



**Cement Bond
Variable Density Log
W/ Gamma Ray/CCL**

Company		Bayswater EMP	
Well		Blehm 9-19	
Field		Wattenberg	
County		Weld	
State		Colorado	
Company		Bayswater EMP	
Well		Blehm 9-19	
Field		Wattenberg	
County		Weld	
State		Colorado	
Location:		API # : 05-123-37693	
Permanent Datum		SHL: 1785' FSL & 518' FEL NESE	
Log Measured From		BHL: 1837' FSL & 612' FEL	
Drilling Measured From		SEC 19 TWP 7N RGE 67W	
Ground Level		Elevation	
Kelly Bushing 13' APD		4978'	
Kelly Bushing		NONE	
Other Services		NONE	
Elevation		K.B. 4991'	
		D.F. 4990'	
		G.L. 4978'	
Date		February 11, 2014	
Run Number		1	
Depth Driller		7216'	
Depth Logger		7159'	
Bottom Logged Interval		7147'	
Top Log Interval		Surface	
Open Hole Size		8.75	
Type Fluid		Fresh Water	
Density / Viscosity		8.33	
Max. Recorded Temp.		N/A	
Estimated Cement Top		670'	
Time Well Ready		8:00	
Time Logger on Bottom		8:50	
Equipment Number		13033	
Location		Brighton	
Recorded By		C. Rail	
Witnessed By		Susan Sears	
Borehole Record		Tubing Record	
Run Number		Bit	
From		To	
Size		Weight	
From		To	
Casing Record		Size	
Surface String		8 5/8#	
Prot. String		24#	
Production String		4 1/2"	
Liner		11.6#	
		0	
		7216'	
		6559'	
		6575'	

<<< 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

Secondary Log on Well
Correlated With Triple Combo From Haliburton 1/11/2014 (+9)

Main Pass and Repeat Pass logged with 0 PSI
Logged from 13' Kelly Bushing

Estimated Top Of Cement @ 670'
Short Joint @ 6559' To 6575'
Thank You For using Allied Wireline Services
(303) 659-4609



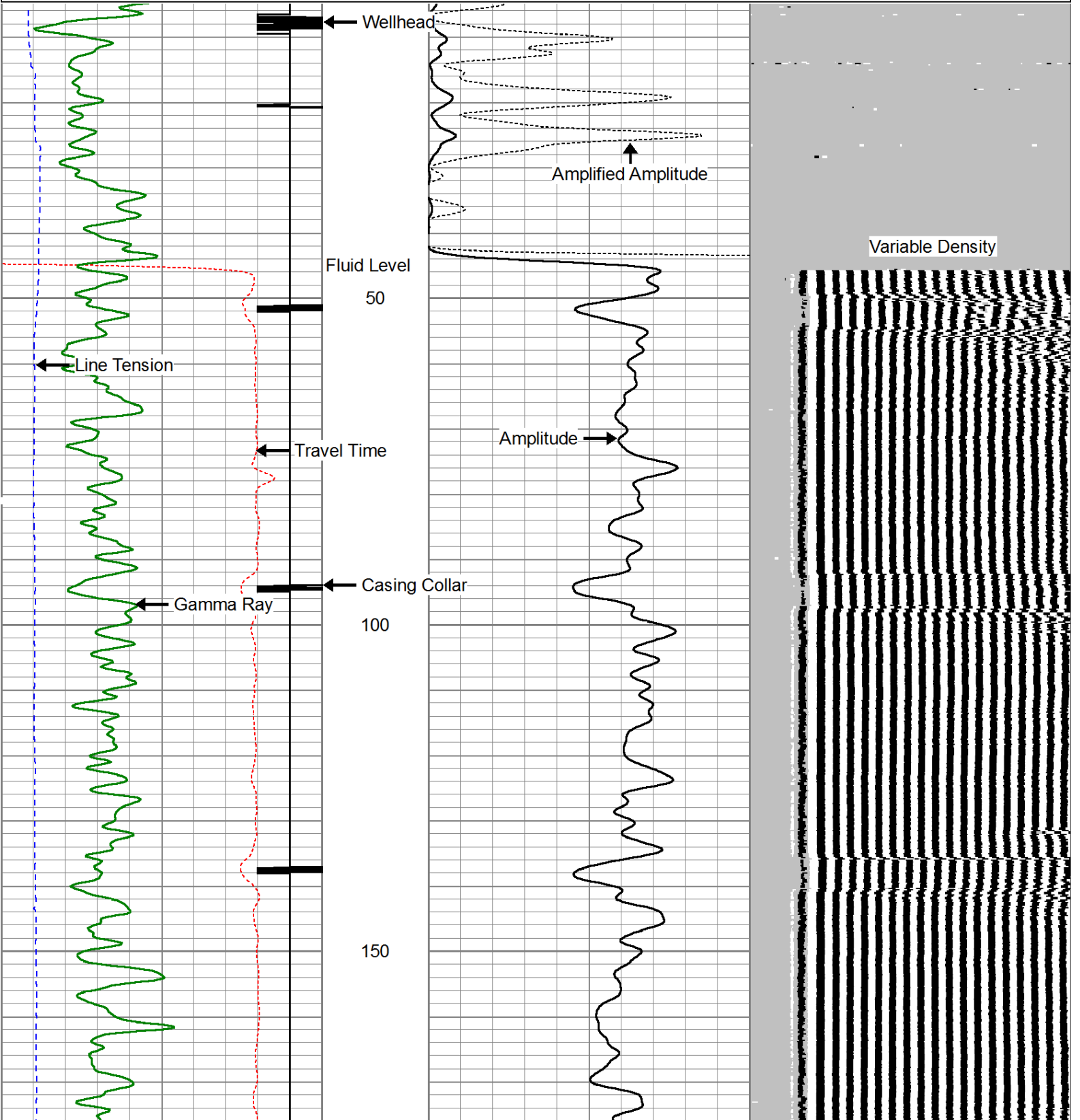
Main Pass (0 PSI)

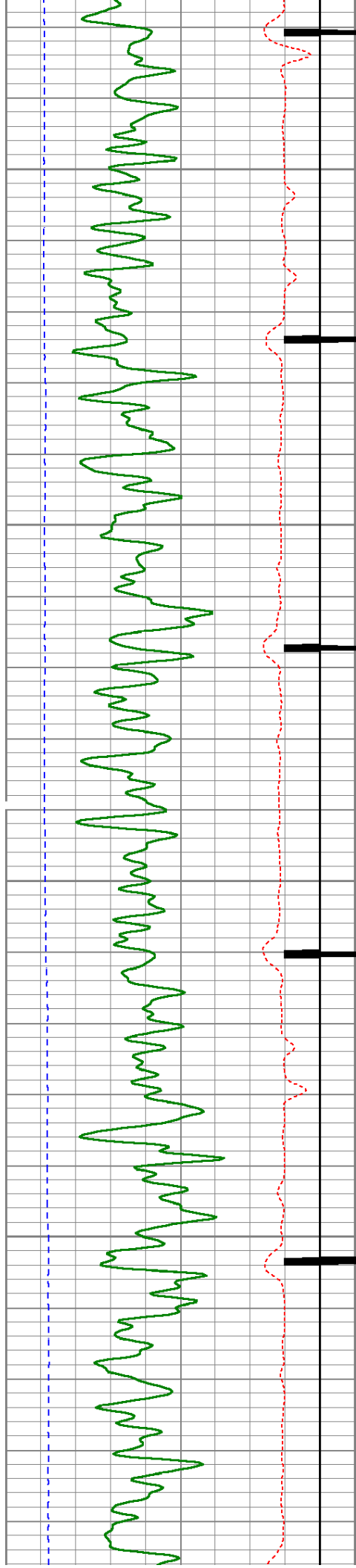
Database File: c:\warrior\data\bayswater\bayswater blehm 9-19_cbl.db
Dataset Pathname: pass8
Presentation Format: cblprobe
Dataset Creation: Wed Feb 12 15:07:57 2014 by Calc 0
Charted by: Depth in Feet scaled 1:240

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



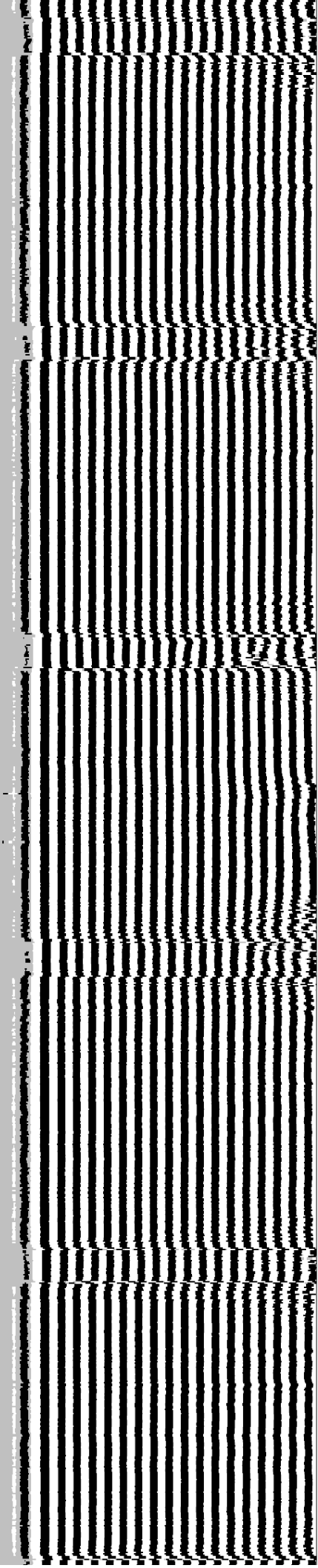
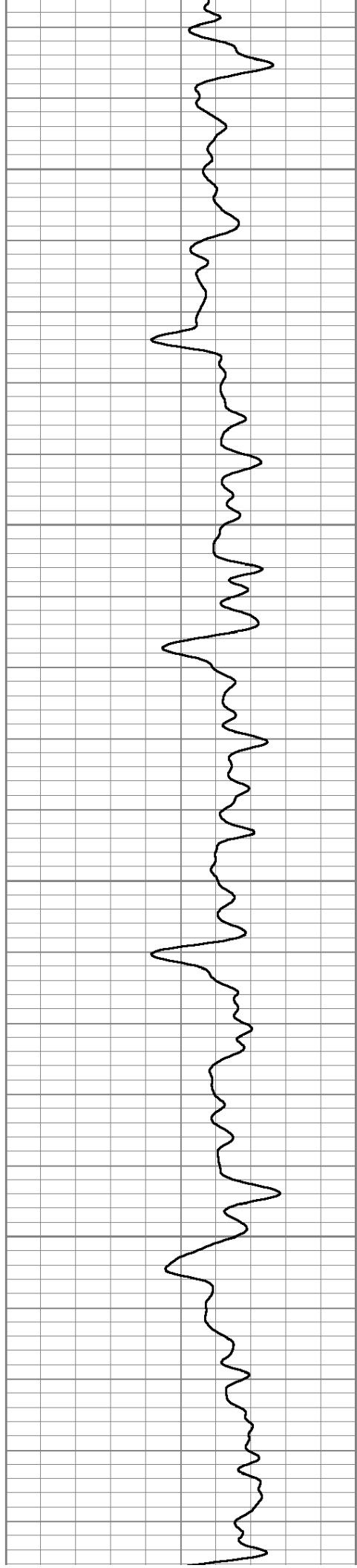


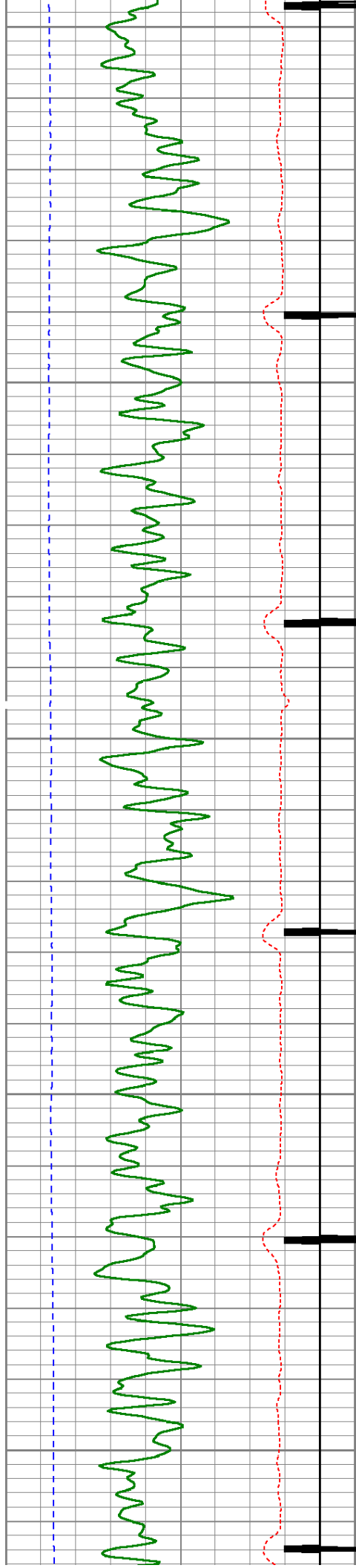
200

250

300

350





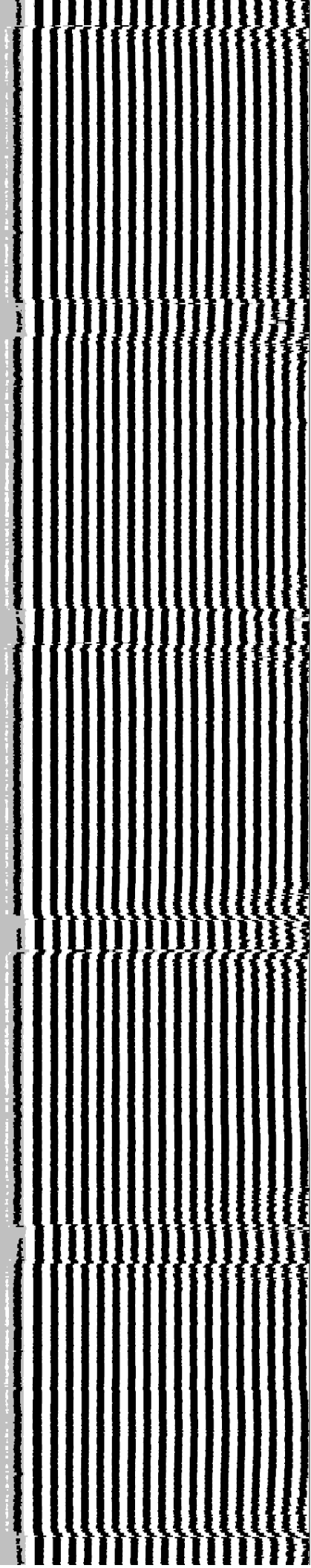
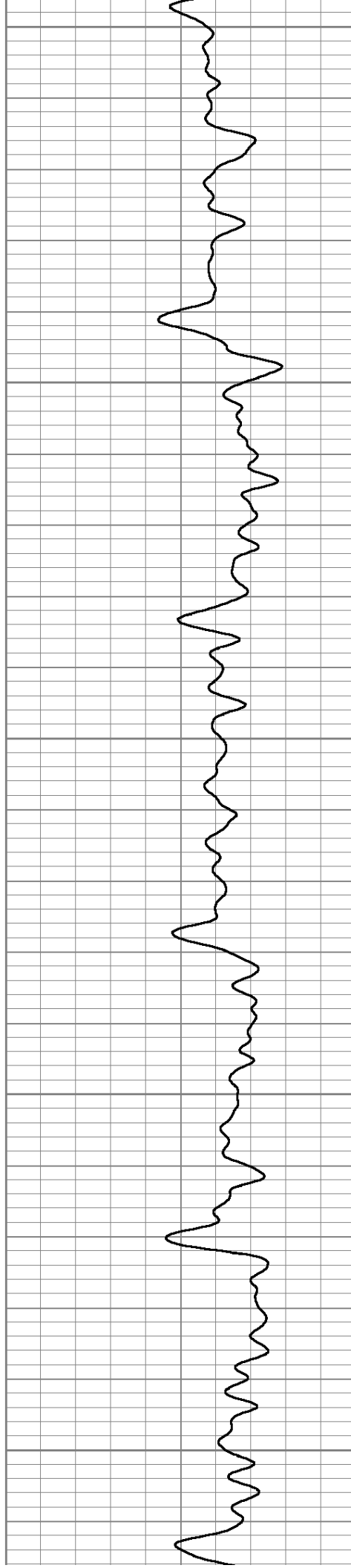
400

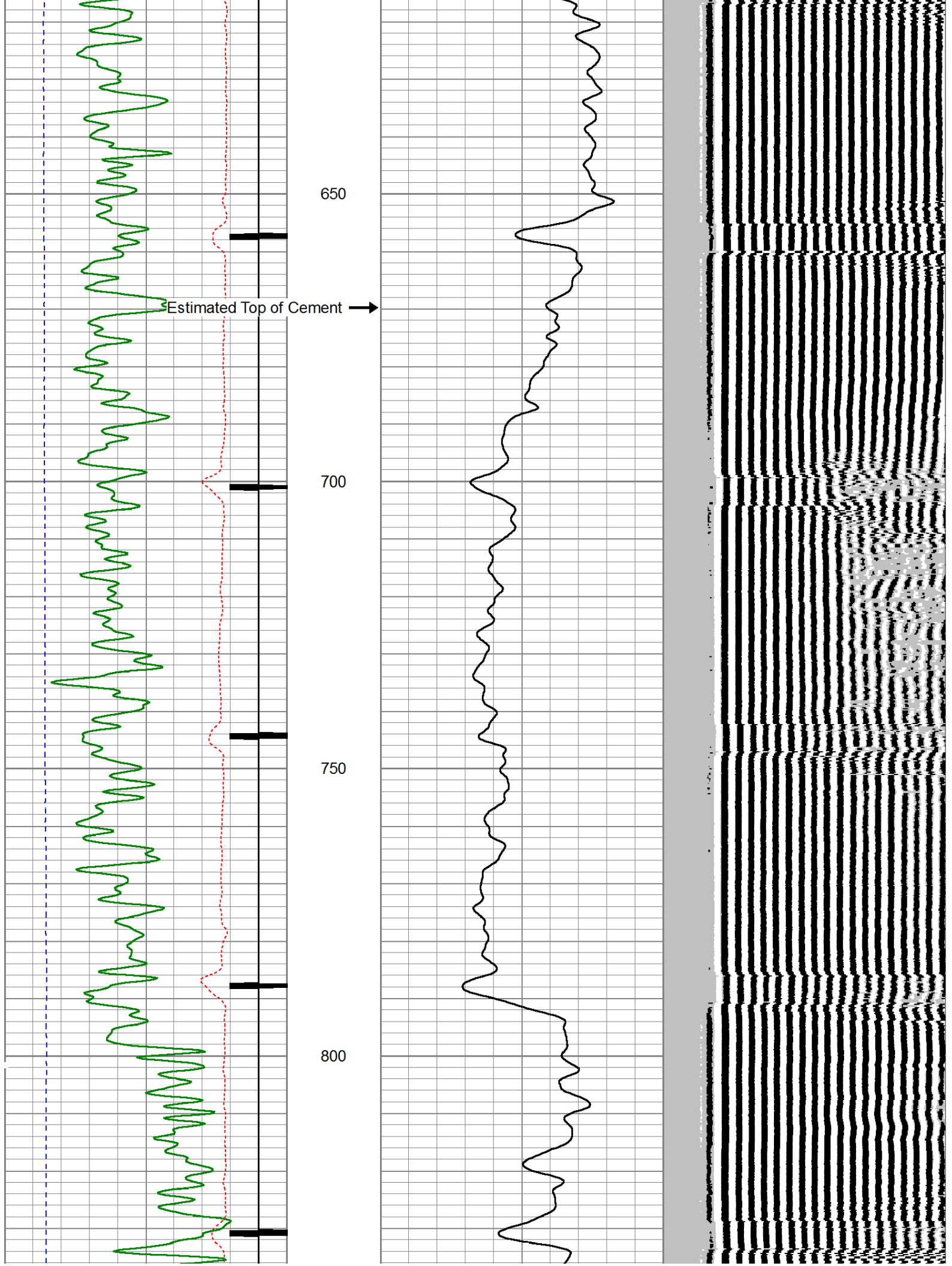
450

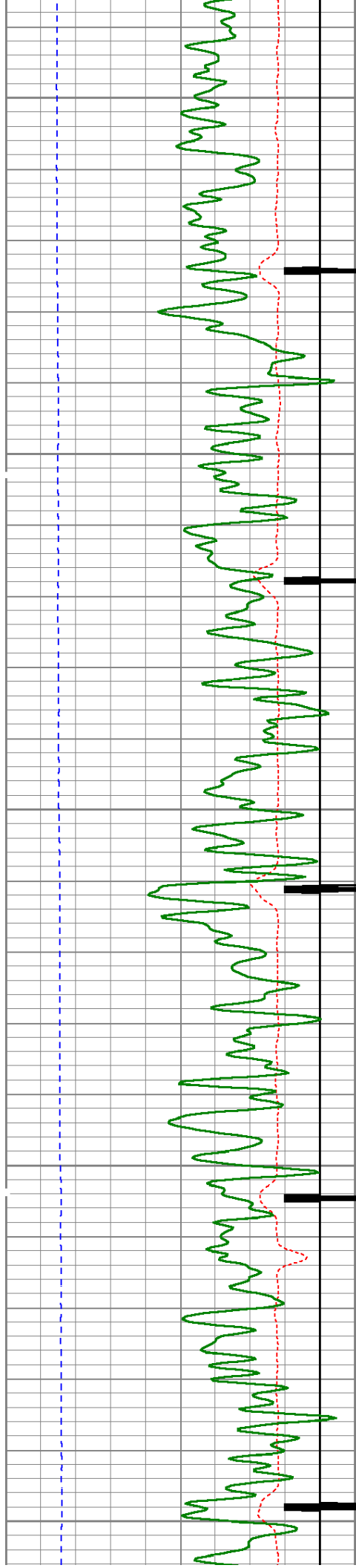
500

550

600







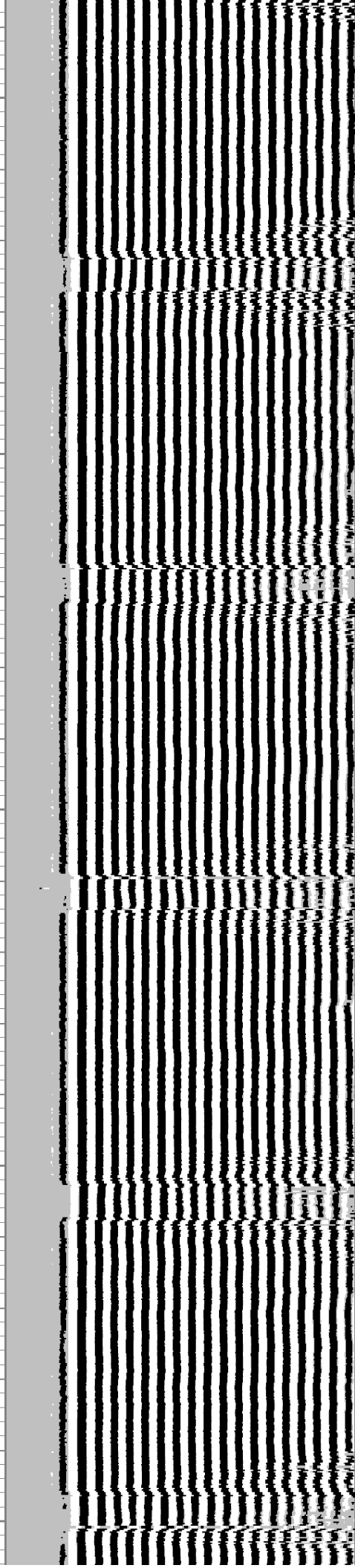
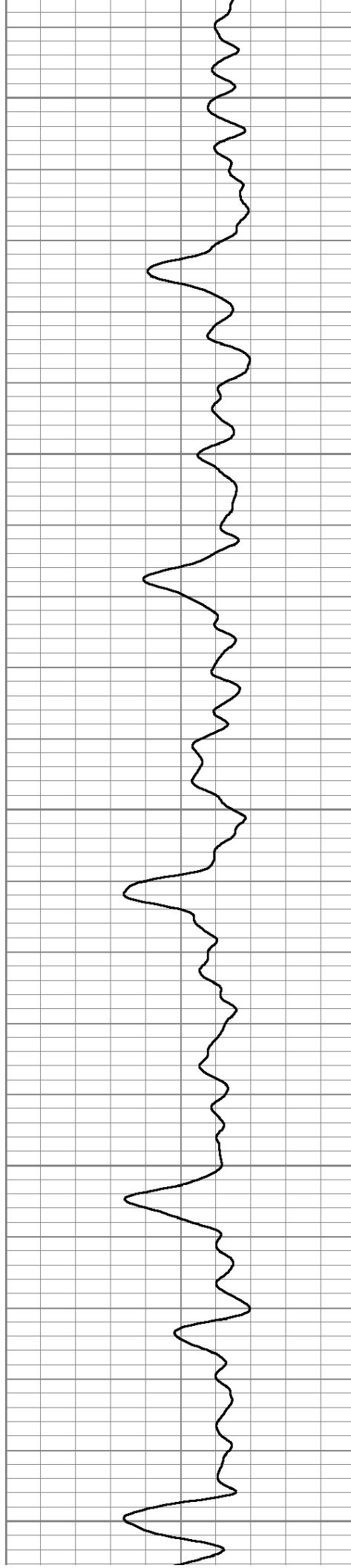
850

