



**Pulsed Neutron
Emulated OH
Log**

Company Laramie Energy LLC
Well CC Federal 0697-03-04W
Field Grand Valley
County Garfield
State Colorado

Company Laramie Energy LLC
Well CC Federal 0697-03-04W
Field Grand Valley
County Garfield
State Colorado

Location: SEC 4 TWP 6S RGE 97W
 API #: 05-045-23933
 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	19-AUG-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.	---						
E. estimated Cement Top	---						
Time Well Ready	---						
Time Logger on Bottom	---						
E. equipment Number	HD-0359						
Location	Grand Junction, CO						
Recorded By	Z. Fisher						
Witnessed By	---						
Borehole Record		Tubing Record					
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record	Size (in)	Wgt (lbs/ft)	Grade	Top	Bottom		
Surface Casing	9.5/8	36	J-55	Surface	2553 FT		
Intermediate #1	4.1/2	11.6	P-110	Surface	10758 FT		
Intermediate #2							
Inner							

<<< 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

This well is an offset well
 Depth referenced to Reliance RBL dated 21-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!



Main Pass

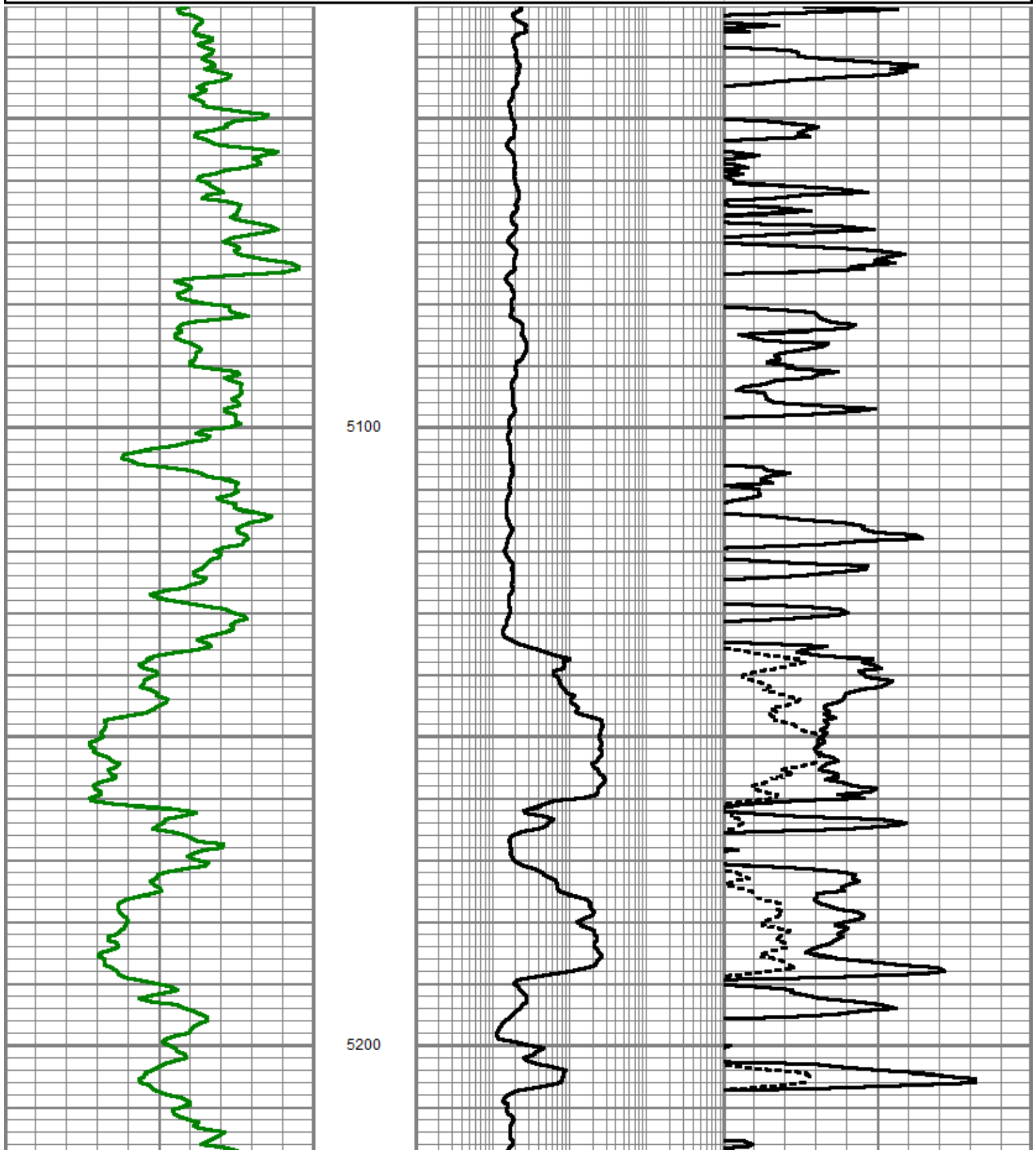
Database File c:\techlog-projects\laramie energy\cc federal 0697-03-04w\processed_laramie energy_cc federal 0697-03-04w_pn_08-19-19.d
Dataset Pathname SHIFTED.1/merge5
Presentation Format ros_emulation_output
Dataset Creation Fri Sep 13 14:00:45 2019
Charted by Depth in Feet scaled 1:240

0 Normalized Gamma Ray (GAPI) 150

0.2 Emulated Resistivity (Ohm-m) 2000

0.3 Emulated Density Porosity -0.1

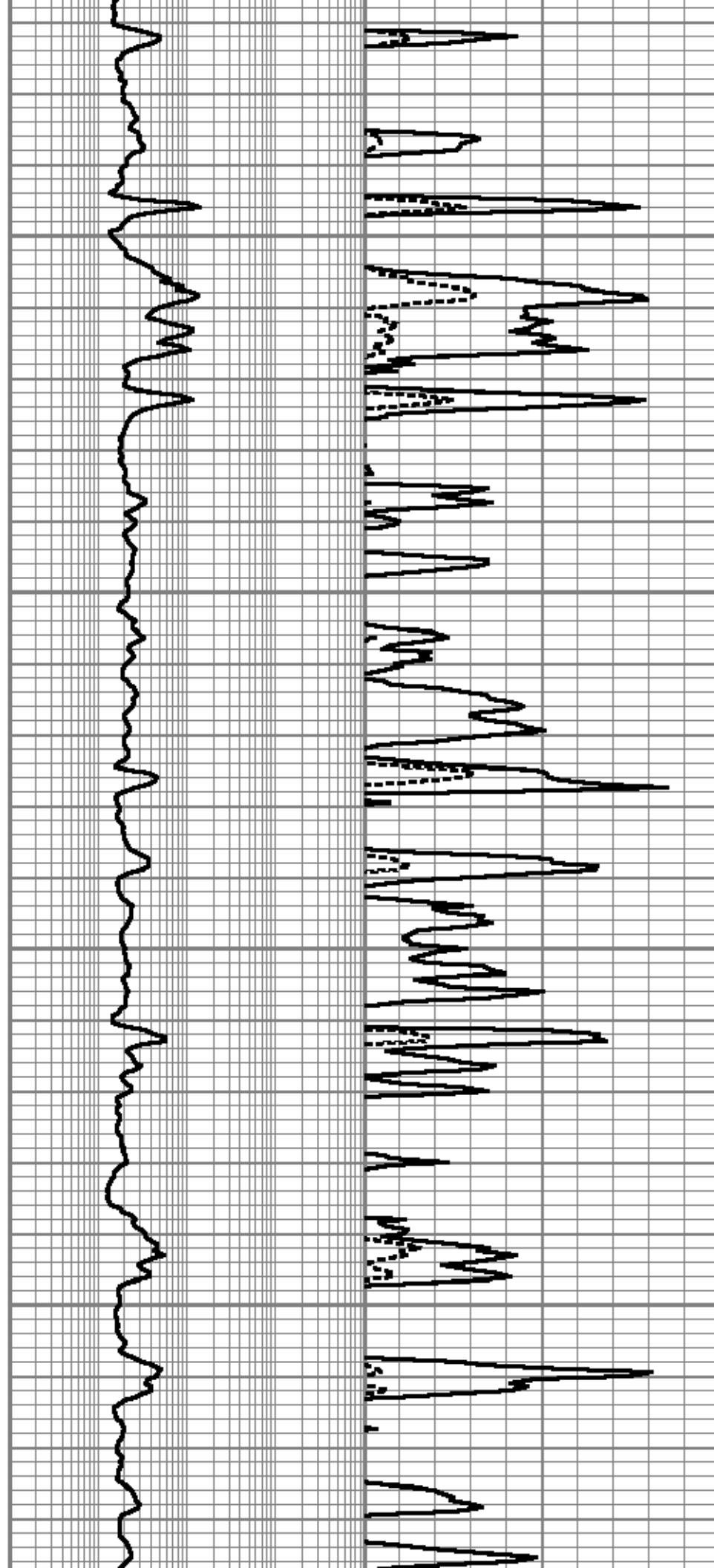
0.3 Emulated Neutron Porosity -0.1

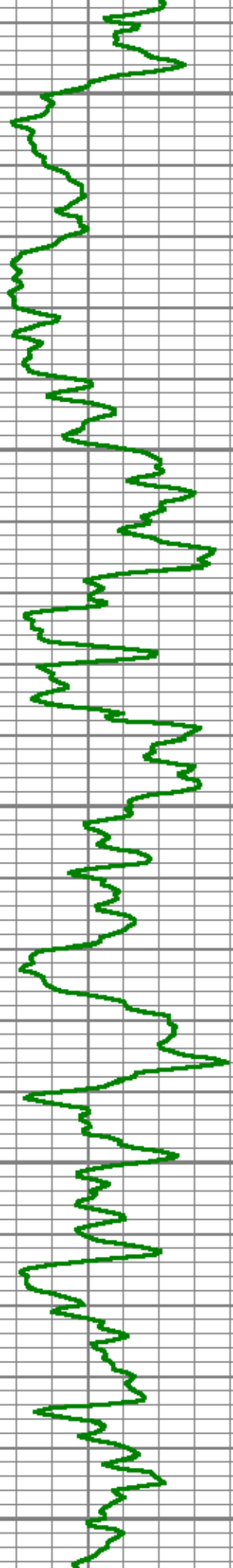




5300

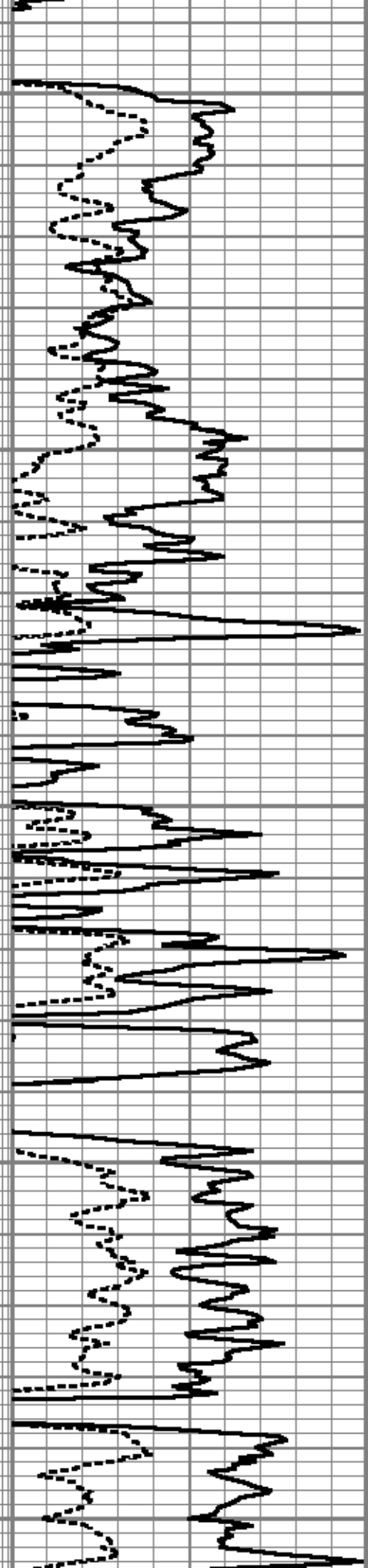
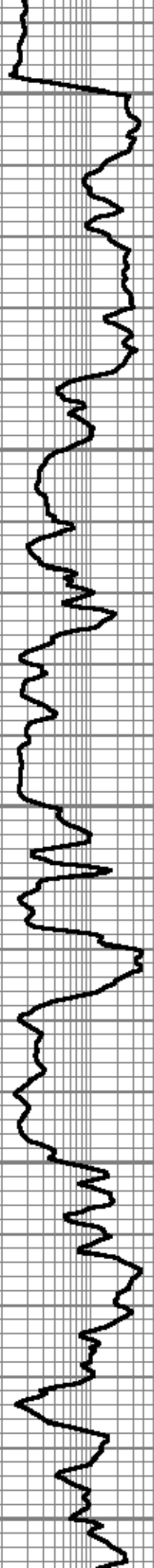
5400

