

BOREHOLE COMPENSATED SONIC LOG

MIDWEST WIRELINE

Company Murfin Drilling Company, Inc.
Well Weis A #1-14
Field
County Sheridan
State Kansas

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Field
County Sheridan State Kansas

Location: API #: 15-179-21508-00-00
2135 FNL & 330 FWL
SEC 14 TWP 6S RGE 28W
Permanent Datum Ground Level Elevation 2730
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing
Other Services
CNL/CDL
DIL/MEL
Elevation
K.B. 2735
D.F.
G.L. 2730

Date 8/1/2024

Run Number Two
Type Log BHCS
Depth Driller 4200
Depth Logger 4193
Bottom Logged Interval 4181
Top Logged Interval 250
Type Fluid In Hole Chemical
Salinity, PPM CL 1300
Density 9.3
Level Full
Max. Rec. Temp. F 118
Operating Rig Time 5 Hours
Equipment -- Location 110 HAYS
Recorded By D. Schmidt
Witnessed By Jeison Rodriquez

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
One	12.25	0	263	8.625	23	0	263
Two	7.875	263	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.

Hoxie,
North to 120th, 1 East, 1/2 North,
East into

Log Measured From: Kelly Bushing 5 Ft. Above Permanent Datum

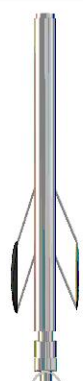
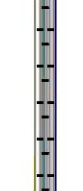
THANK YOU FOR USING MIDWEST WIRELINE LLC
785-625-3858

Your Midwest Wireline Crew

Engineer: D. Schmidt
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: Jeison Rodriquez
Secondary Witness:
Secondary Witness:
Secondary Witness:

Sensor	Offset (ft)	Schematic		Description	Length (ft)	O.D. (in)	Weight (lb)
MCAL MI MN	25.50			ML-PENGO (P003)	5.50	3.50	100.00
	25.50						
	25.50			CENT-PENGO	4.25	3.00	70.00
WVF4 WVF1 WVF3 WVF2	12.50			SLT-PENGO (602)	16.00	3.50	300.00
	12.50						
	10.50						
	10.50						
				CENT-PENGO	4.25	3.00	70.00
Dataset: murfin_weis a 1-14.db: field/well/sonmel/pass2 Total length: 30.00 ft Total weight: 540.00 lb O.D.: 3.50 in							

Log Variables

DatabaseC:\ProgramData\Warrior\Data\murfin_weis a 1-14.db
Dataset field/well/stack/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	118	5.5	0	1		2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	No	mmho/m	mmho/m	mV	degF	Off	ft
		0	-12	150	90		4193

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

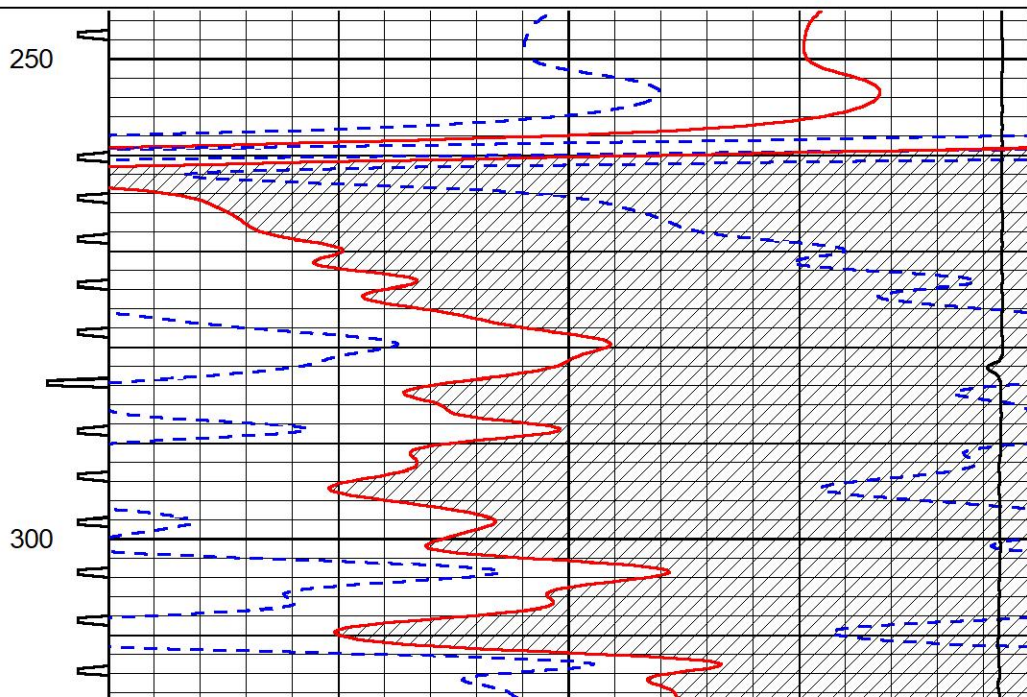
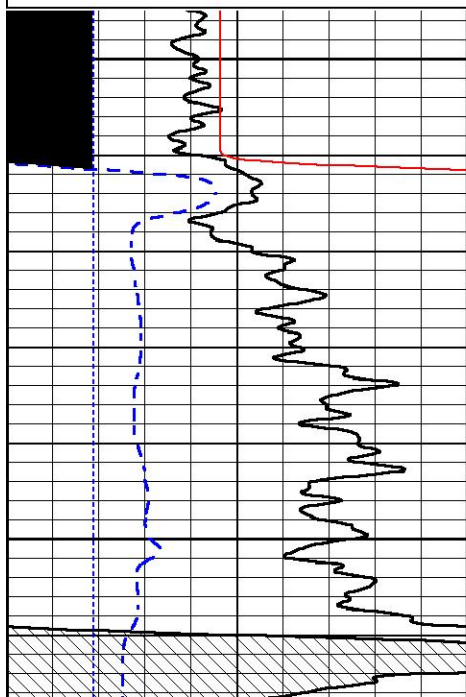


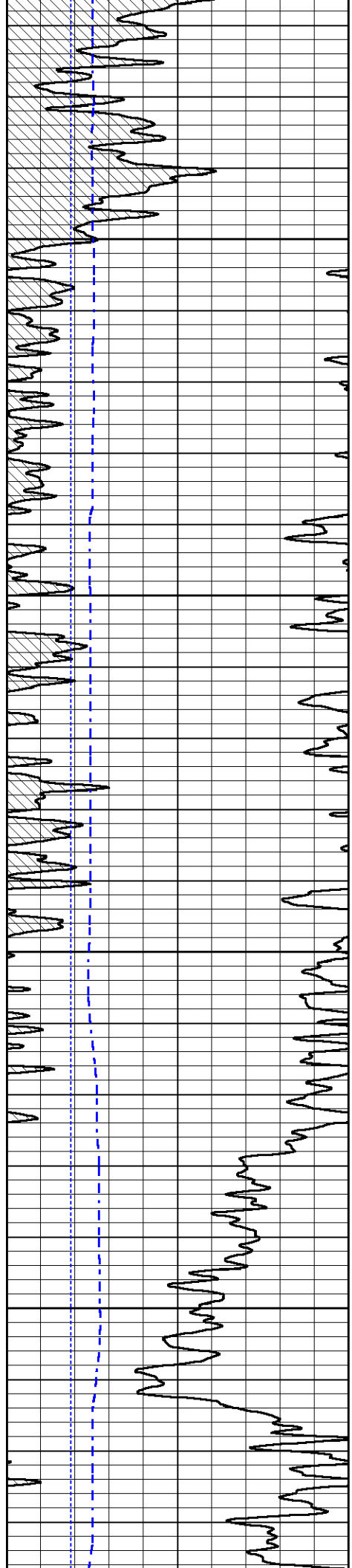
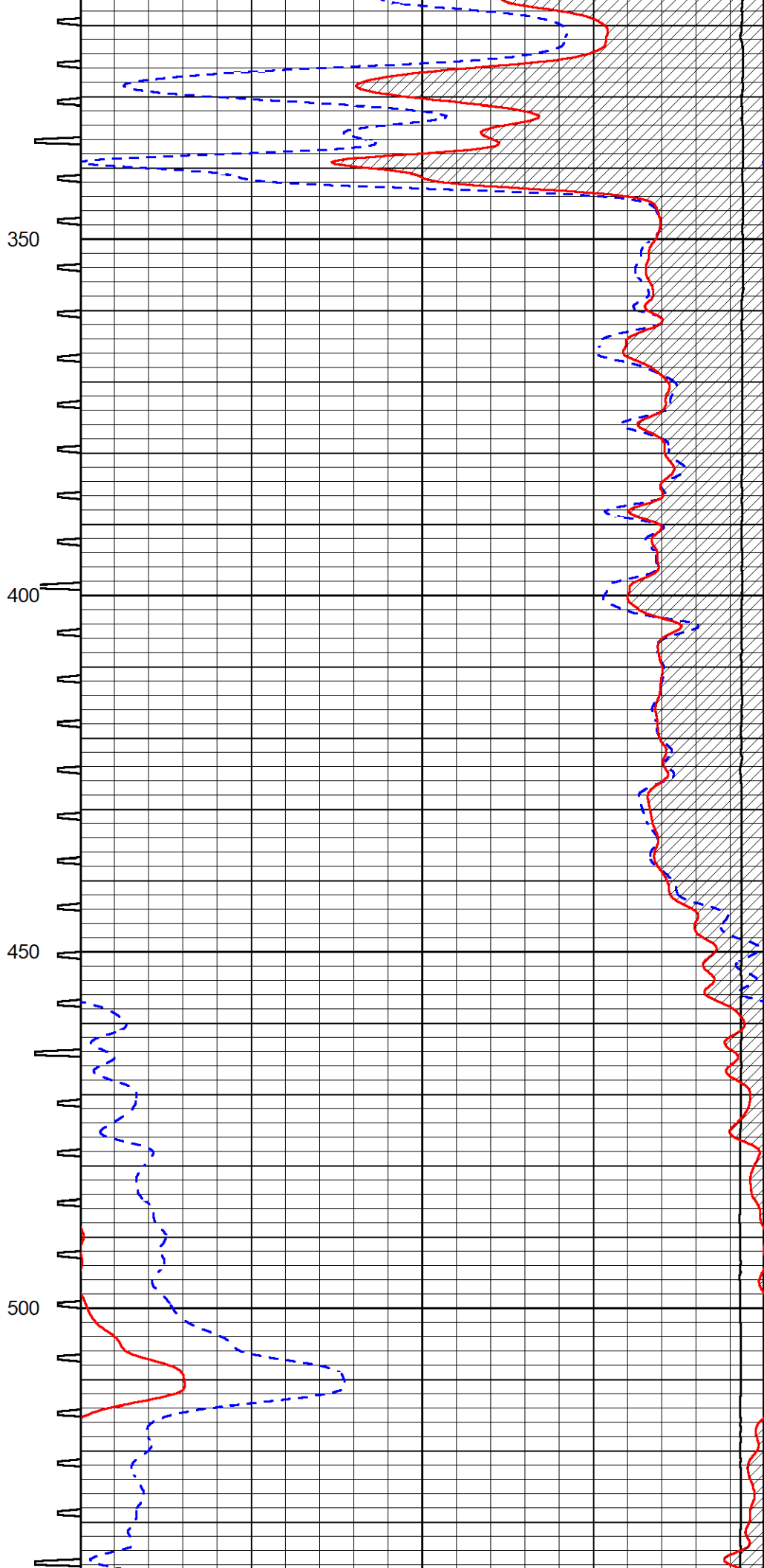
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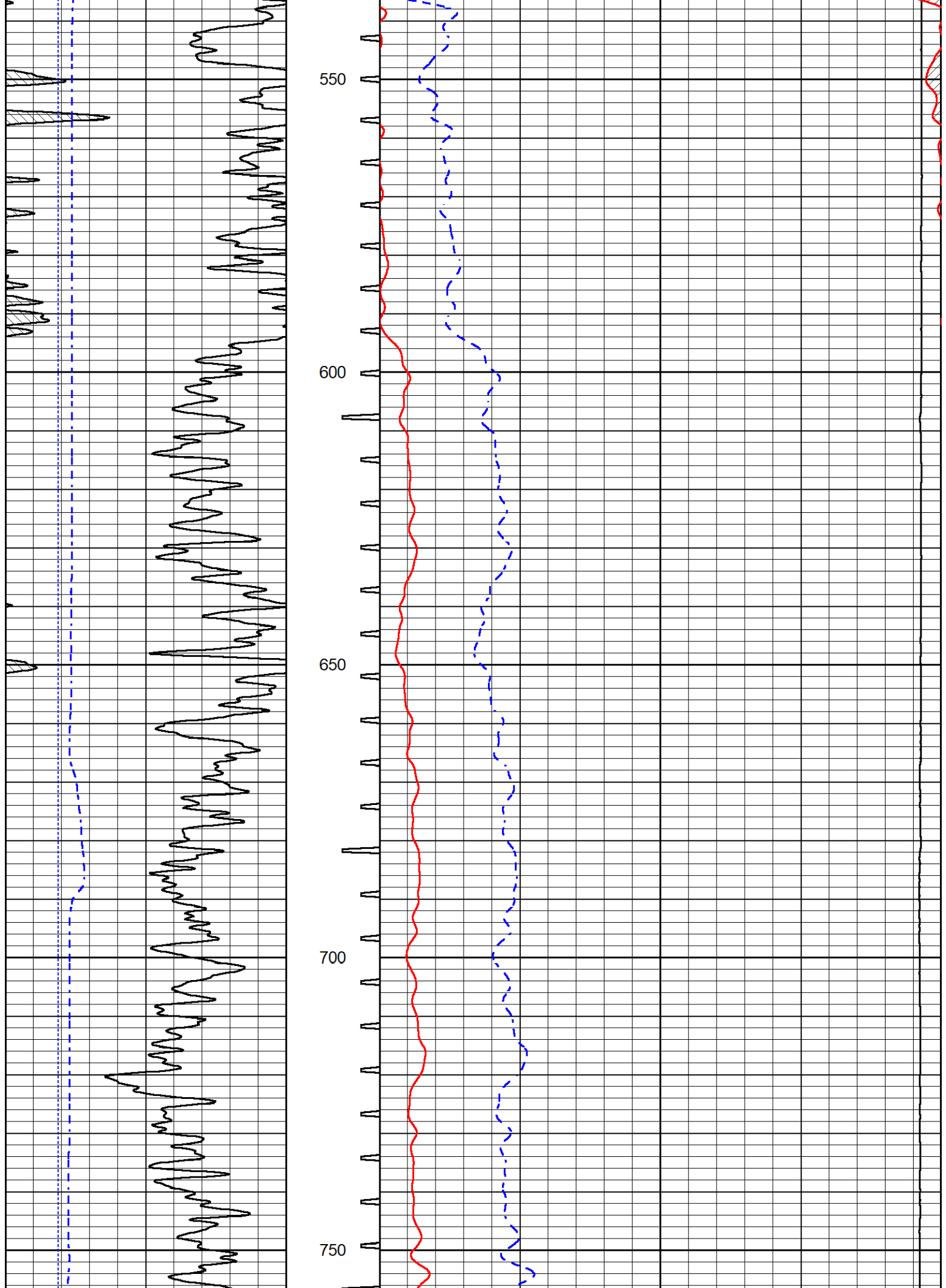
MAIN PASS

