



CEMENT BOND
VARIABLE DENSITY LOG
W/ GAMMA RAY/CCL

Company BONANZA CREEK ENERGY		Company BONANZA CREEK ENERGY	
Well PRONGHORN D-X-9HNB		Well PRONGHORN D-X-9HNB	
Field WATTENBERG		Field WATTENBERG	
County WELD		County WELD	
State COLORADO		State COLORADO	
Location: API #: 05-123-39286		Other Services	
1273' FSL & 260' FWL SWSW		NONE	
SEC 9 TWP 5N RGE 61W		Elevation	
Permanent Datum GL		K.B. 4654	
Log Measured From KB		D.F. 4653	
Drilling Measured From KELLY BUSHING		G.L. 4637	
Date	7 AUGUST 2014		
Run Number	1		
Depth Driller	6281' LT		
Depth Logger	6010'		
Bottom Logged Interval	6010'		
Top Log Interval	0'		
Open Hole Size	8.75"		
Type Fluid	WATER		
Density / Viscosity	8.33		
Max. Recorded Temp.	204		
Estimated Cement Top	130'		
Time Well Ready	12:00		
Time Logger on Bottom	12:30		
Equipment Number	ML 2622		
Location	BRIGHTON		
Recorded By	J. OSTLER		
Witnessed By	M. SCHMIDT		
Borehole Record		Tubing Record	
Run Number	Bit	From	To
		Size	Weight
			From
			To
Casing Record	Size	Wd/ft	Top
Surface String	9.625"	36#	0'
Prot. String			
Production String	7"	28#	0'
Liner	4.5"	11.6#	6281'

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, 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. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

THIS IS THE PRIMARY LOG ON THIS WELL

MAIN PASS AND REPEAT PASS WERE LOGGED WITH 0 PSI AT THE WELL HEAD

CREW: ZACHARY ANDERSON, CHAD MEDINA

THANK YOU FOR CHOOSING ALLIED HORIZONTAL WIRELINE SERVICES



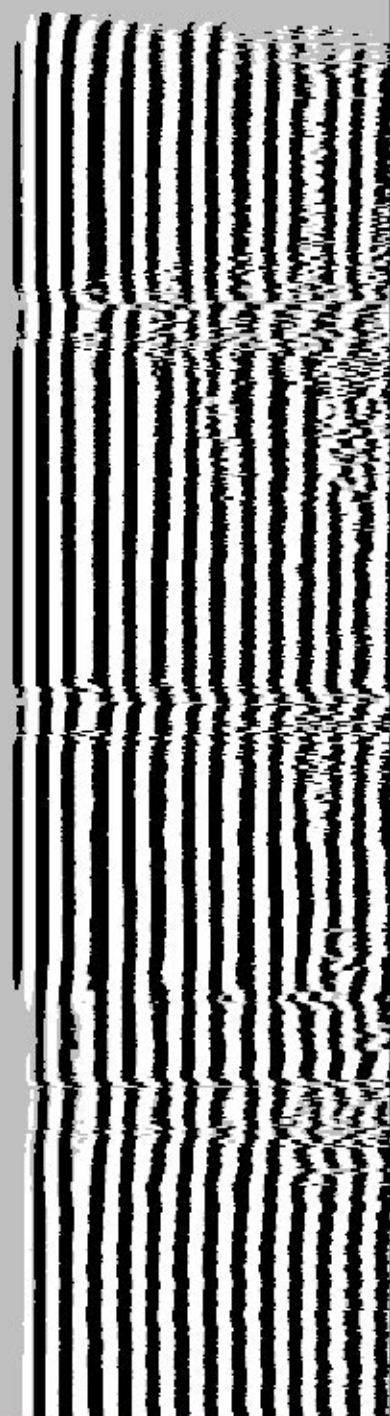
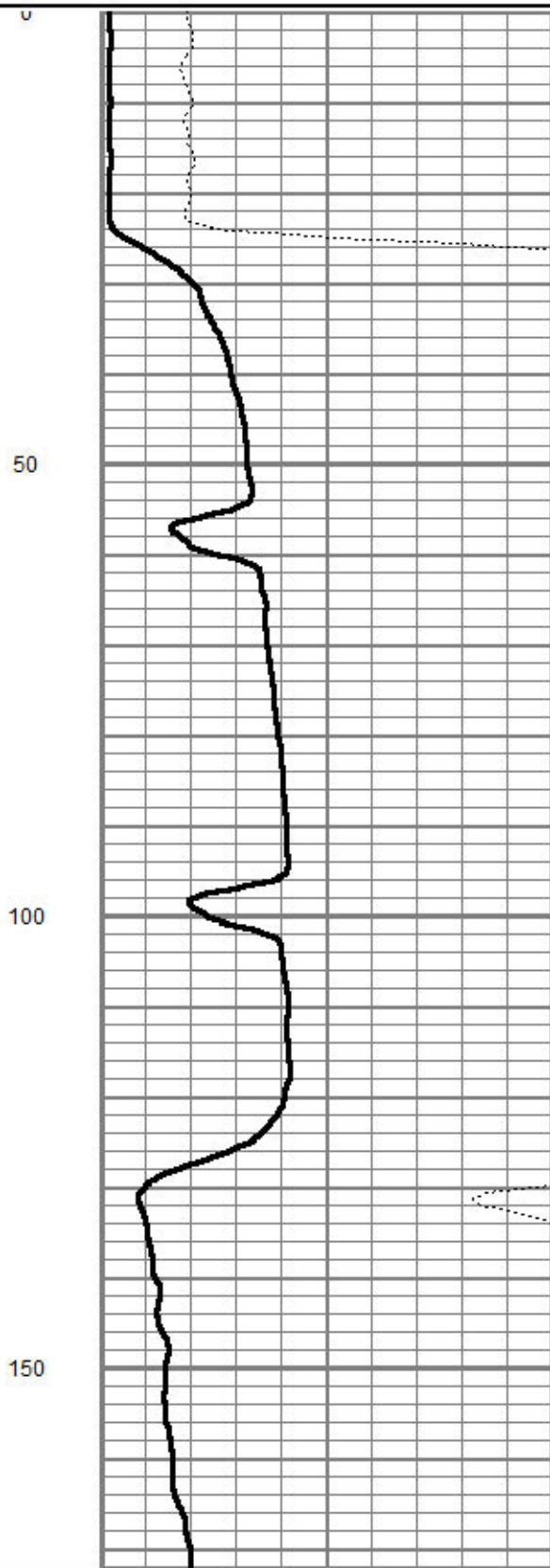
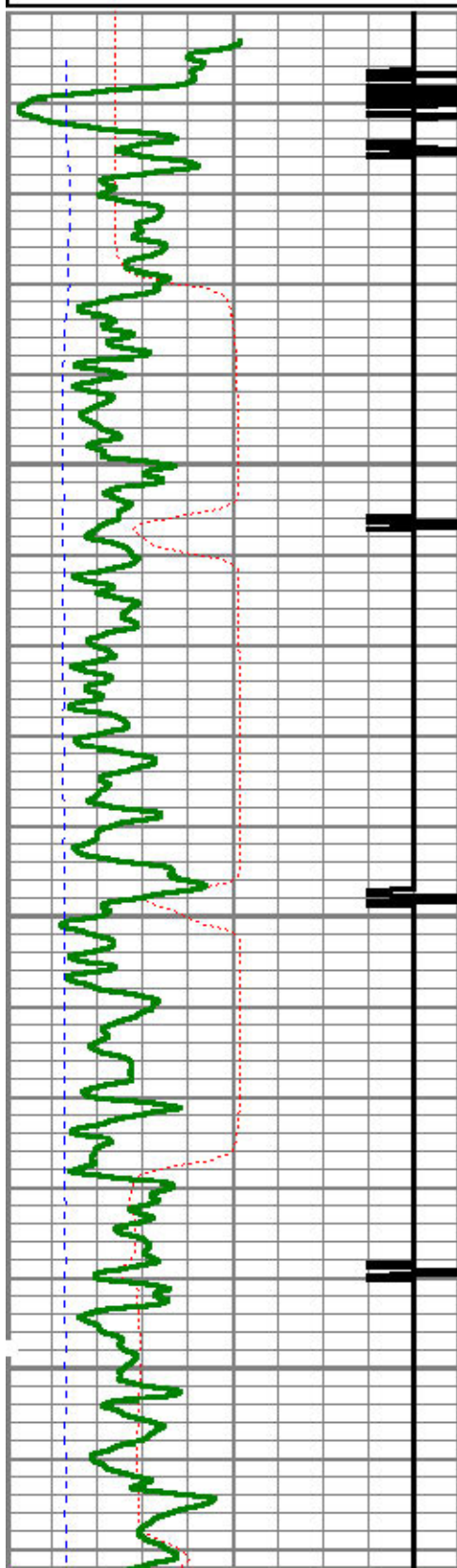
MAIN PASS (0 PSI)

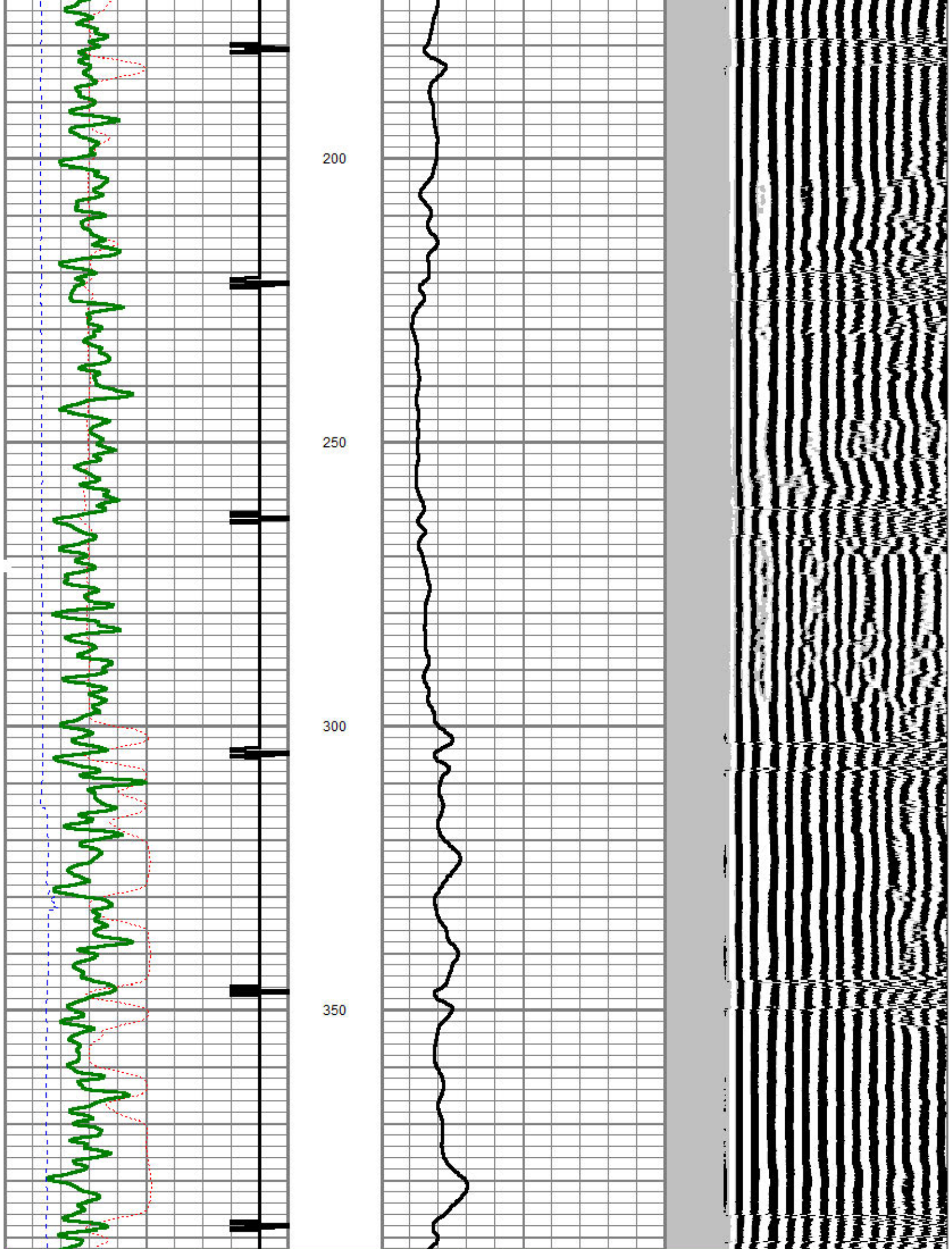
Database File: e:\dx.db
Dataset Pathname: pass5
Presentation Format: cblprobe
Dataset Creation: Thu Aug 07 12:34:11 2014 by Log SCH 120430
Charted by: Depth in Feet scaled 1:240

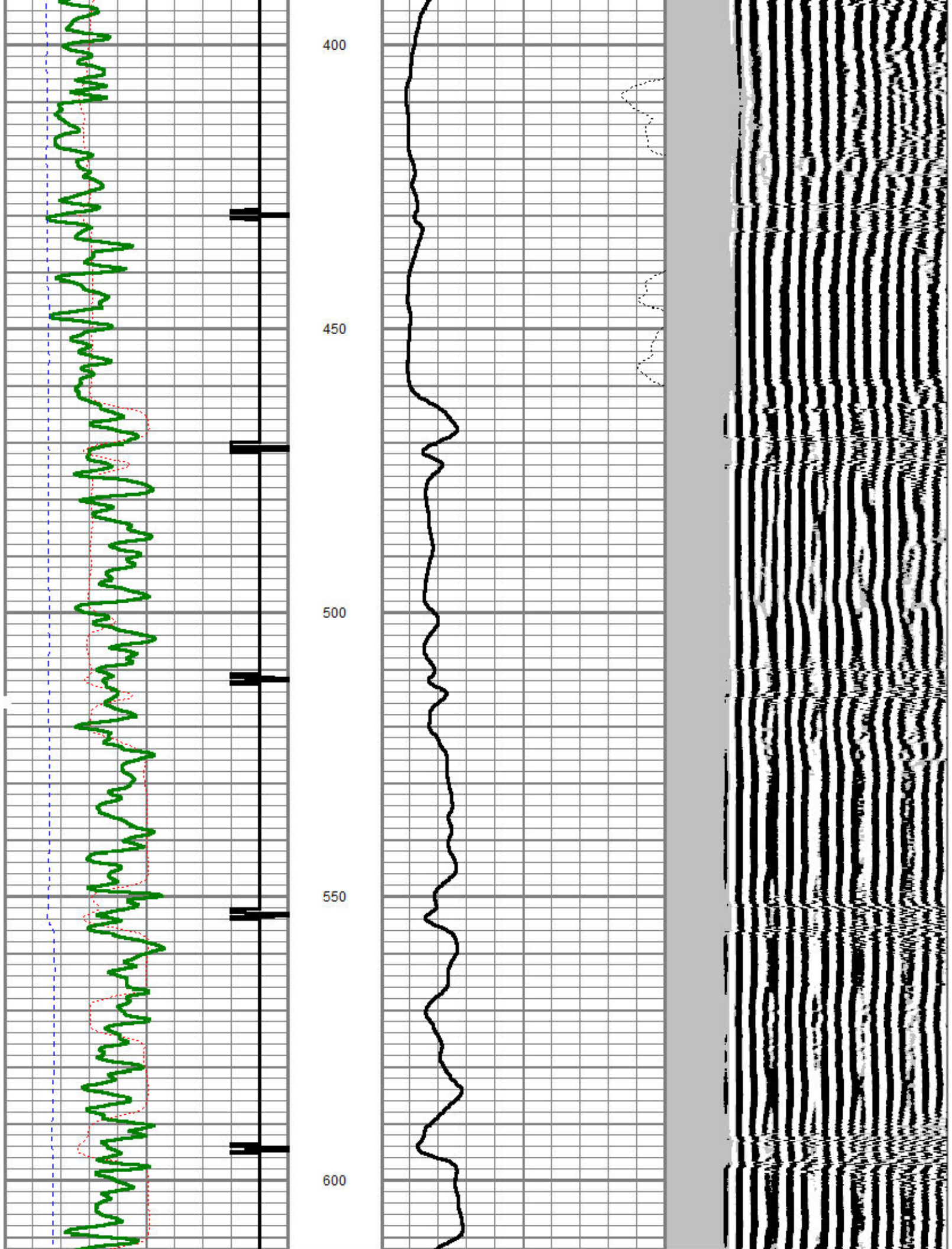
400	Travel Time (usec)	200
9	Casing Collar	-1
0	Gamma Ray (GAPI)	150
0	Line Tension (lb)	2000