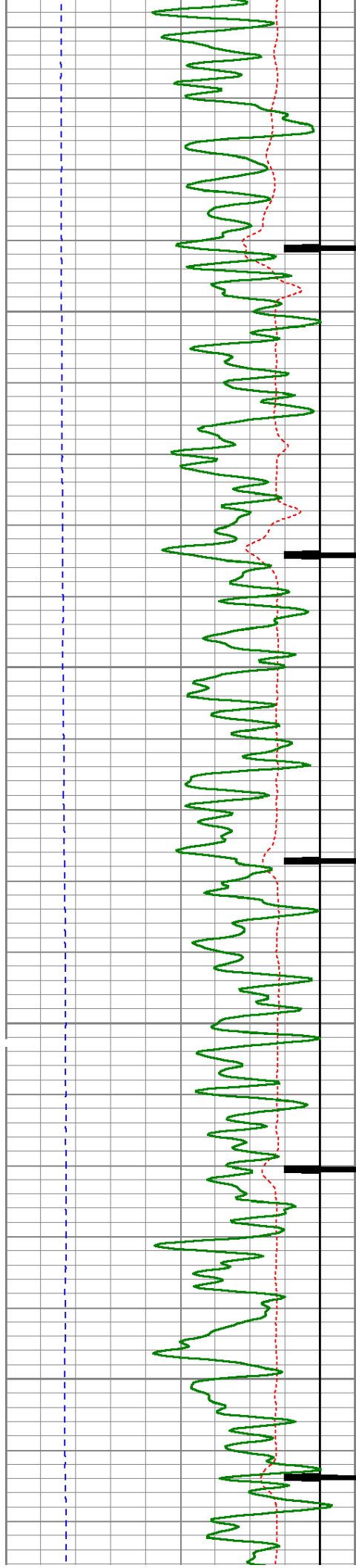
900

950

1000

1050



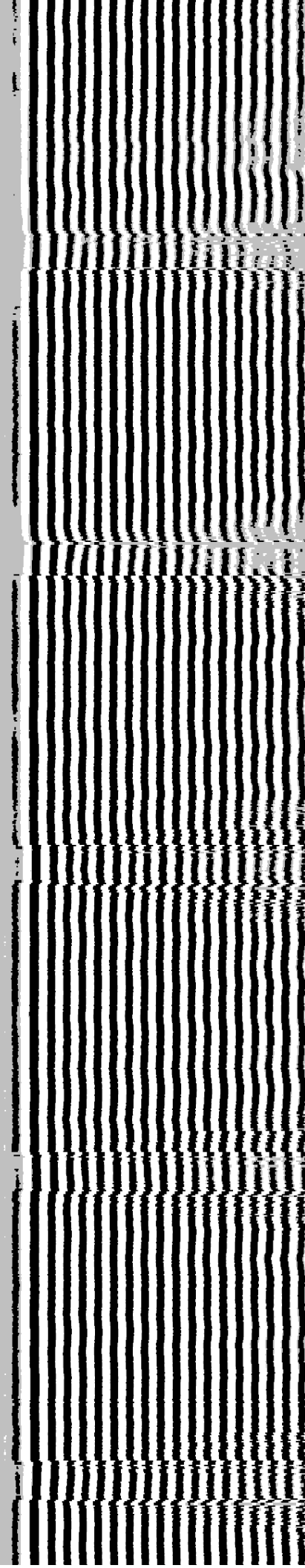
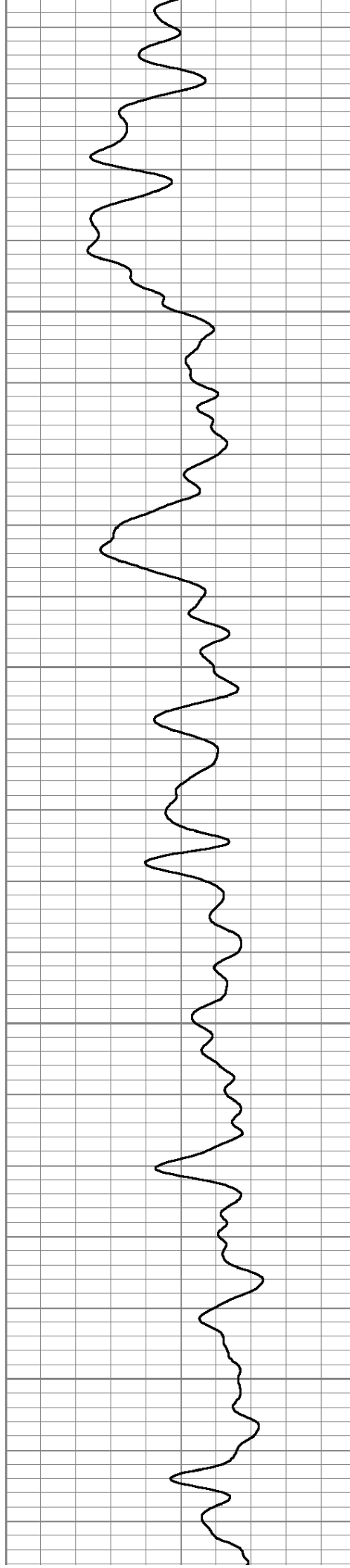


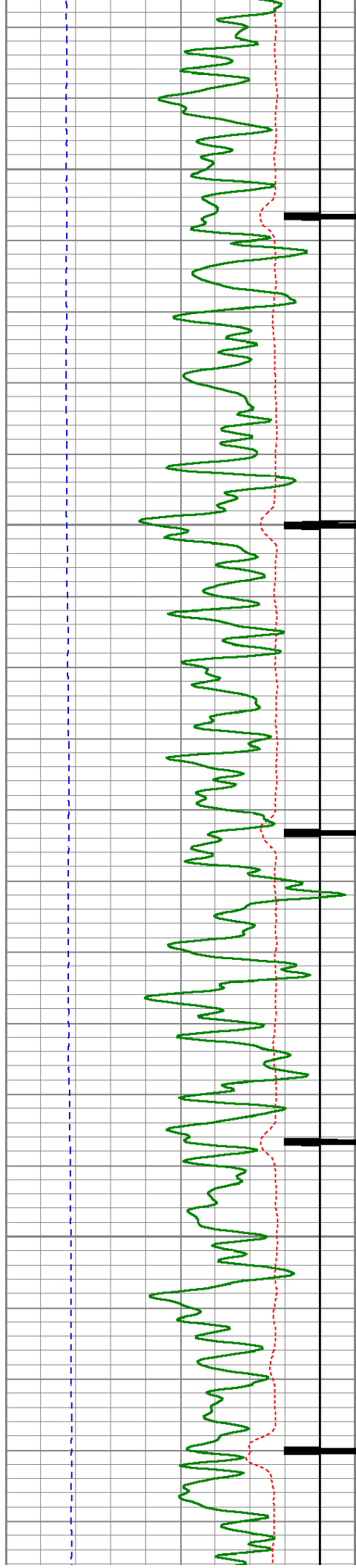
1100

1150

1200

1250



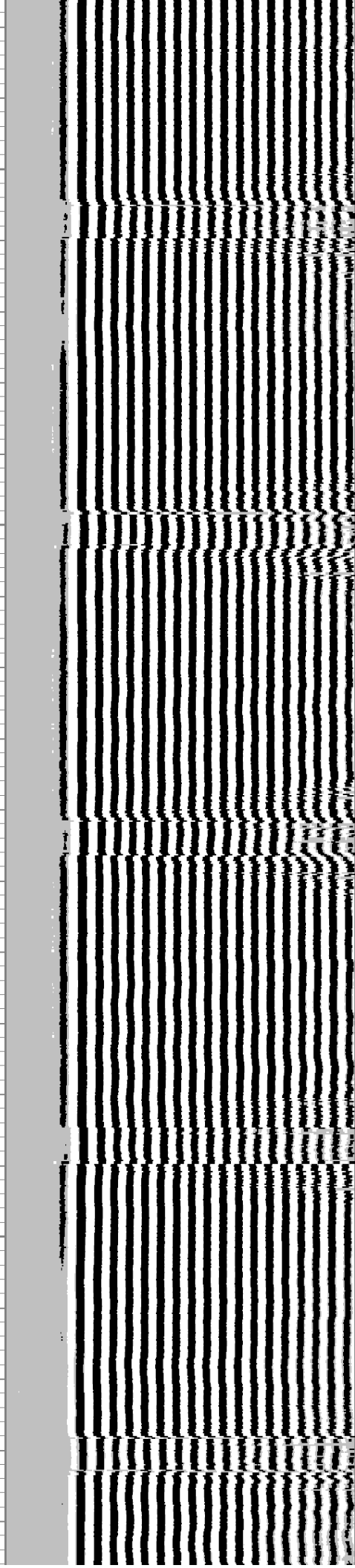
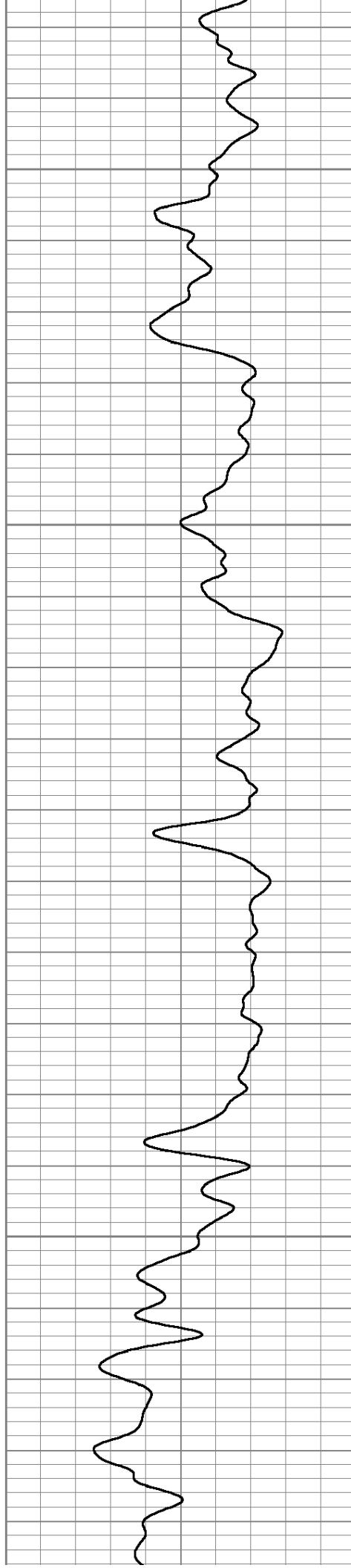


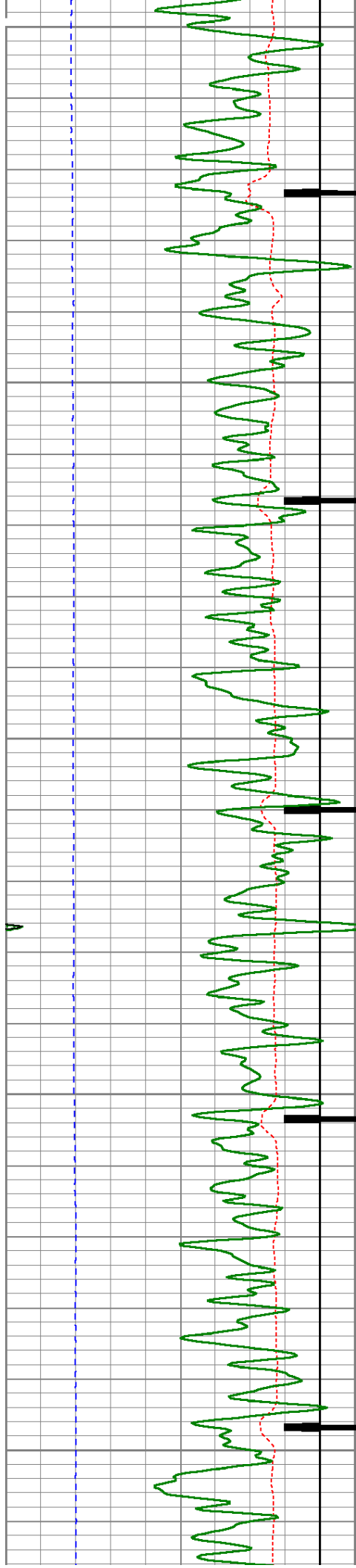
1300

1350

1400

1450





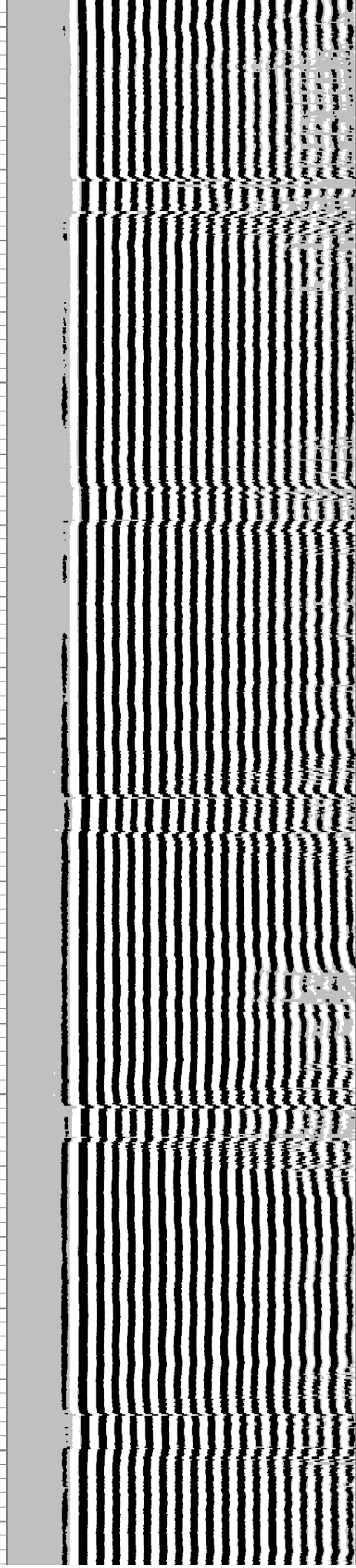
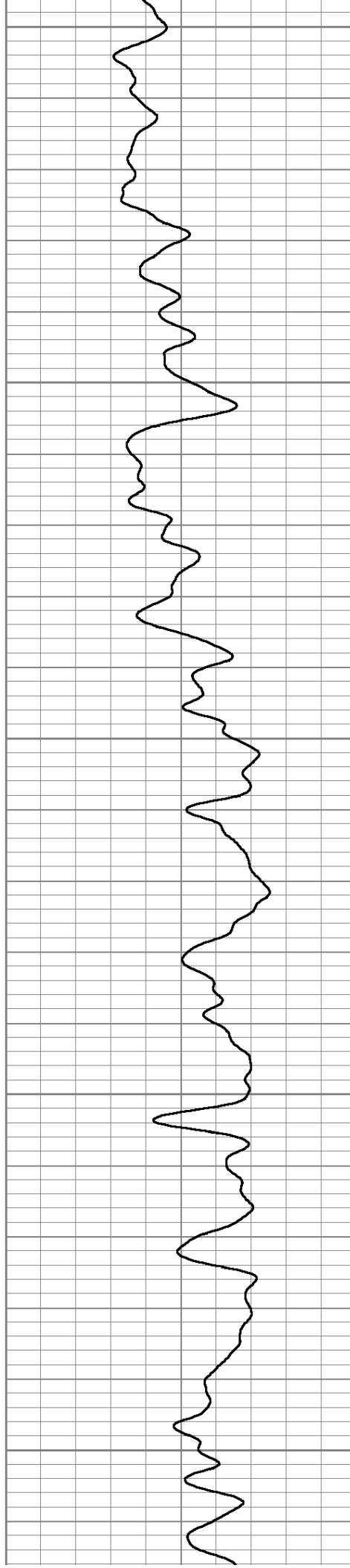
1500

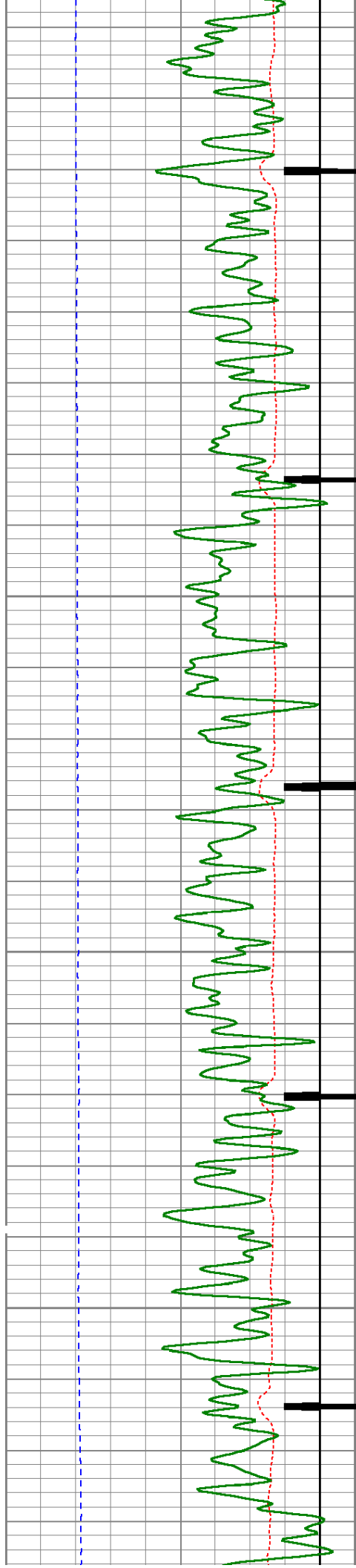
1550

1600

1650

1700



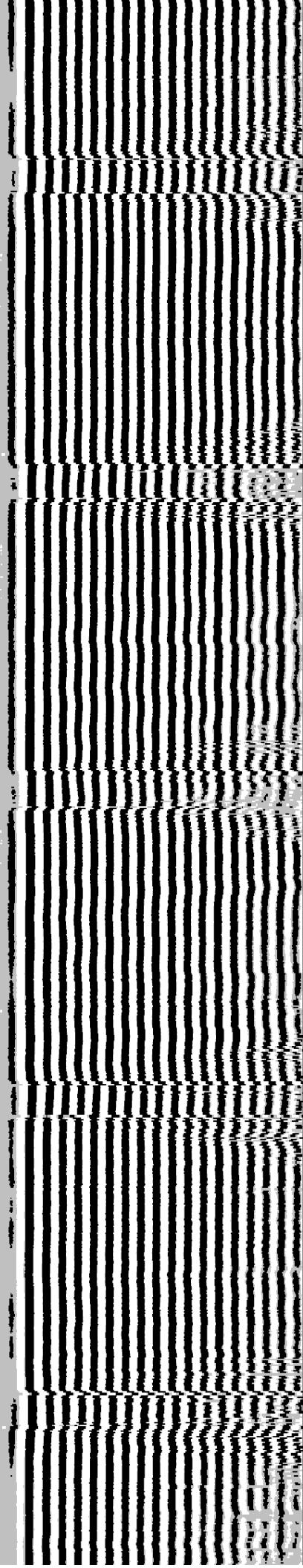
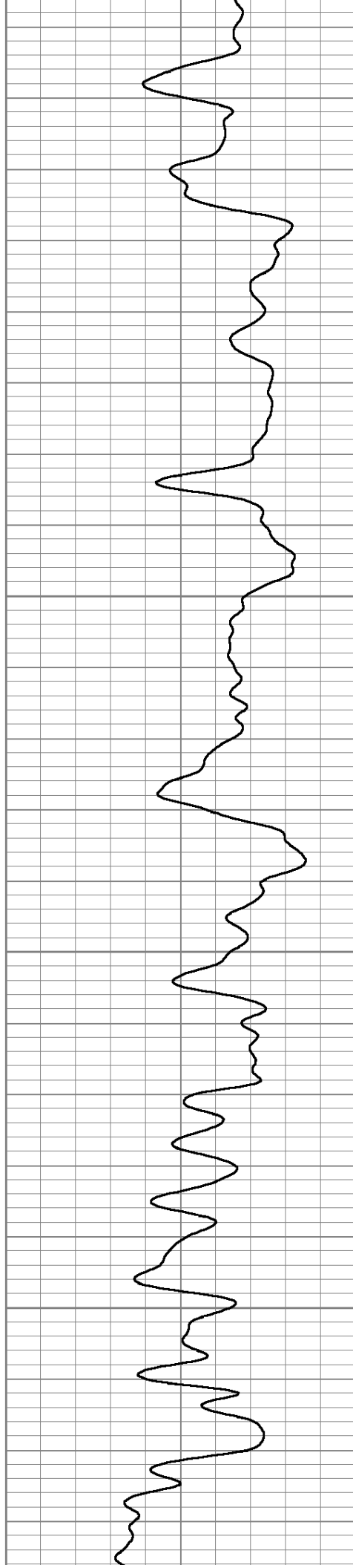