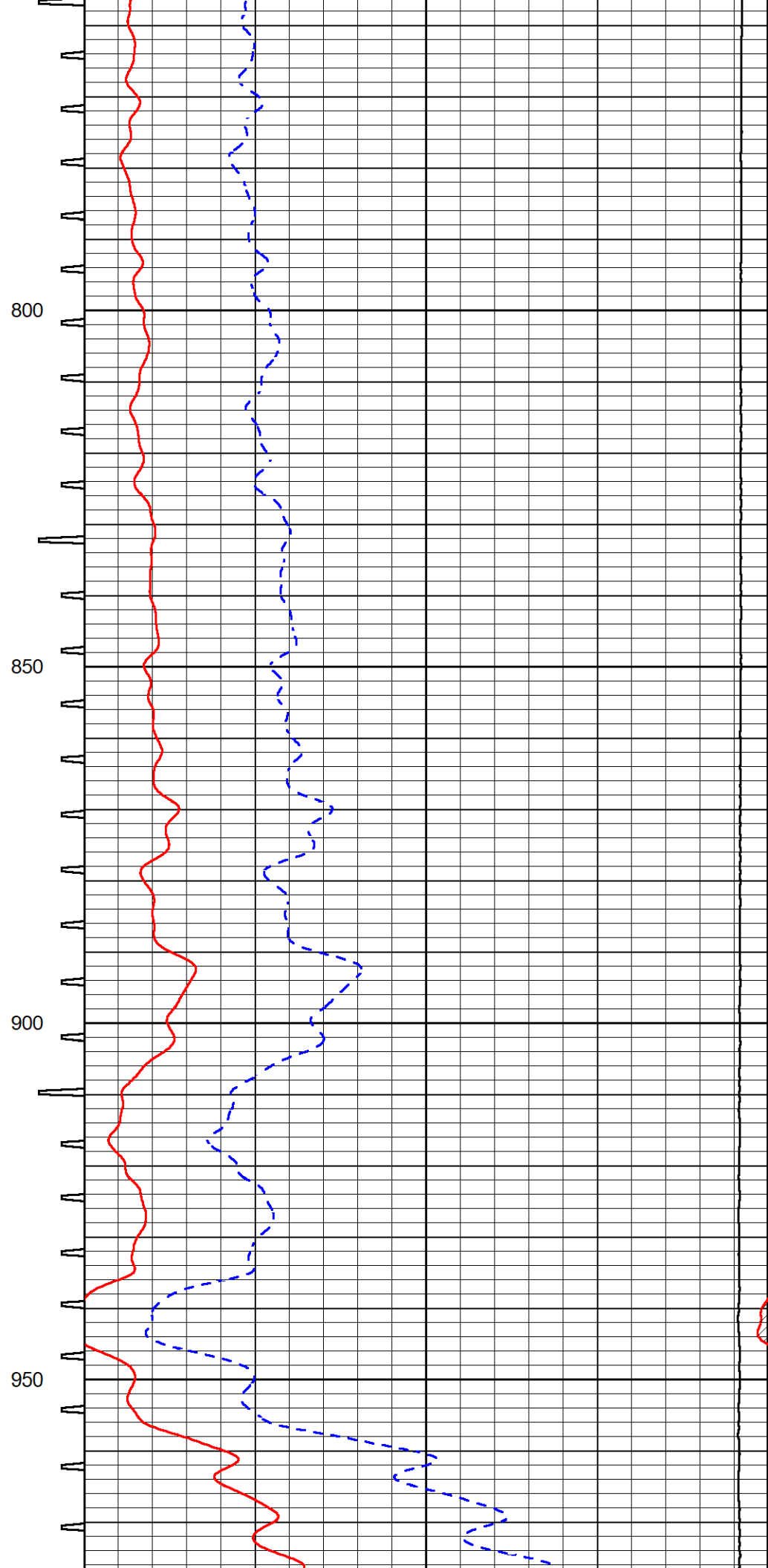
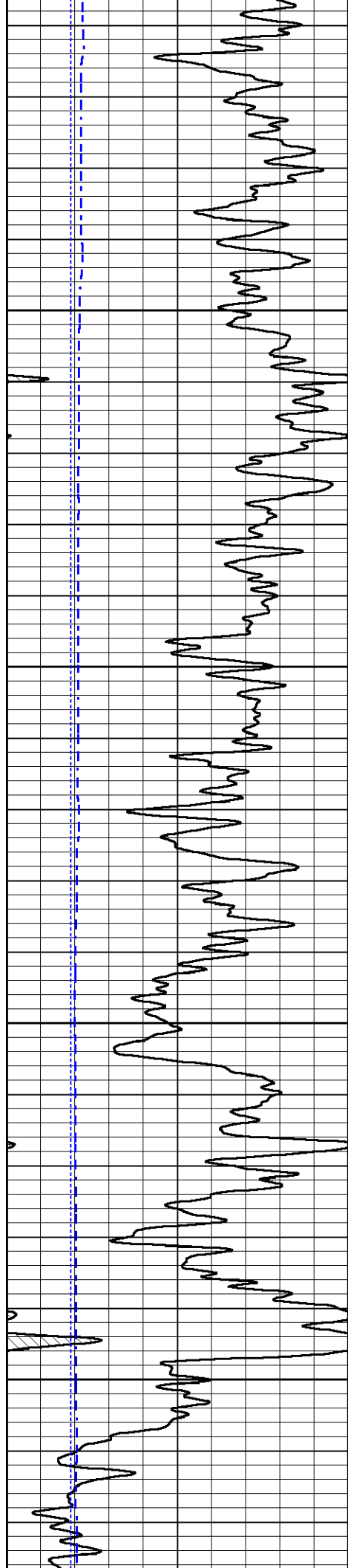
Database File murfin_weis a 1-14.db
Dataset Pathname stack/pass3.4
Presentation Format _sonic
Dataset Creation Fri Aug 02 01:15:20 2024
Charted by Depth in Feet scaled 1:240

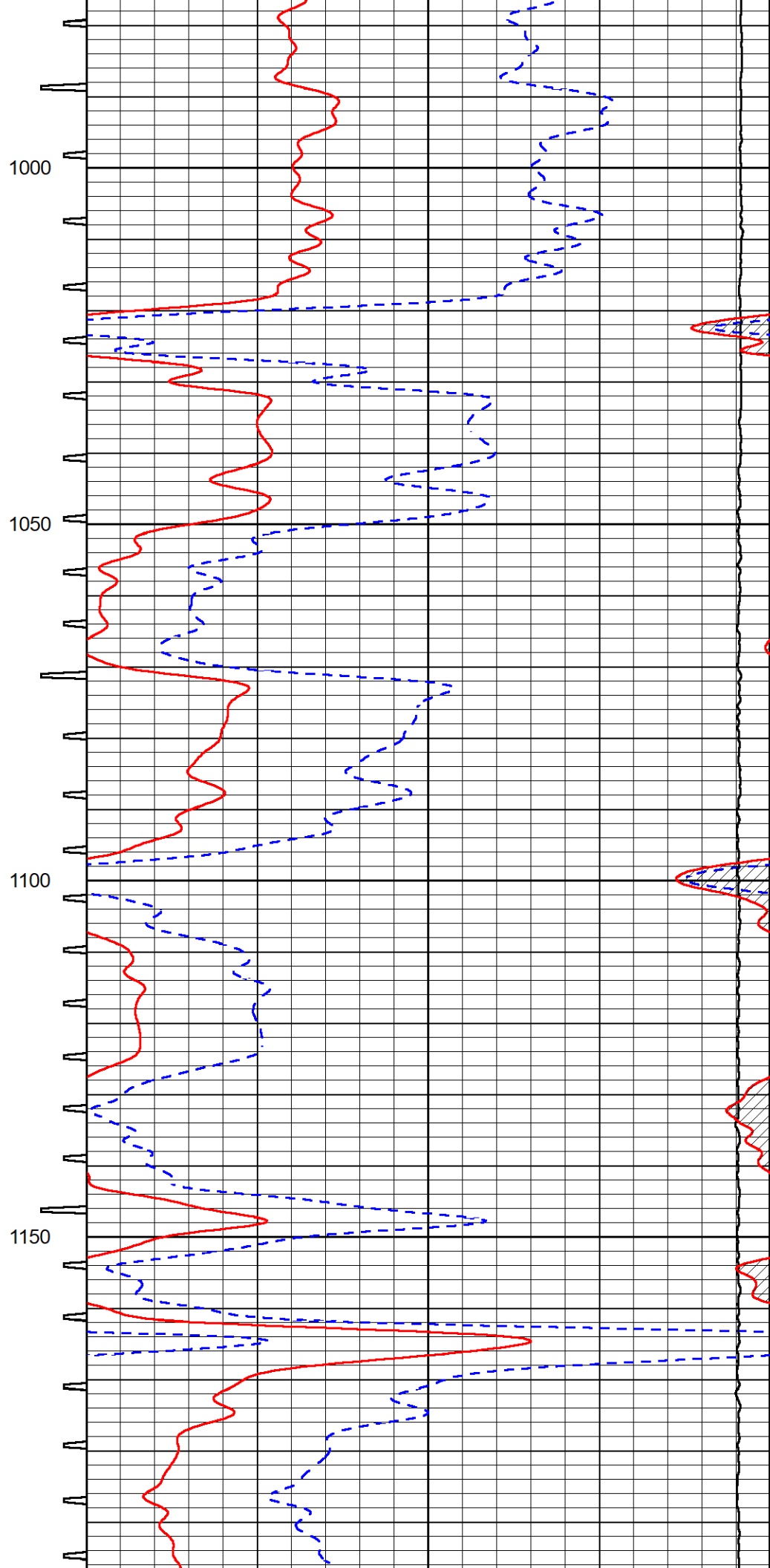
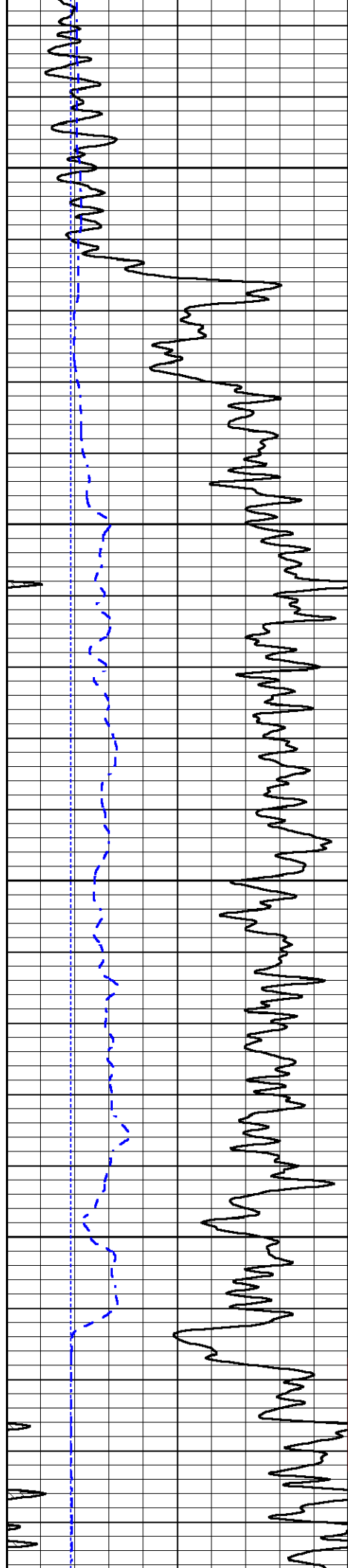
0	Gamma Ray (GAPI)	150	Sonic Int	140	Delta Time (usec/ft) (usec/ft)	40
150	GR (GAPI)	300	5 (msec) 0	30	Sonic Porosity (pu) (pu)	-10
6	LCAL (in)	16		15000	Line Tension (lb)	0
2.875	lcal (in)	7.875				

