



PIONEER

Pioneer Energy Services

BOREHOLE COMPENSATED SONIC LOG

Company **THOMAS GARNER, INC.**
Well **DENNIS NO. 1**
Field **LEISS NORTHWEST**
County **STAFFORD** State **KANSAS**

Location: API #: 15-185-24005-00-00

Other Services

SEC 15 TWP 25S RGE 13W
416' FSL & 1733' FEL

DIL/MEL
CNL/CDL

Permanent Datum GROUND LEVEL Elevation 1927'
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING

Elevation
K.B. 1940'
D.F. N/A
G.L. 1927'

Date 12/1/2017

Run Number TWO

Type Log BHCS

Depth Driller 4282'

Depth Logger 4274'

Bottom Logged Interval 4263'

Top Logged Interval 300'

Type Fluid In Hole CHEMICAL

Salinity, PPM CL 8800

Density 9.1

Level FULL

Max. Rec. Temp. F 119 DEG/F

Operating Rig Time 4 HOURS

Equipment -- Location 108 HAYS

Recorded By J. HENRICKSON

Witnessed By TOM GARNER

Borehole Record

Run No. Bit From To Size Wgt. From To

ONE 12.25" 0 321' 8.625" 23# 0 321'

TWO 7.875" 321' TD

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer 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.
ST. JOHN KANSAS
SOUTH TO HWY 50, 6 SOUTH, 1/2 EAST, NORTH INTO

Log Measured From: KELLY BUSHING 13 Ft. Above Permanent Datum

THANK YOU FOR USING PIONEER ENERGY SERVICES
www.pioneerenergy.com 785-625-3858

Your Pioneer Energy Services Crew

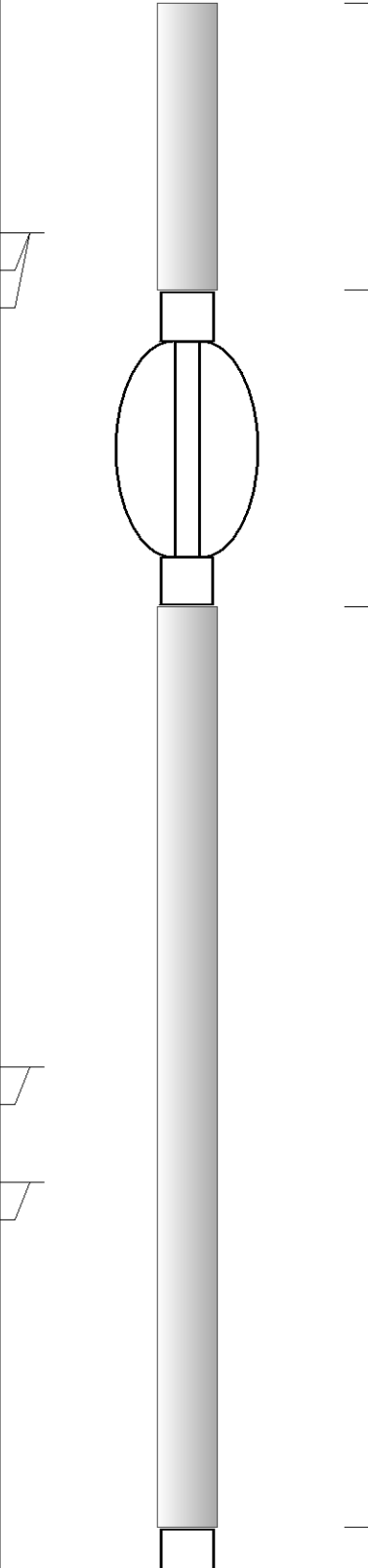
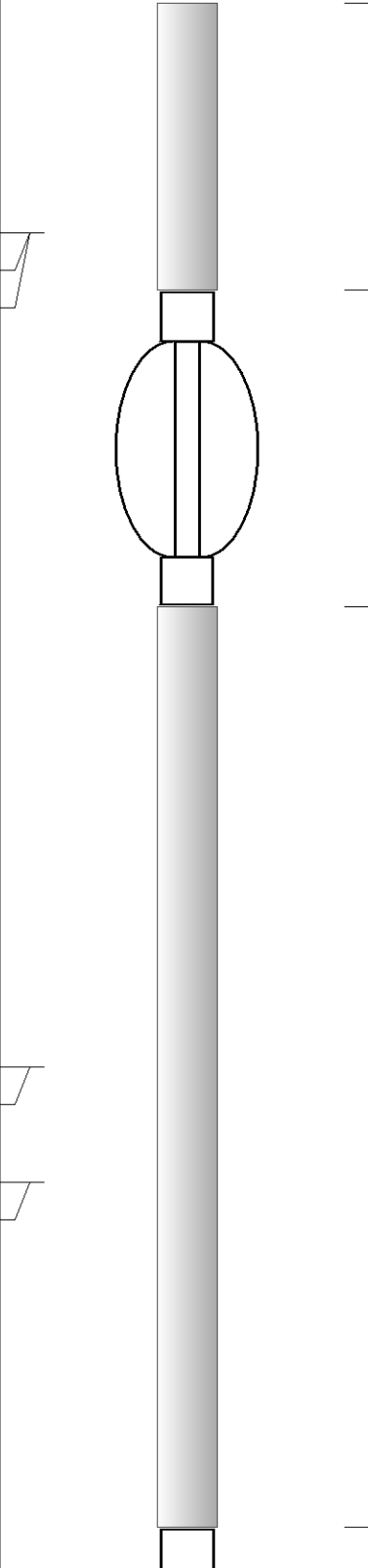
Engineer: J. HENRICKSON
Operator:
Operator:
Operator:

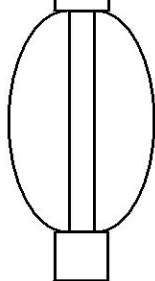
This Log Record Was Witnessed By

Primary Witness: TOM GARNER
Secondary Witness: BRYCE GARNER
Secondary Witness:
Secondary Witness:

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in 7.875	degF 100	in 5.5	in 0	g/cc 1	2	g/cc 2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	0	mmho/m 0	mmho/m 0	mV -210	degF 0	Off	ft 0

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
MCAL MI MN	28.00		ML-Armadillo (Armadillo-4) Pengo micro log tool mandrel with Armadillo Electronics	5.00	3.50	100.00
	28.00					
	28.00					
			CENT-PENGO	5.50	3.00	70.00
WVF4 WVF1	13.50 13.50		SLT-PENGO (0001)	16.00	3.50	300.00
WVF3 WVF2	11.50 11.50					



CENT-PENGO

5.50

3.00

70.00

Dataset: garner_dennis_1.db: field/well/SONMEL/pass3
Total length: 32.00 ft
Total weight: 540.00 lb
O.D.: 3.50 in

