



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No:	Company		WPX ENERGY
CH090864	Well		FEDERAL BCU 542-30-198
API No:	Field		SULPHUR CREEK
06103119960000	County		GARFIELD
	State		COLORADO
Location		Other Services	
30 1N 98W BCU 33-30-198 PAD CYCLONE 29		RPM/TEMP	
SHL: 2063' FSL & 2136' FEL BHL: 2411' FSL & 650' FEL (MESE)			
SEC 30 TWP 1N RGE 98W			
Permanent Datum	GL	Elevation	6738 ft
Log Measured From	KB	21 ft	Above P. D.
Drill Measured From	KELLY BUSHING		
		Elevations	
		KB	6759 ft
		DF	
		GL	6738 ft

Date	25/SEP/14	
Run	ONE	
Service Order	US090864	
Depth Driller	10935 ft	
Depth Logger	10863 ft	
Bottom Logged Interval	10853 ft	
Top Logged Interval	26 ft	
Time Started	1330	
Time Finished	1730	
Operator Rig Time	4 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	78 ft	
Logged Cement Top	NA	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	NA	
Nominal Logging Speed	66 fpm	
Maximum Recorded Temperature	249 degF	
Reference Log	BAKER HUGHES OPEN HOLE	
Reference Log Date	09/SEP/14	
Equipment No.	4271	GRAND JCT
Recorded By	FLOYD RENEAU	
Witnessed By	WAYNE MORCOTTE	

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In making interpretations of logs, our employees will give the customer the benefit of their best judgement. But since all interpretations are opinions based on inferences from electrical or other measurements, we cannot, and we do not guarantee the accuracy or correctness of any interpretation. We shall not be liable or responsible for any loss, cost, damages, or expenses whatsoever incurred or sustained by the customer resulting from any interpretation made by any of our employees.

Borehole Record		
Bit Size	From	To
30 in	21 ft	80 ft
14.75 in	80 ft	3289 ft
8.75 in	3289 ft	10935 ft

Casing Record				
Size	Weight	Grade	From	To
18 in			21 ft	80 ft
9.625 in			21 ft	3289 ft
4.5 in	11.6 lbm/ft	P-110	21 ft	10935 ft

Remarks

All data on this log is shifted and depth matched using the Gamma Ray curve to the Baker Hughes HDIL/ZDL/CN/GR open hole log dated 9/09/2014 at the clients request.

The amount of linear shift is 5 feet.

The depth matching process creates potential for collar lengths to vary from those recorded on other cased hole wireline units without a Gamma Ray reference.

Logged with zero PSI at wellhead.

BHT = 249°F

SJ = 5925'-5947'

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1426XA	10218496	CENT
1	1	GR/CCL	2459XA	10417457	CENT

PRIMARY PRESENTATION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	26.905	10851.000
RAL	Amp Gate Start Near	195.000	usec	26.905	10851.000
RAL	Amp Gate Start Radial	195.000	usec	26.905	10851.000
RAL	Amp Gate Width Far	25.000	usec	26.905	10851.000
RAL	Amp Gate Width Near	25.000	usec	26.905	10851.000
RAL	Amp Gate Width Radial	25.000	usec	26.905	10851.000
RAL	casing od	4.500	inches	26.905	10851.000
RAL	casing wt	11.600	lbm/ft	26.905	10851.000
RAL	FB Start Far	291.900	usec	26.905	10851.000
RAL	FB Start Near	180.000	usec	26.905	10851.000
RAL	FB Start Radial	180.000	usec	26.905	10851.000
RAL	FB Thresh Far	15.000	mv	26.905	10851.000
RAL	FB Thresh Near	10.000	mv	26.905	10851.000
RAL	FB Thresh Radial	10.000	mv	26.905	10851.000
RAL	Fluid Travel Time	200.000	usec/ft	26.905	10851.000

DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES							
1426XA	-12.360	ACAL	ANR	AR1	AR2	AR3	AR4		
		AR5	AR6	AR7	AR8	CHV	FPR2		
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3		
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP		
1426XA	-11.360	AFAR	SIG	TT5					
2459XA	-7.250	CCL							
2459XA	-5.390	GR							
2459XA	0.000	NEU							

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

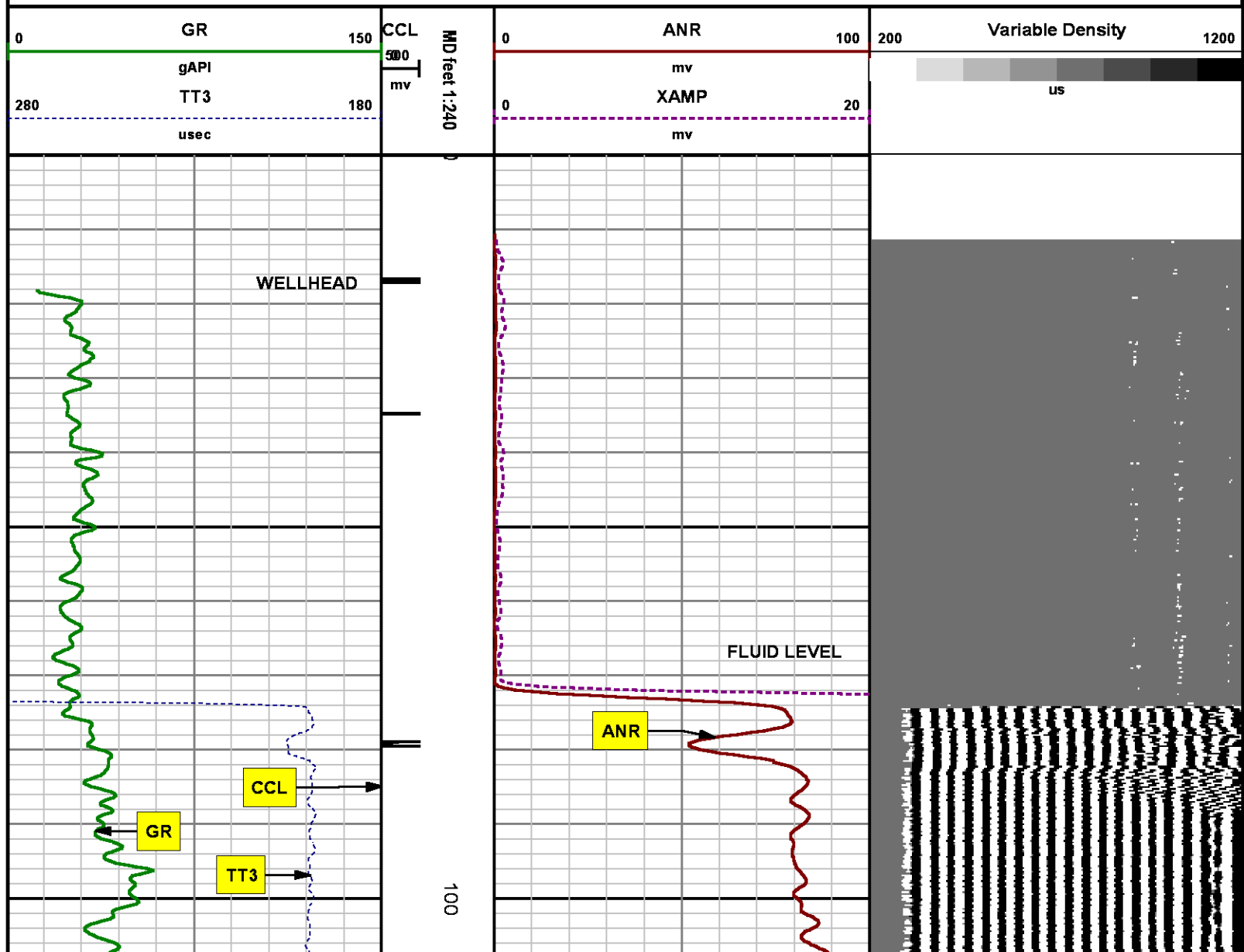
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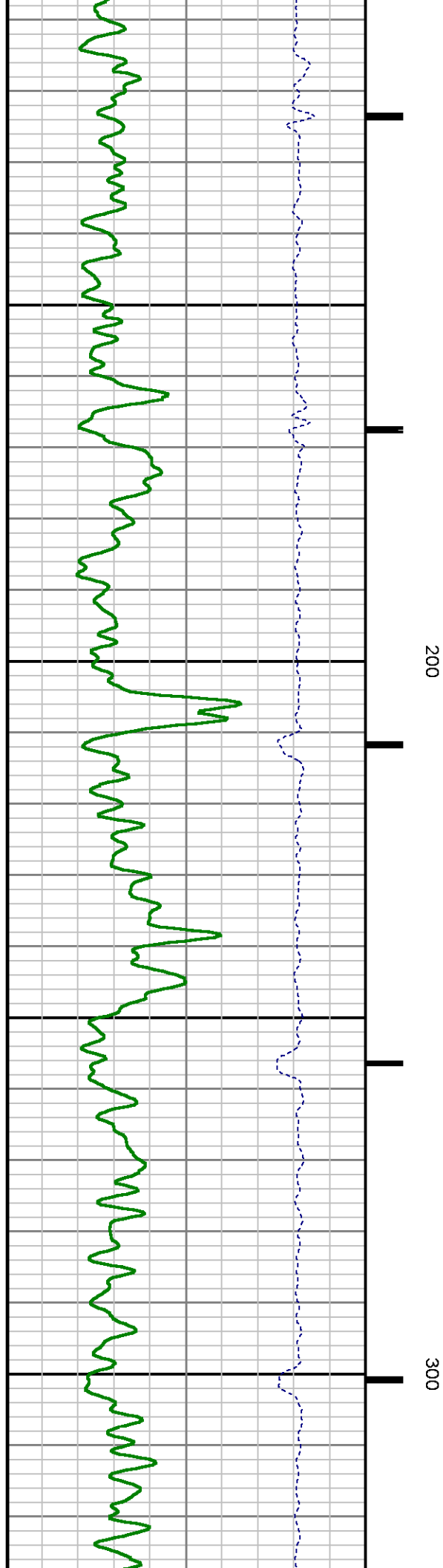
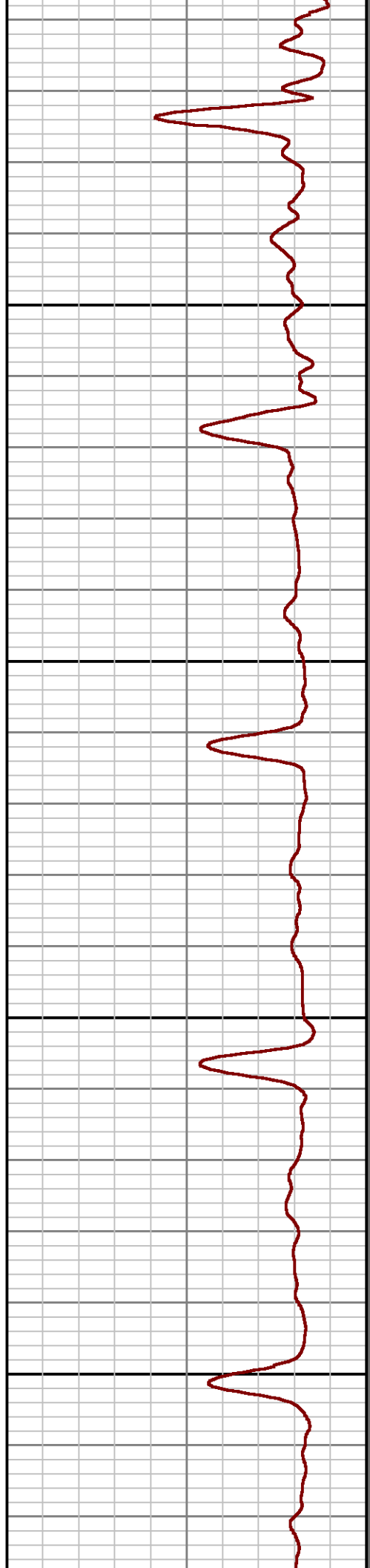
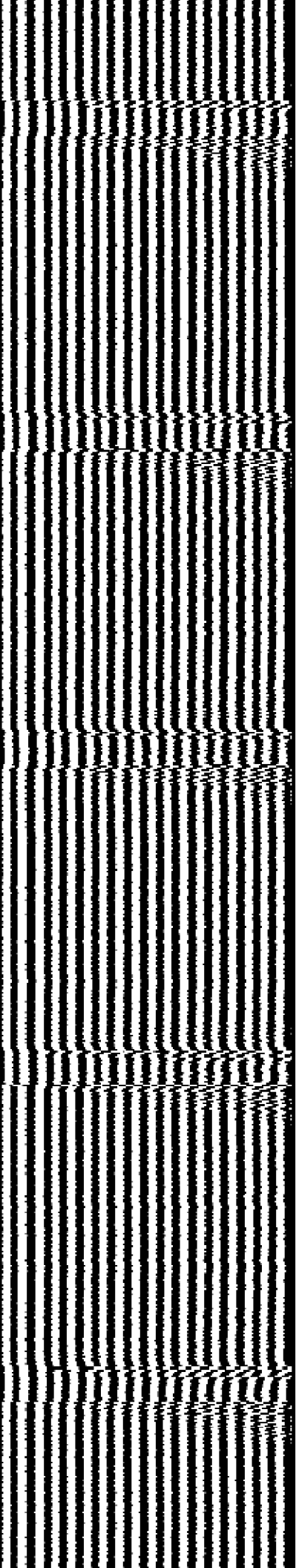
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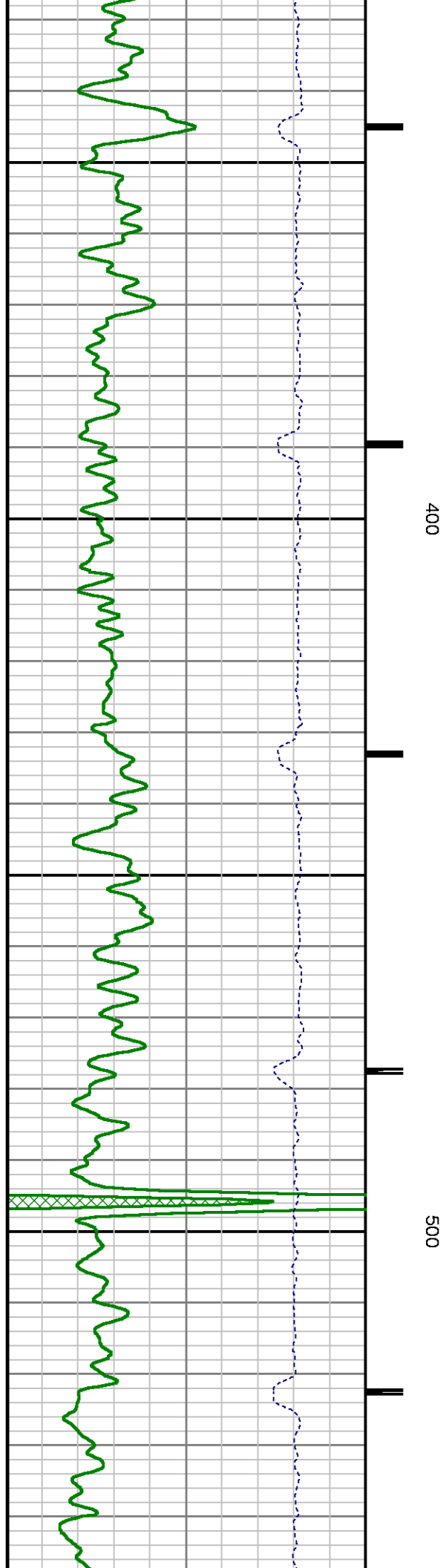
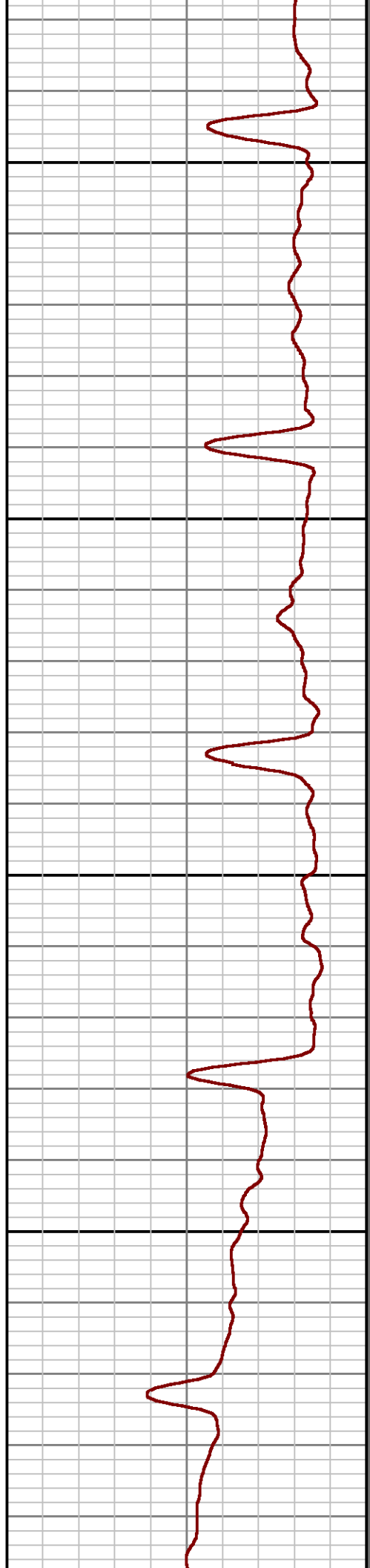
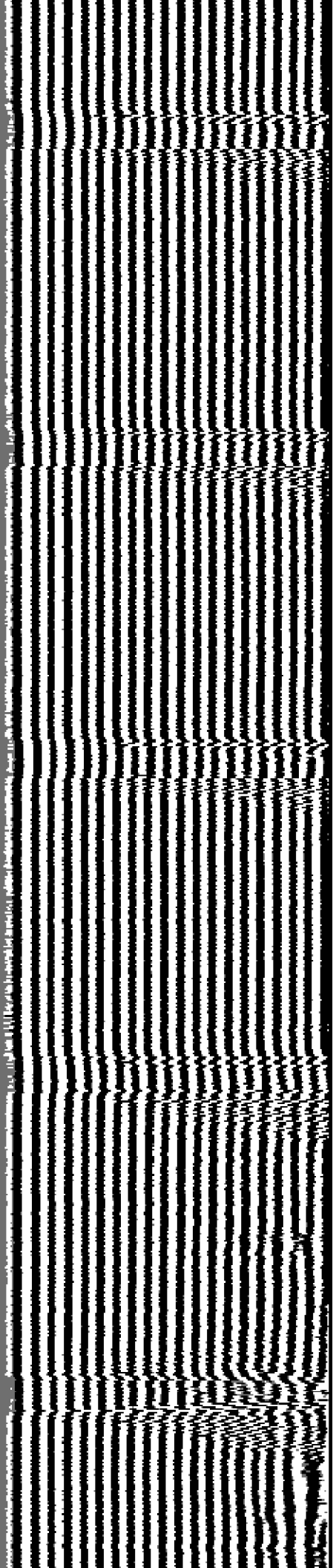
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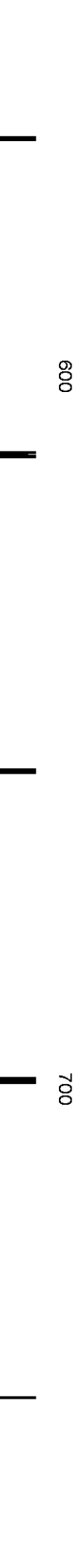
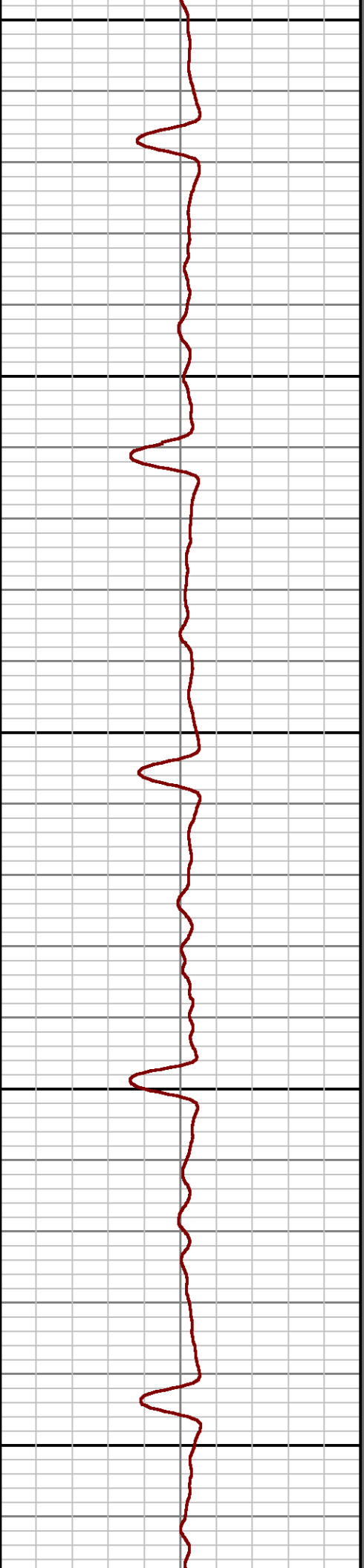
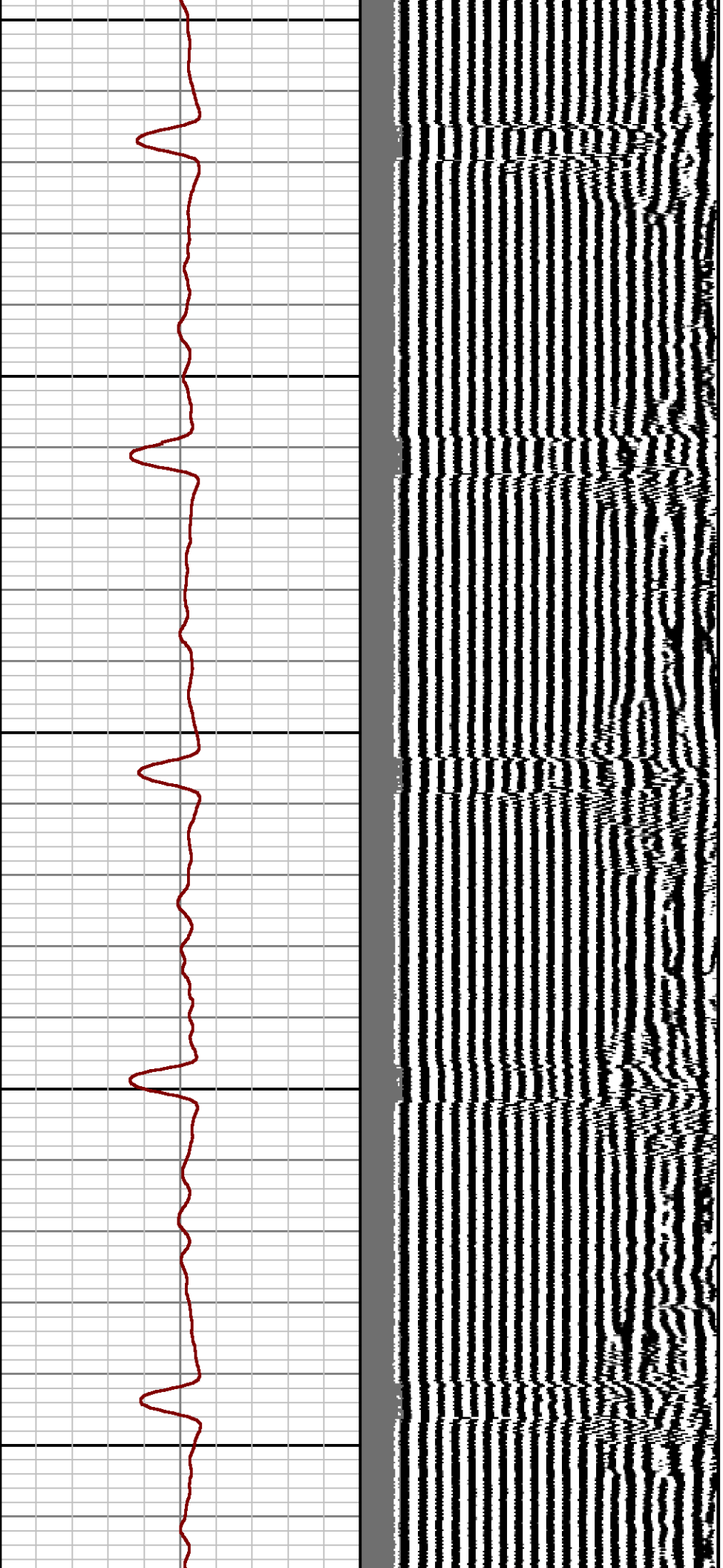
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Created : 9/27/2014 9:53:54 AM



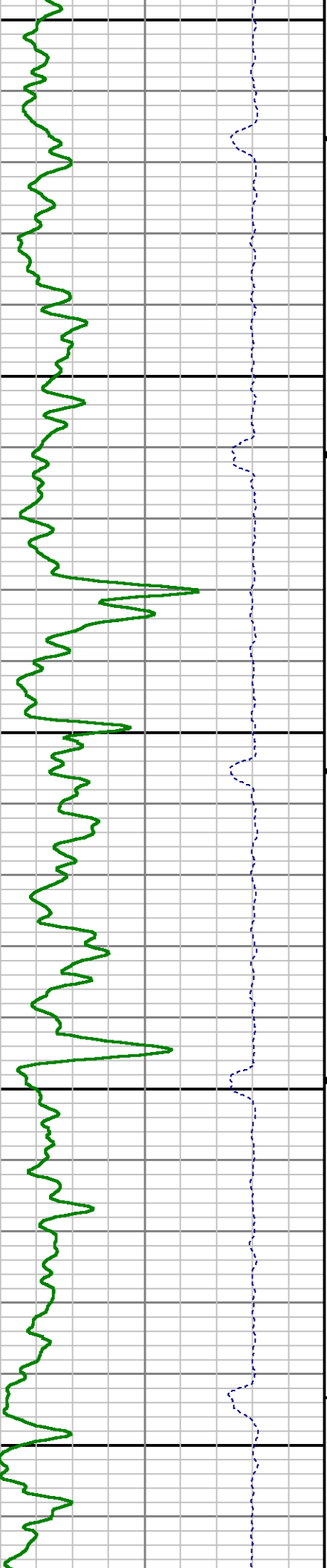


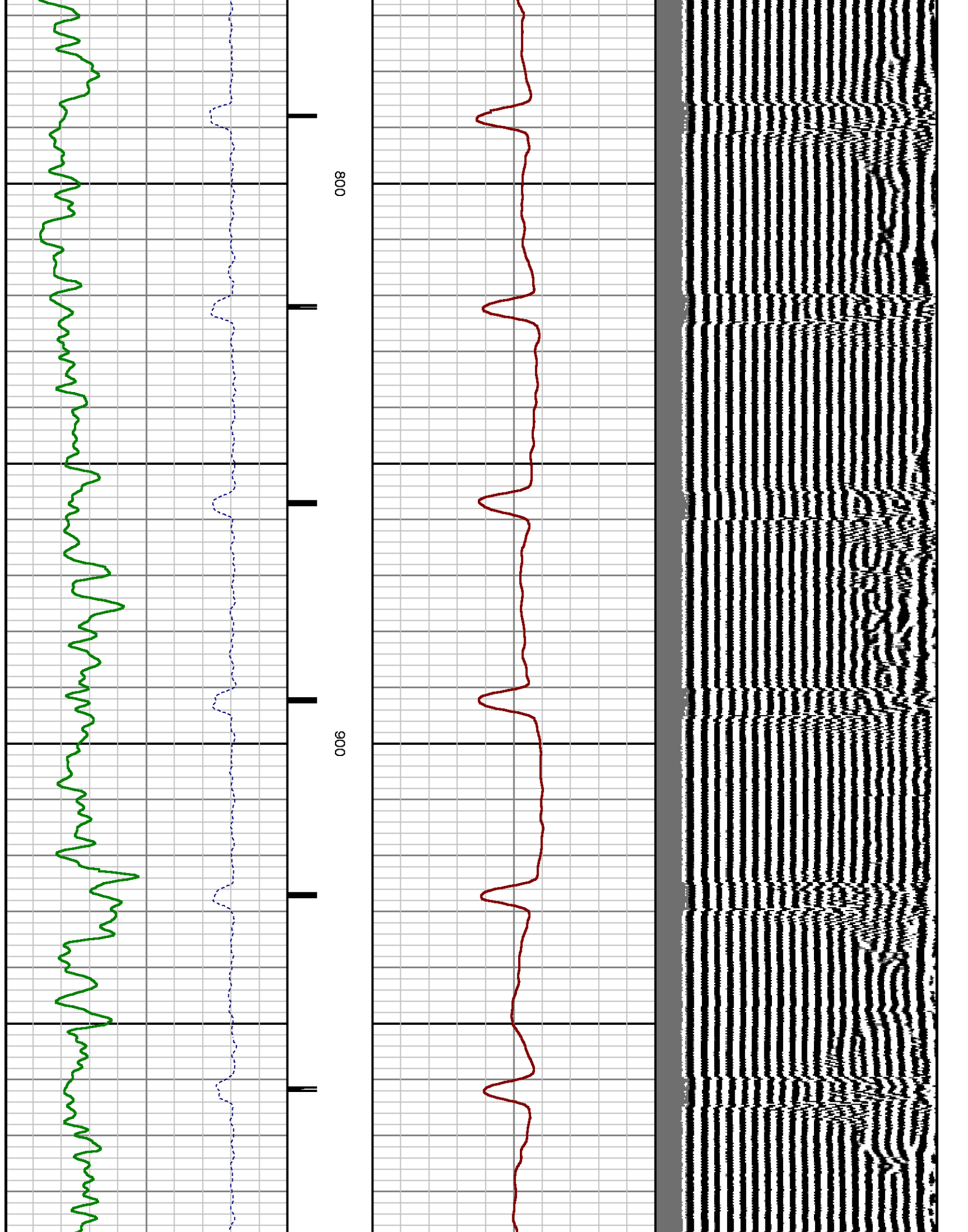


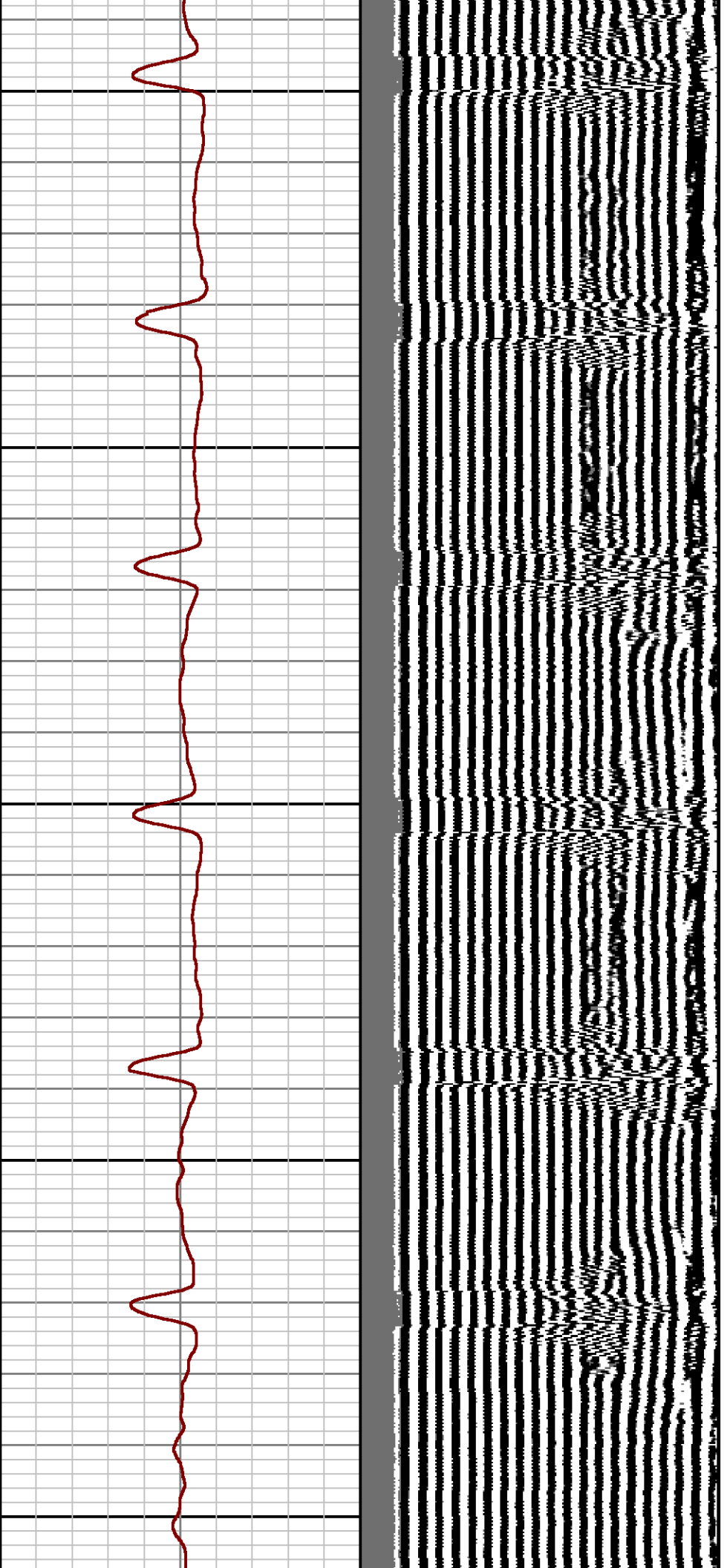


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700



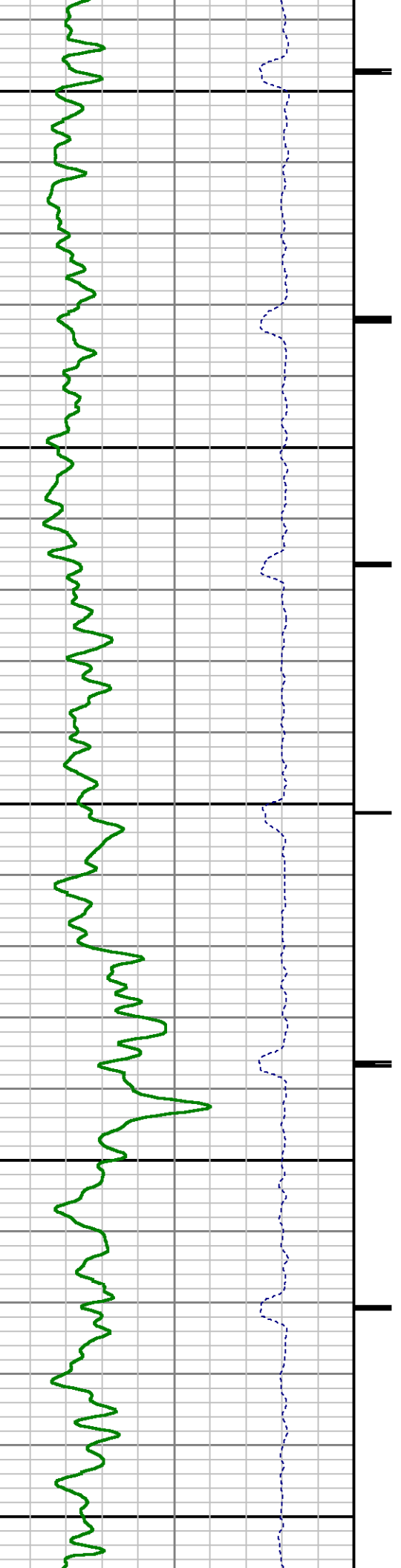


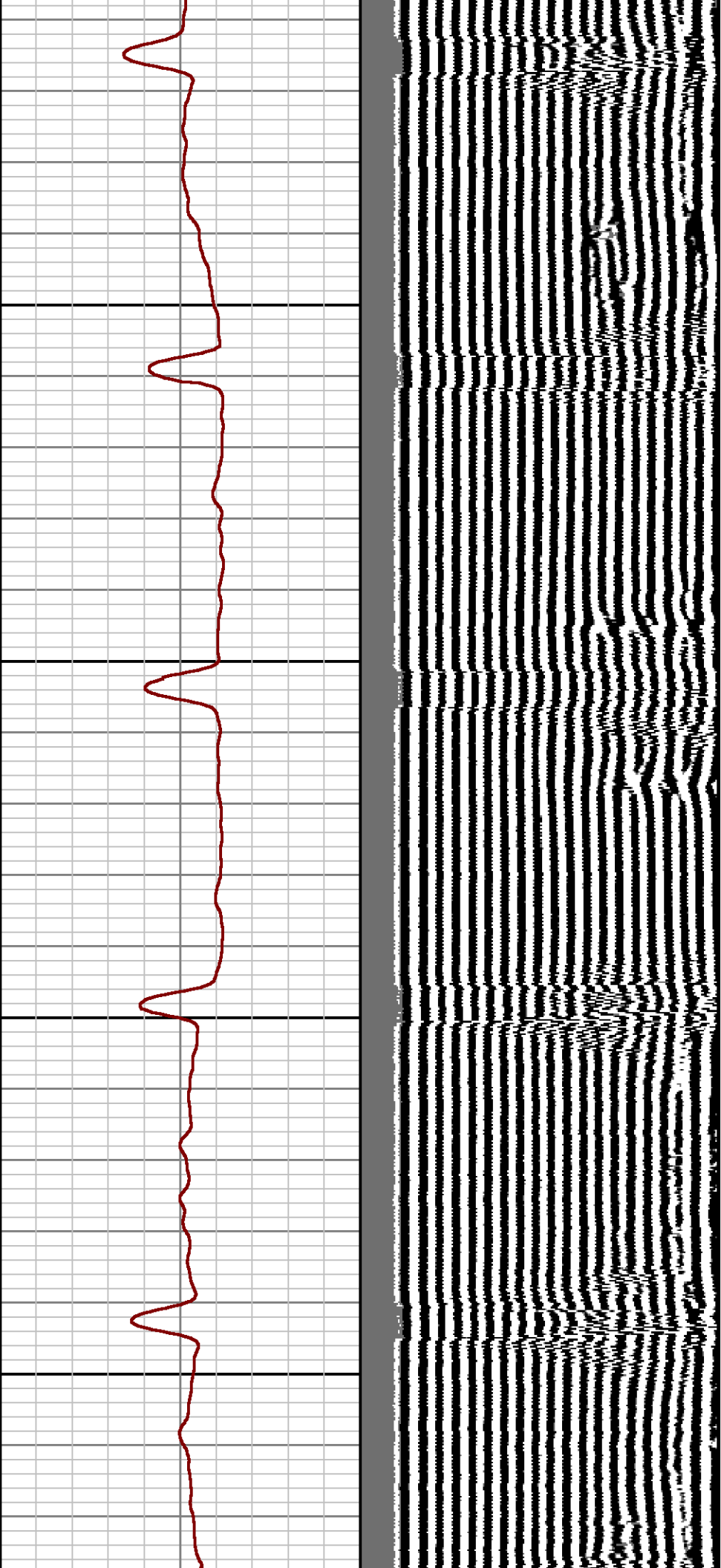


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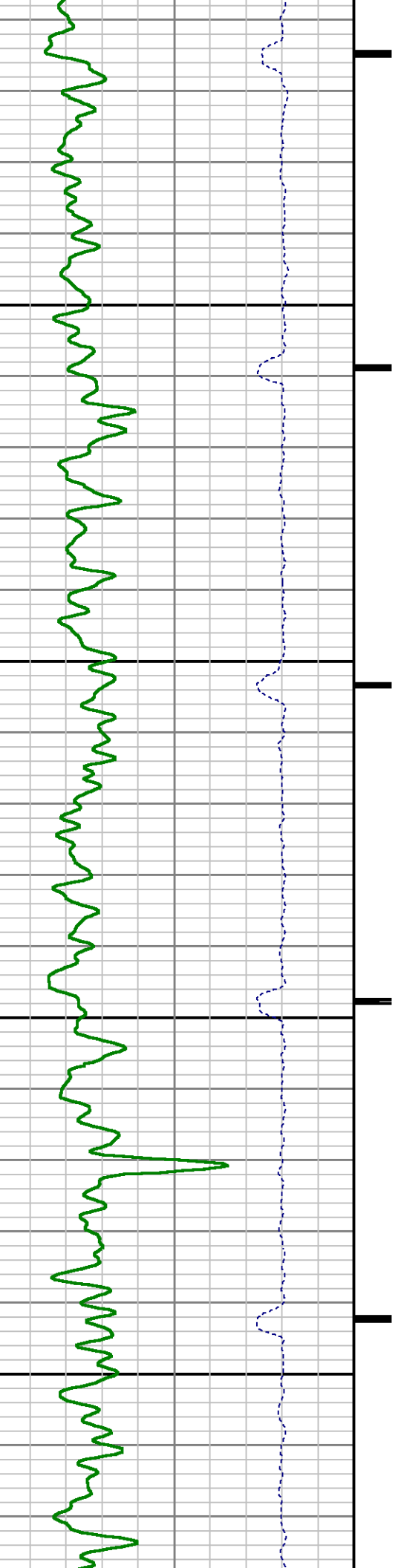
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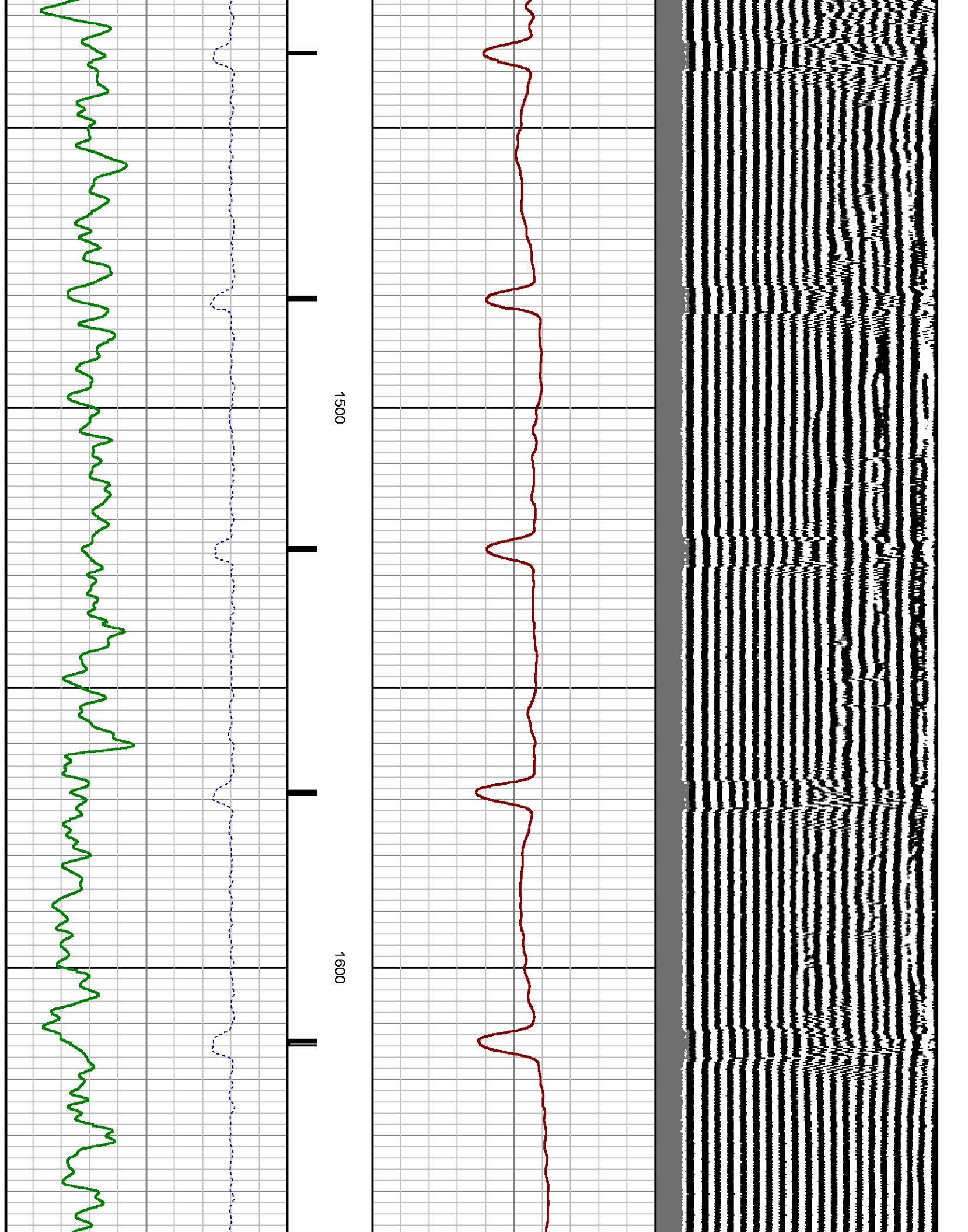


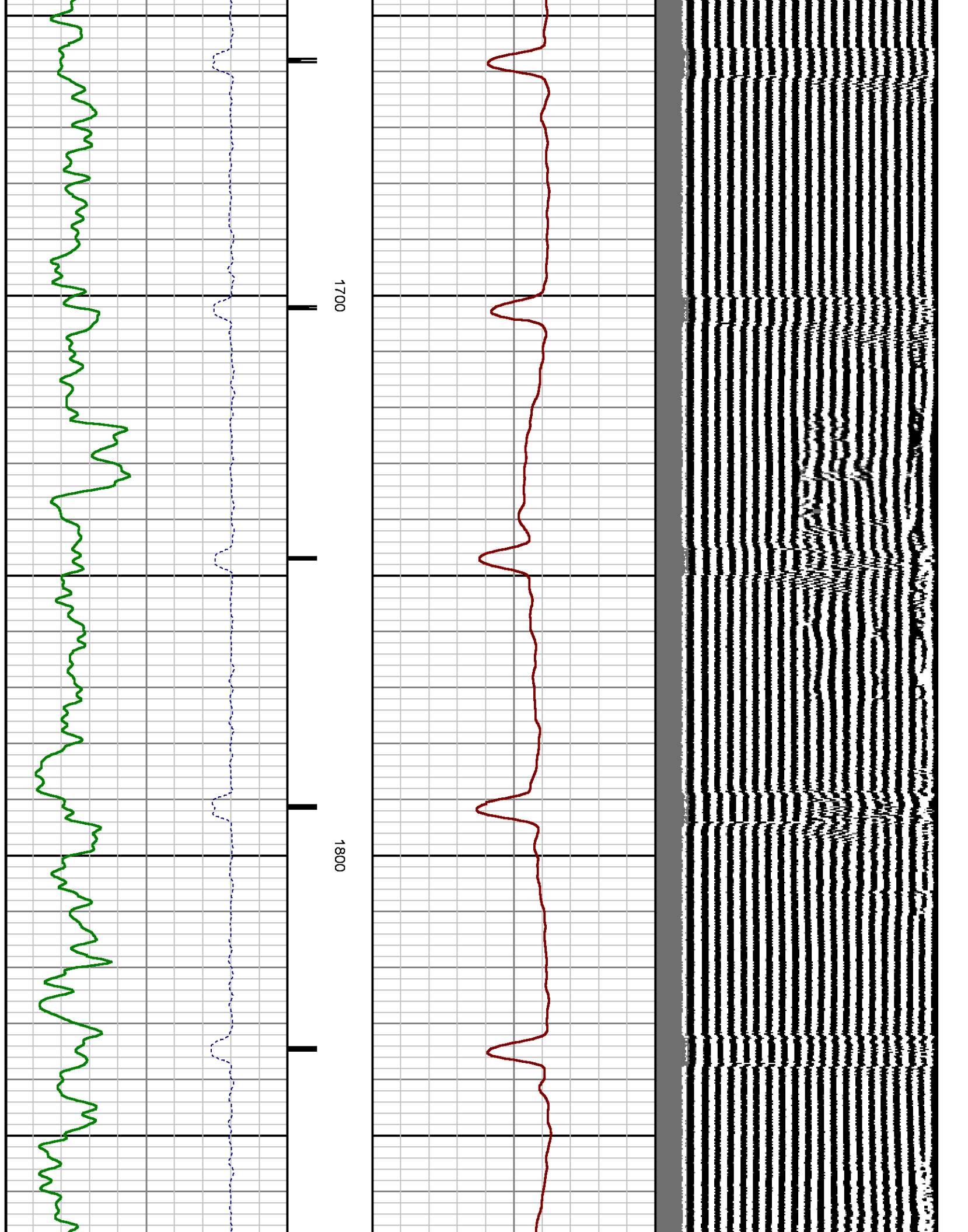


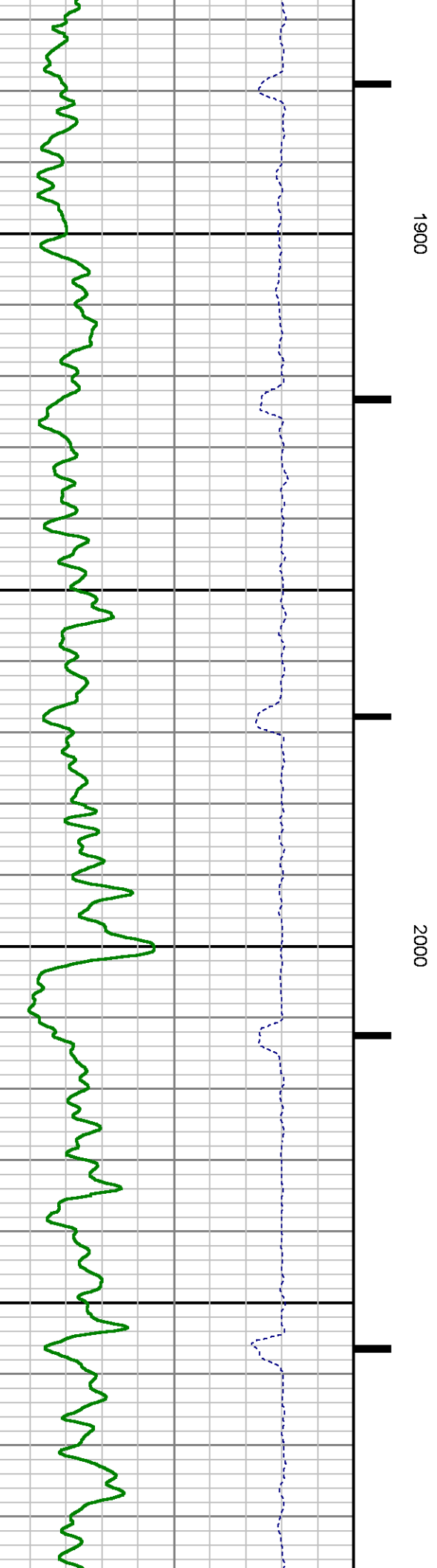
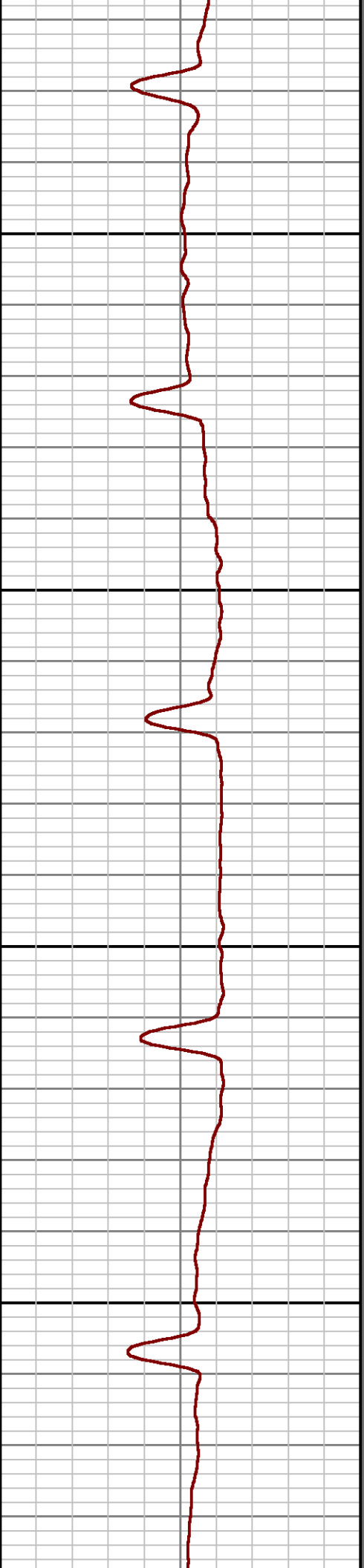
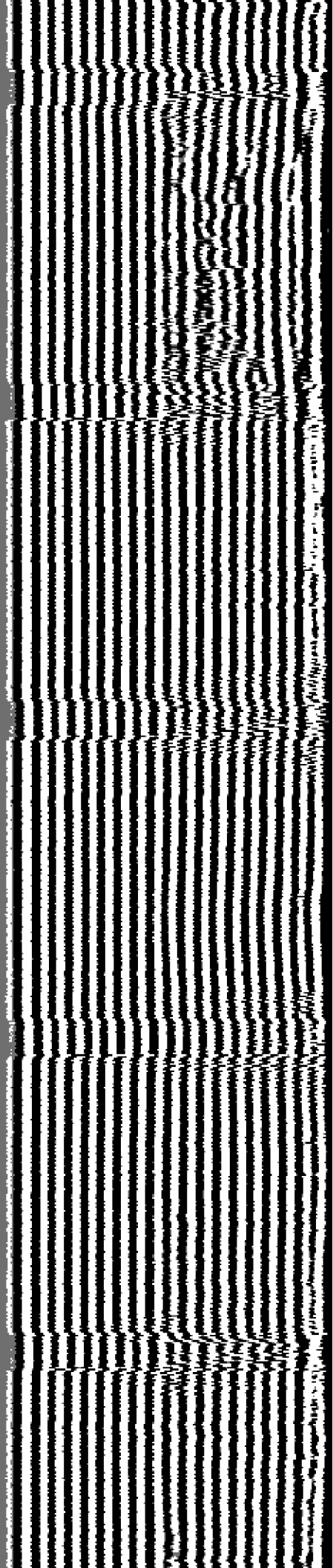
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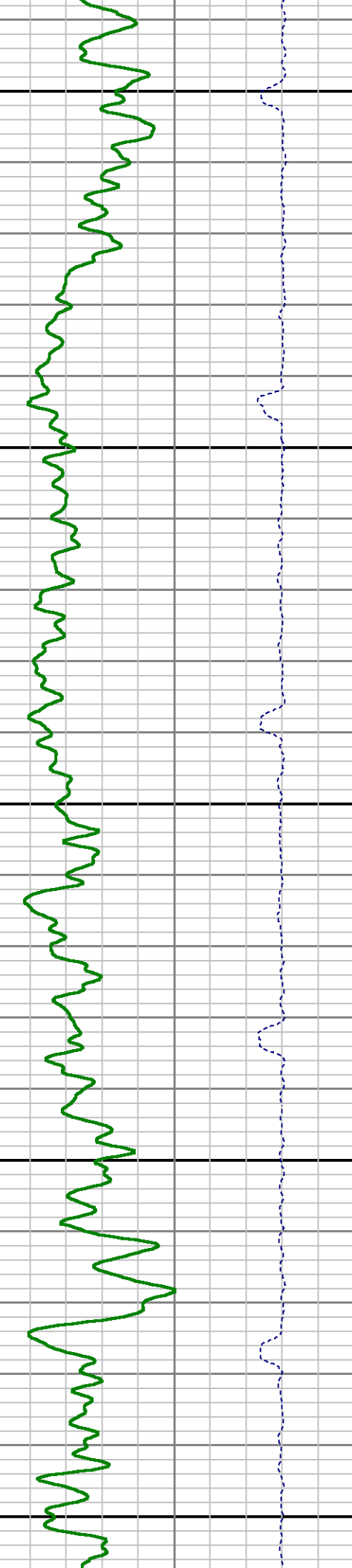
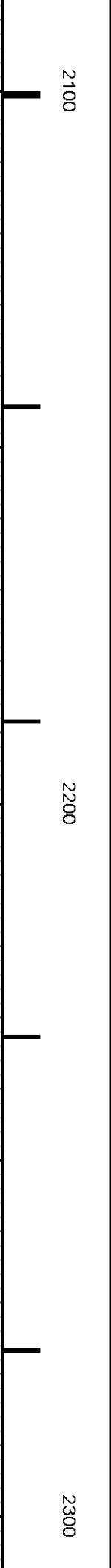
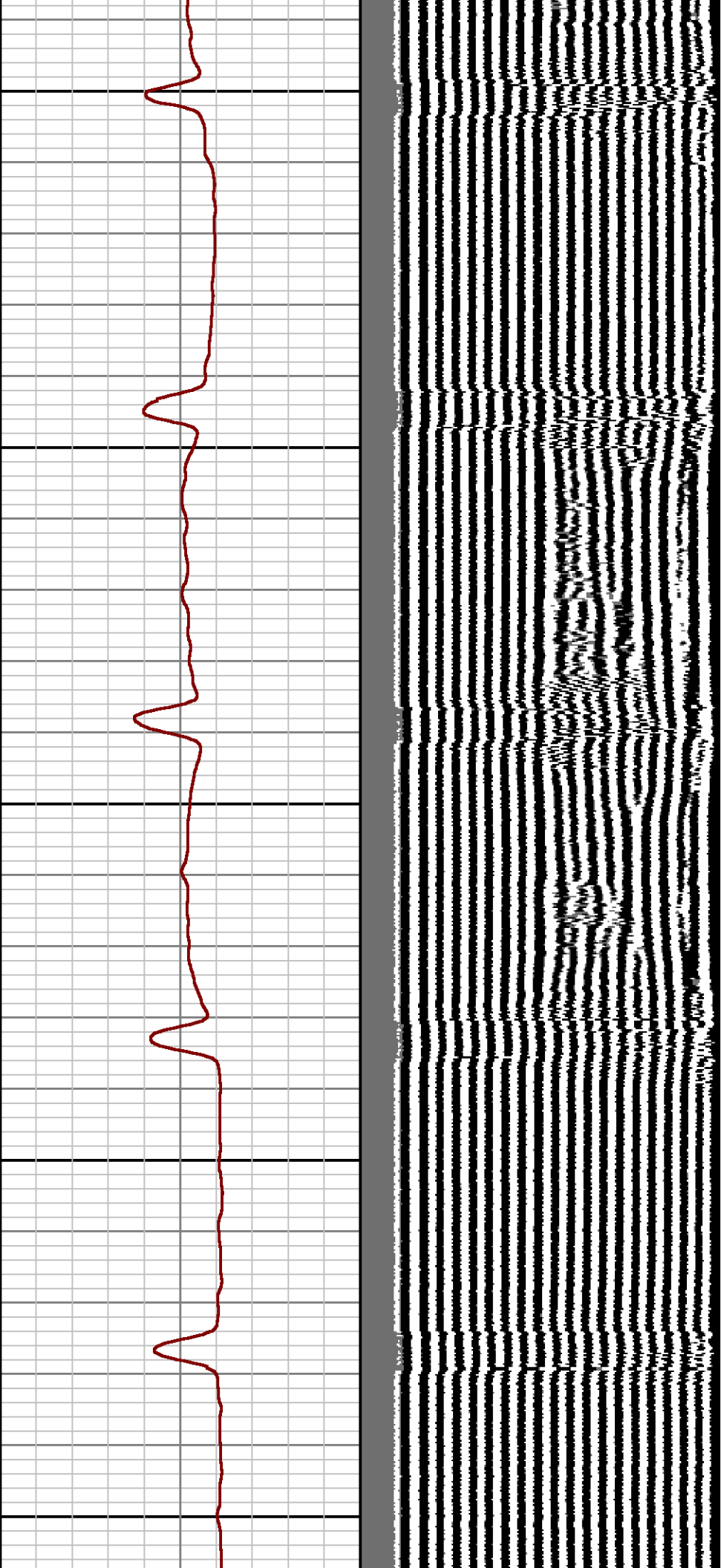
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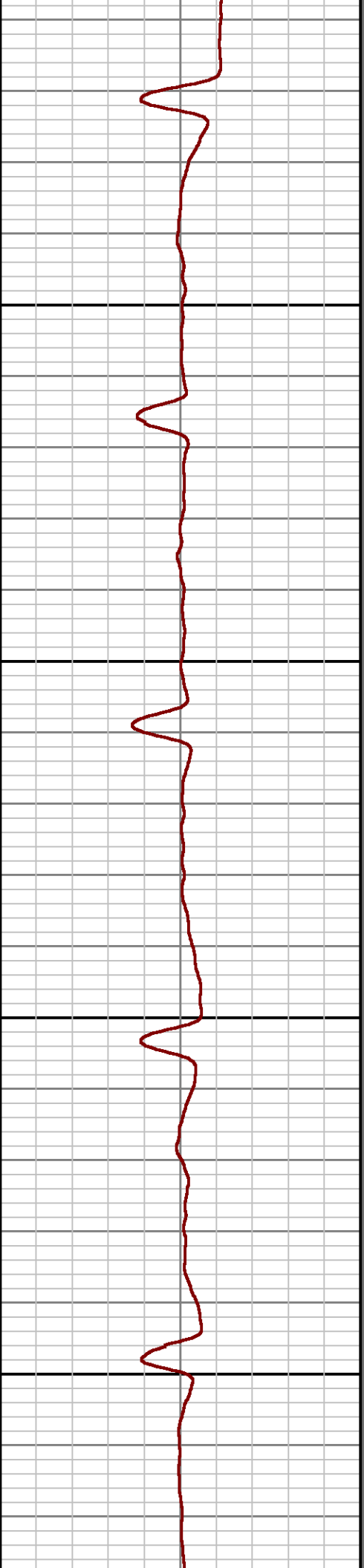
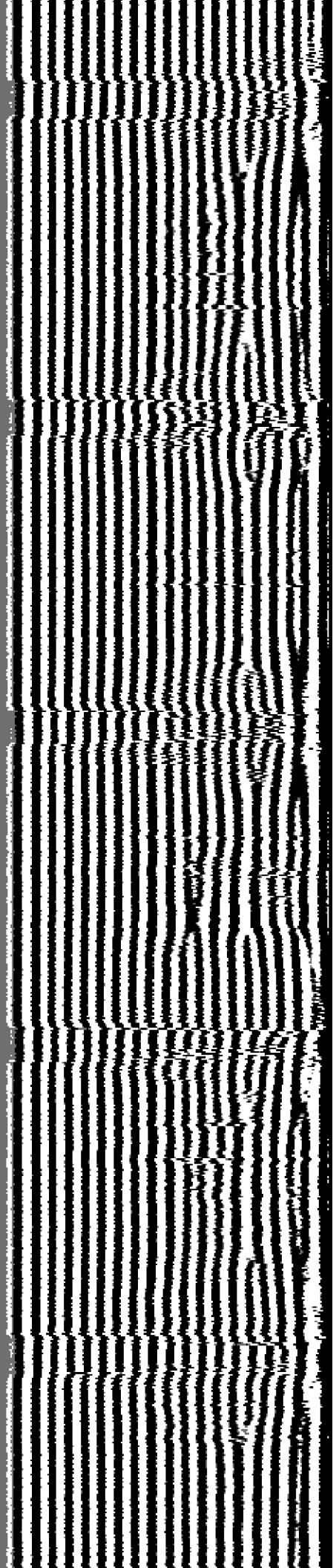






