



PIONEER

Pioneer Energy Services

BOREHOLE COMPENSATED SONIC LOG

Company **CANYON OPERATING, LLC**

Well **B BAR B NO. 25-1**

Field **WC**

County **GRAHAM** State **KANSAS**

Location: API #: 15-065-24158-00-00

Other Services

SEC 25 TWP 8S RGE 23W
1380' FSL & 930' FEL

DIL/MEL
CNL/CDL

Permanent Datum **GROUND LEVEL** Elevation **2233'**
Log Measured From **KELLY BUSHING**
Drilling Measured From **KELLY BUSHING**

Elevation
K.B. **2238'**
D.F. **N/A**
G.L. **2233'**

Date **11/9/2018**

Run Number **TWO**

Type Log **BHCS**

Depth Driller **3820'**

Depth Logger **3820'**

Bottom Logged Interval **3809'**

Top Logged Interval **200'**

Type Fluid In Hole **CHEMICAL**

Salinity, PPM CL **2000**

Density **9.0**

Level **FULL**

Max. Rec. Temp. F **114 DEG/F**

Operating Rig Time **4 HOURS**

Equipment -- Location **108 HAYS**

Recorded By **J. HENRICKSON**

Witnessed By **BRUCE ARD**

Borehole Record

Casing Record

Run No.

Bit

From

To

Size

Wgt.

From

To

ONE

12.25"

0

217'

8.625"

23#

0

217'

TWO

7.875"

217'

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.

HILL CITY KANSAS

3 SOUTH TO NORTH TERRACE, 1 EAST, SOUTH INTO

Log Measured From: KELLY BUSHING 5 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: BRUCE ARD

Secondary Witness:

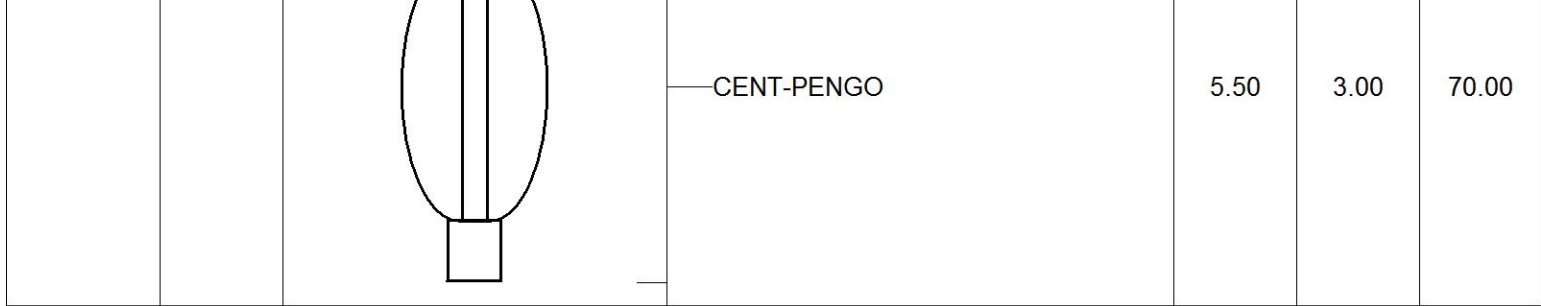
Secondary Witness:

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 20	mmho/m 0	mV 120	degF 0	Off	ft 0

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
MCAL MI MN	22.50		ML-Armadillo (Armadillo-1) Pengo micro log tool mandrel with Armadillo Electronics	5.00	3.50	100.00
	22.50					
	22.50					
	22.50					
WVF4 WVF1	13.50 13.50		SLT-PENGO (0001)	16.00	3.50	300.00
WVF3 WVF2	11.50 11.50					
	11.50					
	11.50					



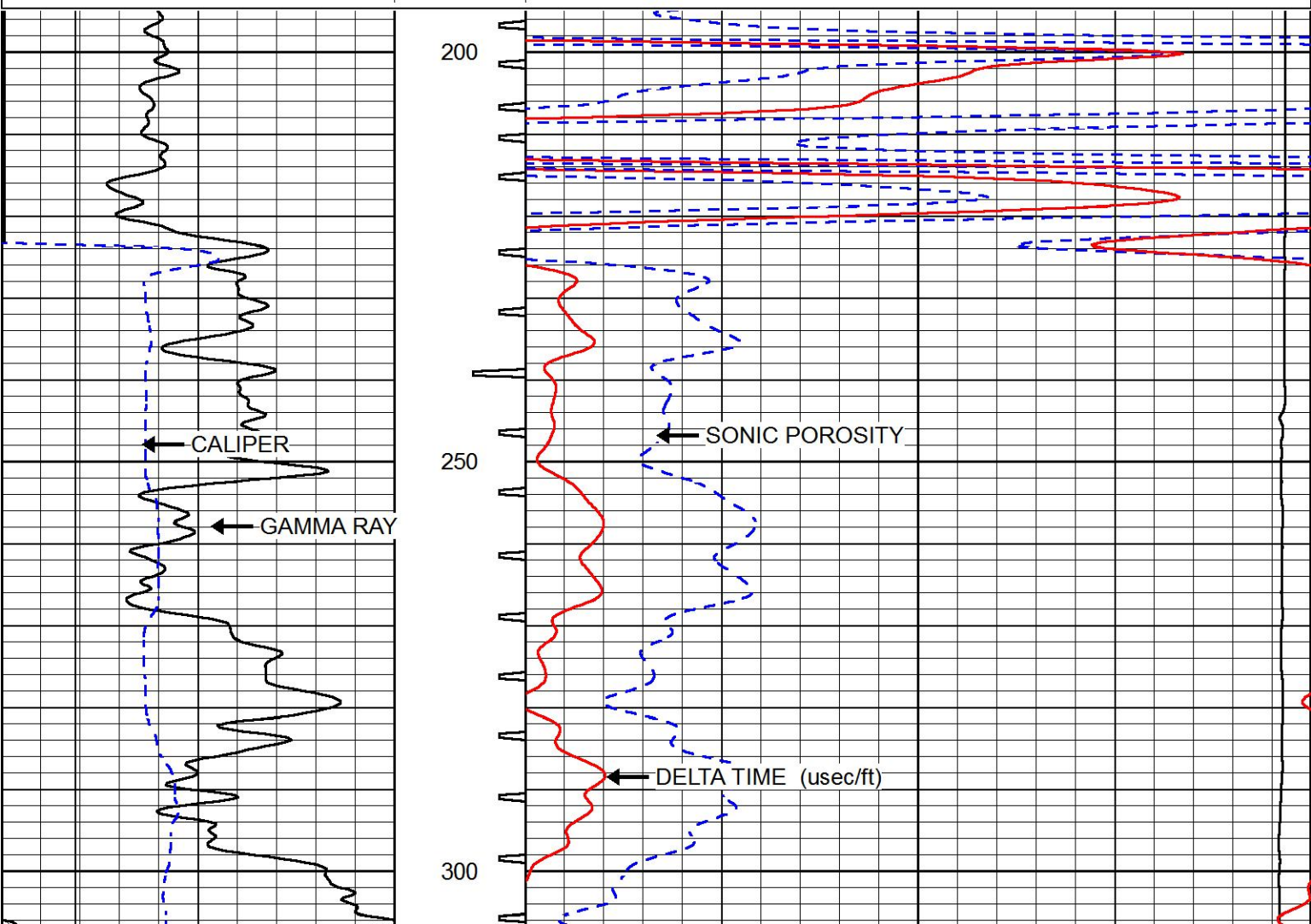
Dataset: canyon_b_bar_b_25_1.db: field/well/SONMEL/pass2
Total length: 26.50 ft
Total weight: 470.00 lb
O.D.: 3.50 in

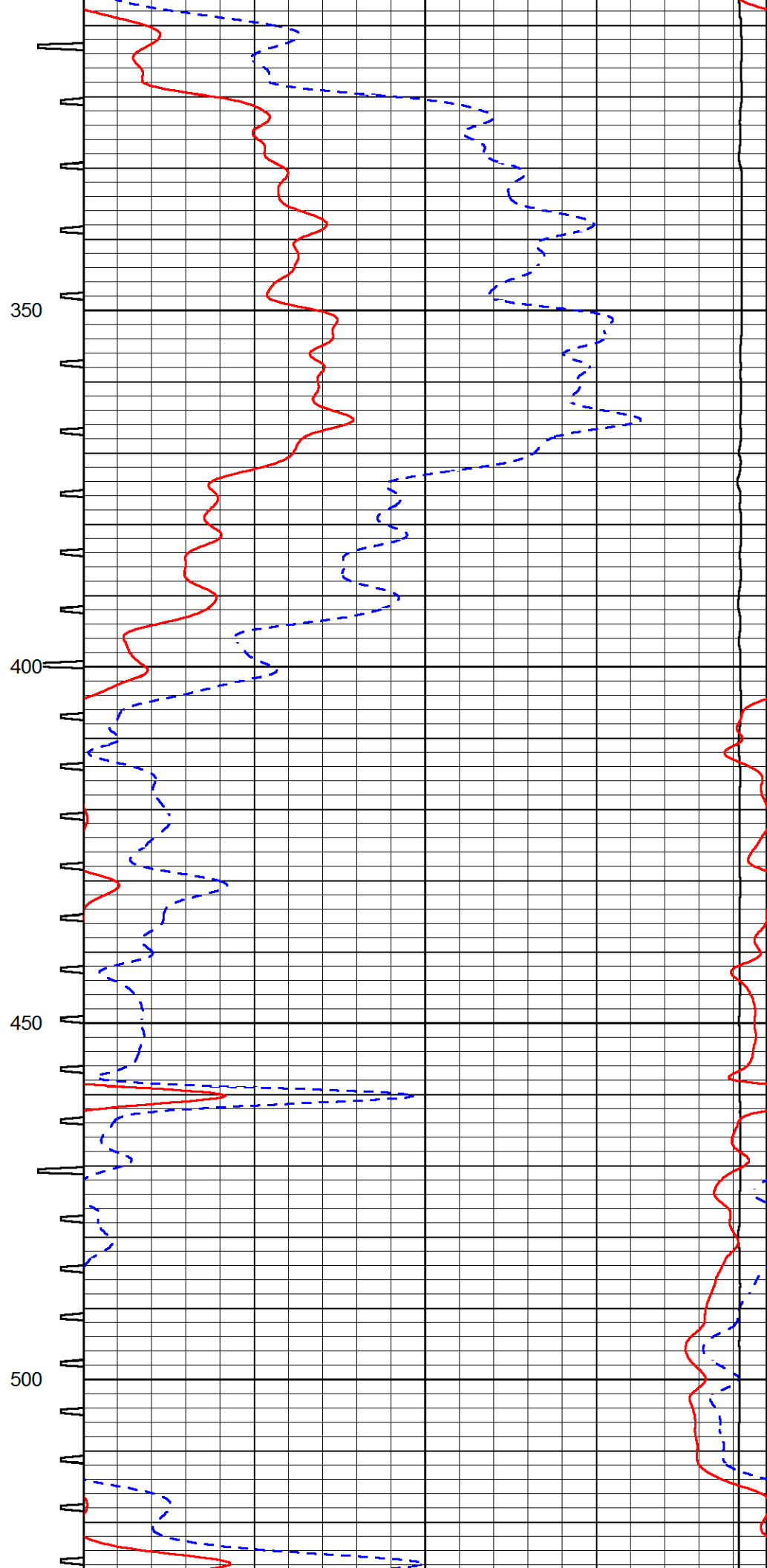
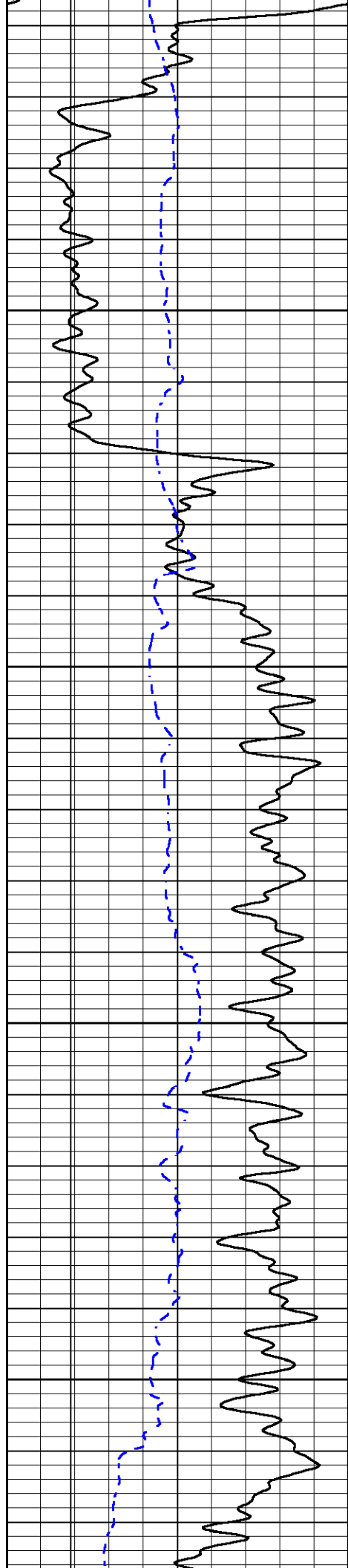


