



# RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: **Company** **WPX ENERGY**

CH085538 **Well** **WPX ENERGY PA 514-2**

API No: **Field** **PARACHUTE**

05045221390000 **County** **GARFIELD** **State** **COLORADO**

2 7S 95W **Location** **SHL: 2003' FSL & 1562' FWL**

GV 86-2 PAD **BHL: 254' FSL & 672' FWL (SWSW)**

AZTEC 1000 **SEC 2 TWP 7S RGE 95W**

**Other Services**  
RPM

Permanent Datum **GL** **Elevation** **5821 ft**

Log Measured From **KB** **25 ft** **Above P. D.**

Drill Measured From **KELLY BUSHING**

**Elevations**

**KB 5846 ft**

**DF**

**GL 5821 ft**

Date	01/MAY/14	
Run	ONE	
Service Order	US085538J	
Depth Driller	7787 ft	
Depth Logger	7762 ft	
Bottom Logged Interval	7752 ft	
Top Logged Interval	25 ft	
Time Started	0700	
Time Finished	1000	
Operator Rig Time	3 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	67 ft	
Logged Cement Top	NA	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	NA	
Nominal Logging Speed	66 fpm	
Maximum Recorded Temperature	226 degF	
Reference Log	NONE	
Reference Log Date	NA	
Equipment No.	4271	GRAND JCT
Recorded By	FLYOD RENEAU	
Witnessed By	DUSTIN WELSH	

- FOLD HERE

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
13.5 in	25 ft	926 ft
8.75 in	926 ft	7787 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in			25 ft	926 ft
4.5 in	11.6 lbm/ft	I-80	25 ft	7787 ft

Remarks
All data on this log is shifted using the CCL curve to put the wellhead (top CCL mark) on depth with ground level elevation at the client's request.
The amount of linear shift is 13 feet.
Logged with zero PSI at wellhead.
BHT = 226°F
SJ = 4154'-4178'

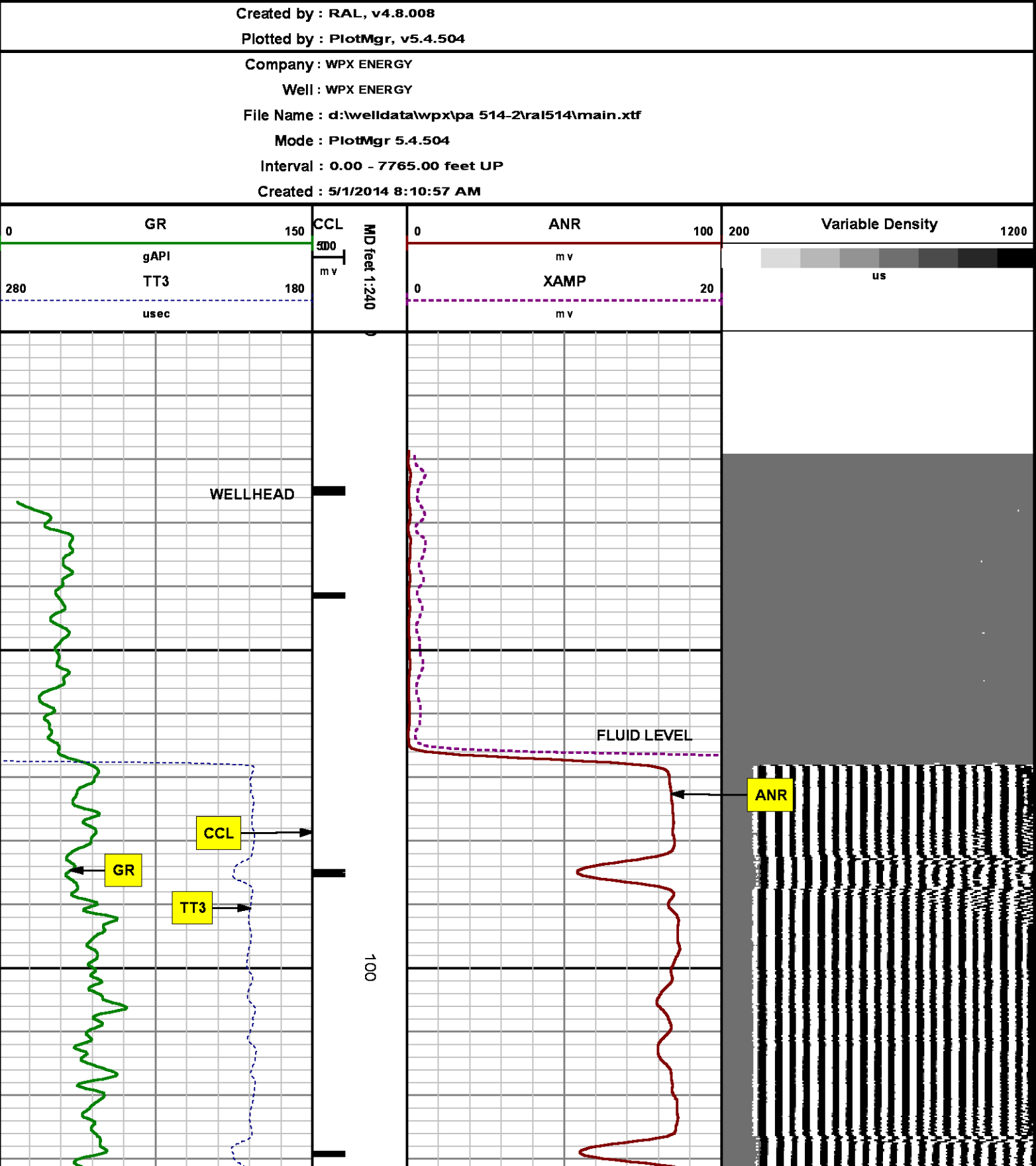
Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1426XA	10218496	CENT
1	1	GR/CCL	2459XA	10417456	CENT

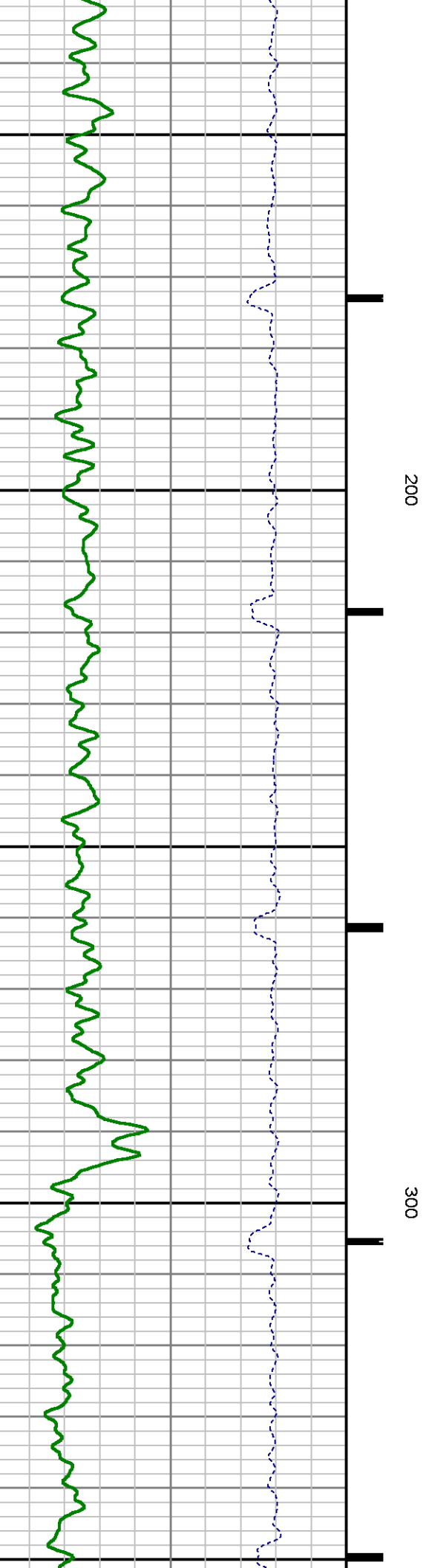
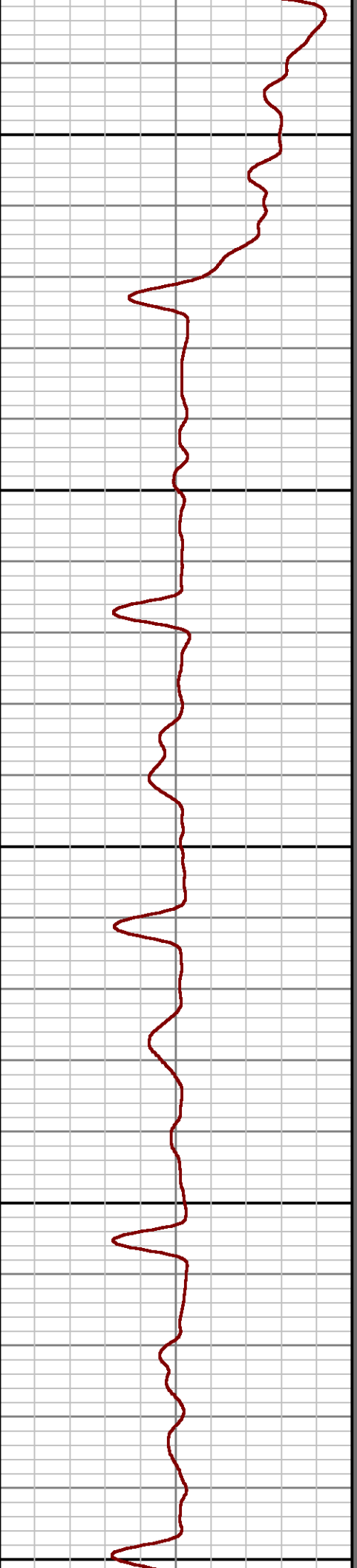
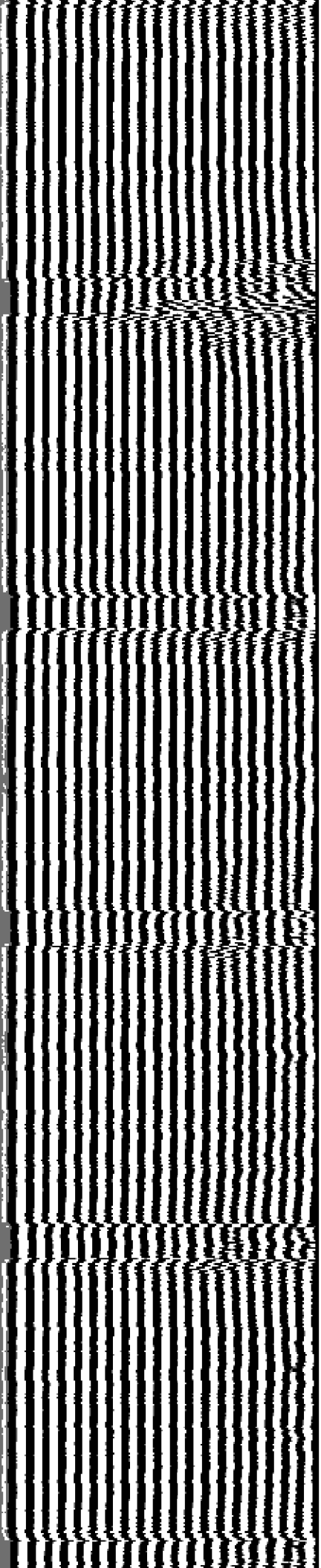
PRIMARY PRESENTATION  
0 PSI

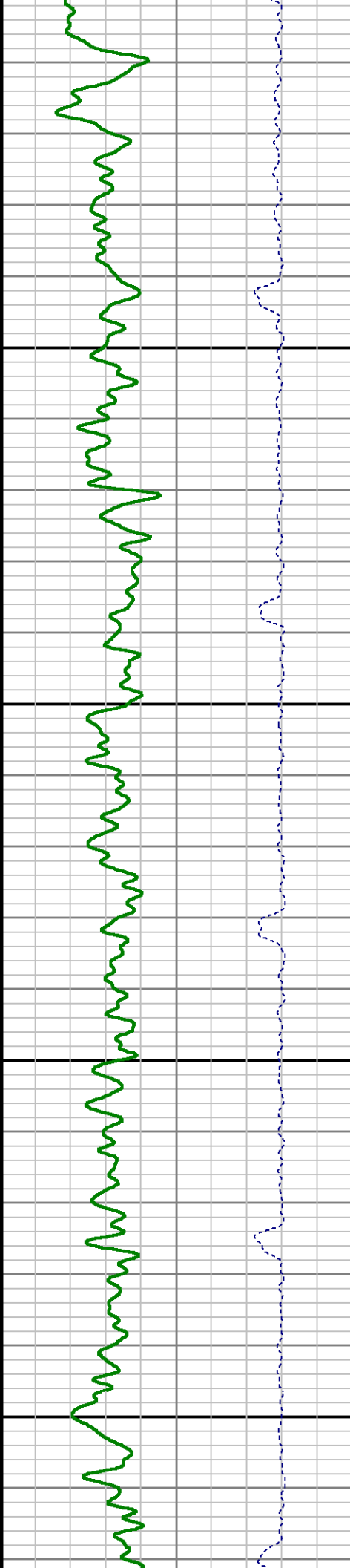
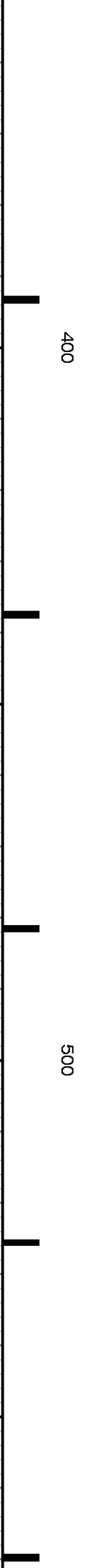
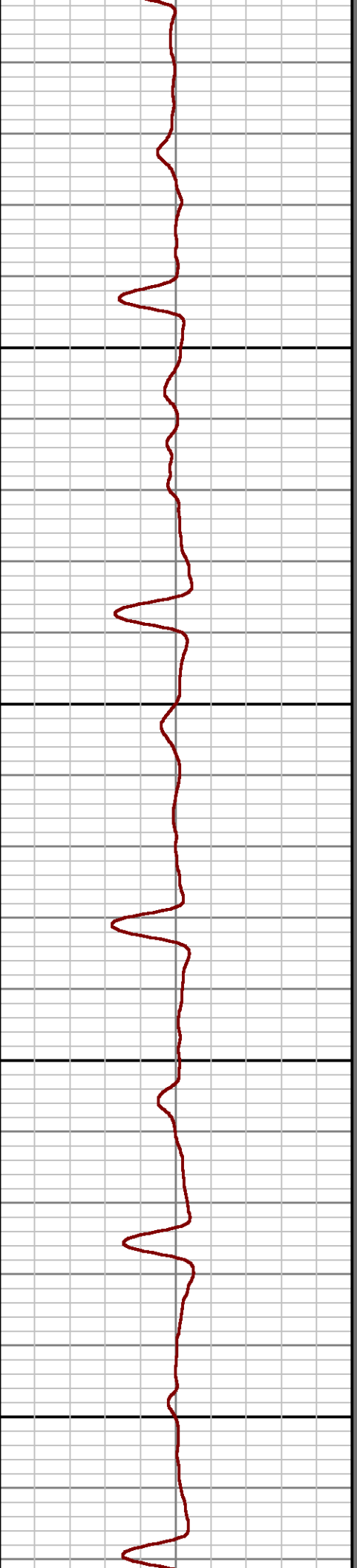
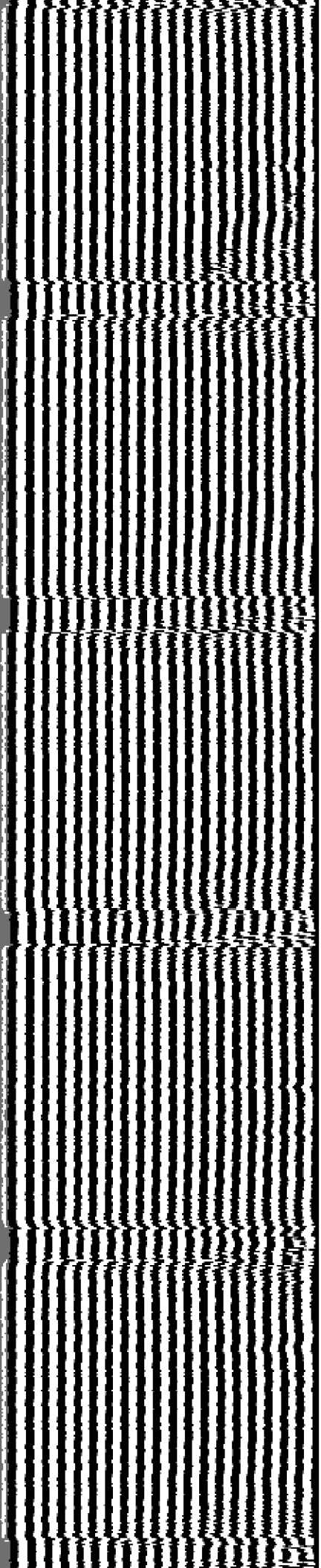
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	34.875	7763.000
RAL	Amp Gate Start Near	195.000	usec	34.875	7763.000
RAL	Amp Gate Start Radial	195.000	usec	34.875	7763.000
RAL	Amp Gate Width Far	25.000	usec	34.875	7763.000
RAL	Amp Gate Width Near	25.000	usec	34.875	7763.000
RAL	Amp Gate Width Radial	25.000	usec	34.875	7763.000
RAL	casing od	4.500	inches	34.875	7763.000
RAL	casing wt	11.600	lbm/ft	34.875	7763.000
RAL	FB Start Far	291.900	usec	34.875	7763.000
RAL	FB Start Near	180.000	usec	34.875	7763.000
RAL	FB Start Radial	180.000	usec	34.875	7763.000
RAL	FB Thresh Far	10.000	mv	34.875	7763.000
RAL	FB Thresh Near	4.000	mv	34.875	7763.000
RAL	FB Thresh Radial	4.000	mv	34.875	7763.000
RAL	Fluid Travel Time	200.000	usec/ft	34.875	7763.000

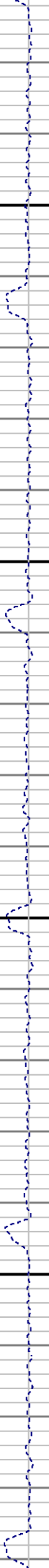
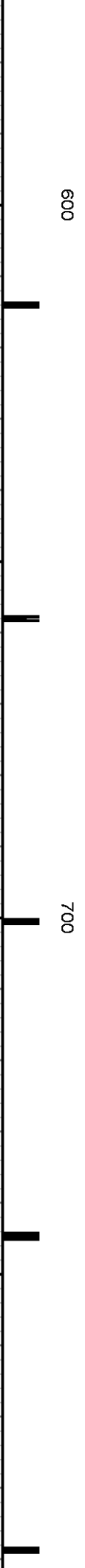
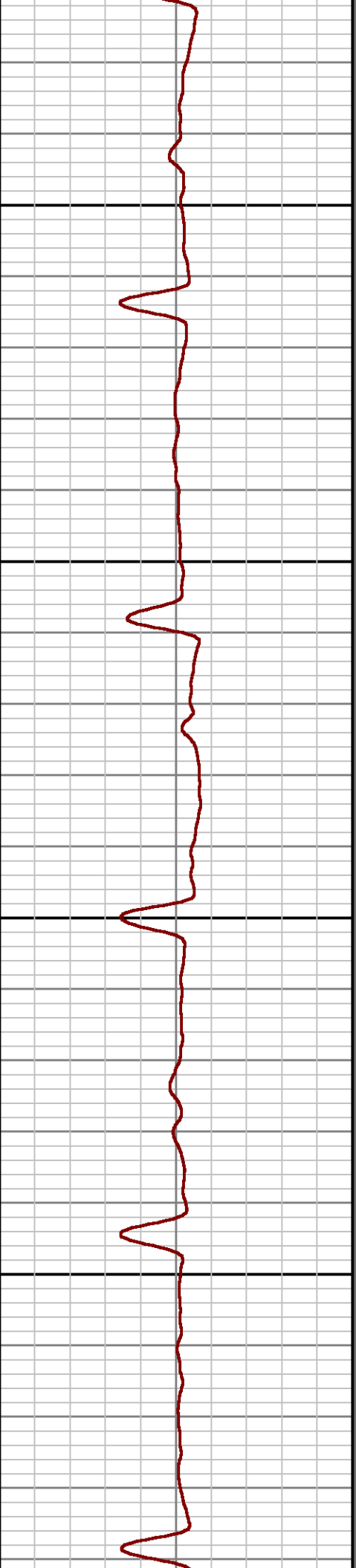
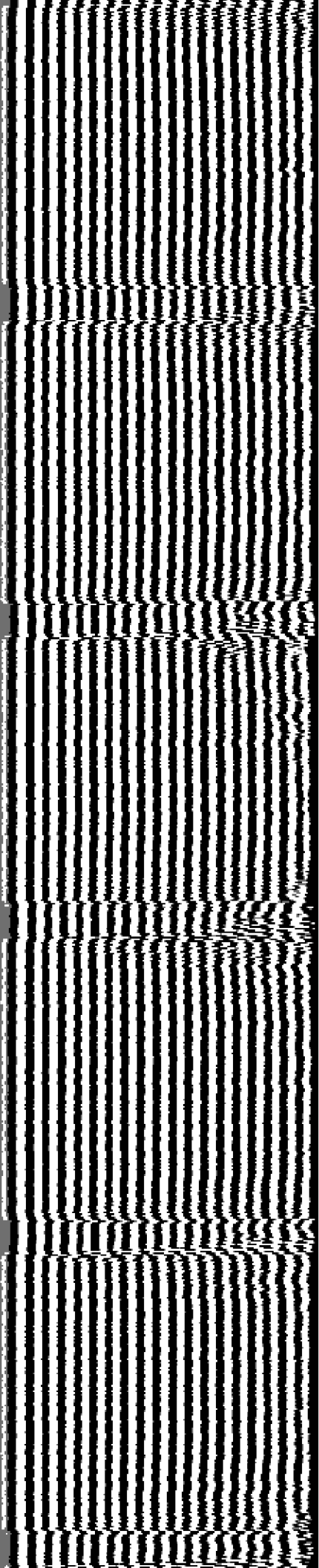
DEPTH OFFSETS							
(for Acquired Curves)							
SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-16.750	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	CHV	FPR2

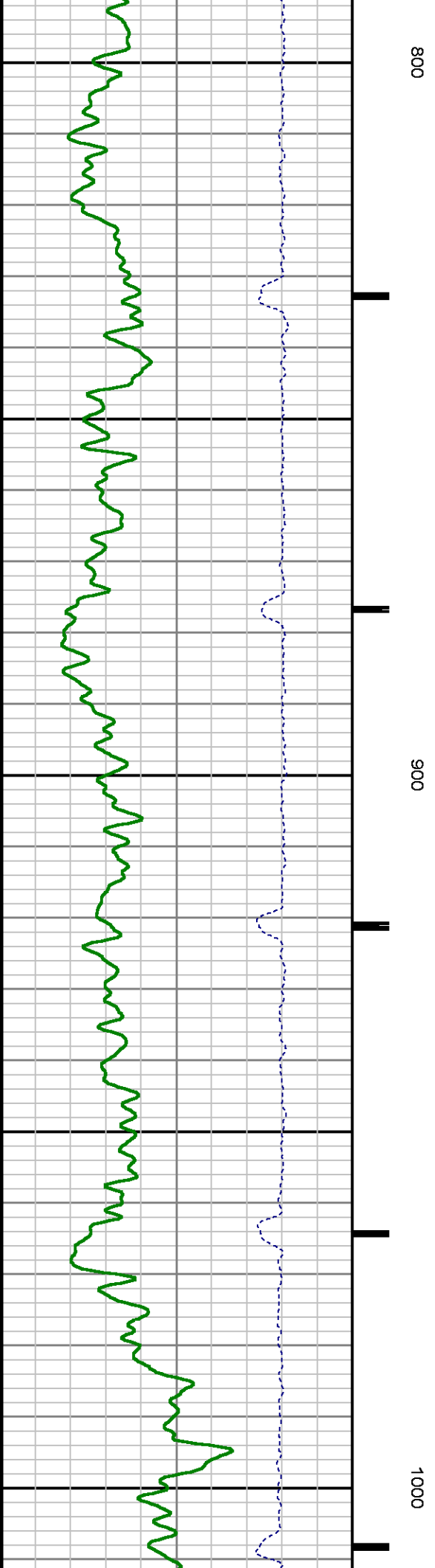
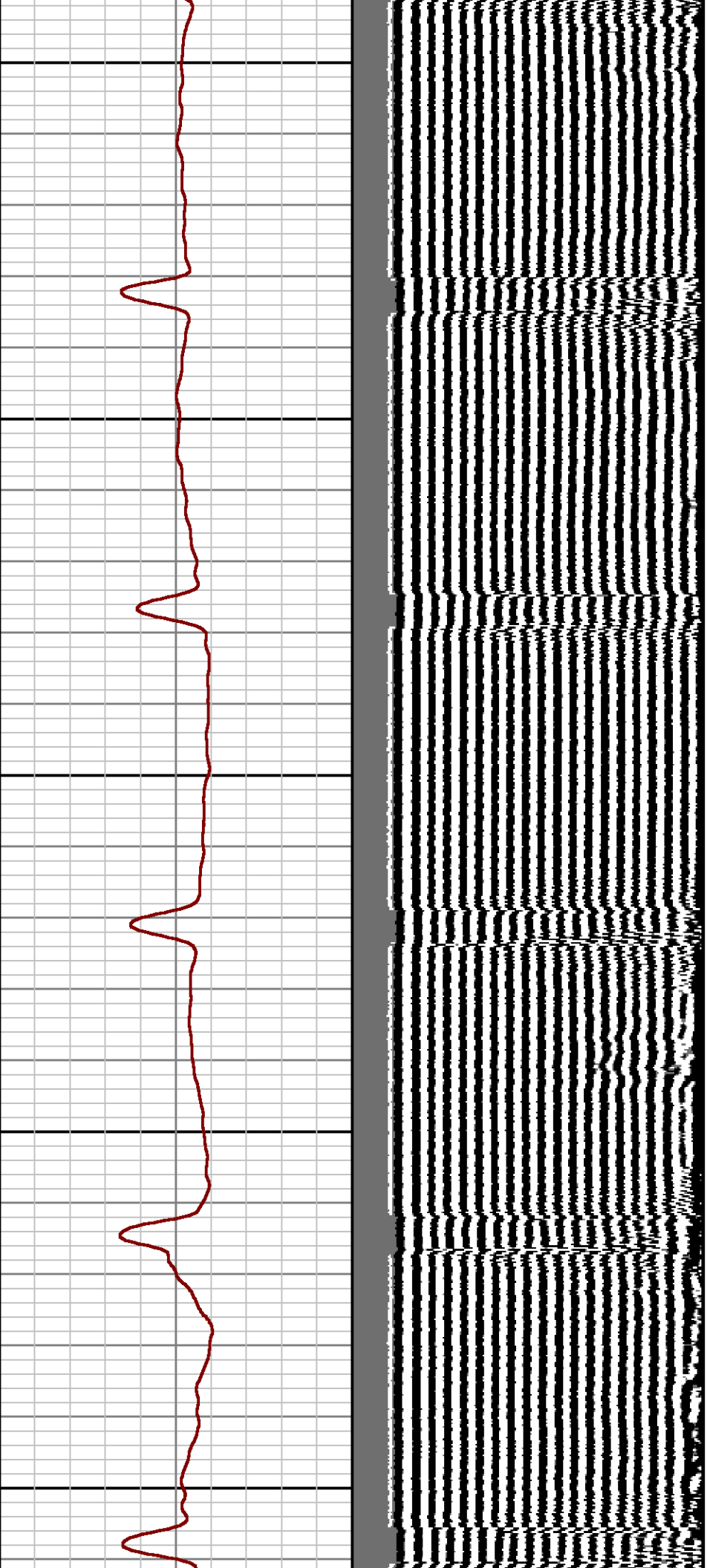
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	-15.750	AFAR	SIG	TT5			
2459XA	-11.340	CCL					
2459XA	-9.490	GR					
2459XA	-4.090	NEU					

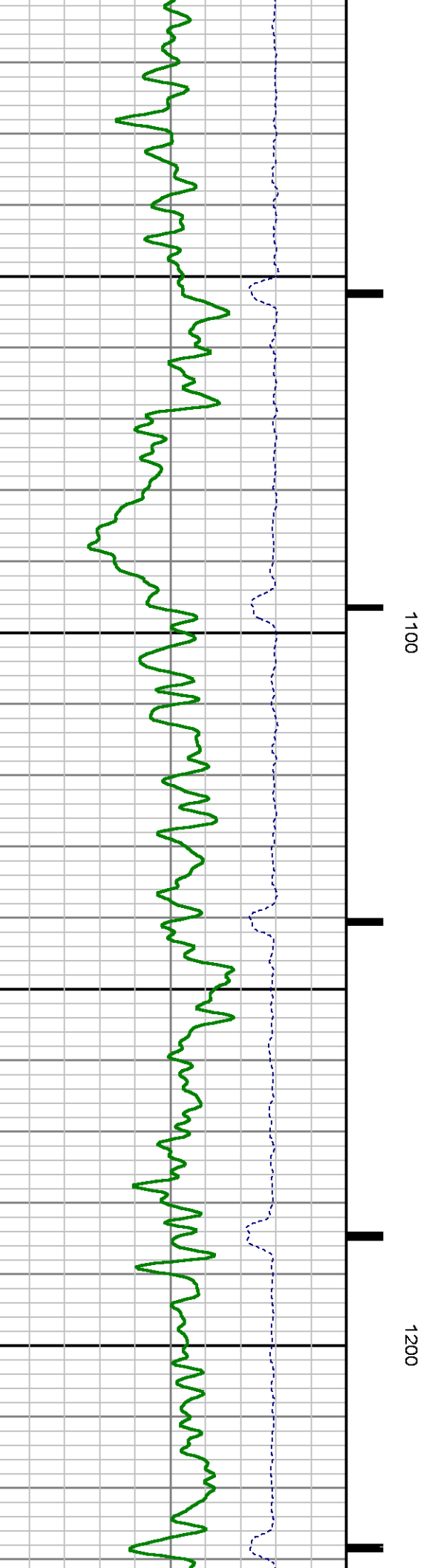
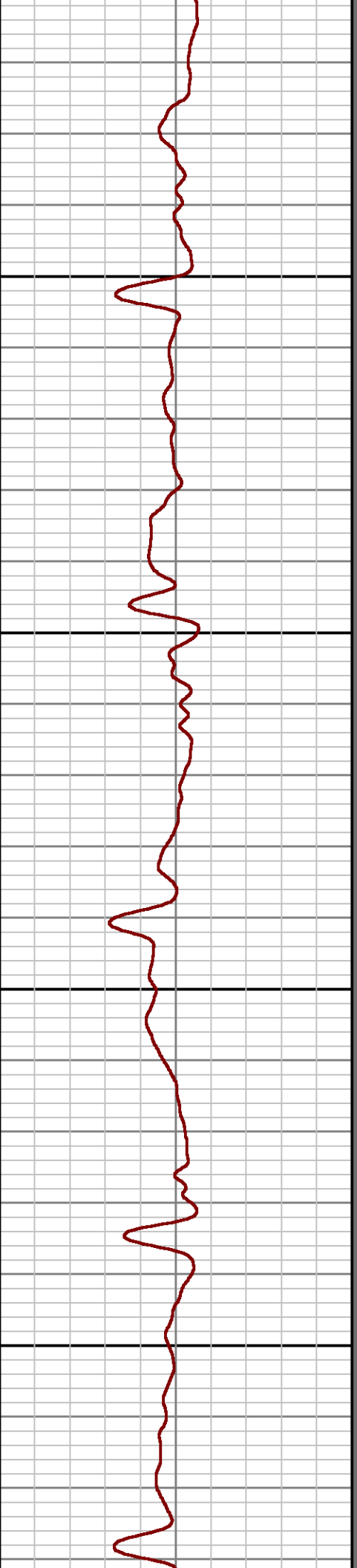
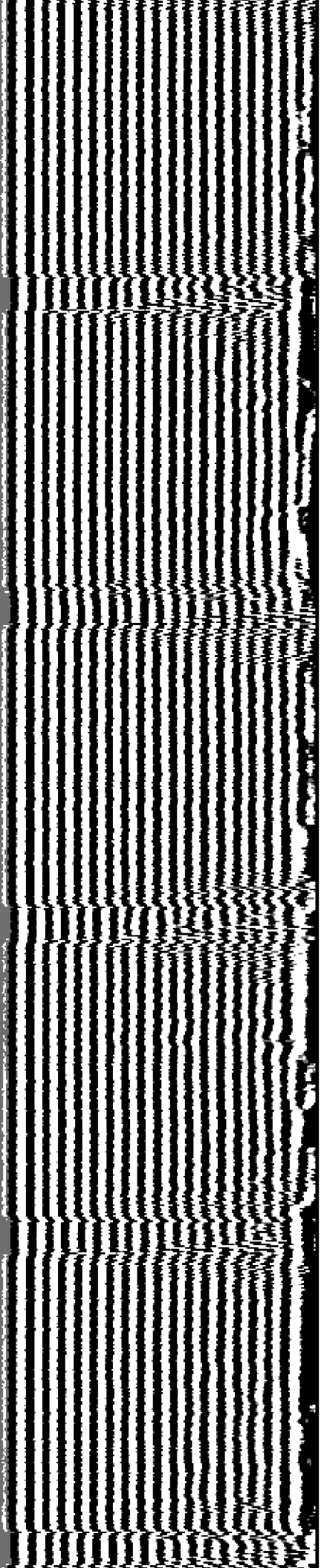




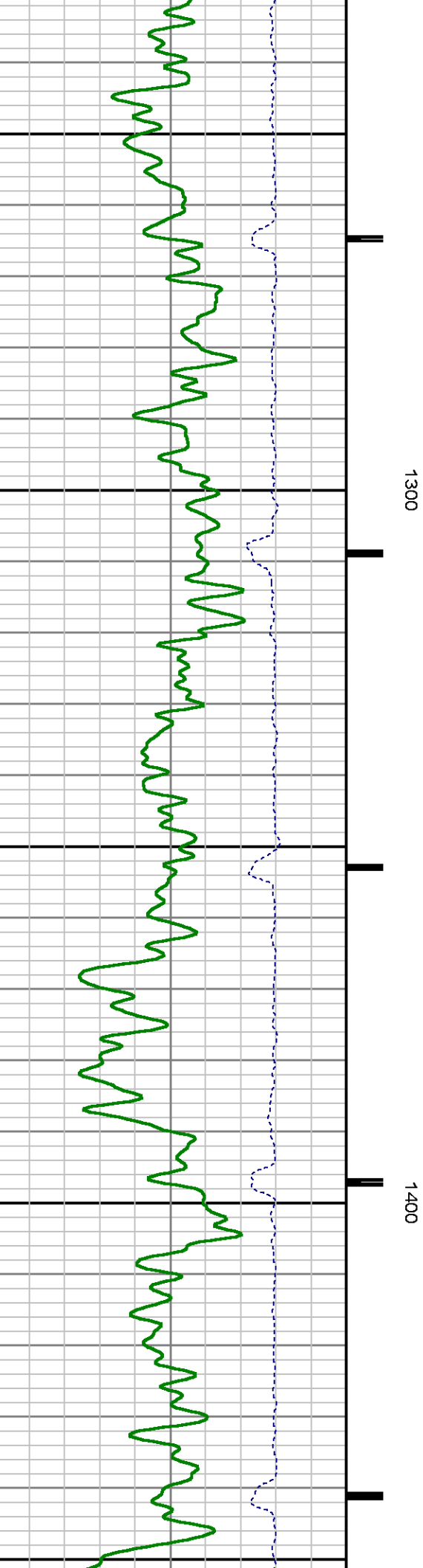
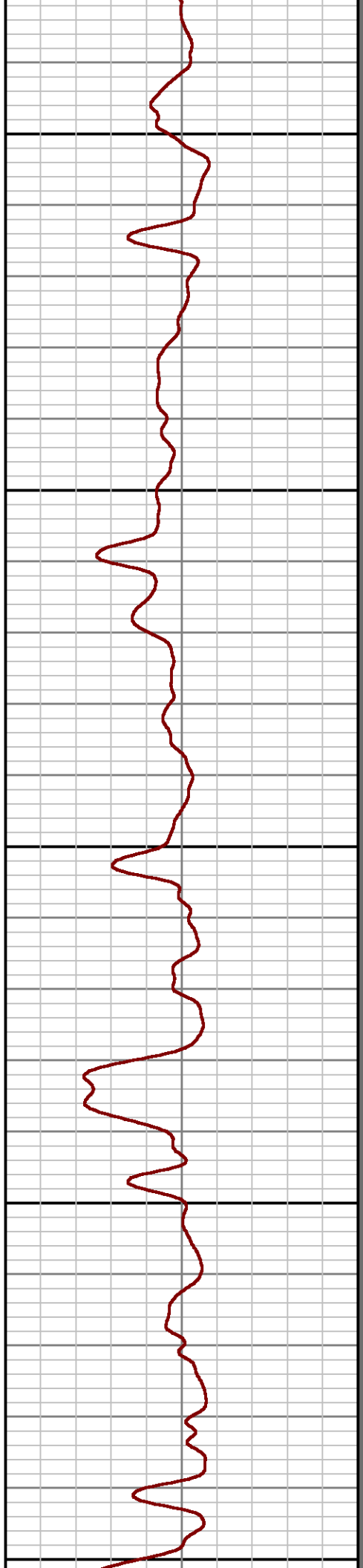
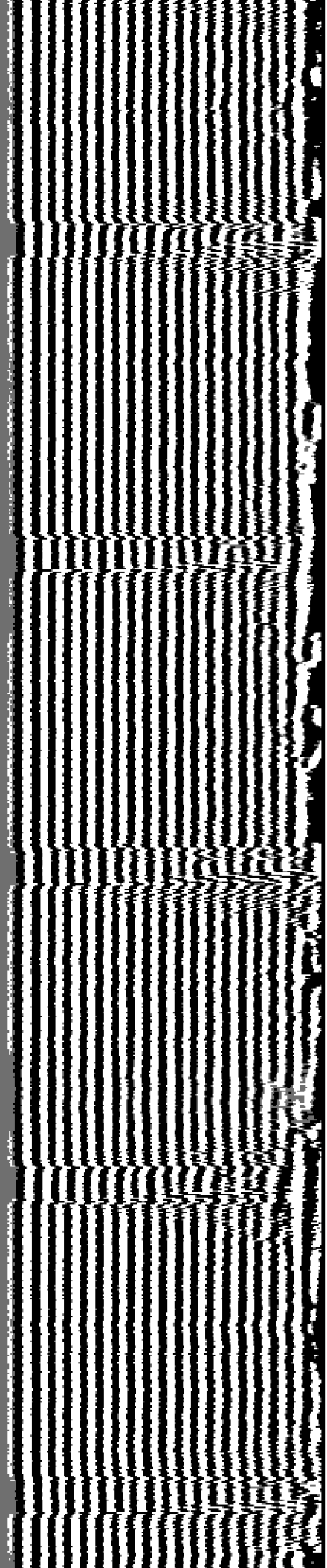