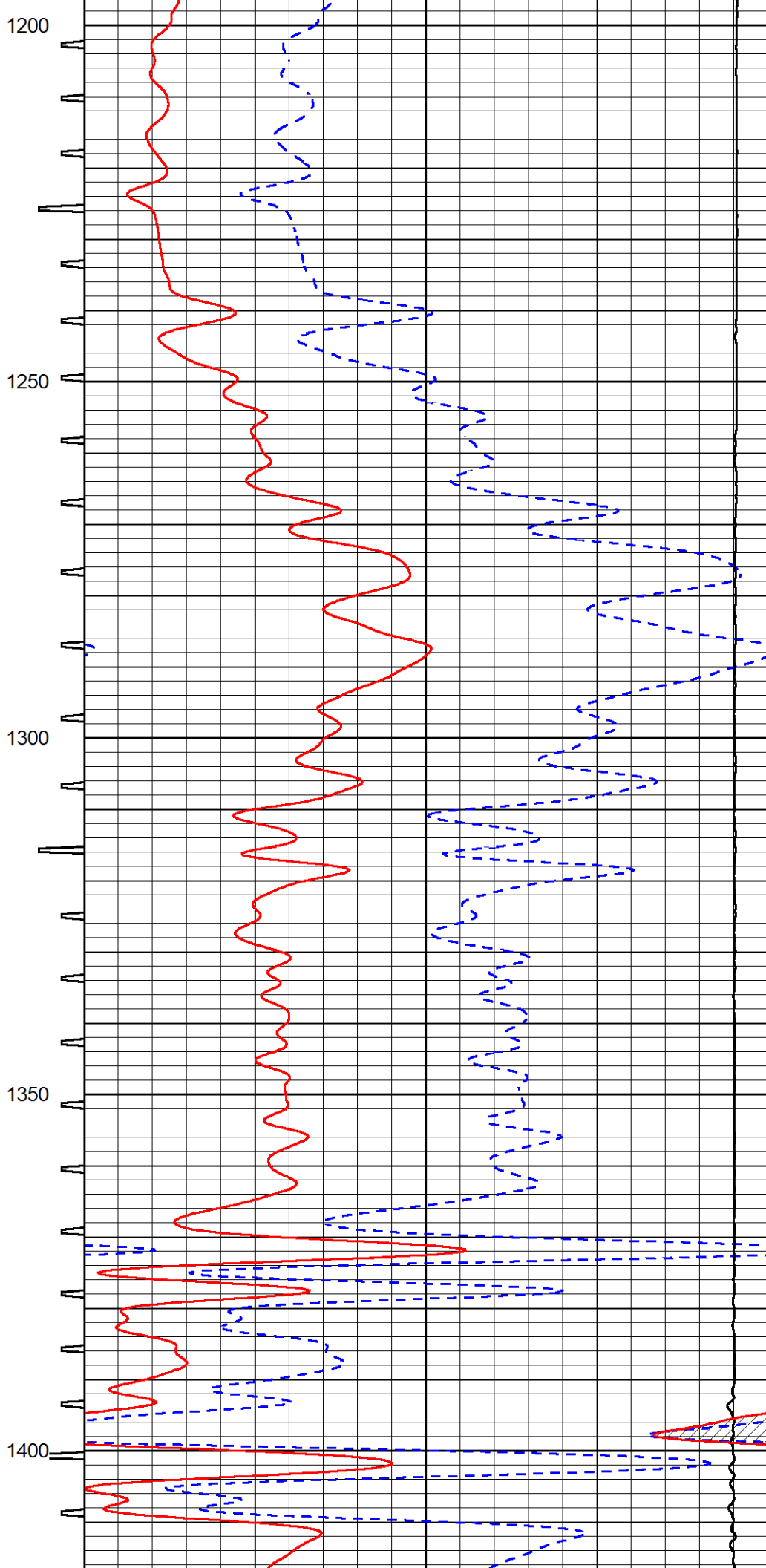
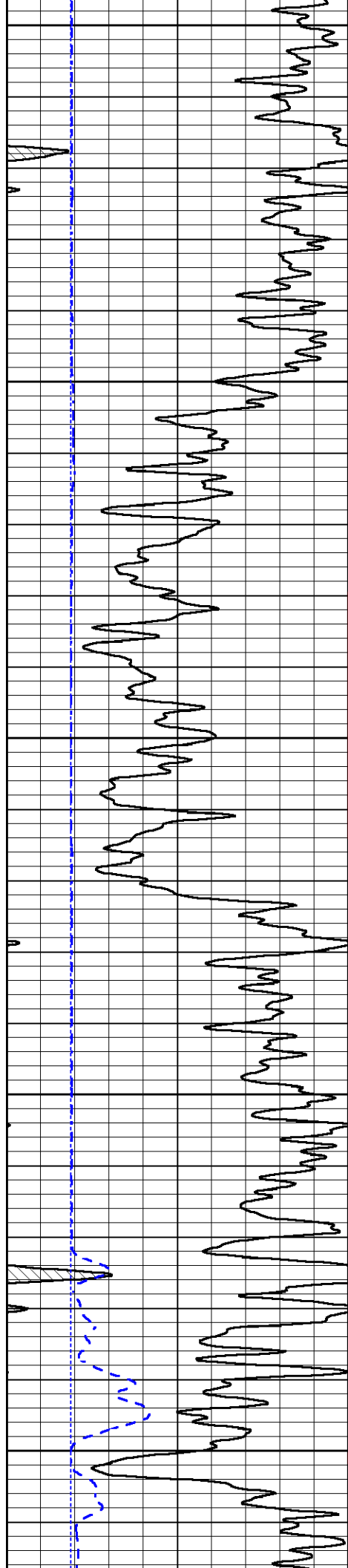


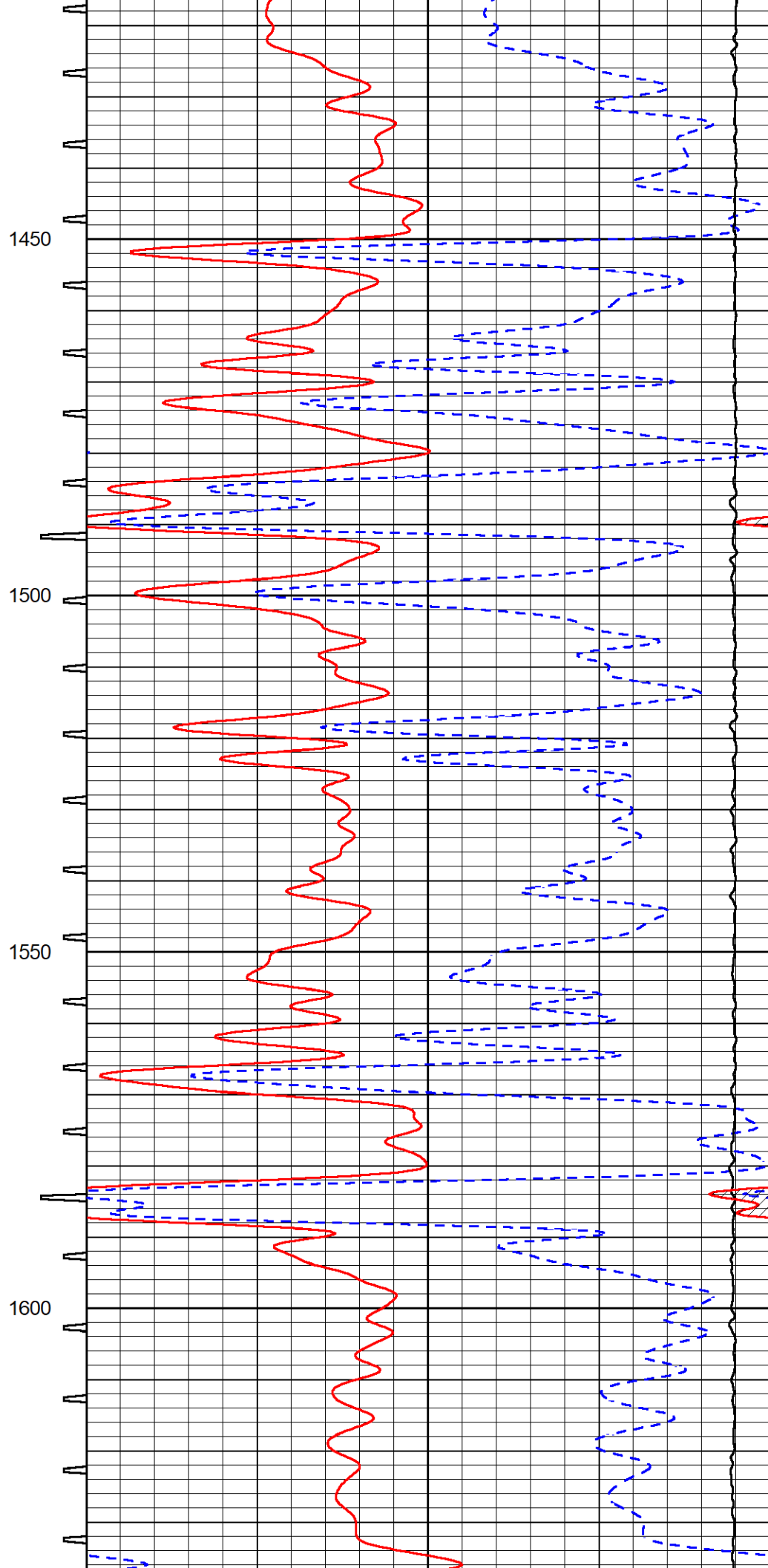
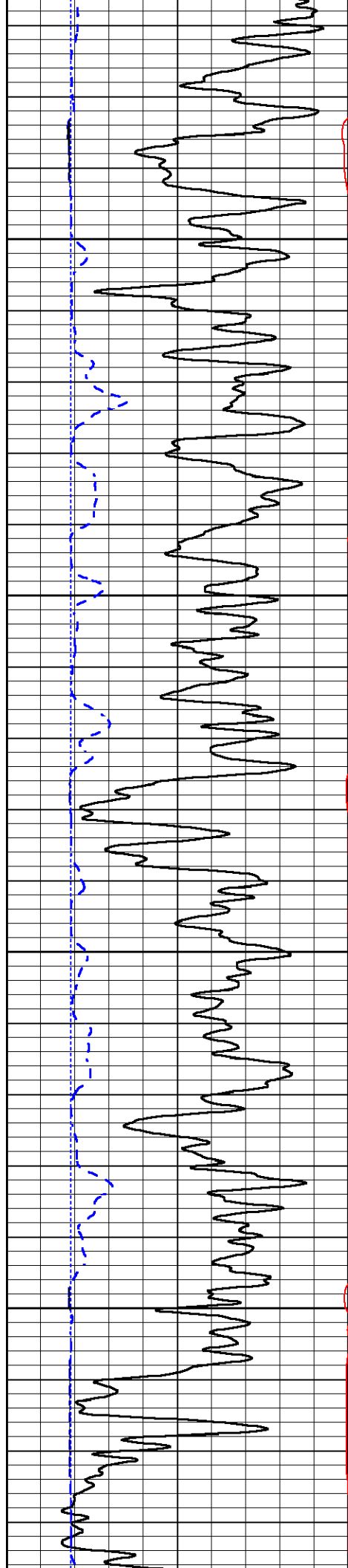


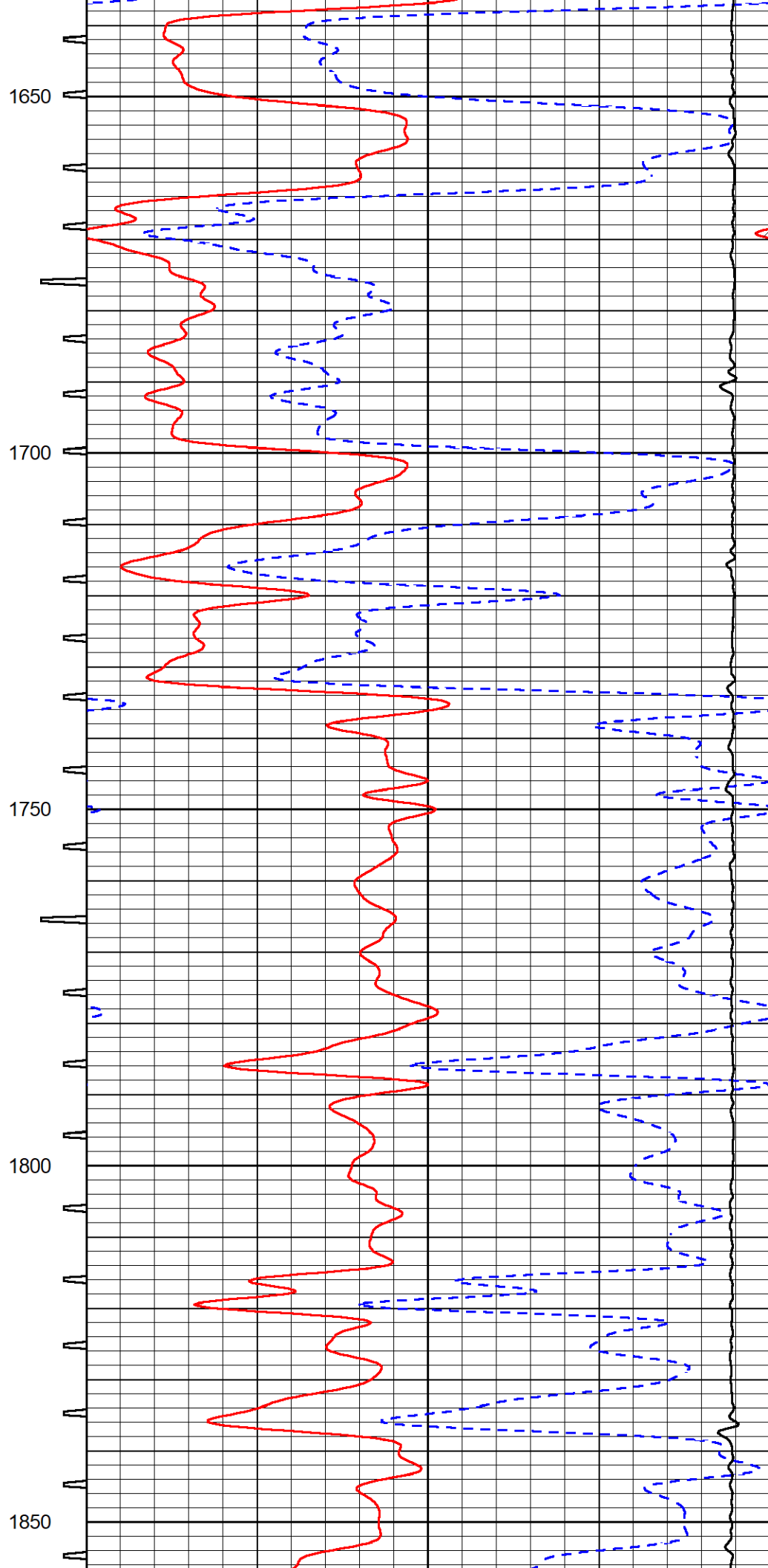
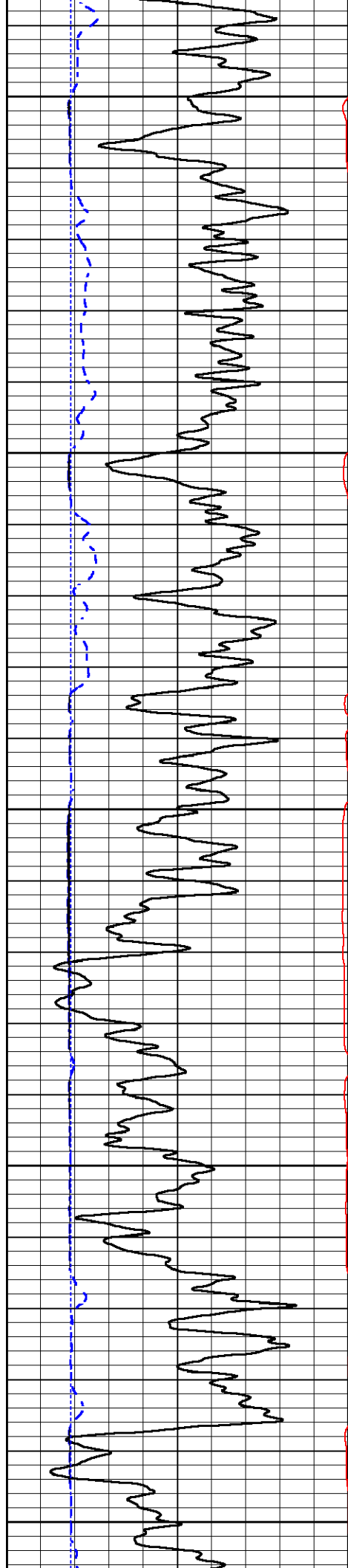


