



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

Company		Bonanza Creek Energy					
Well		State North Platte 24-21-26 HNB					
Field		Wattenberg					
County		Weld					
State		Colorado					
Location:		API # : 05-123-38311					
SEC 26 TWP 5N RGE 63W		Other Services NONE					
Permanent Datum		Ground Level		Elevation			
Log Measured From		Kelly Bushing 17' APD		4550'			
Drilling Measured From		Kelly Bushing		K.B. 4567' D.F. 4566' G.L. 4550'			
Date	December 27, 2013						
Run Number	1						
Depth Driller	10876'						
Depth Logger	6530'						
Bottom Logged Interval	6524'						
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	310'						
Time Well Ready	1145						
Time Logger on Bottom	1230						
Equipment Number	13033						
Location	Brighton						
Recorded By	R.Grisson						
Witnessed By	K. Dodge						
Borehole Record							
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record	Size	Wgt/Ft		Top	Bottom		
Surface String	9 5/8"	36#		0	423'		
Prot. String							
Production String	7"	26#		0	6523'		
Liner	4 1/2"	11.6#		6423'	10876'		

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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 17' Kelly Bushing

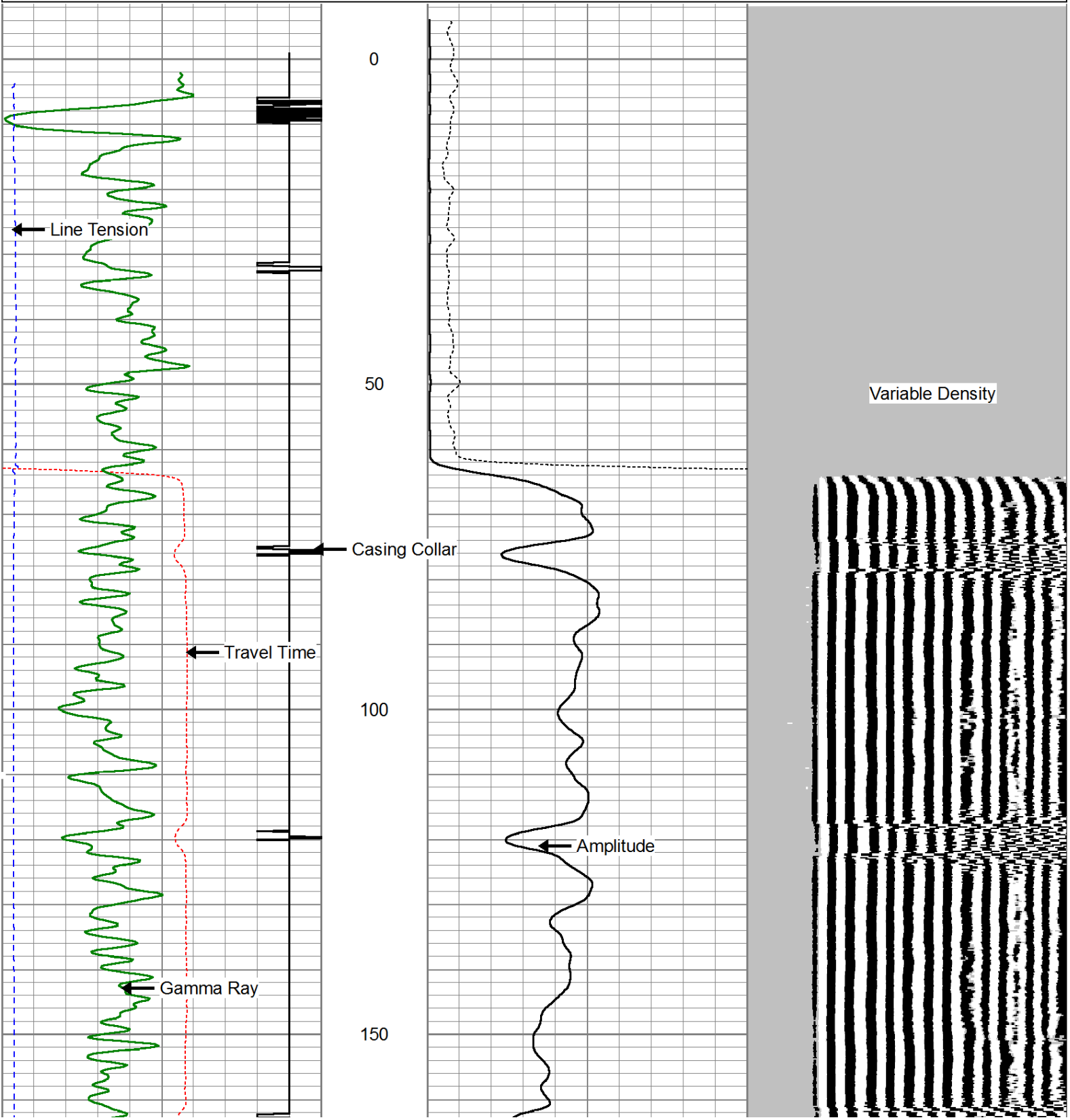
Thank You For using Allied Wireline Services  
(303) 659-4609

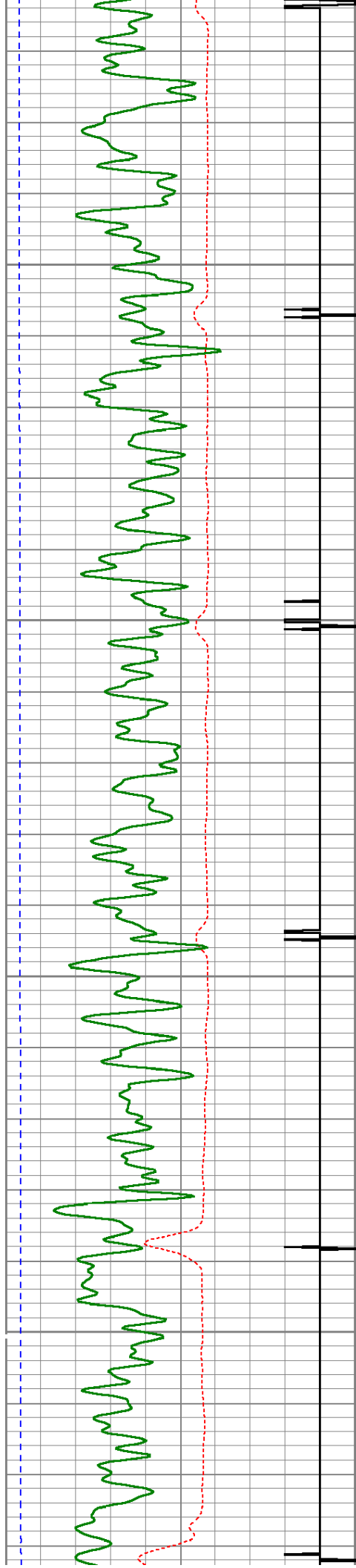


Main Pass (0 PSI)

Database File: bonanza creek state north platte 24-21-26 hnb\_cbl.db  
Dataset Pathname: pass3  
Presentation Format: cblprobe  
Dataset Creation: Fri Dec 27 12:10:45 2013 by Log 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)	5000						



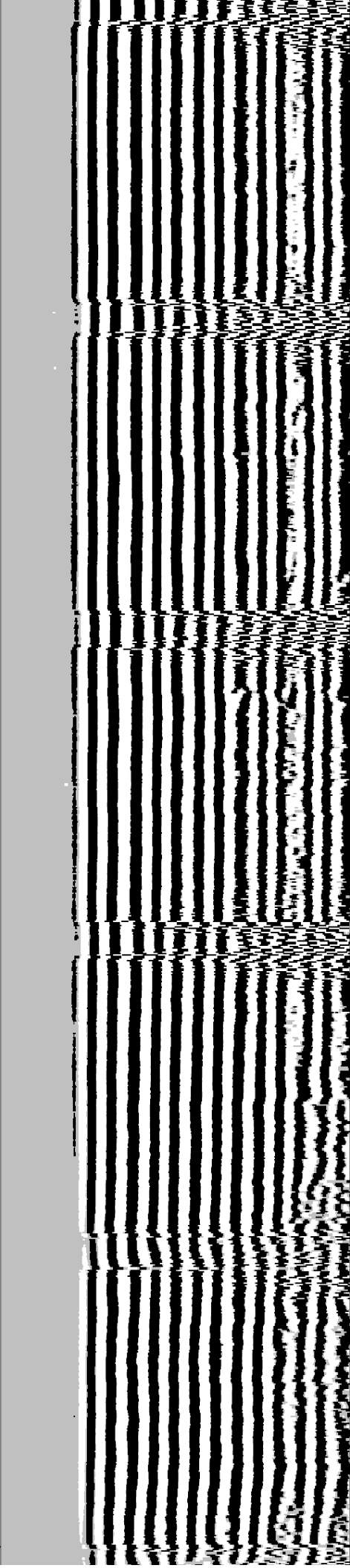
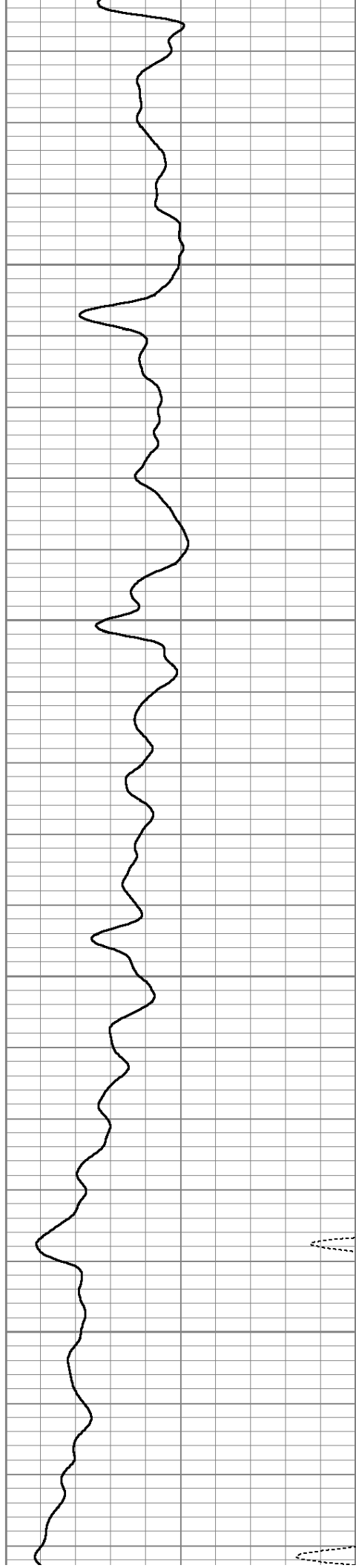


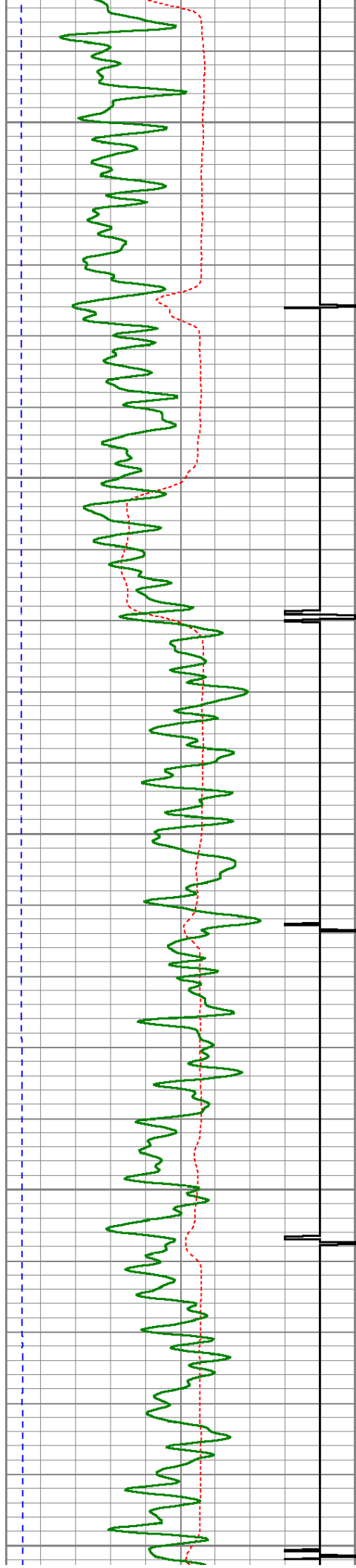
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250

300

350





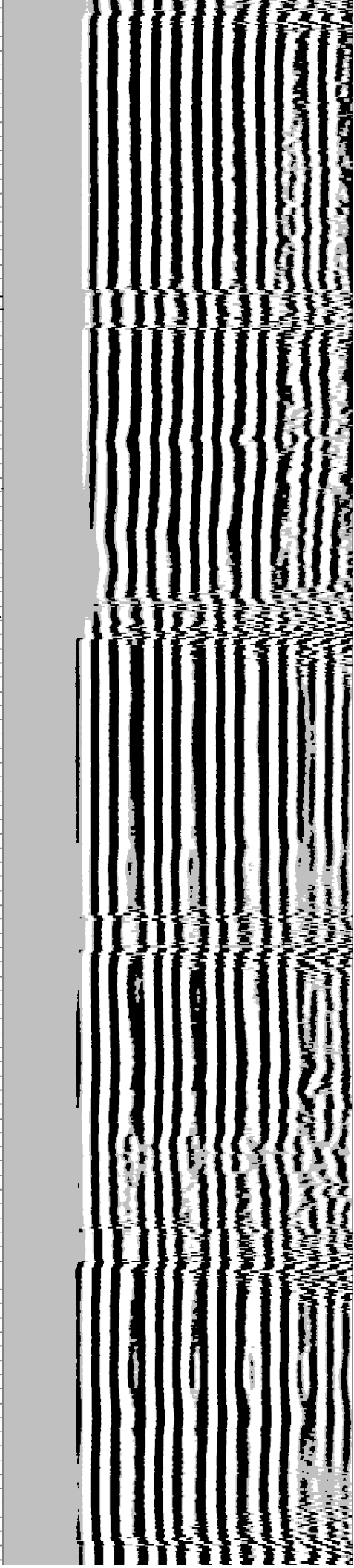
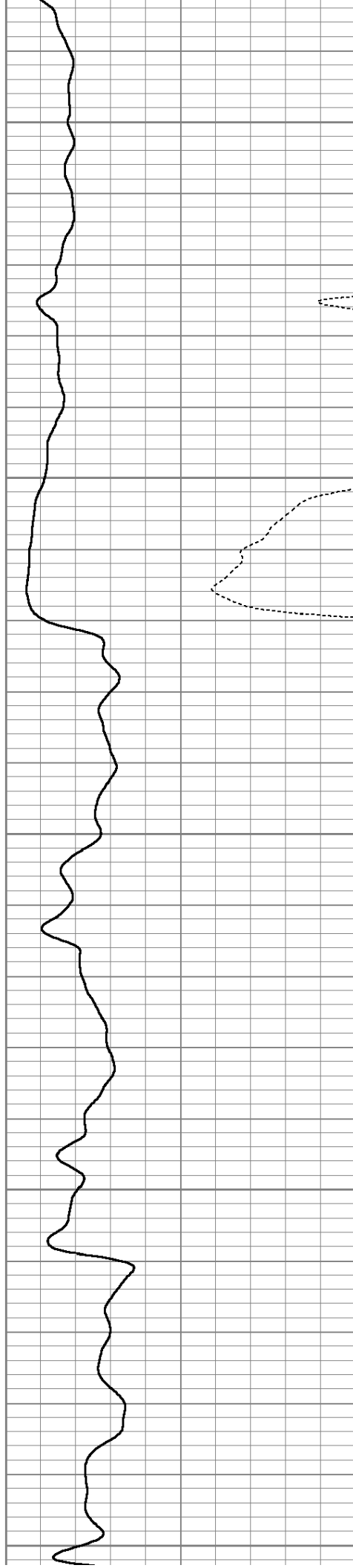
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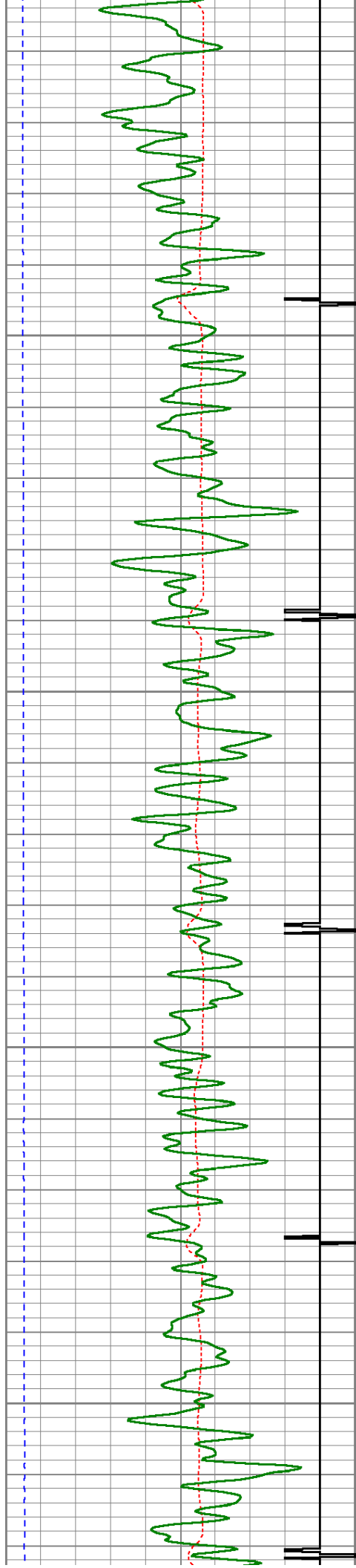
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500

550

600



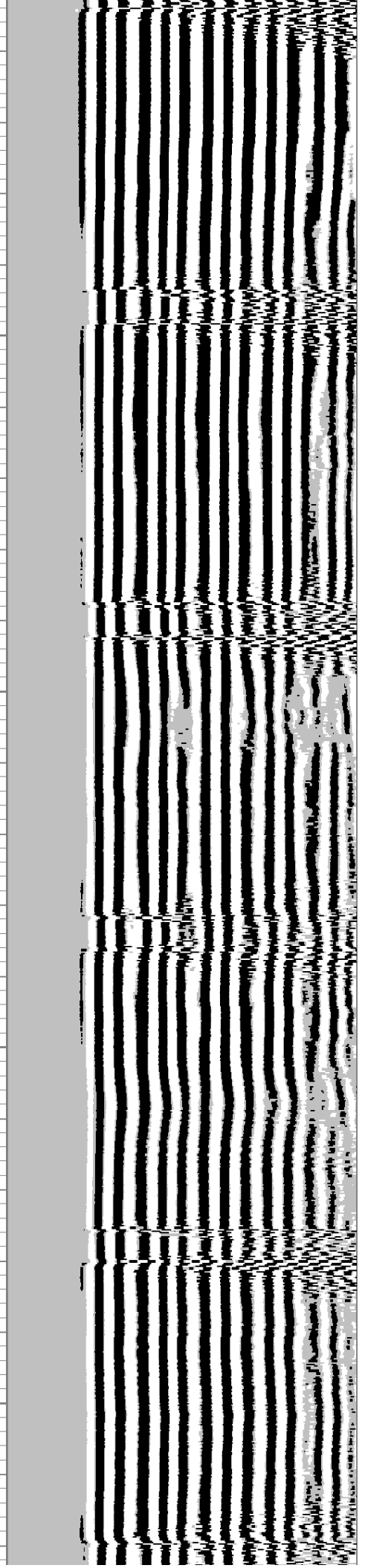
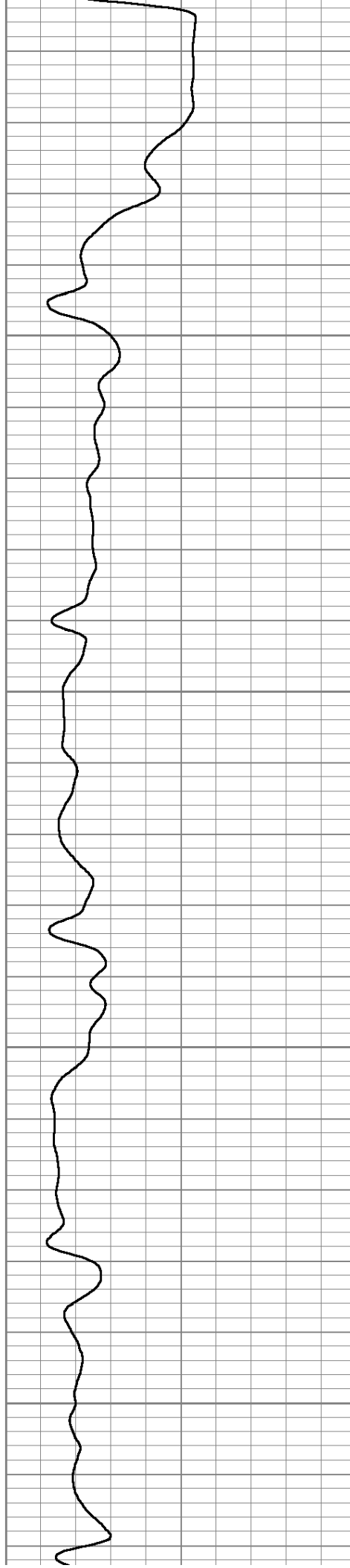


