



PIONEER

Pioneer Energy Services

BOREHOLE COMPENSATED SONIC LOG

Company MURFIN DRILLING COMPANY, INC.

Well KEN NO. 3-17
Field WILDCAT
County RAWLINS
State KANSAS

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Location: API #: 15-153-21193-00-00

1270' FNL & 2060' FWL

SEC 17 TWP 1S RGE 35W

Permanent Datum GROUND LEVEL Elevation 3176'
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING

Other Services
DIL/MEL
CNL/CDL
Elevation
K.B. 3181'
D.F. N/A
G.L. 3176'

Date 7/14/2017

Run Number TWO

Type Log BHCS

Depth Driller 4470'

Depth Logger 4470'

Bottom Logged Interval 4459'

Top Logged Interval 250'

Type Fluid In Hole CHEMICAL

Salinity, PPM CL 600

Density 9.0

Level FULL

Max. Rec. Temp. F 121 DEG/F

Operating Rig Time 4 HOURS

Equipment -- Location 108 HAYS

Recorded By J. HENRICKSON

Witnessed By CLAYTON ERICKSON

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
ONE	12.25"	0	261'	8.625"	23#	0	261'
TWO	7.875"	261'	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.

BEARDSLEY KANSAS
NORTH TO AA ROAD, WEST TO 7 ROAD, NORTH TO CC ROAD,
3/4 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

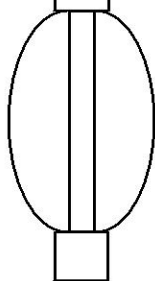
Primary Witness: CLAYTON ERICKSON
Secondary Witness:
Secondary Witness:
Secondary Witness:

DatabaseC:\ProgramData\Warrior\Data\murfin_ken_3_17.db
Dataset field/well/stack/pass3.1/ vars

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in 7.875	degF 121	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 -470	degF 84	Off	ft 4470

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			CENT-PENGO	5.50	3.00	70.00
	28.00						
WVF4 WVF1 WVF3 WVF2	13.50		SLT-PENGO (0001)	16.00	3.50	300.00	
	13.50						
	11.50						
	11.50						



CENT-PENGO

5.50

3.00

70.00

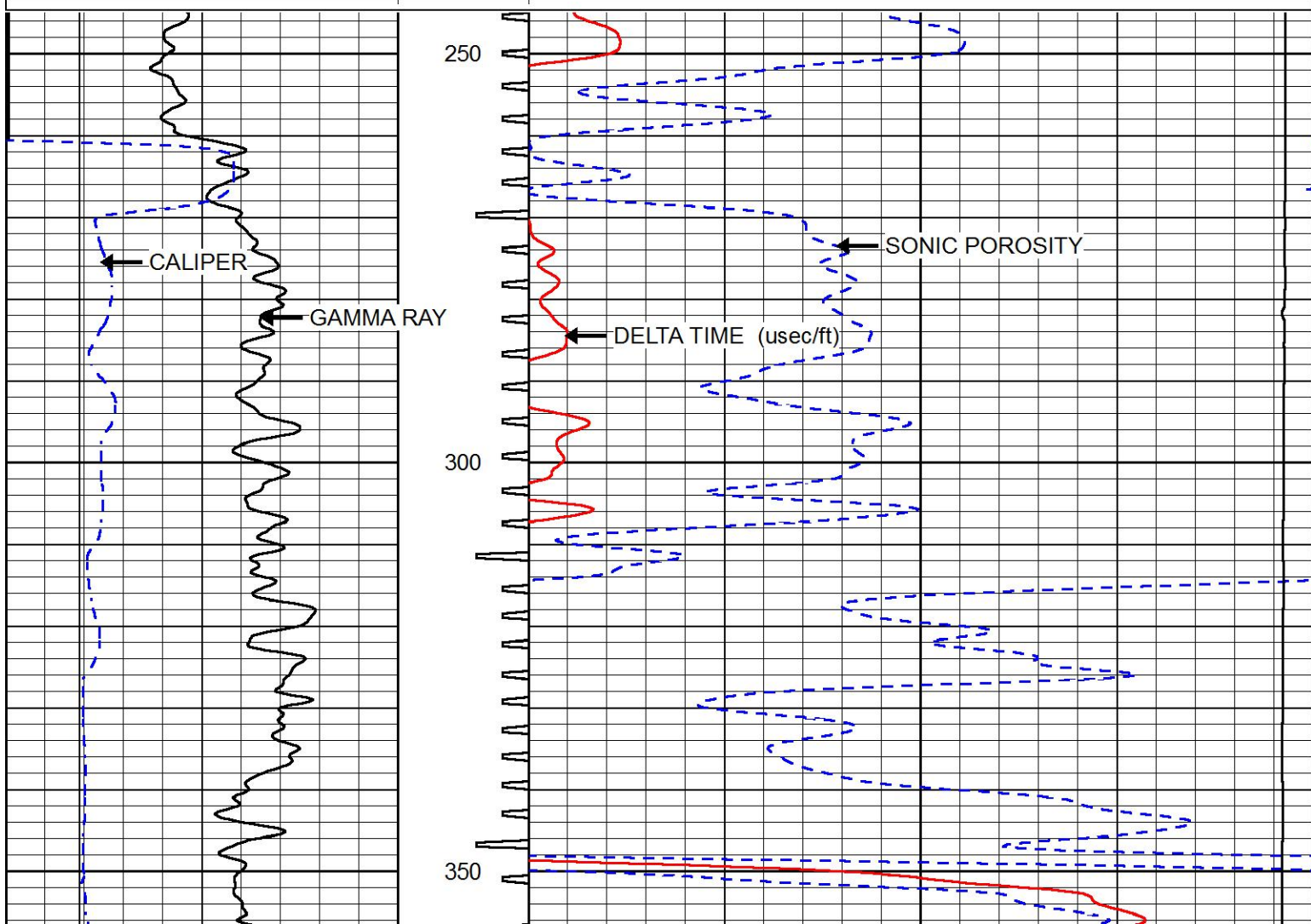
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Total length: 32.00 ft
Total weight: 540.00 lb
O.D.: 3.50 in

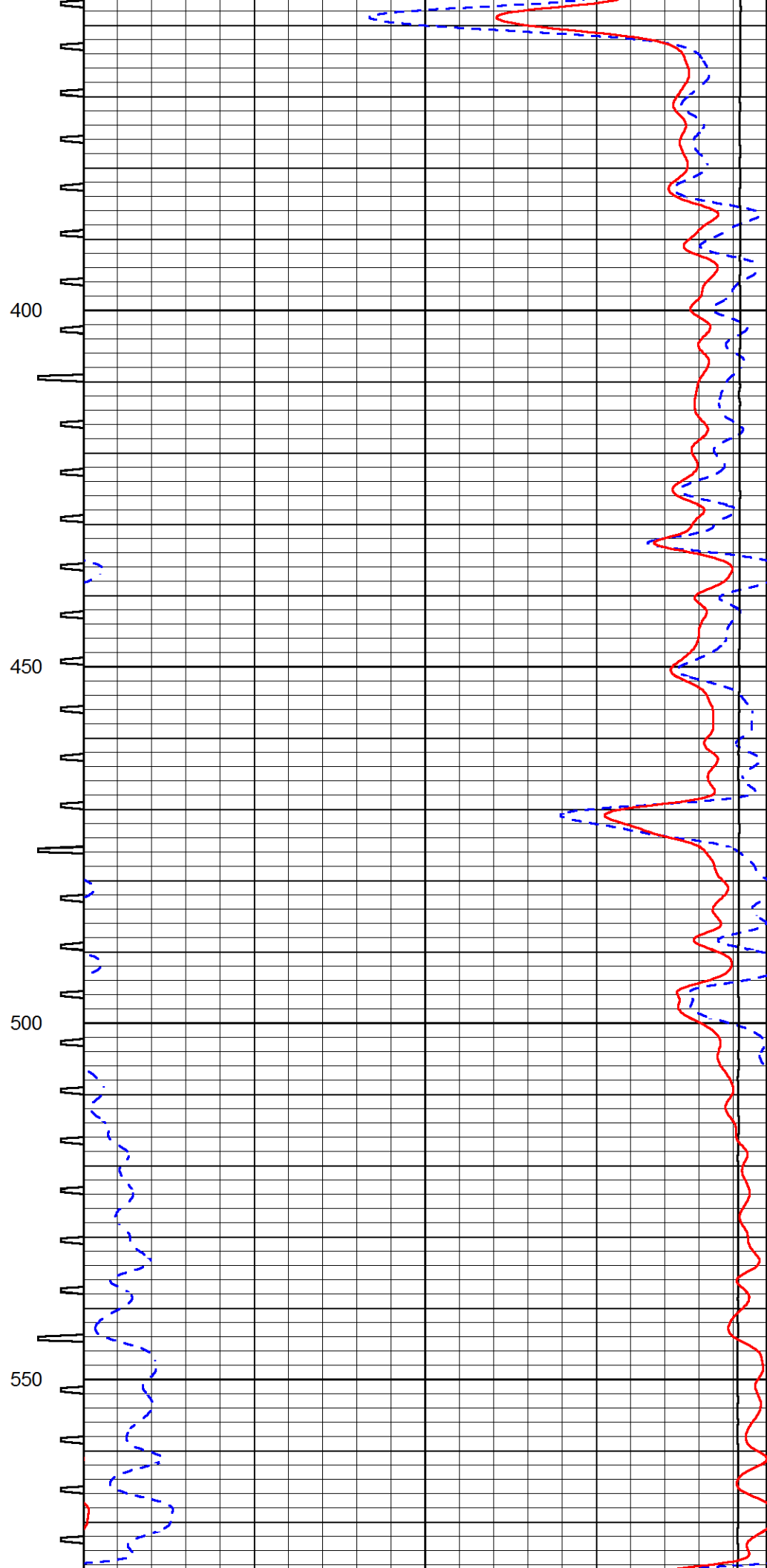
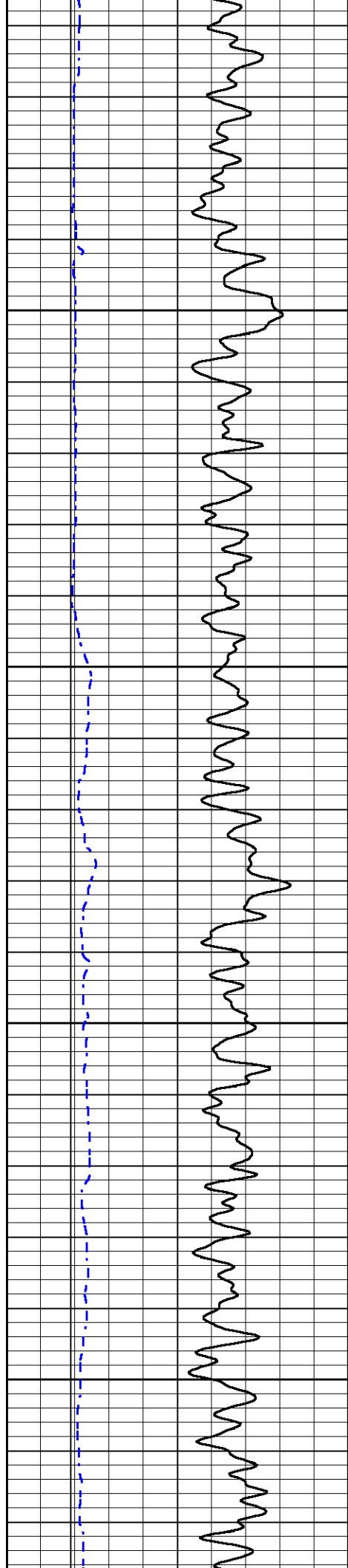


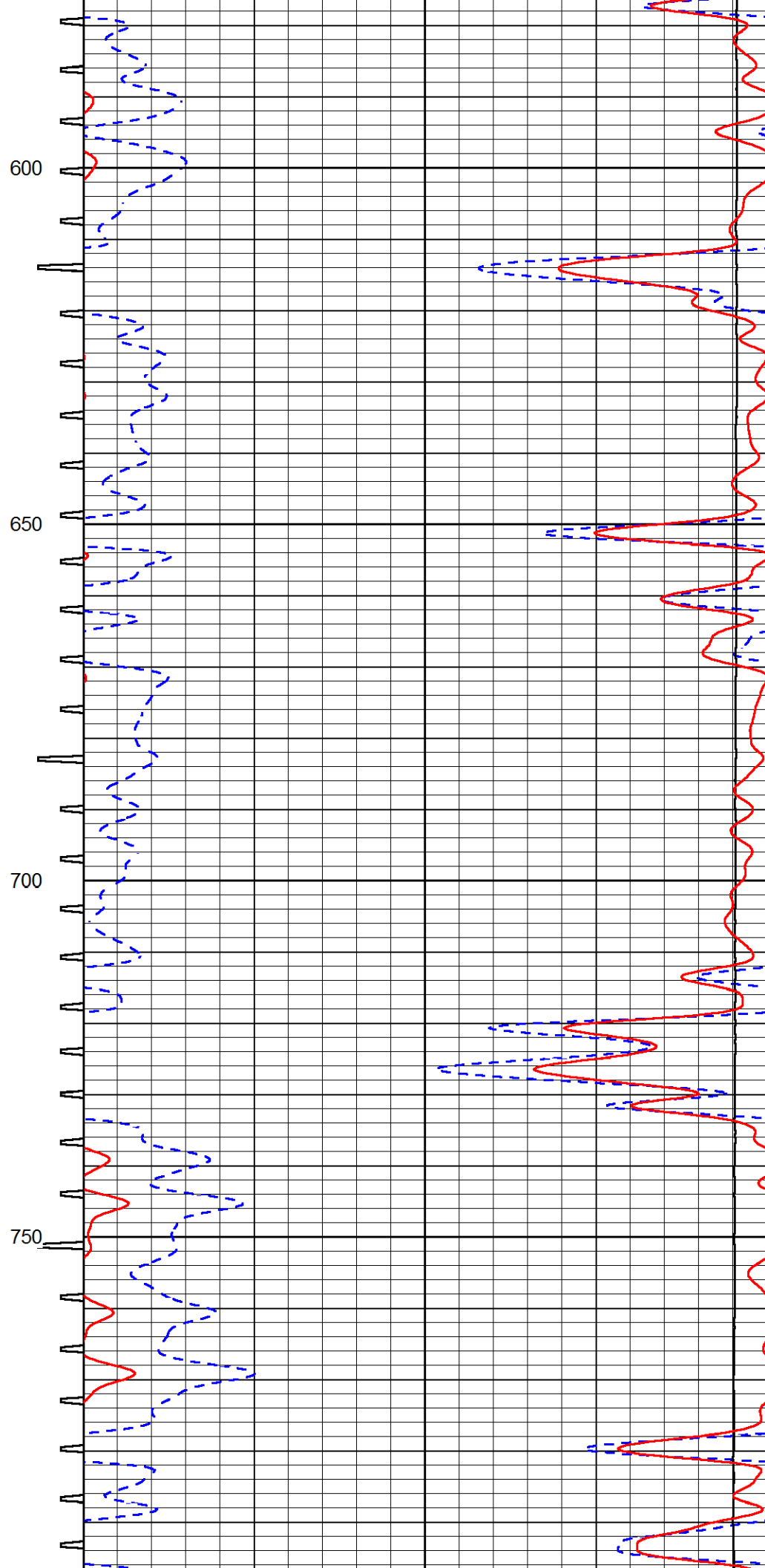
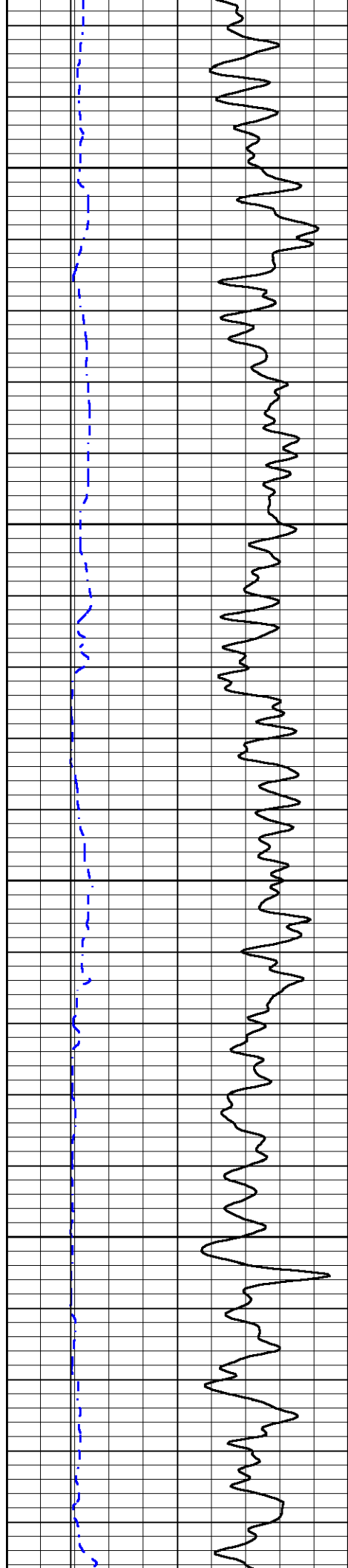
MAIN PASS