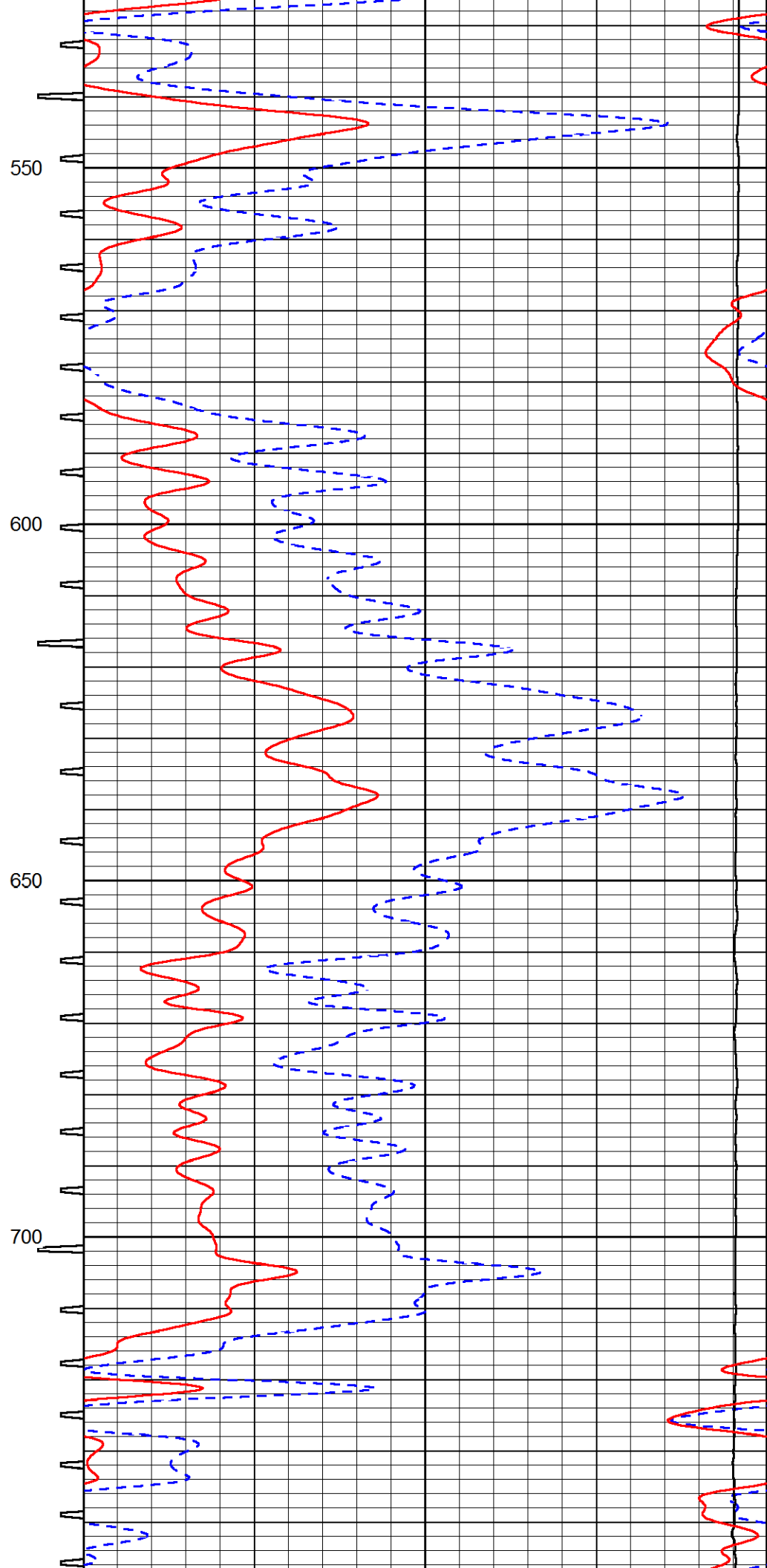
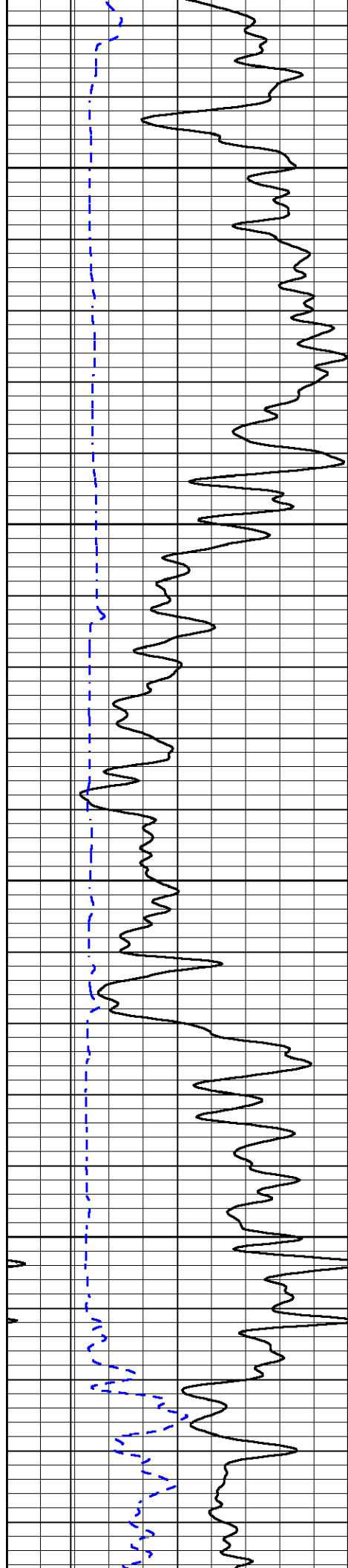
MAIN PASS

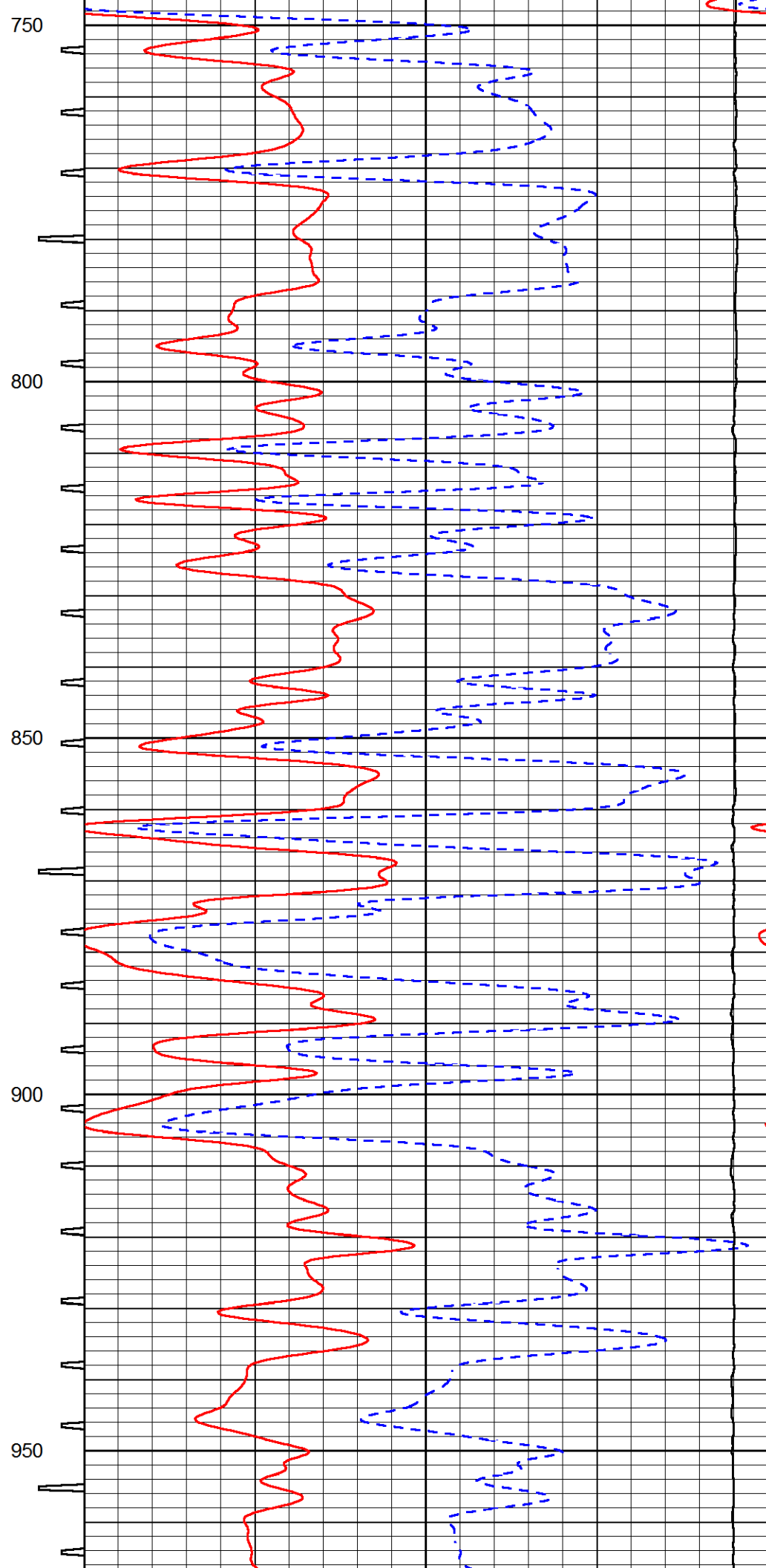
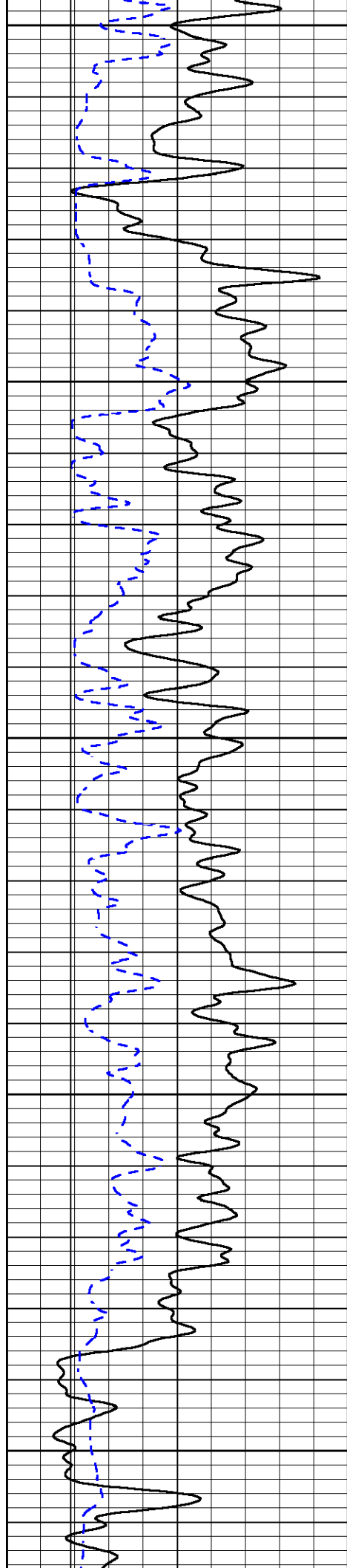
Database File	canyon_b_bar_b_25_1.db
Dataset Pathname	stack/pass3.1
Presentation Format	sonic
Dataset Creation	Fri Nov 09 10:05:32 2018
Charted by	Depth in Feet scaled 1:240