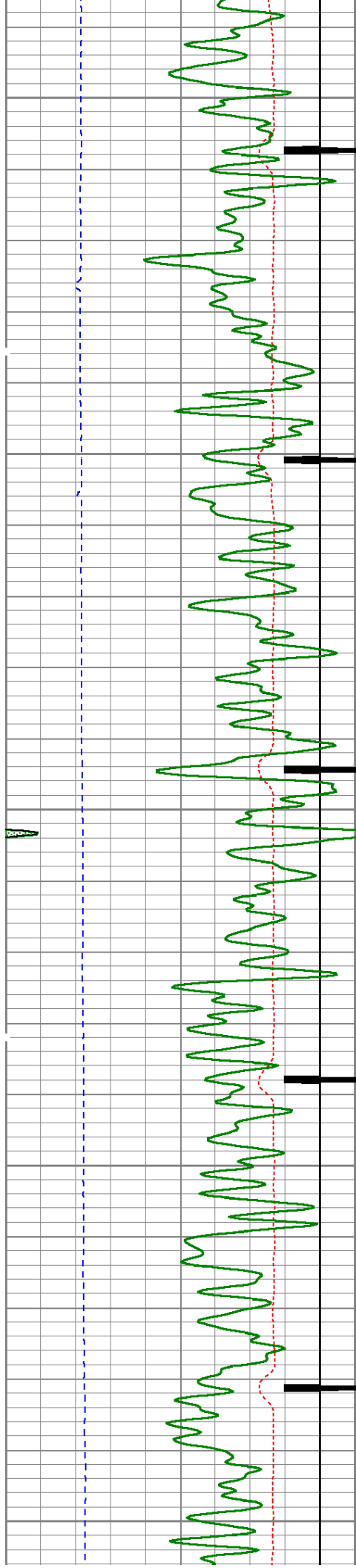
1750

1800

1850

1900





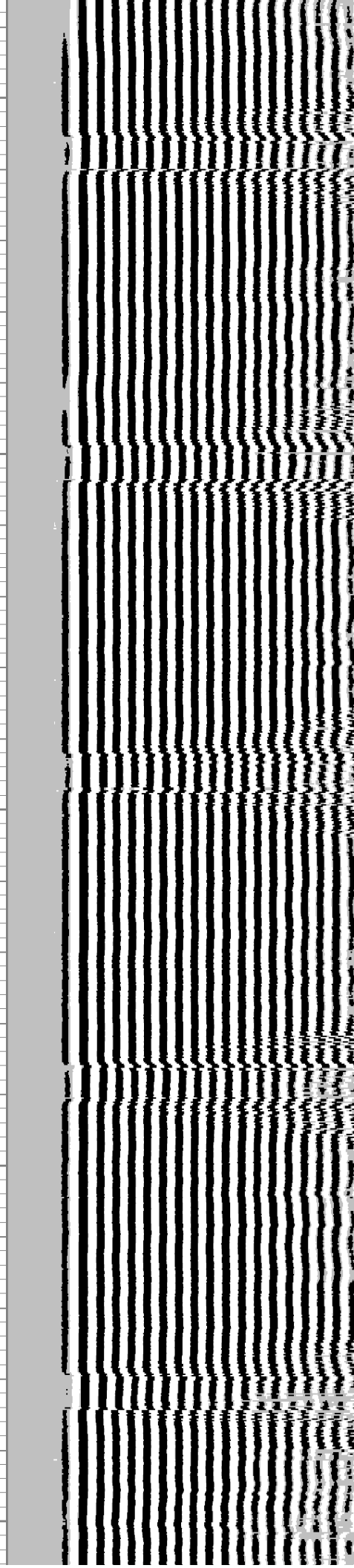
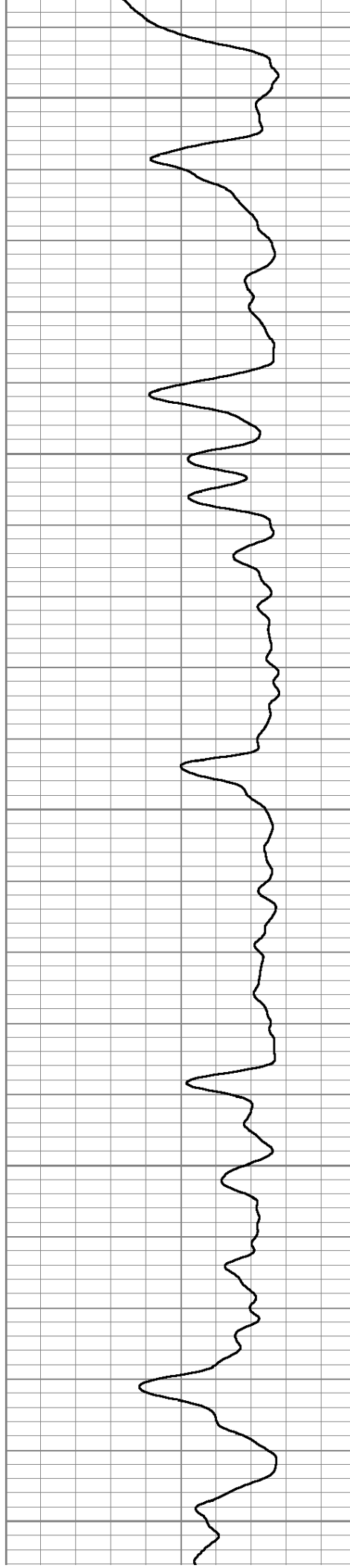
1950

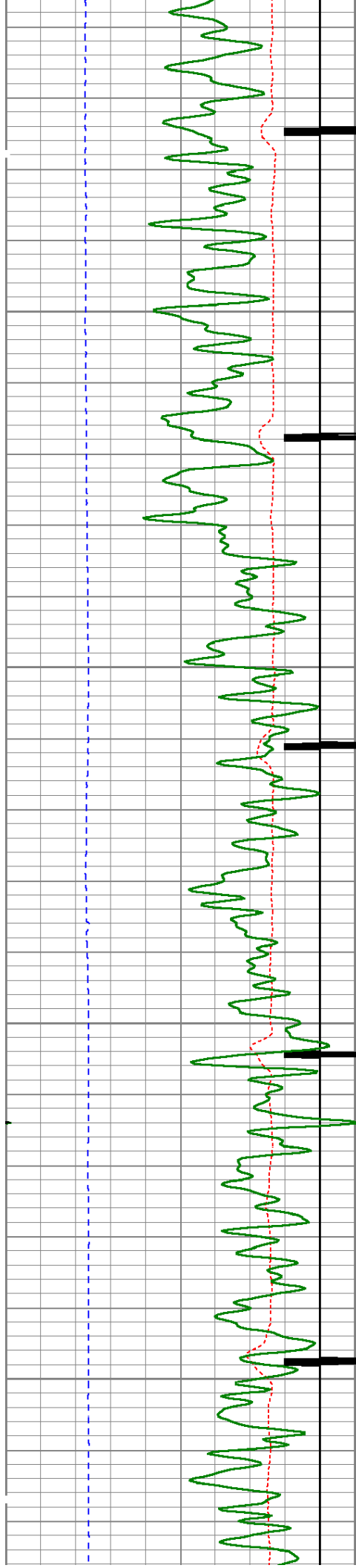
2000

2050

2100

2150



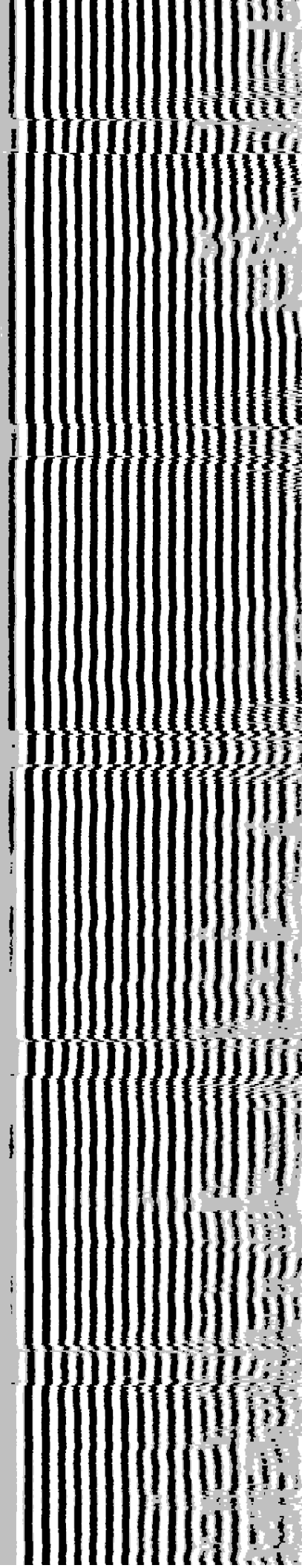
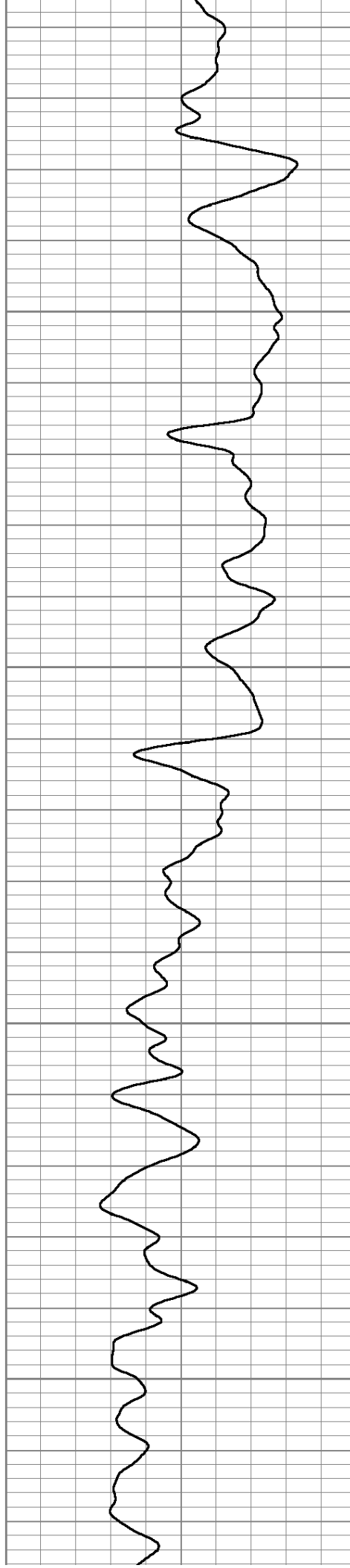


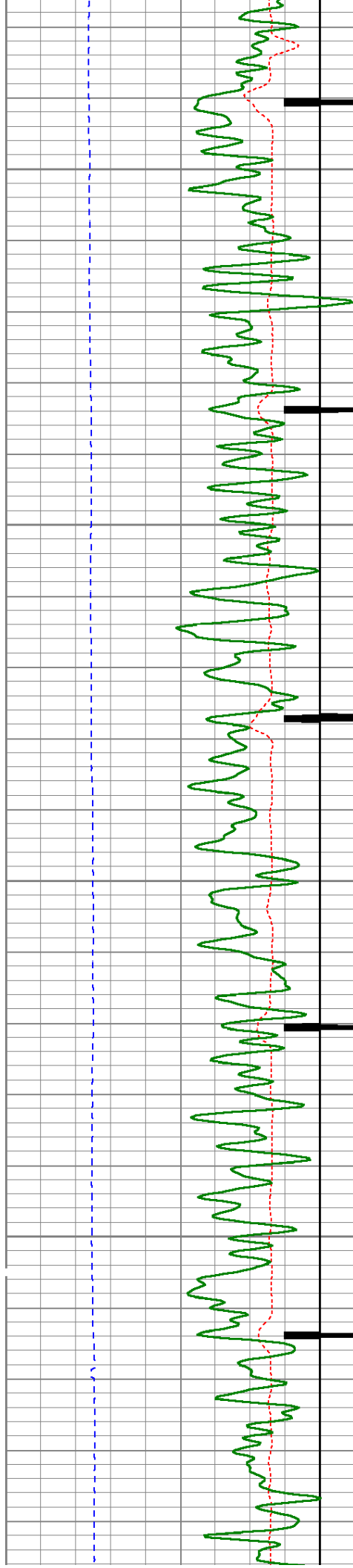
2200

2250

2300

2350



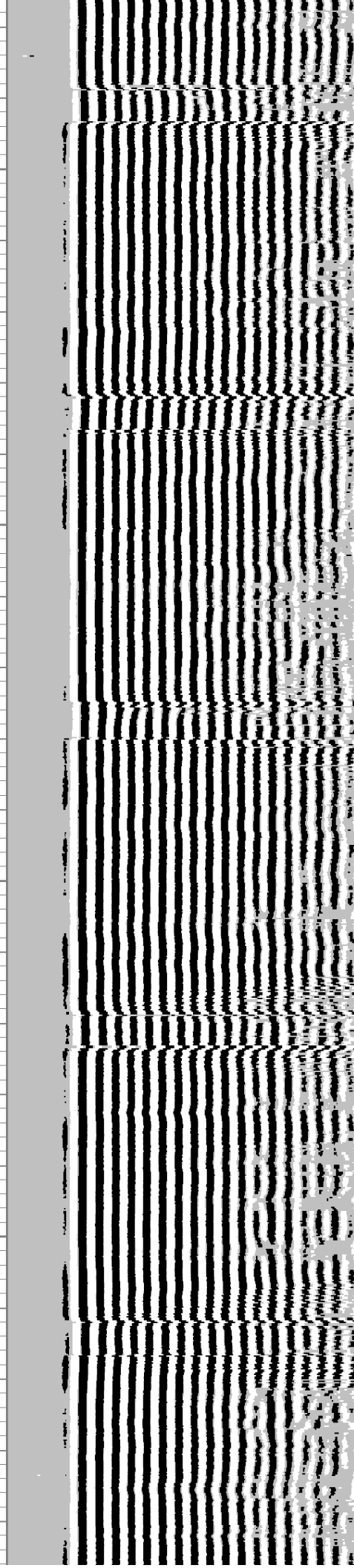
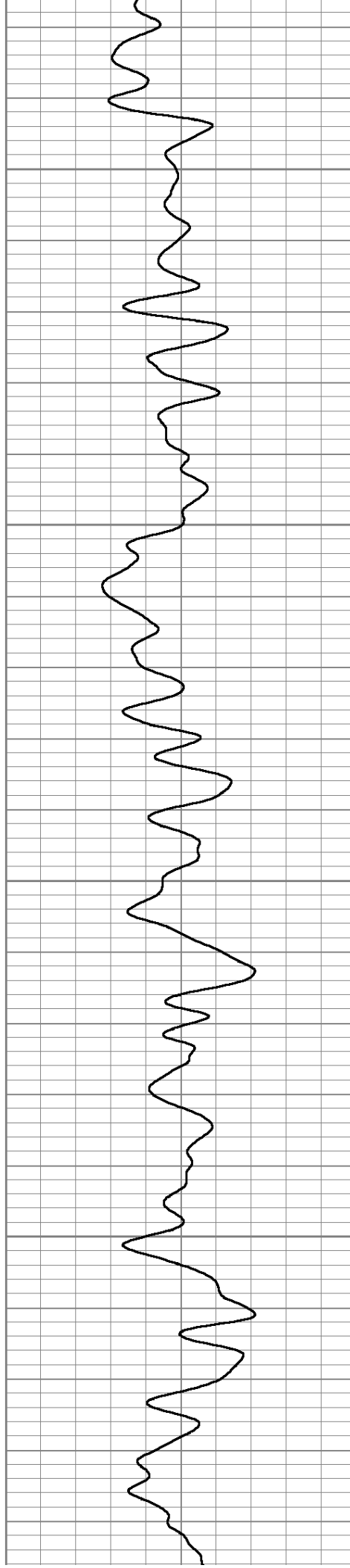


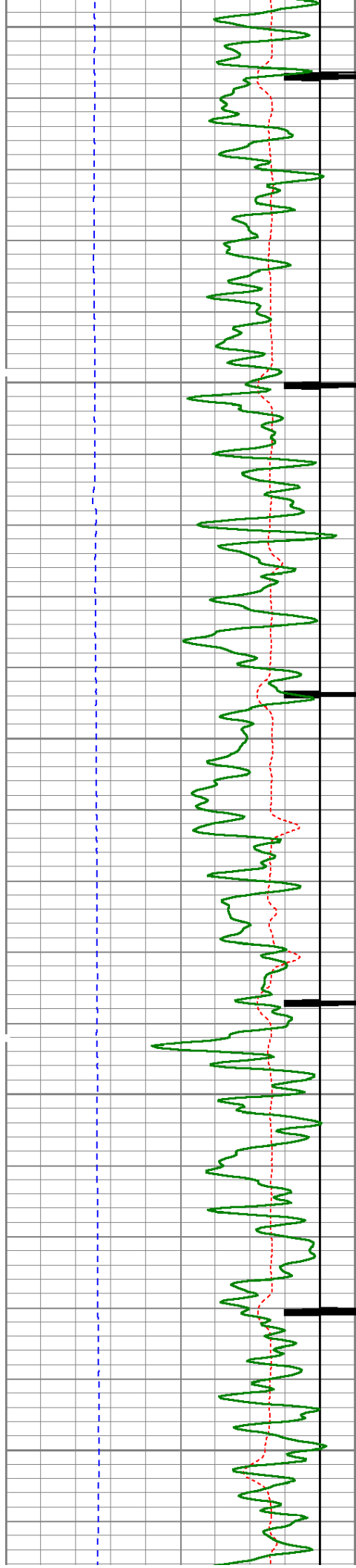
2400

2450

2500

2550





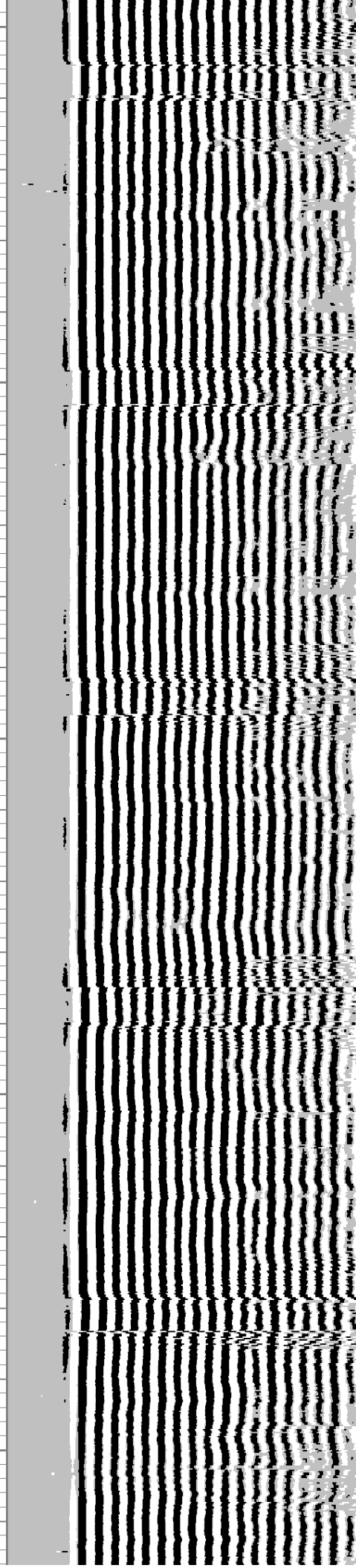
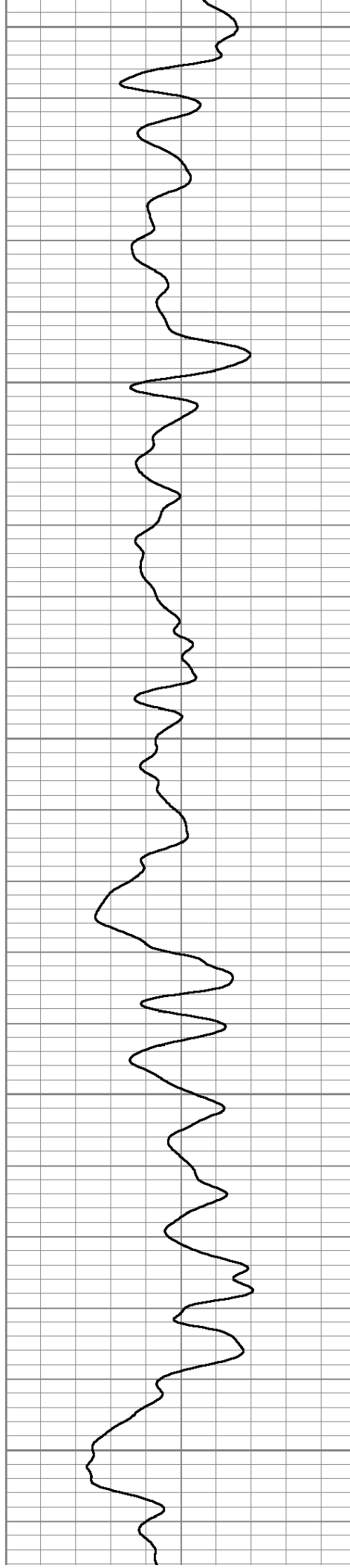
2600