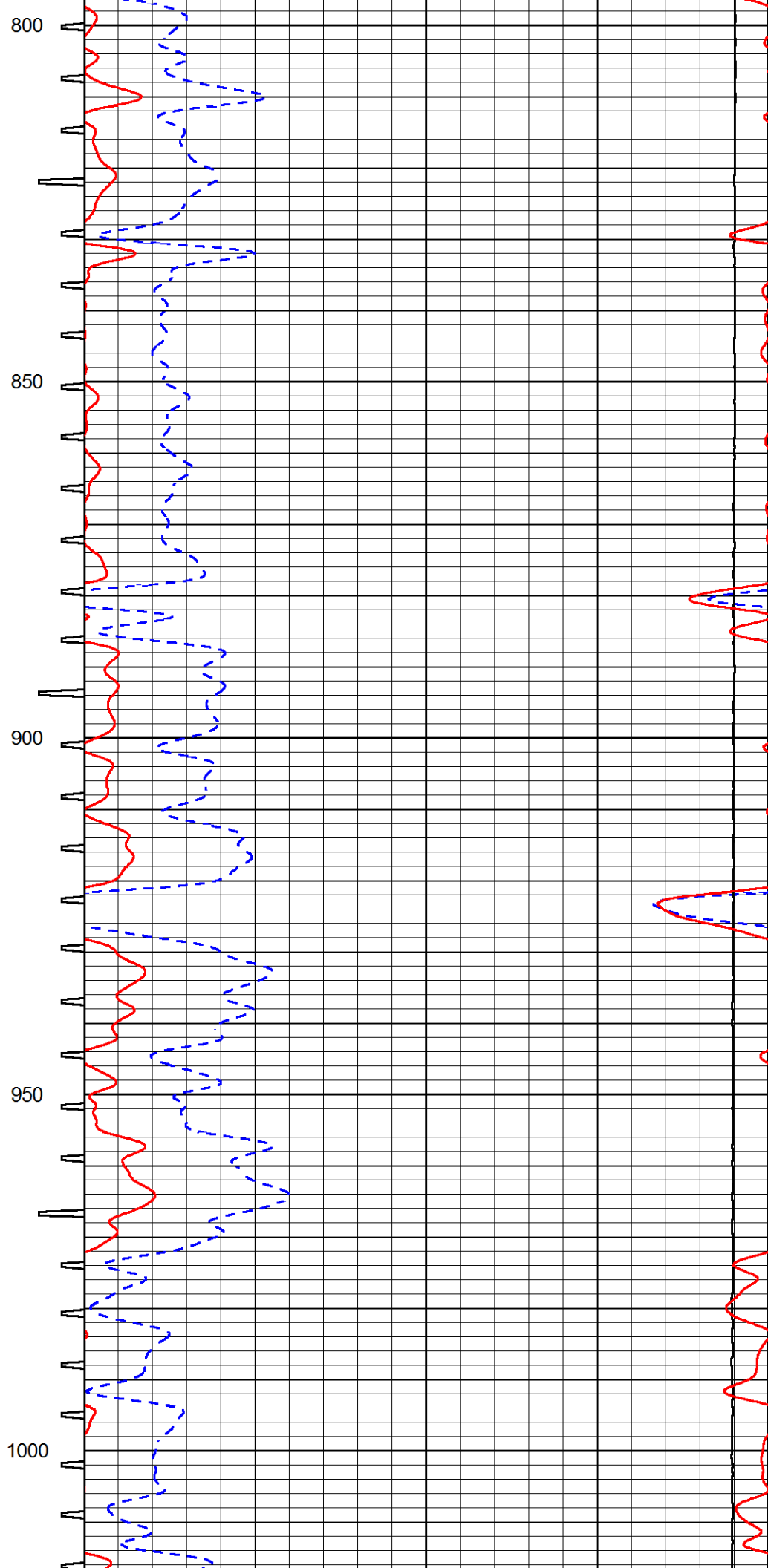
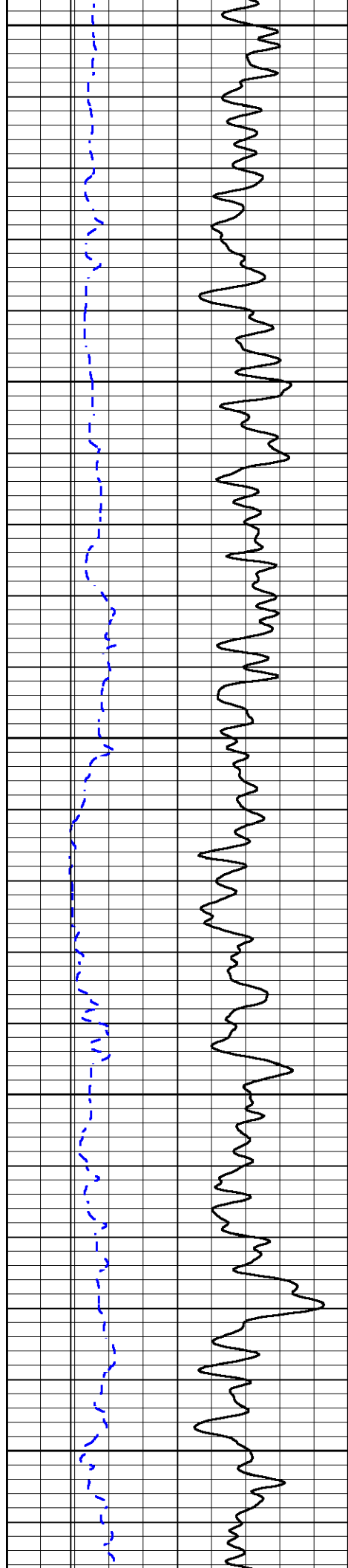
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Dataset Pathname stack/pass3.1
Presentation Format sonic
Dataset Creation Fri Jul 14 15:35:11 2017
Charted by Depth in Feet scaled 1:240

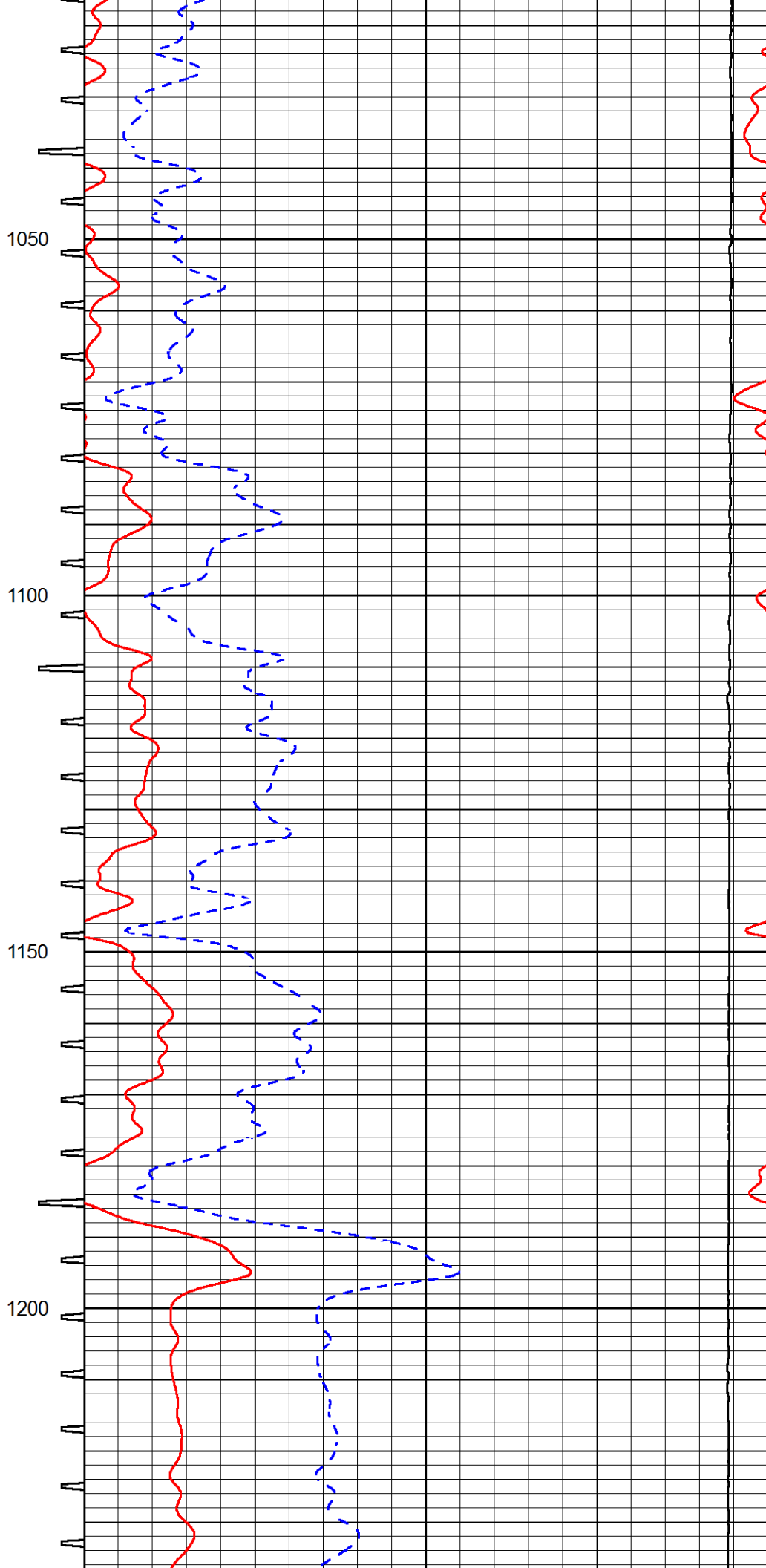
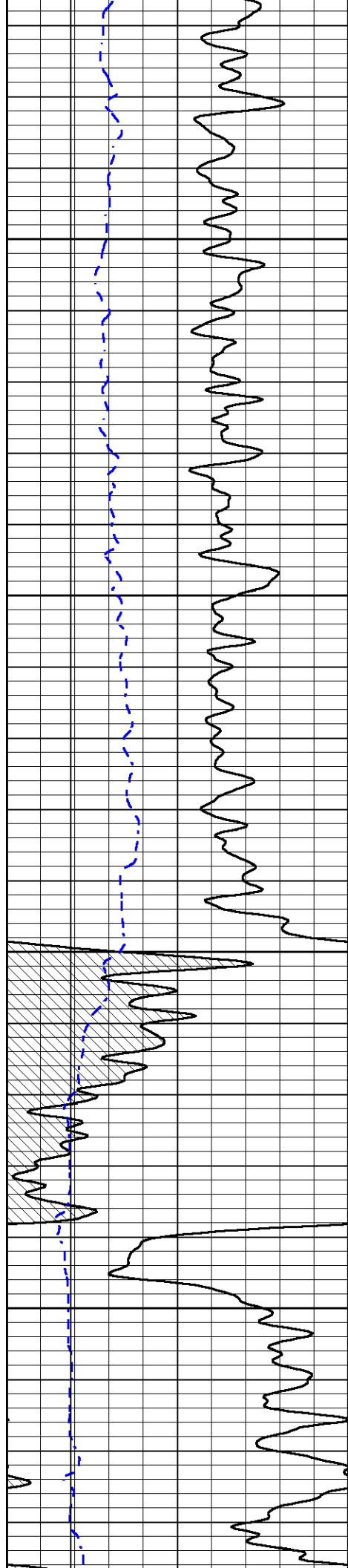
0	GAMMA RAY (GAPI)	150	SONIC INT	140	DELTA TIME (usec/ft) (usec/ft)	40
6	CALIPER (in)	16	RAVEL TIM	30	SONIC POROSITY (pu)	-10
6	BIT SIZE	16	(msec)	15000	LINE TENSION (lb)	0

