



# Mesa Wireline

## CEMENT BOND LOG

Company: ENCANA OIL & GAS (USA) INC  
 Well: ELMQUIST 21-23  
 Field: WATTENBERG  
 County: WELD  
 State: COLORADO

Company: ENCANA OIL & GAS (USA) INC  
 Well: ELMQUIST 21-23  
 Field: WATTENBERG  
 County: WELD  
 State: COLORADO

Location: API #: 05-123-25819-0000  
 SHL: 1641' FNL & 1614' FWL SE NW  
 BHL: 510' FNL & 2130' FWL SE NW  
 SEC. 23 TWP. 2N RGE. 68W

Permanent Datum: GROUND LEVEL Elevation: 4917'  
 Log Measured From: KELLY BUSHING = 13'  
 Drilling Measured From: KELLY BUSHING

Other Services: NONE  
 Elevation: K.B. 4930', D.F. 4931', G.L. 4917'

Date	05 JANUARY 2012						
Run Number	ONE						
Depth Driller	8223'						
Depth Logger	8166'						
Bottom Logged Interval	8166'						
Top Log Interval	4000'						
Open Hole Size	7.875"						
Type Fluid	WATER						
Density / Viscosity	~8.3#						
Max. Recorded Temp.	250 DEG F						
Estimated Cement Top	4350'						
Time Well Ready	N/A						
Time Logger on Bottom	N/A						
Equipment Number	10901 PRD 01						
Location	AULT, CO						
Recorded By	V-FULLER						
Witnessed By	G.CUMMINGS						
Borehole Record							
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	0'	790'				
TWO	7.875"	790'	8223'				
Casing Record							
Surface String	Size	Wgt/Ft	Top	Bottom			
Prot. String	8.625"	24#	0'	790'			
Production String	4.5"	11.6#	0'	8208'			
Liner							

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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

LOG CORRELATED TO PSI HIGH RESOLUTION INDUCTION LOG DATED DECEMBER 20 2011  
 SHORT JOINT 7243' - 7307'

WE APPRECIATE YOUR BUSINESS, MESA WIRELINE LLC, GRAND JUNCTION CO. (970) 257-0458



TOP PASS

5" = 100'

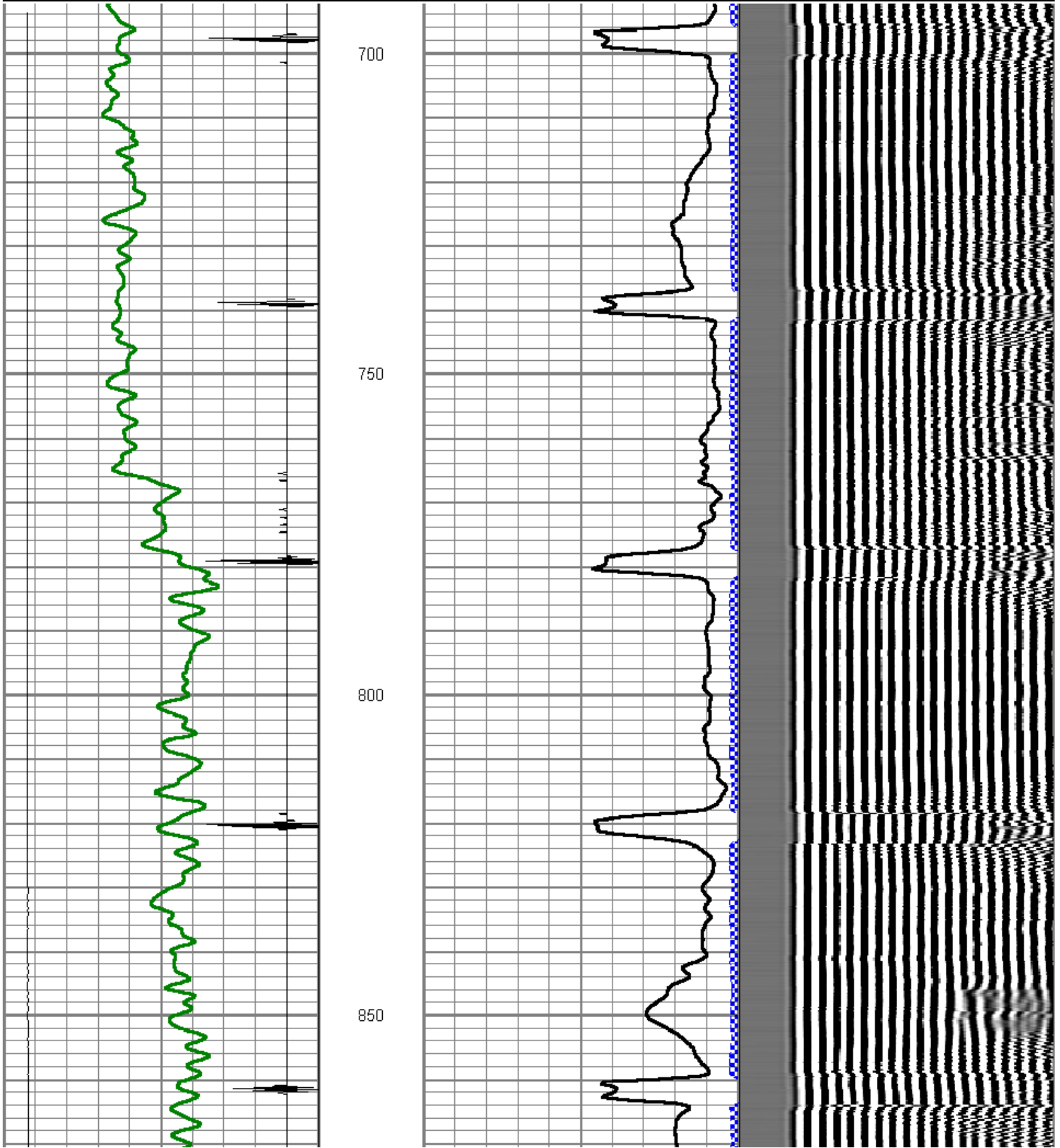
# Mesa Wireline

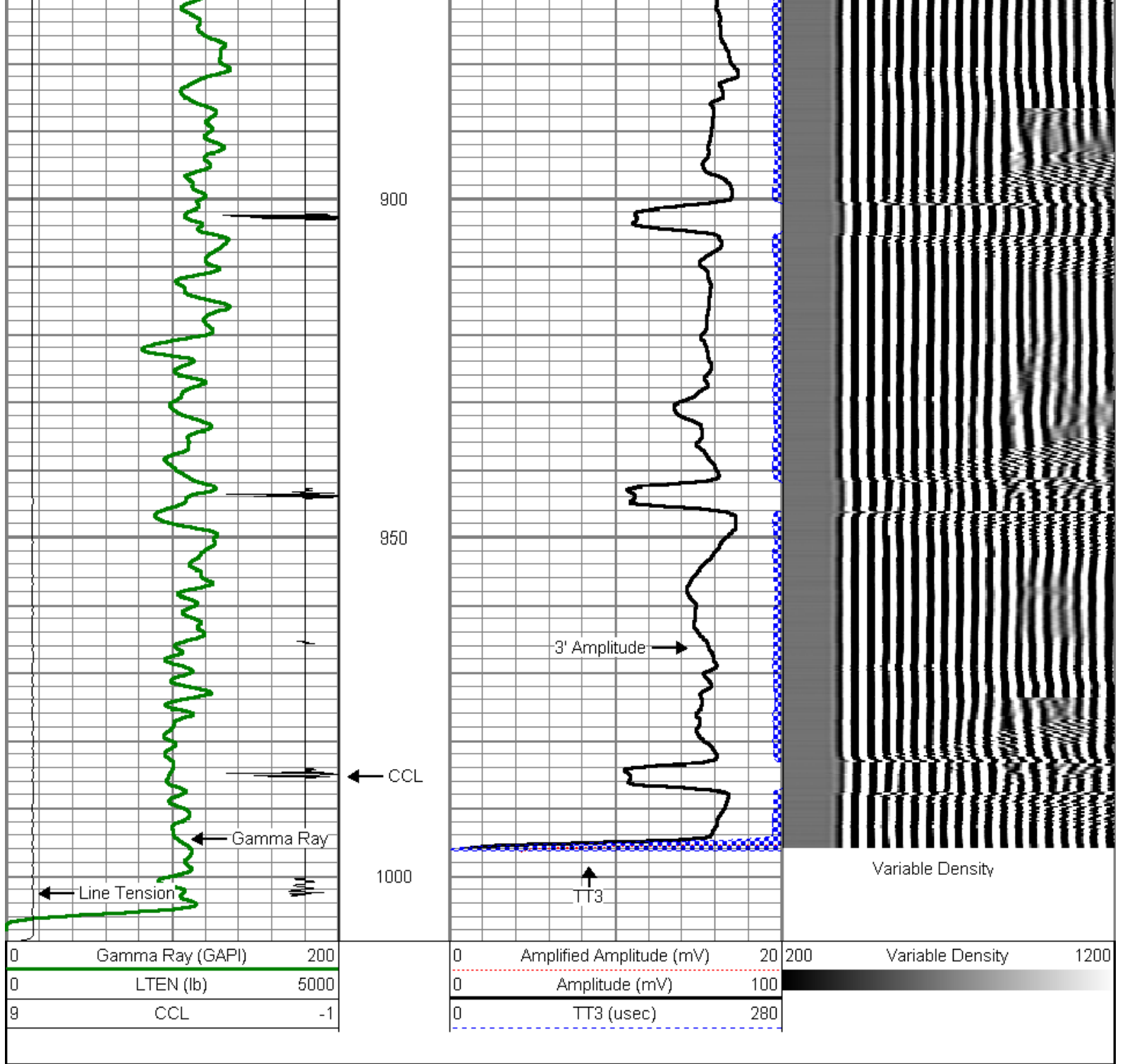
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 Dataset Pathname: pass20  
 Presentation Format: dcbl\_prb  
 Dataset Creation: Thu Jan 05 16:54:19 2012 by Log SCH 110722  
 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	200
0	LTEN (lb)	5000
9	CCL	-1

0	Amplified Amplitude (mV)	20
0	Amplitude (mV)	100
0	TT3 (usec)	280

200 Variable Density 1200

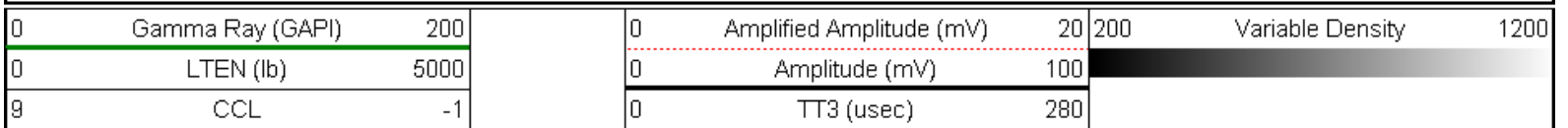


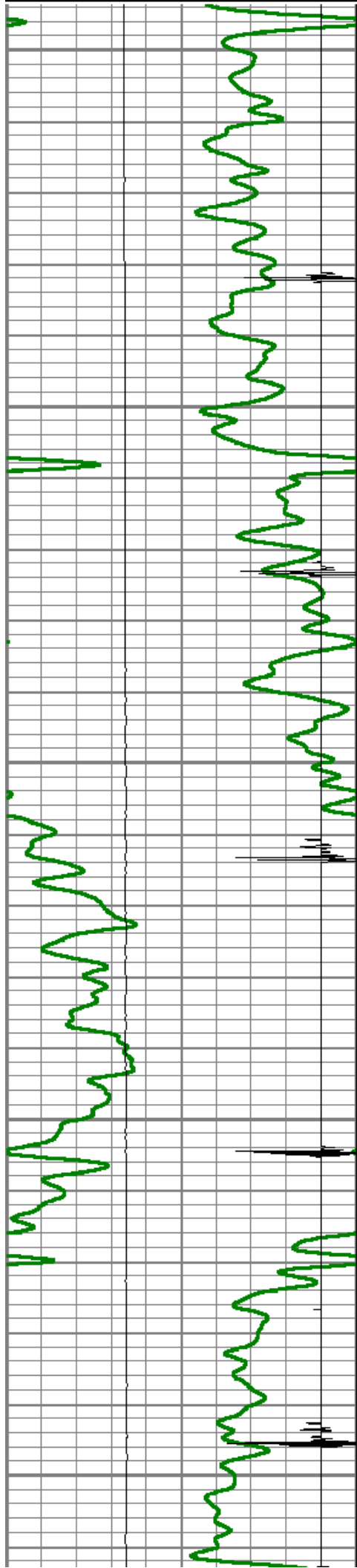


REPEAT PASS

5" = 100'

Database File: elmquist 21-23.db  
 Dataset Pathname: pass18  
 Presentation Format: dcbf\_prb  
 Dataset Creation: Thu Jan 05 15:17:12 2012 by Log SCH 110722  
 Charted by: Depth in Feet scaled 1:240