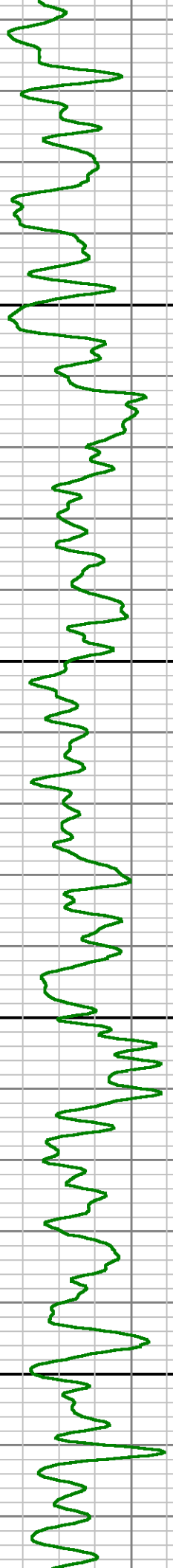
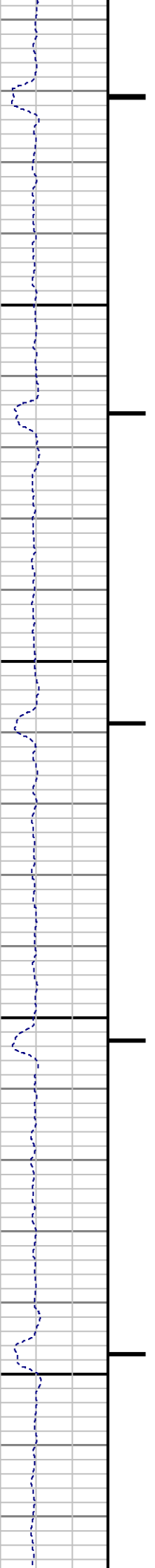


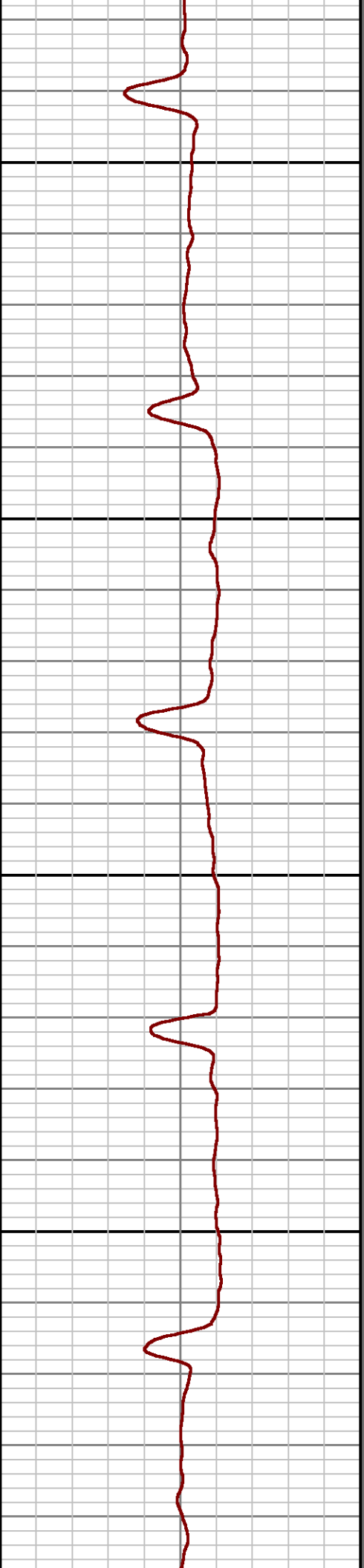
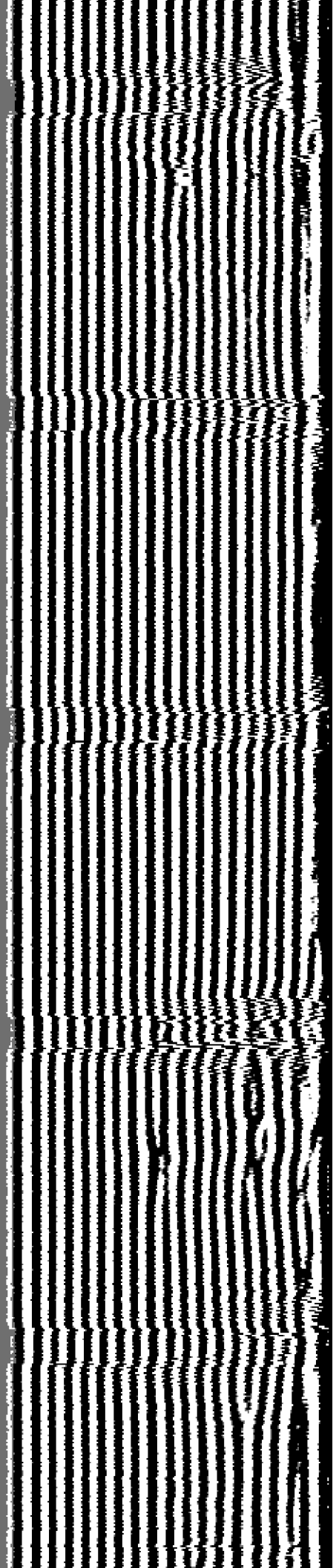




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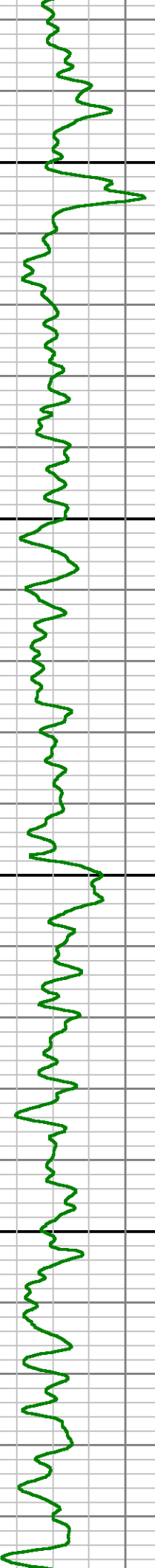
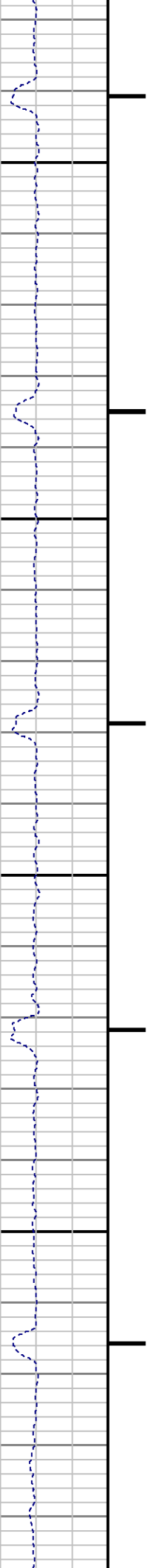
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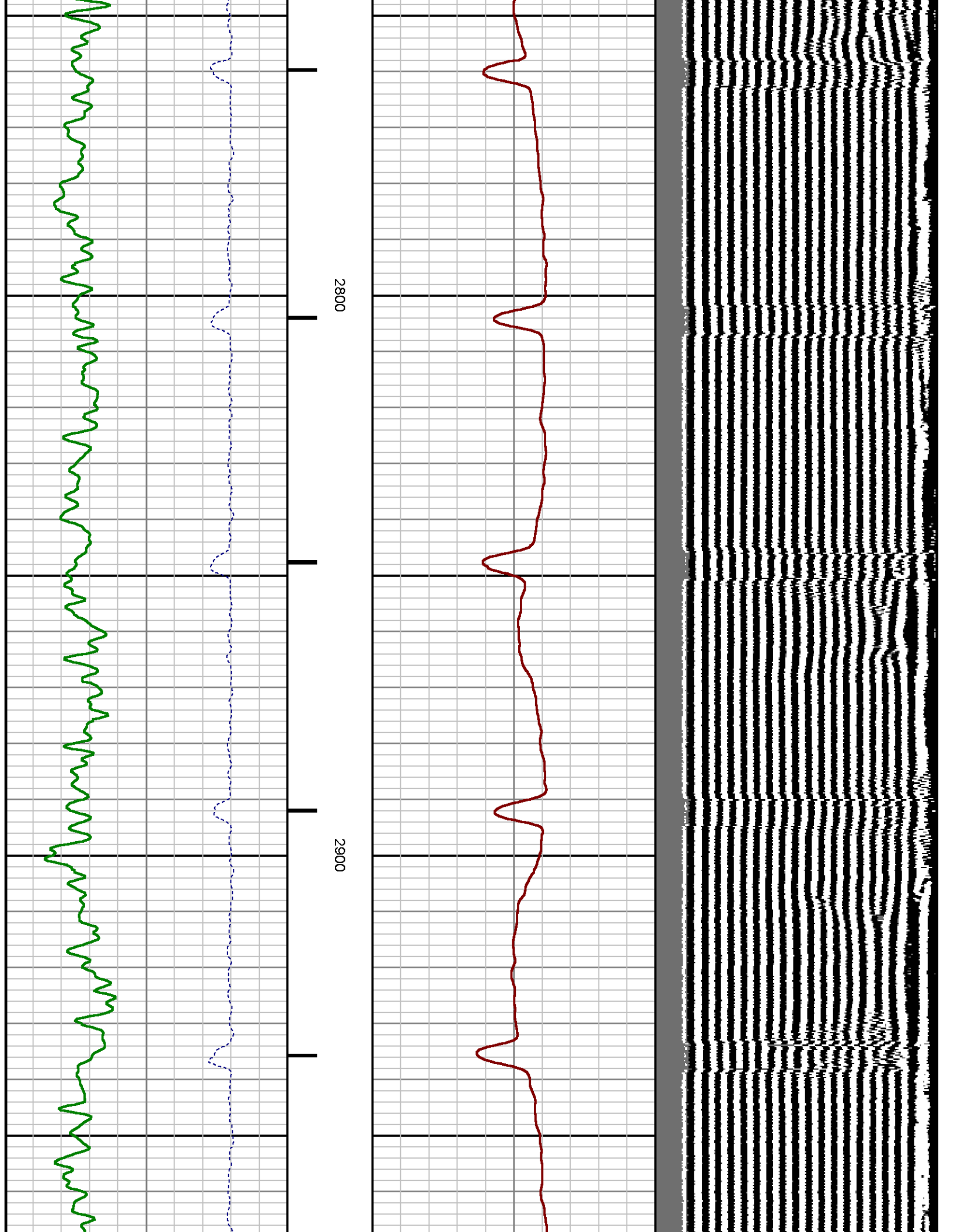


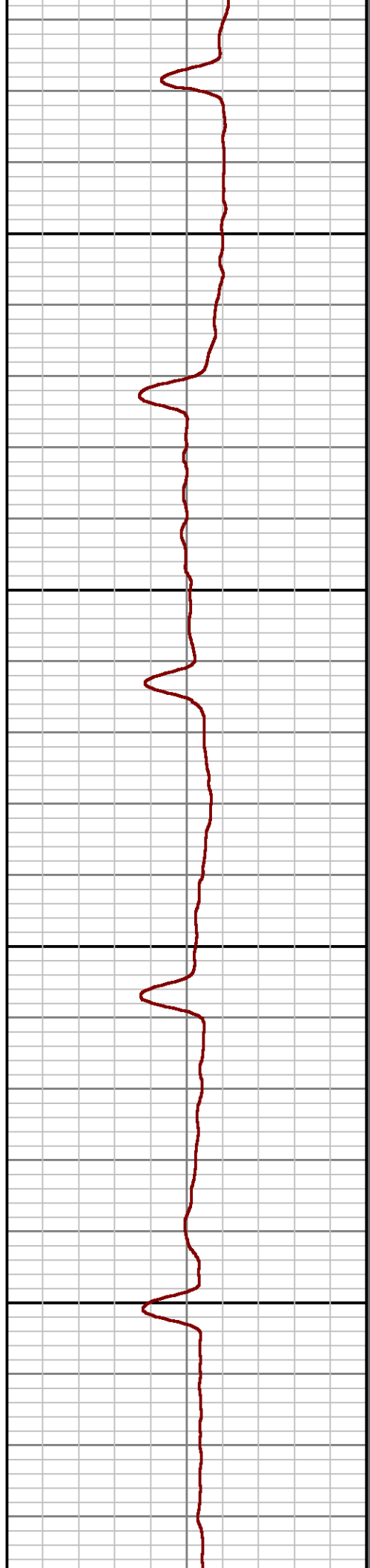
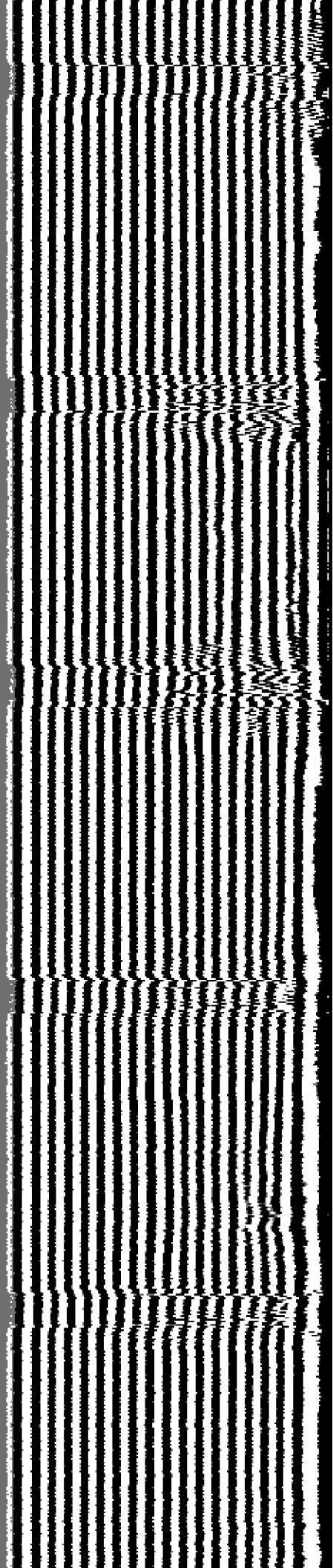


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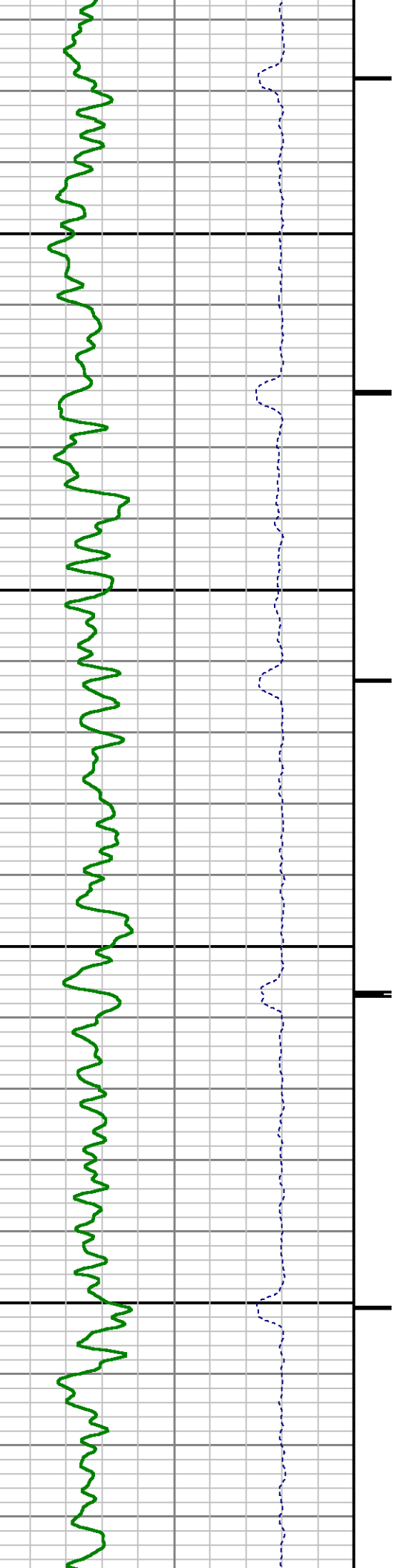


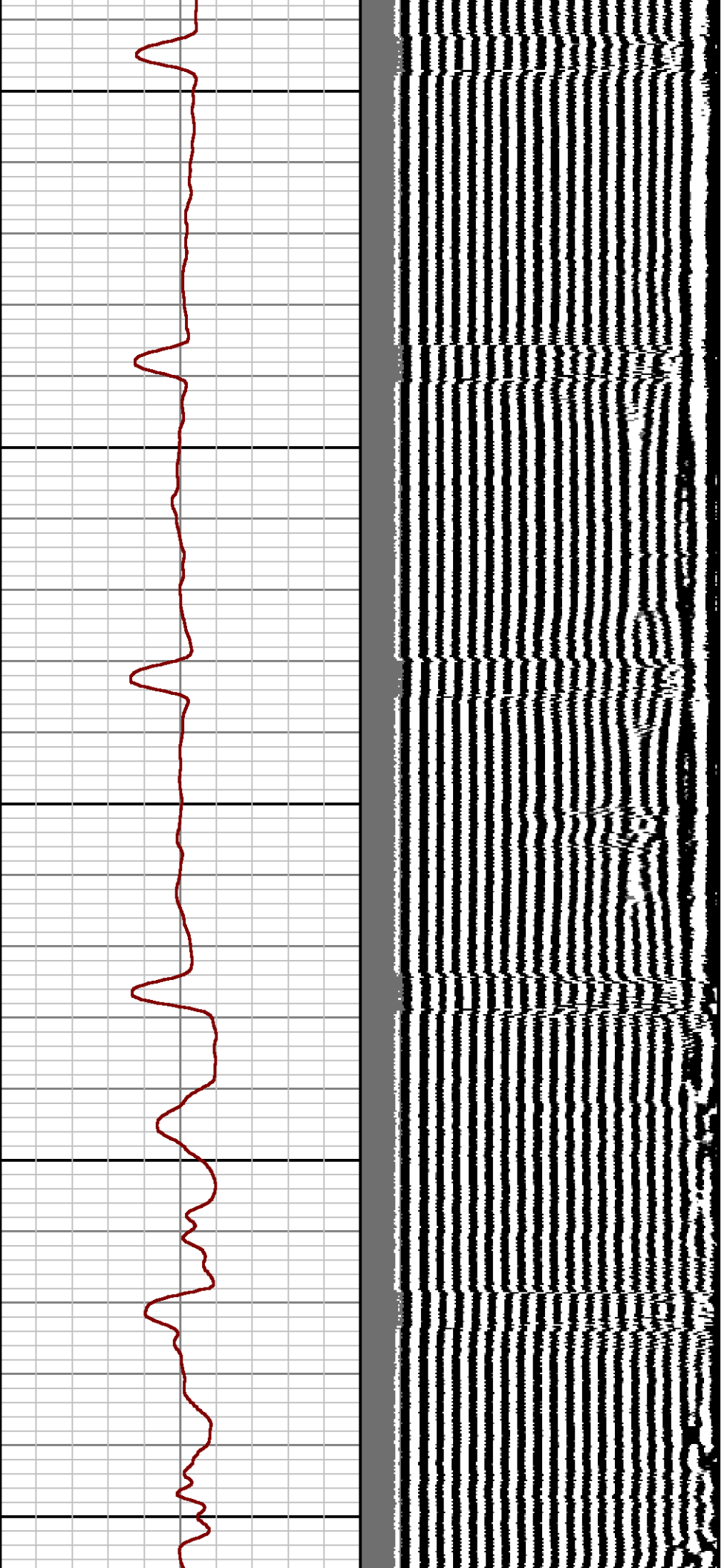




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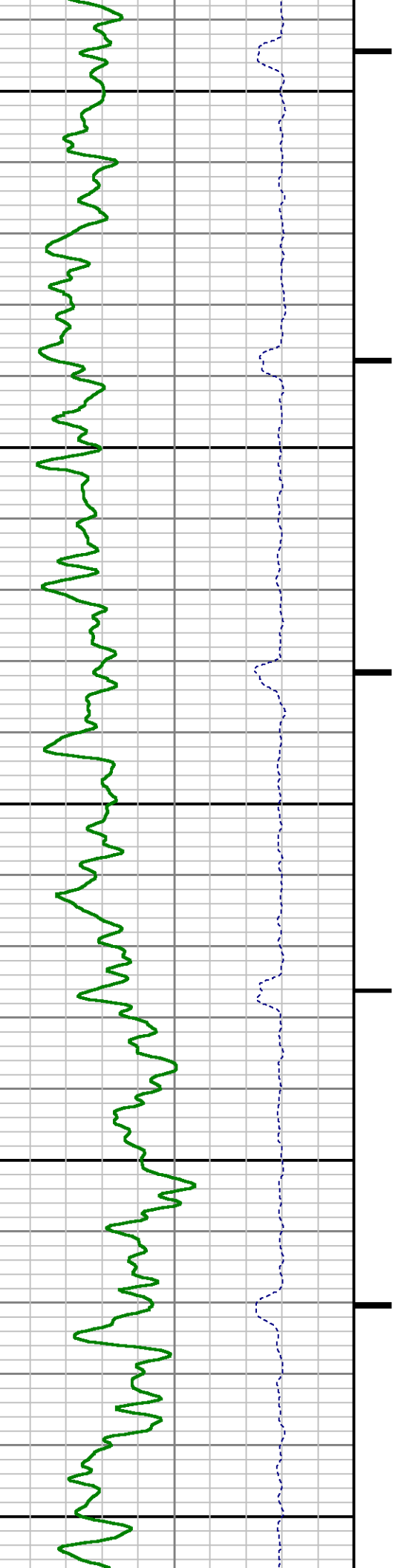


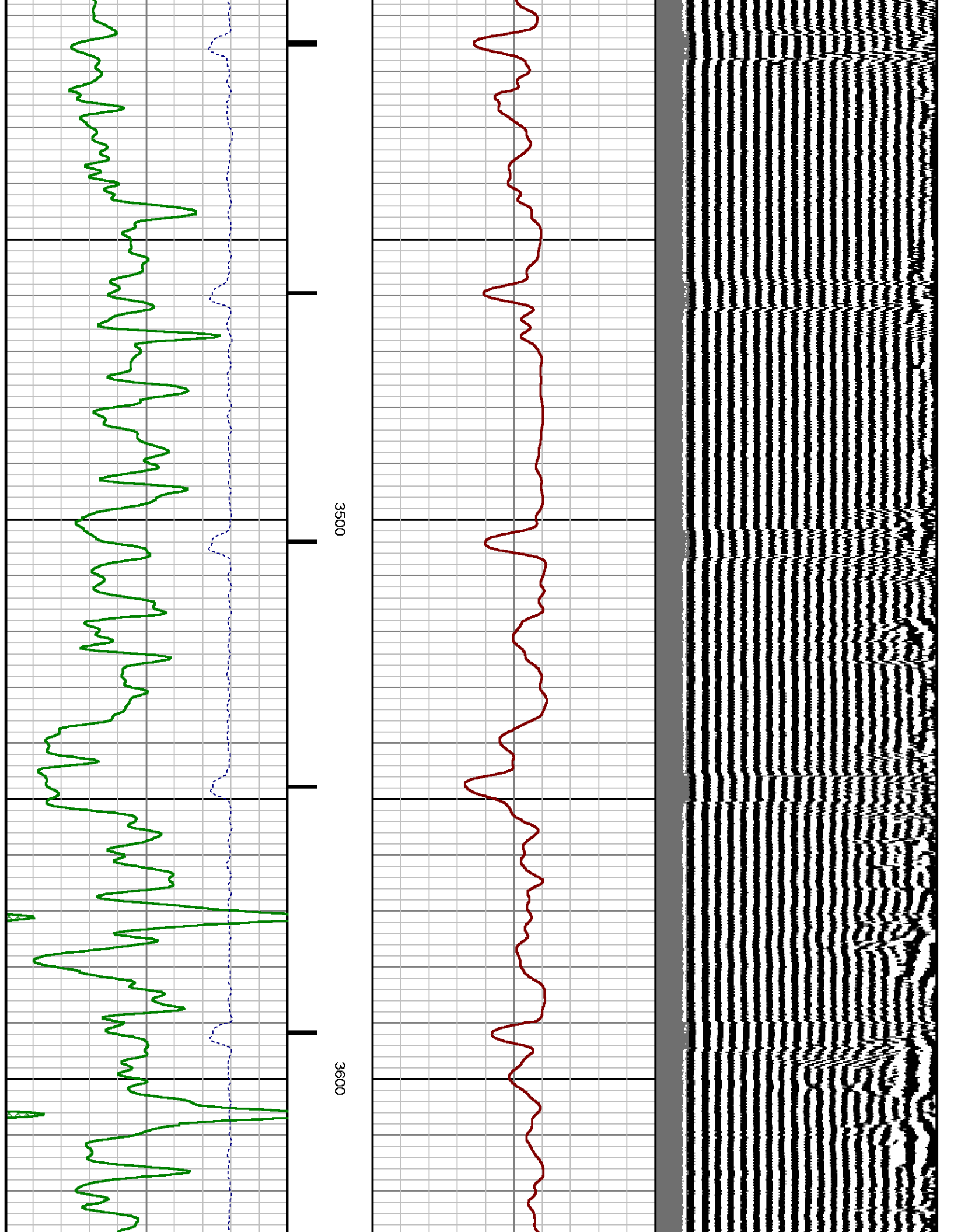


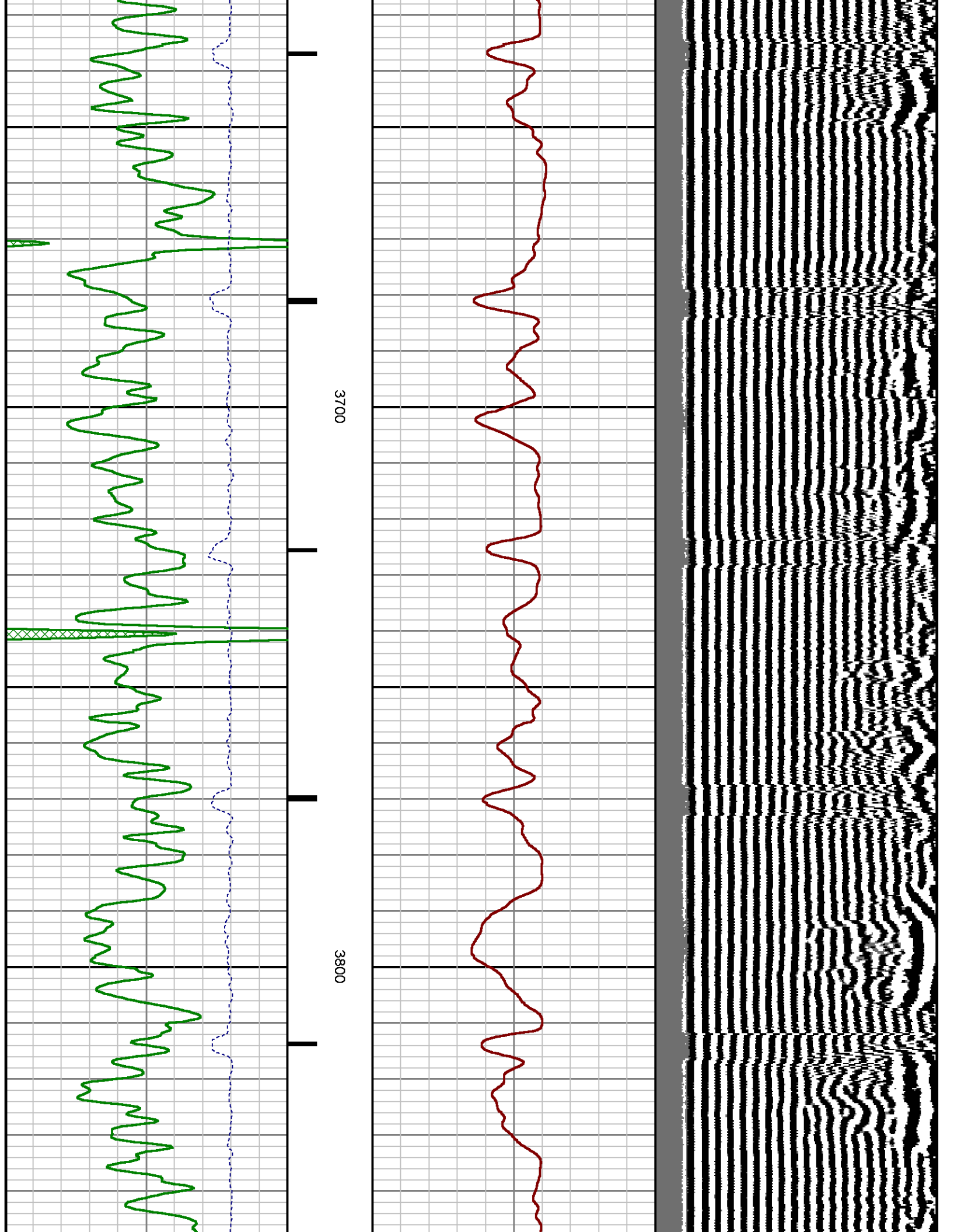
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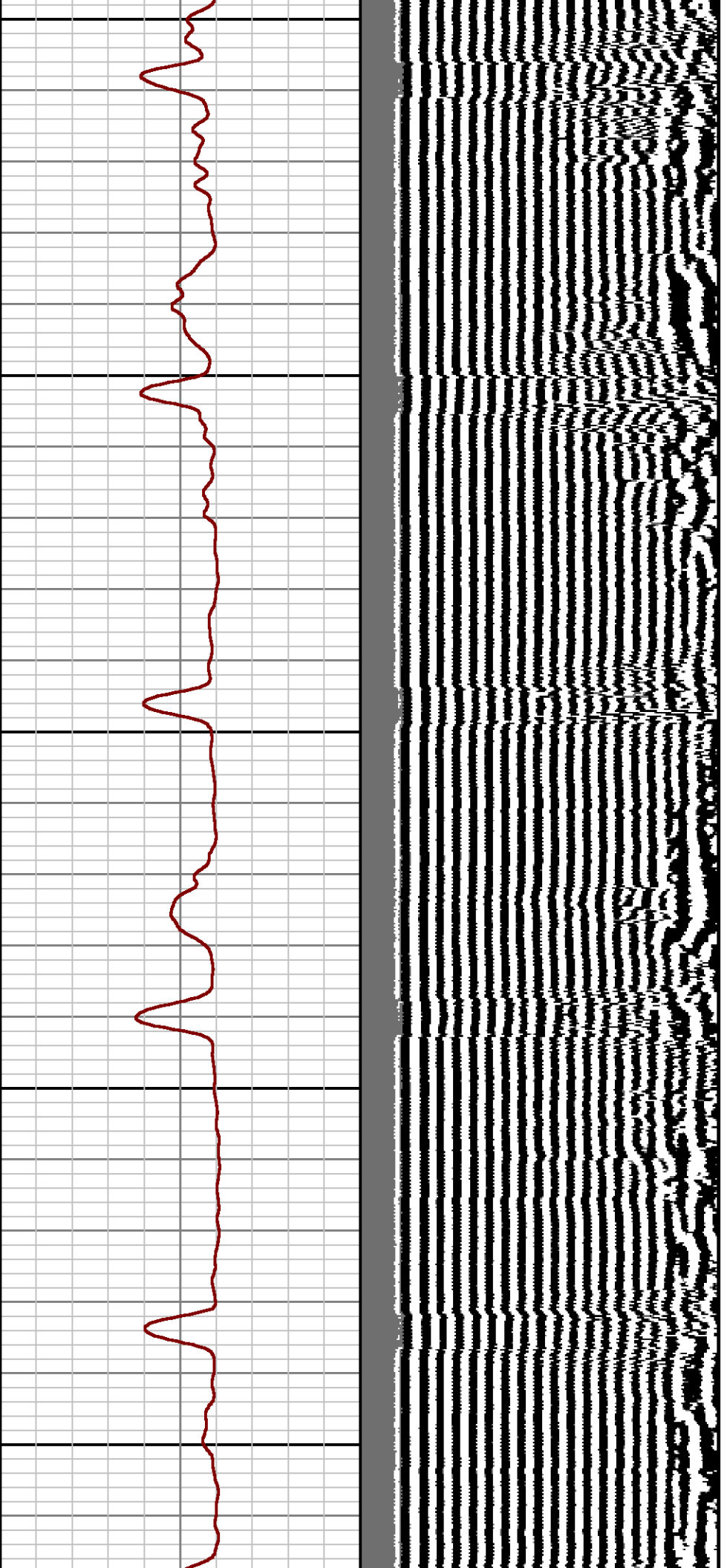
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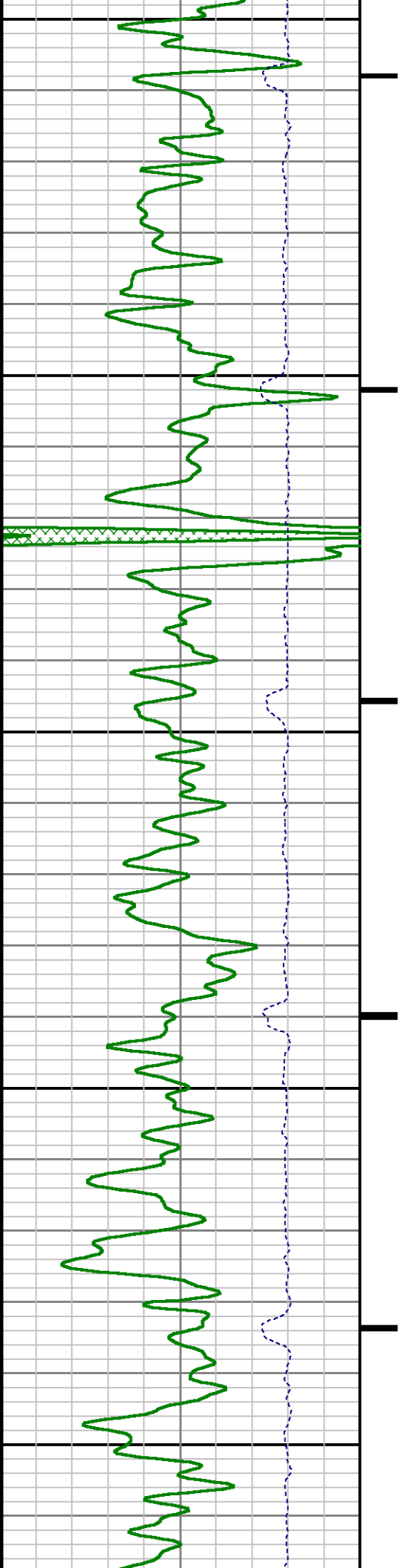


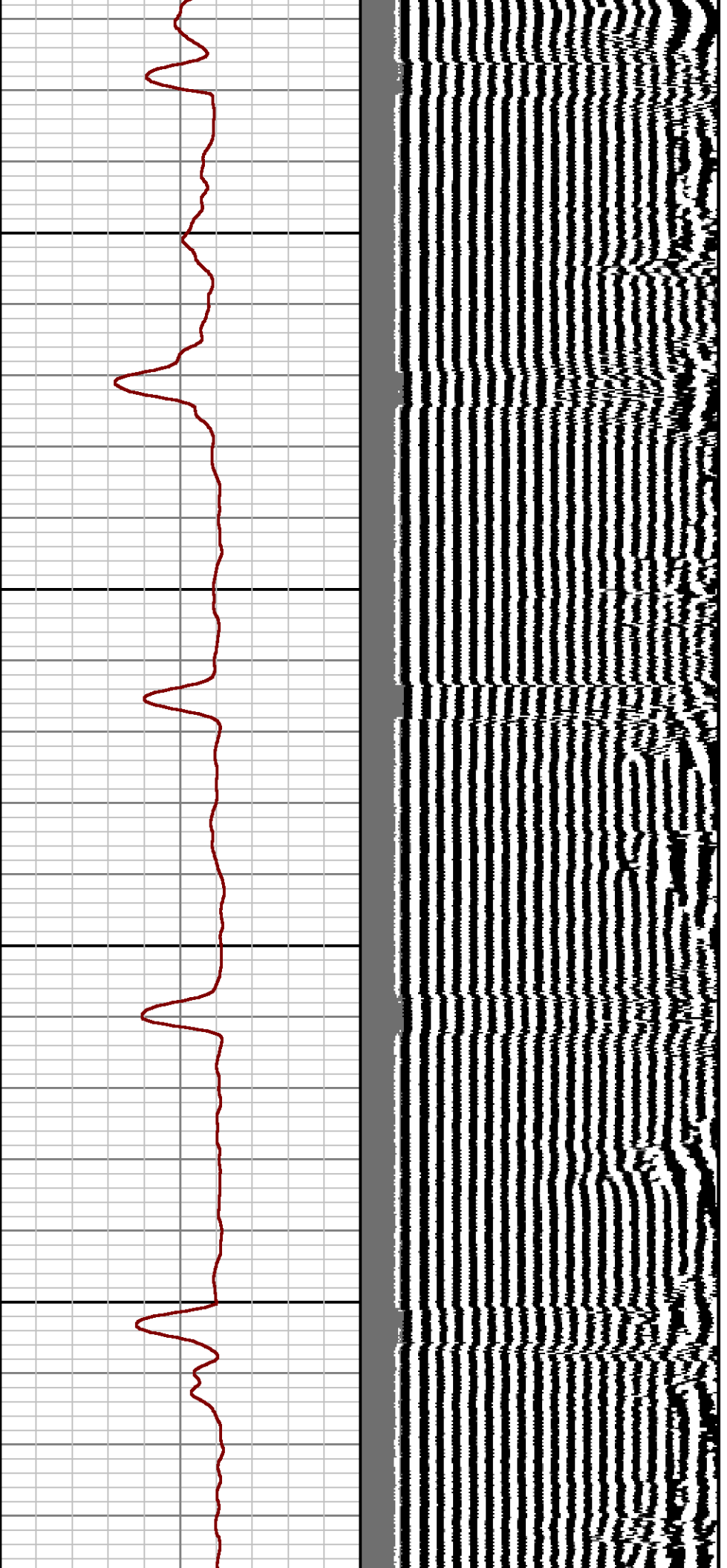




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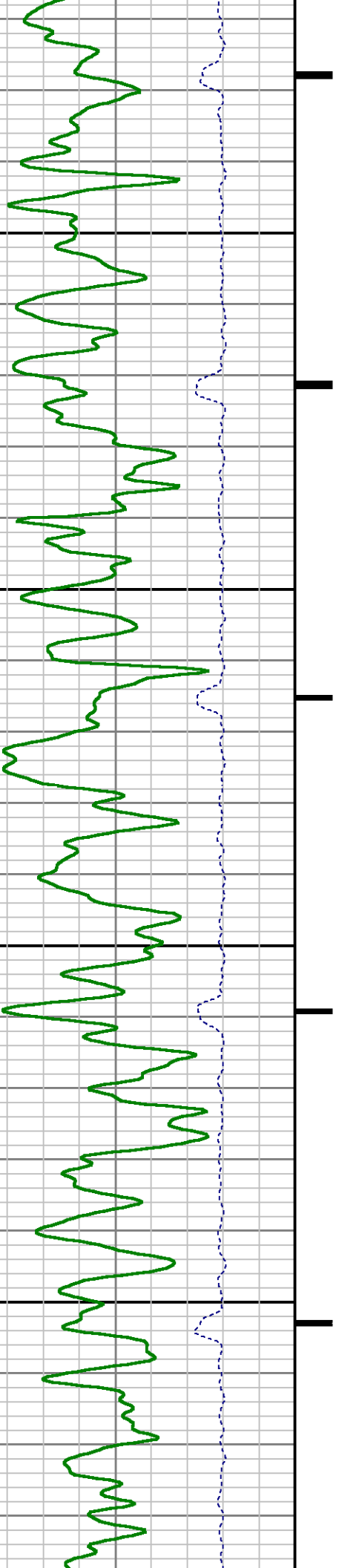
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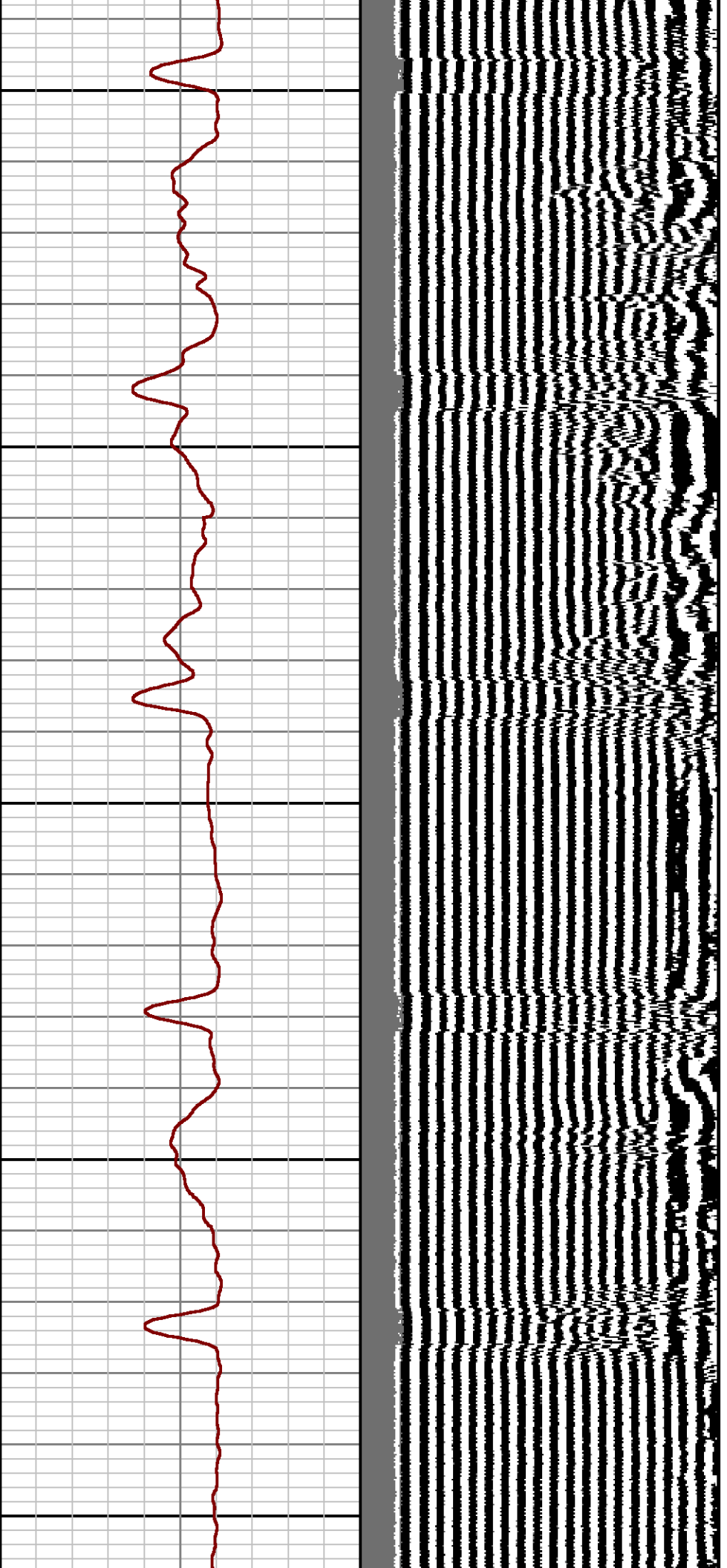




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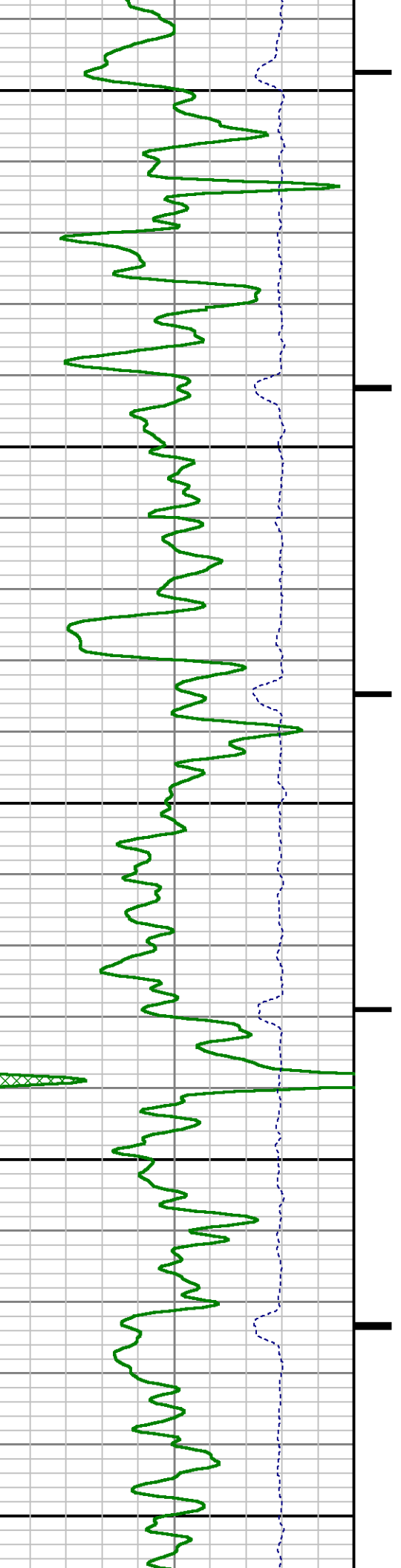