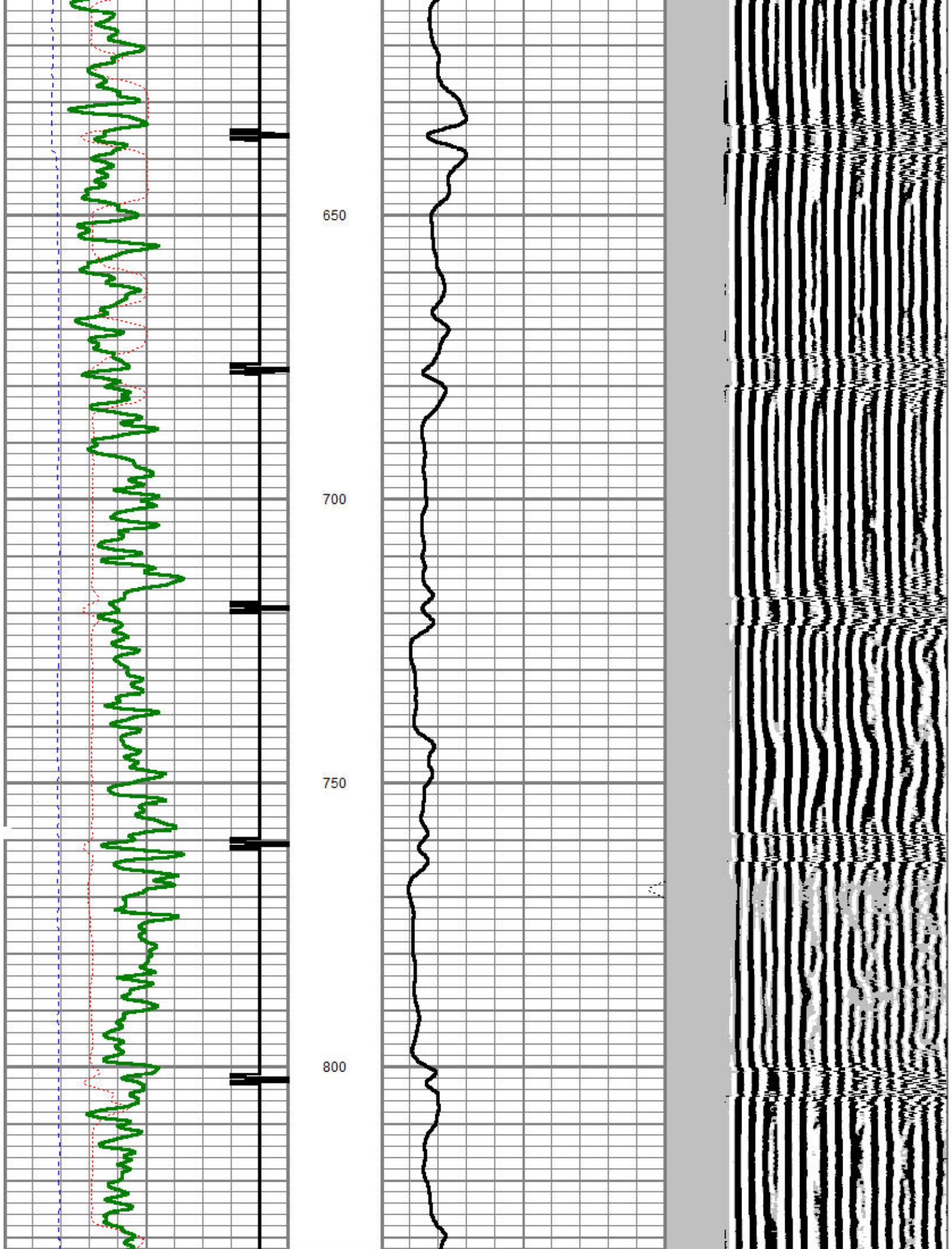
0	Amplitude (mV)	100
0	Amplified Amplitude (mV)	10

