

# Pulsed Neutron Emulated OH Log

Company Laramie Energy LLC  
Well CC Federal 0697-03-06W  
Field Grand Valley  
County Garfield State Colorado

Location: API #: 05-045-23931  
SEC 4 TWP 6S RGE 9TW  
Permanent Datum Ground Level Elevation 8609'  
Log Measured From Kelly Bushing 30 FT  
Drilling Measured From Kelly Bushing  
Other Services ---  
Elevation  
K.B. 8639'  
D.F. 8638'  
G.L. 8609'

Date	05-SEP-2019			
Run Number				
Depth Driller				
Depth Logger				
Bottom Logged Interval				
Top Log Interval				
Open Hole Size	8.750"			
Type Fluid	Water			
Density / Viscosity	8.34 lb/gal			
Max. Recorded Temp.				
Estimated Cement Top				
Time Well Ready				
Time Logger on Bottom				
Equipment Number	HD-0359			
Location	Grand Junction, CO			
Recorded By	Z. Fisher			
Witnessed By				
Borehole Record				
Run Number	Bit	From	To	Size
				Weight
				From
				To
Tubing Record				
Casing Record	Size (in)	Wgt (lbs/ft)	Grade	Top
Surface Casing	9 5/8	36	J-55	Surface
Intermediate #1	4 1/2	11.6	P-110	Surface
Intermediate #2				
Inner				

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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

This well is an Offset Well  
Depth referenced to Reliance RBL dated 22-AUG-2019  
Reliance Hunter RAS PN data was collected on this well  
Training Well: CC 0697-04-08E  
TW models were built using Schlumberger OH provided by the client and  
Reliance Hunter PN data  
Density Porosity Matrix = 2.68 g/cc  
Emulation results may be affected by areas of poor bond  
Emulation results may be affected by washouts and quality of OH data  
Thank you for choosing Reliance Oilfield Services, LLC!

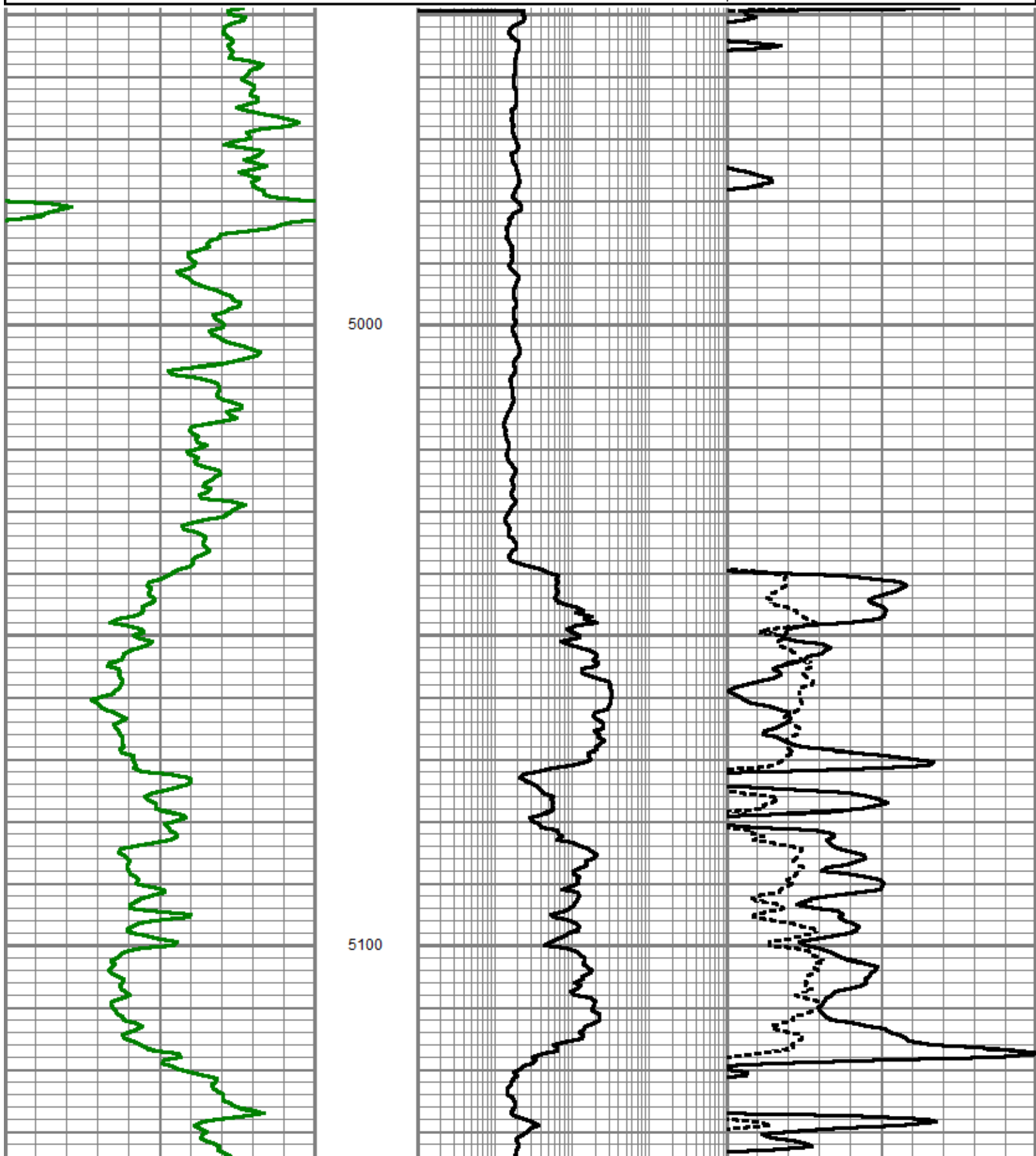
Database File	c:\techlog-projects\laramie_cc 0697-04-08e tw\data\export\cc federal 0697-03-06w\processed_laramie energy_cc 0697-03-06w
Dataset Pathname	run/merge2
Presentation Format	ros_emulation_output
Dataset Creation	Sun Sep 15 17:11:58 2019
Charted by	Depth in Feet scaled 1:240

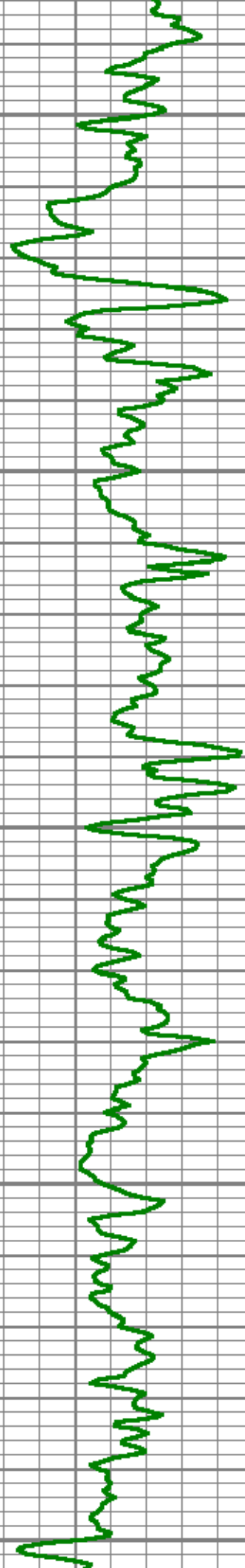
0 Normalized Gamma Ray (GAPI) 150

0.2 Emulated Resistivity (Ohm-m) 2000

0.3 Emulated Density Porosity -0.1

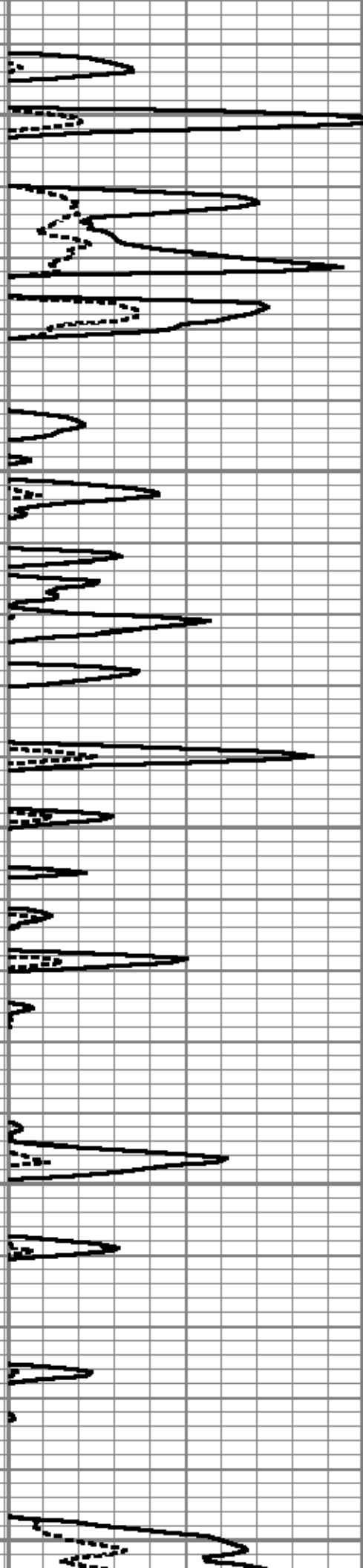
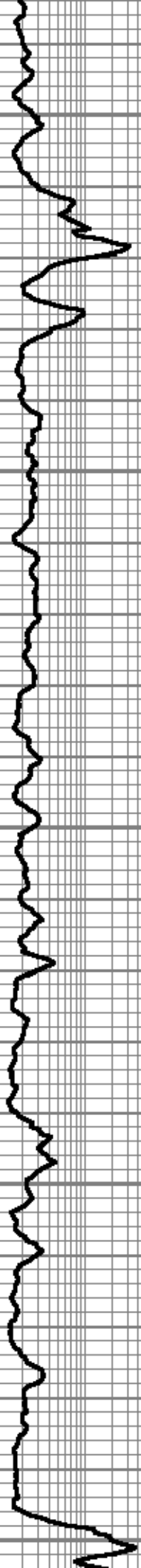
0.3 Emulated Neutron Porosity -0.1

