



MIDWEST WIRELINE

**BOREHOLE COMPENSATED
SONIC LOG**

Company Murfin Drilling Company, Inc.

Well Kaus #1-21

Field

County Cheyenne State Kansas

Location: API #: 15-023-21576-00-00

2310 FSL & 175 FEL

SEC 21 TWP 3S RGE 37W

Other Services
CNL/CDL
DIL/MEL

Company Murfin Drilling Company, Inc.
Well Kaus #1-21
Field
County Cheyenne
State Kansas

Permanent Datum Ground Level Elevation 3423
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing

K.B. 3428
D.F.
G.L. 3423

Date 8/14/2022

Run Number Two

Type Log BHGS

Depth Driller 5191

Depth Logger 5163

Bottom Logged Interval 5151

Top Logged Interval 350

Type Fluid In Hole Chemical

Salinity, PPM CL 1000

Density 9.0

Level Full

Max. Rec. Temp. F 128

Operating Rig Time 5 Hours

Equipment -- Location P-108 HAYS

Recorded By D. Schmidt

Witnessed By Curtis Covey

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
One	12.25	0	388	8.625	23	0	388
Two	7.875	388	TD				

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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.

Bird City,
East to Rd 32, 3/4 North,
West 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: D. Schmidt
Operator:
Operator:
Operator:

Primary Witness: Curtis Covey
Secondary Witness:
Secondary Witness:
Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			CENT-PENGO	4.25	3.00	70.00
WVF4 WVF1	12.50 12.50		SLT-PENGO (602)	15.92	3.50	300.00
WVF3 WVF2	10.50 10.50					
			CENT-PENGO	4.25	3.00	70.00

Dataset: murfin_kaus 1-21.db: field/well/son/pass2
 Total length: 24.42 ft
 Total weight: 440.00 lb
 O.D.: 3.50 in

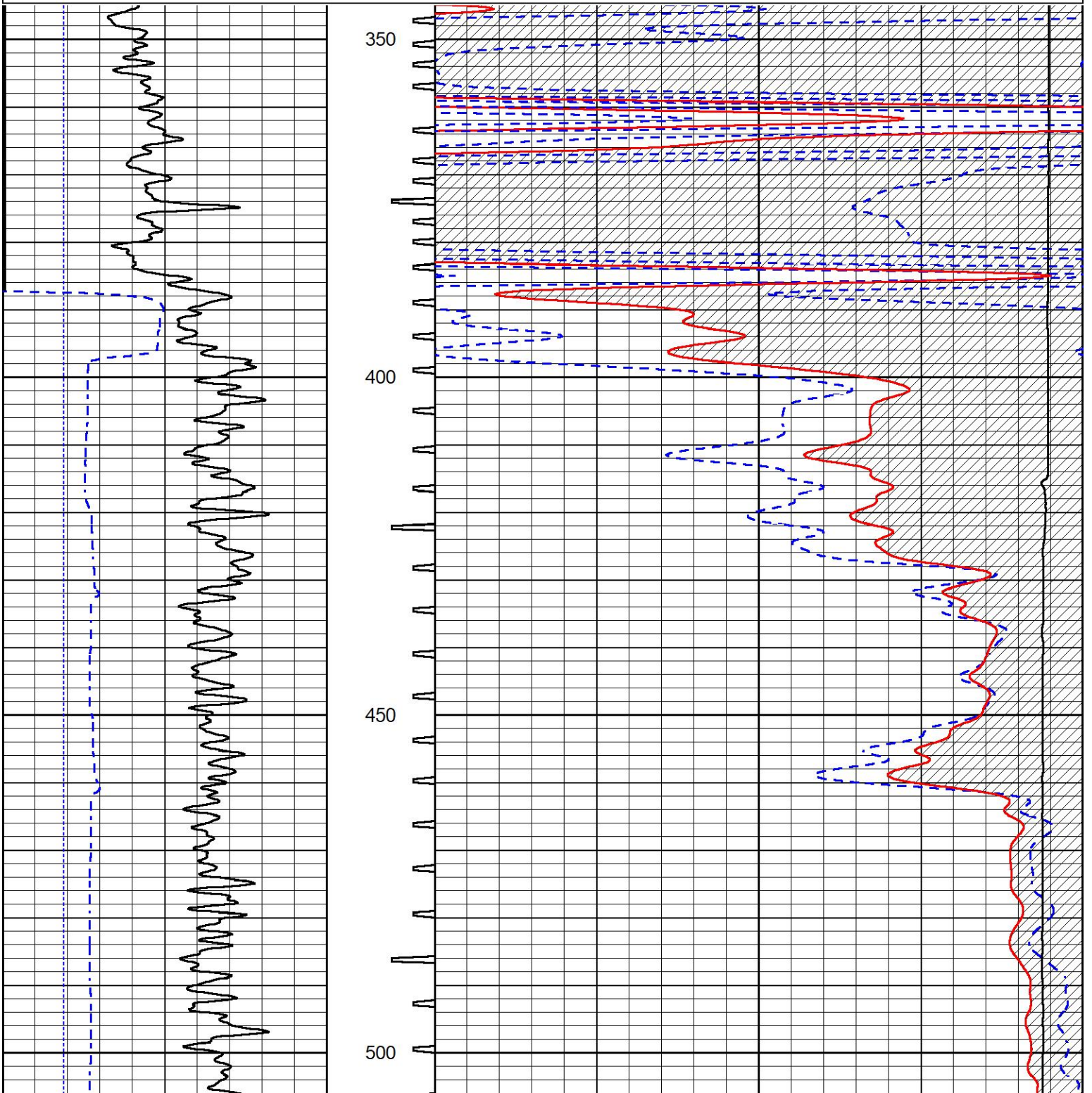


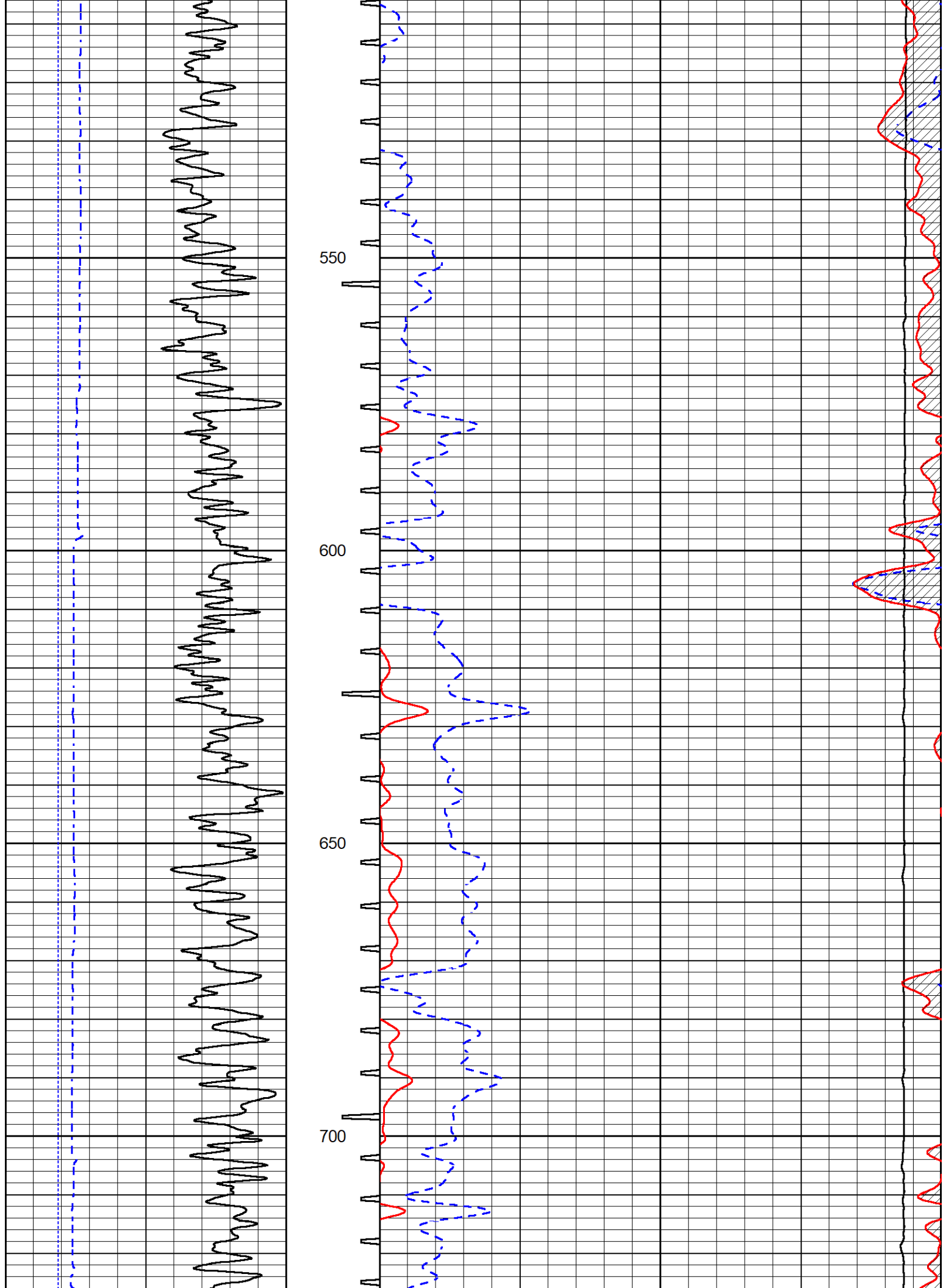
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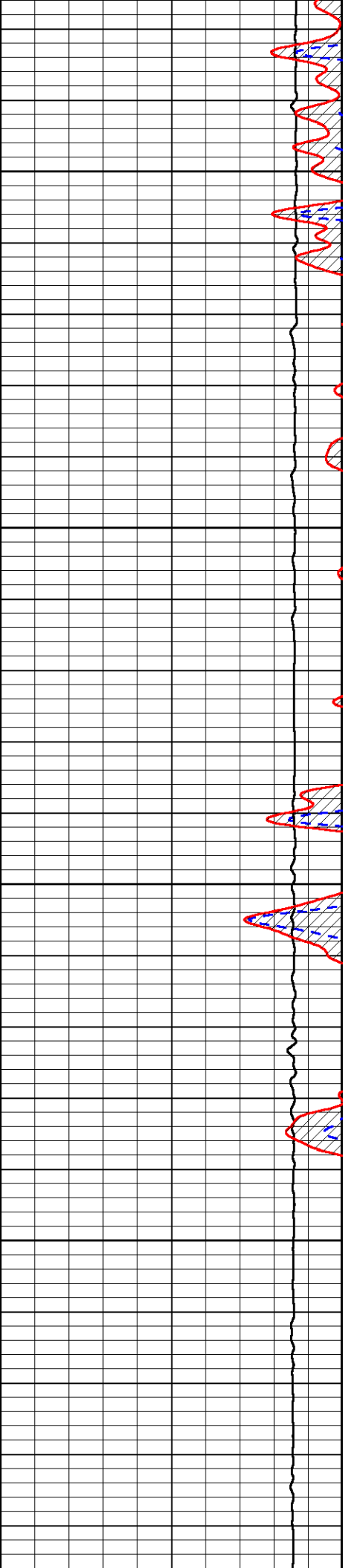
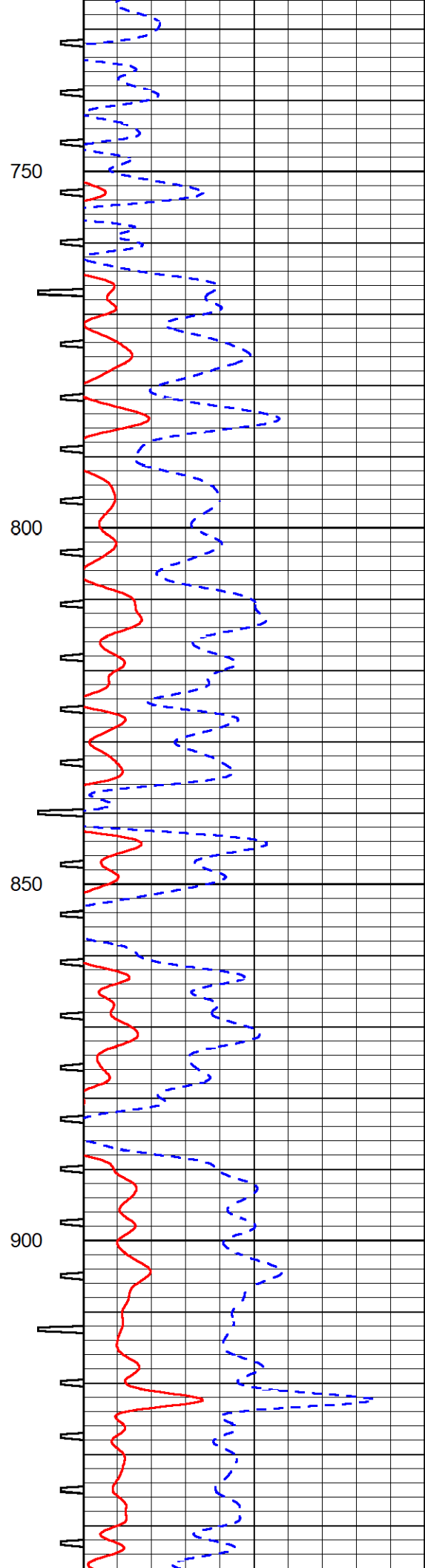
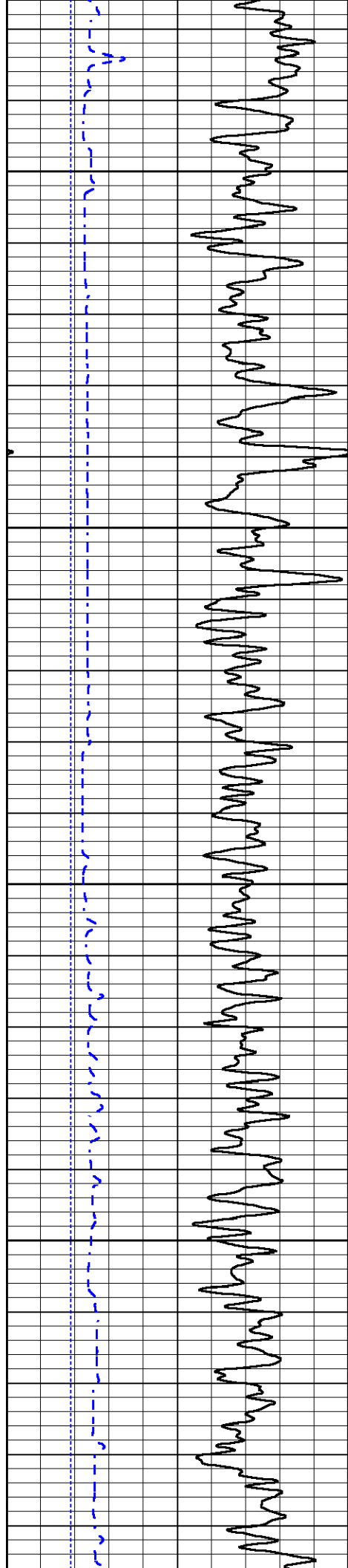
MAIN PASS