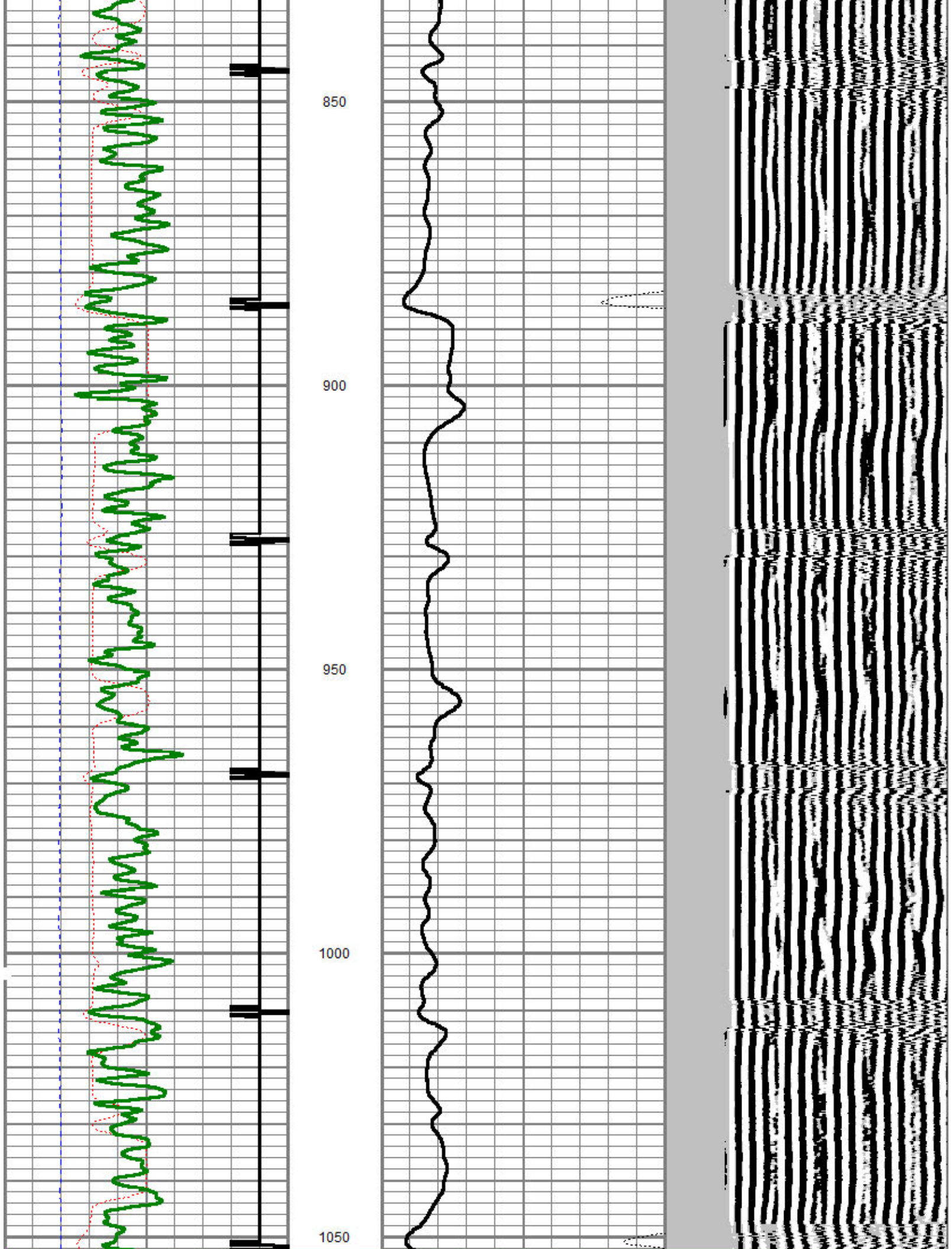
200 Variable Density 1200

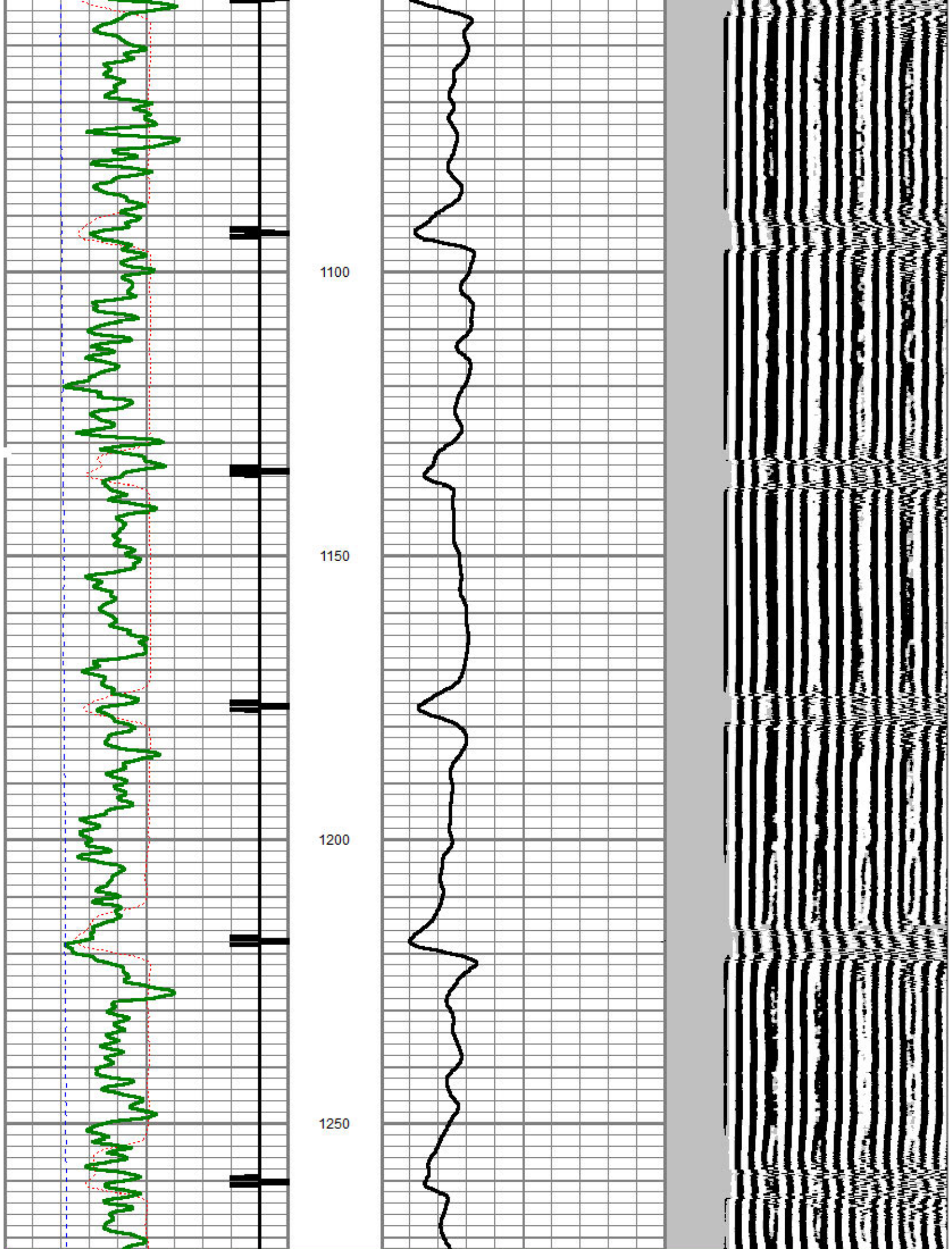


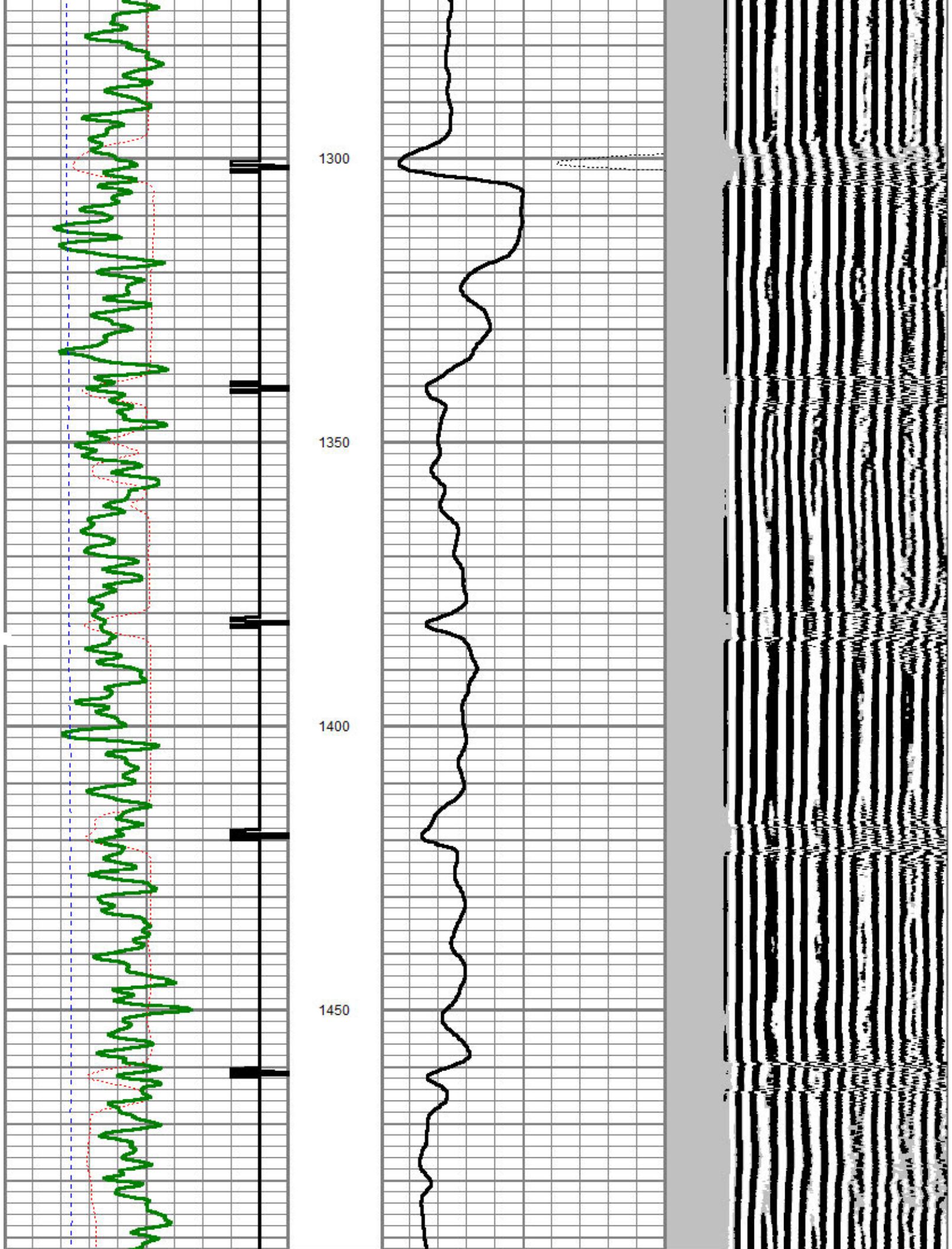


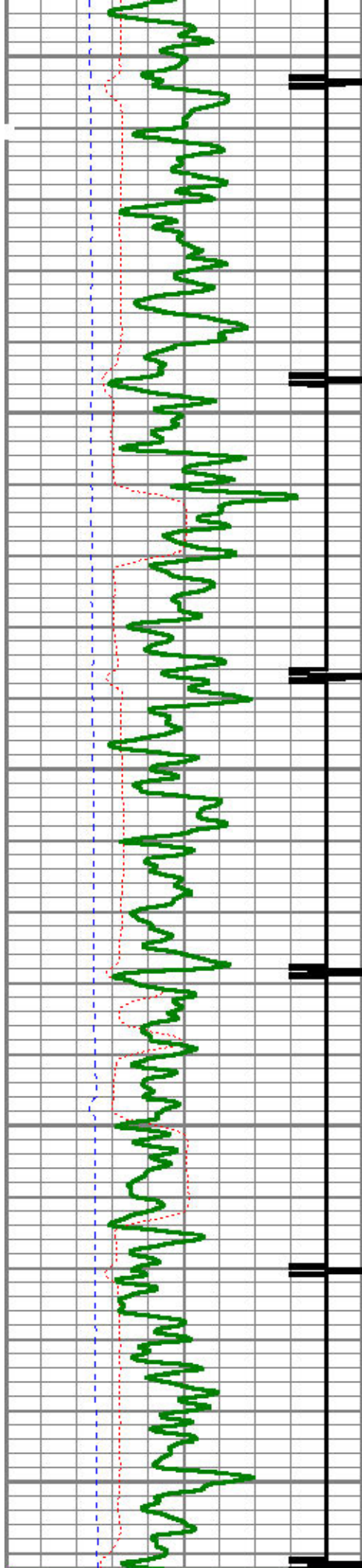












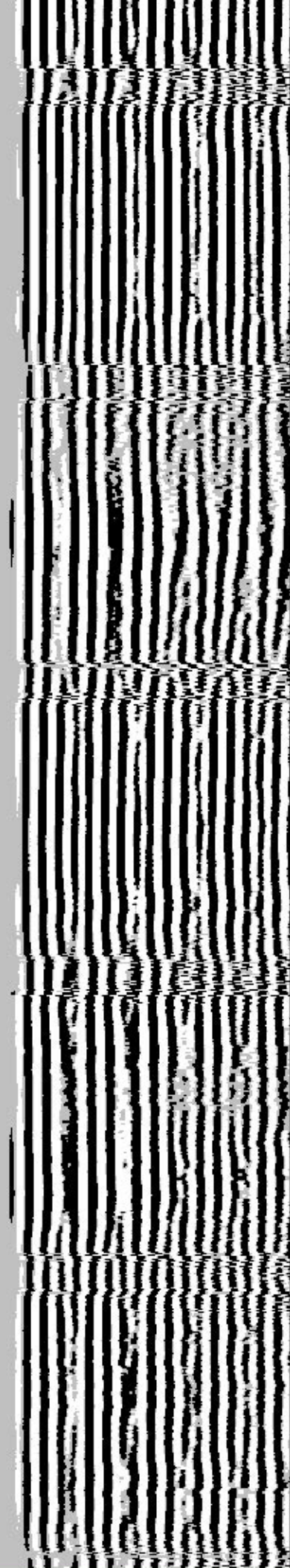
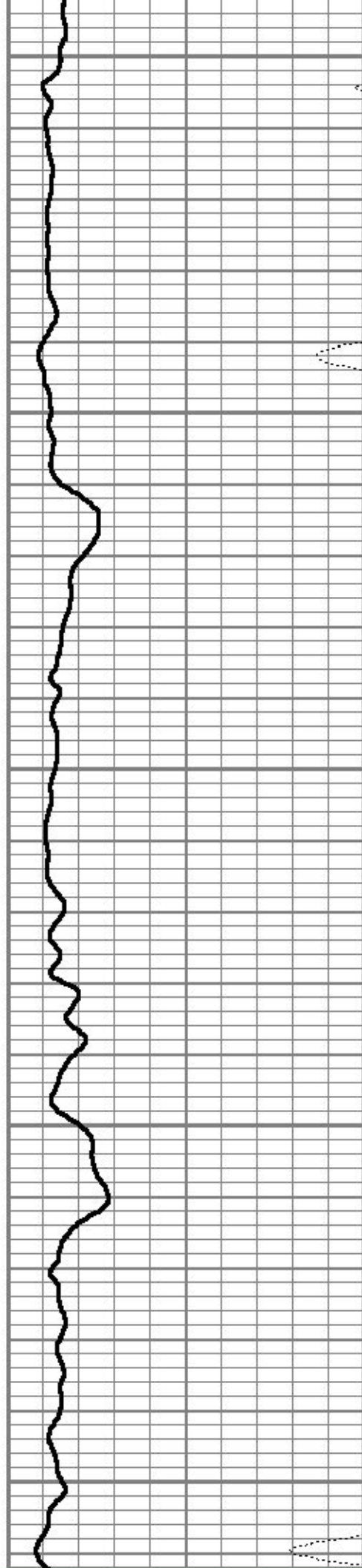
1500