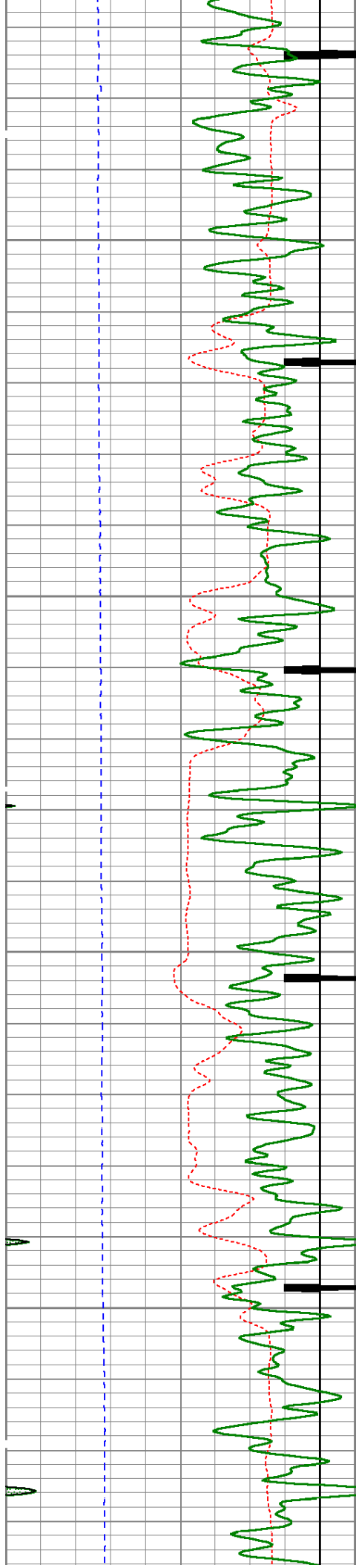
2650

2700

2750

2800



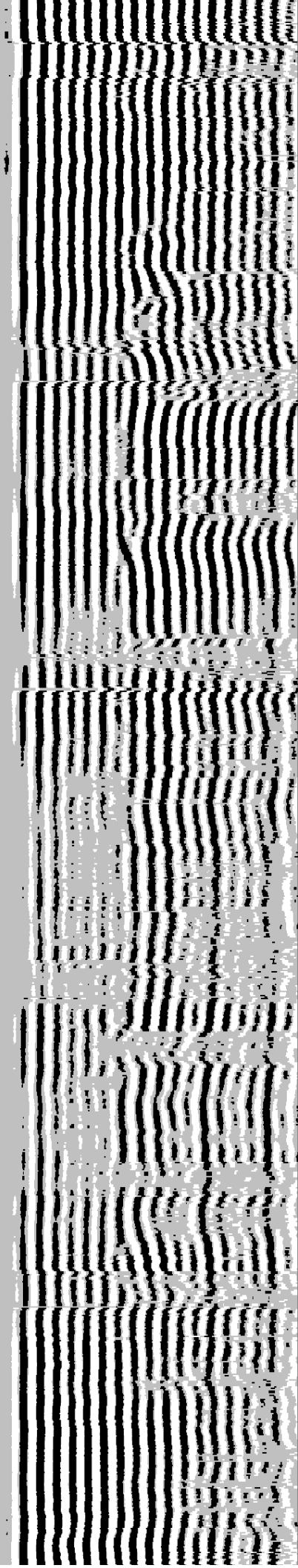
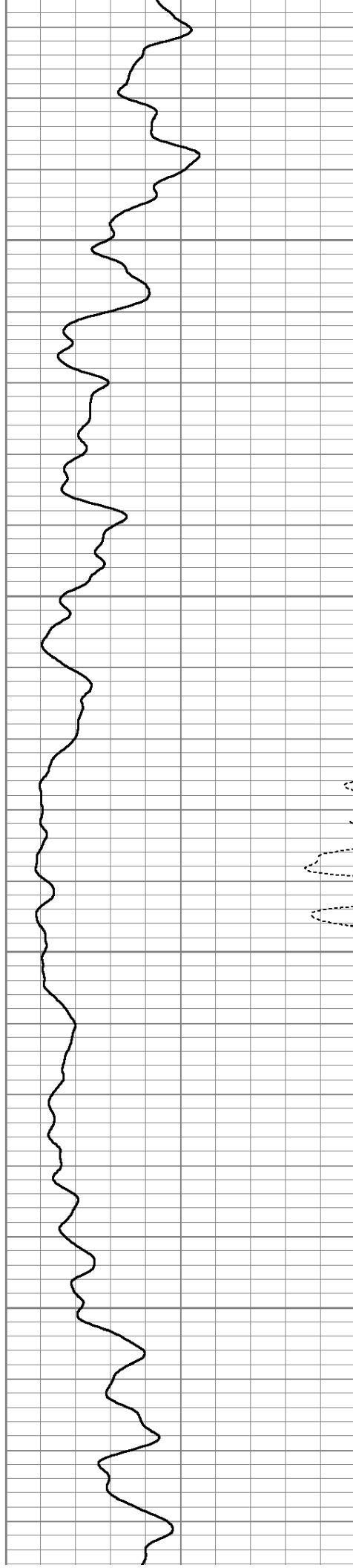


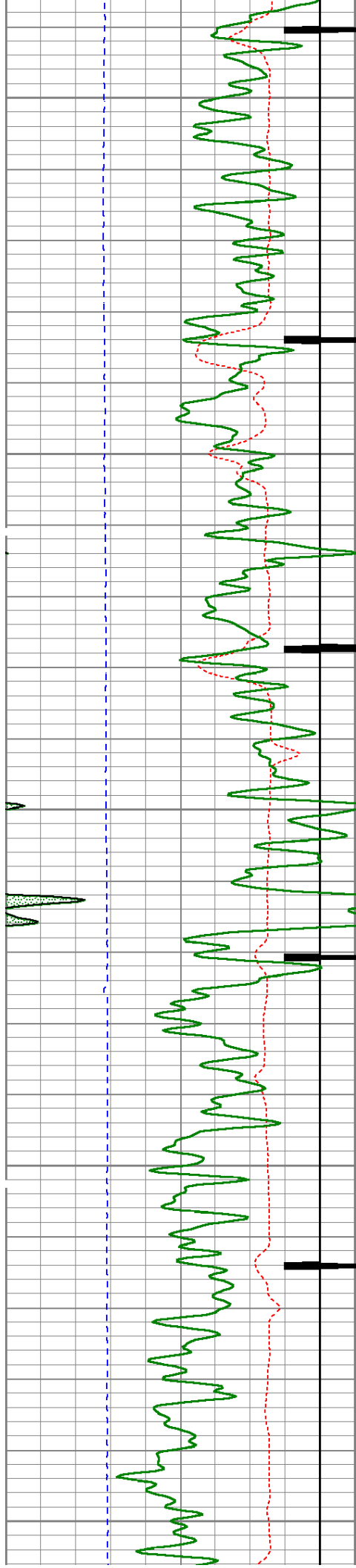
2850

2900

2950

3000





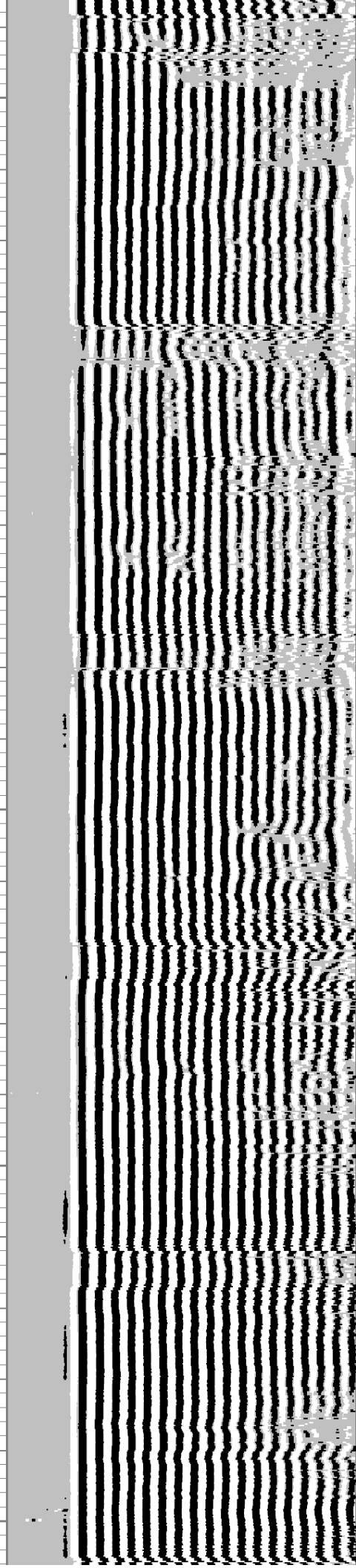
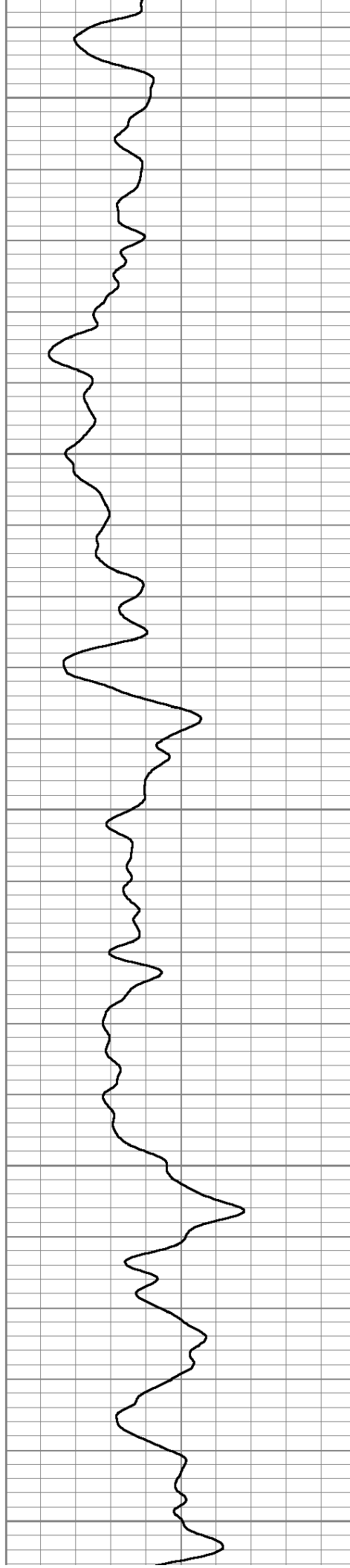
3050

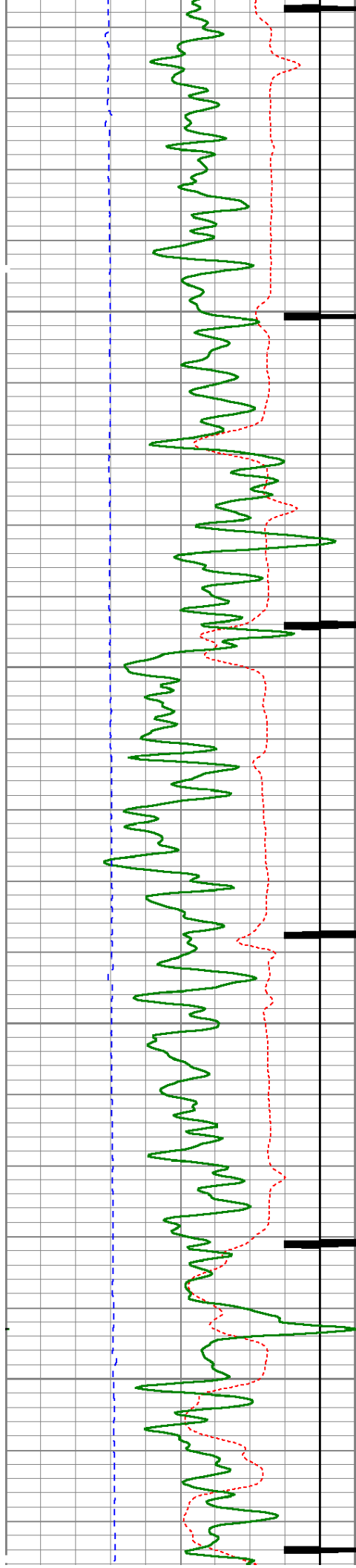
3100

3150

3200

3250



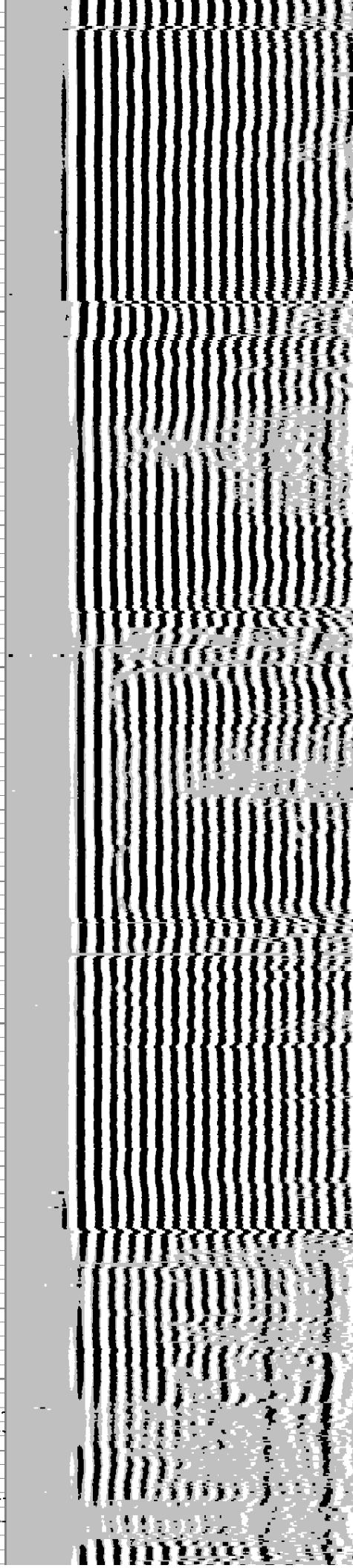
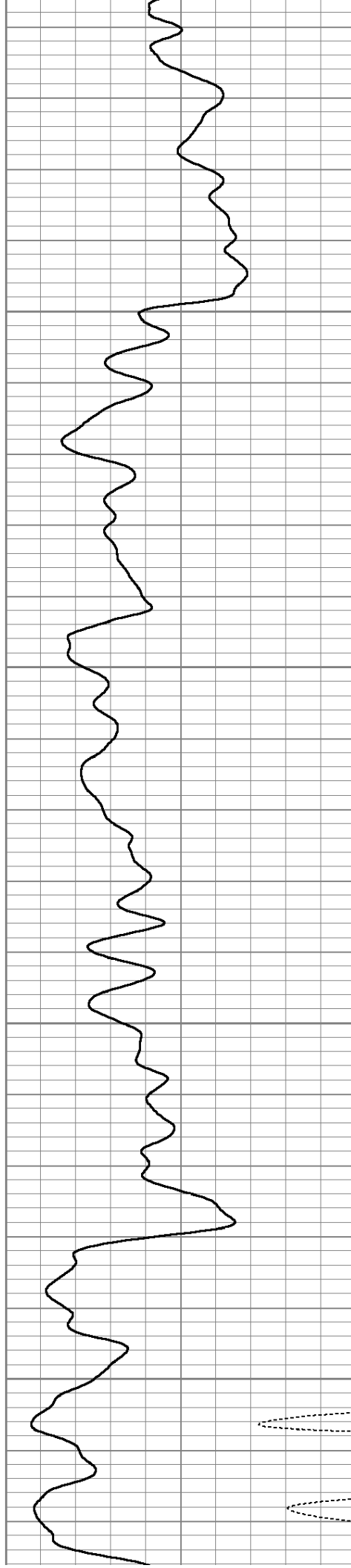


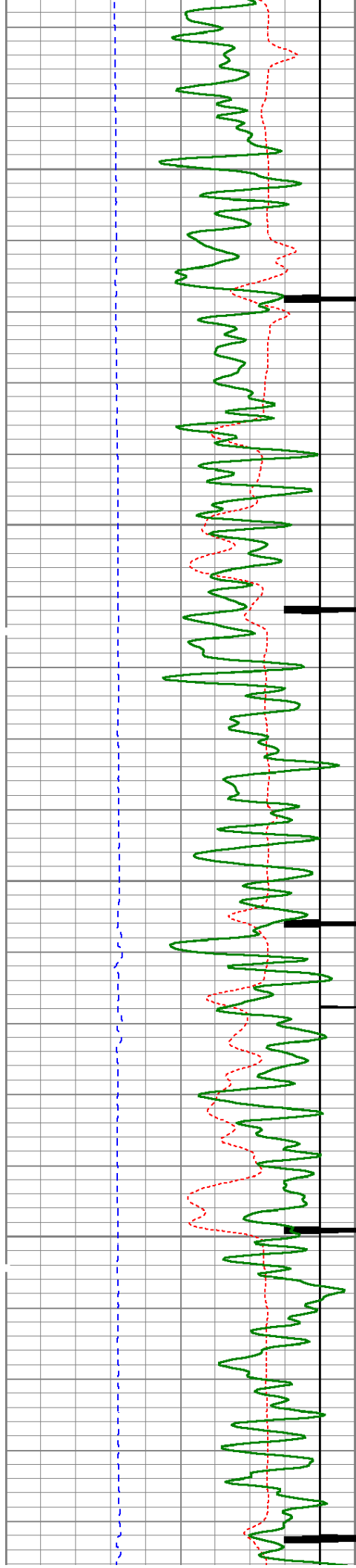
3300

3350

3400

3450



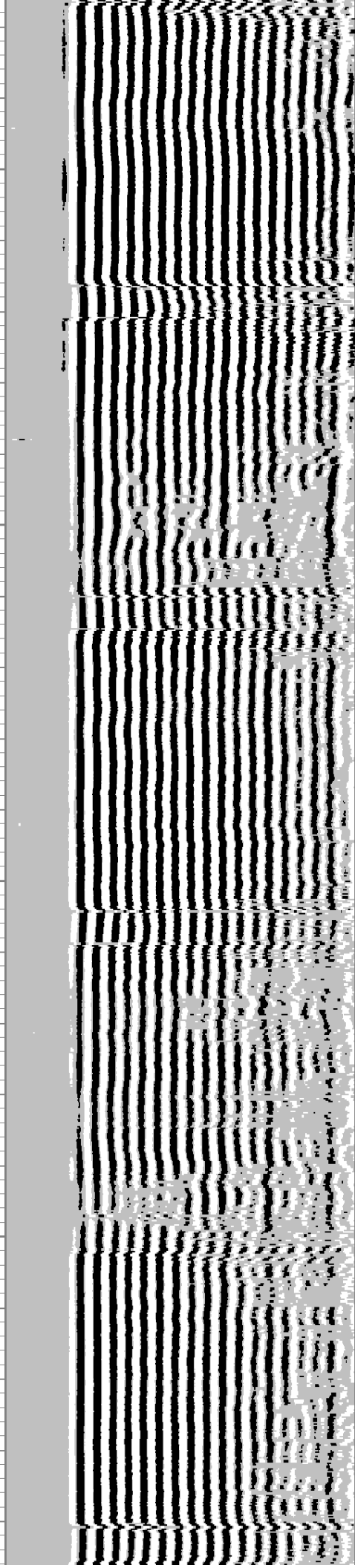
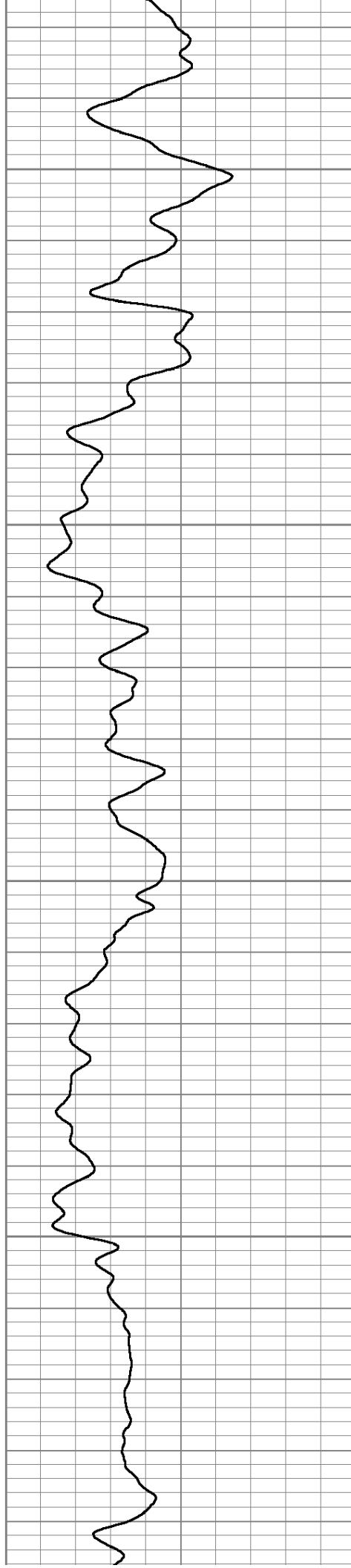