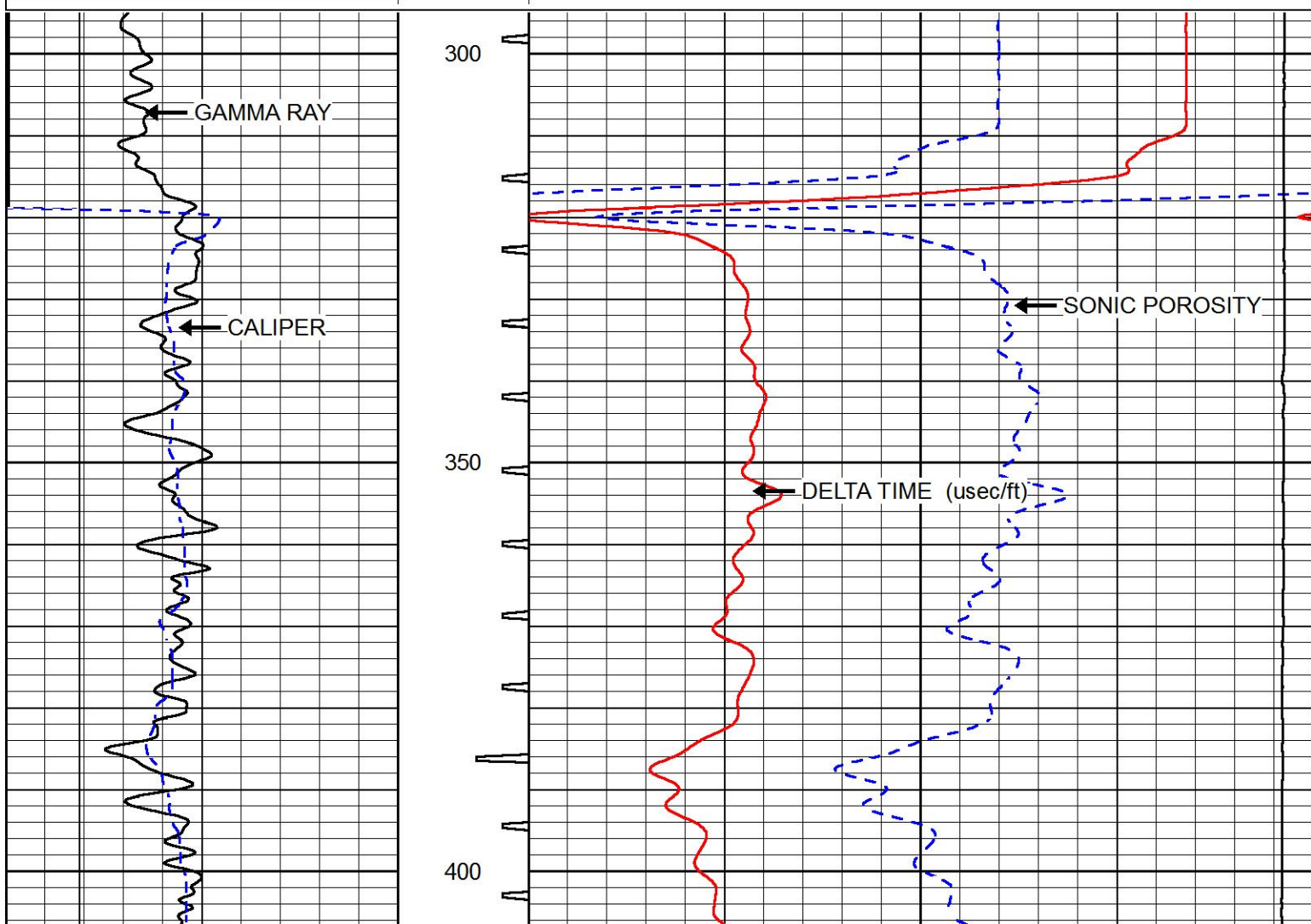


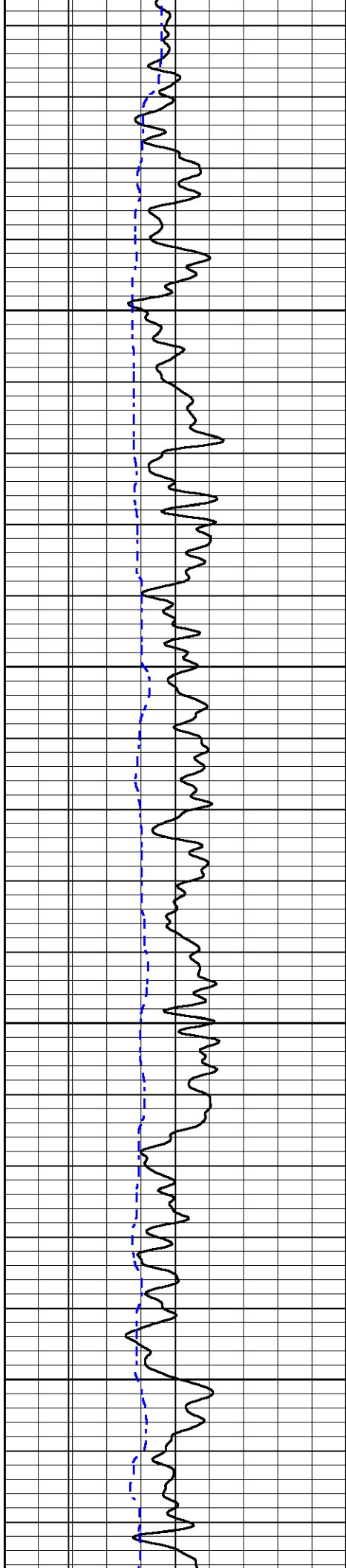
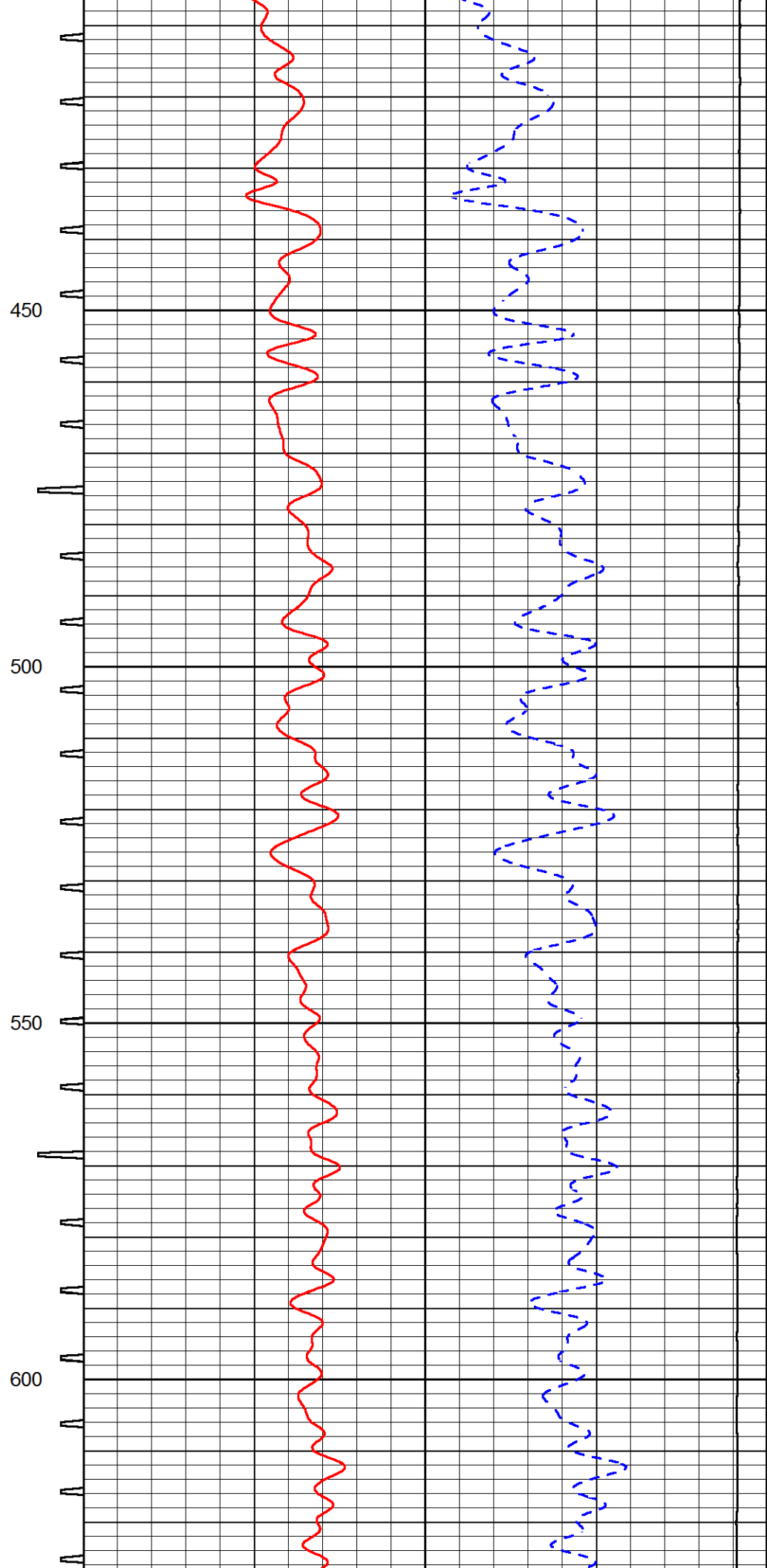
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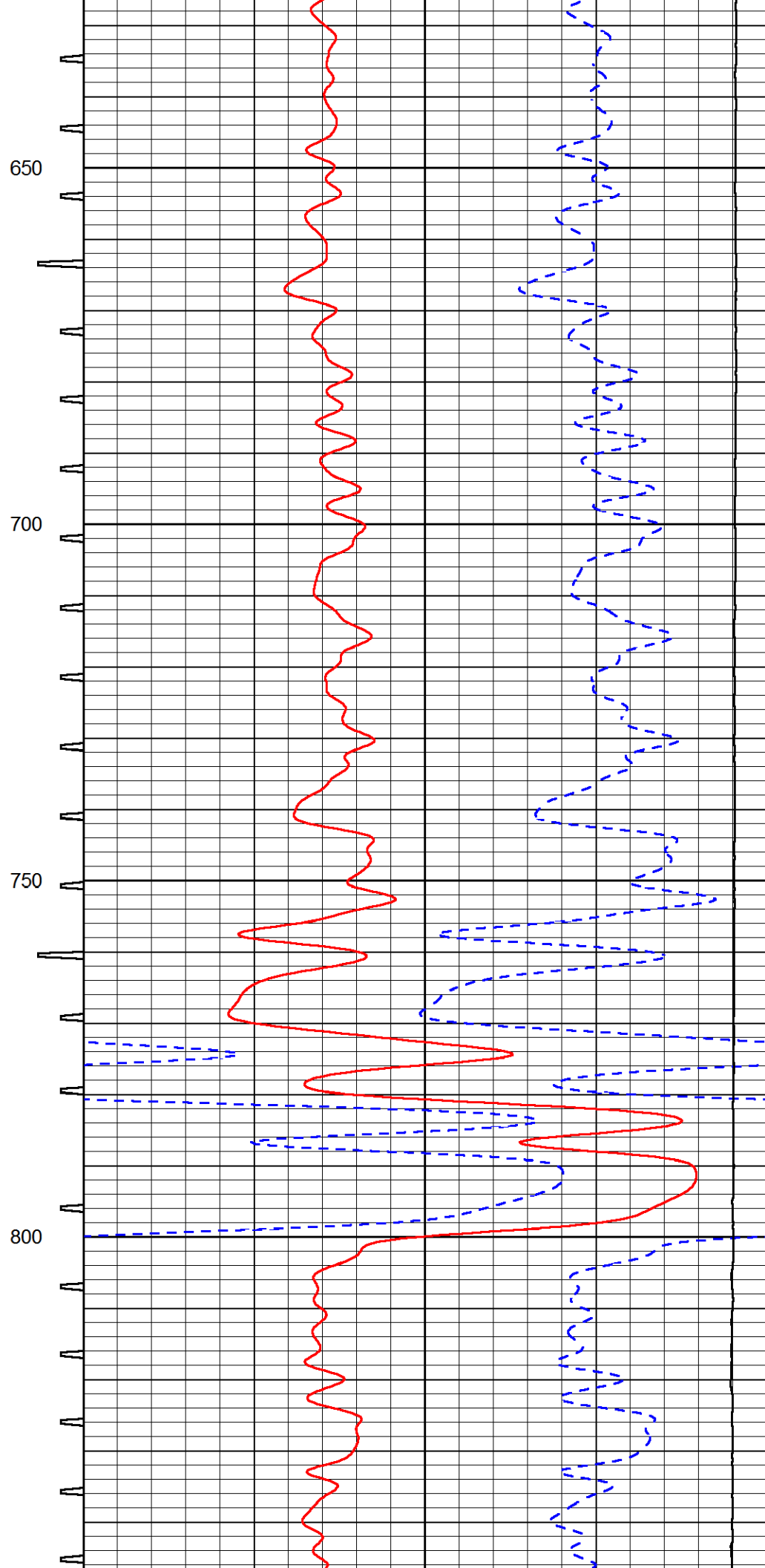
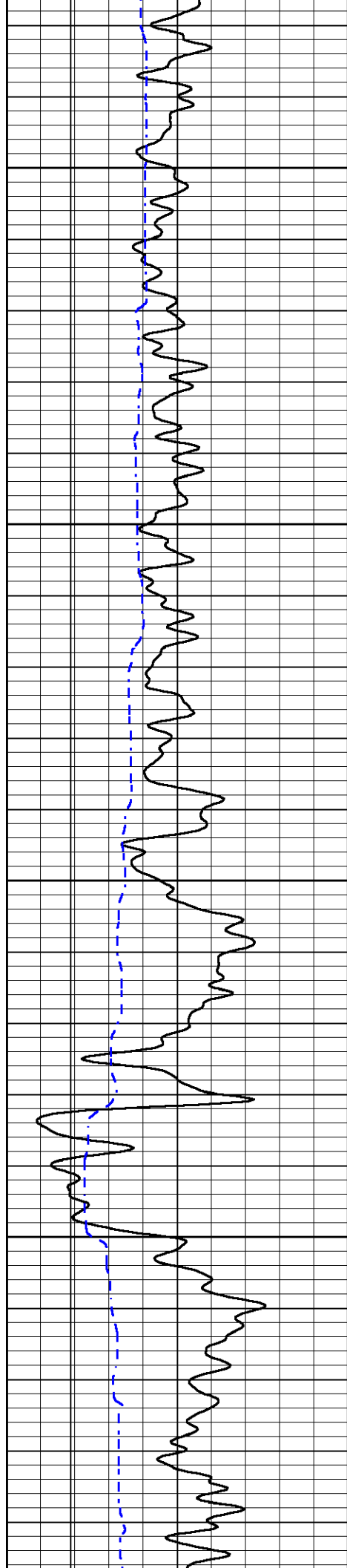
MAIN PASS

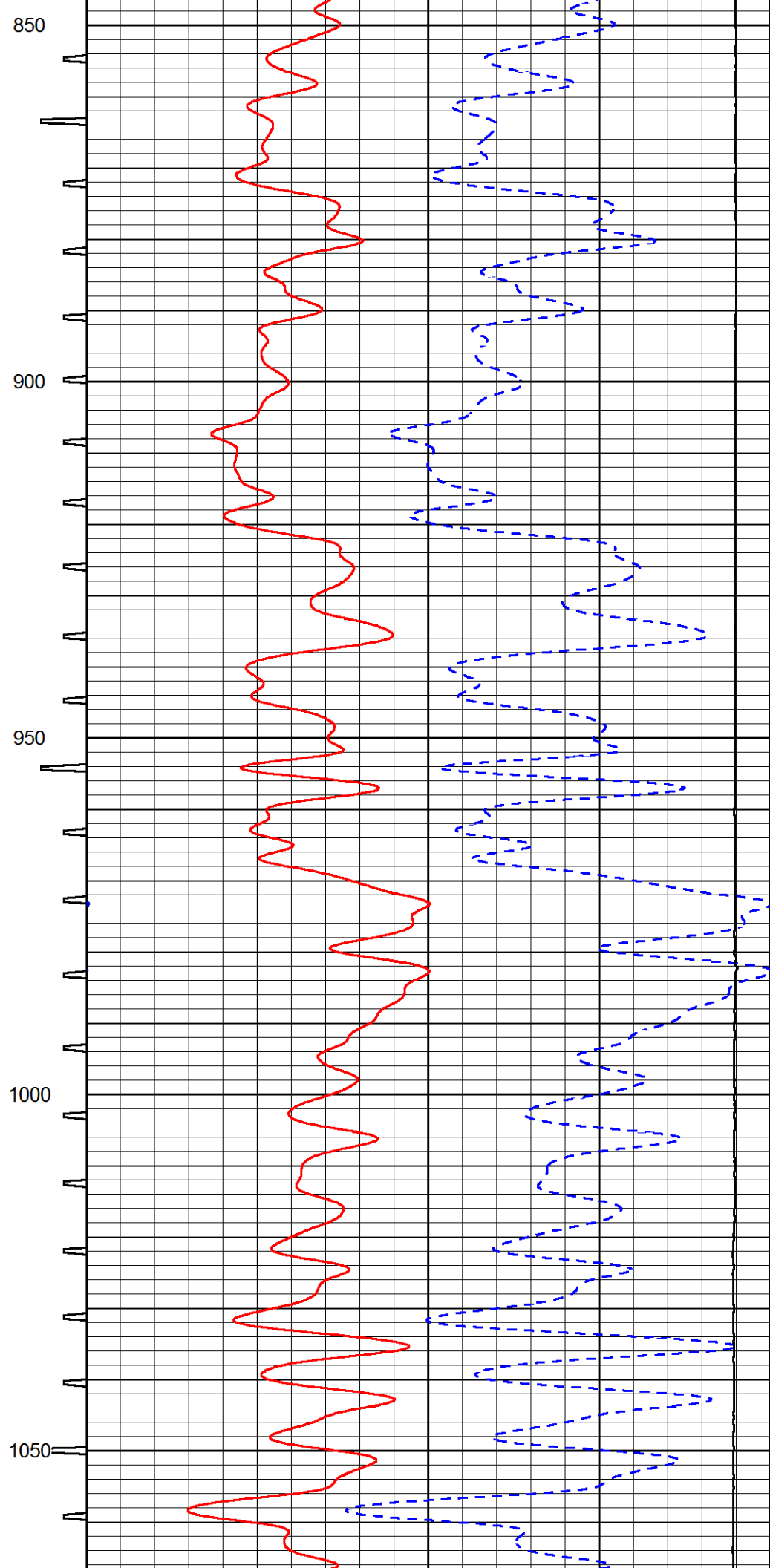
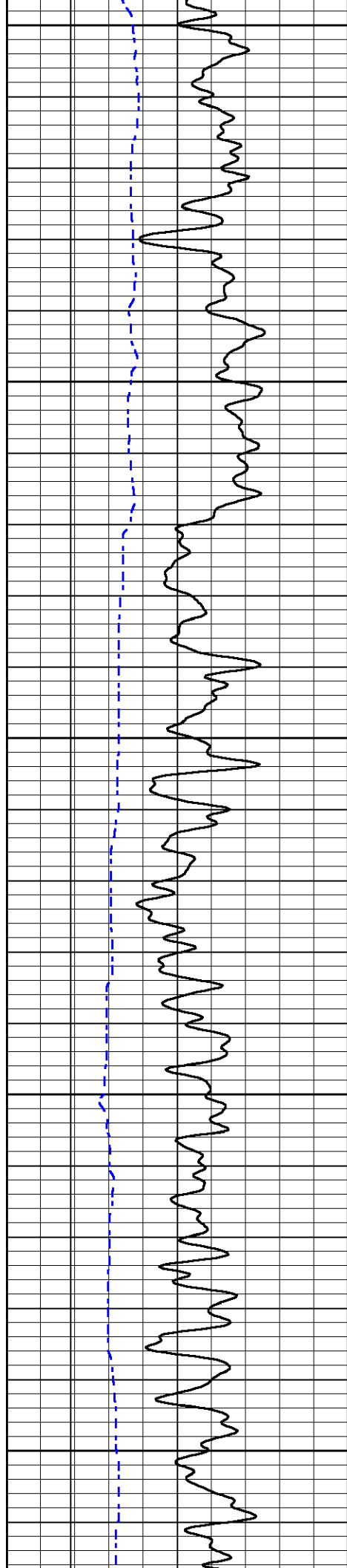
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Presentation Format: sonic
Dataset Creation: Fri Dec 01 12:10:24 2017
Charted by: Depth in Feet scaled 1:240

