



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

Company	Bonanza Creek Energy	Company	Bonanza Creek Energy
Well	Pronghorn 21-24-17HNB	Well	Pronghorn 21-24-17HNB
Field	Wattenberg	Field	Wattenberg
County	Weld	County	Weld
State	Colorado	State	Colorado
Location:		API # : 05-123-39393	Other Services NONE
SEC 17 TWP 5N RGE 62W			
Permanent Datum	Ground Level	Elevation	4592'
Log Measured From	Kelly Bushing 16' APD		
Drilling Measured From	Kelly Bushing		
Elevation	K.B. 4608'		
	D.F. 4506'		
	G.L. 4592'		
Date	June 25, 2014		
Run Number	1		
Depth Driller	-		
Depth Logger	6303'		
Bottom Logged Interval	6291'		
Top Log Interval	Surface		
Open Hole Size	8.75		
Type Fluid	Fresh Water		
Density / Viscosity	8.33		
Max. Recorded Temp.	-		
Estimated Cement Top	Surface		
Time Well Ready	11:30		
Time Logger on Bottom	11:58		
Equipment Number	13033		
Location	Brighton		
Recorded By	C. Rall		
Witnessed By	Daryl Barberousse		
Borehole Record		Tubing Record	
Run Number	Bit	From	To
Casing Record	Size	Wgt/Ft	Top
Surface String	9 5/8"	36#	0
Prot. String			
Production String	7"	26#	0
Liner			6329'

<<< 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

Primary Log on Well
Repeat Pass & Main Pass Logged w/ 0 PSI

Logged from 16' Kelly Bushing

Logging Speed Requested by Company

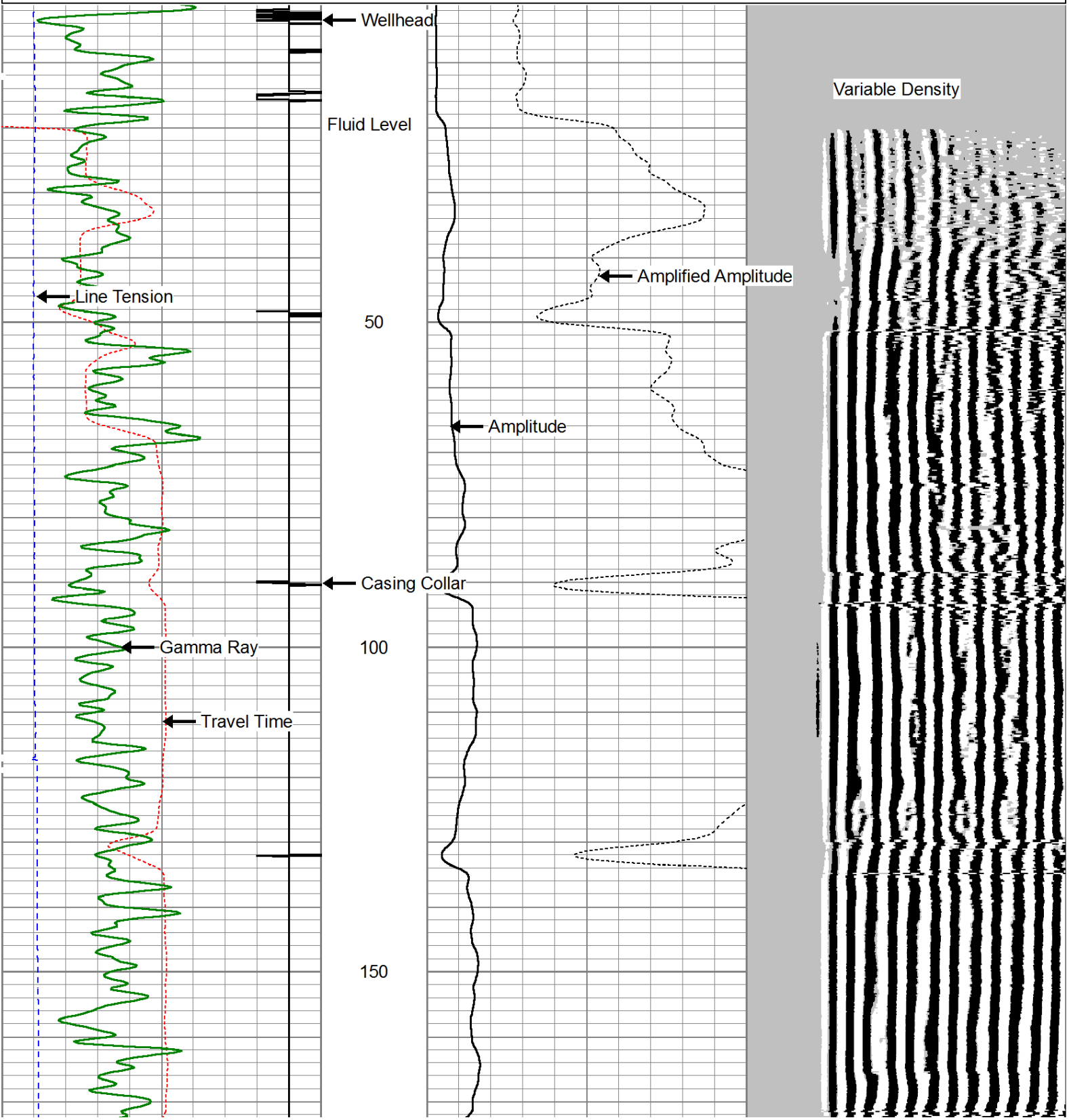
Thank You For using Allied Wireline Services
(303) 659-4609

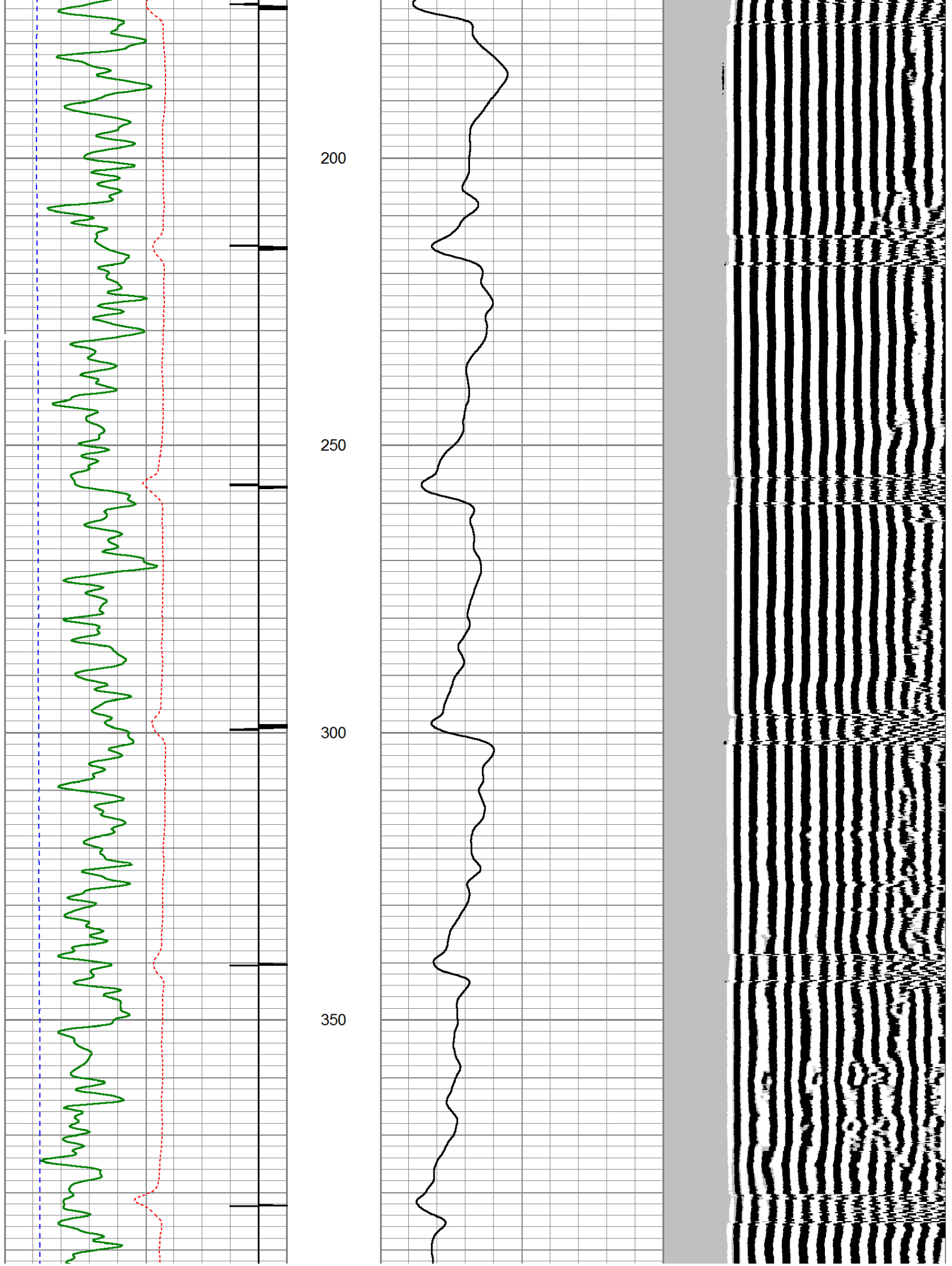


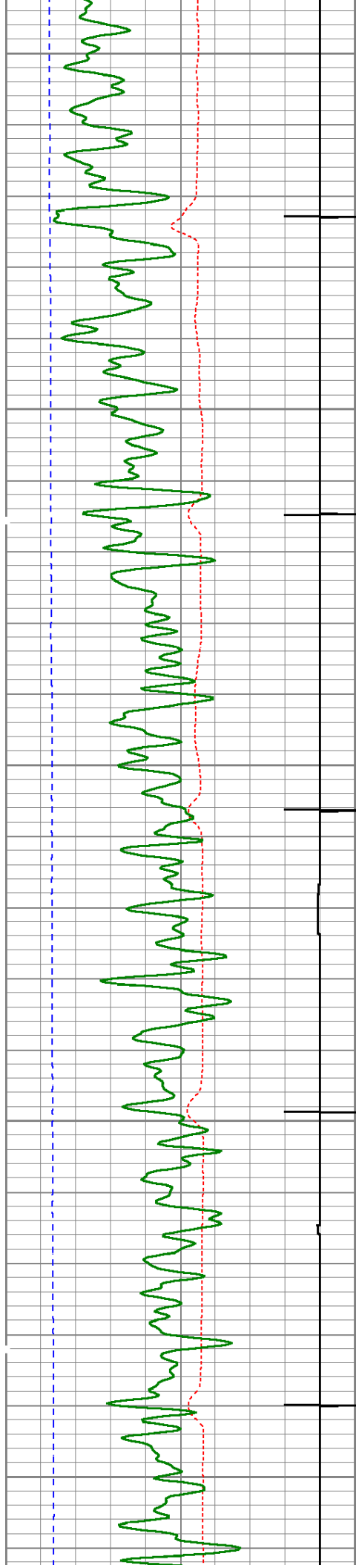
Main Pass (0 PSI)

Database File: bonanza creek pronghorn 21-24-17hnb_cbl.db
Dataset Pathname: pass5.1
Presentation Format: cblprobe
Dataset Creation: Wed Jun 25 13:06:43 2014 by Calc 0
Charted by: Depth in Feet scaled 1:240

400	Travel Time (usec)	200	0	Amplitude (mV)	100	200	Variable Density	1200
9	Casing Collar	-1	0	Amplified Amplitude (mV)	10			
0	Gamma Ray (GAPI)	150						
0	Line Tension (lb)	2000						







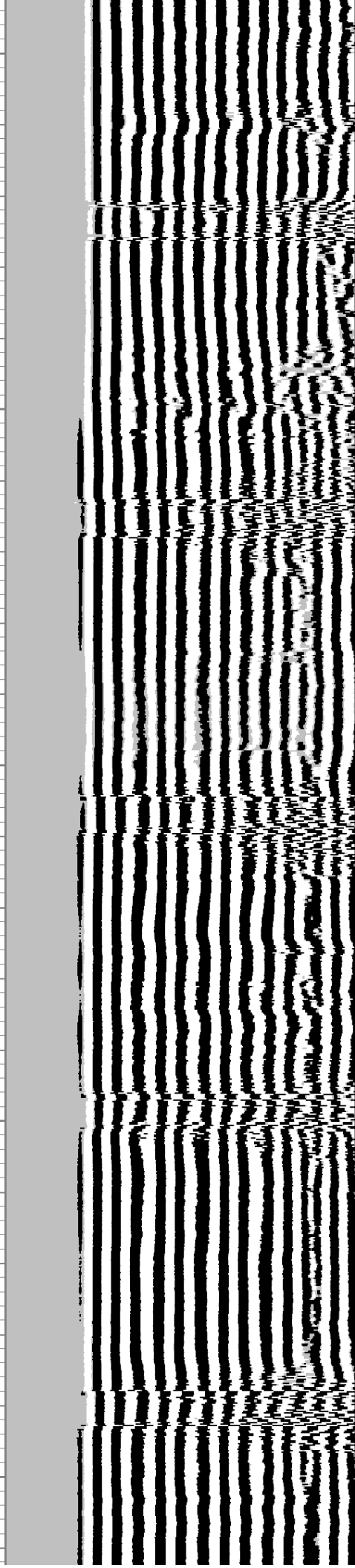
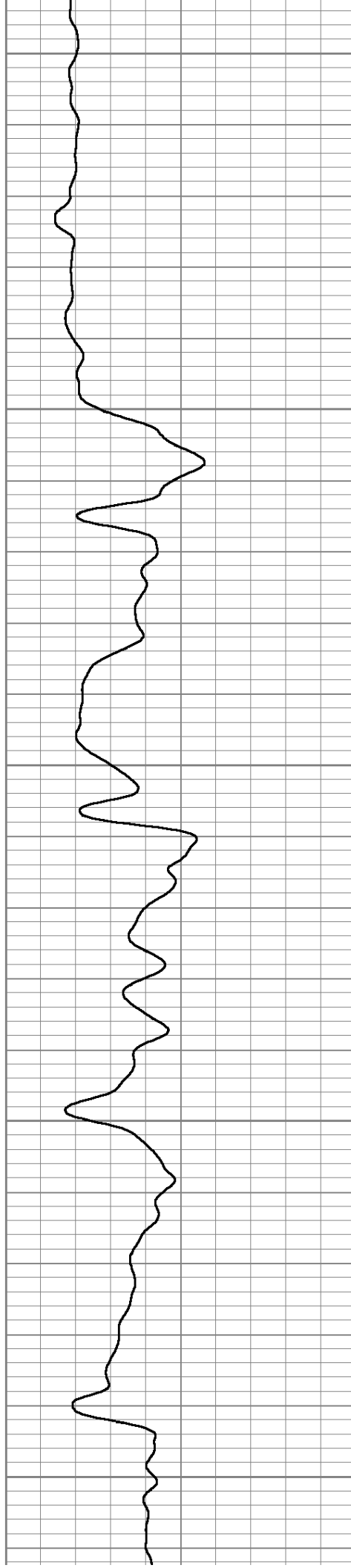
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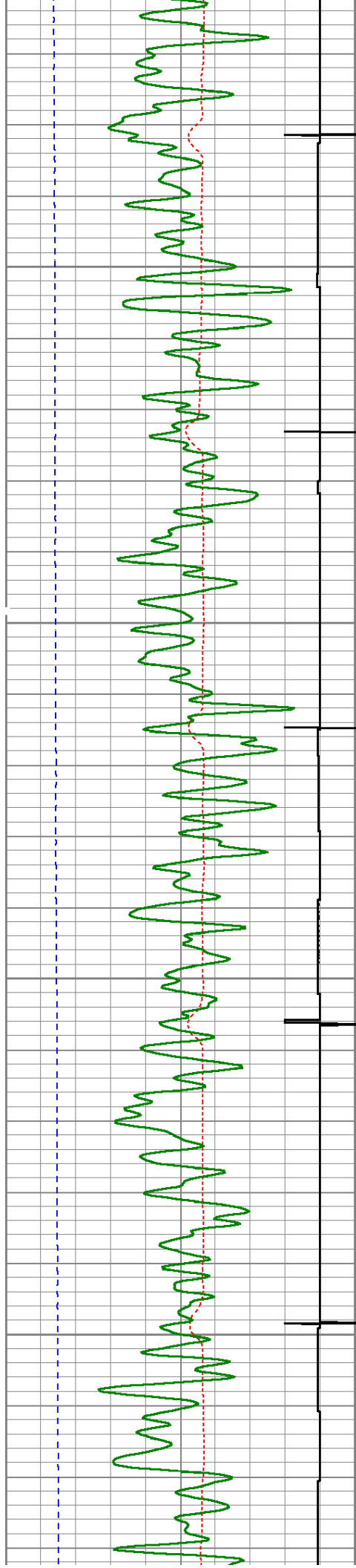
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500

550

600



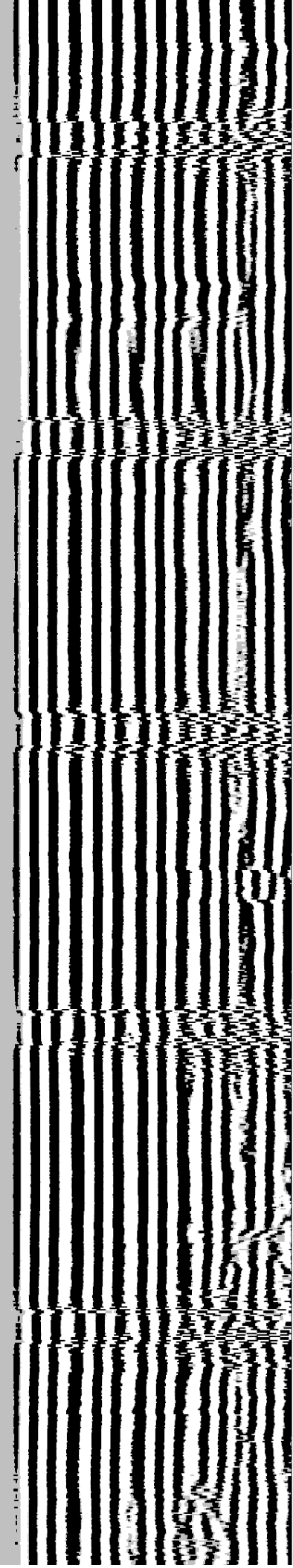
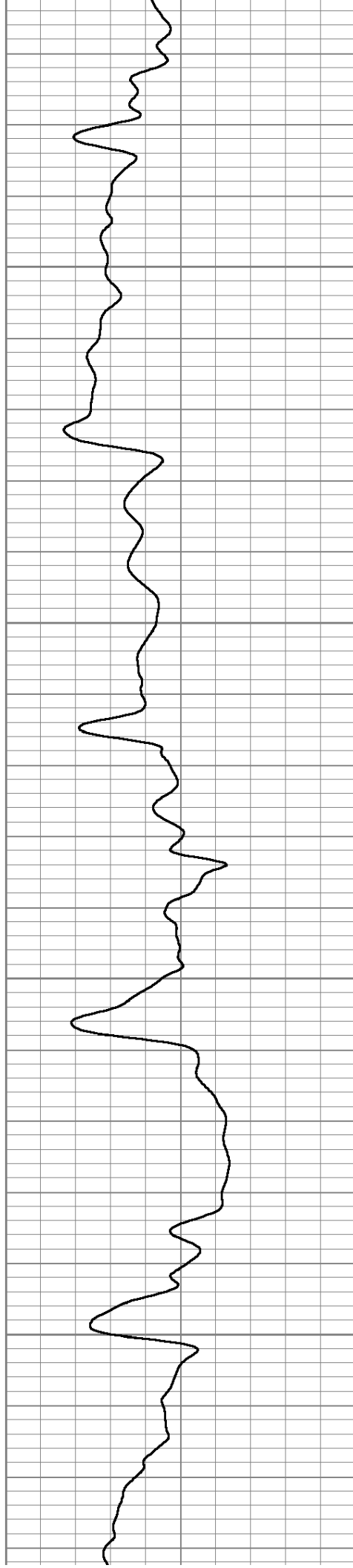