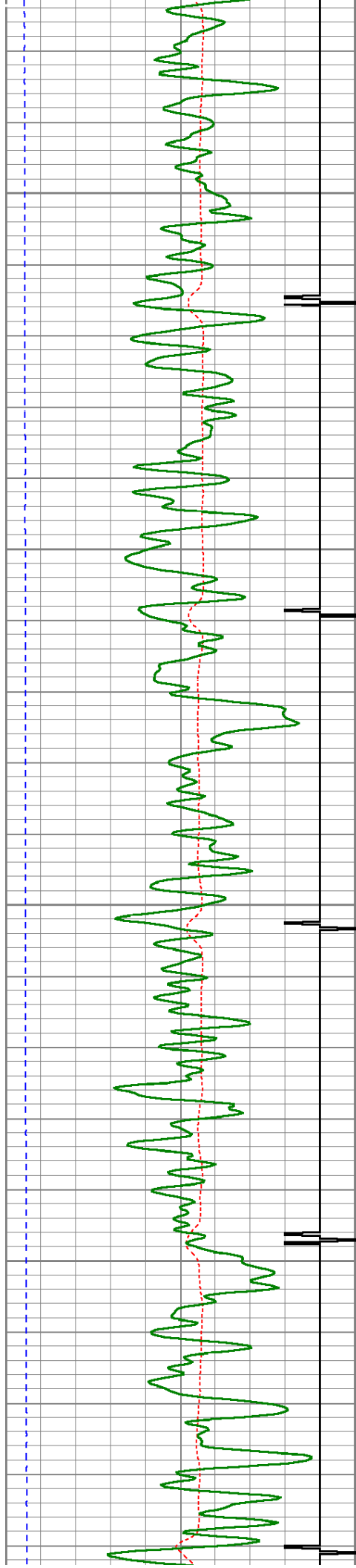
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700

750

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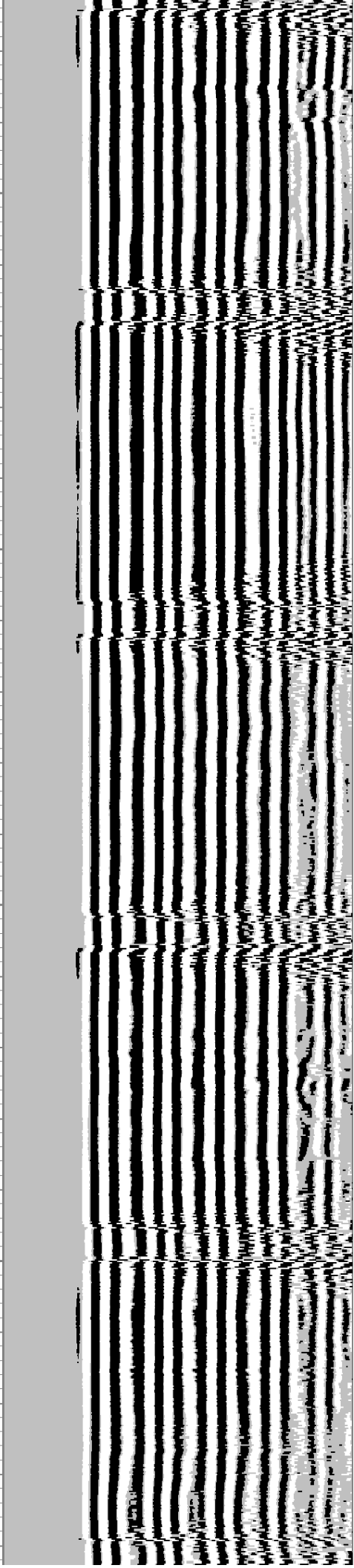
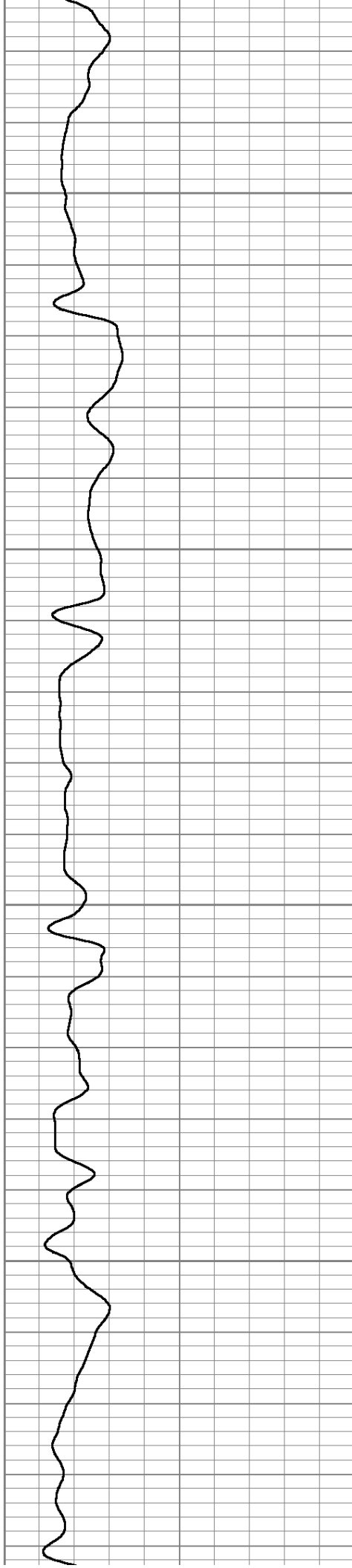


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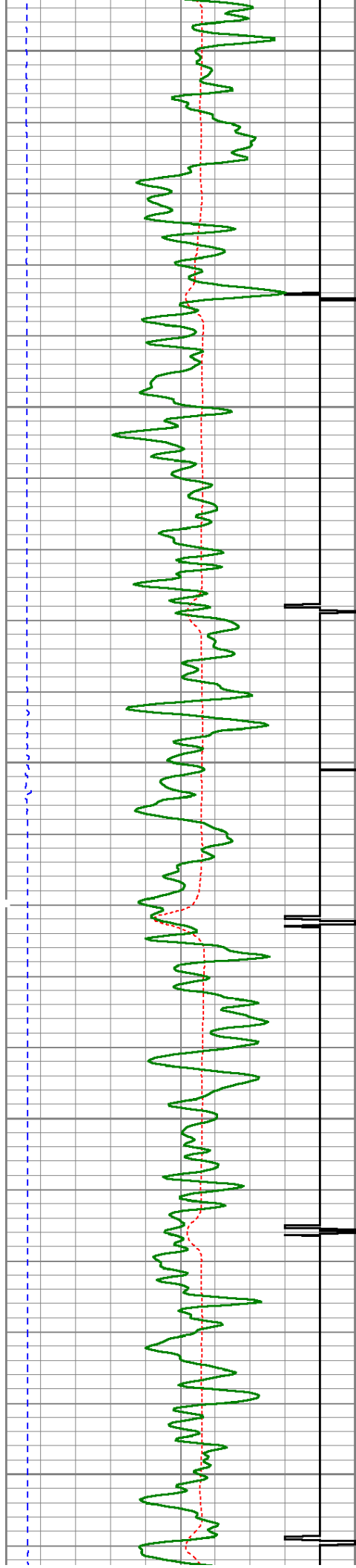
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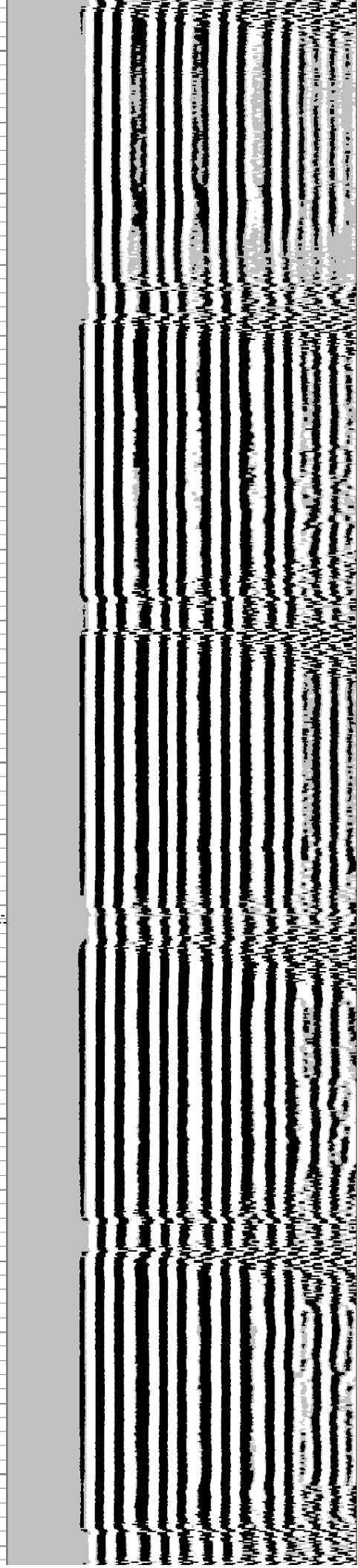
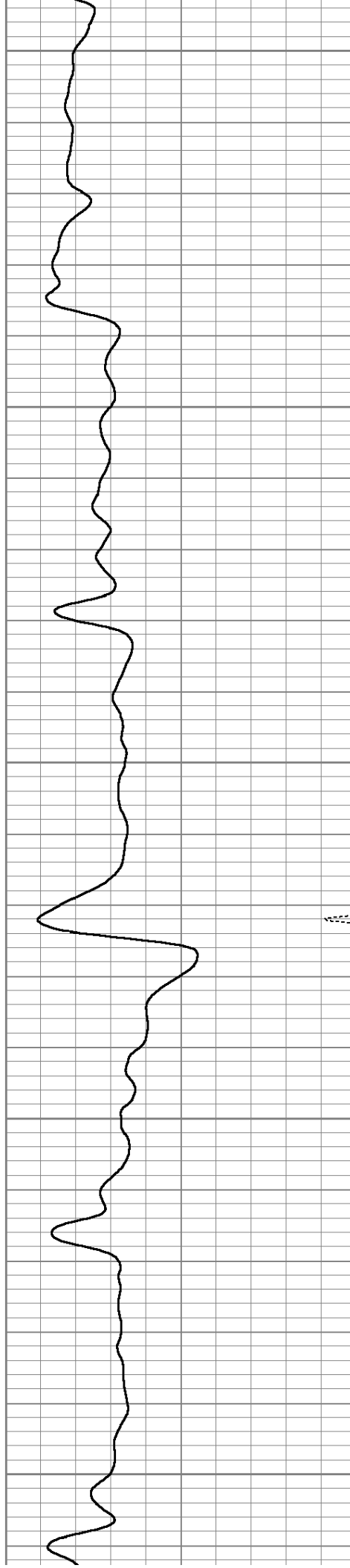
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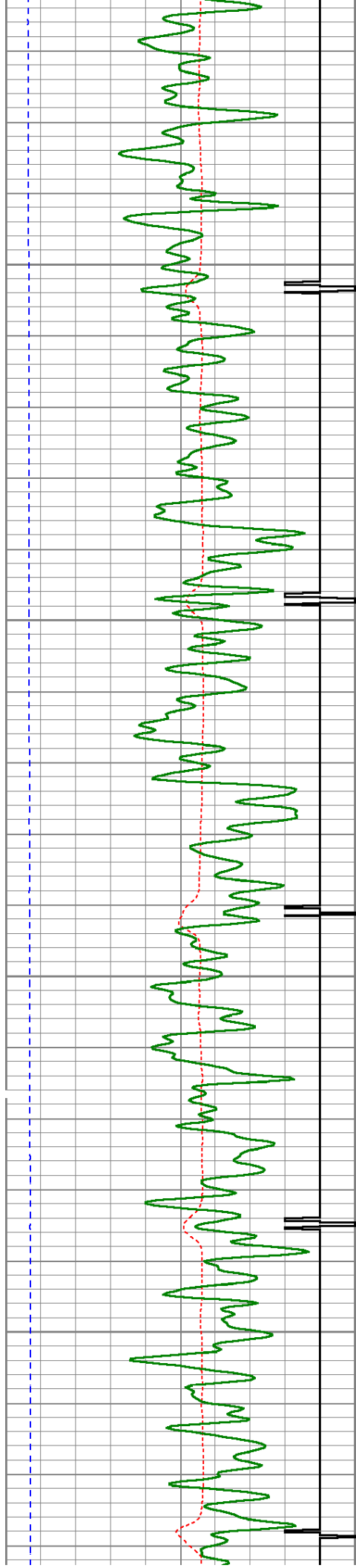
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1250



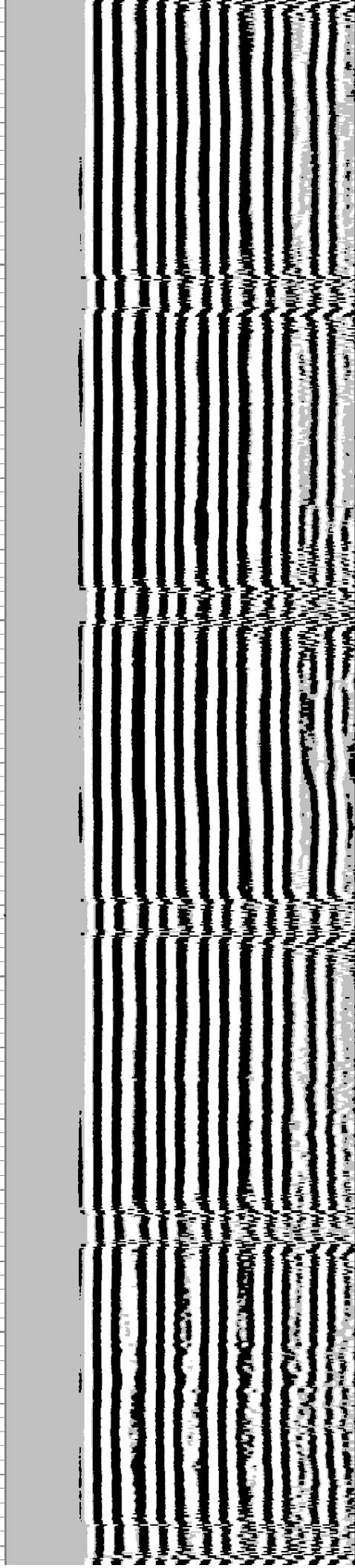
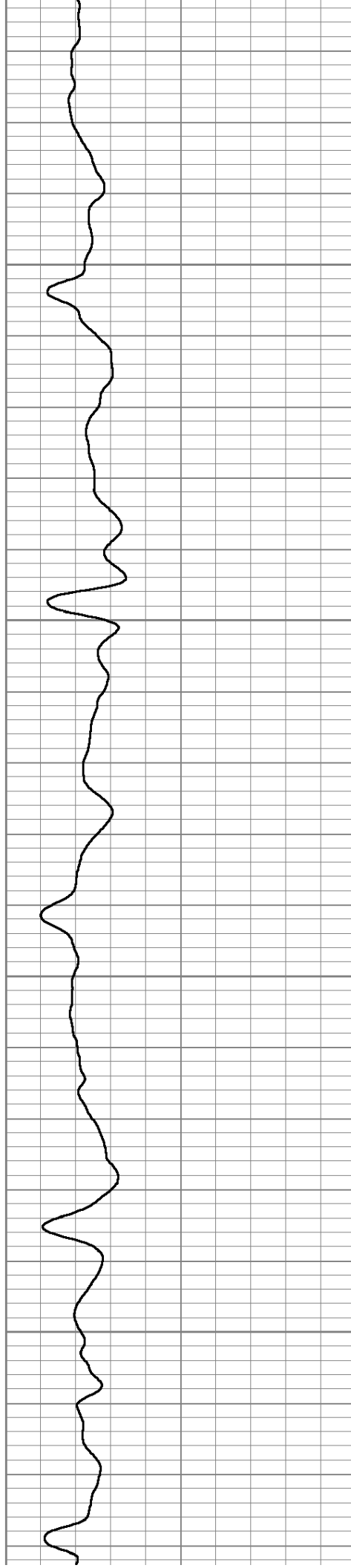


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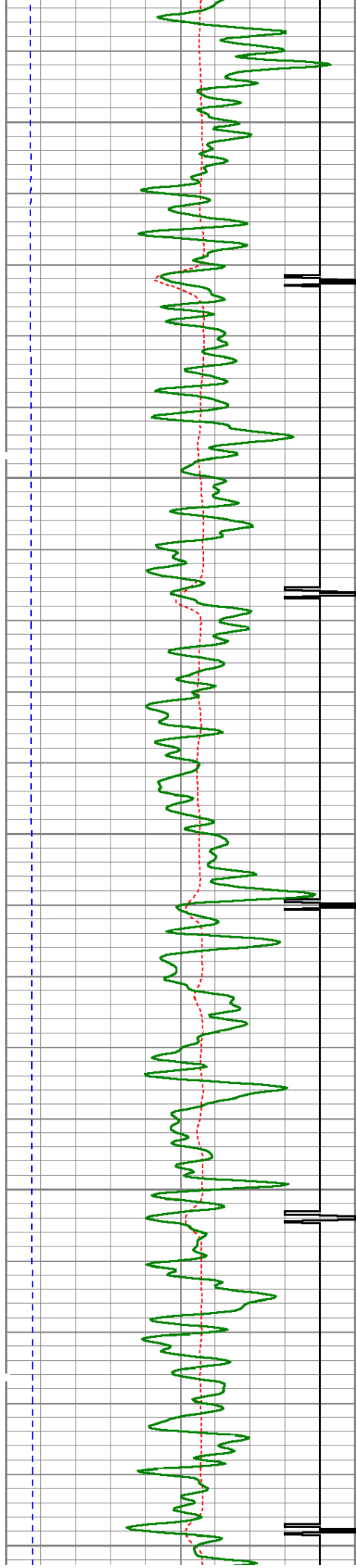
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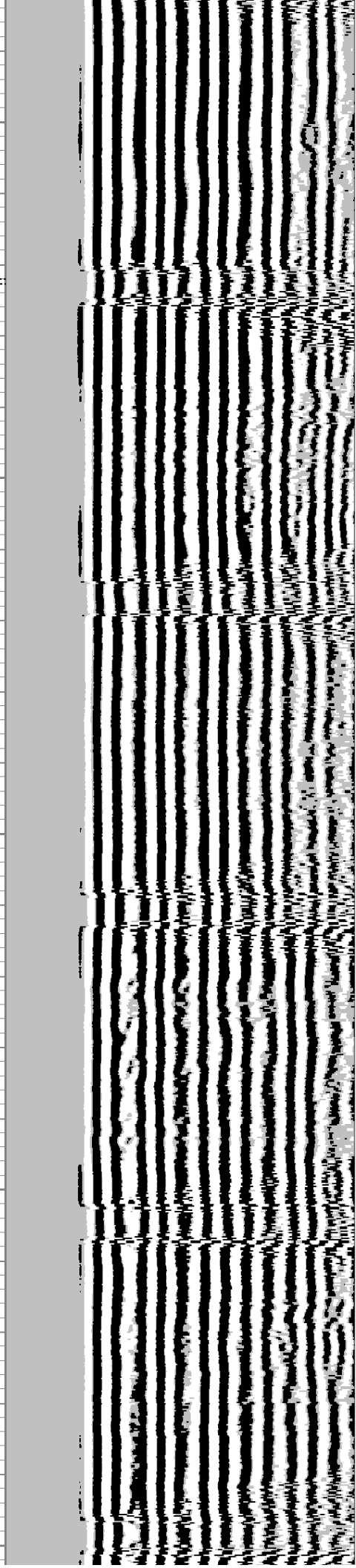
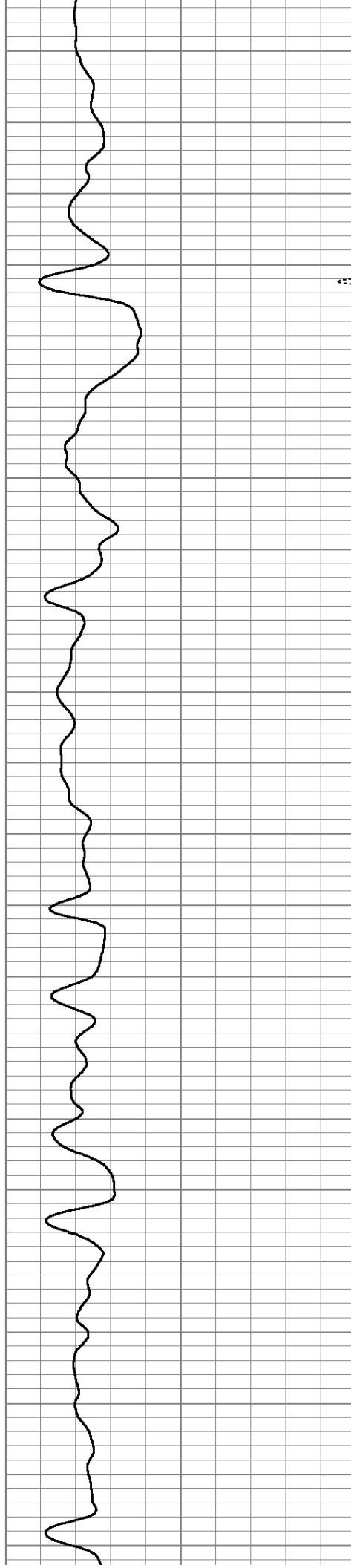
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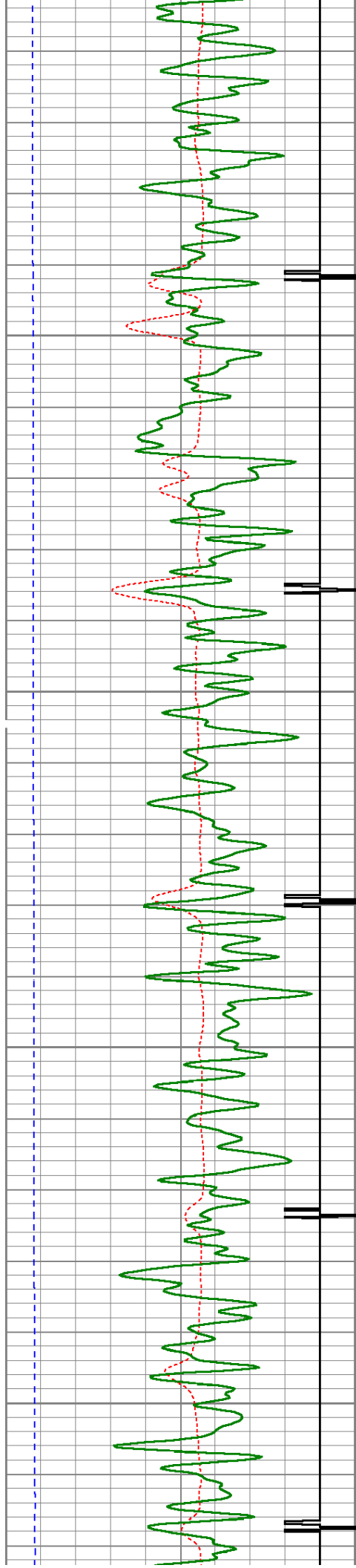
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1700



