MIDWEST WIRELINE

DUAL COMP POROSITY LOG

Company Griffin Management, LLC
Well Kay #1
Field Unknown
County Pratt State Kansas
Location: API # : 15-151-22525-00-00
S2 - S2 - NE
2310' FNL & 1320' FEL
SEC 32 TWP 29S RGE 15W

Other Services: DIL/MEL

Elevation: K.B. 2024' D.F. N/A G.L. 2013'

Permanent Datum: Ground Level Elevation 2013'
Log Measured From: Kelly Bushing
Drilling Measured From: Kelly Bushing

Date	2/23/2021
Run Number	One
Type Log	CNL/CDL
Depth Driller	4860'
Depth Logger	4862'
Bottom Logged Interval	4833'
Top Logged Interval	2800'
Type Fluid In Hole	Chemical
Salinity, PPM CL	4400
Density	9.4
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
One	12.25"	0'	260'
Two	7.875"	260'	TD

Casing Record

Size	Wgt.	From	To
8.625"	23#	0'	260'

Eli J. Felts

<<< Fold Here >>>

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

Haviland,
East to SW 140th Ave, South to SW 110th St, 1 East,
1/2 South, West into

Log Measured From: Kelly Bushing 11 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	Primary Witness: Charles Griffin
Operator:	Secondary Witness: Eli J. Felts
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	40.58		GR-M&W (233-M&W)	3.00	3.50	50.00
CNLSC	37.48		CNT-M&W (207-MW)	5.50	3.50	100.00
CNSSC	36.73					
			CDL-M&W (817-947)	8.50	4.00	250.00
LSD	28.43					
DCAL	28.42					
SSD	27.93					
			ML-PSIML (PSI-01) GO Micro log tools converted to Simplec electronics	7.58	4.00	65.00
MCAL	19.83					
MI	19.83					
MN	19.83					
RLL3F	15.80					
RLL3	15.80					
			DIL-PSI HIGH TEMP (952-828)	18.50	3.50	220.00
CILD	8.00					
CILM	4.70					
SP	0.20					

Dataset:	griffin_kay 1.db: field/well/stkml/pass3.4
Total length:	43.08 ft
Total weight:	685.00 lb
O.D.:	4.00 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\griffin_kay 1.db
Dataset field/well/stkml/pass3.4/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	100	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	230	0	Off	0

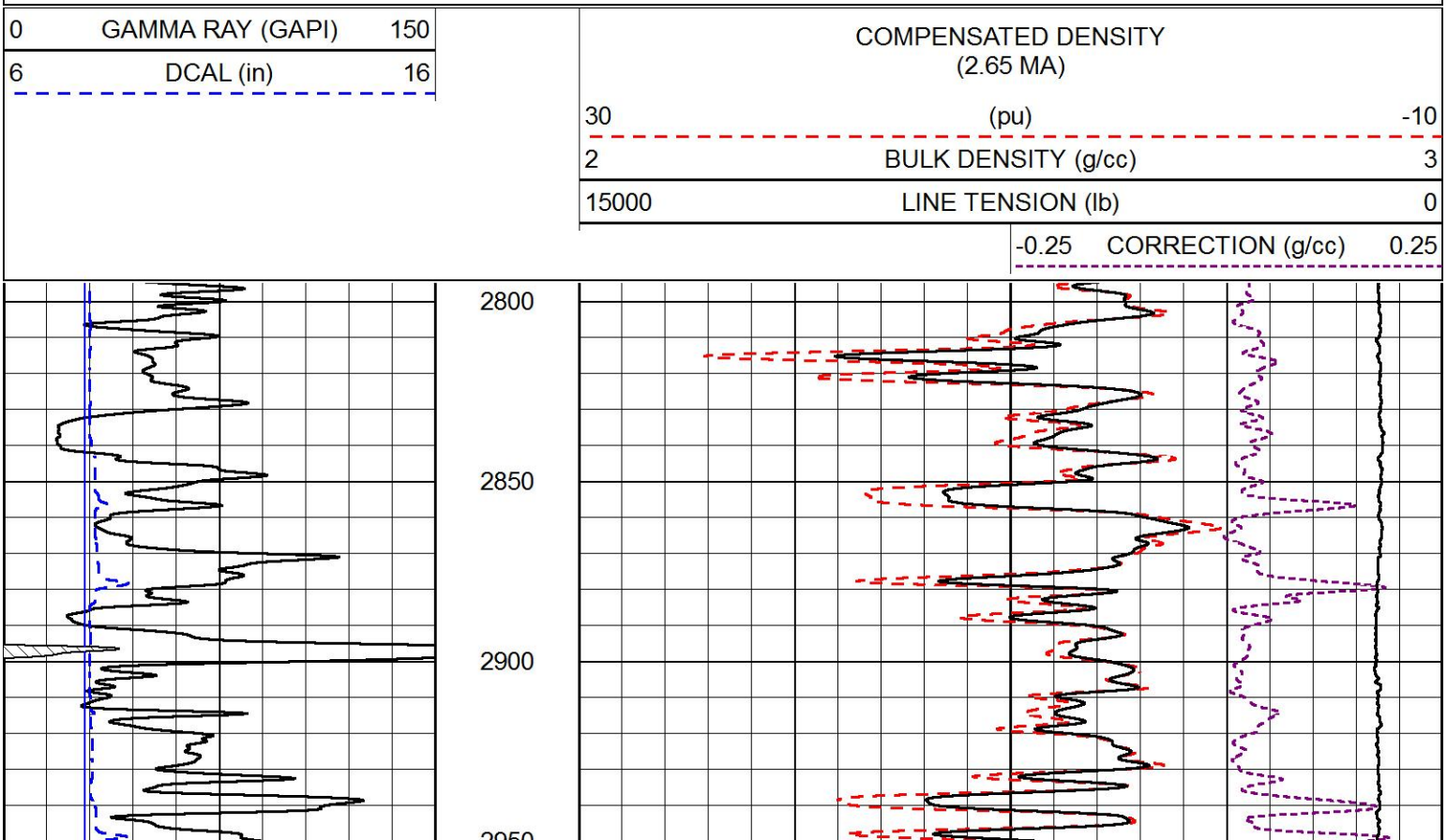
Variable Description

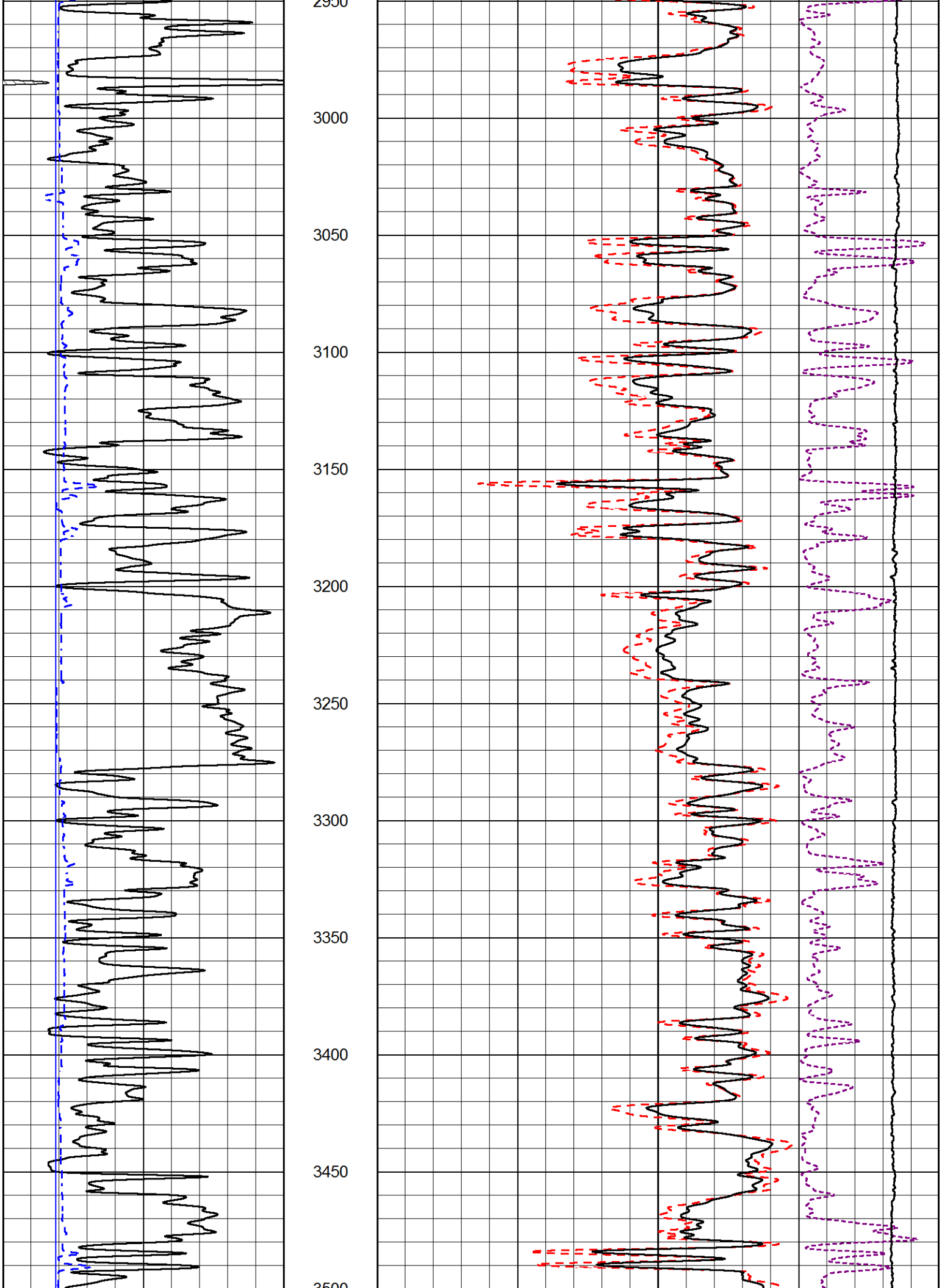
A : Cement Factor (a)
BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
FLUIDDEN : Fluid Density
M : Cement Exp (m)
MATRXDEN : Matrix Density
NPORSEL : Neutron Porosity Curve Select
PERFS : Perforation Flag
SNDERR : Deep Sonde Error Correction
SNDERRM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

