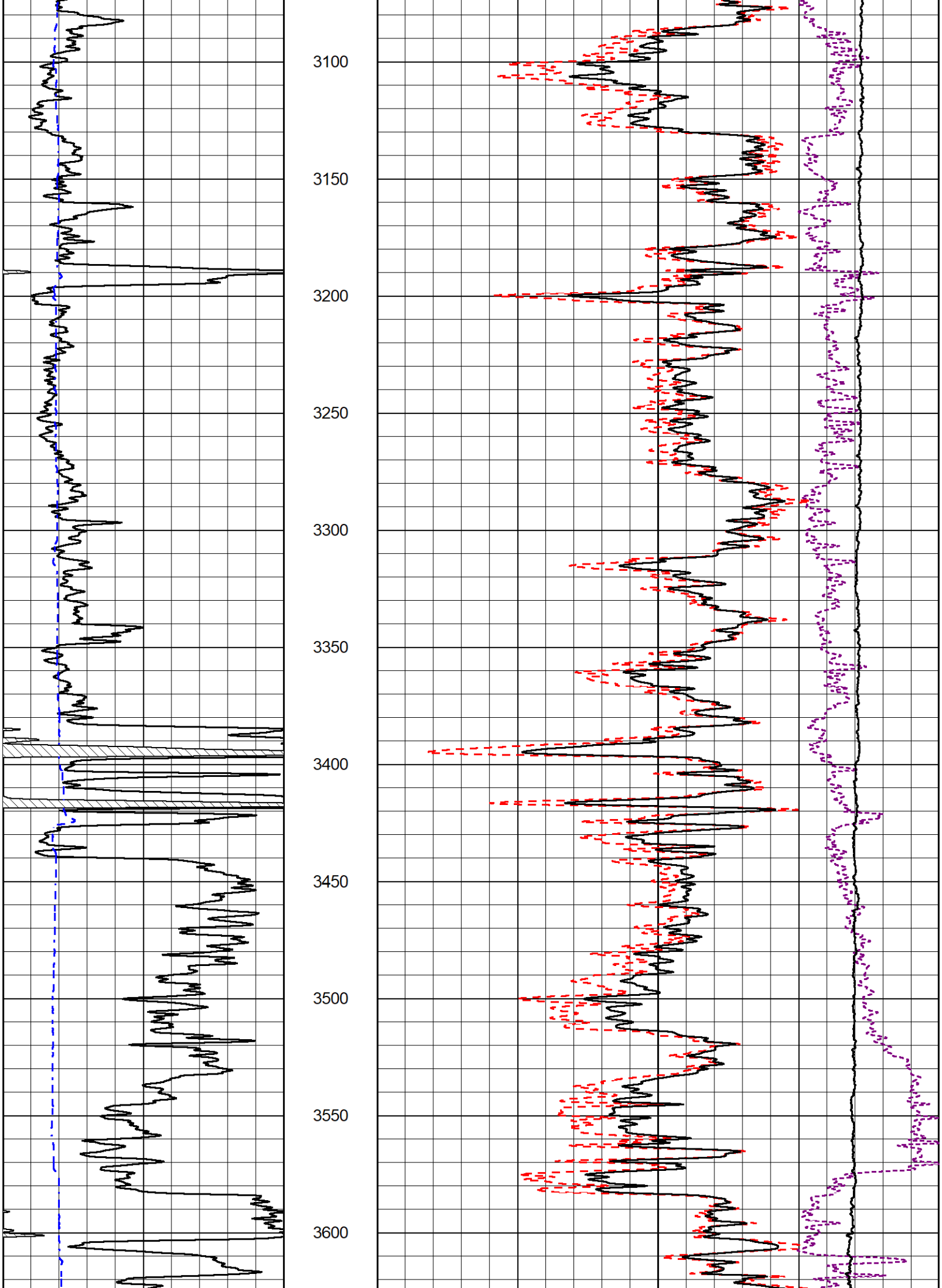
MAIN PASS

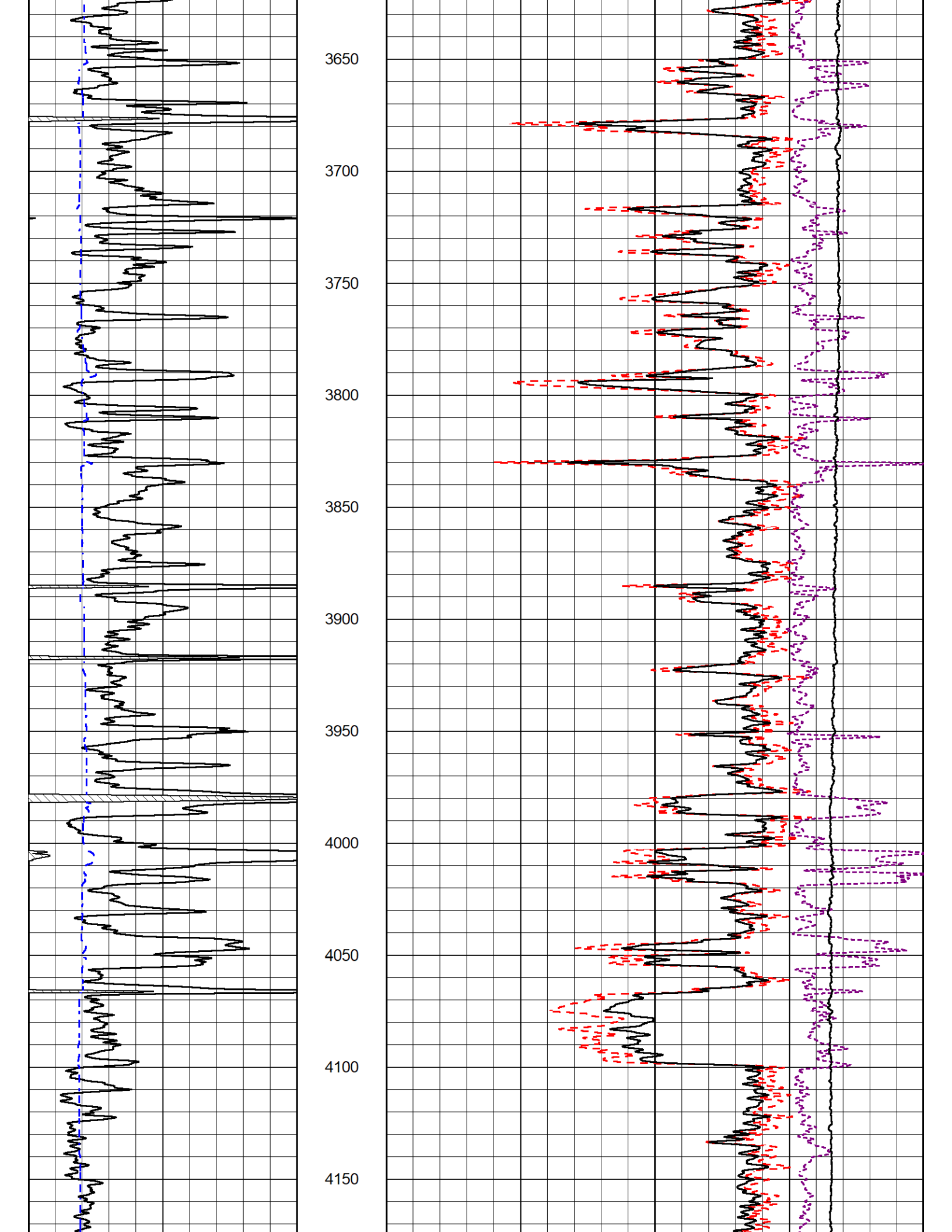
Database File	griffin_kamber #1.db
Dataset Pathname	StkMl/pass3.3
Presentation Format	_cdl
Dataset Creation	Tue Mar 07 19:06:39 2023
Charted by	Depth in Feet scaled 1:600

