



PIONEER
Pioneer Energy Services

**BOREHOLE COMPENSATED
SONIC LOG**

Company MURFIN DRILLING COMPANY, INC.
Well YOUNGMEYER 'A' NO. 1-14
Field WILDCAT
County ELK
State KANSAS

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County ELK State KANSAS

Location: API #: 15-049-22611-00-00
1400' FWL & 2400' FEL
SEC 14 TWP 29S RGE 8E
Permanent Datum GROUND LEVEL Elevation 1598'
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING
Other Services
DIL/MEL
CNL/CDL
Elevation
K.B. 1604'
D.F. N/A
G.L. 1598'

Date	7/16/2017						
Run Number	TWO						
Type Log	BHCS						
Depth Driller	3280'						
Depth Logger	3279'						
Bottom Logged Interval	3268'						
Top Logged Interval	00						
Type Fluid In Hole	CHEMICAL						
Salinity, PPM CL	900						
Density	9.5						
Level	FULL						
Max. Rec. Temp. F	109 DEG/F						
Operating Rig Time	4 HOURS						
Equipment -- Location	108 HAYS						
Recorded By	J. HENRICKSON						
Witnessed By	KEN WALLACE						
Borehole Record							
Run No.	Bit	From	To	Size	Wgt.	From	To
ONE	12.25"	0	40'	8.625"	23#	0	40'
TWO	7.875"	40'	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.

LATHAM KANSAS
8 EAST ON BLAINE STREET, NORTH INTO @ GREEN RANCH SIGN

Log Measured From: KELLY BUSHING 6 Ft. Above Permanent Datum

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

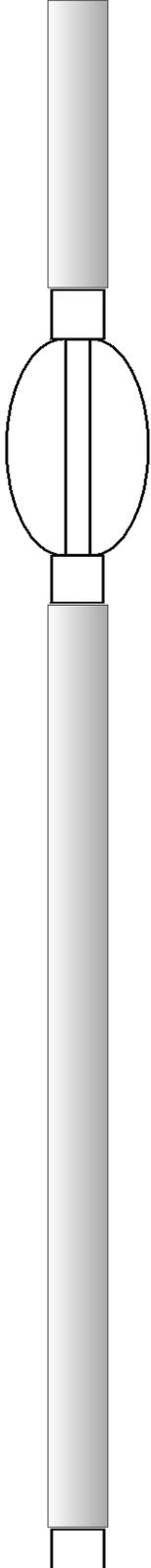
<p>Your Pioneer Energy Services Crew Engineer: J. HENRICKSON Operator: Operator: Operator:</p>	<p>This Log Record Was Witnessed By Primary Witness: KEN WALLACE Secondary Witness: Secondary Witness: Secondary Witness:</p>
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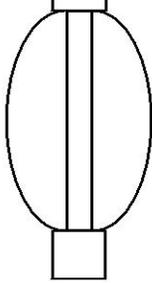
Log Variables

DatabaseC:\ProgramData\Warrior\Data\murfin_youngmeyer_a_1_14.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	109	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	-190	76	Off	3279

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

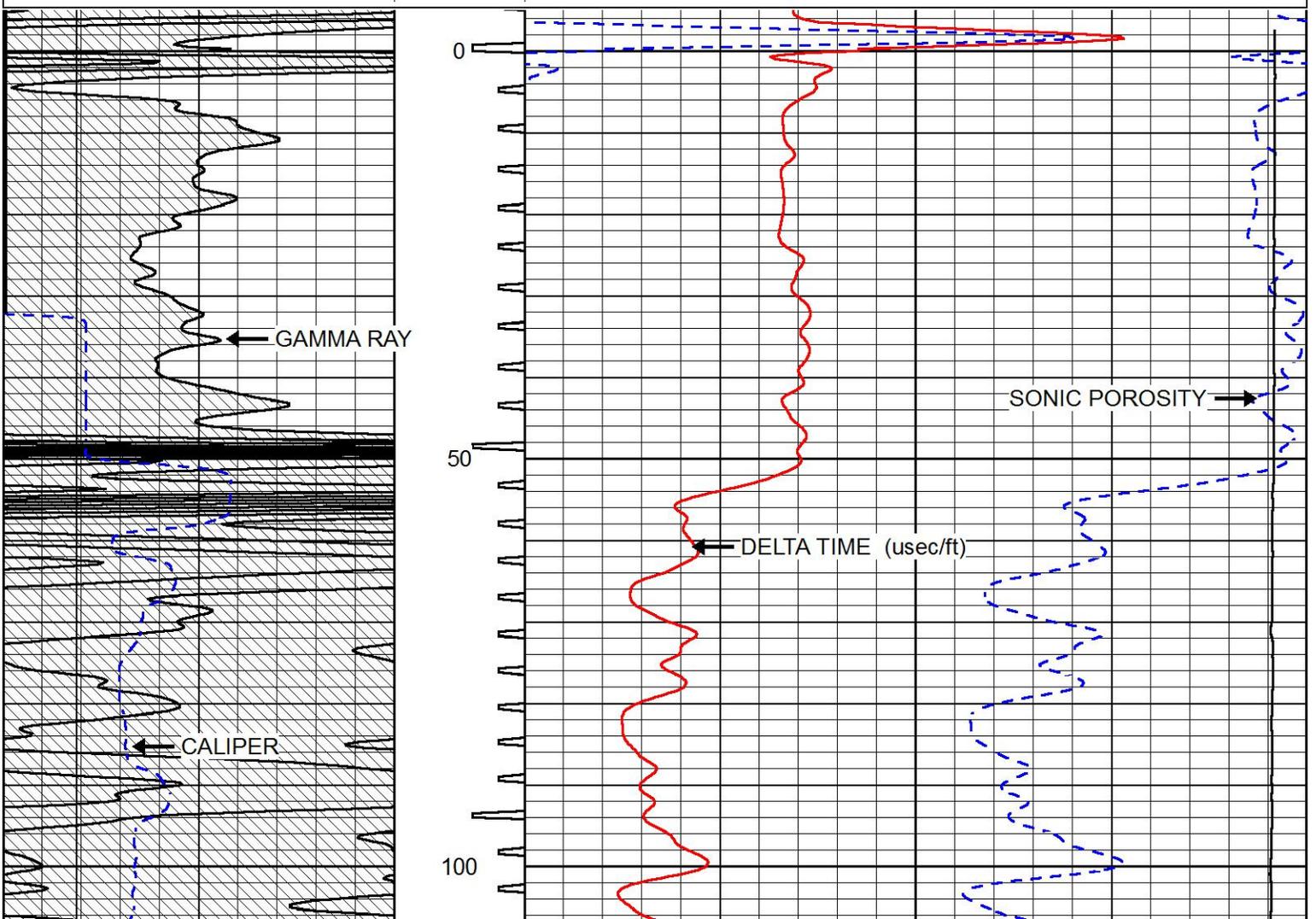
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 Total length: 32.00 ft
 Total weight: 540.00 lb
 O.D.: 3.50 in

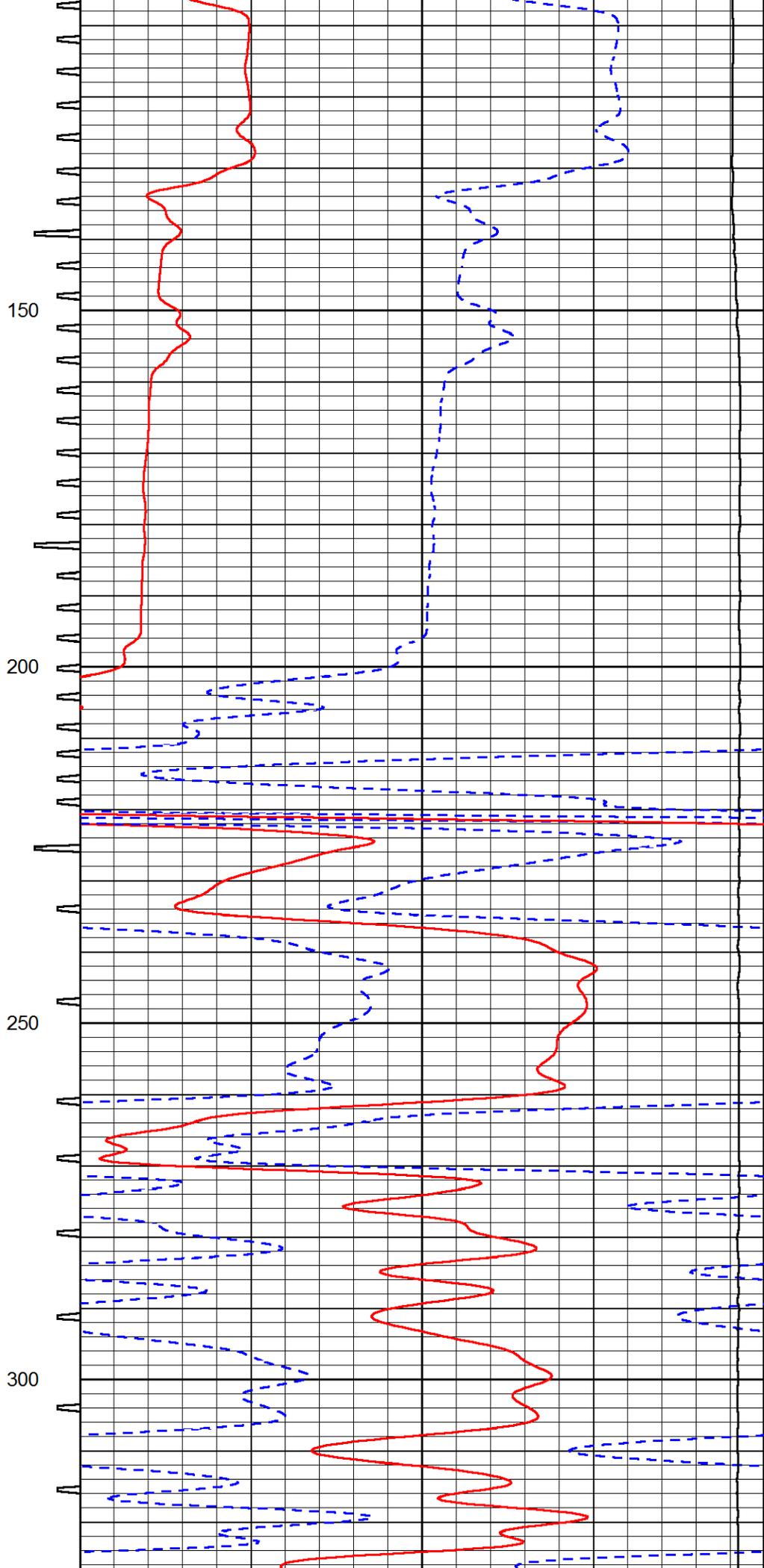
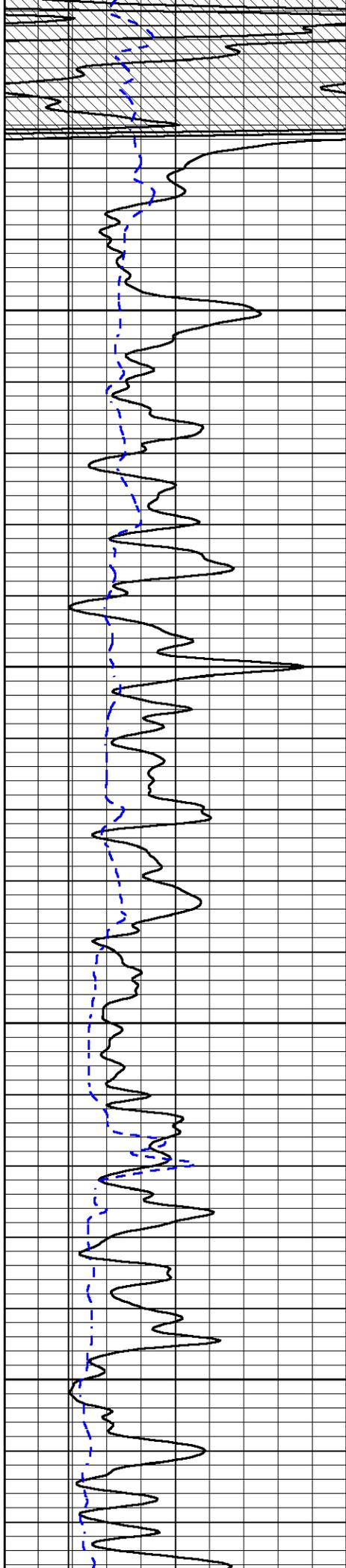