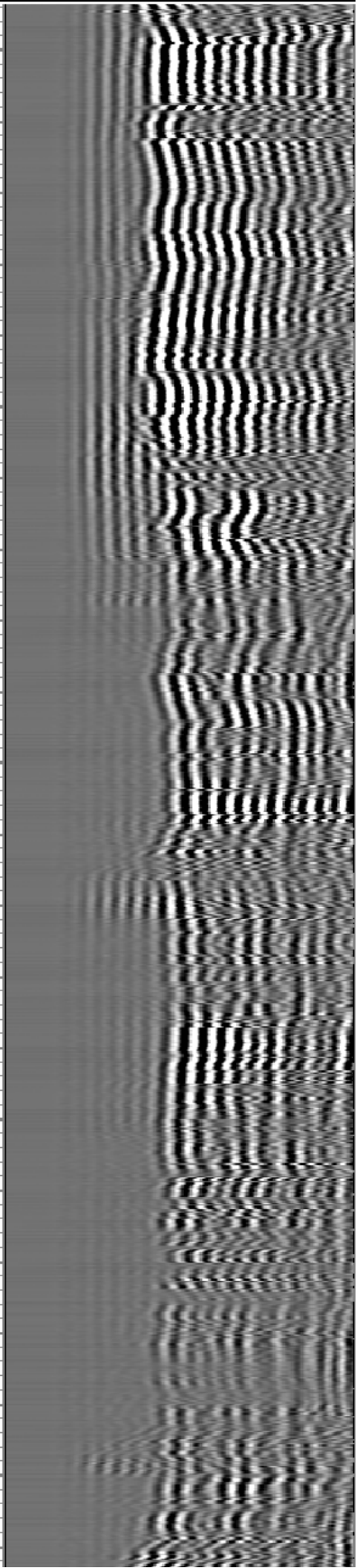
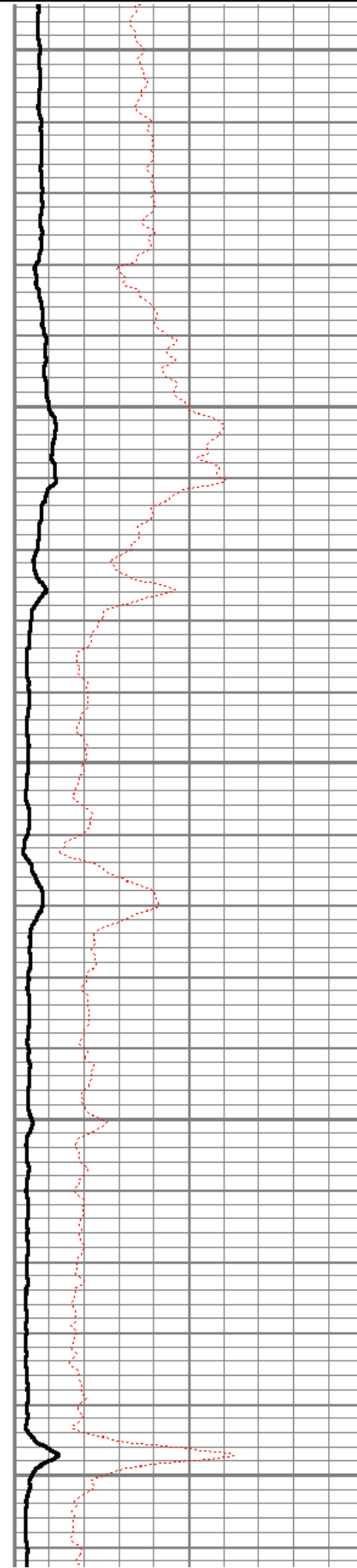
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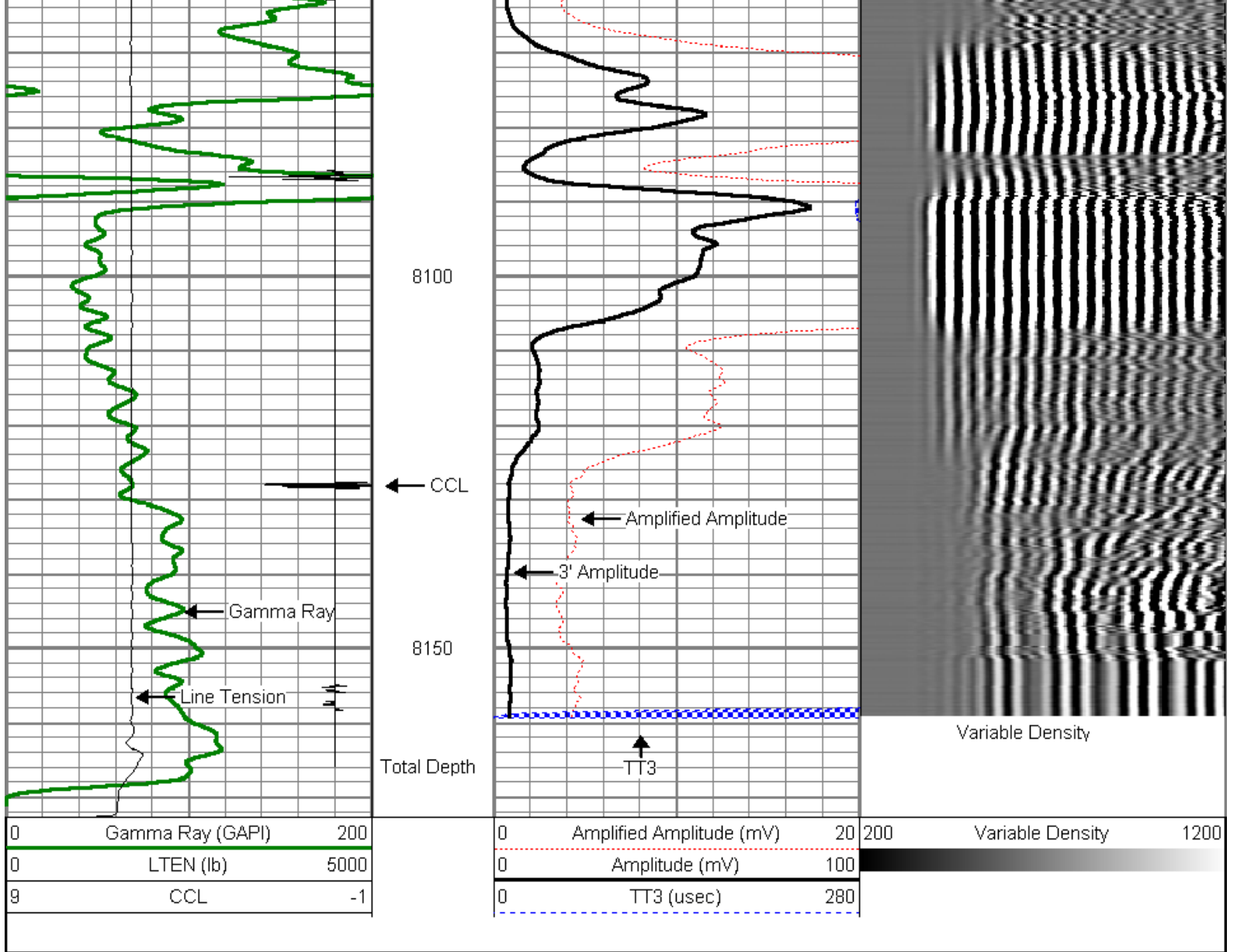
7900

7950

8000

8050



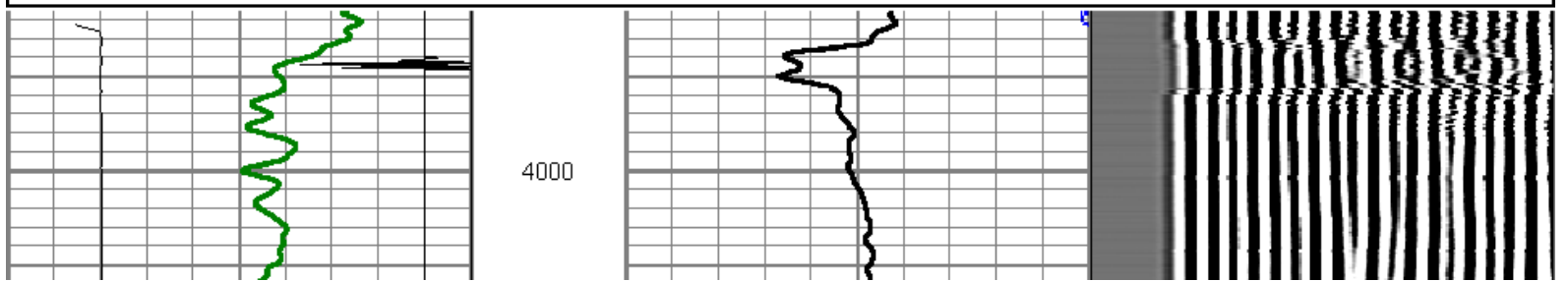


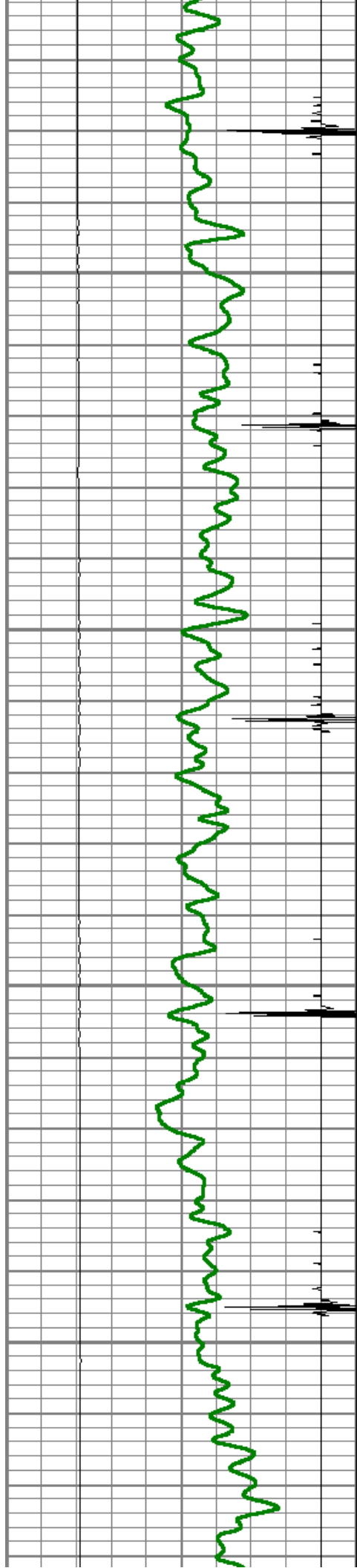
# MAIN PASS

5" = 100'

Database File: elmquist 21-23.db  
 Dataset Pathname: pass19  
 Presentation Format: dcb1\_prb  
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 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	200	0	Amplified Amplitude (mV)	20	200	Variable Density	1200
0	LTEN (lb)	5000	0	Amplitude (mV)	100			
9	CCL	-1	0	TT3 (usec)	280			



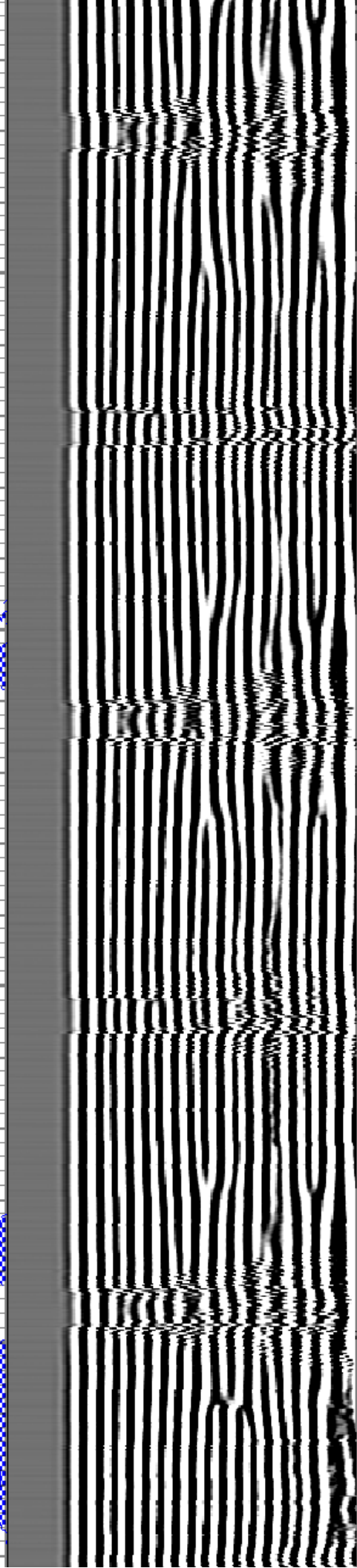
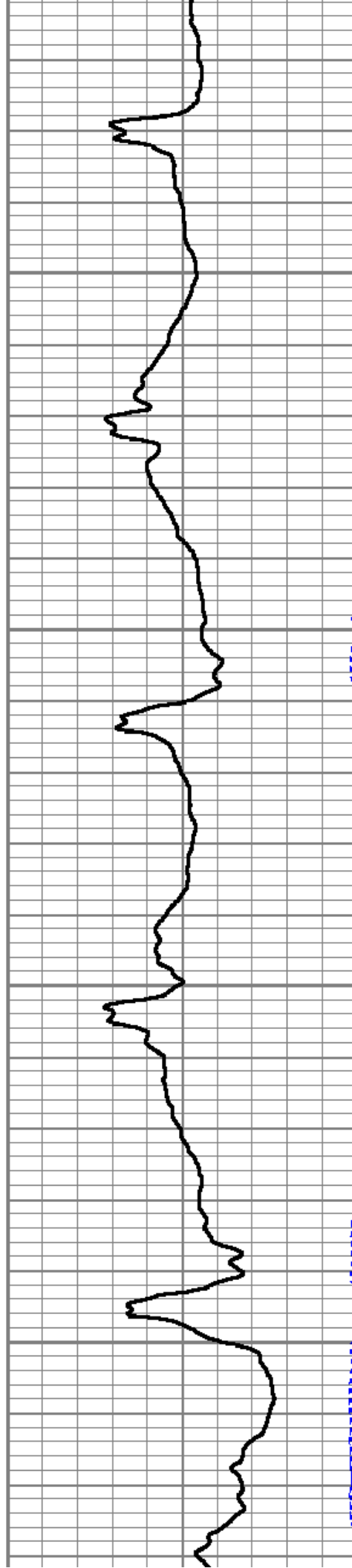


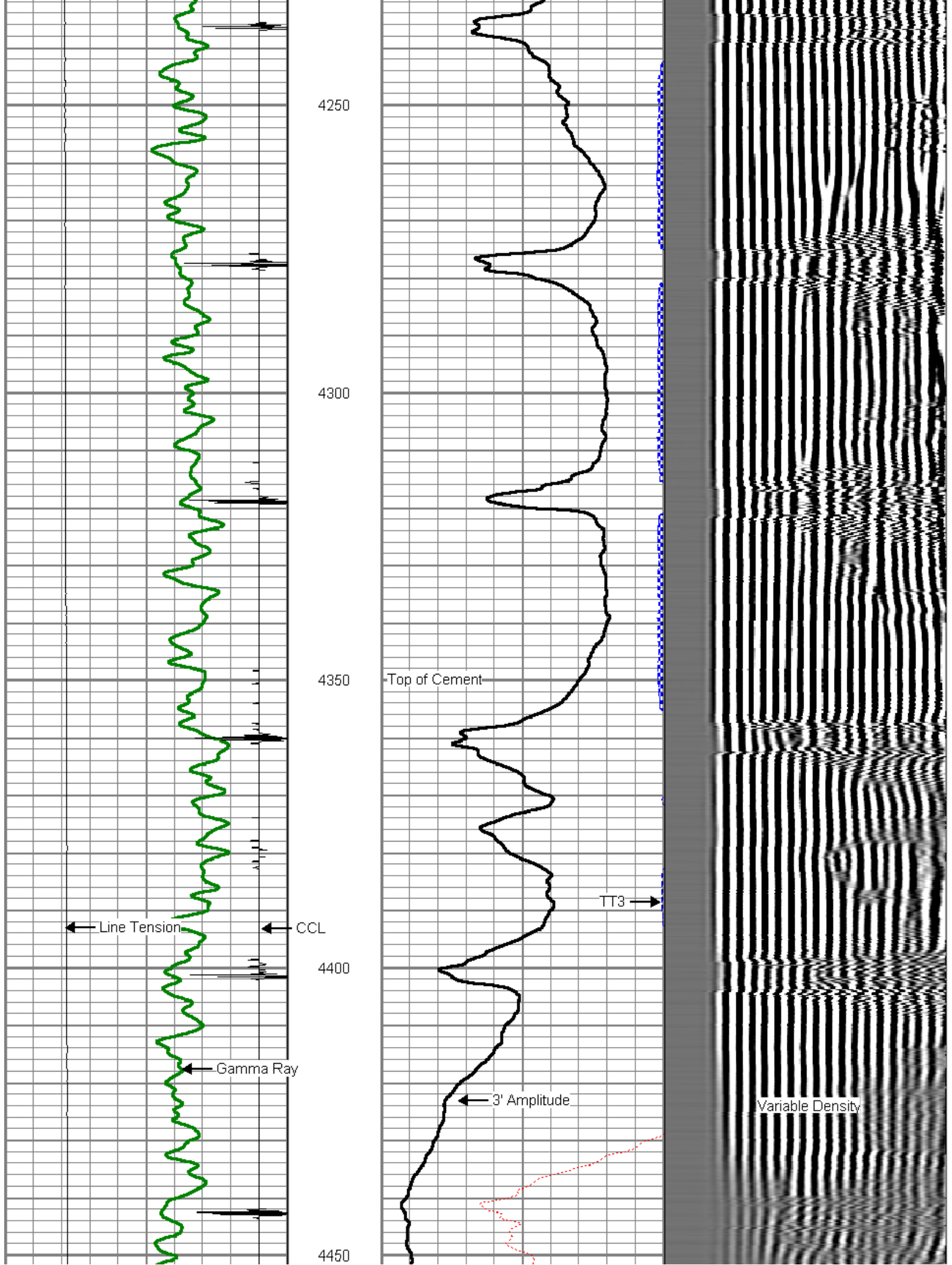
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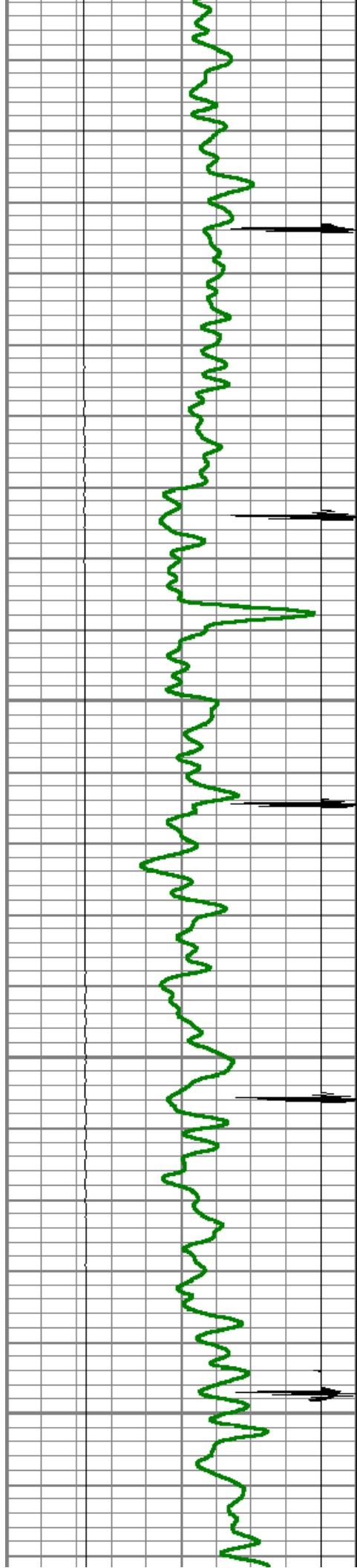
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4150

