



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: _____ Company _____ WPX ENERGY

CH084825 _____ Well _____ FEDERAL PA 331-21

API No: _____ Field _____ PARACHUTE

0504520280000 _____ County _____ GARFIELD _____ State _____ COLORADO

21 6S 95W _____ Location _____

PA 22-21 PAD _____ SHL: 2600' FNL & 1411' FWL

NABORS 673 _____ BHL: 582' FNL & 1620' FEL (NWNE)

SEC 21 TWP 6S RGE 95W

Other Services

RPM

Permanent Datum _____ GL _____ Elevation _____ 6030 ft

Log Measured From _____ KB _____ 26 ft _____ Above P. D.

Drill Measured From _____ KELLY BUSHING

Elevations

KB 6056 ft

DF

GL 6030 ft

Date _____ 23/MAY/14

Run _____ ONE

Service Order _____ US084825J

Depth Driller _____ 9500 ft

Depth Logger _____ 9473 ft

Bottom Logged Interval _____ 9463 ft

Top Logged Interval _____ 26 ft

Time Started _____ 1400

Time Finished _____ 1900

Operator Rig Time _____ 5 HRS

Type of Fluid in Hole _____ WATER

Fluid Density _____ NA

Salinity _____ NA

Fluid Level _____ 28 ft

Logged Cement Top _____ NA

Wellhead Pressure _____ 2000 psi

Maximum Hole Deviation _____ NA

Nominal Logging Speed _____ 66 fpm

Maximum Recorded Temperature _____ 256 degF

Reference Log _____ NONE

Equipment No. _____ NA

Recorded By _____ 4271

Location _____ GRAND JCT

FLORIO RENEAU

GRAN JACOBS

Witnessed By _____

- 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	0 ft	1056 ft
8.75 in	1056 ft	9500 ft

Casing Record

Size	Weight	Grade	From	To
9.625 in			0 ft	1056 ft
4.5 in	11.6 lbm/ft	I-80	0 ft	9500 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.
Top ccl mark is 8' above ground level (height of flange on production tree).
The amount of linear shift is 12 feet.
Logged with 2000psi at wellhead.

BHT = 256°F

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1426XA	10124106	CENT
1	1	GR/CCL	2459XA	10417456	CENT

PRIMARY PRESENTATION

2000 PSI

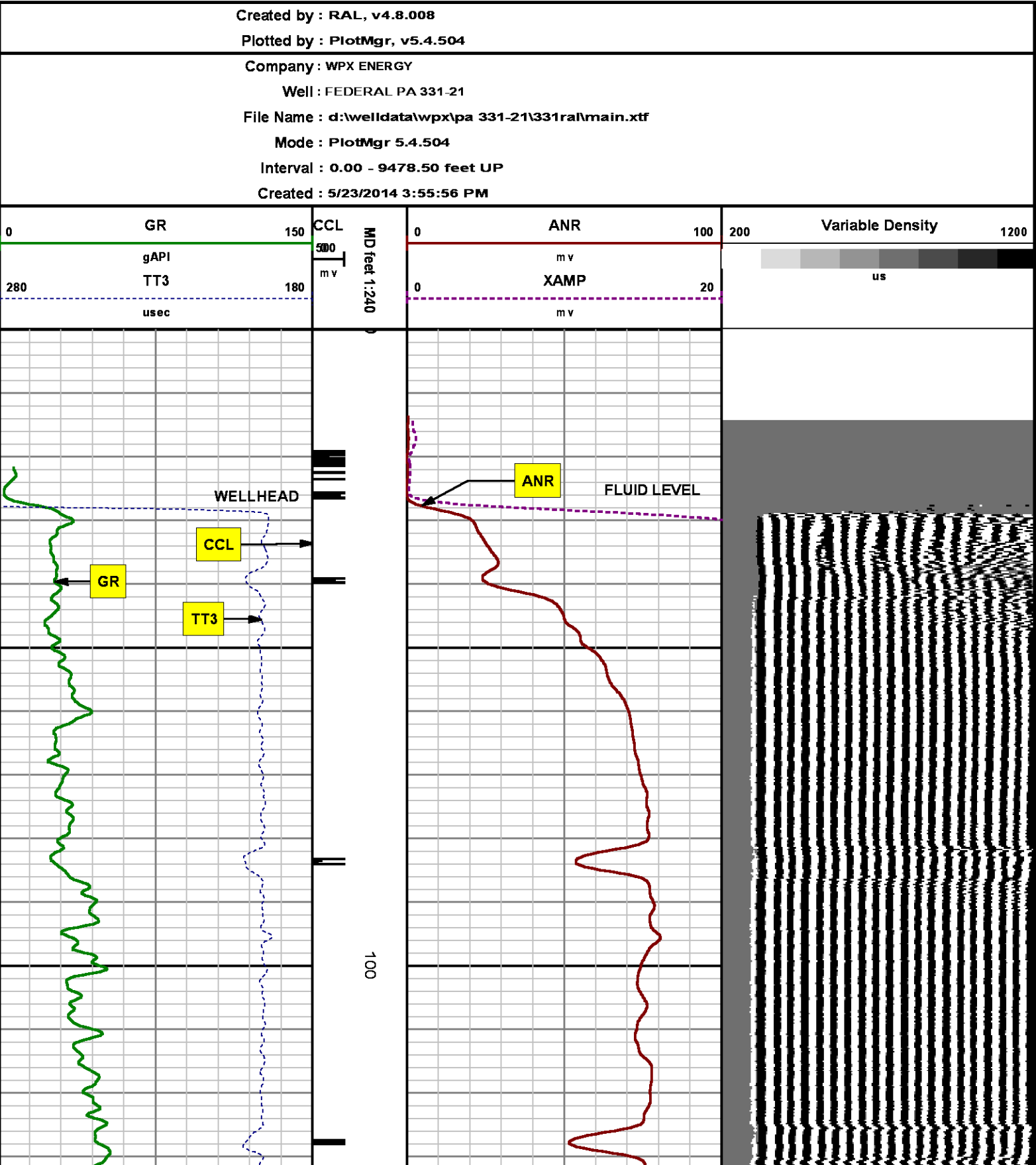
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	29.905	9478.500
RAL	Amp Gate Start Near	195.000	usec	29.905	9478.500
RAL	Amp Gate Start Radial	195.000	usec	29.905	9478.500
RAL	Amp Gate Width Far	25.000	usec	29.905	9478.500
RAL	Amp Gate Width Near	25.000	usec	29.905	9478.500
RAL	Amp Gate Width Radial	25.000	usec	29.905	9478.500
RAL	casing od	4.500	inches	29.905	9478.500
RAL	casing wt	11.600	lbm/ft	29.905	9478.500
RAL	FB Start Far	291.900	usec	29.905	9478.500
RAL	FB Start Near	180.000	usec	29.905	9478.500
RAL	FB Start Radial	180.000	usec	29.905	9478.500
RAL	FB Thresh Far	10.000	mv	29.905	9478.500
RAL	FB Thresh Near	4.000	mv	29.905	9478.500
RAL	FB Thresh Radial	4.000	mv	29.905	9478.500
RAL	Fluid Travel Time	200.000	usec/ft	29.905	9478.062

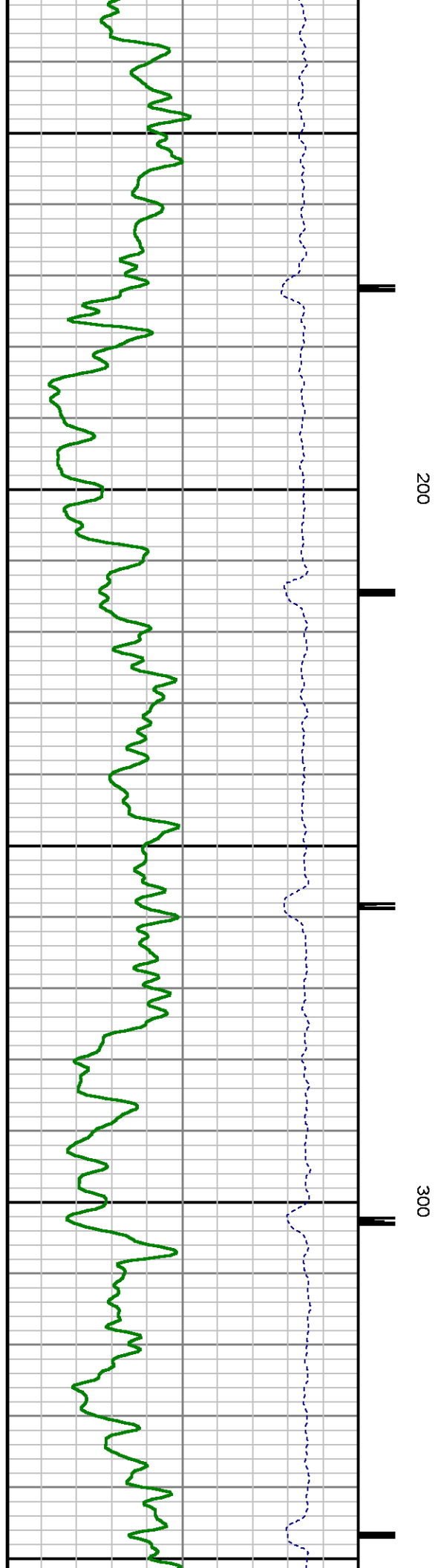
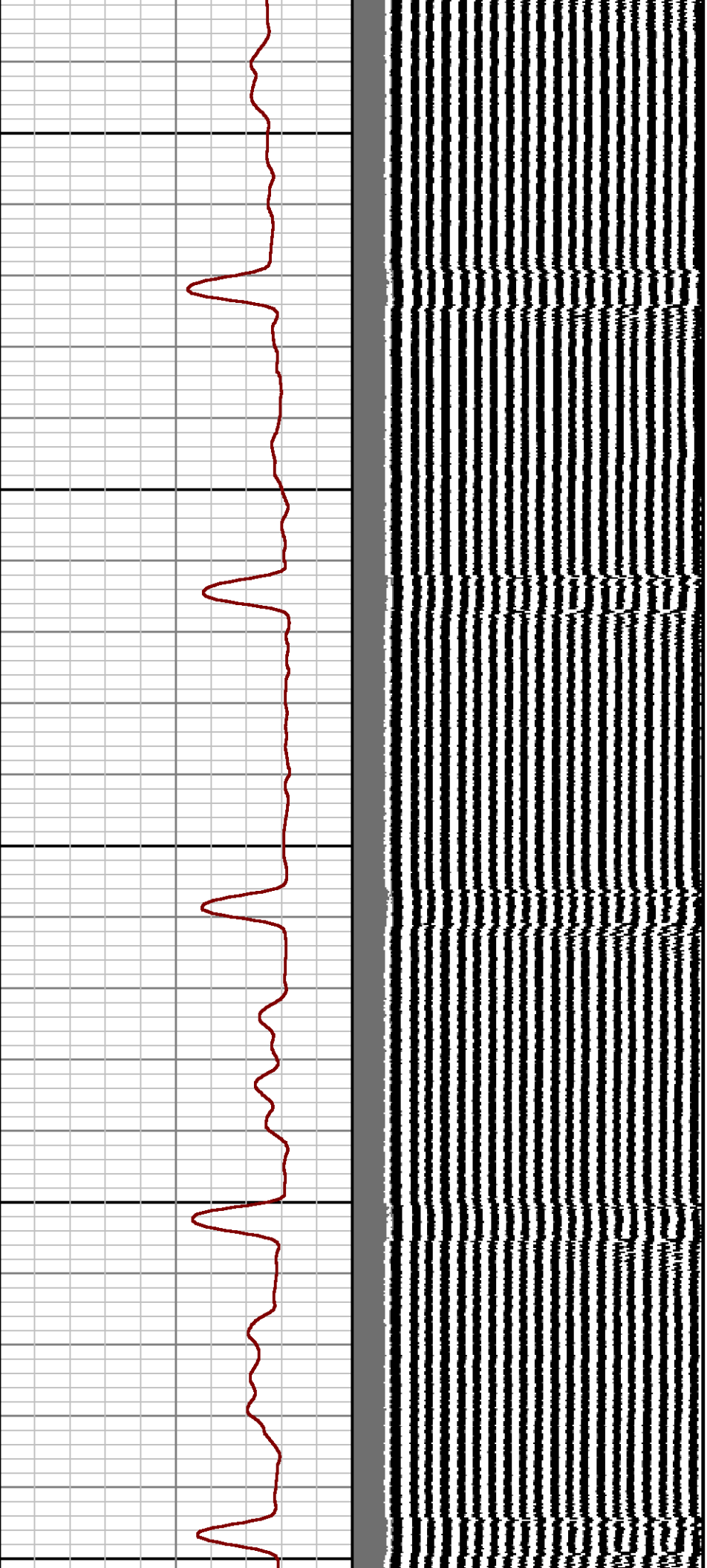
DEPTH OFFSETS

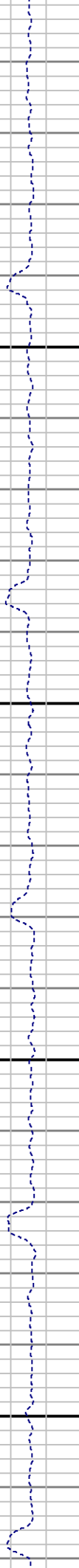
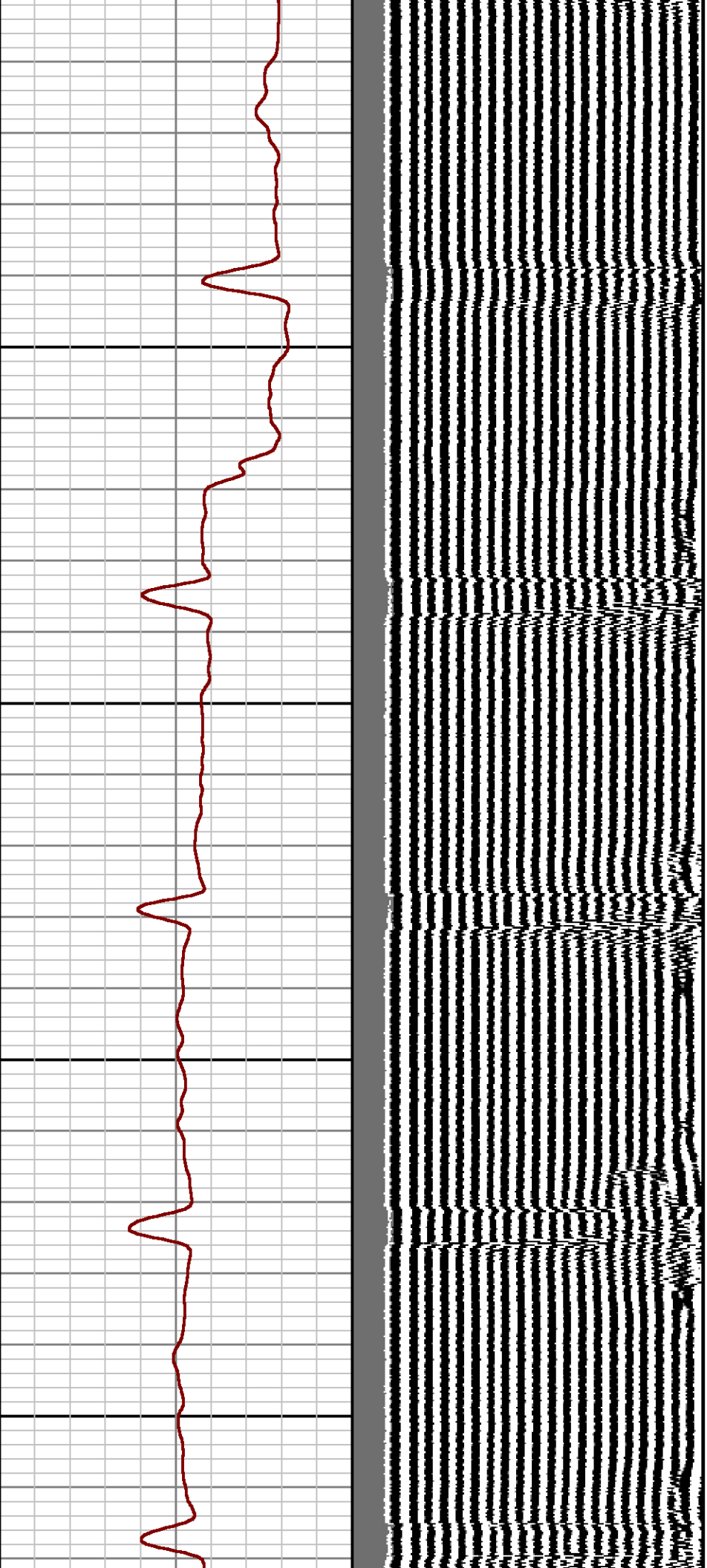
(for Acquired Curves)