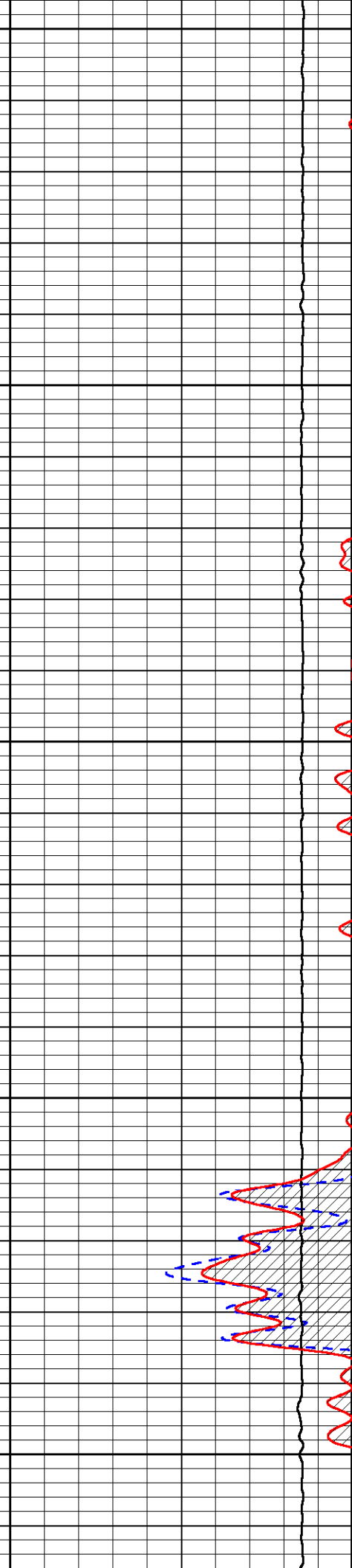
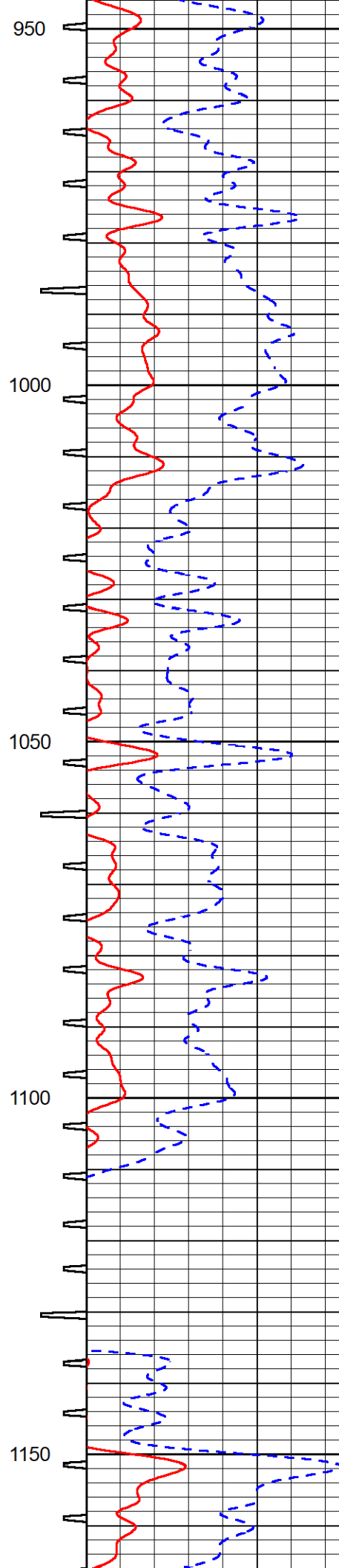
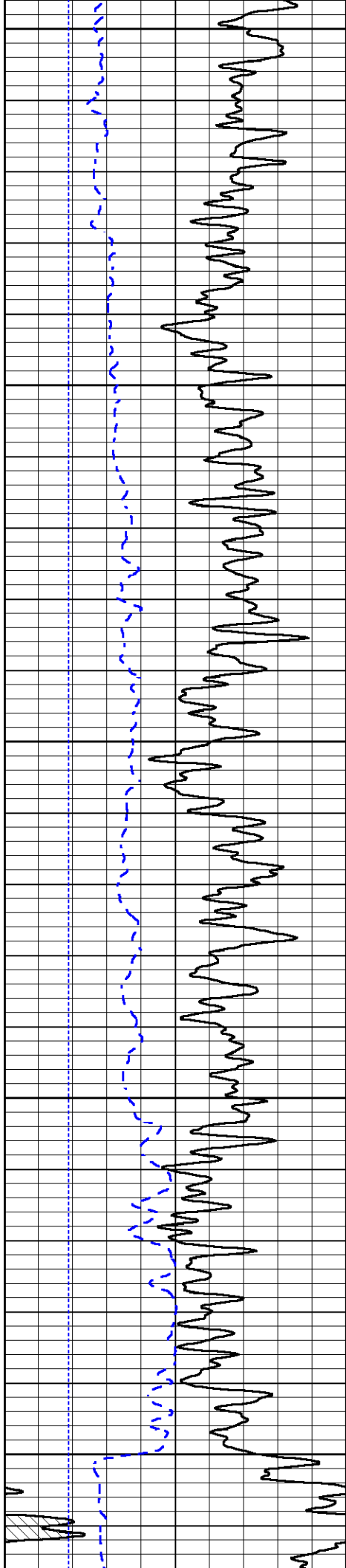
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 Presentation Format _sonic
 Dataset Creation Sun Aug 14 22:36:02 2022
 Charted by Depth in Feet scaled 1:240

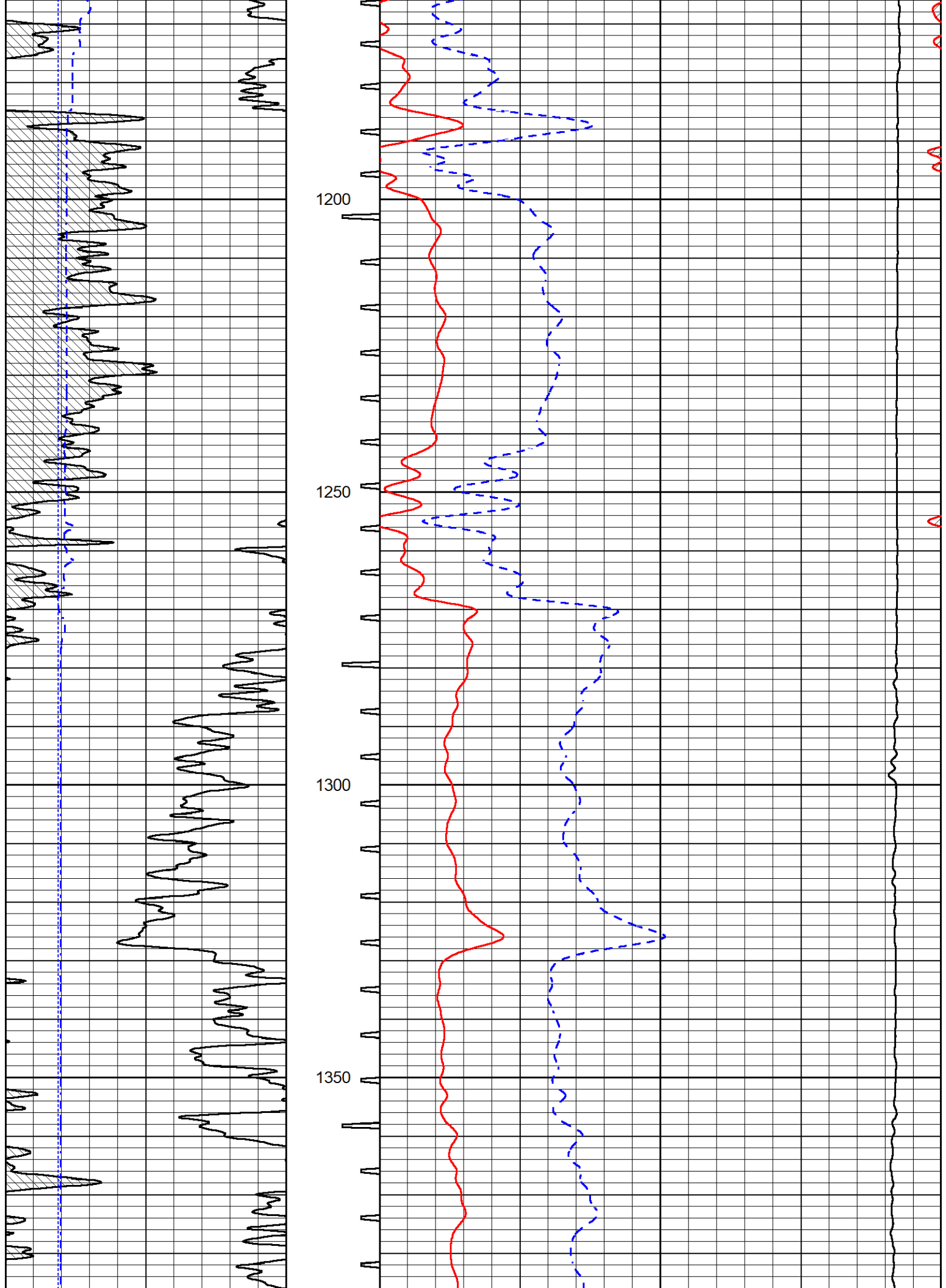
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150	GR (GAPI)	300	5 (msec) 0	30	Sonic Porosity (pu) (pu)	-10
6	Caliper (in)	16		15000	Line Tension (lb)	0

