



CEMENT BOND  
VARIABLE DENSITY LOG  
W/ GAMMA RAY/ CCL

Company				BONANZA CREEK ENERGY					
Well				State Antelope K-O-30 HNB					
Field				WATTENBERG					
County				WELD		State		COLORADO	
Location:				API # : 05-123-37291-00				Other Services	
SEC 30				TWP 5N		RGE 62W		NE NW	
Permanent Datum				KB		Elevation		4608'	
Log Measured From				KB					
Drilling Measured From				GL					
Date				7.31.2013					
Run Number				ONE					
Depth Driller				10980'					
Depth Logger				6737'					
Bottom Logged Interval				6734'					
Top Log Interval				0					
Open Hole Size				8.75"					
Type Fluid				WATER					
Density / Viscosity				8.33					
Max. Recorded Temp.				N/A					
Estimated Cement Top				N/A					
Time Well Ready				14:30					
Time Logger on Bottom				15:10					
Equipment Number				12029CH					
Location				BRIGHTON					
Recorded By				J. Morrison		G. Lueck			
Witnessed By				KURT DODGE					
Borehole Record						Tubing Record			
Run Number		Bit	From	To	Size	Weight	From	To	
ONE		13.5"	0	417'					
TWO		8.75"	0	6956'					
THREE		6.025"	6633'	10980'					
Casing Record		Size	Wgt/Ft		Top	Bottom			
Surface String		9.625"	36		0	417'			
Prot. String		7"			26	0			
Production String		4.5"	11.6		6633'	6956'			
Liner						10980'			

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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

Main Pass and Repeat Pass logged with ( 0 ) PSI

Fell Through Liner Top at 6654'

Thank You For Using Allied Wireline

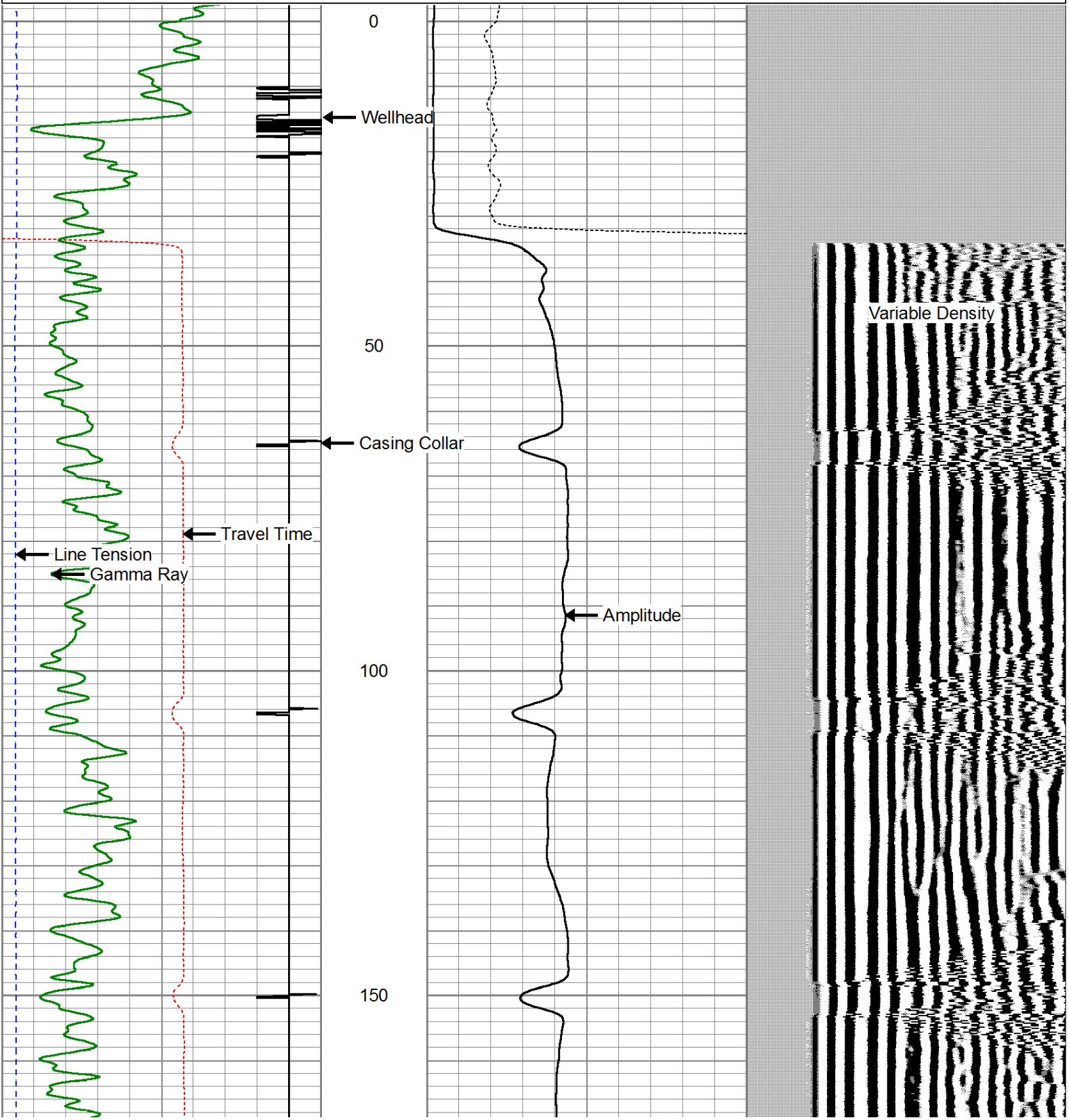
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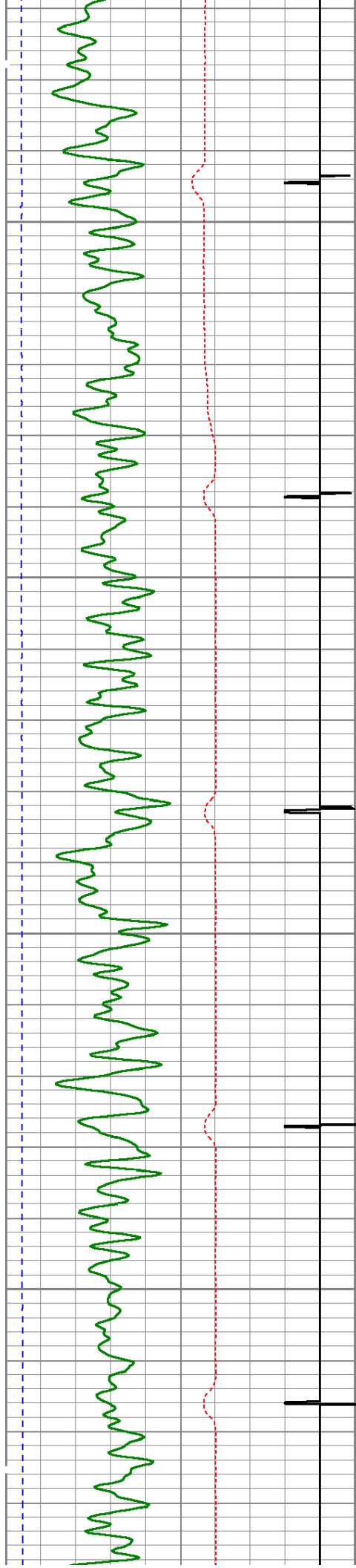


Main Pass ( 0 ) PSI

Database File: bc state\_antelope\_k\_o\_30hnb\_cbl.db  
Dataset Pathname: pass6  
Presentation Format: cblprobe  
Dataset Creation: Wed Jul 31 16:39:13 2013 by Calc SCH 120126  
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						



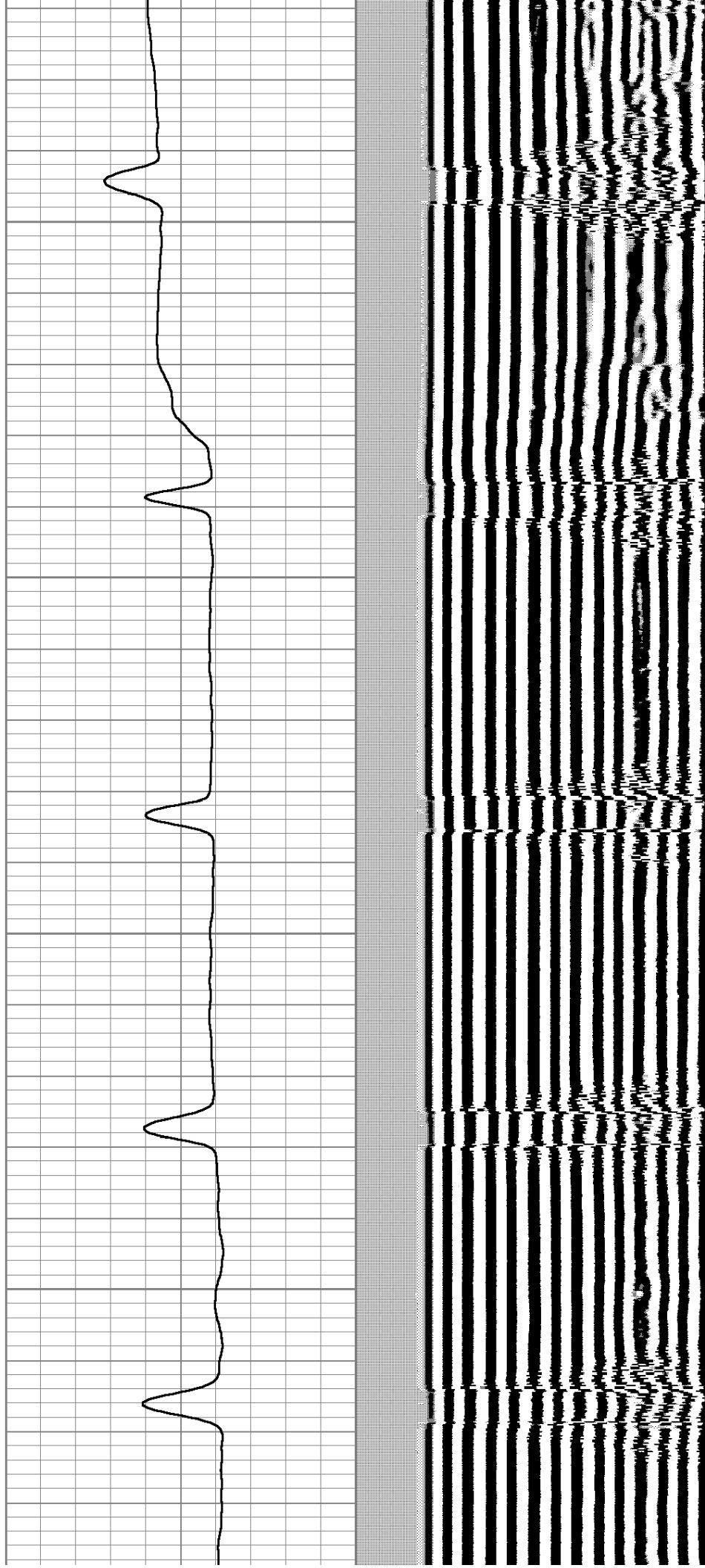


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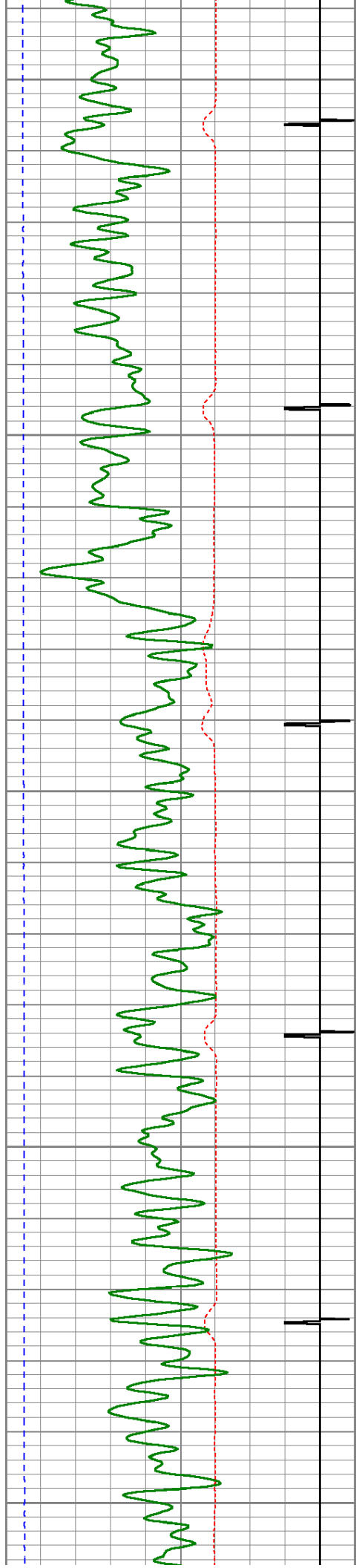
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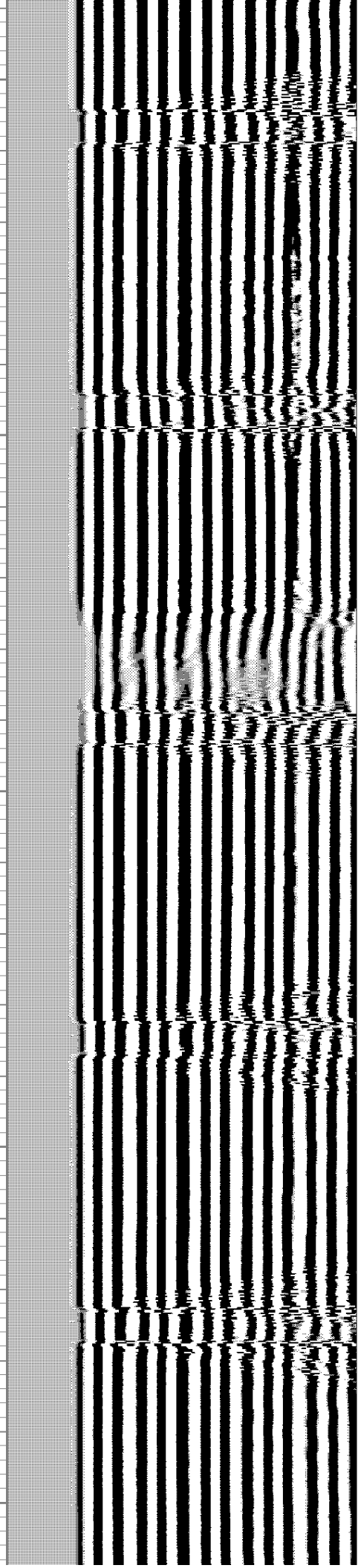
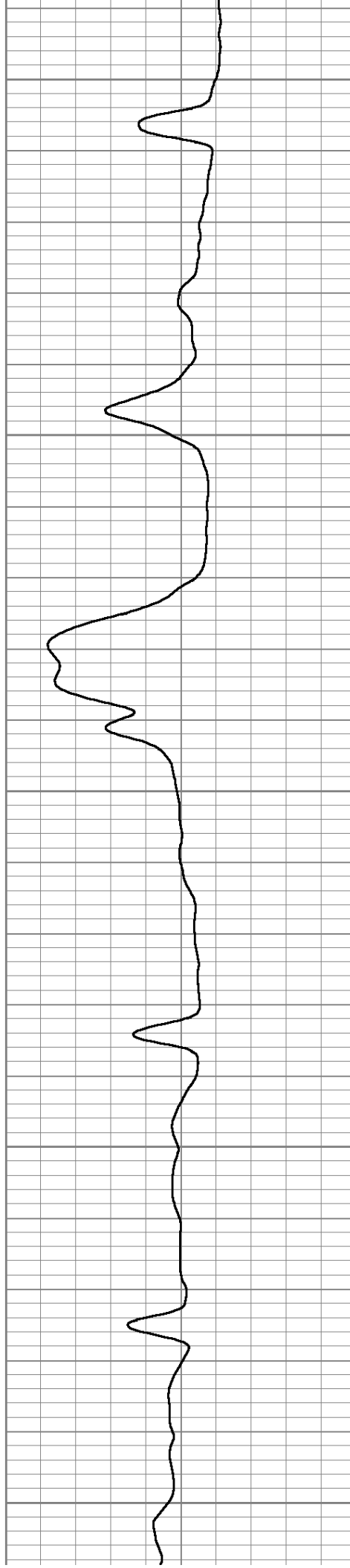
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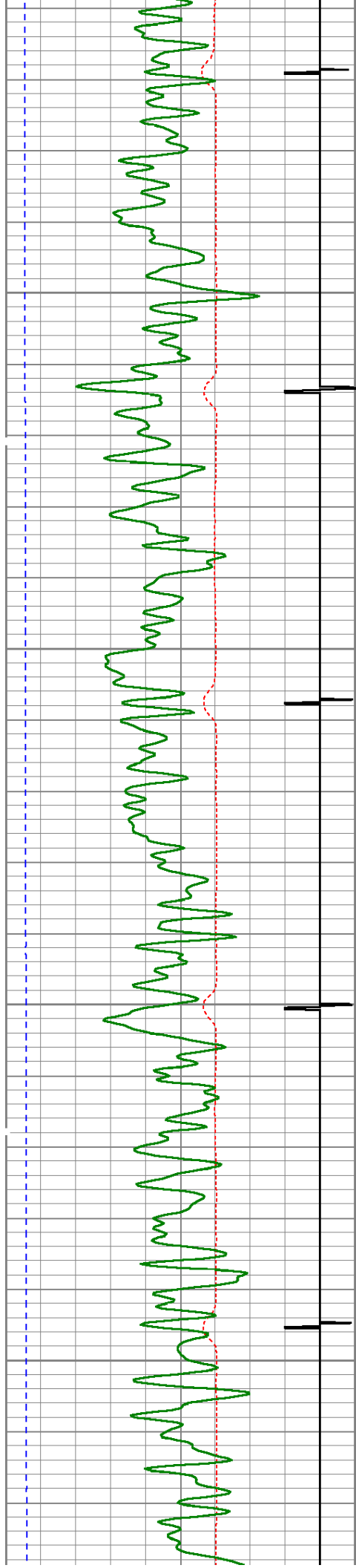
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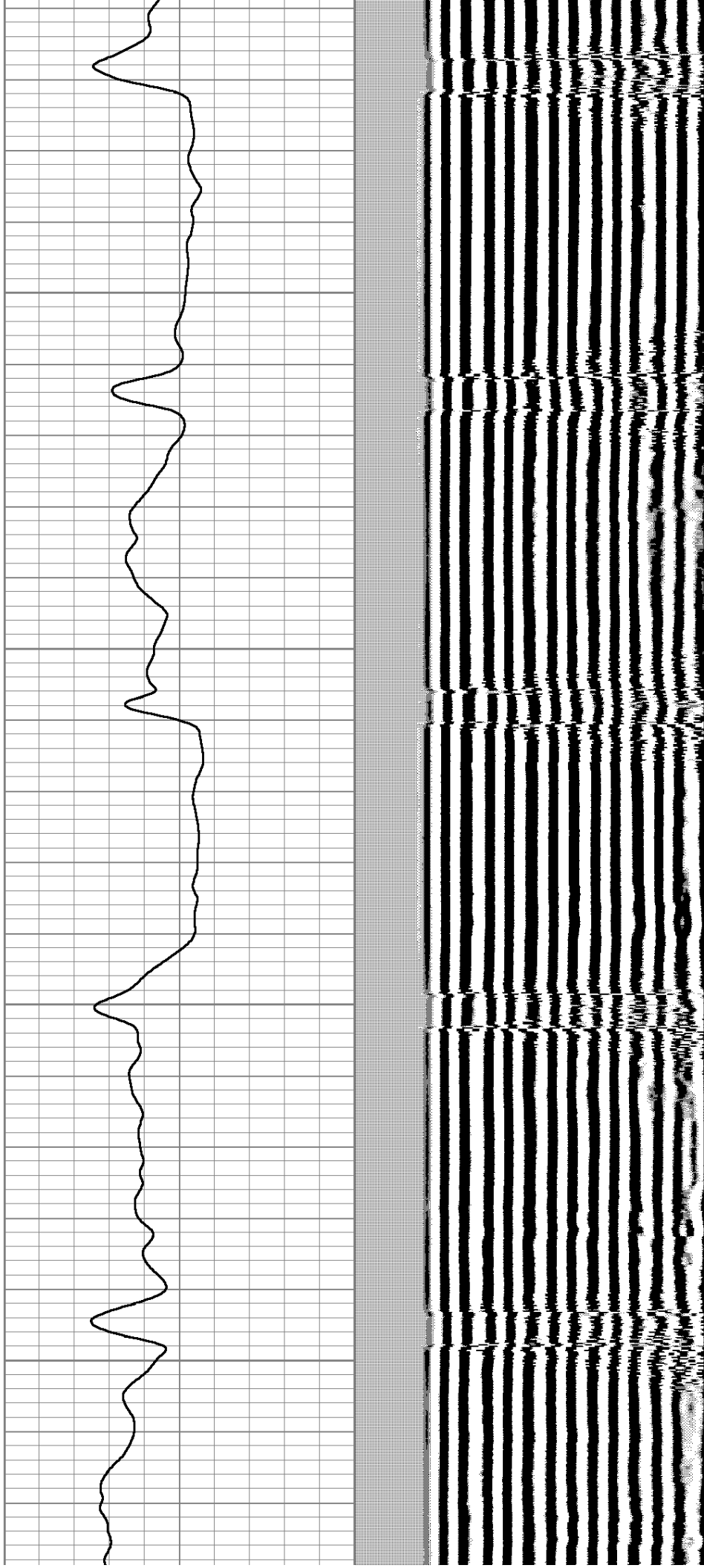


