



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

Company	Bonanza Creek Energy	Company	Bonanza Creek Energy	Location:	API # : 05-123-36836	Other Services
Well	Antelope K-O-18 HNB	Well	Antelope K-O-18 HNB	SEC 18 TWP 5 N RGE 62 W	624' FNL & 1278' FWL	None
Field	Wattenberg	Field	Wattenberg			
County	Weld	County	Weld			
State	Colorado	State	Colorado			
Date	18-April-2013	Permanent Datum	Ground Level	Elevation	4614'	Elevation
Run Number	One	Log Measured From	Kelly Bushing	15' APD		K.B. 4629'
Depth Driller	11104'	Drilling Measured From	Kelly Bushing			D.F. 4628'
Depth Logger	6754'					G.L. 4614'
Bottom Logged Interval	6719'					
Top Log Interval	Surface					
Open Hole Size	8 3/4"					
Type Fluid	Water					
Density / Viscosity	-					
Max. Recorded Temp.	-					
Estimated Cement Top	NA					
Time Well Ready	1300					
Time Logger on Bottom	1345					
Equipment Number	12029					
Location	Brighton, CO					
Recorded By	R.Grissom					
Witnessed By	Kurt Dodge					
Run Number	1	Bit	From	To	Size	Weight
2	13.5"	Surface	410'			
3	8.75"	410'	6920'			
	6.125"	6920'	11256'			
Casing Record	Size	Wgt/Ft	Top	Bottom		
Surface String	9 5/8"	36#	Surface	410'		
Prot. String						
Production String	7"	26#	Surface	6920'		
Liner	4.5"	11 6#	6820'	11104'		
Short Joint						

<<< 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

Well logged using 15' KB

Main Pass and Repeat Pass logged with zero pressure on wellbore.

Your Crew Today. R.Grissom, C.Rall, C.Medina

Thank You for using Allied Wireline

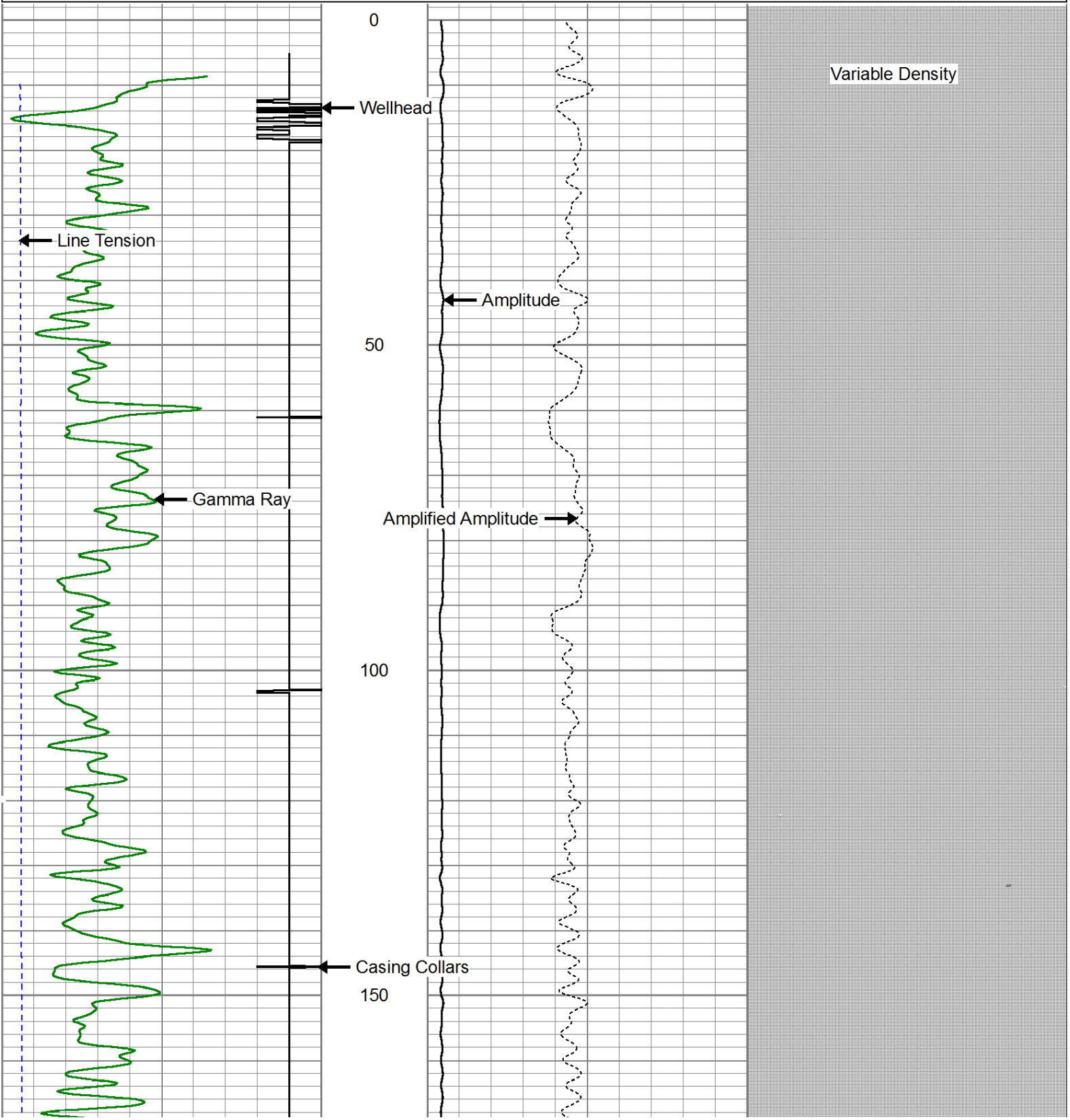
(303) 659-4609

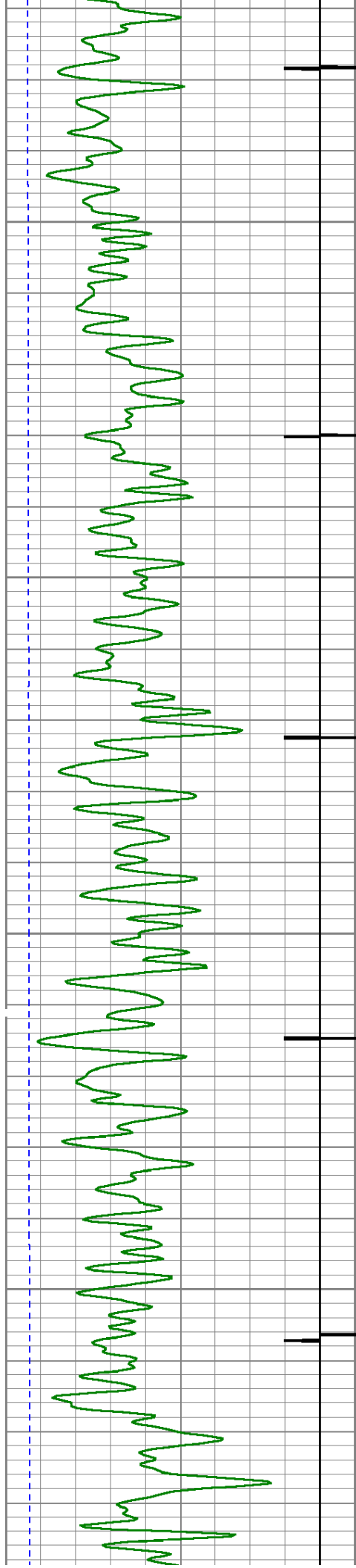


Main Pass (0 PSI)

Database File: bonanza_creek_antelope_k_o_18_hnb_cbl.db
Dataset Pathname: pass6
Presentation Format: cblprobe
Dataset Creation: Thu Apr 18 16:04:43 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						



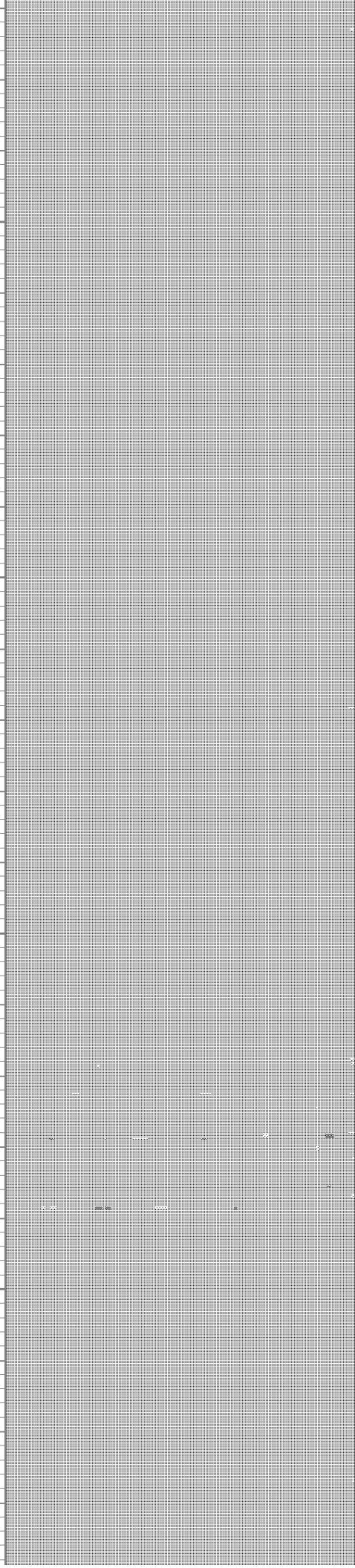
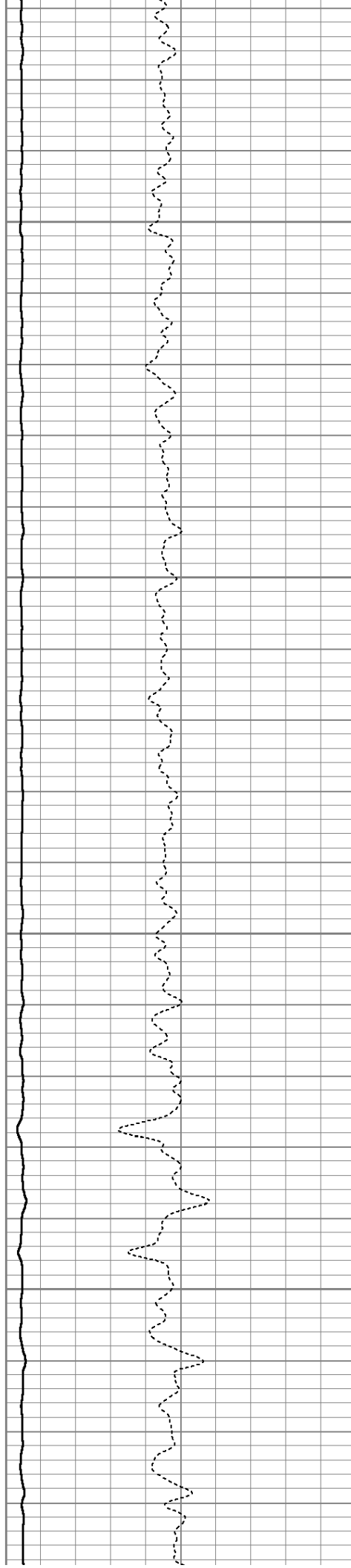


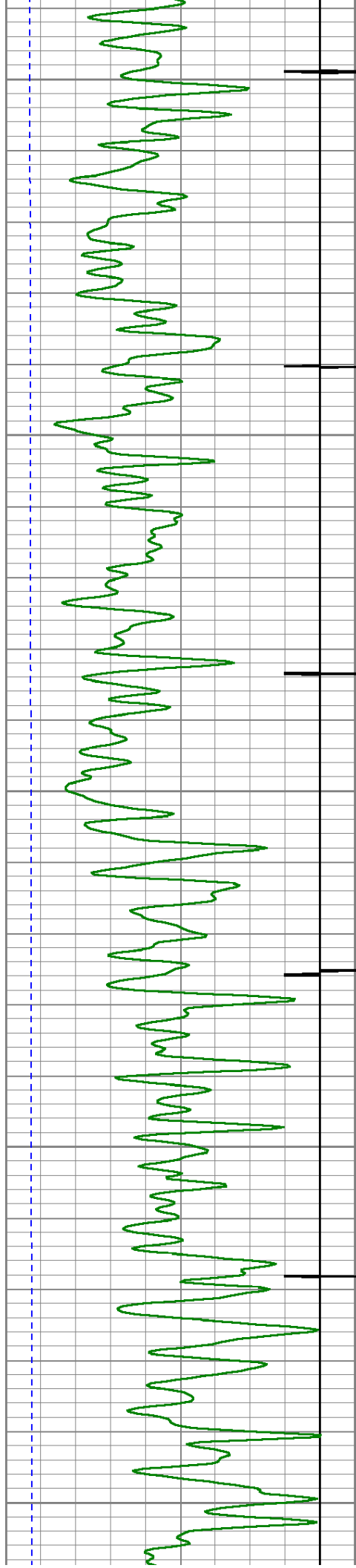
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250

300

350





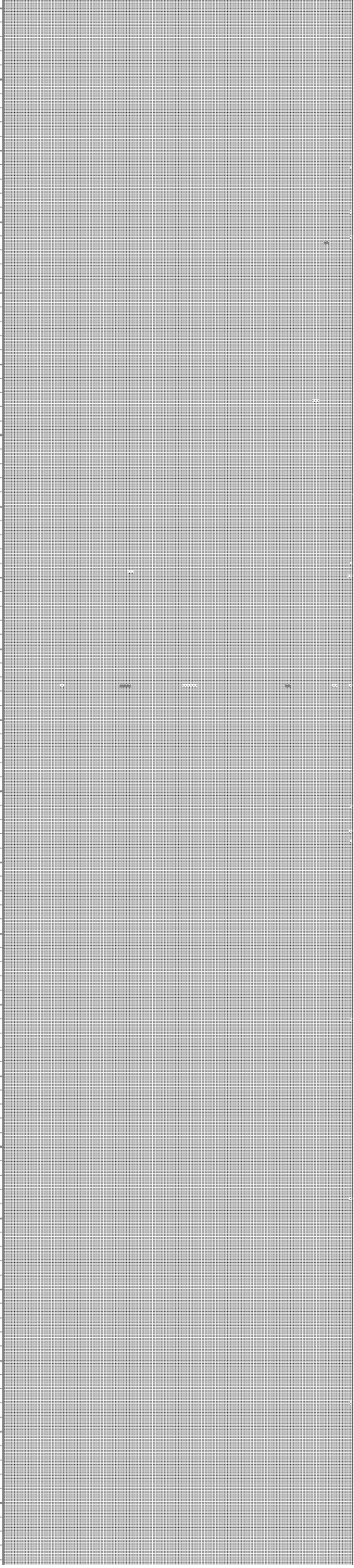
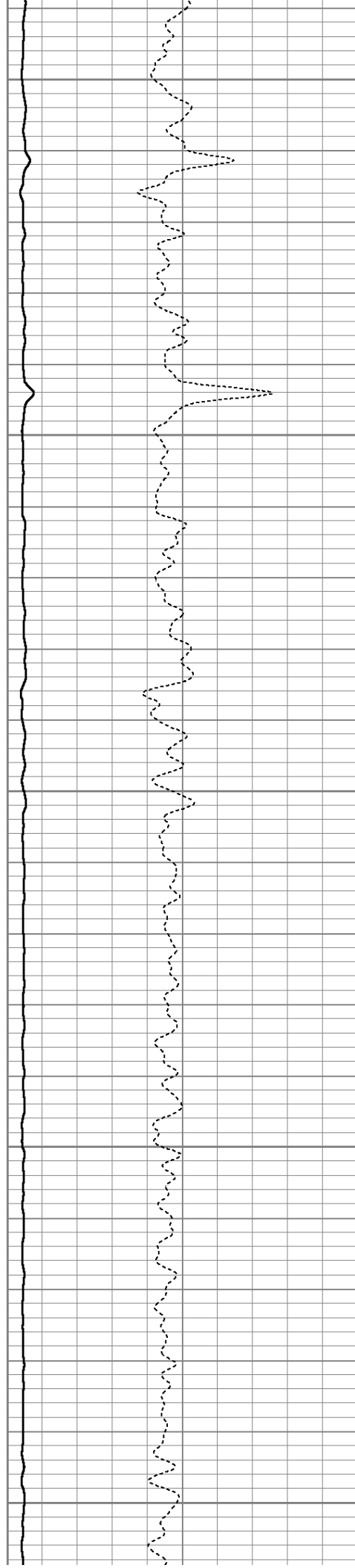
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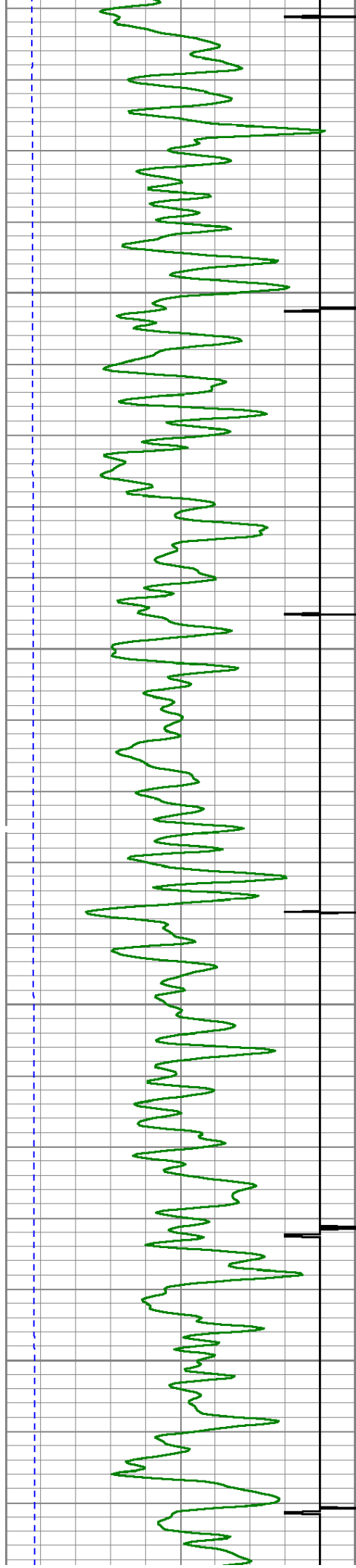
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500

550

600



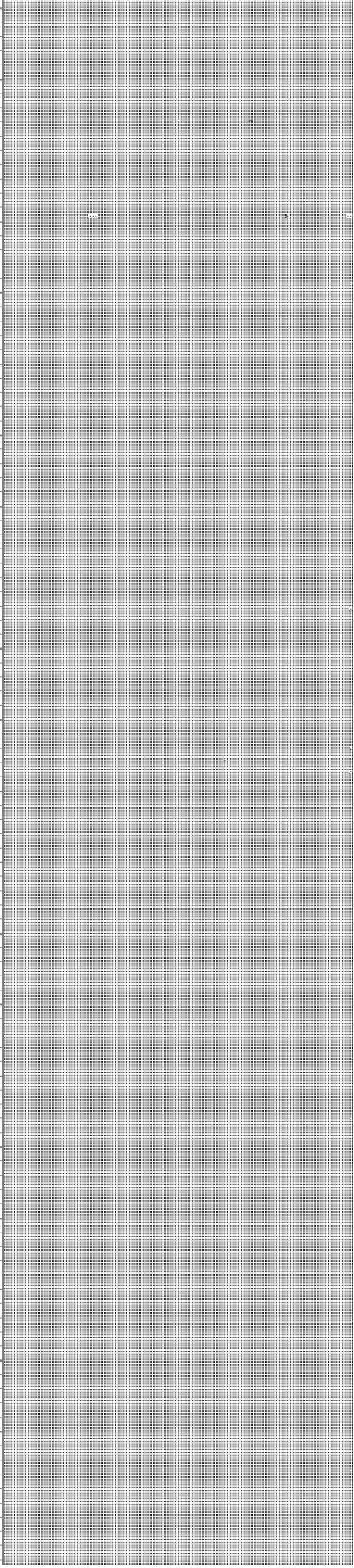
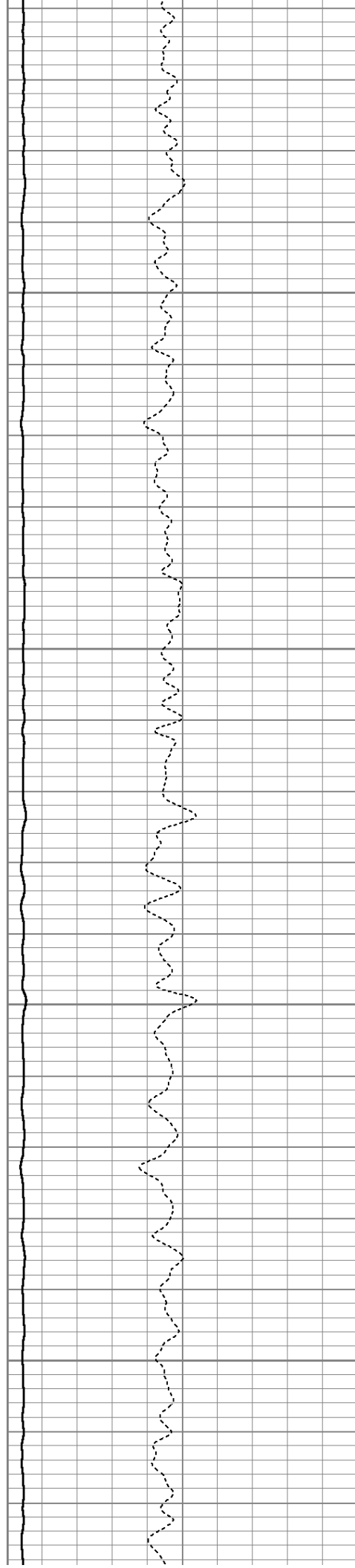