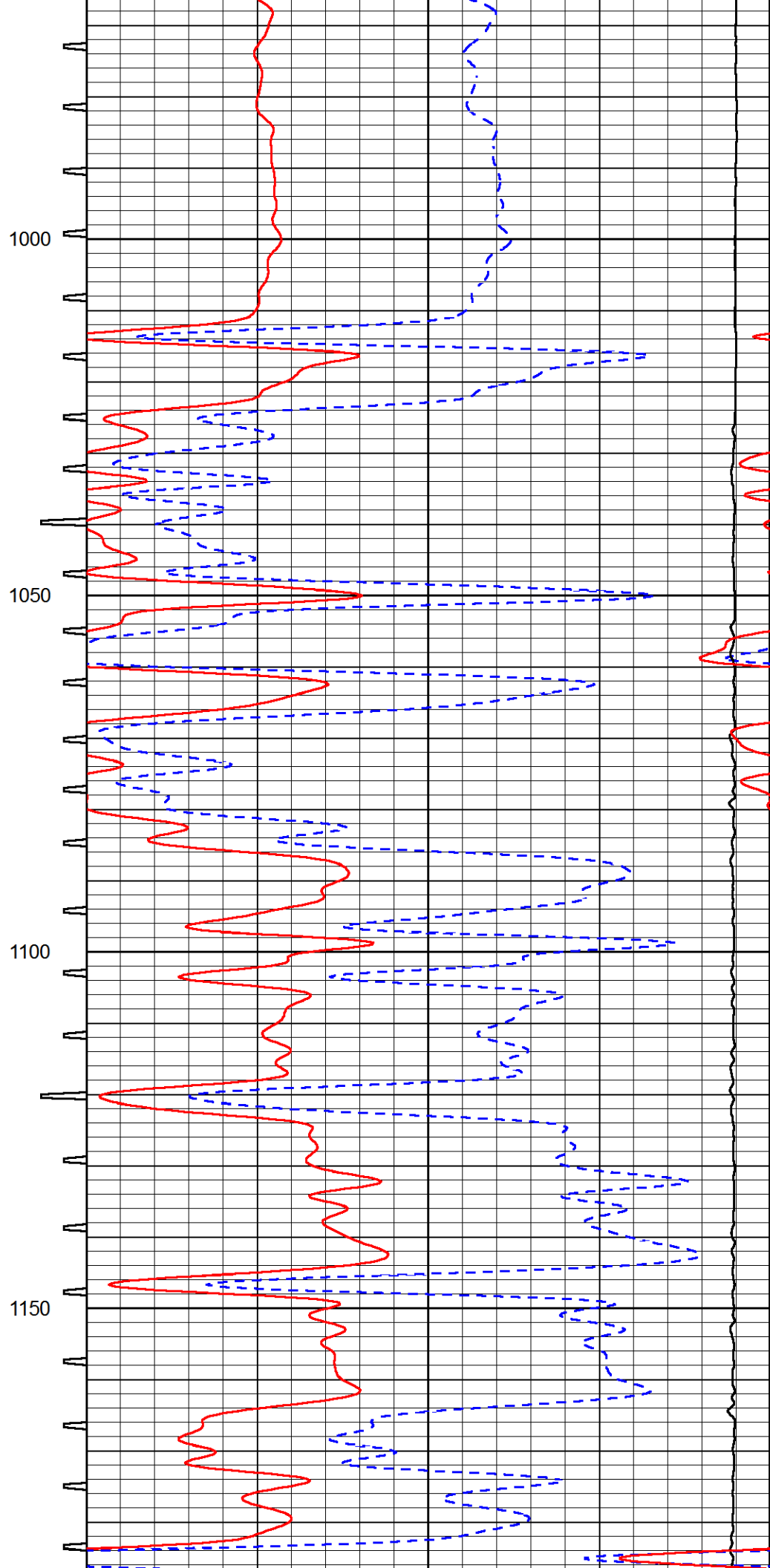
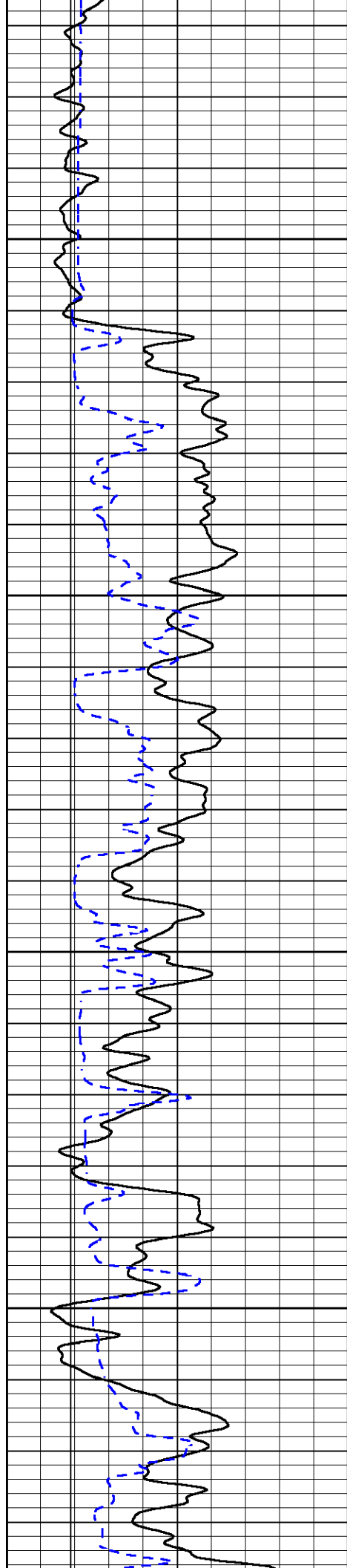
0	GAMMA RAY (GAPI)	150	SONIC INT	140	DELTA TIME (usec/ft) (usec/ft)	40
6	CALIPER (in)	16	RAVEL TIM	30	SONIC POROSITY (pu)	-10
6	BIT SIZE	16	(msec)	15000	LINE TENSION (lb)	0

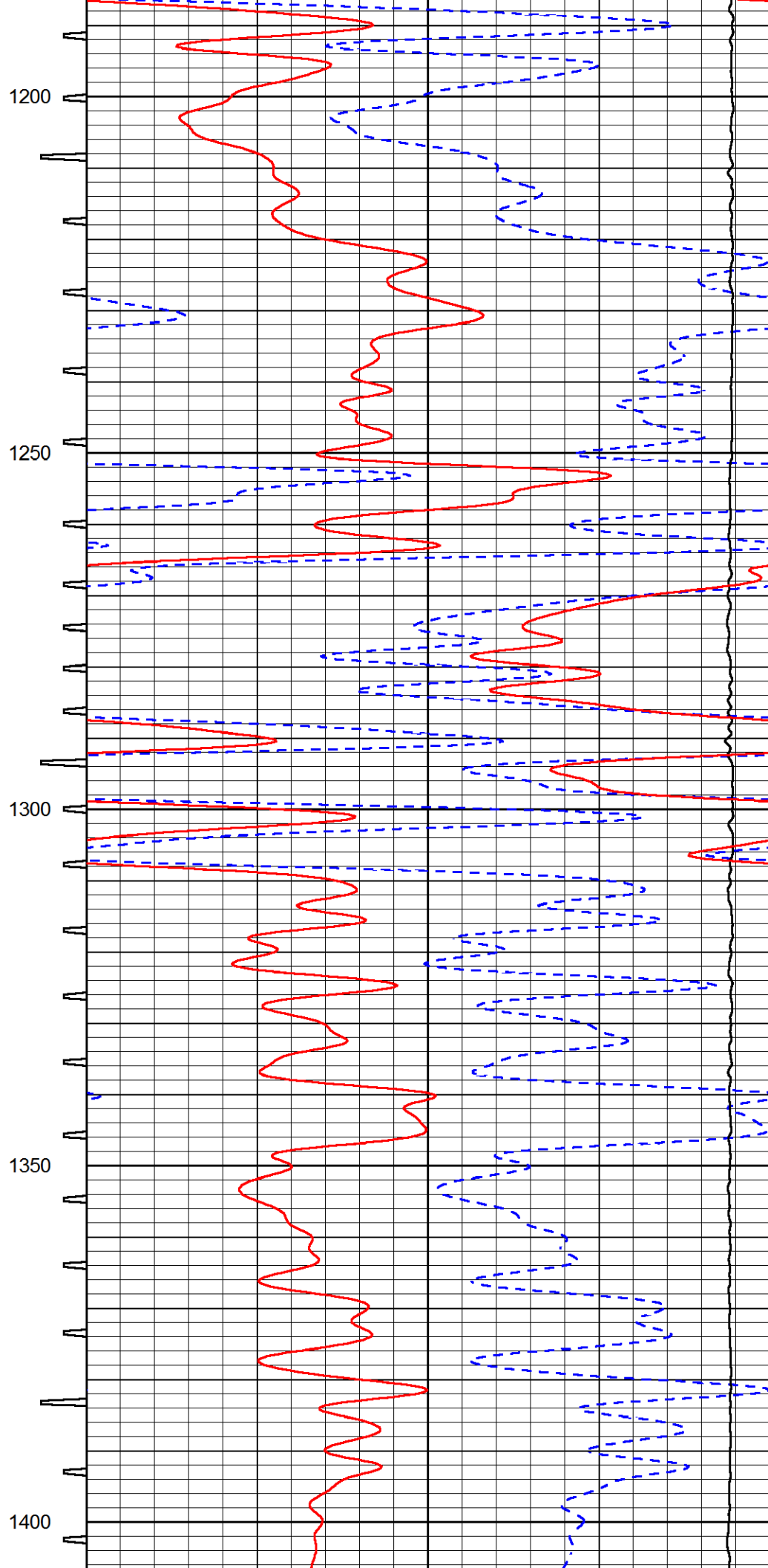
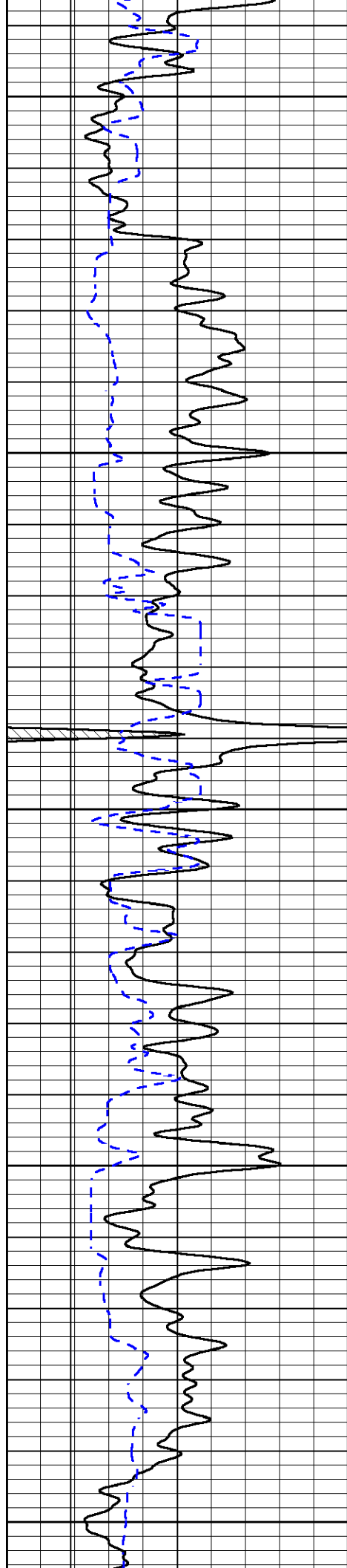


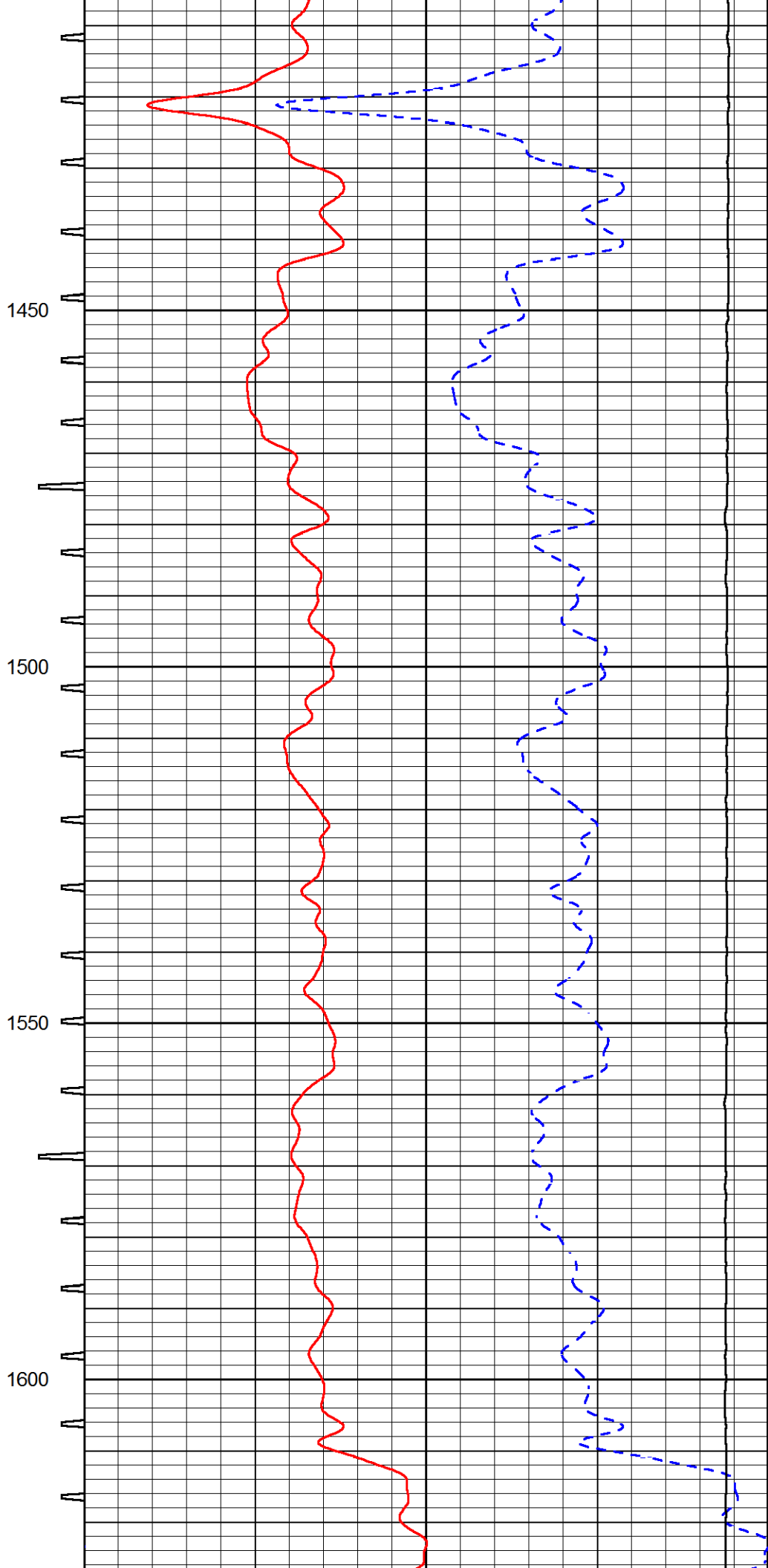
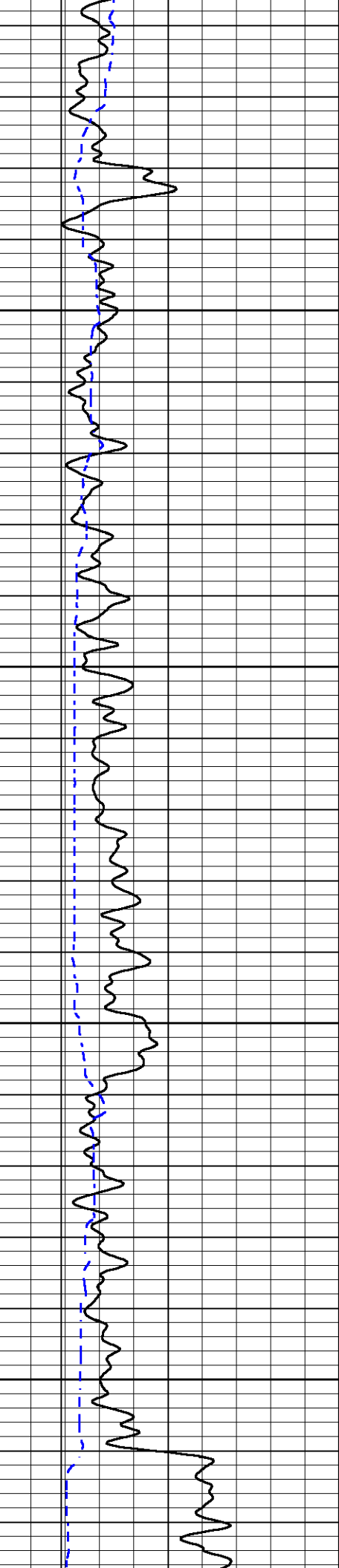


