



CEMENT BOND LOG W/
VARIABLE DENSITY,
GAMMA RAY, CCL, TEMP

Company GREAT WESTERN OIL & GAS

Well OTTESSEN LE 06-351HNX

Field WATTENBERG

County WELD State COLO

Location: API #: 05-123-48287

SEC 33 TWP 1N RGE 66W

Permanent Datum GL KB Elevation 5076.5'

Log Measured From KB KB

Drilling Measured From KB KB

Elevation K.B. 5096.5'

D.F. 5095.5'

G.L. 5076.5'

Date MAR-2-2019

Run Number ONE

Depth Driller 17750

Depth Logger 10257

Bottom Logged Interval 10258

Top Log Interval SURFACE

Open Hole Size NA

Type Fluid WATER

Density / Viscosity 8.34 PPG

Max. Recorded Temp. 190

Estimated Cement Top SEE LOG

Time Well Ready ROA

Time Logger on Bottom 3:45 PM

Equipment Number 72

Location STERLING, CO

Recorded By KYLE GIRDLER

Witnessed By DAVELANG

Run Number

Bit

From

To

Size

Weight

From

To

Size

Wgt/ft

Top

Bottom

Surface String 9 5/8 36 SURFACE 1862

Production String 5.5 1.7 SURFACE 17691

Liner

Comments

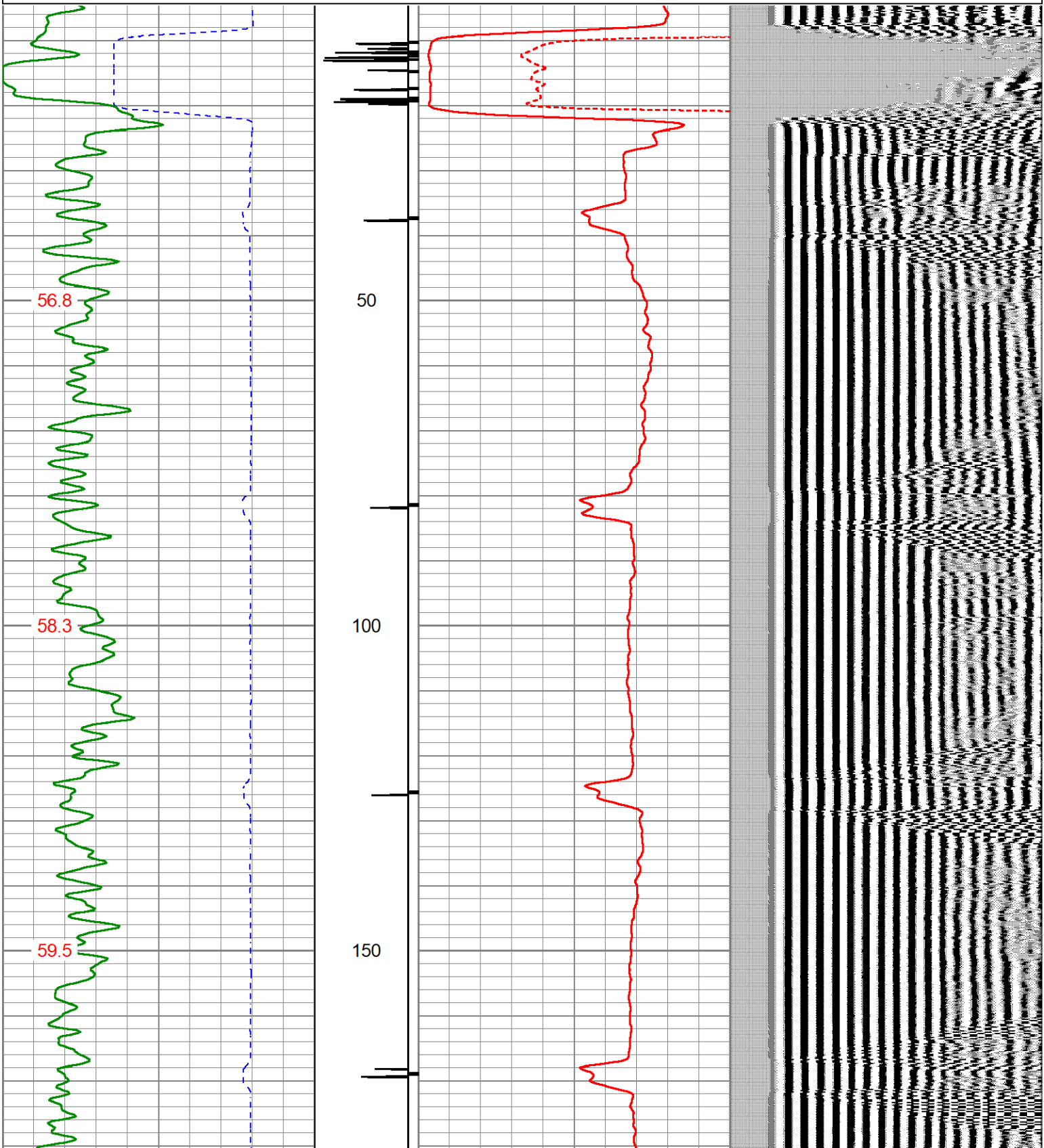
TOOL STRING CENTRALIZED WITH 4 GEMCO CENTRALIZERS
LOG CORRELATED TO MARKER JOINT @ 9647-9657
LOGGED UNDER 1800 WELL INDUCED PSI
THANK YOU FOR USING KLX ENERGY SERVICES

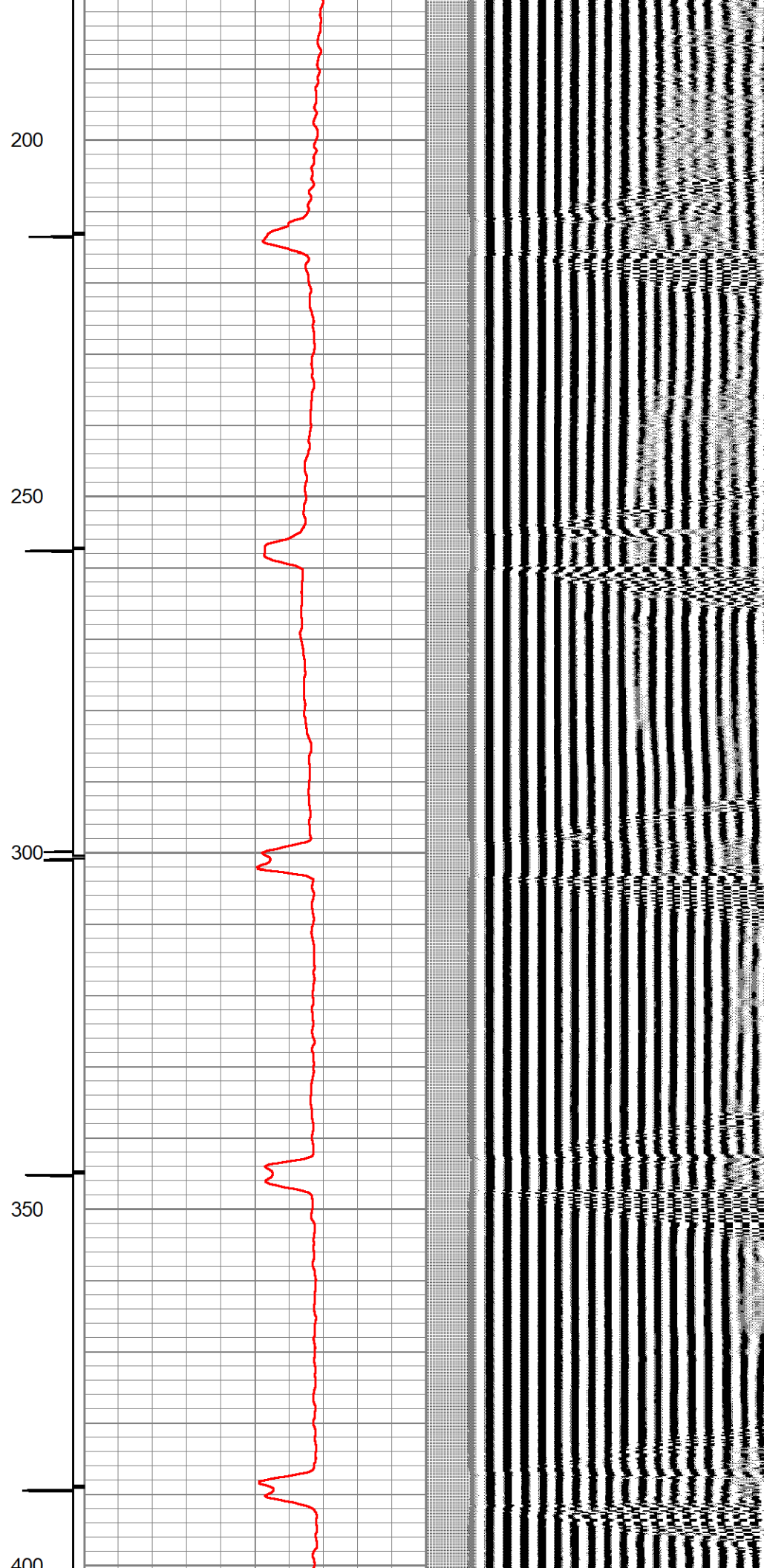
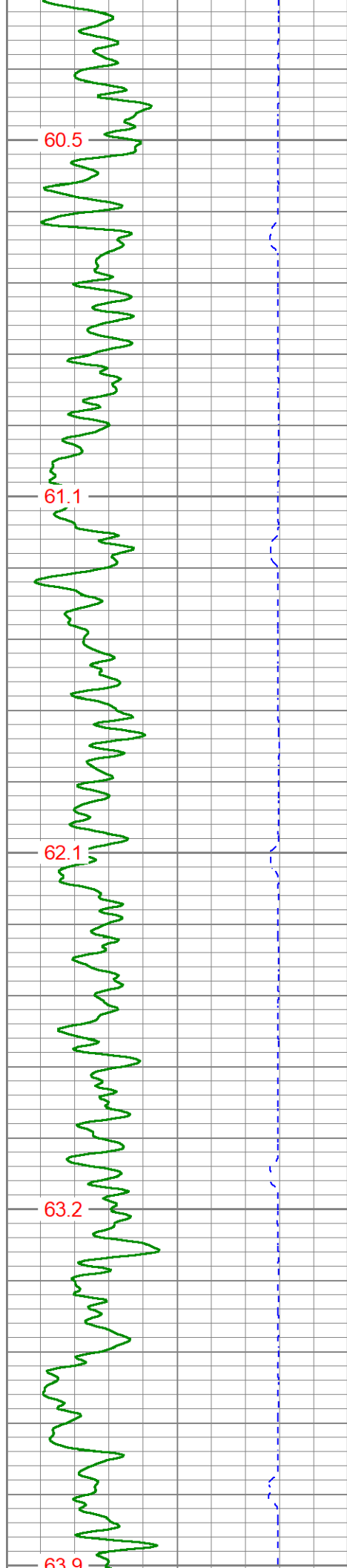


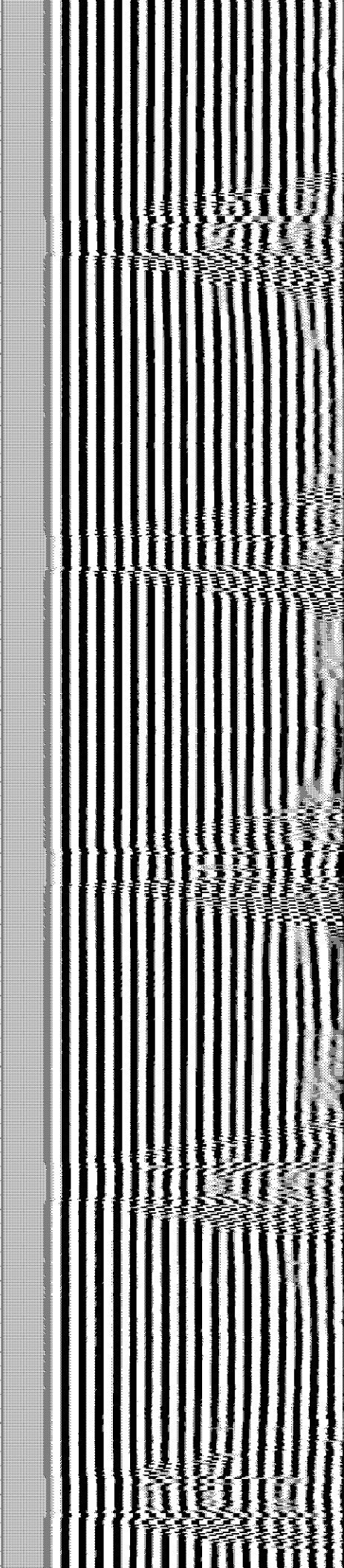
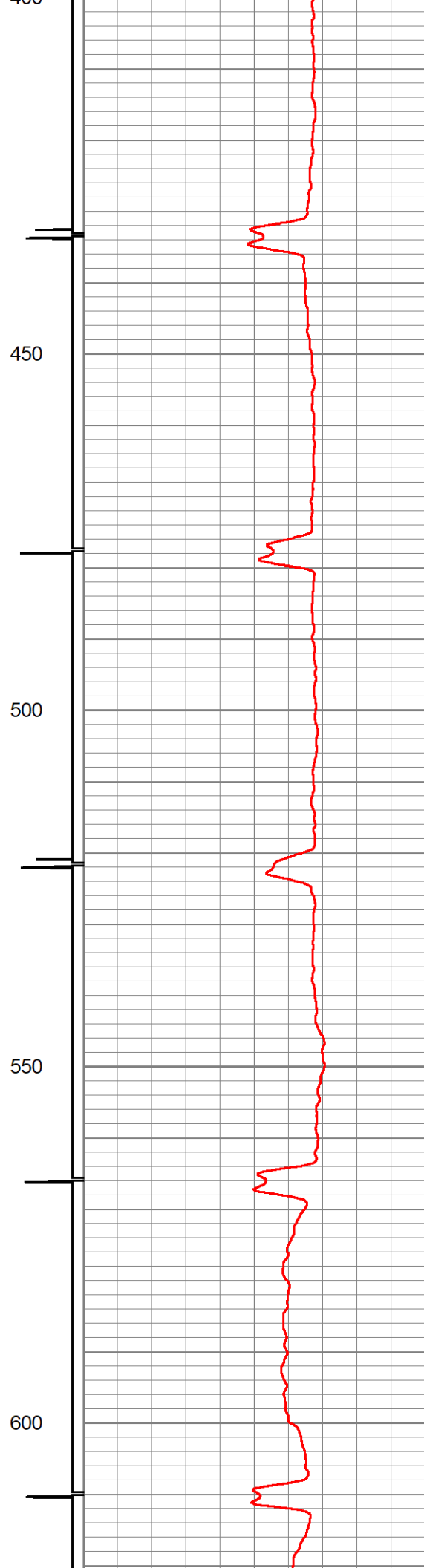
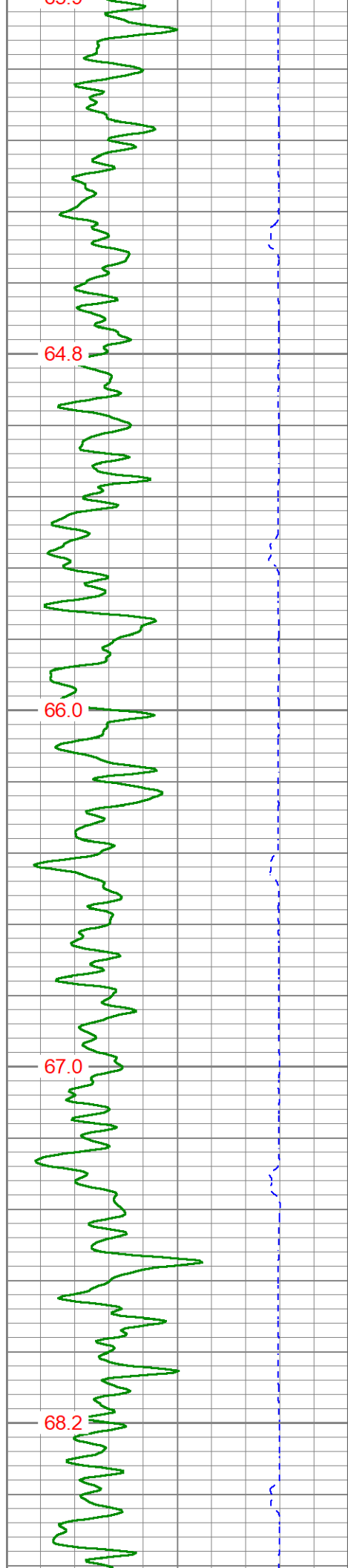
MAIN PASS

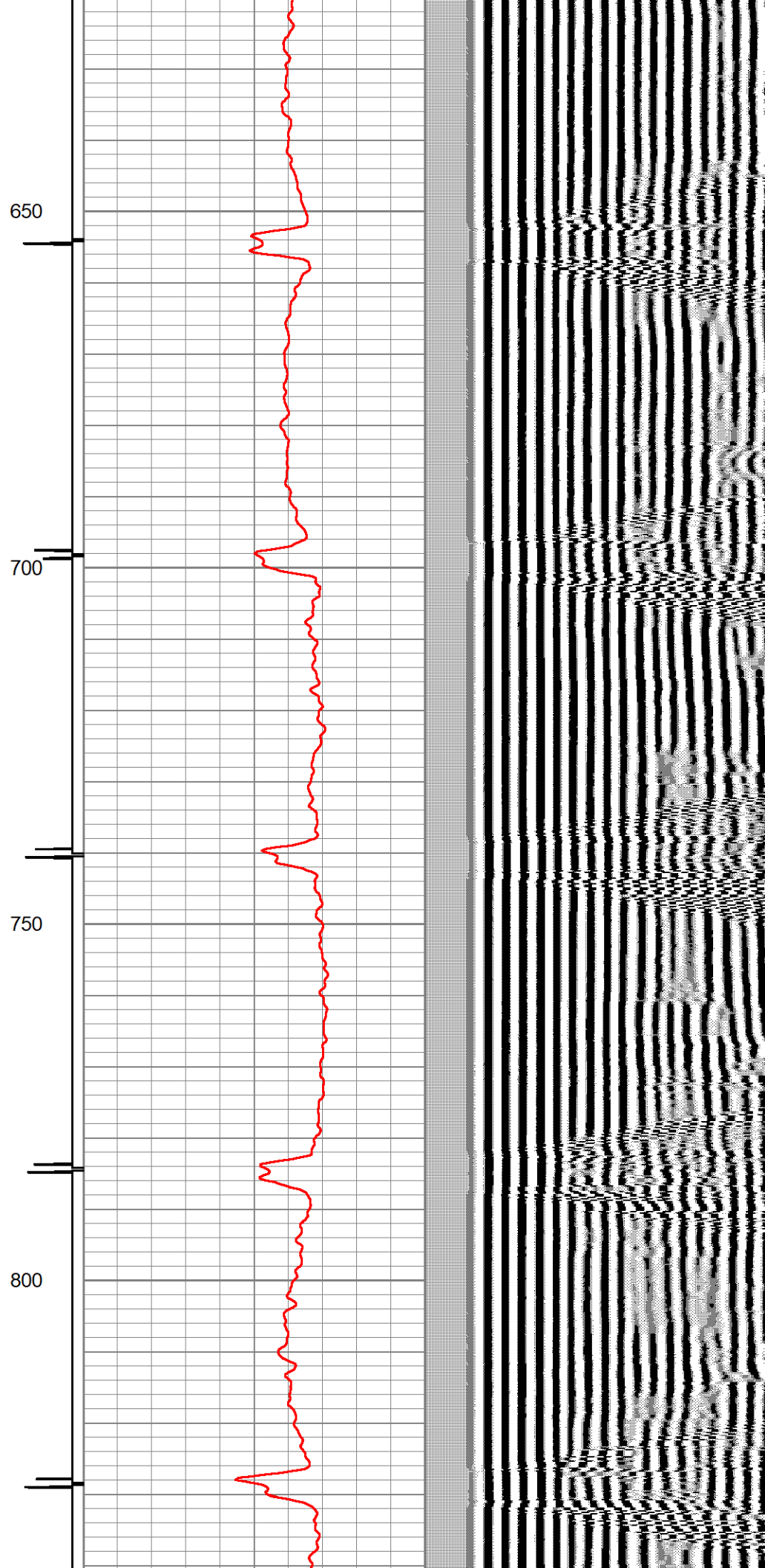
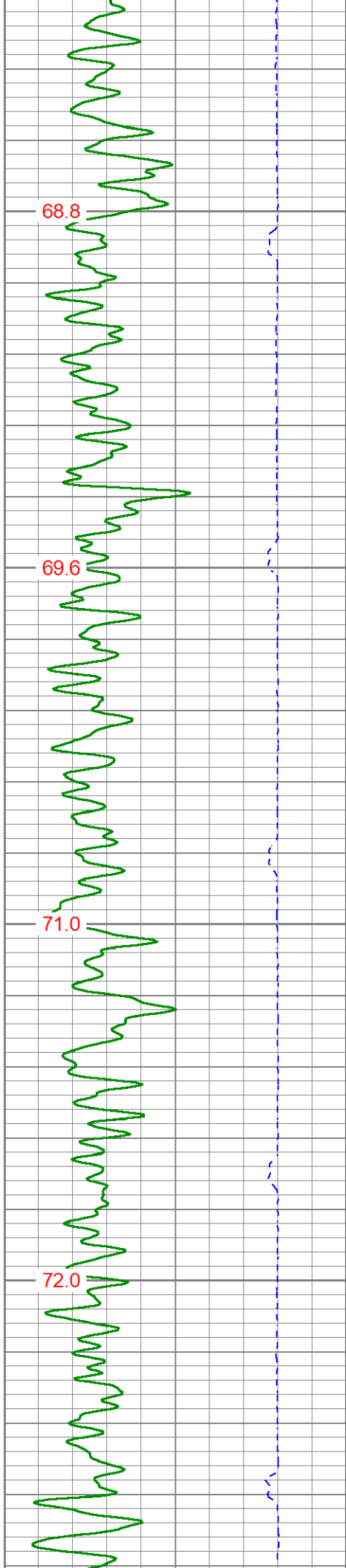
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Dataset Pathname	pass7
Presentation Format	cbl_kggw
Dataset Creation	Sat Mar 02 16:02:01 2019
Charted by	Depth in Feet scaled 1:240

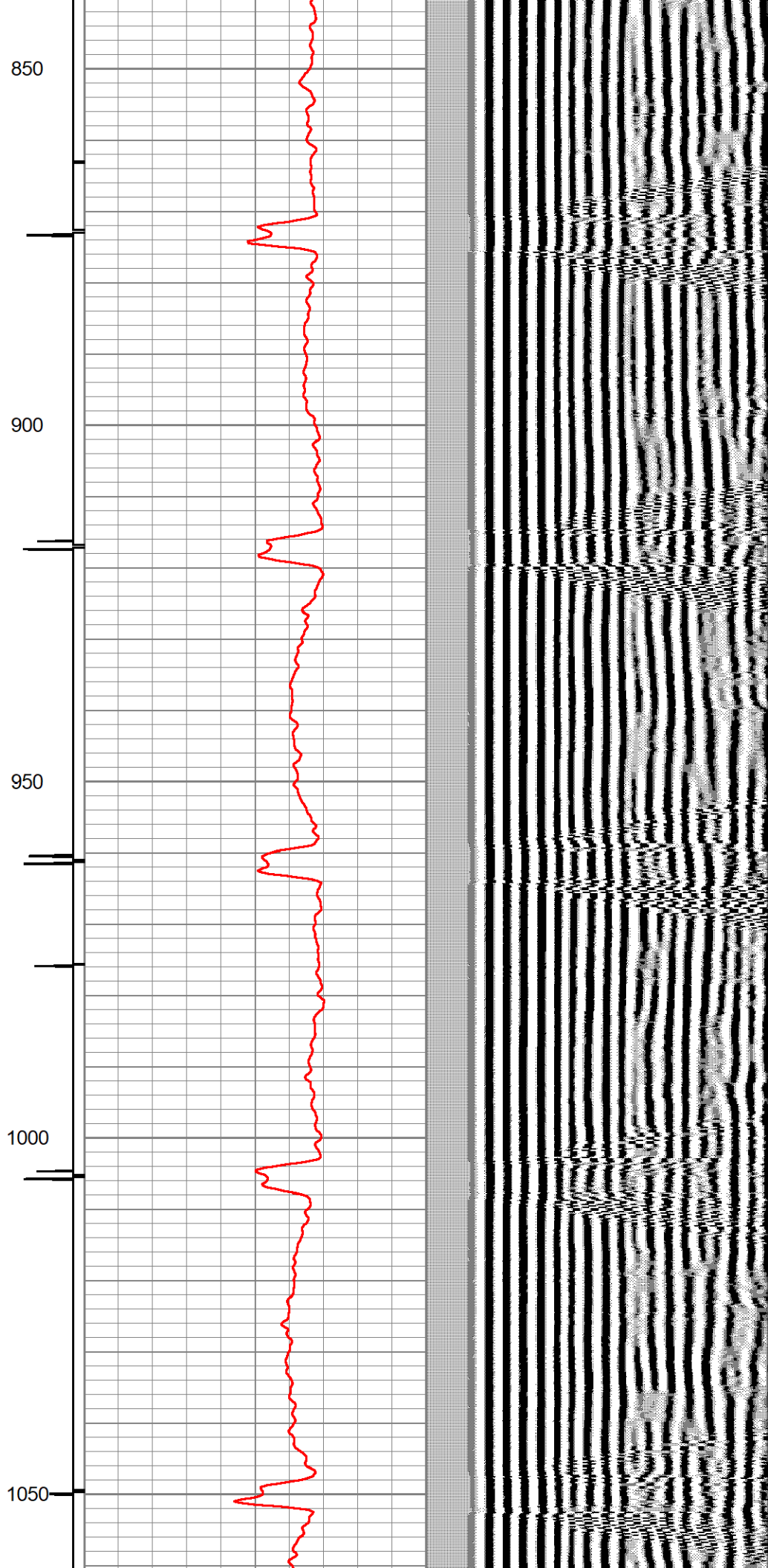
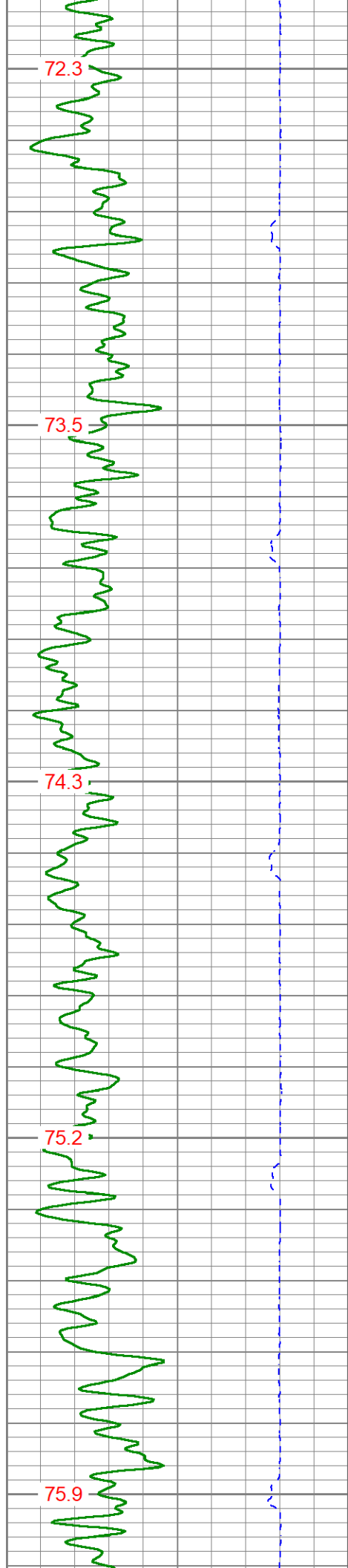
420	TRAVEL TIME (usec)	220	Collar Location	0	AMP AMPLITUDE (mV)	10	200	VDL (usec)	1200
0	Gamma Ray (GAPI)	200	9	-1	0	AMPLITUDE (mV)	100		
0	Line Speed (ft/min)	100							
TEMP									
(degF)									

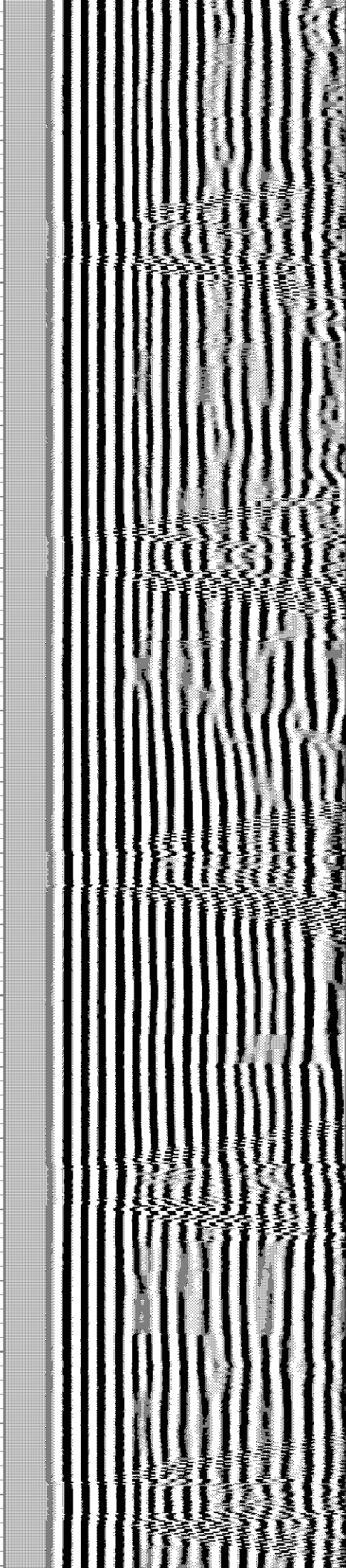
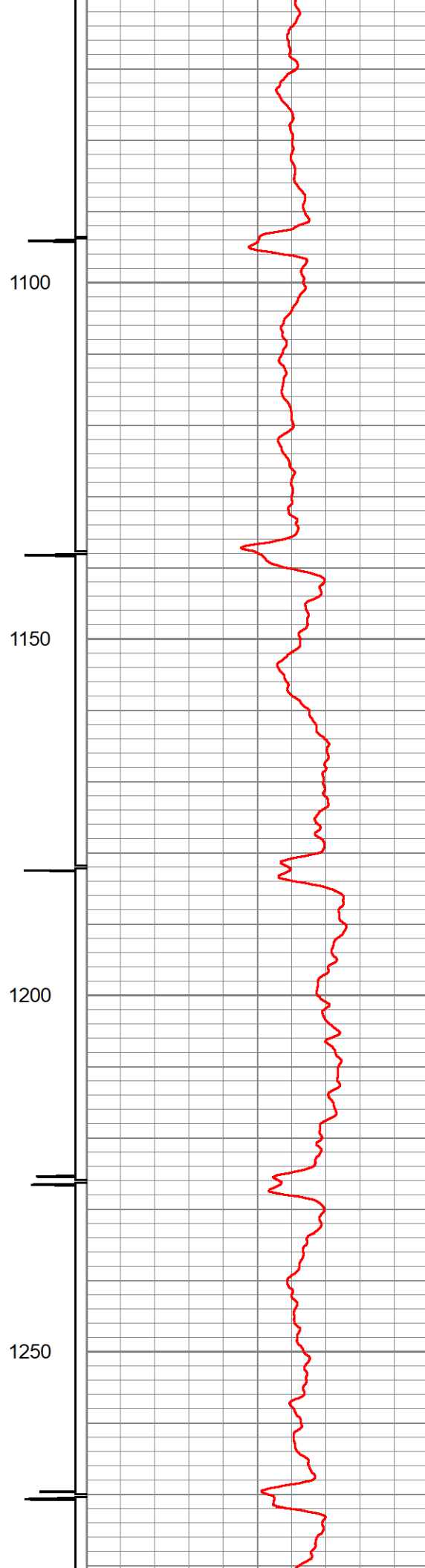
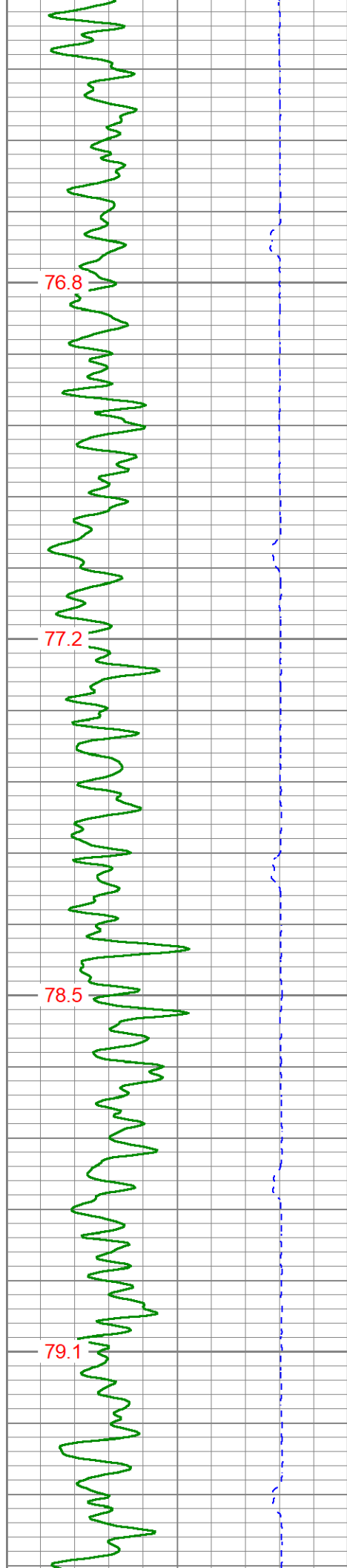