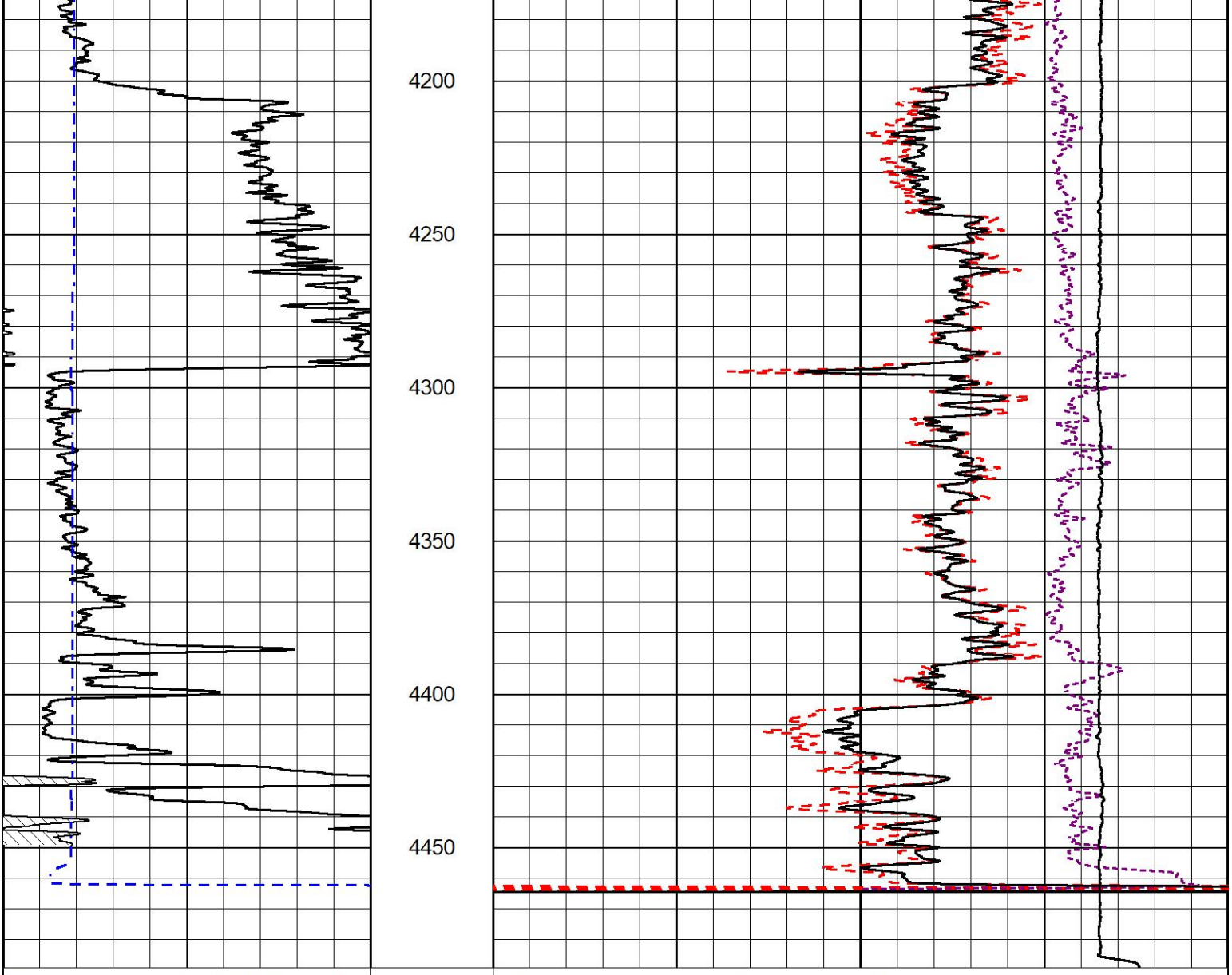



2000
2050
2100
2150
2200
2250
2300
2350
2400
2450
2500


2550
2600
2650
2700
2750
2800
2850
2900
2950
3000
3050


3100
3150
3200
3250
3300
3350
3400
3450
3500
3550
3600


3650
3700
3750
3800
3850
3900
3950
4000
4050
4100
4150

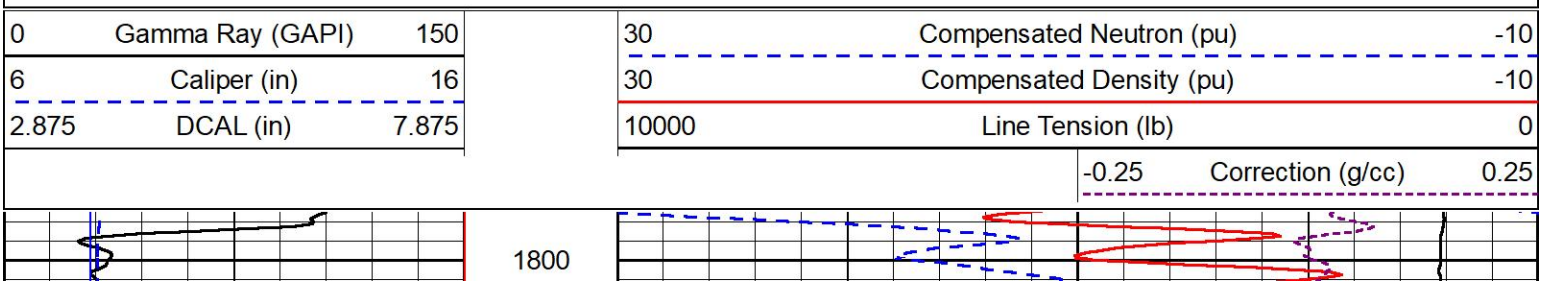


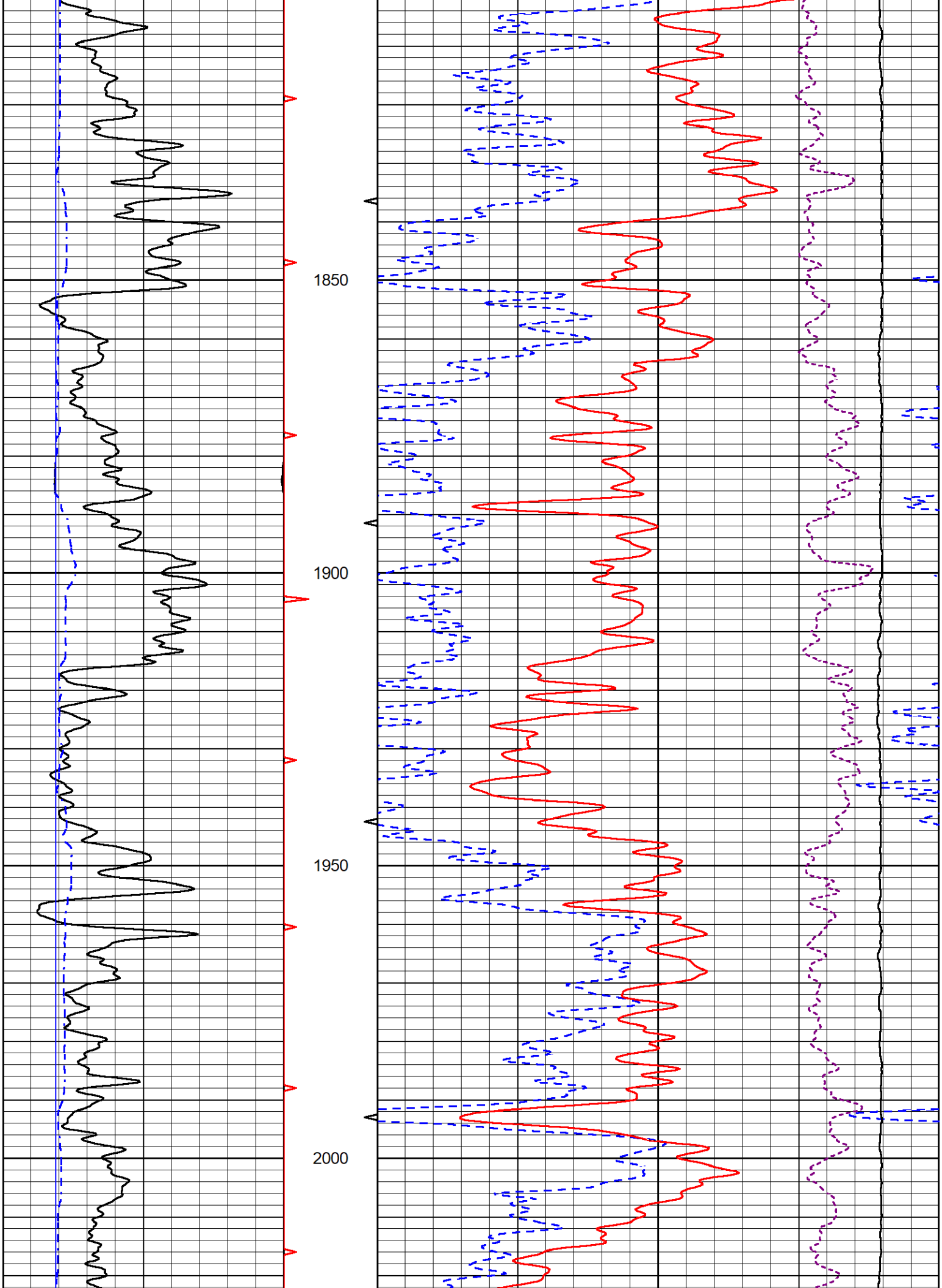