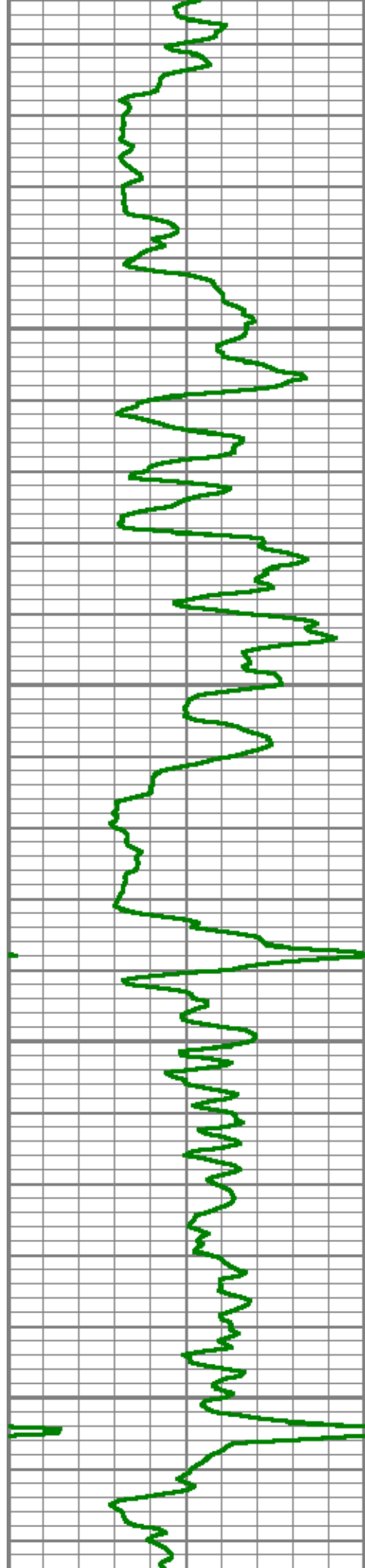




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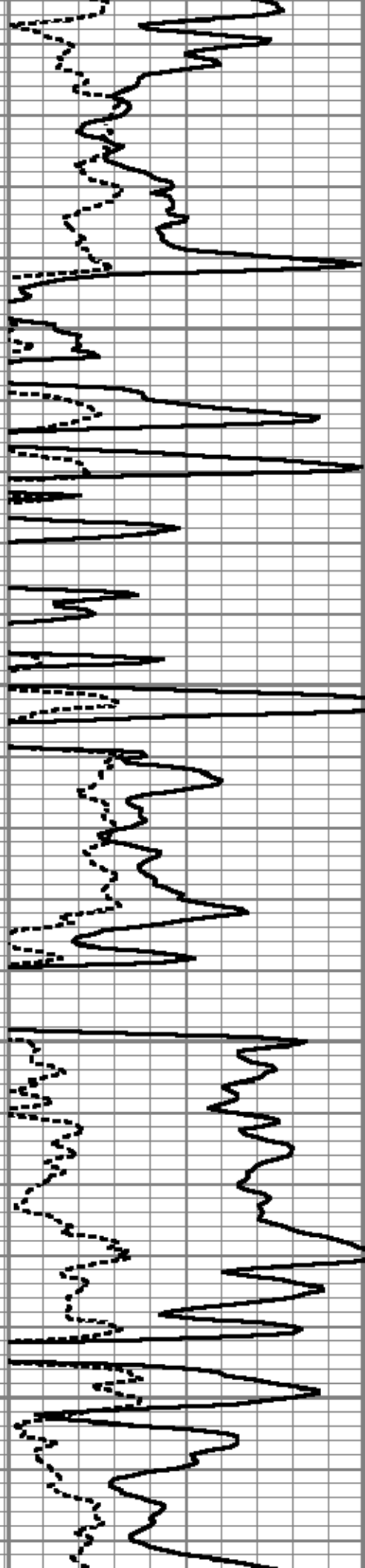
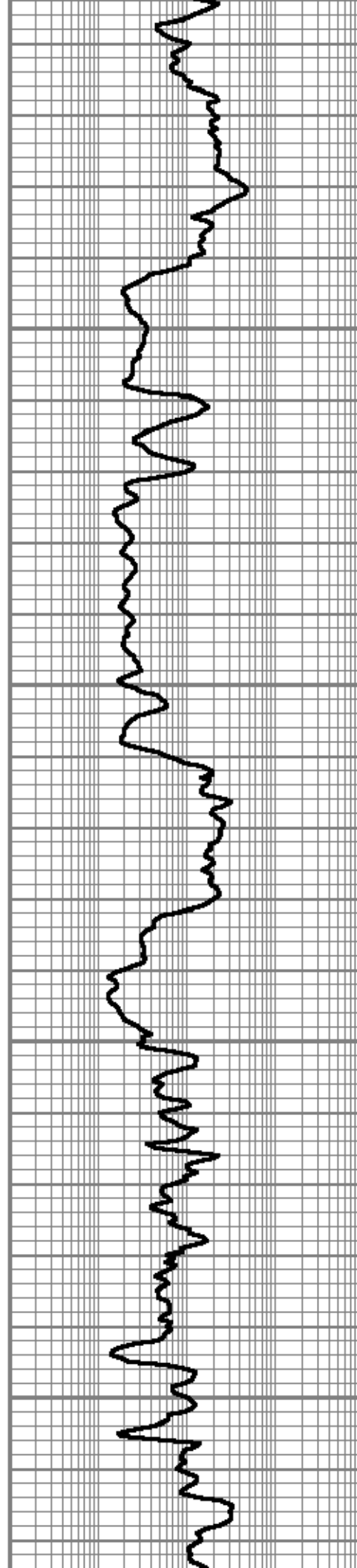
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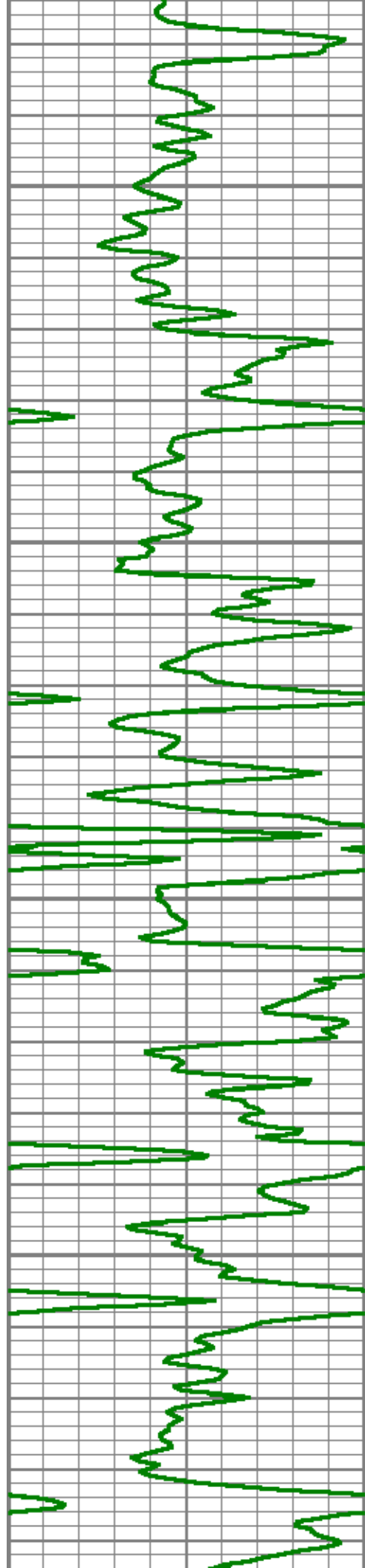




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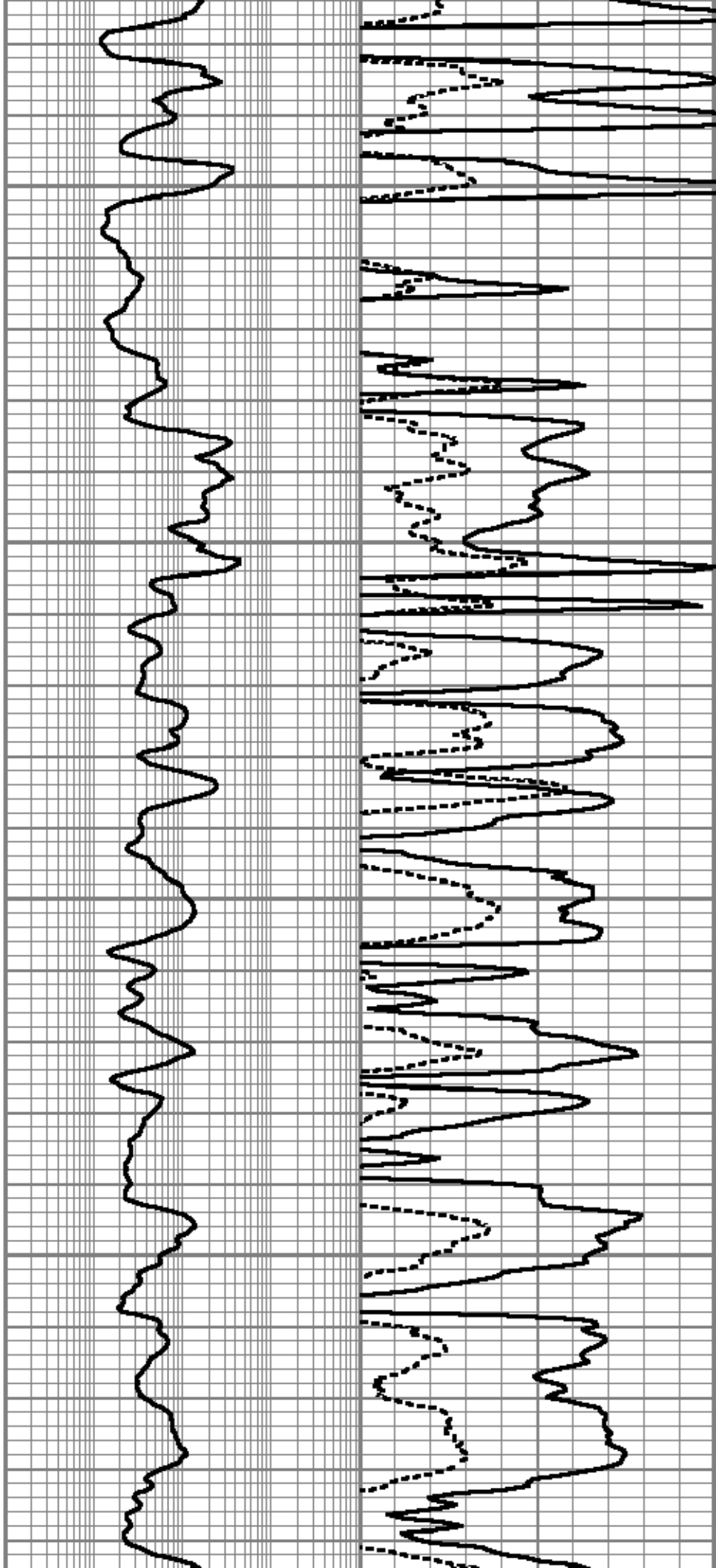
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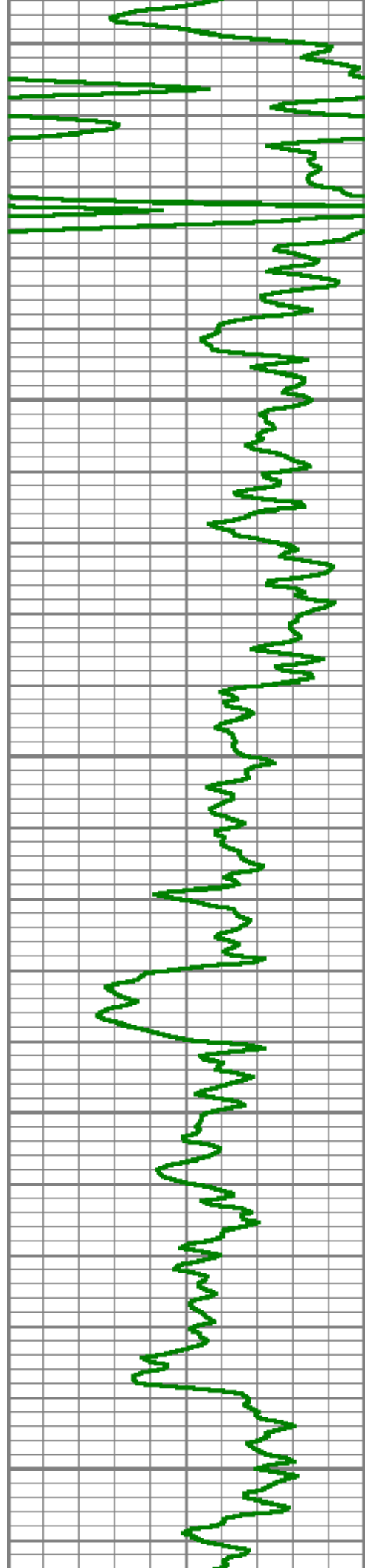




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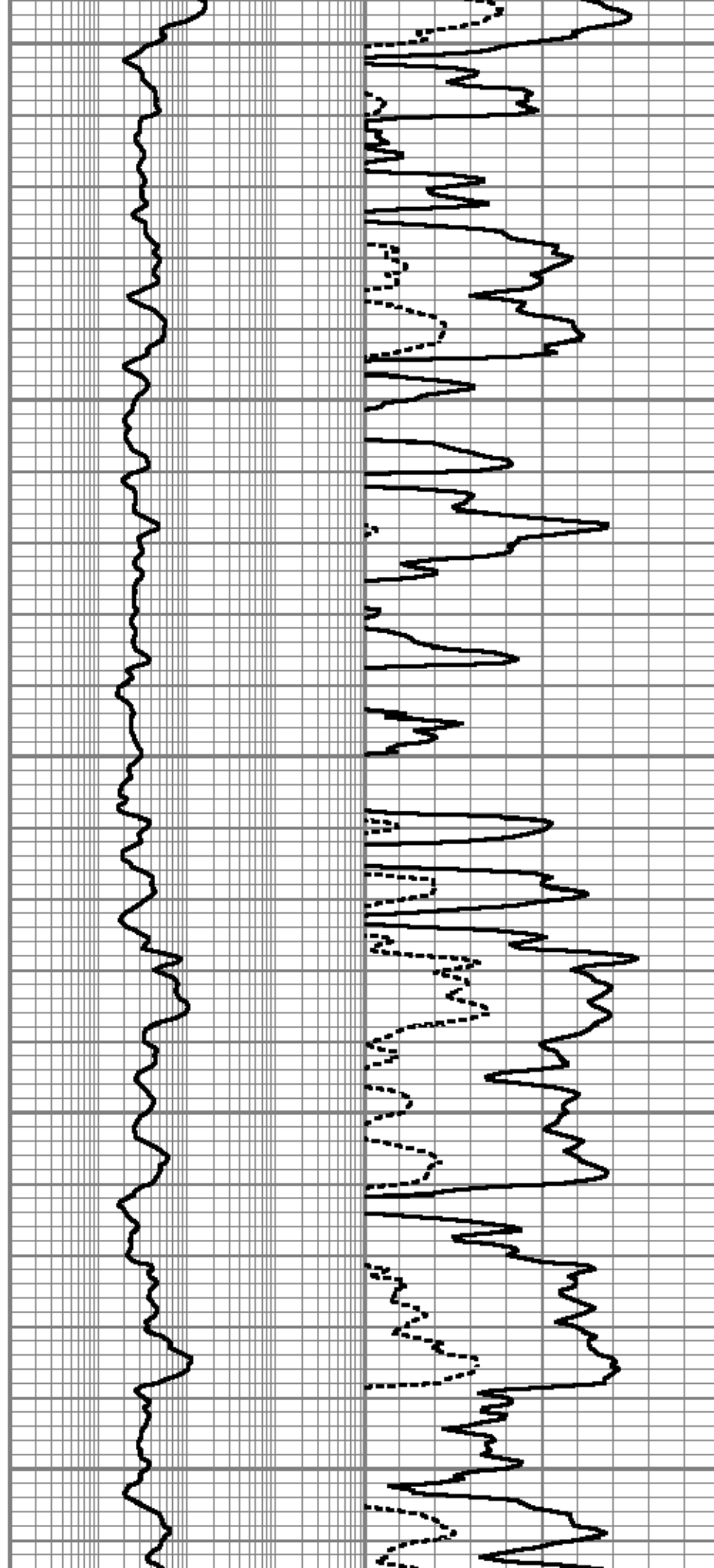