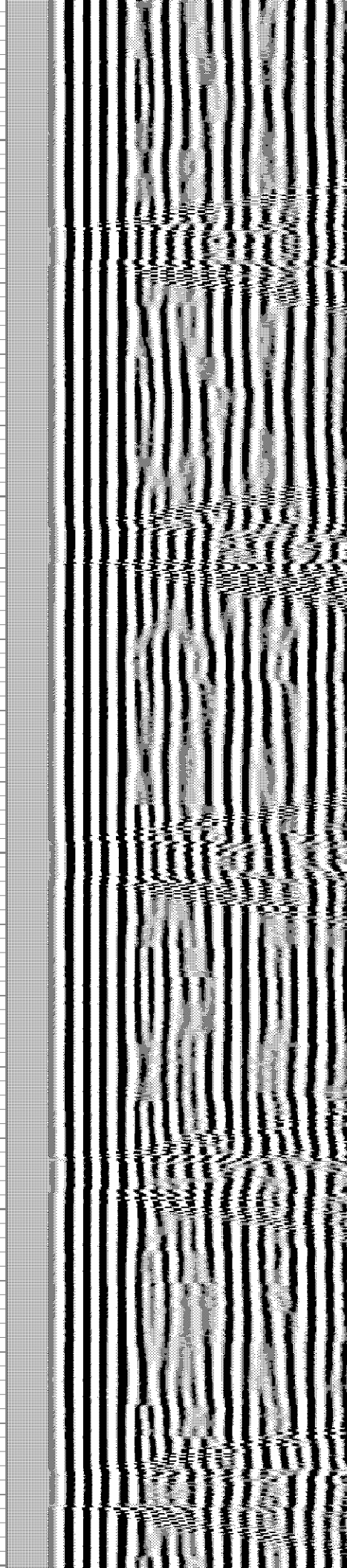
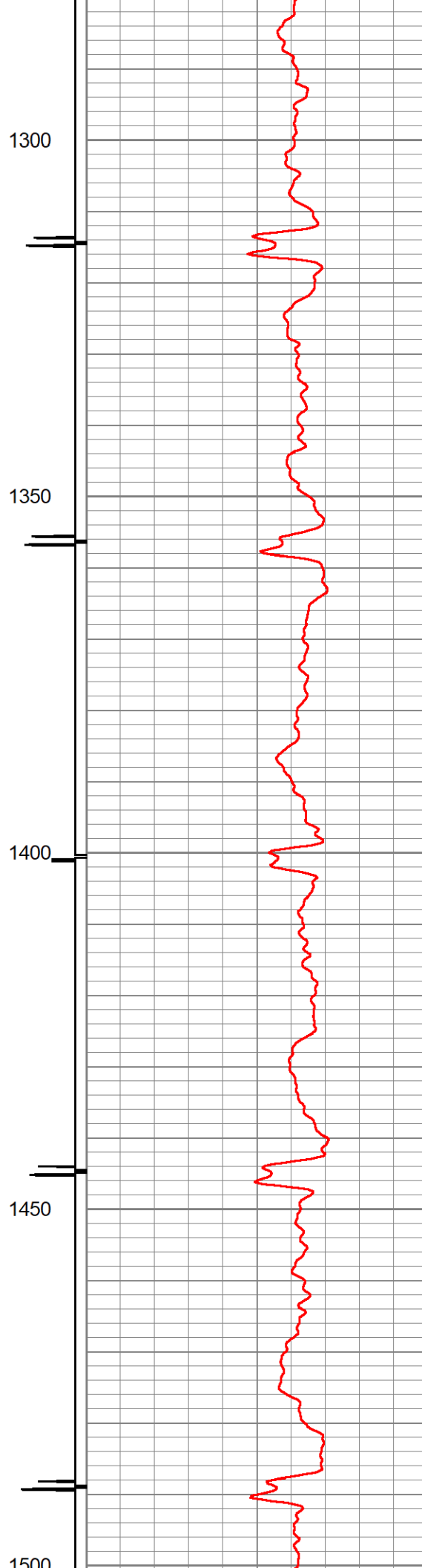
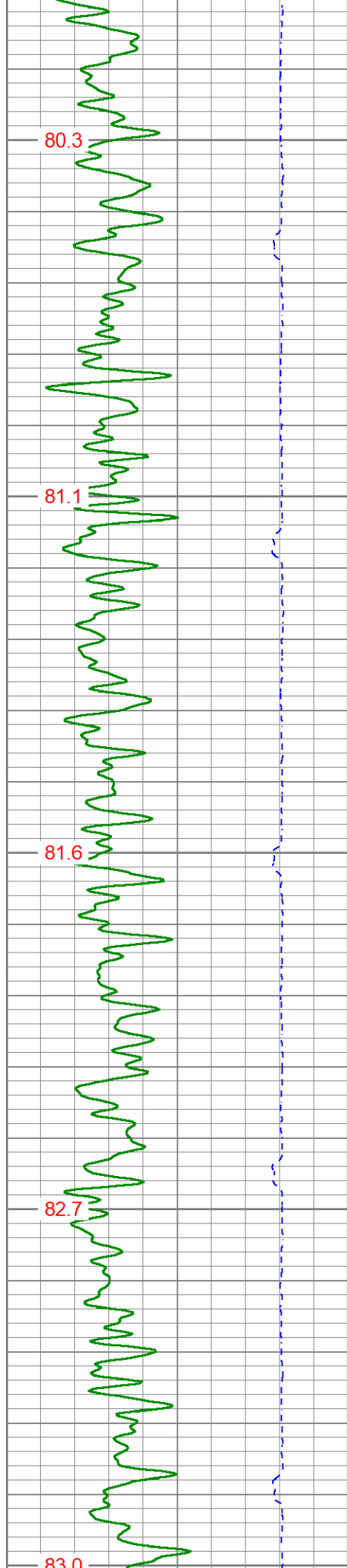


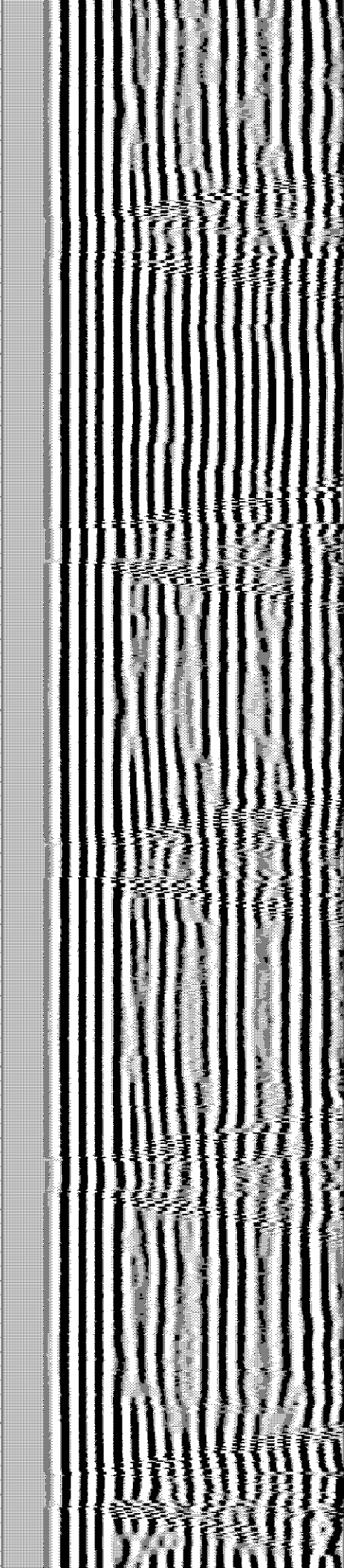
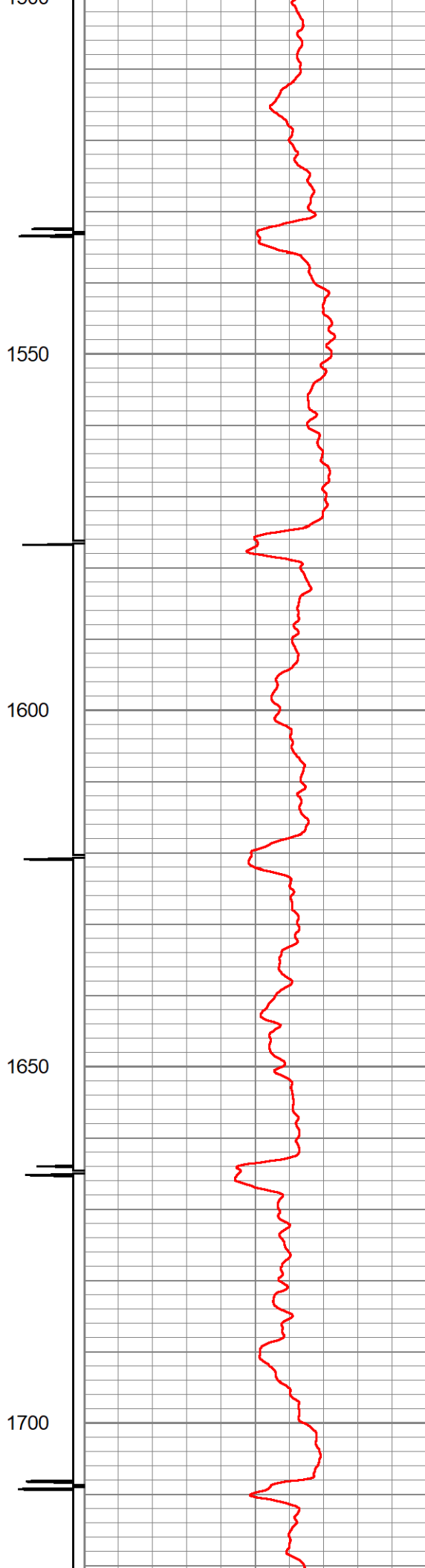
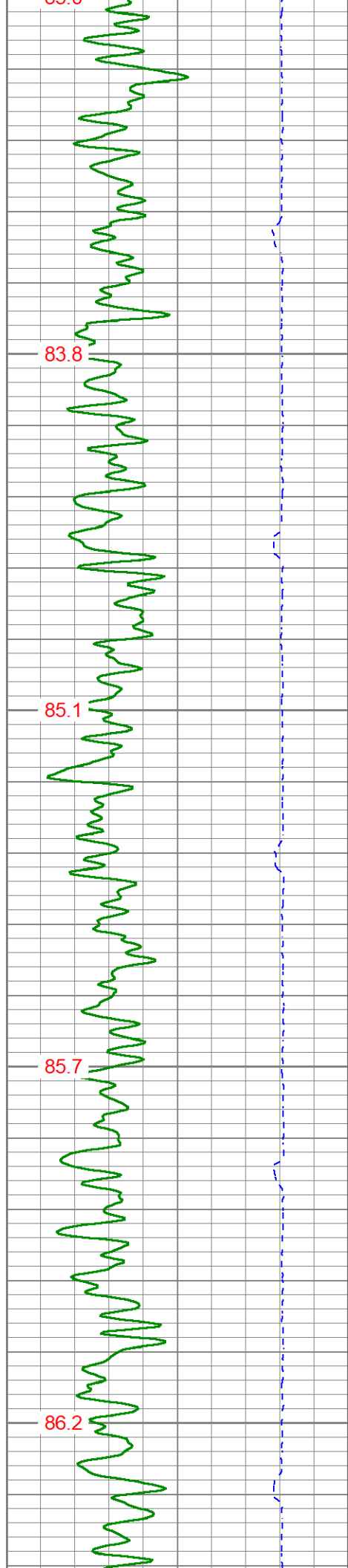


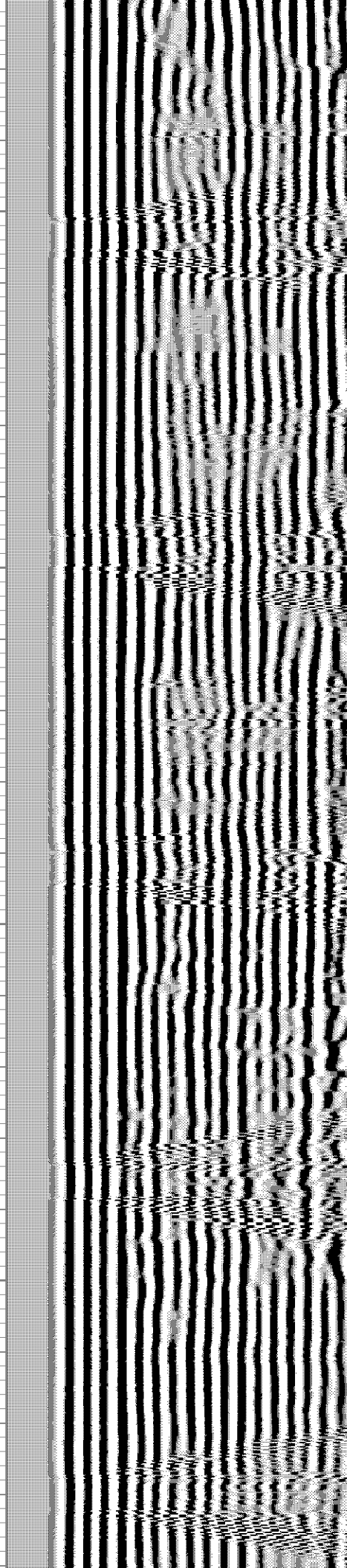
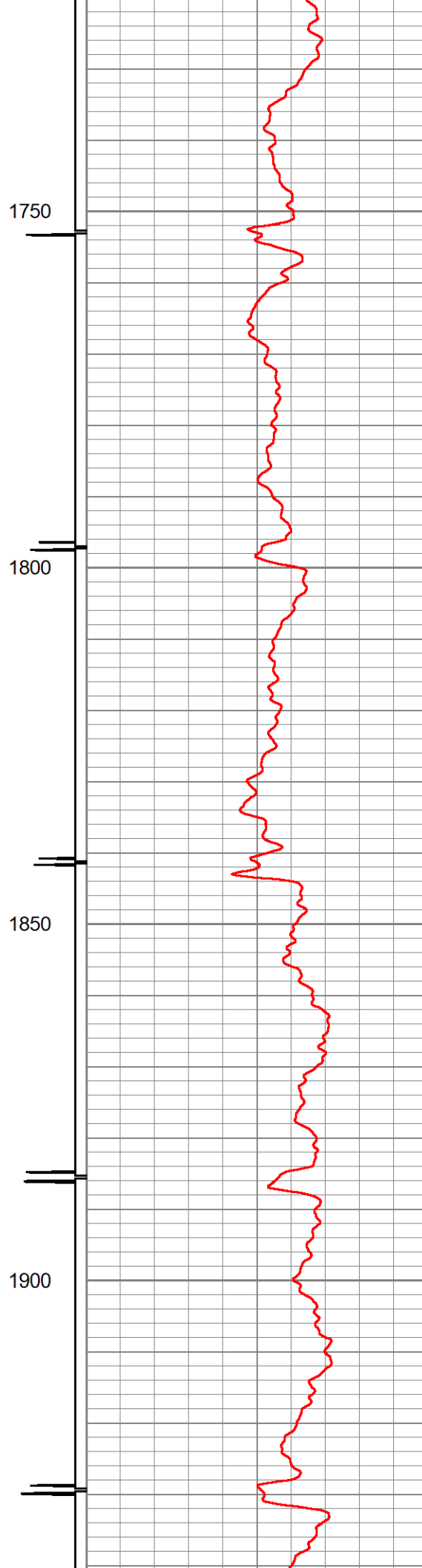
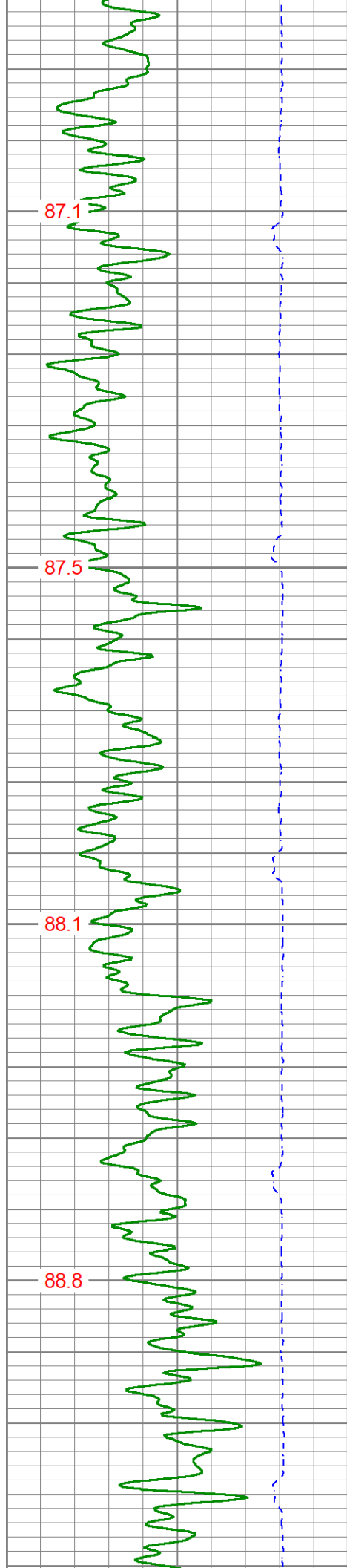


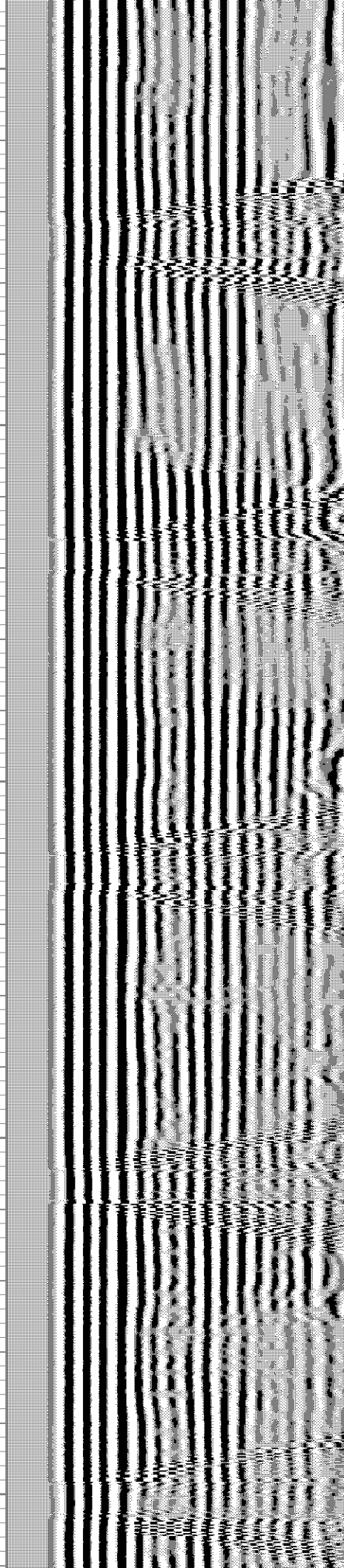
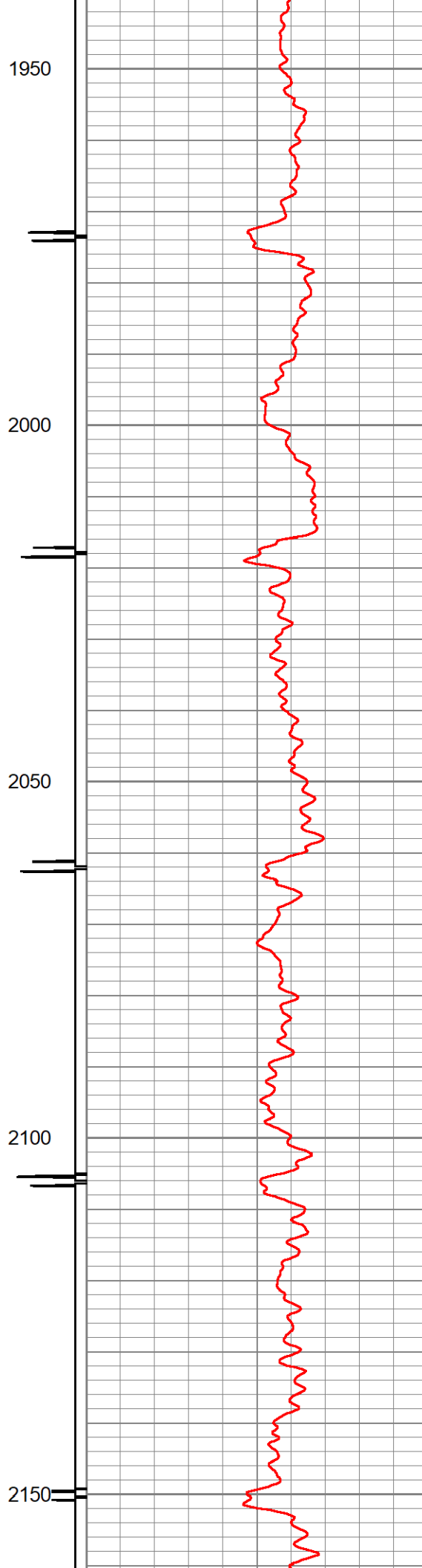
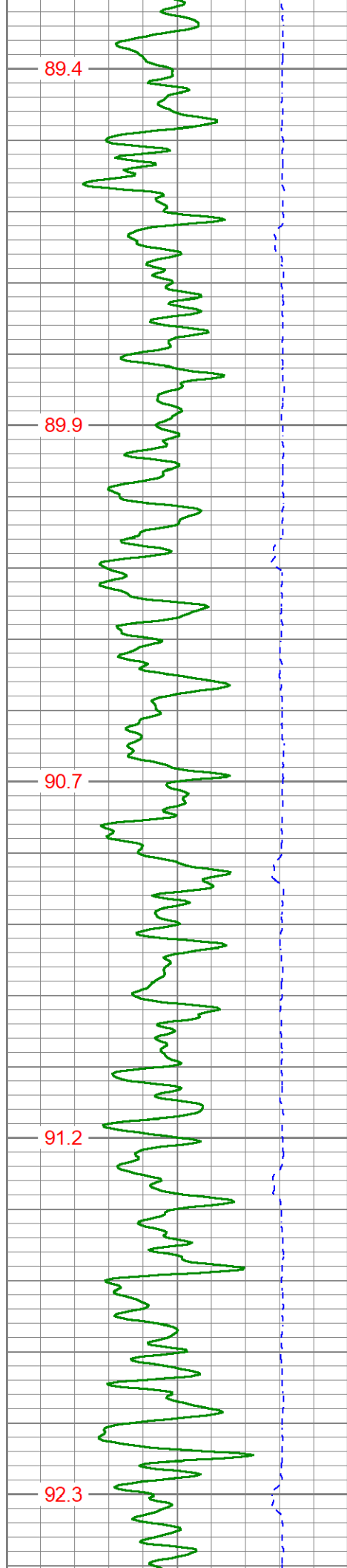


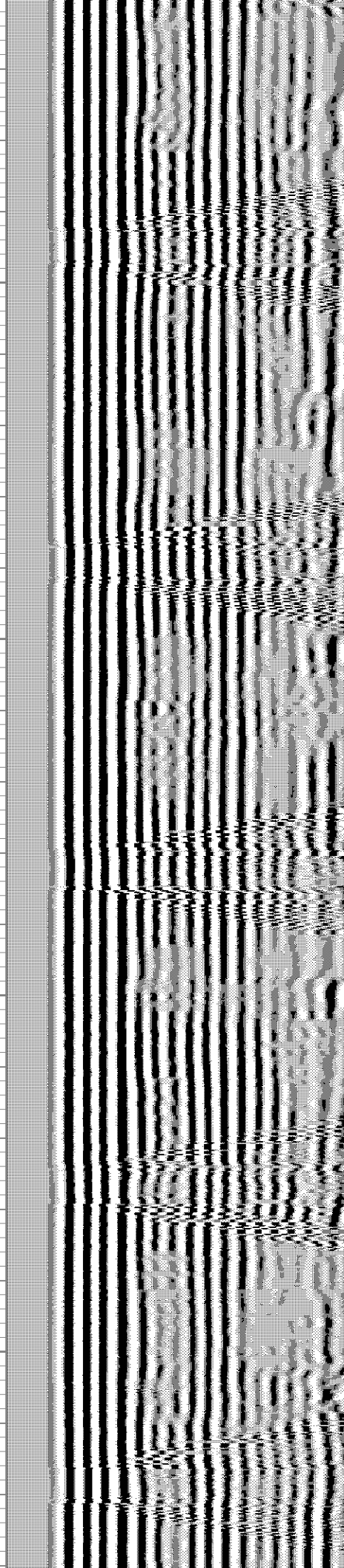
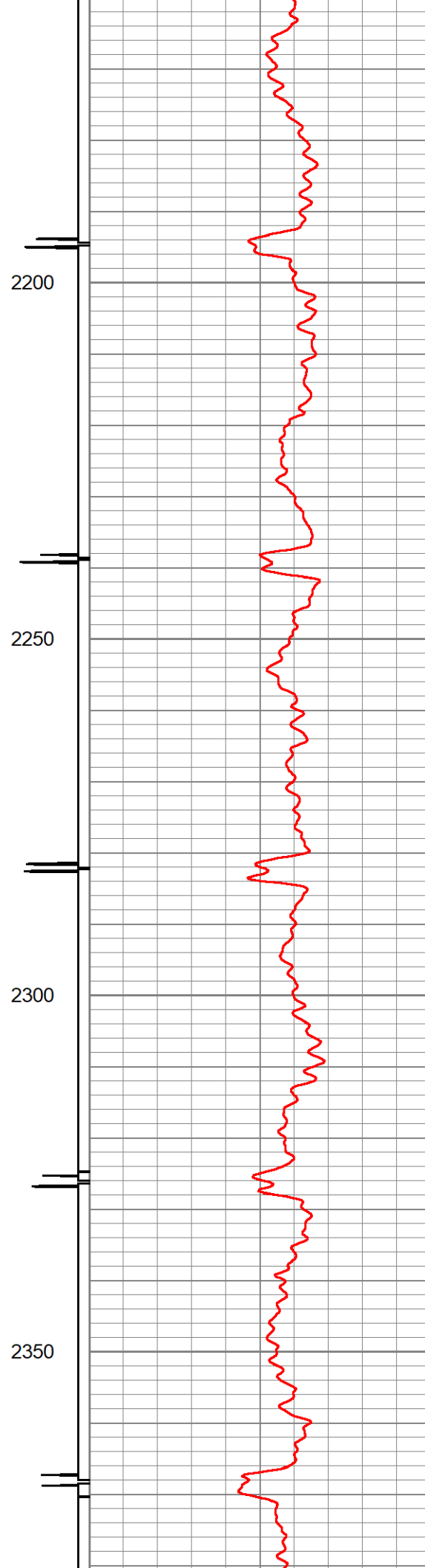
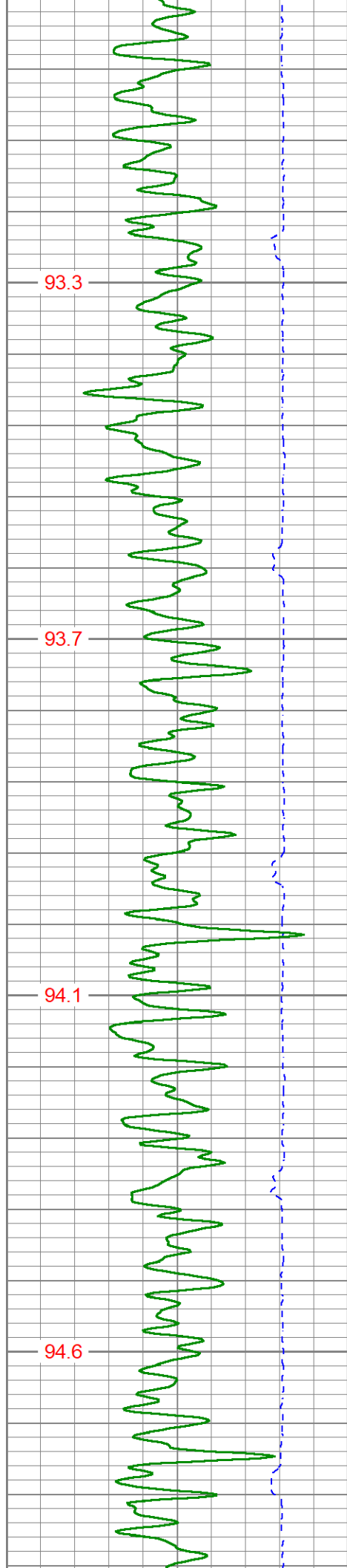


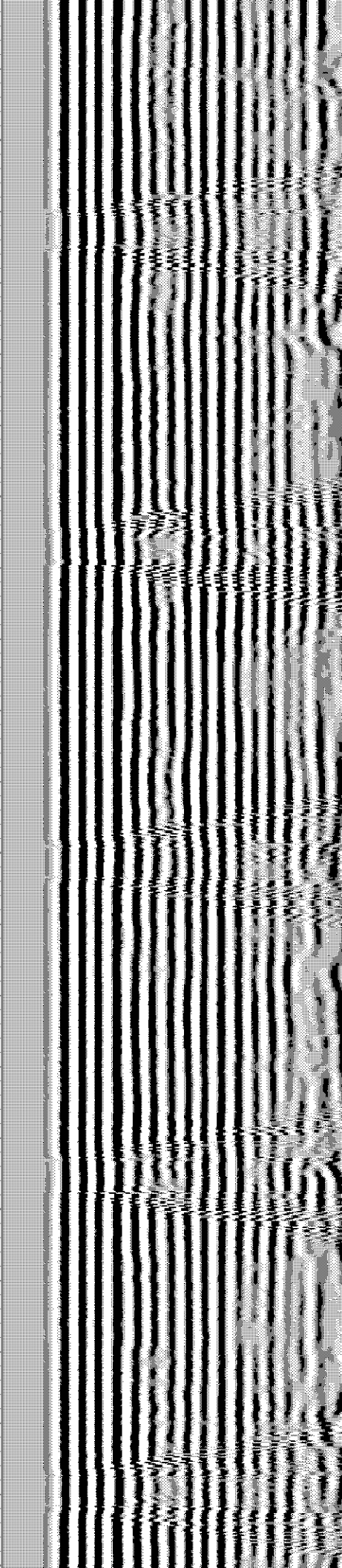
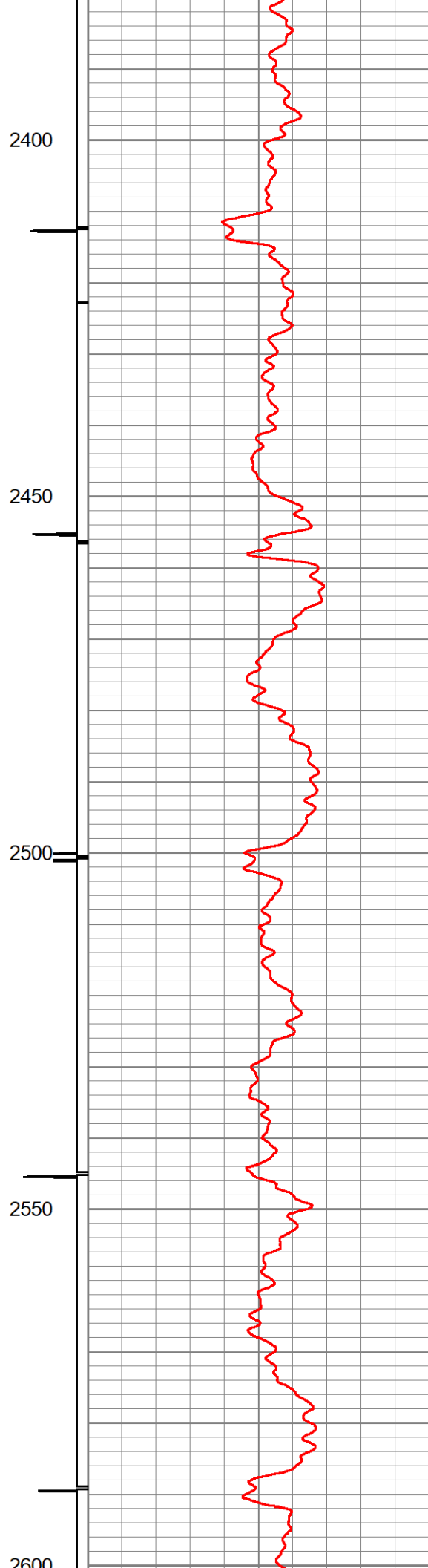
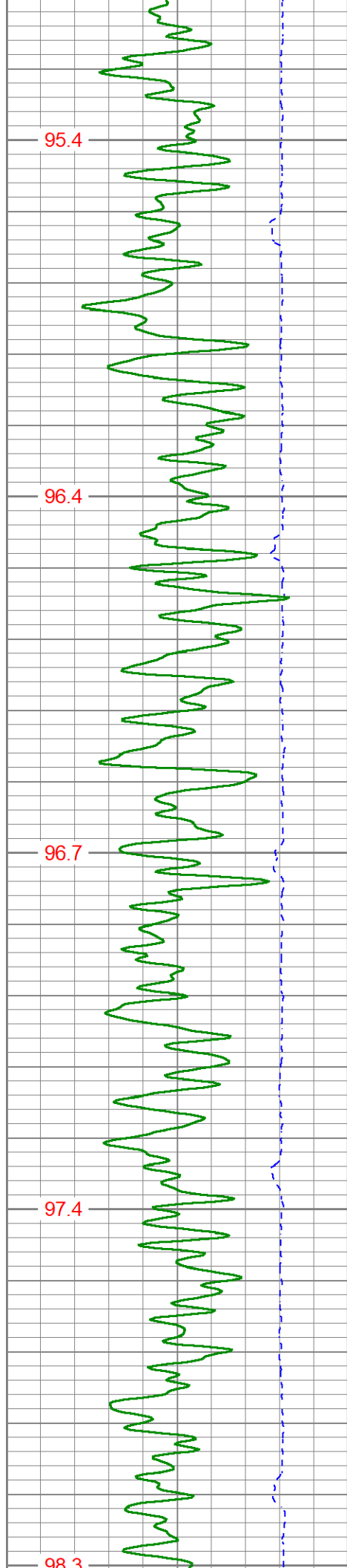