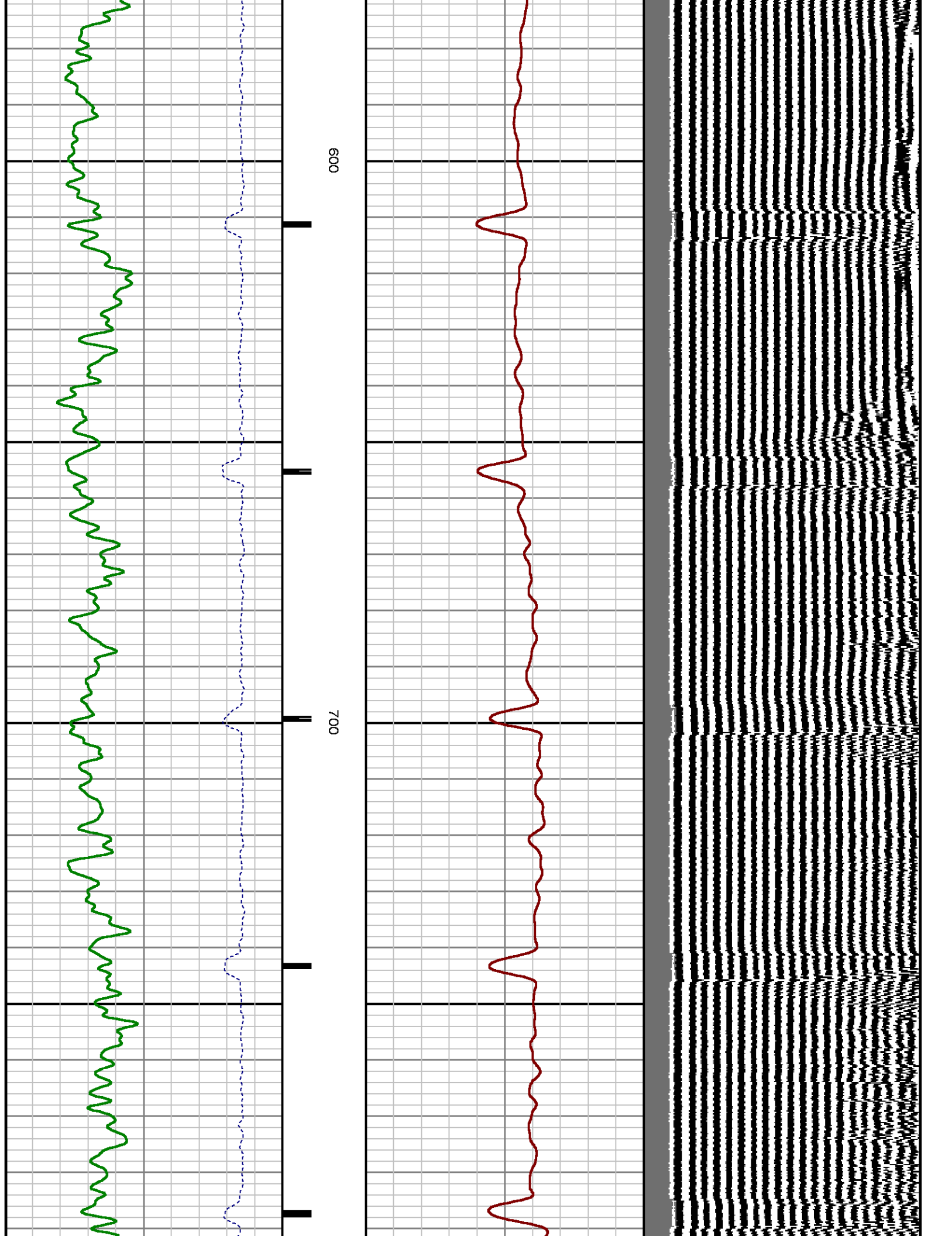
SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-16.750	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	CHV	FPR2

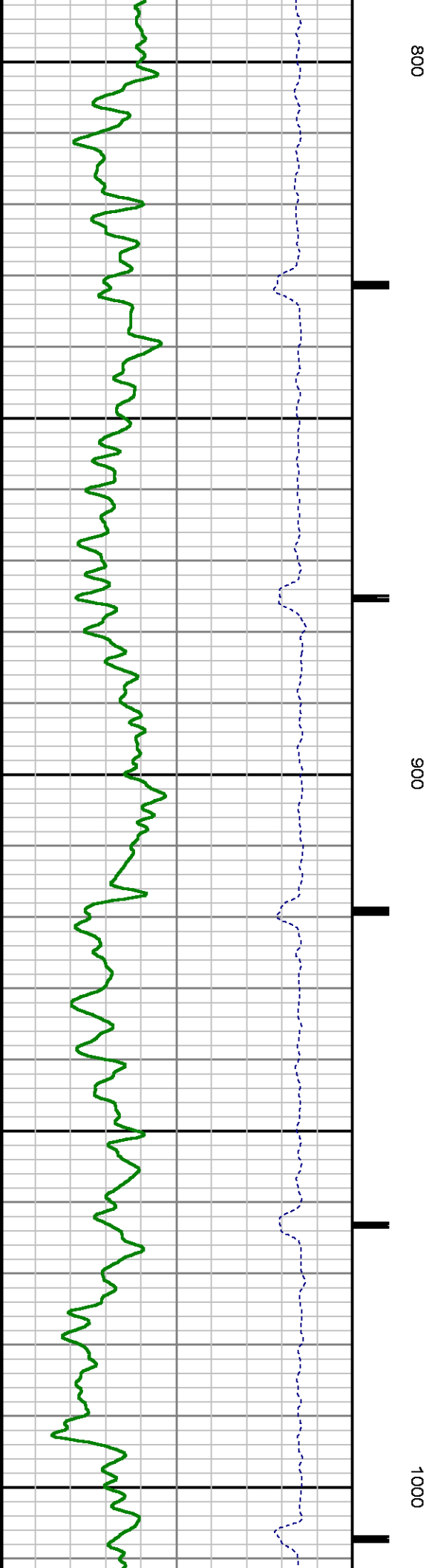
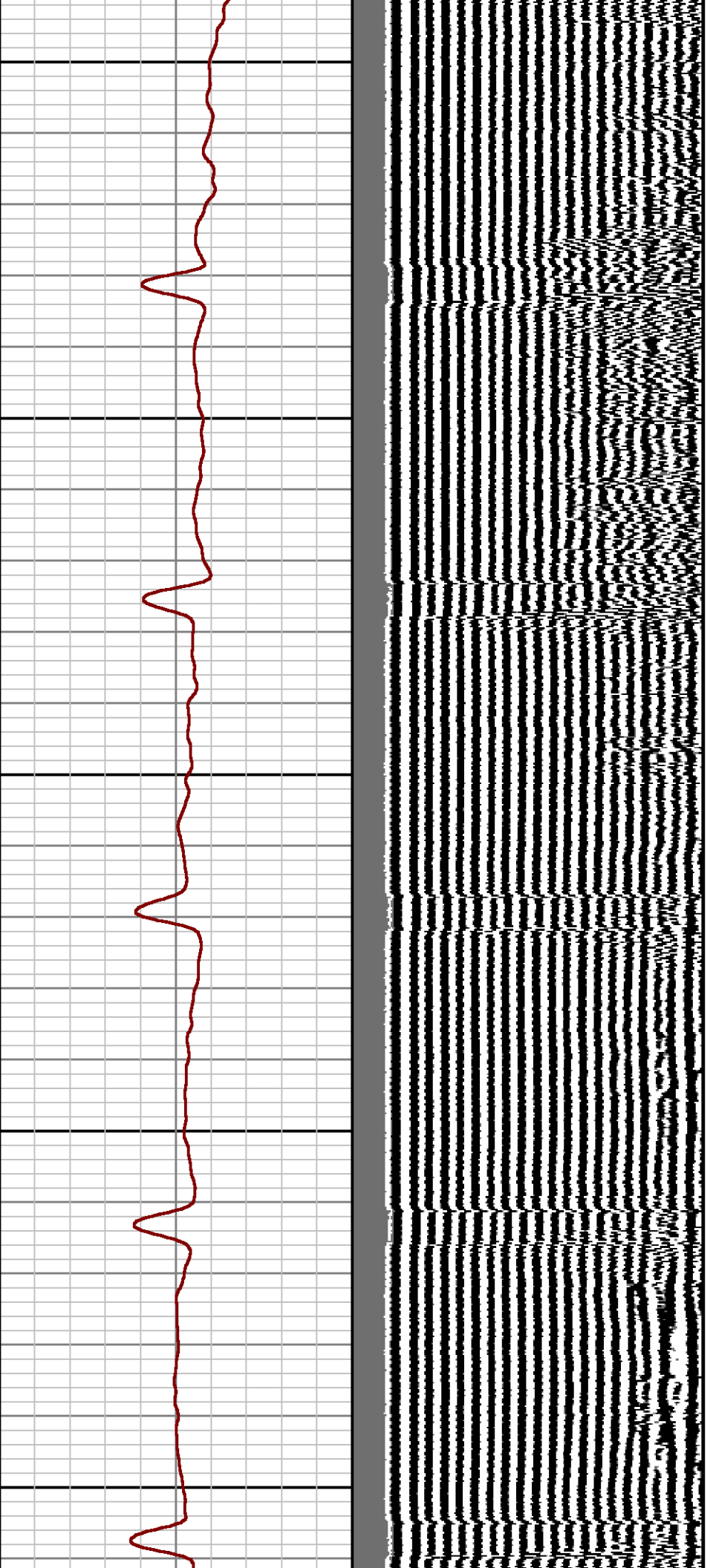
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	-15.750	AFAR	SIG	TT5			
2459XA	-11.340	CCL					
2459XA	-9.490	GR					
2459XA	-4.090	NEU					

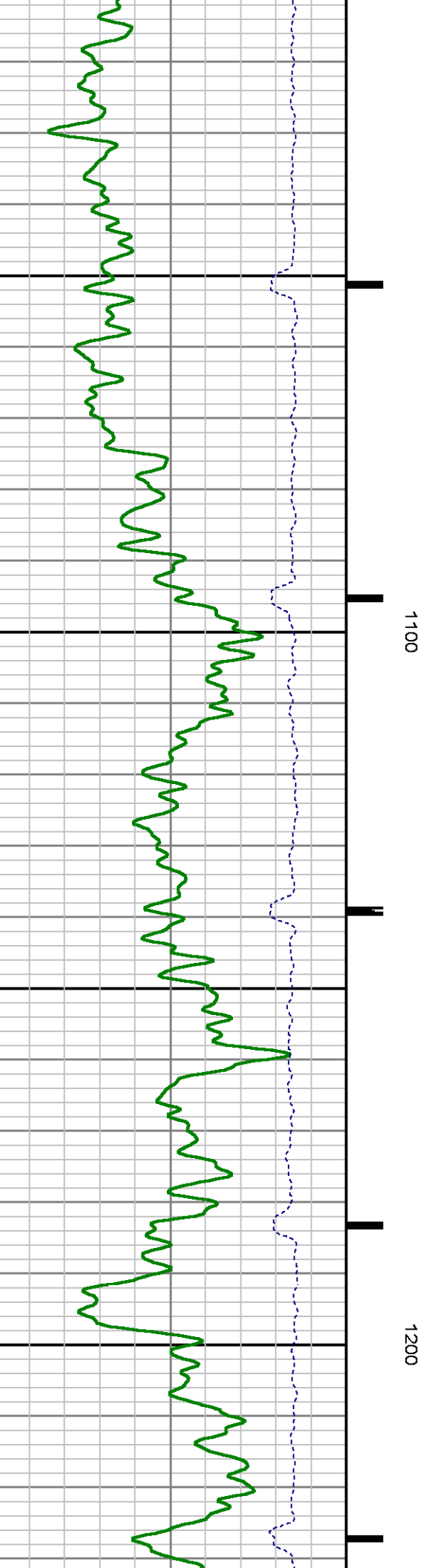
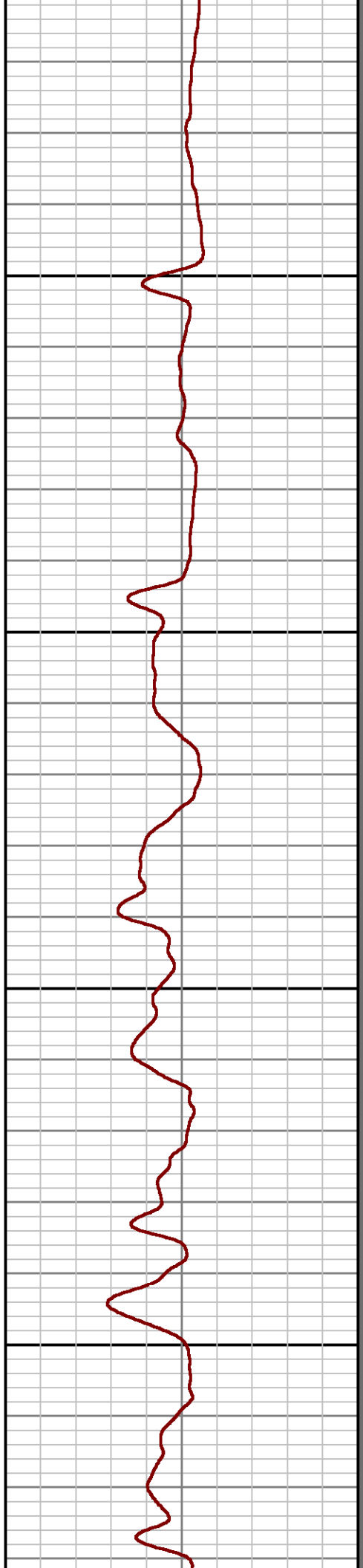
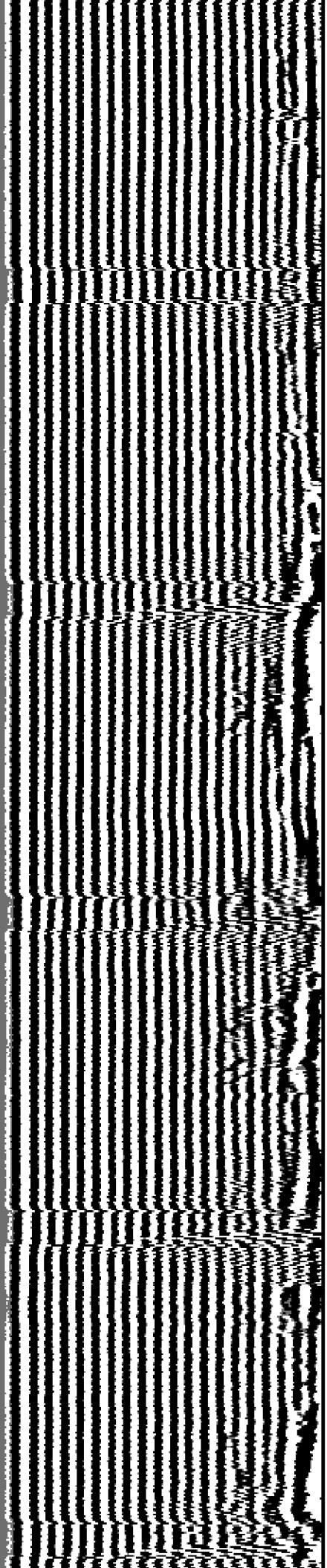