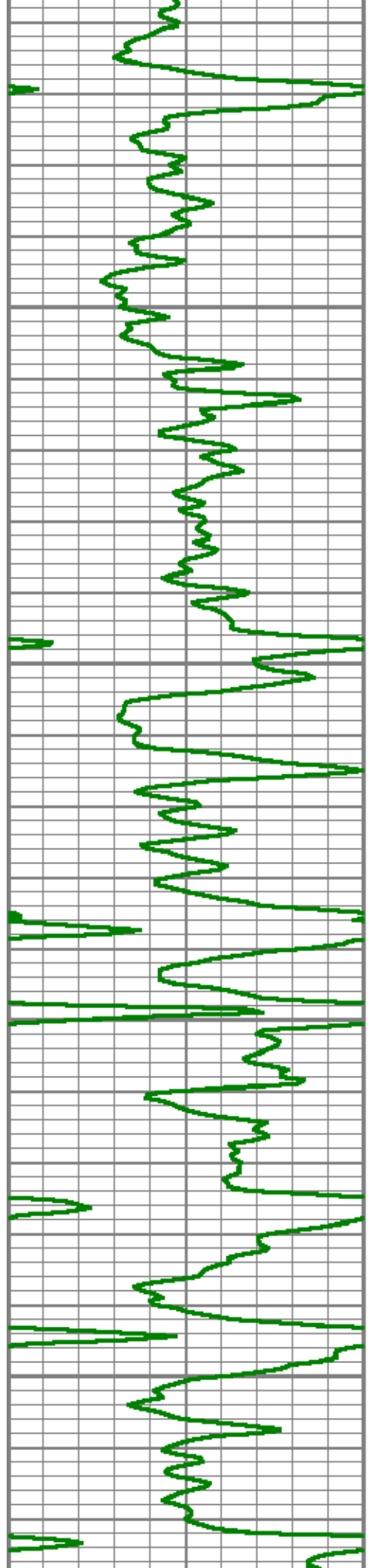




5500

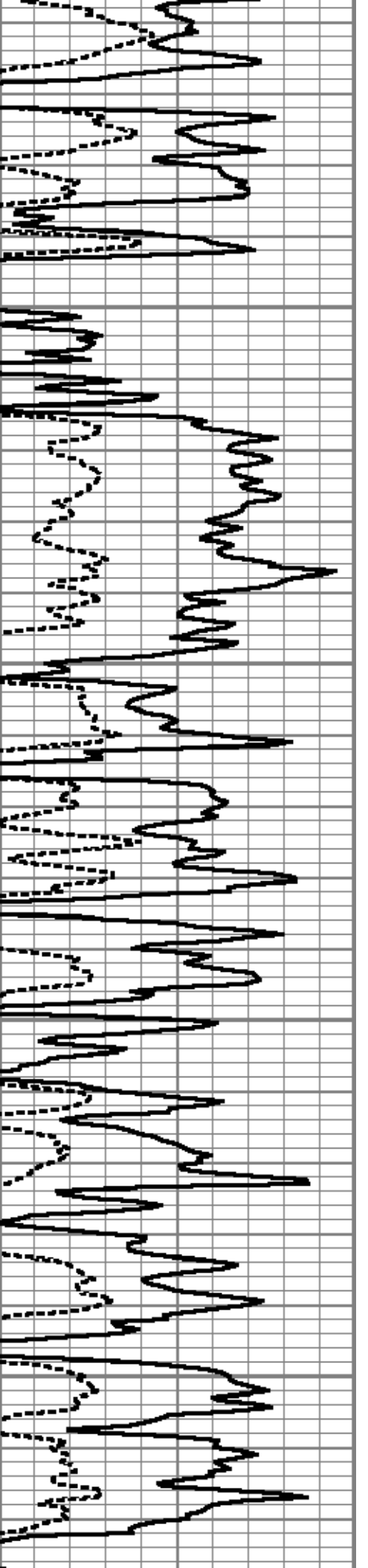
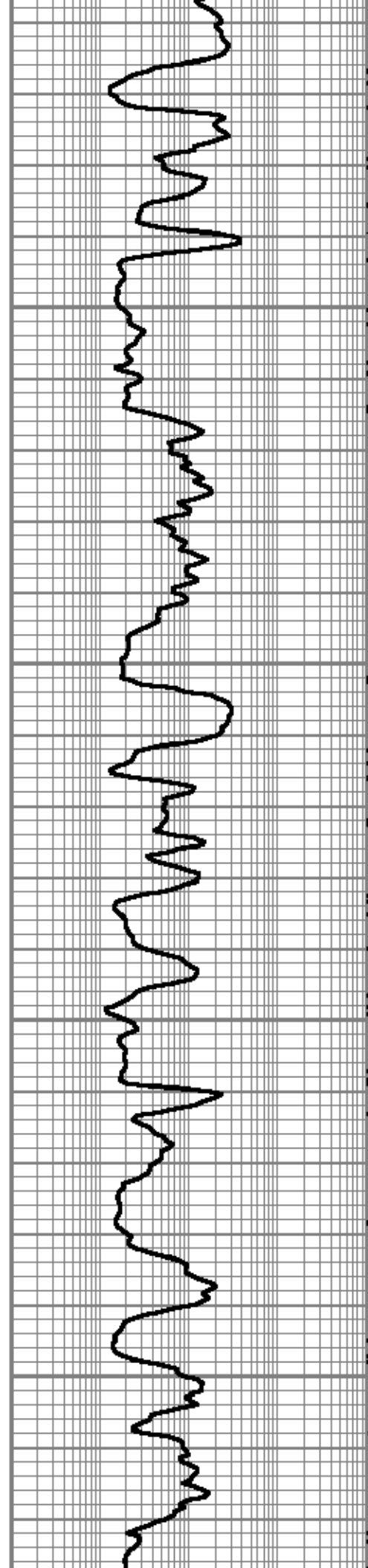
5600

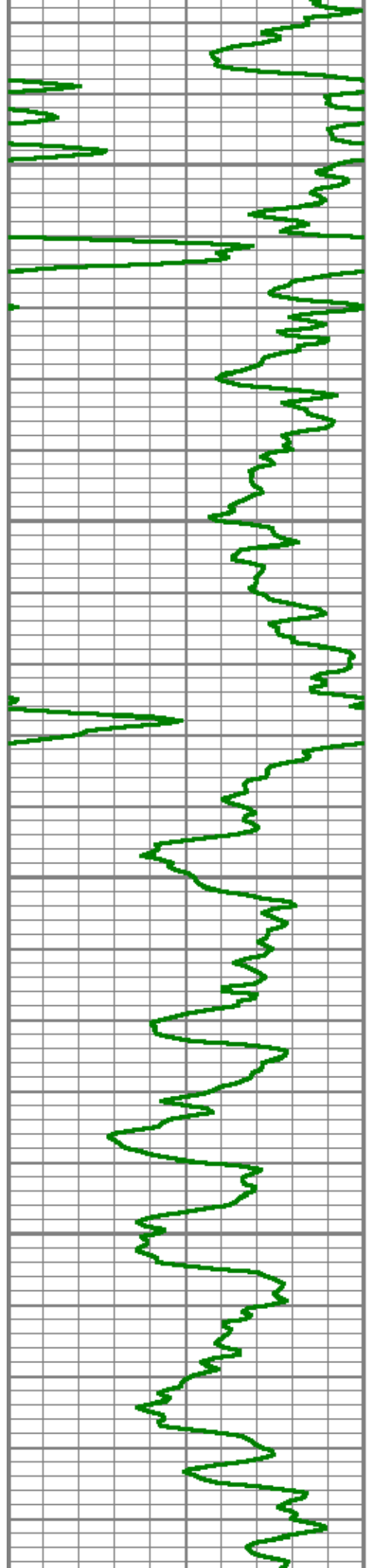




5700

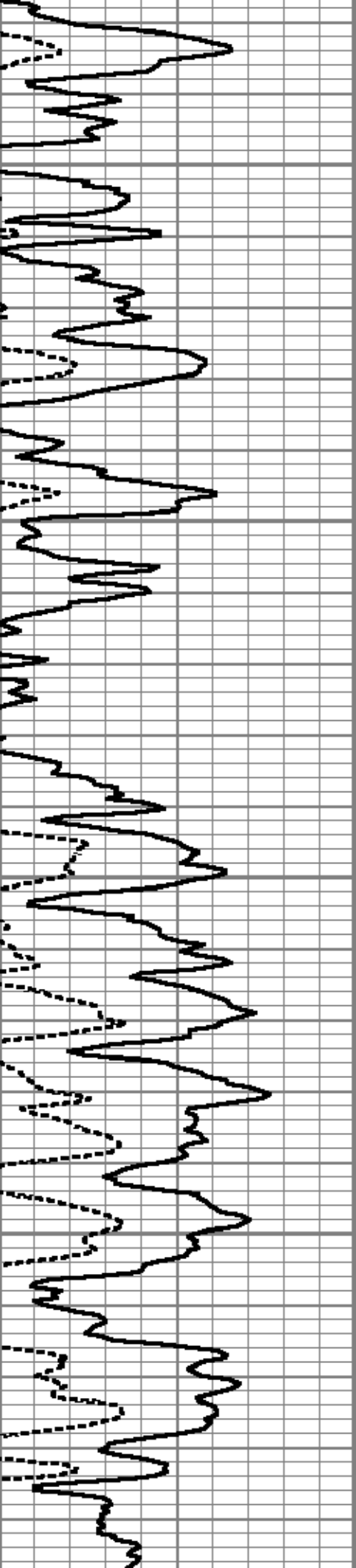
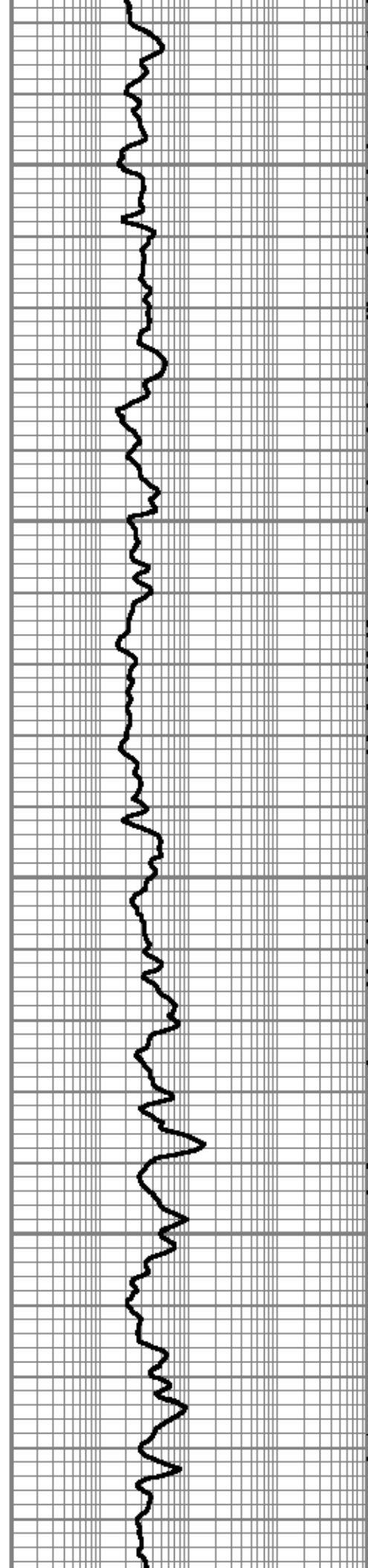
5800

