



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

**Company** Bonanza Creek Energy  
**Well** State North Platte F-J-26HNB  
**Field** Wattenberg  
**County** Weld **State** Colorado

**Location:** API # : 05-123-37093

SHL: 497' FNL & 956' FWL

SEC 26 TWP 5N RGE 63W

**Permanent Datum** Ground Level Elevation 4566'  
**Log Measured From** Kelly Bushing 12.5' APD  
**Drilling Measured From** Kelly Bushing

Other Services  
NONE

Elevation  
K.B. 4572'  
D.F. 4571'  
G.L. 4566'

**Date** December 11, 2013

<b>Run Number</b>	1
<b>Depth Driller</b>	10758'
<b>Depth Logger</b>	6569'
<b>Bottom Logged Interval</b>	6566'
<b>Top Log Interval</b>	Surface
<b>Open Hole Size</b>	8.75
<b>Type Fluid</b>	Fresh Water
<b>Density / Viscosity</b>	8.33
<b>Max. Recorded Temp.</b>	N/A
<b>Estimated Cement Top</b>	2434'
<b>Time Well Ready</b>	7:50
<b>Time Logger on Bottom</b>	8:28
<b>Equipment Number</b>	13033
<b>Location</b>	Brighton
<b>Recorded By</b>	C. Rall
<b>Witnessed By</b>	K. Dodge

Borehole Record				Tubing Record			
Bit	From	To	Size	Weight	From	To	

<b>Casing Record</b>	<b>Size</b>	<b>Wgt/Ft</b>	<b>Top</b>	<b>Bottom</b>
Surface String	9 5/8"	36#	0	476'
Prot. String				
Production String	7"	26#	0	6778'
Liner	4 1/2"	11.6#	6678'	10758'

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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 this Well

Main Pass and Repeat Pass logged with 0 PSI

Logged from 12.5' Kelly Bushing

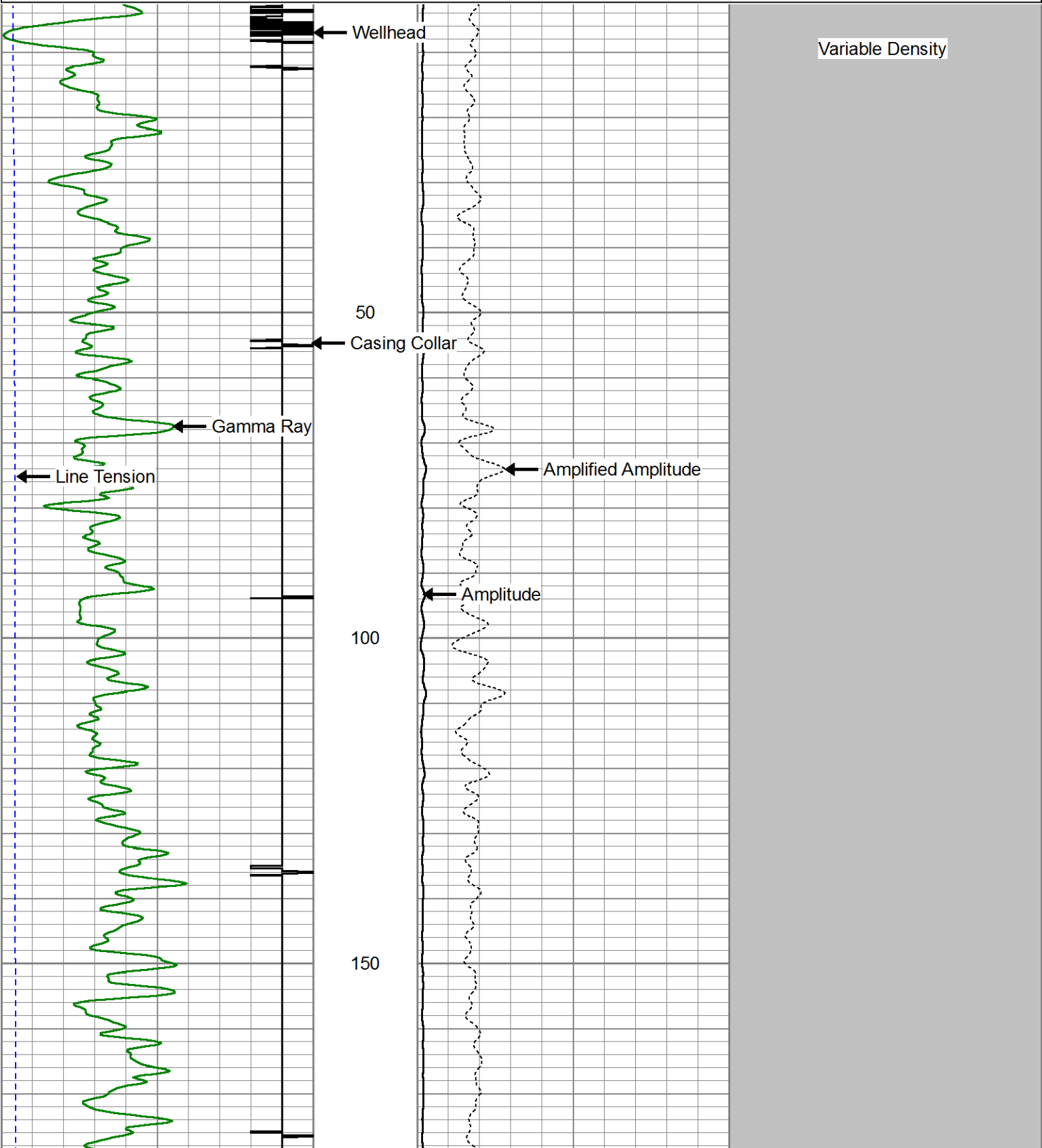
Estimated Top of Cement @ 2434'

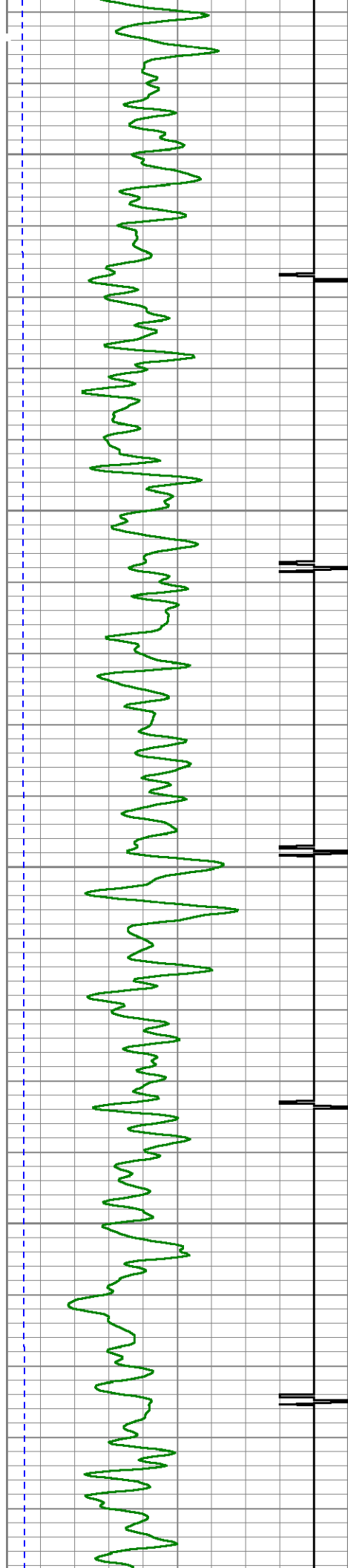
Thank You For using Allied Wireline Services  
(303) 659-4609



**Main Pass ( 0 PSI )**

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)	5000						



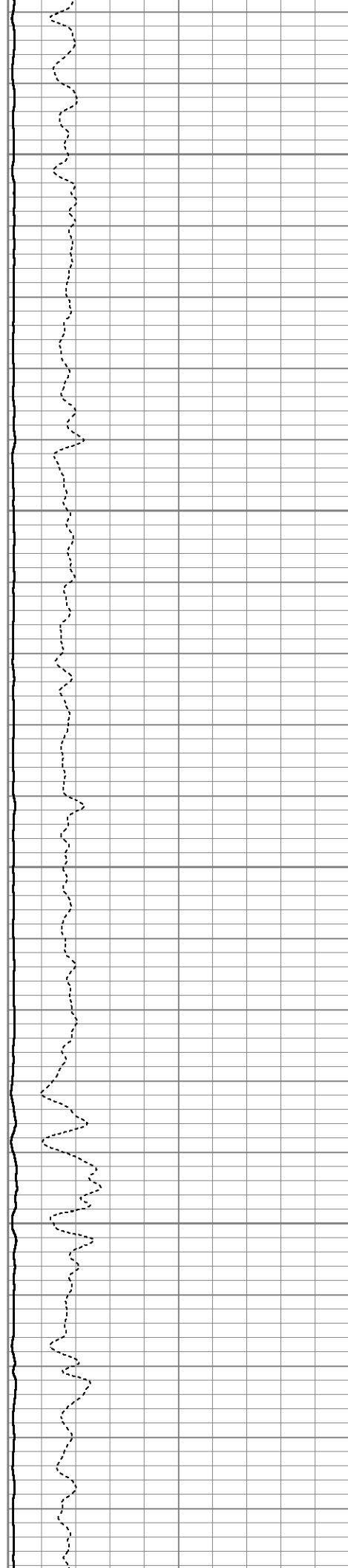


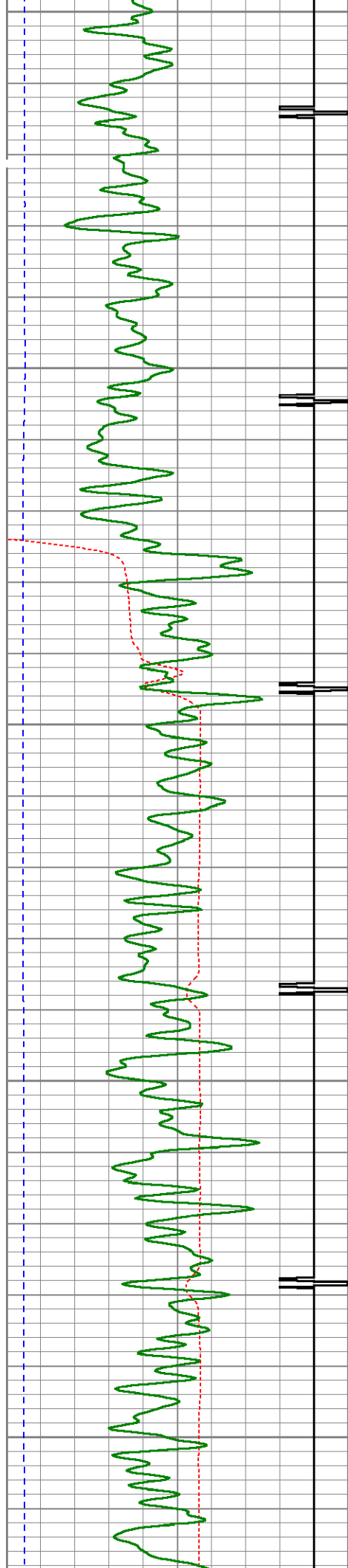
200

250

300

350





Fluid Level

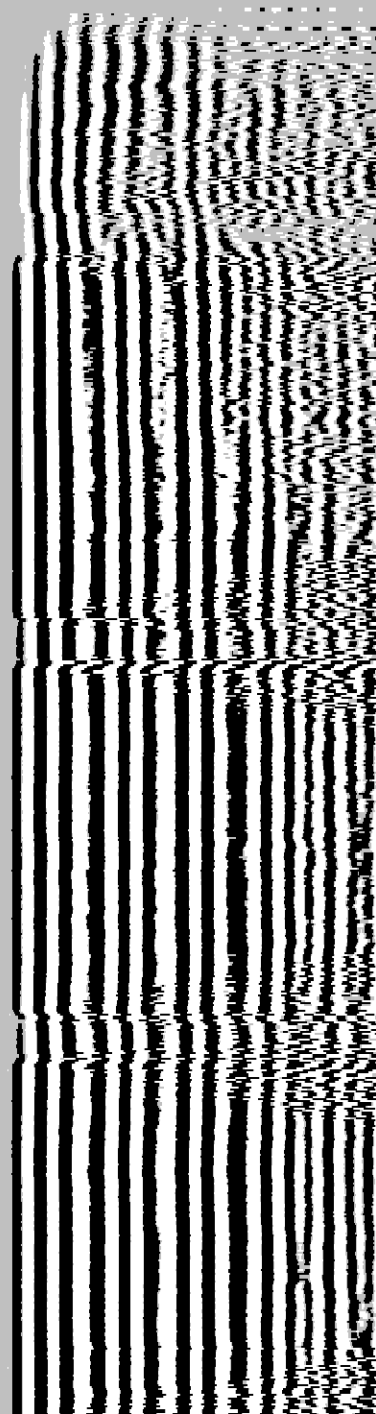
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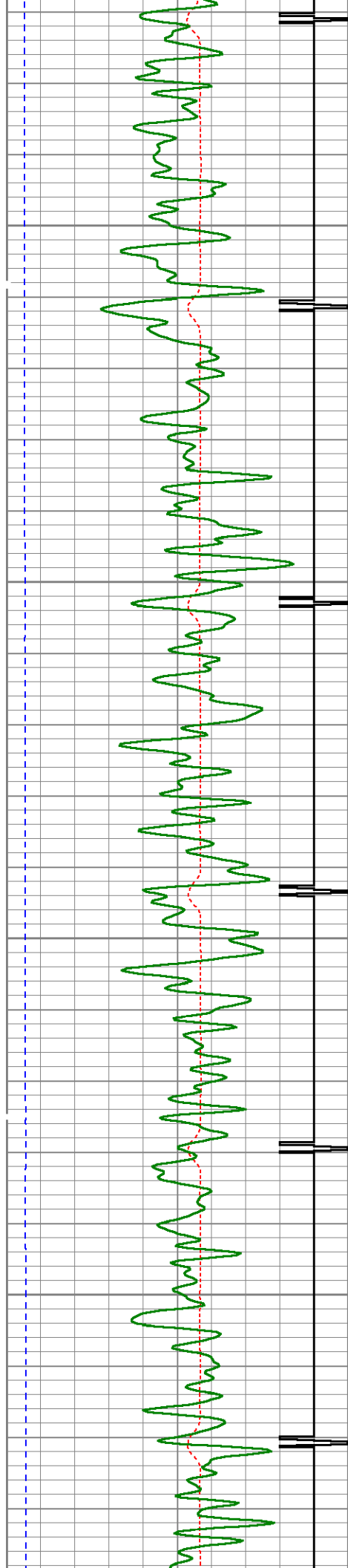
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500

550

600



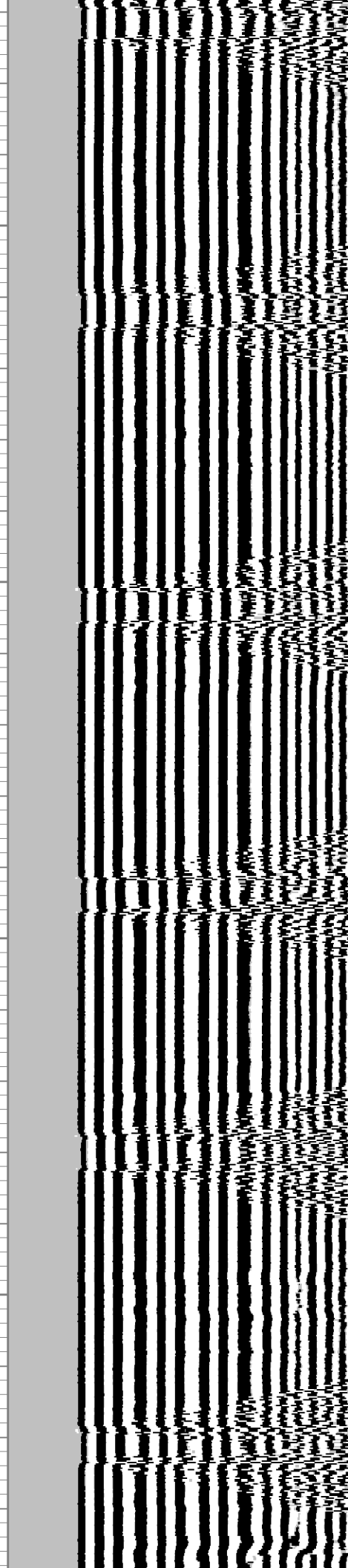
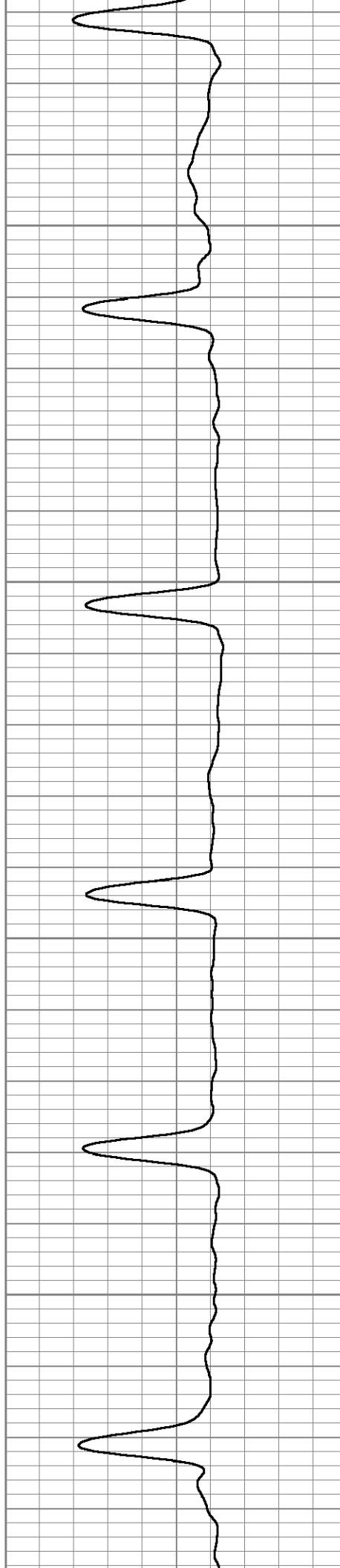