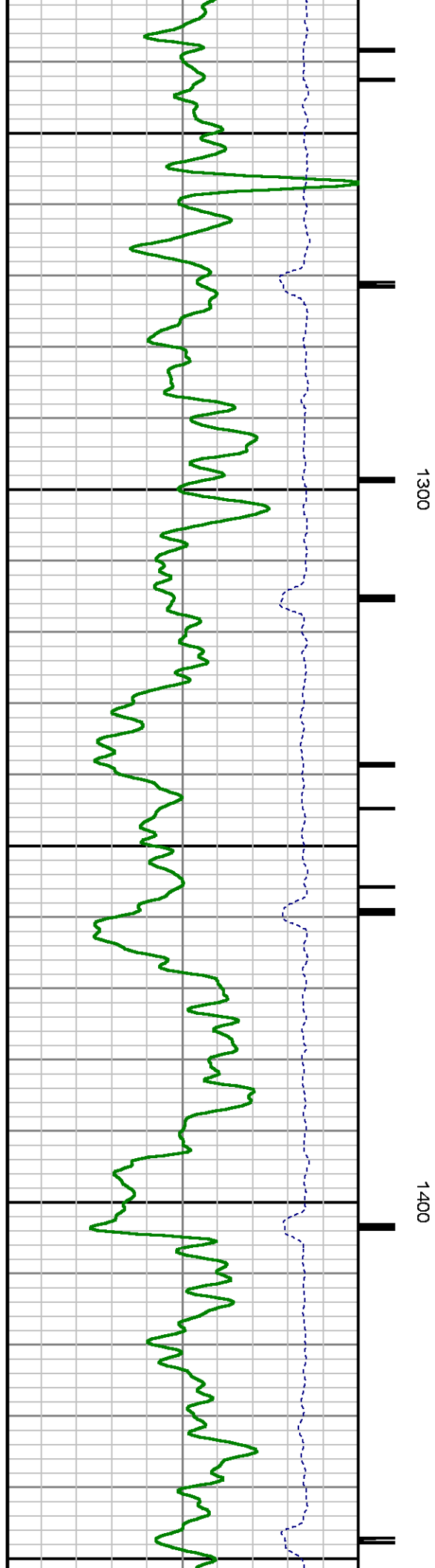
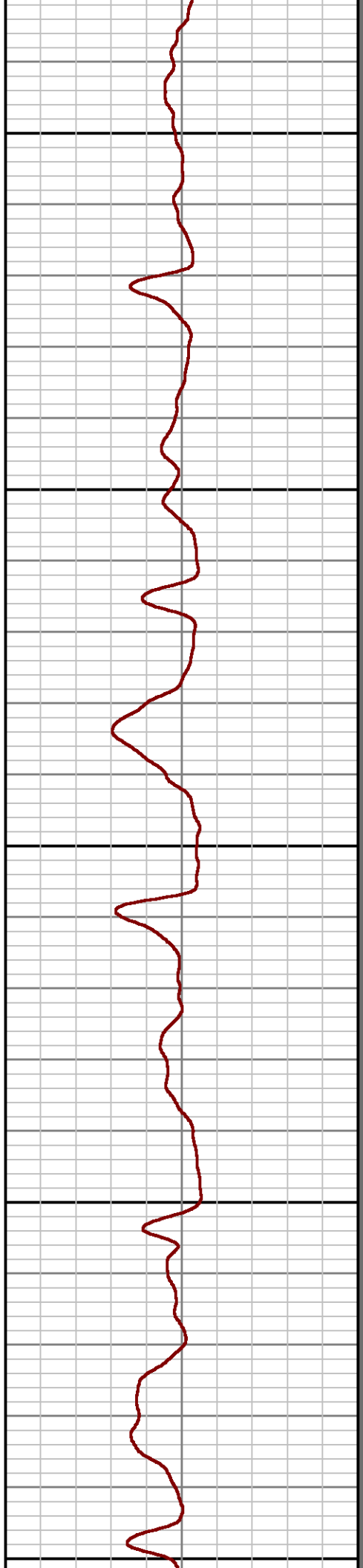
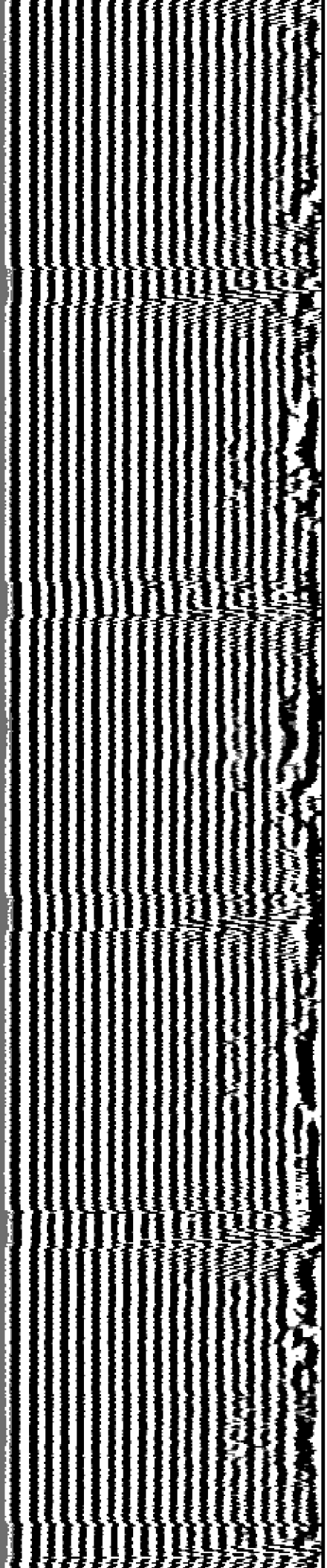


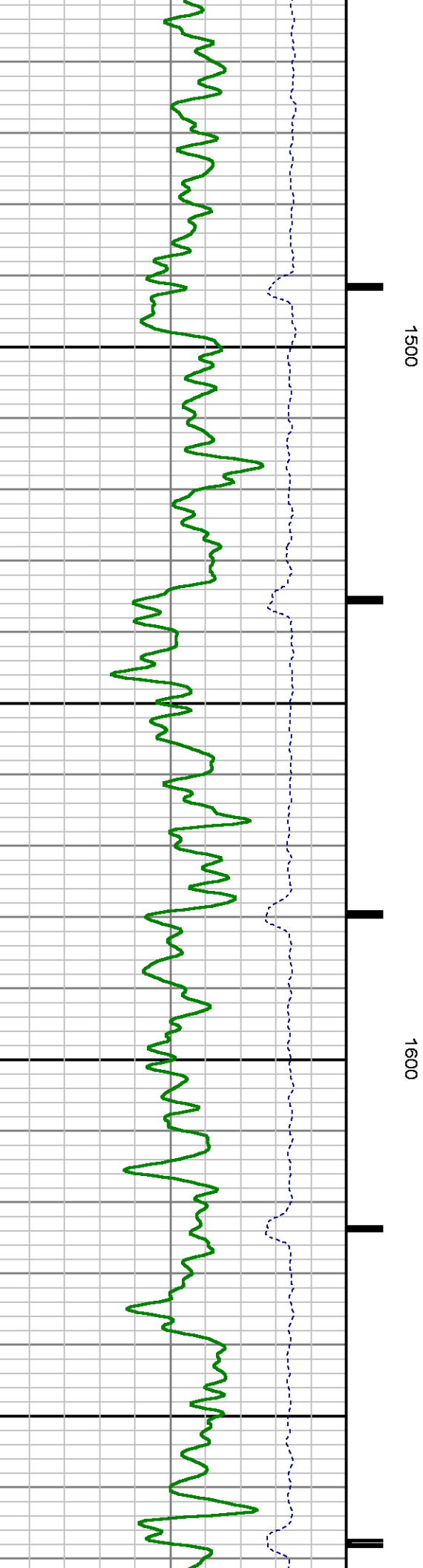
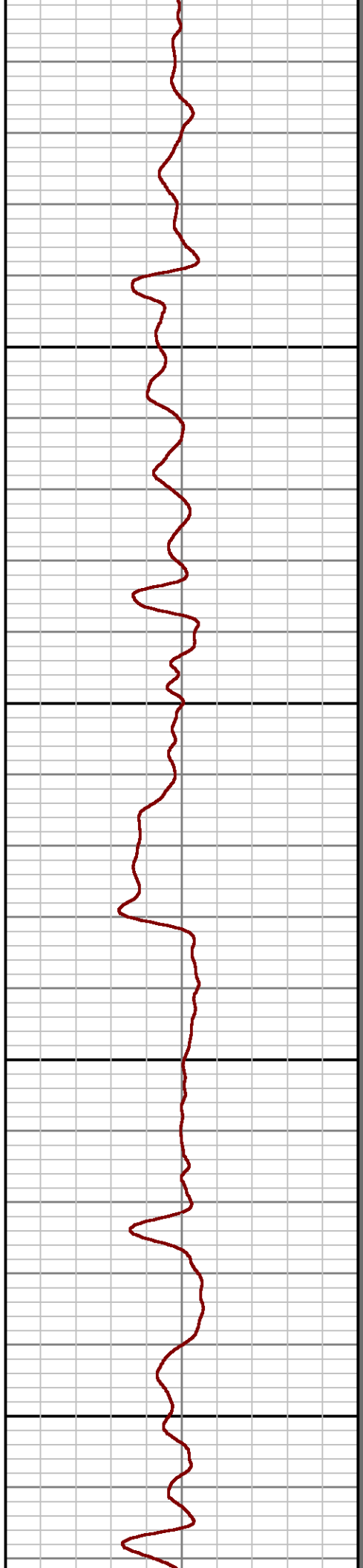
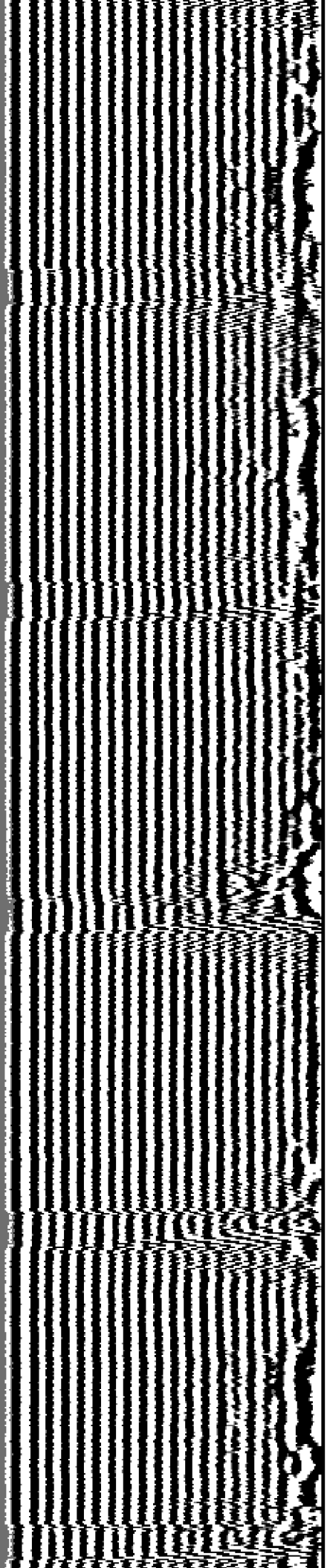


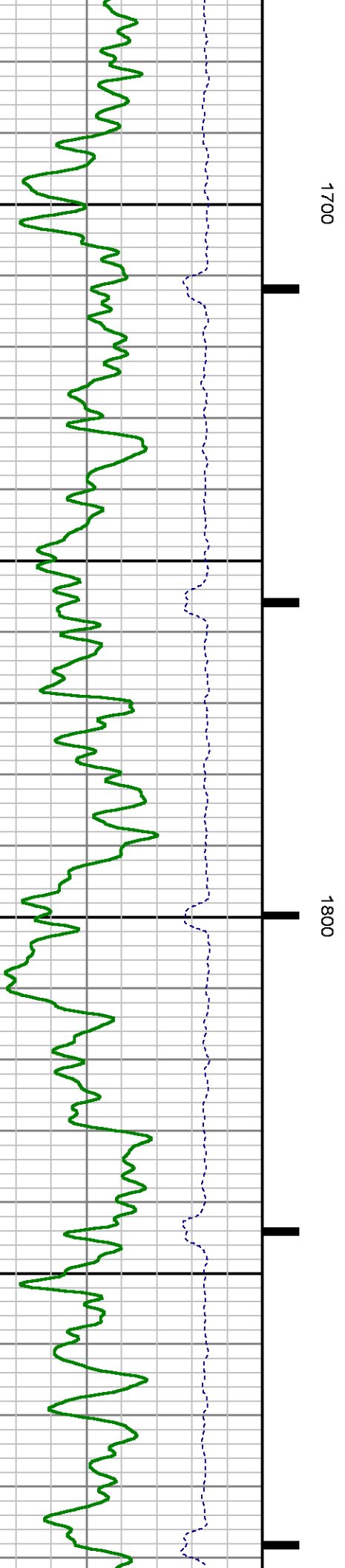
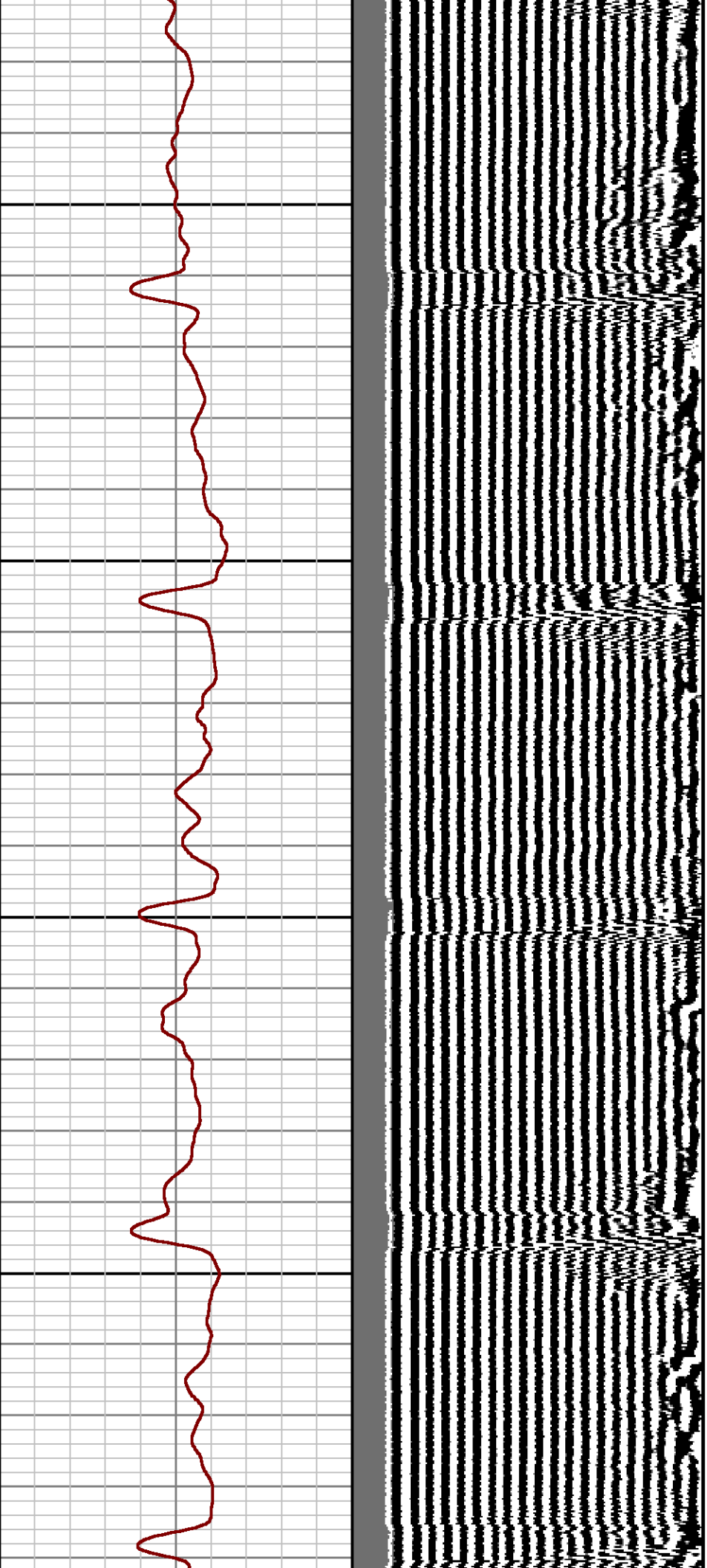


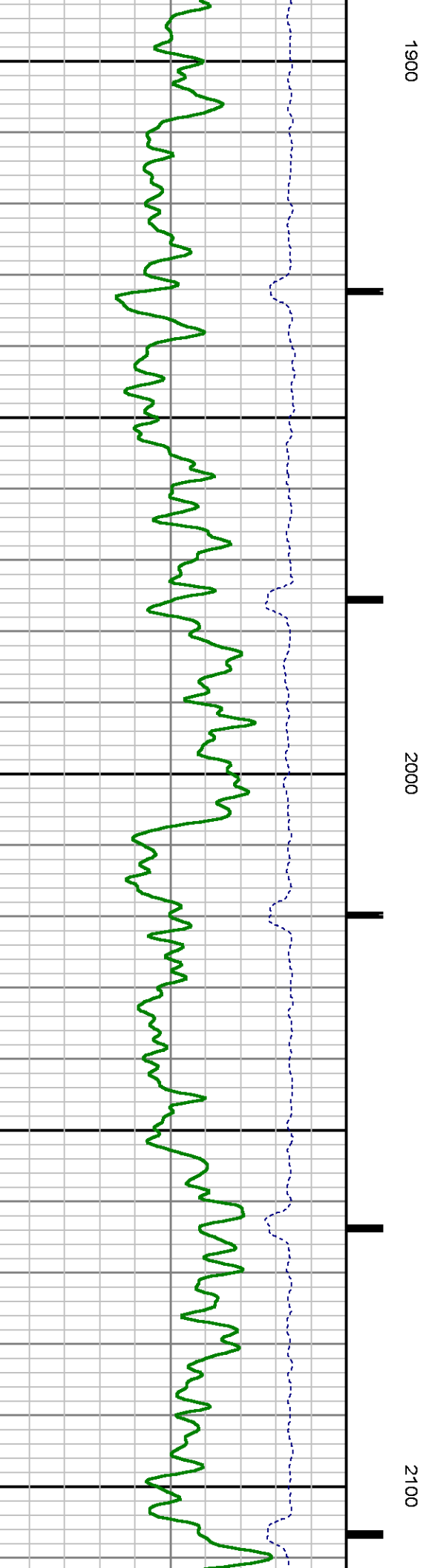
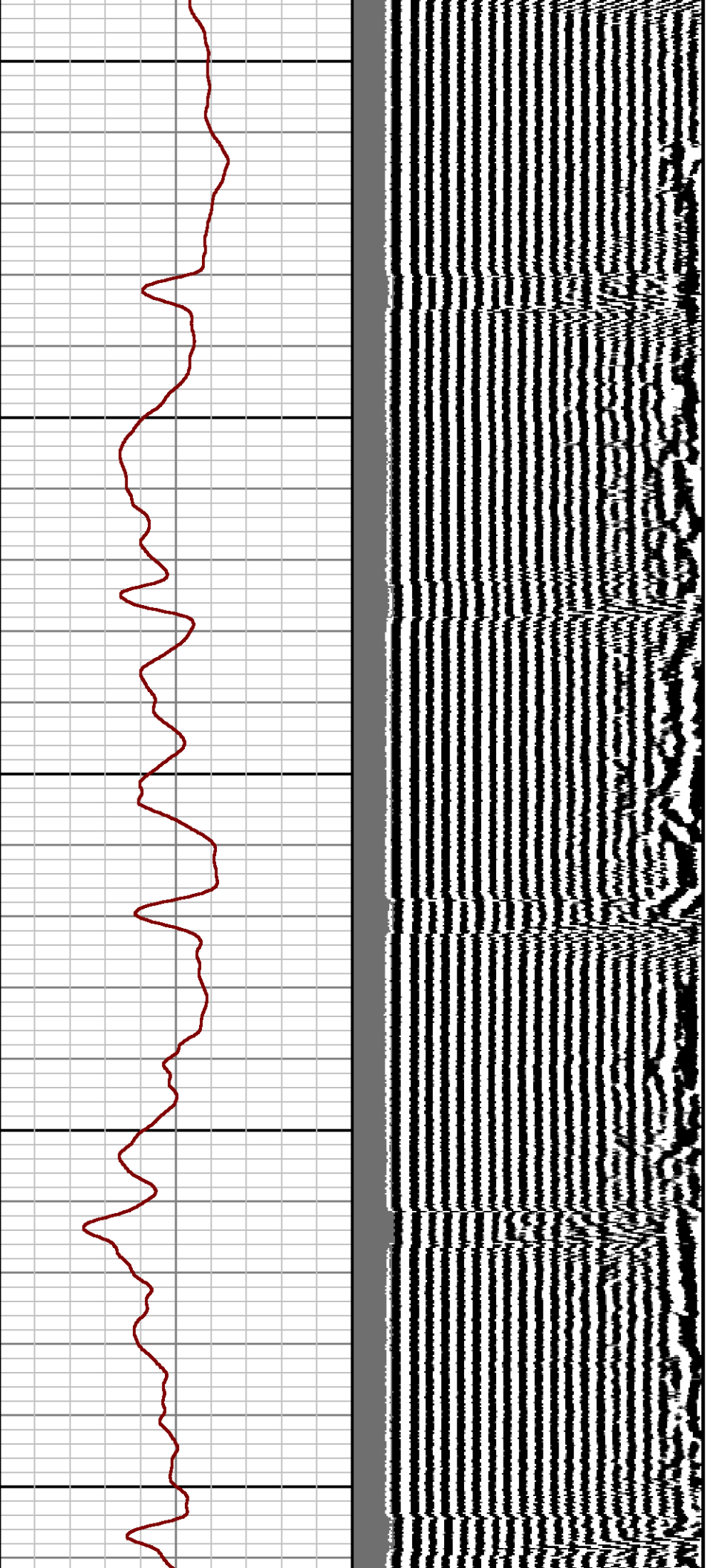