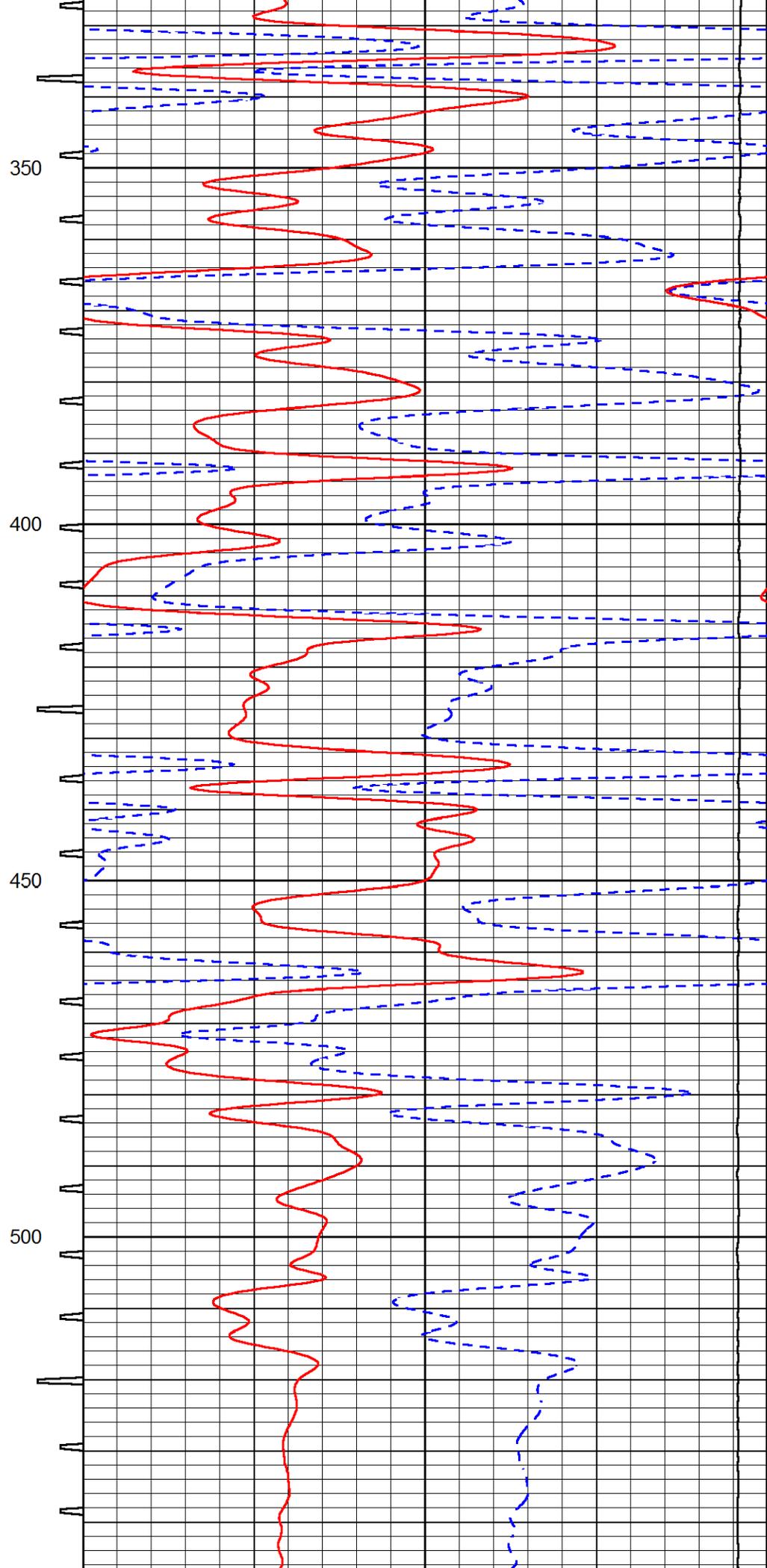
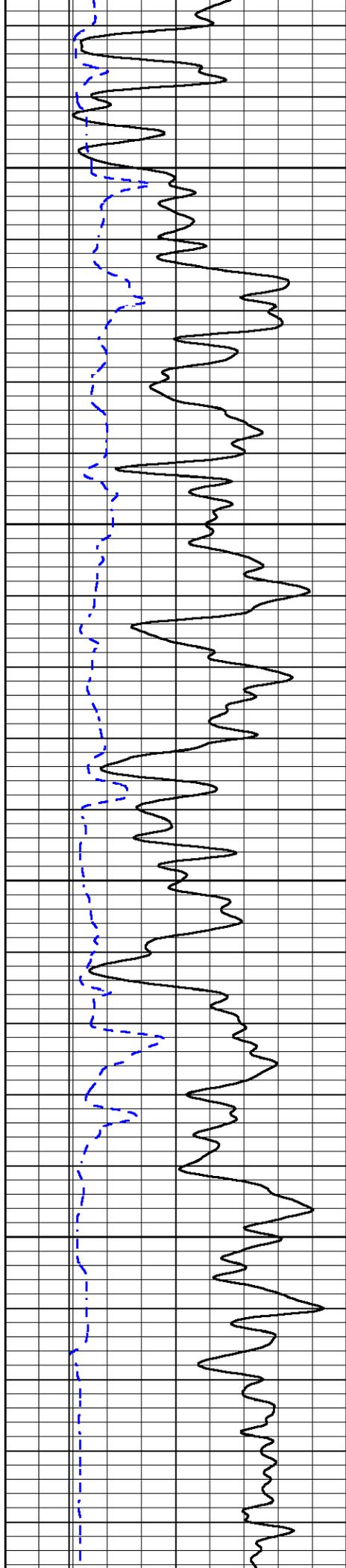
MAIN PASS