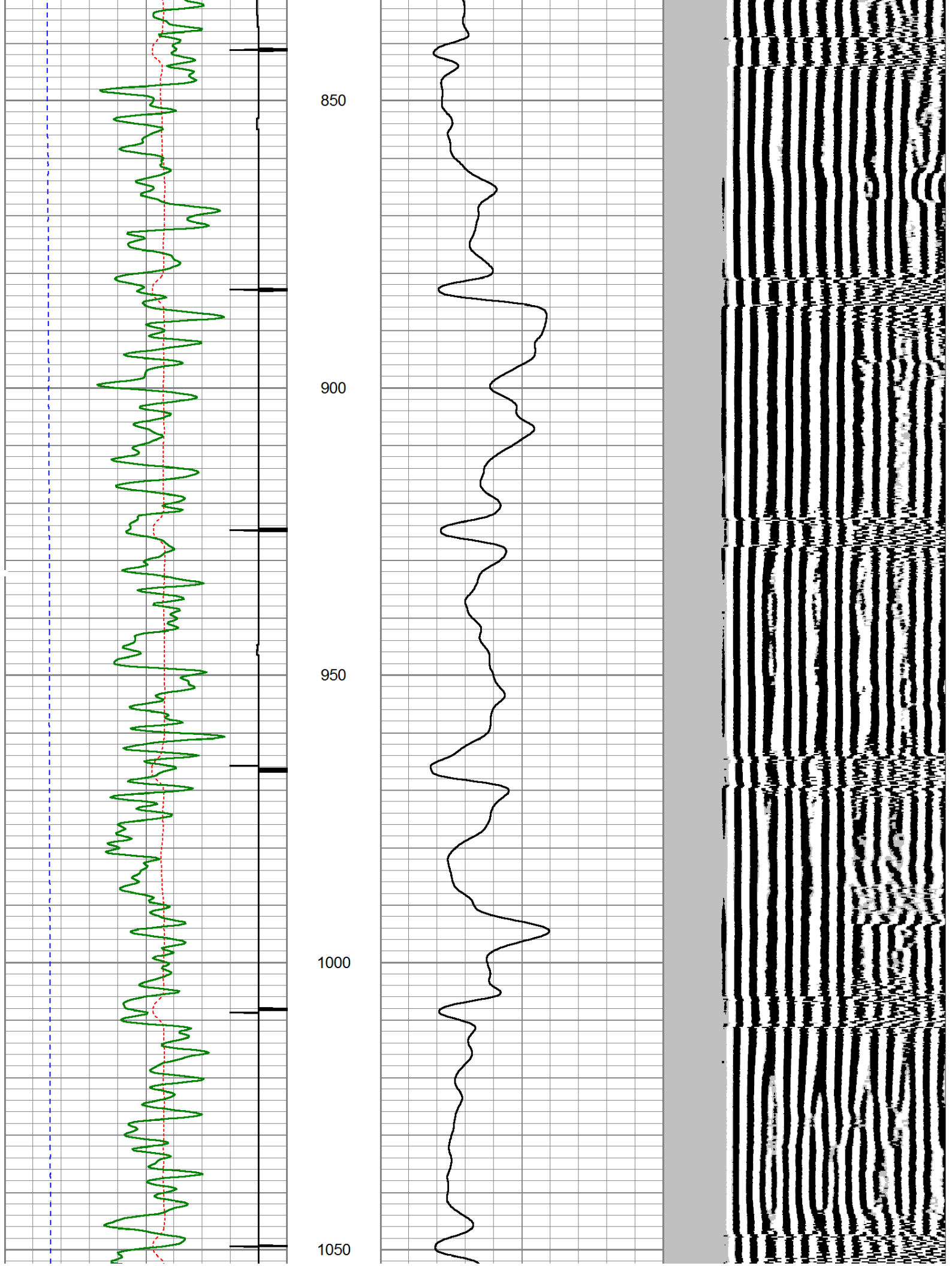
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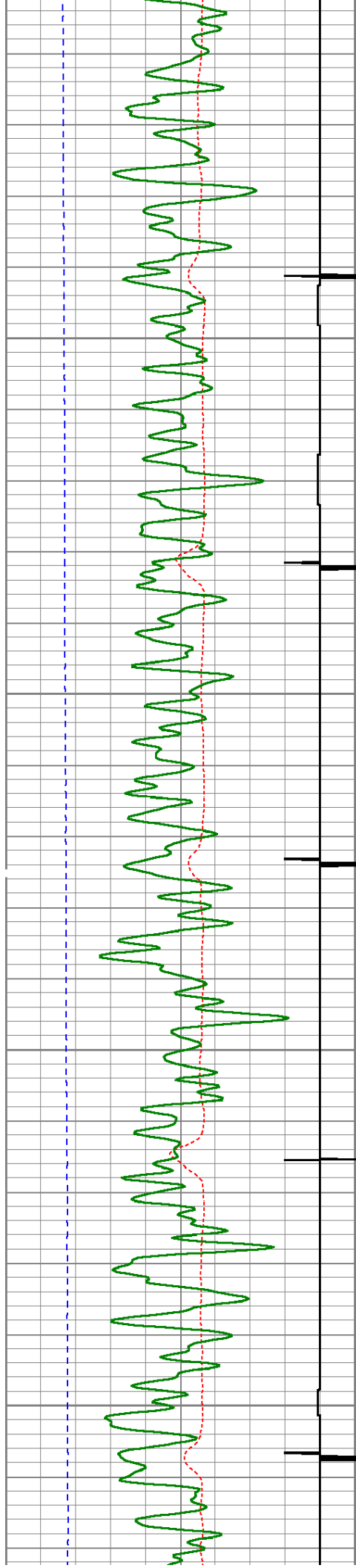
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750

800





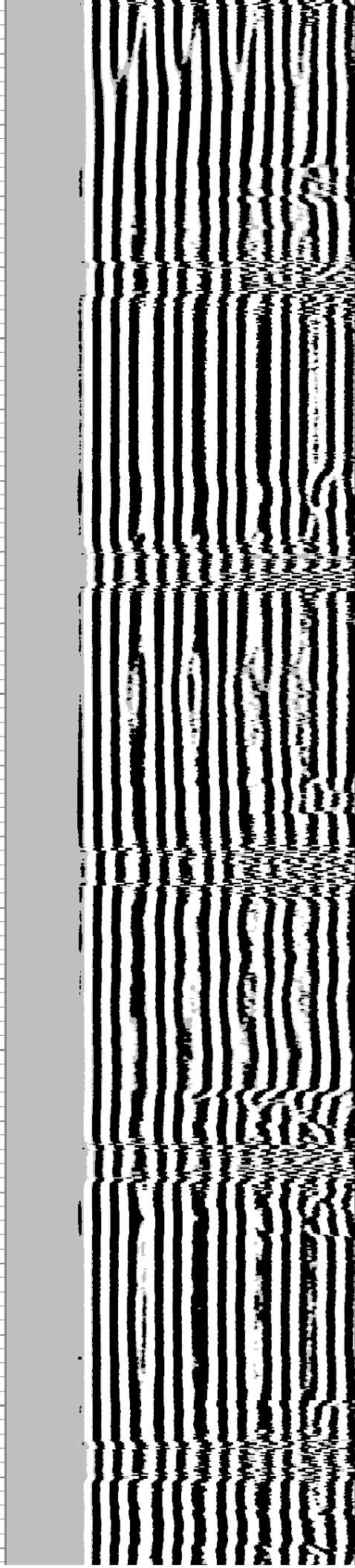
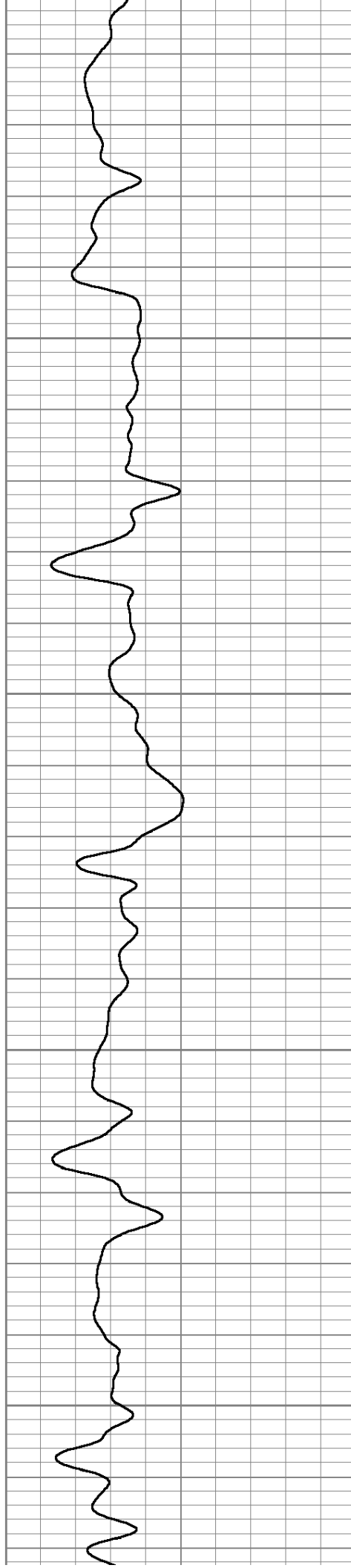


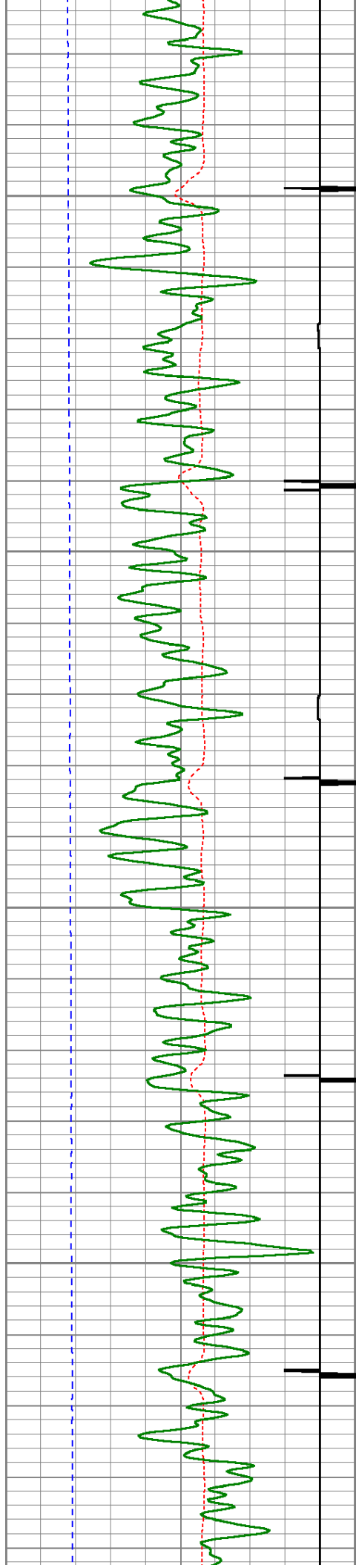
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1150

1200

1250



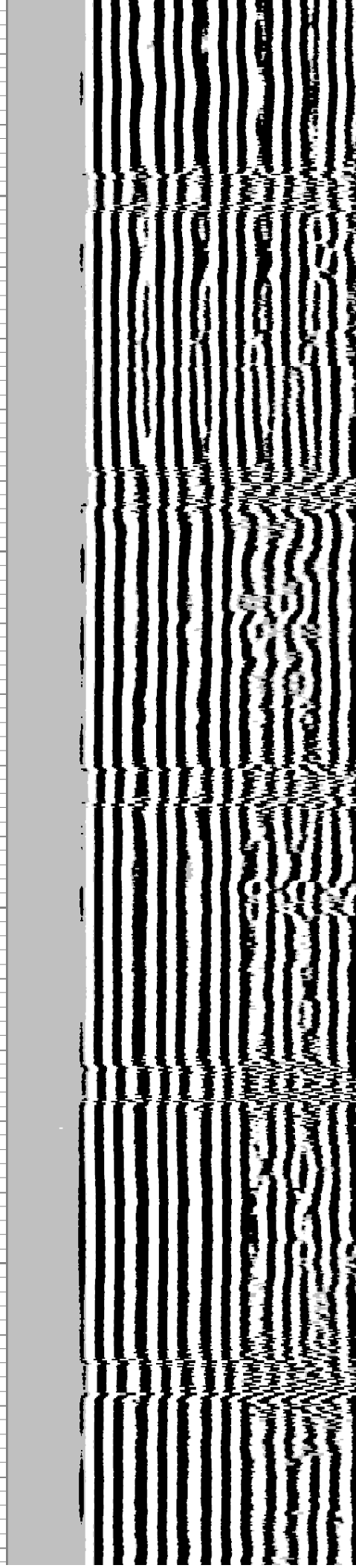
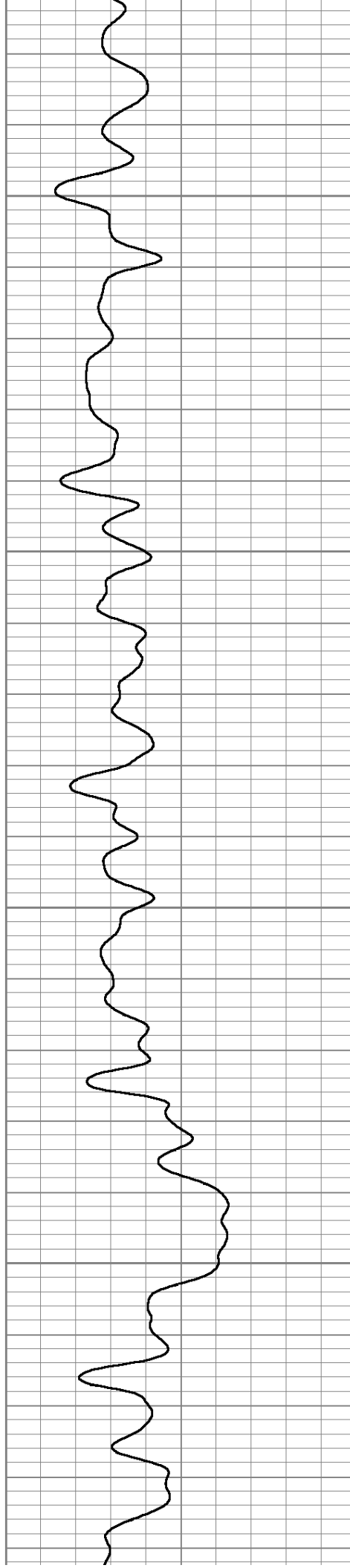


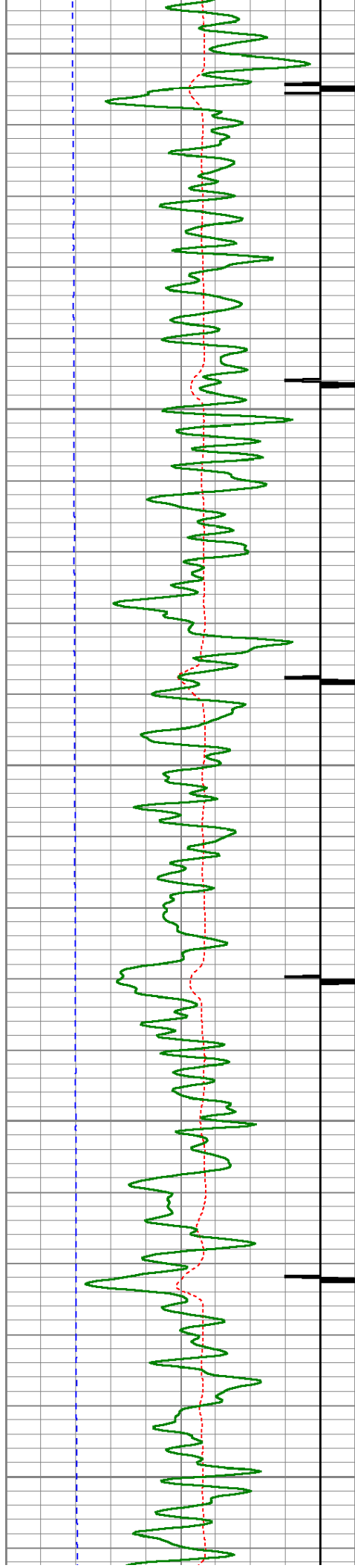
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1350

1400

1450





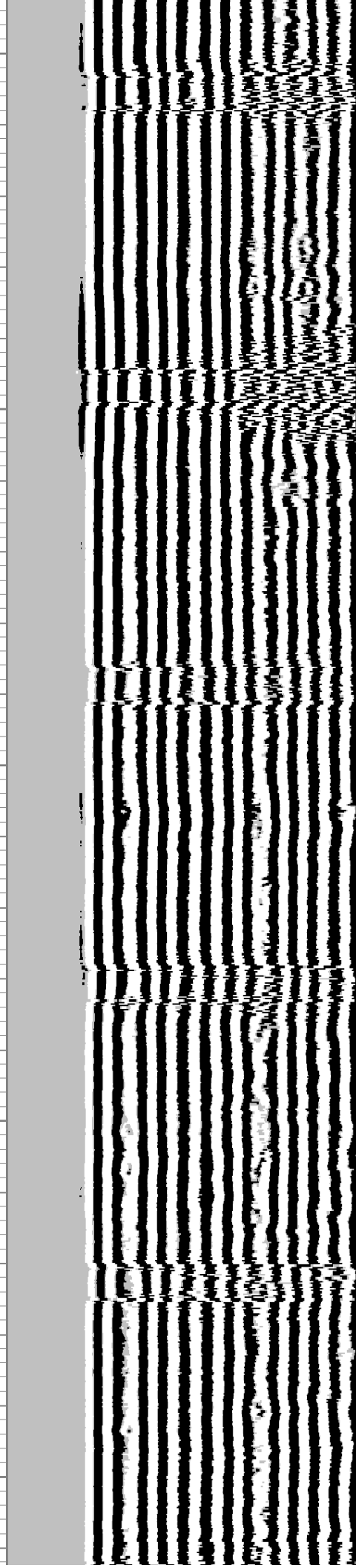
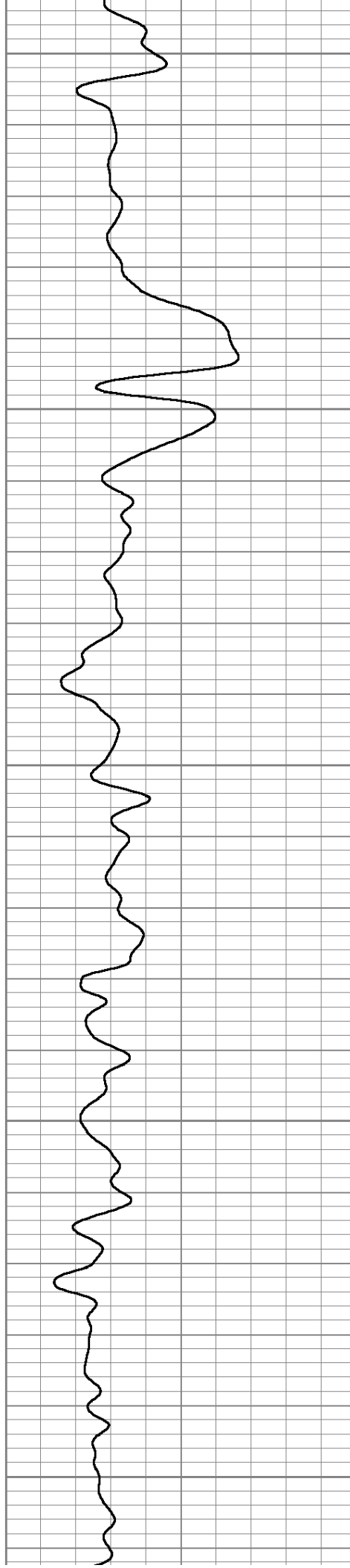
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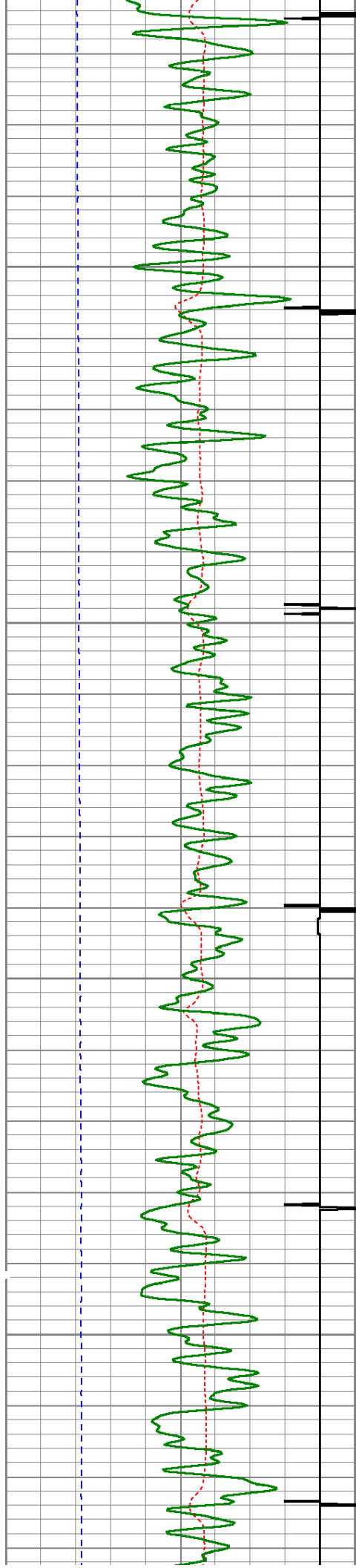
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1650