MIDWEST WIRELINE

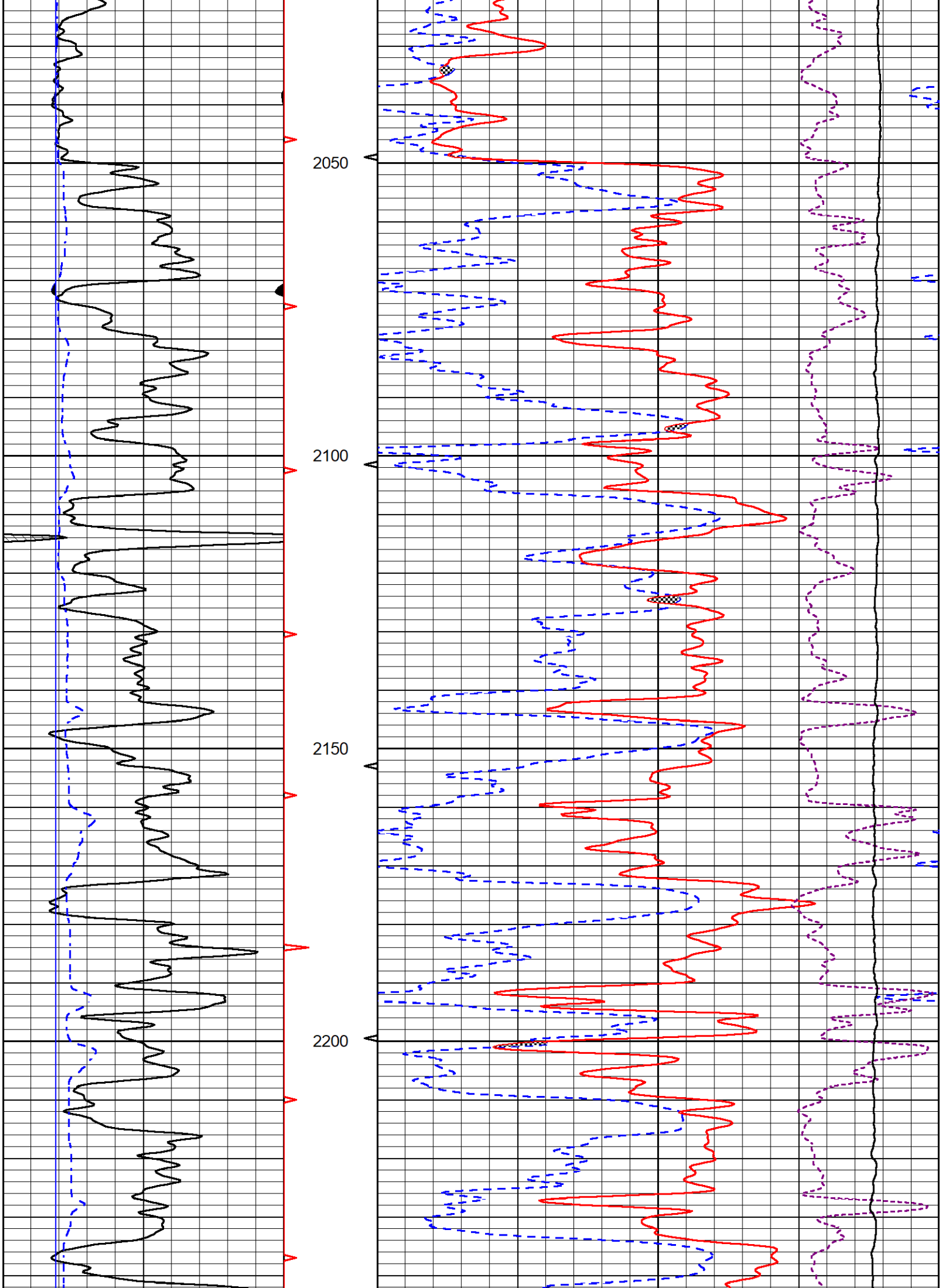
DETAIL SECTION

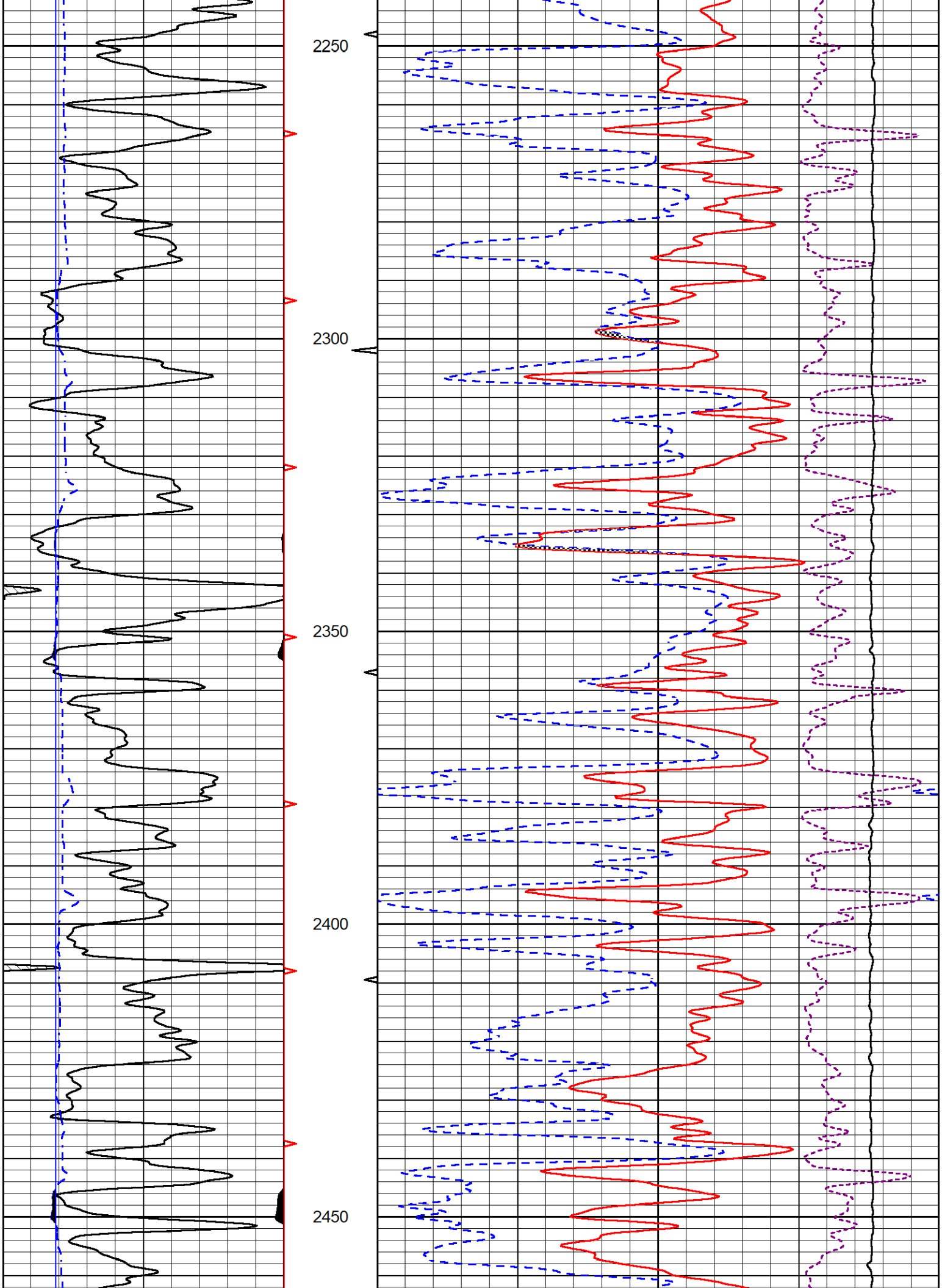
MAIN PASS

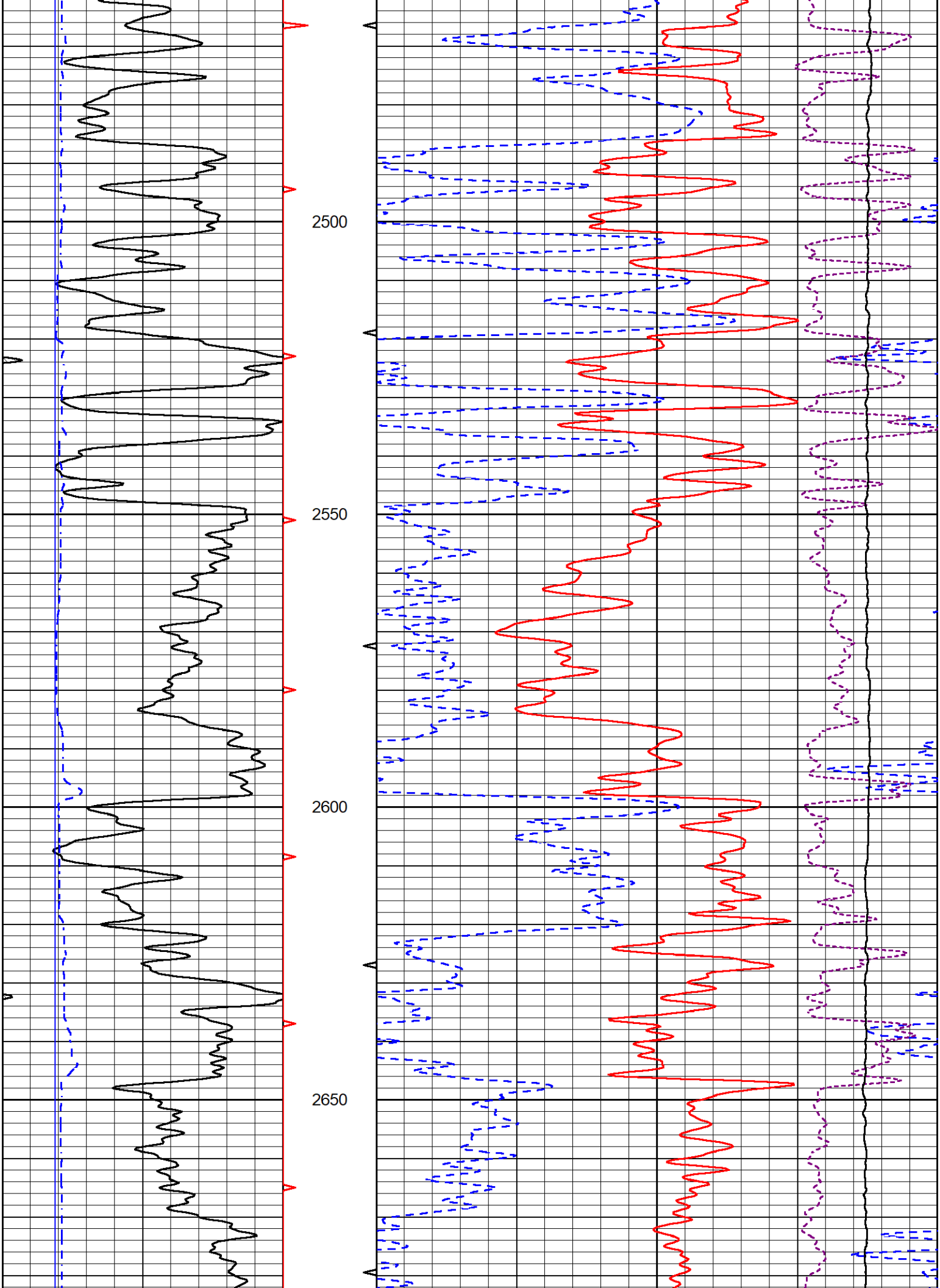
Database File	griffin_kamber #1.db
Dataset Pathname	StkMI/pass3.1
Presentation Format	_CNDLS~1
Dataset Creation	Tue Mar 07 19:24:41 2023
Charted by	Depth in Feet scaled 1:240