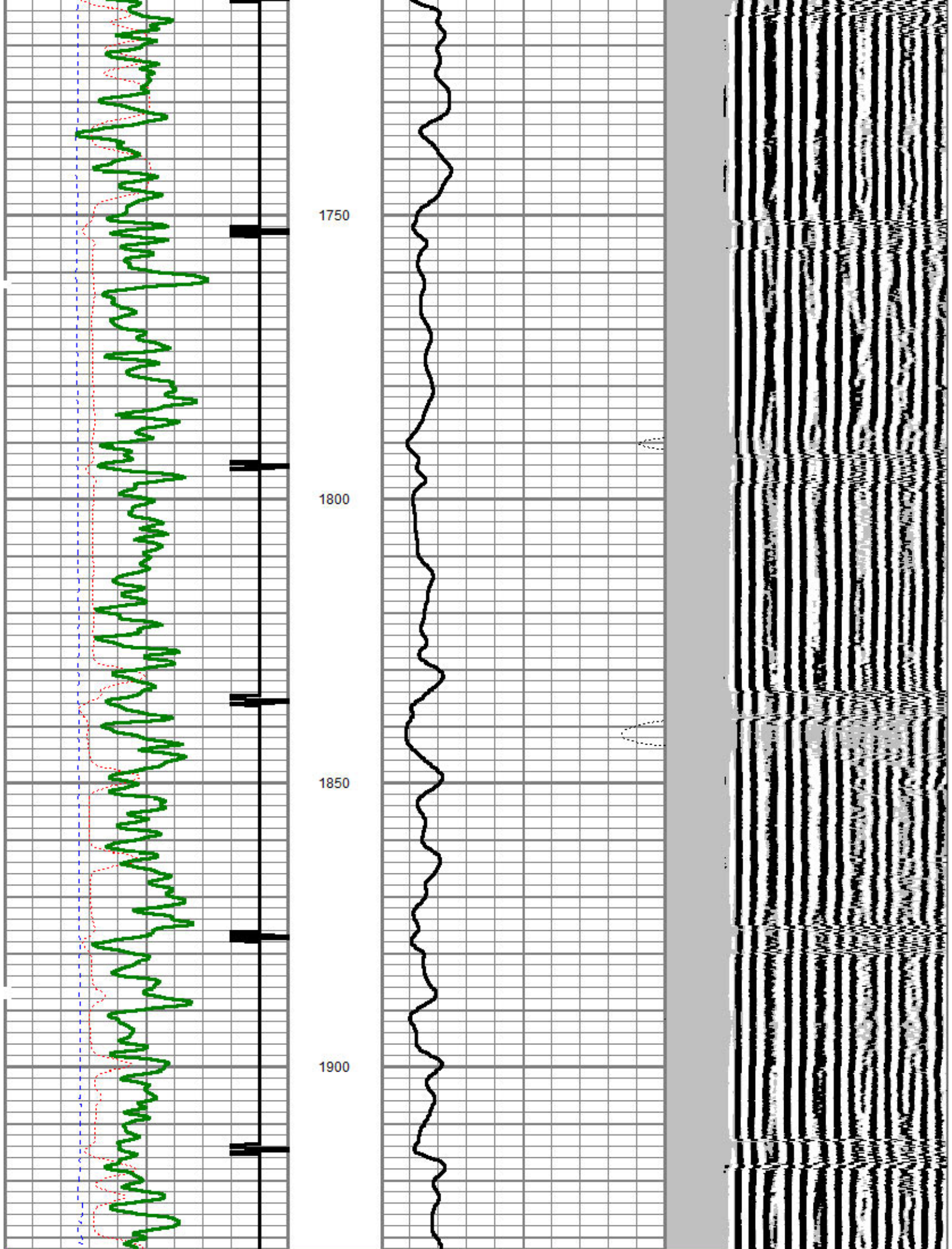
1550

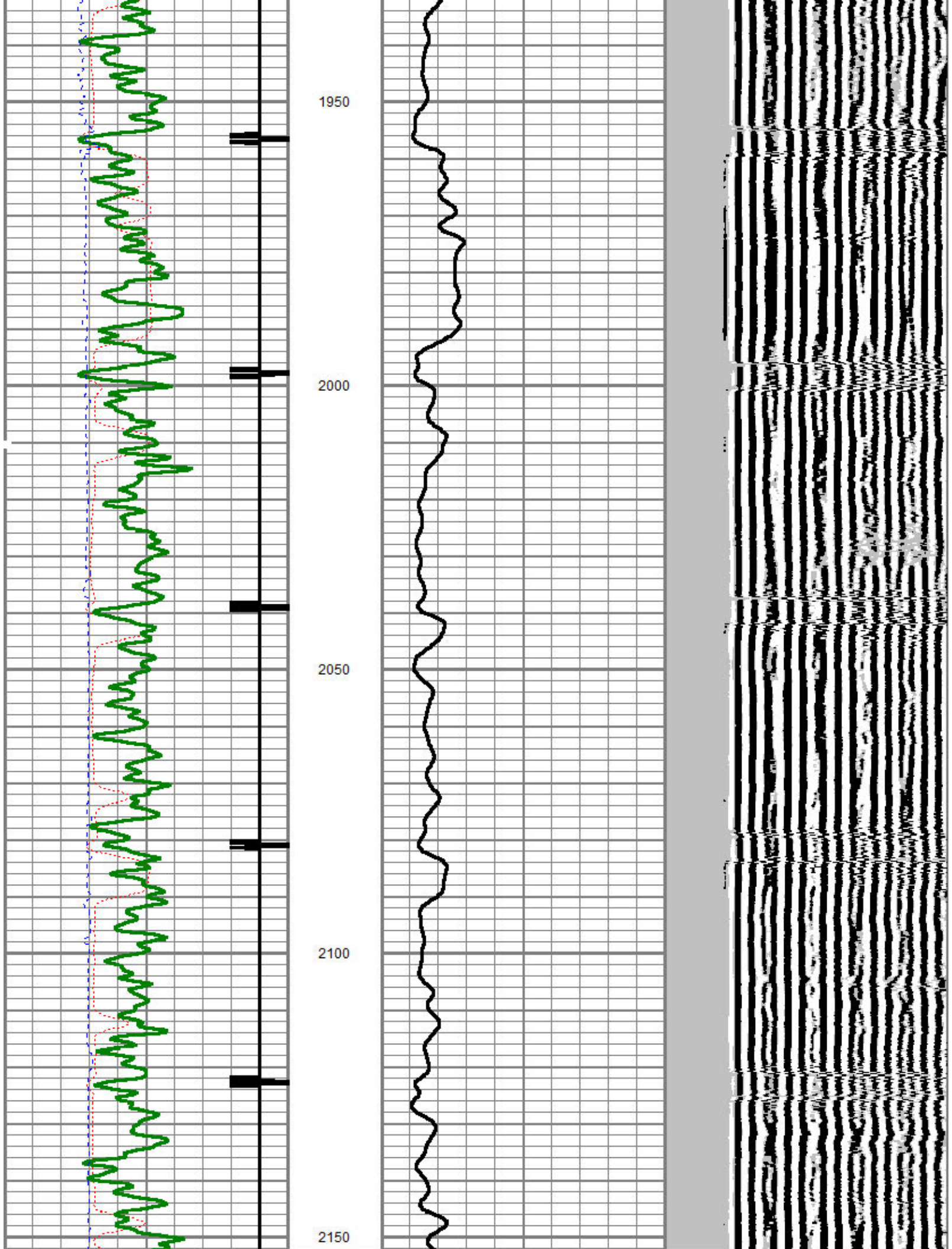
1600

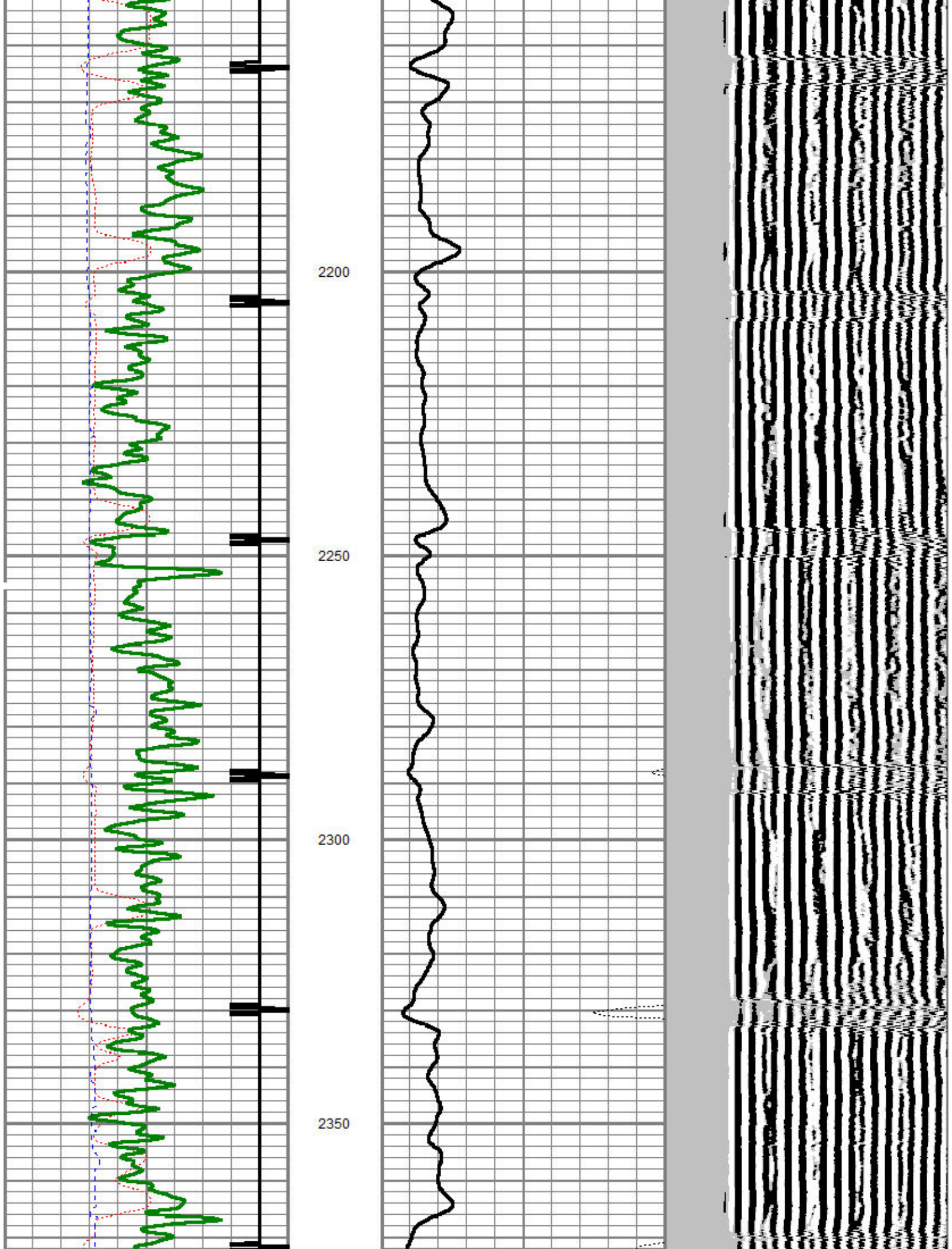
1650

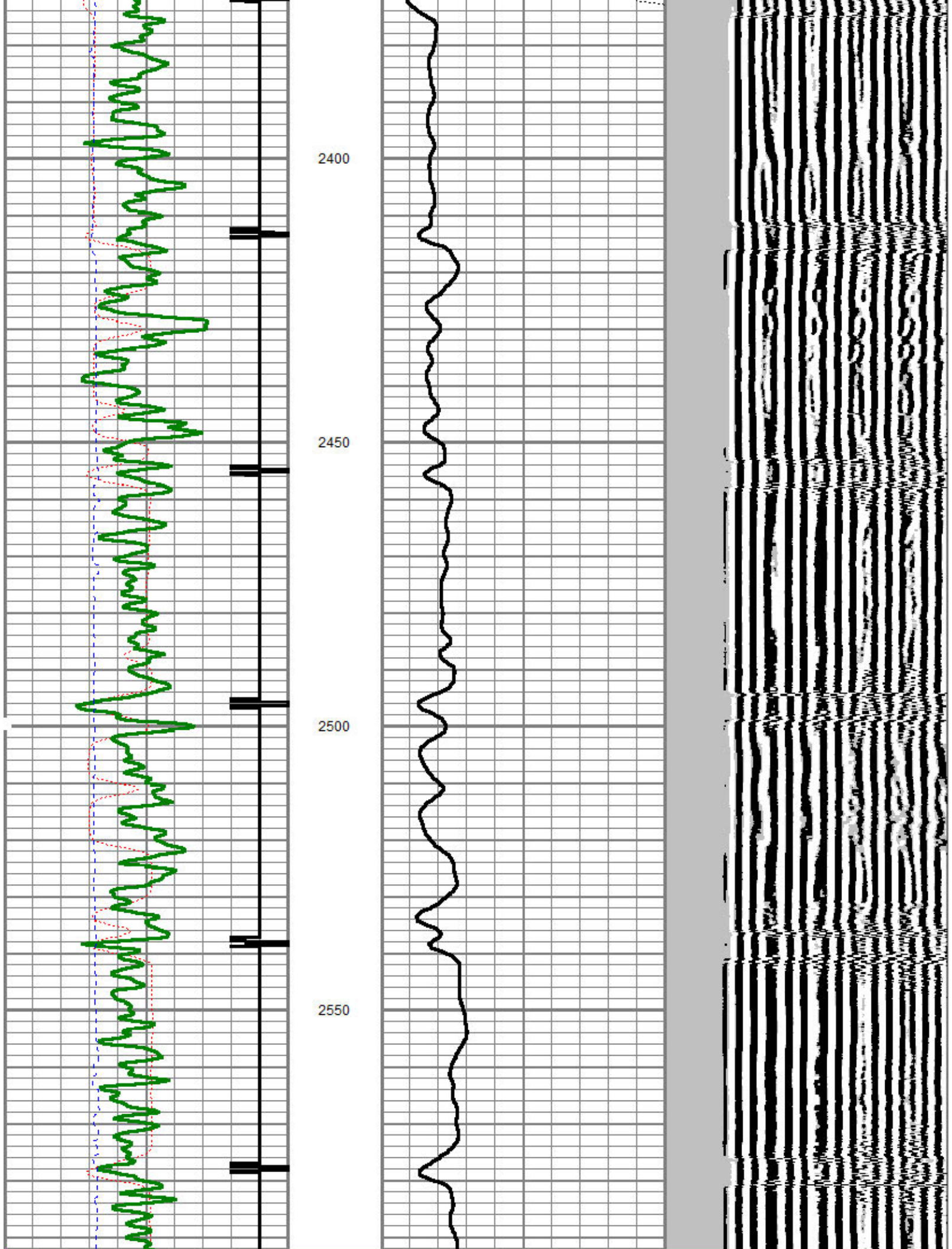
1700

