



**BOREHOLE COMPENSATED
SONIC LOG**

Company STRATAKAN EXPLORATION, LLC
 Well GASKILL RANGE-BERTRAND 5-1
 Field WILDCAT
 County LOGAN
 State KANSAS

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Location: API #: 15-109-21524-00-00
 56' FSL & 2048' FWL
 SEC 5 TWP 12S RGE 33W
 Permanent Datum GROUND LEVEL Elevation 3167'
 Log Measured From KELLY BUSHING
 Drilling Measured From KELLY BUSHING
 Other Services
 DIL/MEL
 CNL/CDL
 Elevation
 K.B. 3172'
 D.F. N/A
 G.L. 3167'

Date	9/17/2017						
Run Number	TWO						
Type Log	BHCS						
Depth Driller	4790'						
Depth Logger	4789'						
Bottom Logged Interval	4778'						
Top Logged Interval	250'						
Type Fluid In Hole	CHEMICAL						
Salinity, PPM CL	5,000						
Density	9.2						
Level	FULL						
Max. Rec. Temp. F	124 DEG/F						
Operating Rig Time	4 HOURS						
Equipment -- Location	108 HAYS						
Recorded By	J. HENRICKSON						
Witnessed By	JASON ALM						
Borehole Record							
Run No.	Bit	From	To	Size	Wgt.	From	To
ONE	12.25"	0	260'	8.625"	23#	0	260'
TWO	7.7875"	260'	TD				
Casing Record							

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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.

MONUMENT KANSAS
5 SOUTH, EAST INTO

Log Measured From: KELLY BUSHING 5 Ft. Above Permanent Datum

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

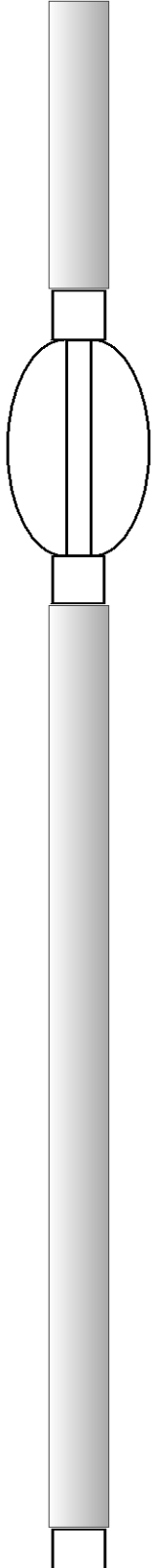

Your Pioneer Energy Services Crew	This Log Record Was Witnessed By
Engineer: J. HENRICKSON	Primary Witness: JASON ALM
Operator:	Secondary Witness:
Operator:	Secondary Witness:
Operator:	Secondary Witness:

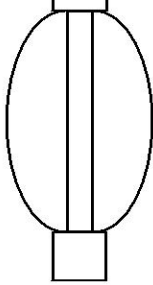
Log Variables

DatabaseC:\ProgramData\Warrior\Data\stratakan_gaskill_range_bertrand_unit_5_1.db
 Dataset field/well/stack/pass3.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	124	5.5	0	1	2	2.71
NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	0	0	0	-225	57	Off	4789

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
MCAL MI MN	28.00 28.00 28.00		ML-Armadillo (Armadillo-4) Pengo micro log tool mandrel with Armadillo Electronics	5.00	3.50	100.00
			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

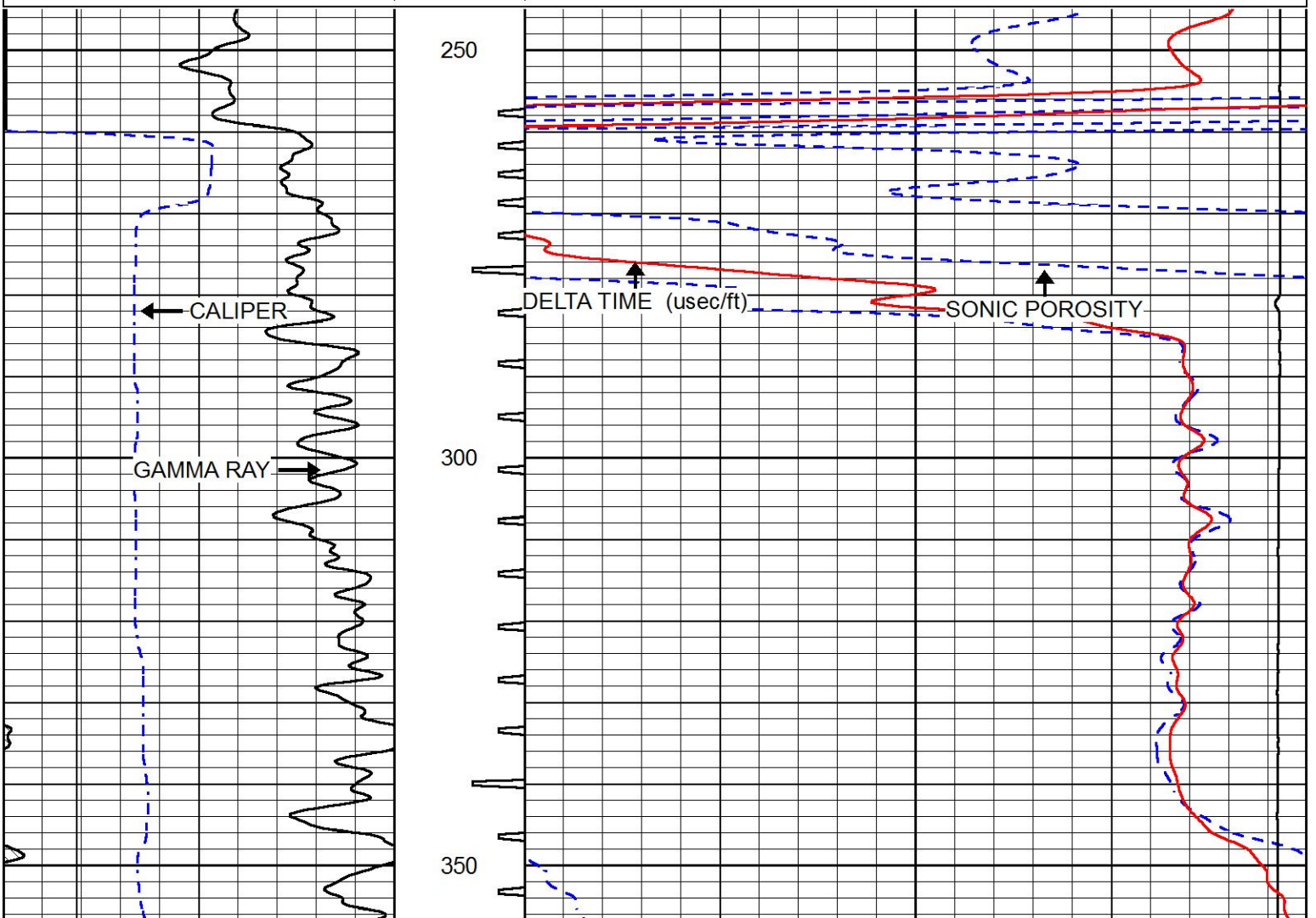
Dataset: stratakan_gaskill_range_bertrand_unit_5_1.db: field/well/SONMEL/pass3
 Total length: 32.00 ft
 Total weight: 540.00 lb
 O.D.: 3.50 in

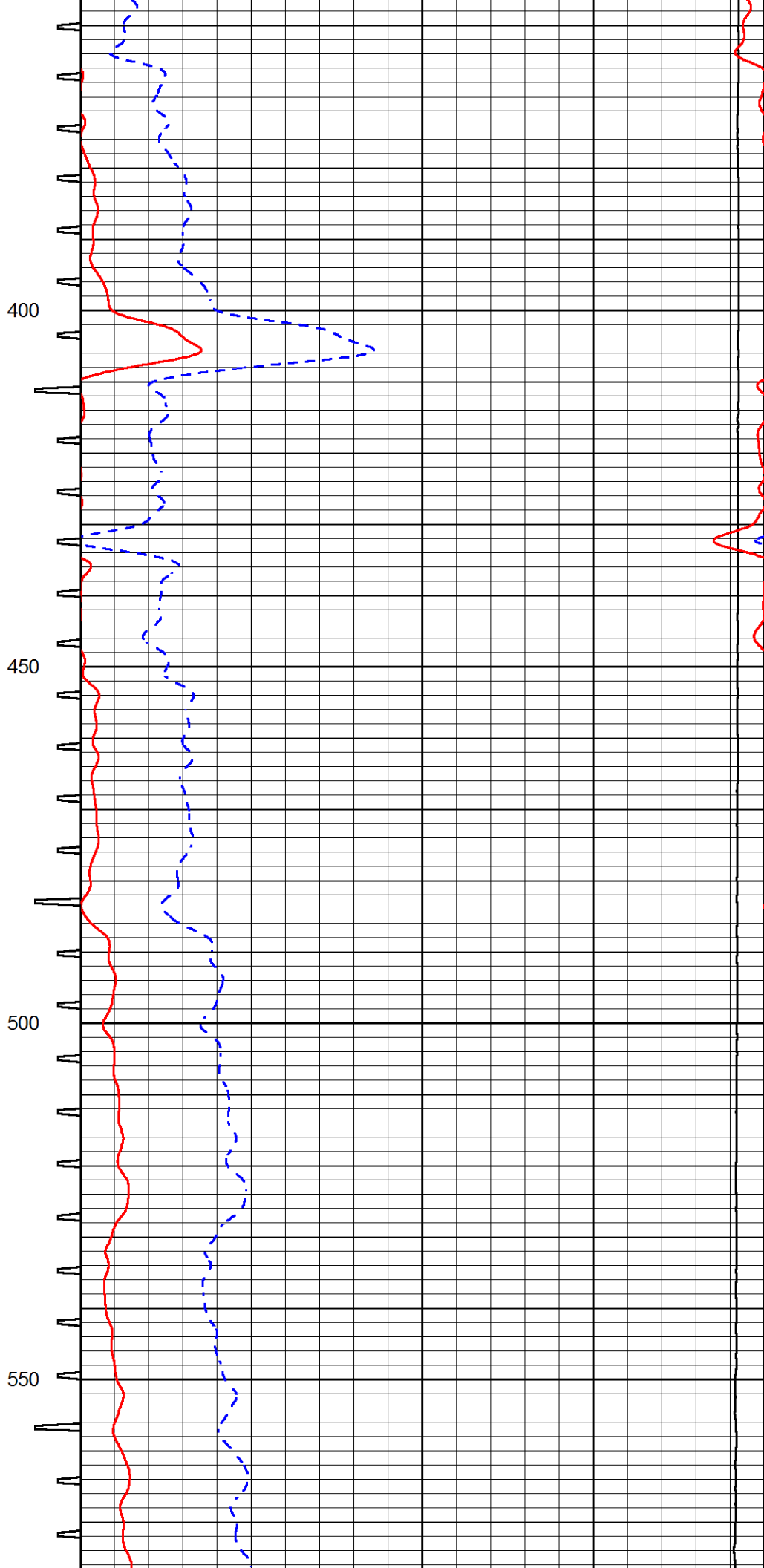
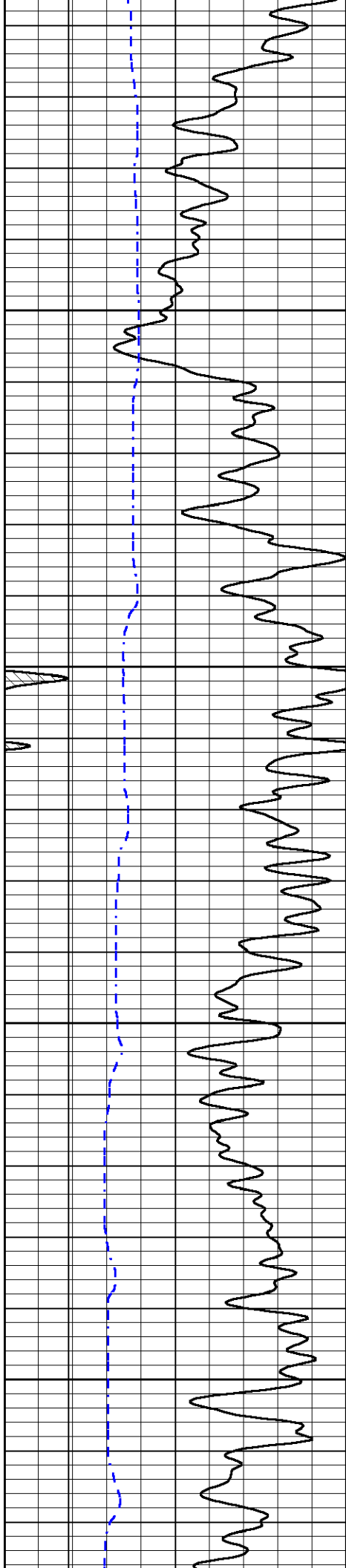


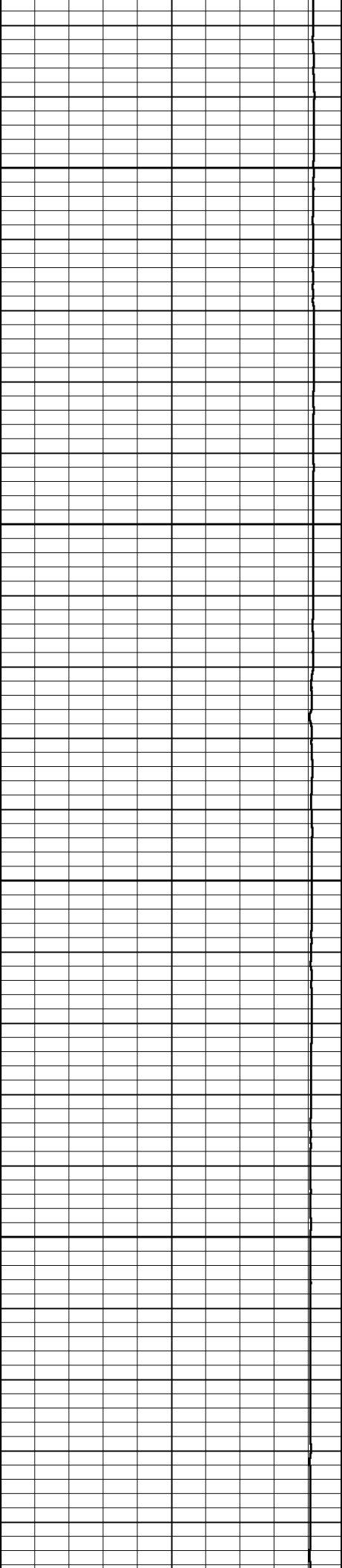
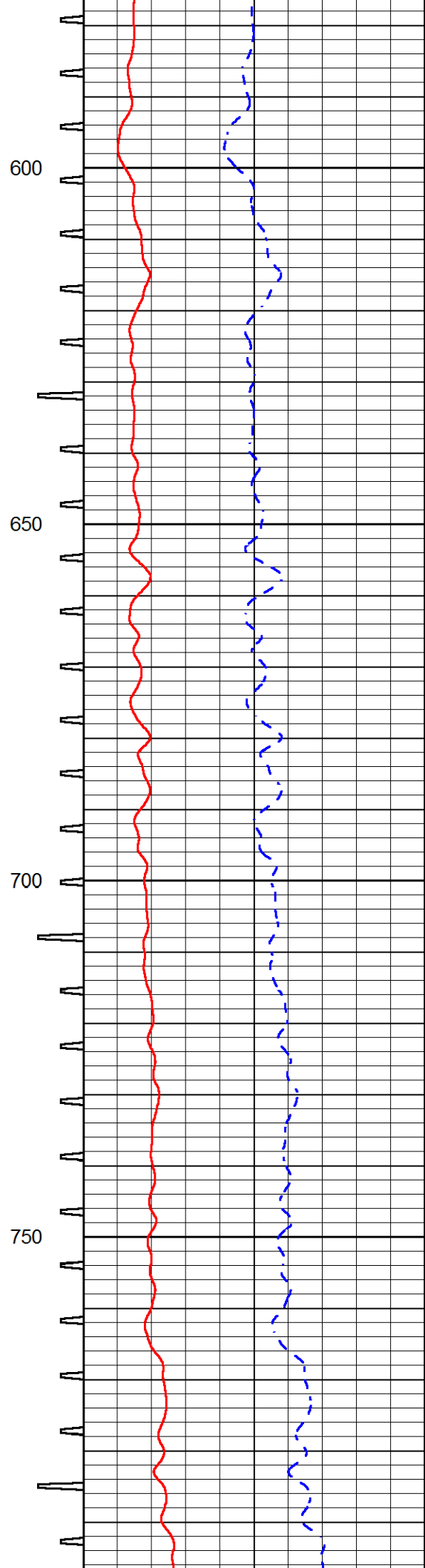
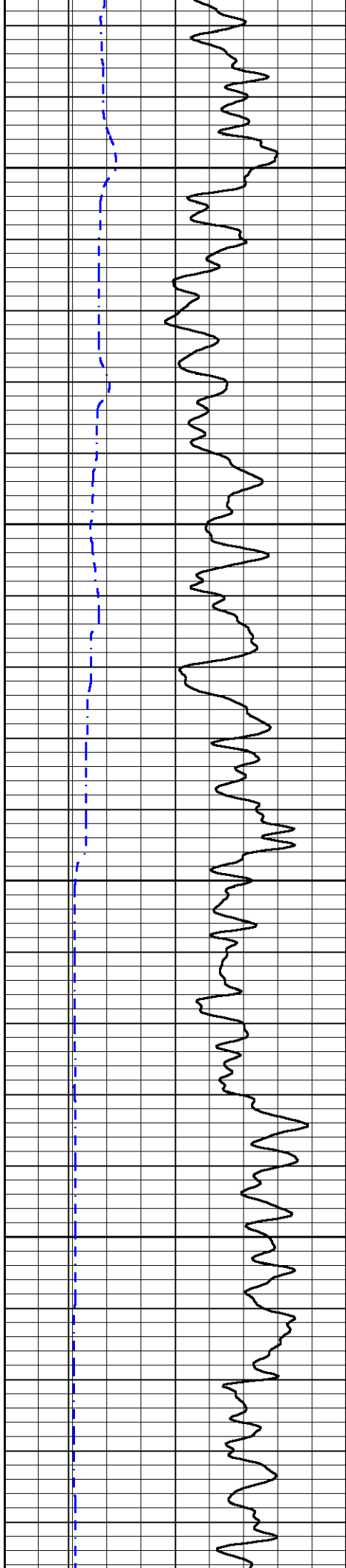
MAIN PASS