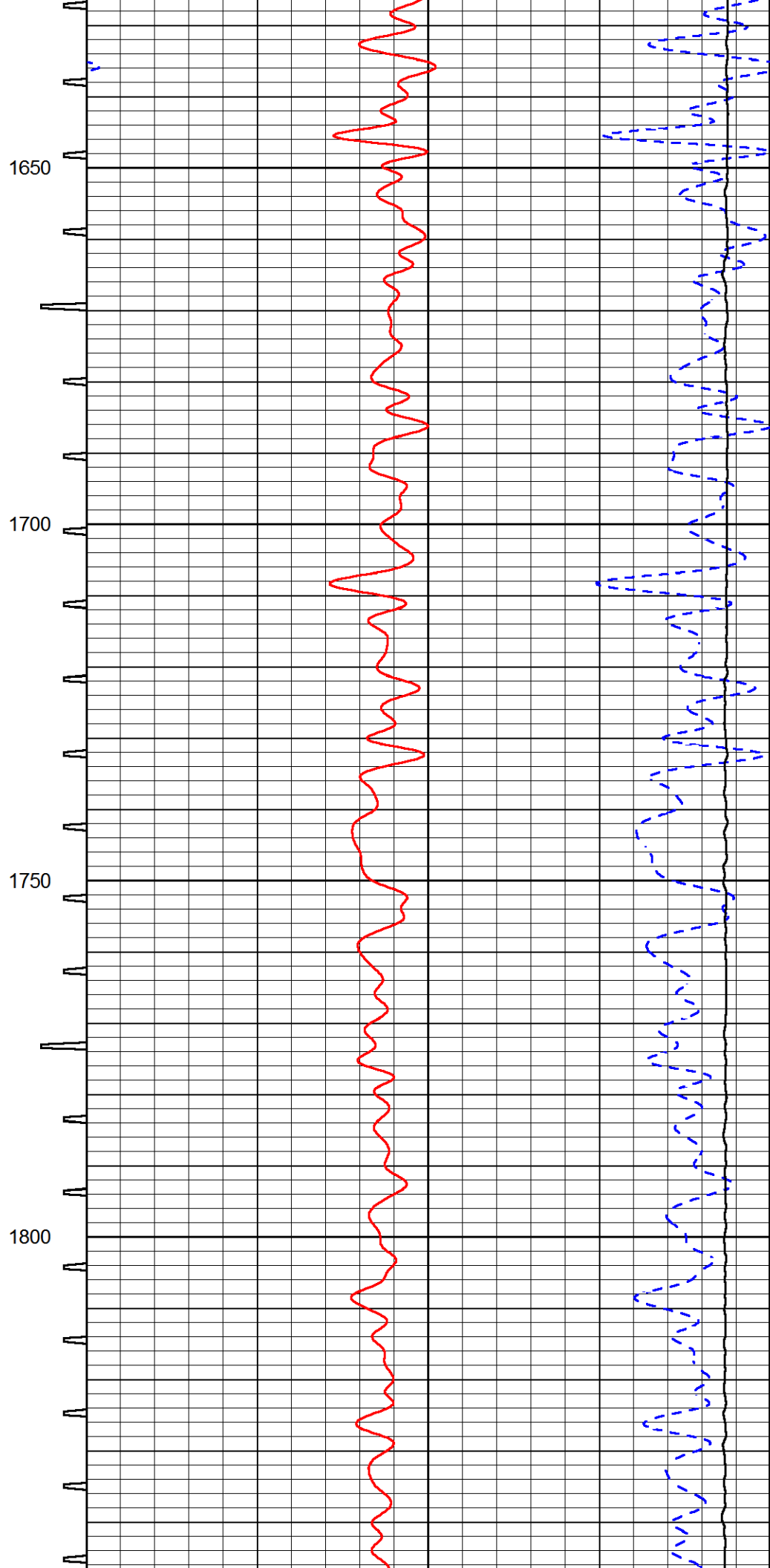
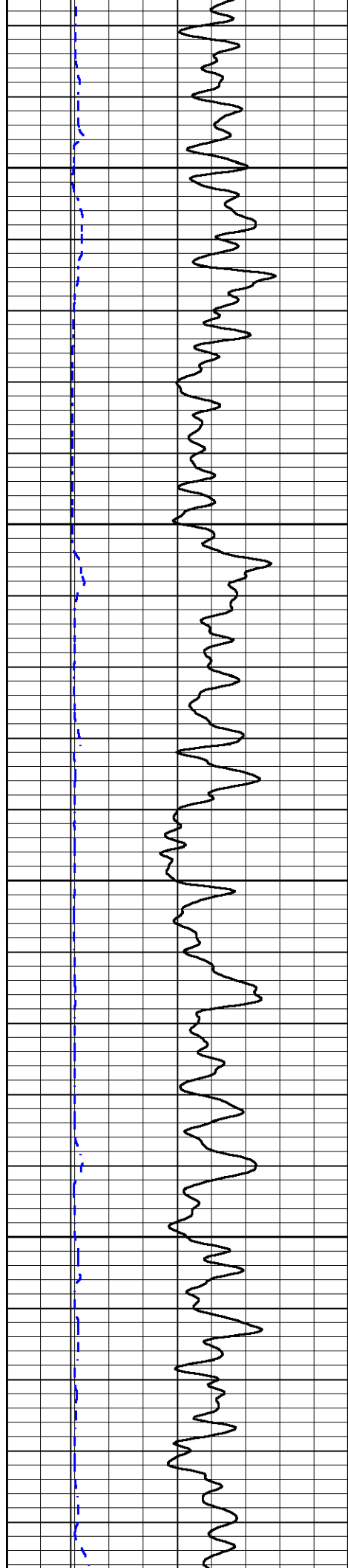


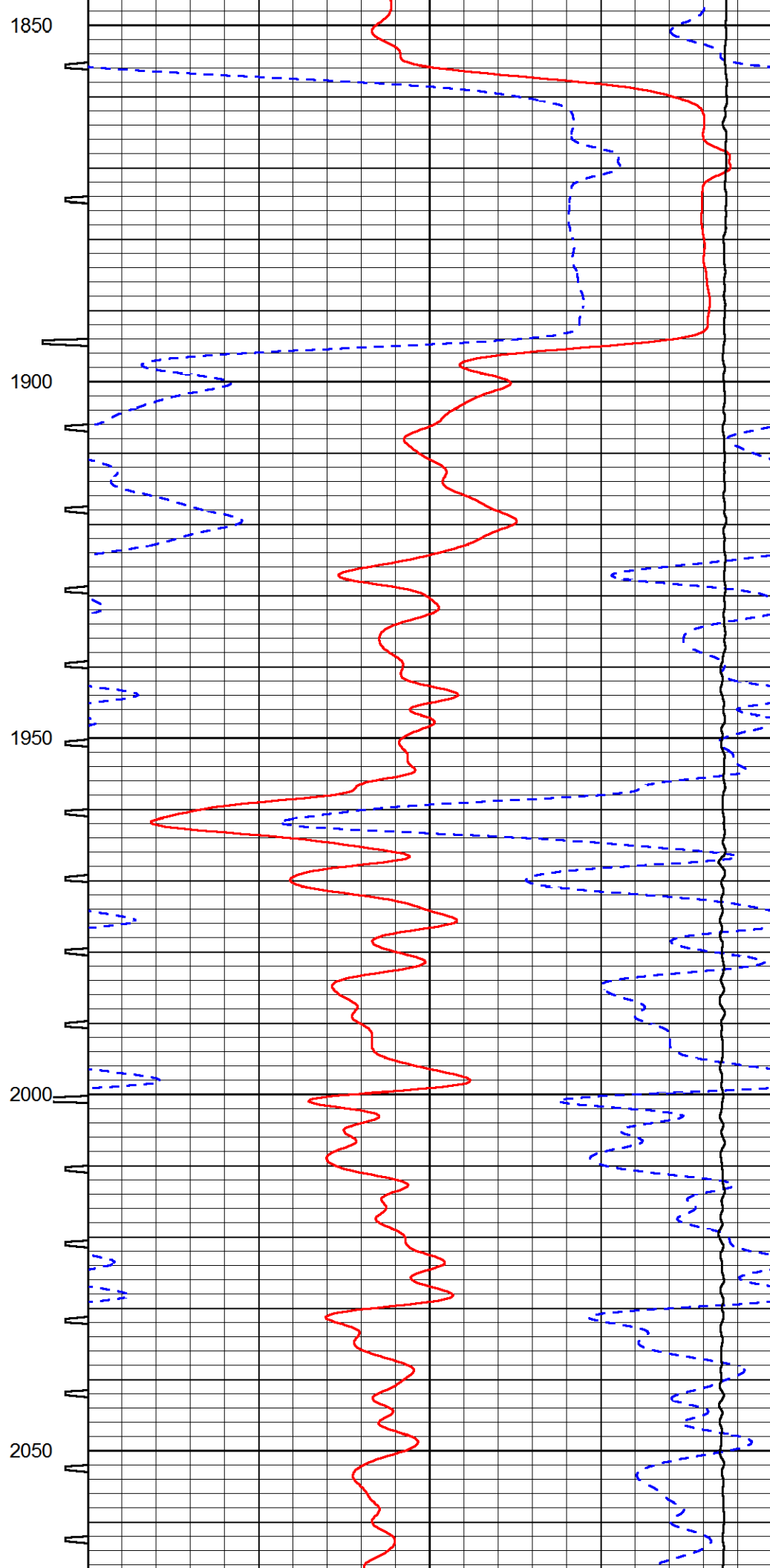
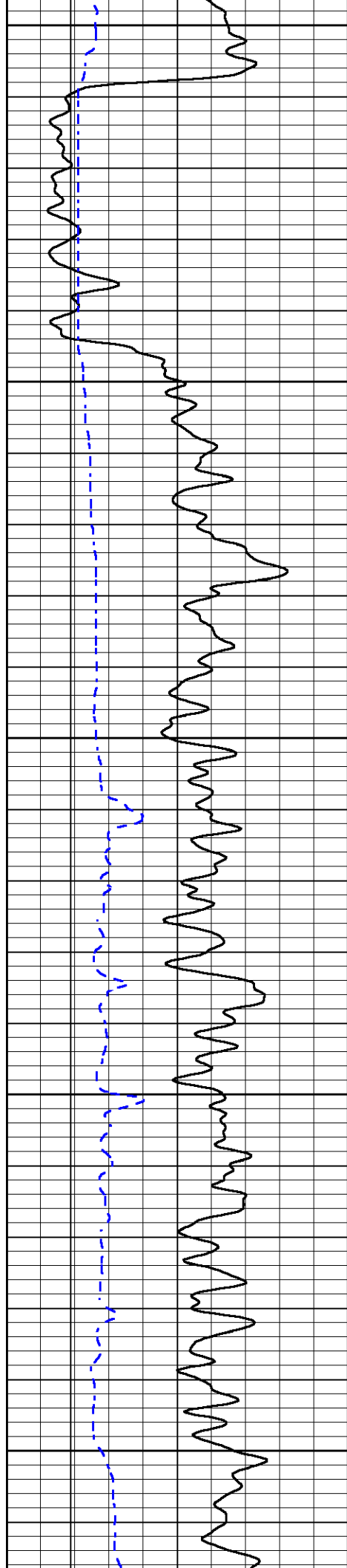