4200





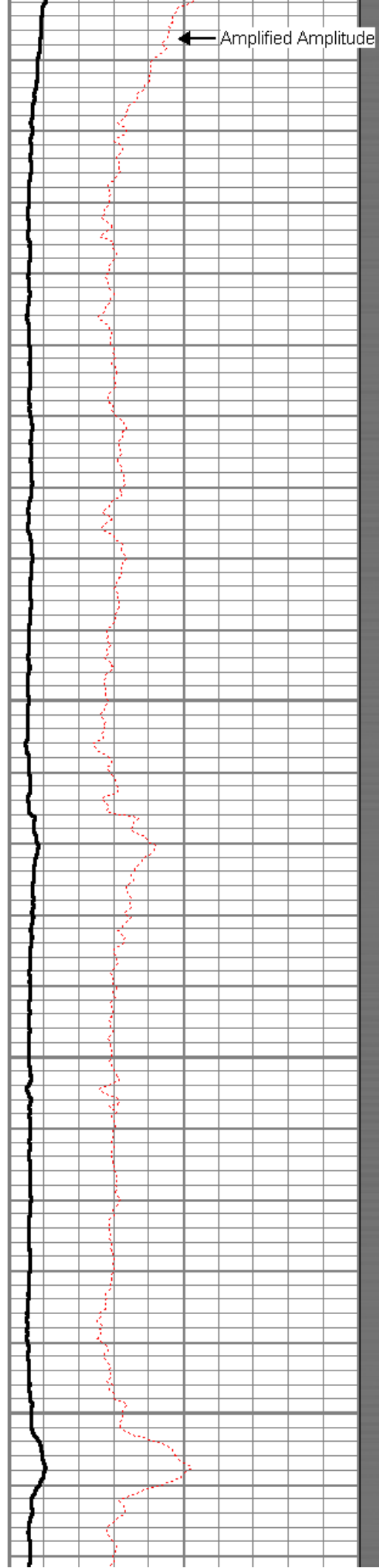


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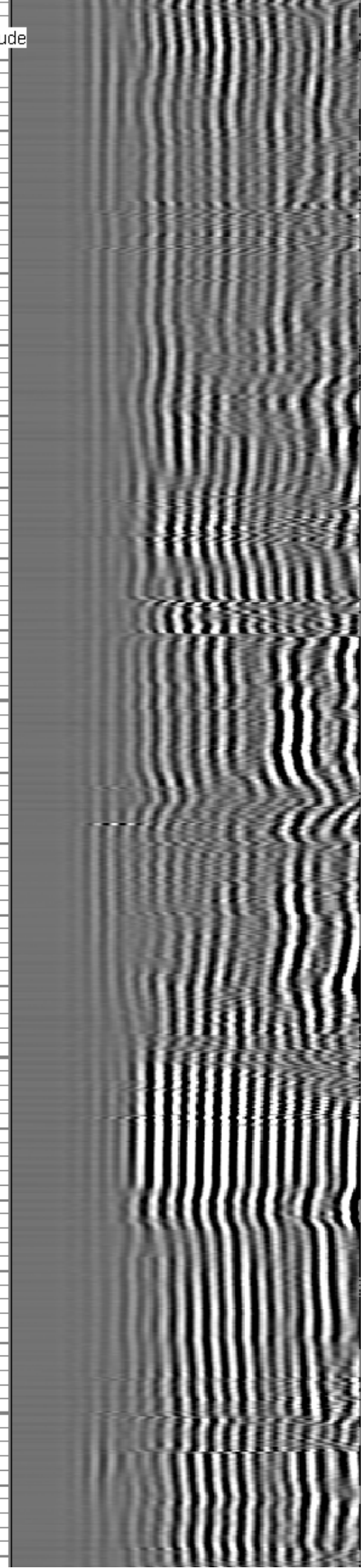
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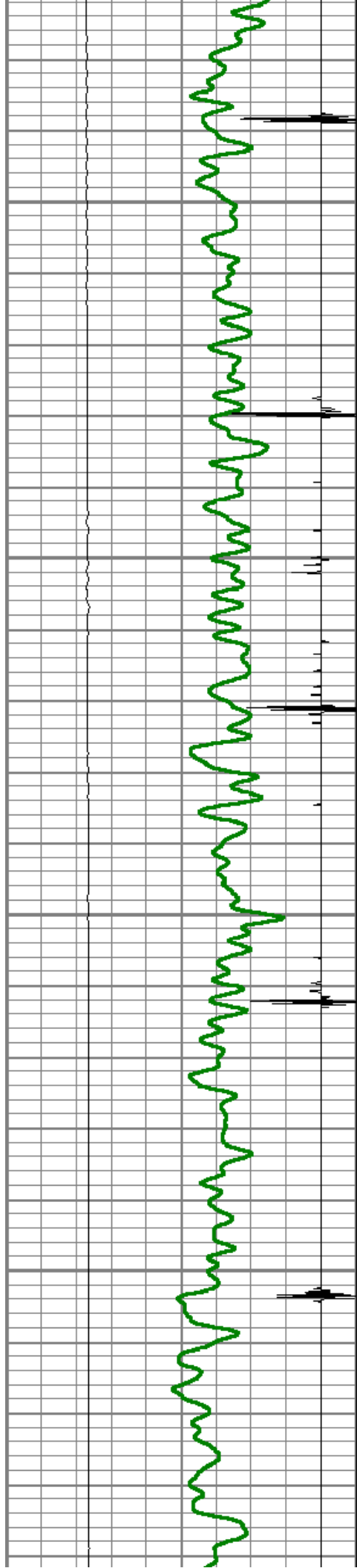
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4650



← Amplified Amplitude



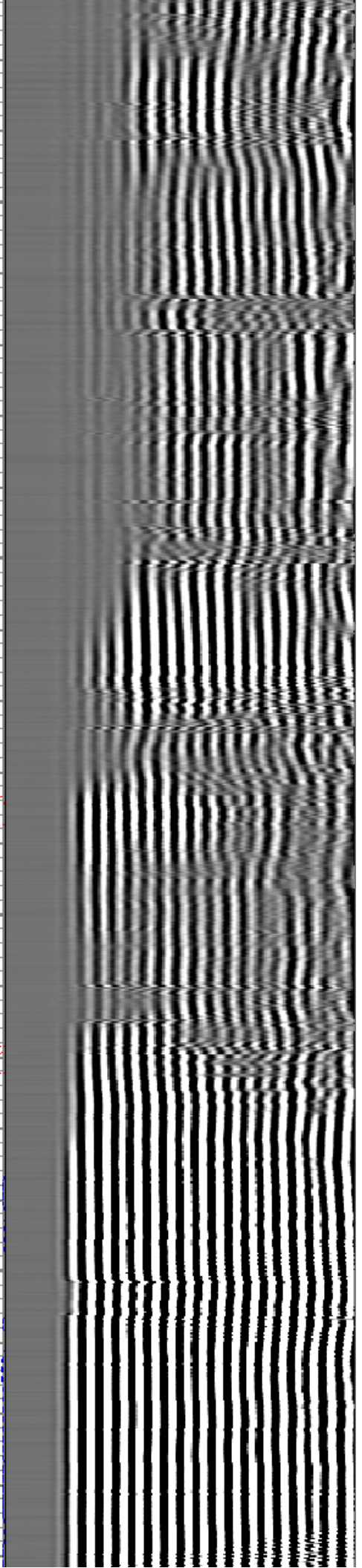
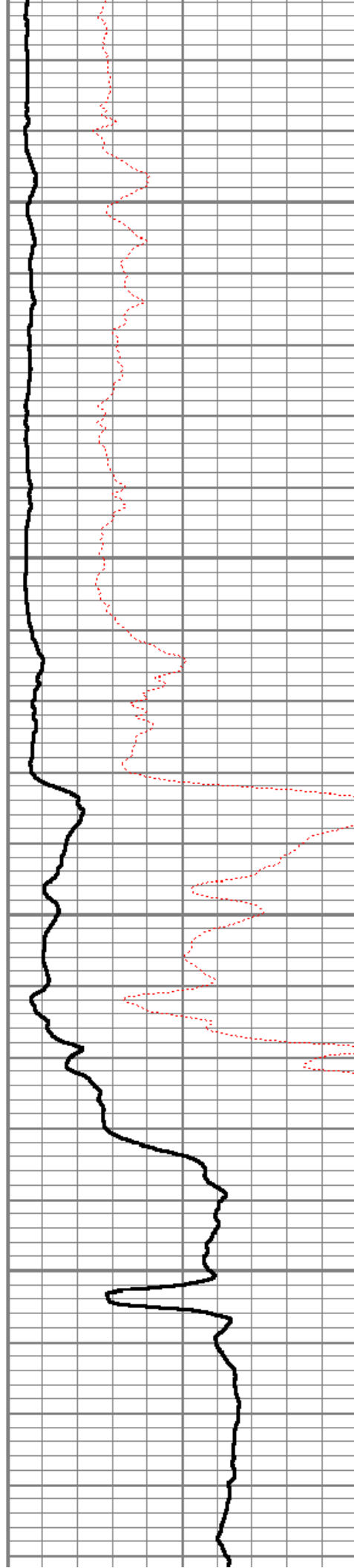


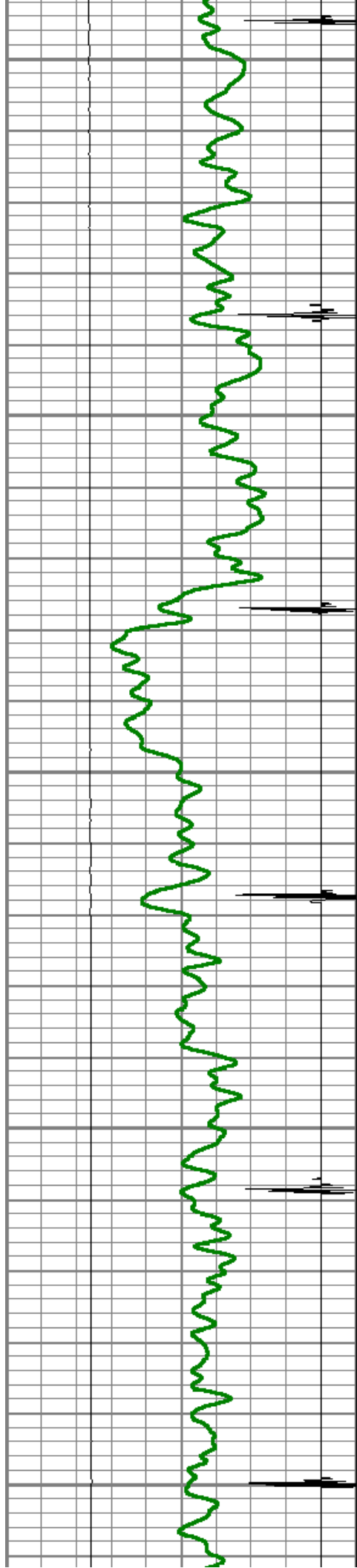
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4800