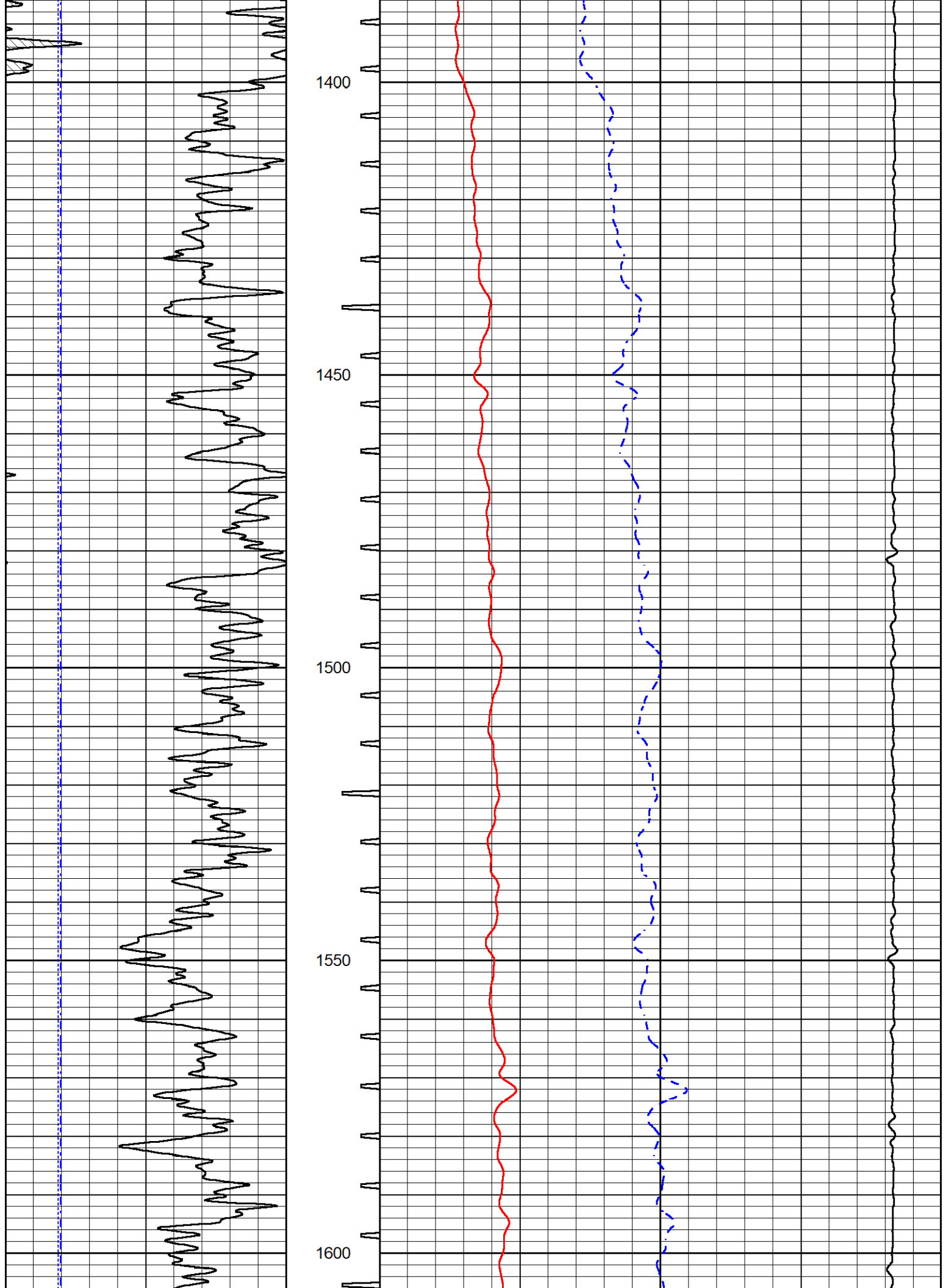


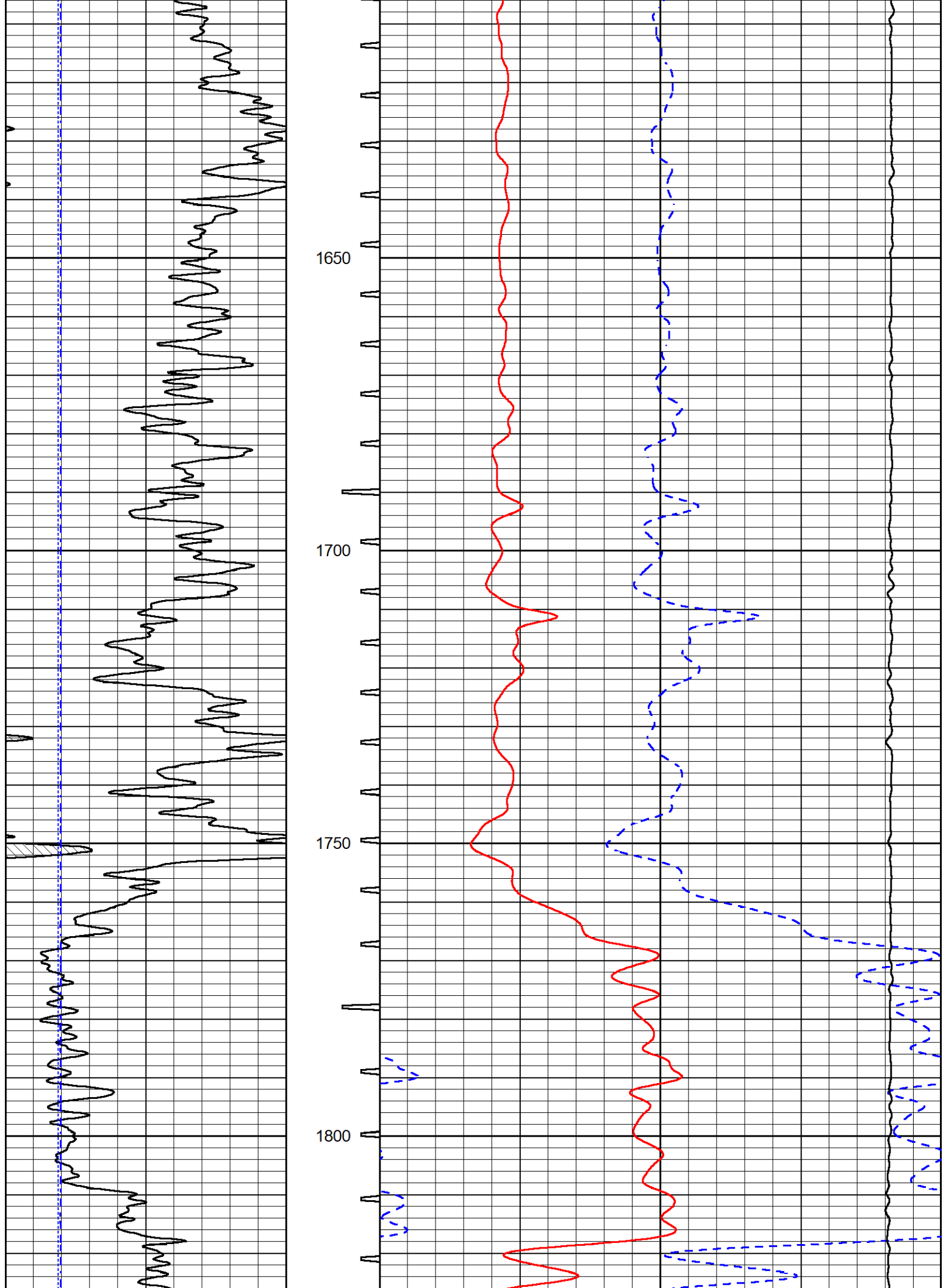


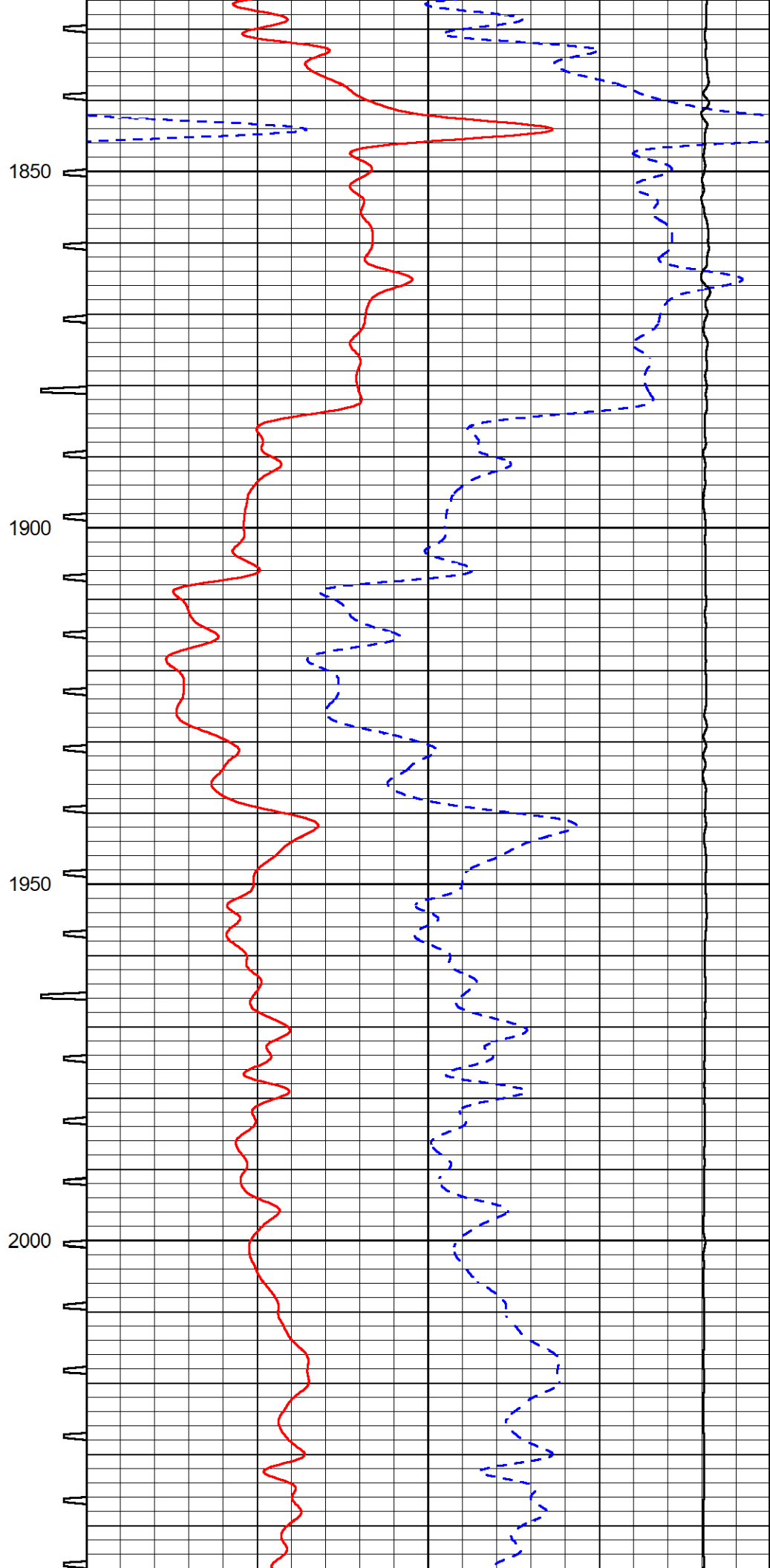
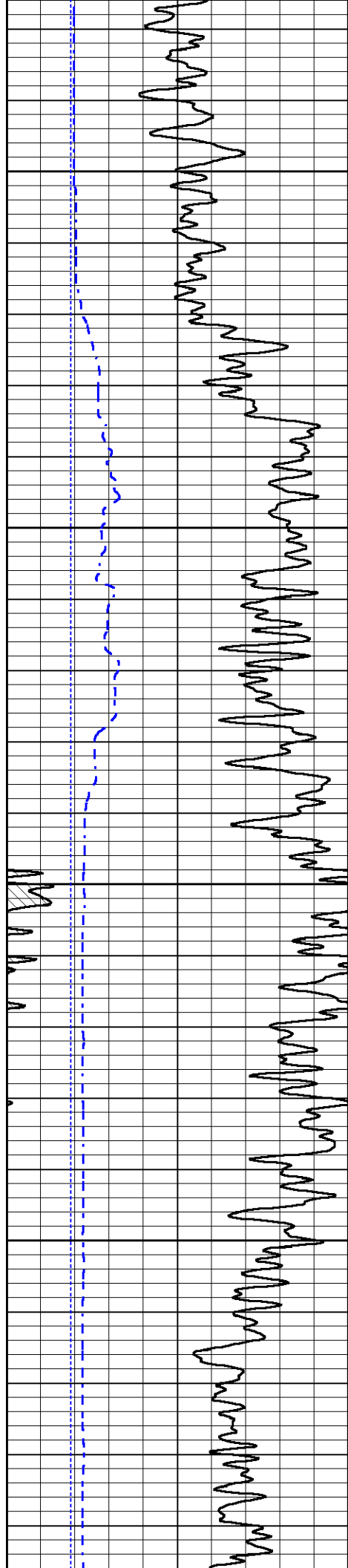










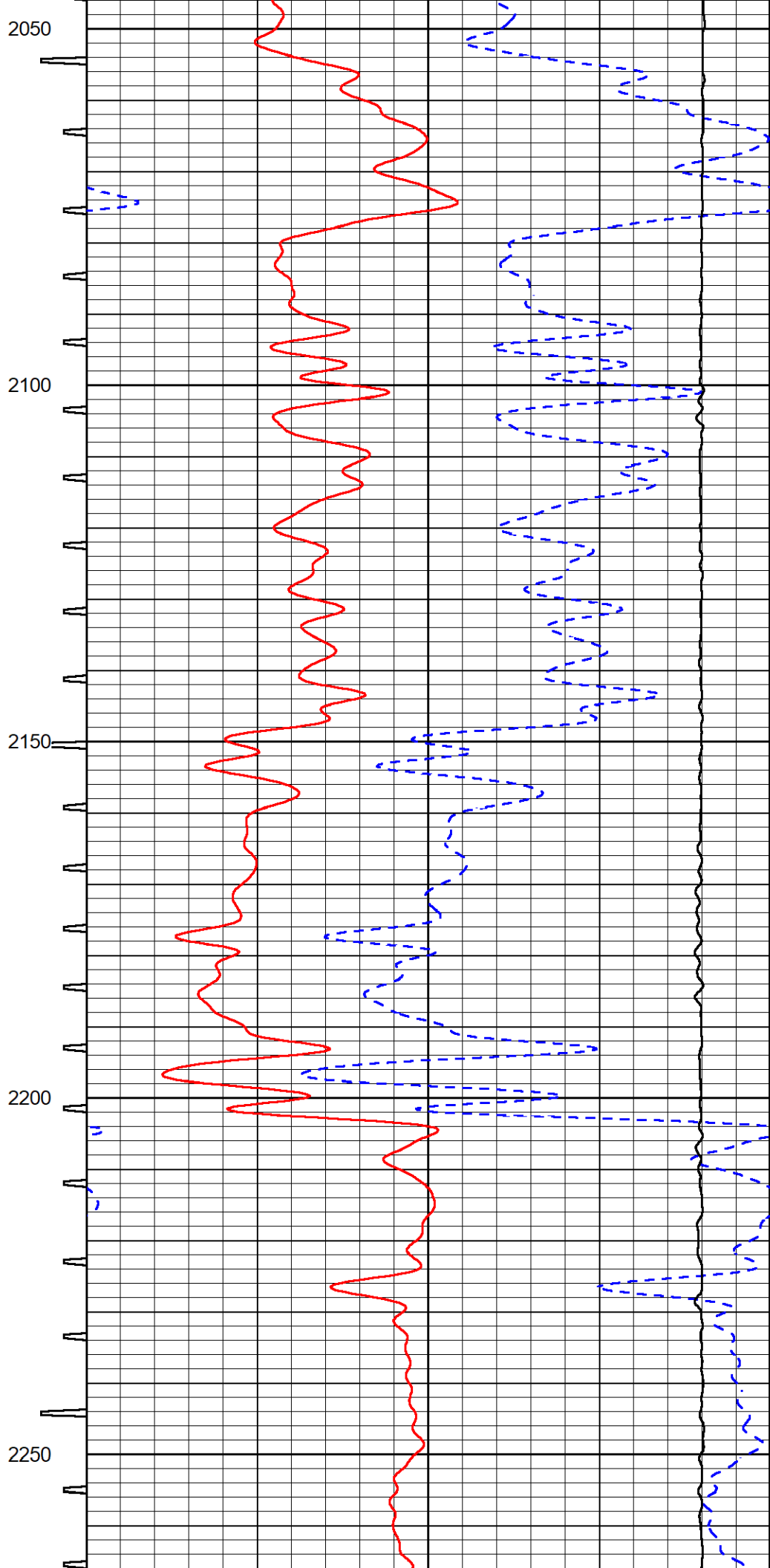
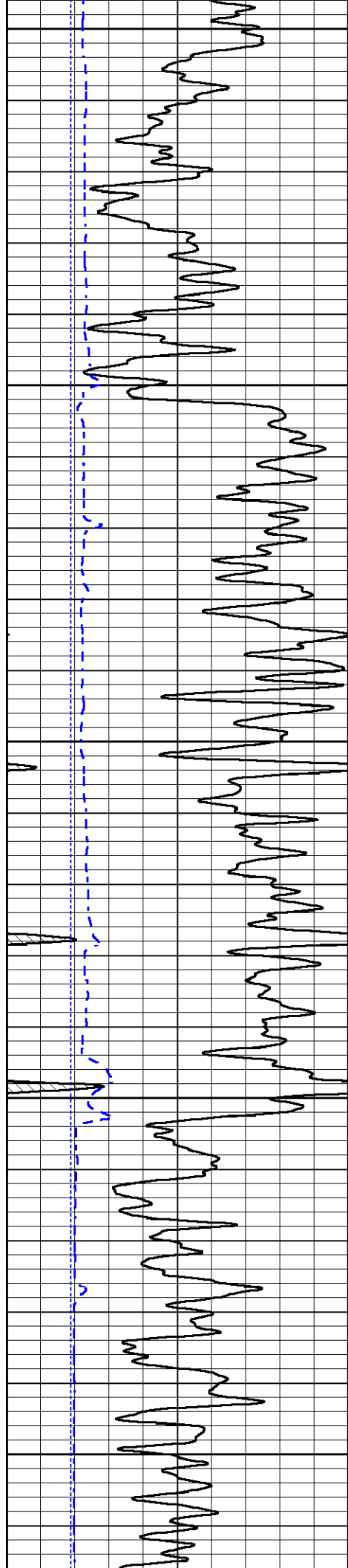