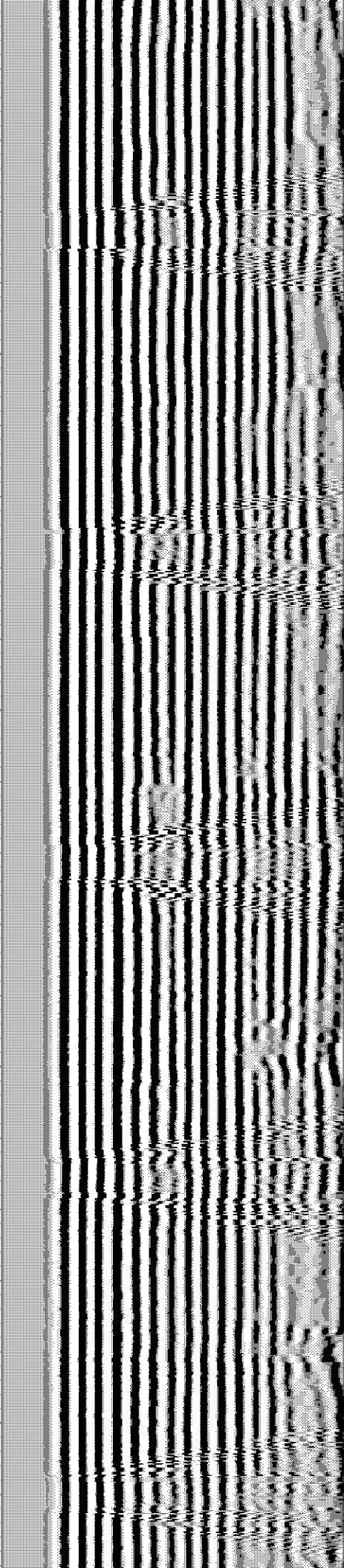
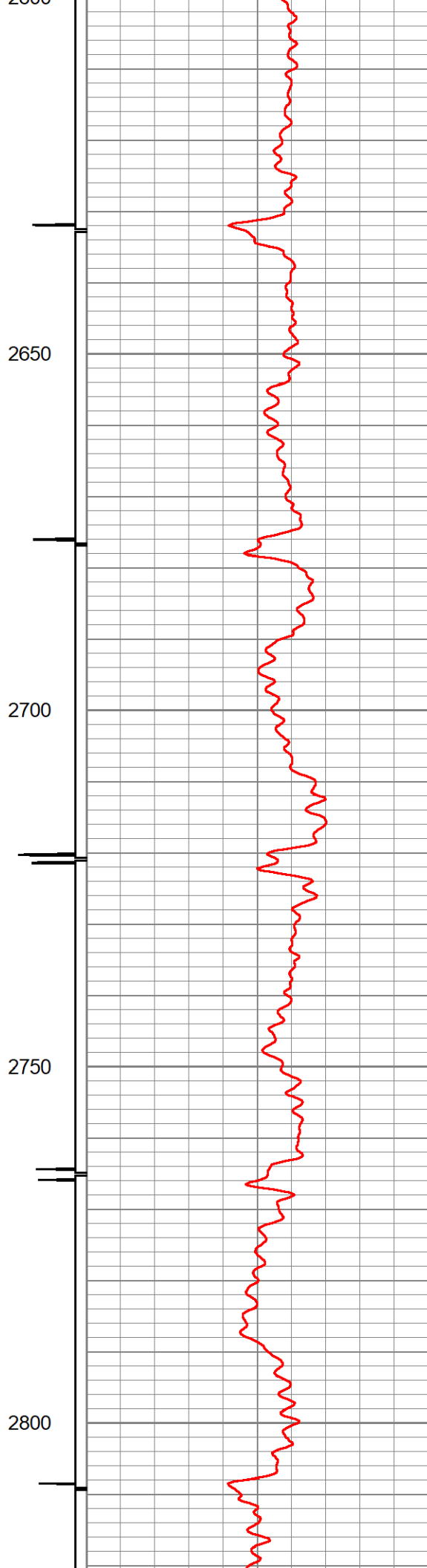
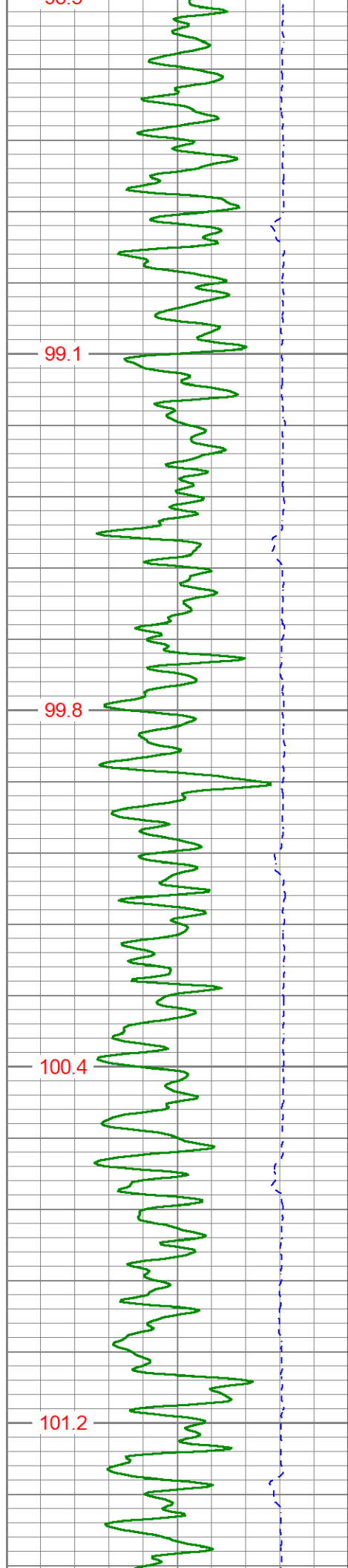


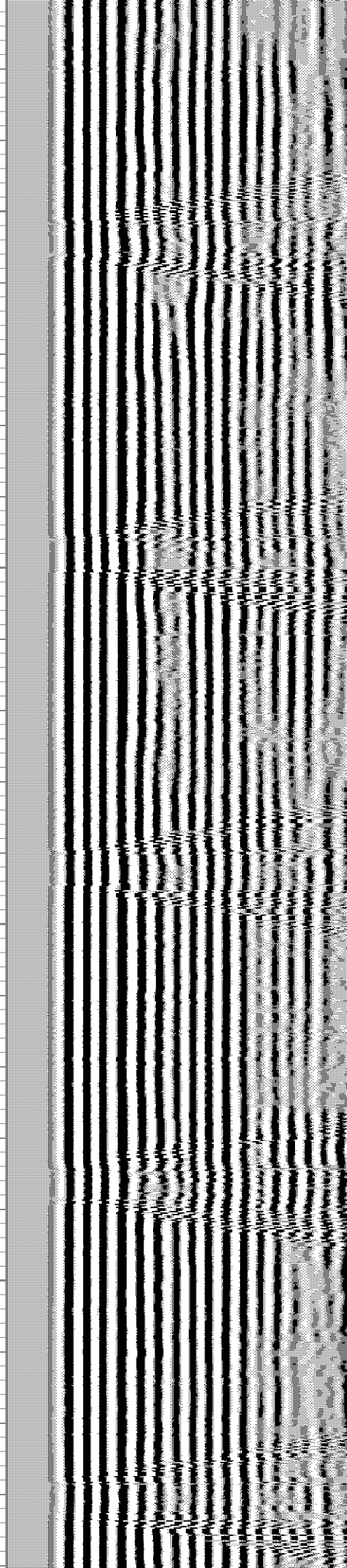
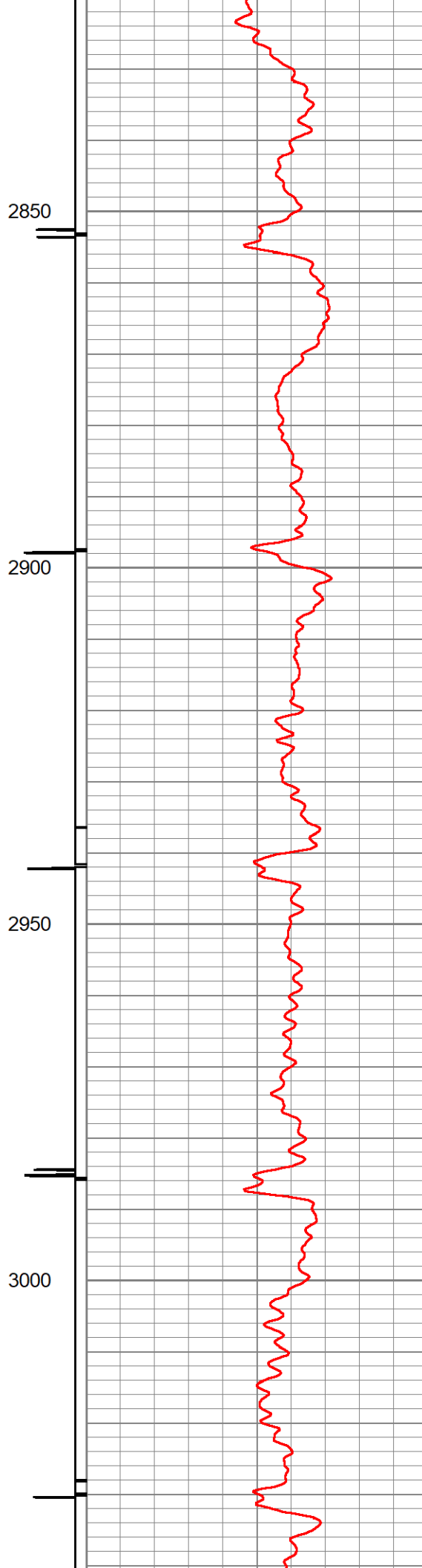
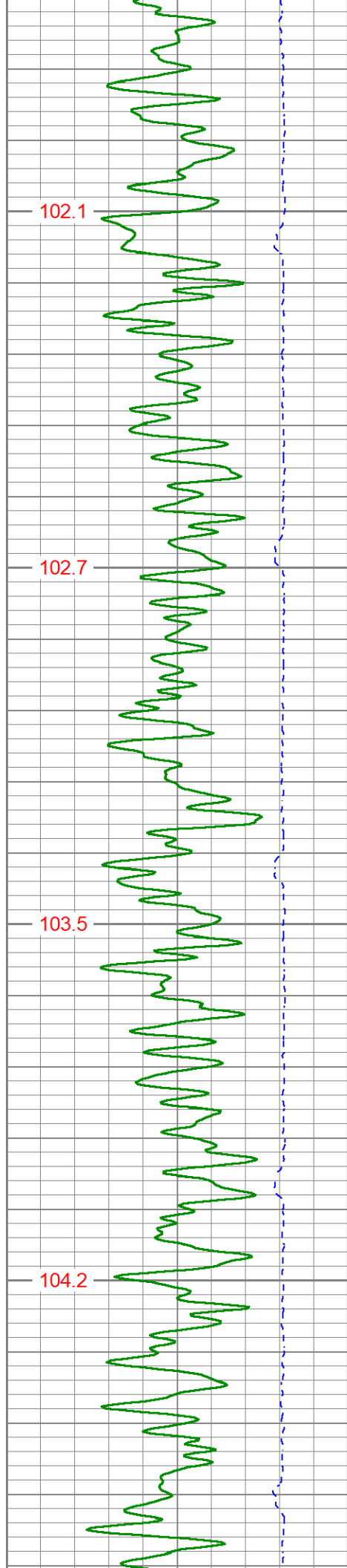


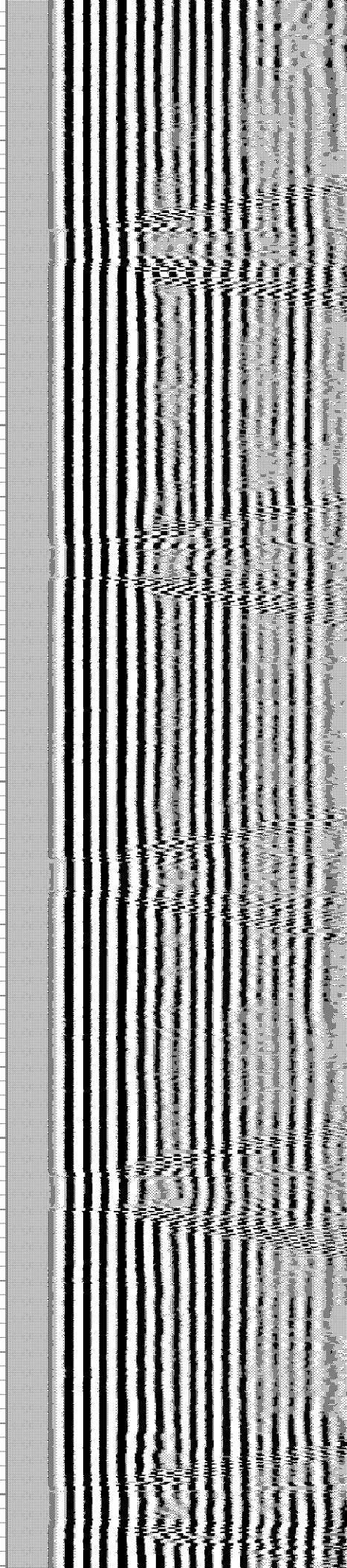
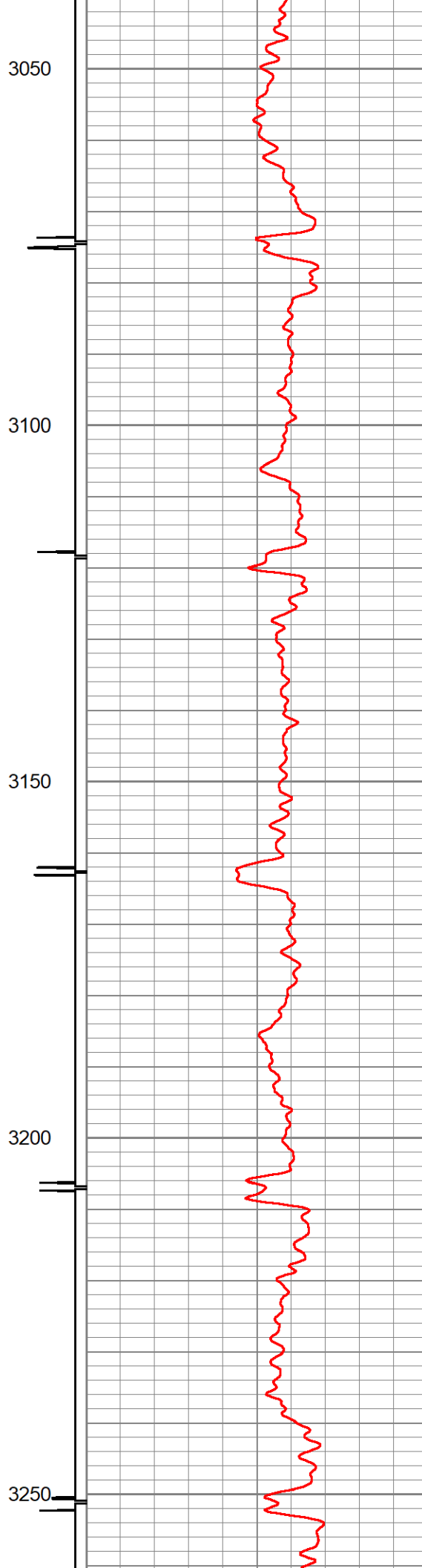
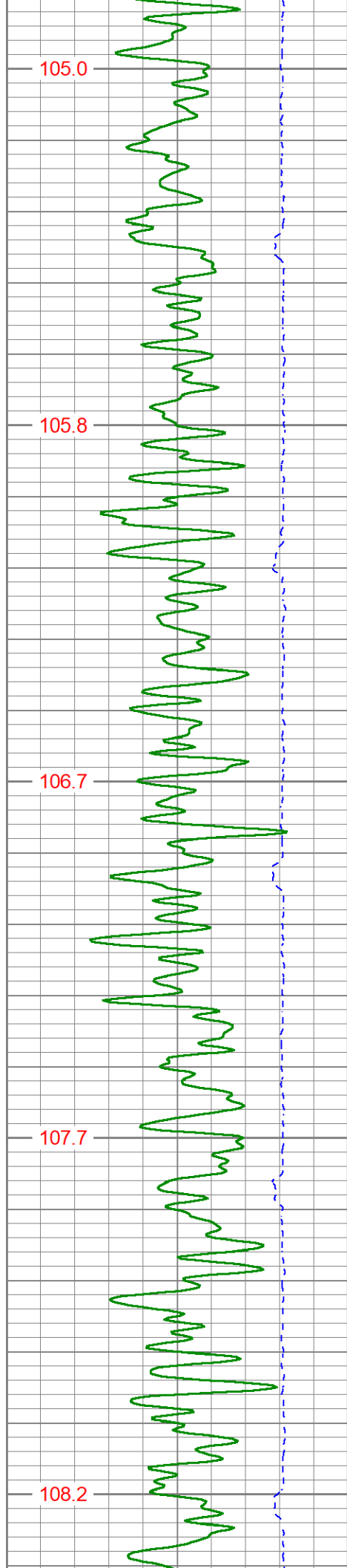


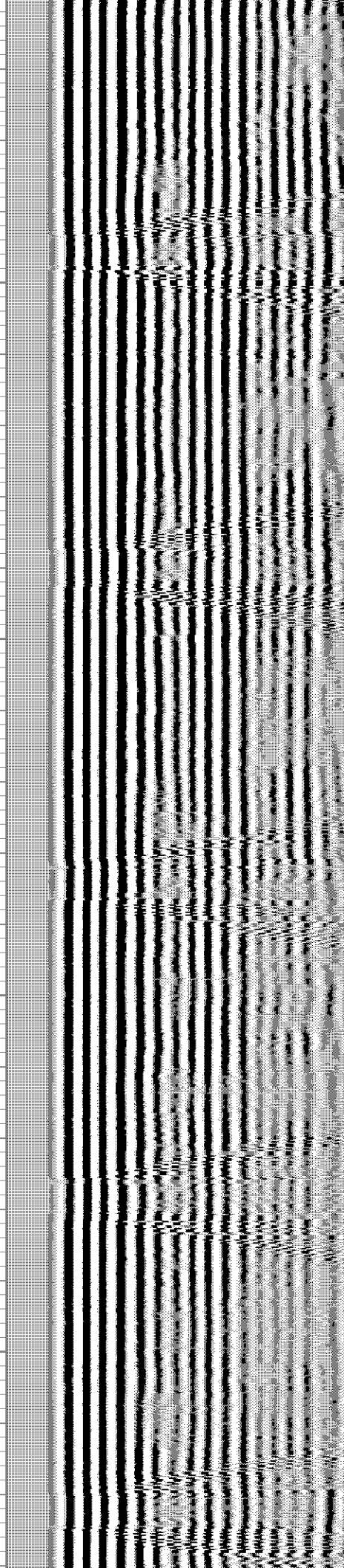
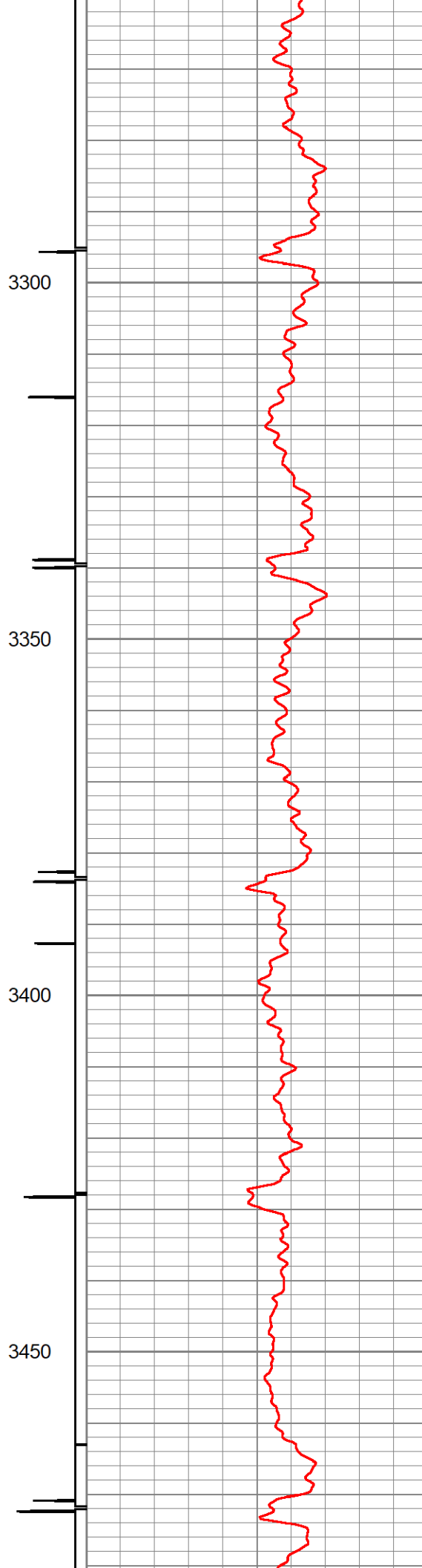
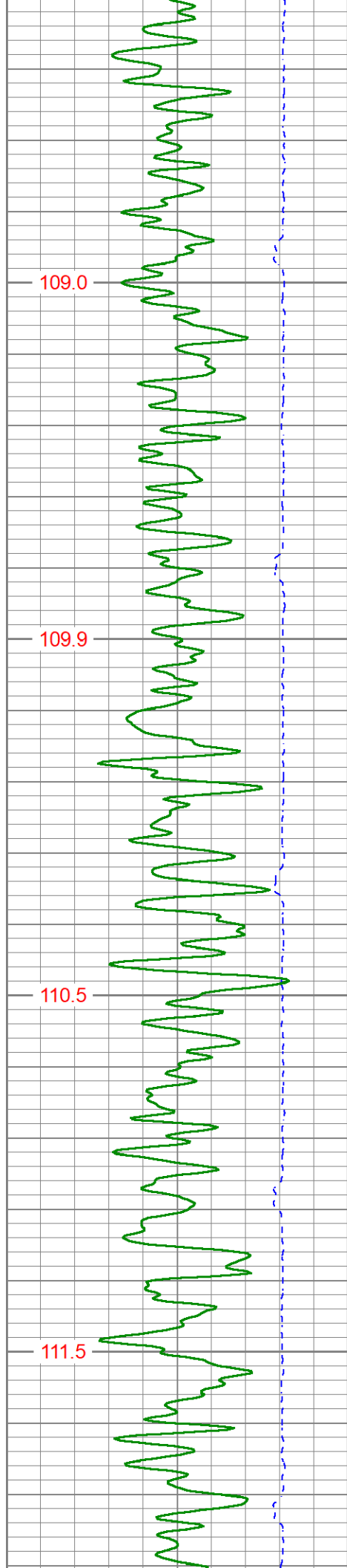


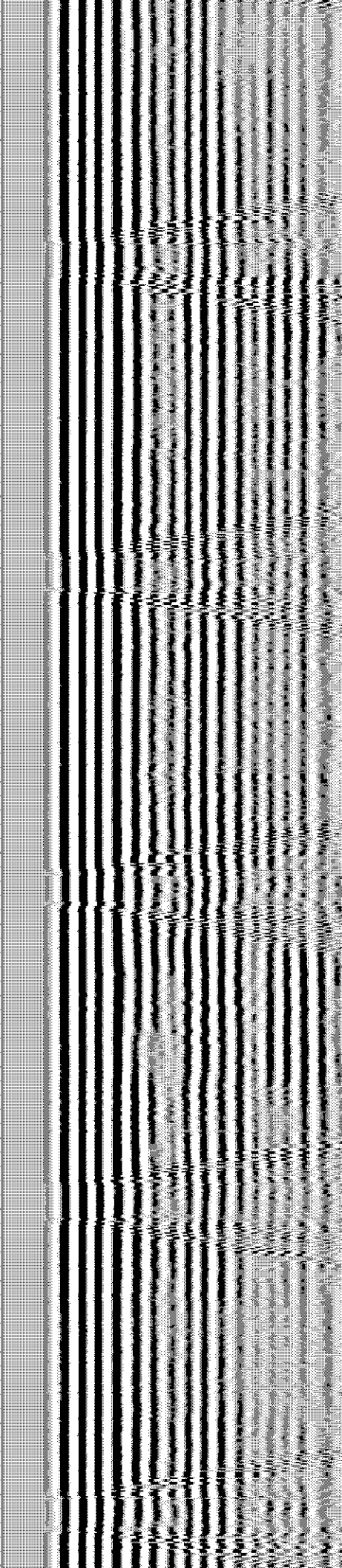
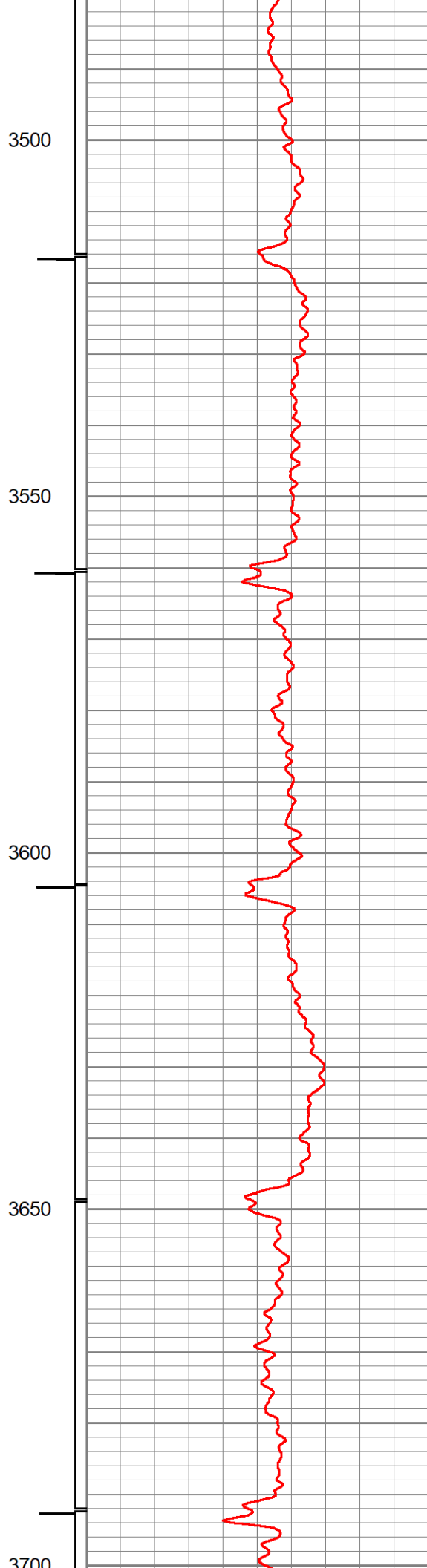
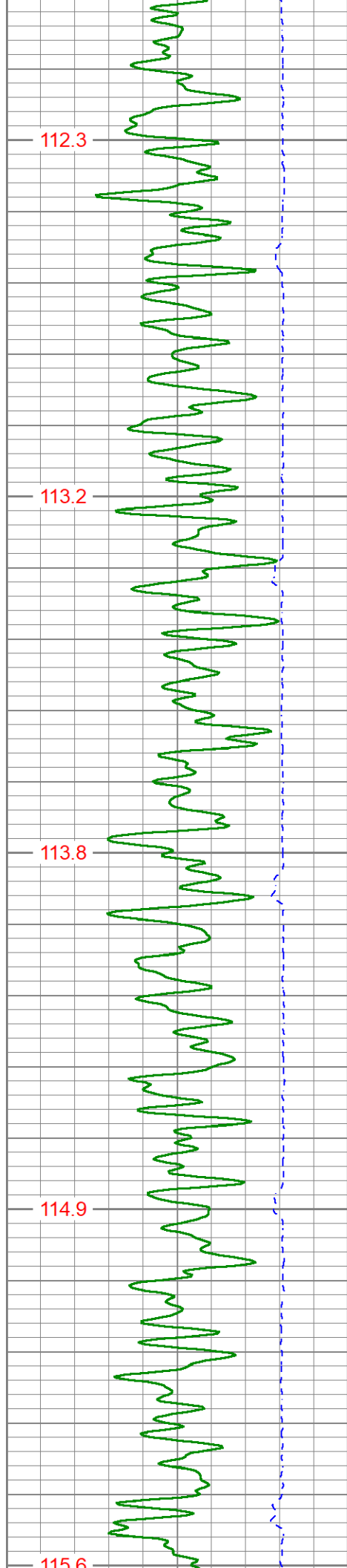


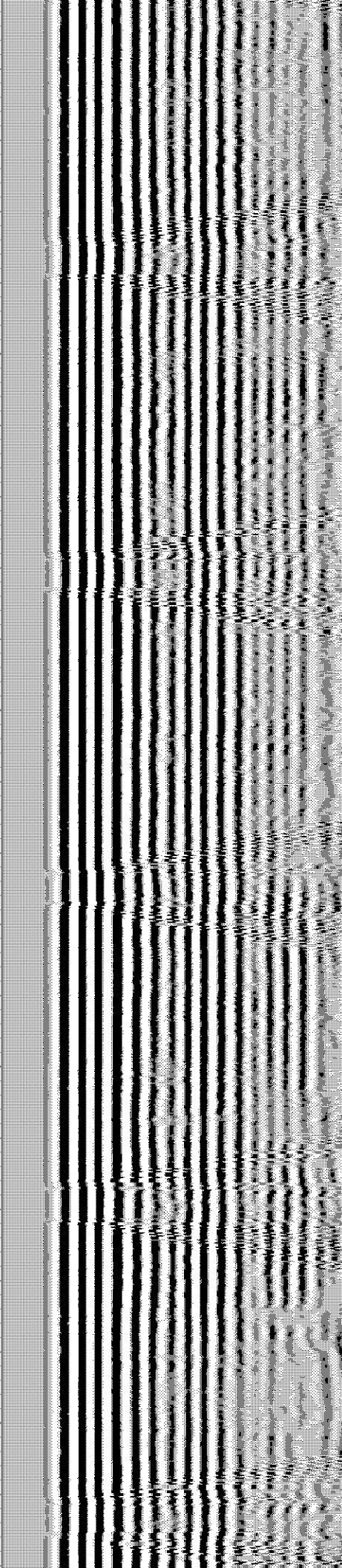
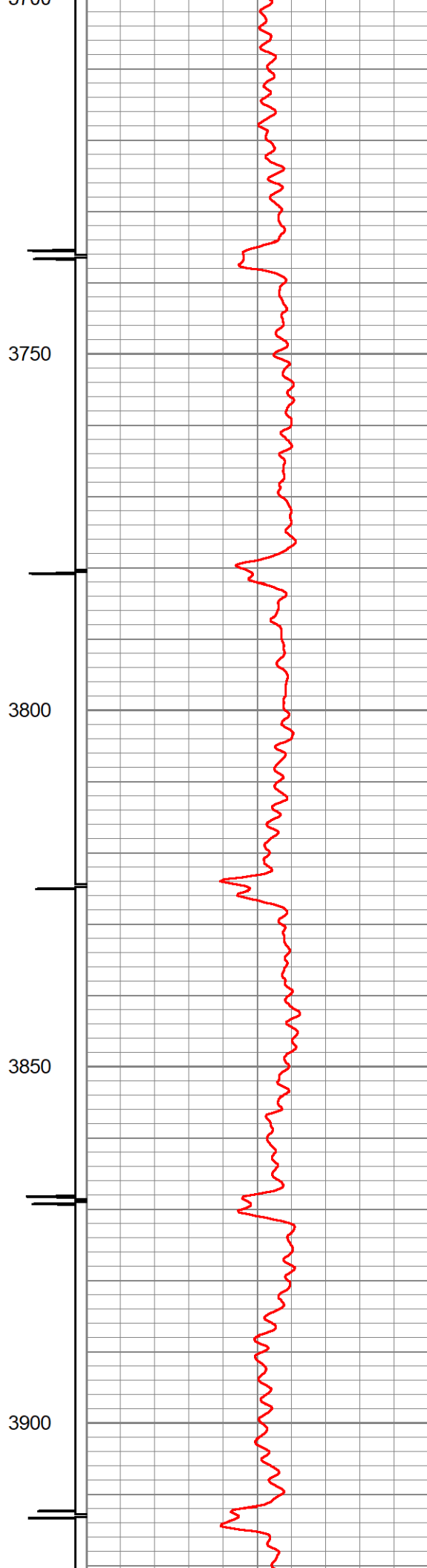
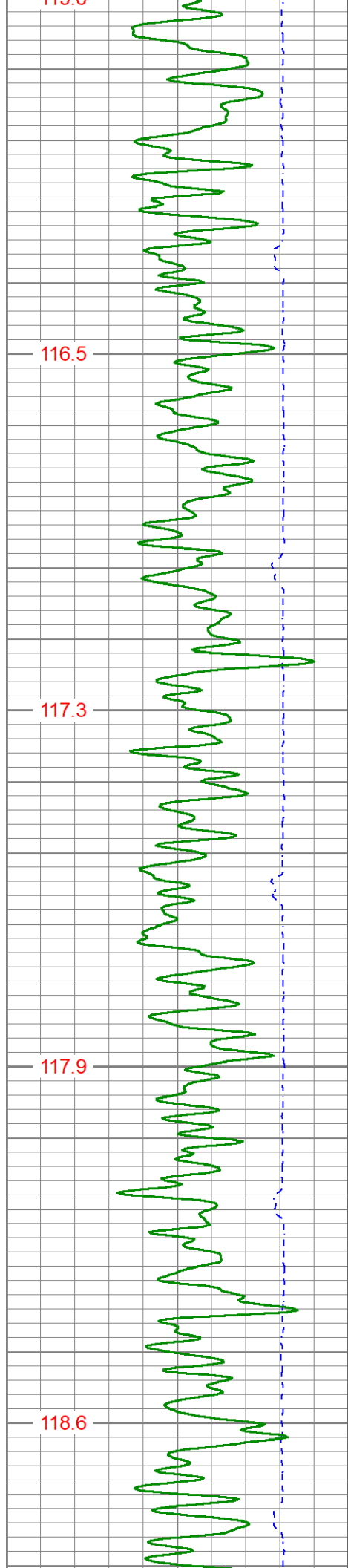


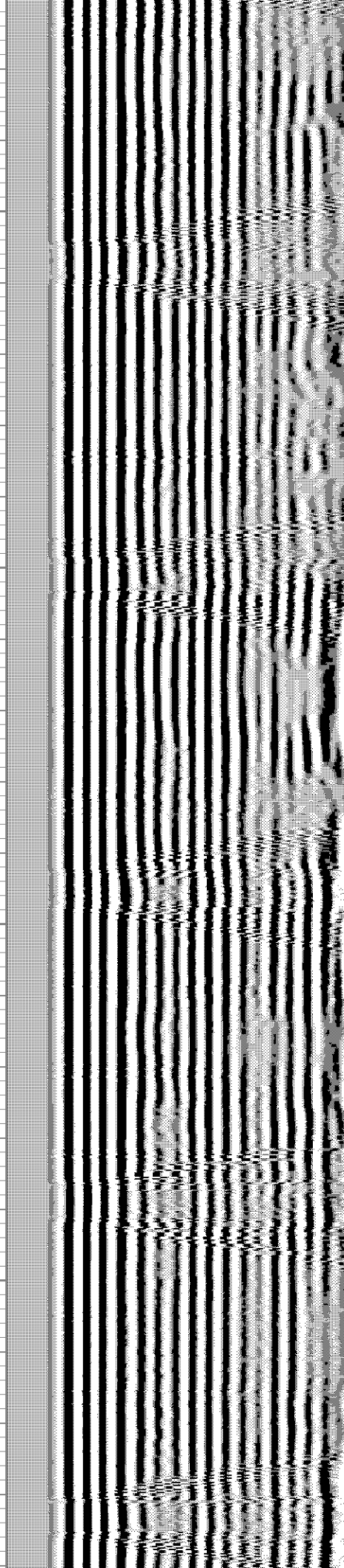
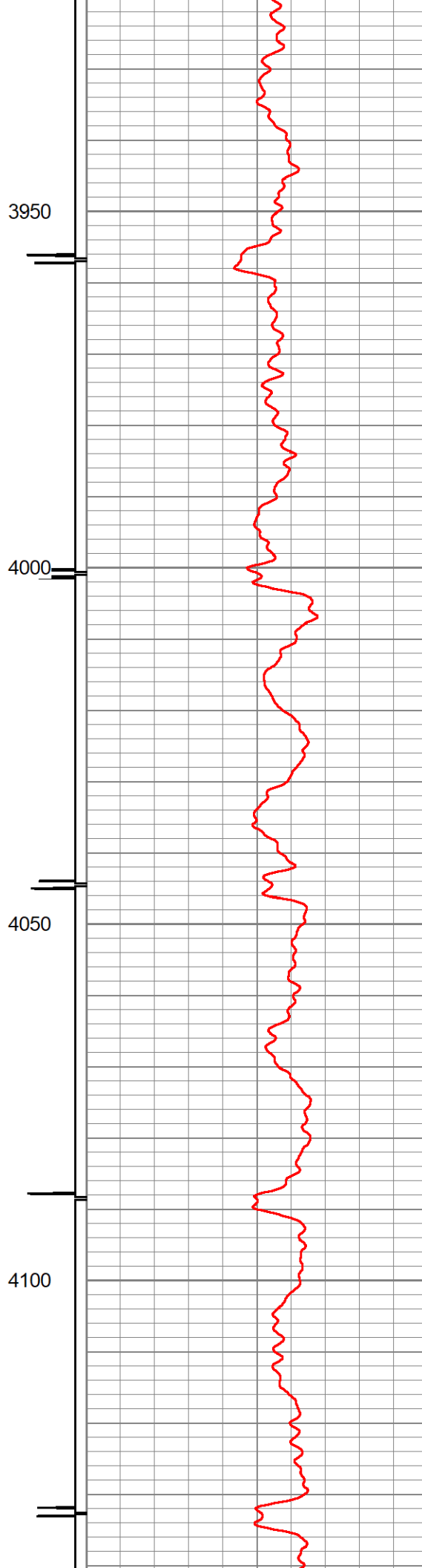
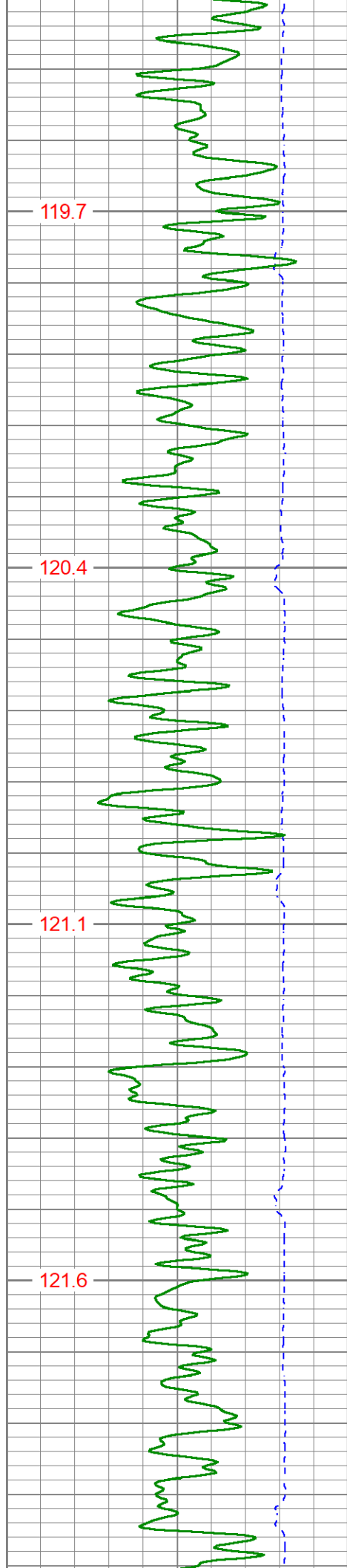