MIDWEST WIRELINE

MAIN PASS

Database File	griffin_kay 1.db
Dataset Pathname	stkml/pass3.1
Presentation Format	_cdl
Dataset Creation	Tue Feb 23 18:10:04 2021
Charted by	Depth in Feet scaled 1:600

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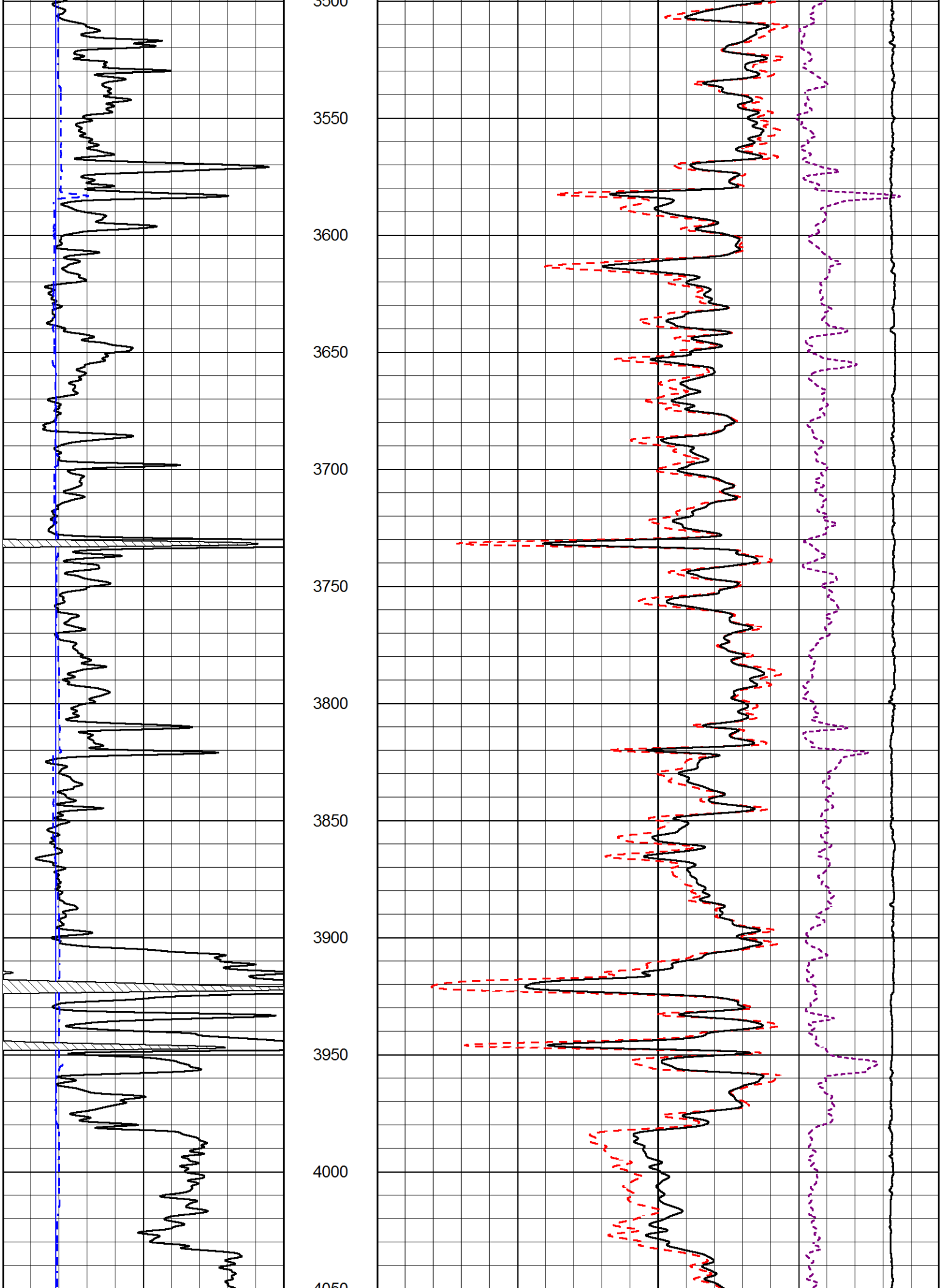
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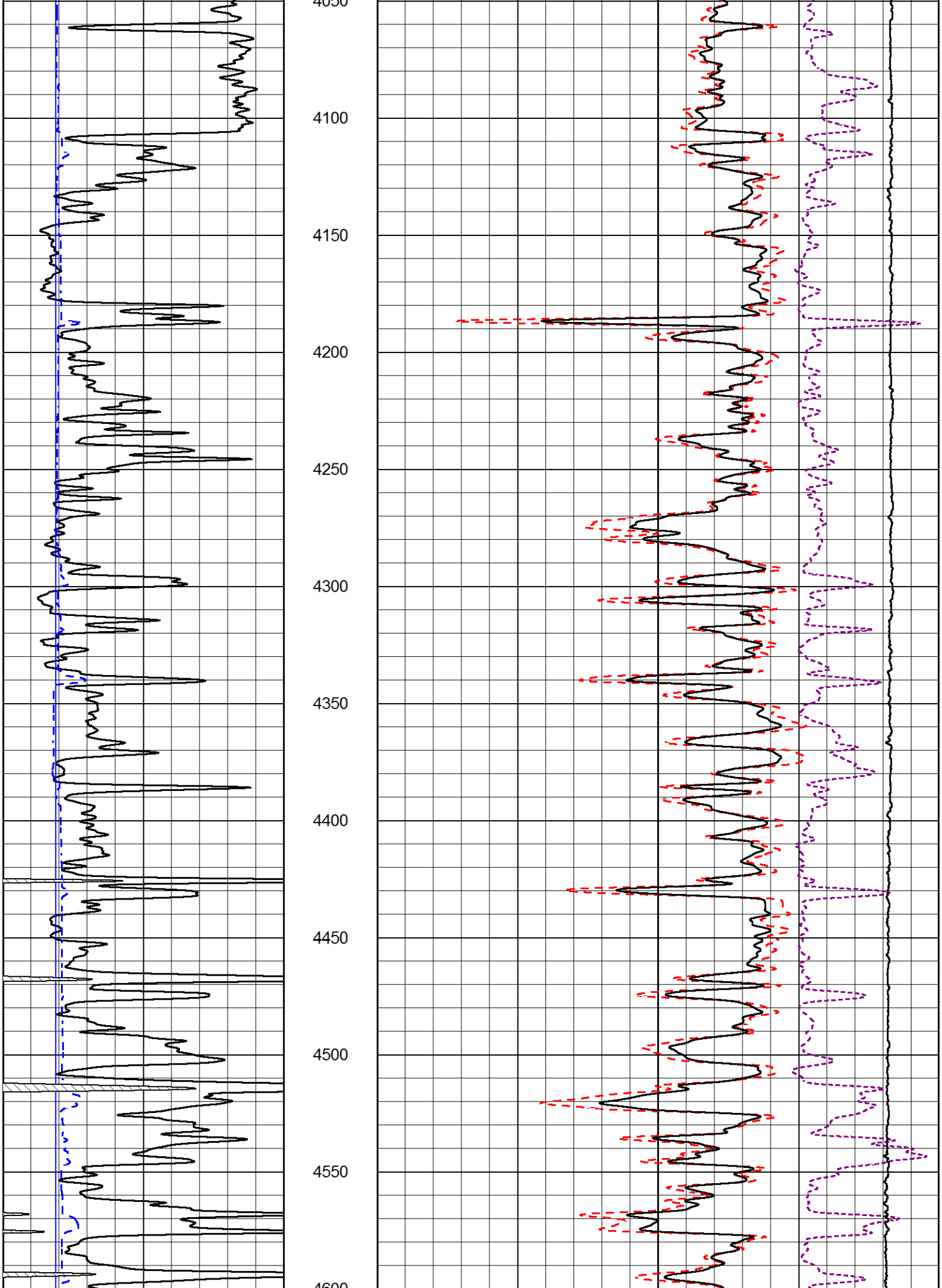