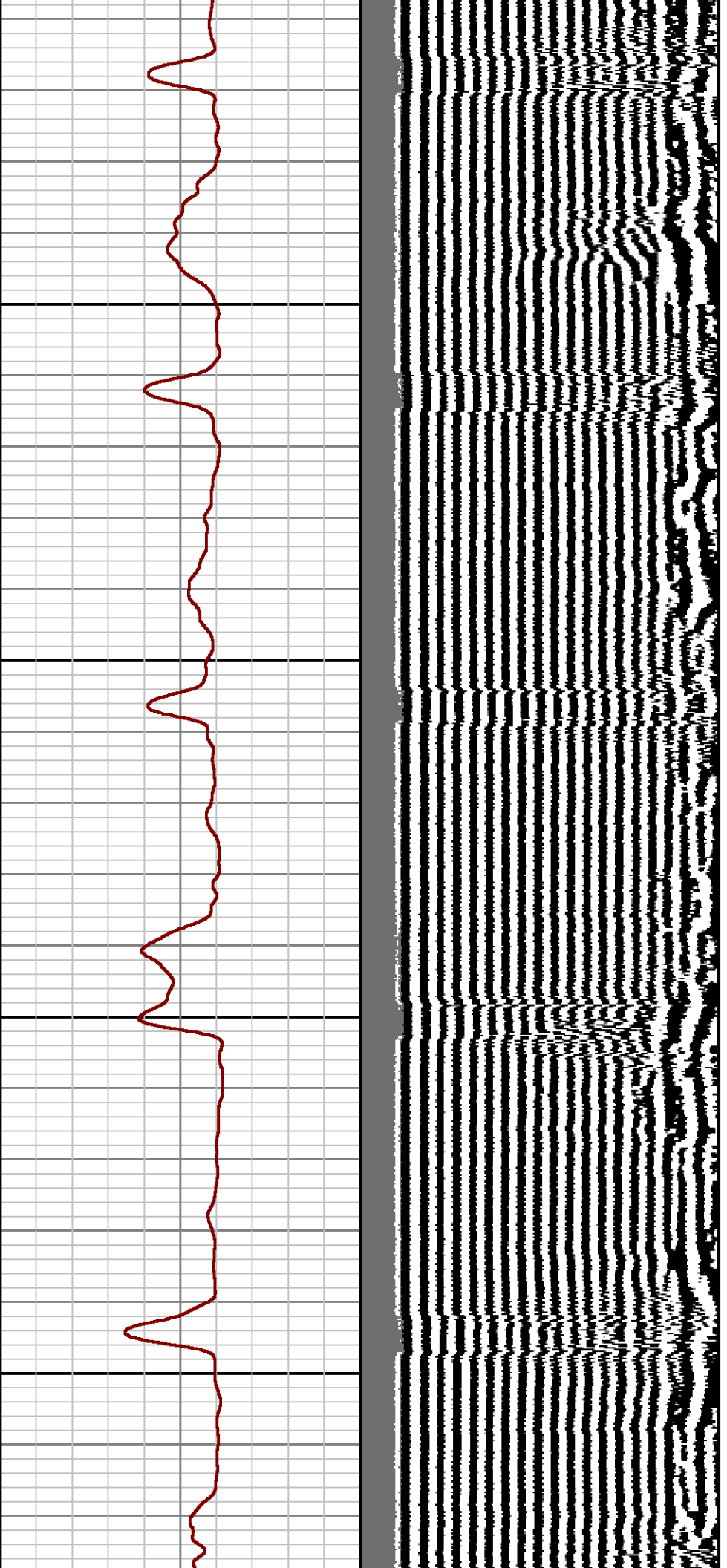


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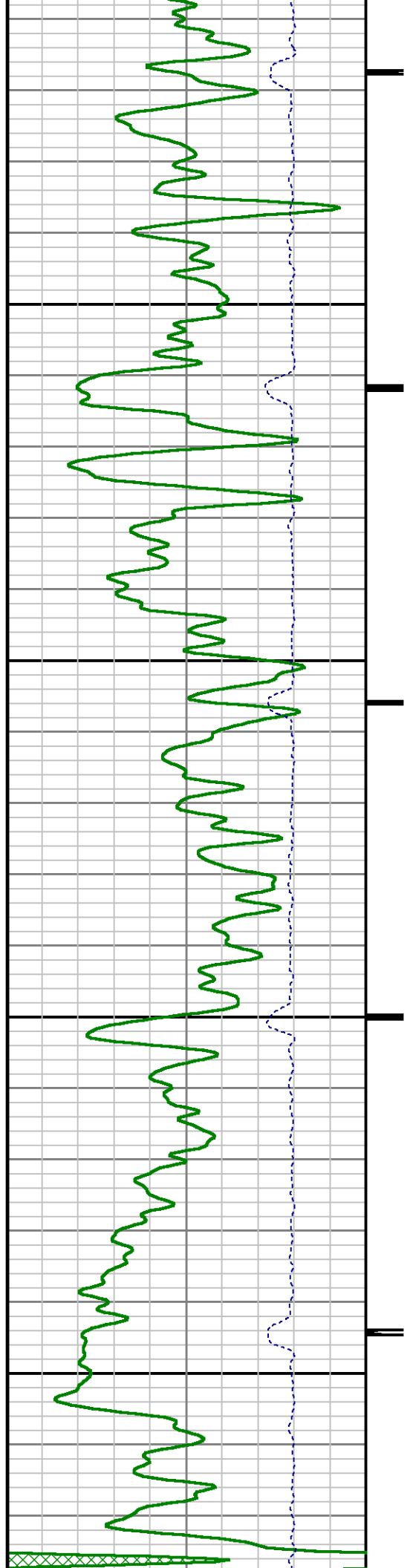
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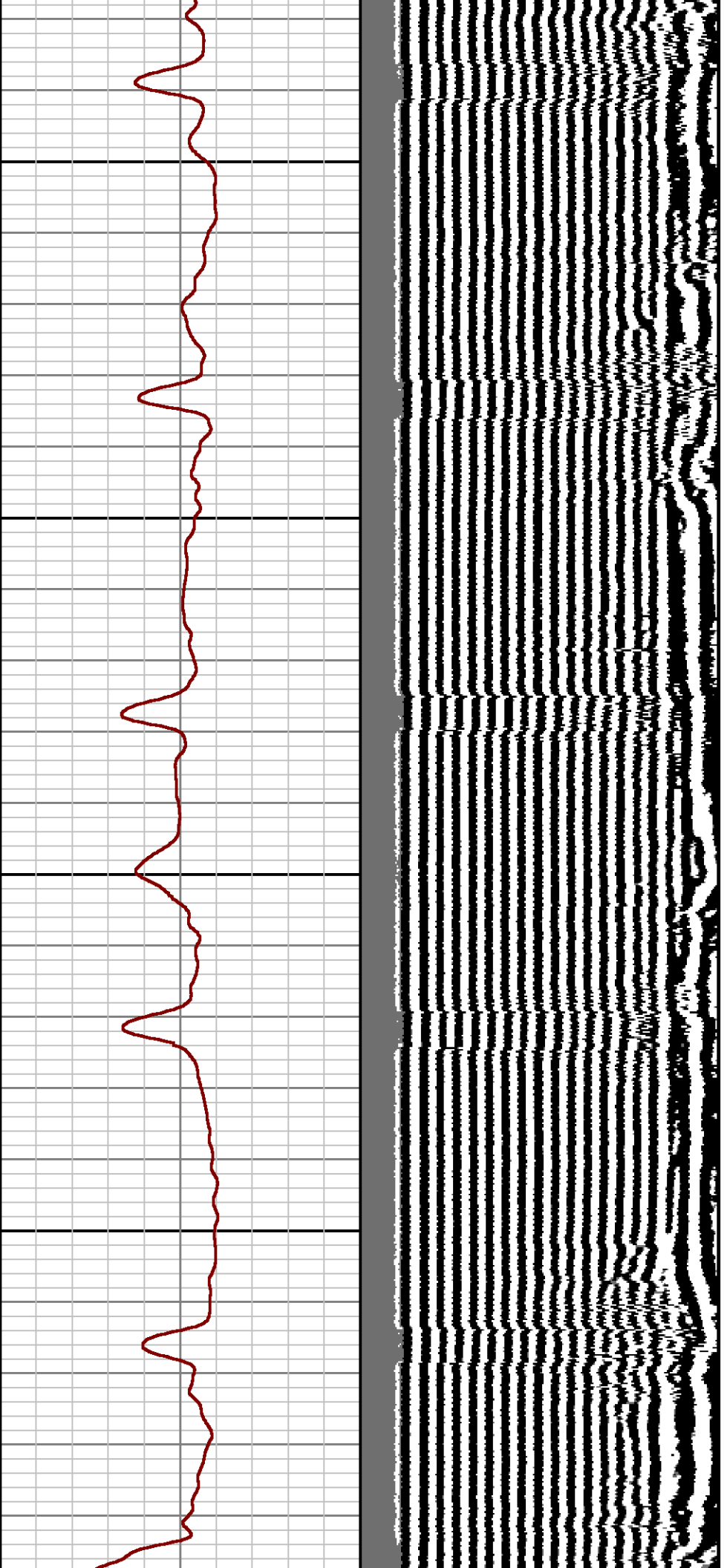




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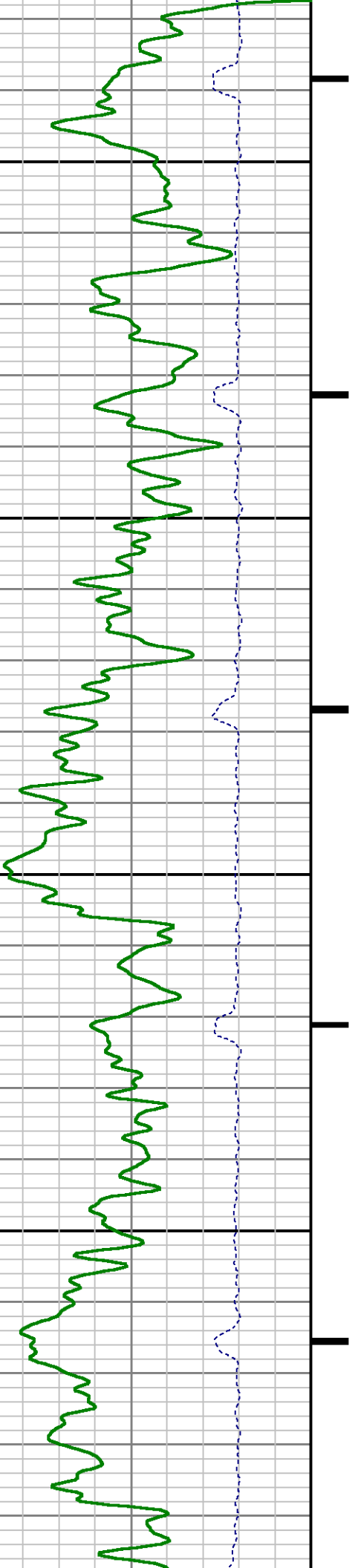
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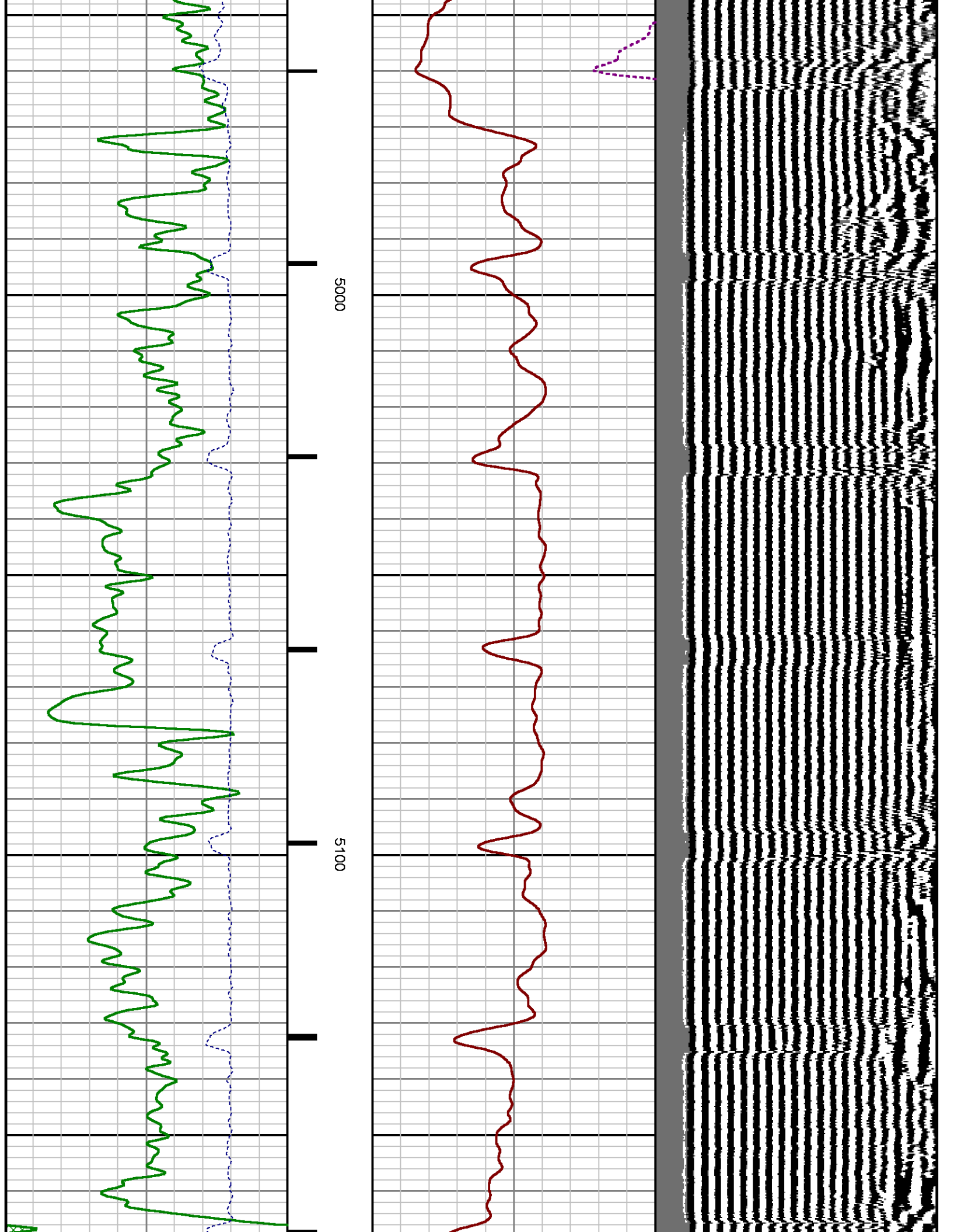


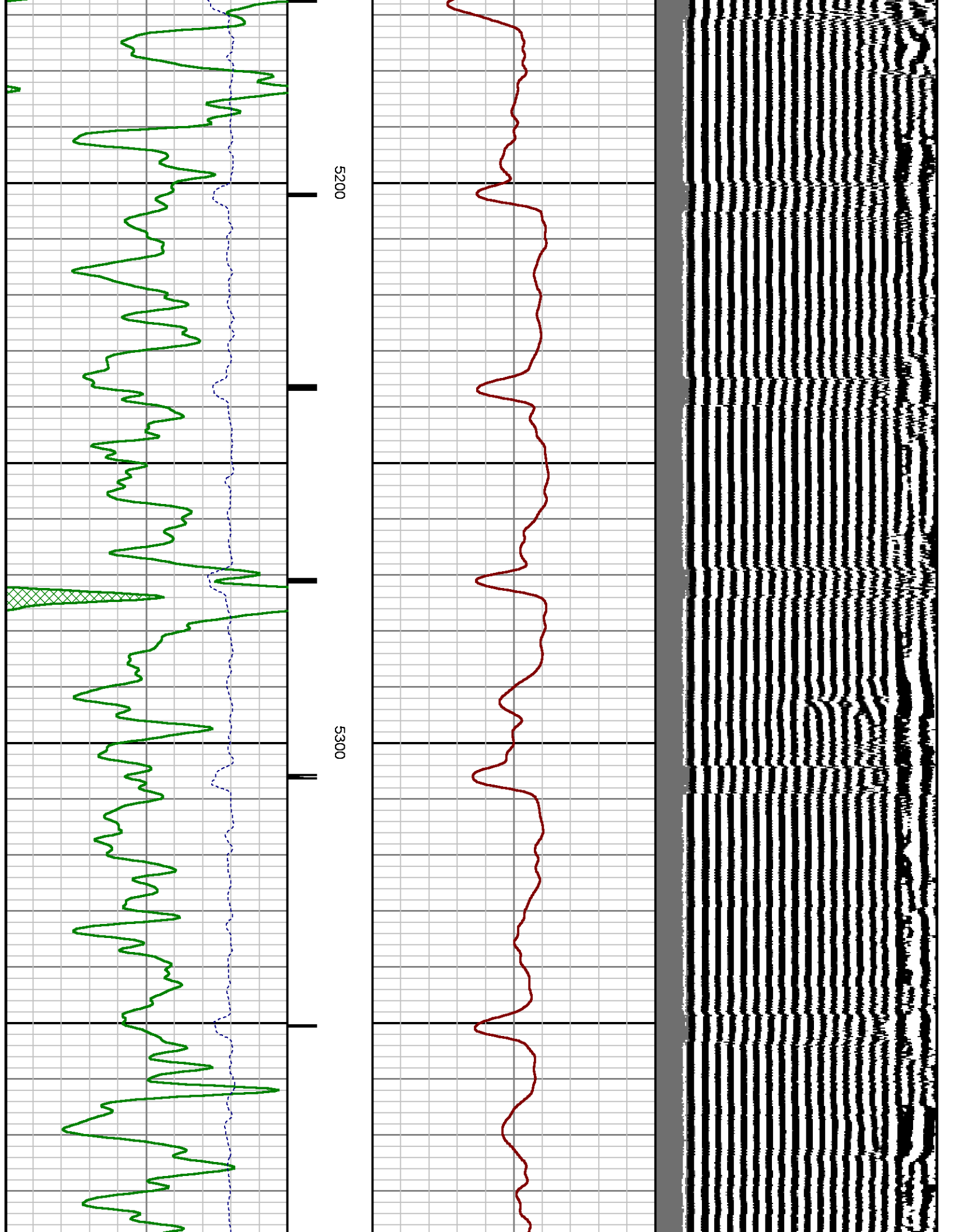


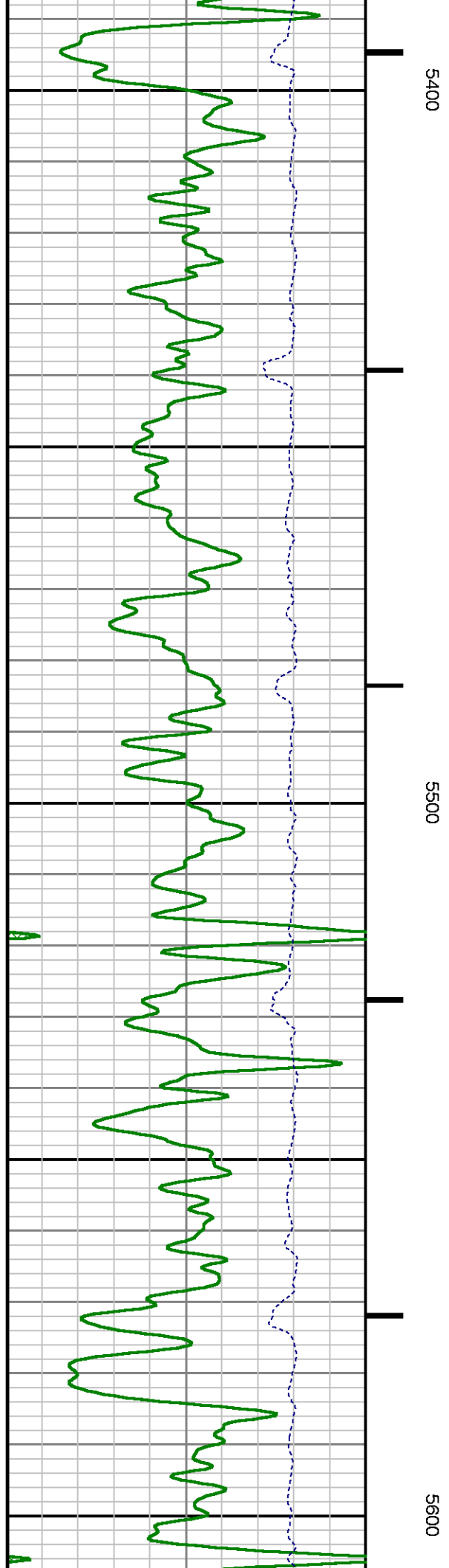
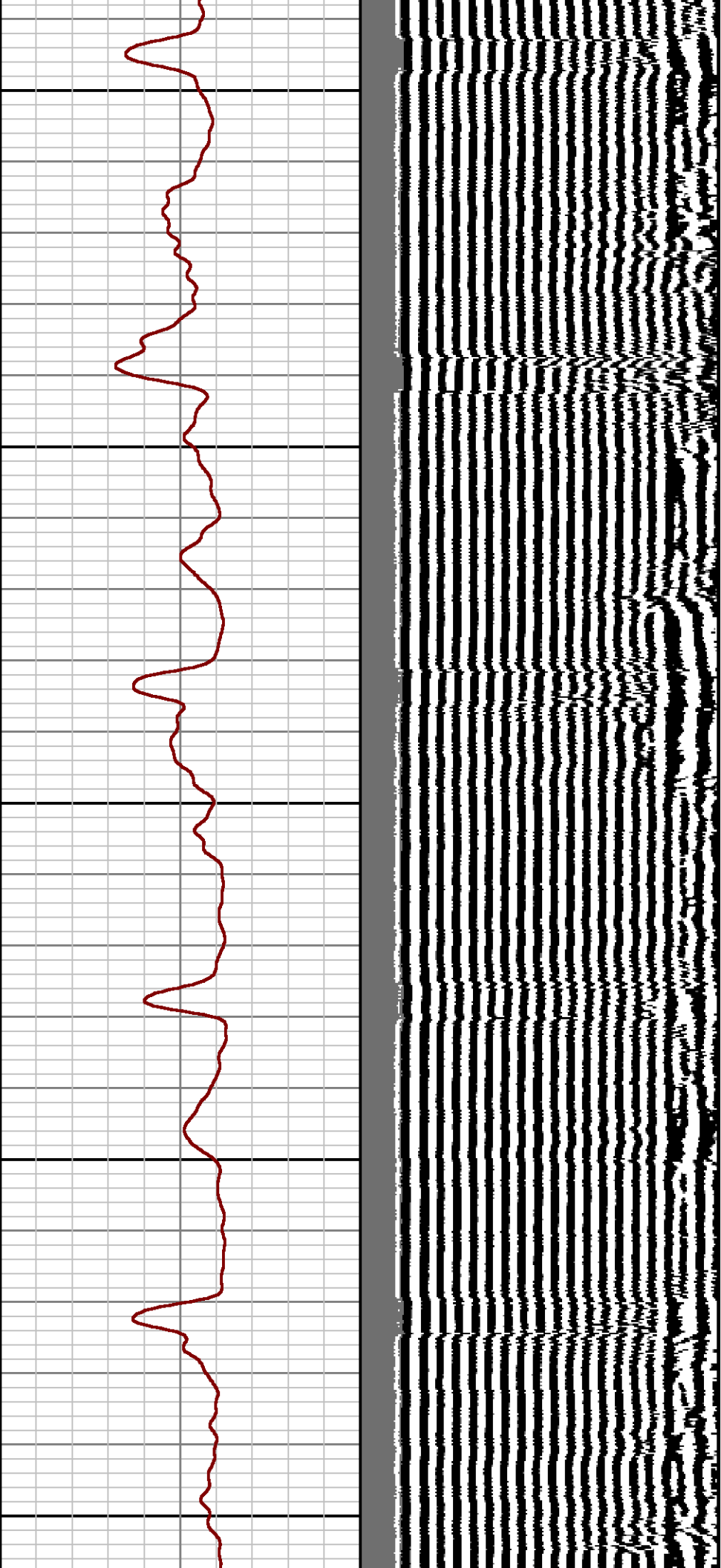
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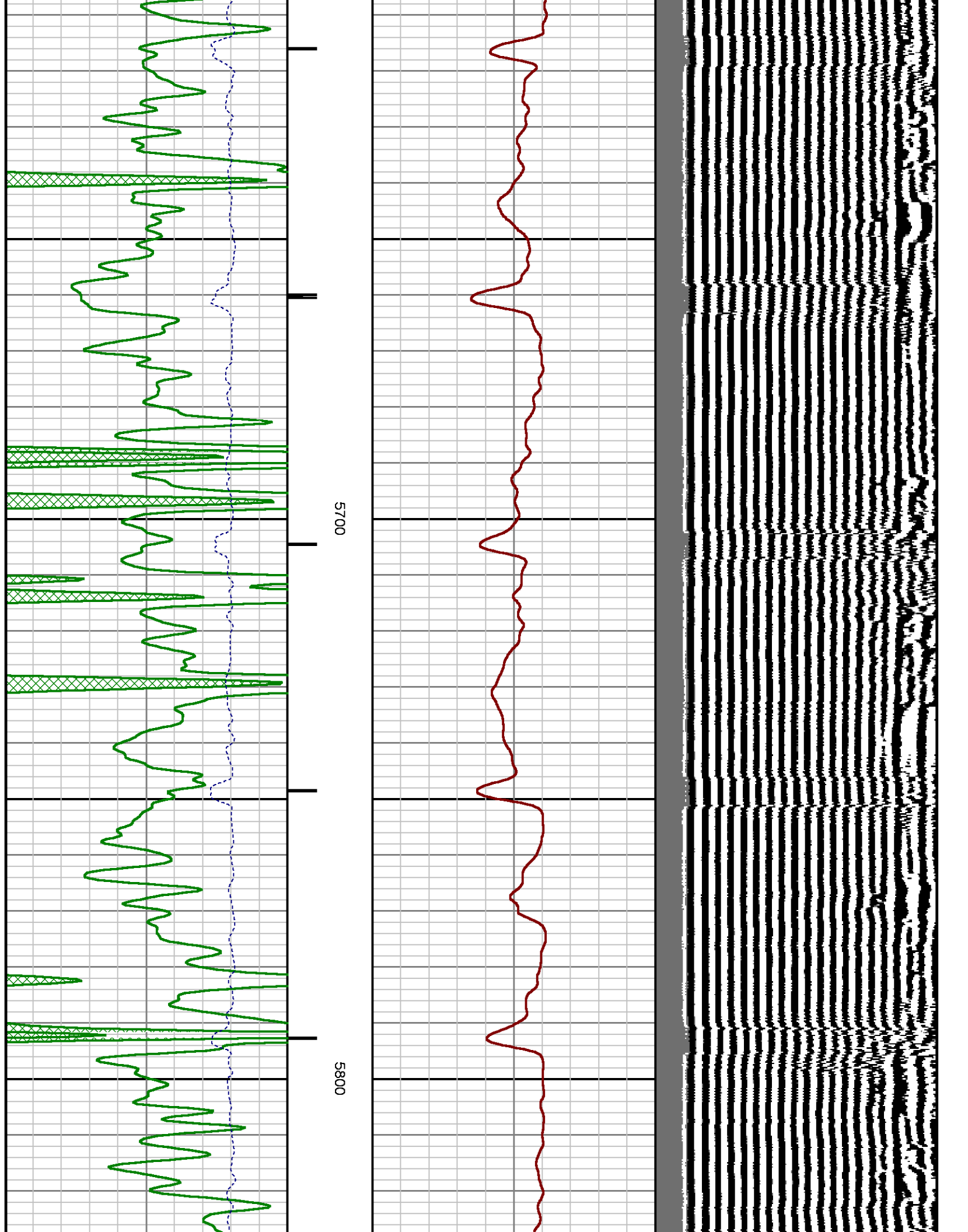
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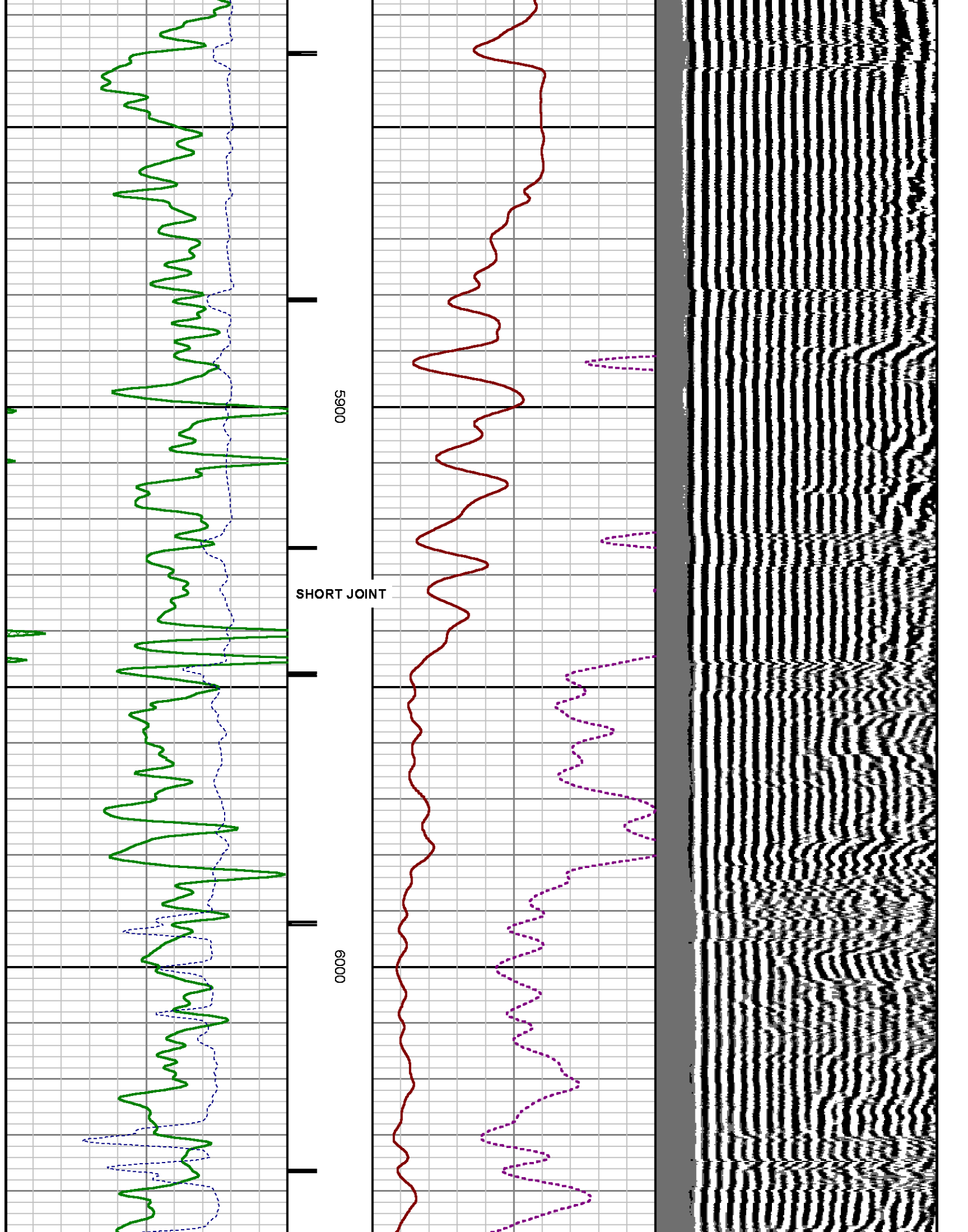


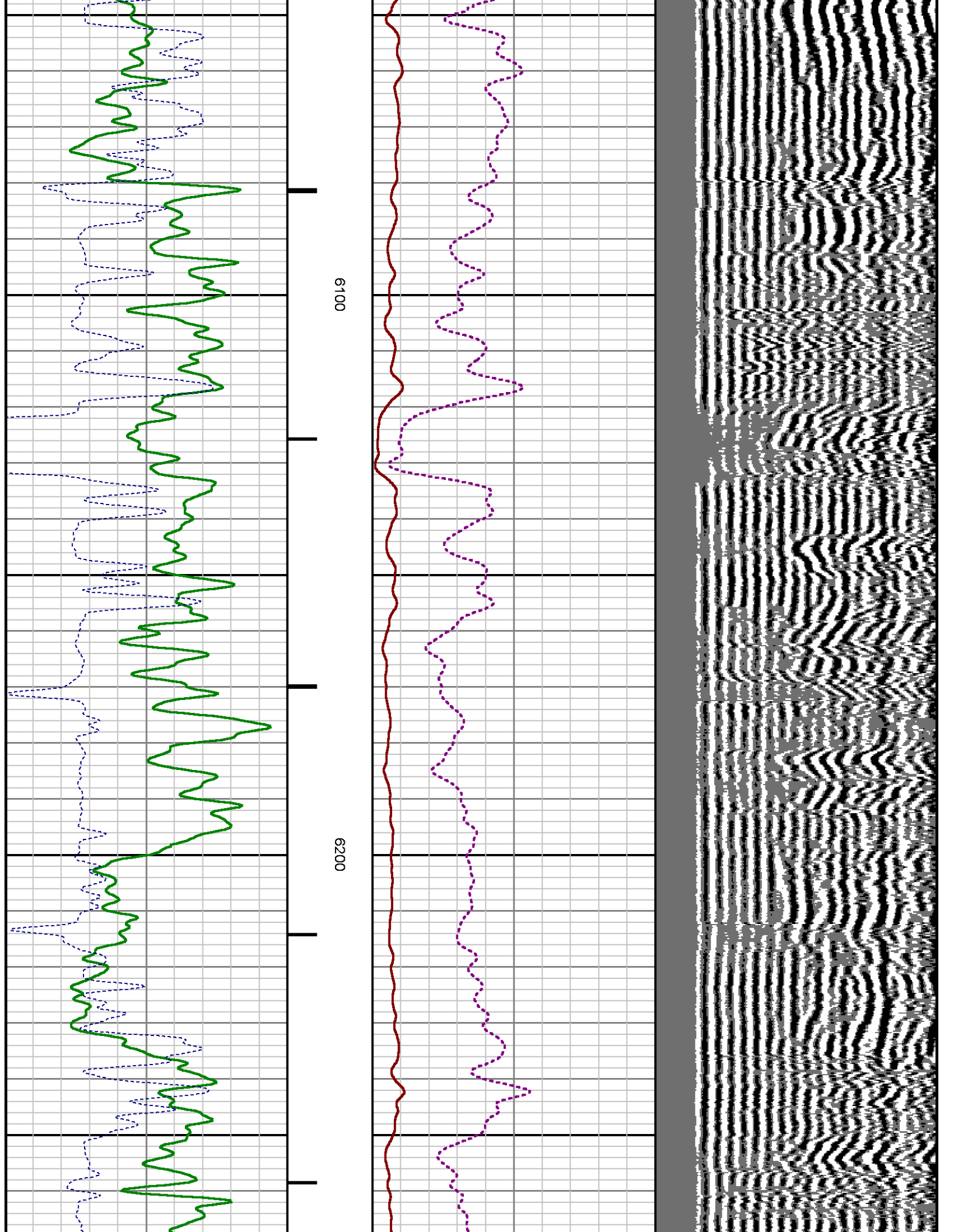


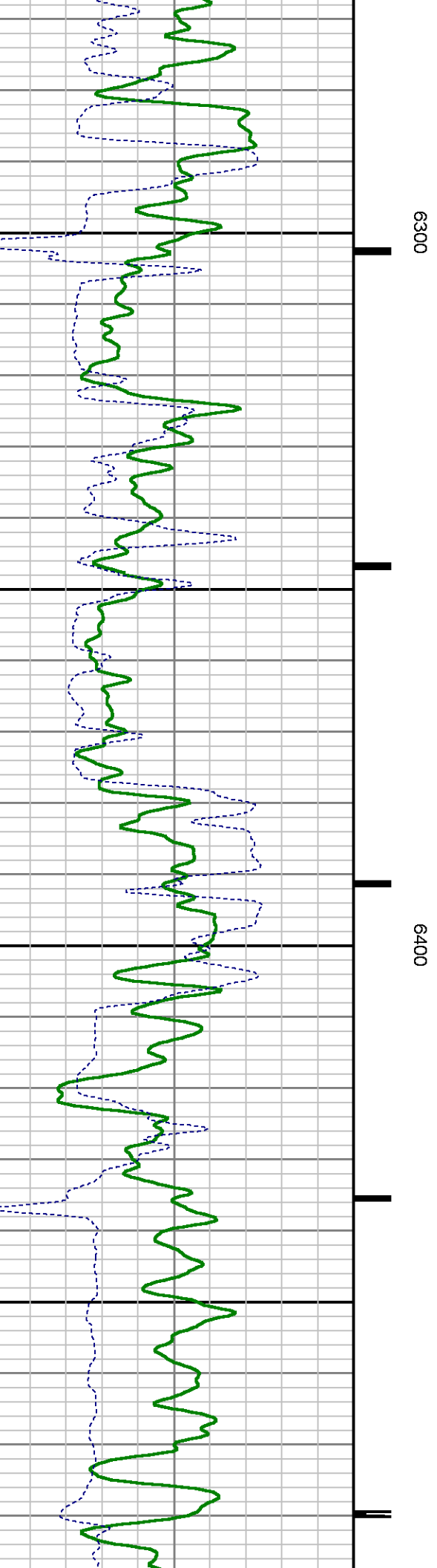
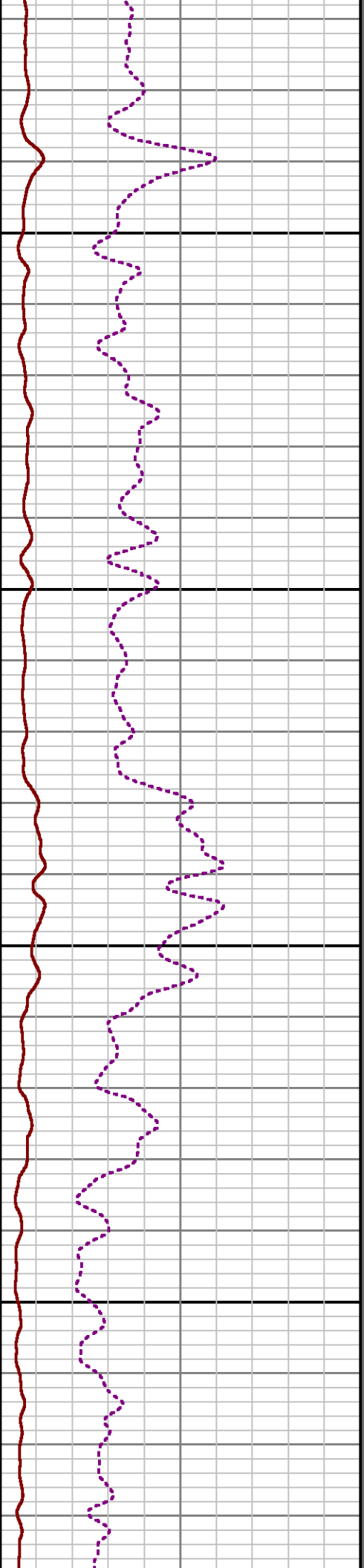
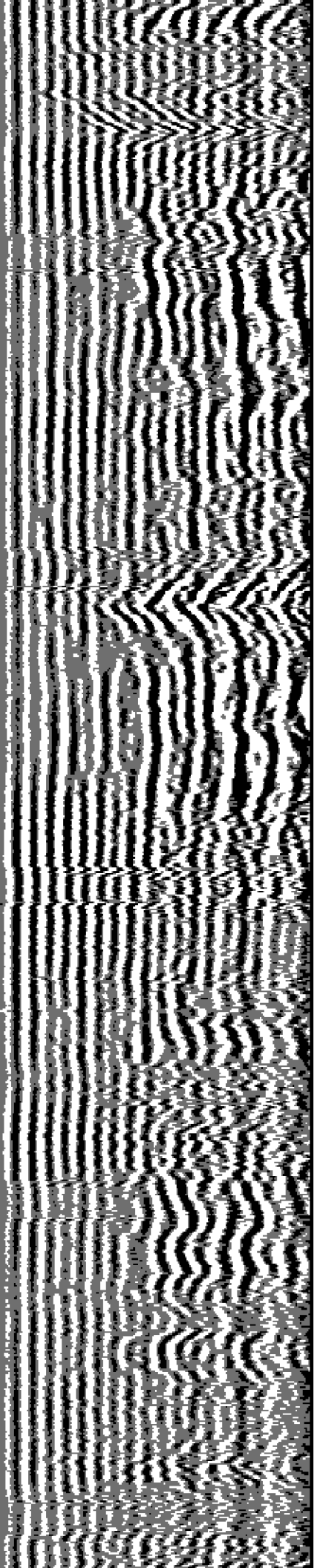


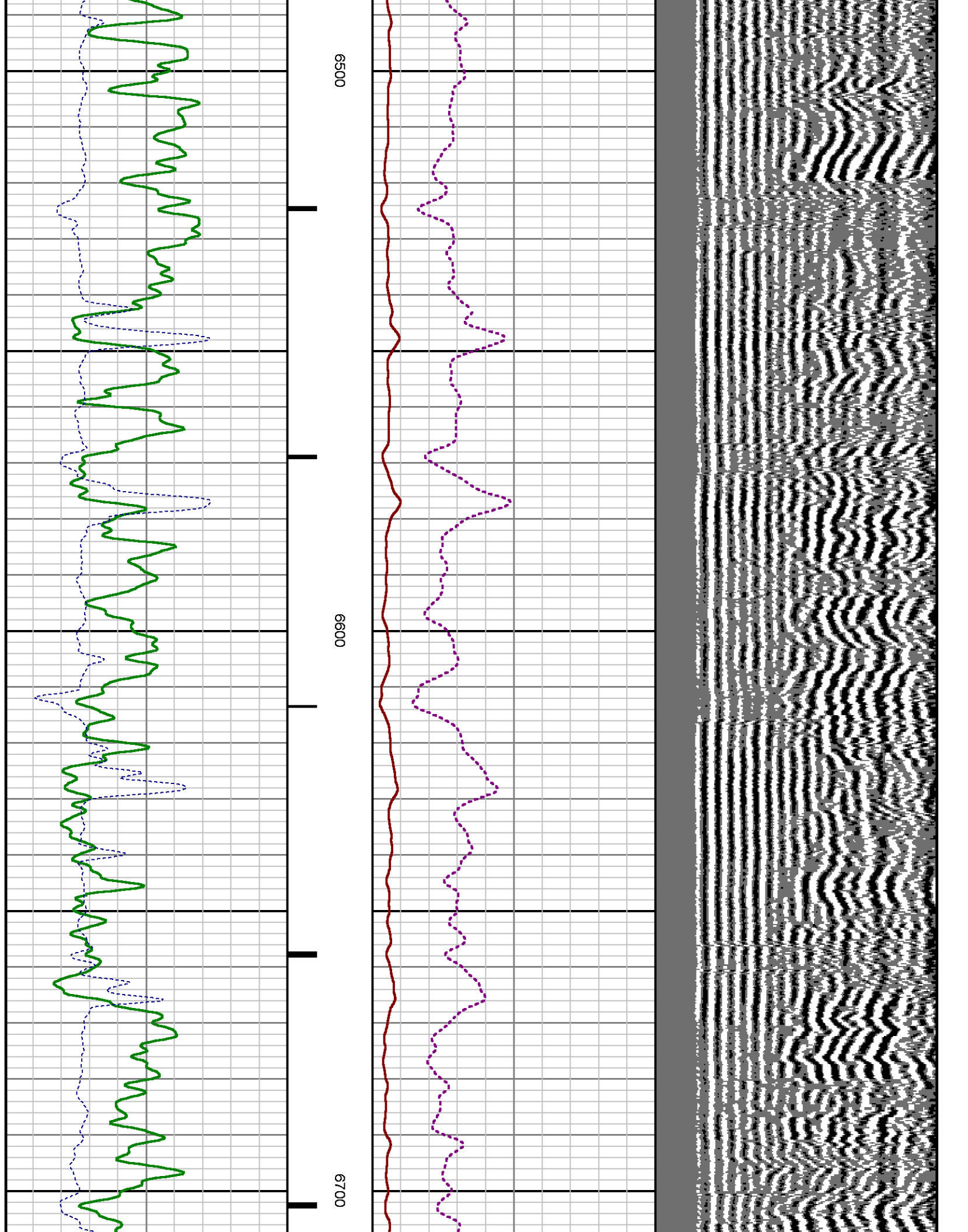


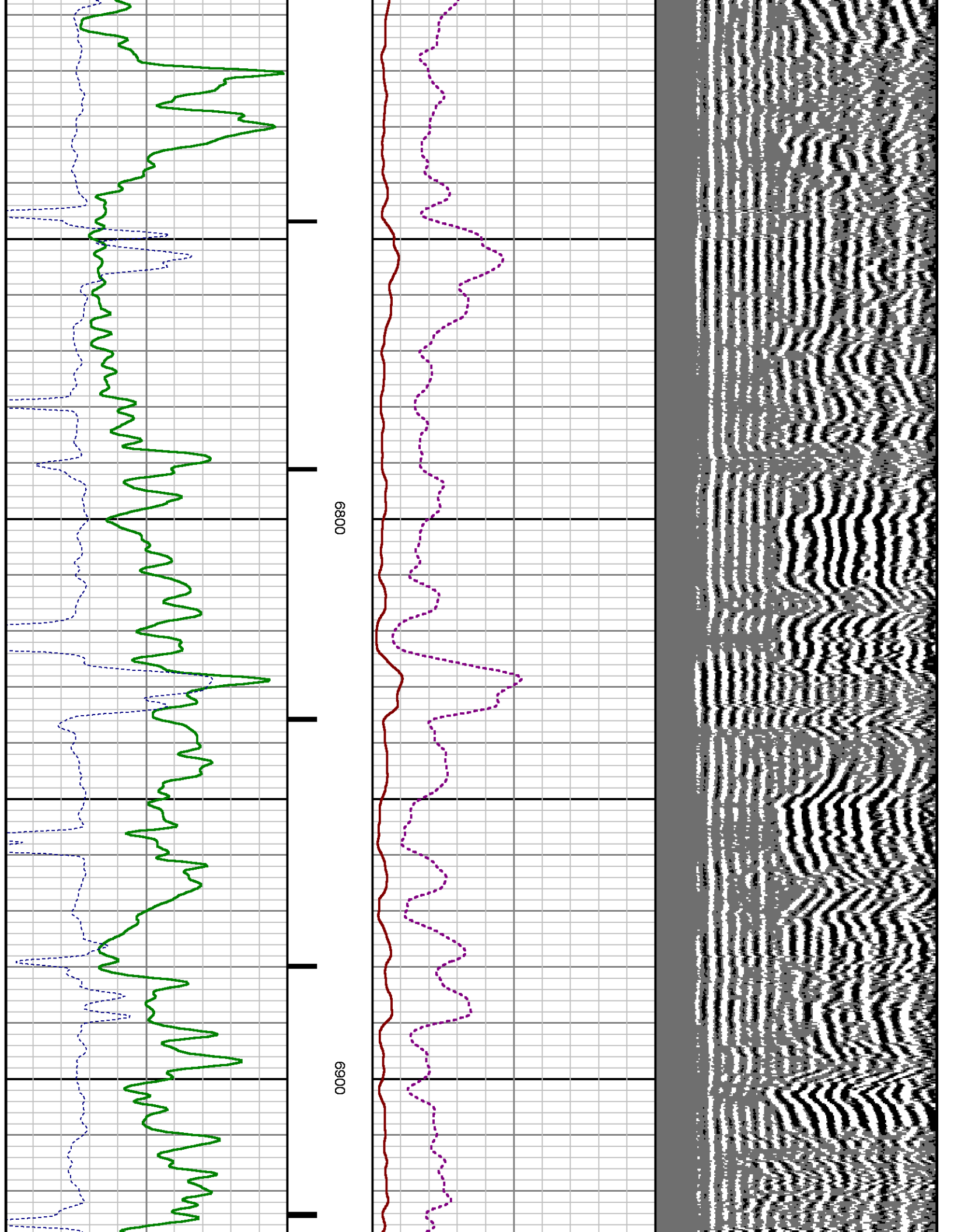


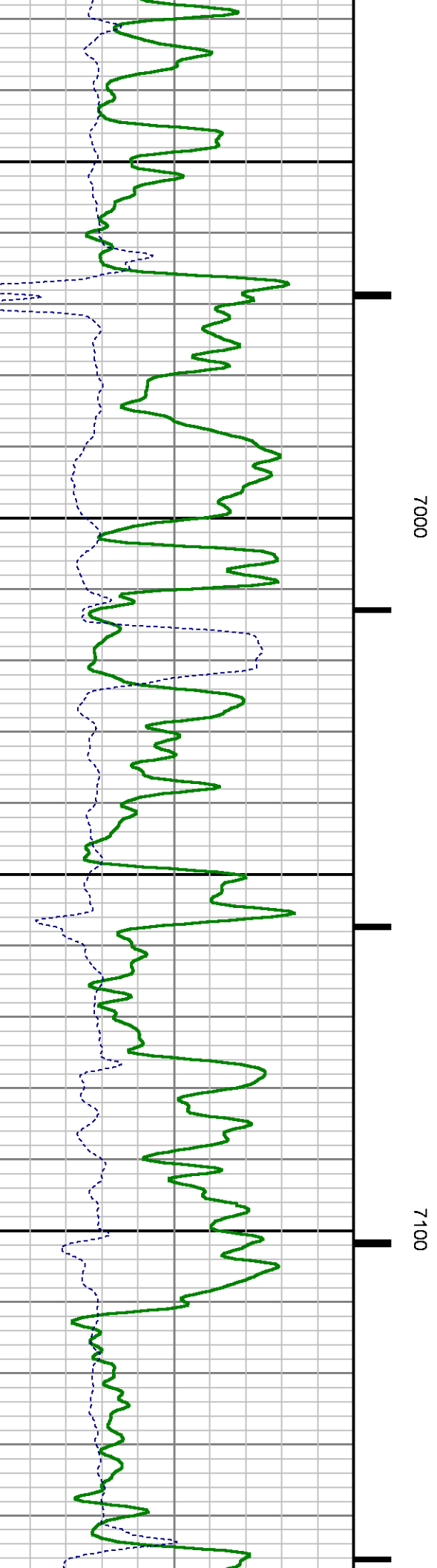
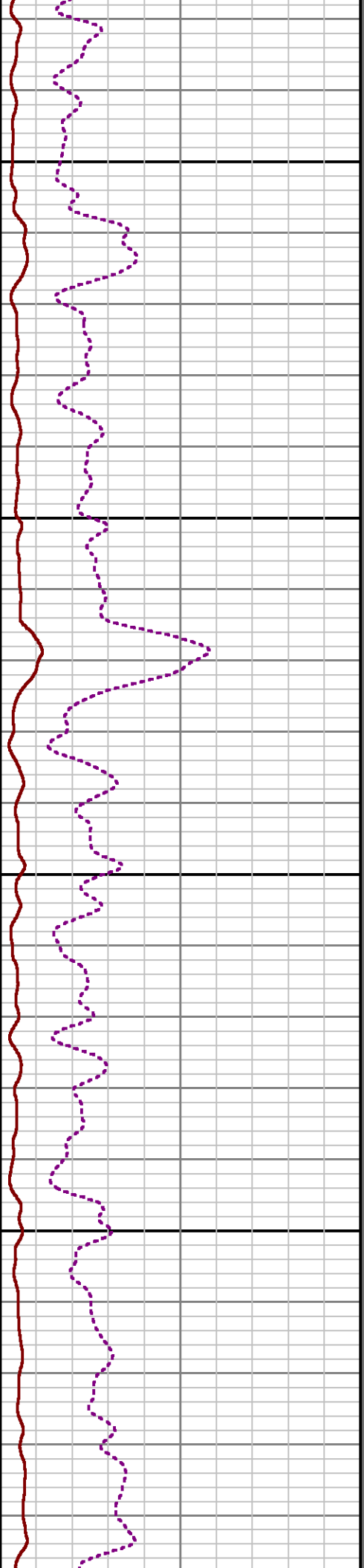
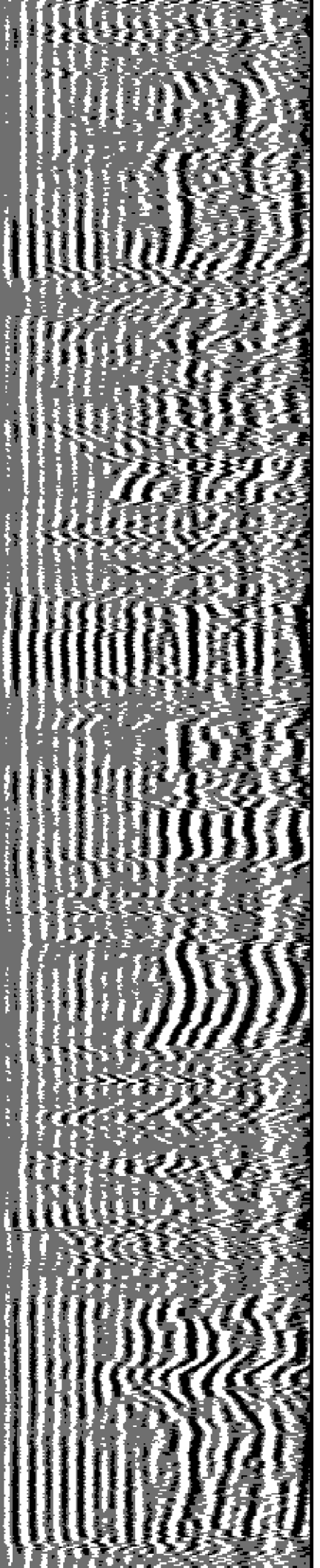


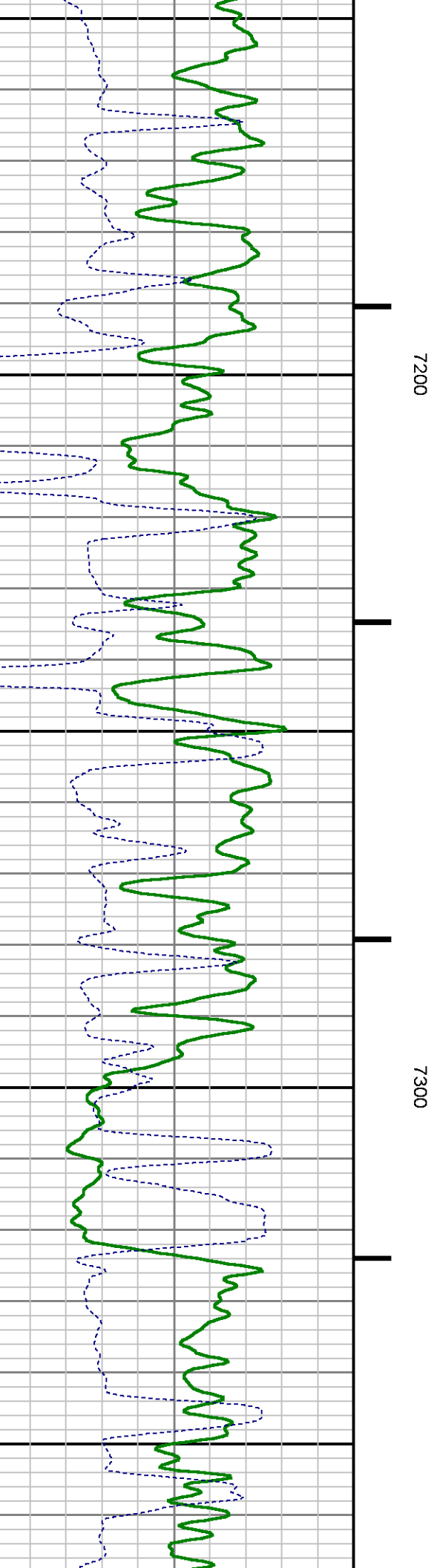
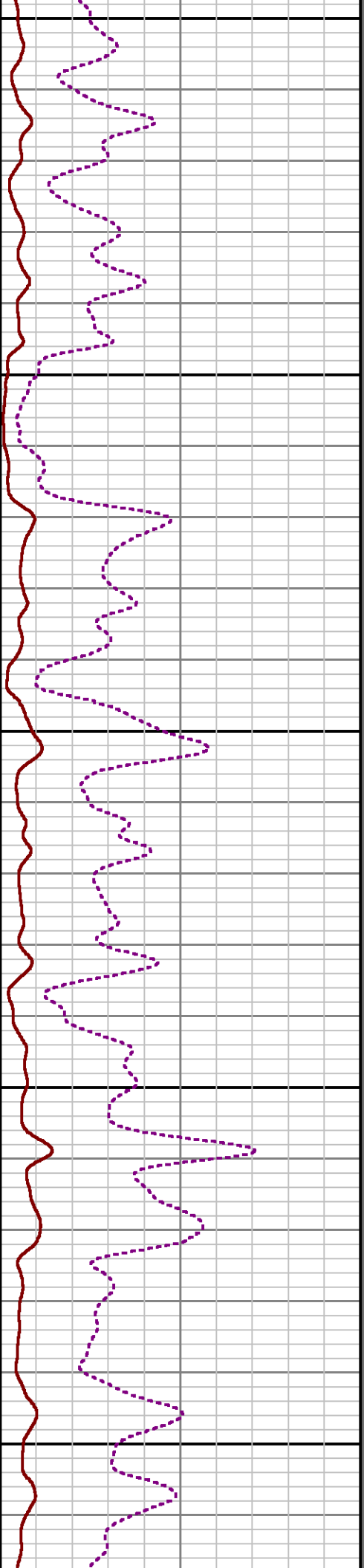
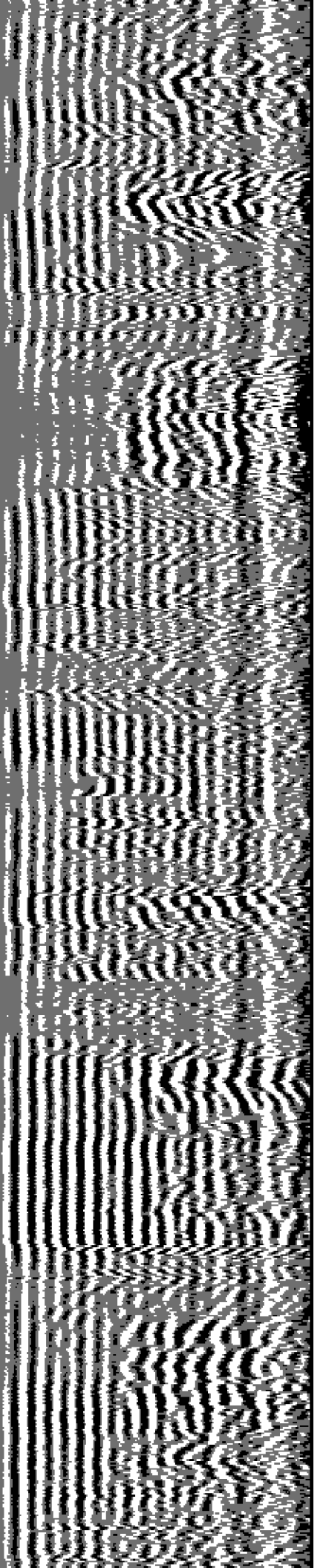