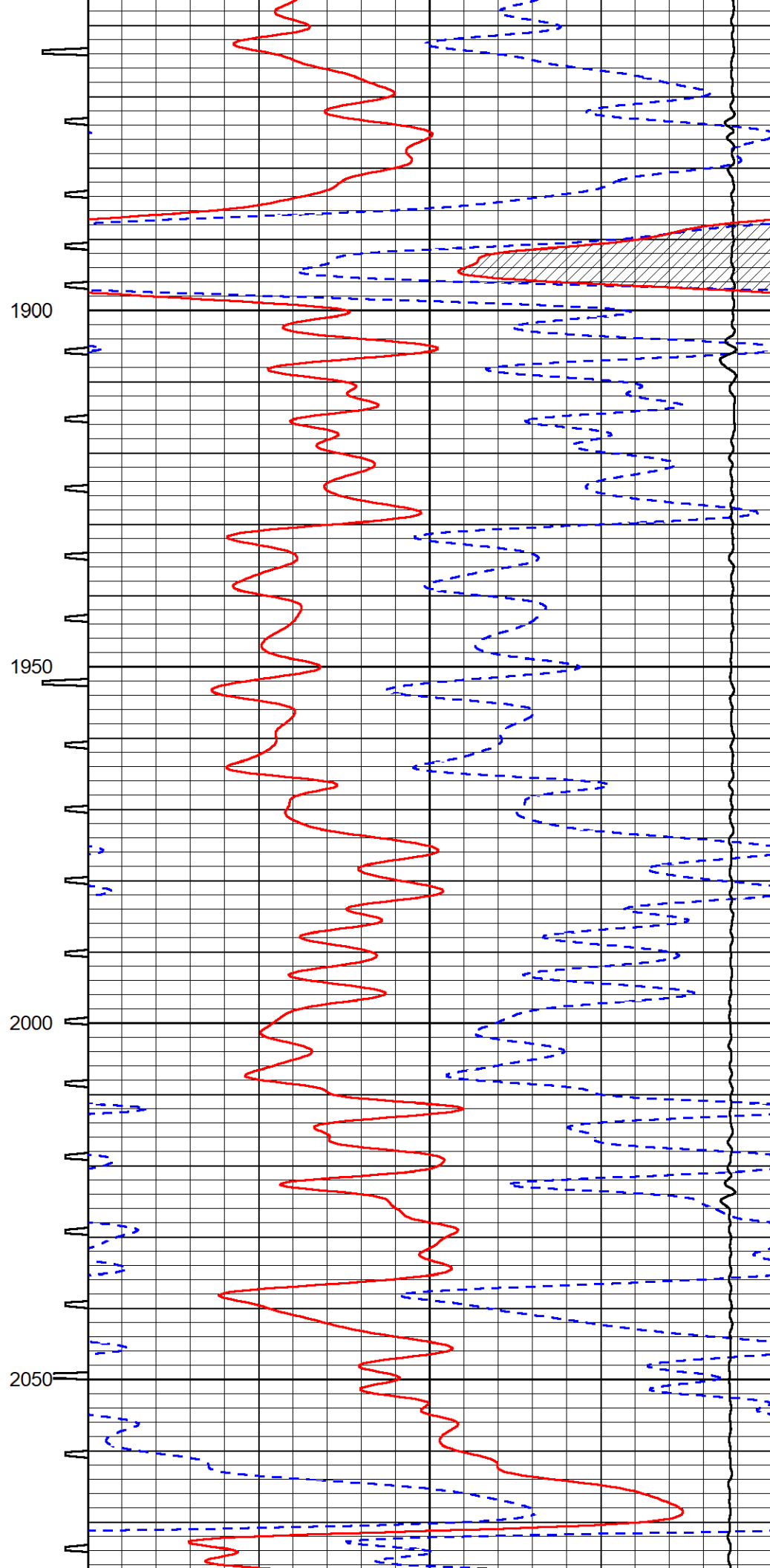
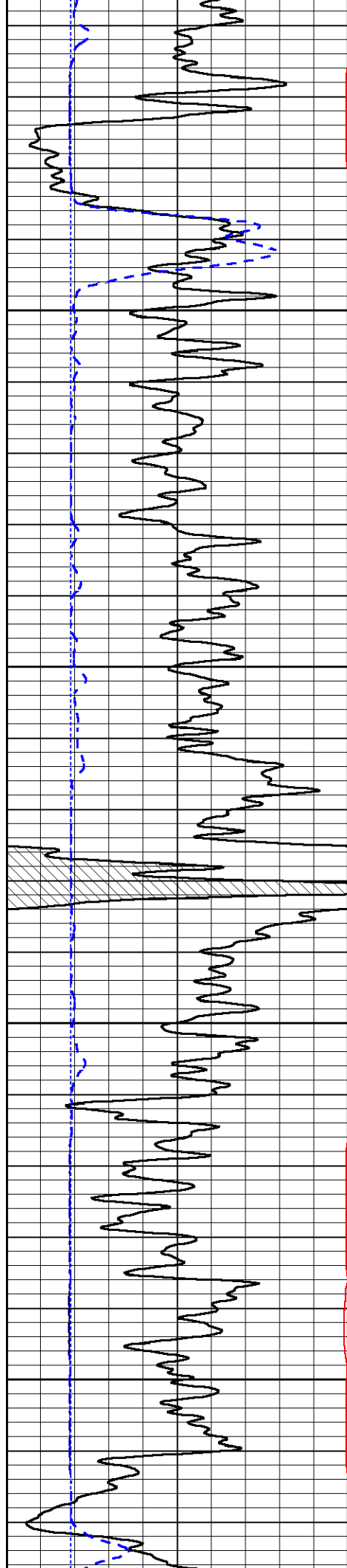


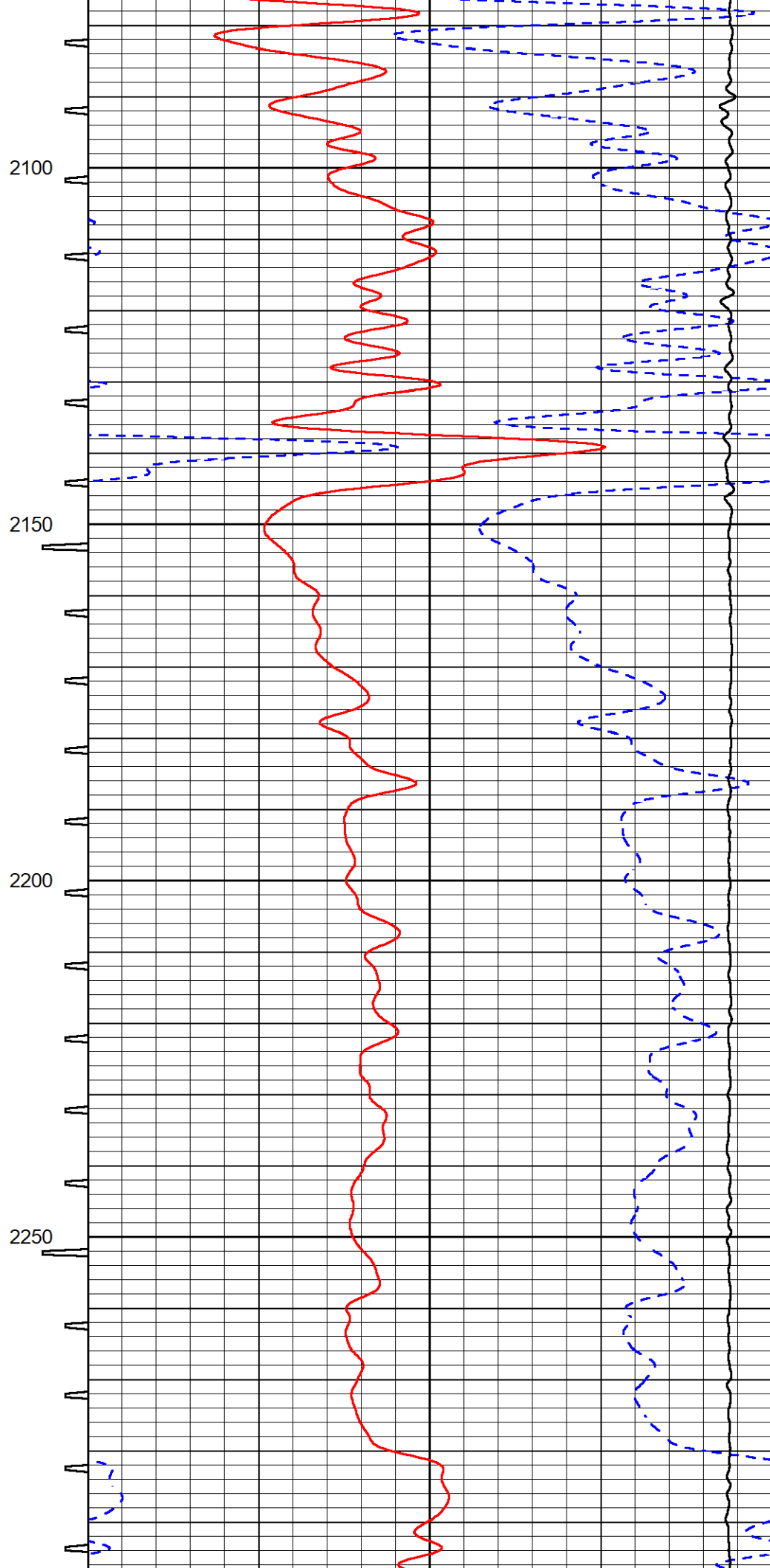
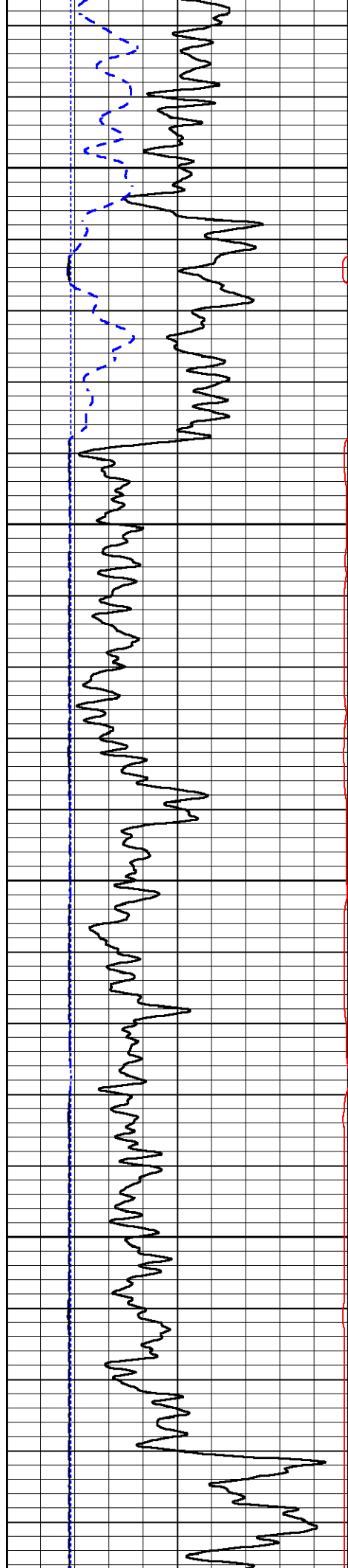