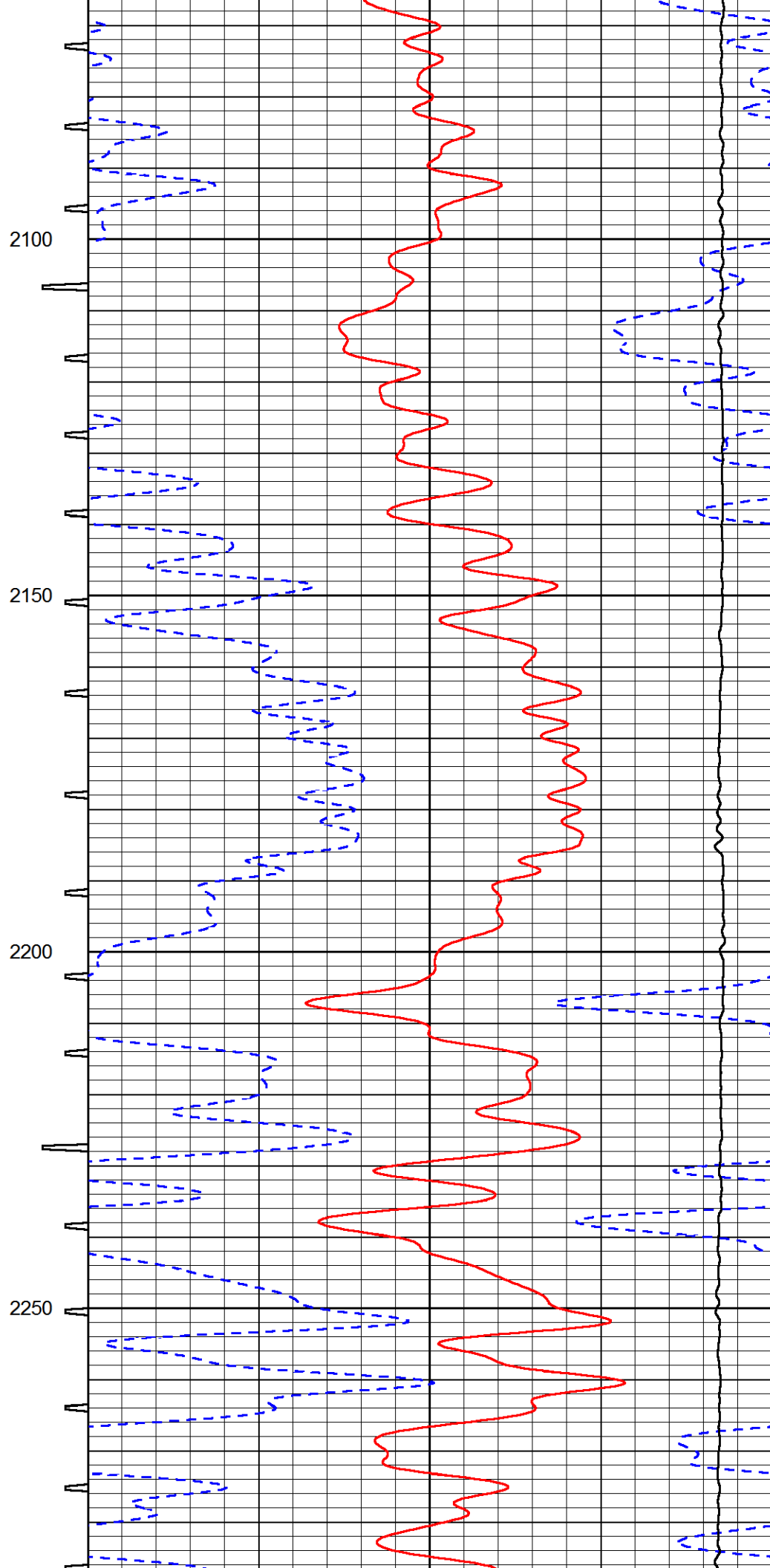
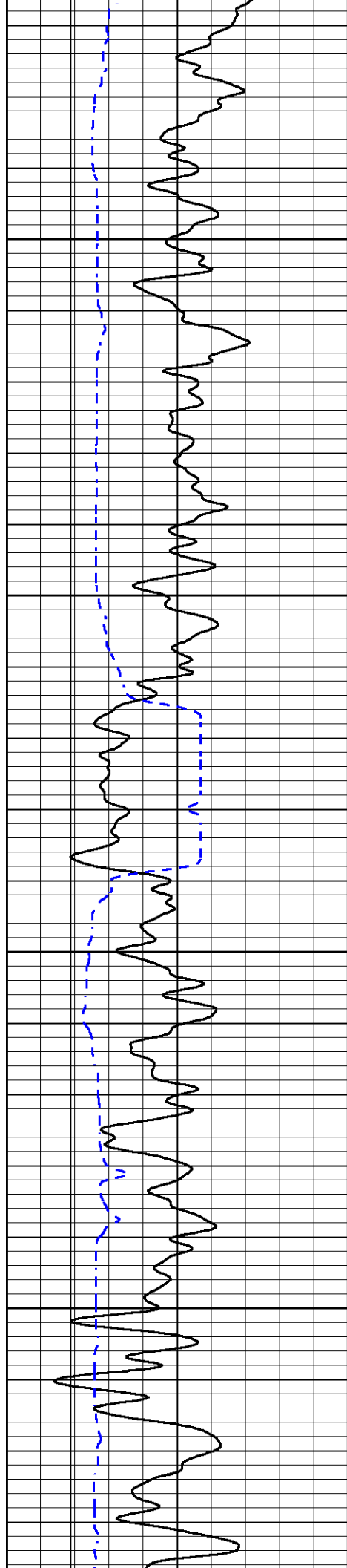


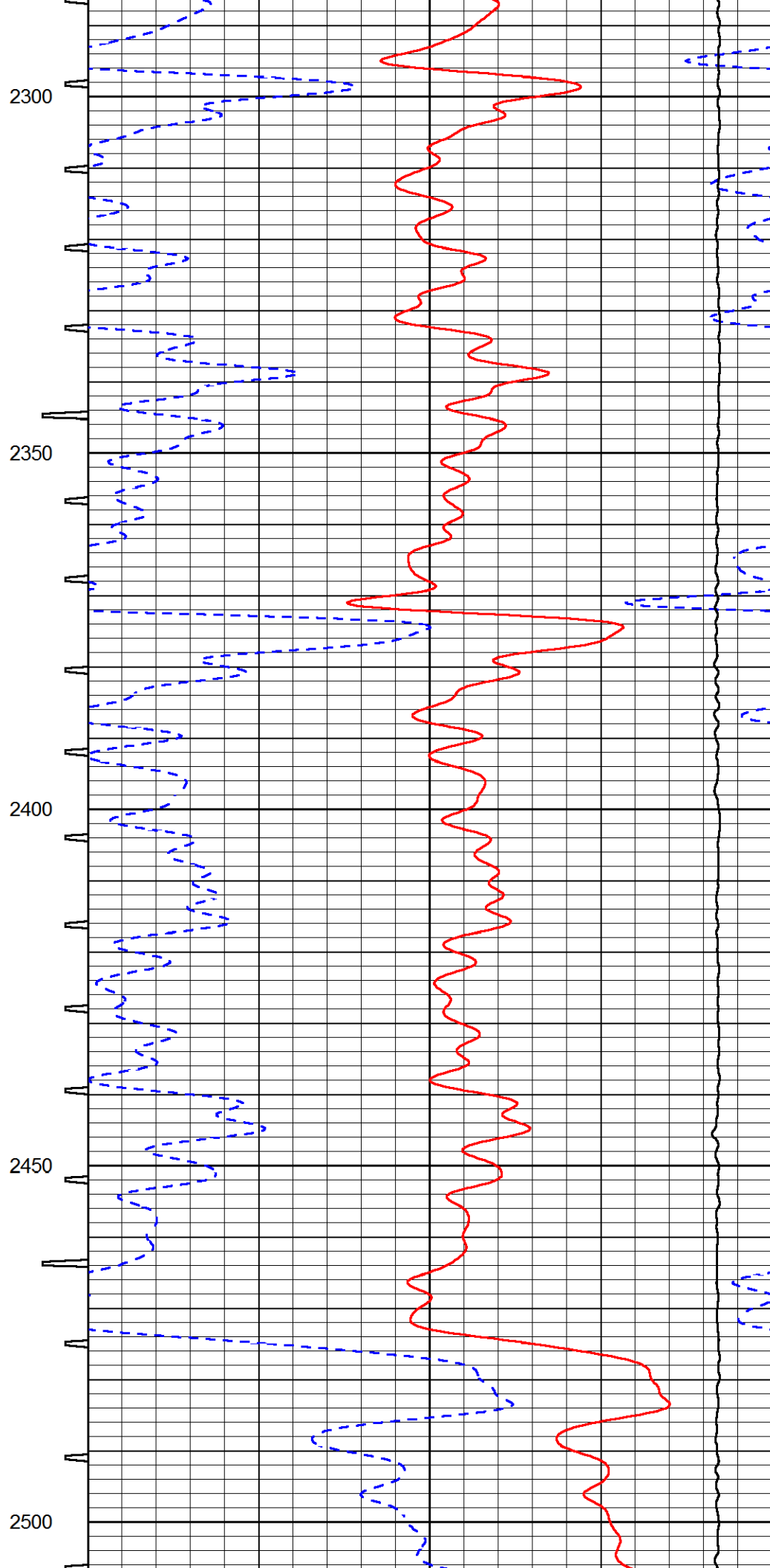
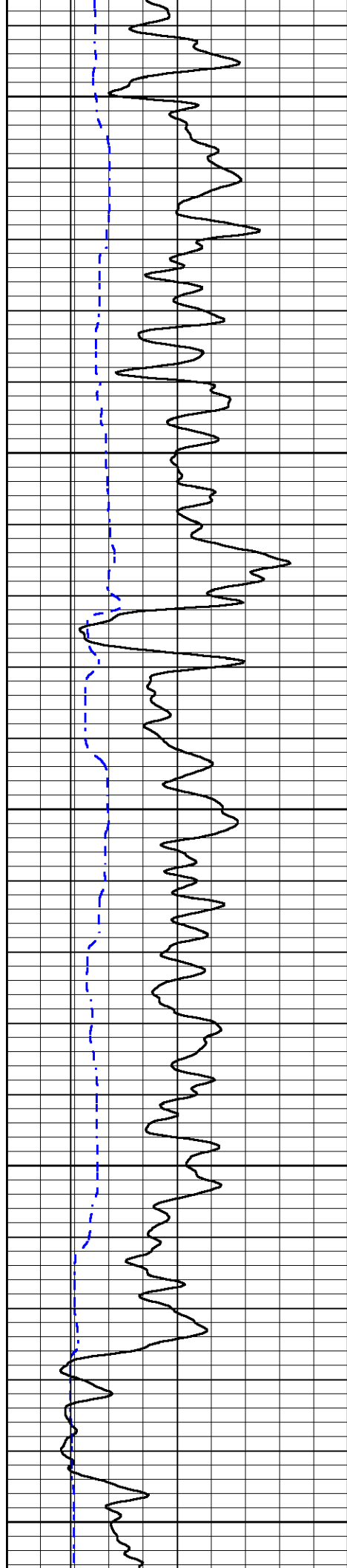