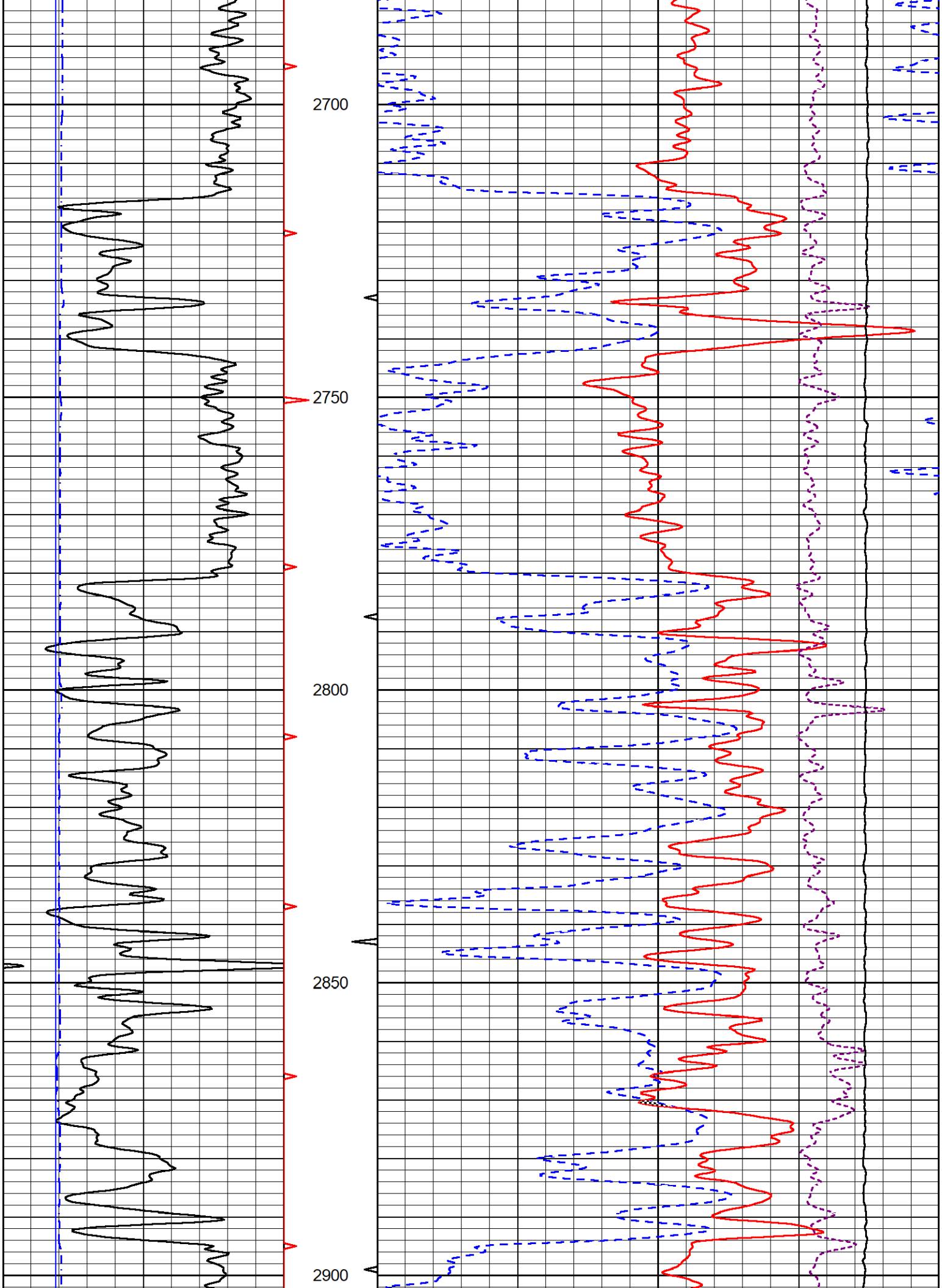


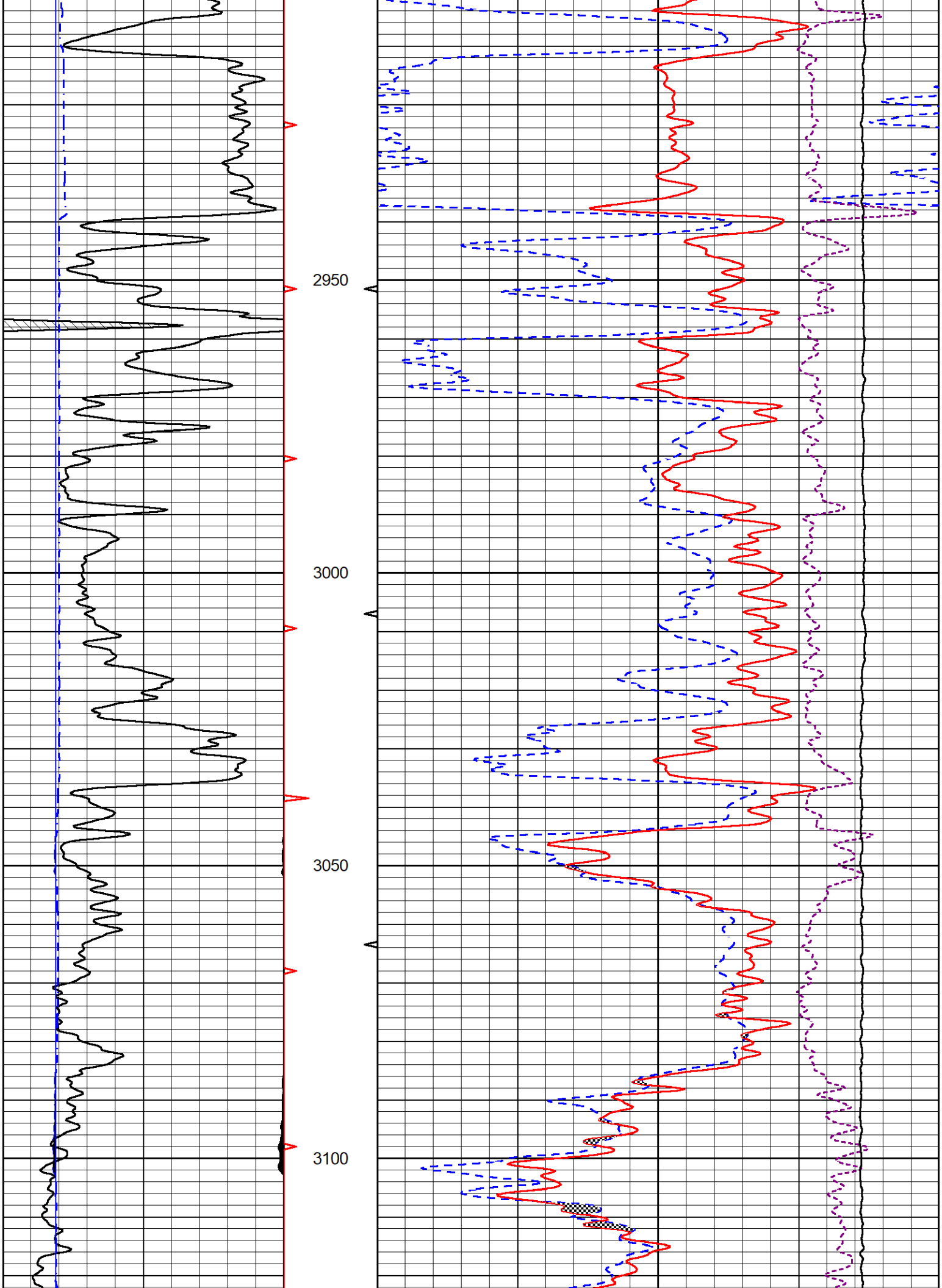

1850
1900
1950
2000

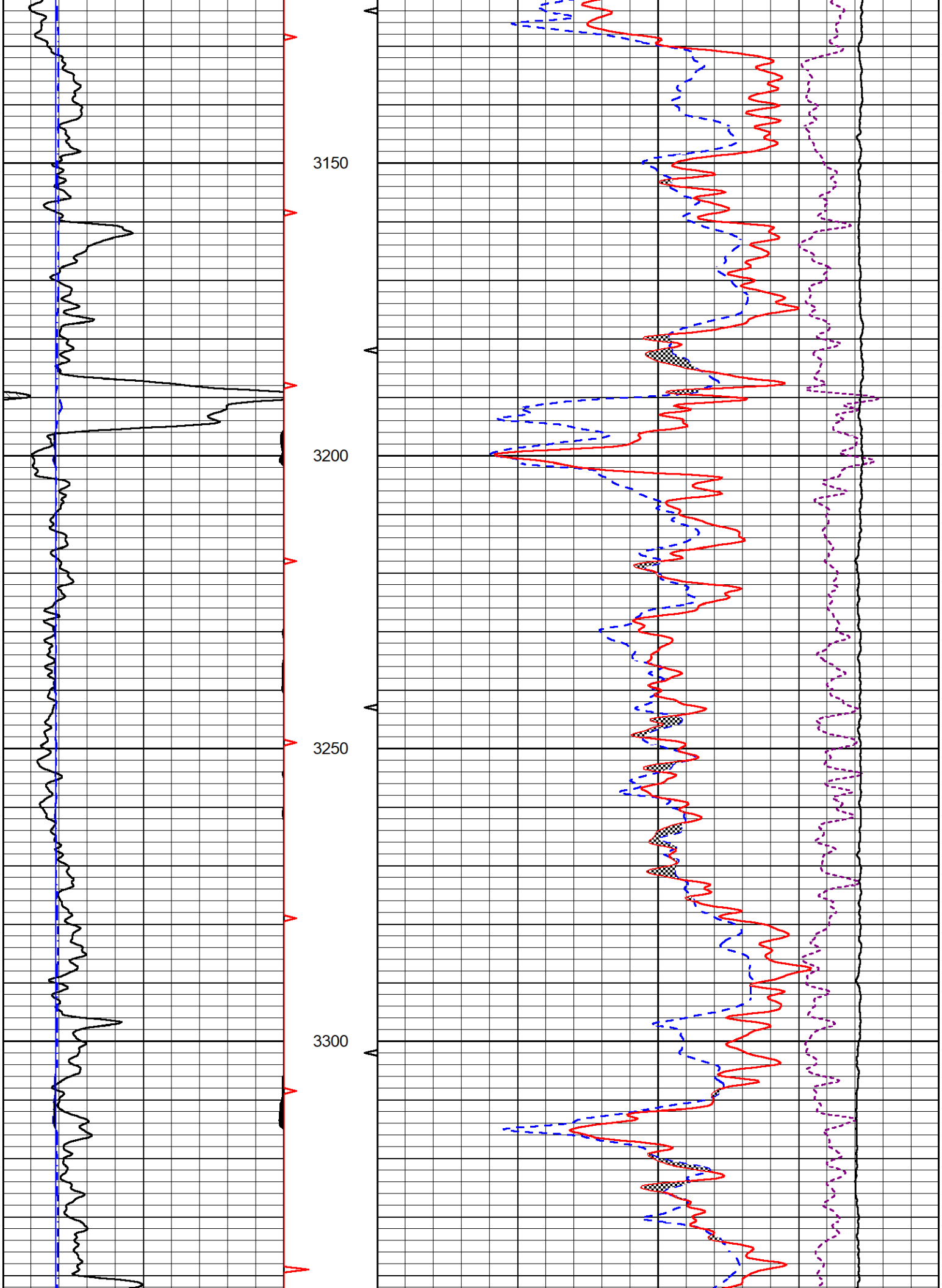

2050
2100
2150
2200

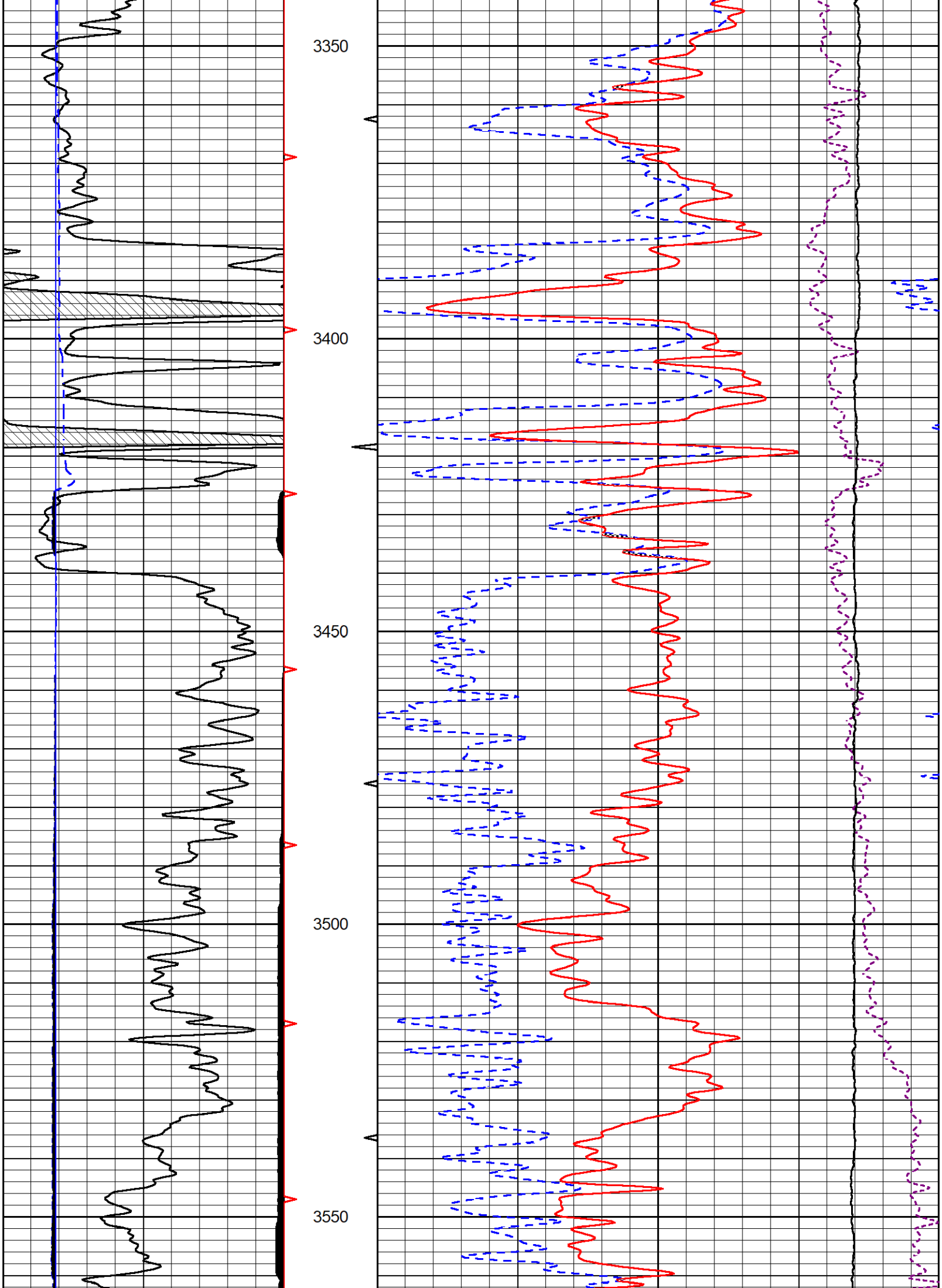

2250
2300
2350
2400
2450

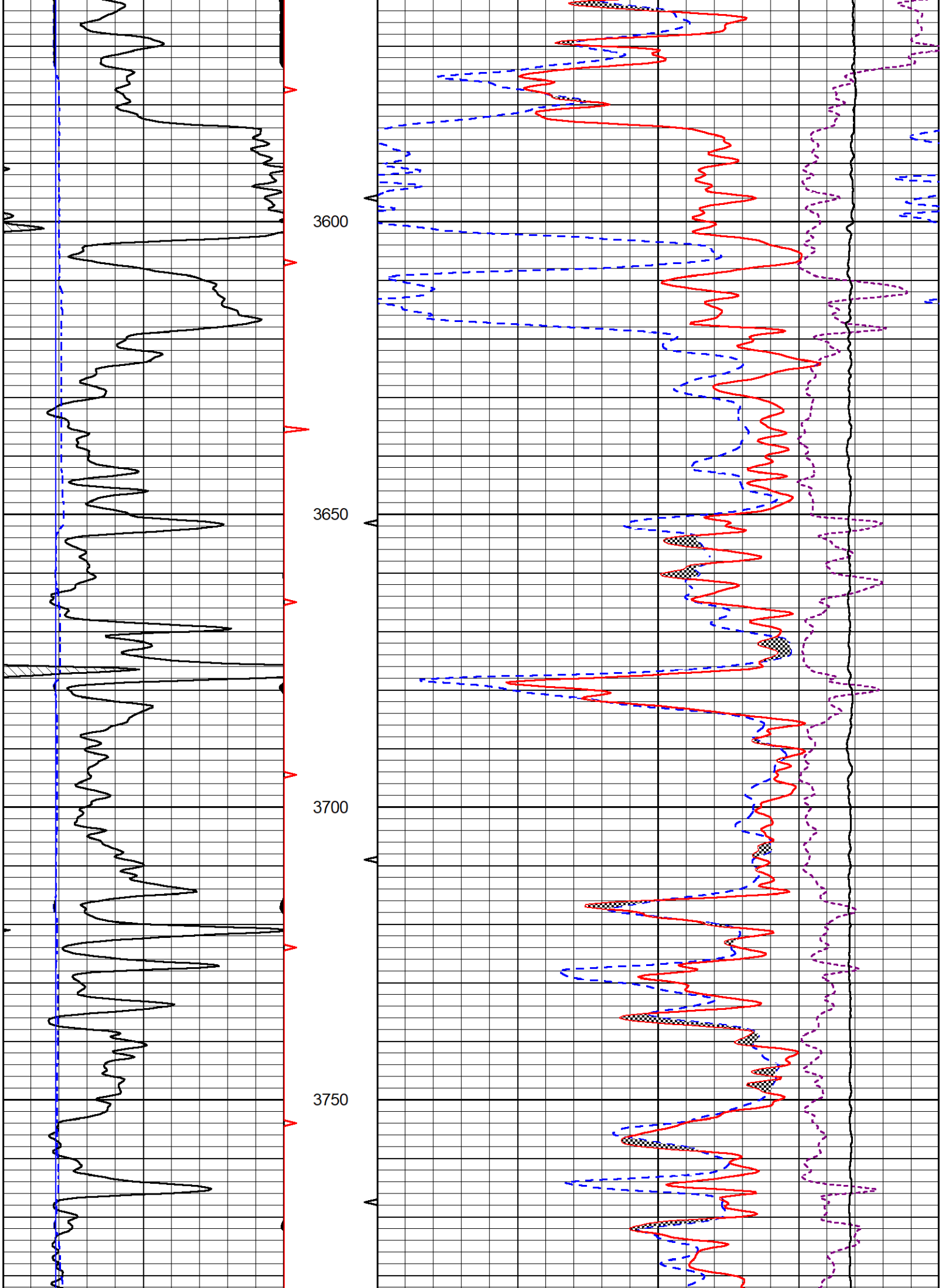

2500
2550
2600
2650

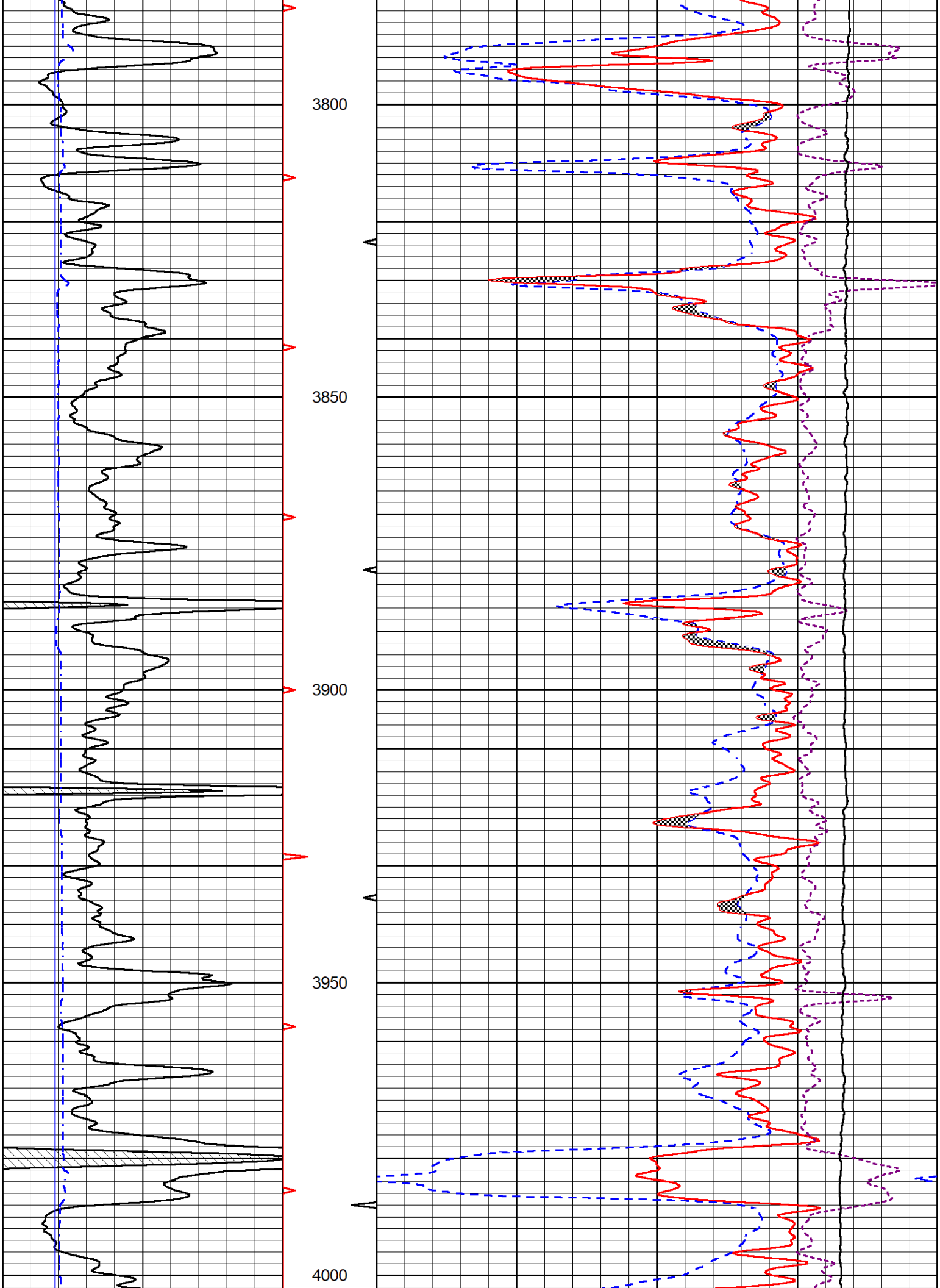

2700
2750
2800
2850
2900

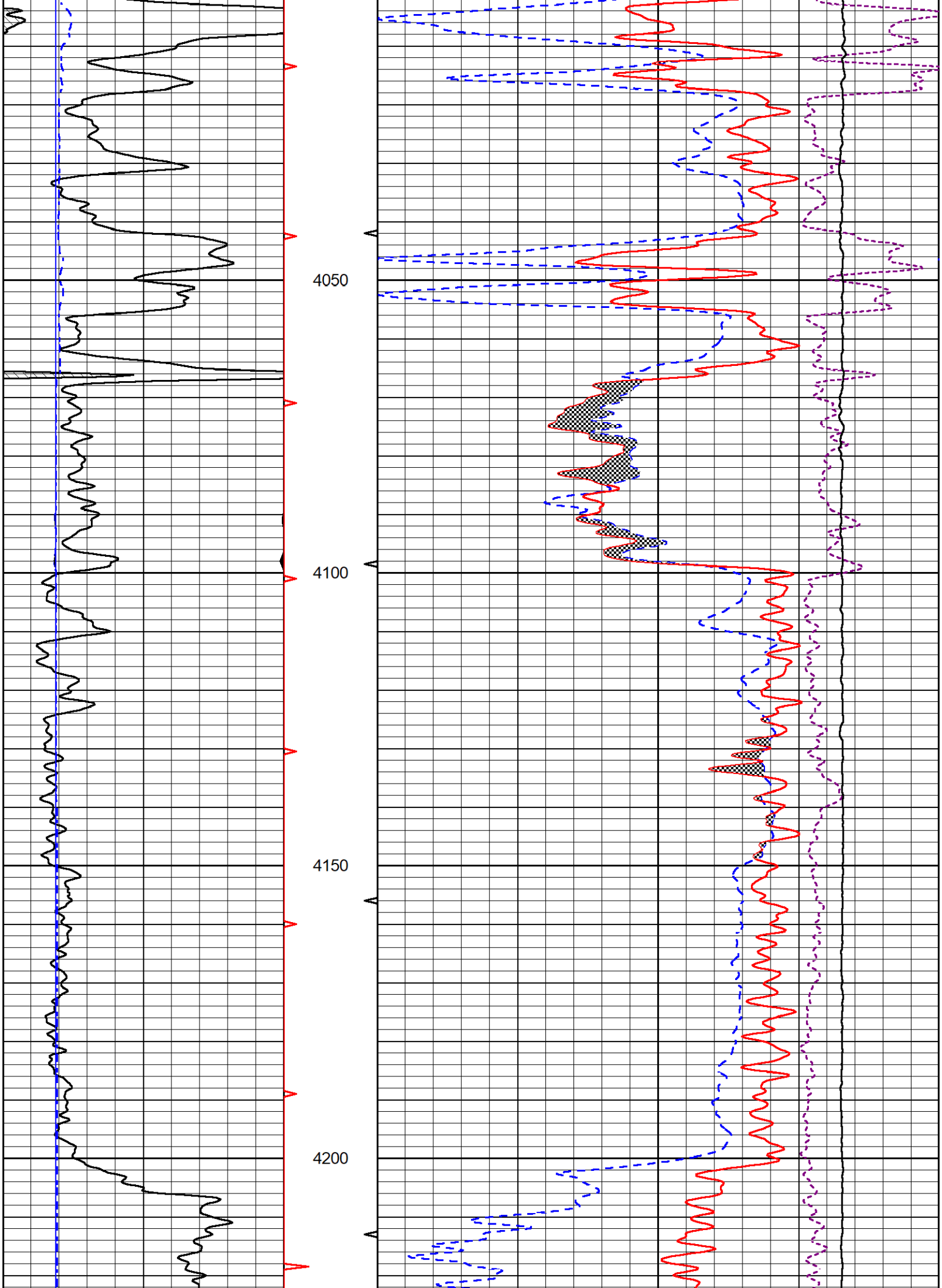

2950
3000
3050
3100