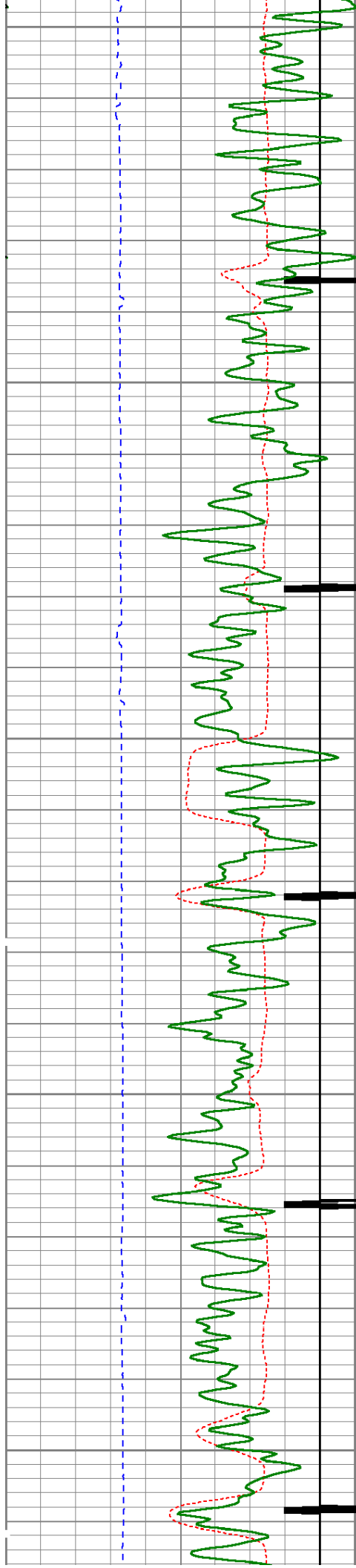
3500

3550

3600

3650





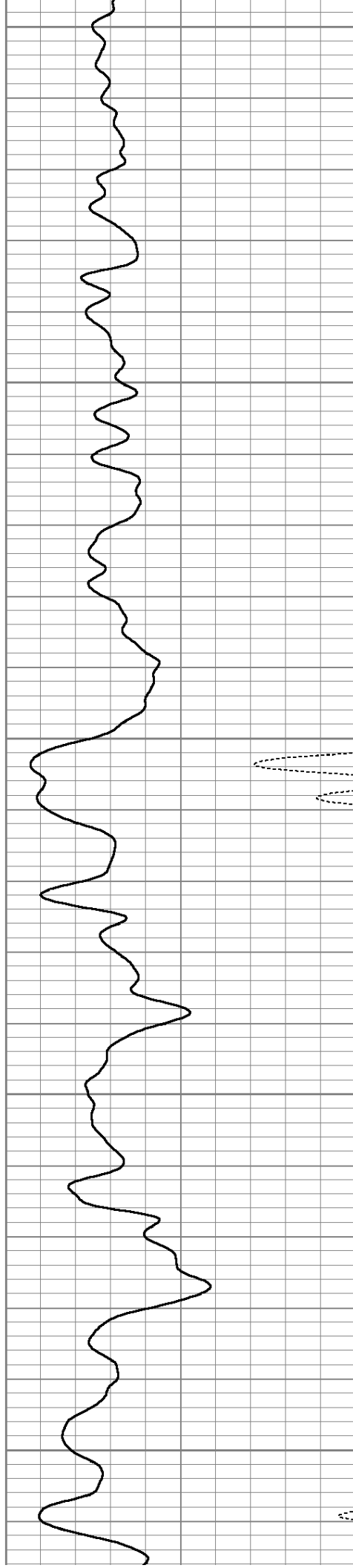
3700

3750

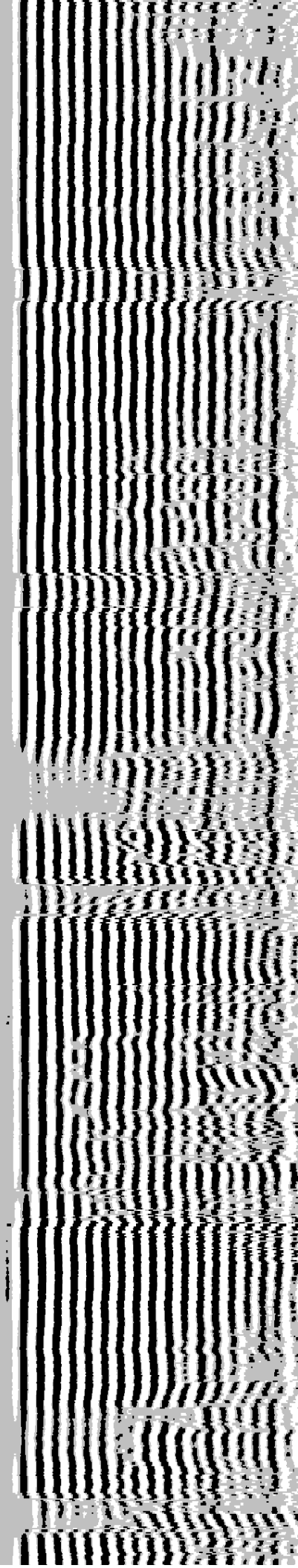
3800

3850

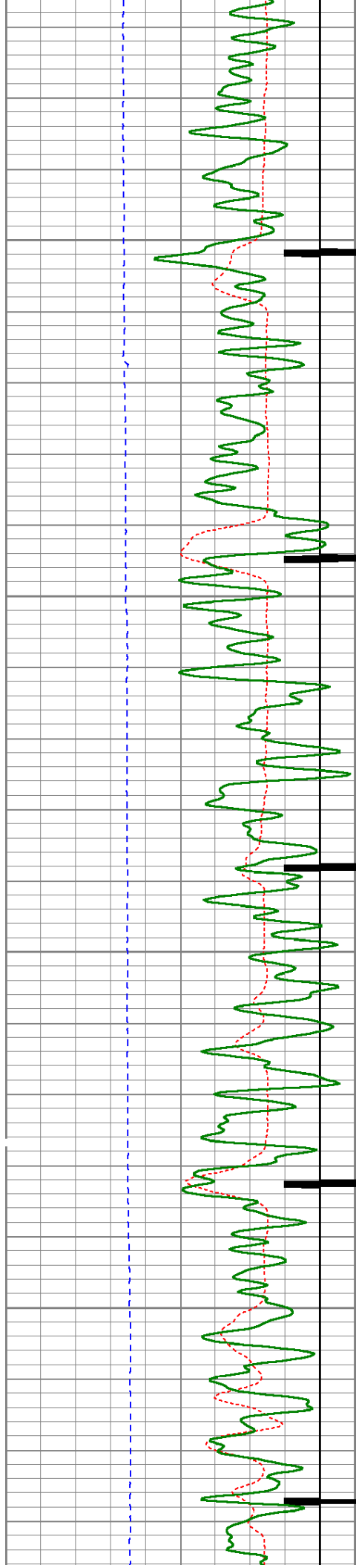
3900



A



A

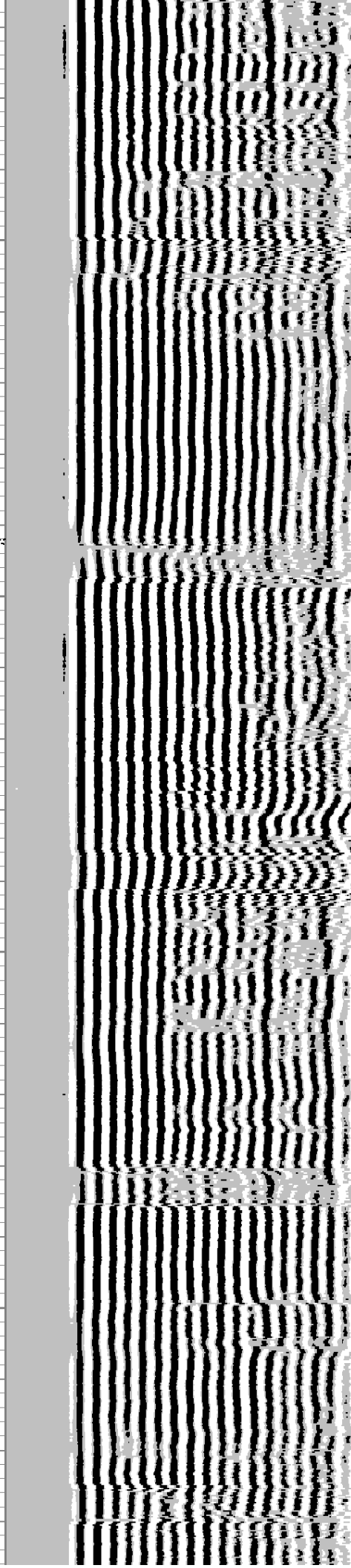
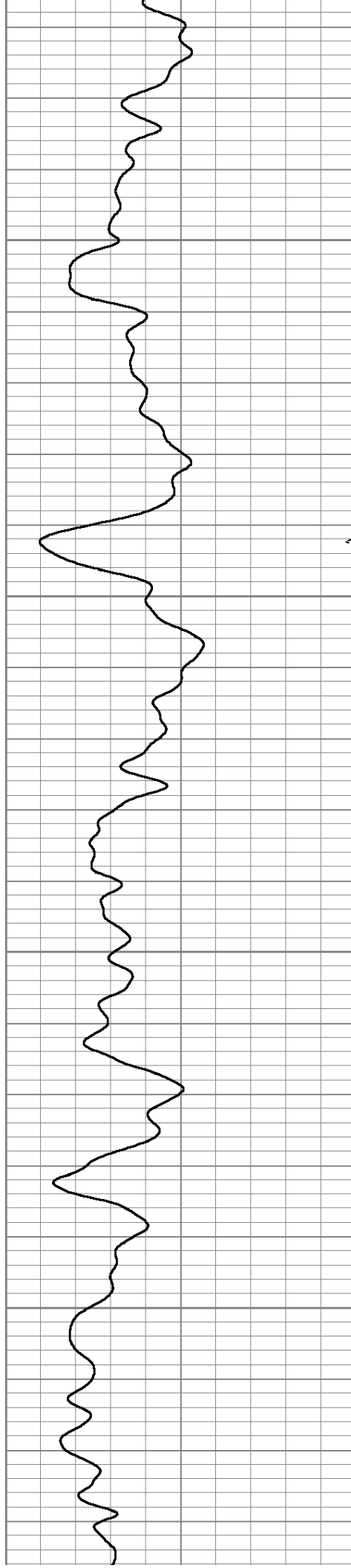


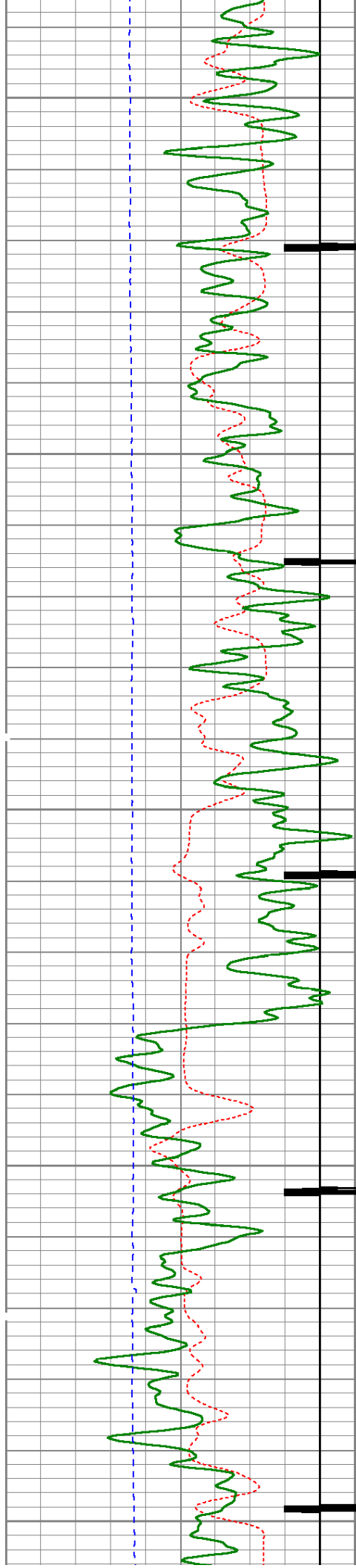
3950

4000

4050

4100





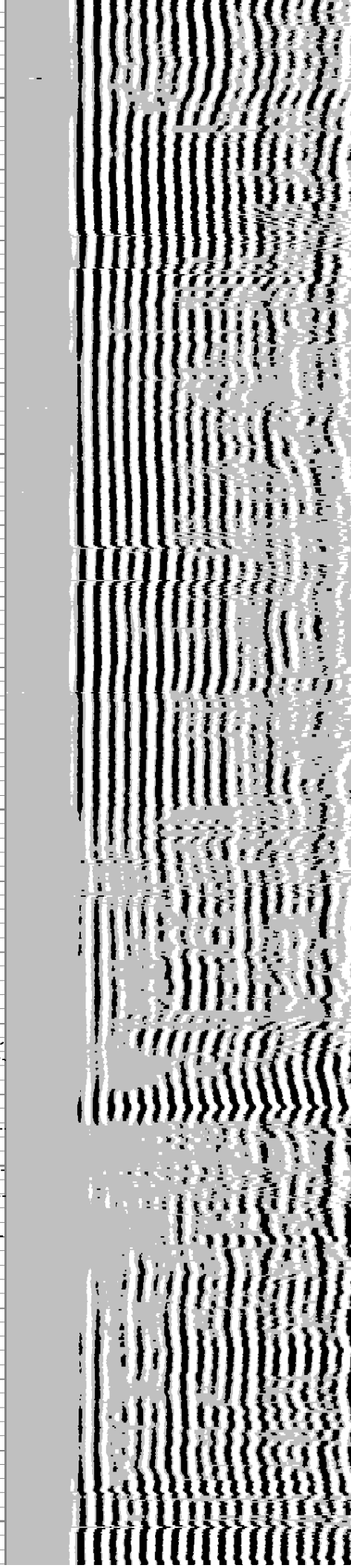
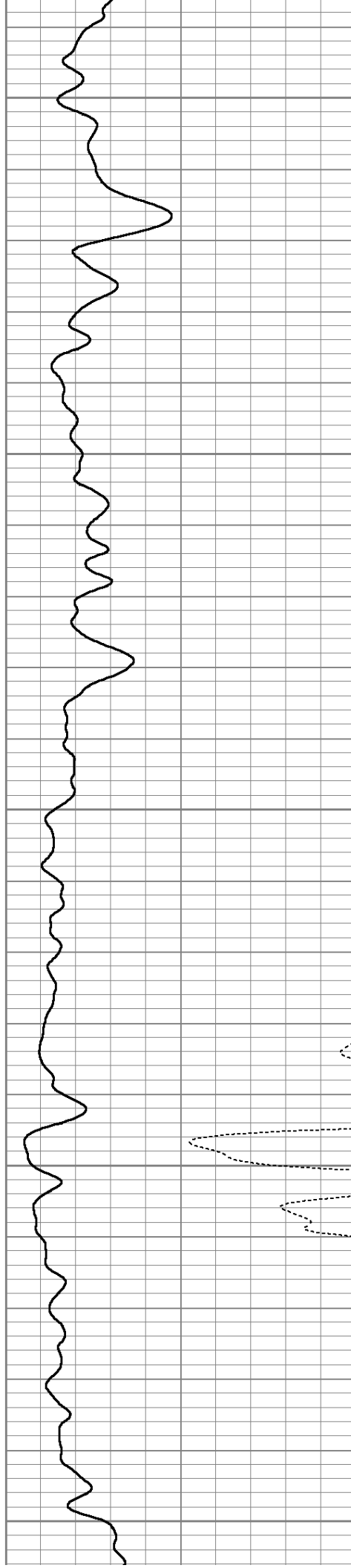
4150

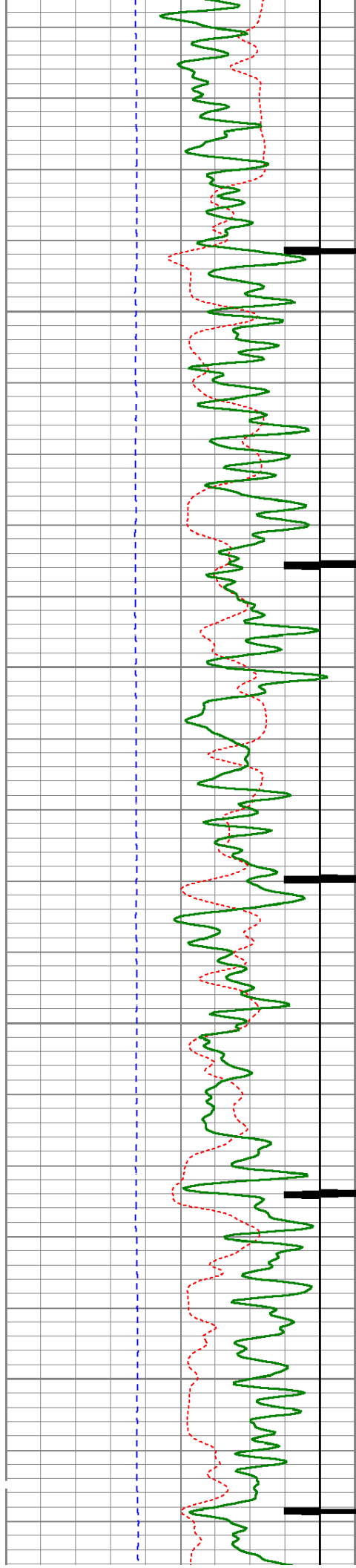
4200

4250

4300

4350



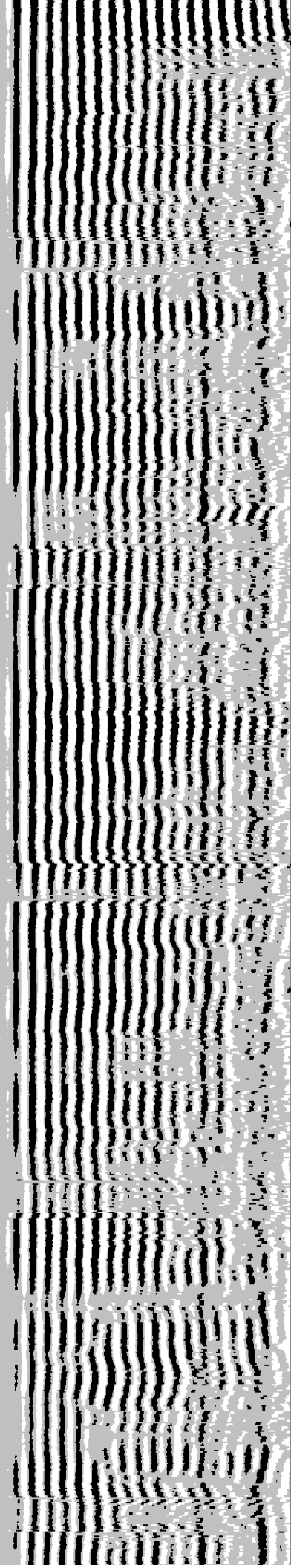
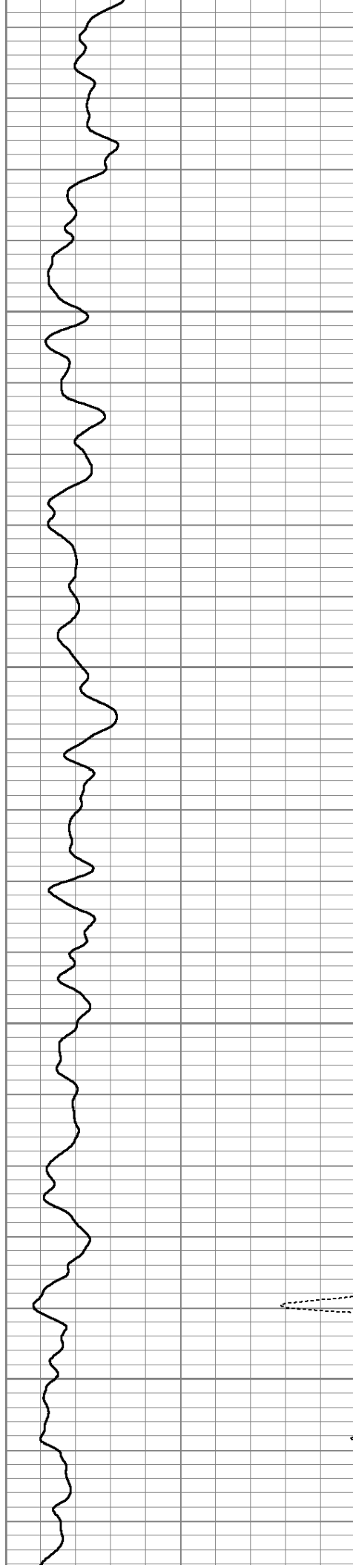


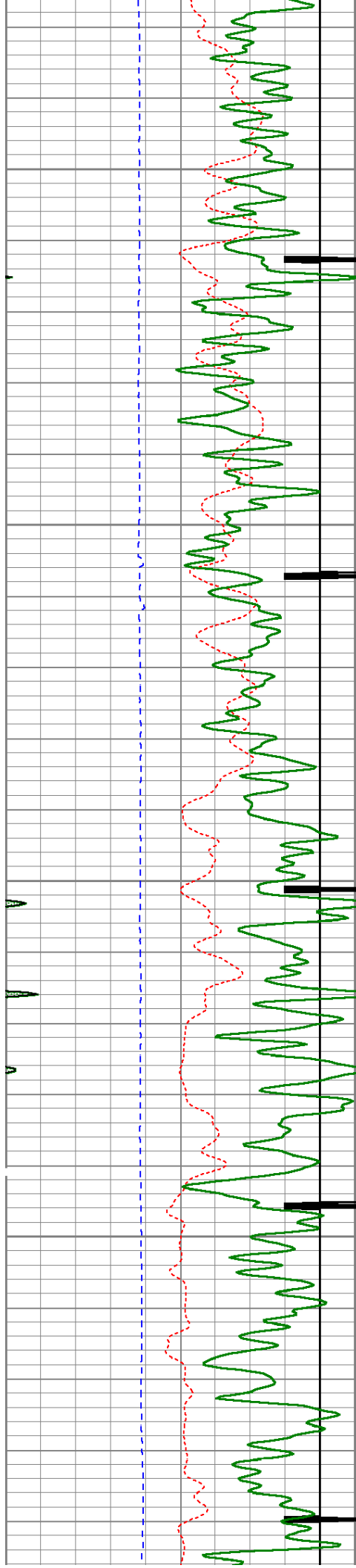
4400

4450

4500

4550



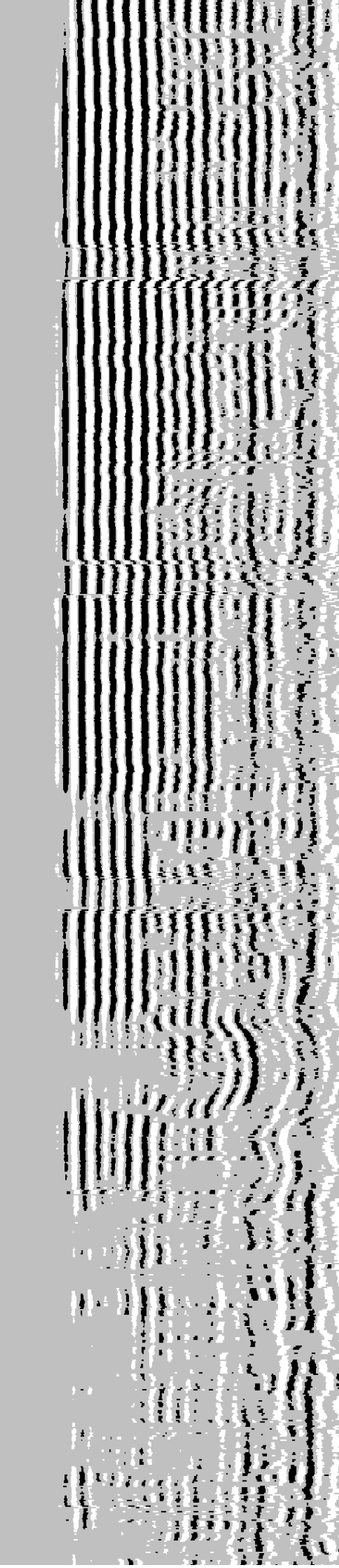
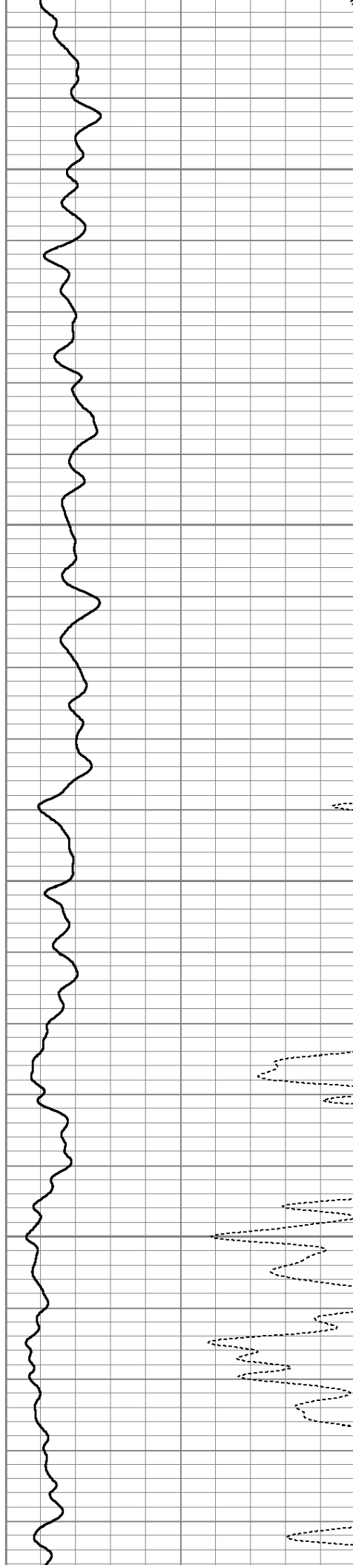