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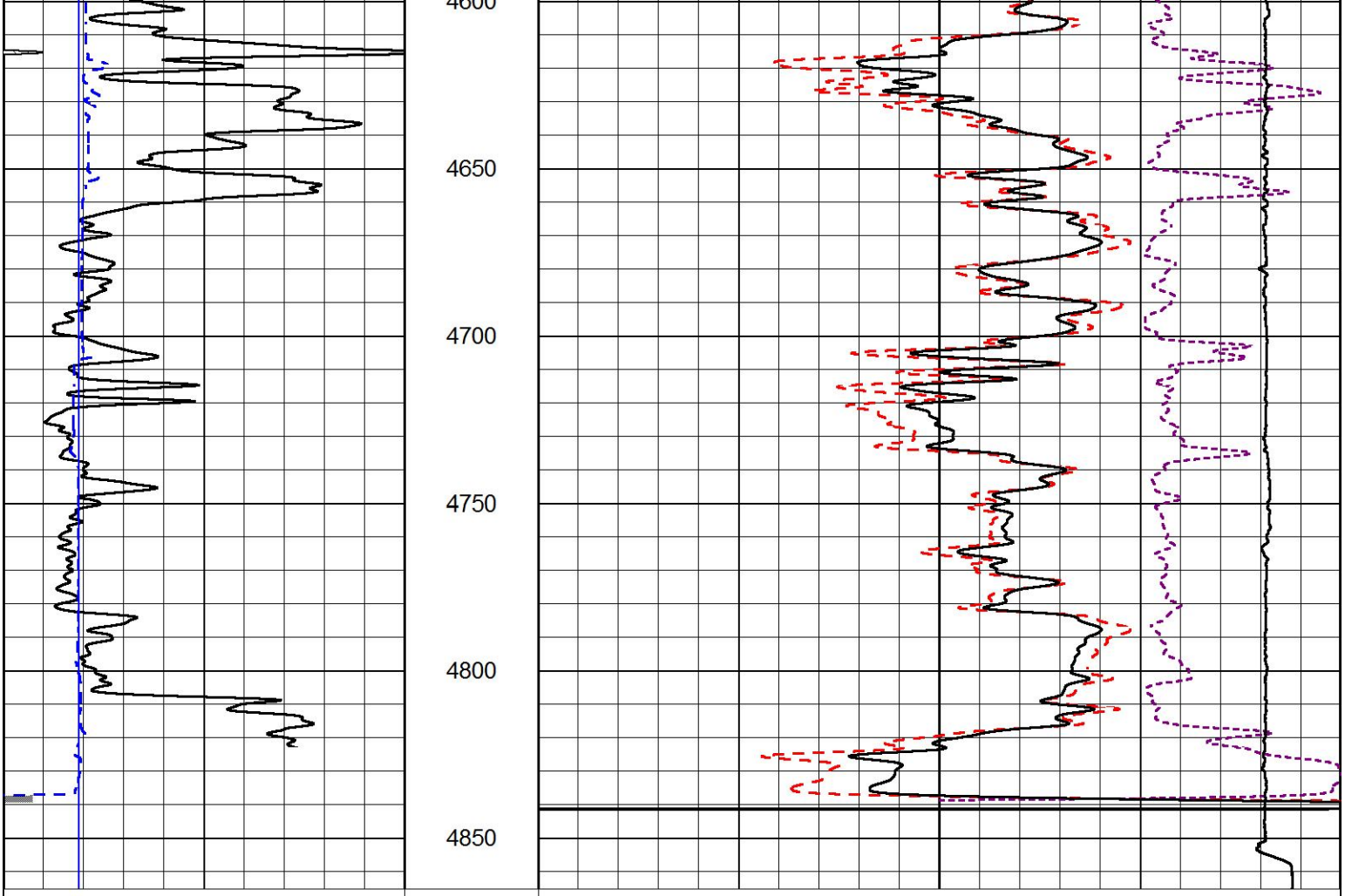
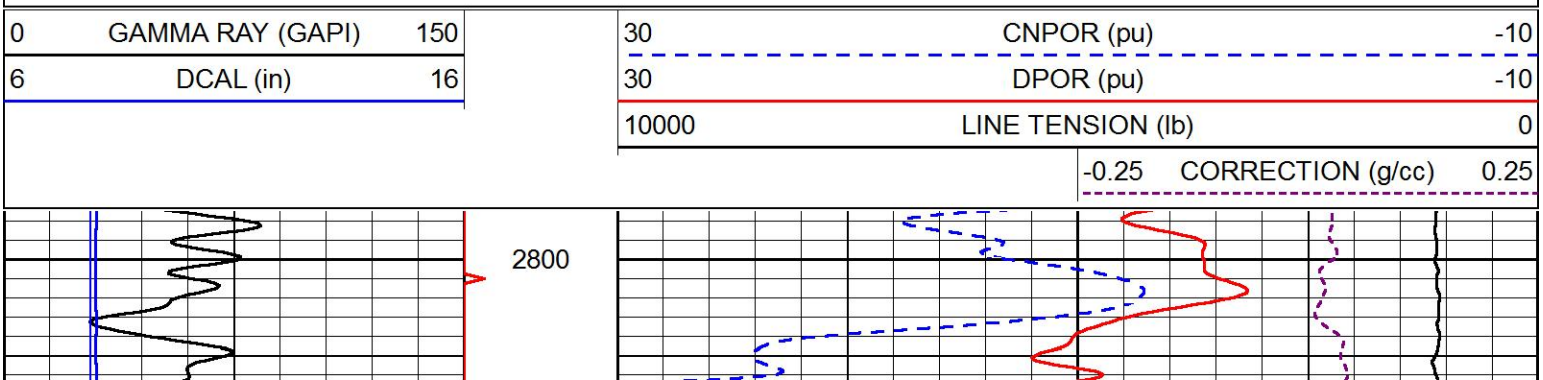
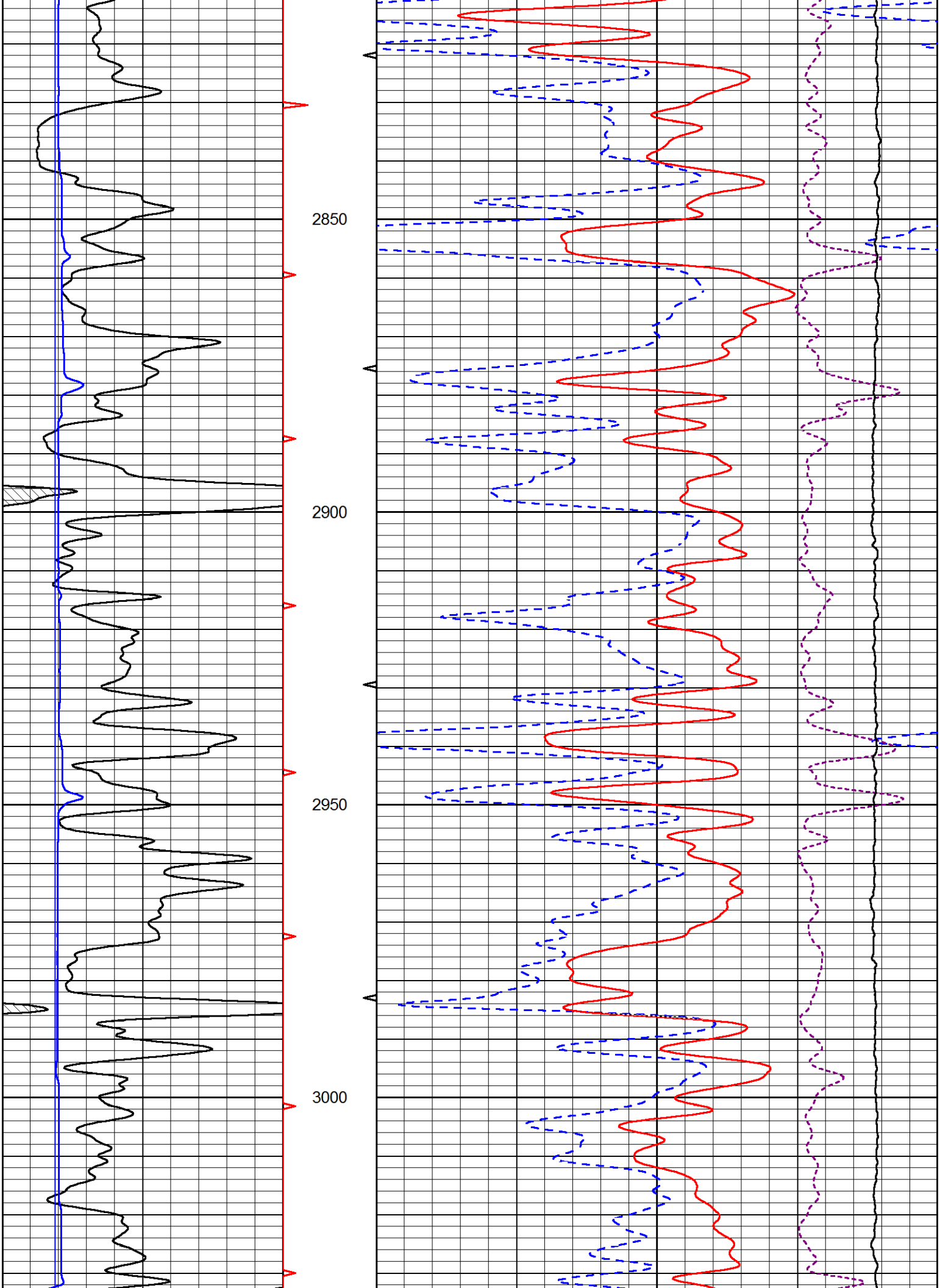


MIDWEST WIRELINE

MAIN PASS

Database File	griffin_kay 1.db
Dataset Pathname	stkml/pass3.1
Presentation Format	_CNDLS~1
Dataset Creation	Tue Feb 23 18:10:04 2021
Charted by	Depth in Feet scaled 1:240