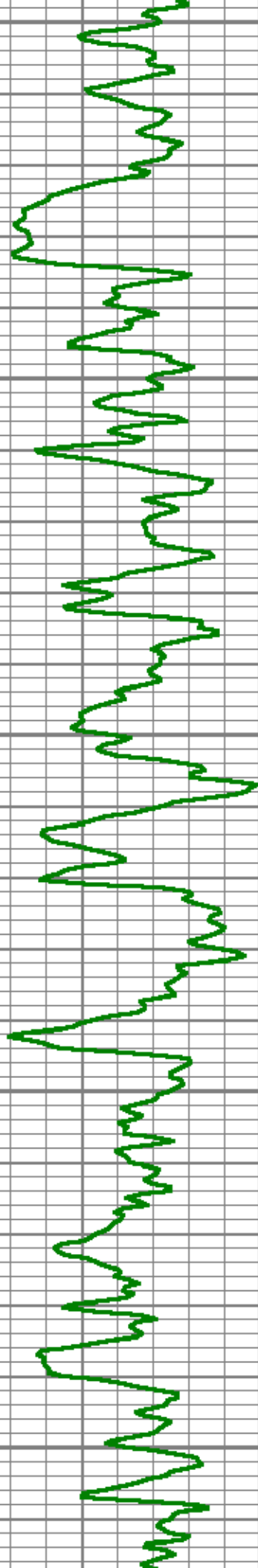




5900

6000

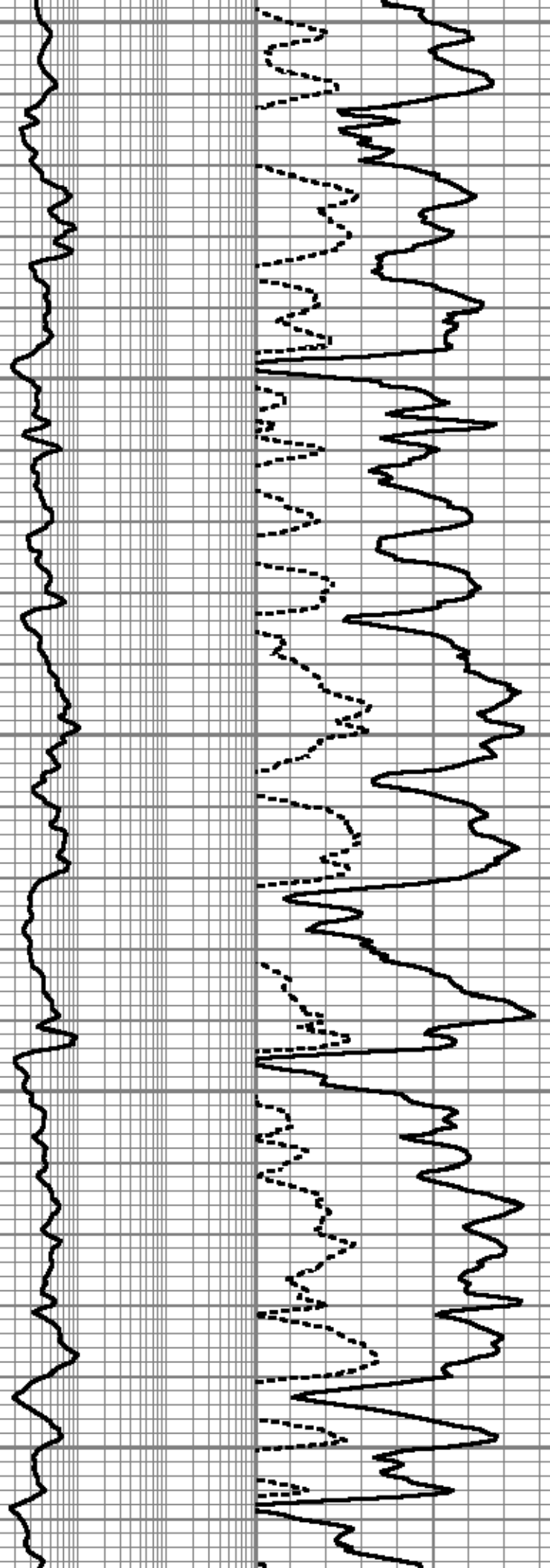


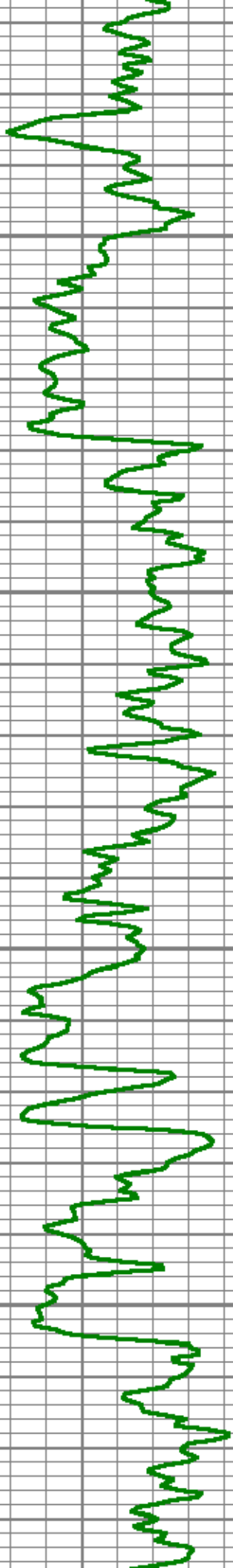


6100

6200

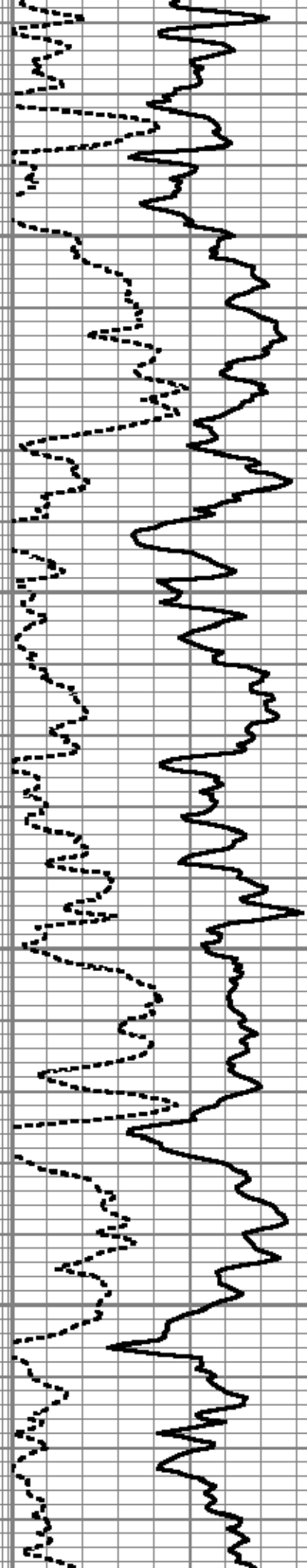
6300

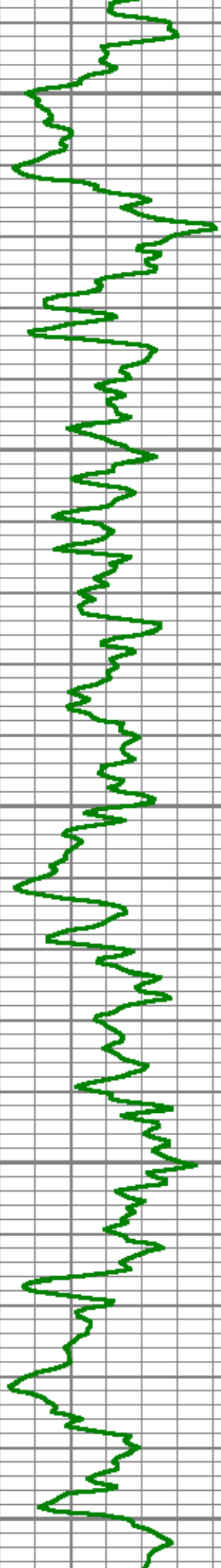




6400

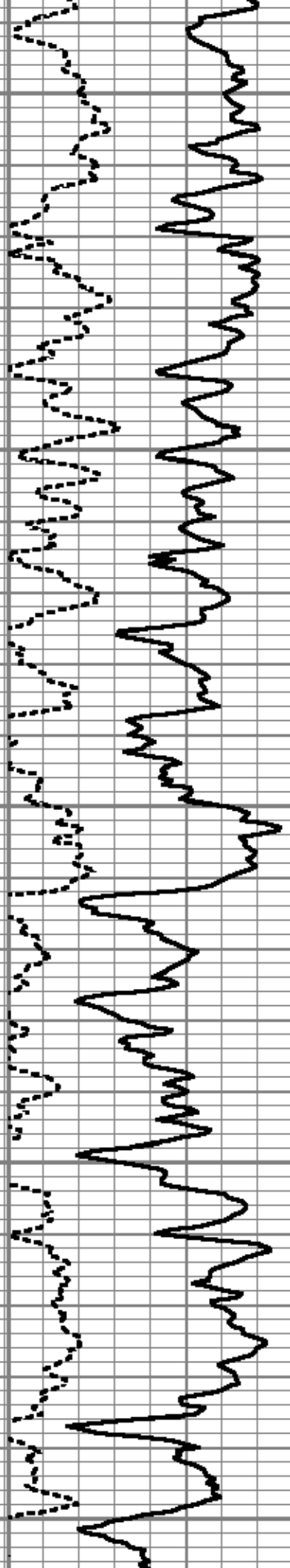
6500

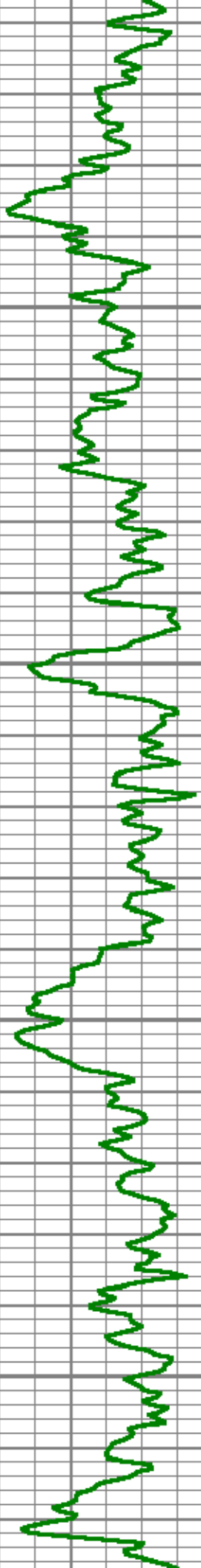




6600

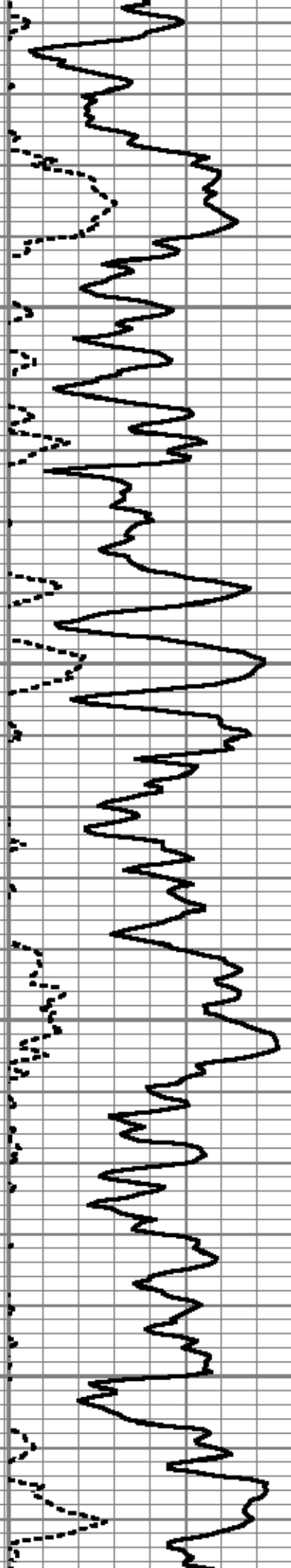
6700