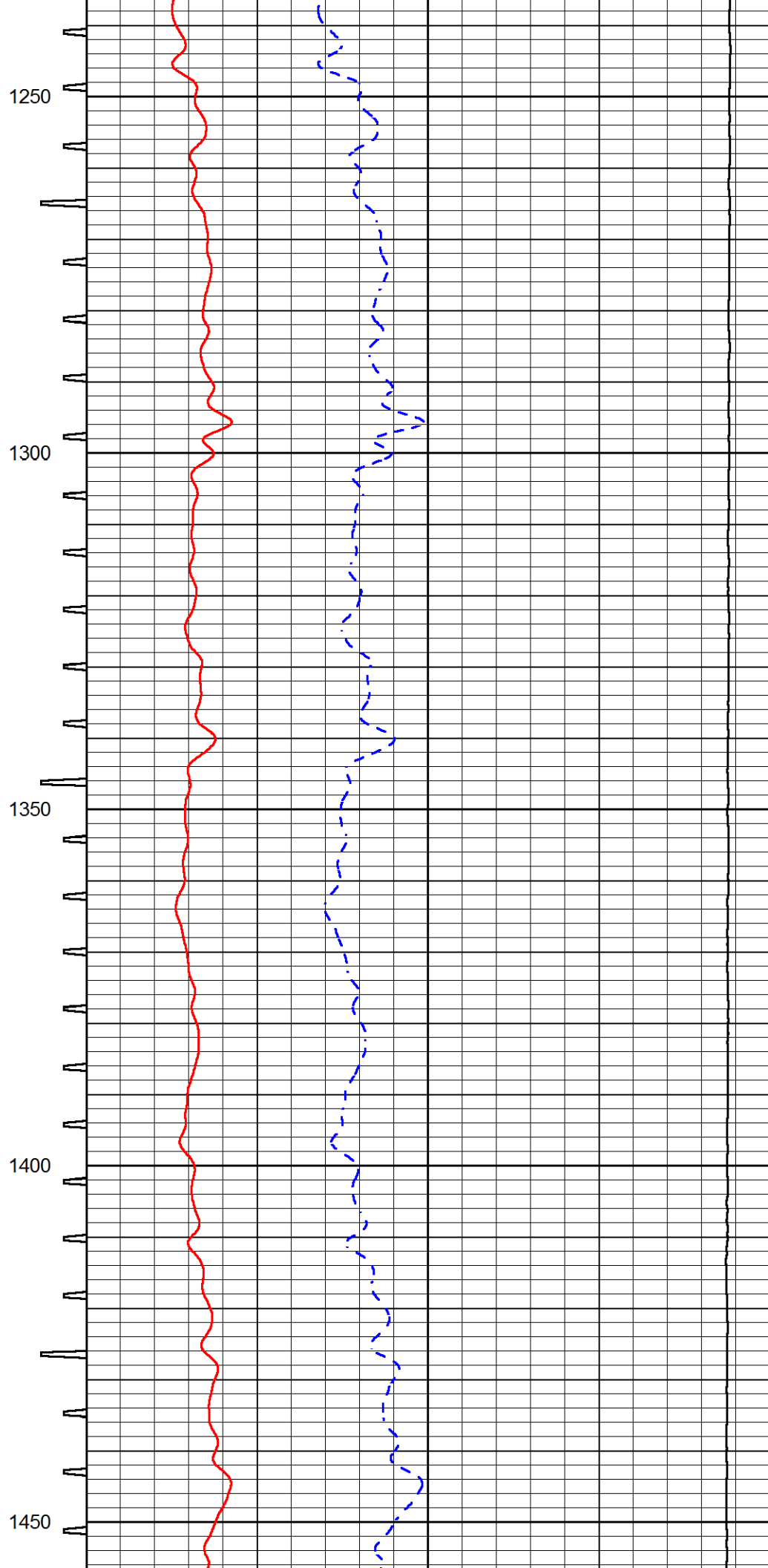
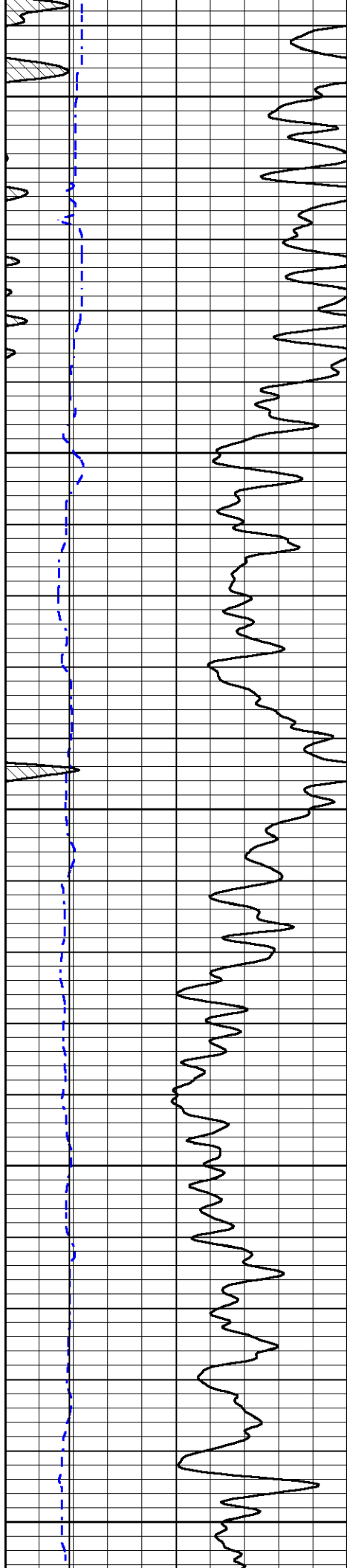


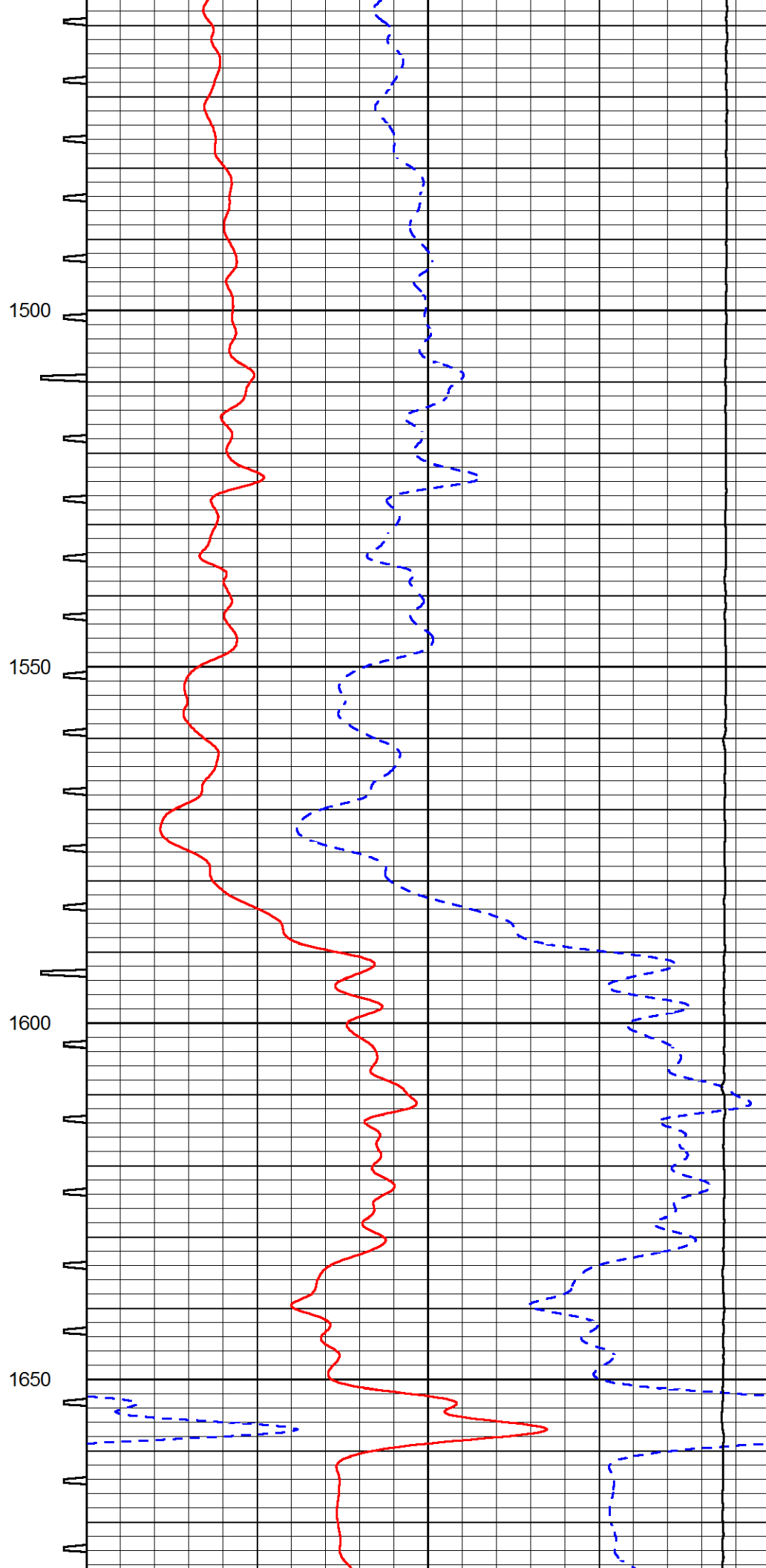
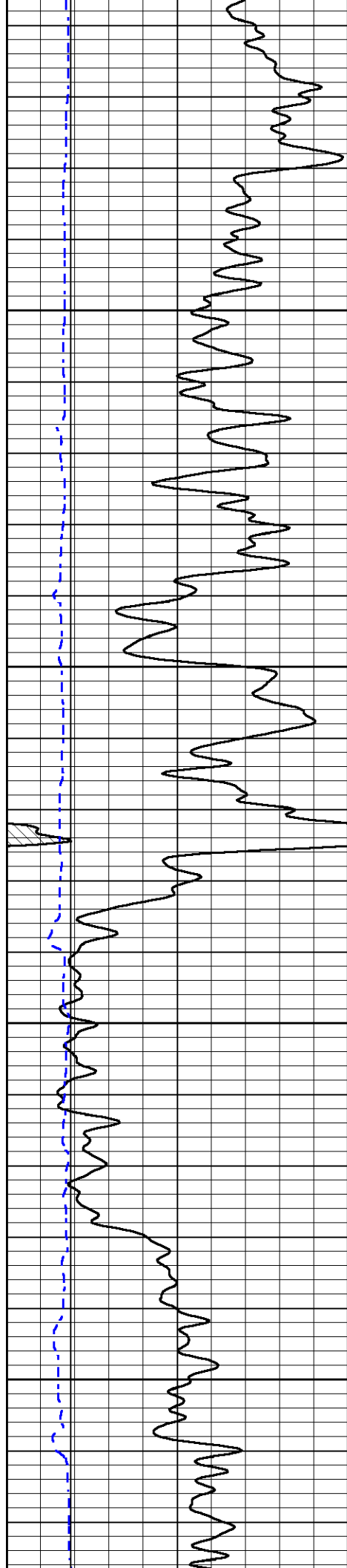


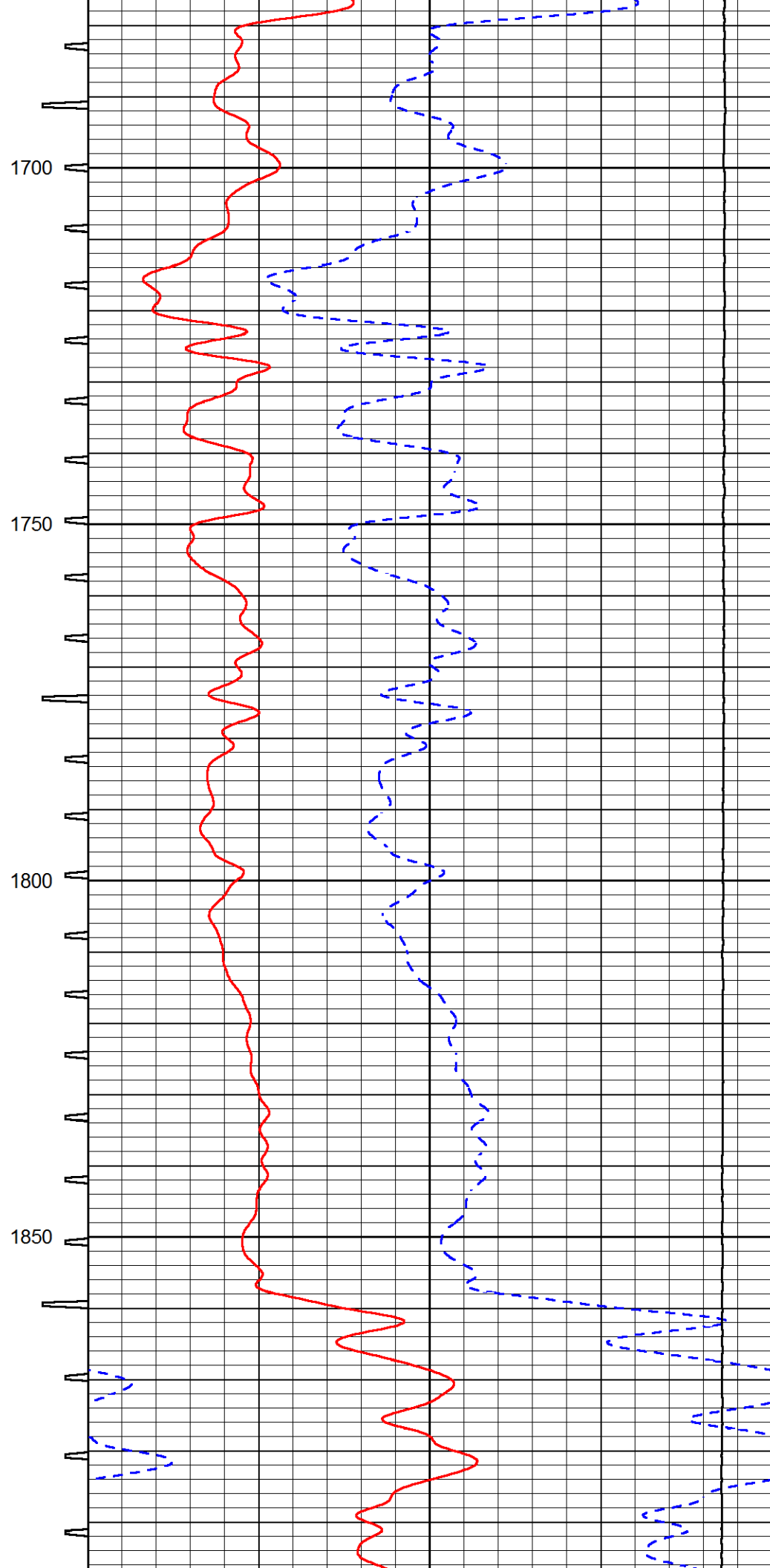
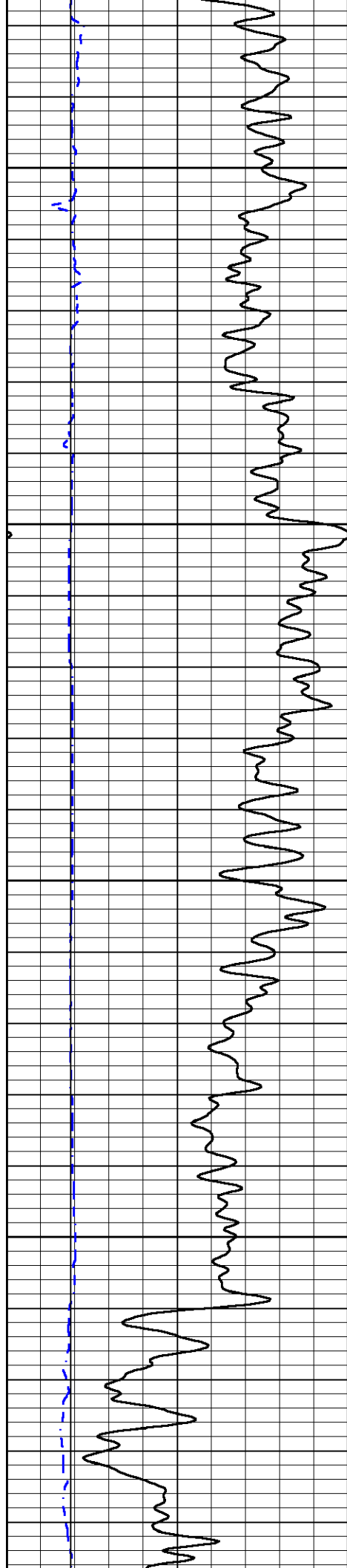