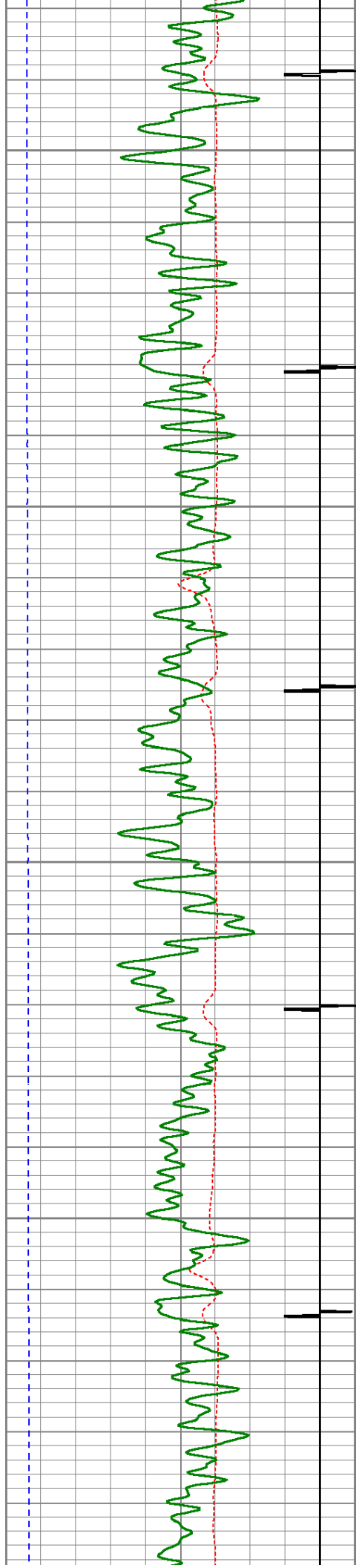
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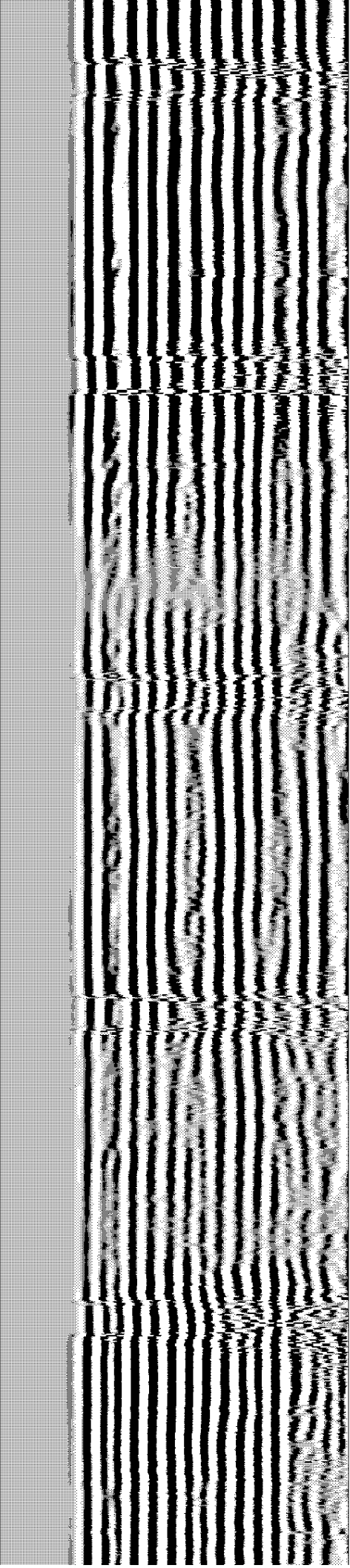
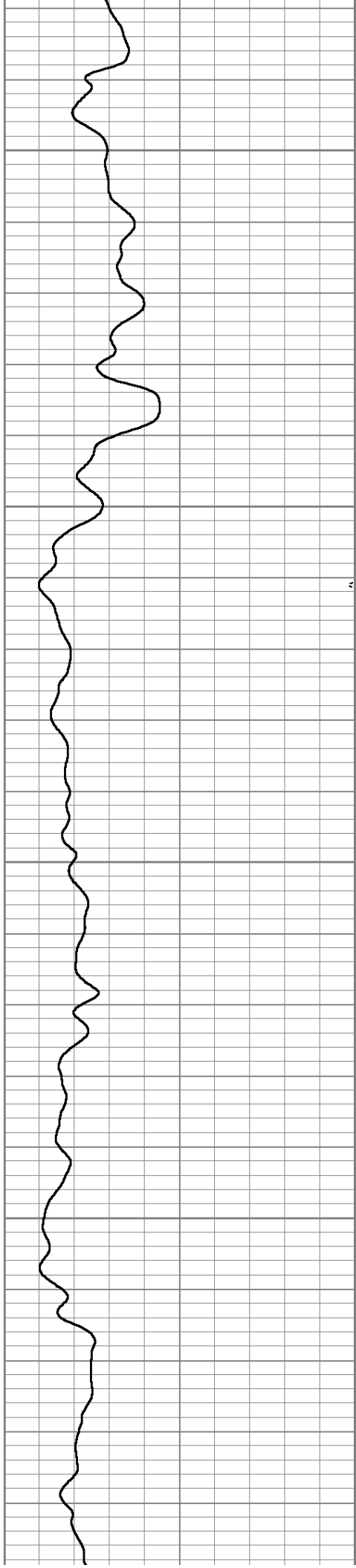


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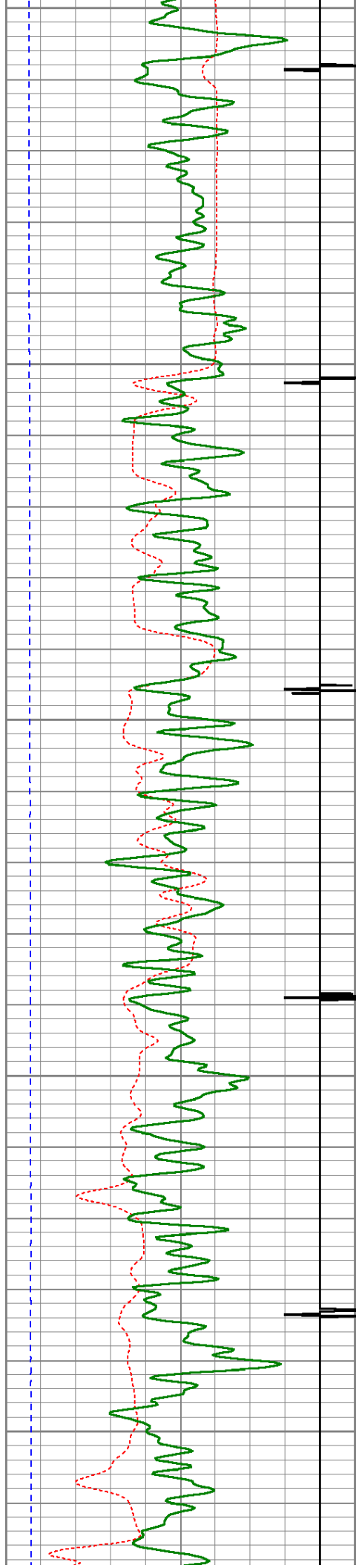
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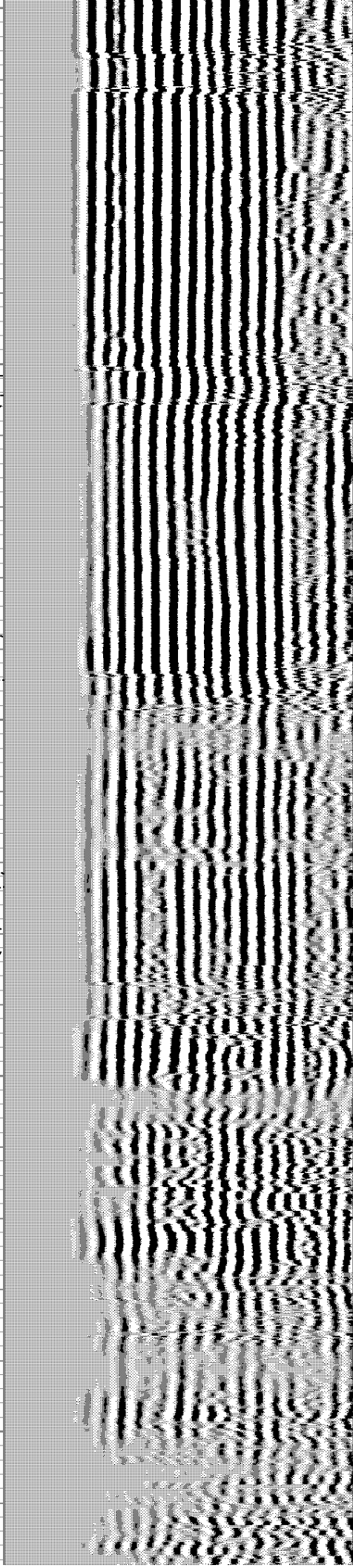
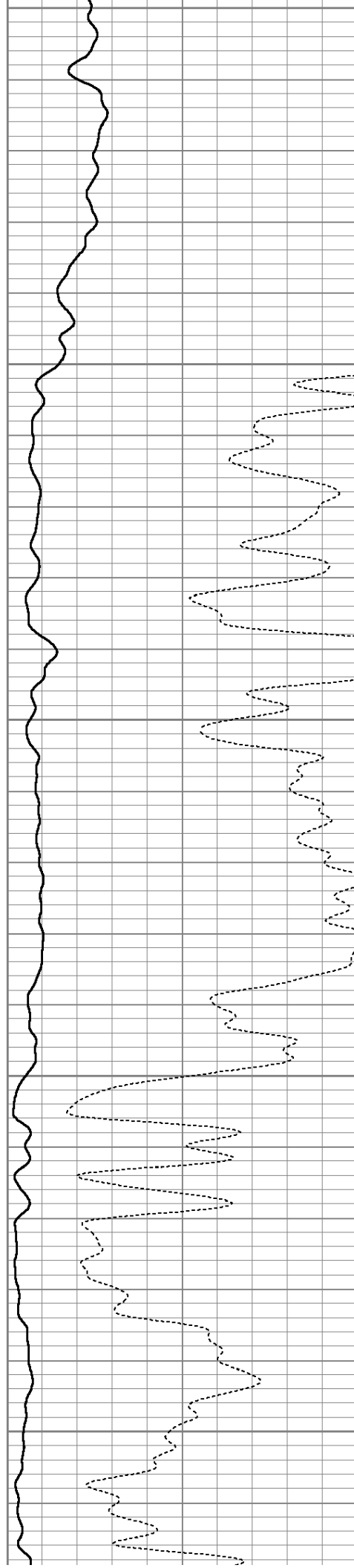
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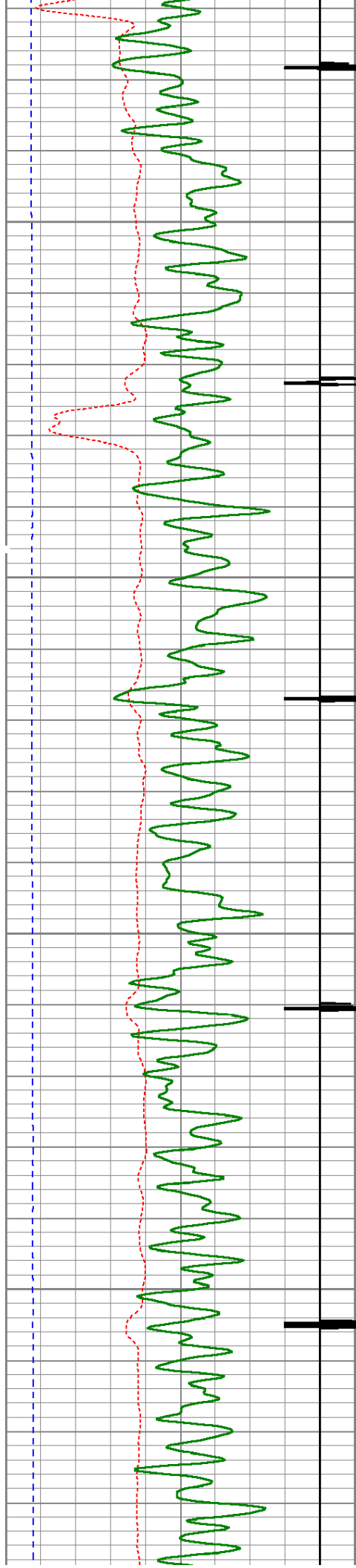
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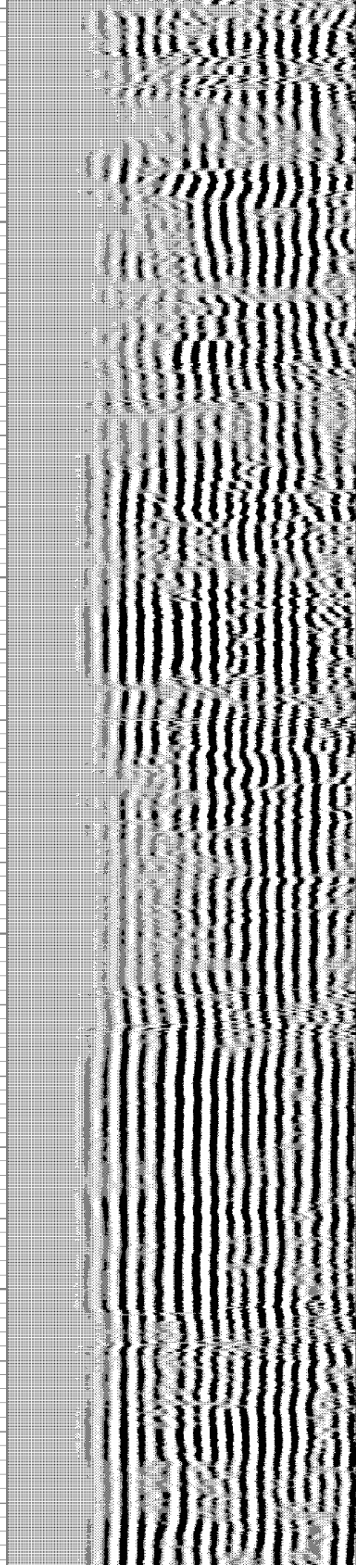
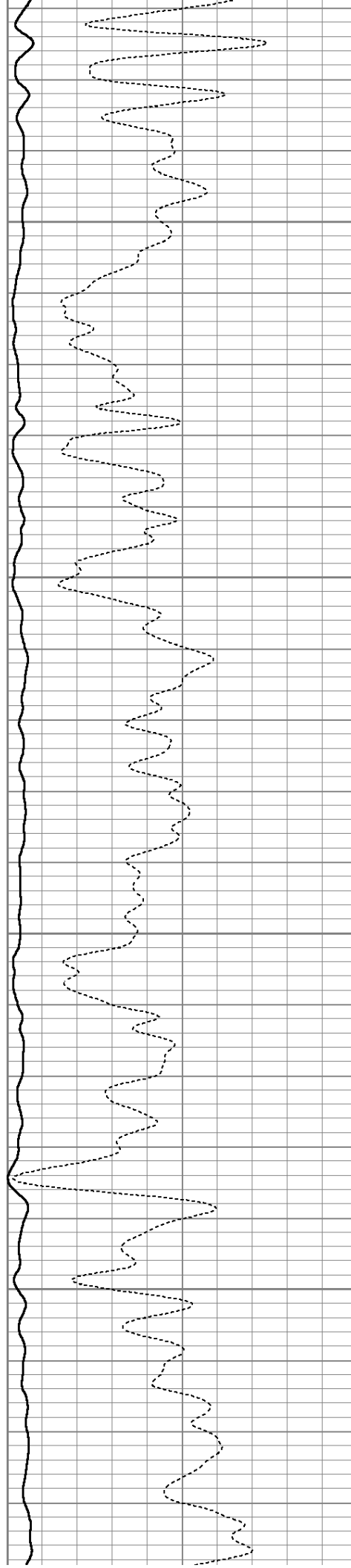


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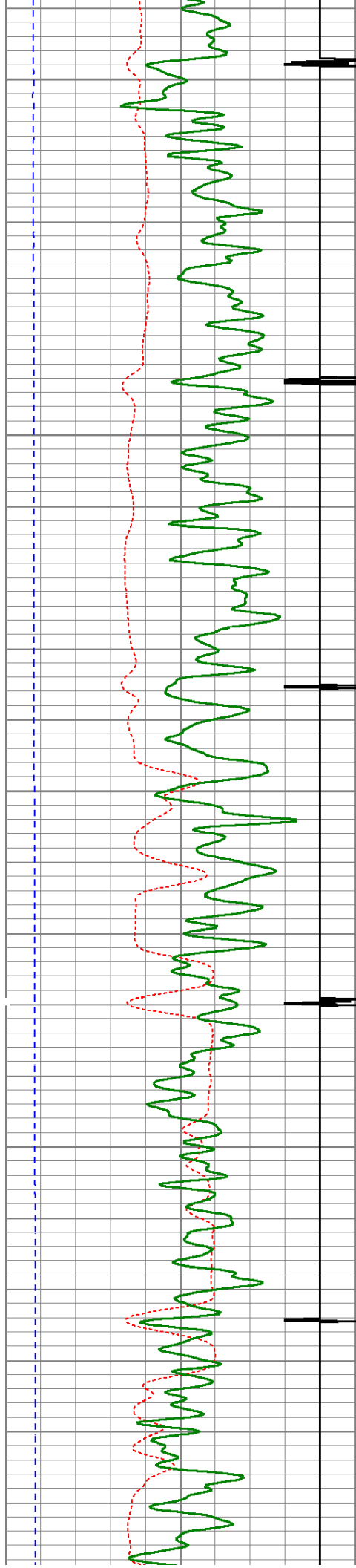
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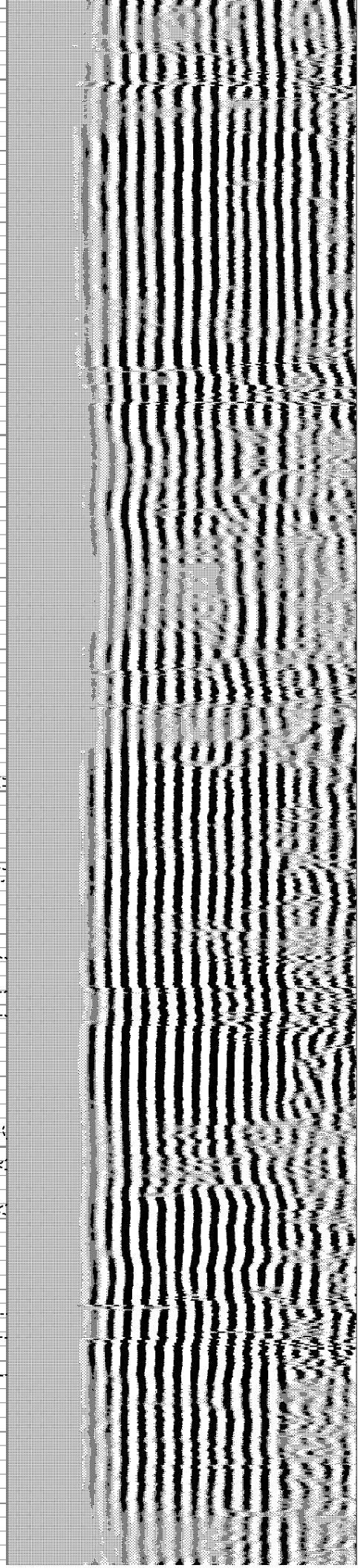
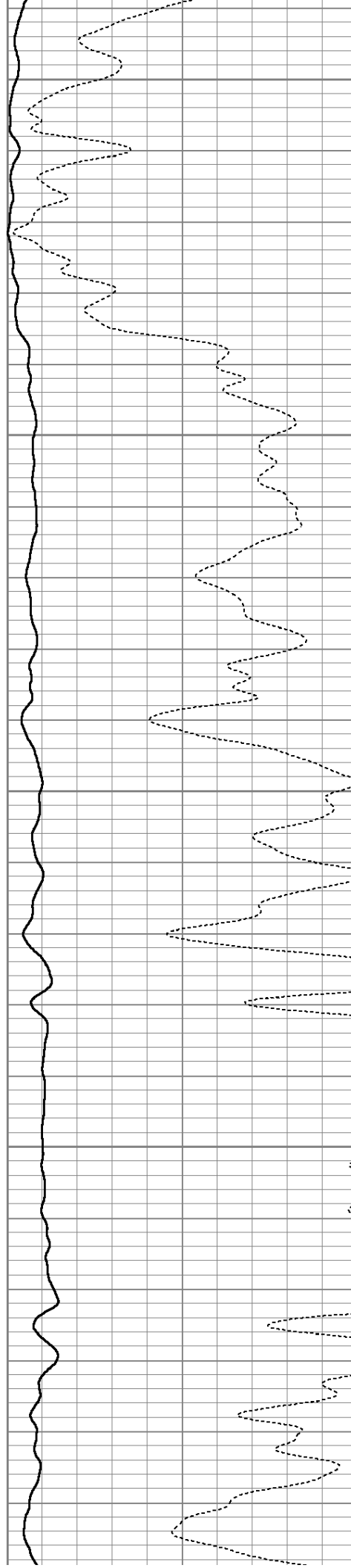
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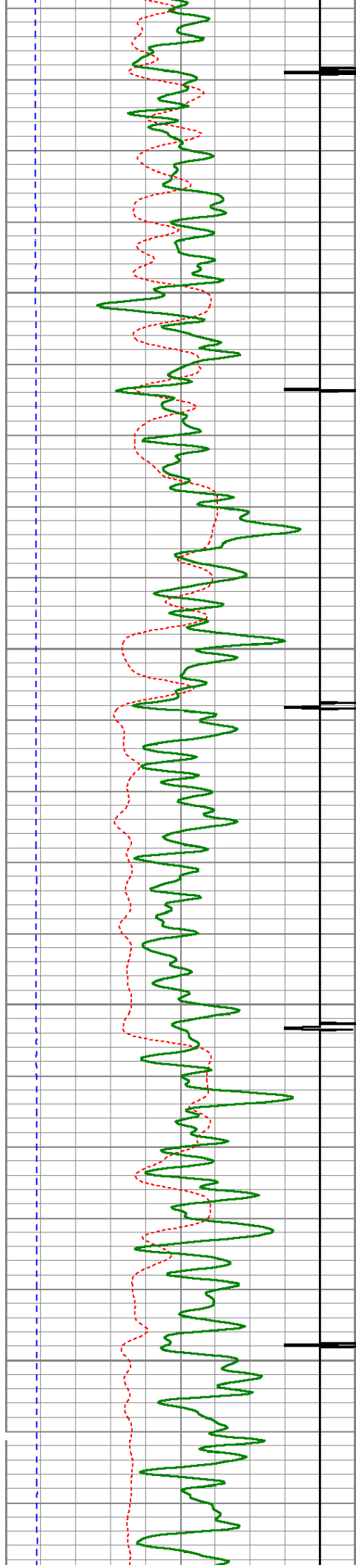
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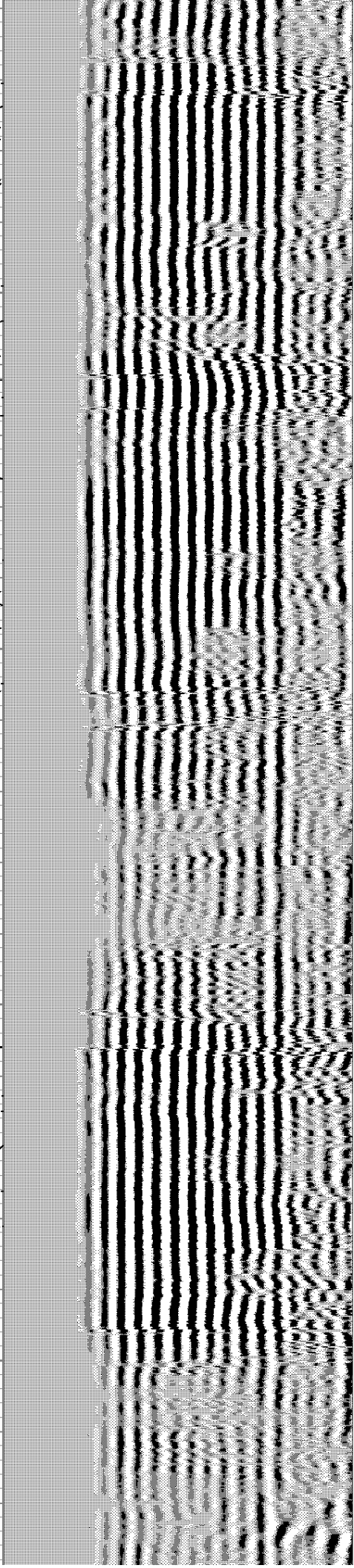
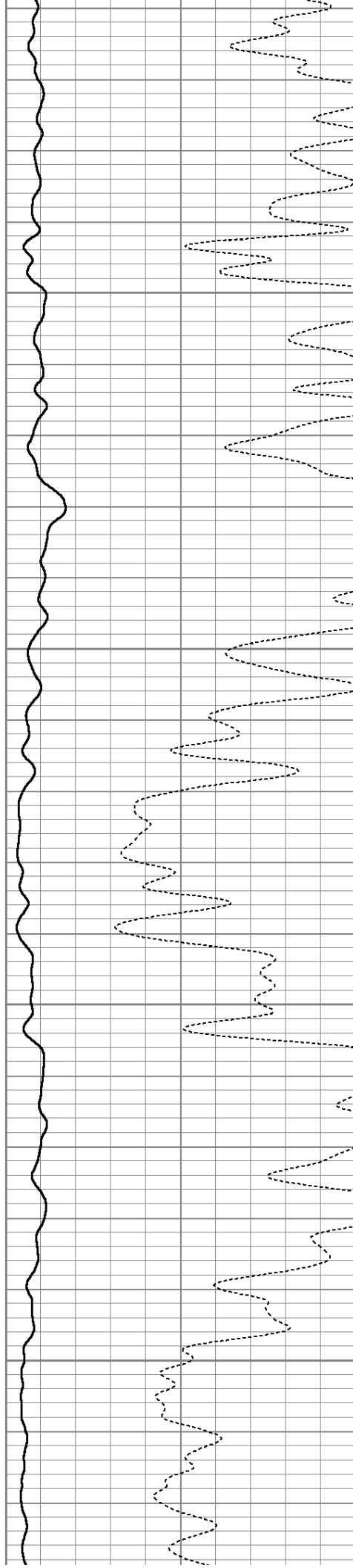