1700



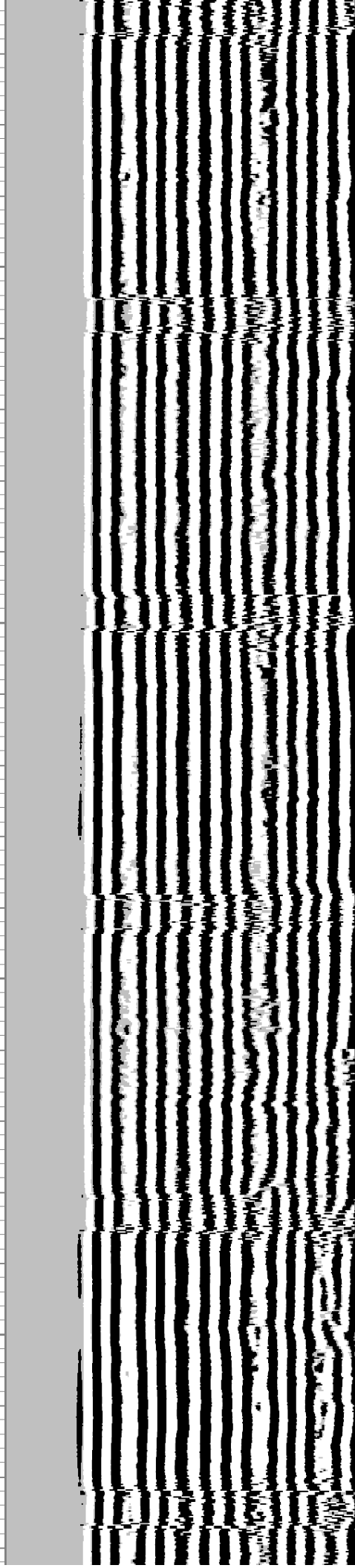
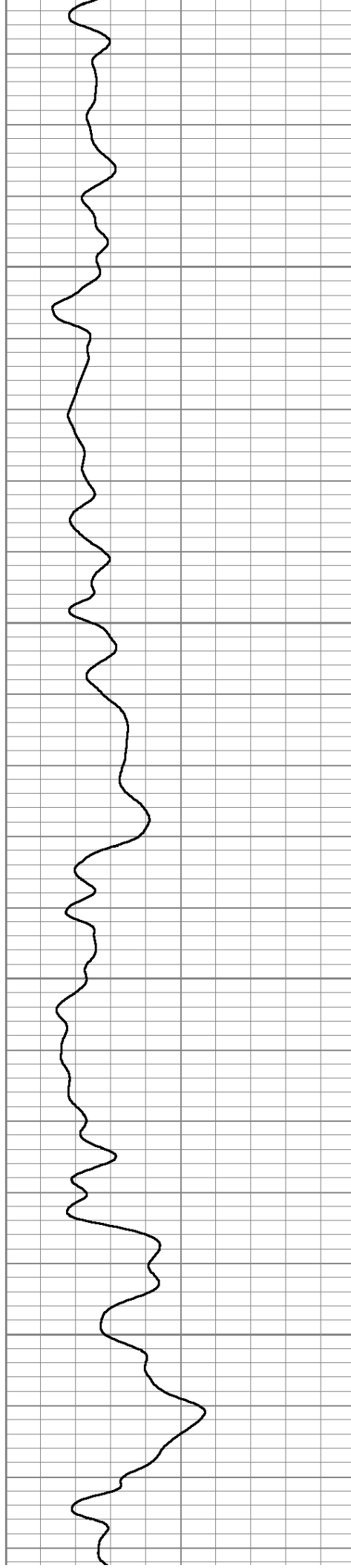


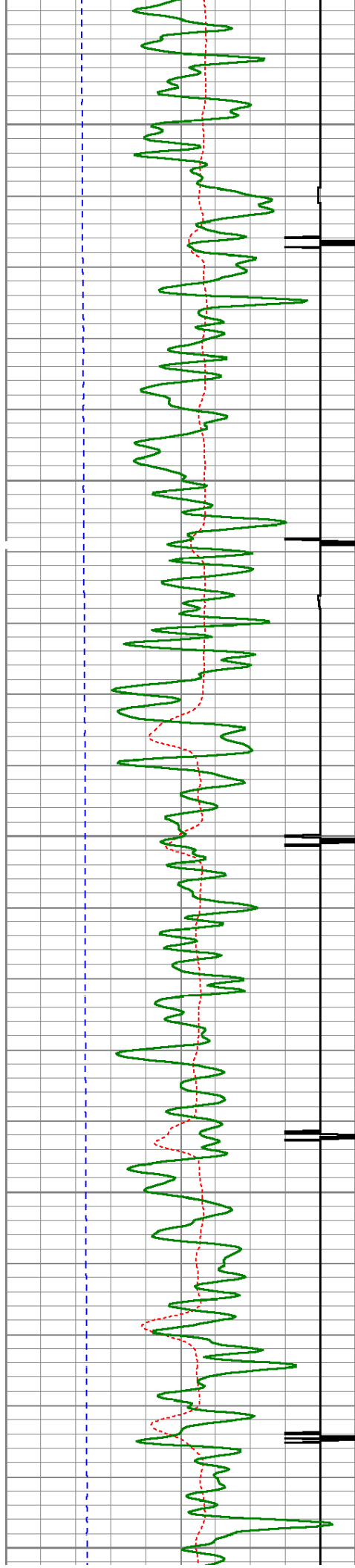
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1850

1900





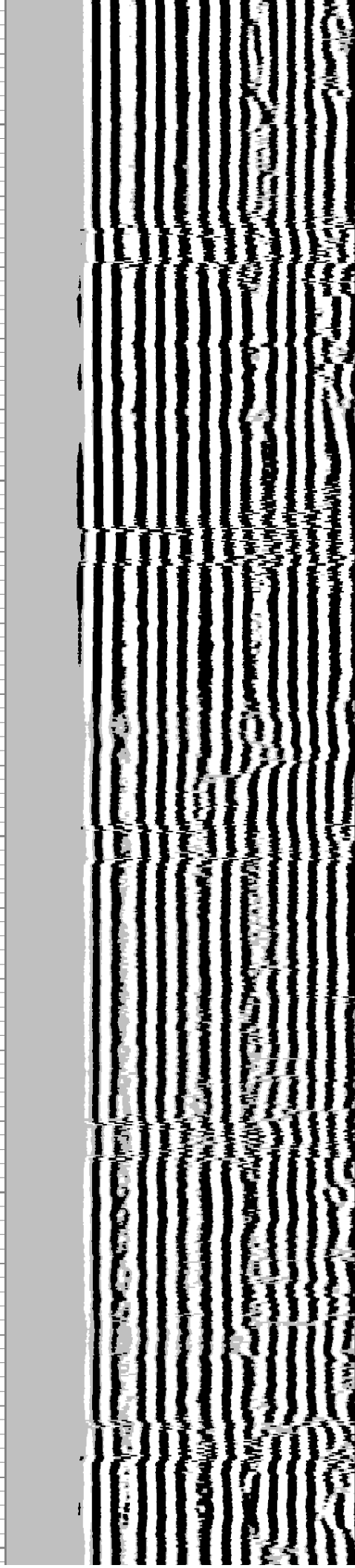
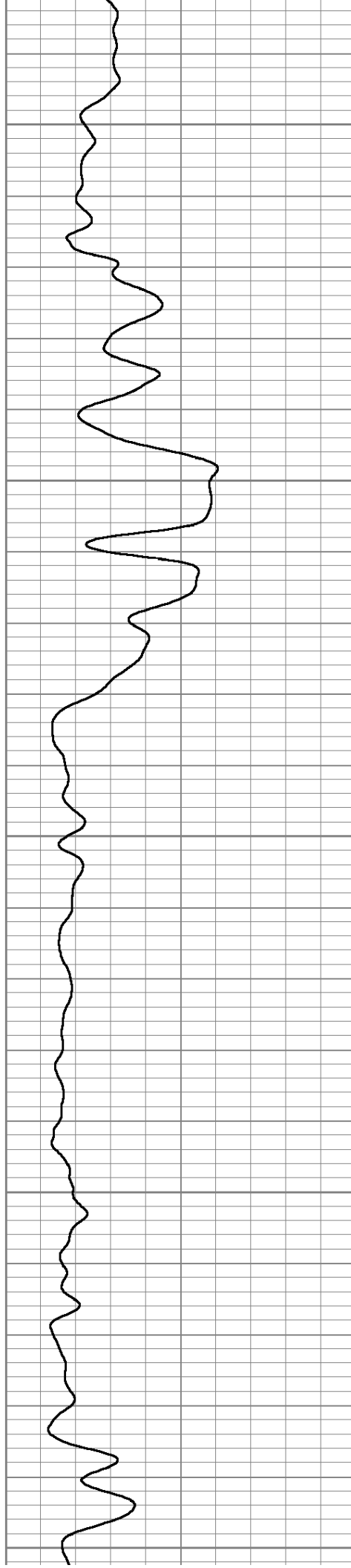
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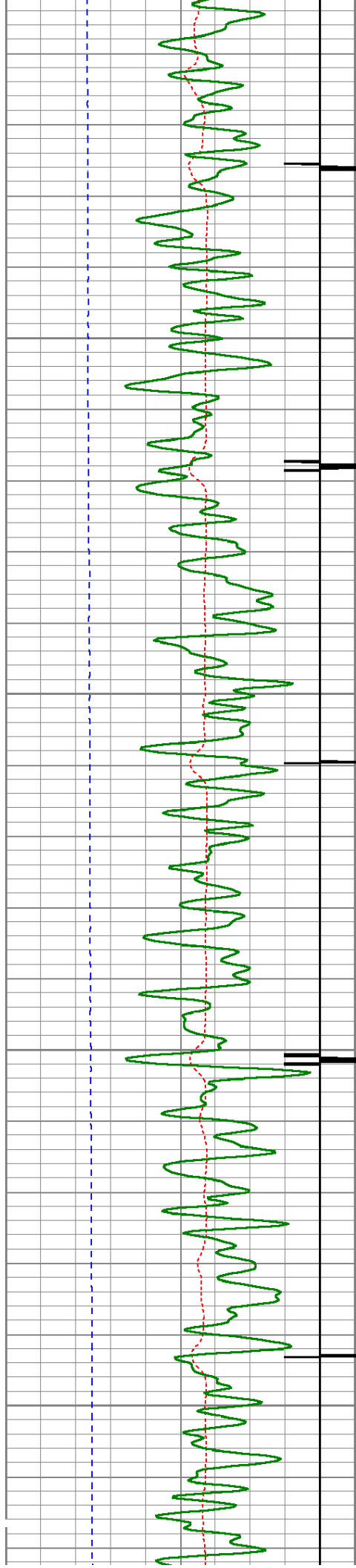
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2050

2100

2150



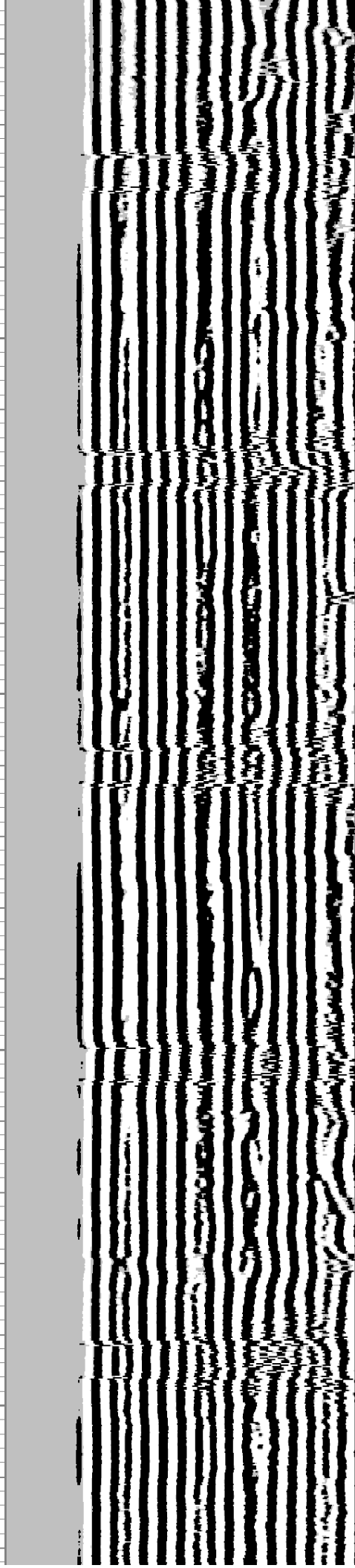
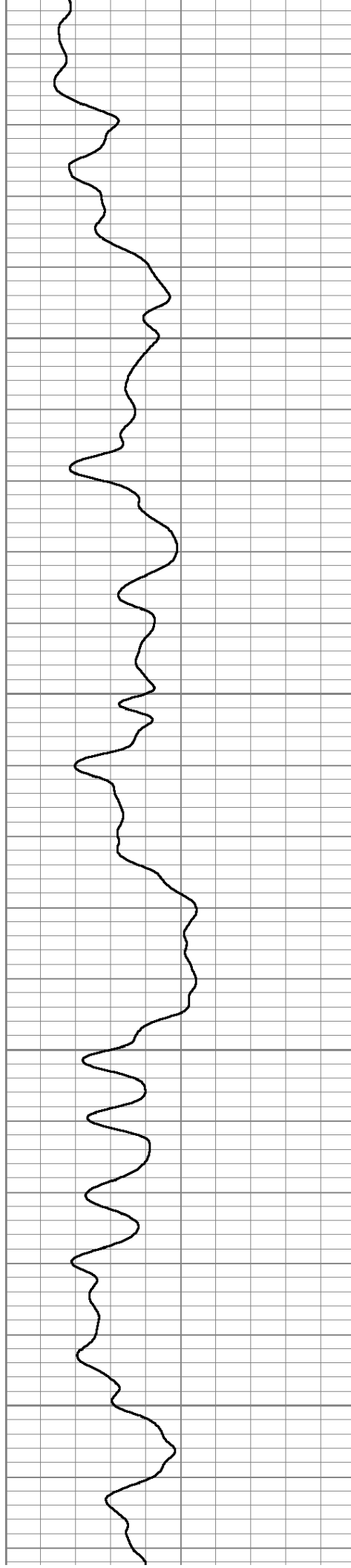


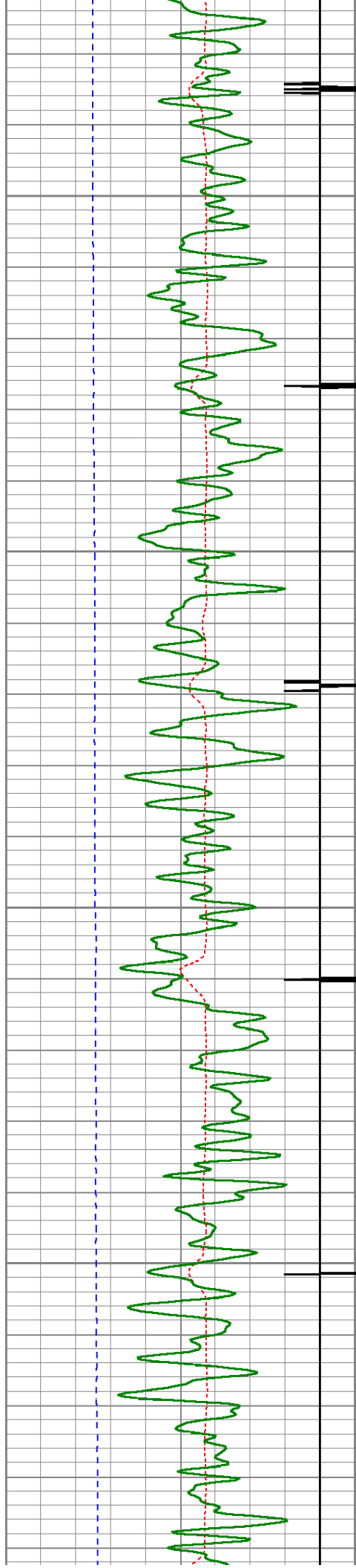
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2300

2350



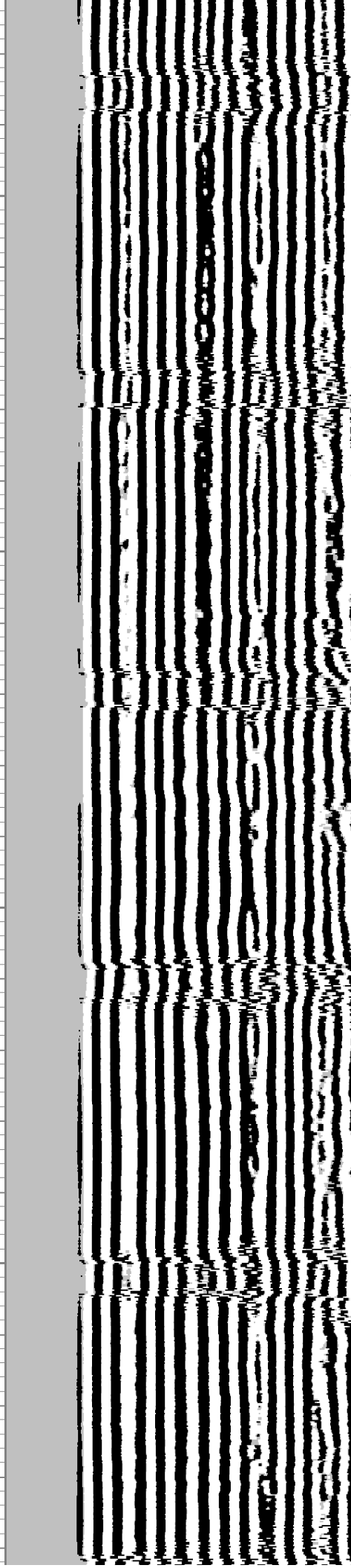
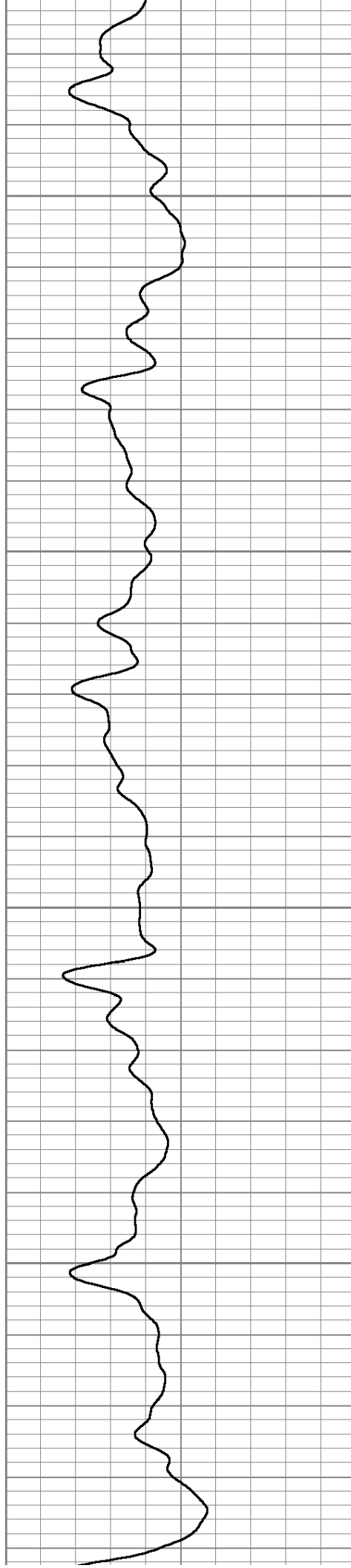