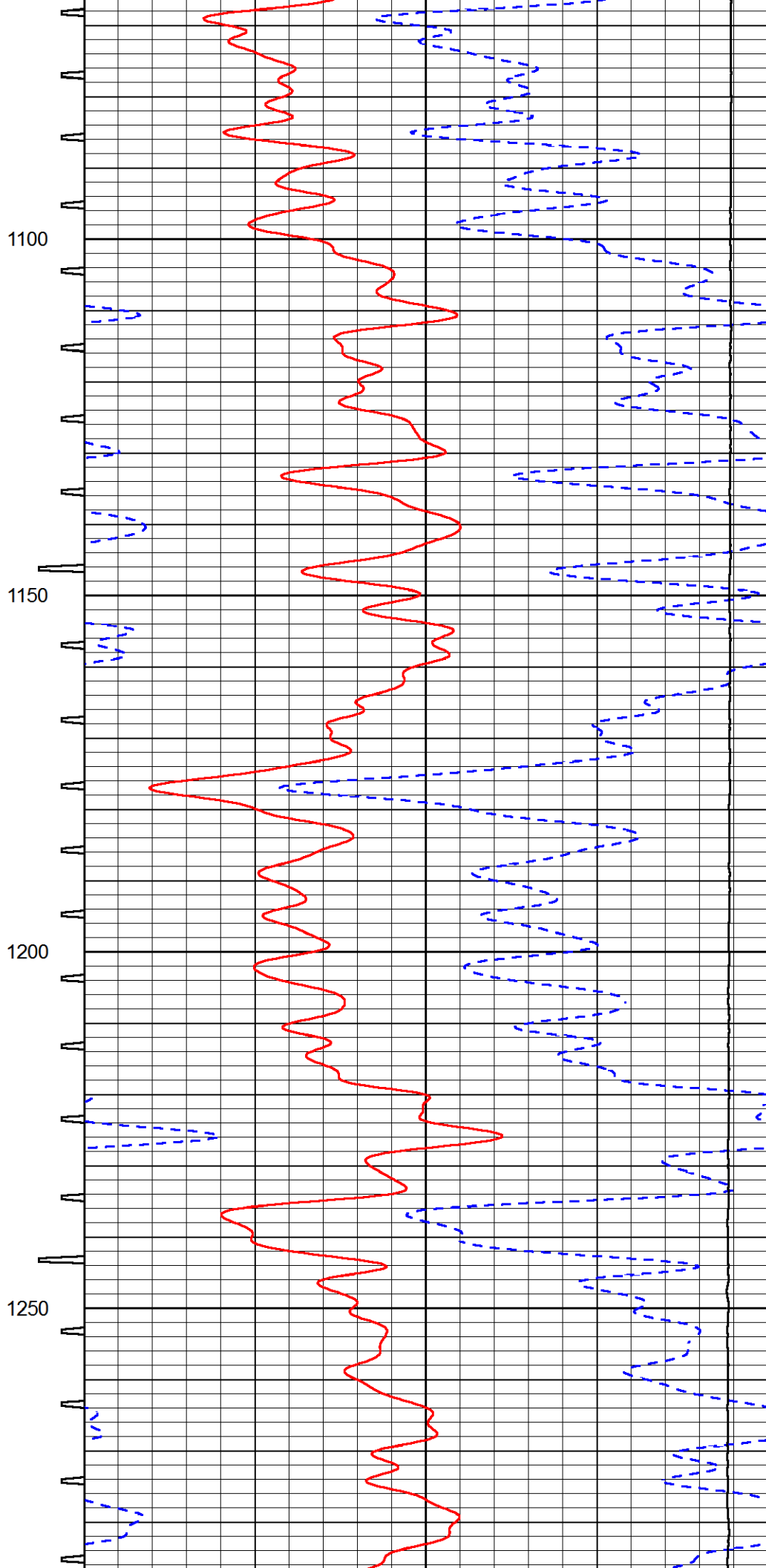
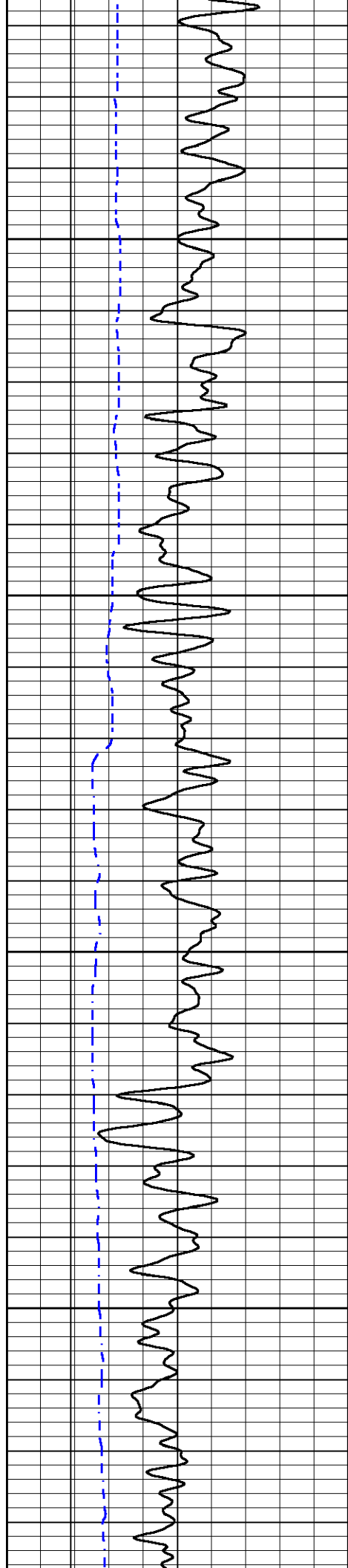
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6	CALIPER (in)	16	TRAVEL TIME	30	SONIC POROSITY (pu)	-10
6	BIT SIZE	16	(msec)	15000	LINE TENSION (lb)	0

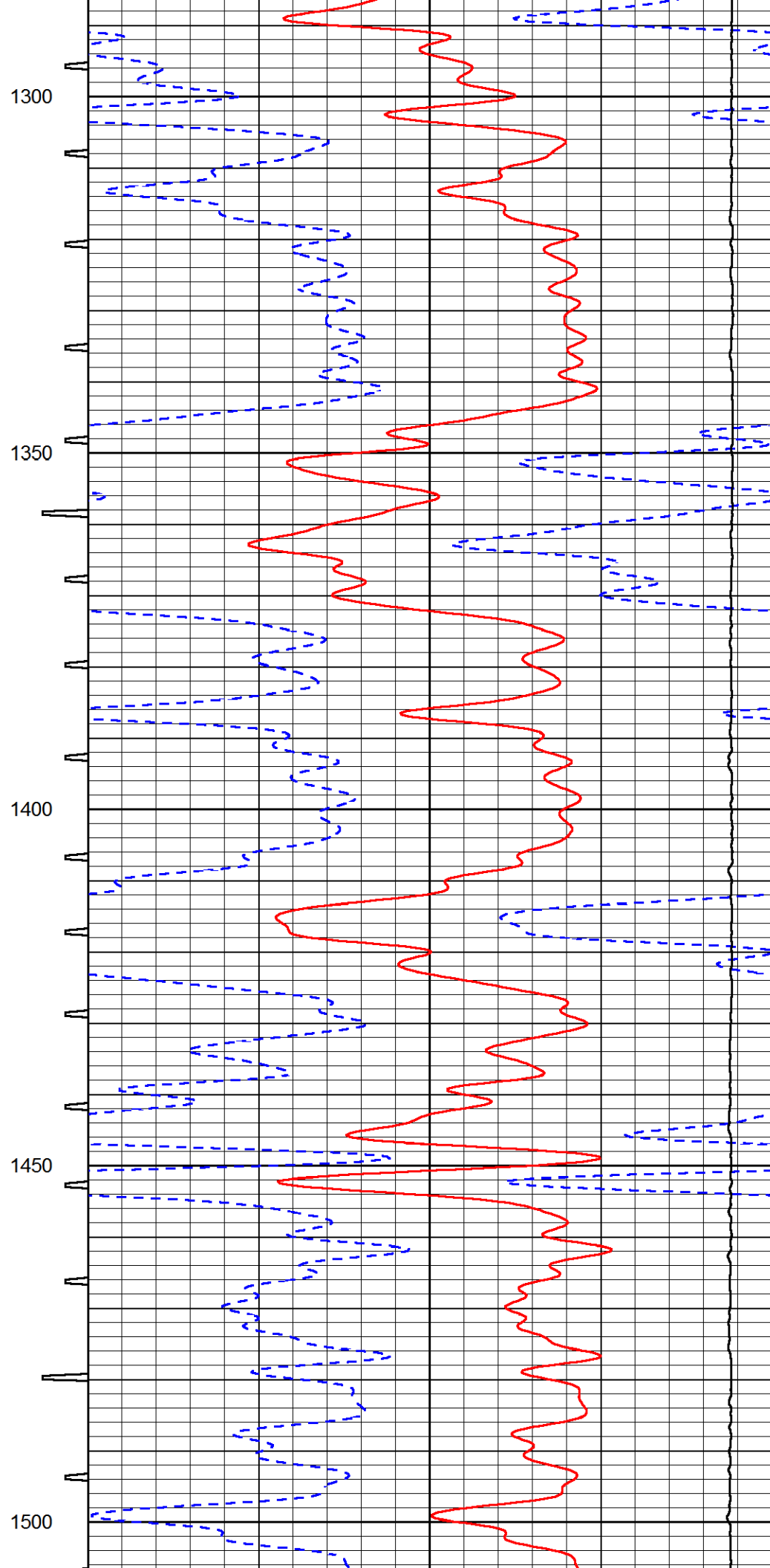
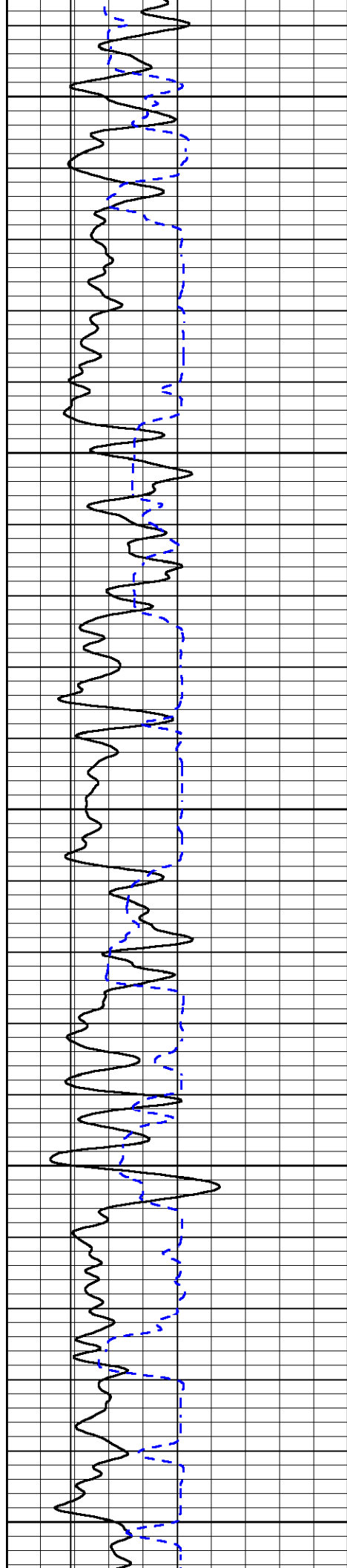


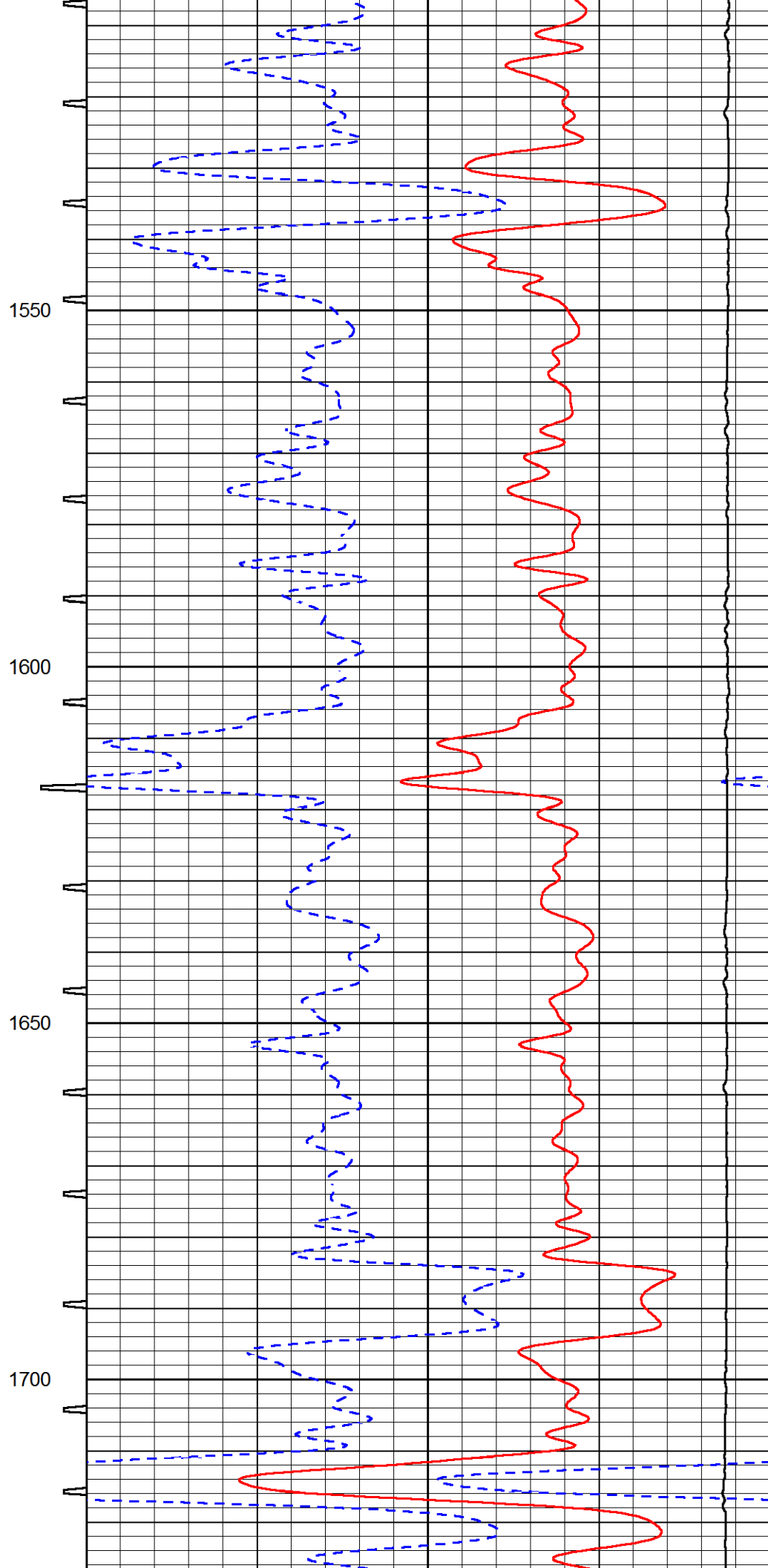
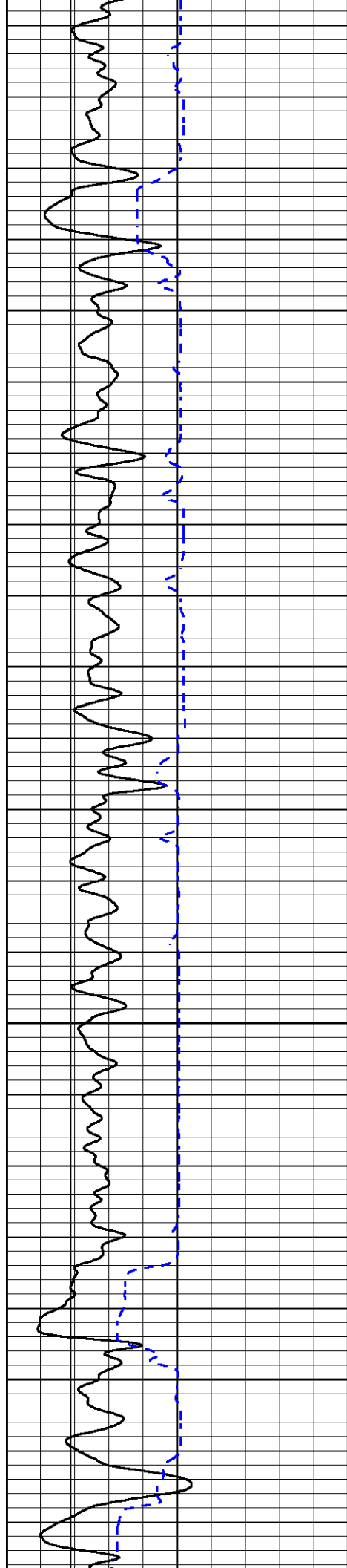