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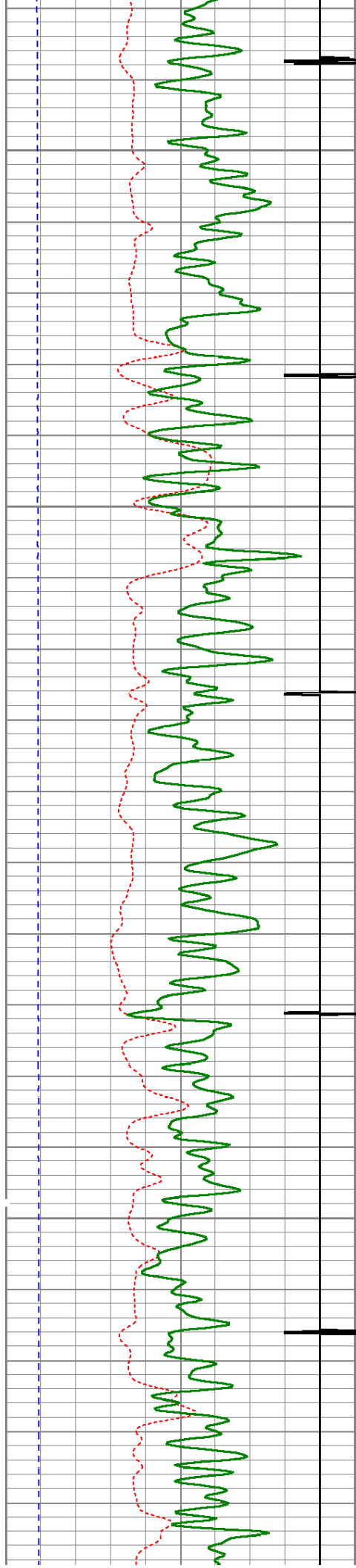
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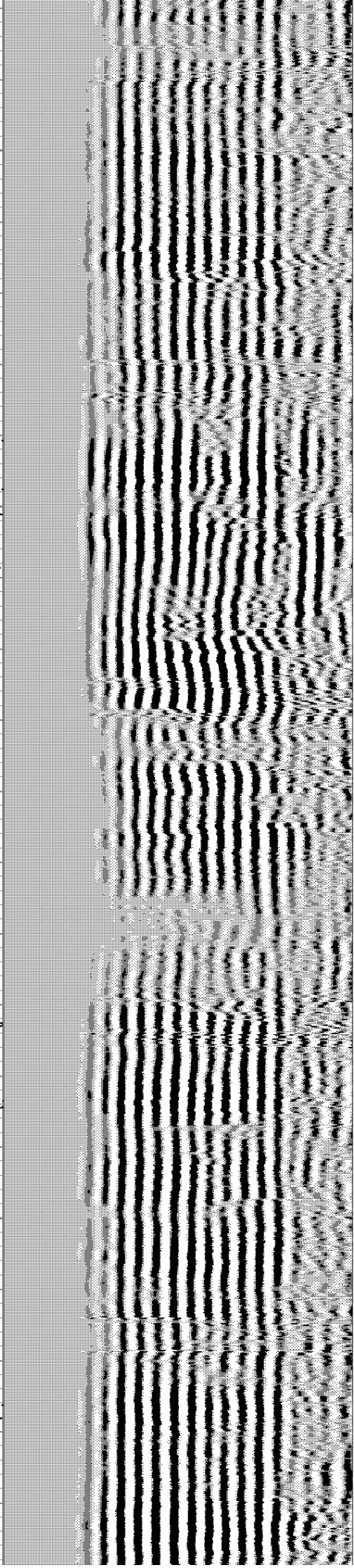
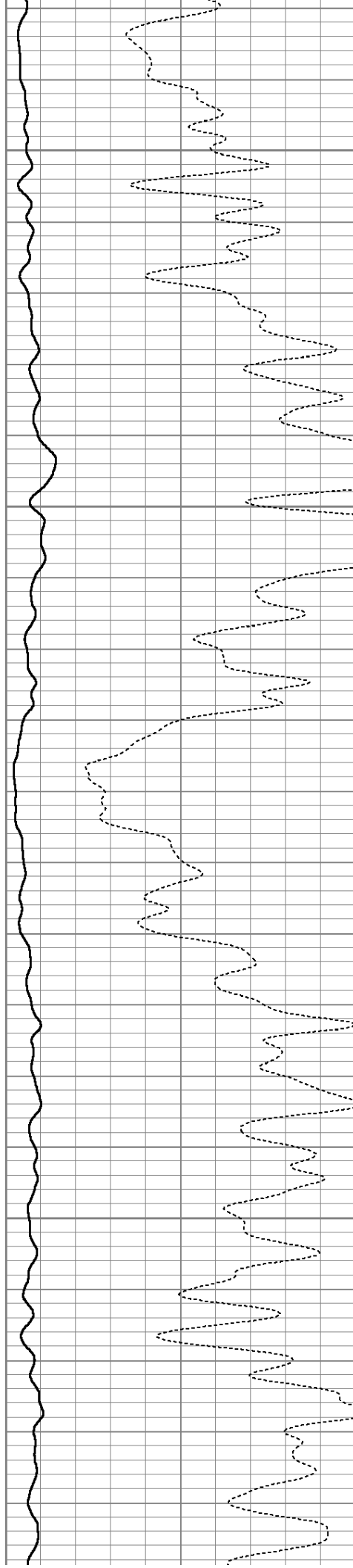


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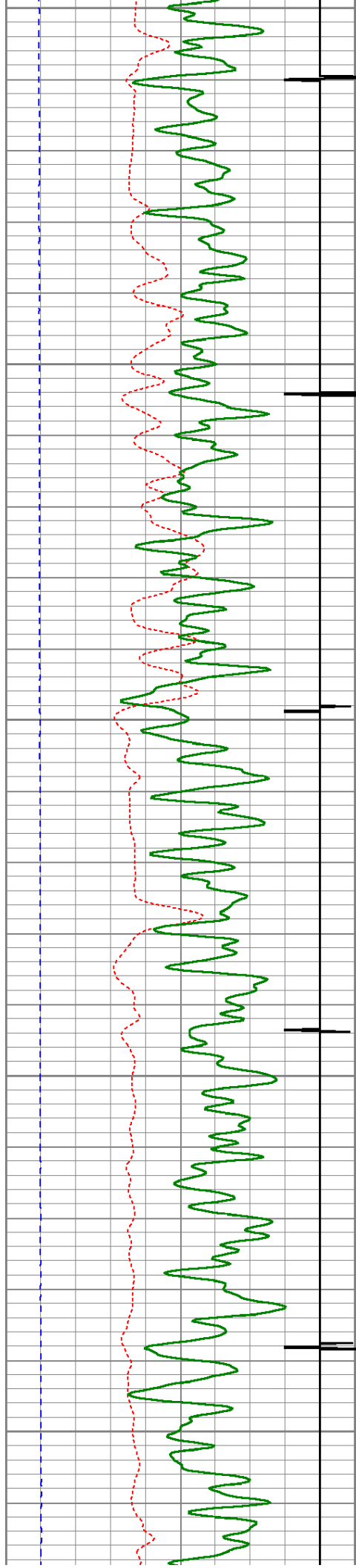
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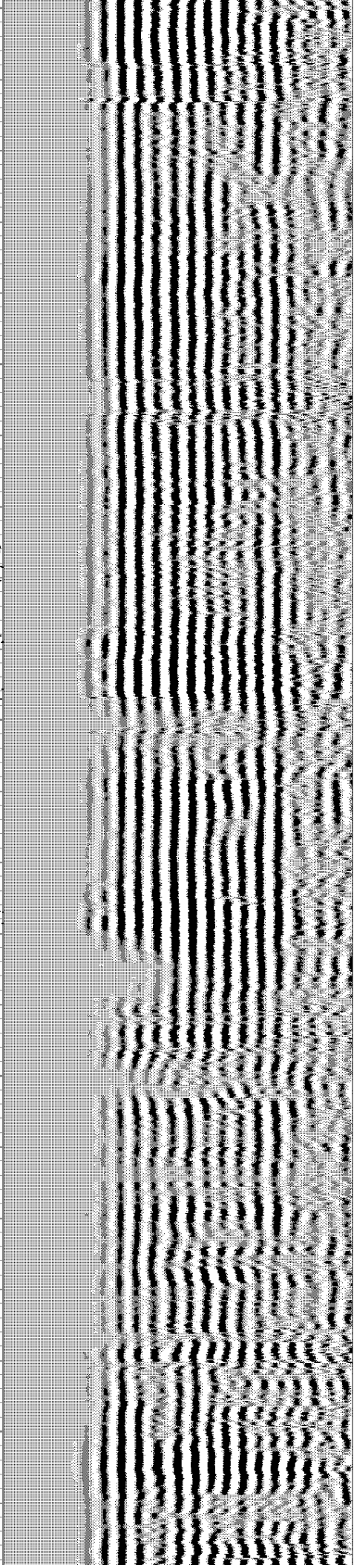
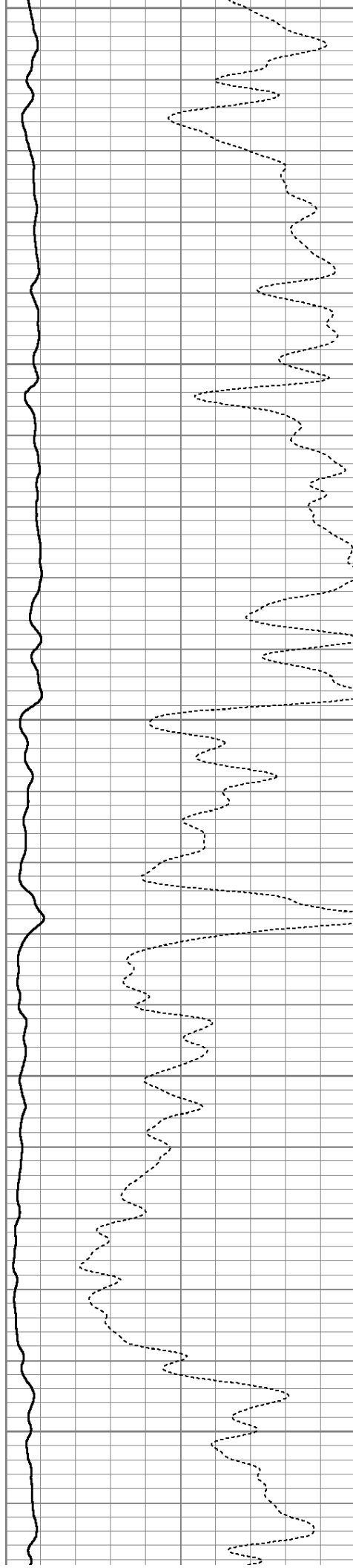
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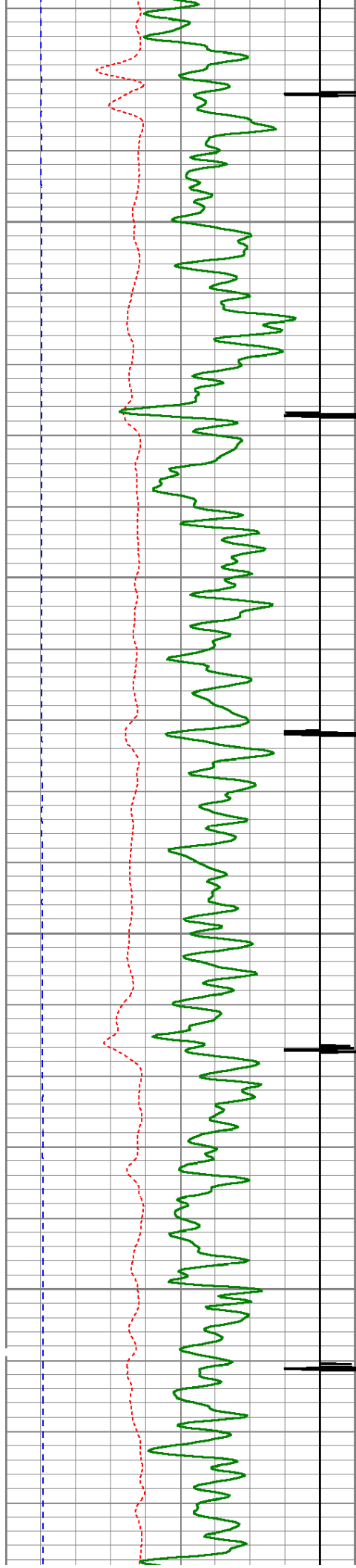
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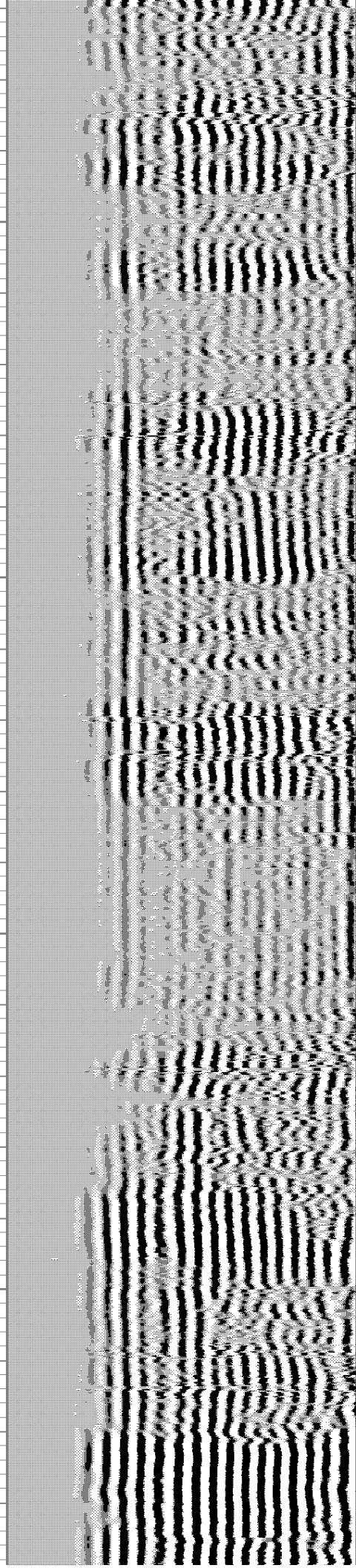
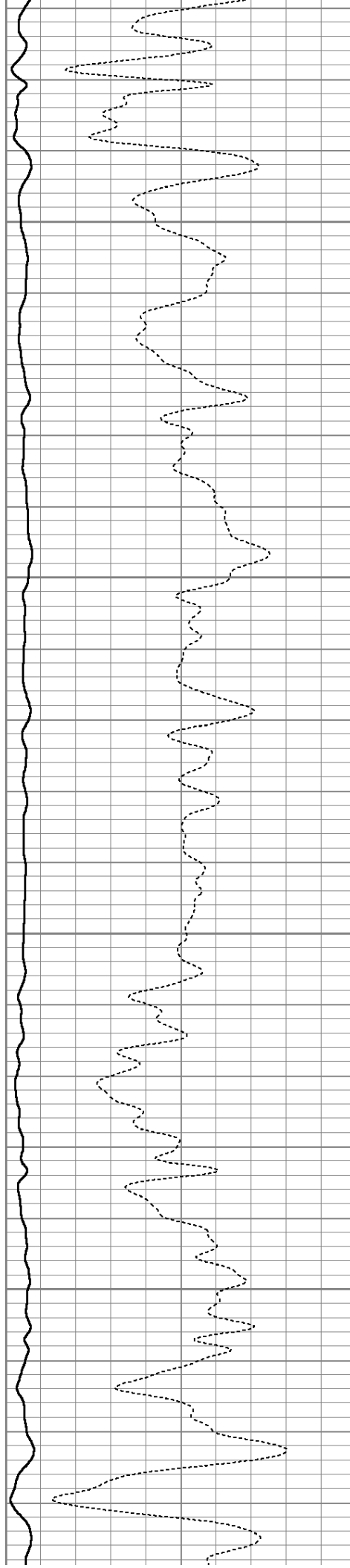