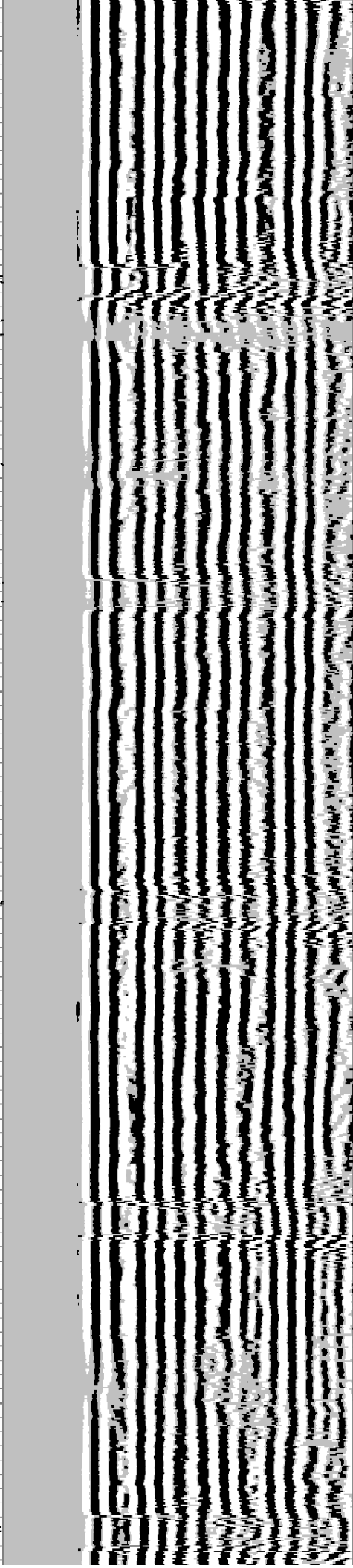
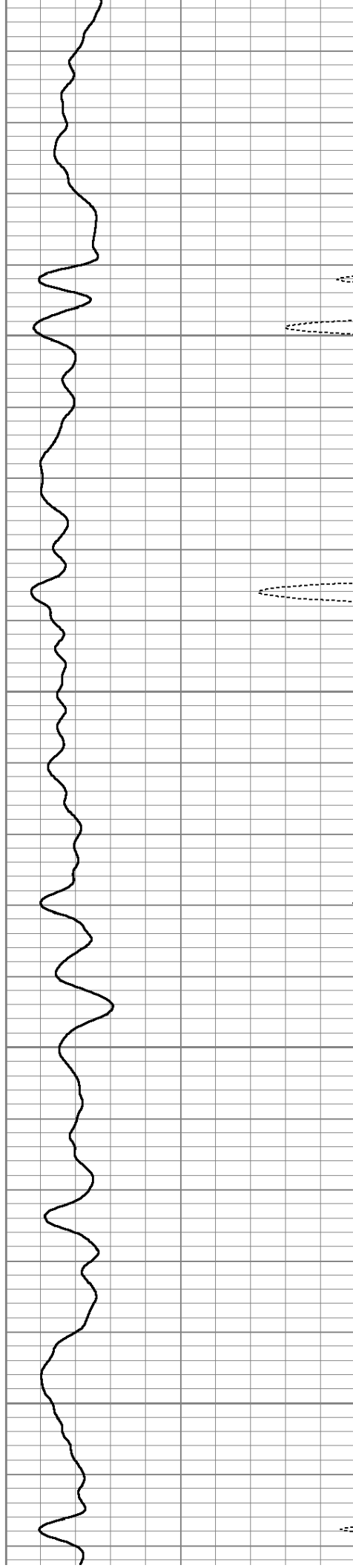


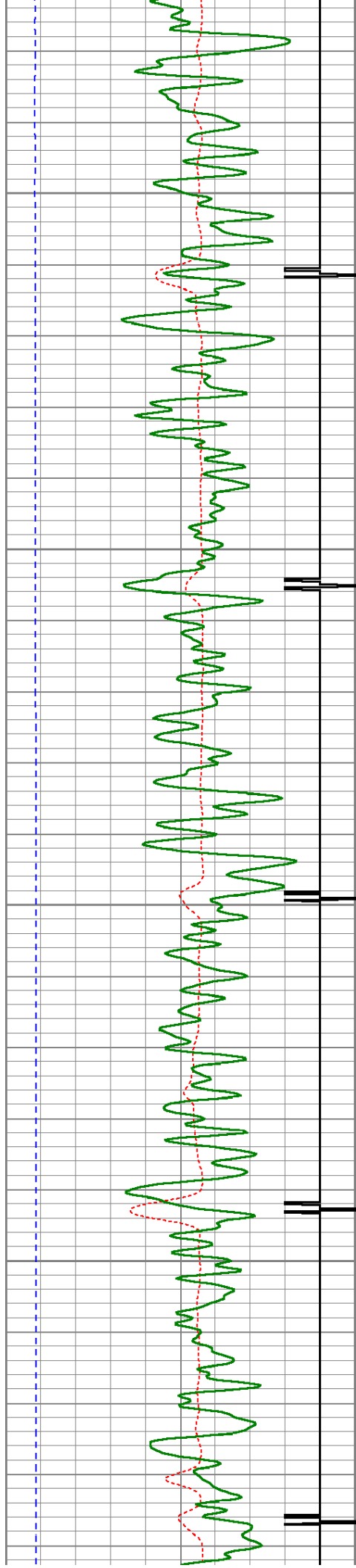
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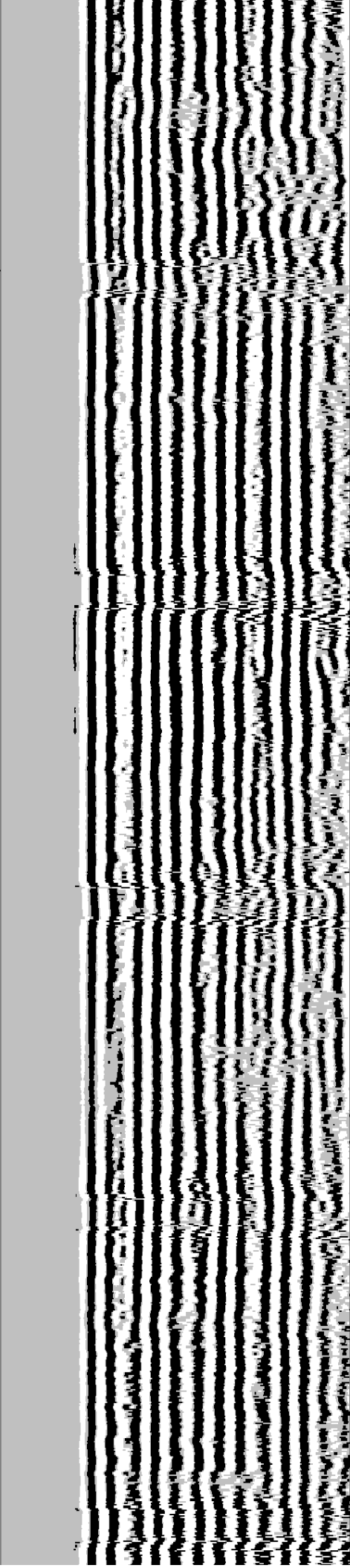
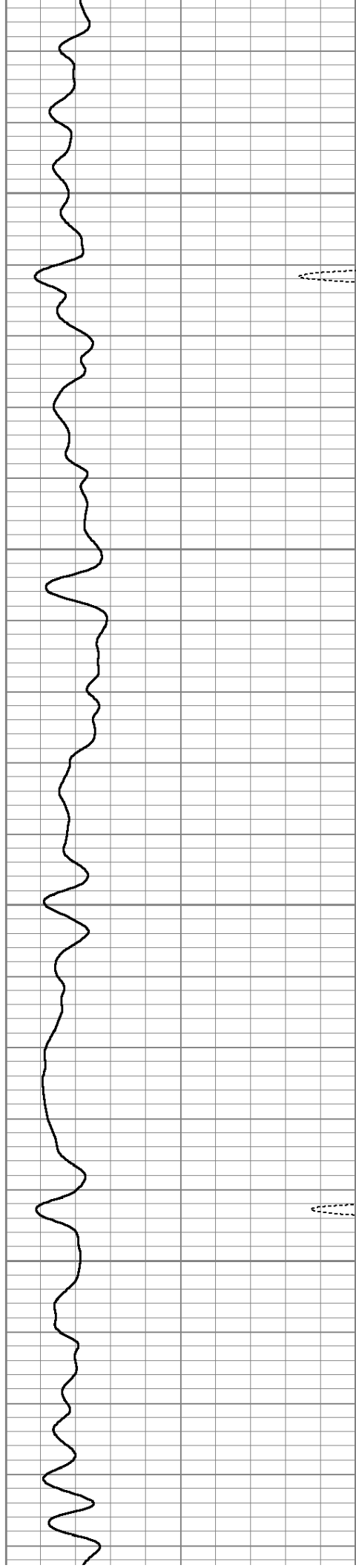


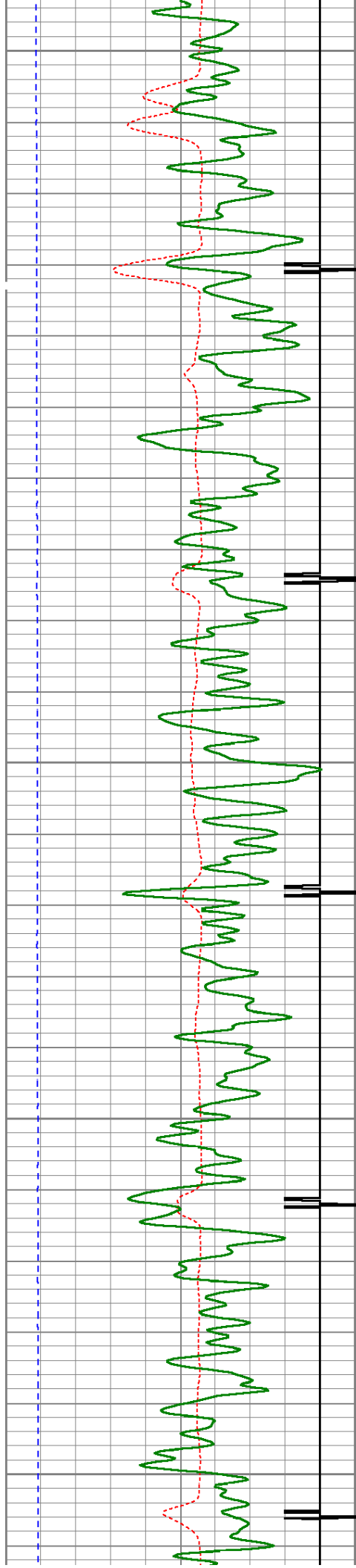
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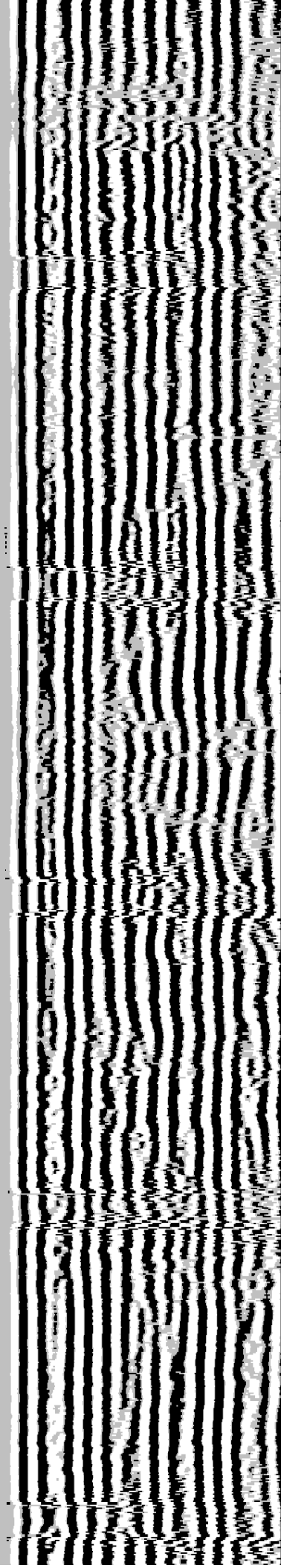
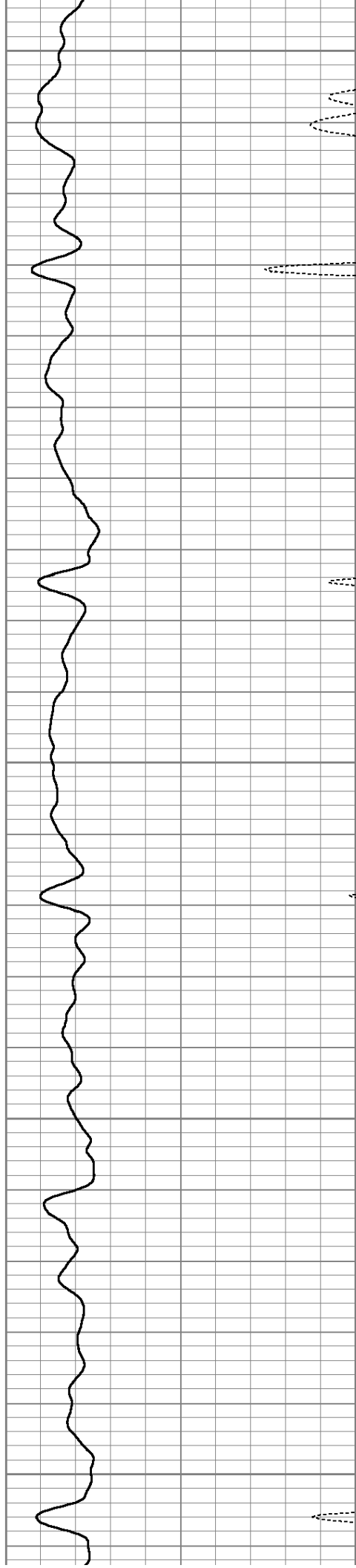
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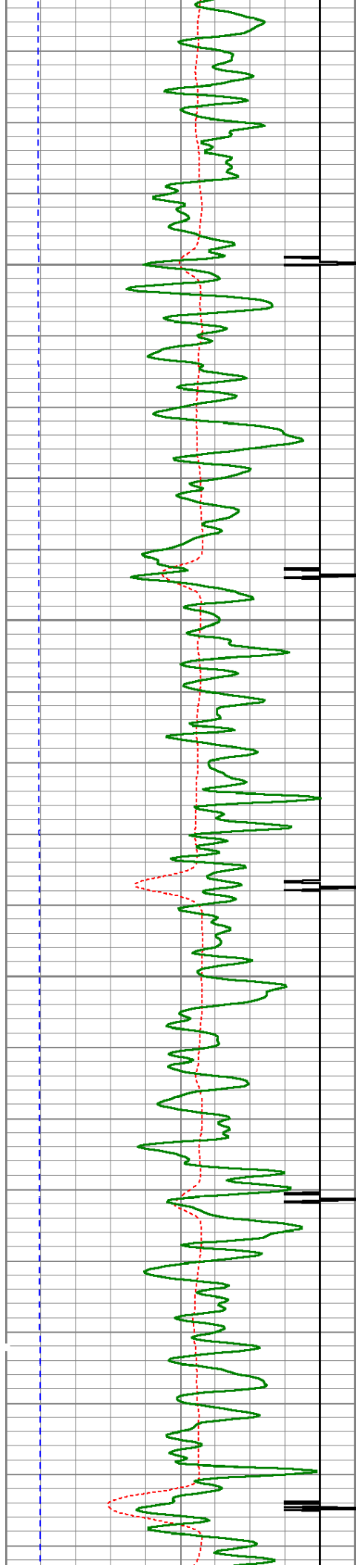
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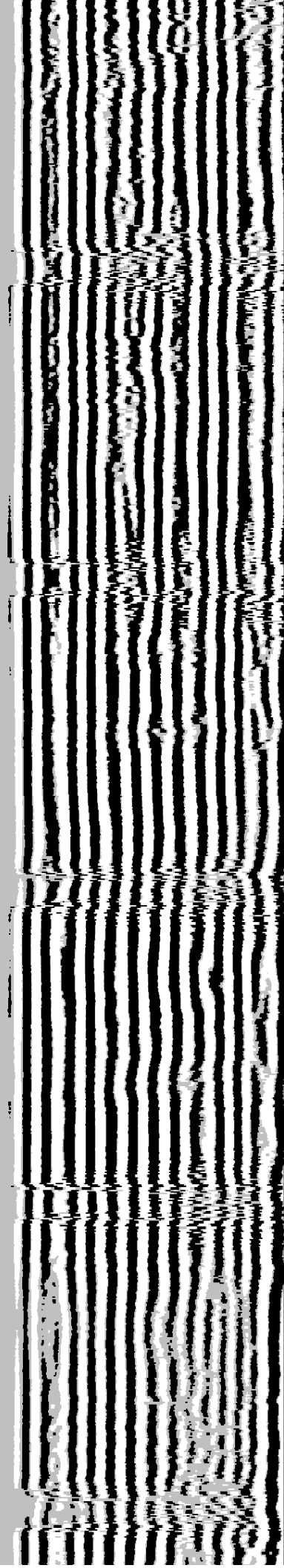
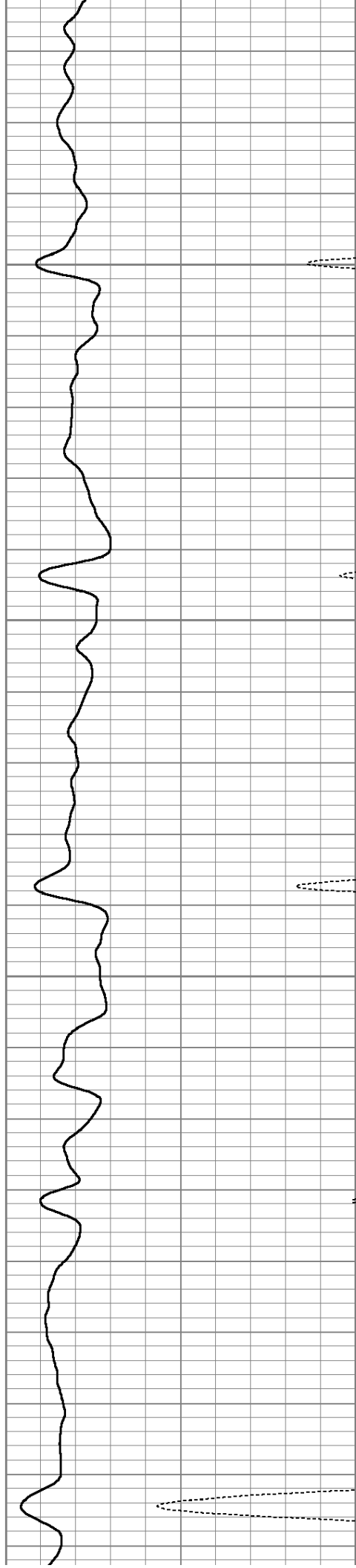