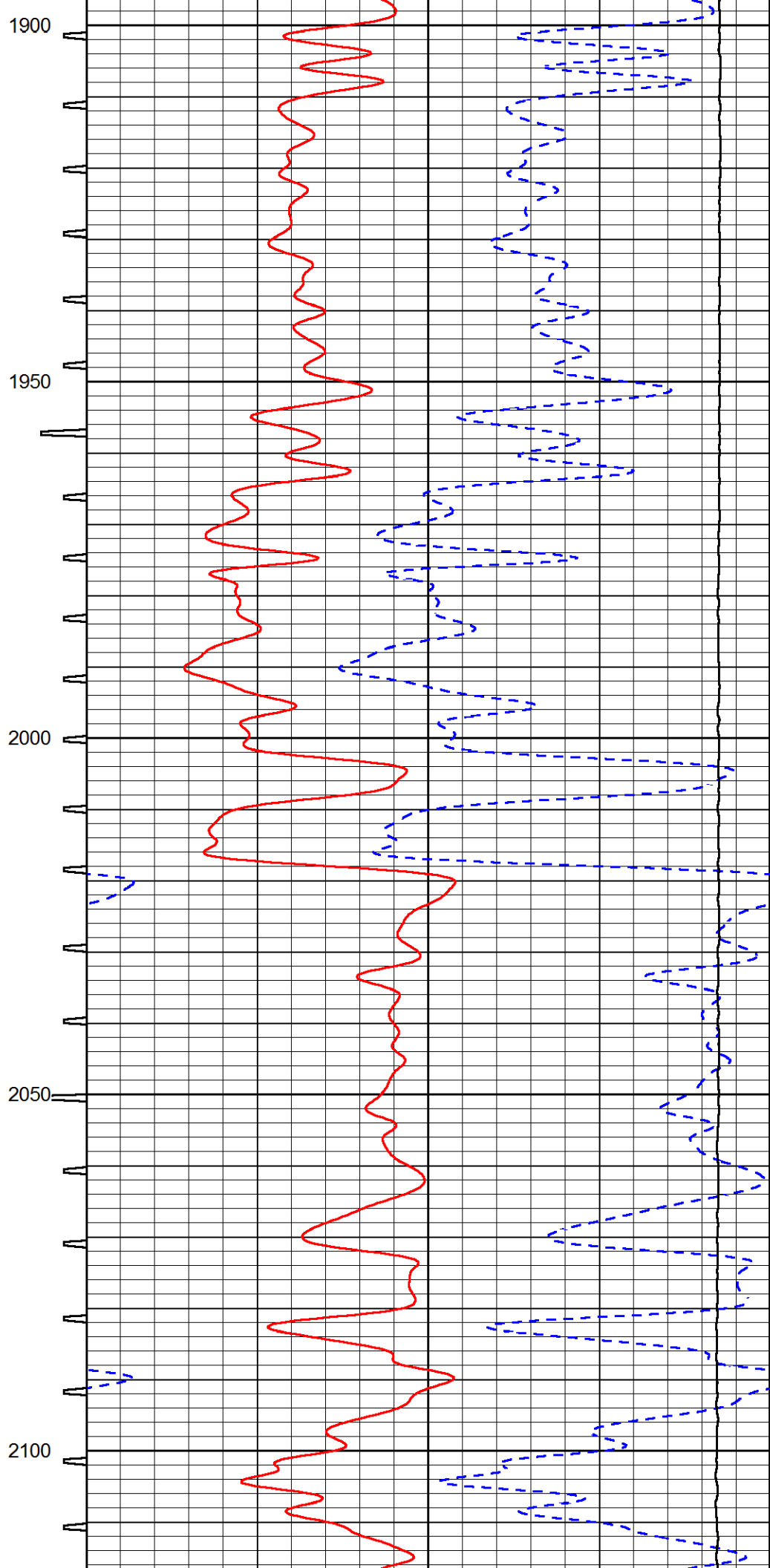
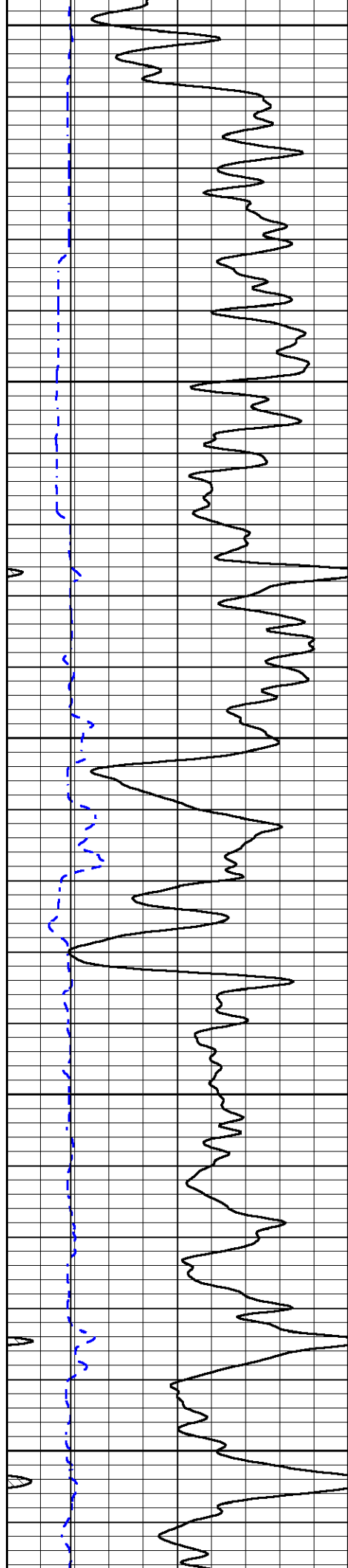


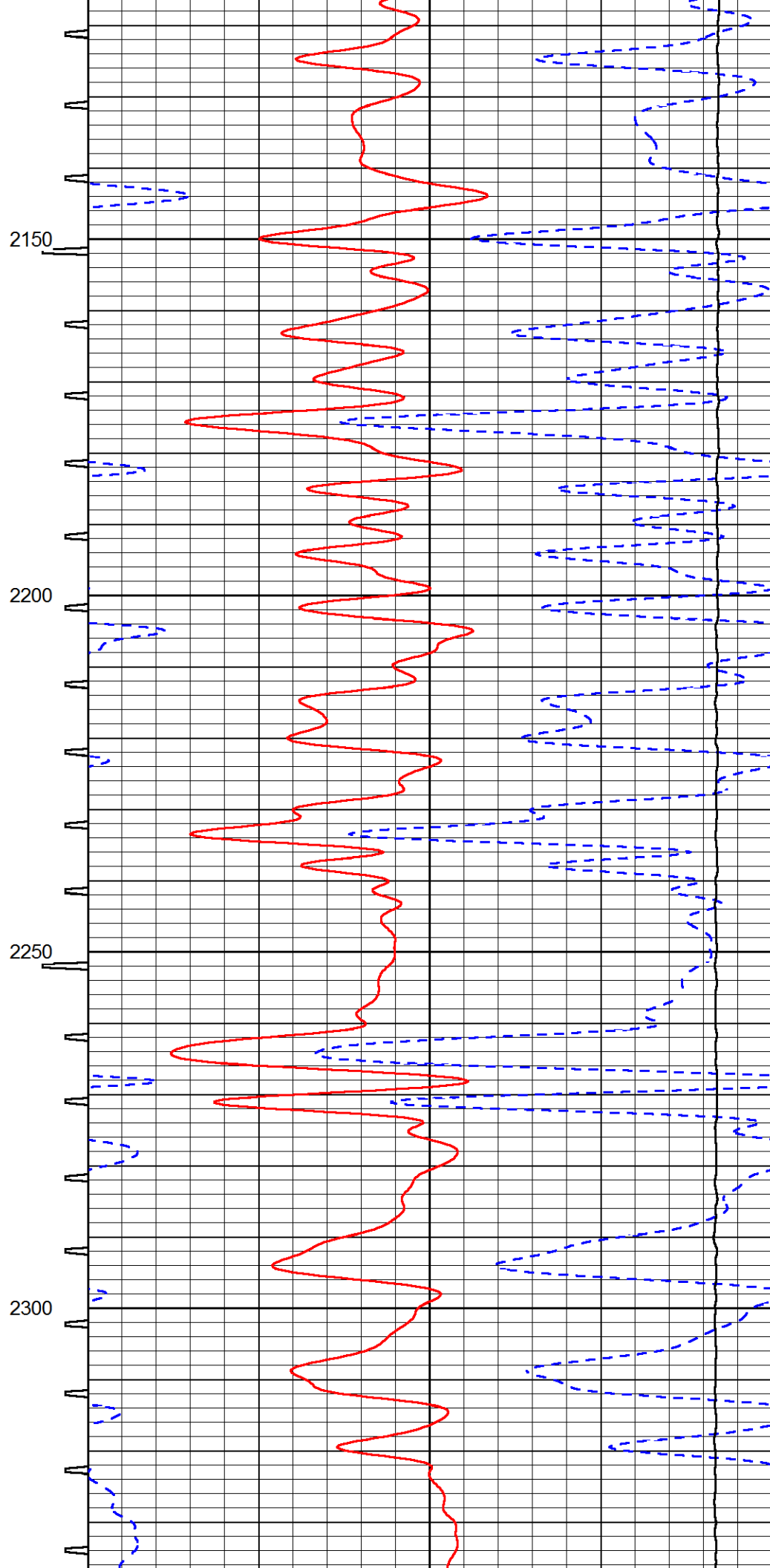
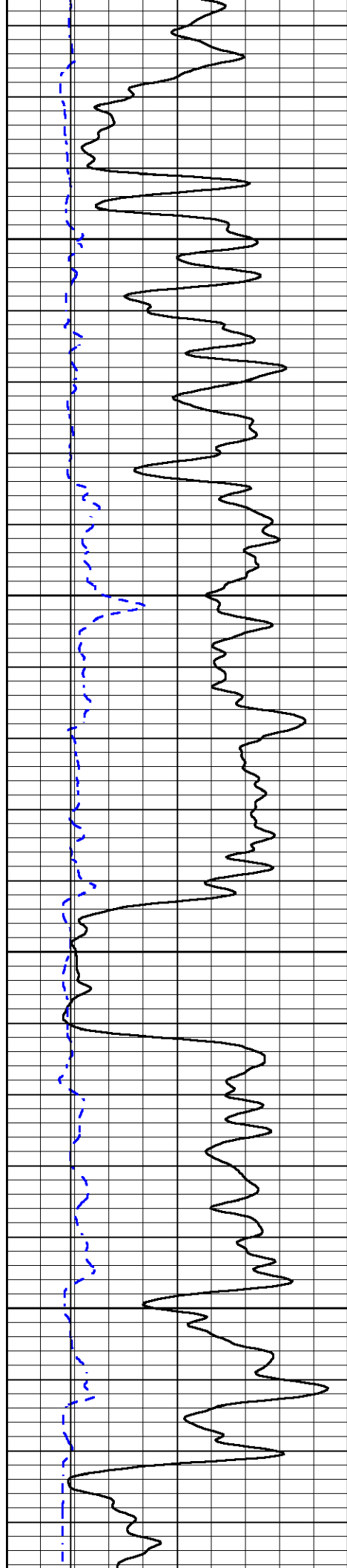