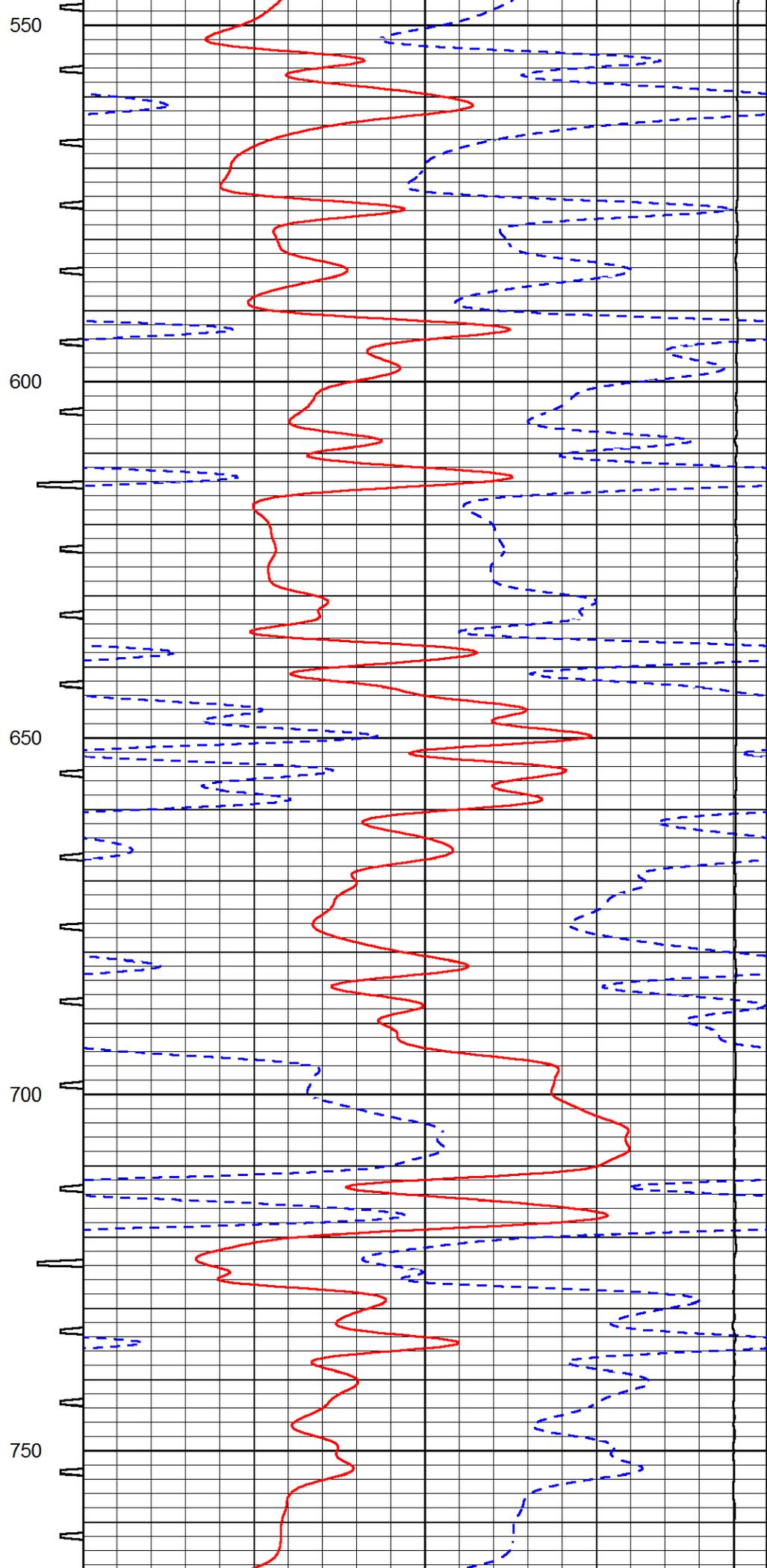
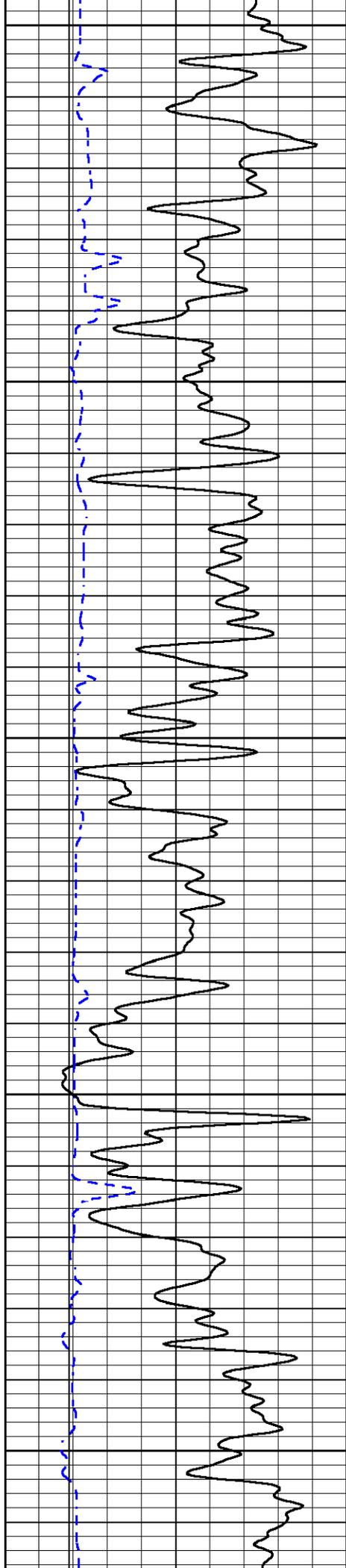
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 Dataset Pathname stack/pass3.1
 Presentation Format sonic
 Dataset Creation Sun Jul 16 23:39:50 2017
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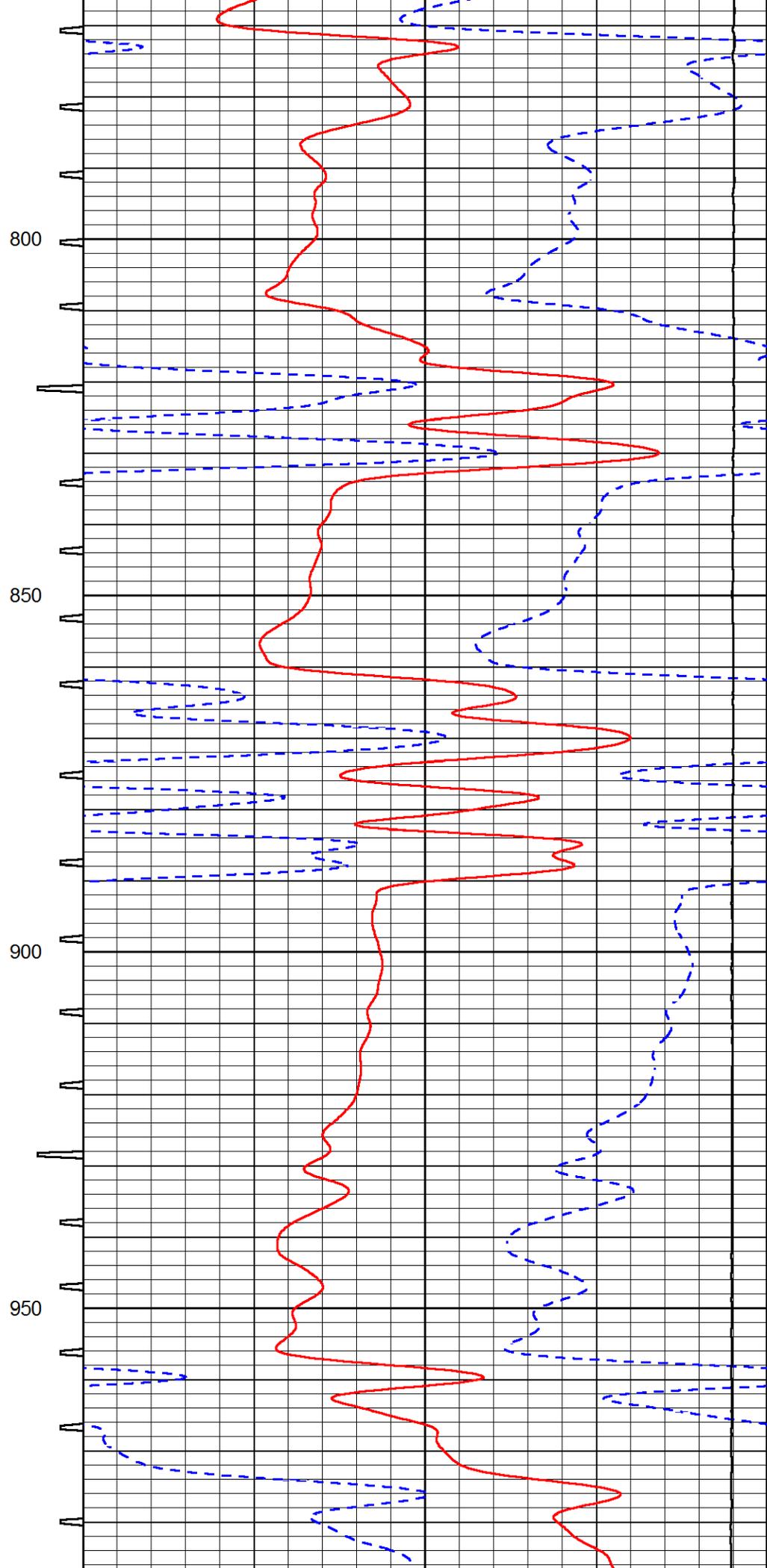
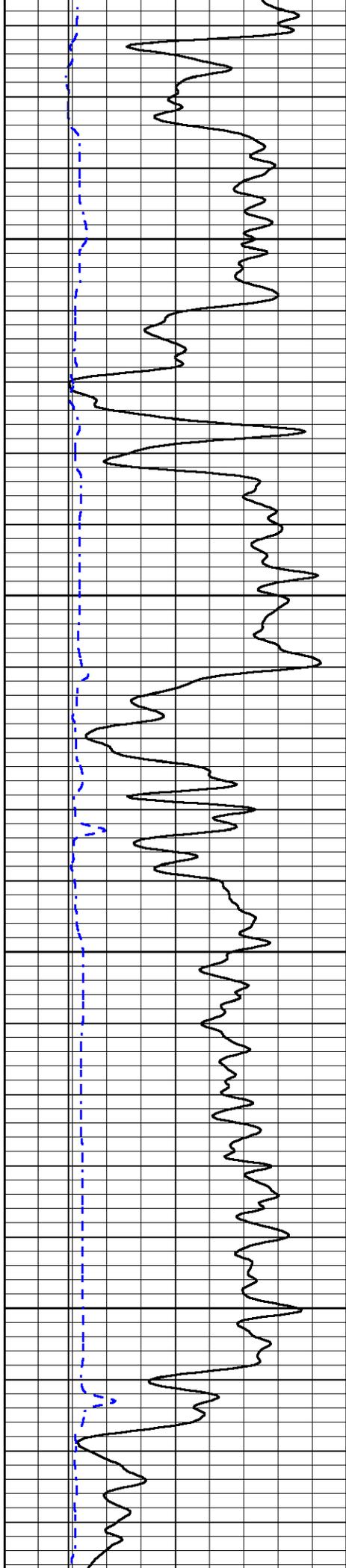
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6	CALIPER (in)	16	TRAVEL TIME	30	SONIC POROSITY (pu)	-10
6	BIT SIZE	16	(msec)	15000	LINE TENSION (lb)	0

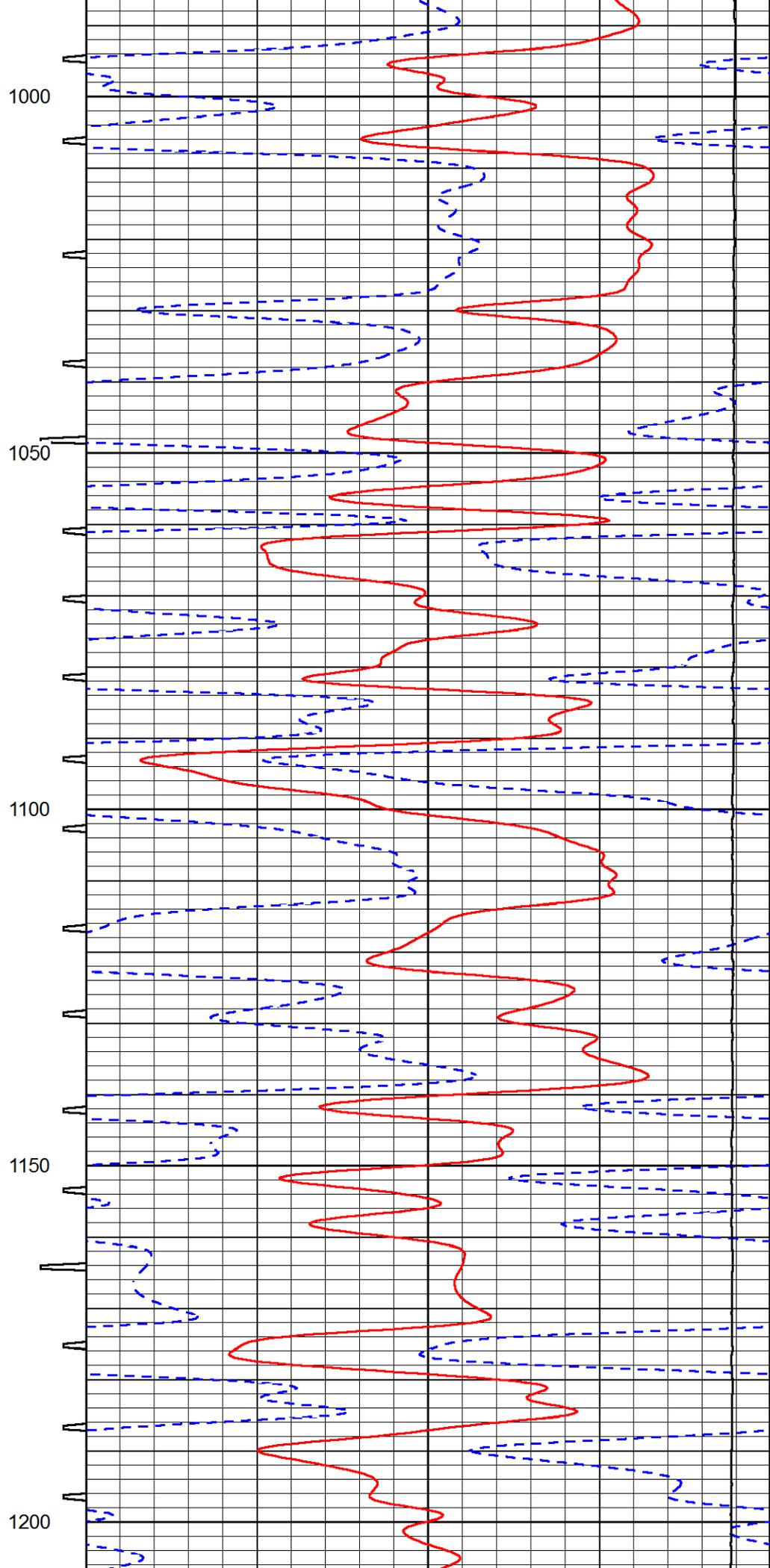
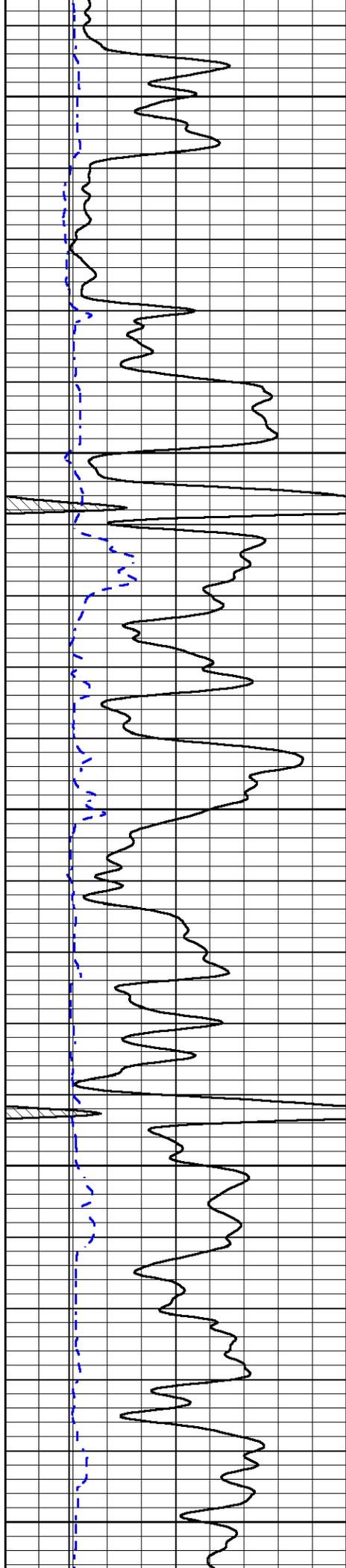