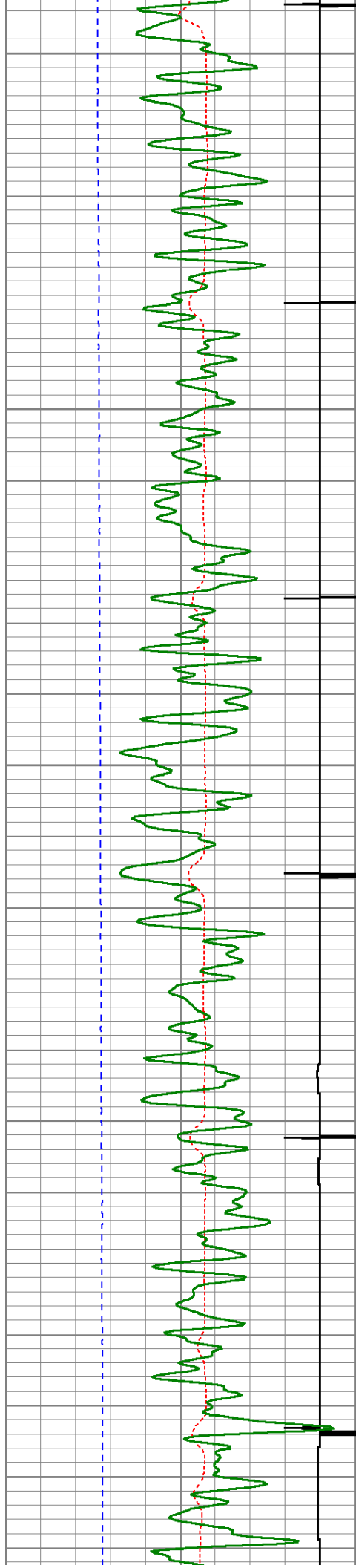
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2500

2550





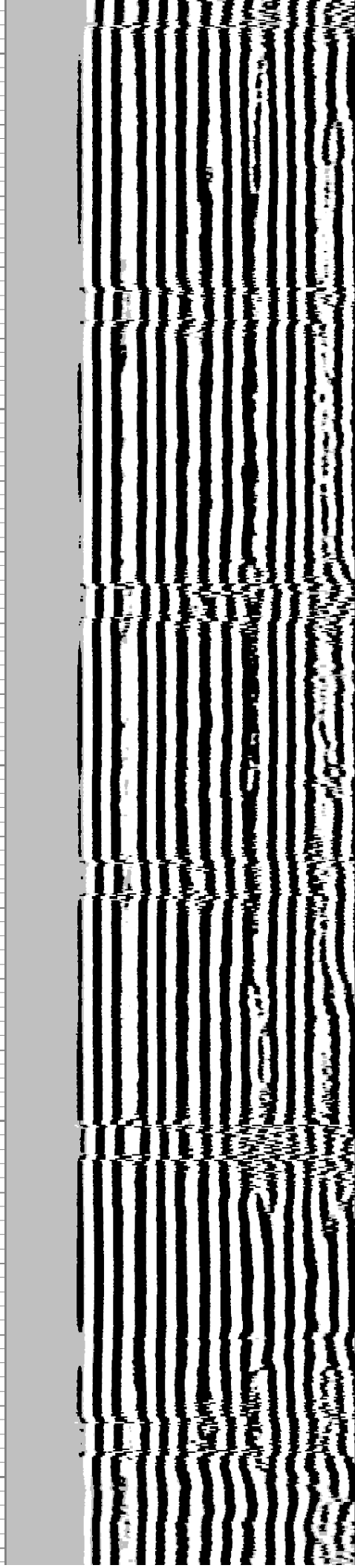
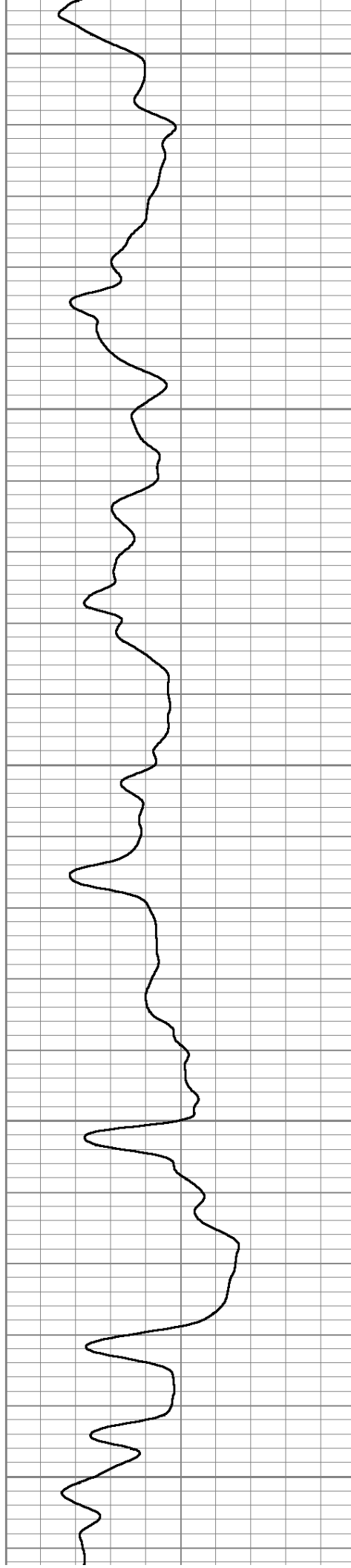
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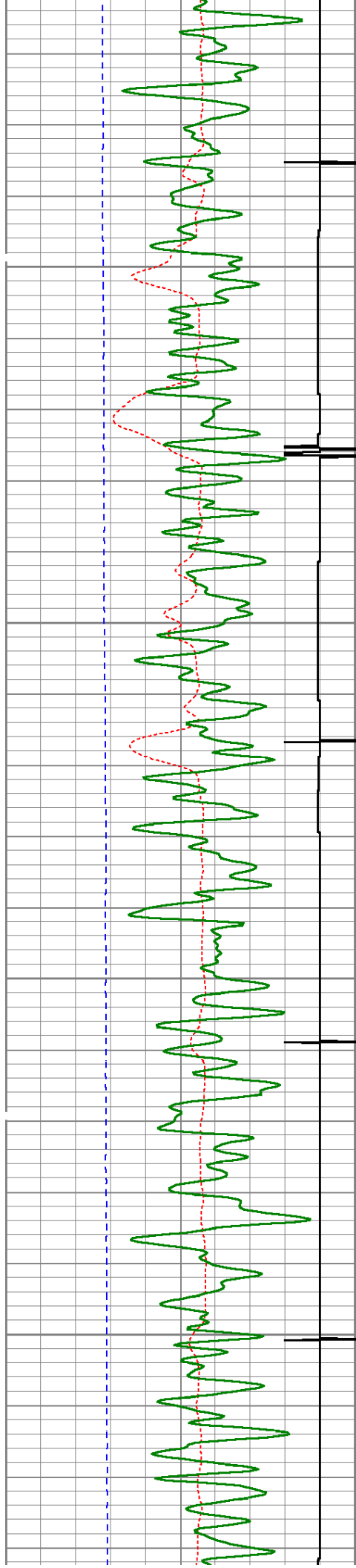
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2800



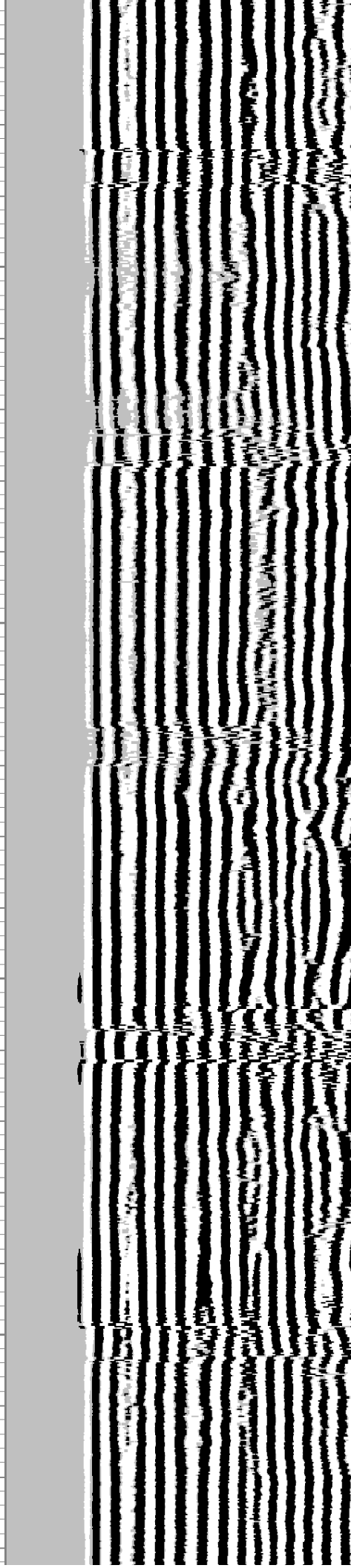
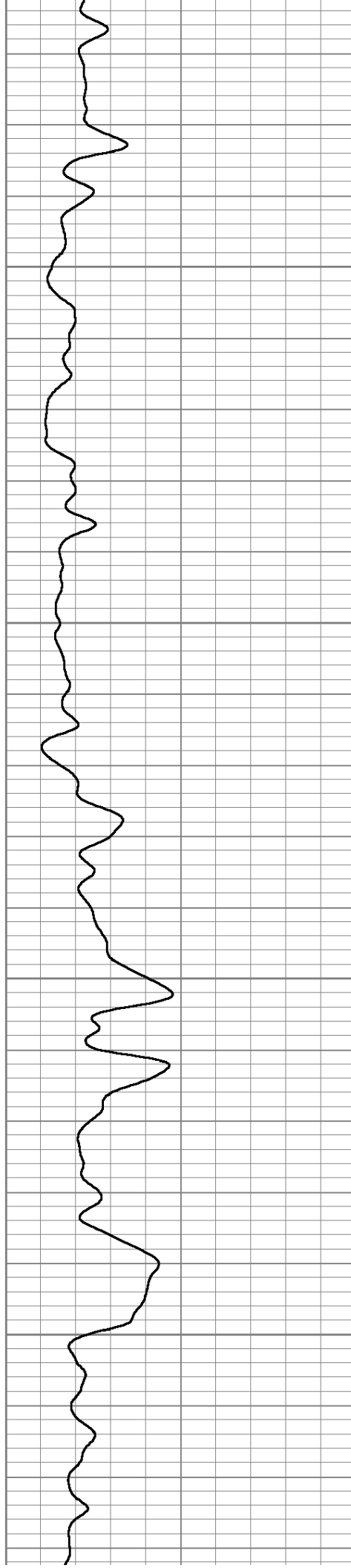


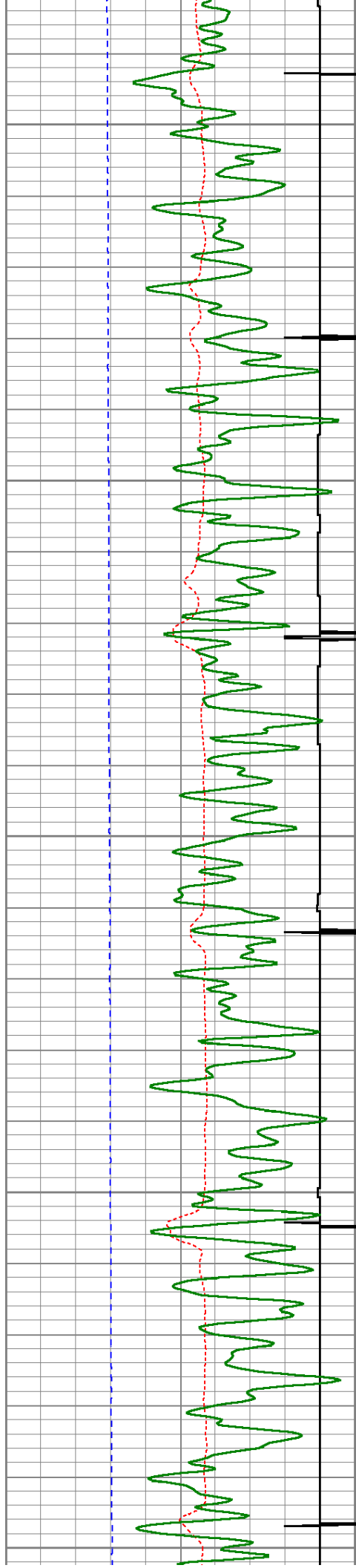
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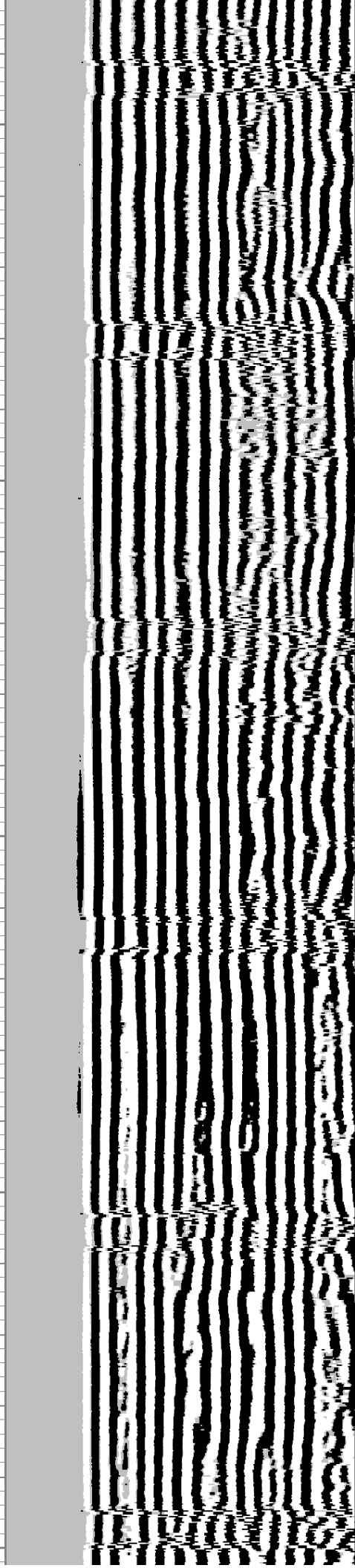
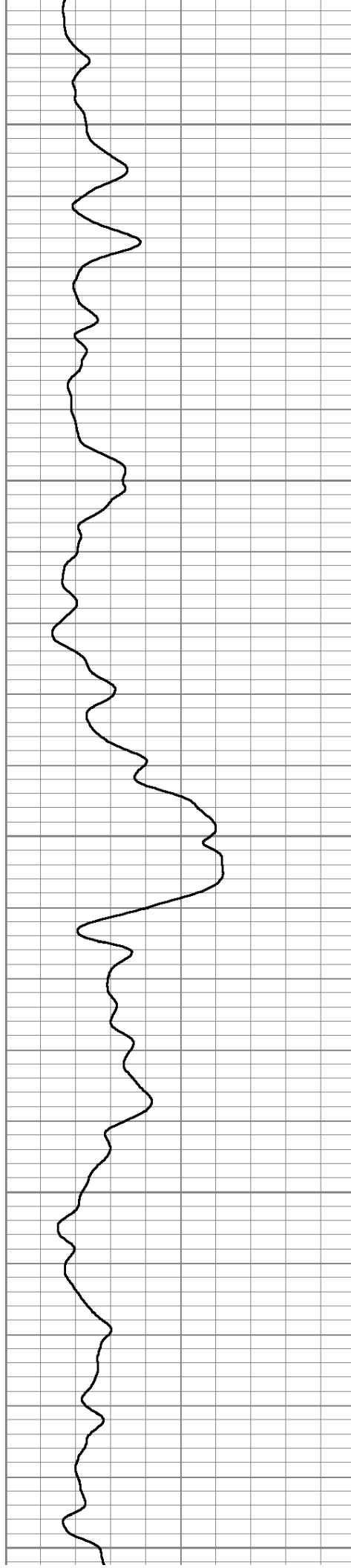
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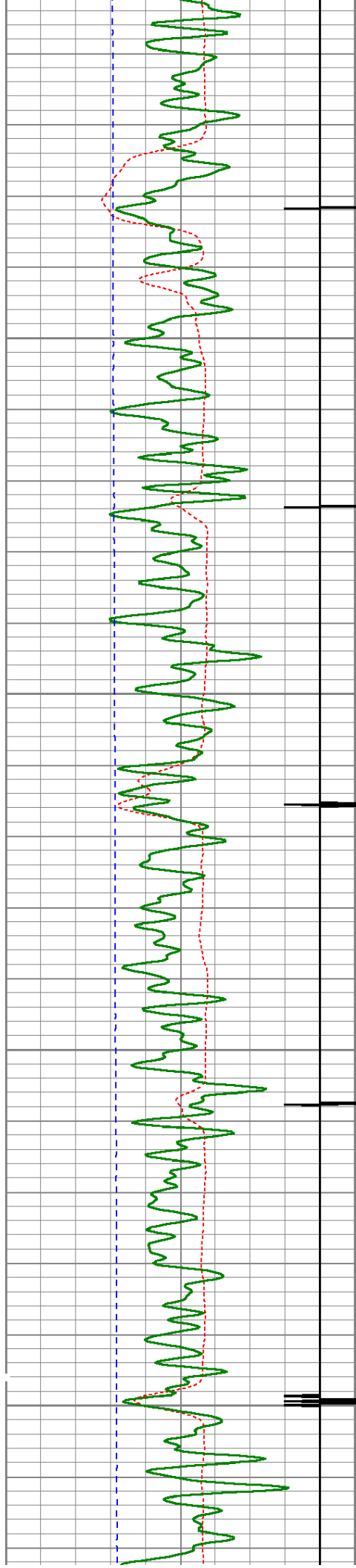
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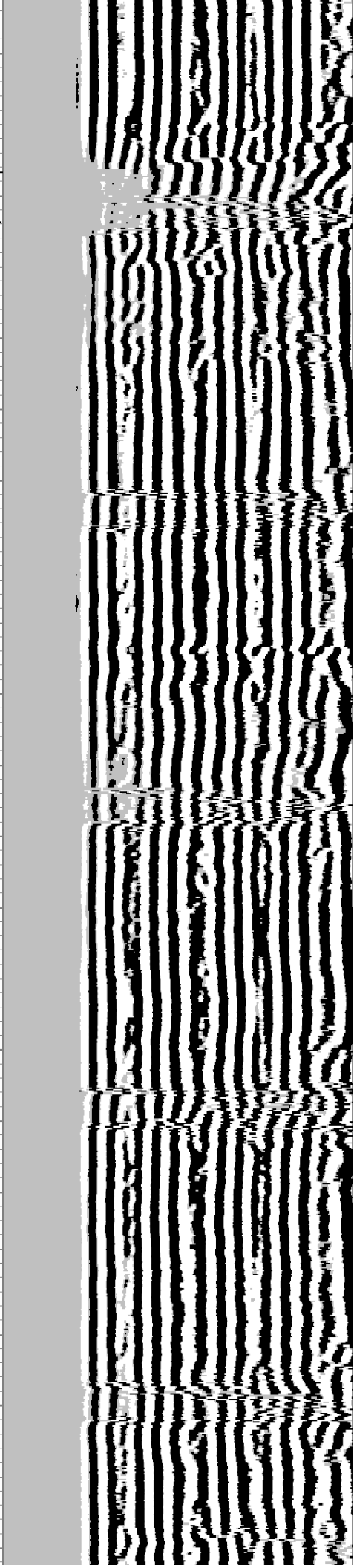
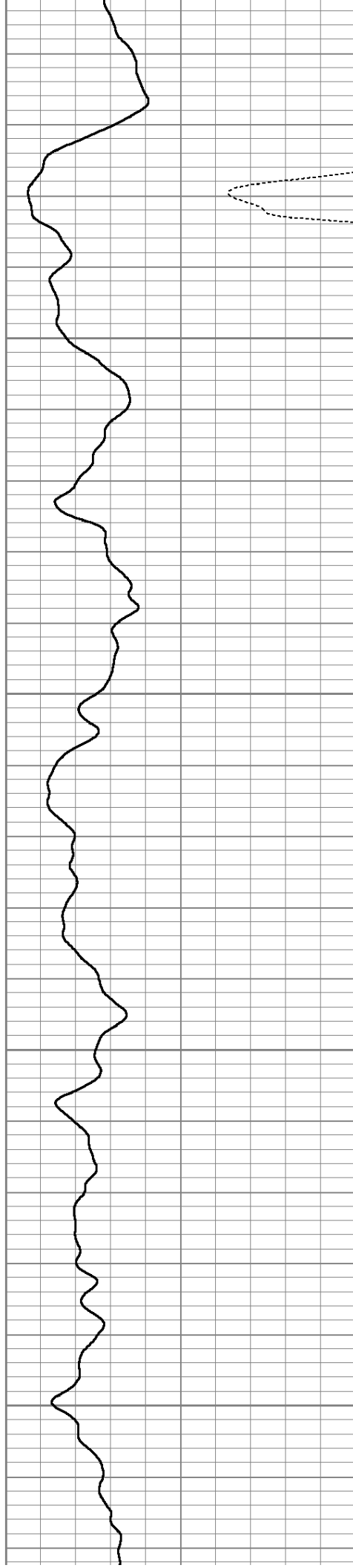