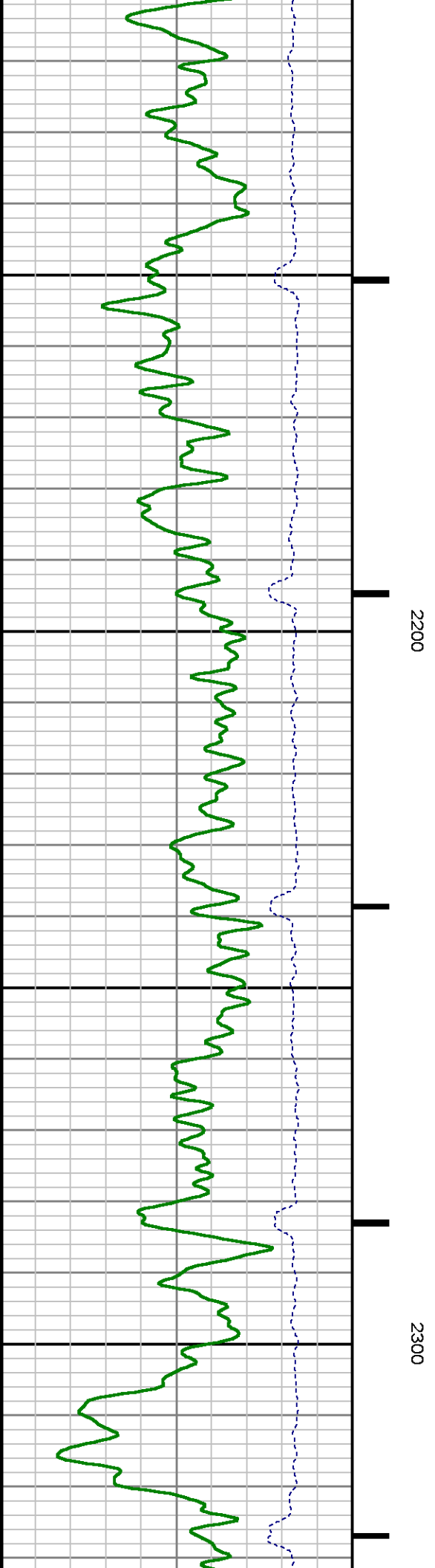
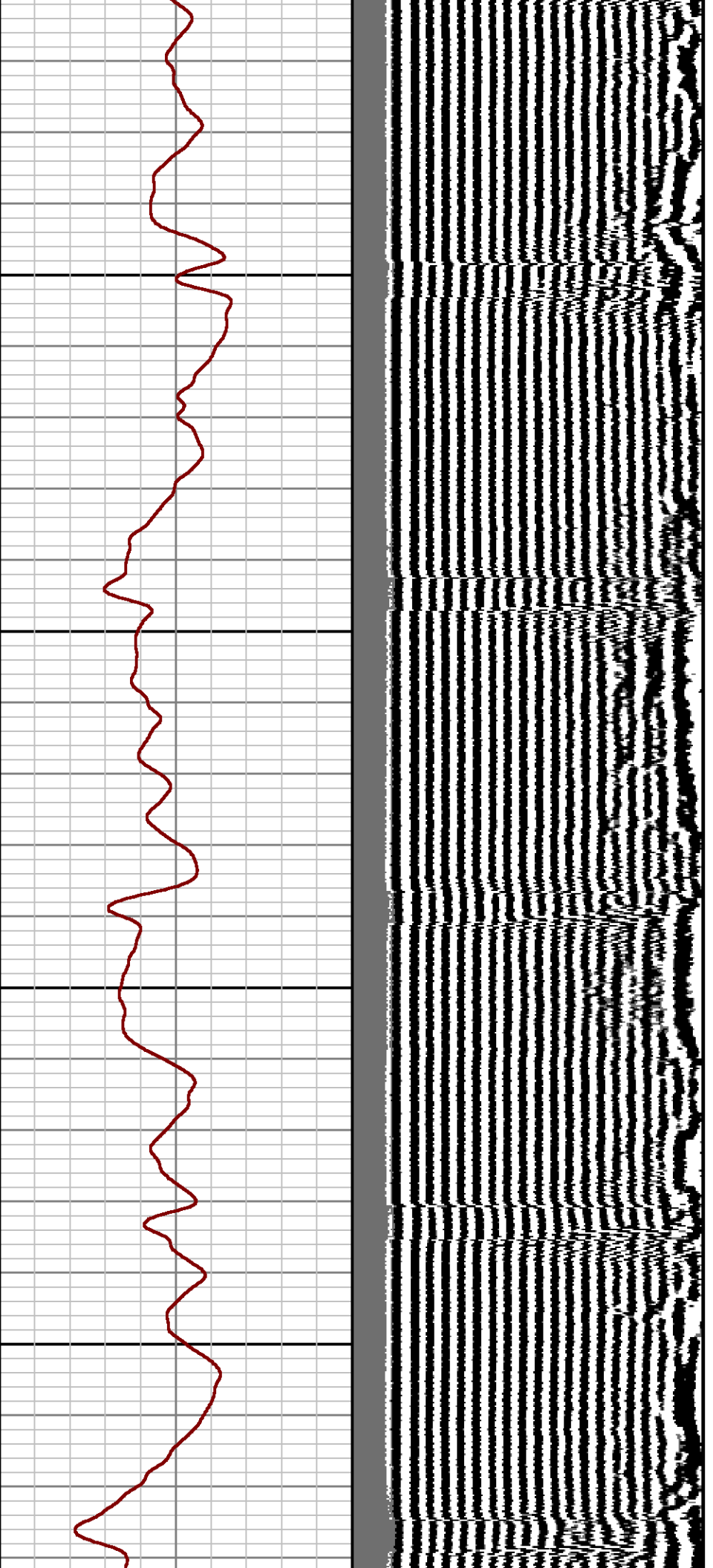


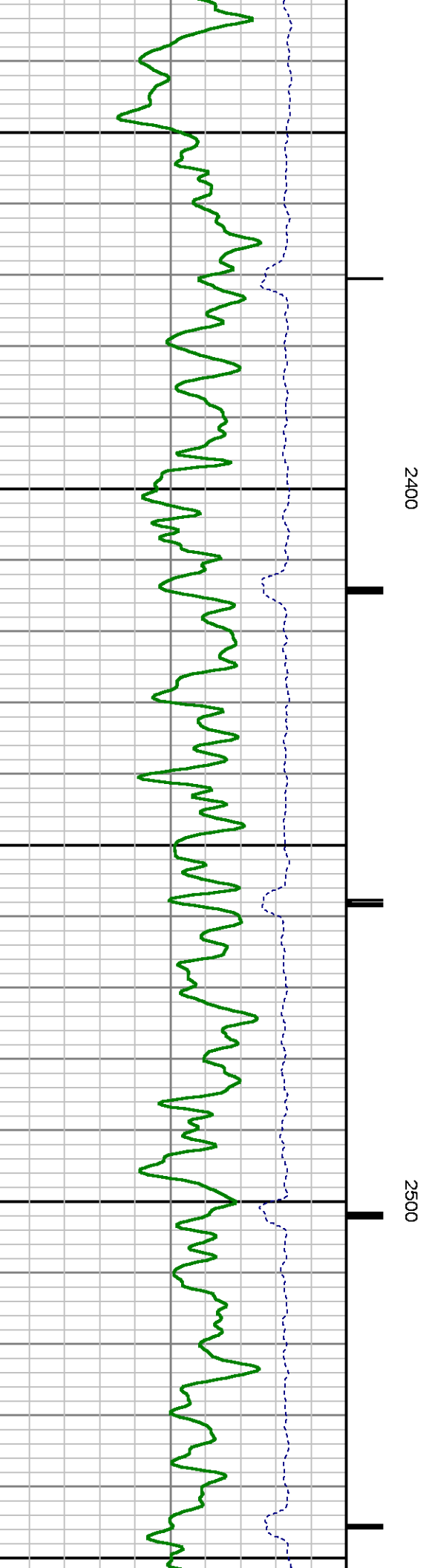
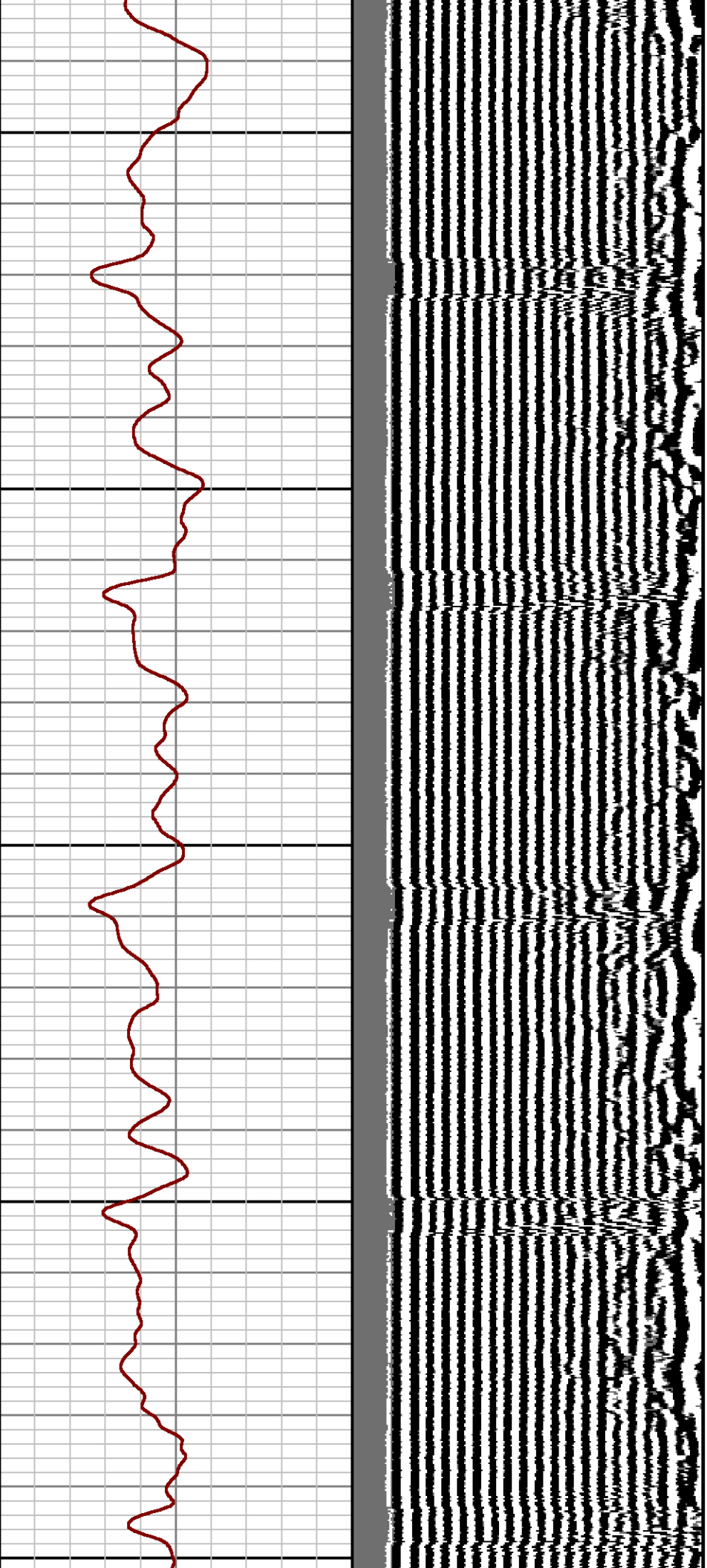


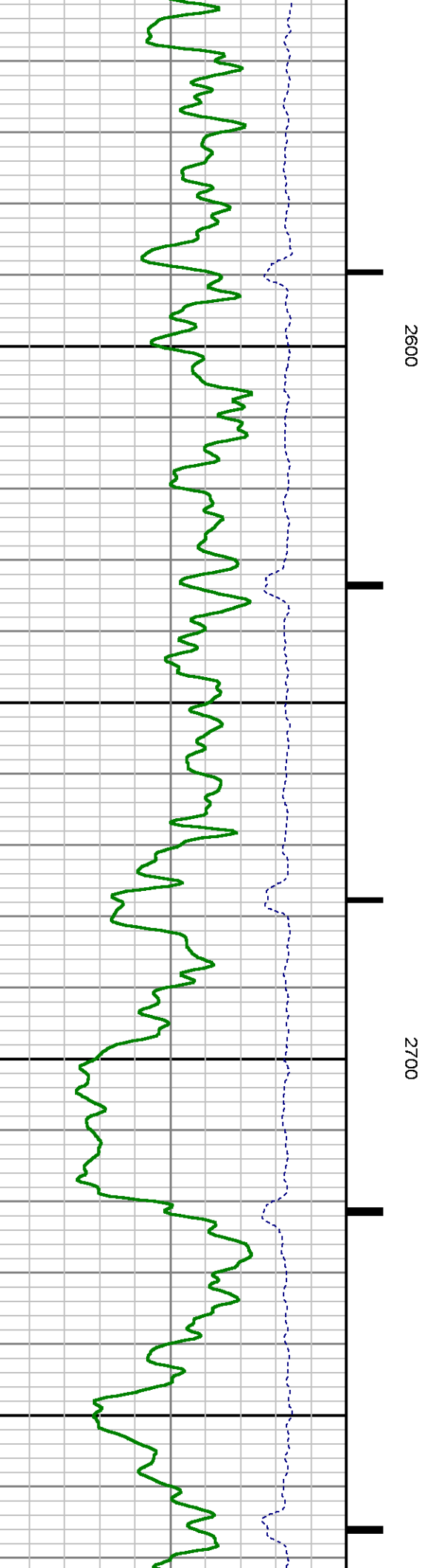
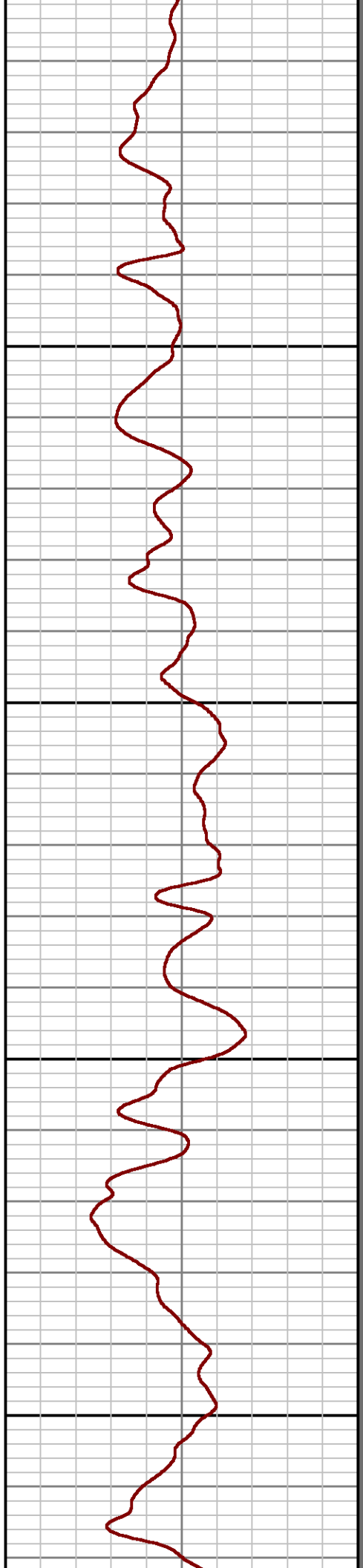
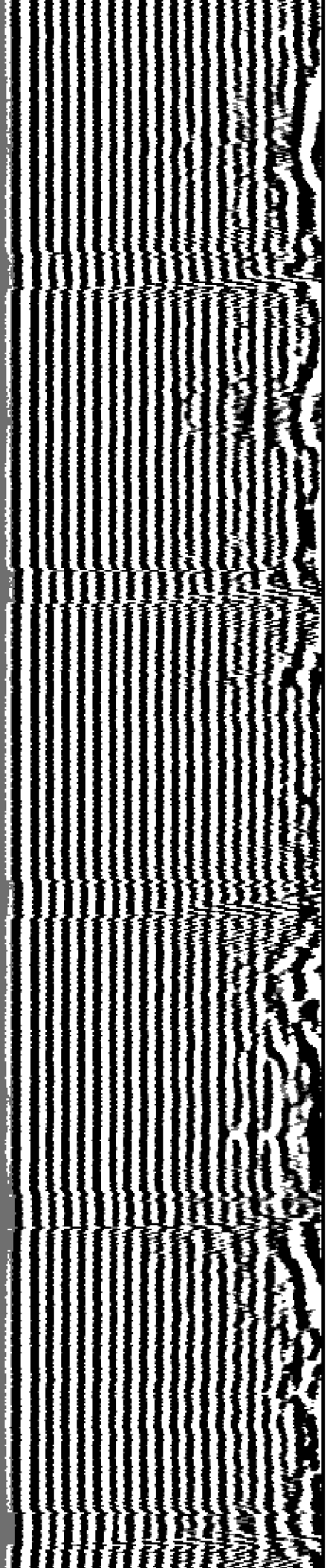