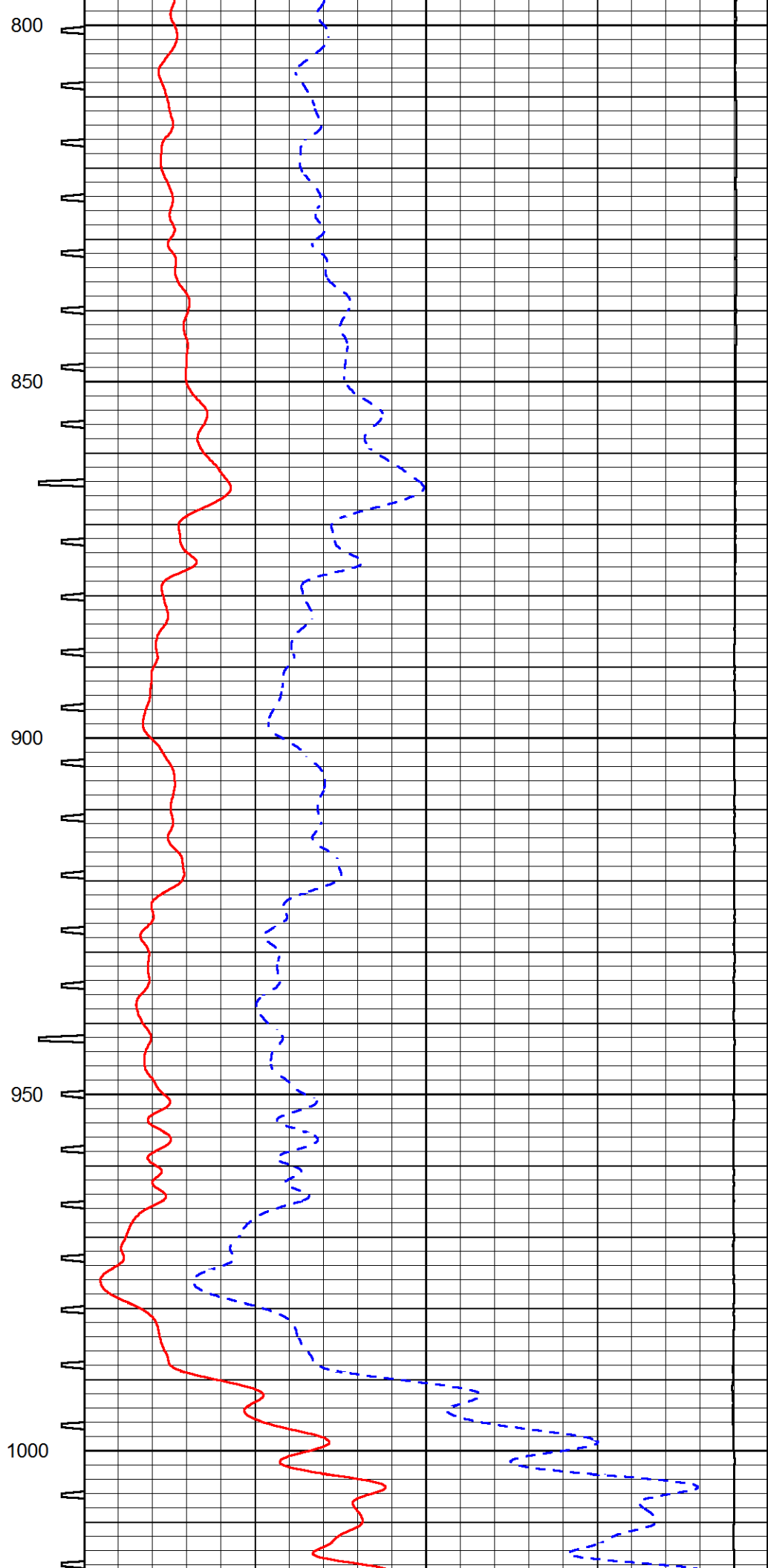
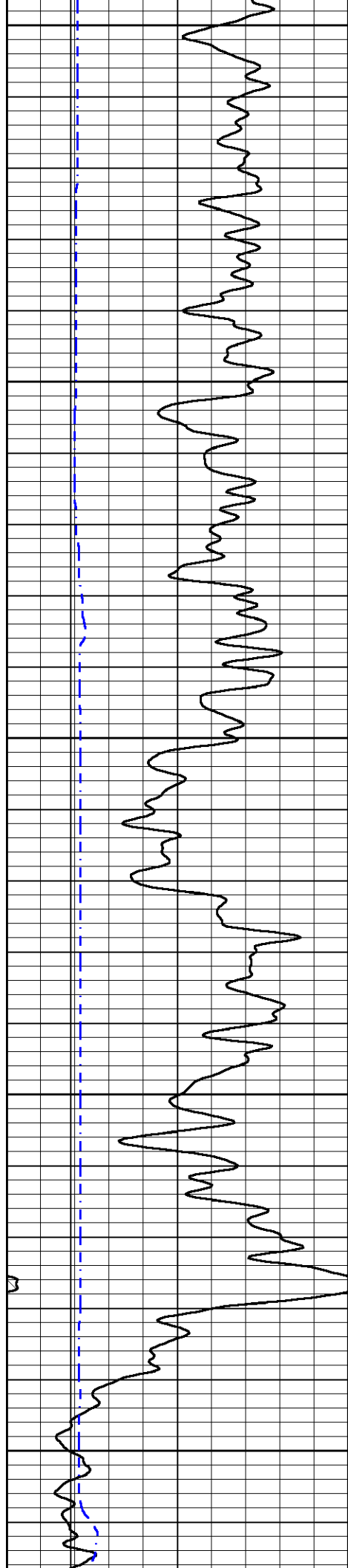
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 Dataset Pathname stack/pass3.1
 Presentation Format sonic
 Dataset Creation Sun Sep 17 17:17:20 2017
 Charted by Depth in Feet scaled 1:240

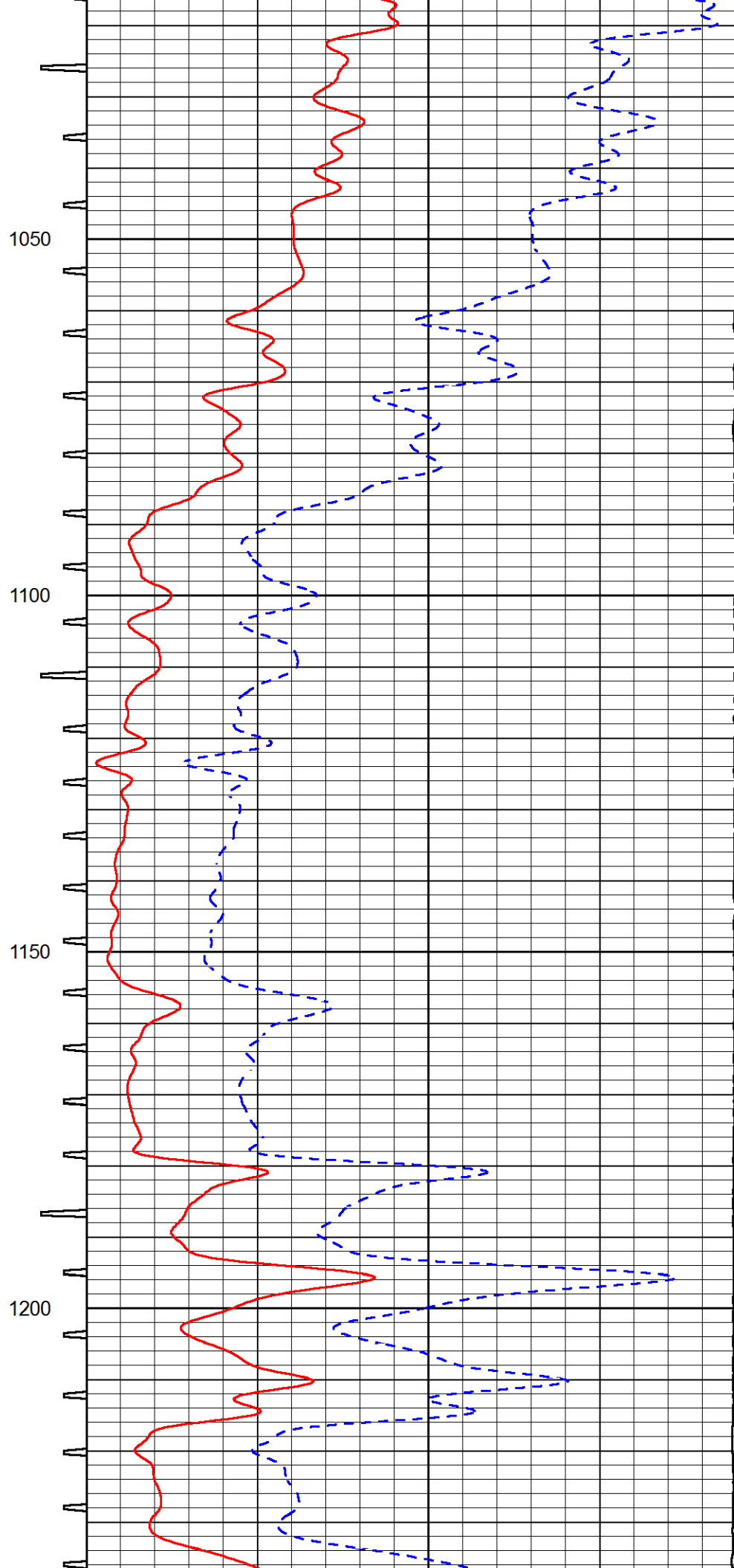
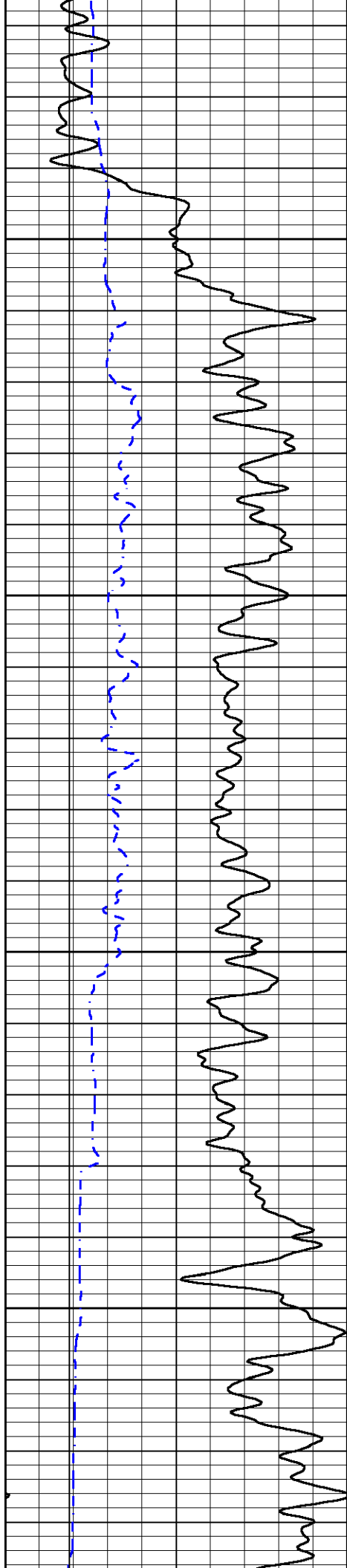
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6	CALIPER (in)	16	TRAVEL TIME	30	SONIC POROSITY (pu)	-10
6	BIT SIZE	16	(msec)	15000	LINE TENSION (lb)	0