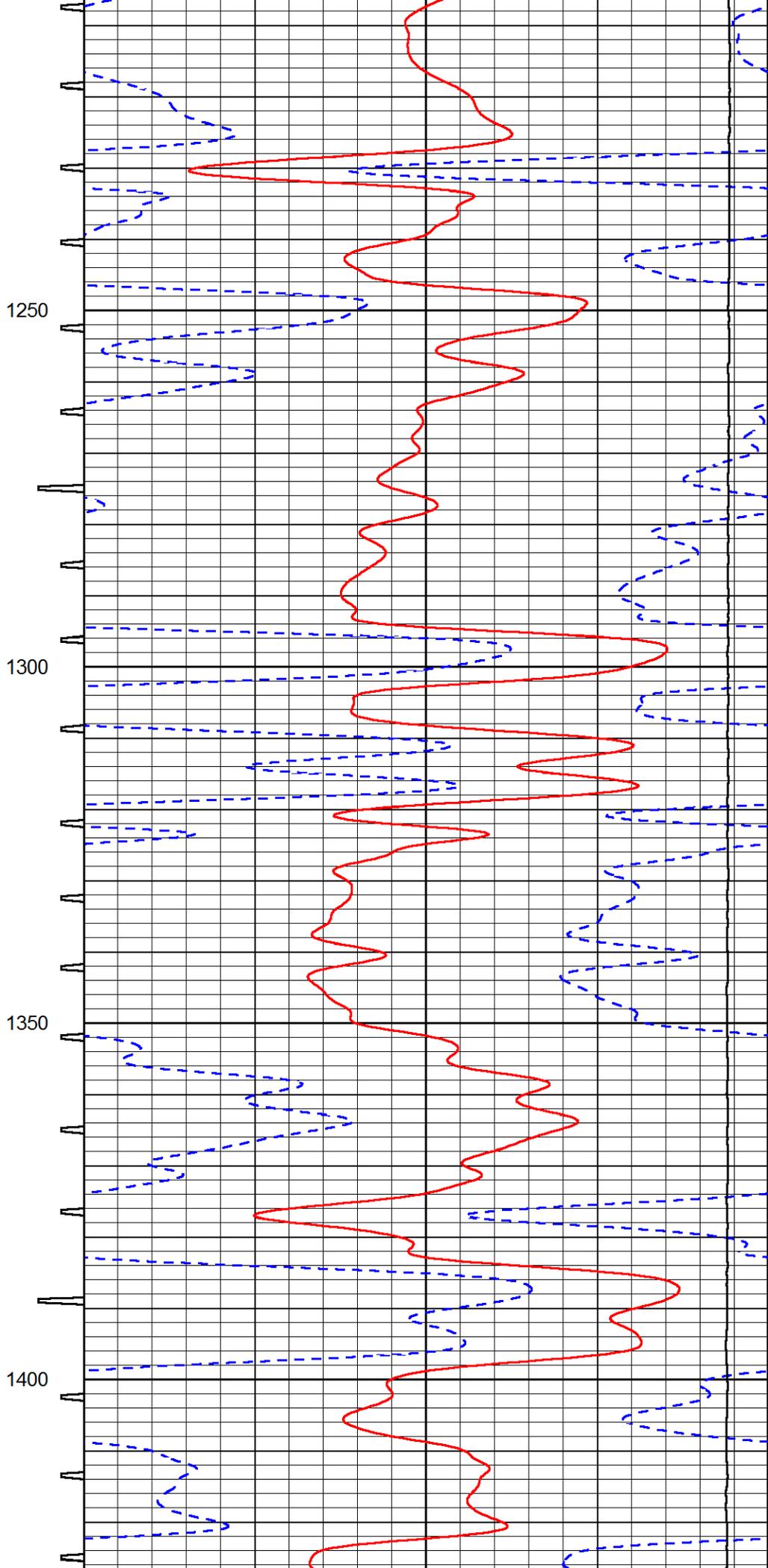
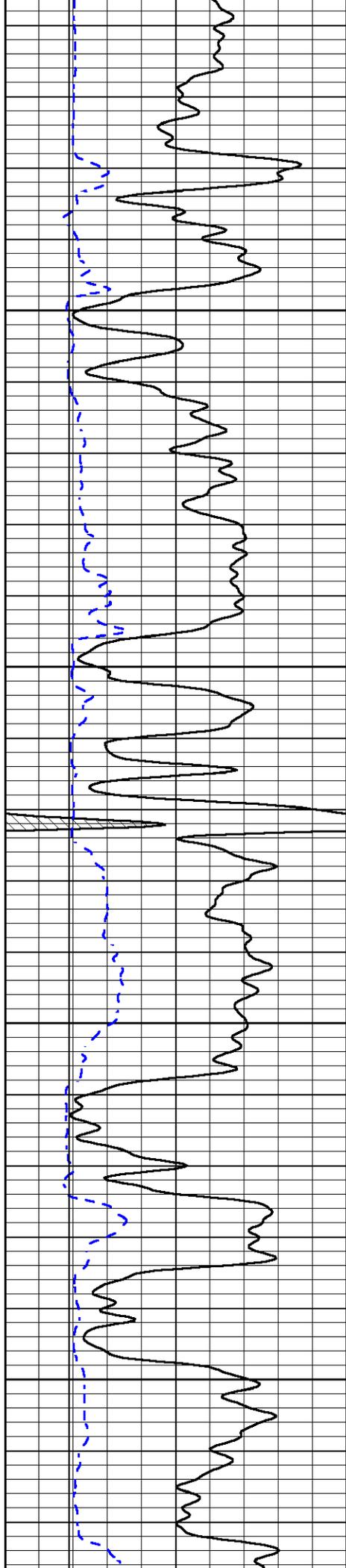