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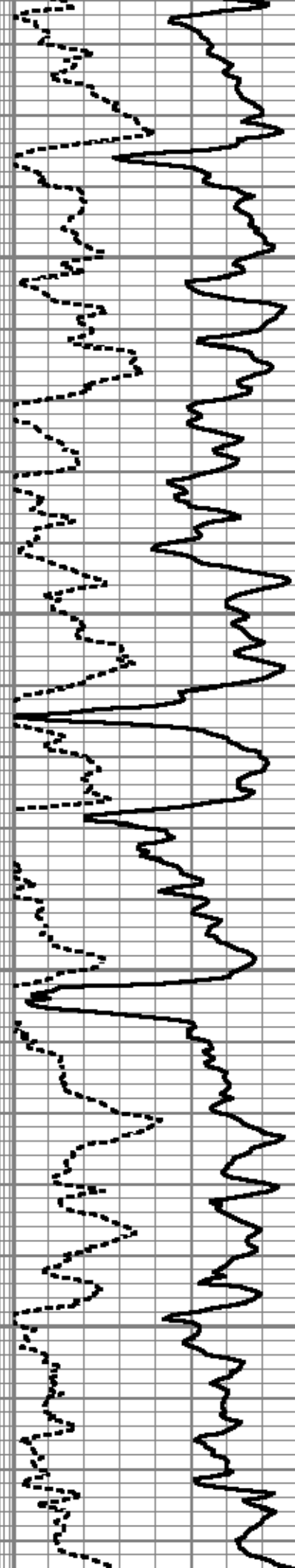
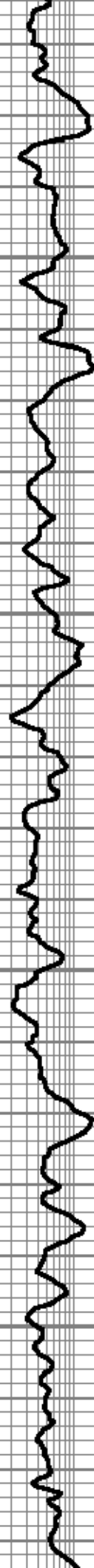


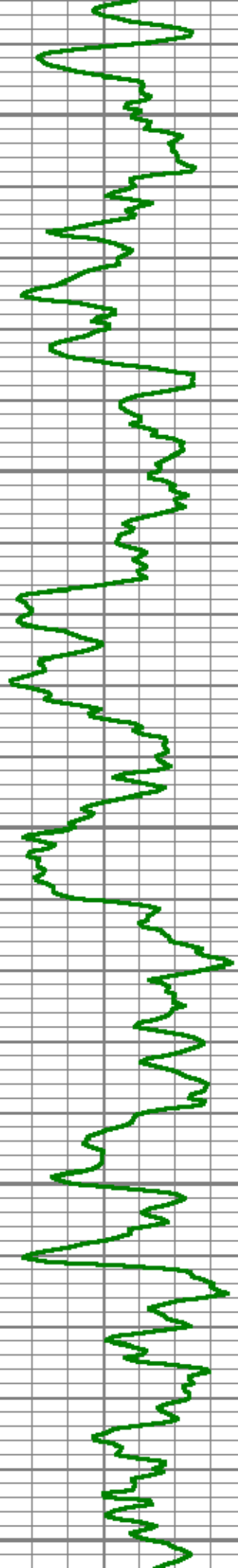




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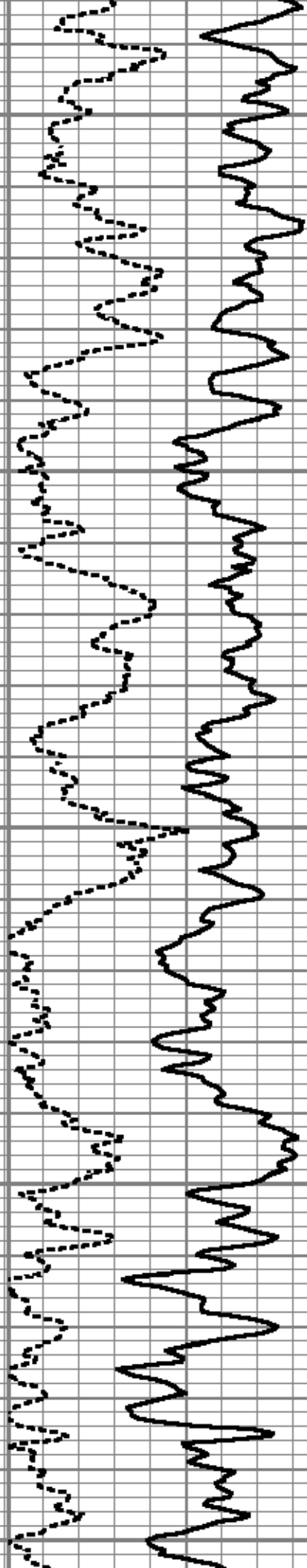
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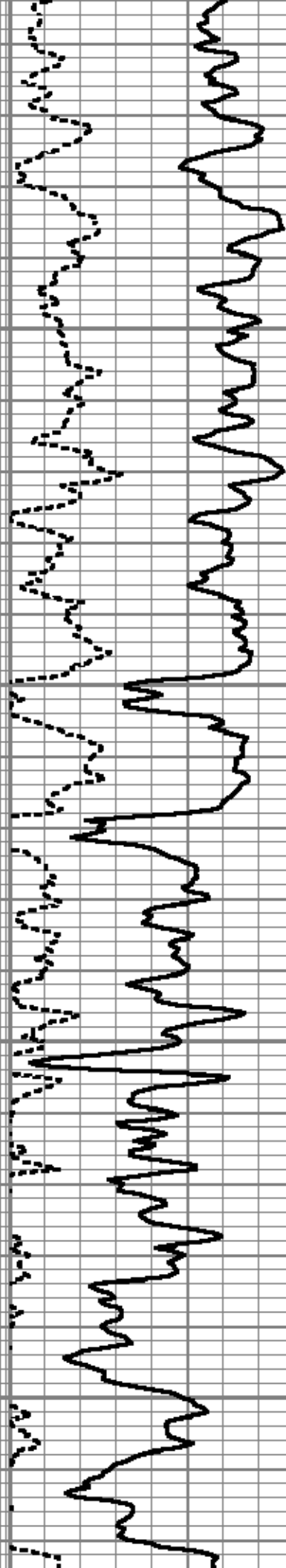
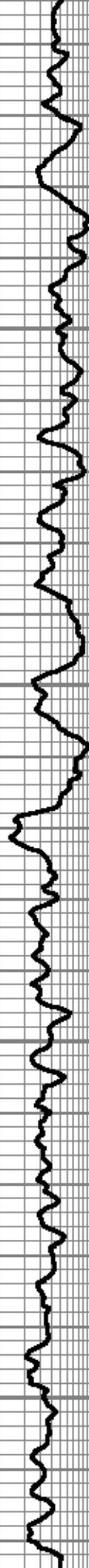


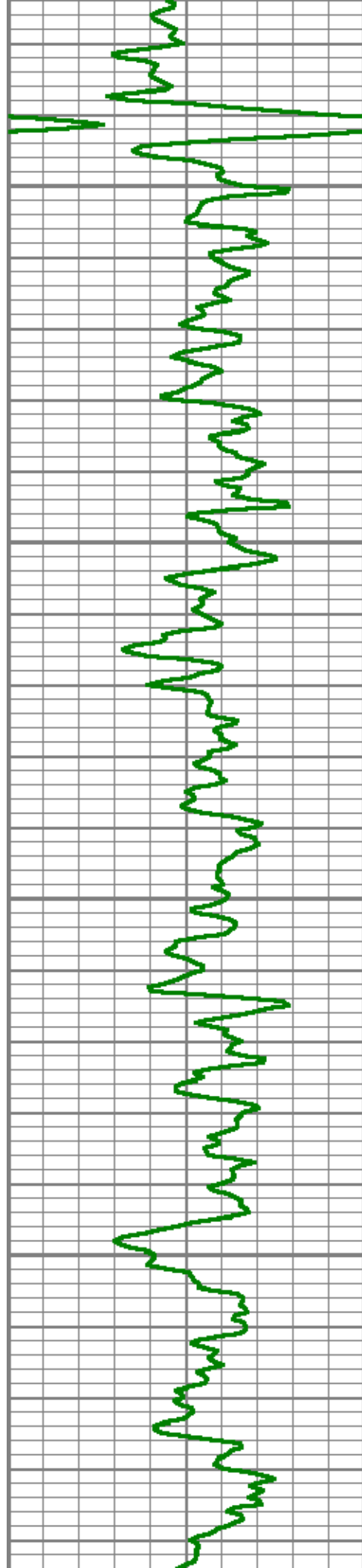




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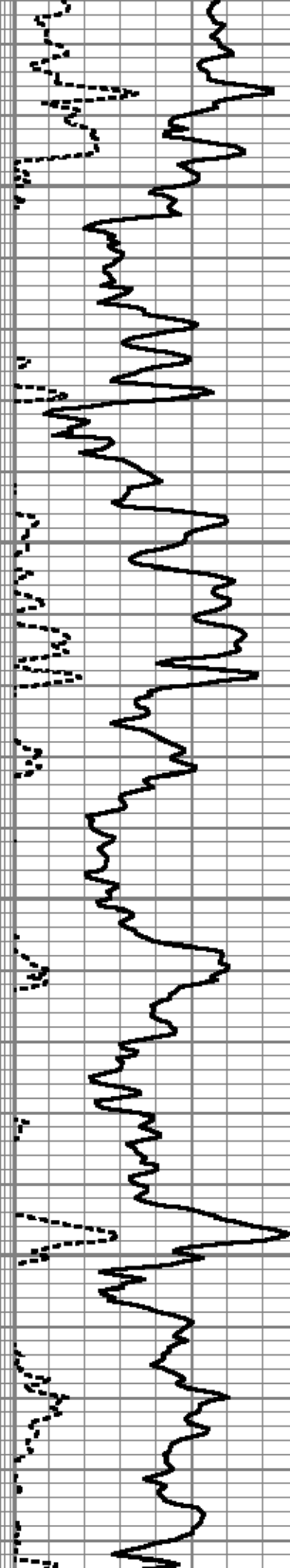
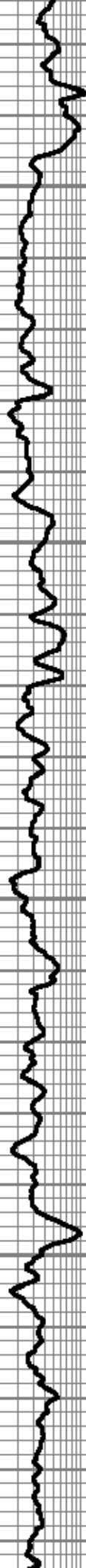
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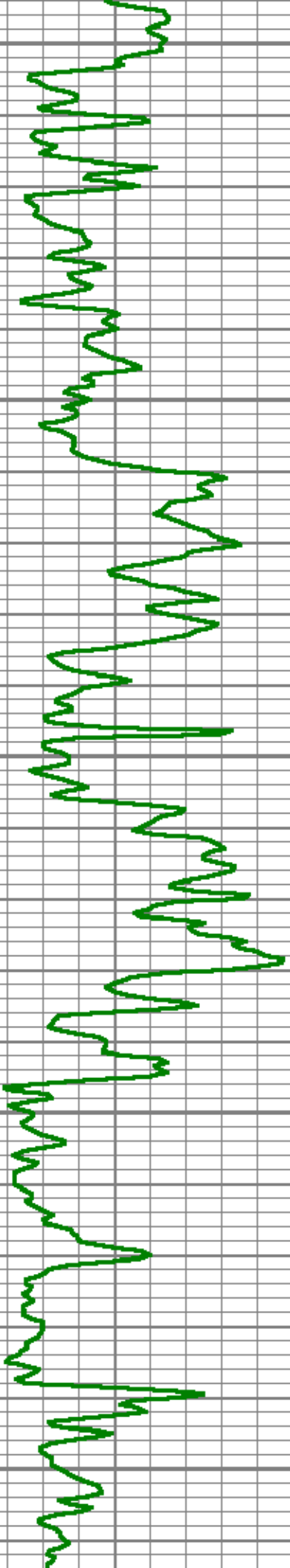




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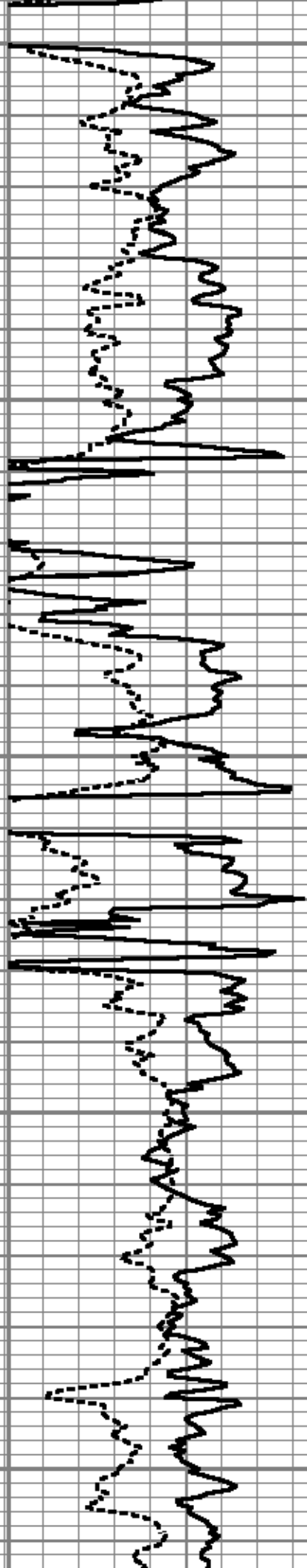
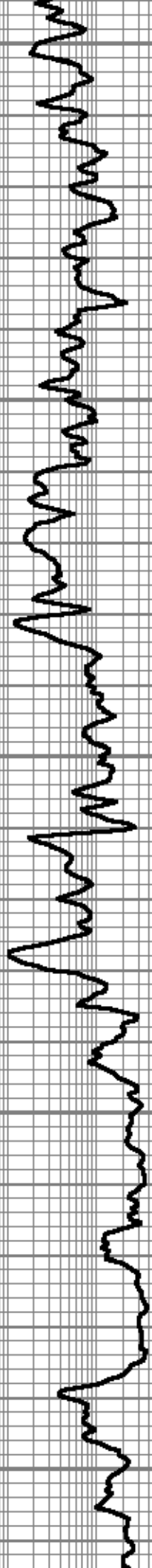