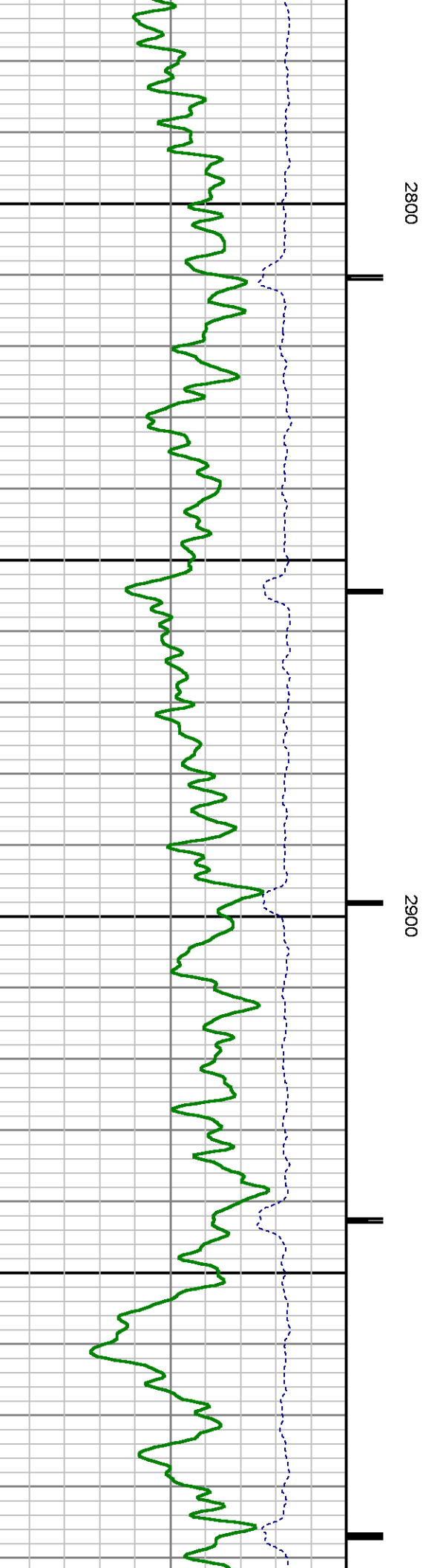
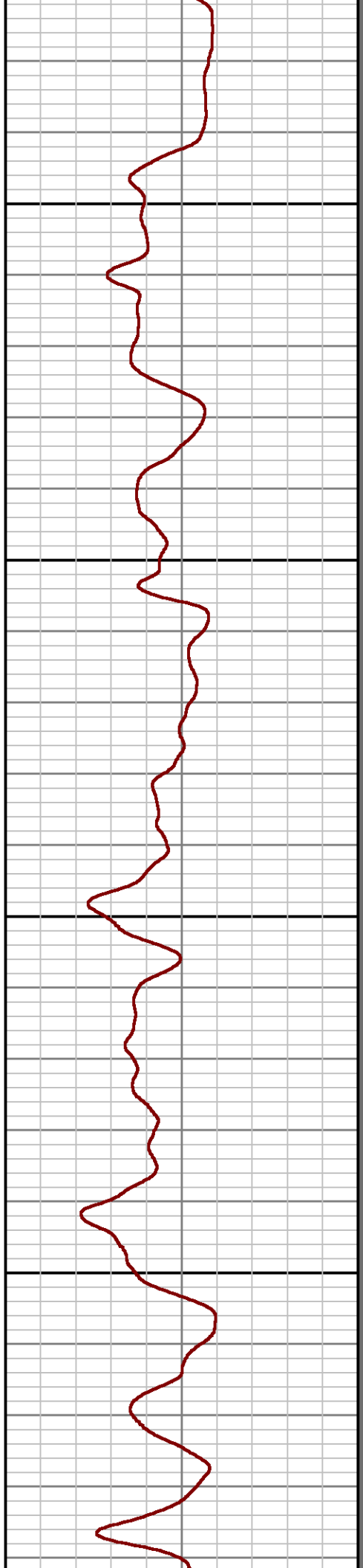
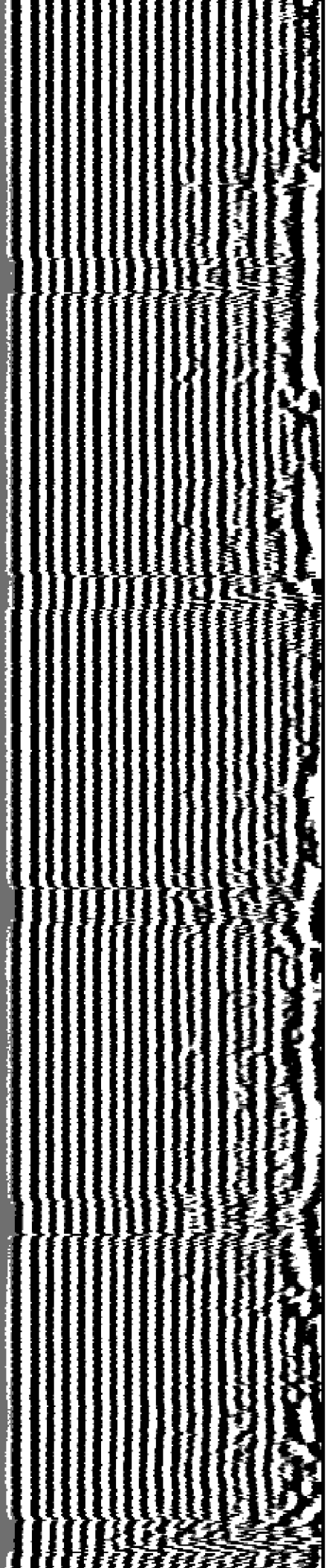


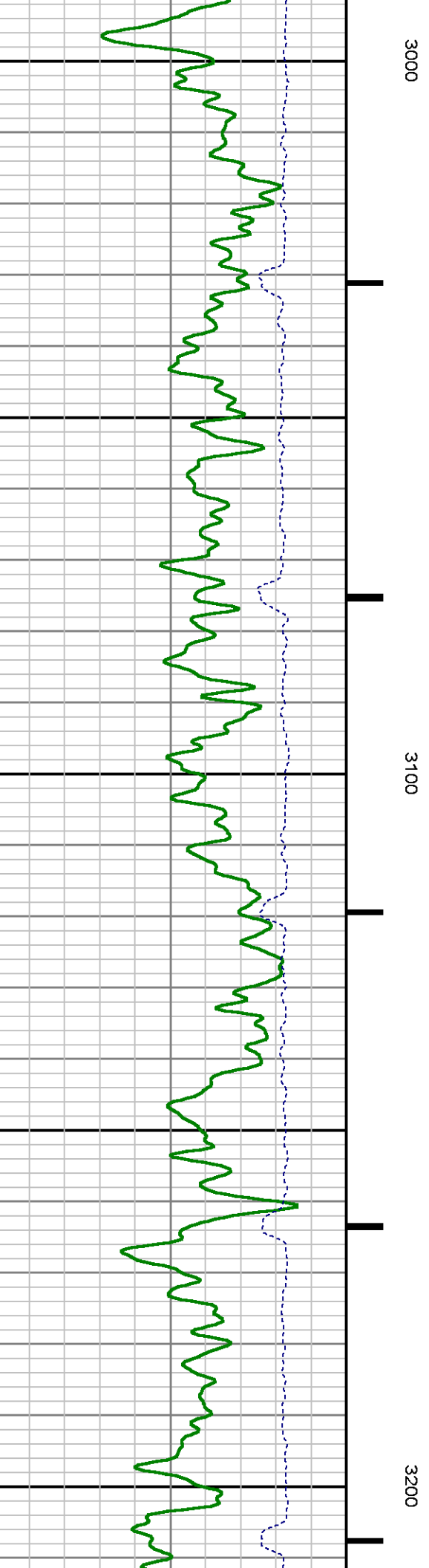
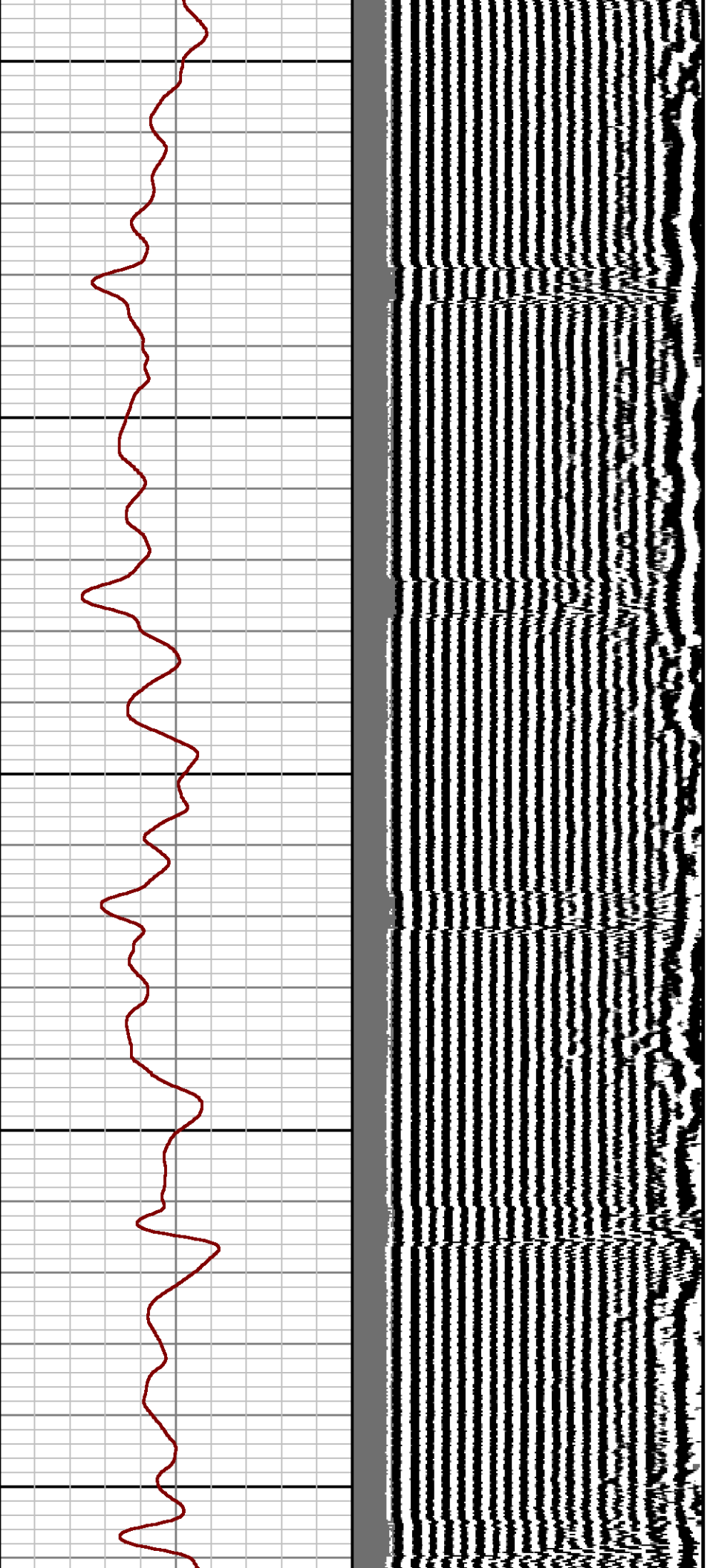


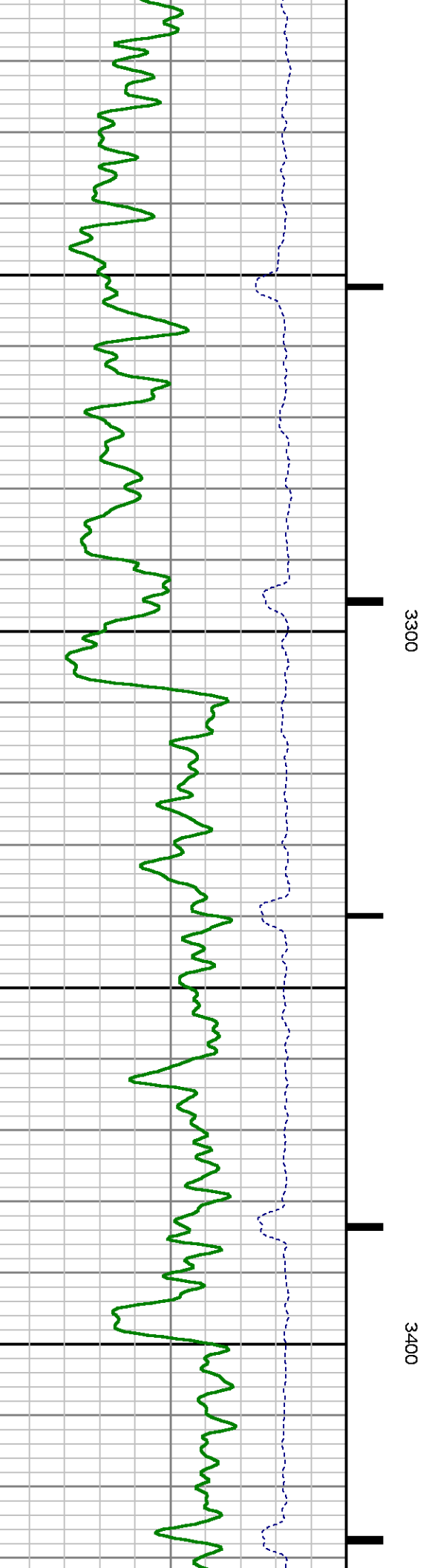
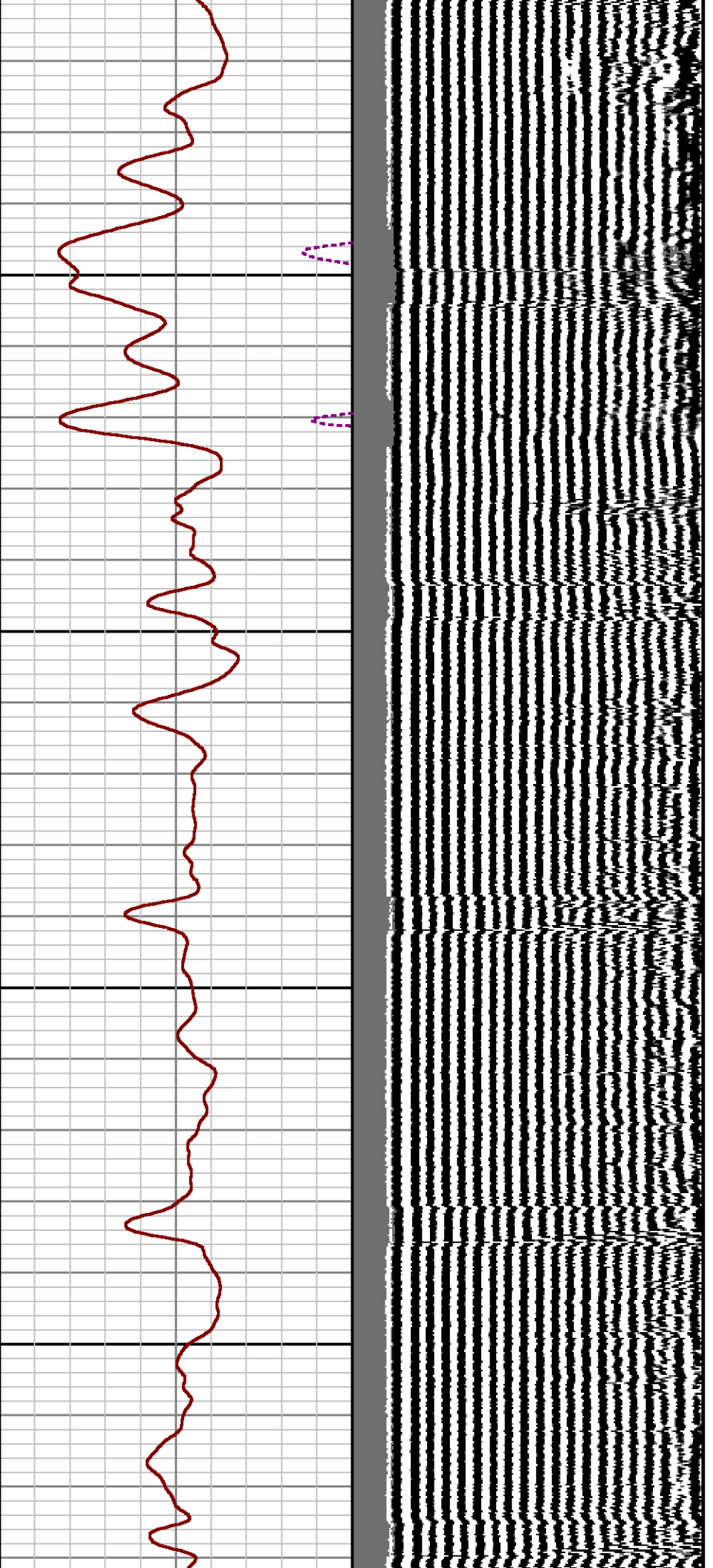