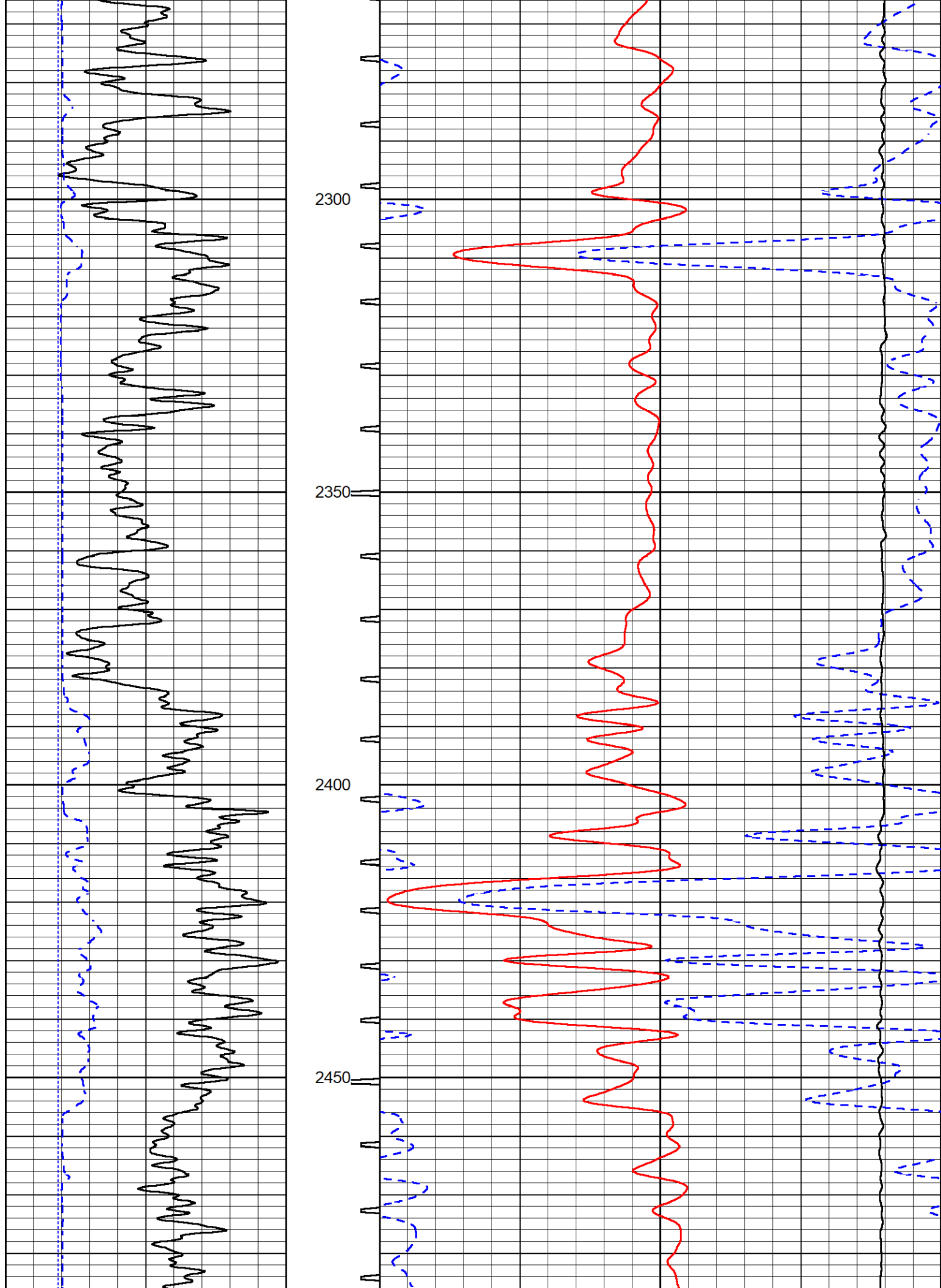
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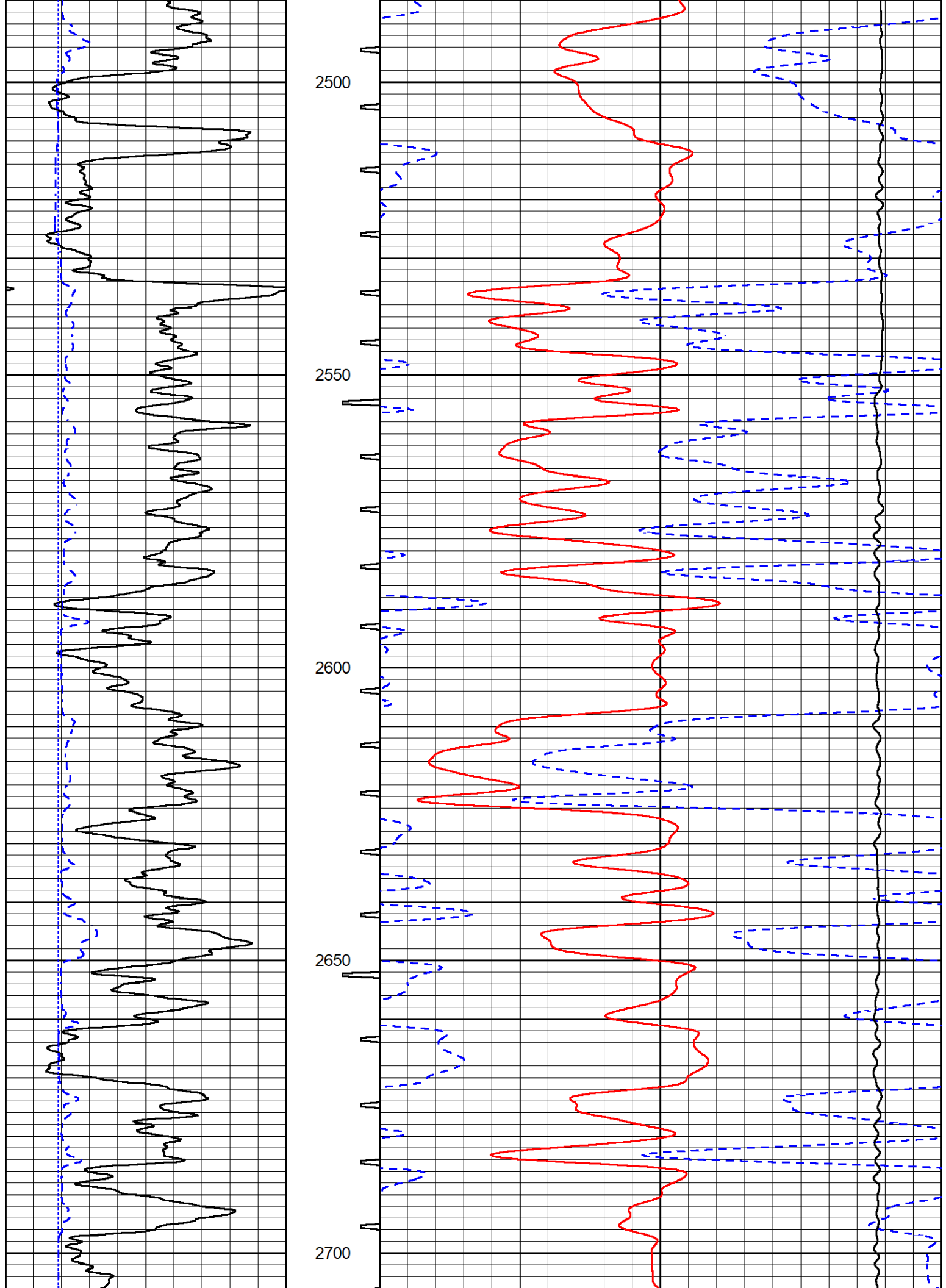
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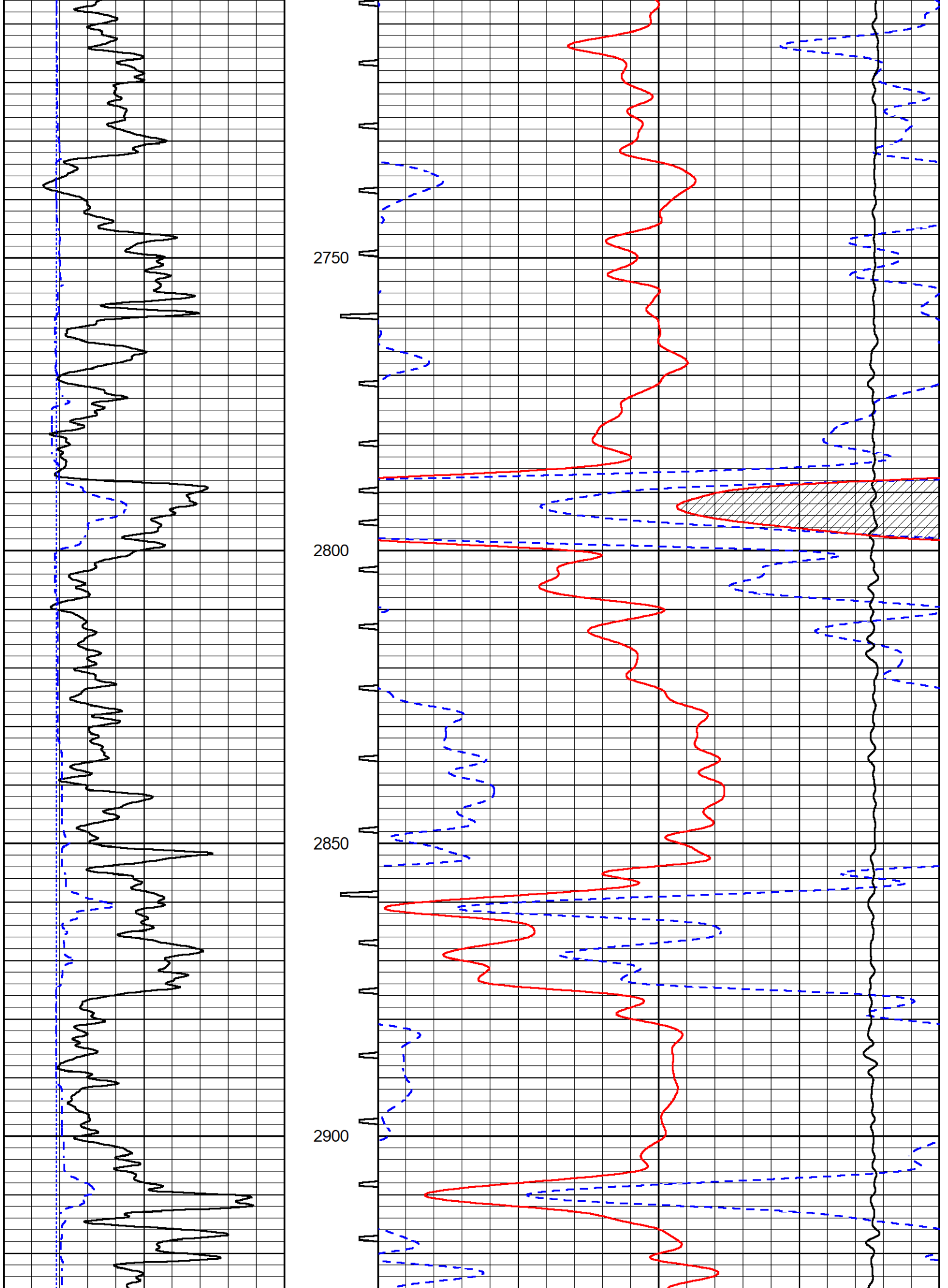
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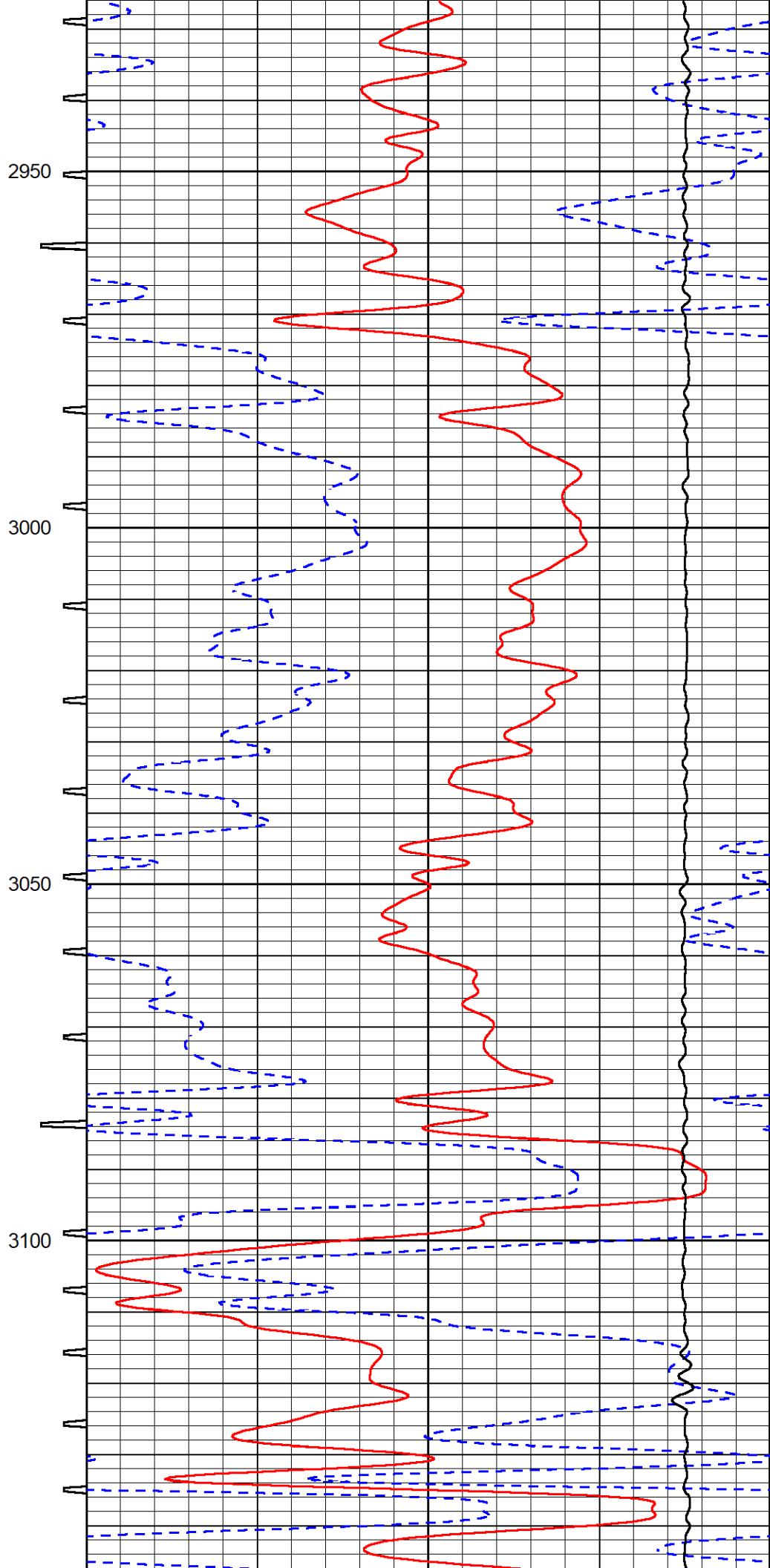
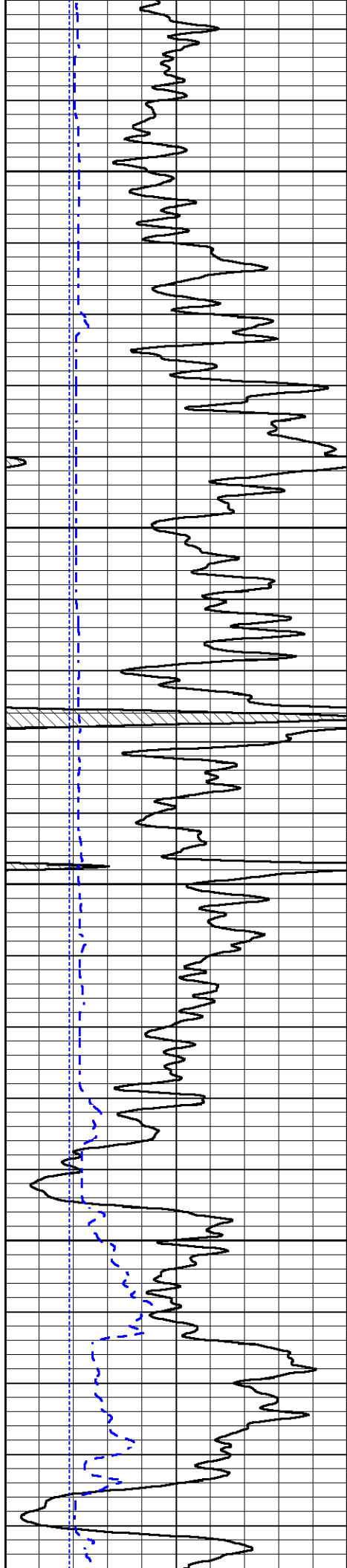
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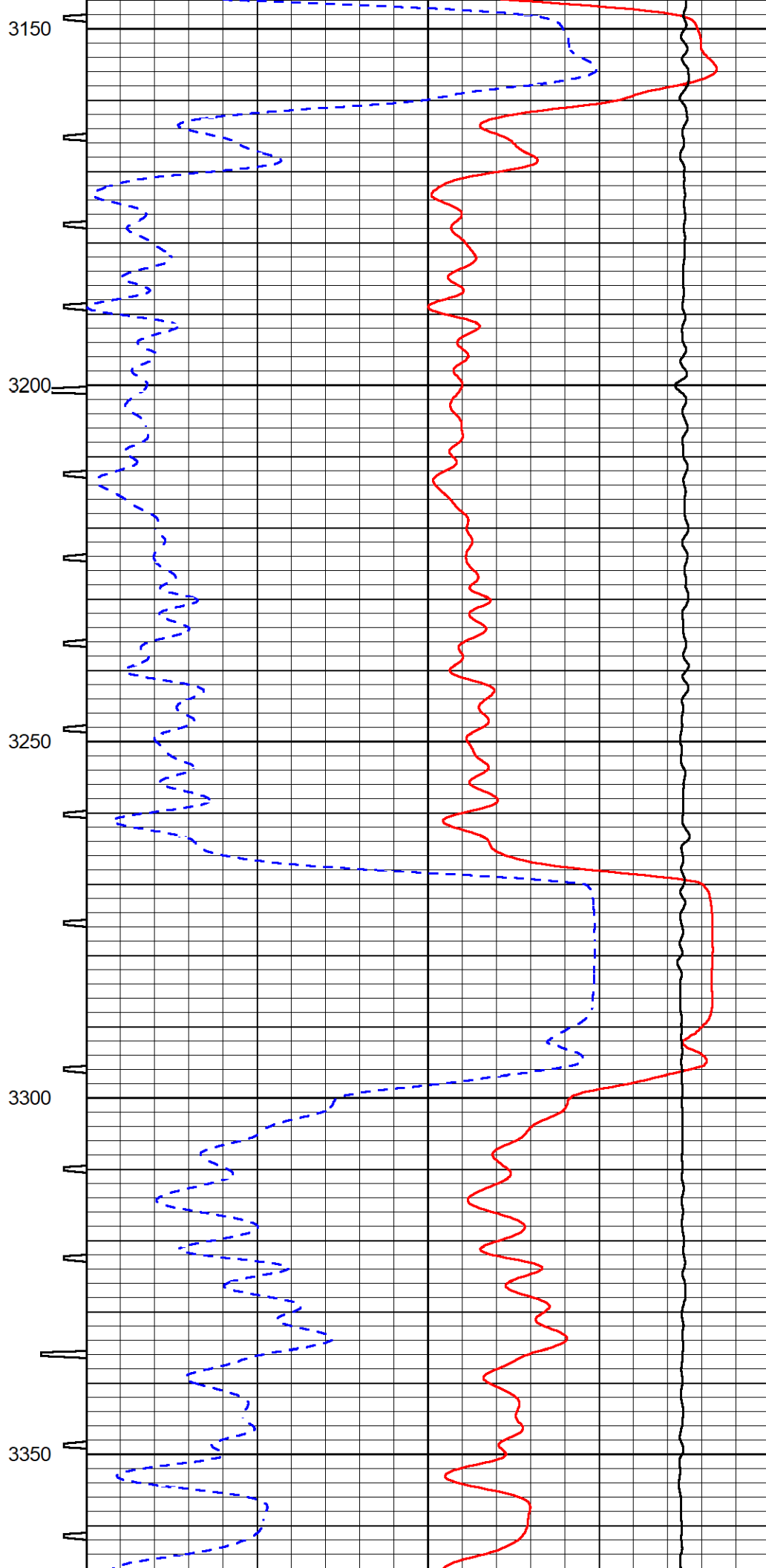
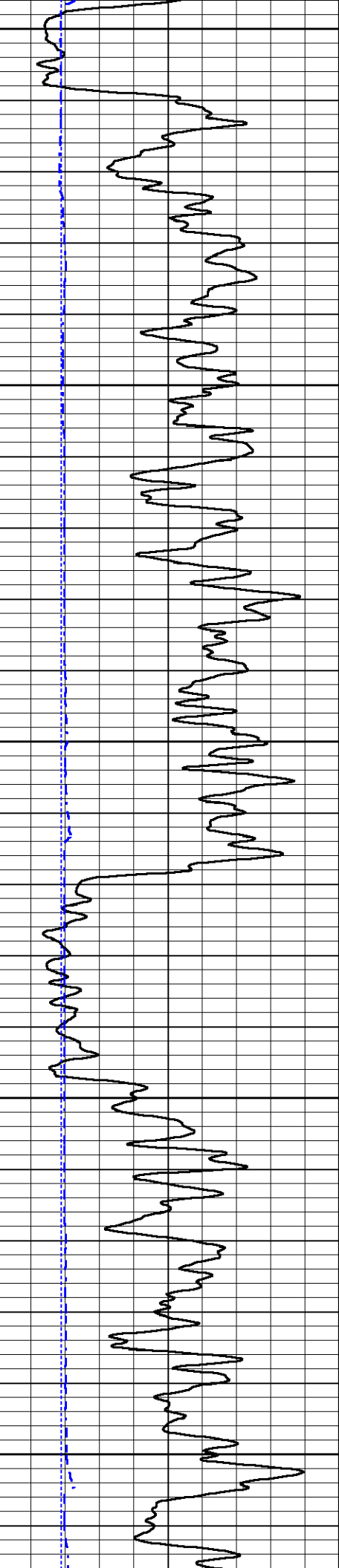