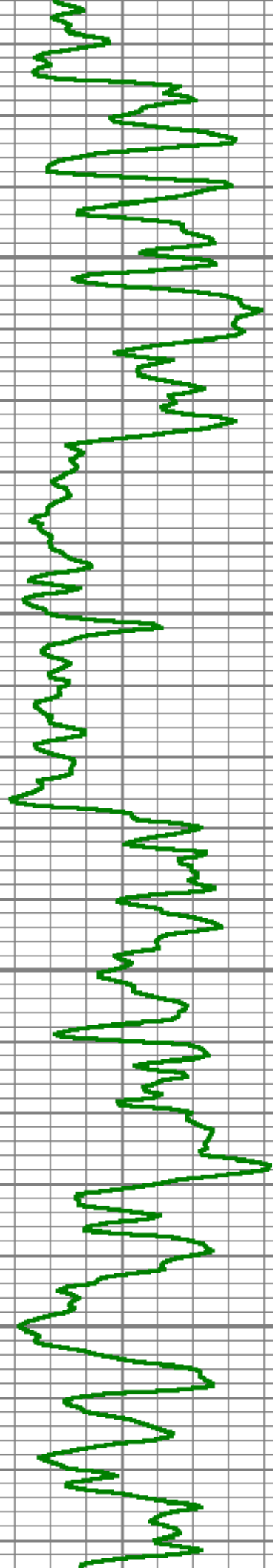


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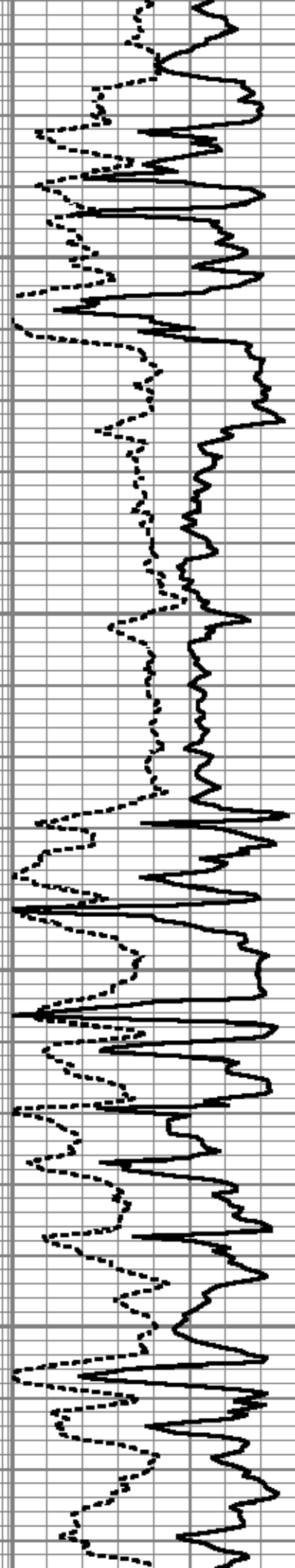
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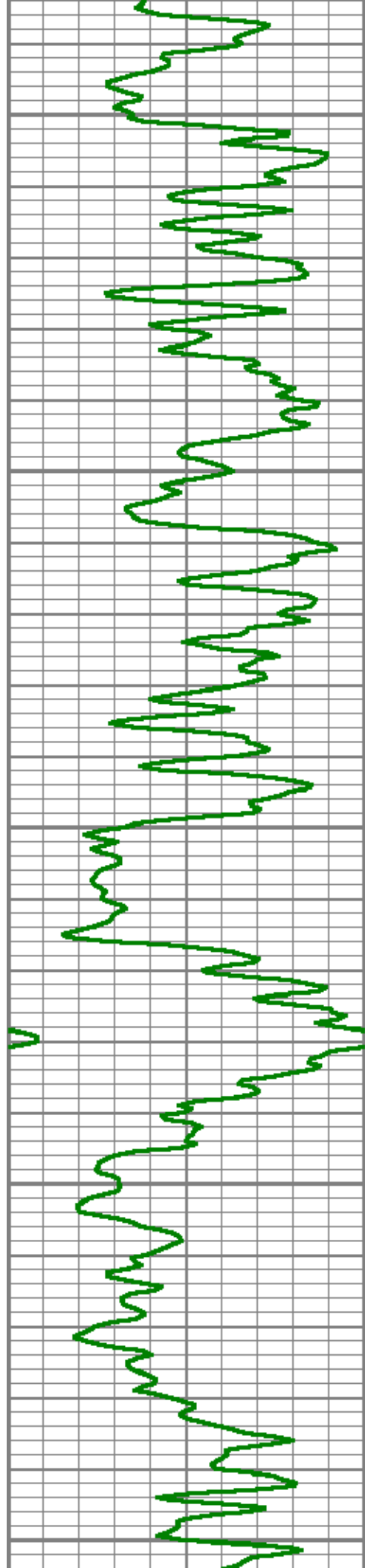




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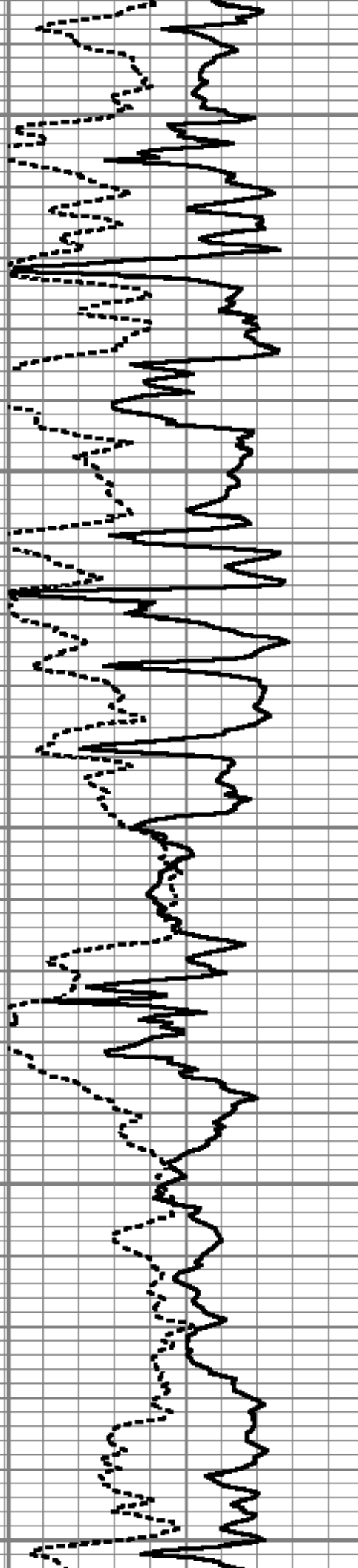
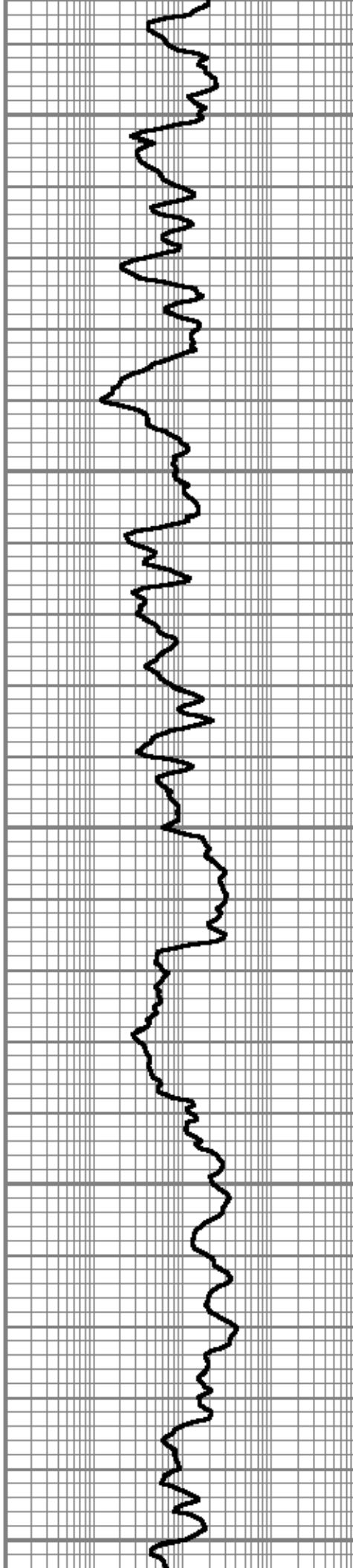
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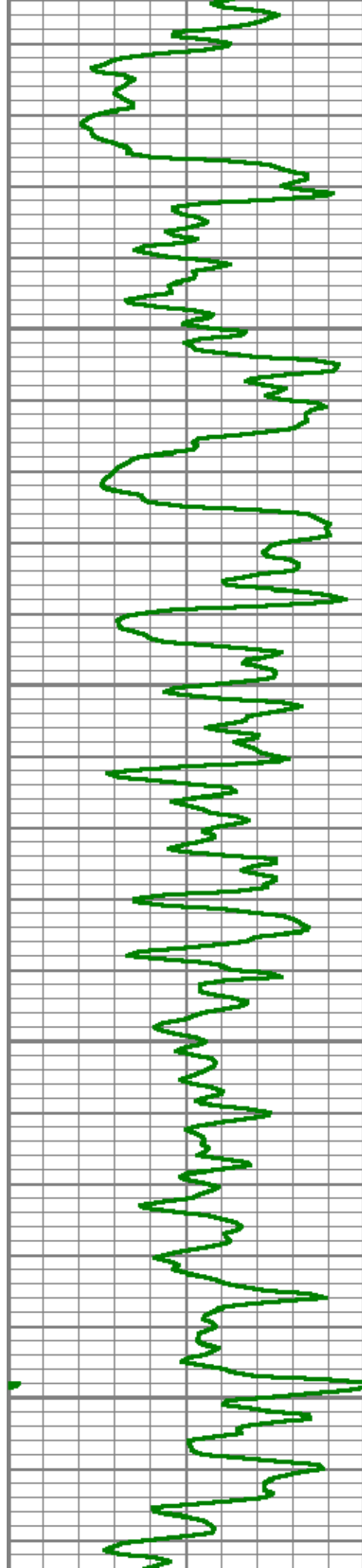




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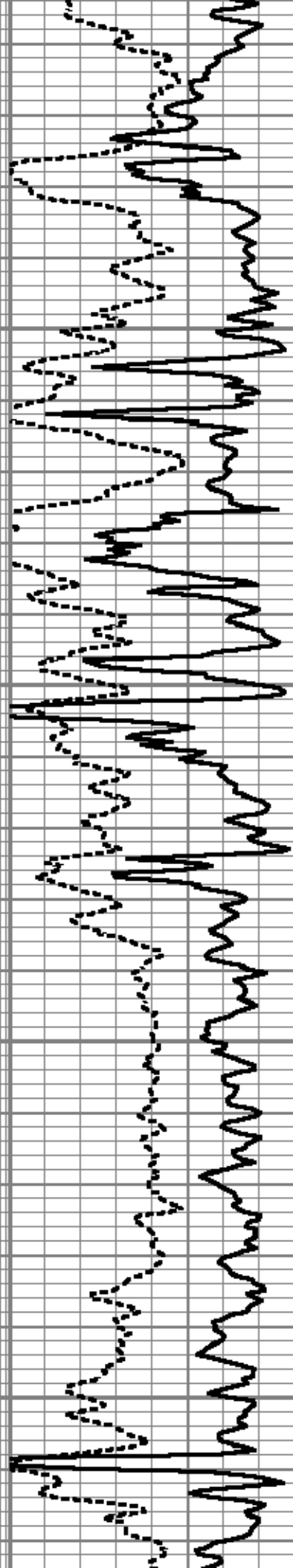
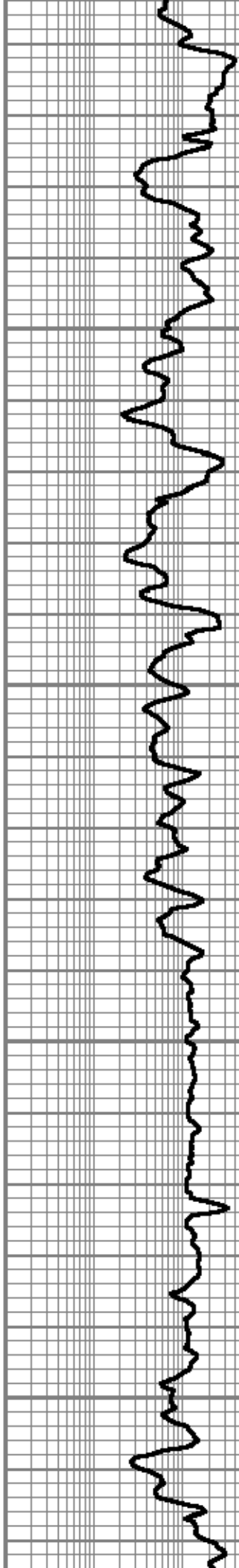
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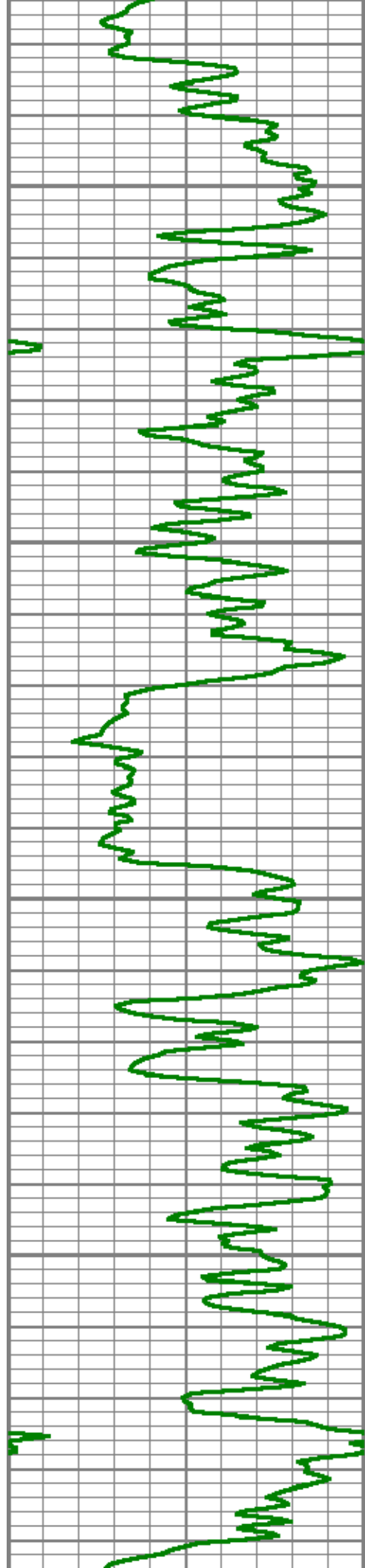