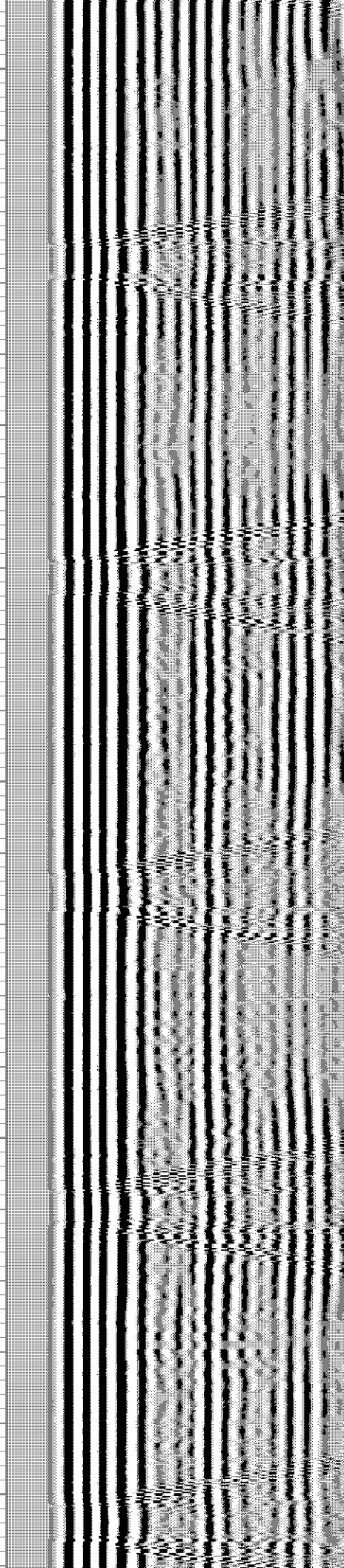
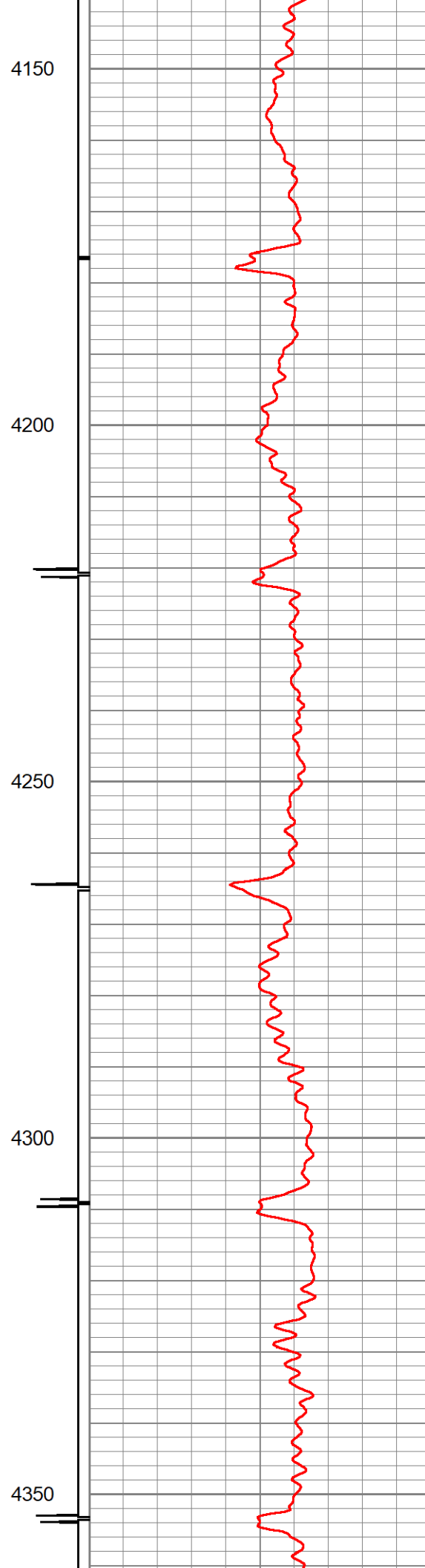
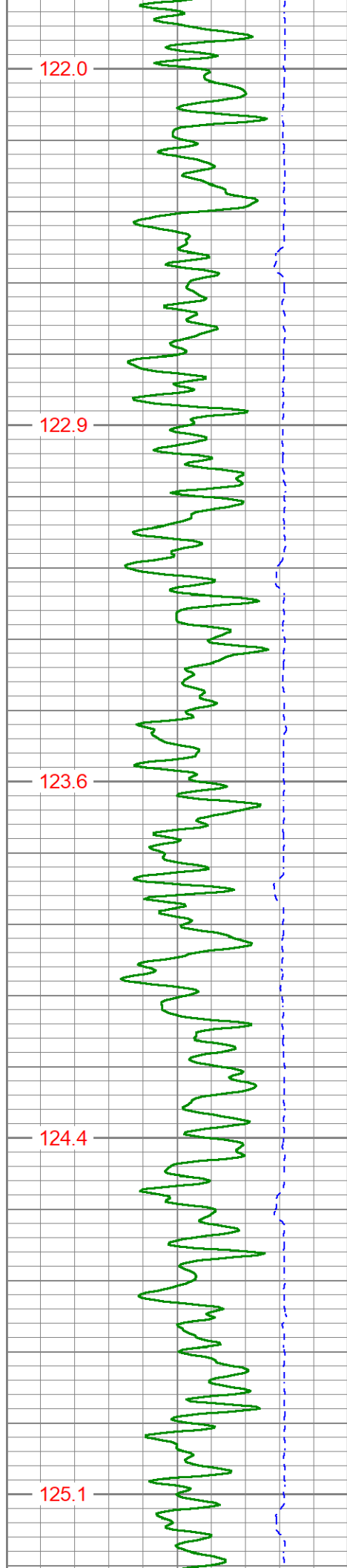


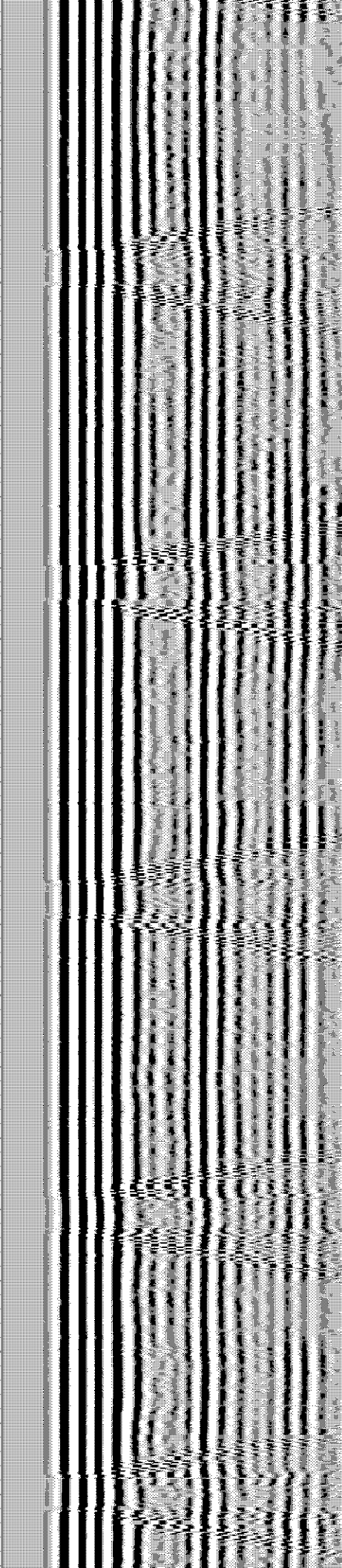
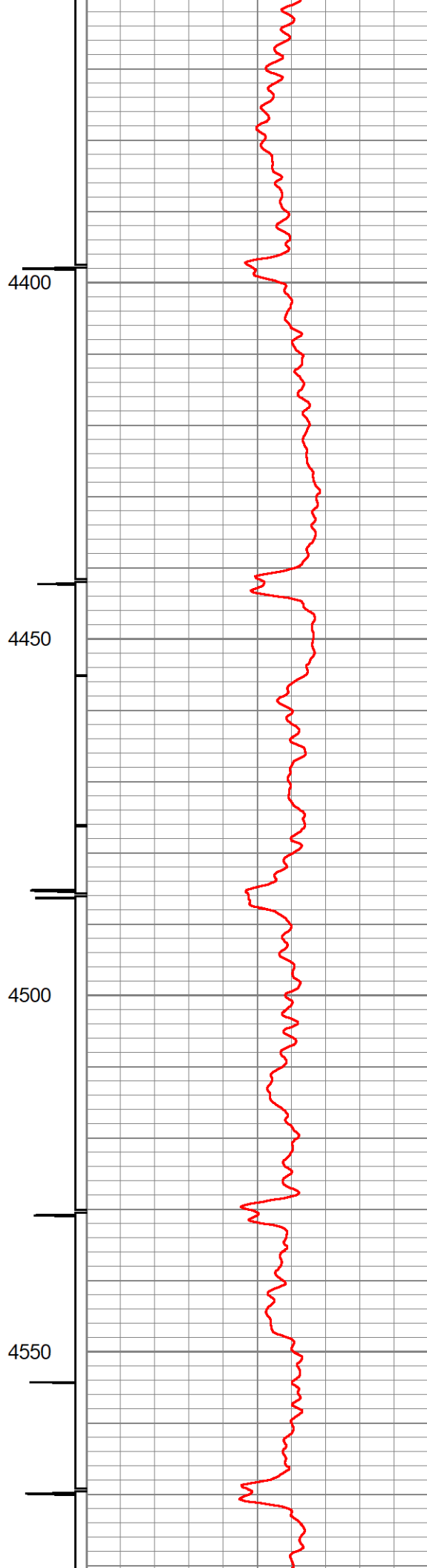
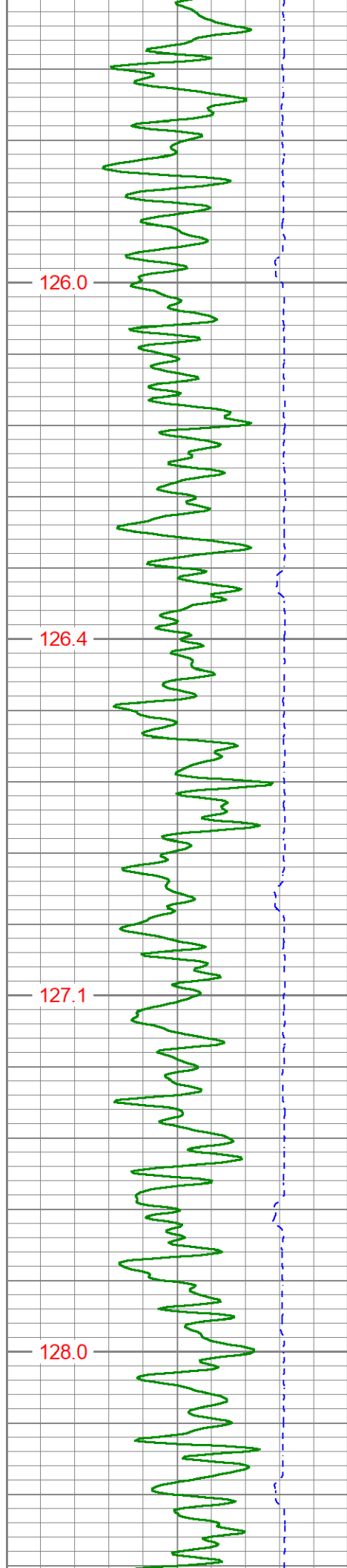


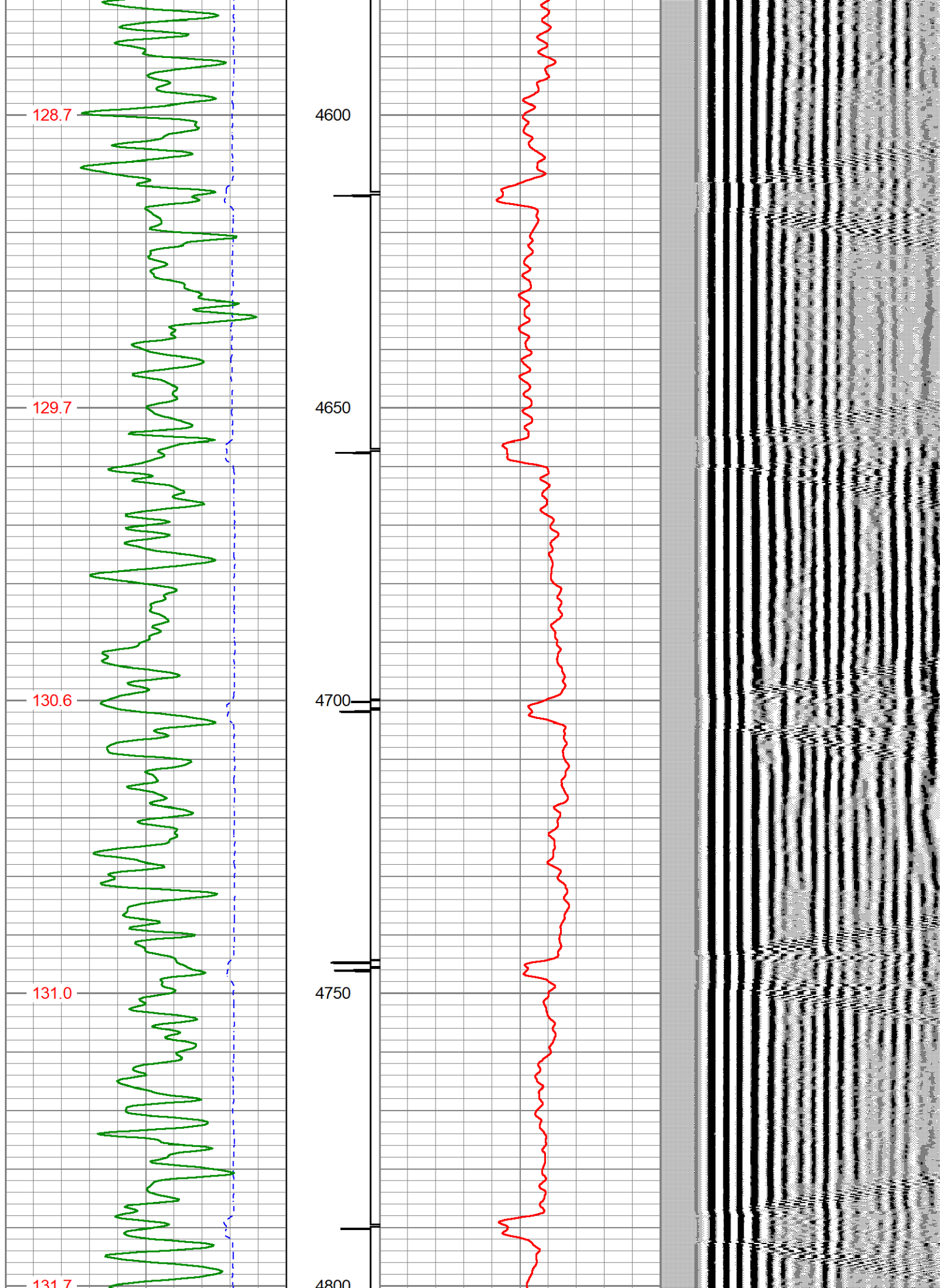


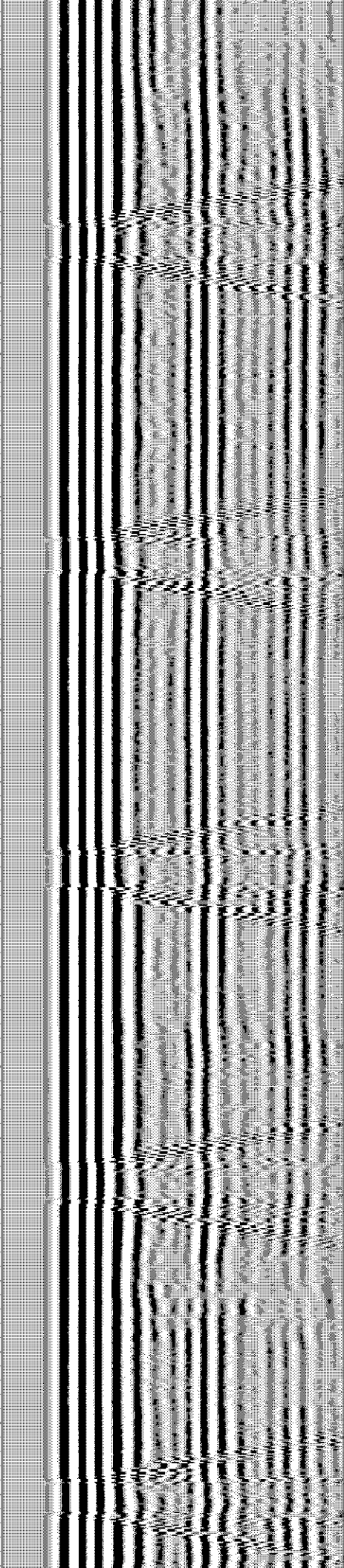
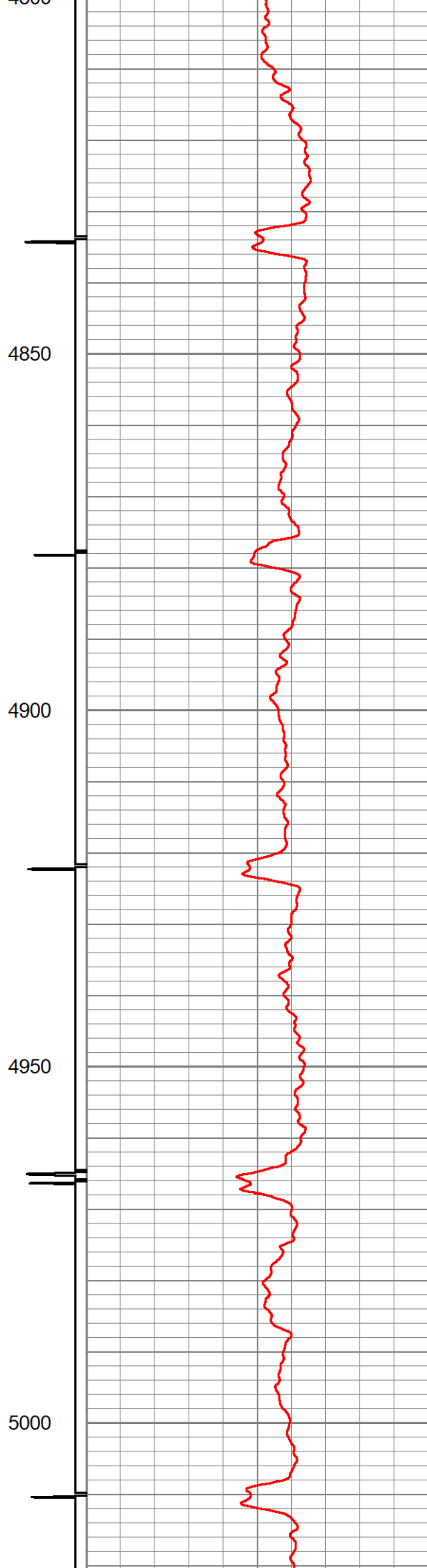
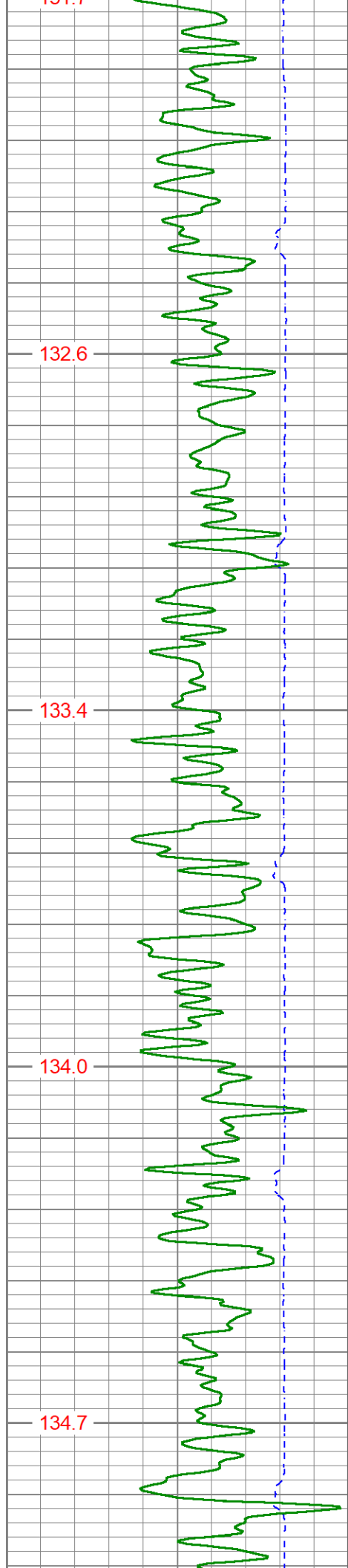


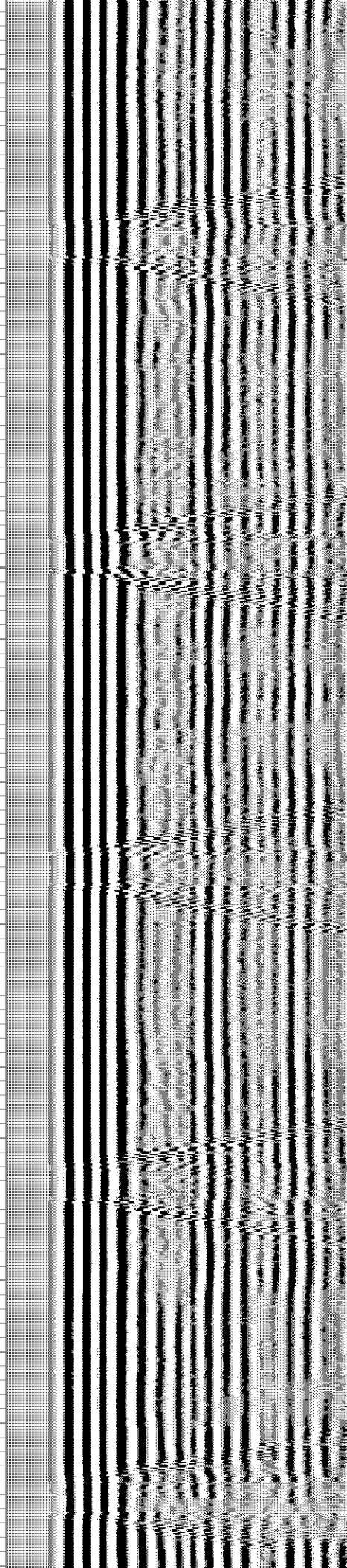
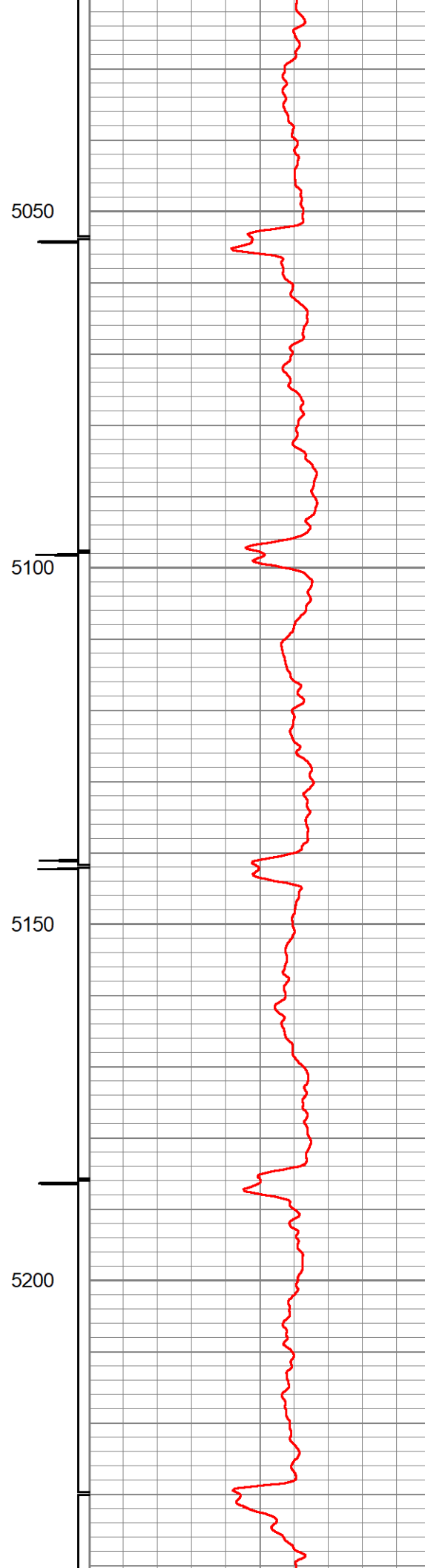
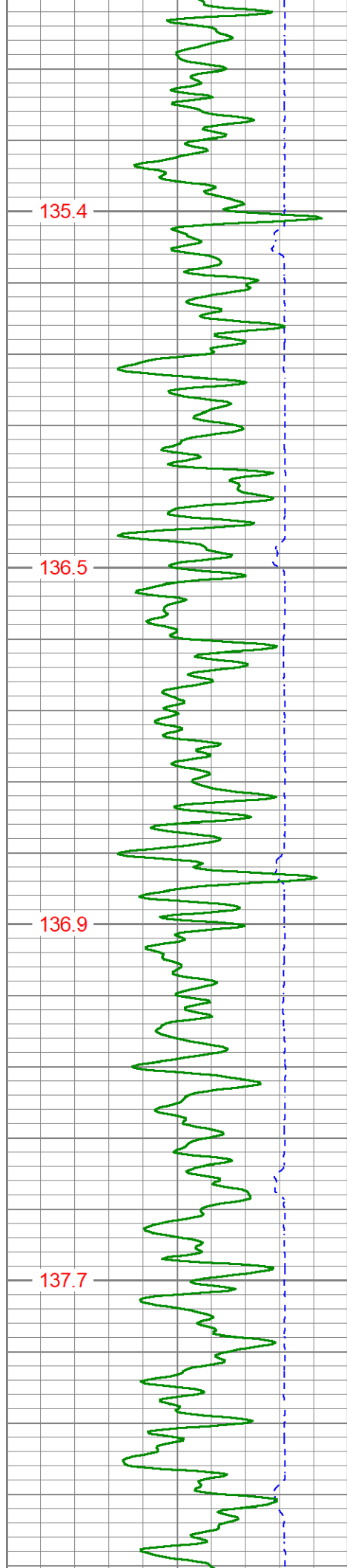


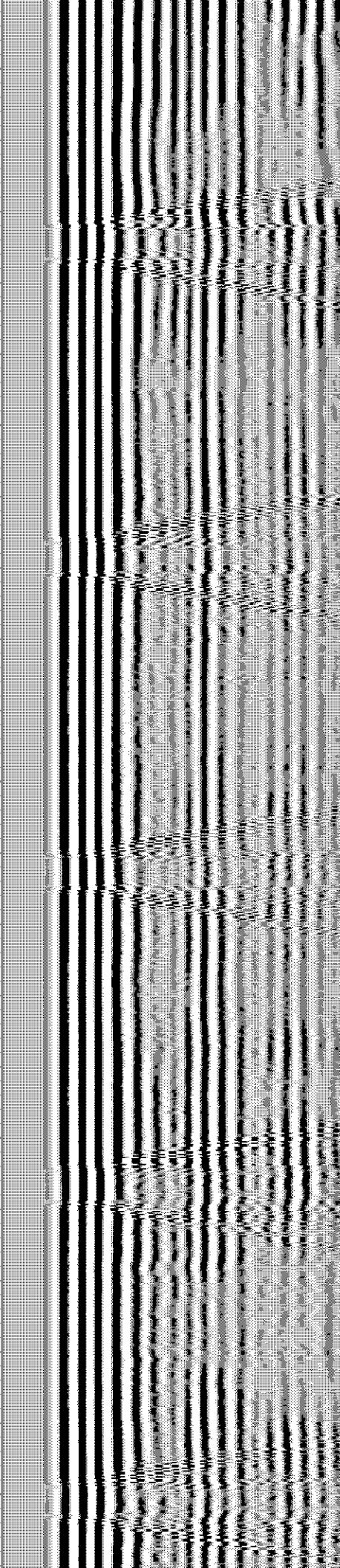
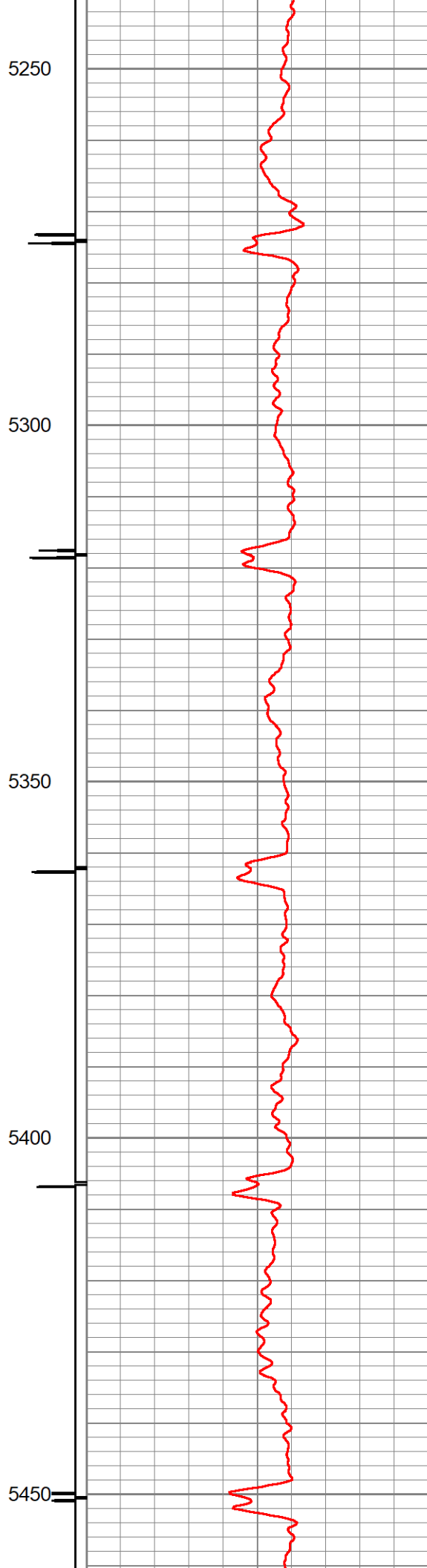
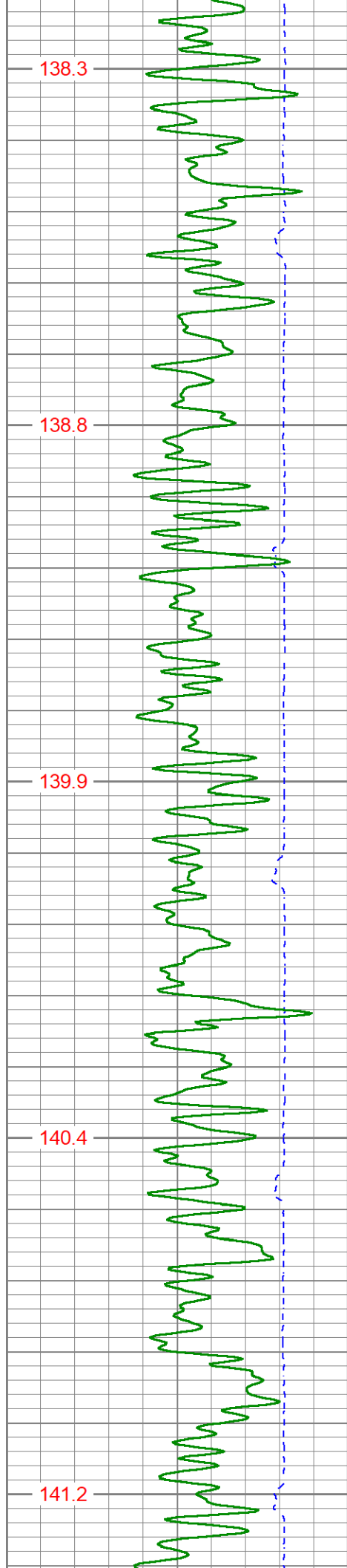