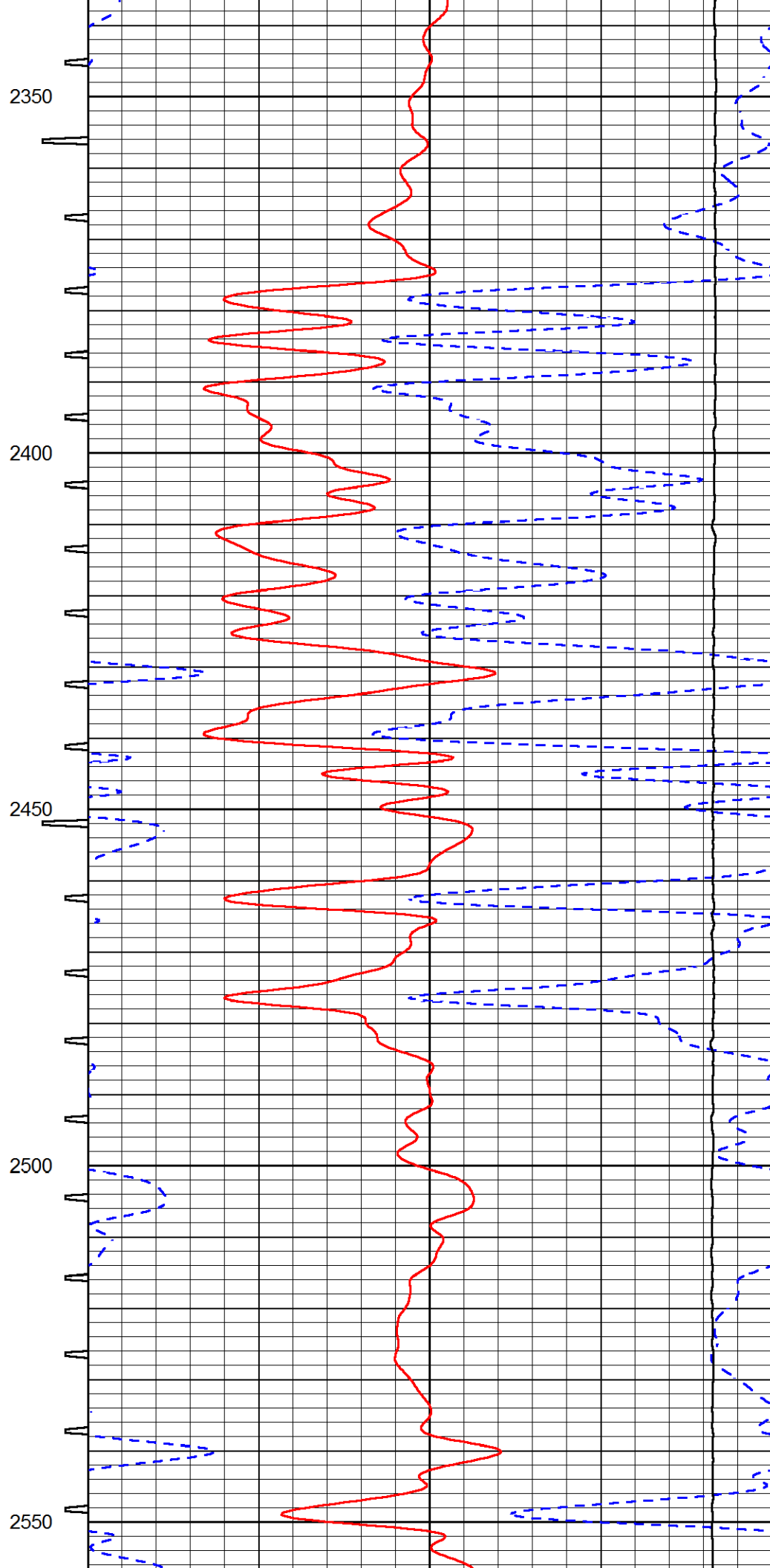
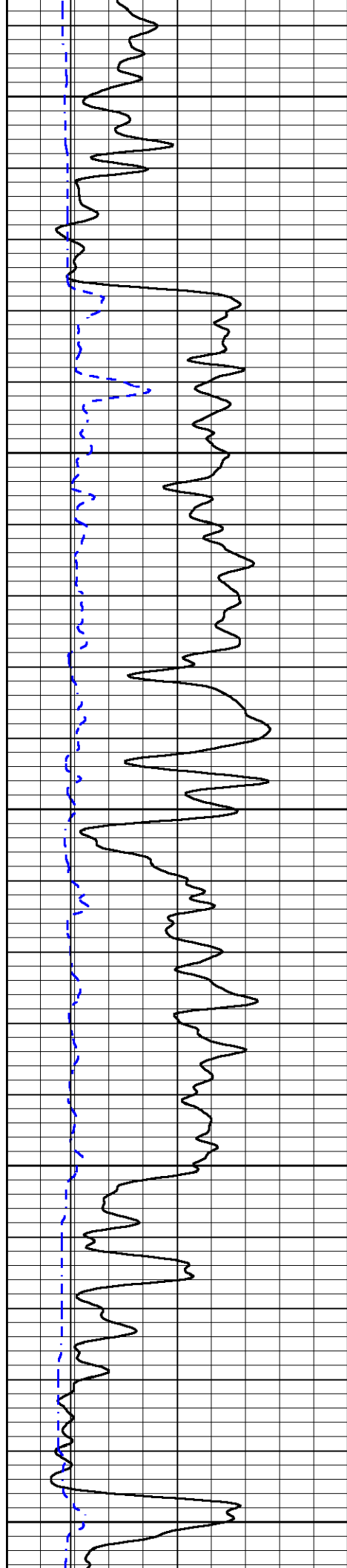


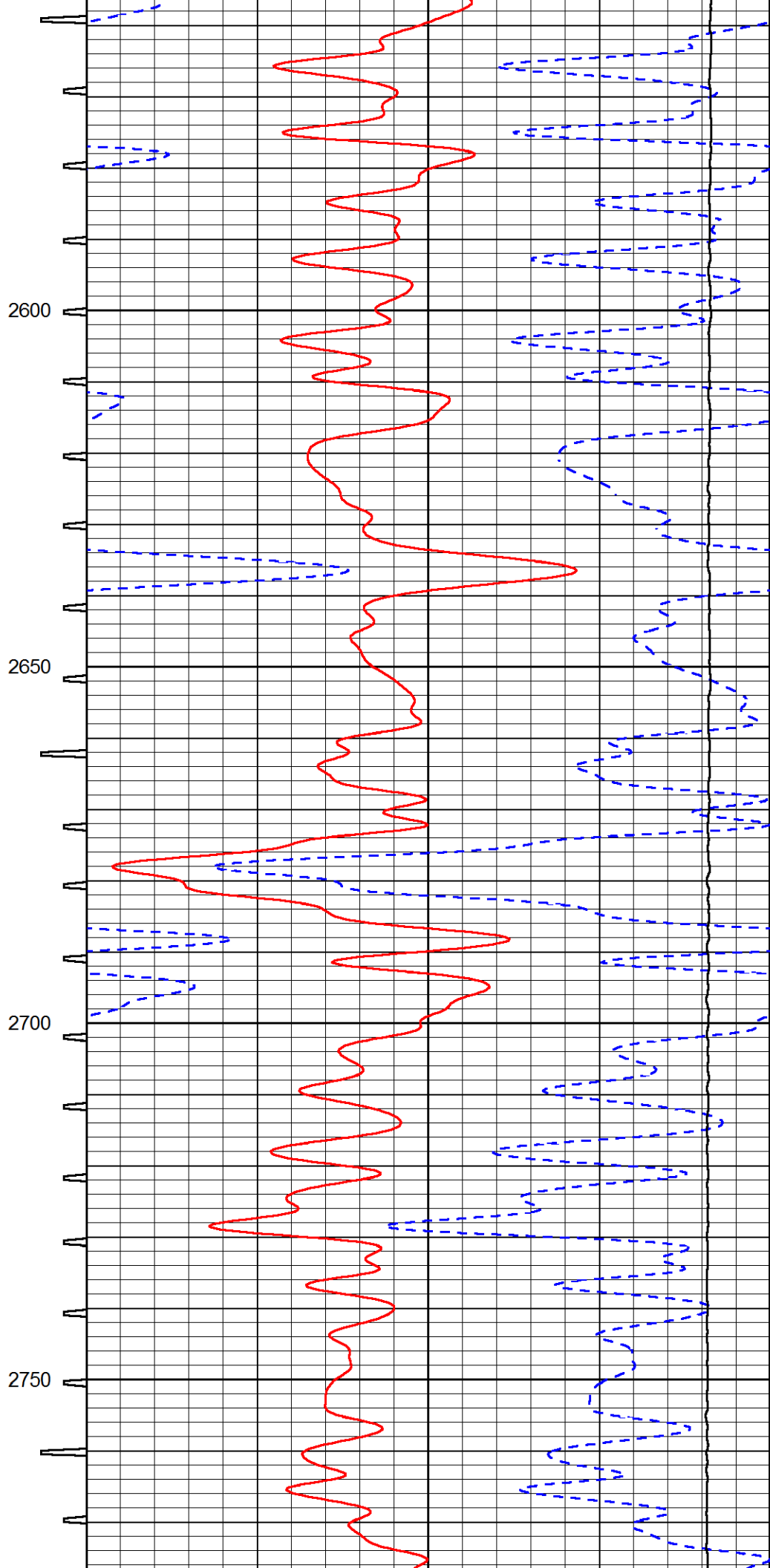
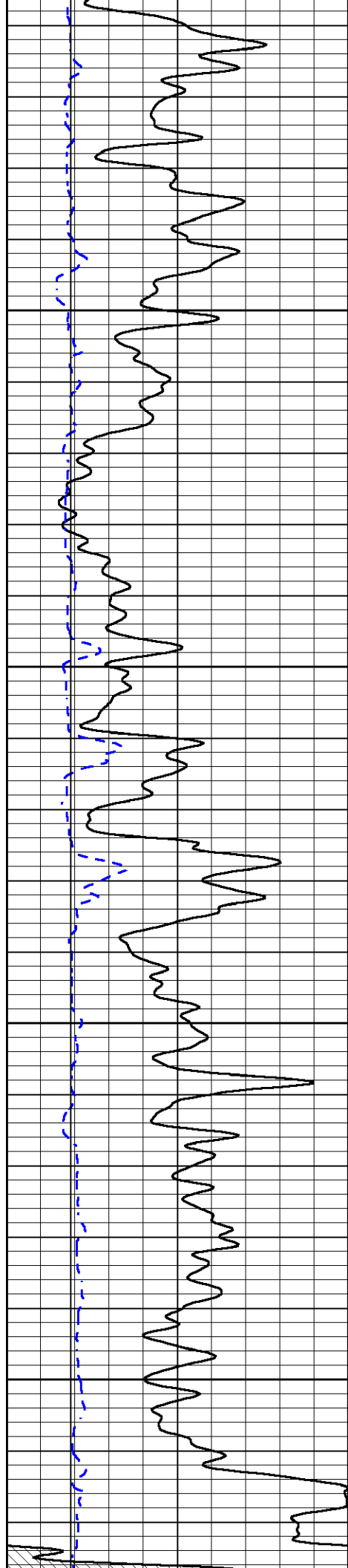


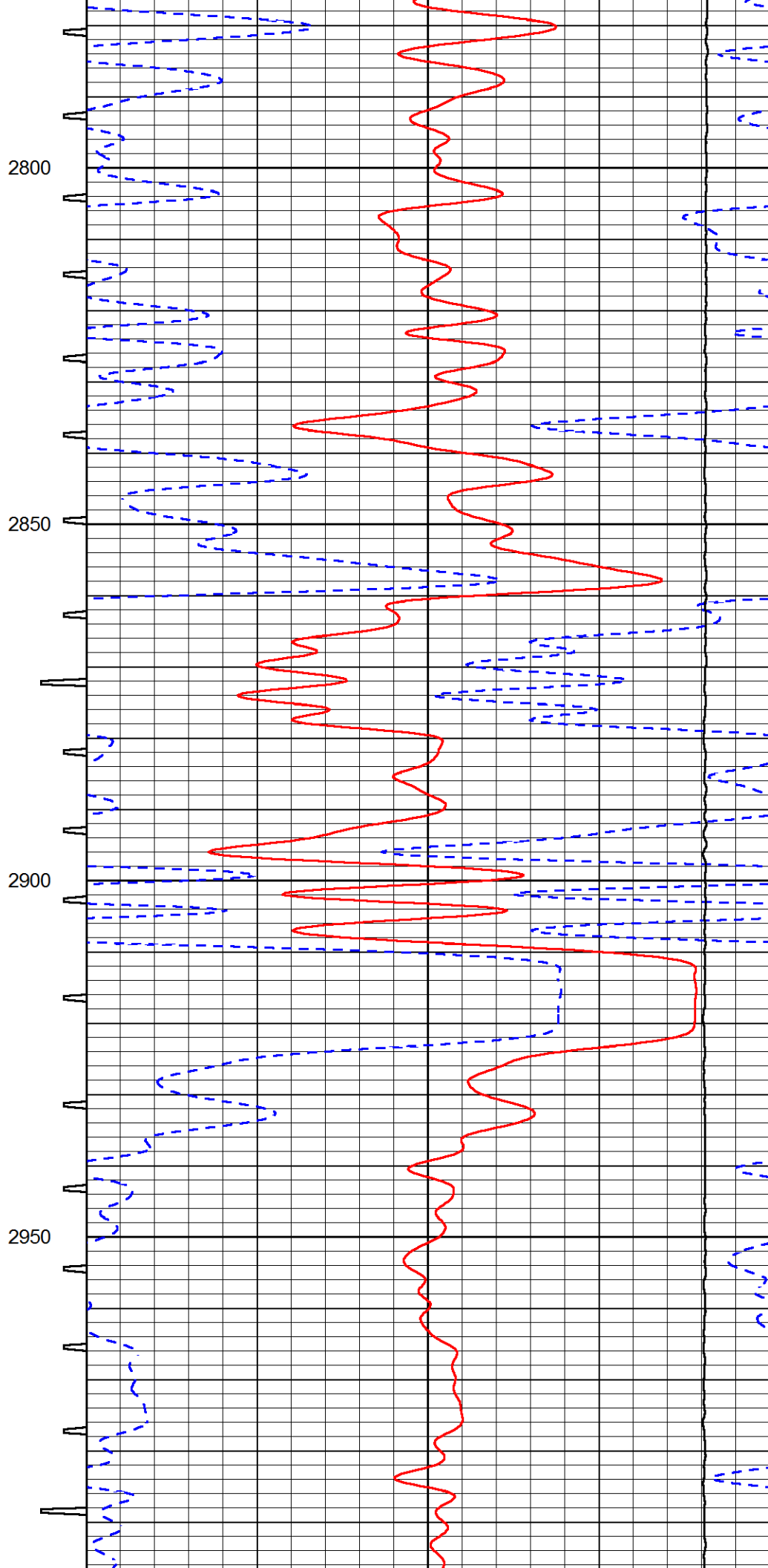
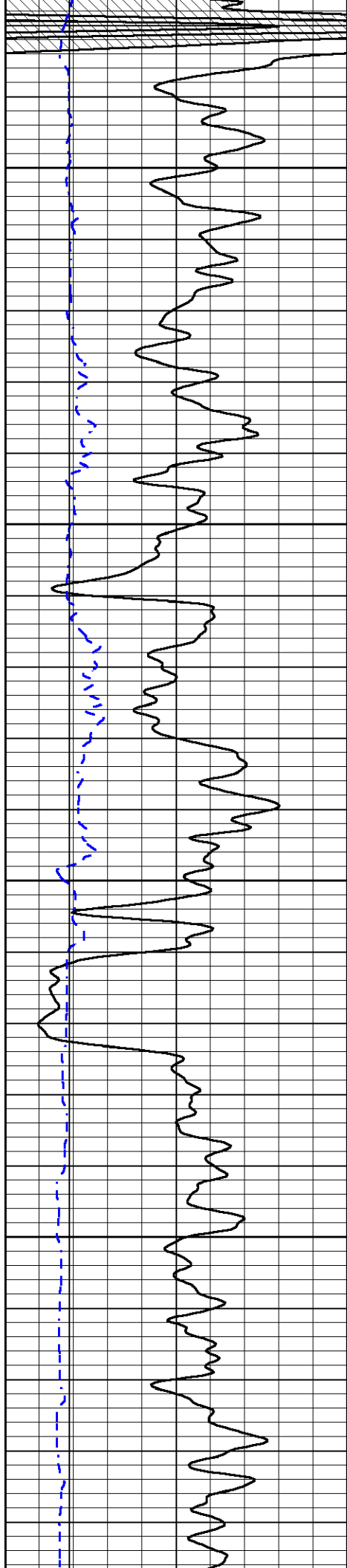