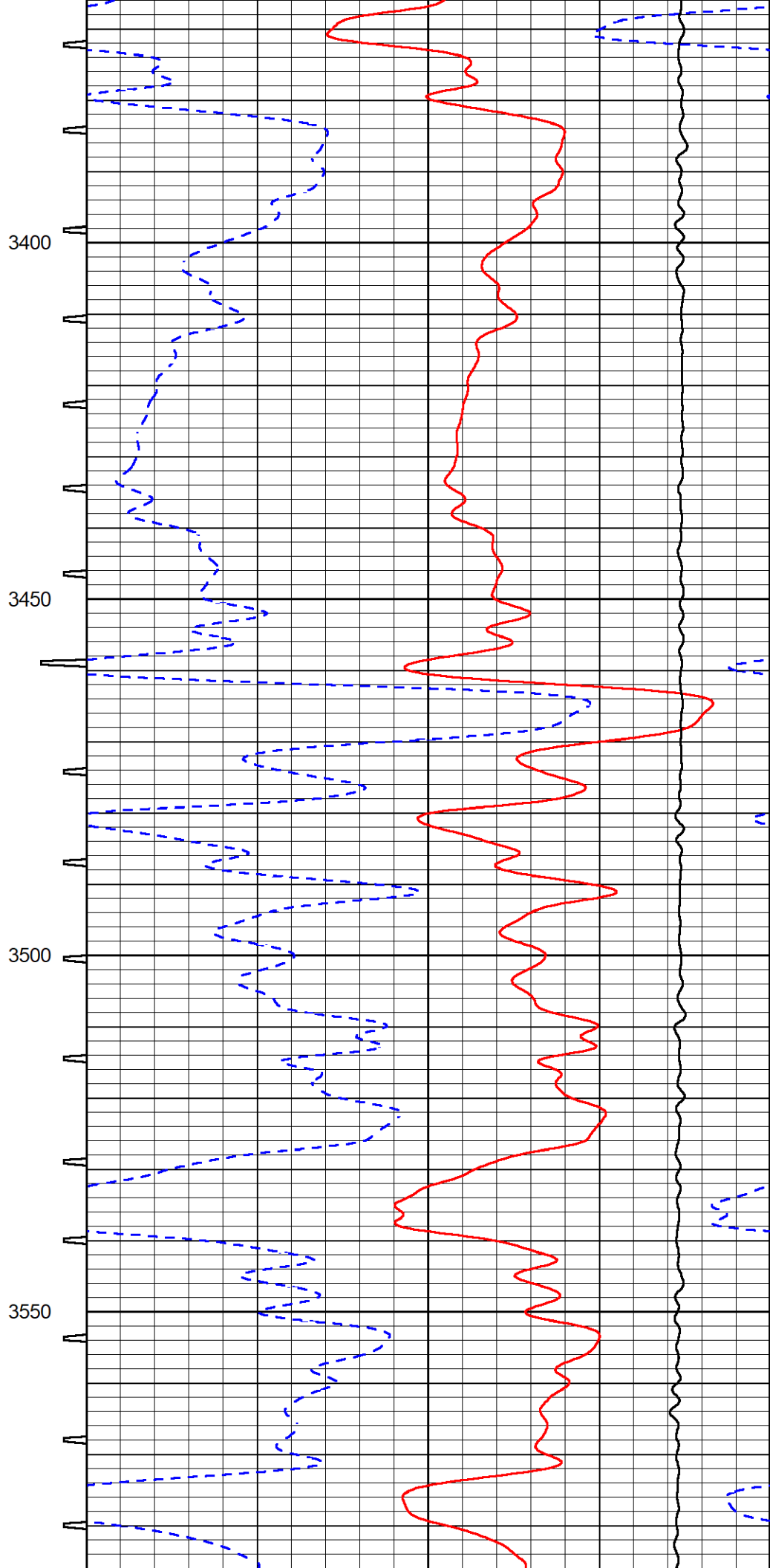
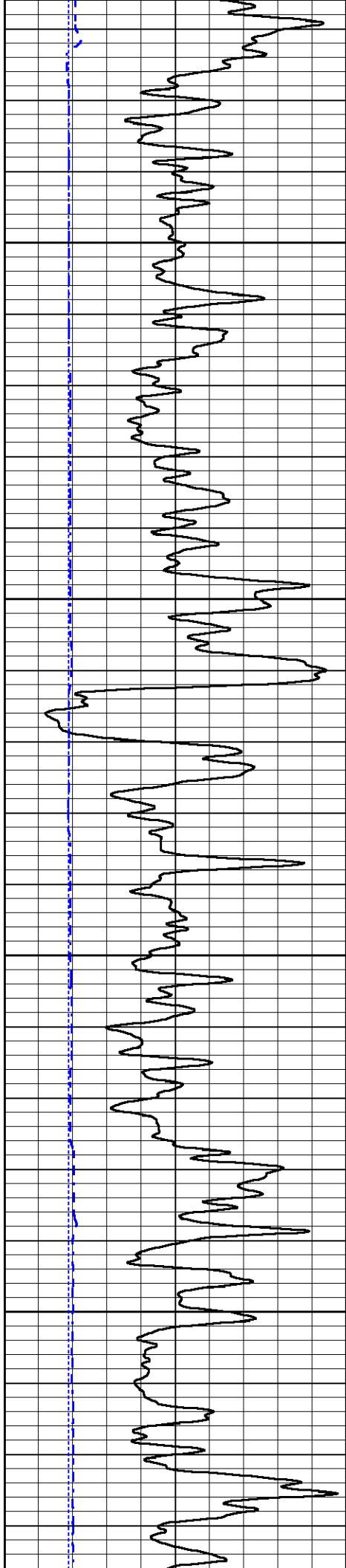
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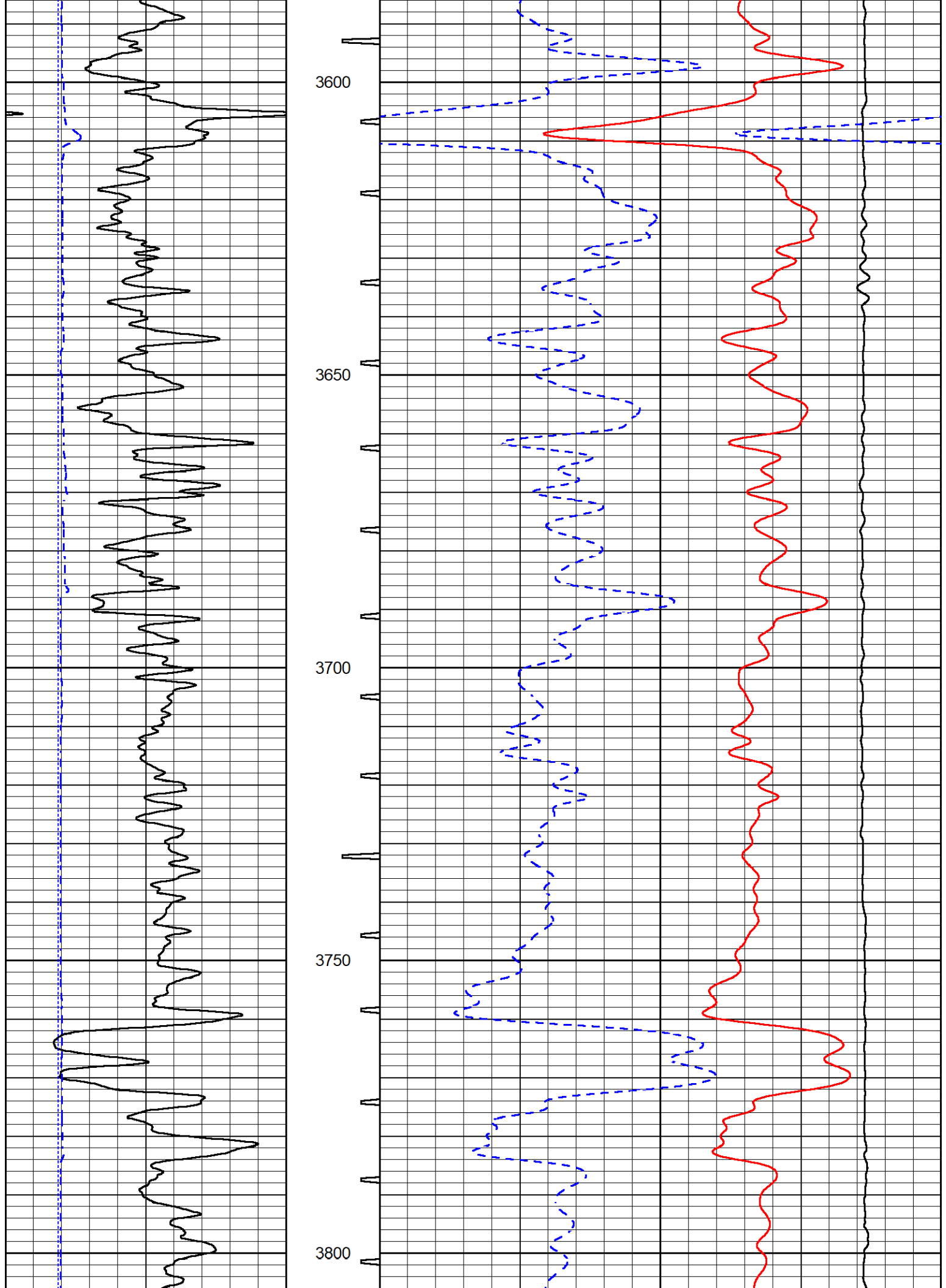
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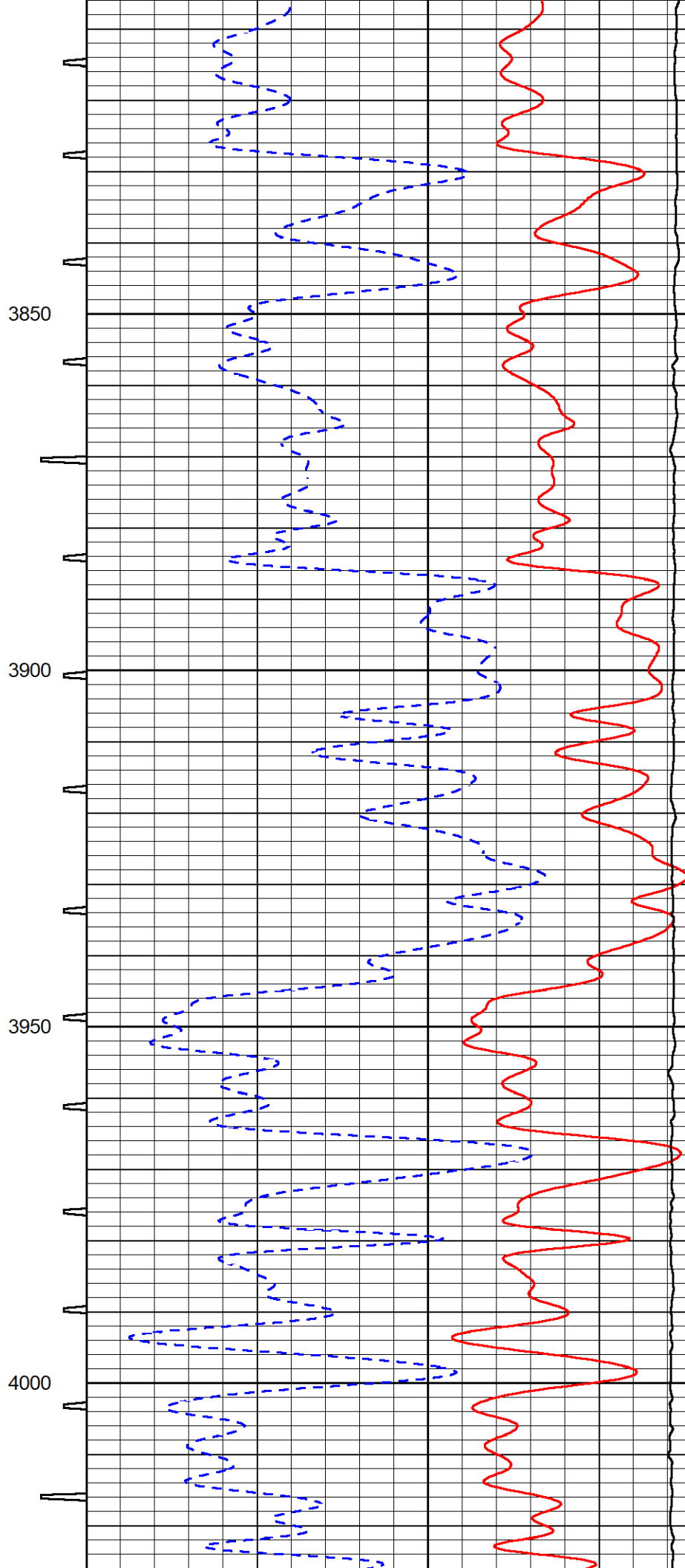
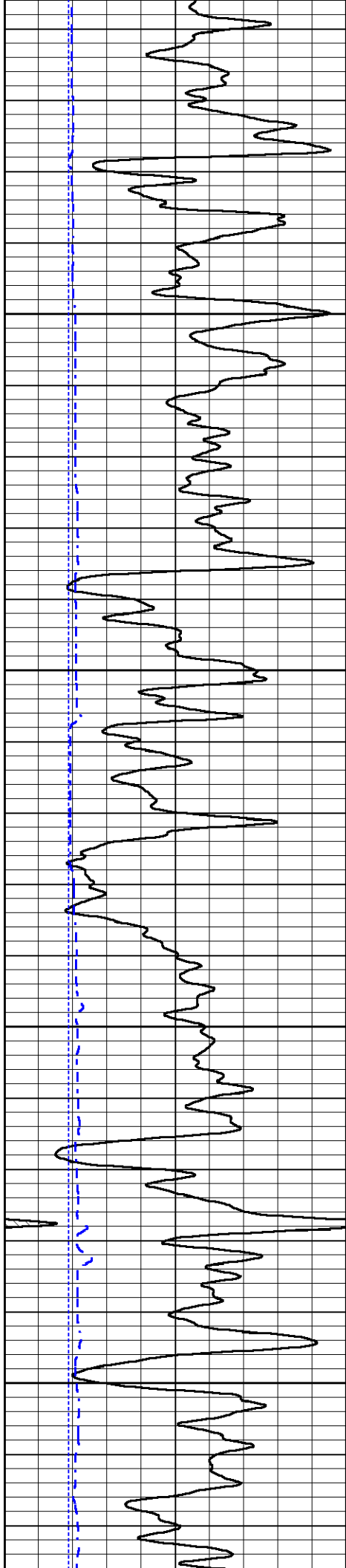
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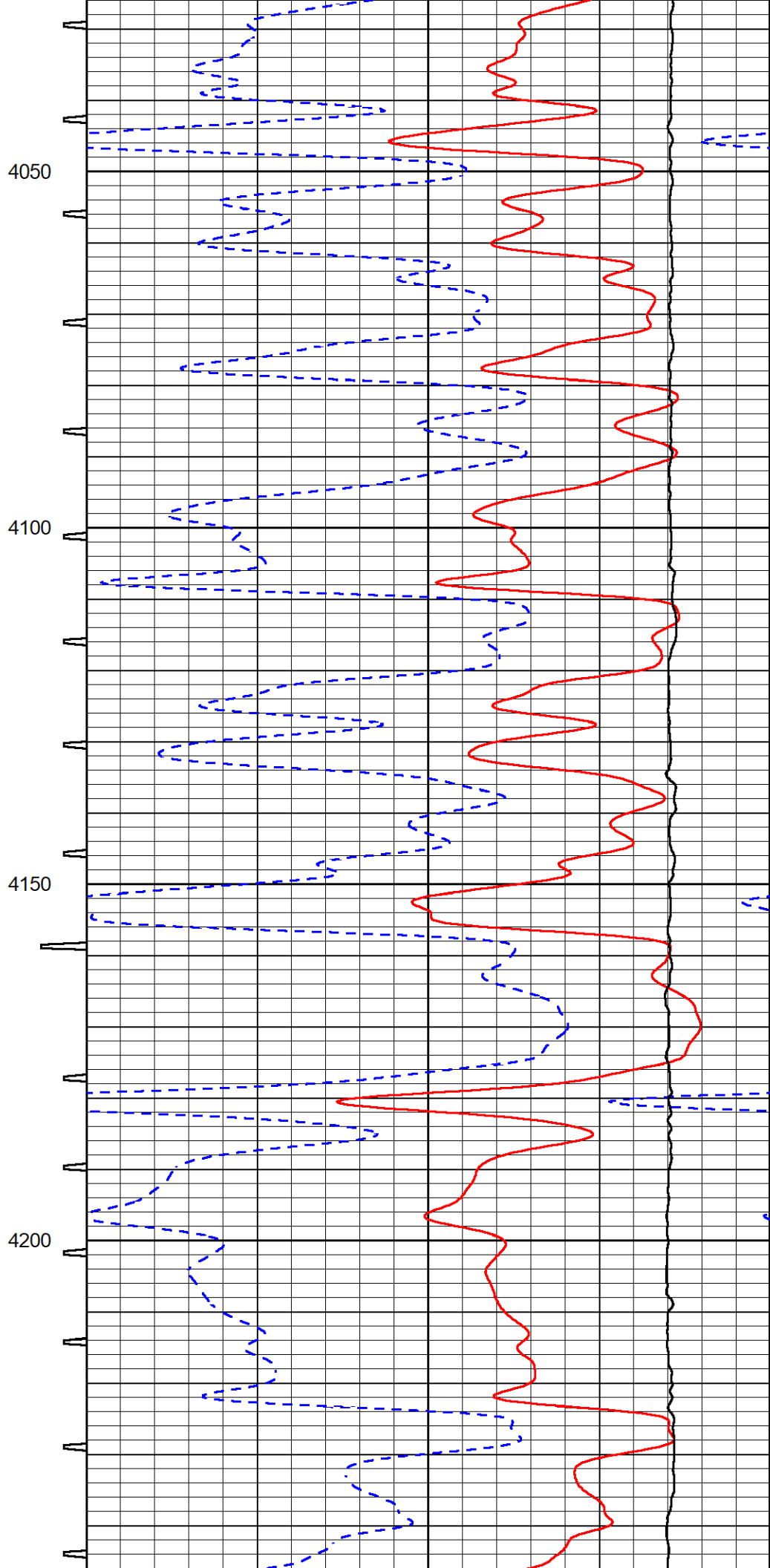
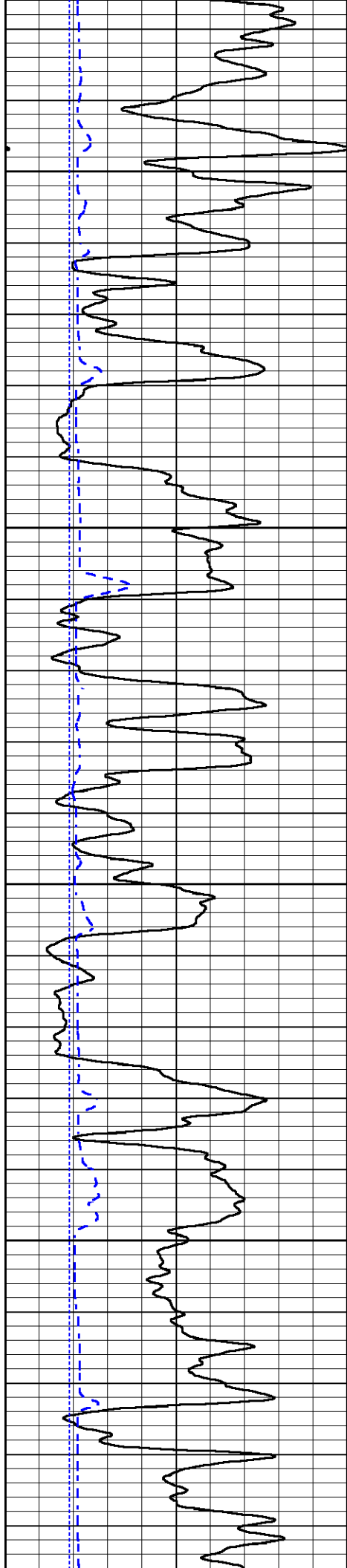
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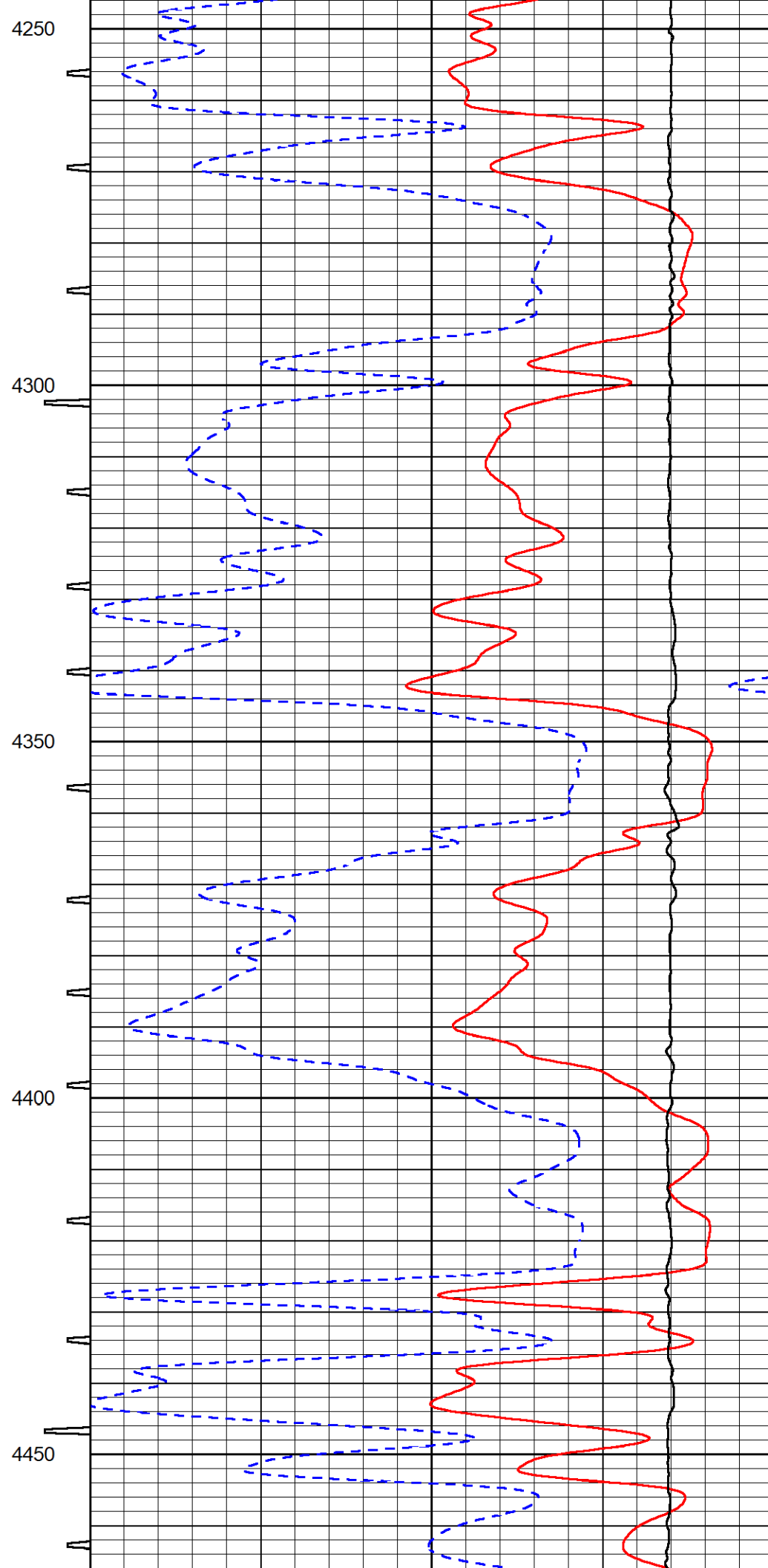
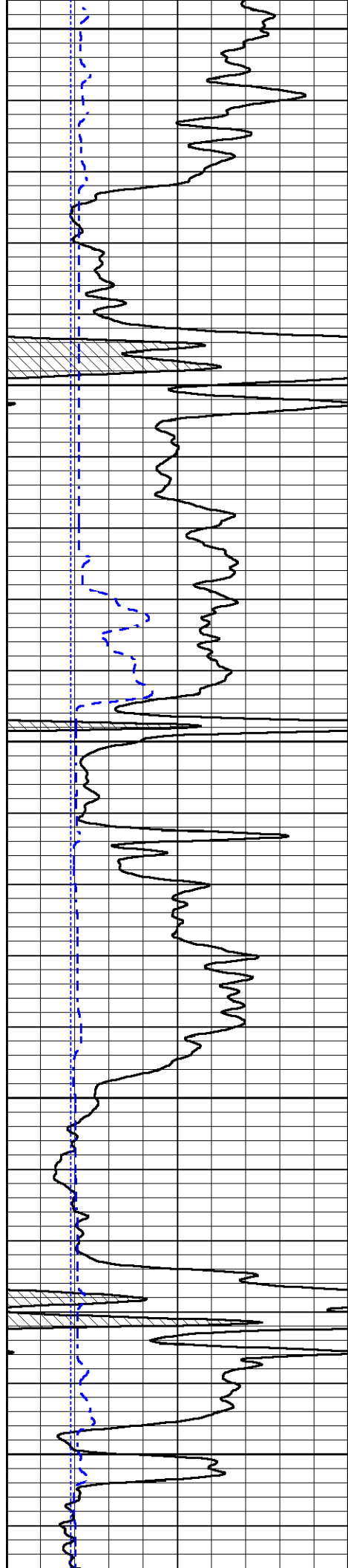