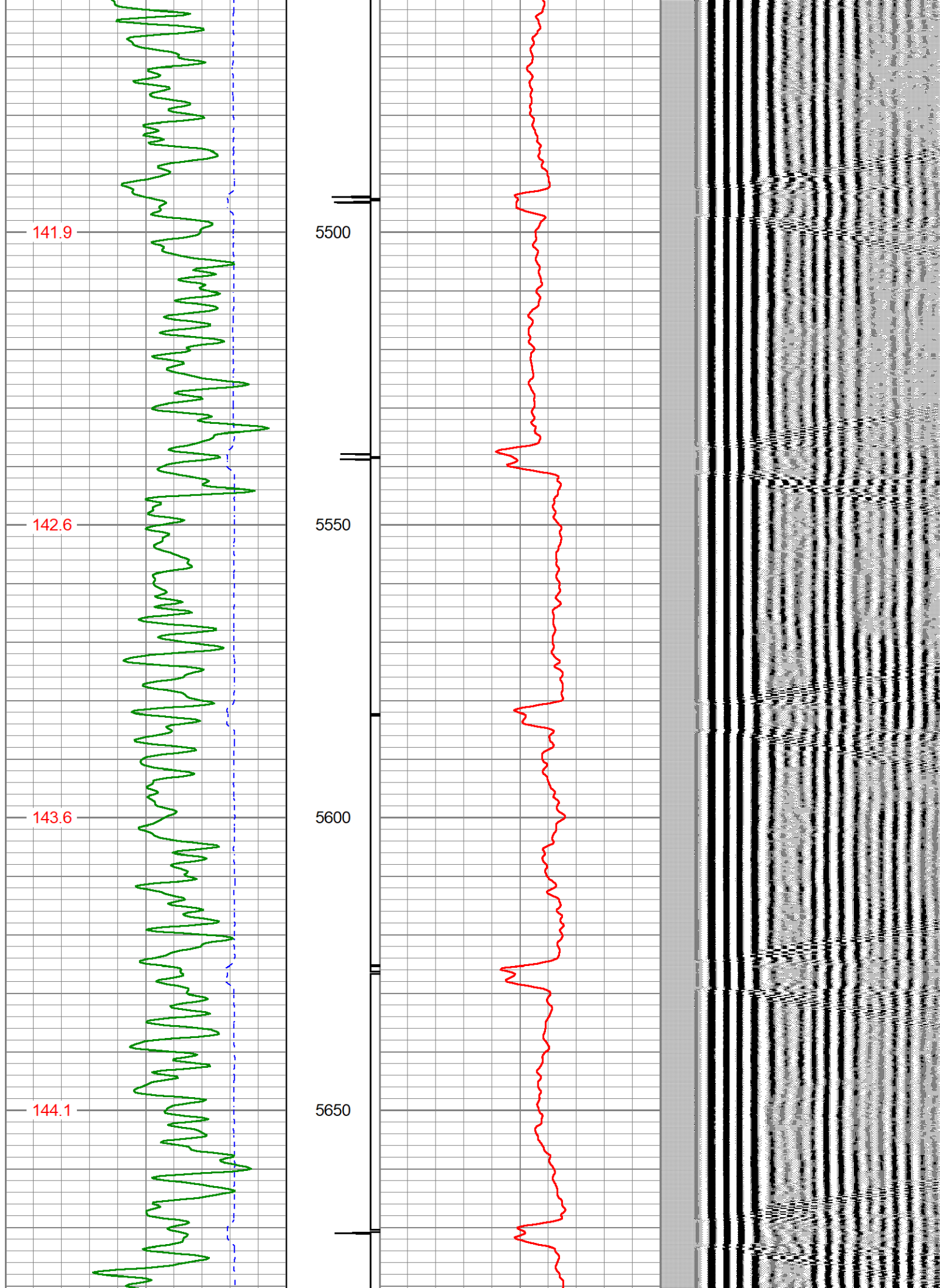


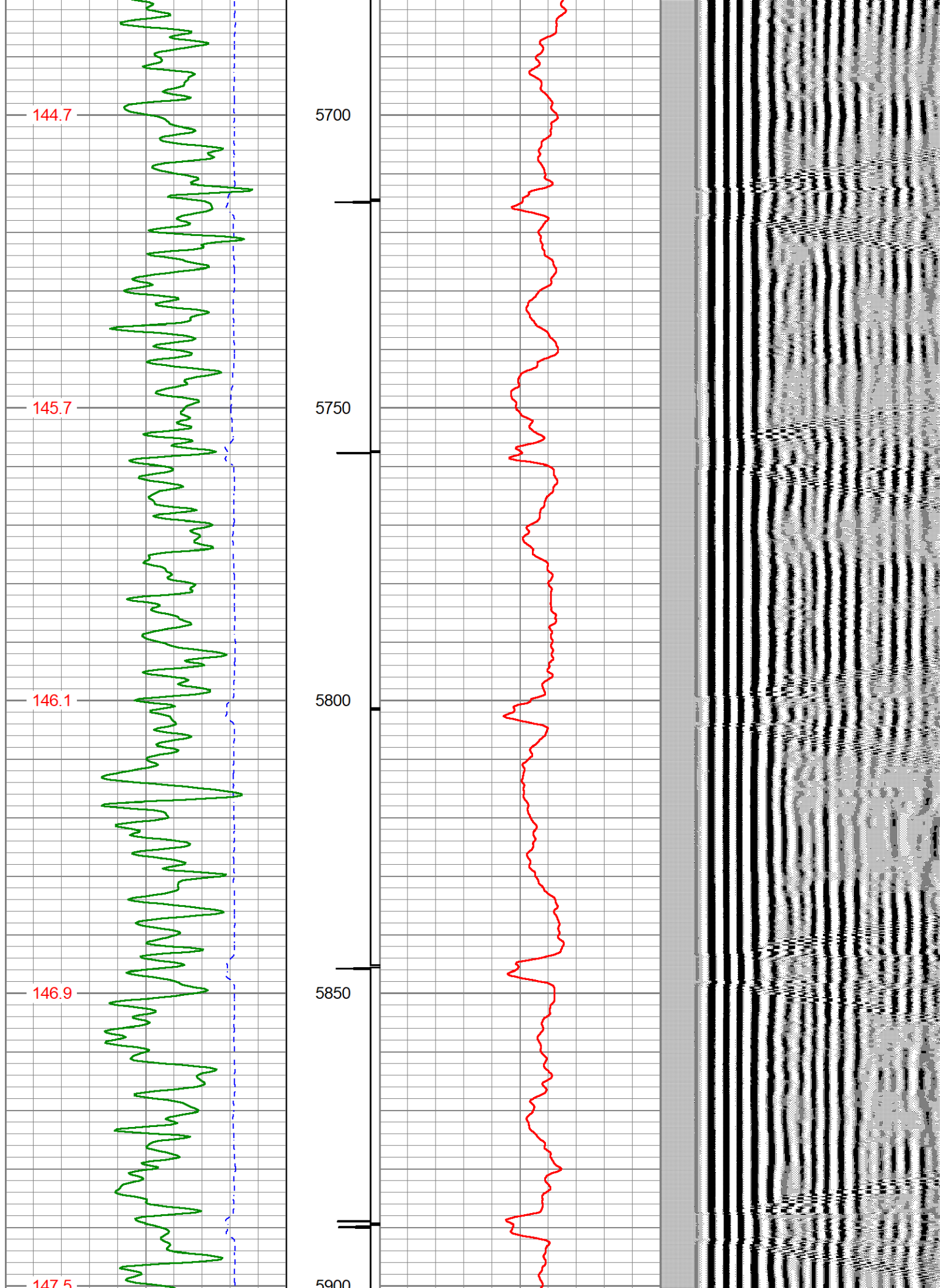


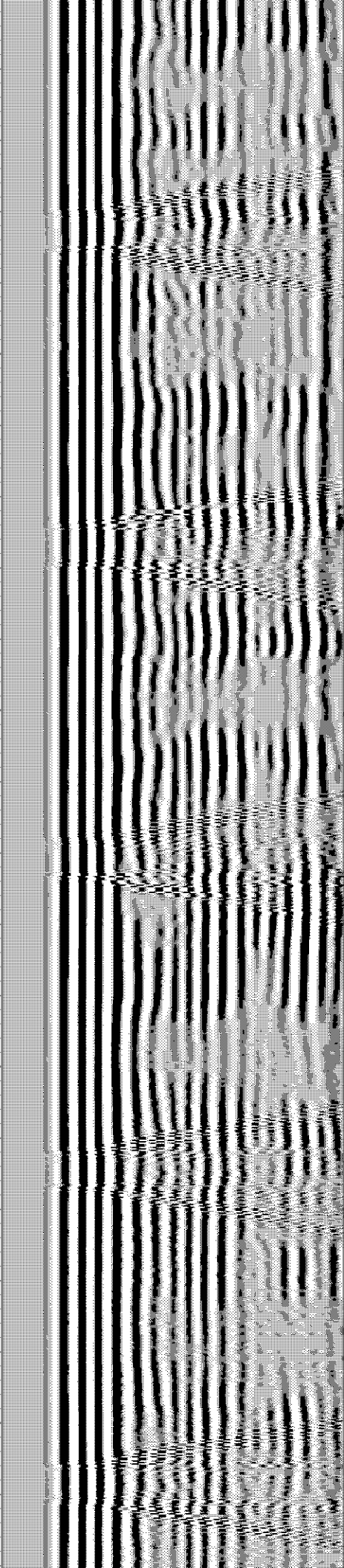
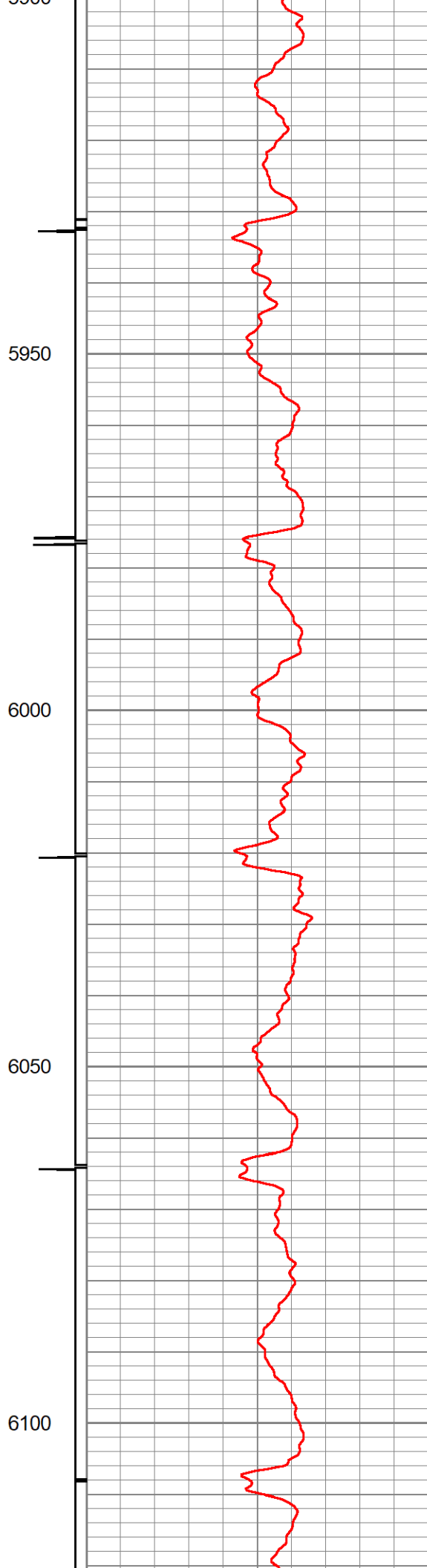
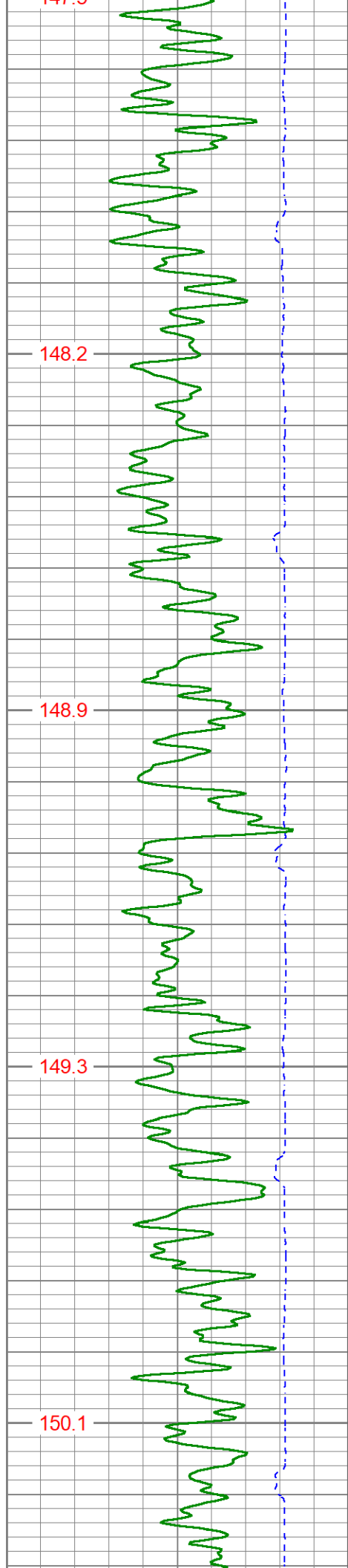


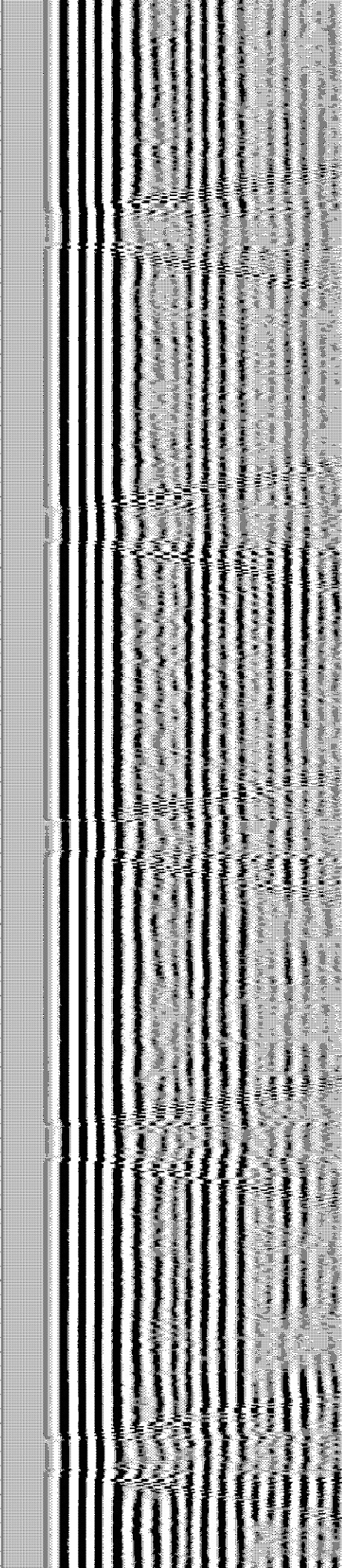
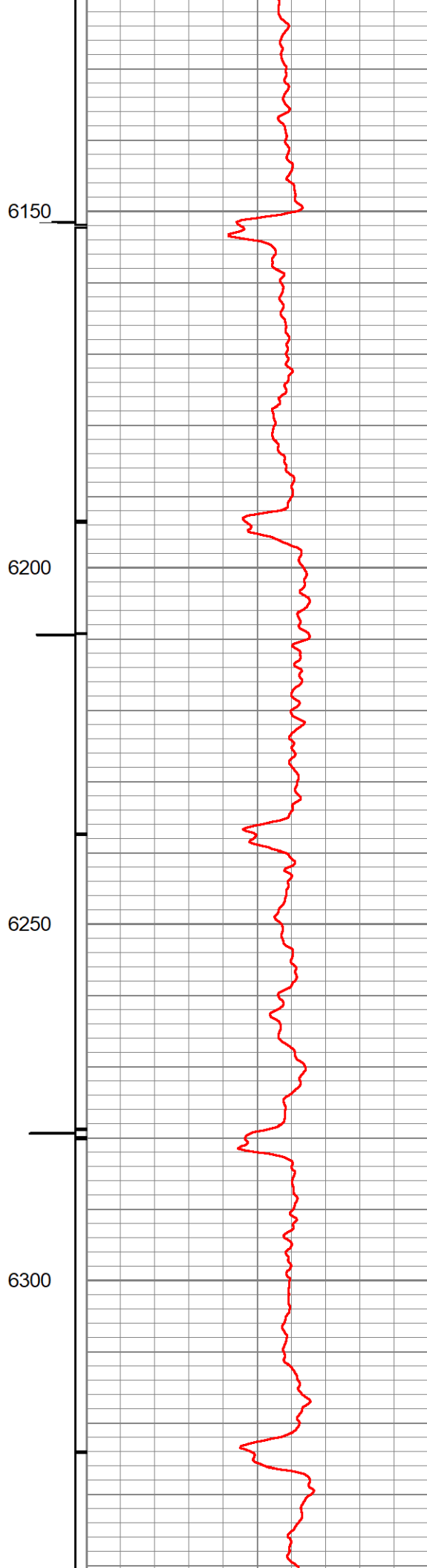
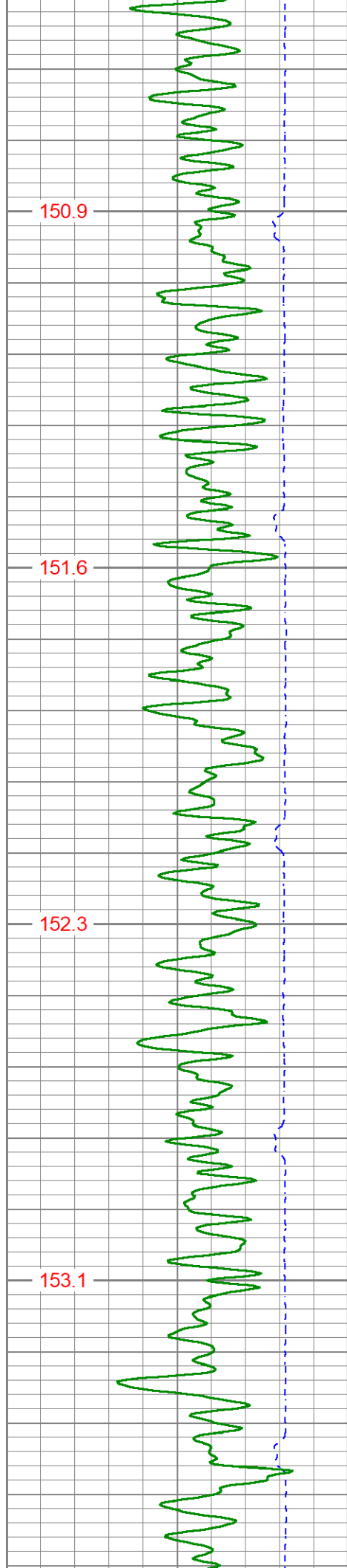


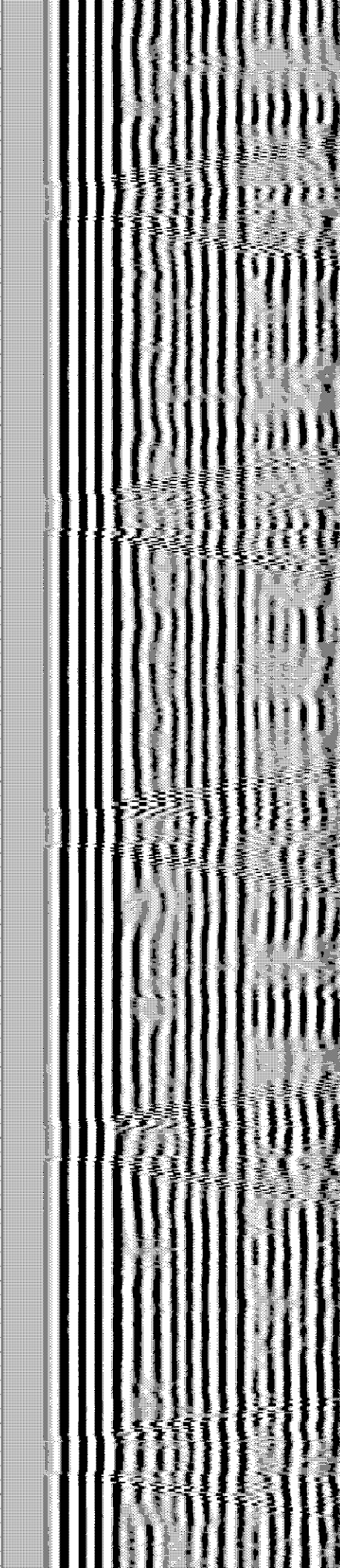
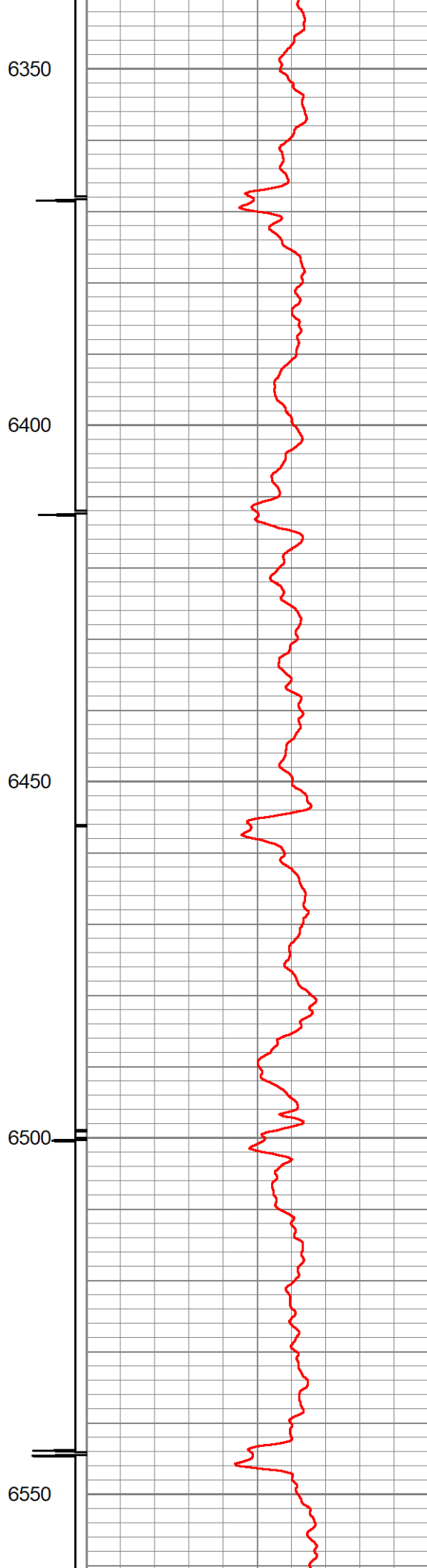
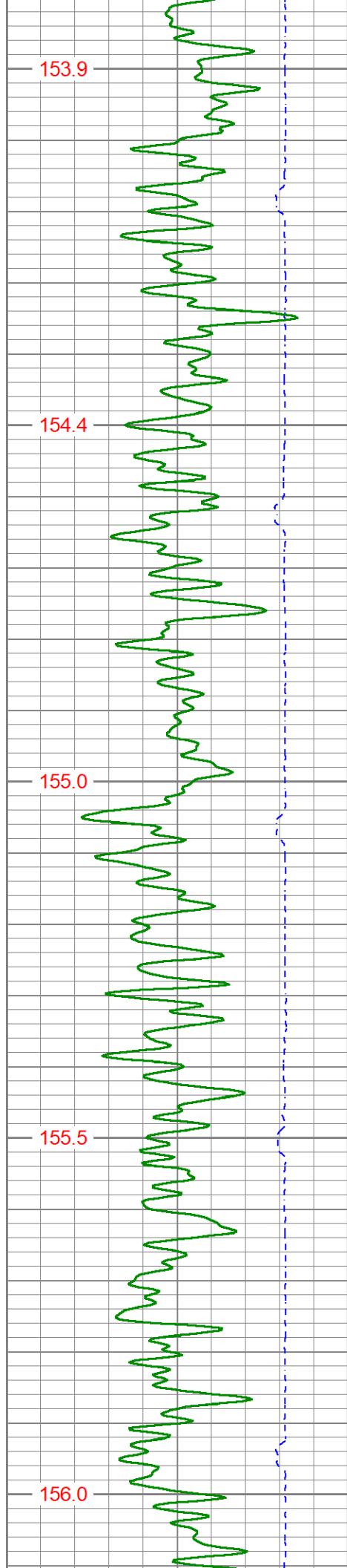


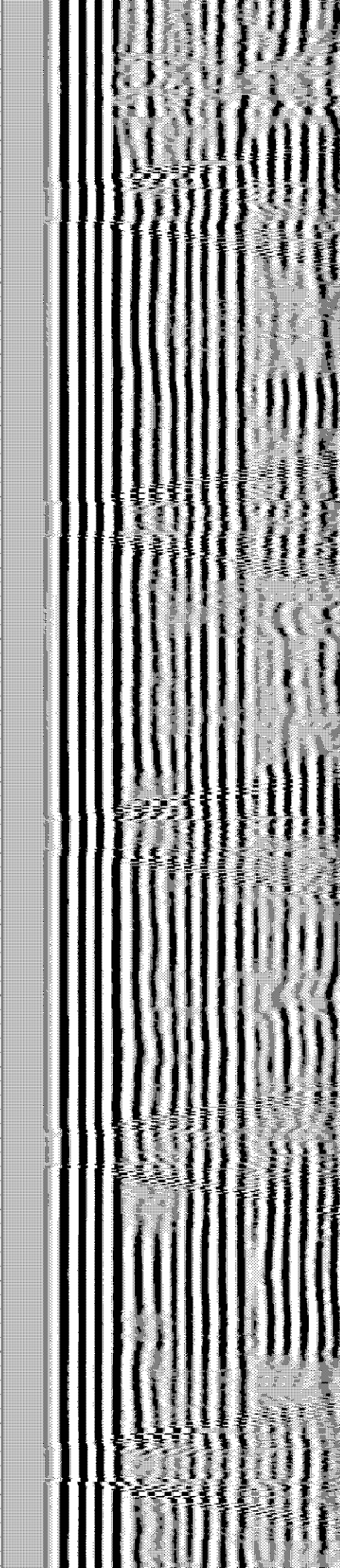
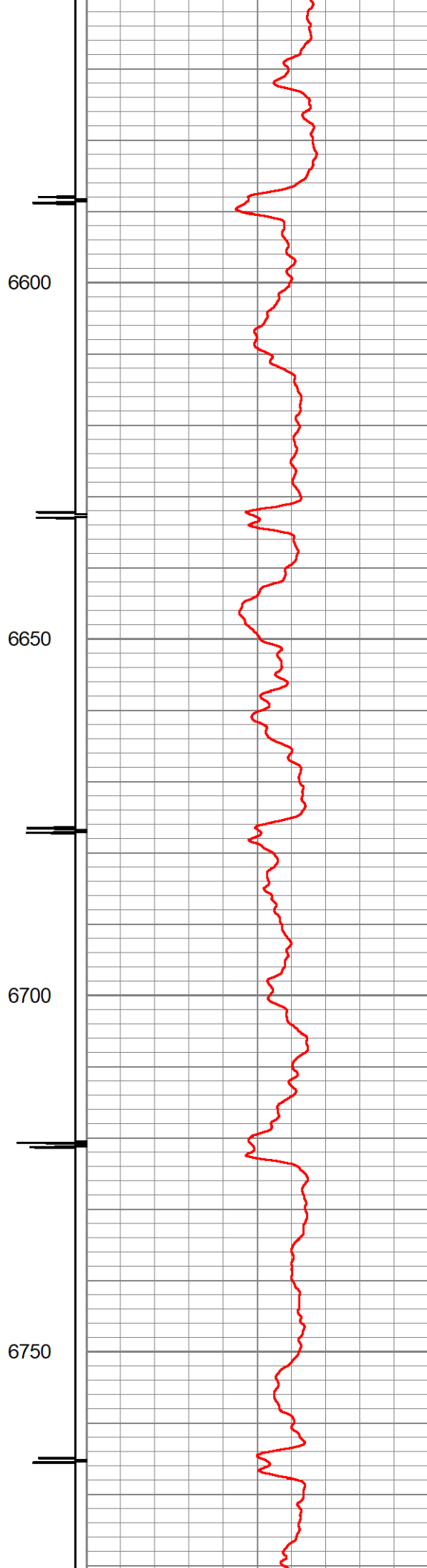
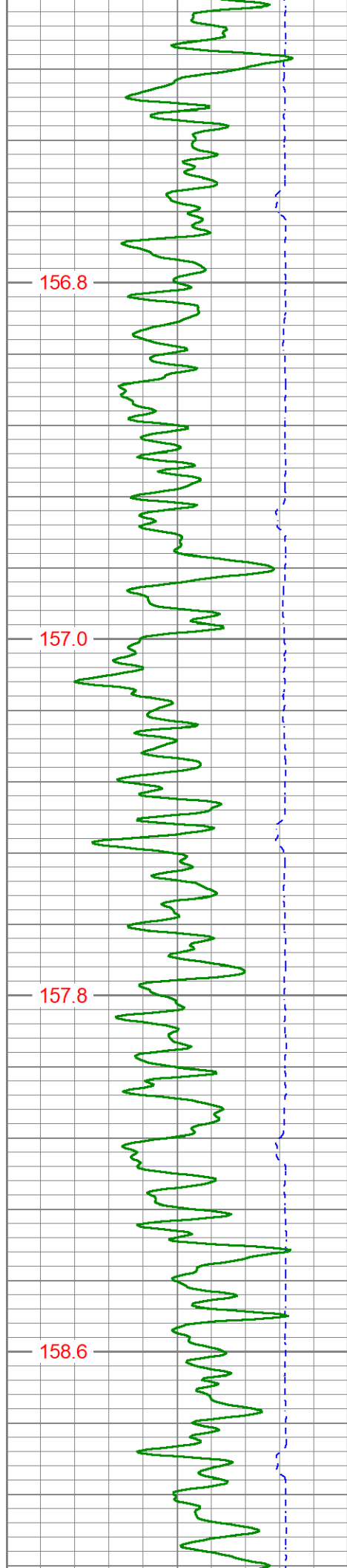


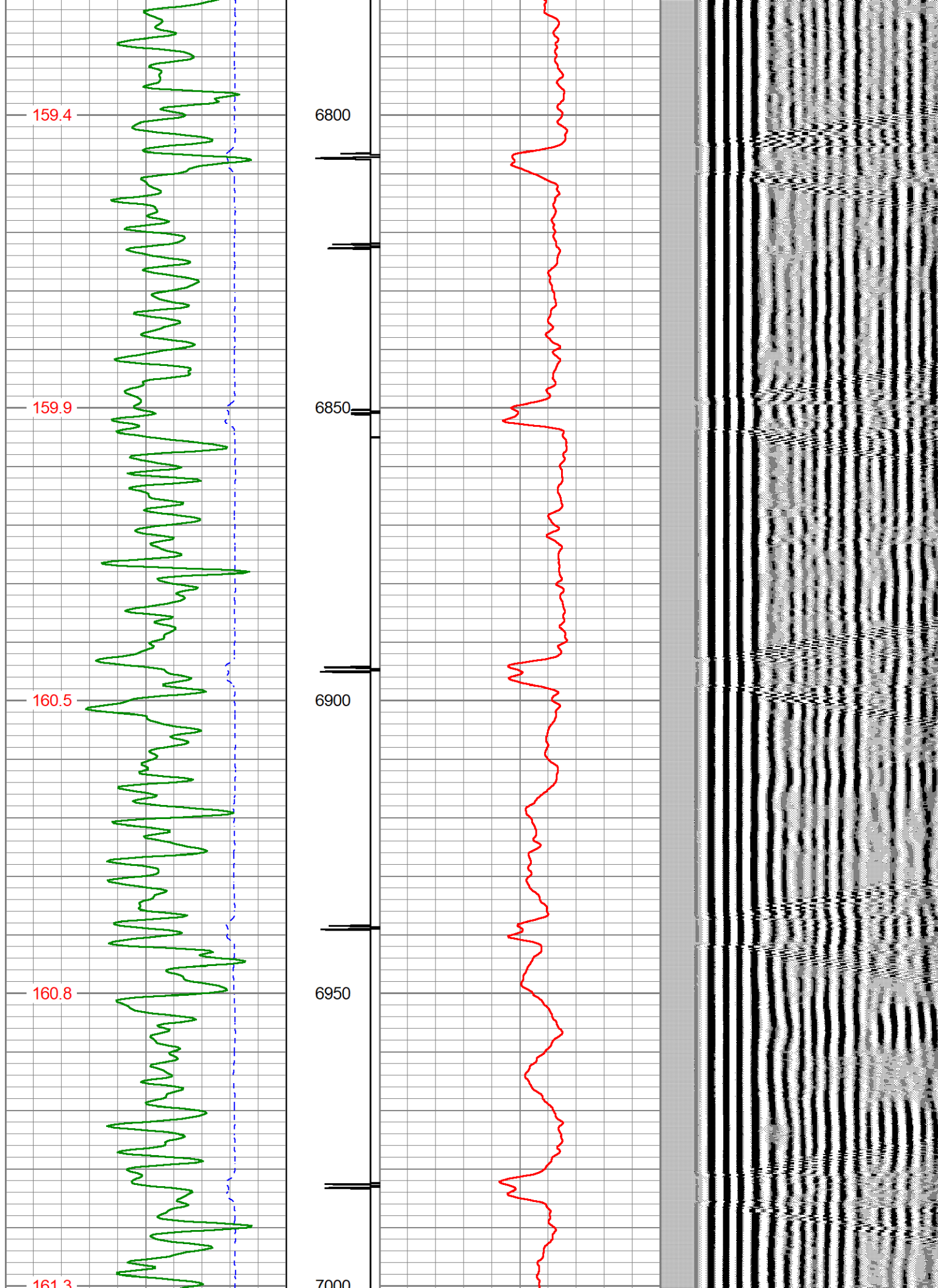


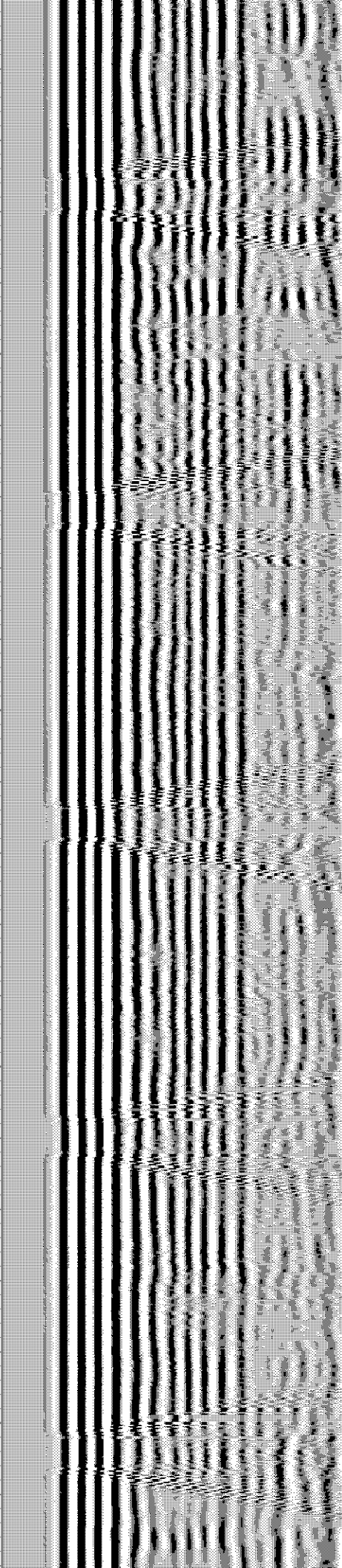
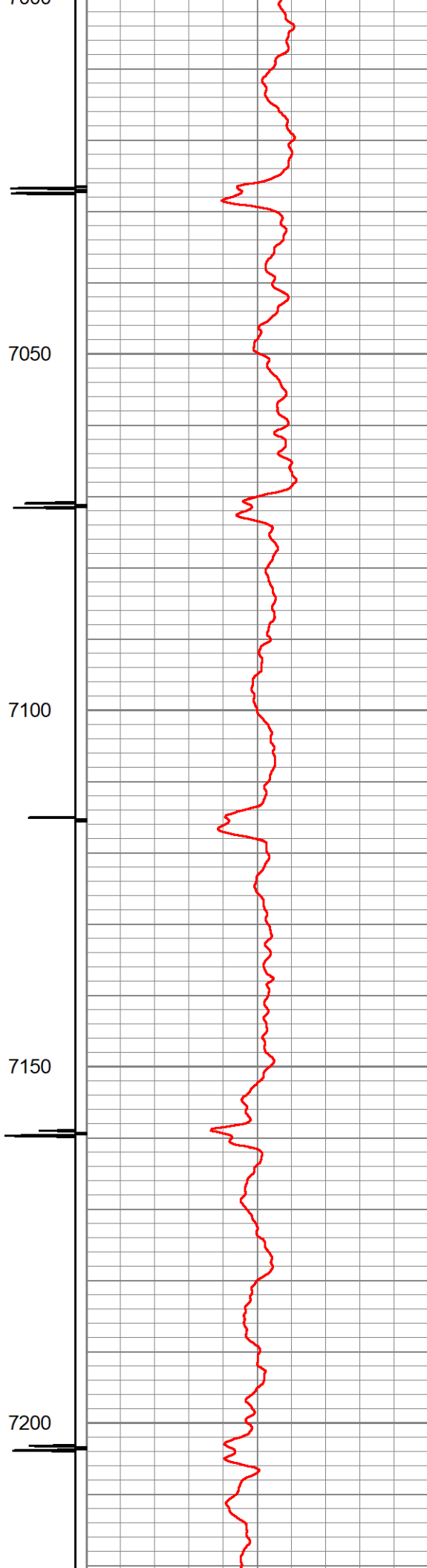
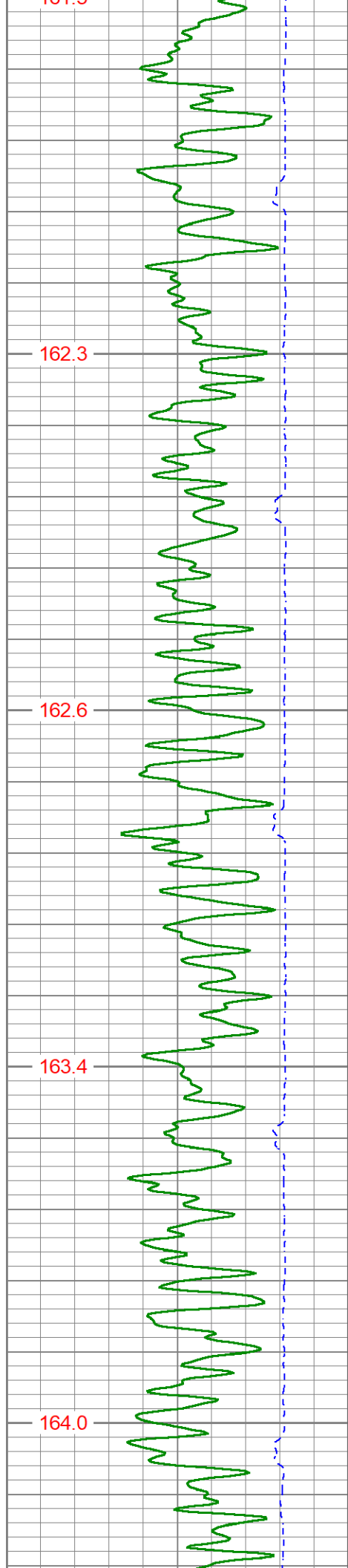