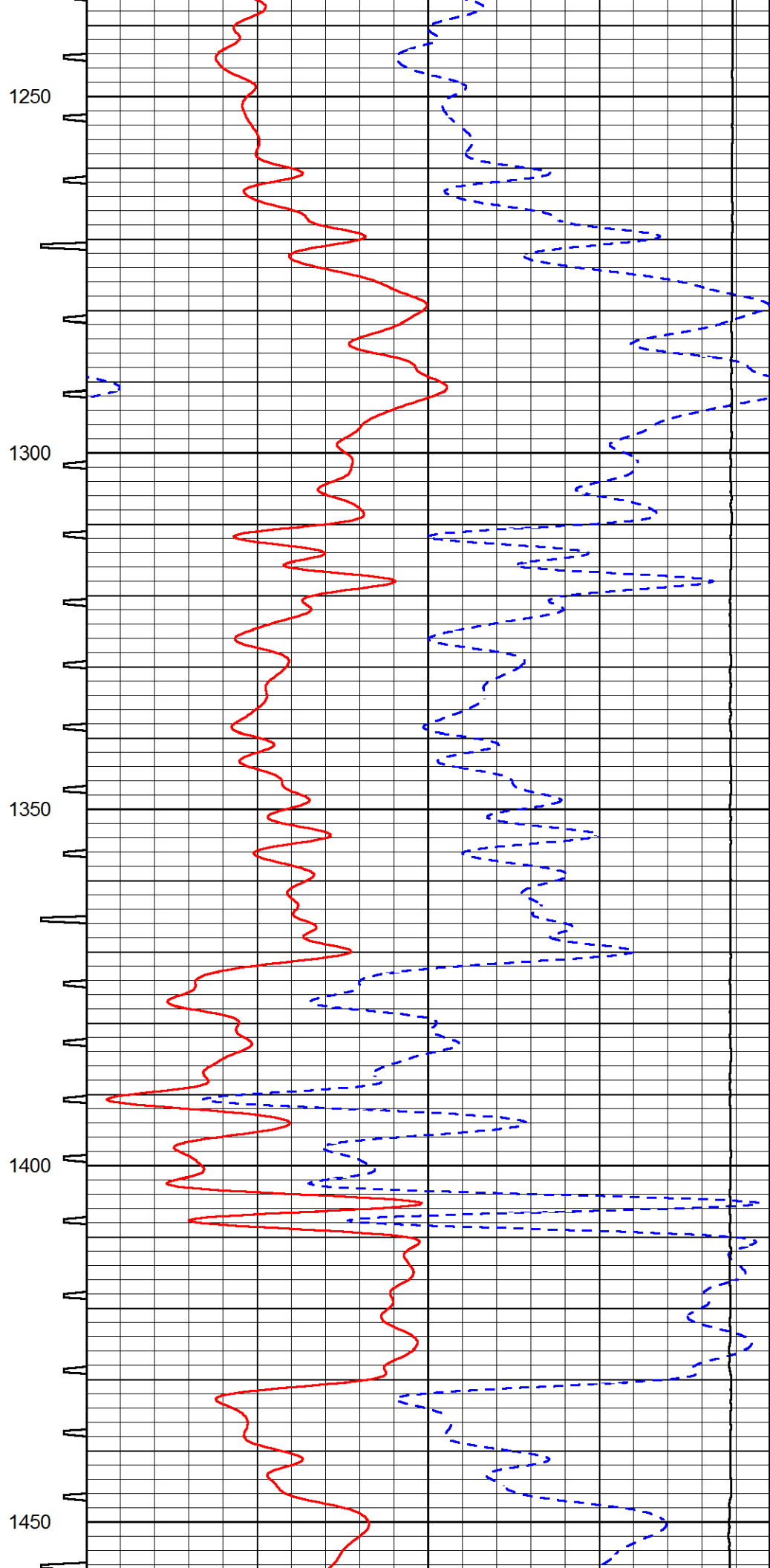
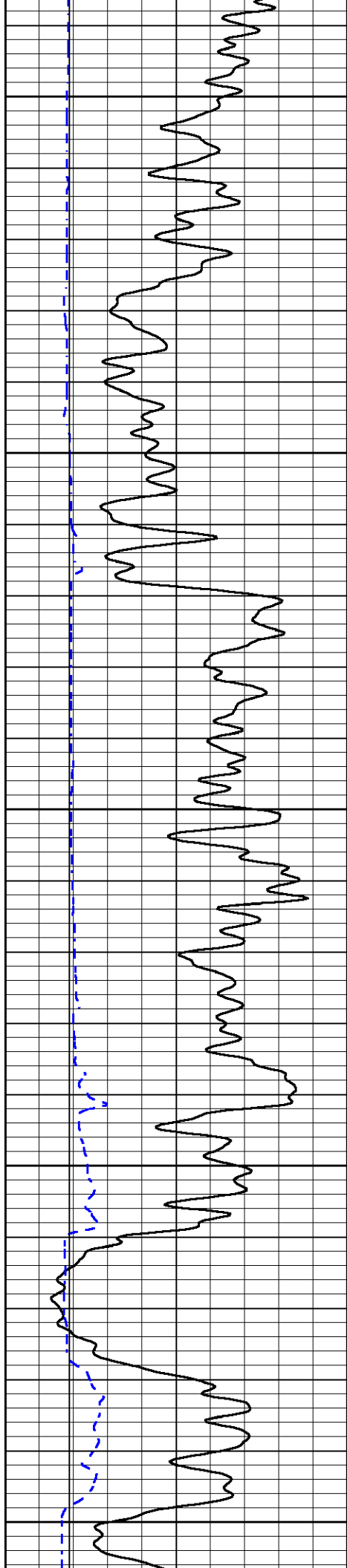


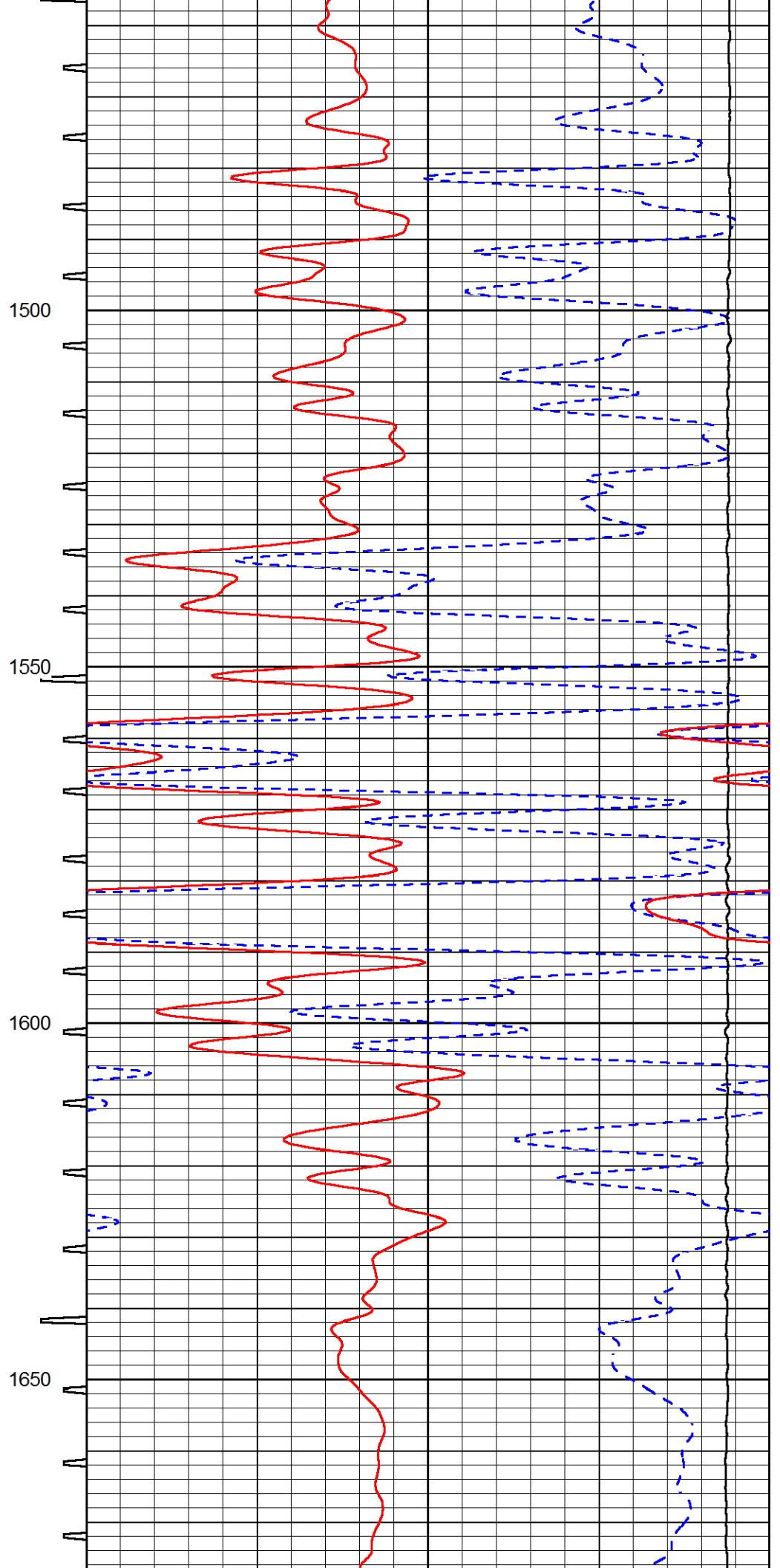
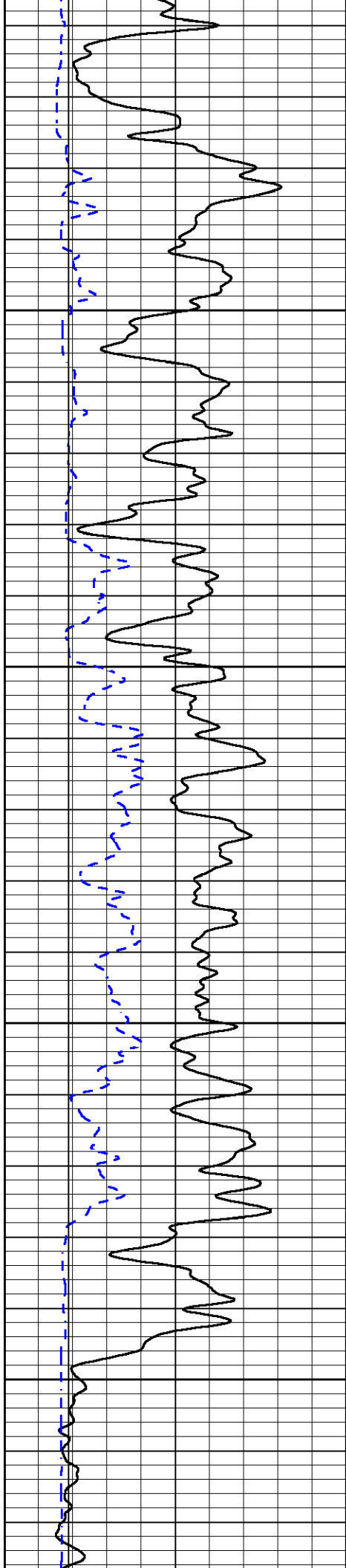