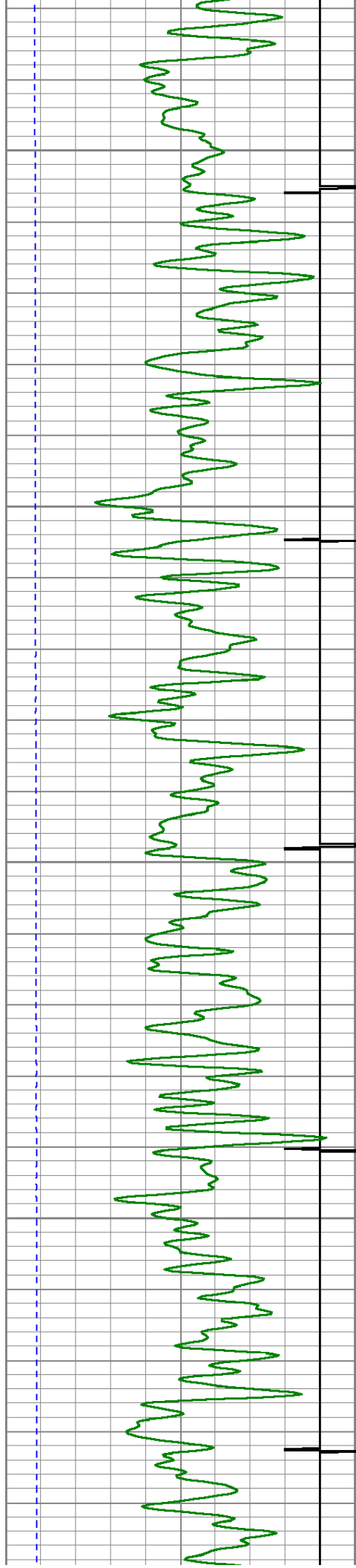
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750

800



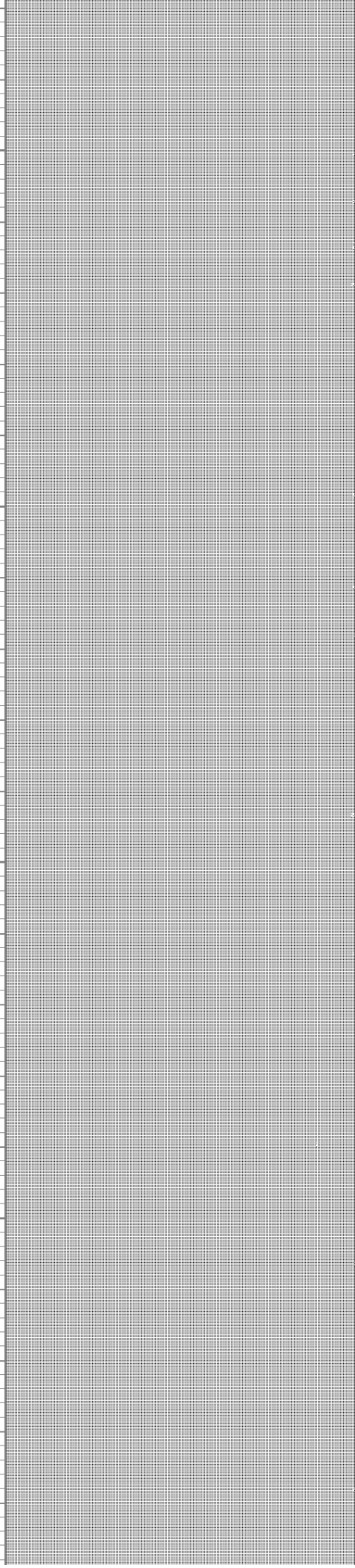
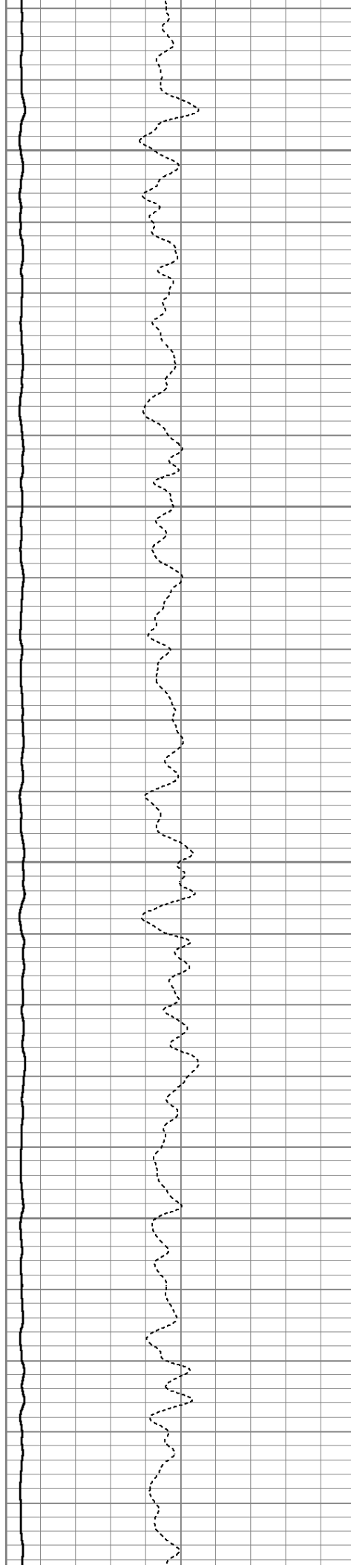


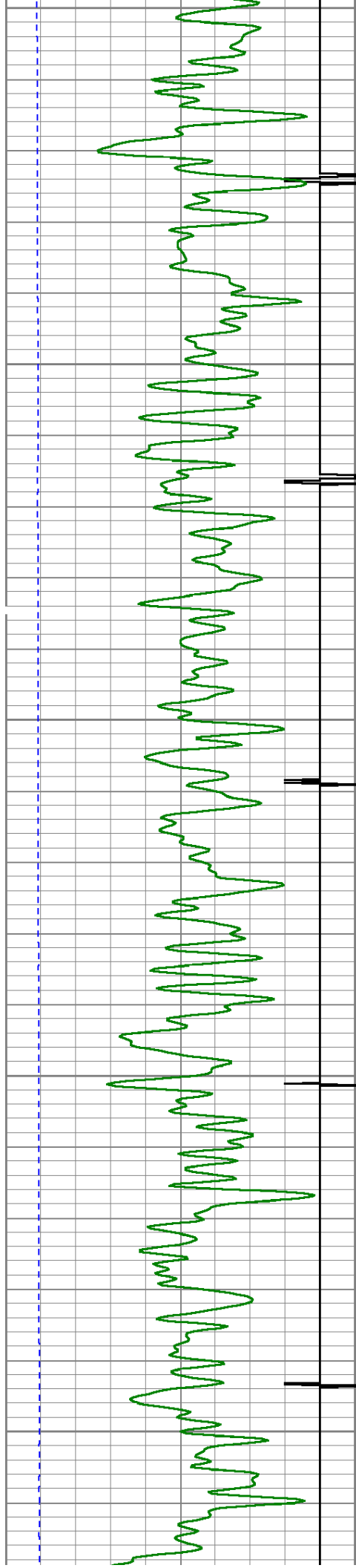
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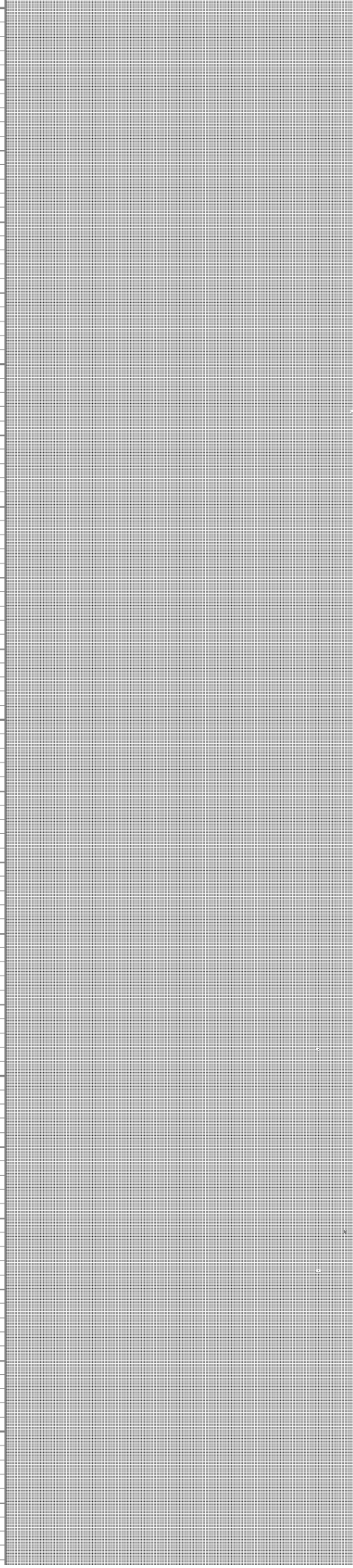
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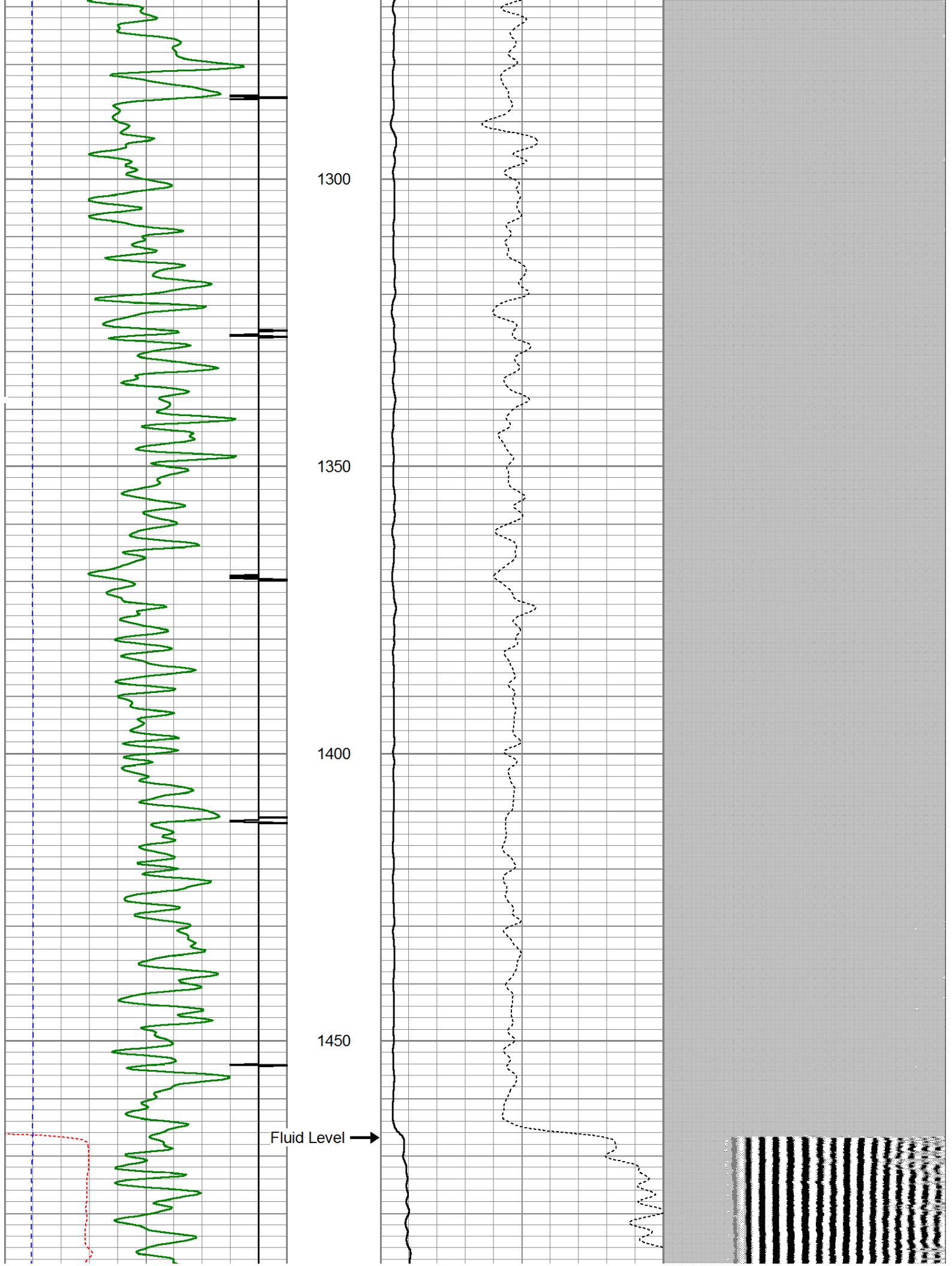
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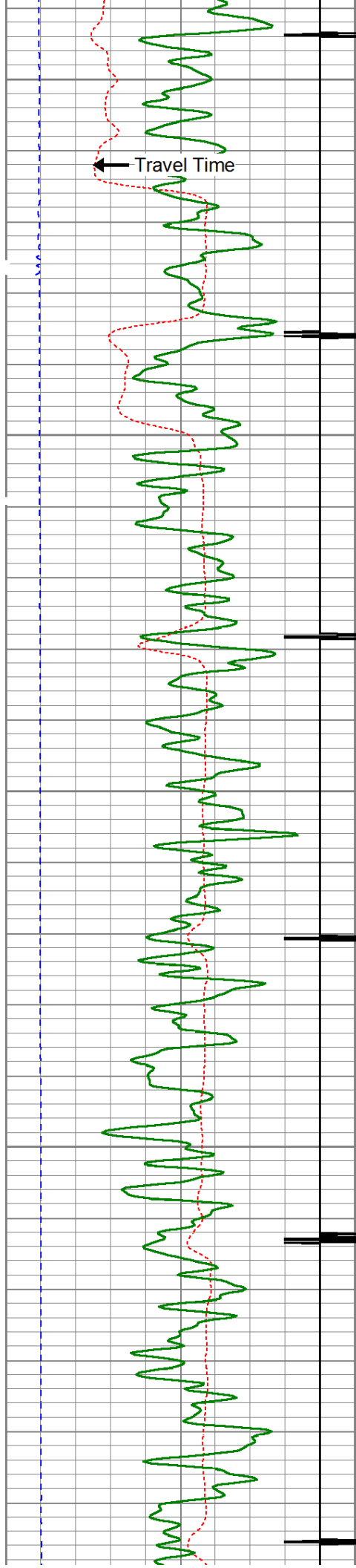
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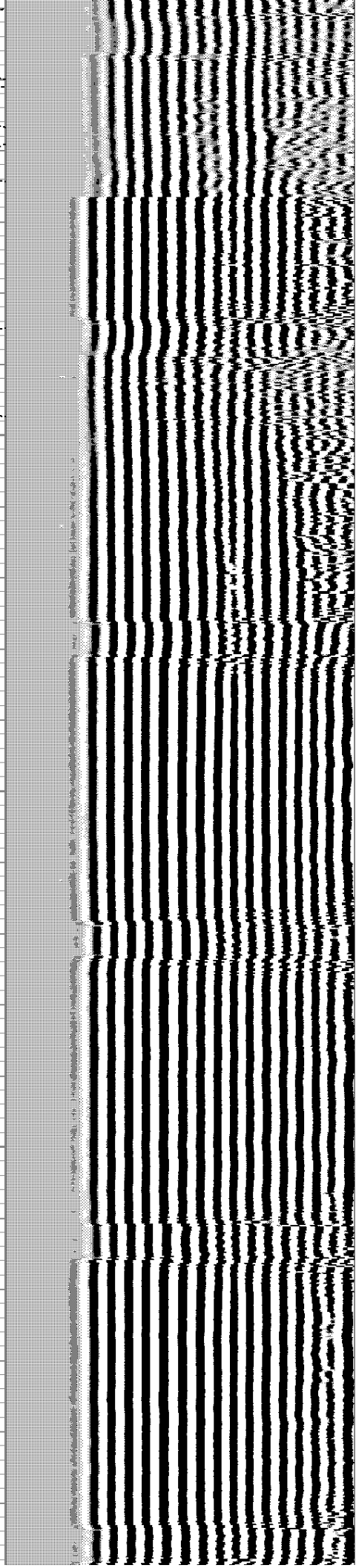
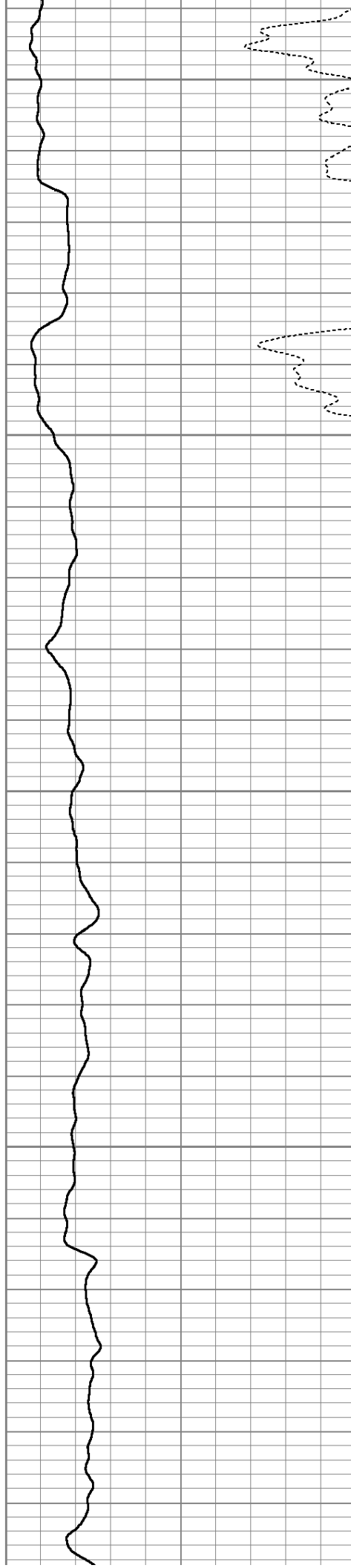
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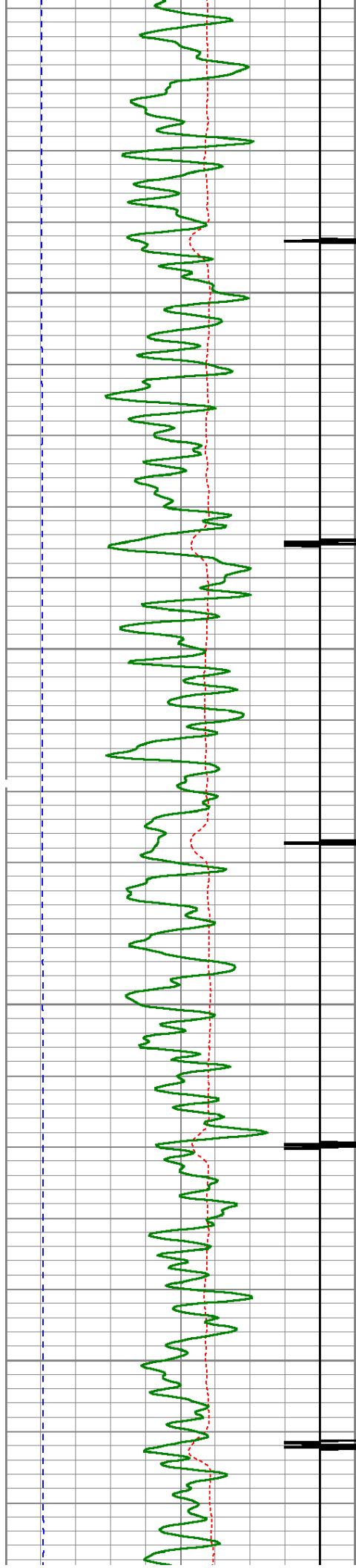
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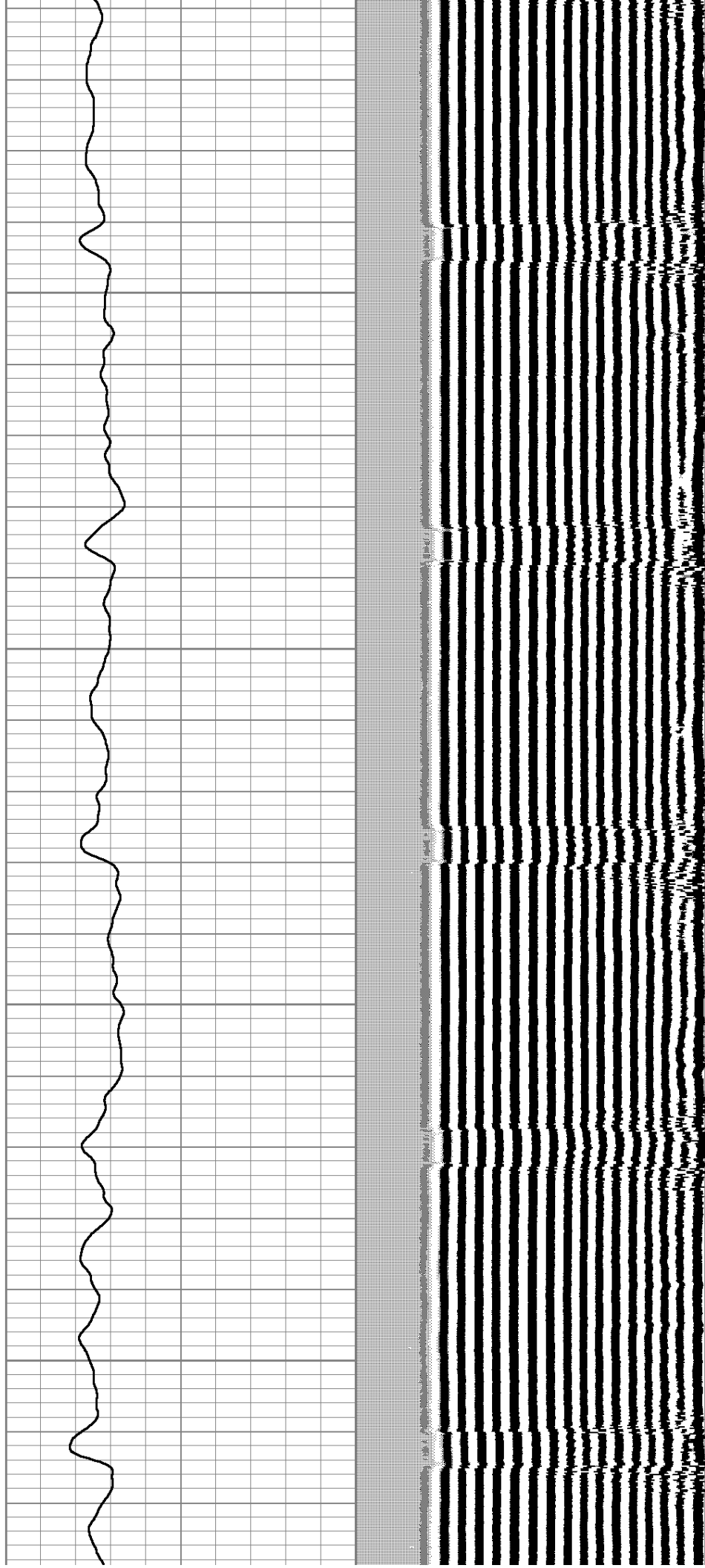