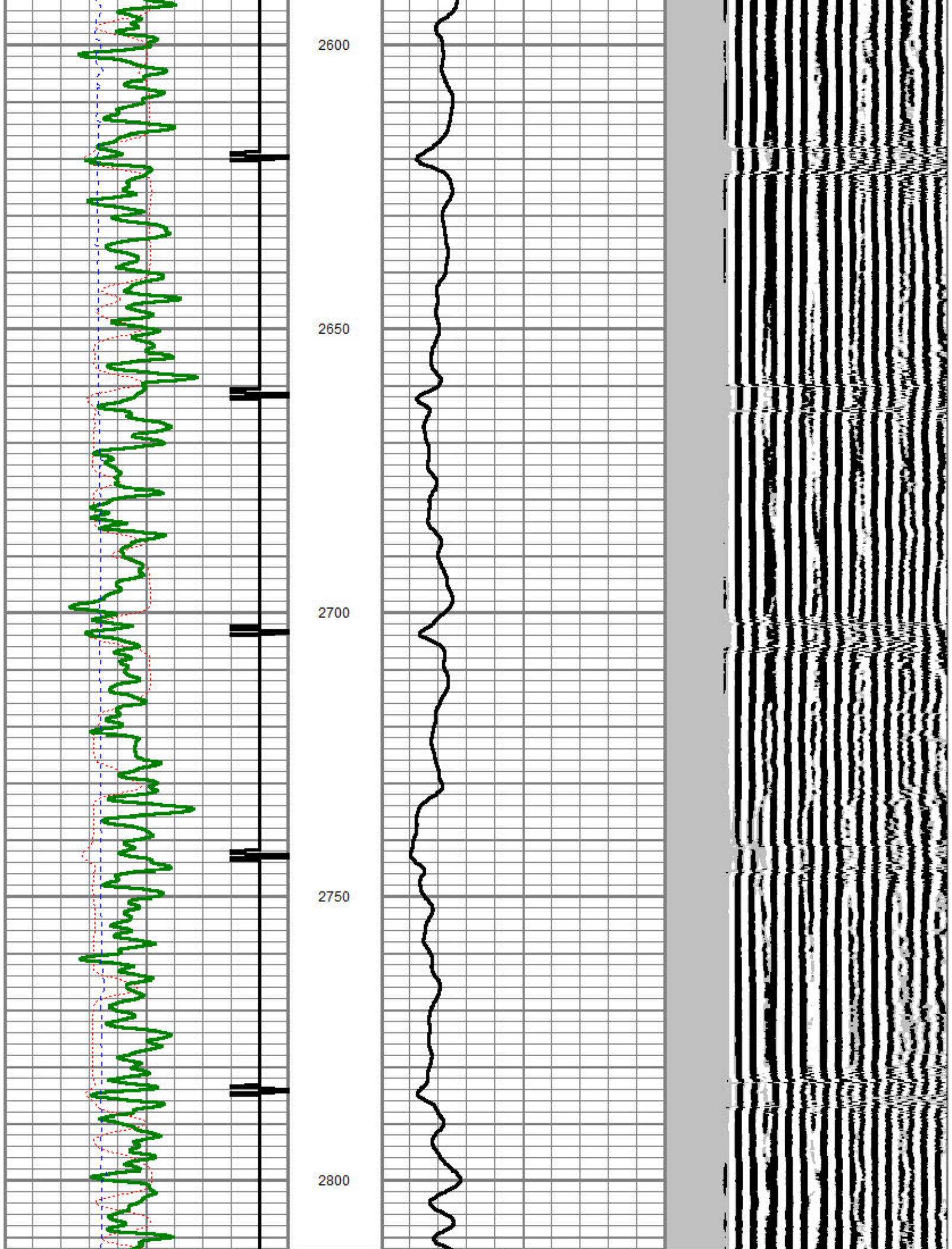


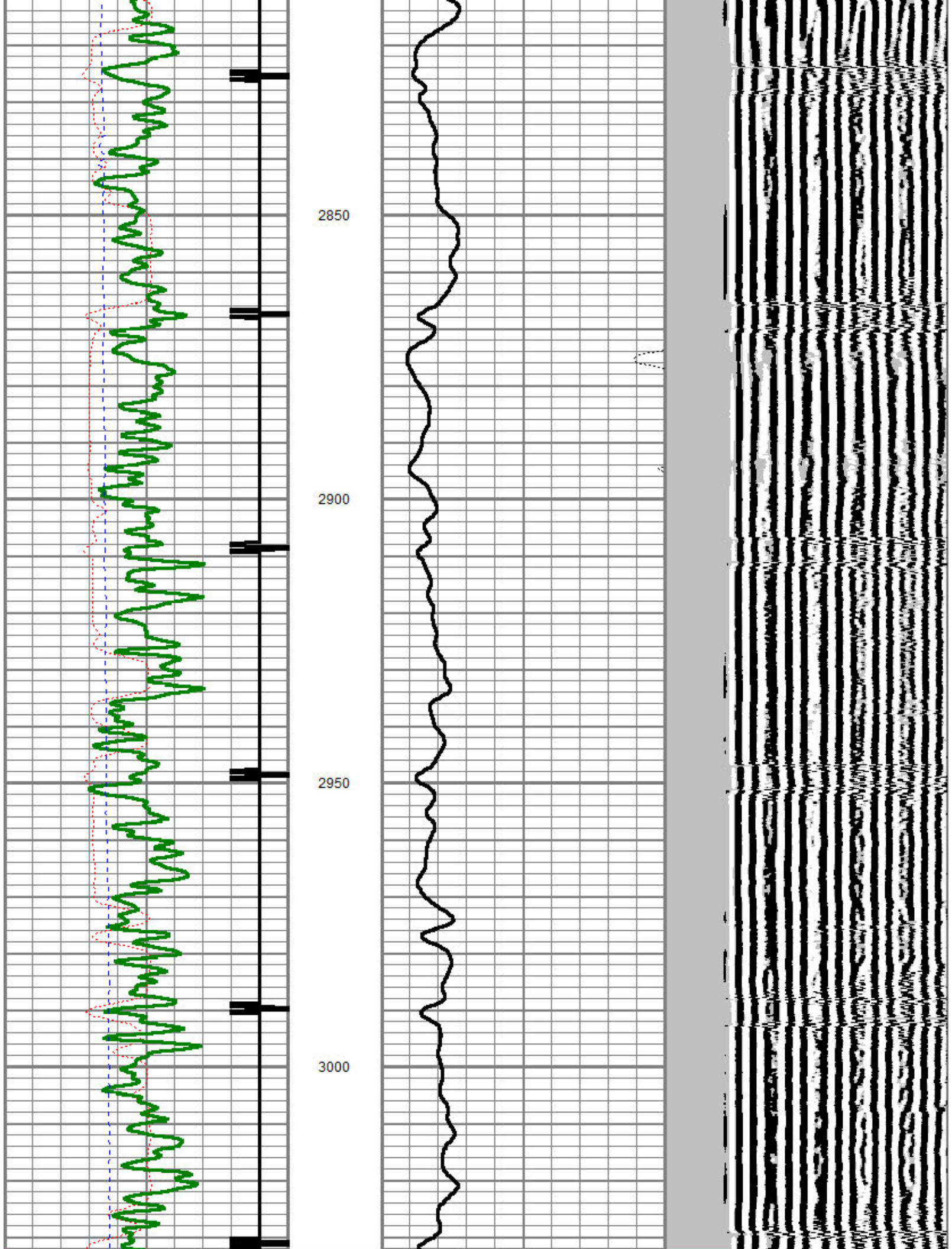


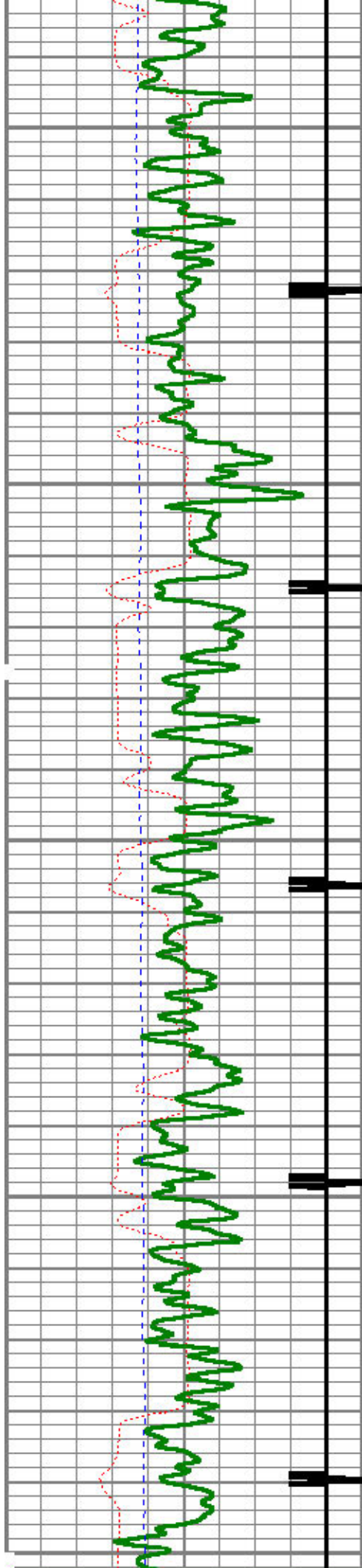












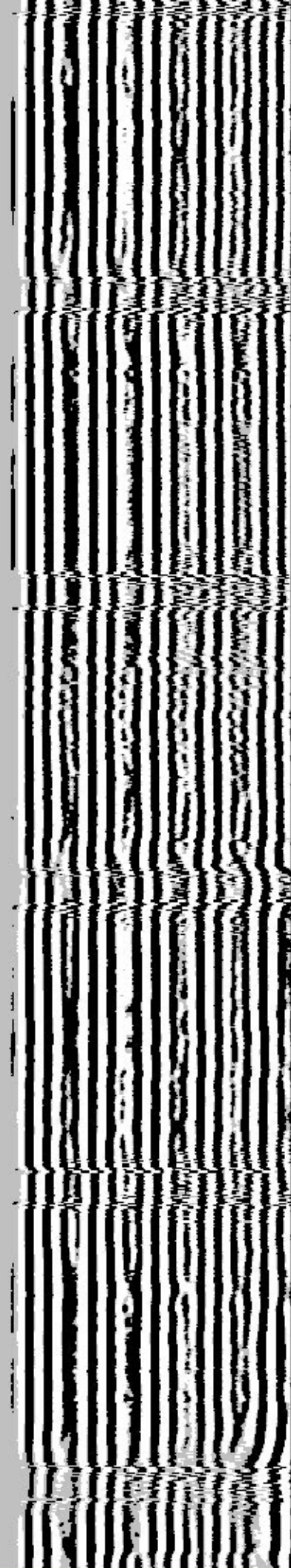
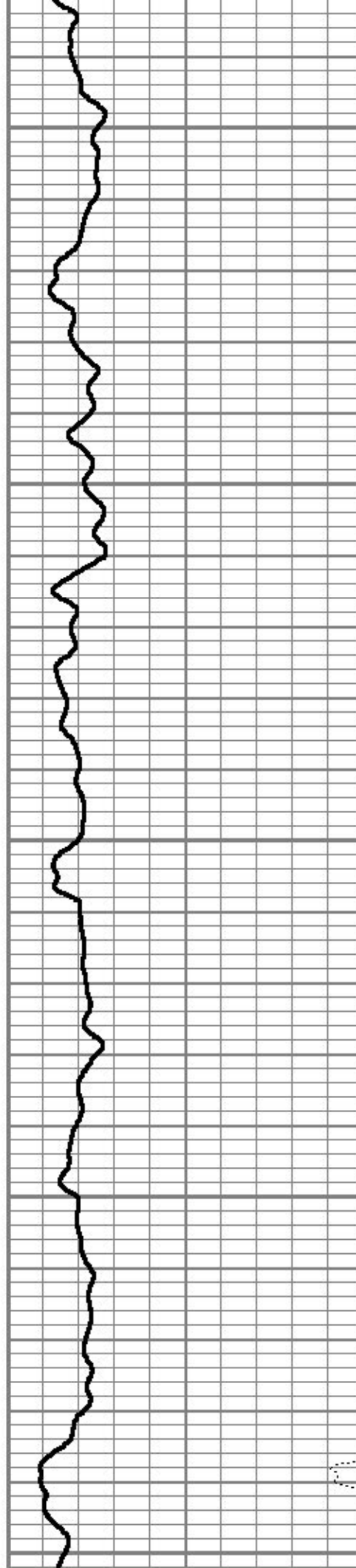
3050