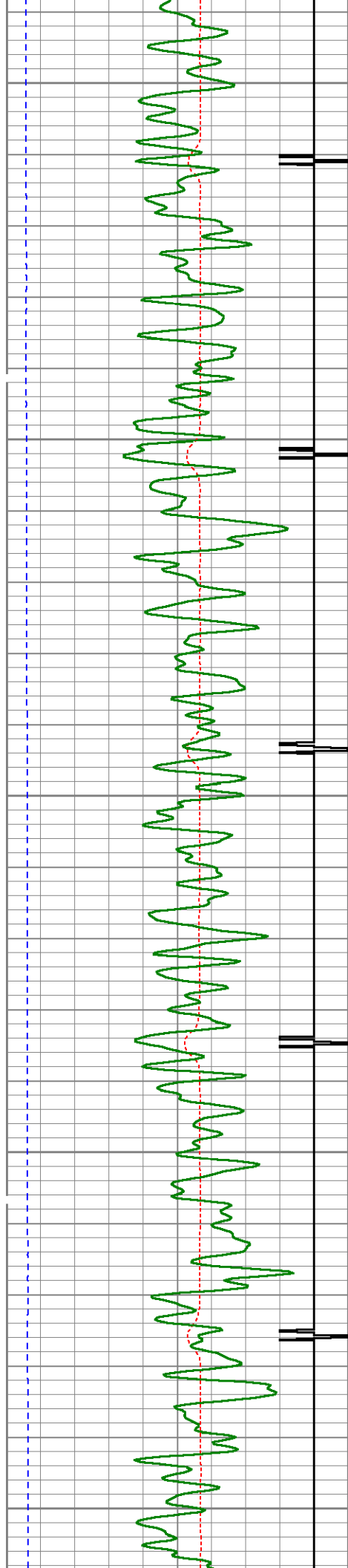
650

700

750

800





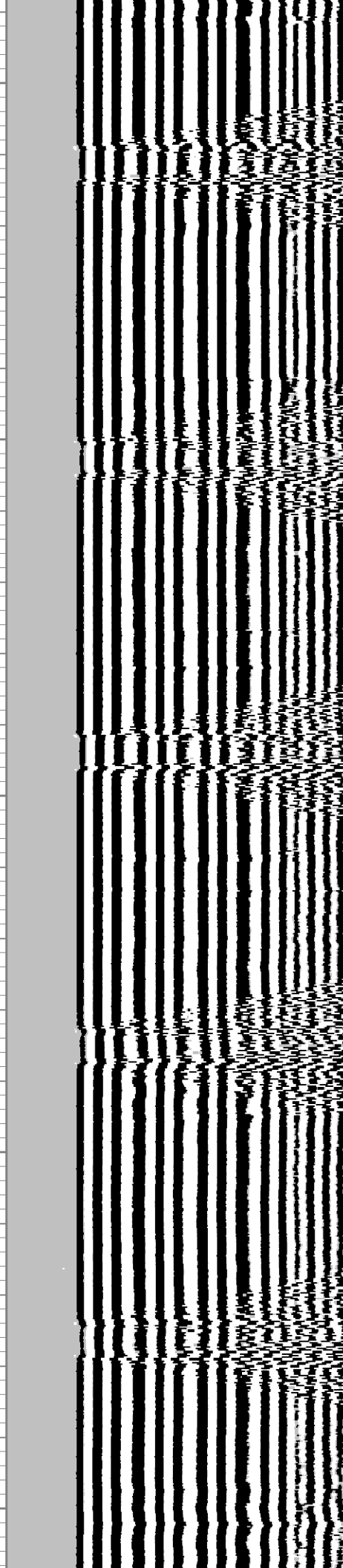
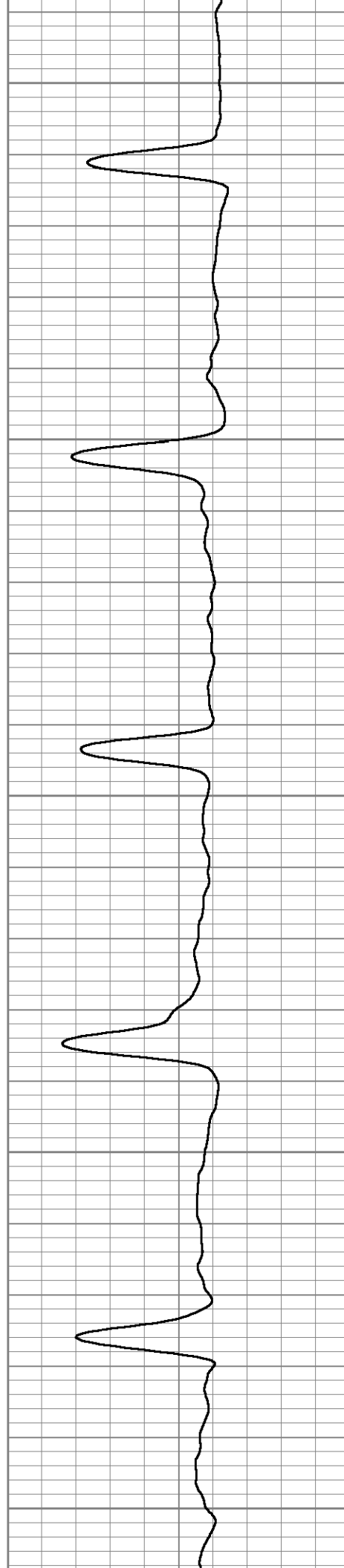
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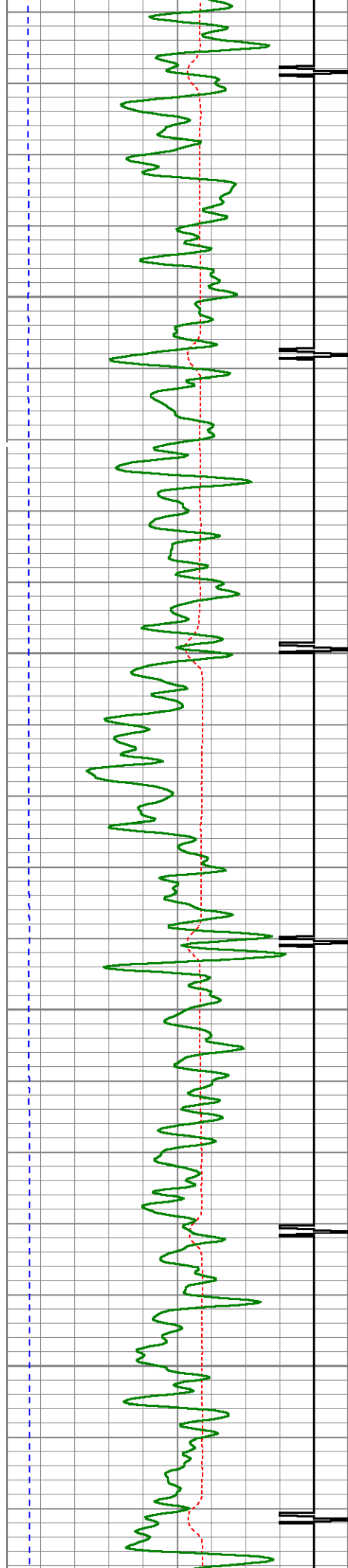
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950

1000

1050



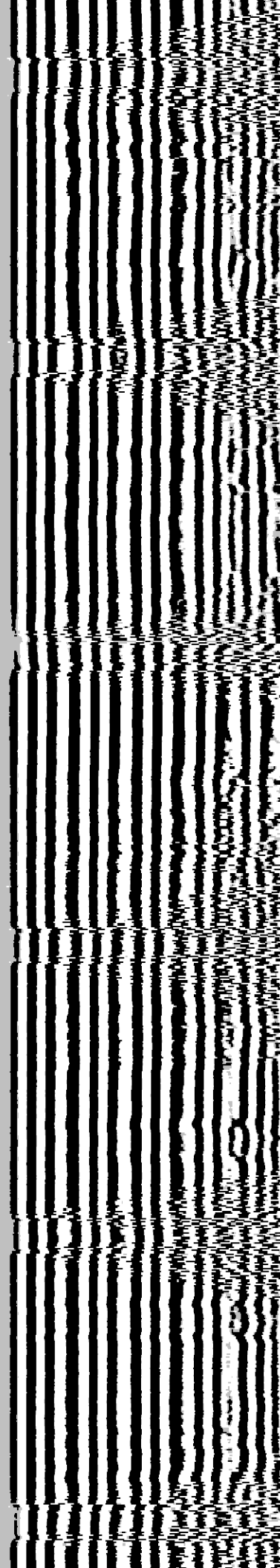
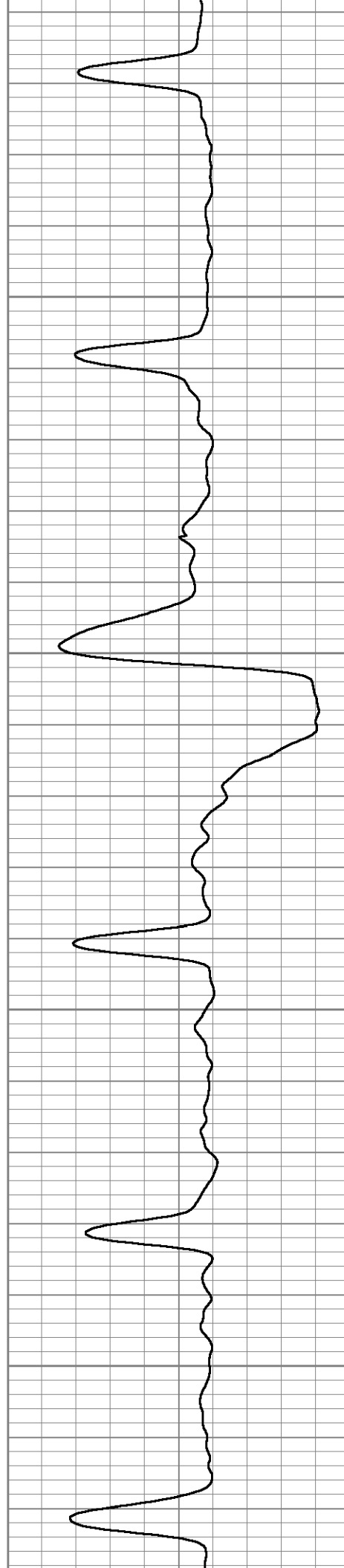


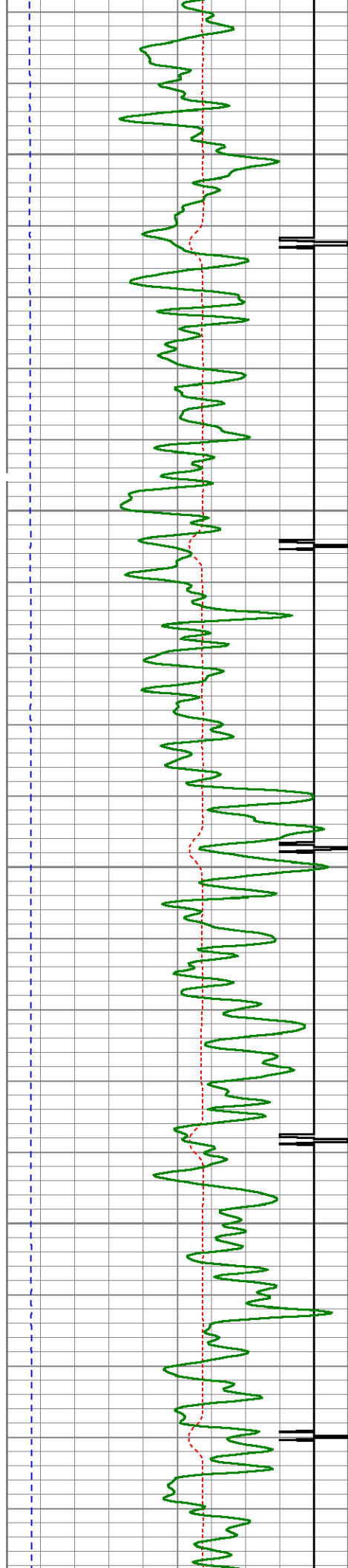
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1150

1200

1250



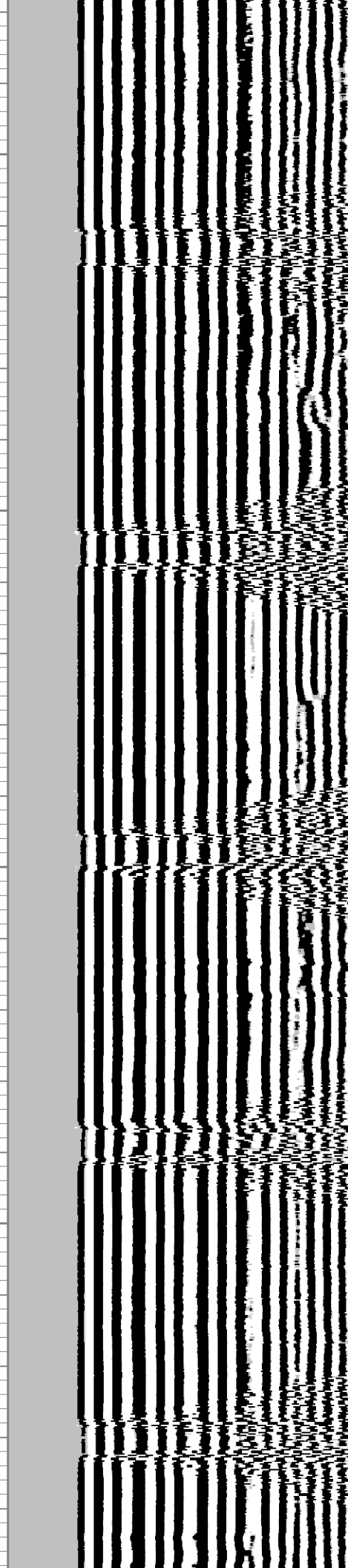
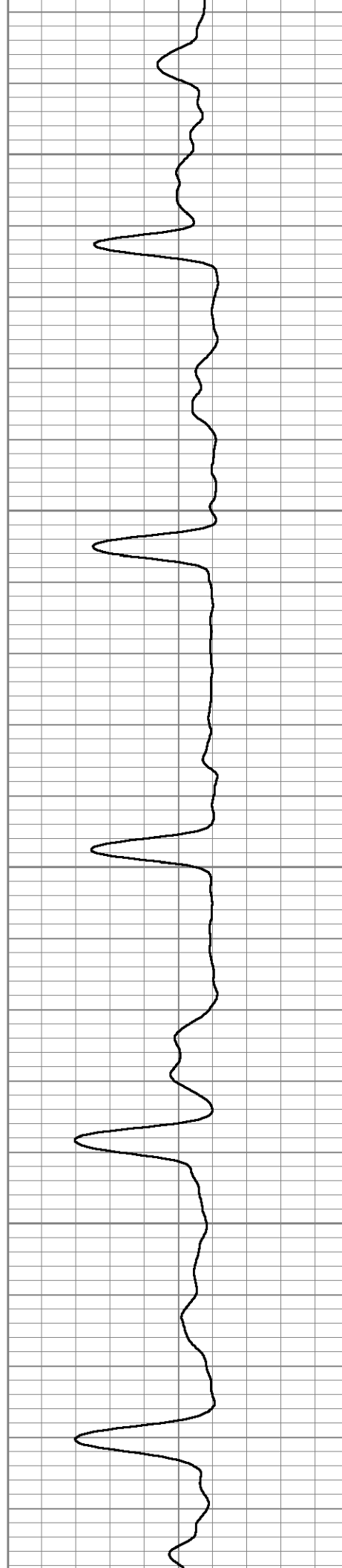


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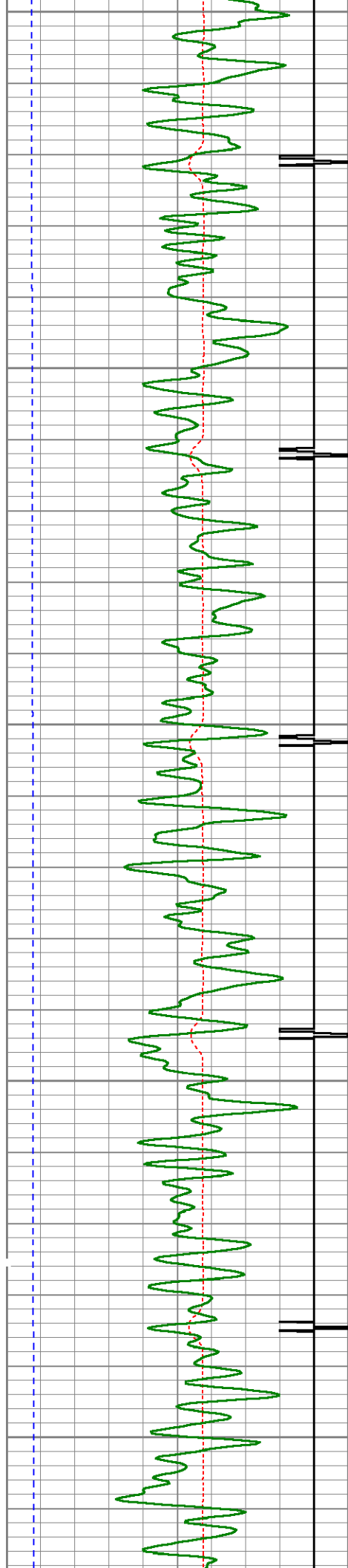
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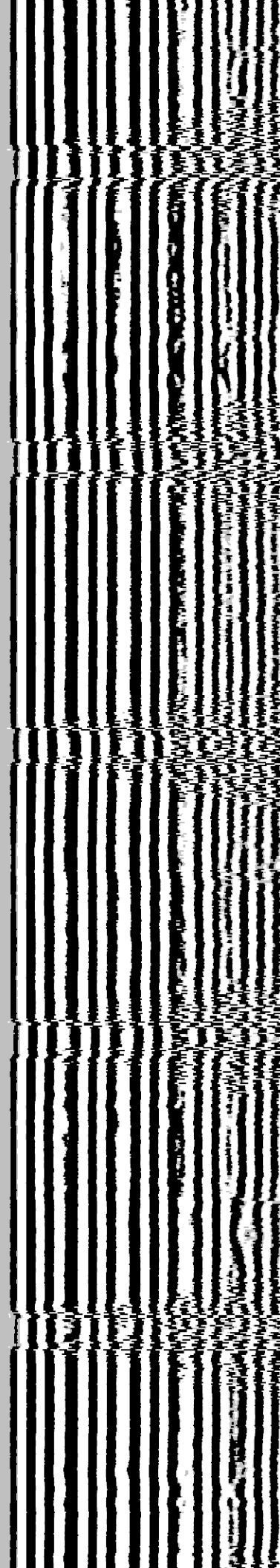
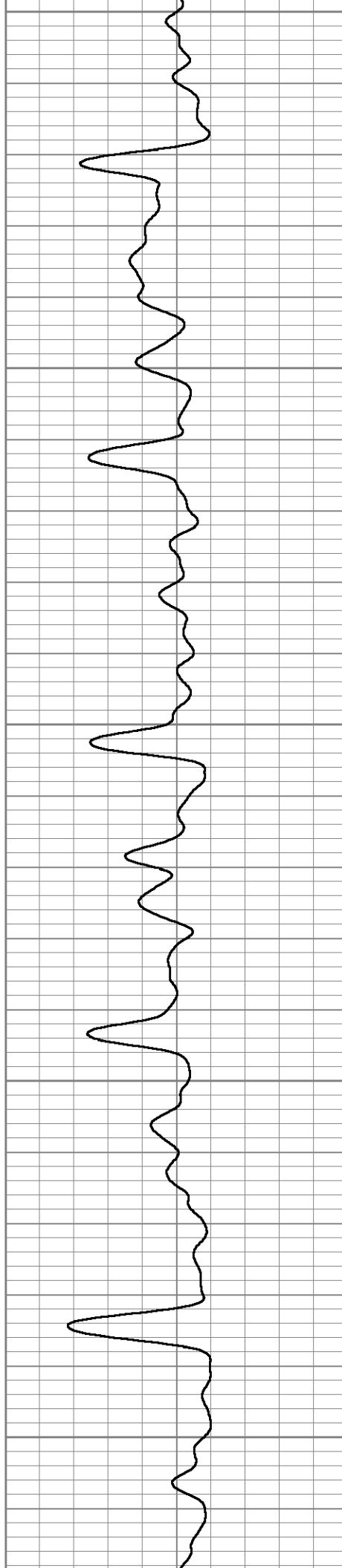
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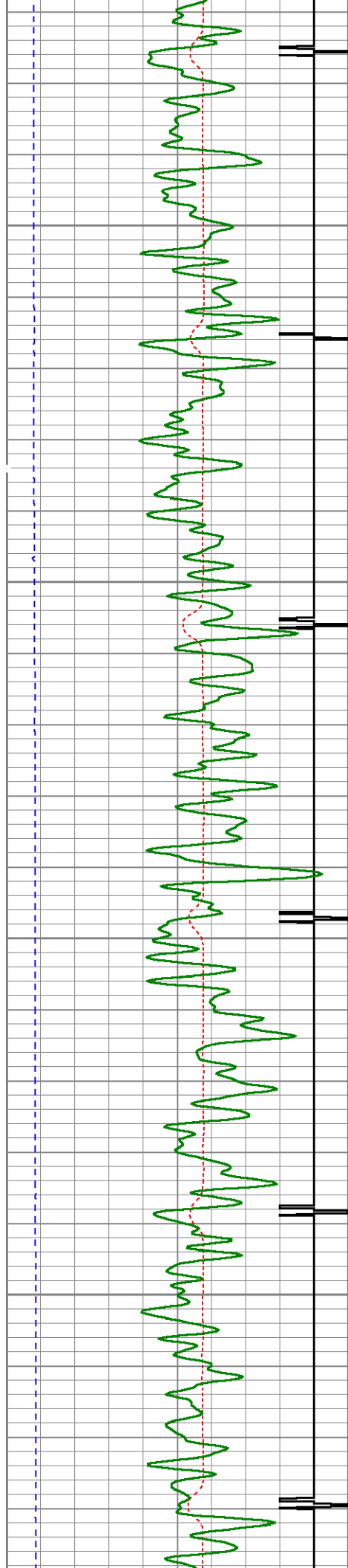
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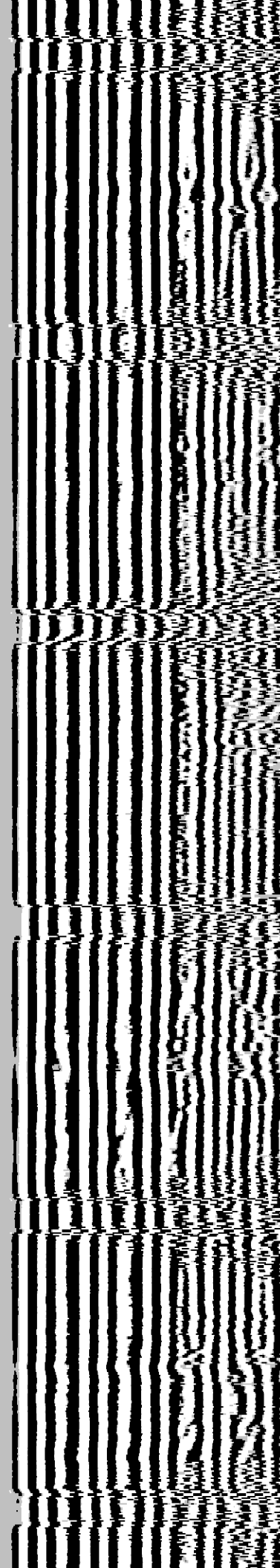
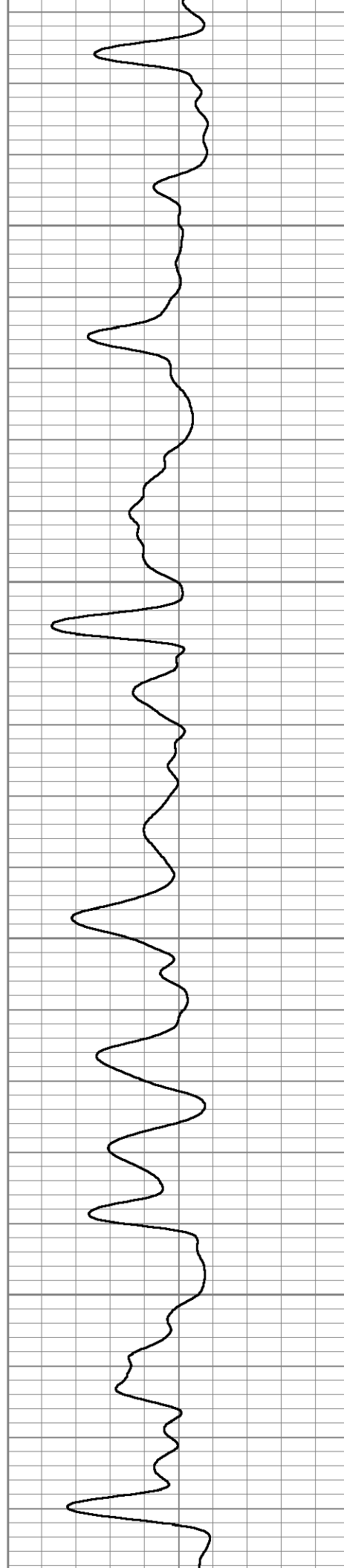