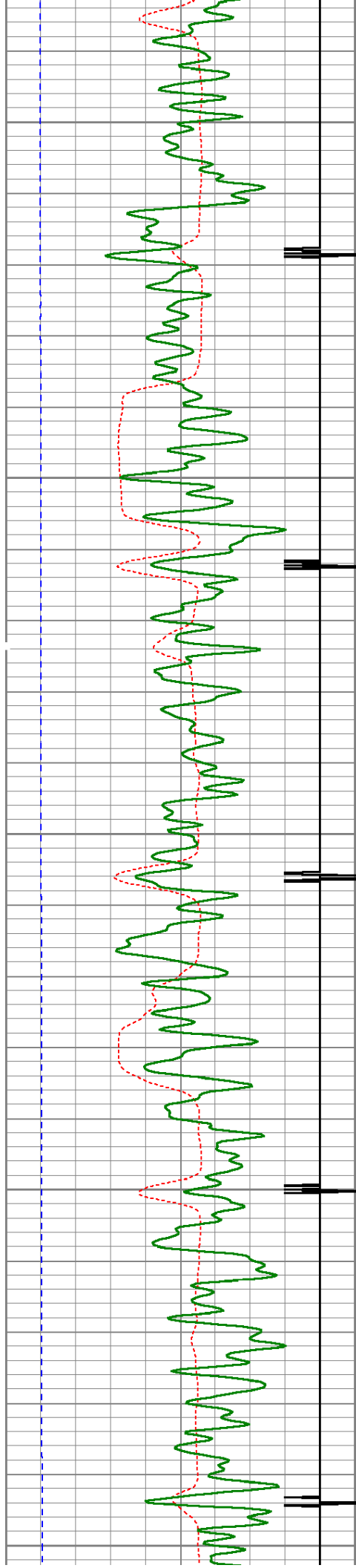
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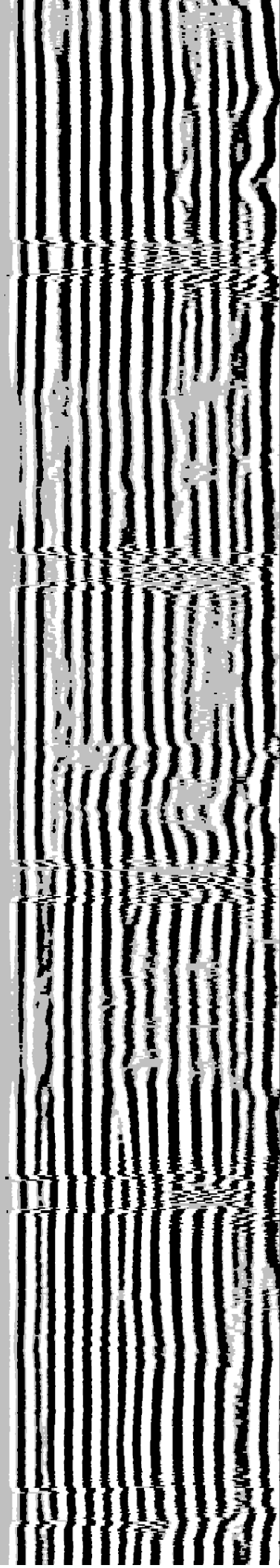
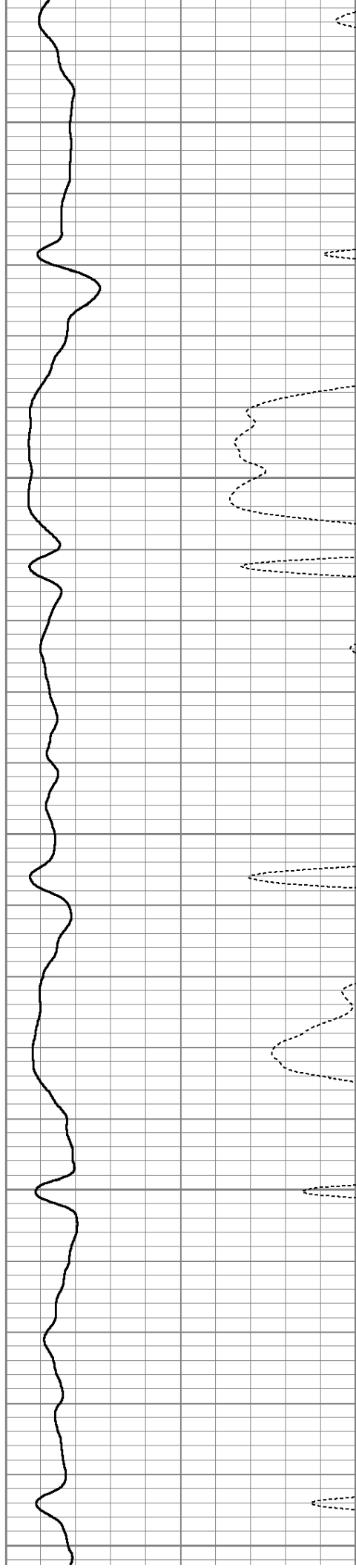
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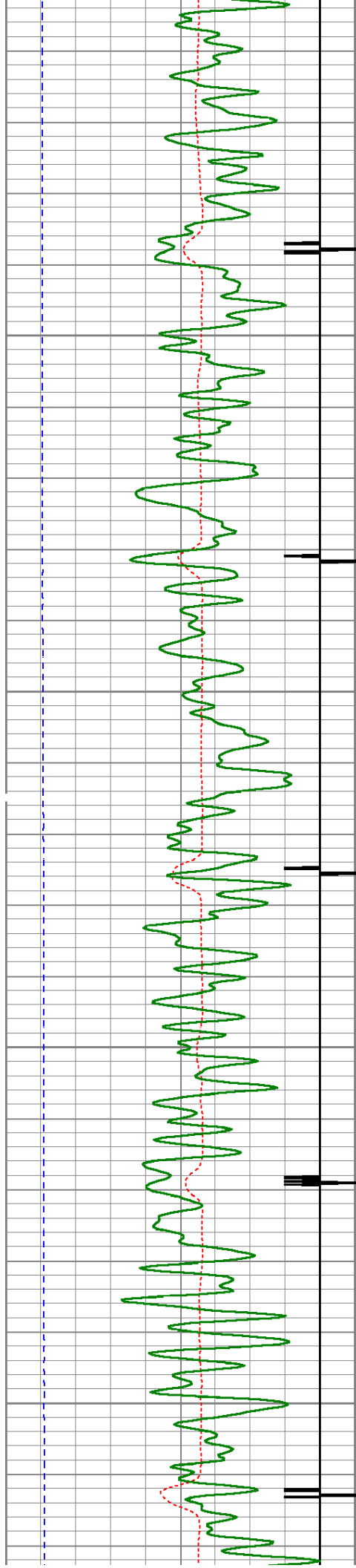
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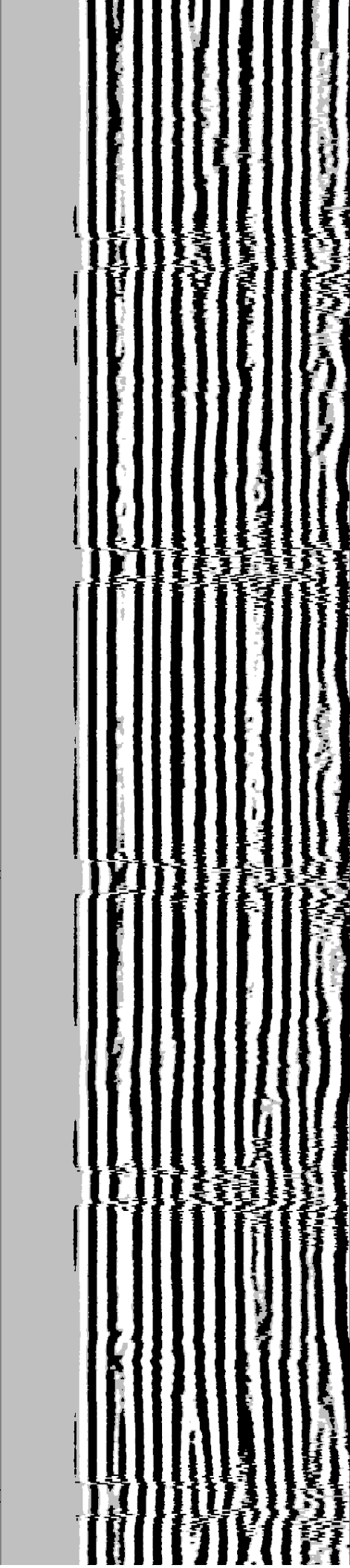
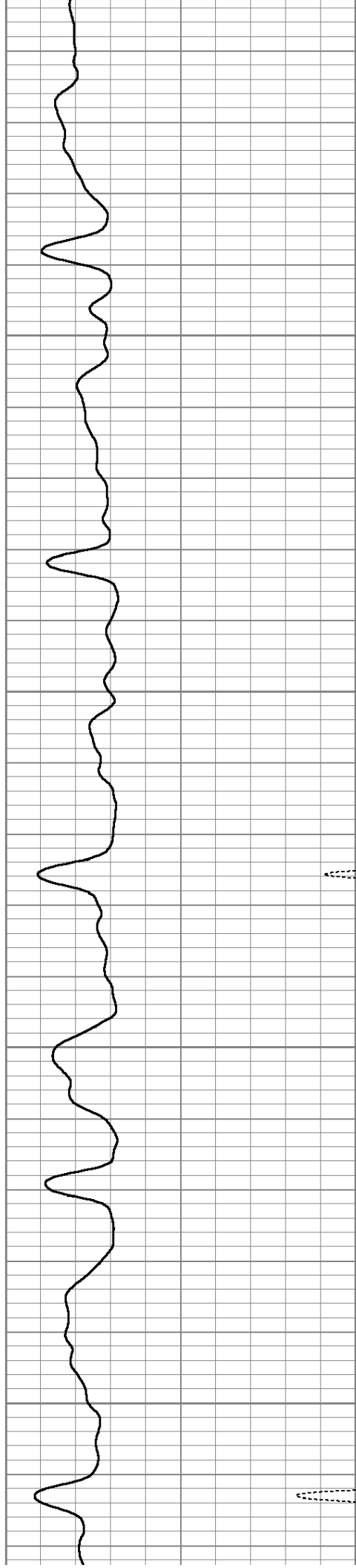


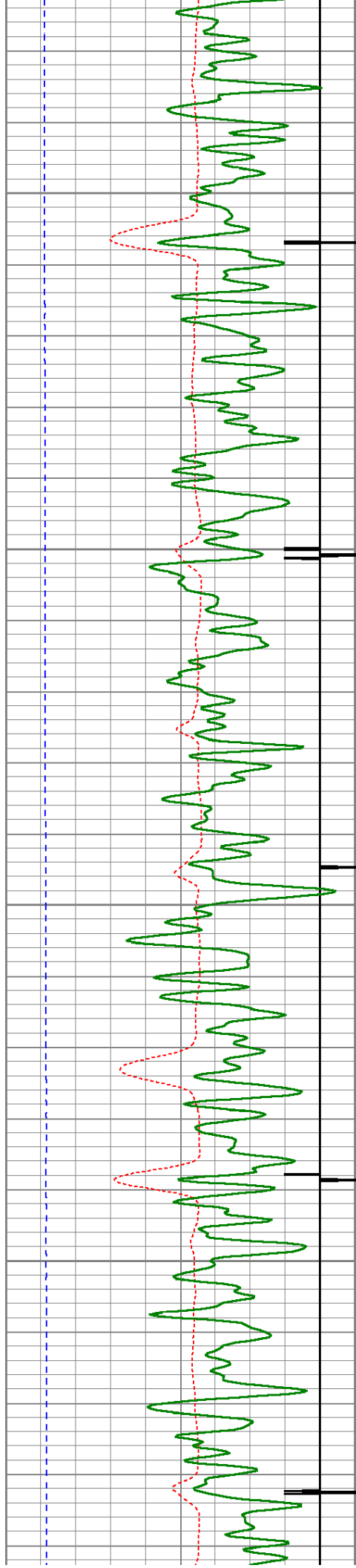
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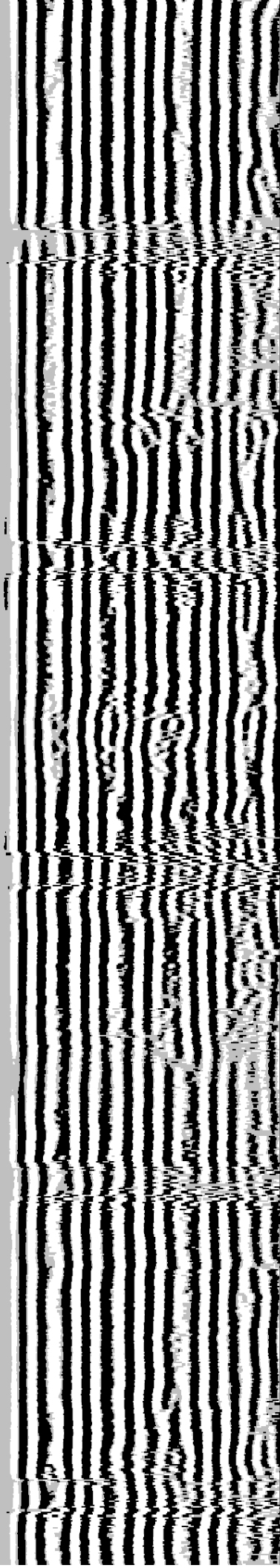
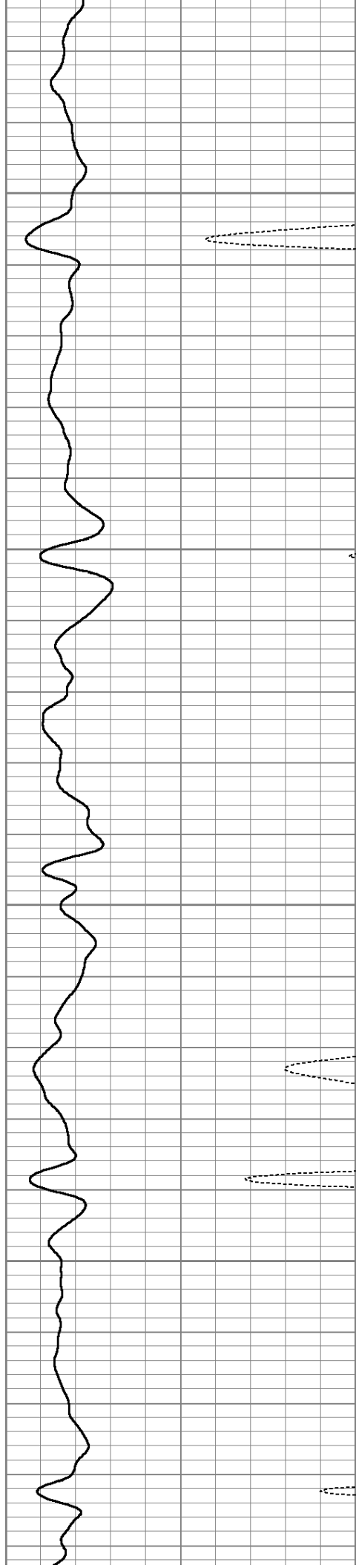


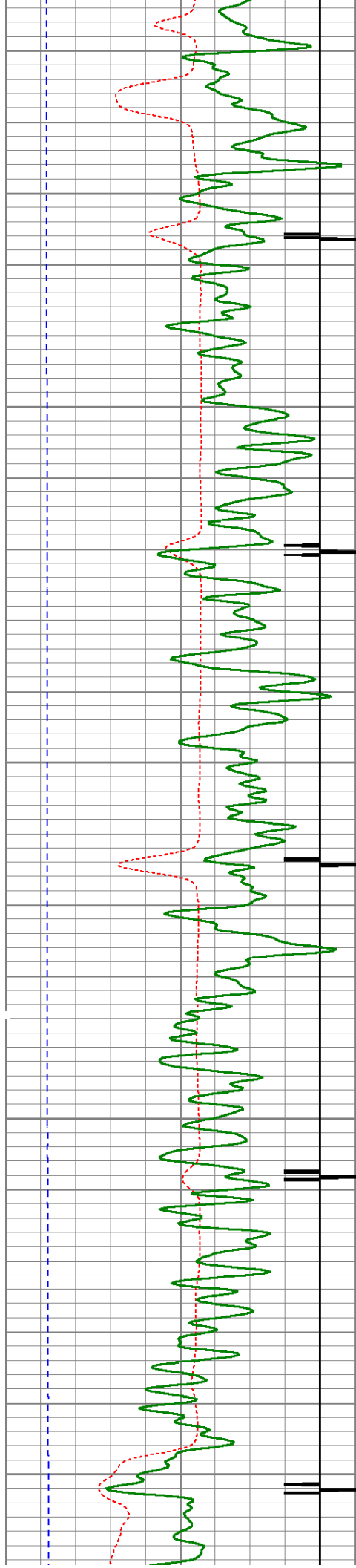
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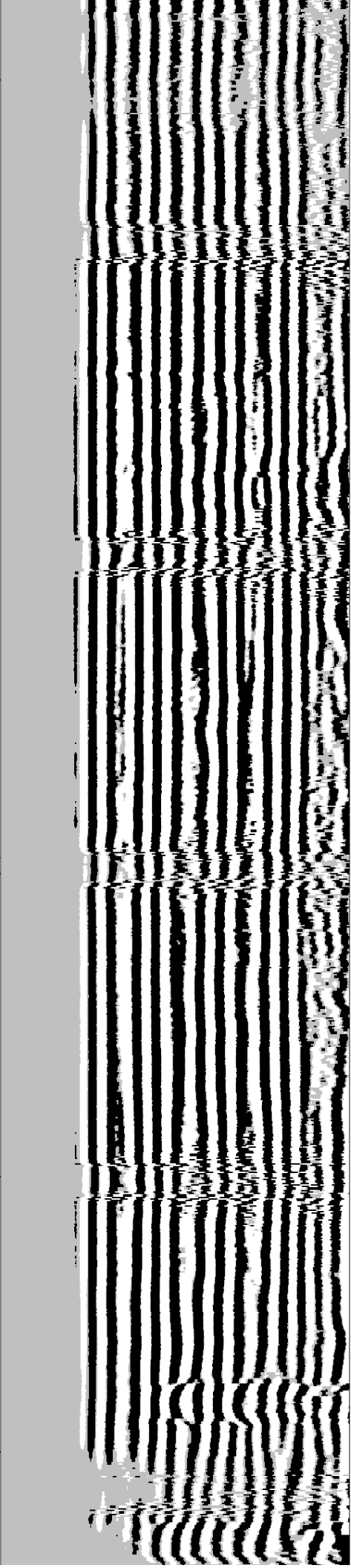
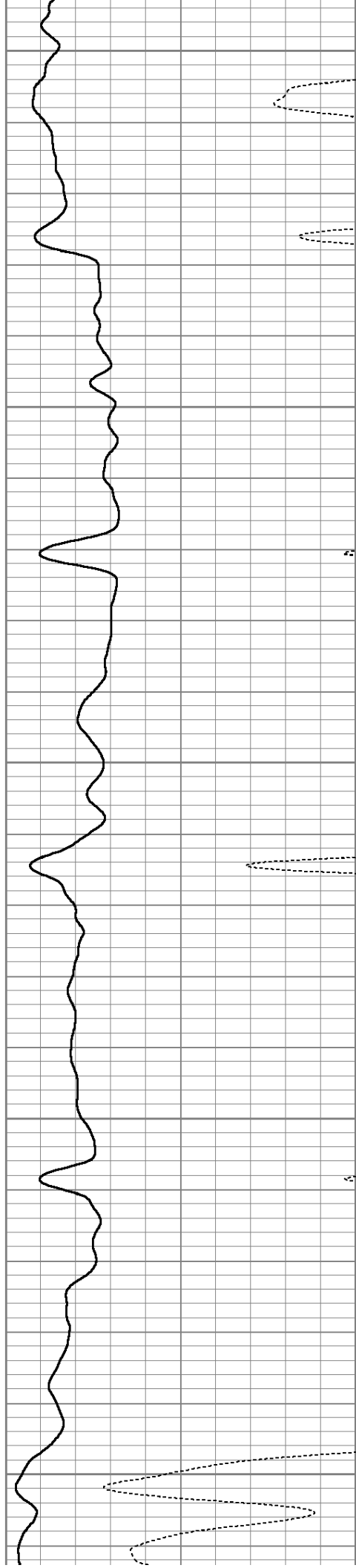
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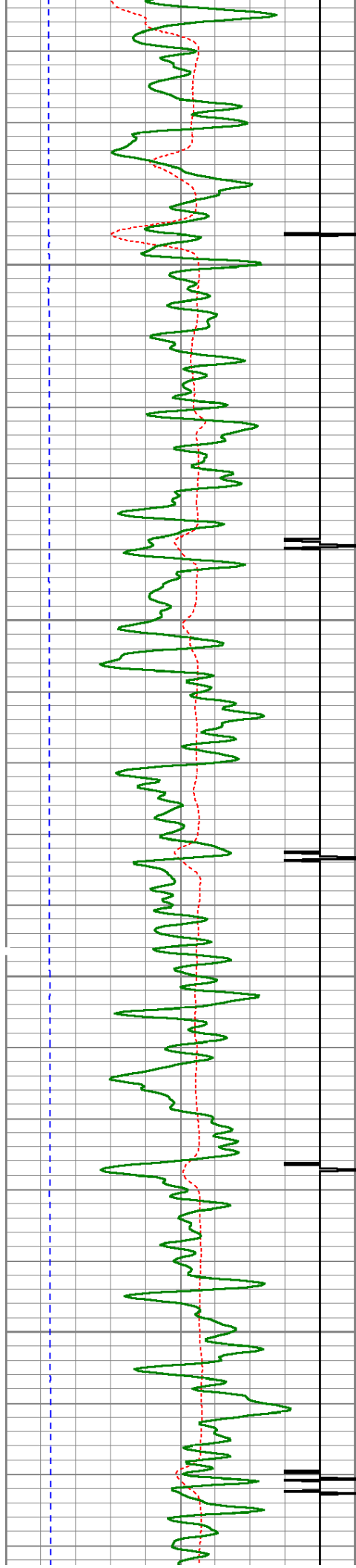
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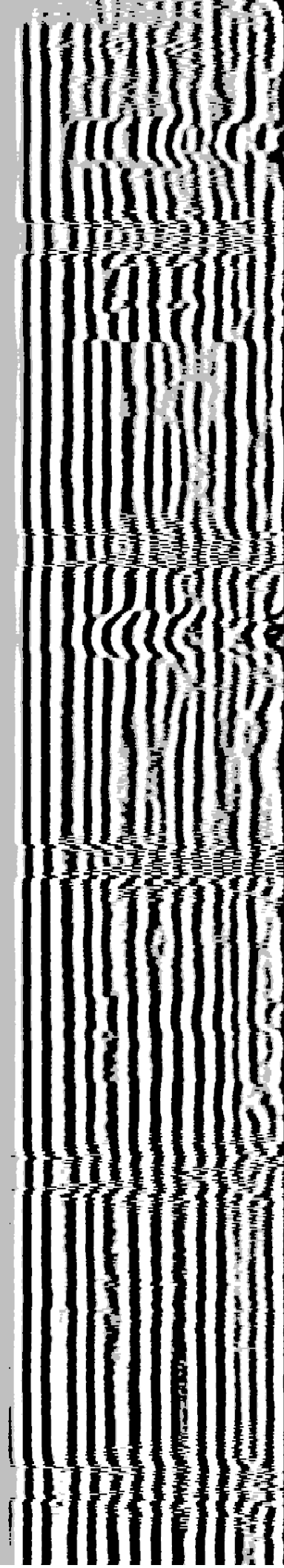
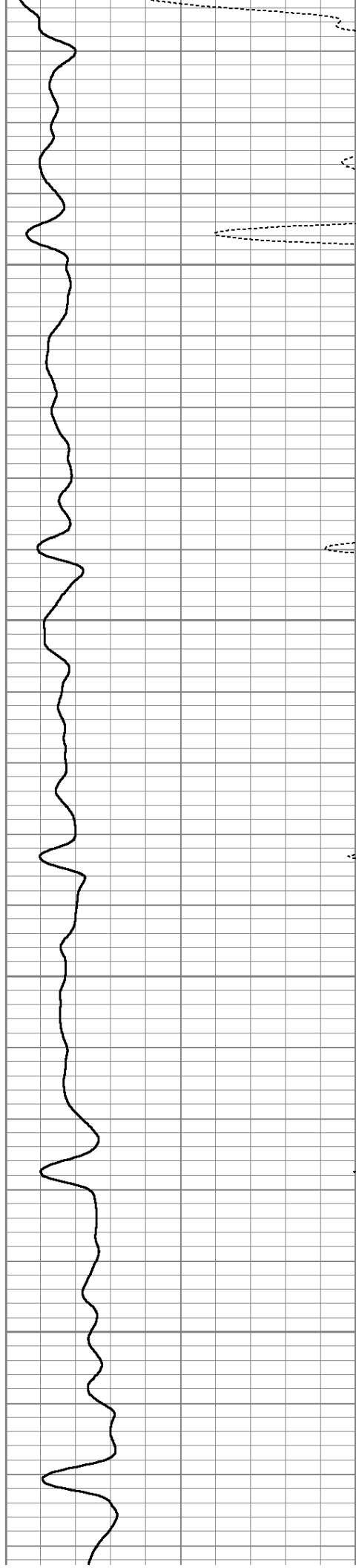