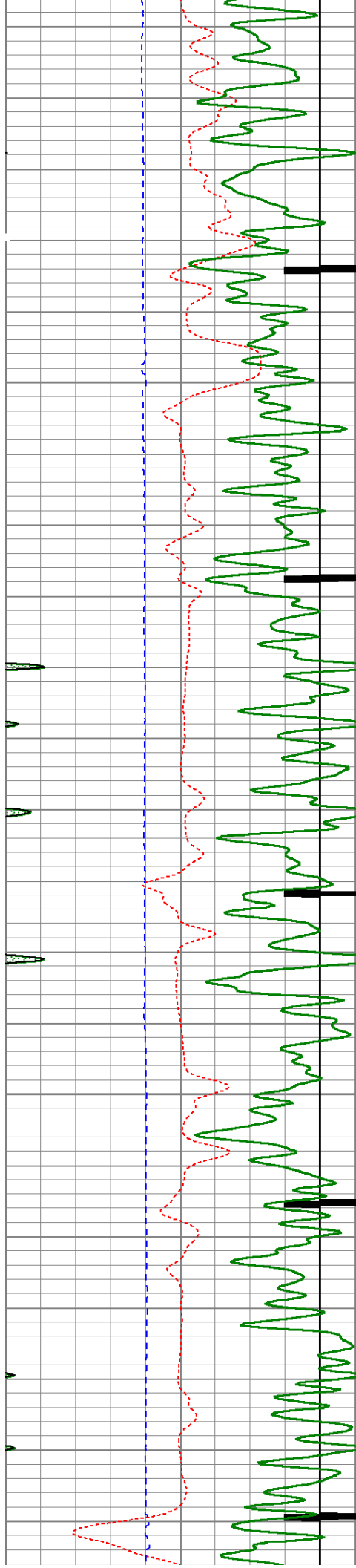
4600

4650

4700

4750





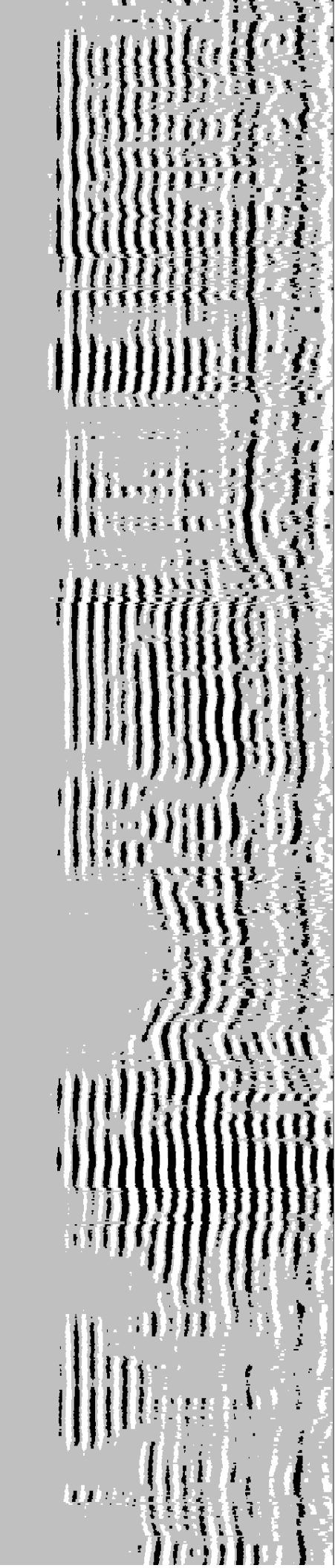
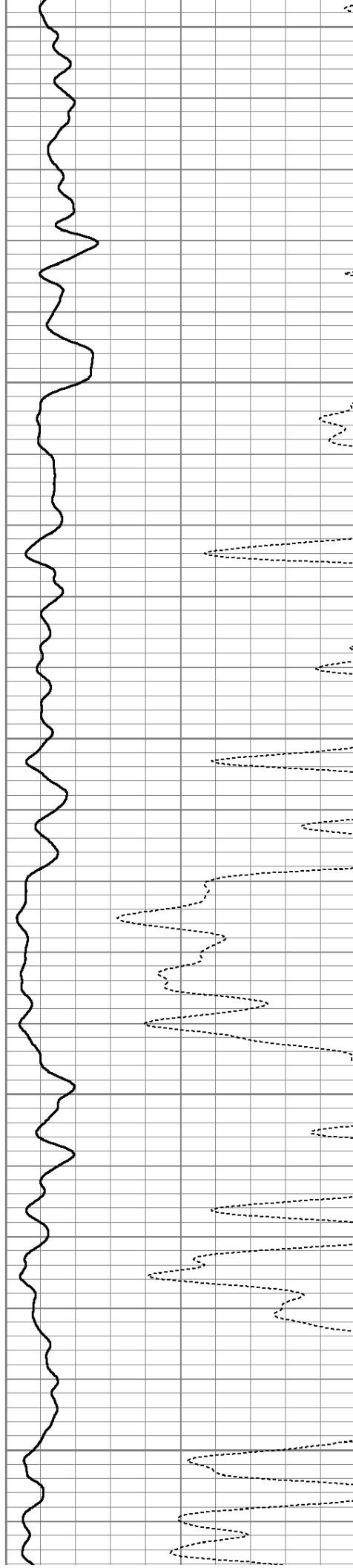
4800

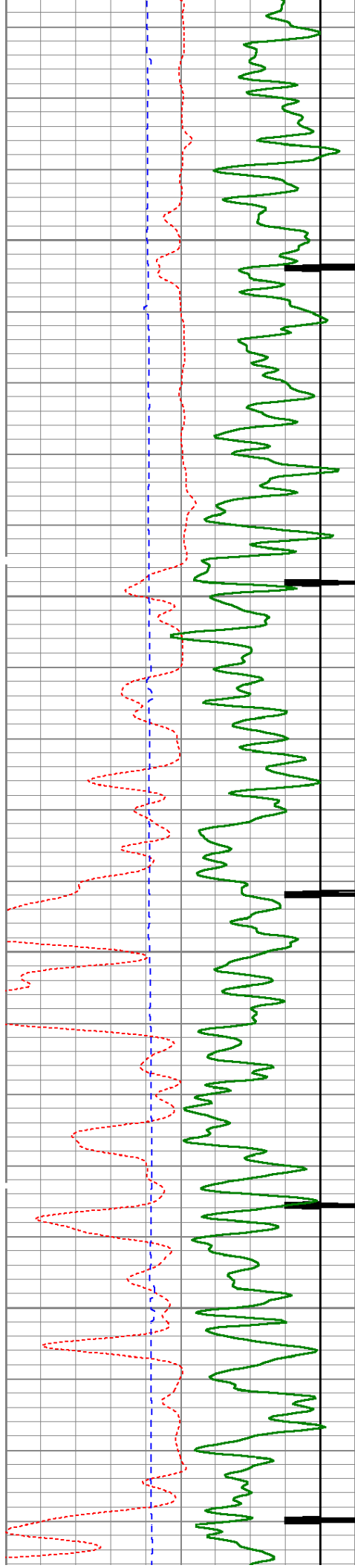
4850

4900

4950

5000



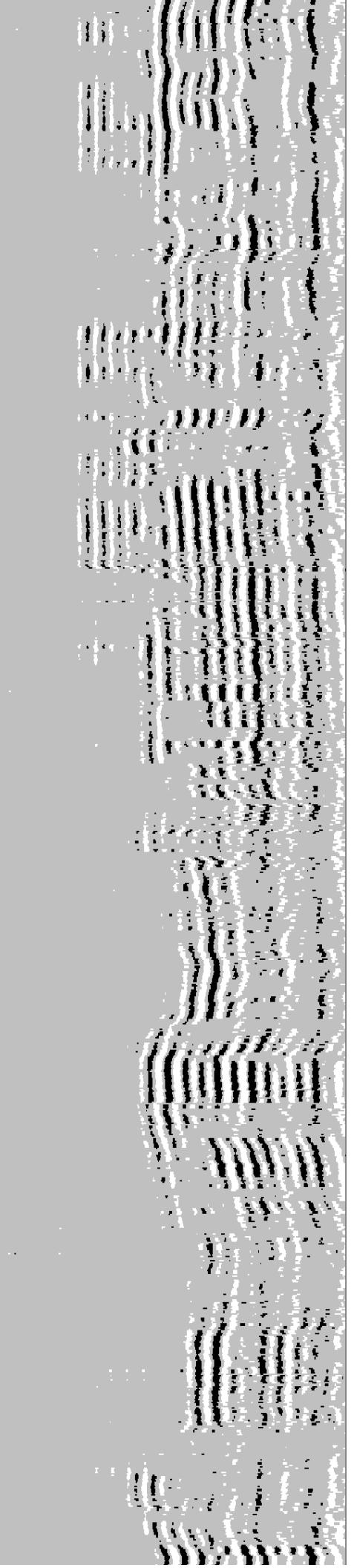
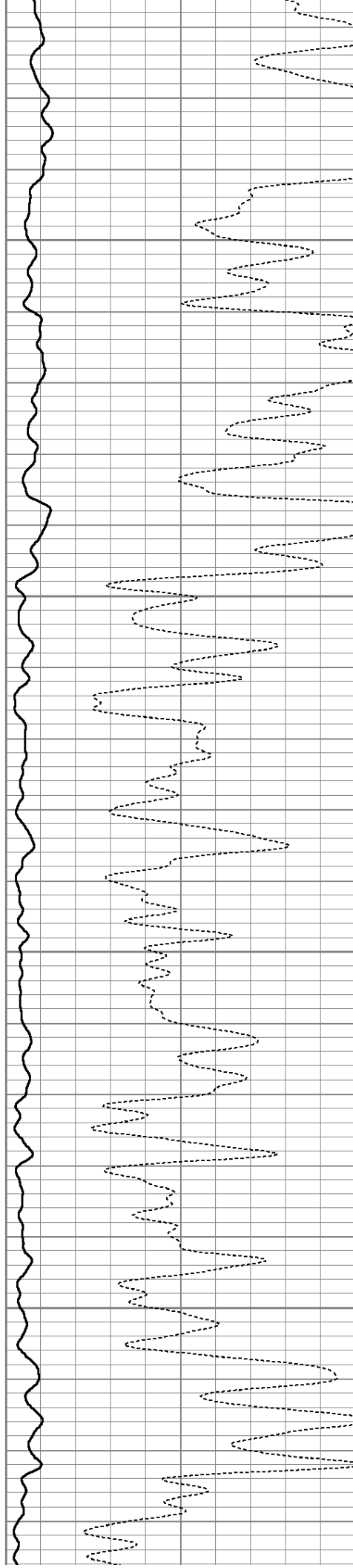


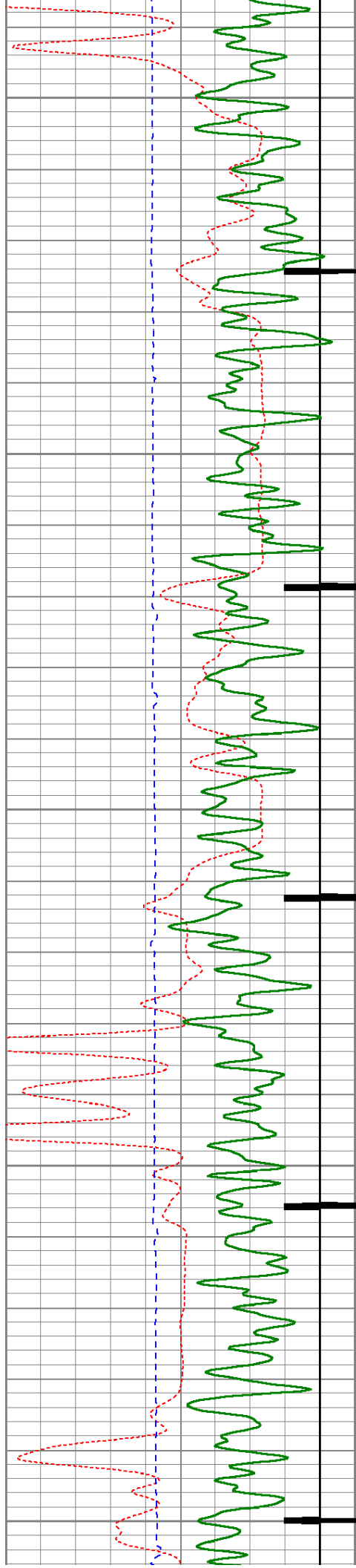
5050

5100

5150

5200





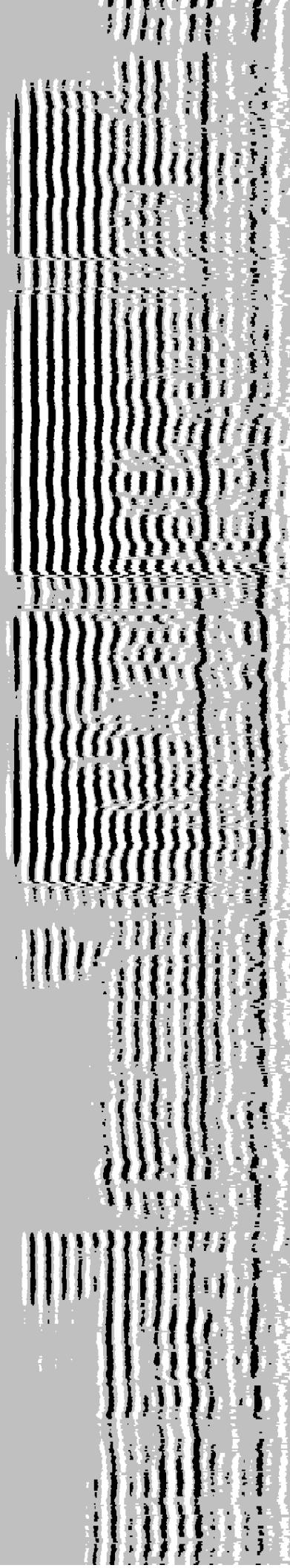
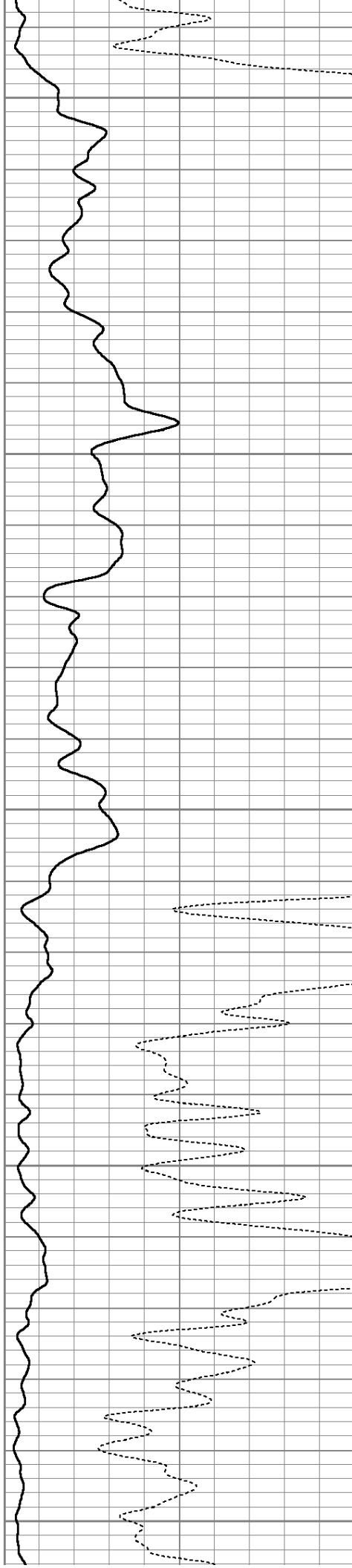
5250

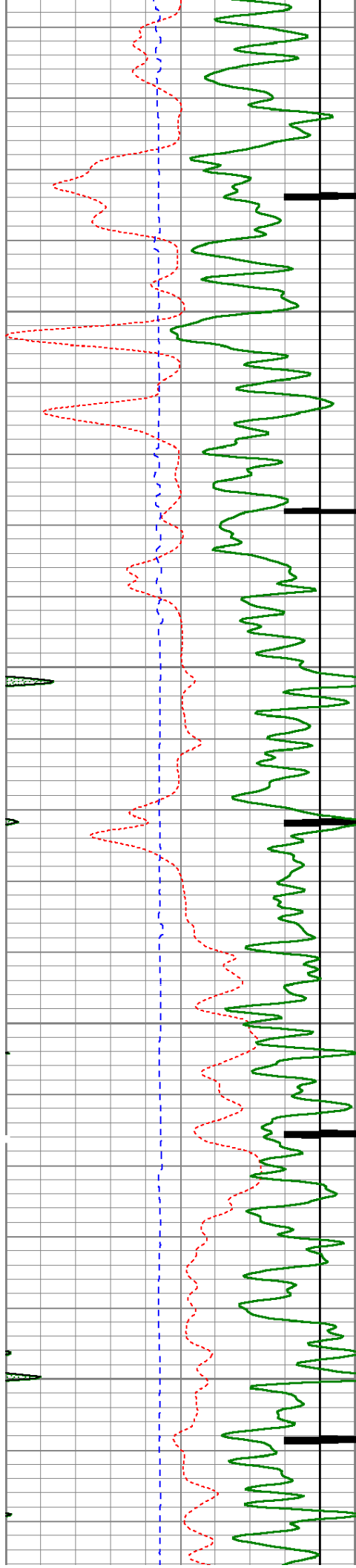
5300

5350

5400

5450



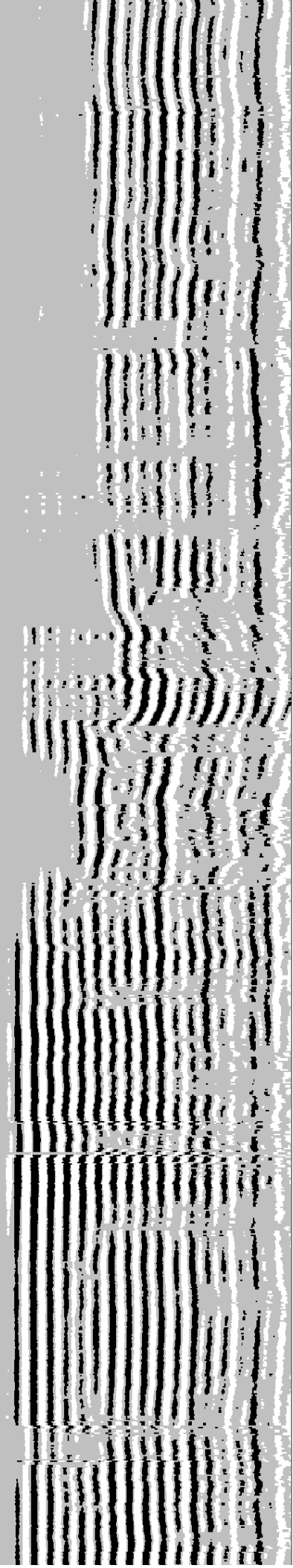
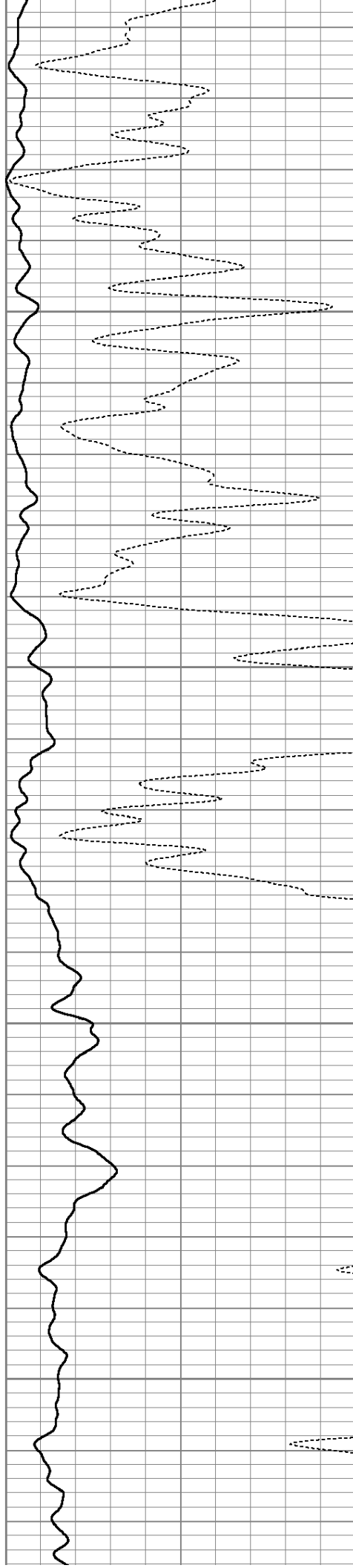


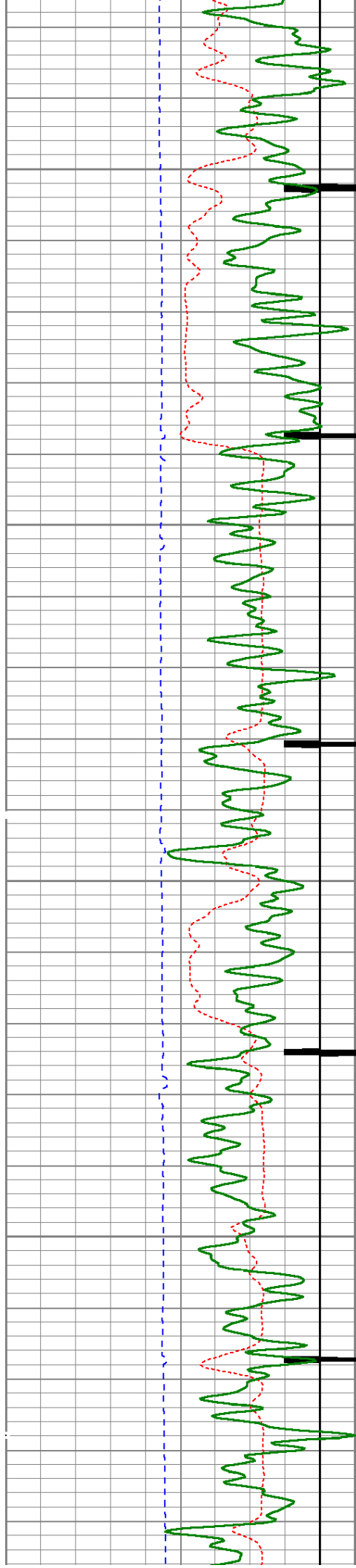
5500

5550

5600

5650



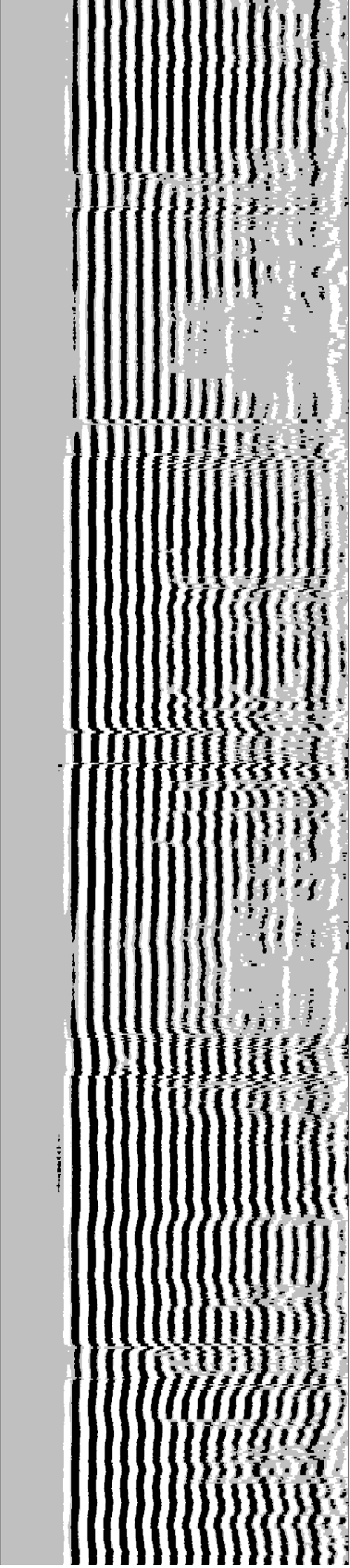
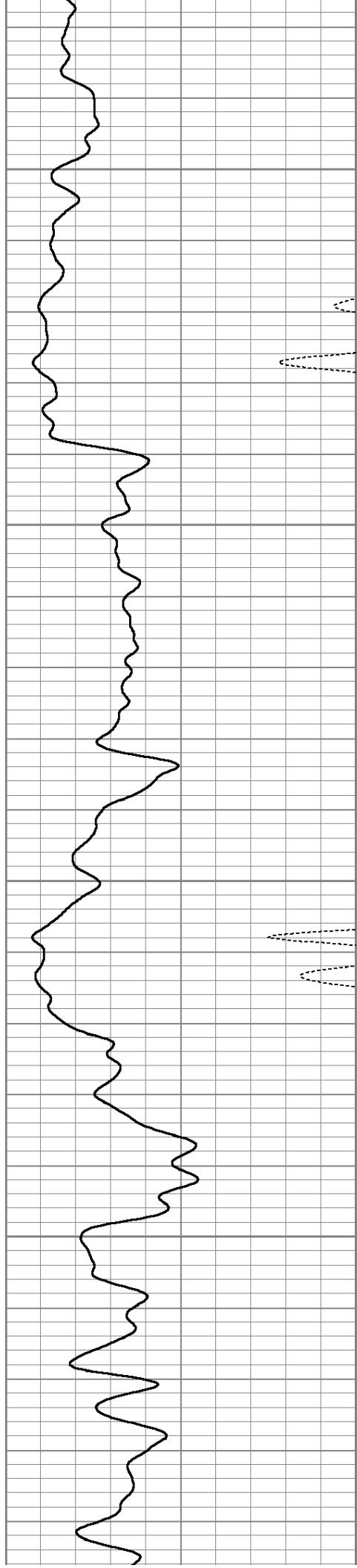