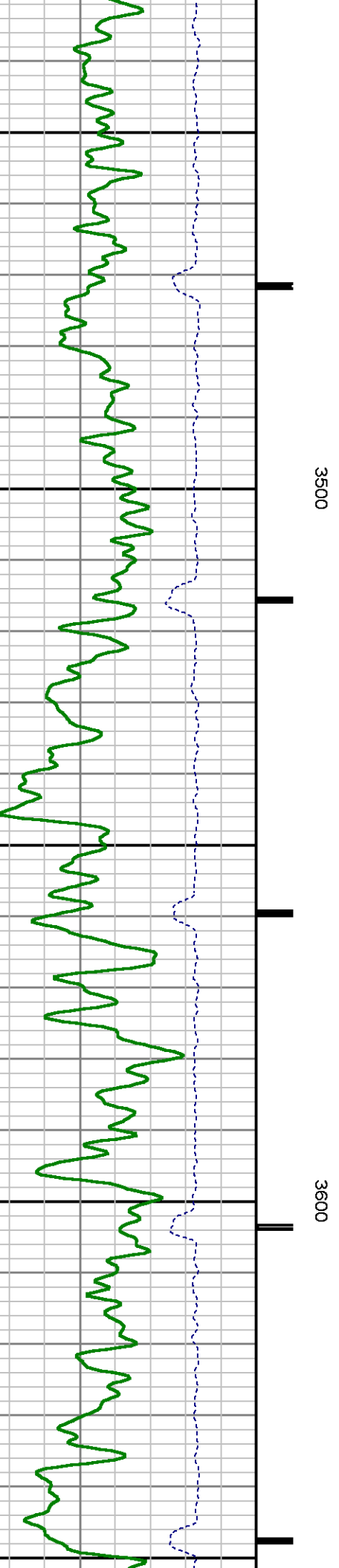
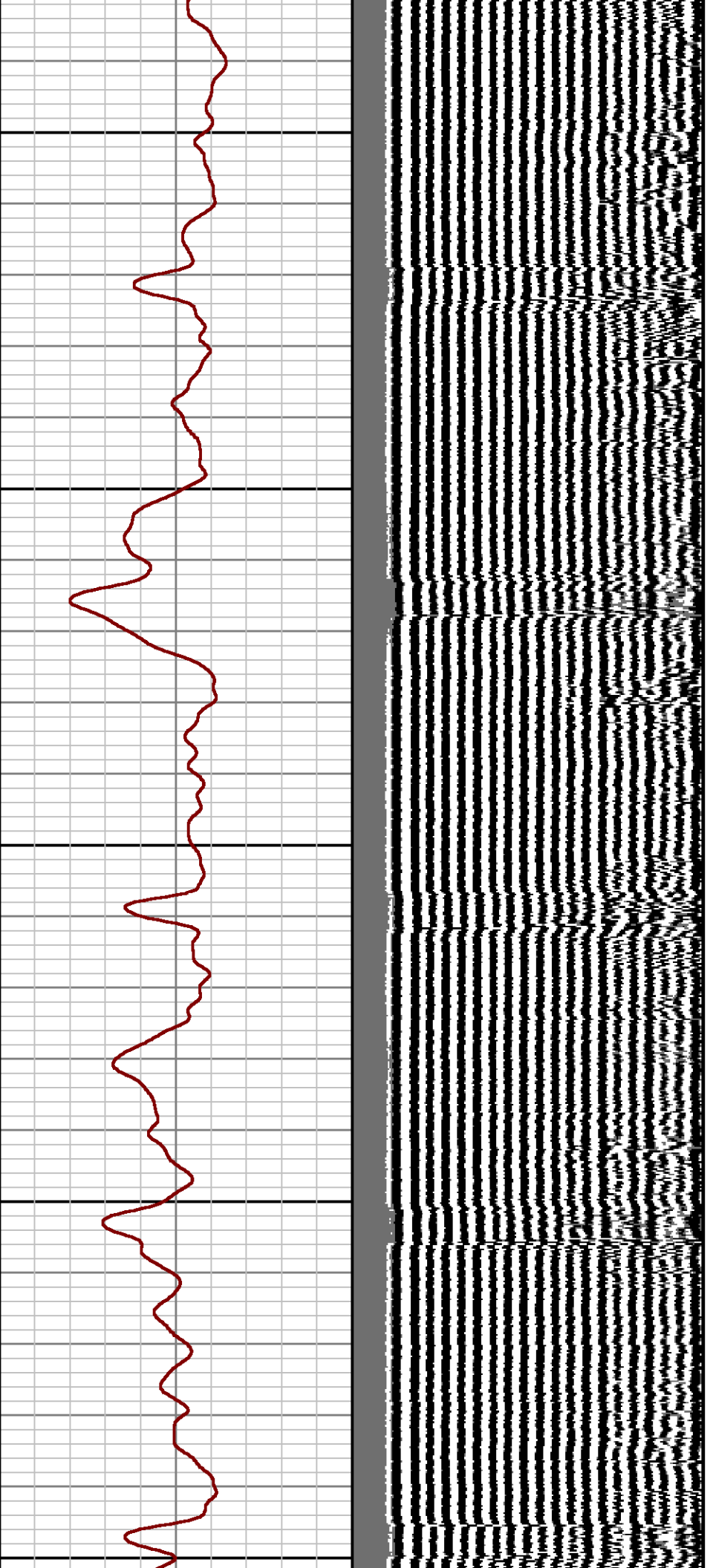


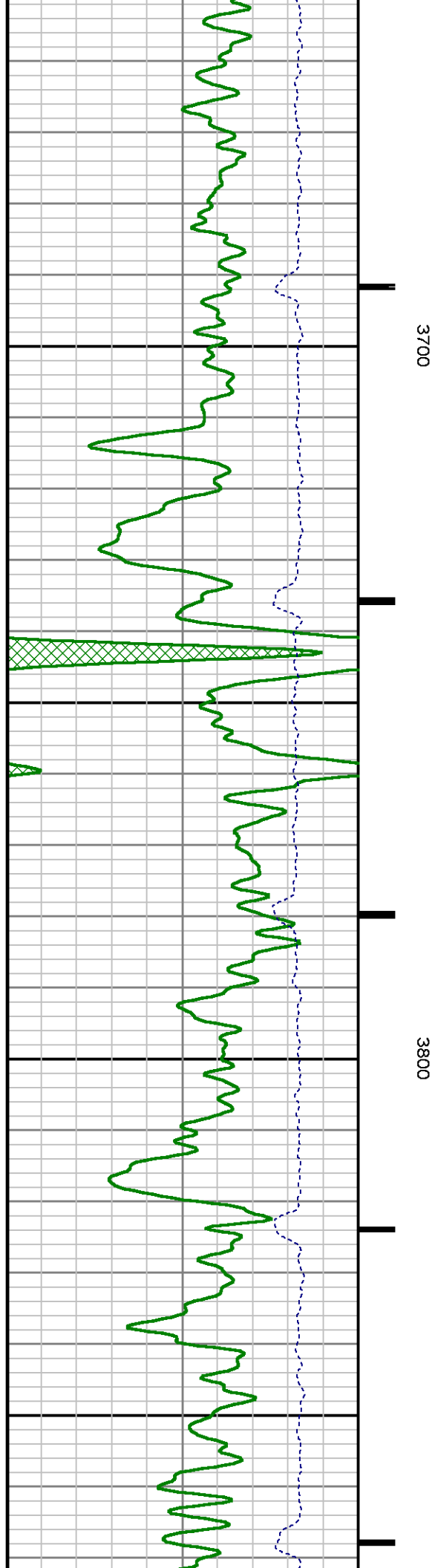
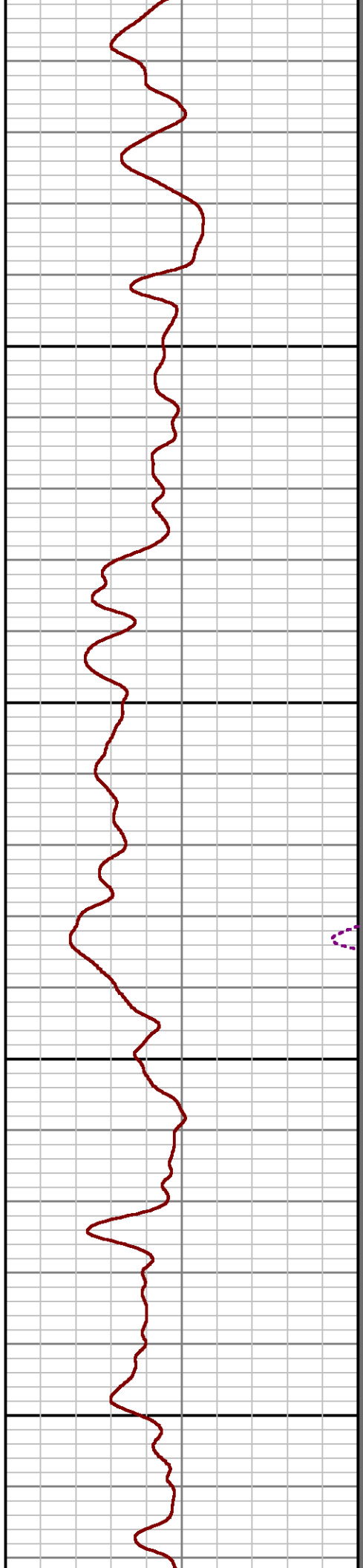
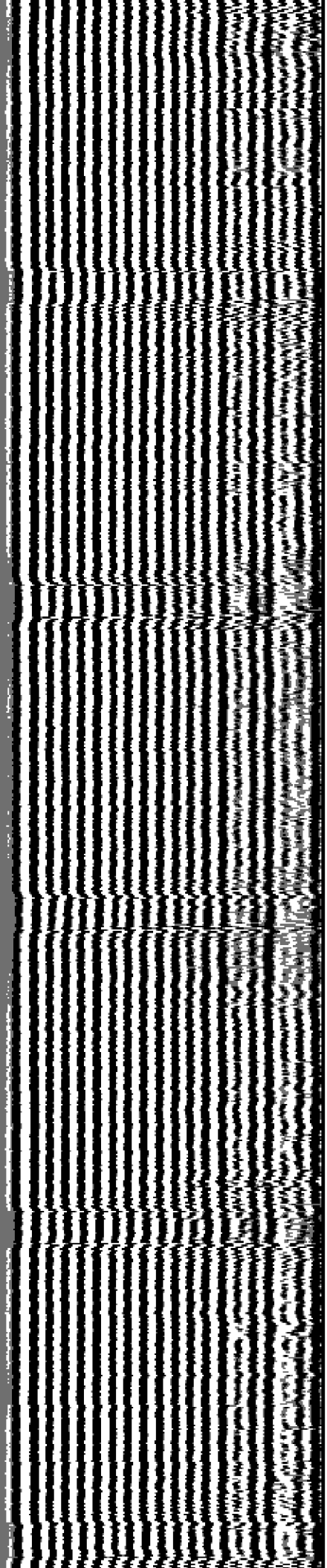


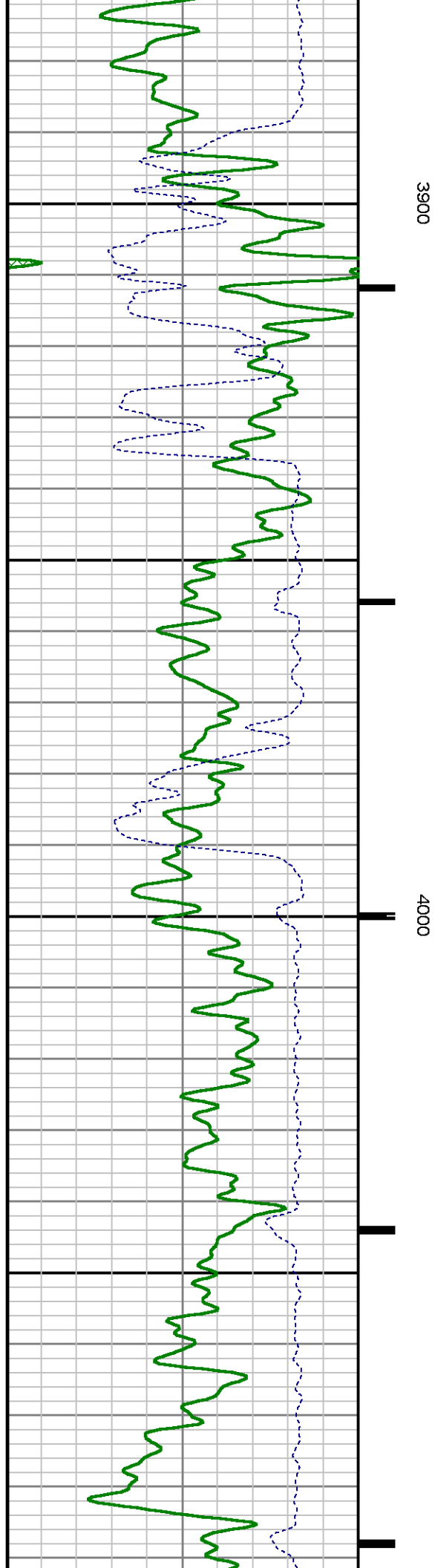
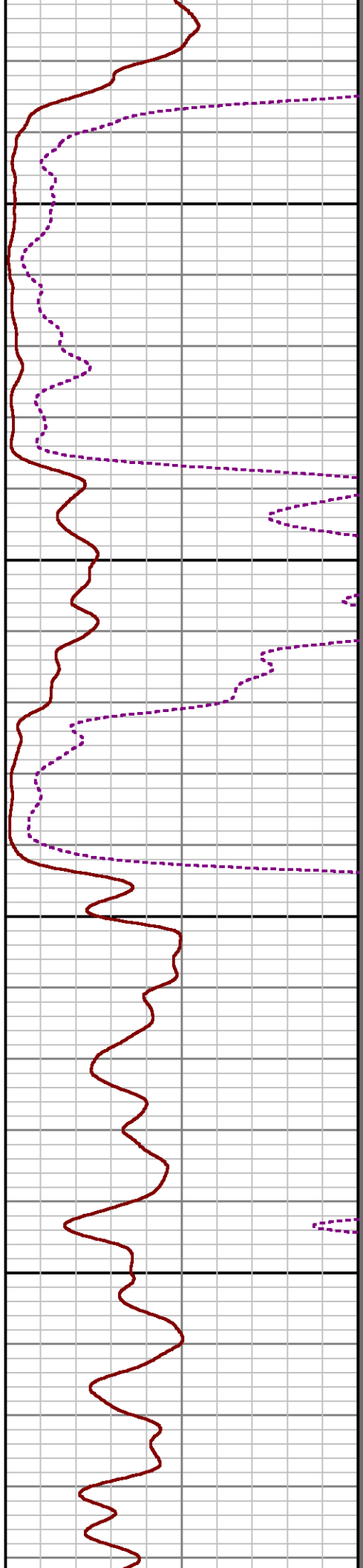
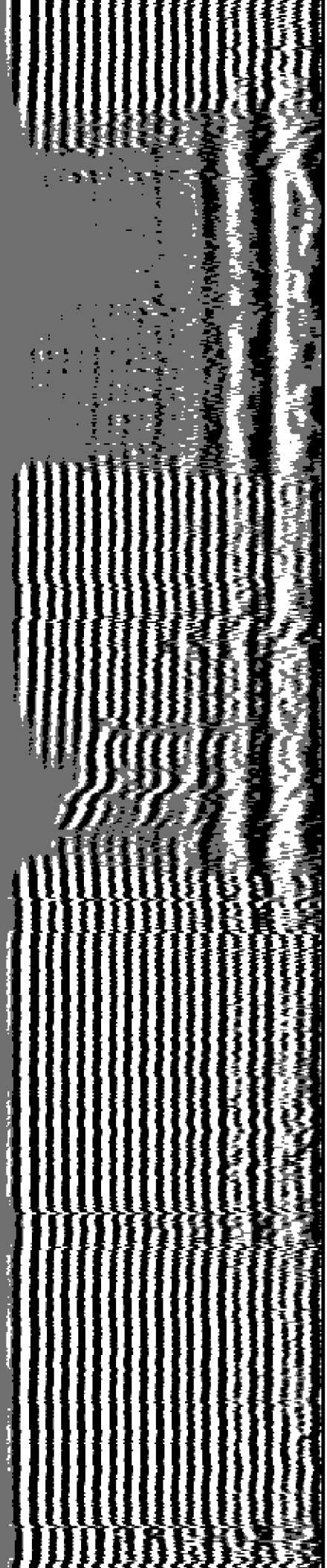