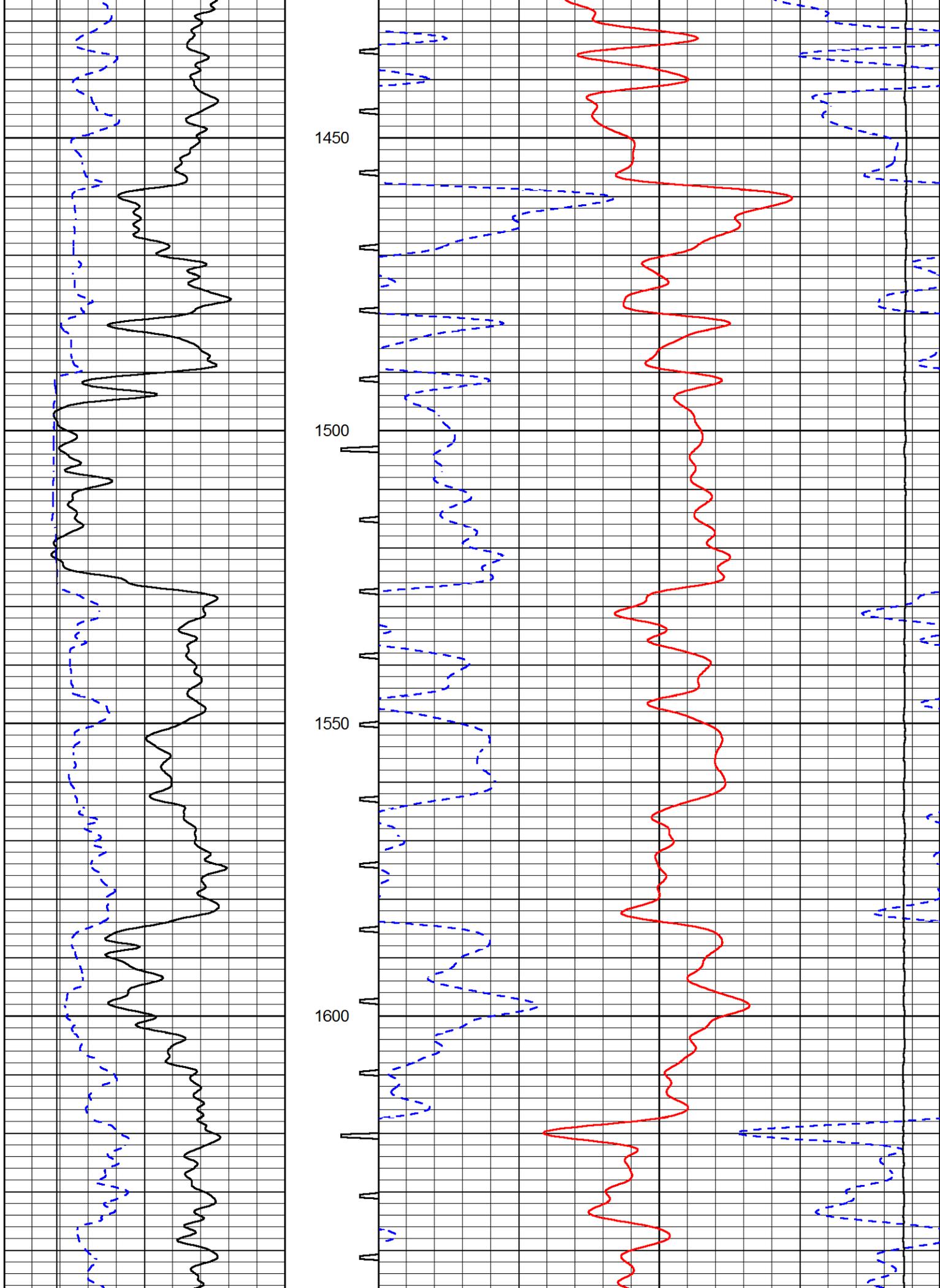


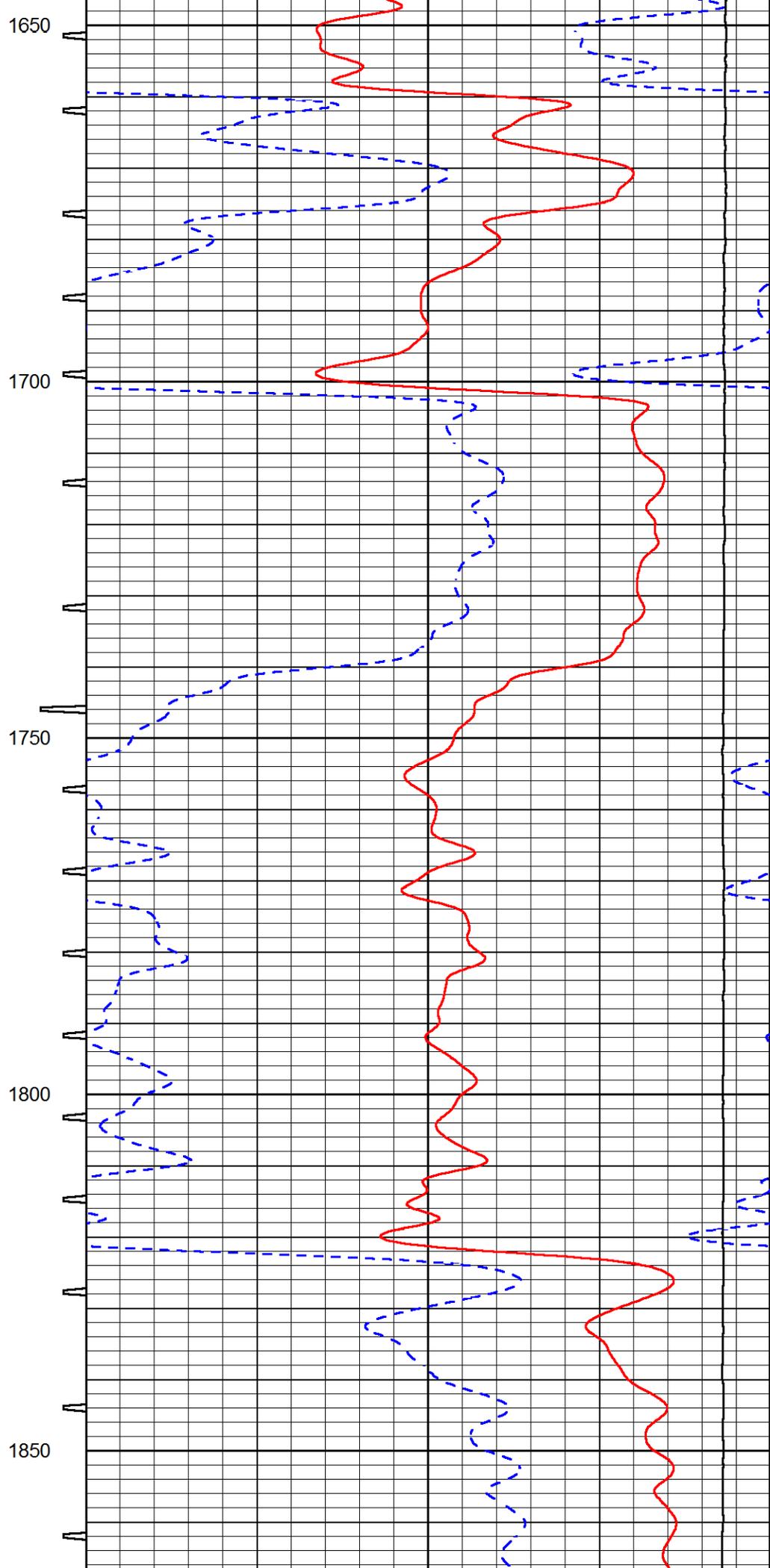
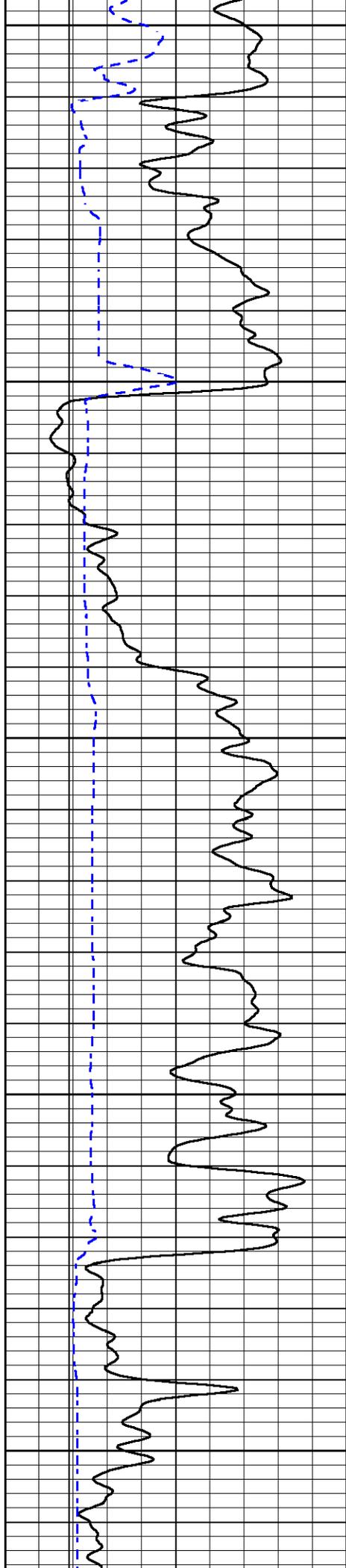


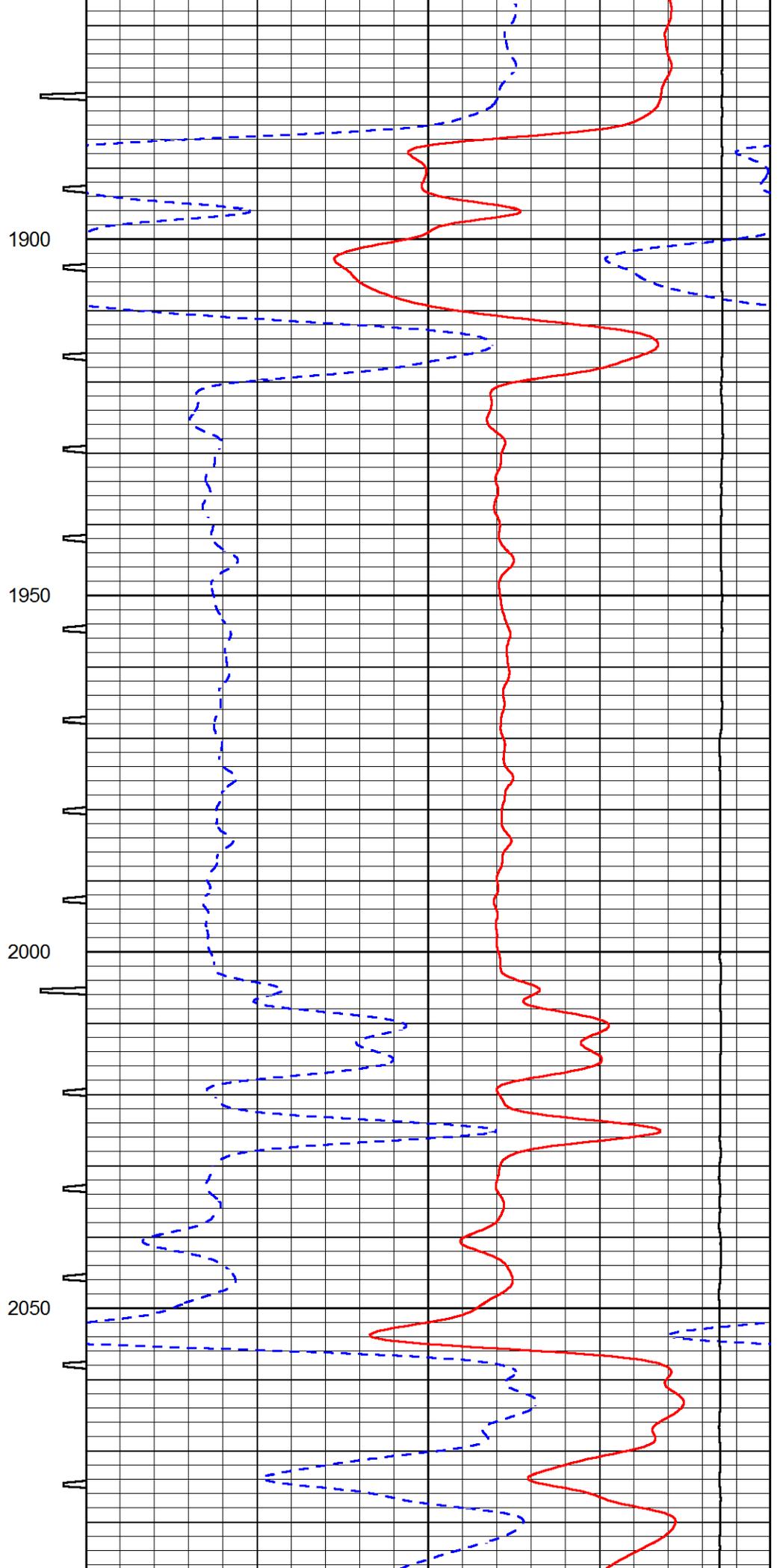
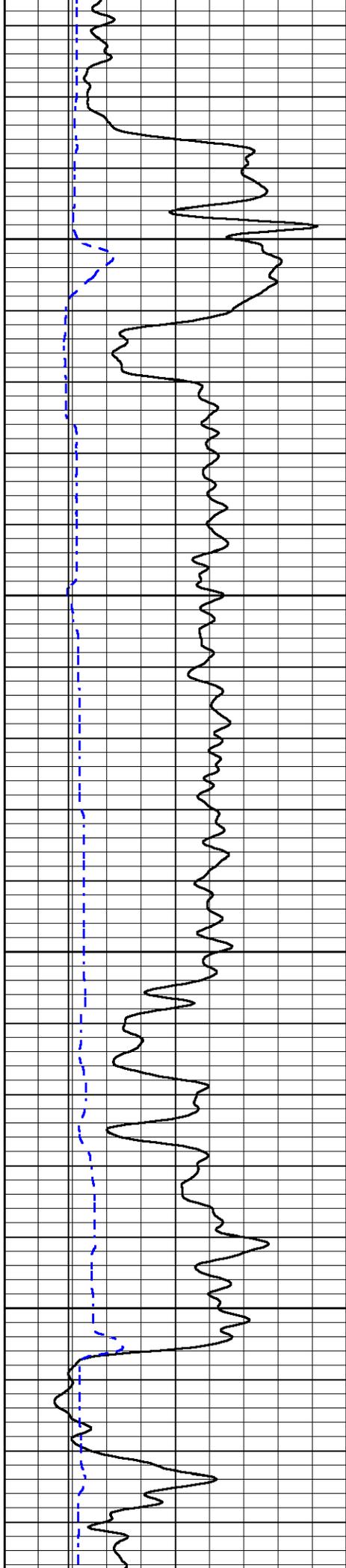


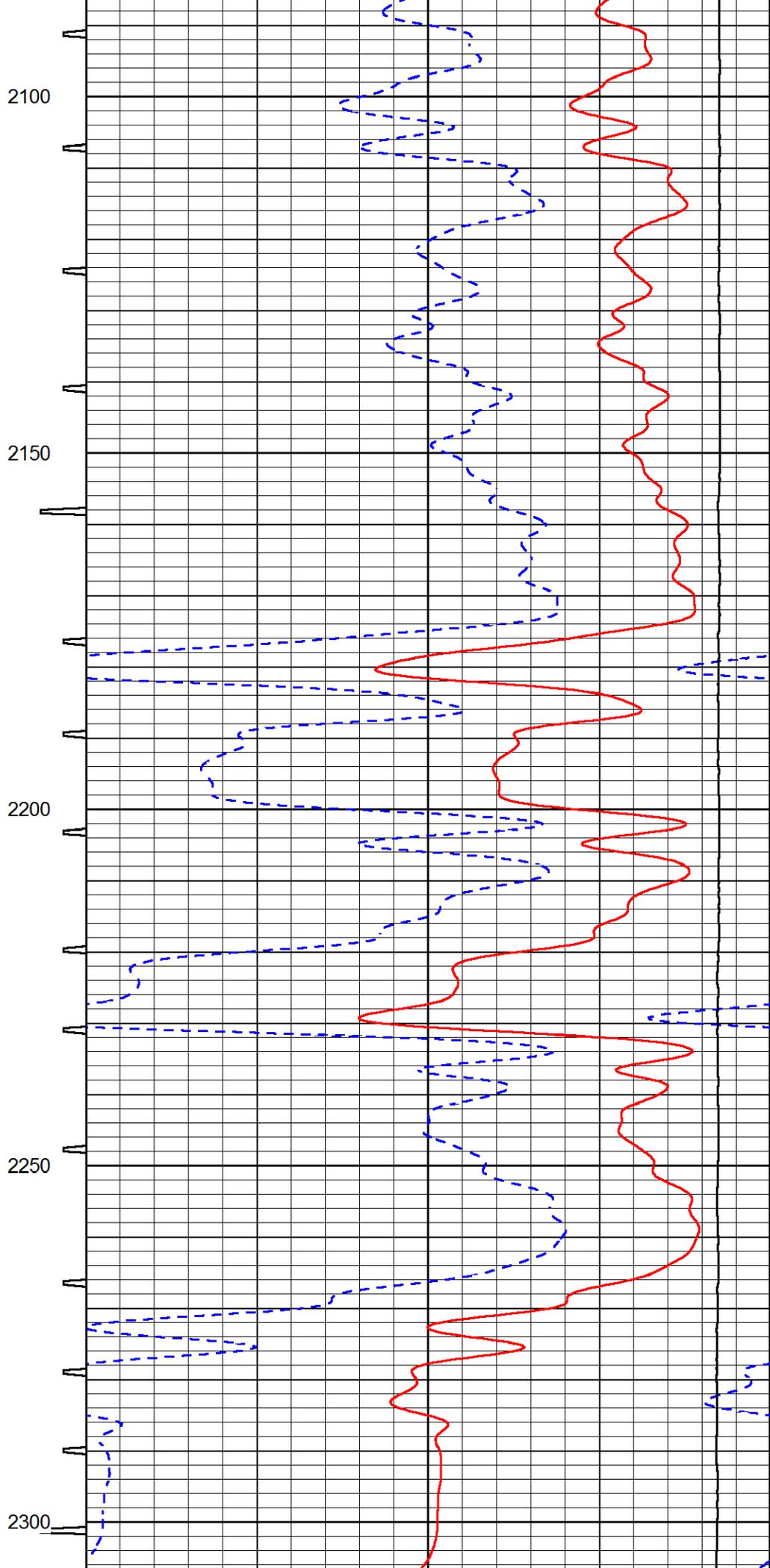
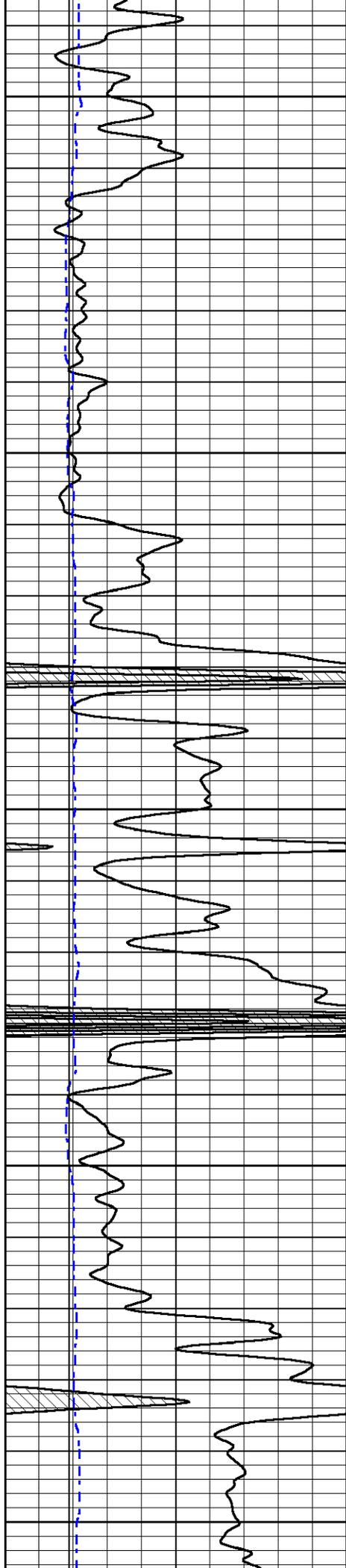