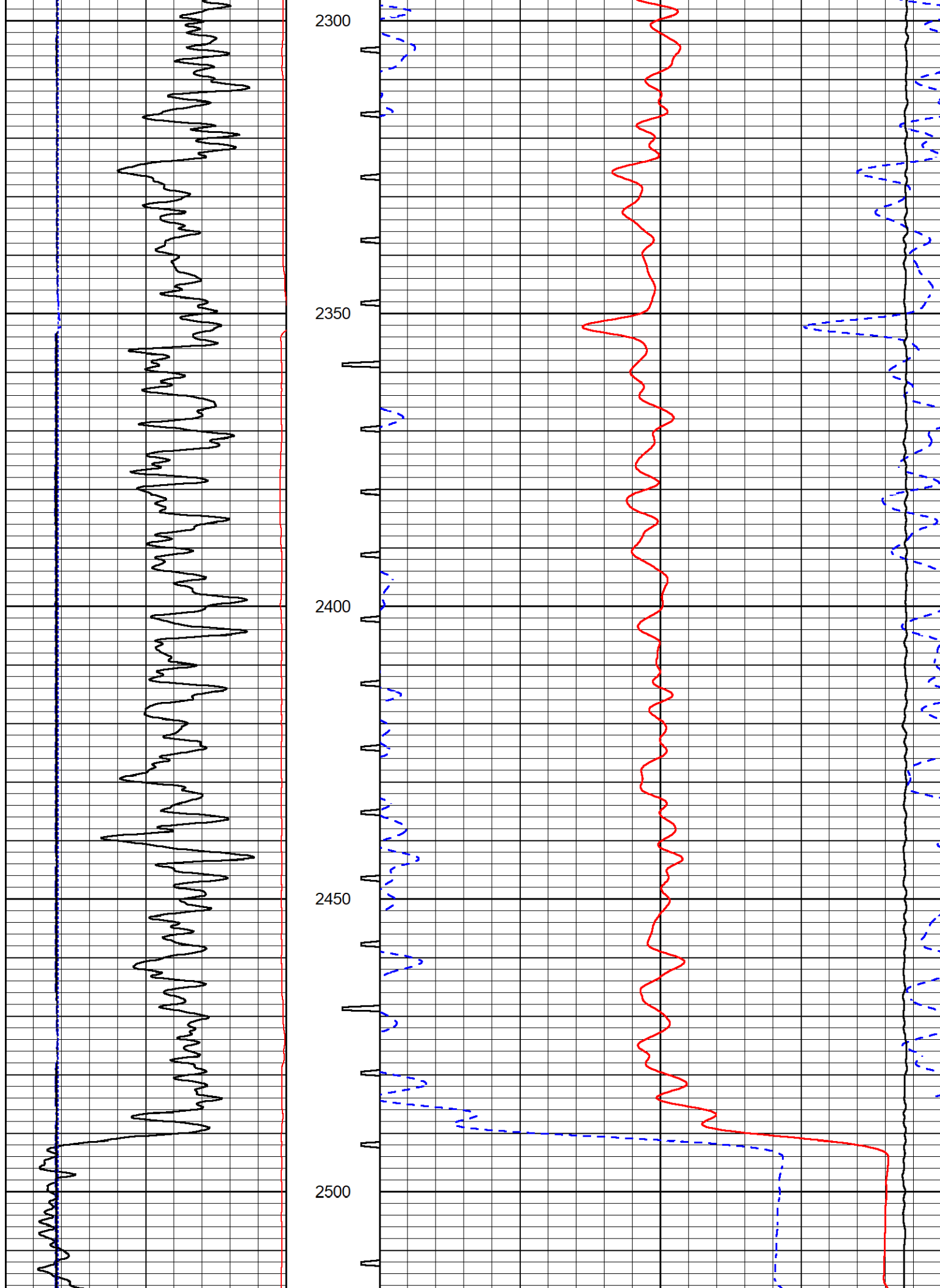










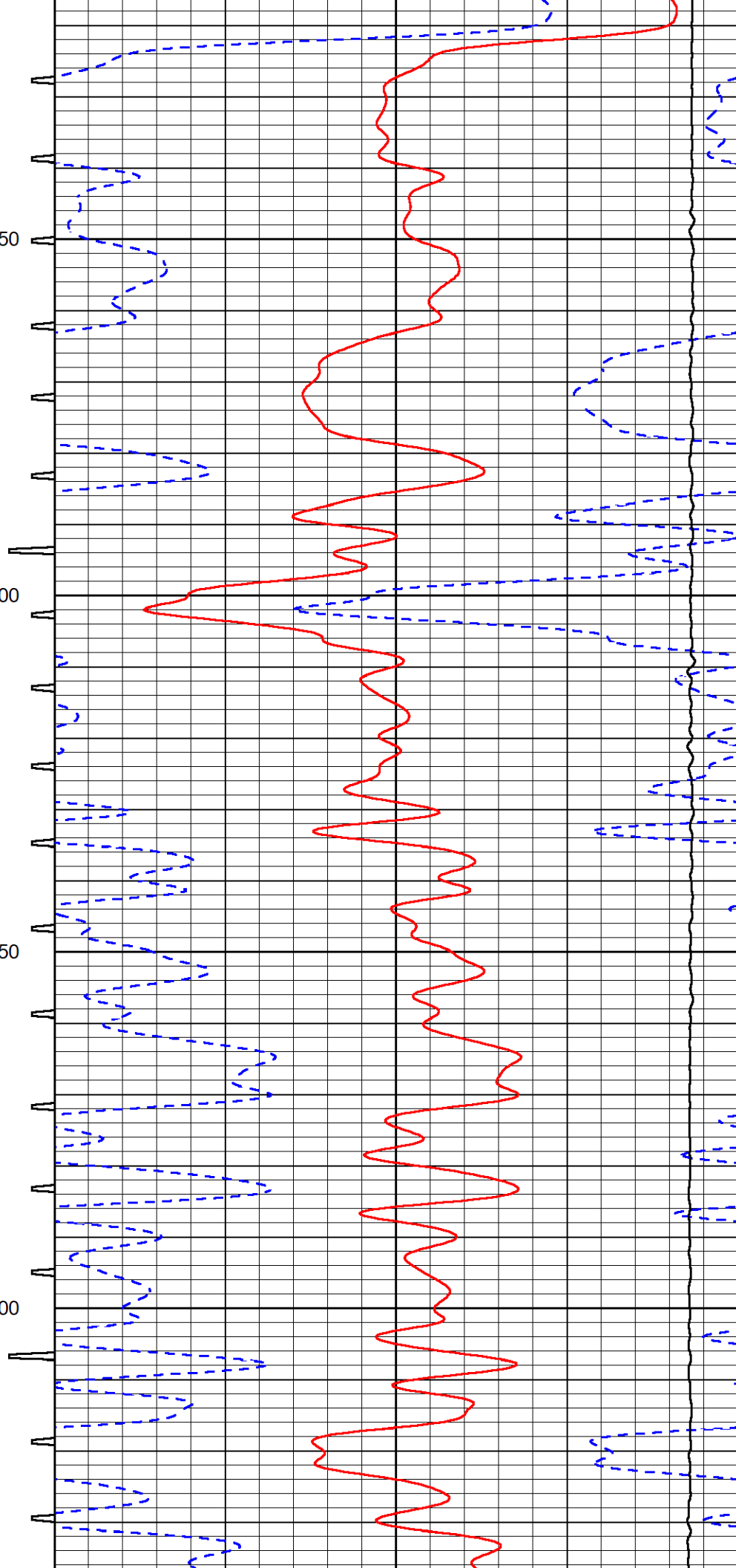
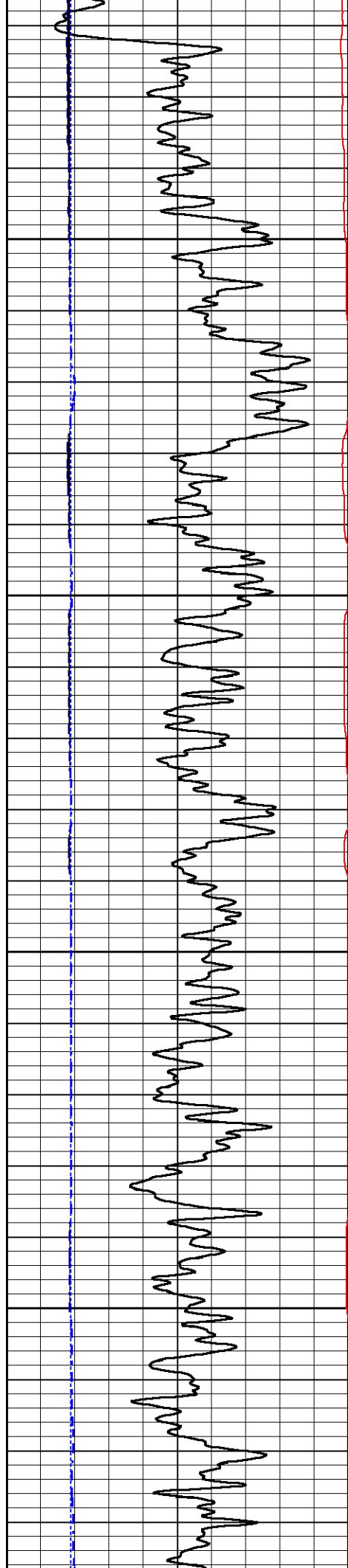