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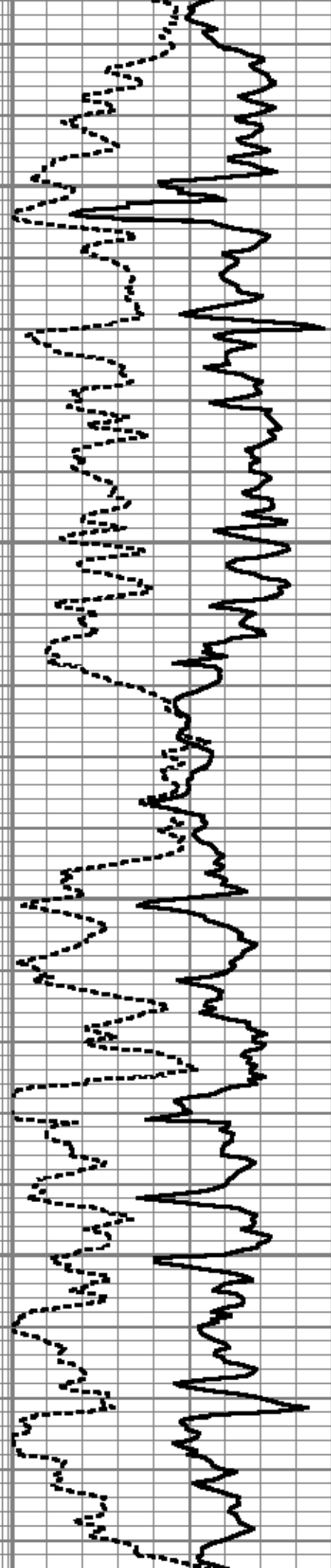
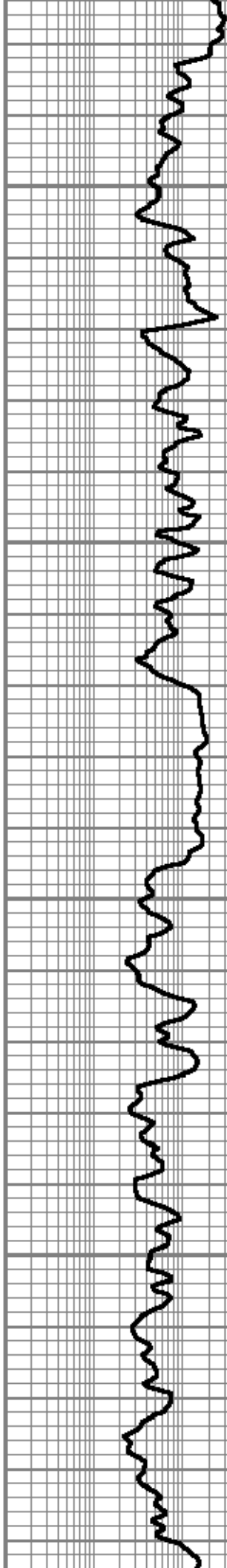


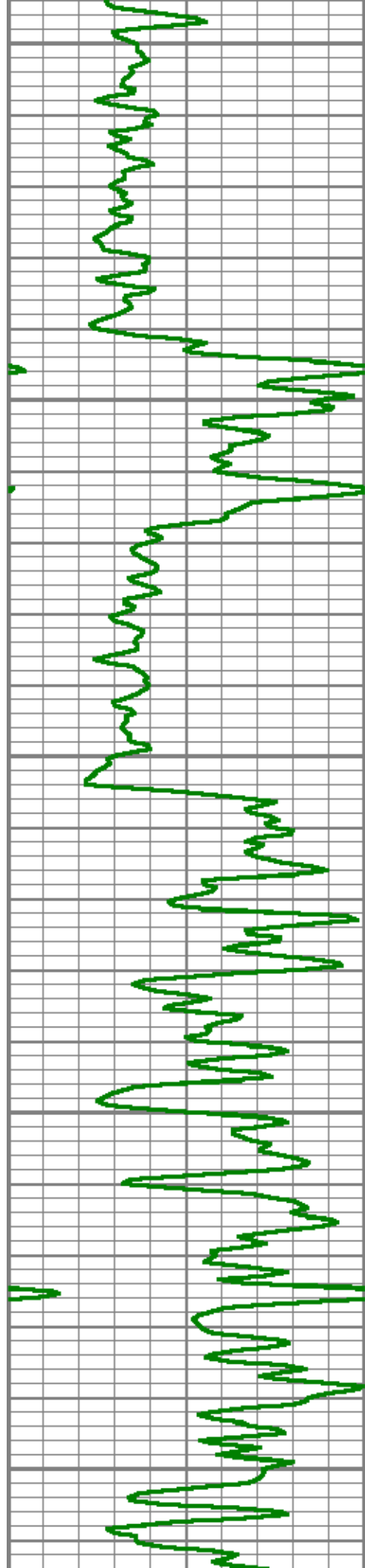




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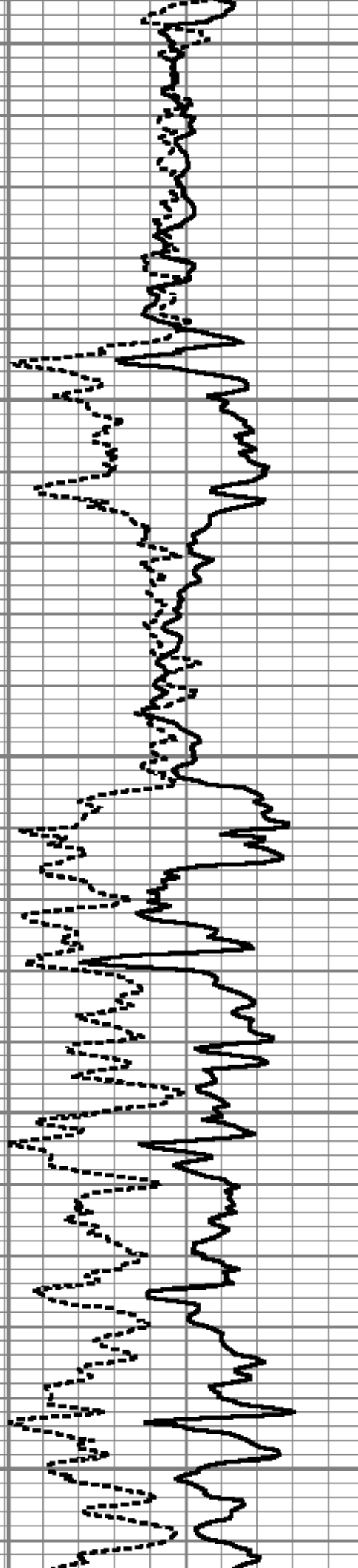
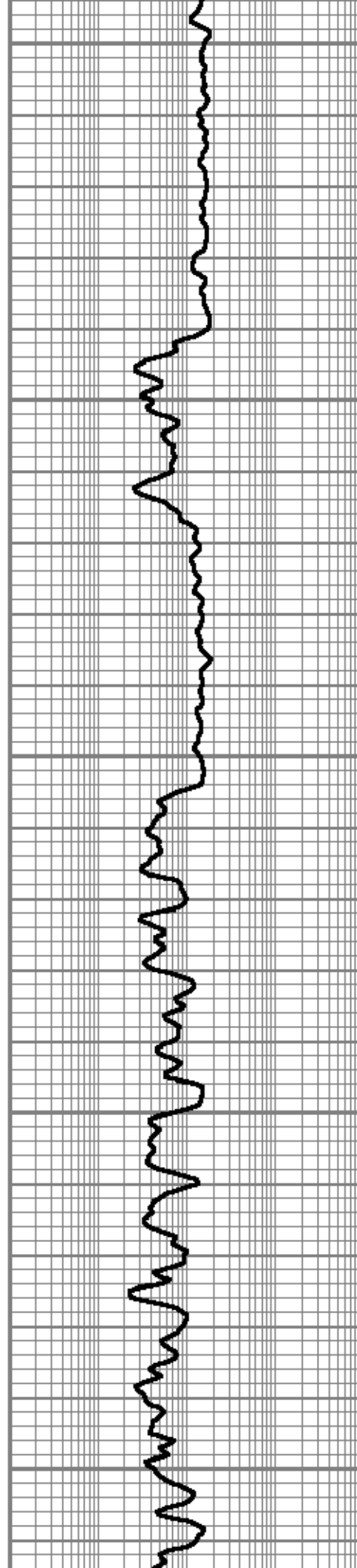


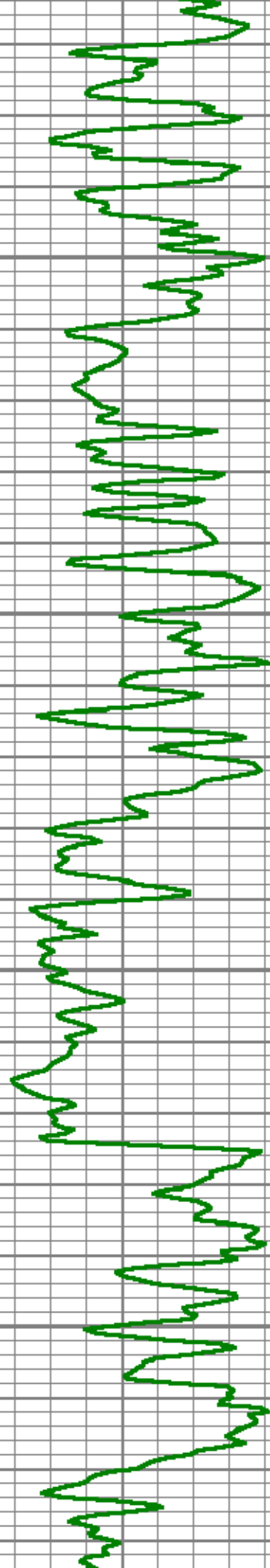


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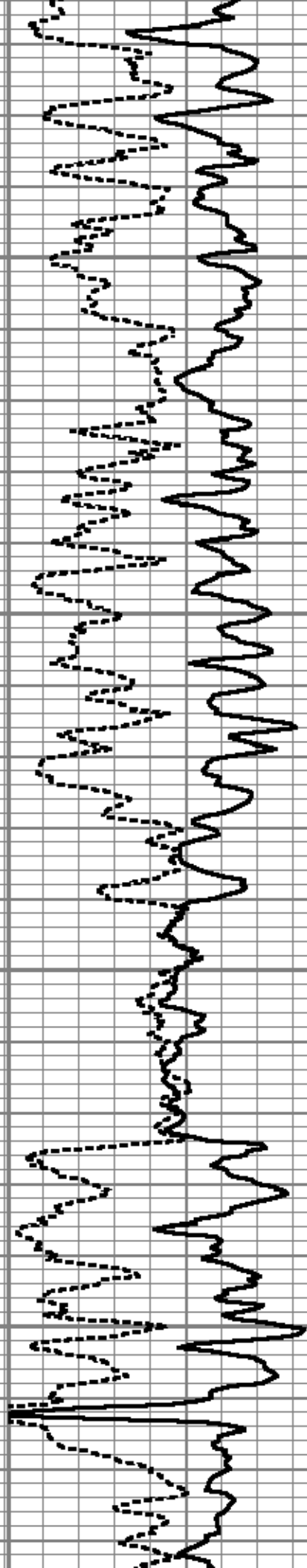
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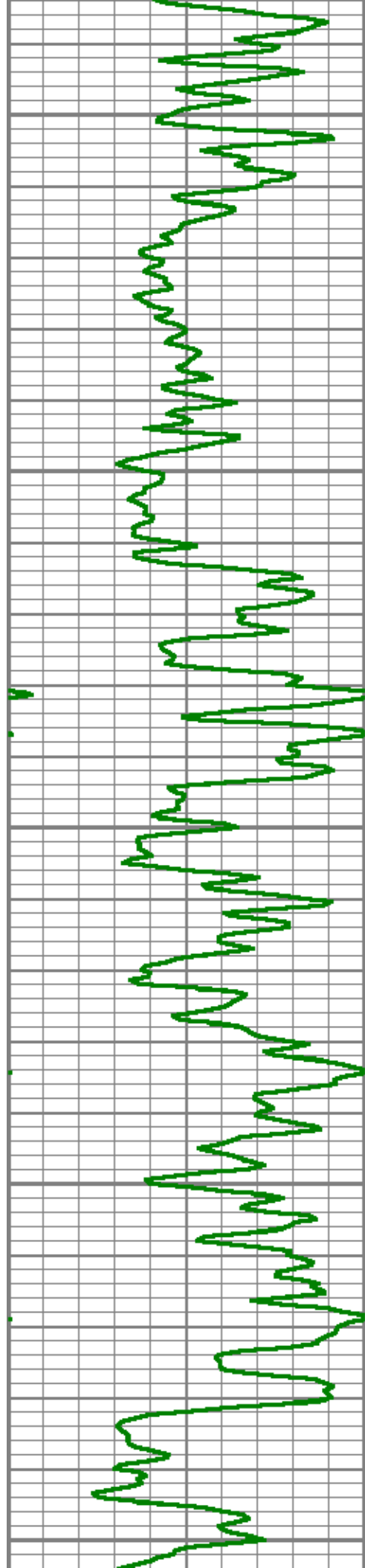