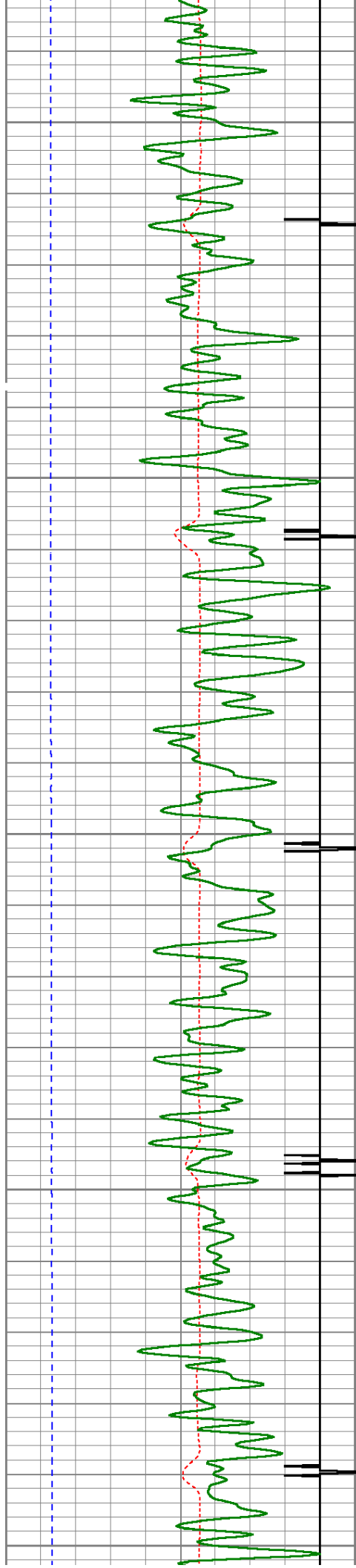
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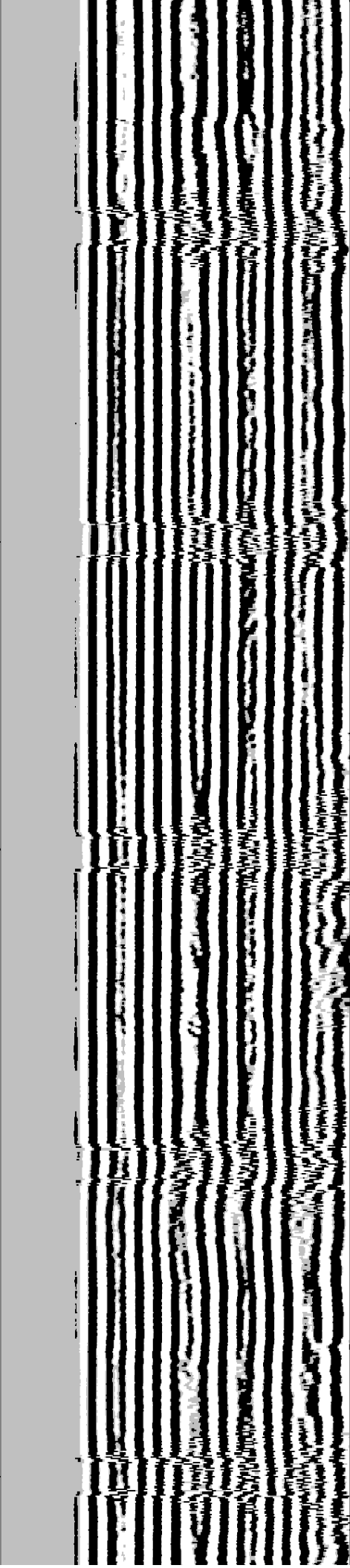
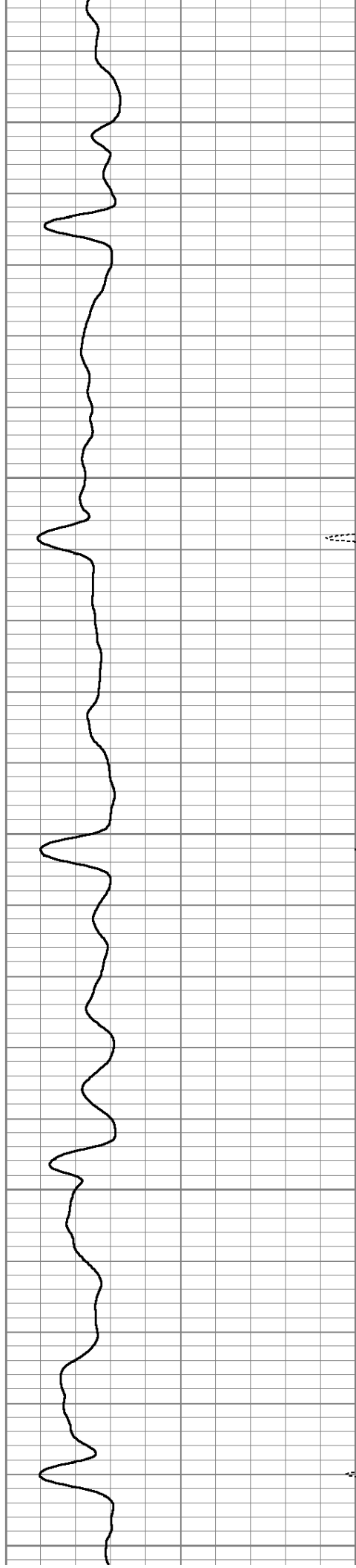
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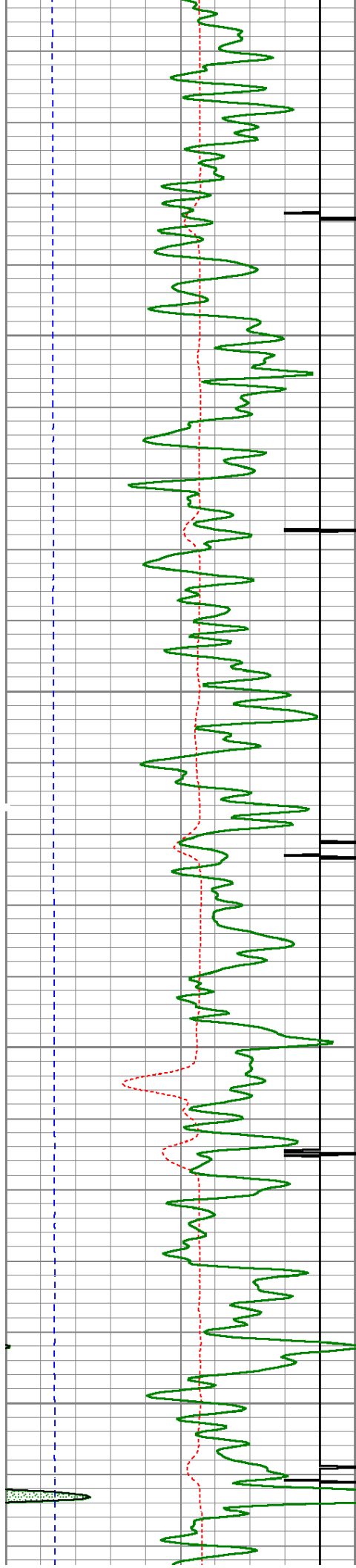
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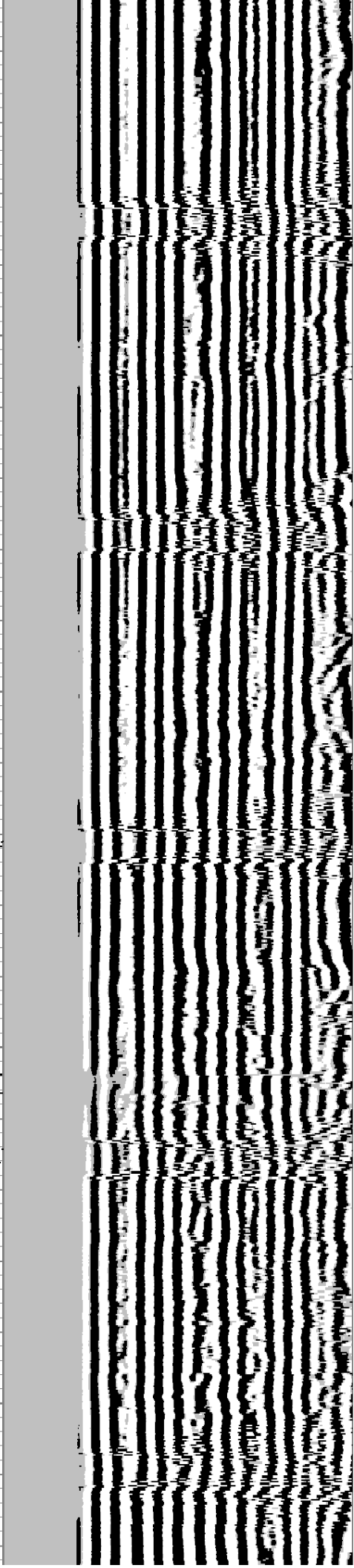
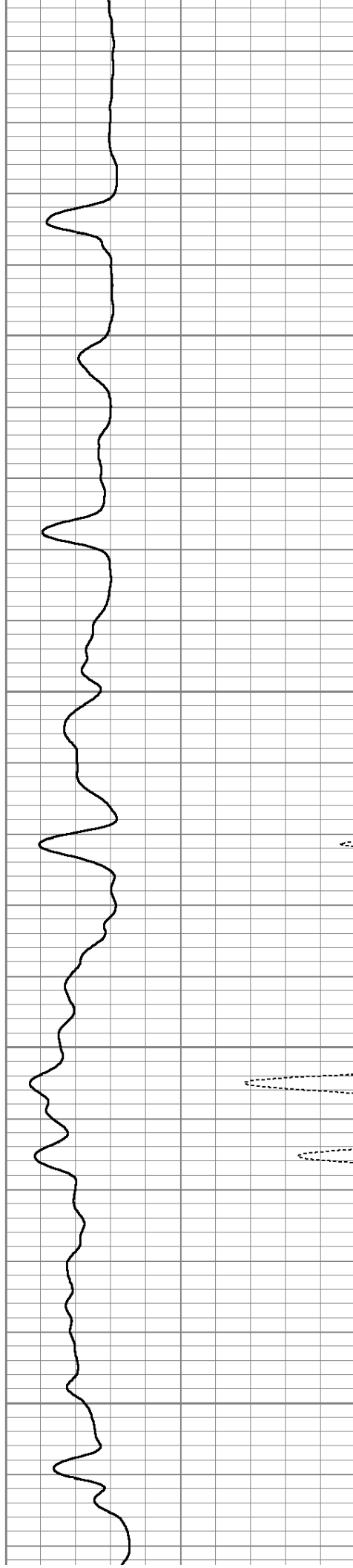


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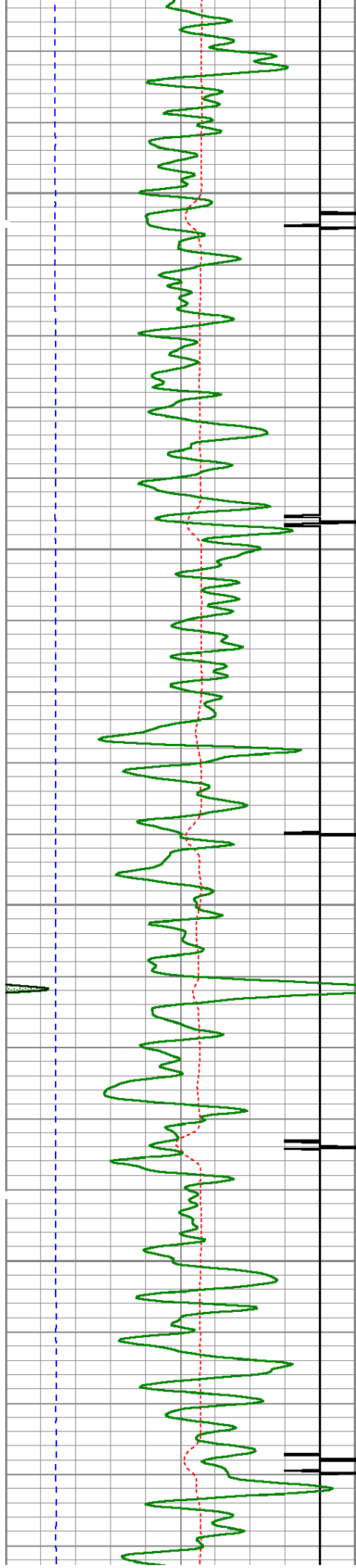
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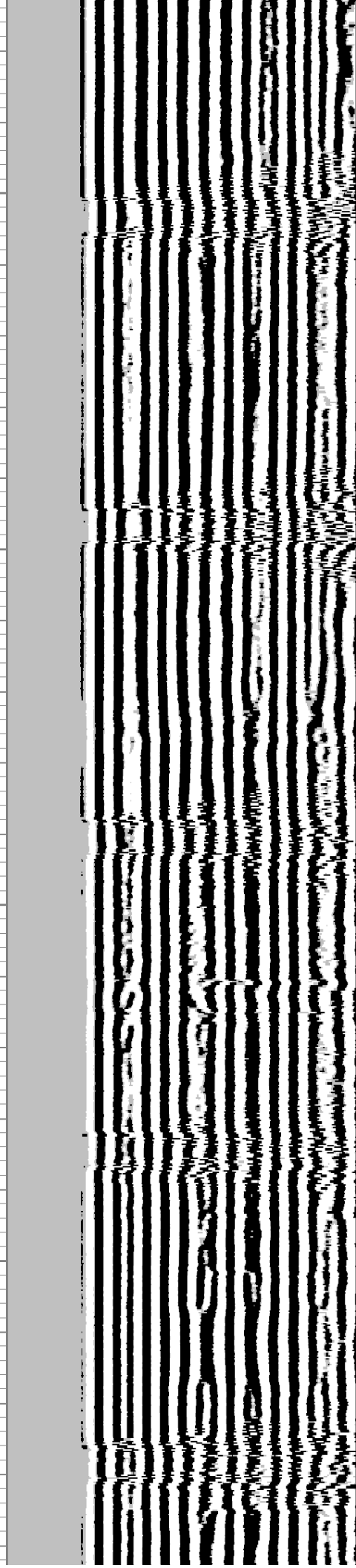
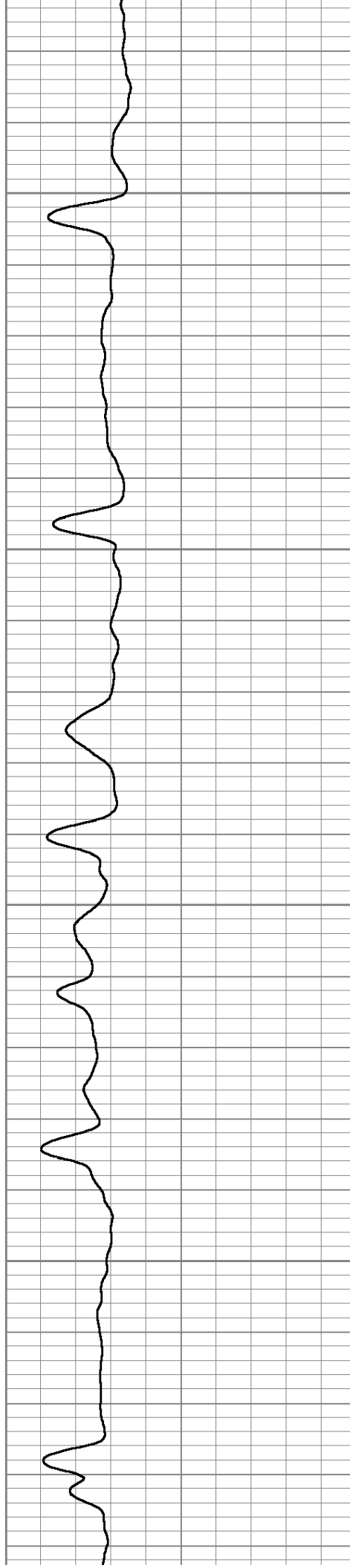