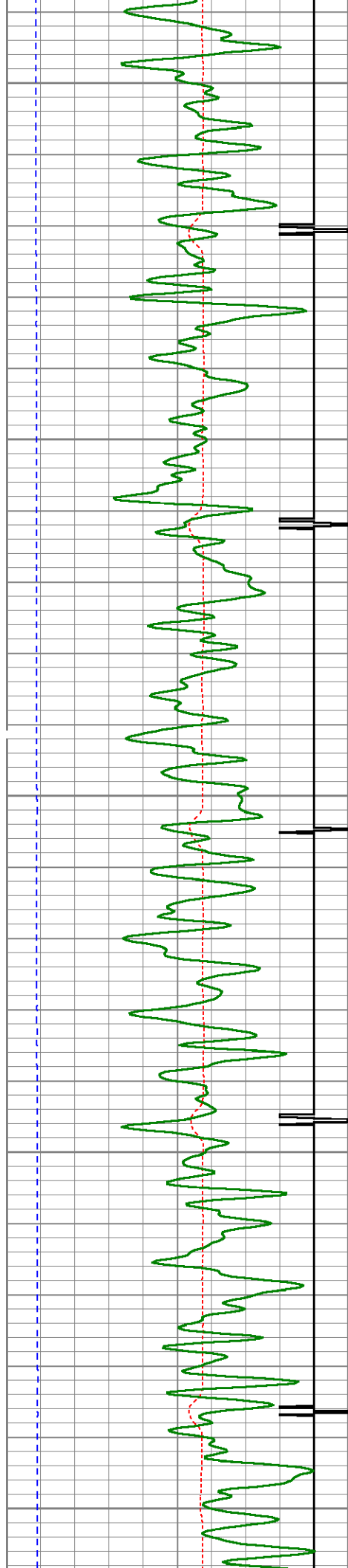
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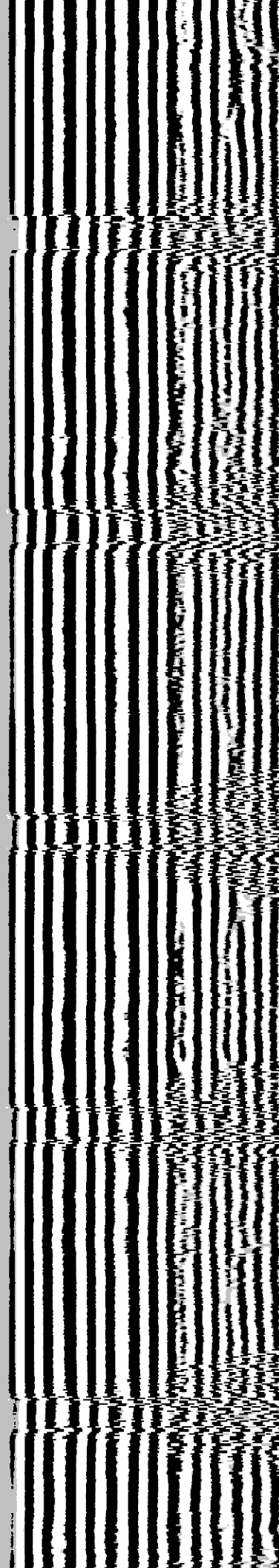
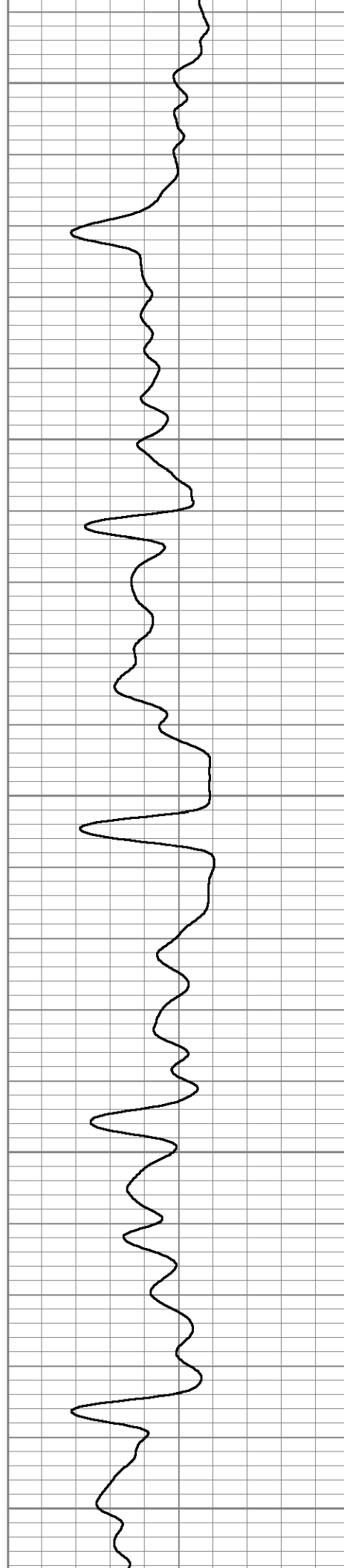
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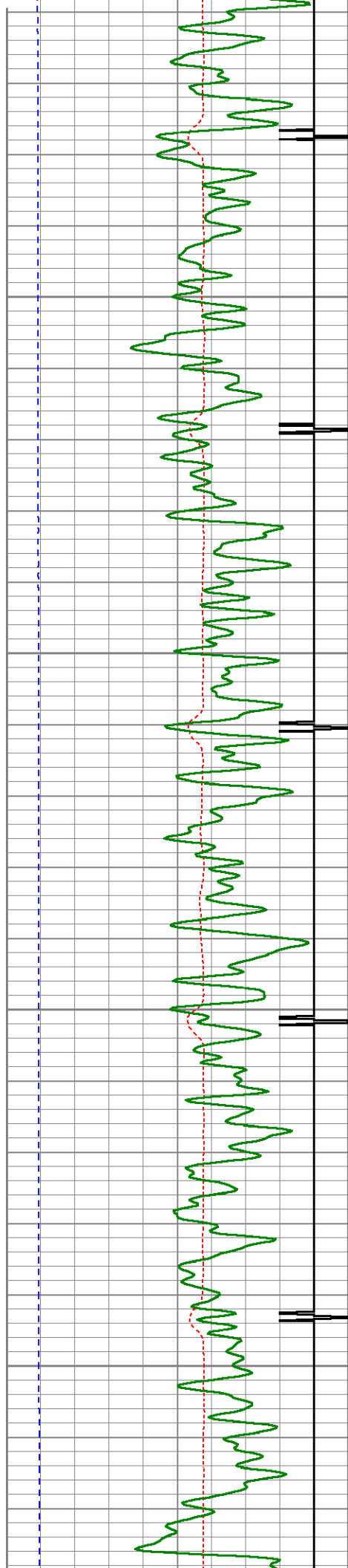
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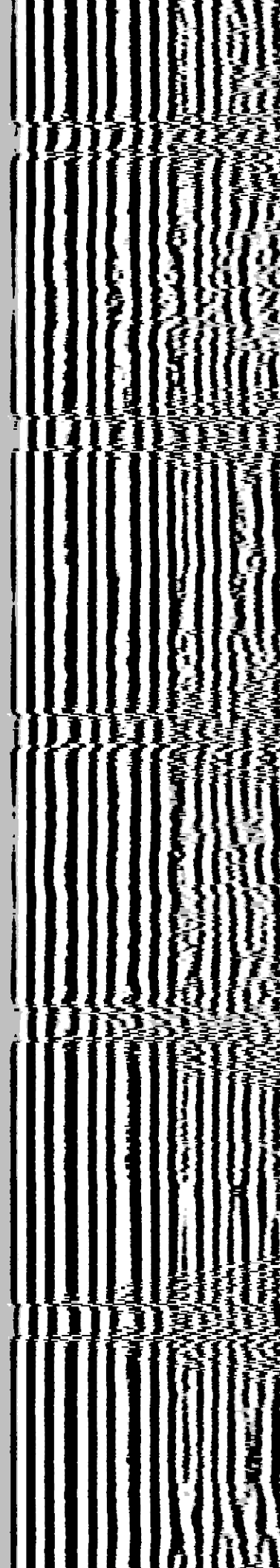
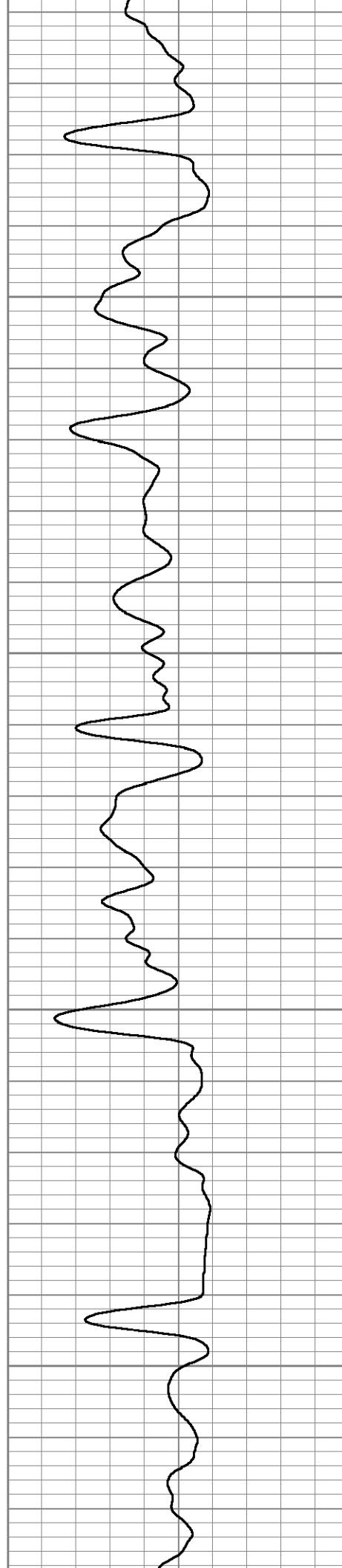


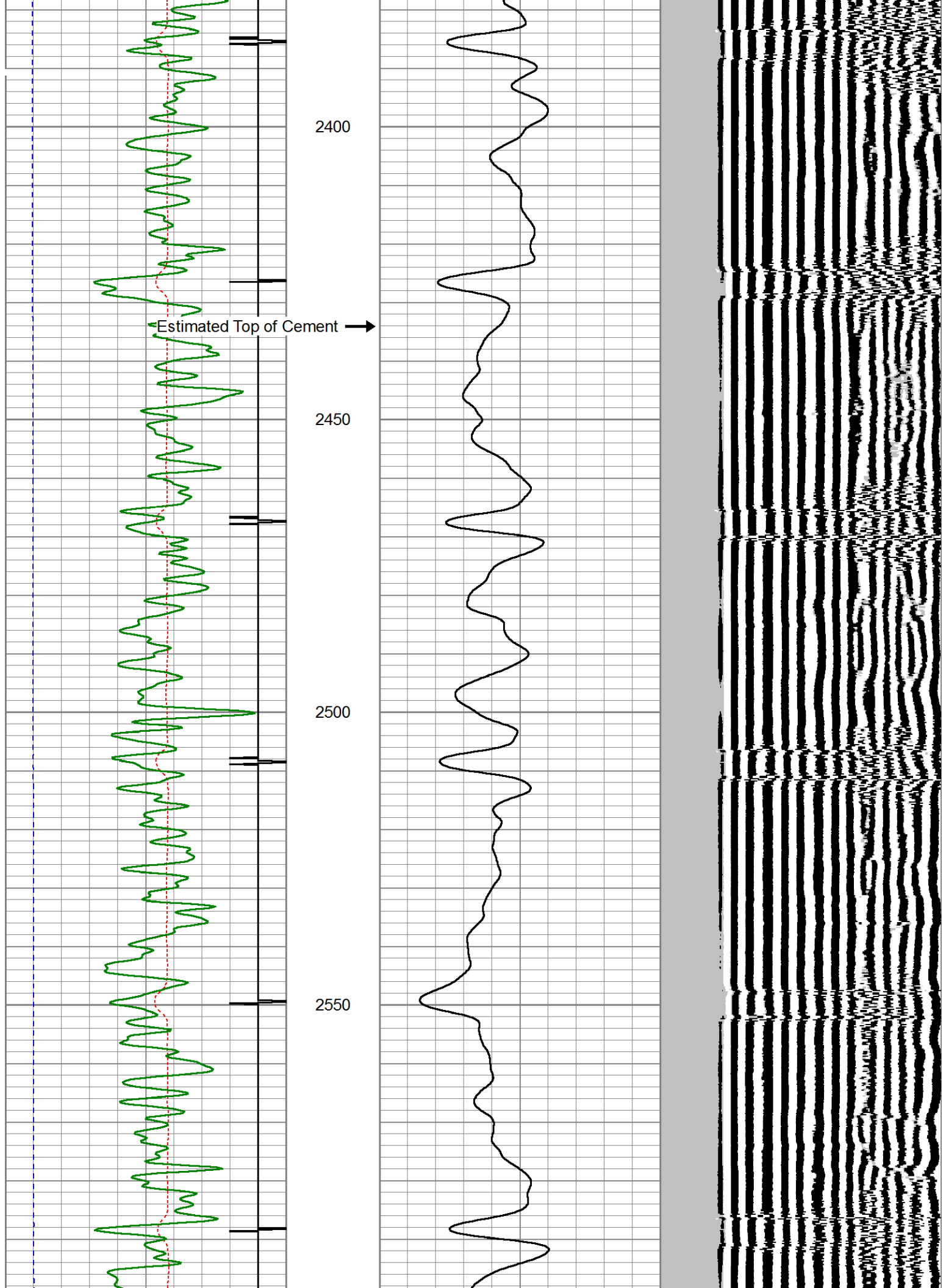
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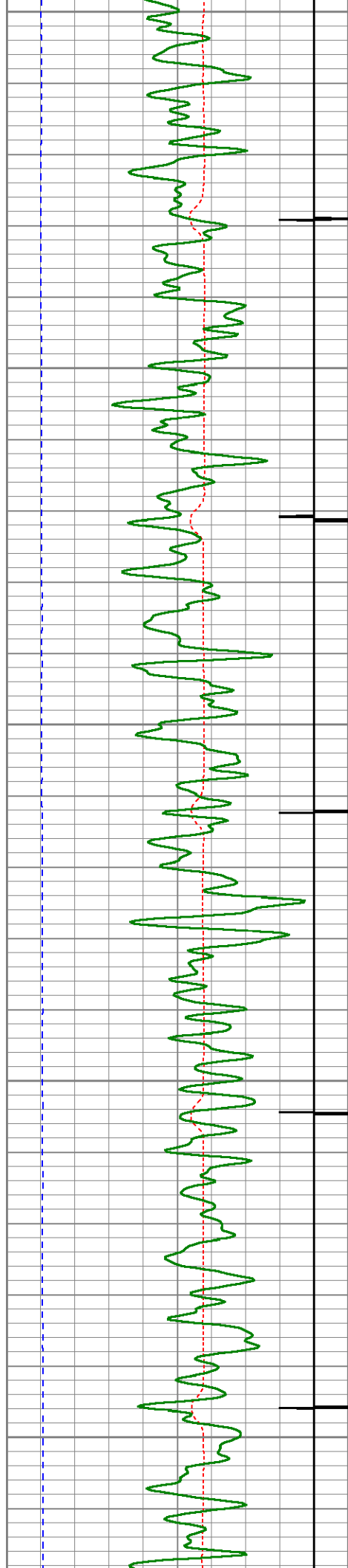
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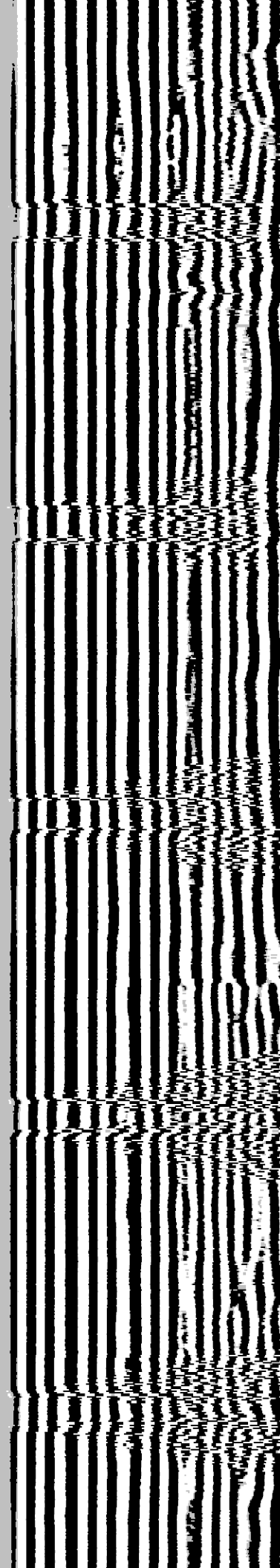
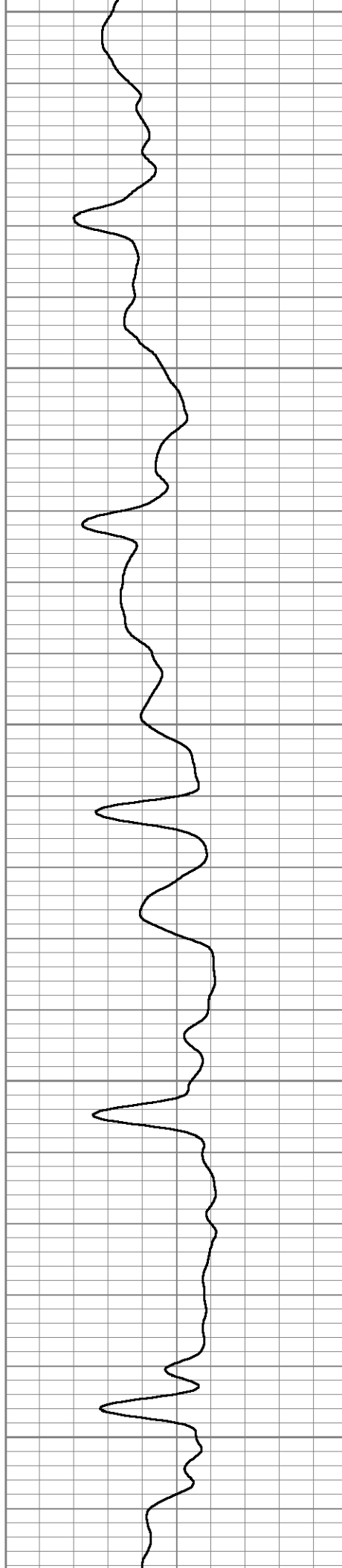
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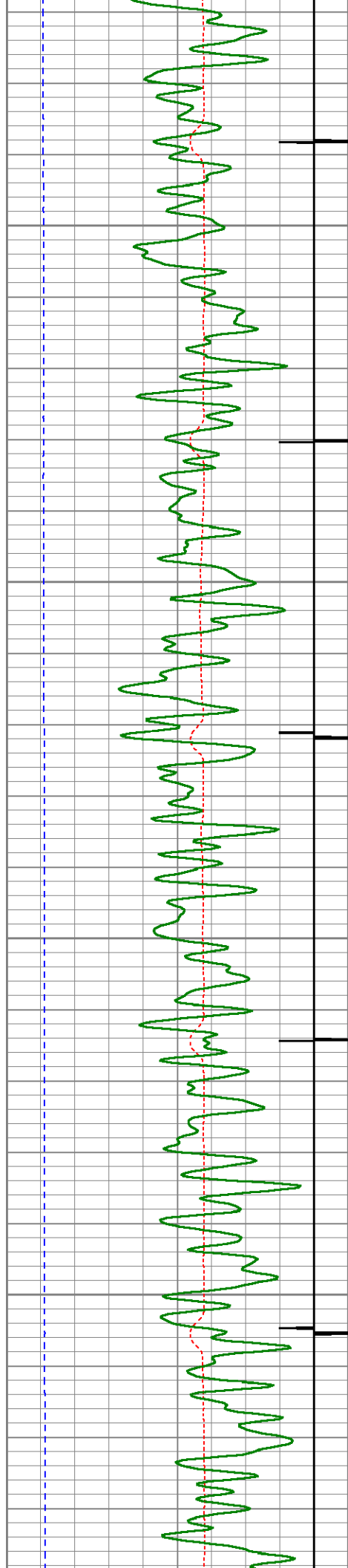
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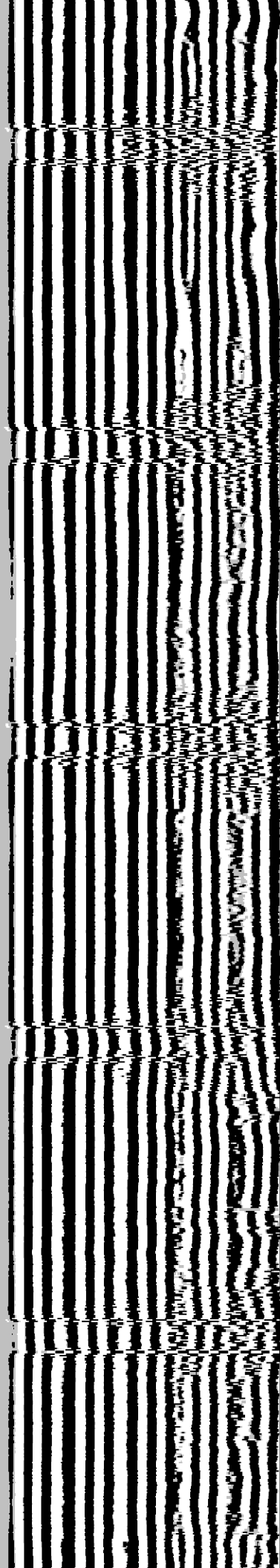
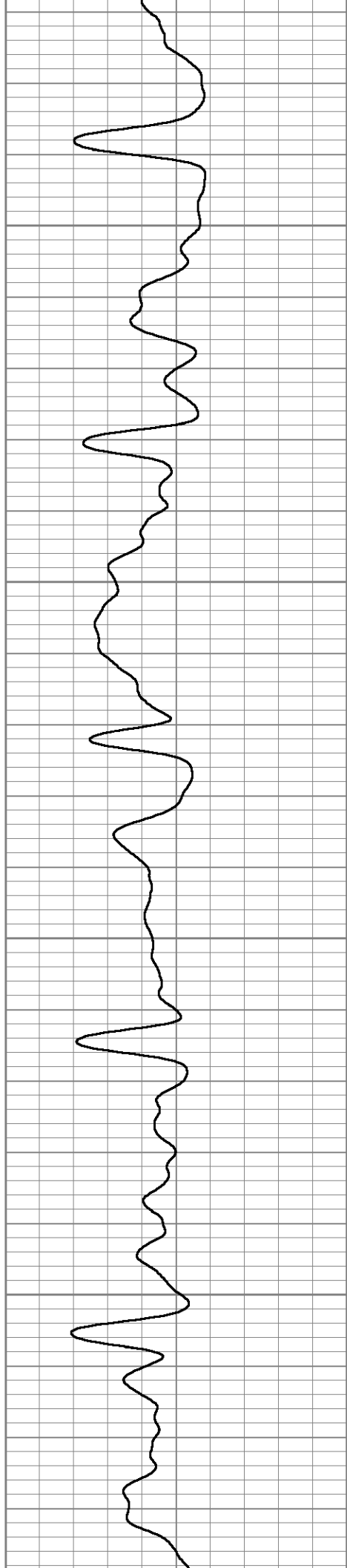