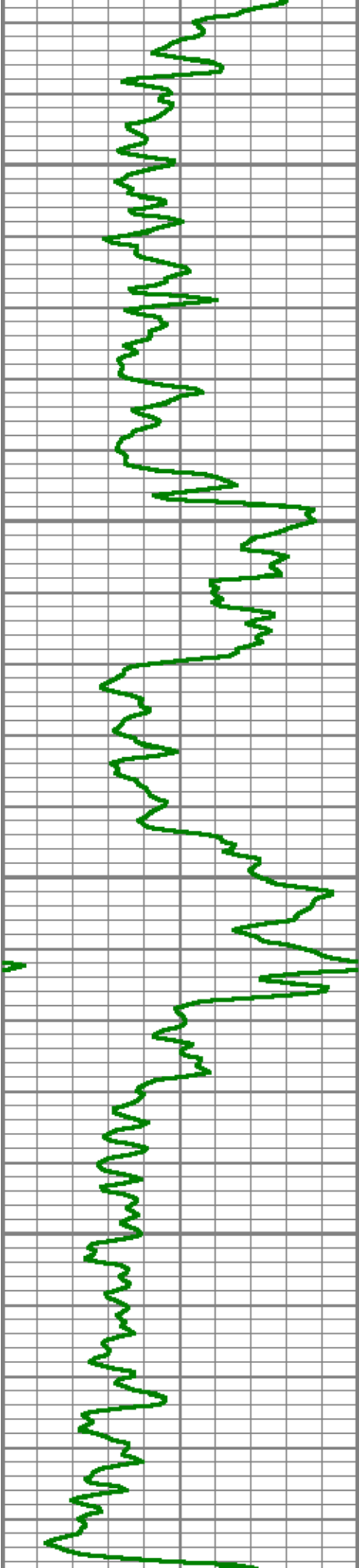




6800

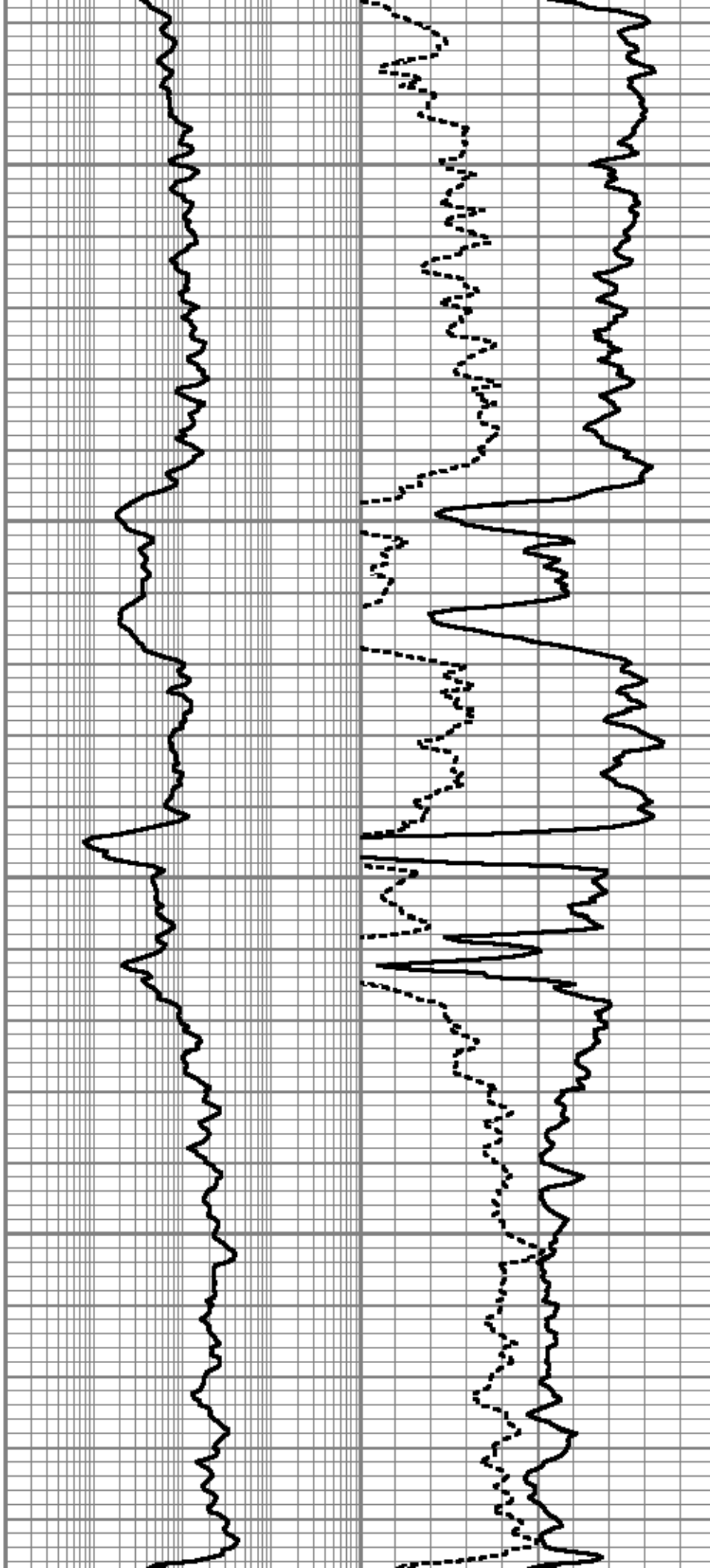
6900

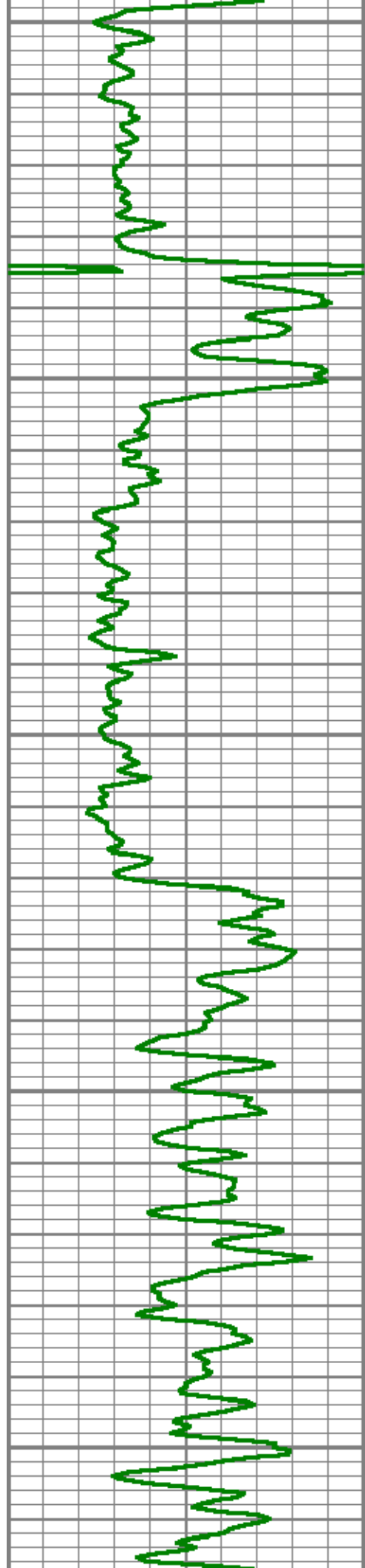




7000

7100

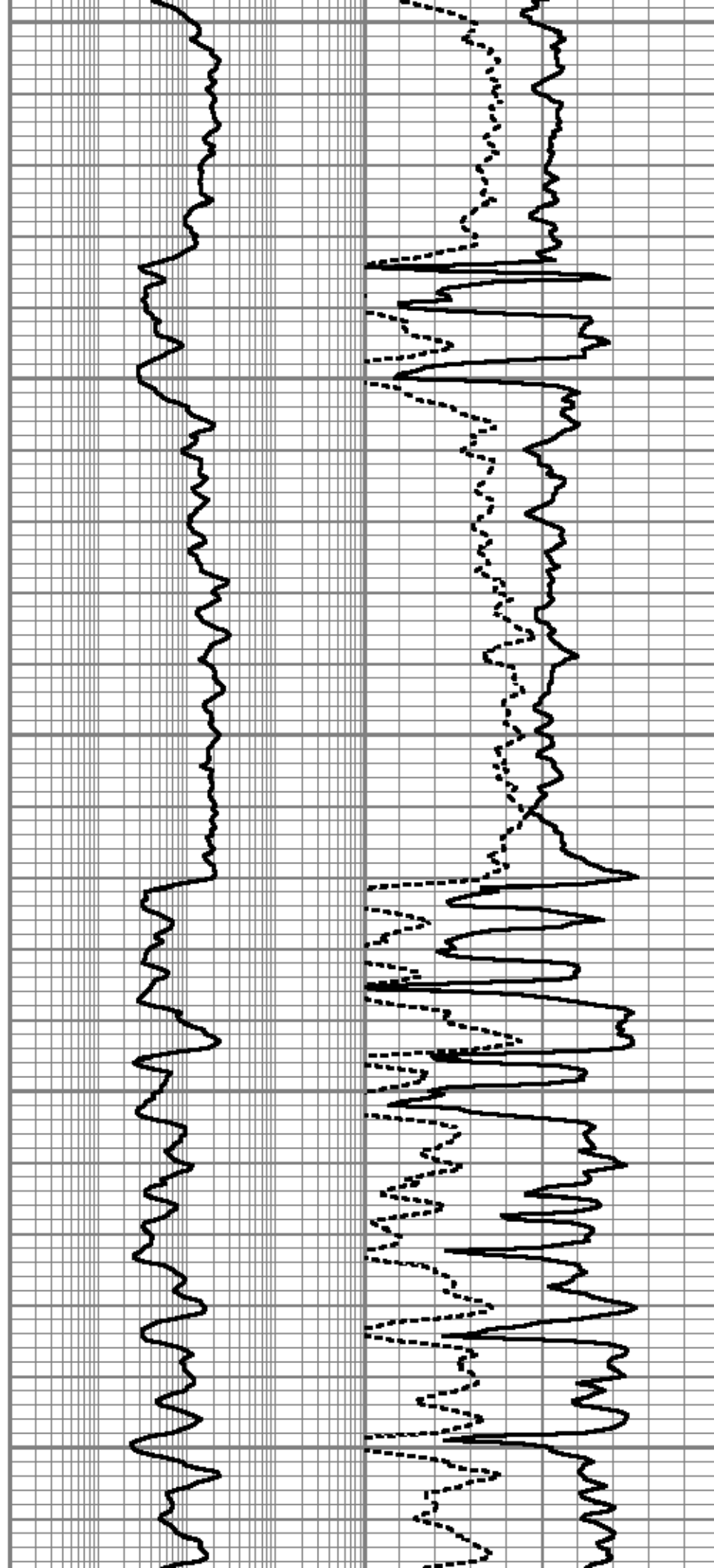


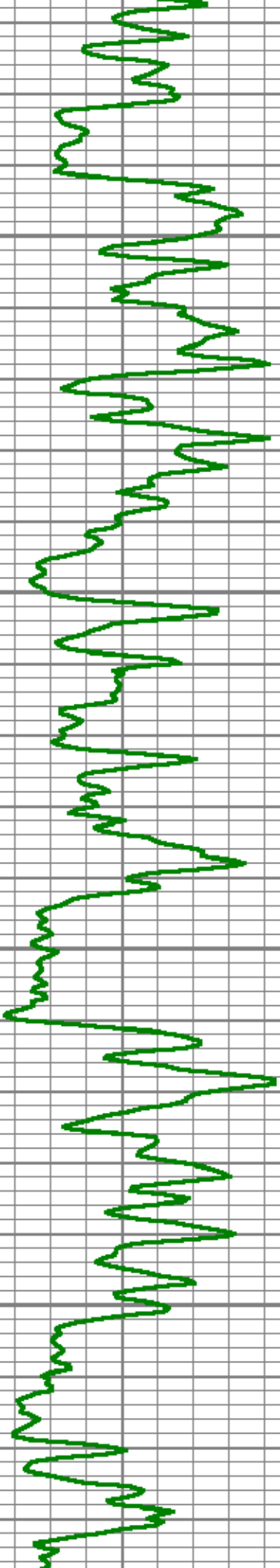


7200

7300

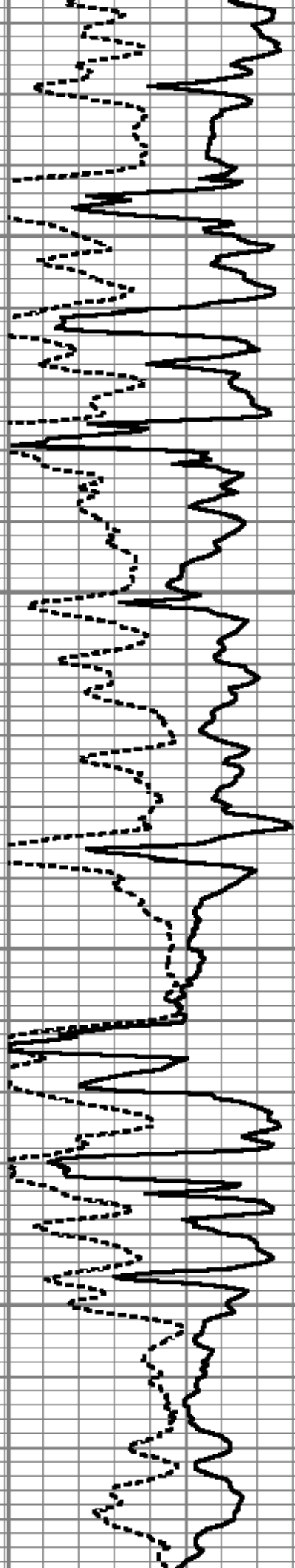
7400

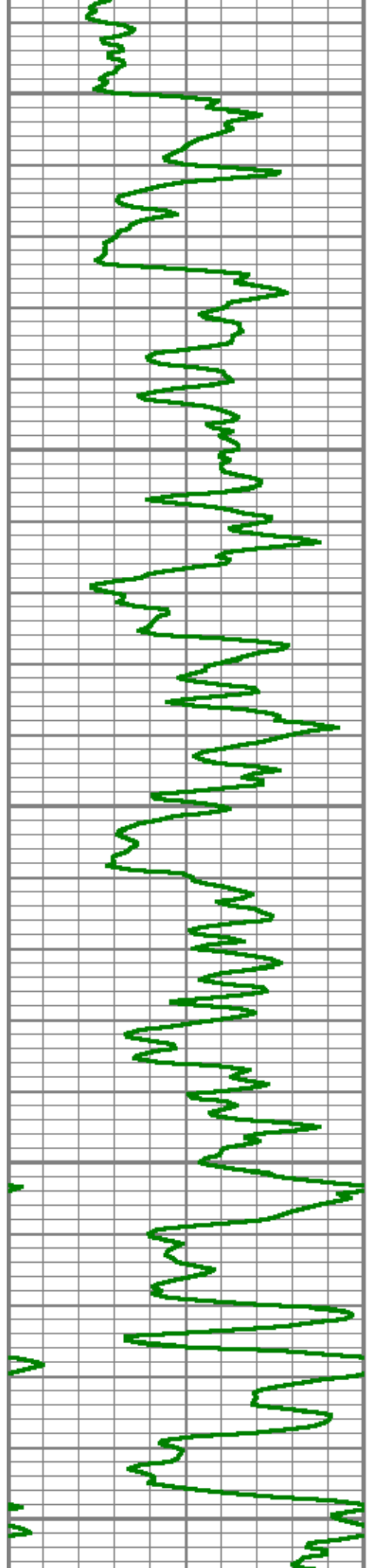




7500

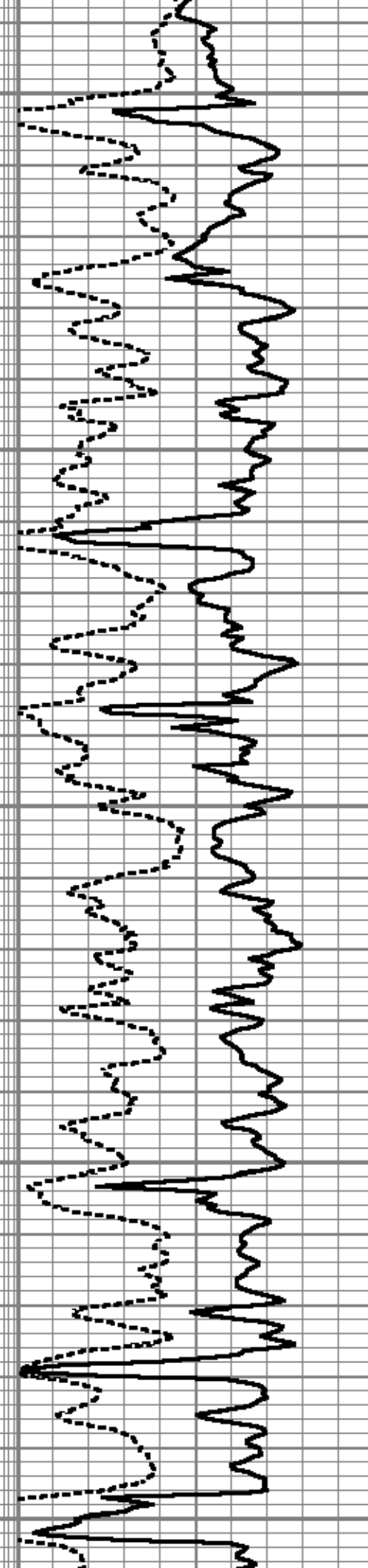
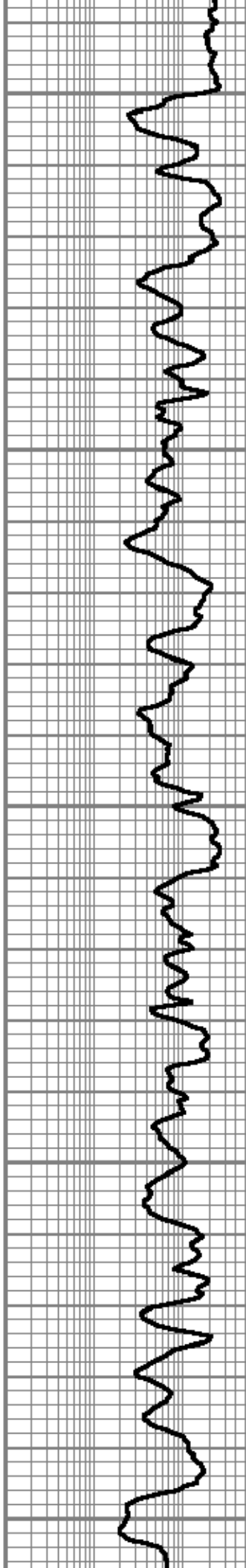
7600