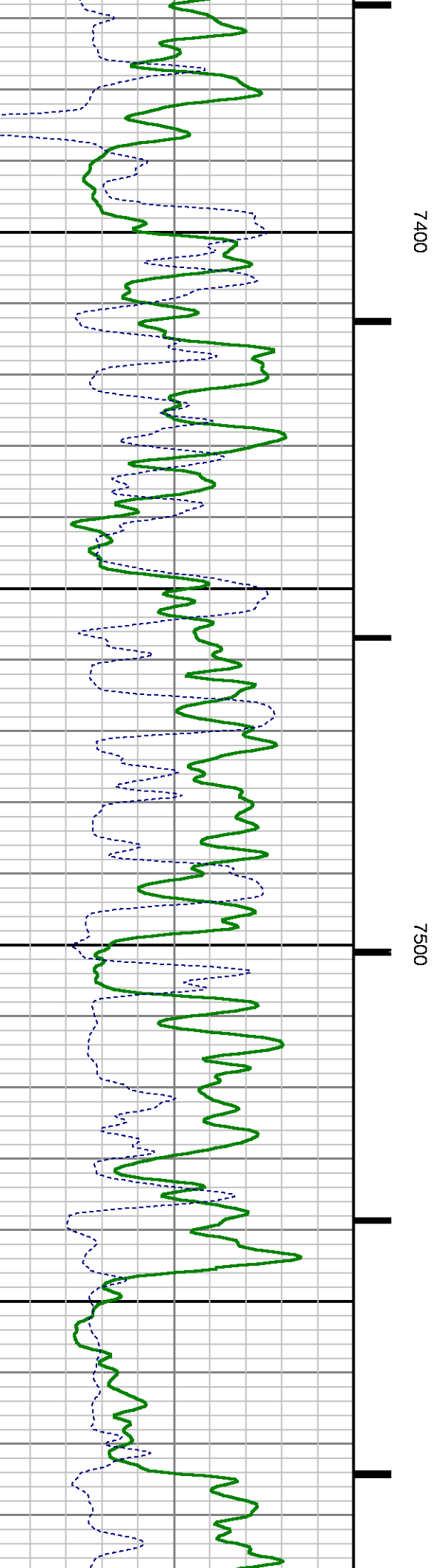
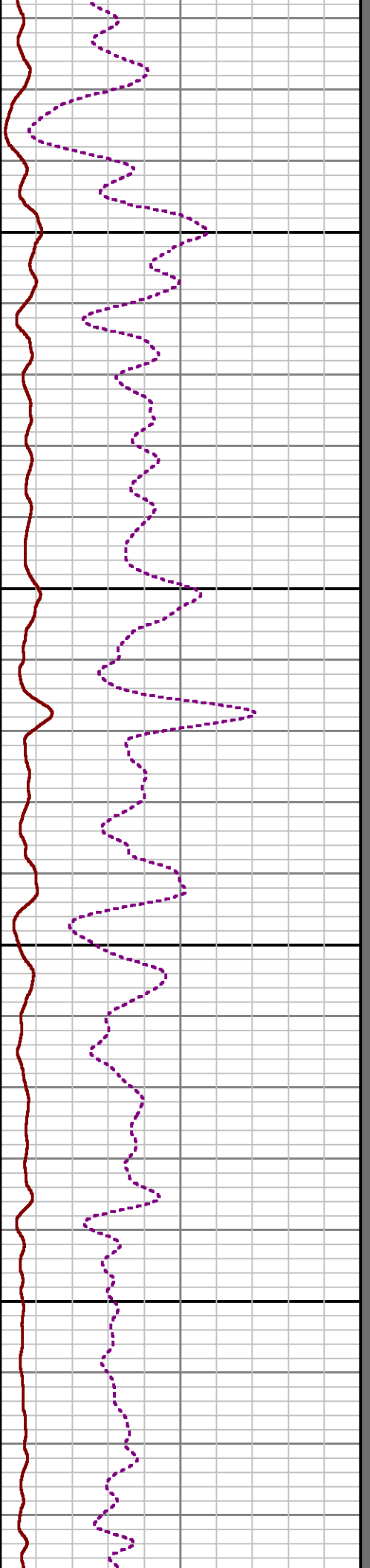
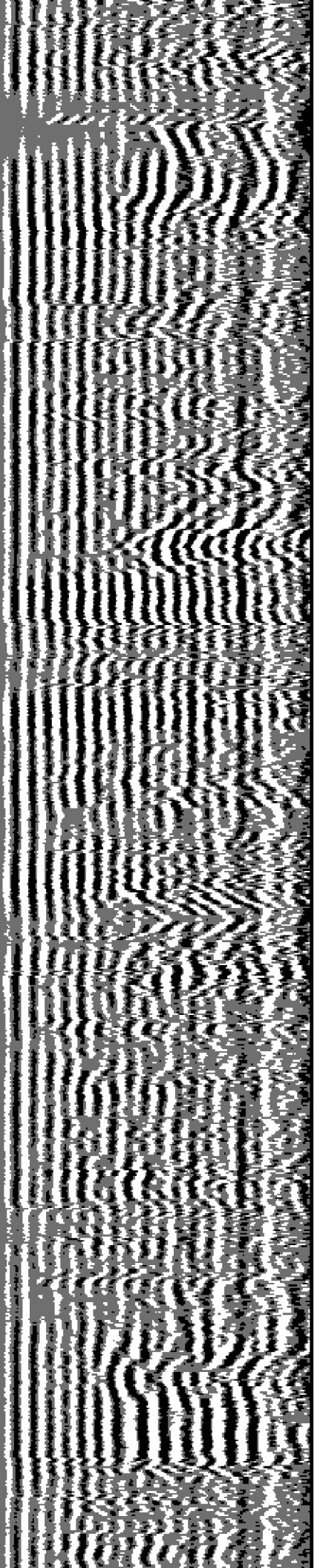


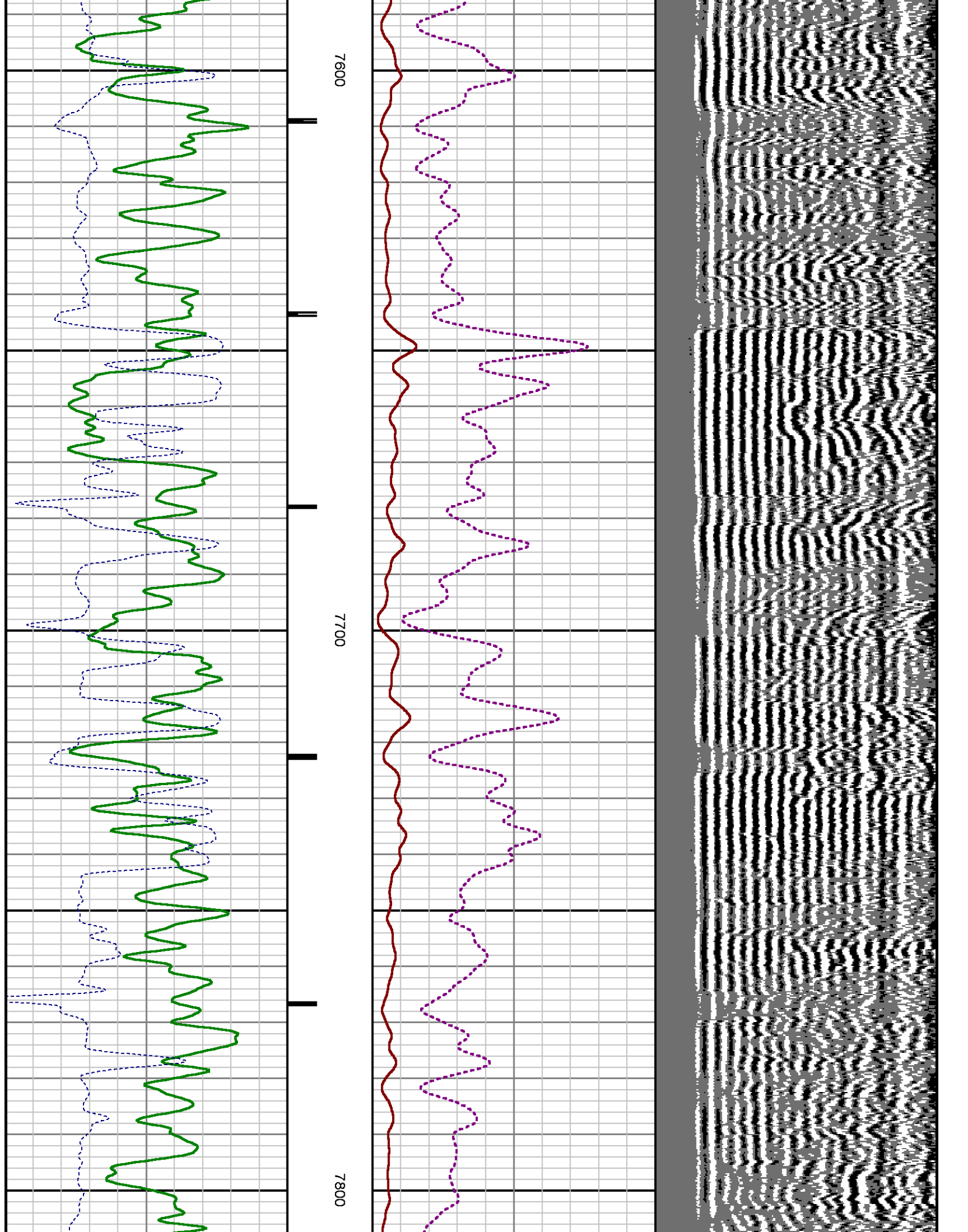


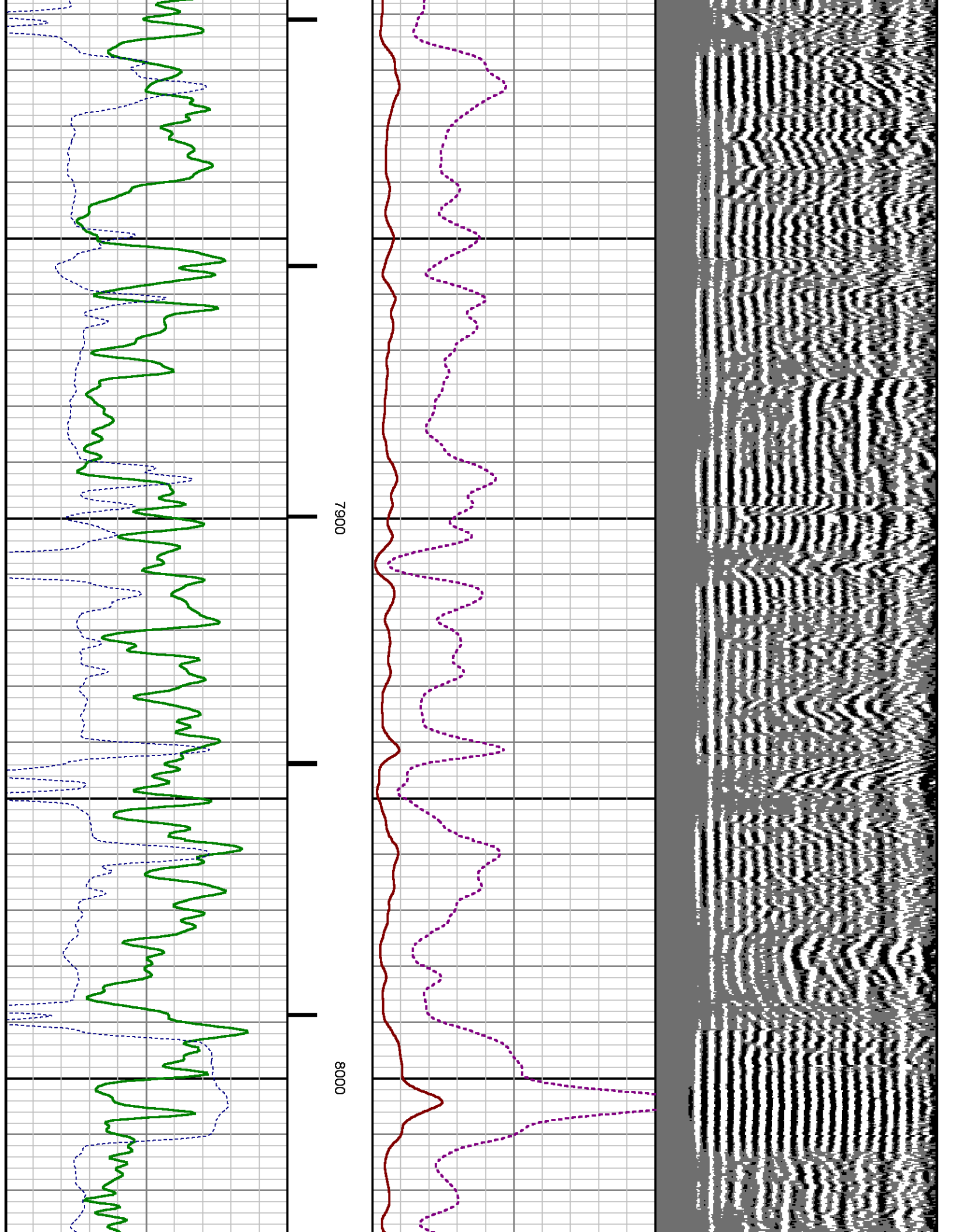


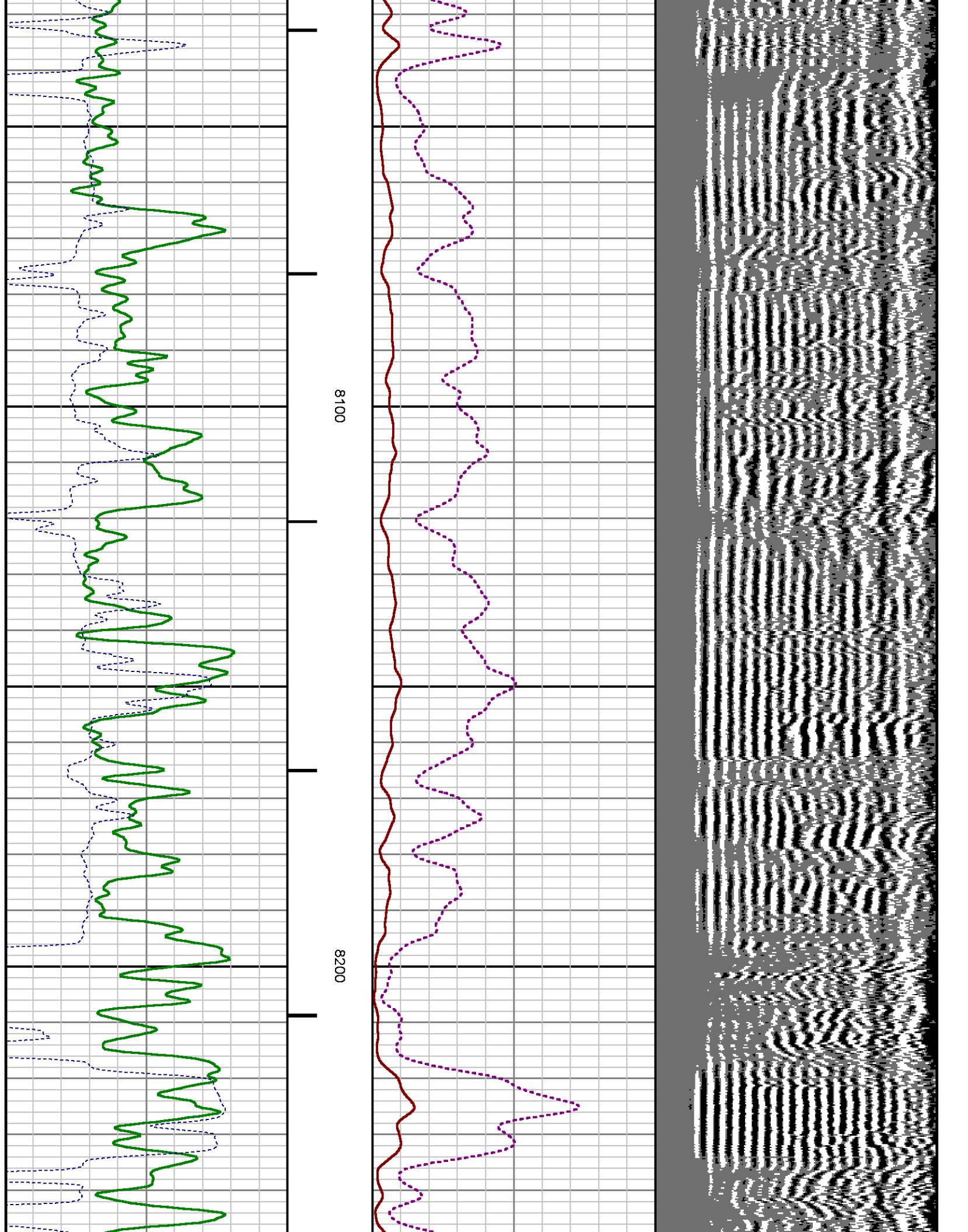


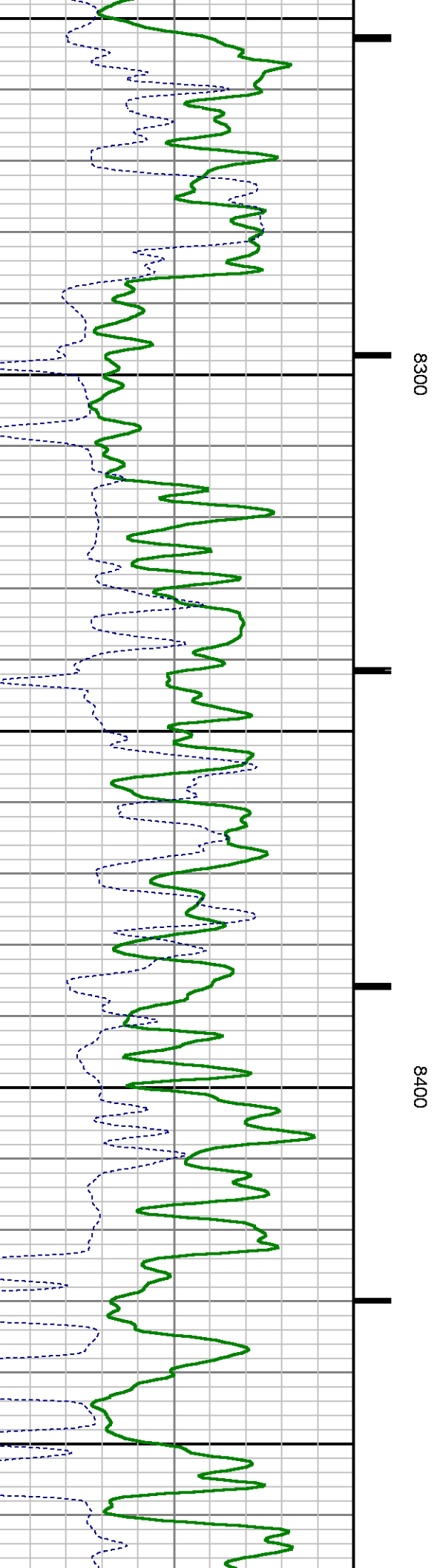
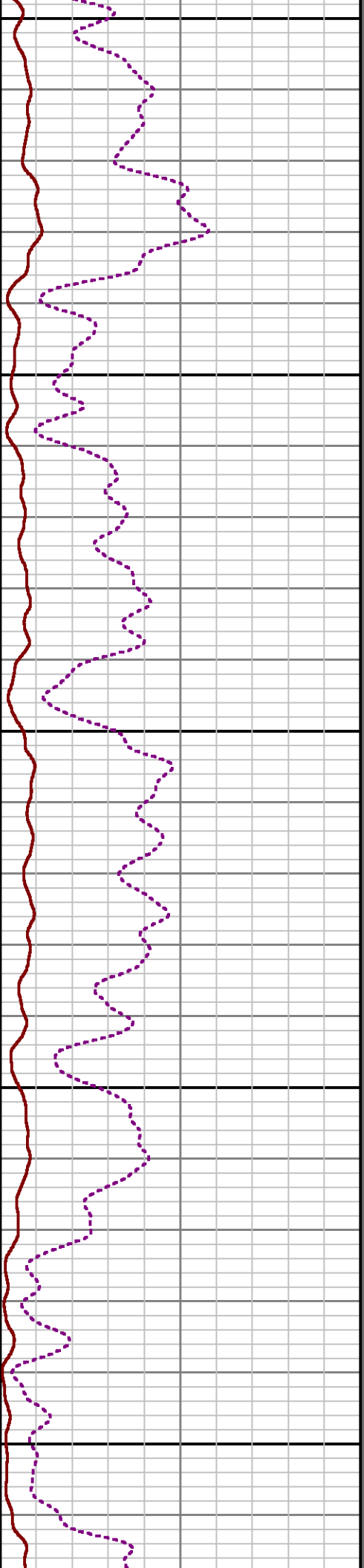
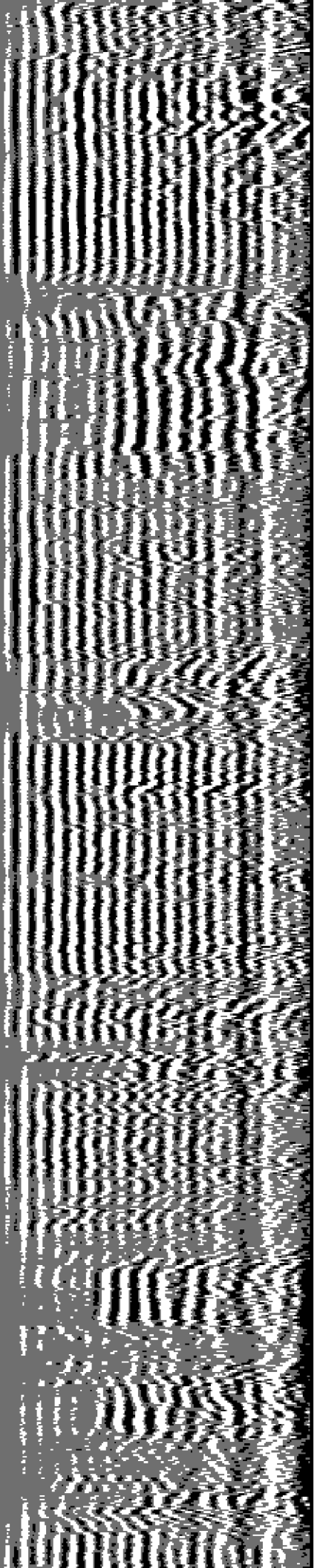


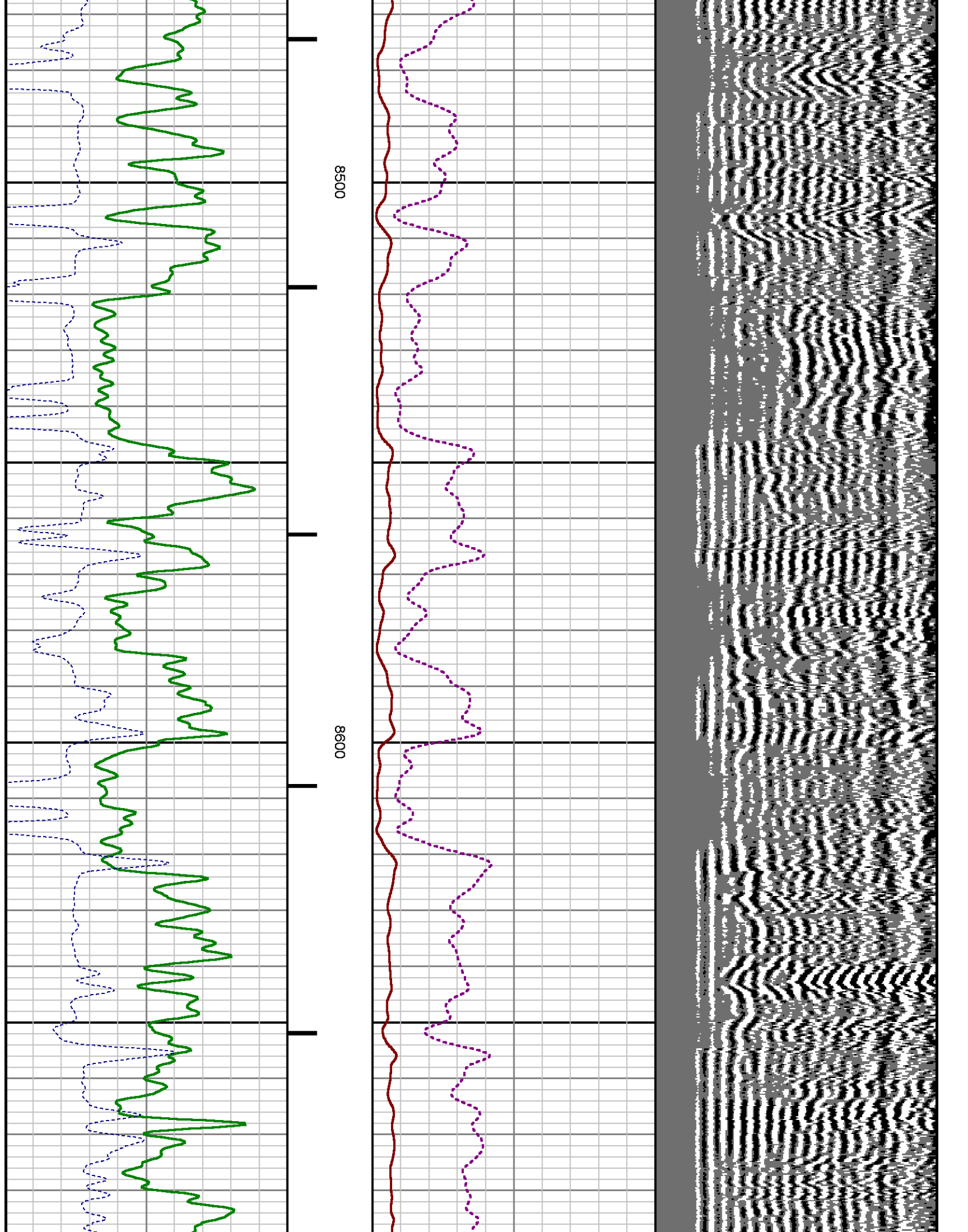


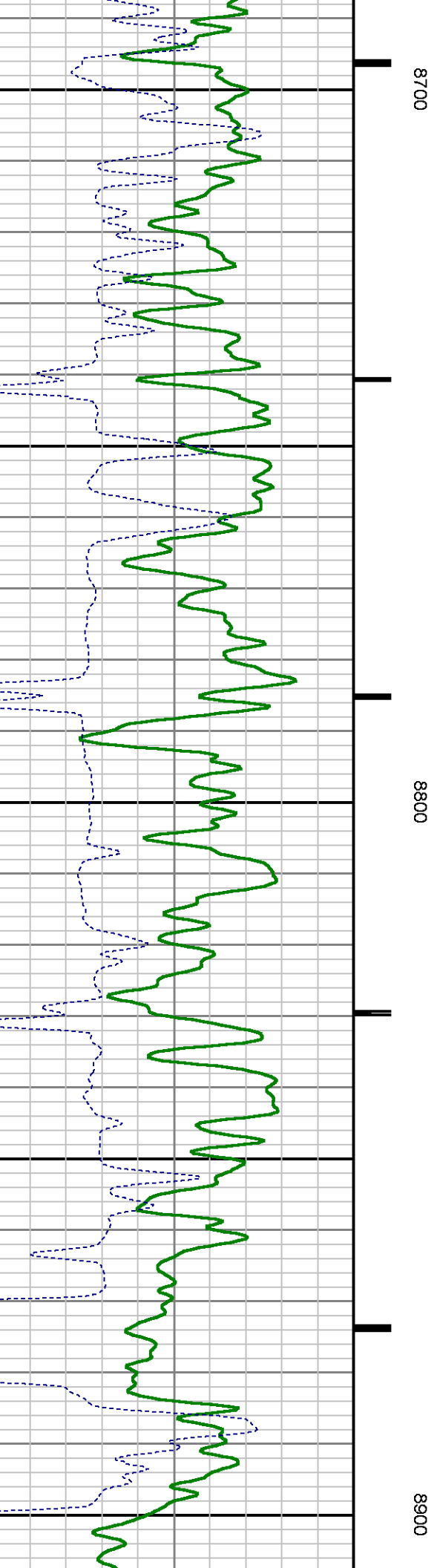
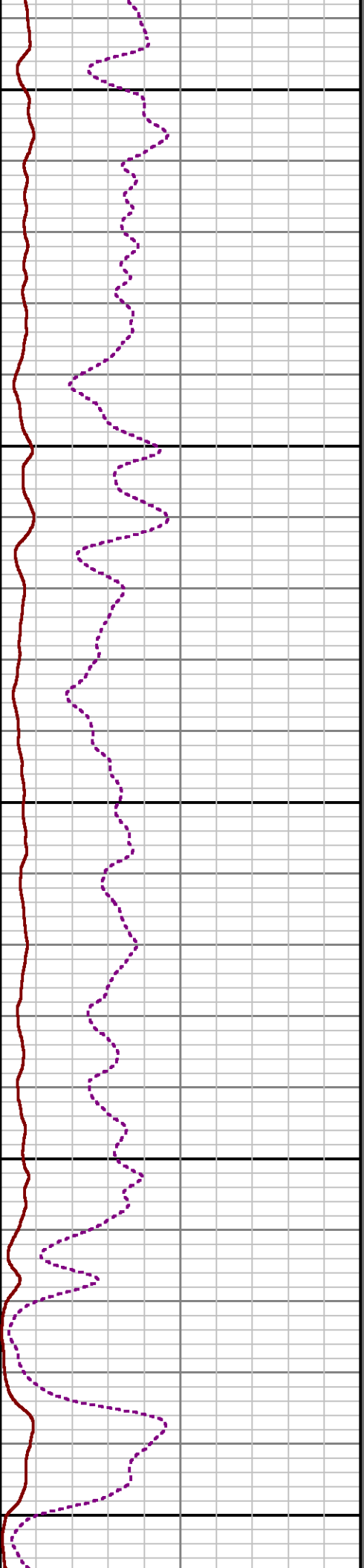
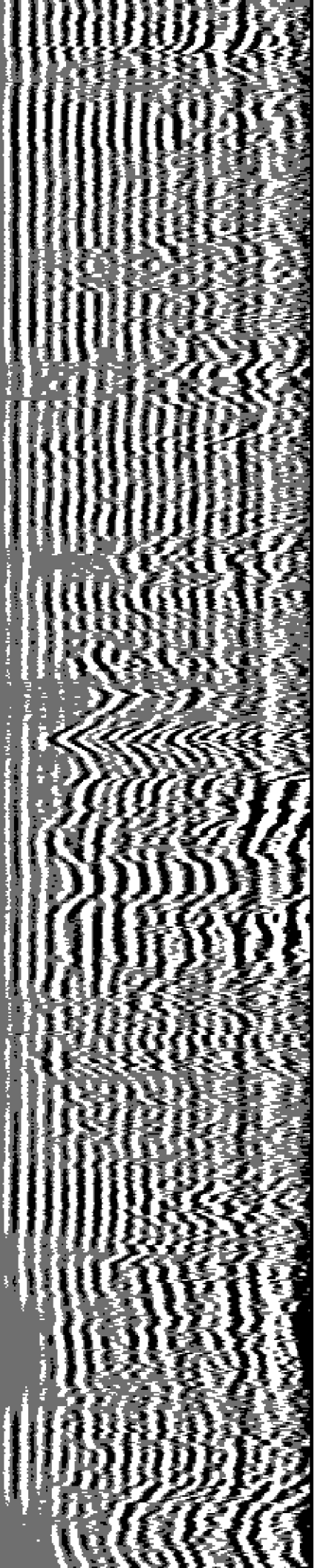


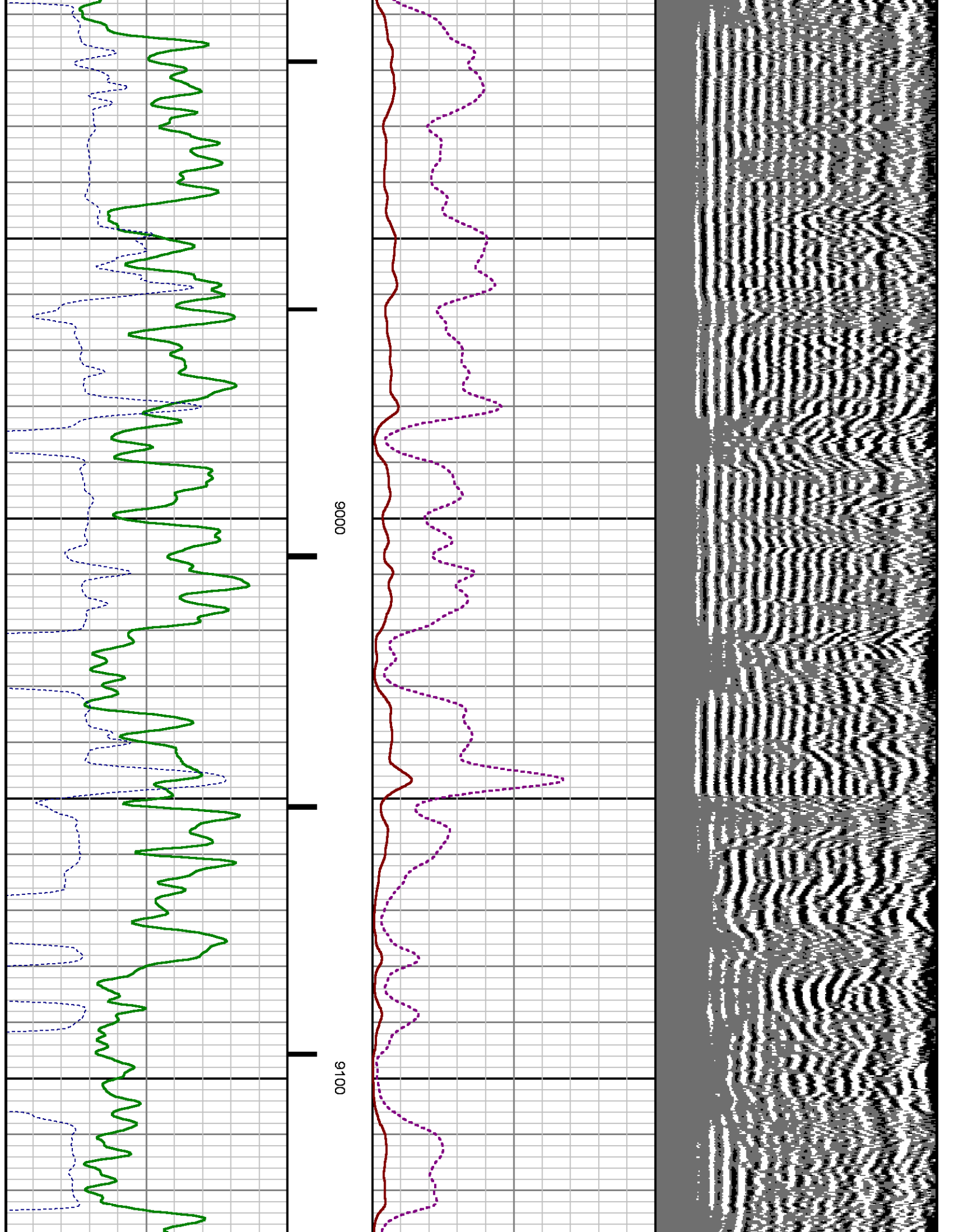


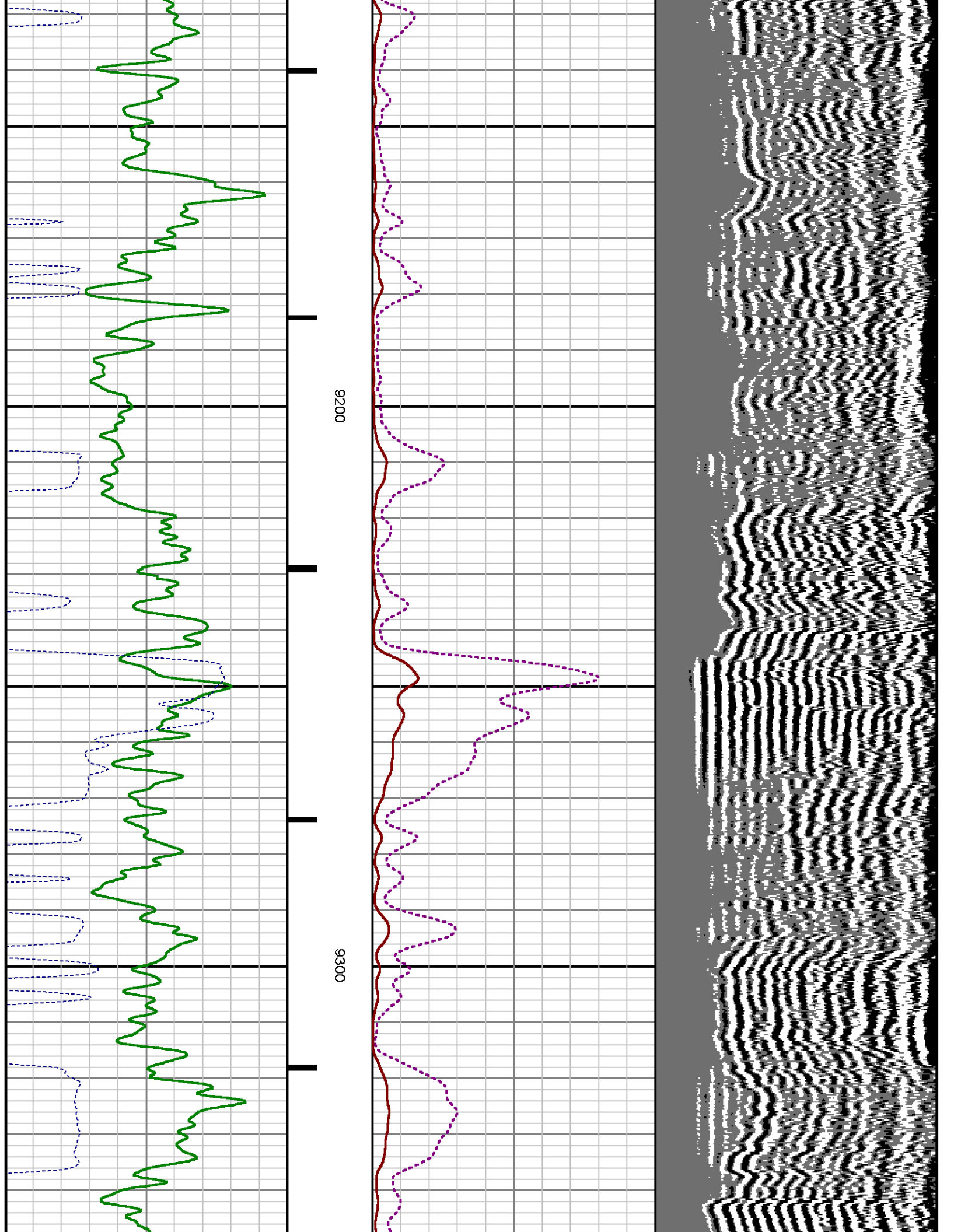


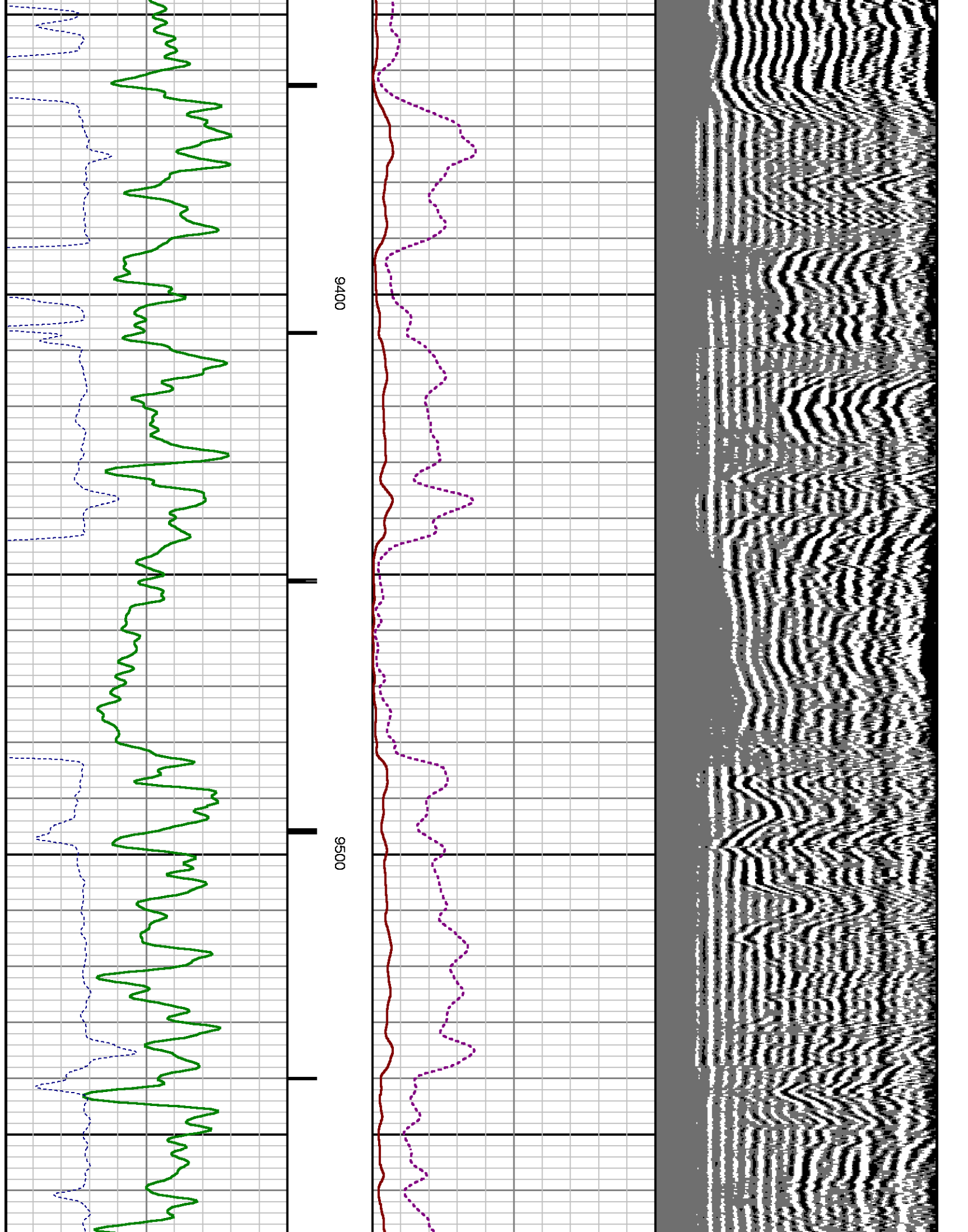


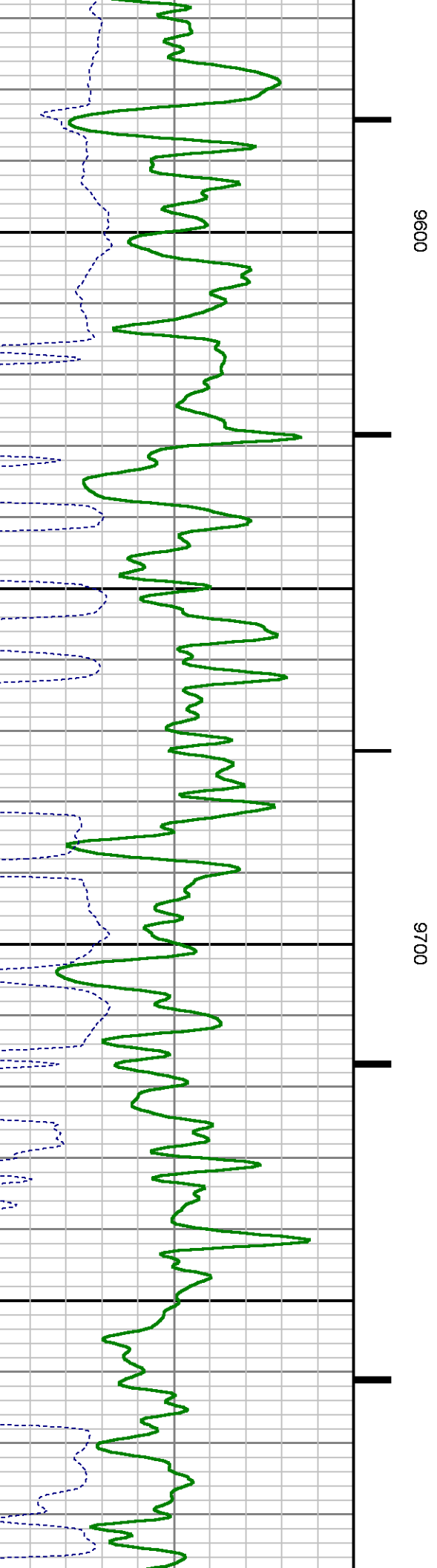
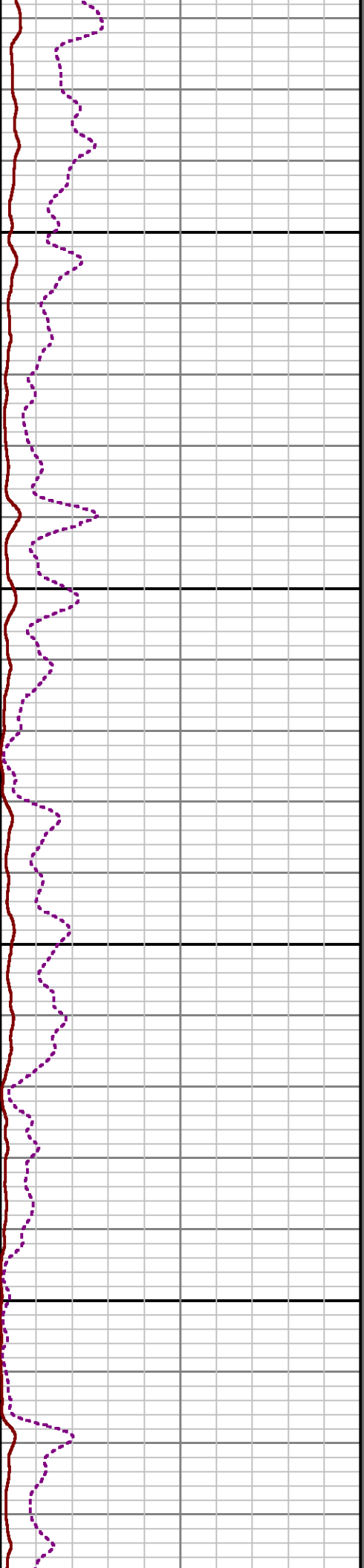
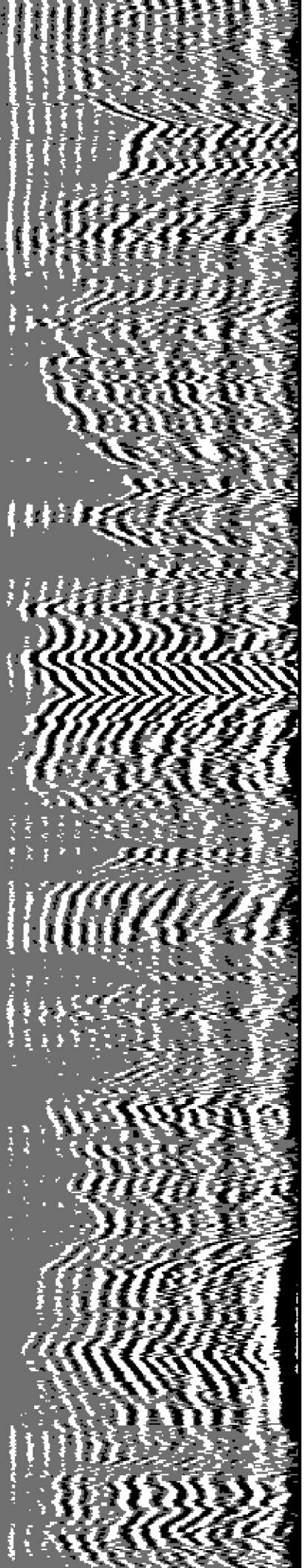