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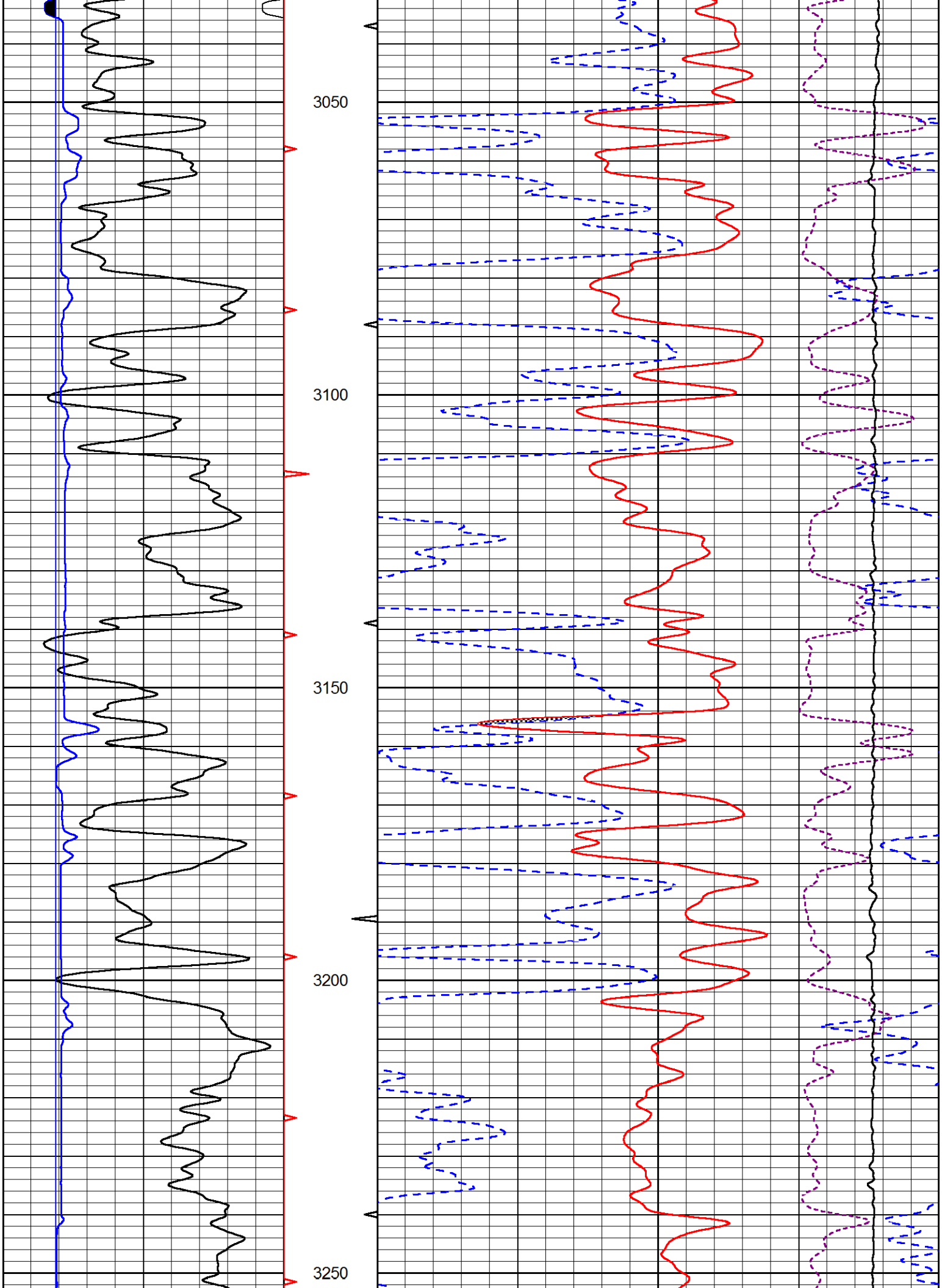
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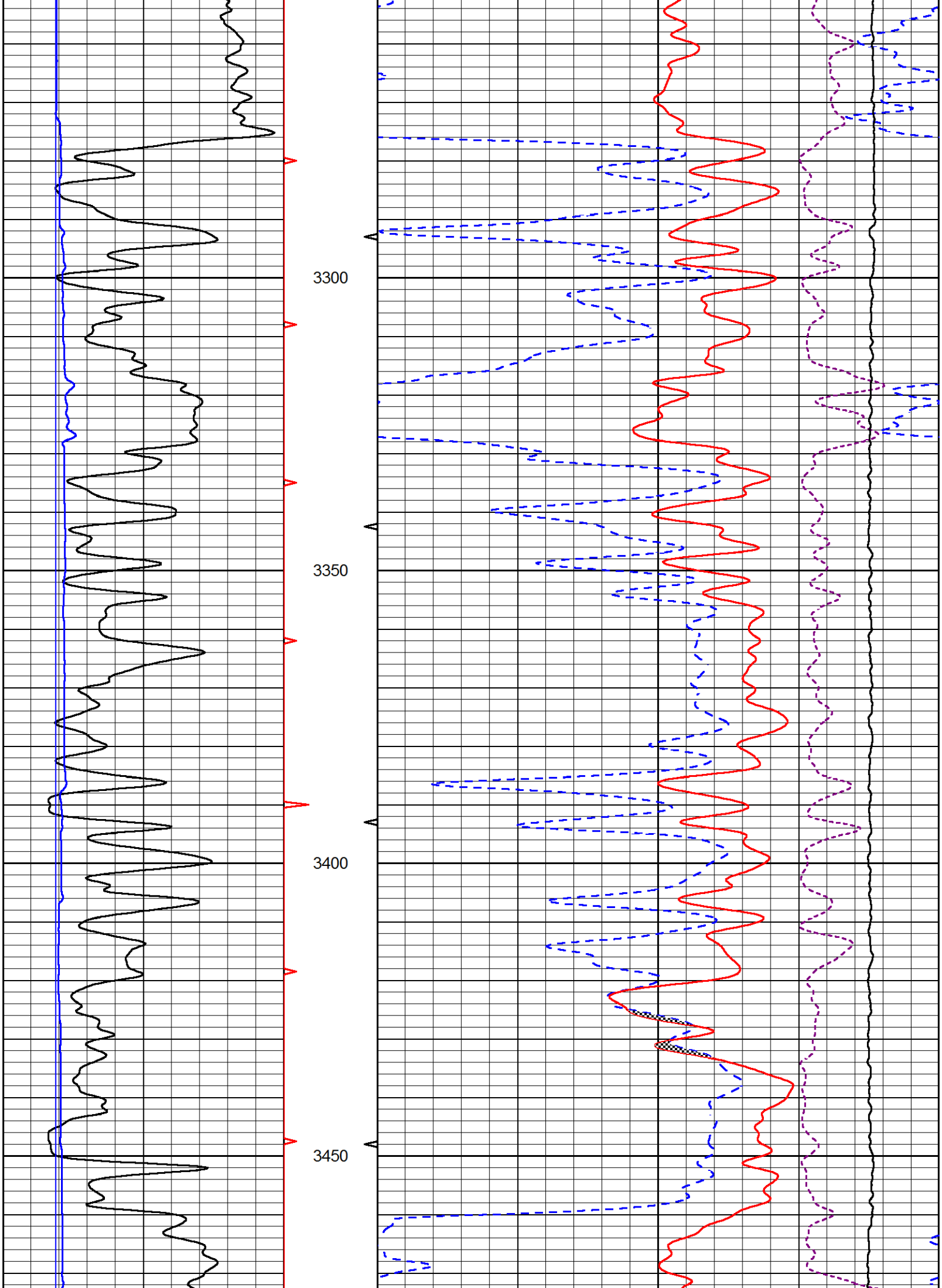
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