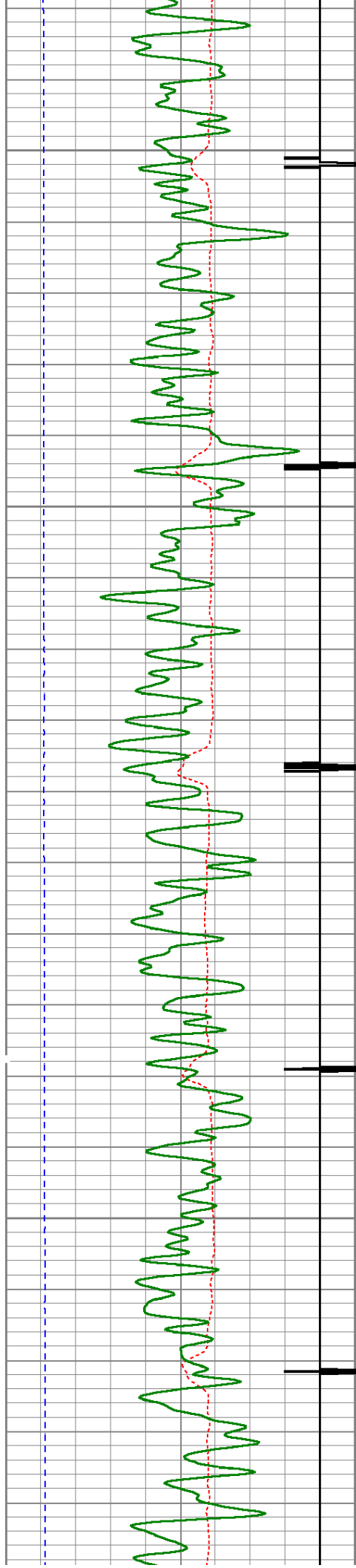
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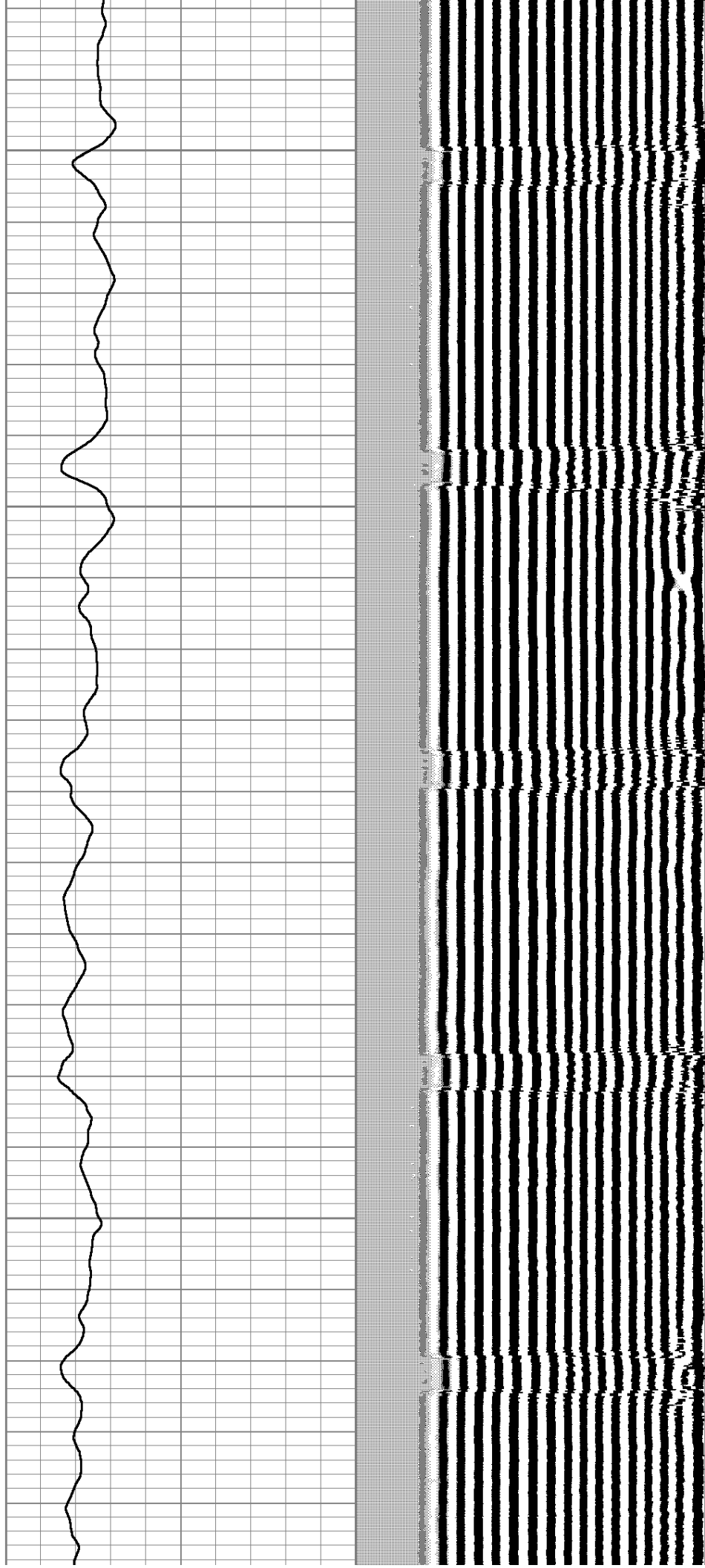


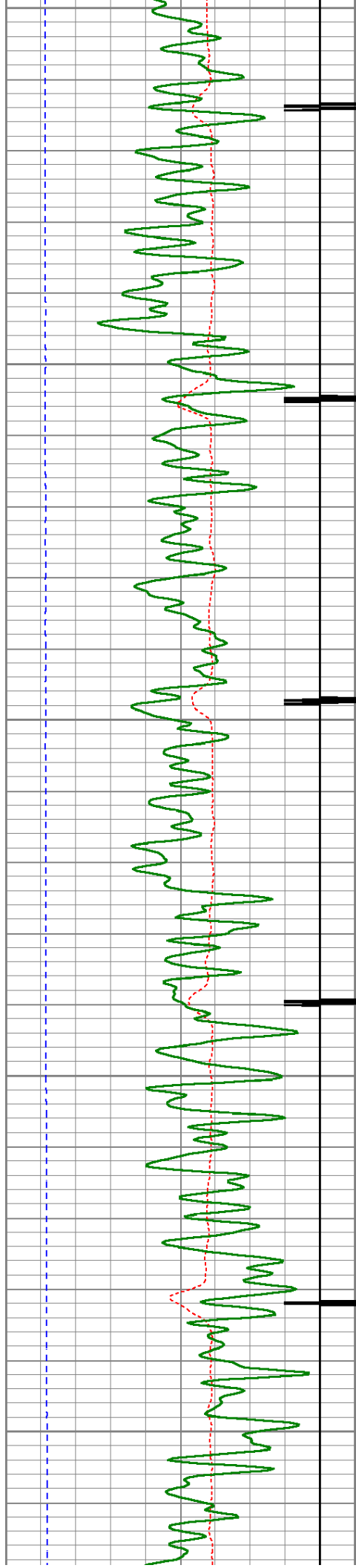
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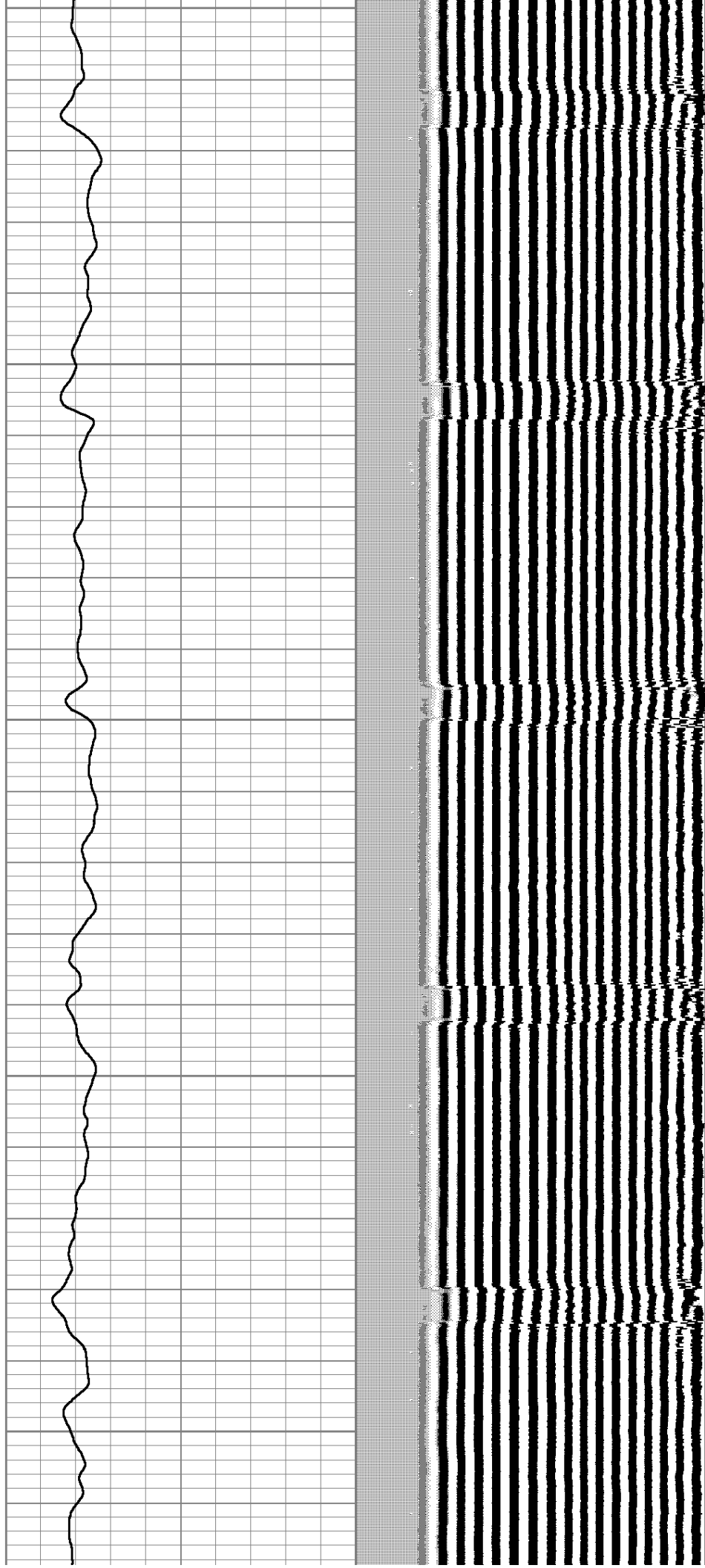
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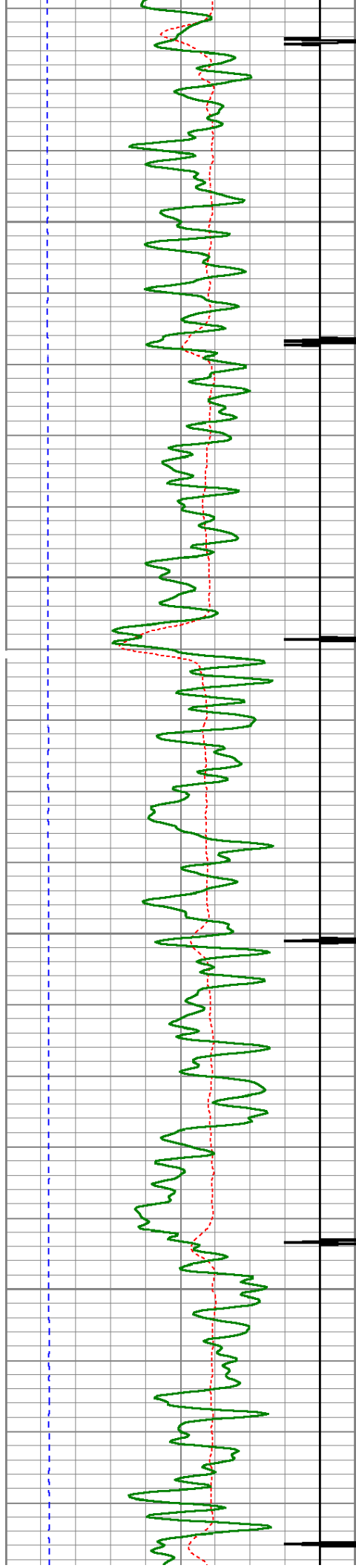
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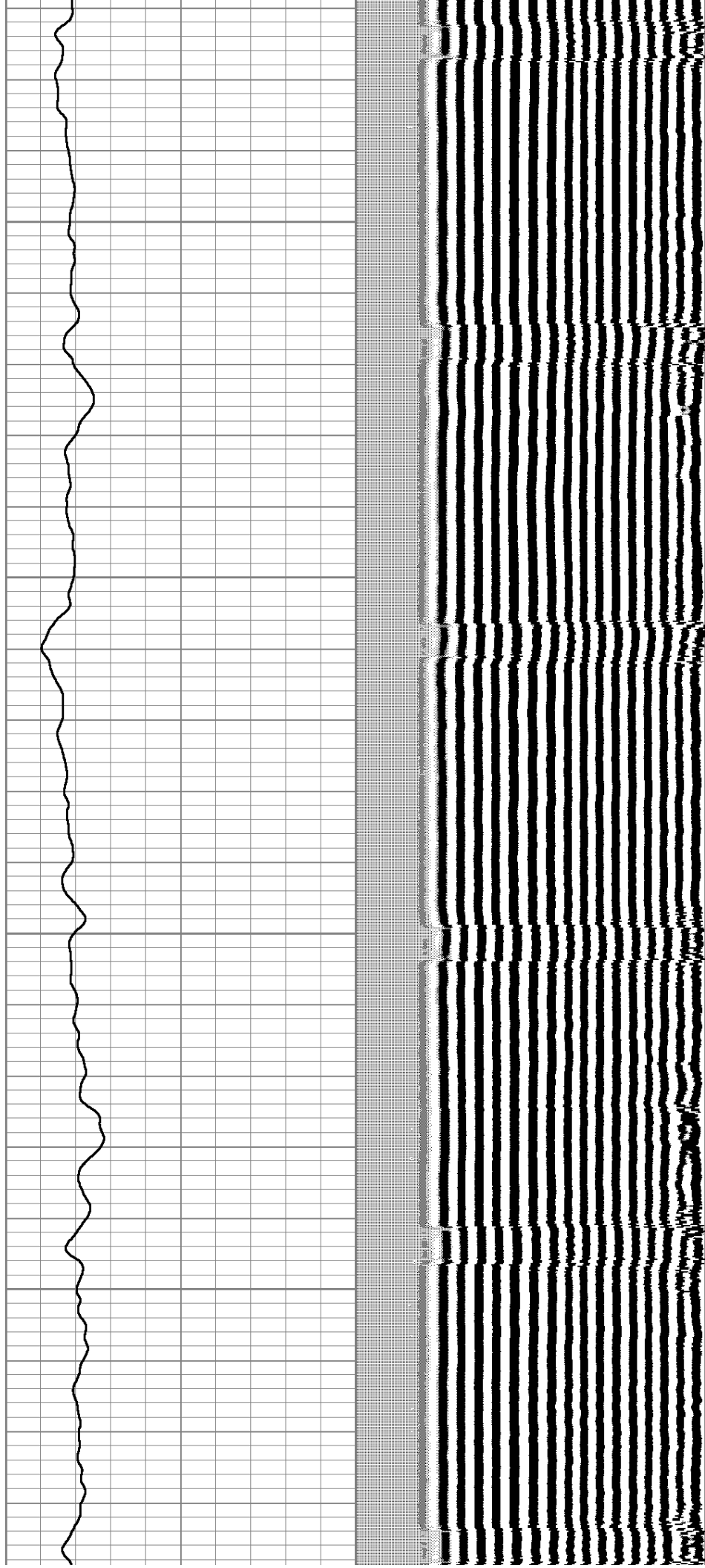