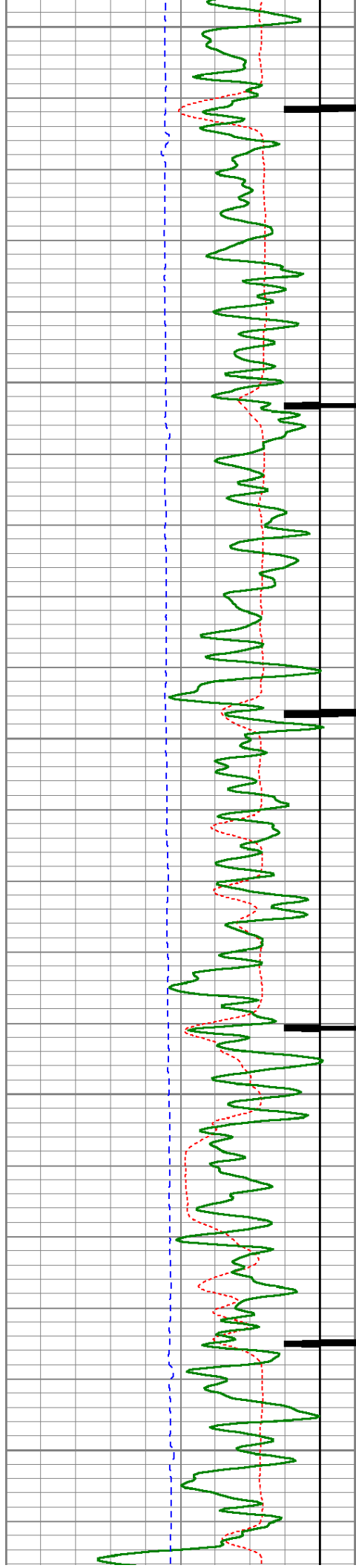
5700

5750

5800

5850





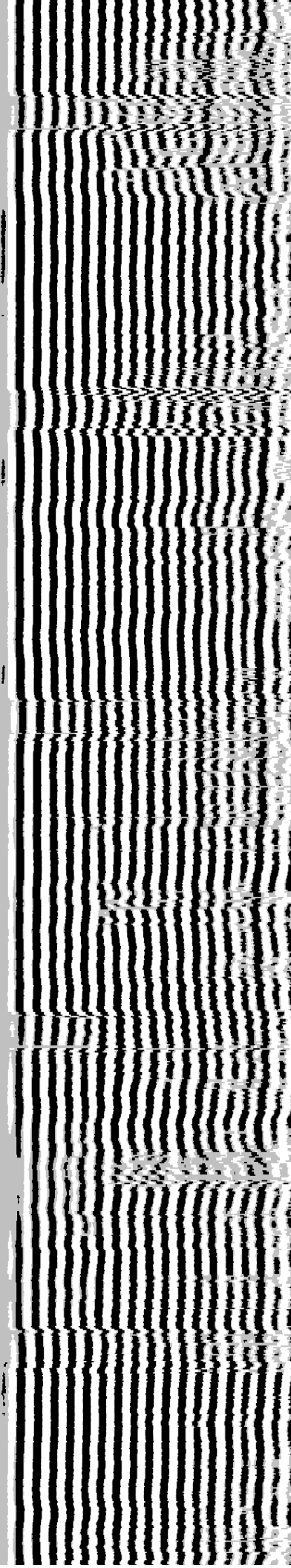
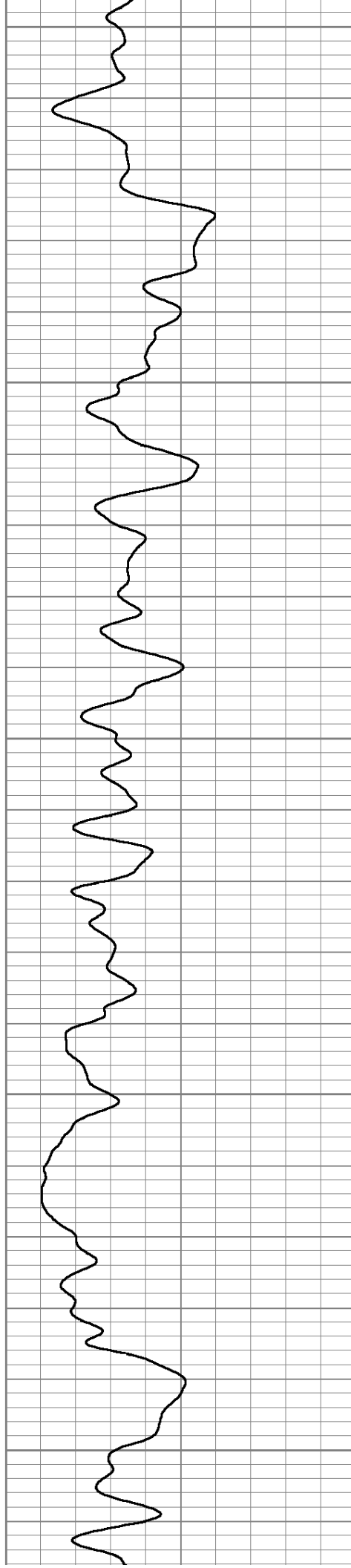
5900

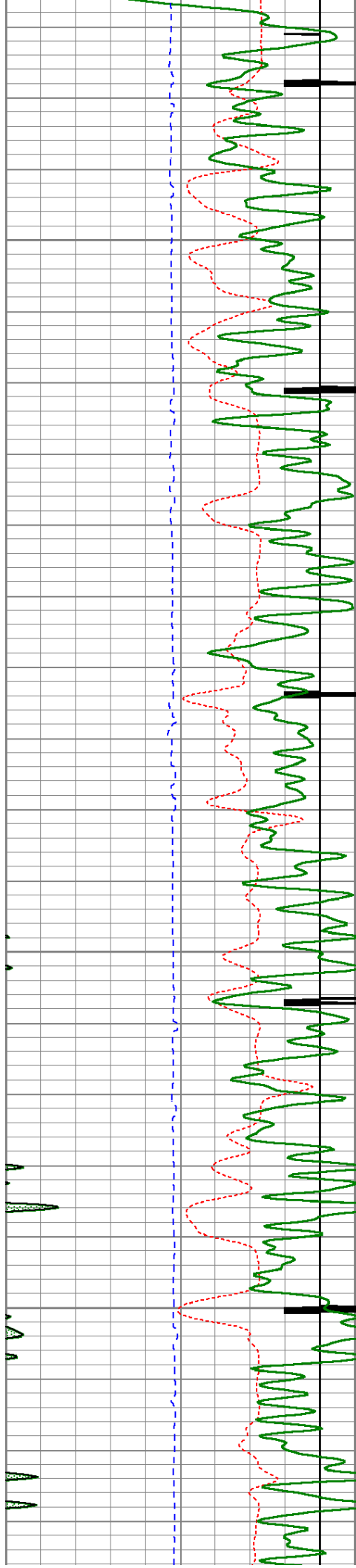
5950

6000

6050

6100



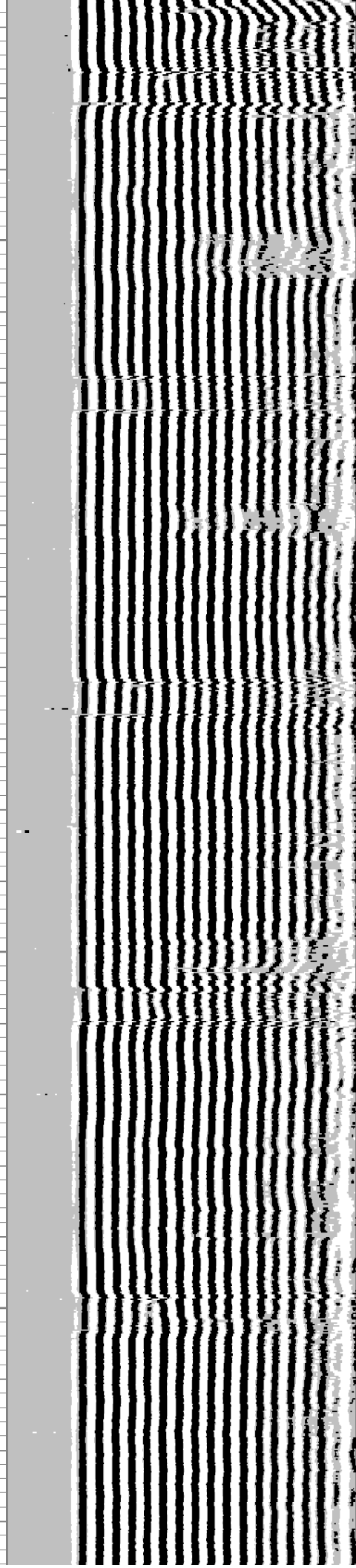
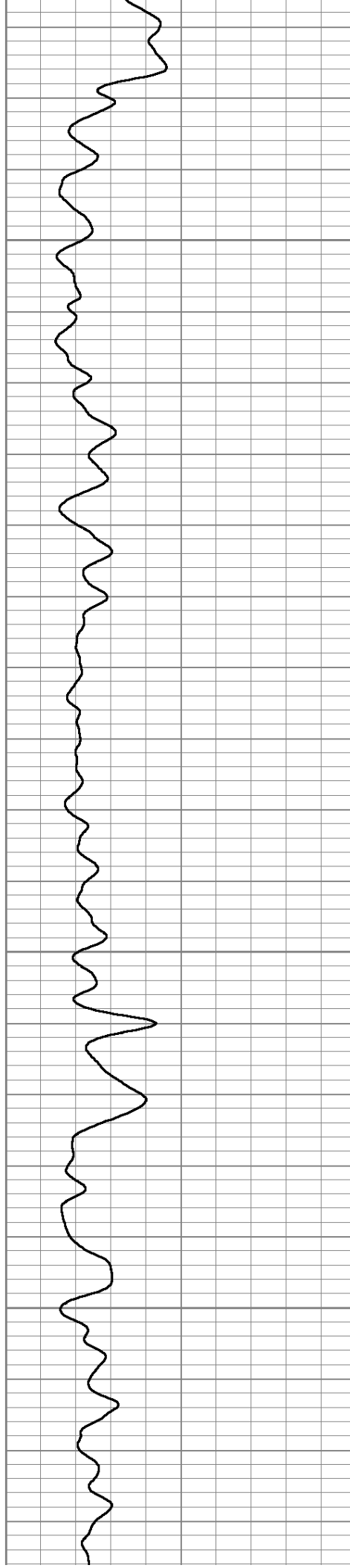


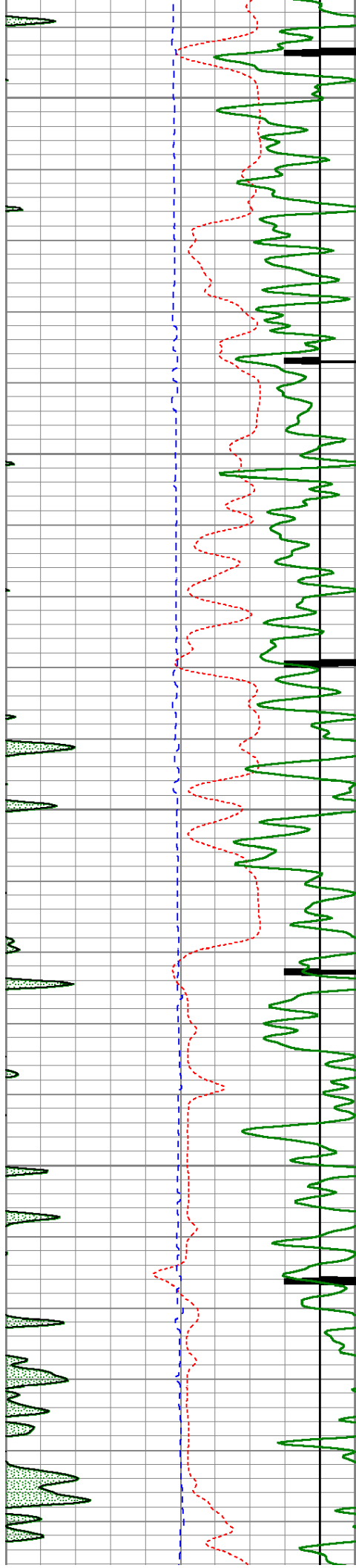
6150

6200

6250

6300





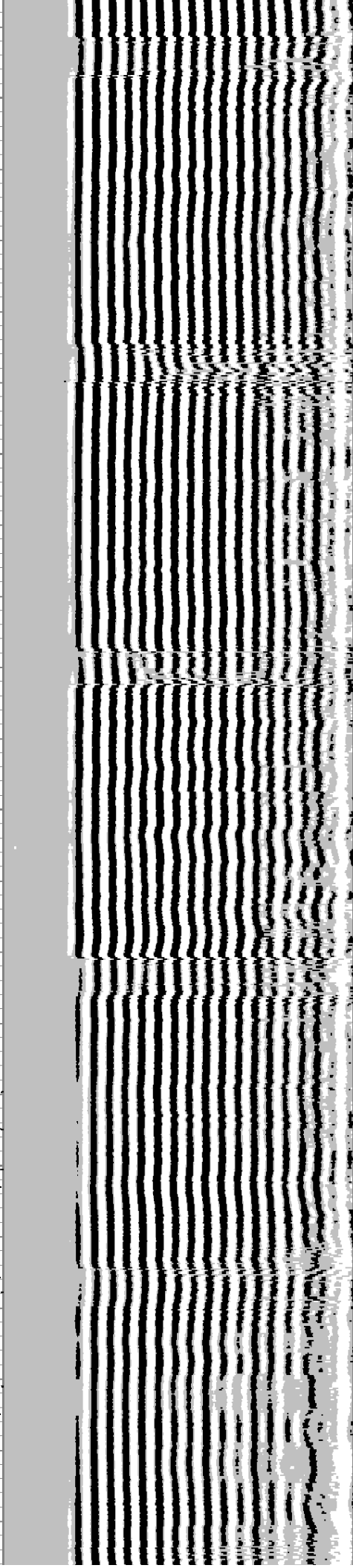
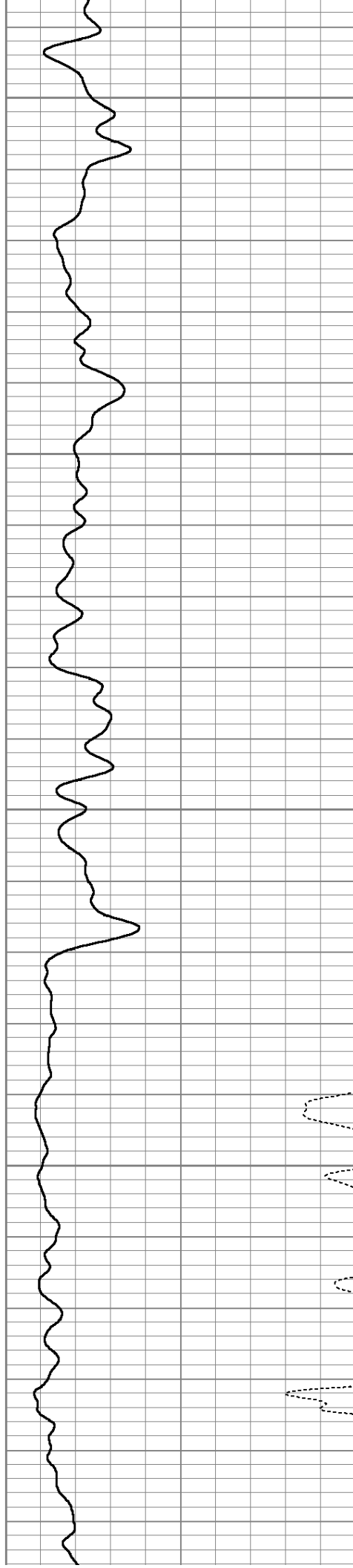
6350

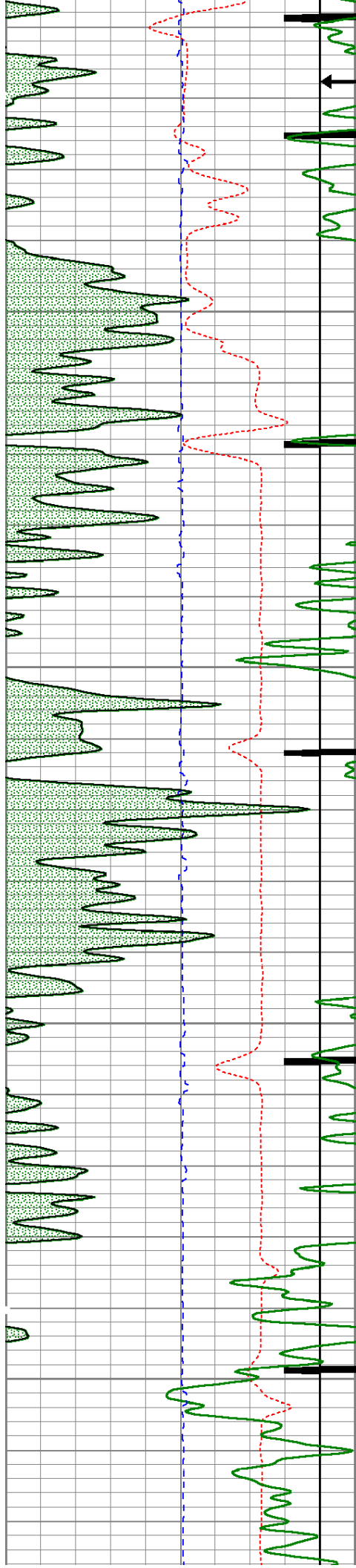
6400

6450

6500

6550





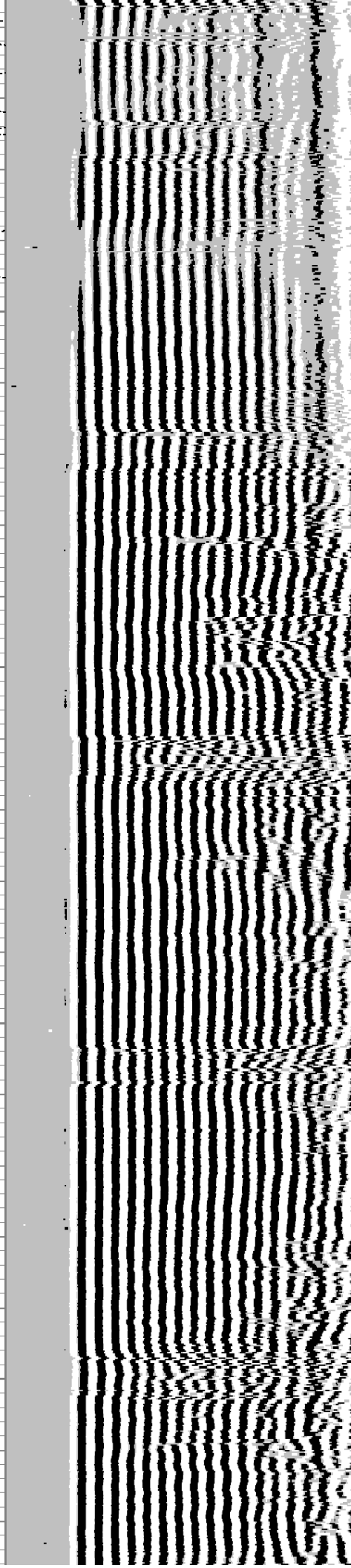
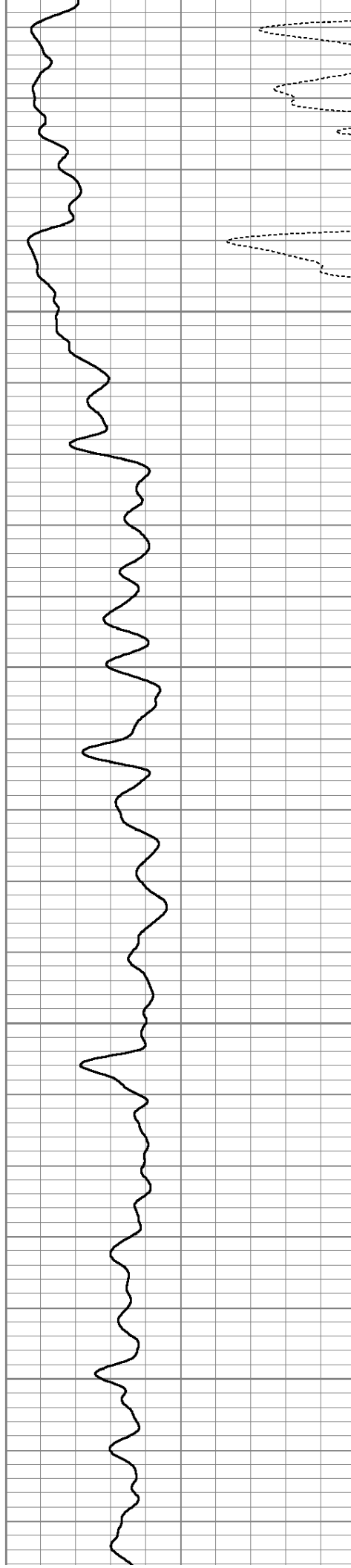
Short Joint