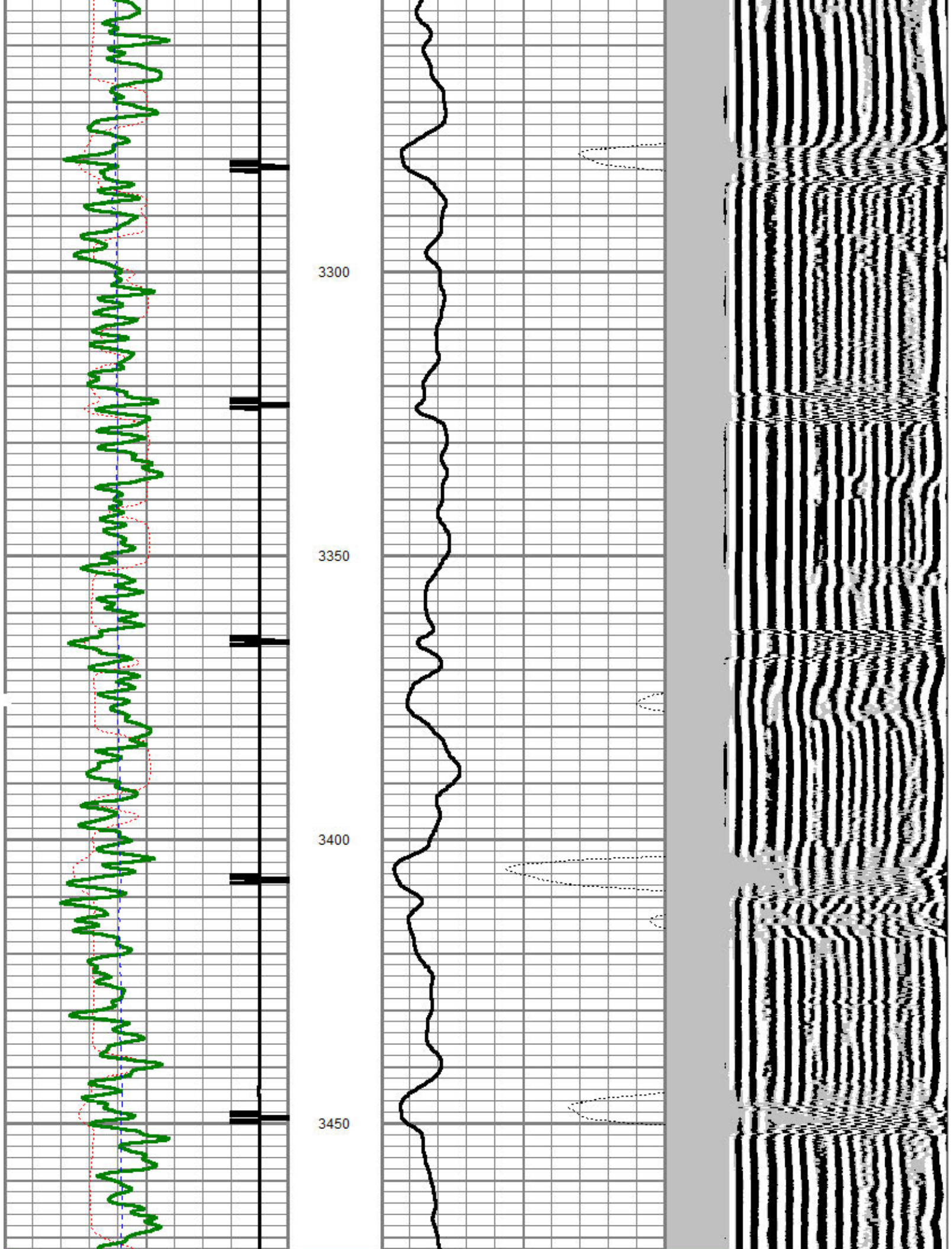
3100

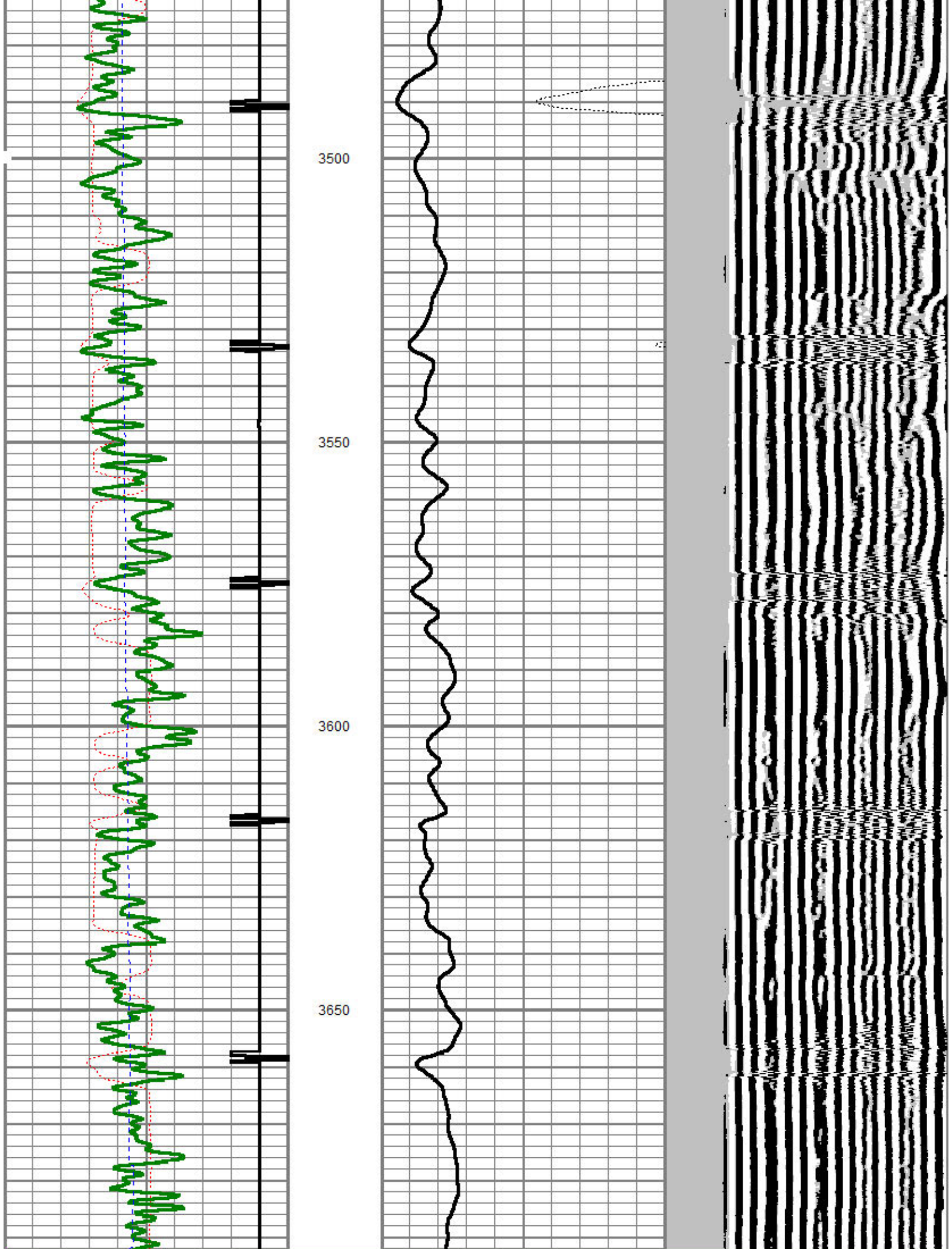
3150

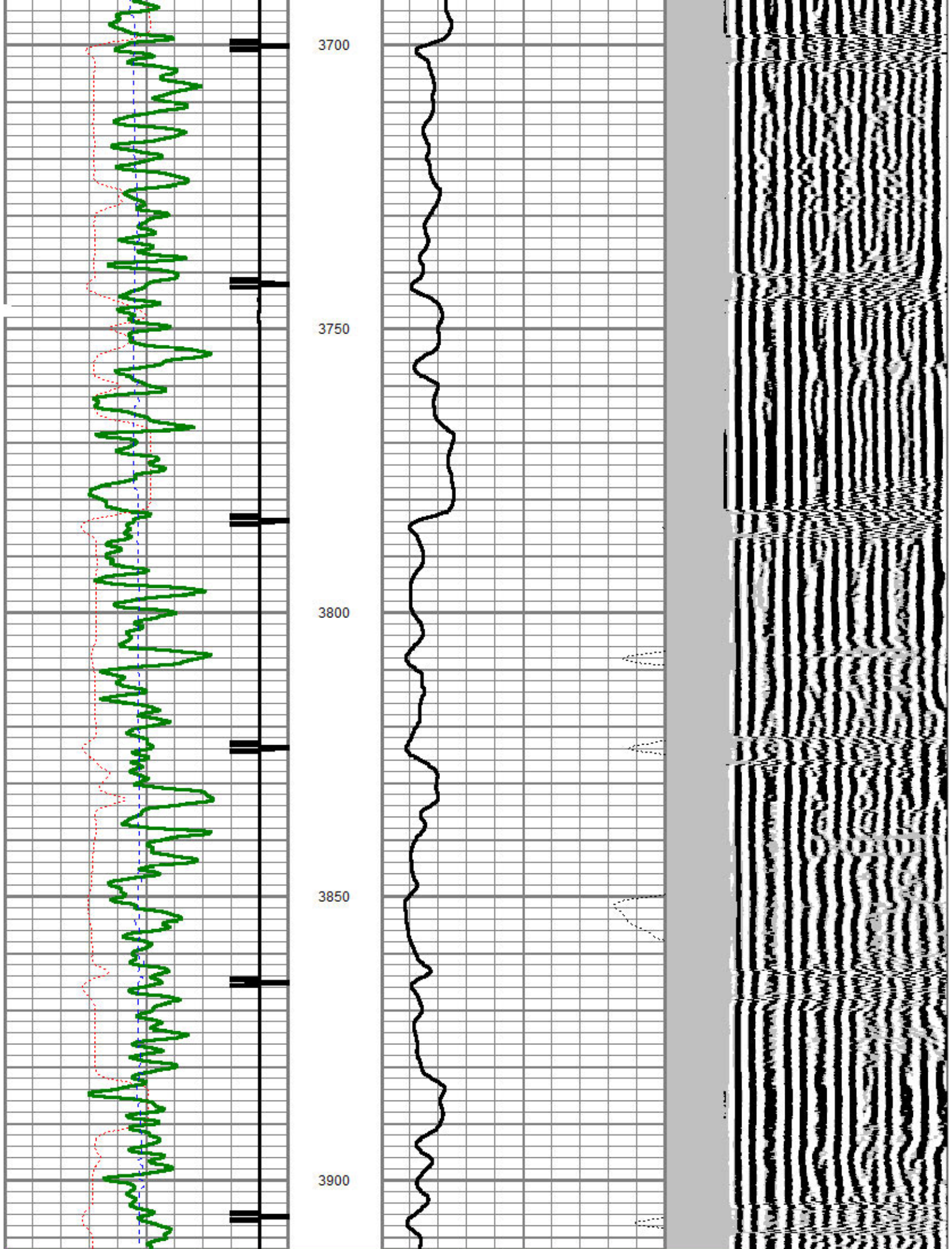
3200

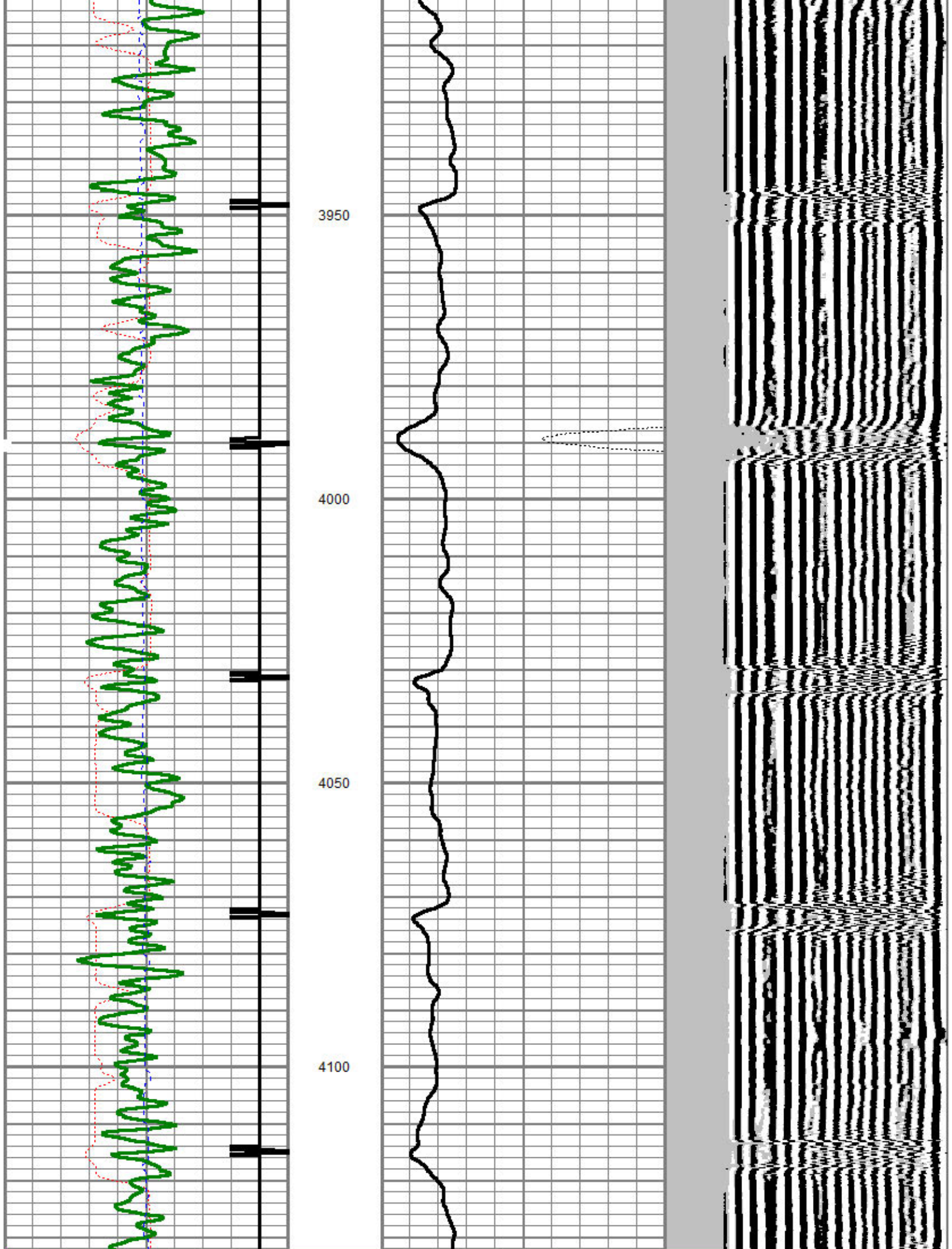
3250

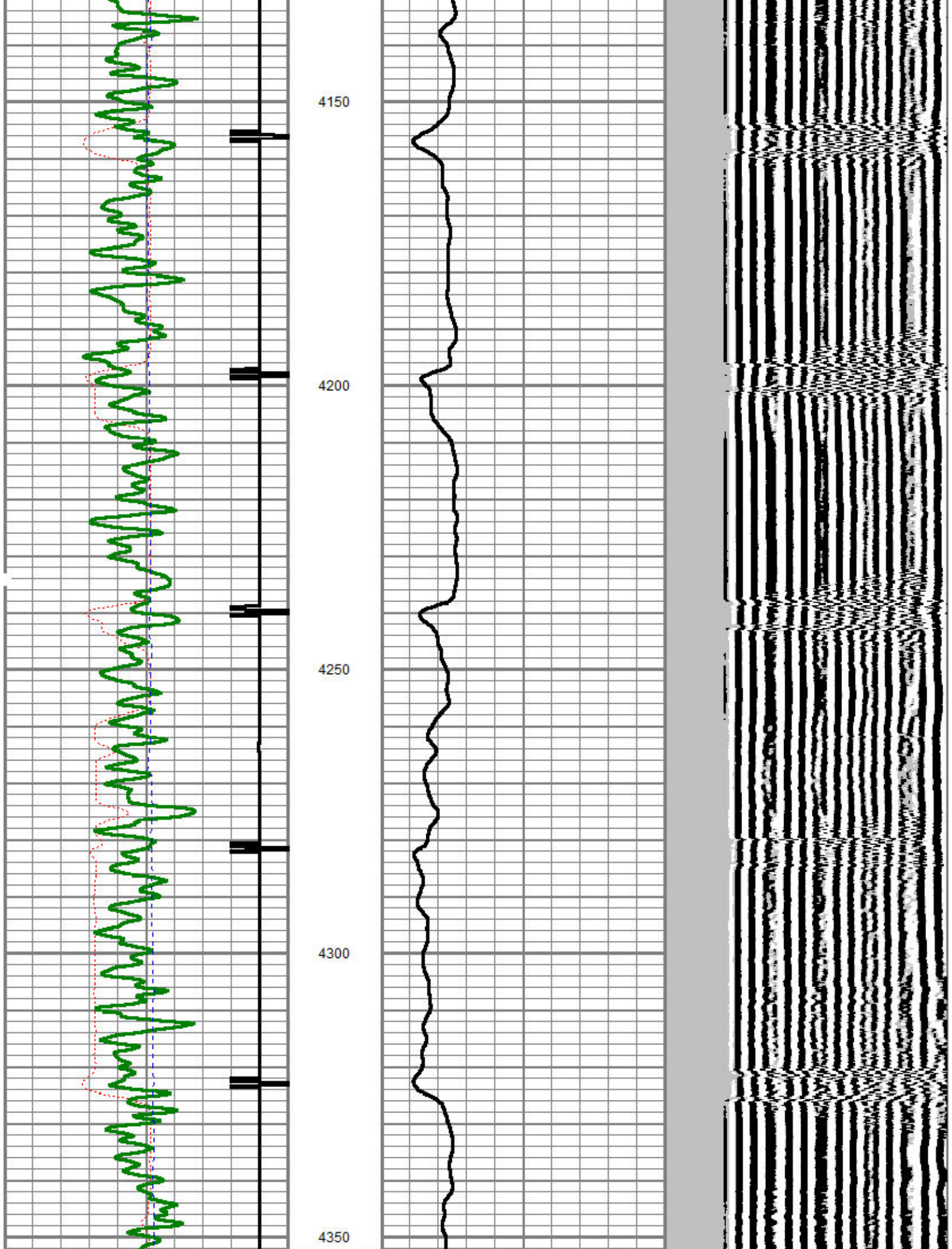


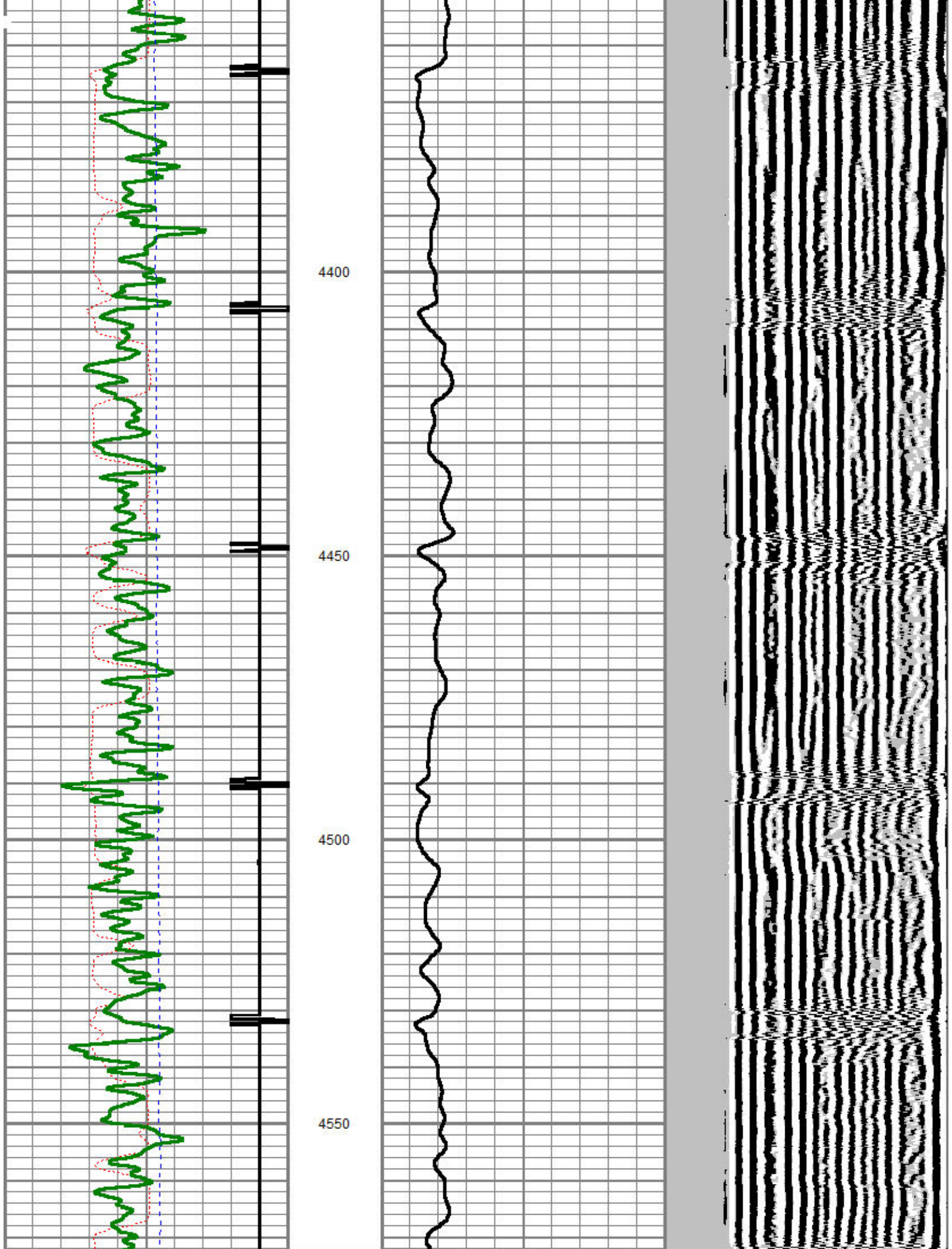


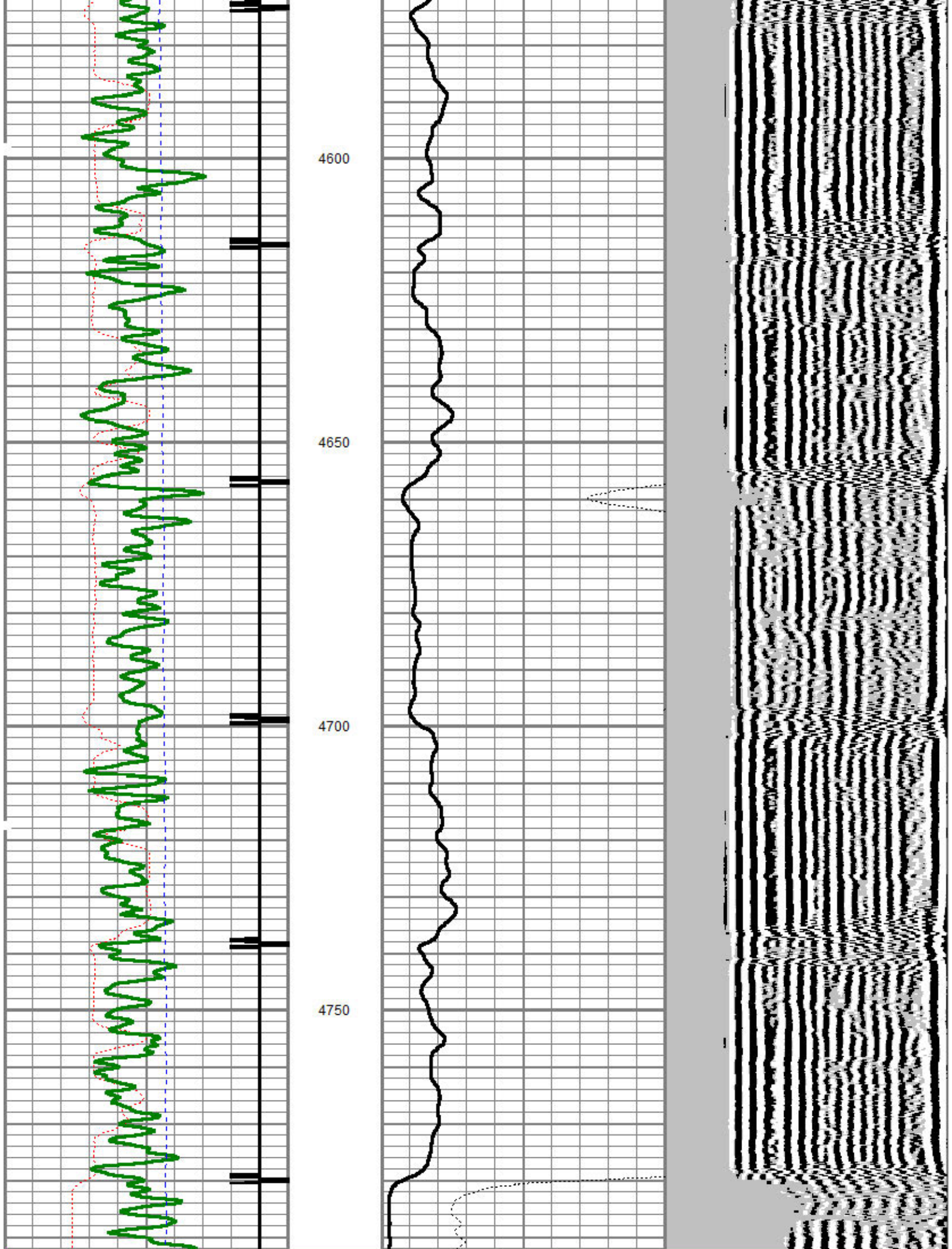


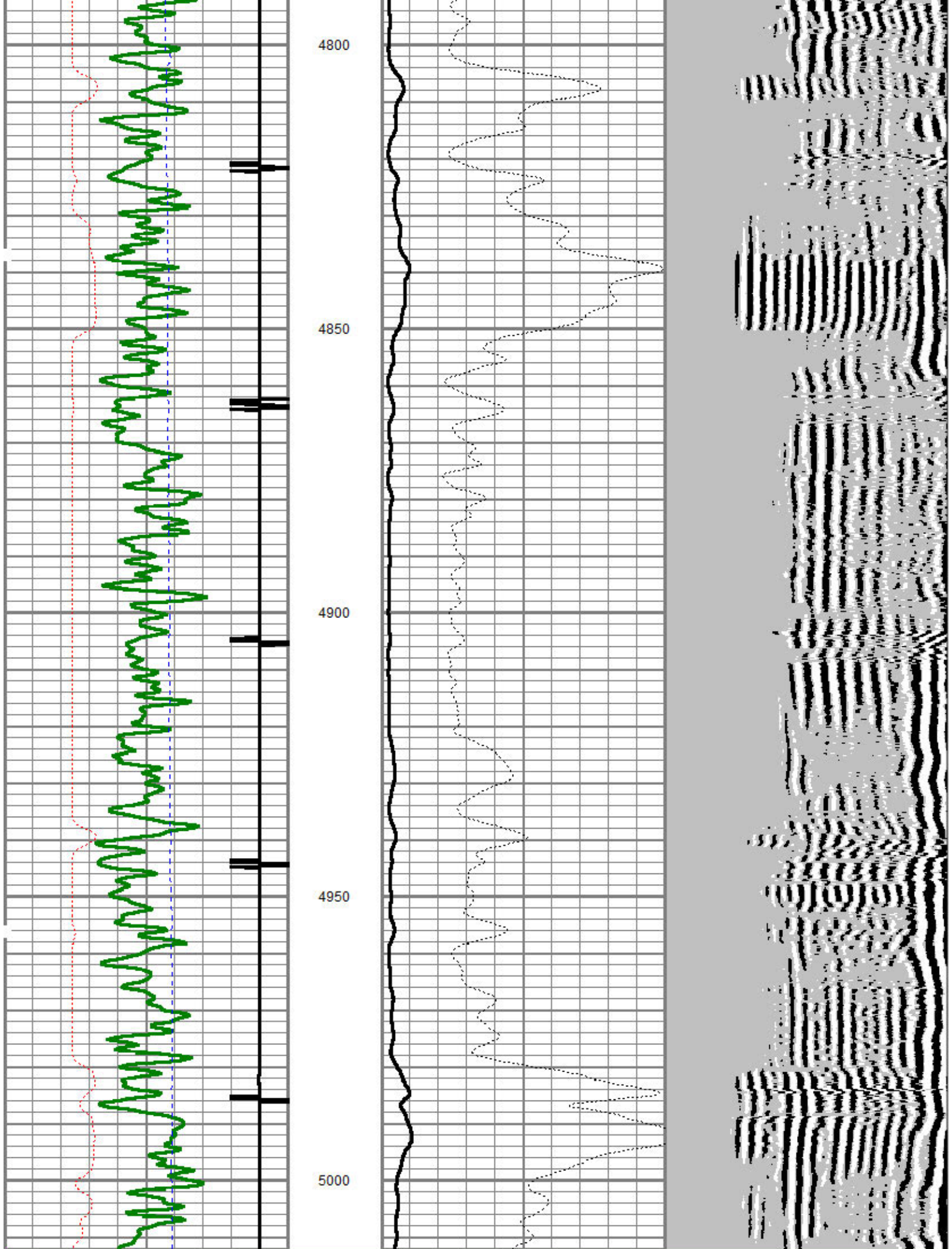