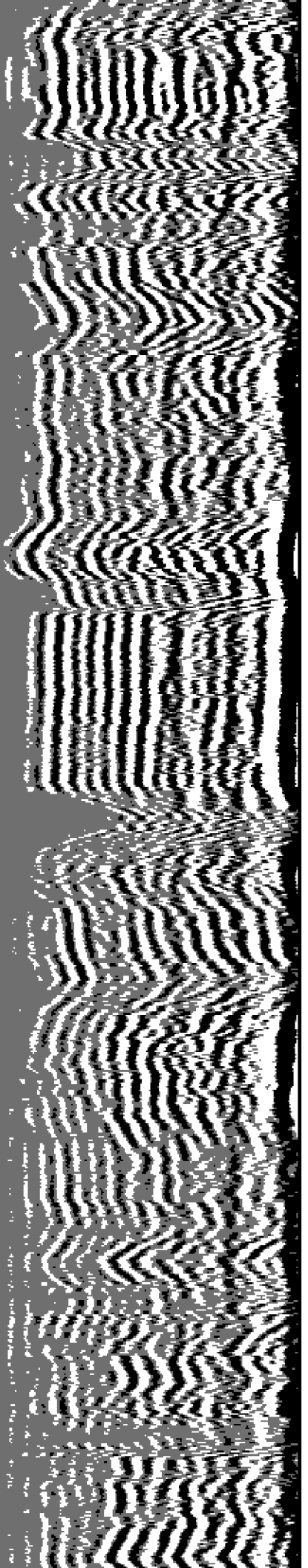








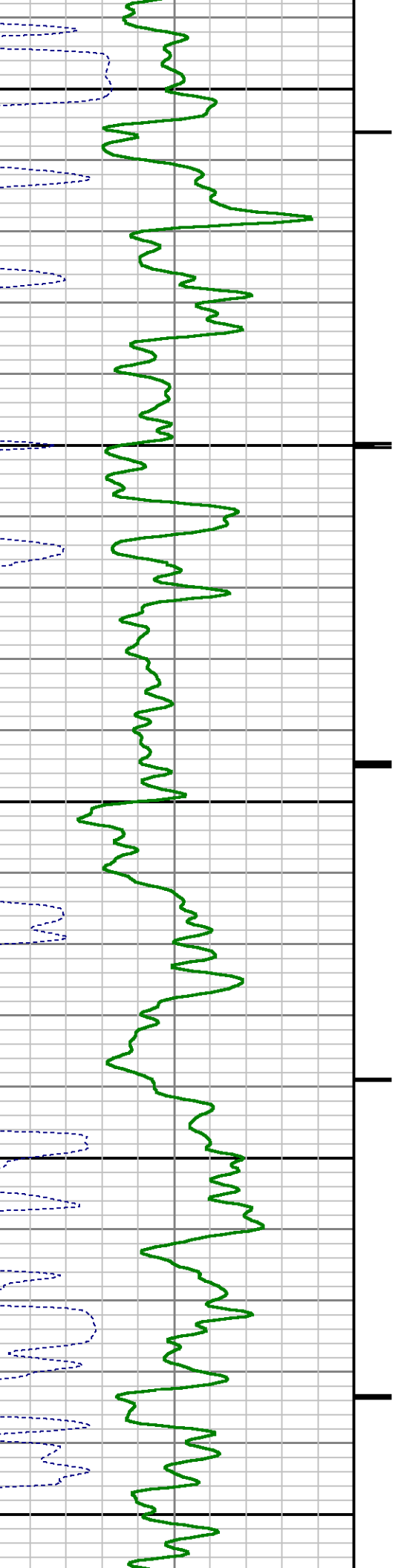


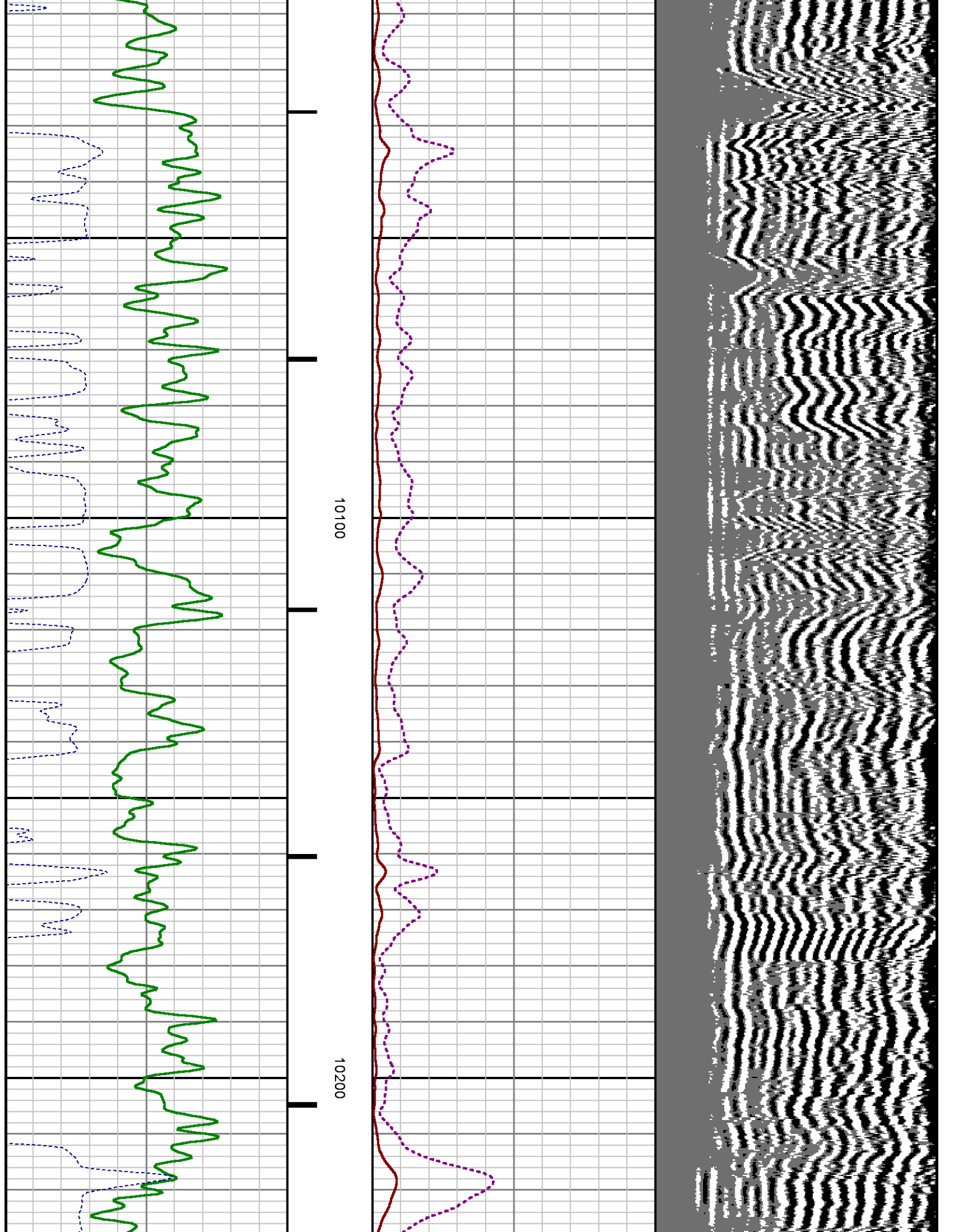


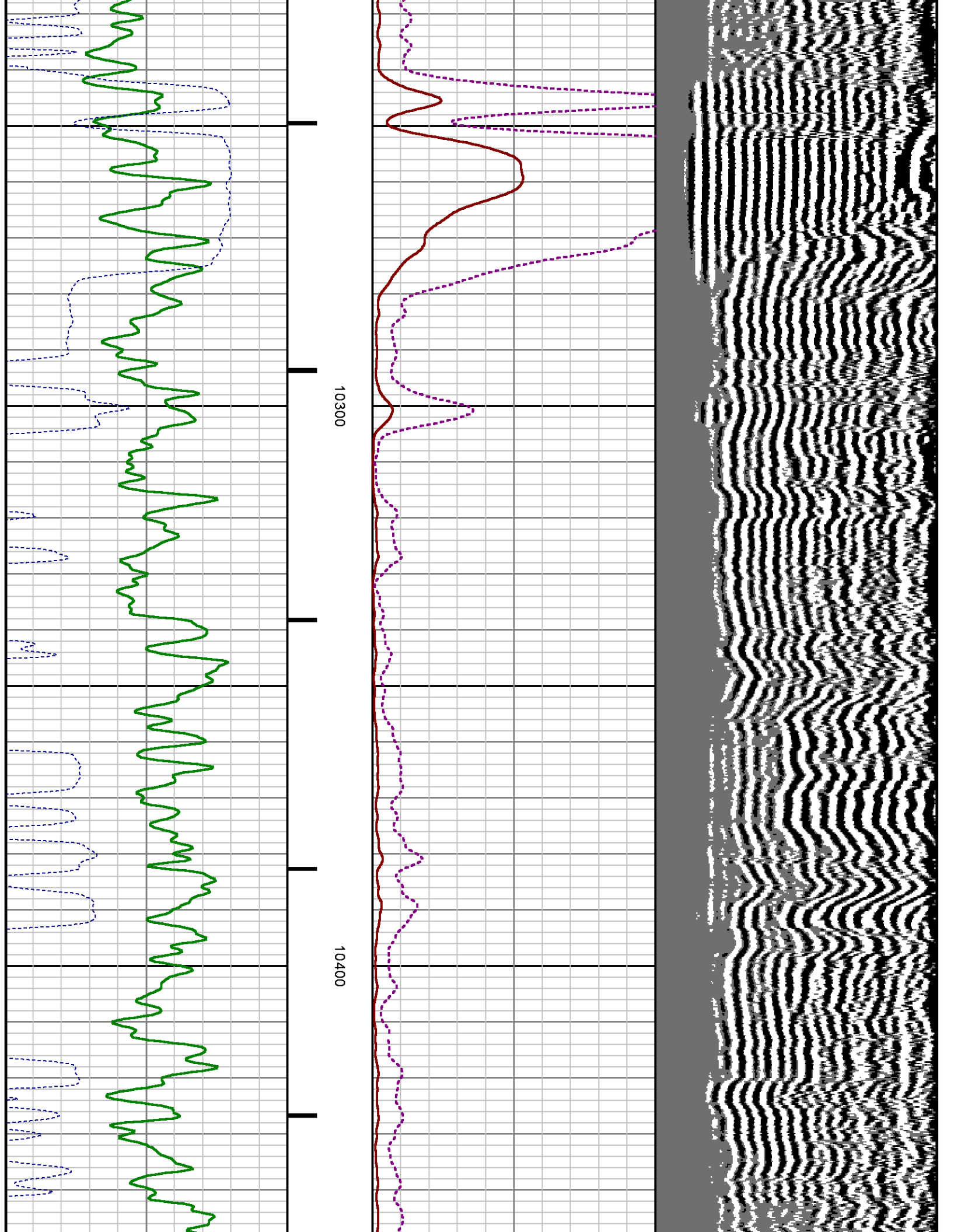
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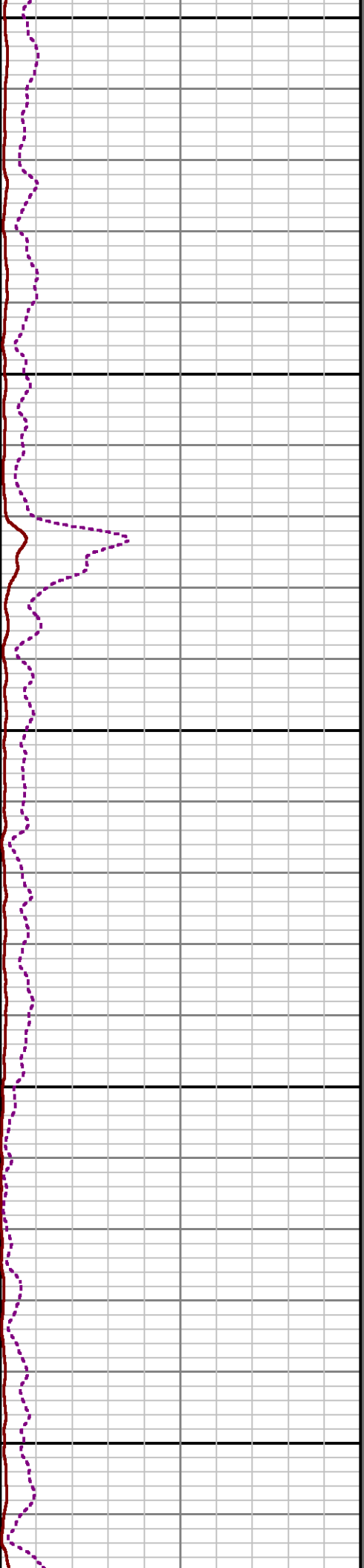
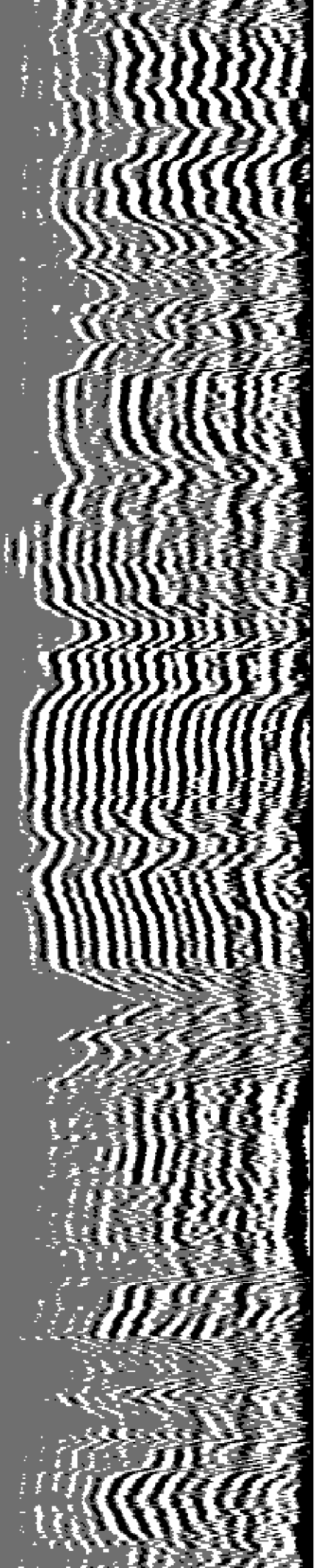
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10000



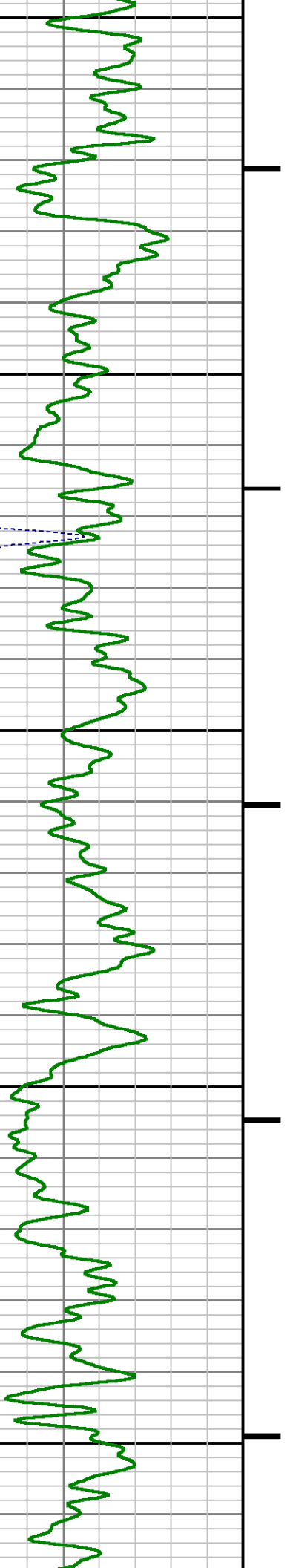


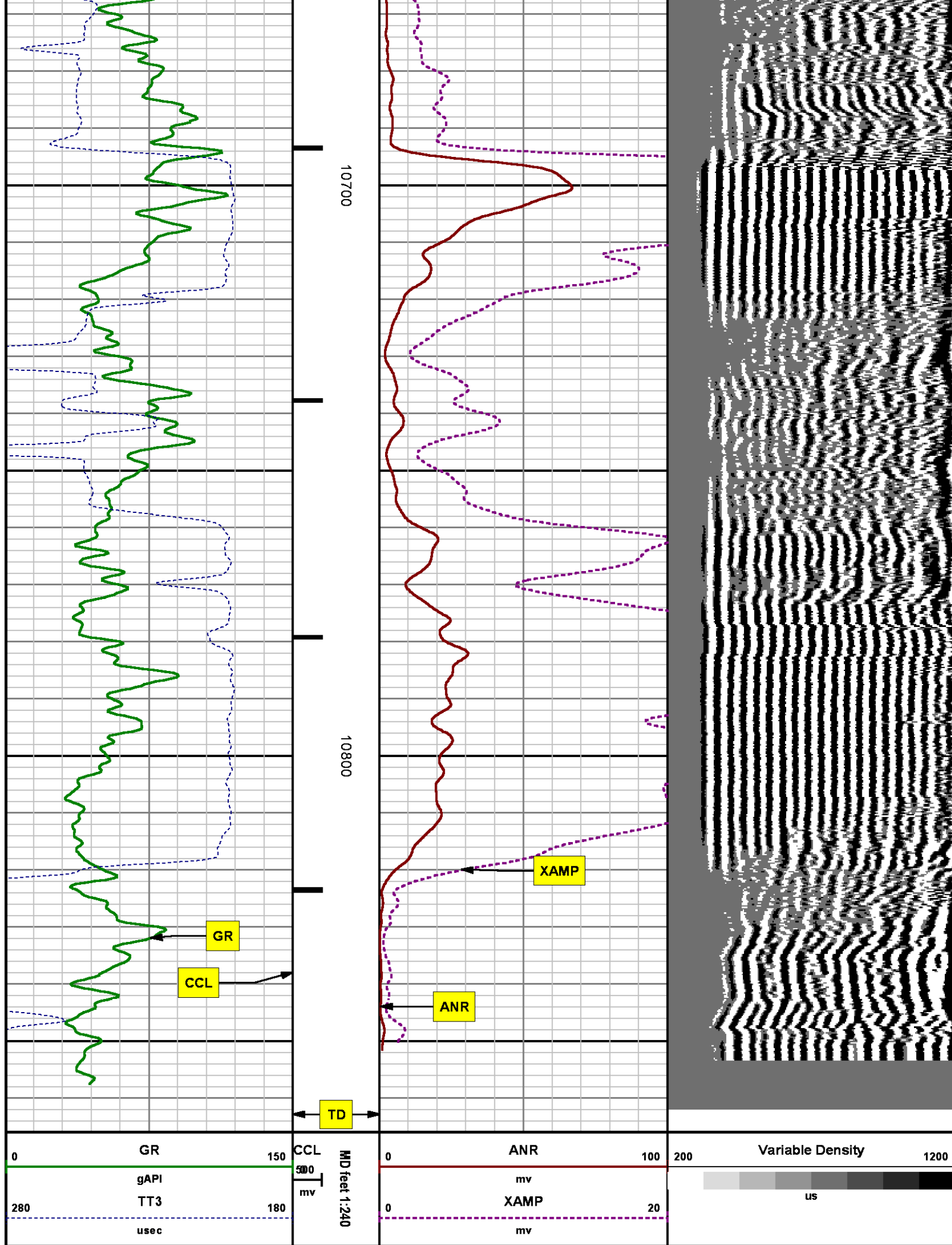




10500

10600





SECONDARY PRESENTATION

O PSI

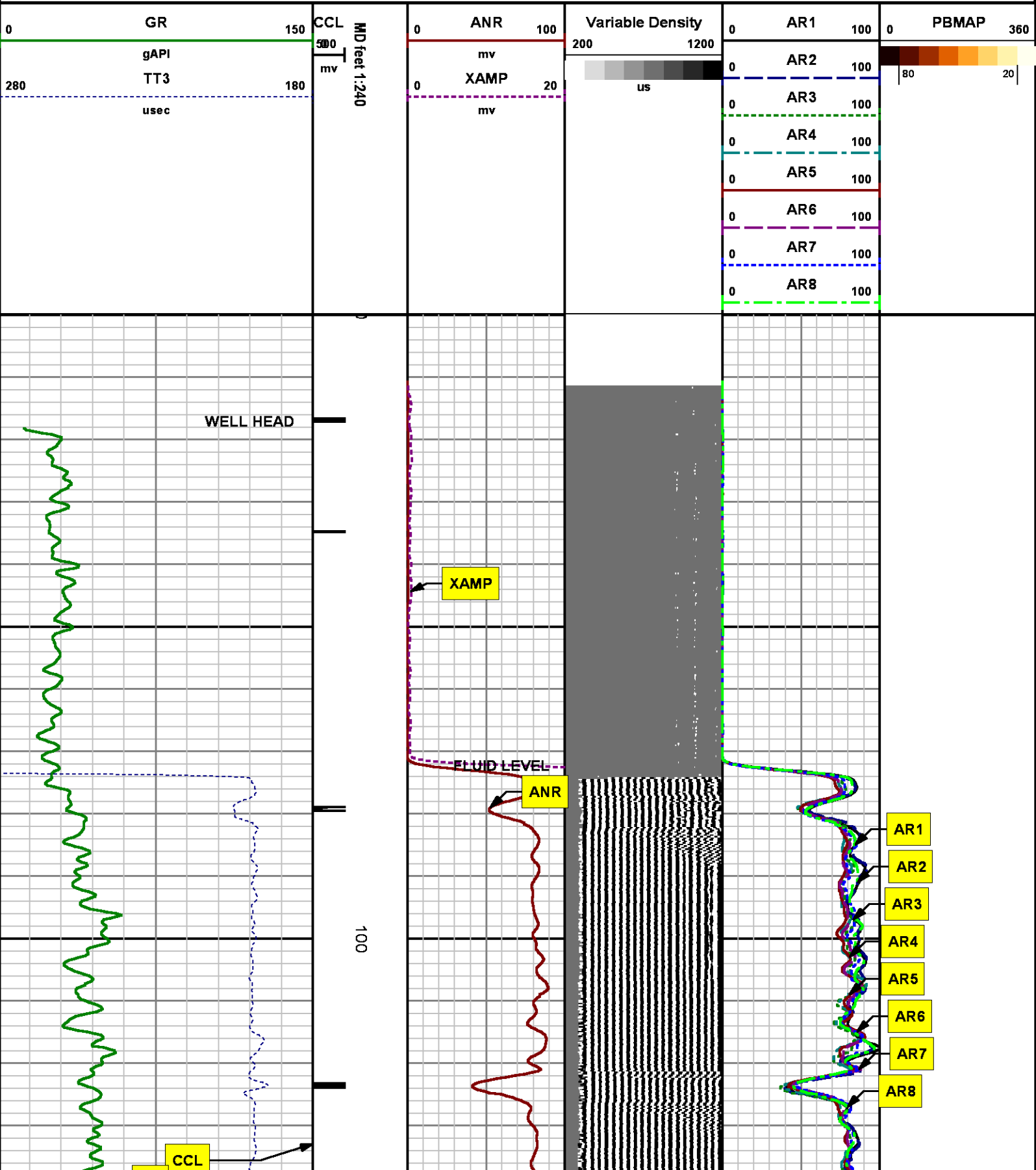
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	26.905	10851.000
RAL	Amp Gate Start Near	195.000	usec	26.905	10851.000
RAL	Amp Gate Start Radial	195.000	usec	26.905	10851.000
RAL	Amp Gate Width Far	25.000	usec	26.905	10851.000
RAL	Amp Gate Width Near	25.000	usec	26.905	10851.000
RAL	Amp Gate Width Radial	25.000	usec	26.905	10851.000
RAL	casing od	4.500	inches	26.905	10851.000
RAL	casing wt	11.600	lbm/ft	26.905	10851.000
RAL	FB Start Far	291.900	usec	26.905	10851.000
RAL	FB Start Near	180.000	usec	26.905	10851.000
RAL	FB Start Radial	180.000	usec	26.905	10851.000
RAL	FB Thresh Far	15.000	mv	26.905	10851.000
RAL	FB Thresh Near	10.000	mv	26.905	10851.000
RAL	FB Thresh Radial	10.000	mv	26.905	10851.000
RAL	Fluid Travel Time	200.000	usec/ft	26.905	10851.000

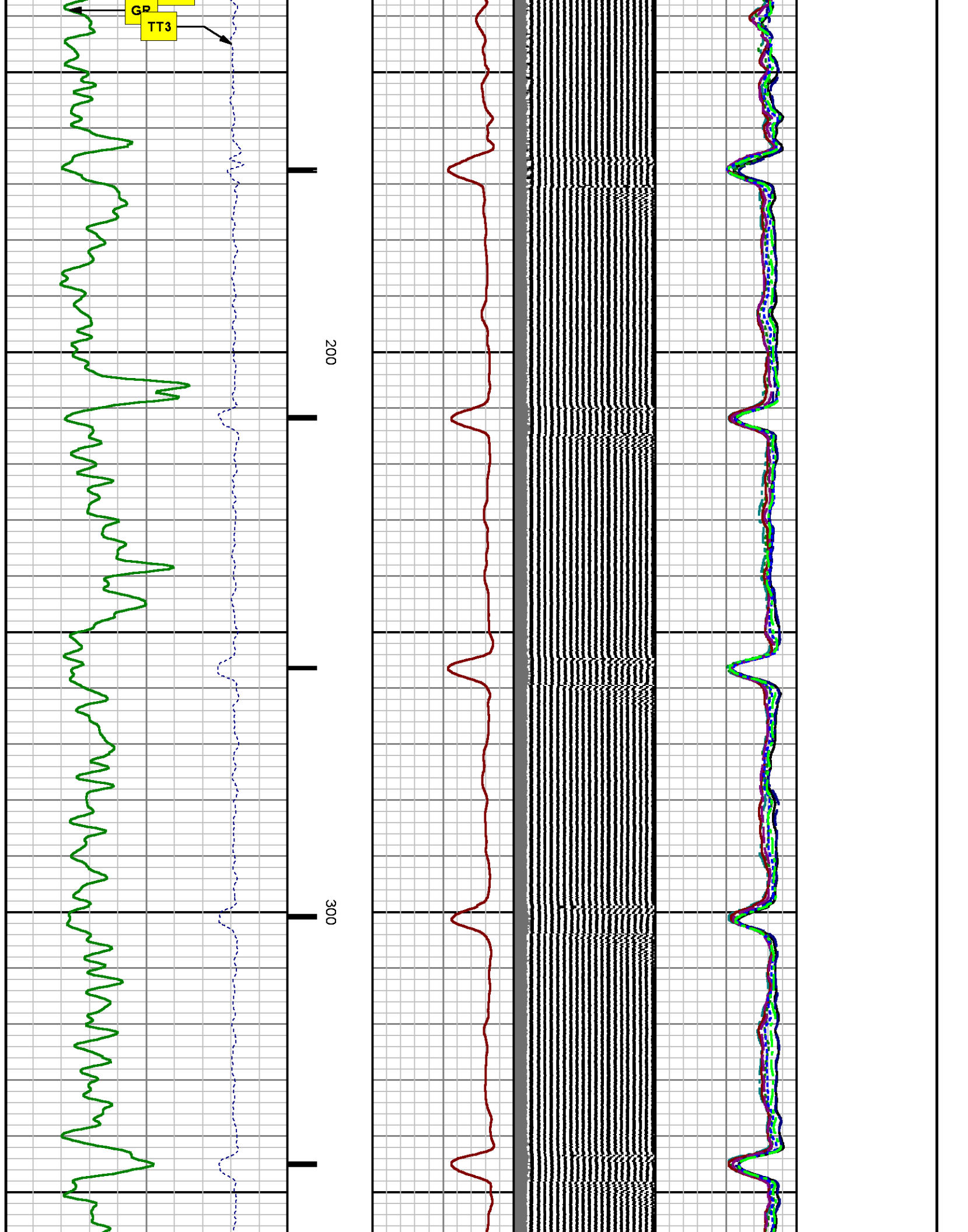
DEPTH OFFSETS

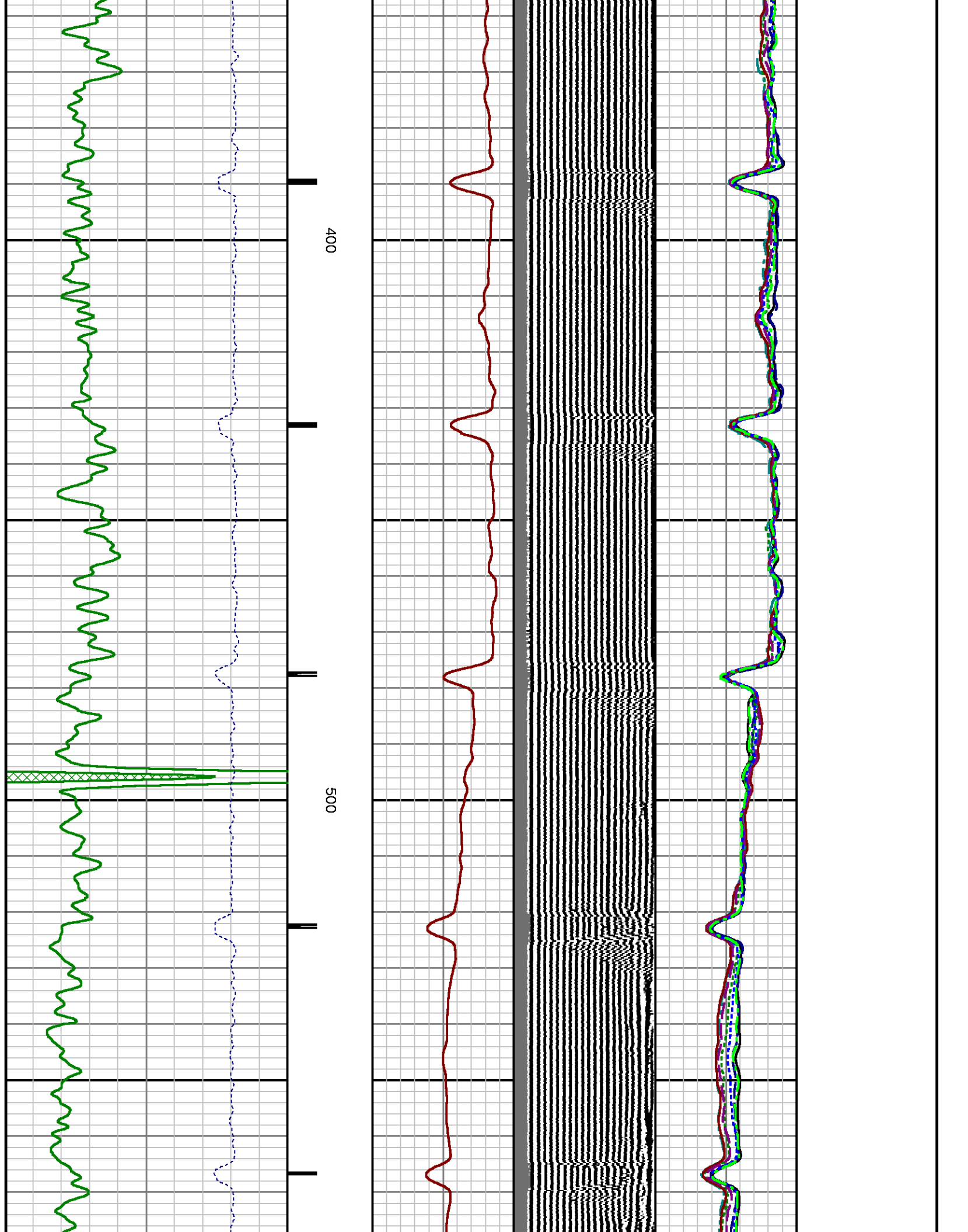
(for Acquired Curves)

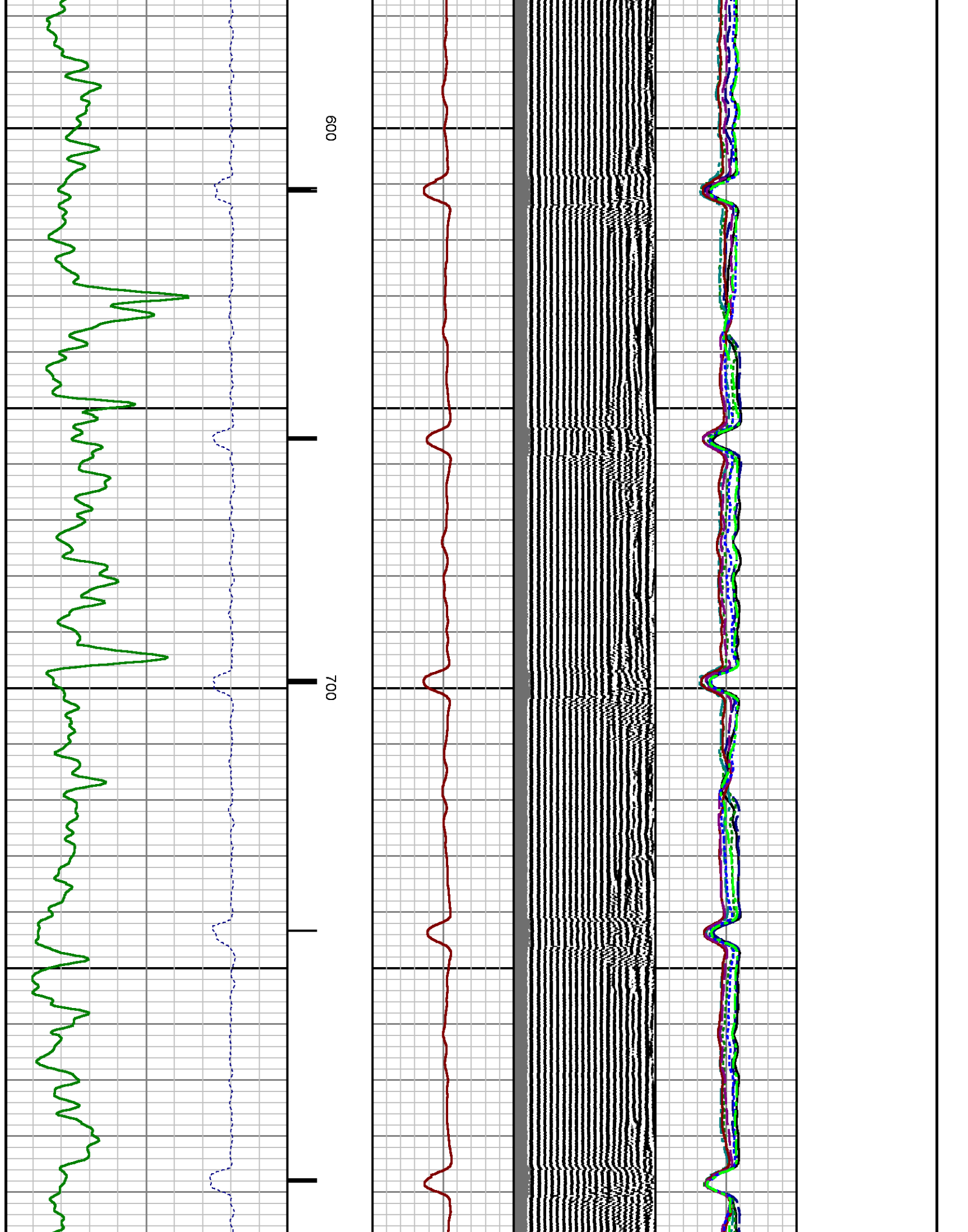
SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-12.360	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	CHV	FPR2
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	-11.360	AFAR	SIG	TT5			
2459XA	-7.250	CCL					
2459XA	-5.390	GR					
2459XA	0.000	NEU					

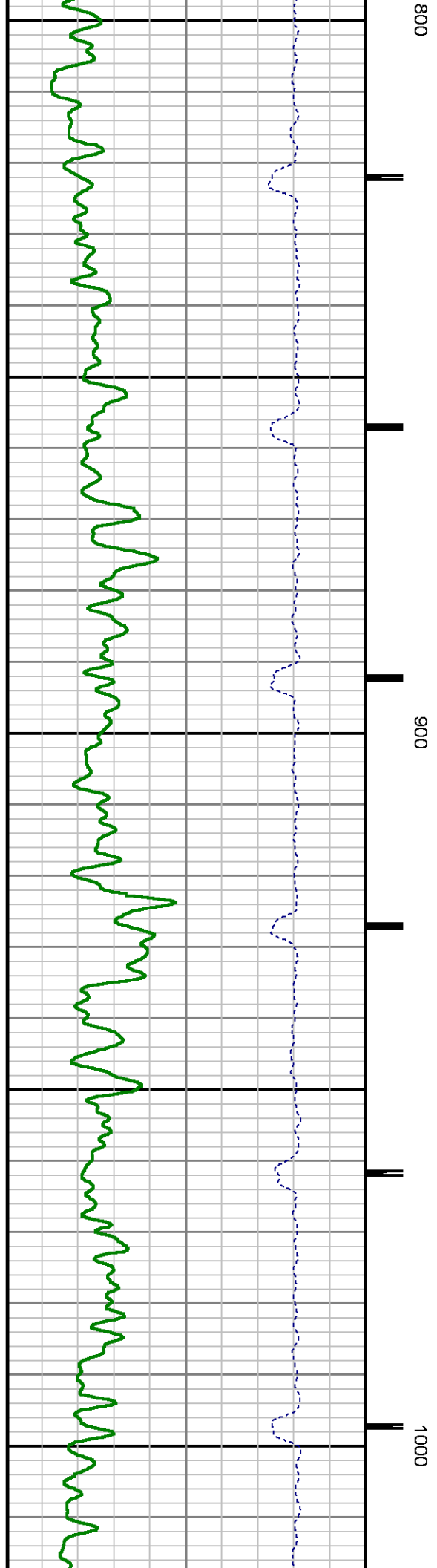
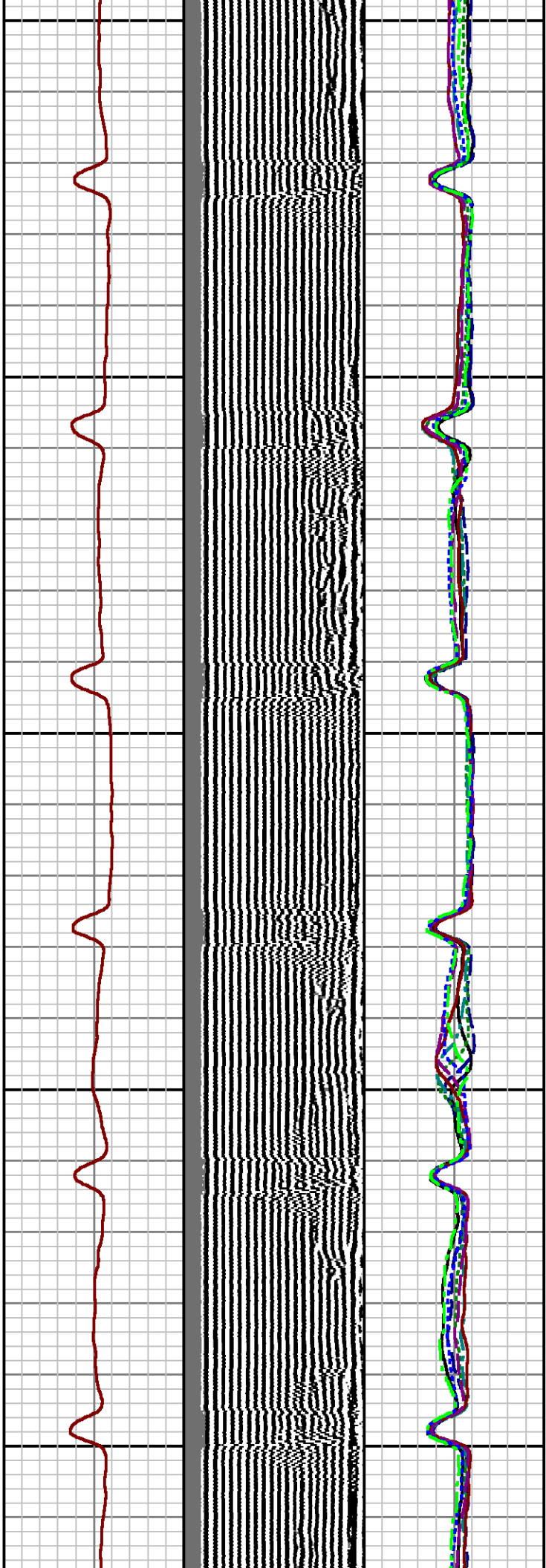
Company : WPX ENERGY
Well : FEDERAL BCU 542-30-198
File Name : d:\welldata\wpx\bcu 542-30-198\542ra\main.xtf
Mode : PlotMgr 5.4.504
Interval : 0.00 - 10866.00 feet UP
Created : 9/27/2014 9:53:54 AM

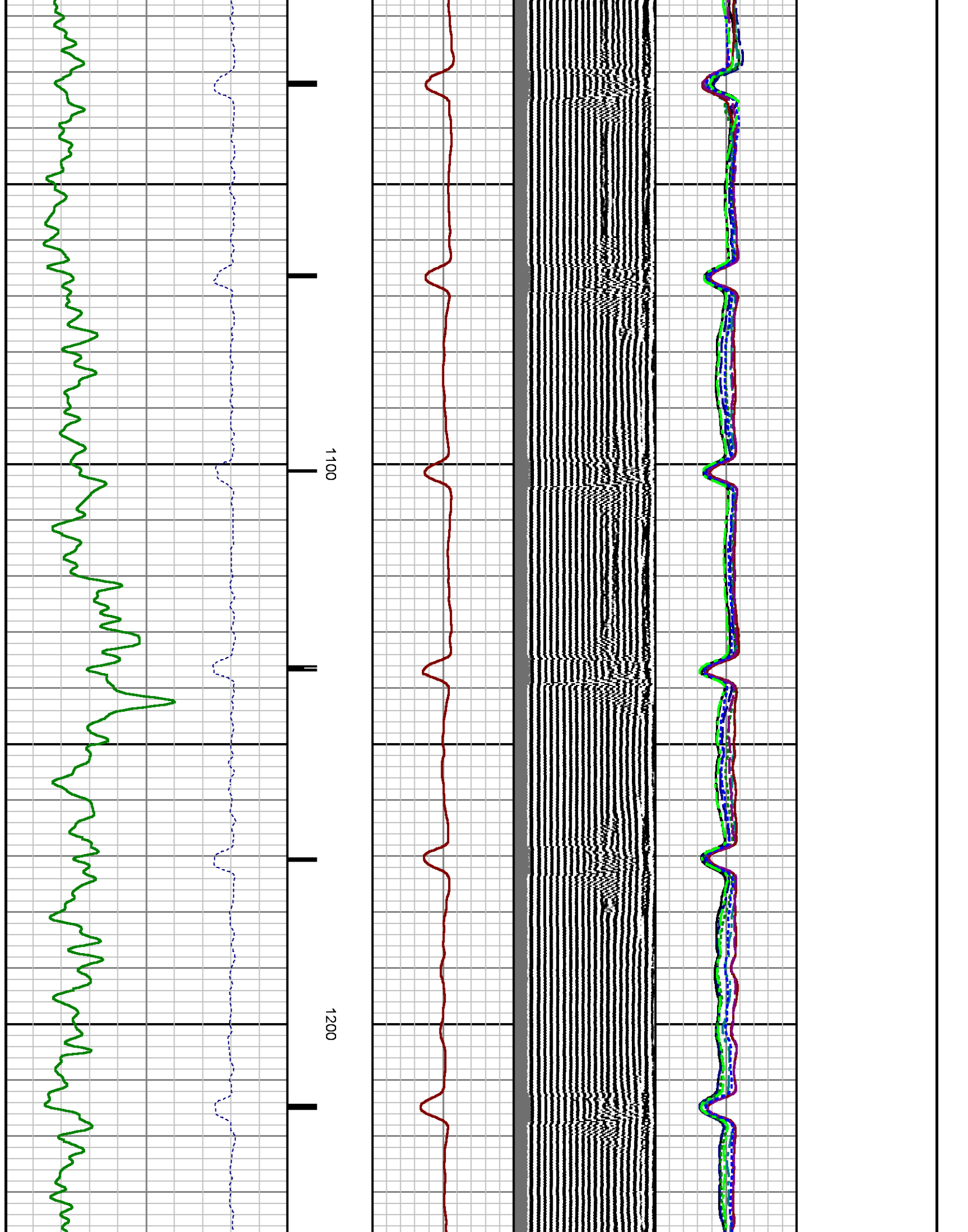


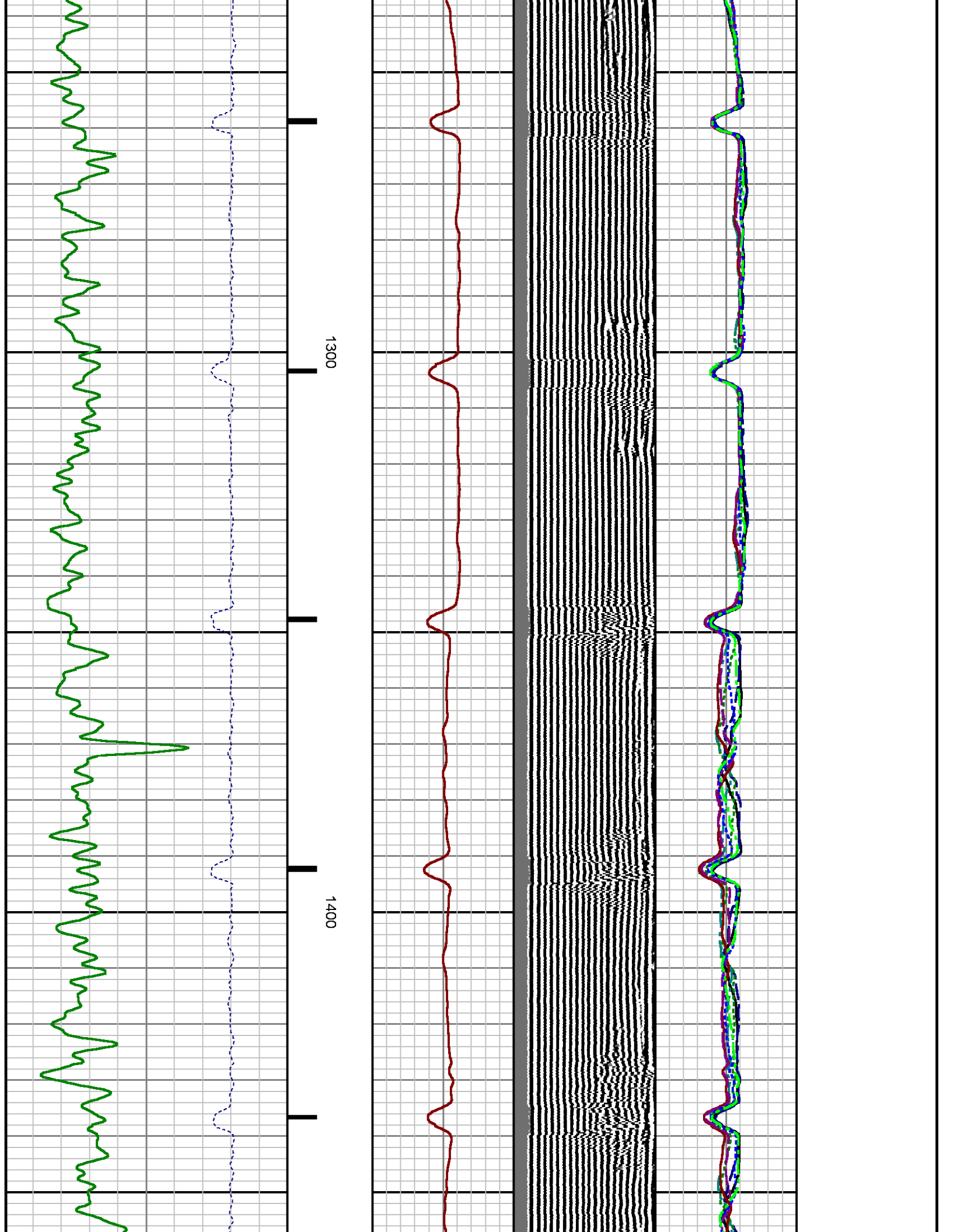


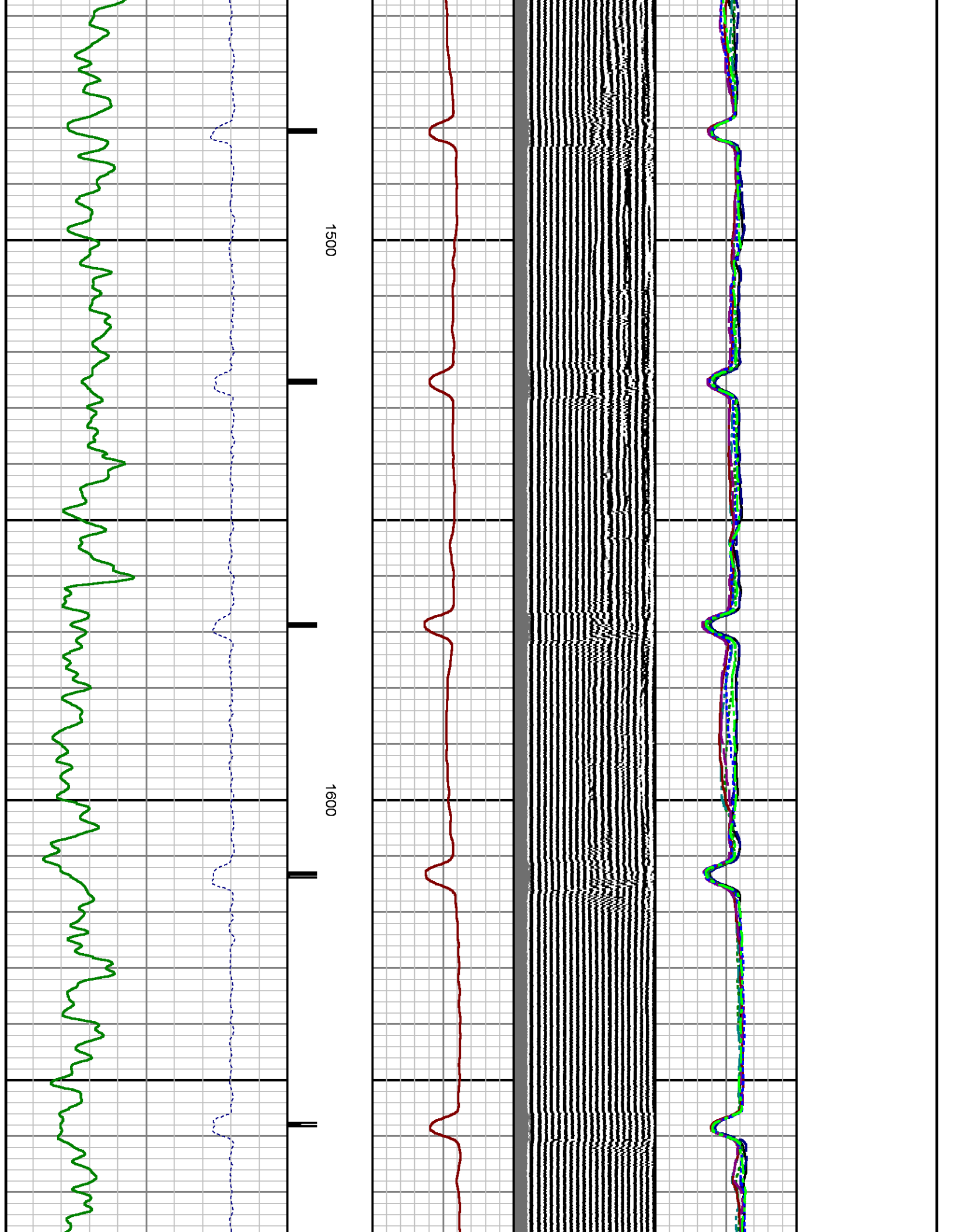


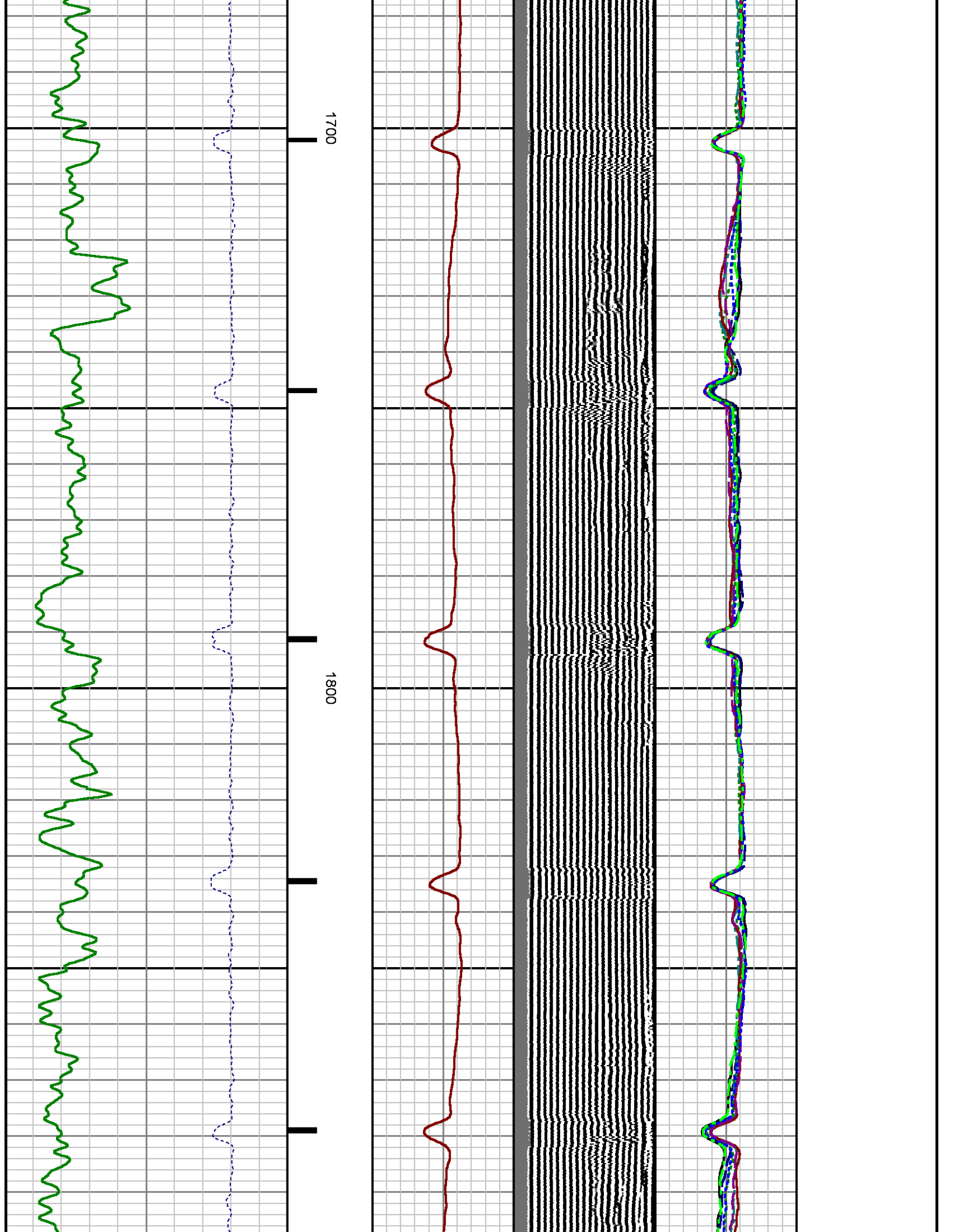


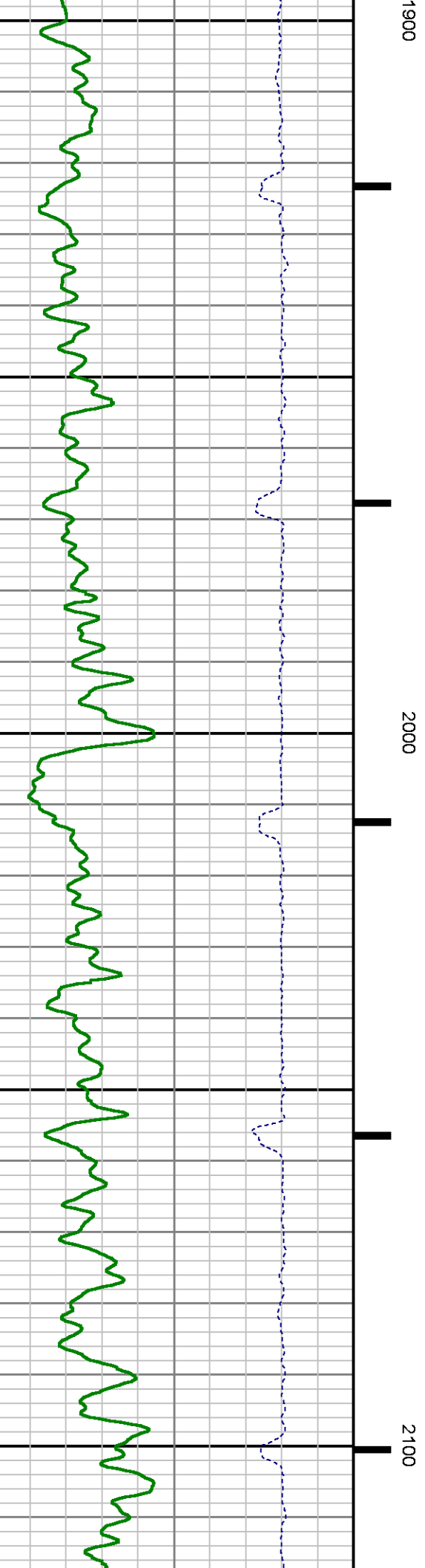
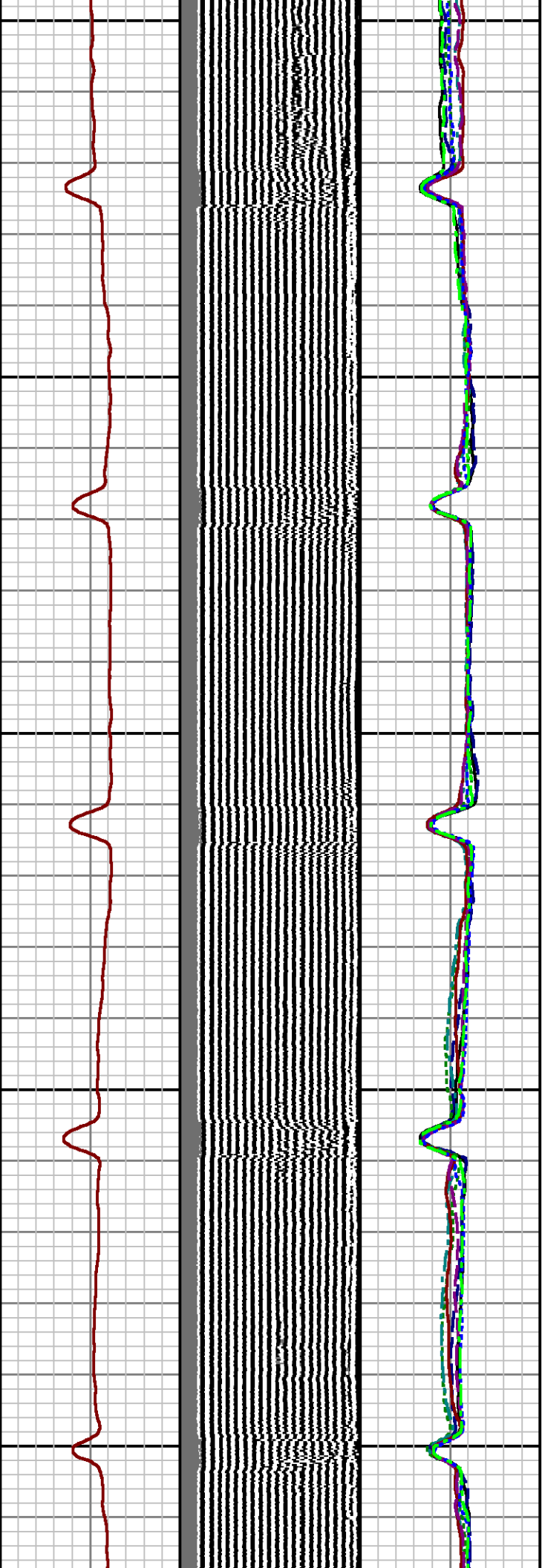