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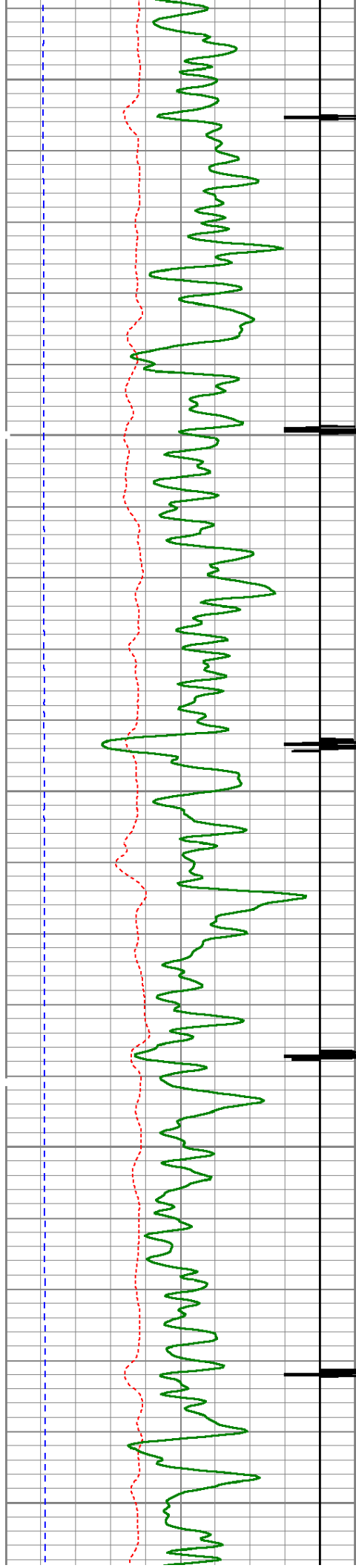
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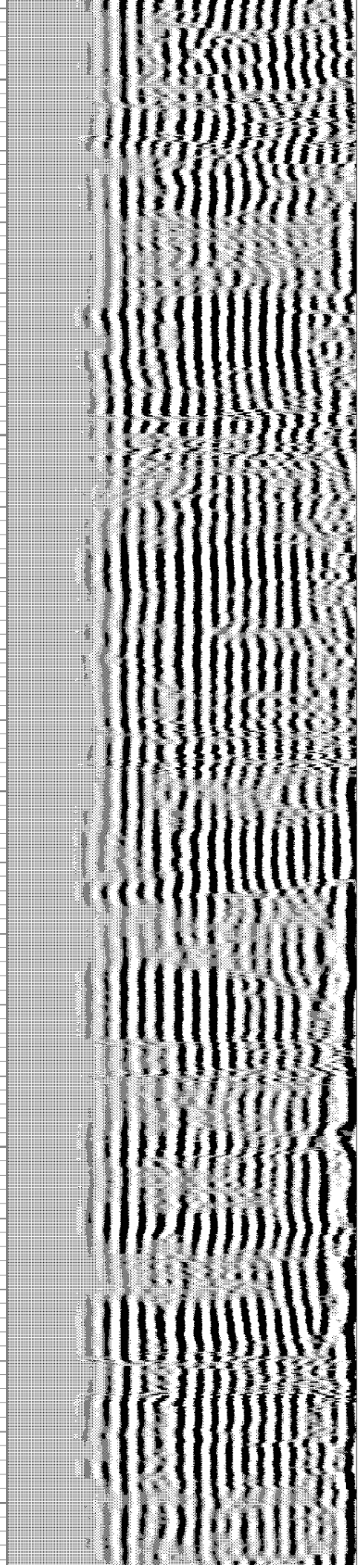
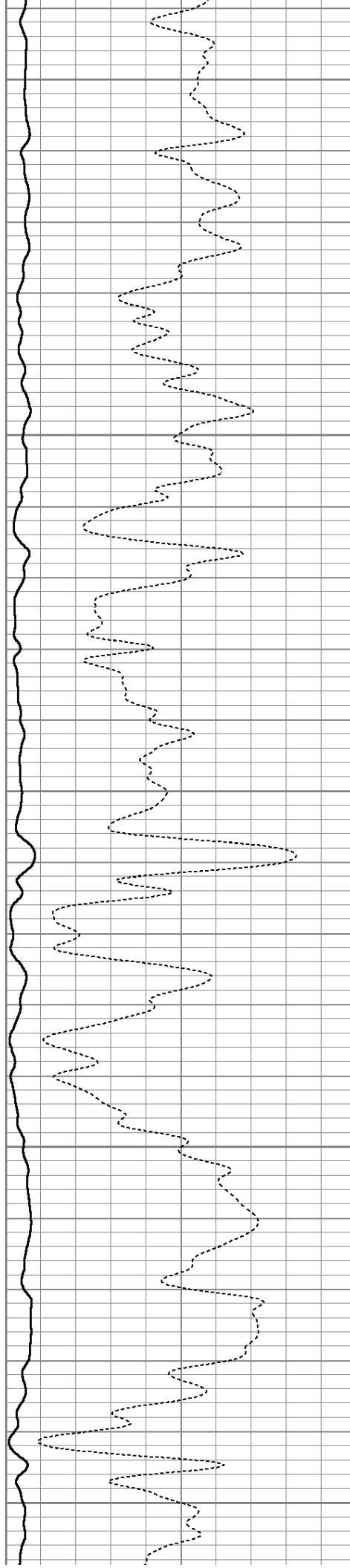
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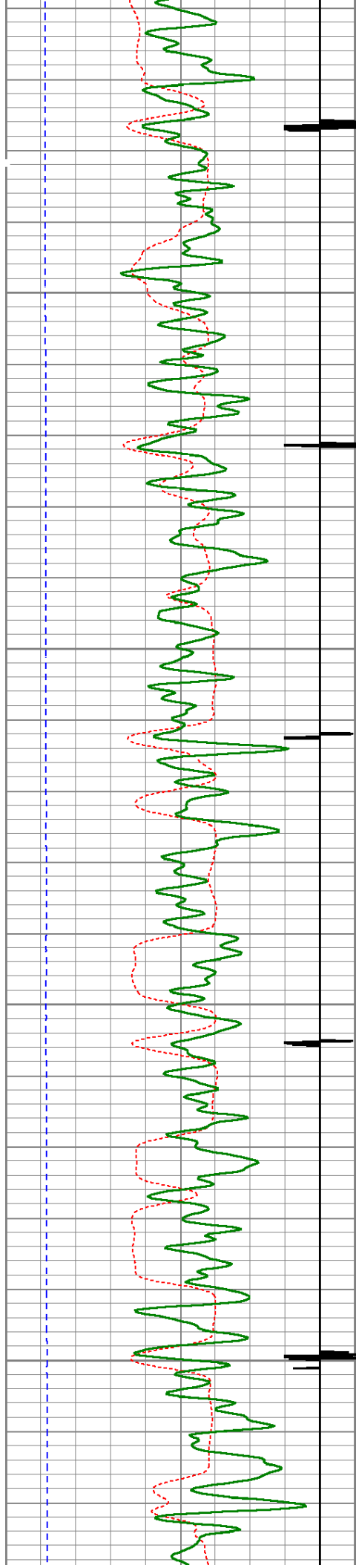
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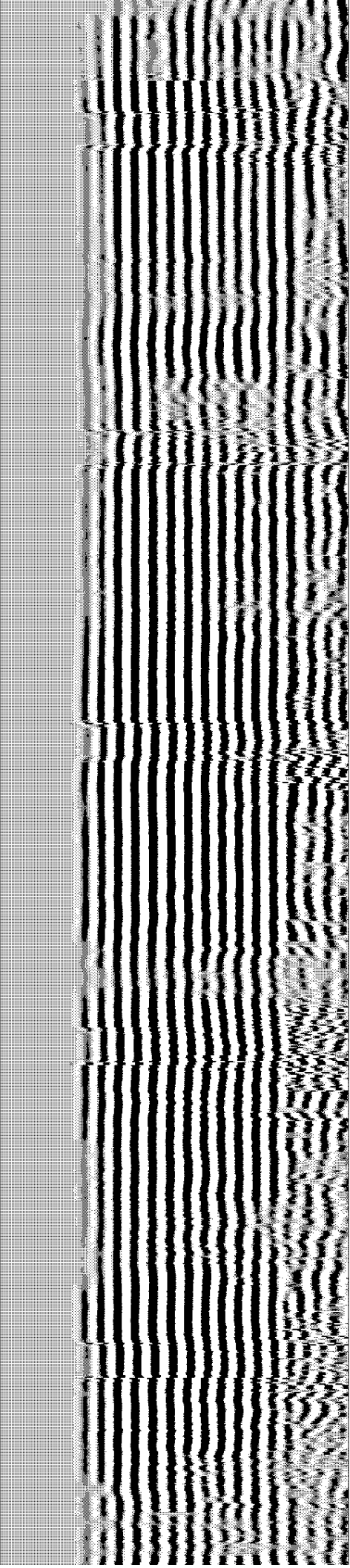
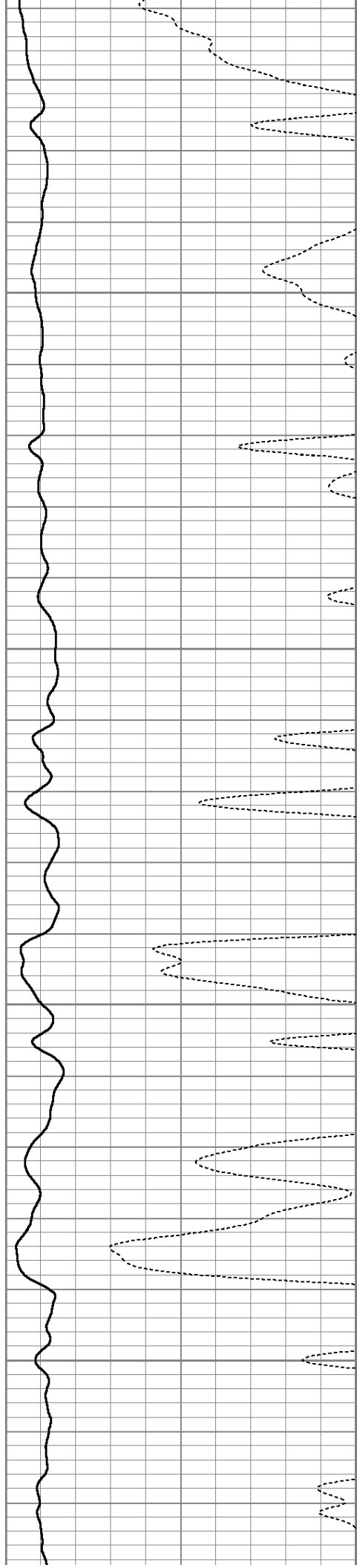


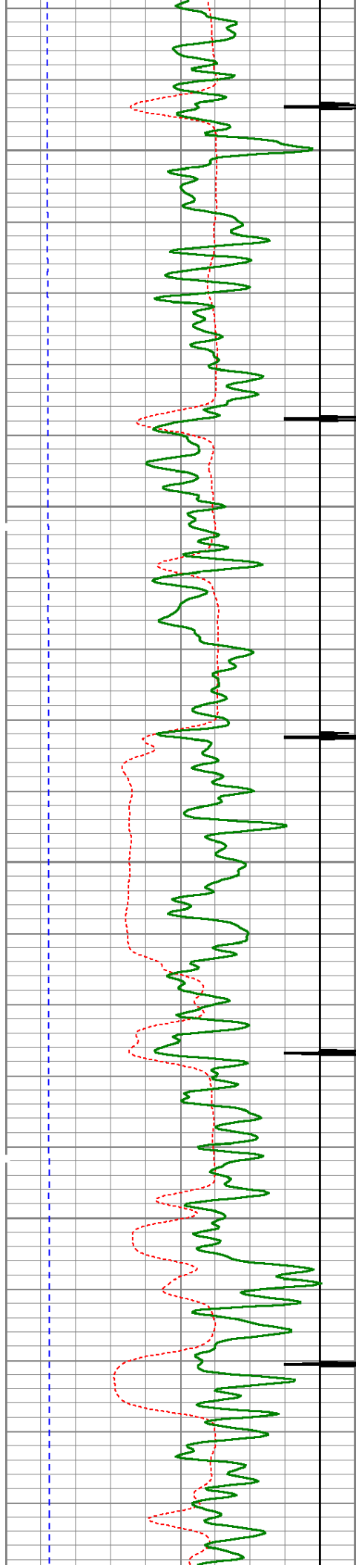
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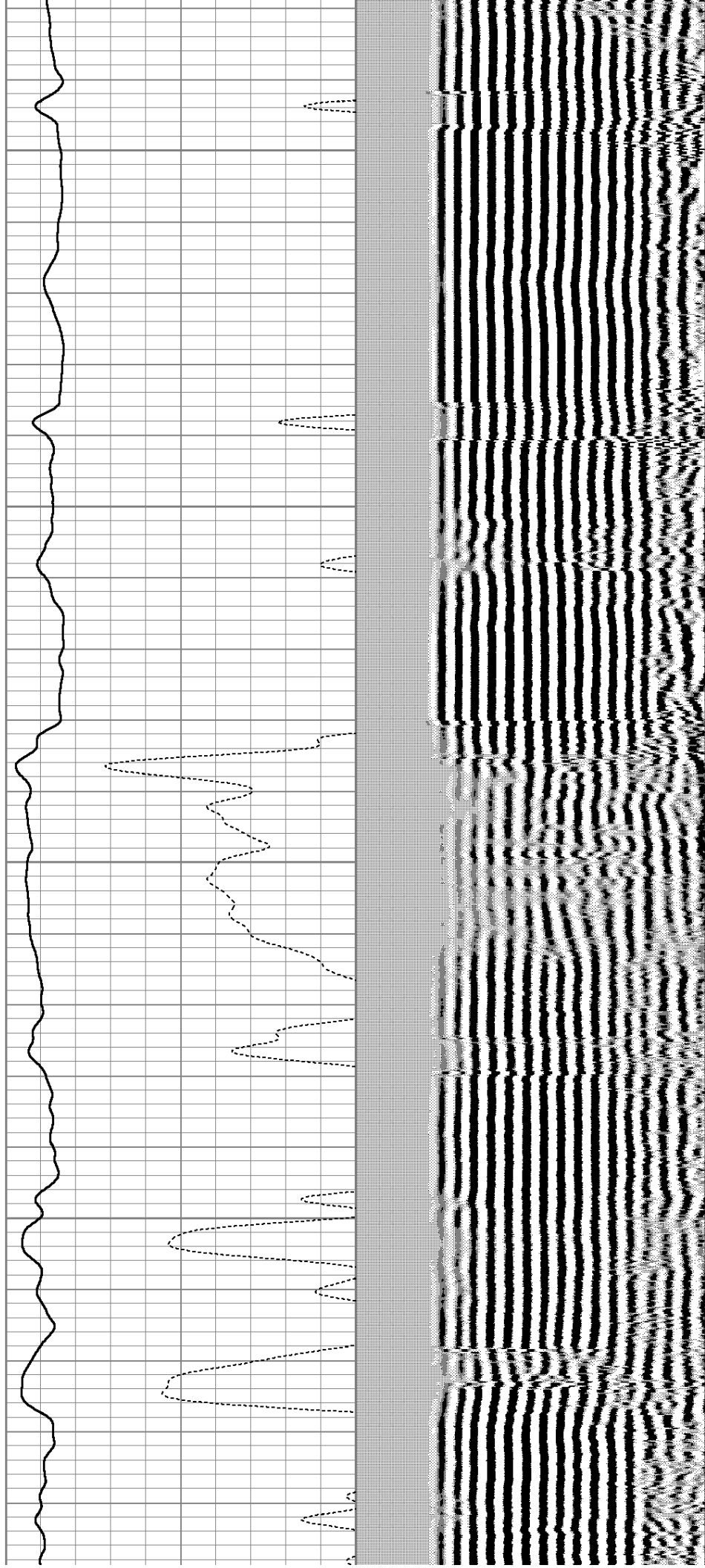


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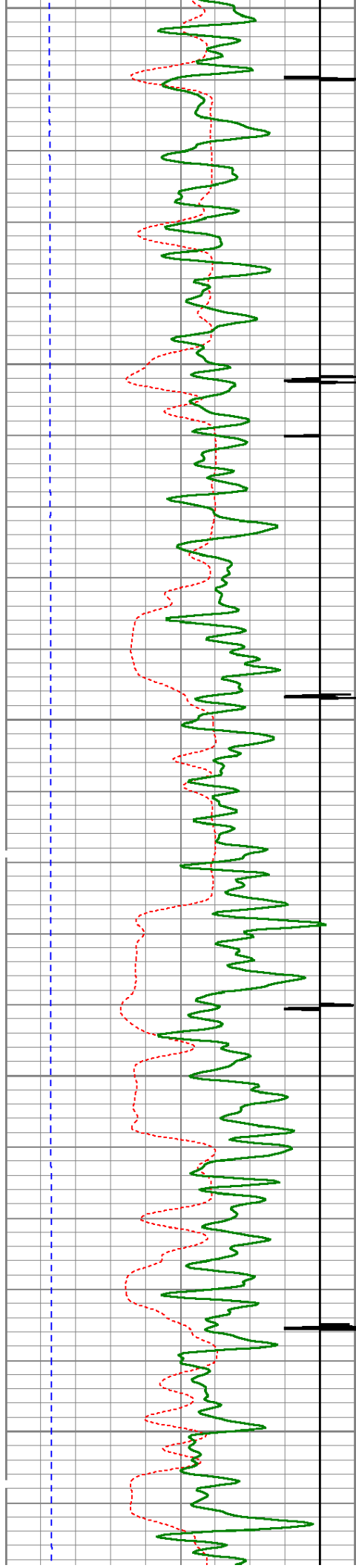
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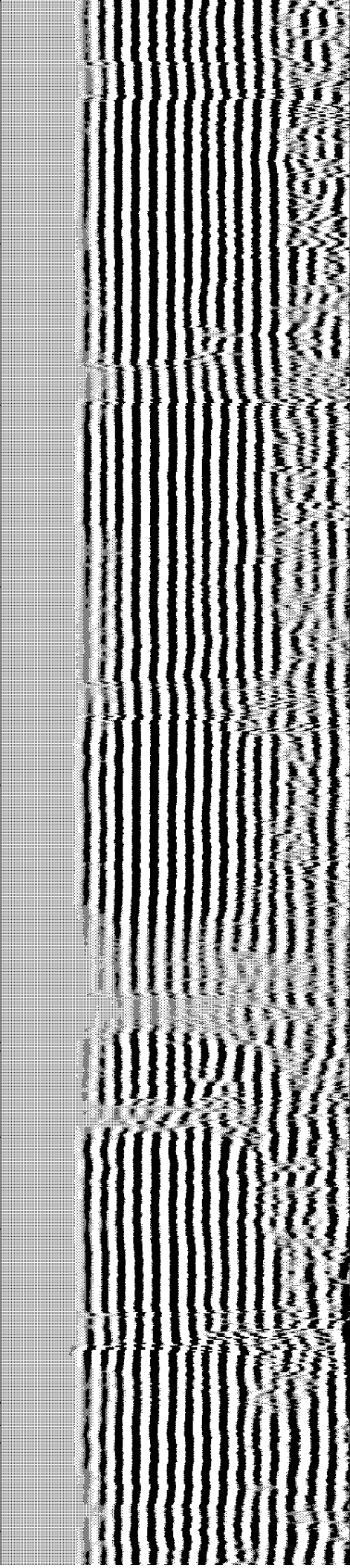
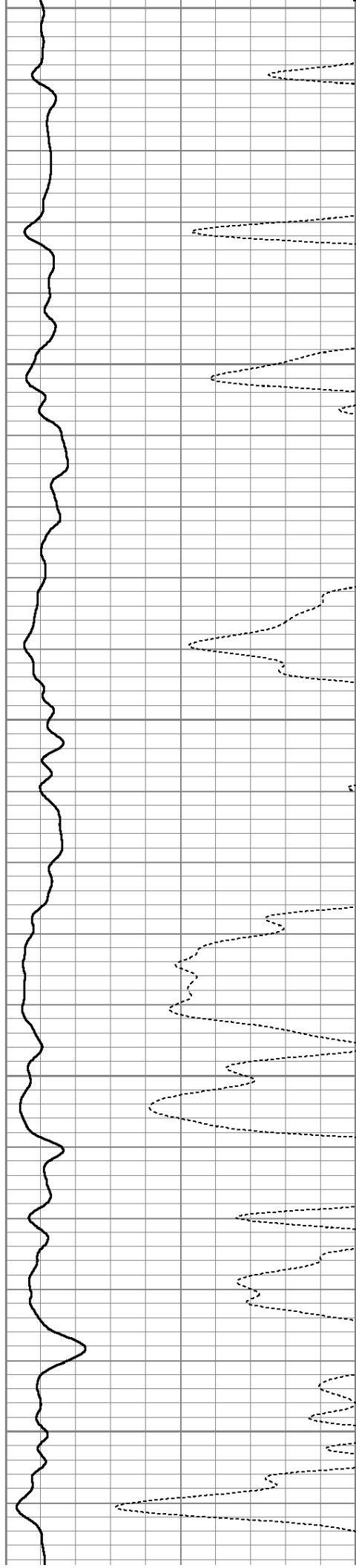
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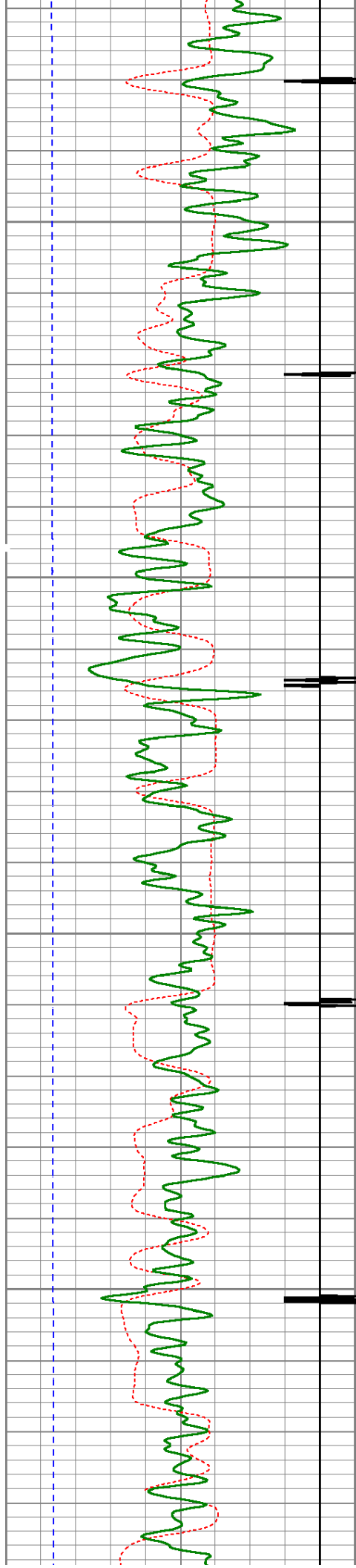
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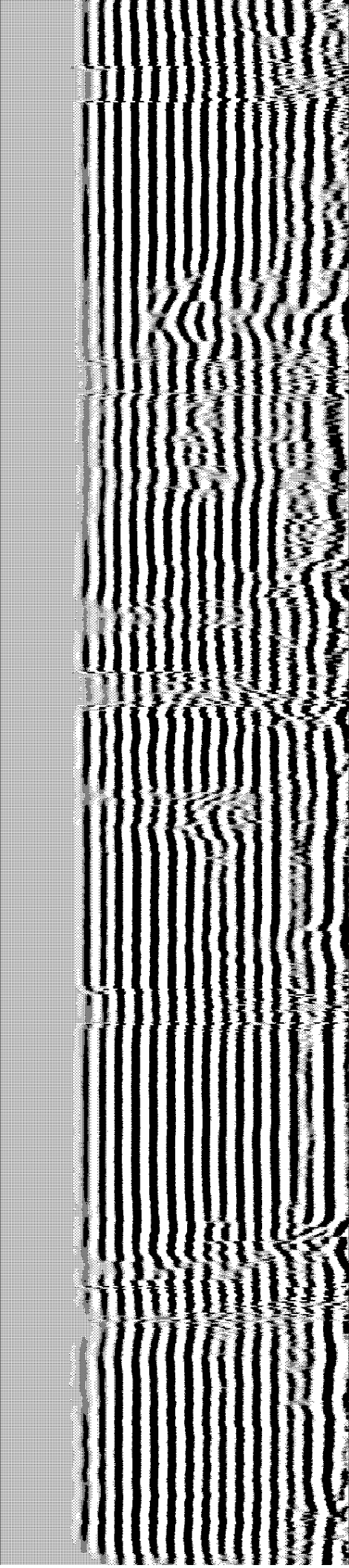
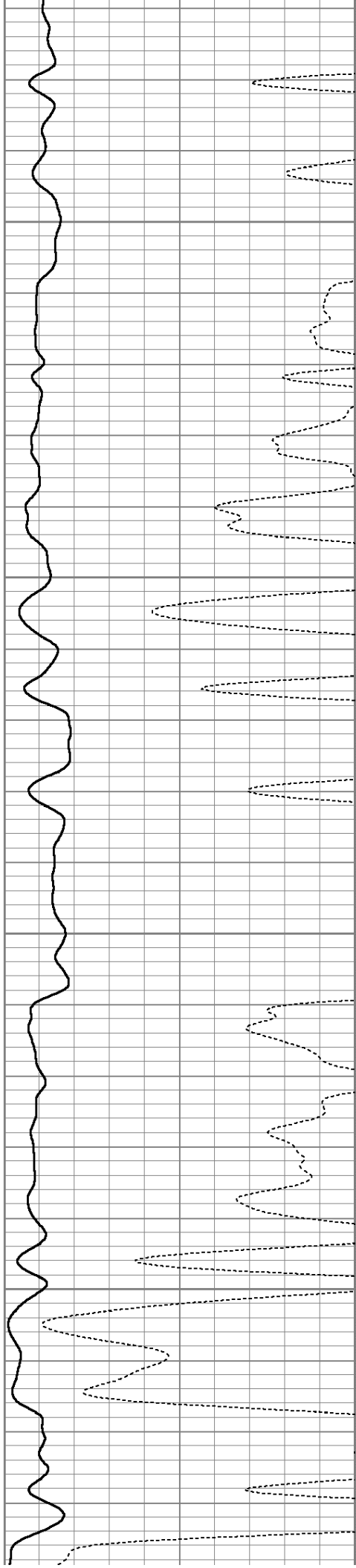