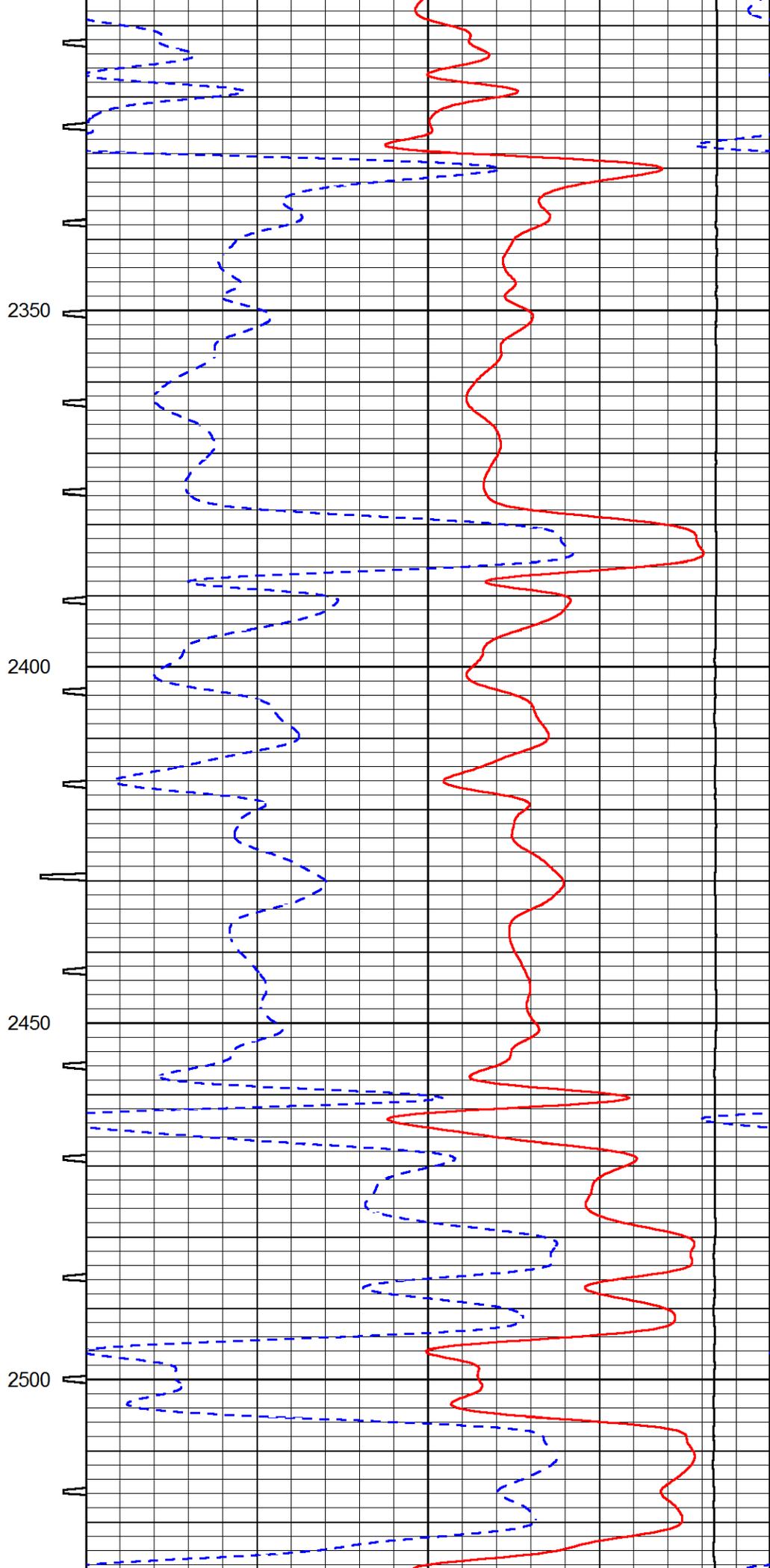
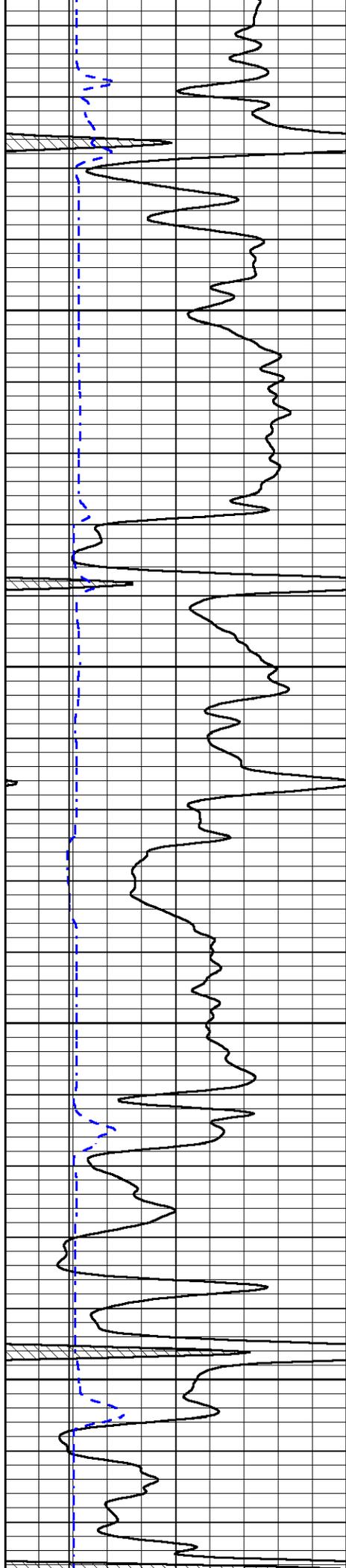


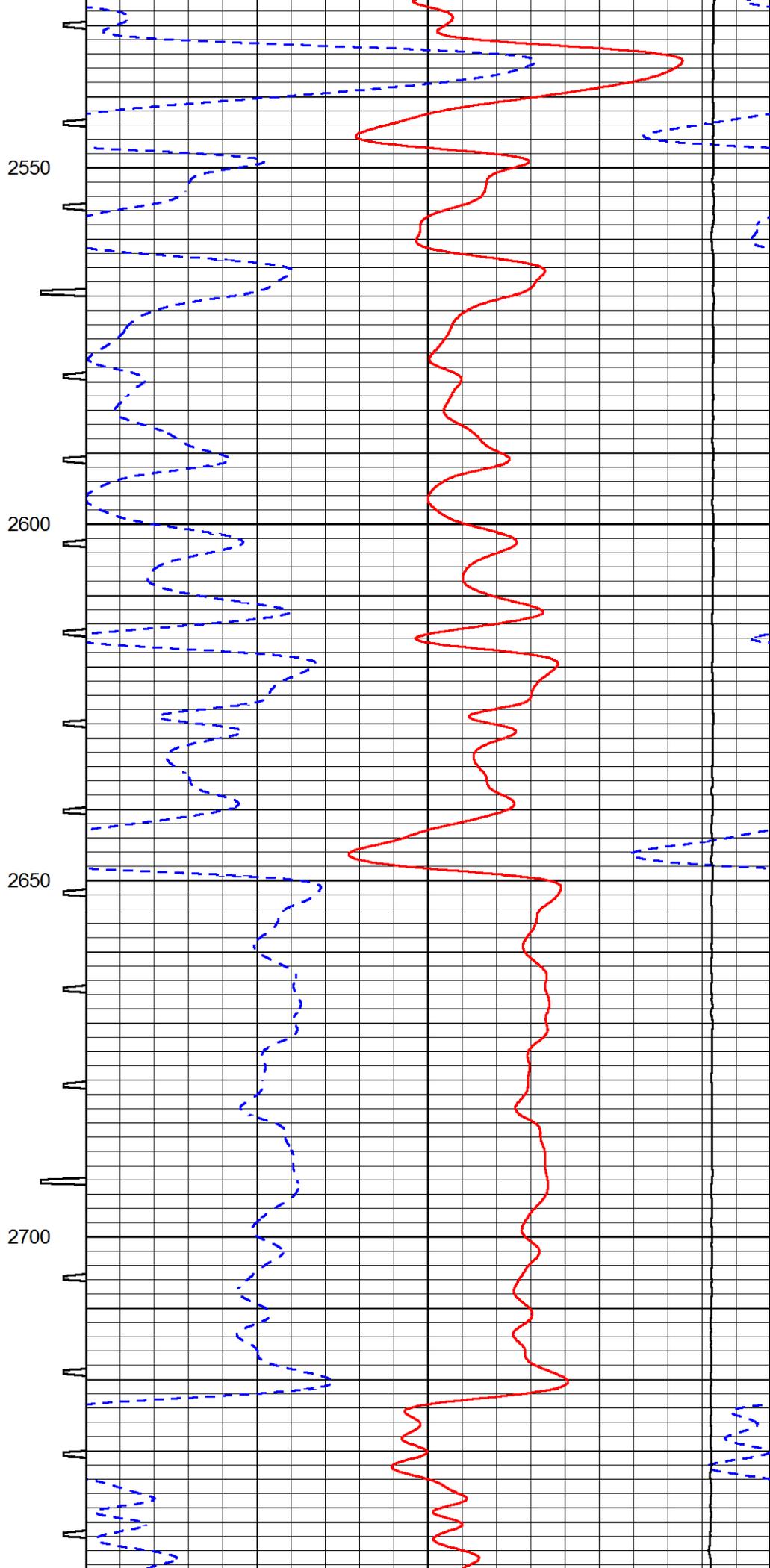
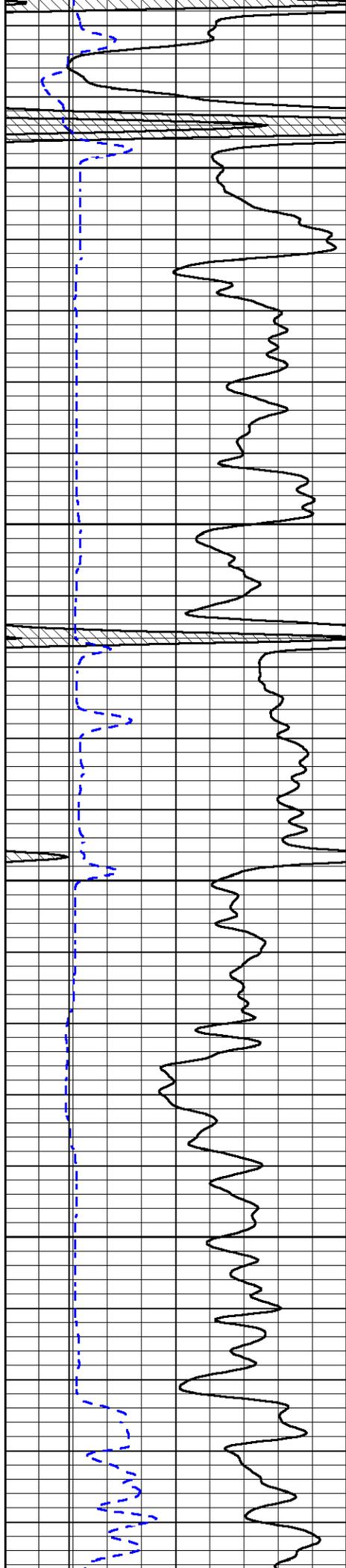