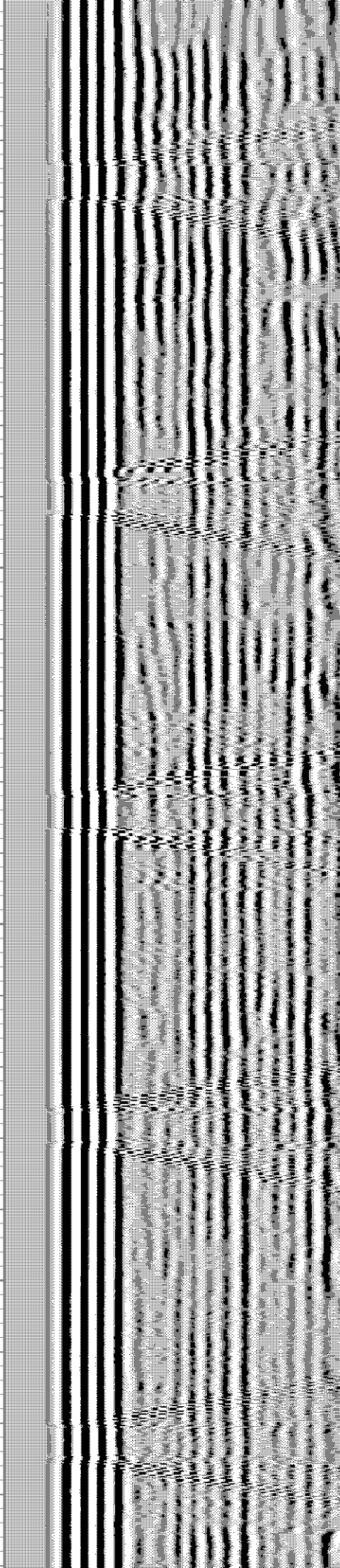
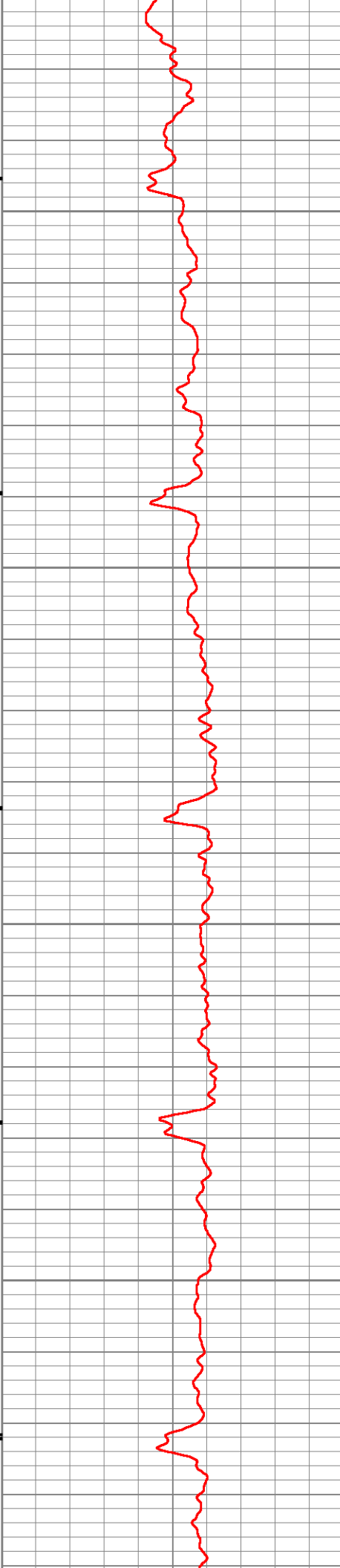
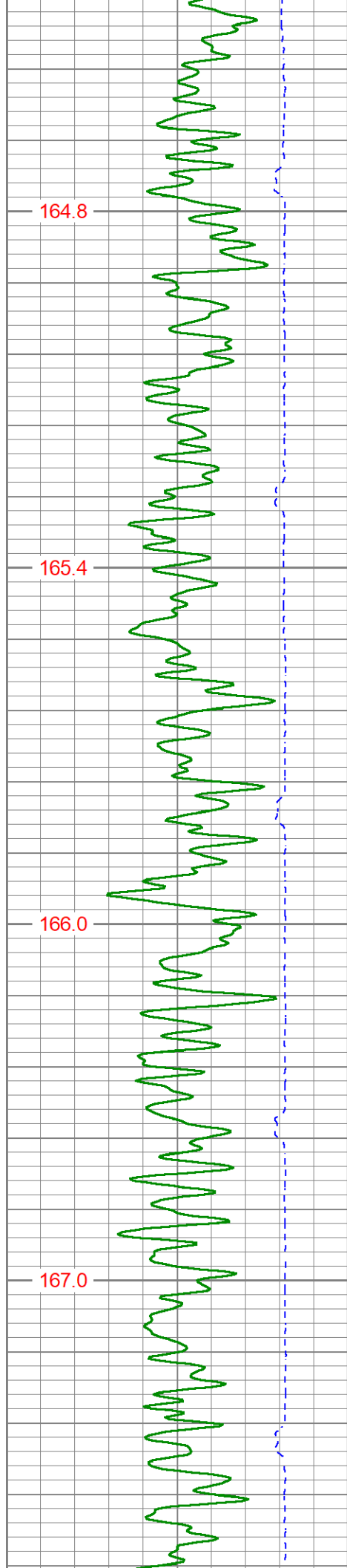


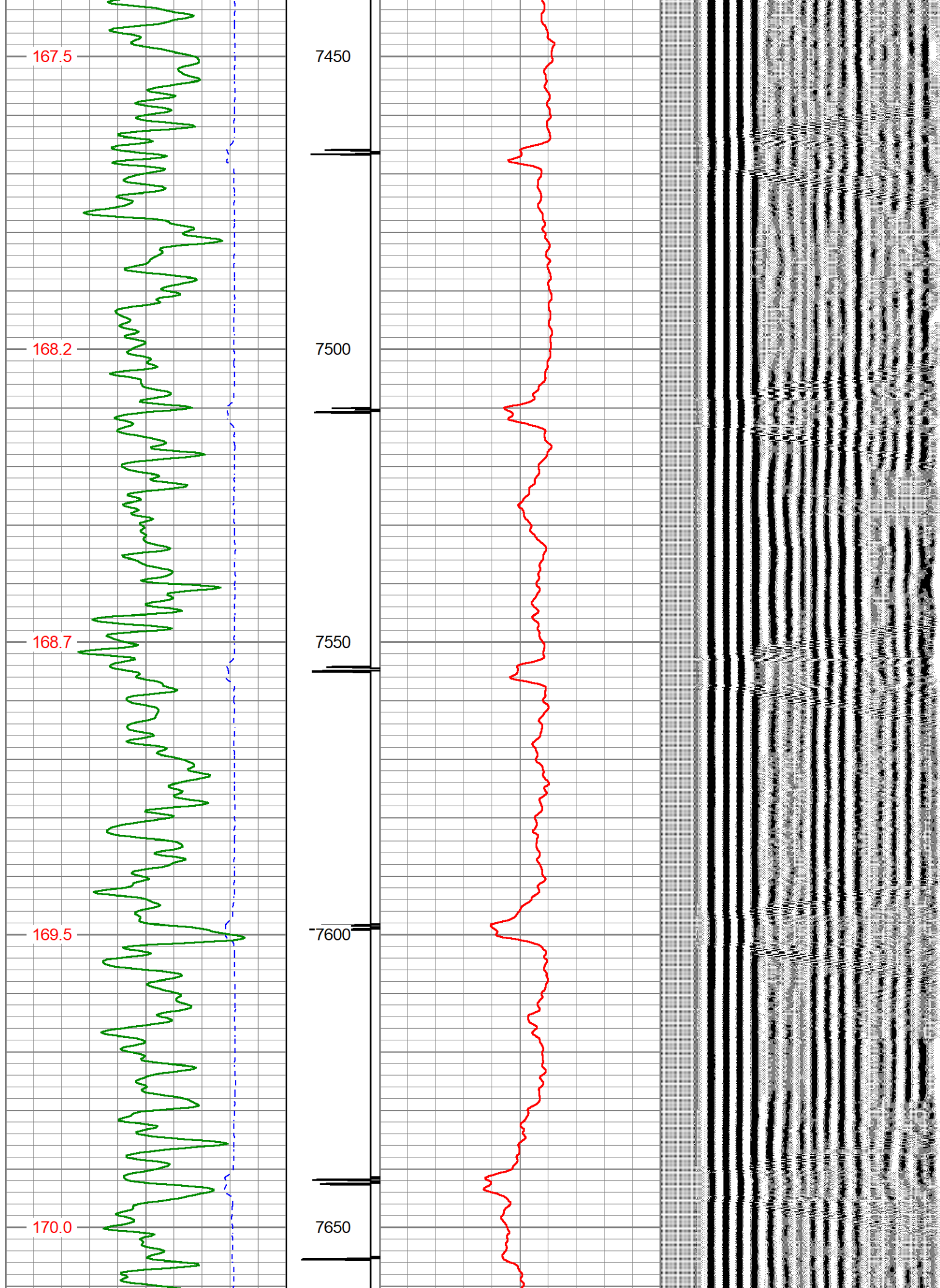


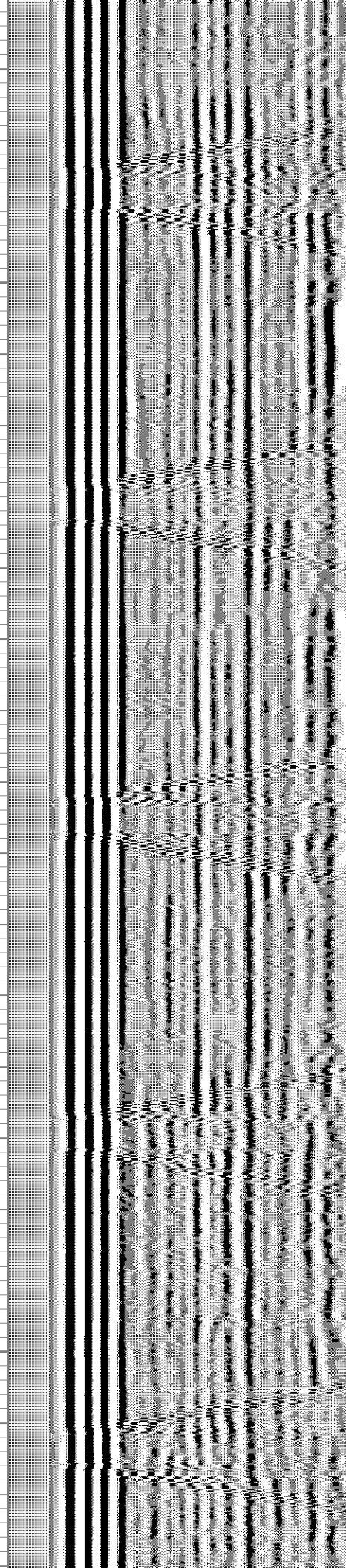
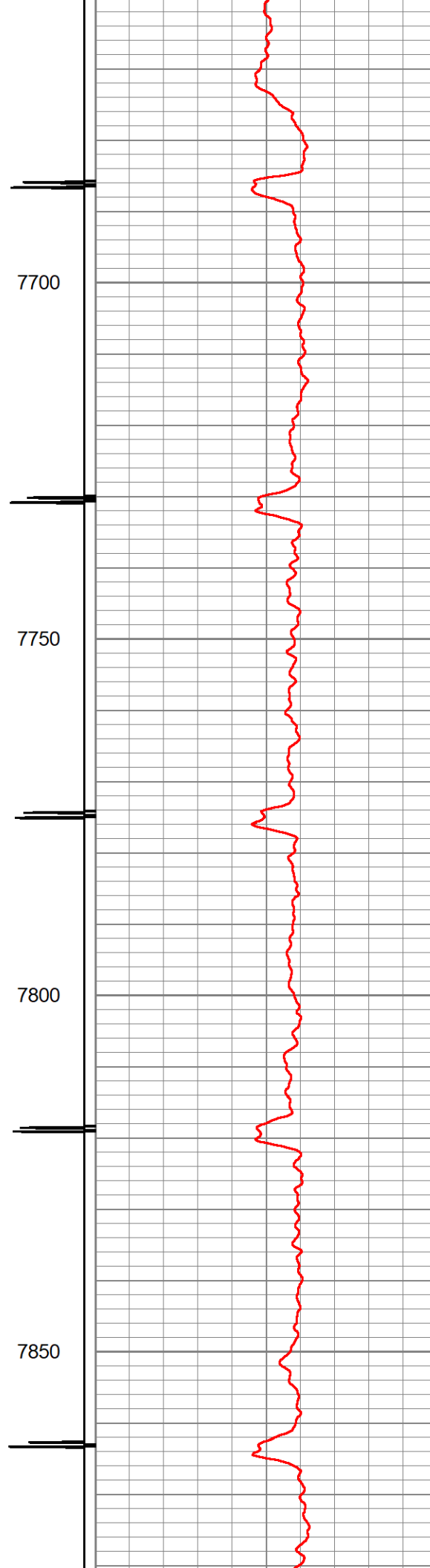
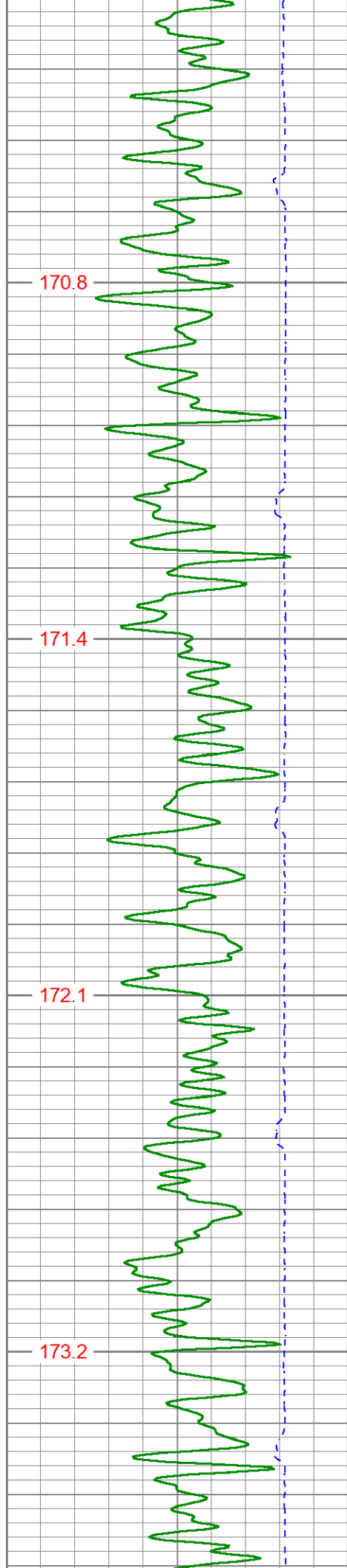


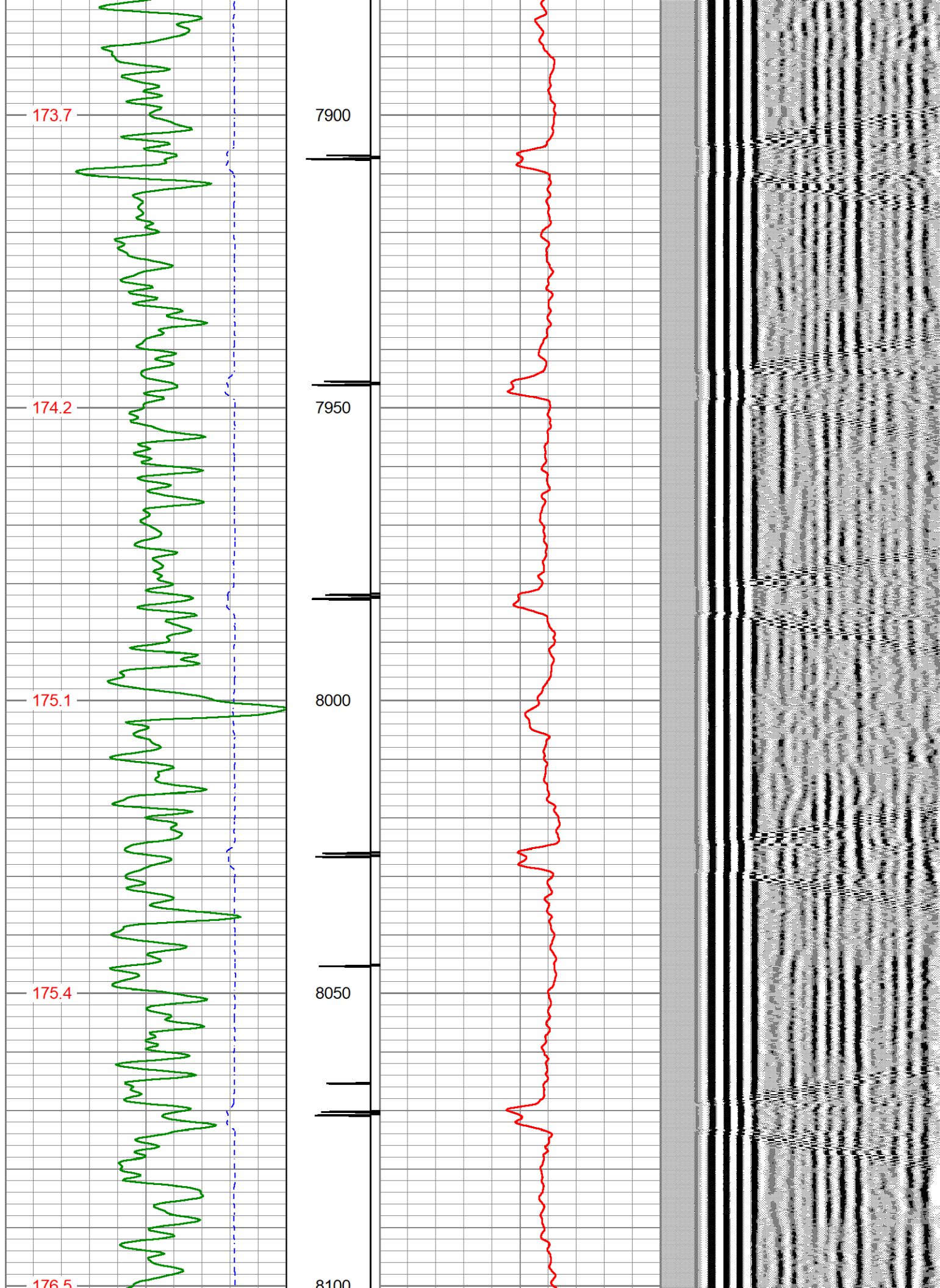


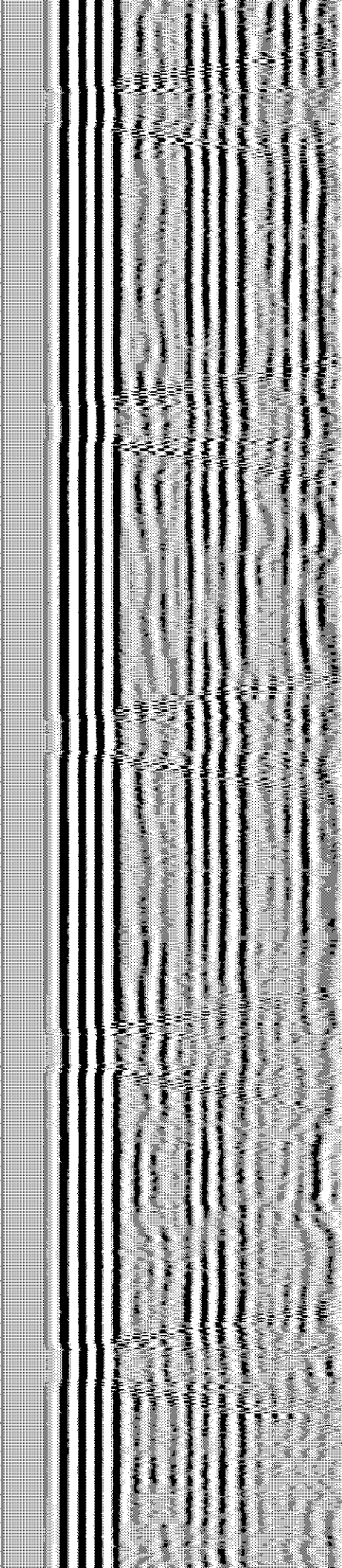
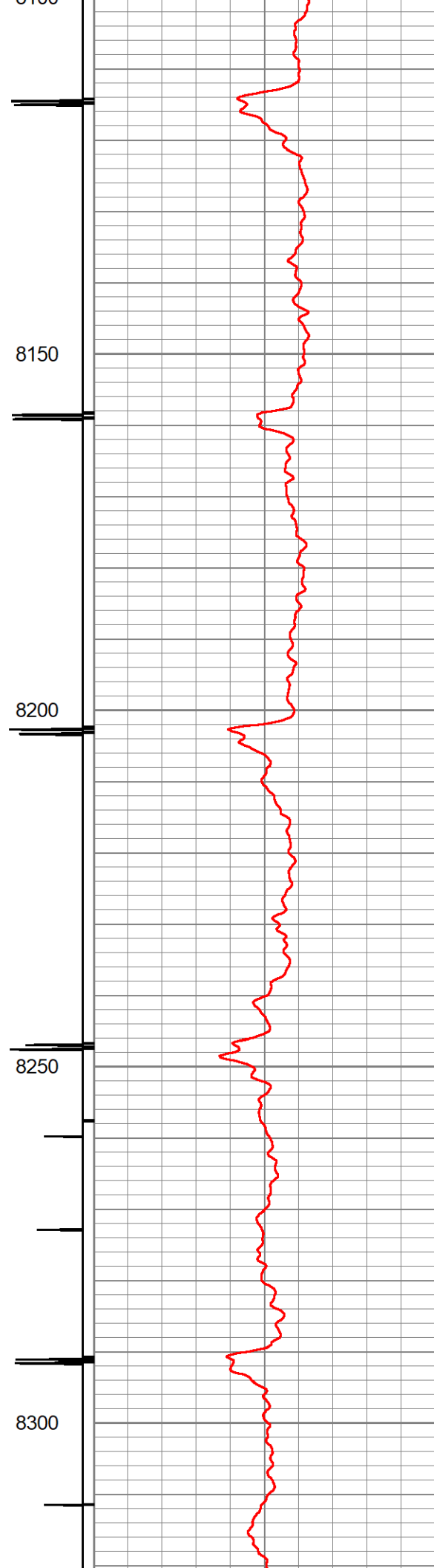
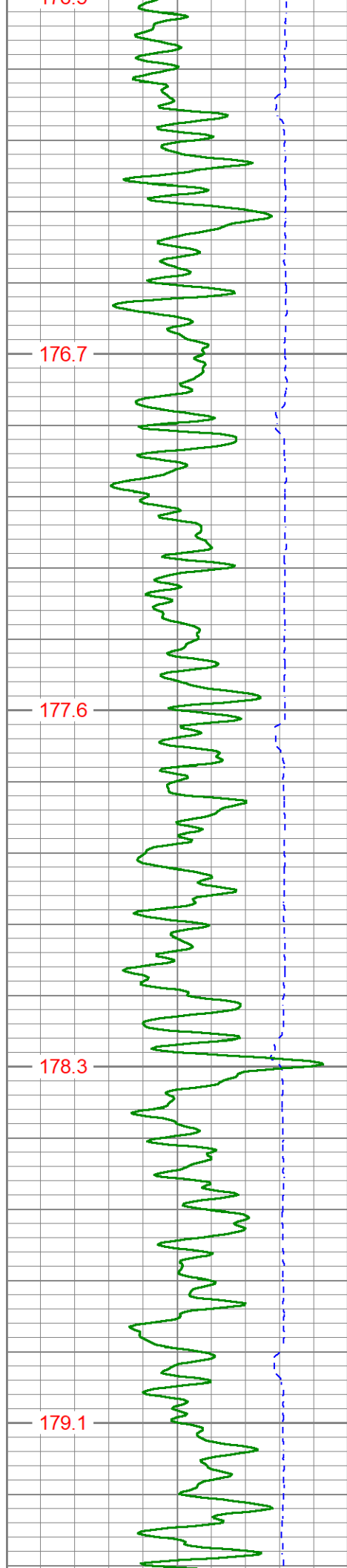


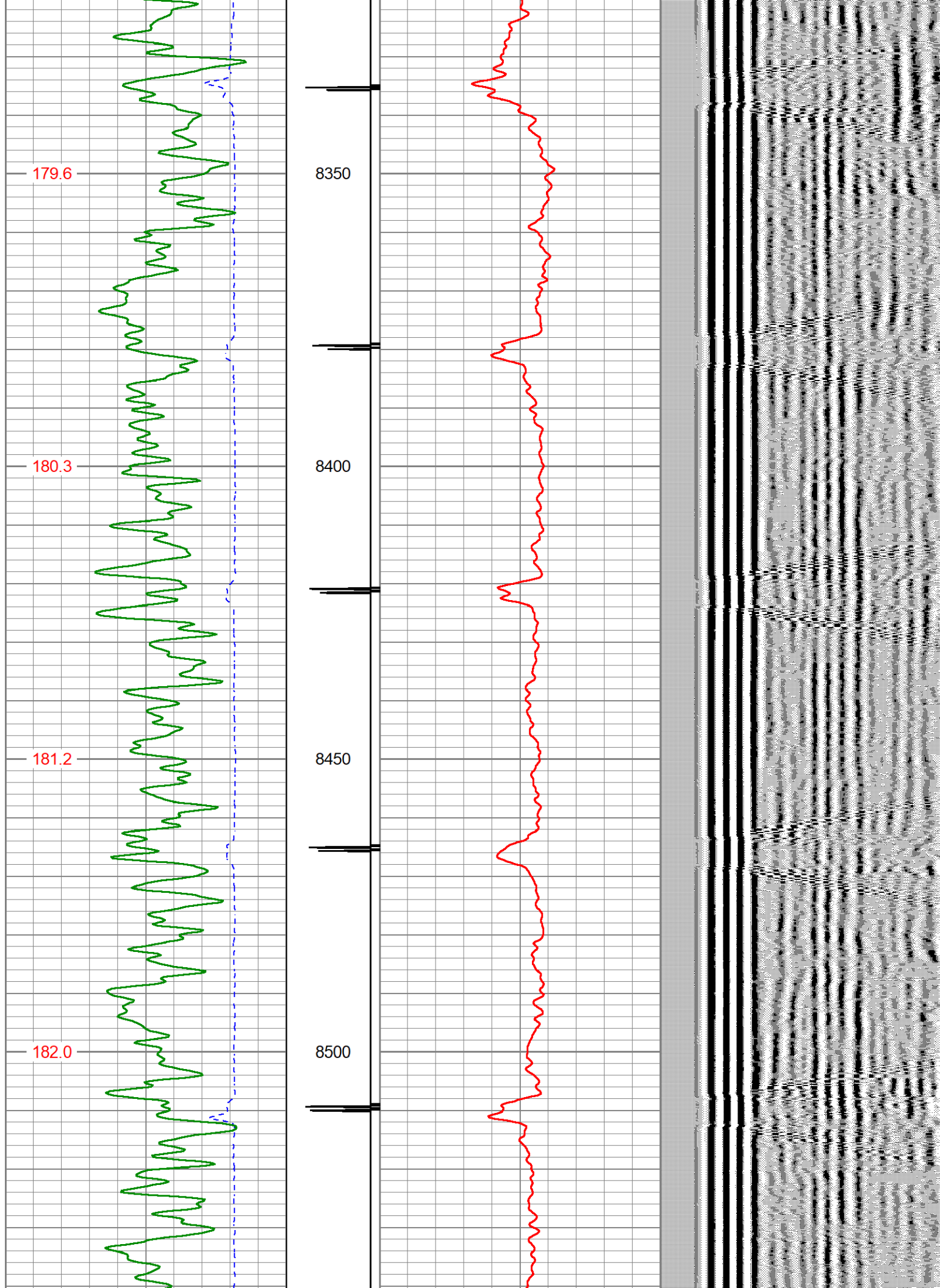


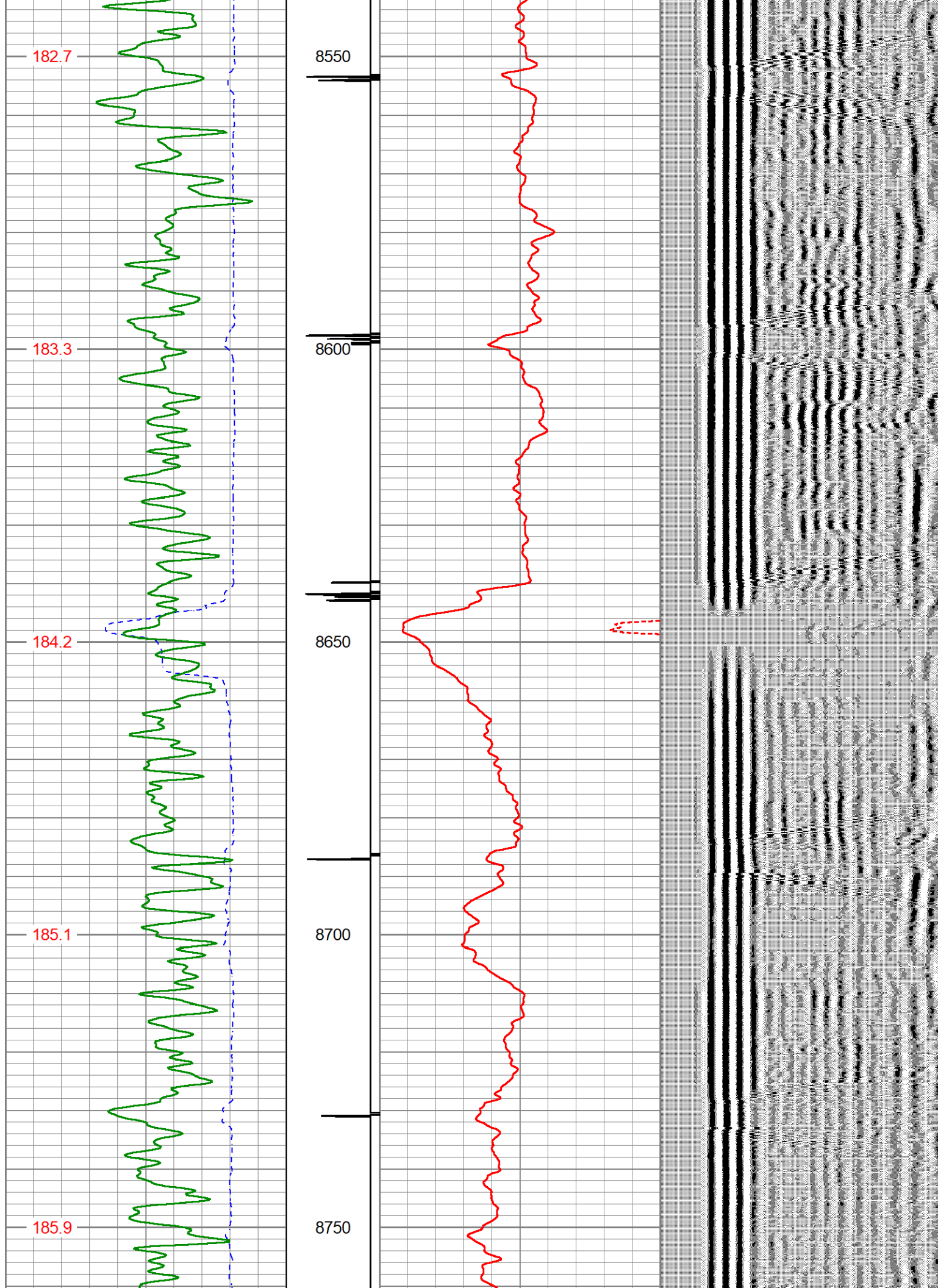


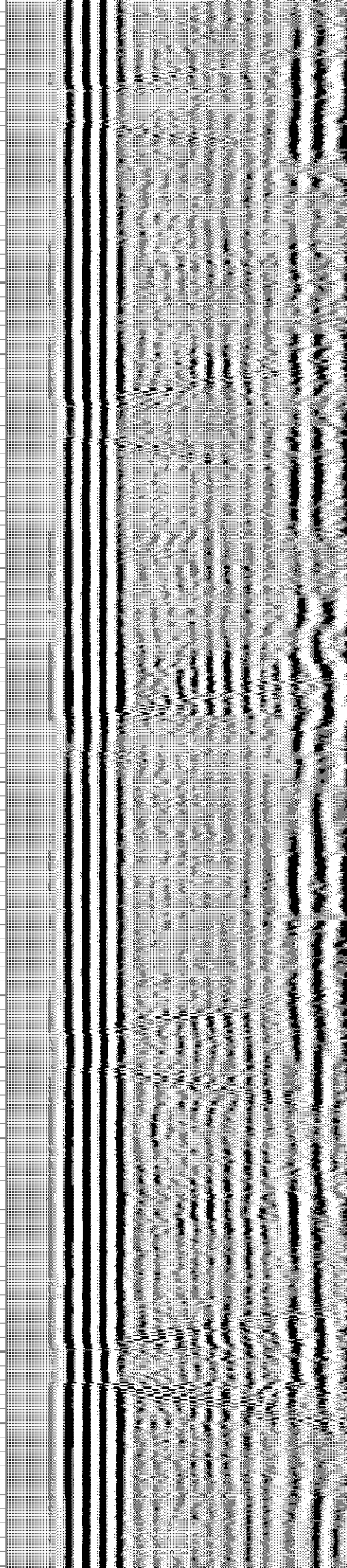
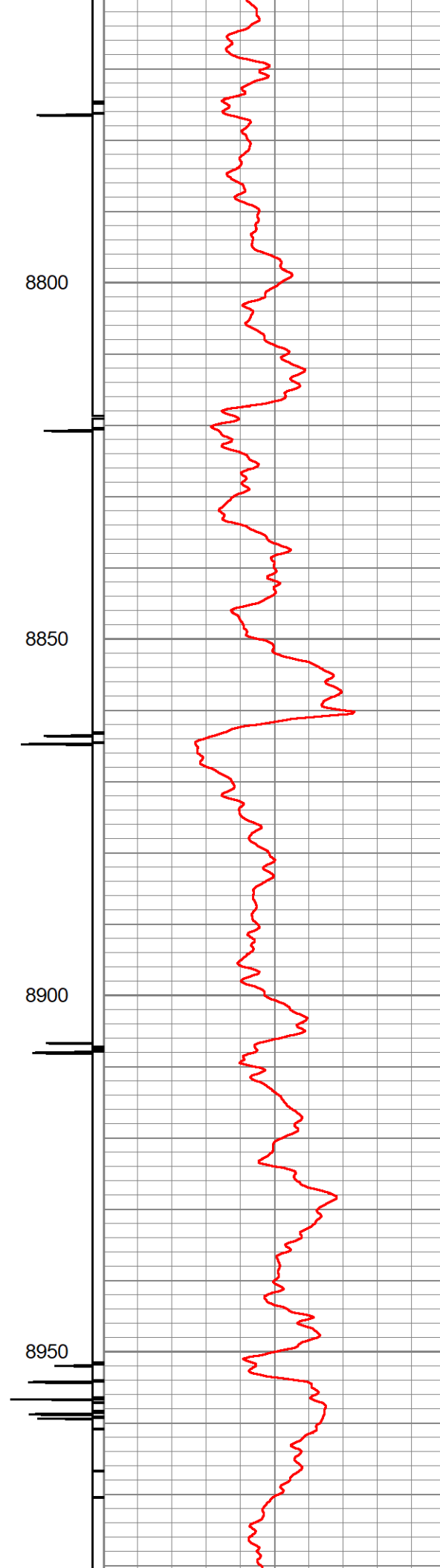
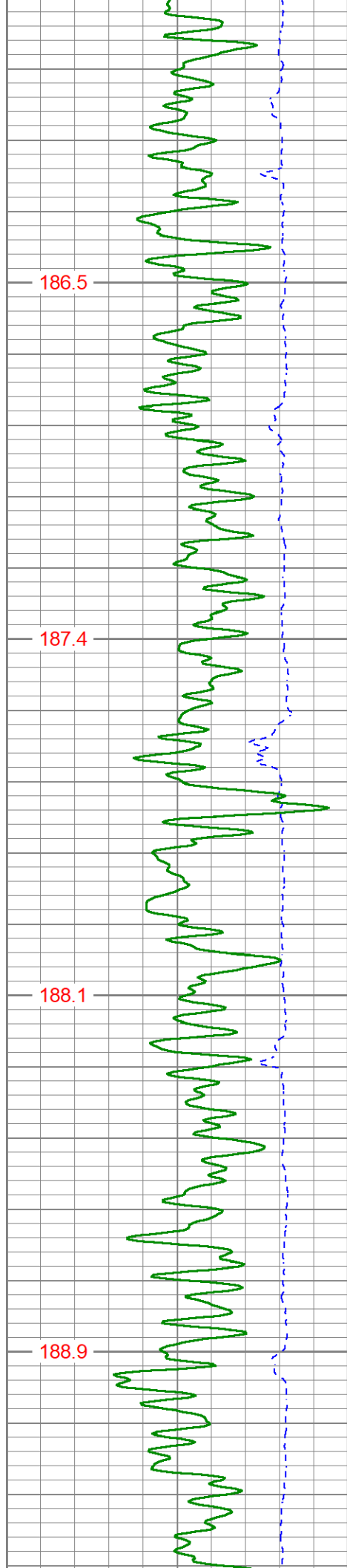