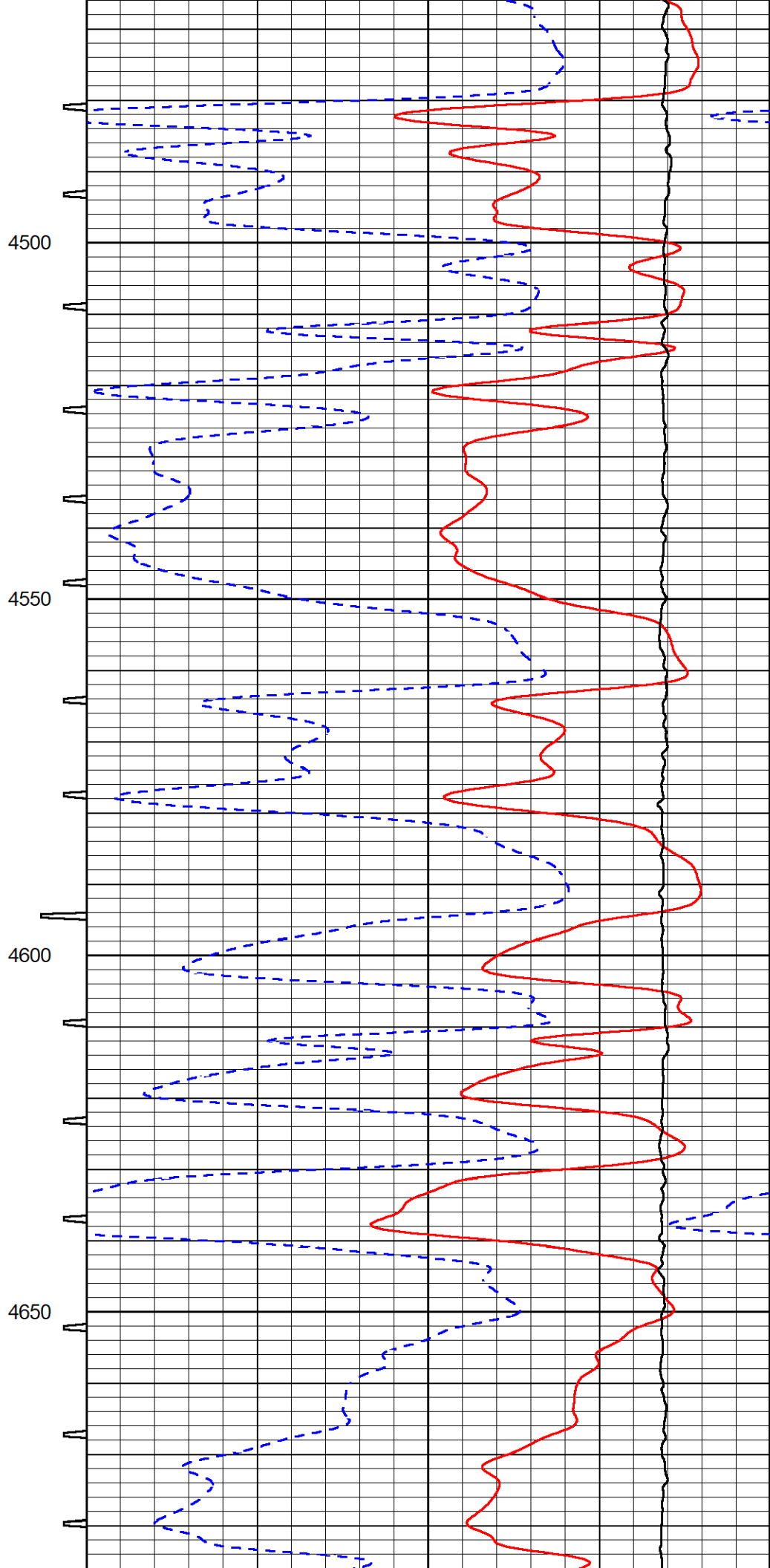
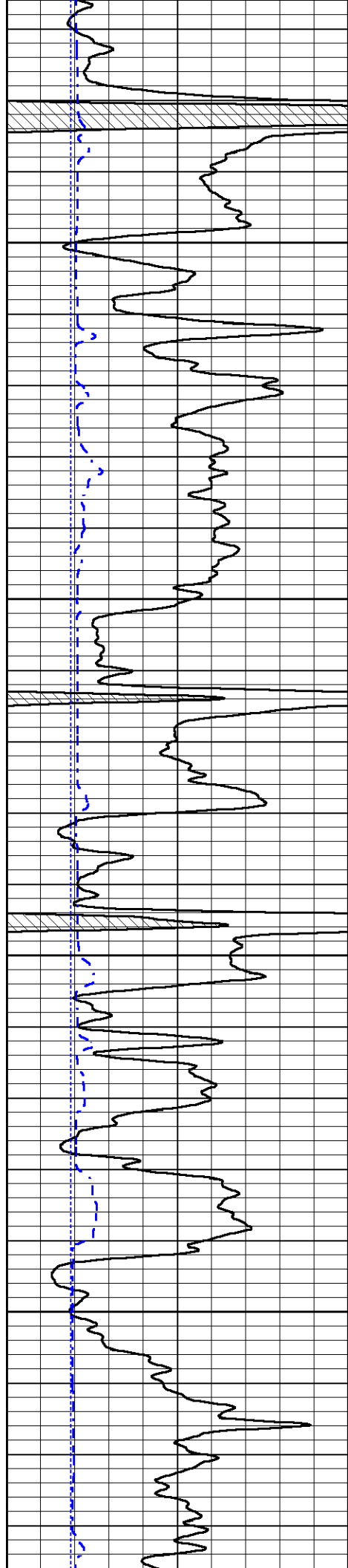