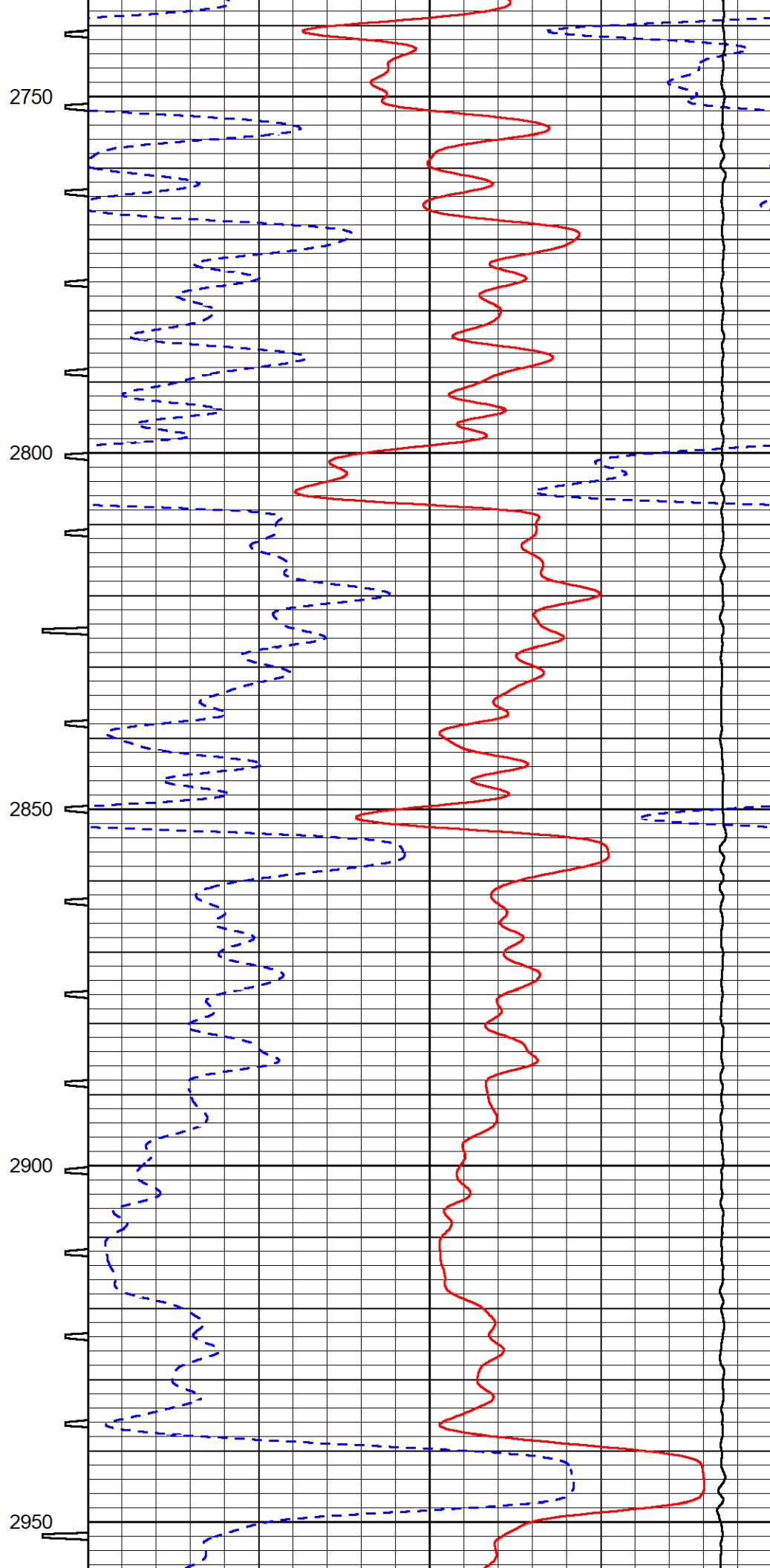
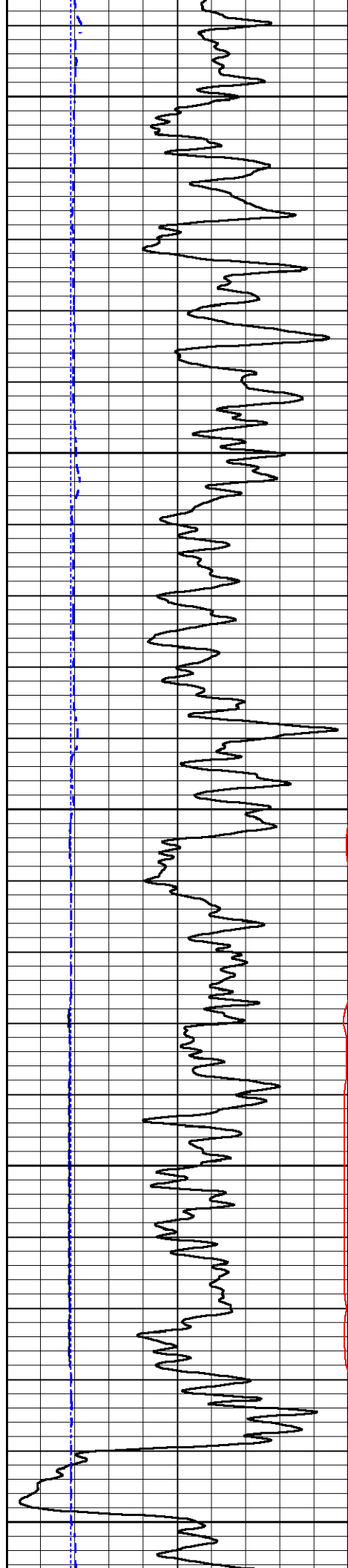
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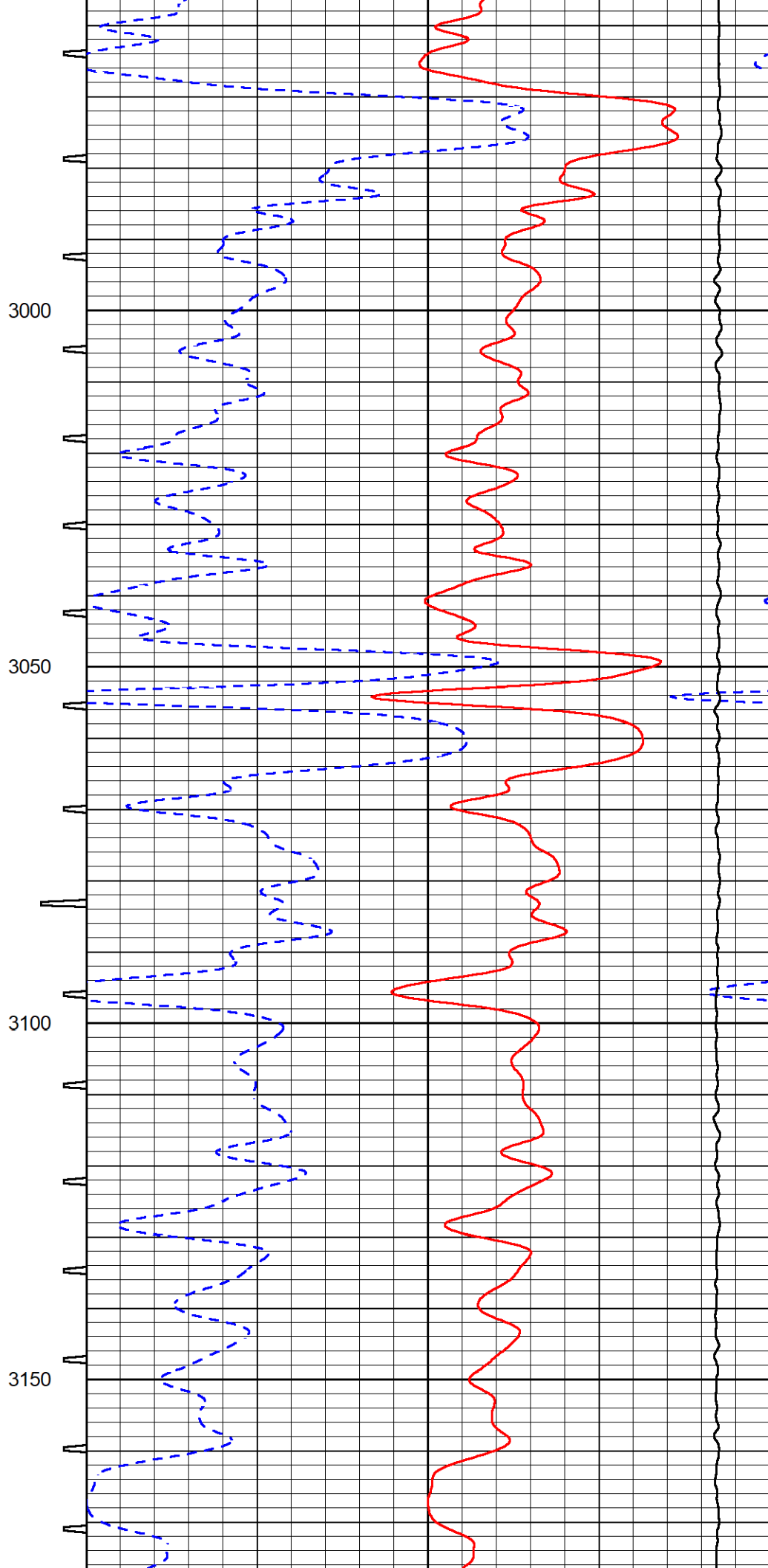
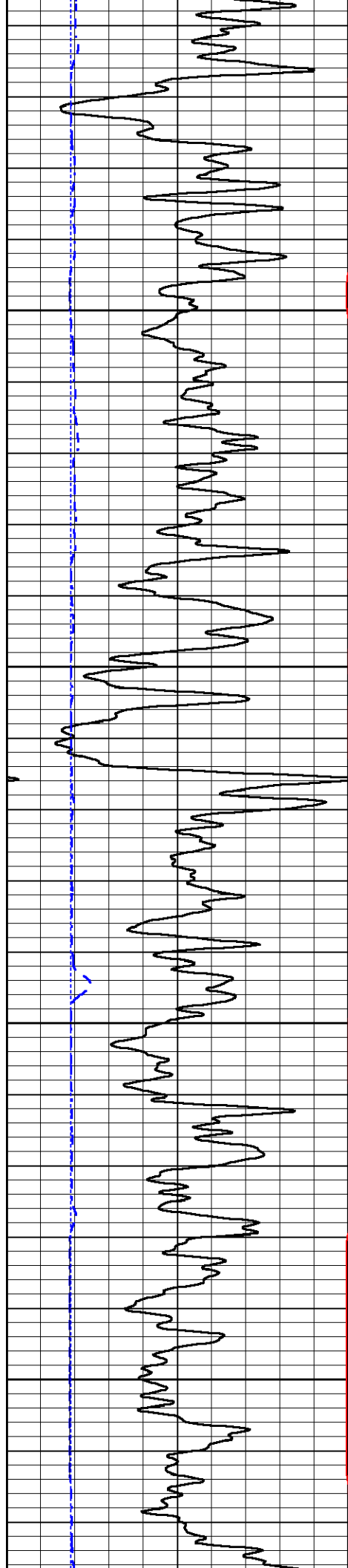
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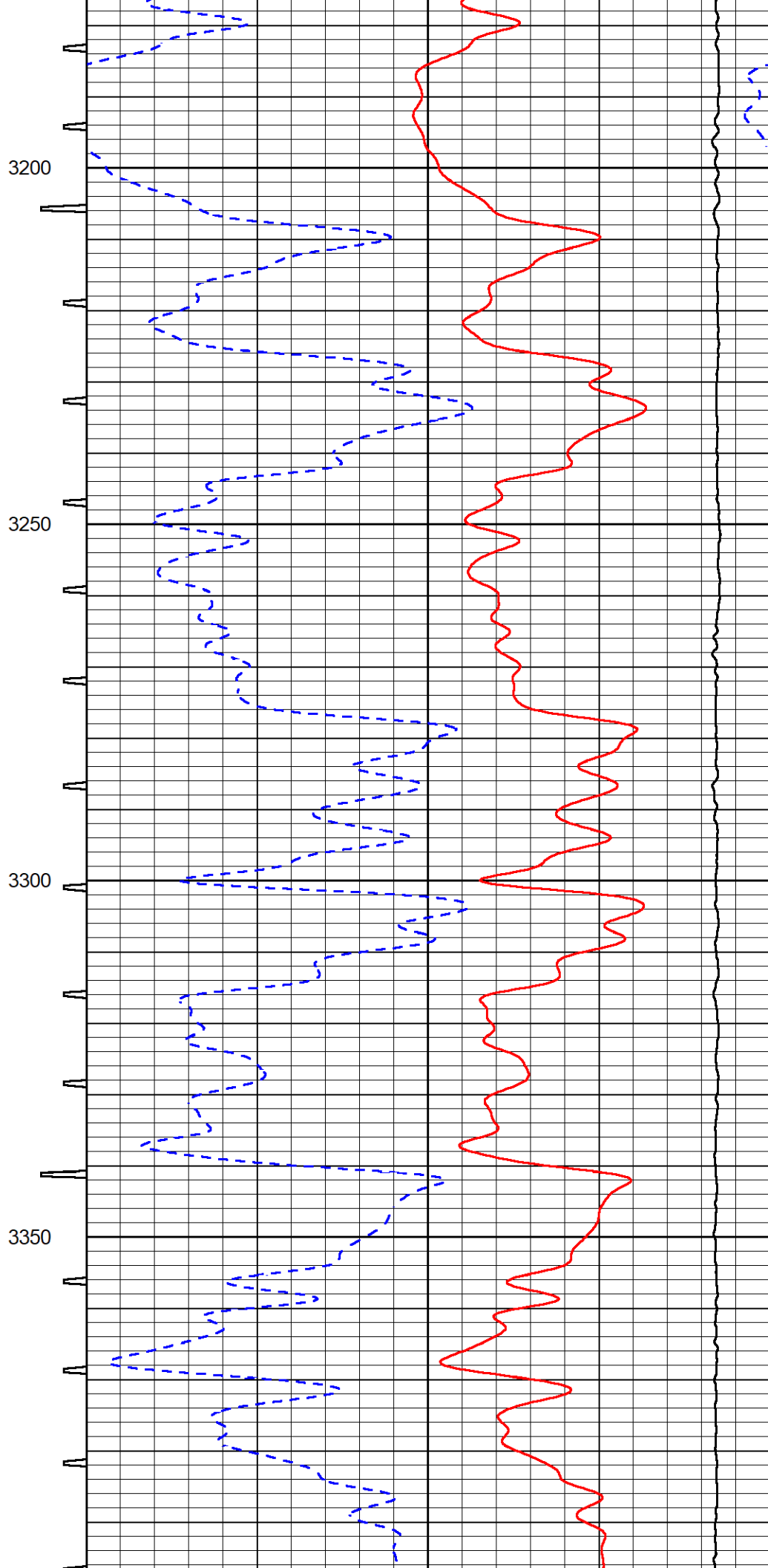
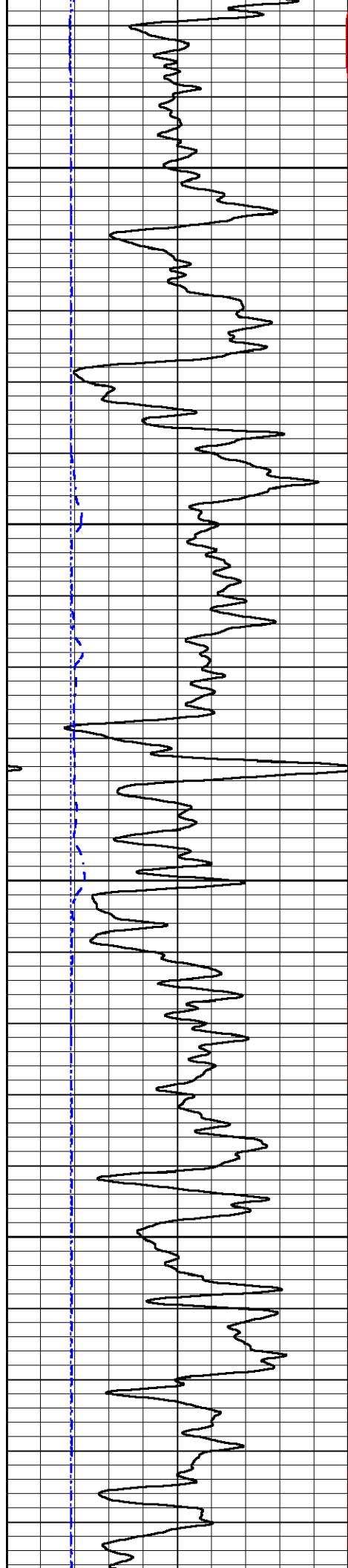
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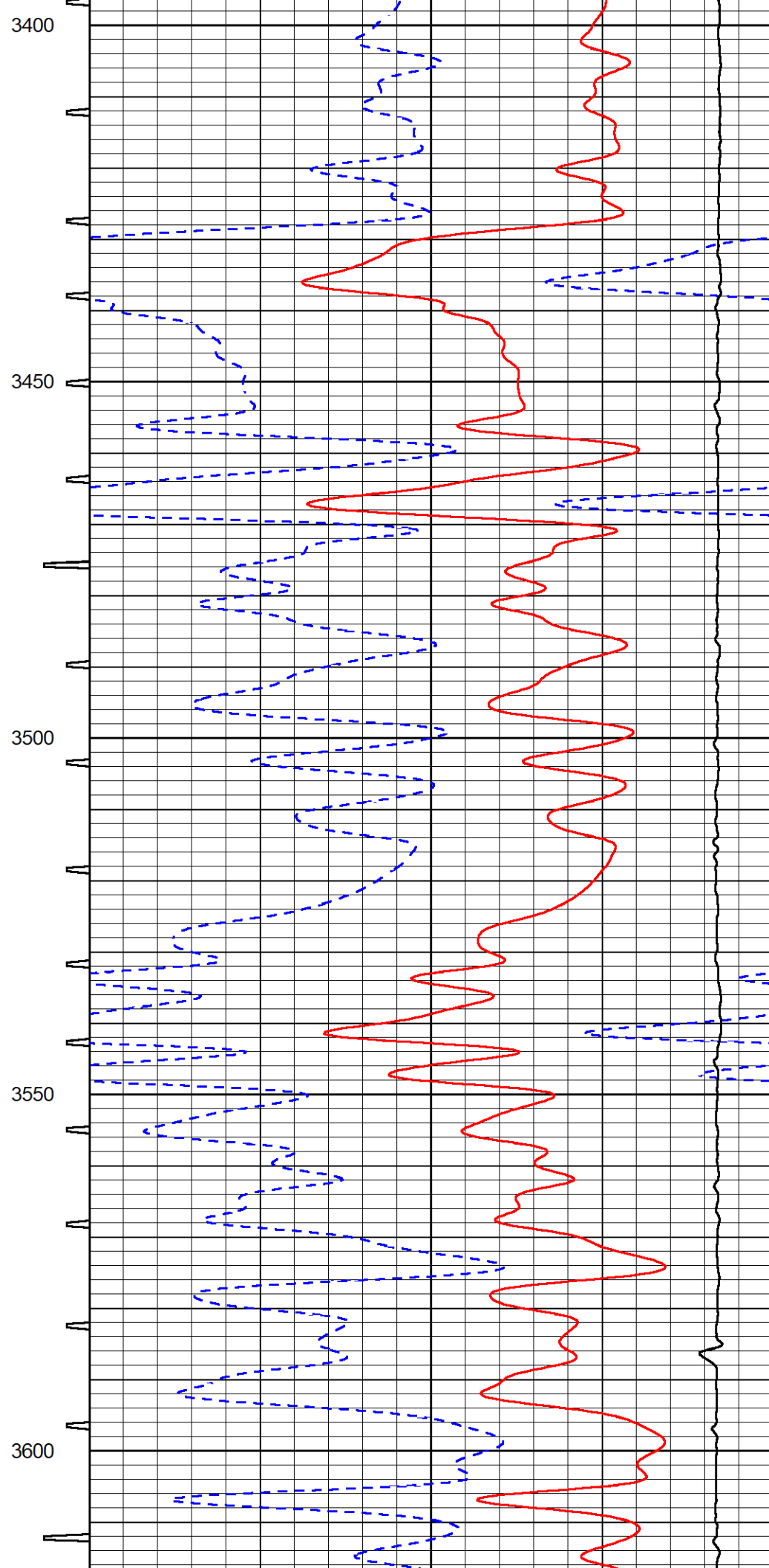
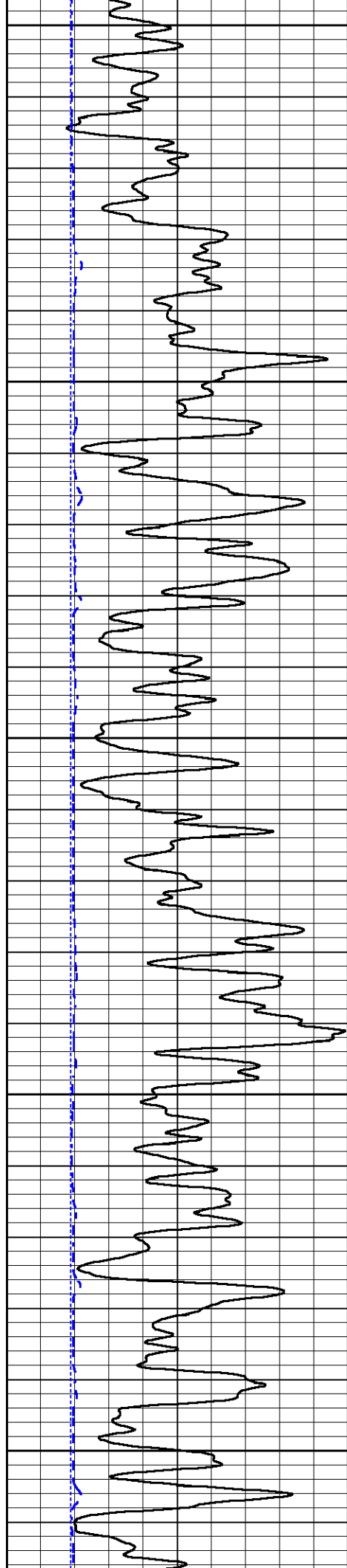
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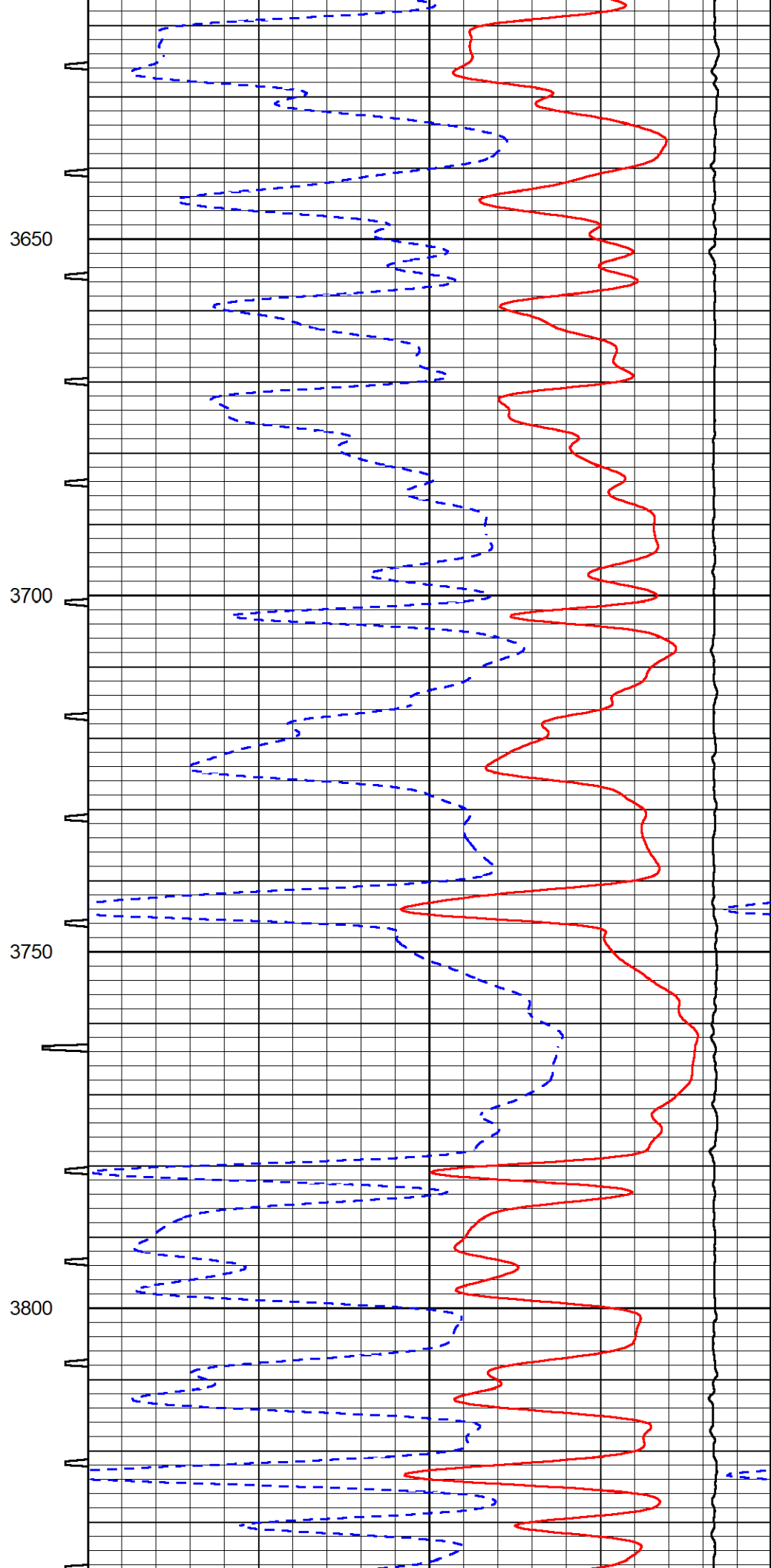
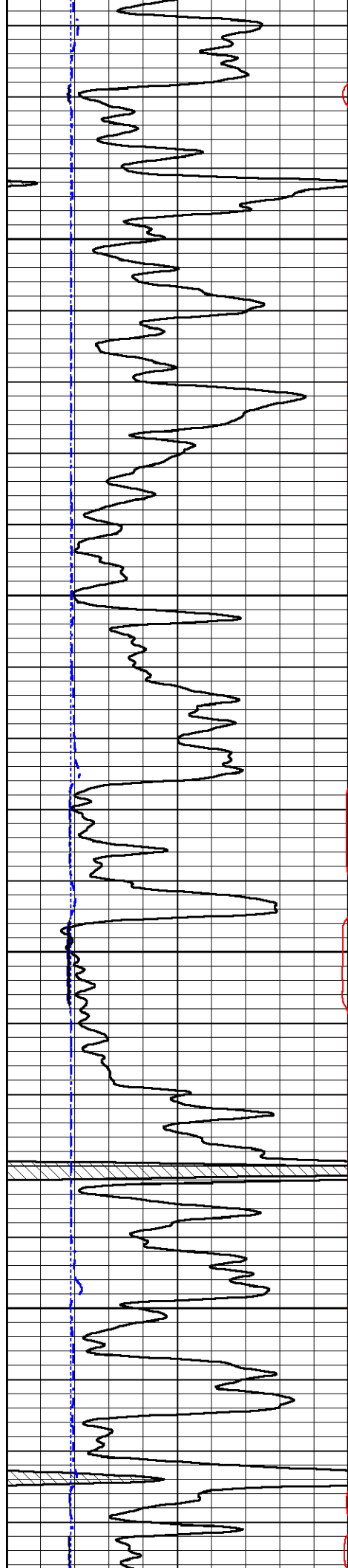