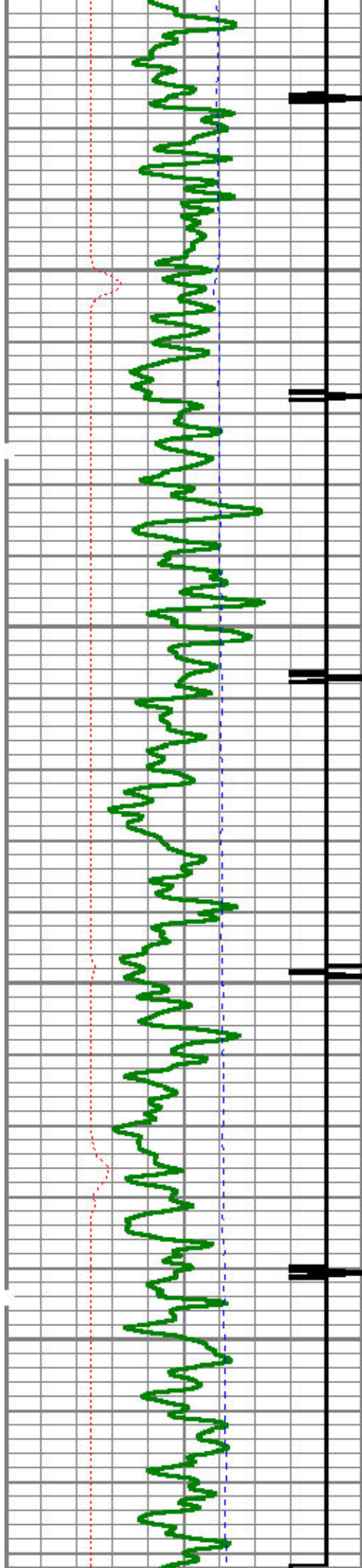










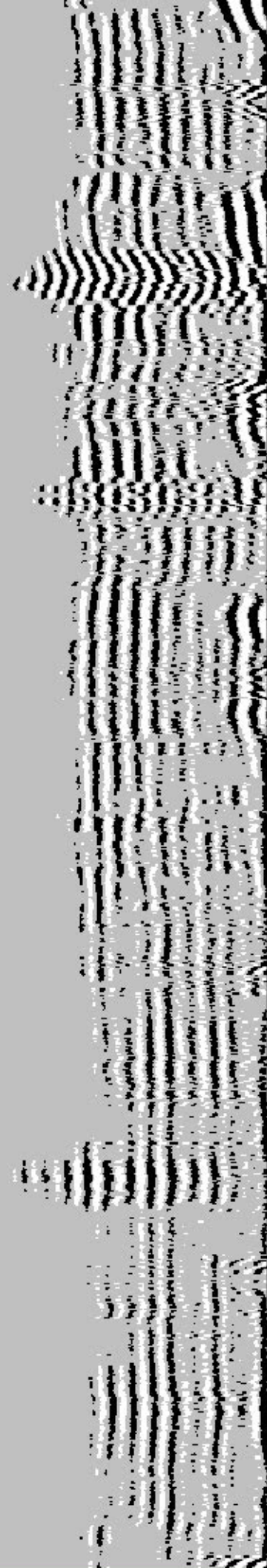
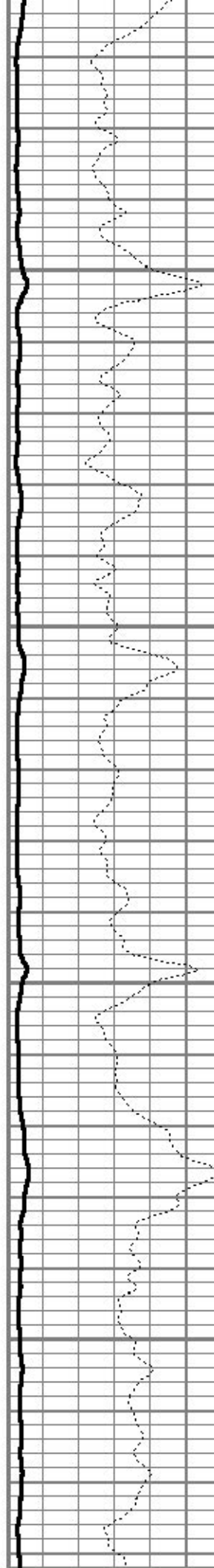


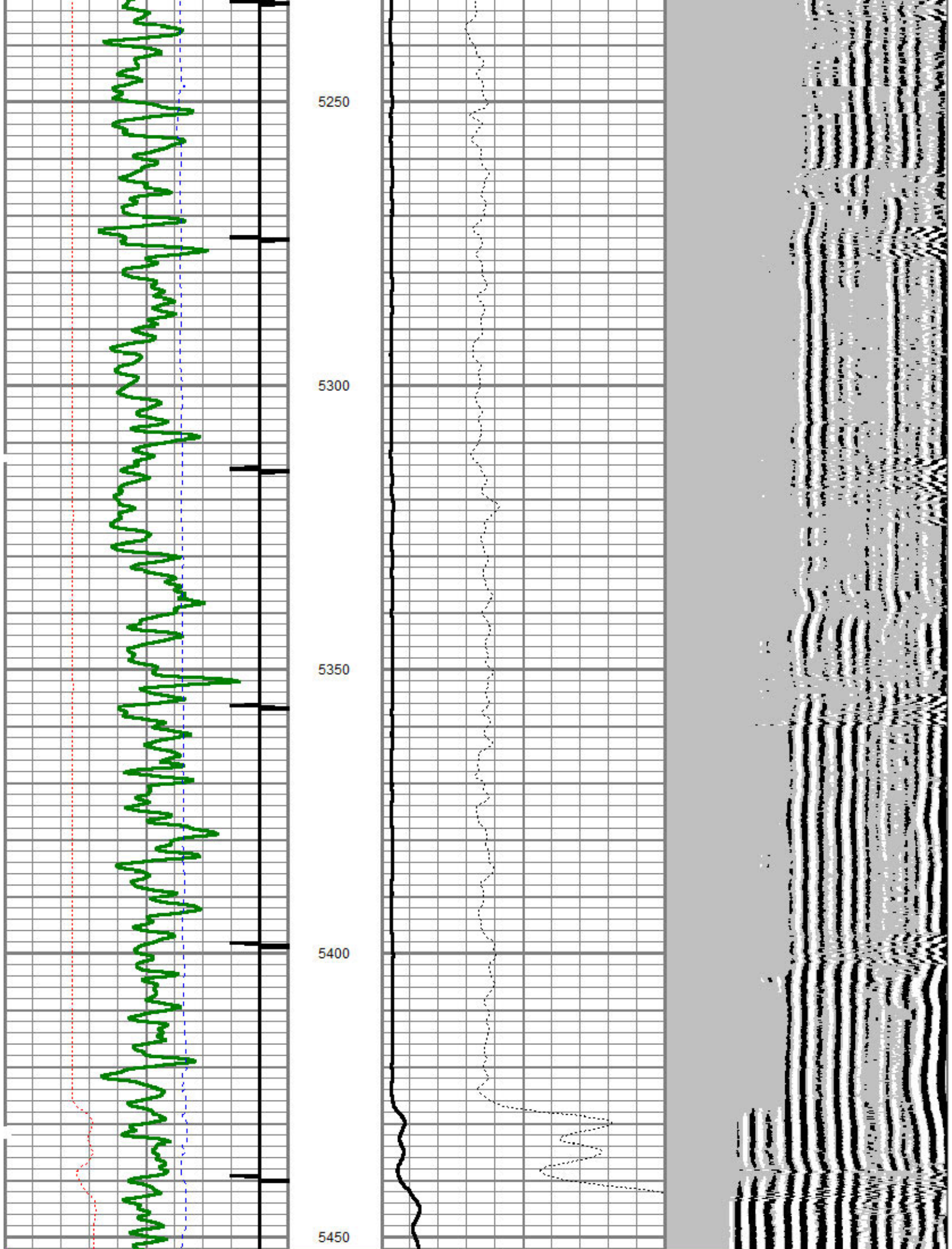
5050

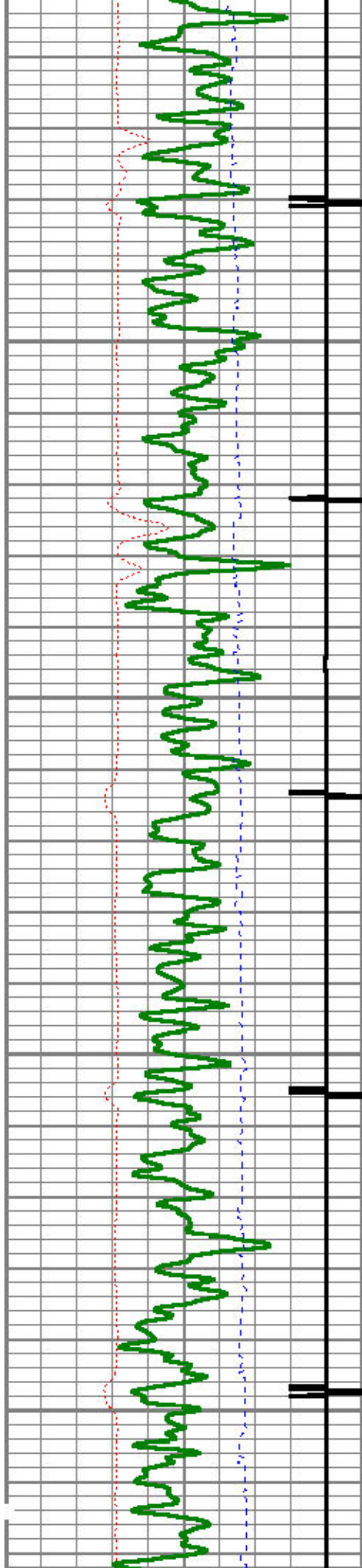
5100

5150

5200





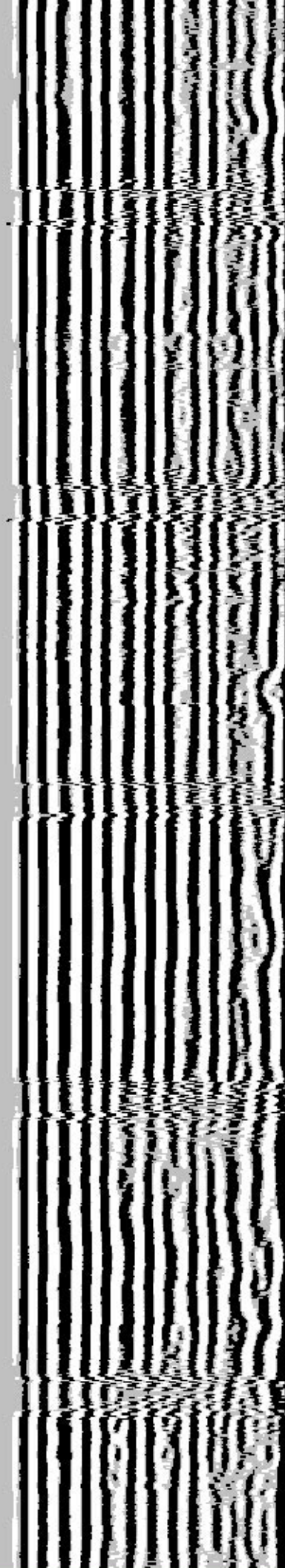
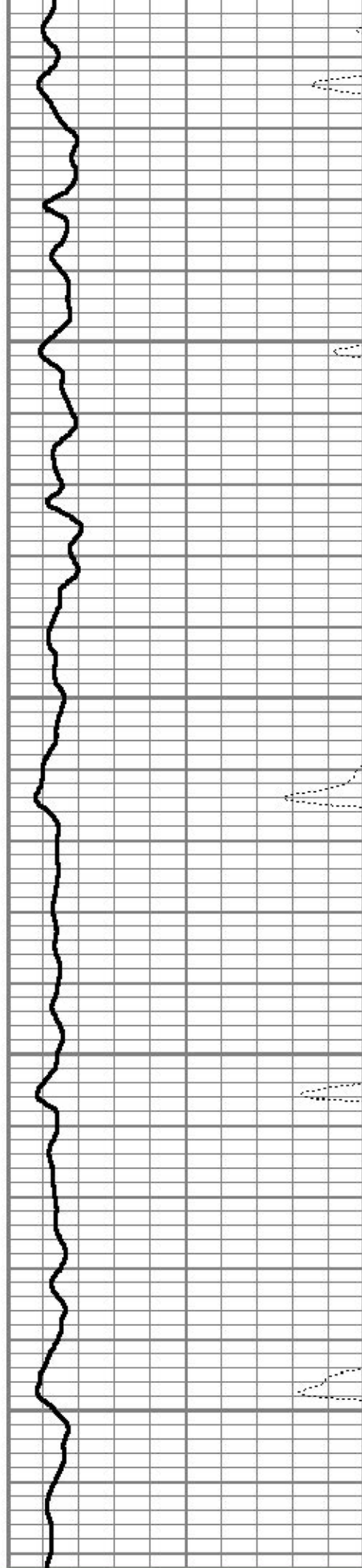