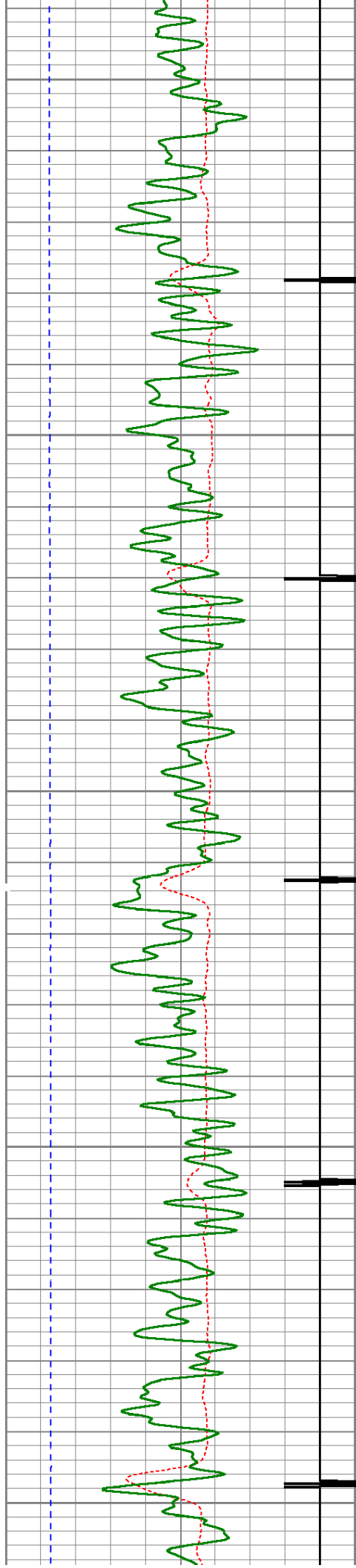
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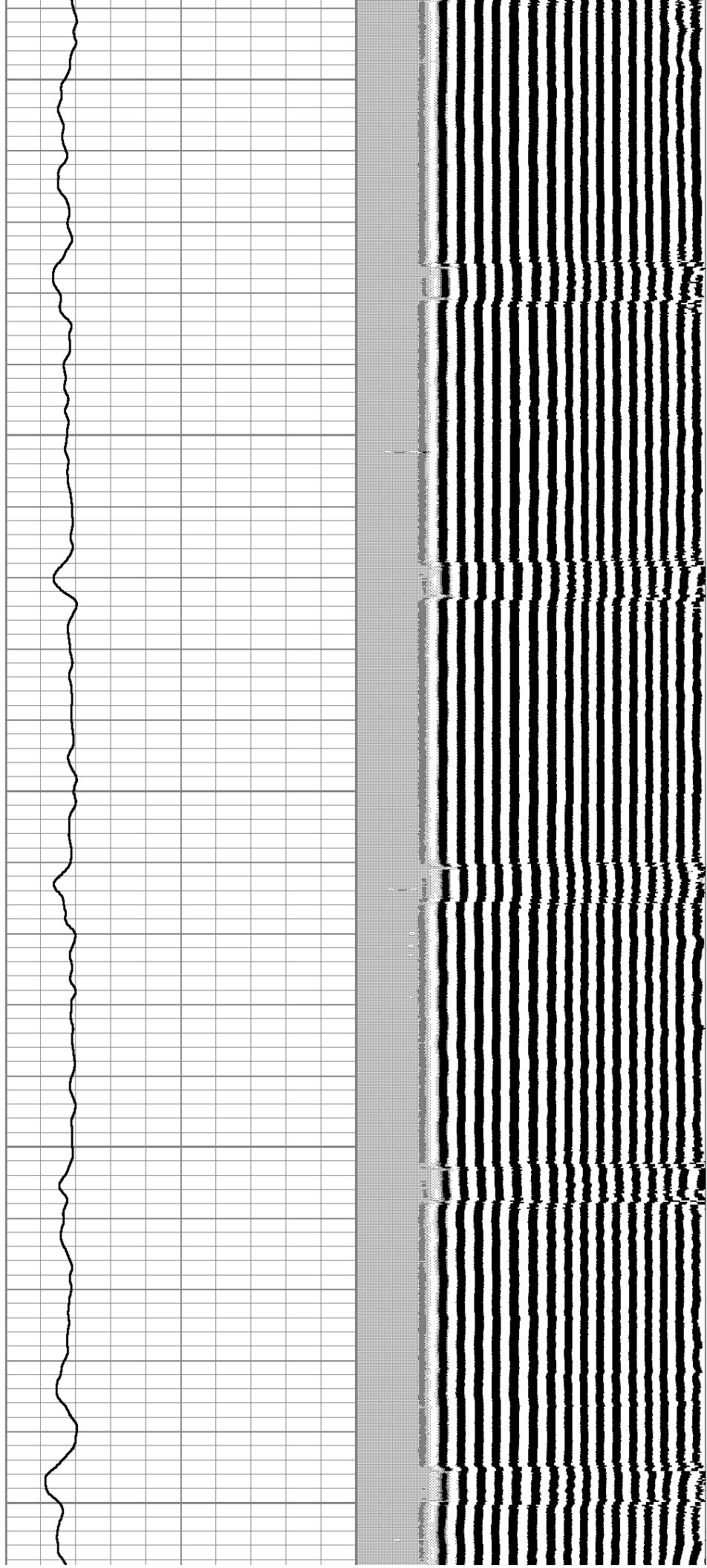
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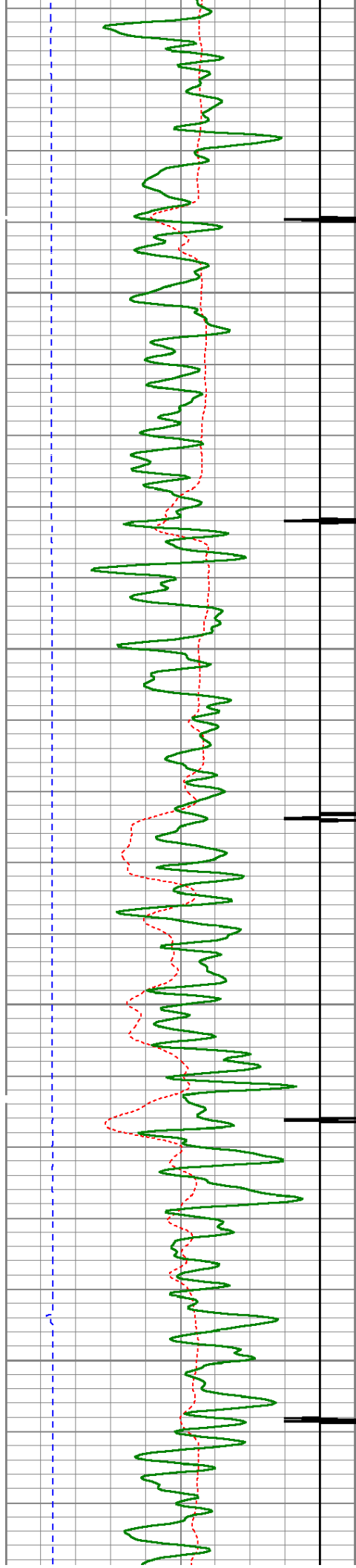
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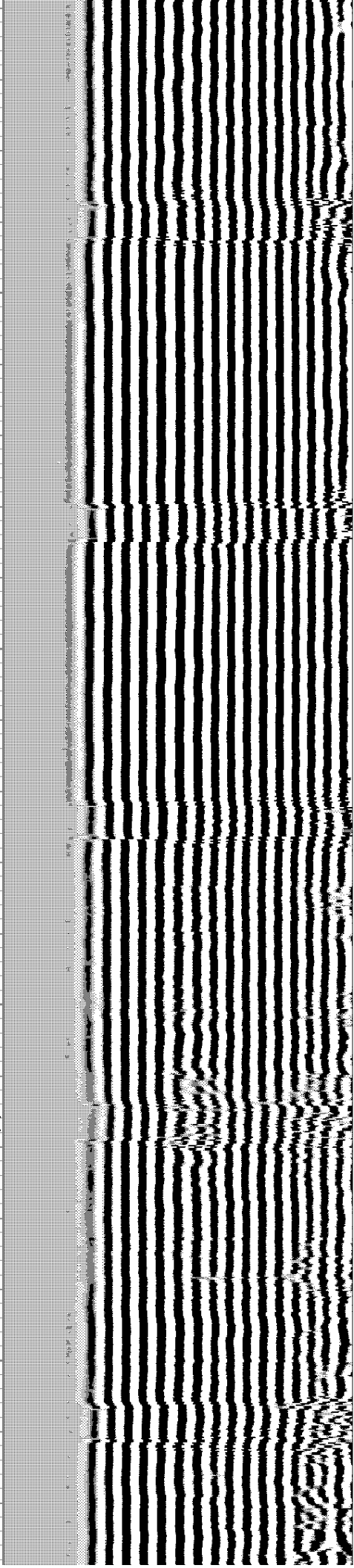
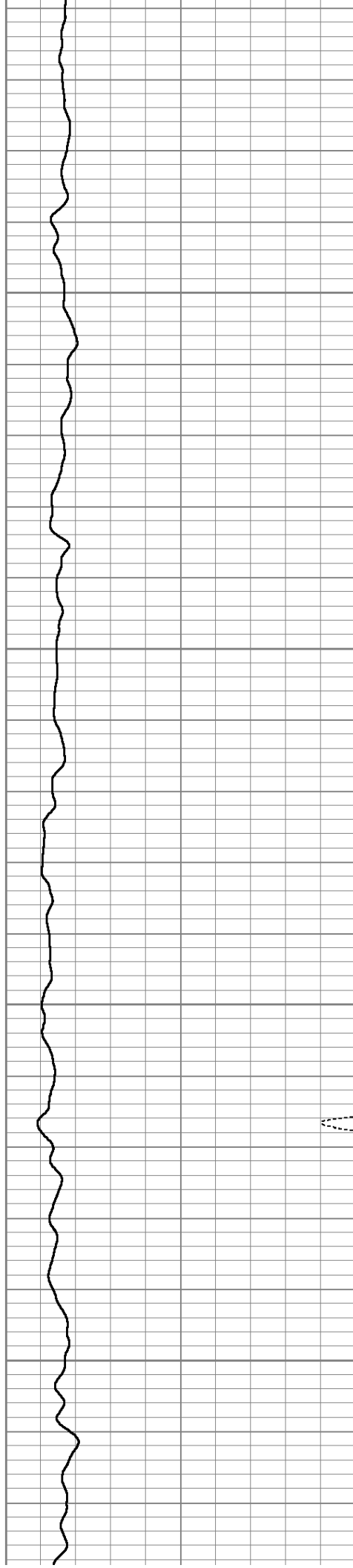


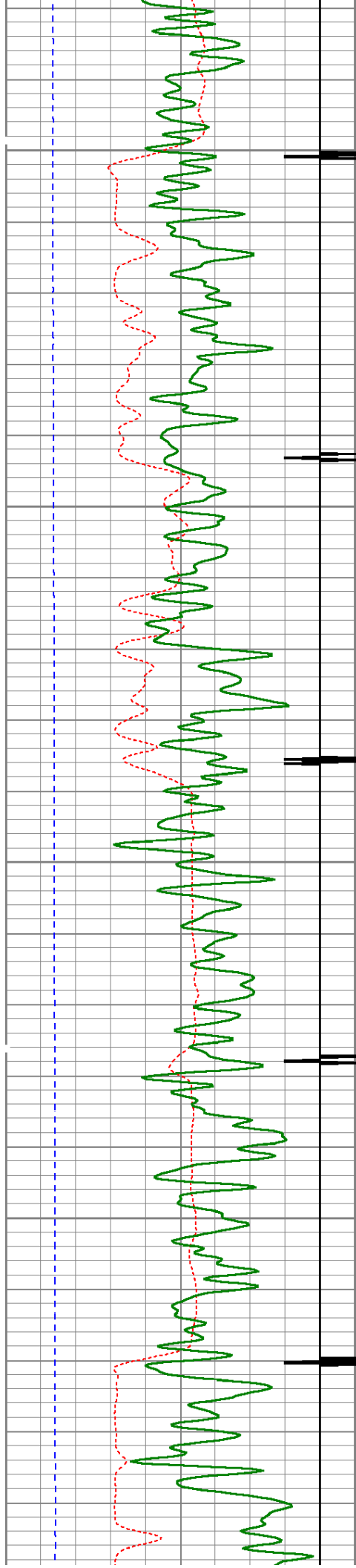
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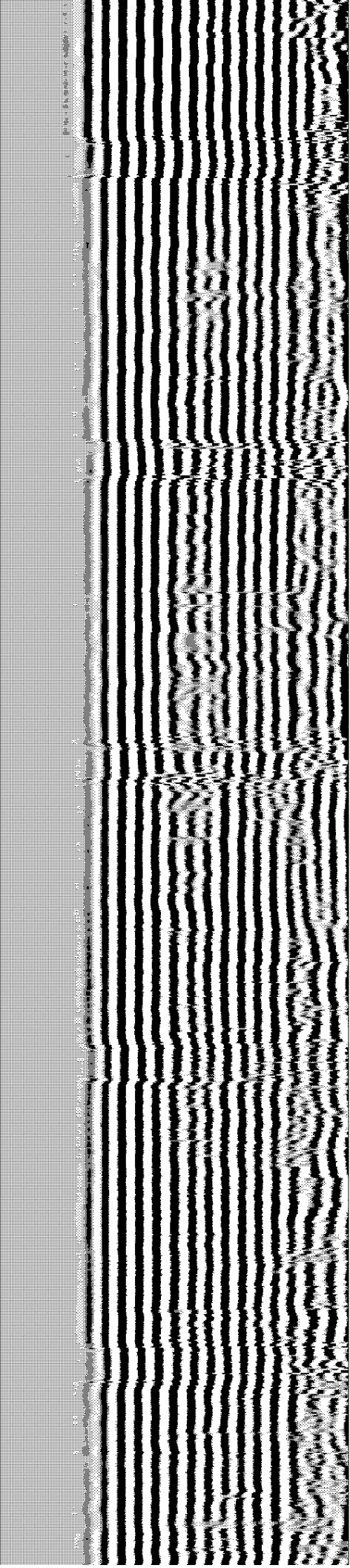
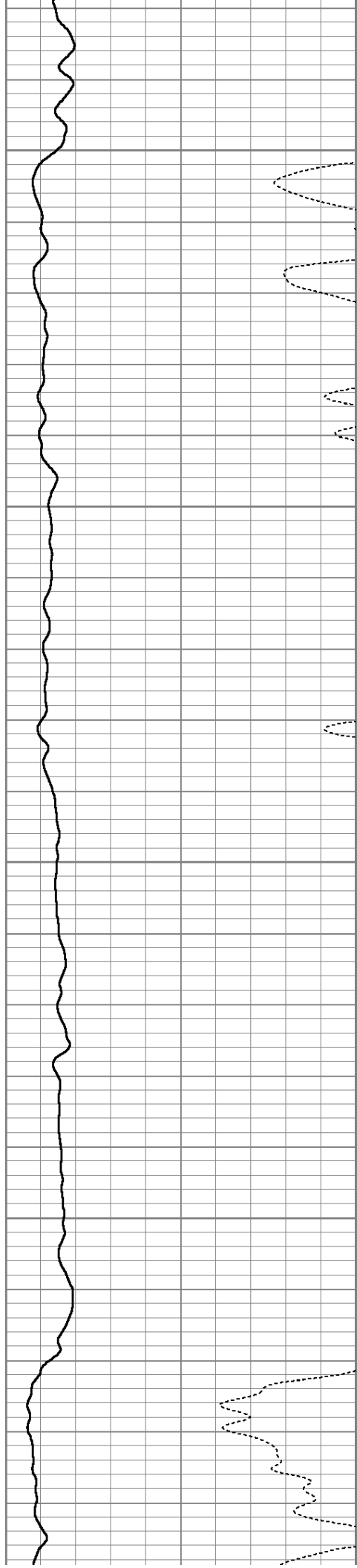


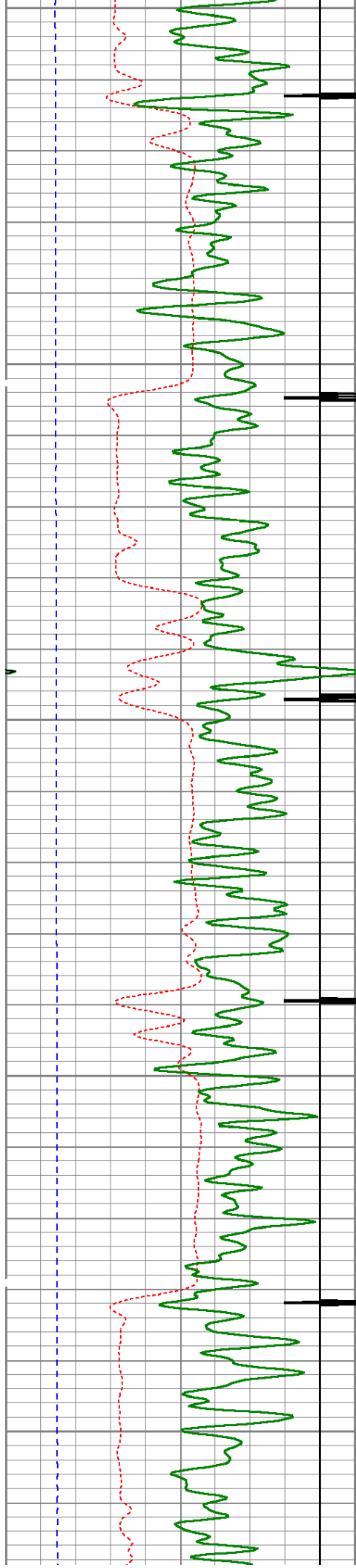
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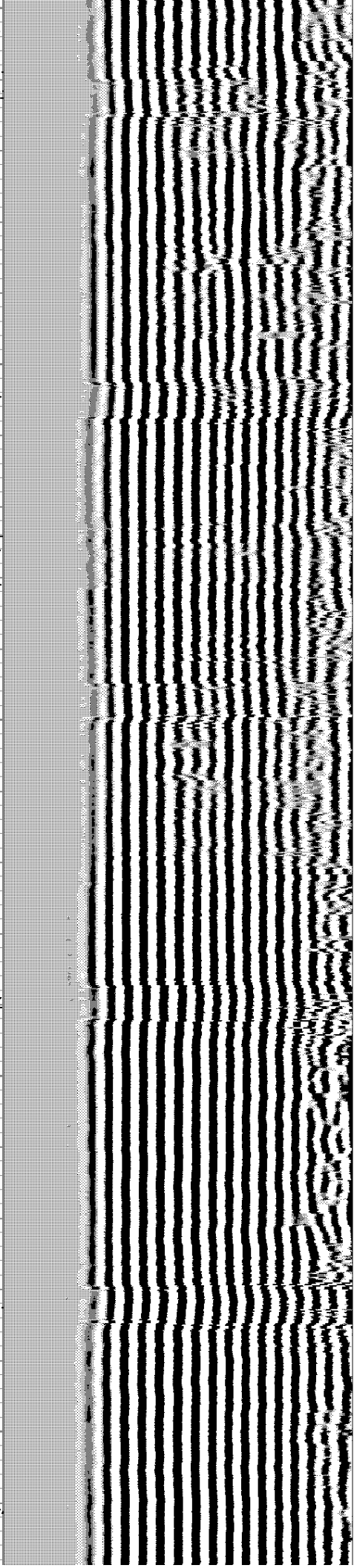
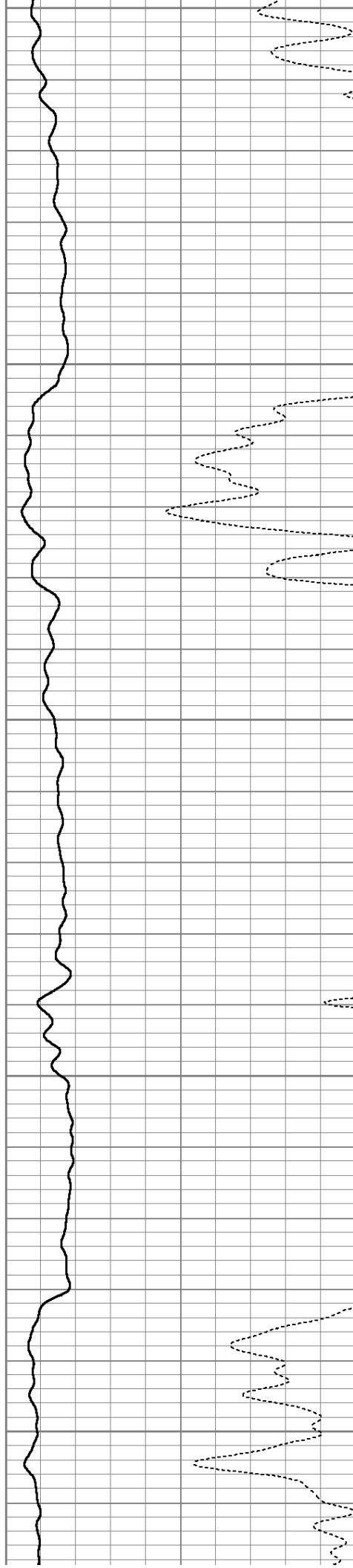
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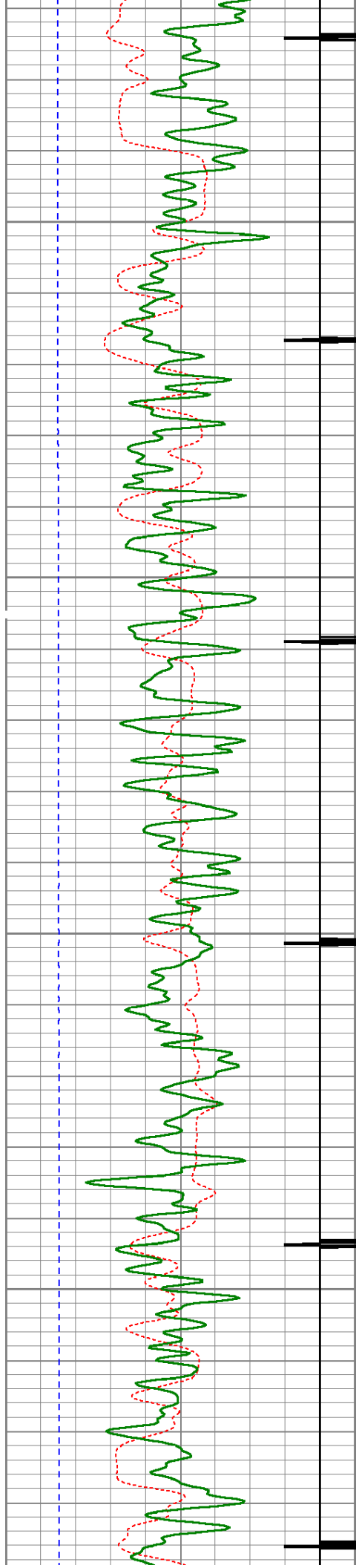
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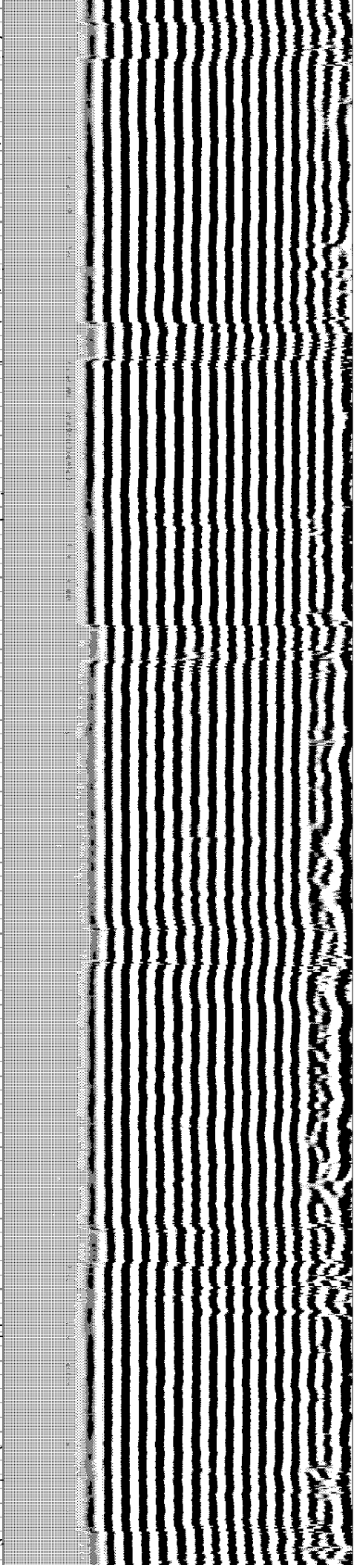
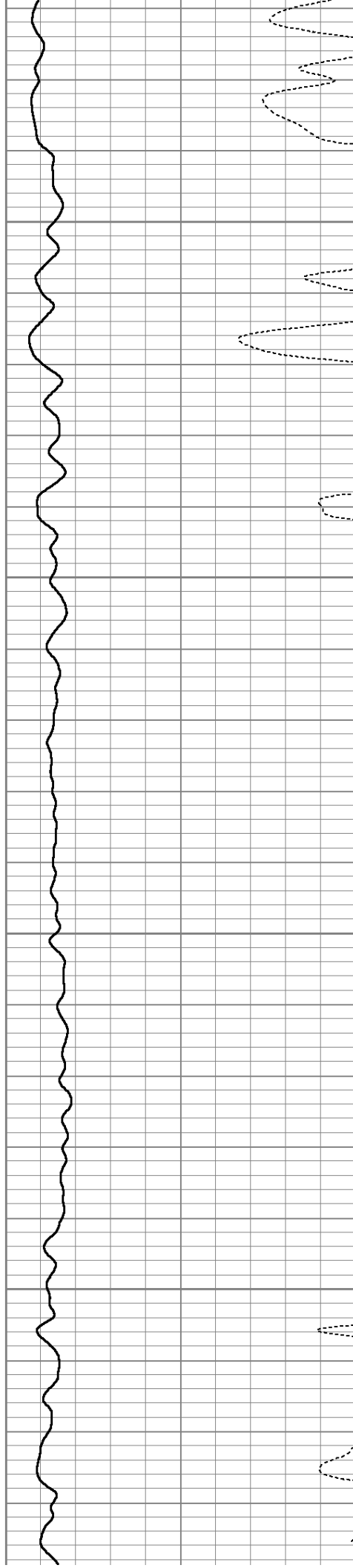