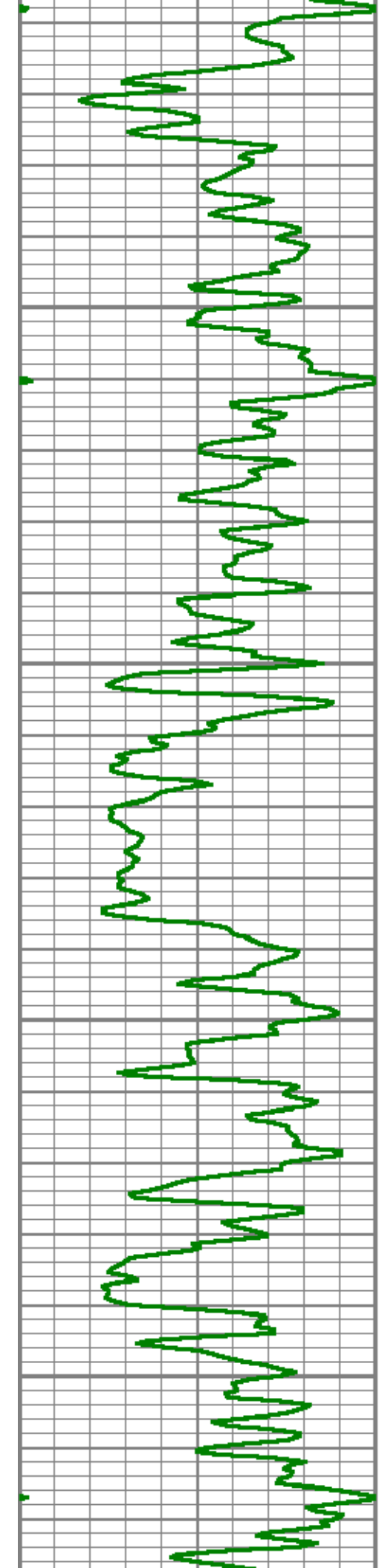




7700

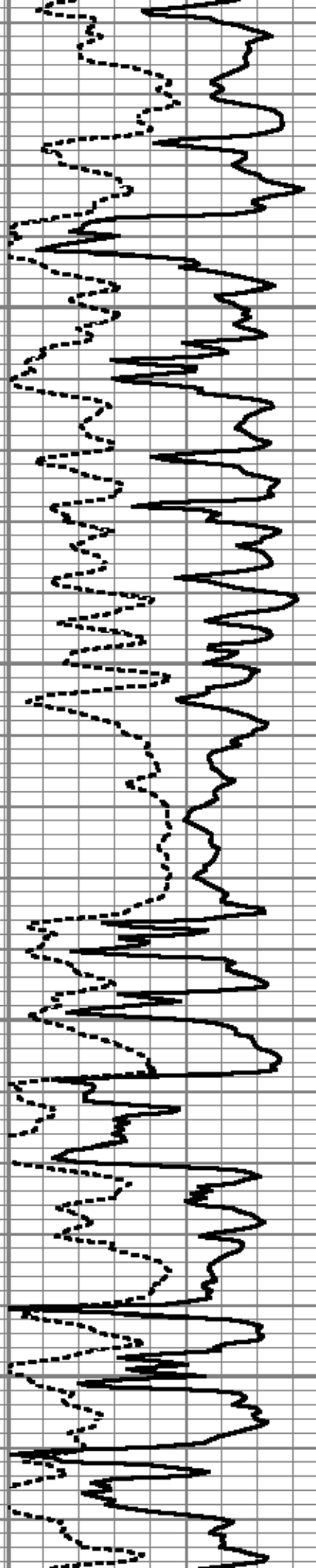
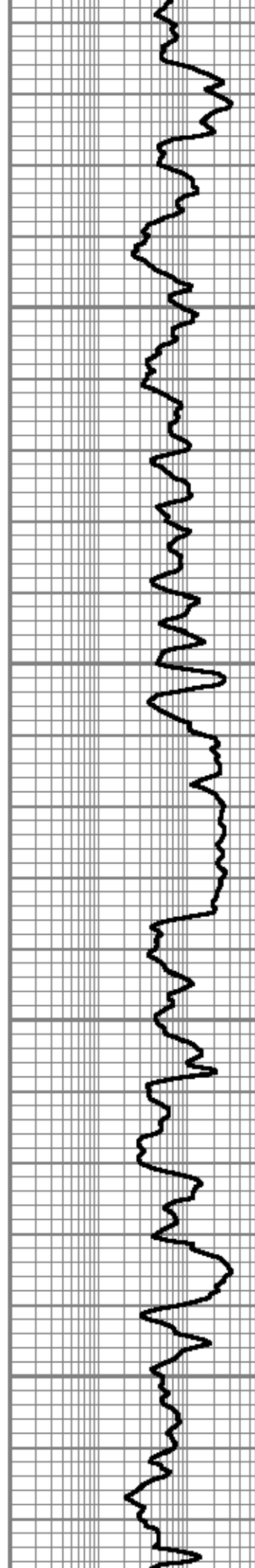
7800

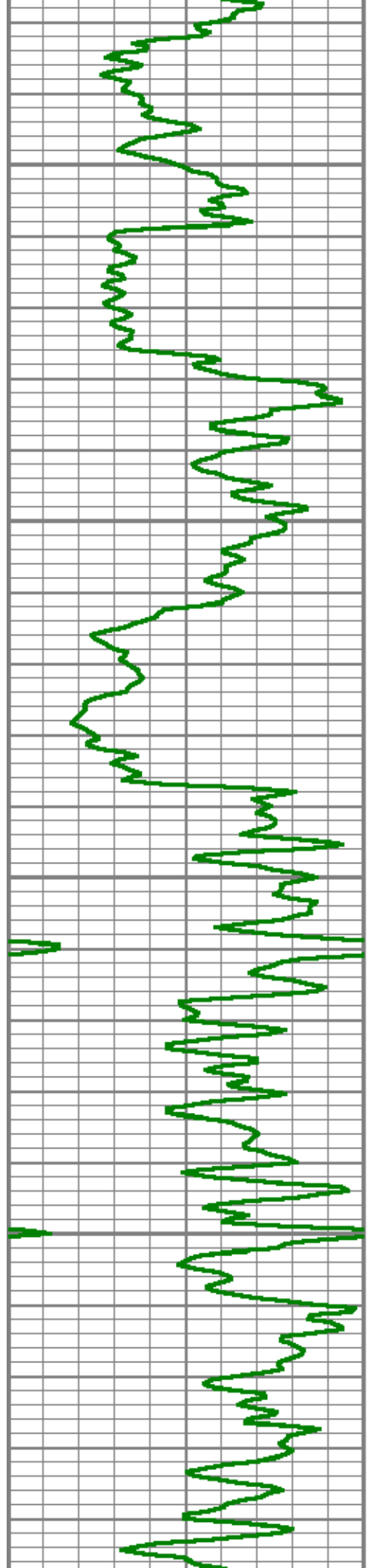




7900

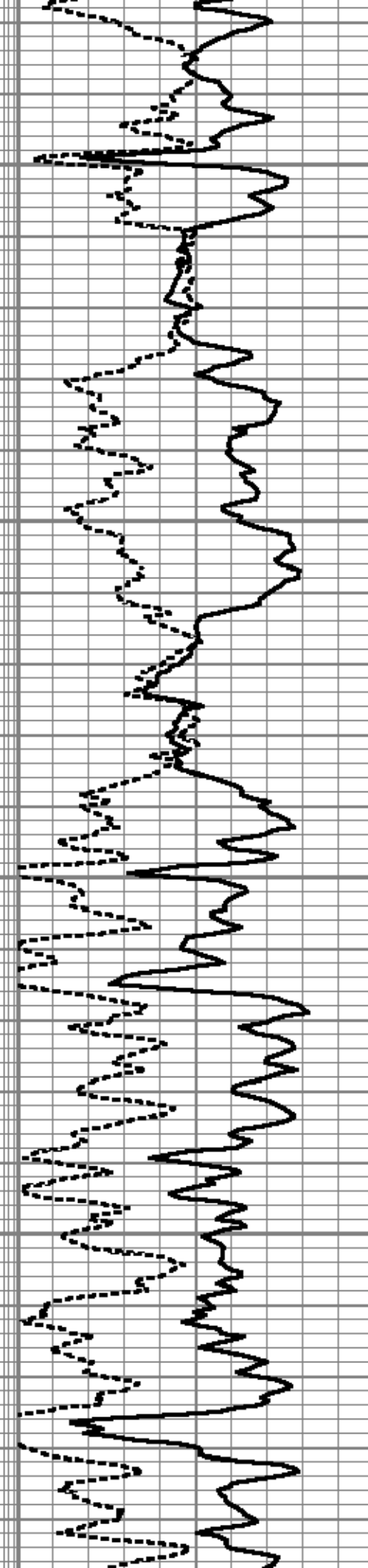
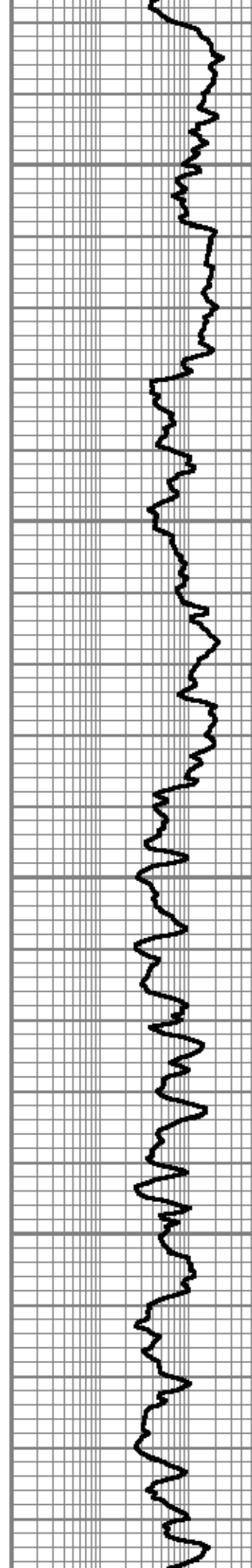
8000

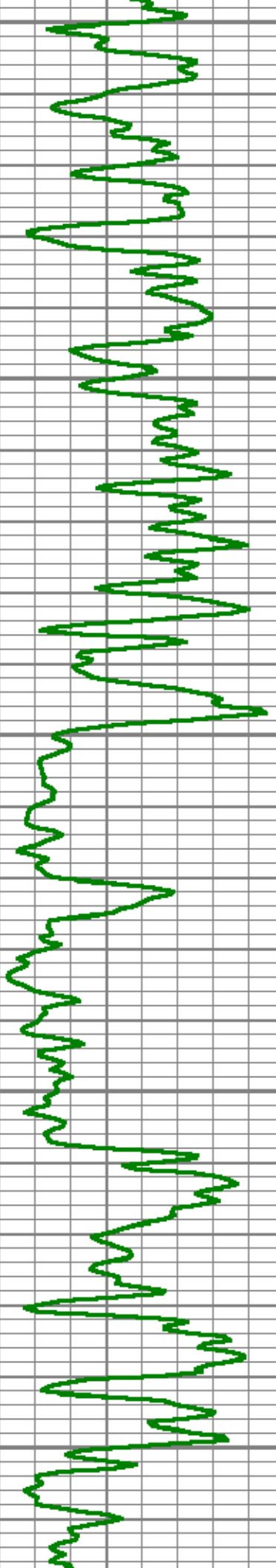




8100

8200

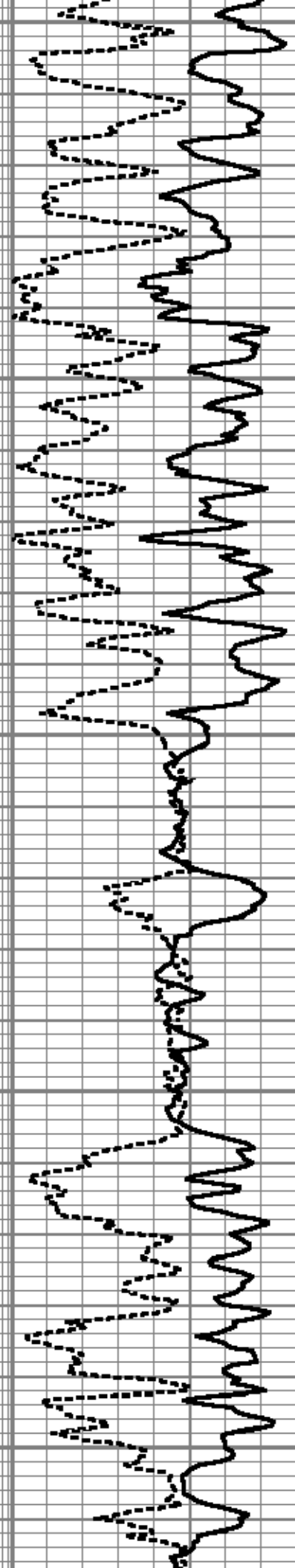
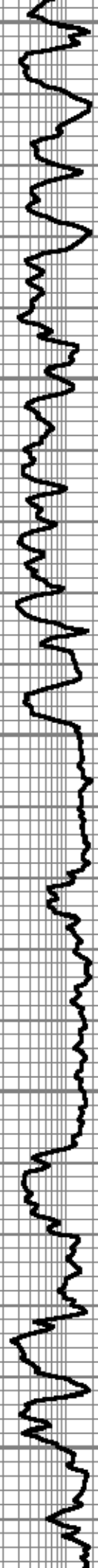