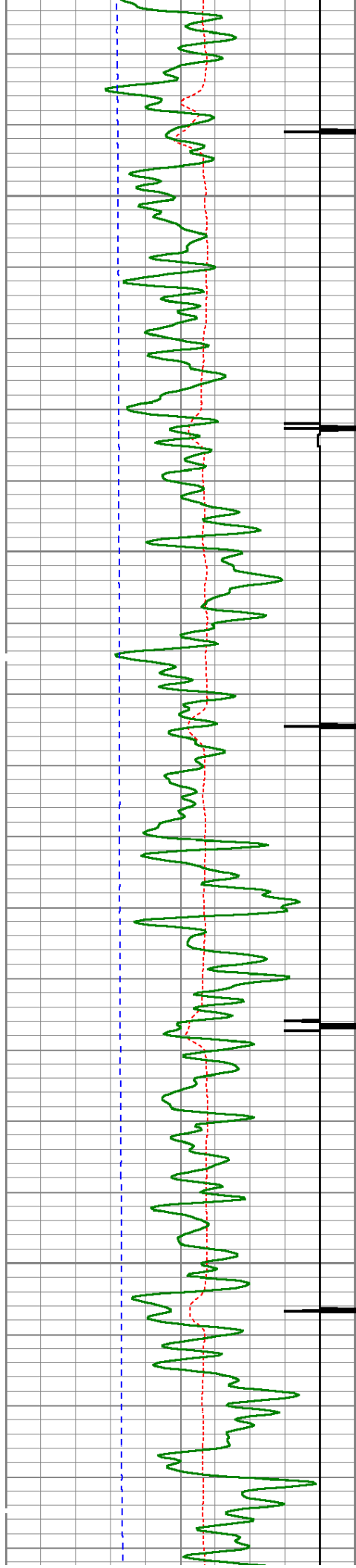
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3400

3450



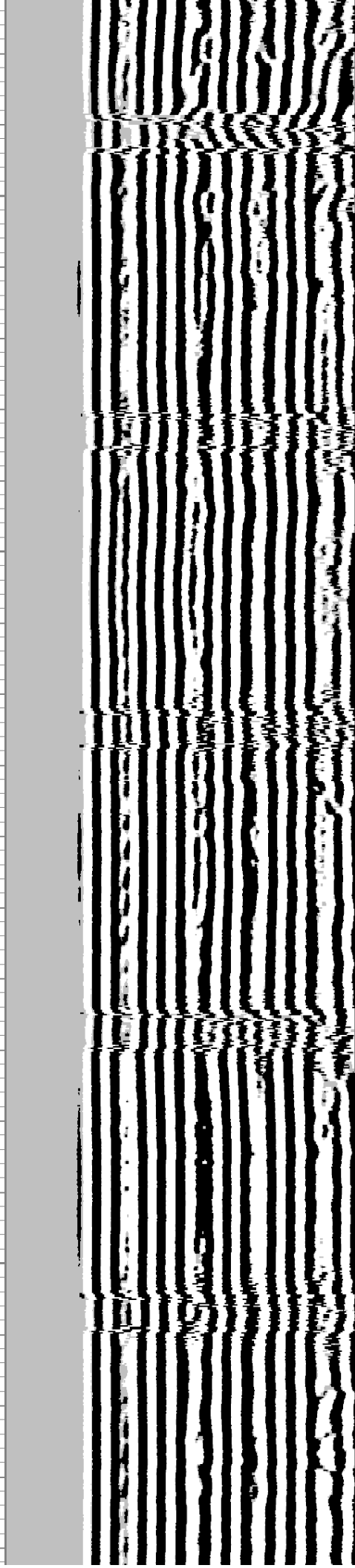
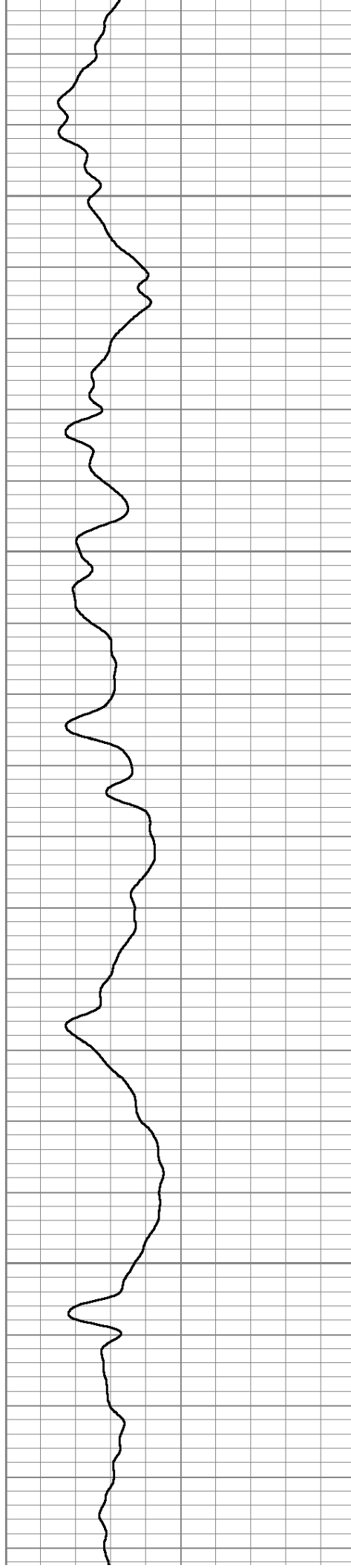


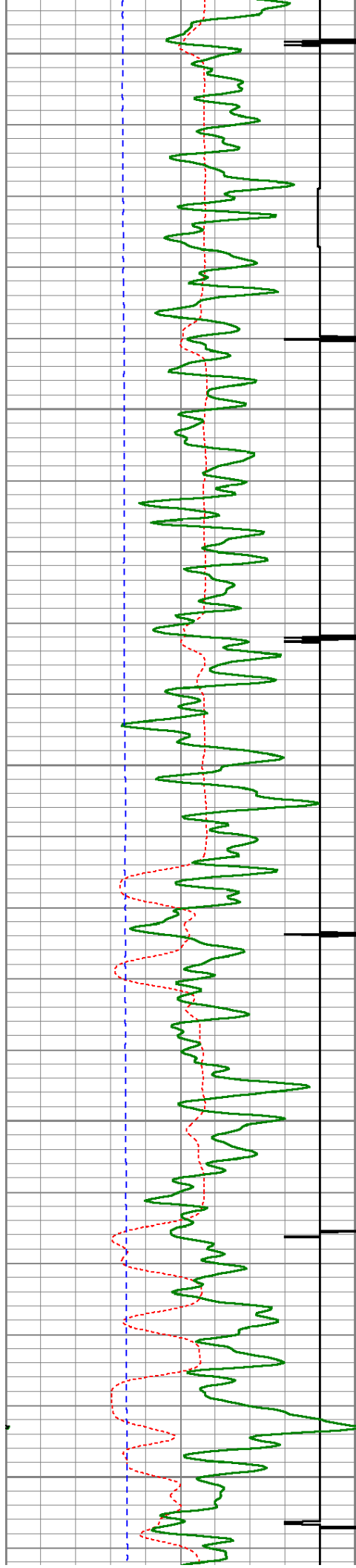
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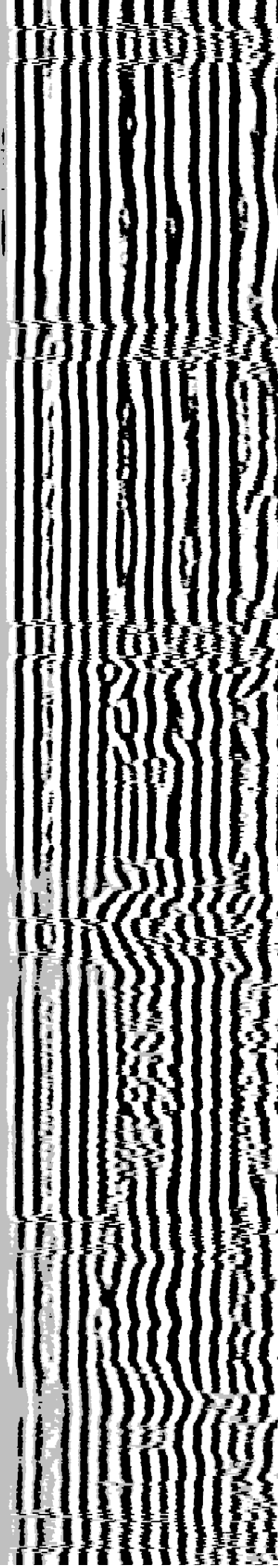
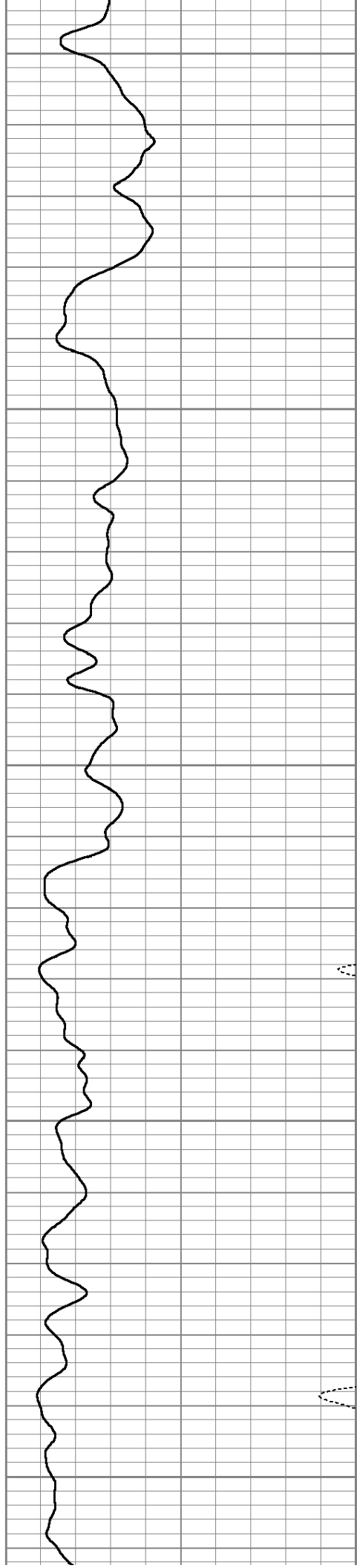
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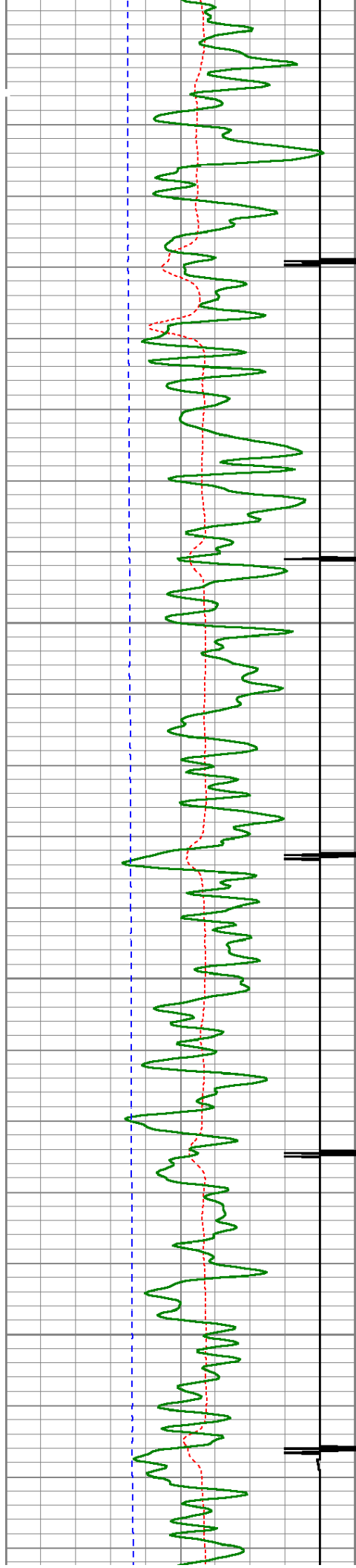
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3900



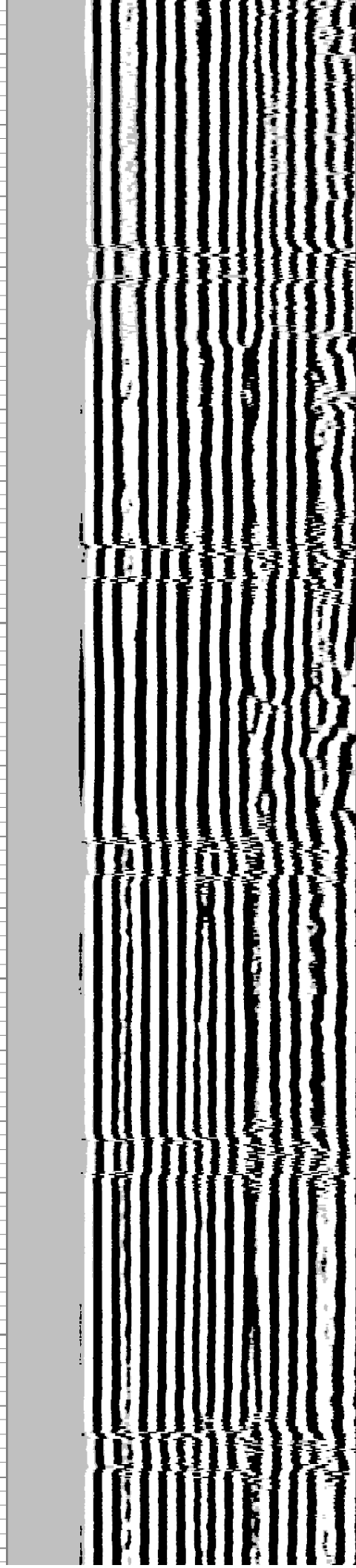
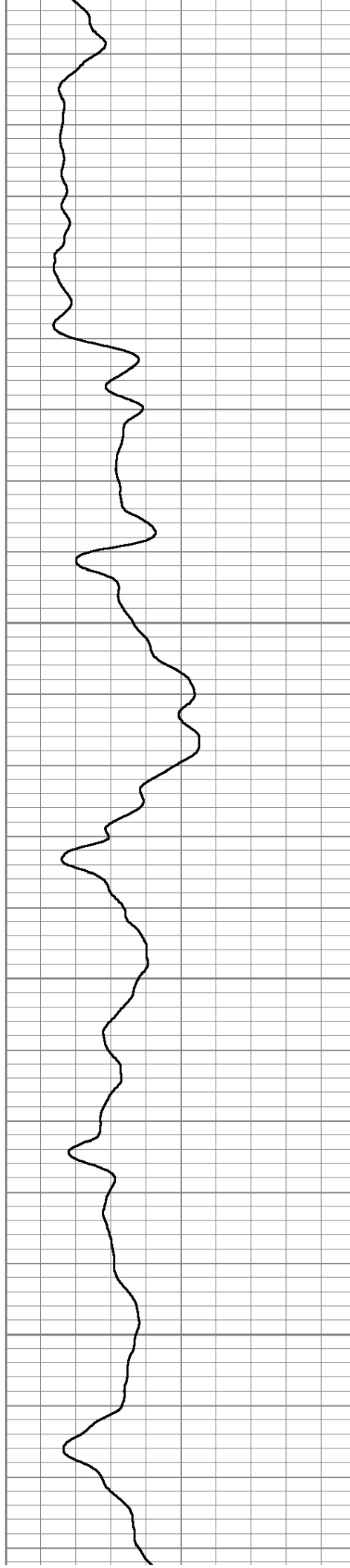