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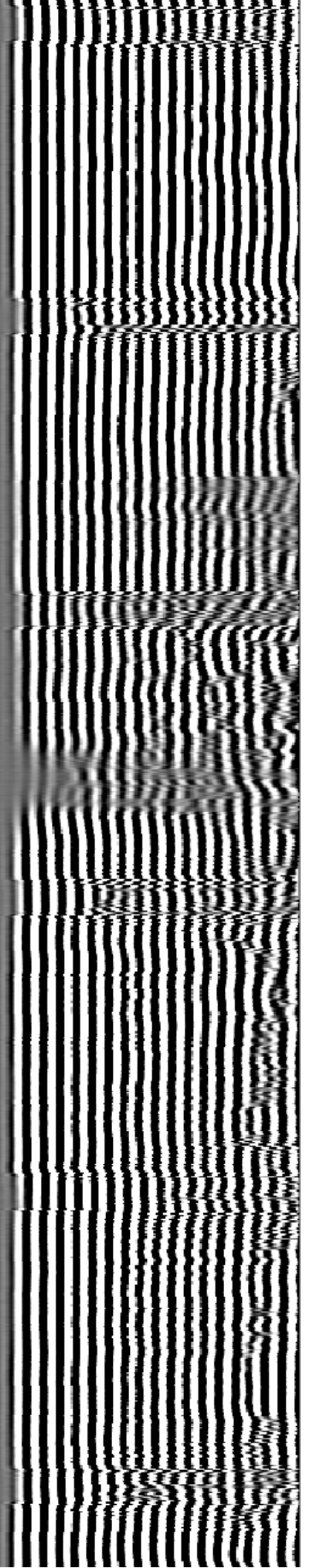
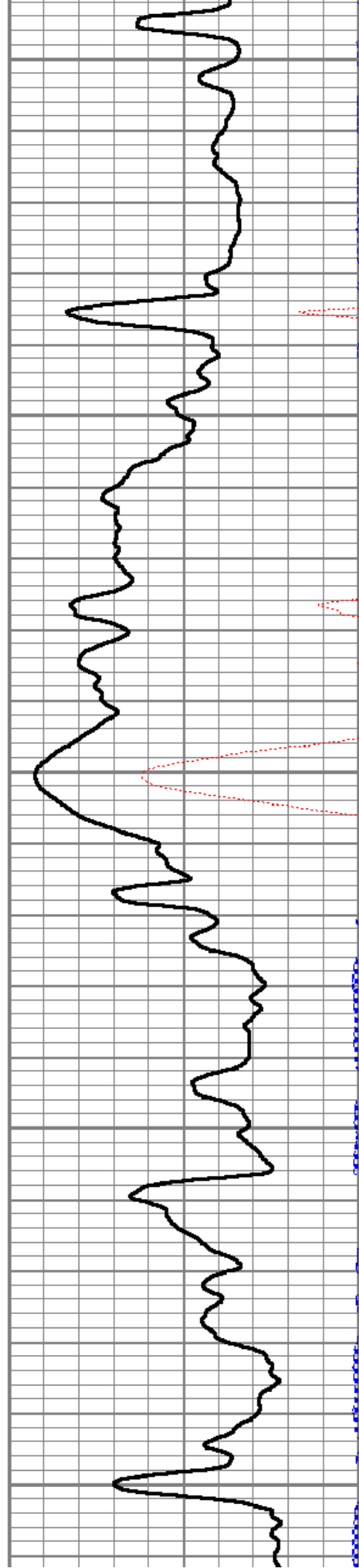
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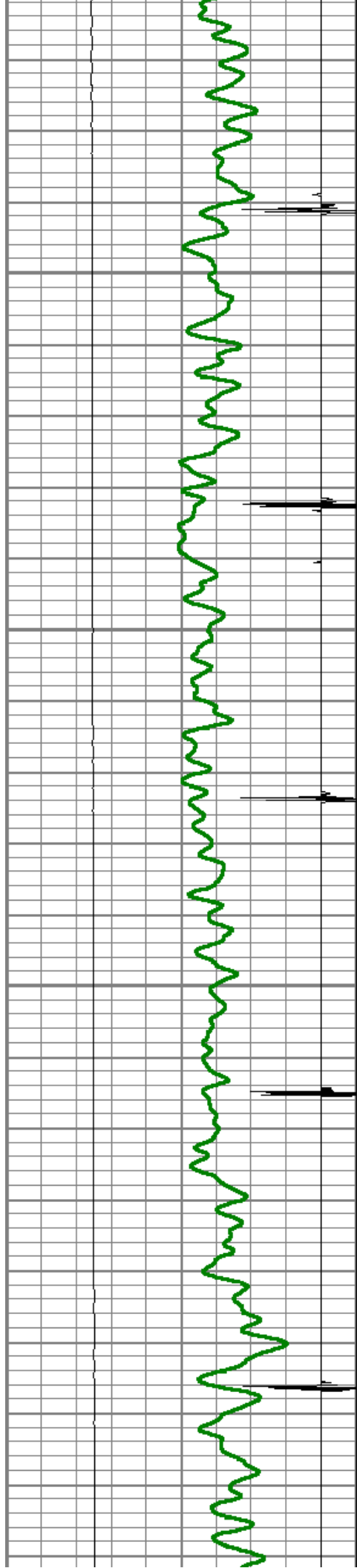
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5000

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5100



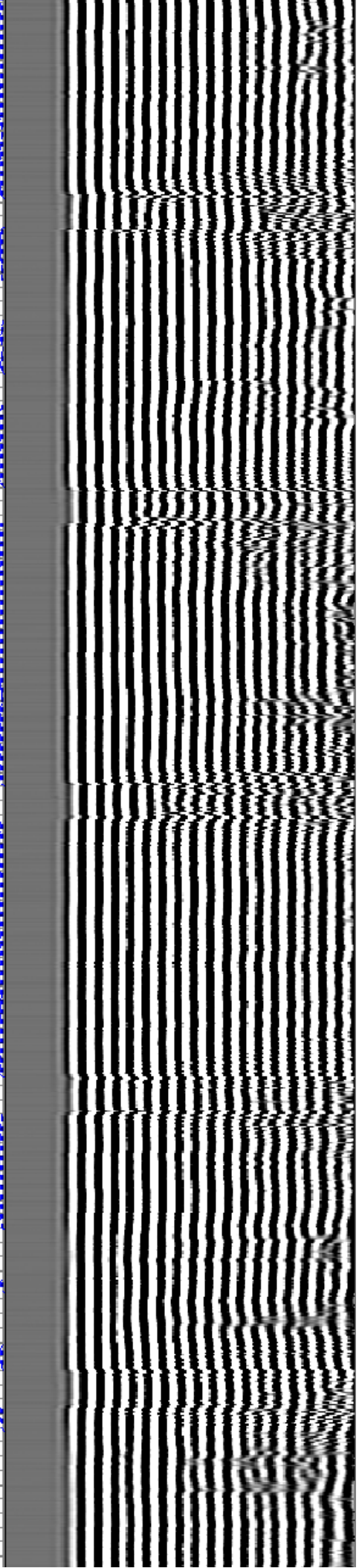
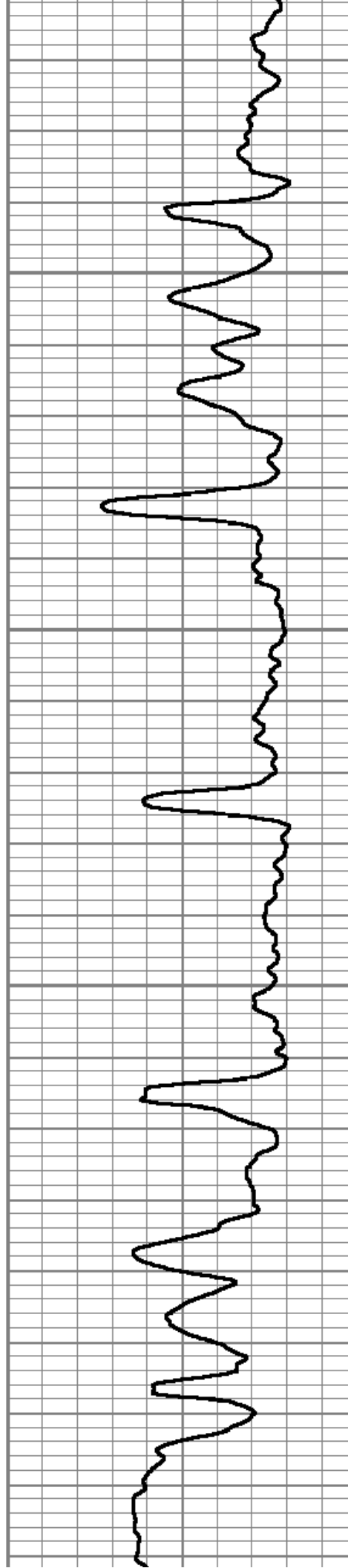


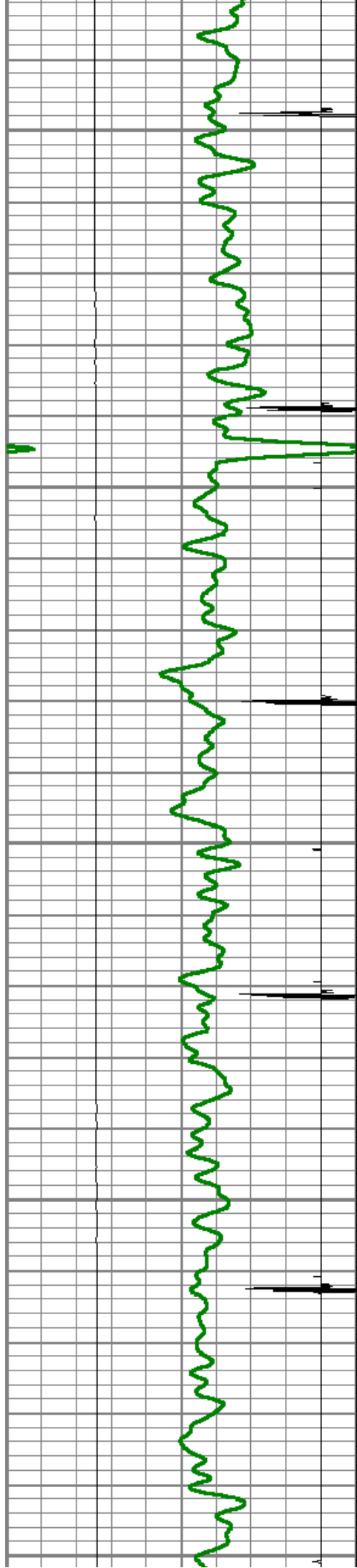
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5200

5250

5300





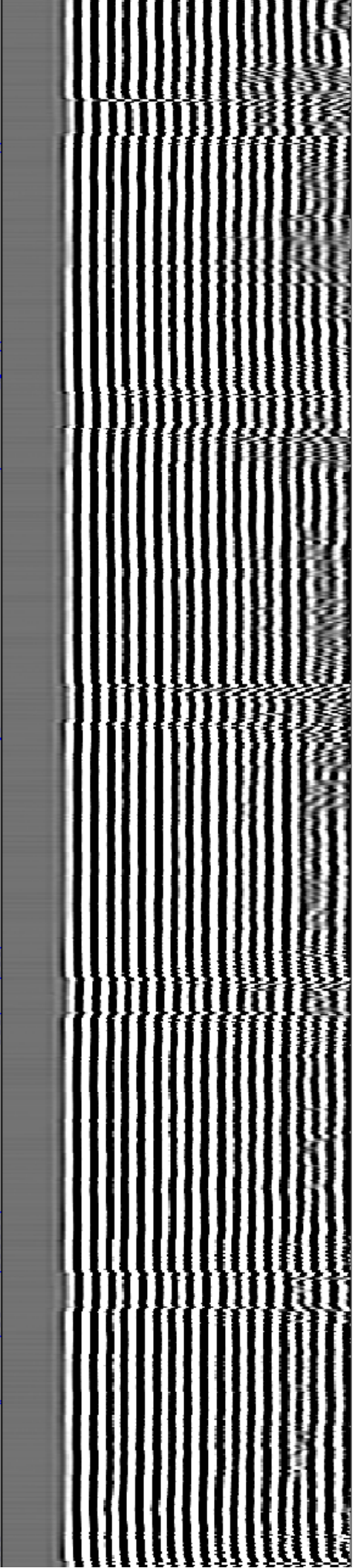
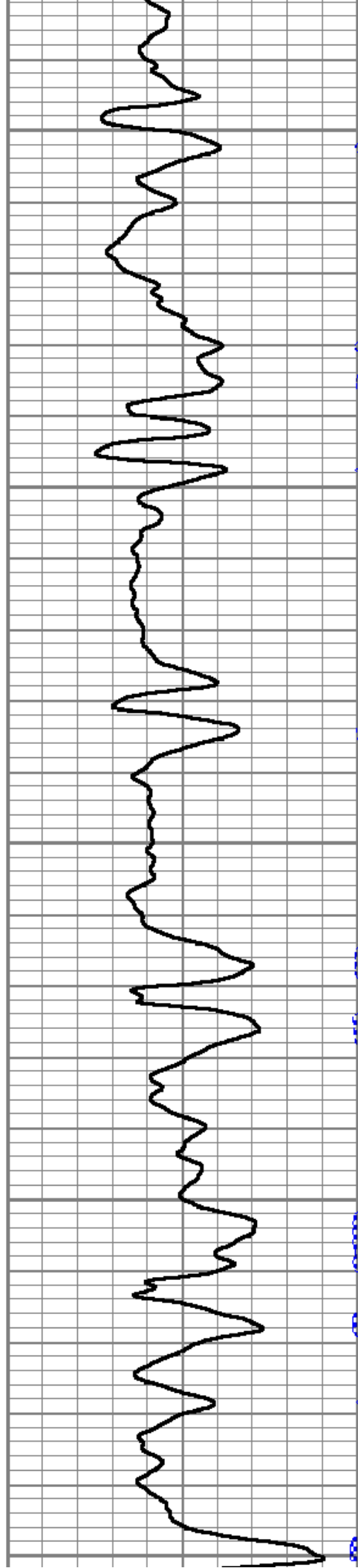
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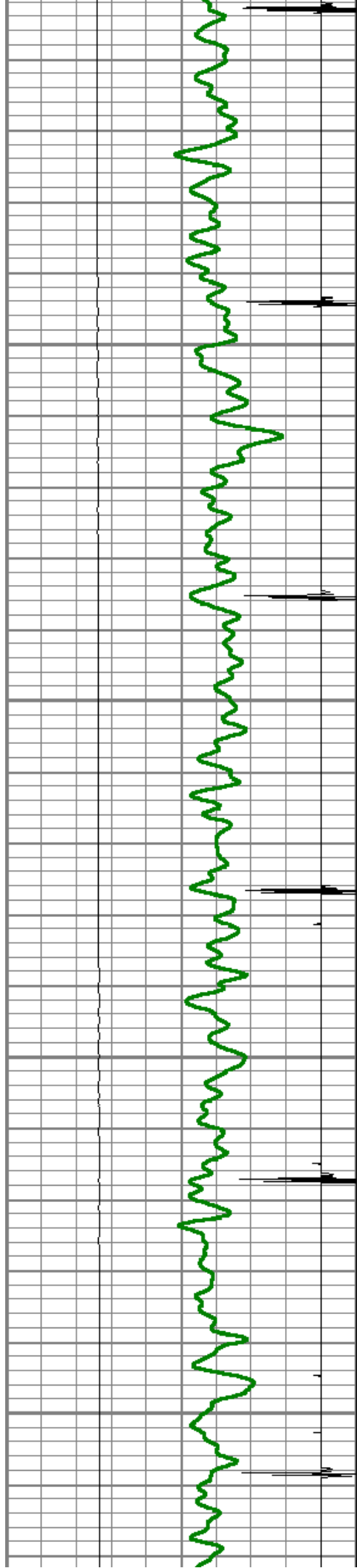
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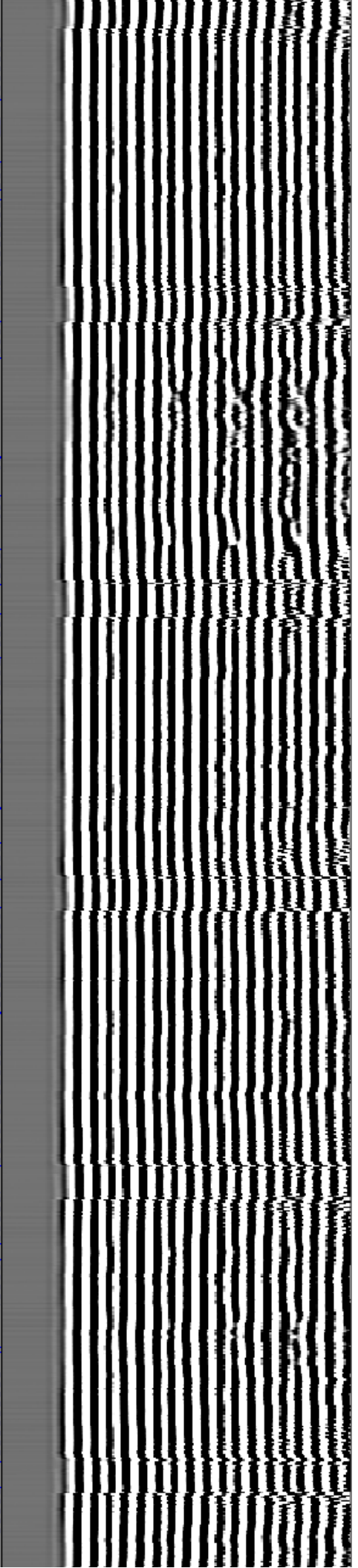
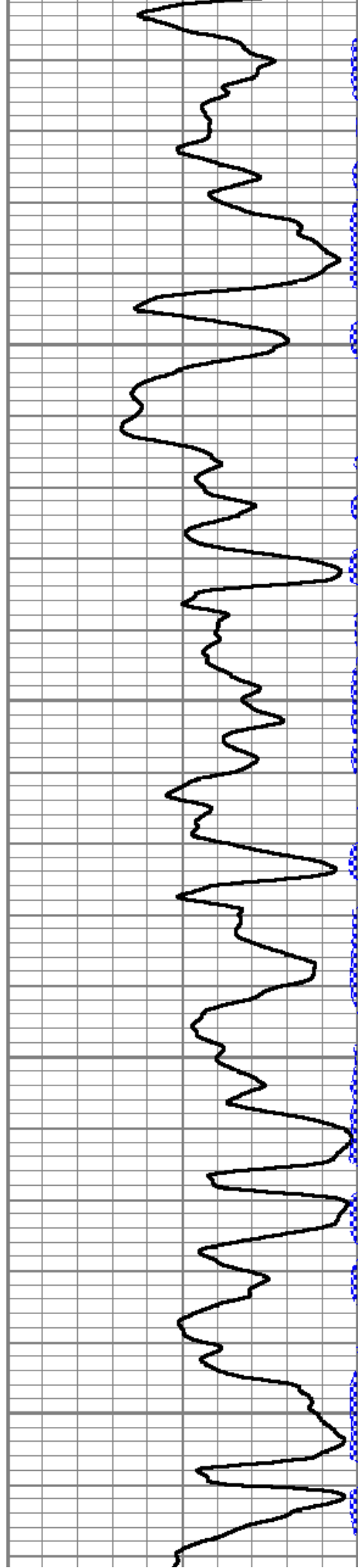