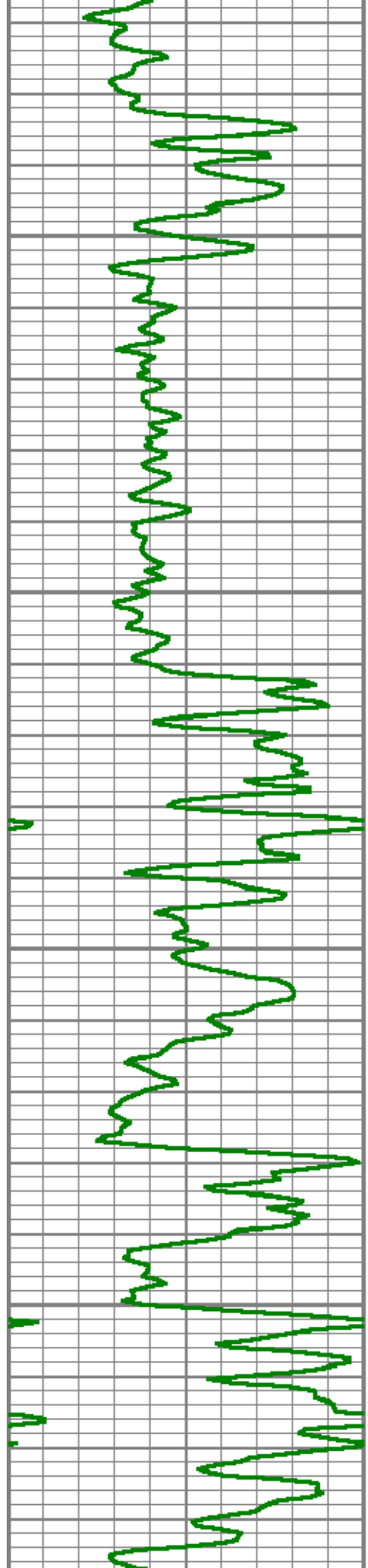


8300

8400

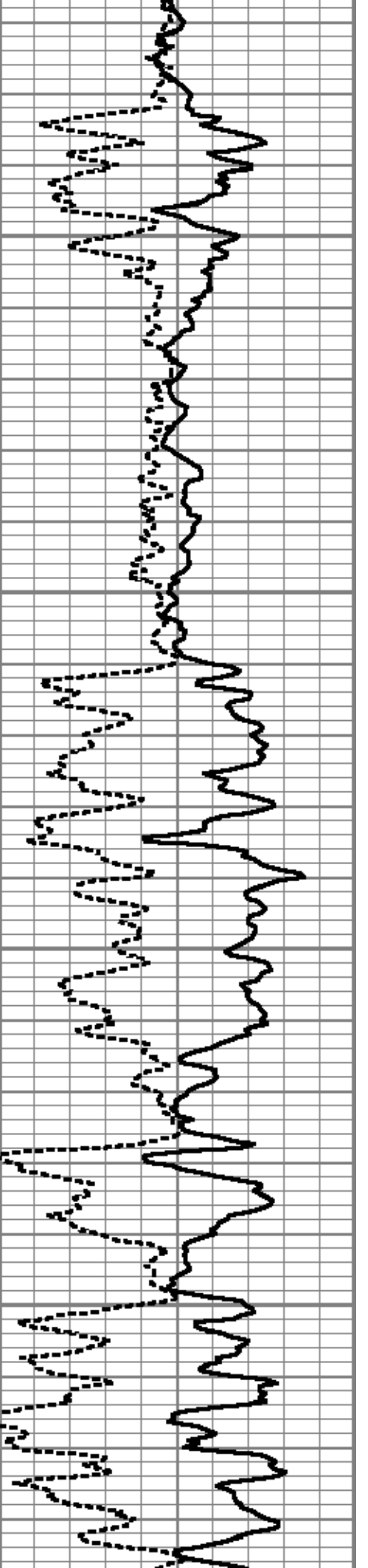
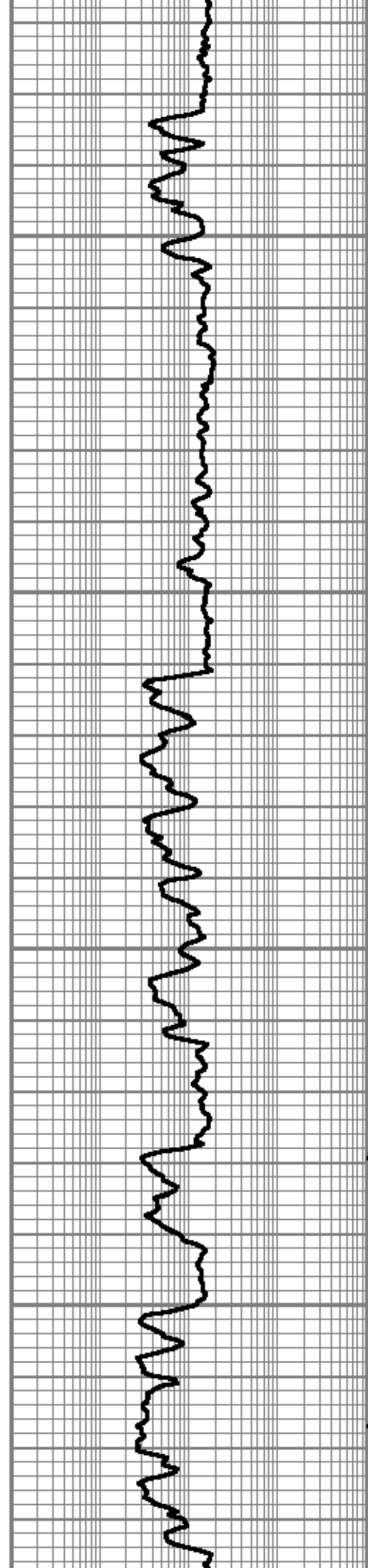
8500

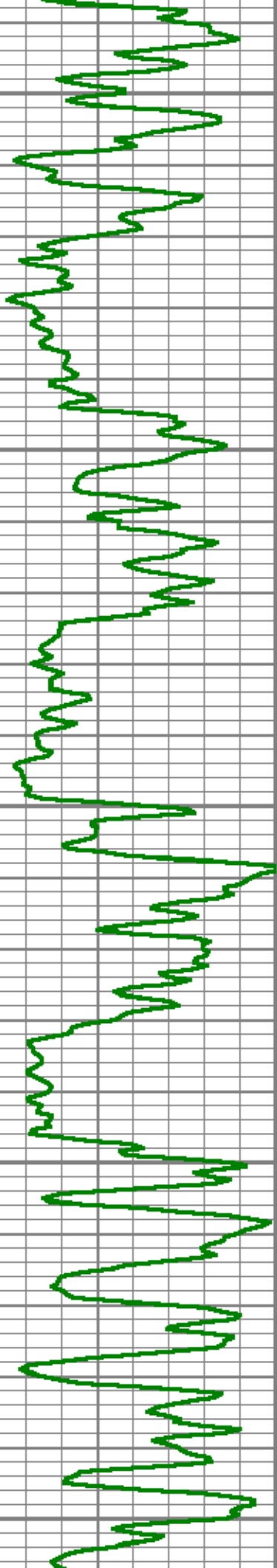




8600

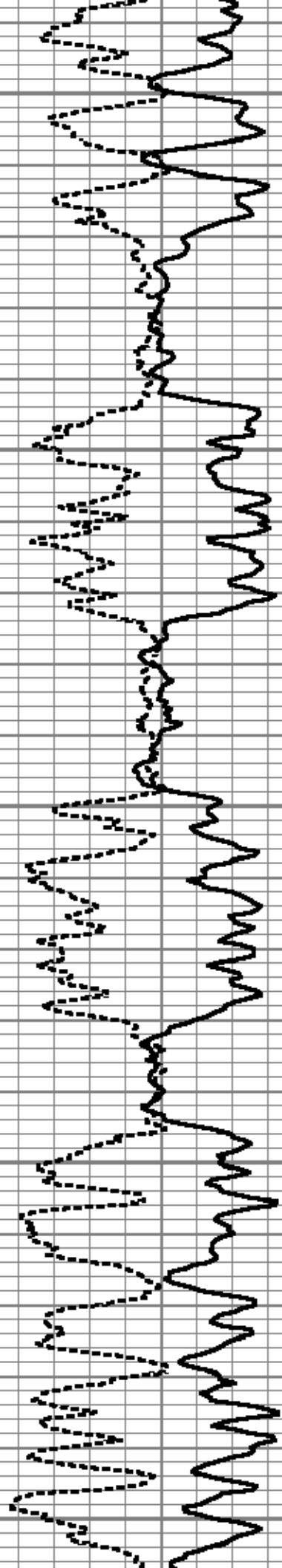
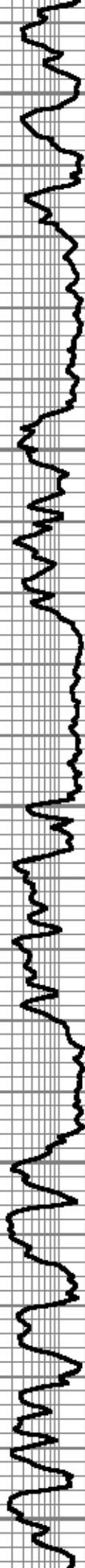
8700