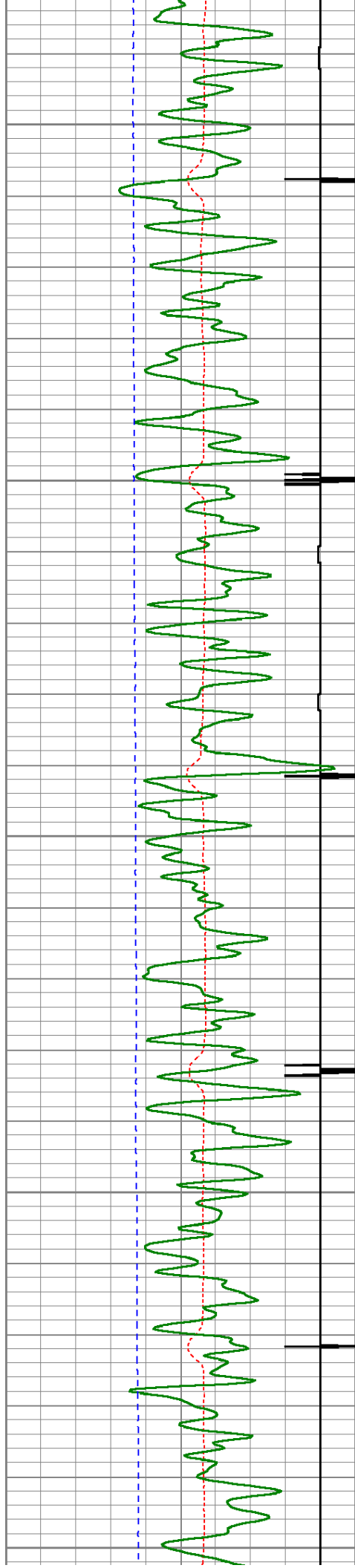
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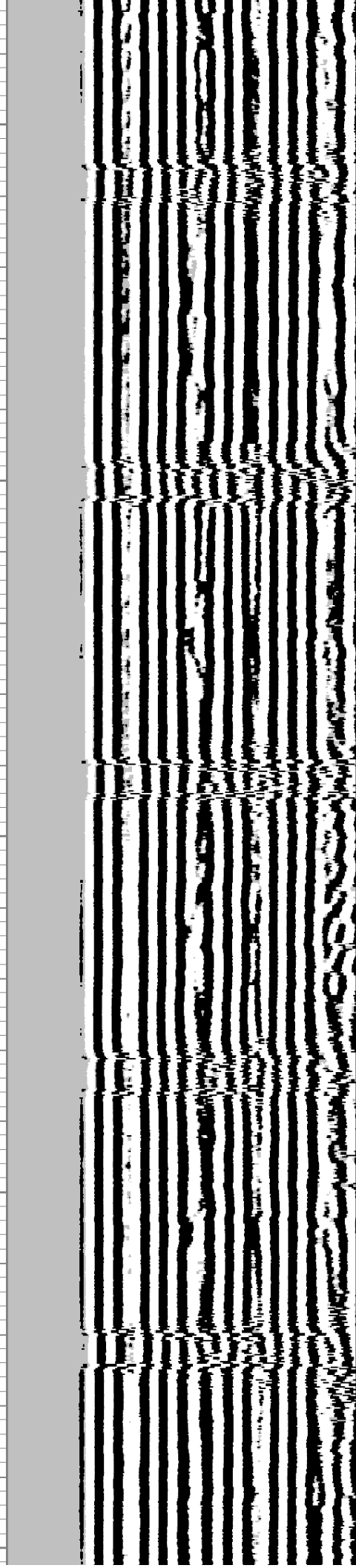
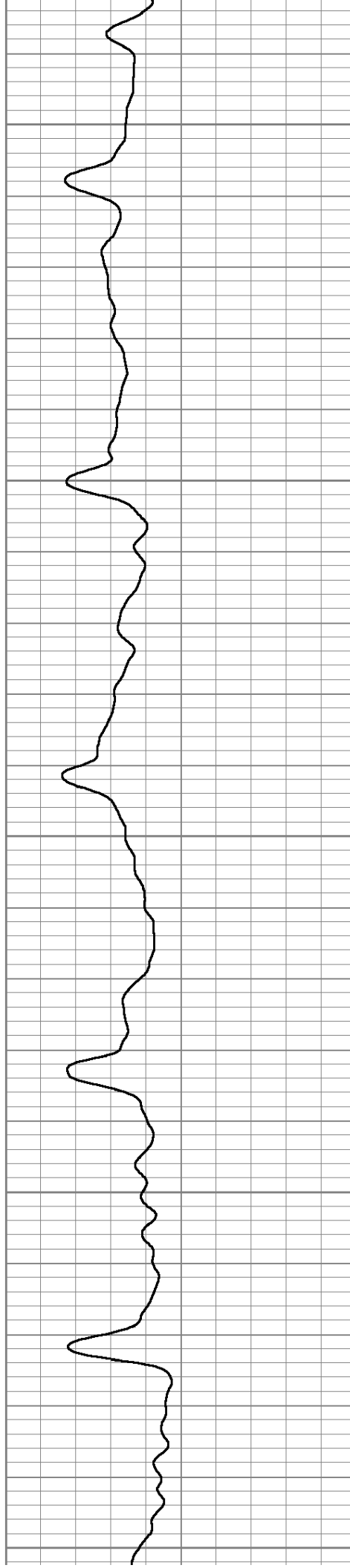
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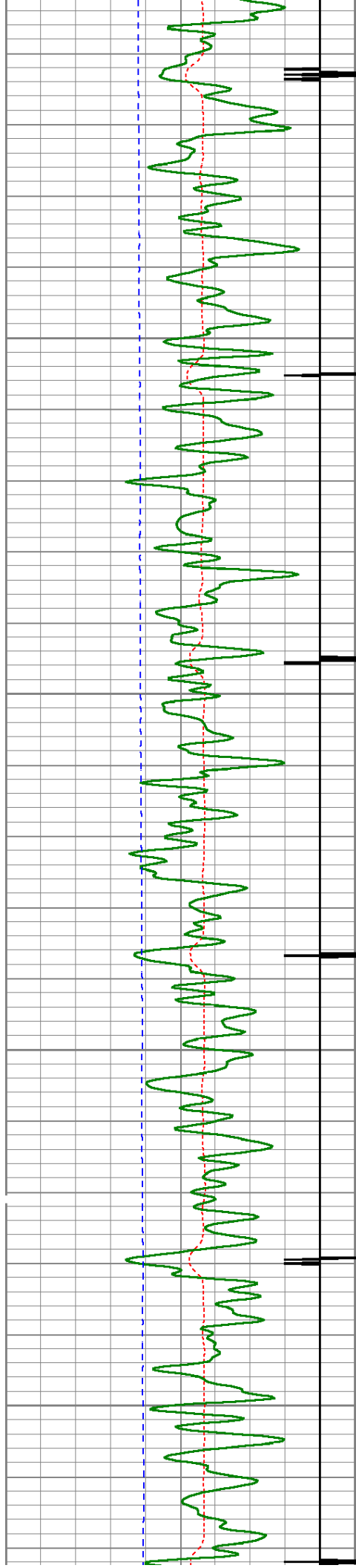
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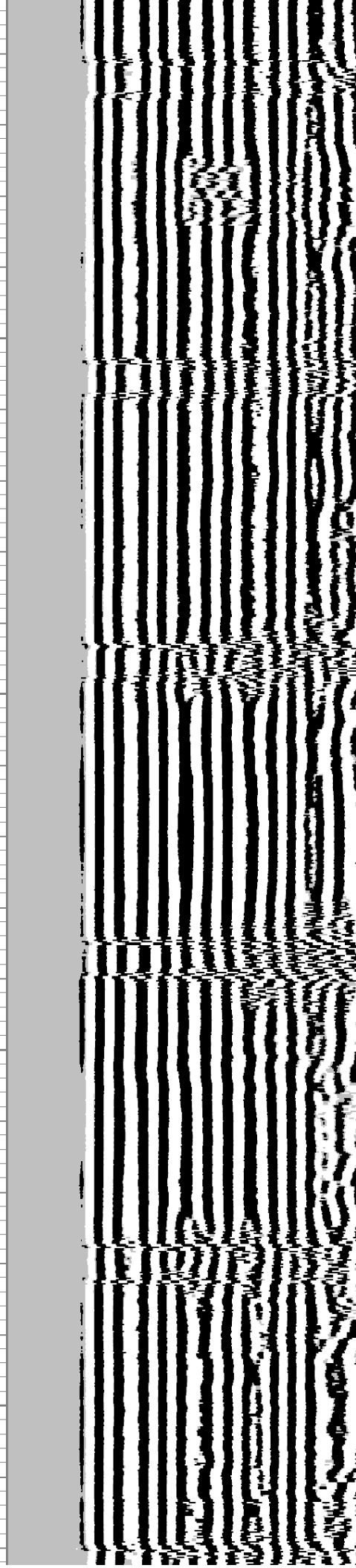
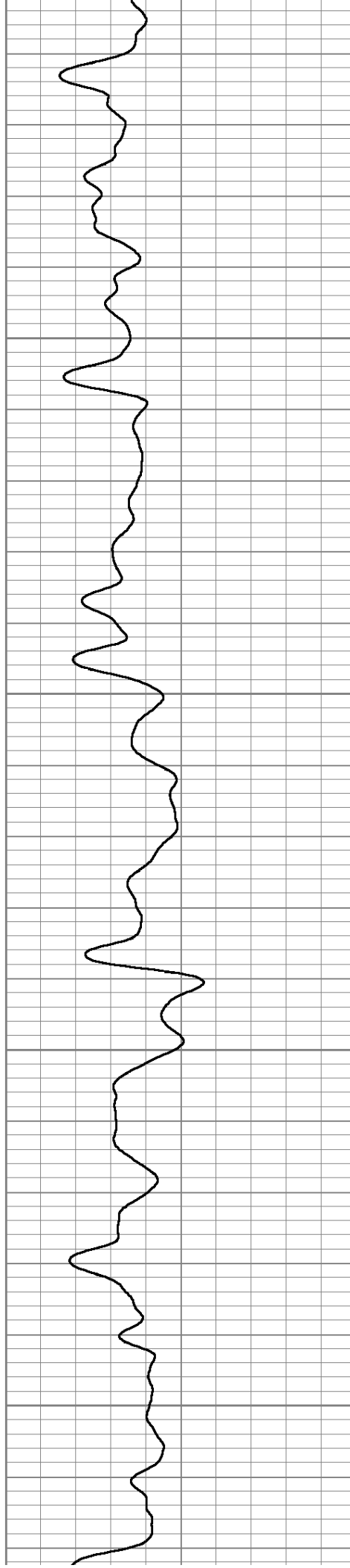


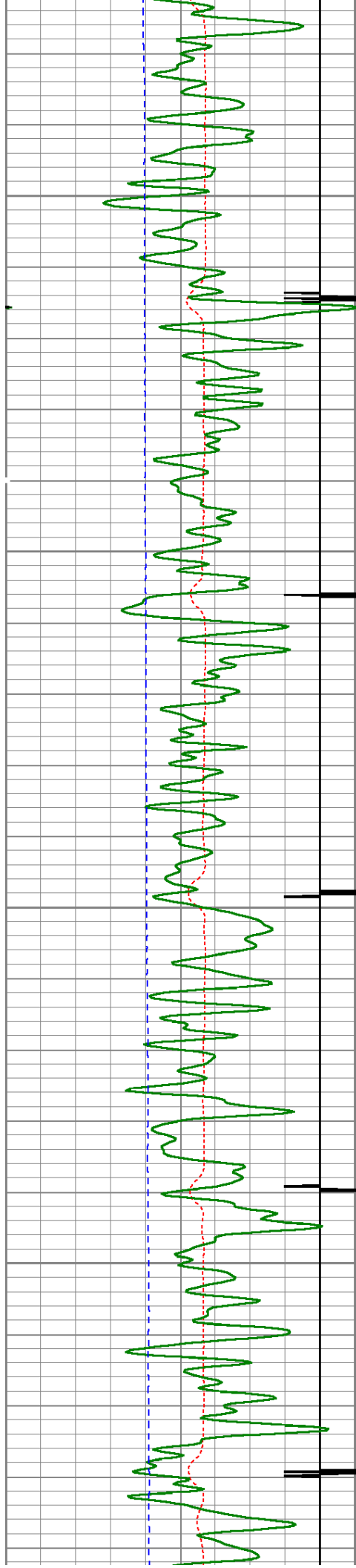
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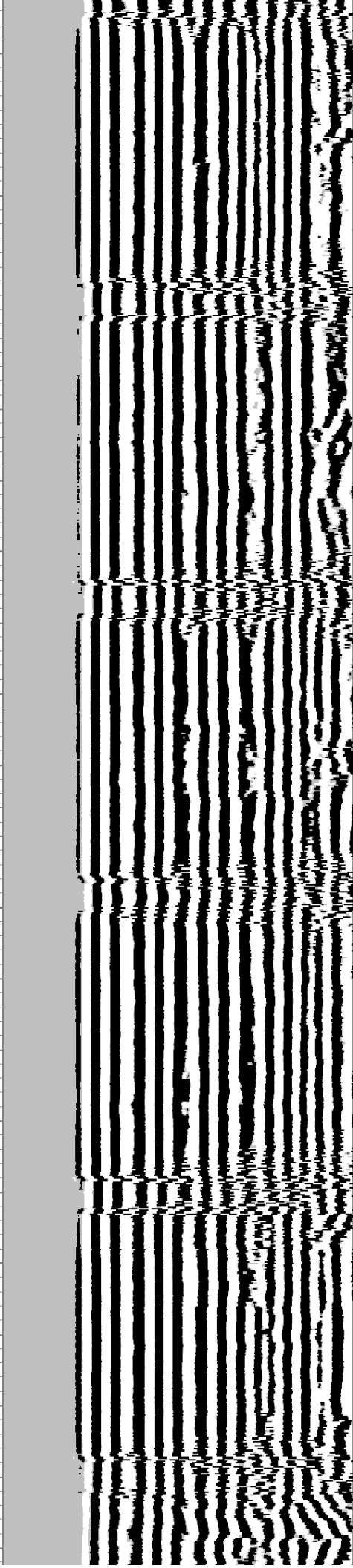
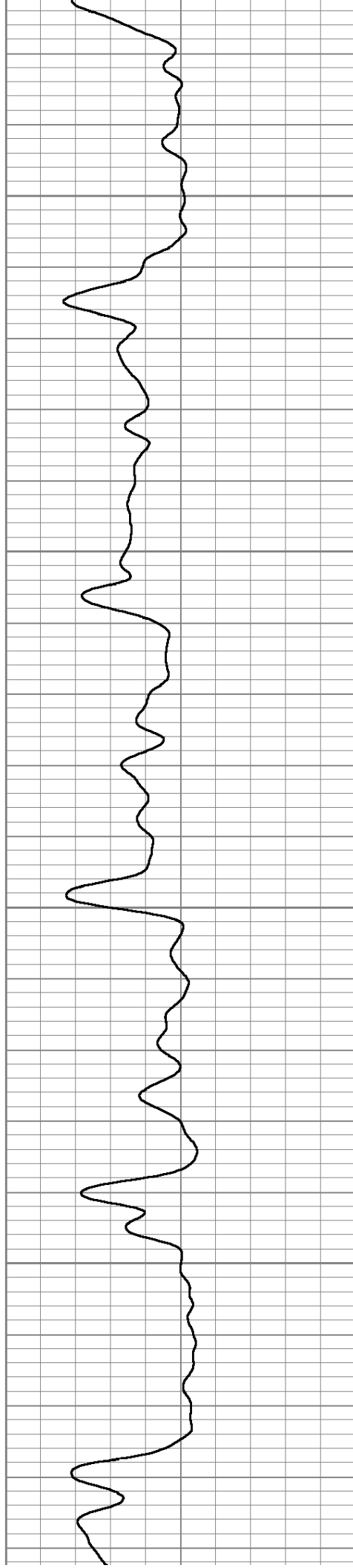


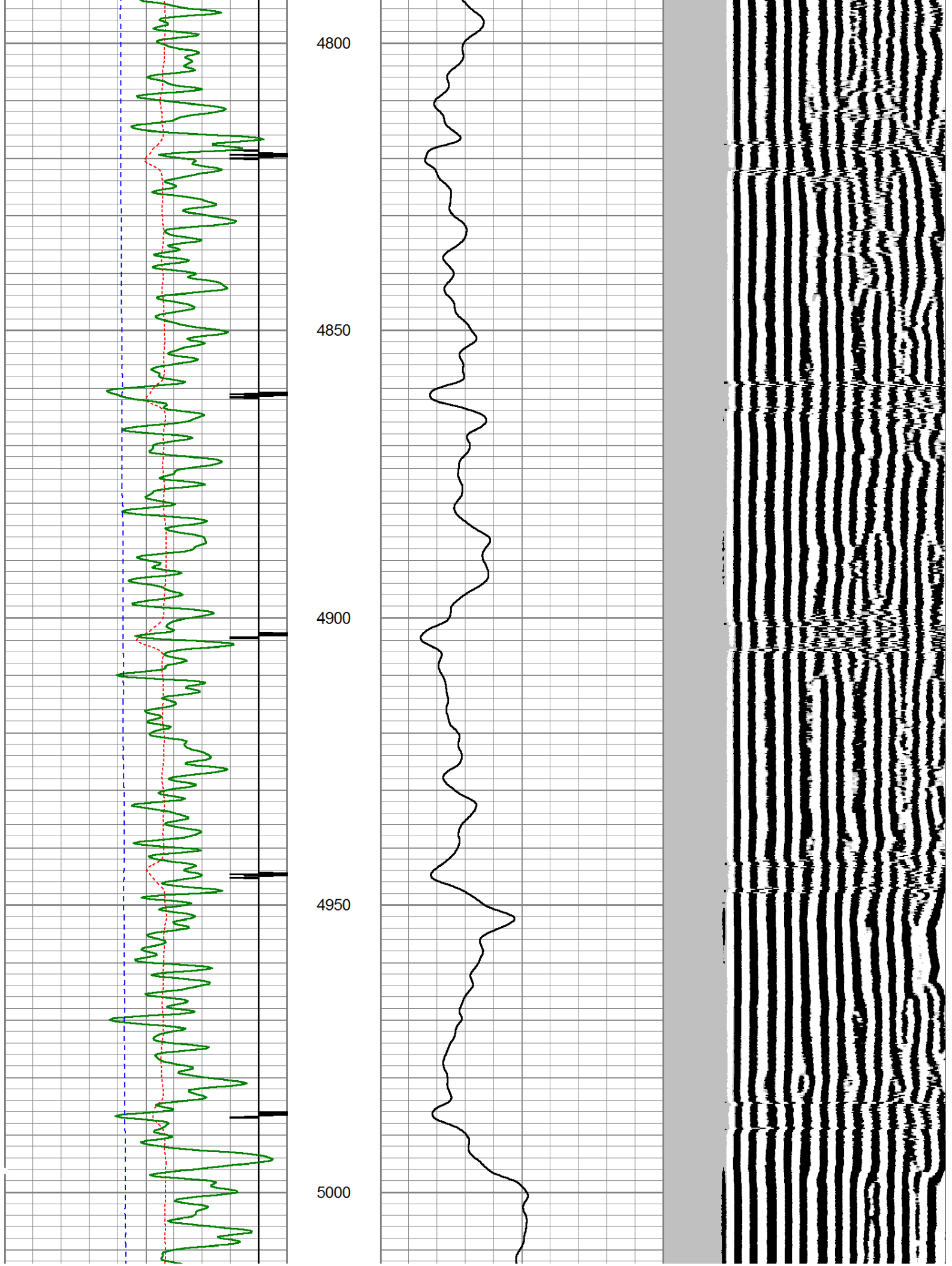
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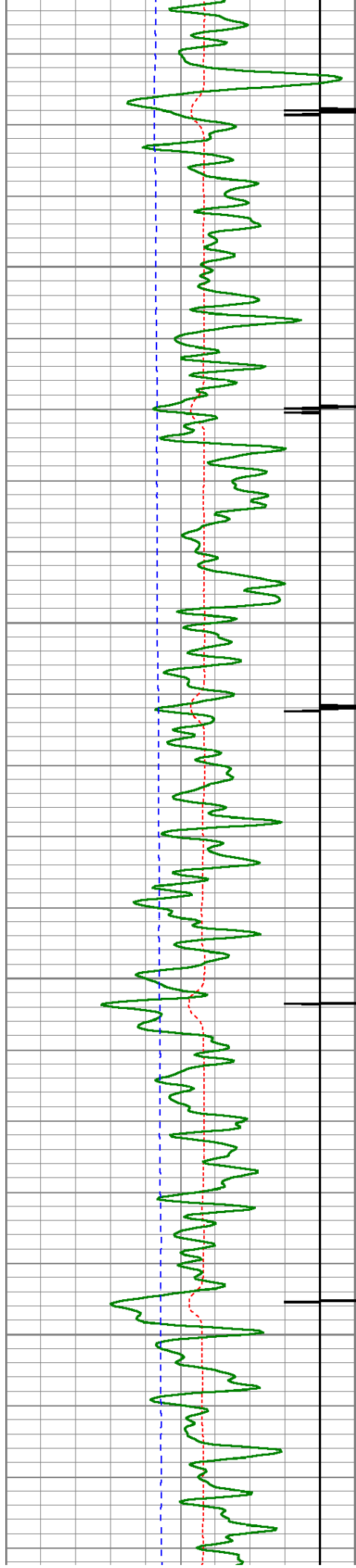
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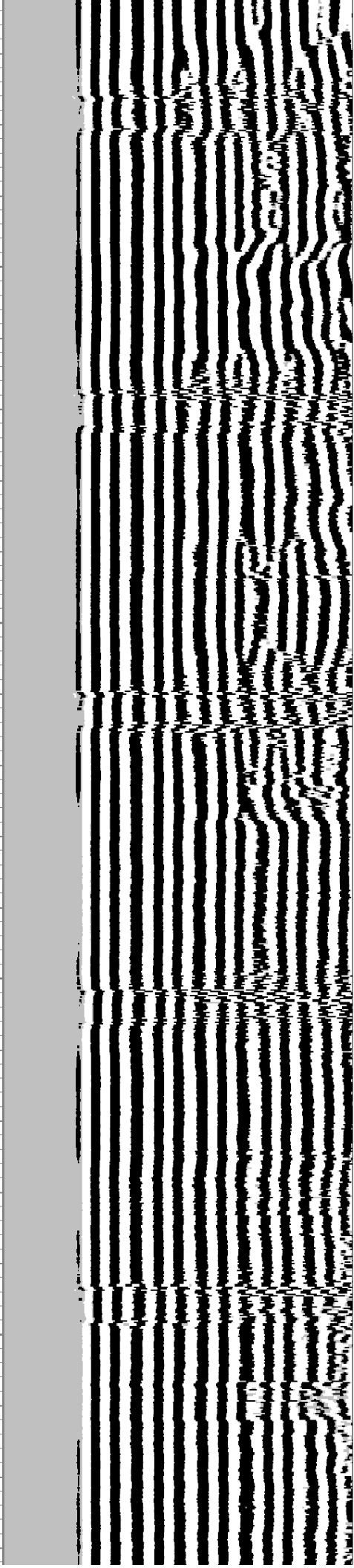
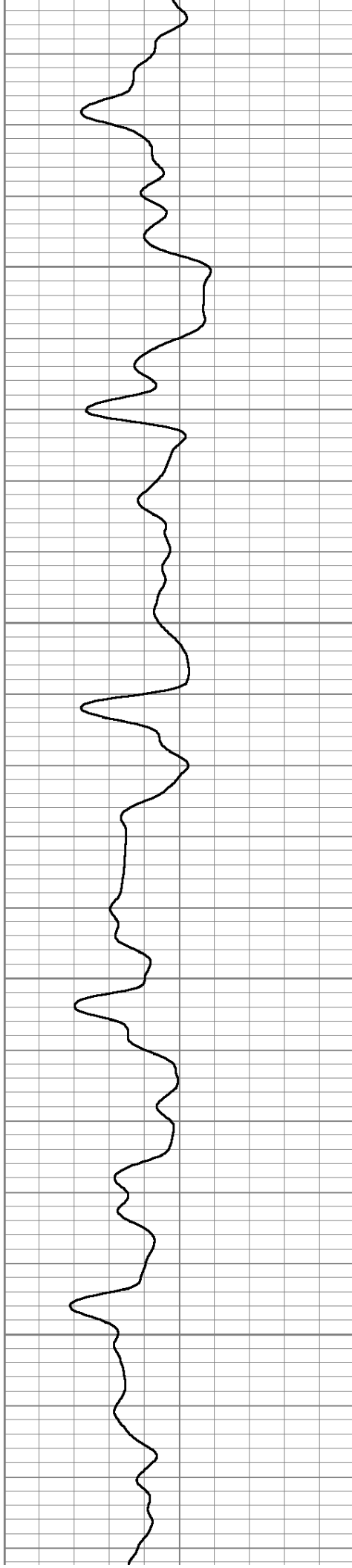