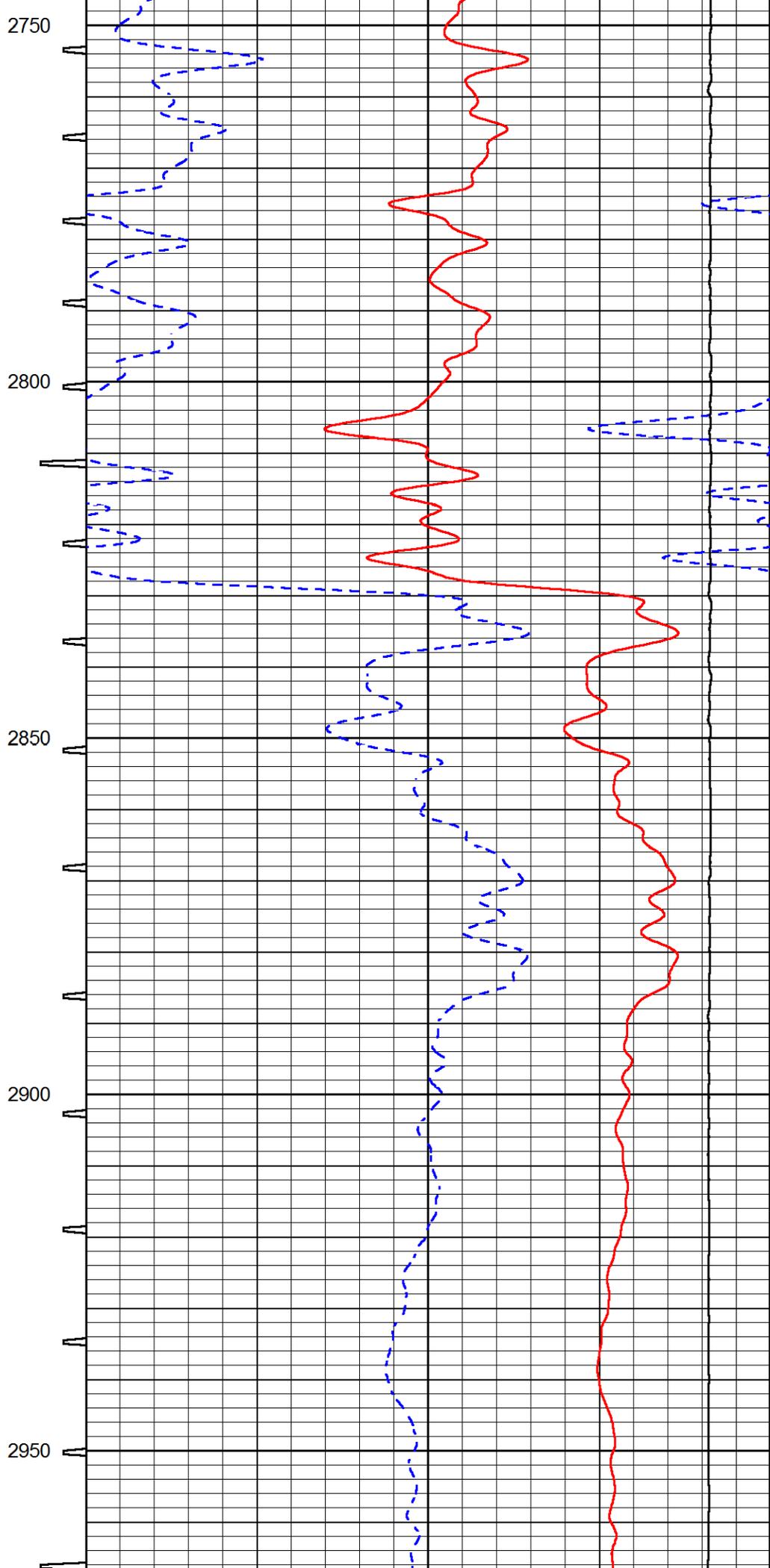
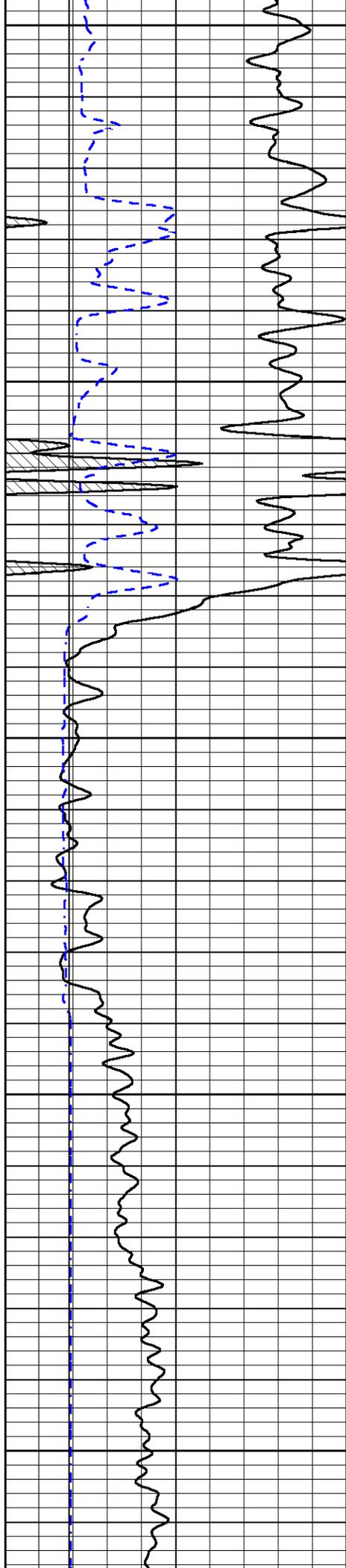


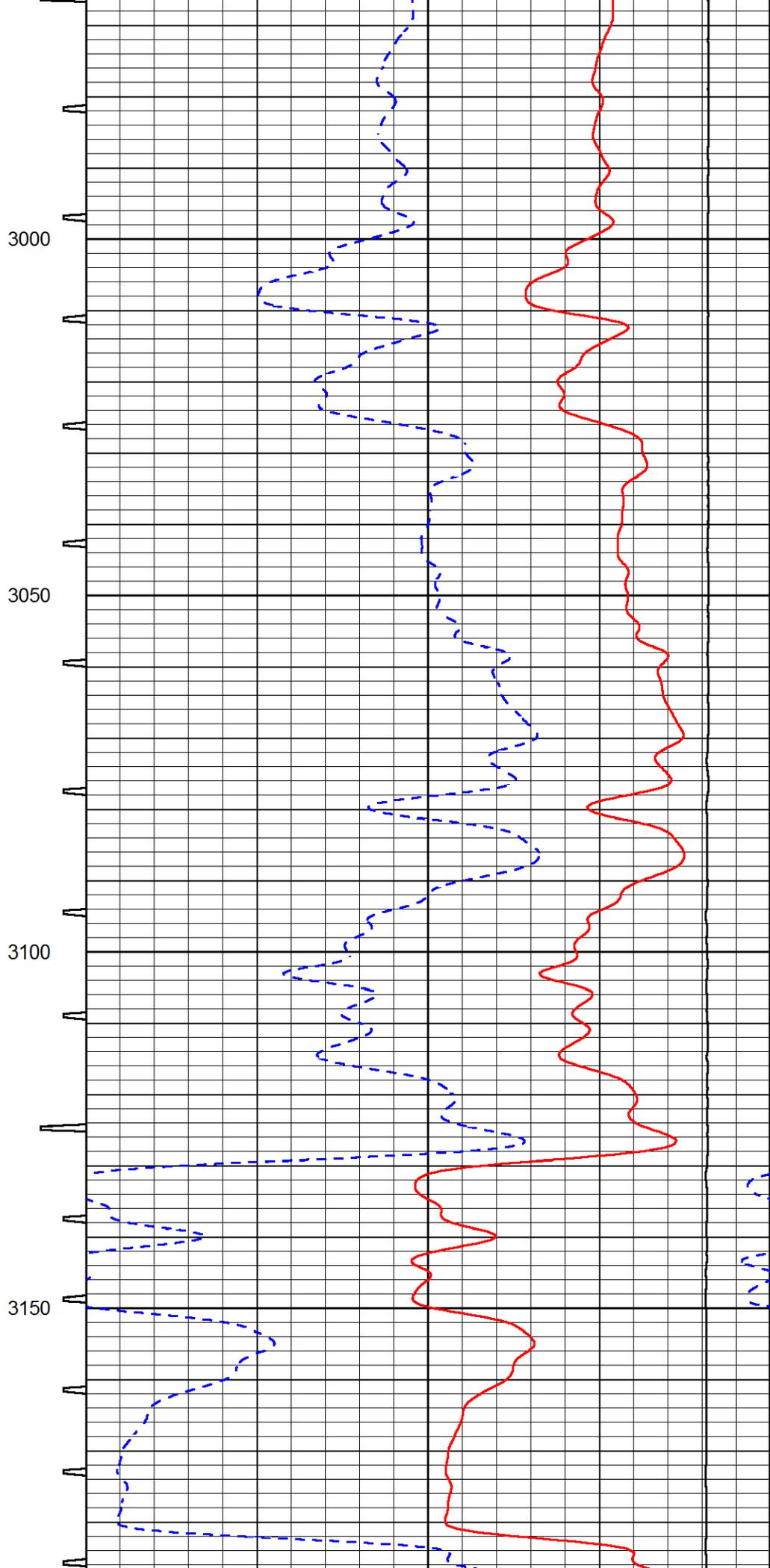
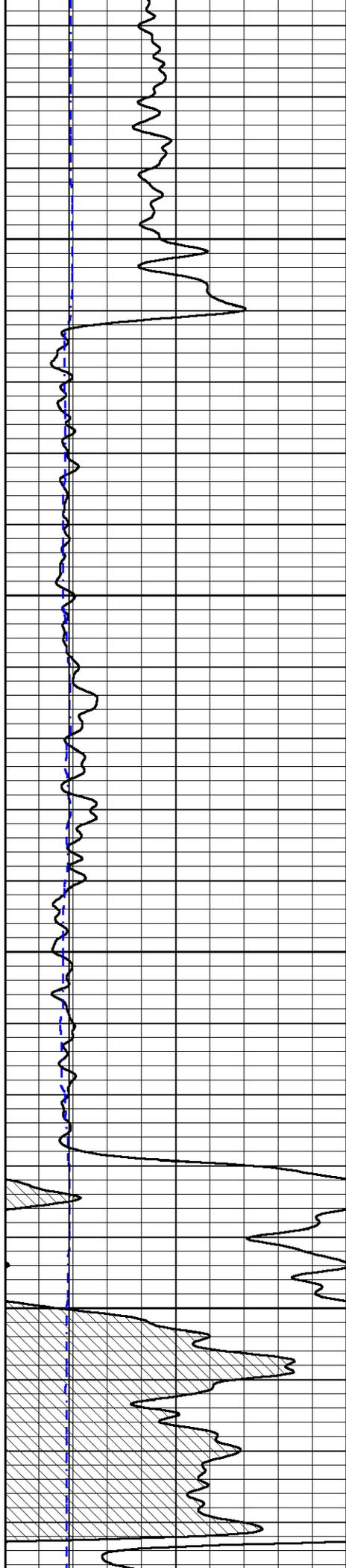