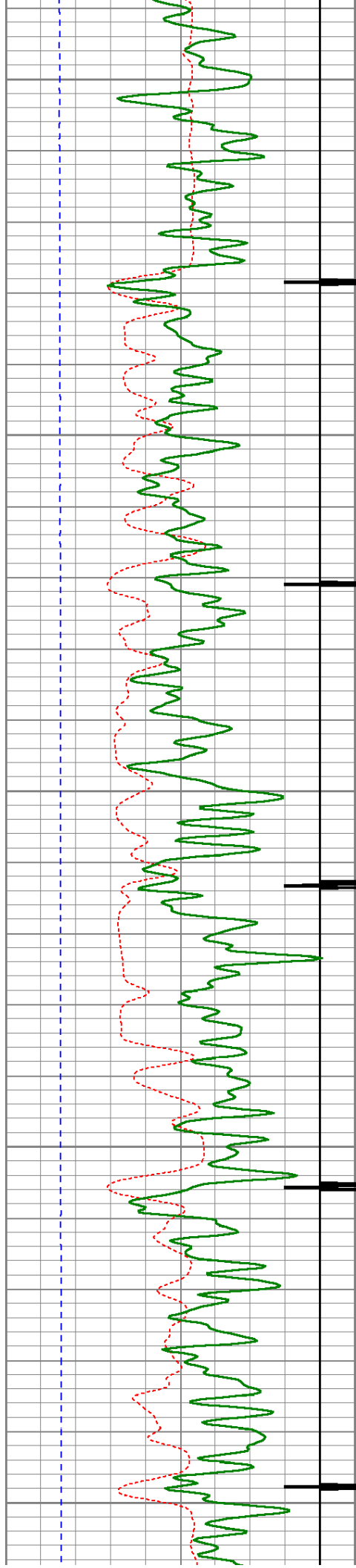
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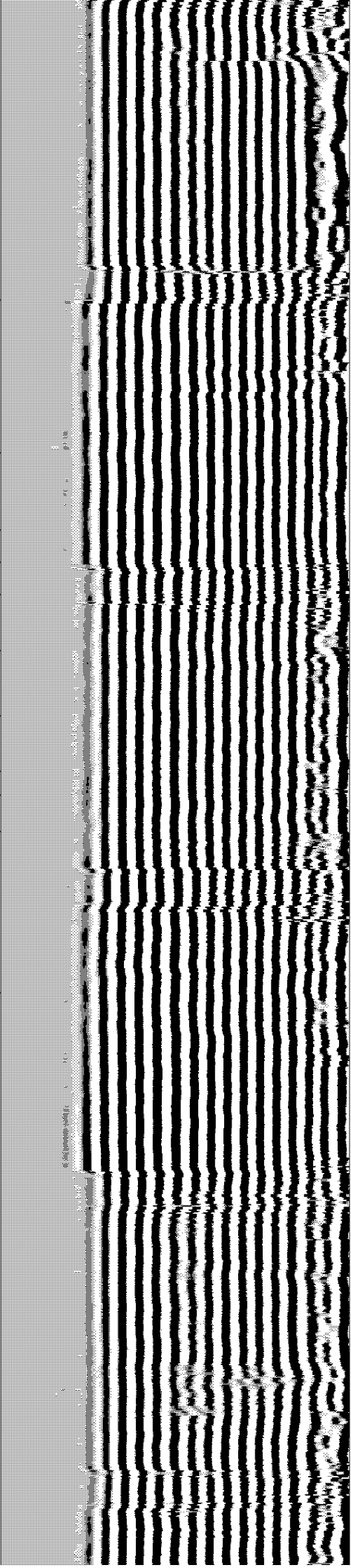
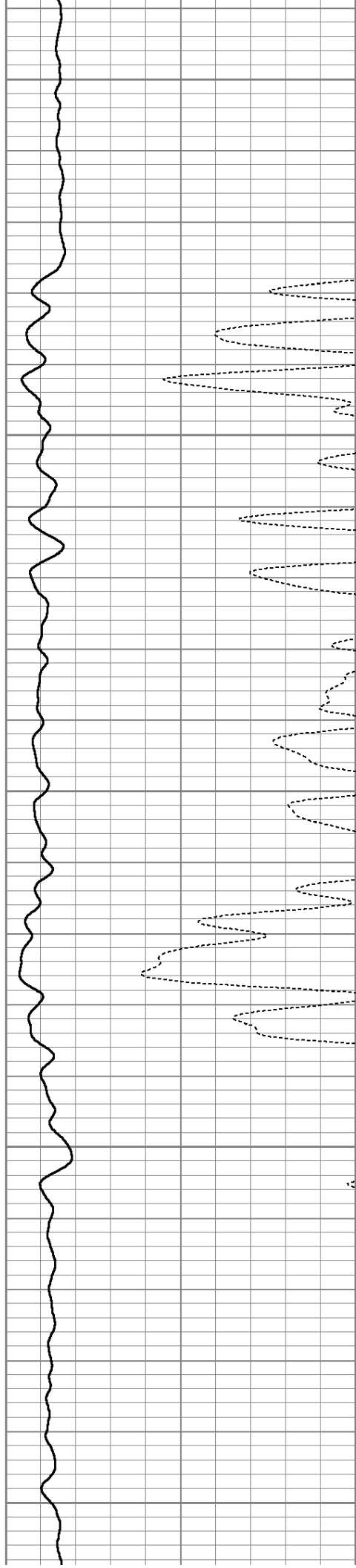
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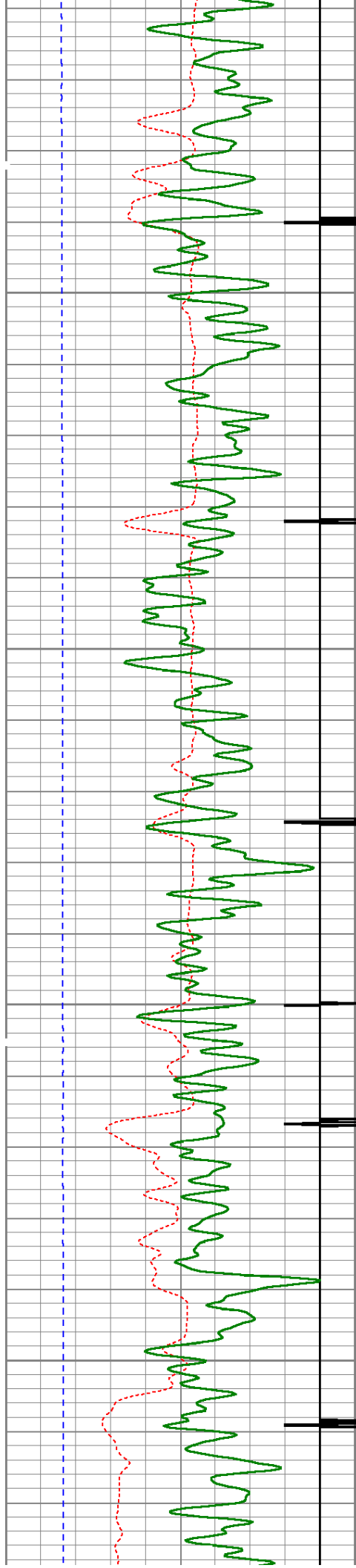
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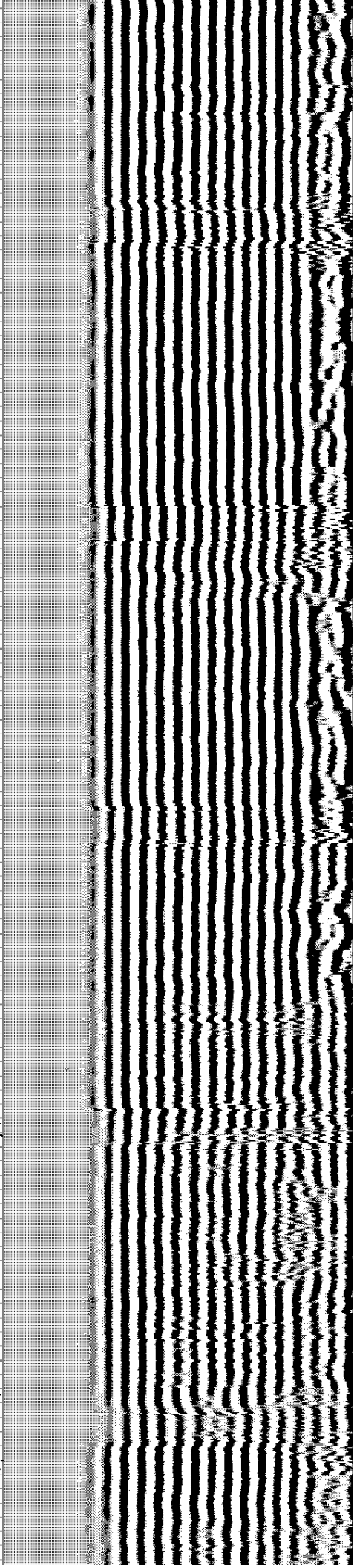
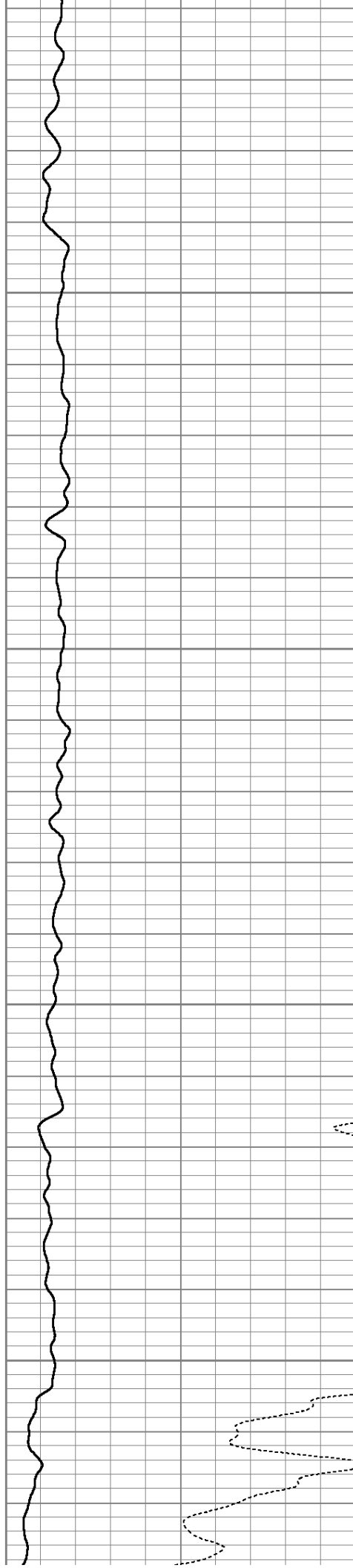


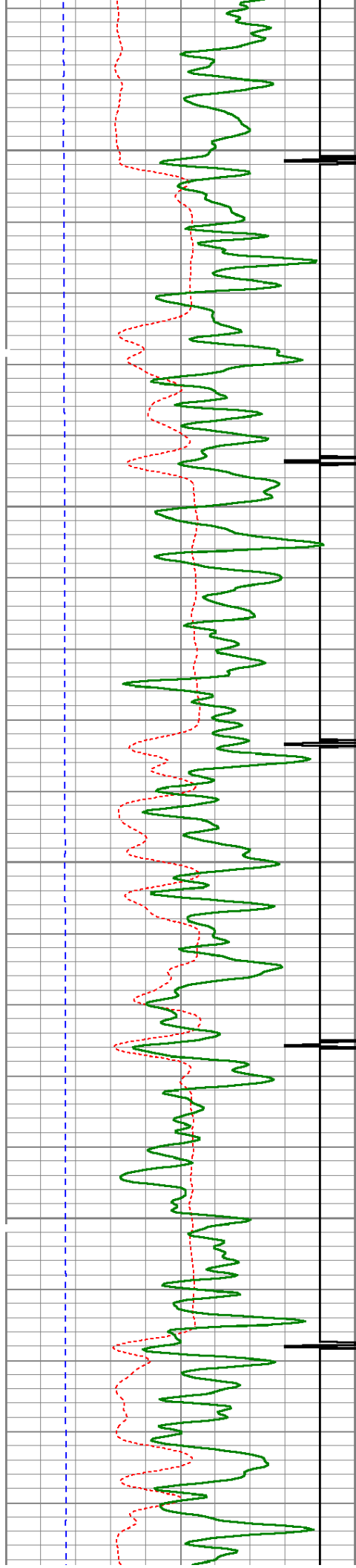
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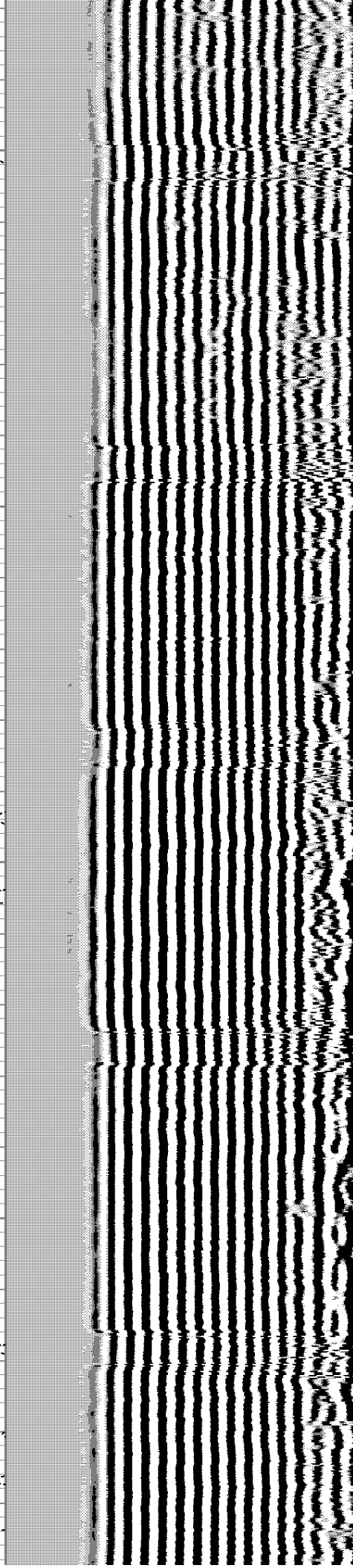
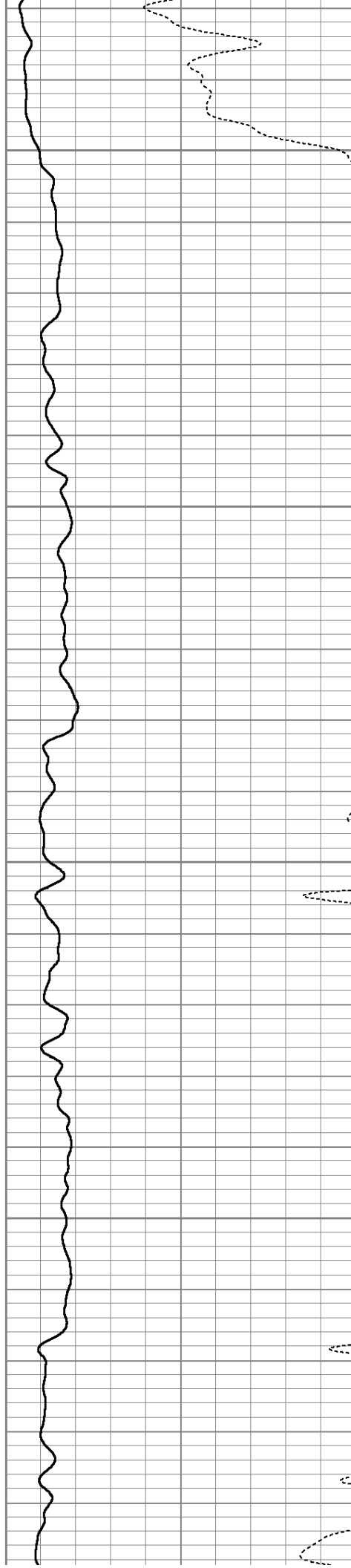