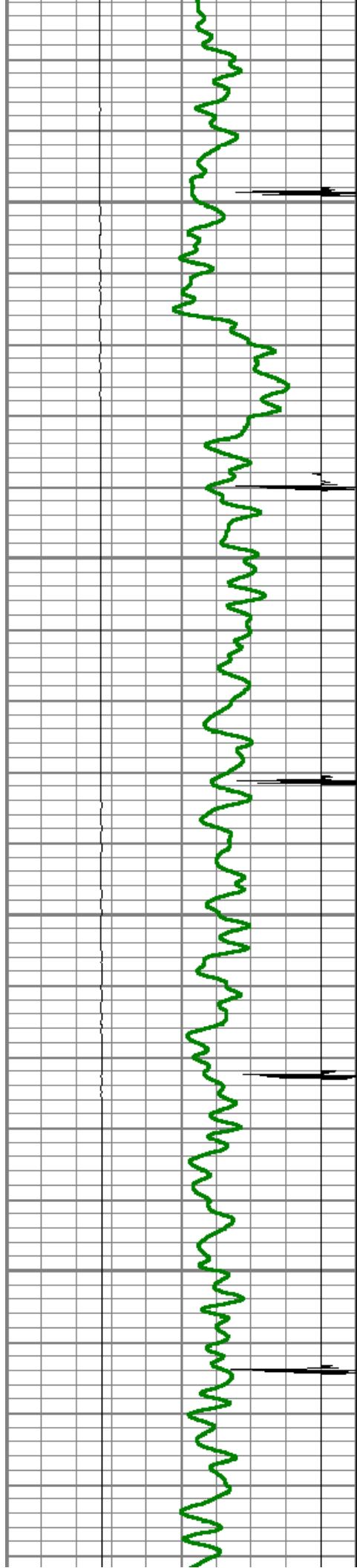
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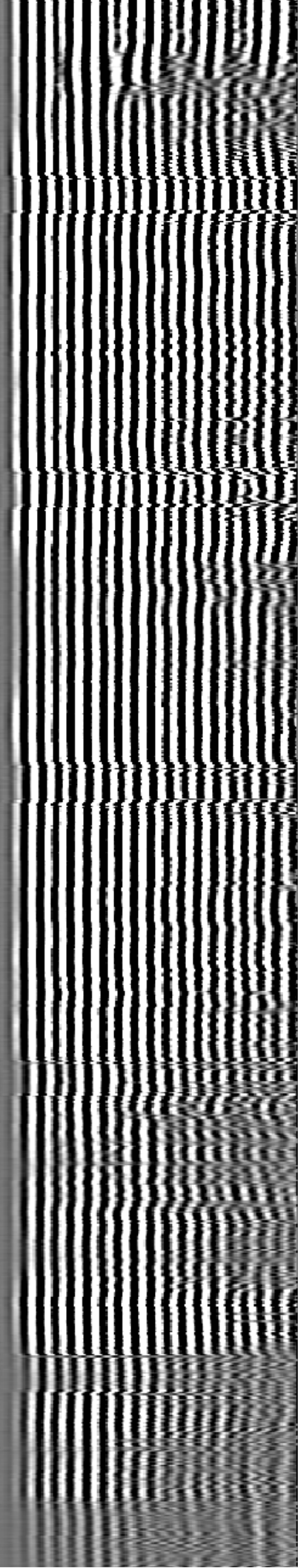
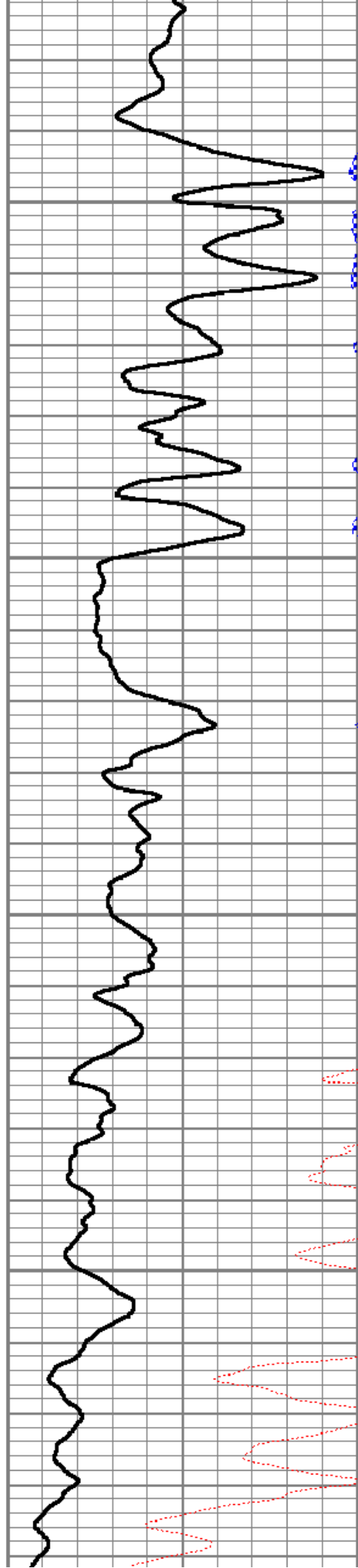


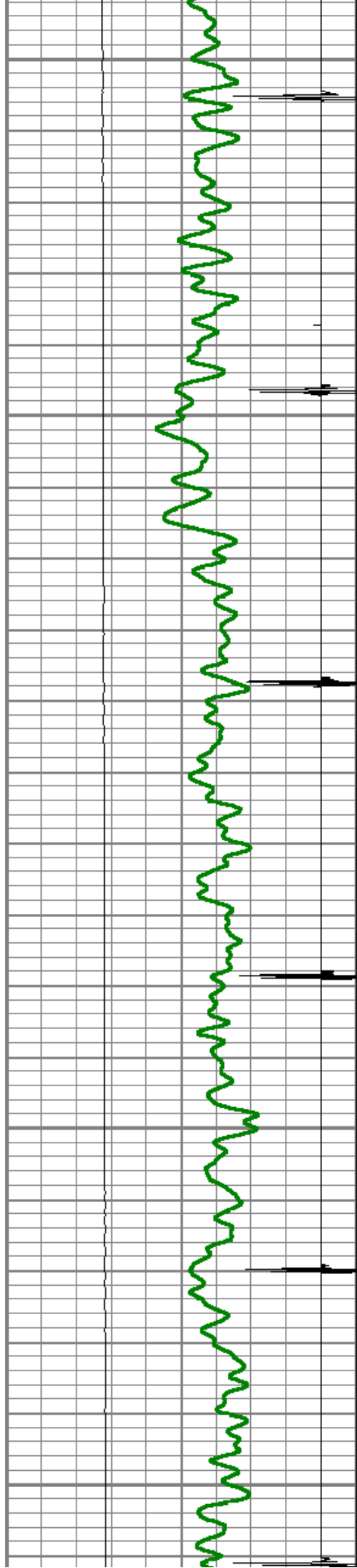
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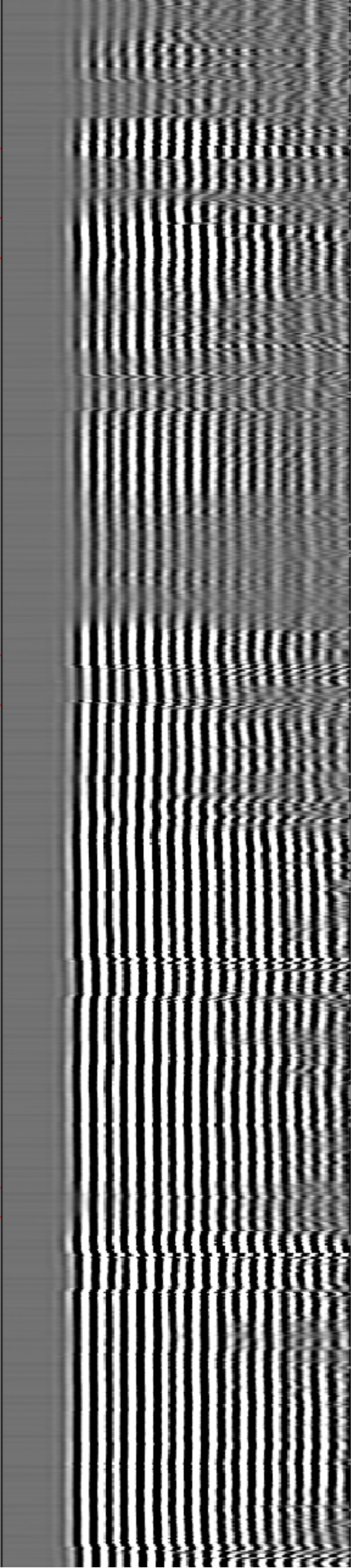
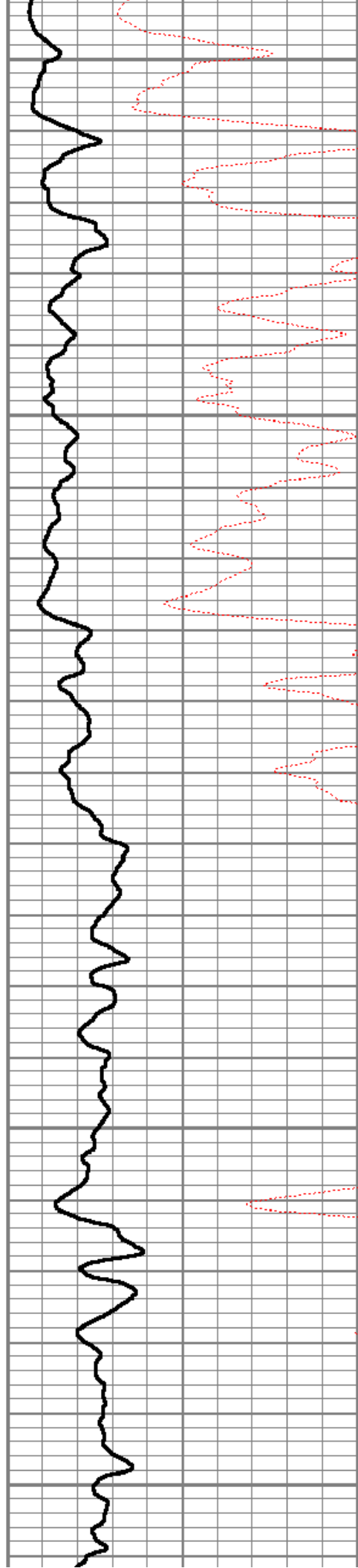
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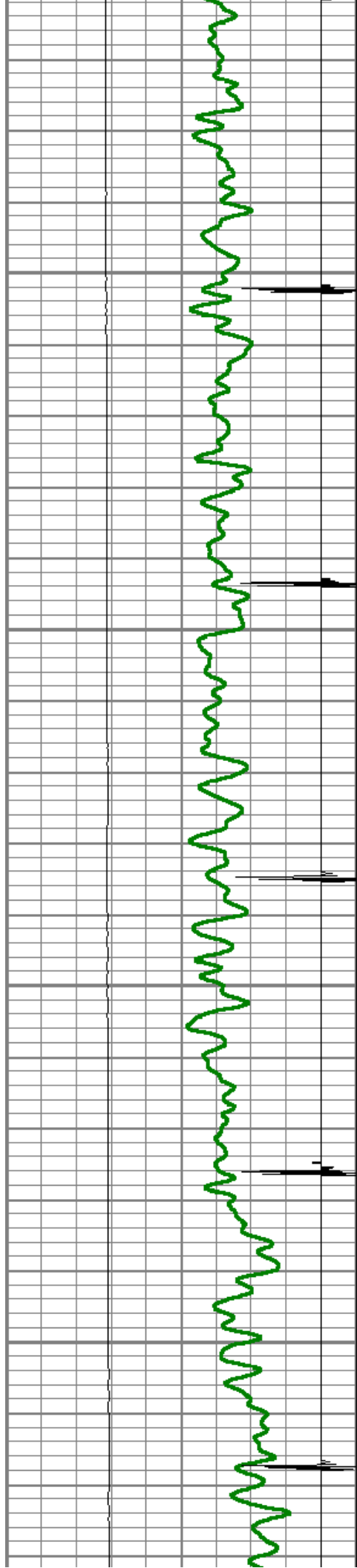
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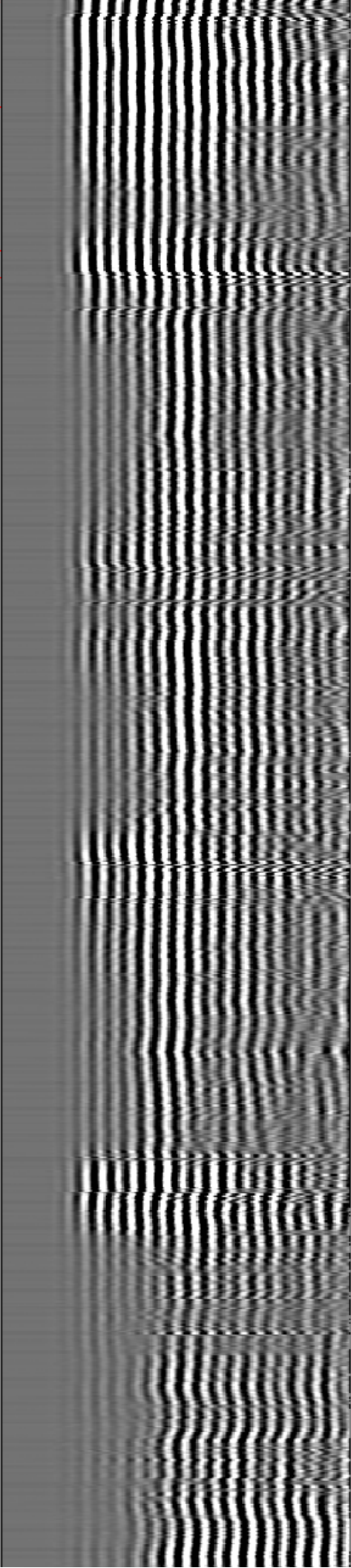
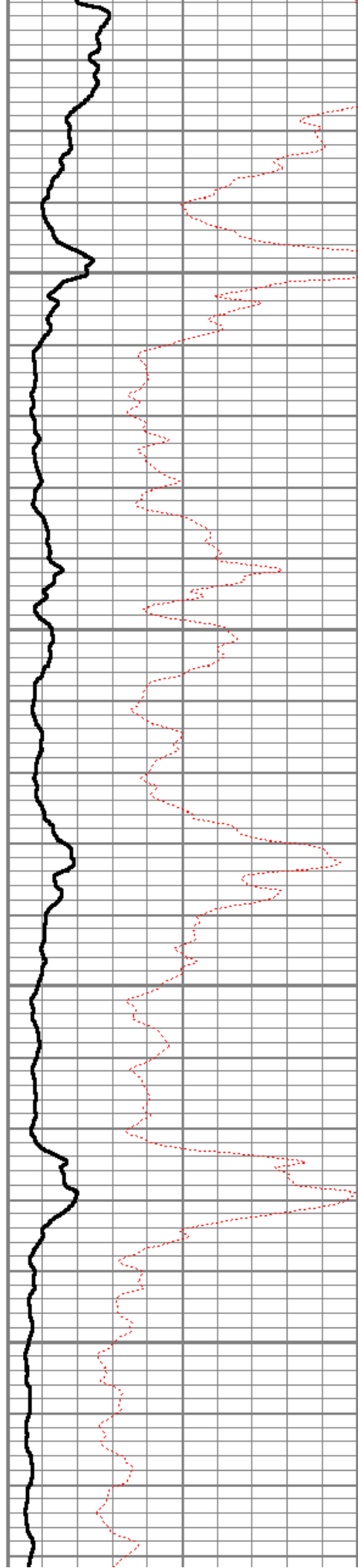