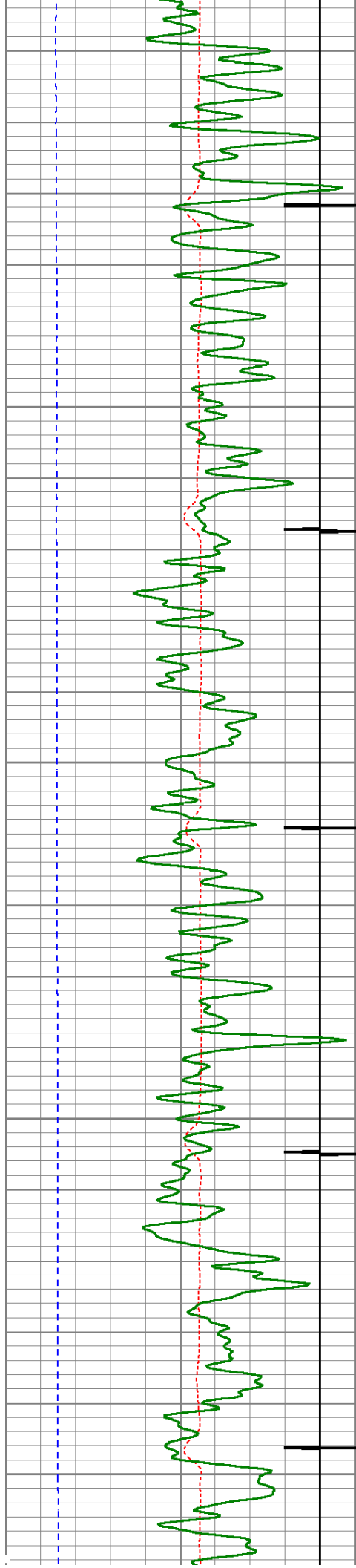
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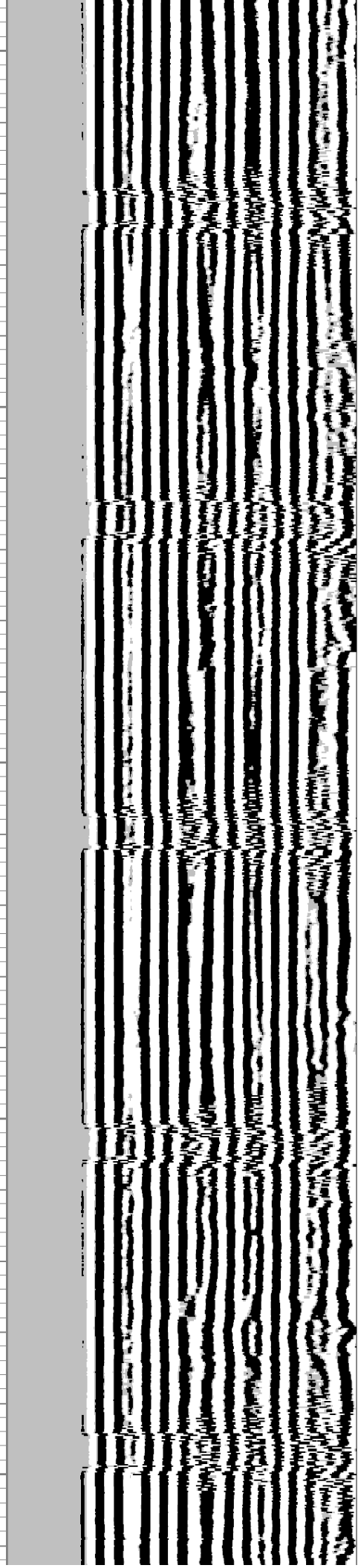
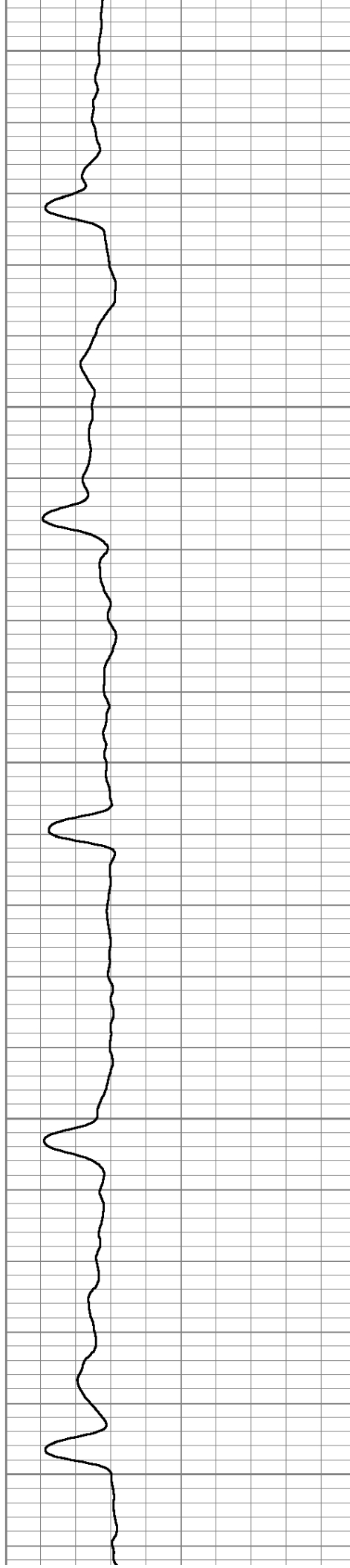
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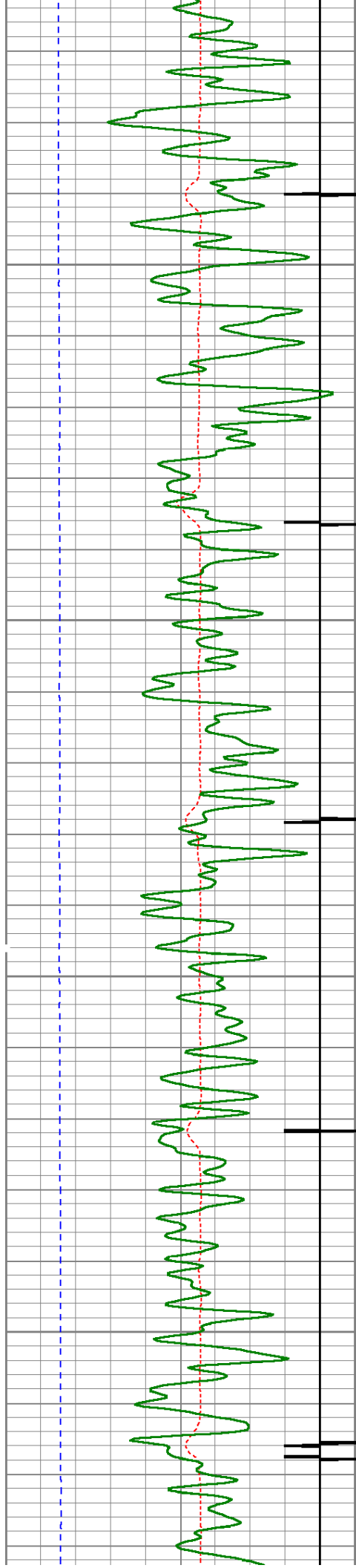
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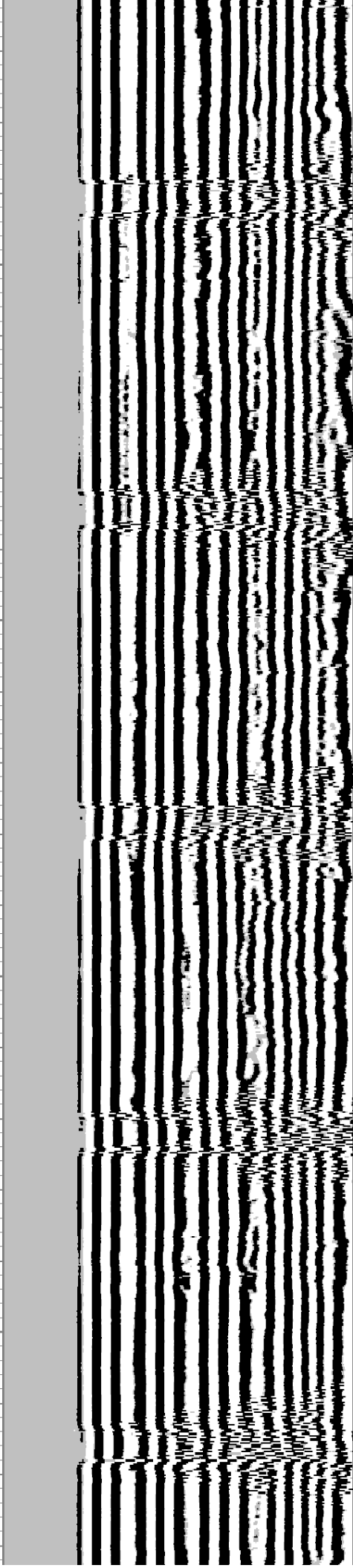
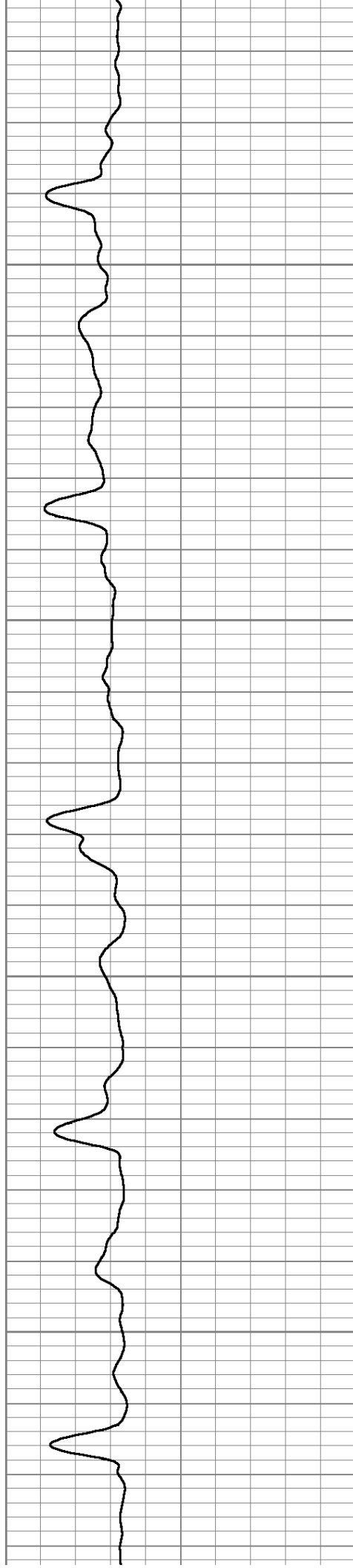


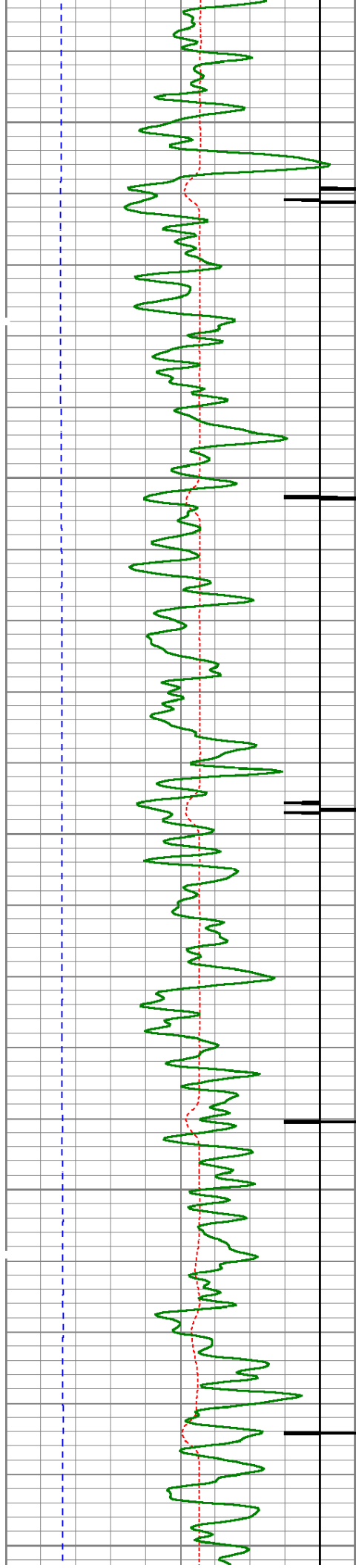
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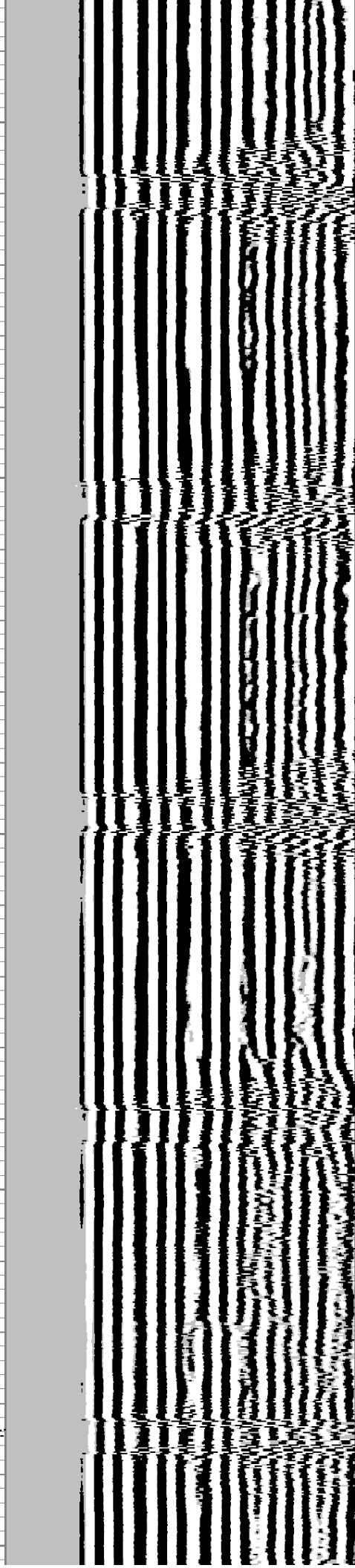
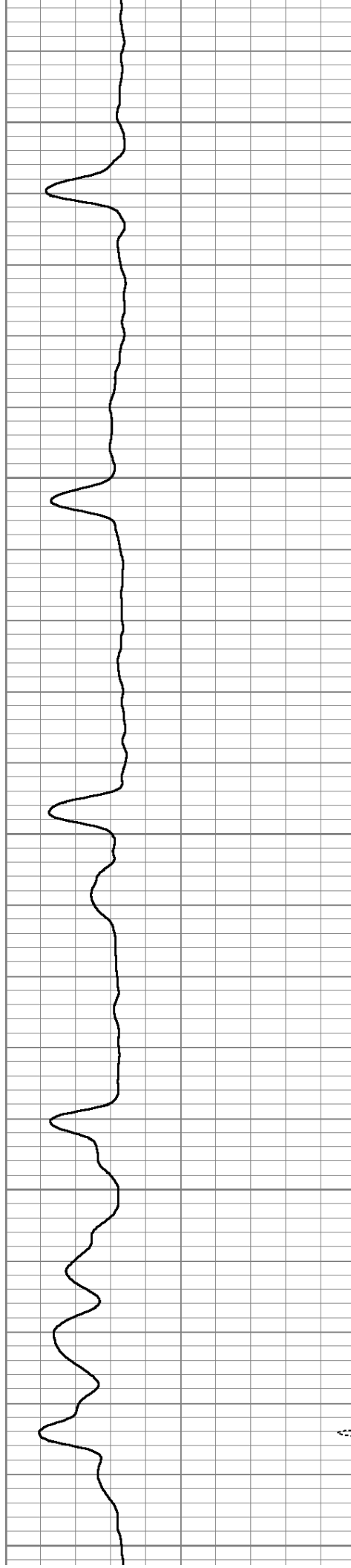
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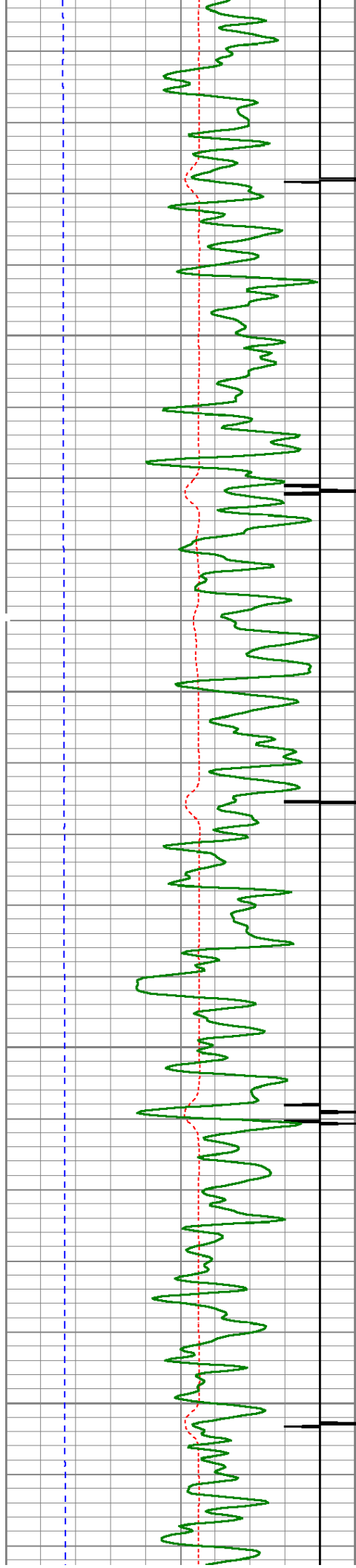
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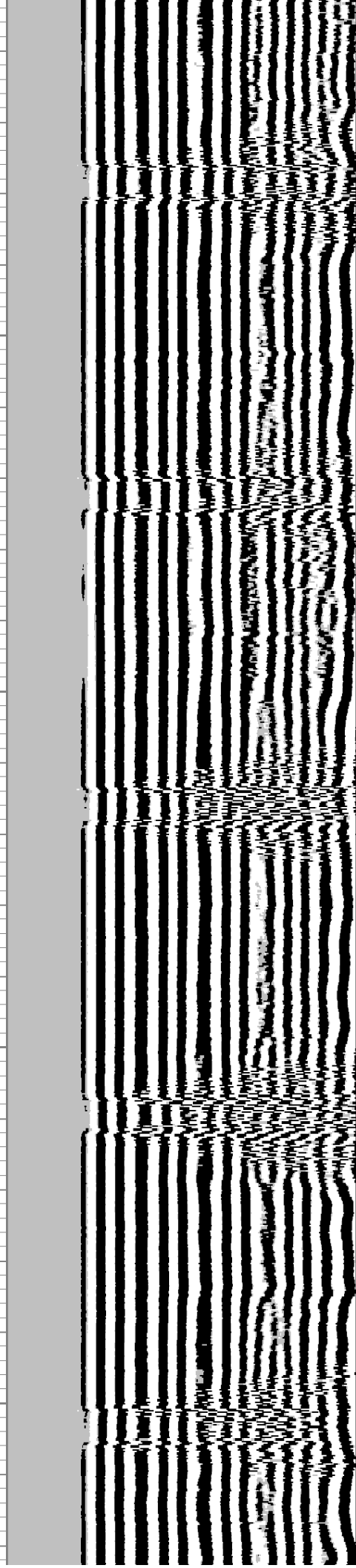
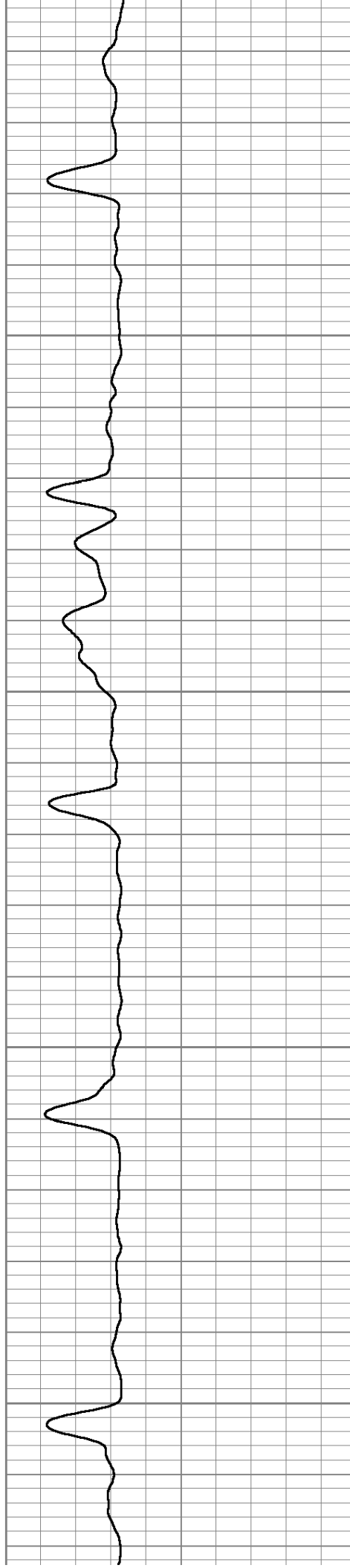