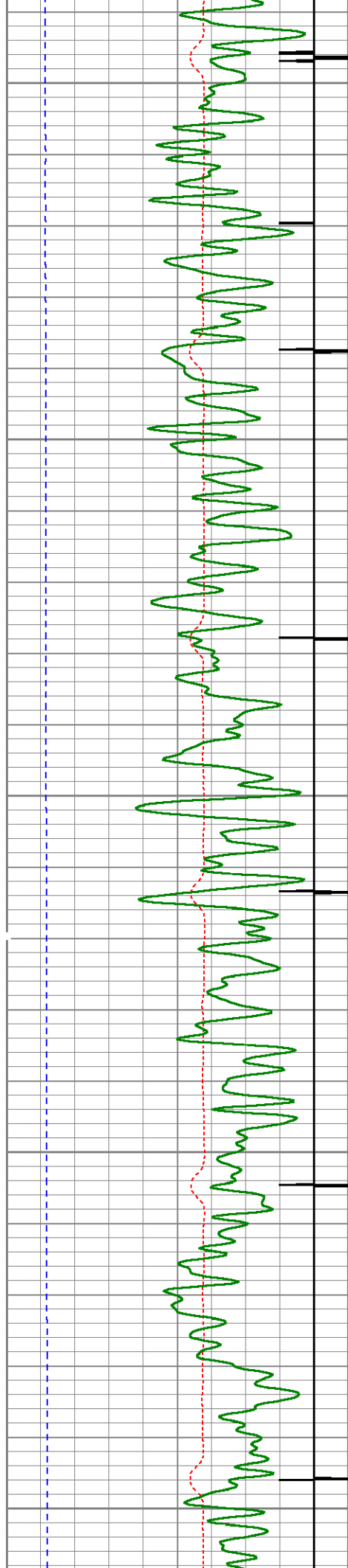
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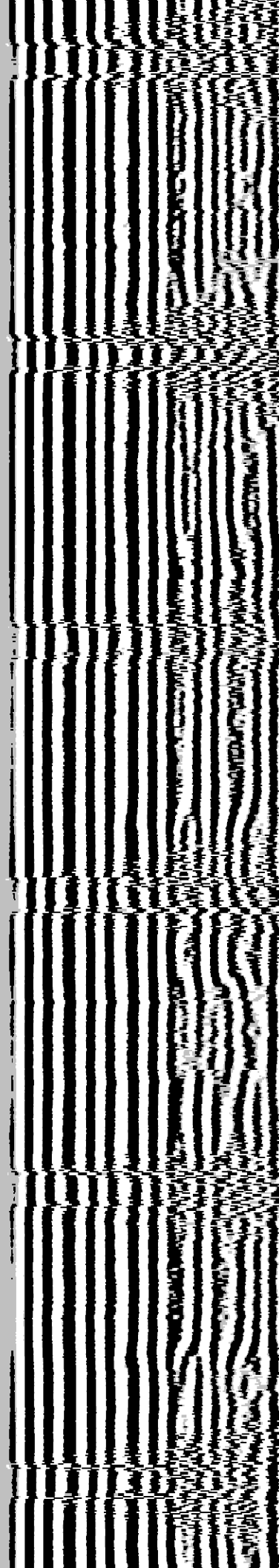
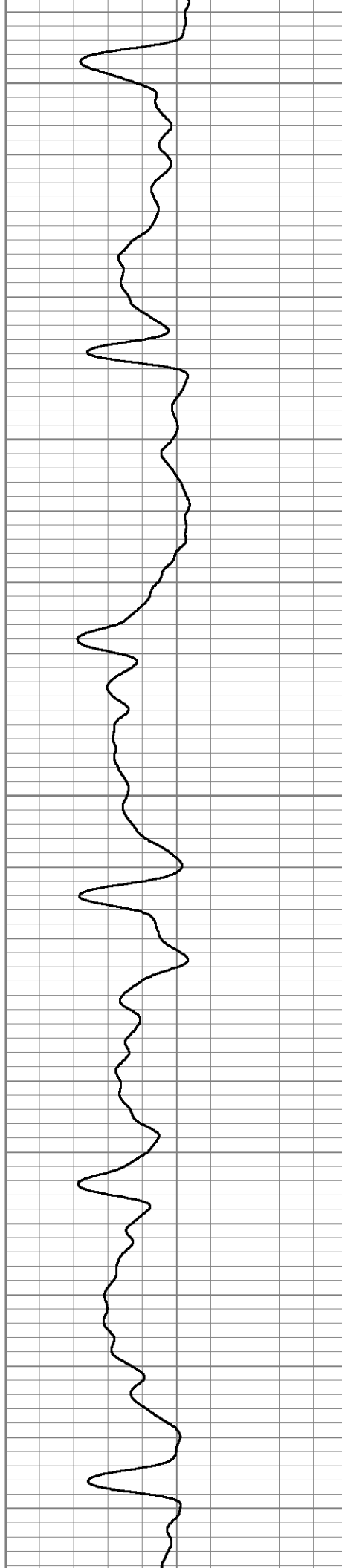
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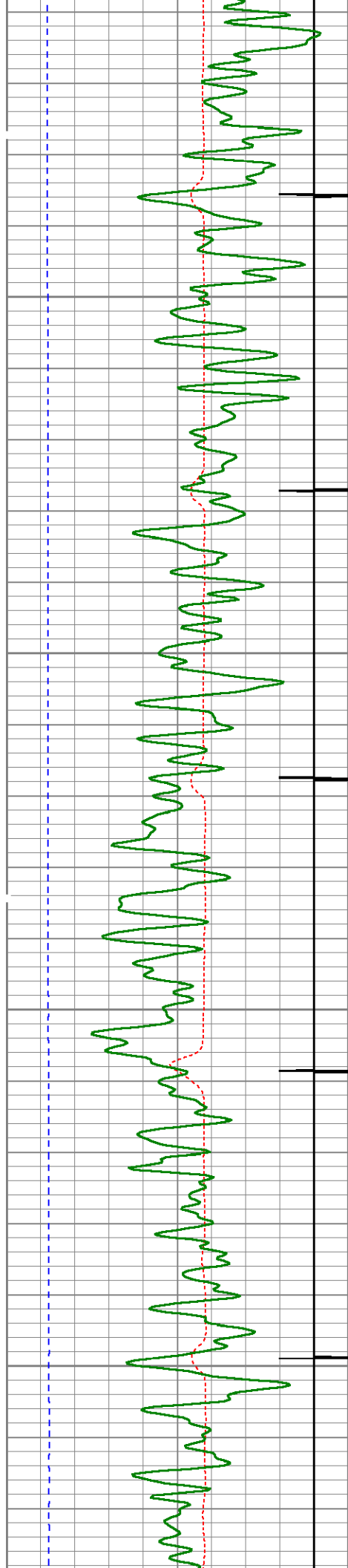
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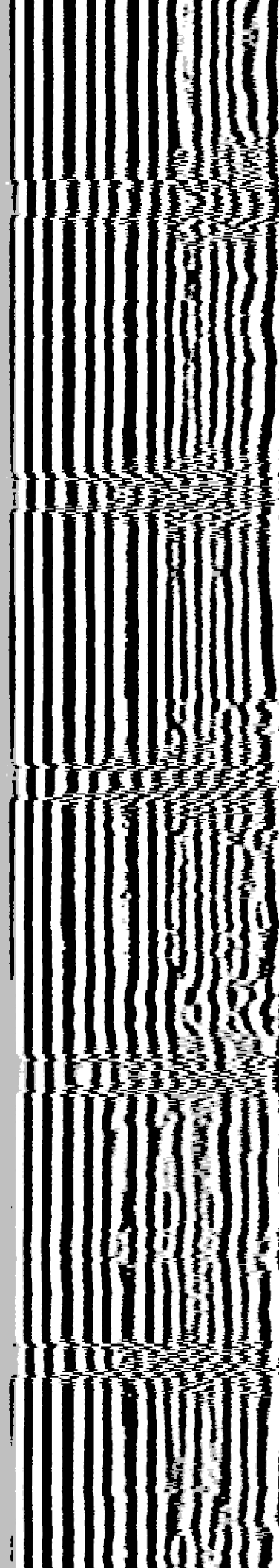
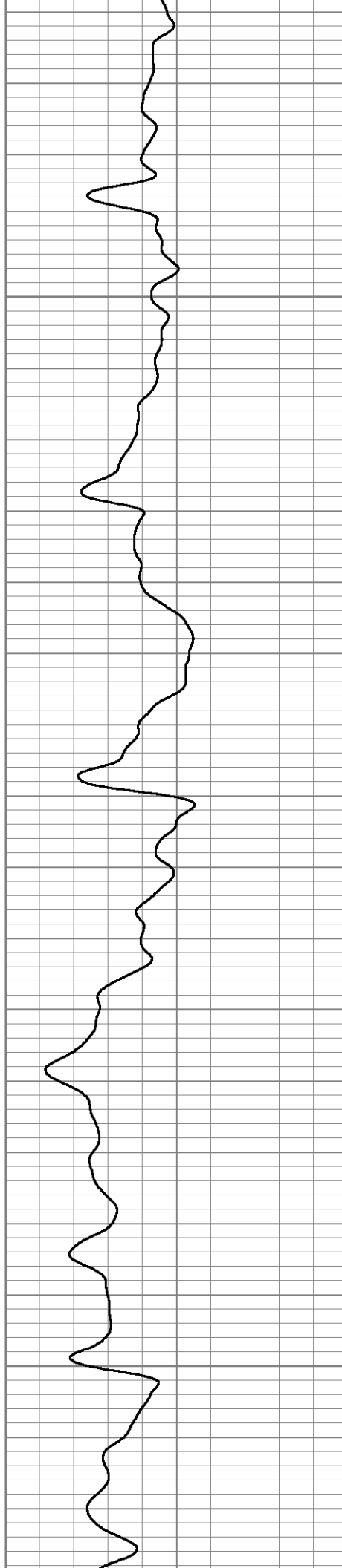


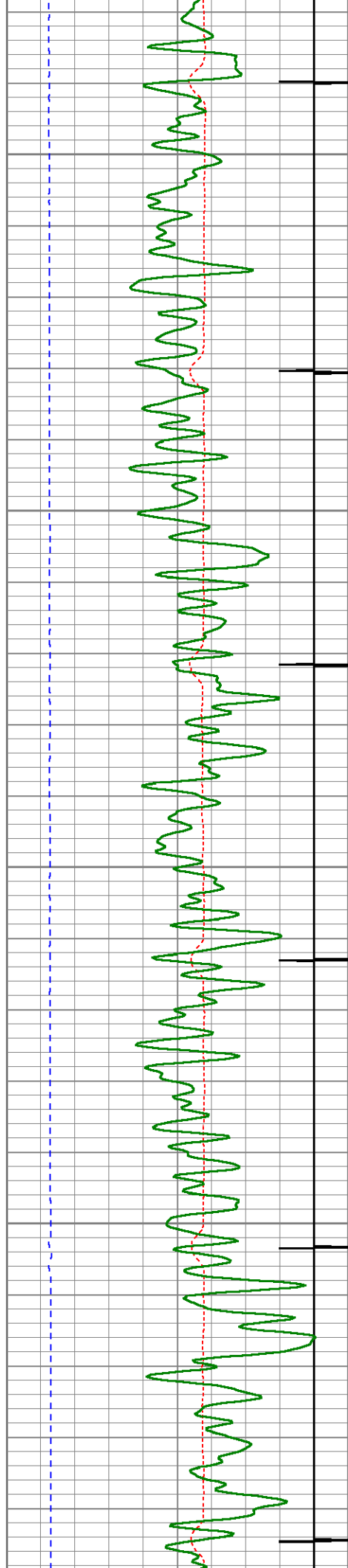
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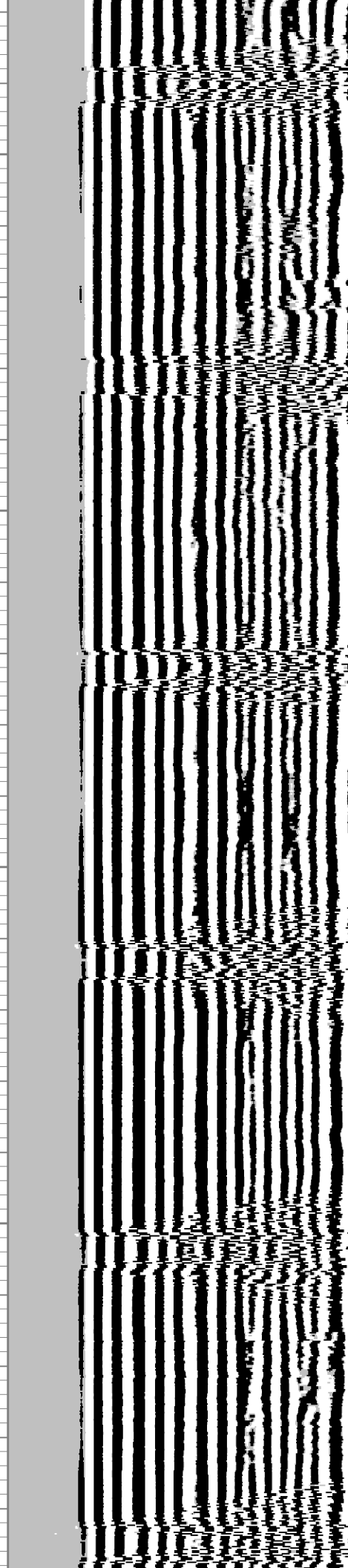
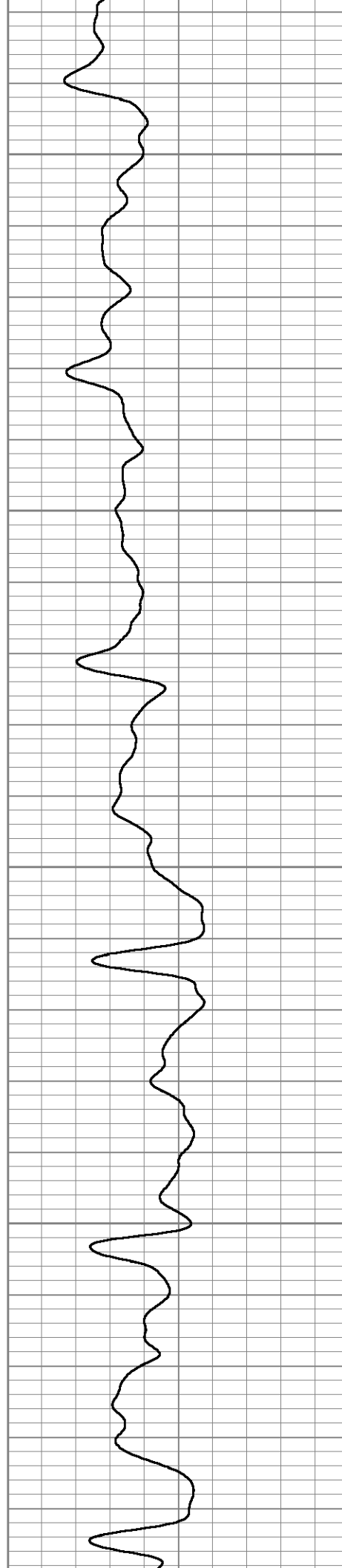