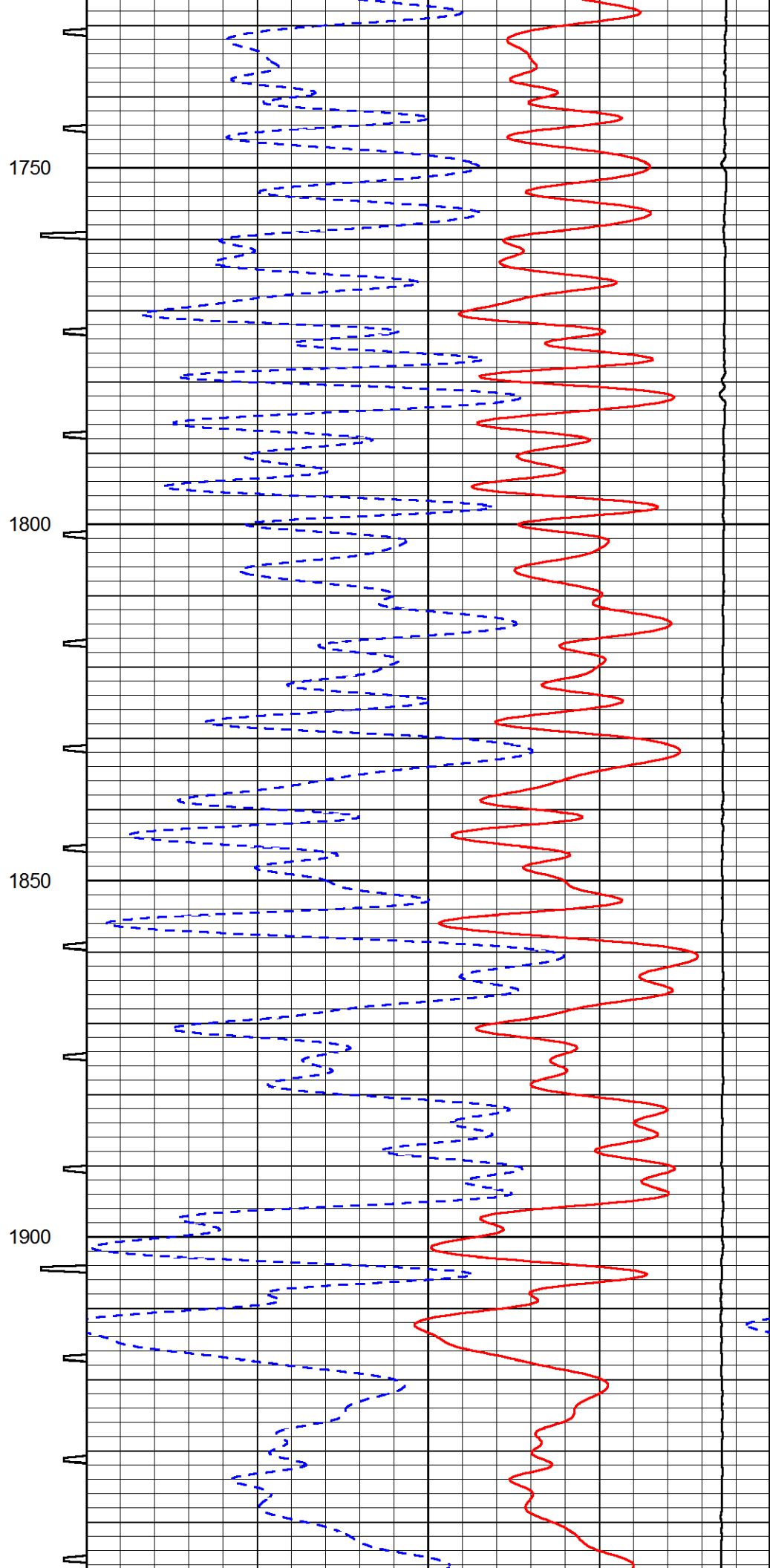
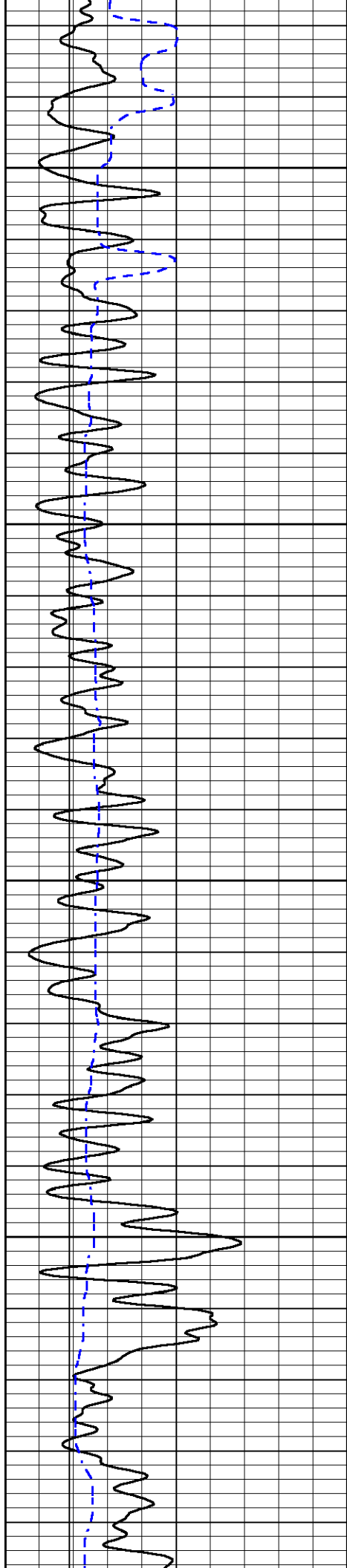


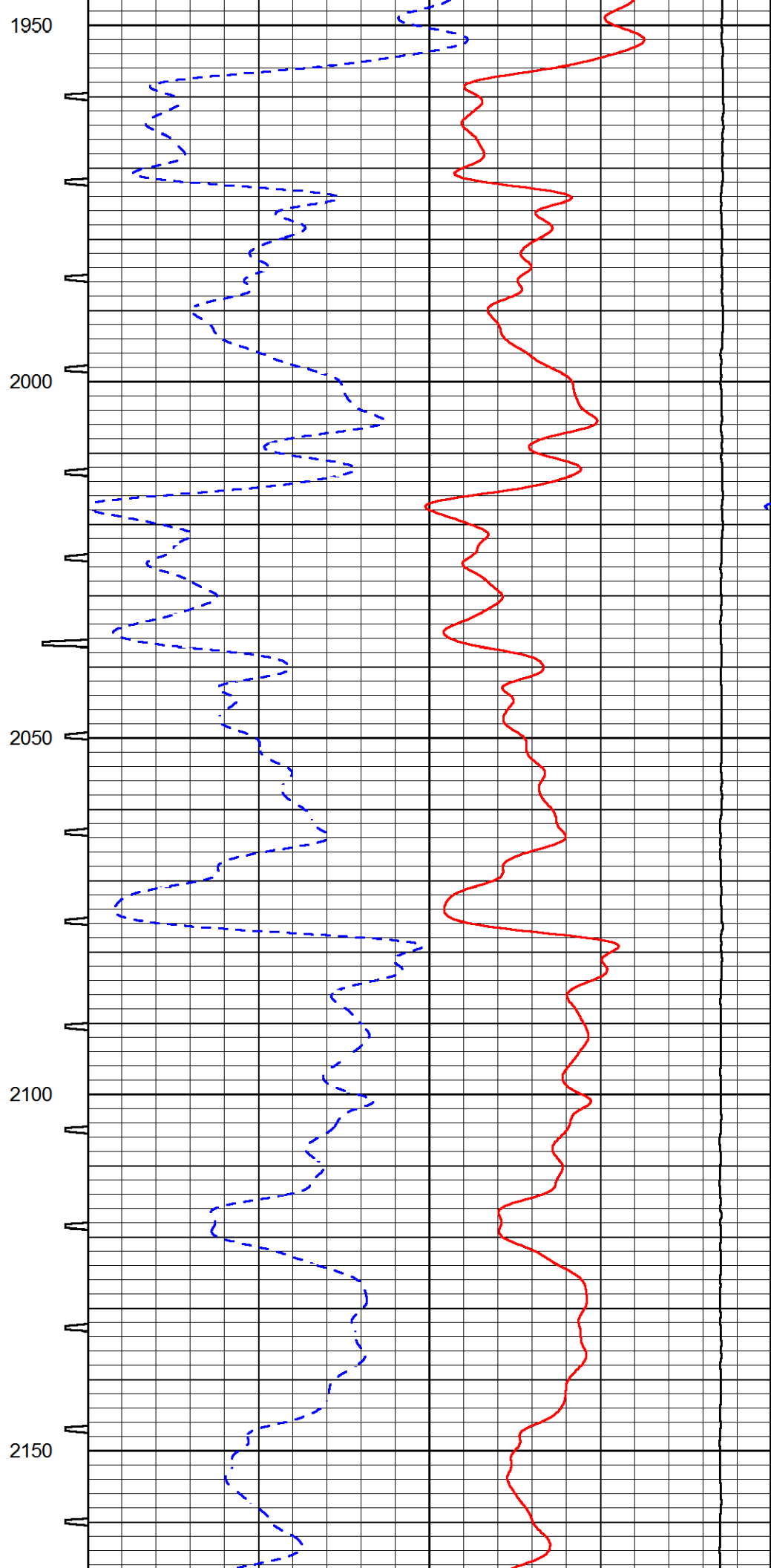
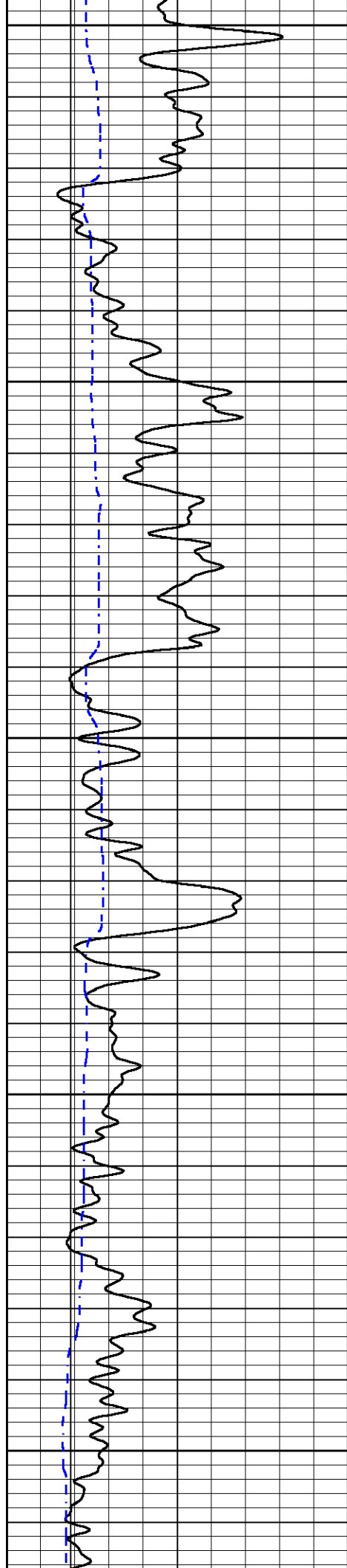