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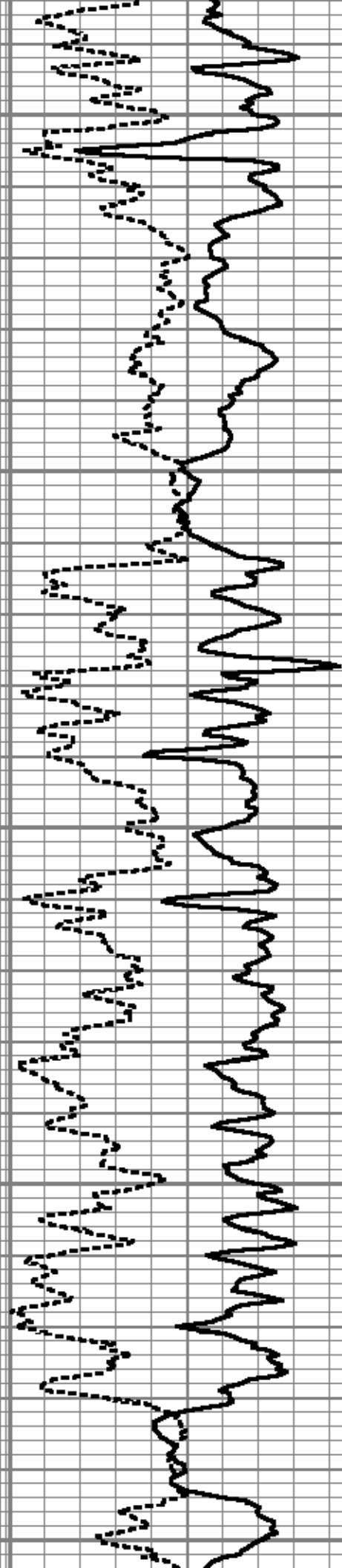
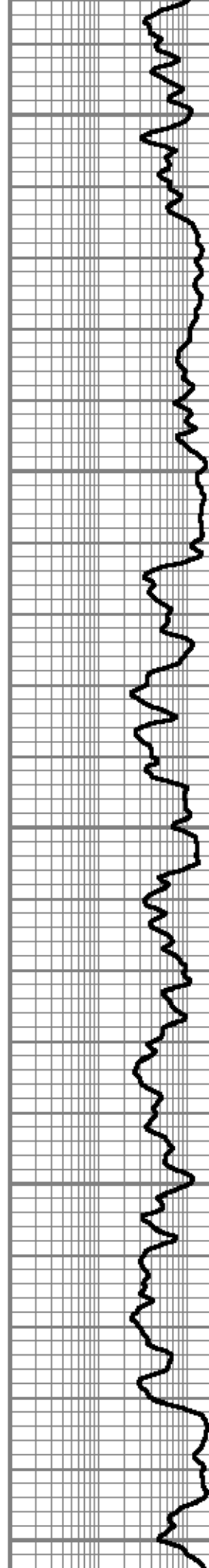
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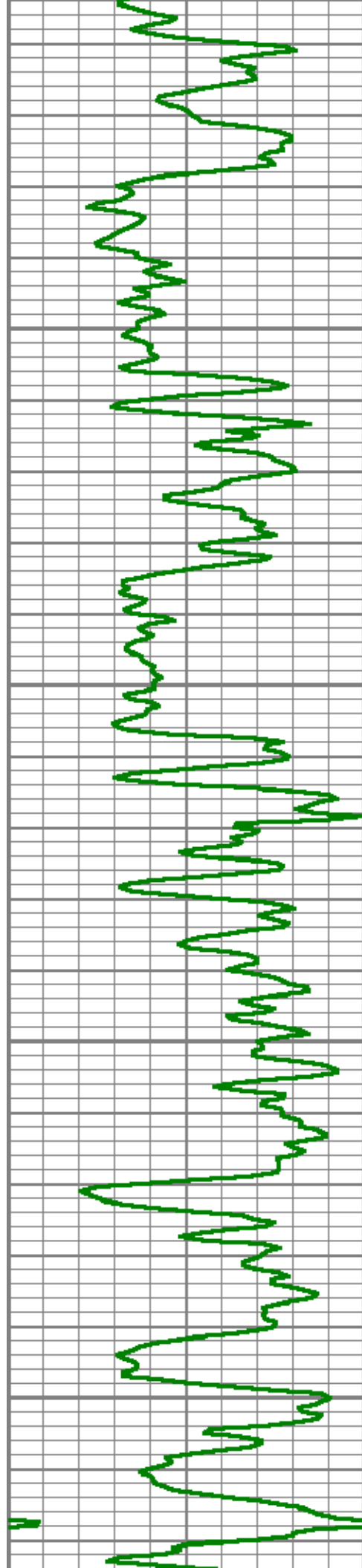




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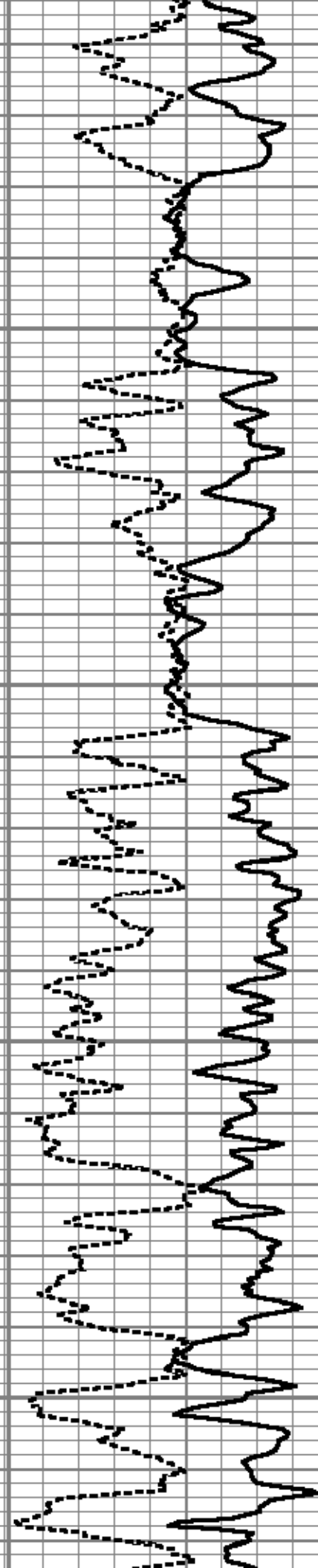
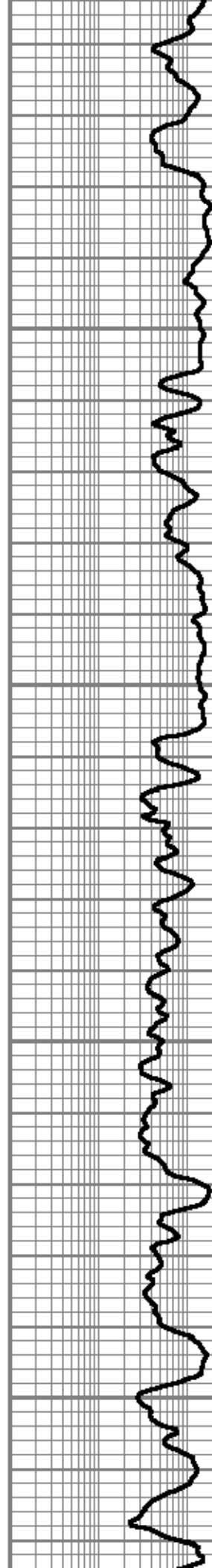
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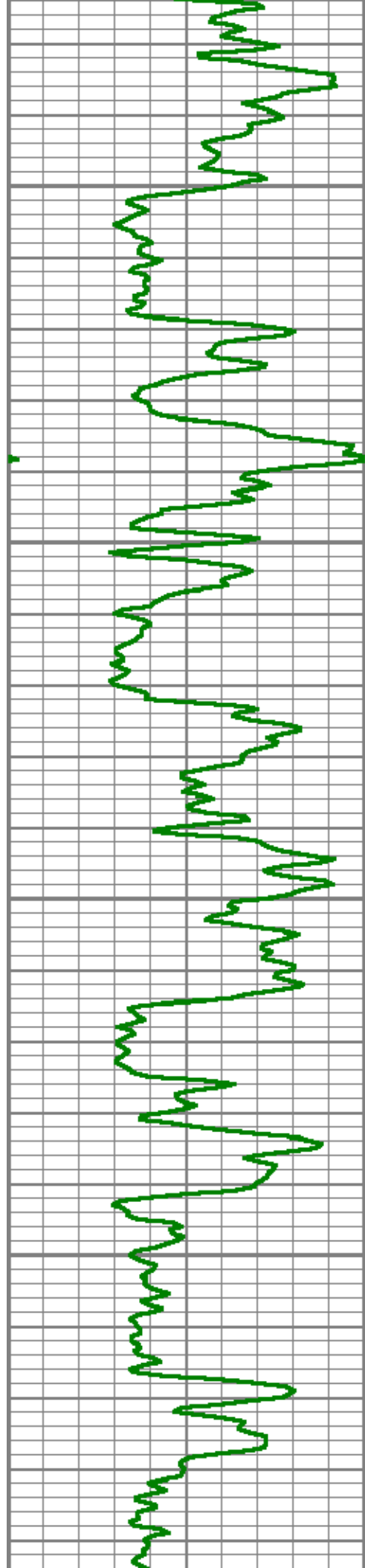




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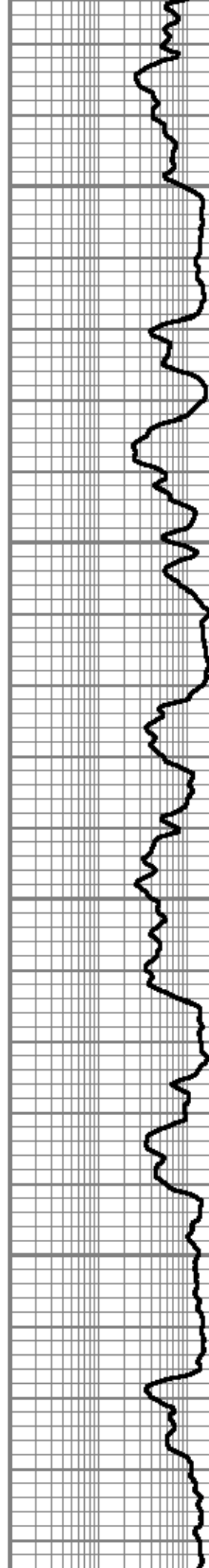
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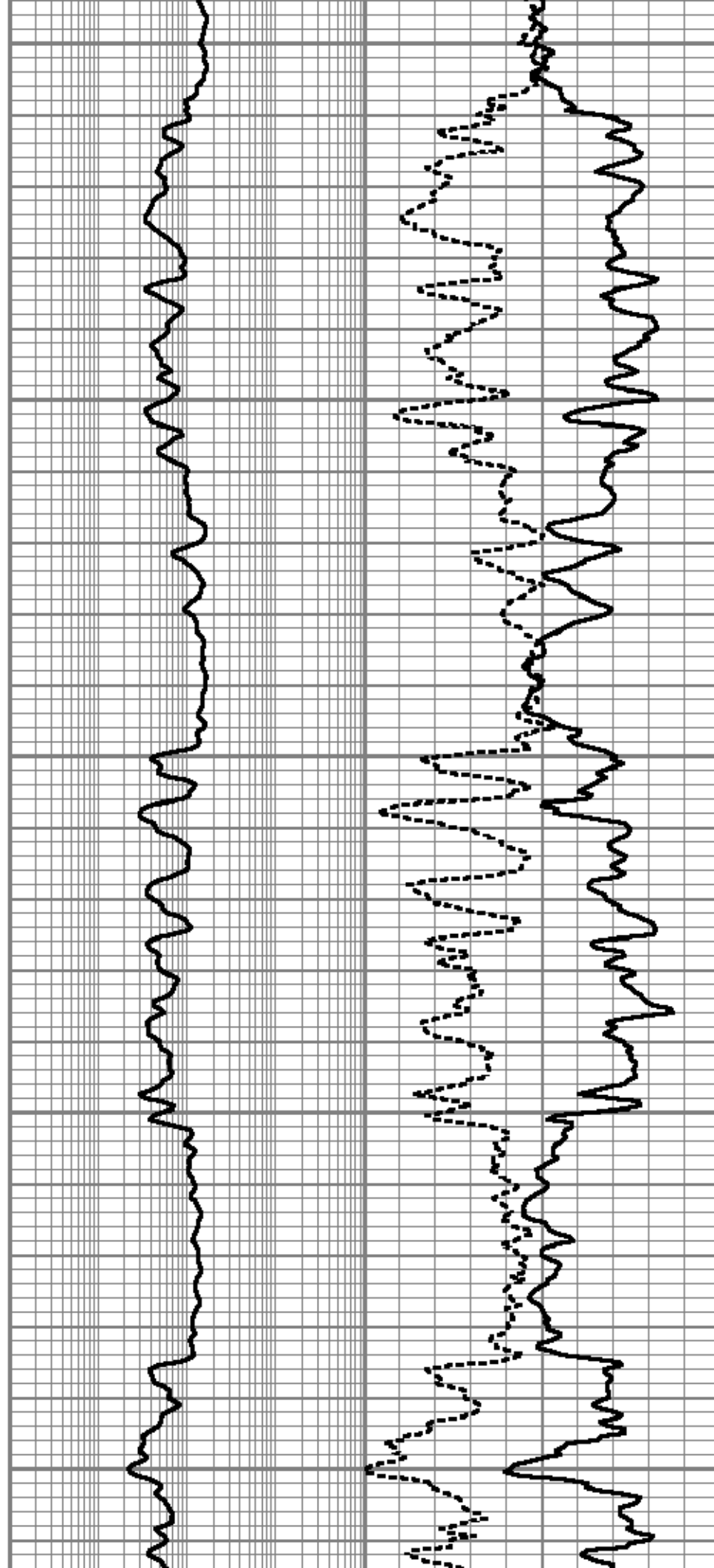
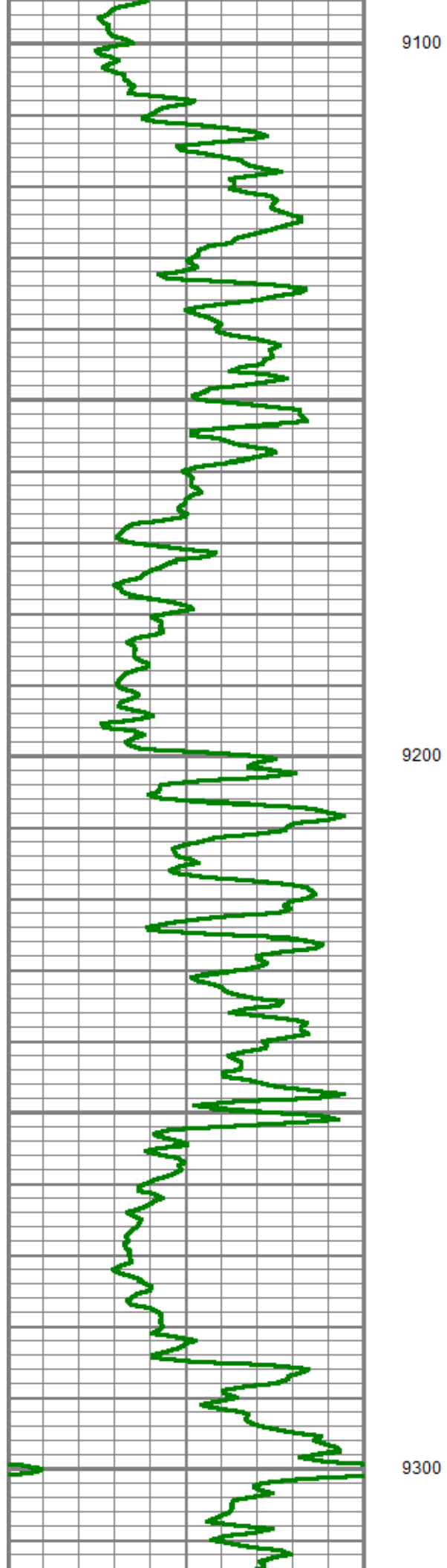