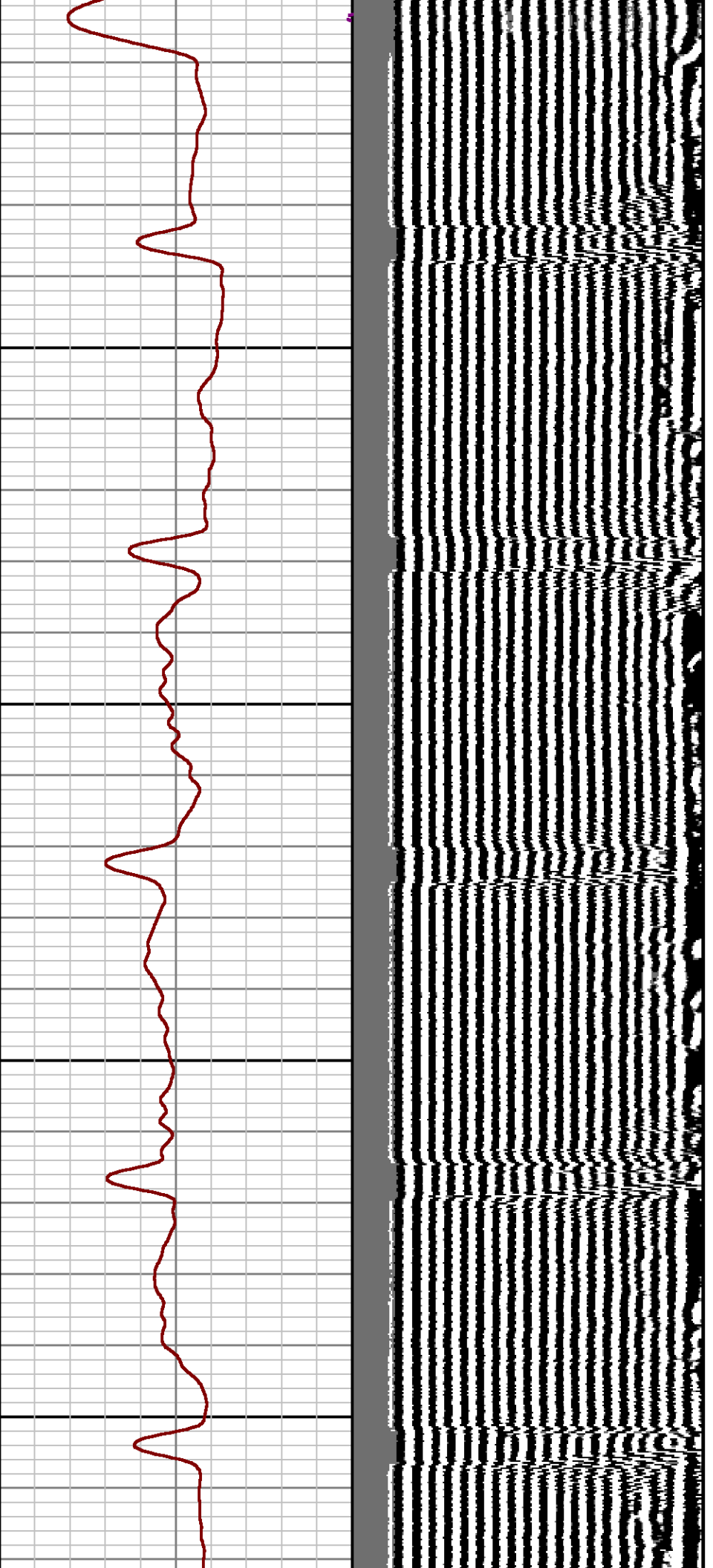






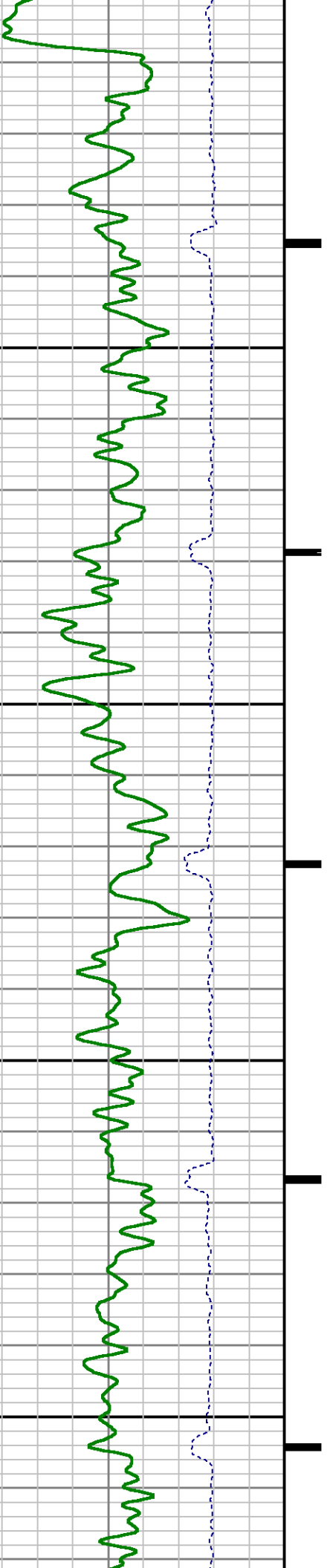


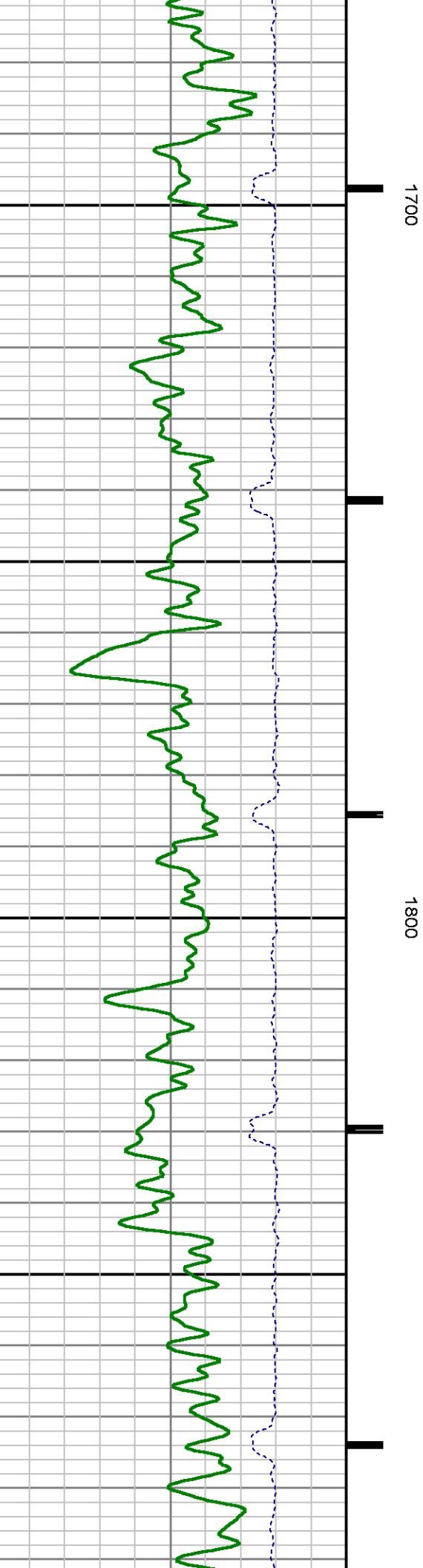
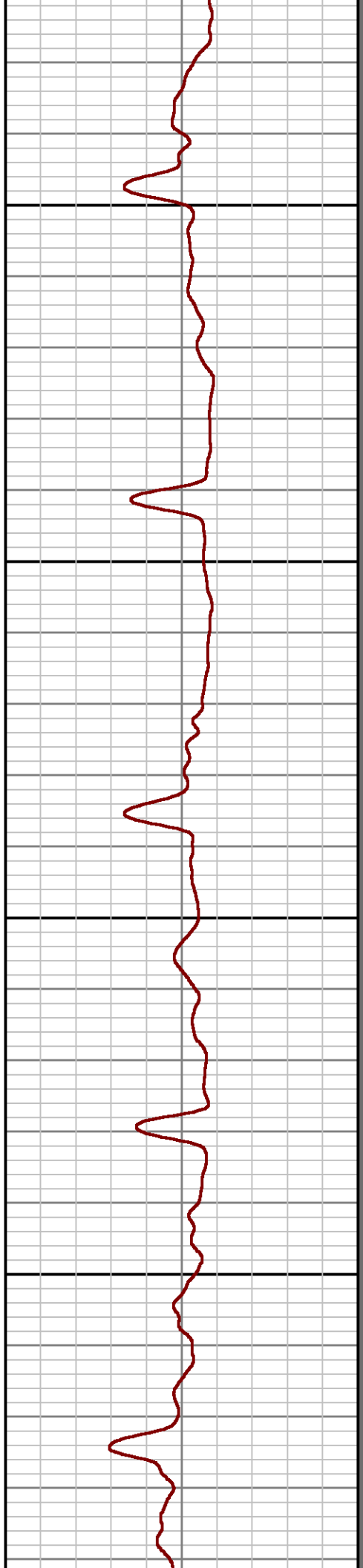
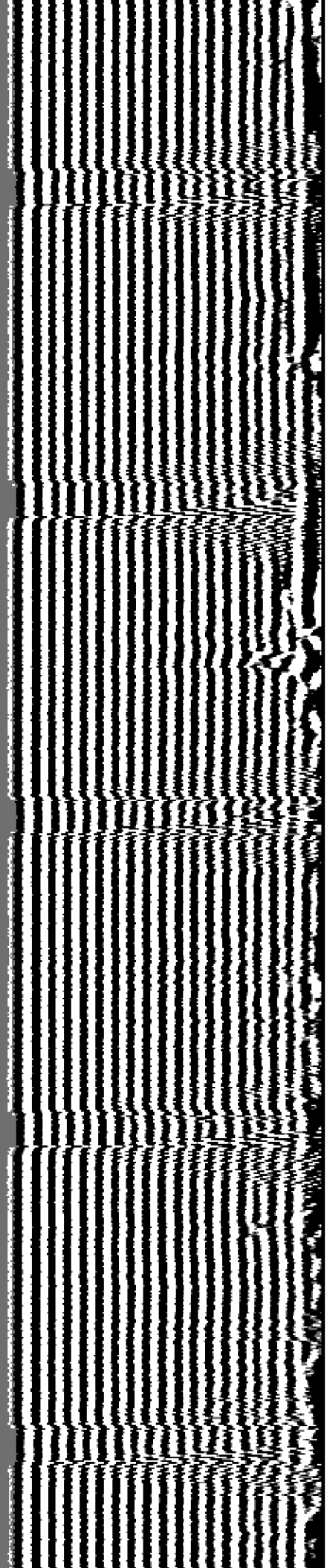


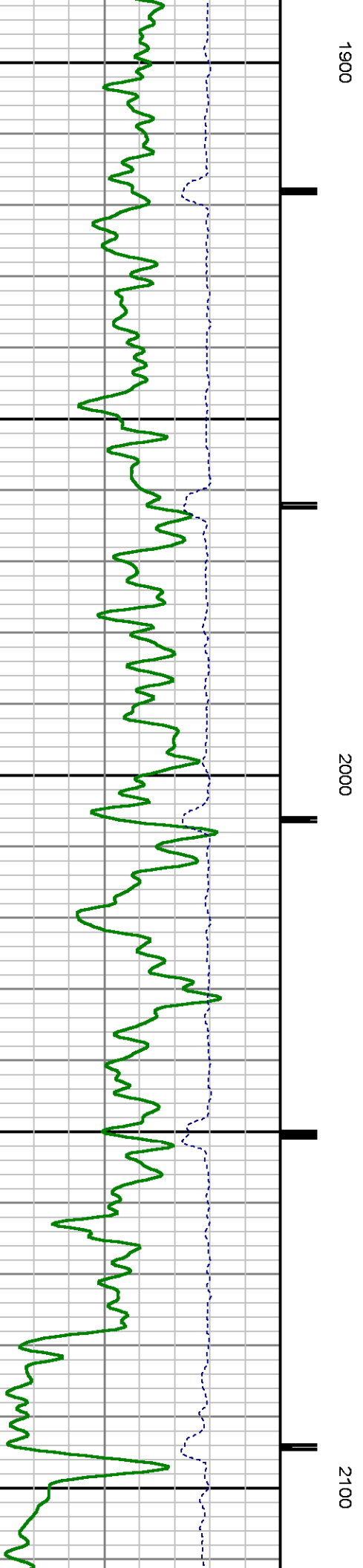
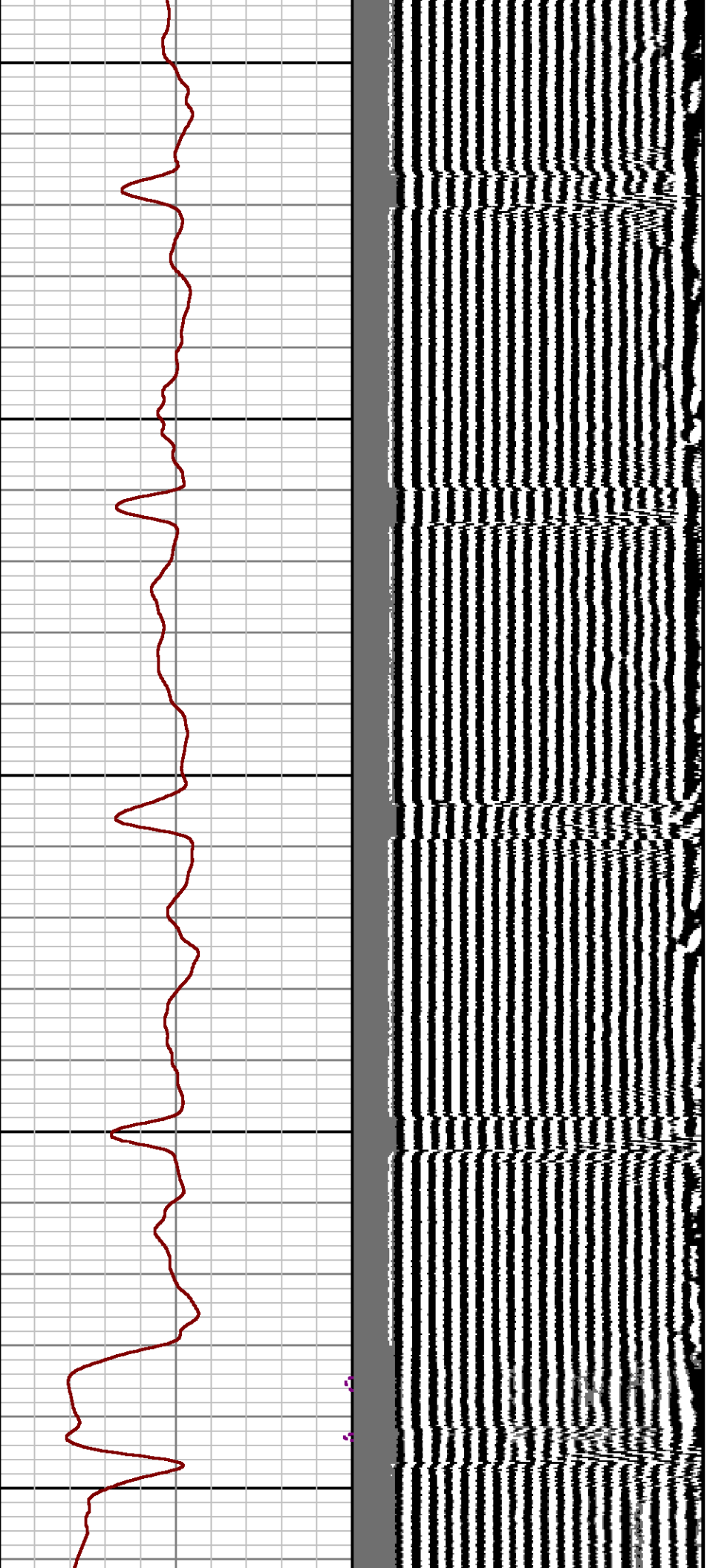


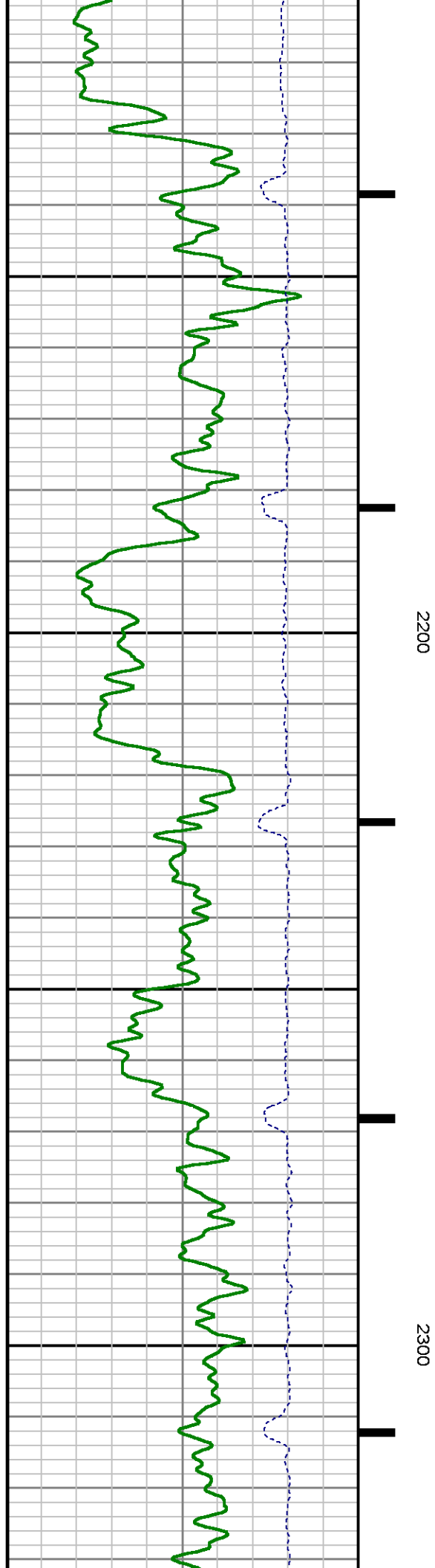
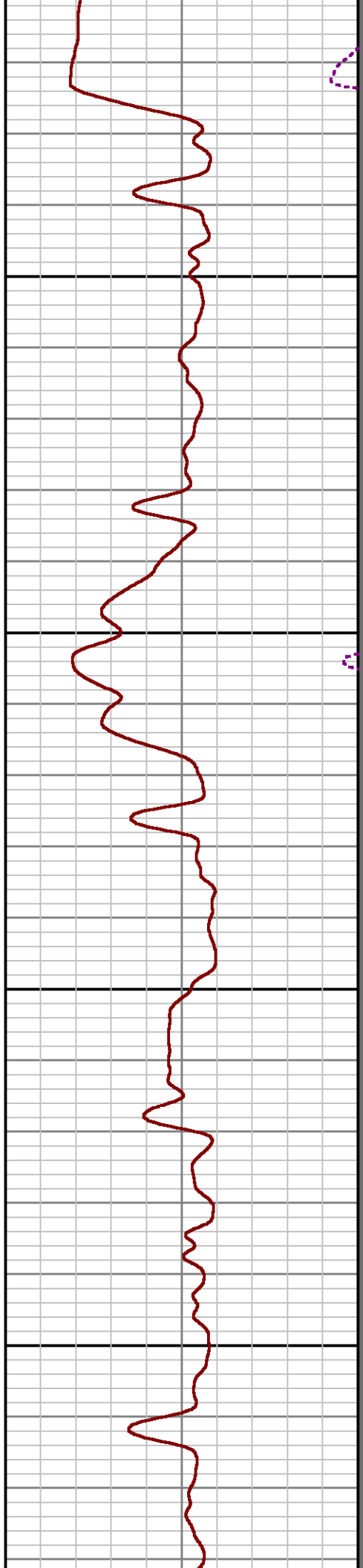
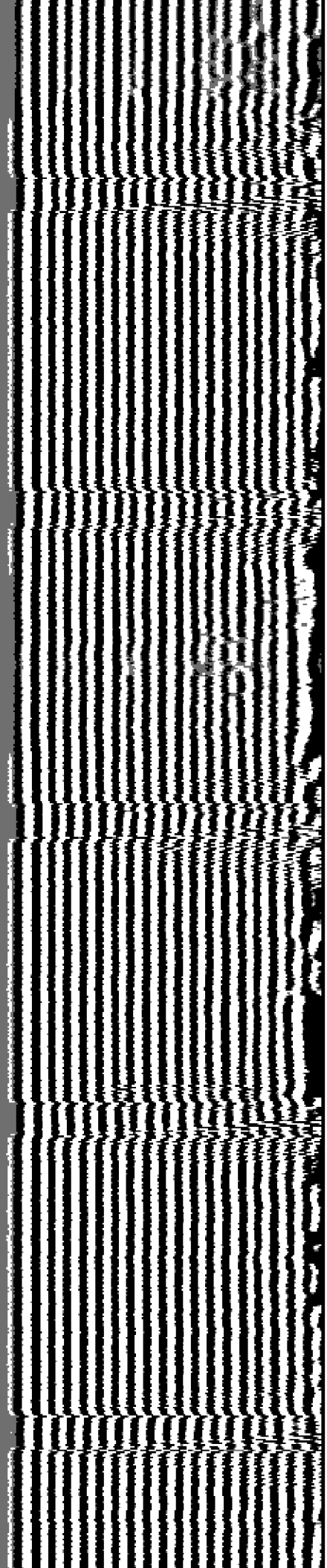
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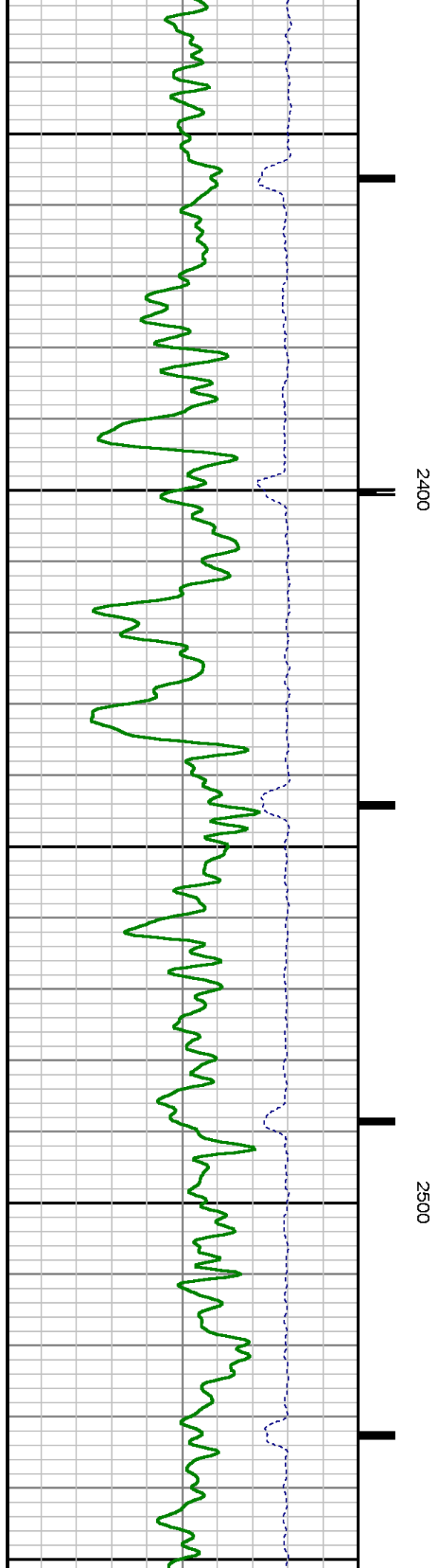
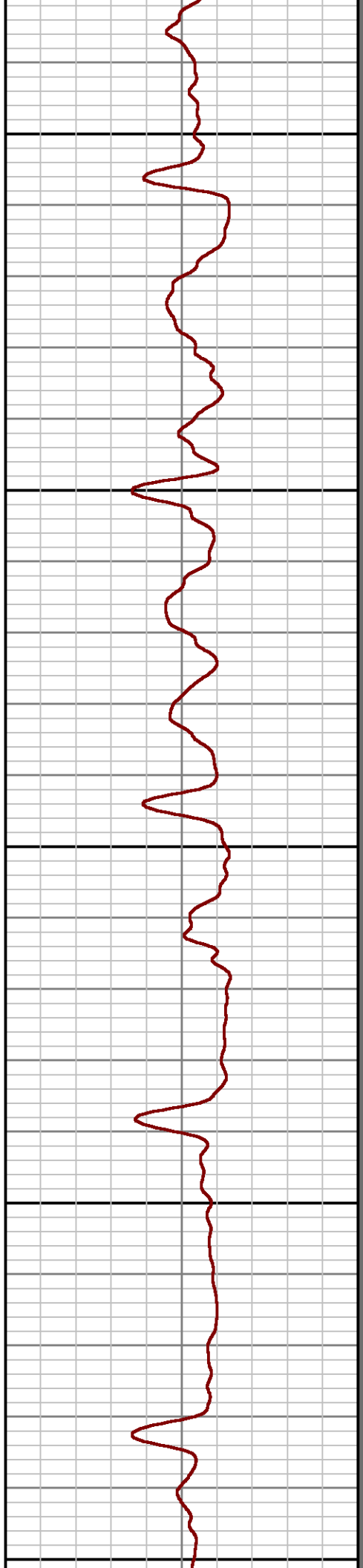
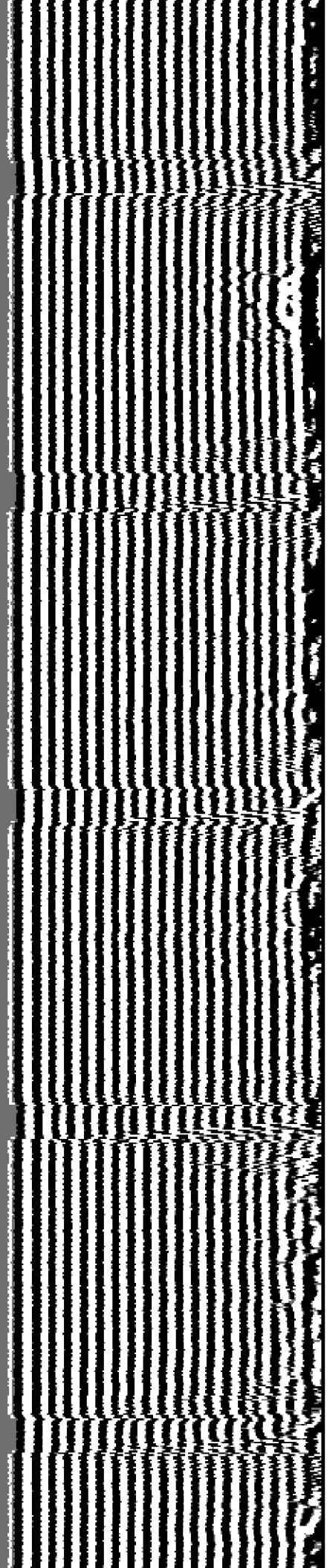
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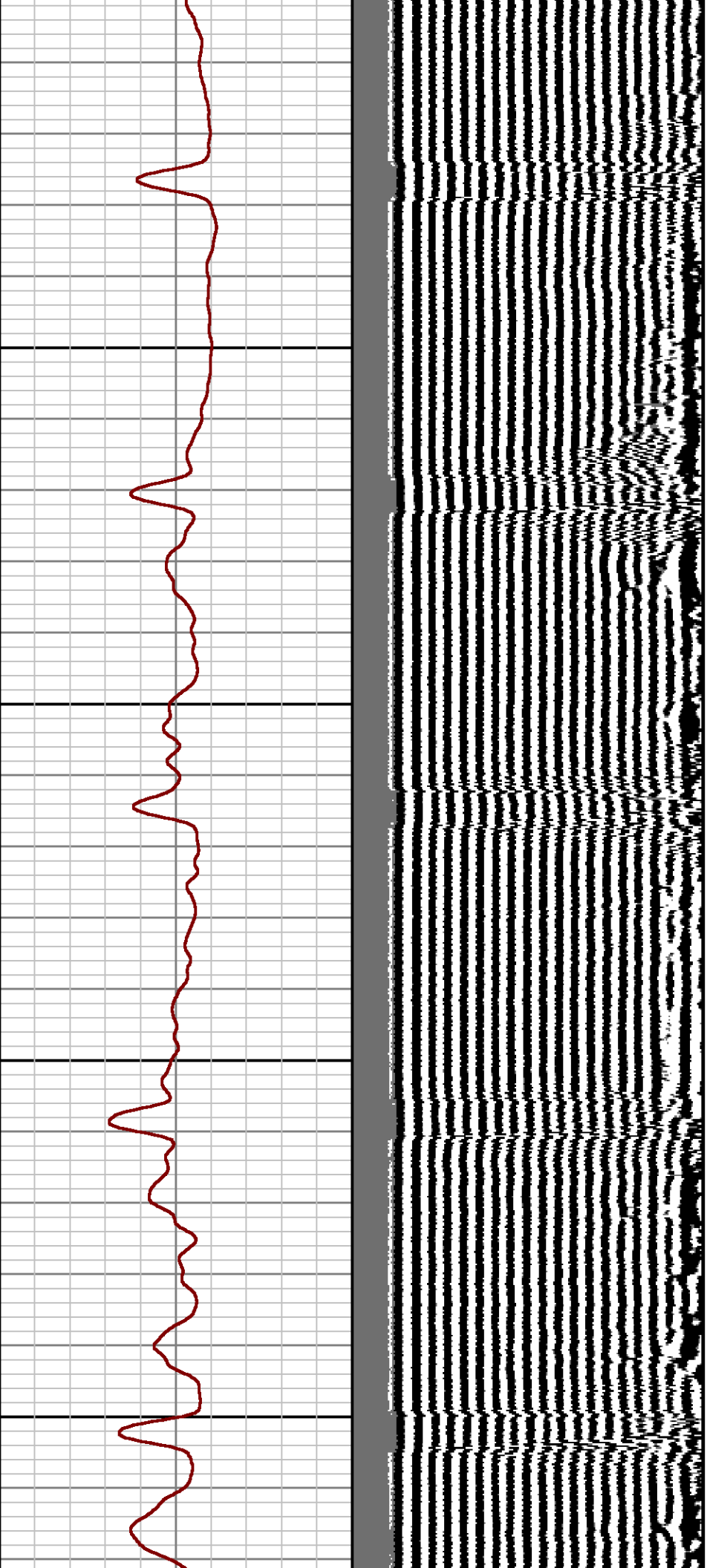






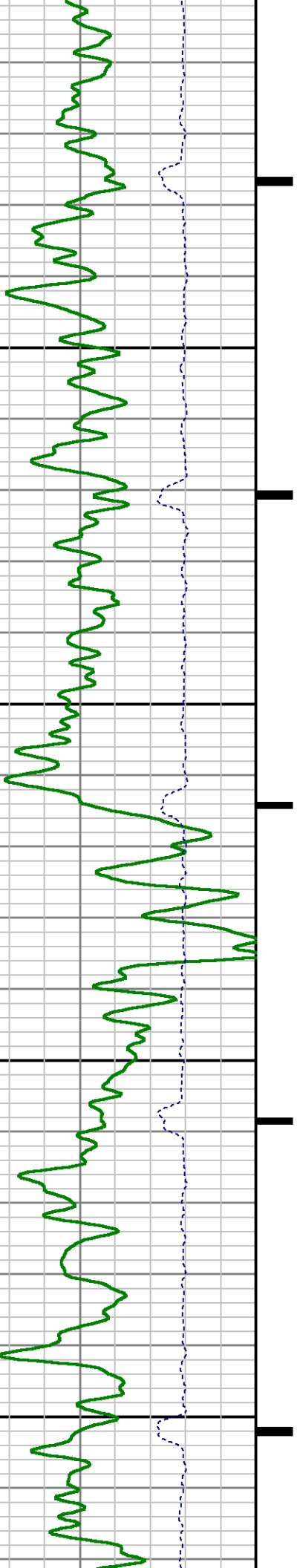


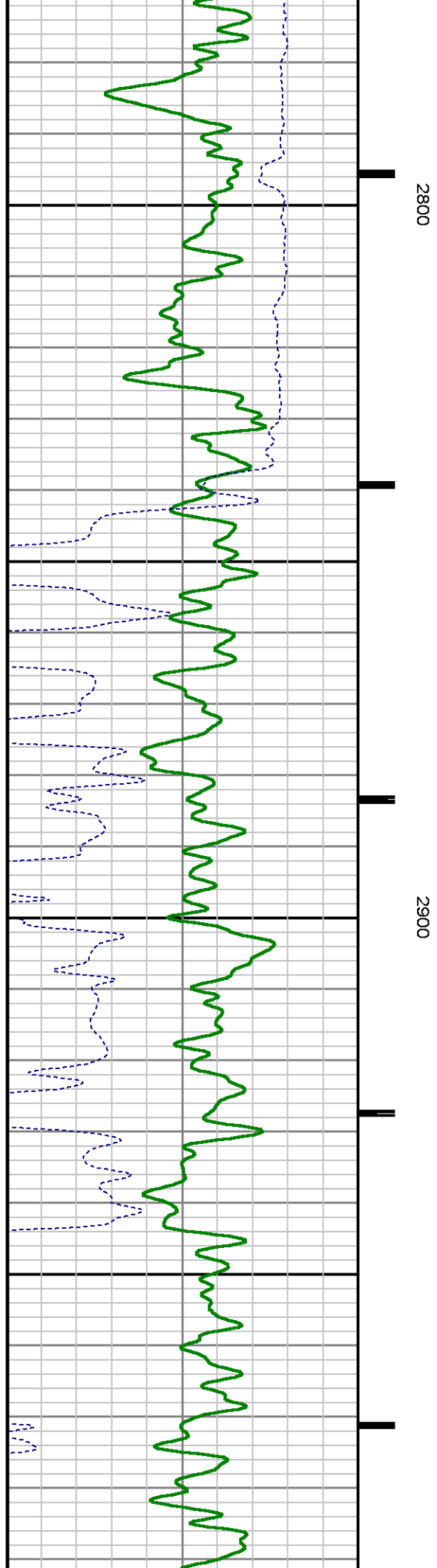
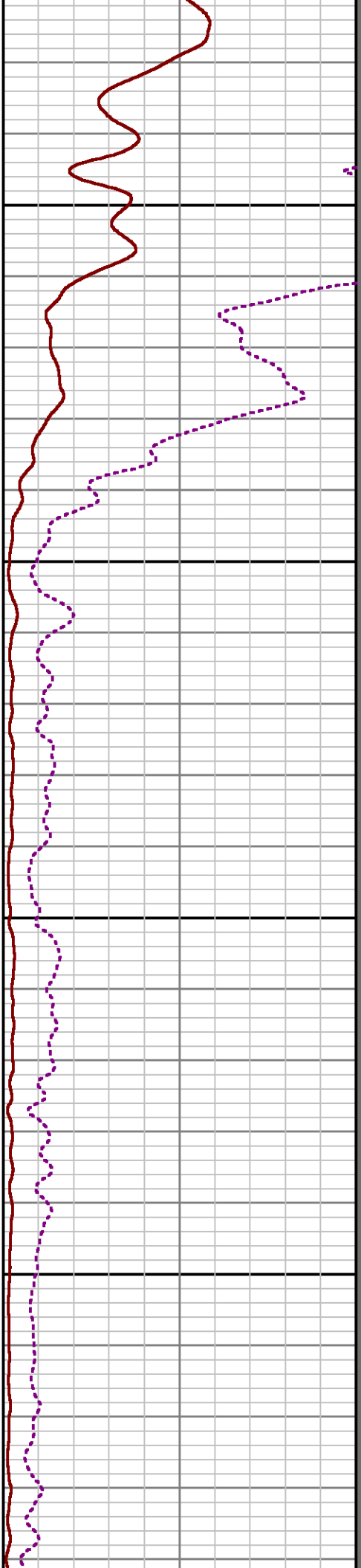
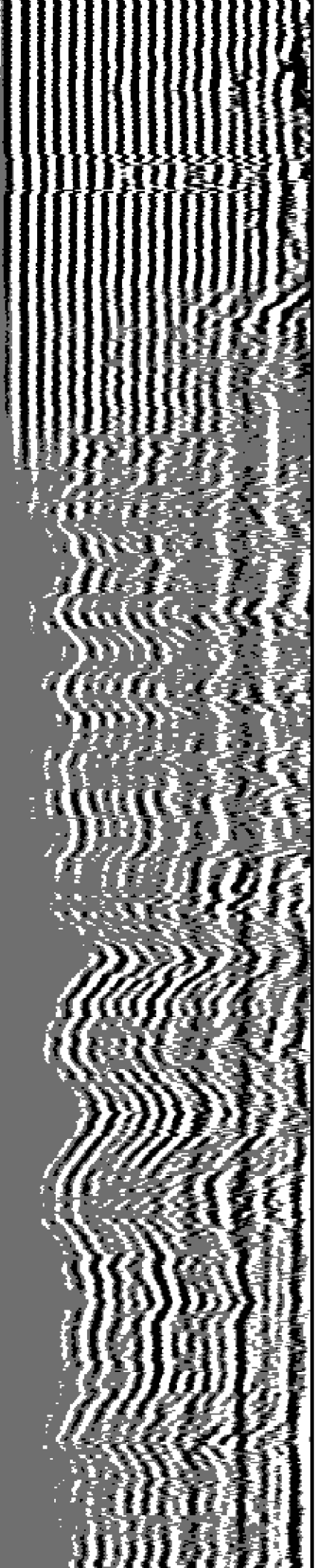




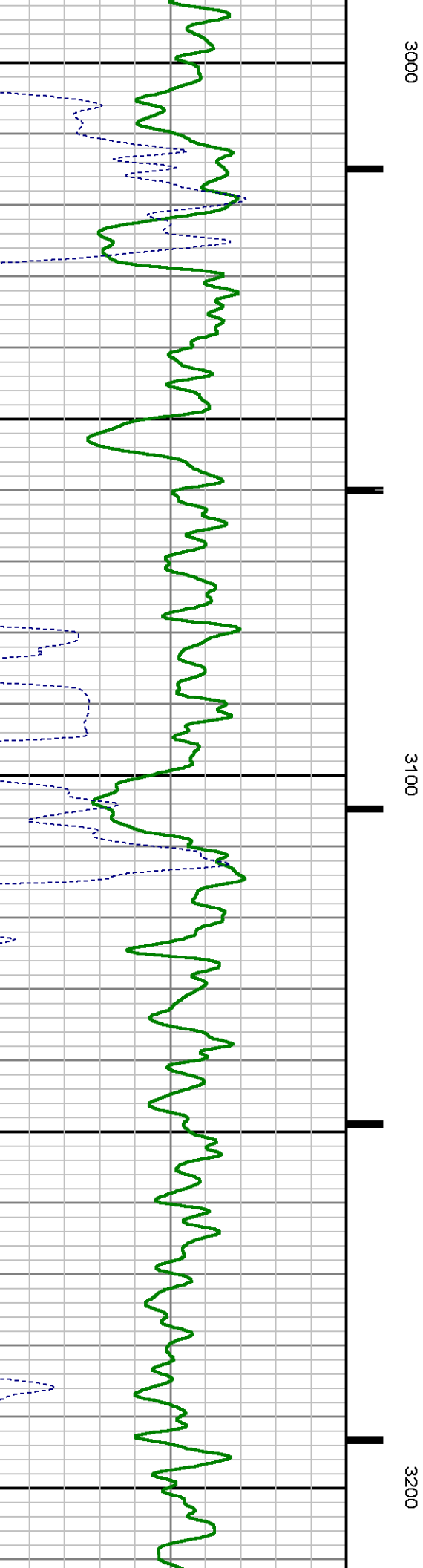
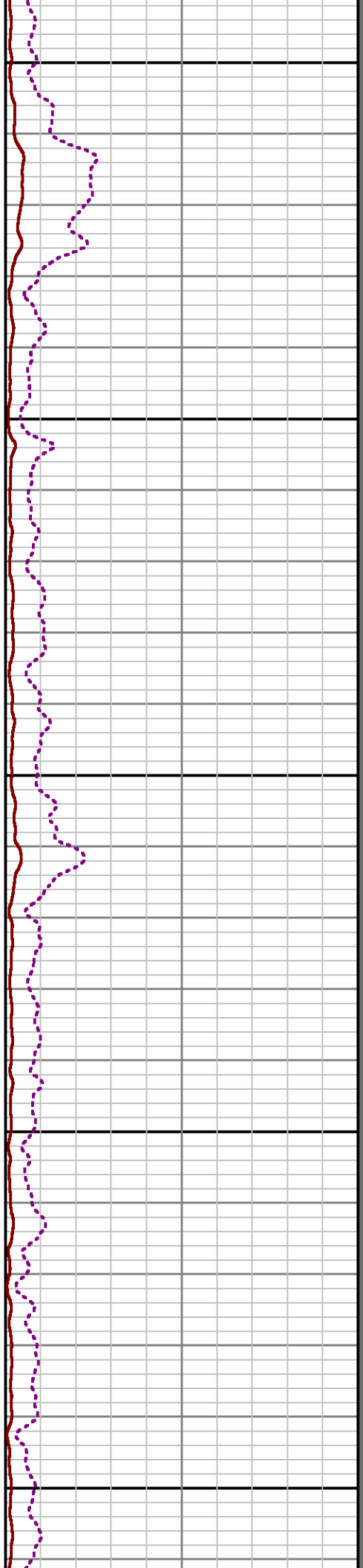
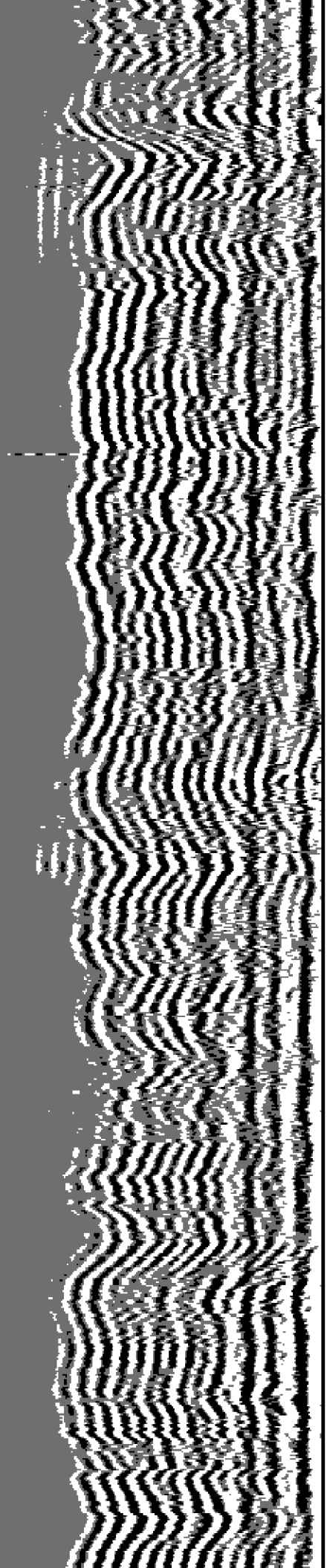
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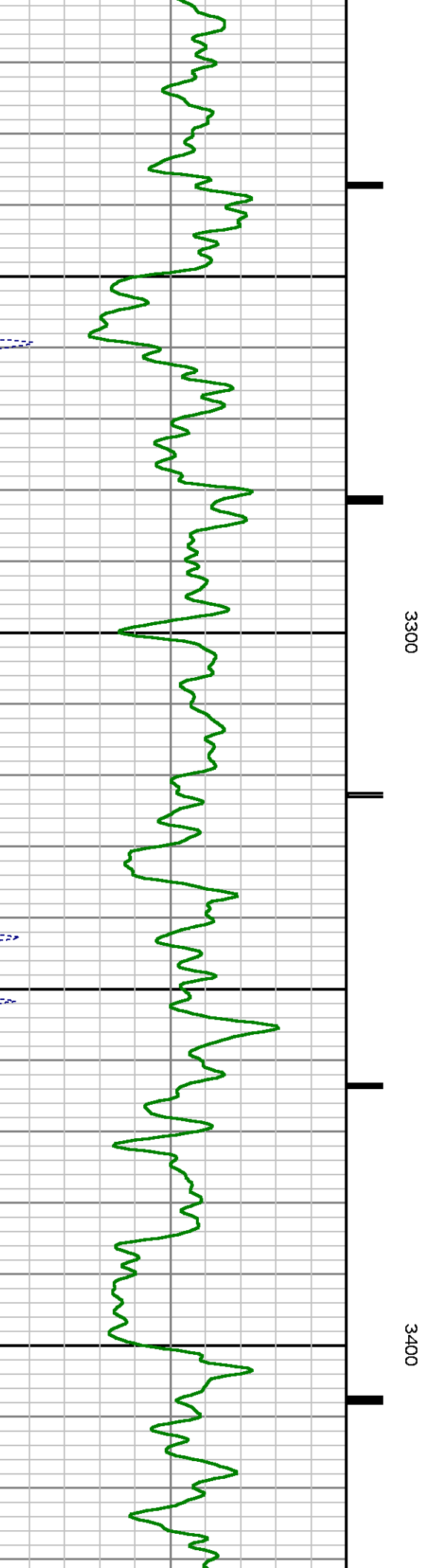
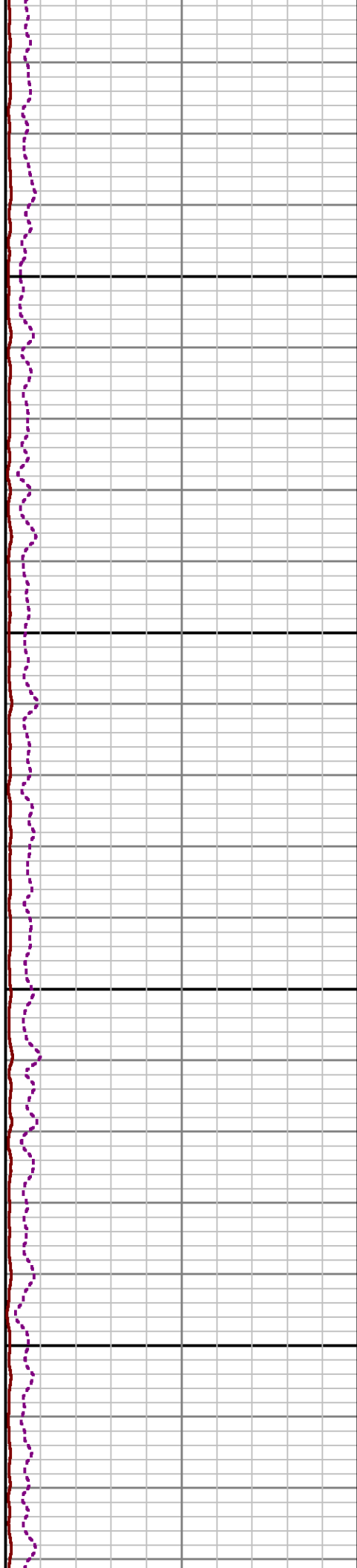
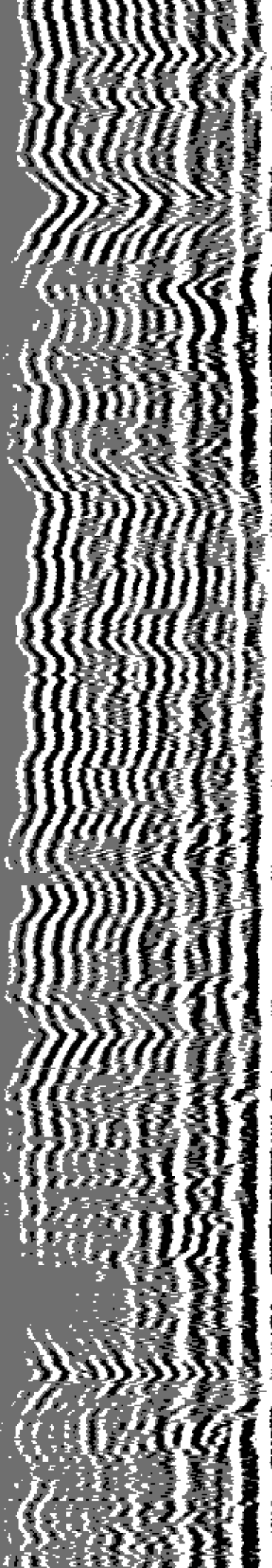
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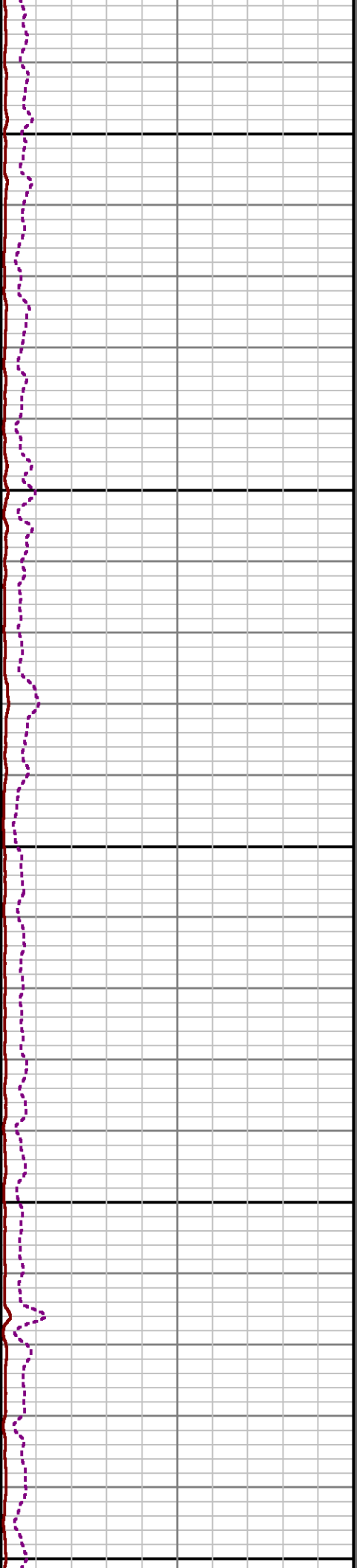
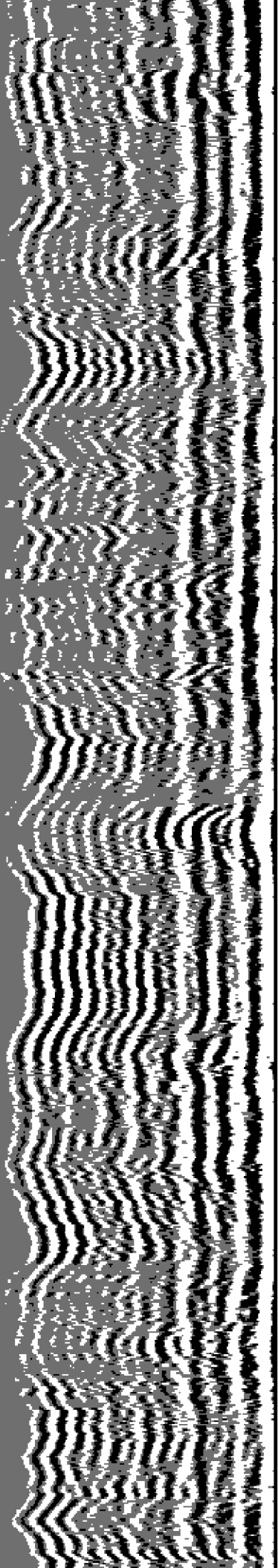