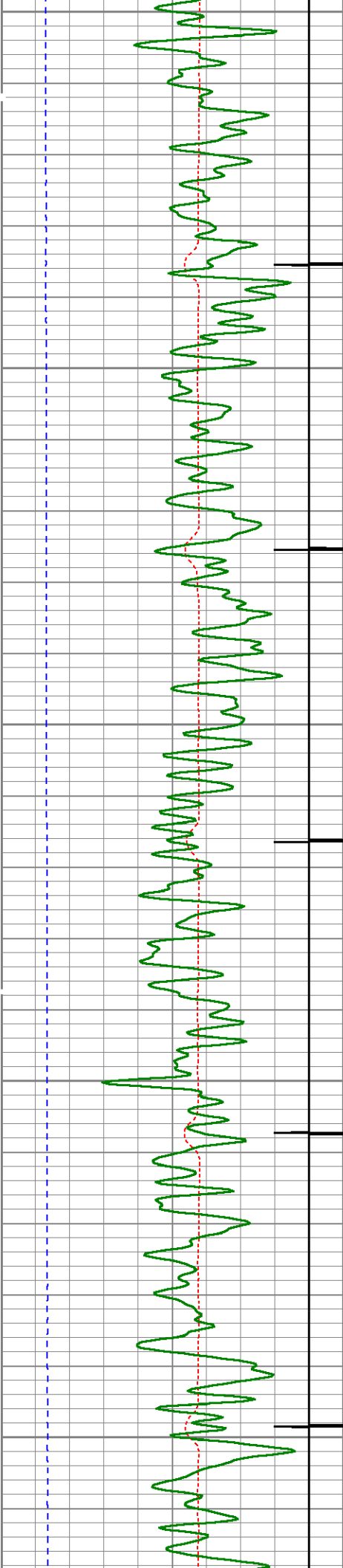
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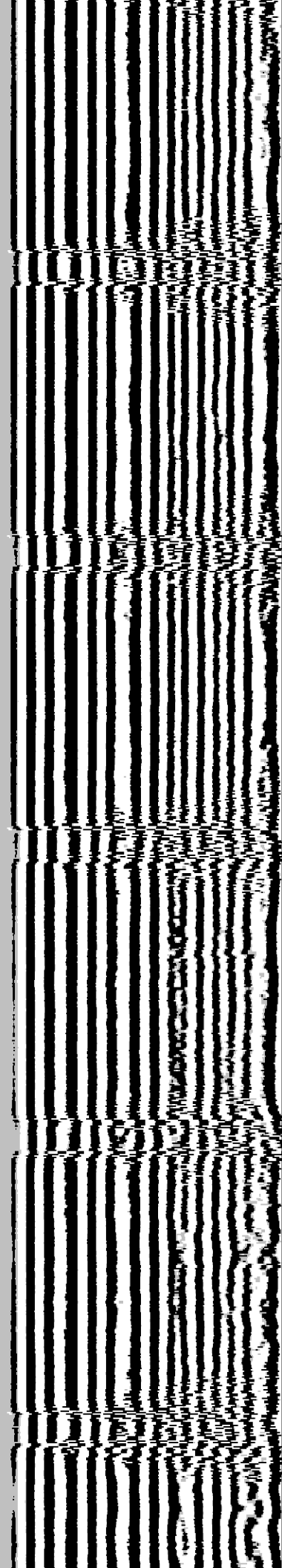
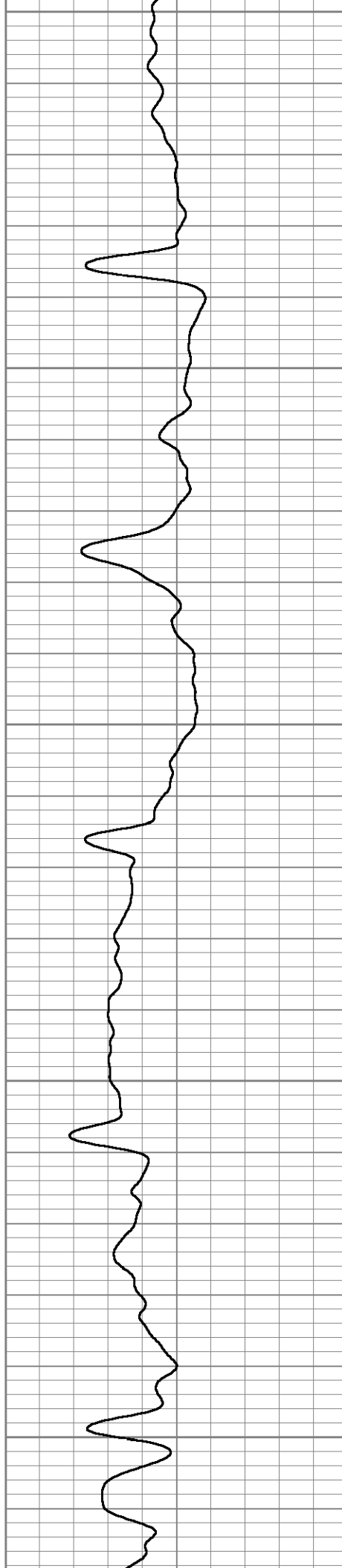
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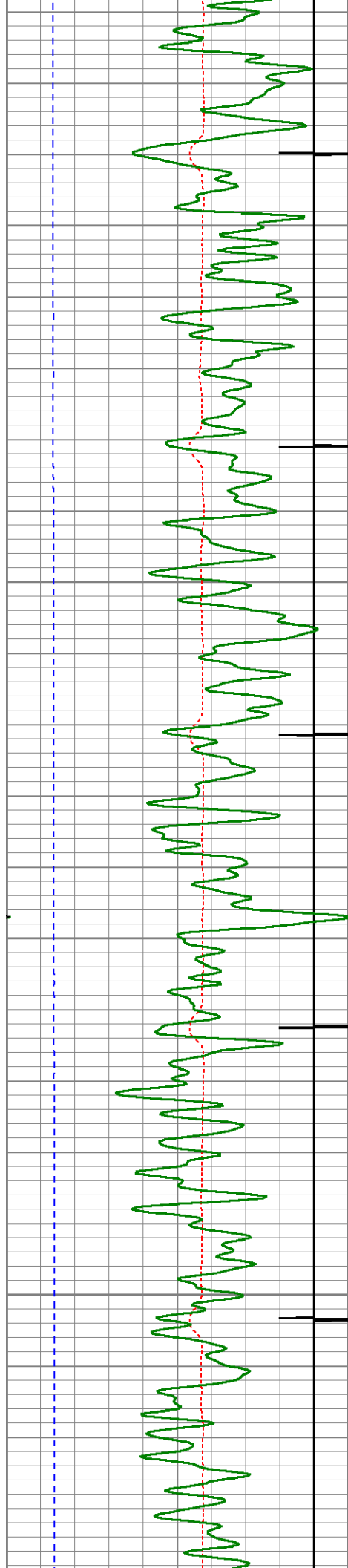
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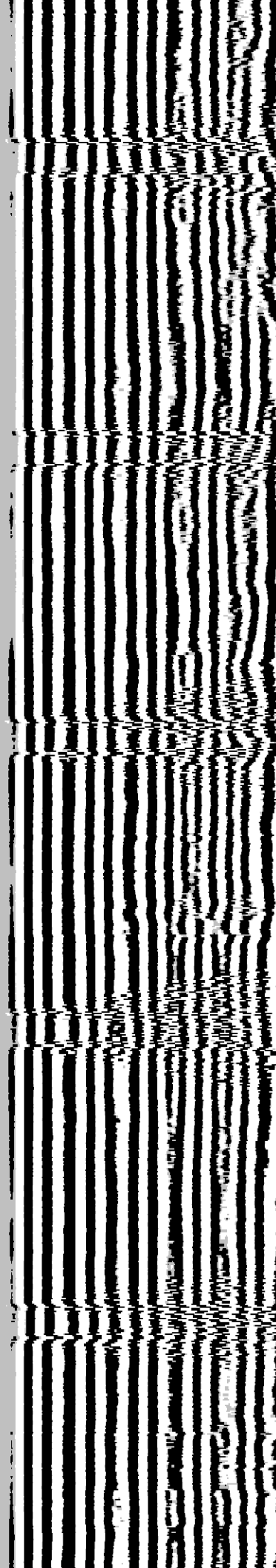
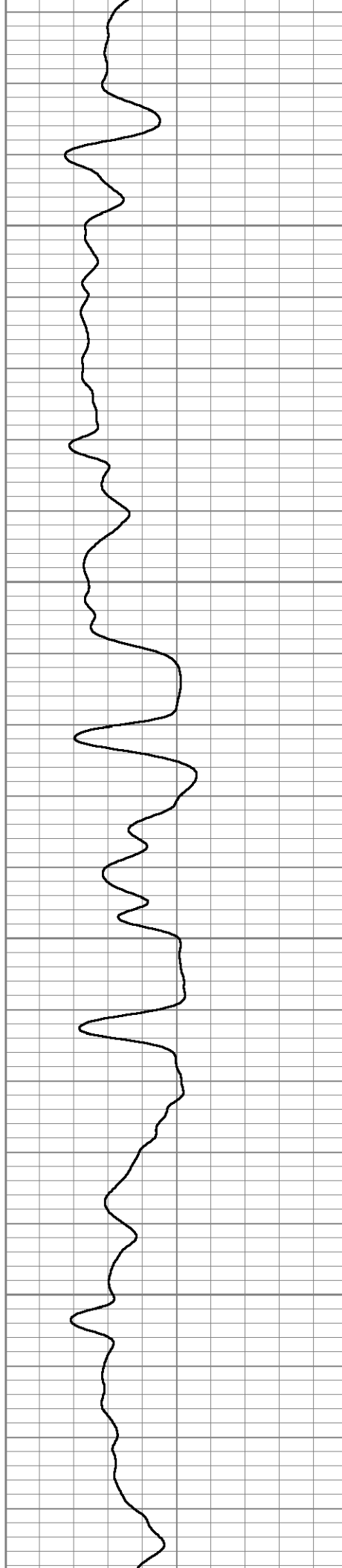


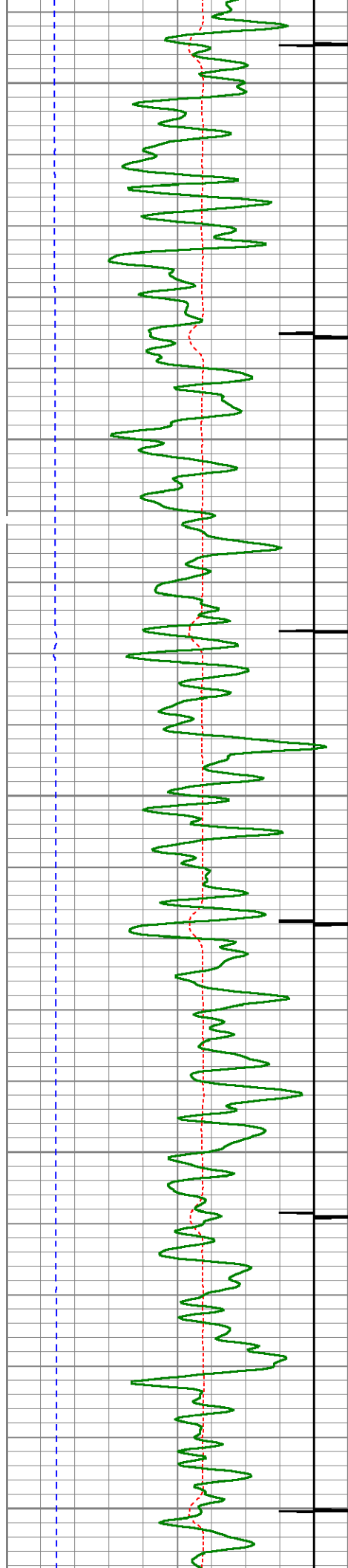
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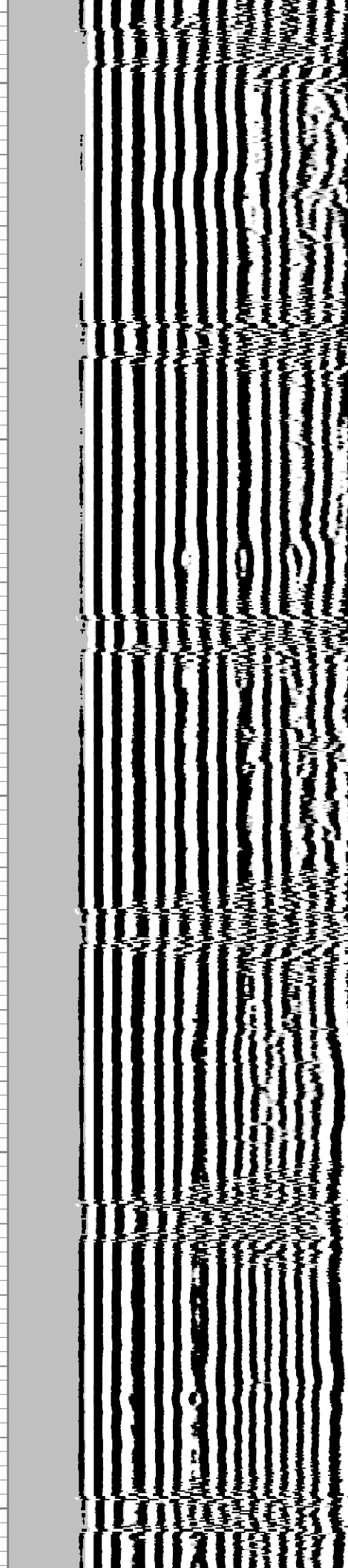
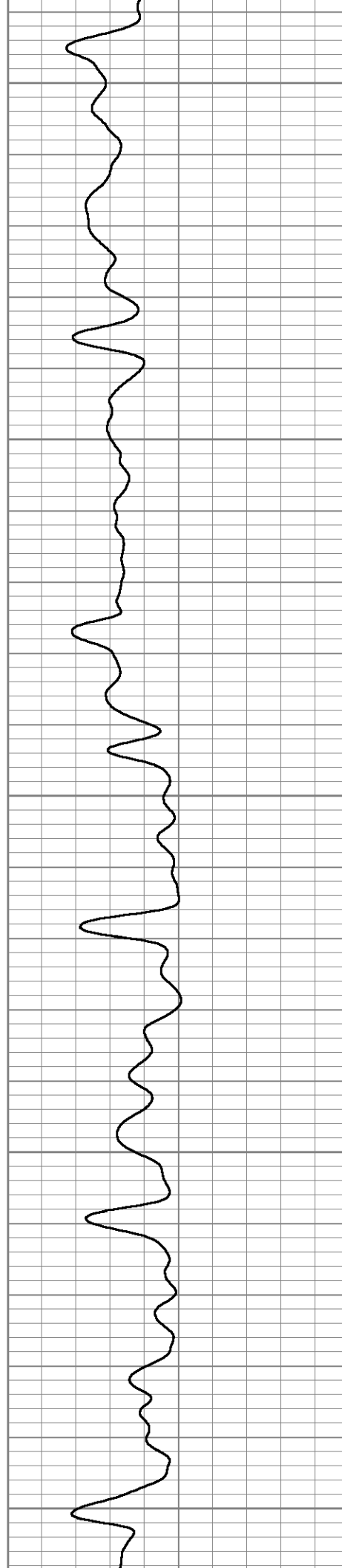
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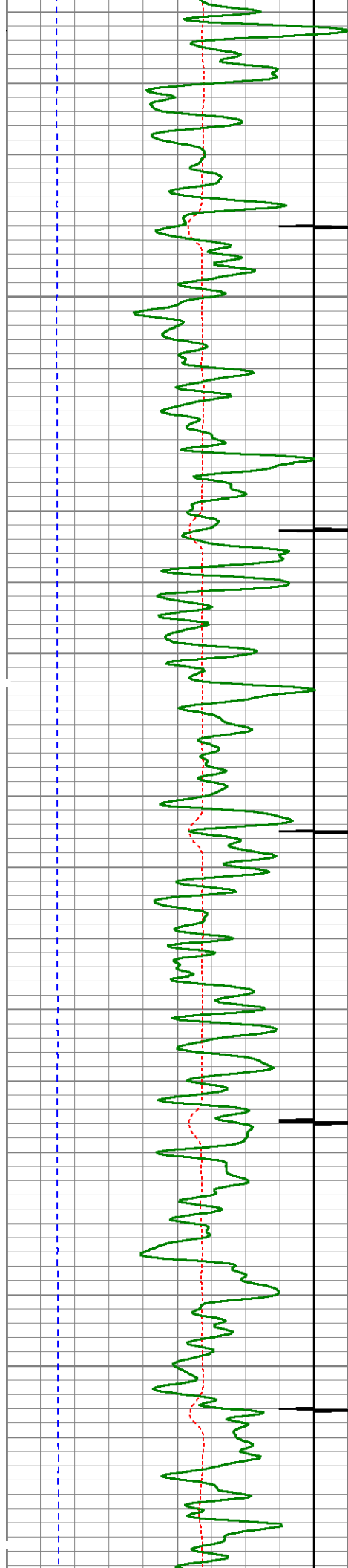
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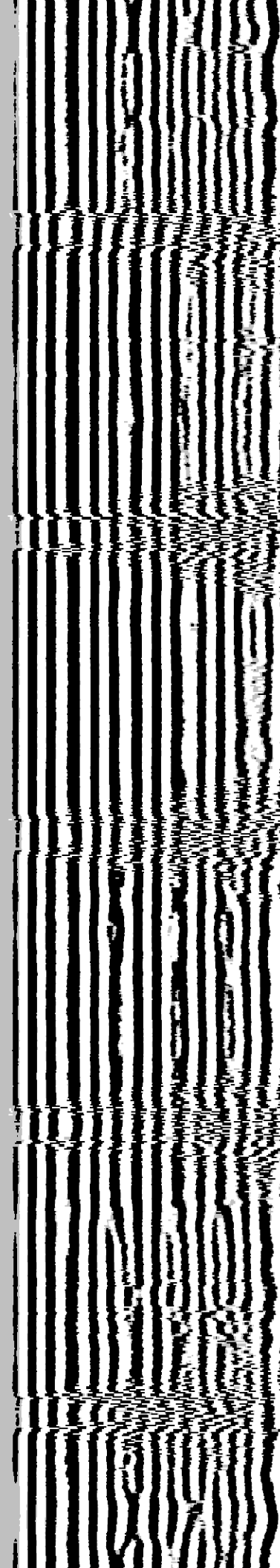
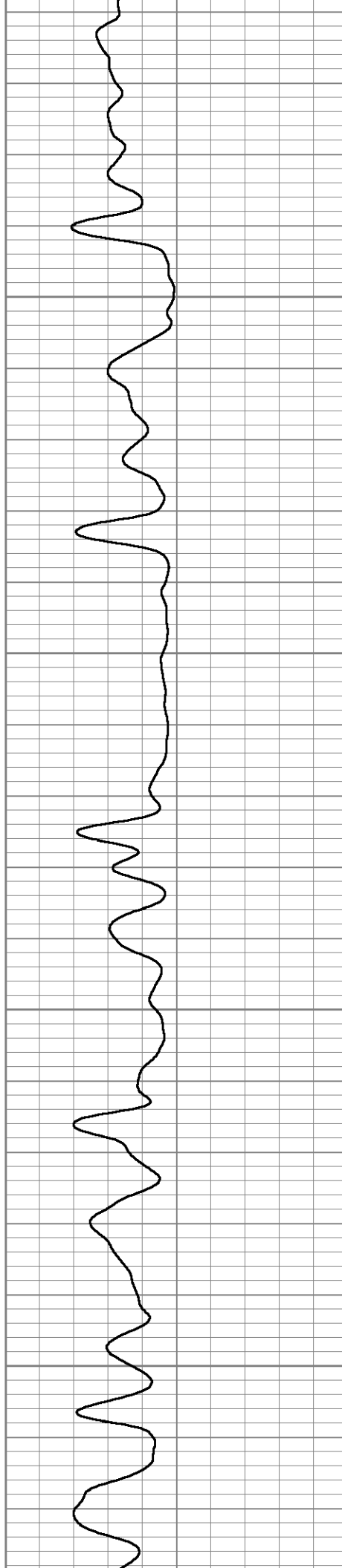