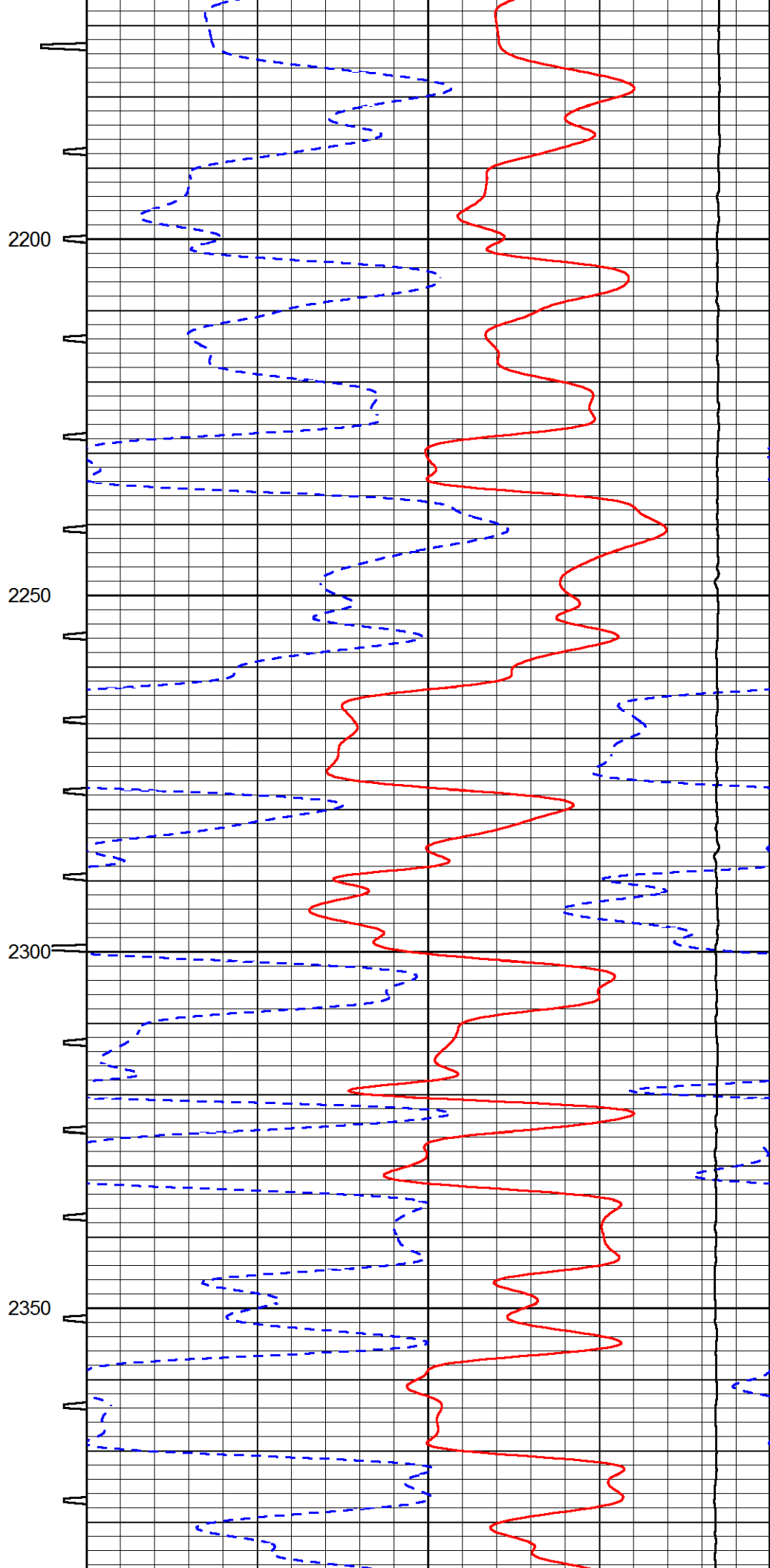
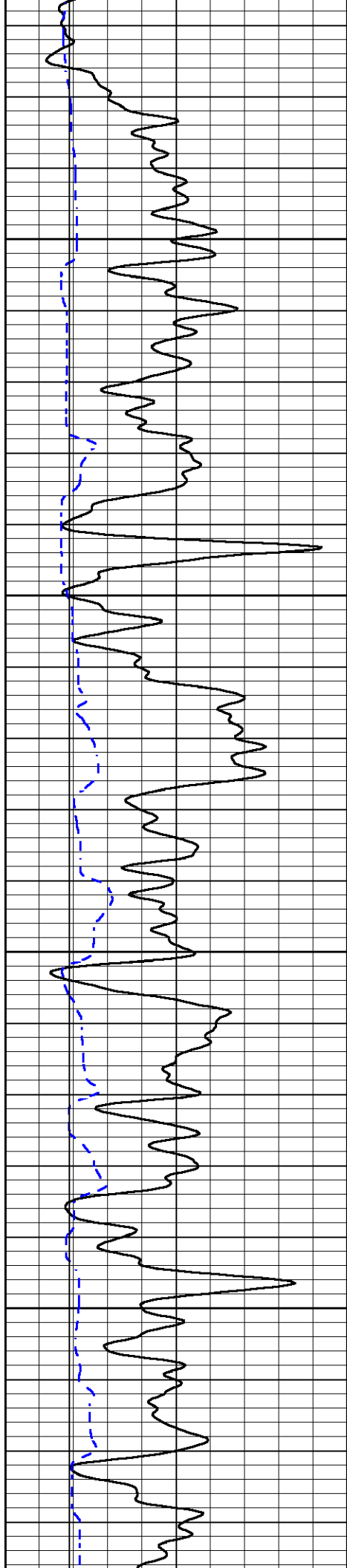


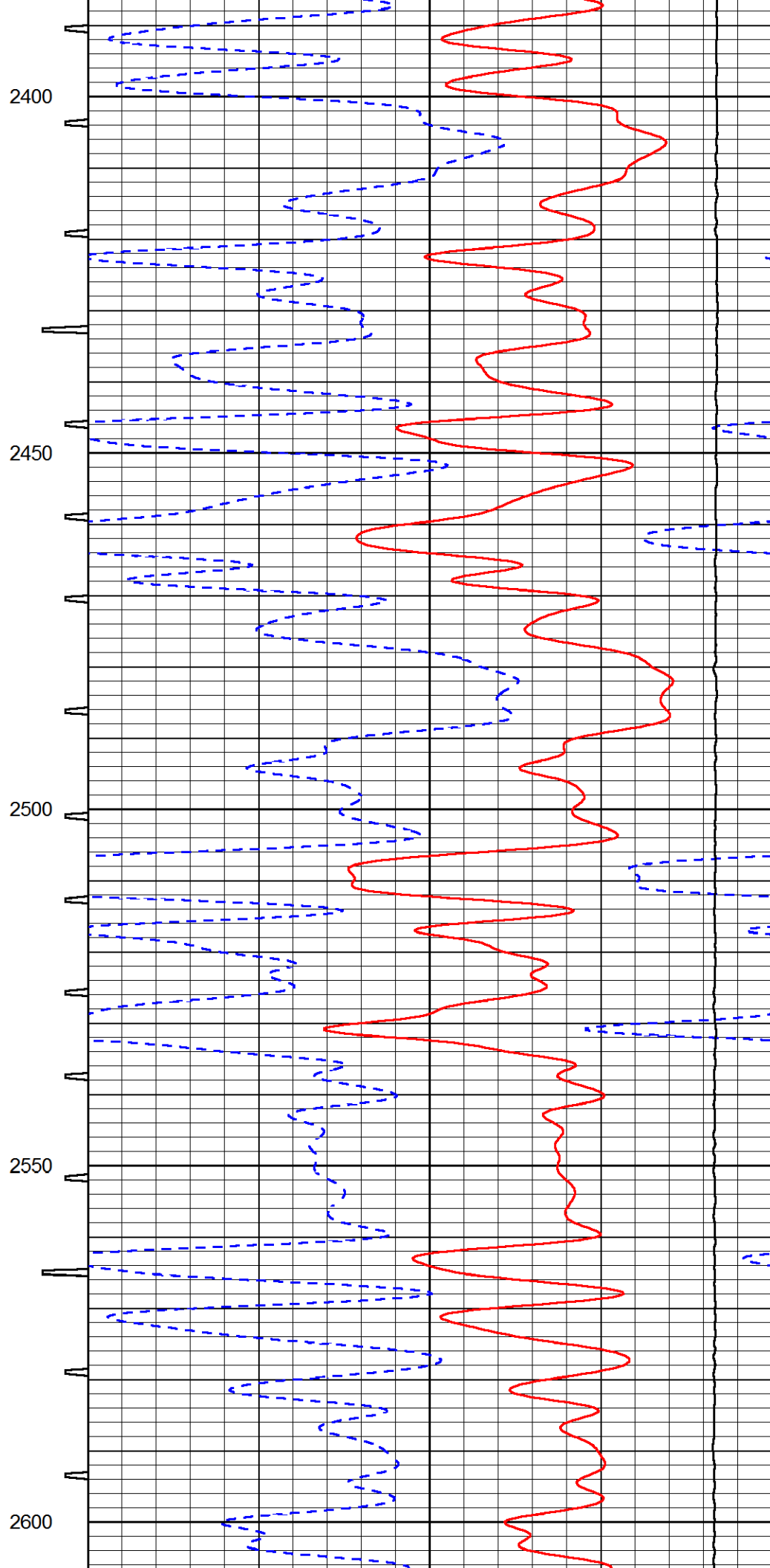
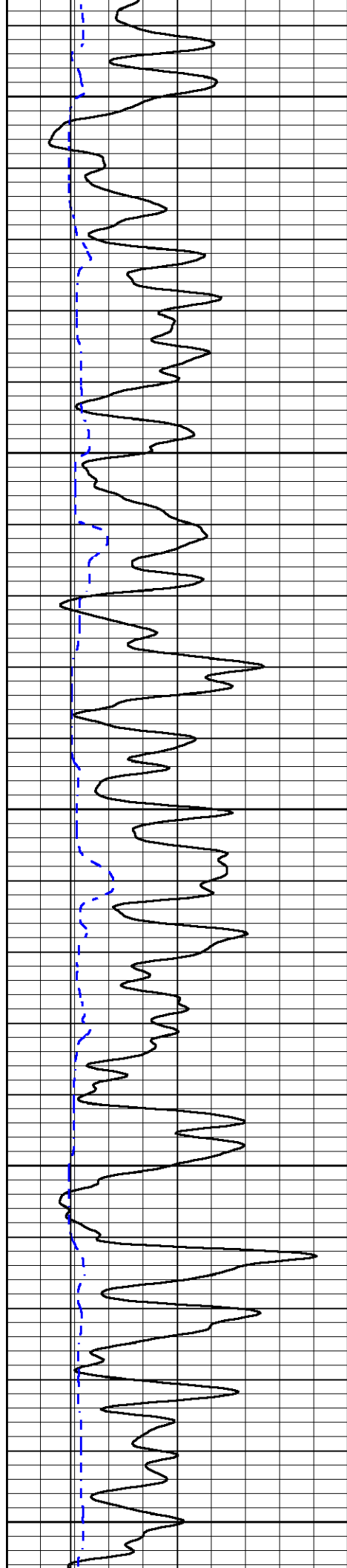


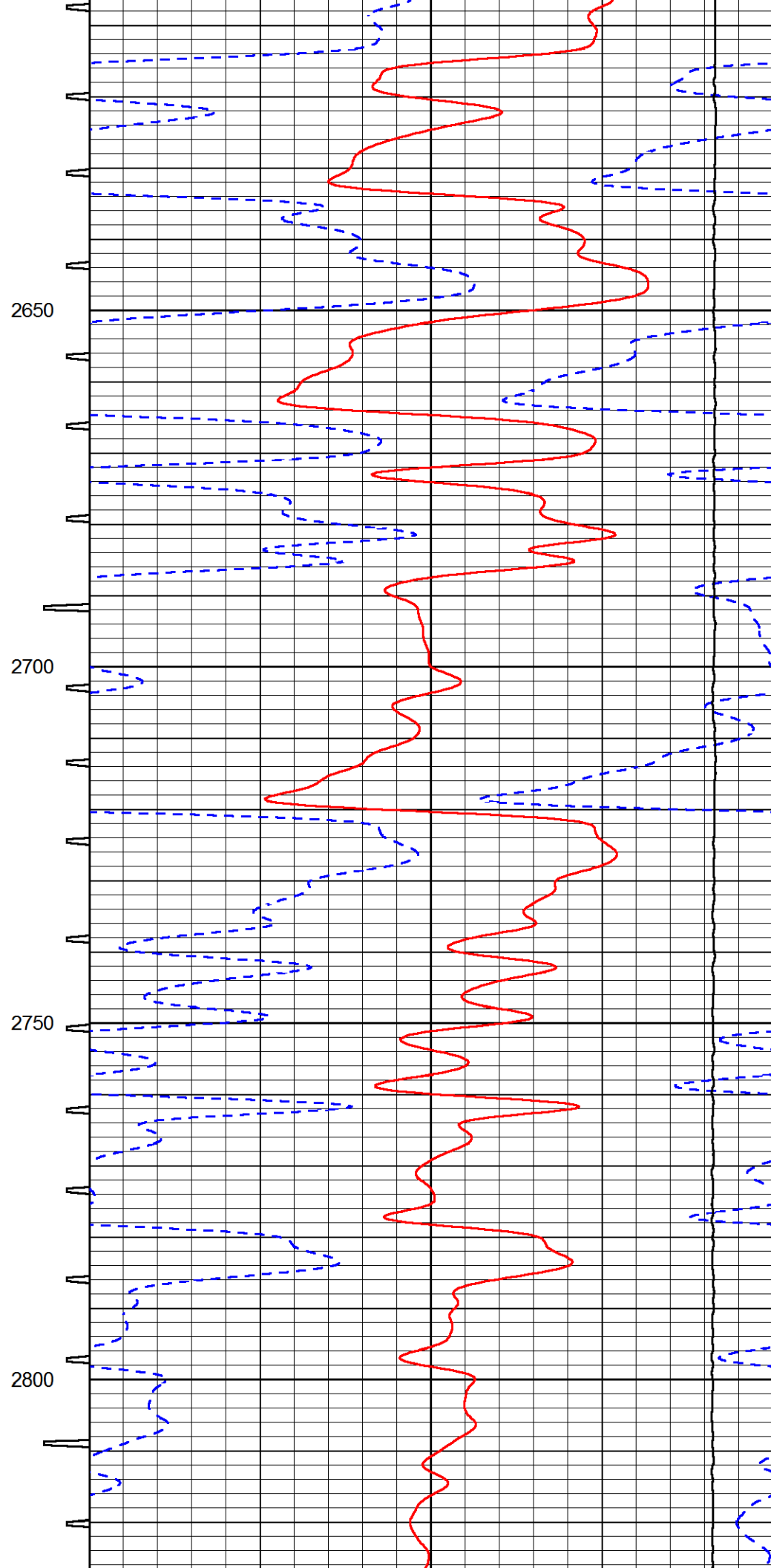
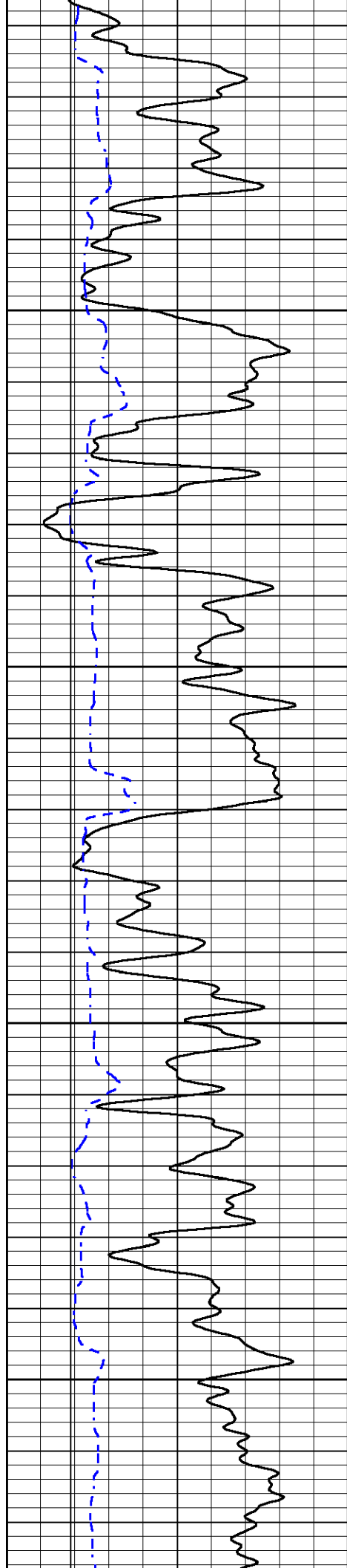