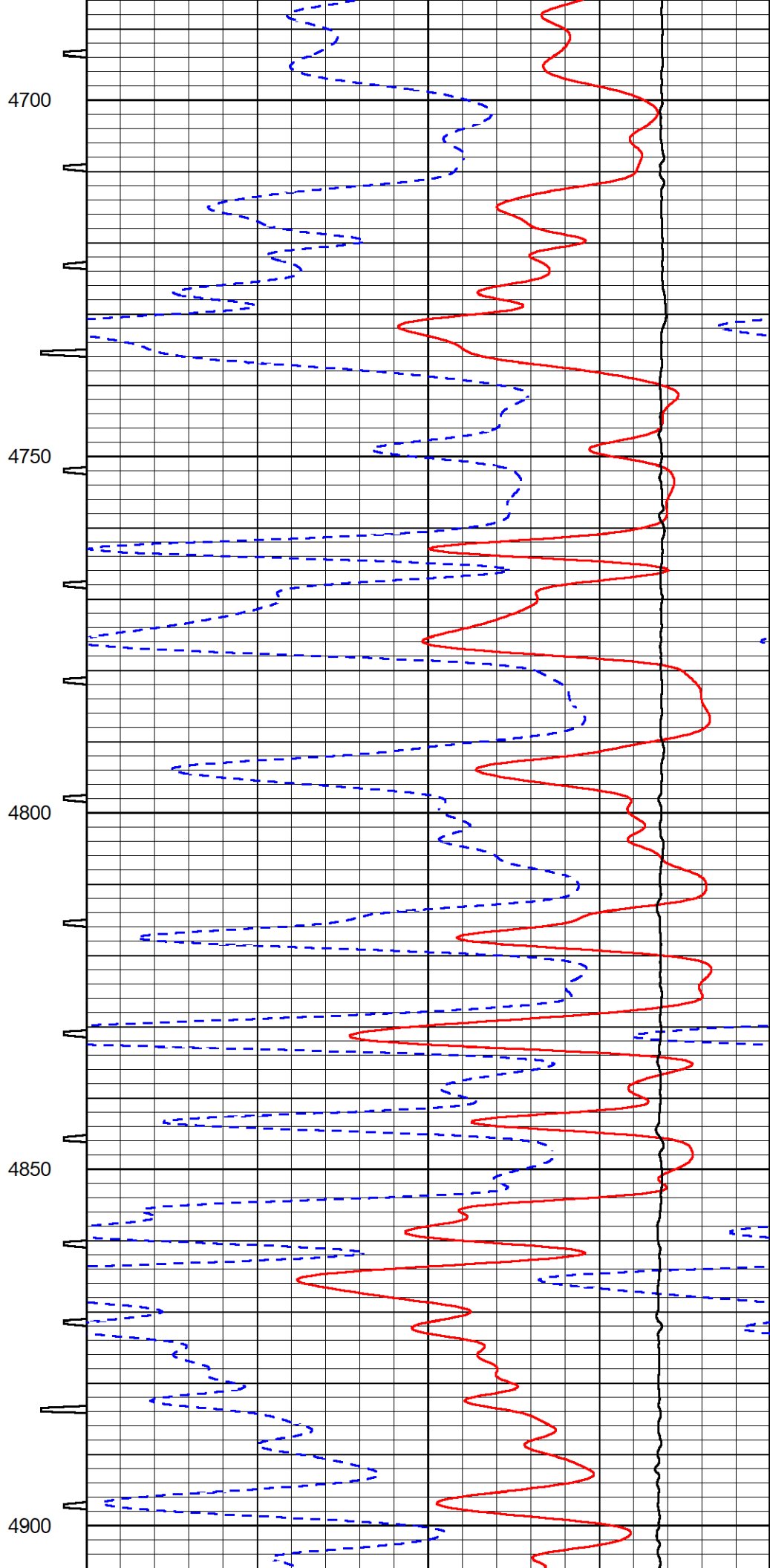
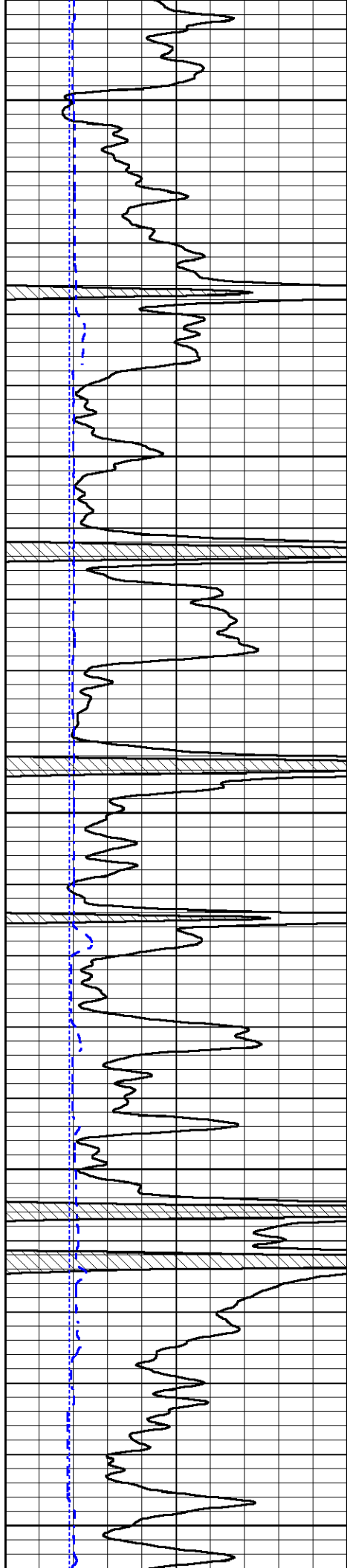


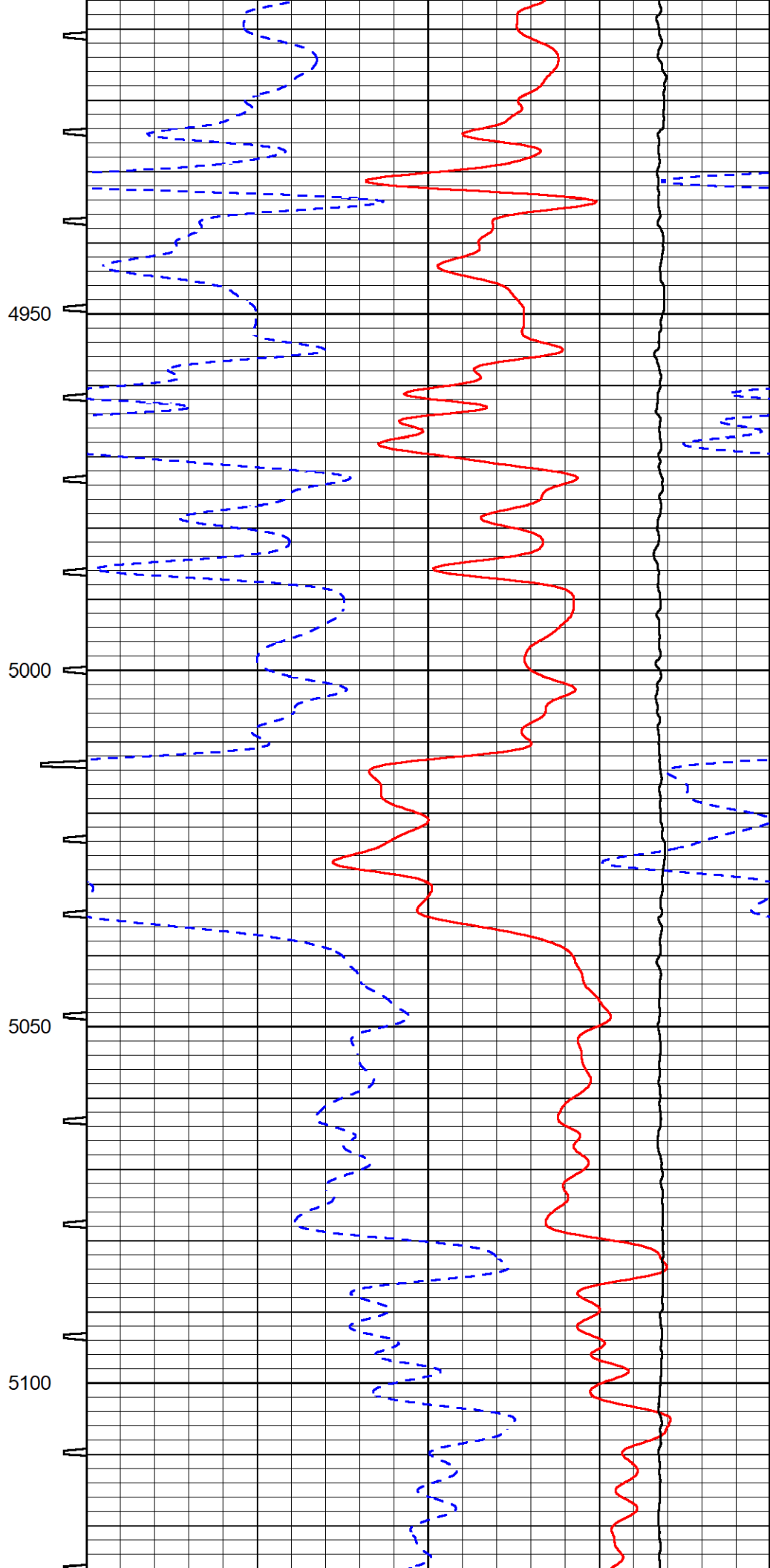
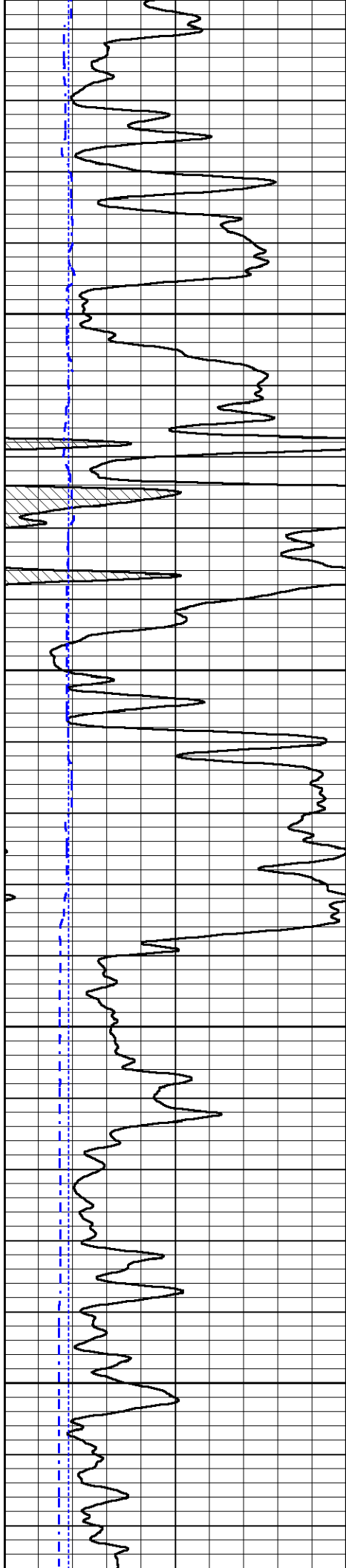