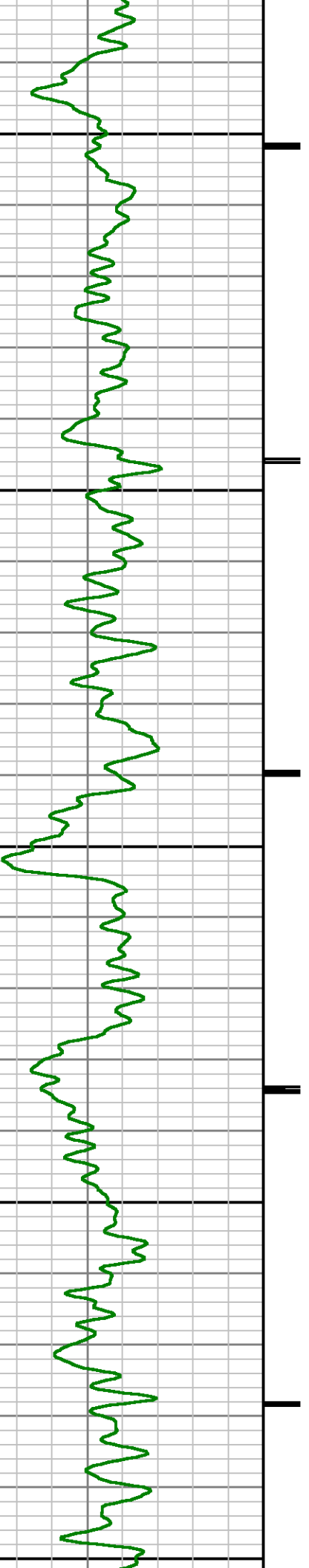




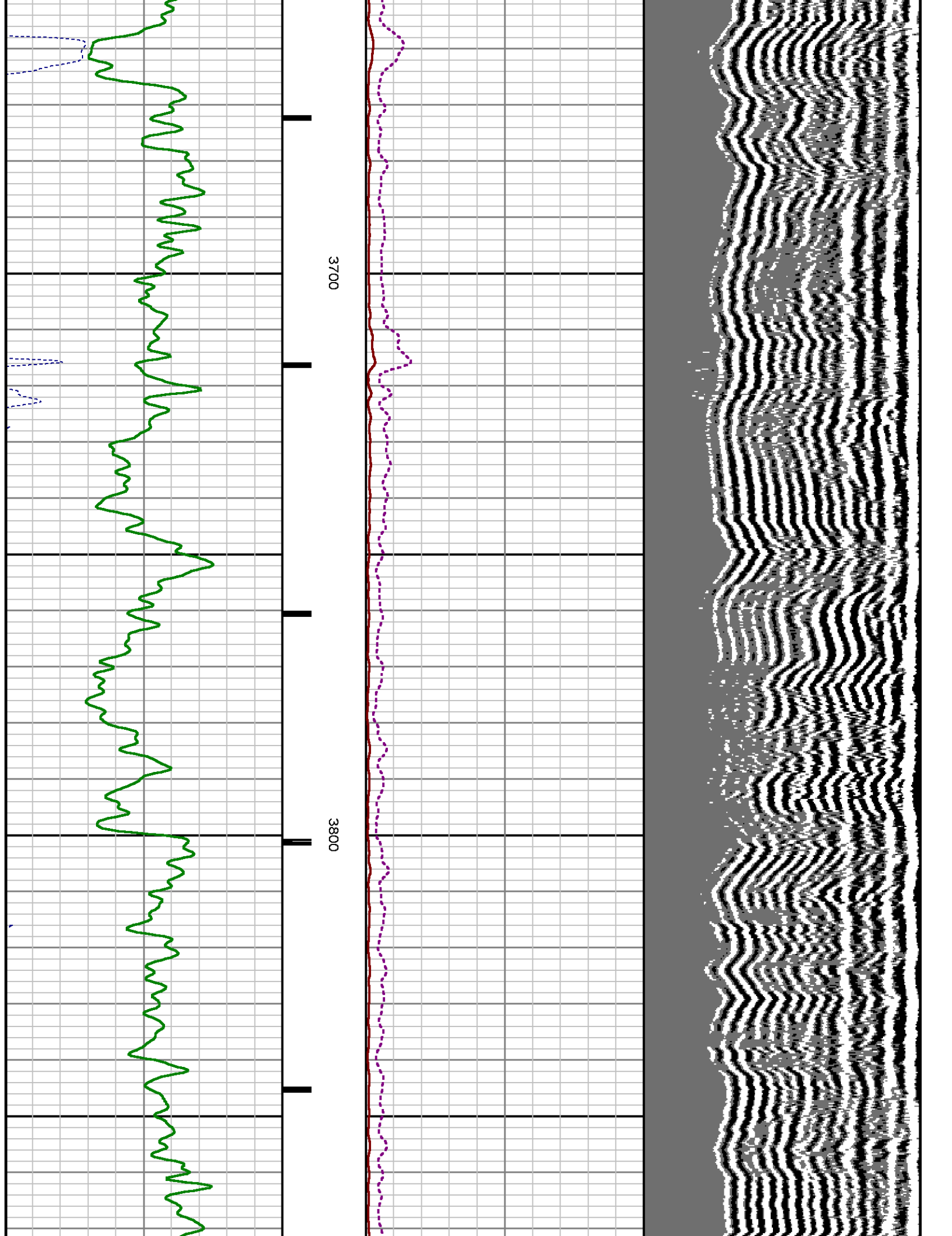


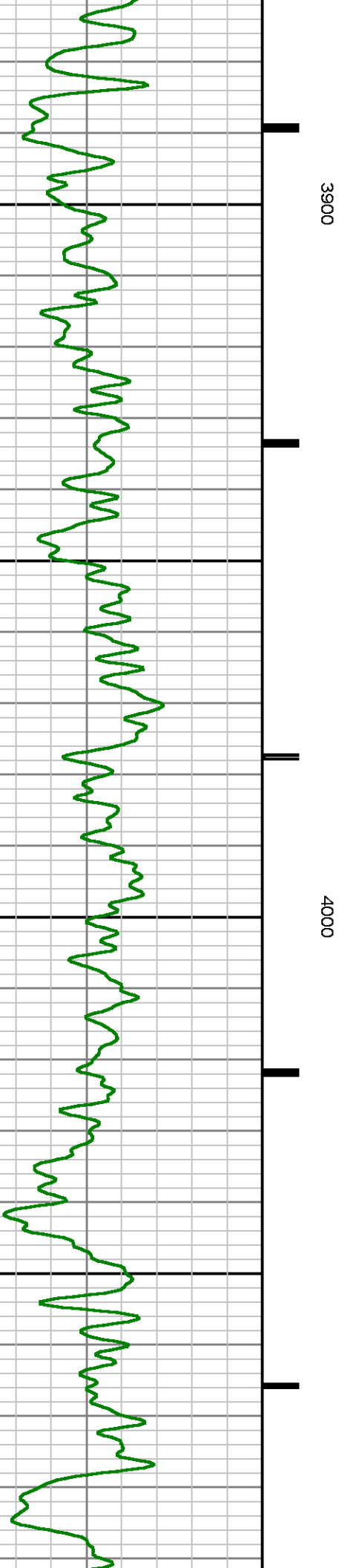
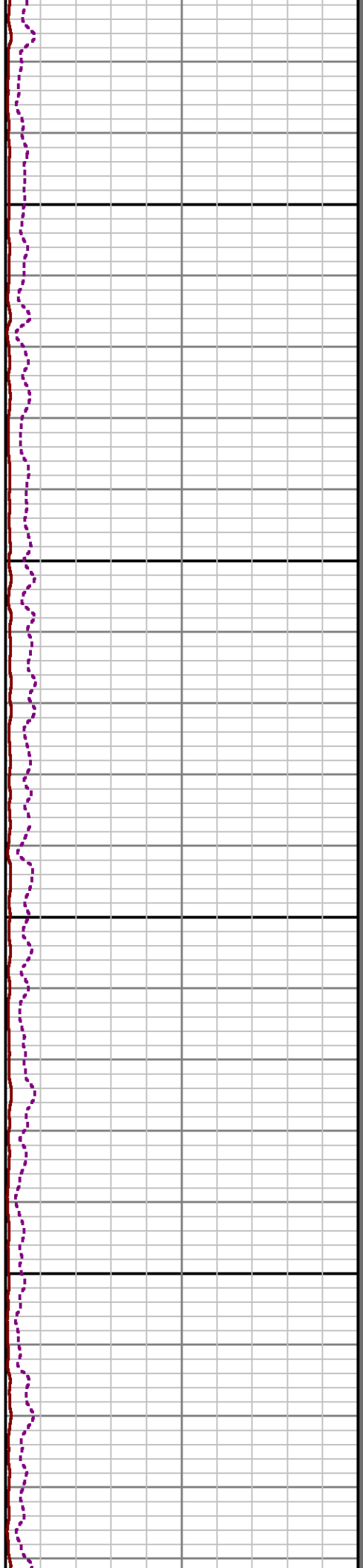
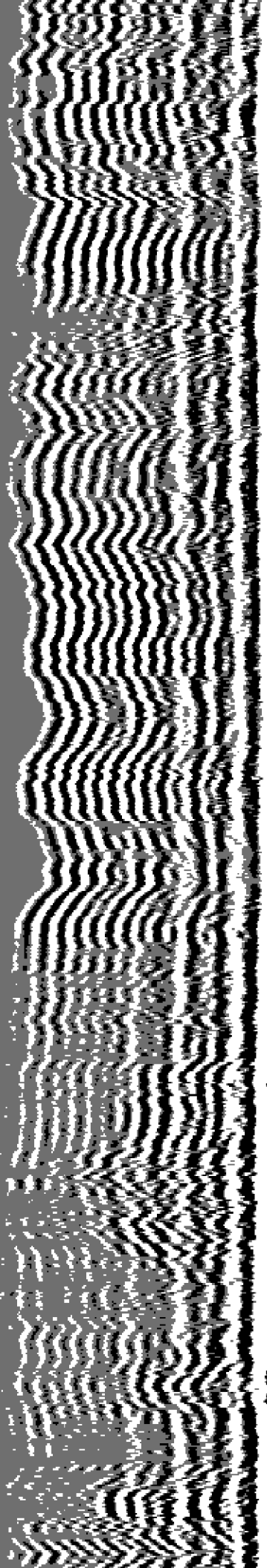
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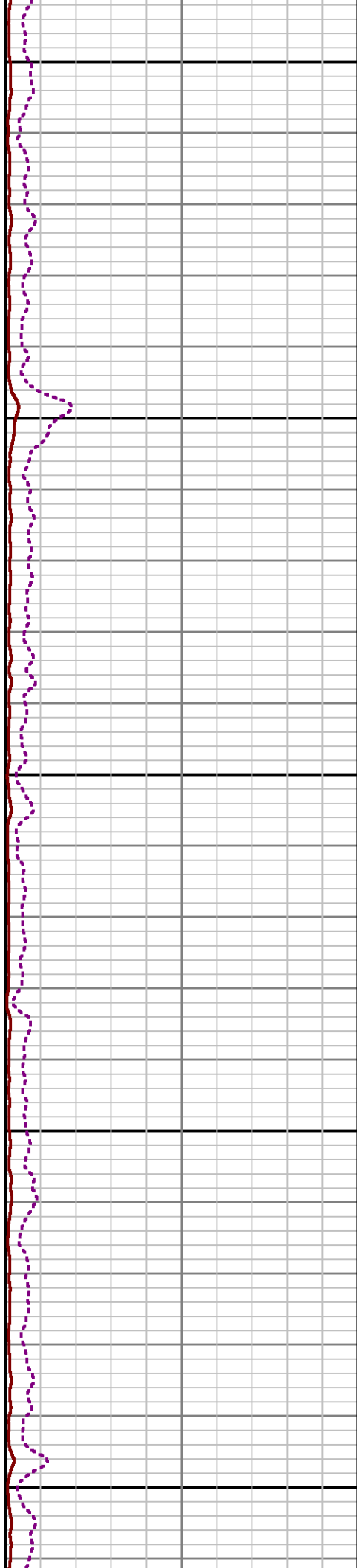
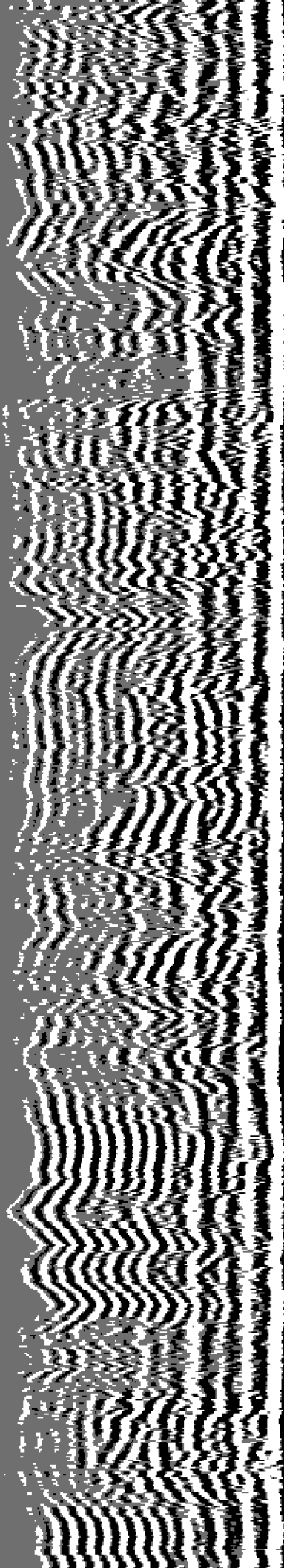


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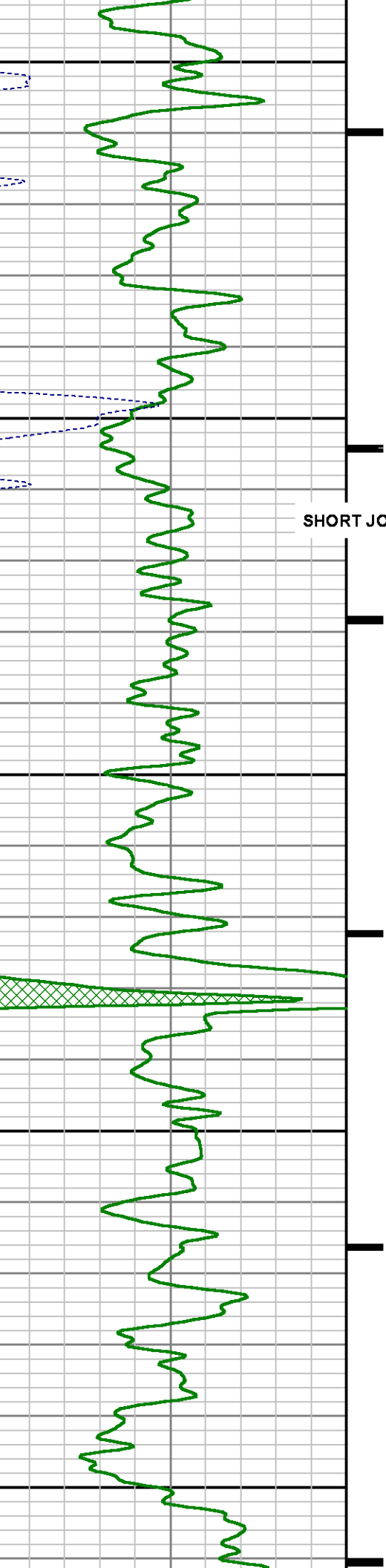


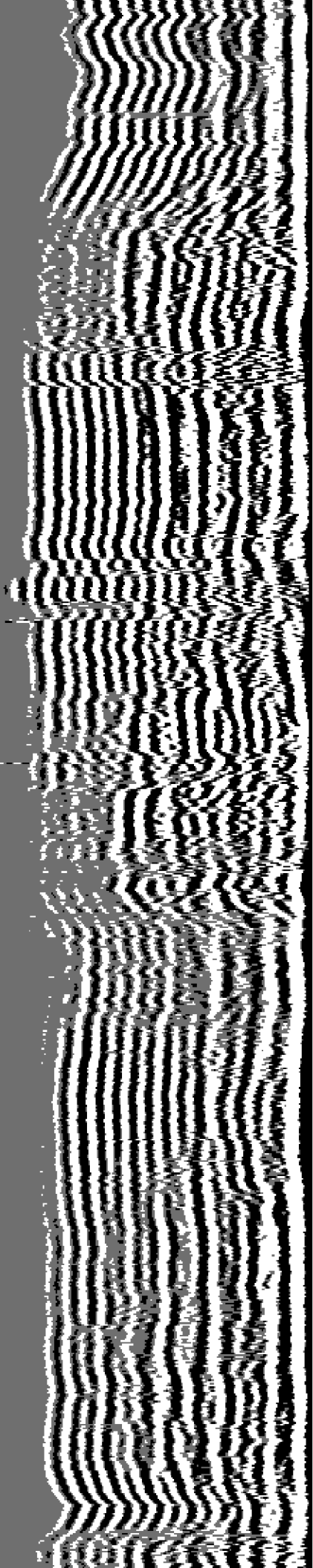
SHORT JOINT

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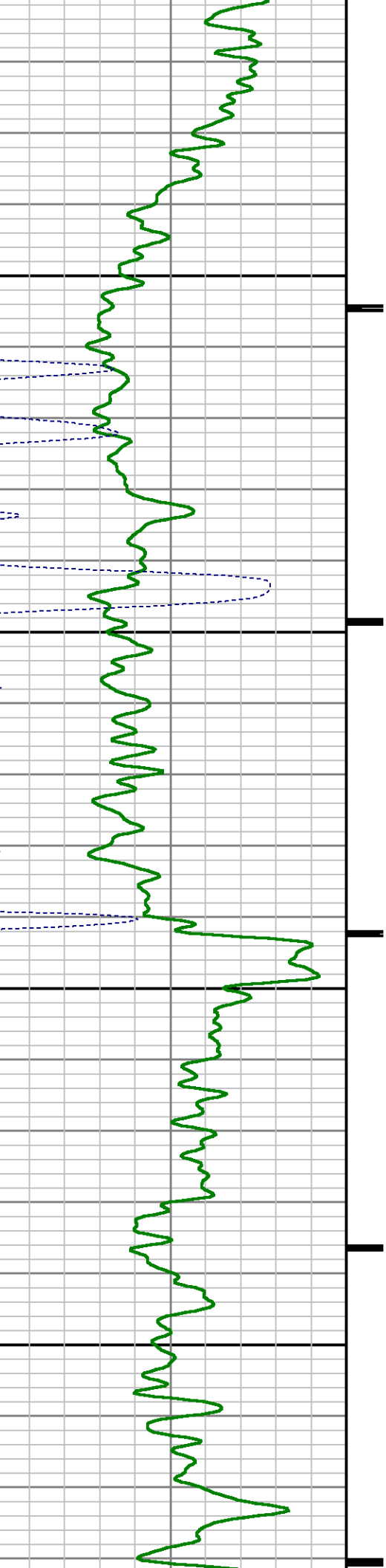
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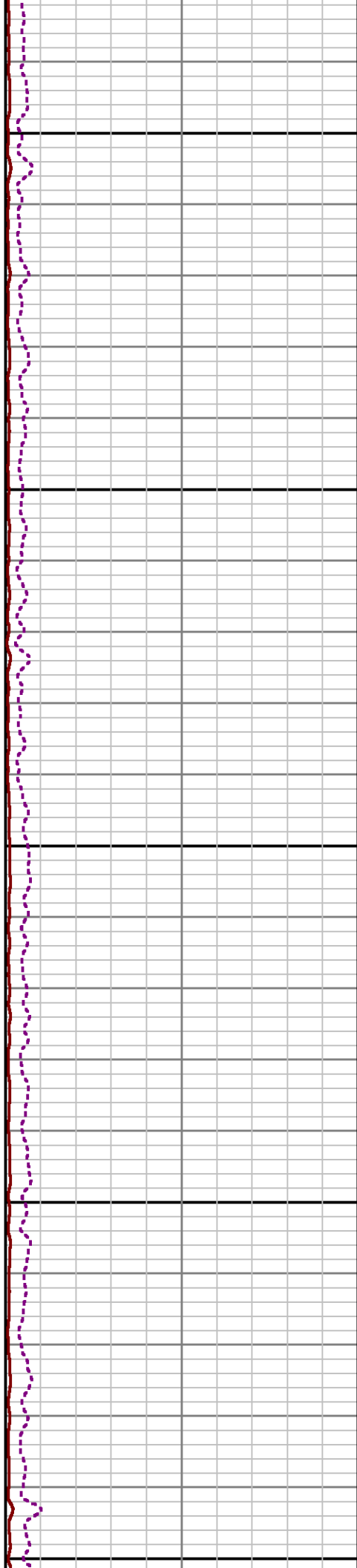
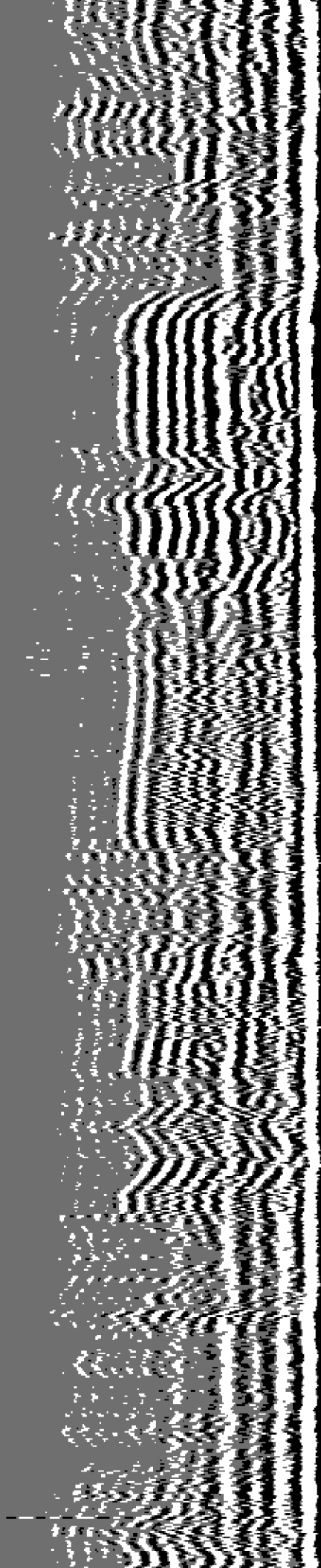




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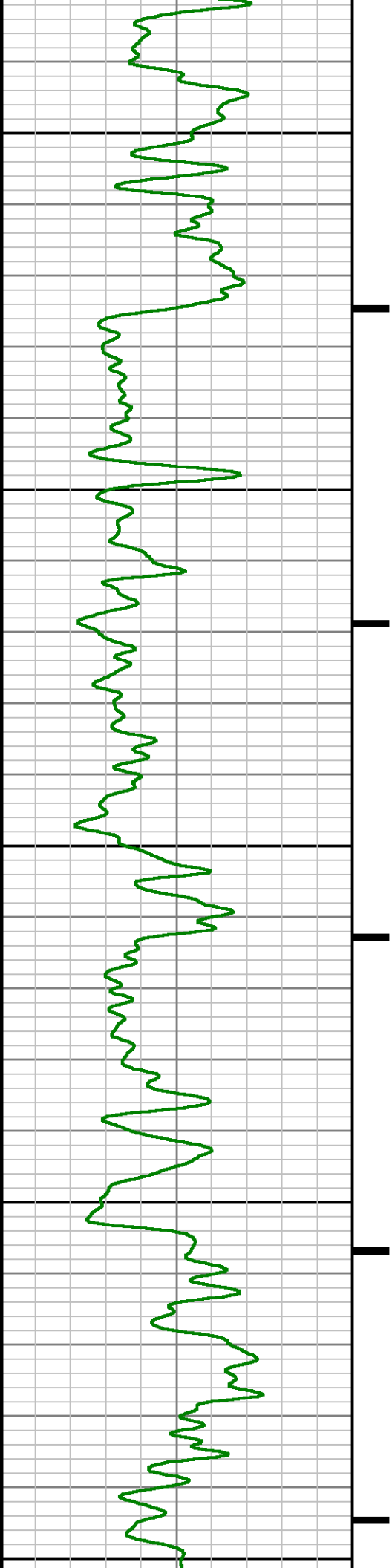
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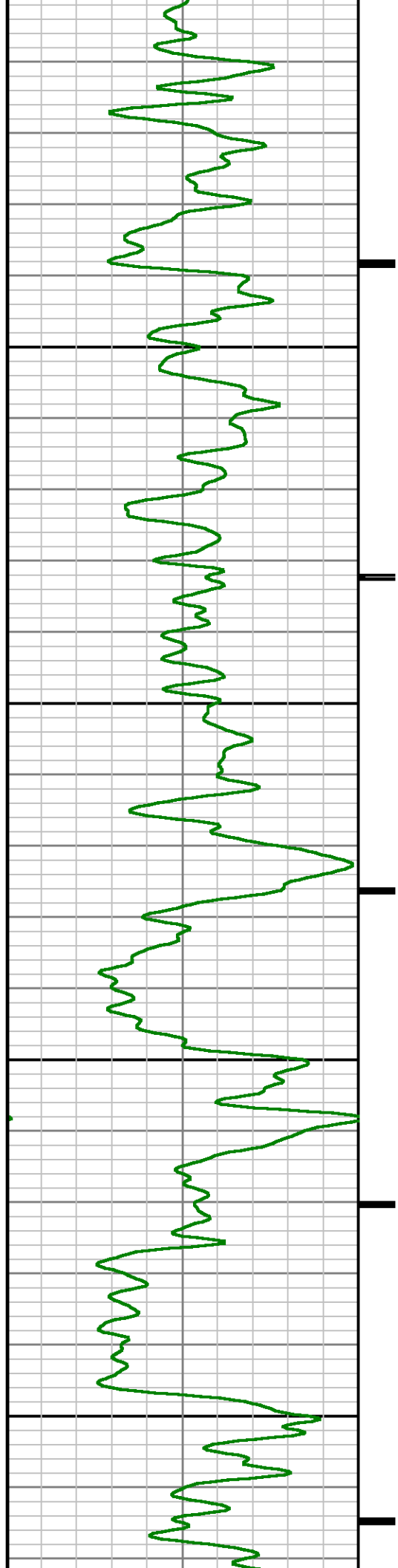
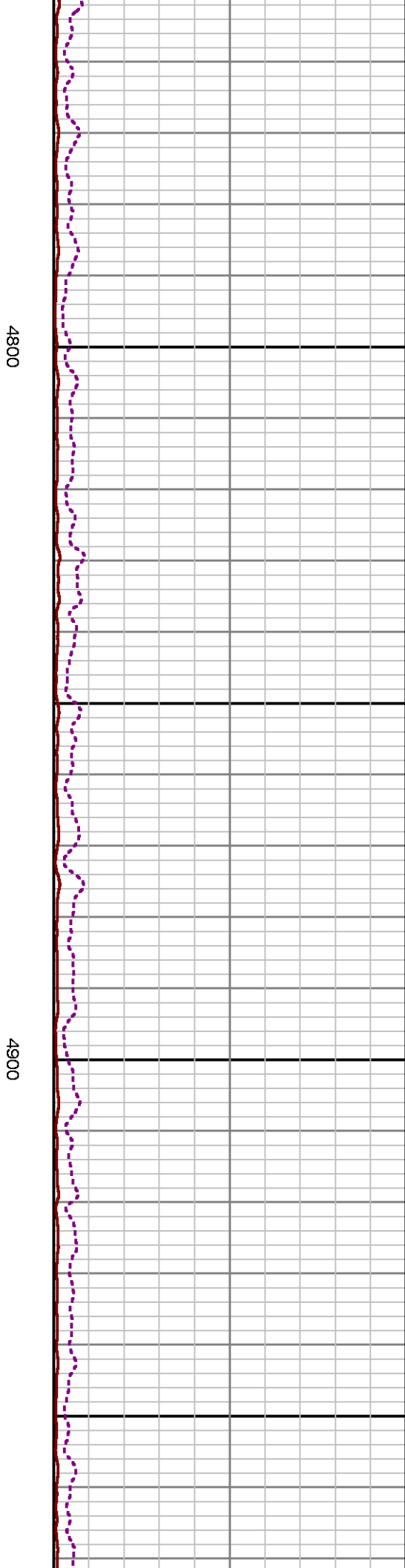
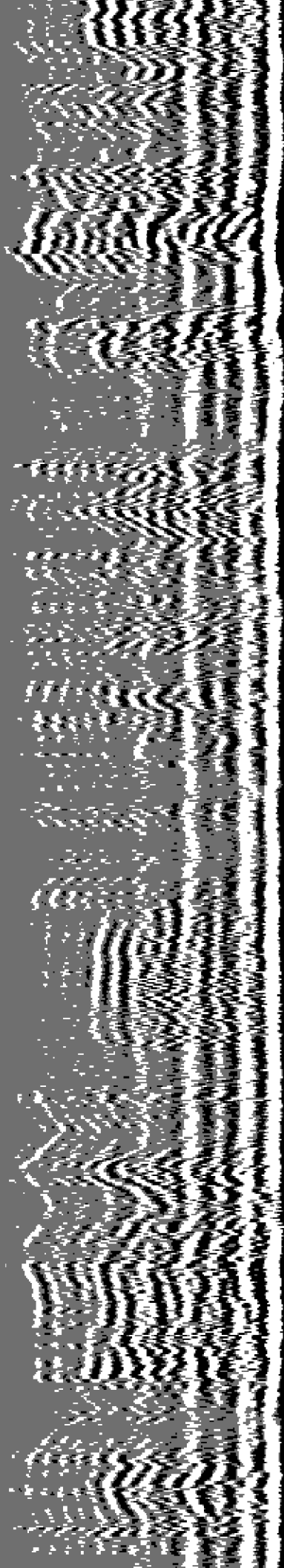


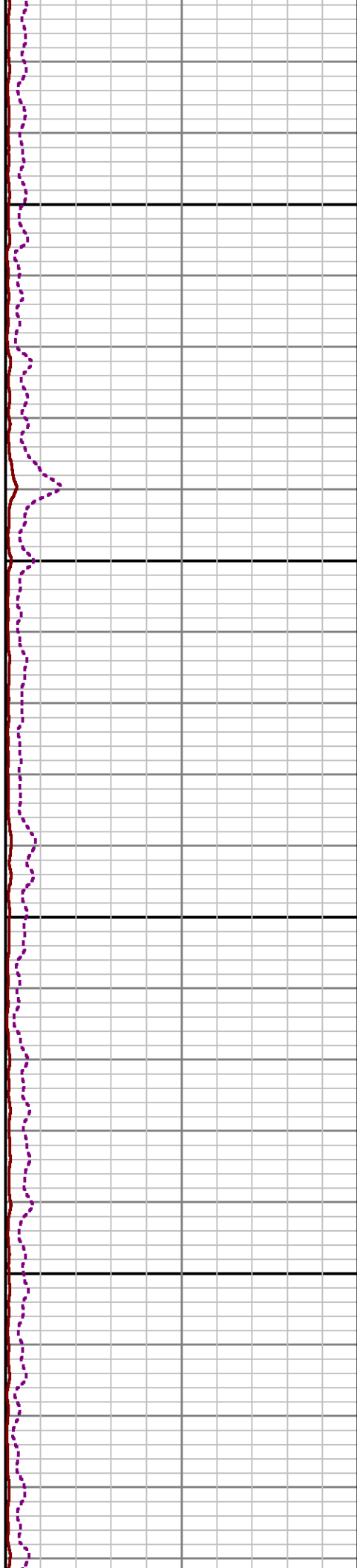
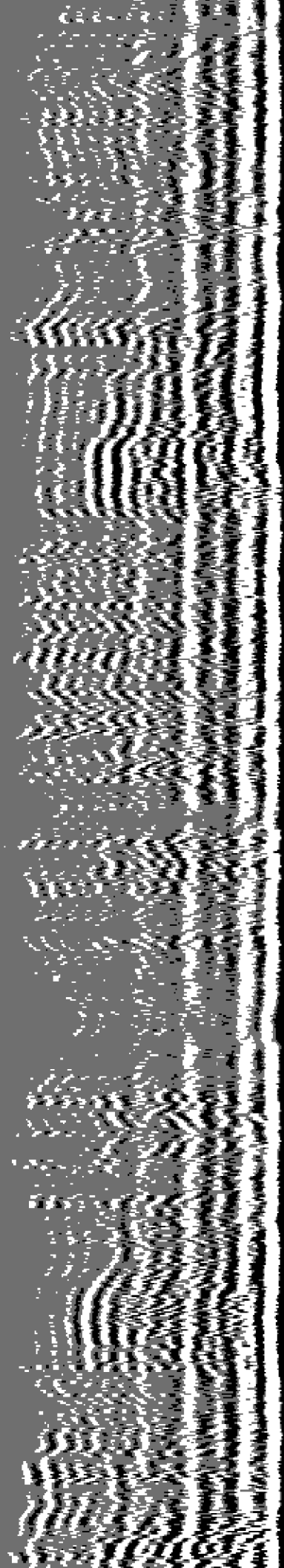
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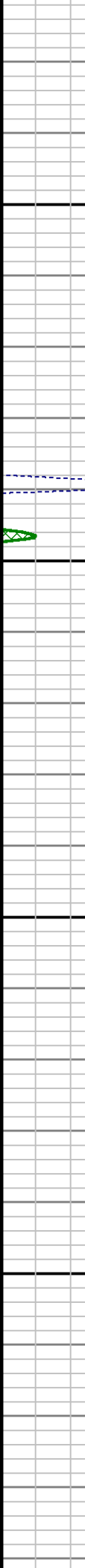
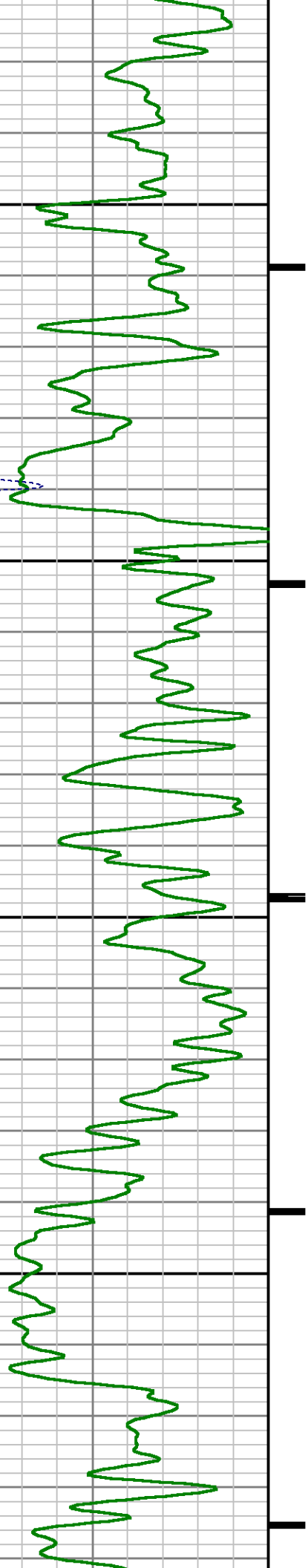