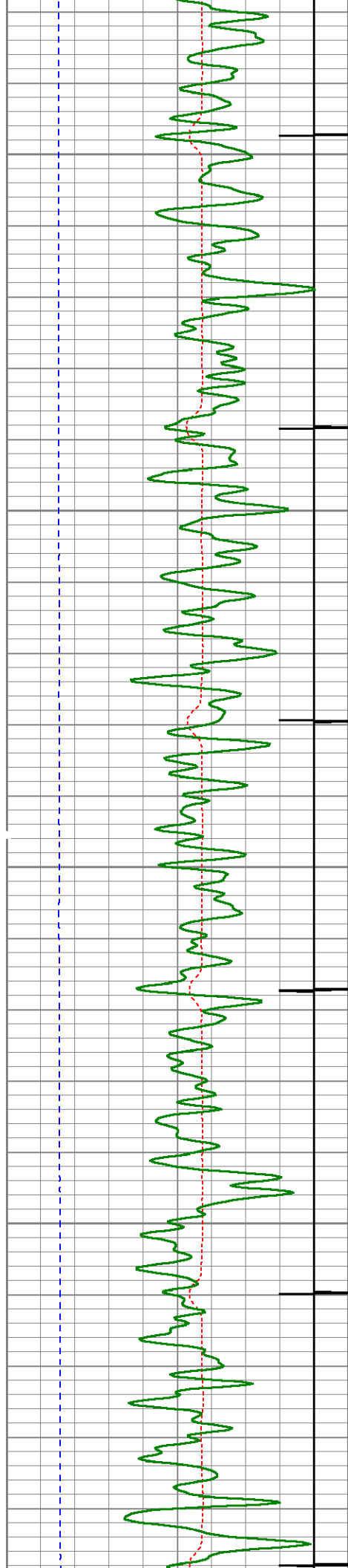
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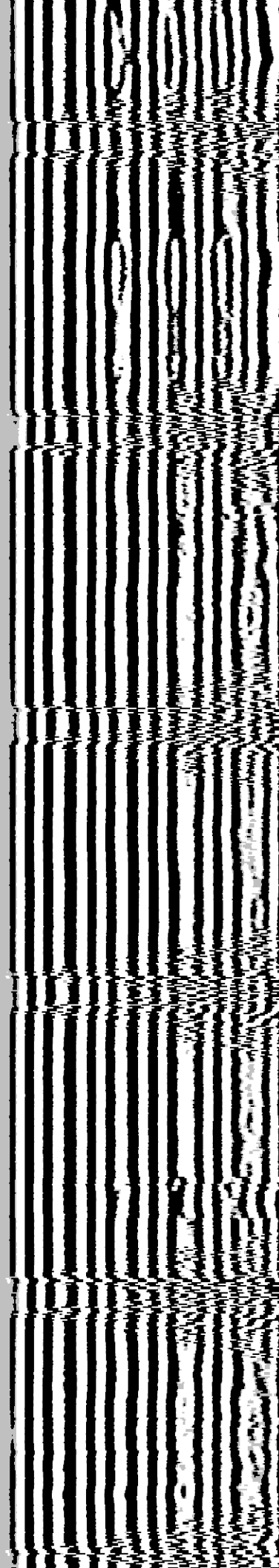
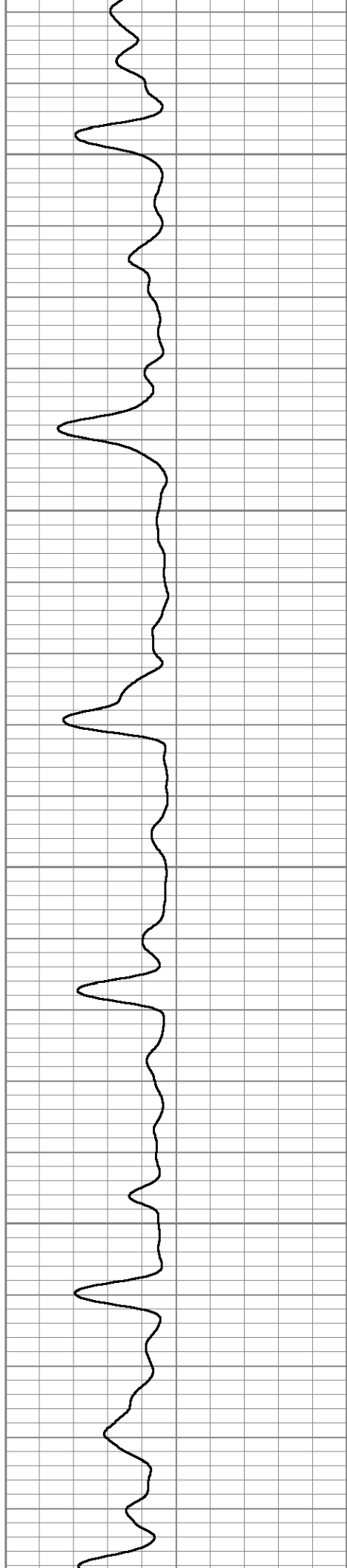


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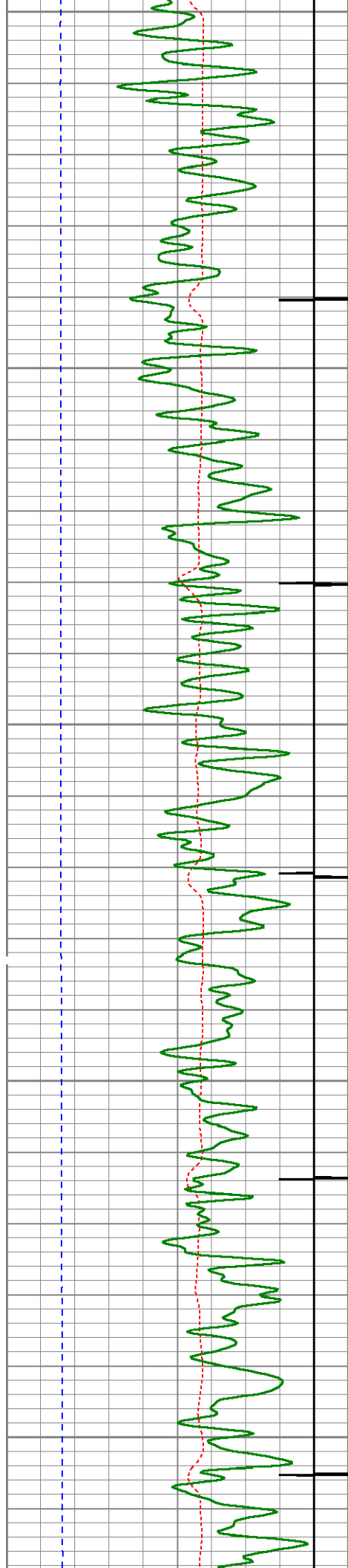
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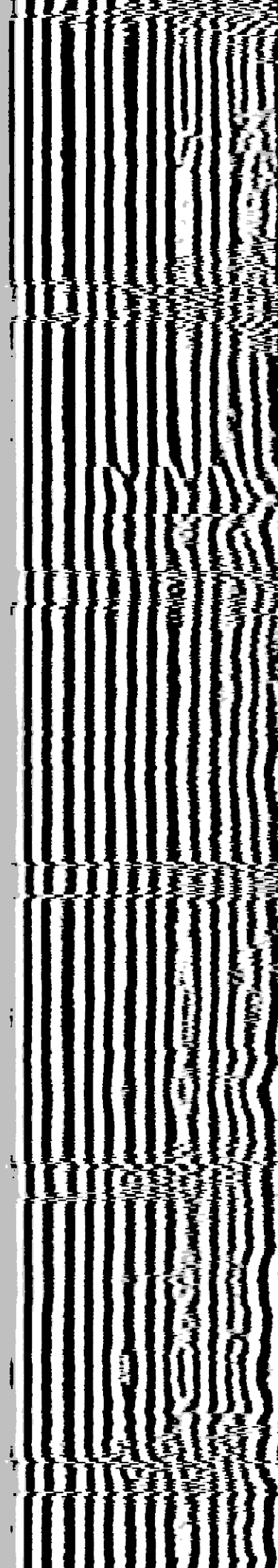
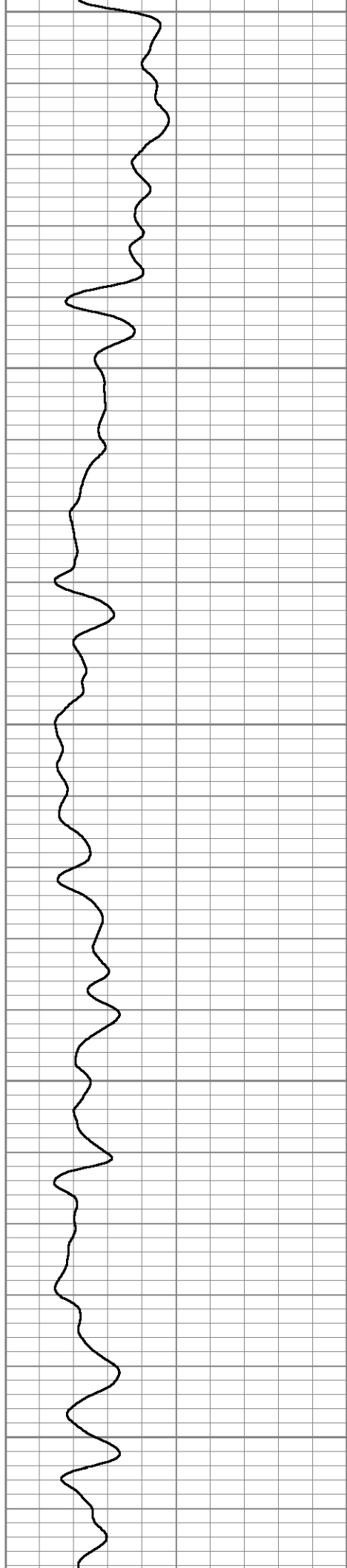
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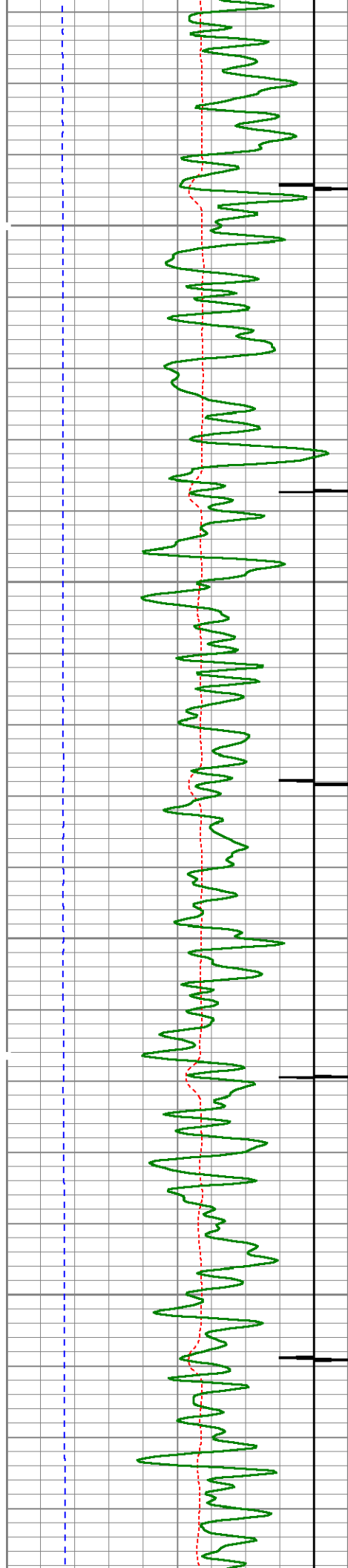
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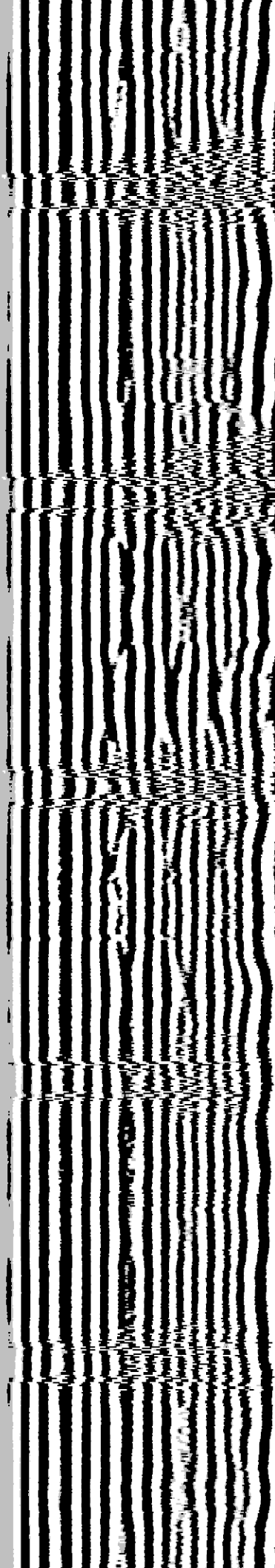
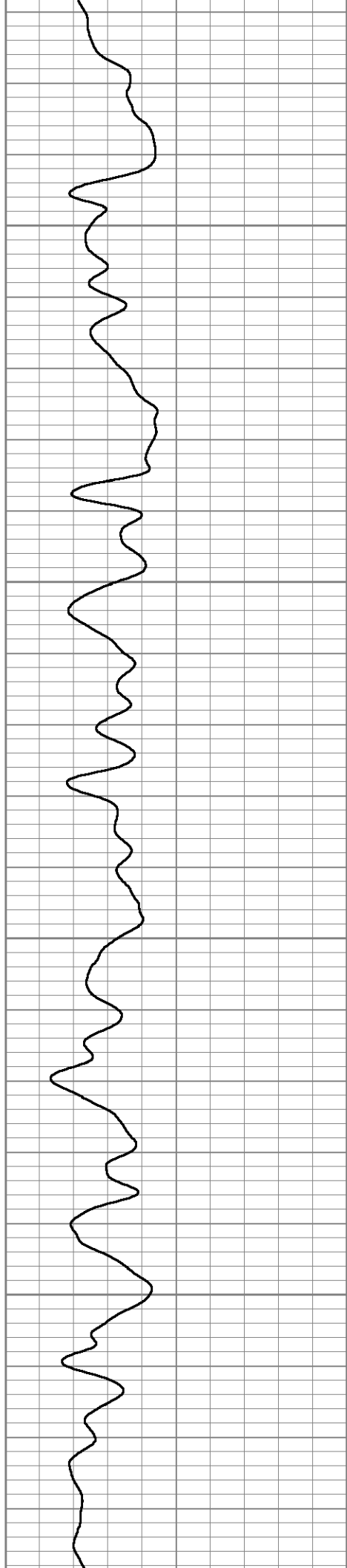


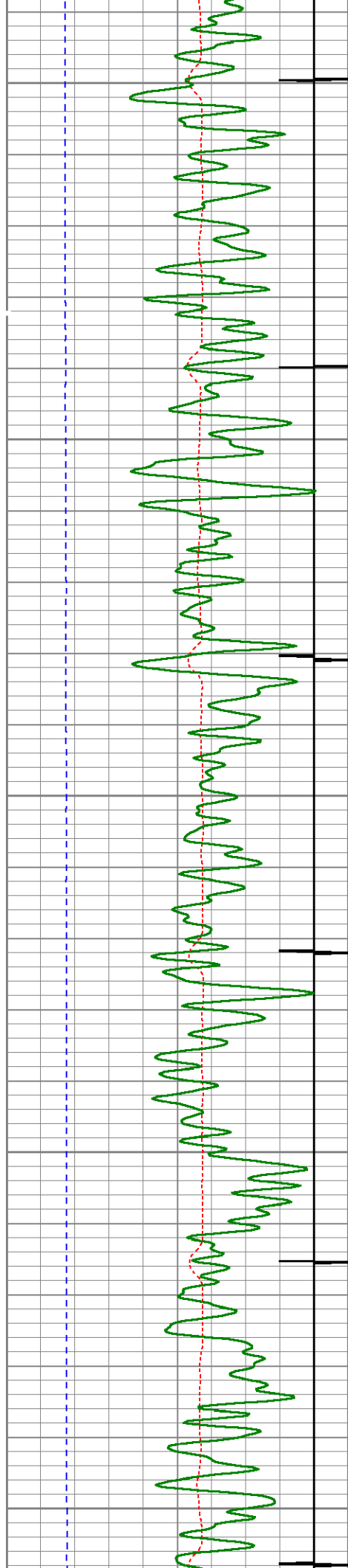
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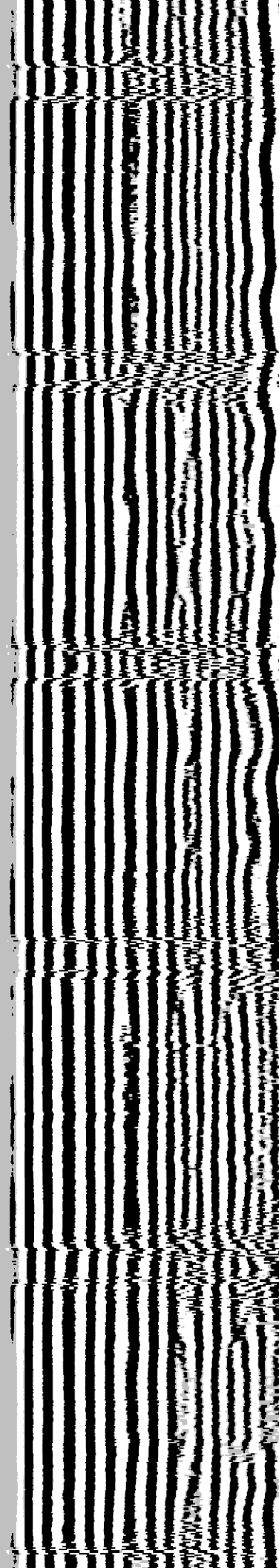
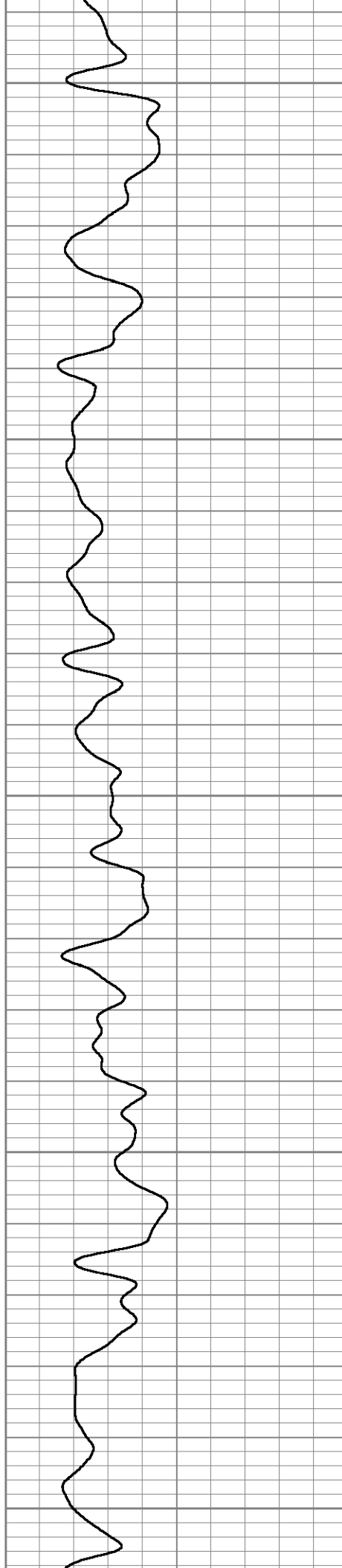
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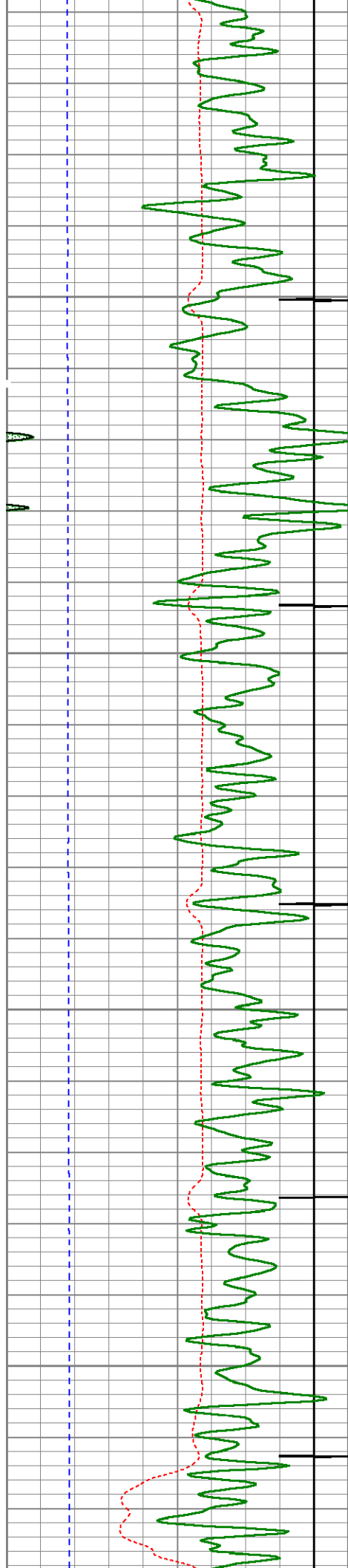
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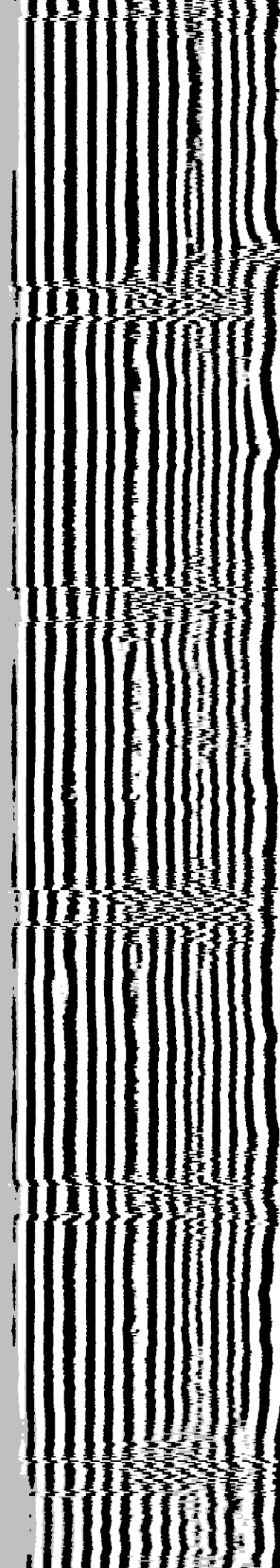
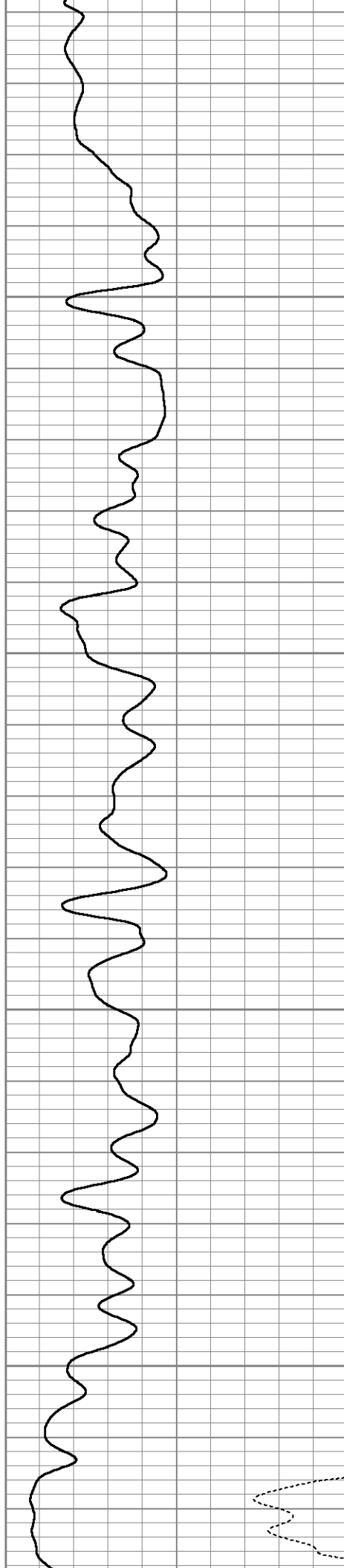