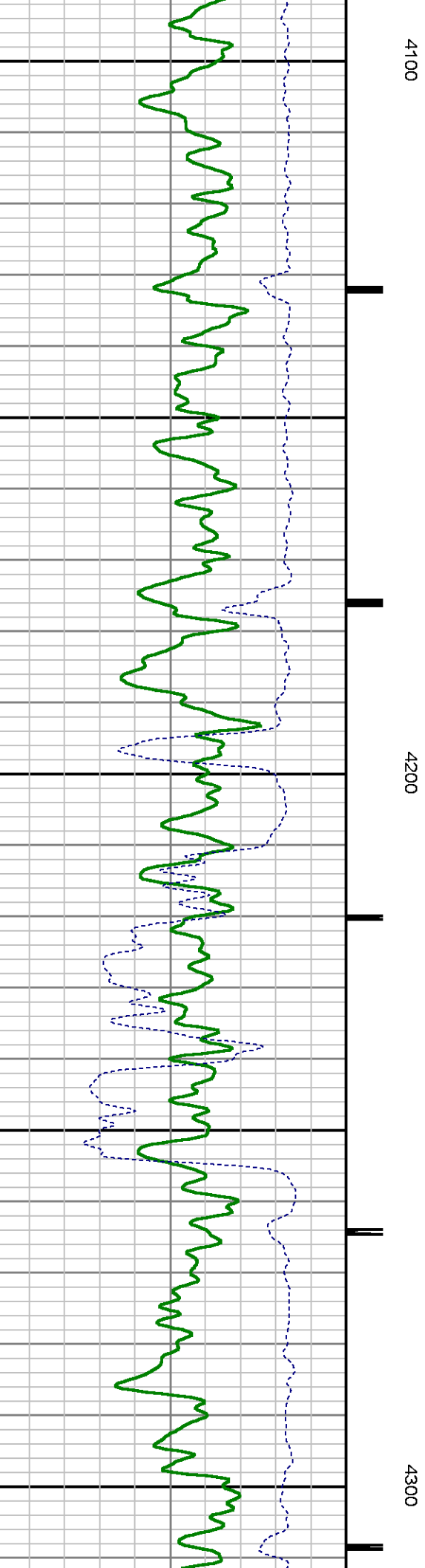
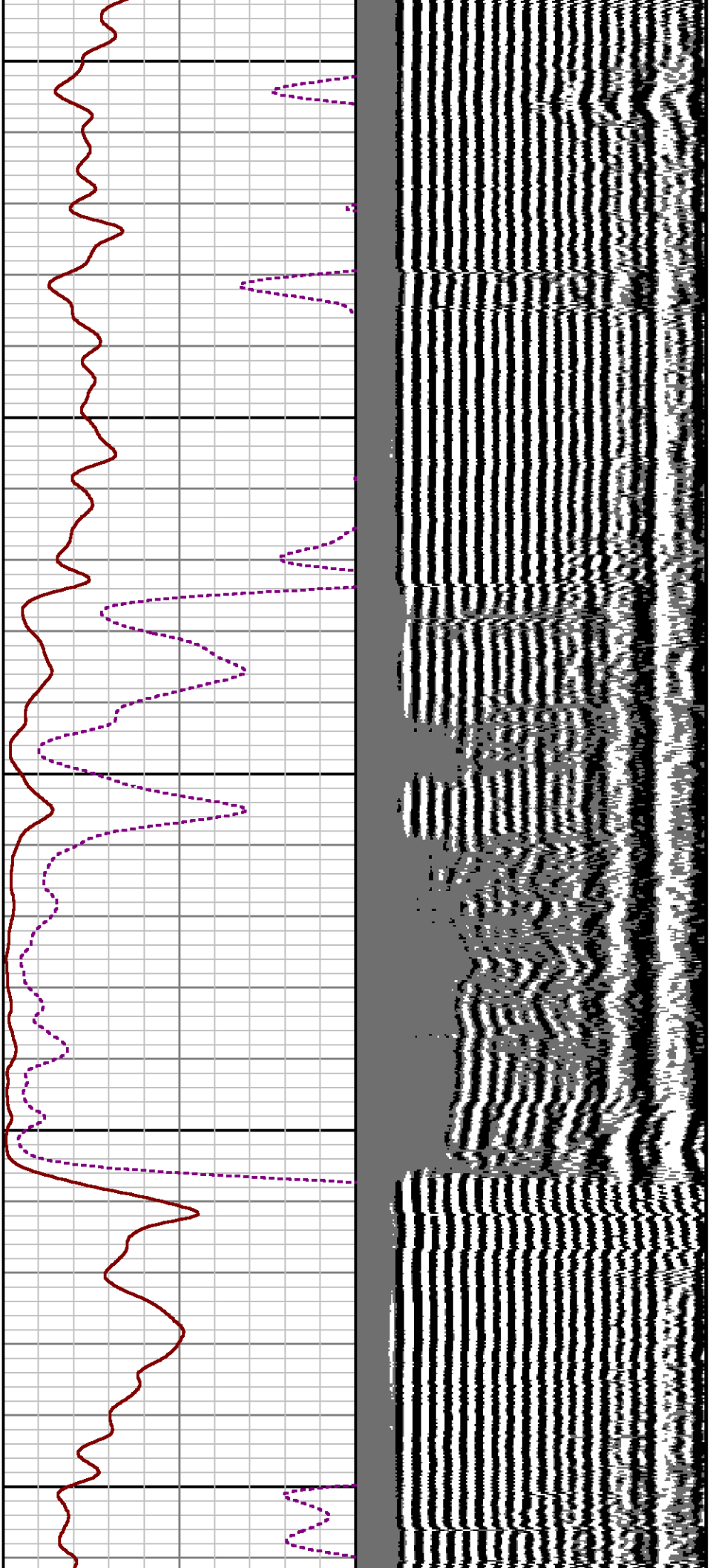


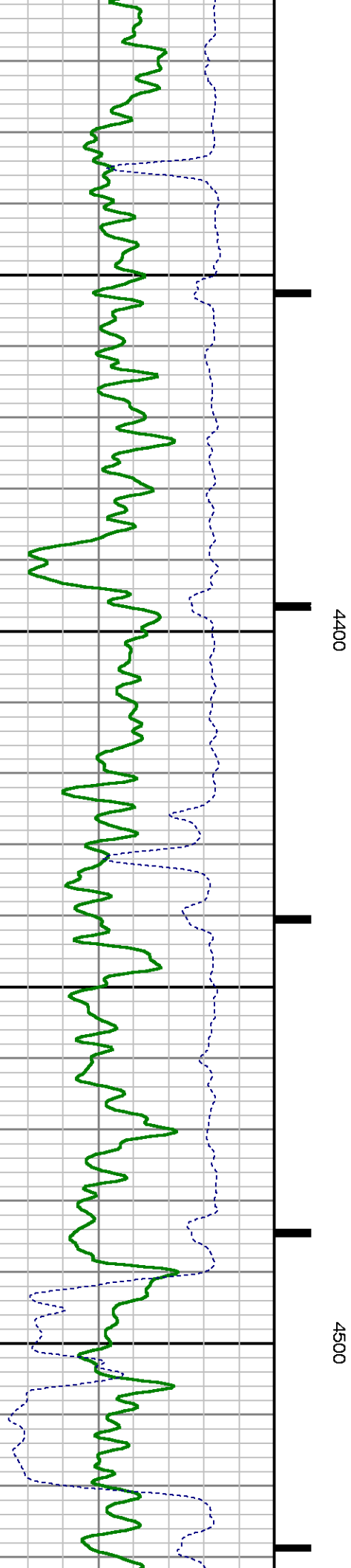
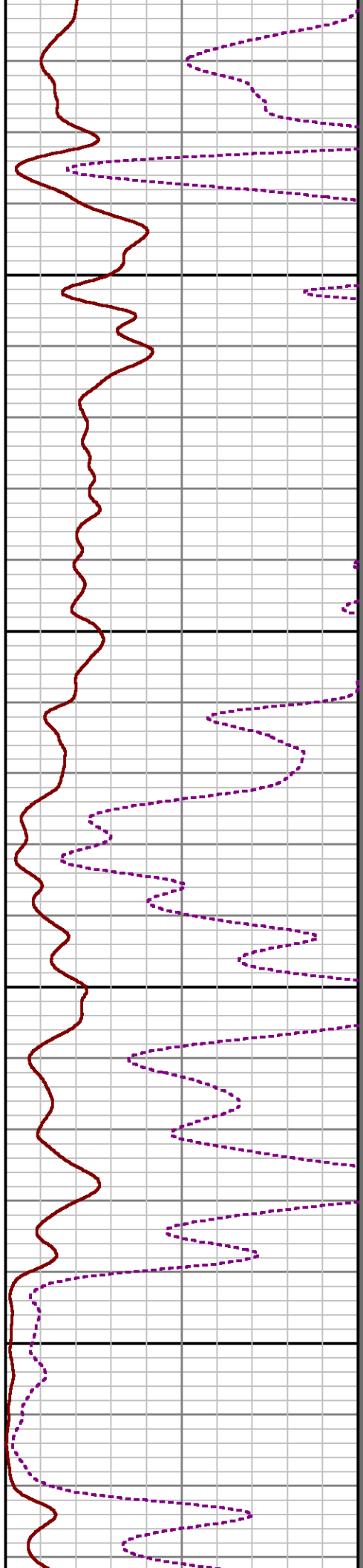
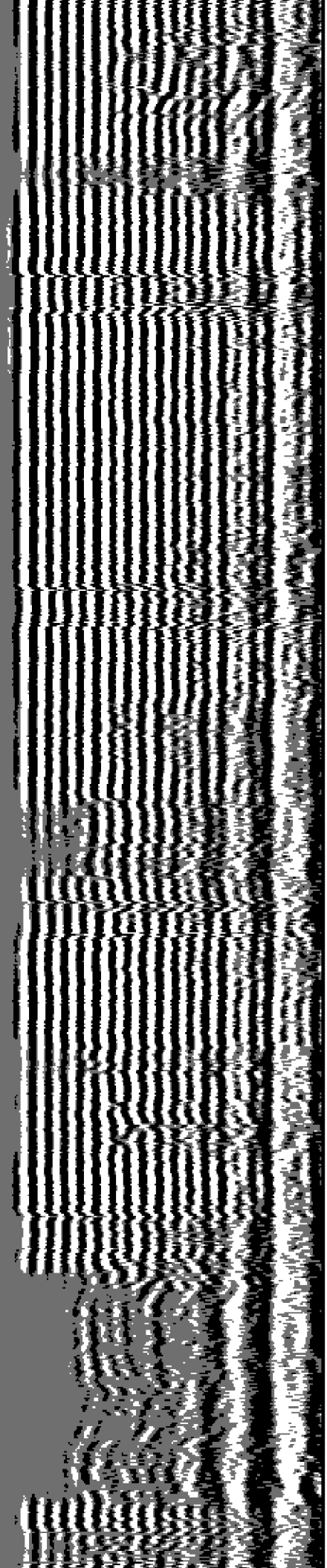


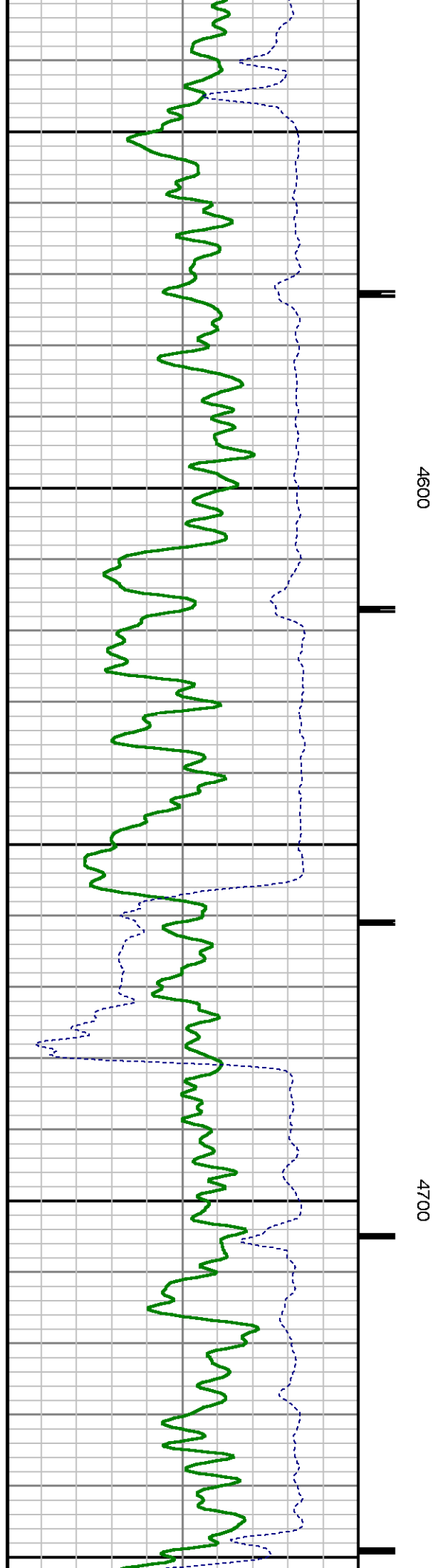
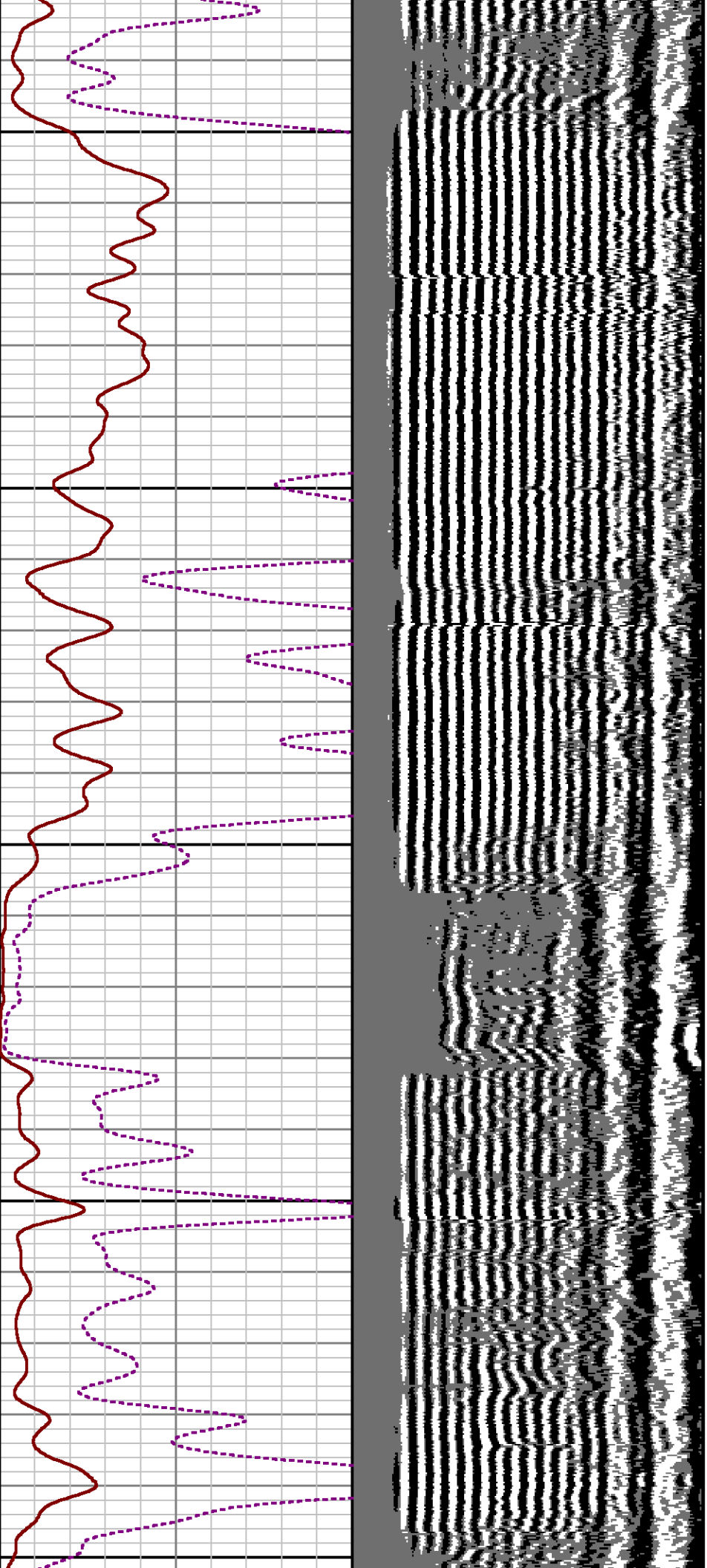