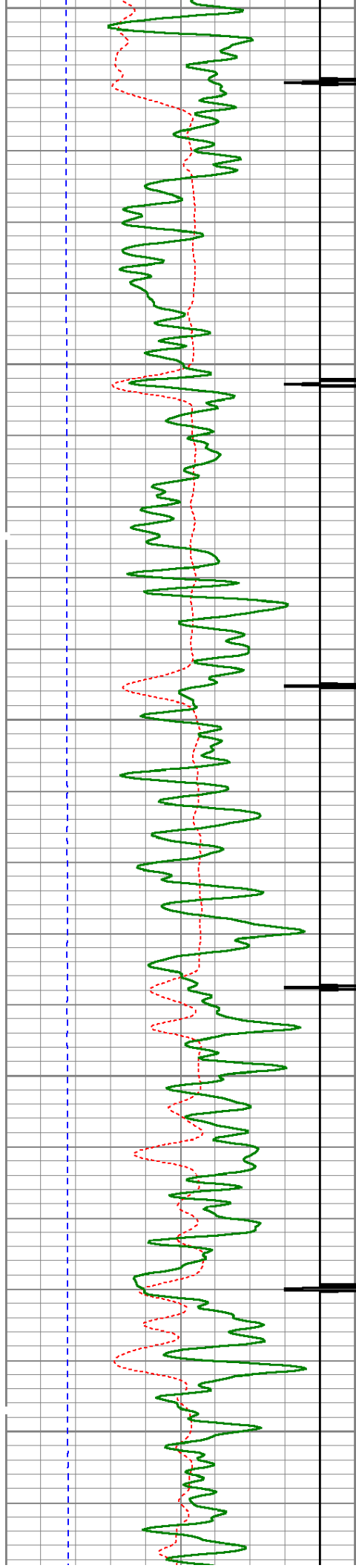
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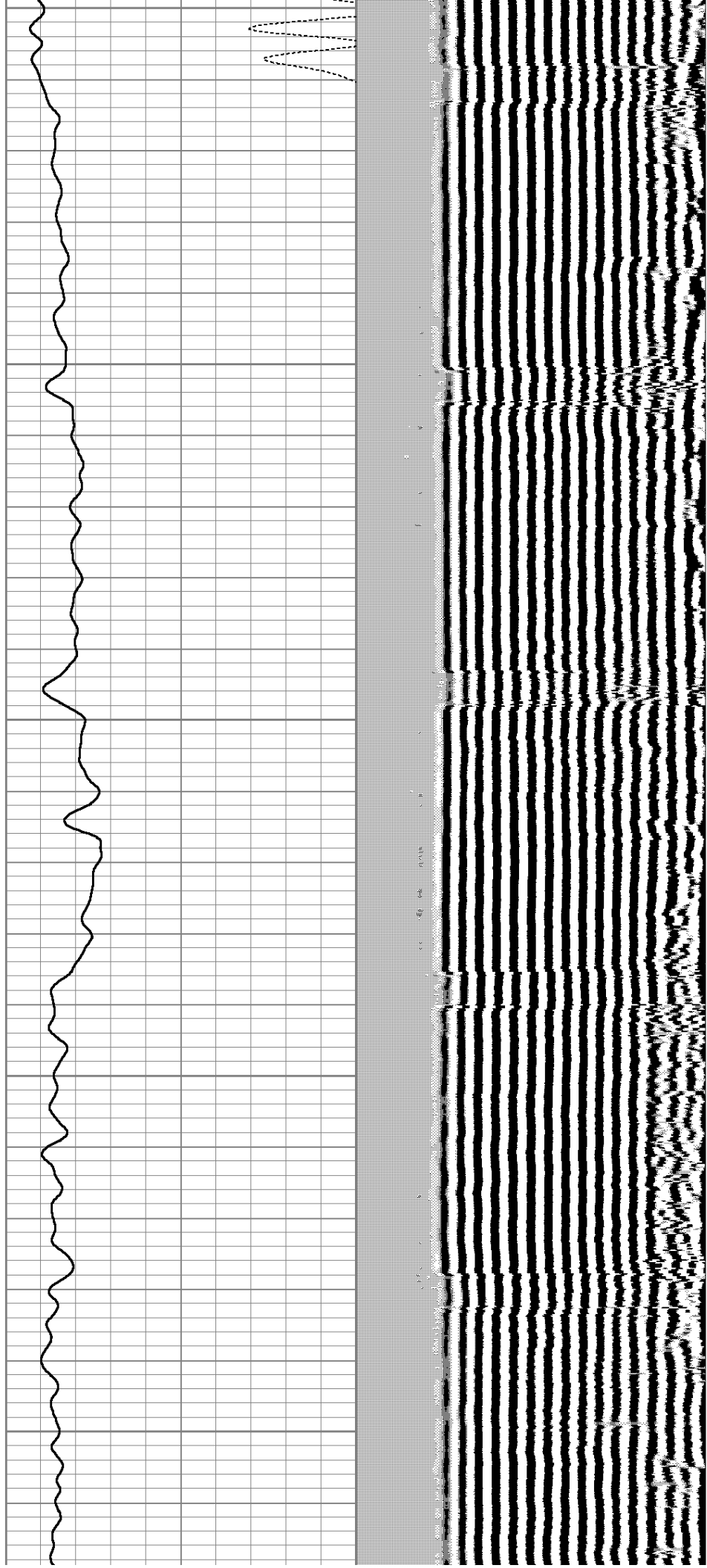
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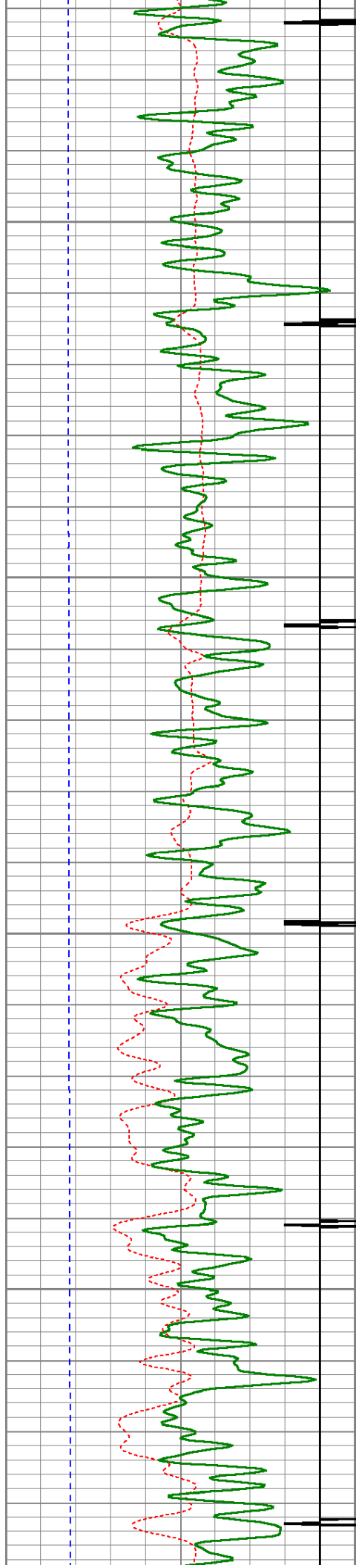
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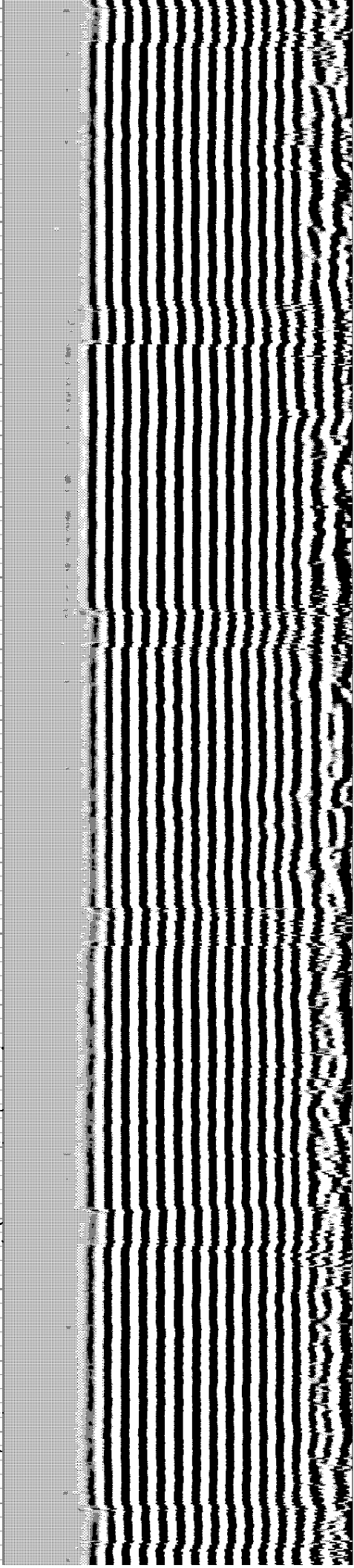
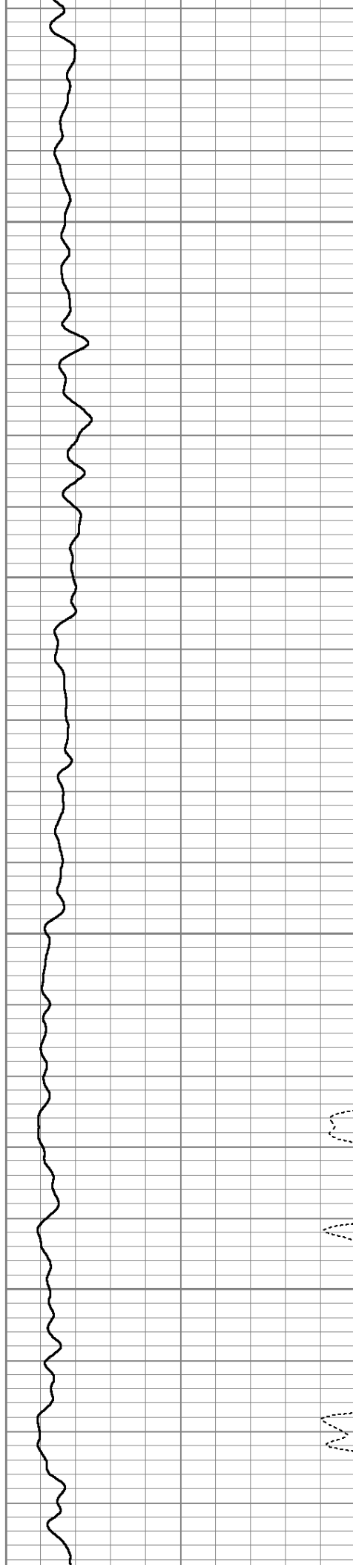


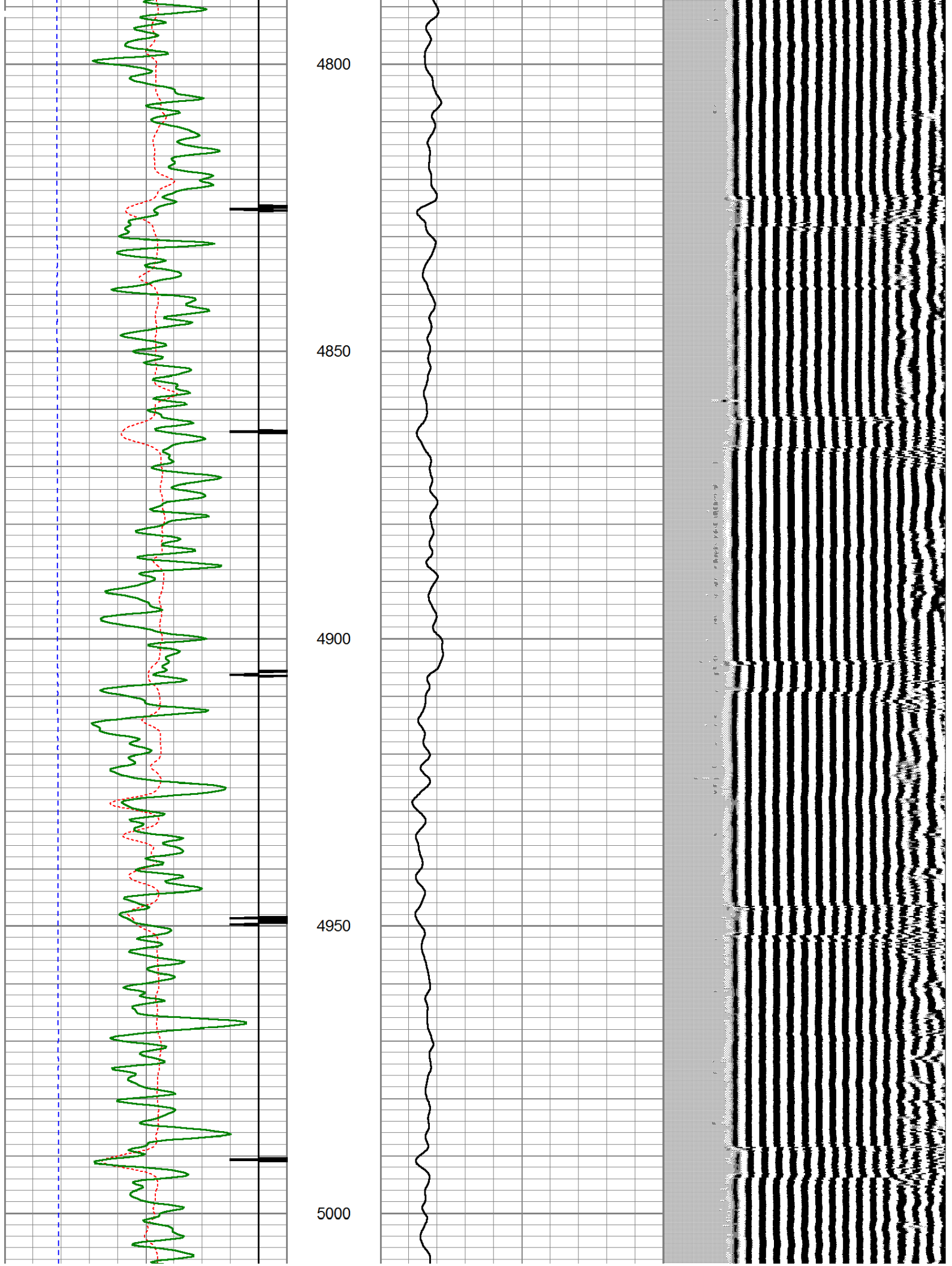
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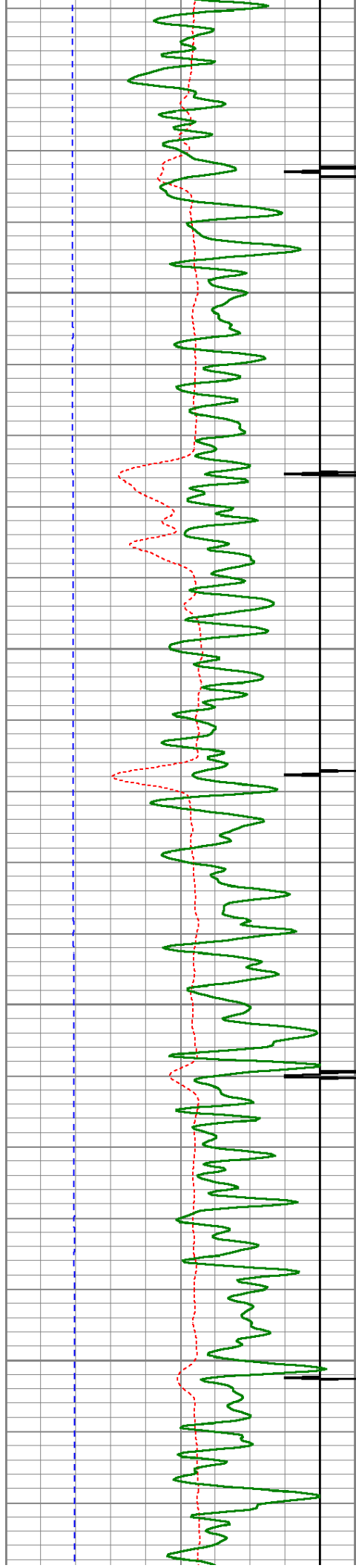
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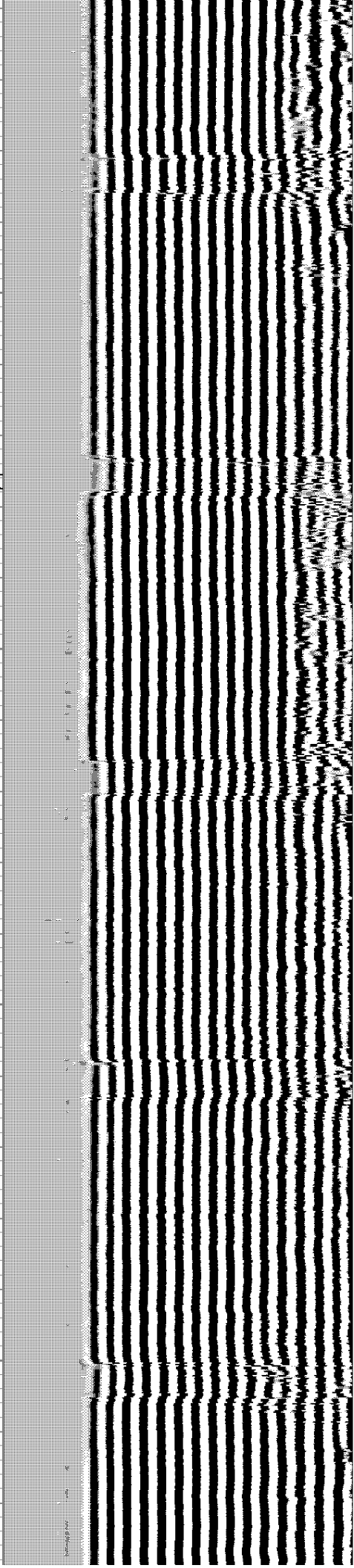
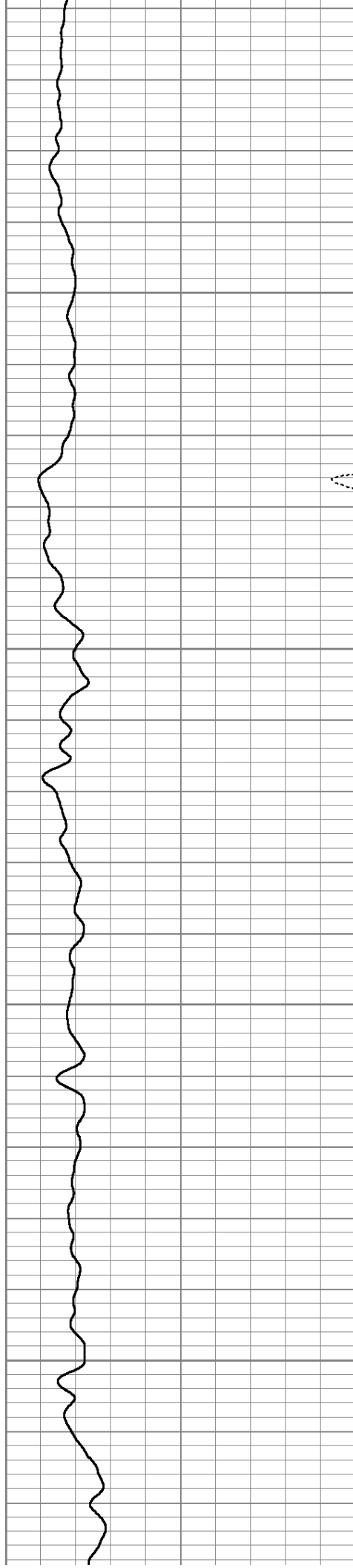


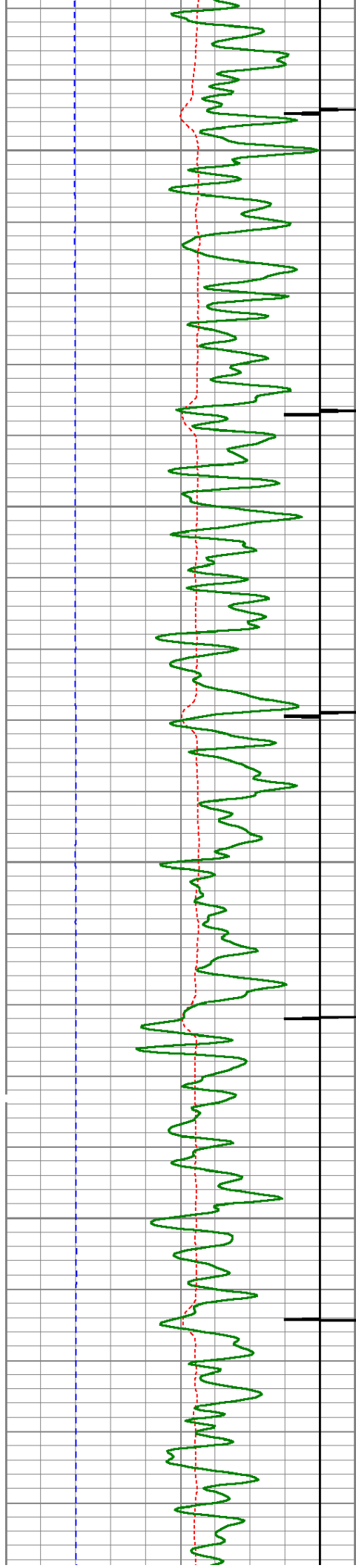
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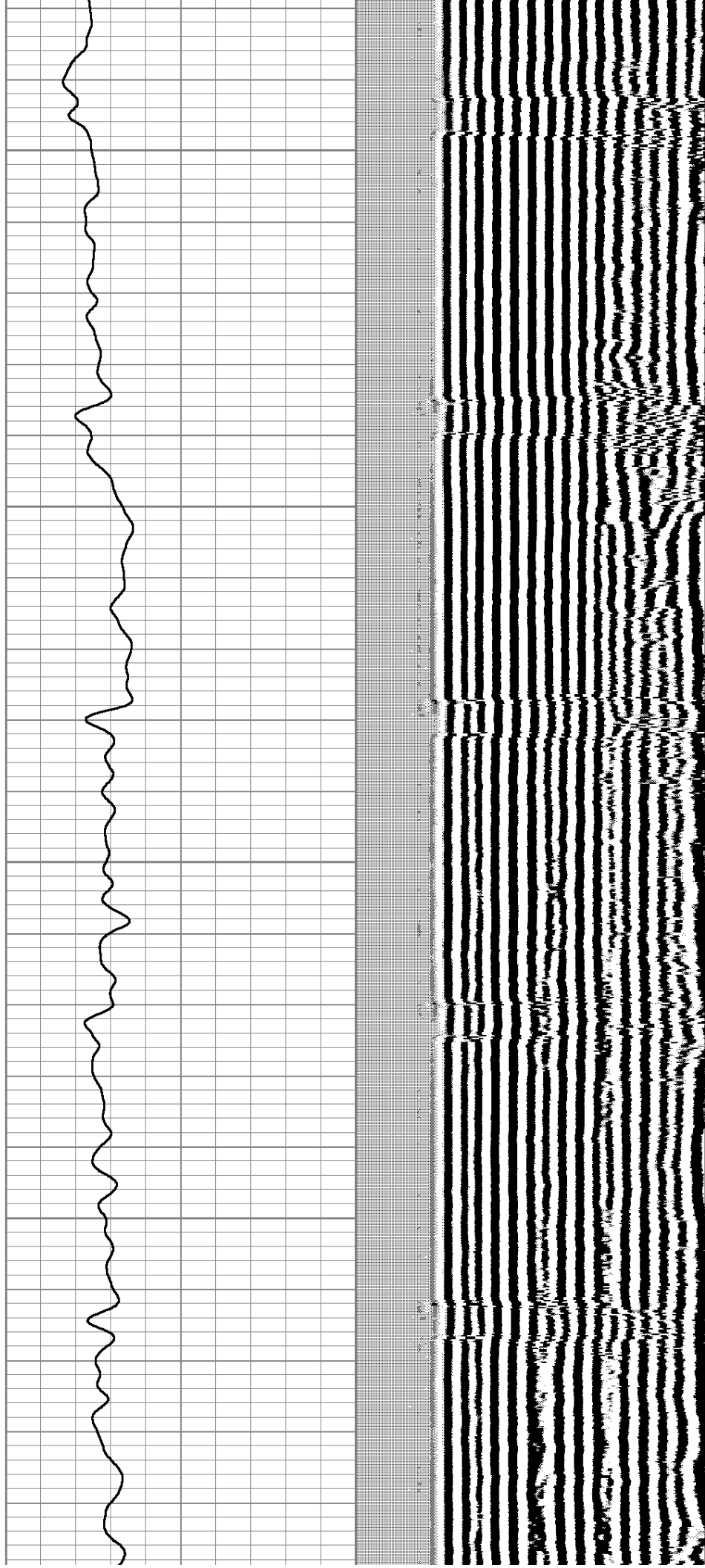