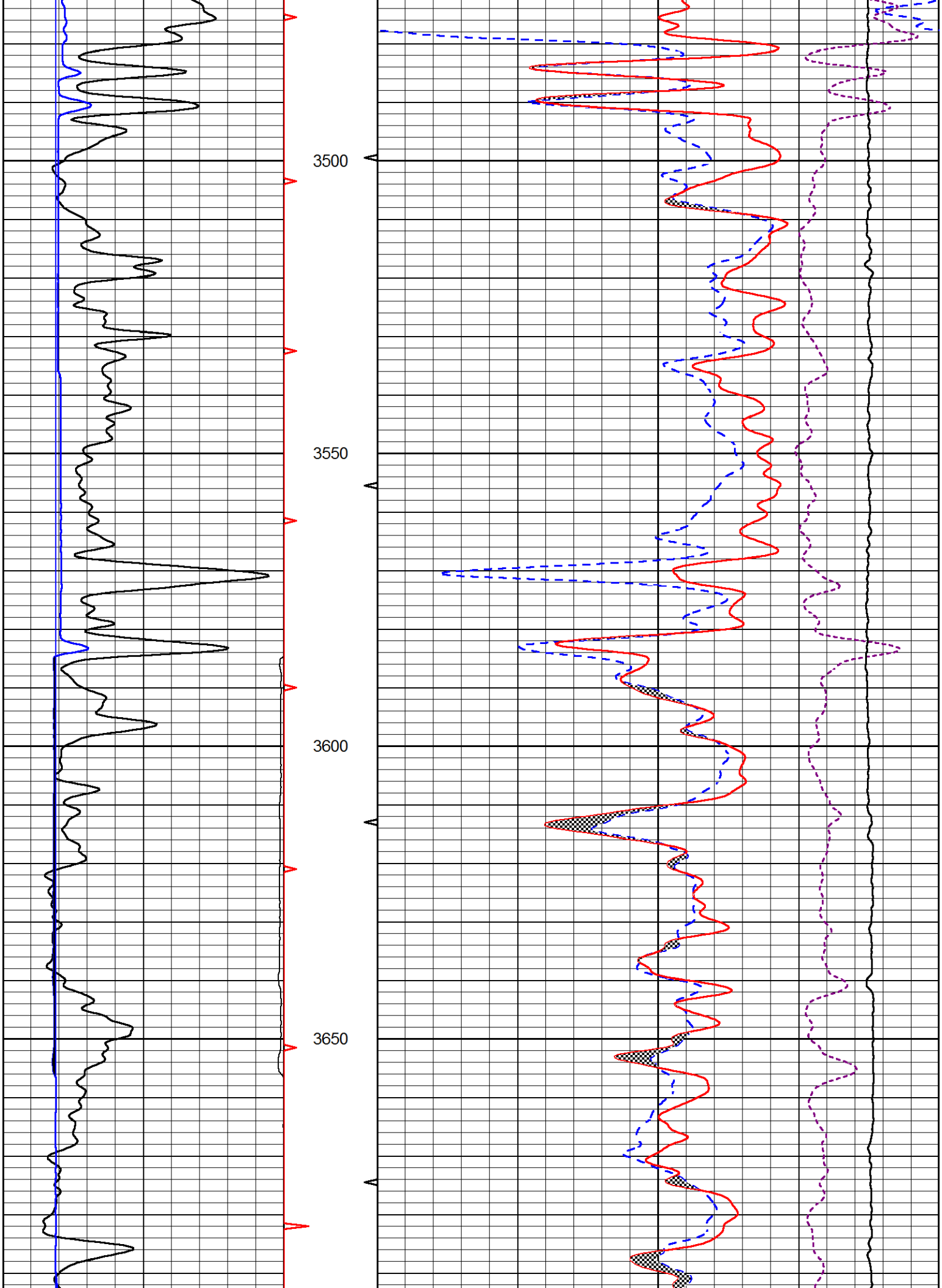
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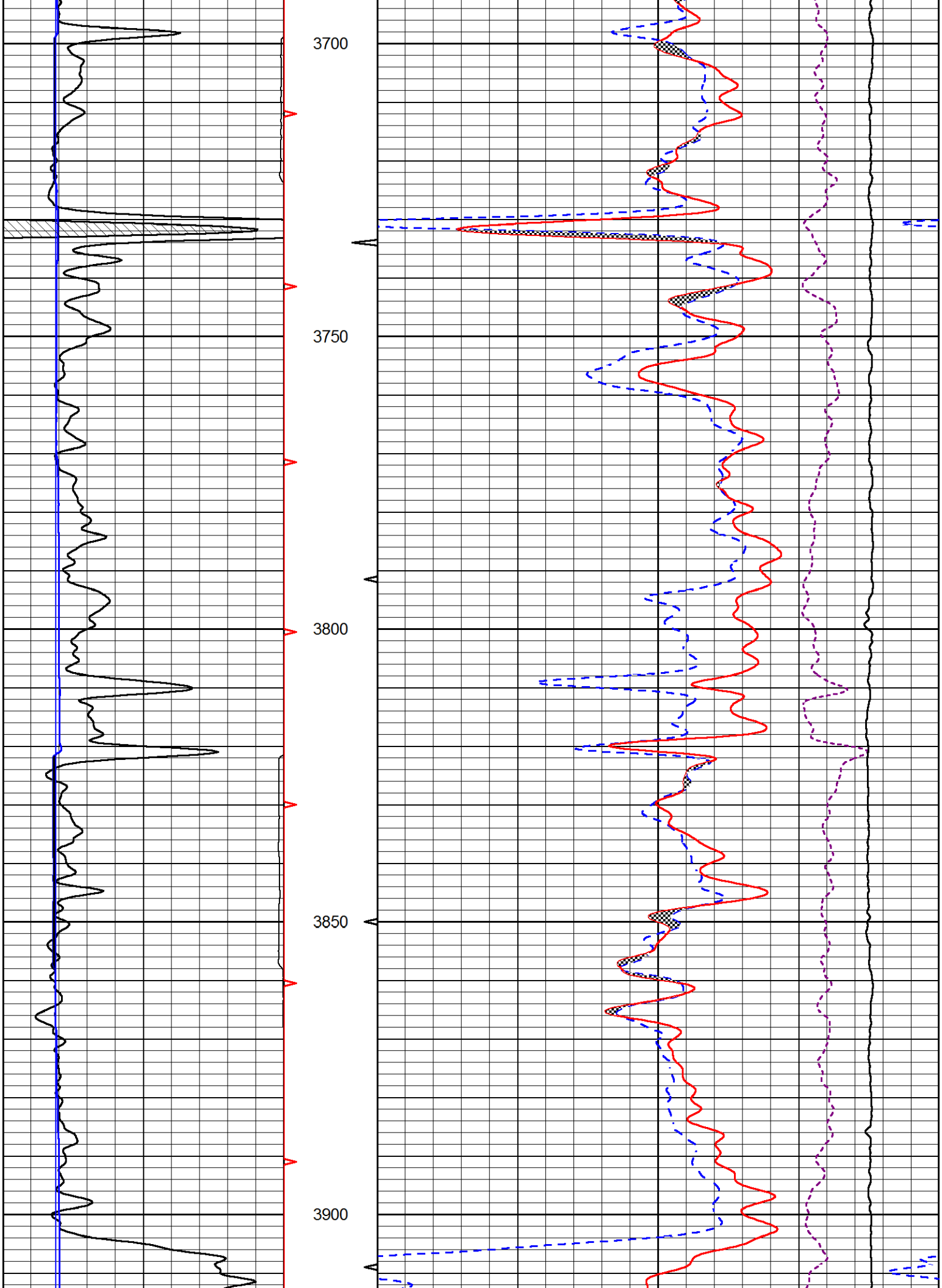
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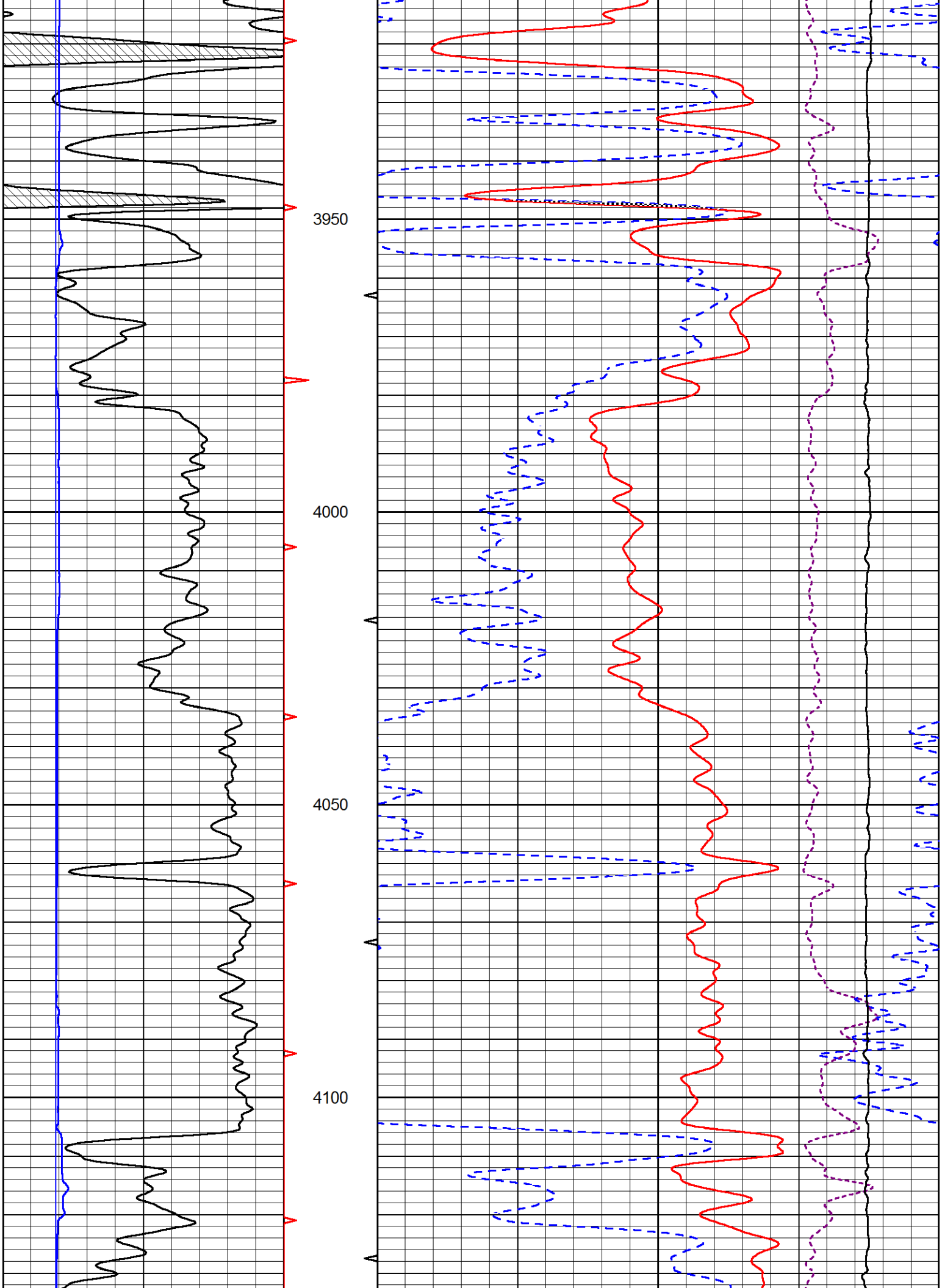