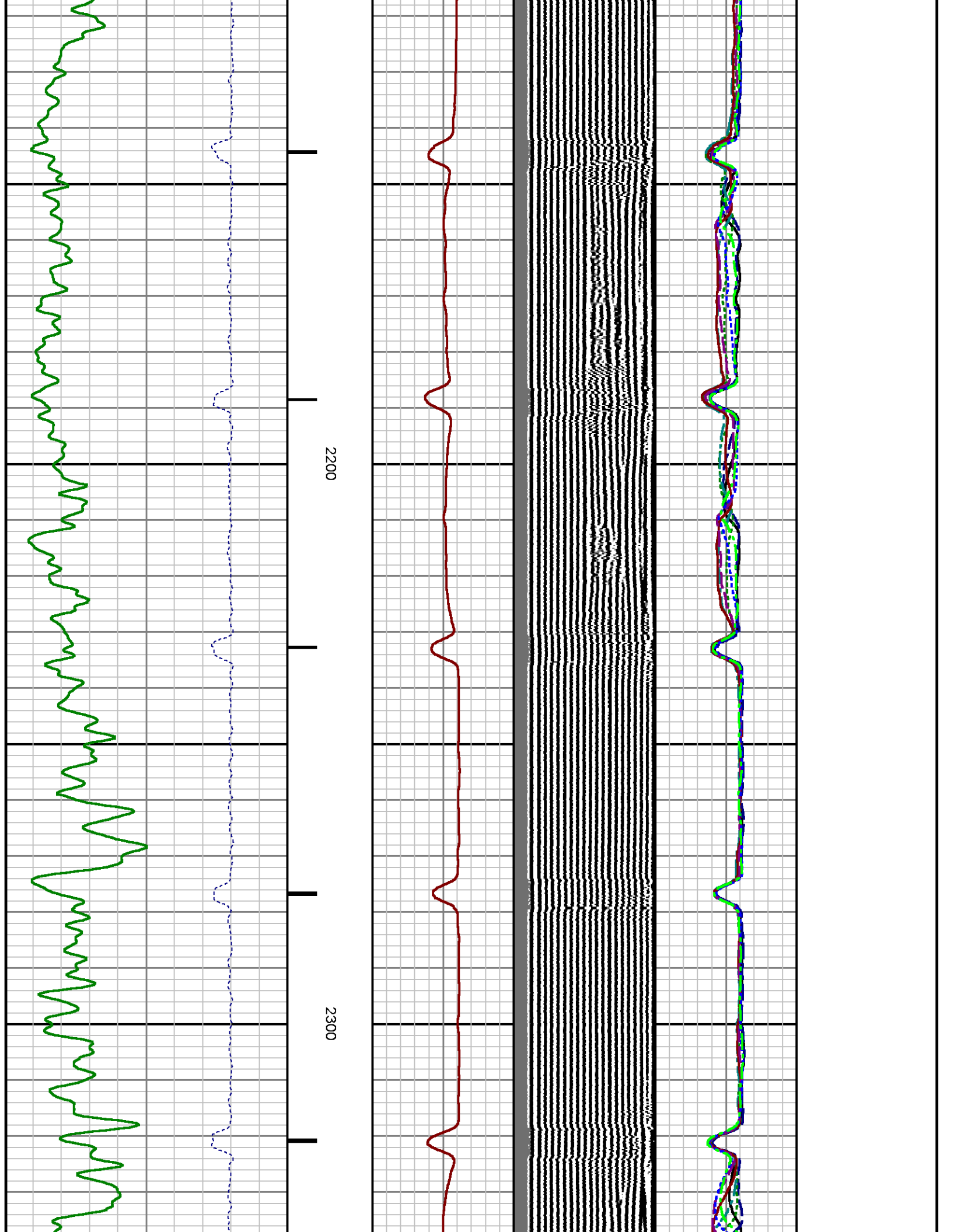


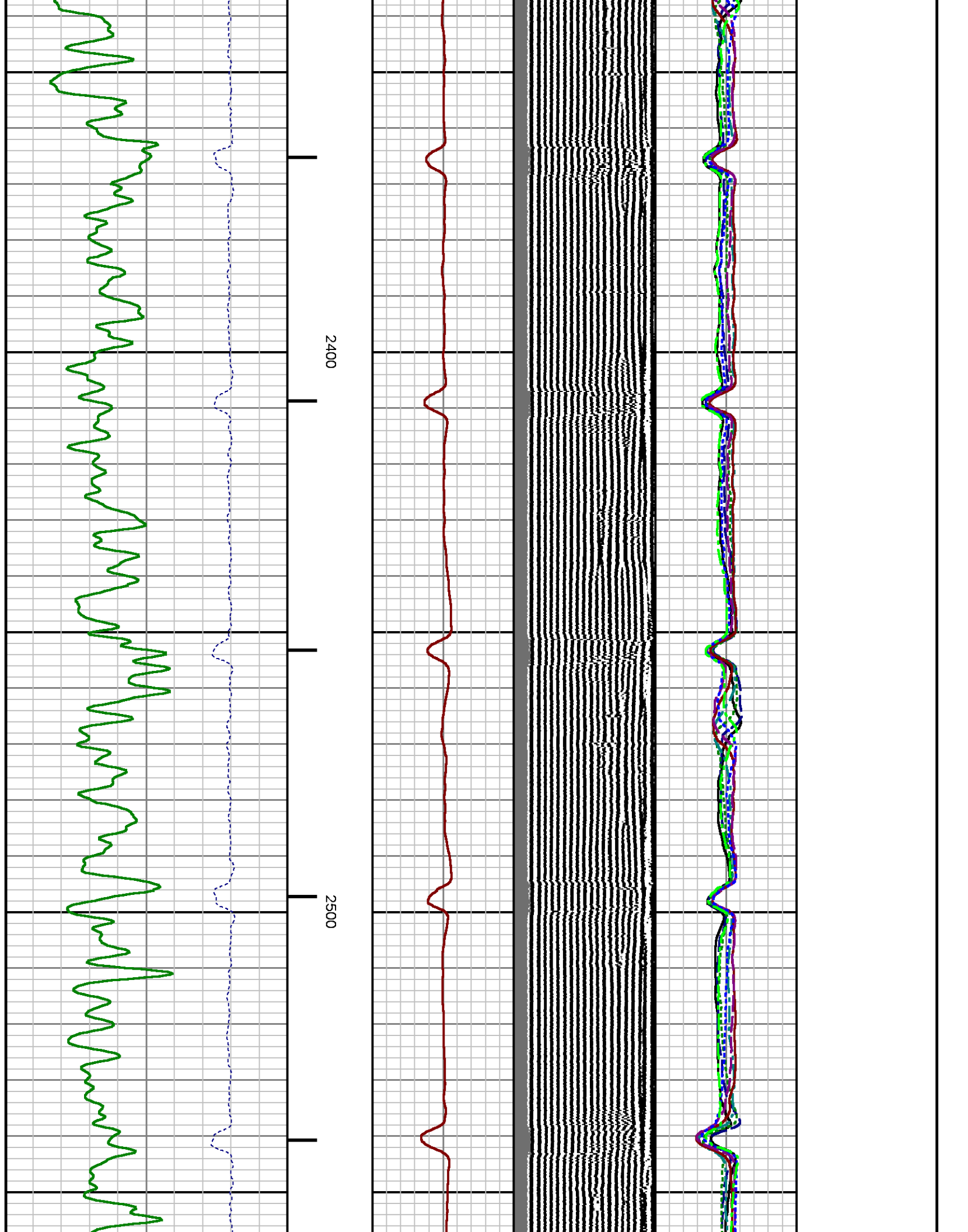


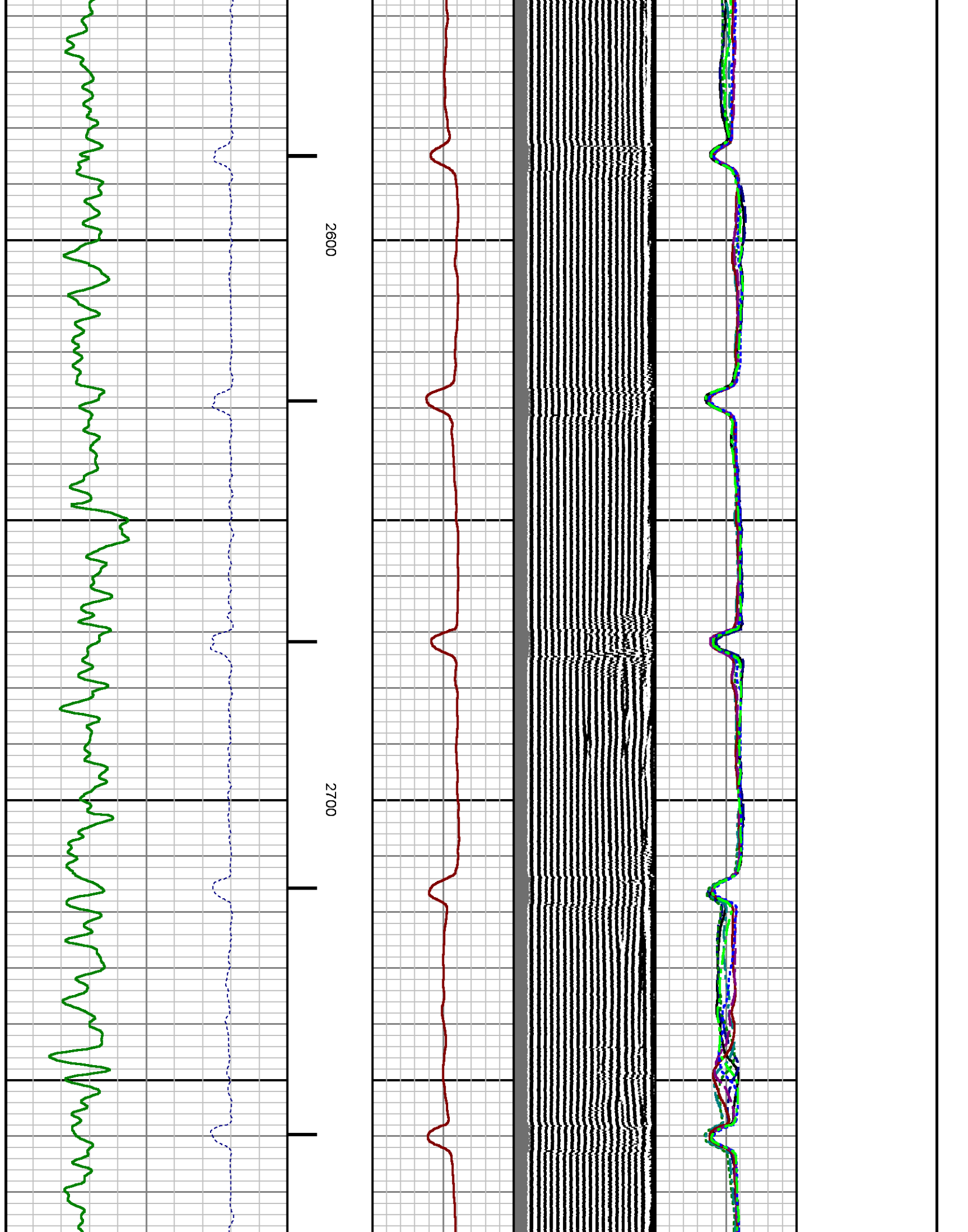


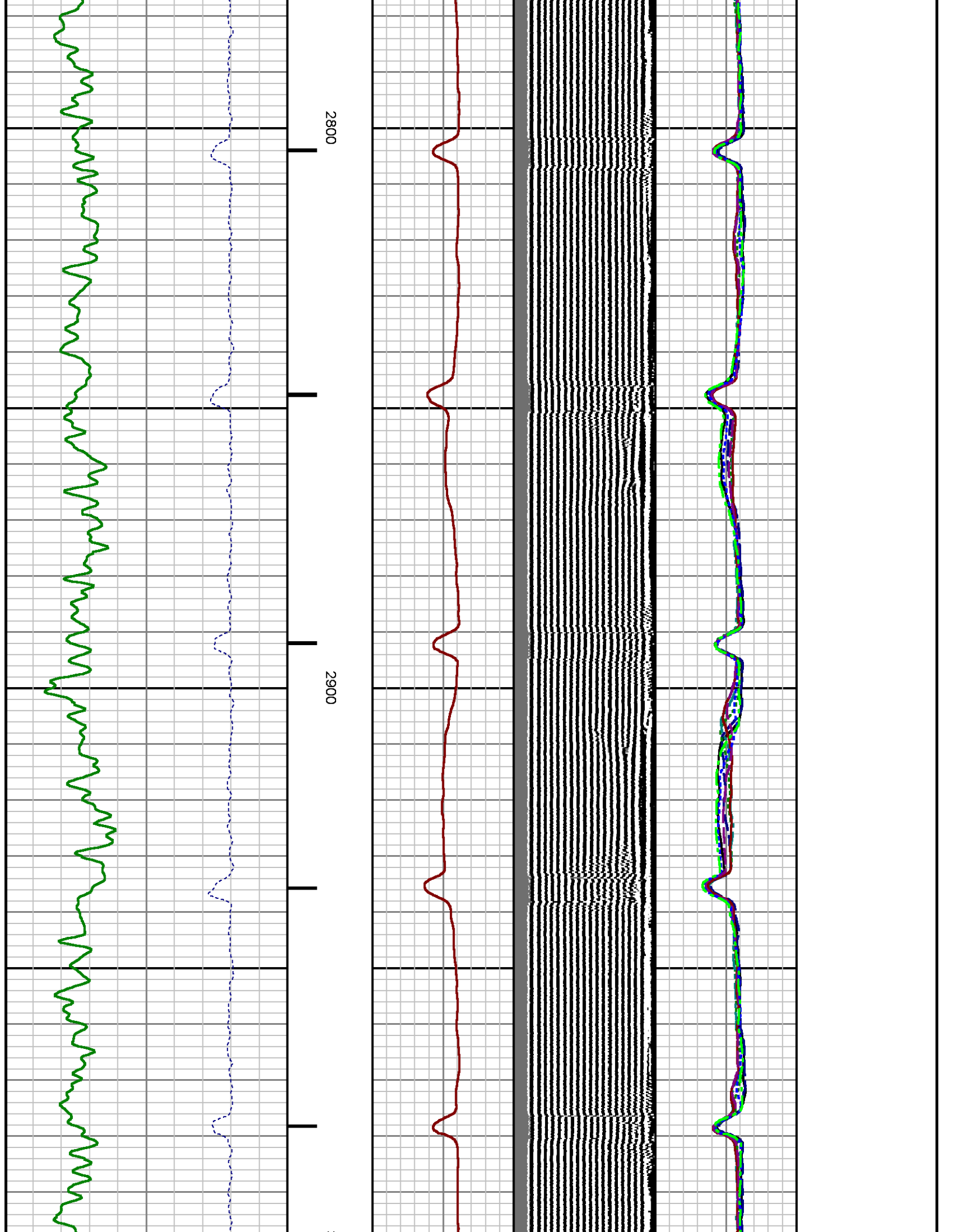


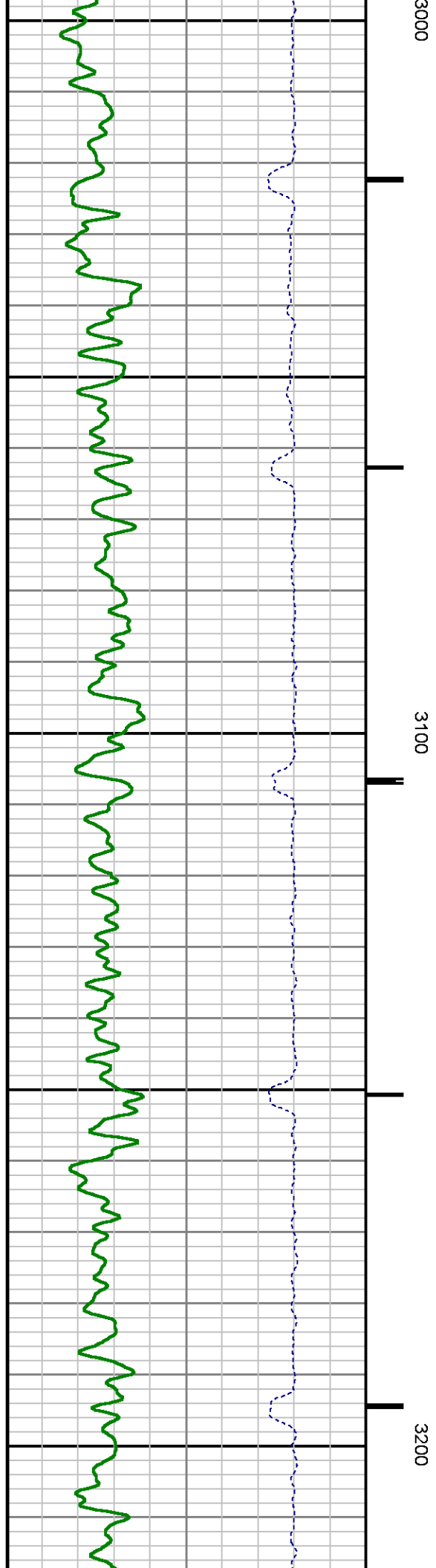
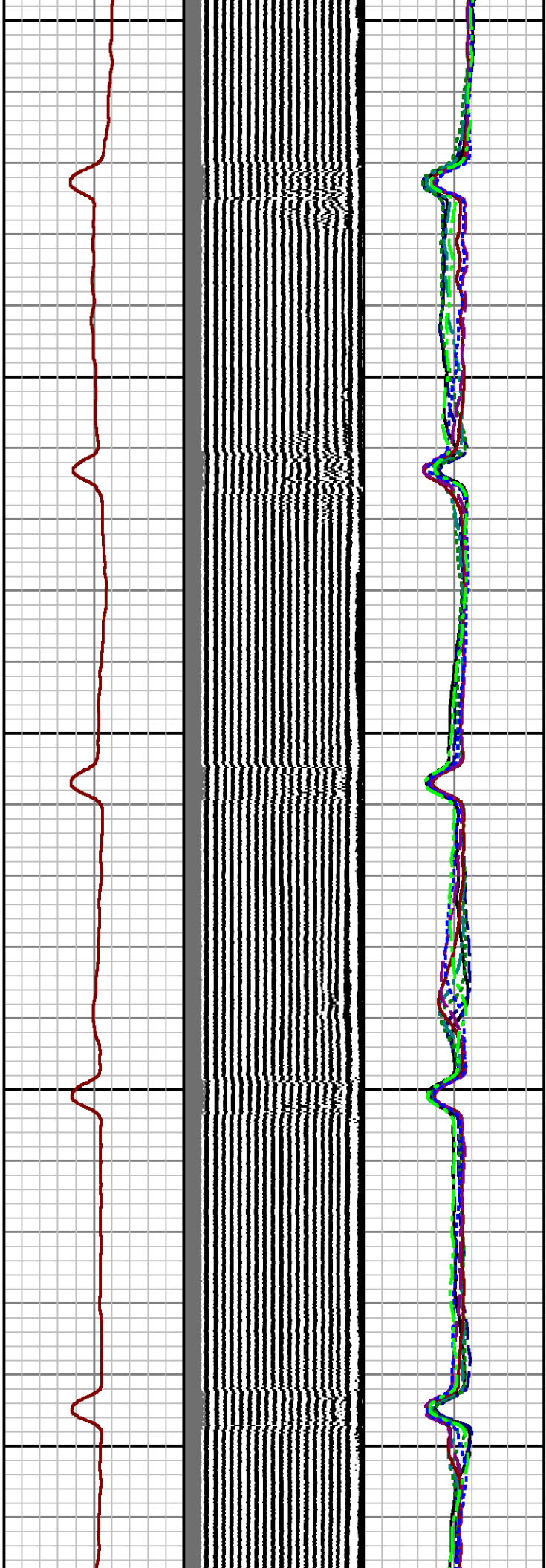


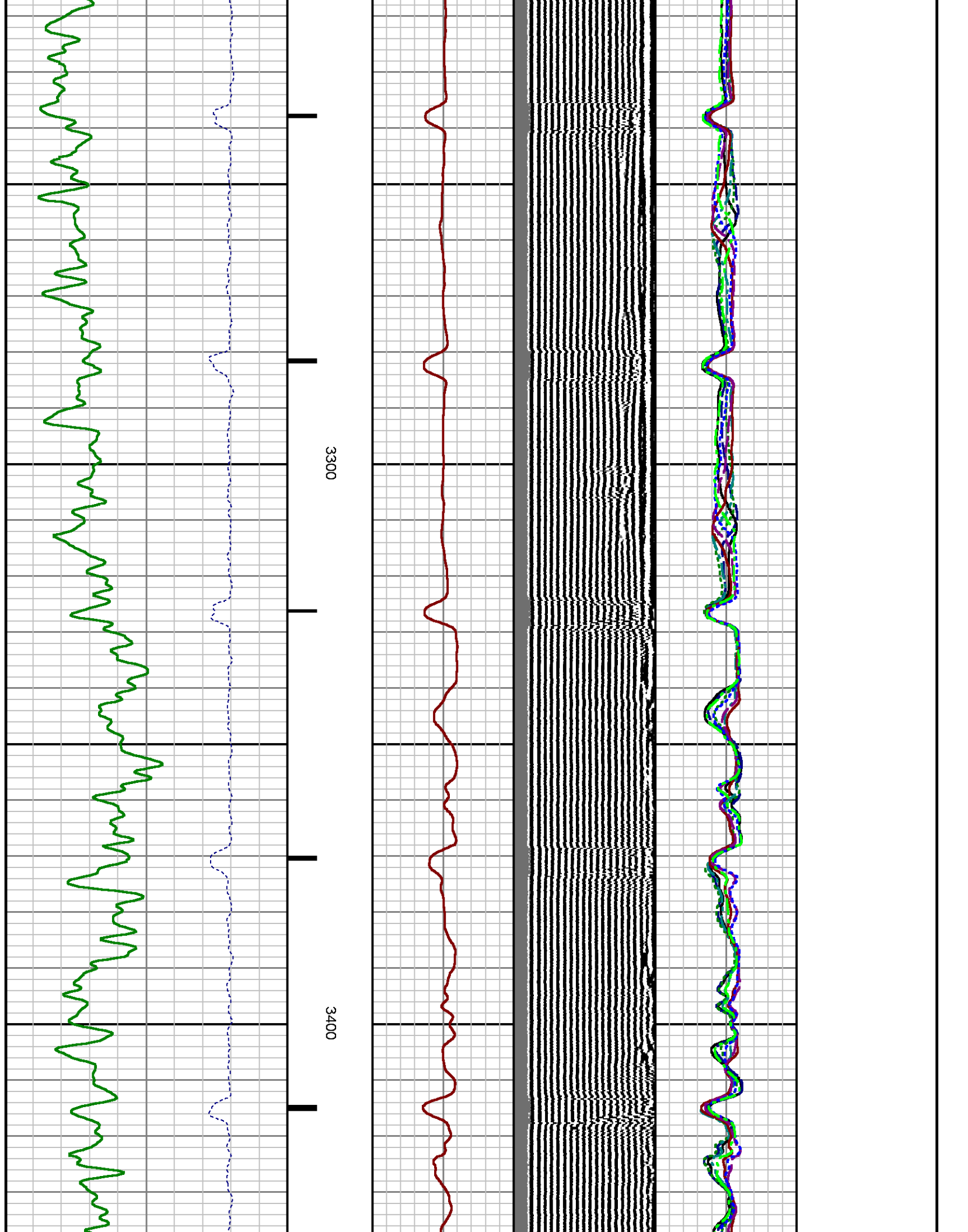


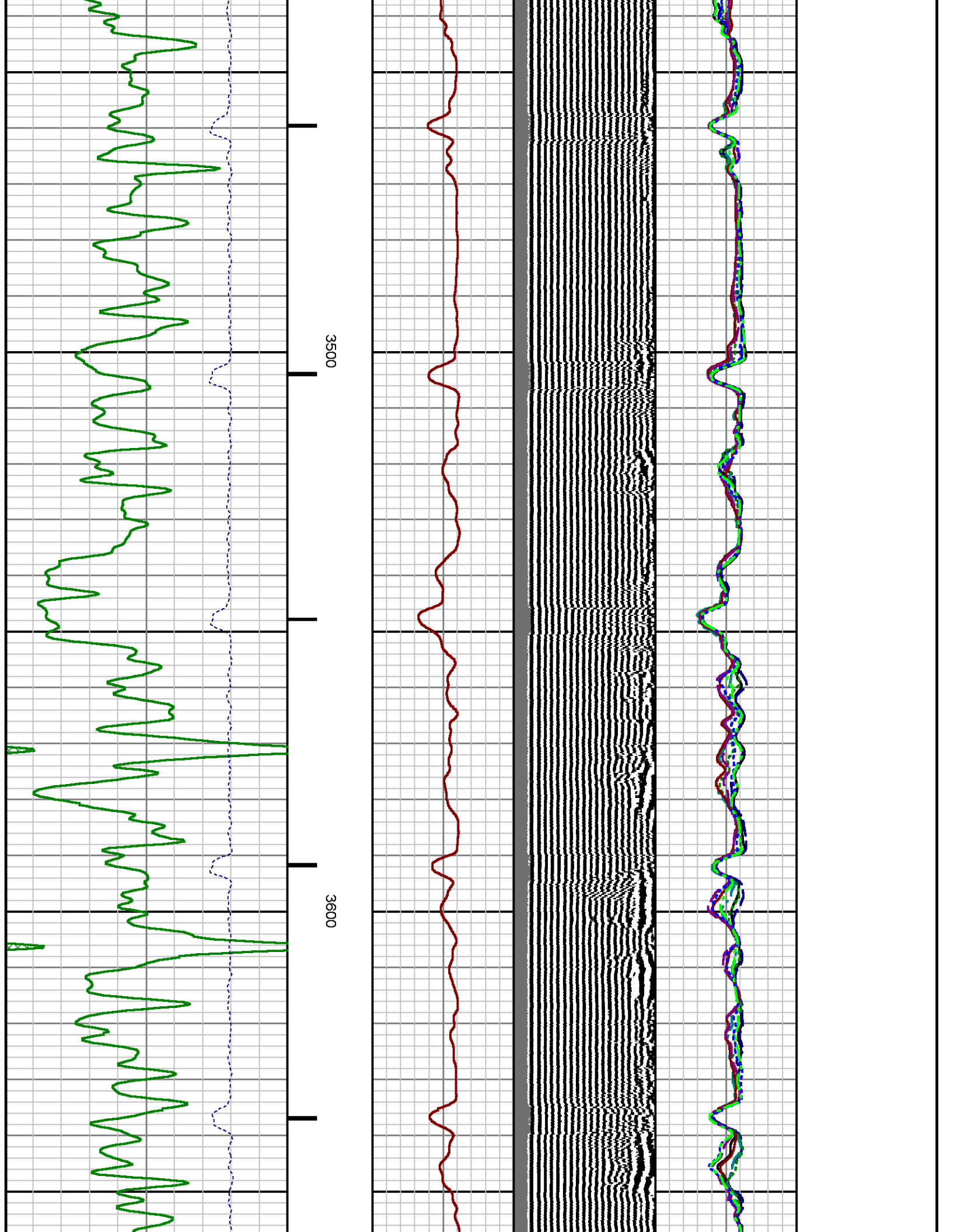


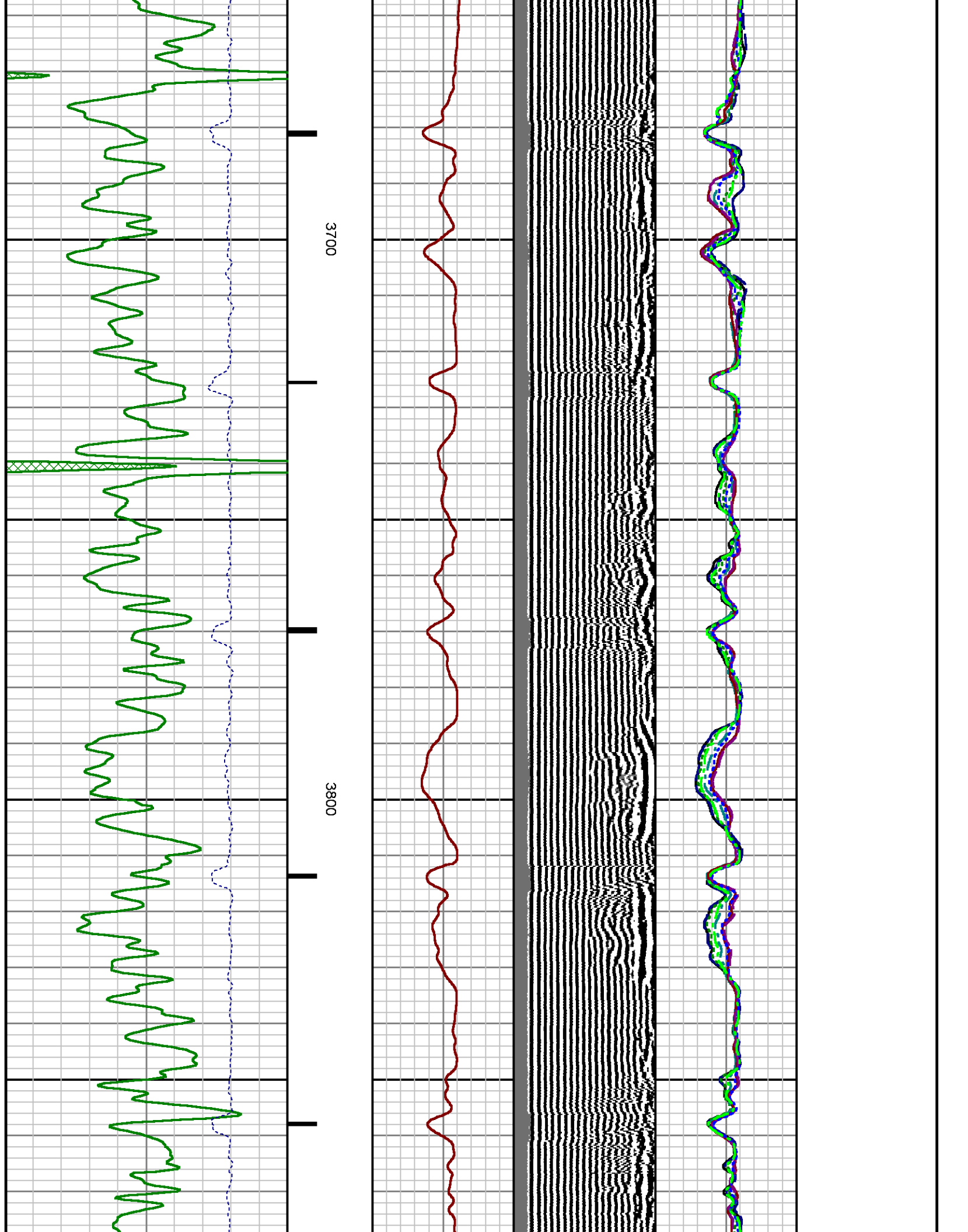


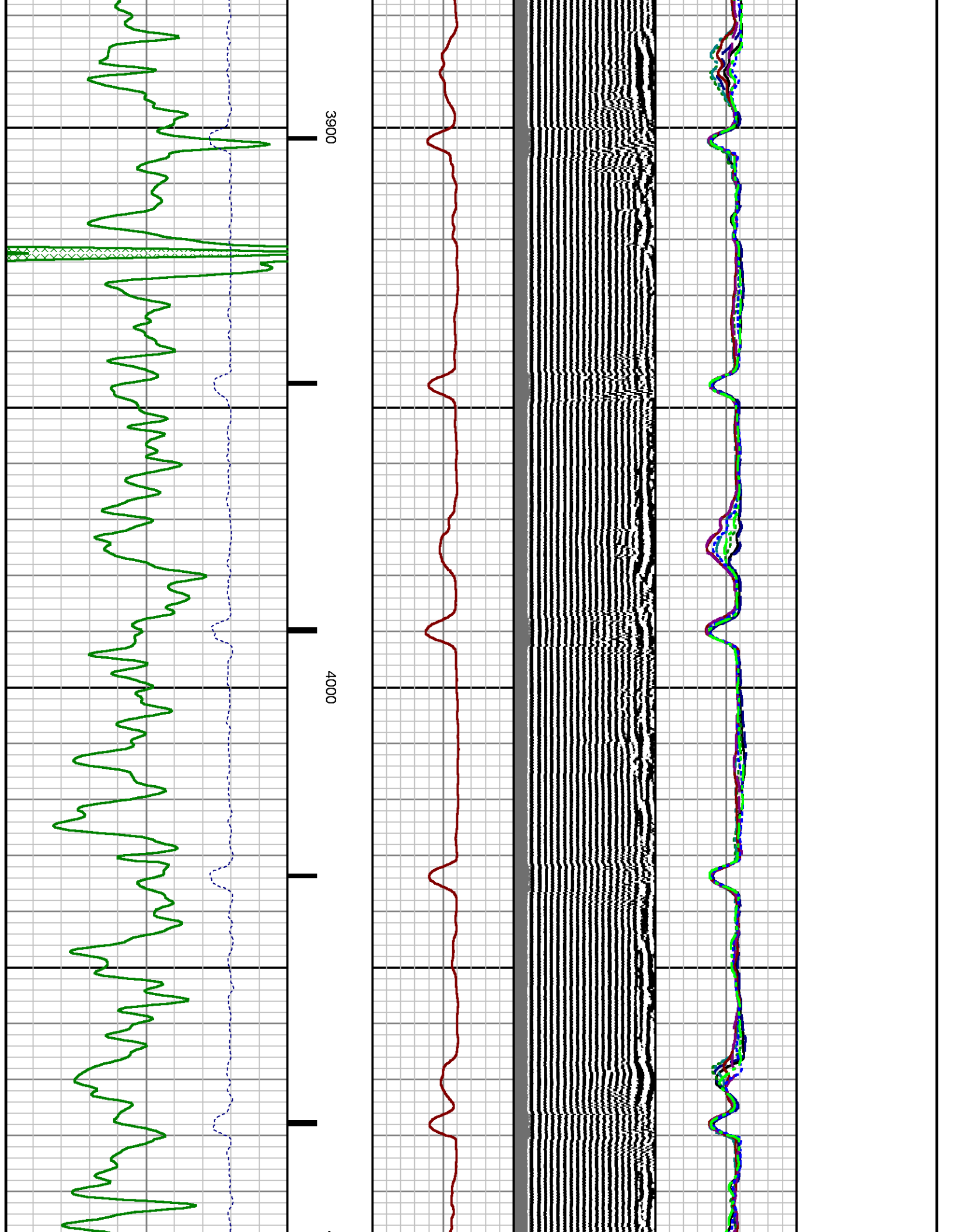


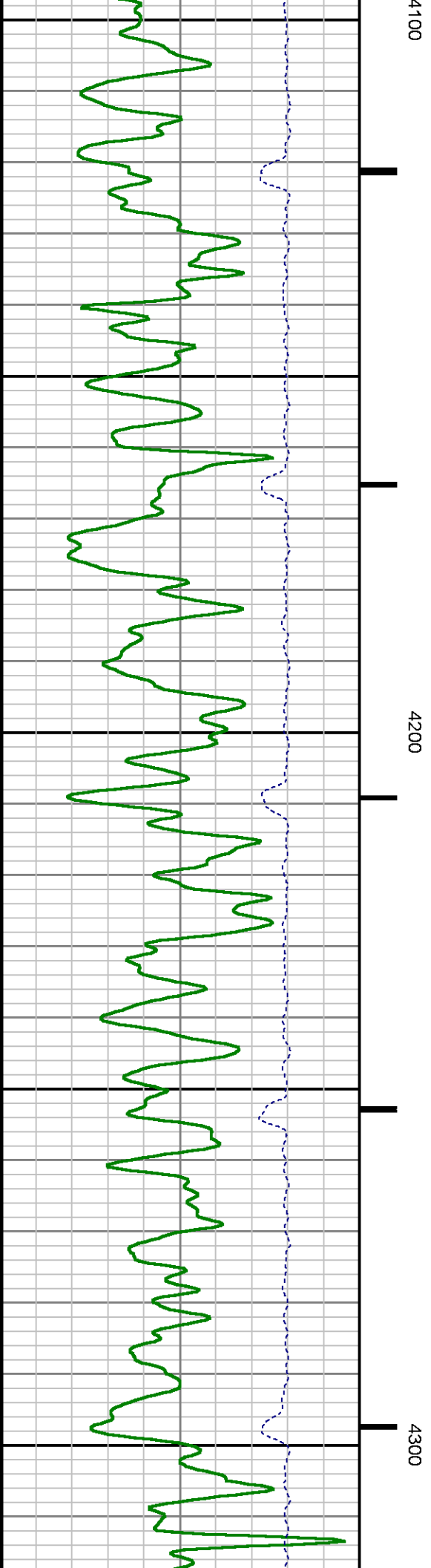
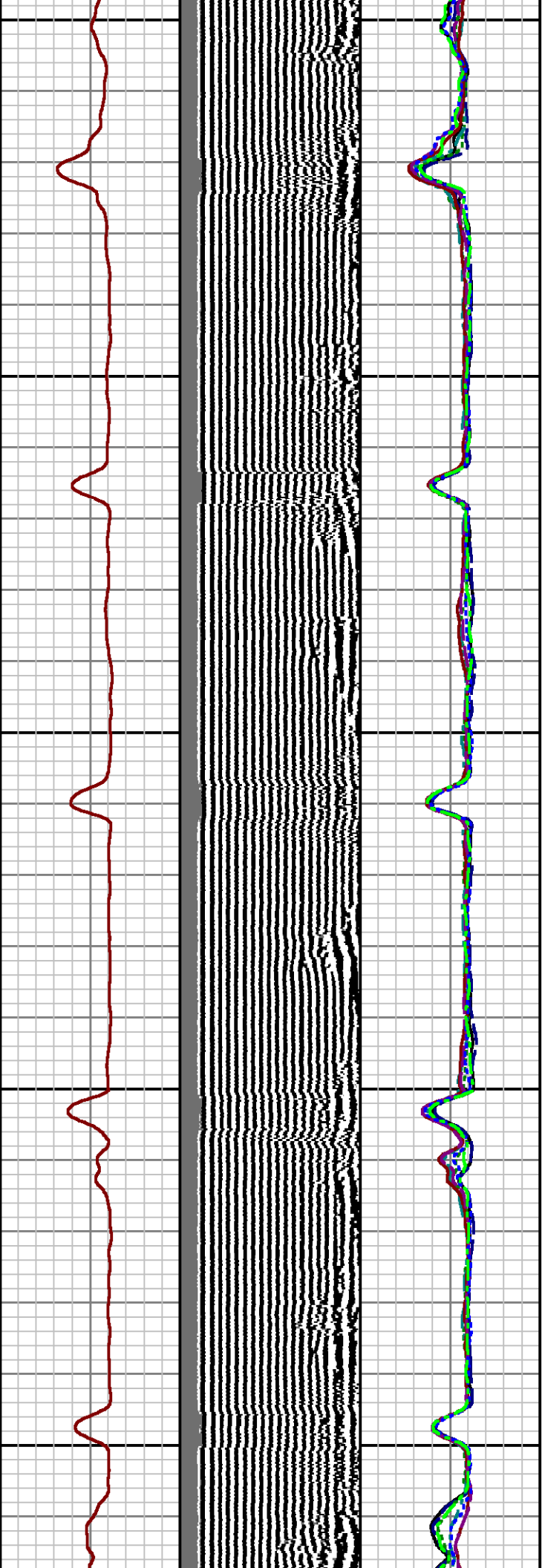