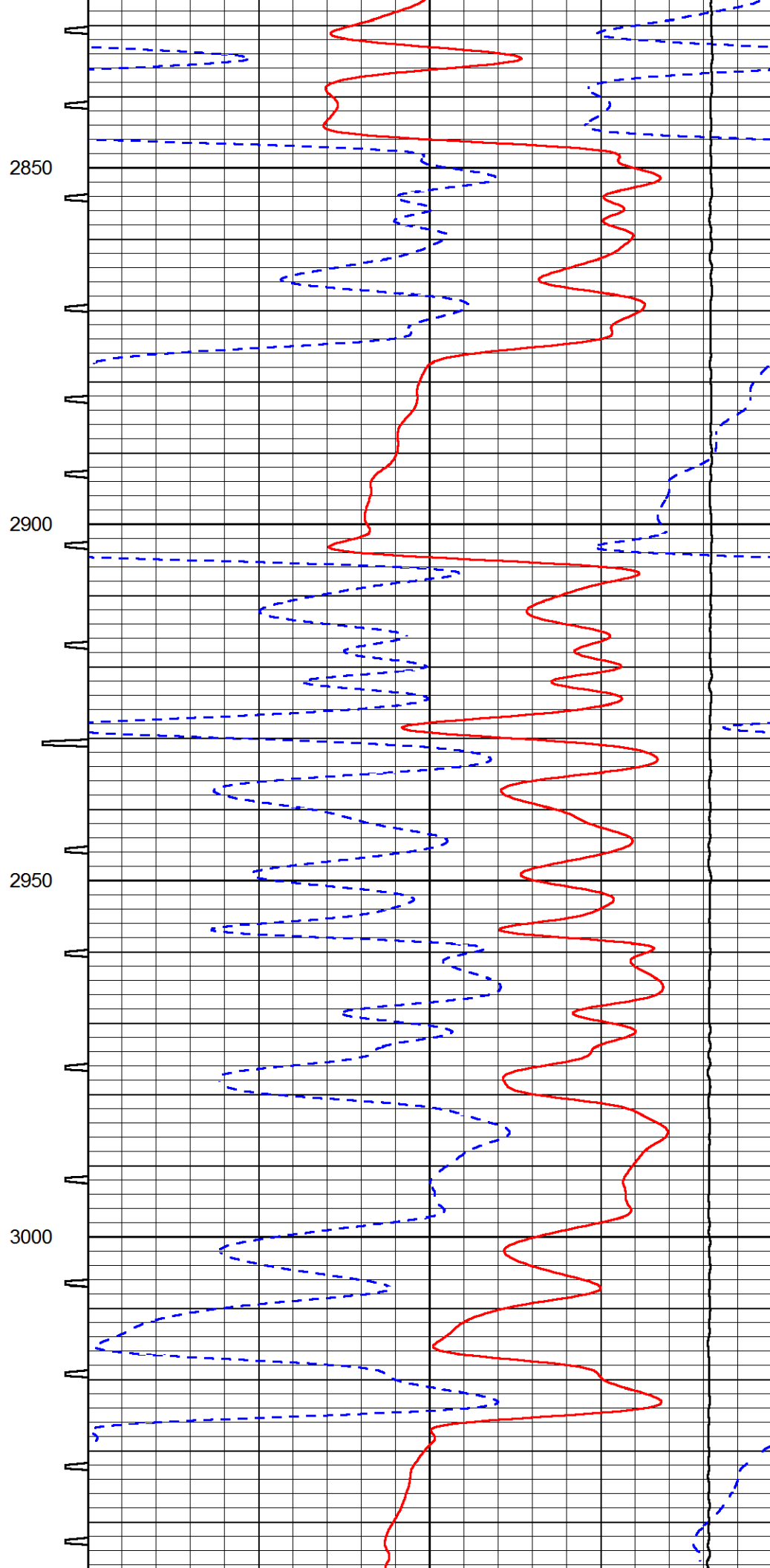
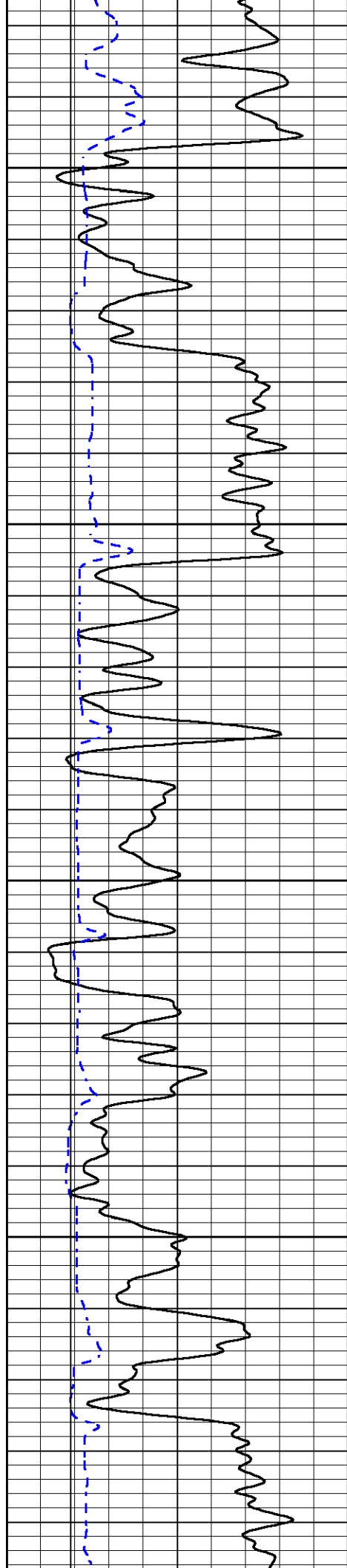


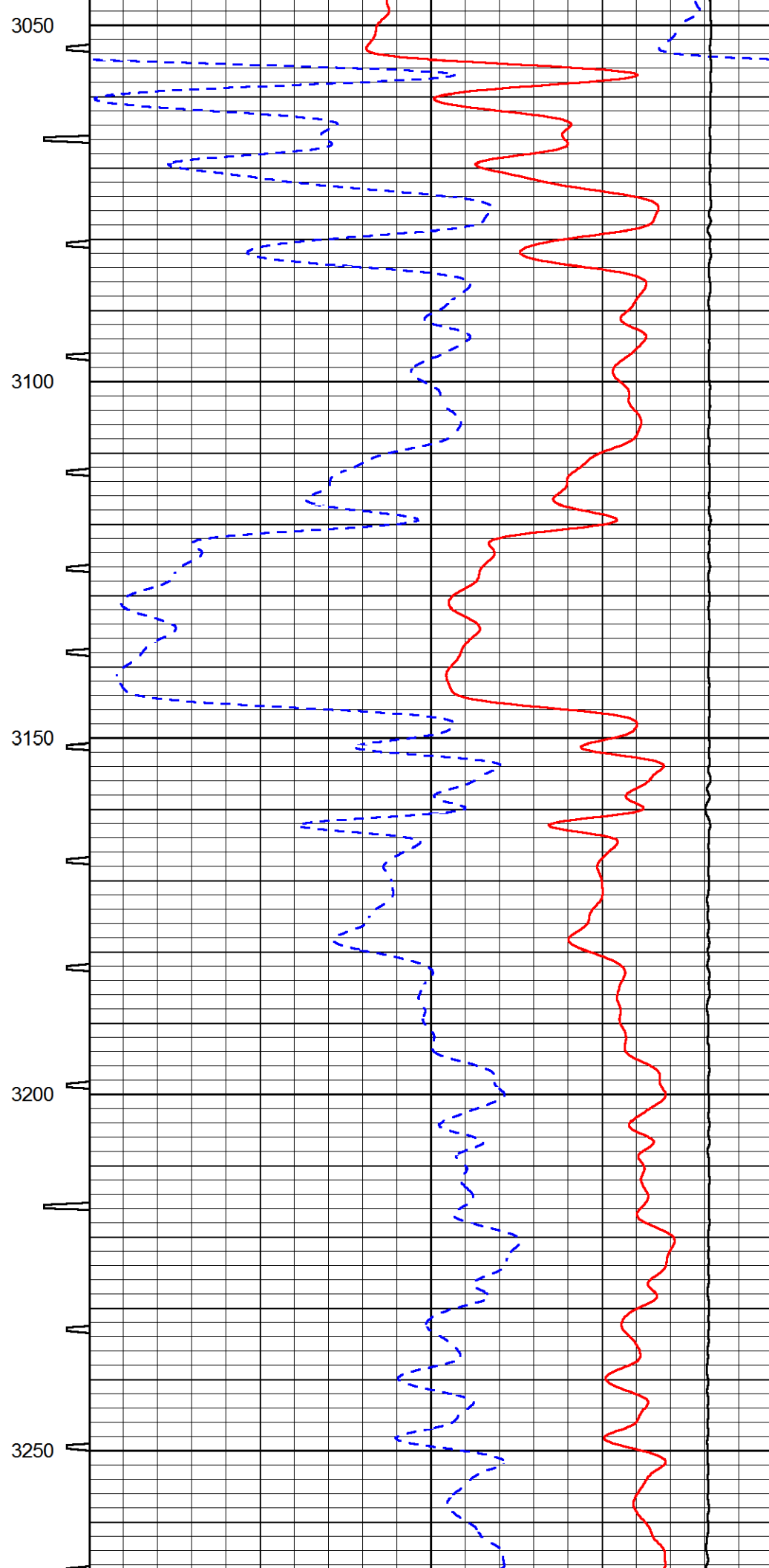
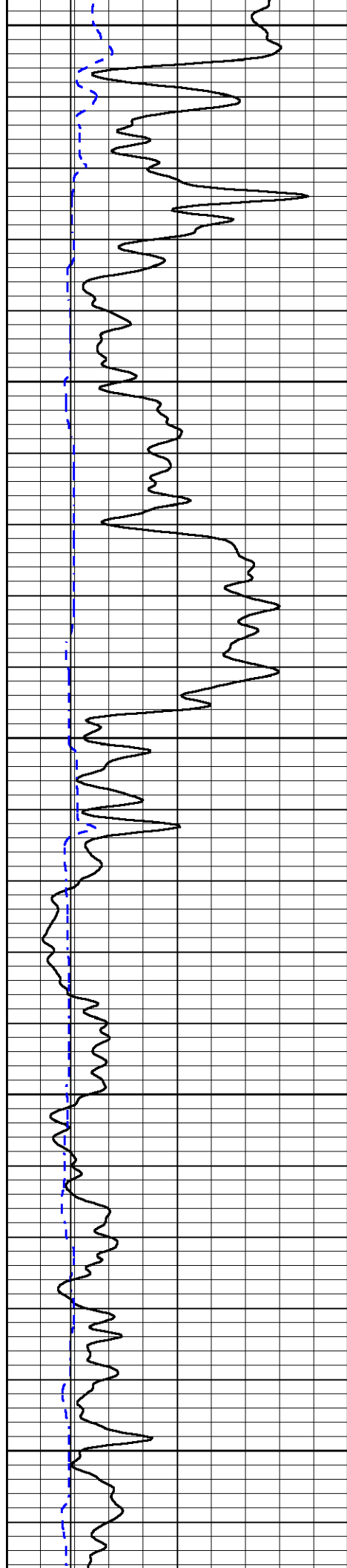


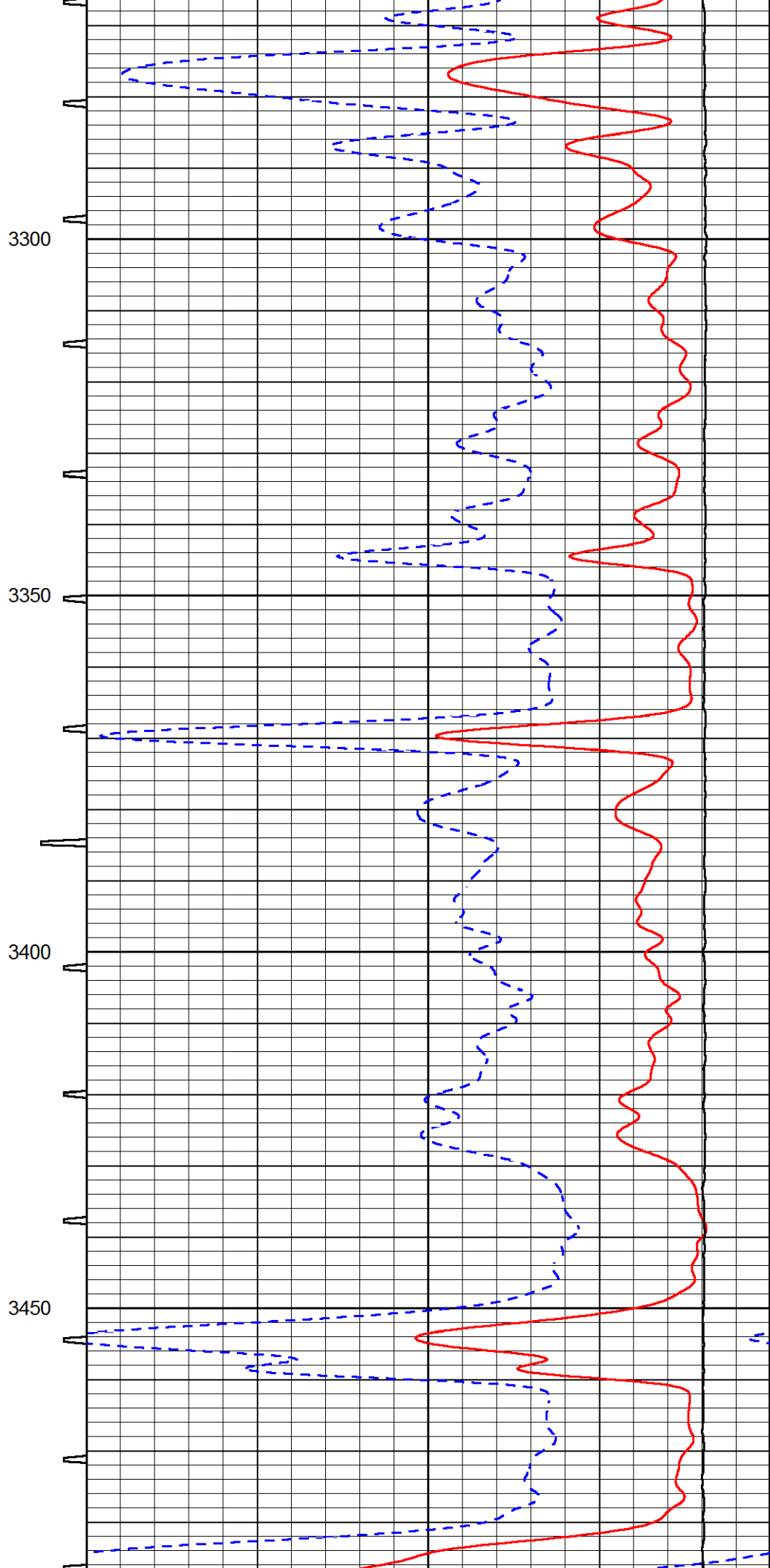
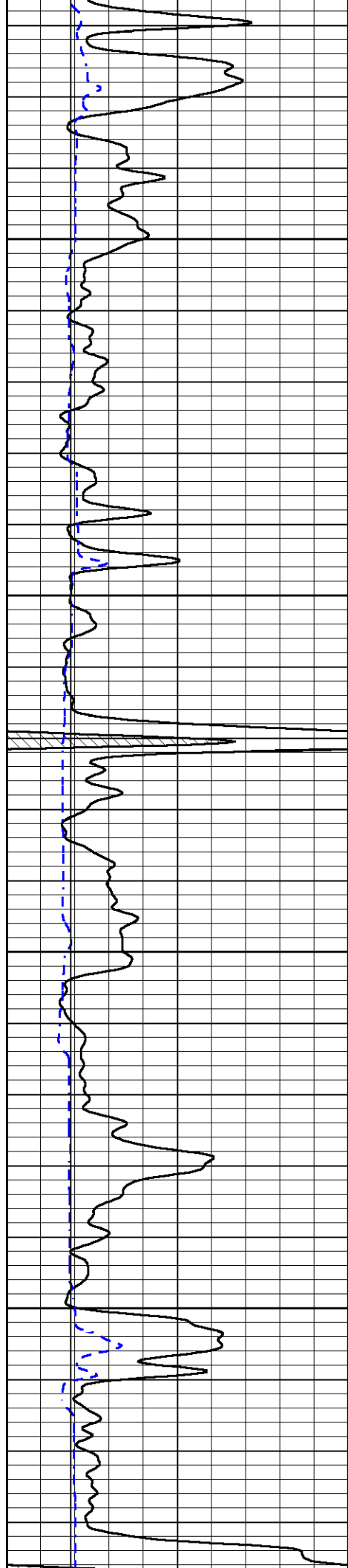