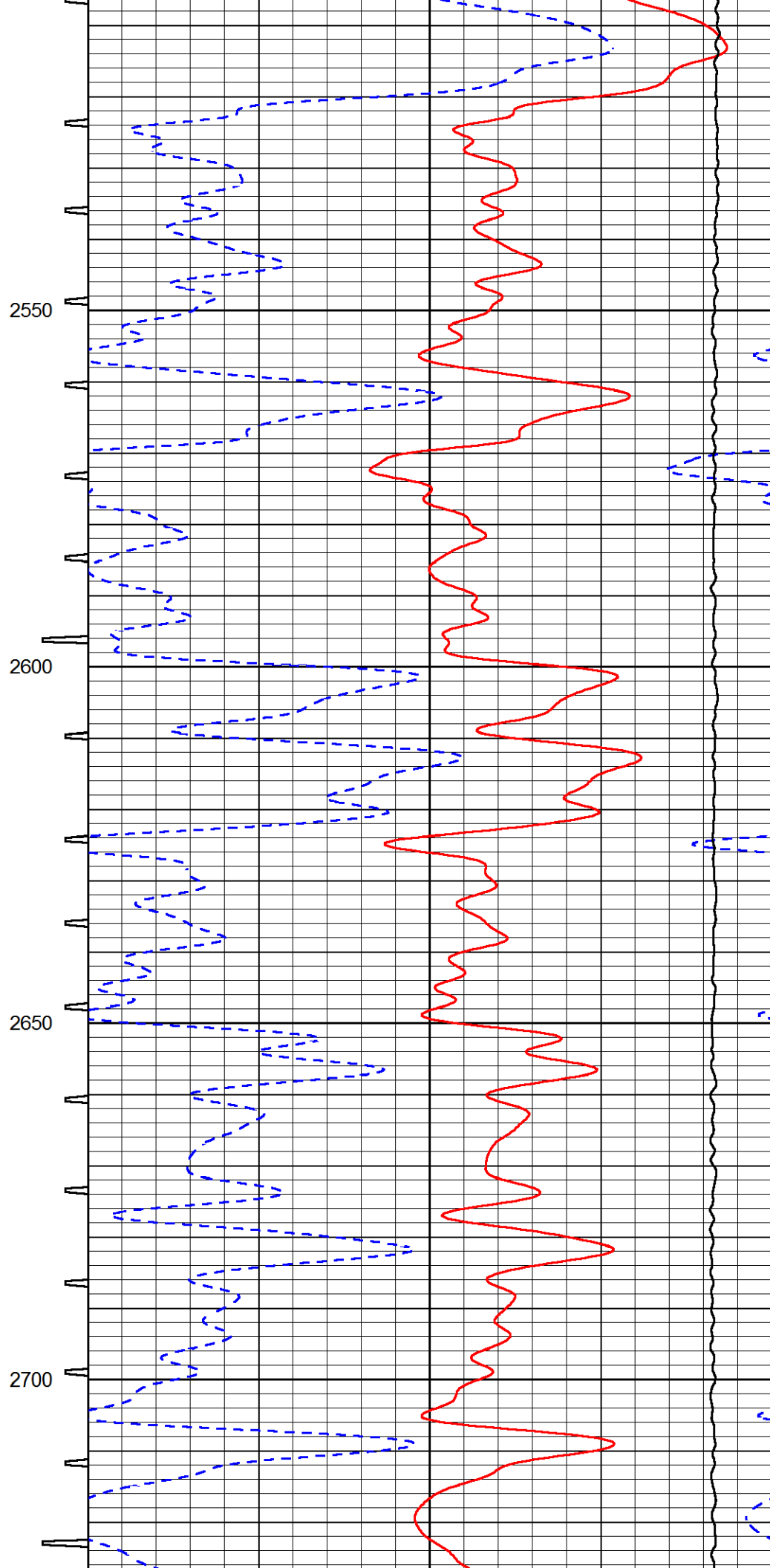
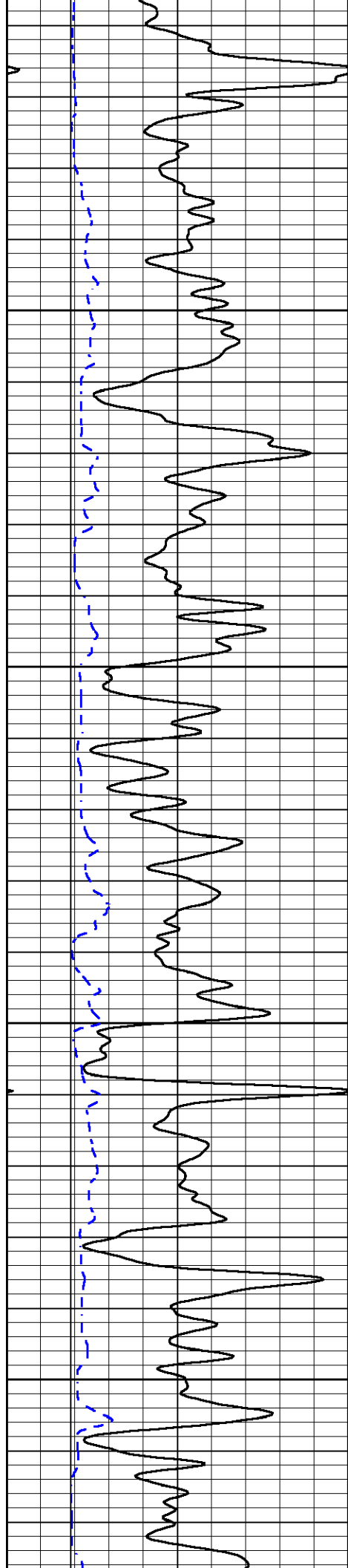


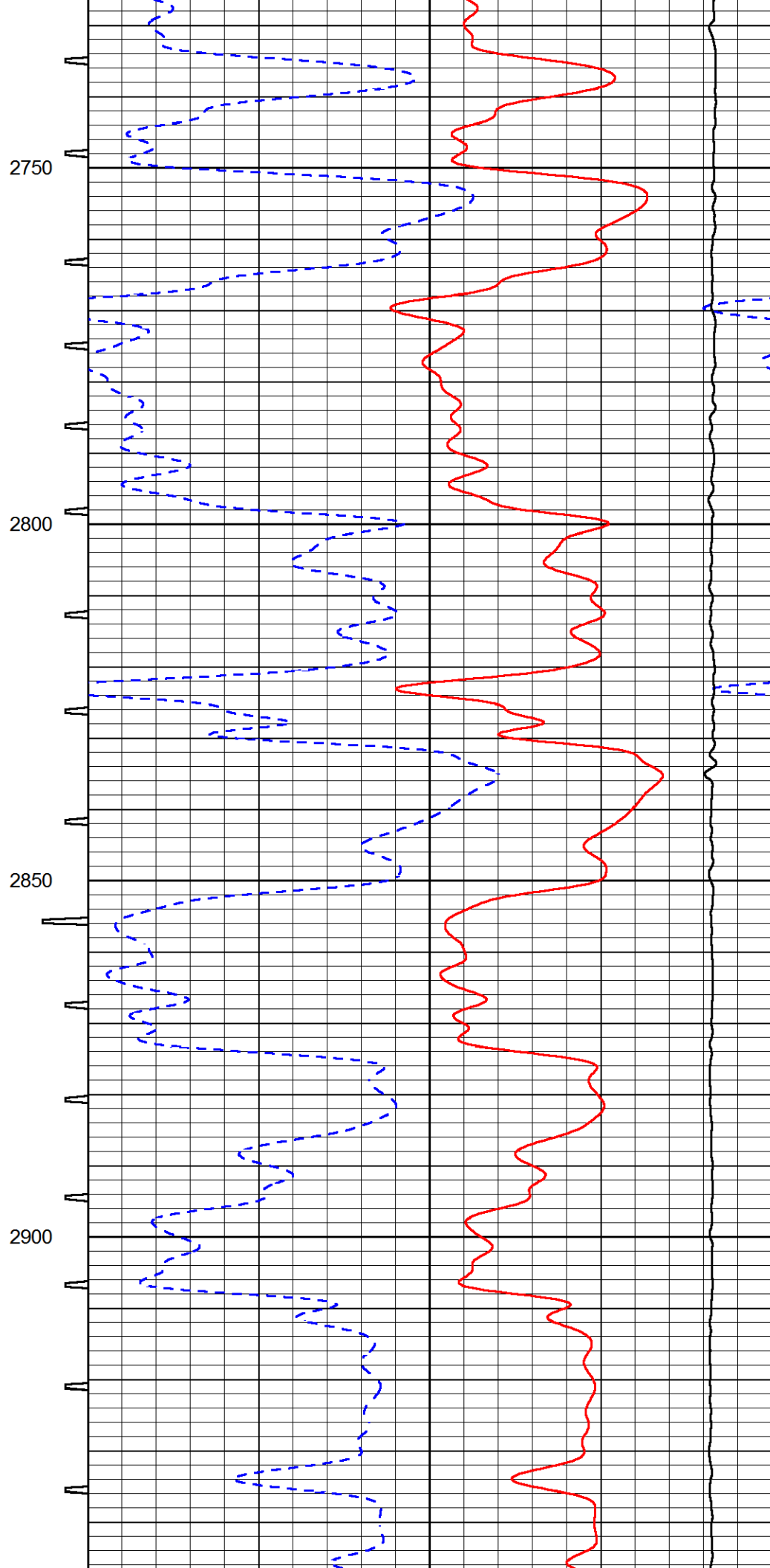
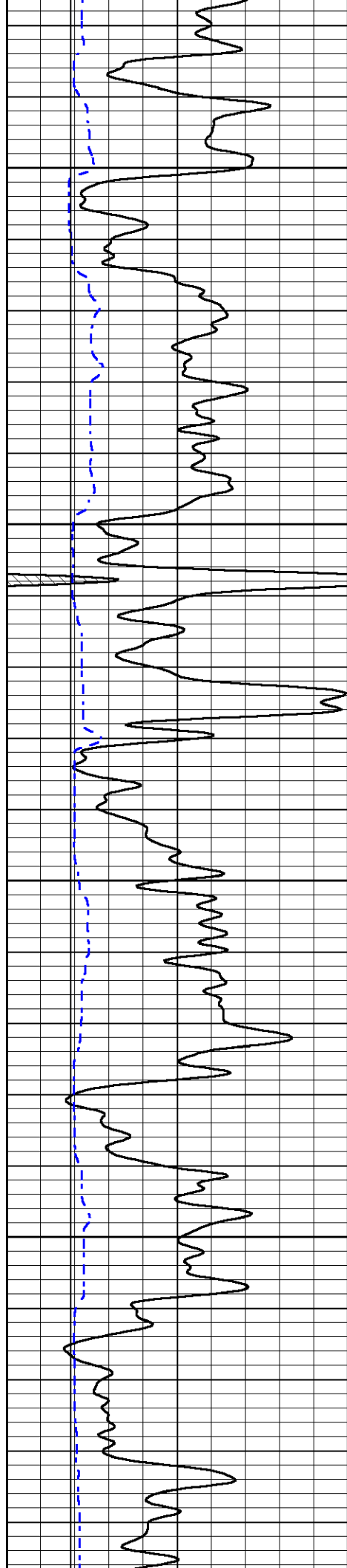


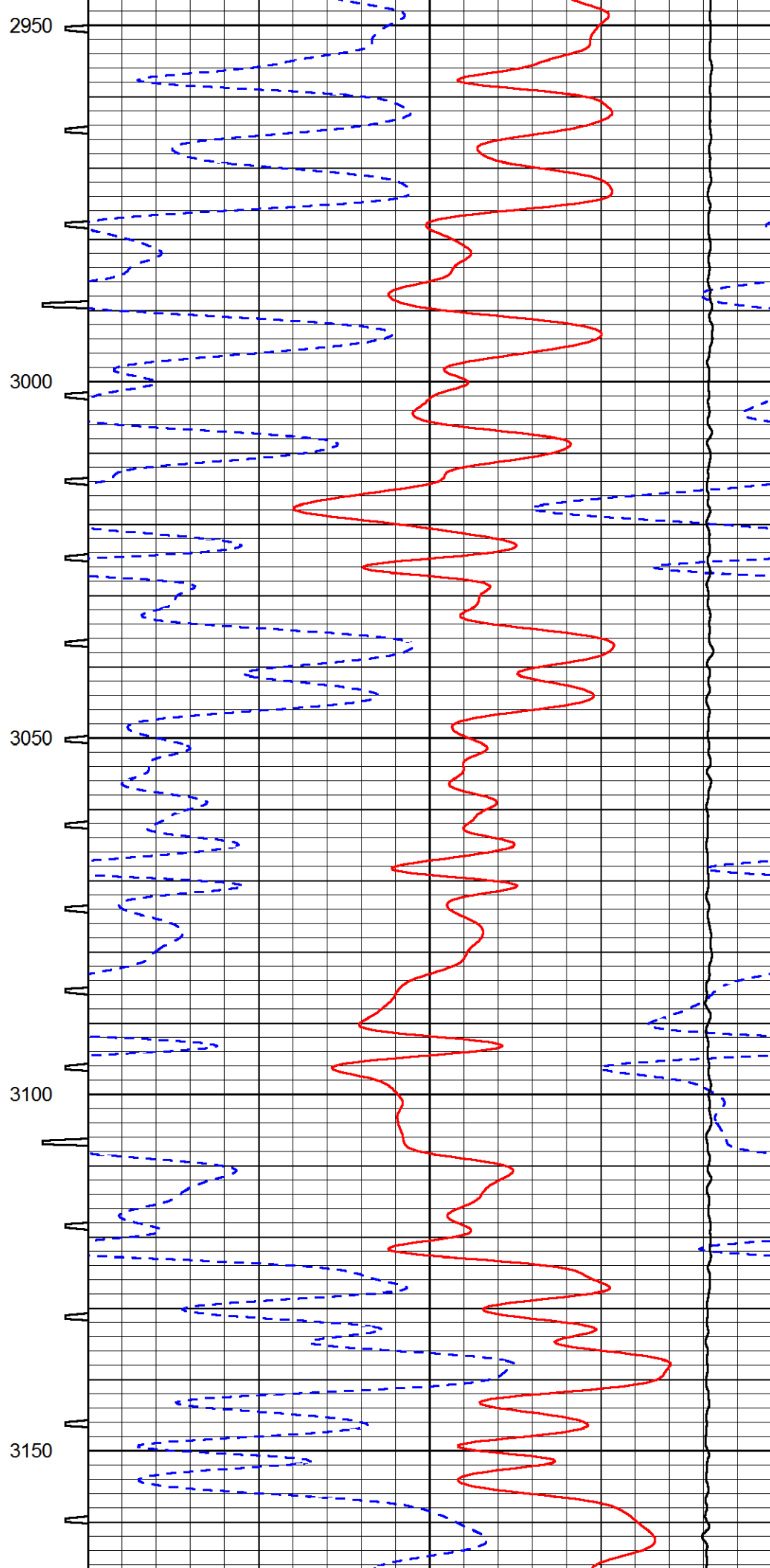
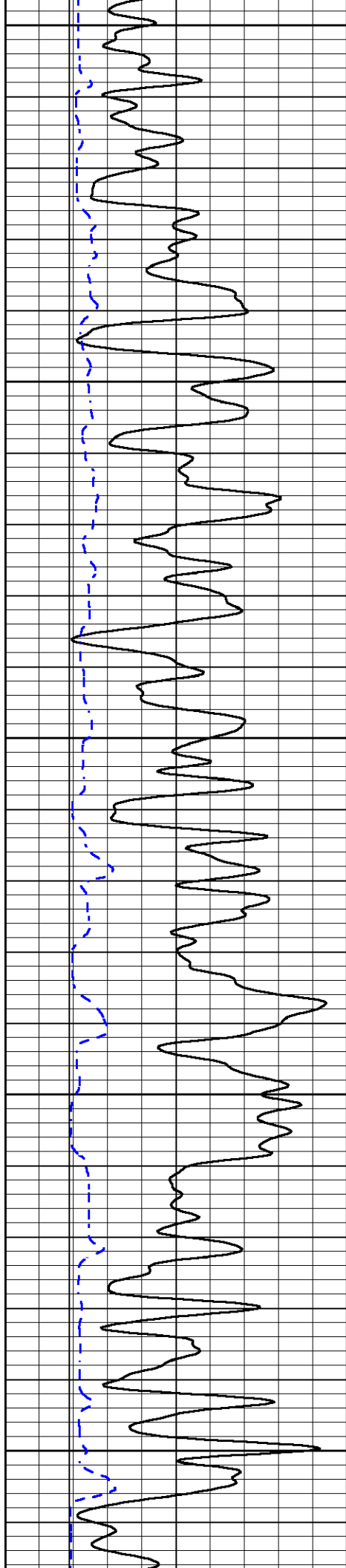