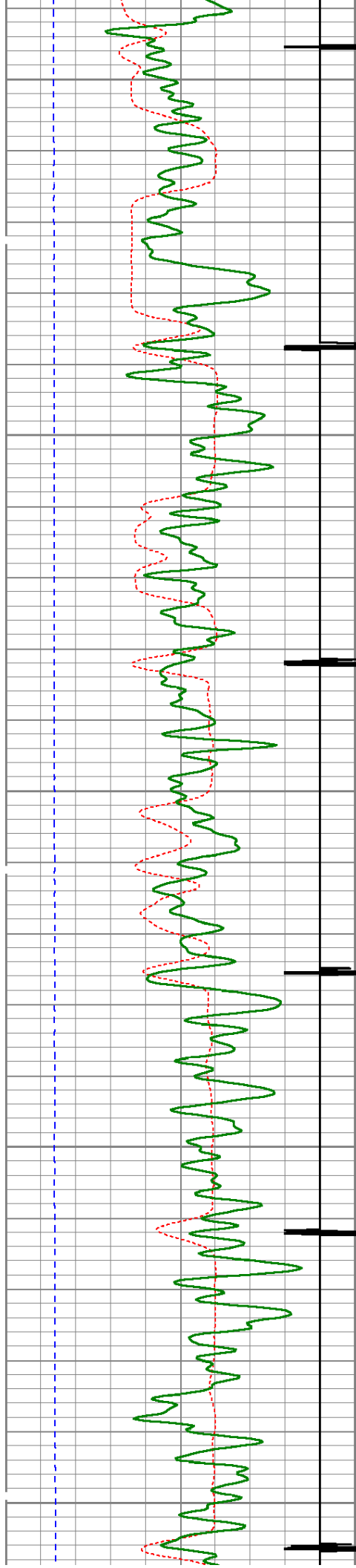
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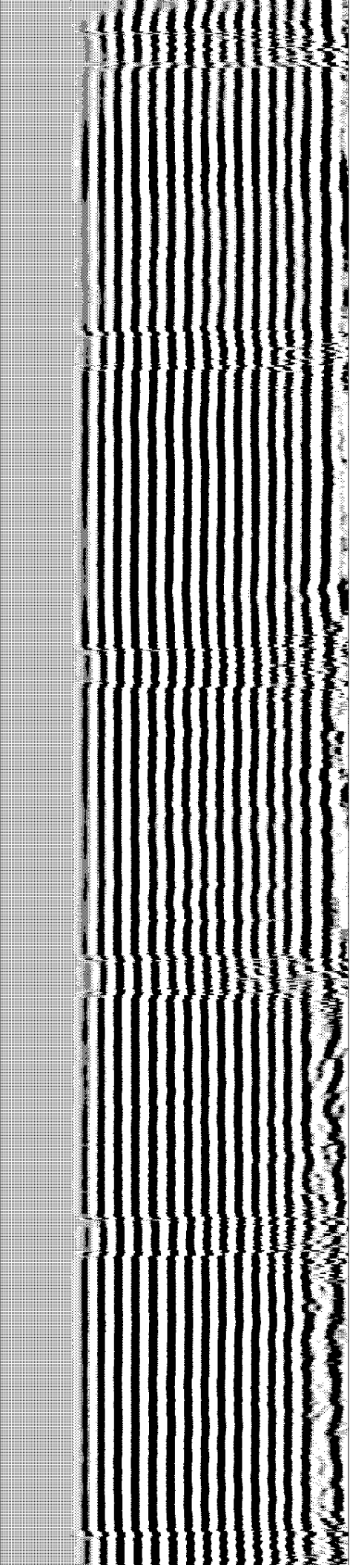
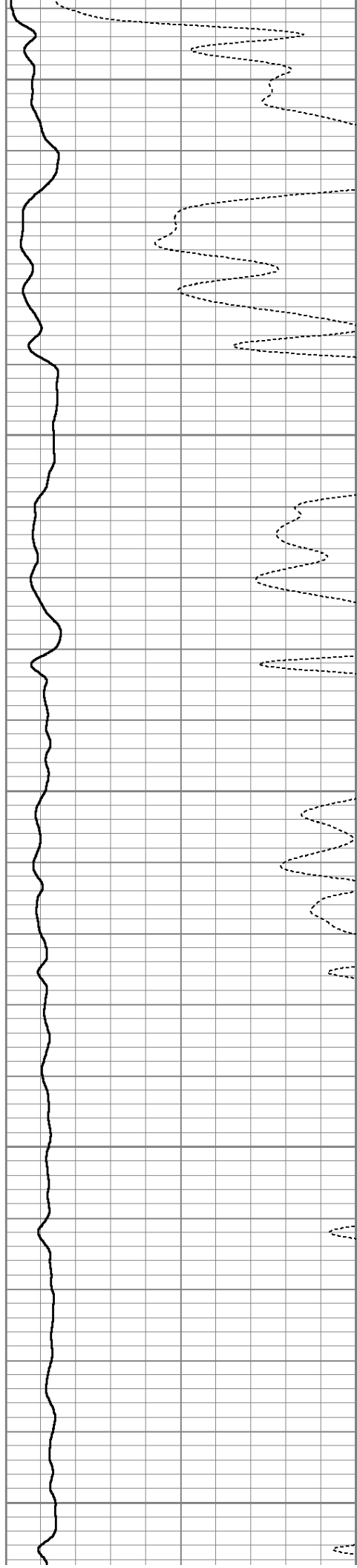
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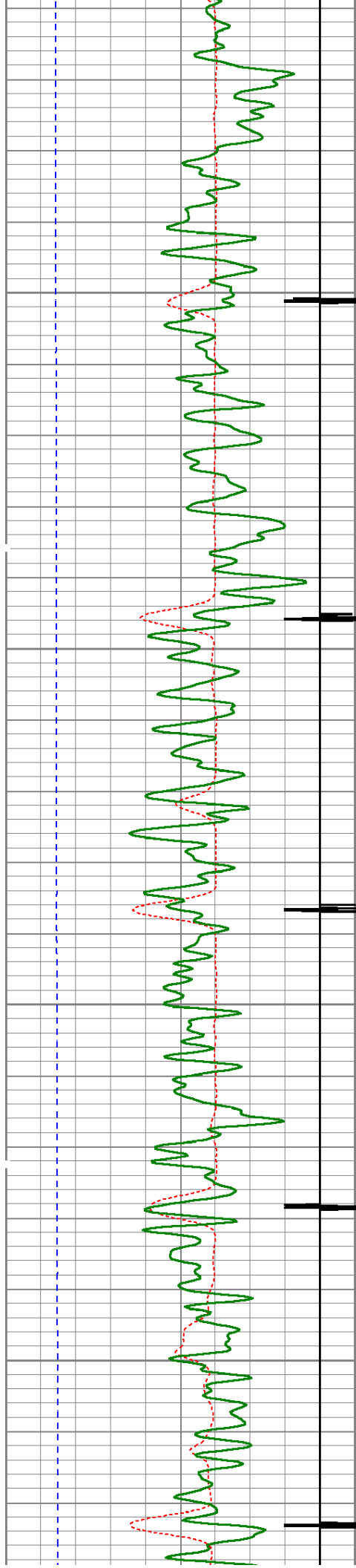
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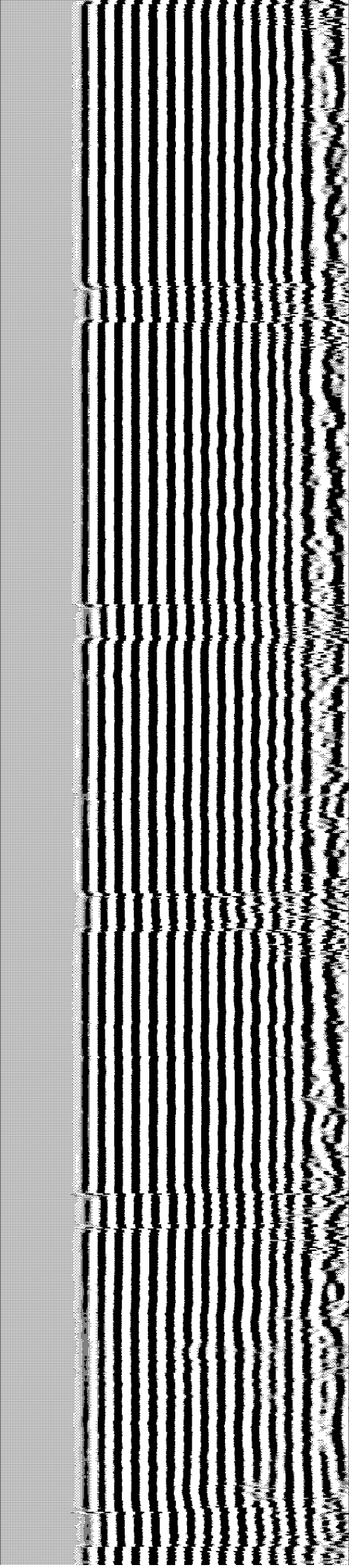
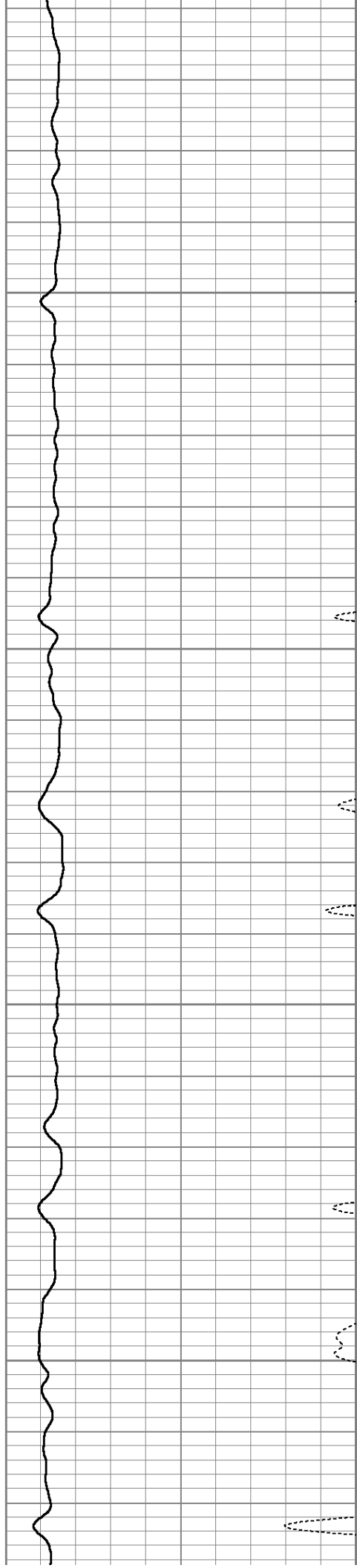


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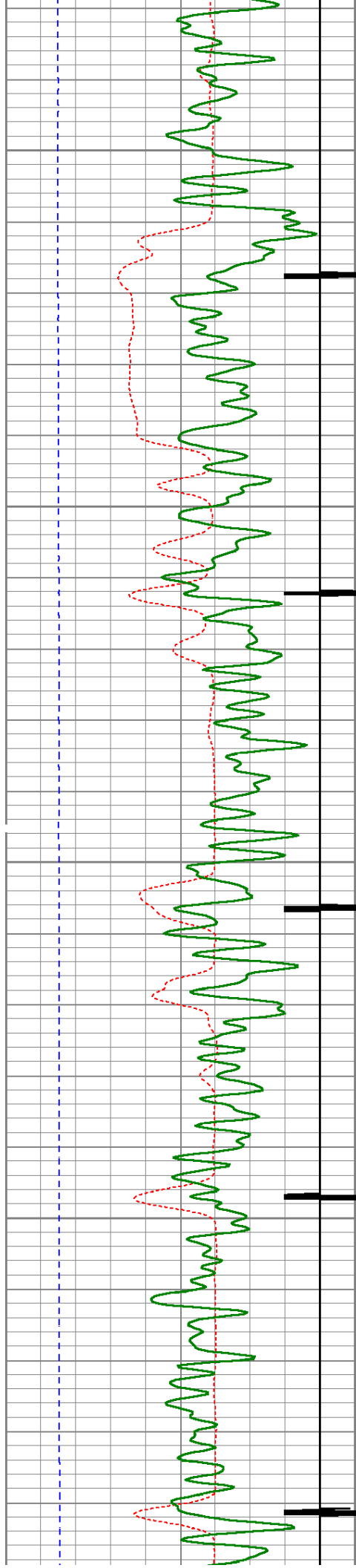
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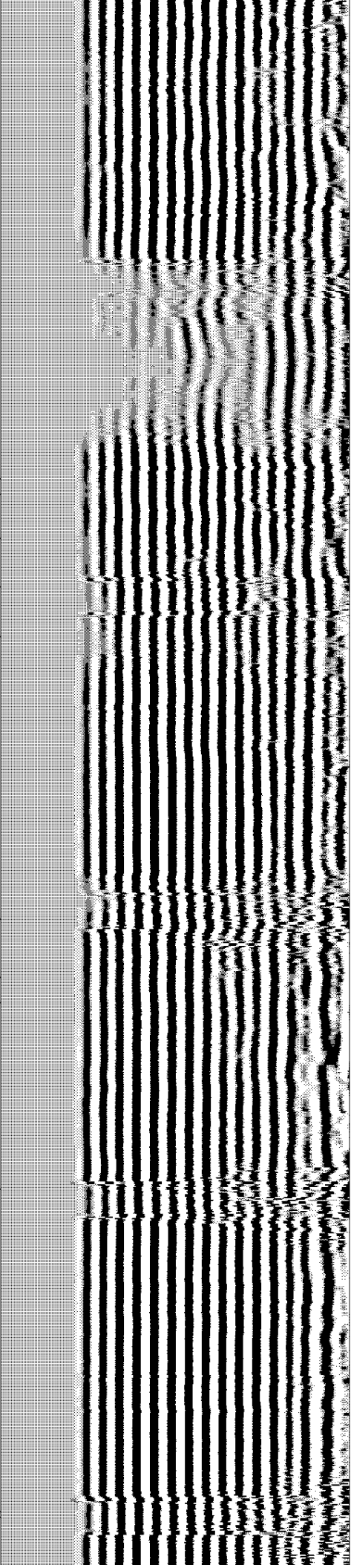
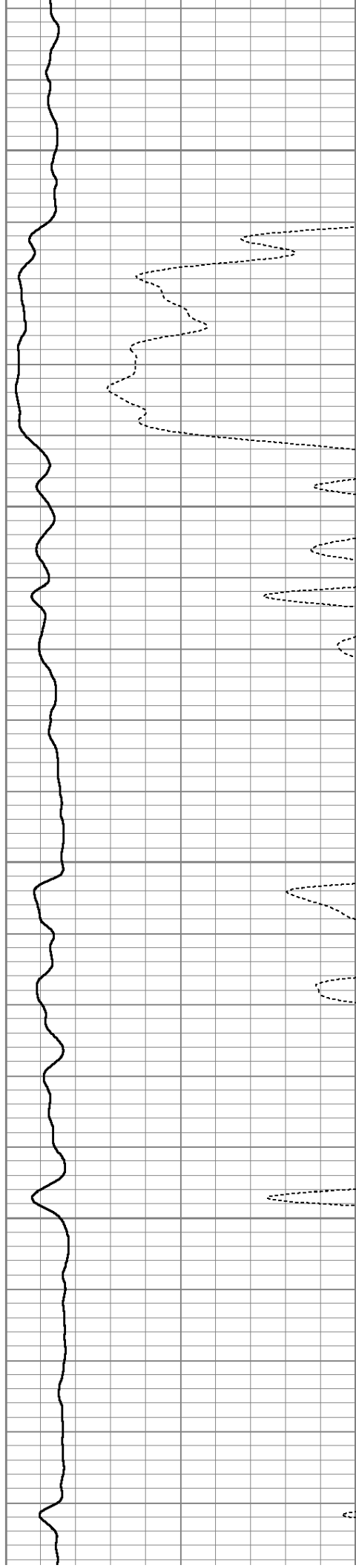