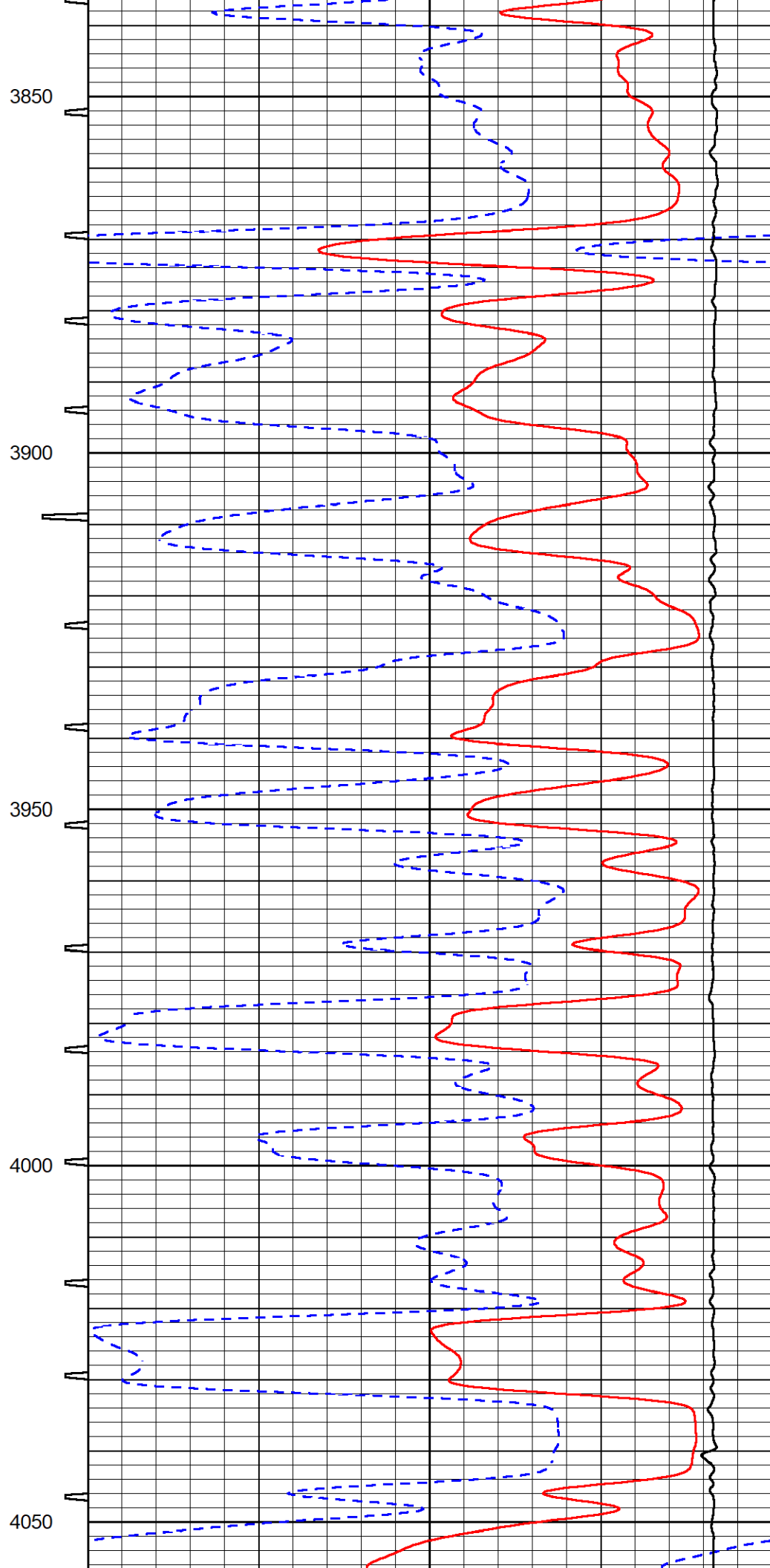
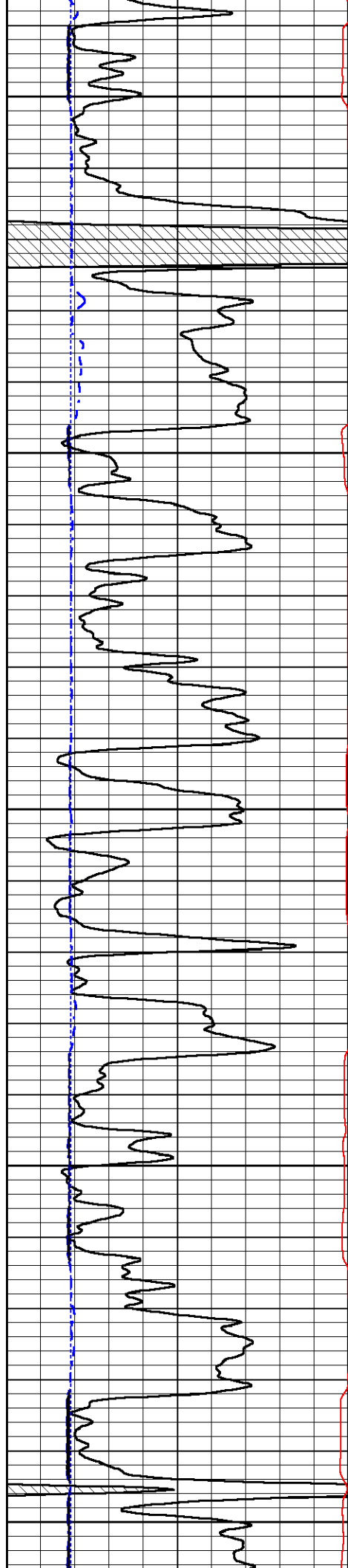