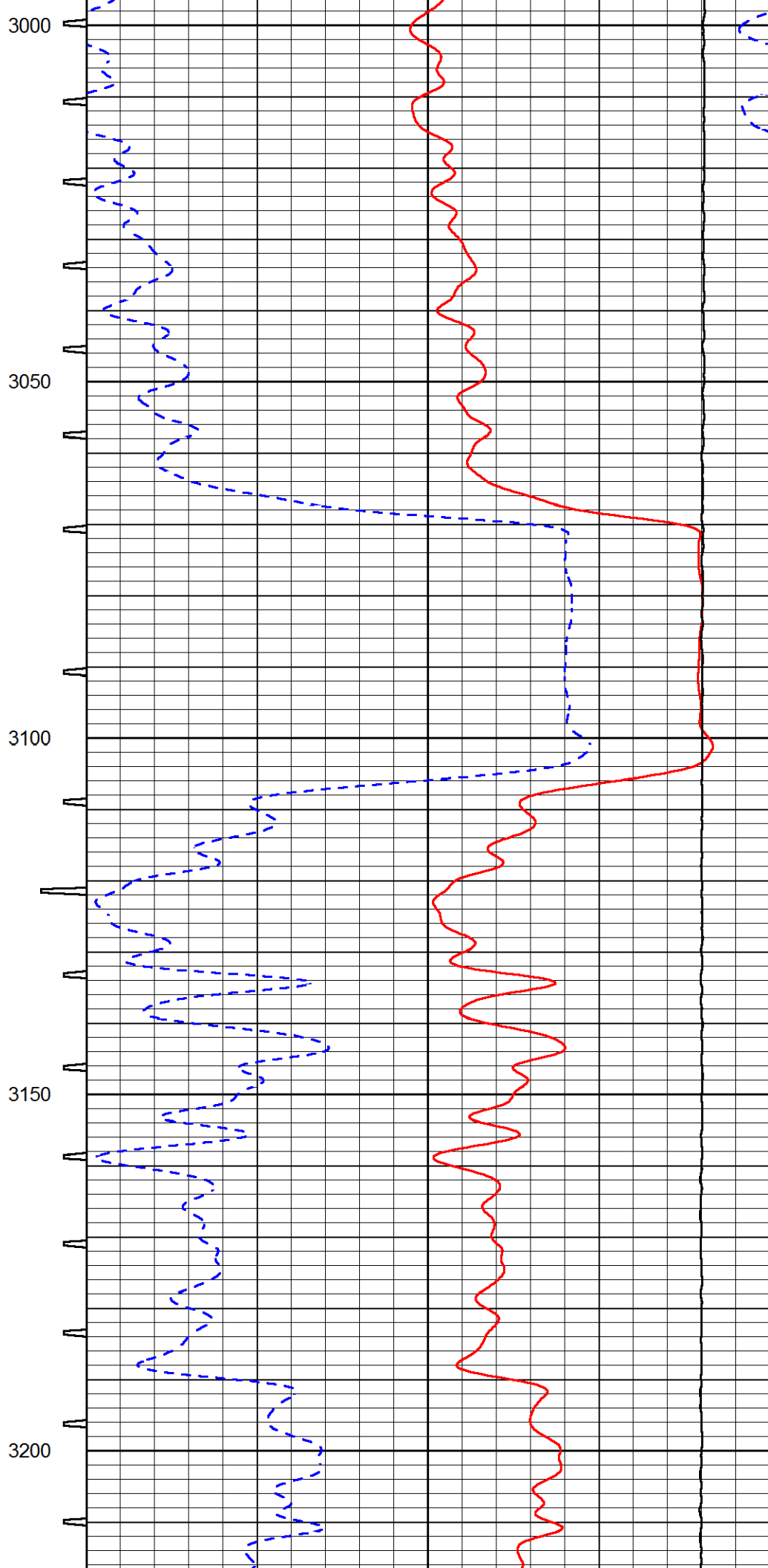
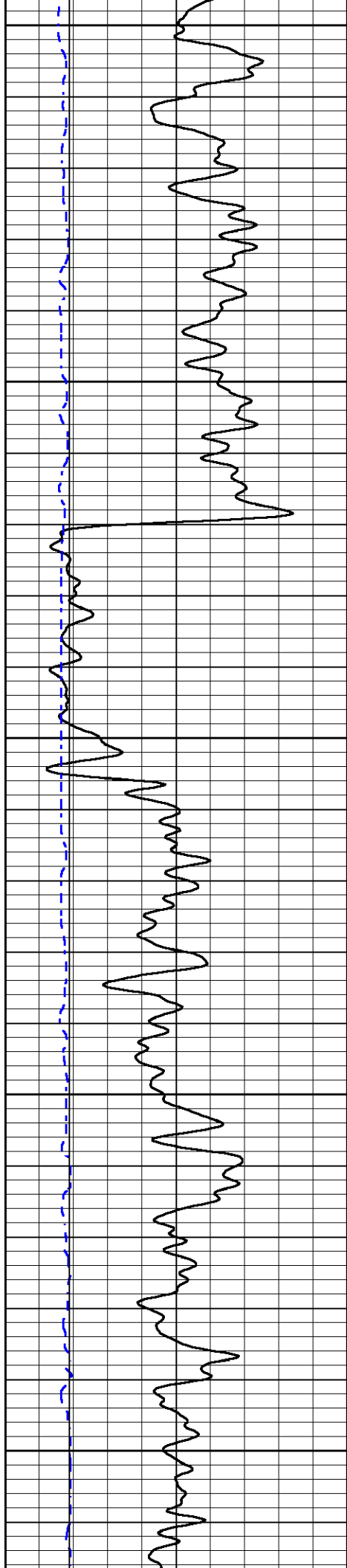


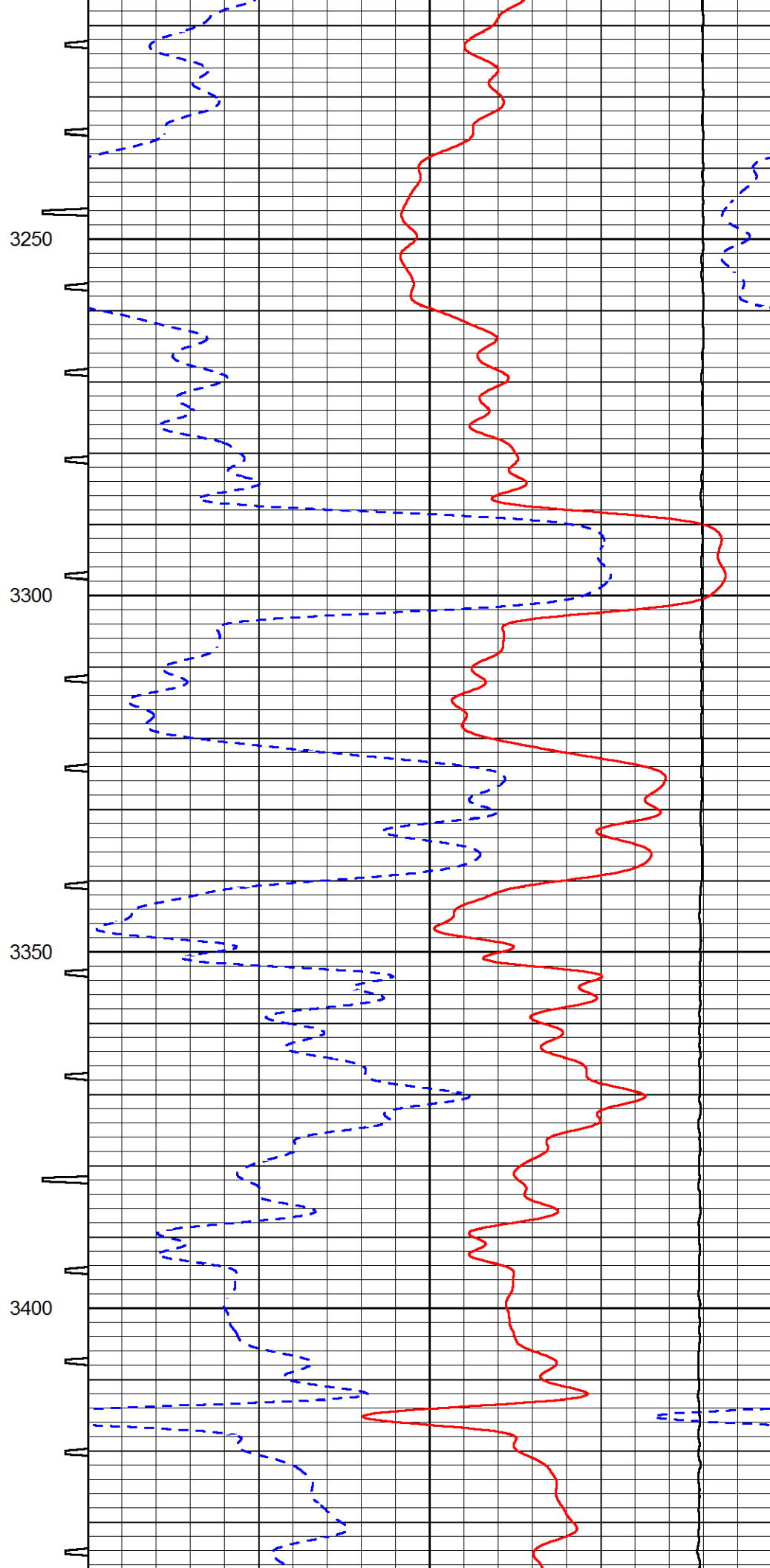
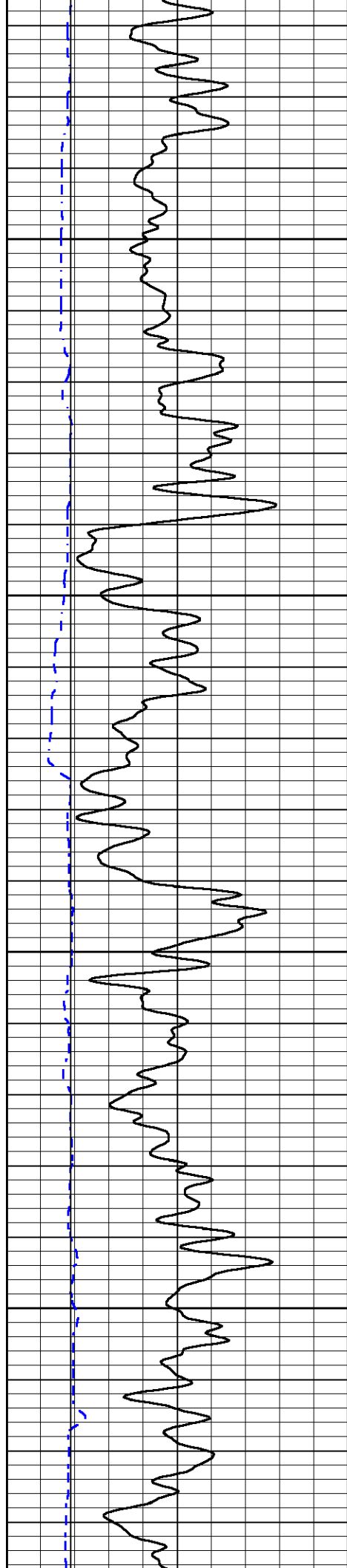