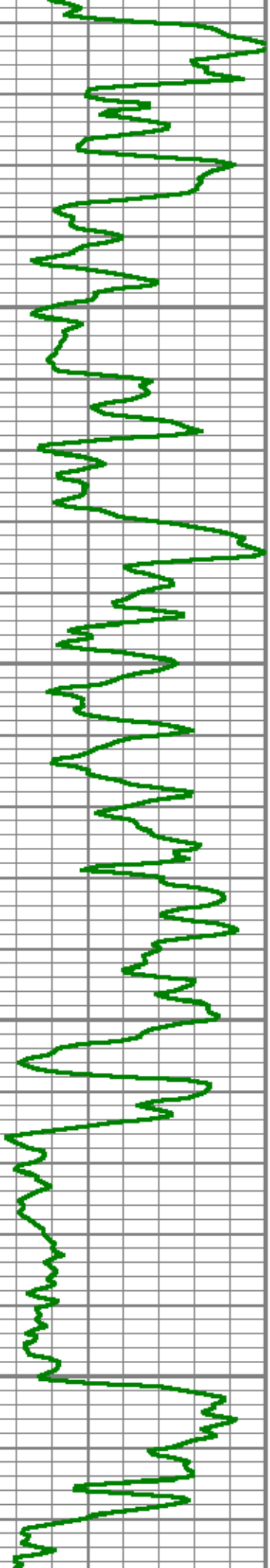




8800

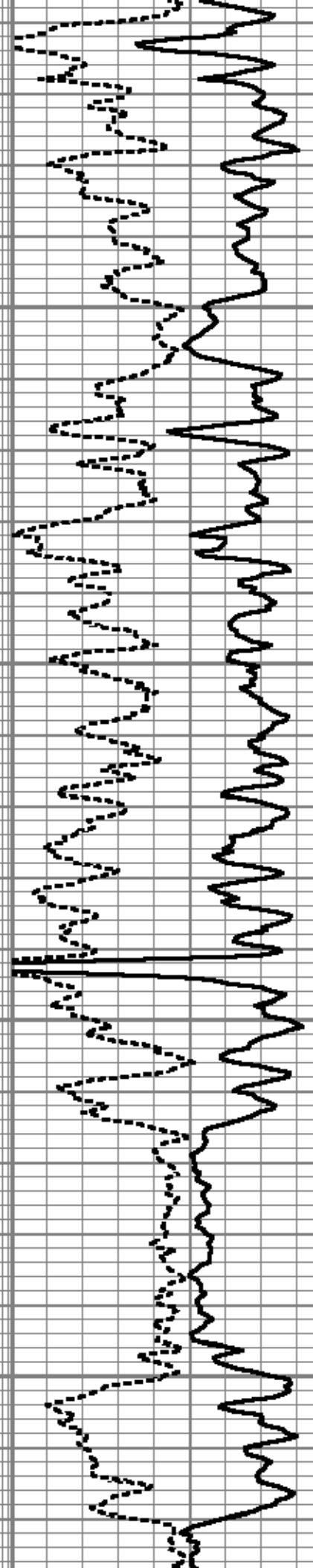
8900

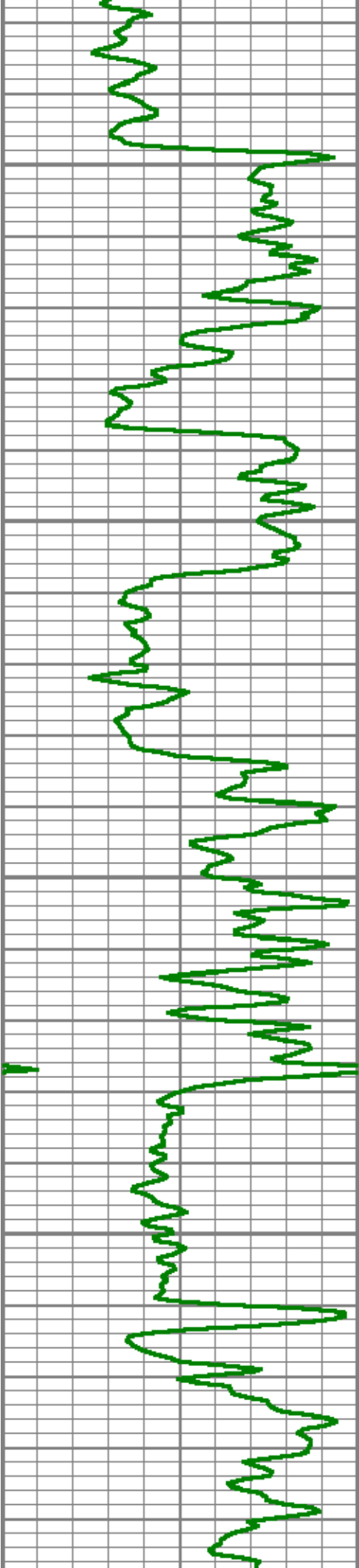




9000

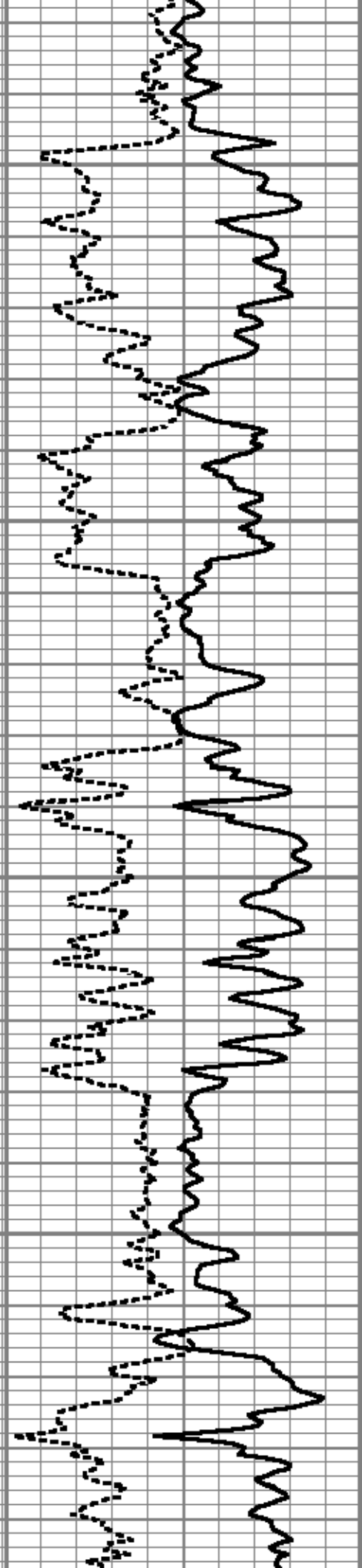
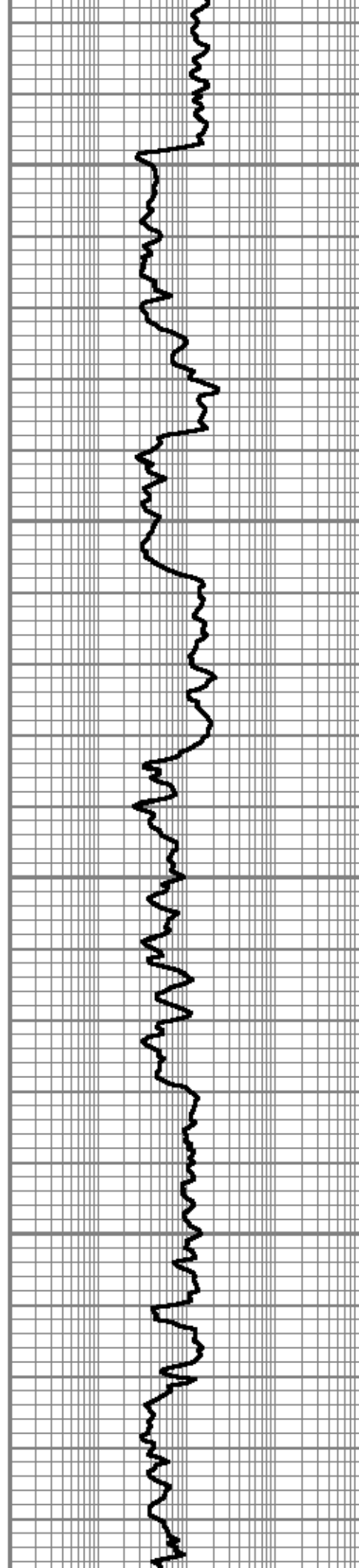
9100