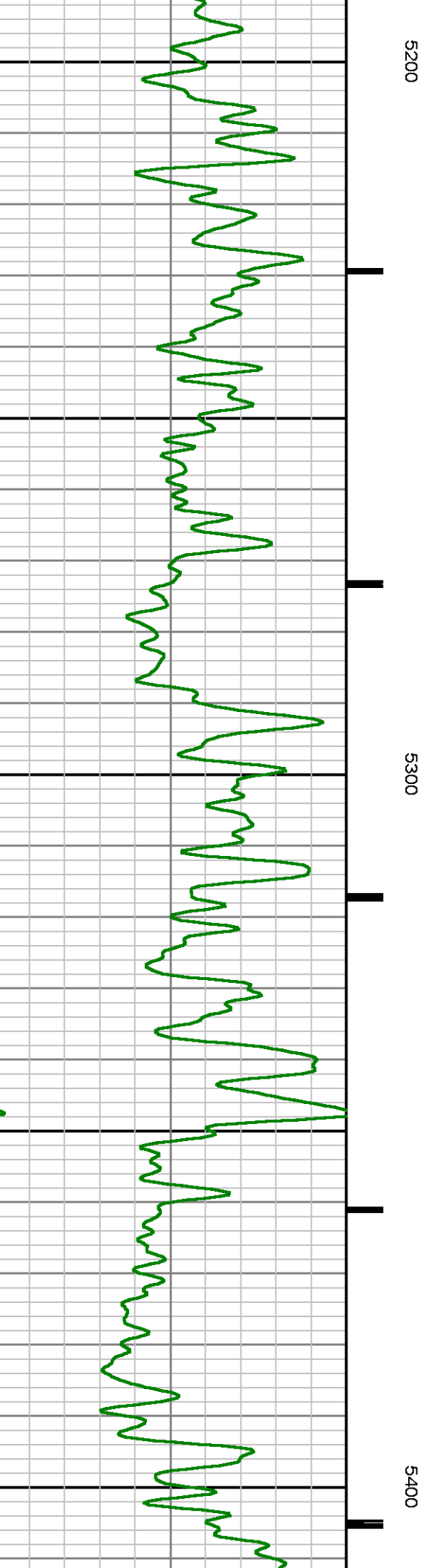
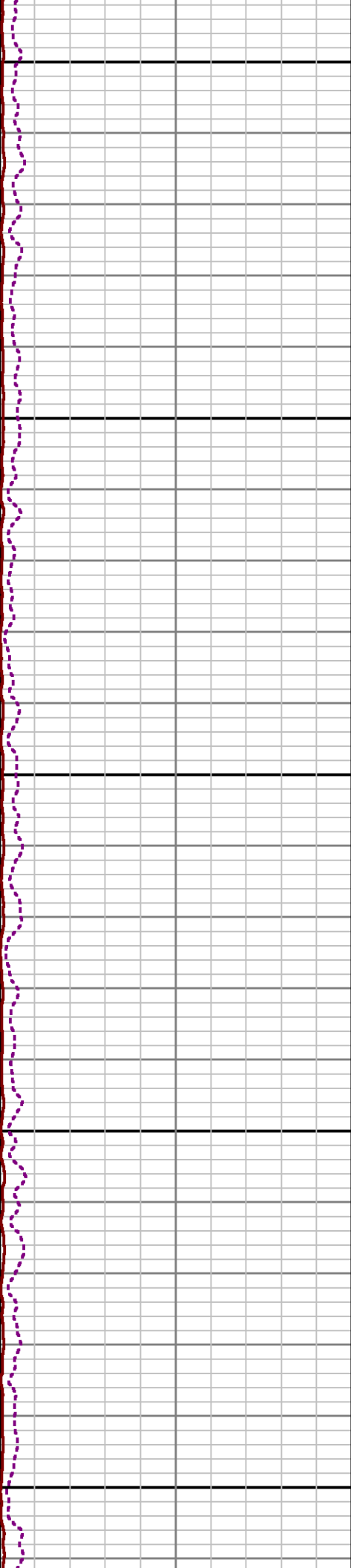
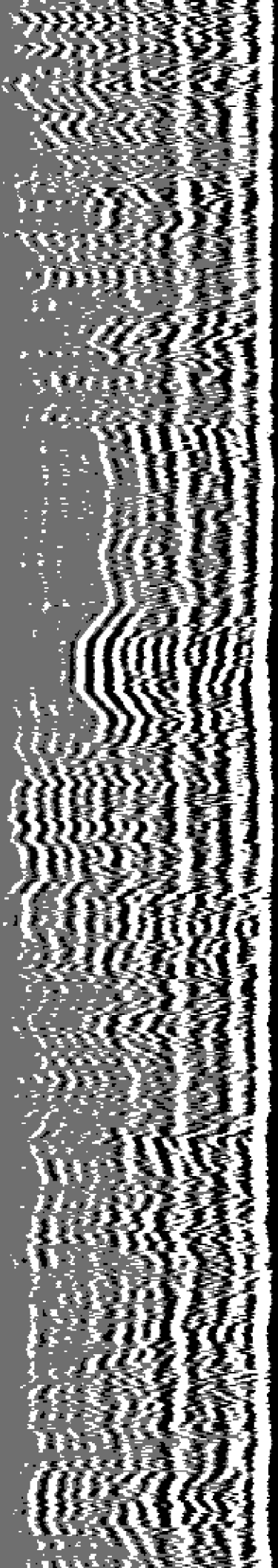


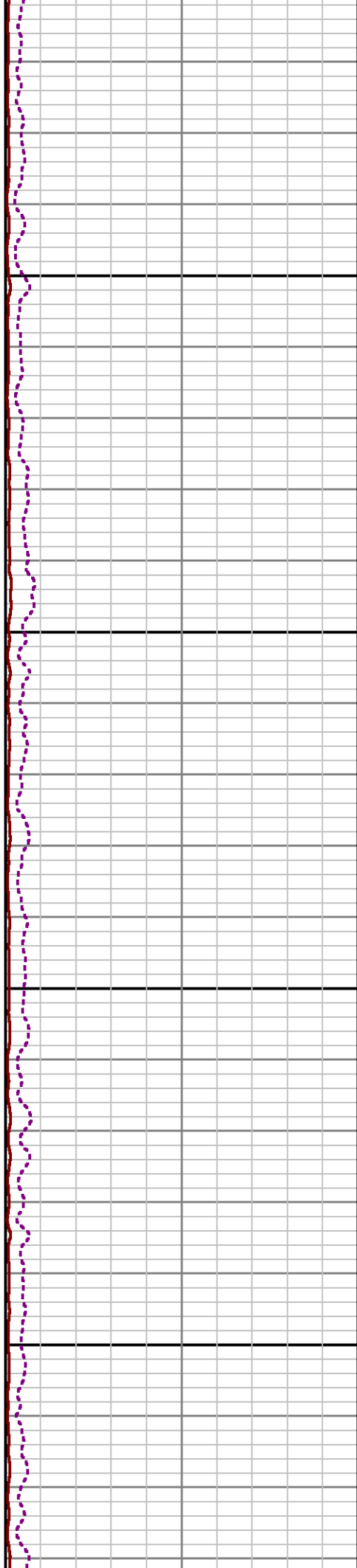
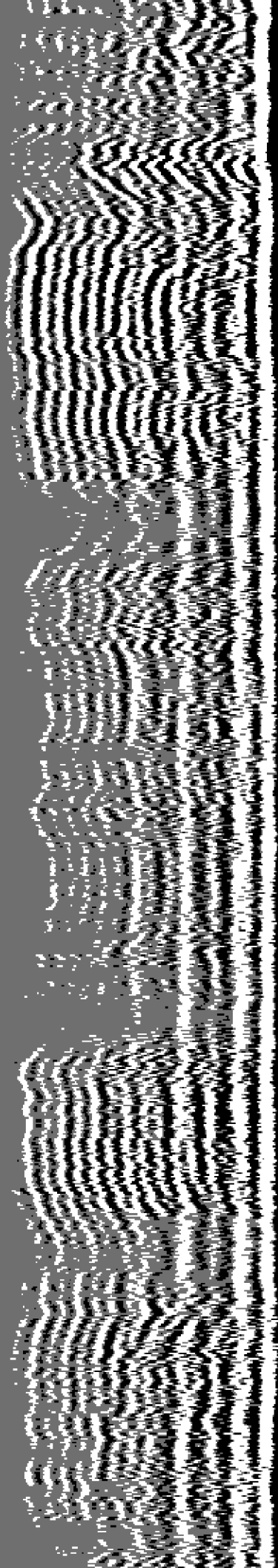


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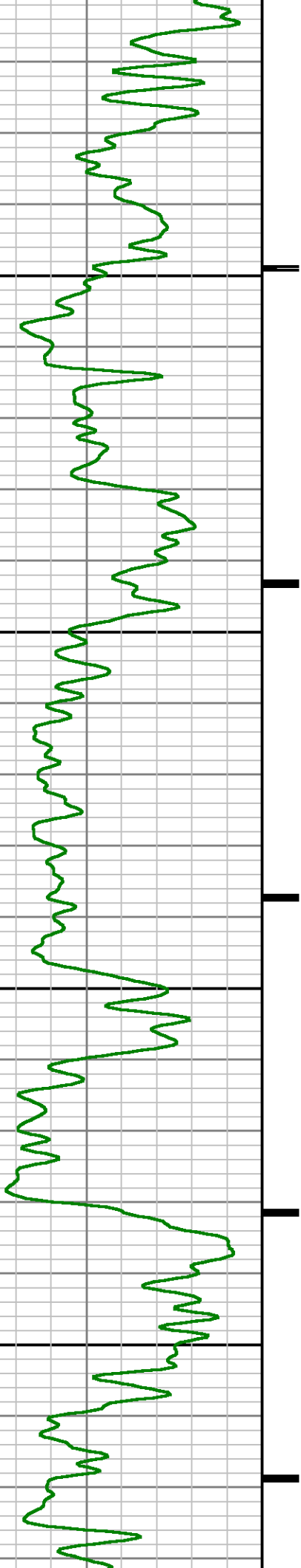


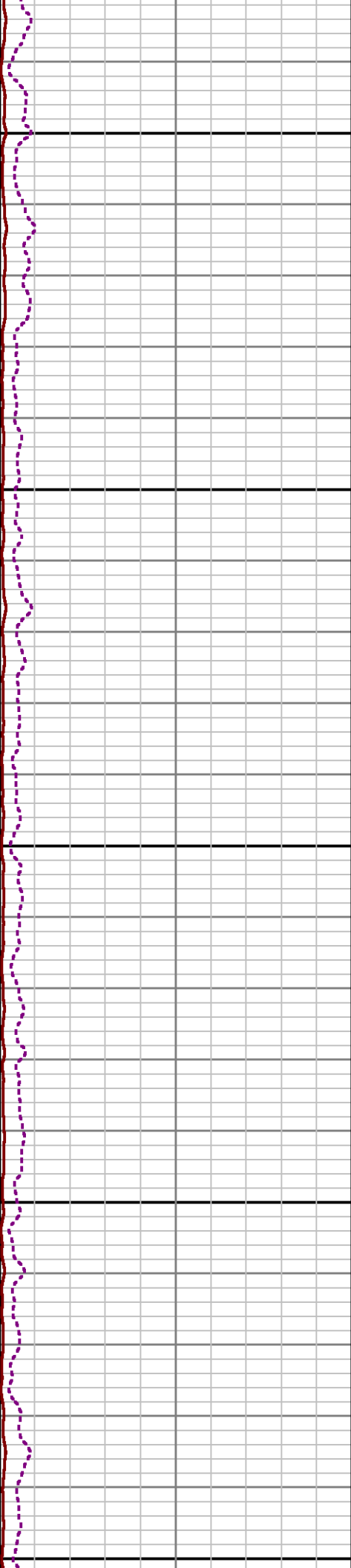
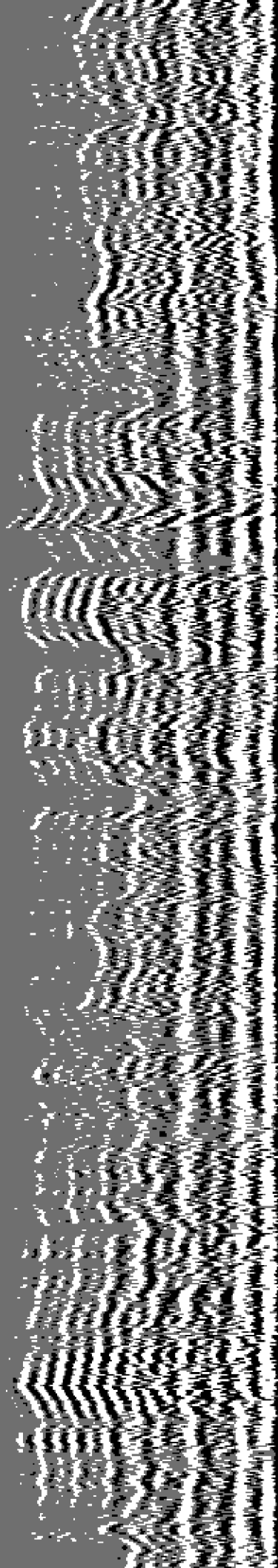




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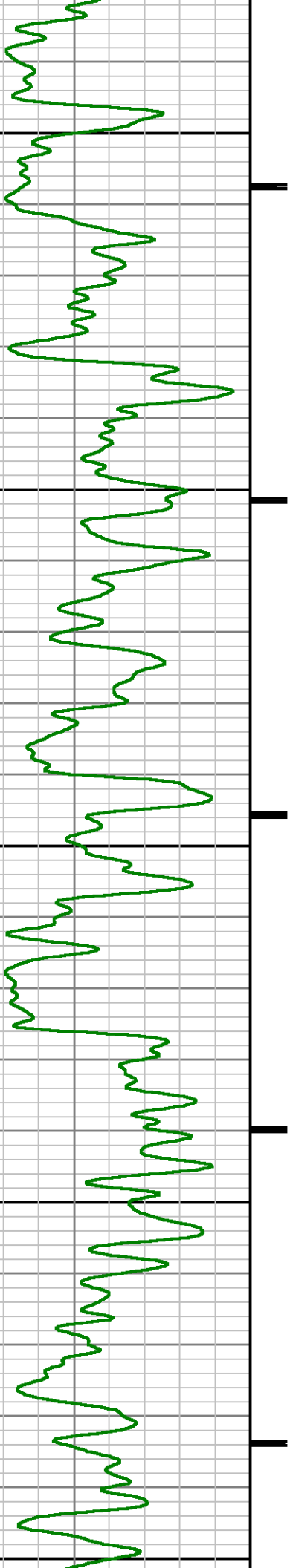
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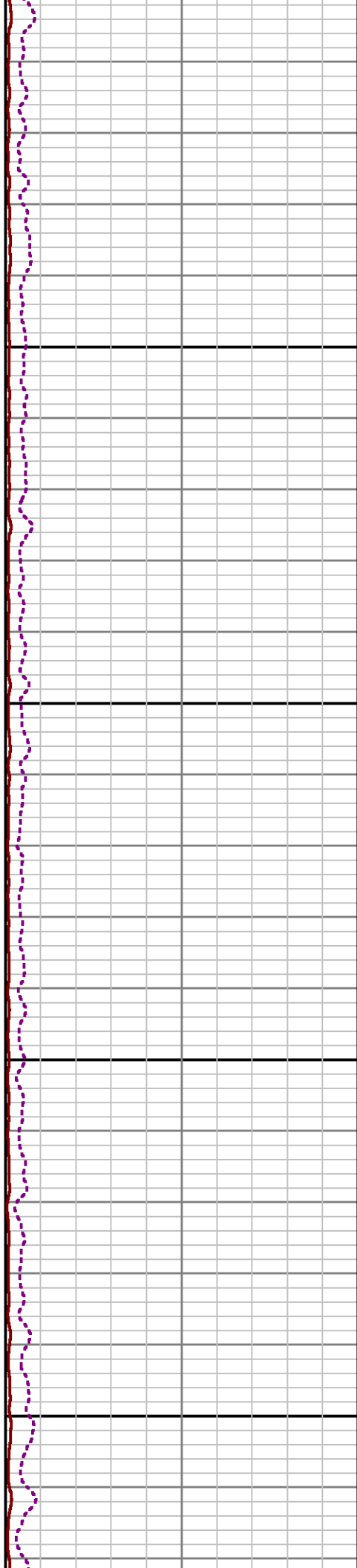
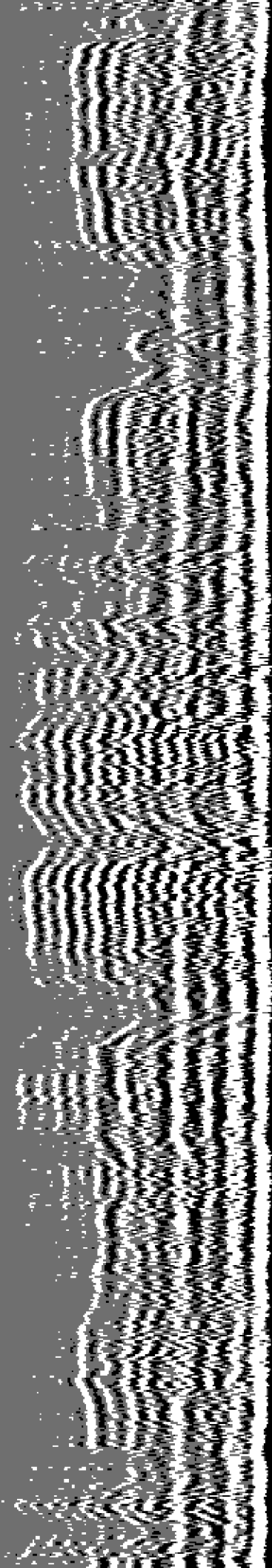




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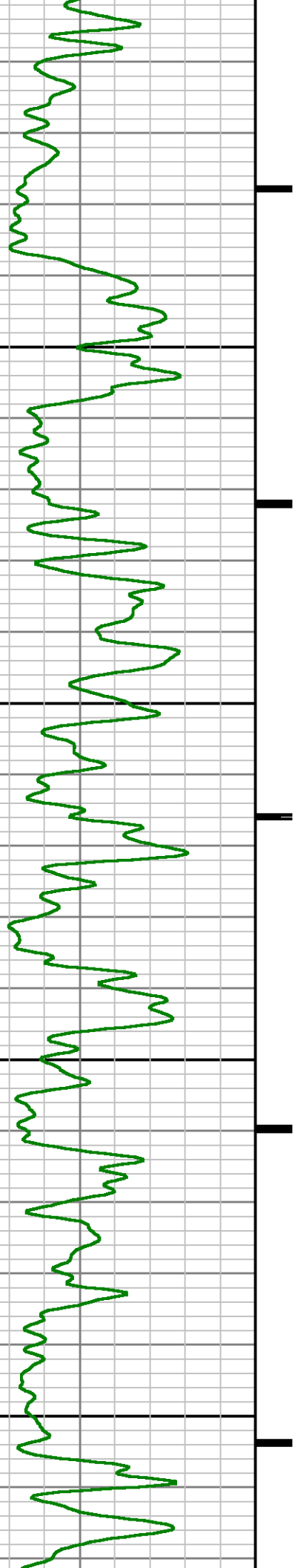
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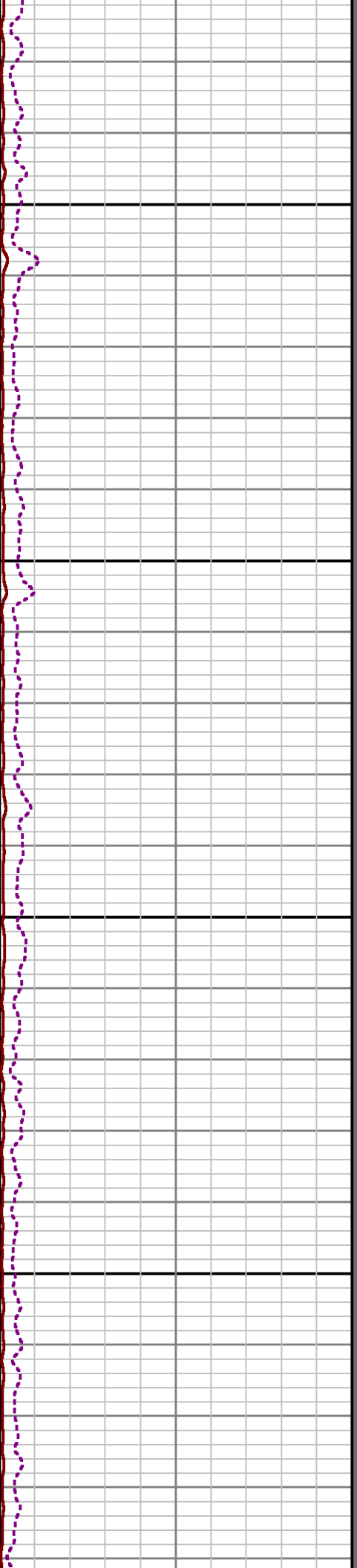
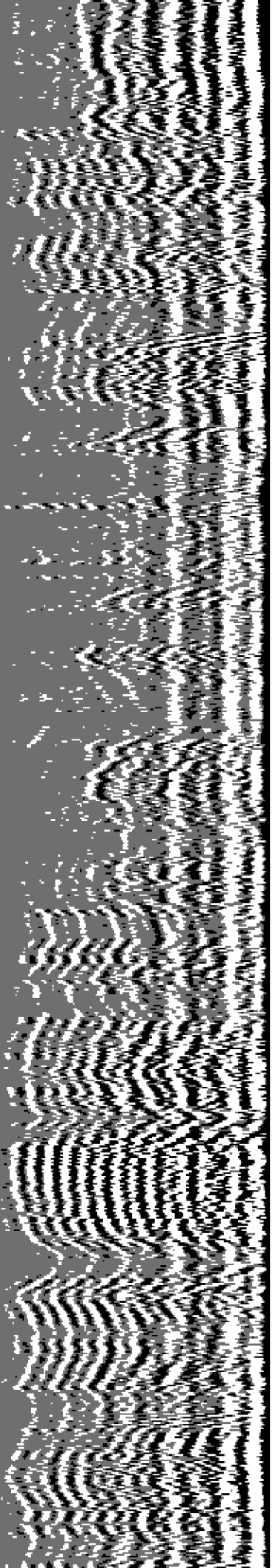


5900

6000

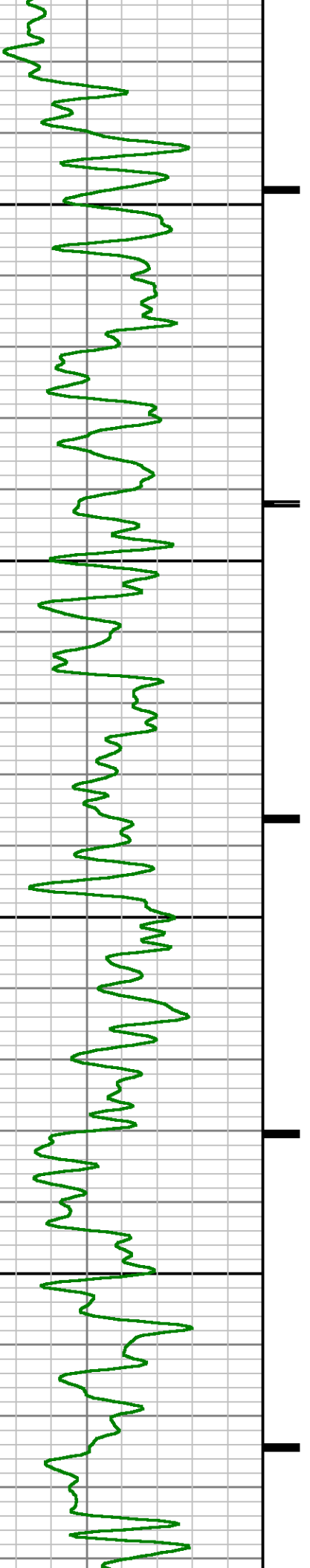


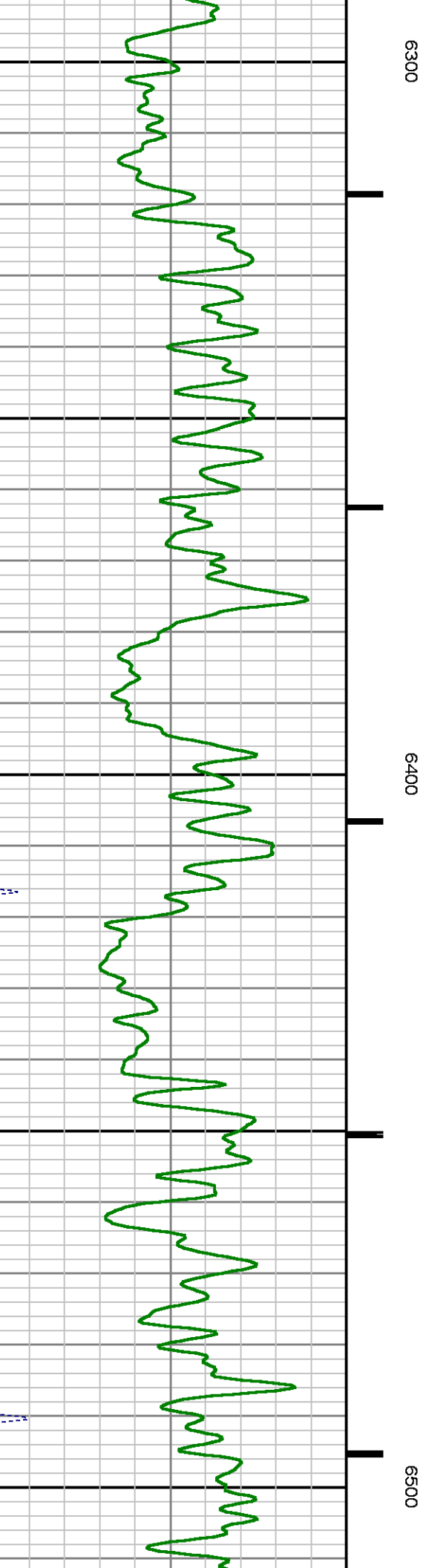
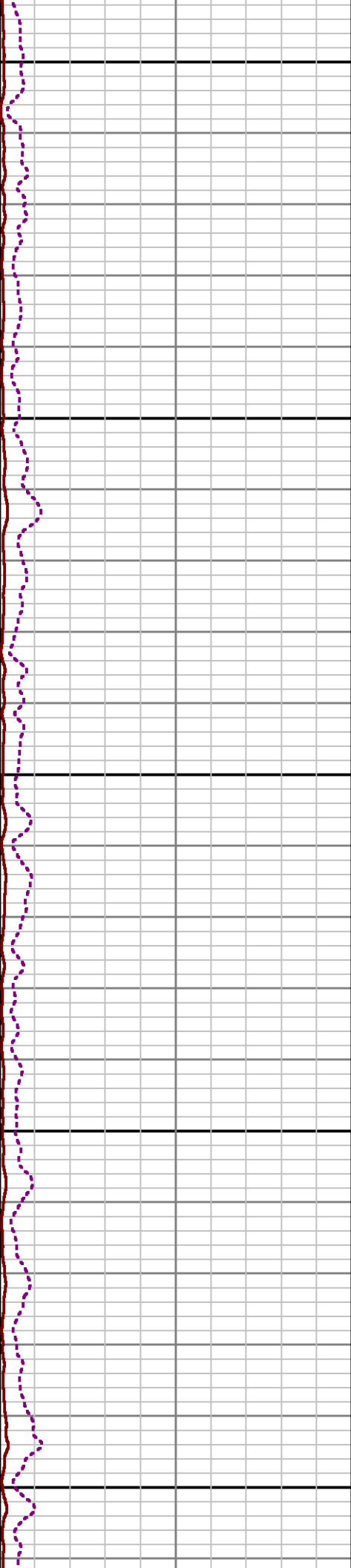
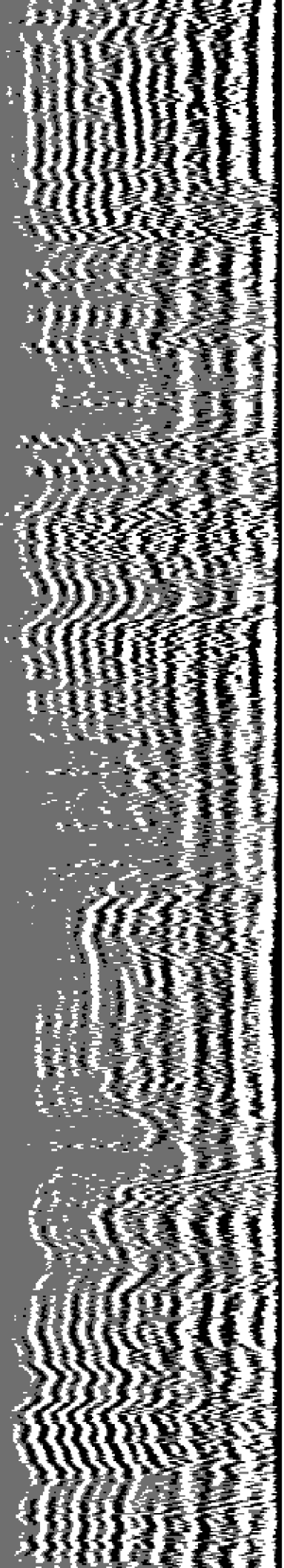




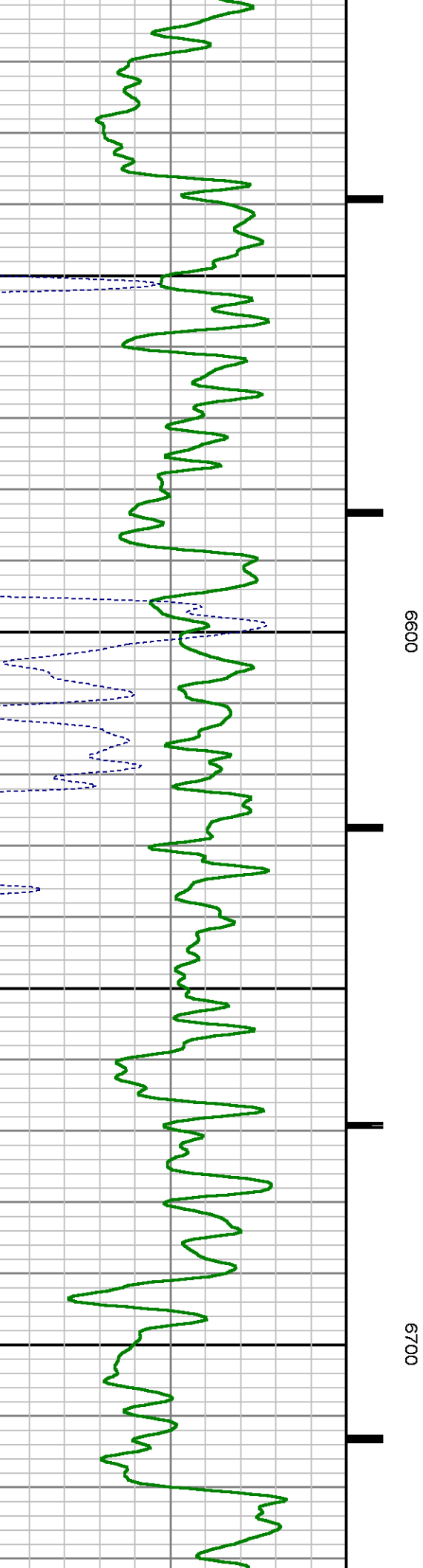
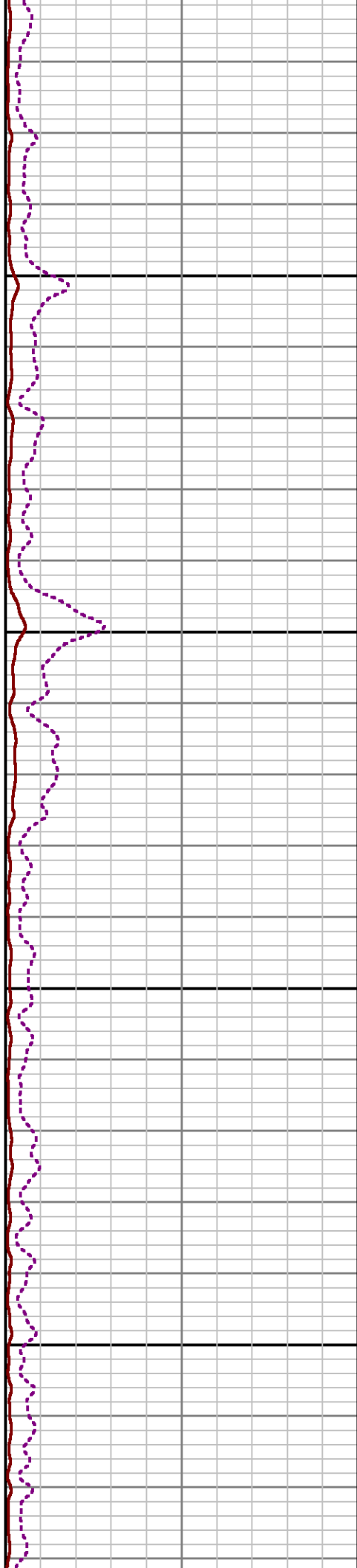
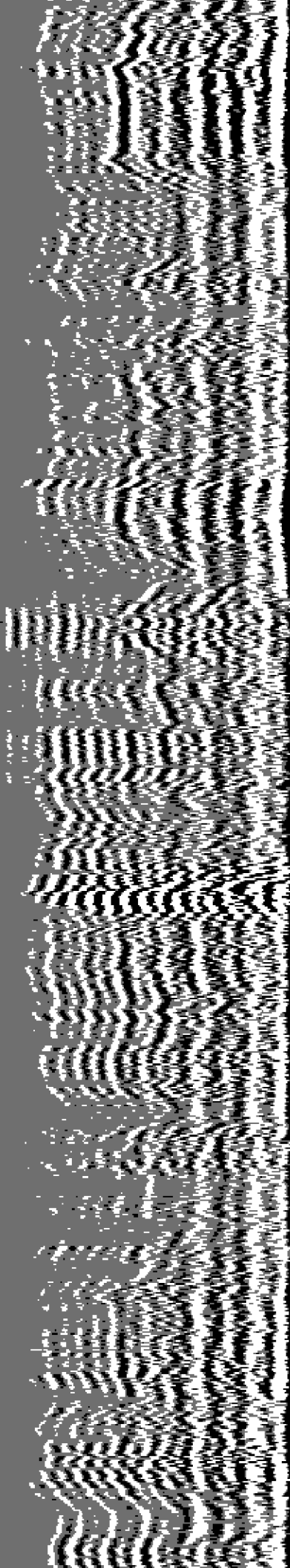
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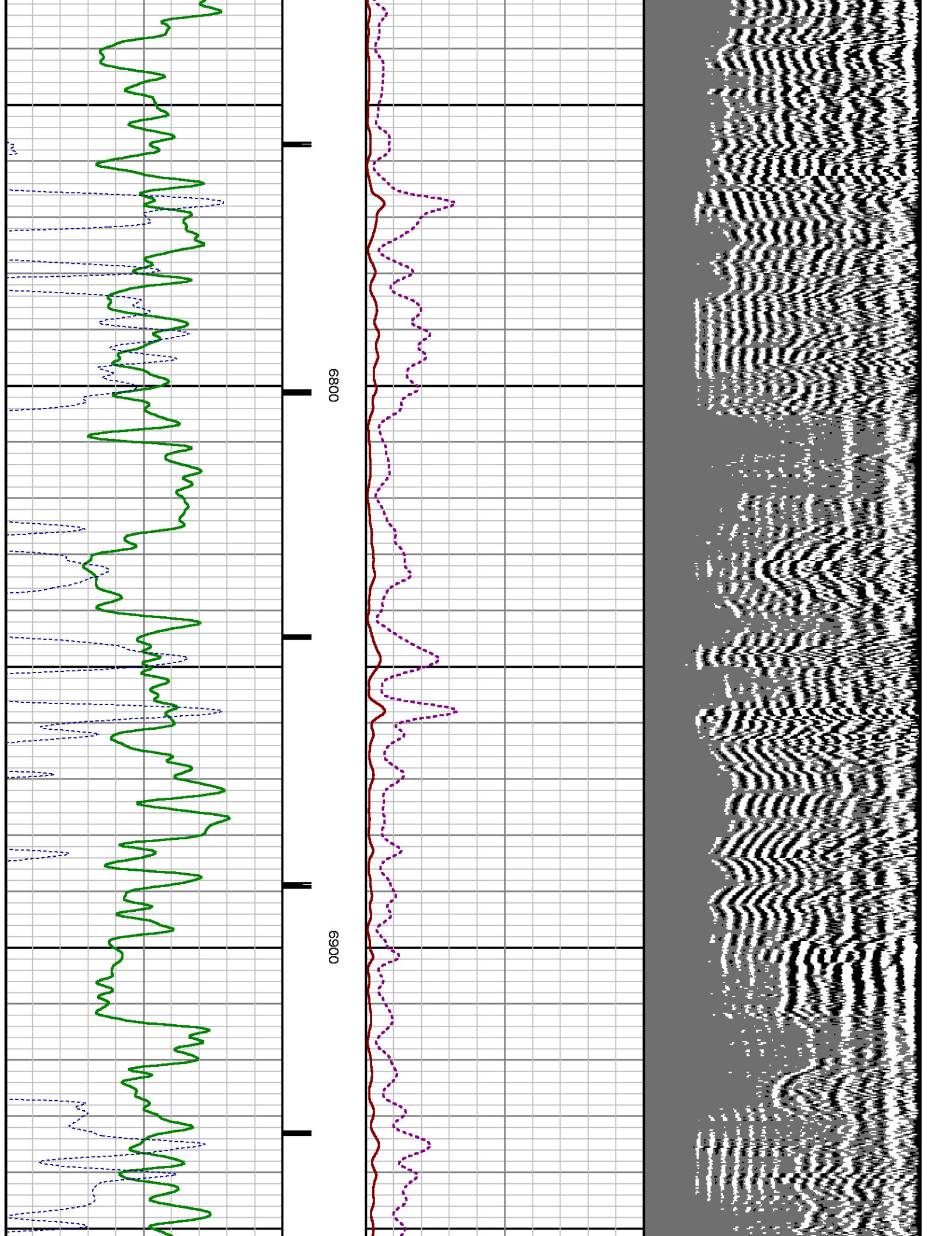
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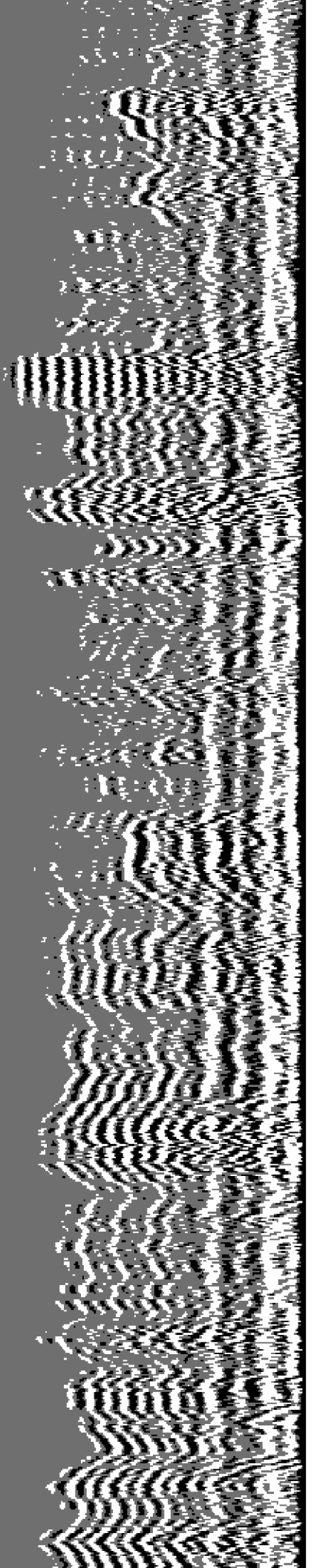






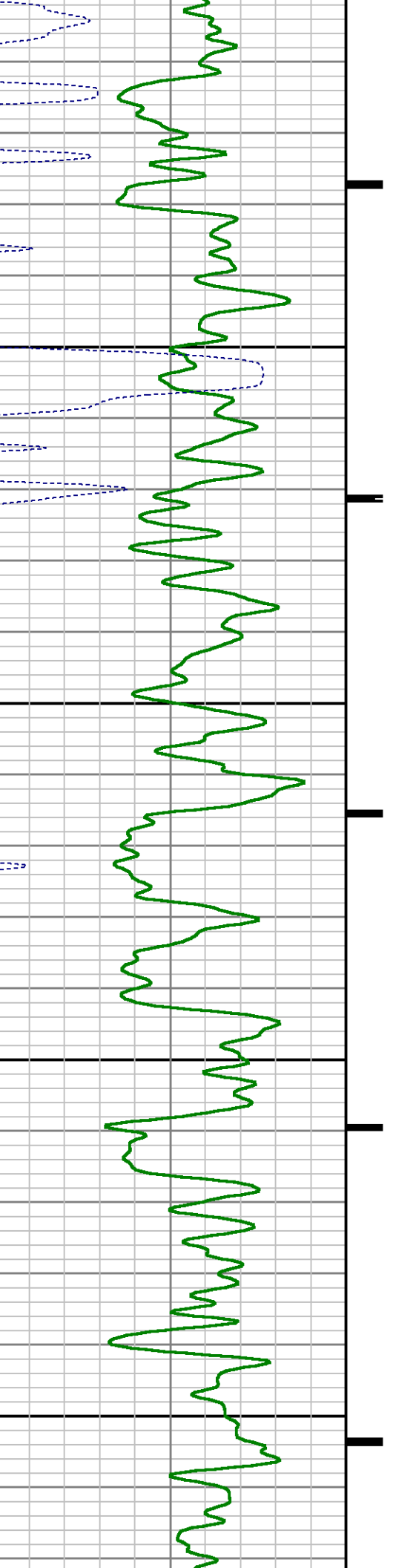


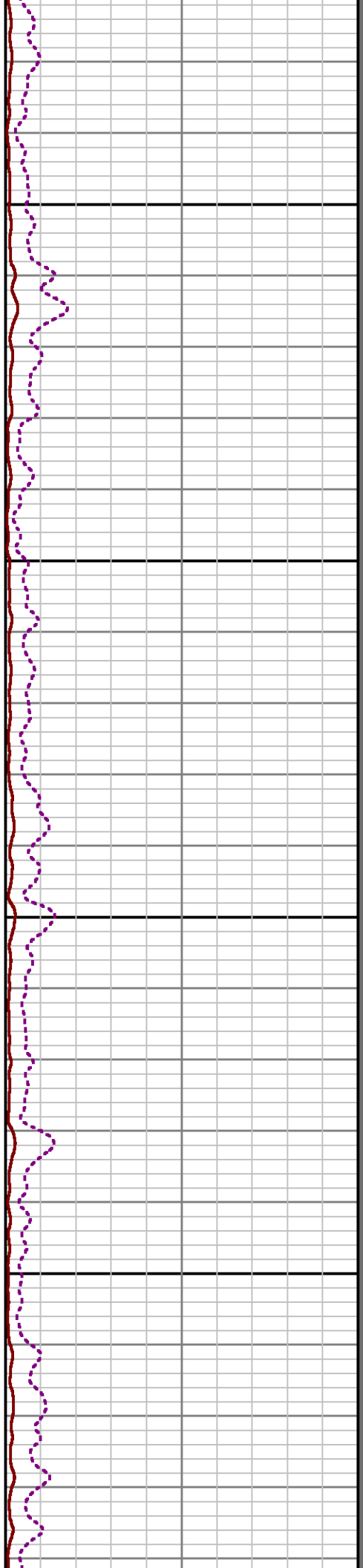
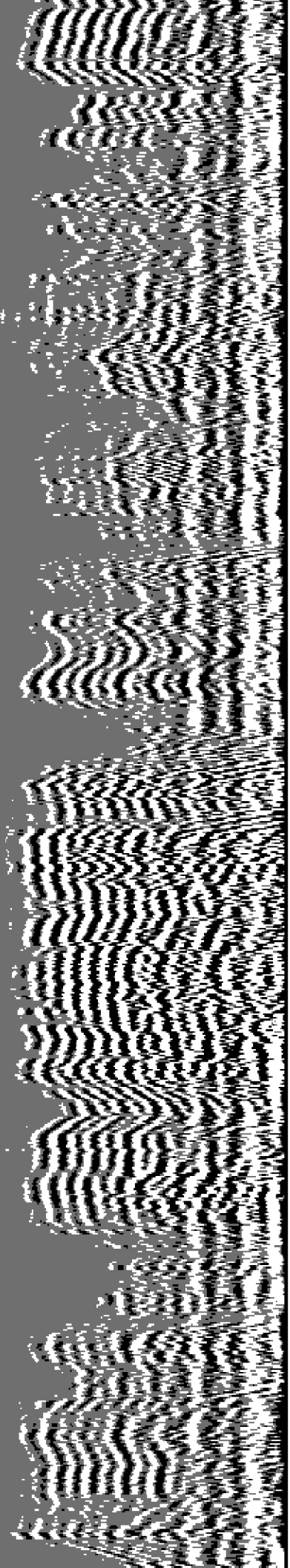