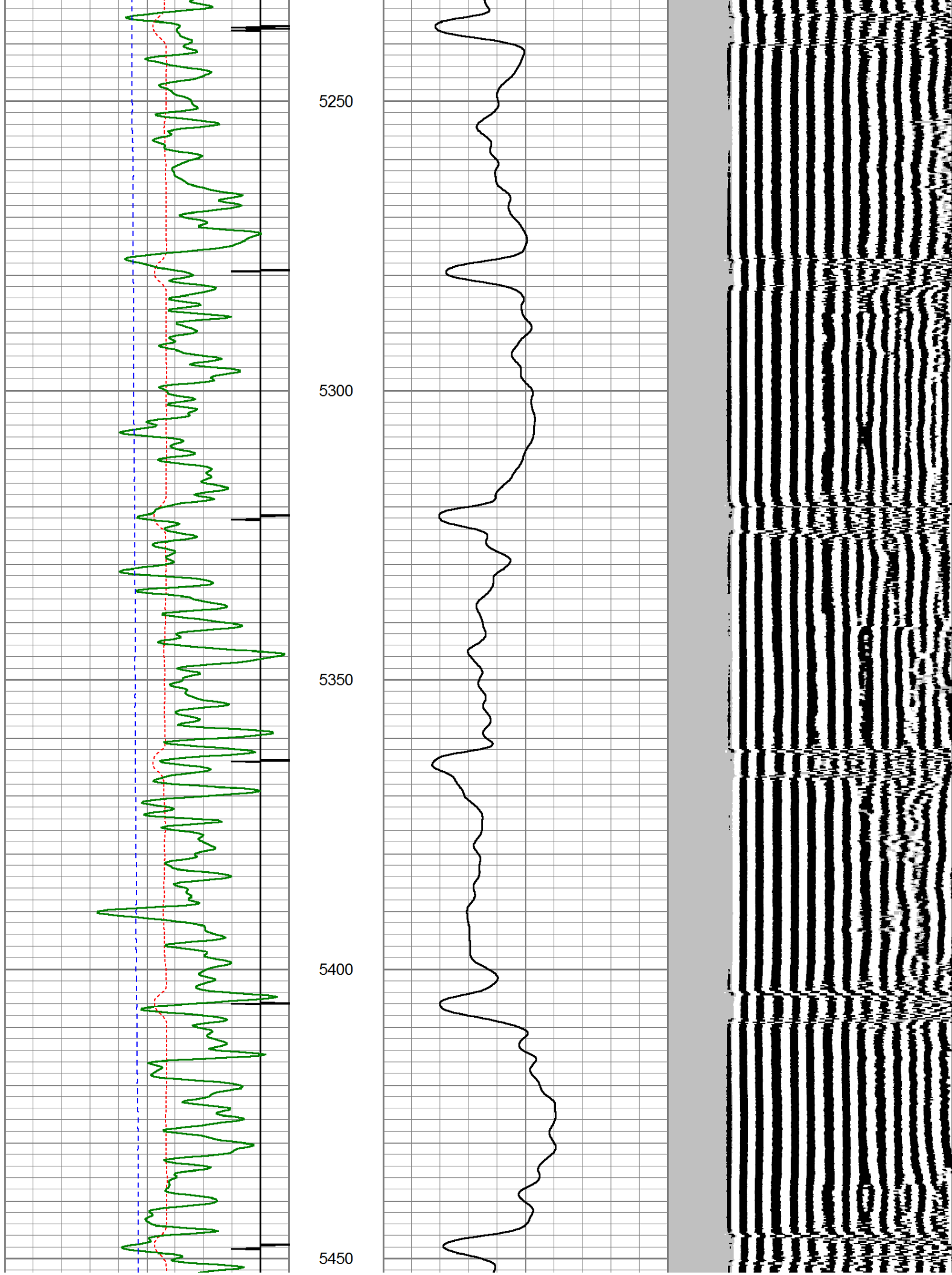
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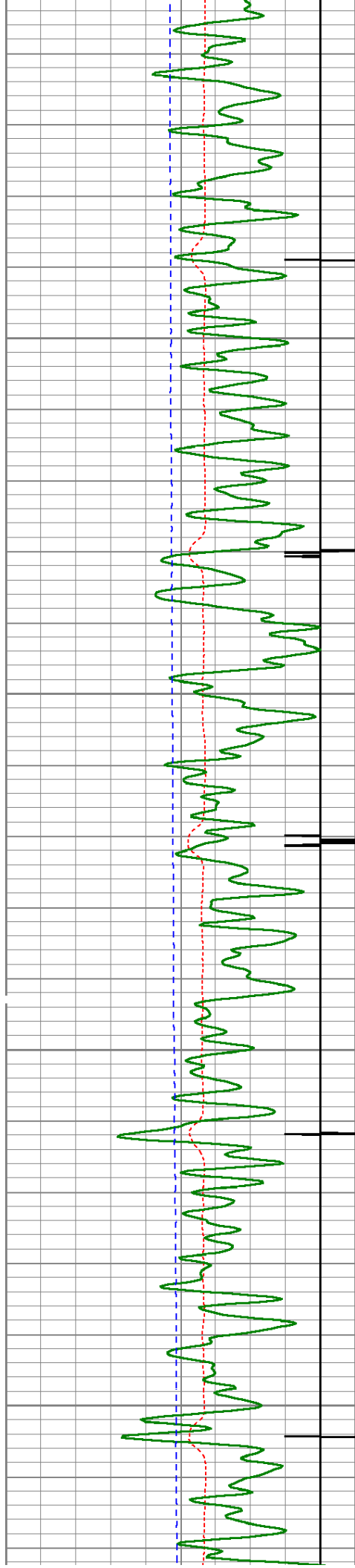
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5200





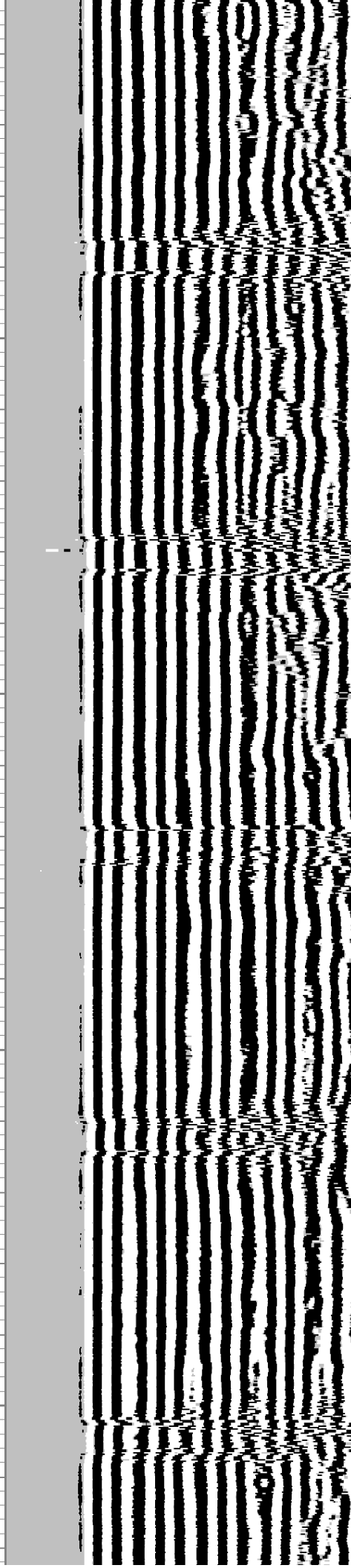
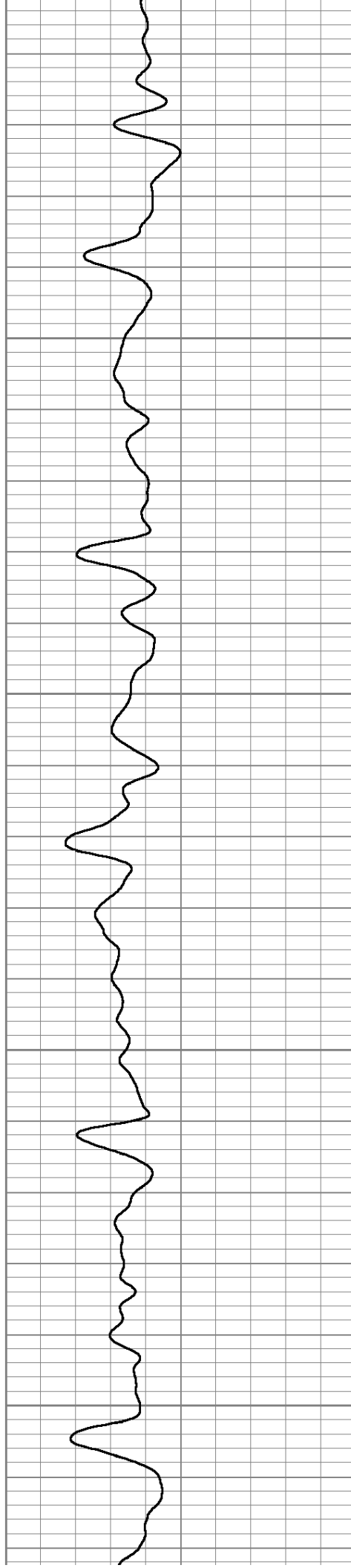


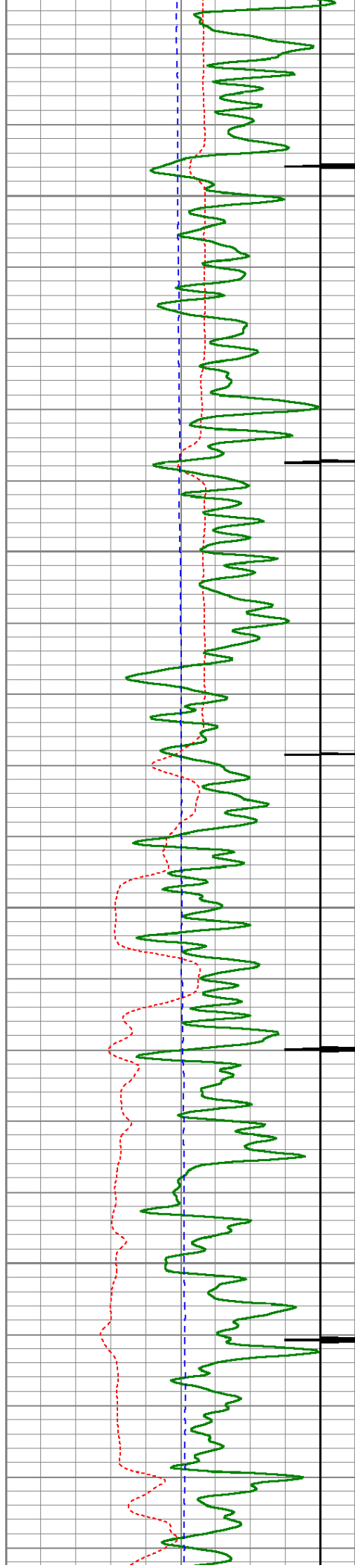
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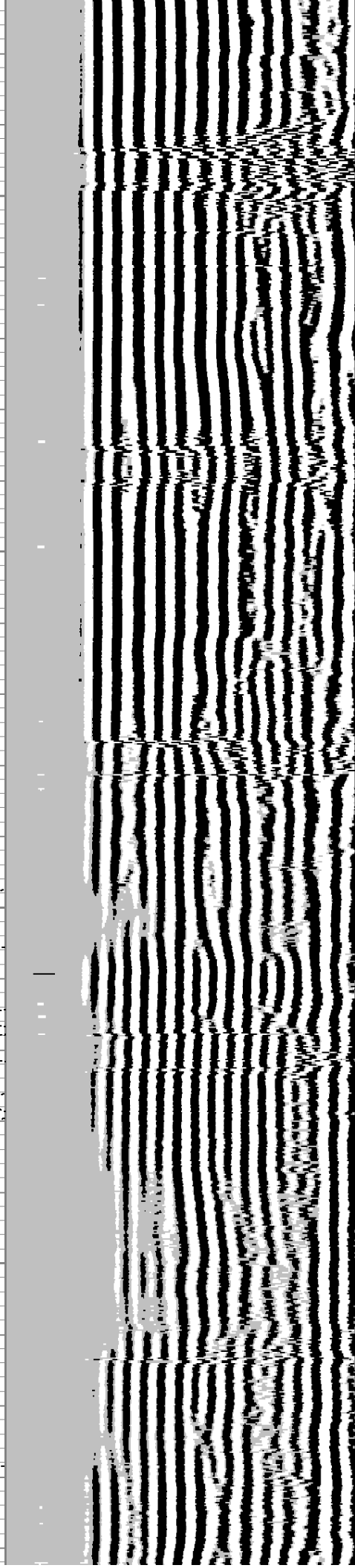
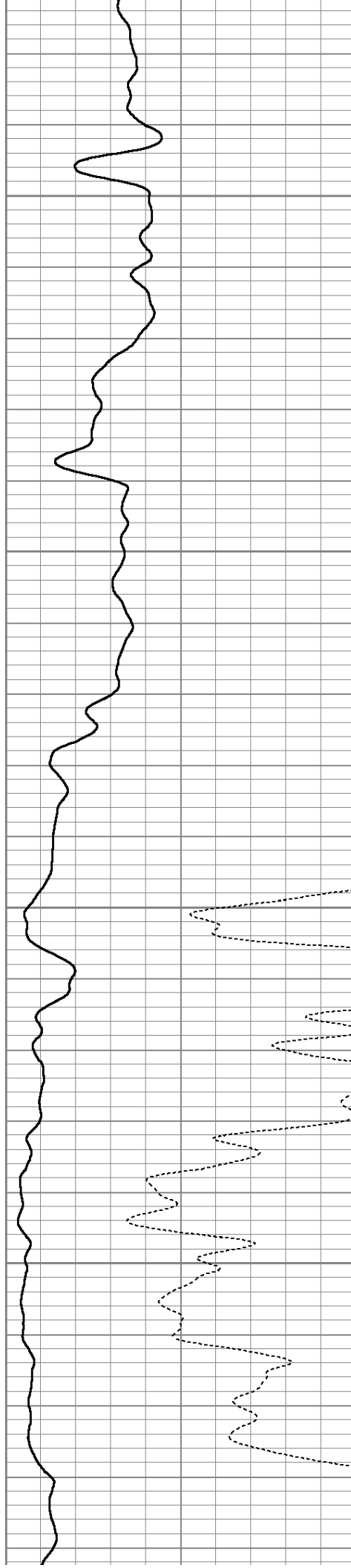