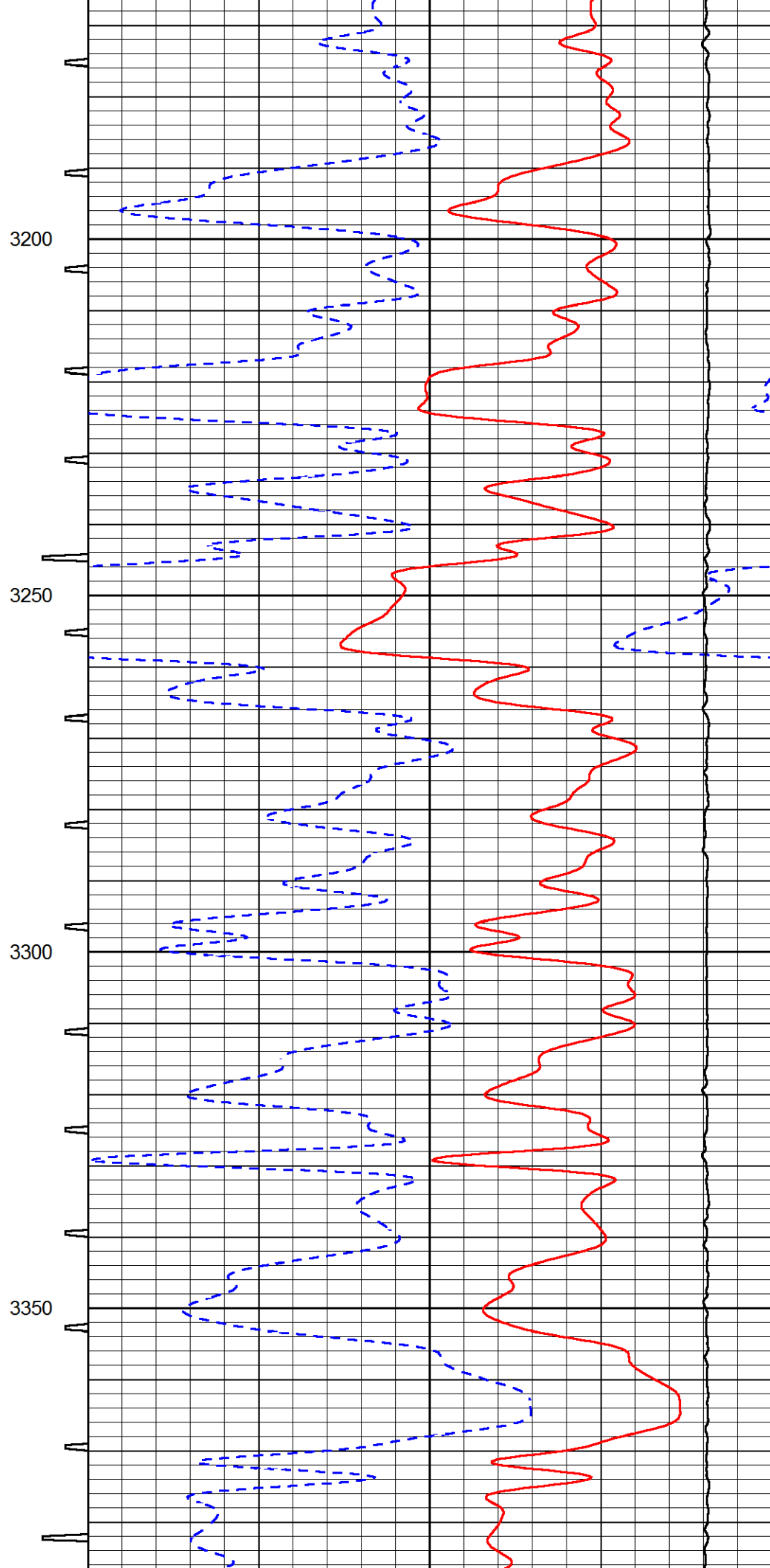
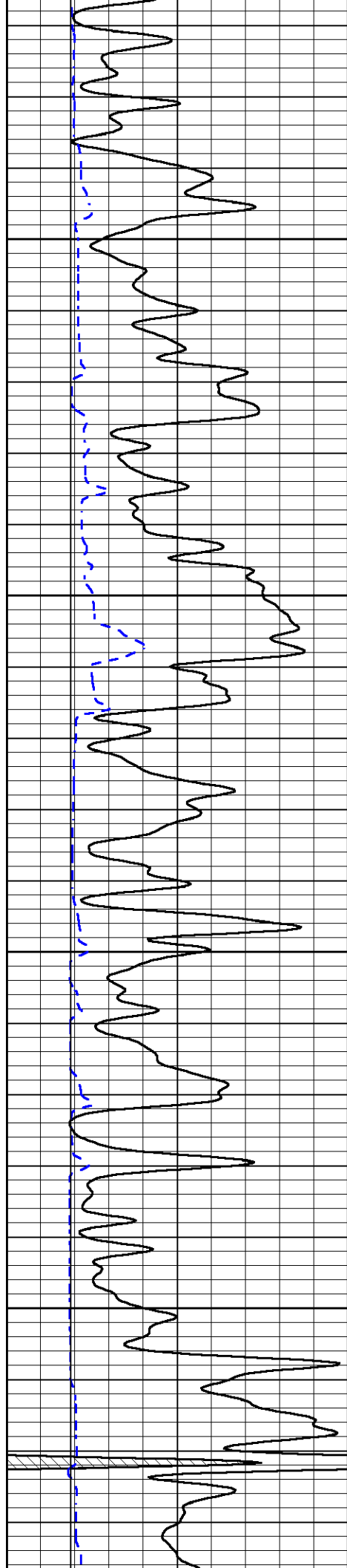


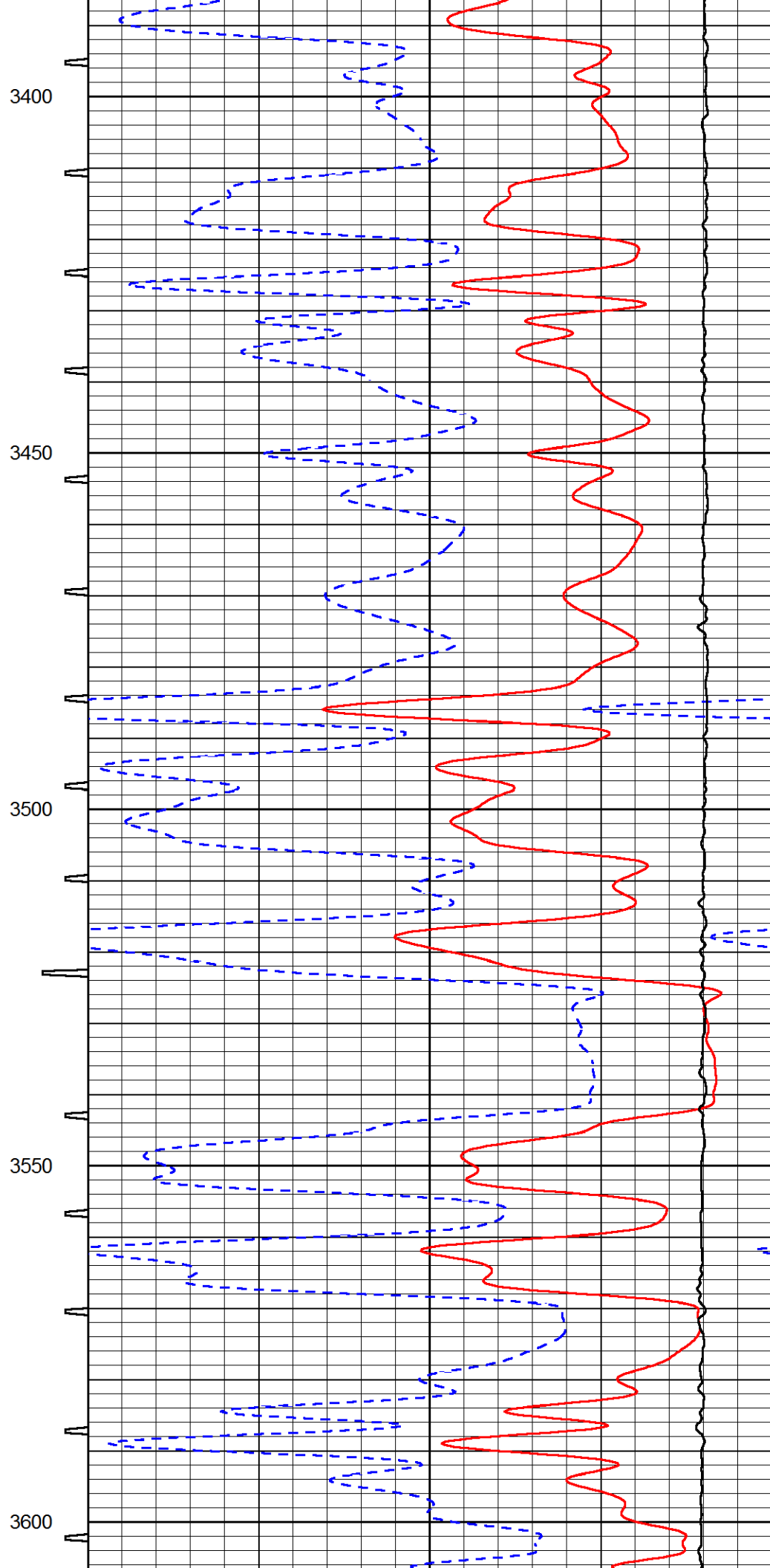
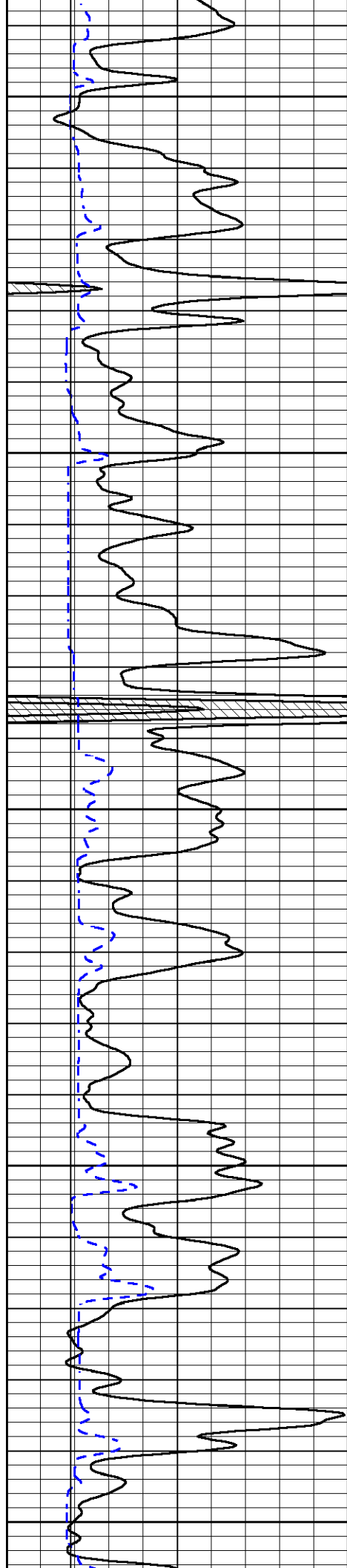