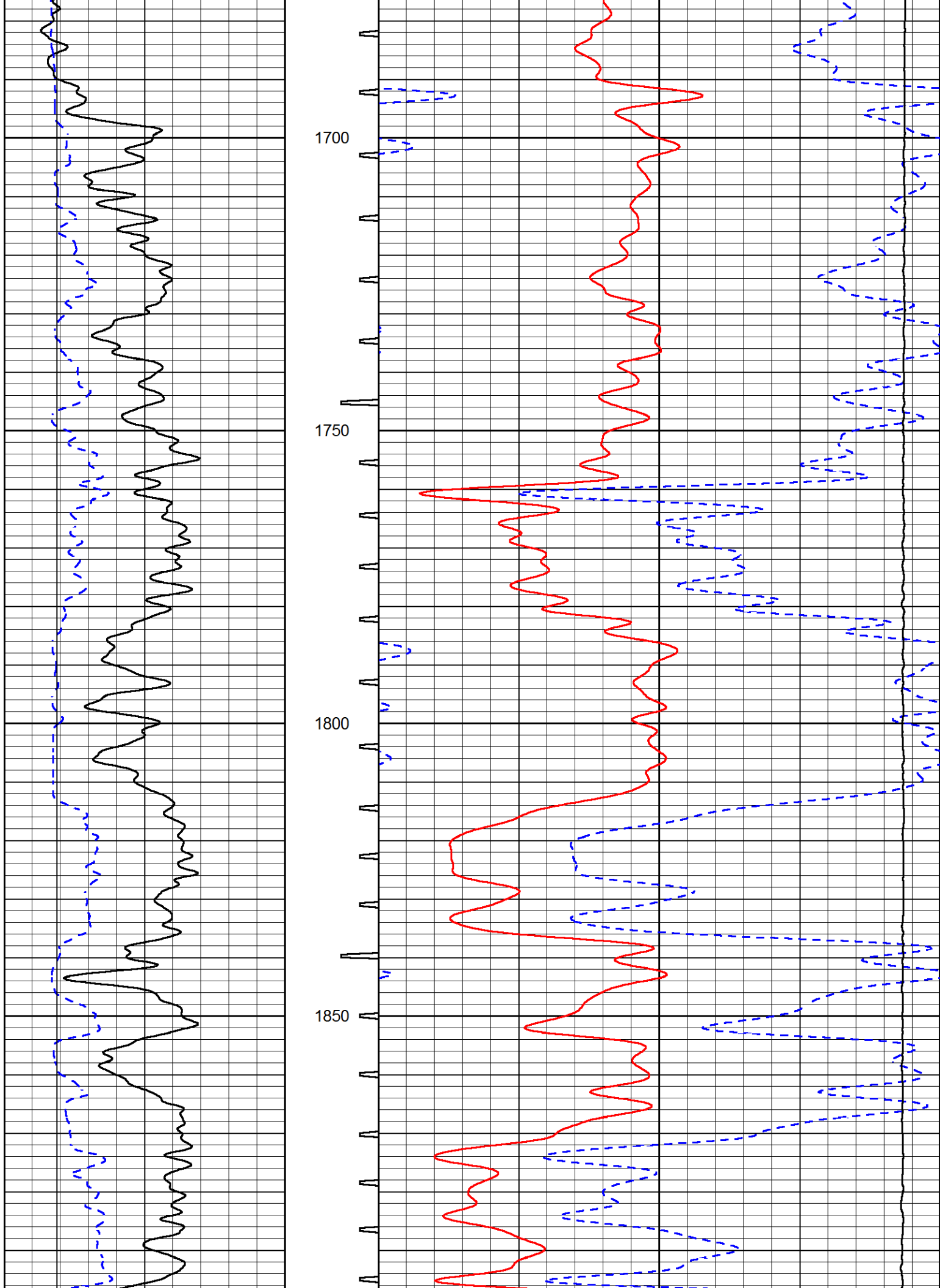


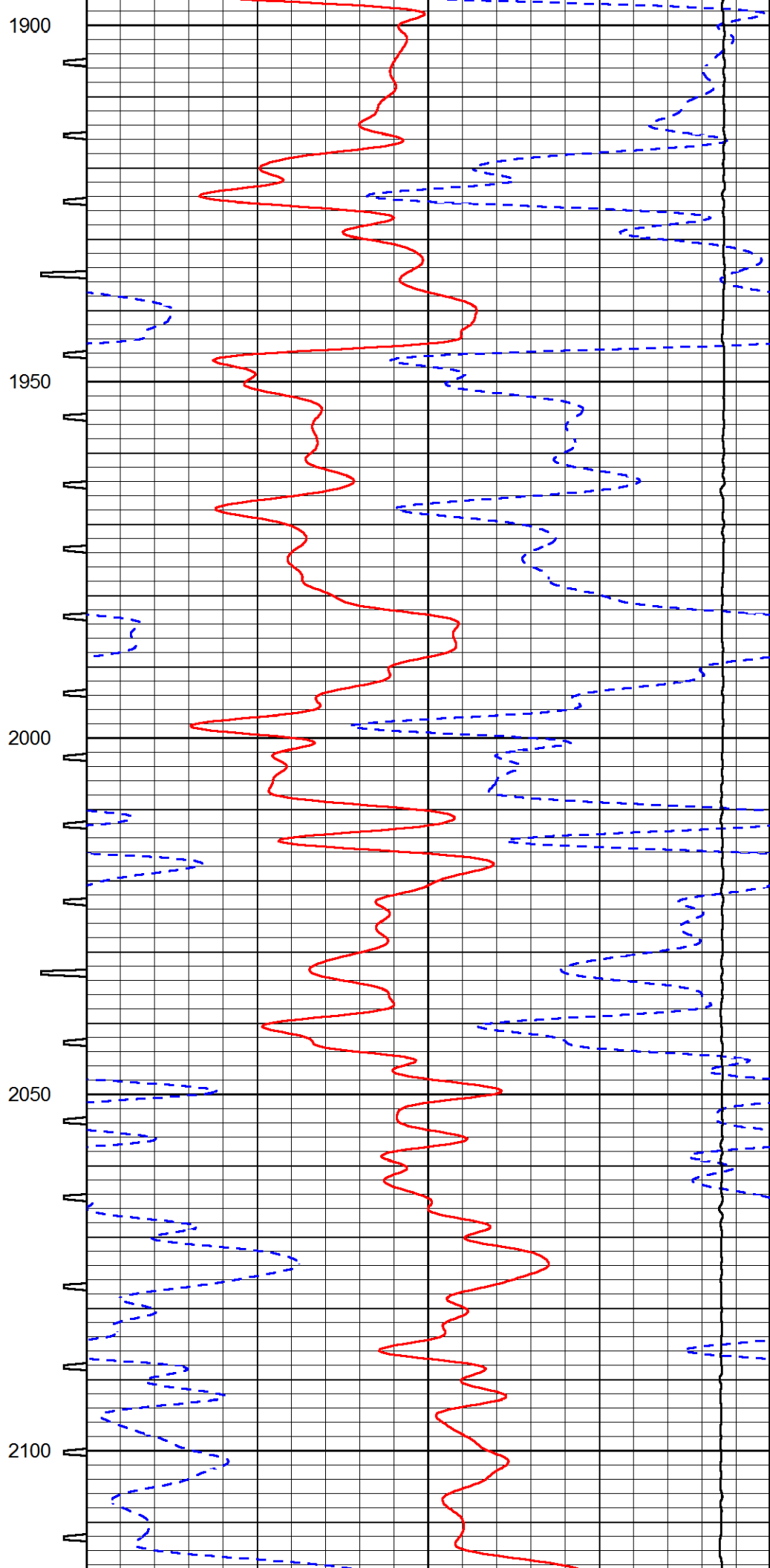
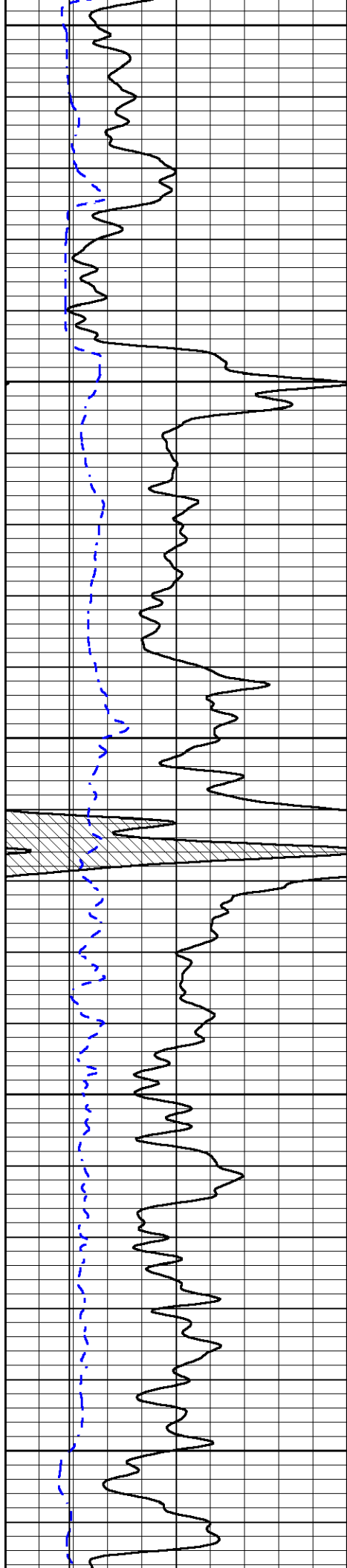


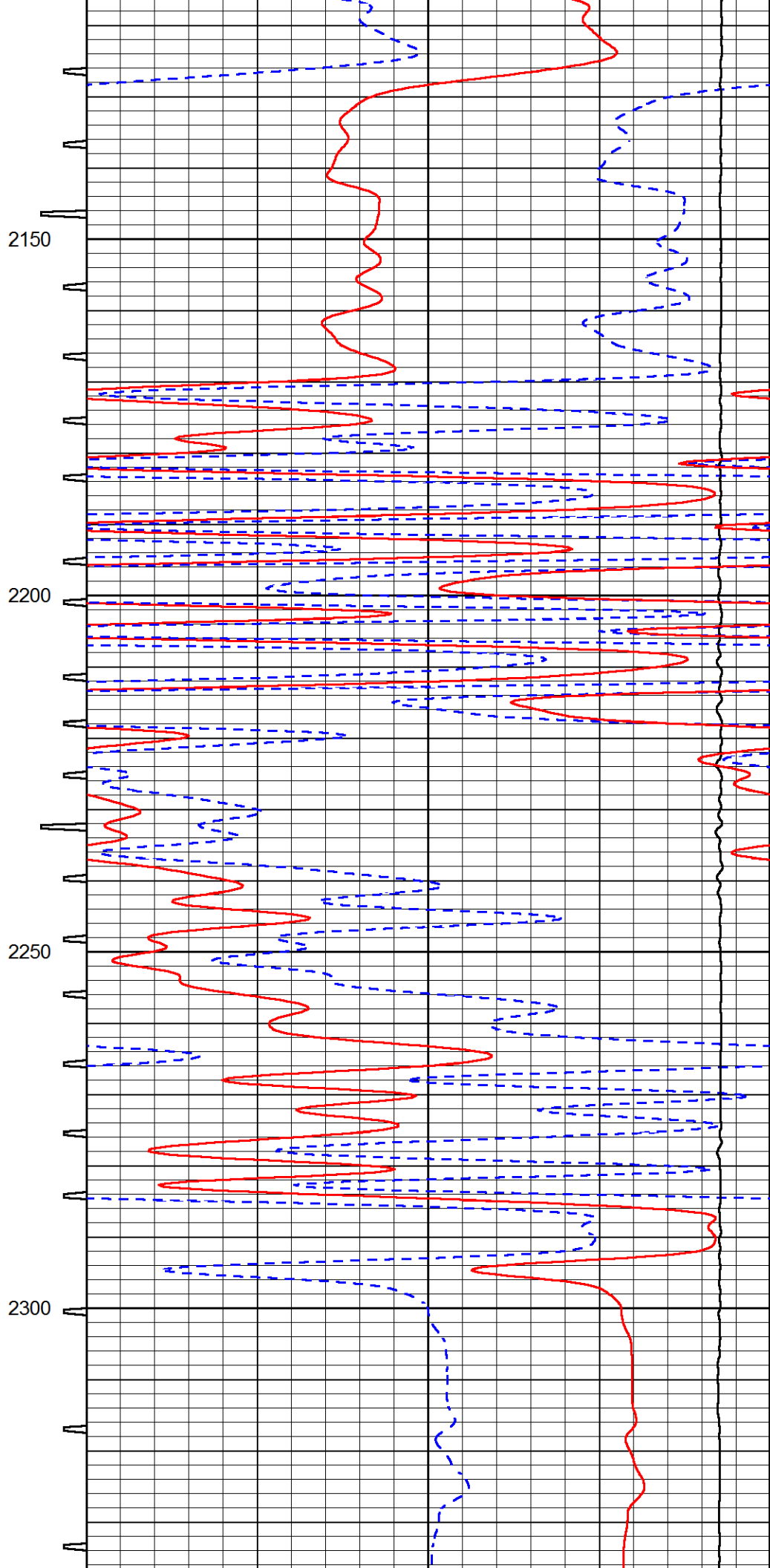
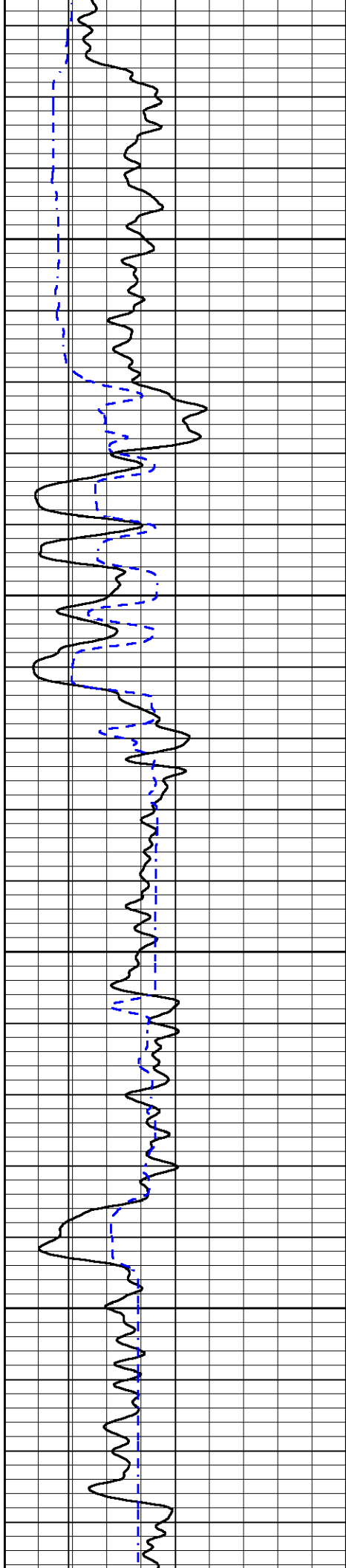


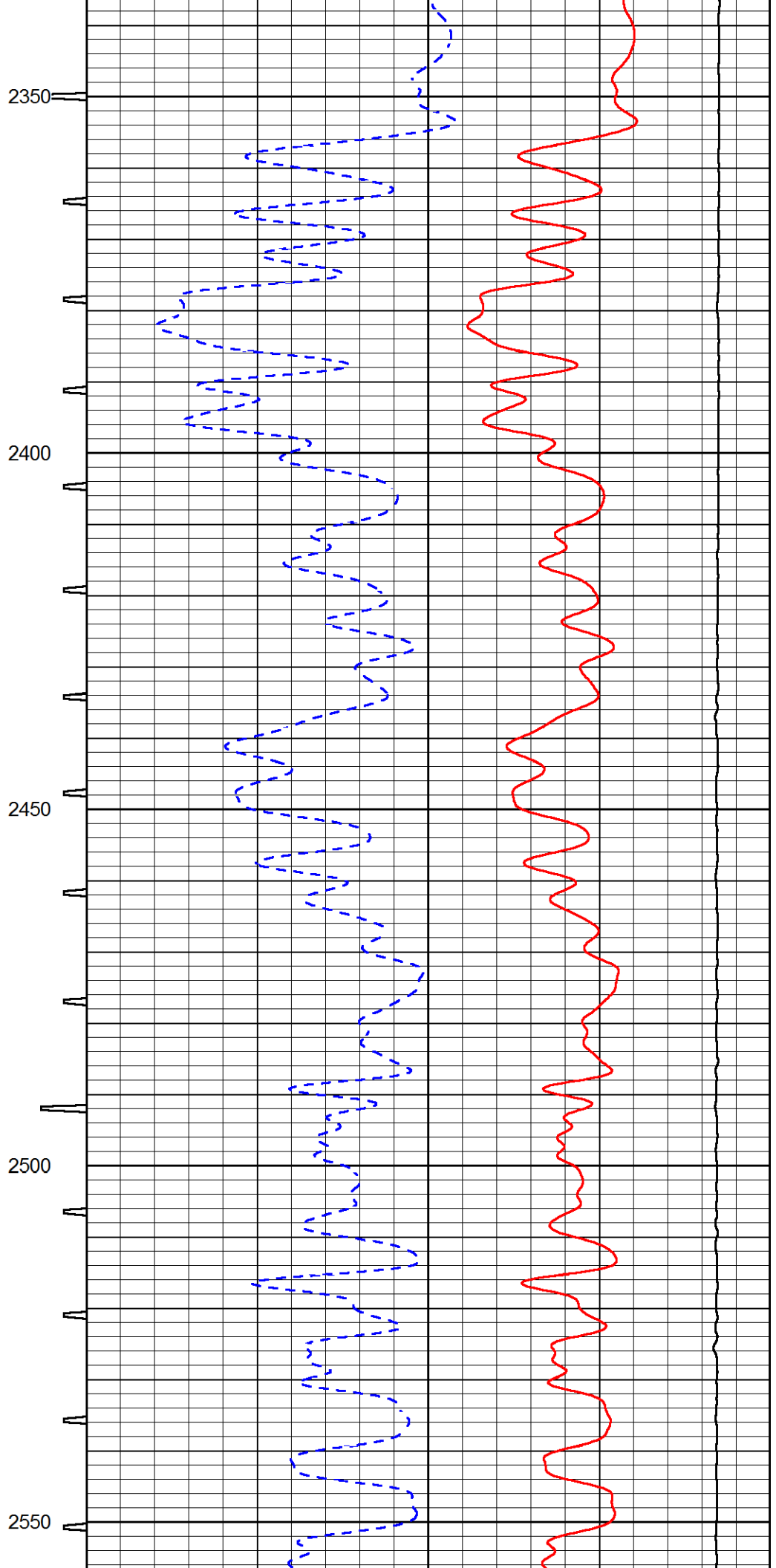
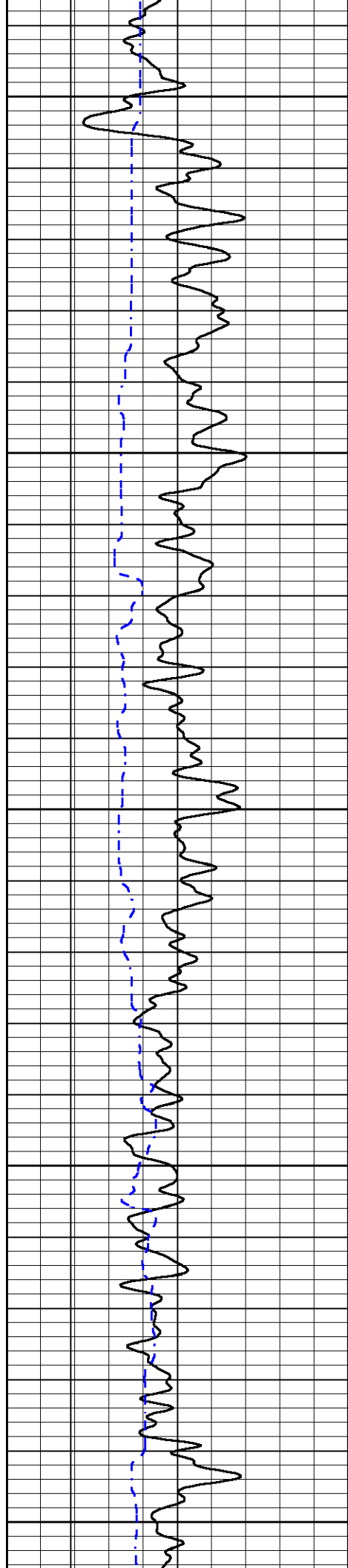