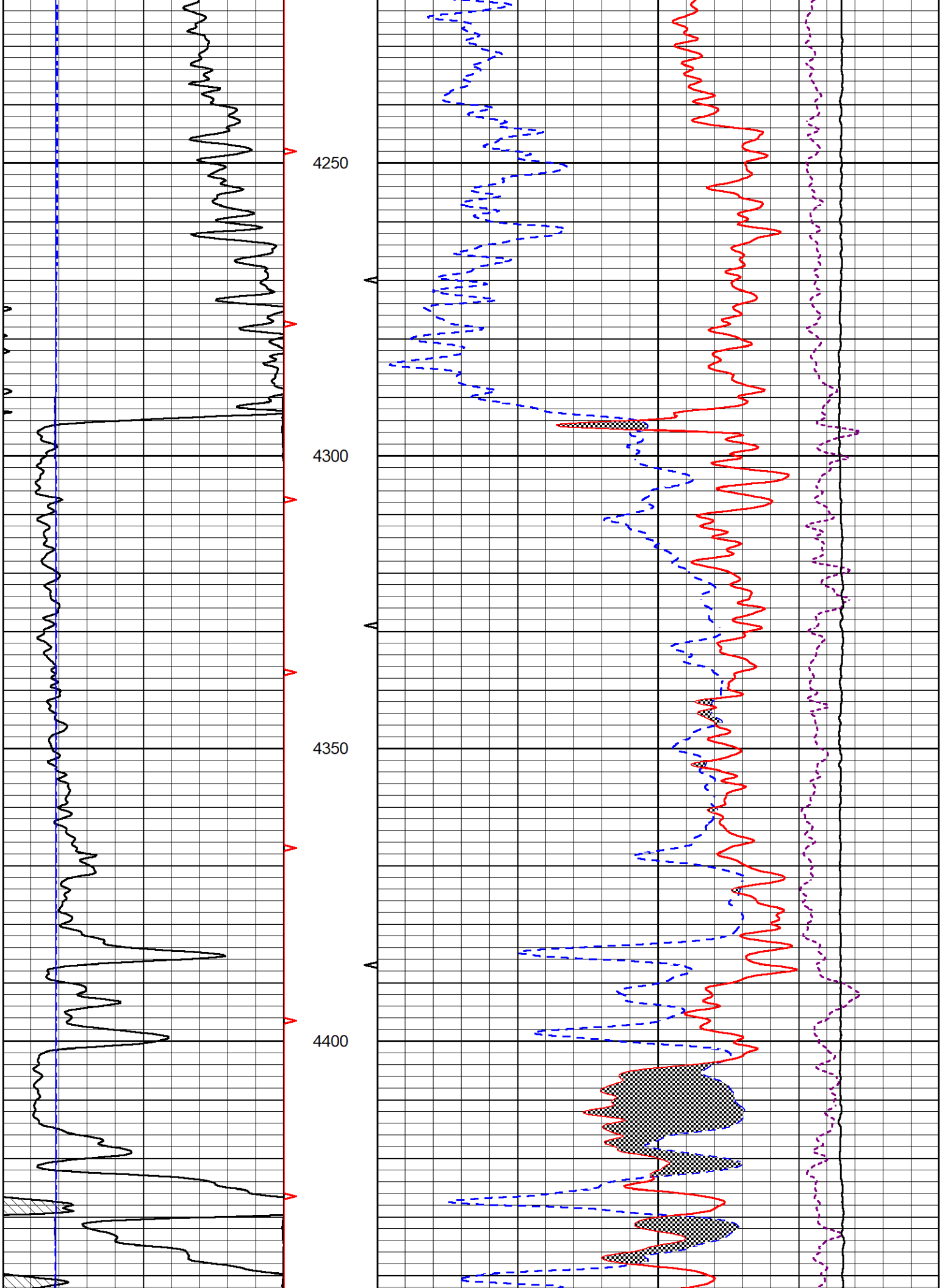

3150
3200
3250
3300

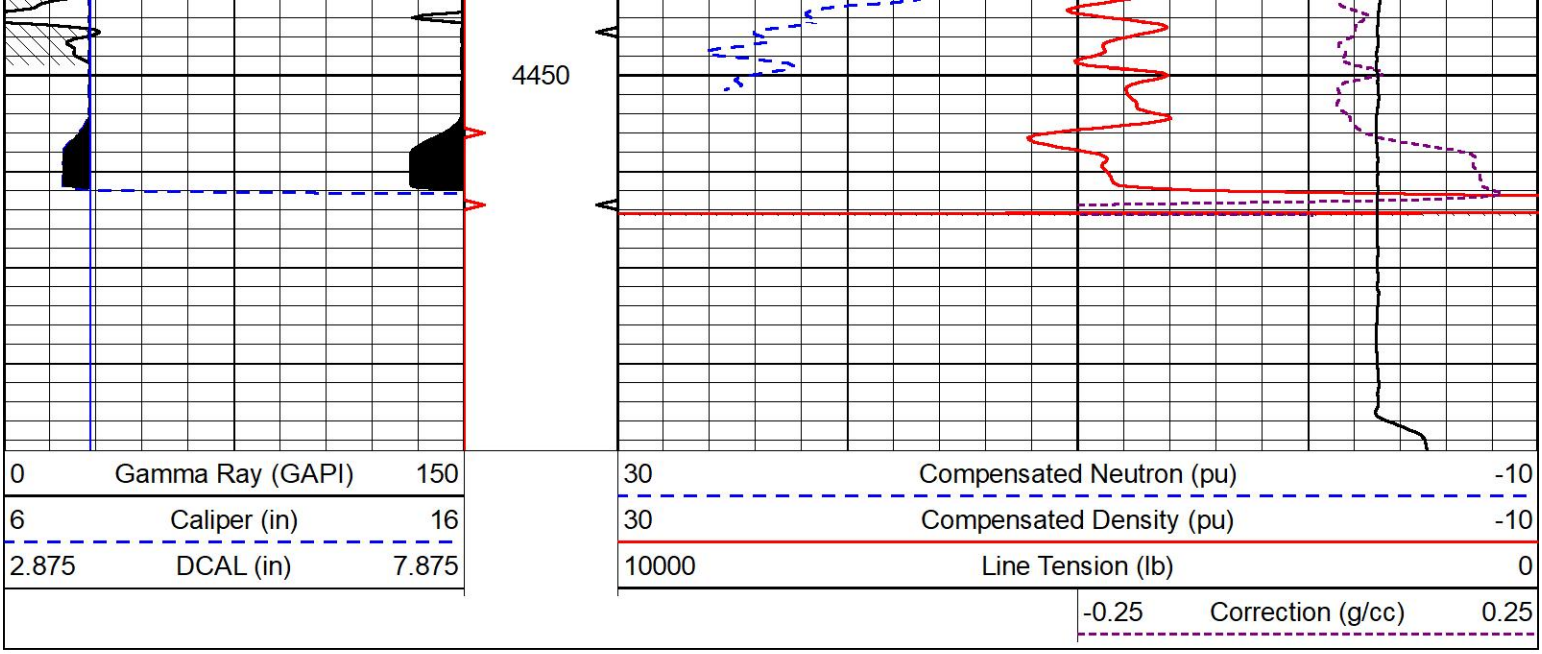

3350
3400
3450
3500
3550


3600
3650
3700
3750


3800
3850
3900
3950
4000


4050
4100
4150
4200


4250
4300
4350
4400

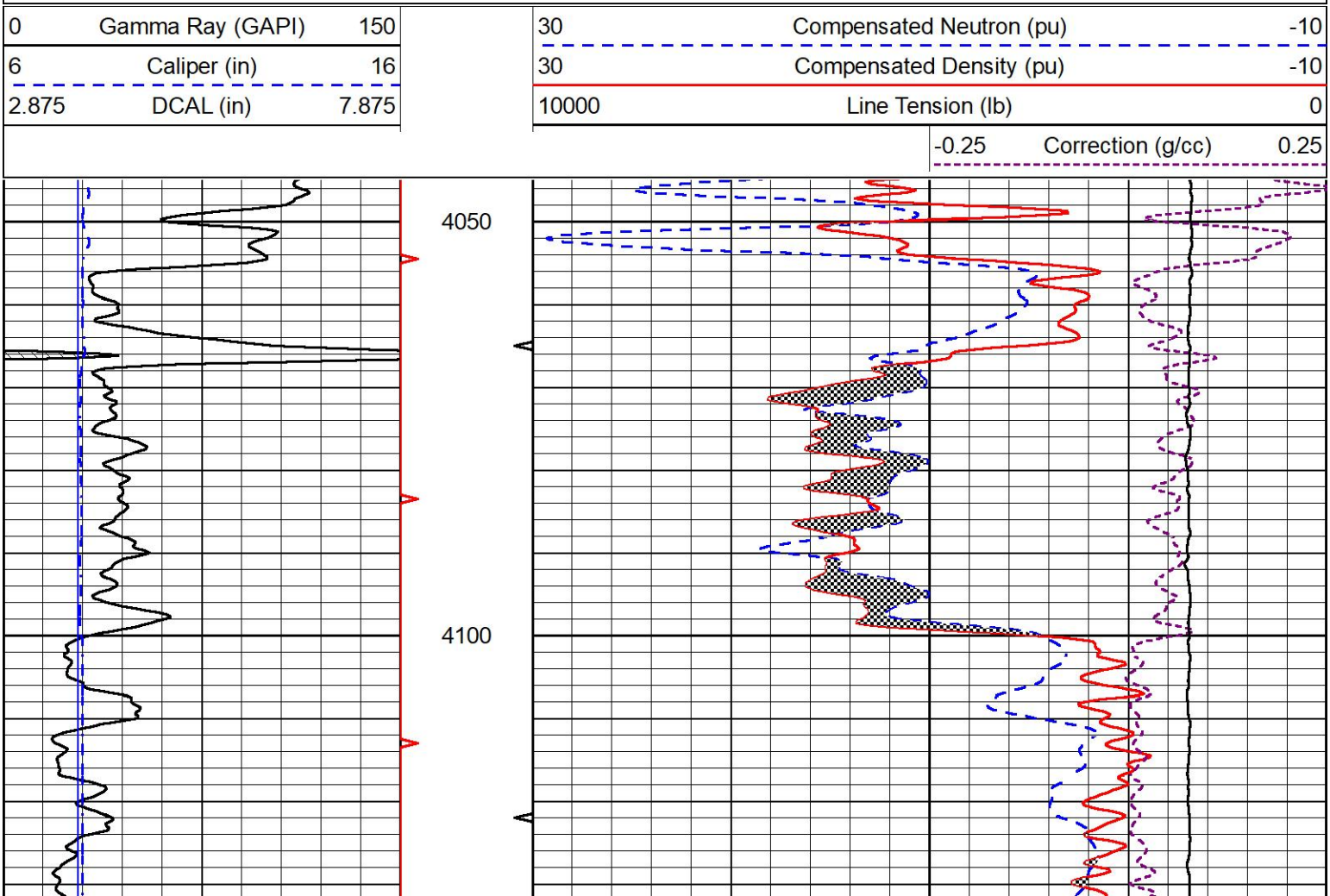


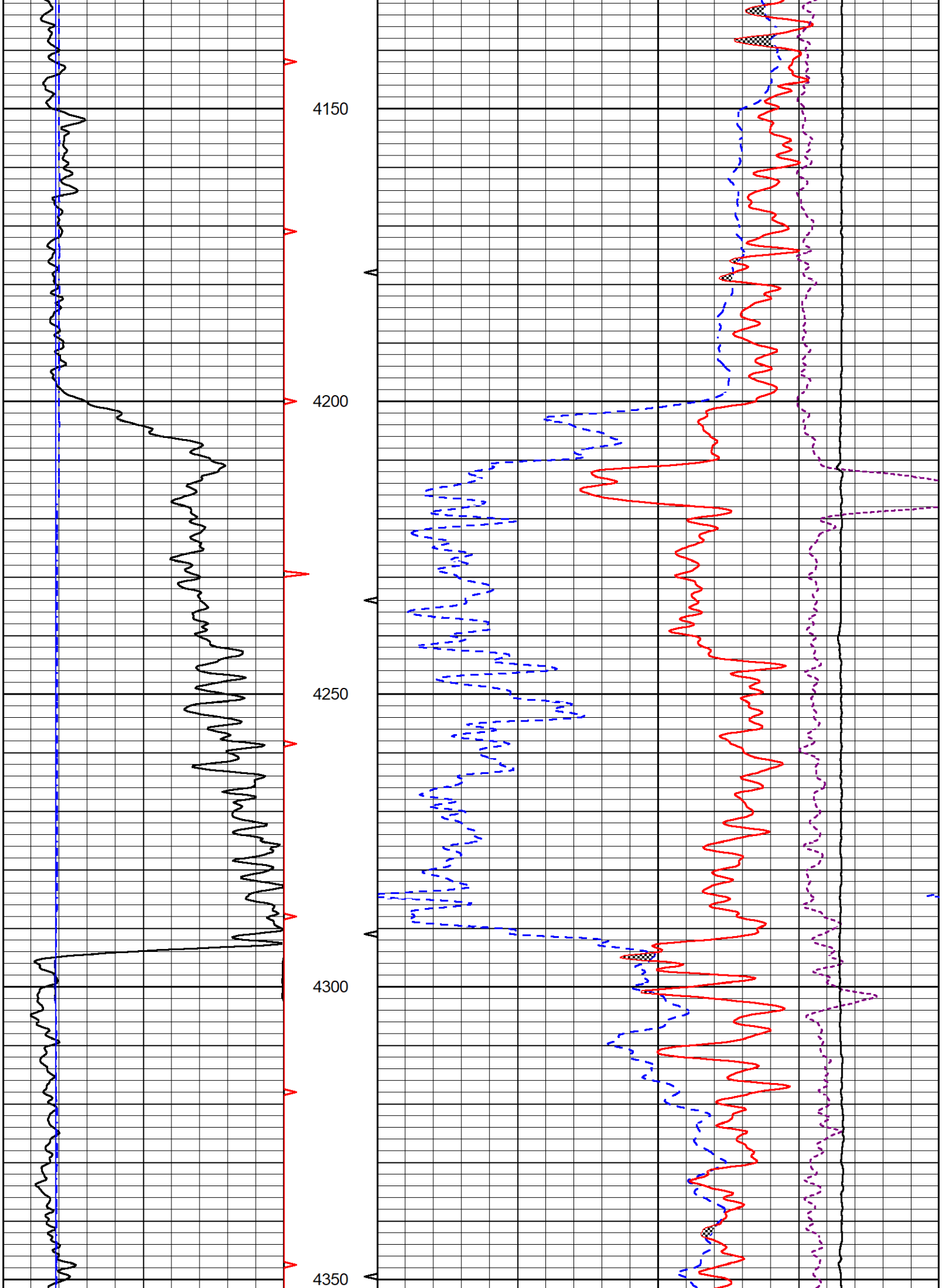
MIDWEST WIRELINE

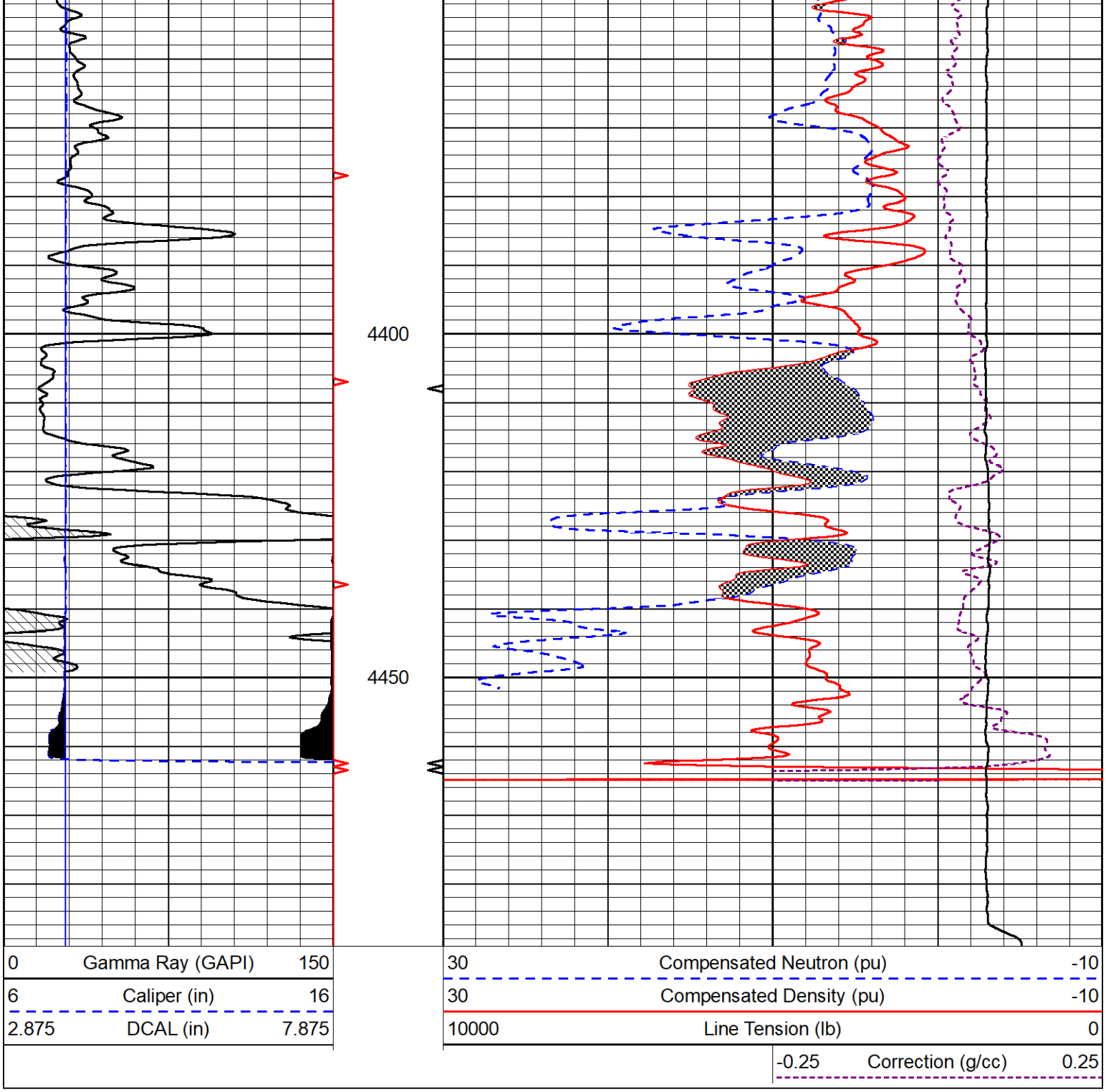
REPEAT SECTION

REPEAT PASS

Database File	griffin_kamber #1.db
Dataset Pathname	StkMl/pass2.1