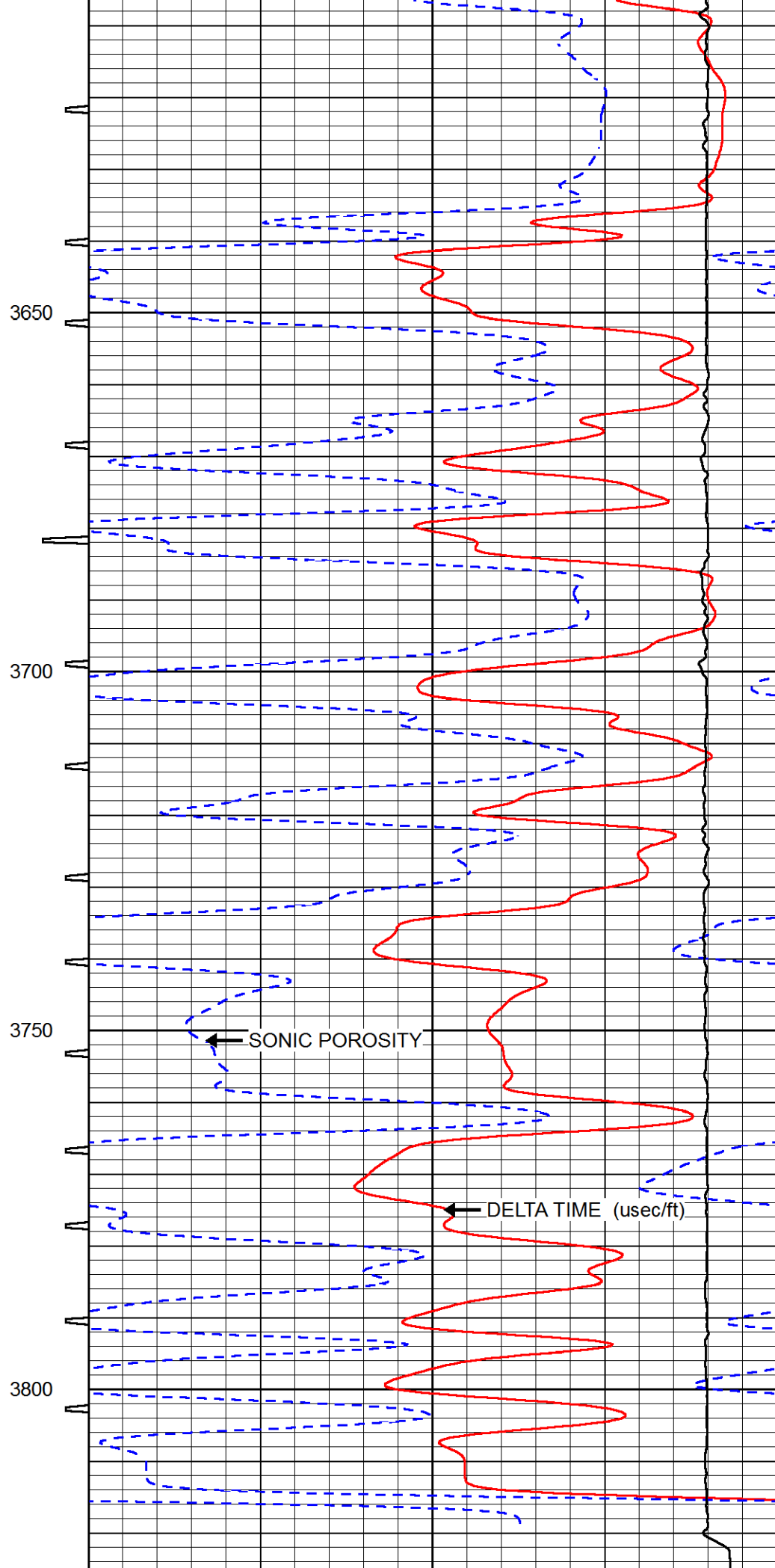
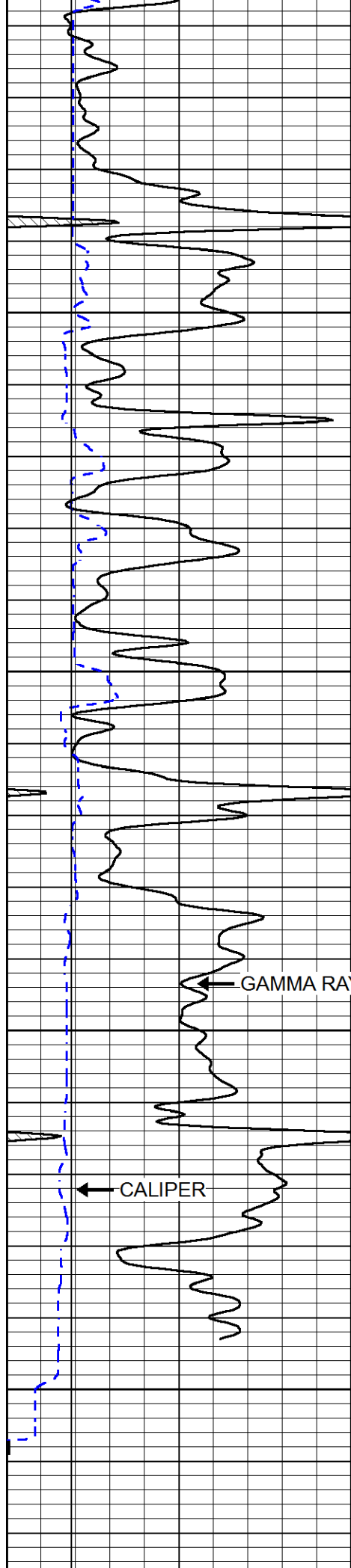












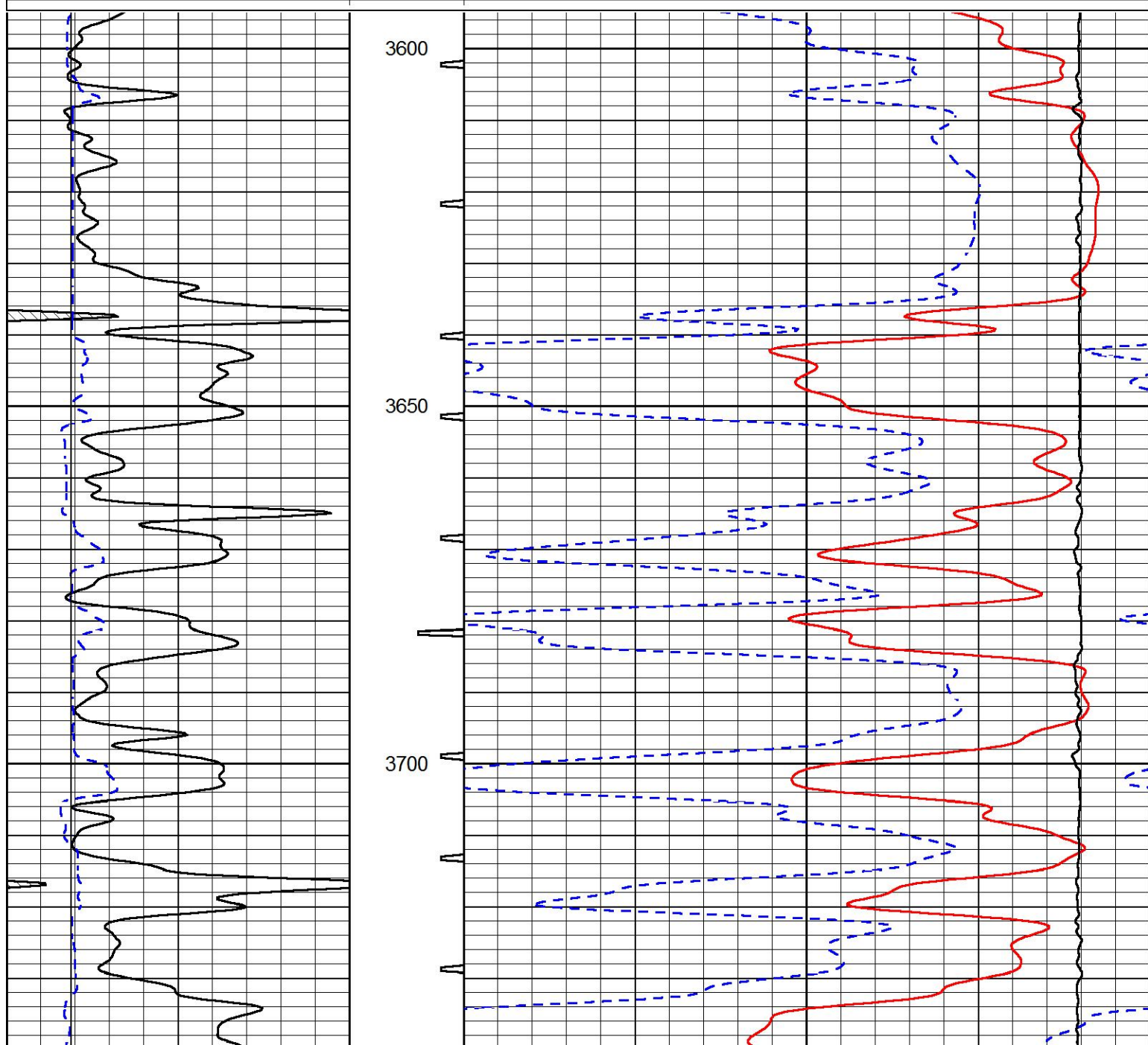
0	GAMMA RAY (GAPI)	150	SONIC INT	140	DELTA TIME (usec/ft) (usec/ft)	40
6	CALIPER (in)	16	RAVEL TIM	30	SONIC POROSITY (pu)	-10
6	BIT SIZE	16	(msec)	15000	LINE TENSION (lb)	0

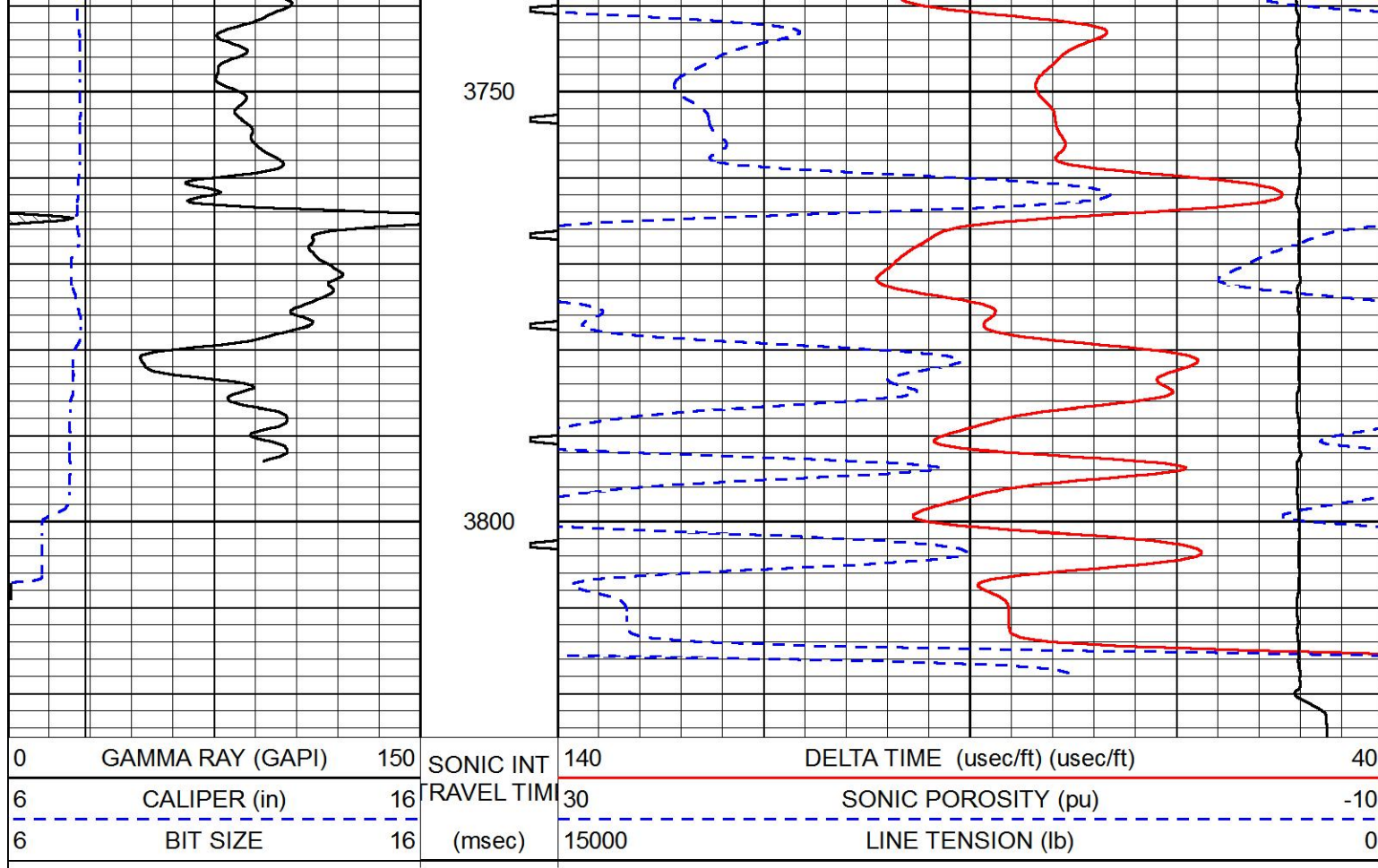


REPEAT SECTION

Database File canyon_b_bar_b_25_1.db
Dataset Pathname stack/pass2.1
Presentation Format sonic
Dataset Creation Fri Nov 09 10:05:42 2018
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	RAVEL TIM	30	SONIC POROSITY (pu)	-10
6	BIT SIZE	16	(msec)	15000	LINE TENSION (lb)	0





 PIONEER Pioneer Energy Services	Company	CANYON OPERATING, LLC
	Well	B BAR B NO. 25-1
	Field	WC
	County	GRAHAM
	State	KANSAS