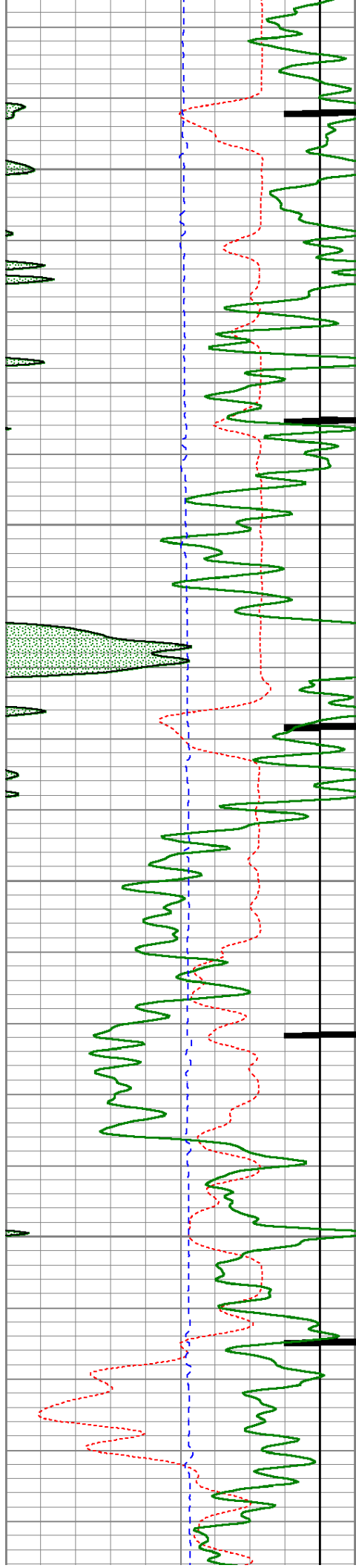
6600

6650

6700

6750



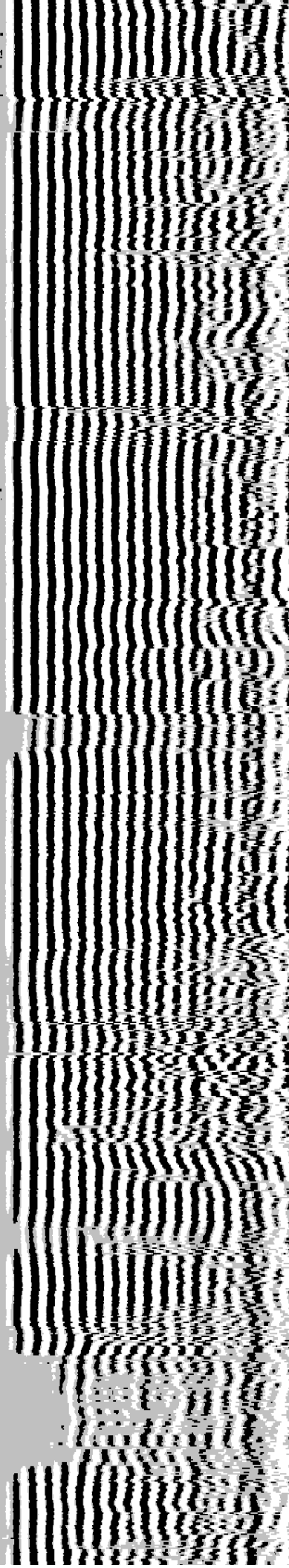
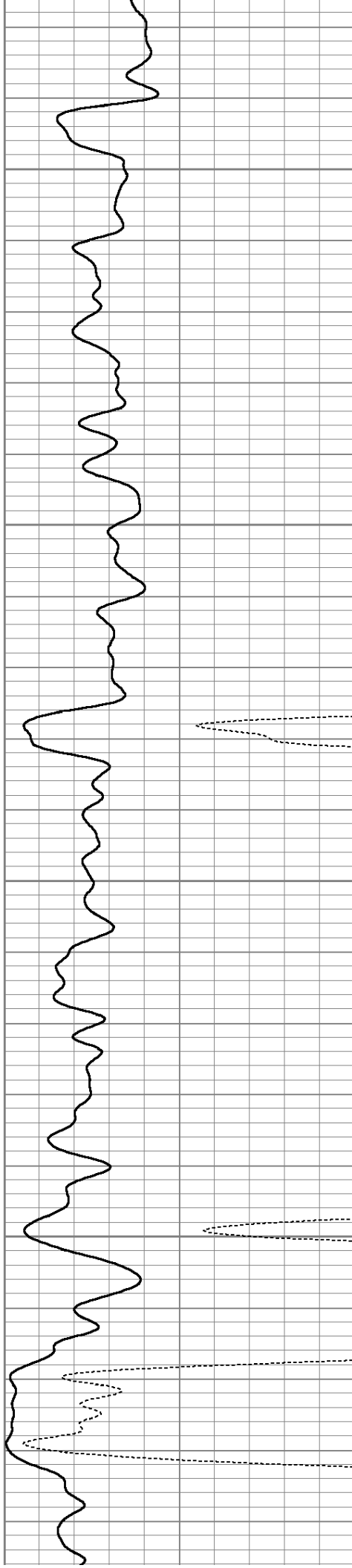


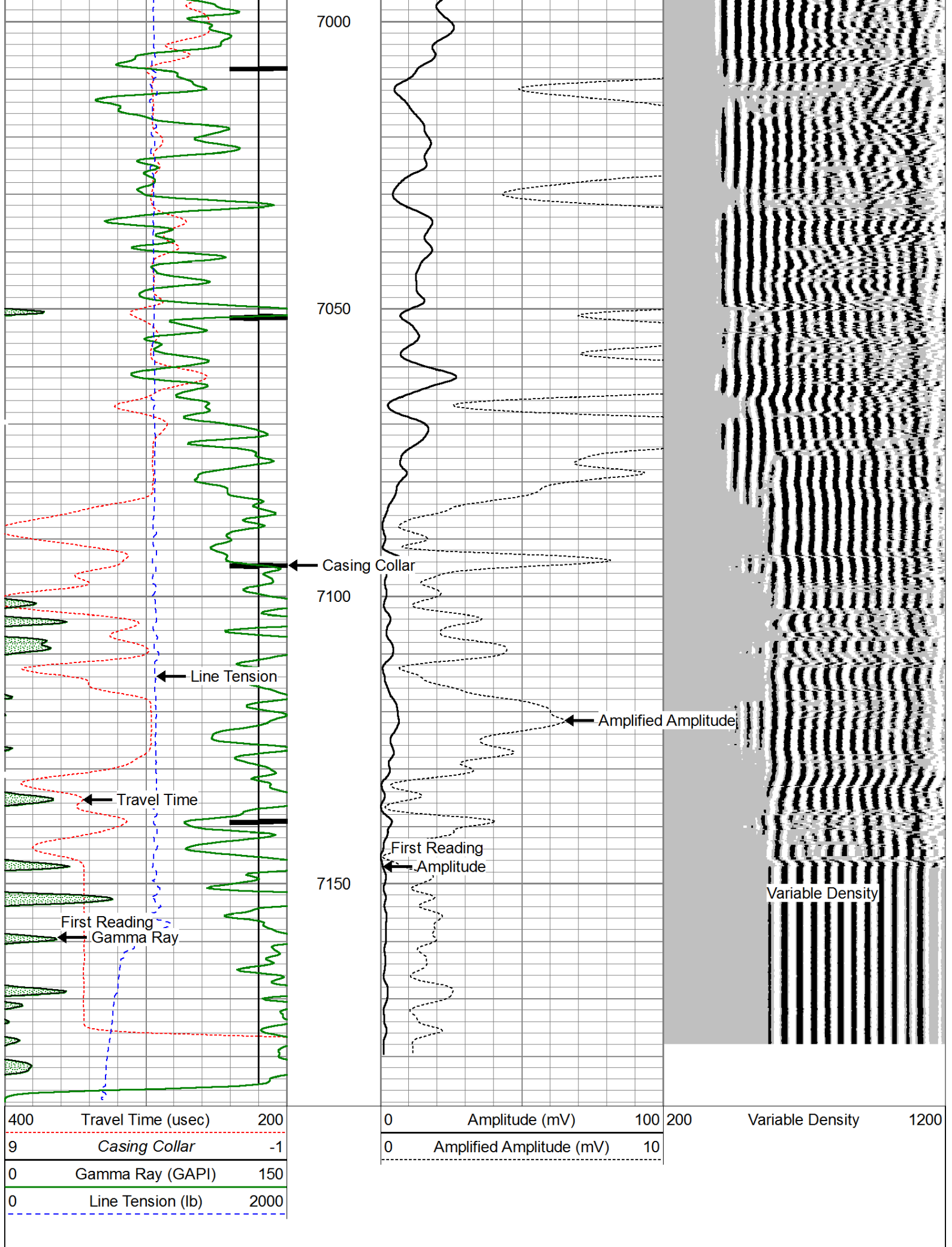
6800

6850

6900

6950

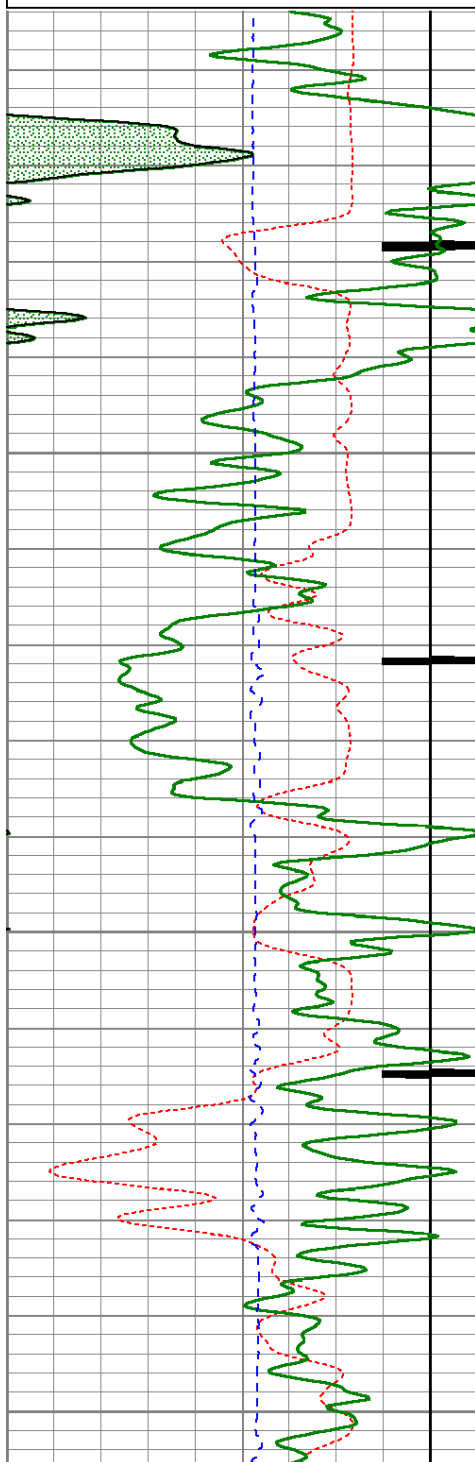




Database File: c:\warrior\data\bayswater\bayswater blehm 9-19_cbl.db
 Dataset Pathname: pass3
 Presentation Format: cblprobe
 Dataset Creation: Tue Feb 11 08:55:22 2014 by Log 0
 Charted by: Depth in Feet scaled 1:240

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

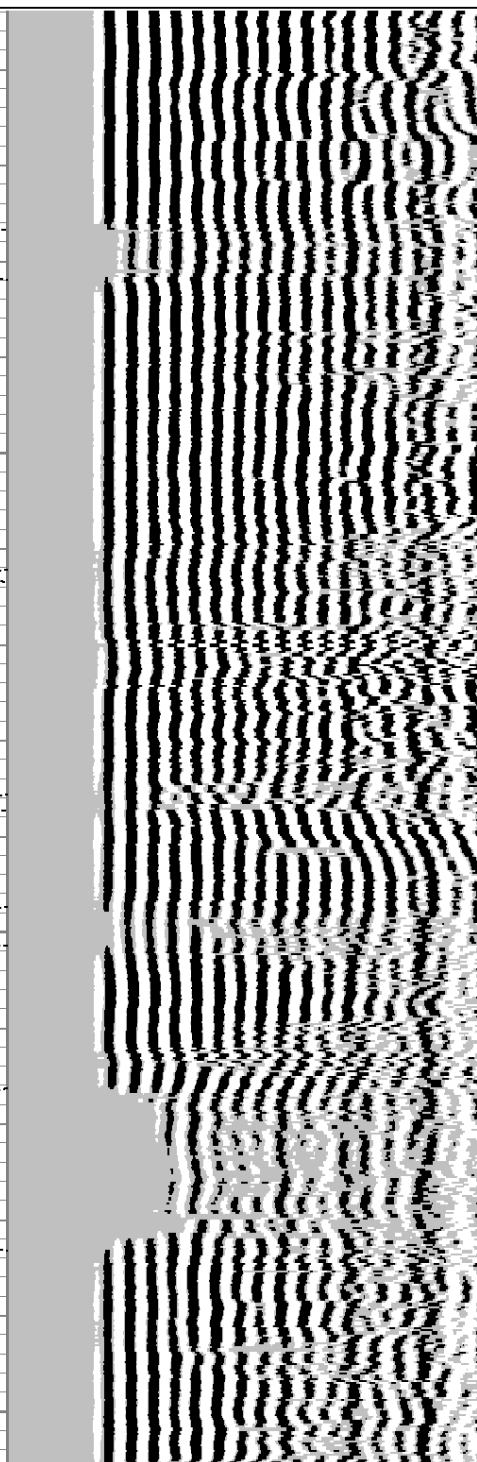
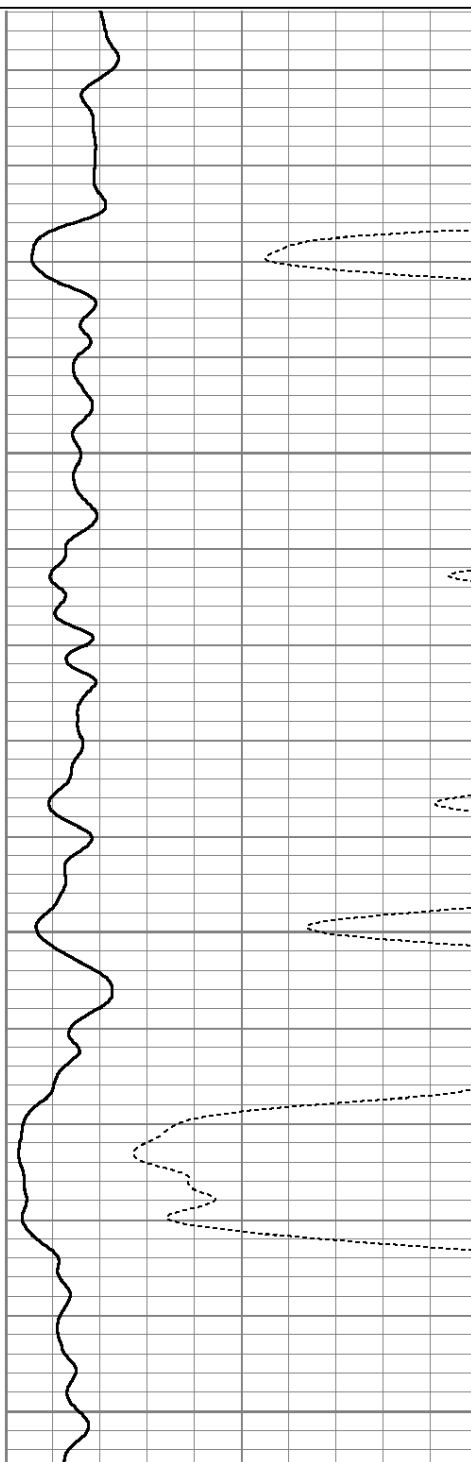
0	Amplitude (mV)	100	200	Variable Density	1200
0	Amplified Amplitude (mV)	10			

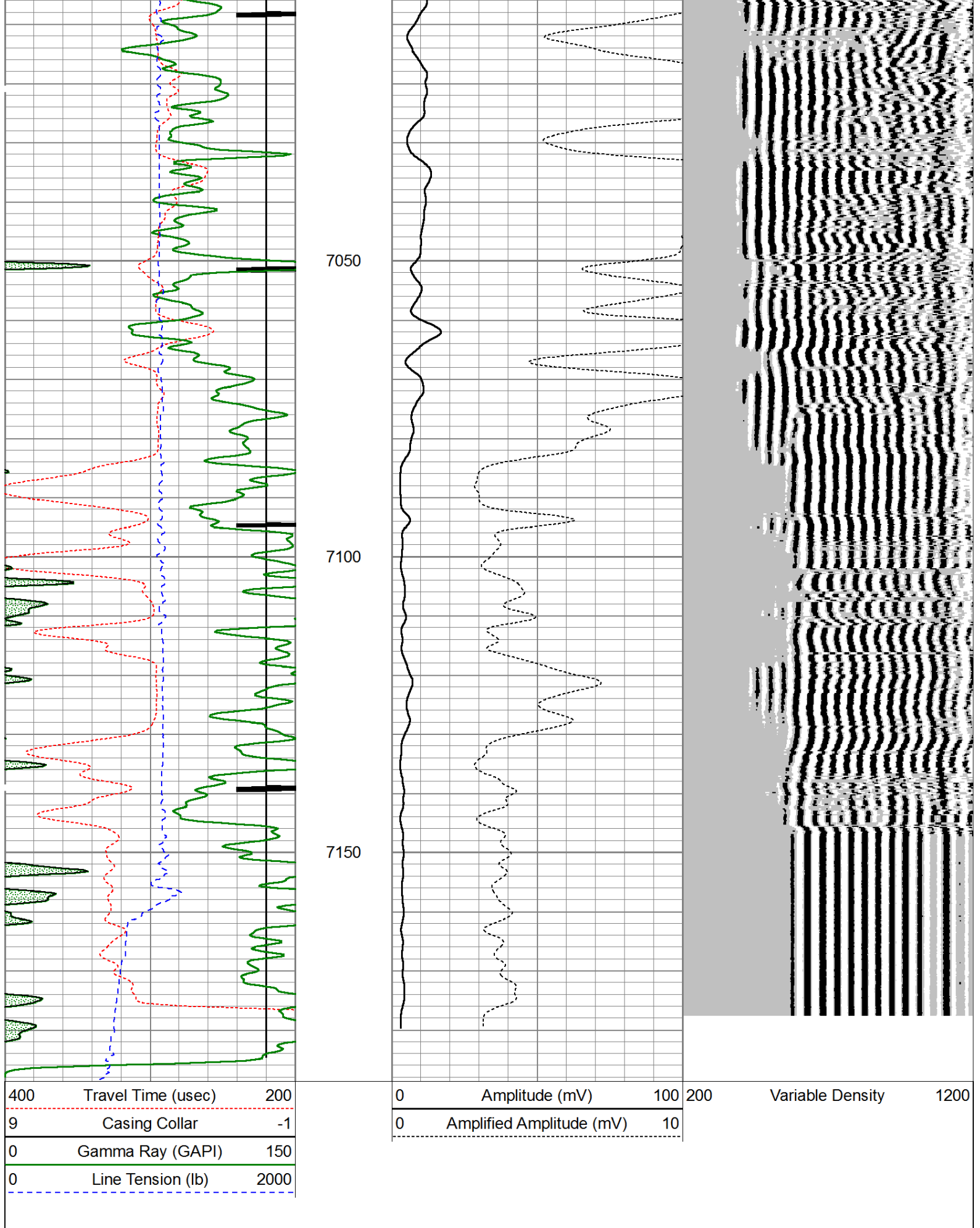


6900

6950

7000





Calibration Report

Database File: C:\Warrior\Data\Raywater\baywater_bldhm 9.19_ch1.dh

Gamma Ray Calibration Report

Serial Number: 111111
 Tool Model: Probe275
 Performed: Tue Feb 11 08:37:44 2014

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

Sensitivity: 0.8500 GAPI/cps

Temperature Calibration Report

Serial Number: 111111
 Tool Model: Probe275
 Performed: Sun Jun 13 13:33:21 1993

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

Segmented Cement Bond Log Calibration Report

Serial Number: 101224
 Tool Model: Probe

Calibration Casing Diameter: 4.500 in
 Calibration Depth: 2000.462 ft

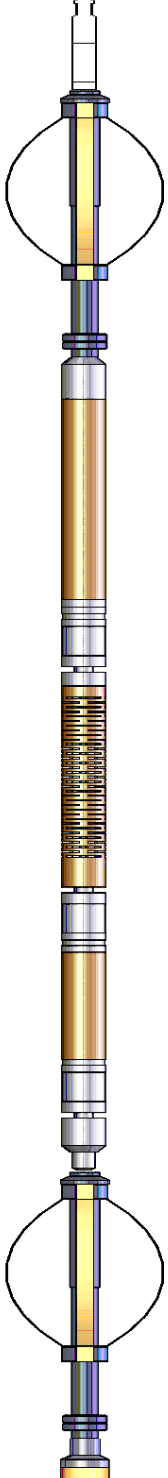
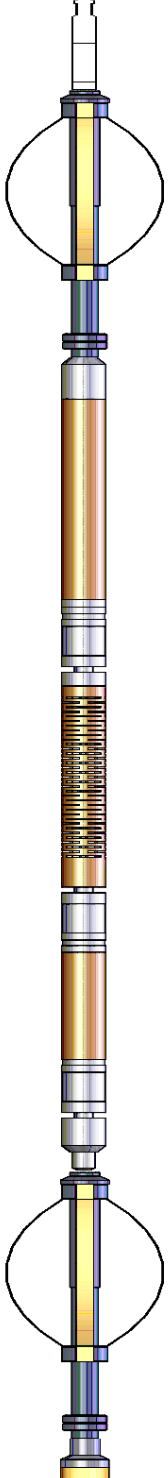
Master Calibration, performed Tue Feb 11 08:32:21 2014:

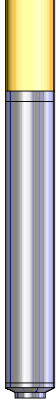
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.020	0.716	1.000	81.196	128.968	3.154
CAL	-0.016	0.836				
5'	-0.013	0.653	1.000	81.196	120.511	2.537
SUM						
S1	0.008	0.771	0.000	100.000	131.099	-1.040
S2	-0.025	0.708	0.000	100.000	136.304	3.444
S3	-0.019	0.723	0.000	100.000	134.783	2.558
S4	-0.021	0.729	0.000	100.000	133.427	2.766
S5	-0.021	0.722	0.000	100.000	134.622	2.777
S6	-0.021	0.713	0.000	100.000	136.265	2.808
S7	-0.020	0.711	0.000	100.000	136.770	2.778
S8	-0.021	0.715	0.000	100.000	135.953	2.793

Internal Reference Calibration, performed Mon Oct 10 09:42:03 2005:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.016	0.836	1.000	0.000

	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	11.84		RBT-Probe (101224) Probe Radii Bond Tool with Digital Telemetry	8.75	2.75	90.00
WVFCAL	11.84					
WVFS1	11.84					
WVFS2	11.84					
WVFS3	11.84					
WVFS4	11.84					
WVFS5	11.84					
WVFS6	11.84					
WVFS7	11.84					
WVFS8	11.84					
WVF5FT	10.84					
			Probe275 2.75" Centralizer	2.88	2.75	20.00

CCL	3.88		4.78	2.75	57.00
TEMP	3.00				
GR	2.54				
Dataset: bayswater blehm 9-19_cbl.db: field/well/run1/pass5.1 Total Length: 20.28 ft Total Weight: 197.00 lb O.D. 2.75 in					