Presentation Format	_CNDLS~1
Dataset Creation	Tue Mar 07 18:18:27 2023
Charted by	Depth in Feet scaled 1:240




4150
4200
4250
4300
4350



Calibration Report

Database File	griffin_kamber #1.db
Dataset Pathname	StkMl/pass3.1
Dataset Creation	Tue Mar 07 19:24:41 2023

Dual Induction Calibration Report

Serial-Model:	501 HT-M&W
Surface Cal Performed:	Thu Jan 12 19:31:52 2023

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		m	b
Deep	83.639	487.104	0.000	183.000	mmho/m	0.455	-33.000
Medium	113.335	1585.690	0.000	442.000	mmho/m	0.305	-31.000

Microlog Calibration Report

Serial-Model: 401-PSIML
Performed: Tue Jan 31 07:24:49 2023

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	18500.0000	-1.0000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	15500.0000	-0.5000
Caliper	1.0052	1.0858	5.0000	16.5000	in	142.7190	-139.2500

Compensated Density Calibration Report

Serial-Model: 307-08-M&W
Source #: 20762B
Master Calibration Performed: Sat Feb 25 11:00:49 2023

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	4131.04	5675.82	cps
Aluminum	2.635	g/cc	781.38	3576.78	cps

Spine Angle = 74.50 Density/Spine Ratio = 0.509

	Size		Reading
Small Ring	6.00	in	1.16
Large Ring	18.00	in	1.01

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	Kamber #1
Field	Lion West
County	Pratt
State	Kansas