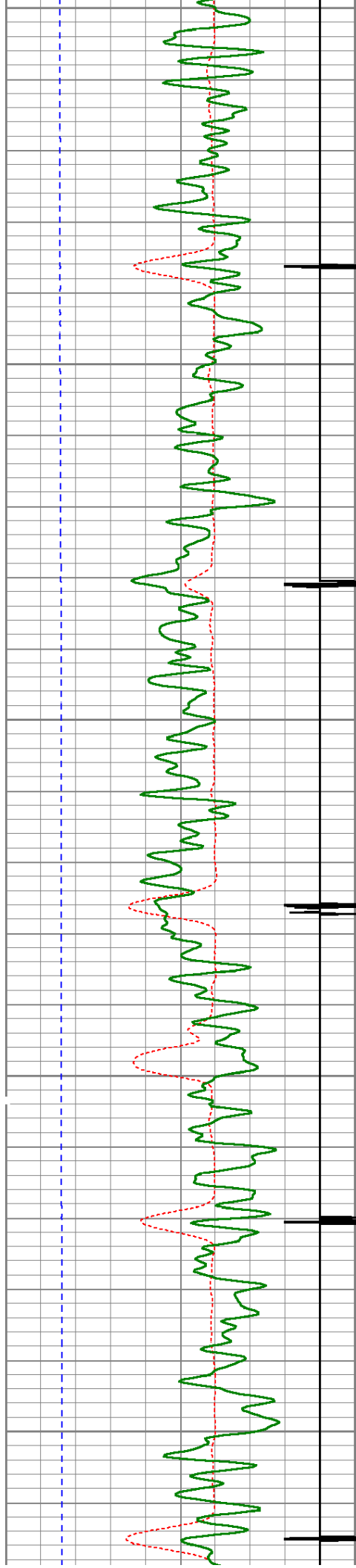
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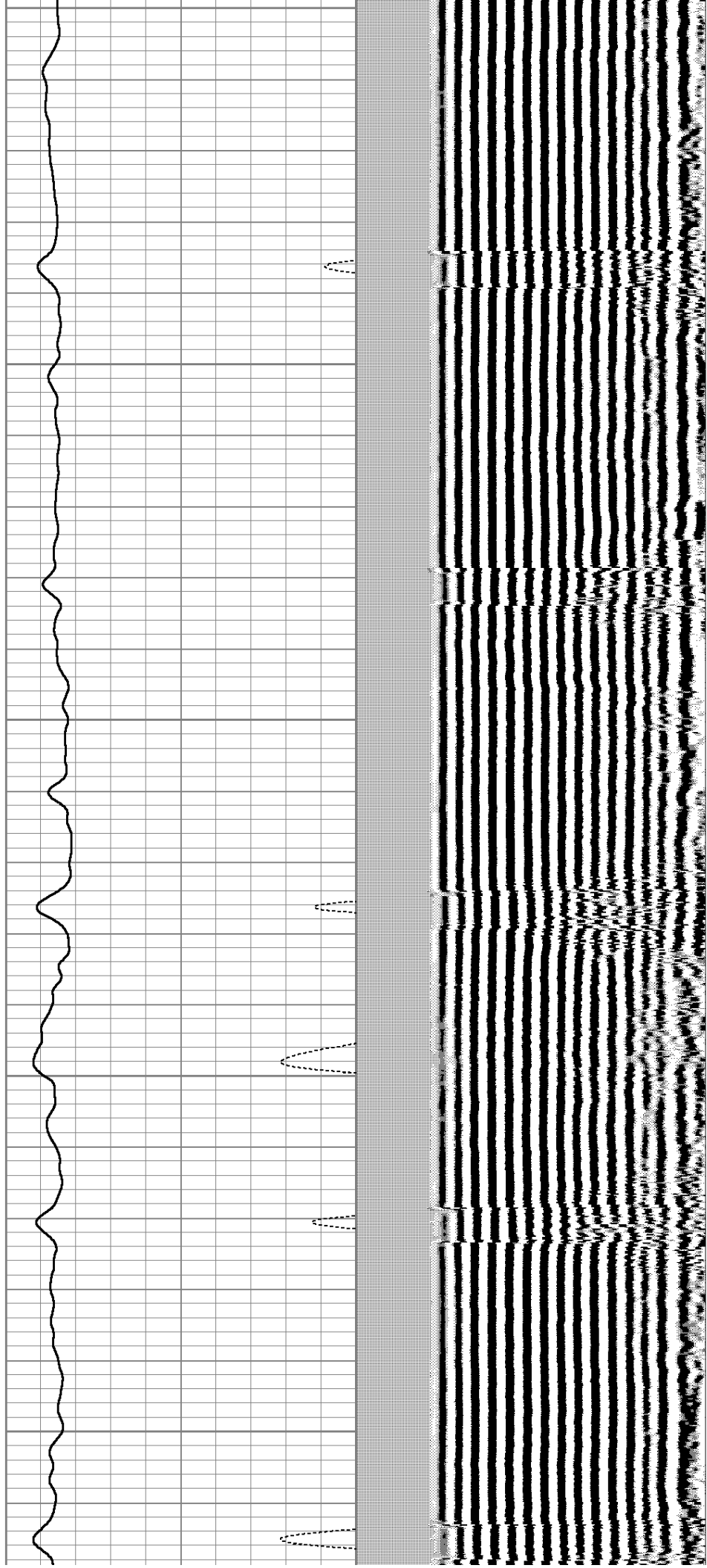
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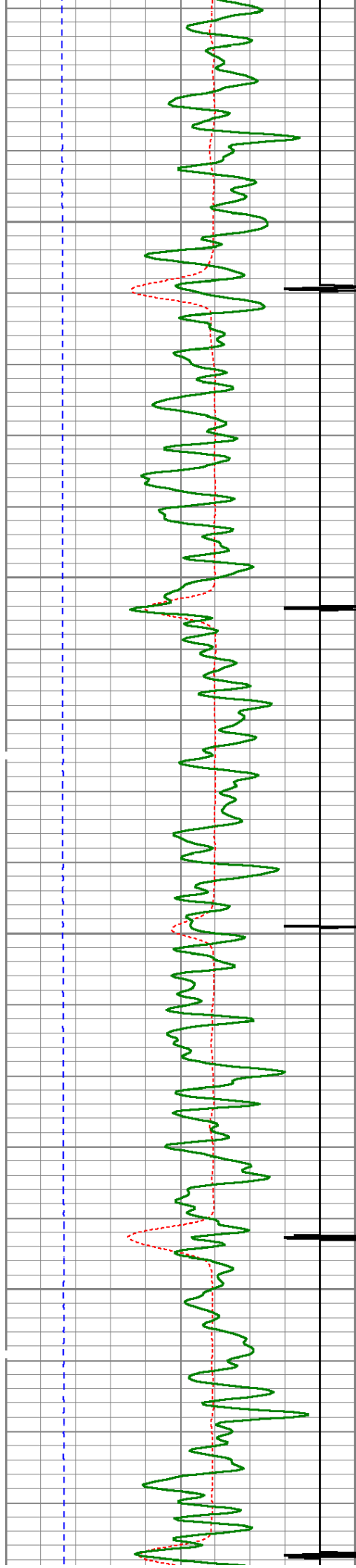
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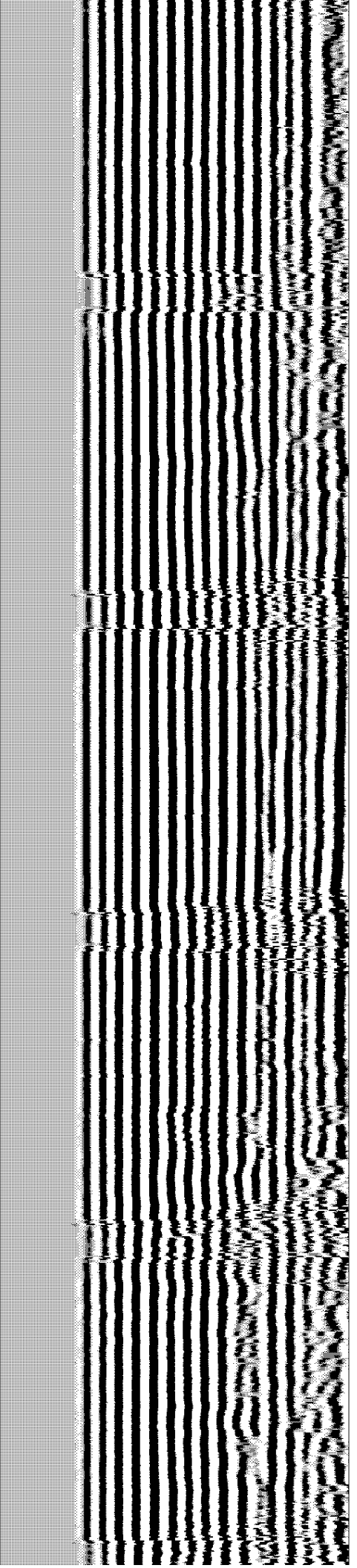
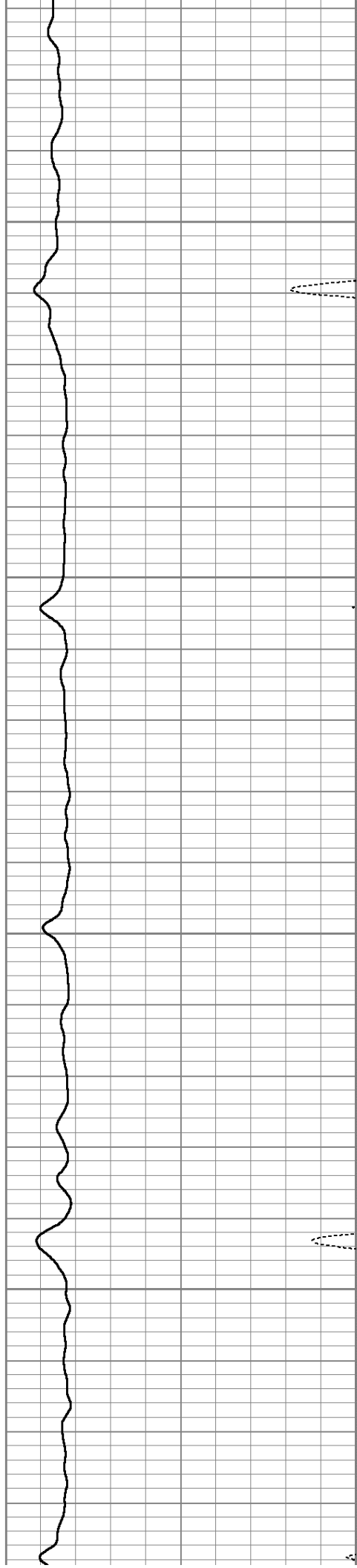


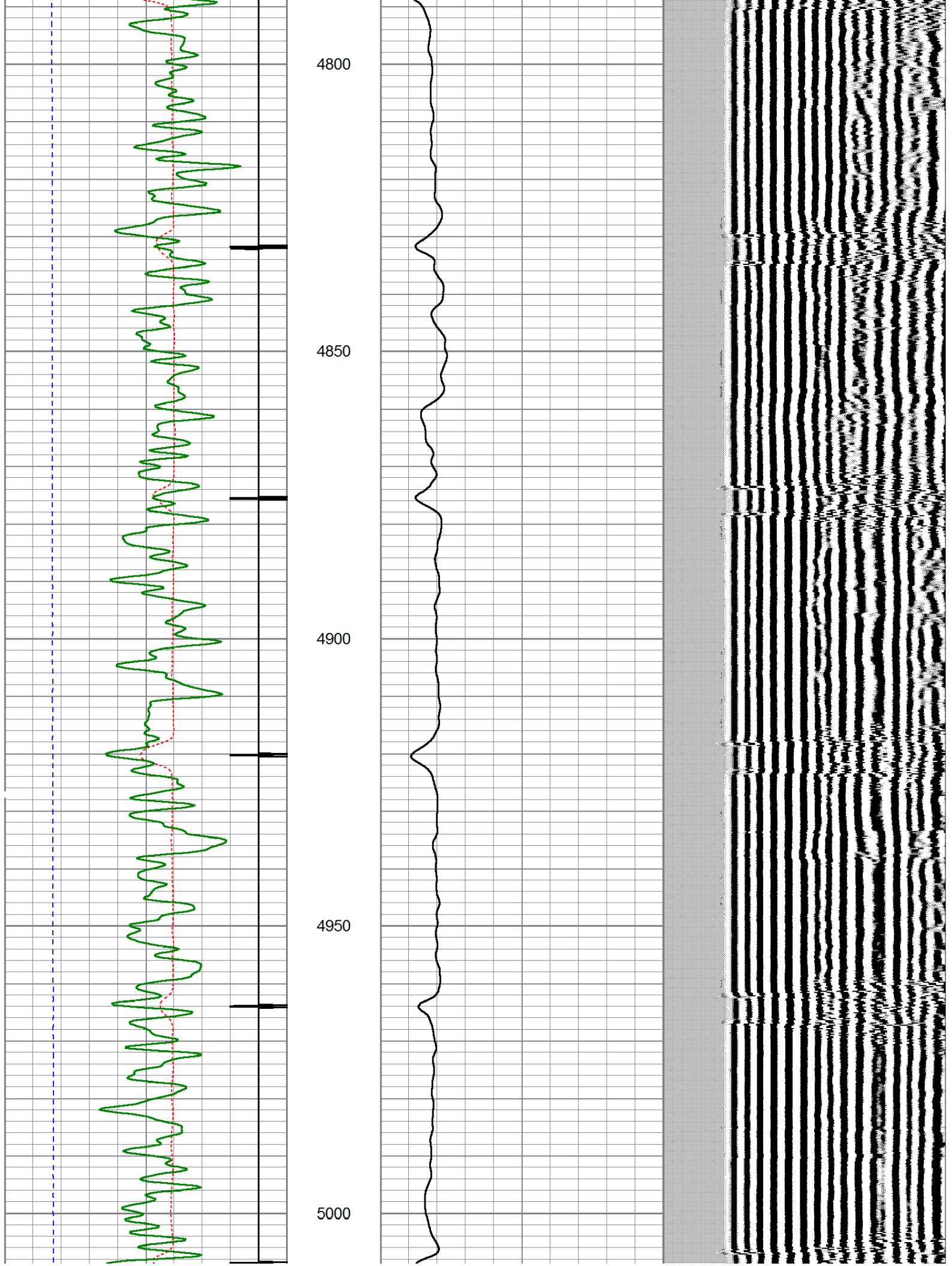
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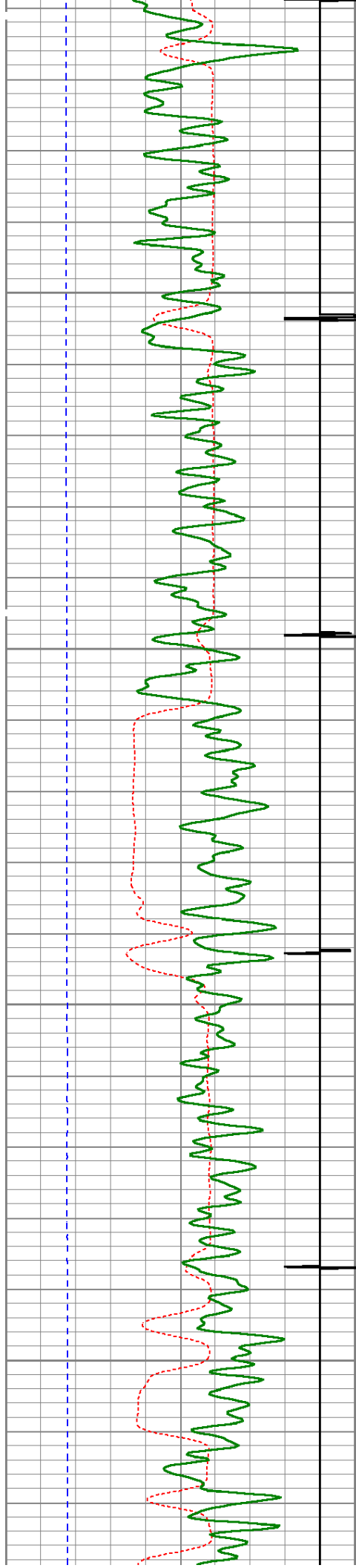
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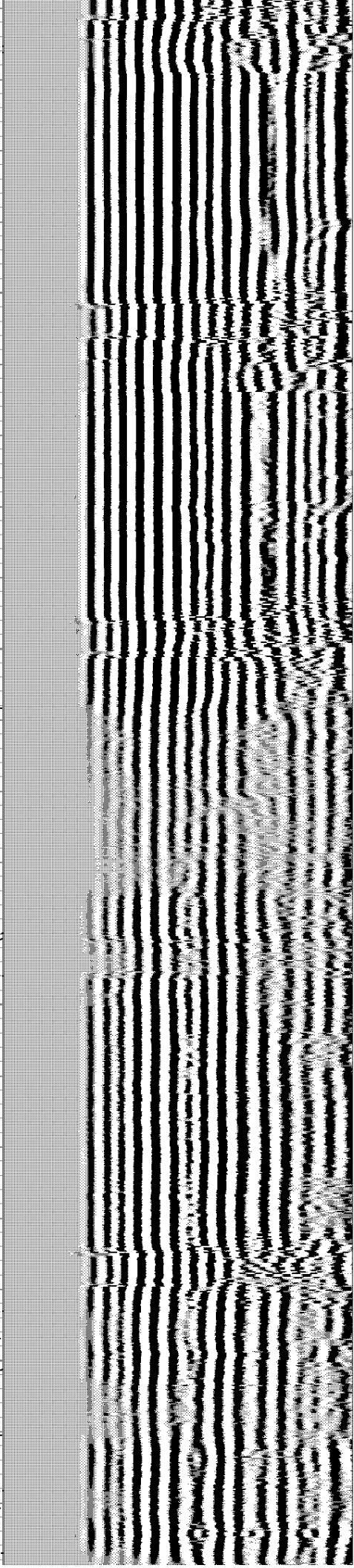
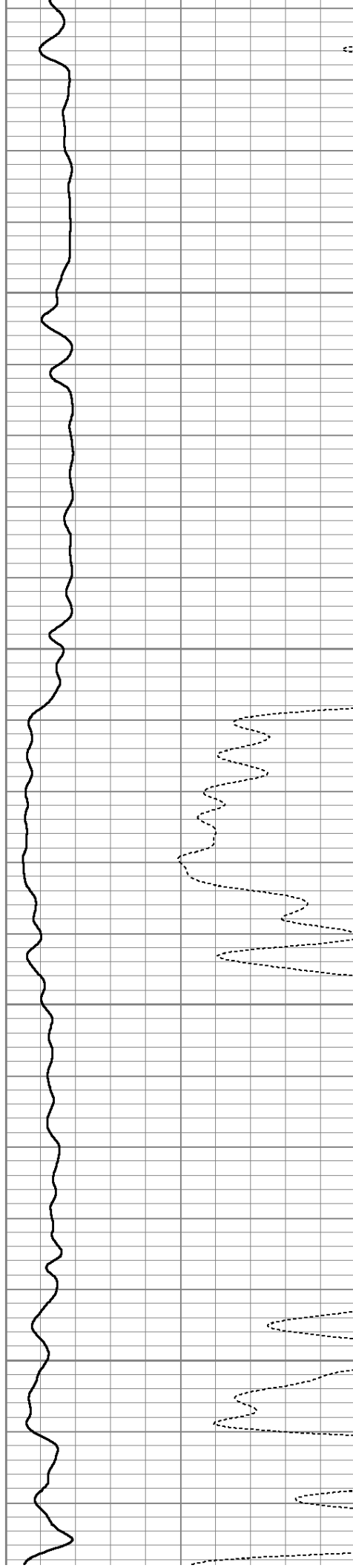


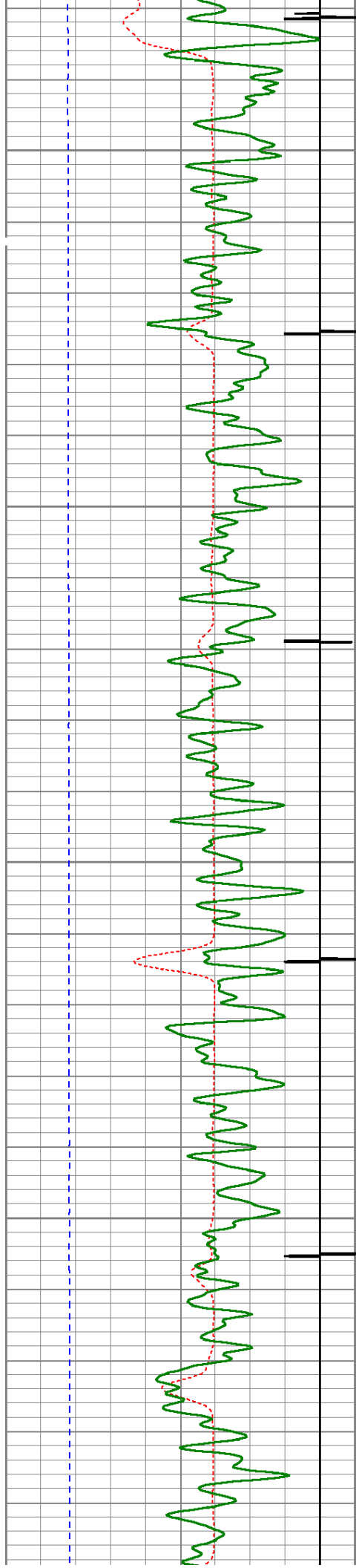
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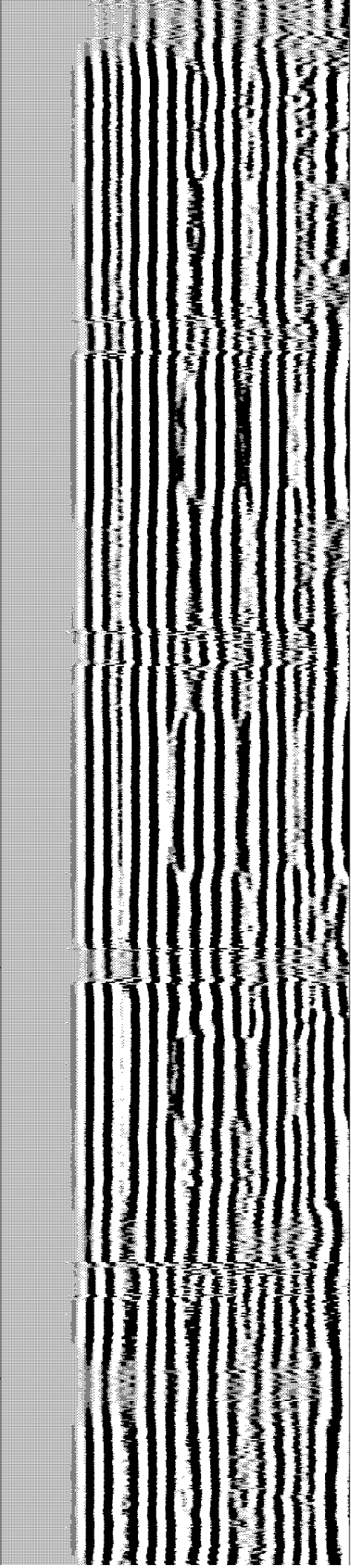
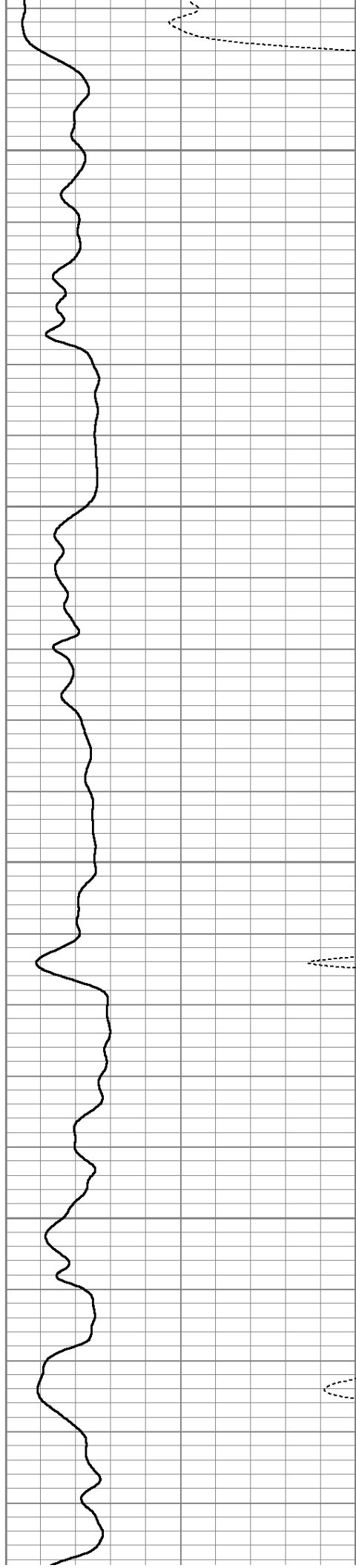