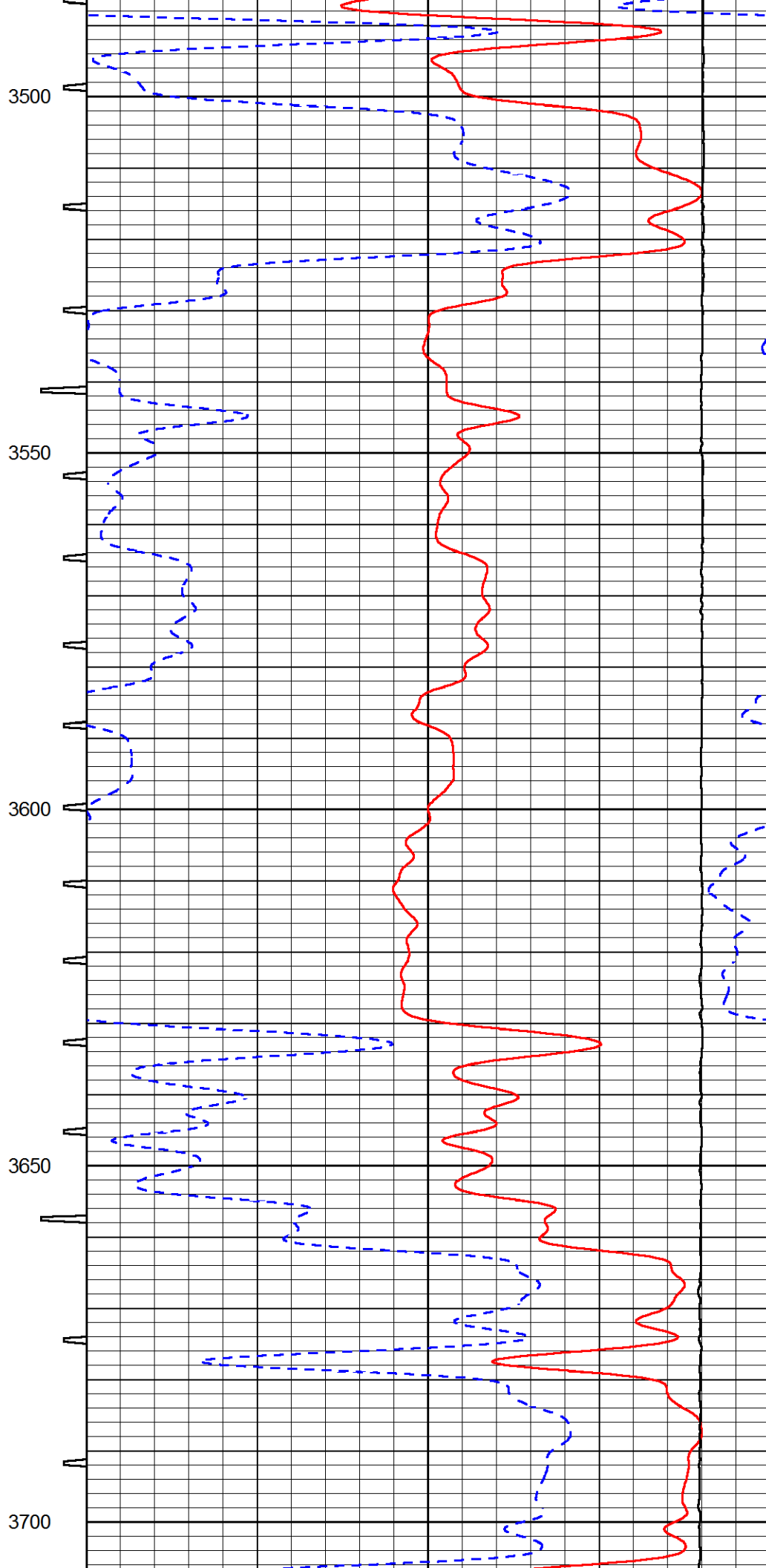
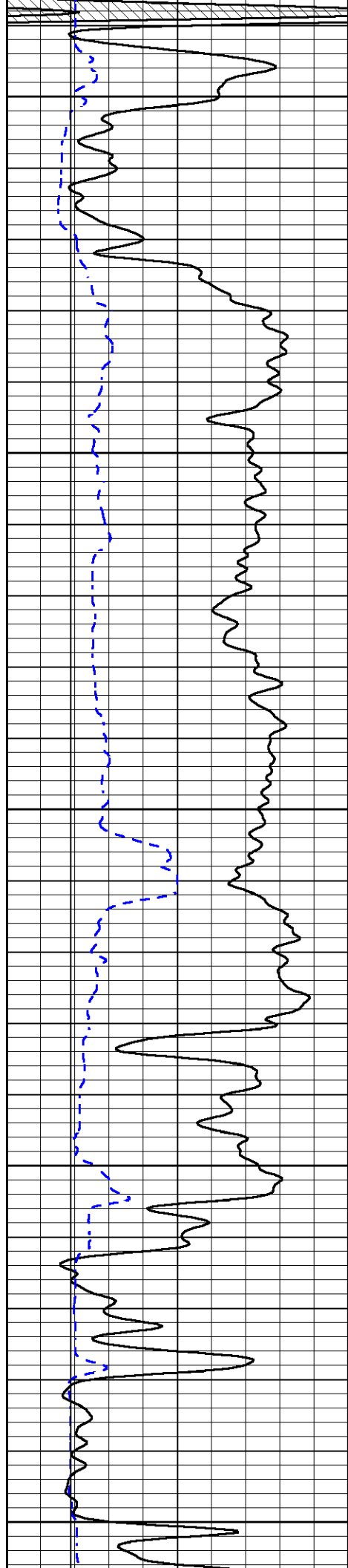


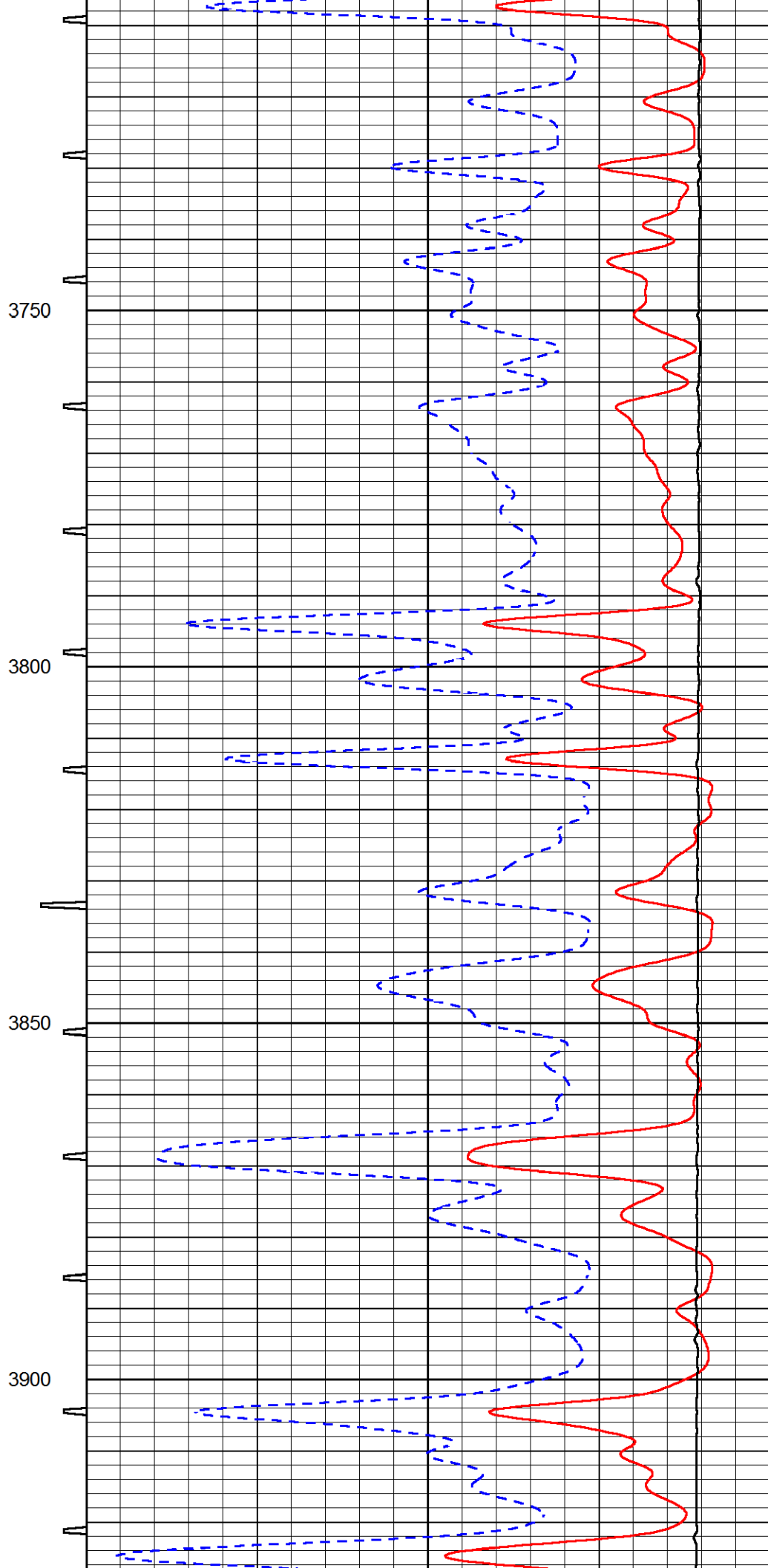
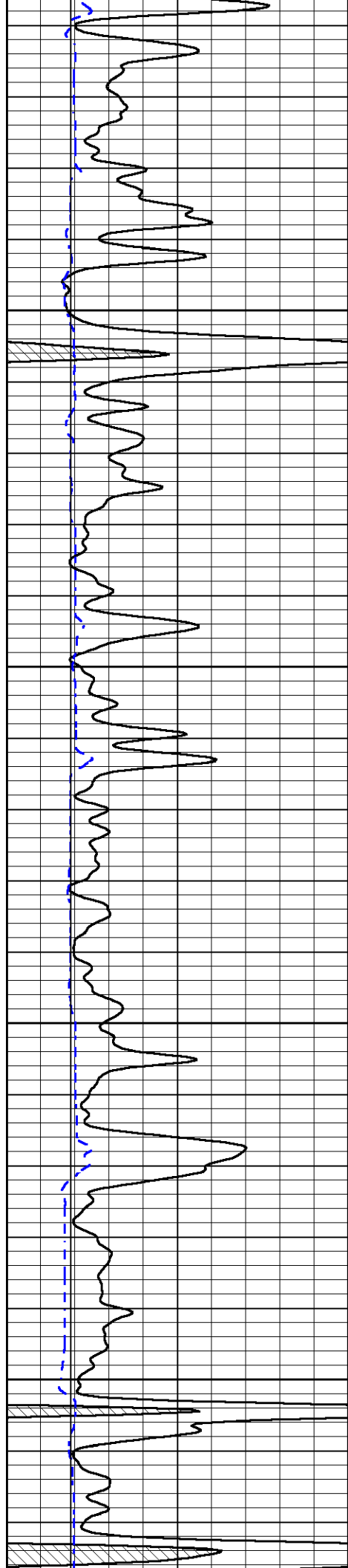