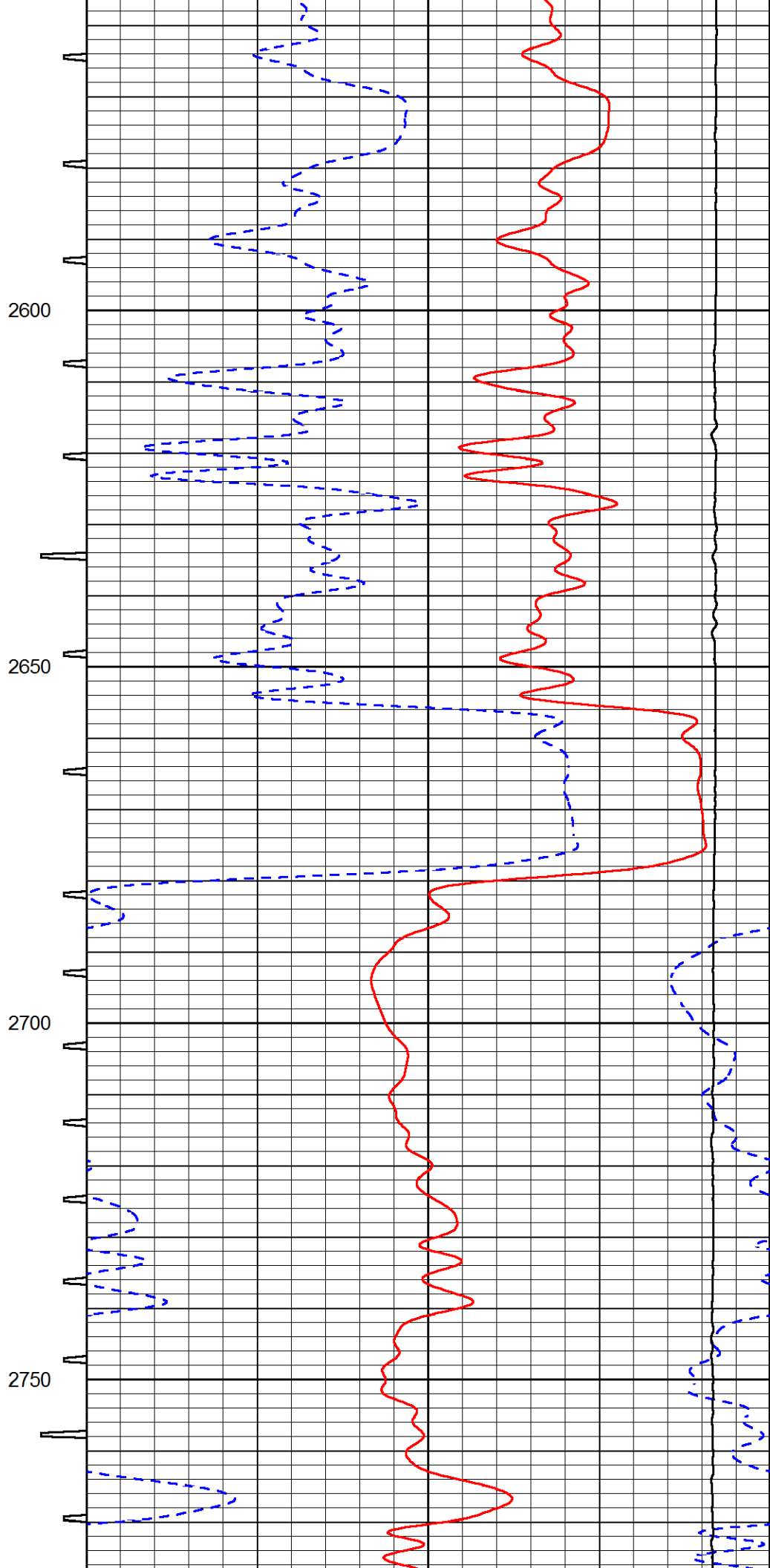
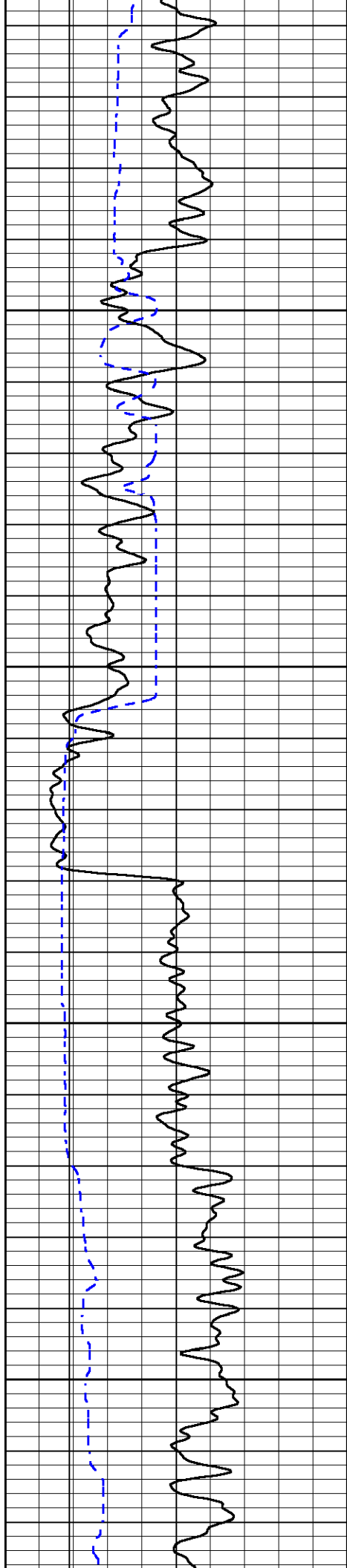


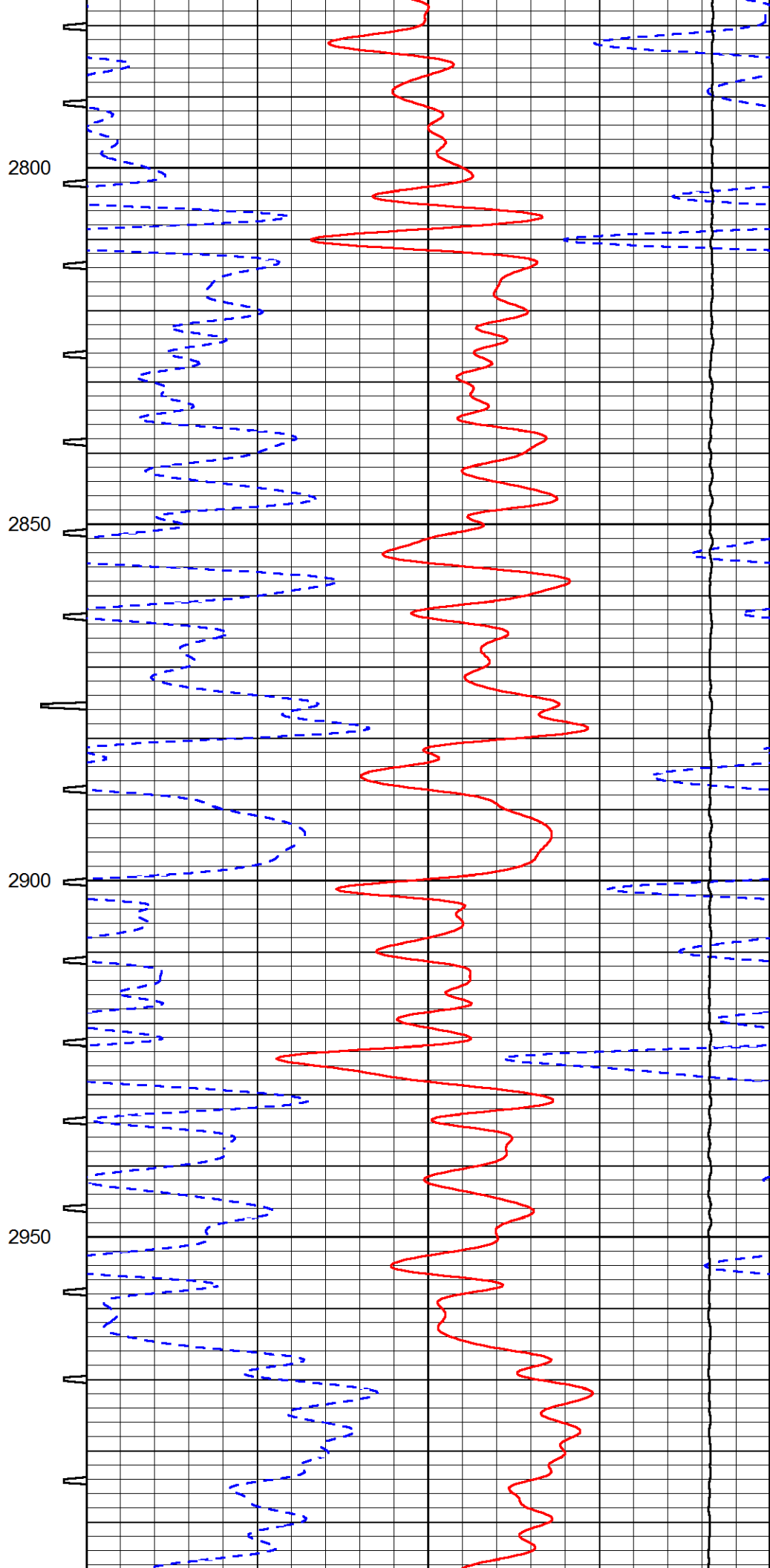
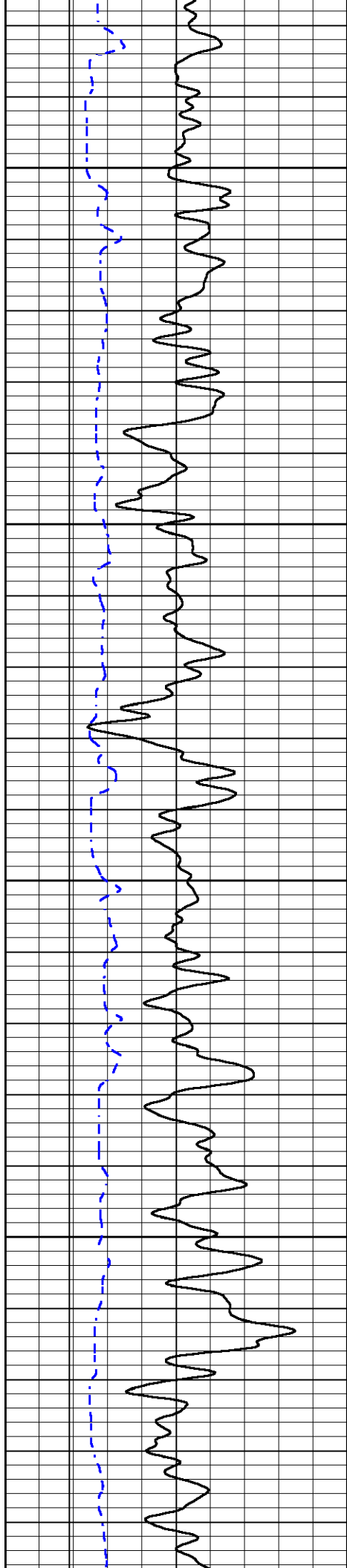


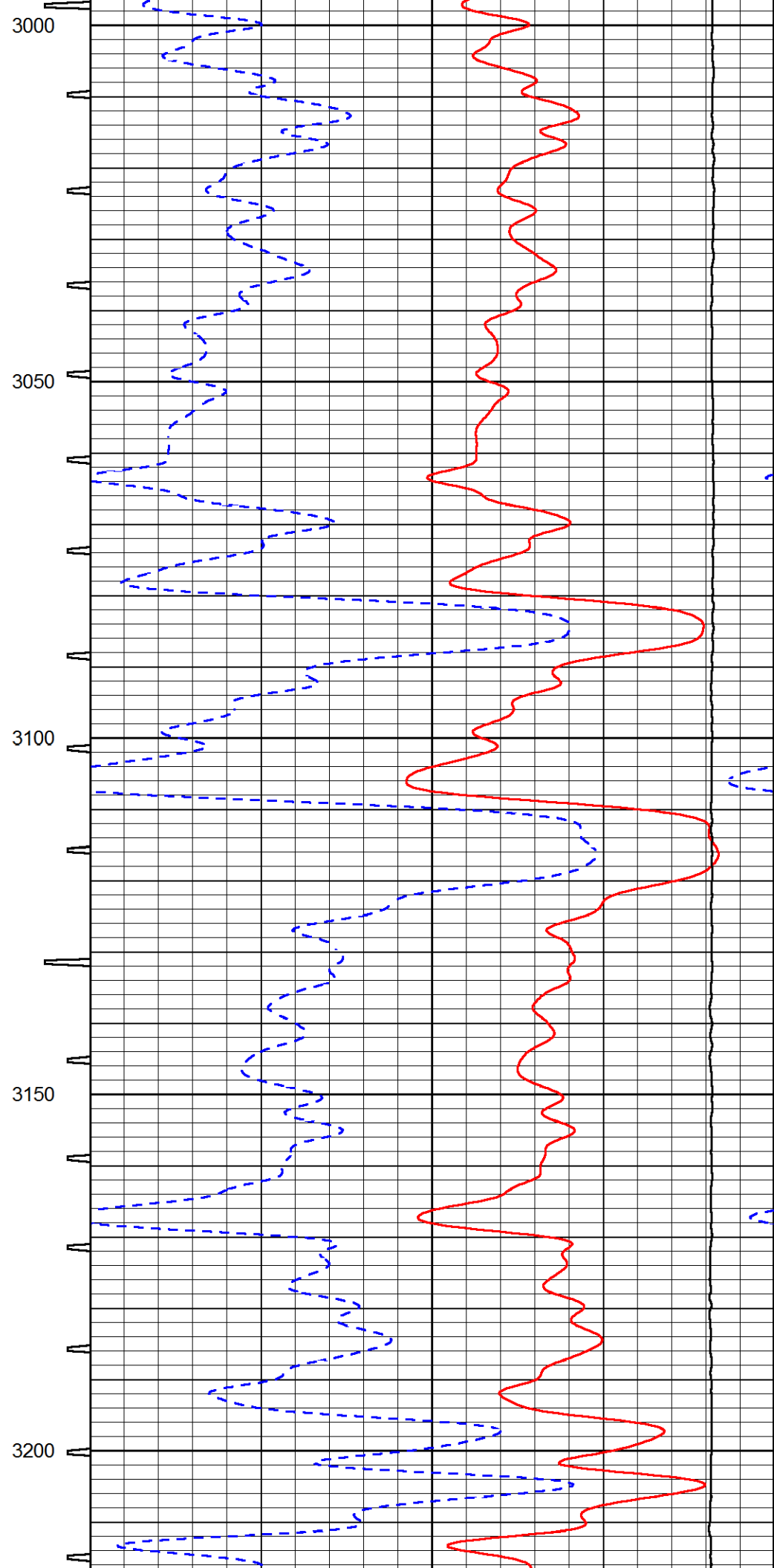
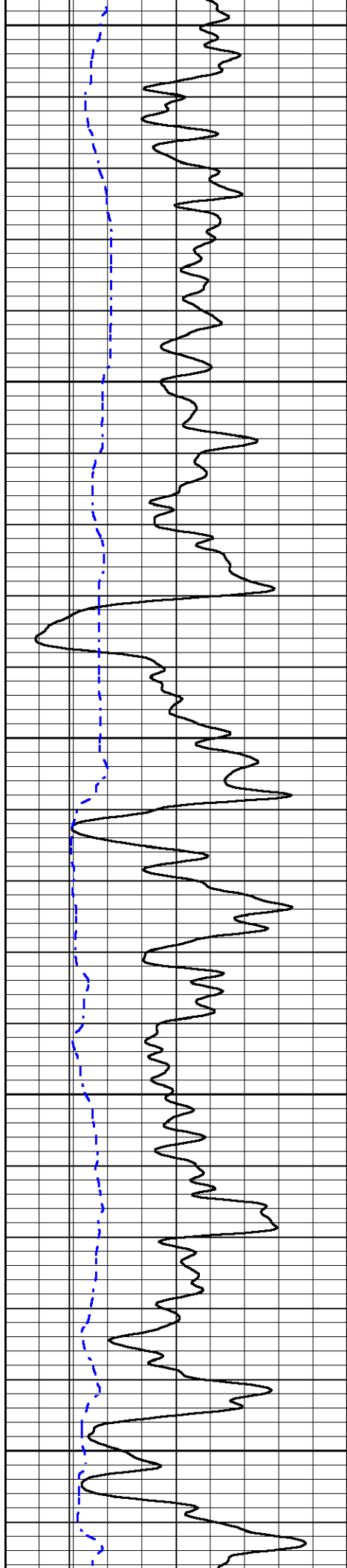