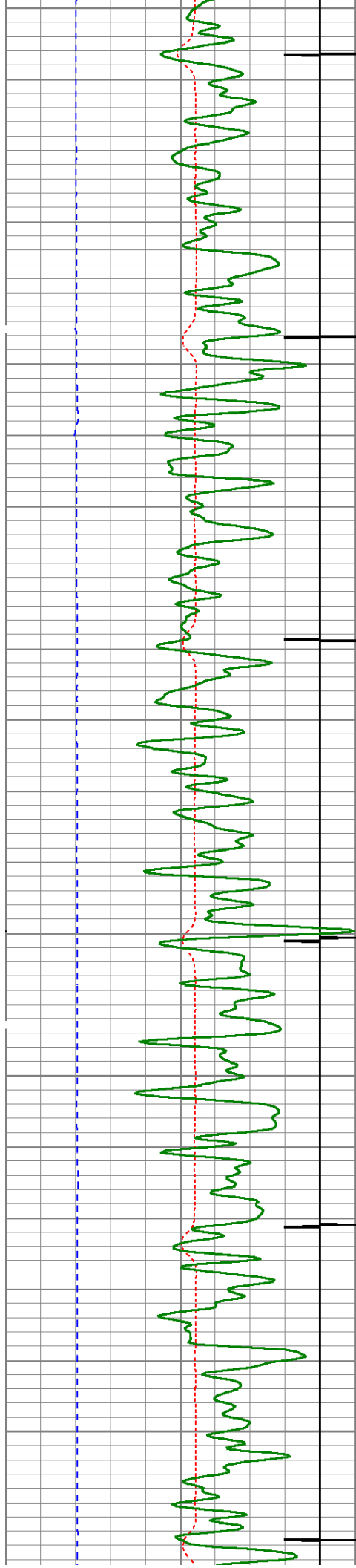
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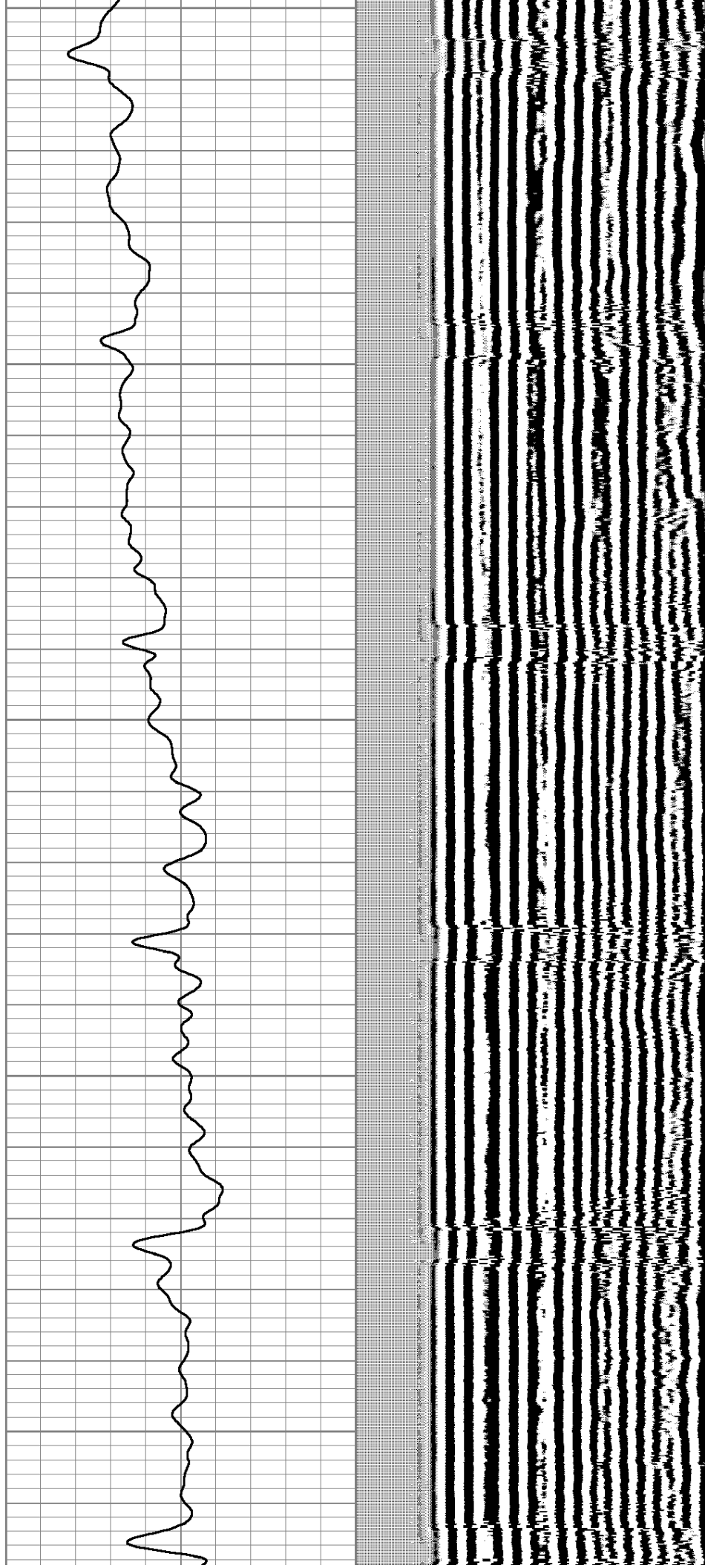
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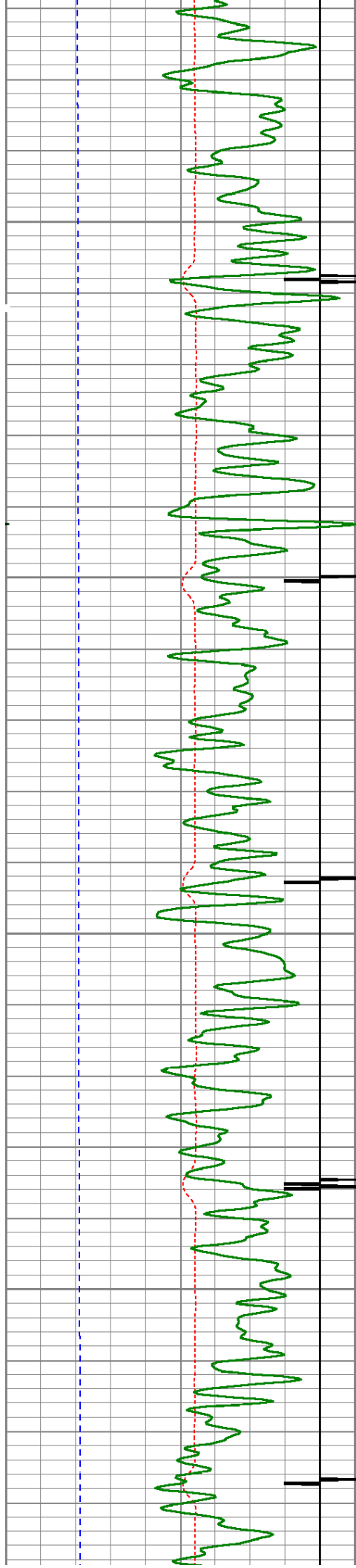
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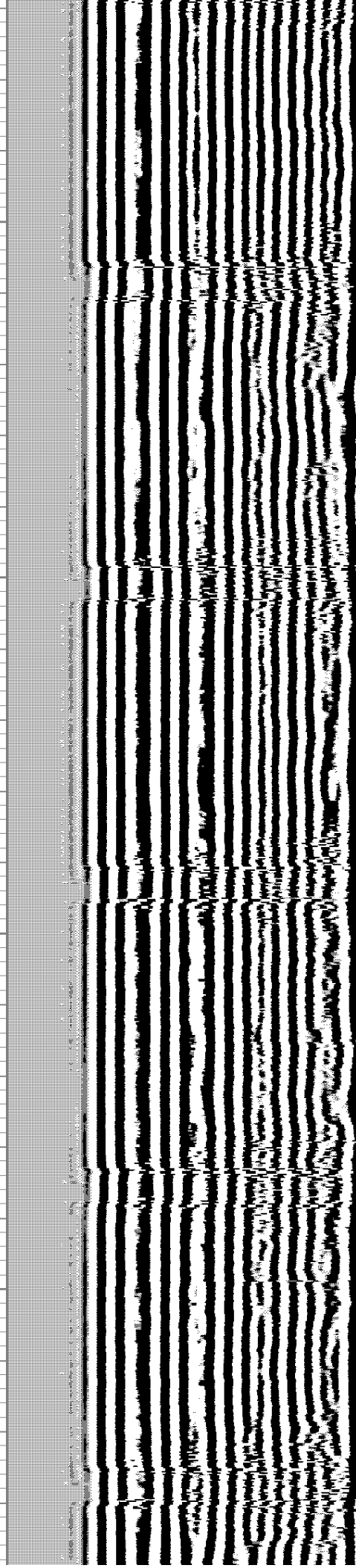
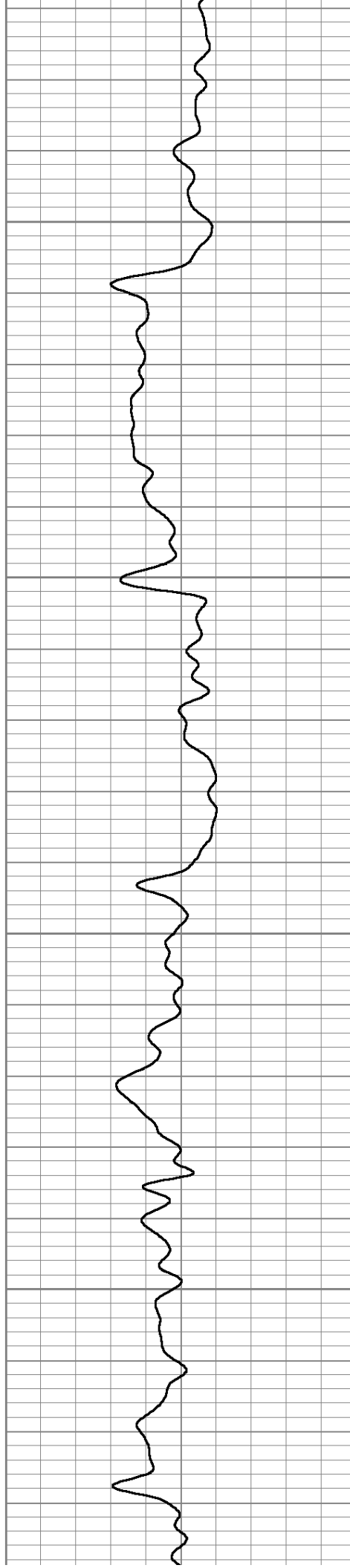


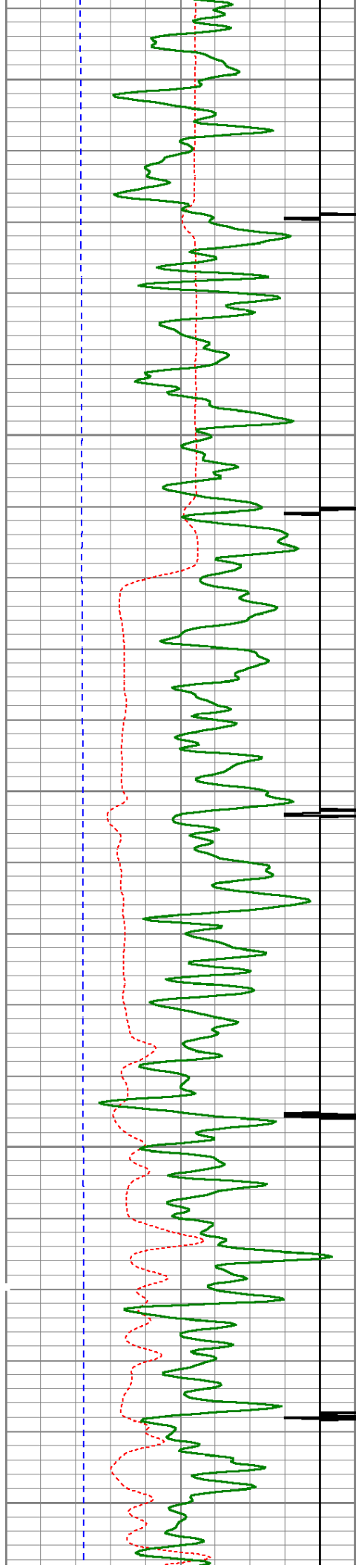
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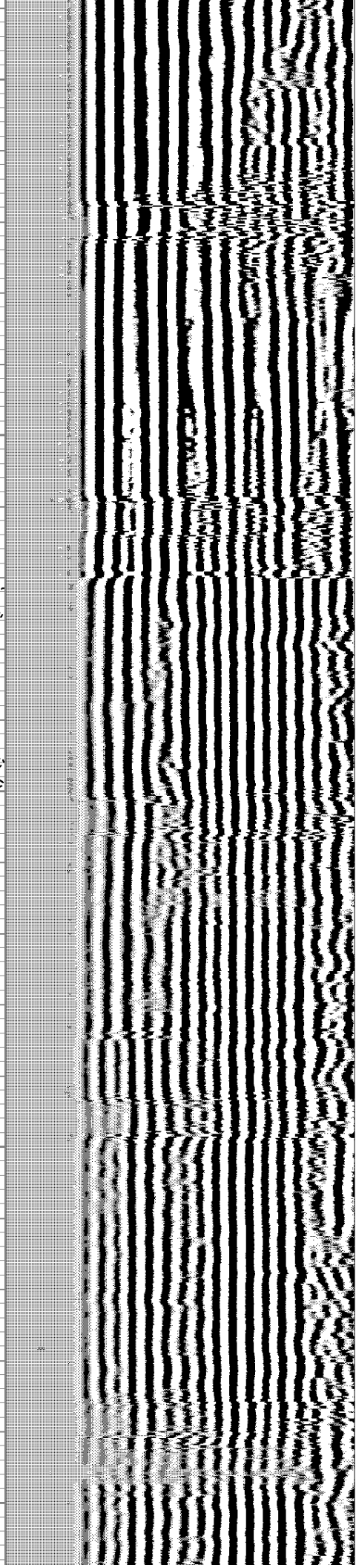
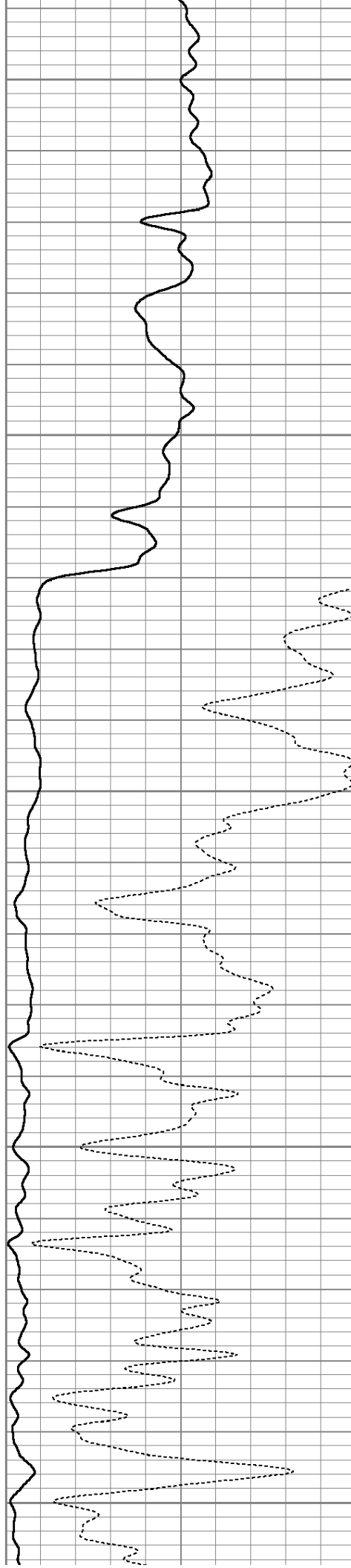
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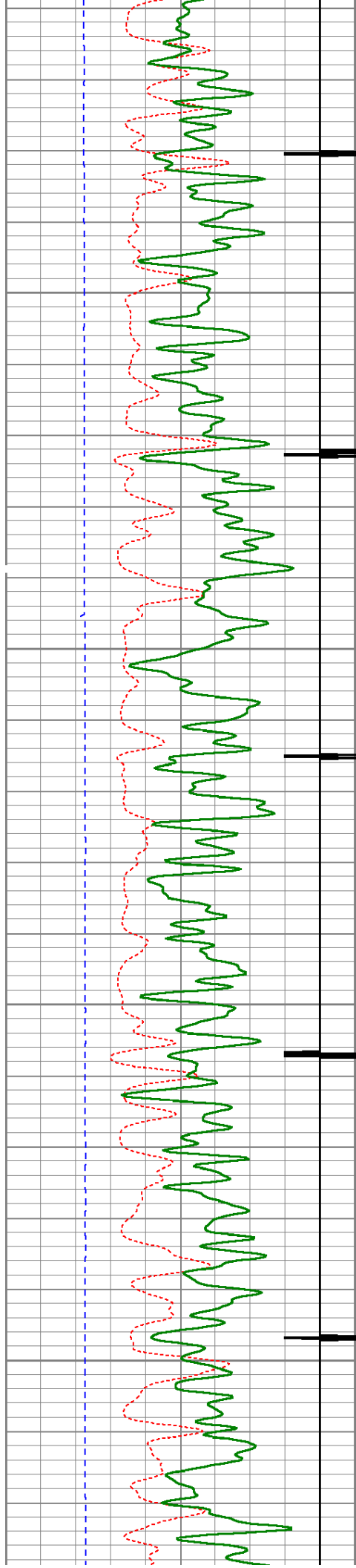
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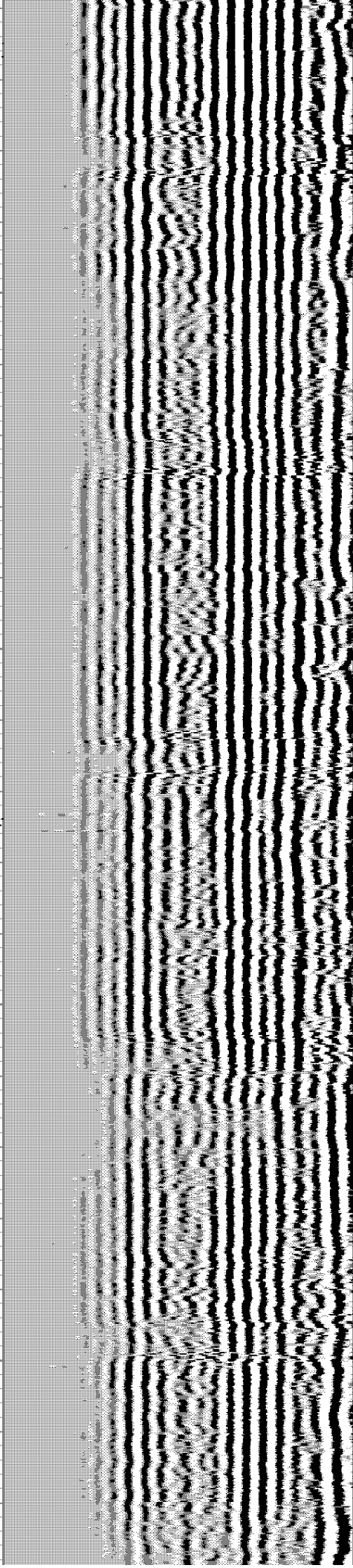
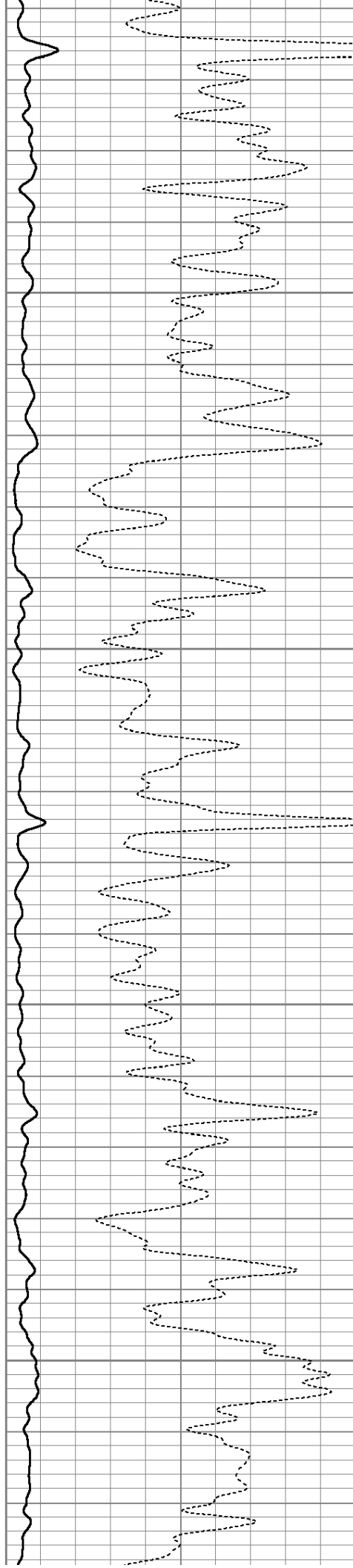