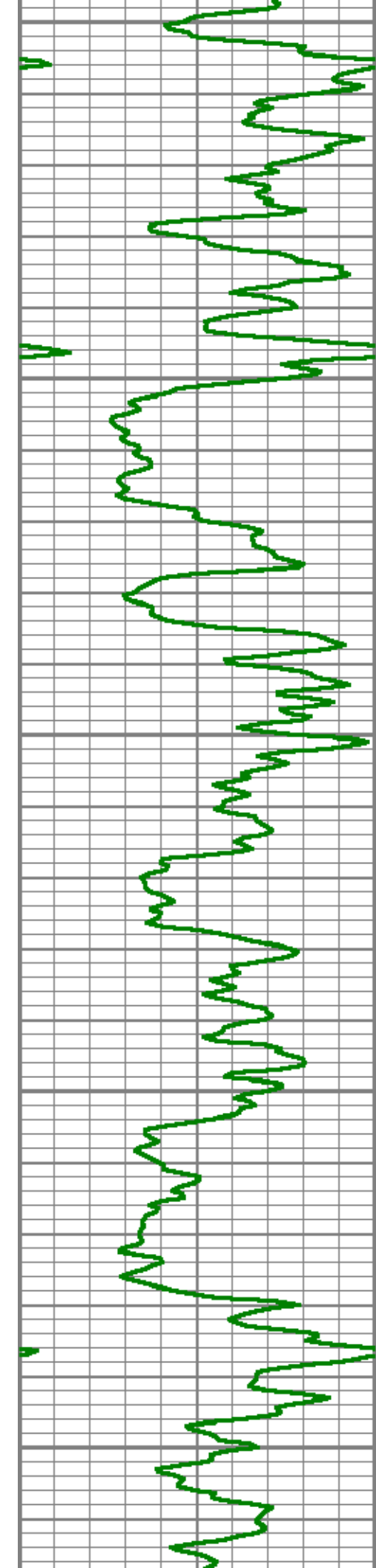




9200

9300

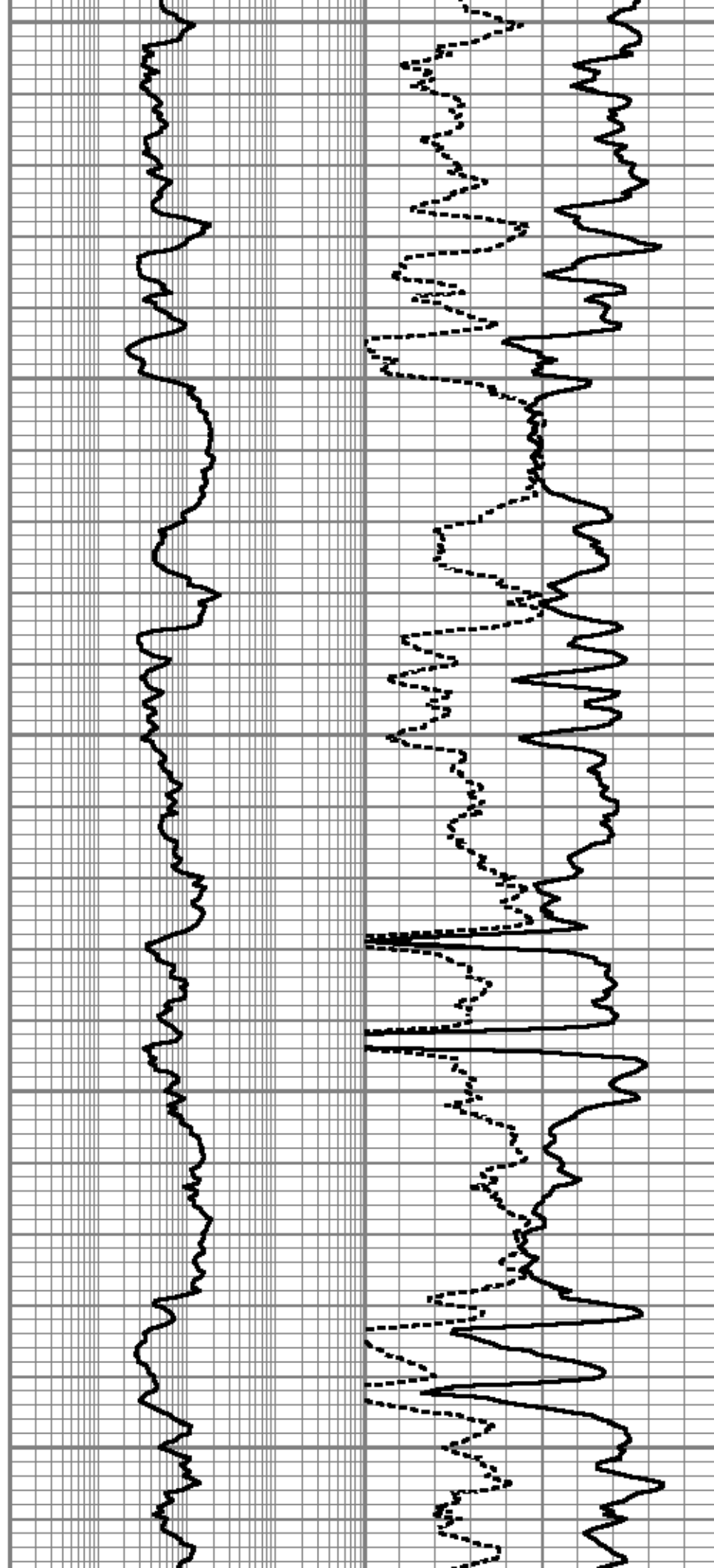


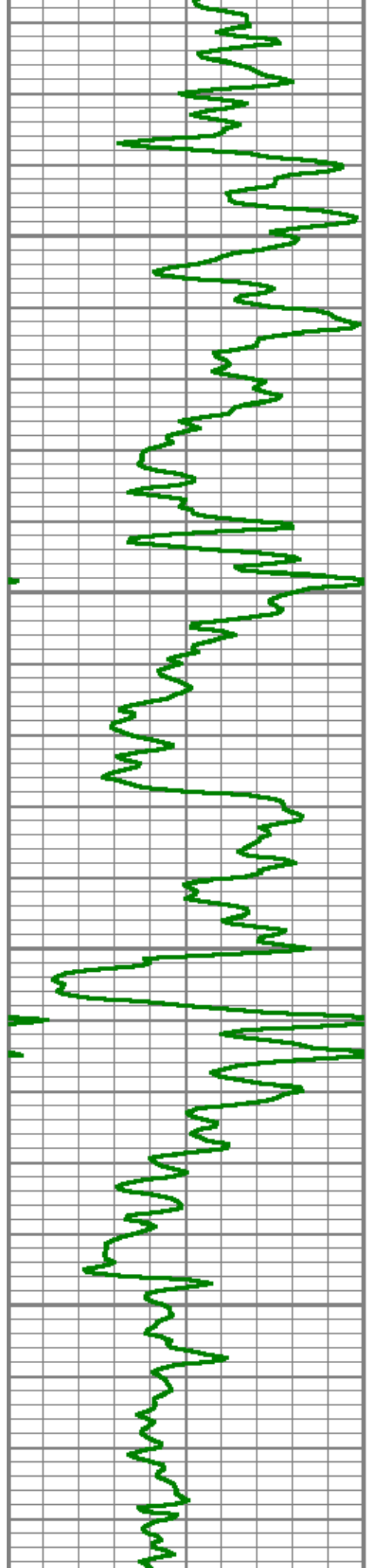


9400

9500

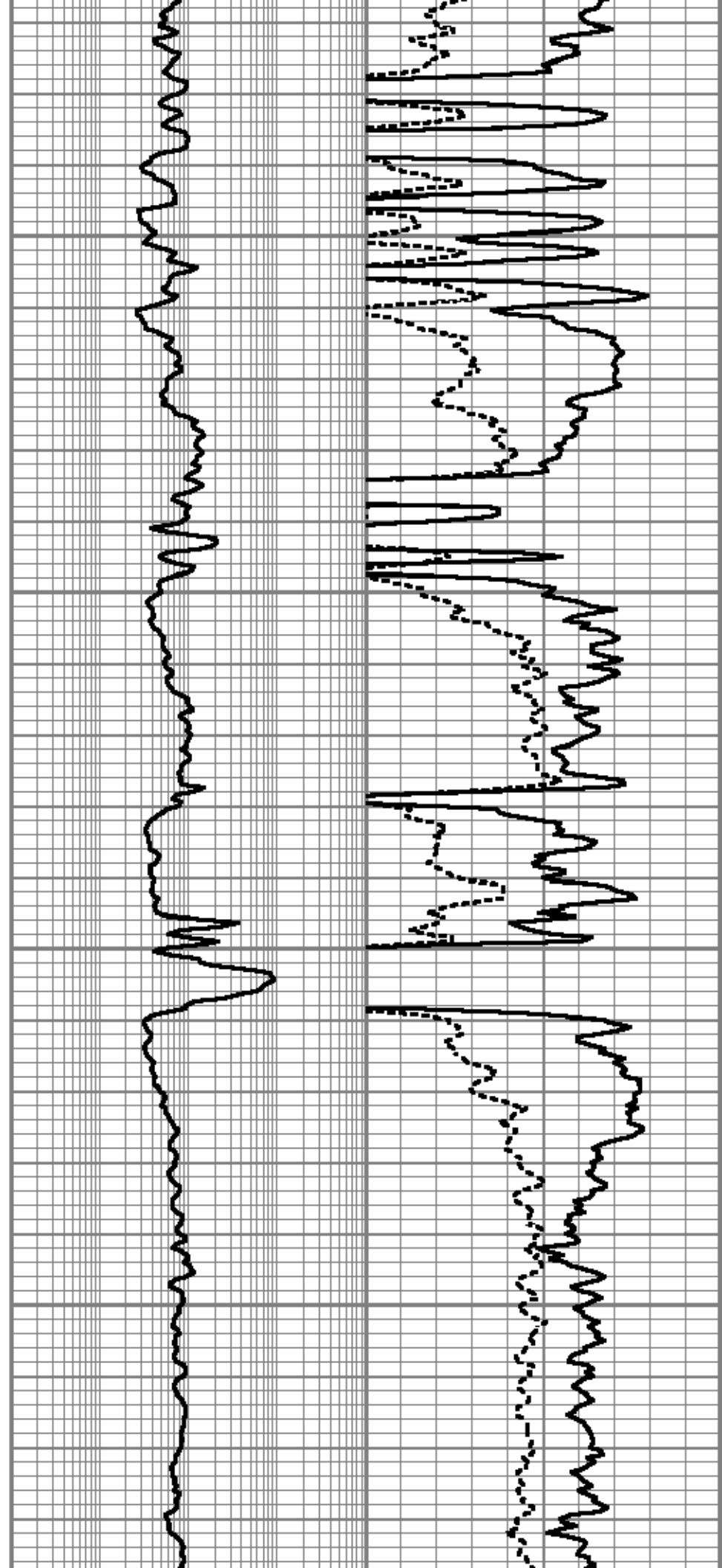
9600





9700

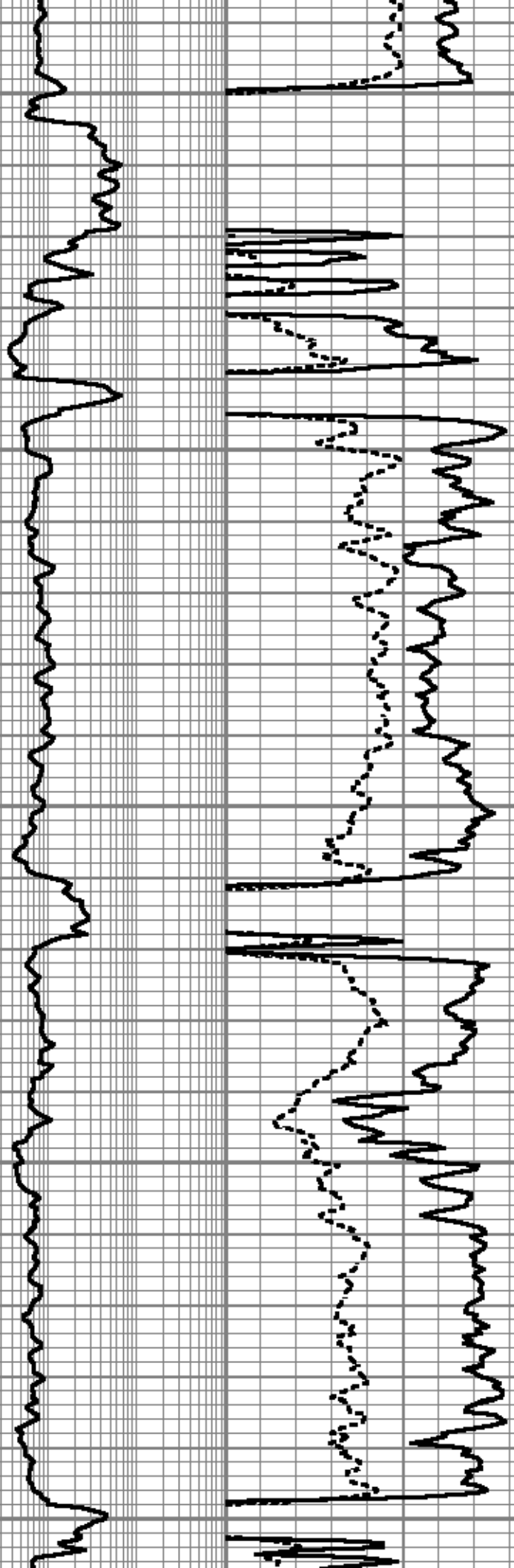
9800

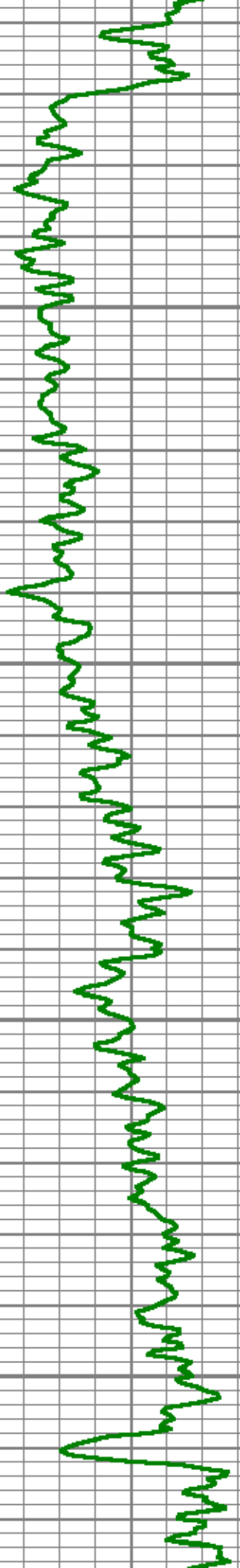




9900

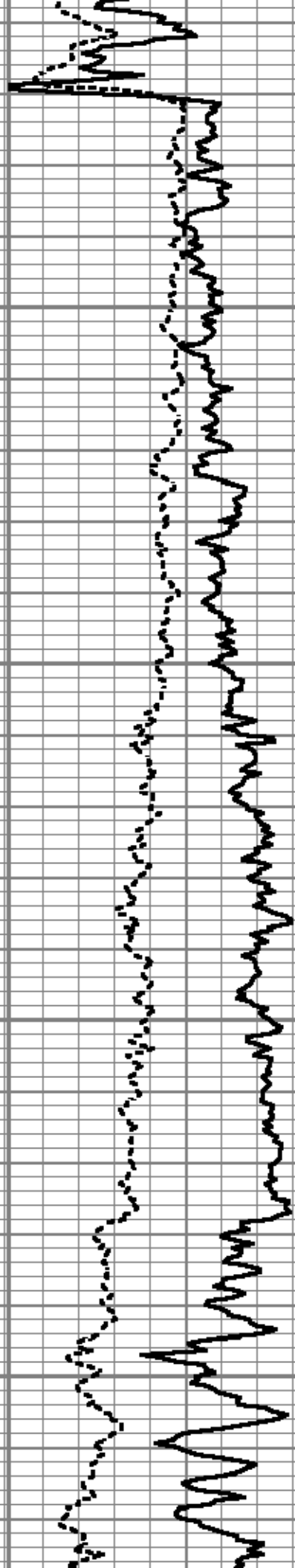
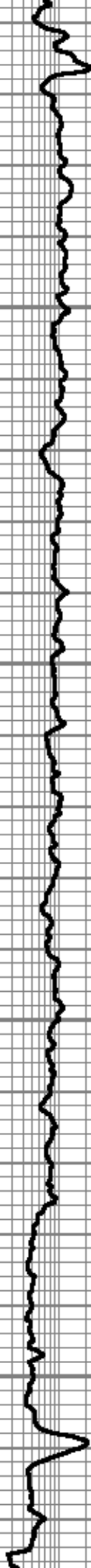
10000





10100

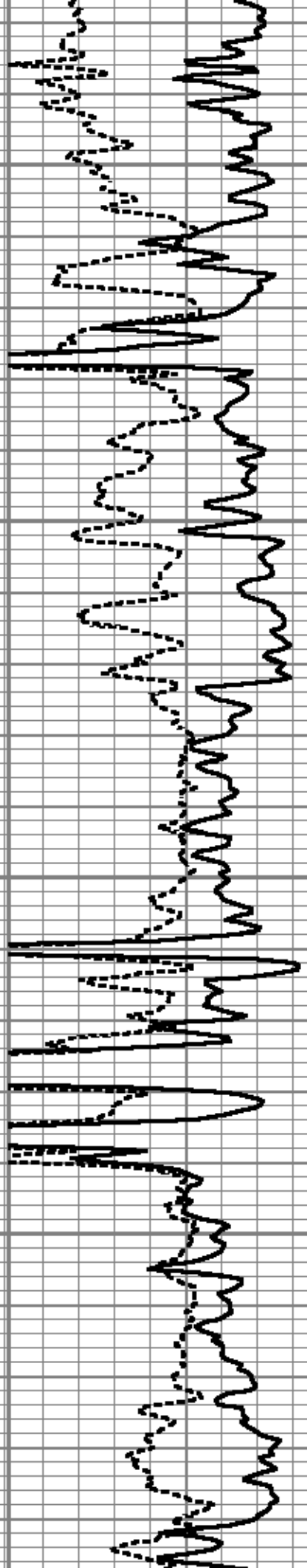
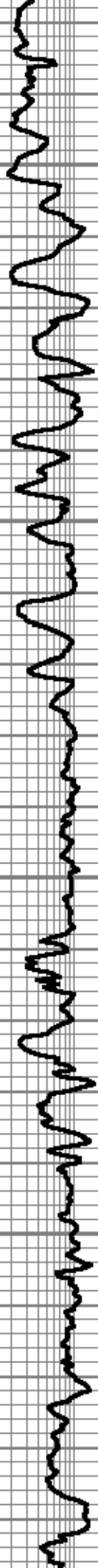
10200

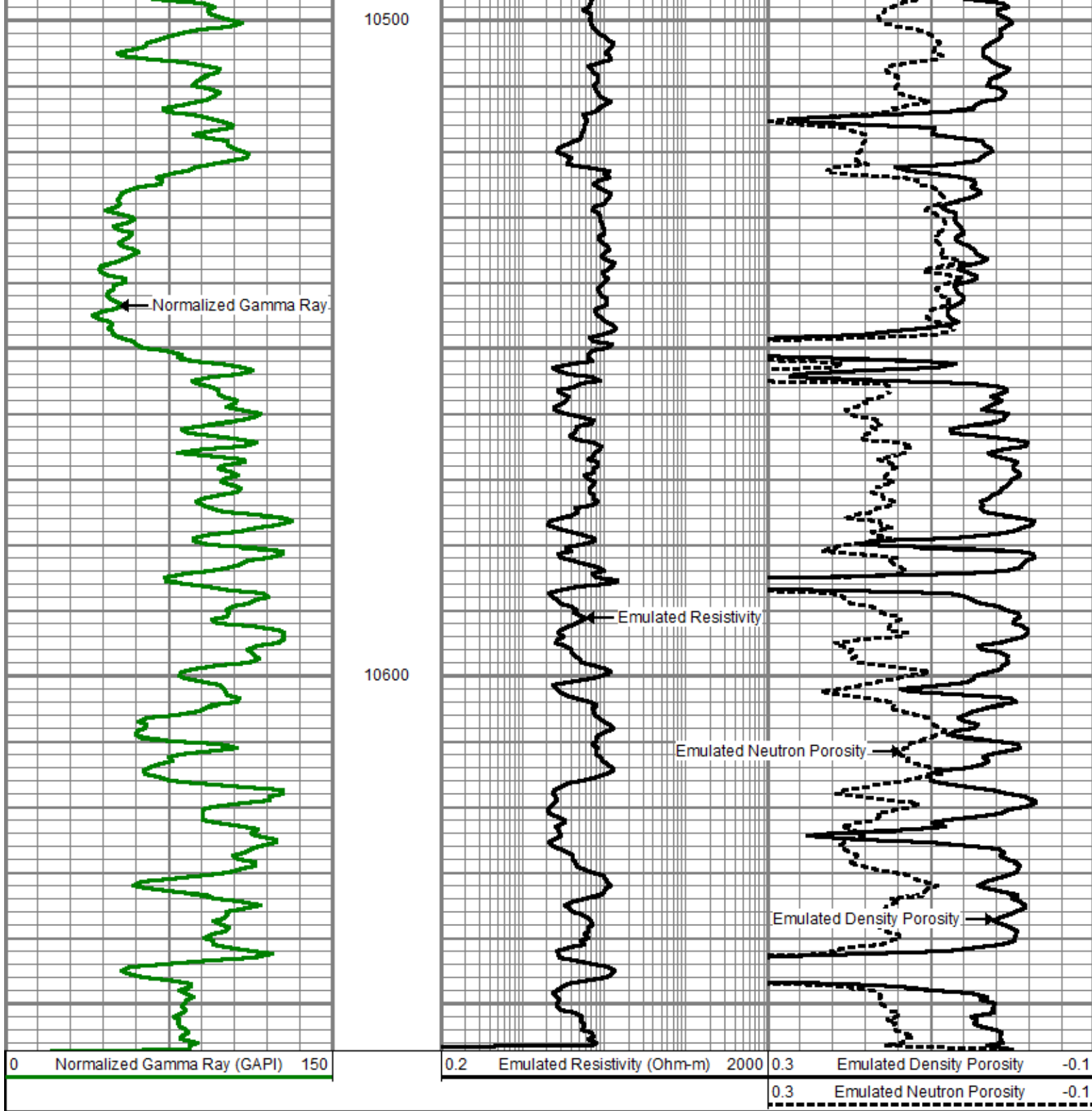




10300

10400





Company	Laramie Energy LLC
Well	CC Federal 0697-03-04W
Field	Grand Valley
County	Garfield
State	Colorado