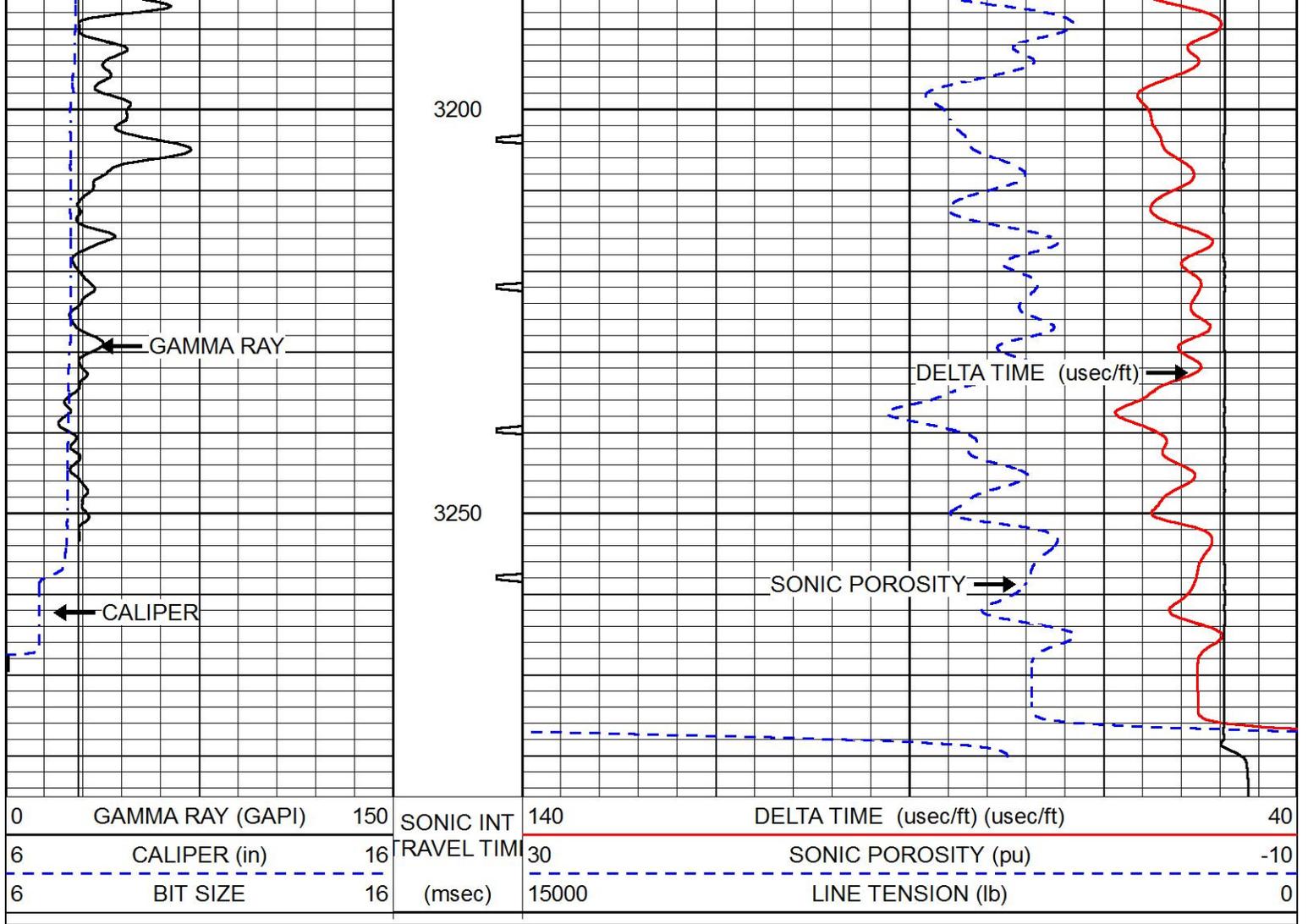








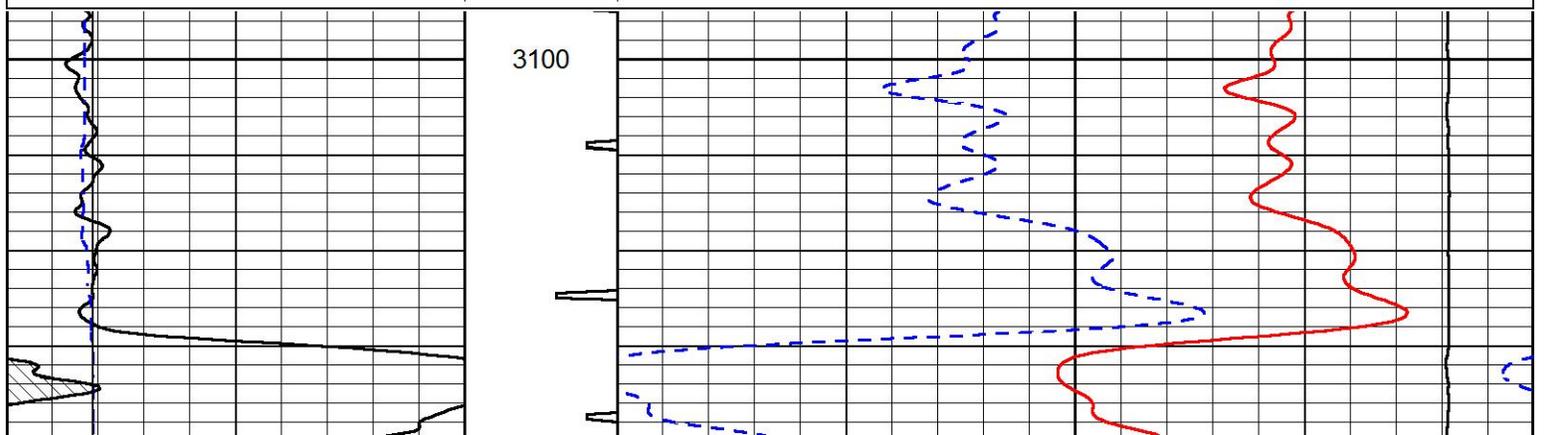


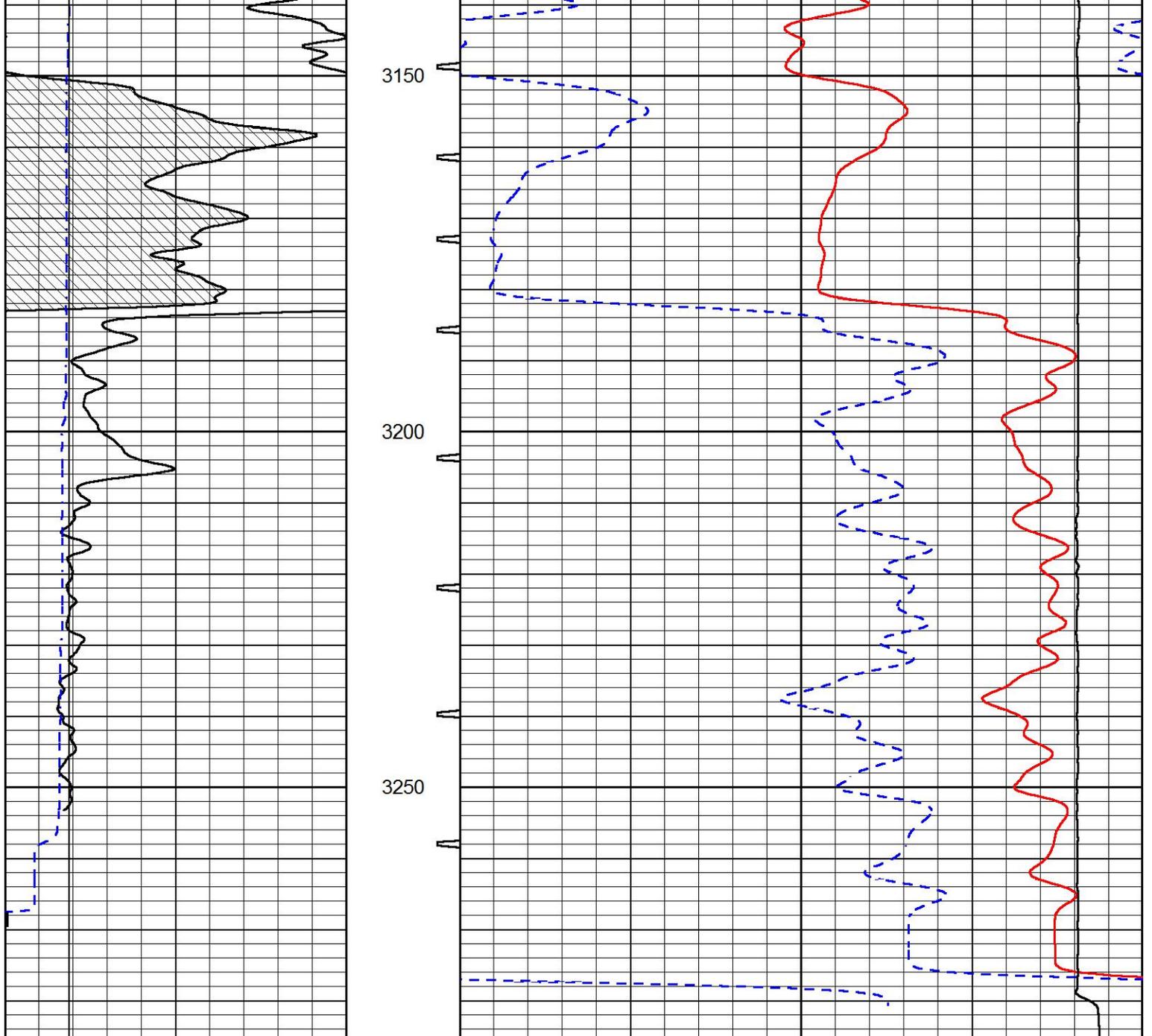


REPEAT SECTION

Database File murfin_youngmeyer_a_1_14.db
 Dataset Pathname stack/pass2.1
 Presentation Format sonic
 Dataset Creation Sun Jul 16 22:26:33 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





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



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