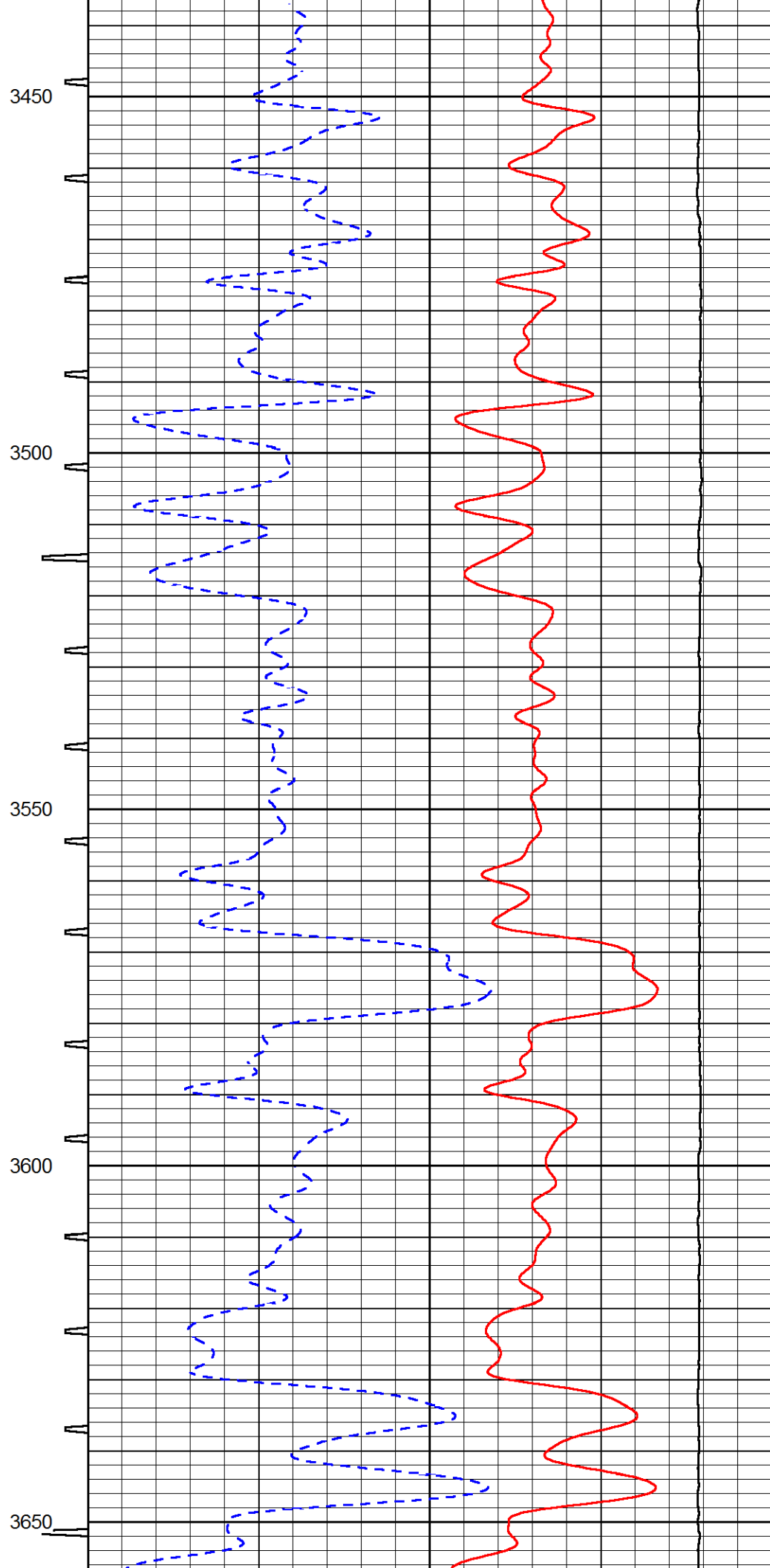
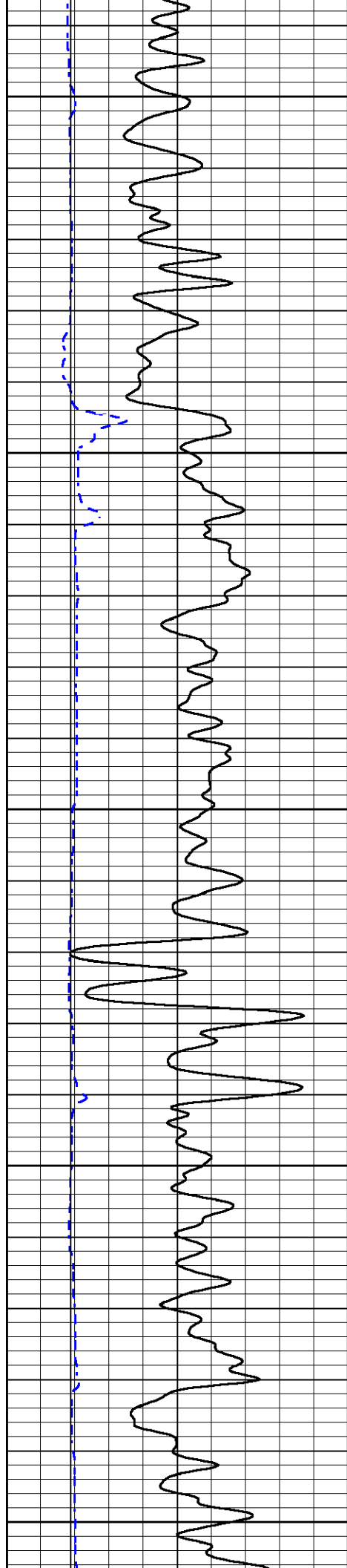


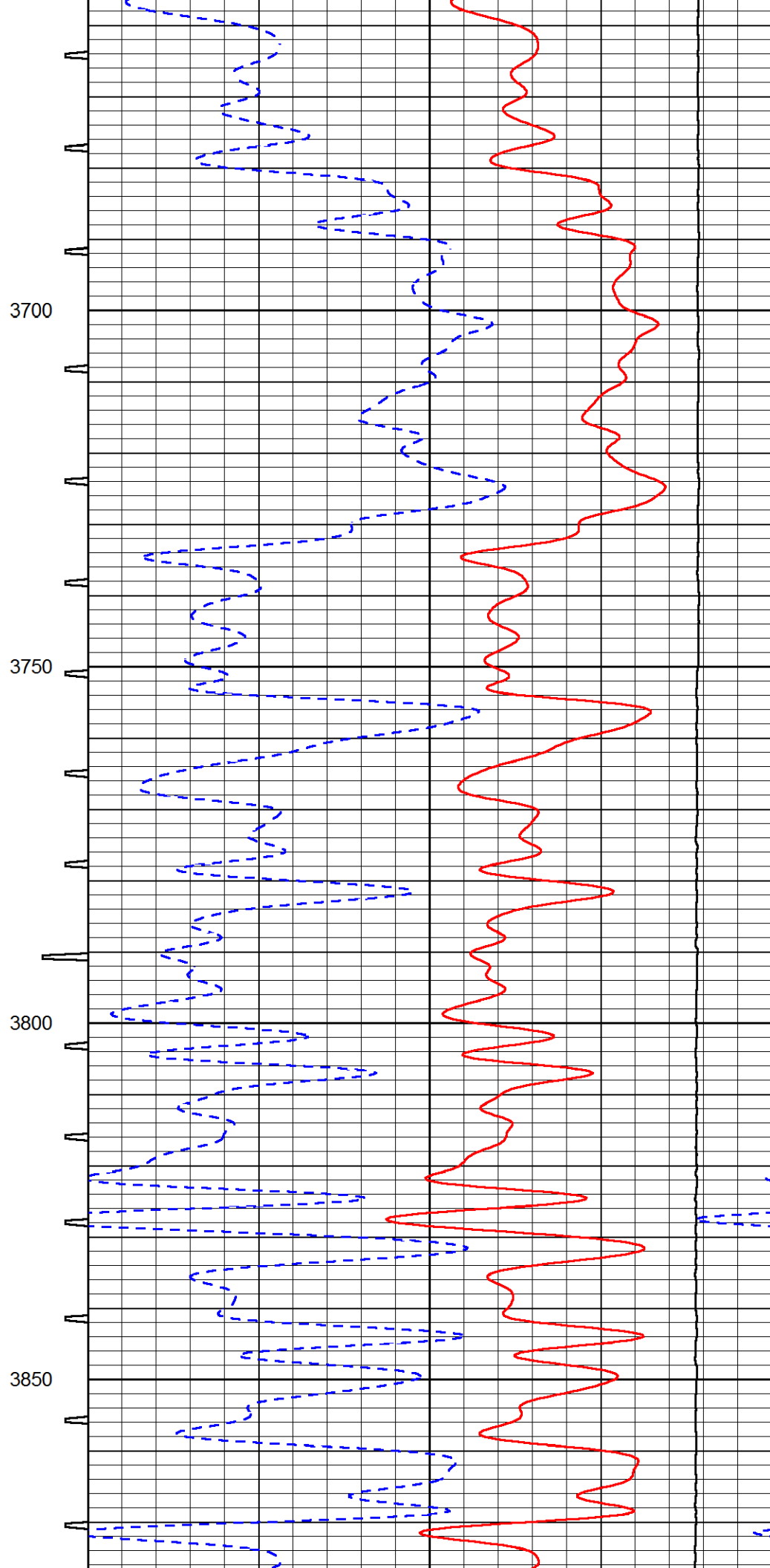
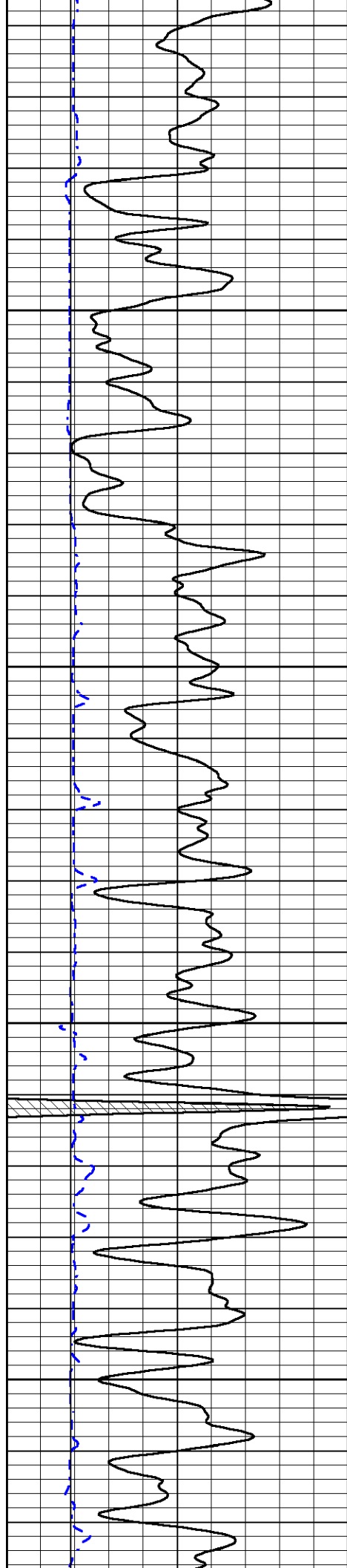


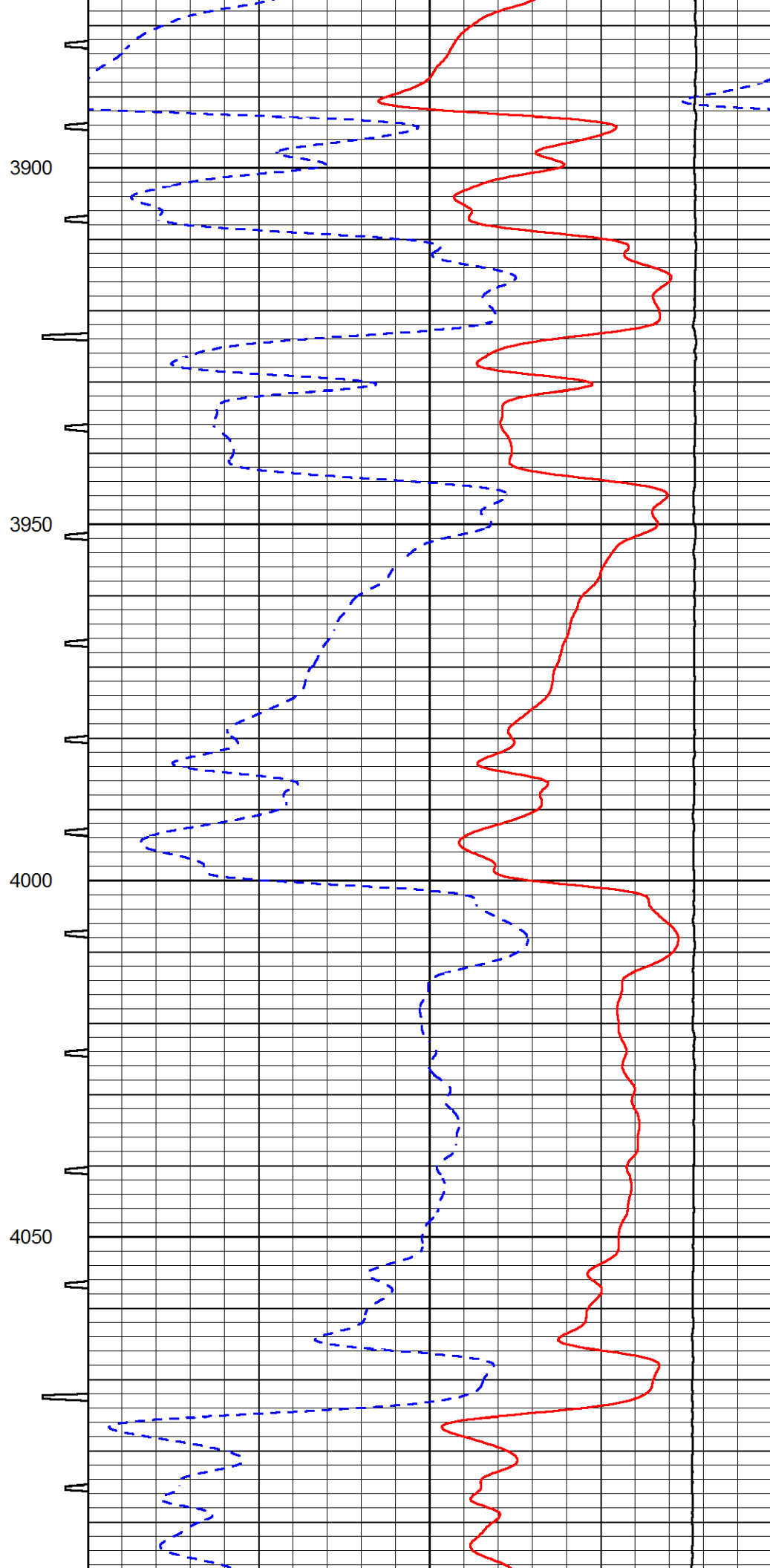
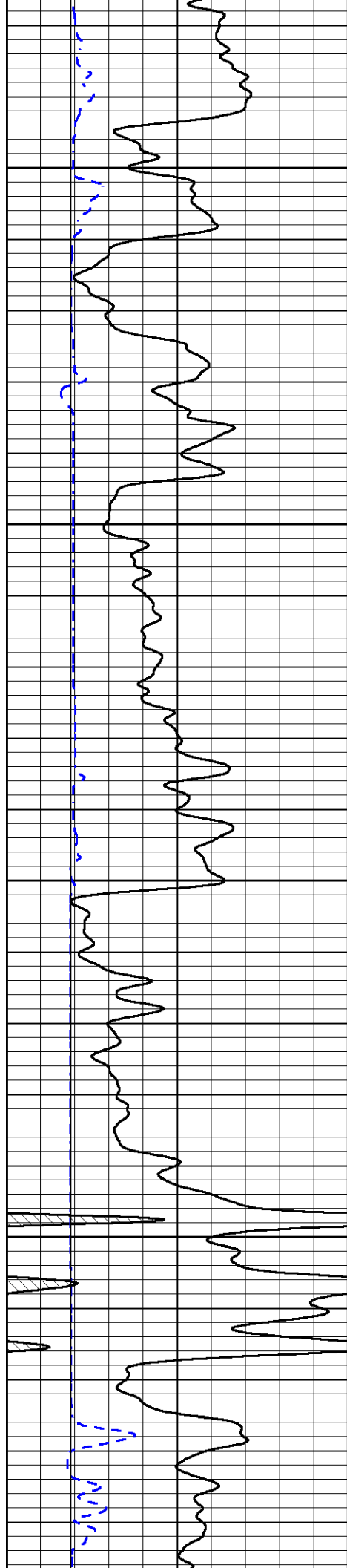