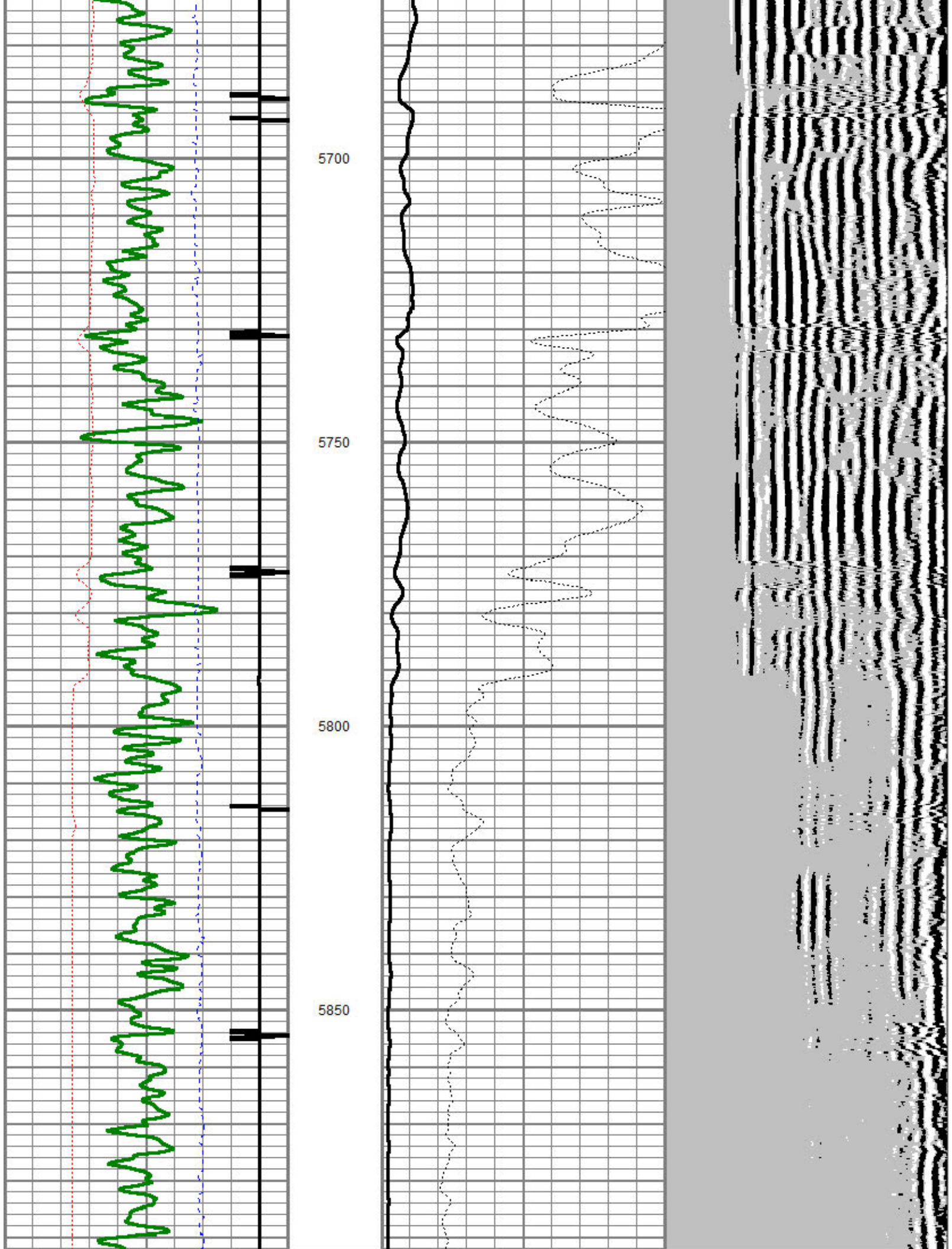
5500

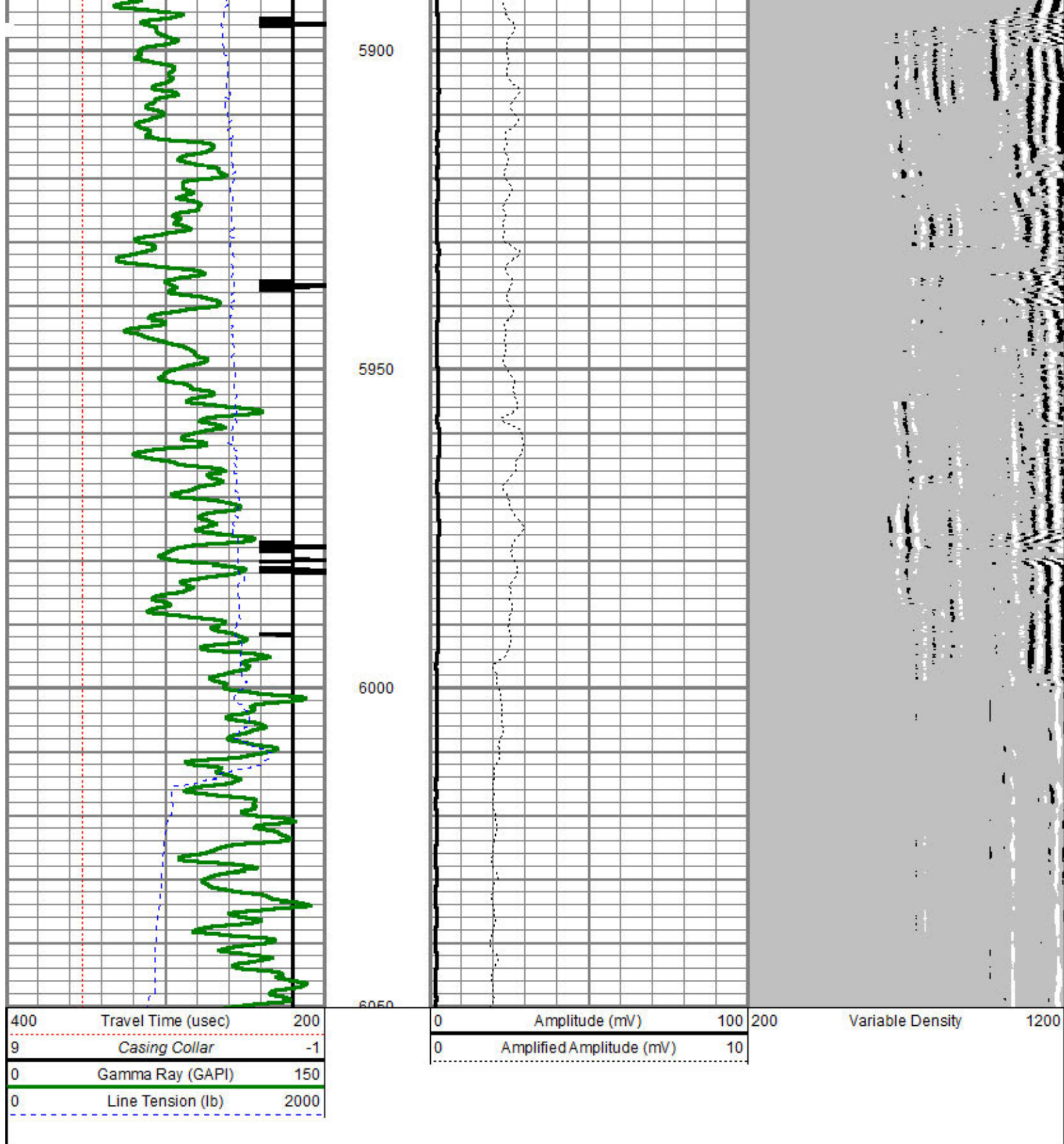
5550

5600

5650







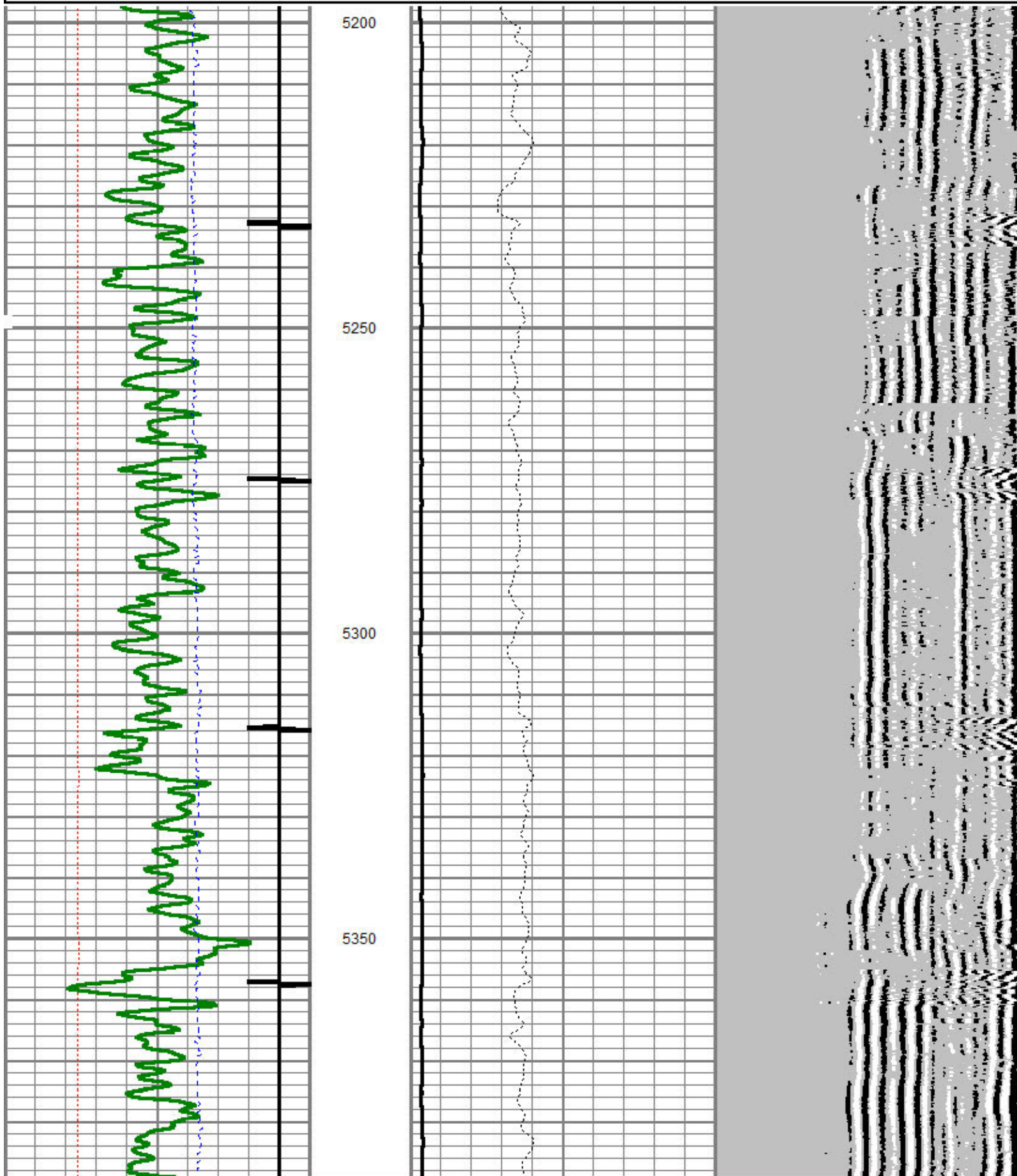
REPEAT PASS (0 PSI)

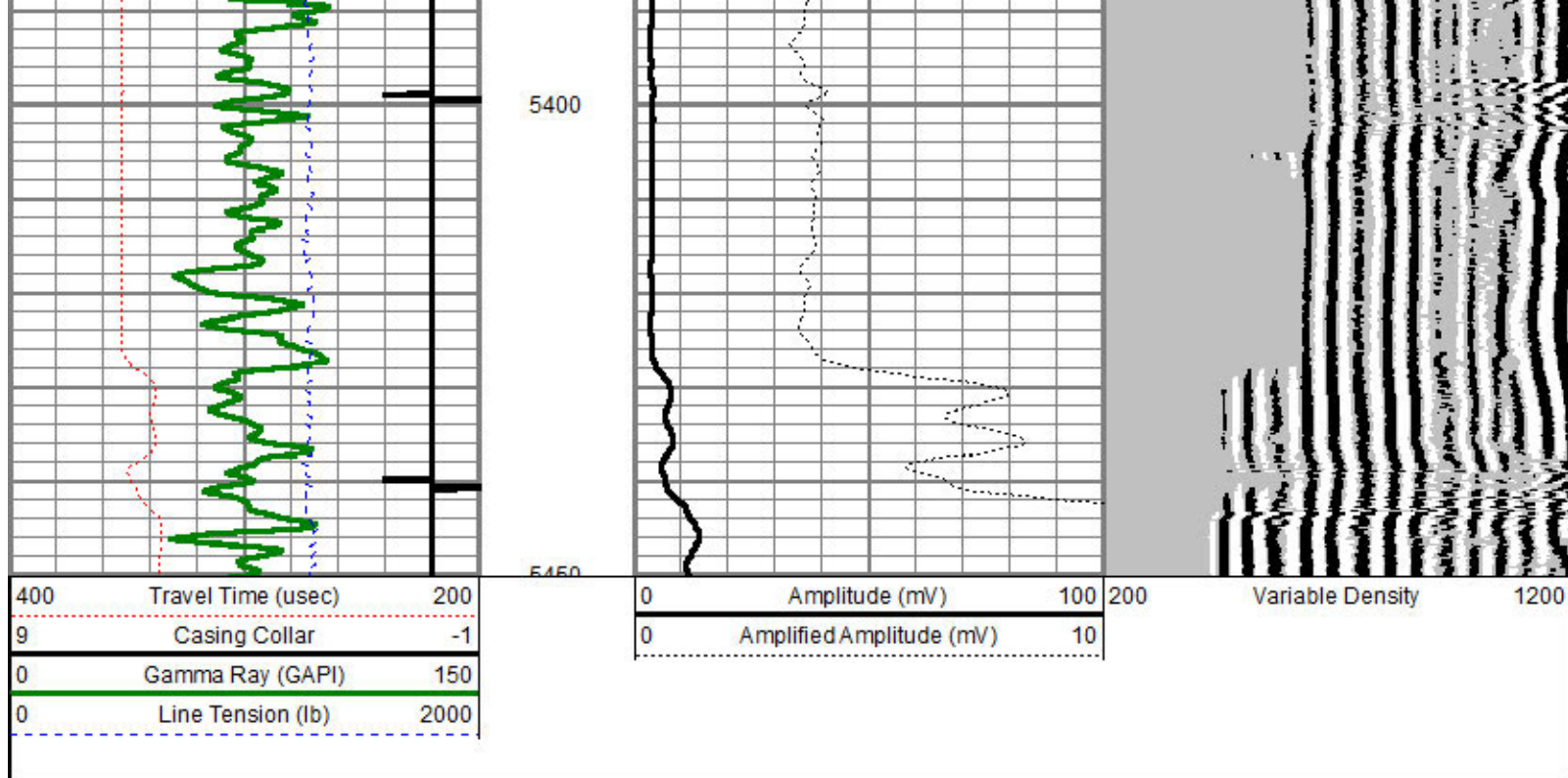
Database File: e:\dx.db
 Dataset Pathname: pass3
 Presentation Format: cblprobe
 Dataset Creation: Thu Aug 07 12:21:30 2014 by Log SCH 120430

400	Travel Time (usec)	200
9	Casing Collar	-1
0	Gamma Ray (GAPI)	150
0	Line Tension (lb)	2000

0	Amplitude (mV)	100
0	Amplified Amplitude (mV)	10

200 Variable Density 1200





Calibration Report

Database File: e:\dx.db
 Dataset Pathname: pass5
 Dataset Creation: Thu Aug 07 12:34:11 2014 by Log SCH 120430

Temperature Calibration Report

Serial Number: 101234
 Tool Model: 1.375TEMP
 Performed: Wed Aug 06 13:35:40 2014

	Reference	Reading
Low Reference:	1.00 degF	10.00 cps
High Reference:	1.00 degF	10.00 cps
Gain:	0.10	
Offset:	0.00	
Delta Spacing	2	

Gamma Ray Calibration Report

Serial Number: 111111
 Tool Model: Probe275
 Performed: Wed Aug 06 14:21:14 2014

Calibrator Value: 1022.0 GAPI

Background Reading: 99.7 cps
 Calibrator Reading: 1610.4 cps

Sensitivity: 0.6765 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: 101224
 Tool Model: Probe

Calibration Casing Diameter: 5.500 in
 Calibration Depth: 0.000 ft

Master Calibration, performed Wed Aug 06 13:50:31 2014:

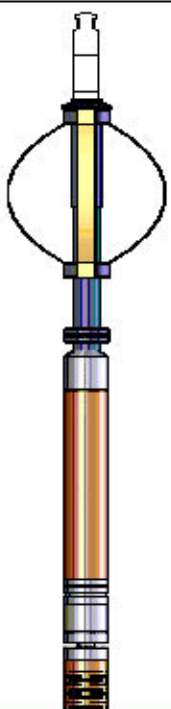
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.003	0.719	1.500	71.921	97.495	1.790
CAL	-0.002	0.778				
5'	0.003	0.655	1.500	71.921	108.056	1.152
SUM						
S1	0.044	0.760	0.000	100.000	139.702	-6.175
S2	-0.006	0.720	0.000	100.000	137.824	0.814
S3	-0.003	0.732	0.000	100.000	136.139	0.341
S4	-0.003	0.738	0.000	100.000	134.814	0.448
S5	-0.003	0.733	0.000	100.000	135.744	0.461
S6	-0.003	0.727	0.000	100.000	136.828	0.476
S7	-0.003	0.717	0.000	100.000	138.782	0.446
S8	-0.003	0.722	0.000	100.000	137.843	0.446


Internal Reference Calibration, performed Mon Oct 10 10:42:03 2005:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.002	0.778	1.000	0.000

Air Zero Calibration, performed Sun Oct 27 21:29:00 2013:

	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	Len (ft)	OD (in)	Wt (lb)
			Titan Cable_head	1.00	1.44	10.00
			Probe275 2.75" Centralizer	2.88	2.75	20.00

WVF3FT	13.09		RBT-Probe (101224) Probe Radii Bond Tool with Digital Telemetry	8.75	2.75	90.00
WVFCAL	13.09					
WVFS1	13.09					
WVFS2	13.09					
WVFS3	13.09					
WVFS4	13.09					
WVFS5	13.09					
WVFS6	13.09					
WVFS7	13.09					
WVFS8	13.09					
WVF5FT	12.09					
			Probe275 2.75" Centralizer	2.88	2.75	20.00
CCL	5.13					
GR	3.79		GR-Probe275 (111111) Probe 2 3/4" Logging Gamma Ray	4.78	2.75	57.00
TEMP	0.08		Temp-1.375TEMP (101234) Temperature Tool	1.25	1.38	30.00
Dataset: dx.db: field/well/run1/pass5 Total Length: 21.53 ft Total Weight: 227.00 lb O.D.: 2.75 in						

Company	BONANZA CREEK ENERGY					
Well	PRONGHORN D-X-9HNB					
Field	WATTENBERG					
County	WELD	State	COLORADO			
			CEMENT BOND VARIABLE DENSITY LOG W/ GAMMA RAY/CCL			