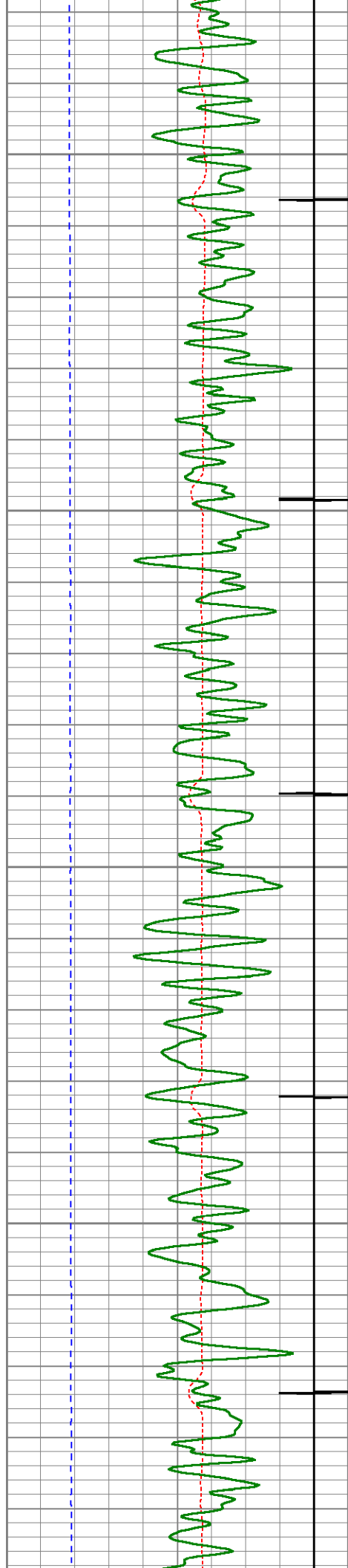
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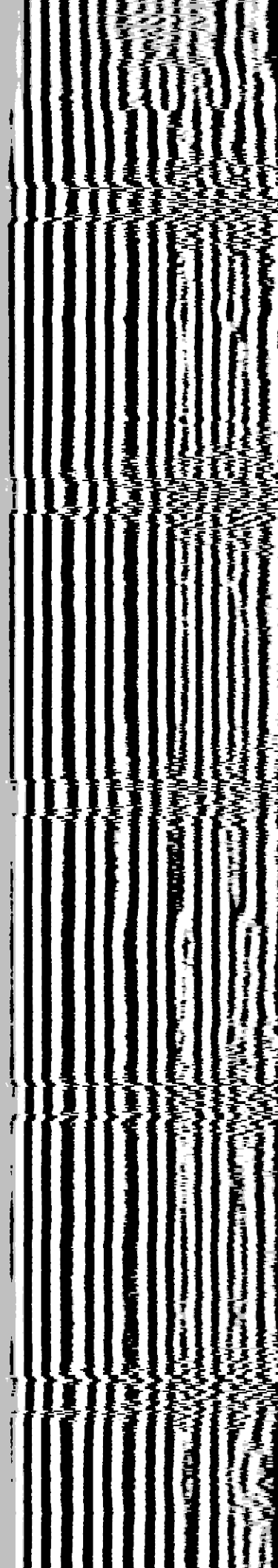
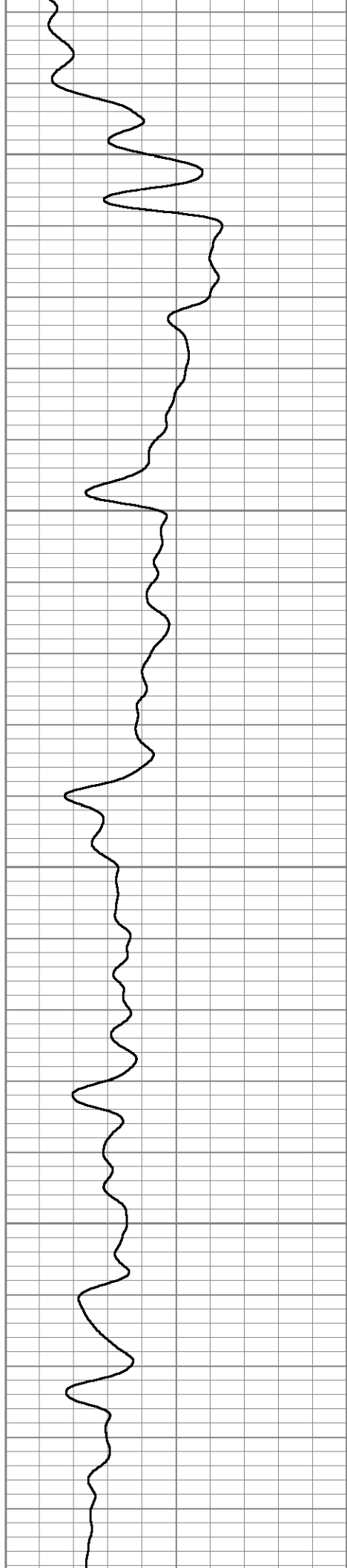


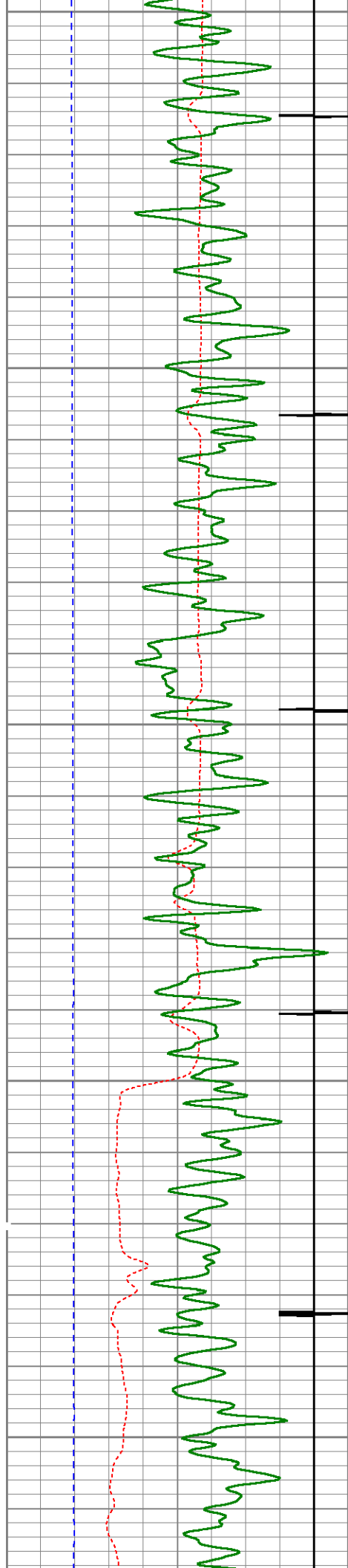
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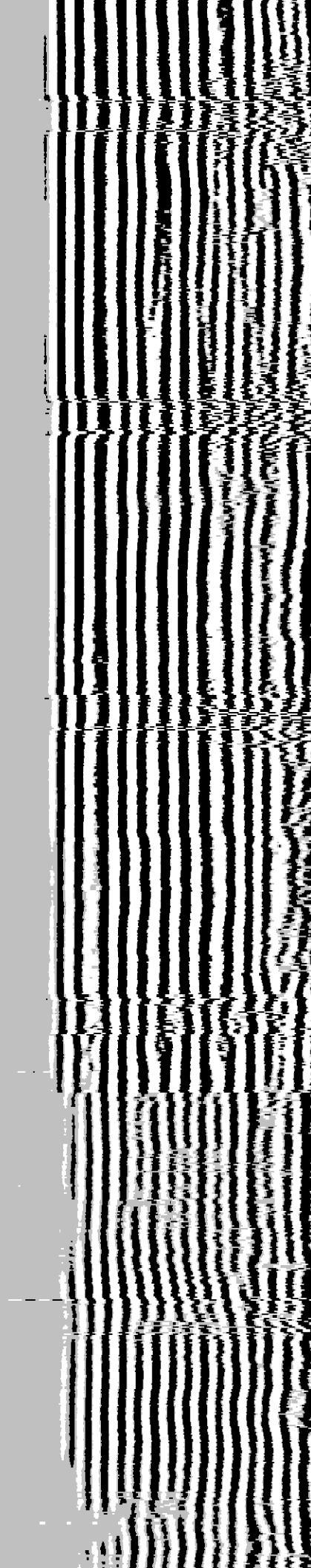
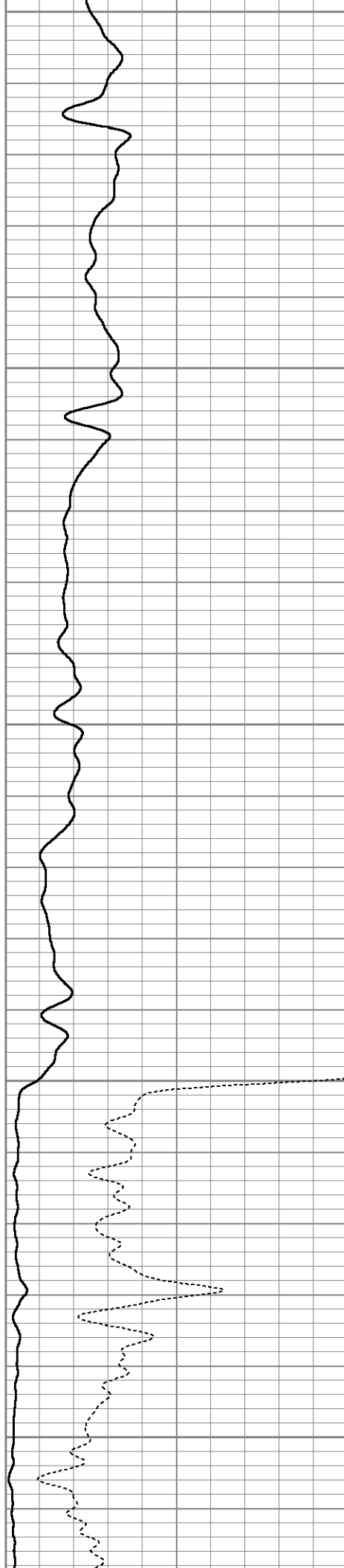
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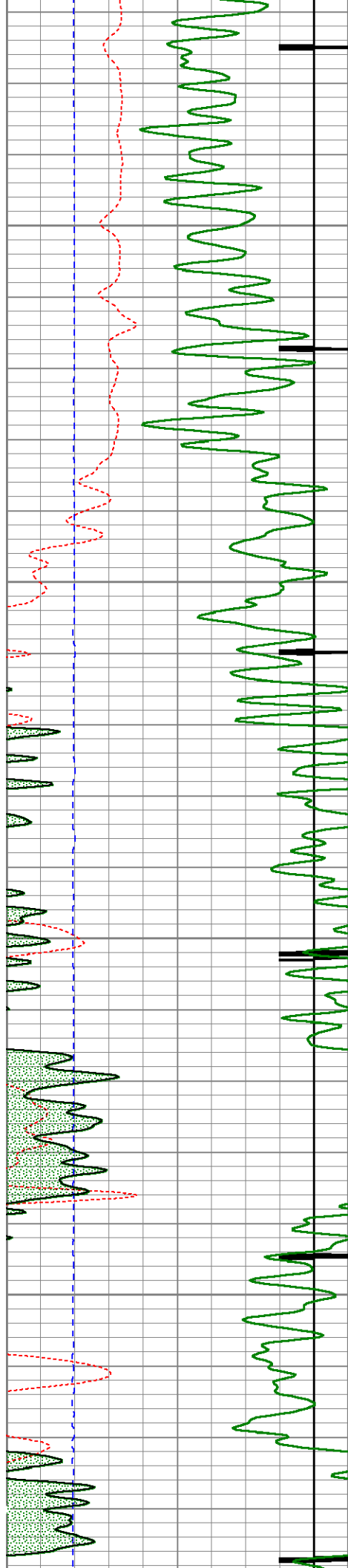
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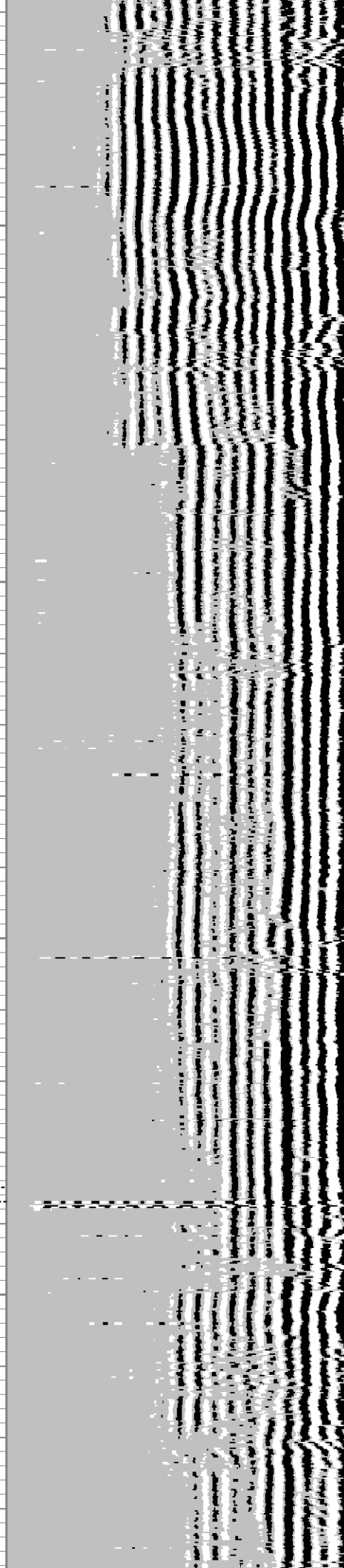
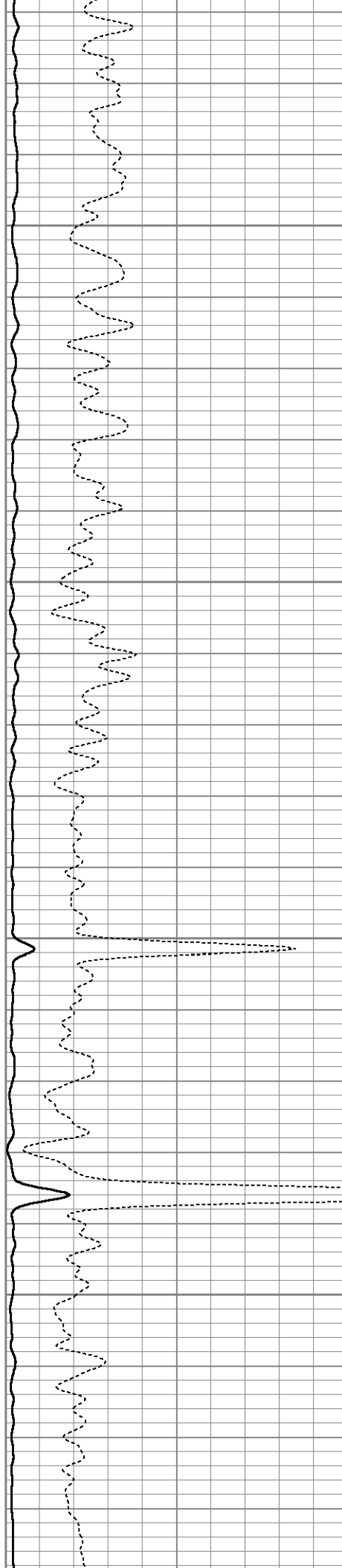