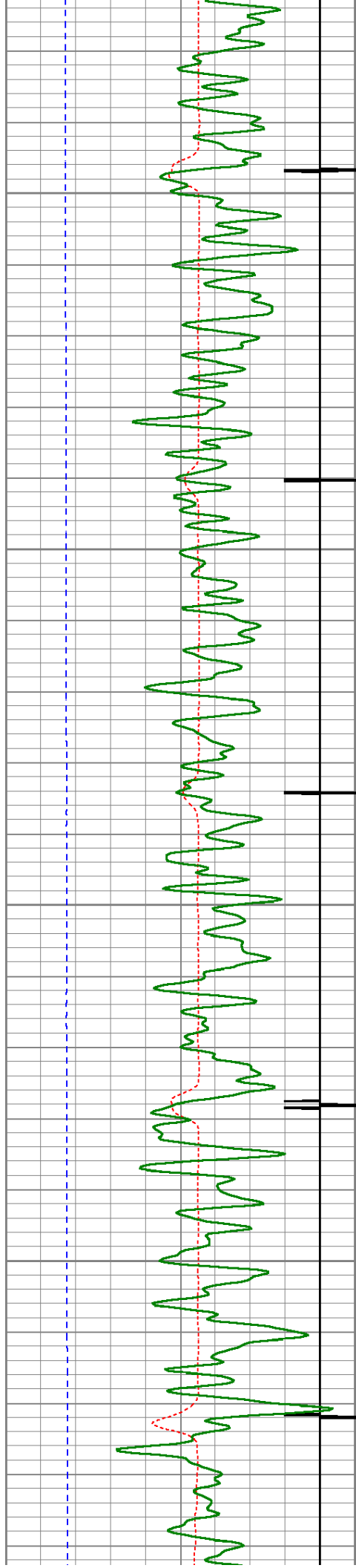
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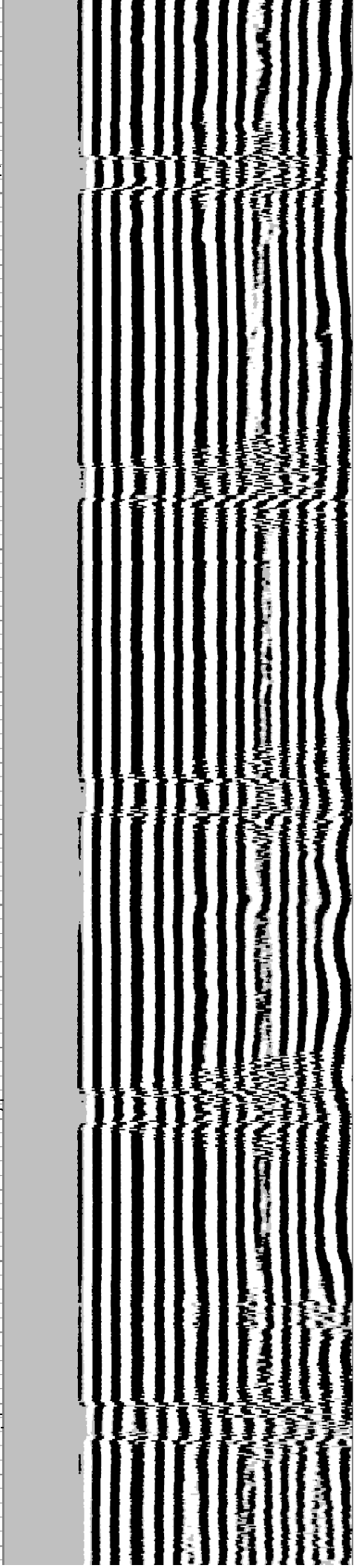
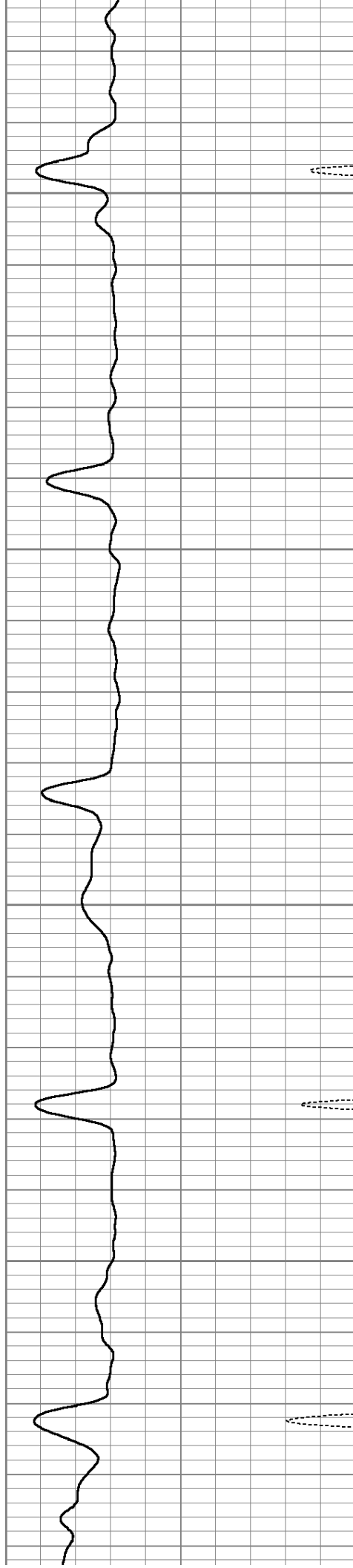


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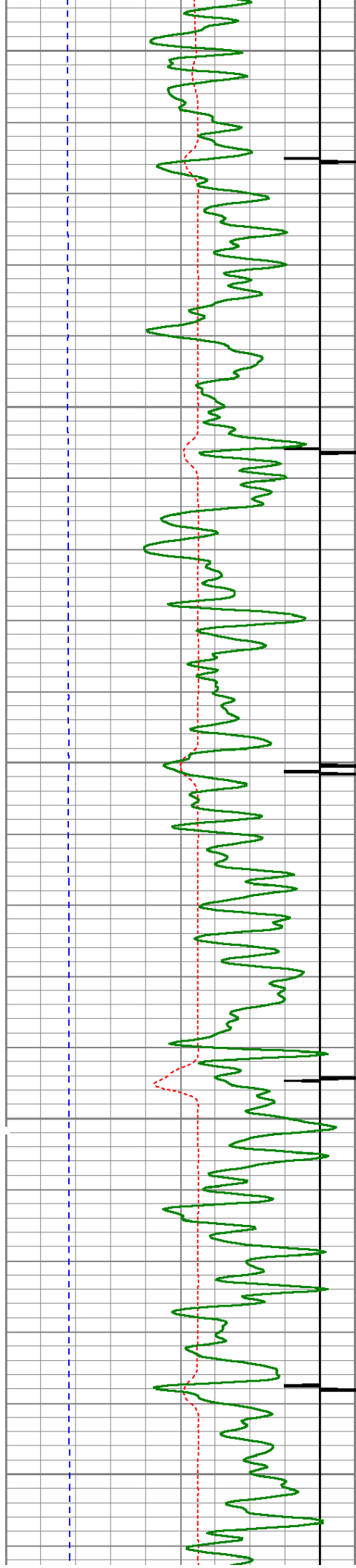
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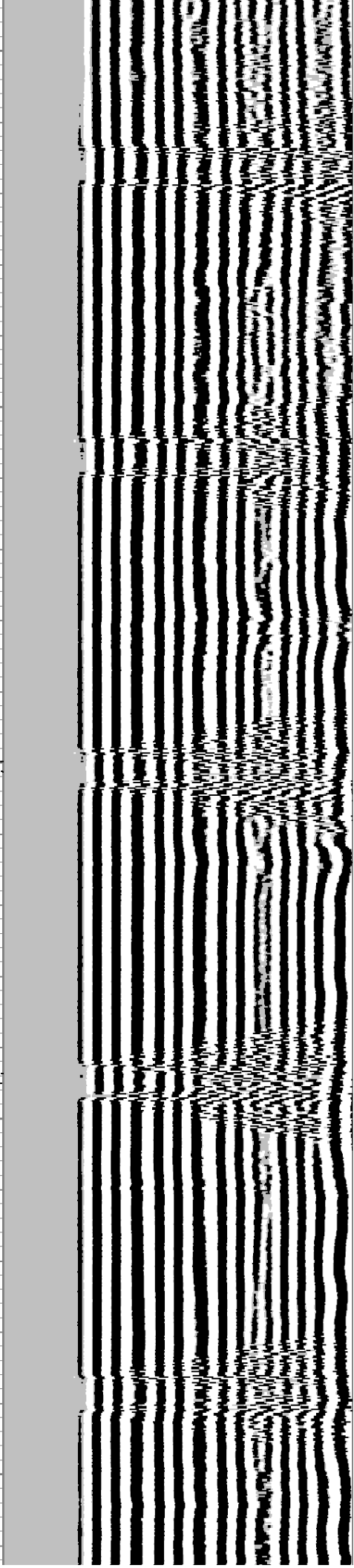
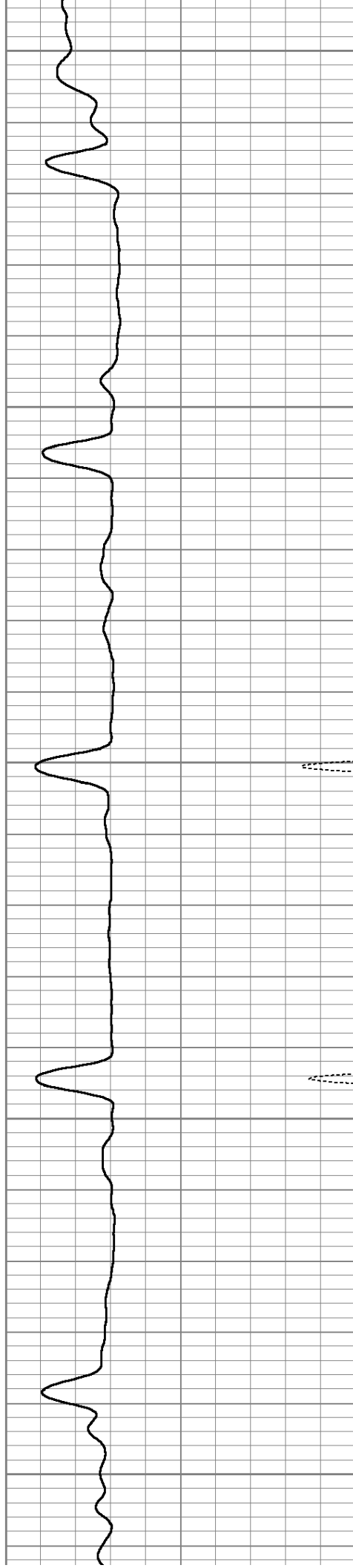
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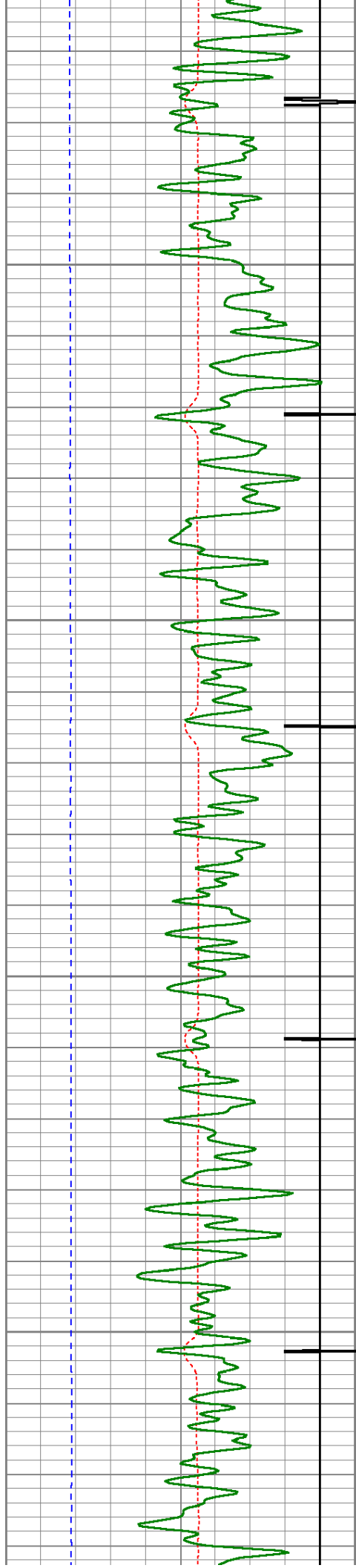
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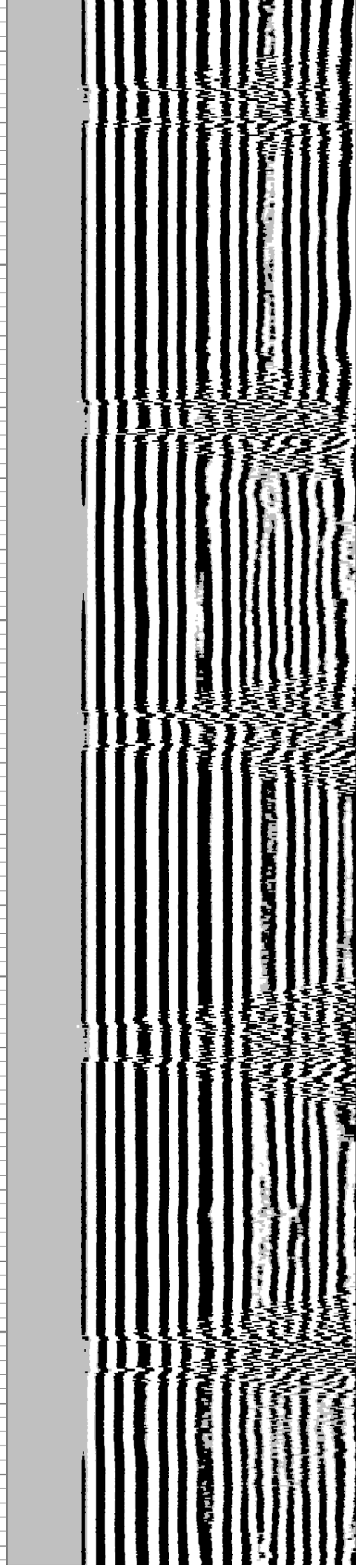
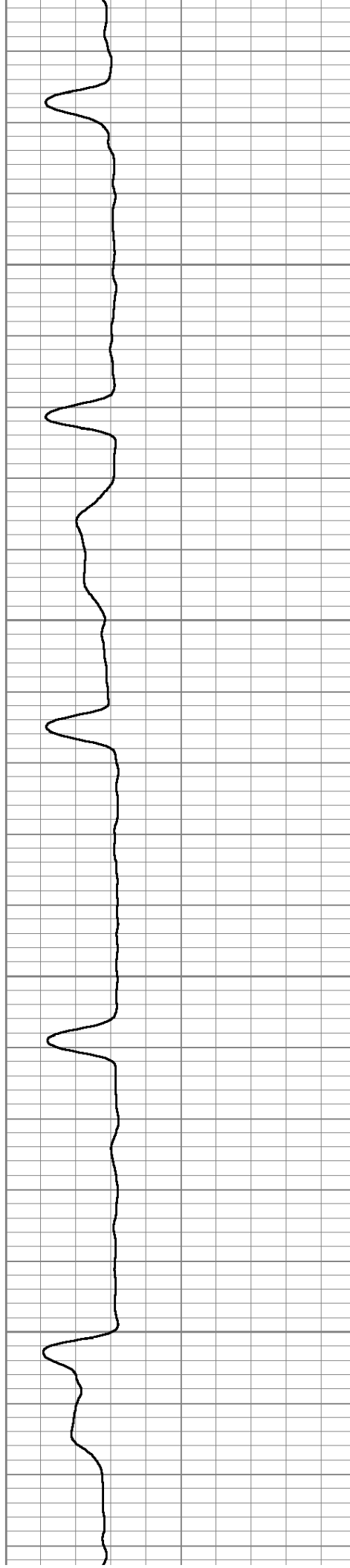


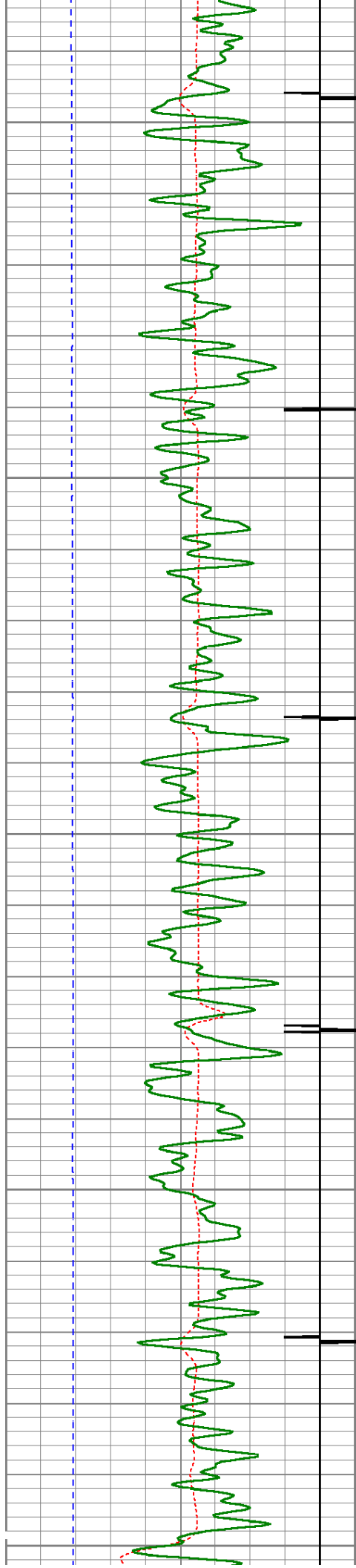
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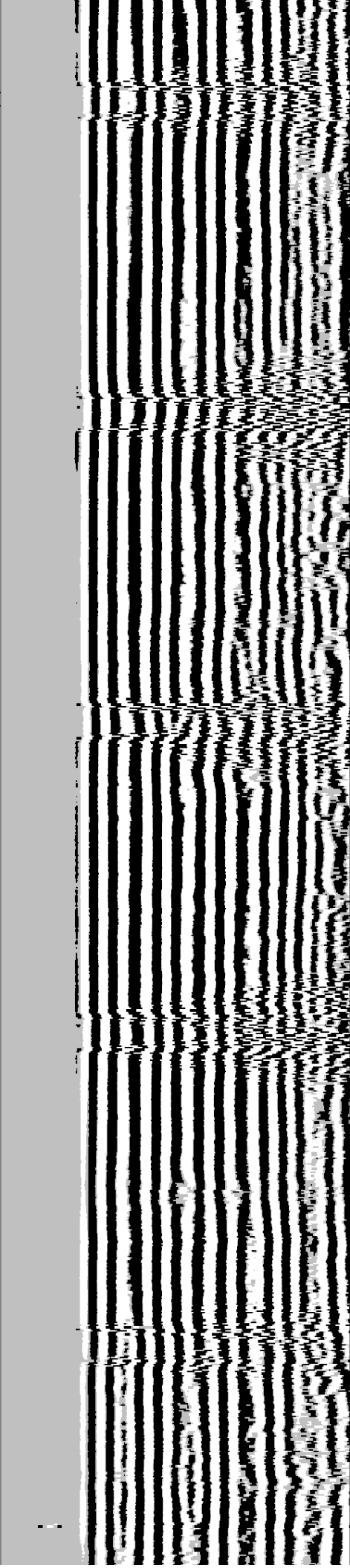
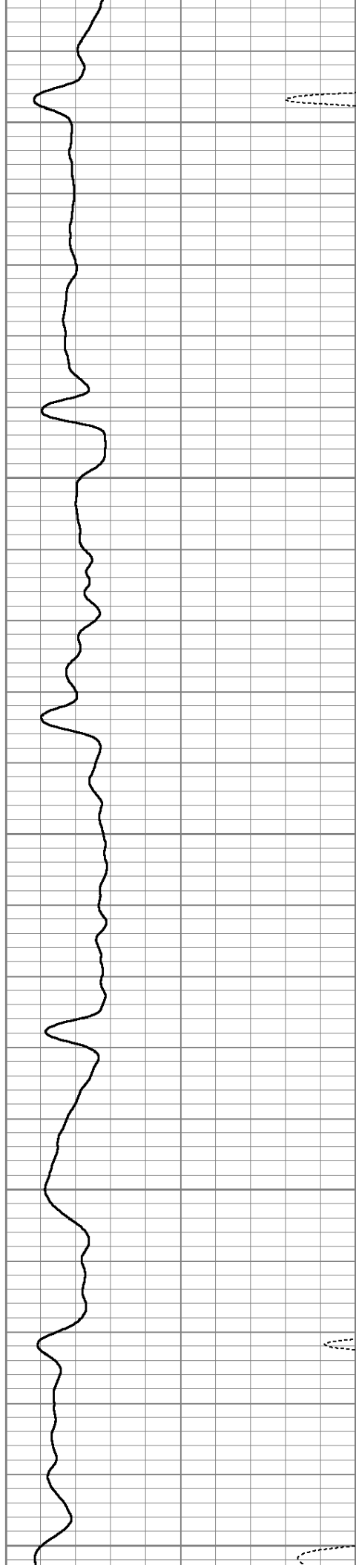
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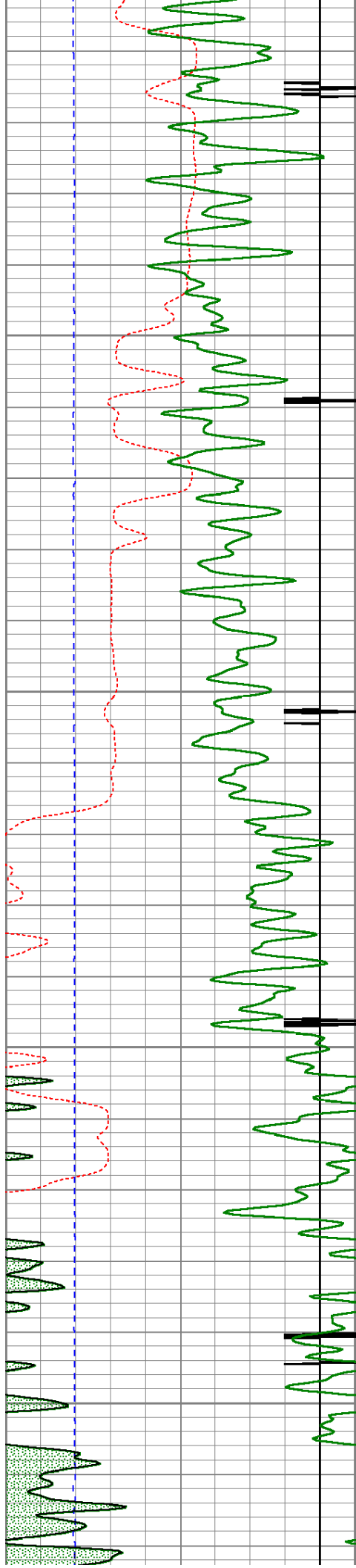
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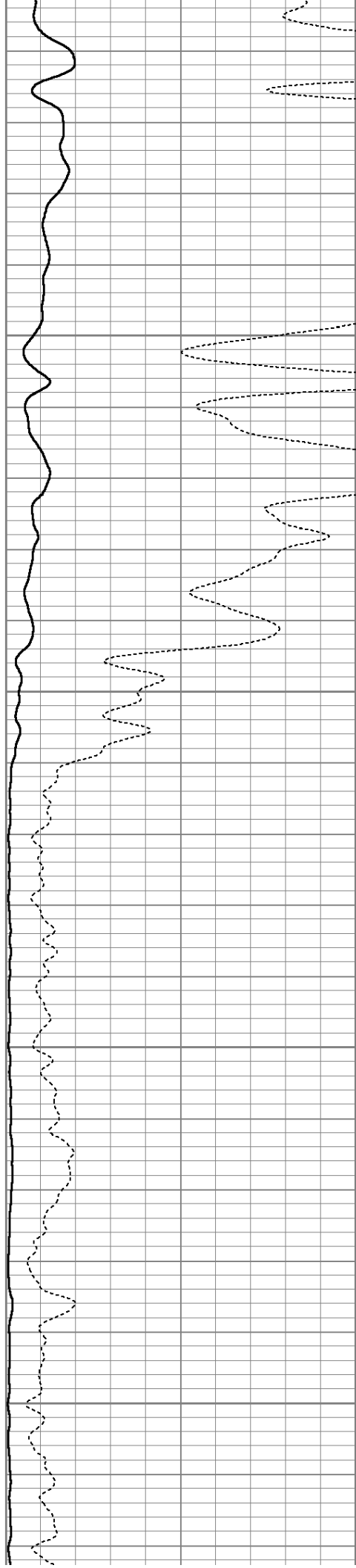