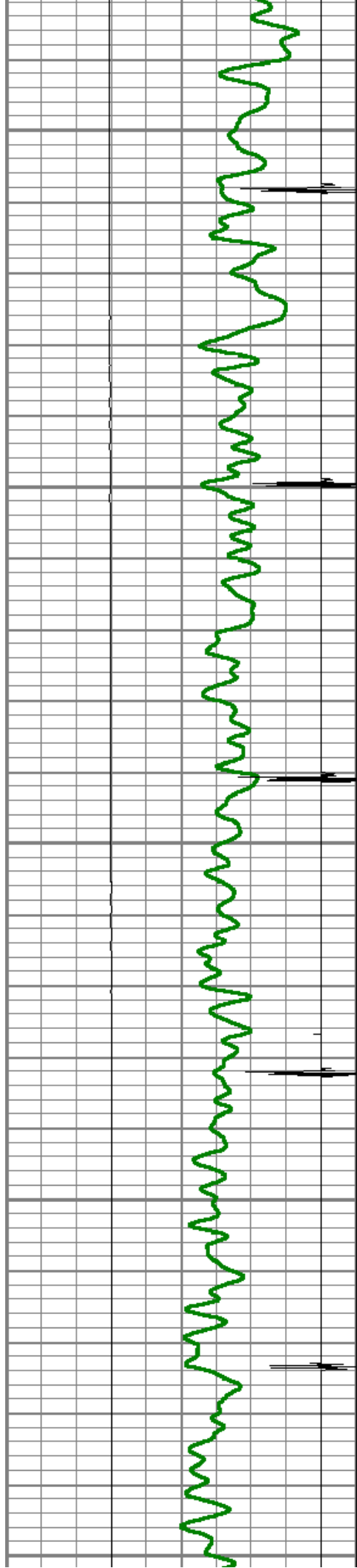
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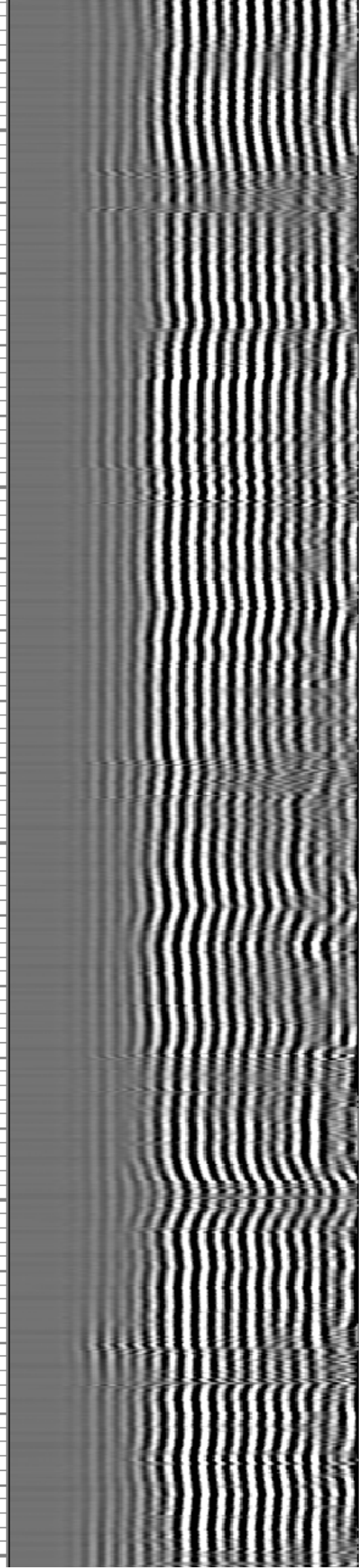
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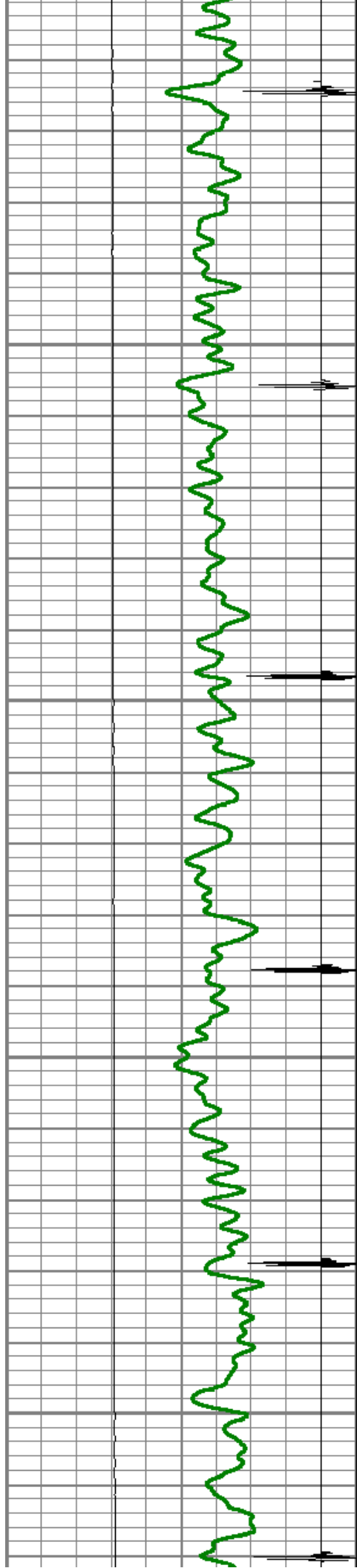
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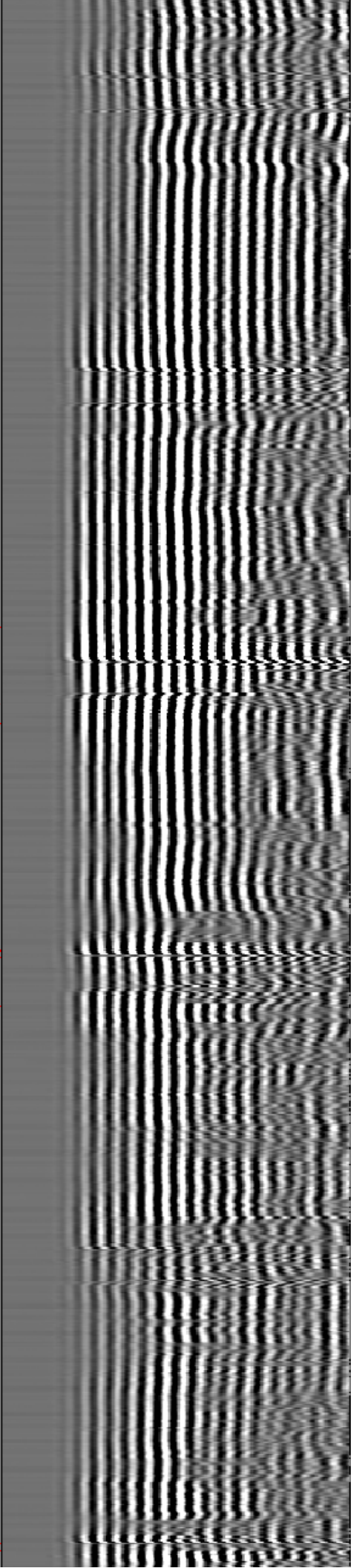
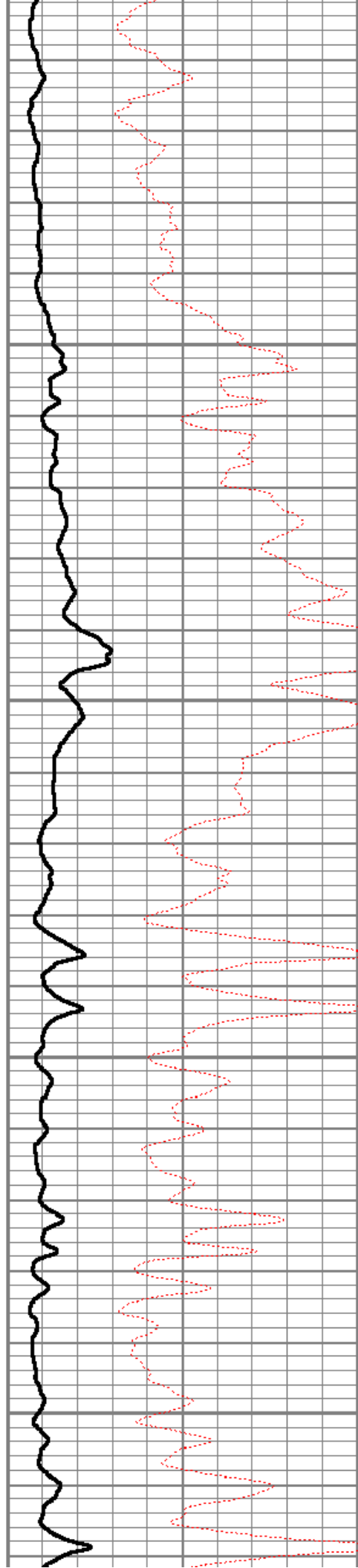


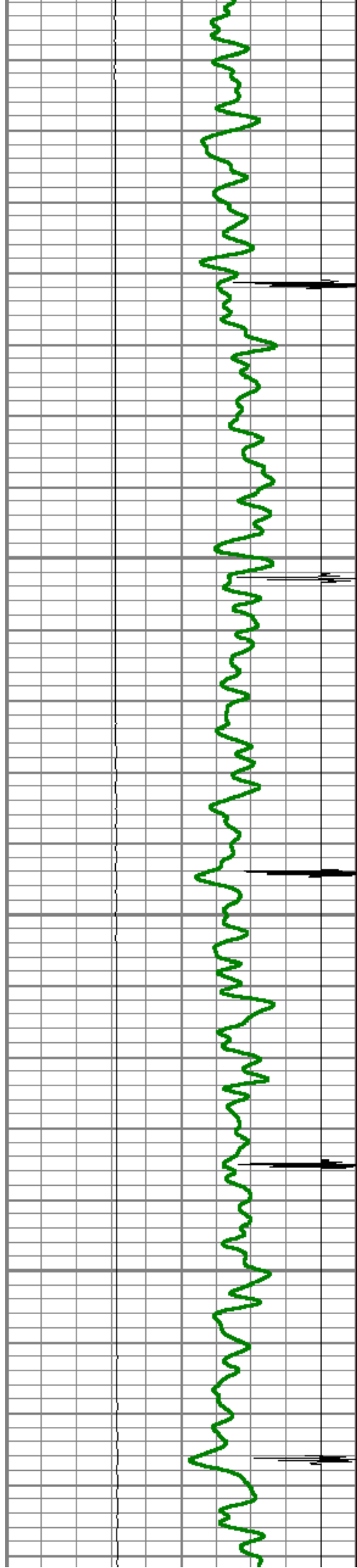
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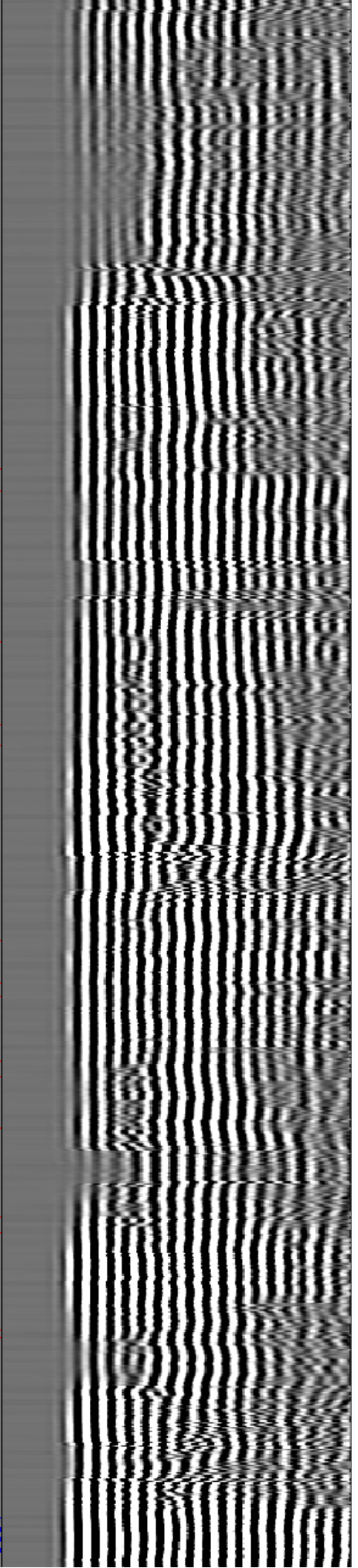
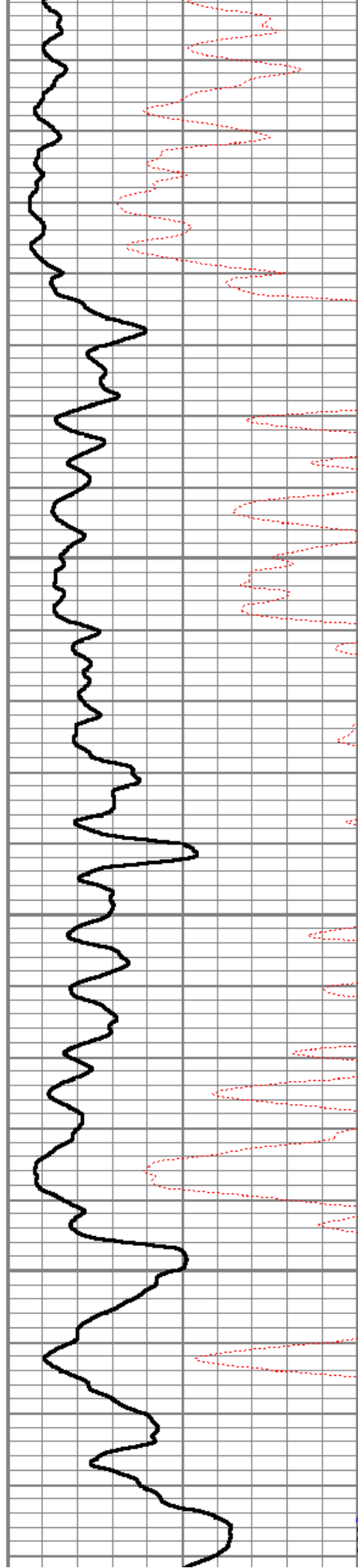