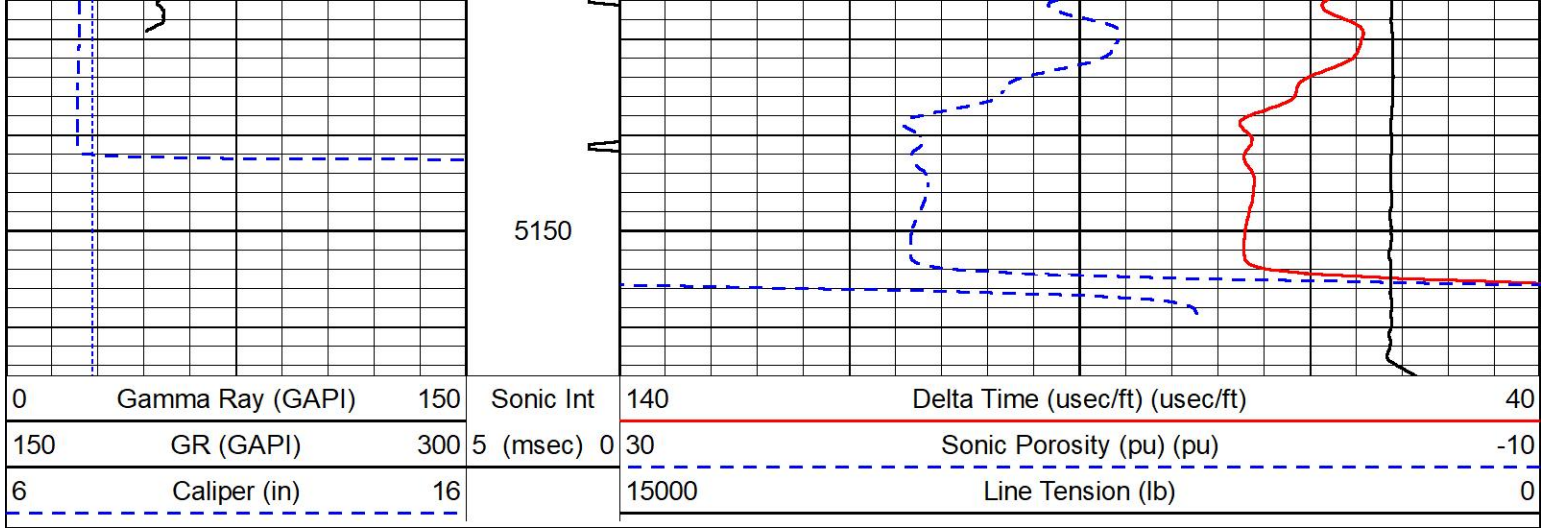












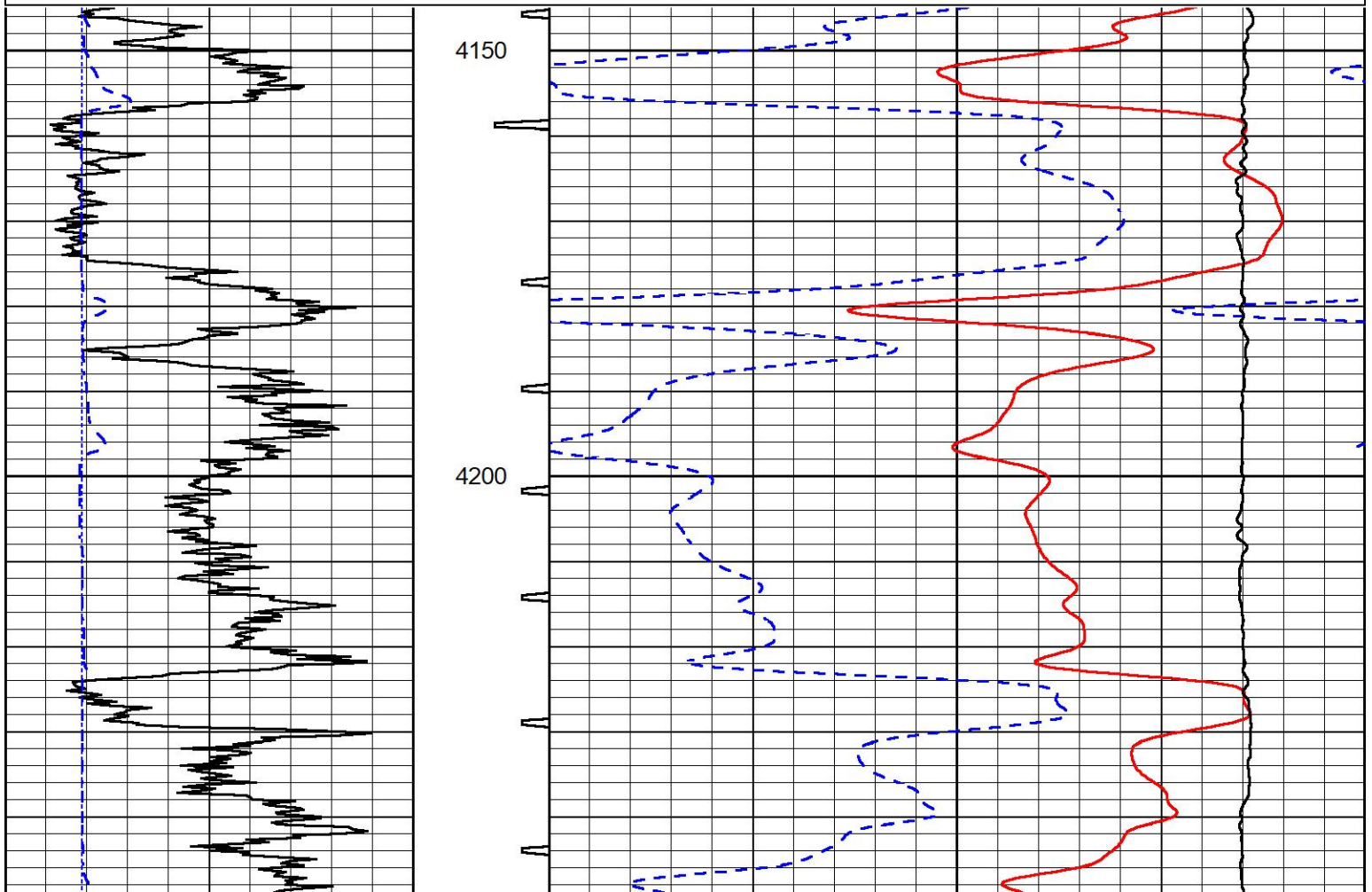
MIDWEST WIRELINE

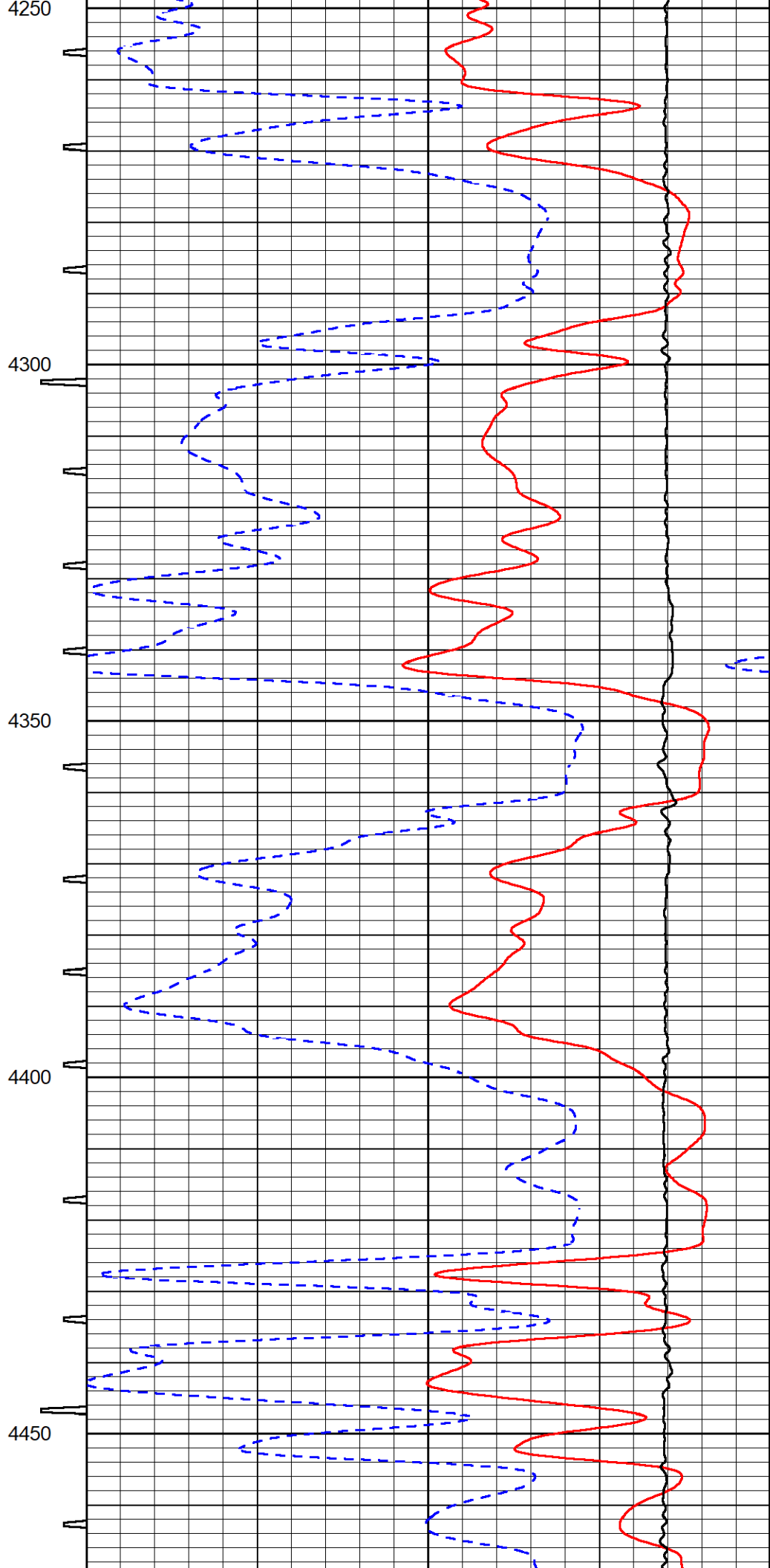
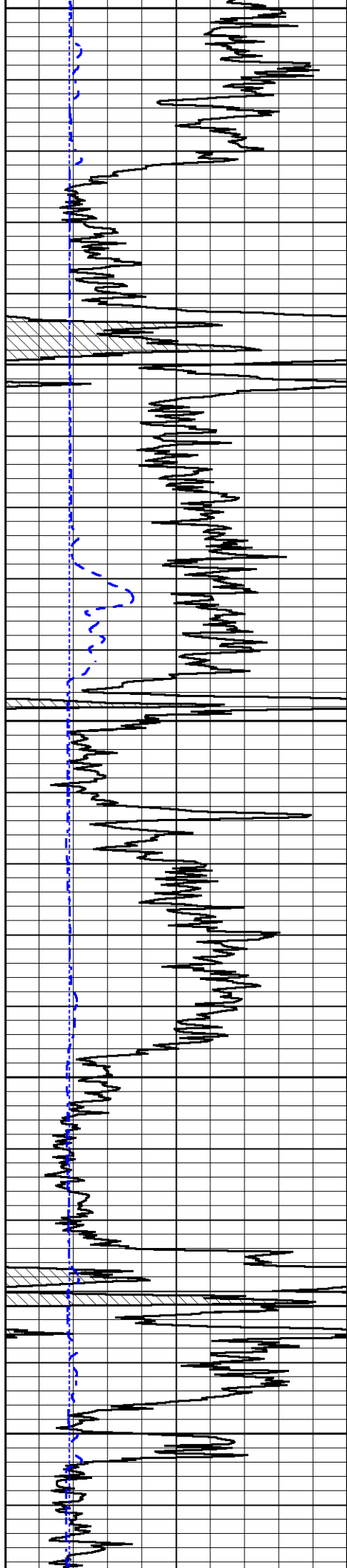
REPEAT SECTION

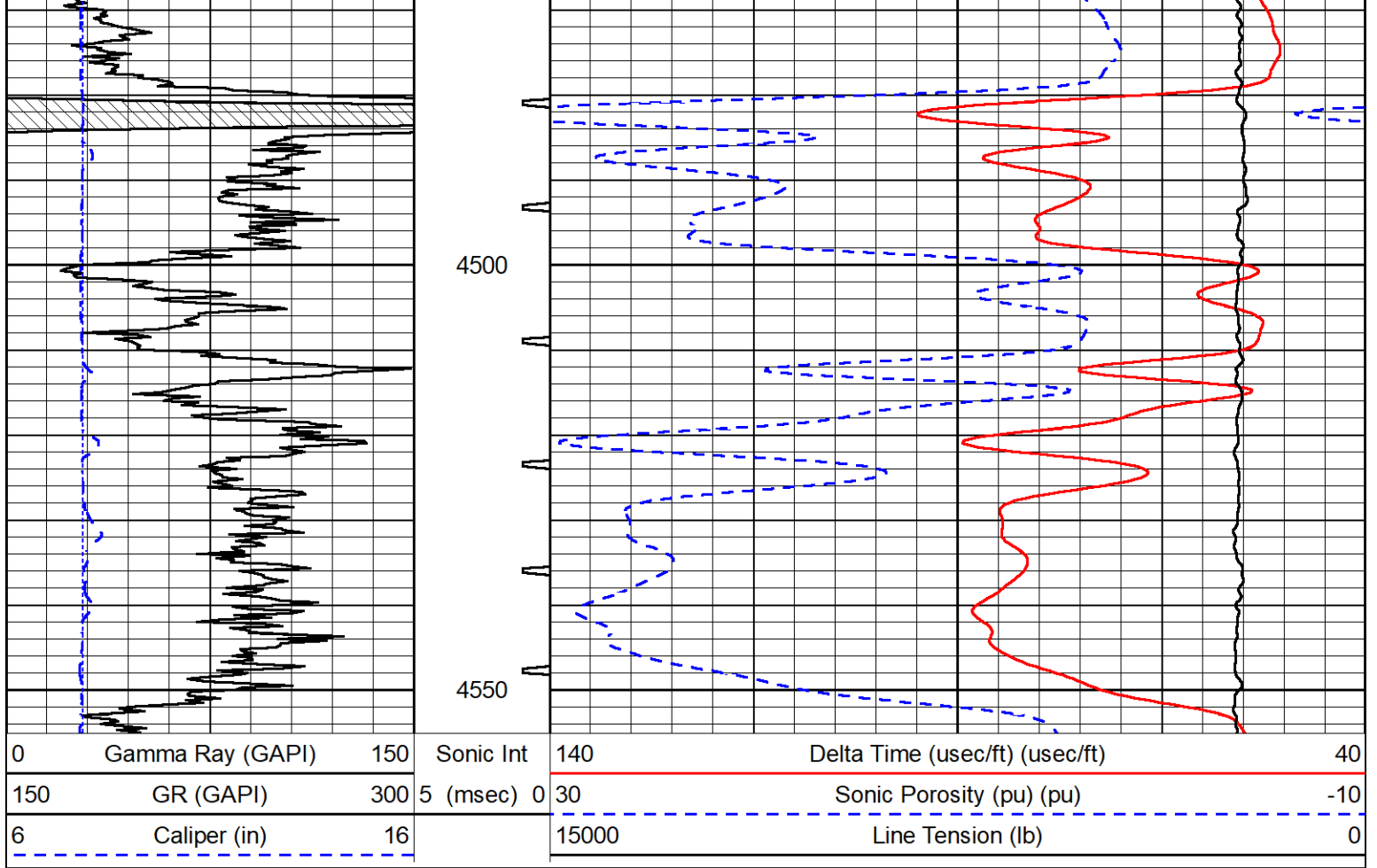
REPEAT PASS

Database File murfin_kaus 1-21.db
 Dataset Pathname stkml/pass2.1
 Presentation Format _sonic
 Dataset Creation Sun Aug 14 21:38:15 2022
 Charted by Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150	Sonic Int	140	Delta Time (usec/ft) (usec/ft)	40
150	GR (GAPI)	300	5 (msec) 0	30	Sonic Porosity (pu) (pu)	-10
6	Caliper (in)	16		15000	Line Tension (lb)	0







Calibration Report

Database File murfin_kaus 1-21.db
 Dataset Pathname stkml/pass4.17
 Dataset Creation Sun Aug 14 21:42:13 2022

Dual Induction Calibration Report

Serial-Model: 505 HT-M&W
 Surface Cal Performed: Wed Feb 2 12:55:14 2022

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop	mmho/m	m	b
Deep	167.000	835.000	0.000	255.800	mmho/m	0.480	-62.000
Medium	1348.000	1348.000	0.000	255.800	mmho/m	0.390	-59.000

Microlog Calibration Report

Serial-Model: 401-PSI STKBL ML
 Performed: Mon Aug 1 06:22:24 2022

	Readings		References			Results	
	Zero	Cal	Zero	Cal	Ohm-m	m	b
Normal	0.0037	0.0043	0.0000	10.0000	Ohm-m	16000.0000	-2.0000
Inverse	0.1208	0.0013	0.0000	10.0000	Ohm-m	13700.0000	-0.8000
Caliper	1.0049	1.0846	5.5000	20.0000	in	135.0000	-131.3000

Compensated Density Calibration Report

Serial-Model: 201-01 M&W

Serial-Model:
Source #:
Master Calibration Performed:

304-04-M&W
21170B
Sun May 29 09:31:45 2022

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	6392.84	8538.69	cps
Aluminum	2.685	g/cc	1184.69	5433.63	cps
Spine Angle = 74.99			Density/Spine Ratio = 0.533		
	Size		Reading		
Small Ring	4.00	in	1.15		
Large Ring	14.00	in	1.02		

Compensated Neutron Calibration Report

Serial-Model: 210-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: 103
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



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