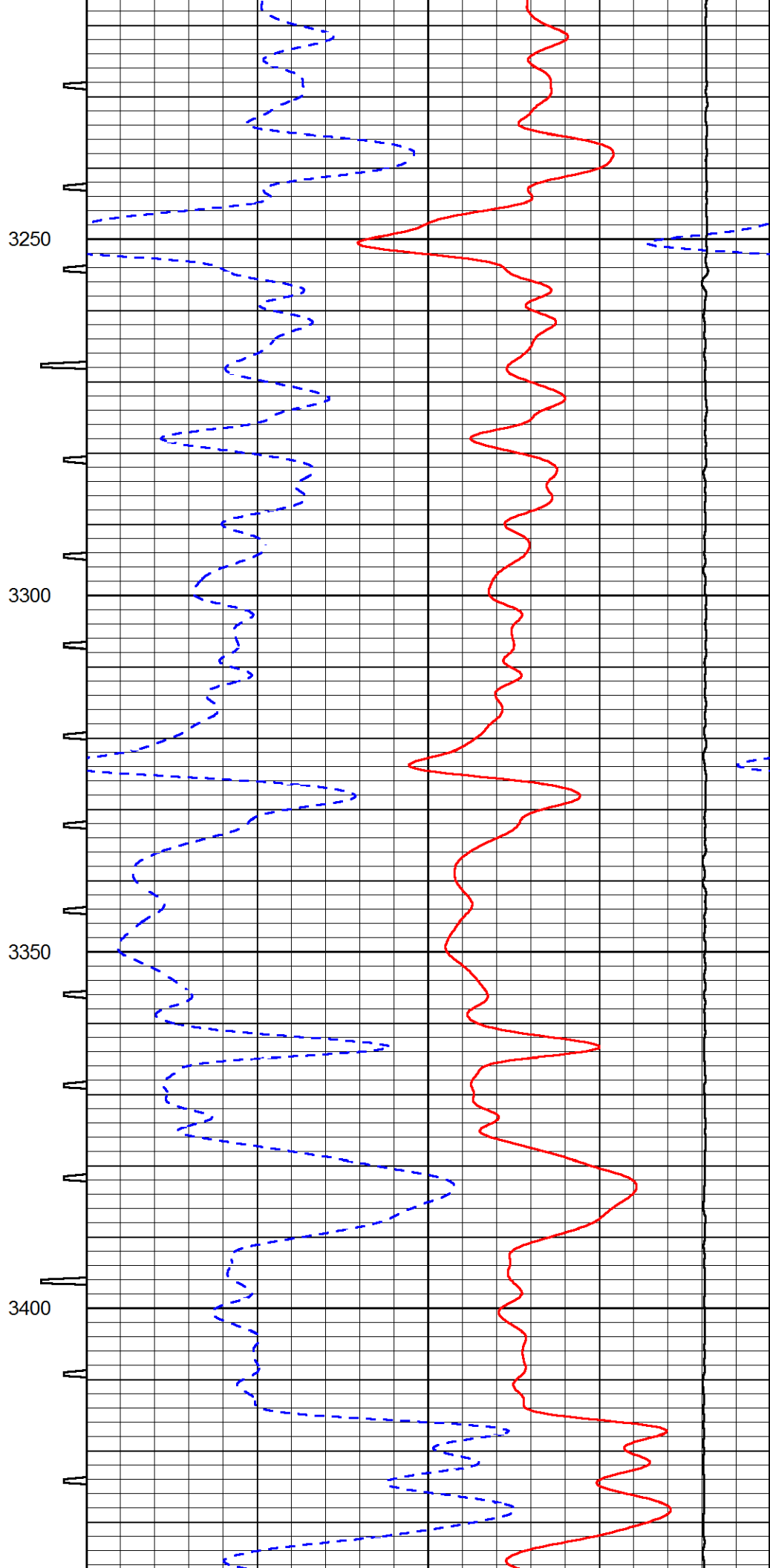
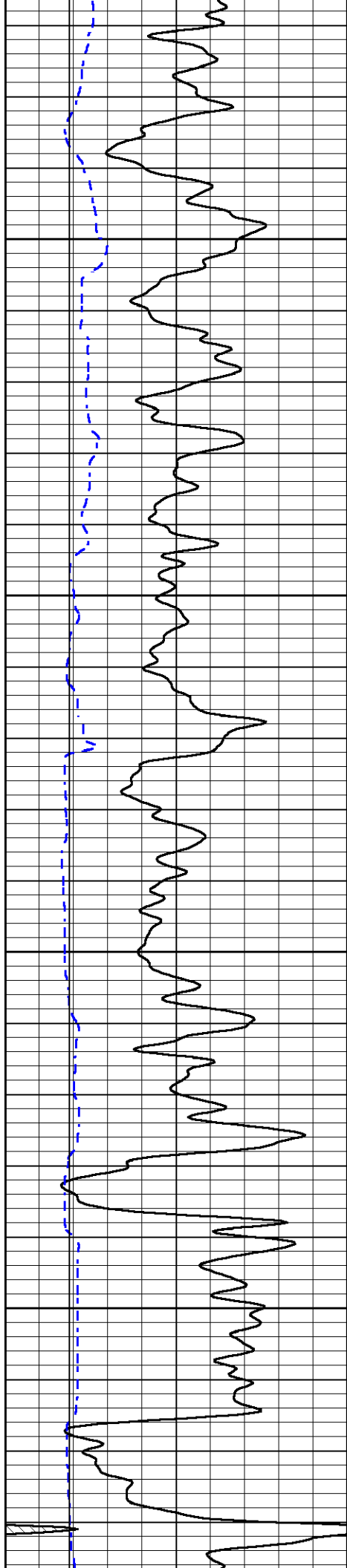


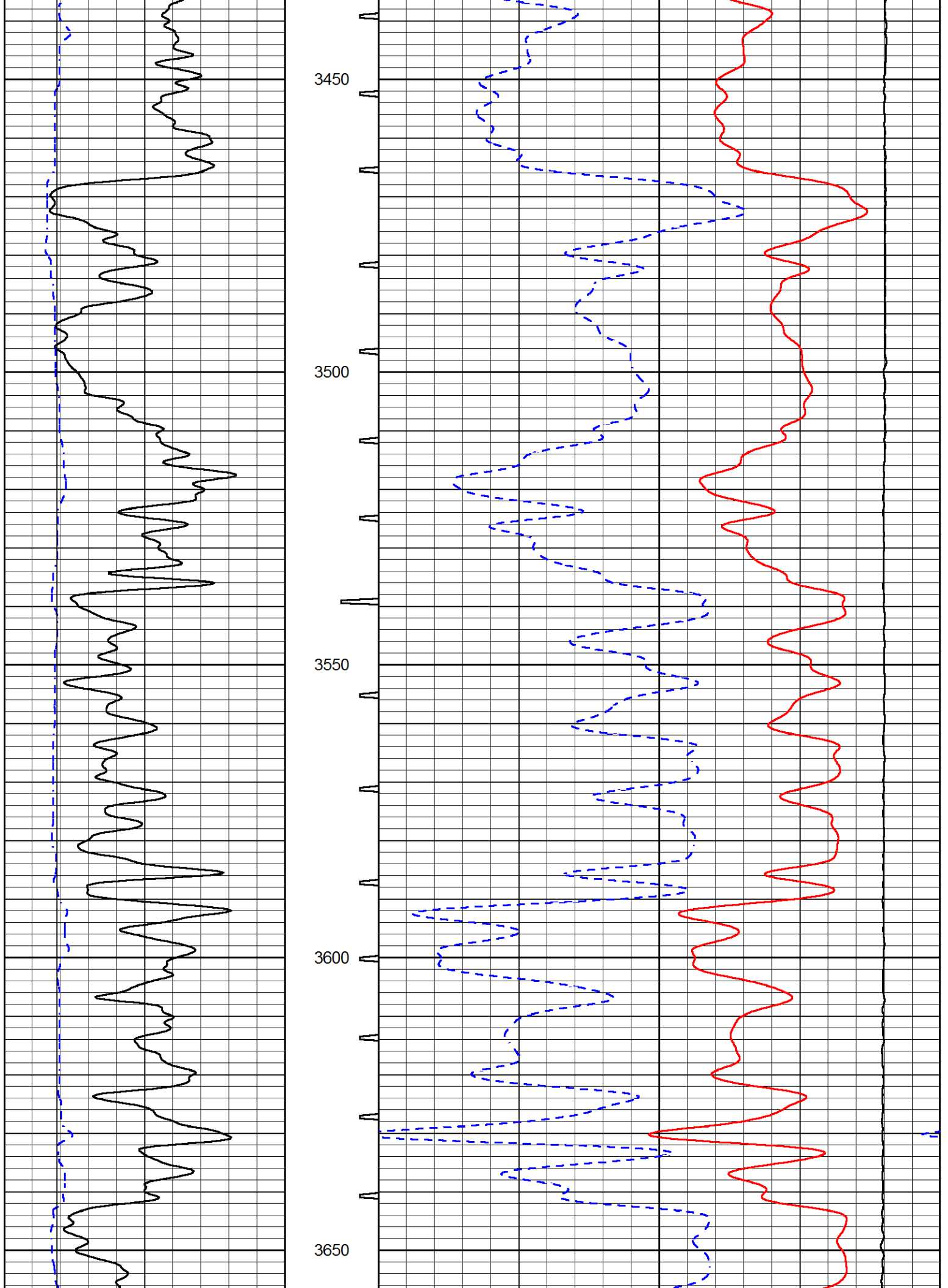


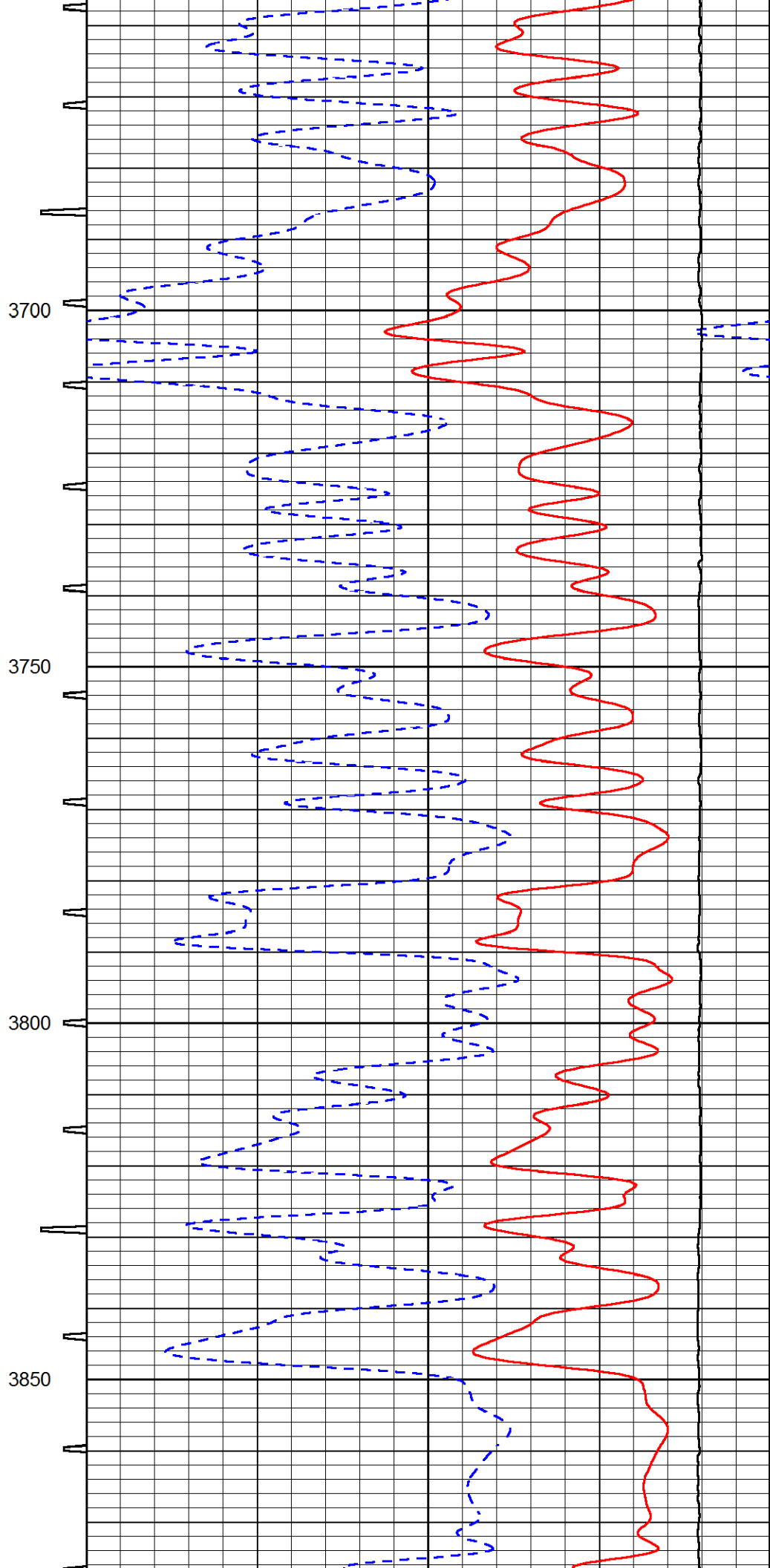
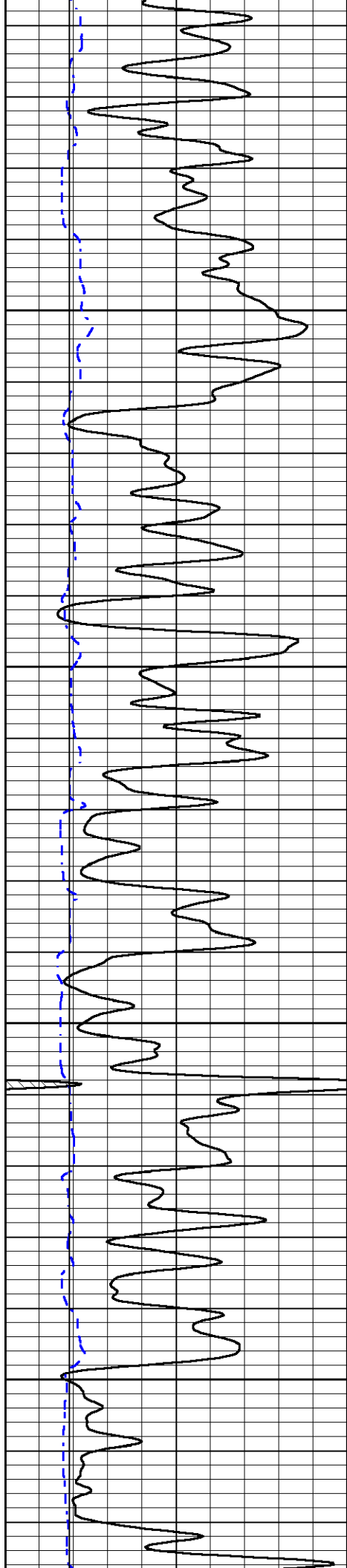