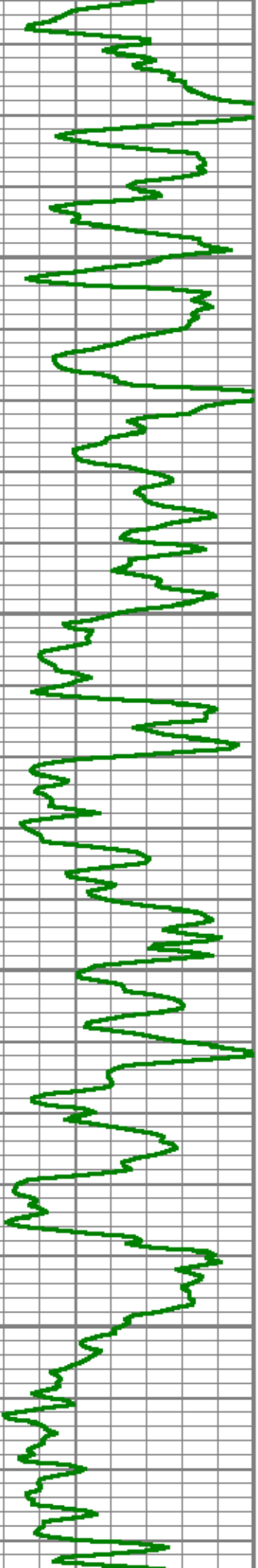
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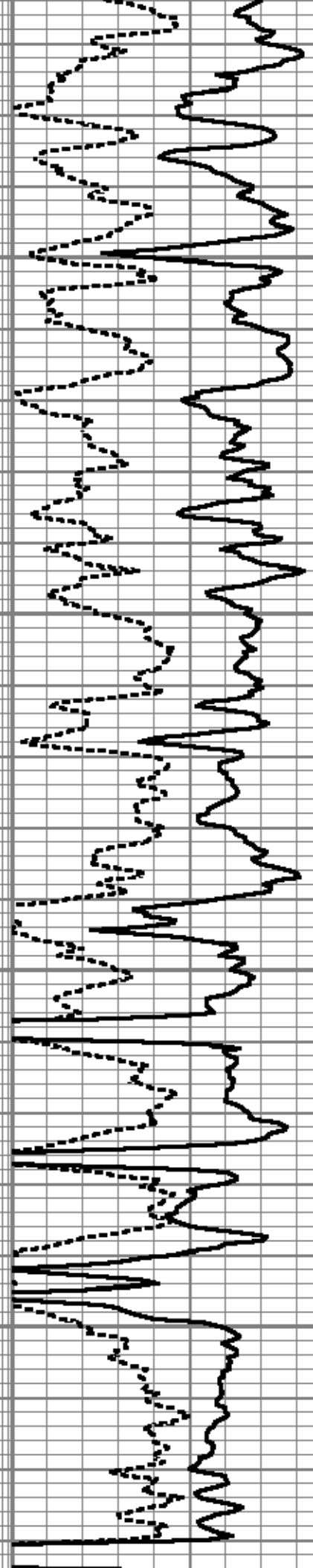






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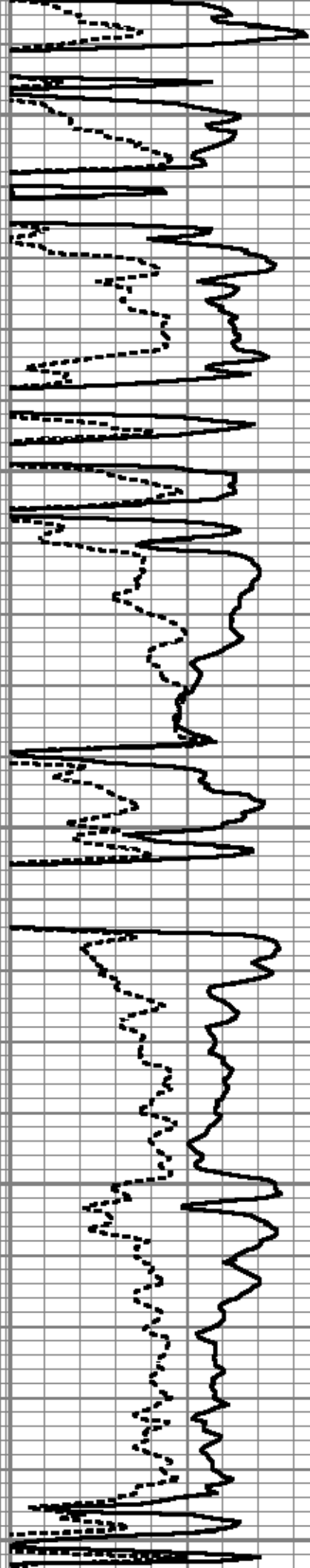
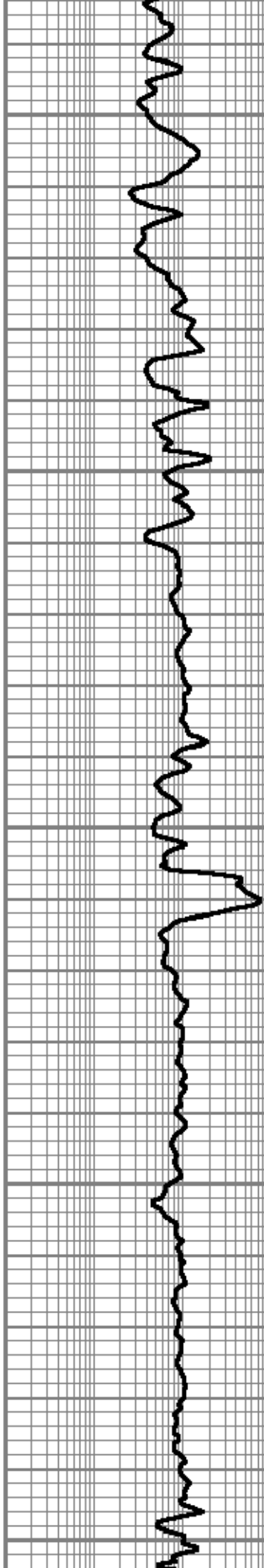
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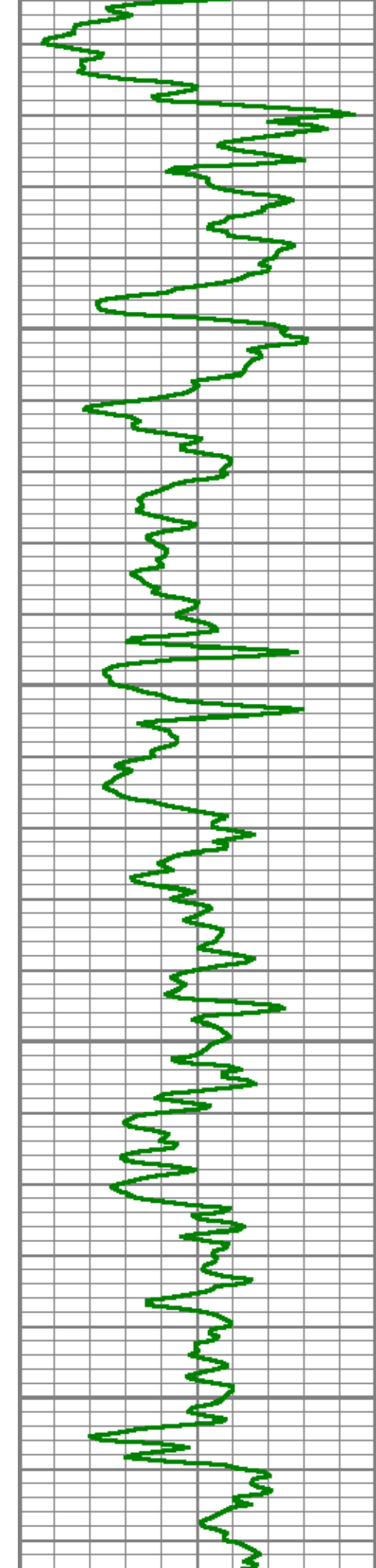




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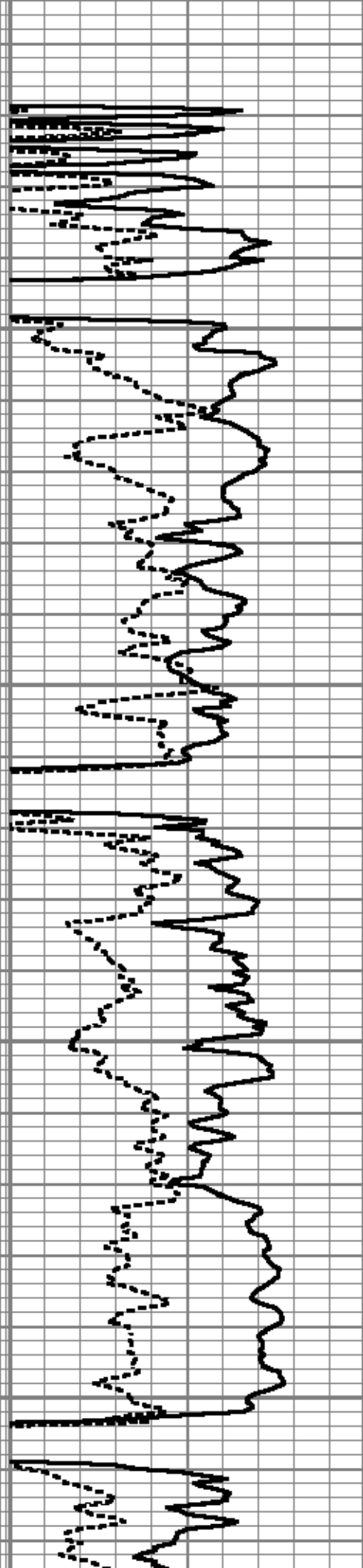
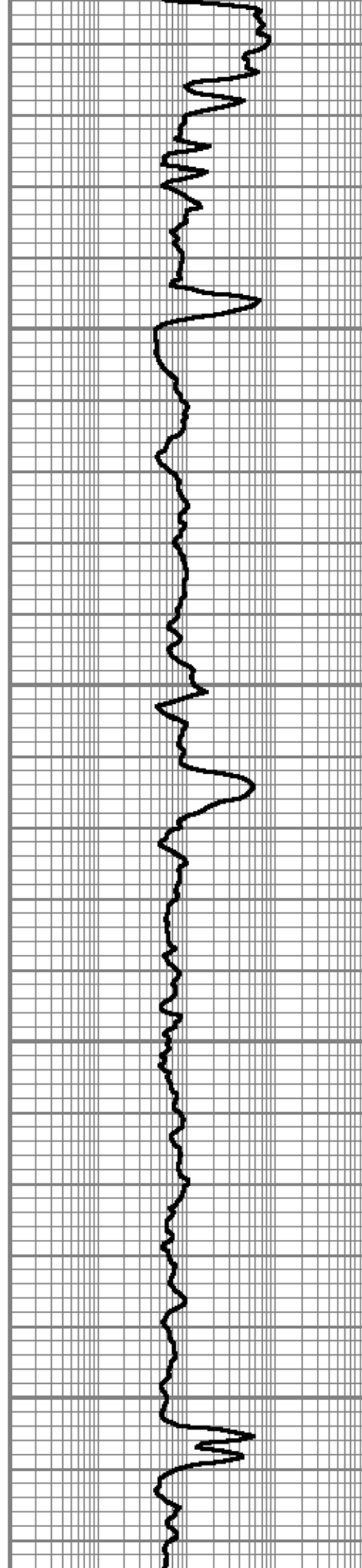
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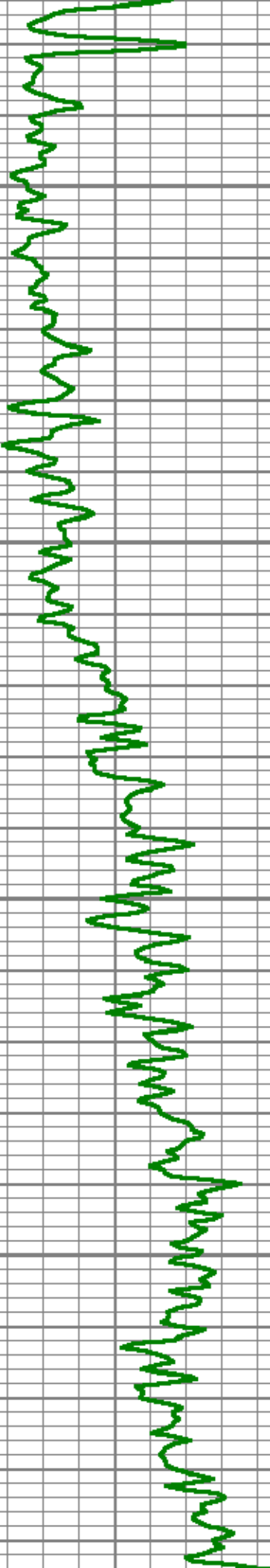