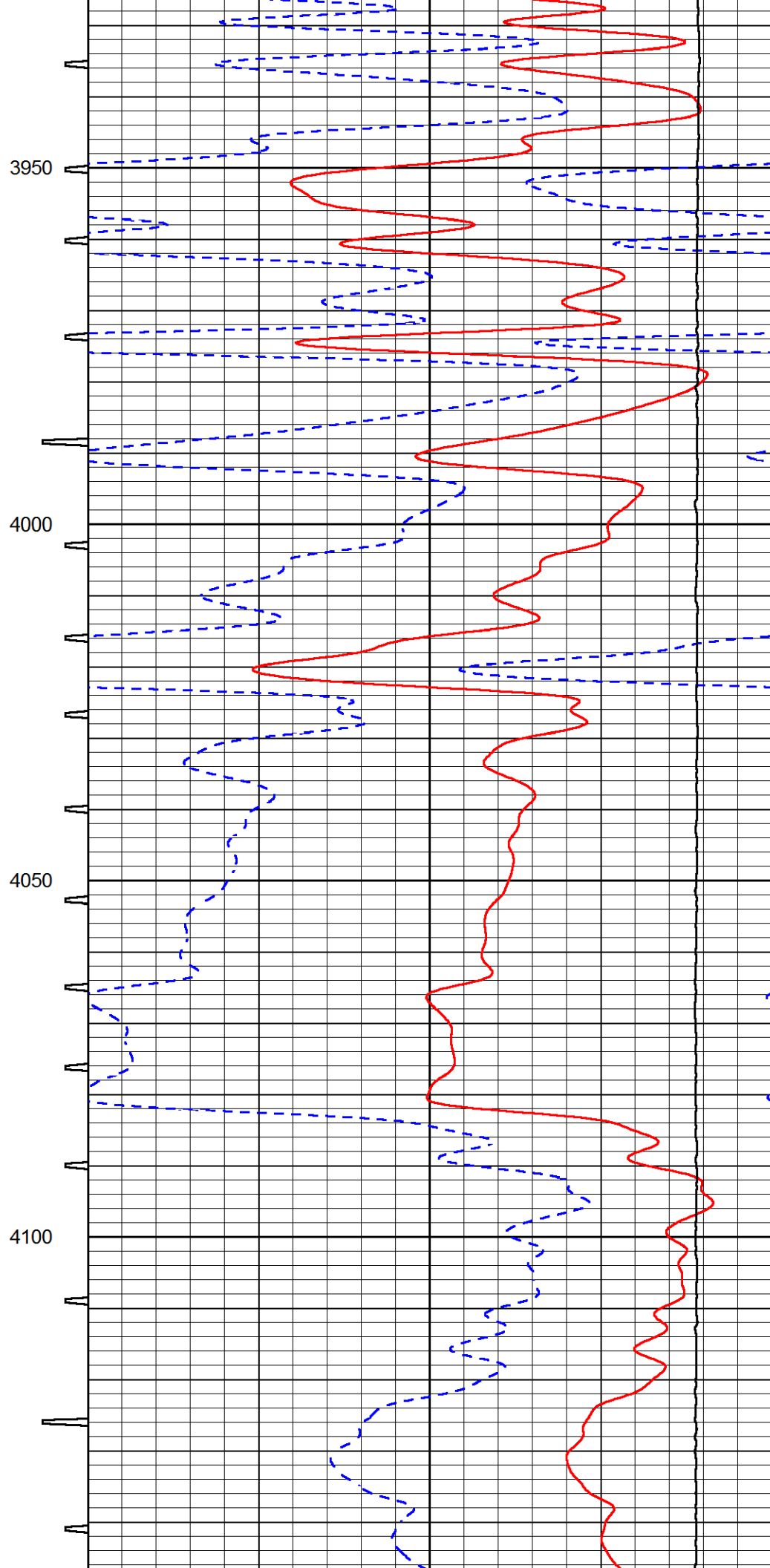
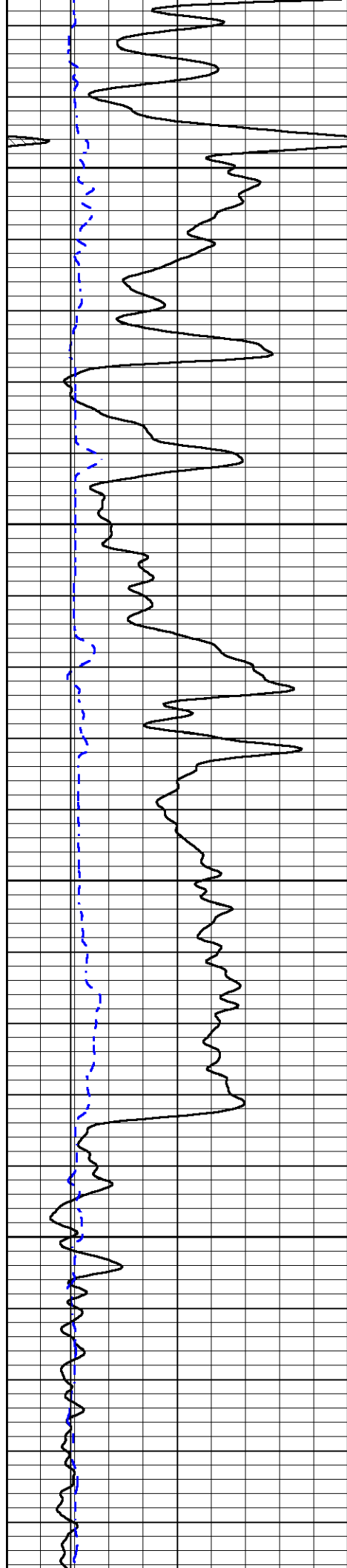


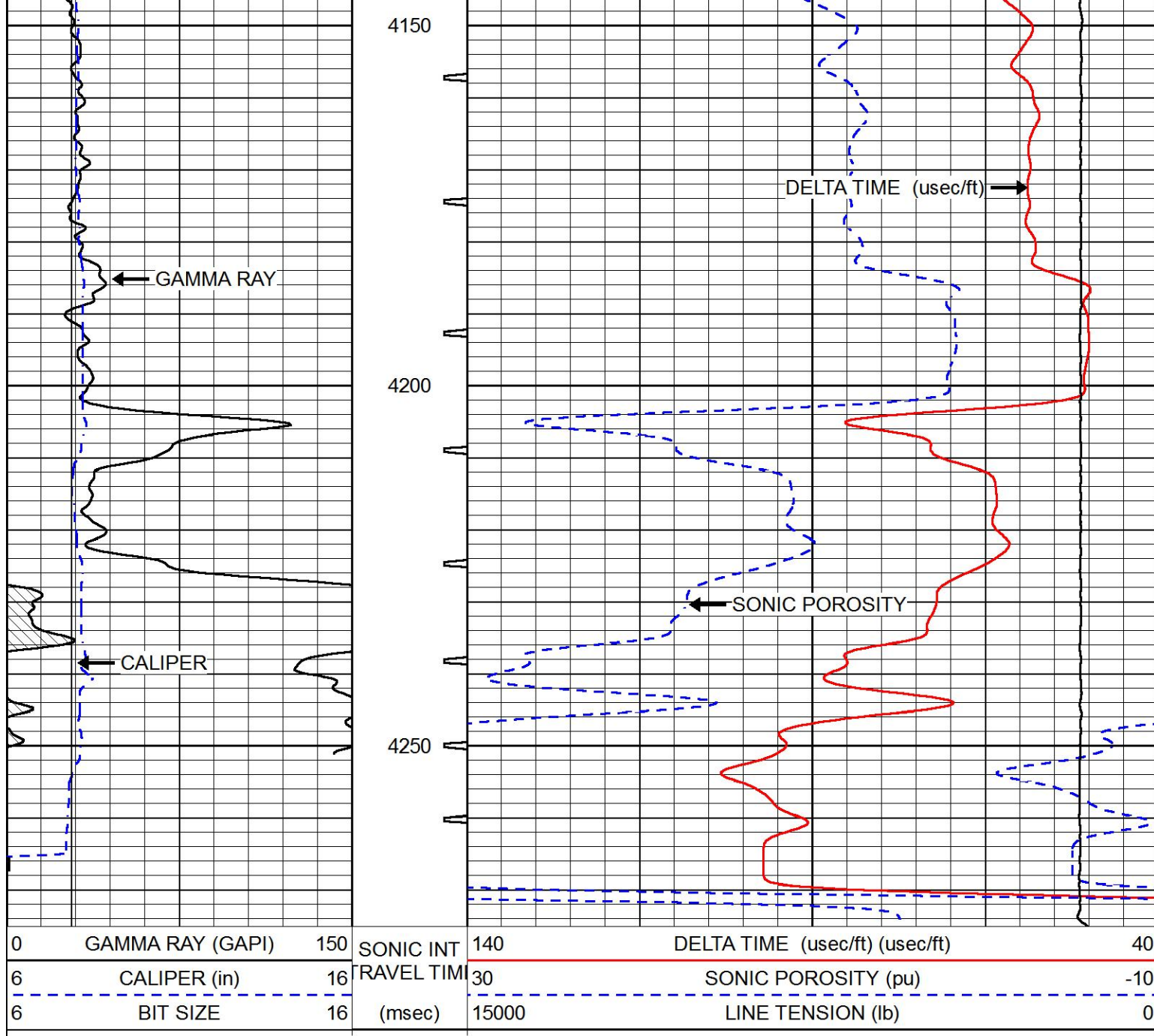








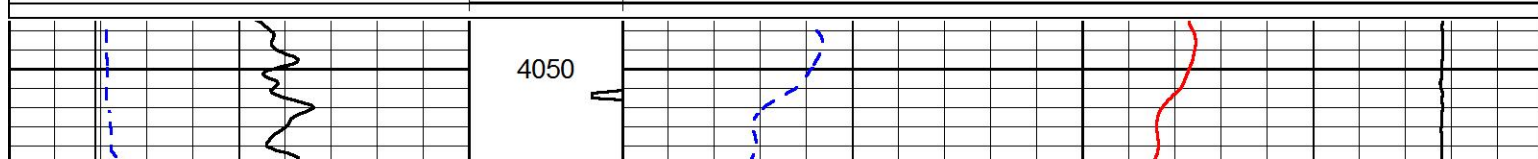


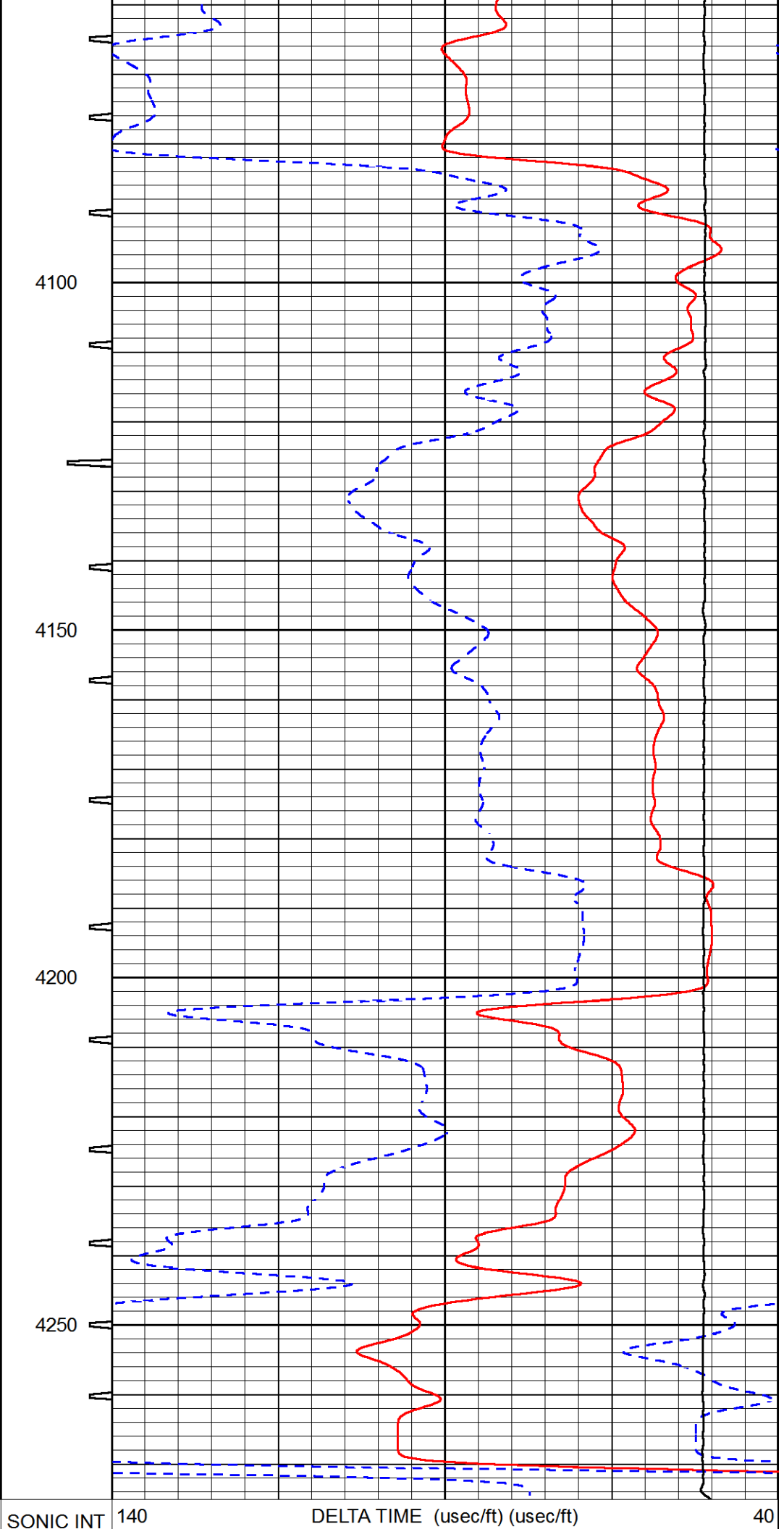
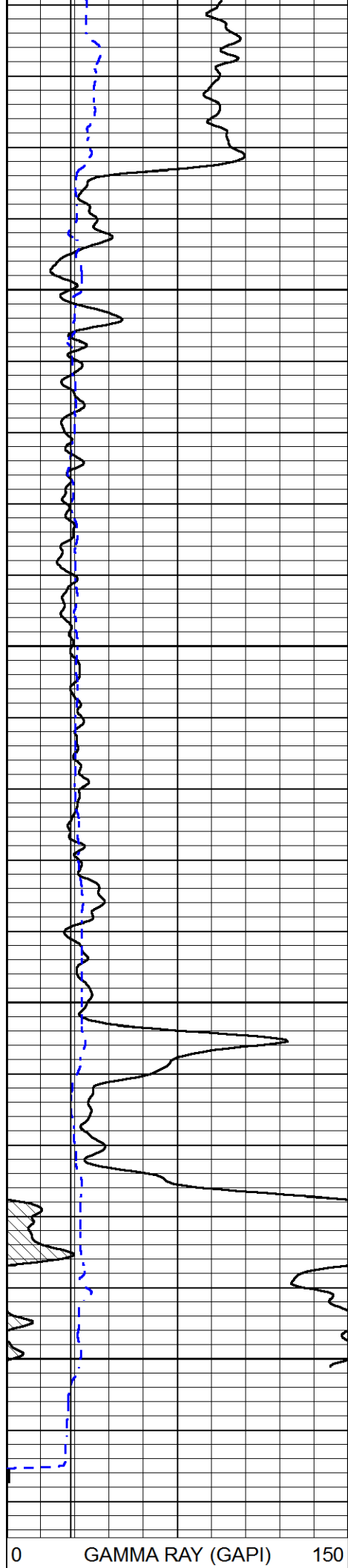


REPEAT SECTION

Database File	garner_dennis_1.db
Dataset Pathname	stack/pass2.1
Presentation Format	sonic
Dataset Creation	Fri Dec 01 12:10:36 2017
Charted by	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	SONIC INT	140	DELTA TIME (usec/ft) (usec/ft)	40
6	CALIPER (in)	16	TRAVEL TIME (msec)	30	SONIC POROSITY (pu)	-10
6	BIT SIZE	16		15000	LINE TENSION (lb)	0





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6	BIT SIZE	16	(msec)	15000	LINE TENSION (lb)	0

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