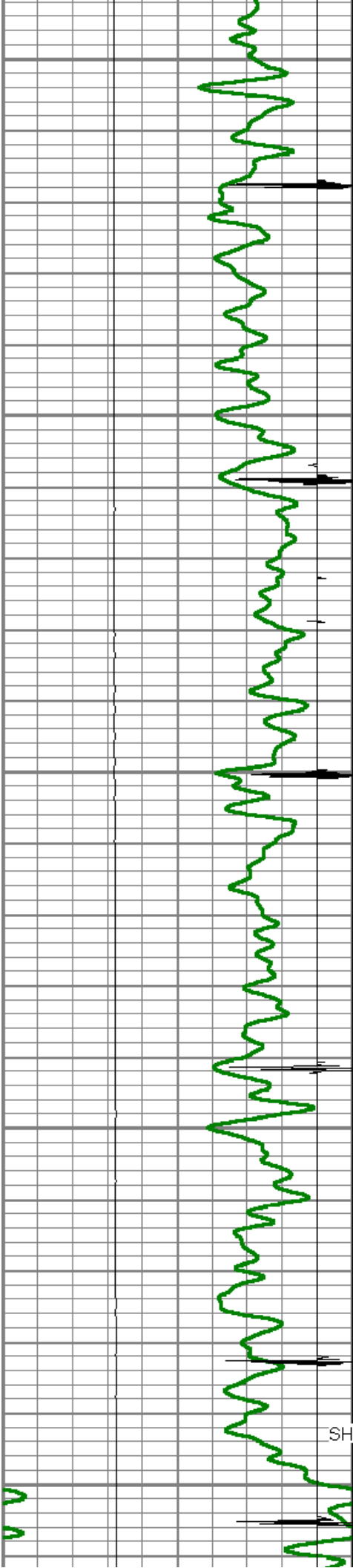
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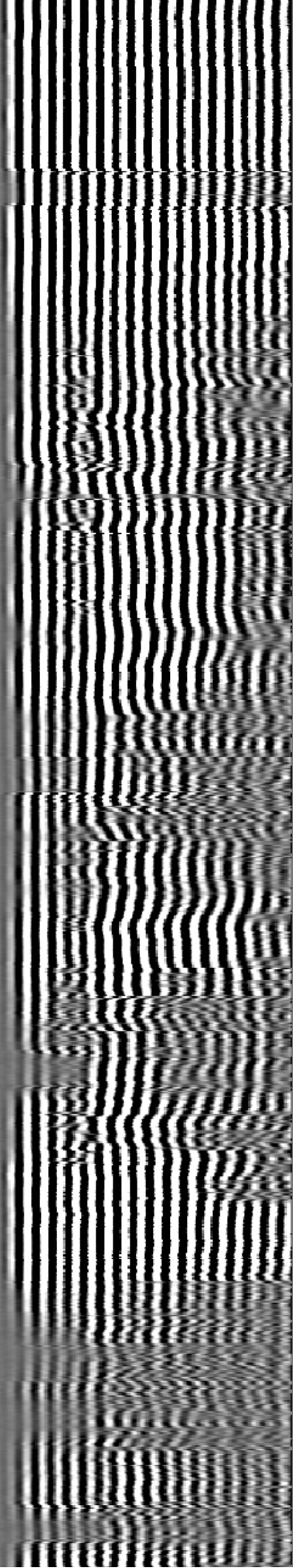
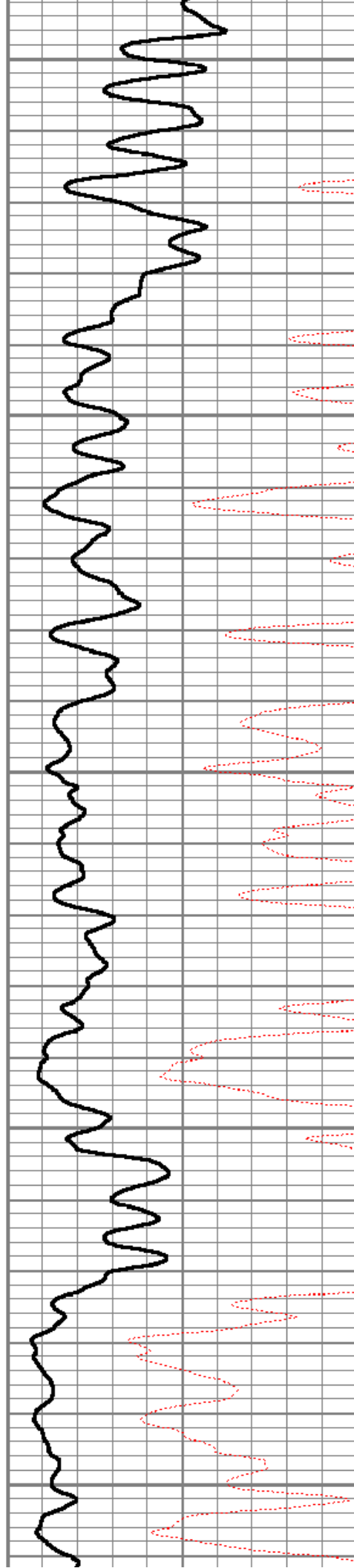
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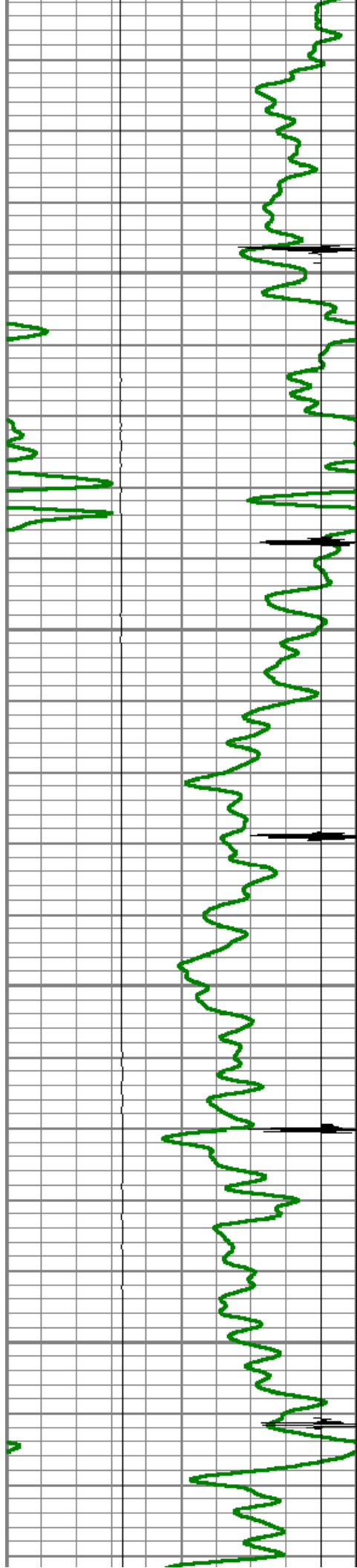
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SHORT JOINT



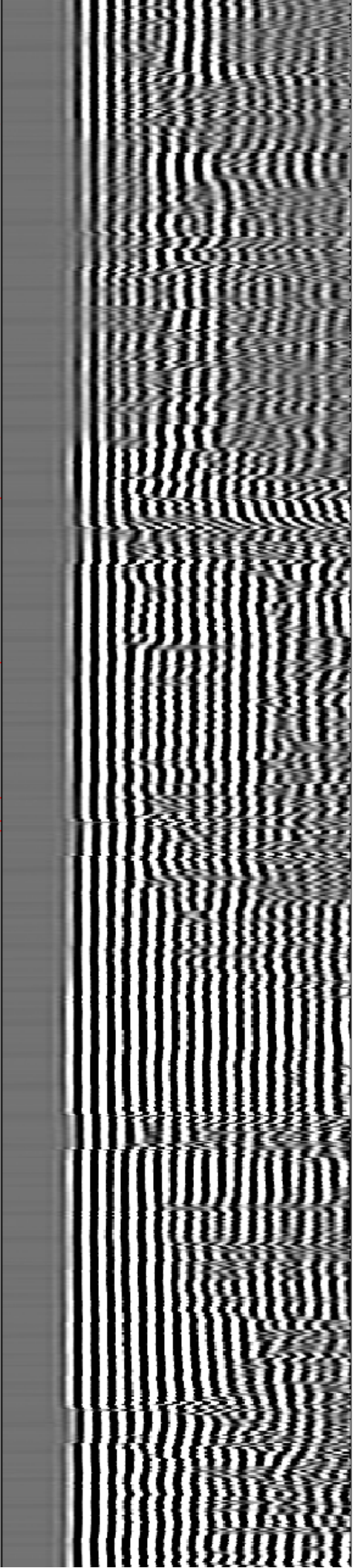
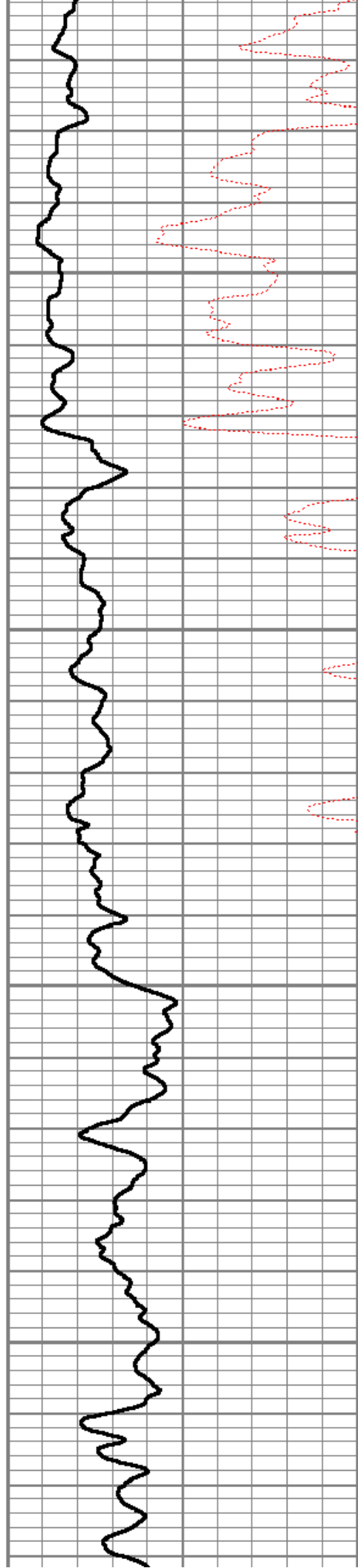