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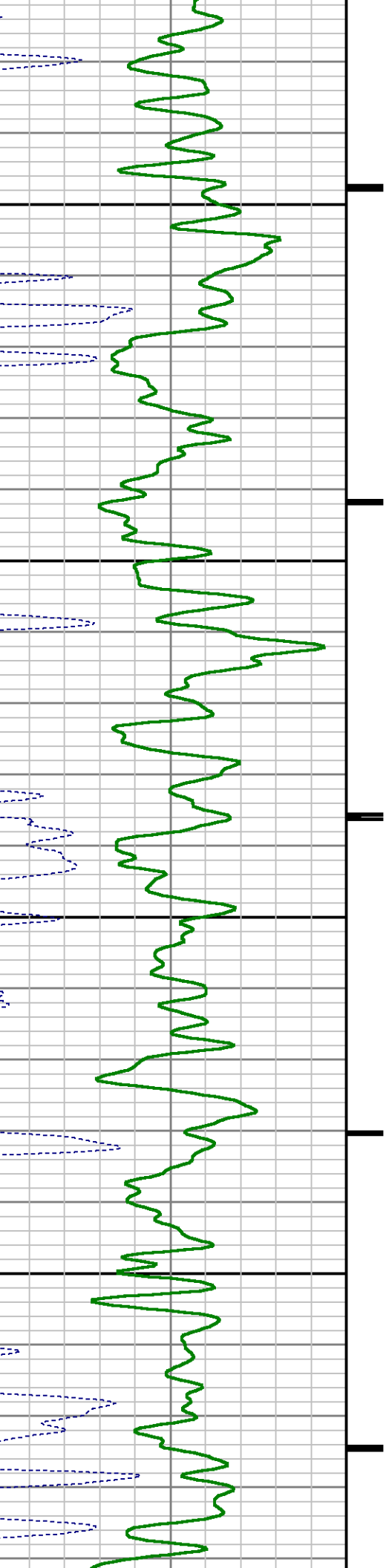
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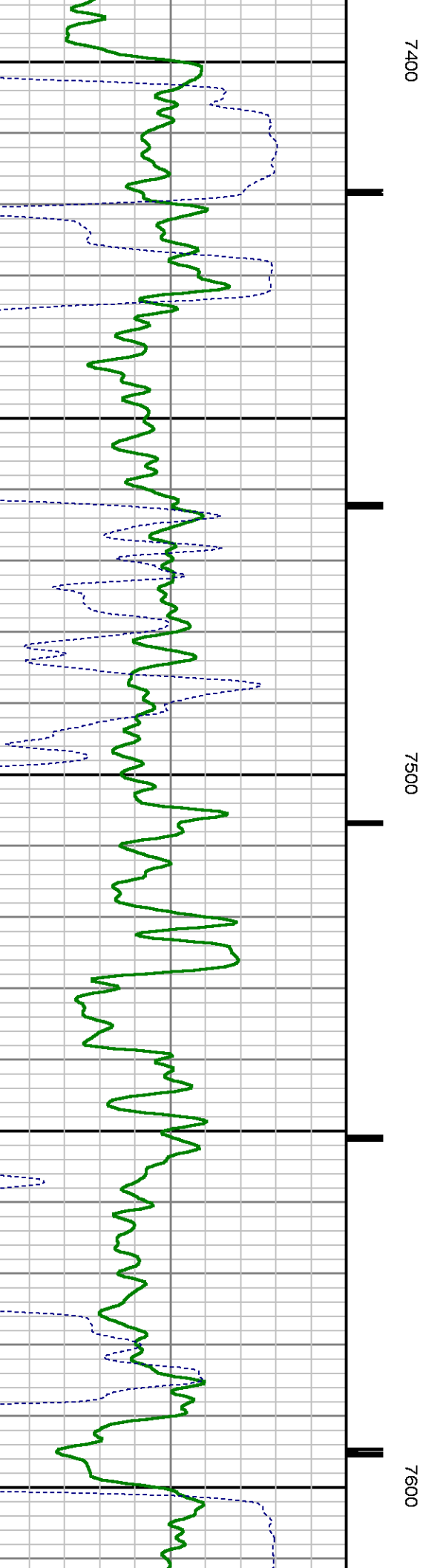
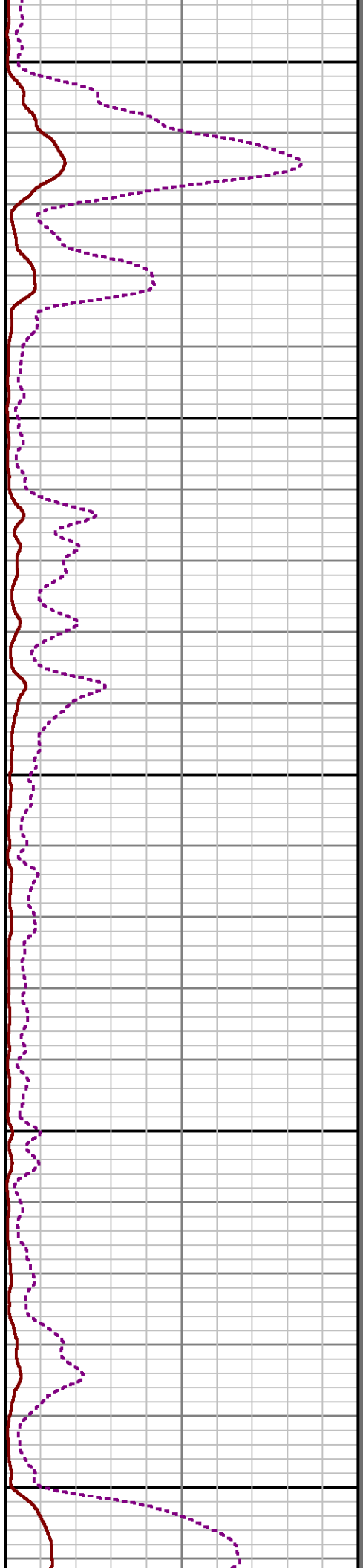
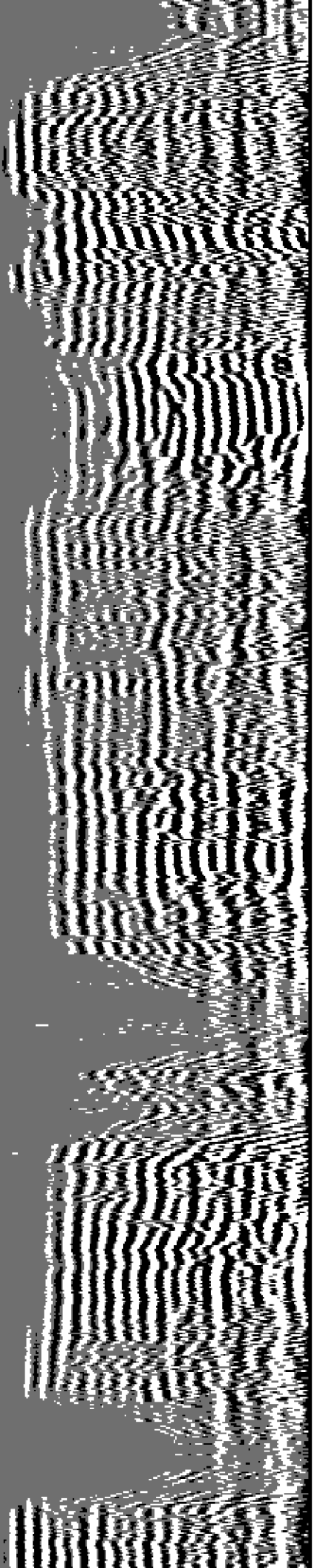




7200

7300









MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	34.875	7763.000
RAL	Amp Gate Start Near	195.000	usec	34.875	7763.000
RAL	Amp Gate Start Radial	195.000	usec	34.875	7763.000
RAL	Amp Gate Width Far	25.000	usec	34.875	7763.000
RAL	Amp Gate Width Near	25.000	usec	34.875	7763.000
RAL	Amp Gate Width Radial	25.000	usec	34.875	7763.000
RAL	casing od	4.500	inches	34.875	7763.000
RAL	casing wt	11.600	lbm/ft	34.875	7763.000
RAL	FB Start Far	291.900	usec	34.875	7763.000
RAL	FB Start Near	180.000	usec	34.875	7763.000
RAL	FB Start Radial	180.000	usec	34.875	7763.000
RAL	FB Thresh Far	10.000	mV	34.875	7763.000
RAL	FB Thresh Near	4.000	mV	34.875	7763.000
RAL	FB Thresh Radial	4.000	mV	34.875	7763.000
RAL	Fluid Travel Time	200.000	usec/ft	34.875	7763.000

## DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-16.750	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	-15.750	AFAR	SIG	TT5			
2459XA	-11.340	CCL					
2459XA	-9.490	GR					
2459XA	-4.090	NEU					

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

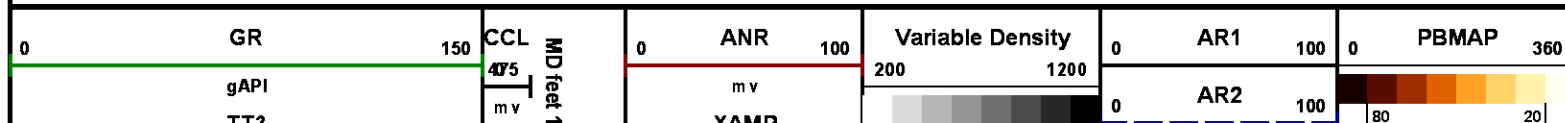
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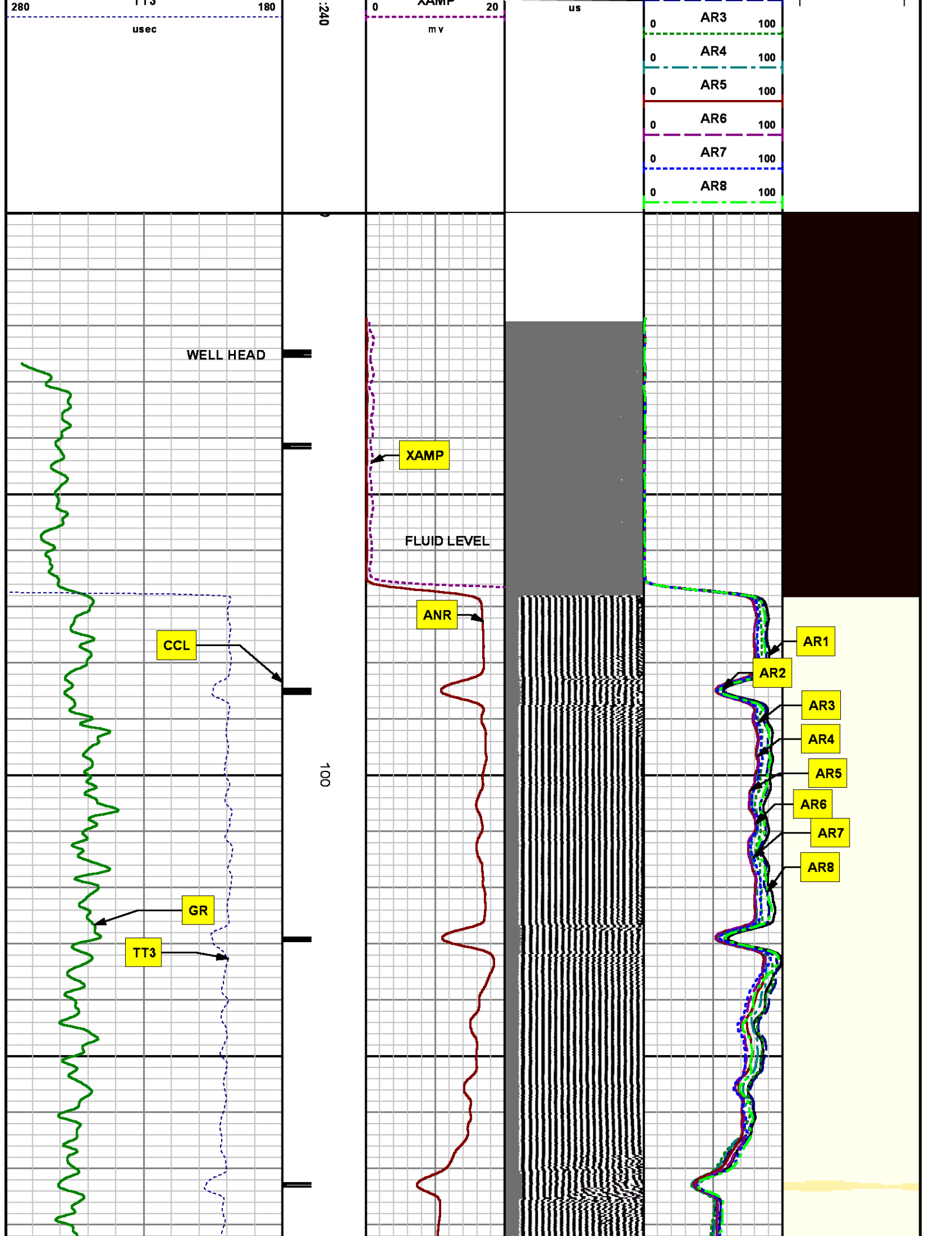
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Mode : PlotMgr 5.4.504

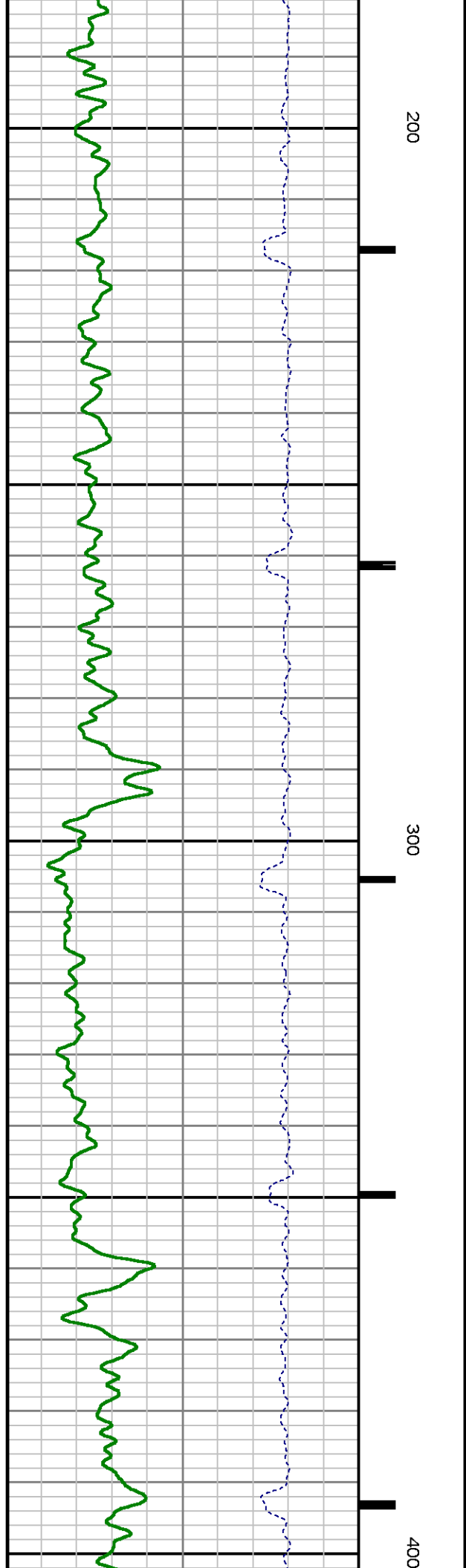
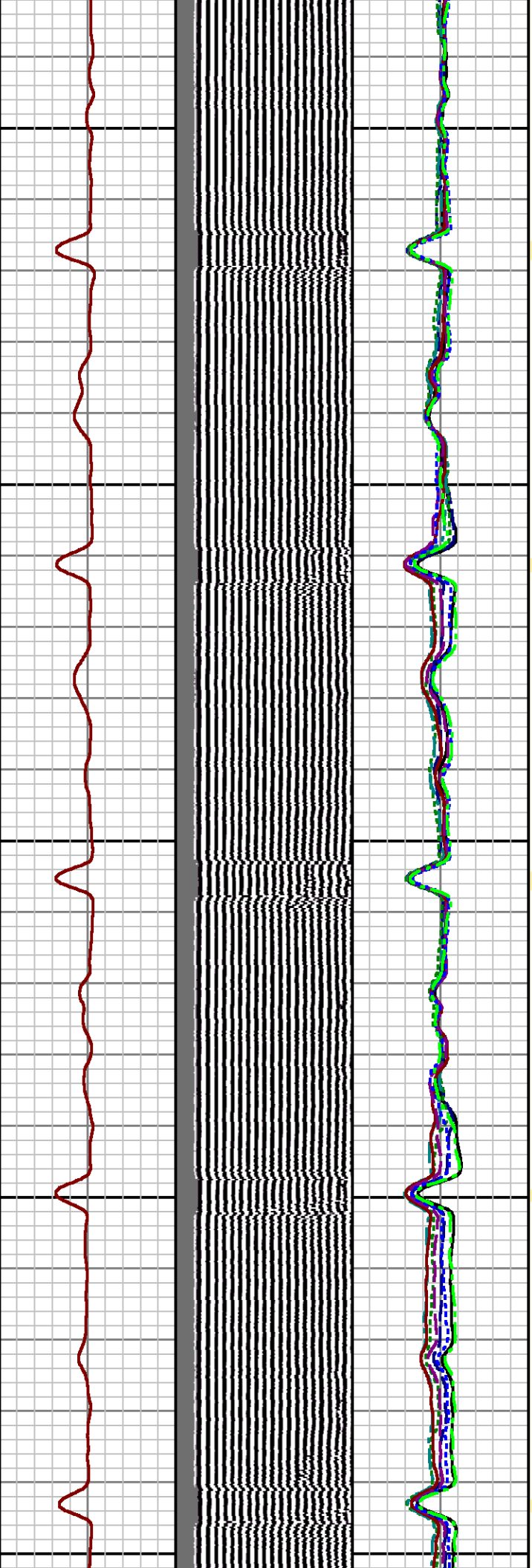
Interval : 0.00 - 7765.00 feet UP

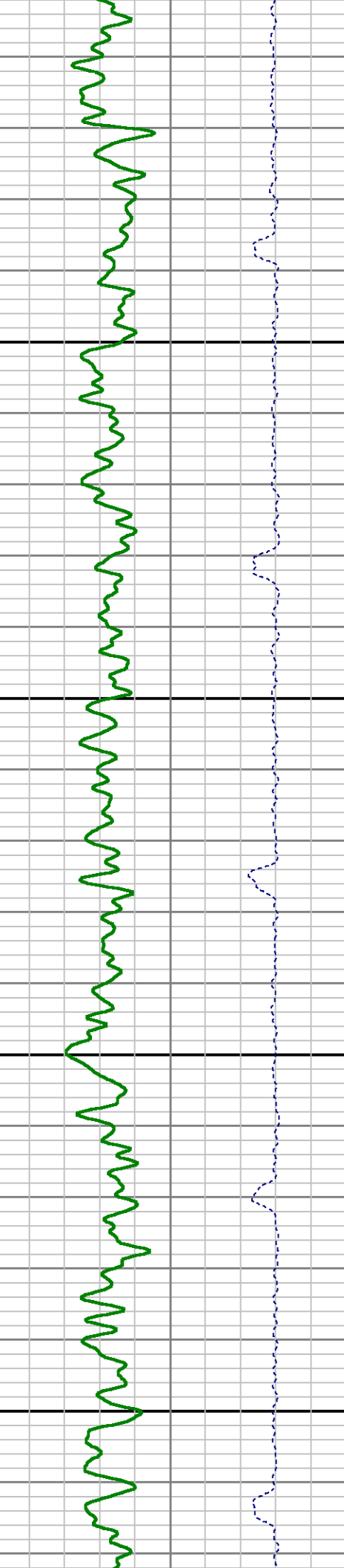
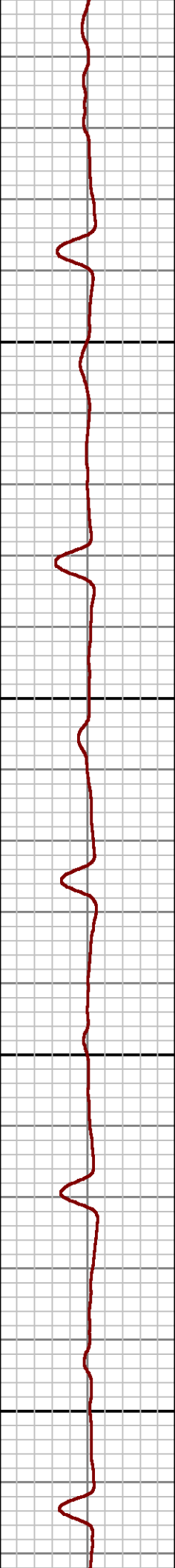
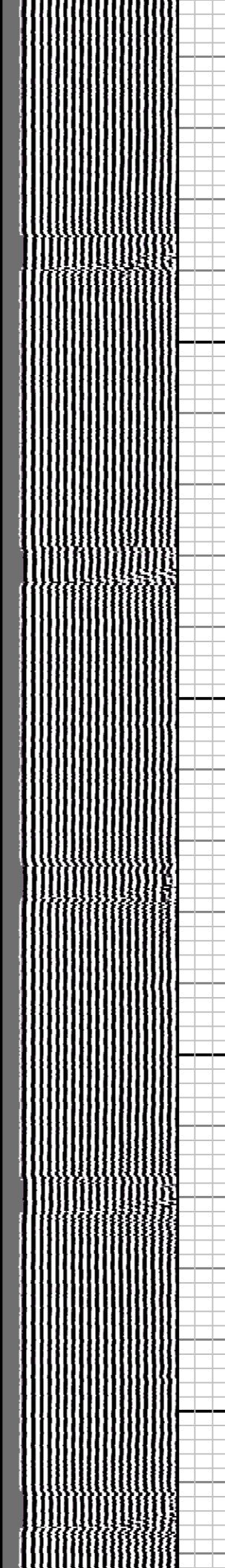
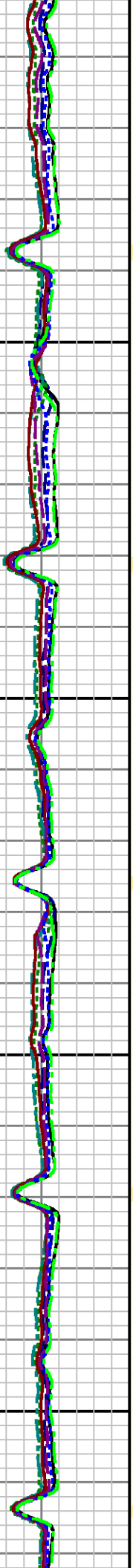
Created : 5/1/2014 8:10:57 AM

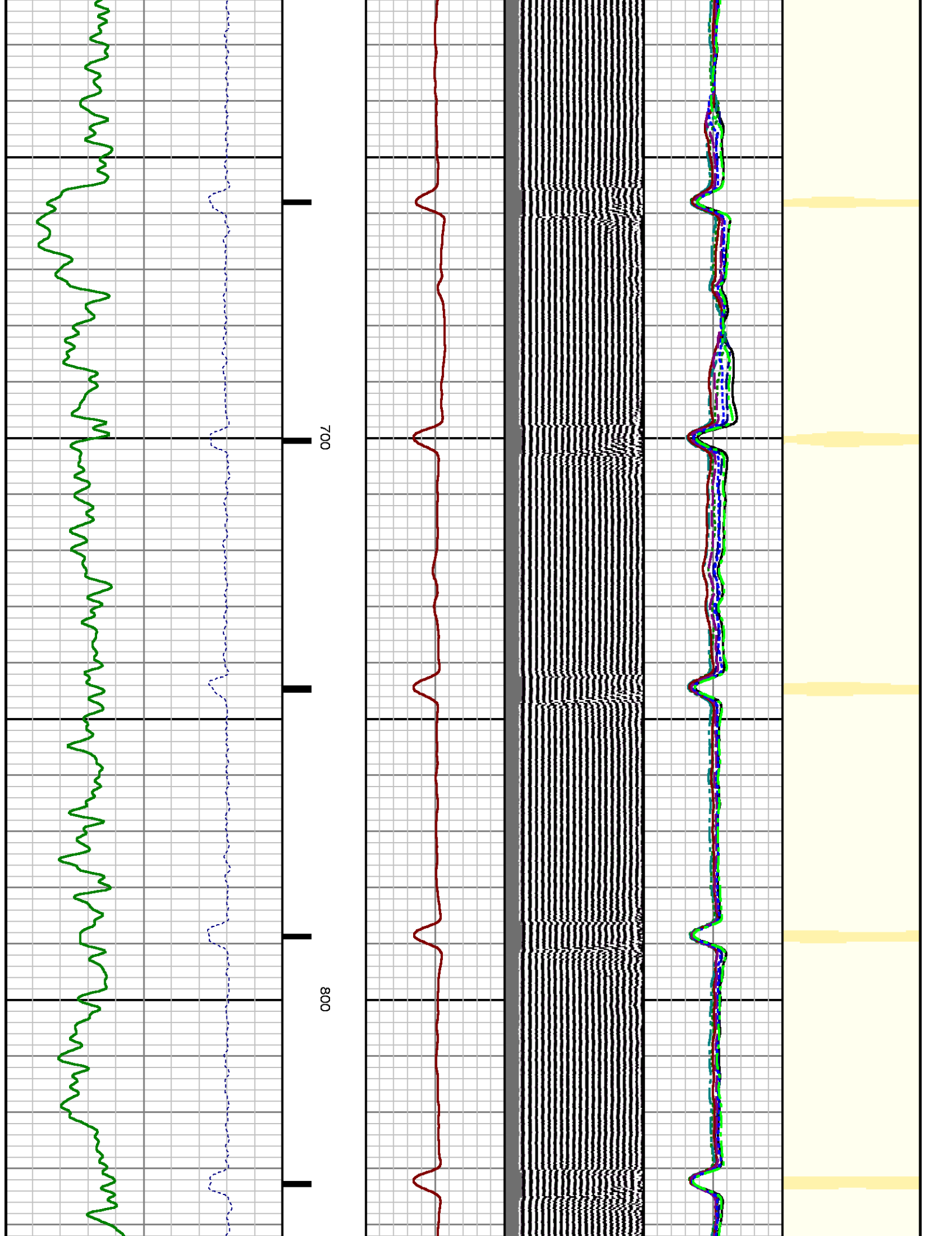


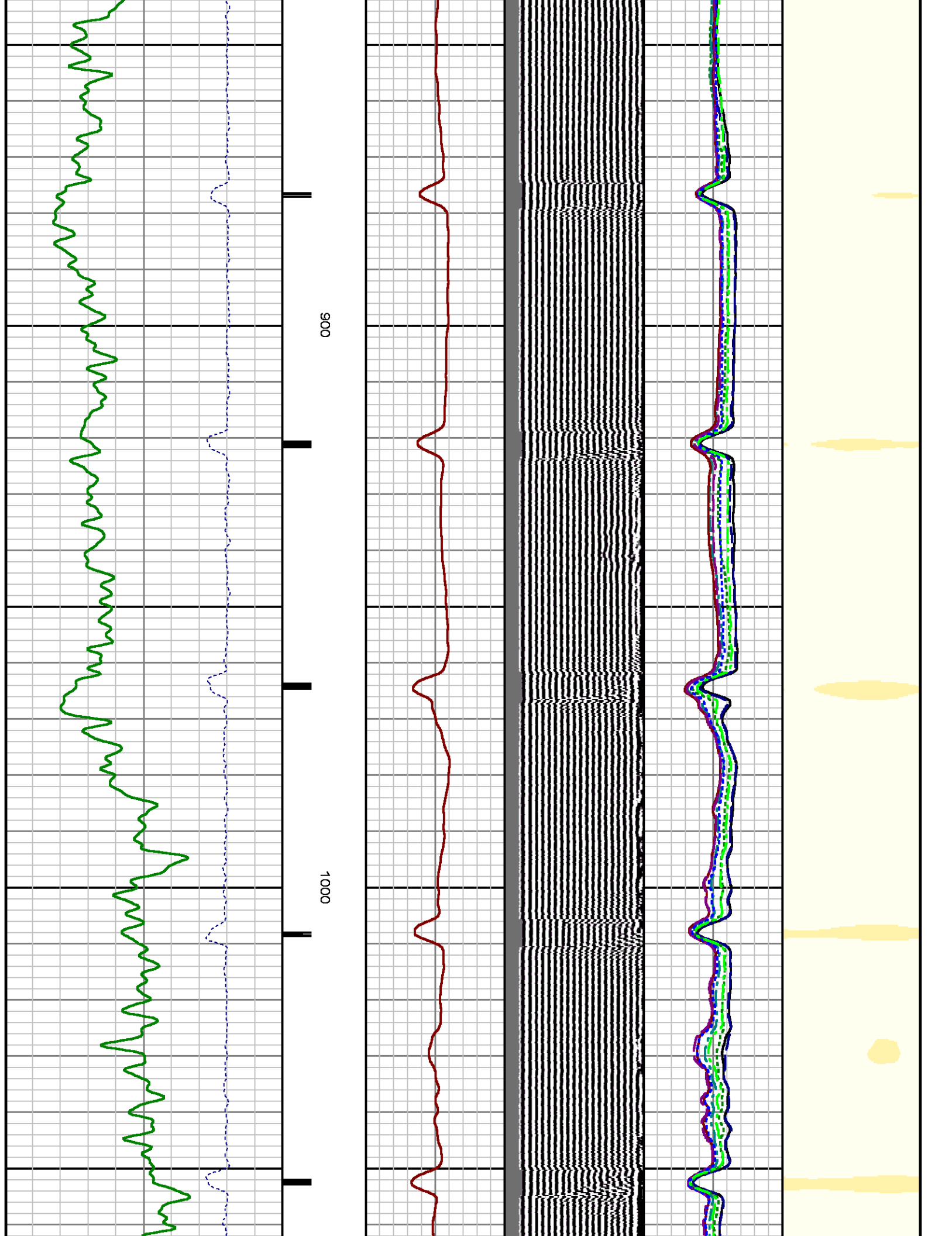


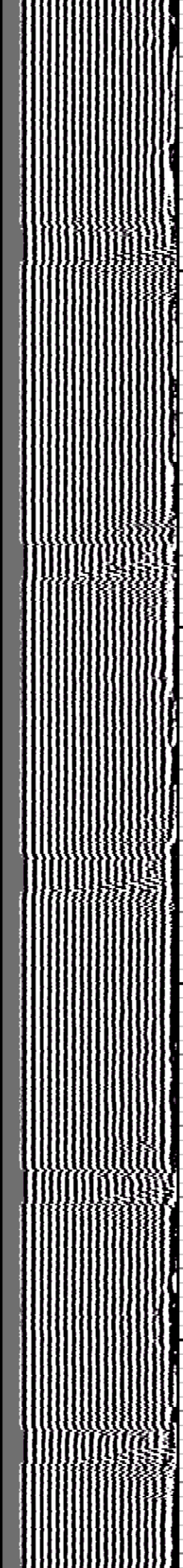
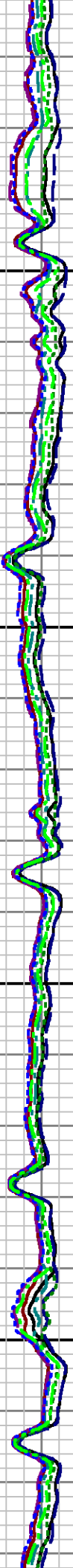






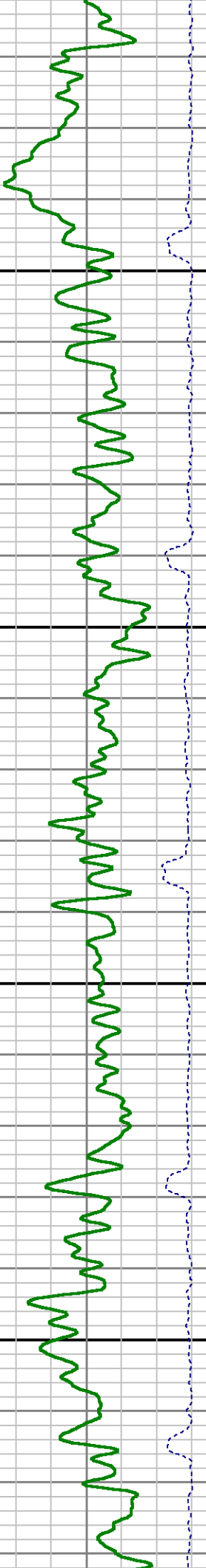


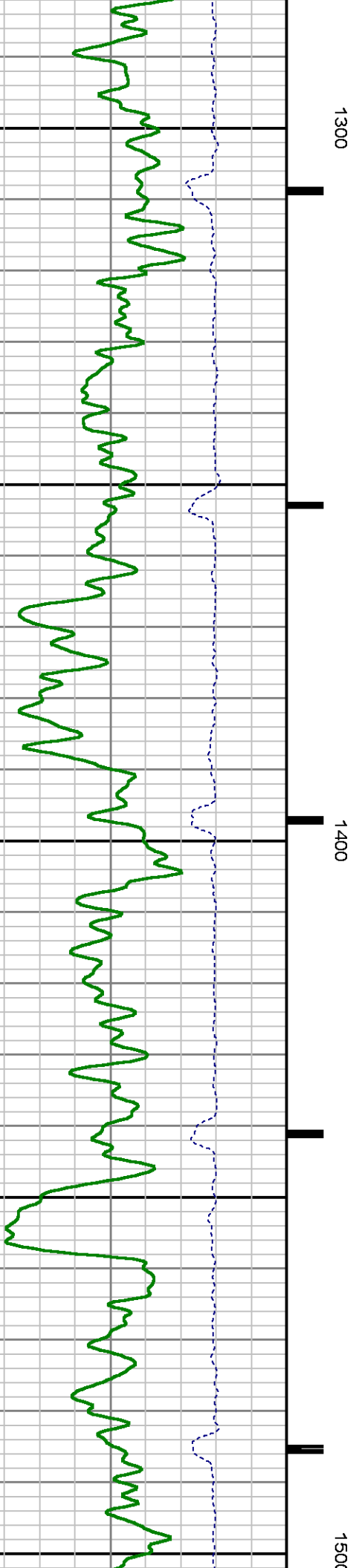
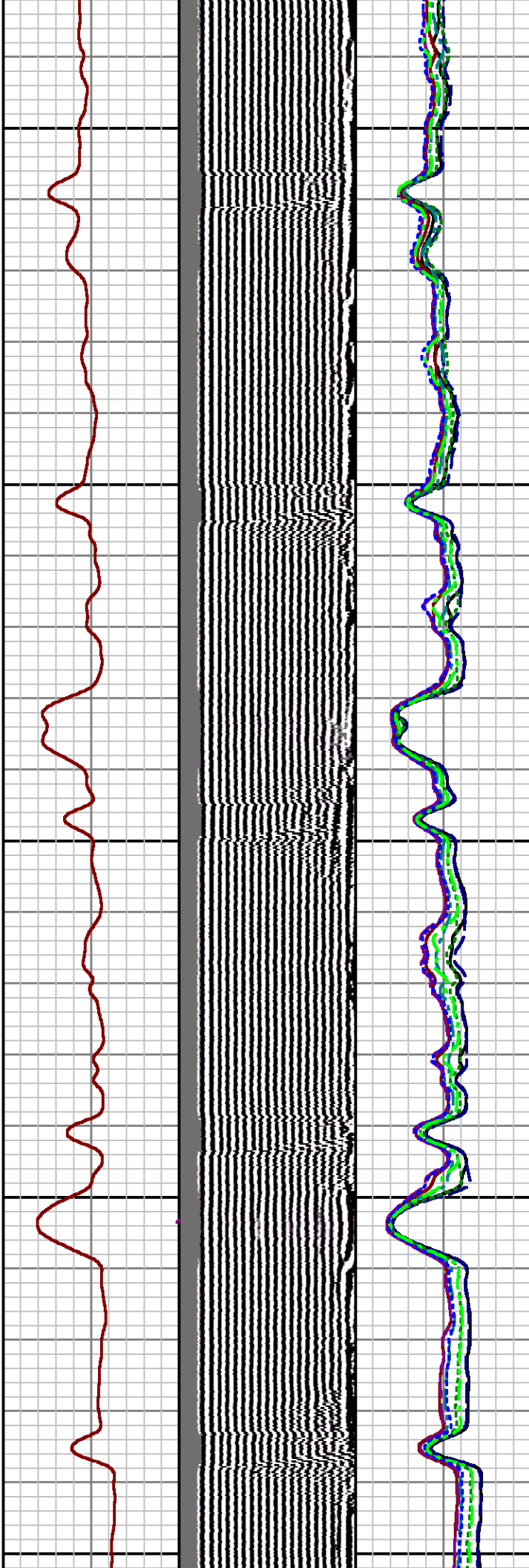
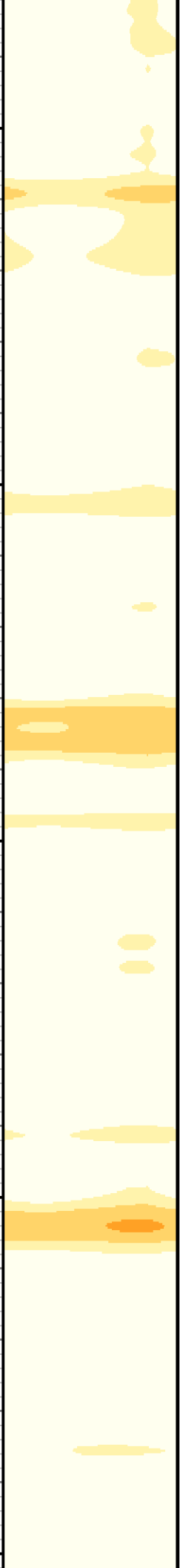




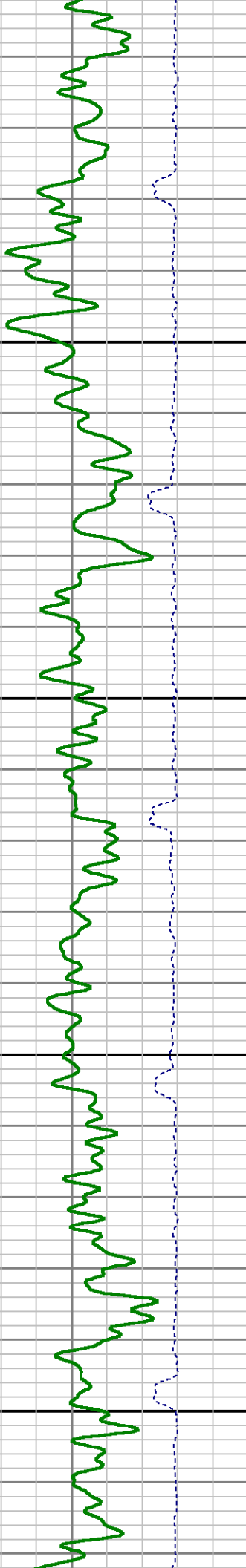
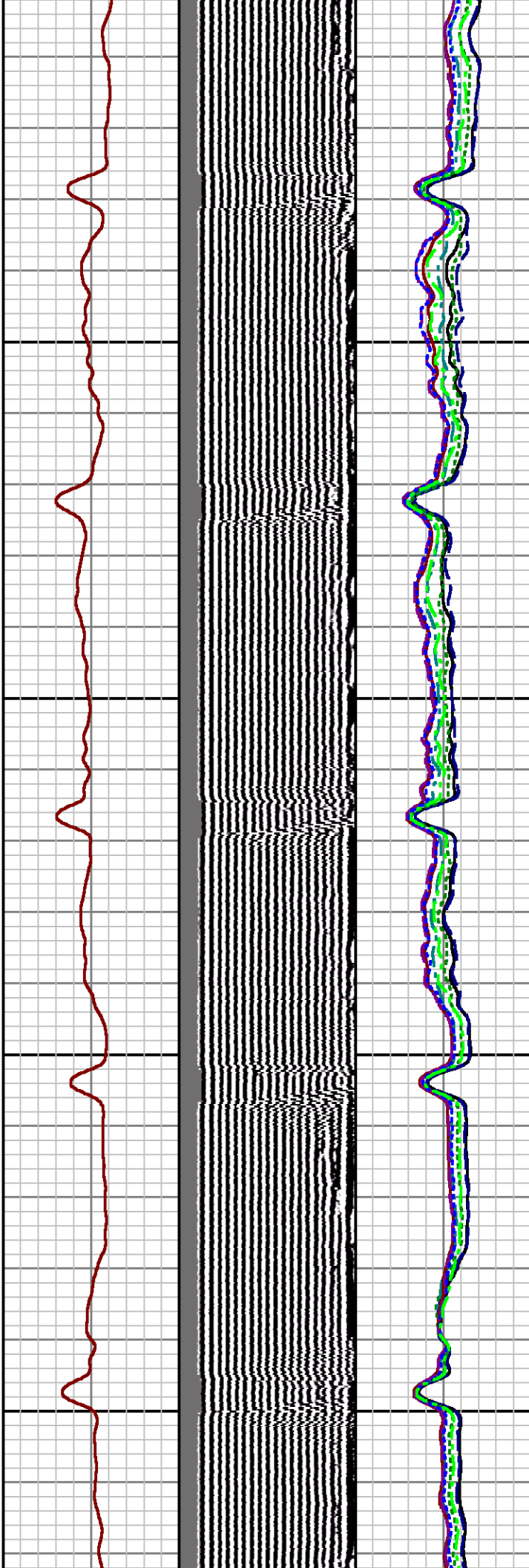
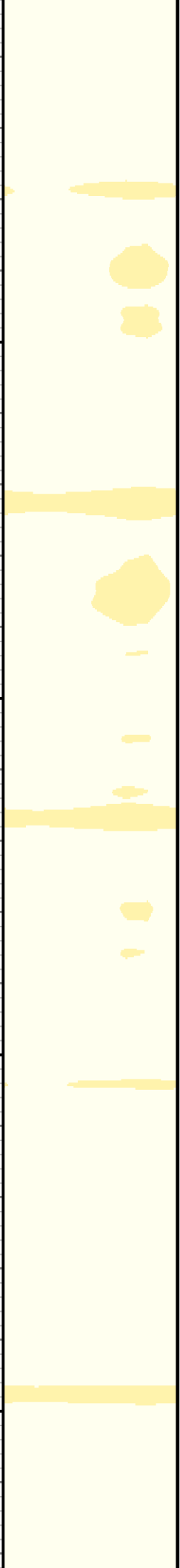
1100