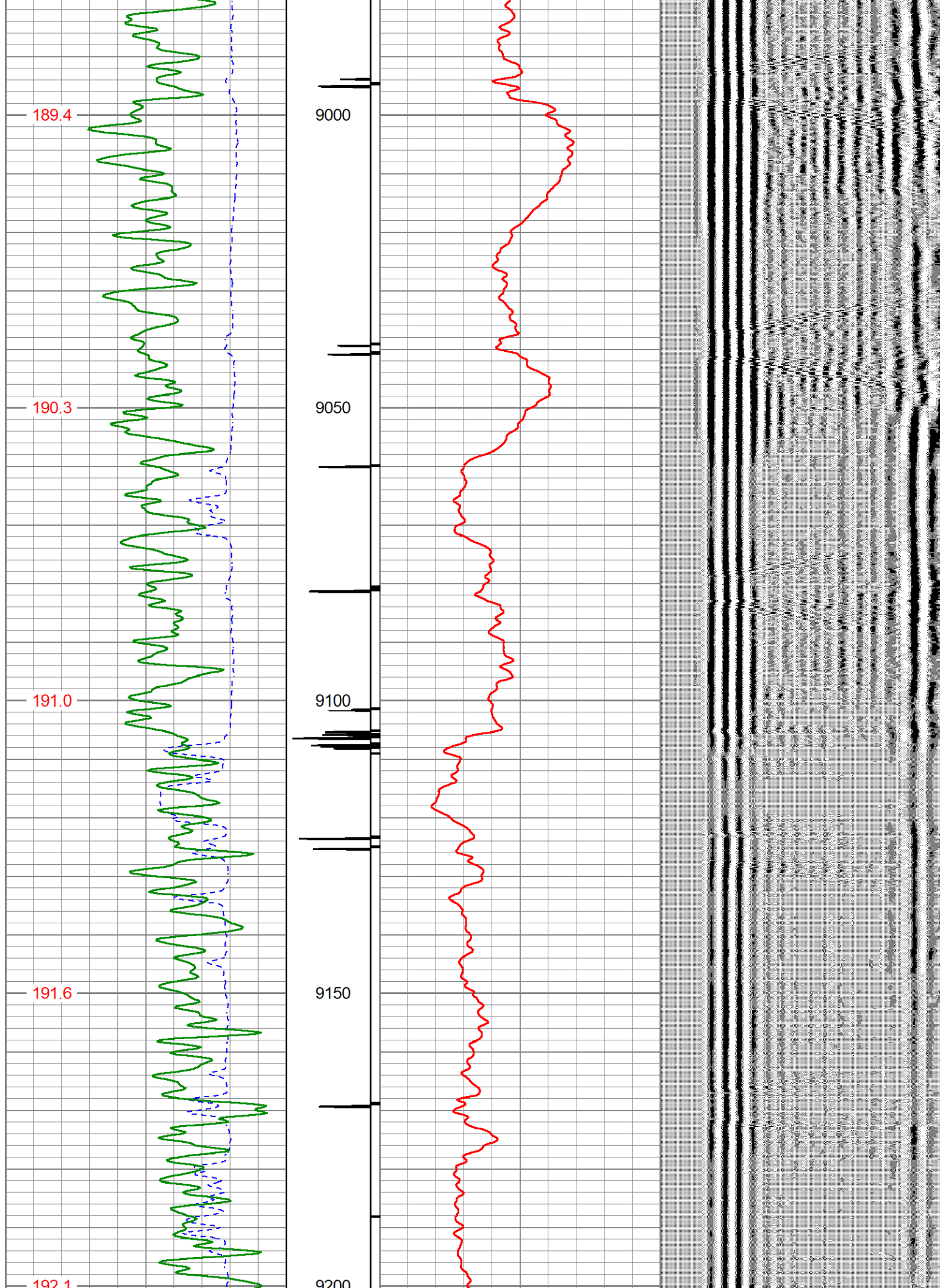


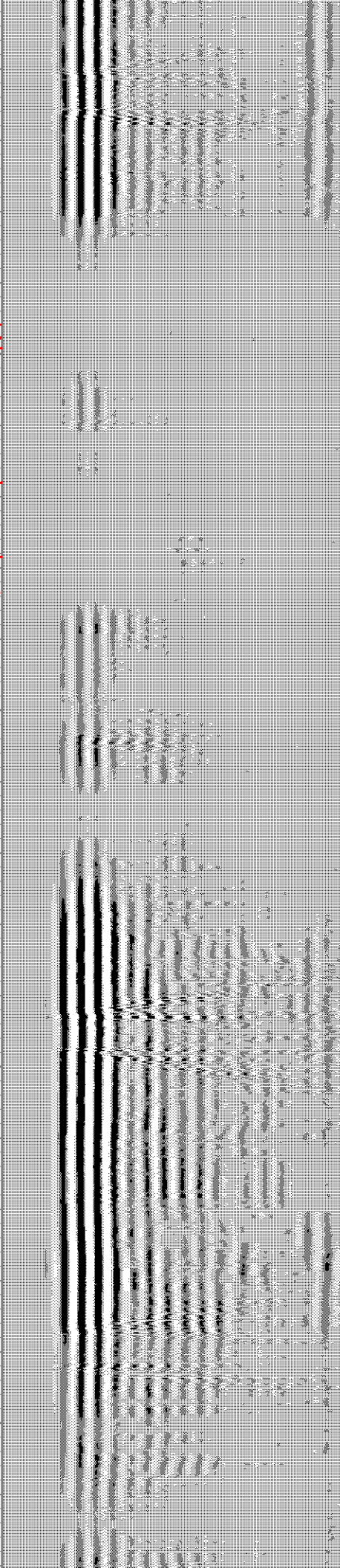
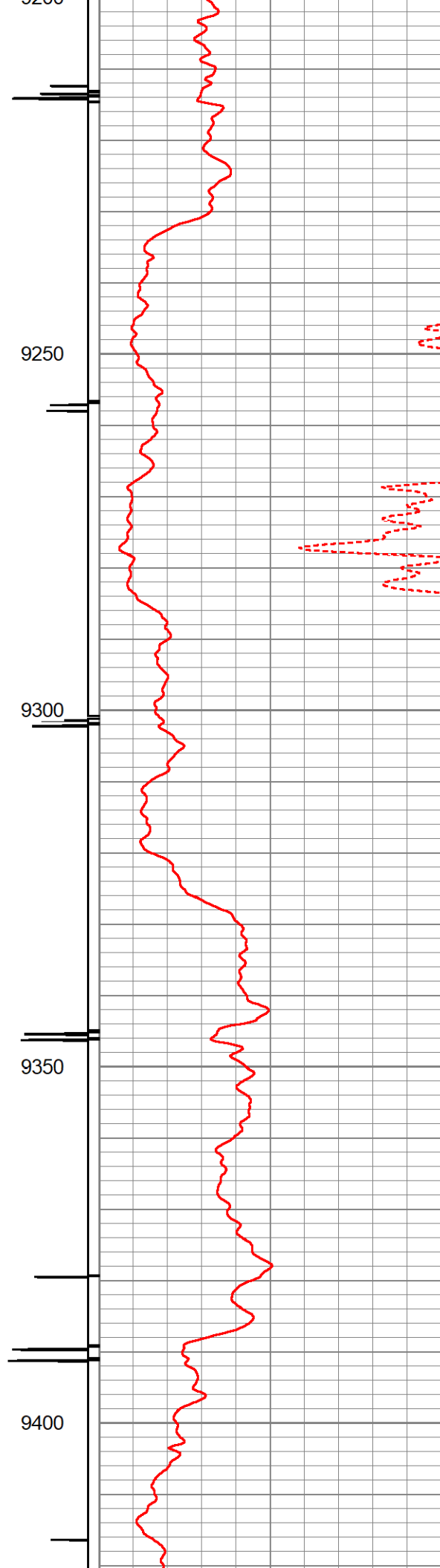
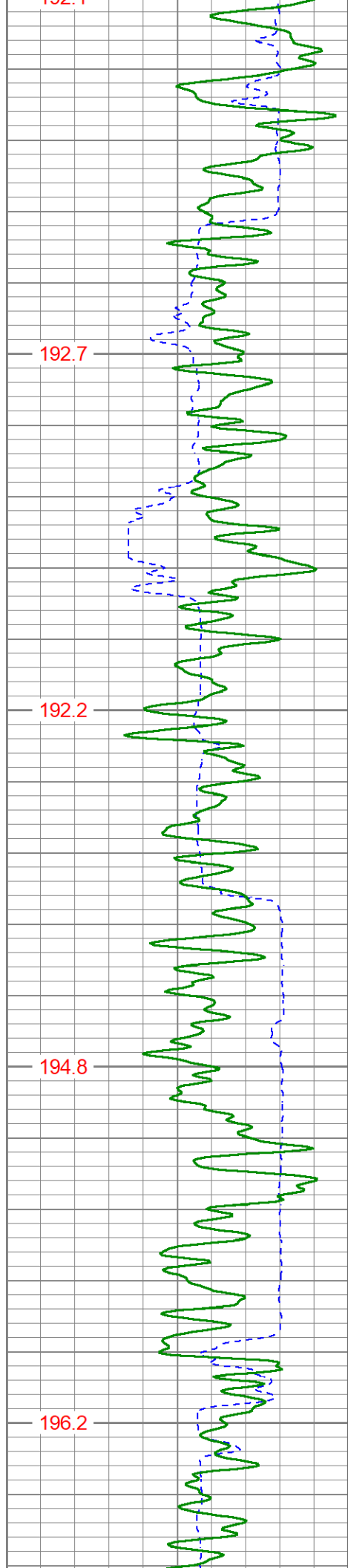


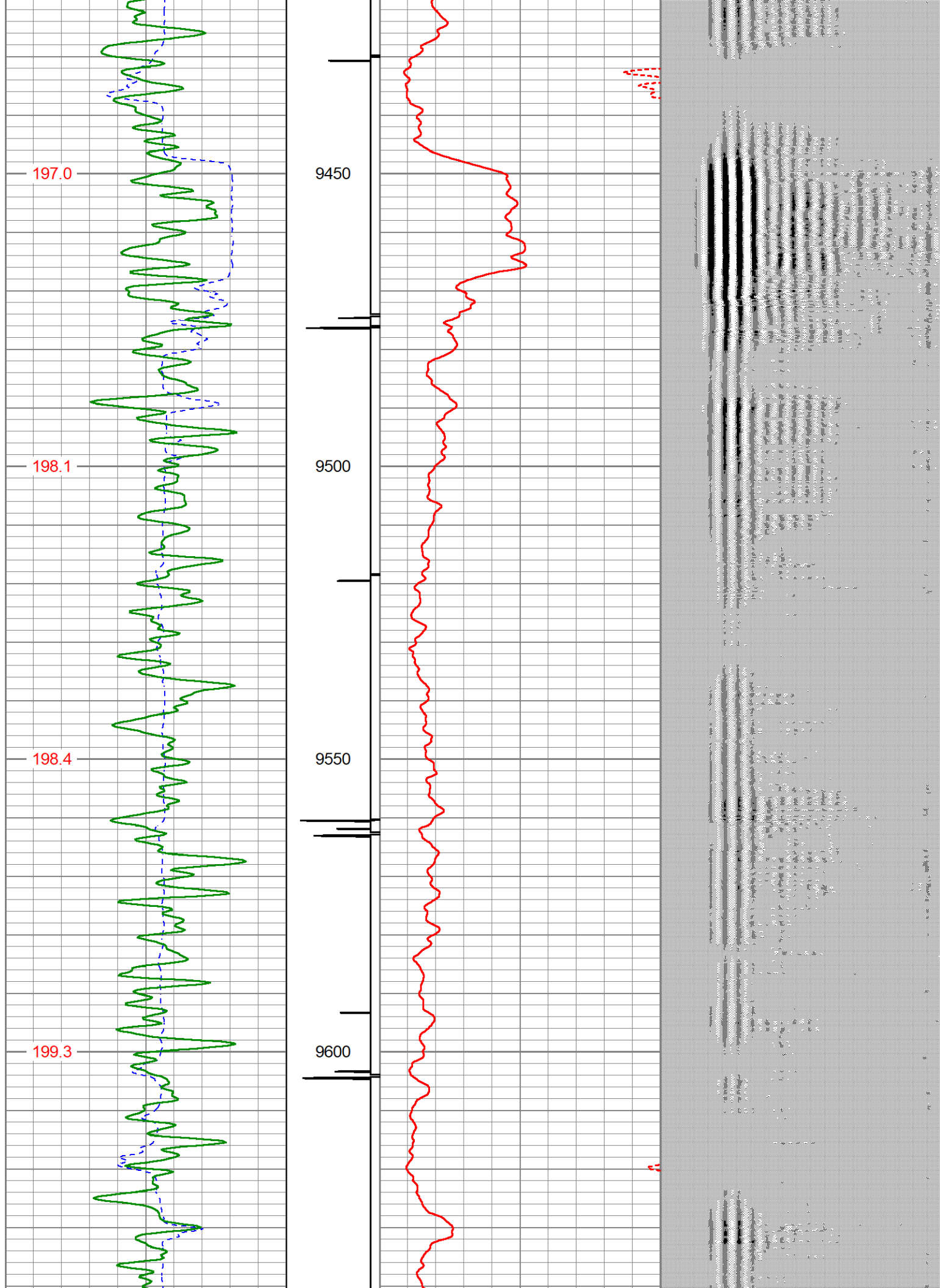


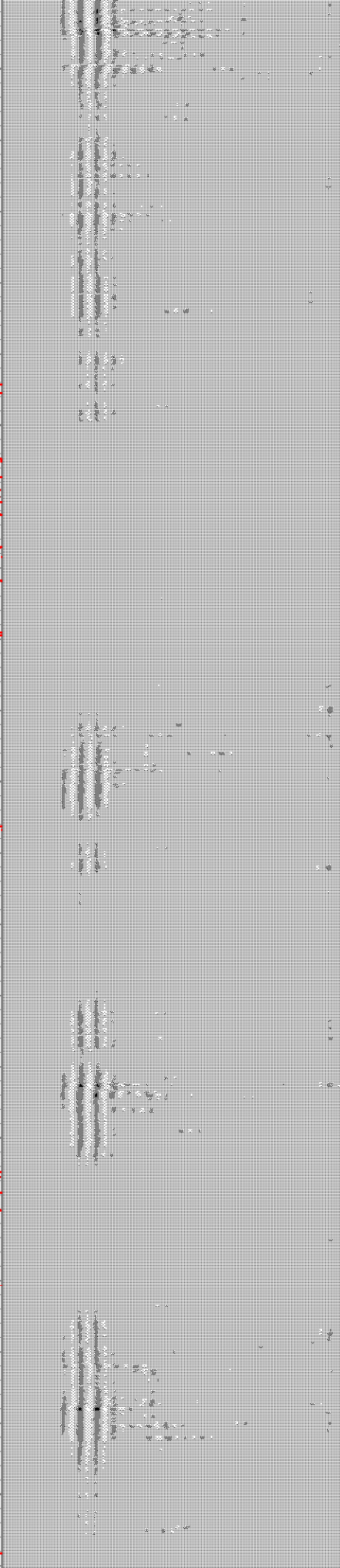
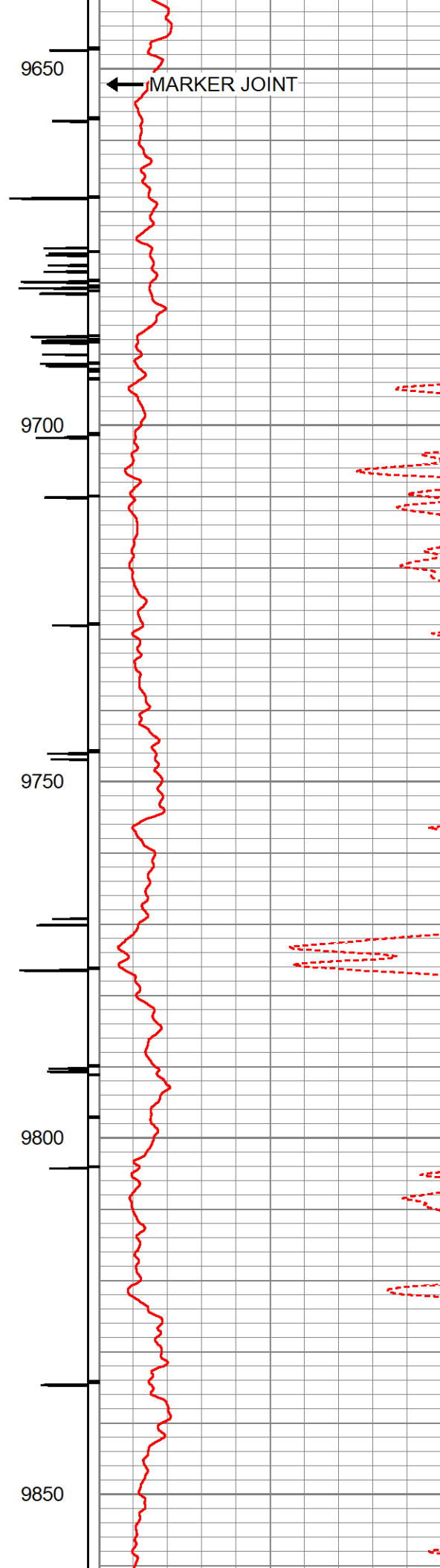
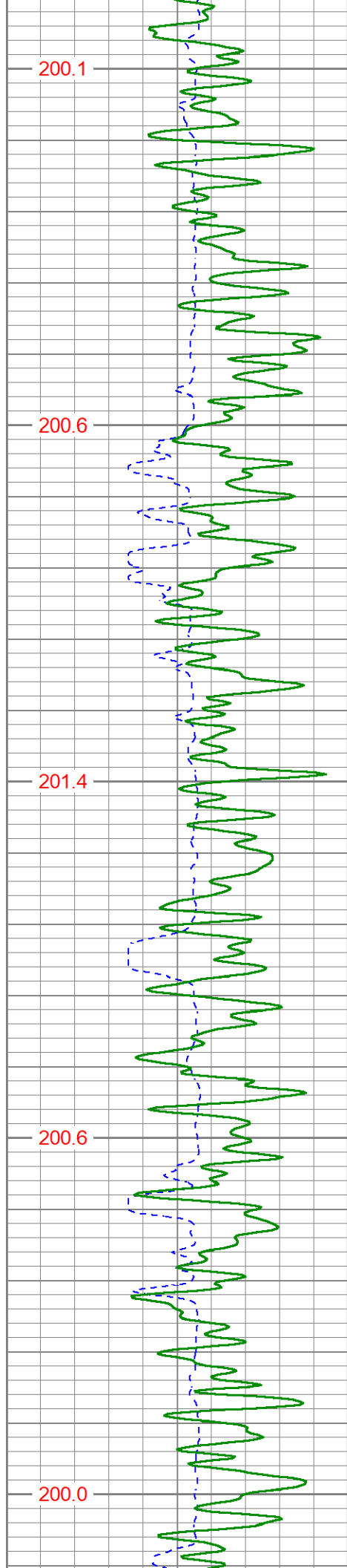


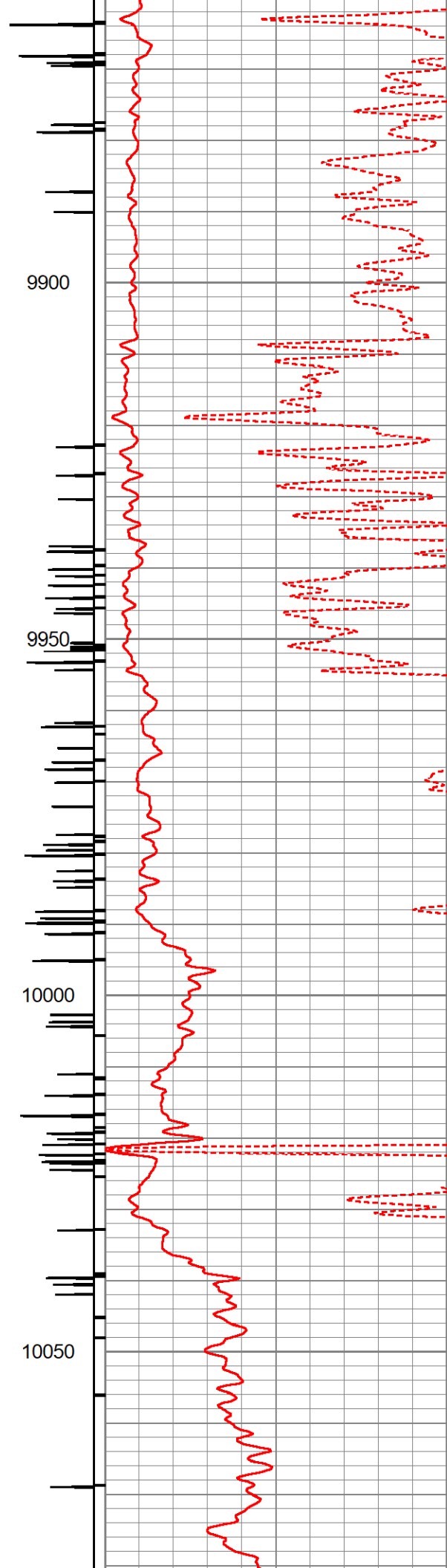
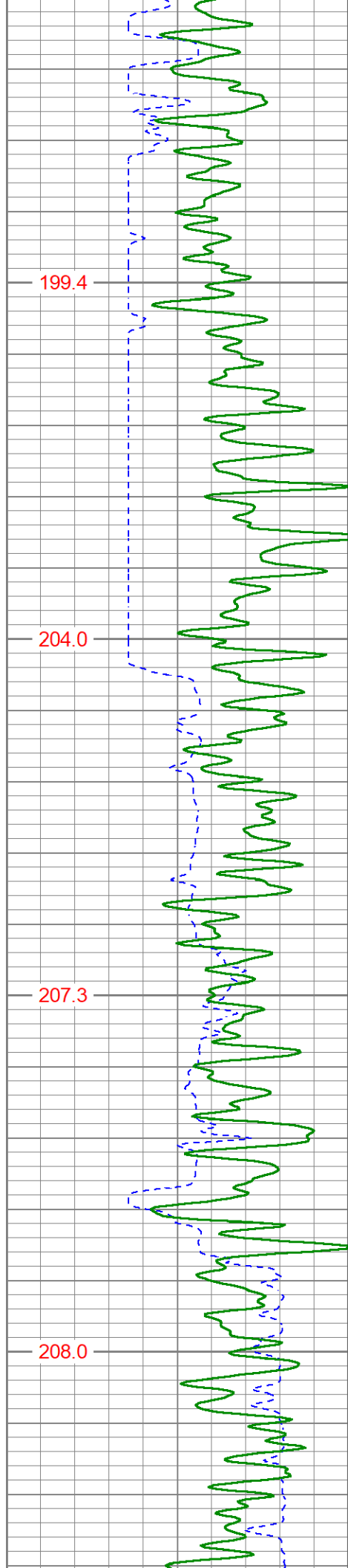


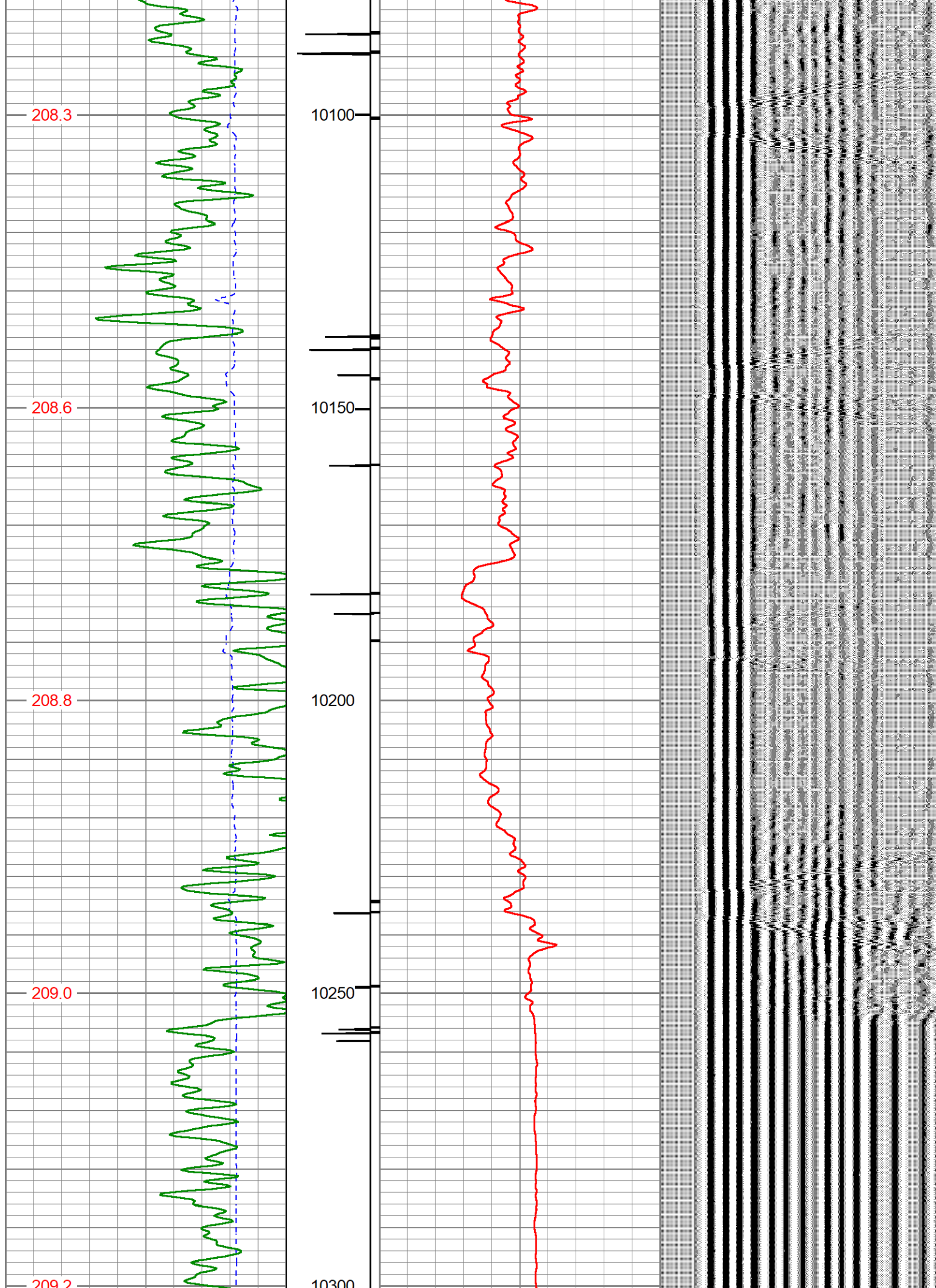


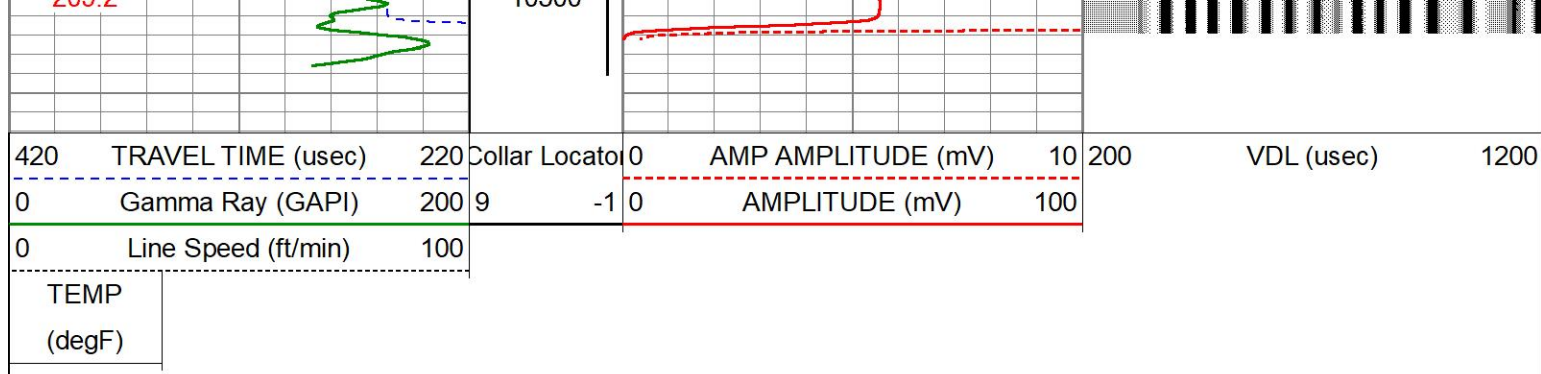






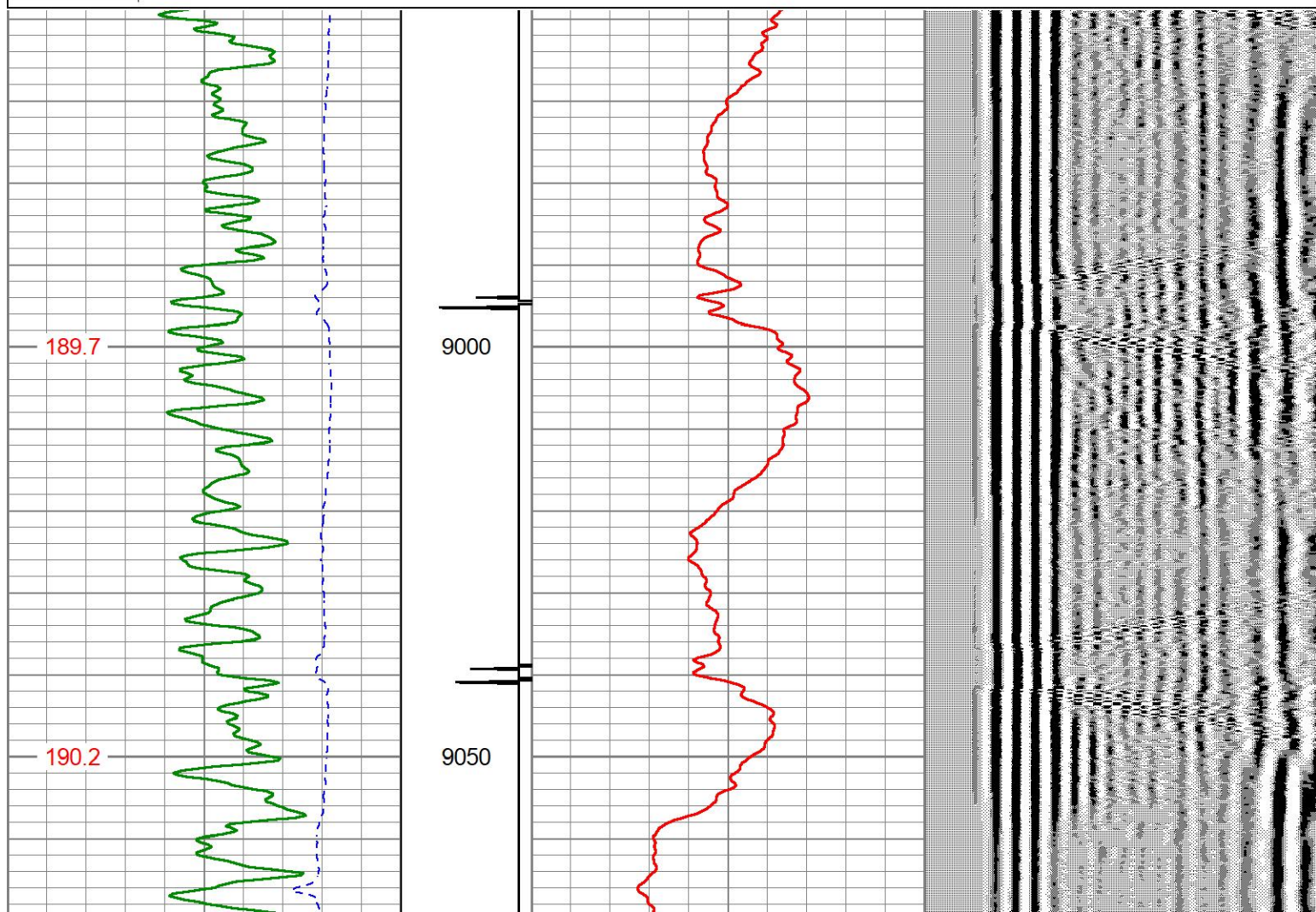
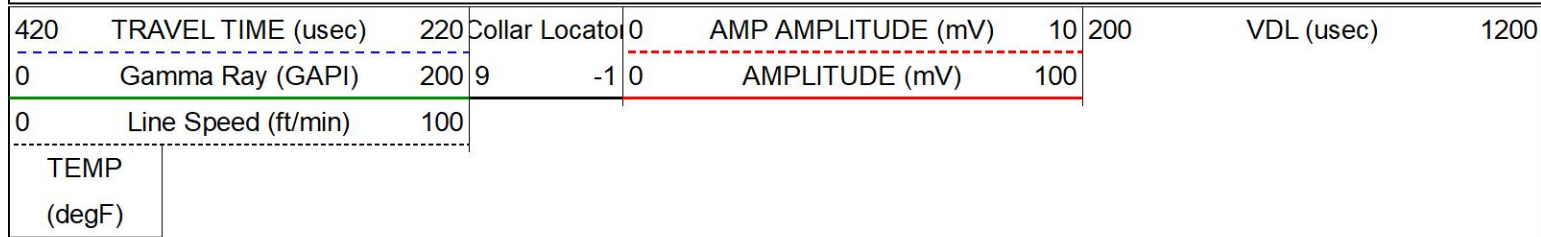