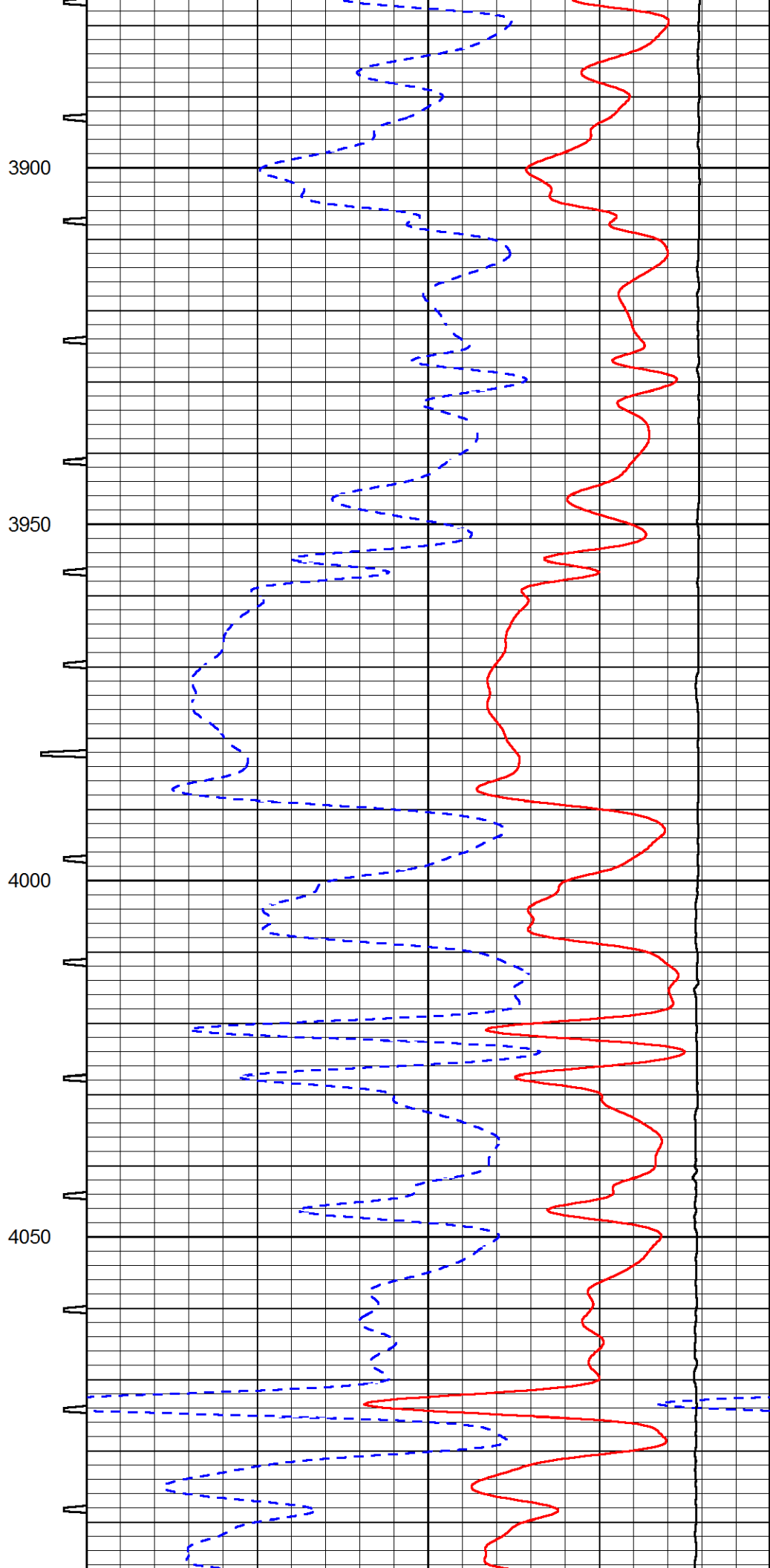
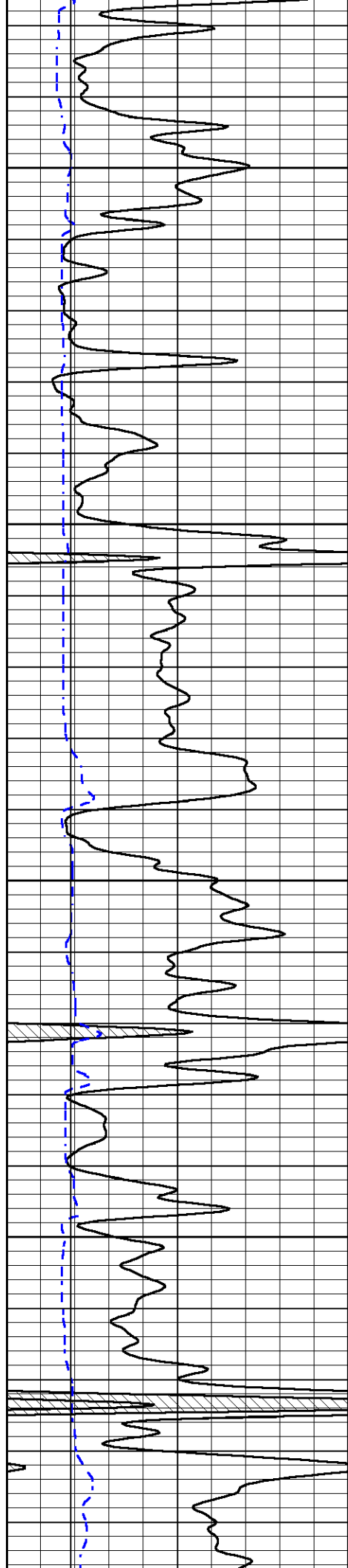


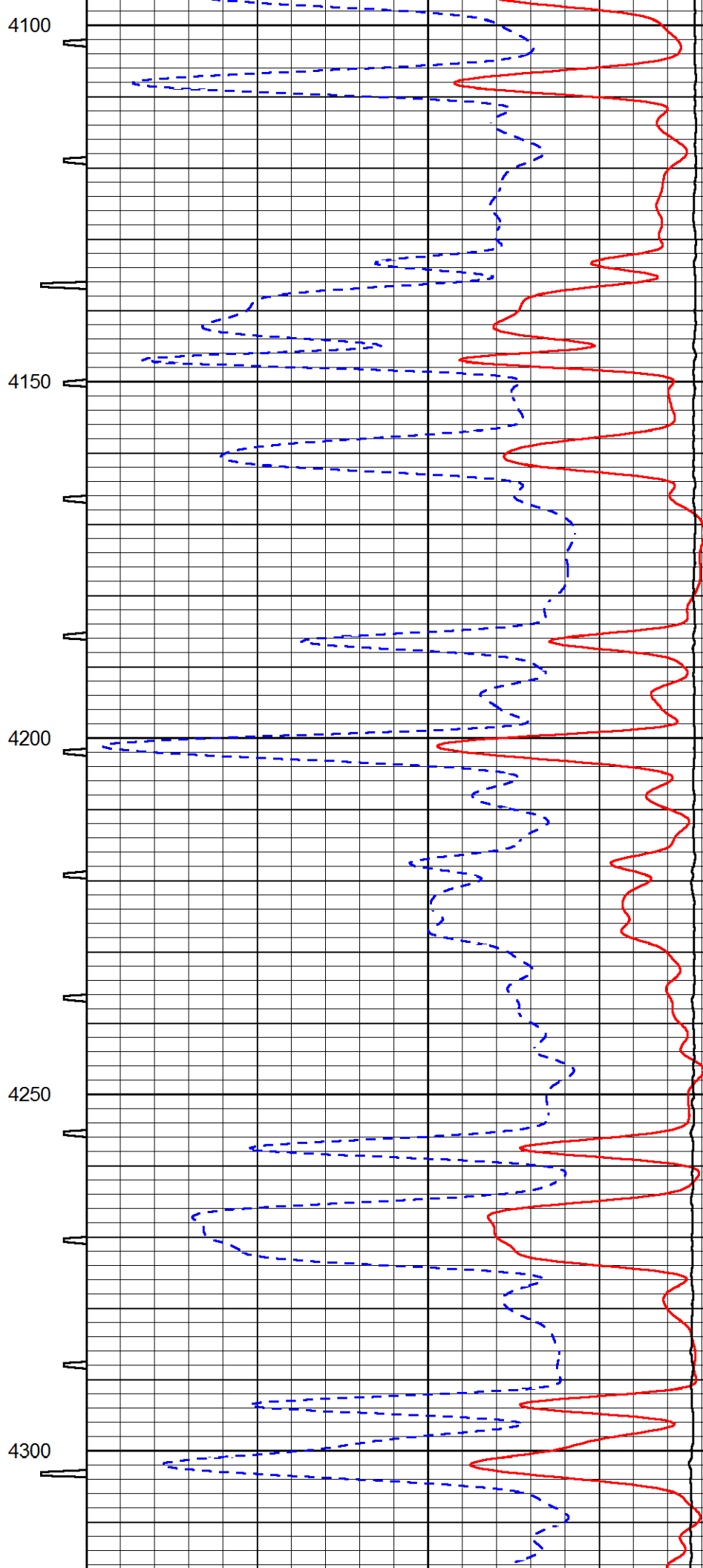
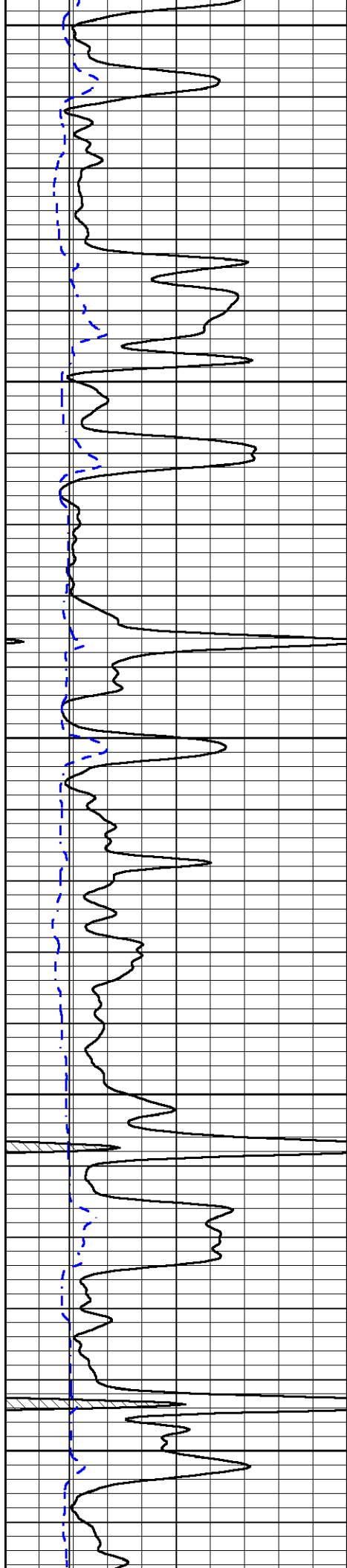


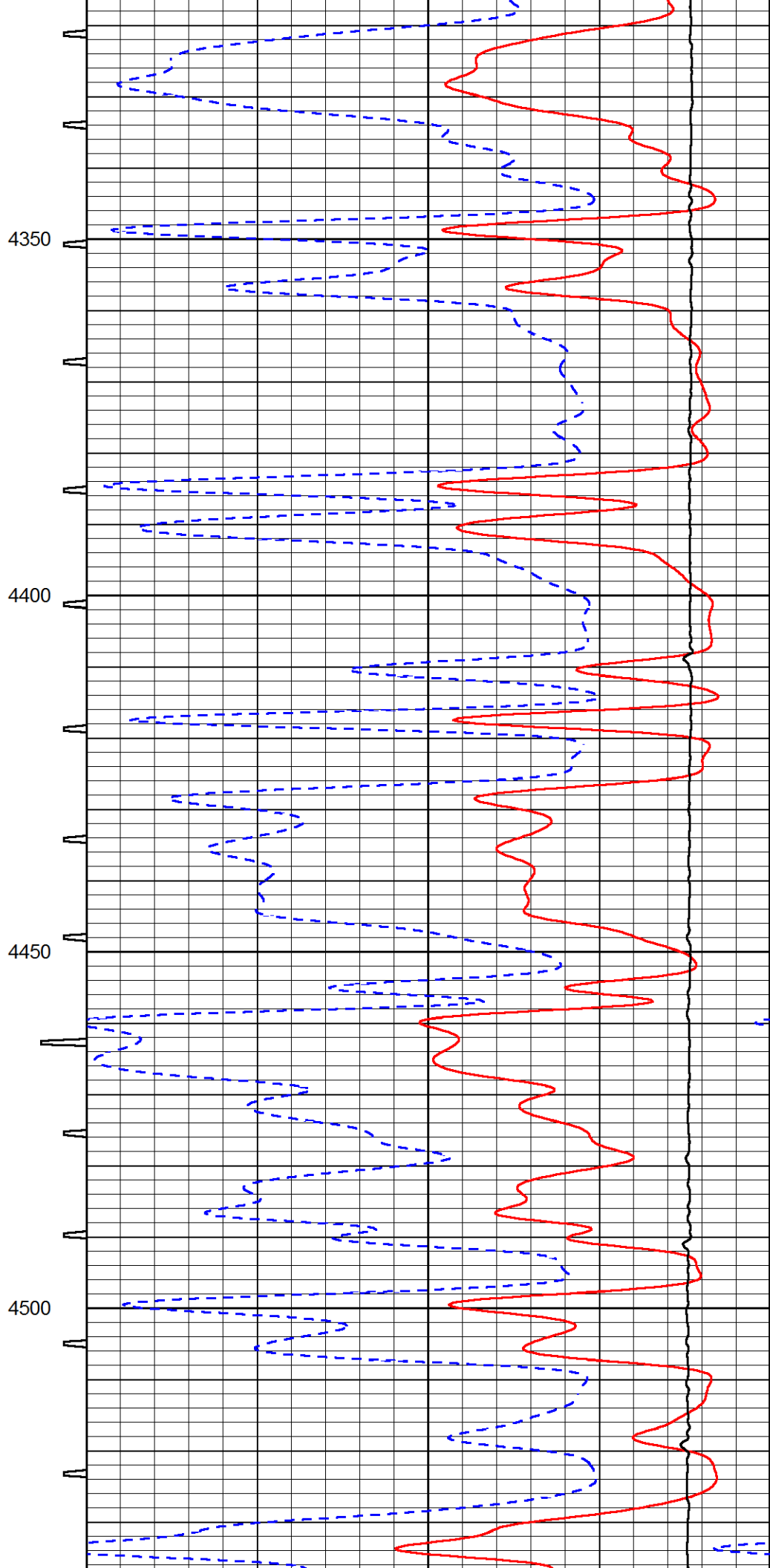
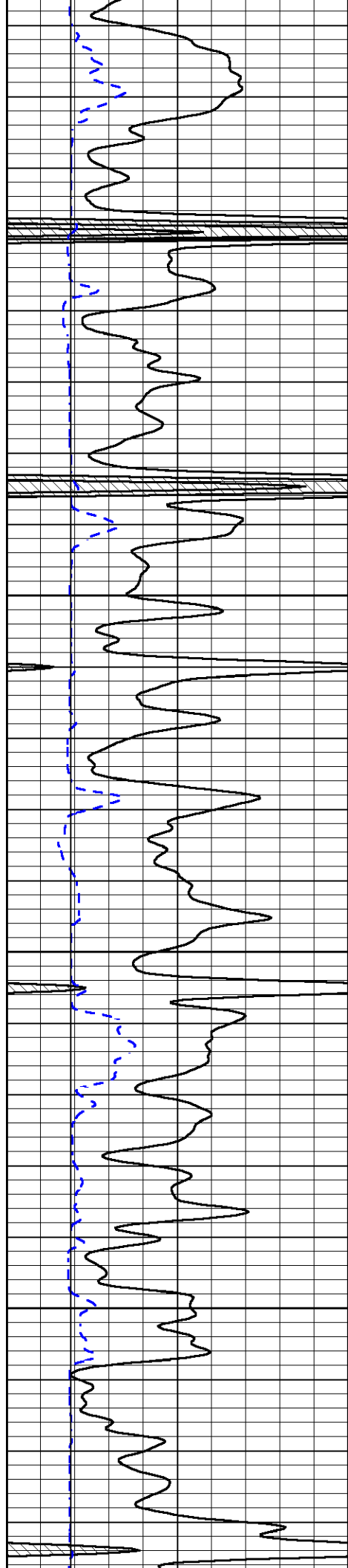