1200



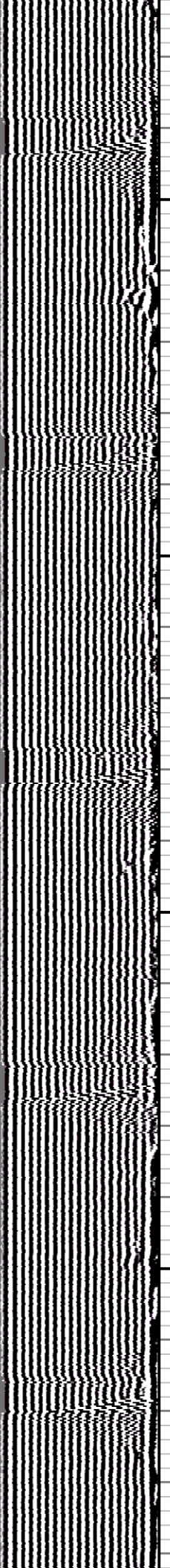
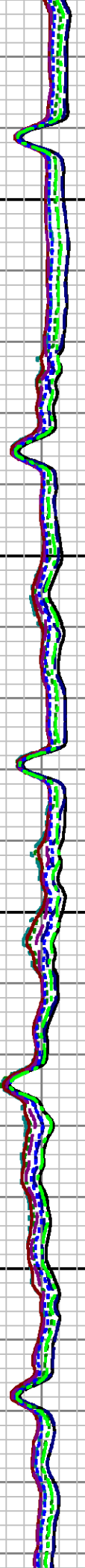






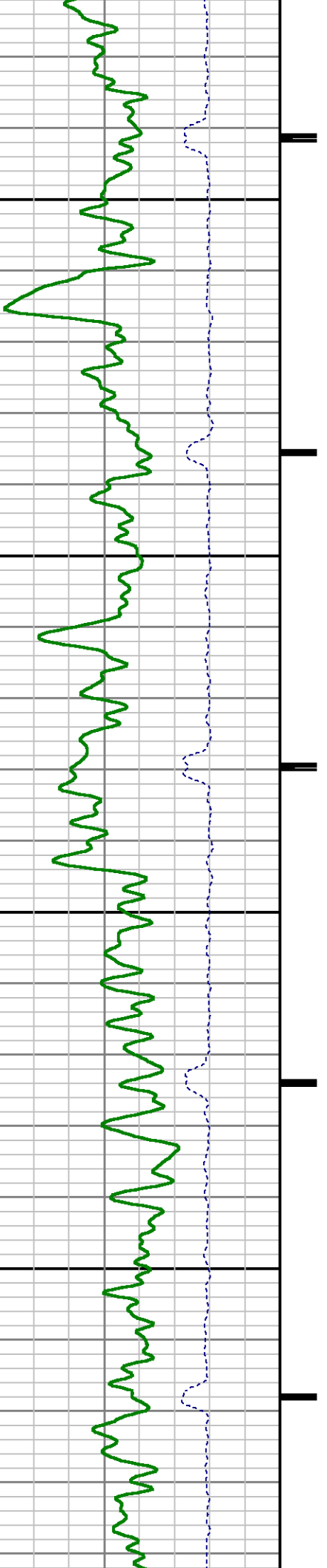
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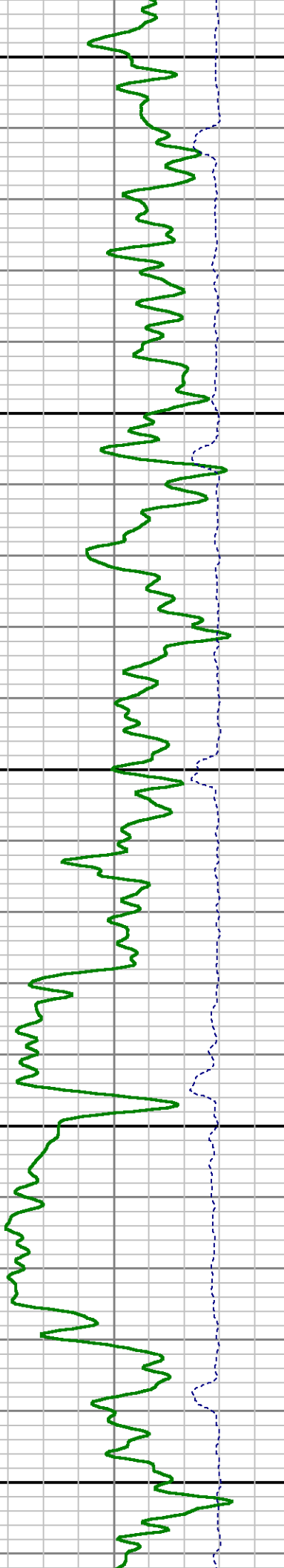
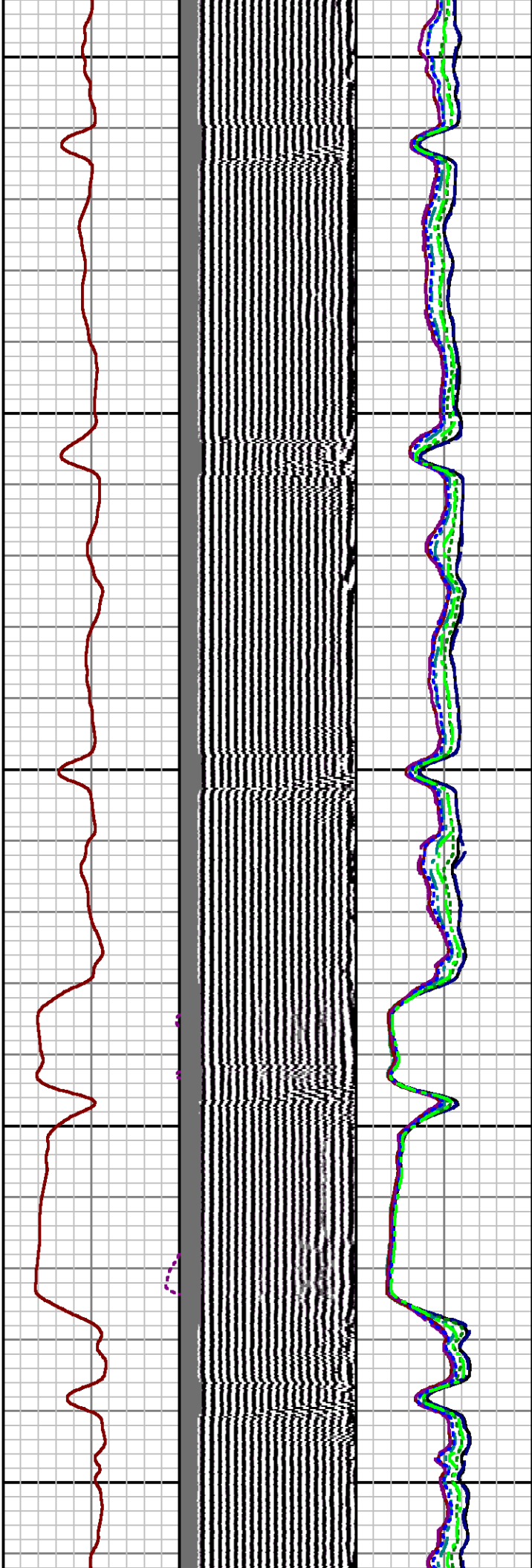
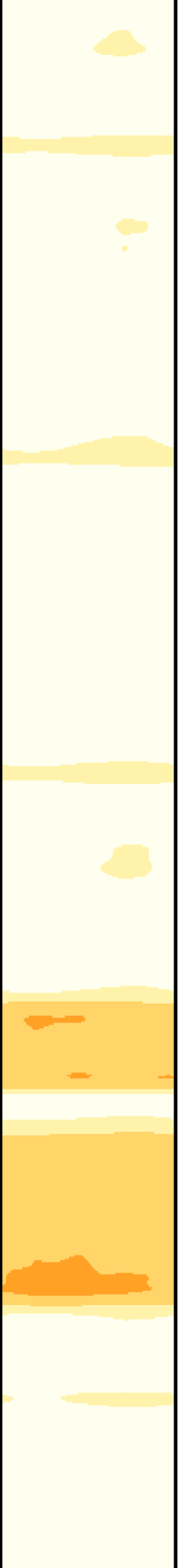
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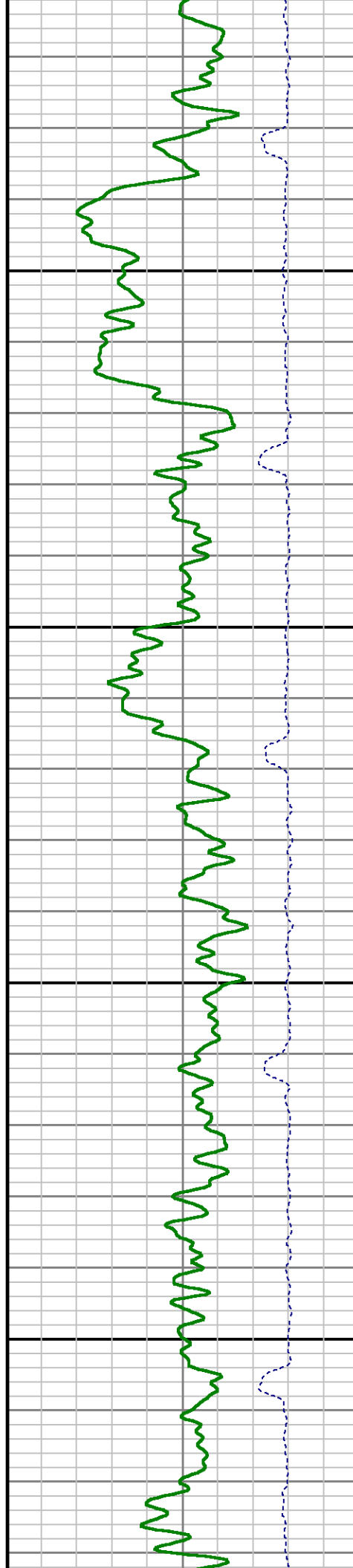
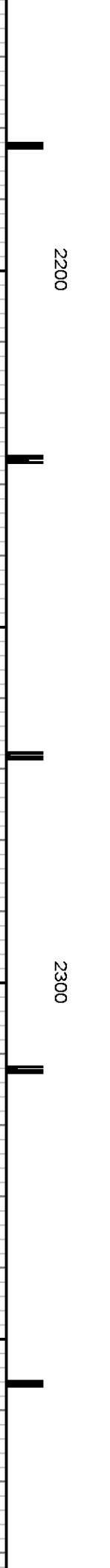
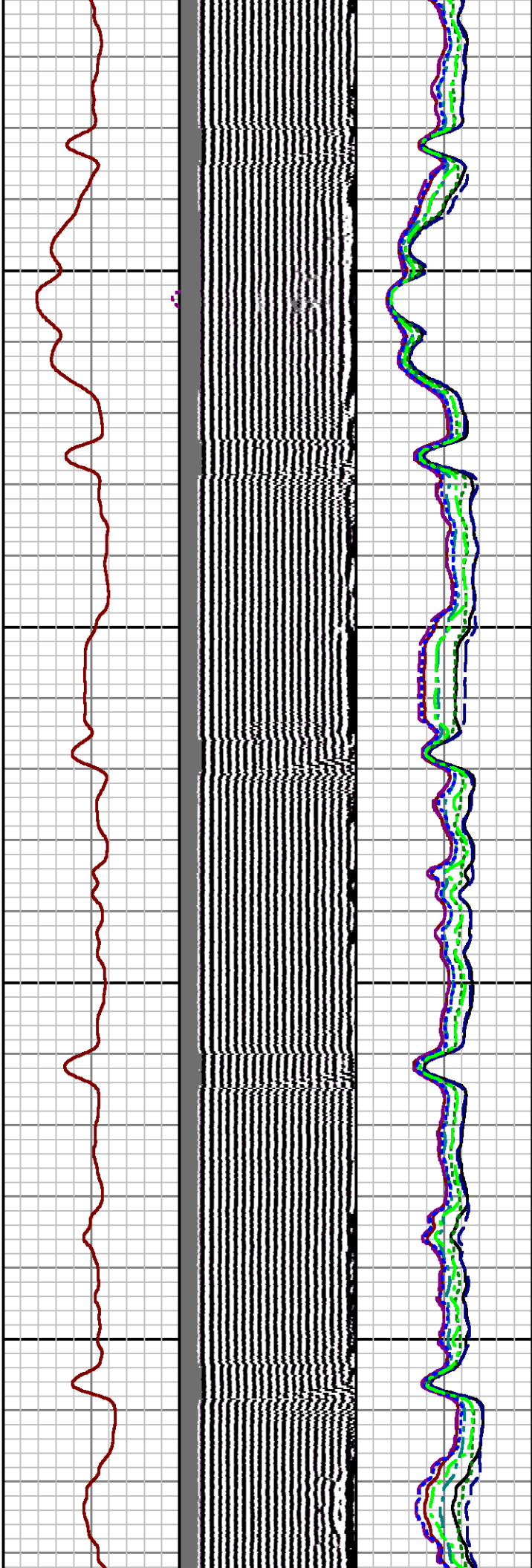
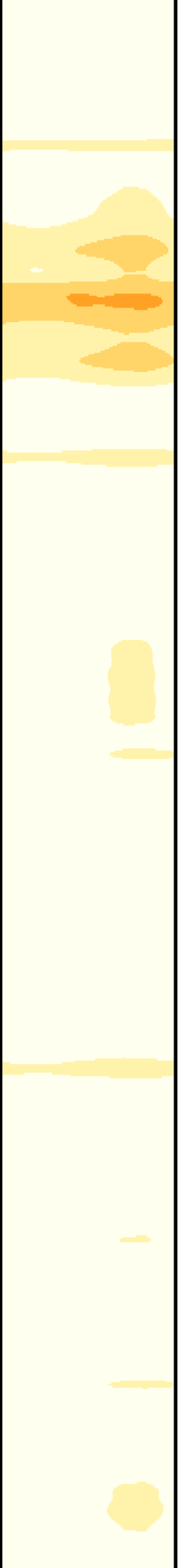


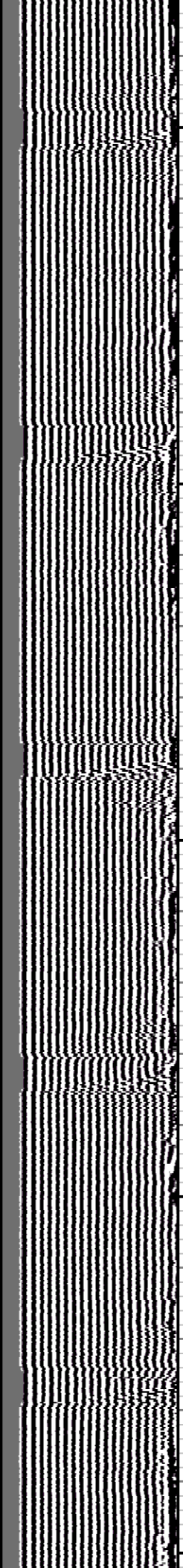
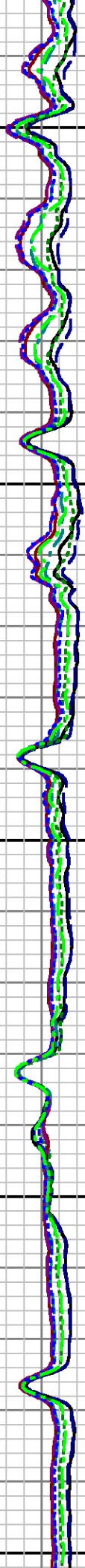
1800

1900





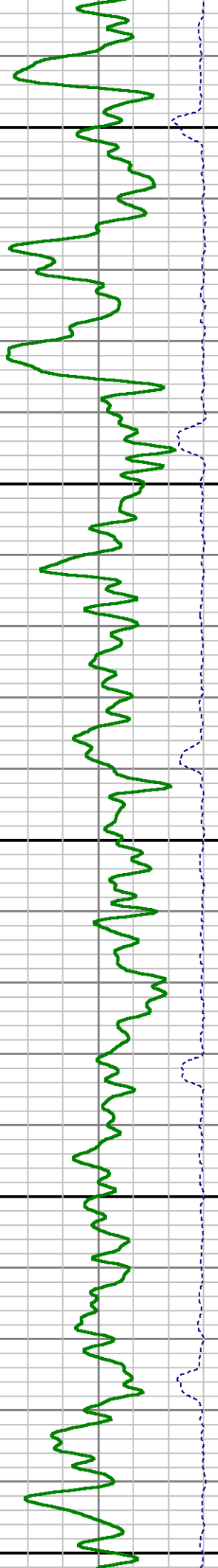




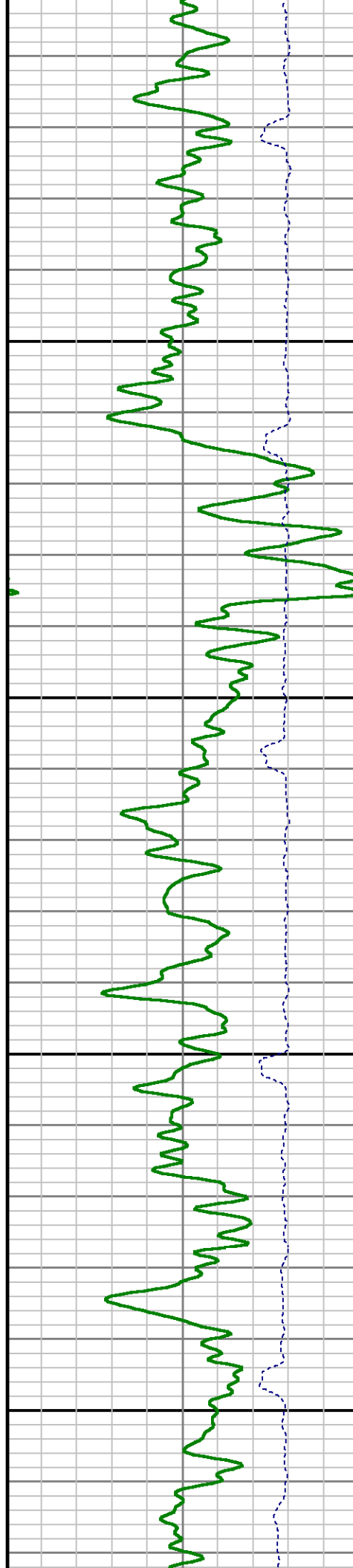
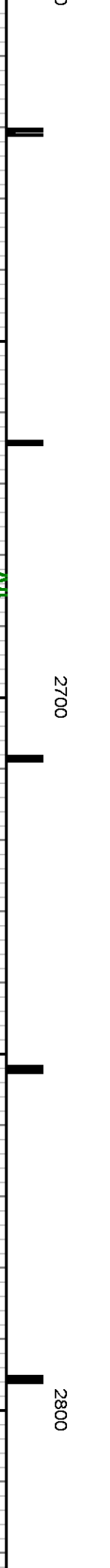
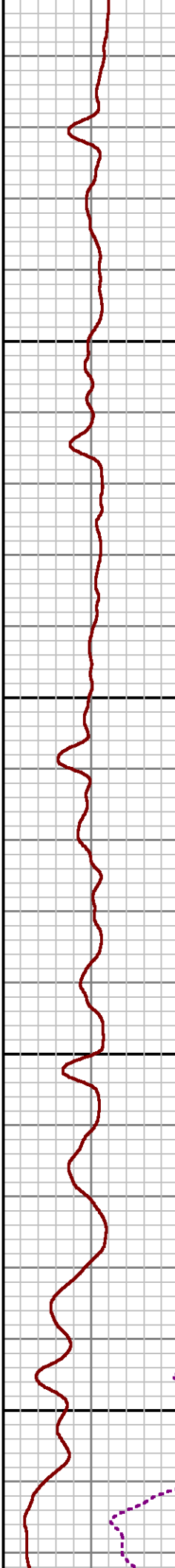
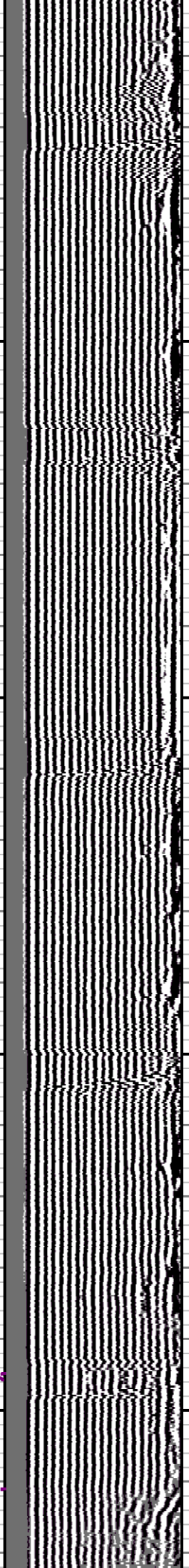
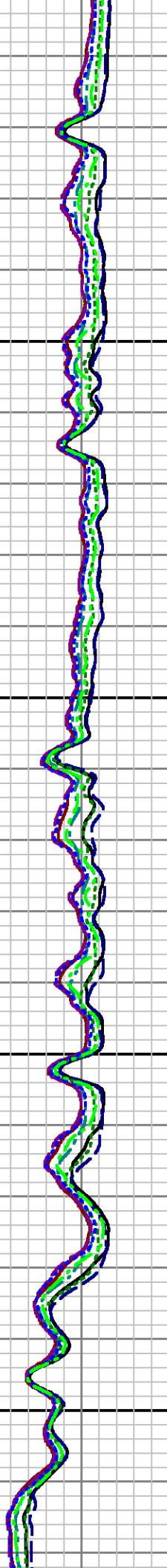
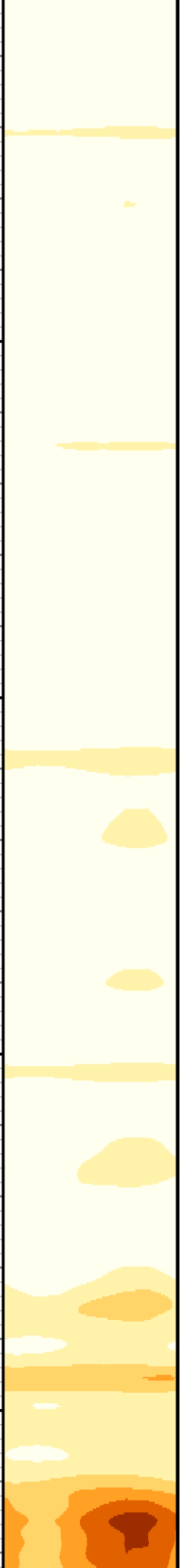
2400

2500

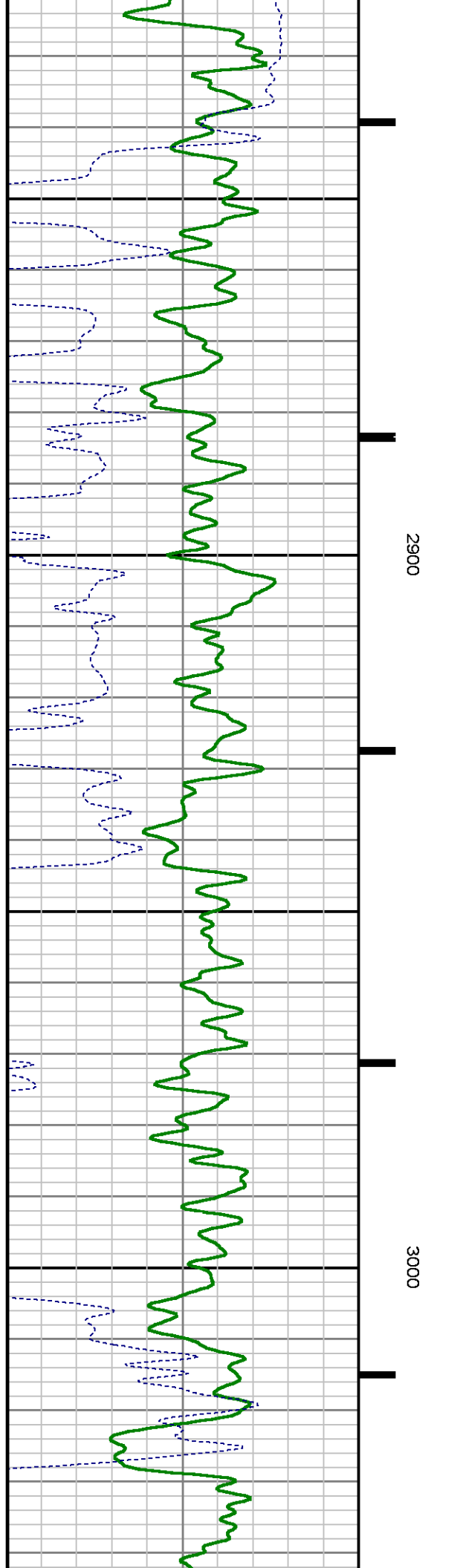
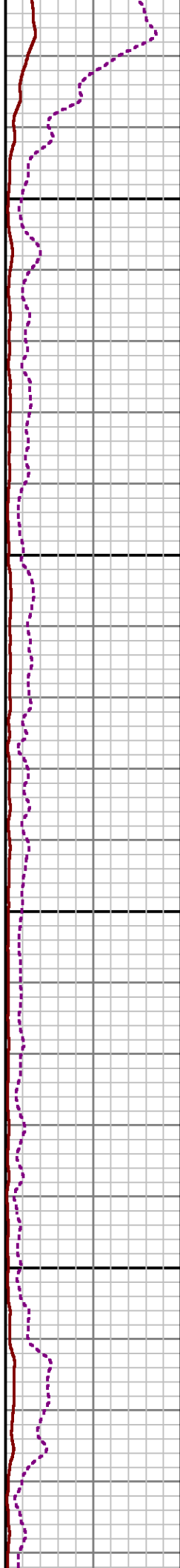
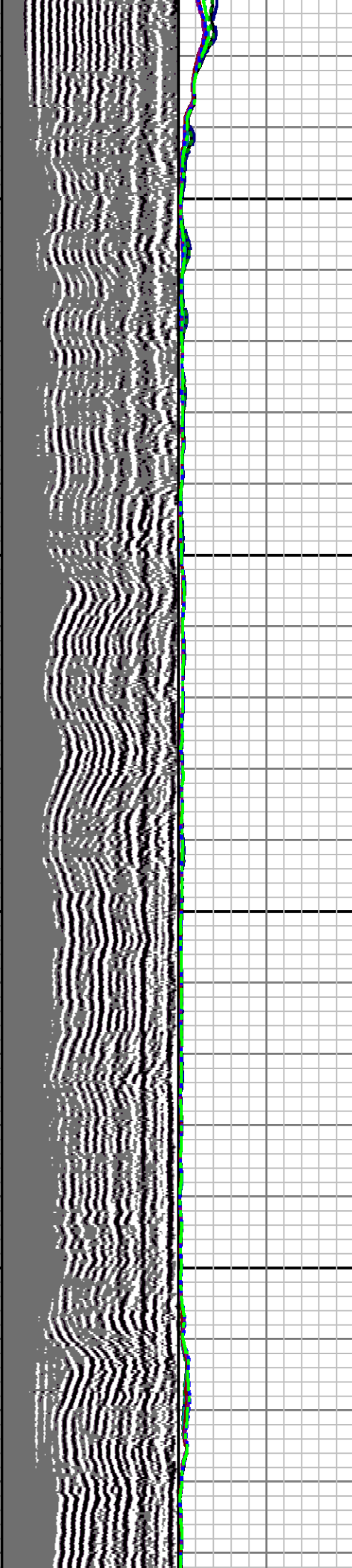
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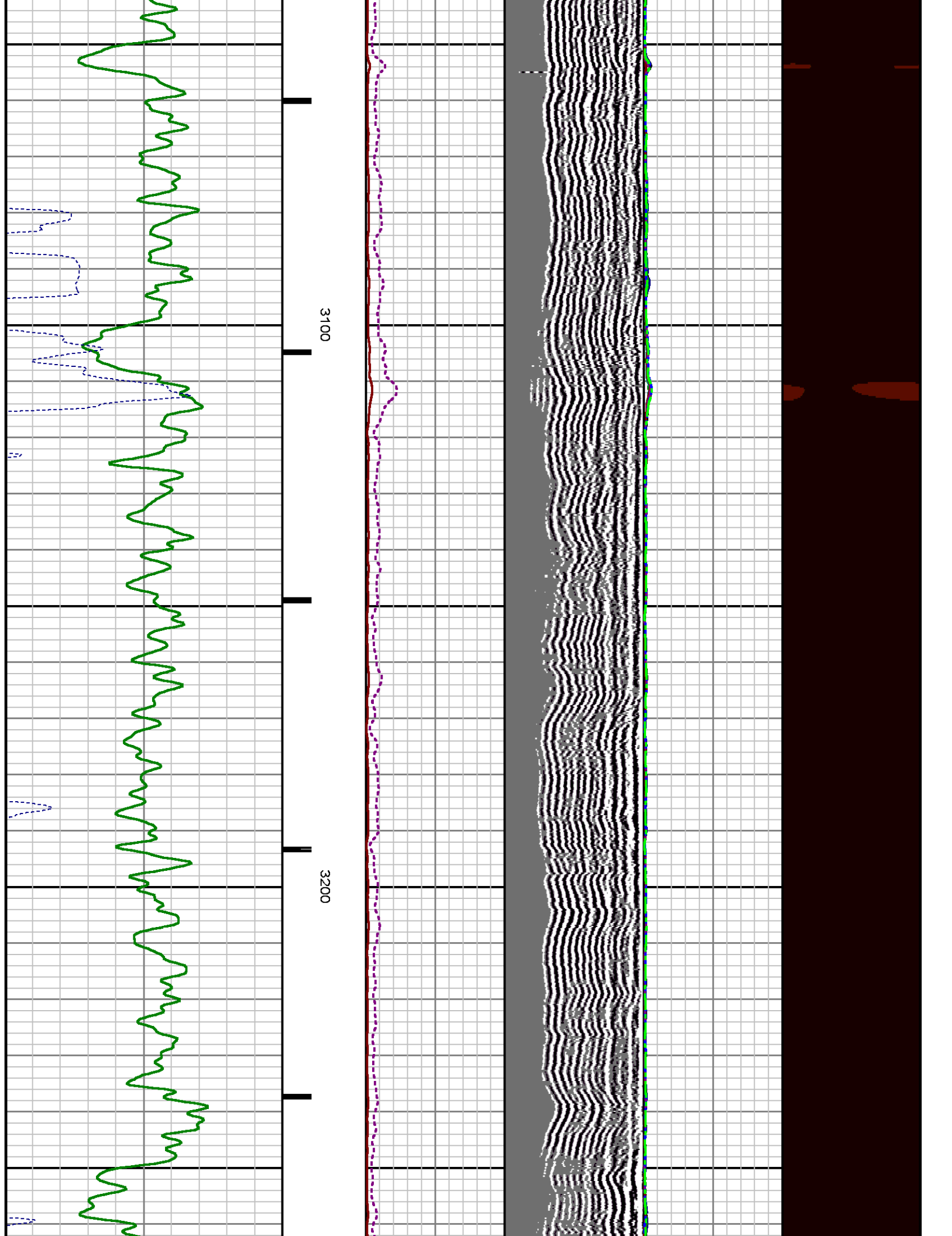