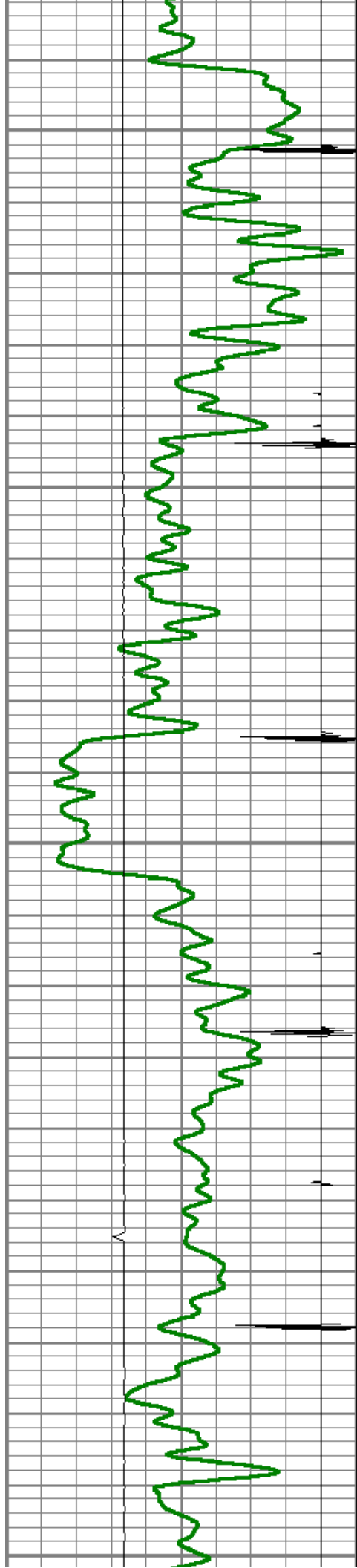
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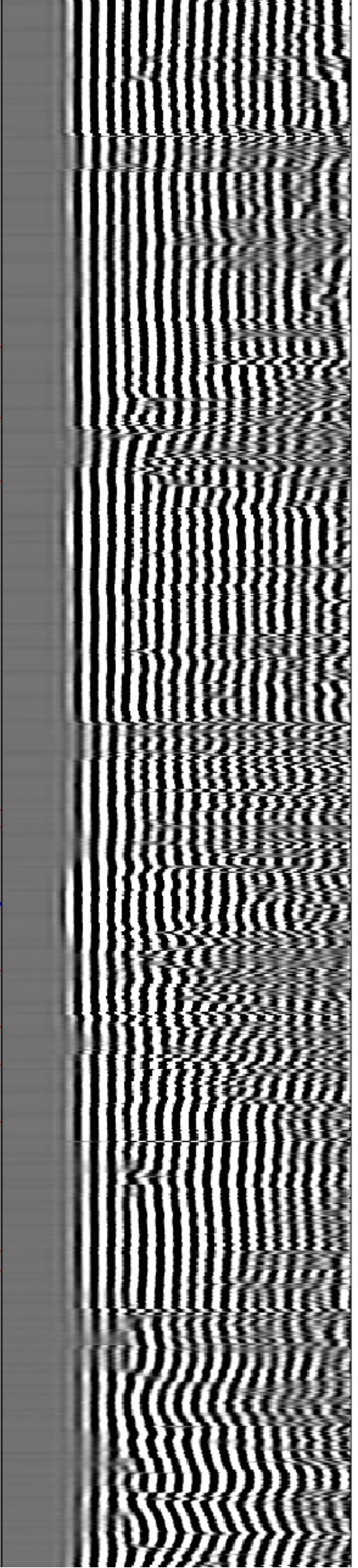
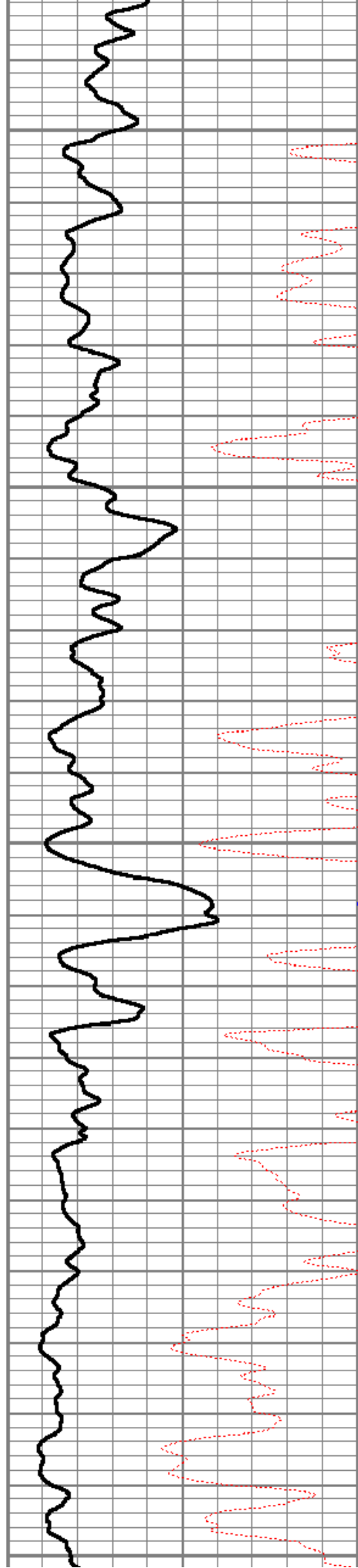
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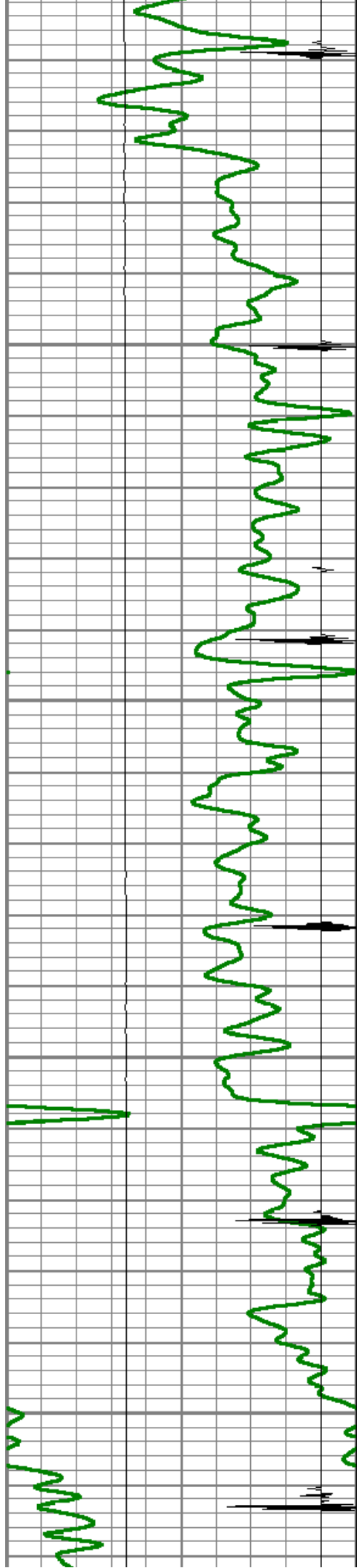
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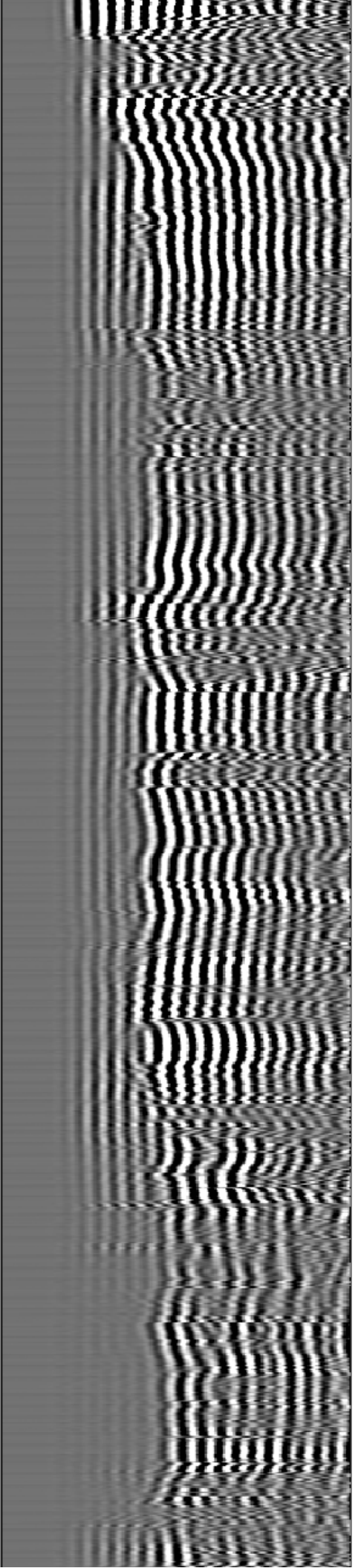
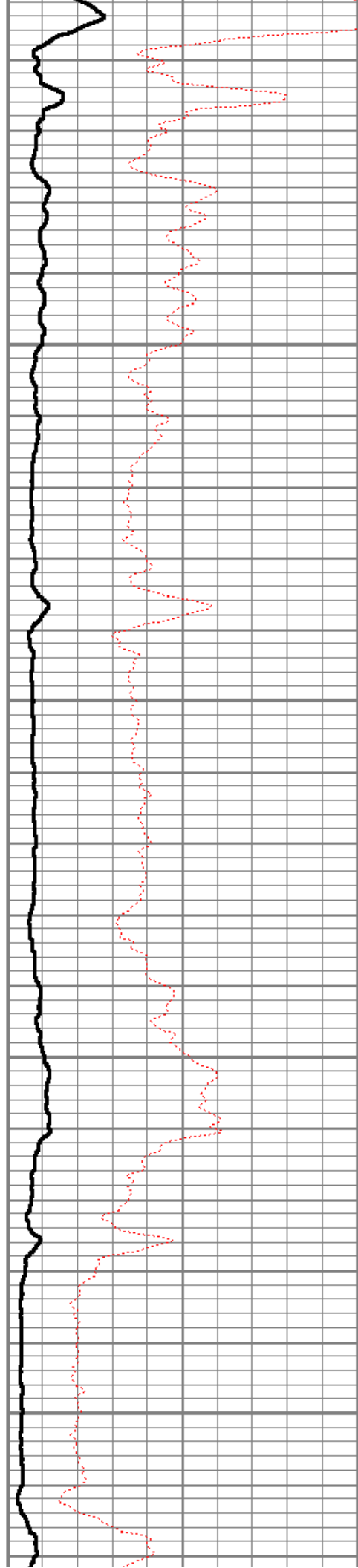


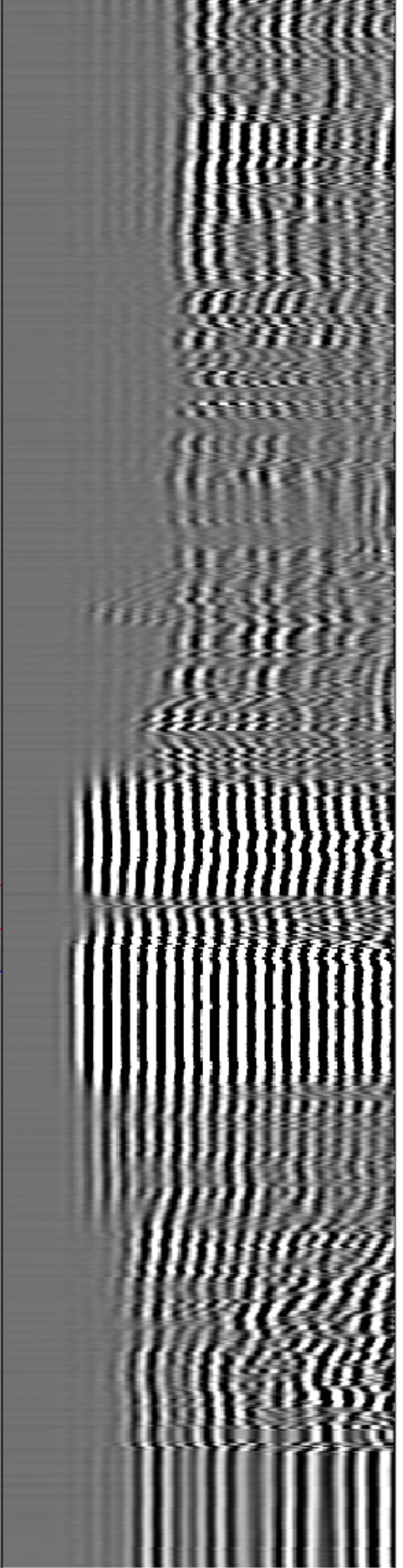
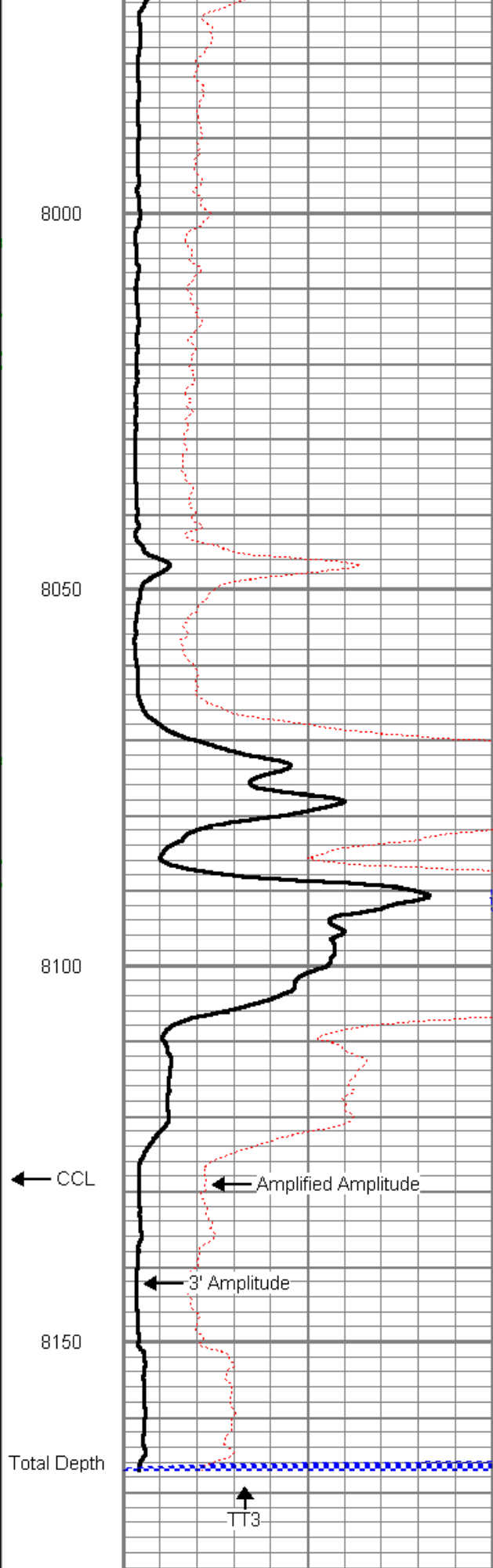
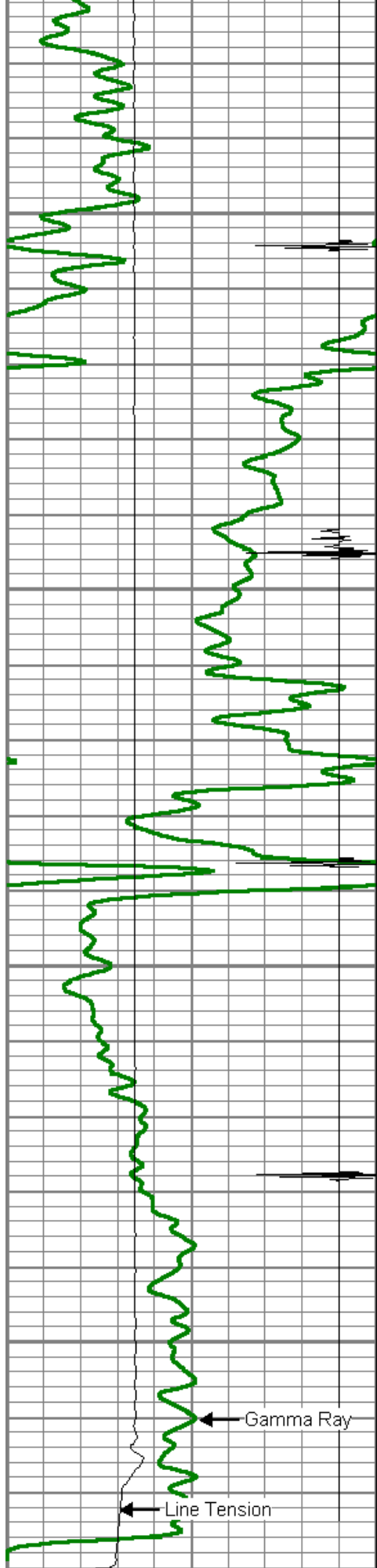
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7950





0	Gamma Ray (GAPI)	200
0	LTEN (lb)	5000
0	CCL	1

0	Amplified Amplitude (mV)	20
0	Amplitude (mV)	100
0	TT3 (µsec)	200

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



Company	ENCANA OIL & GAS (USA) INC
Well	ELMQUIST 21-23
Field	WATTENBERG
County	WELD
State	COLORADO