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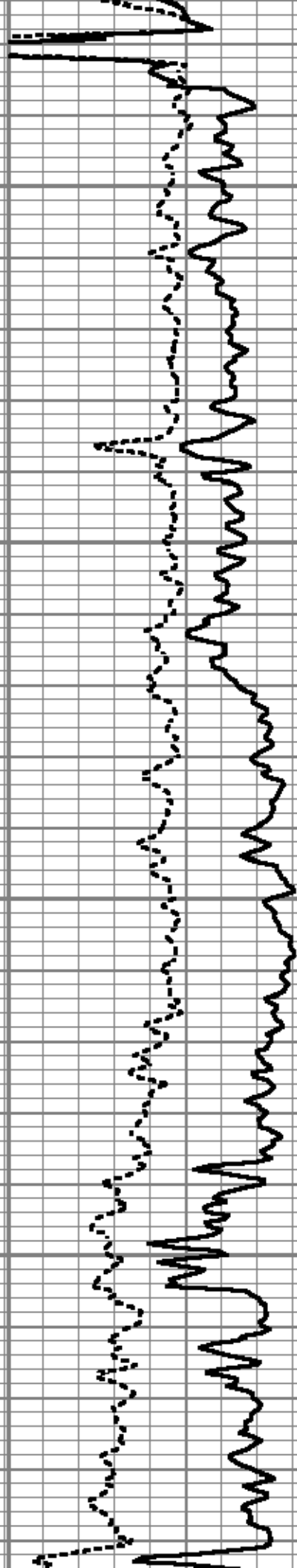
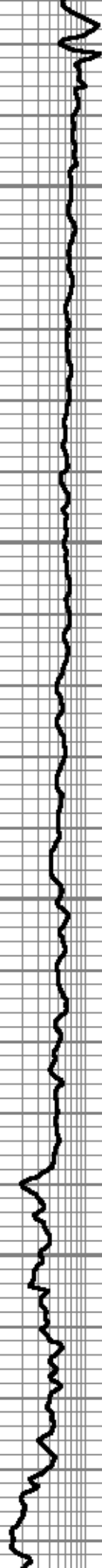
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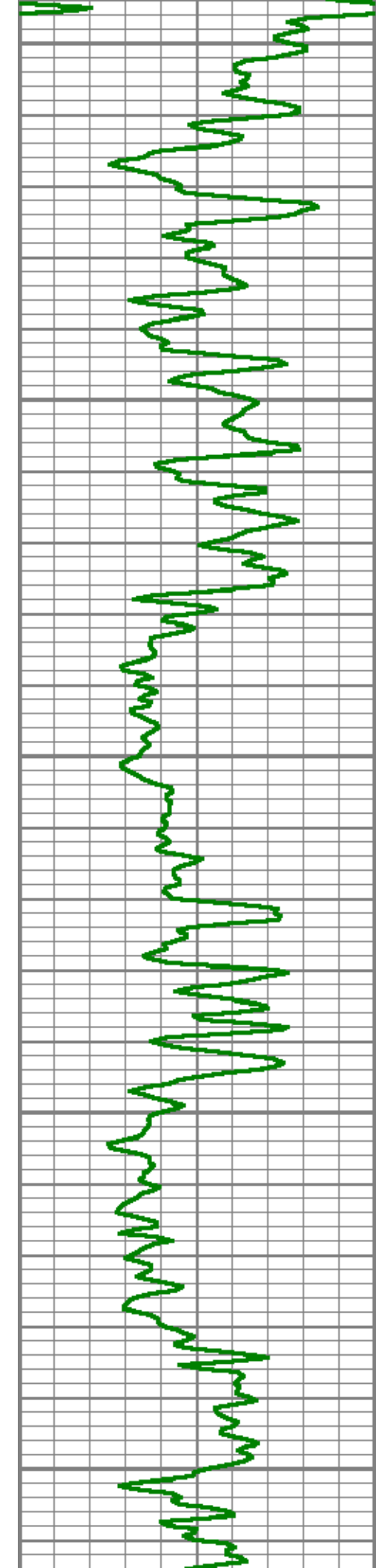




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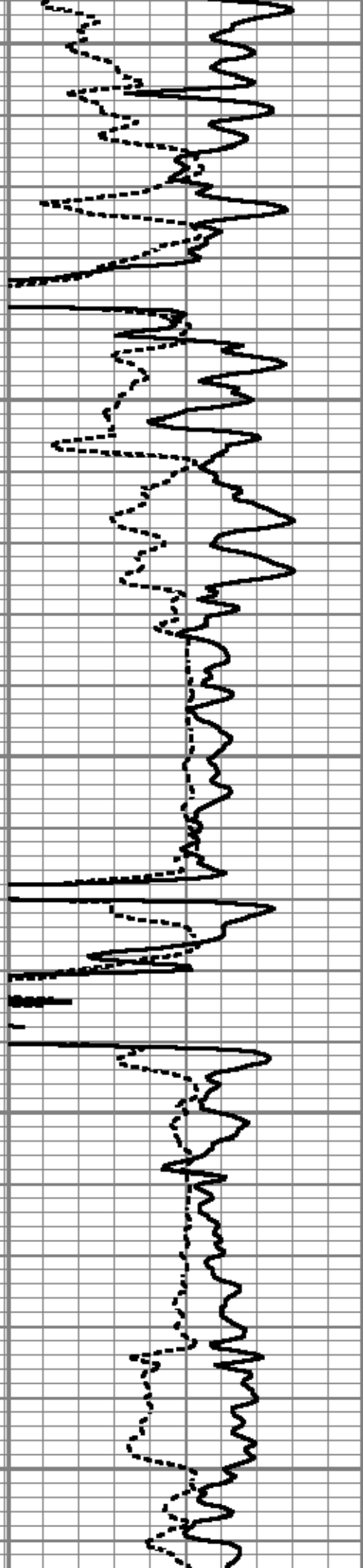
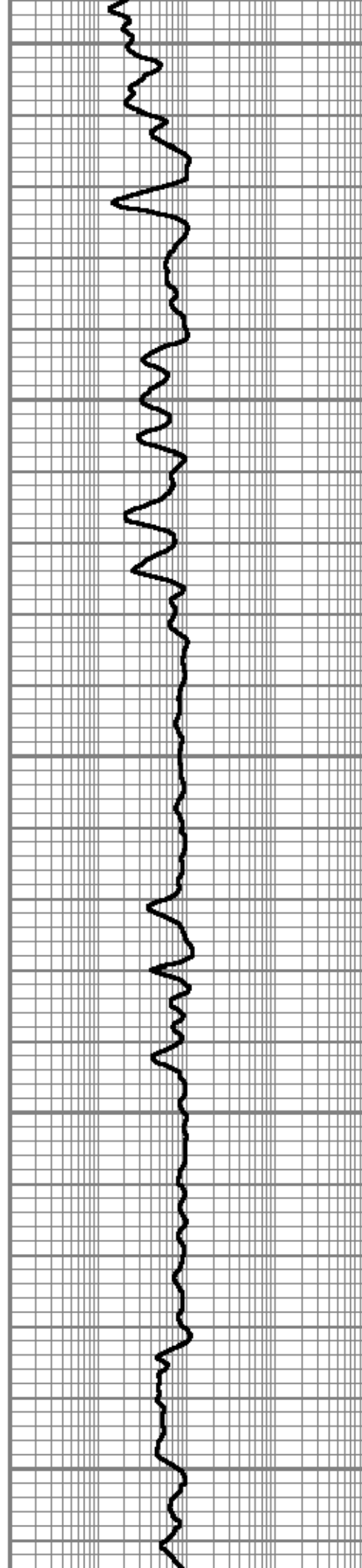




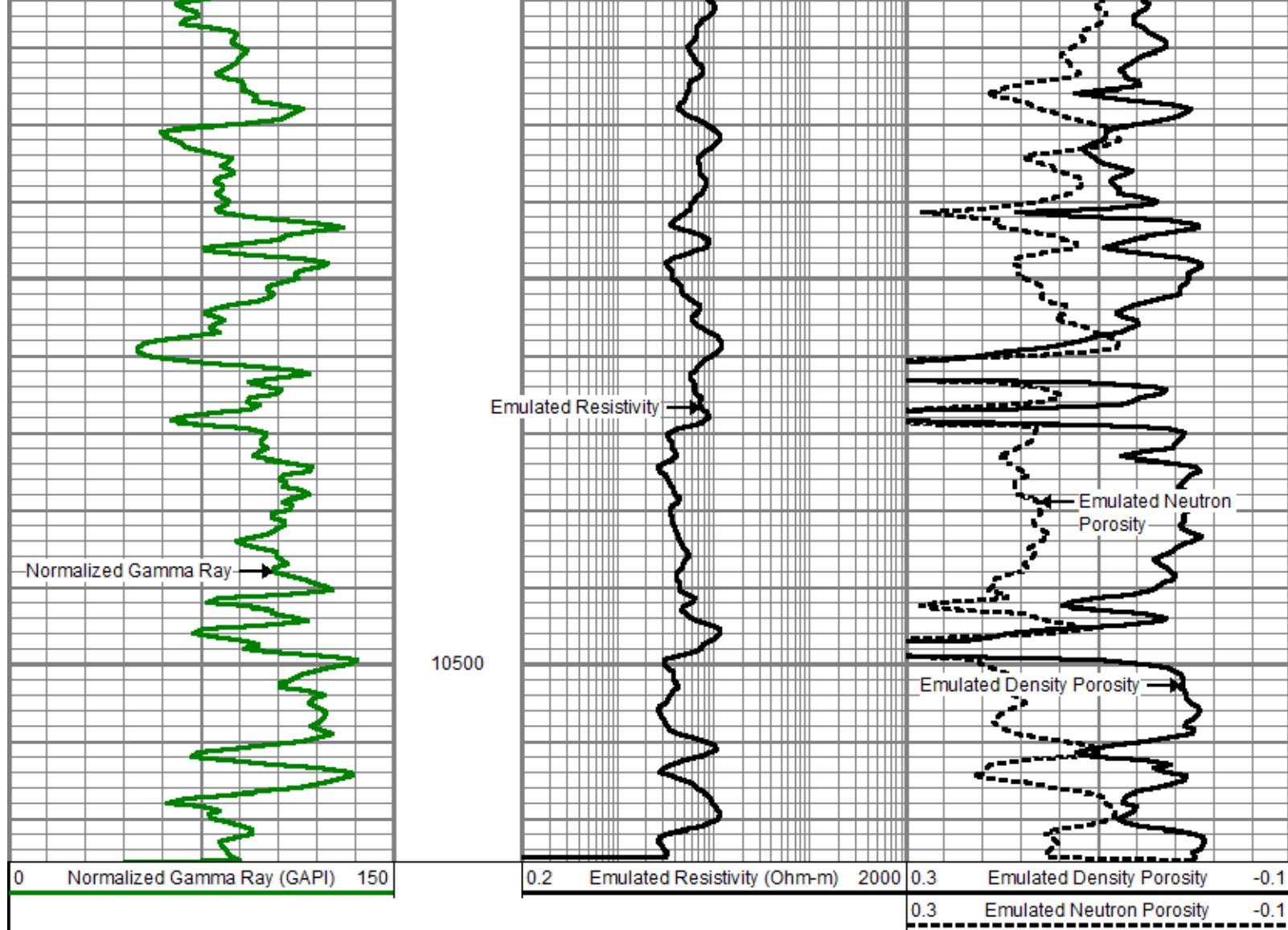
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Field	Grand Valley
County	Garfield
State	Colorado