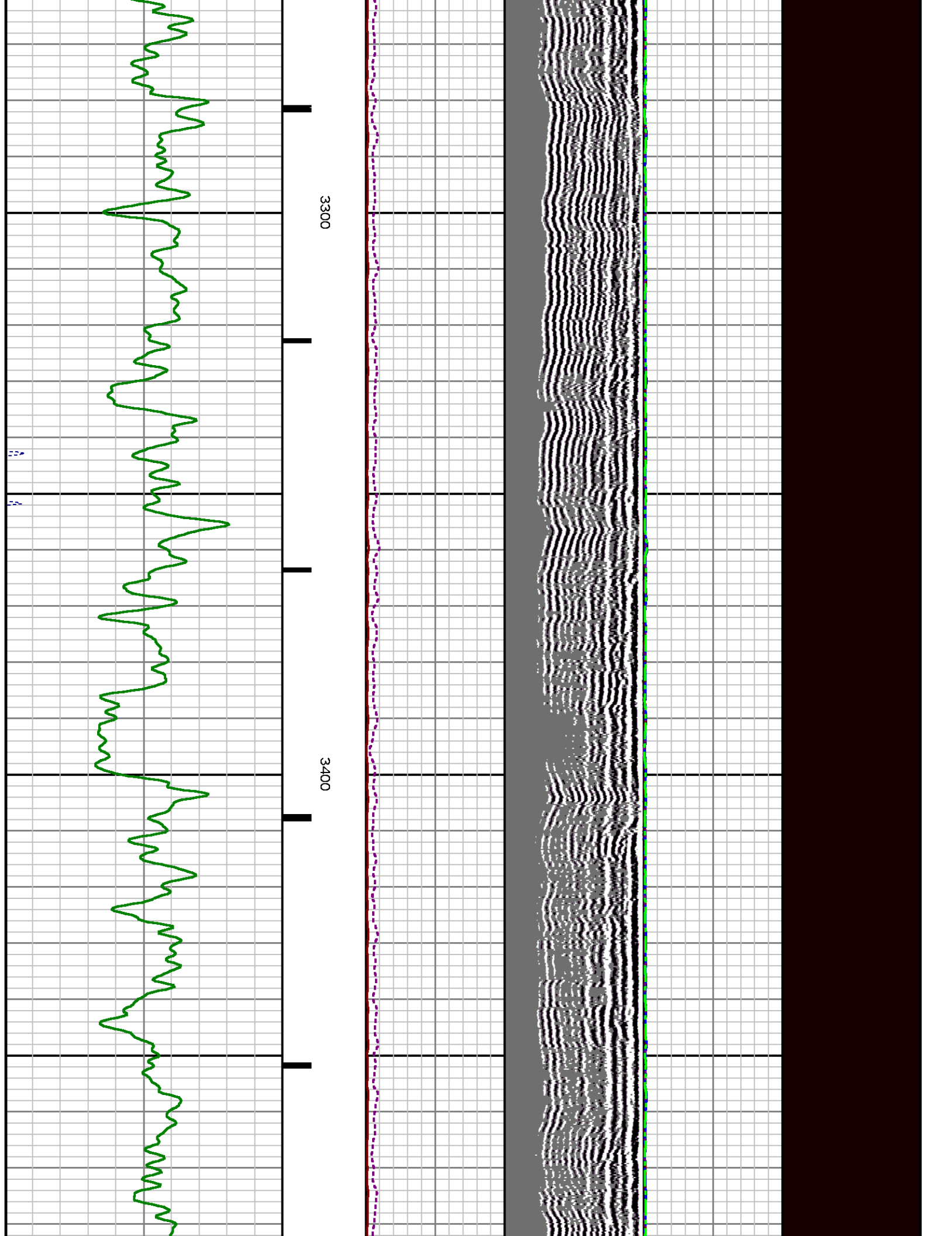


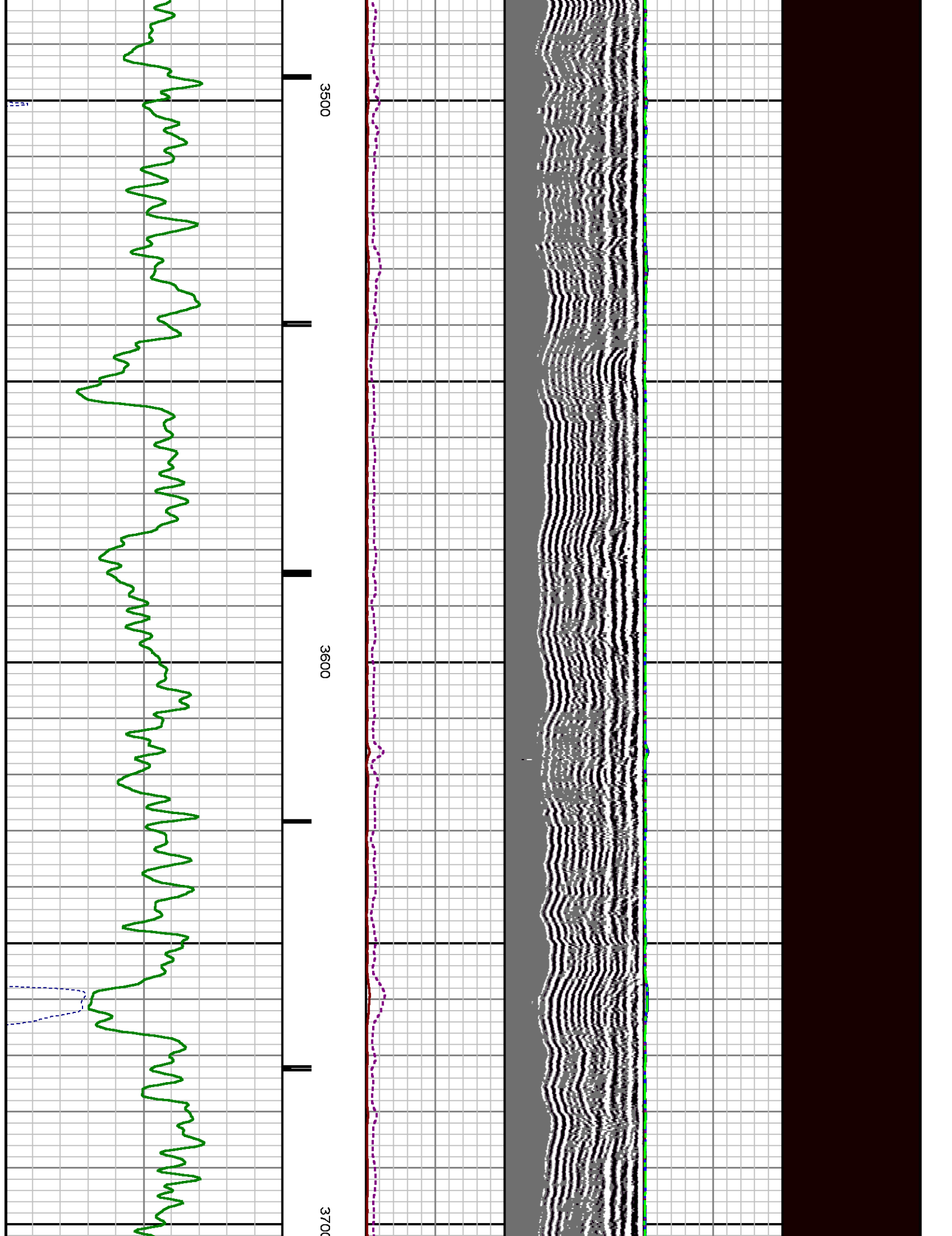


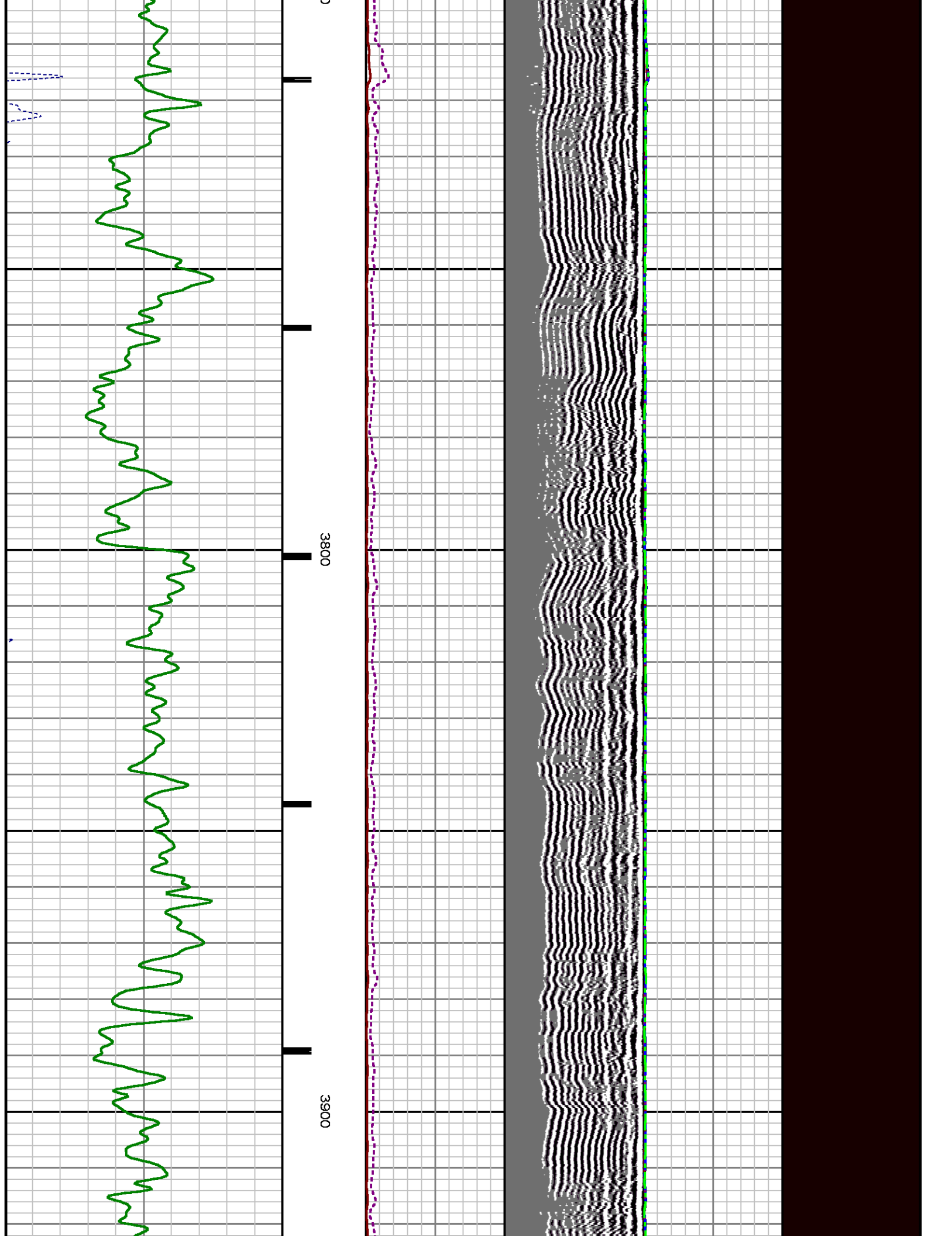




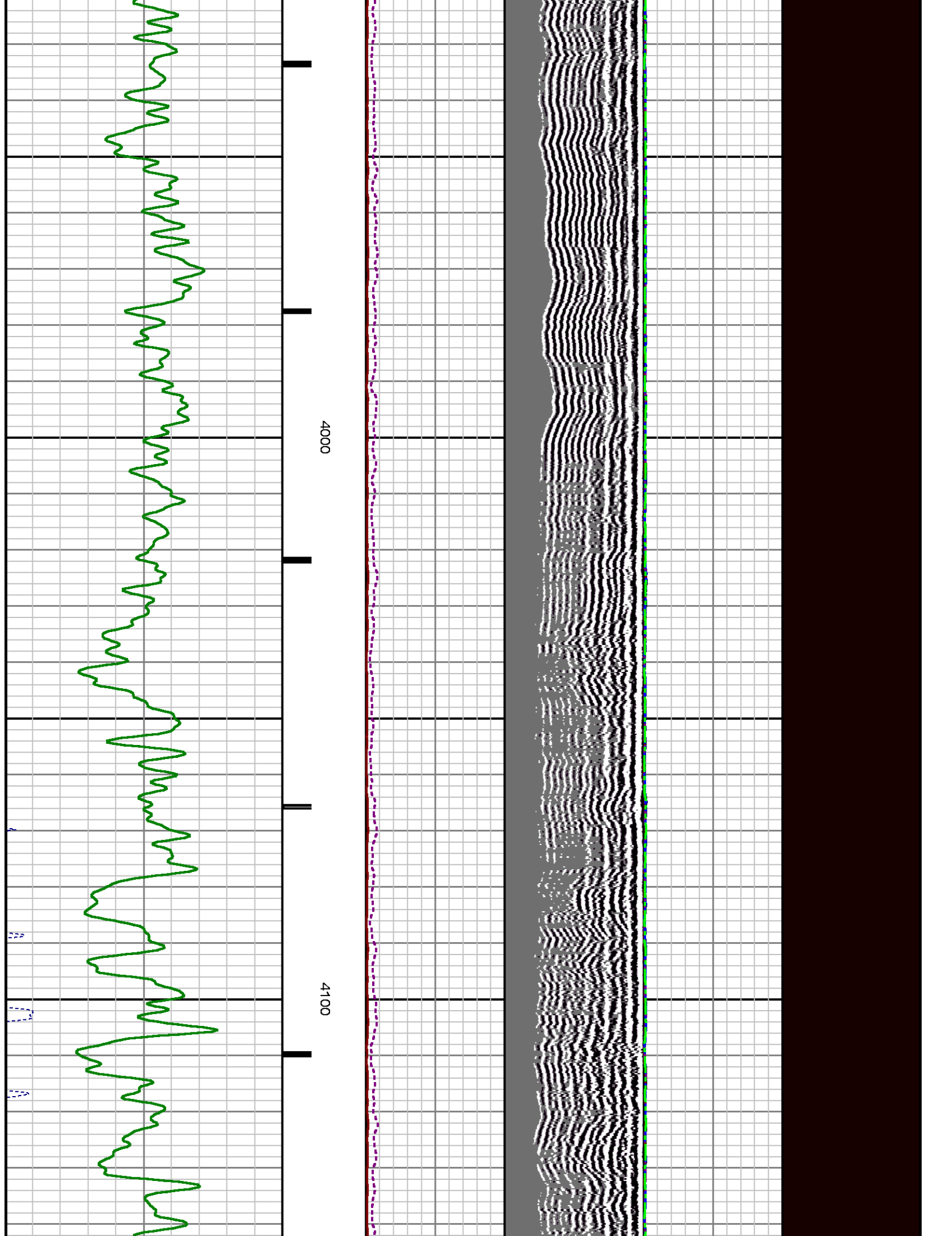




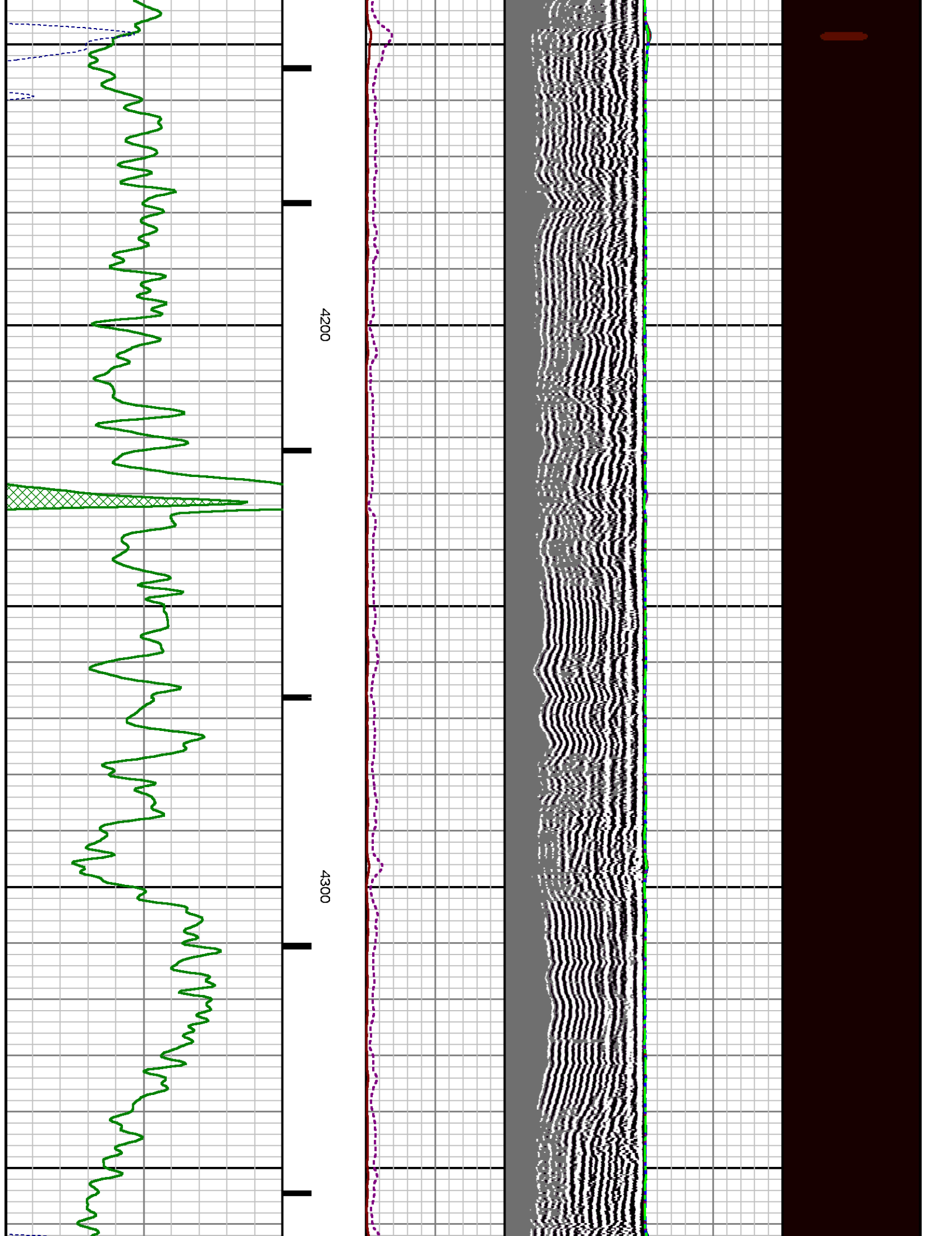


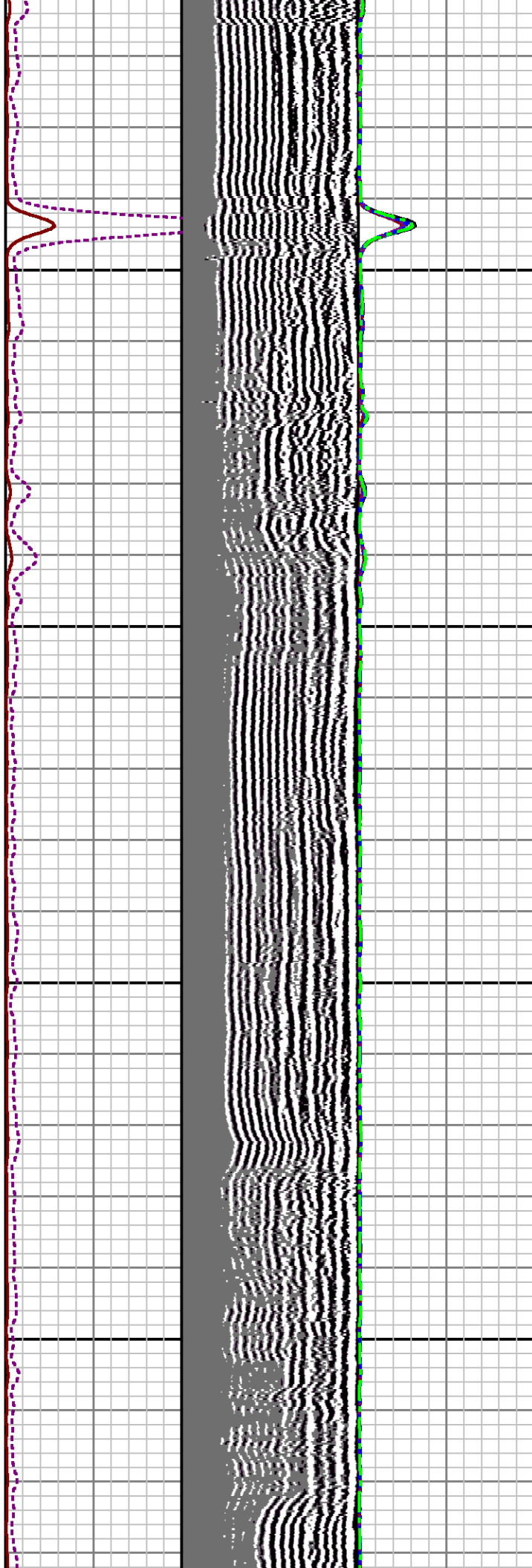






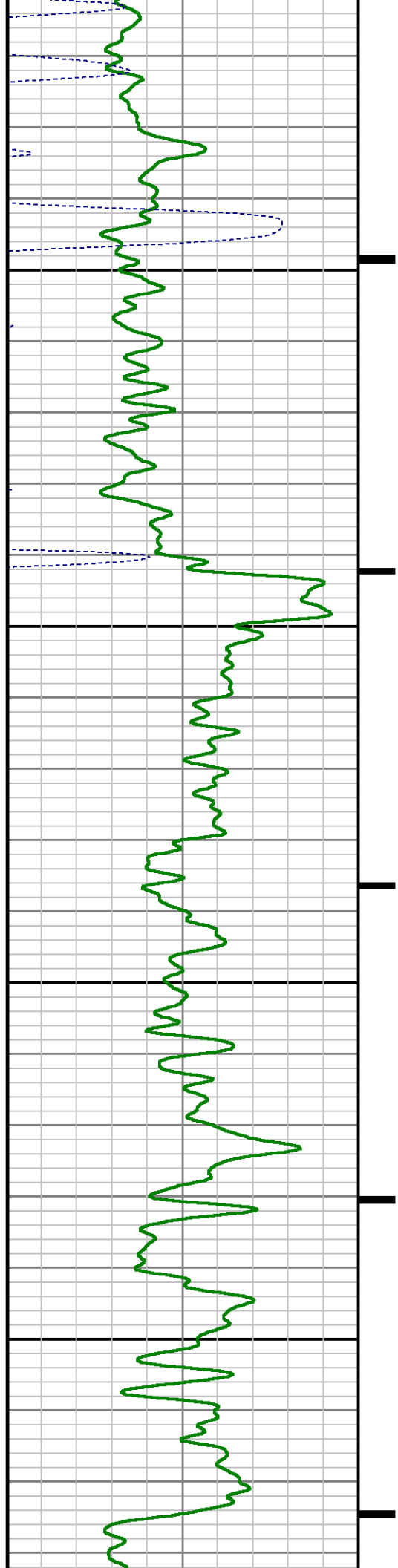


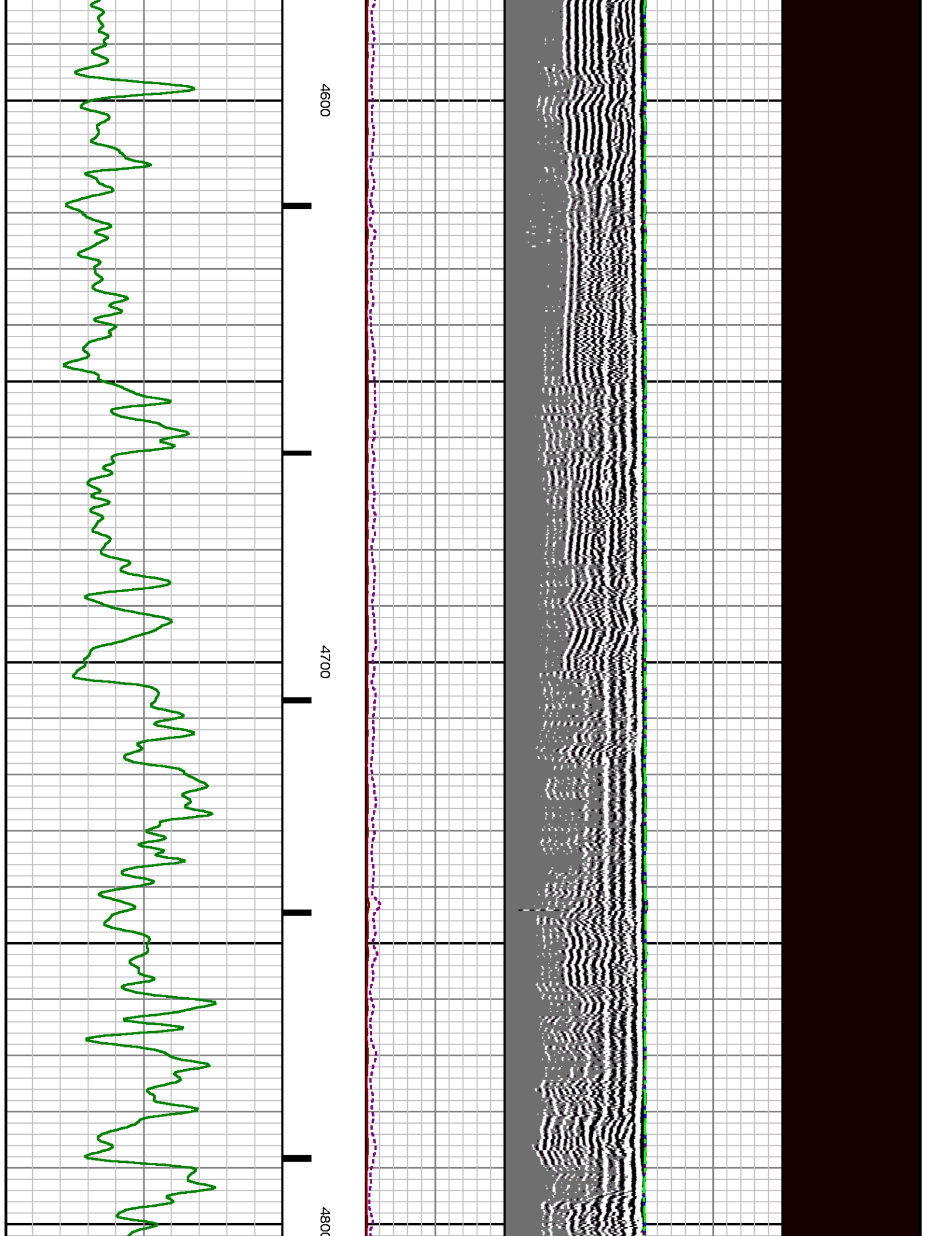


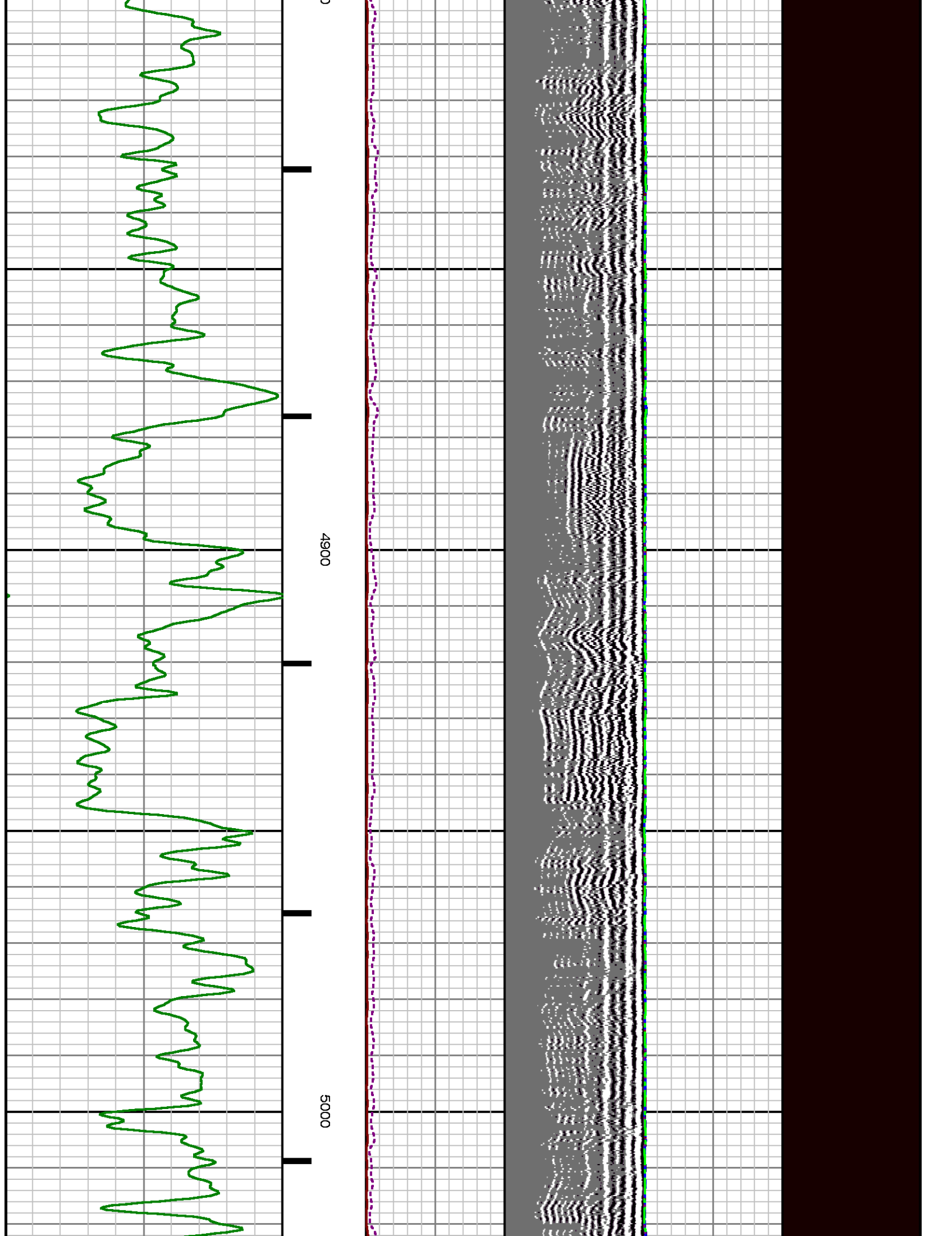


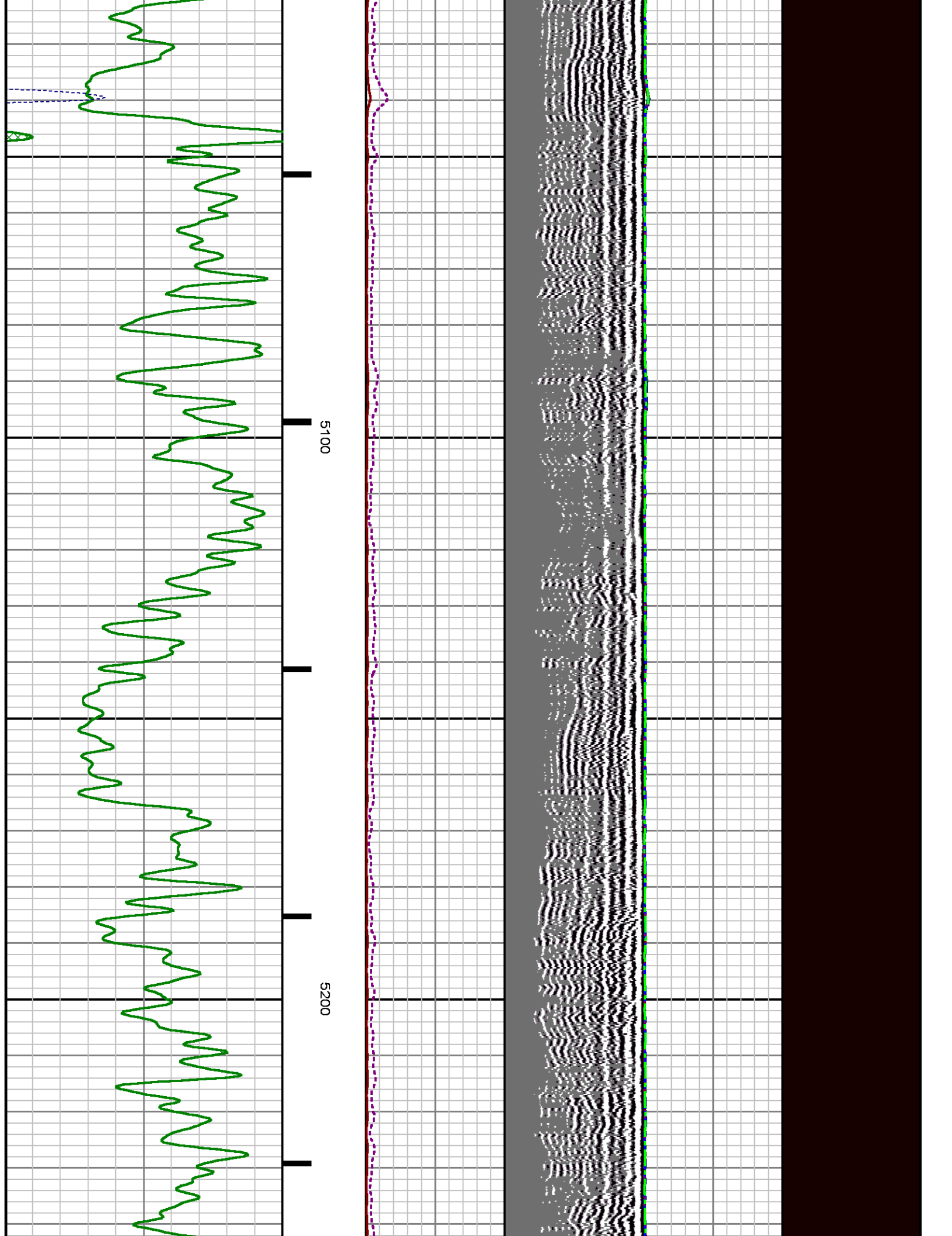
4400

4500

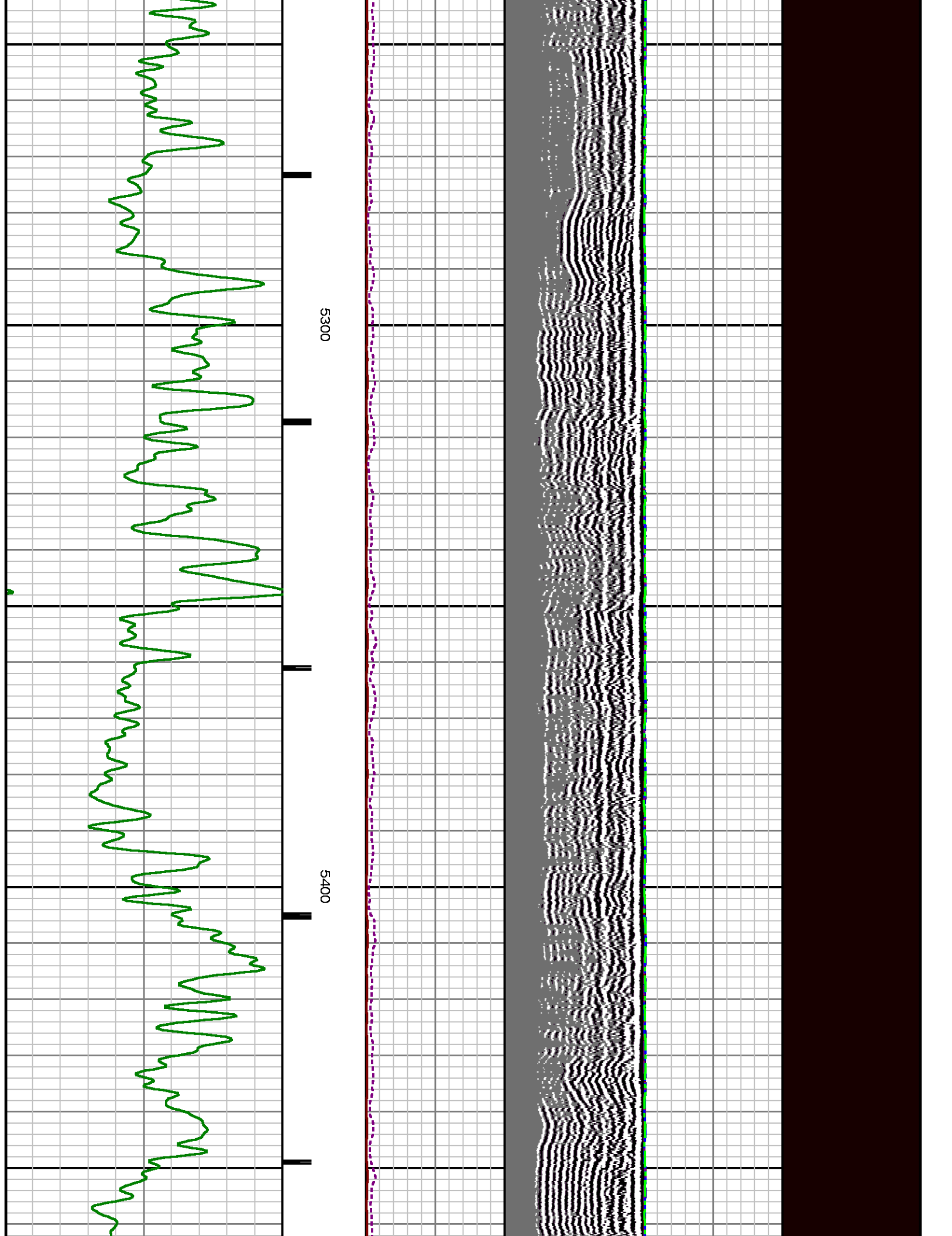




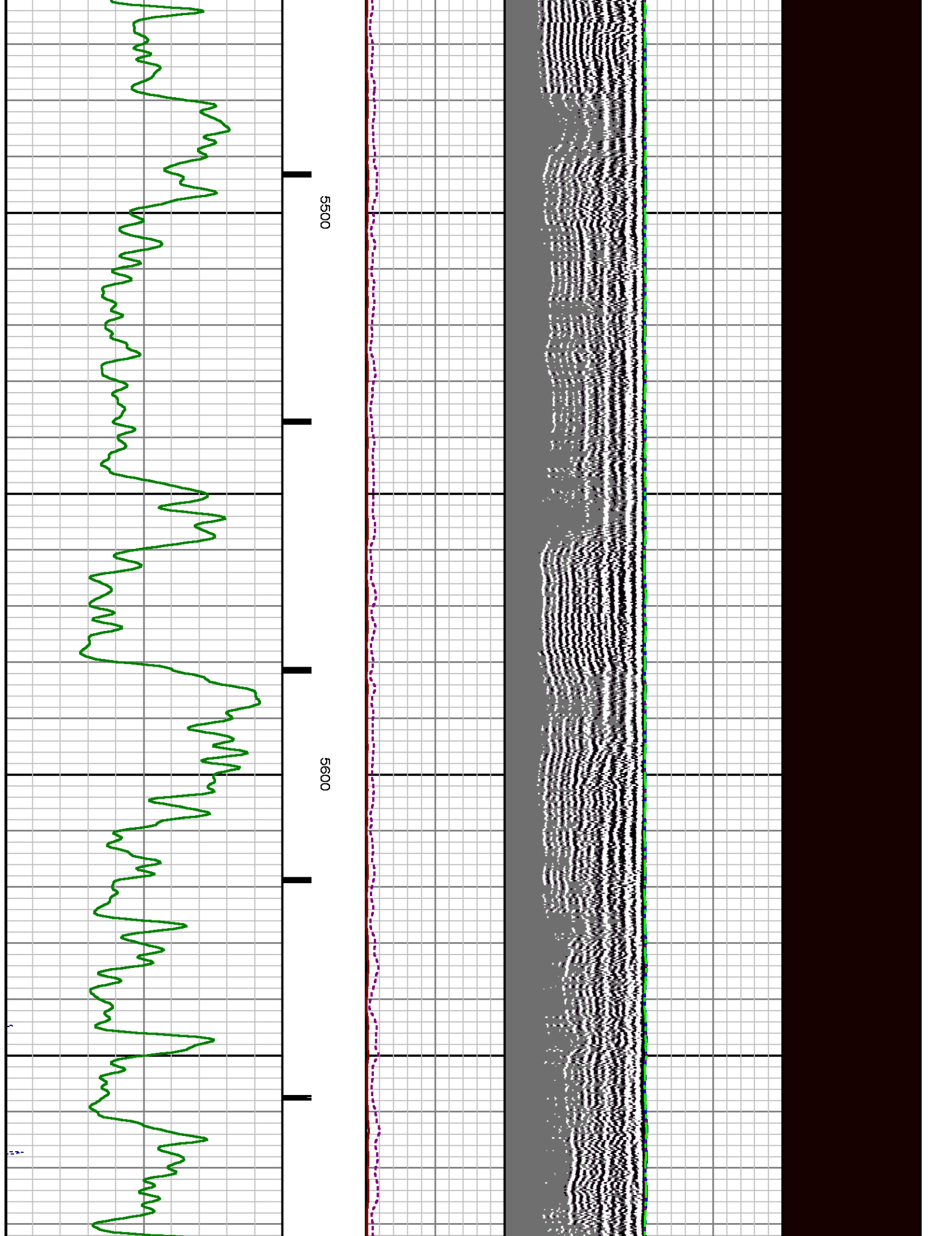


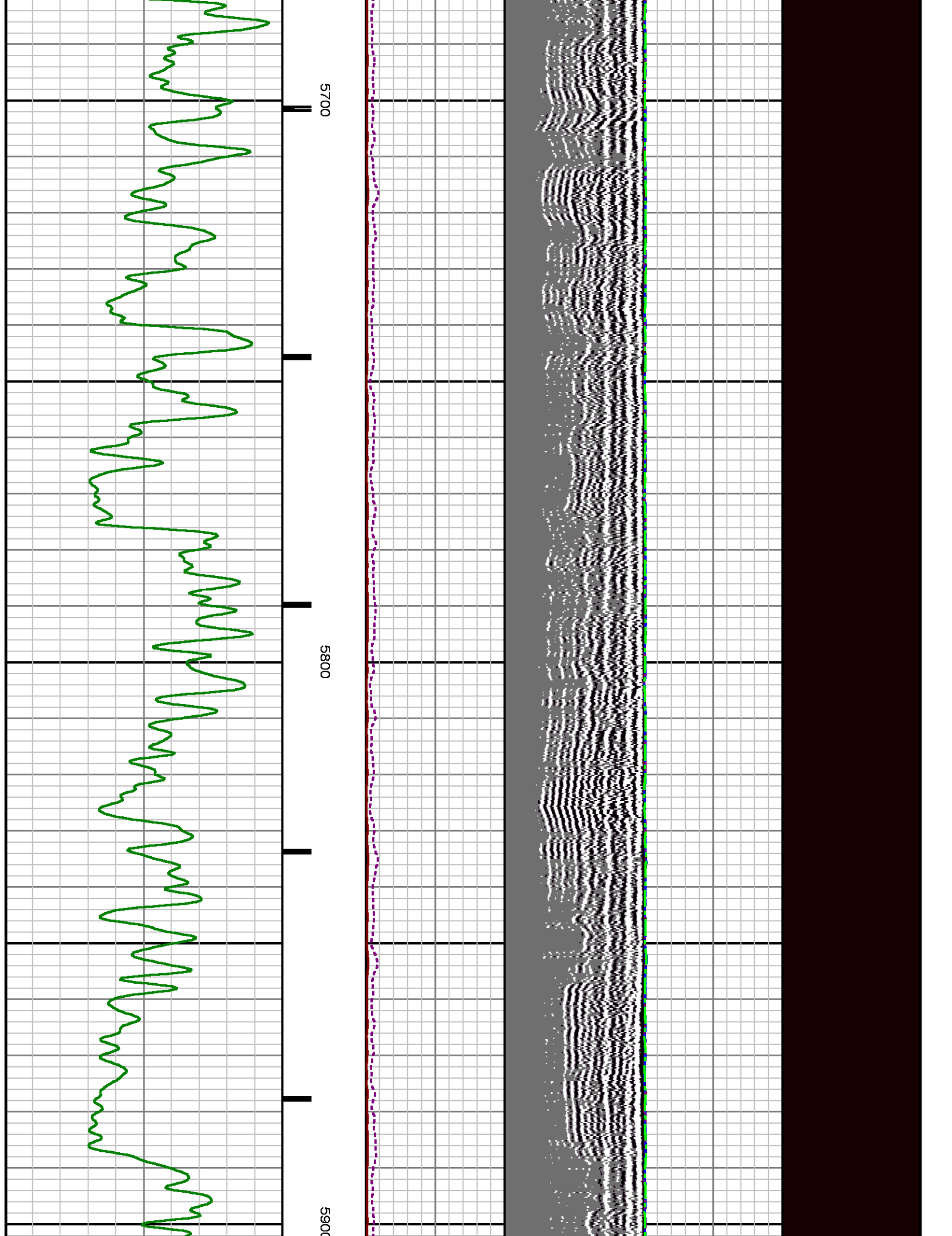


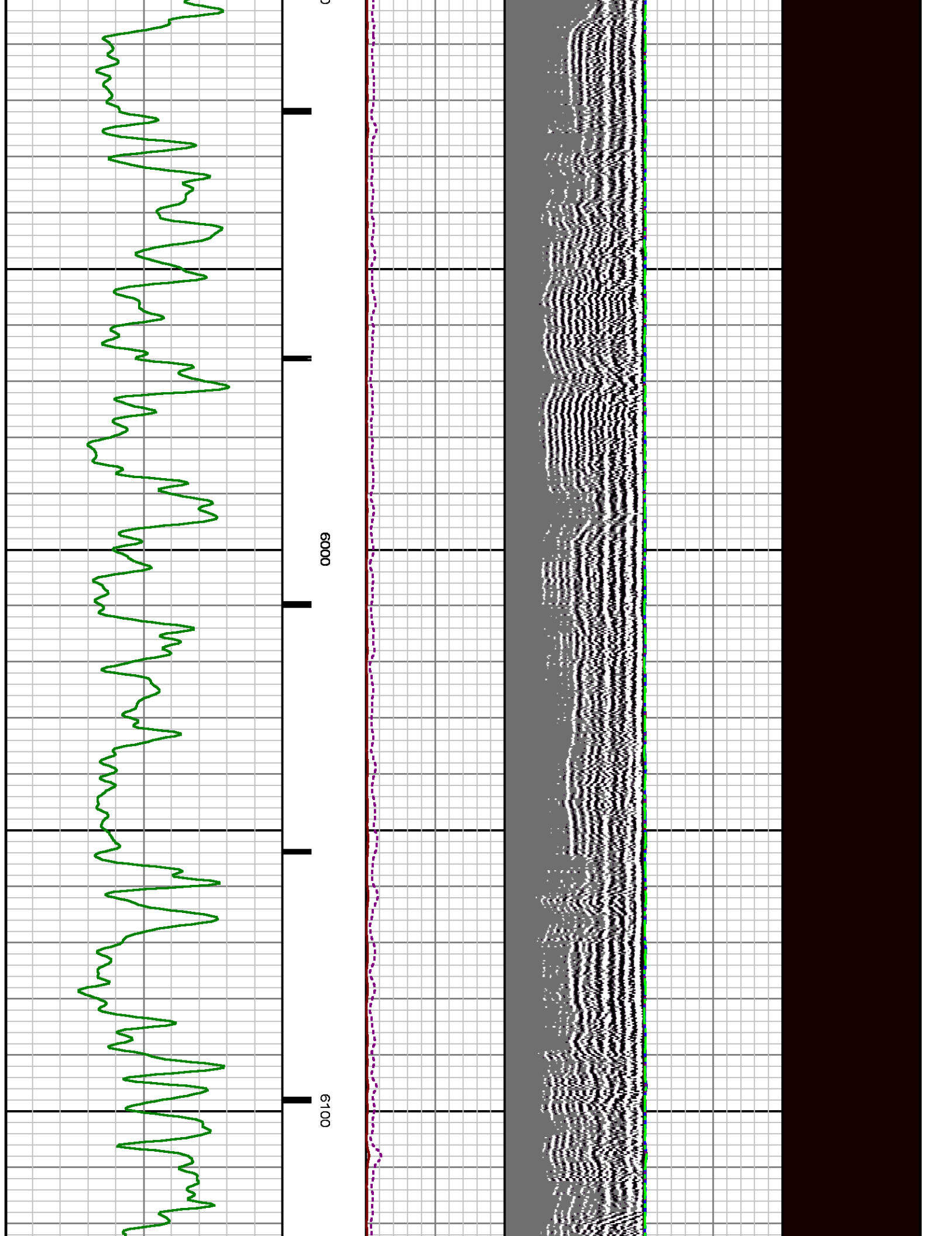


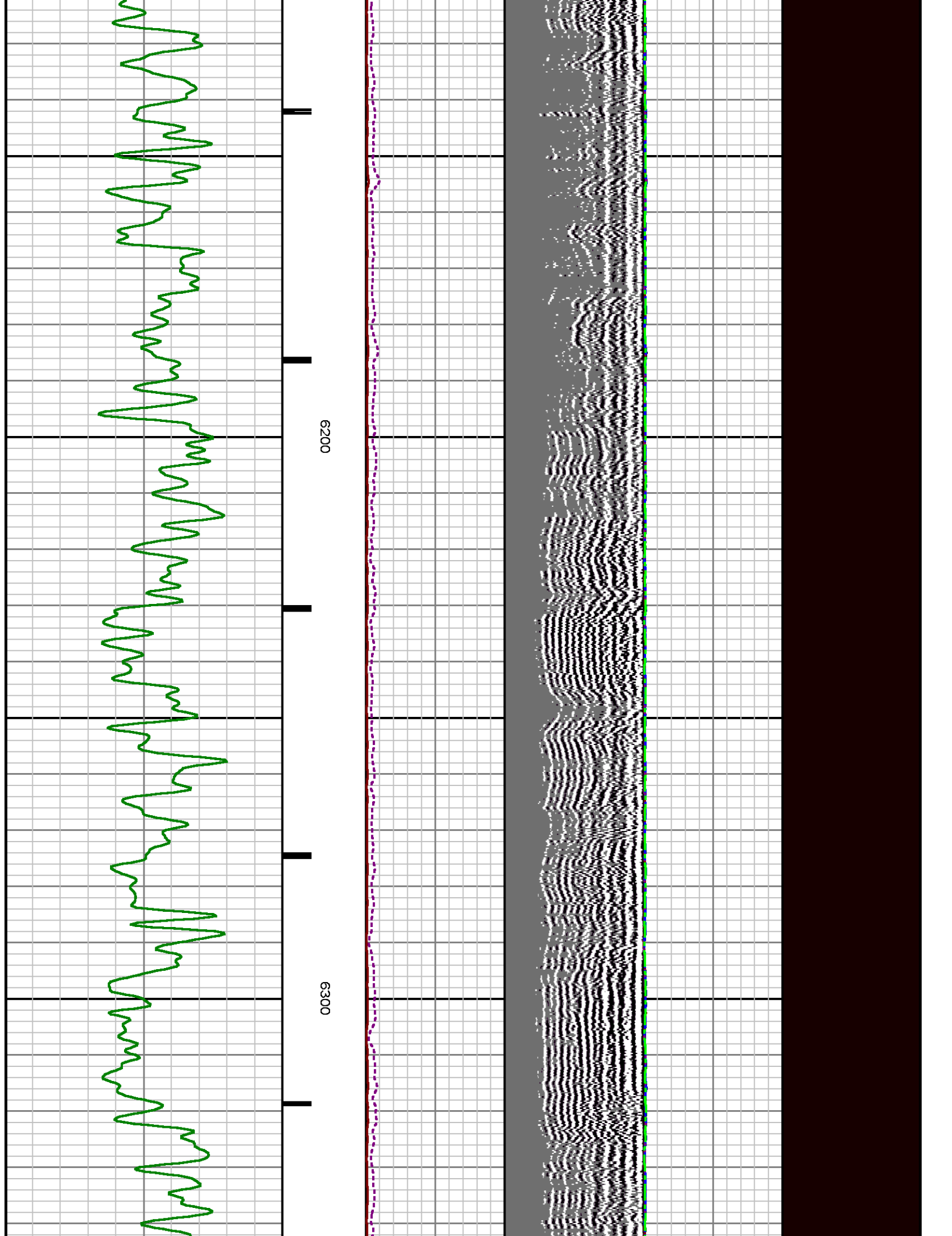


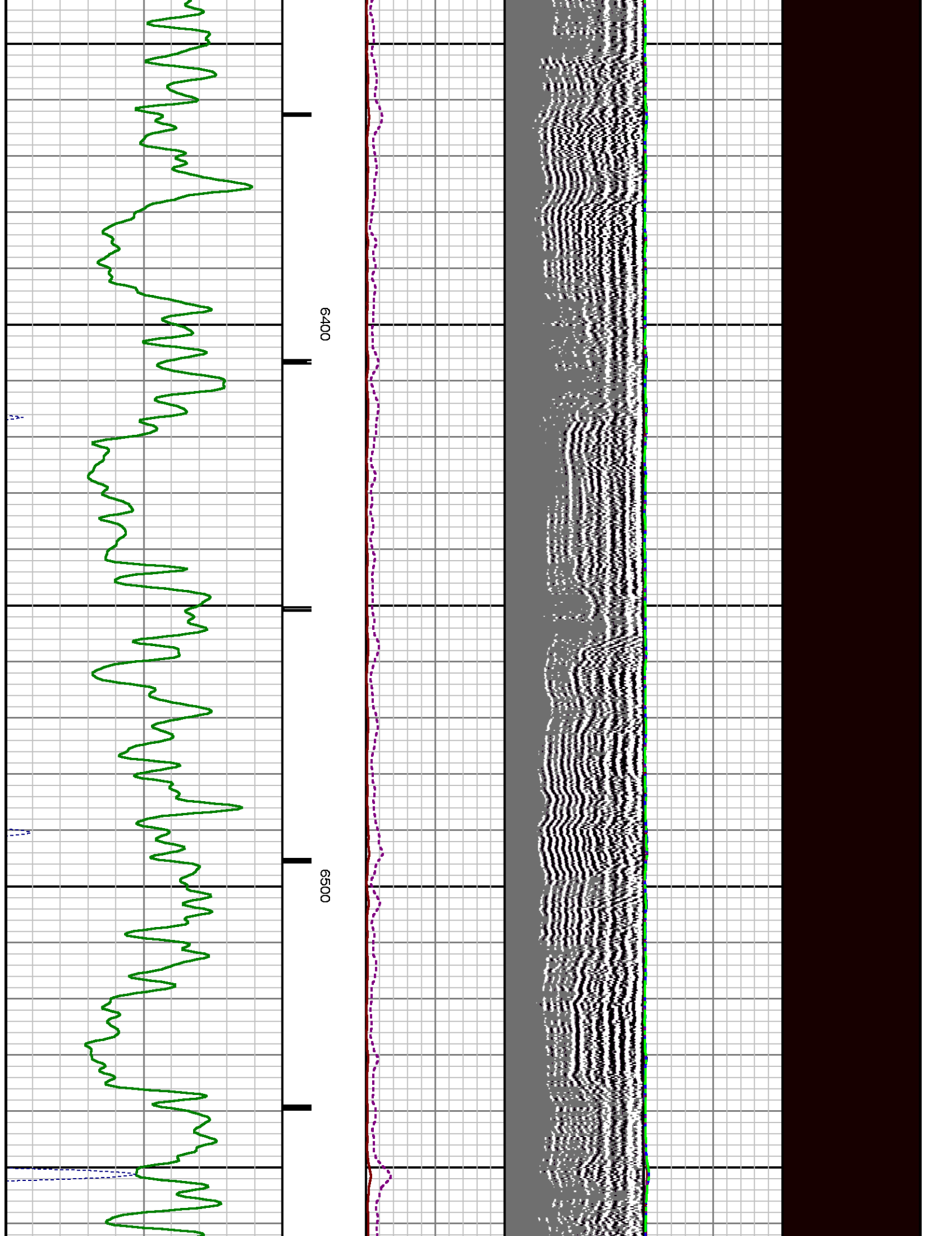




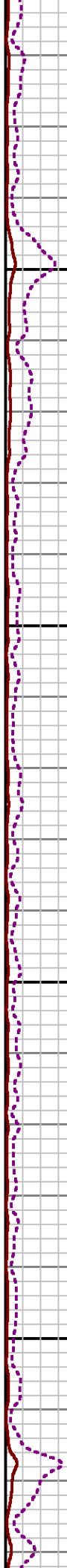
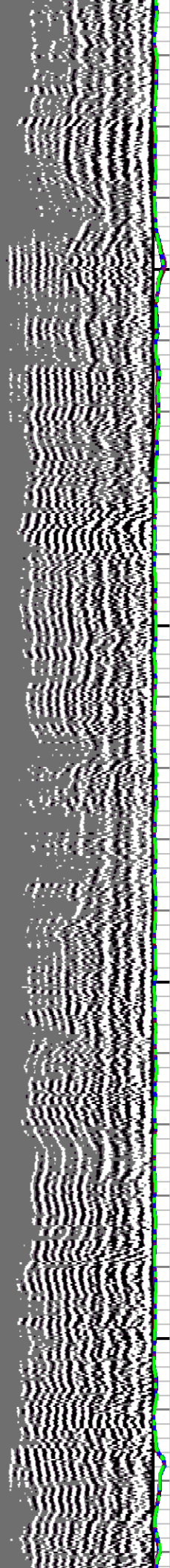