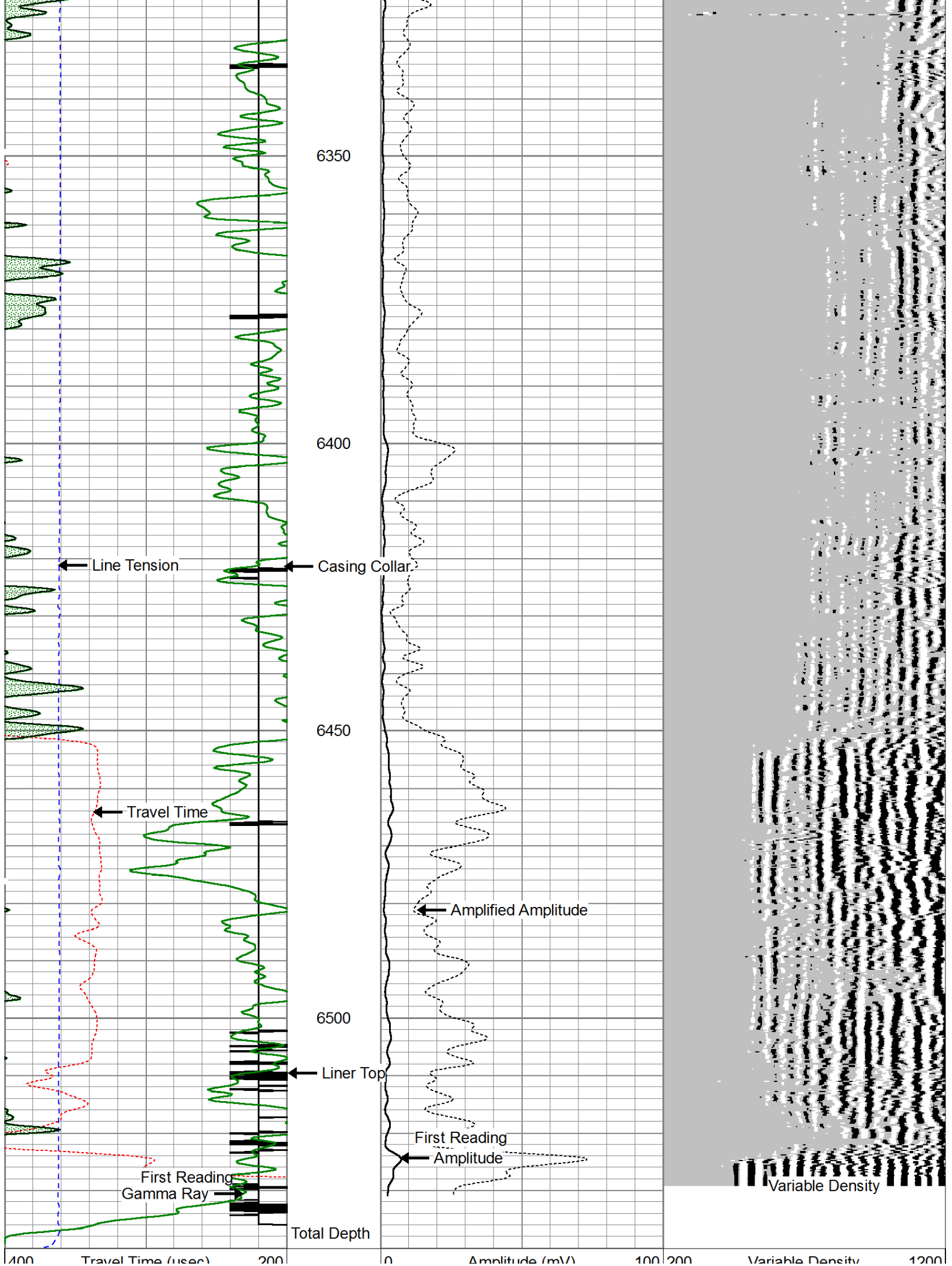
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6200

6250

6300





400	Travel Time (usec)	200
9	Casing Collar	-1
0	Gamma Ray (GAPI)	150
0	Line Tension (lb)	5000

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

200	Variable Density	1200
-----	------------------	------



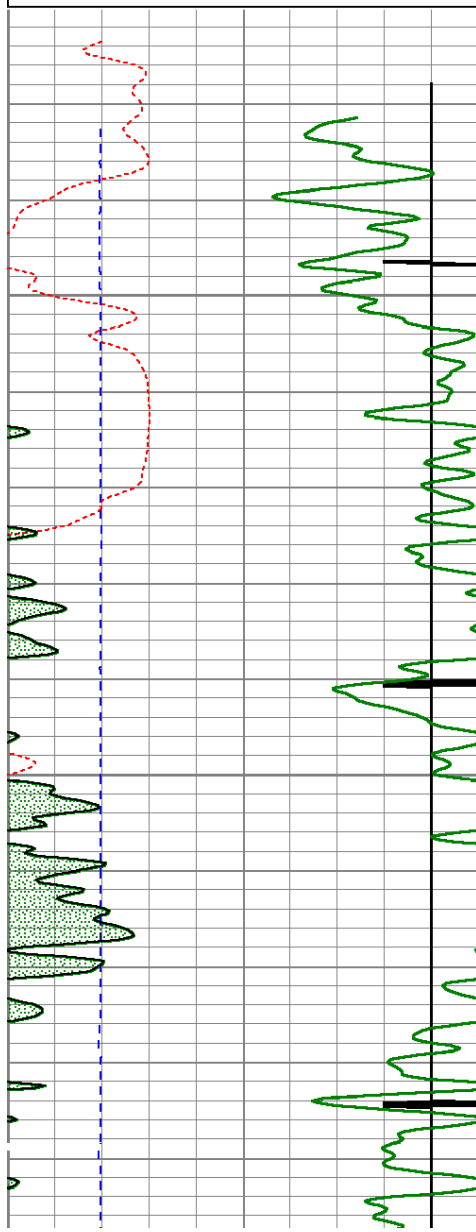
# Repeat Section (0 PSI)

Database File: bonanza creek state north platte 24-21-26 hnb\_cbl.db  
Dataset Pathname: pass2  
Presentation Format: cblprobe  
Dataset Creation: Fri Dec 27 12:03:16 2013 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)	5000

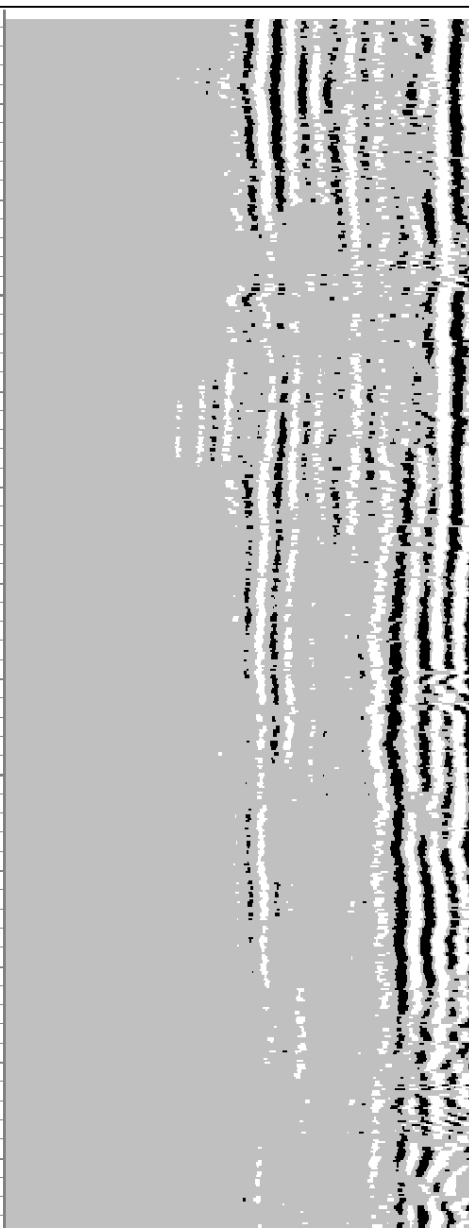
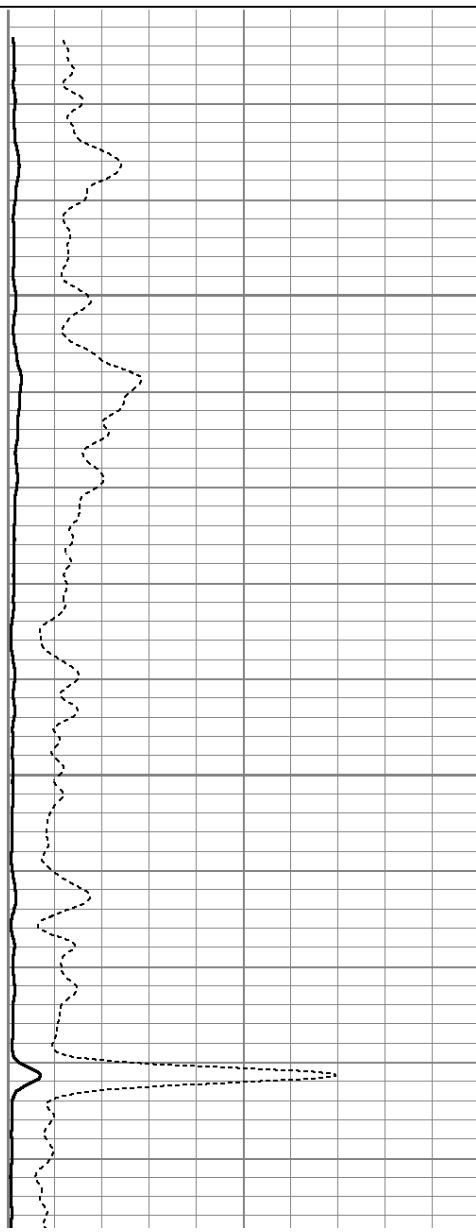
0	Amplitude (mV)	100
0	Amplified Amplitude (mV)	10

200	Variable Density	1200
-----	------------------	------

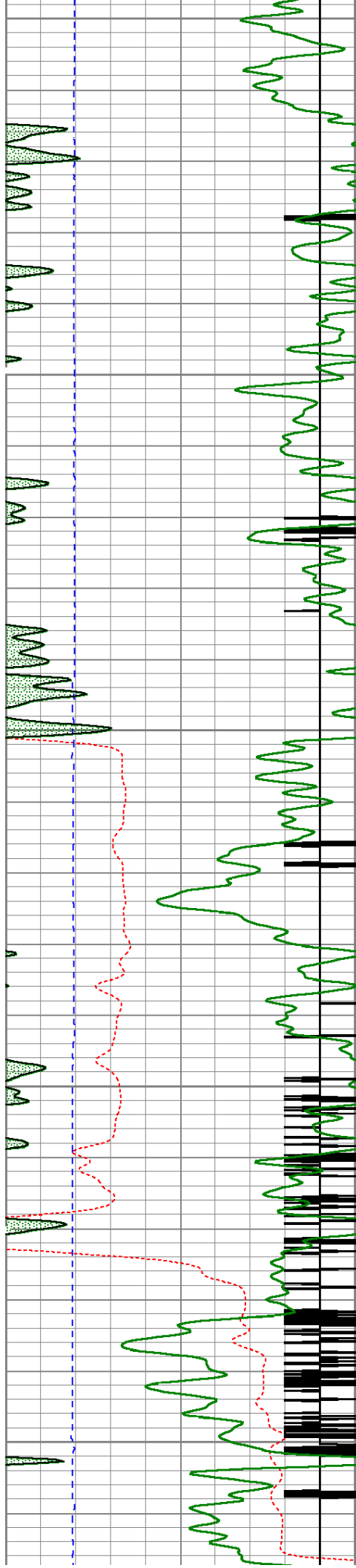


6250

6300







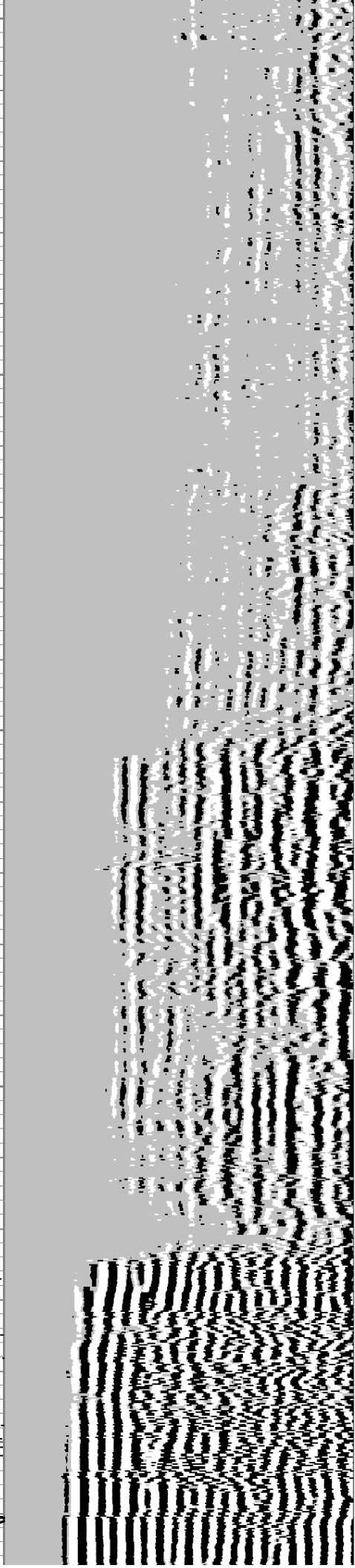
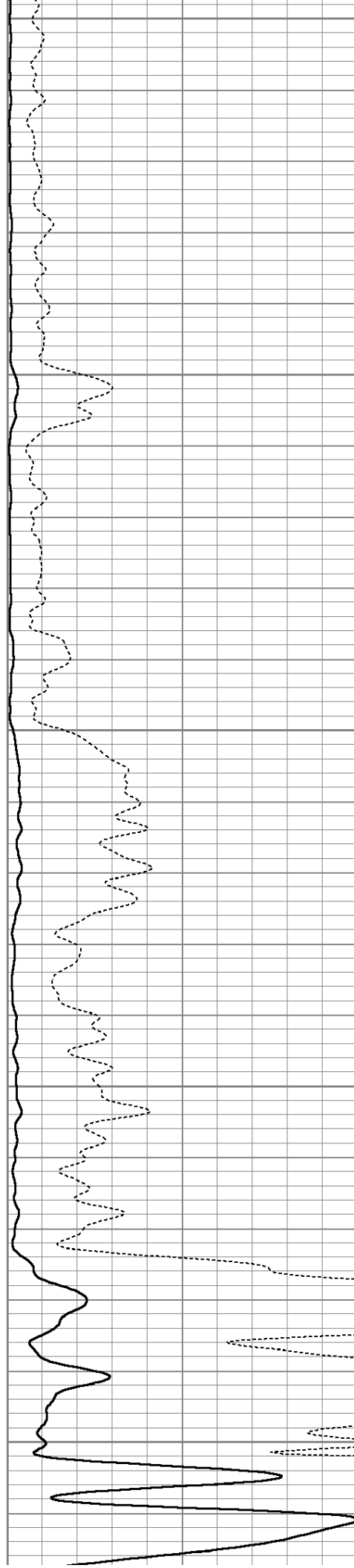
6350

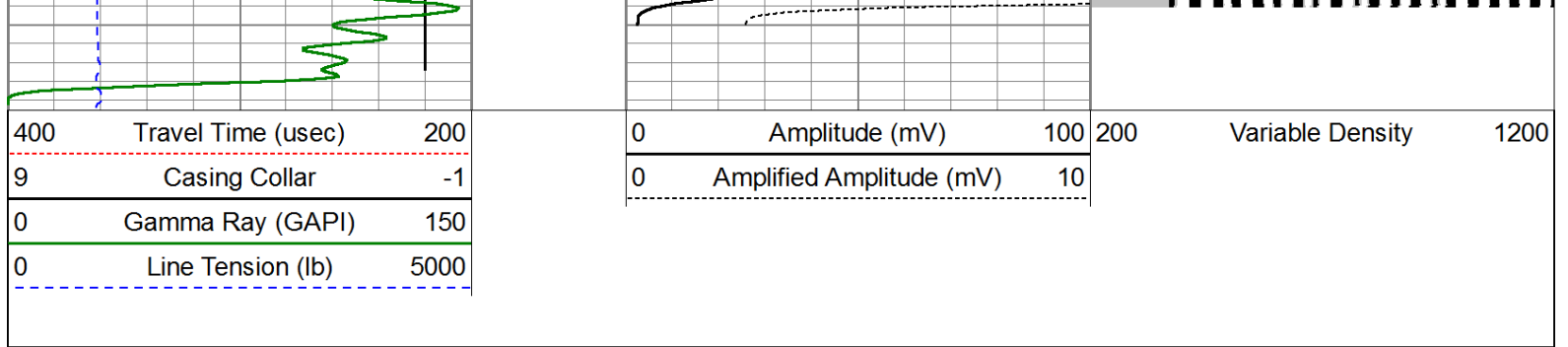
6400

6450

6500

6550





**Calibration Report**

Database File: bonanza creek state north platte 24-21-26 hnb\_cbl.db  
 Dataset Pathname: pass3  
 Dataset Creation: Fri Dec 27 12:10:45 2013 by Log 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:	110108-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:	101254	
Tool Model:	Probe	
Calibration Casing Diameter:	7.000	in
Calibration Depth:	6227.117	ft

Master Calibration, performed Fri Dec 27 07:11:22 2013:						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.016	0.603	1.000	62.165	98.800	2.597
CAL	0.738	0.752				
5'	-0.020	0.645	1.000	62.165	92.014	2.824
SUM						
S1	0.001	0.640	0.000	100.000	156.488	-0.107
S2	-0.010	0.600	0.000	100.000	163.938	1.641
S3	-0.012	0.569	0.000	100.000	172.115	2.128
S4	-0.016	0.560	0.000	100.000	173.806	2.724

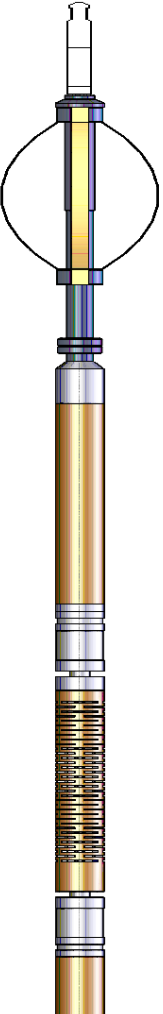
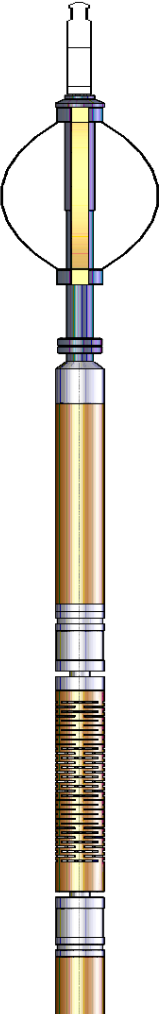
S4	-0.016	0.689	0.000	100.000	178.000	2.721
S5	-0.017	0.614	0.000	100.000	158.572	2.693
S6	-0.018	0.682	0.000	100.000	142.820	2.528
S7	-0.017	0.712	0.000	100.000	137.109	2.372
S8	-0.017	0.639	0.000	100.000	152.460	2.578

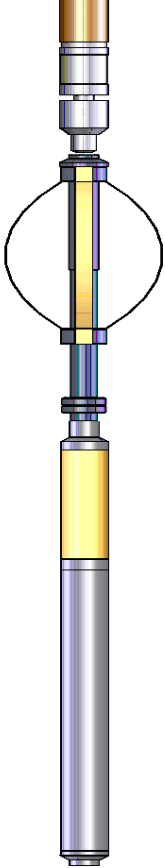
Internal Reference Calibration, performed Mon Oct 10 09:42:03 2005:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.738	0.752	1.000	0.000

Air Zero Calibration, performed Fri Dec 27 06:35:43 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 (101254) 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		2.88	2.75	20.00
WVFS7	11.84				
WVFS8	11.84				
WVF5FT	10.84				
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 24-21-26 hnb_cbl.db: field/well/run1/pass3 Total Length: 20.28 ft Total Weight: 197.00 lb O.D. 2.75 in					