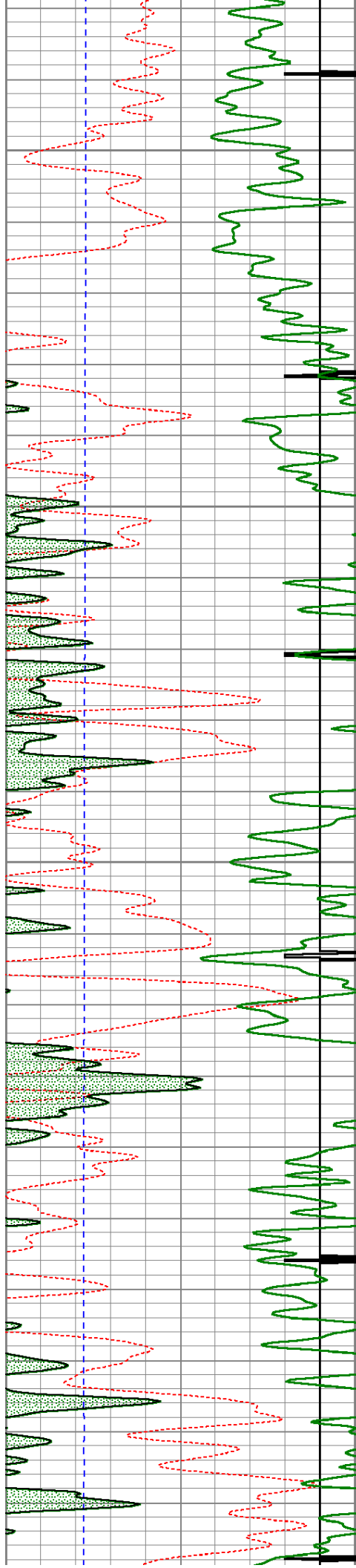
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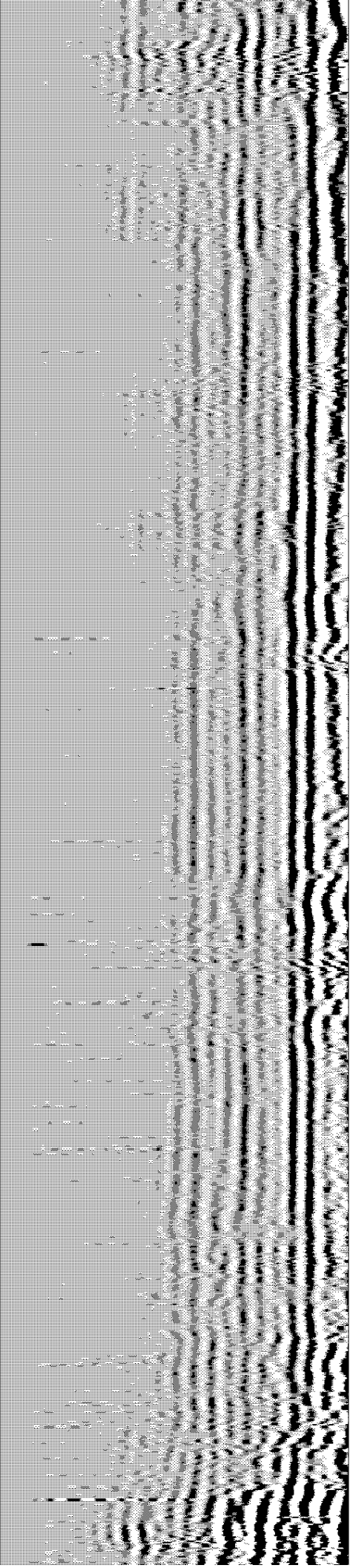
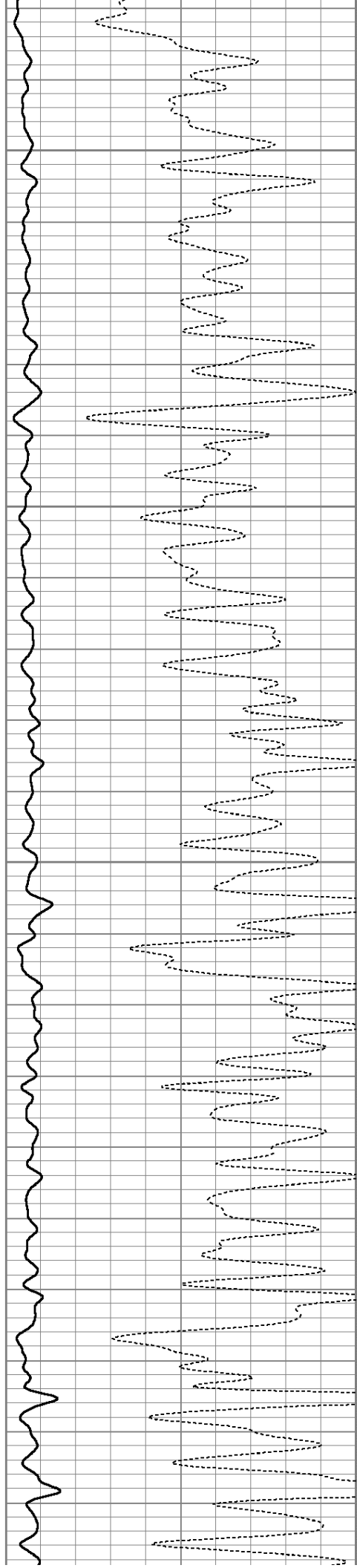


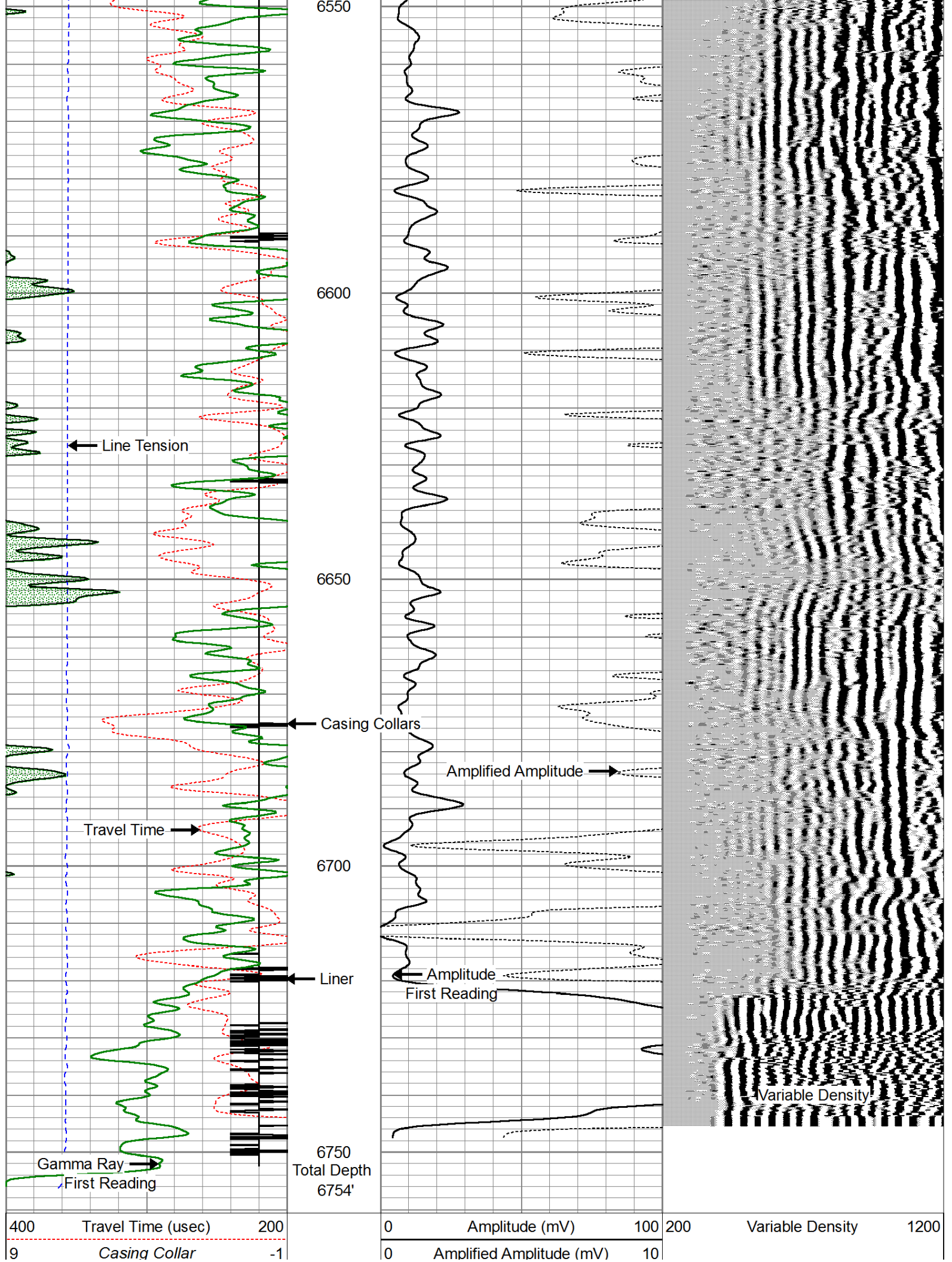
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6400

6450

6500





0	Gamma Ray (GAPI)	150
0	Line Tension (lb)	5000

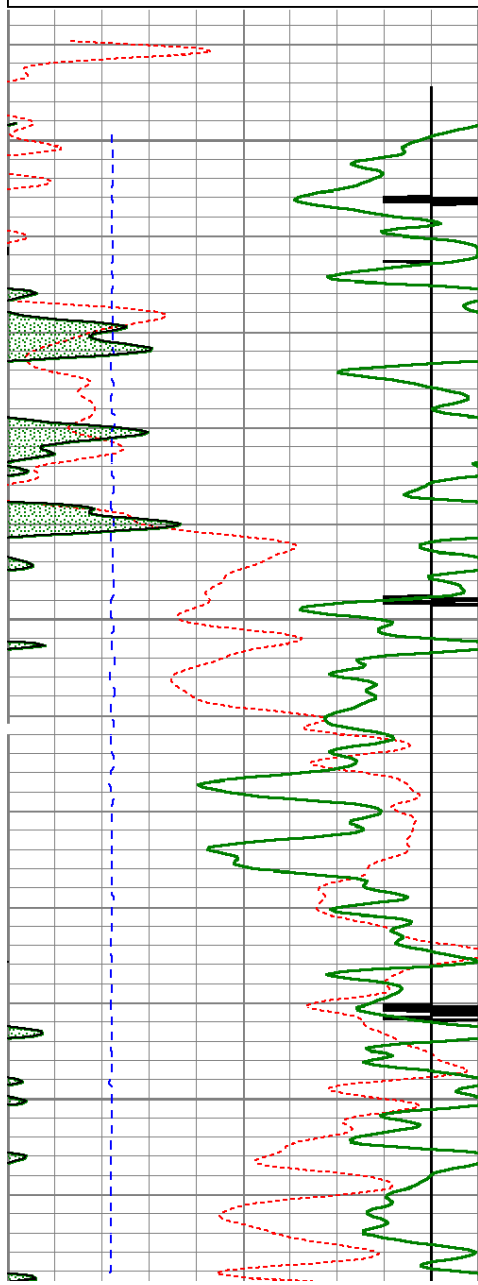


Repeat Pass (0 PSI)

Database File: bonanza_creek_antelope_k_o_18_hnb_cbl.db
 Dataset Pathname: pass4.2
 Presentation Format: cblprobe
 Dataset Creation: Thu Apr 18 16:12:51 2013 by Calc SCH 120126
 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

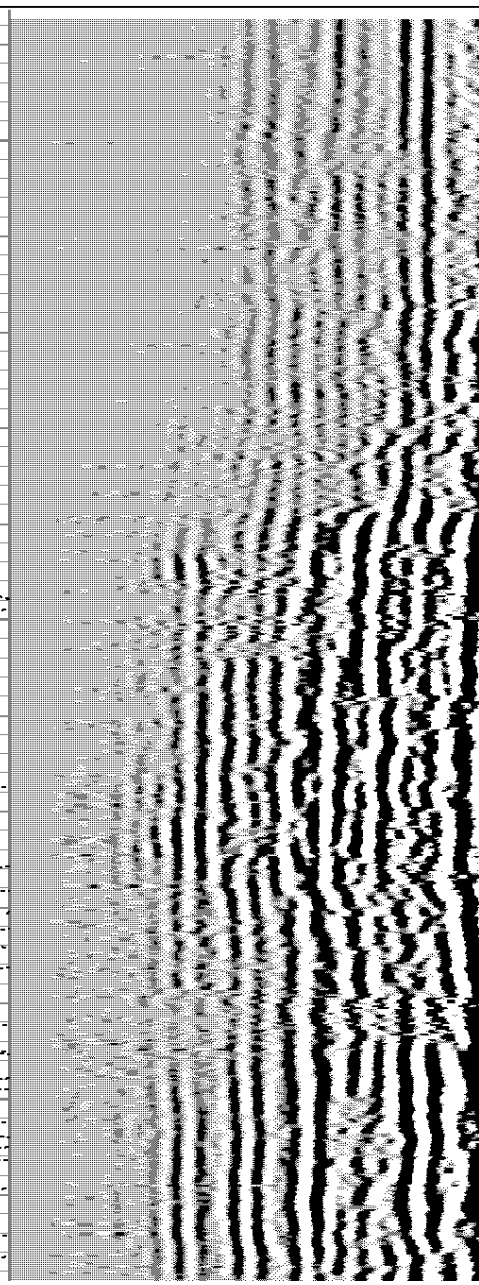
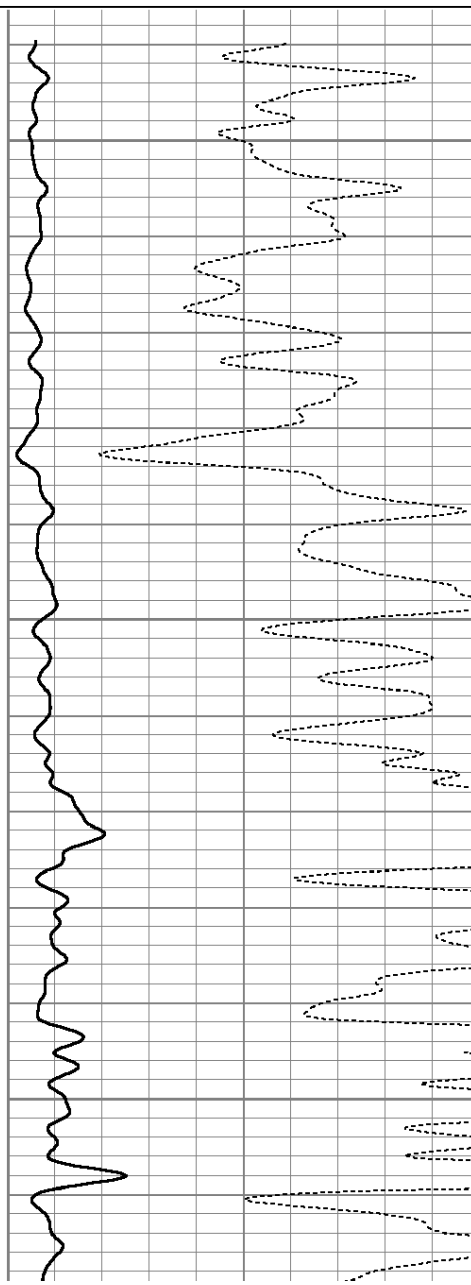
0	Amplitude (mV)	100	200	Variable Density	1200
0	Amplified Amplitude (mV)	10			

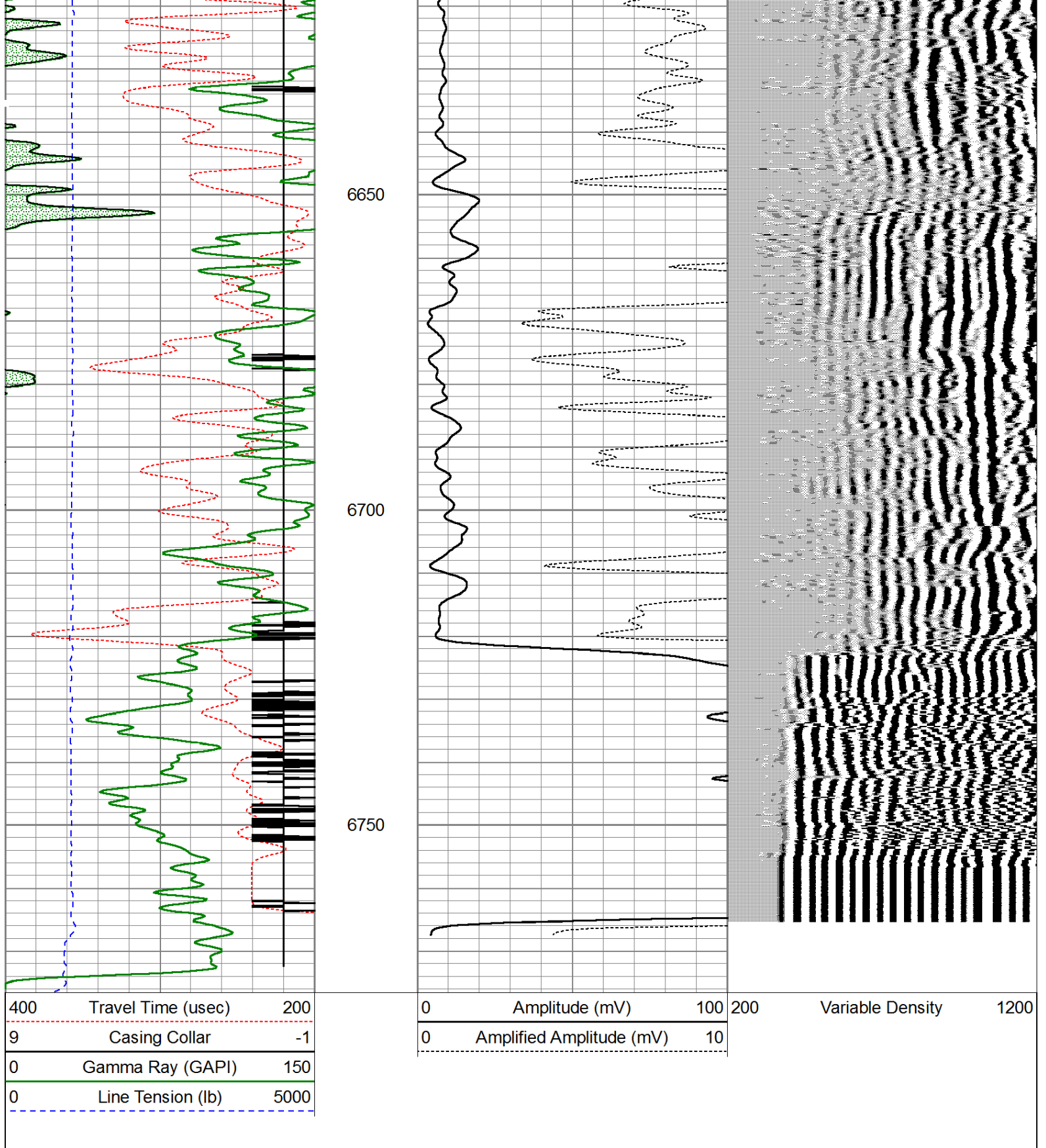


6500

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6600





Calibration Report

Database File: bonanza_creek_antelope_k_o_18_hnb_cbl.db
Dataset Pathname: pass6
Dataset Creation: Thu Apr 18 16:04:43 2013 by Calc SCH 120126

Gamma Ray Calibration Report

Serial Number: 120367-Dig
Tool Model: Probe275
Performed: Mon Apr 08 15:11:42 2013

Performed:

Mon Apr 08 13:11:42 2013

Calibrator Value:	138.0	GAPI
Background Reading:	37.7	cps
Calibrator Reading:	241.8	cps
Sensitivity:	0.8500	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	101224
Tool Model:	Probe
Calibration Casing Diameter:	7.000 in
Calibration Depth:	5789.940 ft

Master Calibration, performed Thu Apr 18 14:02:50 2013:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.007	0.680	1.000	62.165	84.066	4.381
CAL	-0.018	1.313				
5'	-0.006	0.581	1.000	62.165	104.115	1.646
SUM						
S1	-0.018	0.692	0.000	100.000	125.880	4.502
S2	0.007	0.615	0.000	100.000	132.527	4.105
S3	-0.000	0.582	0.000	100.000	157.570	4.040
S4	-0.001	0.627	0.000	100.000	138.667	4.088
S5	-0.000	0.694	0.000	100.000	132.151	4.025
S6	-0.001	0.733	0.000	100.000	123.882	4.103
S7	0.000	0.719	0.000	100.000	126.456	4.954
S8	0.000	0.701	0.000	100.000	120.859	4.037

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	-0.018	1.313	1.000	0.000

Air Zero Calibration, performed Thu Apr 18 13:17:49 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