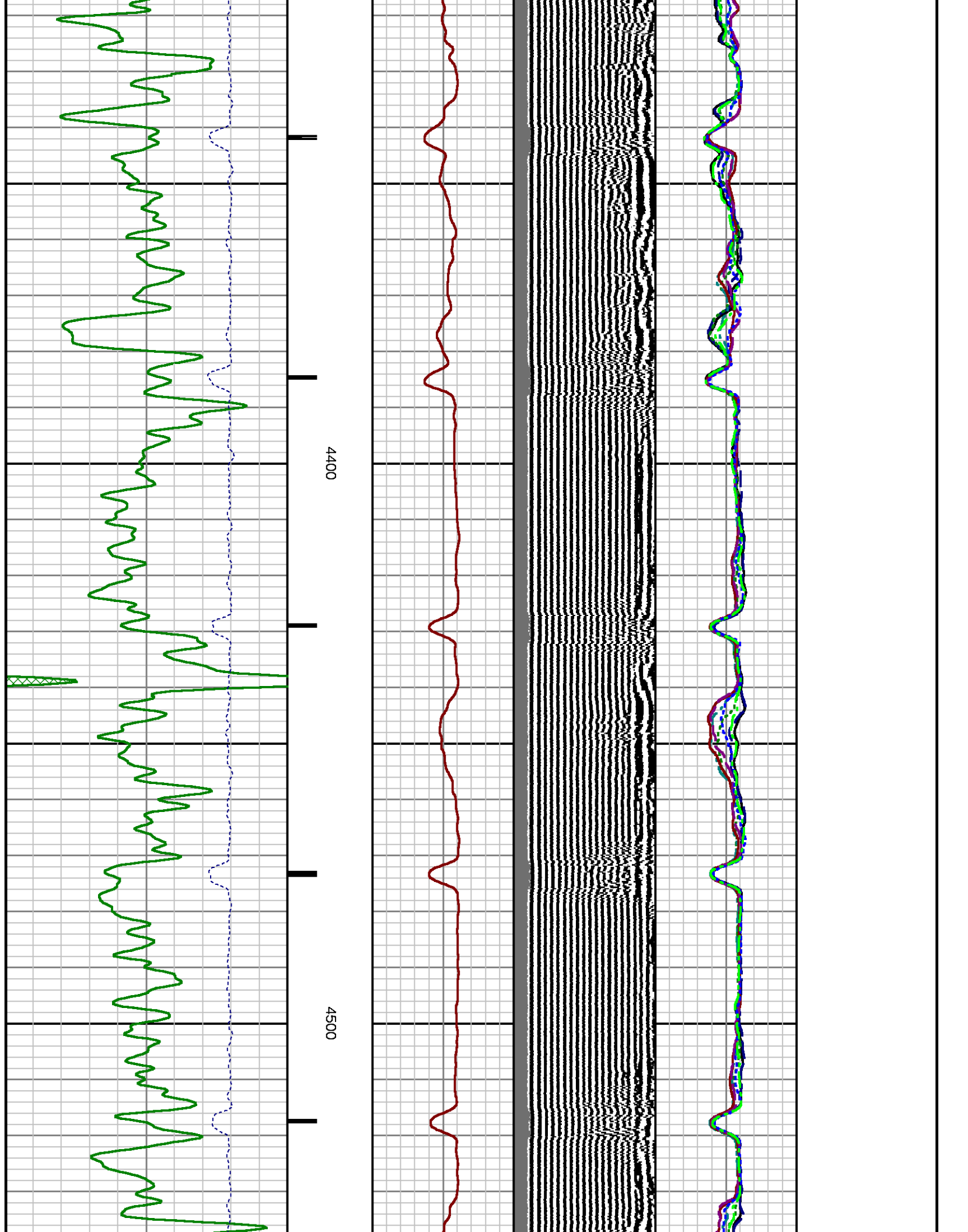


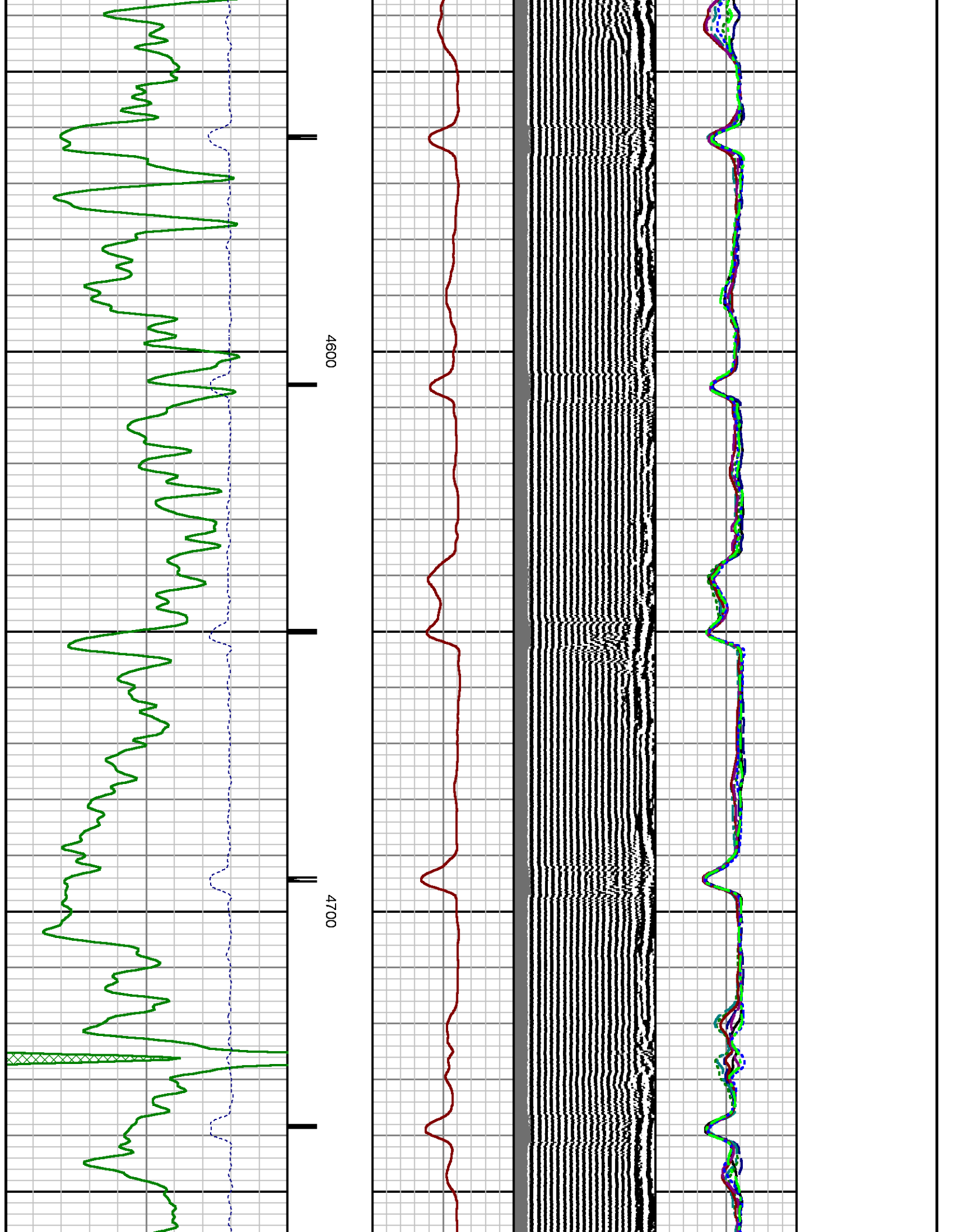


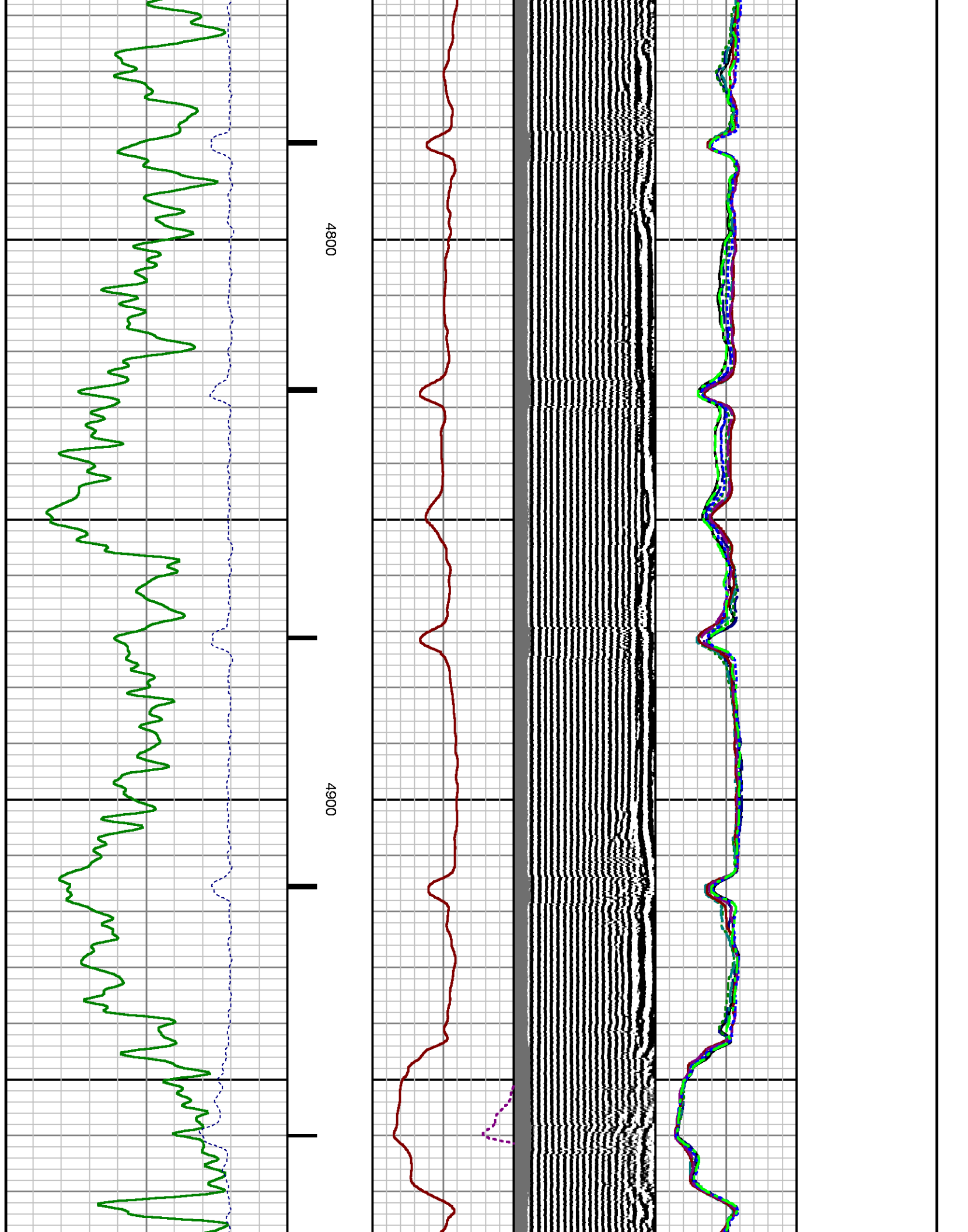


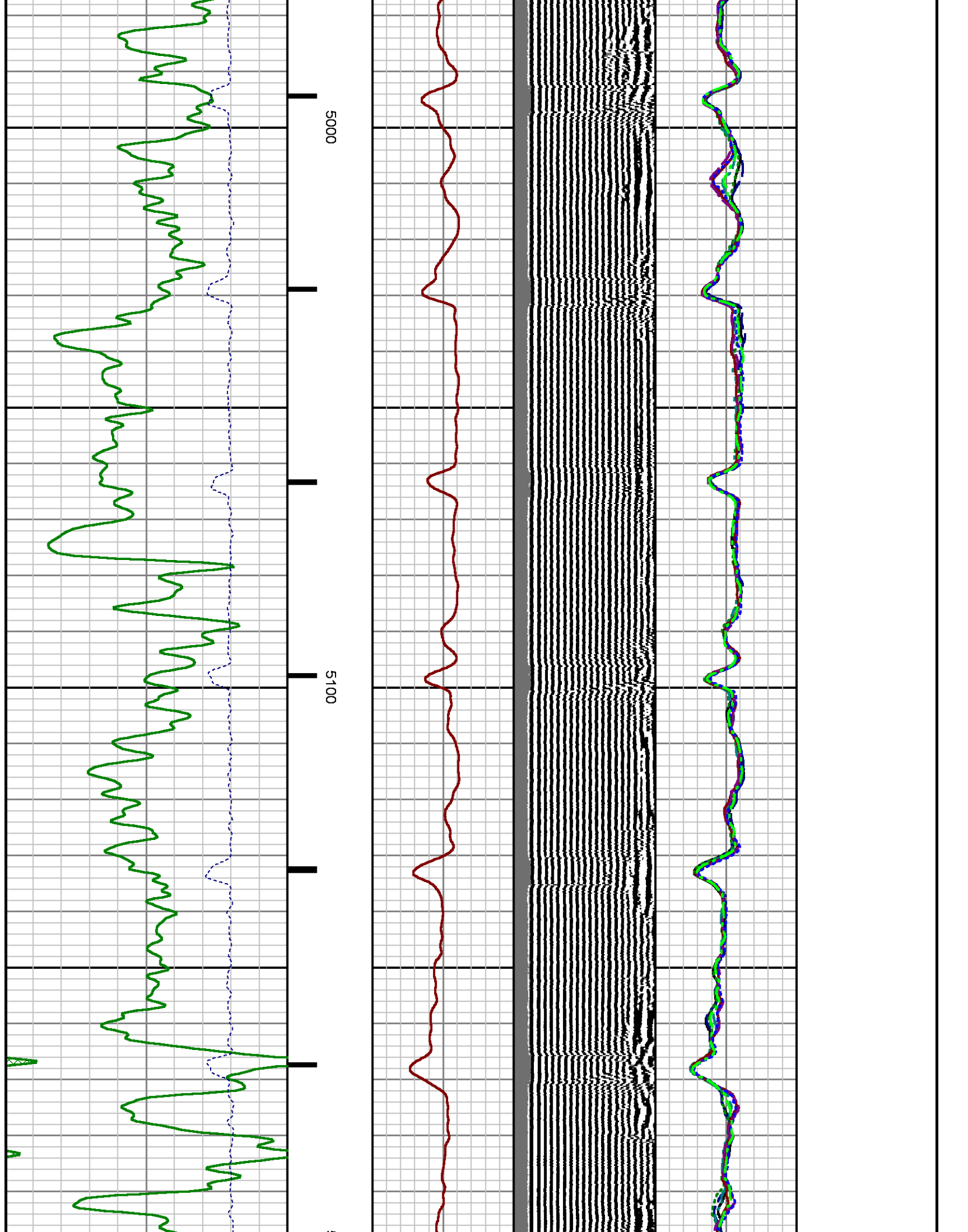


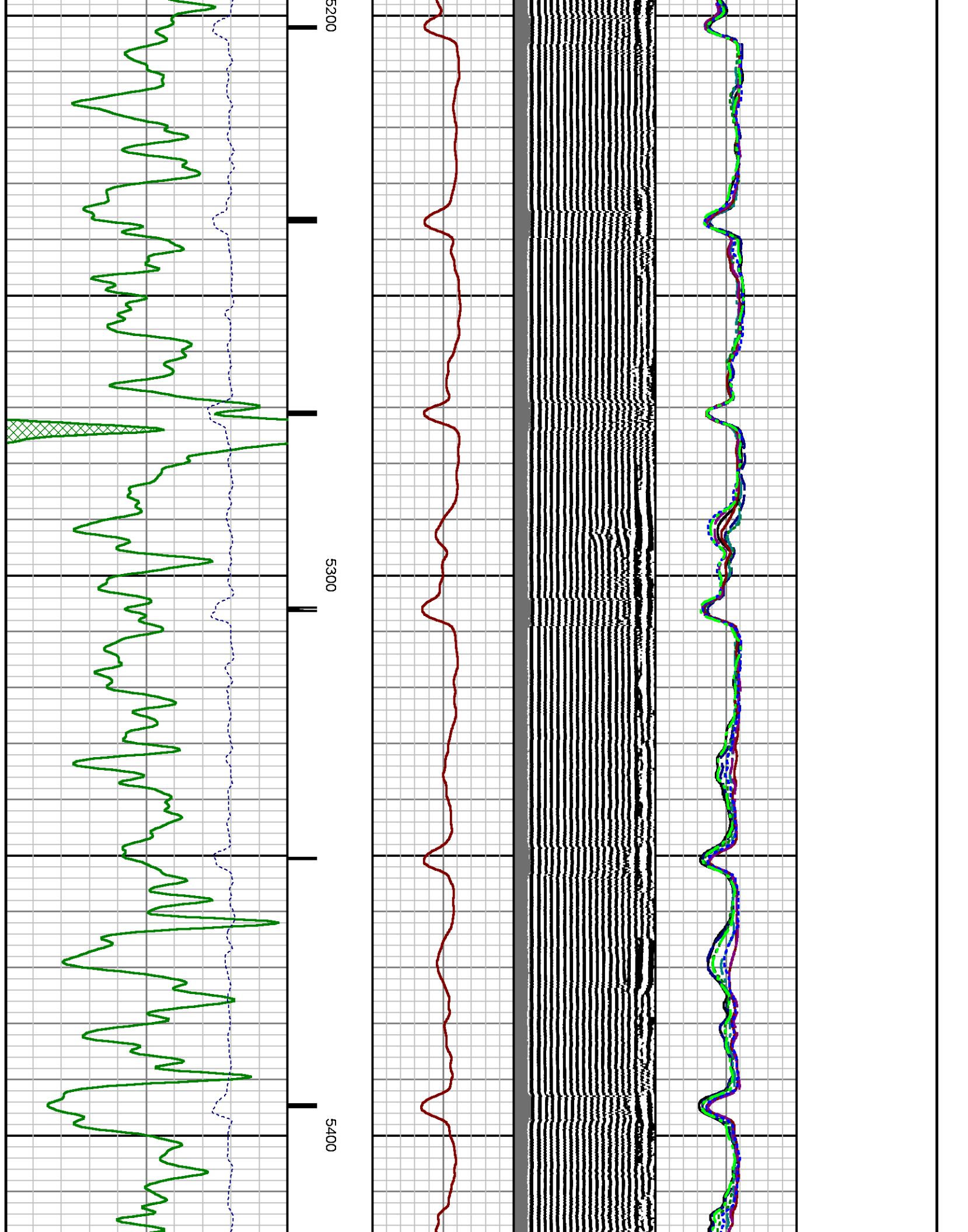


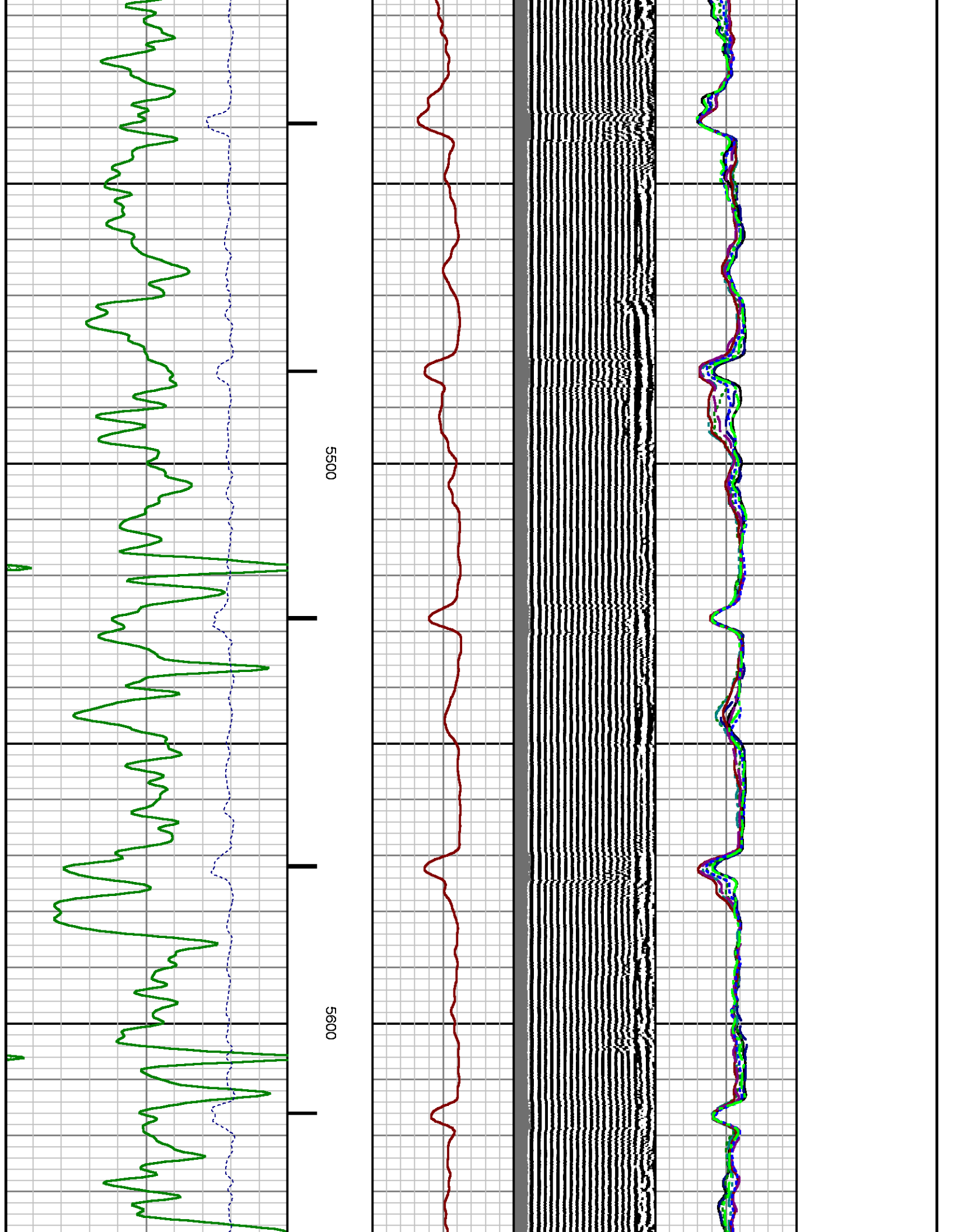


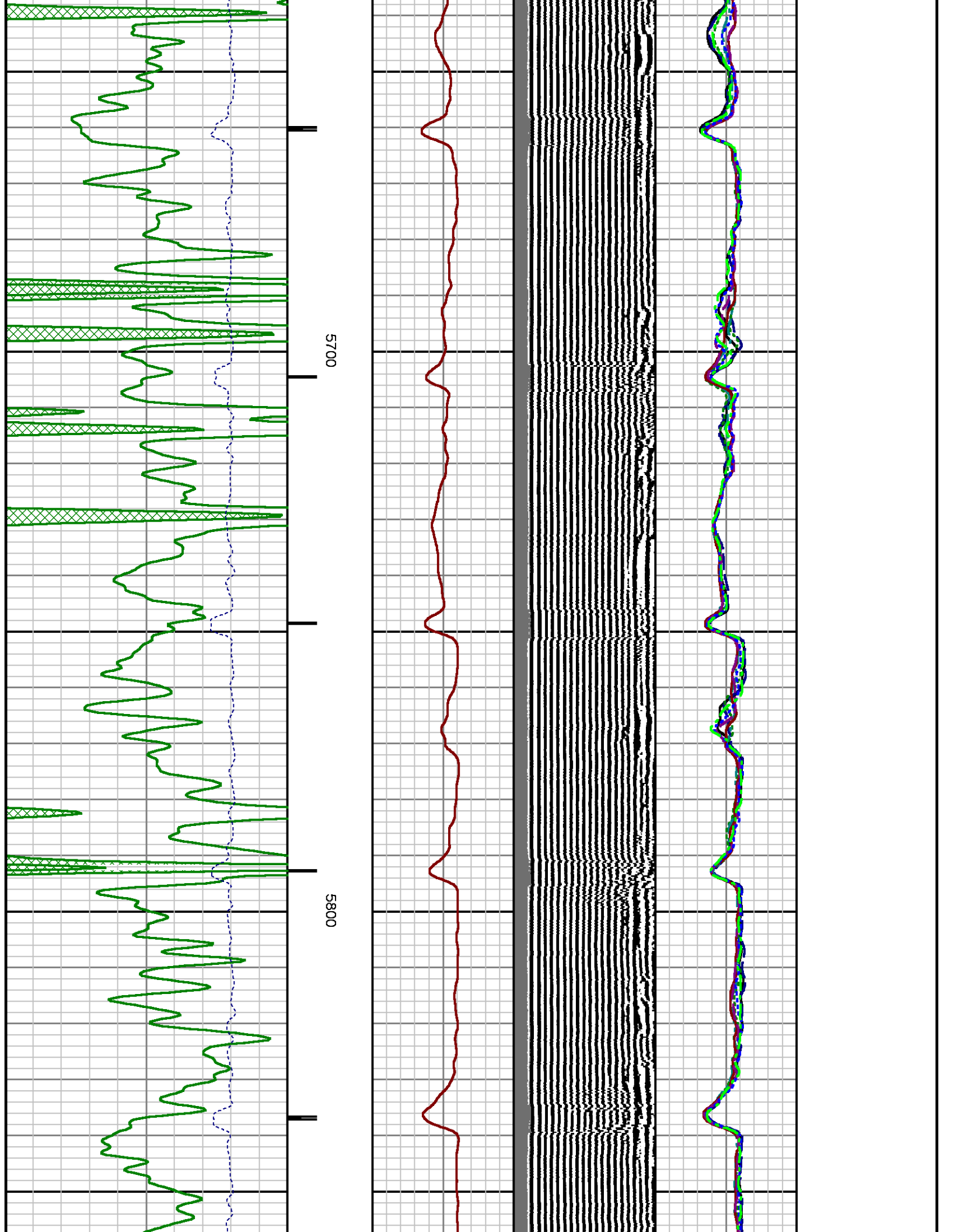


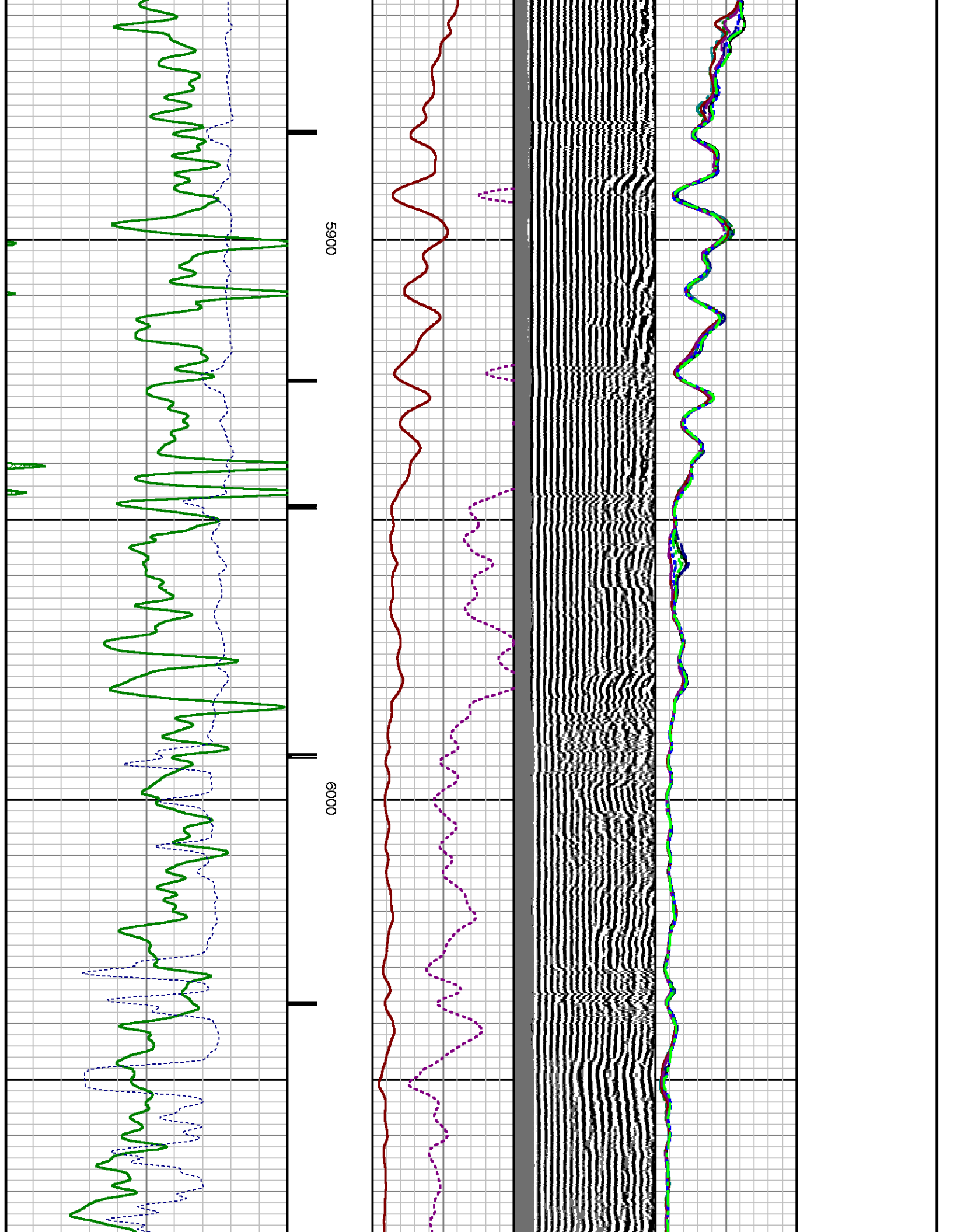


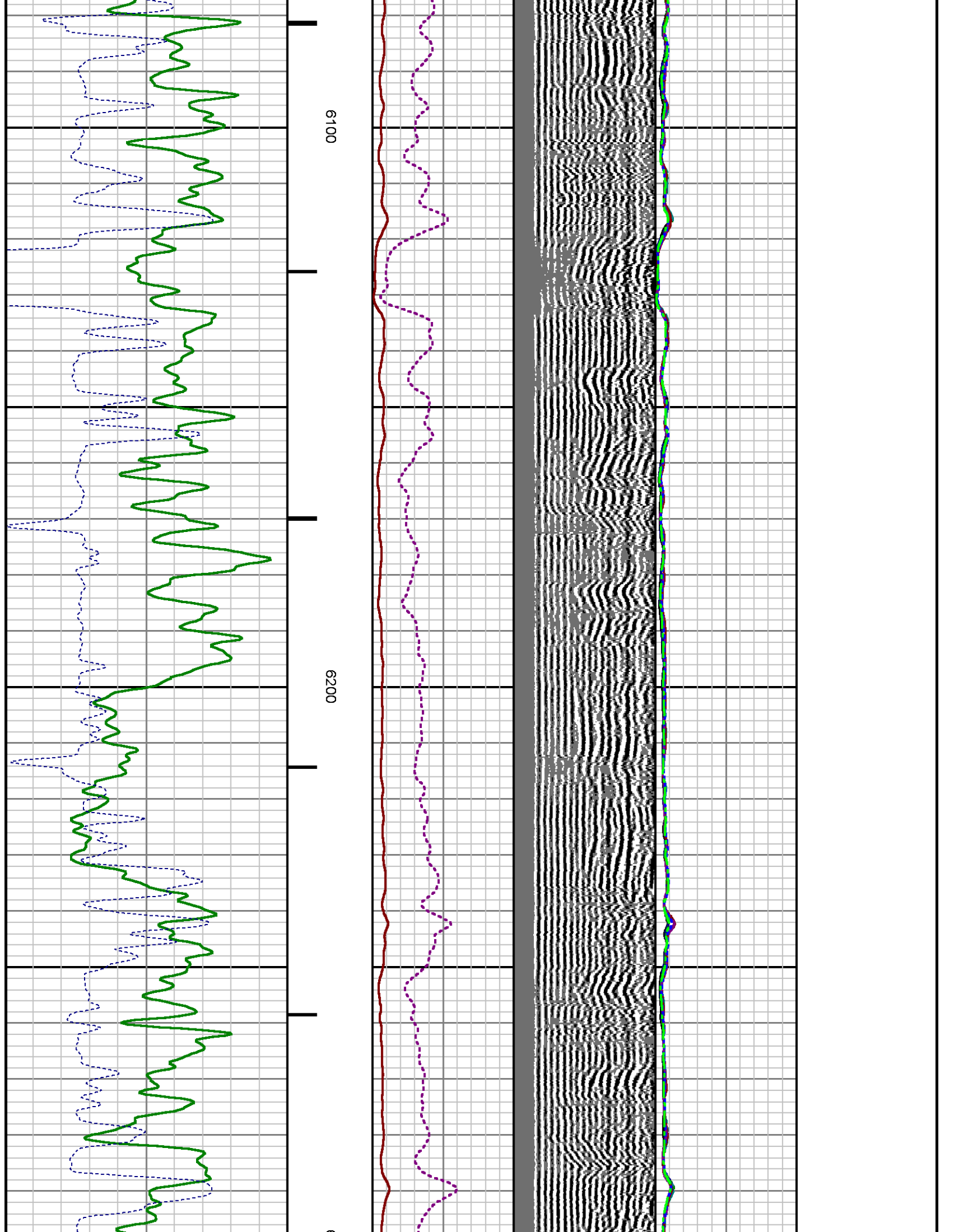


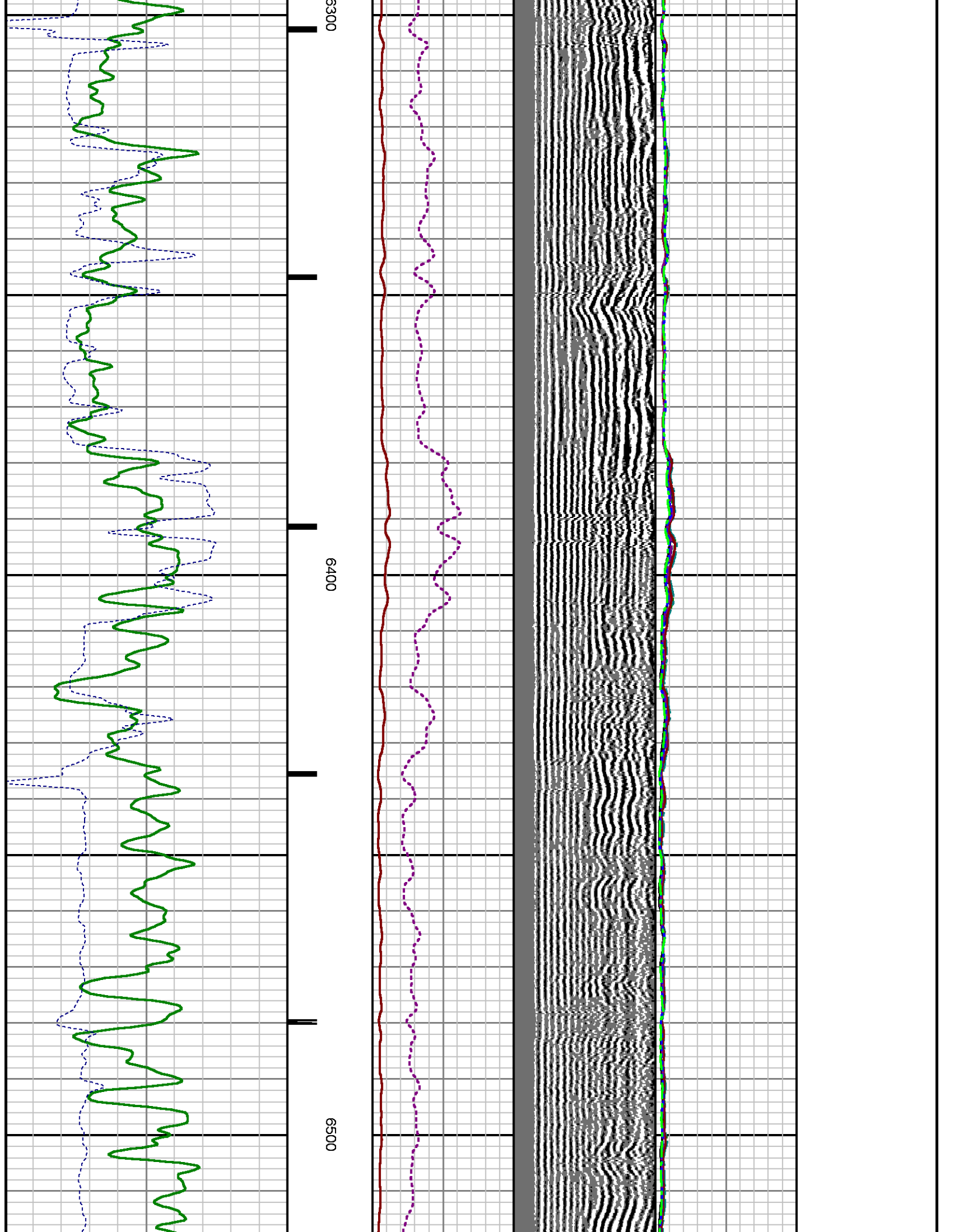


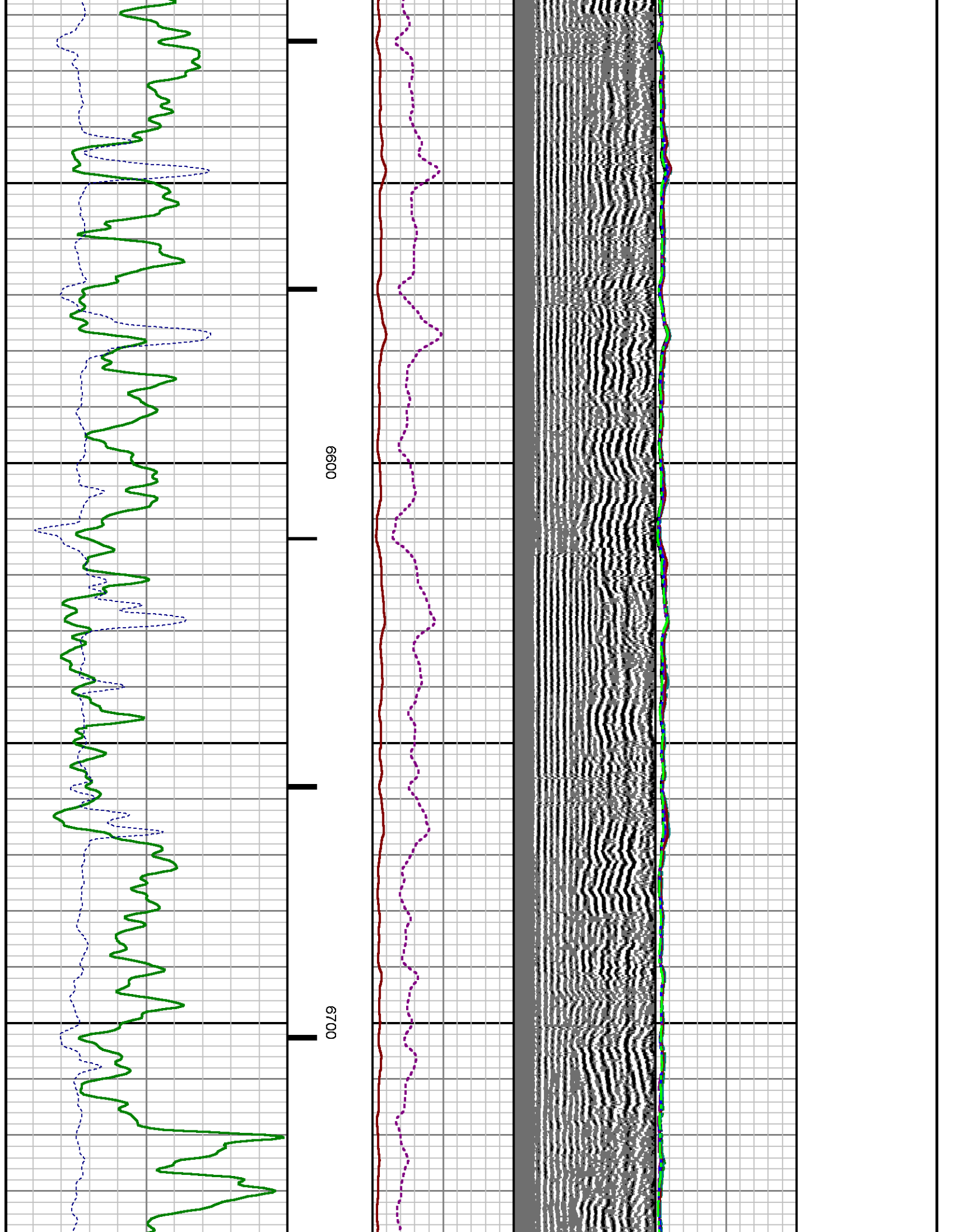


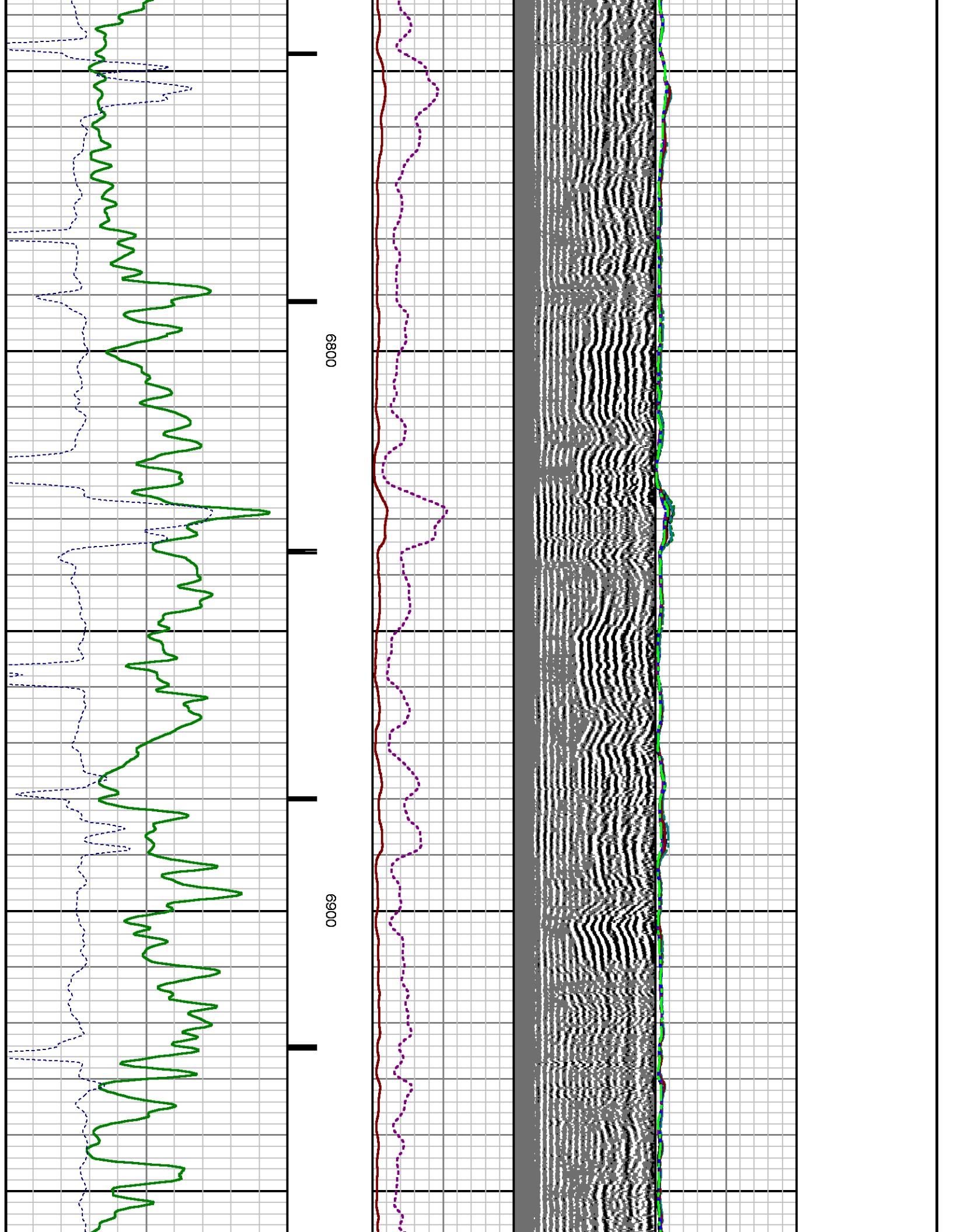


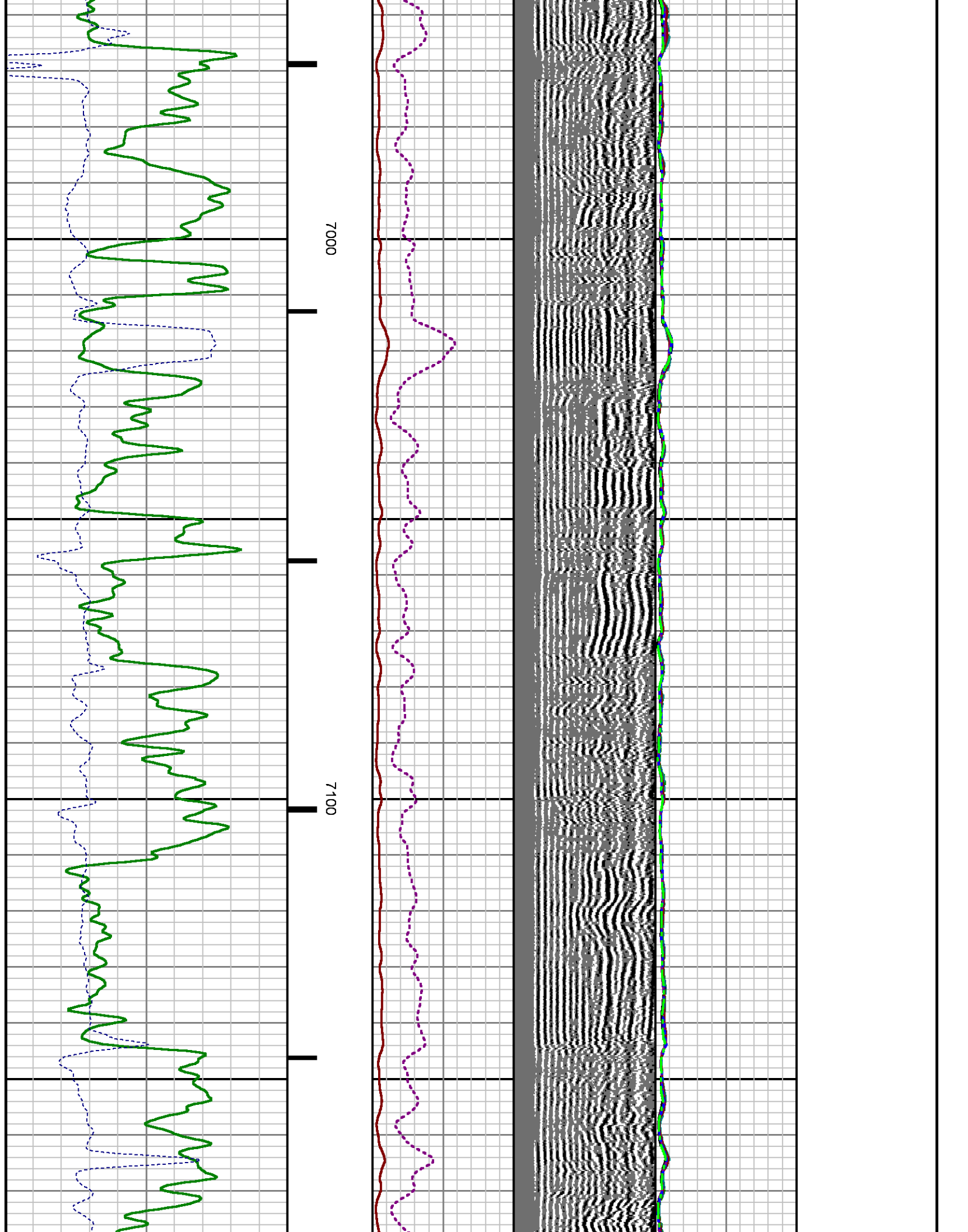


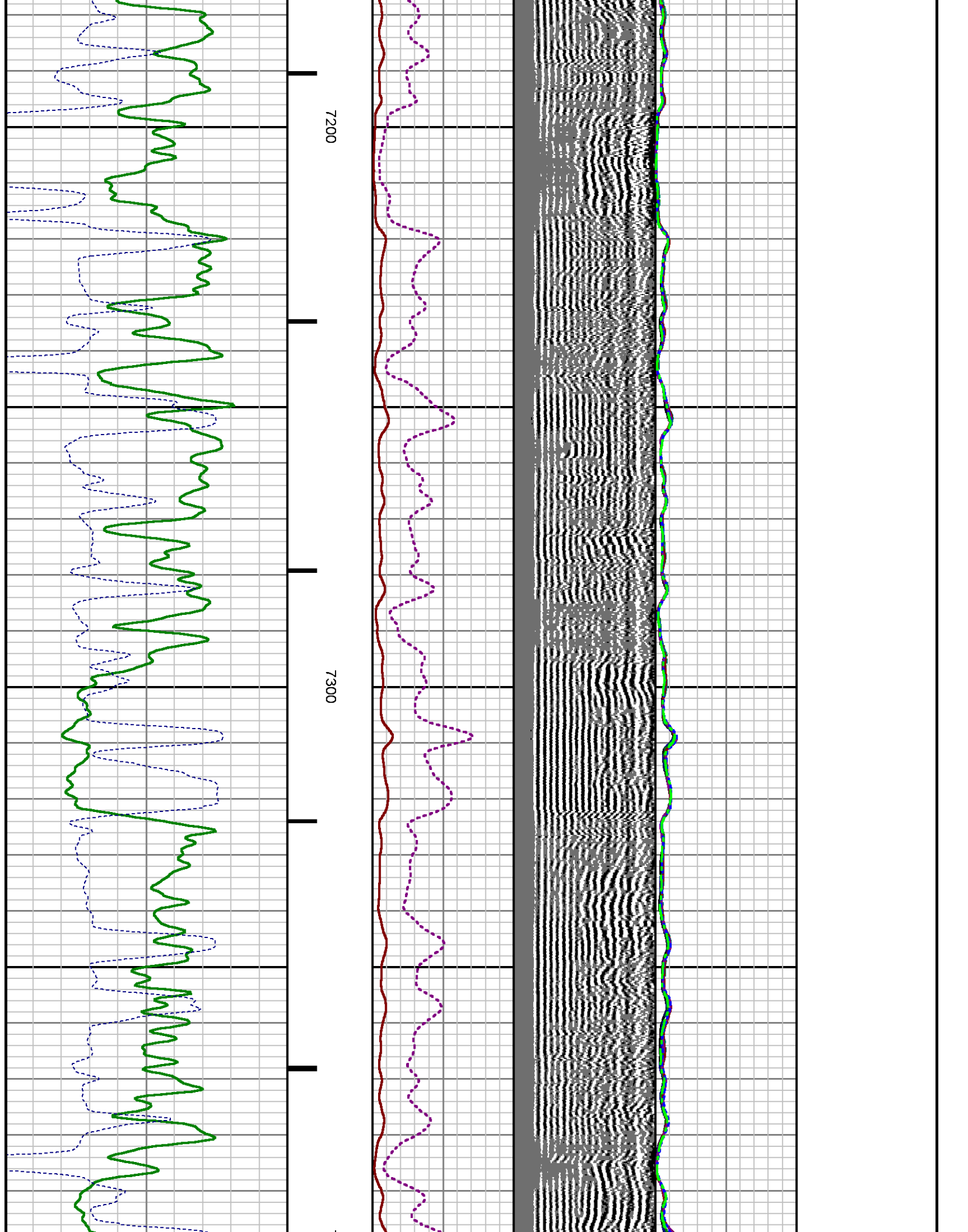


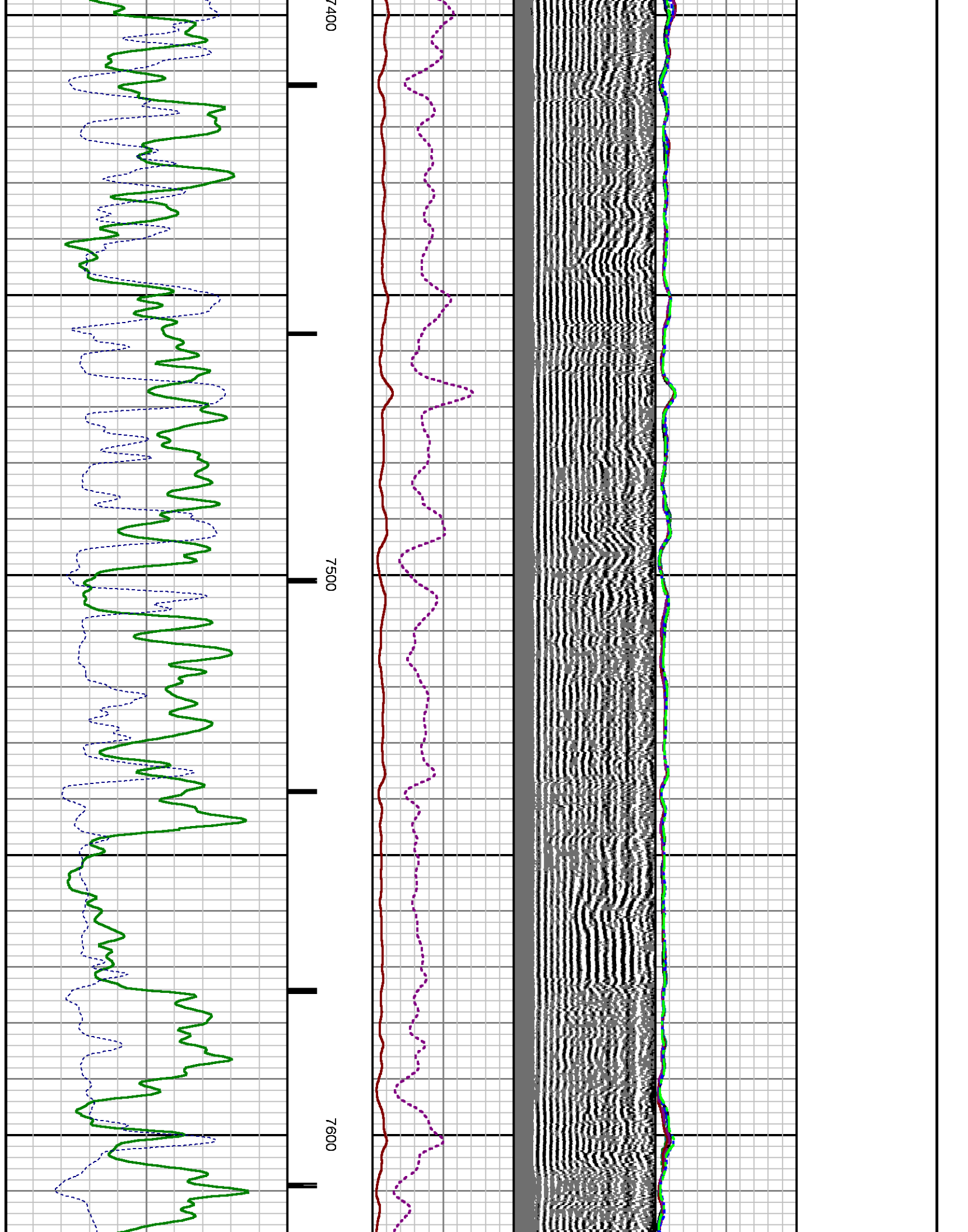


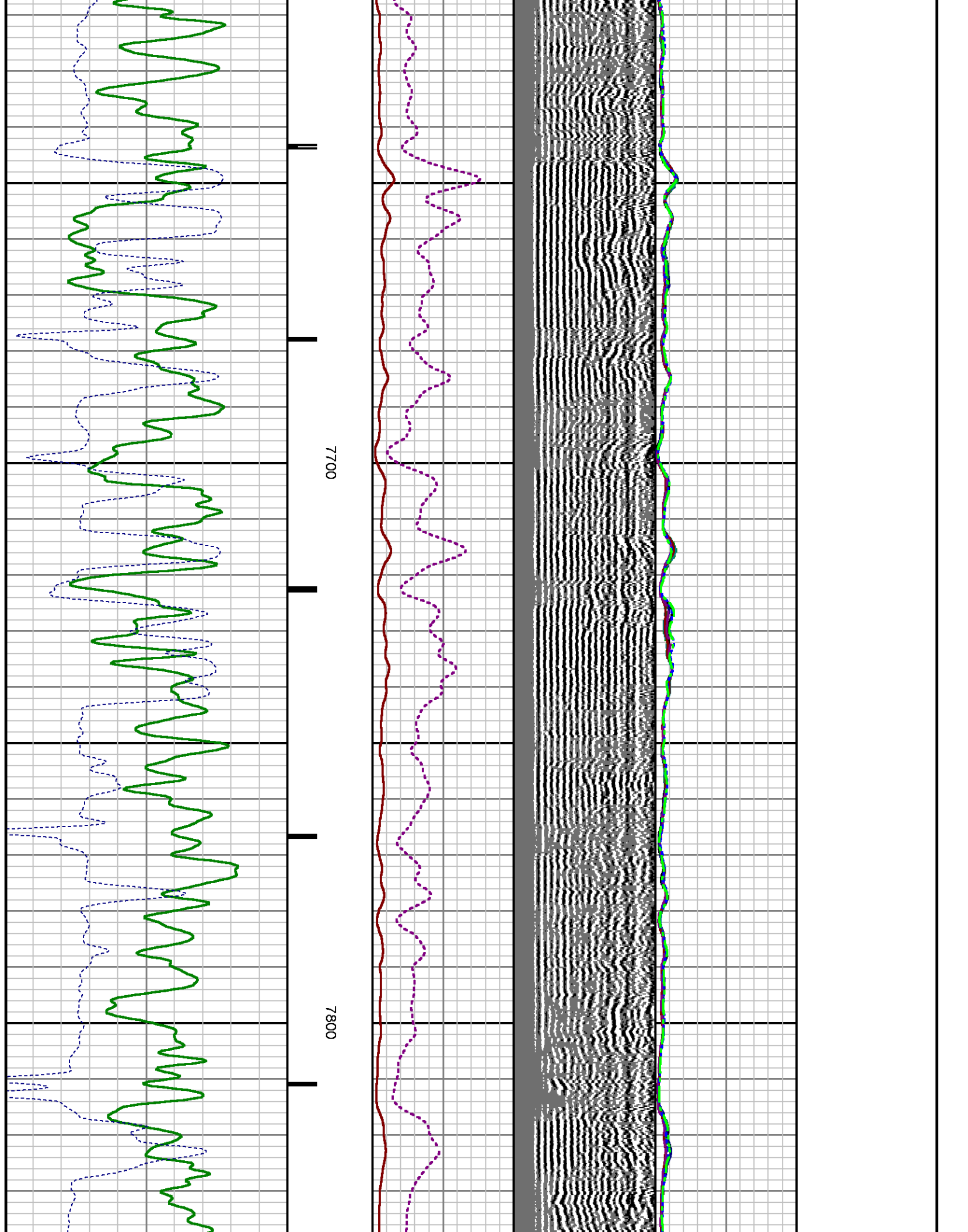


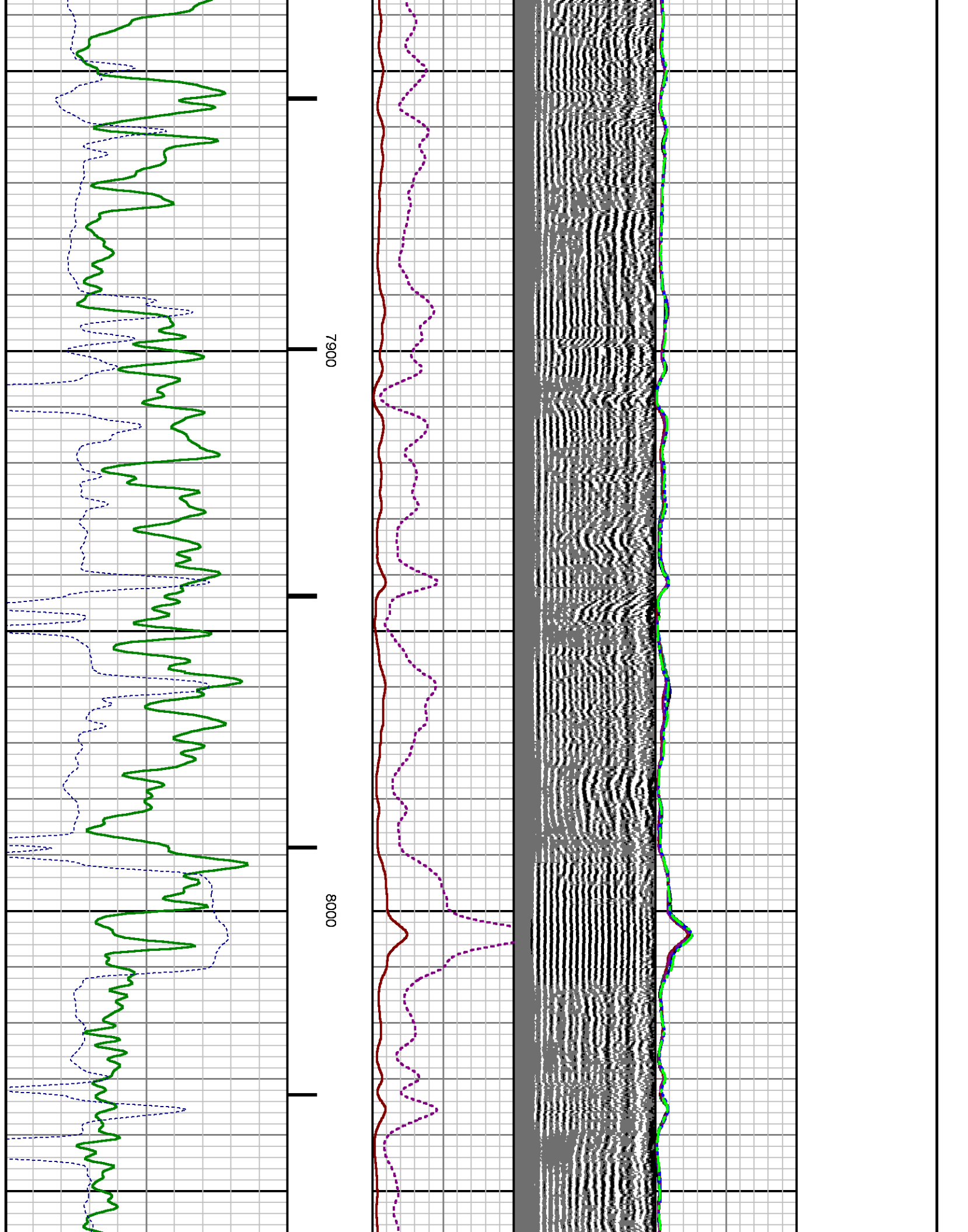


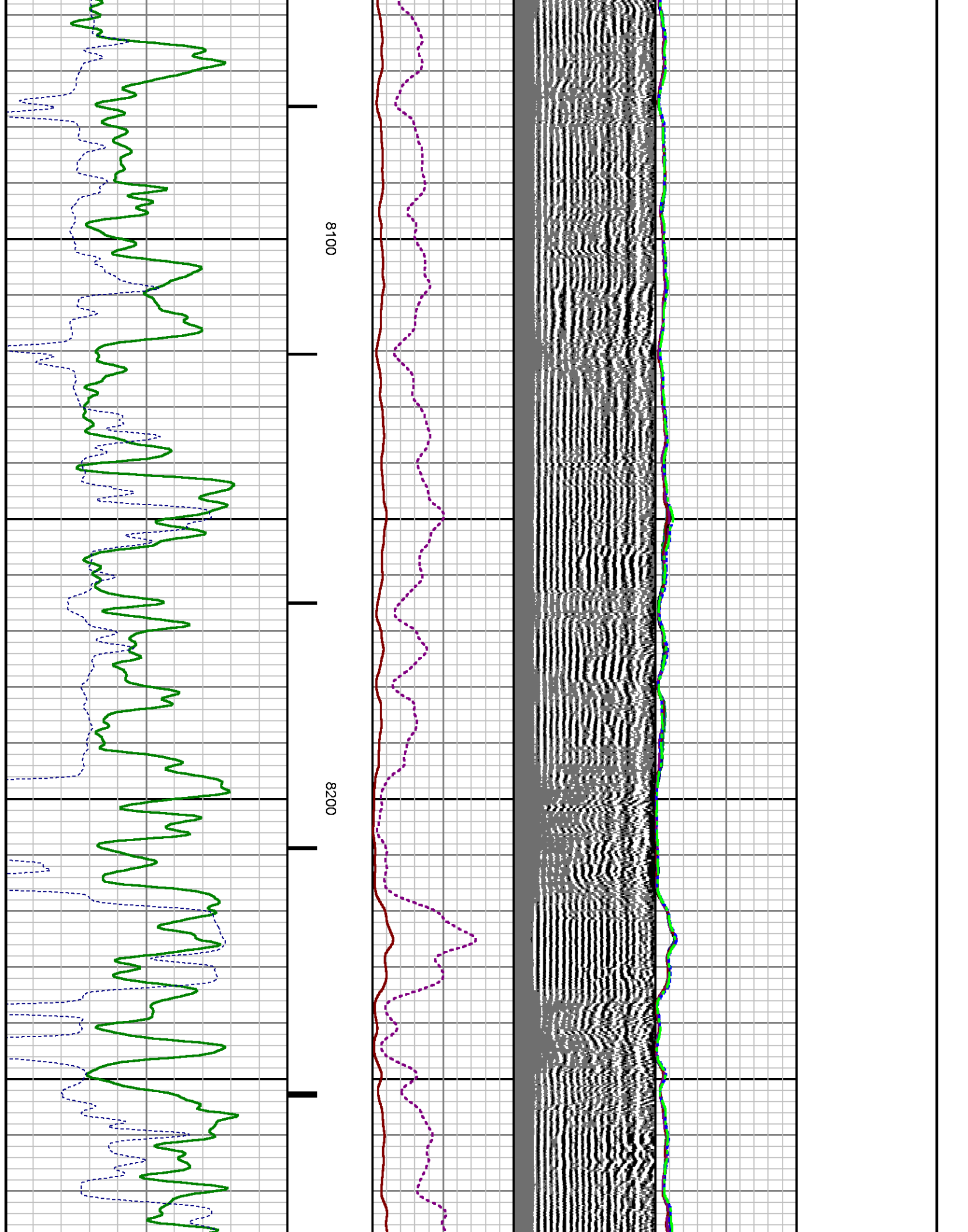


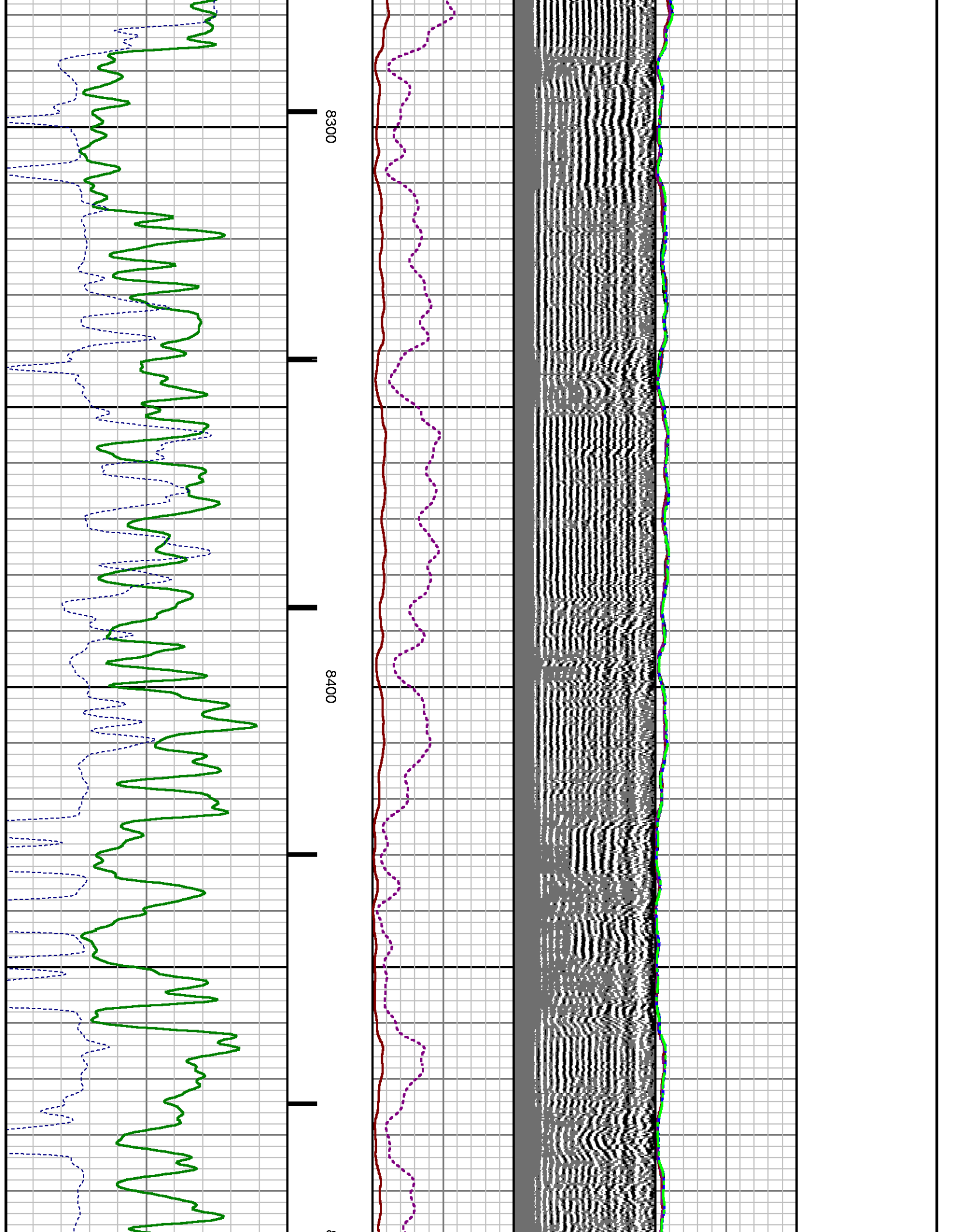


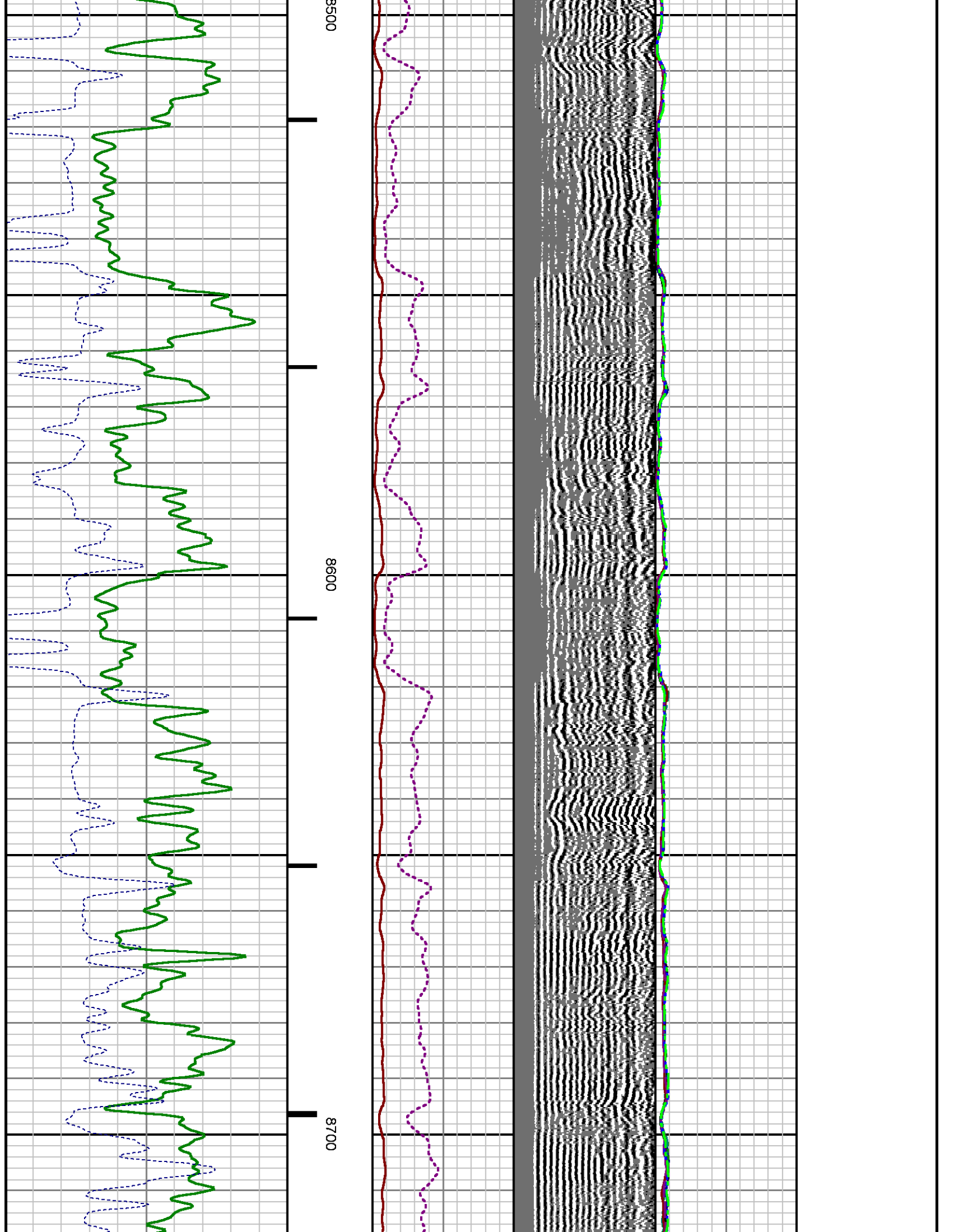


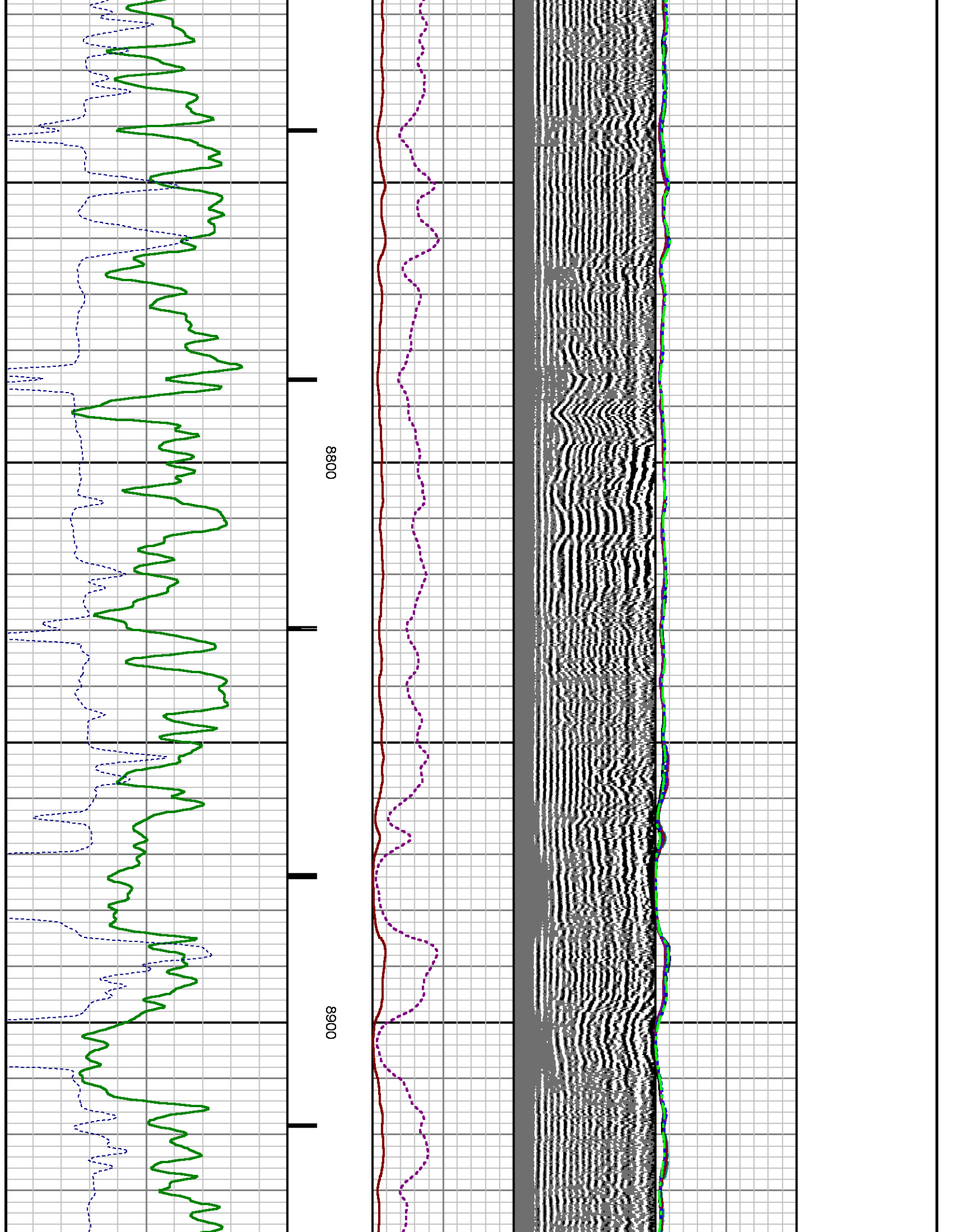


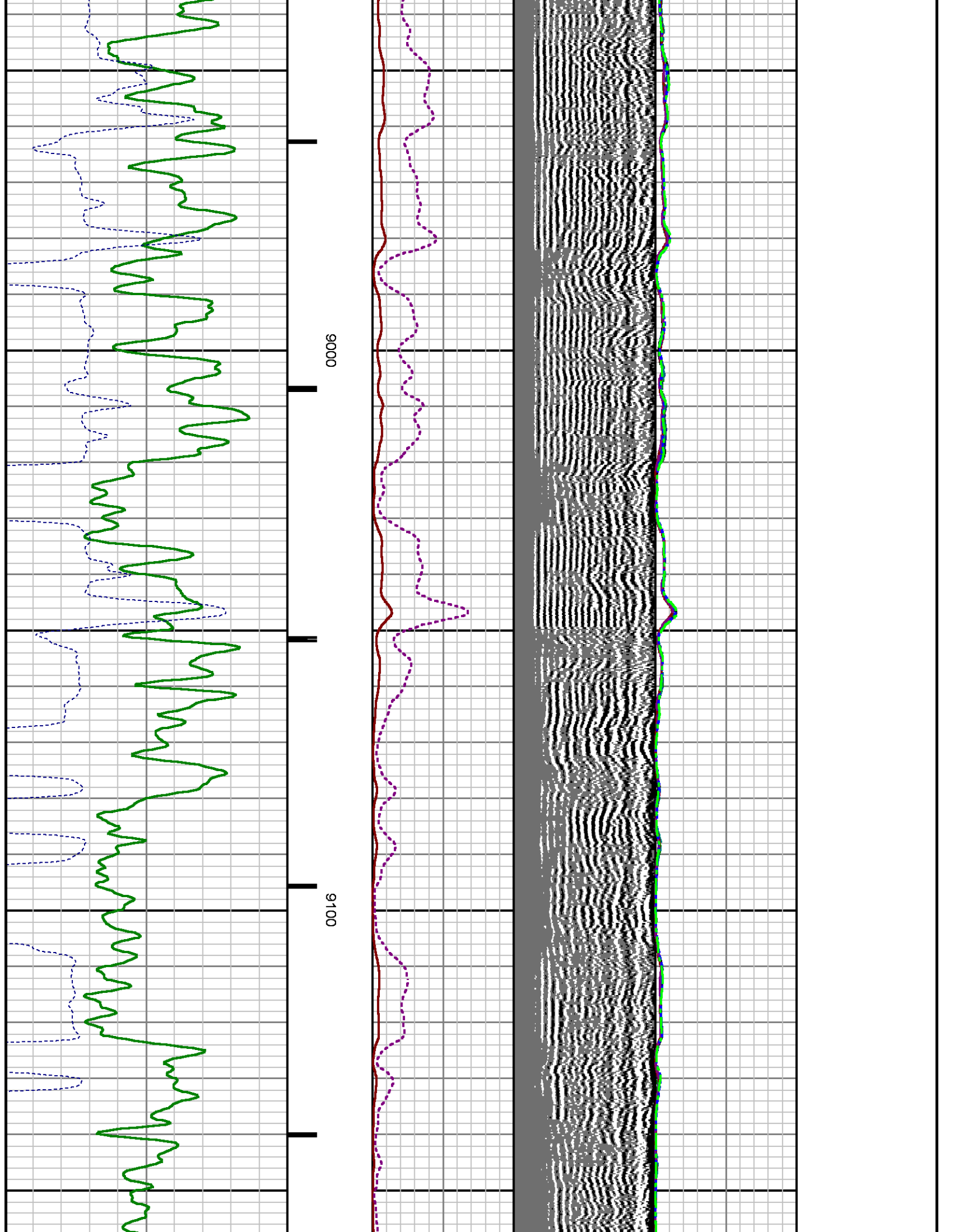


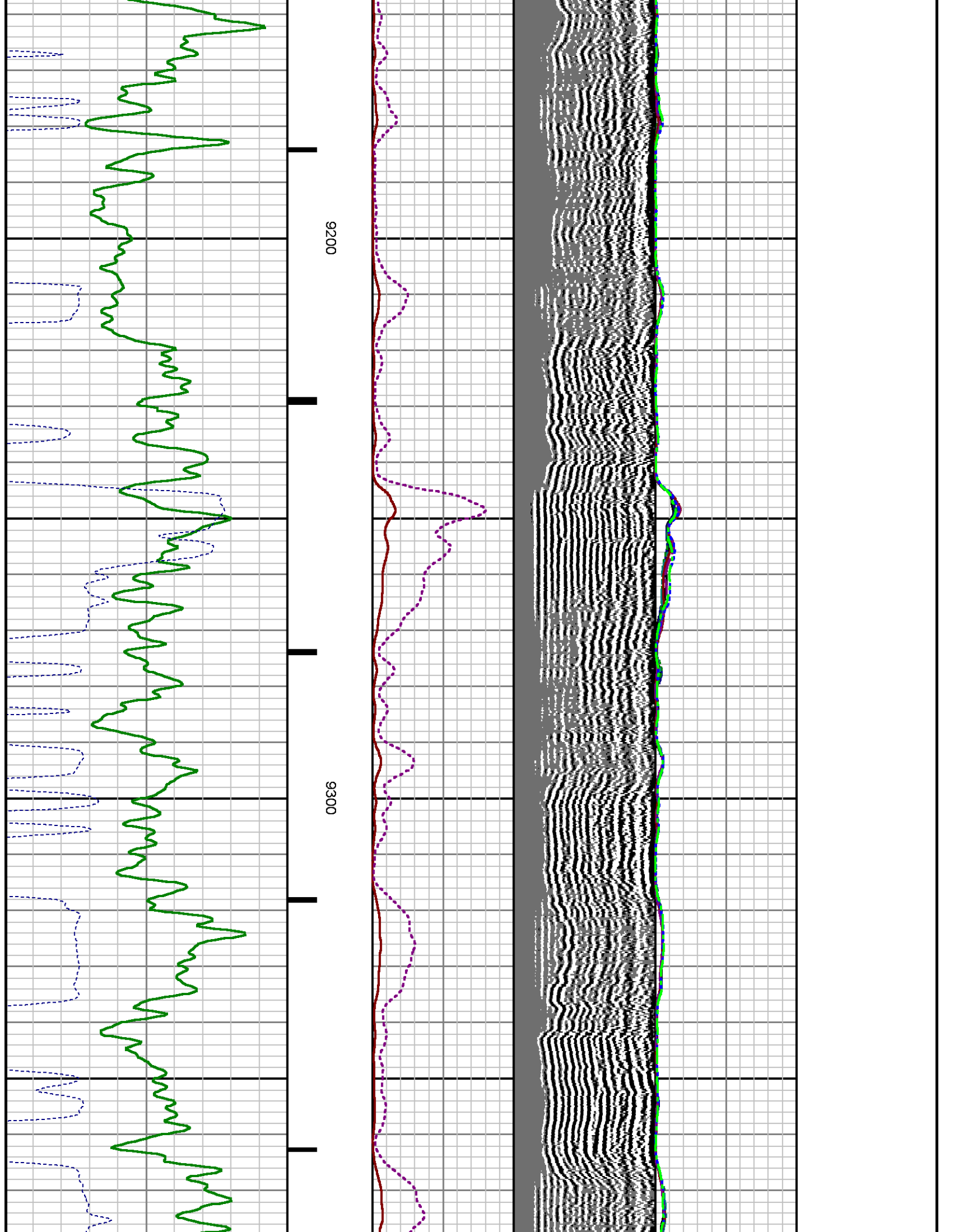


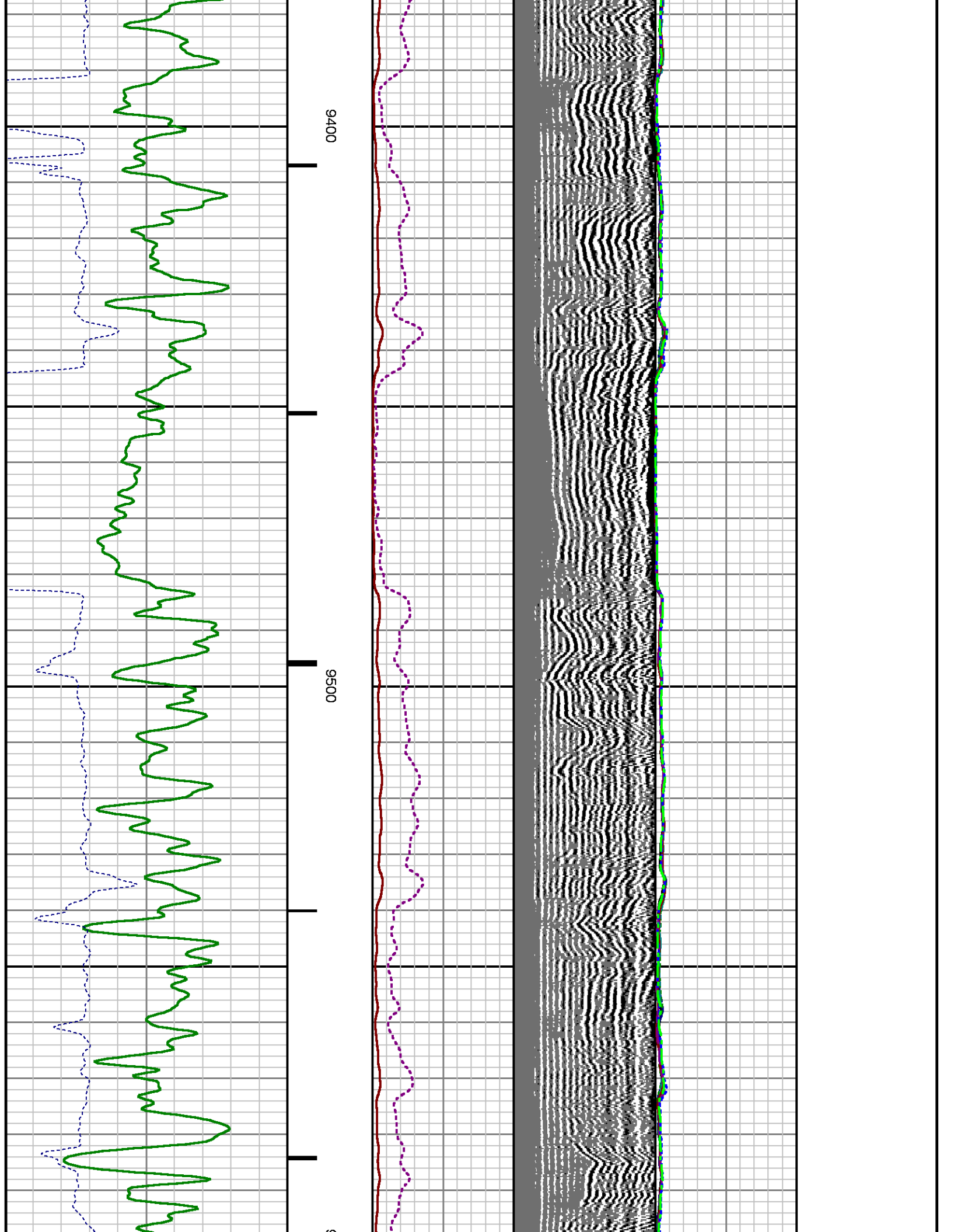


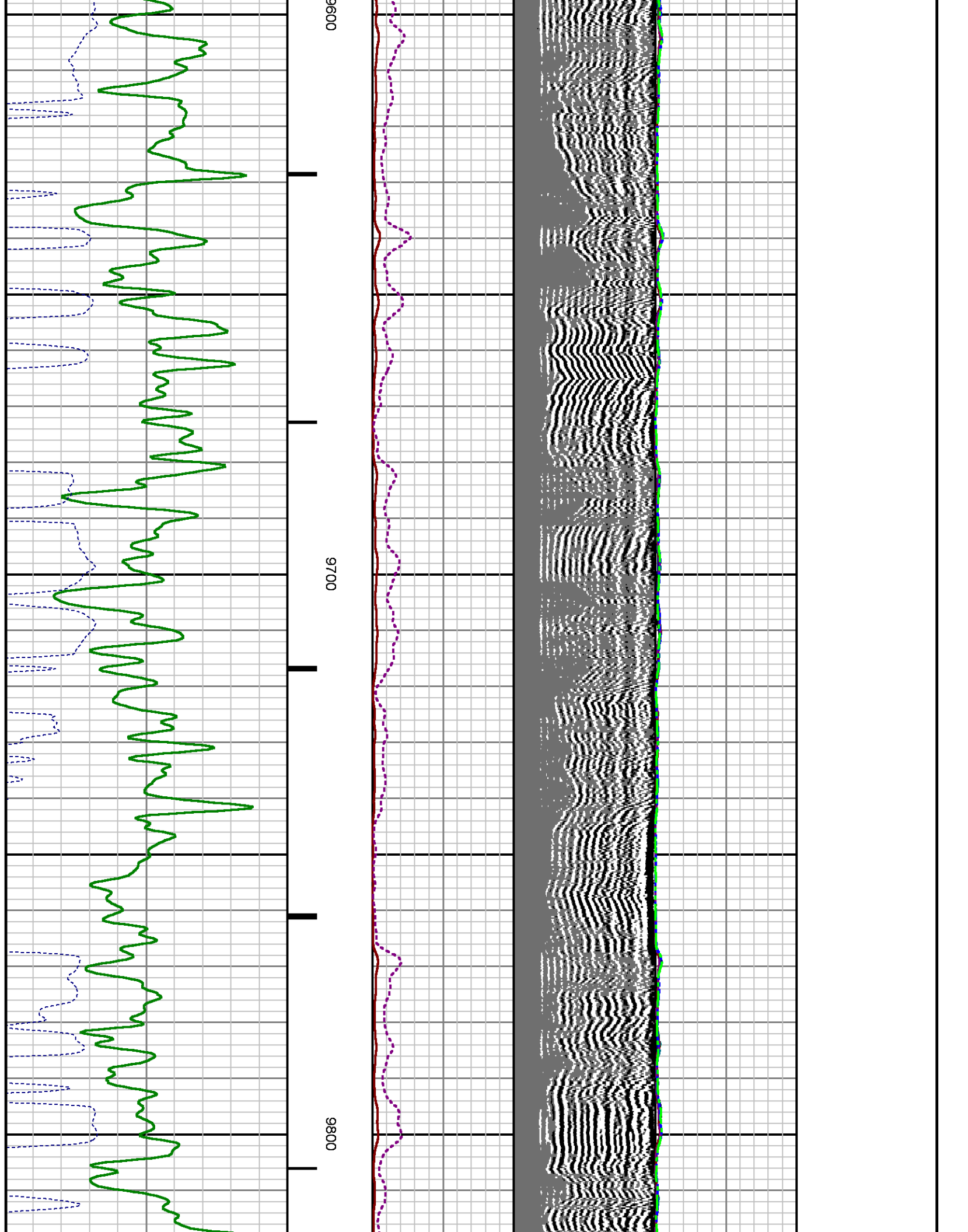


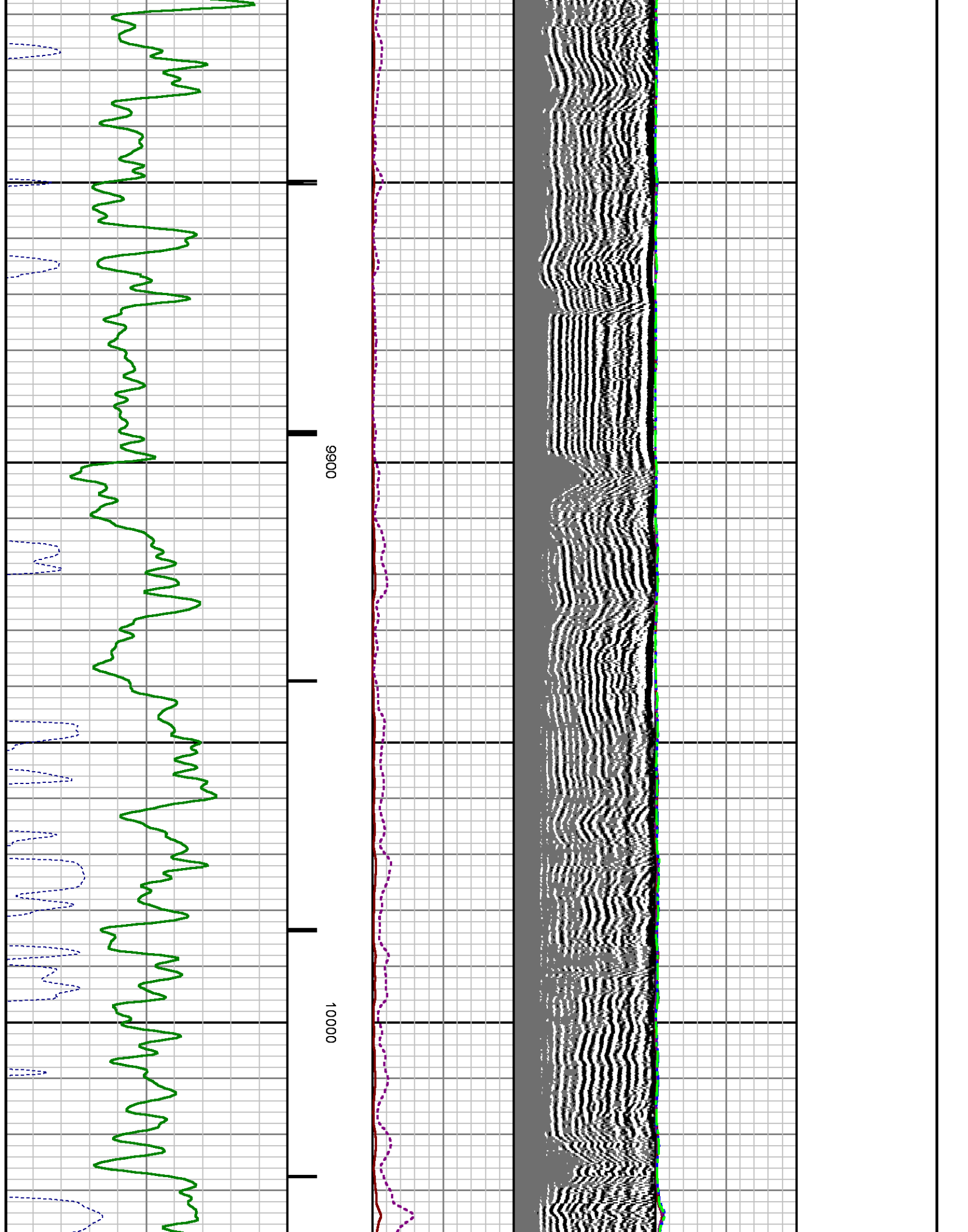


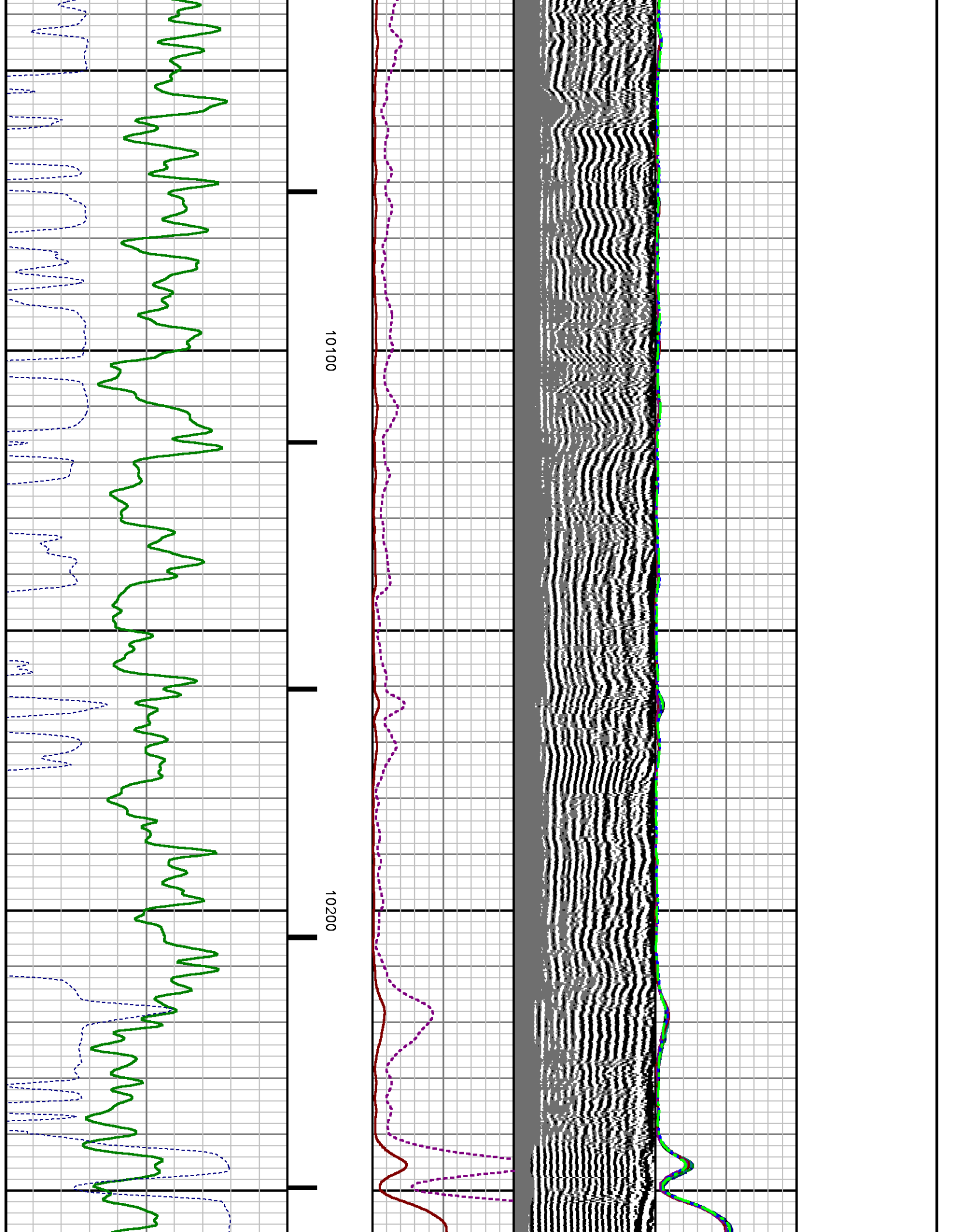


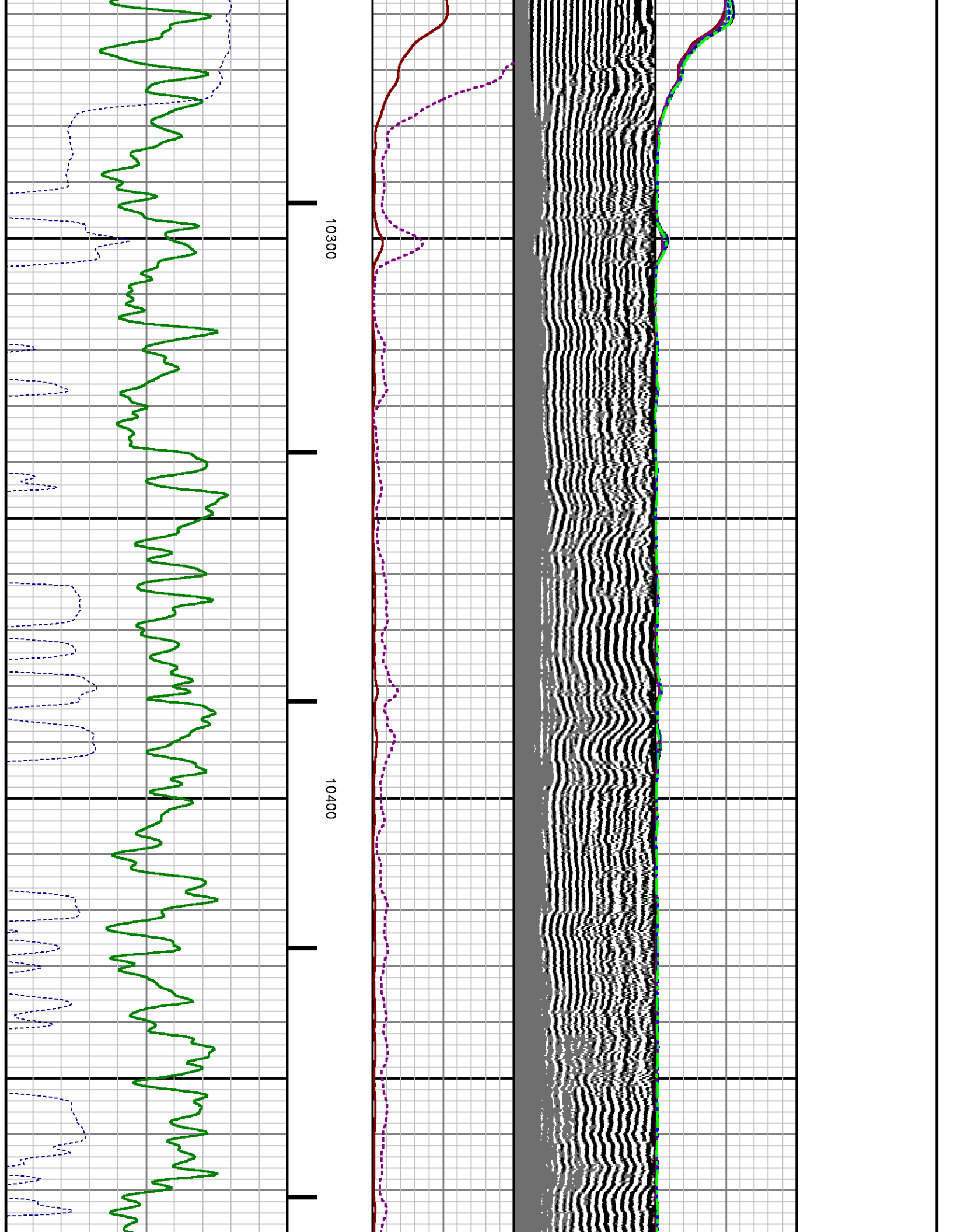


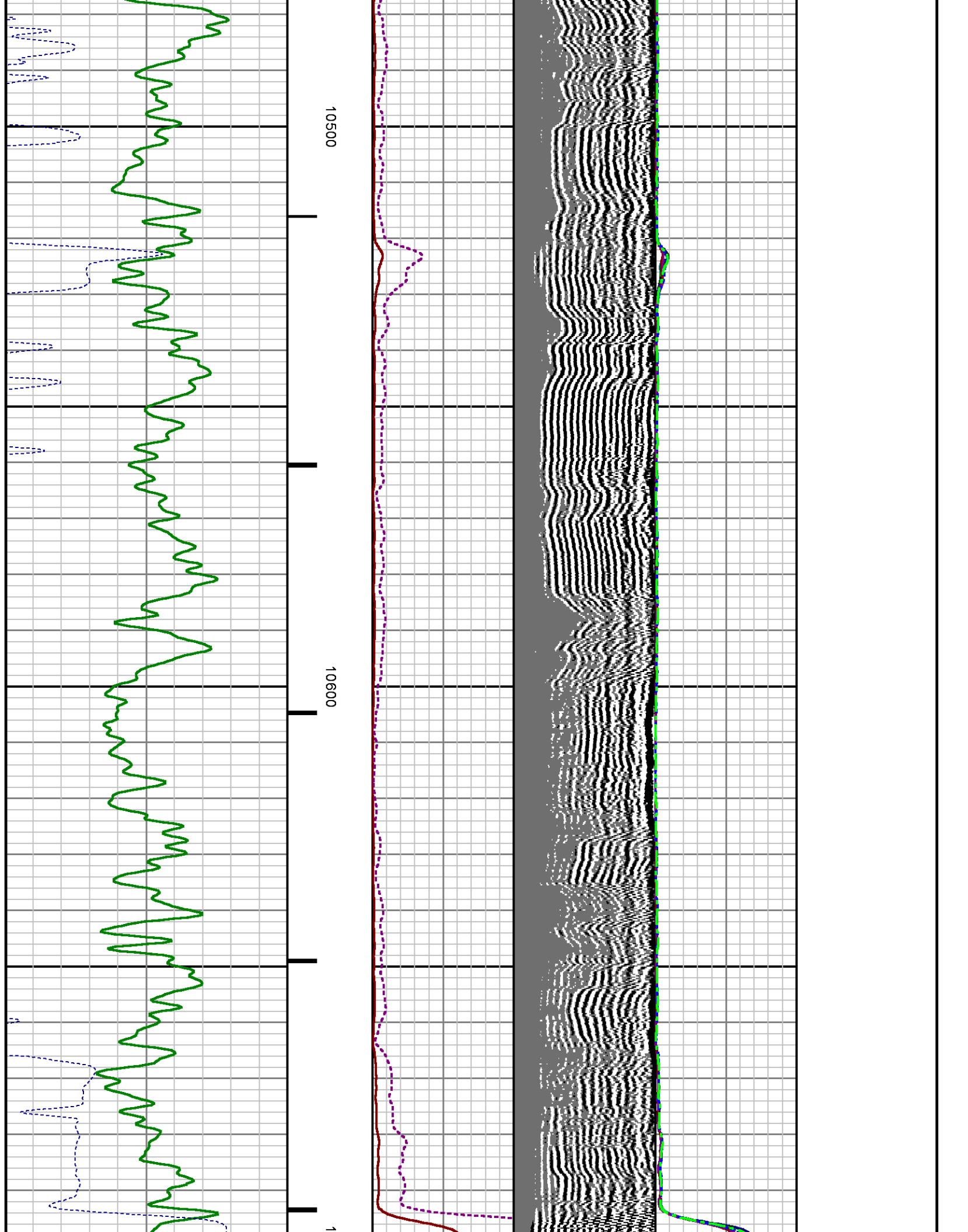


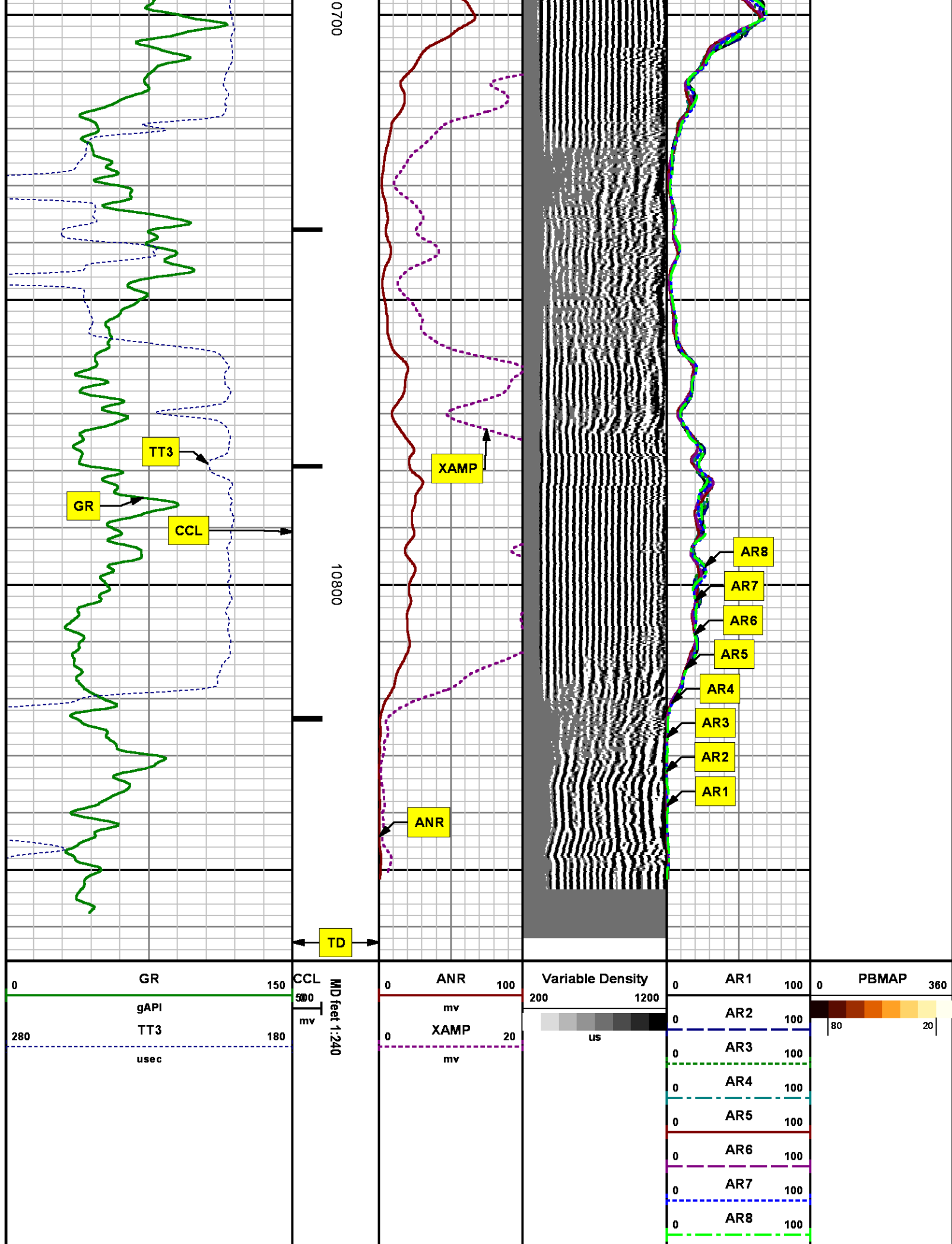












REPEAT SECTION

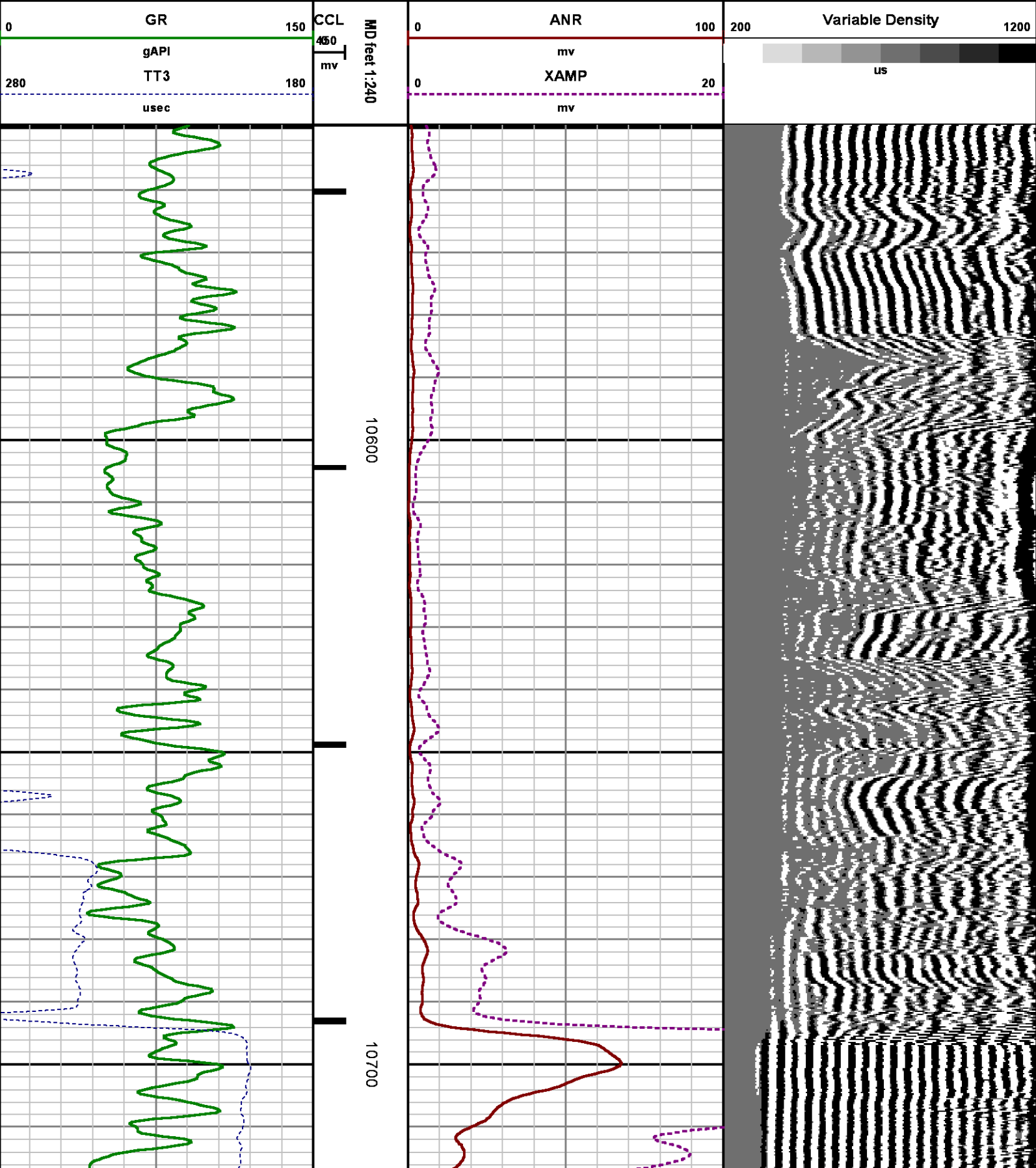
0 PSI

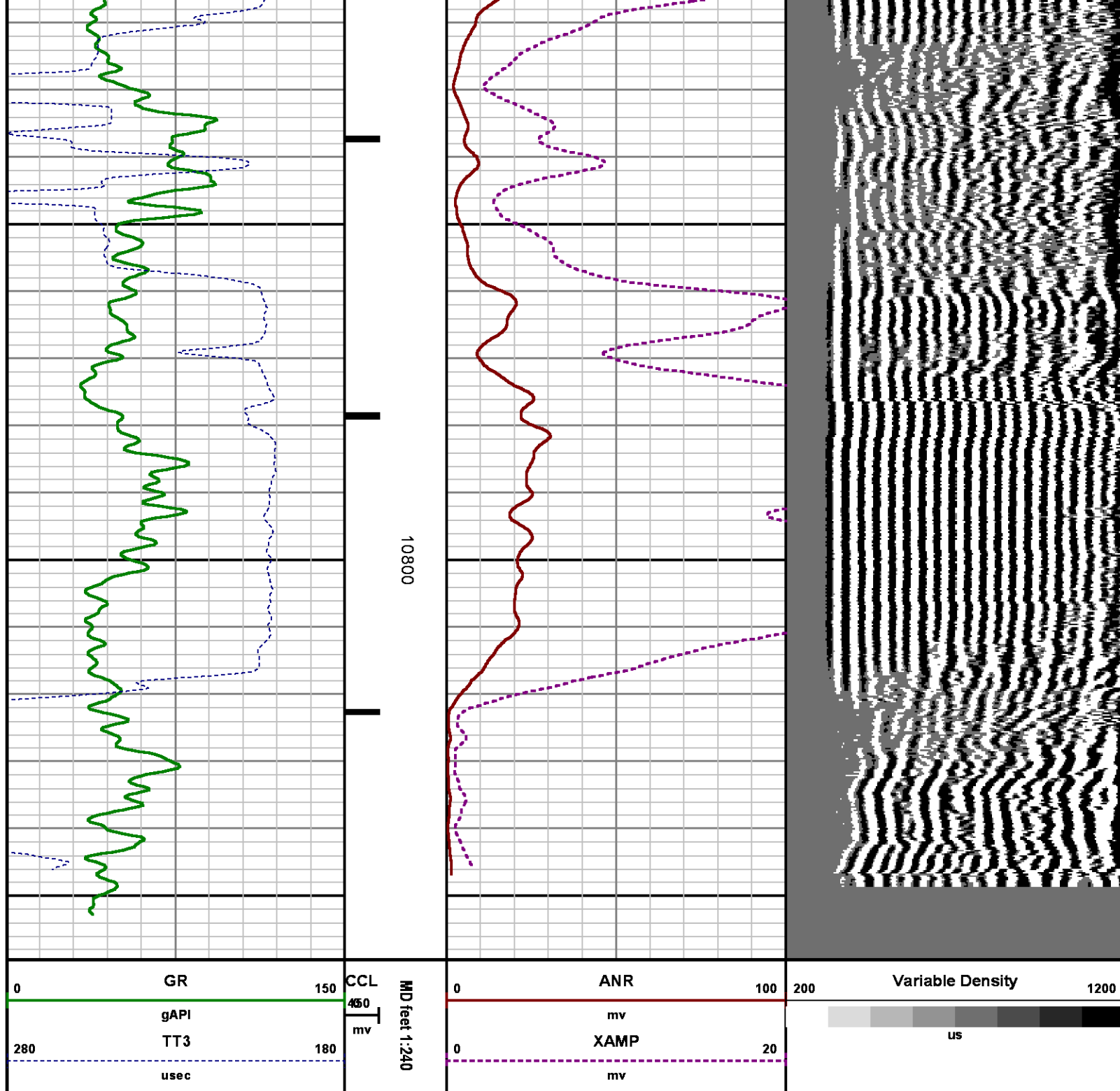
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	10549.550	10859.550
RAL	Amp Gate Start Near	195.000	usec	10549.550	10859.550
RAL	Amp Gate Start Radial	195.000	usec	10549.550	10859.550
RAL	Amp Gate Width Far	25.000	usec	10549.550	10859.550
RAL	Amp Gate Width Near	25.000	usec	10549.550	10859.550
RAL	Amp Gate Width Radial	25.000	usec	10549.550	10859.550
RAL	casing od	4.500	inches	10549.550	10859.550
RAL	casing wt	11.600	lbm/ft	10549.550	10859.550
RAL	FB Start Far	291.900	usec	10549.550	10859.550
RAL	FB Start Near	180.000	usec	10549.550	10859.550
RAL	FB Start Radial	180.000	usec	10549.550	10859.550
RAL	FB Thresh Far	15.000	mv	10549.550	10859.550
RAL	FB Thresh Near	10.000	mv	10549.550	10859.550
RAL	FB Thresh Radial	10.000	mv	10549.550	10859.550
RAL	Fluid Travel Time	200.000	usec/ft	10549.550	10859.550

DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-12.360	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	CHV	FPR2
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	-11.360	AFAR	SIG	TT5			
2459XA	-7.250	CCL					