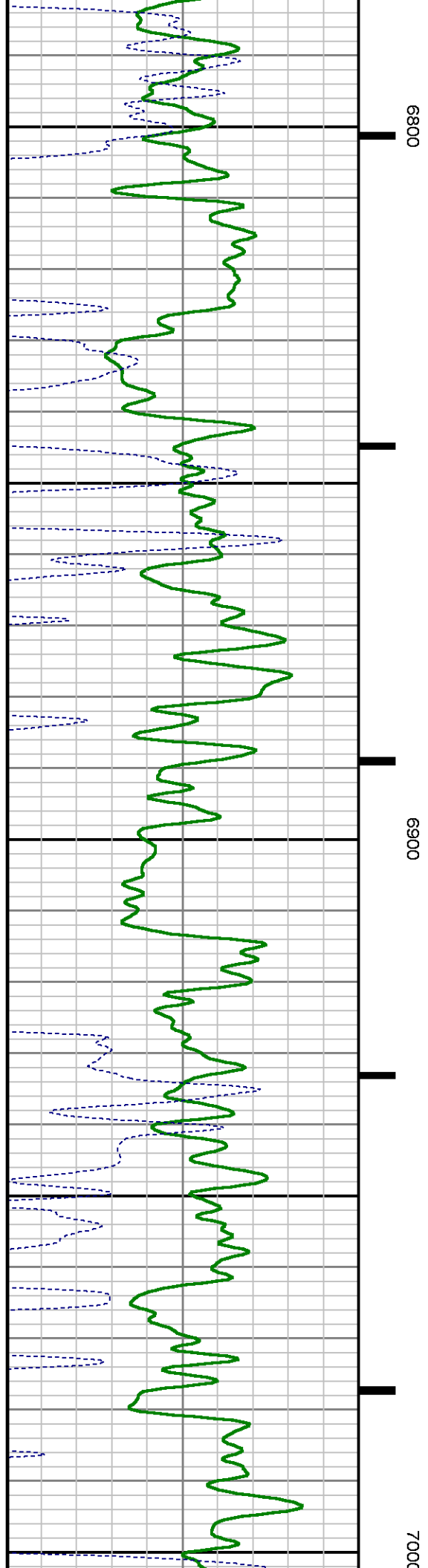
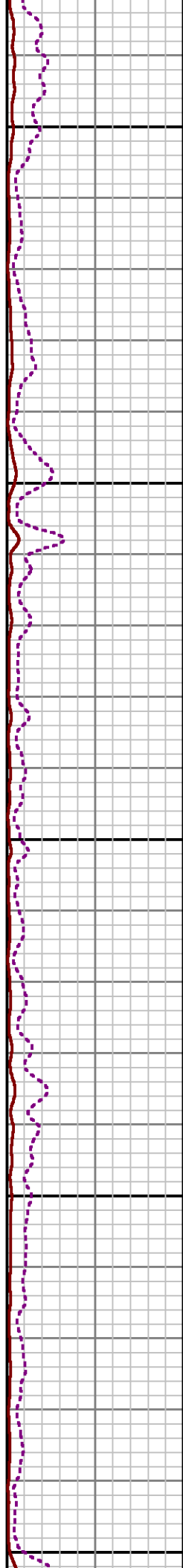
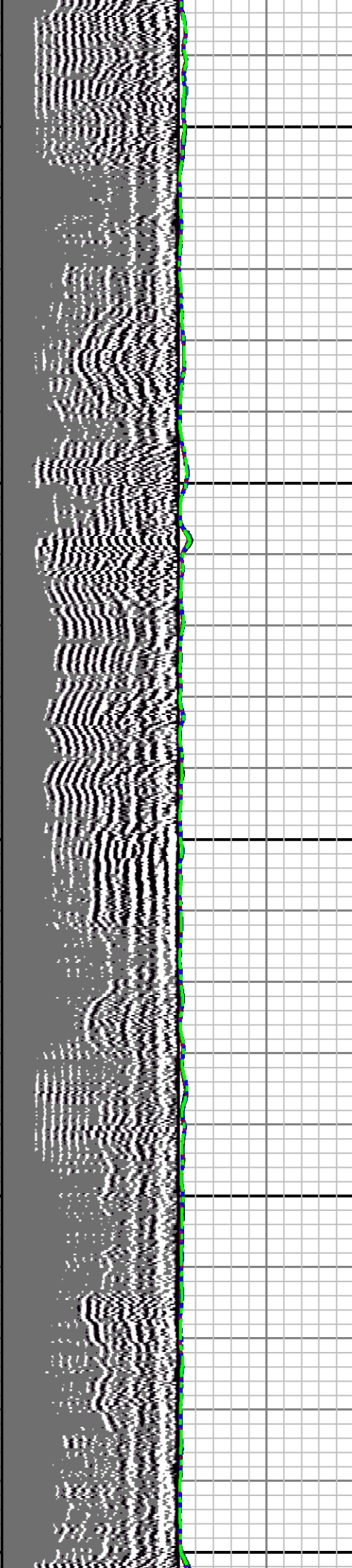


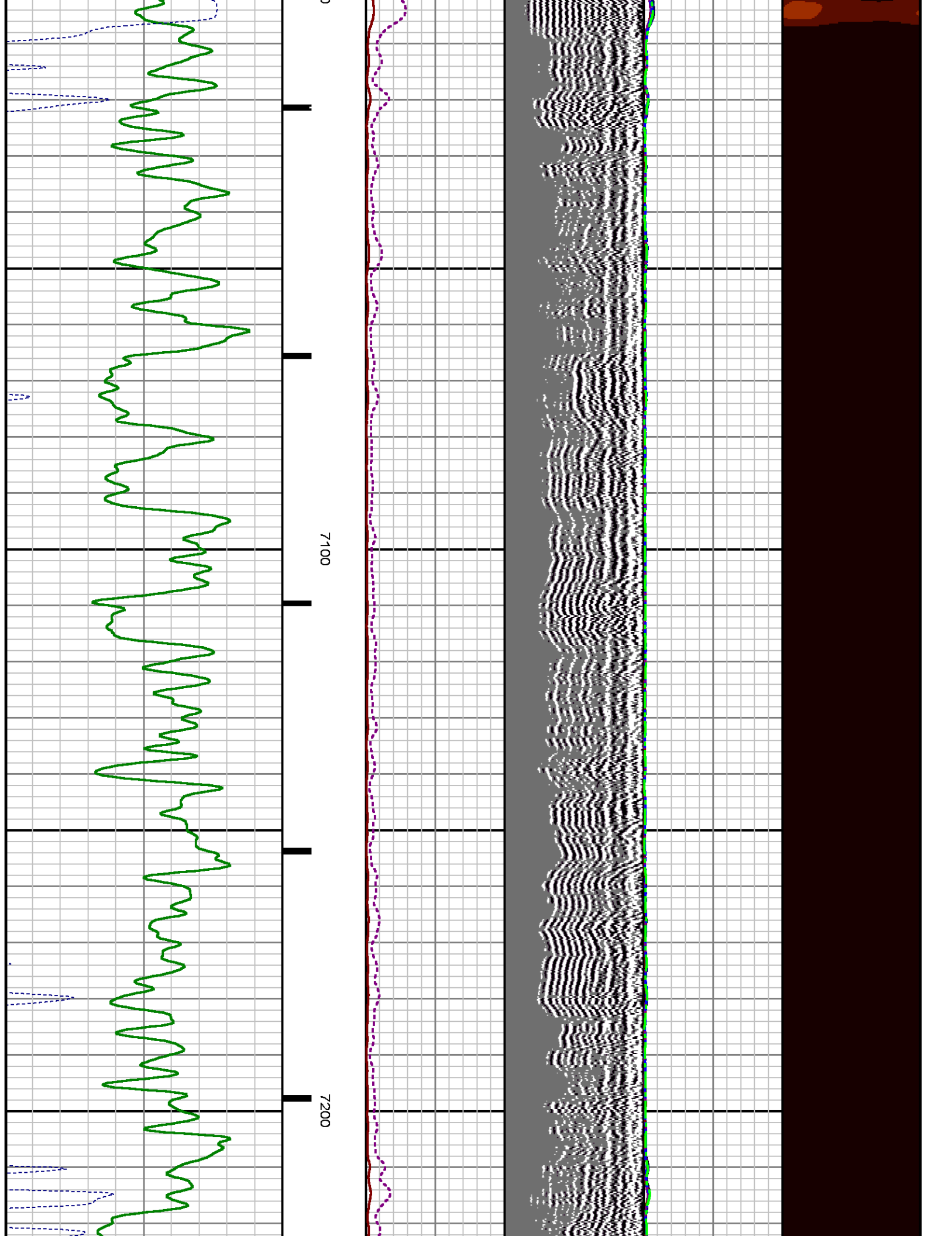
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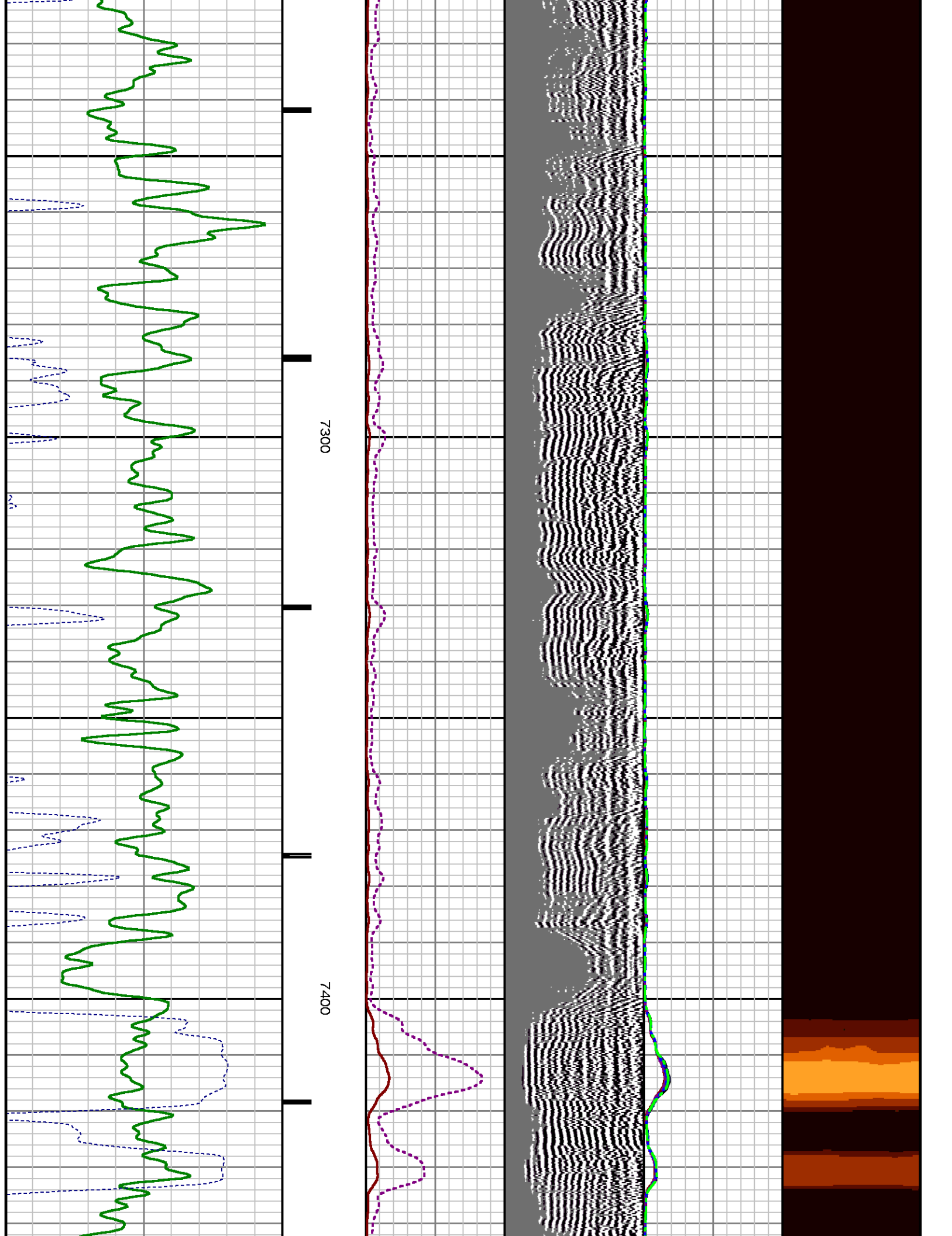
6700

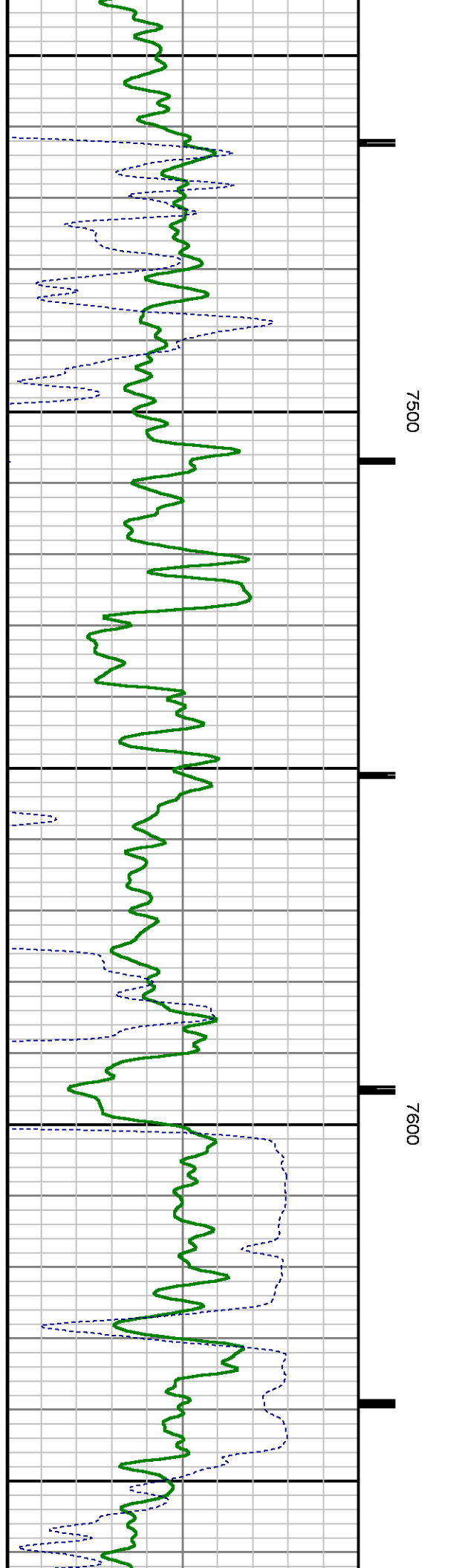
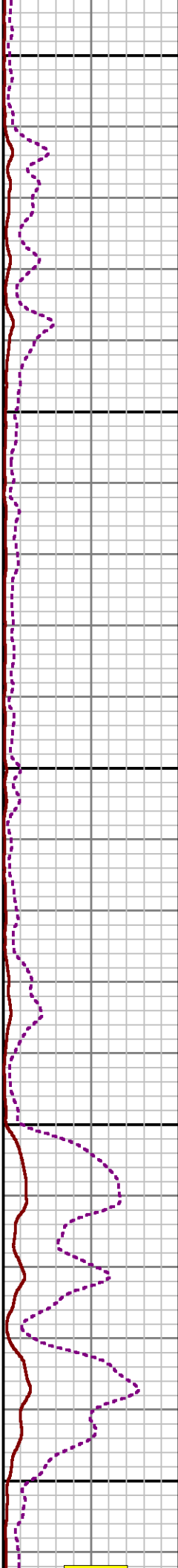
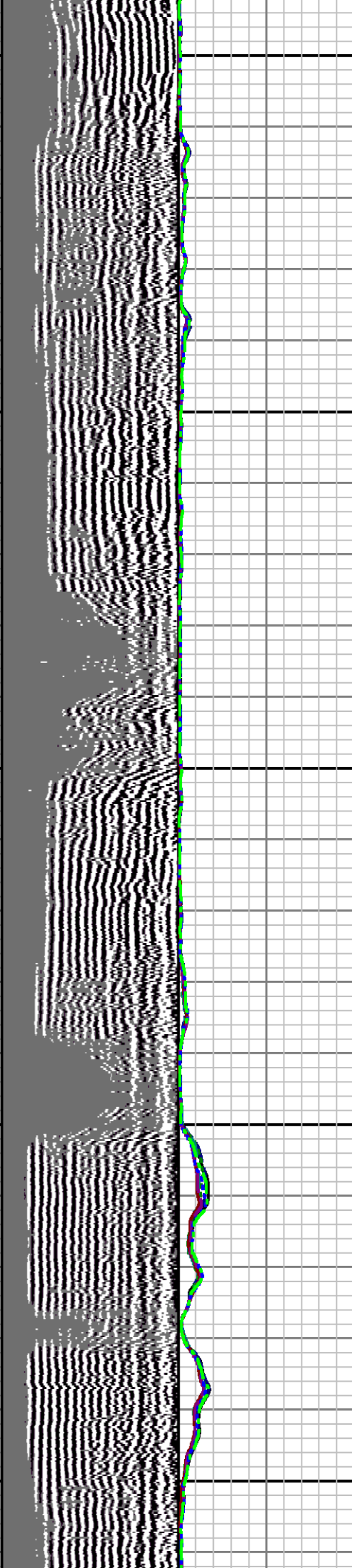


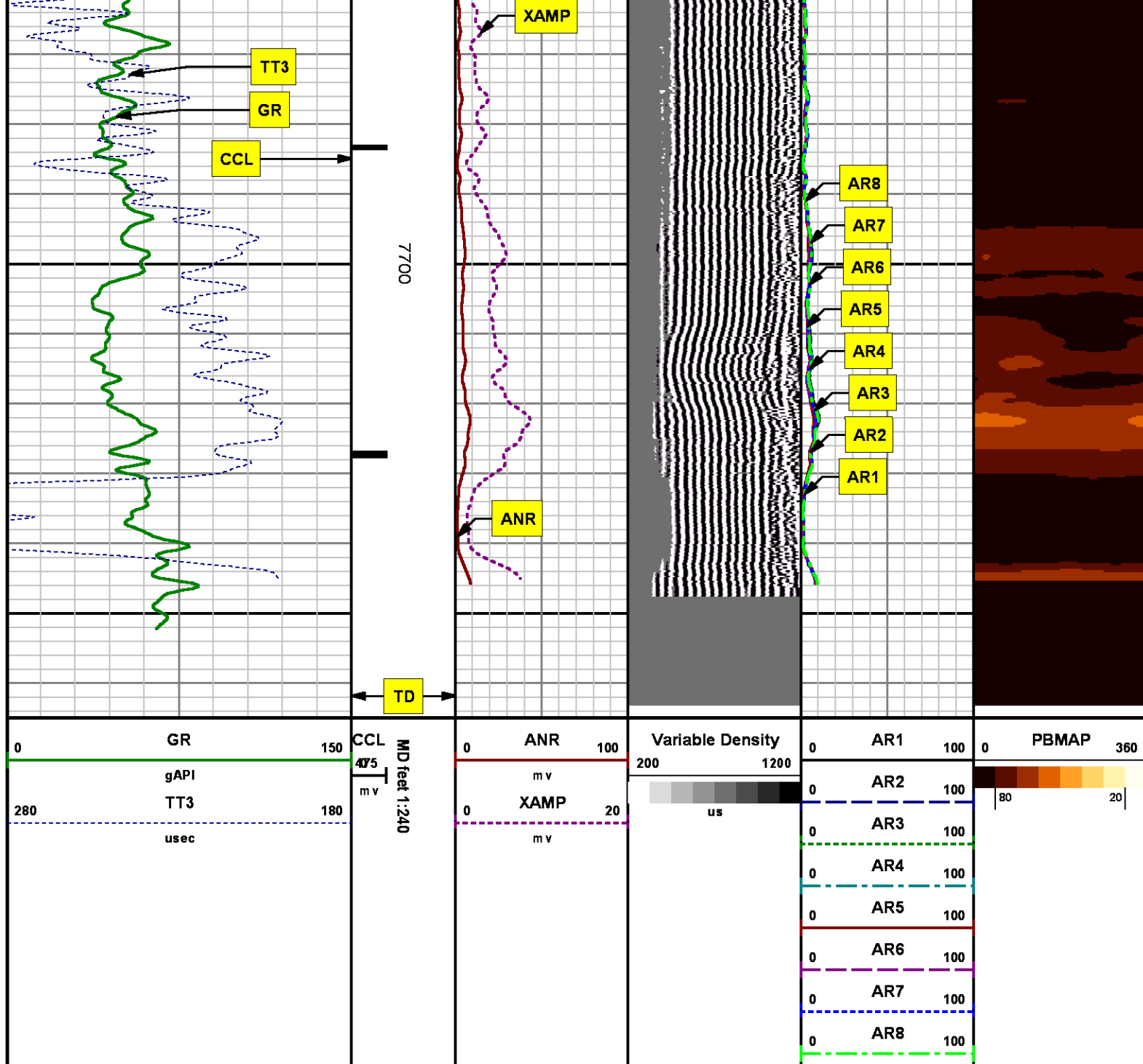












REPEAT SECTION  
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	7432.428	7761.460
RAL	Amp Gate Start Near	195.000	usec	7432.428	7761.460
RAL	Amp Gate Start Radial	195.000	usec	7432.428	7761.460
RAL	Amp Gate Width Far	25.000	usec	7432.428	7761.460
RAL	Amp Gate Width Near	25.000	usec	7432.428	7761.460
RAL	Amp Gate Width Radial	25.000	usec	7432.428	7761.460
RAL	casing od	4.500	inches	7432.428	7761.460
RAL	casing wt	11.600	lbm/ft	7432.428	7761.460
RAL	FB Start Far	291.900	usec	7432.428	7761.460
RAL	FB Start Near	180.000	usec	7432.428	7761.460
RAL	FB Start Radial	180.000	usec	7432.428	7761.460
RAL	FB Thresh Far	10.000	mv	7432.428	7761.460
RAL	FB Thresh Near	4.000	mv	7432.428	7761.460
RAL	FB Thresh Radial	4.000	mv	7432.428	7761.460
RAL	Fluid Travel Time	200.000	usec/ft	7432.428	7761.178

## DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-16.750	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	-15.750	AFAR	SIG	TT5			
2459XA	-11.340	CCL					
2459XA	-9.490	GR					
2459XA	-4.090	NEU					

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

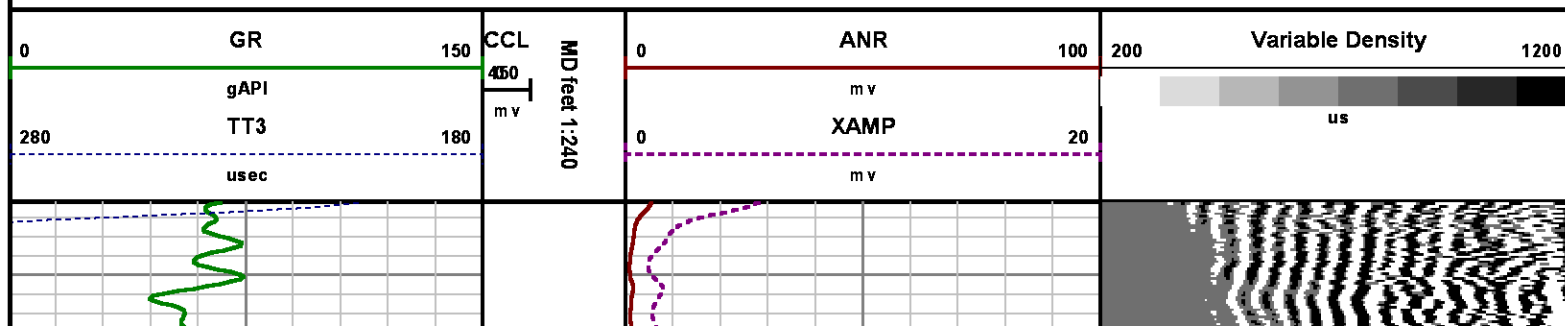
Well : WPX ENERGY

File Name : d:\welldata\wpx\pa 514-2\ral514\repeat.xtf

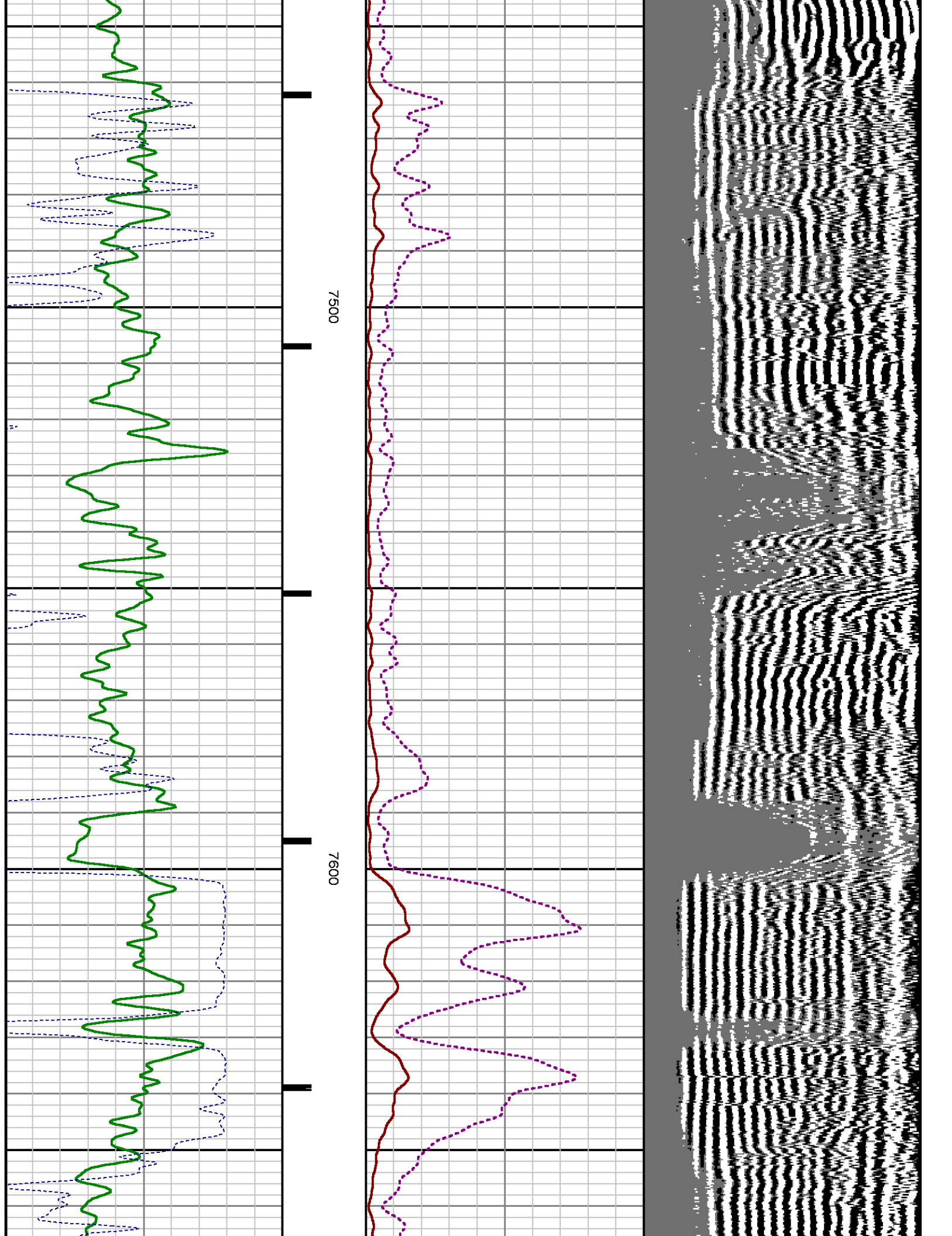
Mode : PlotMgr 5.4.504

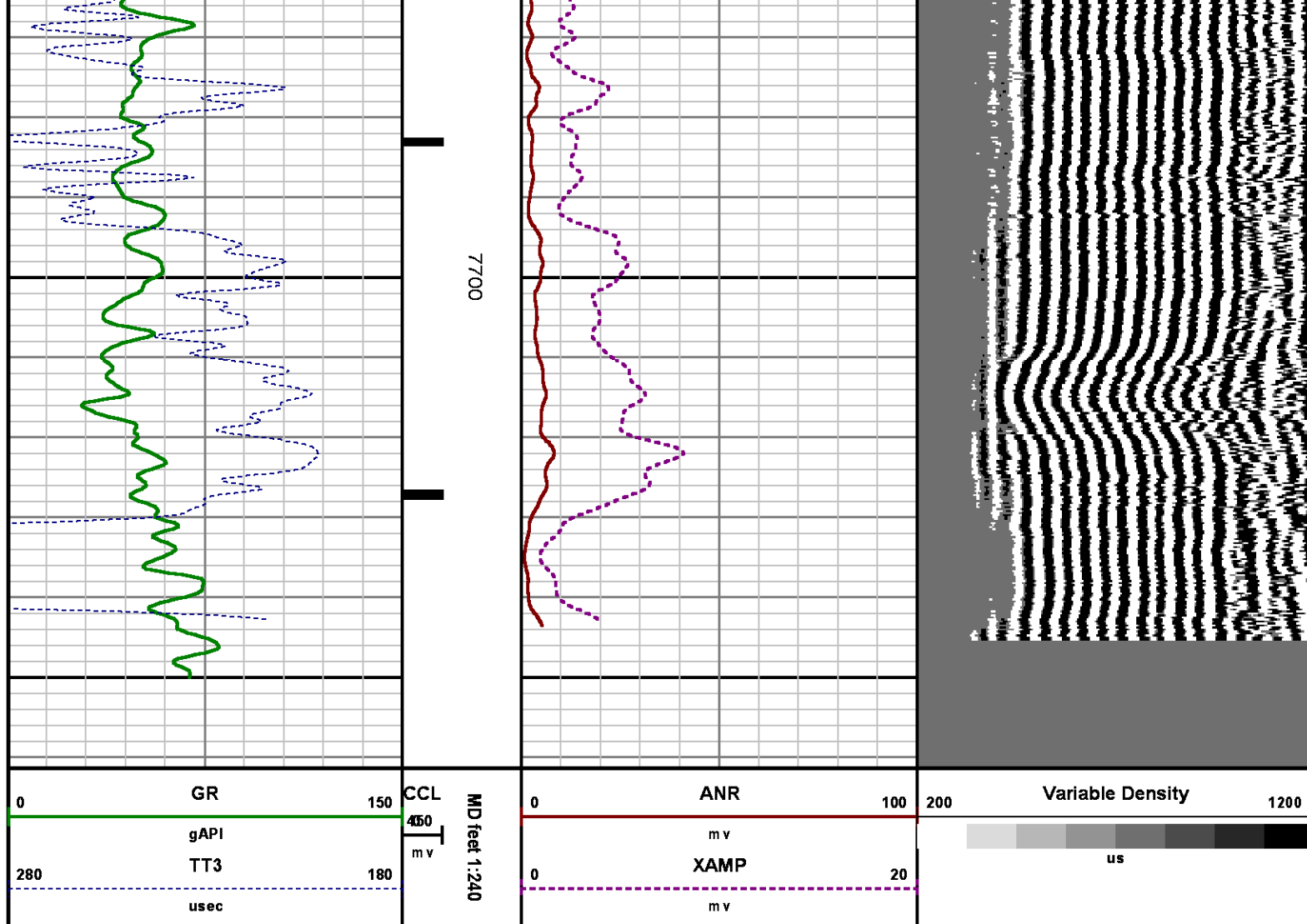
Interval : 7432.46 - 7761.46 feet UP

Created : 5/1/2014 8:03:23 AM









## CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP\496A29\_shp.cal

### SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Tue Apr 29 12:08:57 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: A29

Tool Delay [u sec] -51.00 Tank OD in 5.50 Tank Wt lbm/ft 15.50 Tank ID in 4.95

RECEIVER	Travel Time [u sec]	Amp. Gate Start [u sec]	Amp. Gate Width [u sec]	Zero Gate Start [u sec]	Zero Gate Width [u sec]	Zero Amp. [mV]	Amp Ref. [mV]	Shop Factor
CAL Pulse	218	216	30	166	25	0.208	100.00	0.31
3 Ft. Receiver	217	216	30	166	25	1.510	100.00	0.31
5 Ft. Receiver	225	226	30	222	25	2.242	150.00	0.25

5 Ft. Receiver	327	332	30	282	25	2.840	150.00	0.35
Radial #1	217	216	30	166	25	1.090	100.00	0.31
Radial #2	218	216	30	166	25	0.741	100.00	0.31
Radial #3	218	216	30	166	25	0.881	100.00	0.31
Radial #4	218	216	30	166	25	1.058	100.00	0.31
Radial #5	217	216	30	166	25	1.388	100.00	0.31
Radial #6	216	216	30	166	25	1.409	100.00	0.31
Radial #7	216	216	30	166	25	0.685	100.00	0.30
Radial #8	218	216	30	166	25	0.793	100.00	0.30

## RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\496A29\_fid.cal

### WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Tue Apr 29 12:11:43 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: A29

Tool Delay [usec] -51.00 Casing OD 4.50 in Casing Wt 11.60 lbm/ft Casing ID 4.00 in

RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	166	25	0.003	0.000	1.00	100.000
3 Ft. Receiver	195	25	2.373			
5 Ft. Receiver	305	25	3.229			
Radial #1	195	25	1.608			
Radial #2	195	25	1.574			
Radial #3	195	25	1.874			
Radial #4	195	25	1.903			
Radial #5	195	25	2.155			
Radial #6	195	25	2.219			
Radial #7	195	25	1.846			
Radial #8	195	25	1.836			

## GAMMA RAY

Calibration File: C:\case\calver\GR\456A3.cal

### CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Apr 03 13:37:28 2014 TOOL SERIES: 2459XA ASSET: 456 SEQ: A3

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	76.84	356.71	0.661	50.80	235.80	185.00

Verification File: C:\case\calver\GR\456A3.VP

DATE/TIME PERFORMED: Thu Apr 03 13:38:35 2014

TOOL SERIES: 2459XA

ASSET:

456

SEQ: A3

Calibrator #

Background

Calibrator On

Multiplicative

Background

Calibrator On

Differential

[cps]

[cps]

[api]

[api]

[api]

S2K WA612

80.98

351.78

0.661

53.53

232.54

179.01

# TOOL DIAGRAM

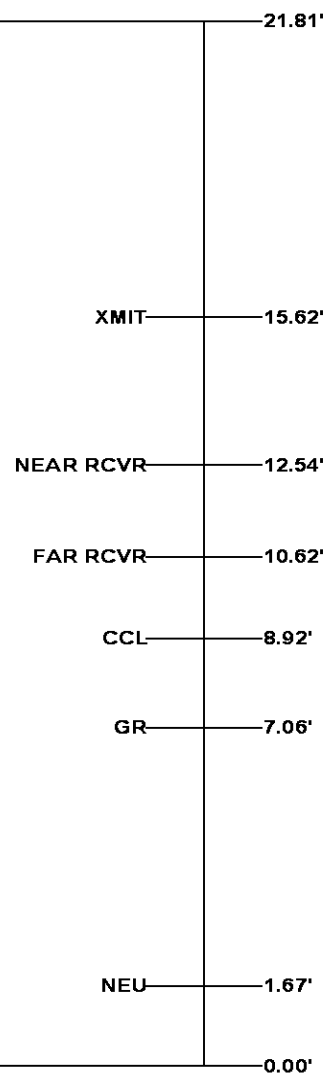
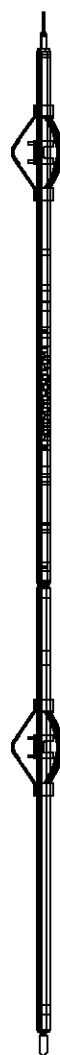
## OTA SHORT CABLE HEAD

### 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"



Company

WPX ENERGY

File No:

<div>BAKER HUGHES</div> <div>Baker Atlas</div> <div>CASE</div>	Well	WPX ENERGY PA 514-2		CH085538
	Field	PARACHUTE		API No:
	County	GARFIELD	State	COLORADO
Location		Elevations		
SHL: 2003' FSL & 1562' FWL		KB 5846 ft		2 7S 95W
BHL: 254' FSL & 672' FWL (SWSW)		DF		GV 86-2 PAD
		GL 5821 ft		AZTEC 1000
SEC 2		TWP 7S	RGE 95W	