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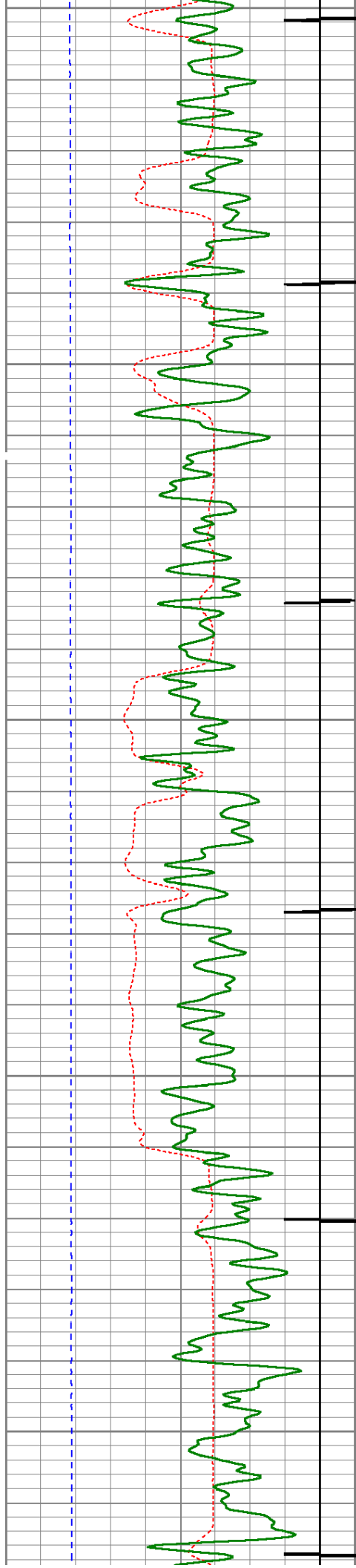
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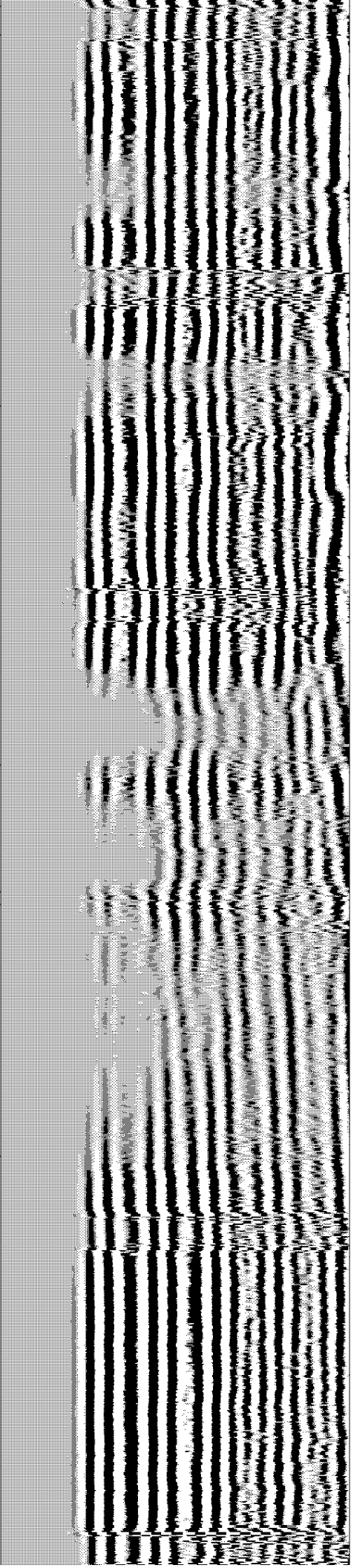
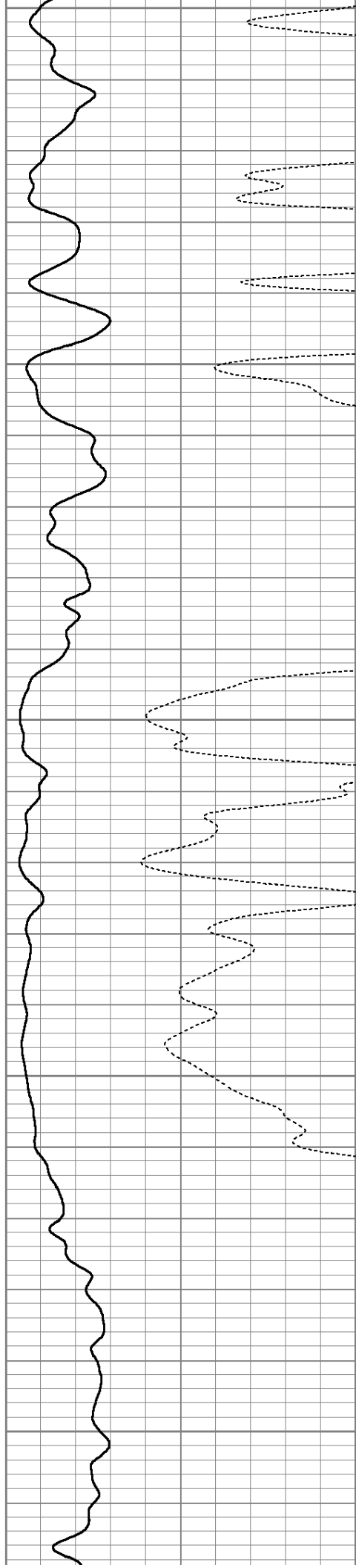
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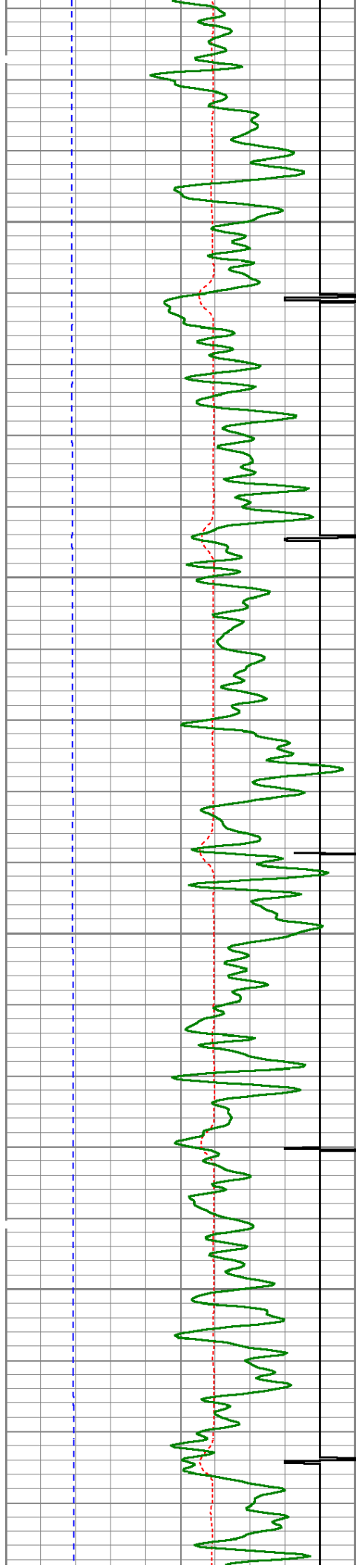
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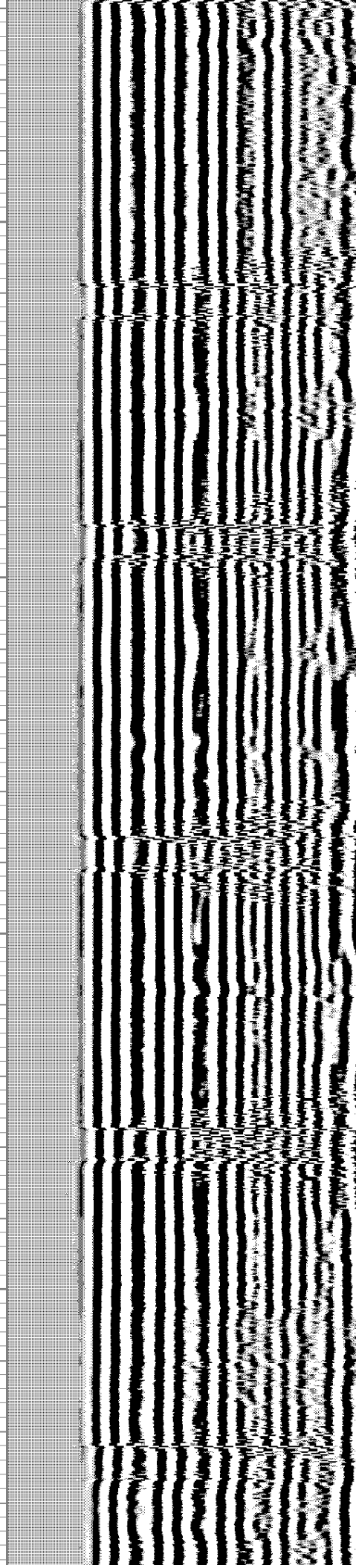
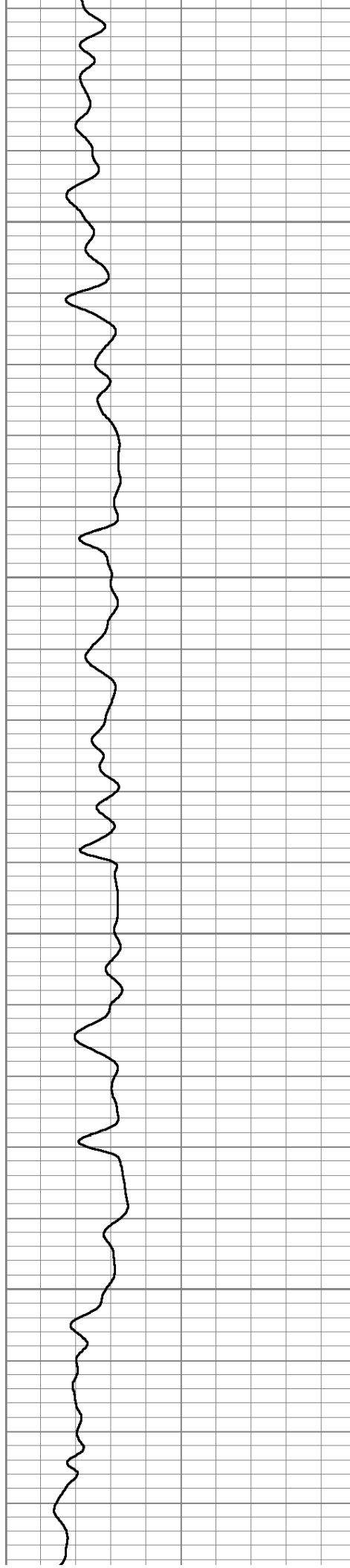


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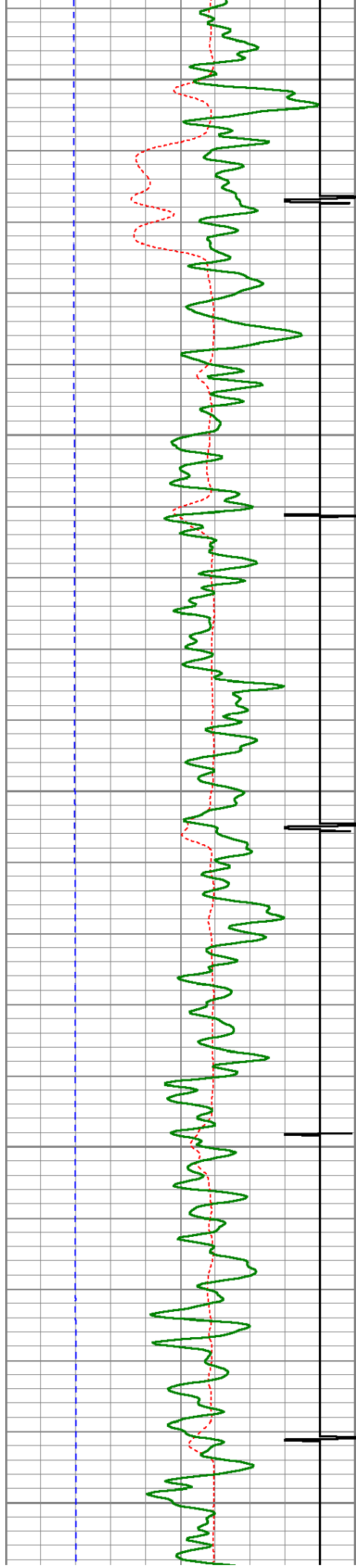
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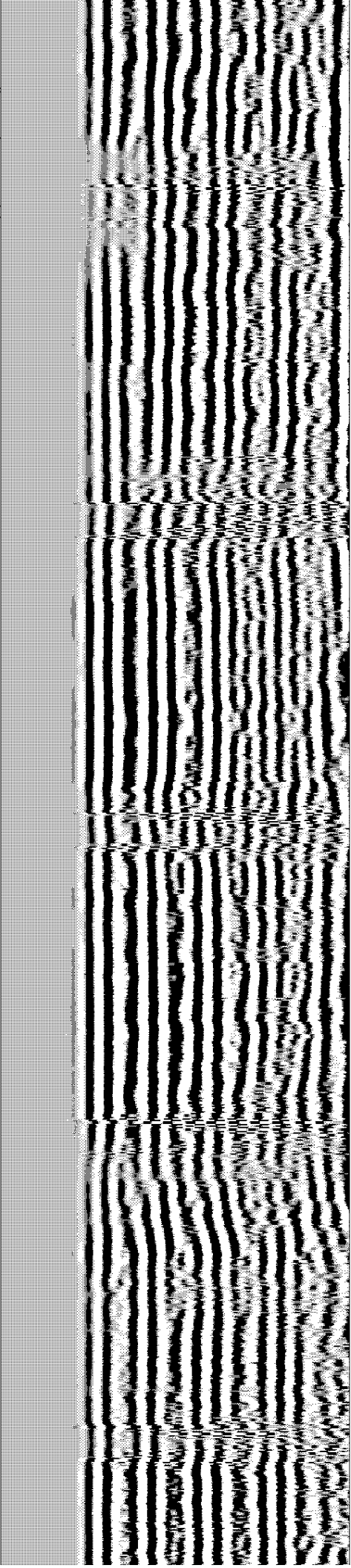
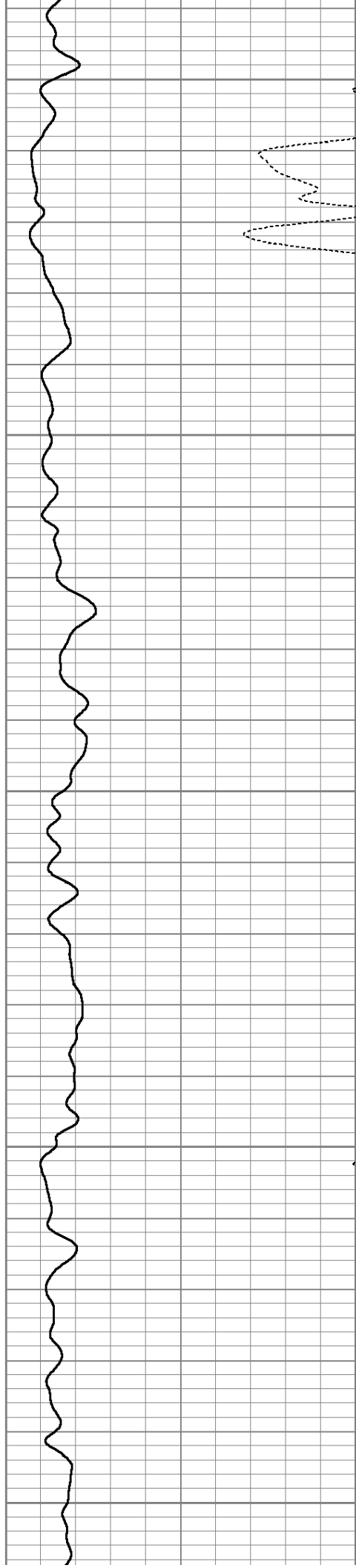
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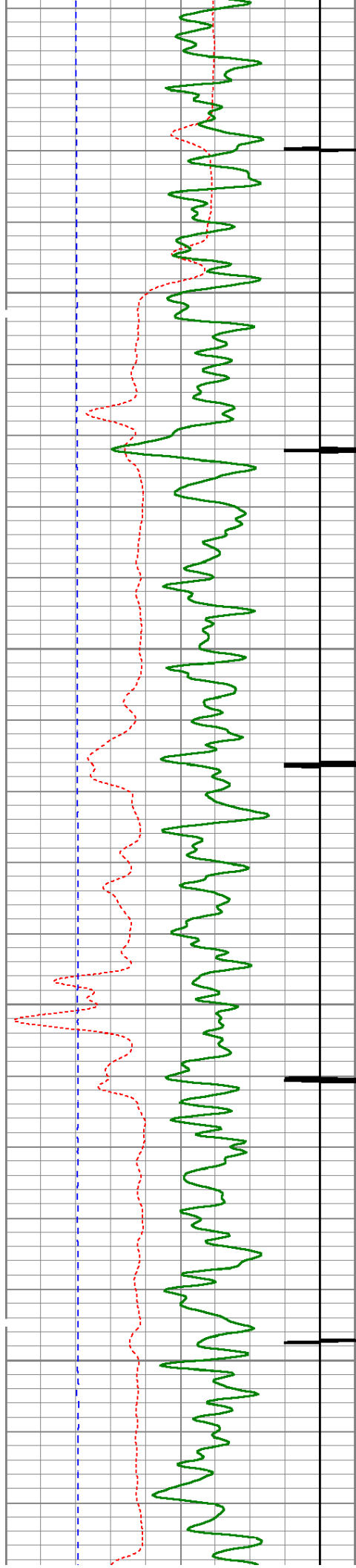
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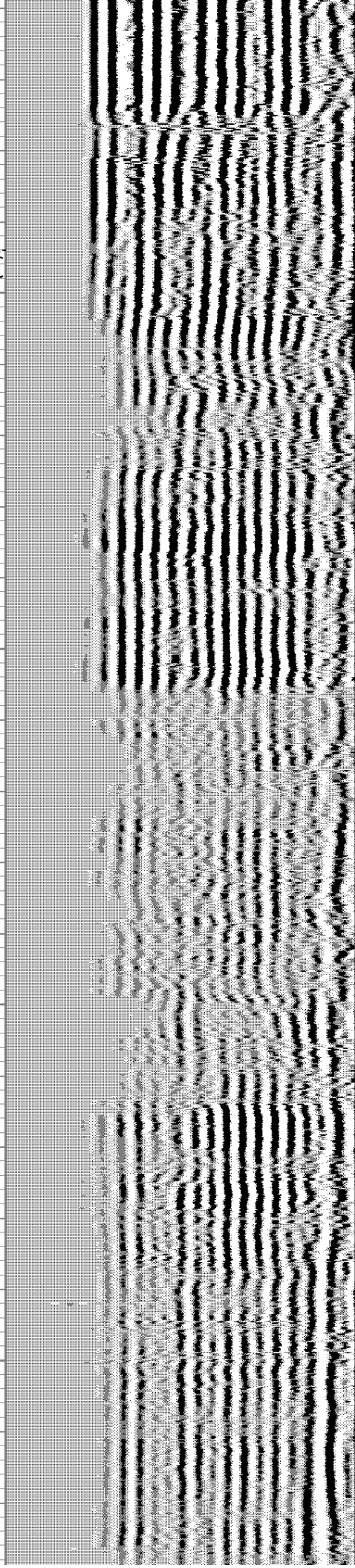
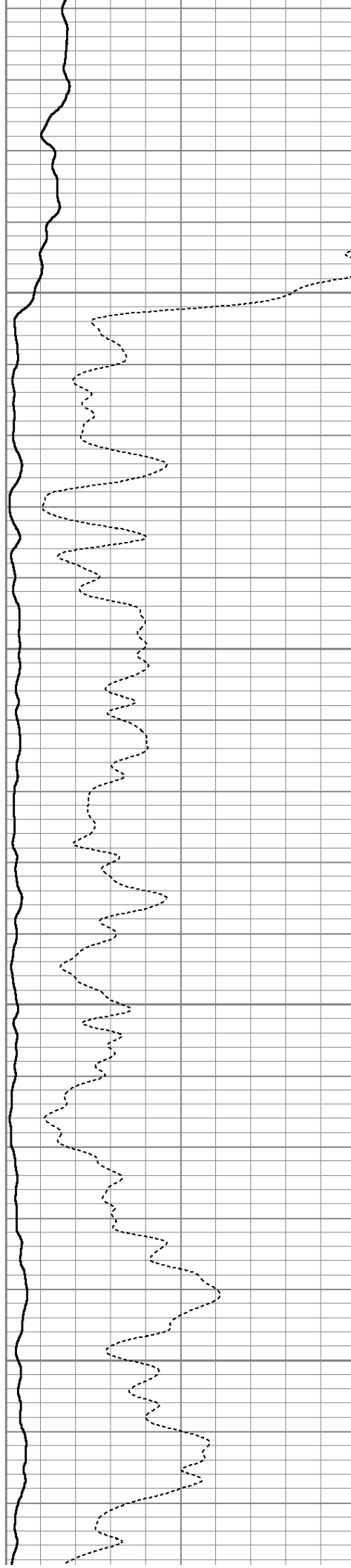


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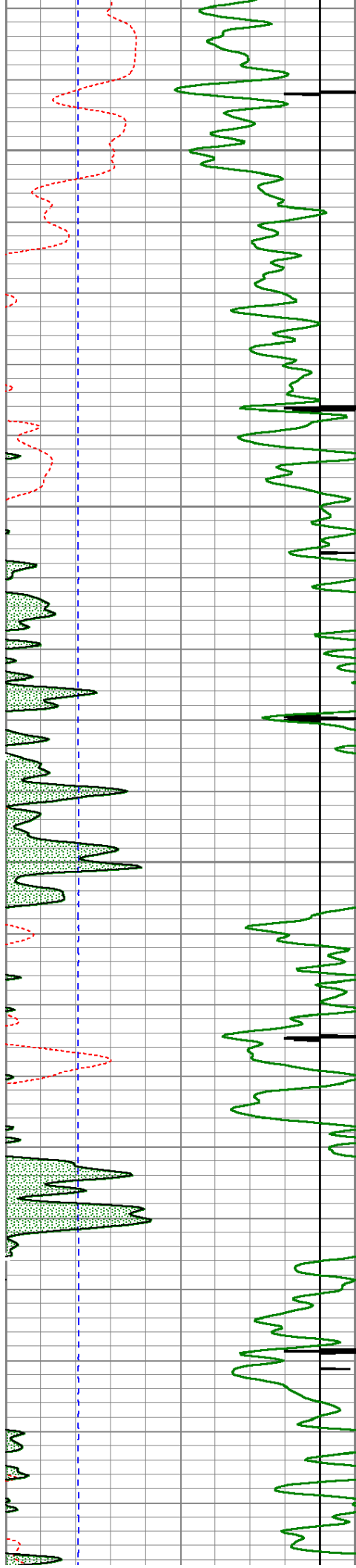
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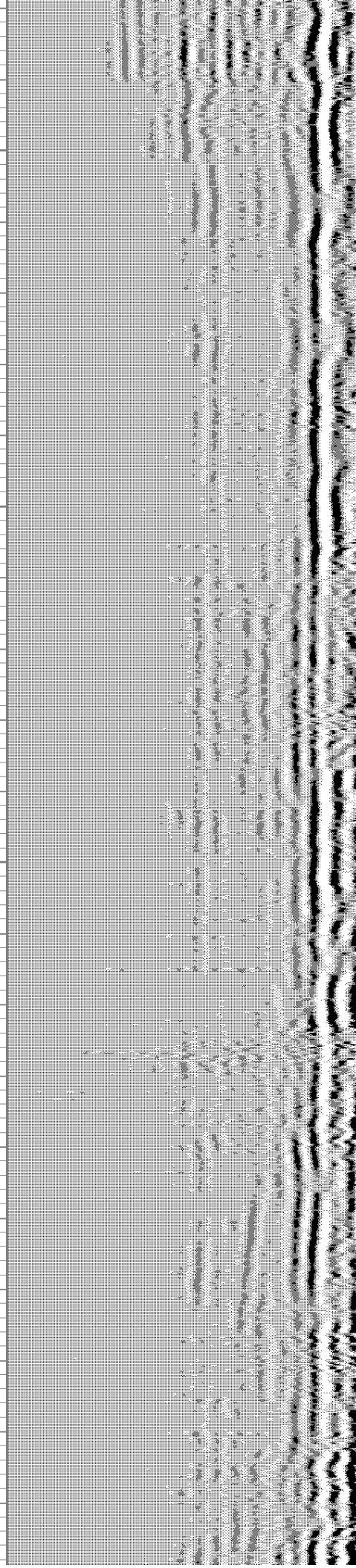
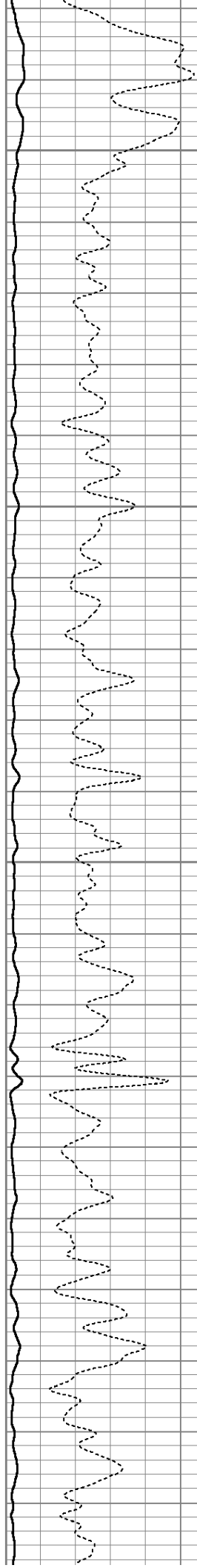