2459XA	-5.390	GR					
2459XA	0.000	NEU					





CALIBRATION SUMMARY

RALSHP

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Sep 25 08:55:34 2014

TOOL SERIES: 1426XA

ASSET:

496

SEQ: SEP25

Tool Delay
[usec]

-55.00

Tank OD
in

5.50

Tank Wt
lbm/ft

15.50

Tank ID
in

4.95

RECEIVER	Travel Time [usec]	Amp. Gate Start [usec]	Amp. Gate Width [usec]	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Amp Ref. [mV]	Shop Factor
CAL Pulse	216	216	30	166	25	-0.201	100.00	0.31
3 Ft. Receiver	216	216	30	159	25	0.358	100.00	0.31
5 Ft. Receiver	324	325	30	239	25	0.281	150.00	0.35
Radial #1	216	216	30	150	25	0.544	100.00	0.31
Radial #2	216	216	30	150	25	0.410	100.00	0.30
Radial #3	216	216	30	150	25	-0.273	100.00	0.31
Radial #4	216	216	30	150	25	-0.424	100.00	0.31
Radial #5	216	216	30	150	25	-0.105	100.00	0.31
Radial #6	216	216	30	150	25	0.647	100.00	0.31
Radial #7	216	216	30	150	25	0.373	100.00	0.31
Radial #8	216	216	30	150	25	0.052	100.00	0.31

RALFLD

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Sep 25 08:59:28 2014

TOOL SERIES: 1426XA

ASSET:

496

SEQ: SEP25

Tool Delay
[usec]

-55.00

Casing OD
in

4.50

Casing Wt
lbm/ft

11.60

Casing ID
in

4.00

RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	166	25	-0.113	0.000	1.00	100.000
3 Ft. Receiver	200	30	3.085			
5 Ft. Receiver	317	30	3.690			
Radial #1	200	30	3.379			
Radial #2	200	30	3.371			
Radial #3	200	30	3.353			
Radial #4	200	30	3.209			
Radial #5	200	30	3.541			
Radial #6	200	30	3.869			
Radial #7	200	30	3.067			
Radial #8	200	30	3.085			

TOOL DIAGRAM

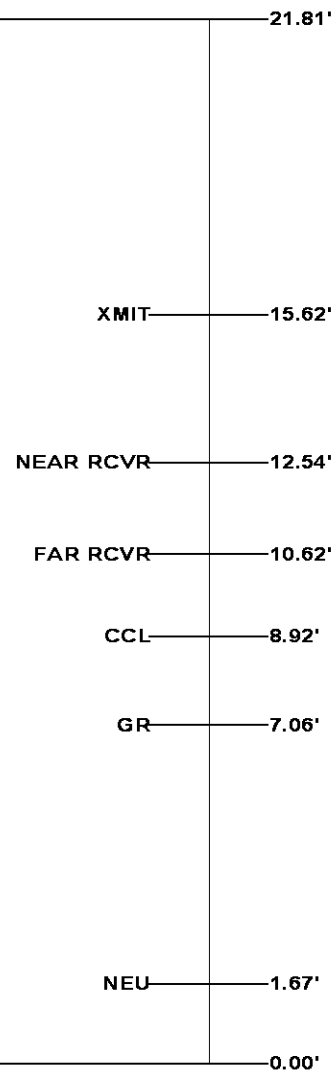
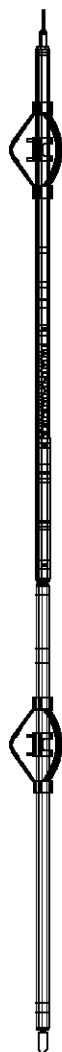
OTA SHORT CABLE HEAD

PROBE 2 3/4 DUAL RECEIVER RADII

Series 1426XA
Mnemonic PROB
Diameter 2.75"
Length 11.17'
Measure Point 0.75' FAR RCVR
Measure Point 2.67' NEAR RCVR
Measure Point 5.75' XMIT
Temp Rating 350.00 °F
Press Rating 18000.00 PSI

Probe GR/CCL/NEU

Series 2459XA
Mnemonic PROB
Diameter 2.75"
Length 9.42'
Measure Point 1.21' NEU
Measure Point 6.60' GR
Measure Point 8.46' CCL



Total Length: 21.81'
Total Weight: Not Available
Max Diameter: 0' 2.75"



Baker Atlas

CASE

Company

WPX ENERGY

Well

FEDERAL BCU 542-30-198

Field

SULPHUR CREEK

County

GARFIELD

State

COLORADO

Location

SHL: 2063' FSL & 2135' FEL

BHL: 2411' FSL & 650' FEL (NESE)

Elevations

KB 6759 ft

DF

GL 6738 ft

File No:

CH090864

API No:

05103119960000

30 1N 98W

BCU 33-30-198 PAD

CYCLONE 29

SEC 30 TWP 1N RGE 98W