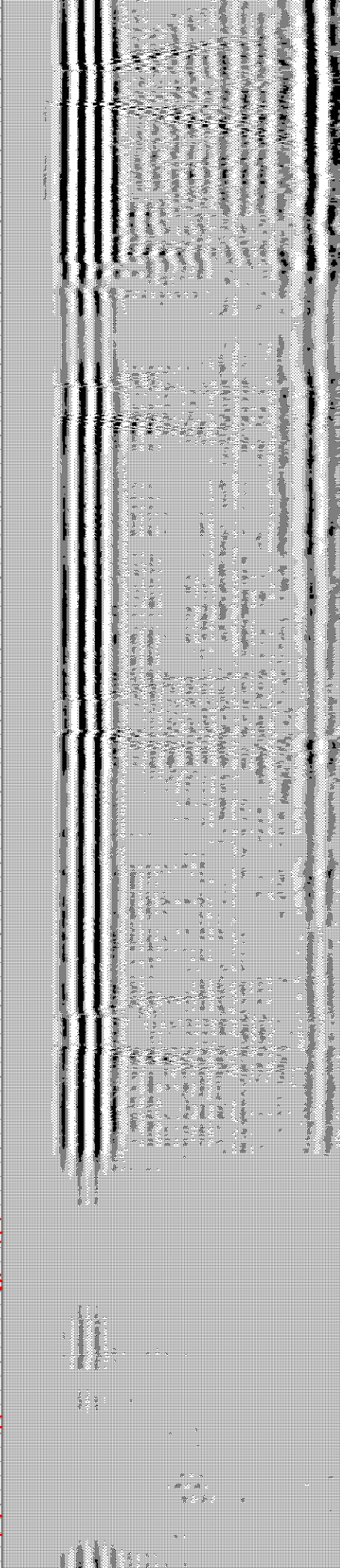
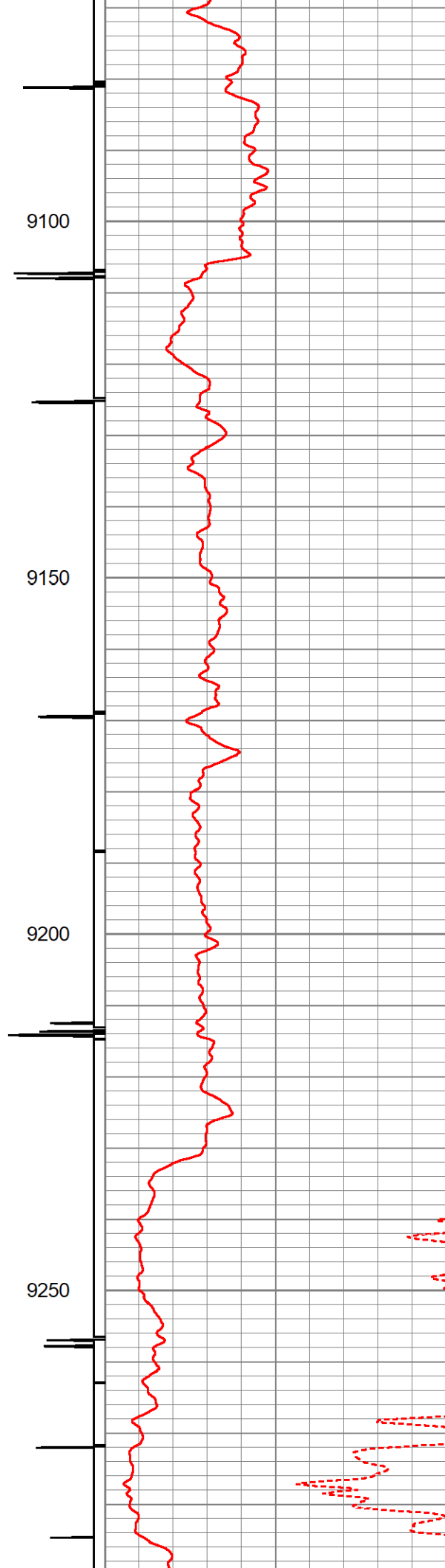
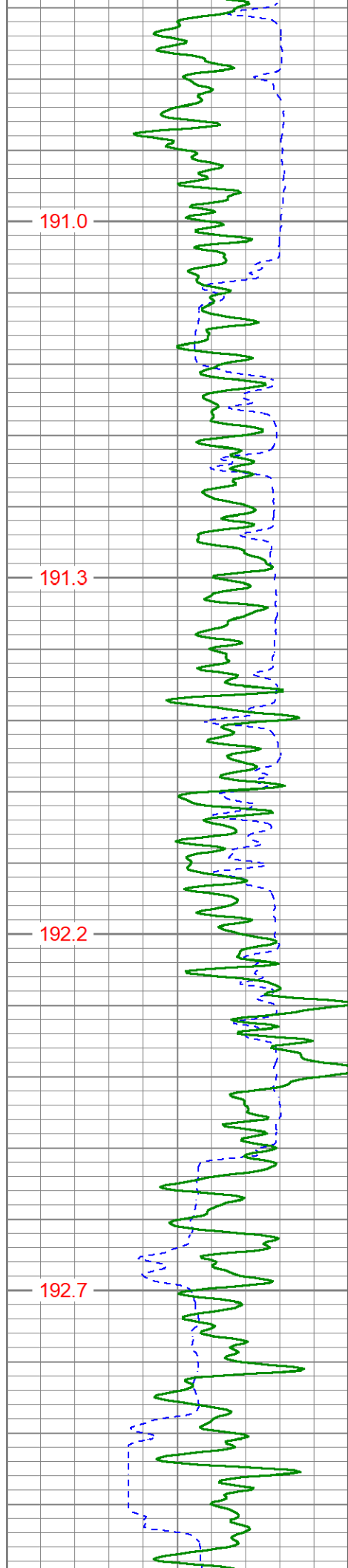


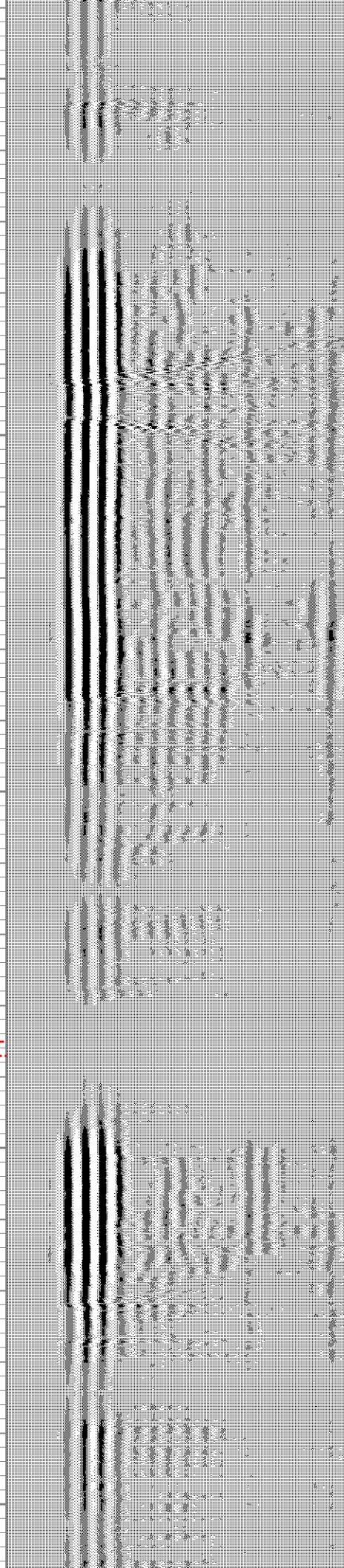
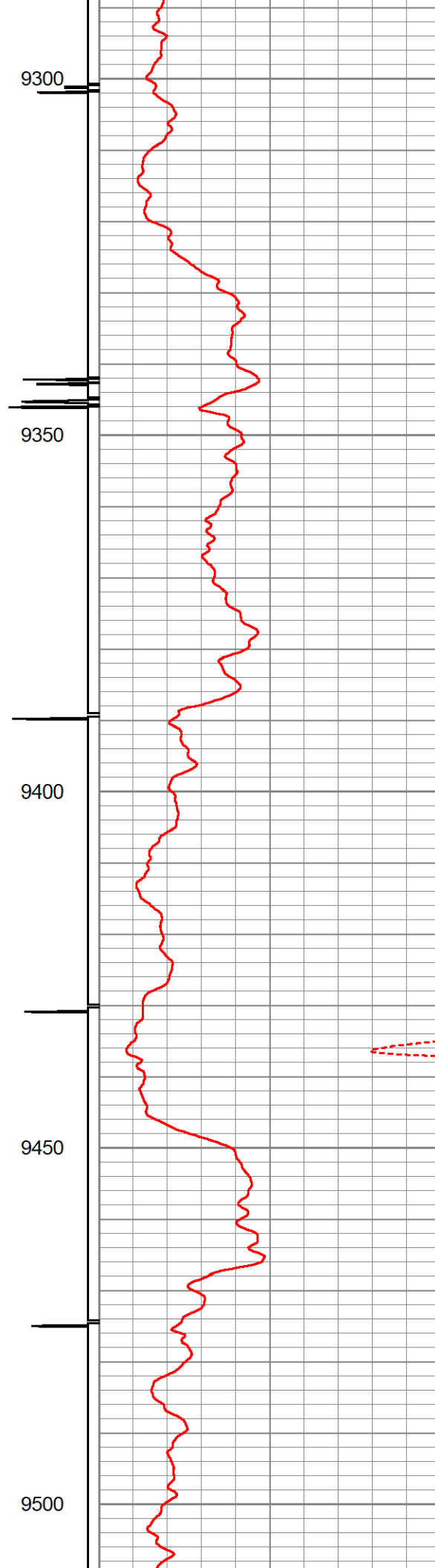
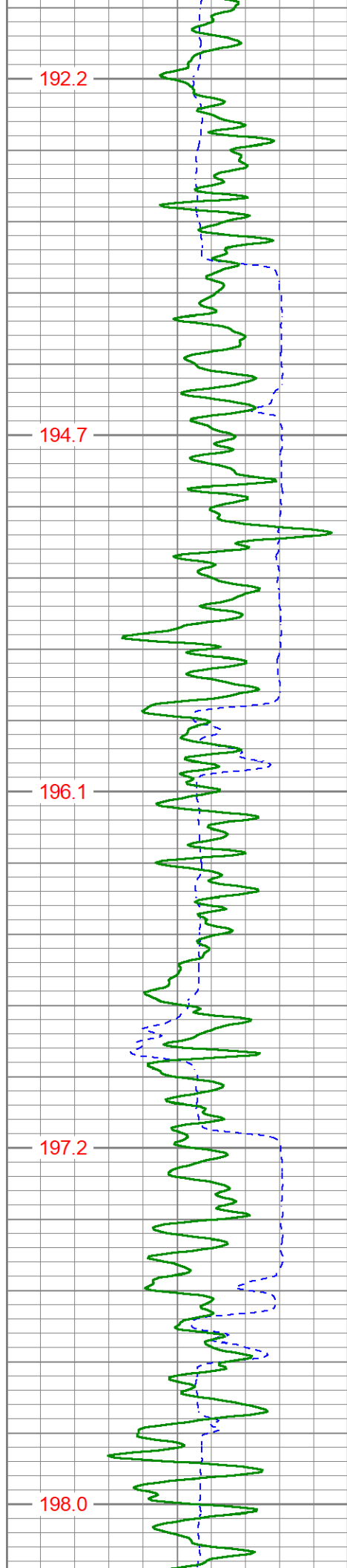


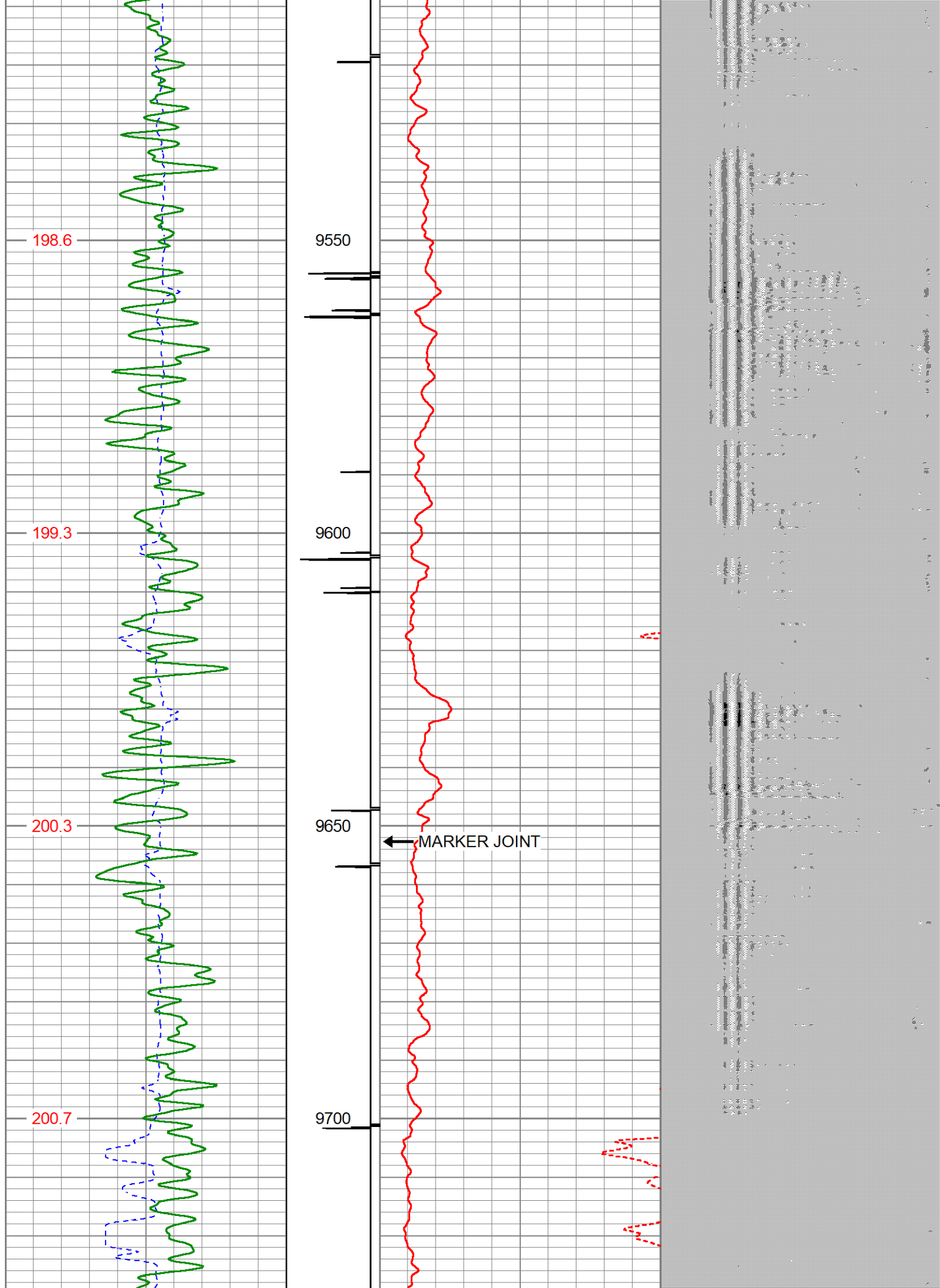
REPEAT PASS

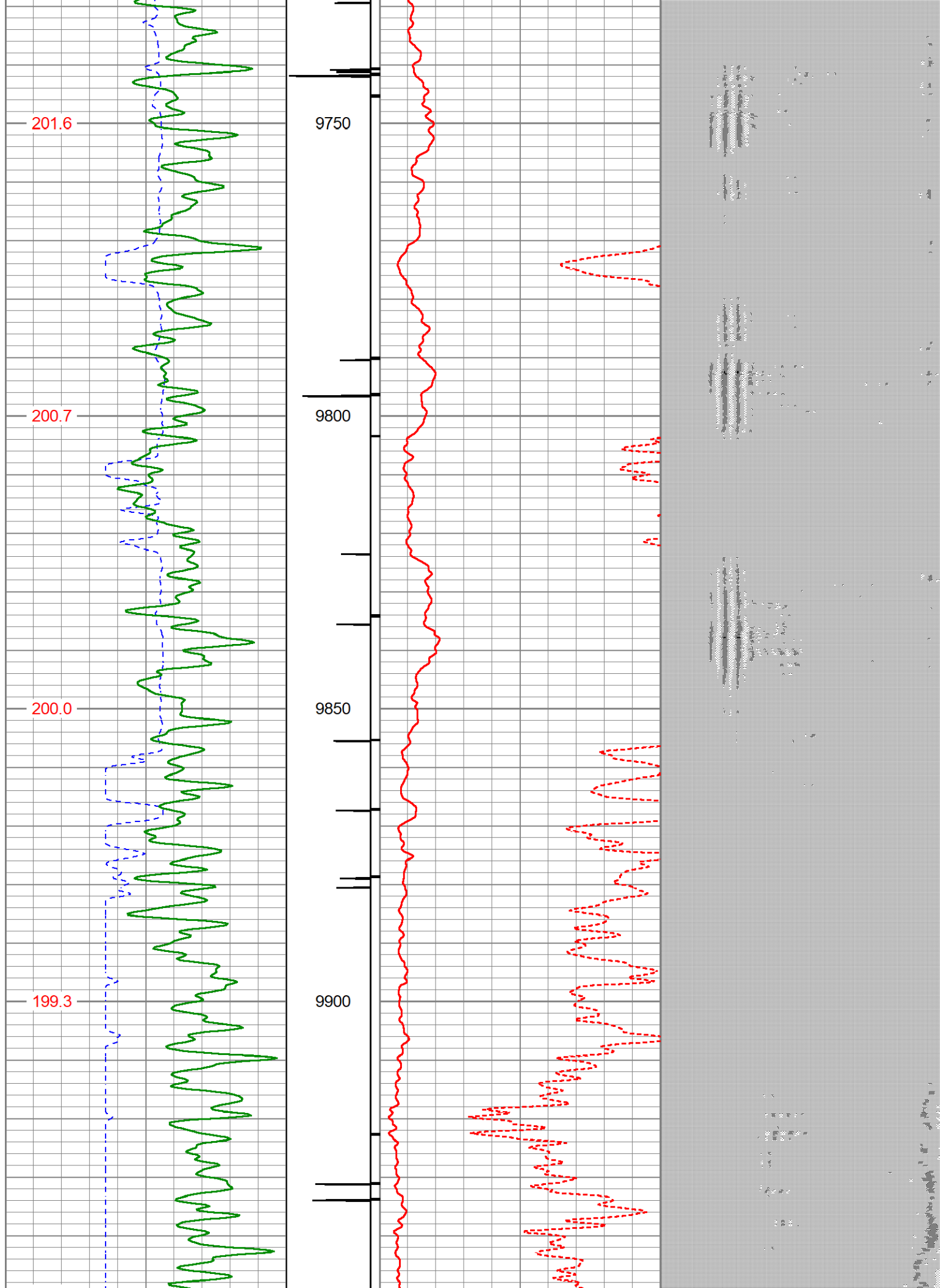
Database File: ottesen_le06_351_hnx.db
 Dataset Pathname: pass5
 Presentation Format: cbl_kggw
 Dataset Creation: Sat Mar 02 15:44:22 2019
 Charted by: Depth in Feet scaled 1:240

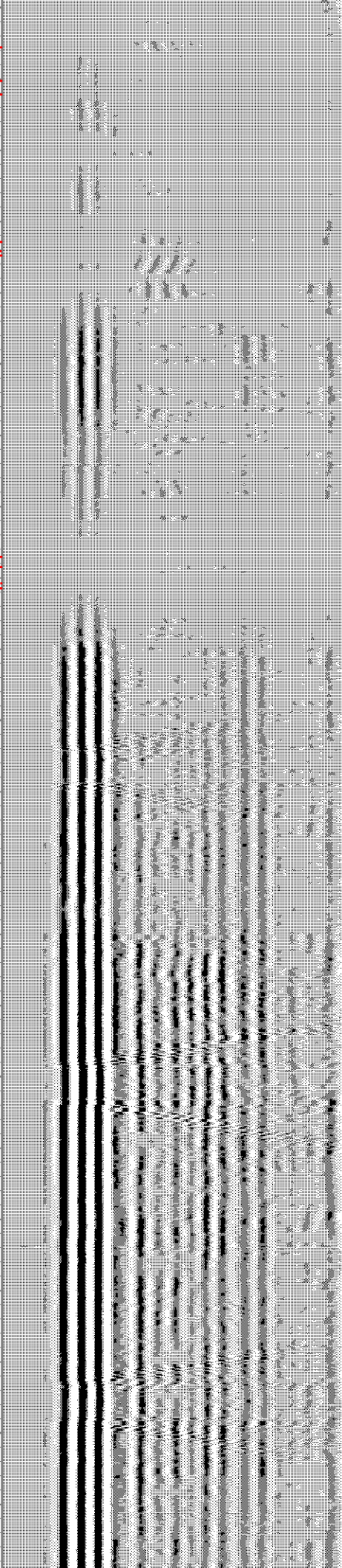
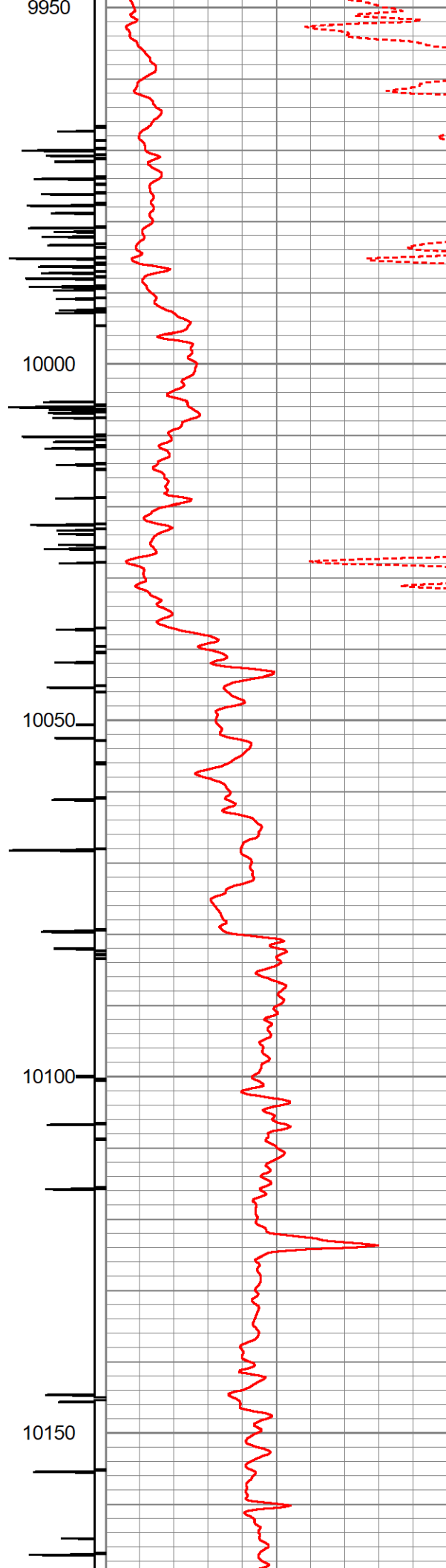
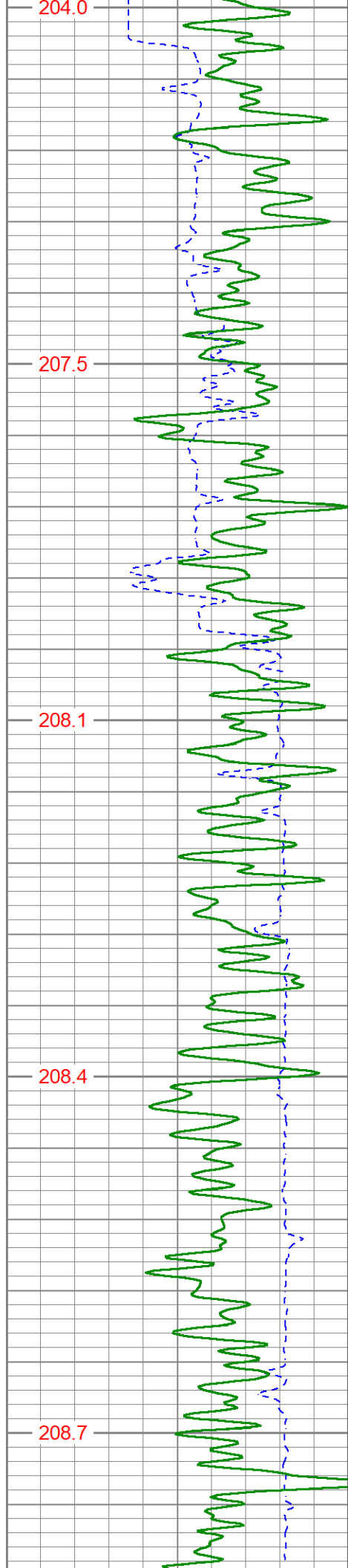


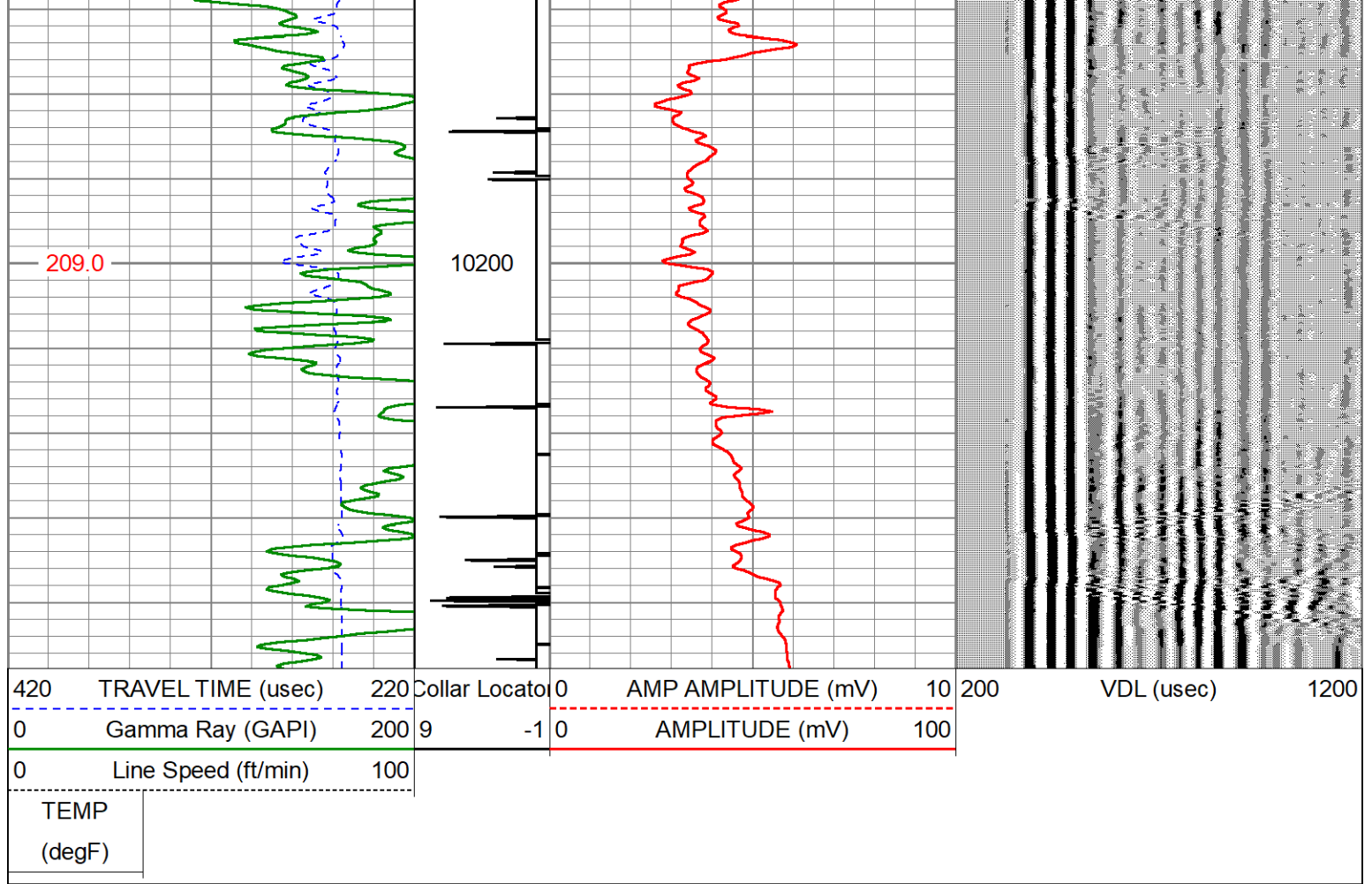












Calibration Report		
Database File	ottesen_le06_351_hnx.db	
Dataset Pathname	pass7	
Dataset Creation	Sat Mar 02 16:02:01 2019	
Gamma Ray Calibration Report		
Serial Number:	FW1304-44	
Tool Model:	Probe275	
Performed:	(Not Performed)	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps
Segmented Cement Bond Log Calibration Report		
Serial Number:	121043	
Tool Model:	Probe 2.75 Radii W/Temp	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	1116.908	ft

Master Calibration, performed Sat Mar 02 15:07:57 2019:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.003	0.332	1.000	71.921	215.203	0.380

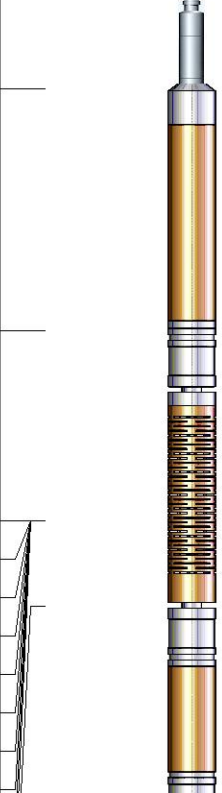
CAL	0.003	0.652				
5'	0.005	0.282	1.000	71.921	255.524	-0.263
SUM						
S1	0.005	0.353	0.000	71.921	206.331	-0.939
S2	-0.006	0.330	0.000	71.921	214.589	1.189
S3	-0.000	0.363	0.000	71.921	198.196	0.060
S4	-0.000	0.365	0.000	71.921	196.773	0.036
S5	0.001	0.336	0.000	71.921	214.621	-0.186
S6	0.003	0.322	0.000	71.921	225.238	-0.572
S7	0.002	0.309	0.000	71.921	233.949	-0.420
S8	0.003	0.302	0.000	71.921	240.196	-0.645

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.003	0.652	1.000	0.000

Air Zero Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.000		0.000		0.000	
5'	0.000		0.000		0.000	
SUM						
S1	0.000		0.000		0.000	
S2	0.000		0.000		0.000	
S3	0.000		0.000		0.000	
S4	0.000		0.000		0.000	
S5	0.000		0.000		0.000	
S6	0.000		0.000		0.000	
S7	0.000		0.000		0.000	
S8	0.000		0.000		0.000	

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
HeadVolt	21.13		CHD-Titan Titan 1 7/16" GO Cablehead	1.00	1.44	5.00
Temp	18.28					
WVFS8	16.05		RBT-Probe 2.75 Radii W/Temp (121043) Probe 2.75" Radial with Integral Temperature Sub	9.39	2.75	90.00
WVFS7	16.05					
WVFS6	16.05					
WVFS5	16.05					
WVFS4	16.05					
WVFS3	16.05					
WVFS2	16.05					
WVES1	16.05					

Tool Joint	Tool Joint Length (ft)	Tool Joint Weight (lb)	Tool Joint O.D. (in)	Tool Joint Description	Tool Joint Length (ft)	Tool Joint Weight (lb)	Tool Joint O.D. (in)
WVFCAL	16.05						
WVF3FT	16.05						
WVF5FT	15.05						
HEADVOLT	11.80						
CCL	10.92						
GR	9.58			GR-Probe275 (FW1304-44) Probe 2 3/4" Logging Gamma Ray 6 Pin	4.80	2.75	57.00
				WeightBar-7ft313inlineS 3 1/8" Steel 7' In Line Weight Bar	7.00	3.13	149.00

Dataset: ottesen_le06_351_hnx.db: field/well/run1/pass7

Total length: 22.19 ft

Total weight: 301.00 lb

O.D.: 3.13 in