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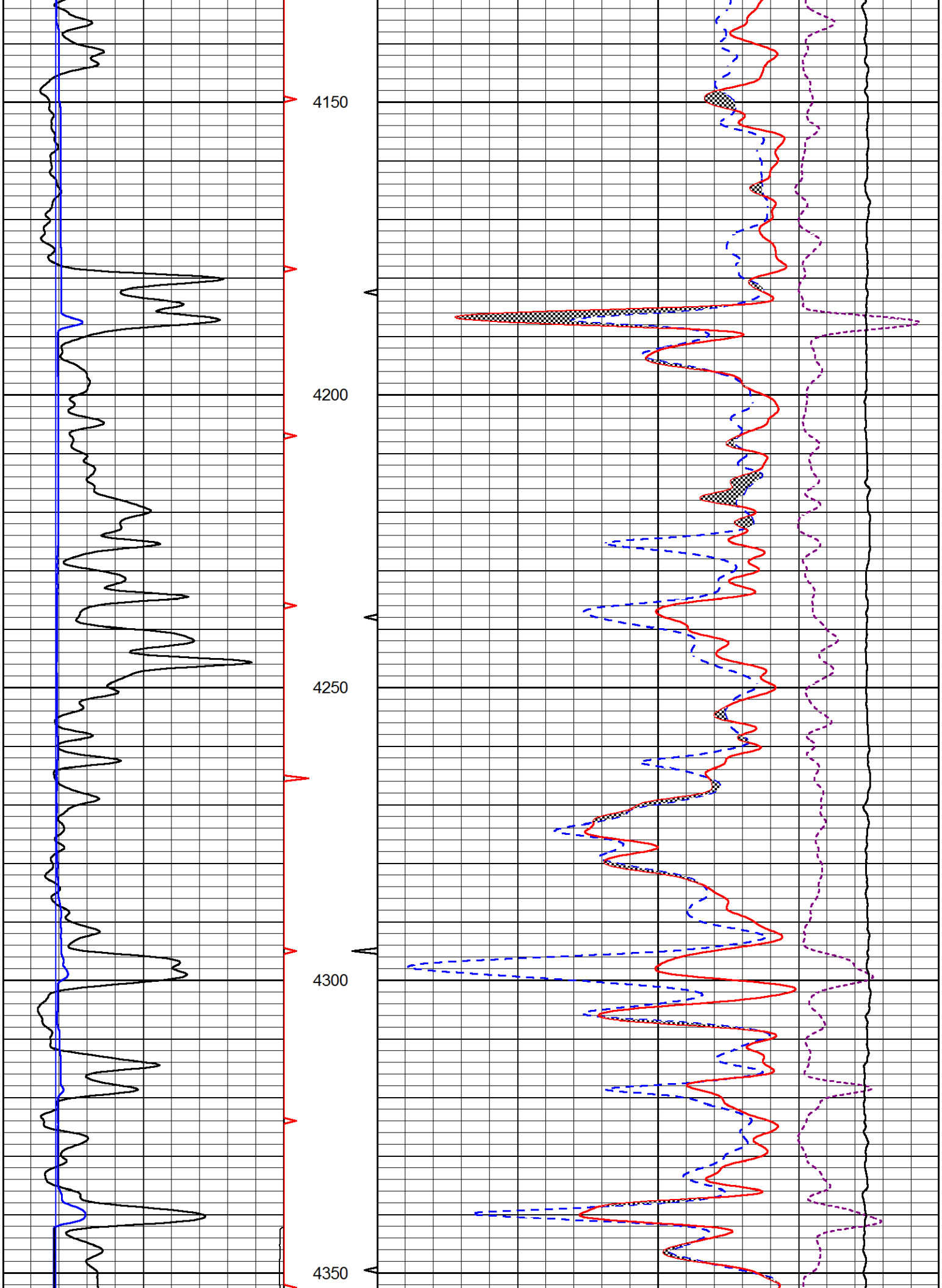
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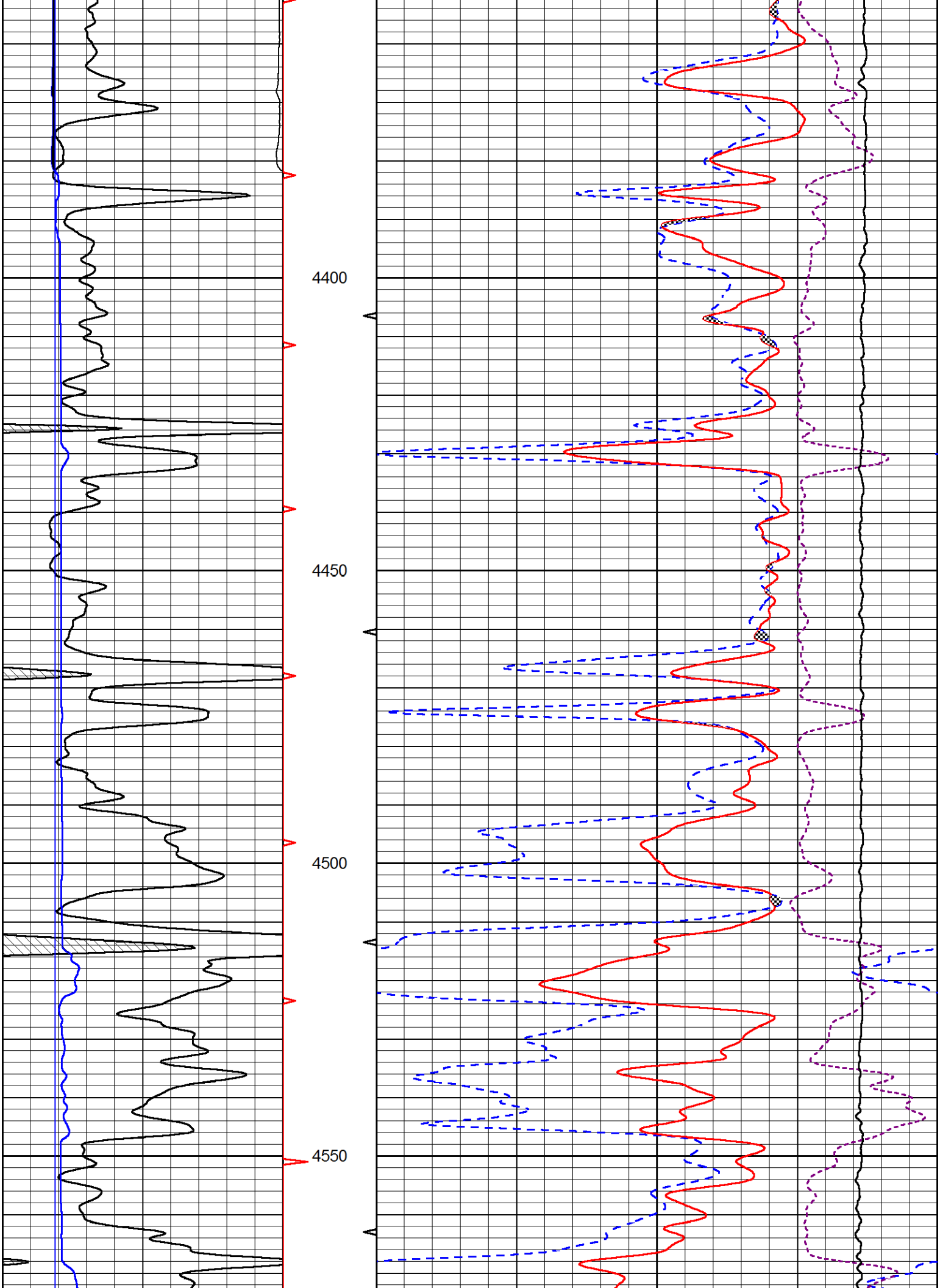
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