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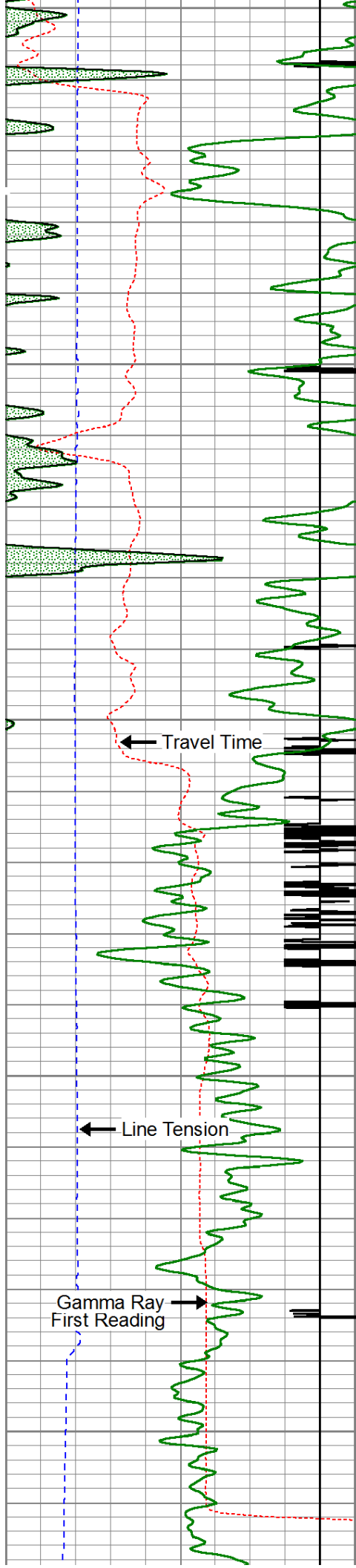
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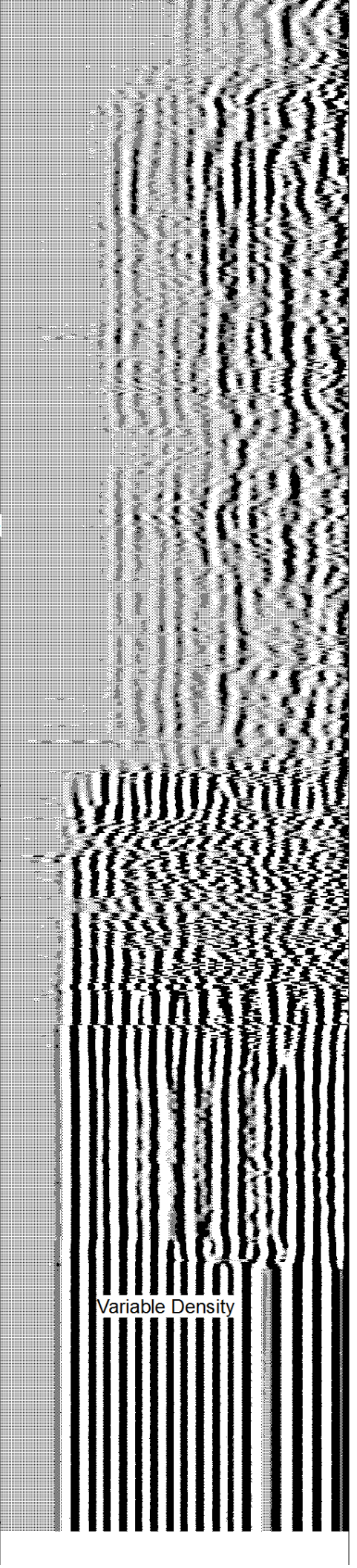
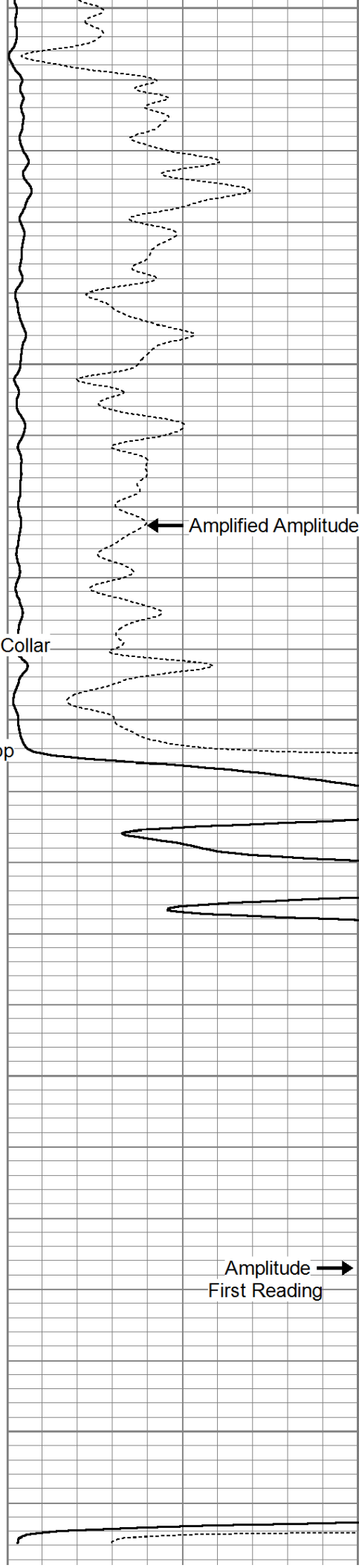
6500



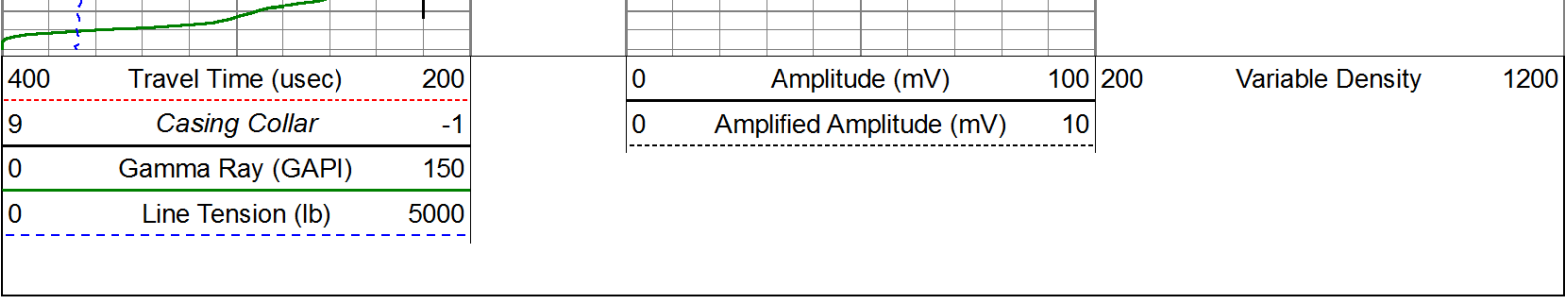




6550  
6600  
6650  
6700  
6750  
DEPTH 6737'



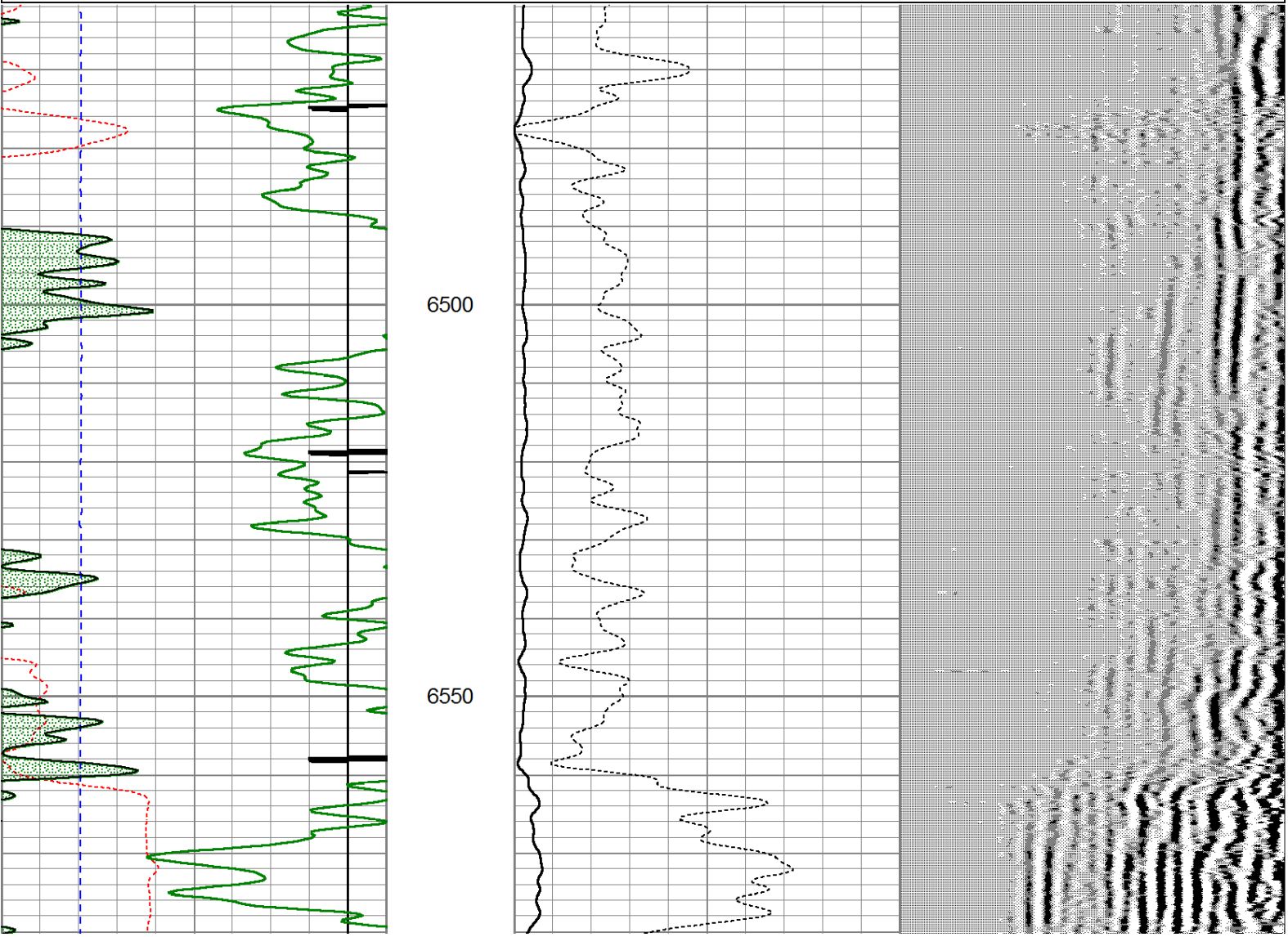
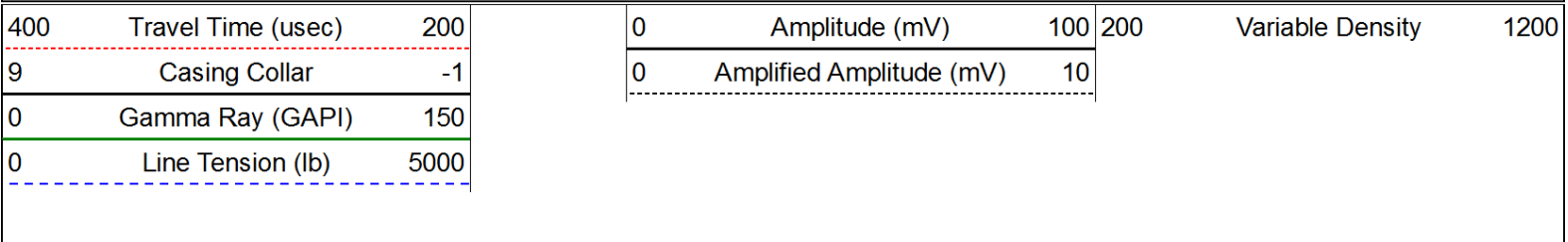


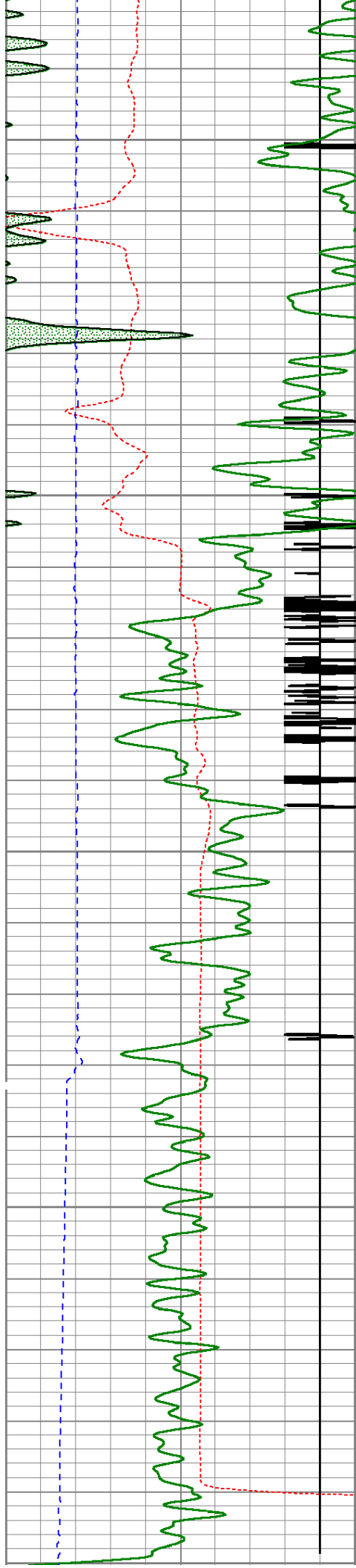




# Repeat Pass ( 0 ) PSI

Database File:	bc state_antelope_k_o_30hnb_cbl.db
Dataset Pathname:	pass3
Presentation Format:	cblprobe
Dataset Creation:	Wed Jul 31 15:09:04 2013 by Log SCH 120126
Charted by:	Depth in Feet scaled 1:240





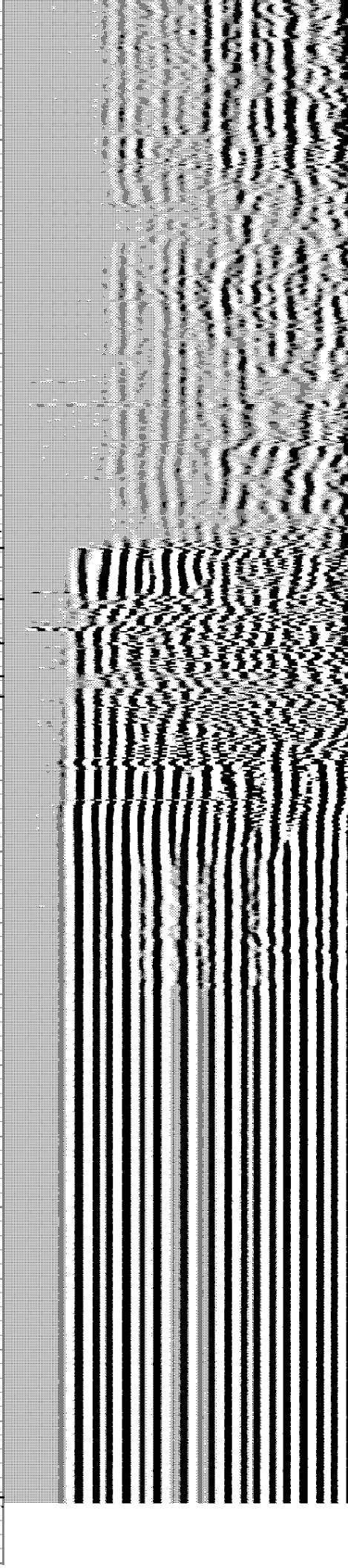
6600

6650

6700

6750

6800





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						

Calibration Report								
Database File:	bc state_antelope_k_o_30hnb_cbl.db							
Dataset Pathname:	pass6							
Dataset Creation:	Wed Jul 31 16:39:13 2013 by Calc SCH 120126							

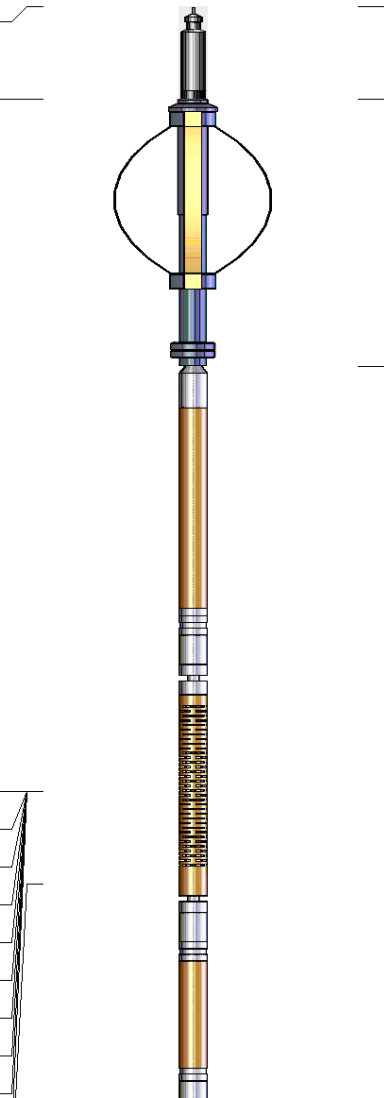
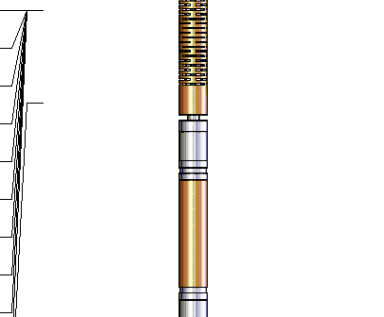
Gamma Ray Calibration Report								
Serial Number:	110108-Dig							
Tool Model:	Probe275							
Performed:	Wed Jul 10 19:14:22 2013							
Calibrator Value:	1.0	GAPI						
Background Reading:	0.0	cps						
Calibrator Reading:	1.0	cps						
Sensitivity:	0.8500	GAPI/cps						

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	1				

Segmented Cement Bond Log Calibration Report								
Serial Number:	101224							
Tool Model:	Probe							
Calibration Casing Diameter:	7.000	in						
Calibration Depth:	270.184	ft						

Master Calibration, performed Wed Jul 31 15:06:58 2013:								
	Raw (v)		Calibrated (mv)		Results			
	Zero	Cal	Zero	Cal	Gain	Offset		
3'	-0.004	0.622	0.600	62.165	88.998	2.975		
CAL	-0.012	0.660						
5'	-0.010	0.603	0.600	62.165	100.388	1.628		
SUM								
S1	0.002	0.672	0.000	100.000	149.462	-0.369		
S2	-0.007	0.597	0.000	100.000	165.482	1.164		
S3	-0.004	0.533	0.000	100.000	186.093	0.800		
S4	-0.009	0.534	0.000	100.000	184.289	1.593		
S5	-0.006	0.567	0.000	100.000	174.543	1.112		
S6	-0.011	0.626	0.000	100.000	157.004	1.784		
S7	-0.007	0.670	0.000	100.000	147.683	1.015		

S7	0.007	0.000	0.000	100.000	147.000	1.010
S8	-0.006	0.687	0.000	100.000	144.347	0.899
Internal Reference Calibration, performed Wed Jul 10 20:06:34 2013:						
	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.012	0.660	1.000	0.000
Air Zero Calibration, performed Wed Jul 31 10:05:51 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)
CHD	20.28		Titan Cable_head	1.00	1.44	10.00
CENT	19.28		Probe275 2.75" Centralizer	2.88	2.75	20.00
WVFS3FT	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					
CENT	7.66		Probe275 2.75" Centralizer	2.88	2.75	20.00
GR	4.78					
TEMP	4.00					
CCL	3.88					
GR	2.54	GR-Probe275 (110108-Dig) Probe 2 3/4" Logging Gamma Ray	4.78	2.75	57.00	
Dataset: bc state_antelope_k_o_30hnb_cbl.db: field/well/run1/pass6						
Total Length: 20.28 ft						
Total Weight: 197.00 lb						
O.D. 2.75 in						