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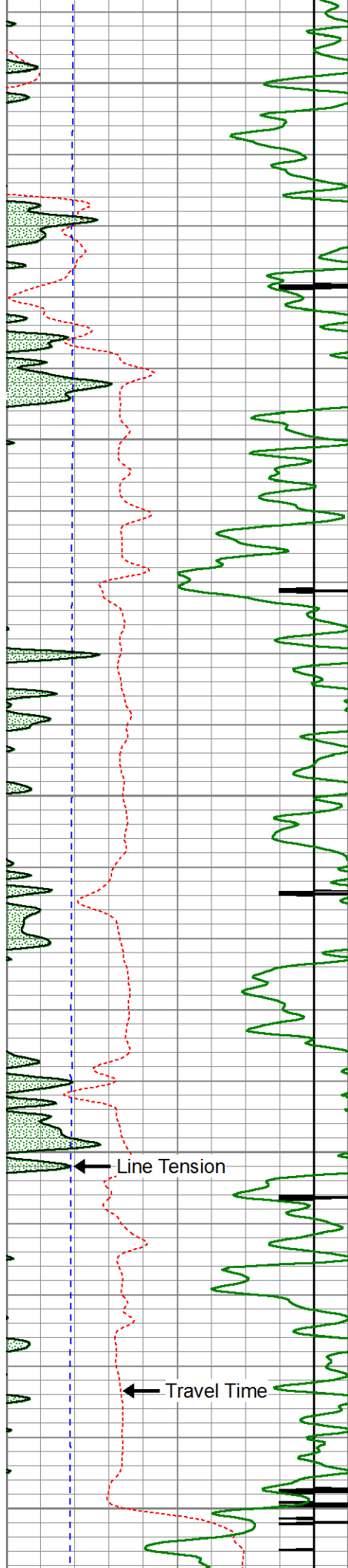
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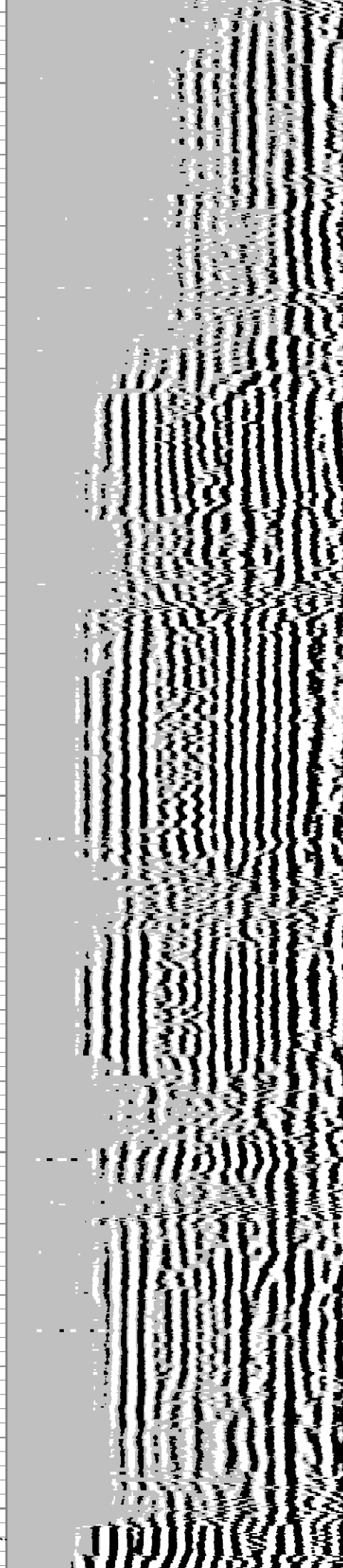
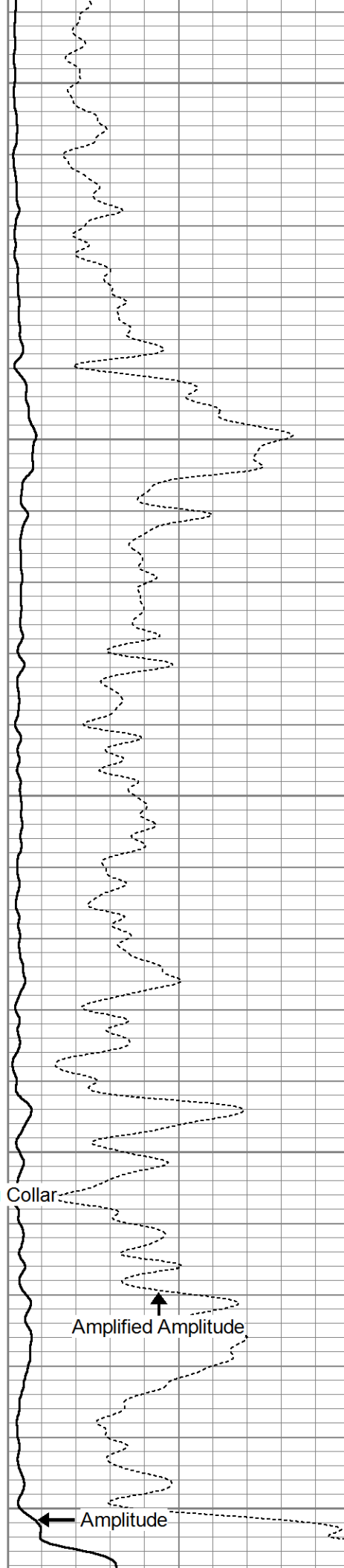
Line Tension

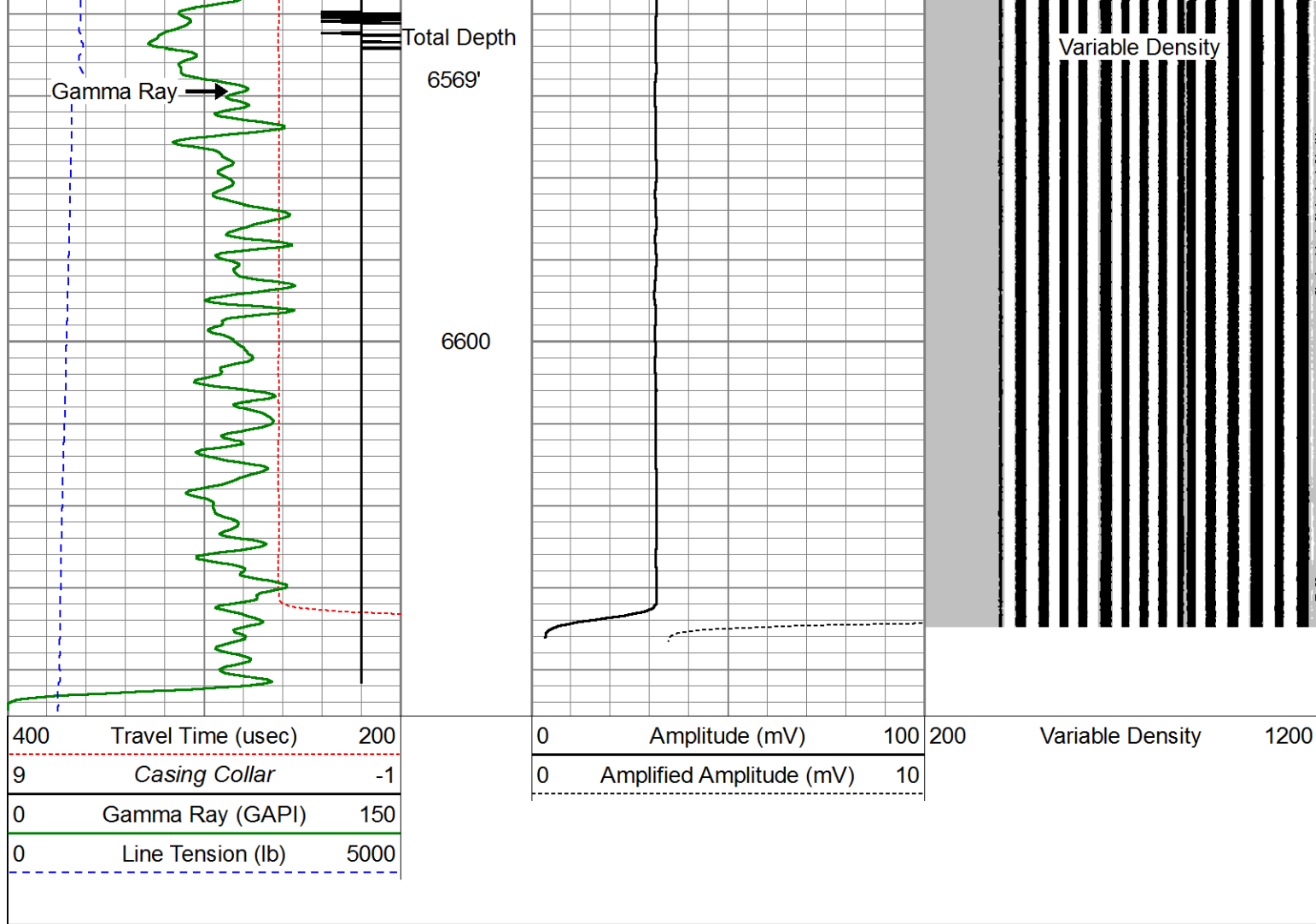
Travel Time

Casing Collar

Amplified Amplitude

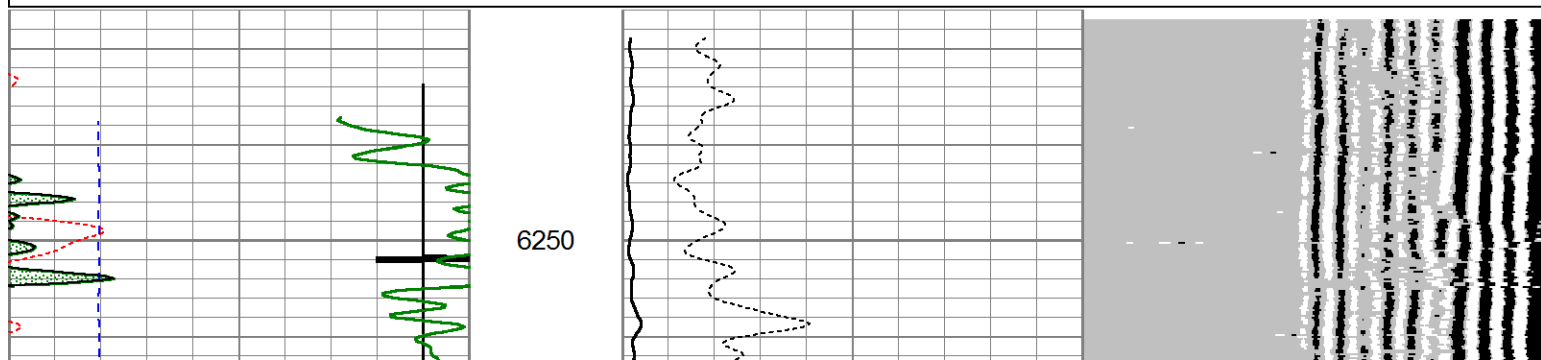
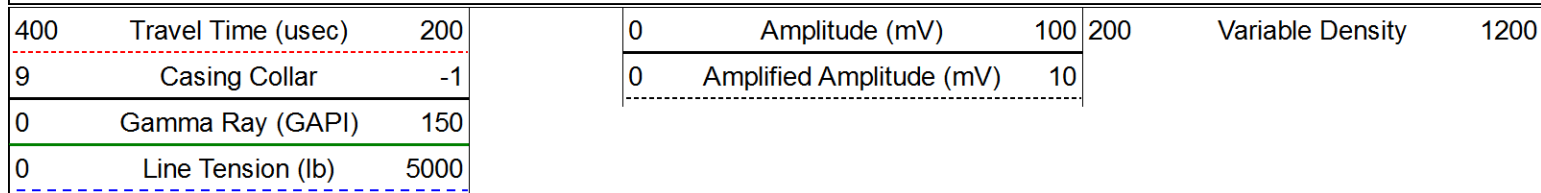
Amplitude



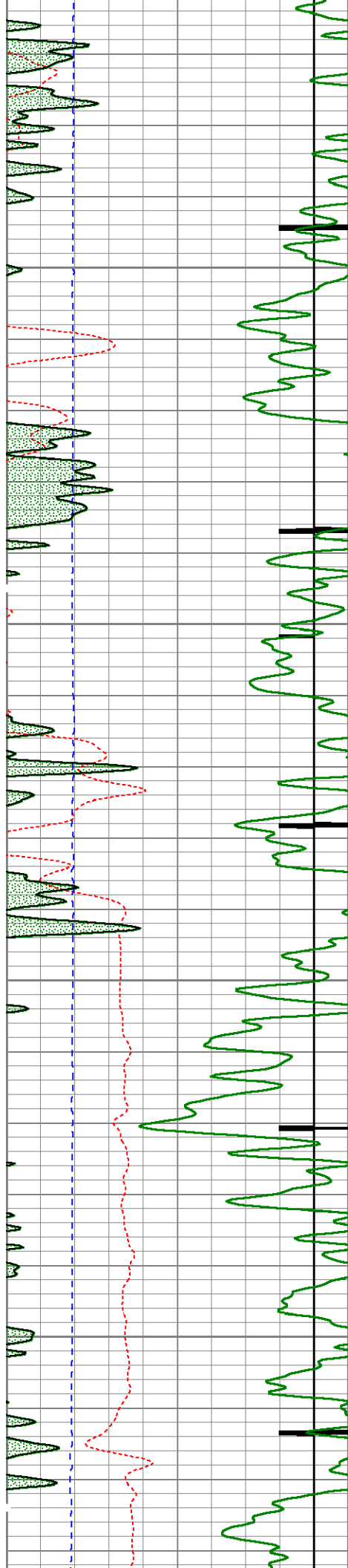


# Repeat Pass ( 0 PSI )

Database File: c:\warrior\data\cased hole\bonanza creek\state north platte f-j-26hnb\_cbl\bonanza creek state north platte  
 Dataset Pathname: pass3  
 Presentation Format: cblprobe  
 Dataset Creation: Wed Dec 11 08:25:43 2013 by Log 0  
 Charted by: Depth in Feet scaled 1:240





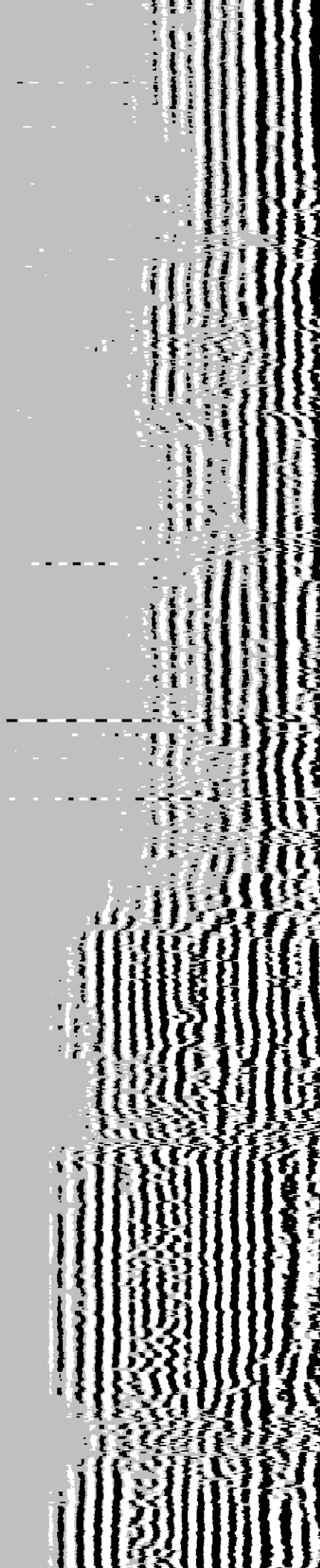
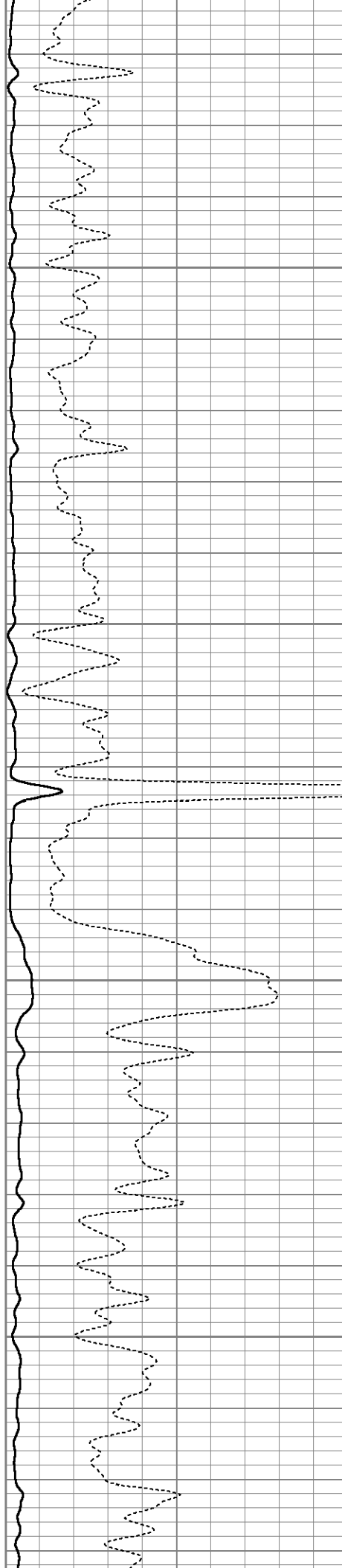


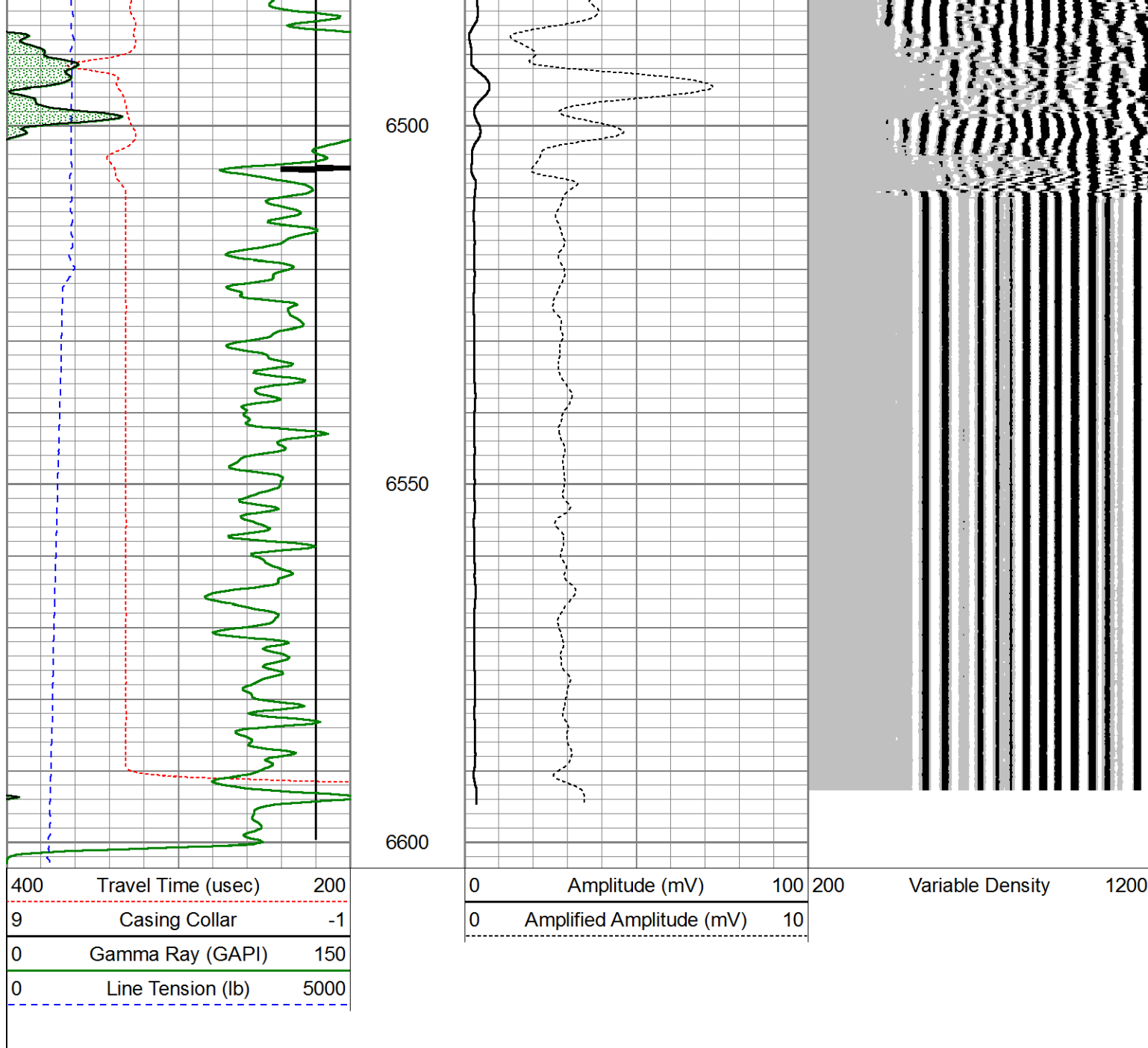
6300

6350

6400

6450





Calibration Report		
Database File:	C:\Warrior\Data\Cased Hole\Bonanza Creek\State North Platte F-J-26HNB_CBL\bonanza creek state north	
Dataset Pathname:	pass5.1	
Dataset Creation:	Wed Dec 11 09:54:45 2013 by Calc 0	
Gamma Ray Calibration Report		
Serial Number:	110108-Dig	
Tool Model:	Probe275	
Performed:	Fri Nov 29 14:39:10 2013	
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: 110100-Dig  
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: 111107  
Tool Model: Probe

Calibration Casing Diameter: 7.000 in  
Calibration Depth: 1107.263 ft

Master Calibration, performed Wed Dec 11 08:47:28 2013:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.027	0.625	1.000	62.165	88.963	3.498
CAL	-0.035	1.201				
5'	-0.023	0.558	1.000	62.165	105.263	3.382
SUM						
S1	-0.011	0.689	0.000	100.000	142.827	-0.081
S2	-0.012	0.727	0.000	100.000	135.407	1.579
S3	-0.020	0.712	0.000	100.000	136.656	2.709
S4	-0.018	0.662	0.000	100.000	147.119	2.669
S5	-0.019	0.586	0.000	100.000	165.458	3.108
S6	-0.019	0.537	0.000	100.000	179.941	3.352
S7	-0.020	0.519	0.000	100.000	185.545	3.710
S8	-0.018	0.559	0.000	100.000	173.214	3.193

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	-0.035	1.201	1.000	0.000

Air Zero Calibration, performed Thu Oct 17 08:50:08 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
			RBT-Probe (111107) Probe Radii Bond Tool with Digital Telemetry	8.75	2.75	90.00
WVF3FT	11.84					
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					
TEMP	3.00					
GR	2.54		GR-Probe275 (110108-Dig) Probe 2 3/4" Logging Gamma Ray	4.78	2.75	57.00

Dataset:
bonanza creek state north platte f-j-26HNB\_cbl.db: field/well/run1/pass5.1

Total Length:
20.28 ft

Total Weight:
197.00 lb

O.D.
2.75 in