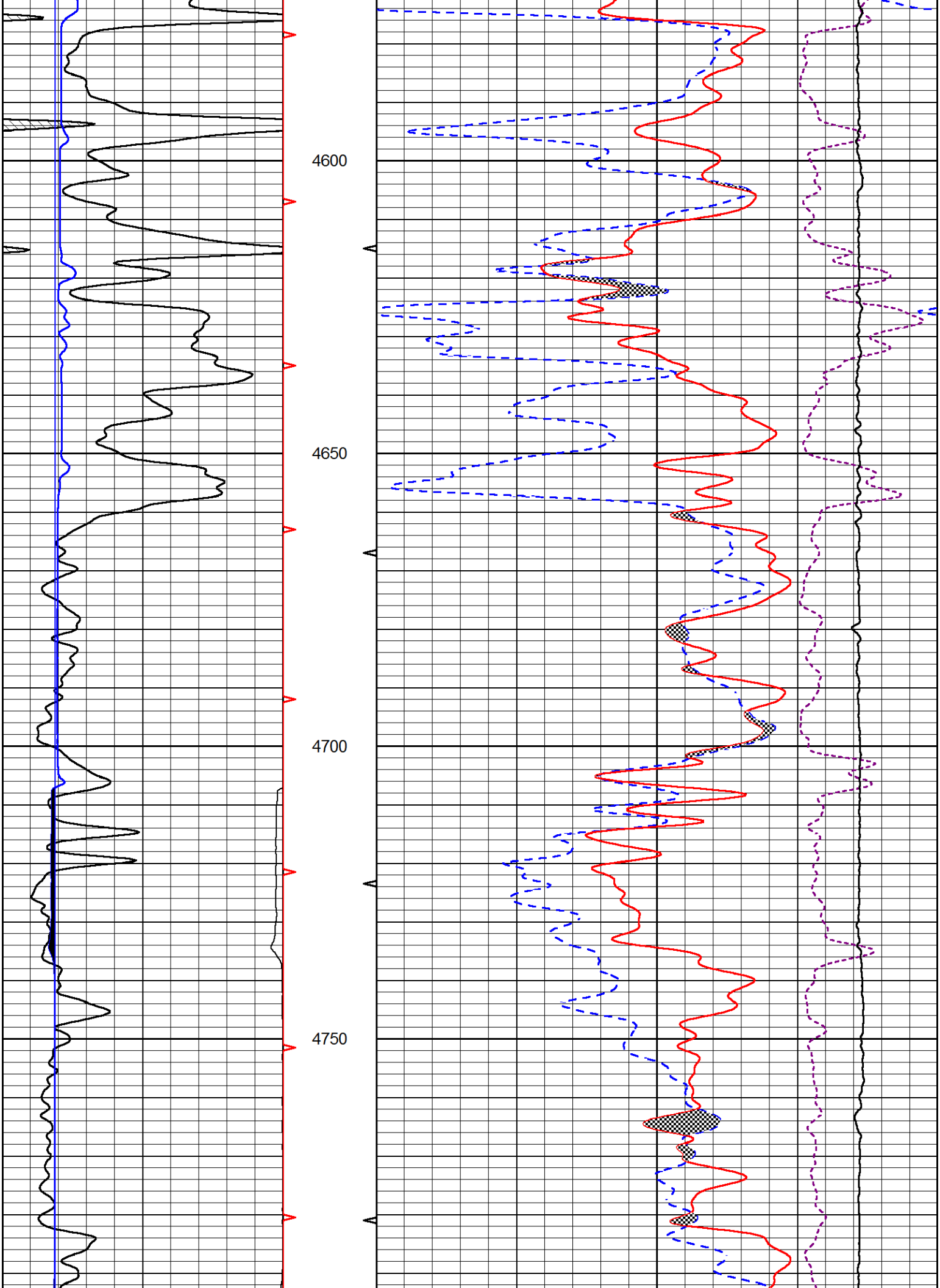
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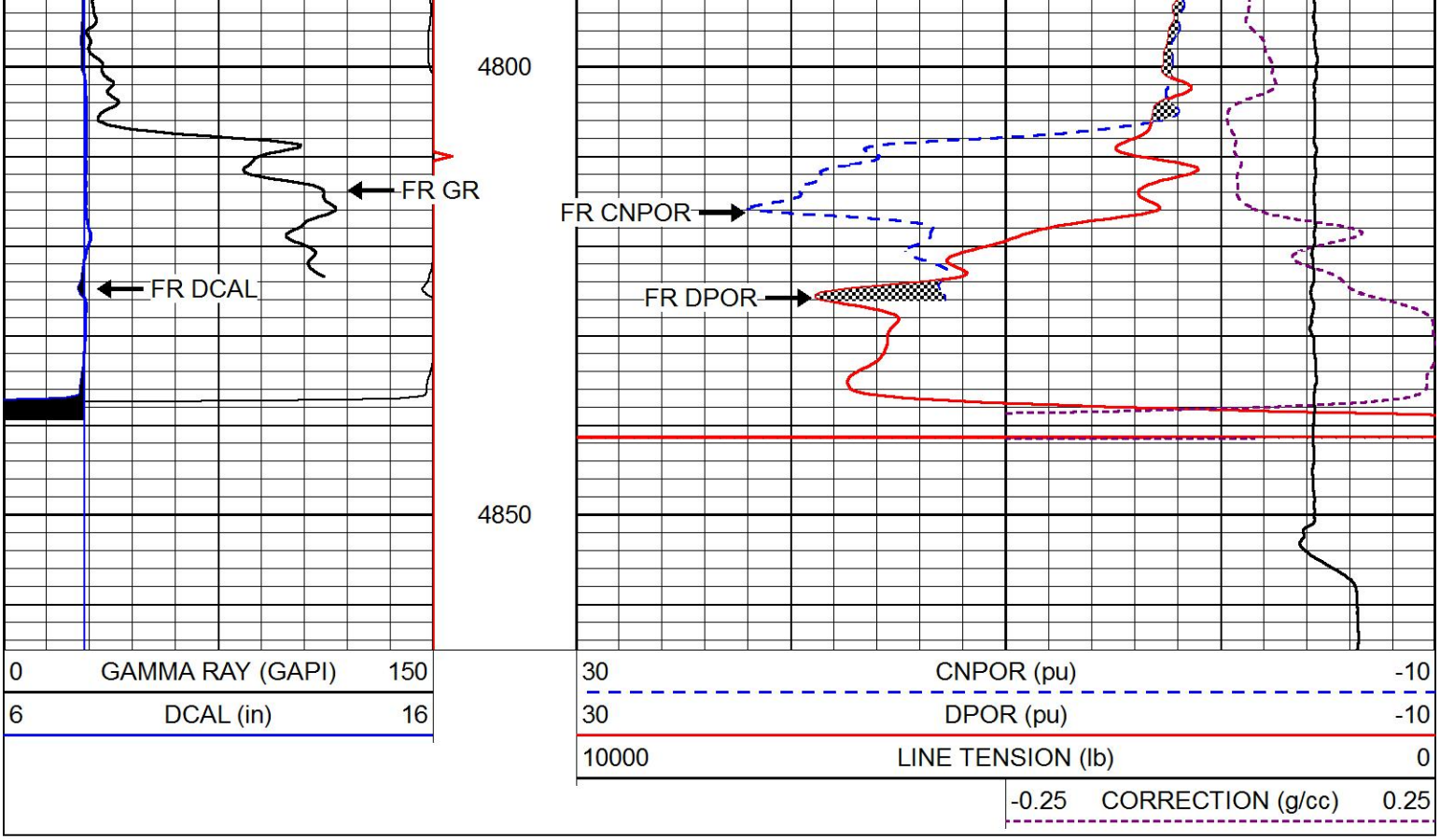
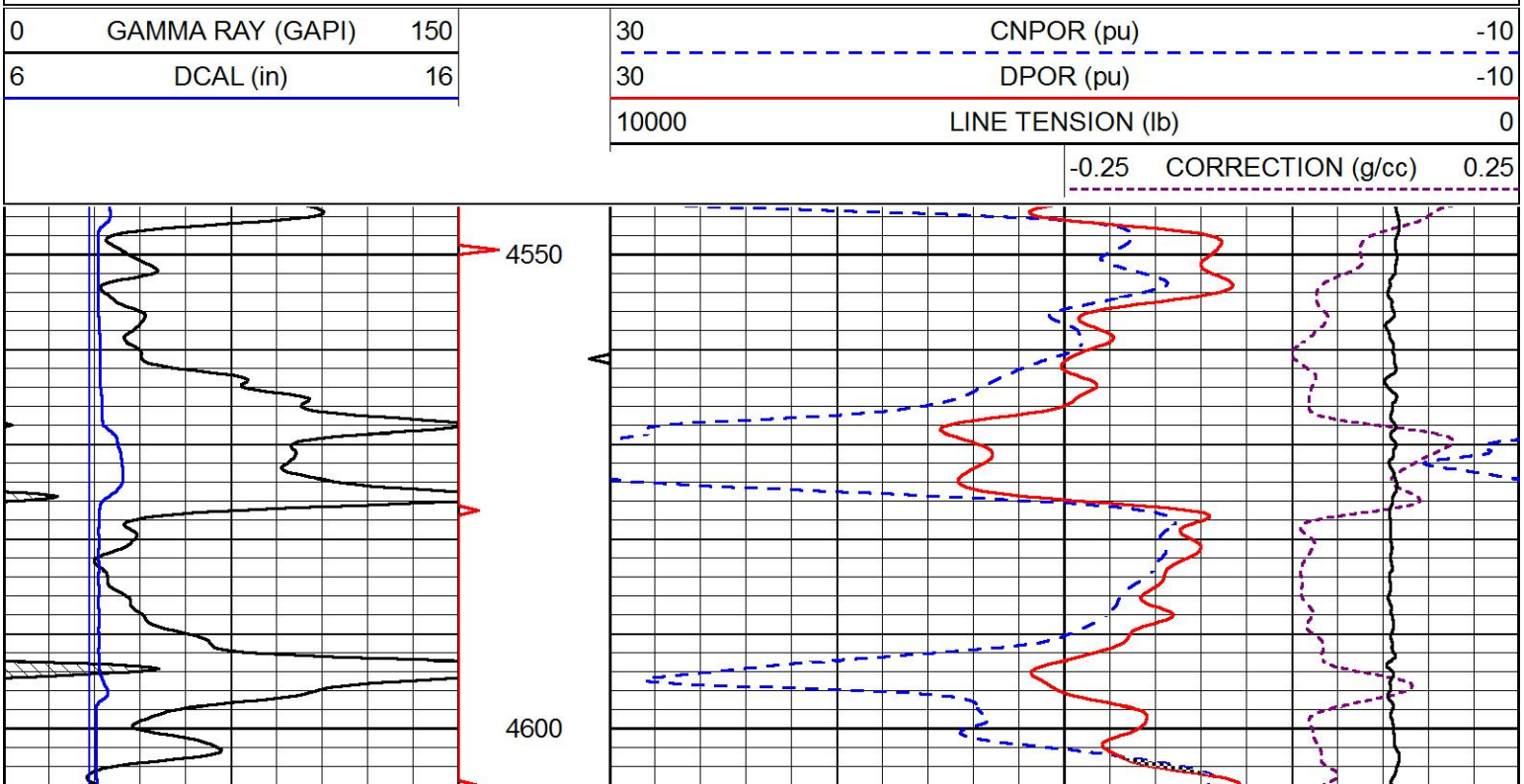
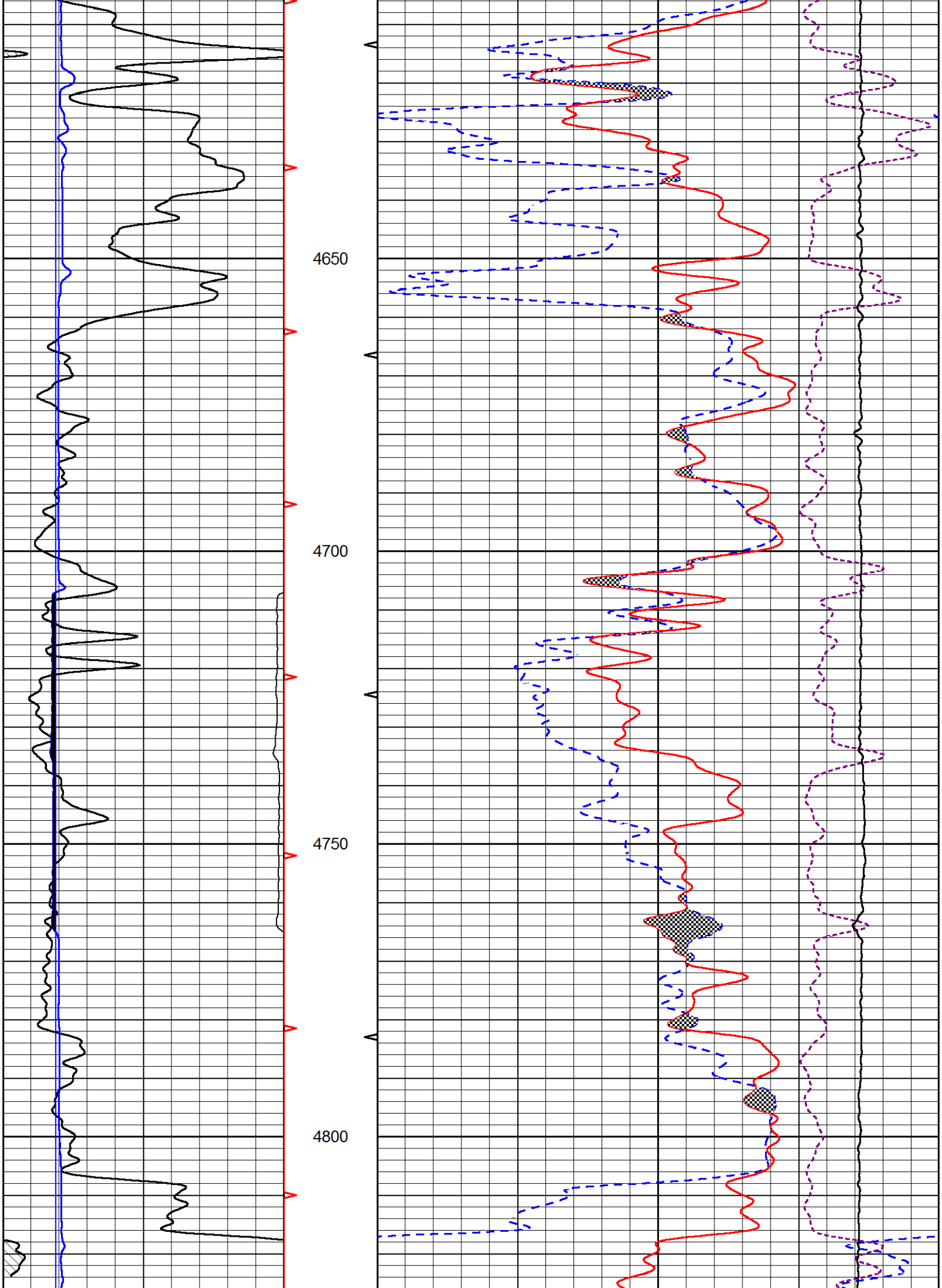