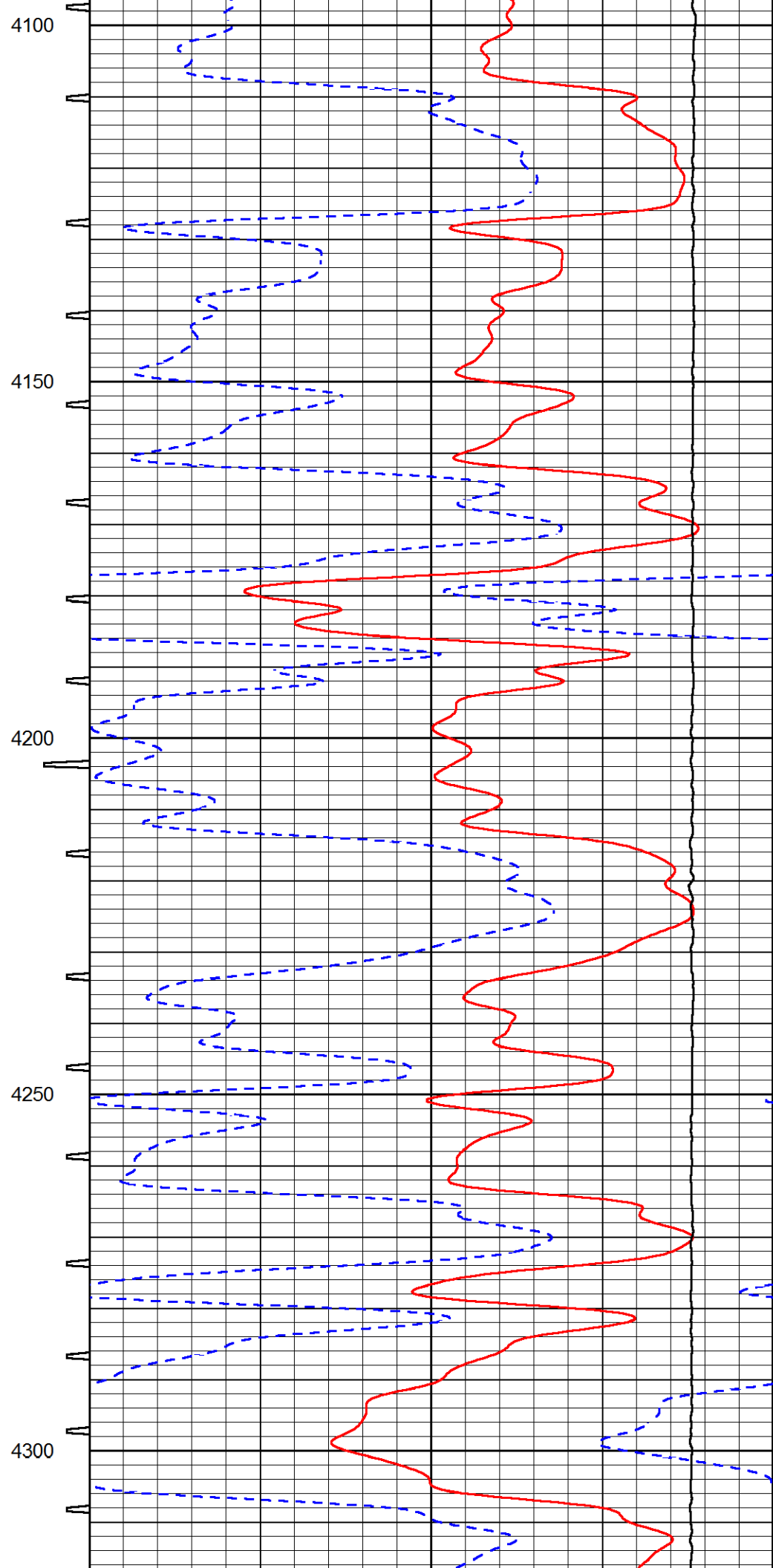
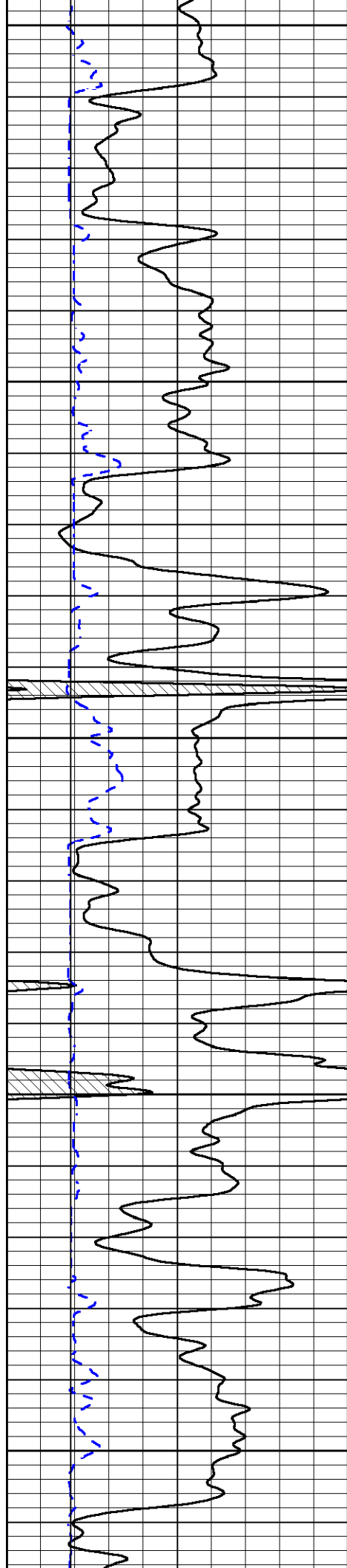


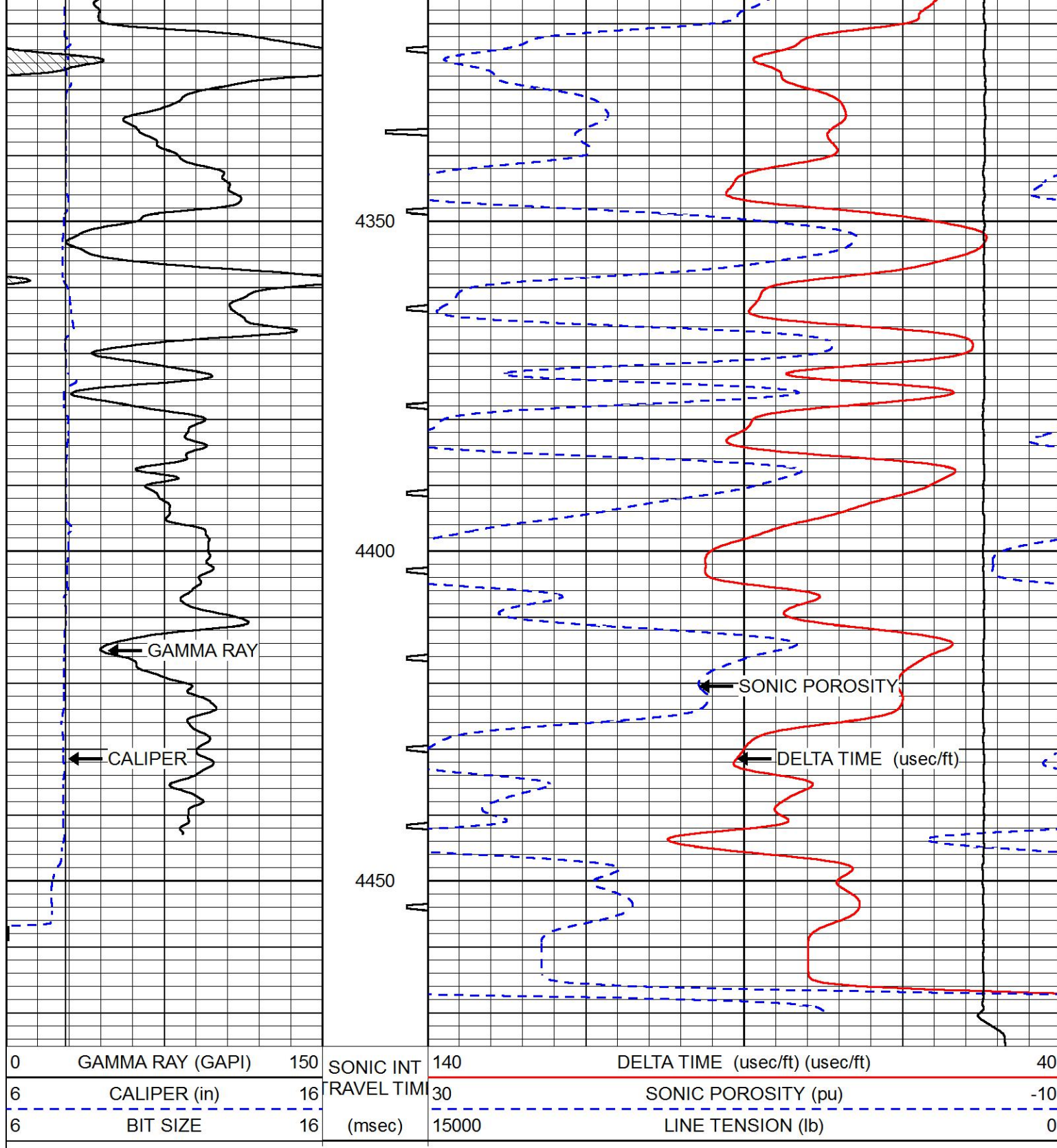






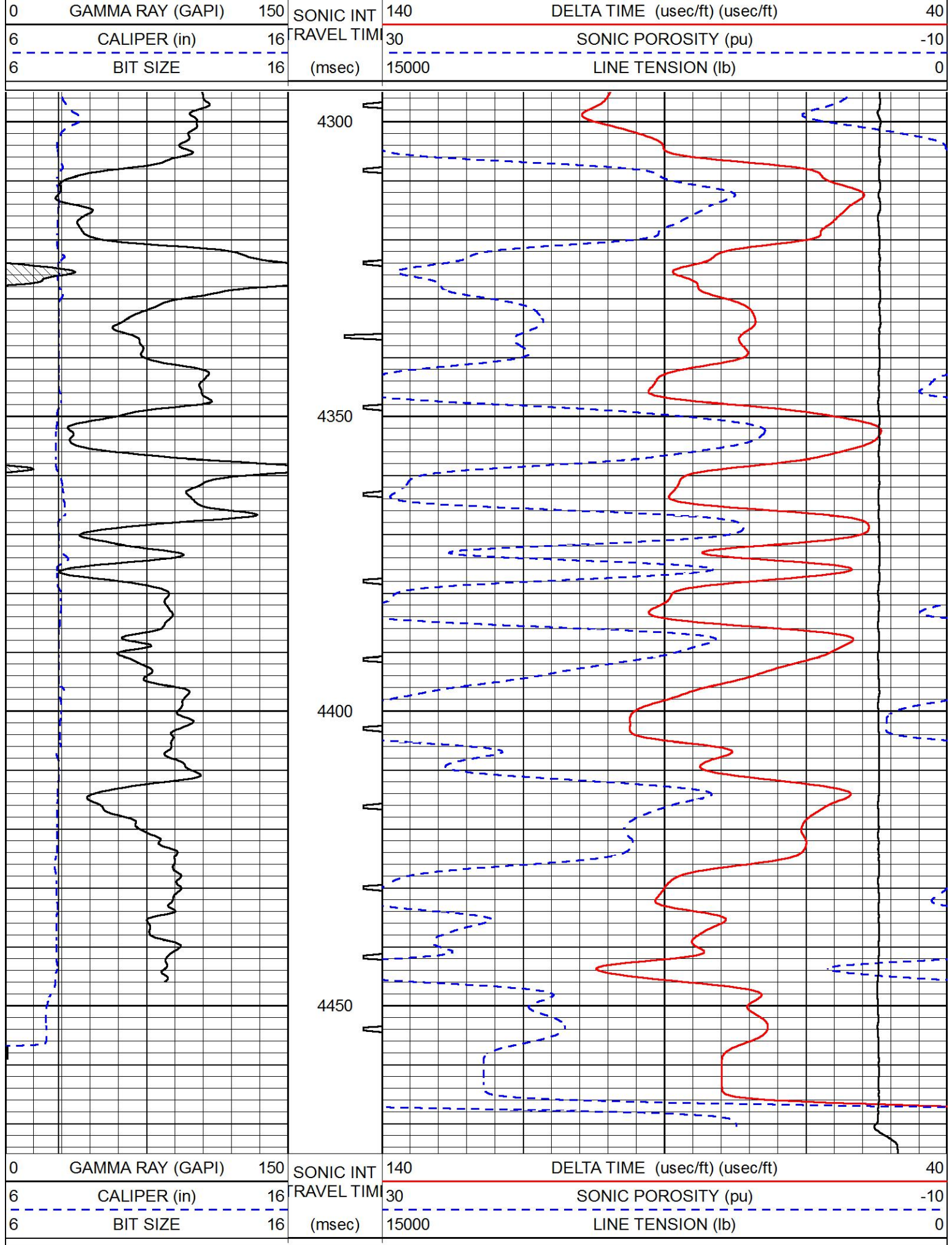






REPEAT SECTION

Database File: murfin_ken_3_17.db
 Dataset Pathname: stack/pass2.1
 Presentation Format: sonic
 Dataset Creation: Fri Jul 14 14:32:37 2017
 Charted by: Depth in Feet scaled 1:240





Company	MURFIN DRILLING COMPANY, INC.
Well	KEN NO. 3-17
Field	WILDCAT
County	RAWLINS
State	KANSAS