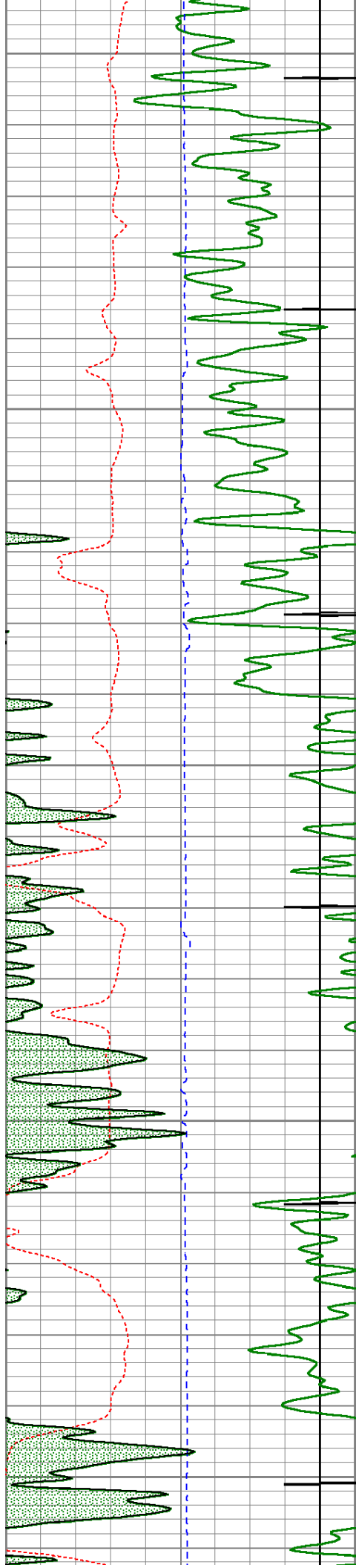
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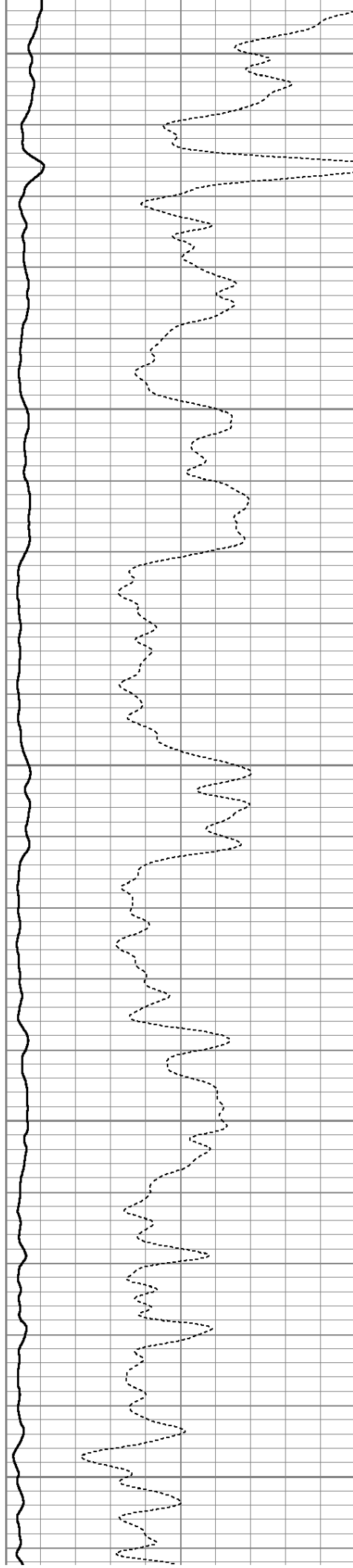
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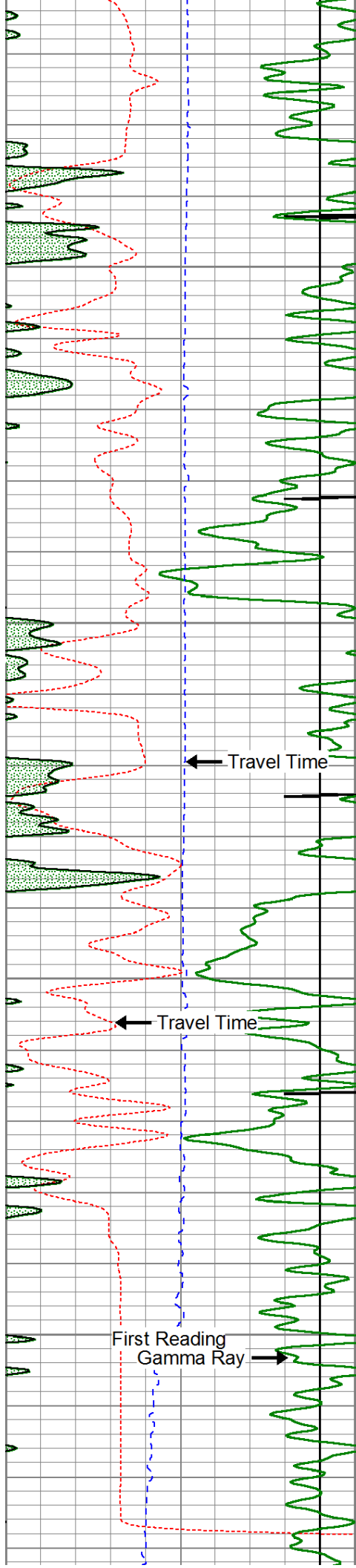
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6050

6100





6150

6200

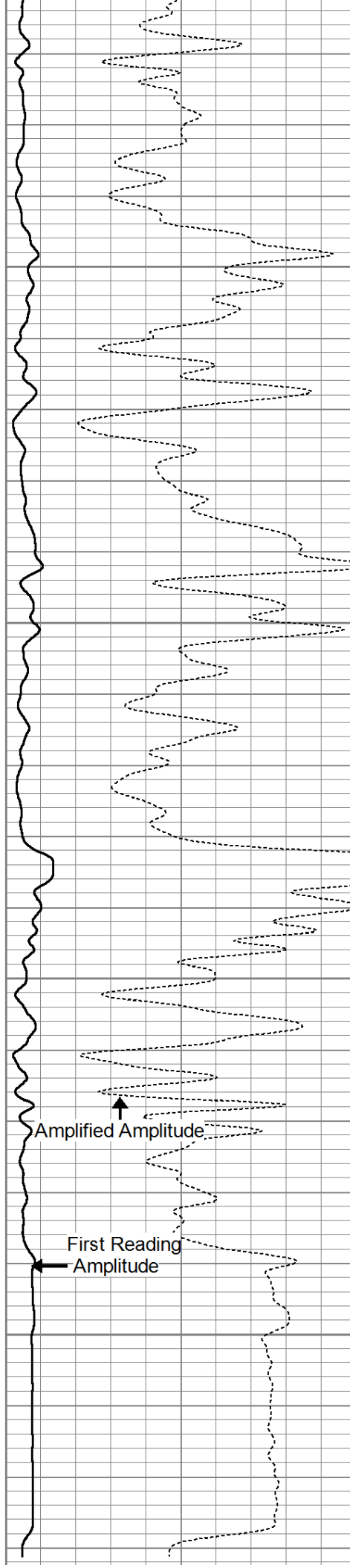
6250

6300

Travel Time

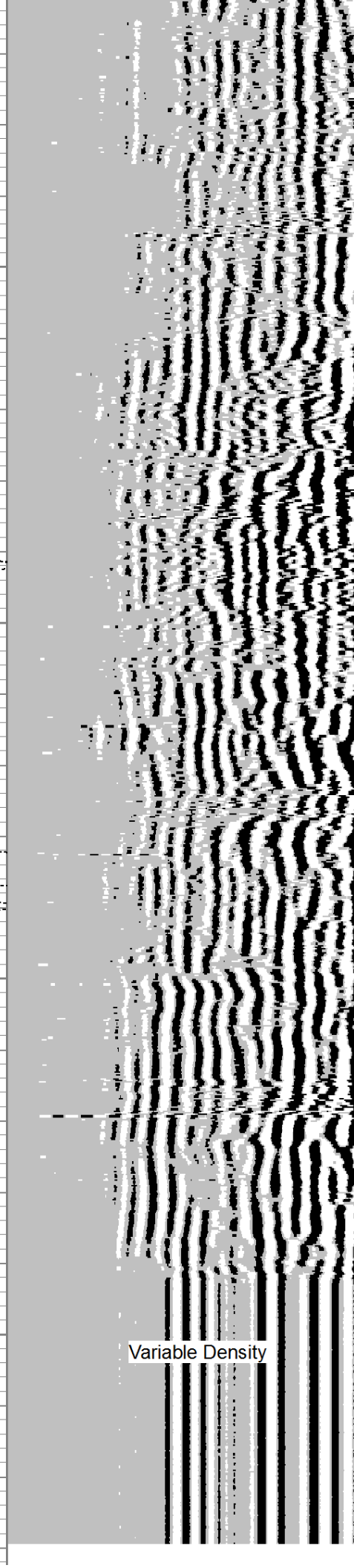
Travel Time

First Reading
Gamma Ray

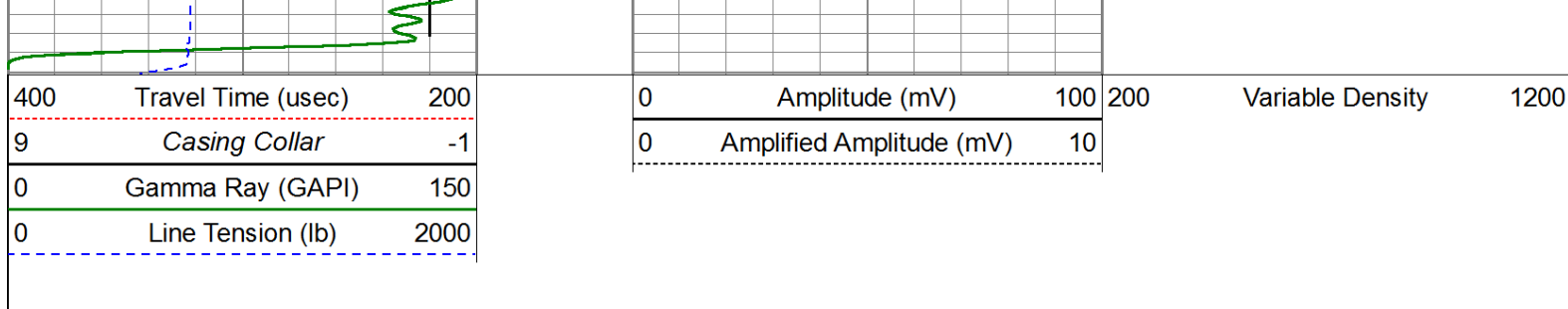


Amplified Amplitude

First Reading
Amplitude



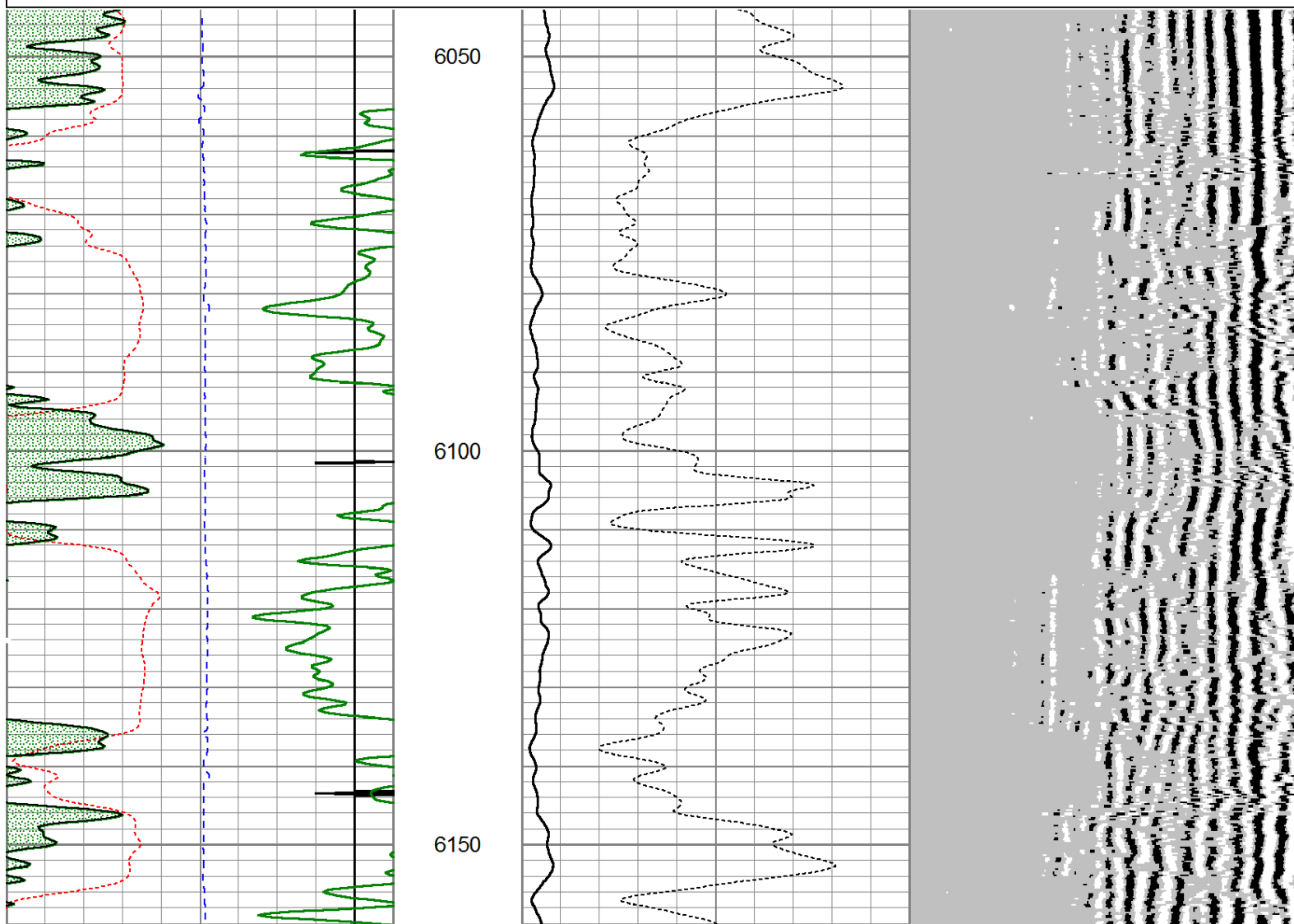
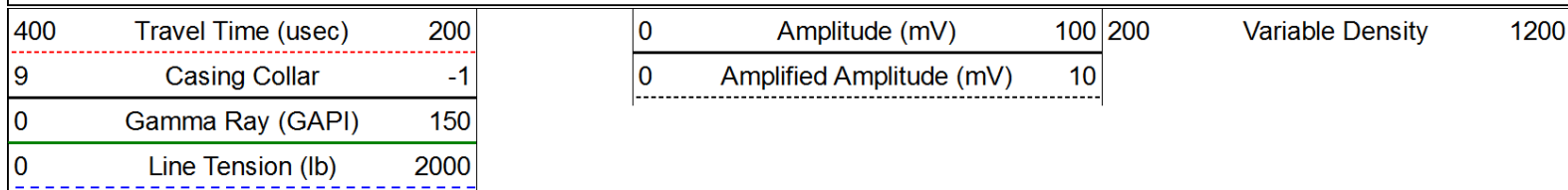
Variable Density

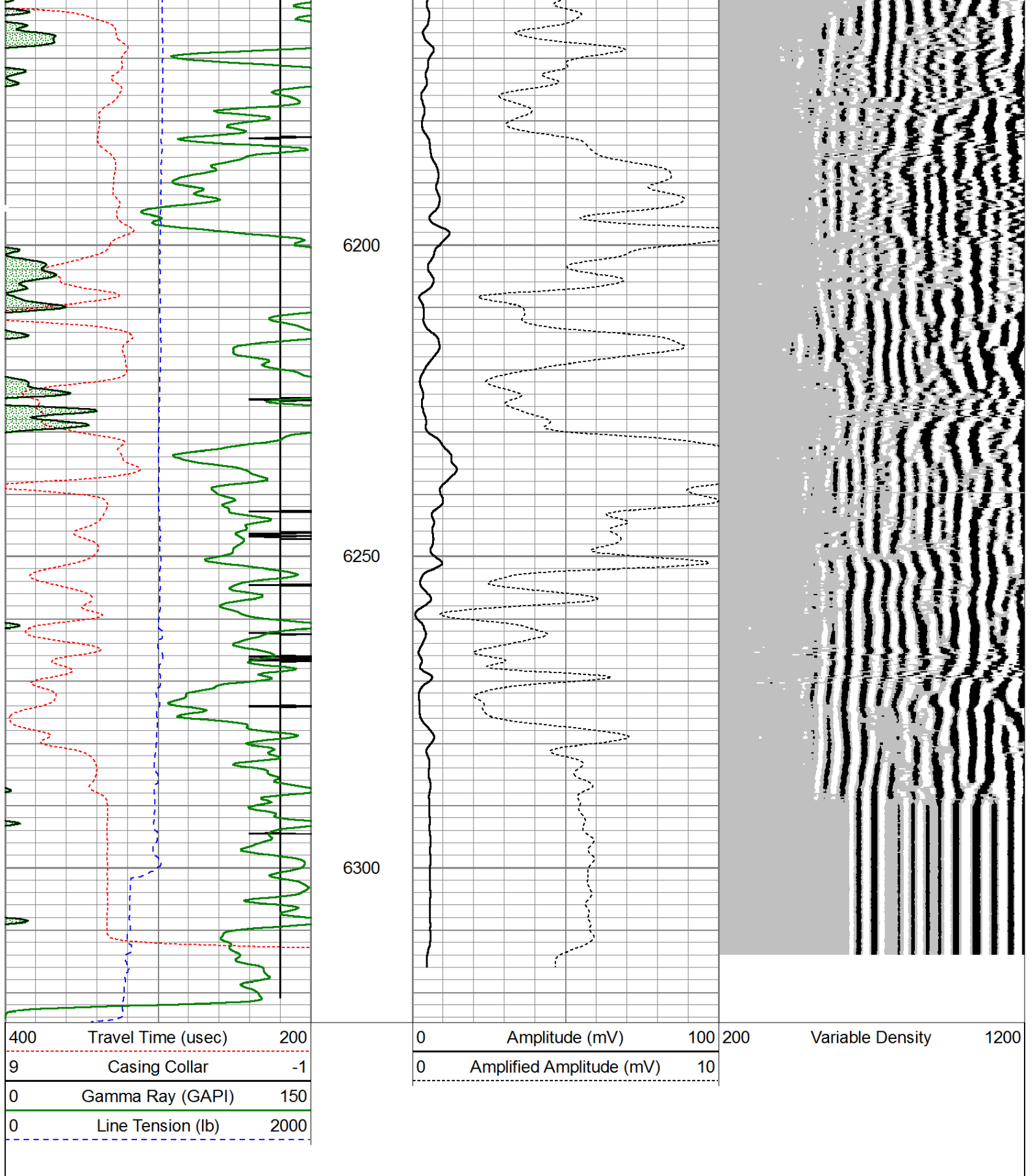




Repeat Pass (0 PSI)

Database File: bonanza creek pronghorn 21-24-17hnb_cbl.db
 Dataset Pathname: pass3
 Presentation Format: cblprobe
 Dataset Creation: Wed Jun 25 11:57:48 2014 by Log 0
 Charted by: Depth in Feet scaled 1:240





Calibration Report

Database File: bonanza creek pronghorn 21-24-17hnb_cbl.db
Dataset Pathname: pass5.1
Dataset Creation: Wed Jun 25 13:06:43 2014 by Calc 0

Gamma Ray Calibration Report

Serial Number

111111

Serial Number: 111111
Tool Model: Probe275
Performed: Sun Jun 22 07:58:34 2014

Calibrator Value: 1022.0 GAPI
Background Reading: 82.4 cps
Calibrator Reading: 1474.8 cps
Sensitivity: 0.8500 GAPI/cps

Temperature Calibration Report

Serial Number: 111111
Tool Model: Probe275
Performed: Wed Jun 04 15:56:51 2014

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

Segmented Cement Bond Log Calibration Report

Serial Number: 111107
Tool Model: Probe
Calibration Casing Diameter: 5.500 in
Calibration Depth: 1073.003 ft

Master Calibration, performed Wed Jun 25 12:49:53 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.028	0.719	1.000	71.921	80.881	4.683
CAL	-0.026	0.727				
5'	-0.024	0.660	1.000	71.921	103.725	3.460
SUM						
S1	-0.089	0.719	0.000	100.000	123.728	10.988
S2	-0.028	0.720	0.000	100.000	133.644	3.806
S3	-0.026	0.699	0.000	100.000	137.947	3.624
S4	-0.033	0.722	0.000	100.000	132.499	4.341
S5	-0.027	0.734	0.000	100.000	131.389	3.522
S6	0.002	0.717	0.000	100.000	139.917	-0.275
S7	0.000	0.695	0.000	100.000	143.891	-0.018
S8	-0.038	0.703	0.000	100.000	135.054	5.081

Internal Reference Calibration, performed Wed Dec 31 17:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.026	0.727	1.000	0.000

Air Zero Calibration, performed Fri Jan 24 08:41:46 2014:

	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
WVFS3FT	11.84		RBT-Probe (111107) 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					
WVFS5FT	10.84					
			Probe275 2.75" Centralizer	2.88	2.75	20.00
CCL	3.88					
TEMP	3.00					
GR	2.54		GR Probe275 (111111)	4.78	2.75	57.00