REPEAT SECTION

MIDWEST WIRELINE

Database File	griffin_kay 1.db
Dataset Pathname	stkml/pass2.1
Presentation Format	_CNDLS~1
Dataset Creation	Tue Feb 23 17:28:53 2021
Charted by	Depth in Feet scaled 1:240

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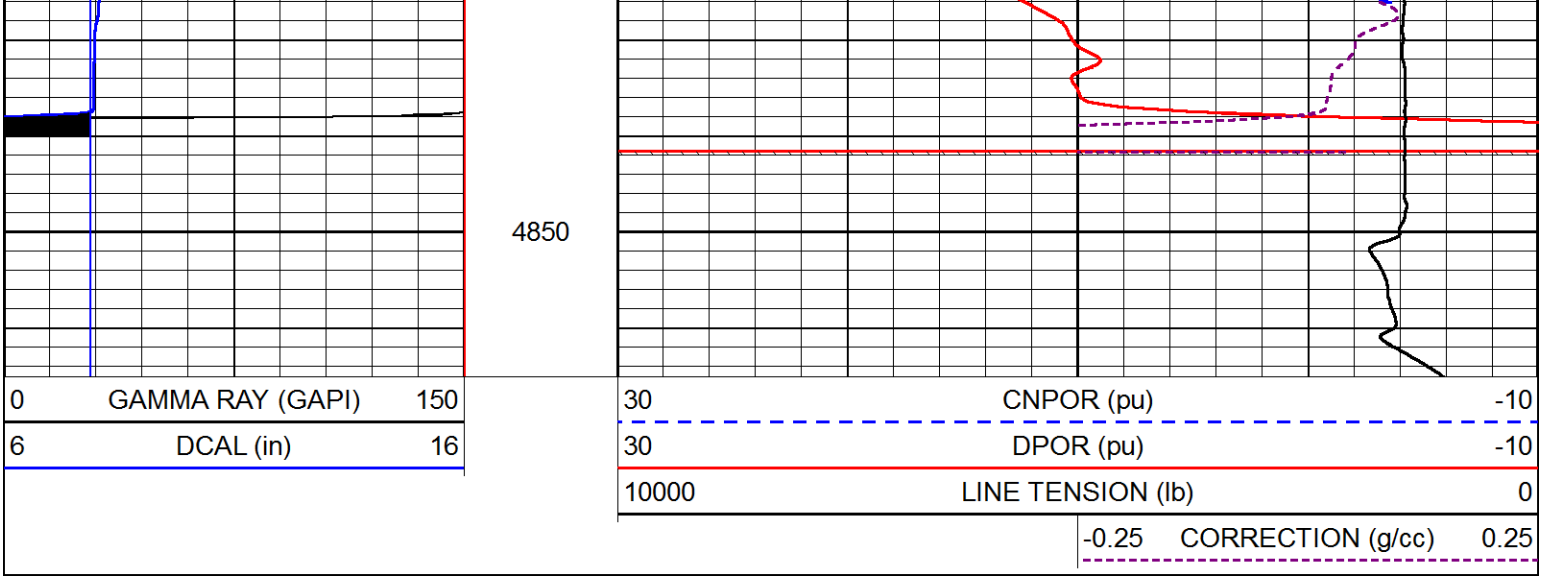

Calibration Report

Database File griffin_kay 1.db
Dataset Pathname stkml/pass3.4
Dataset Creation Tue Feb 23 17:21:24 2021

Dual Induction Calibration Report

Serial-Model: 952-828-PSI HIGH TEMP
Calibration Performed: Thu Feb 04 06:43:01 2021

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		Gain	Offset
Deep	167.000	835.000	0.000	255.000	mmho/m	0.455	-35.500
Medium	0.000	1348.000	142.000	255.000	mmho/m	0.325	-34.000

Microlog Calibration Report

Serial-Model: PSI-01-PSIML
Performed: Sun Jan 17 01:42:11 2021

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	16000.0000	-1.9000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	17000.0000	-1.3000
Caliper	1.0033	1.0841	5.0000	16.5000	in	142.3500	-138.5000

Compensated Density Calibration Report

Serial-Model: 817-947-M&W
Source / Verifier: 16955B / 2ci
Master Calibration Performed: Sun Sep 20 22:09:47 2020

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	6127.15	5922.31	cps
Aluminum	2.675	g/cc	1141.85	3762.09	cps

Spine Angle = 74.89 Density/Spine Ratio = 0.529

	Size		Reading
Small Ring	4.50	in	1.02
Large Ring	14.50	in	1.23

Compensated Neutron Calibration Report

Serial Number: 207-MW
Tool Model: M&W
Calibration Performed: WED FEB 13 10:30:30 2019

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
Calibration Performed: Sun Sep 20 22:10:24 2020

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.5500 GAPI/cps