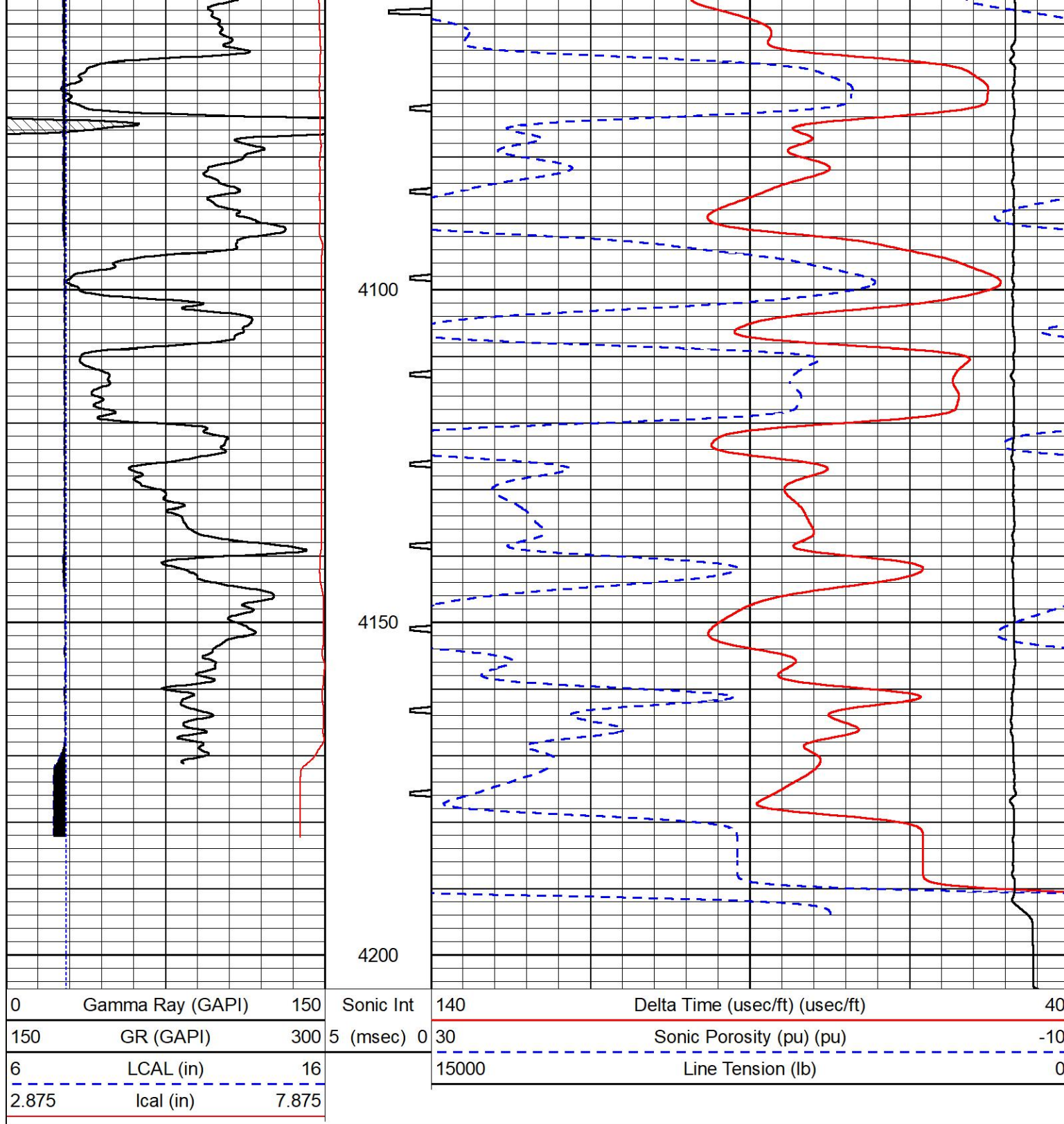












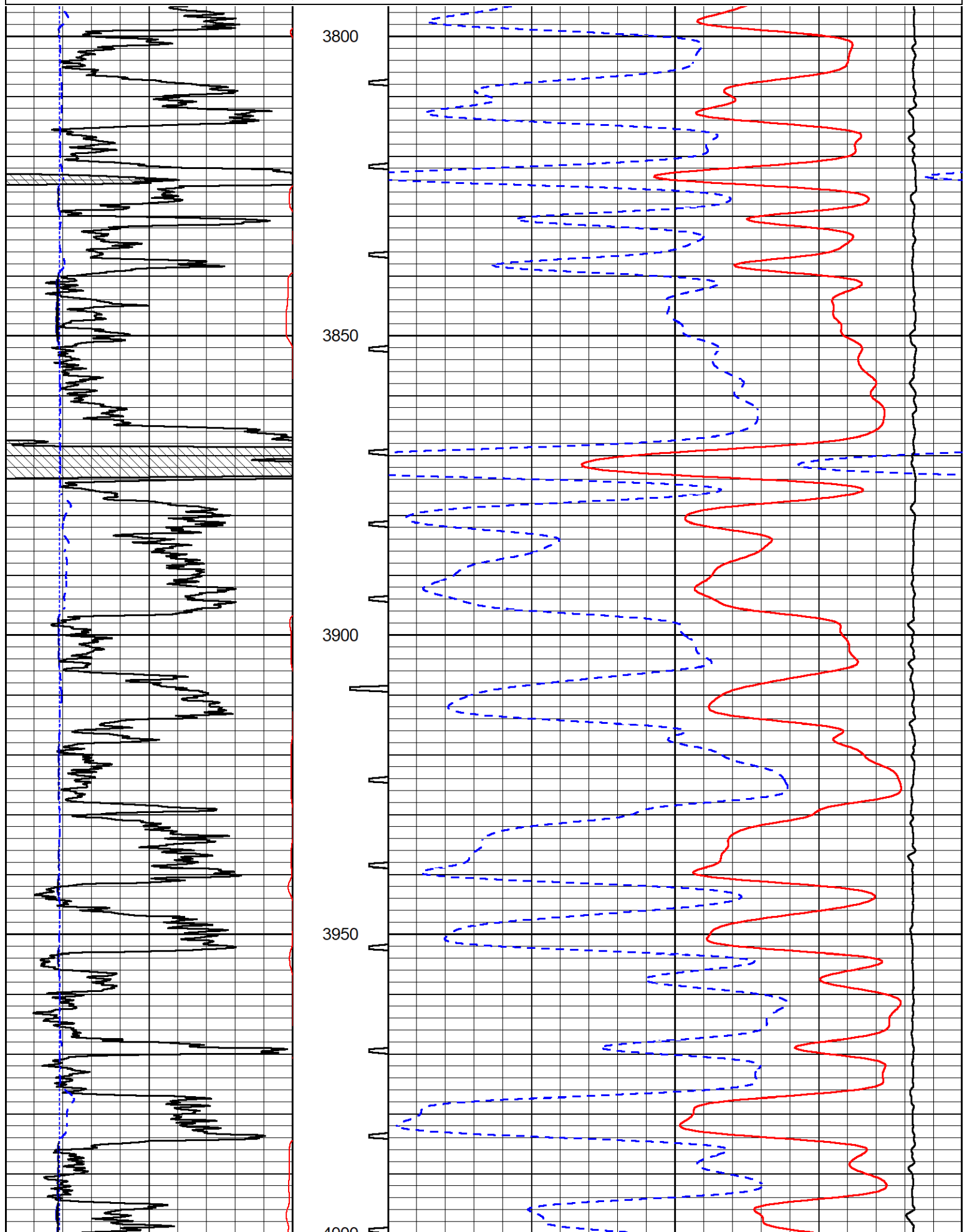
REPEAT SECTION

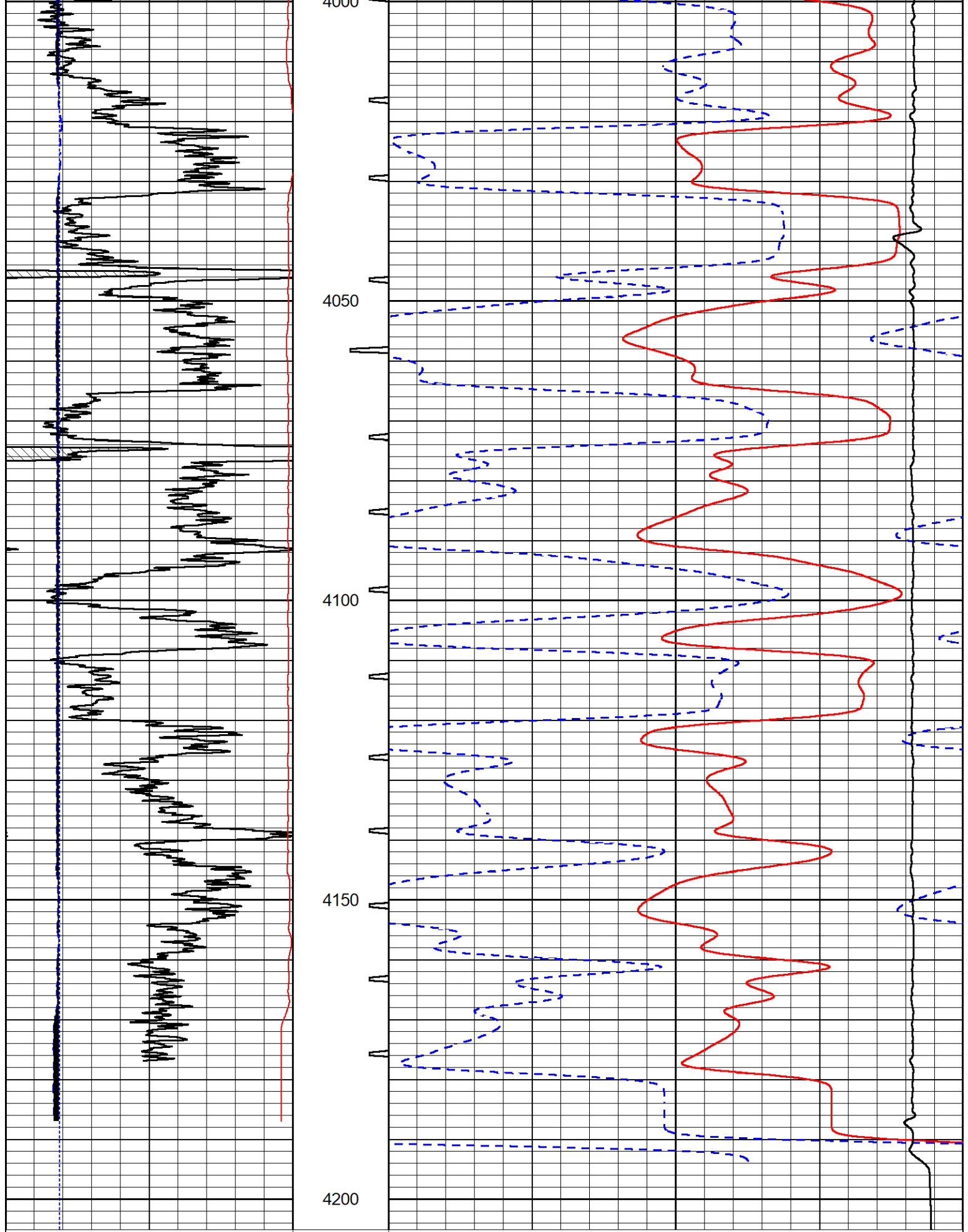
REPEAT PASS

Database File: murfin_weis a 1-14.db
 Dataset Pathname: stack/pass2.1
 Presentation Format: _sonic
 Dataset Creation: Fri Aug 02 00:38:34 2024
 Charted by: Depth in Feet scaled 1:240



150	GR (GAPI)	300	5 (msec)	0	30	Sonic Porosity (pu)	0	-10
6	LCAL (in)	16			15000	Line Tension (lb)		0
2.875	lcal (in)	7.875						





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	LCAL (in)	16		15000	Line Tension (lb)	0

Calibration Report									
Database File	murfin_weis a 1-14.db								
Dataset Pathname	stack/pass3.1								
Dataset Creation	Fri Aug 02 01:13:18 2024								
Dual Induction Calibration Report									
Serial-Model:					506-M&W				
Surface Cal Performed:					Sun Jun 30 20:32:27 2024				
Readings			References				Results		
Loop:	Air	Loop		Air	Loop		m	b	
Deep	84.211	428.152		0.000	255.800	mmho/m	0.465	-32.000	
Medium	141.000	670.654		0.000	255.800	mmho/m	0.390	-10.000	
LITHODENSITY Calibration Report									
Serial Number:		703-03							
Tool Model:		STEP LITHO Short							
Performed:		Fri May 31 13:59:15 2024							
Source:									
	Win1	Win2	Win3	Win4	Win5	Win6	Win7	Win8	
Background:									
SS:	56	59	223	276	25	75	46	1	cps
LS:	83	90	344	441	51	132	90	3	cps
Aluminum:									
SS:	1063	1260	2893	2631	48	80	48	3	cps
LS:	1179	2084	3854	1823	62	133	86	5	cps
Magnesium:									
SS:	1756	2035	4740	3894	55	79	49	4	cps
LS:	4981	8390	15059	6054	115	127	85	14	cps
Aluminum+Iron:									
SS:	676	887	2426	2310	45	79	52	2	cps
LS:	700	1495	3280	1630	60	131	90	5	cps
		Density			PE				
		Actual	Calibrated		Actual	Calibrated	Quality		
Background:									
SS:							0.236		
LS:							0.189		
Aluminum:									
SS:		2.6000	2.6000	g/cc			0.249		
LS:		2.6000	2.6000	g/cc			0.216		
Magnesium:									
SS:		1.6800	1.6800	g/cc	2.5700	2.5700	0.232		
LS:		1.6800	1.6800	g/cc	2.5700	2.5700	0.198		
Aluminum+Iron:									
SS:						6.1800	0.208		
LS:						6.1800	0.188		
Caliper:			Reference:		Reading:				
Small Ring:			6.0 in		1.0				
Large Ring:			14.0 in		1.0				
Gain:			12.765						
Offset:			2.170						

Compensated Neutron Calibration Report

Serial Number: 210
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

Gamma Ray Calibration Report

Serial Number: 105
Tool Model: M&W
Performed: Sat Oct 21 23:48:19 2023

Calibrator Value: 500.0 GAPI

Background Reading: 24.0 cps
Calibrator Reading: 637.0 cps

Sensitivity: 0.6000 GAPI/cps



Company Murfin Drilling Company, Inc.
Well Weis A #1-14
Field
County Sheridan
State Kansas