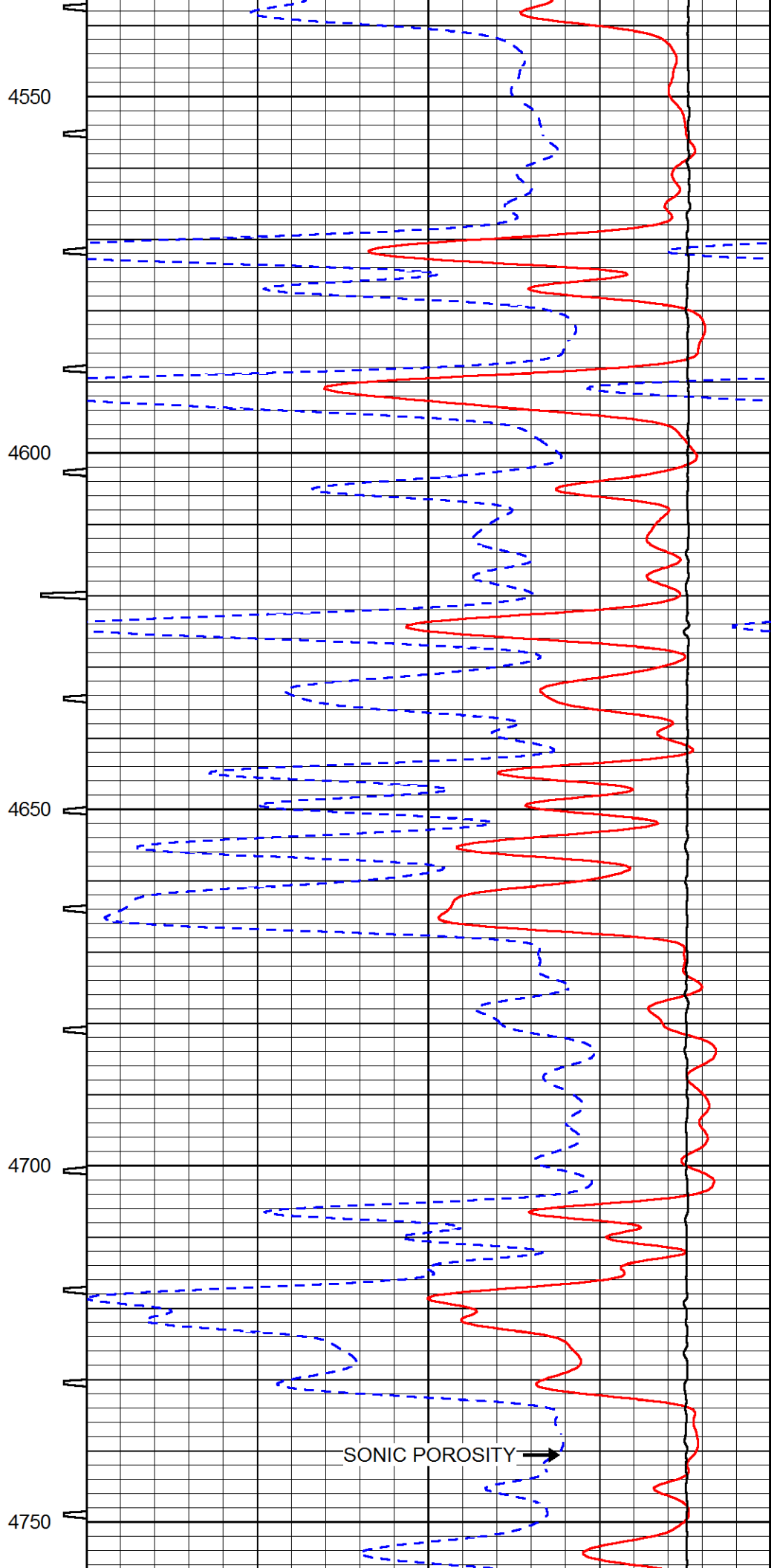
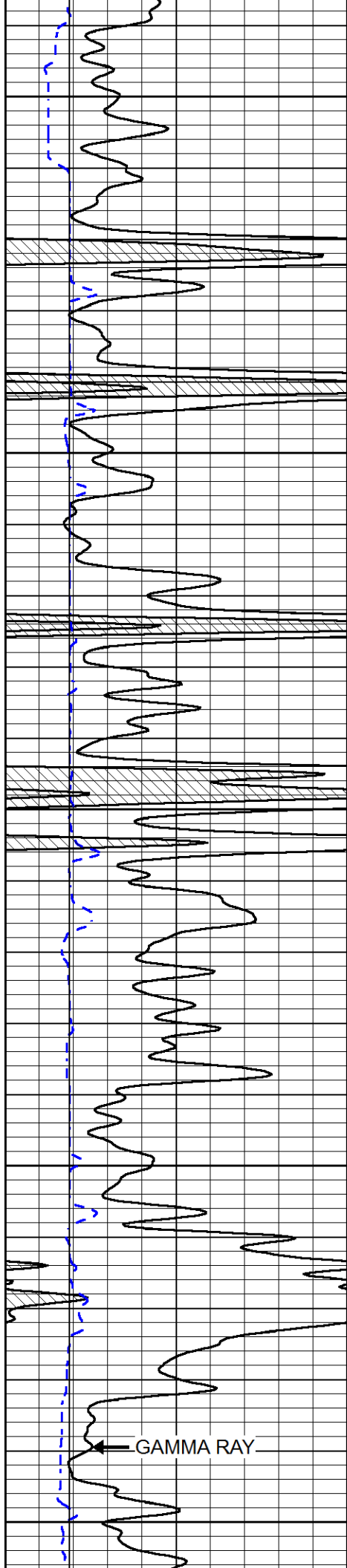


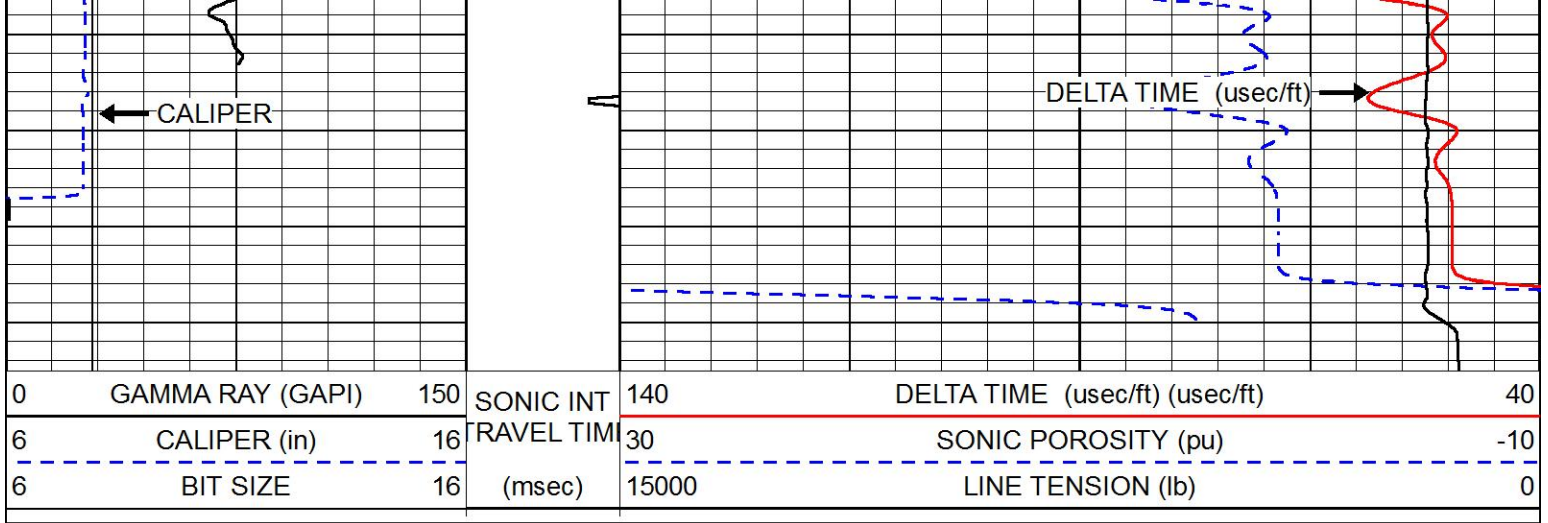








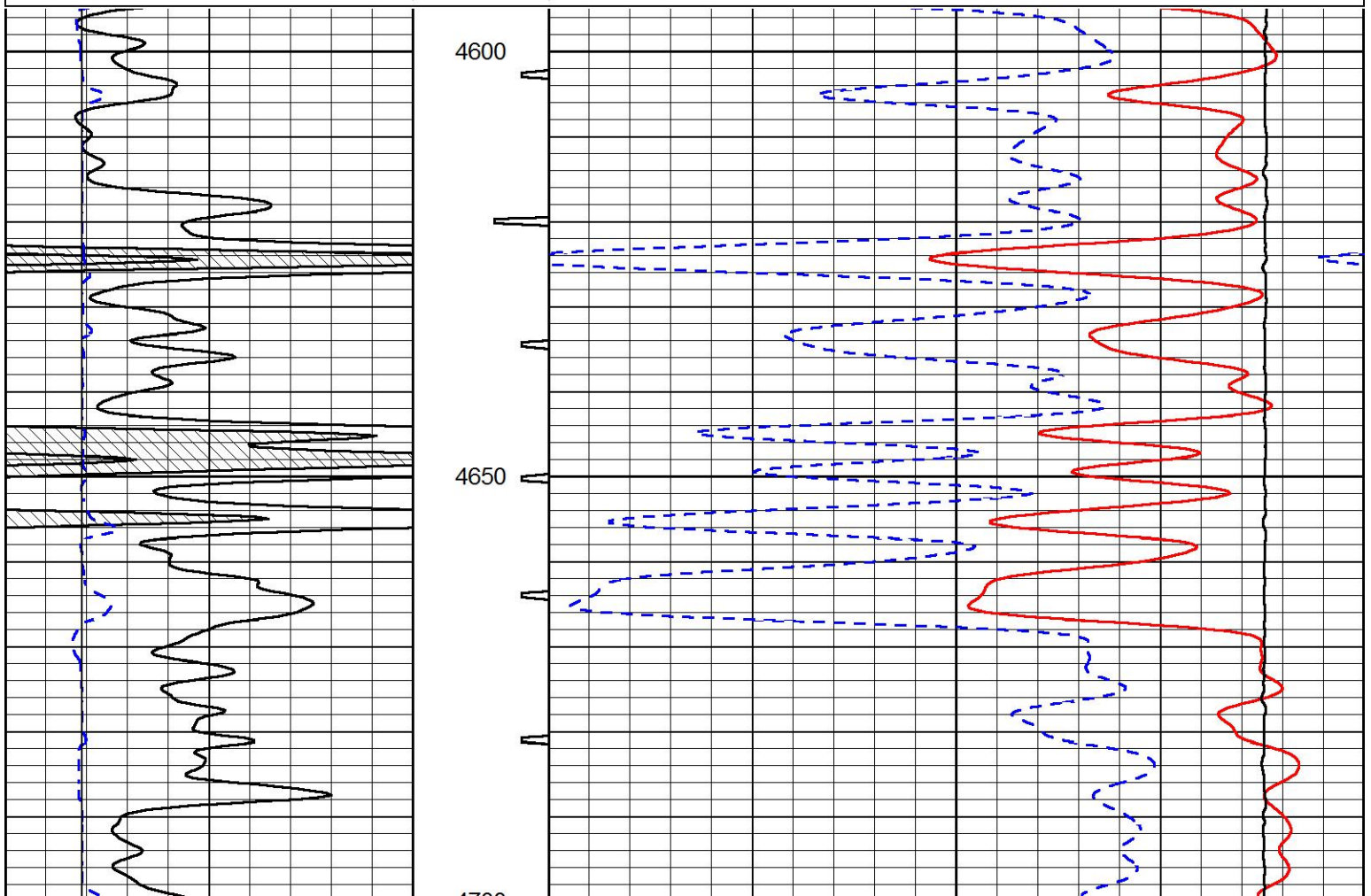


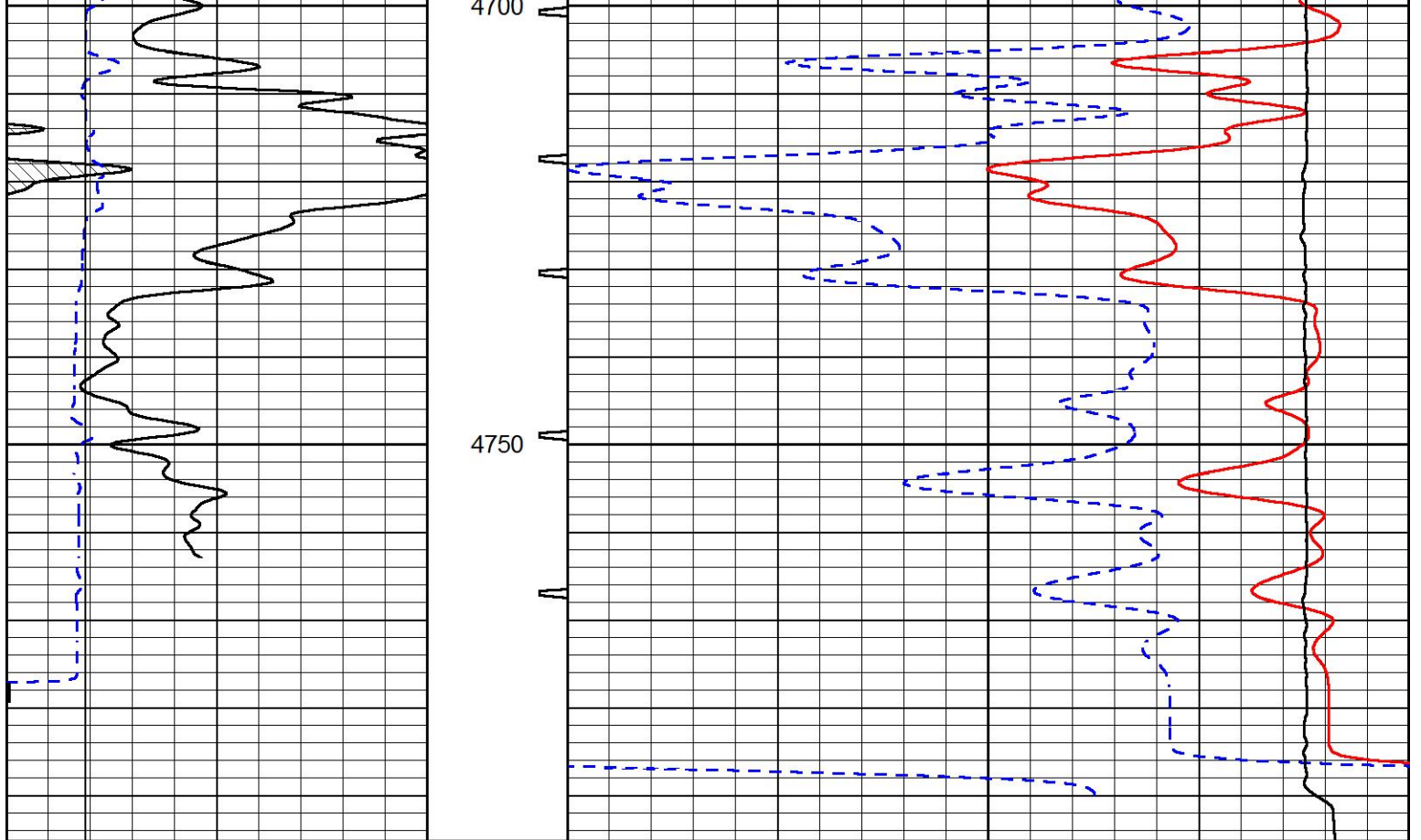


REPEAT SECTION

Database File stratakan_gaskill_range_bertrand_unit_5_1.db
 Dataset Pathname stack/pass2.1
 Presentation Format sonic
 Dataset Creation Sun Sep 17 16:32:22 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	30	SONIC POROSITY (pu)	-10
6	BIT SIZE	16	(msec)	15000	LINE TENSION (lb)	0





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