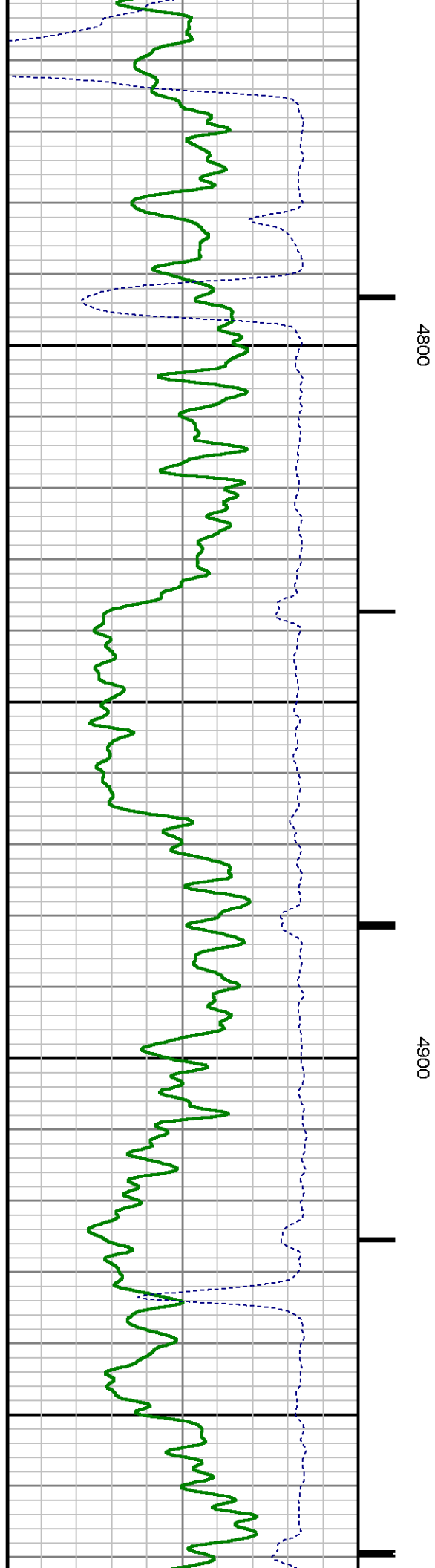
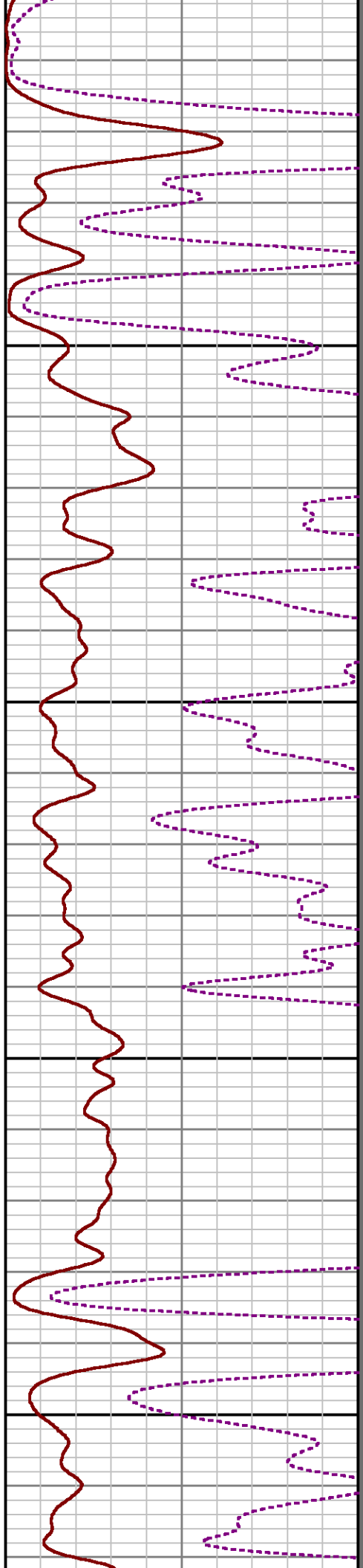
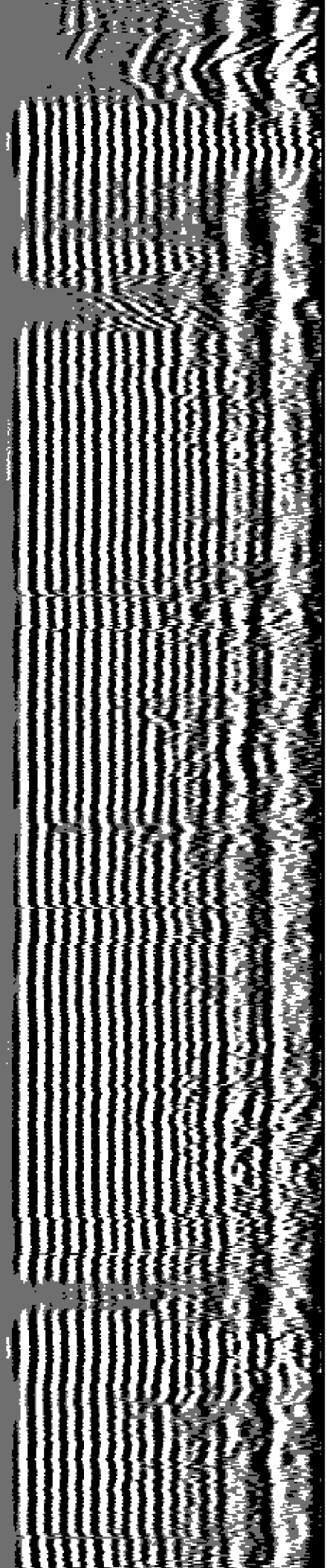


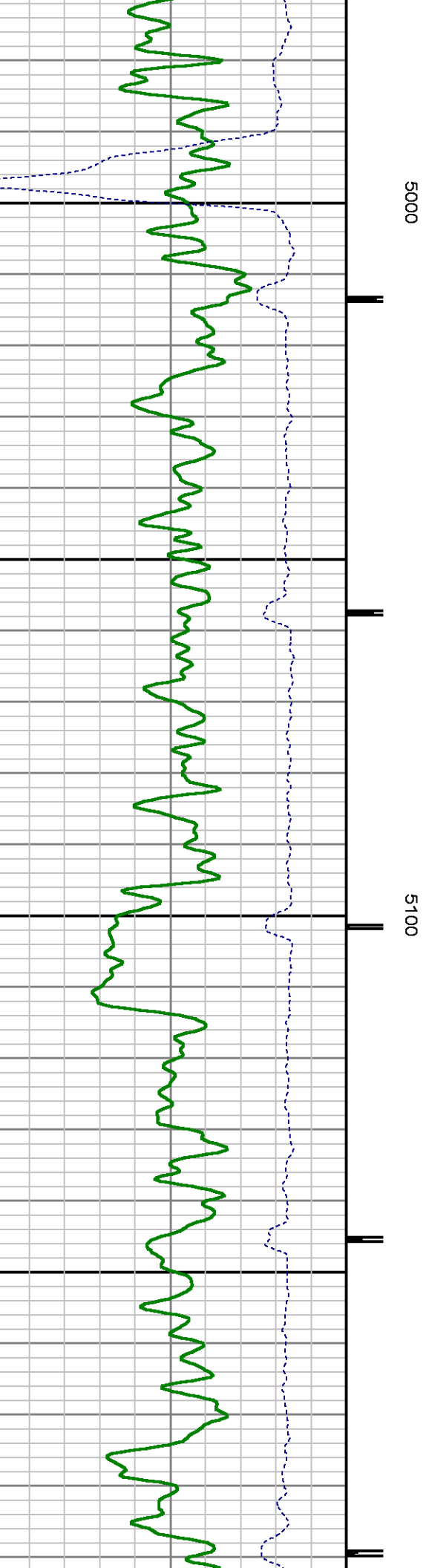
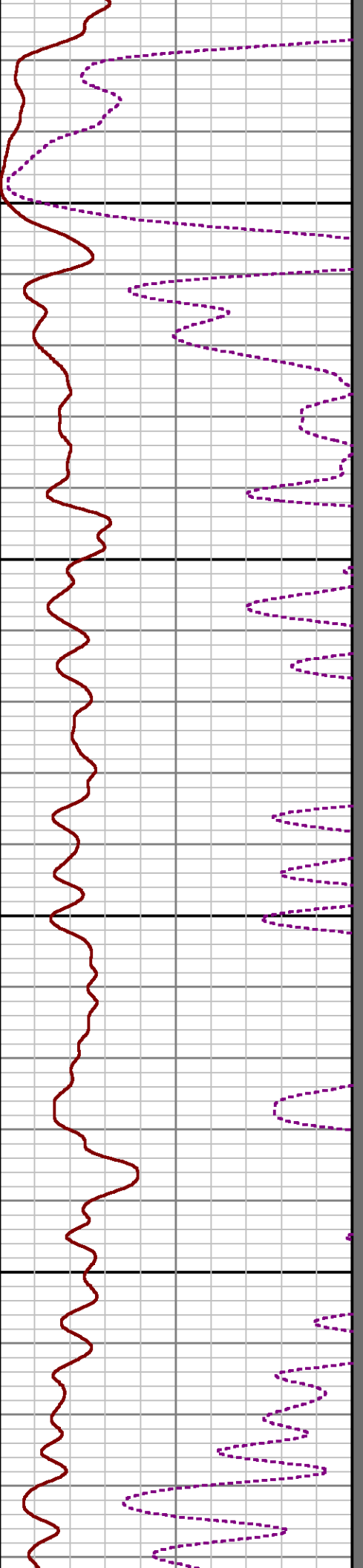
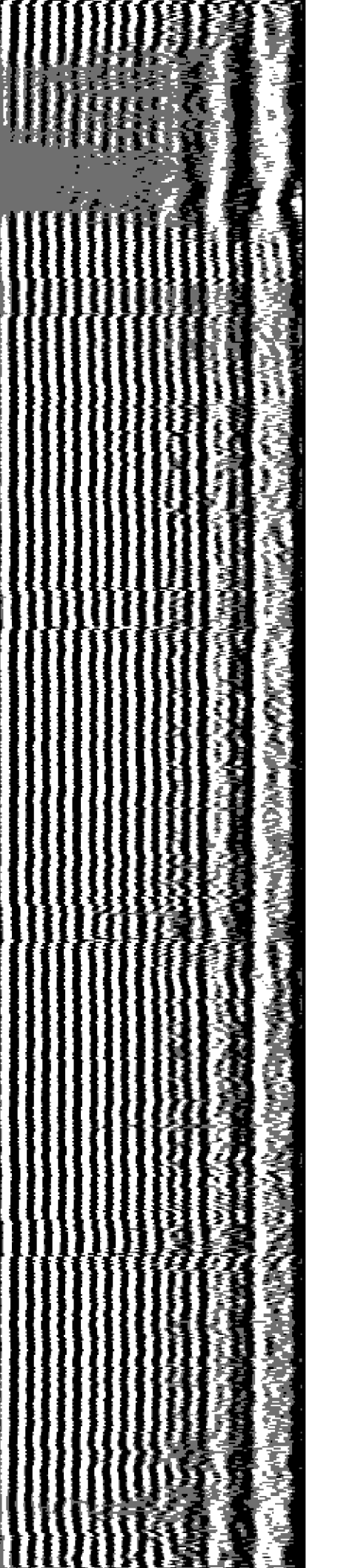


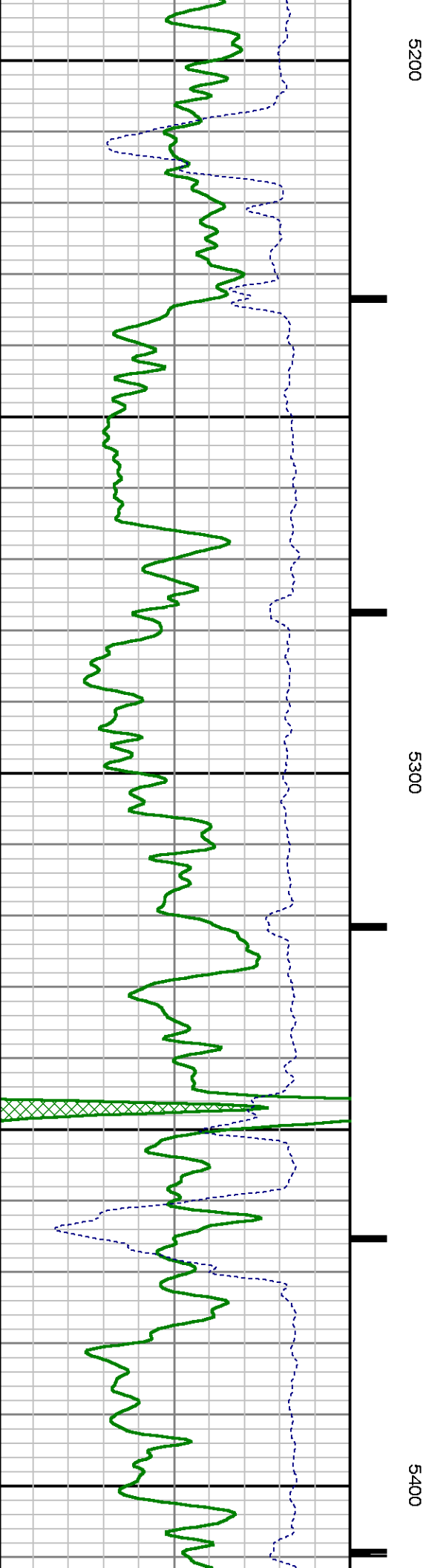
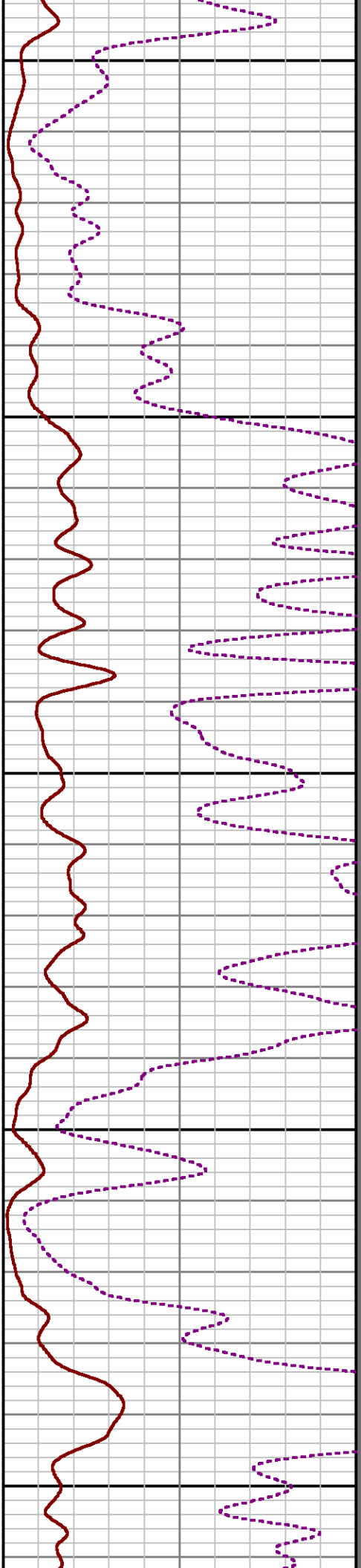
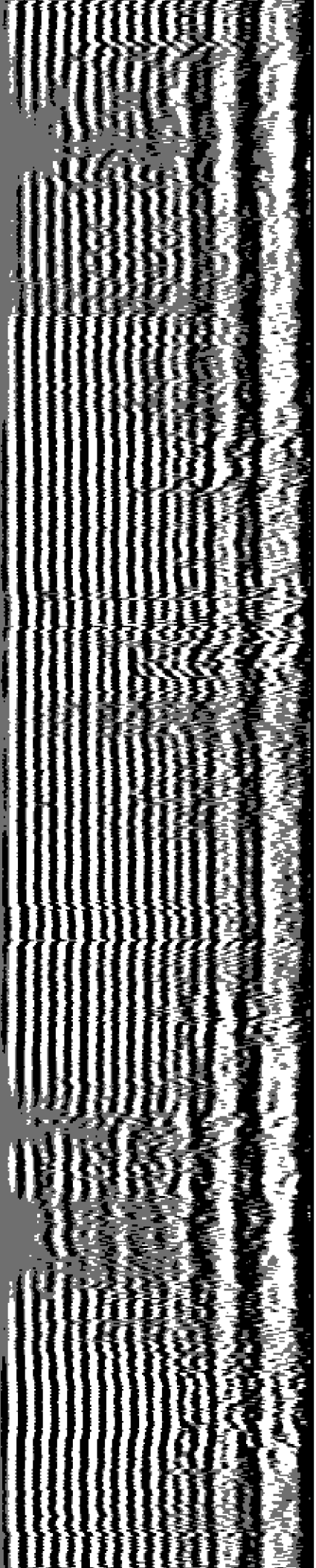


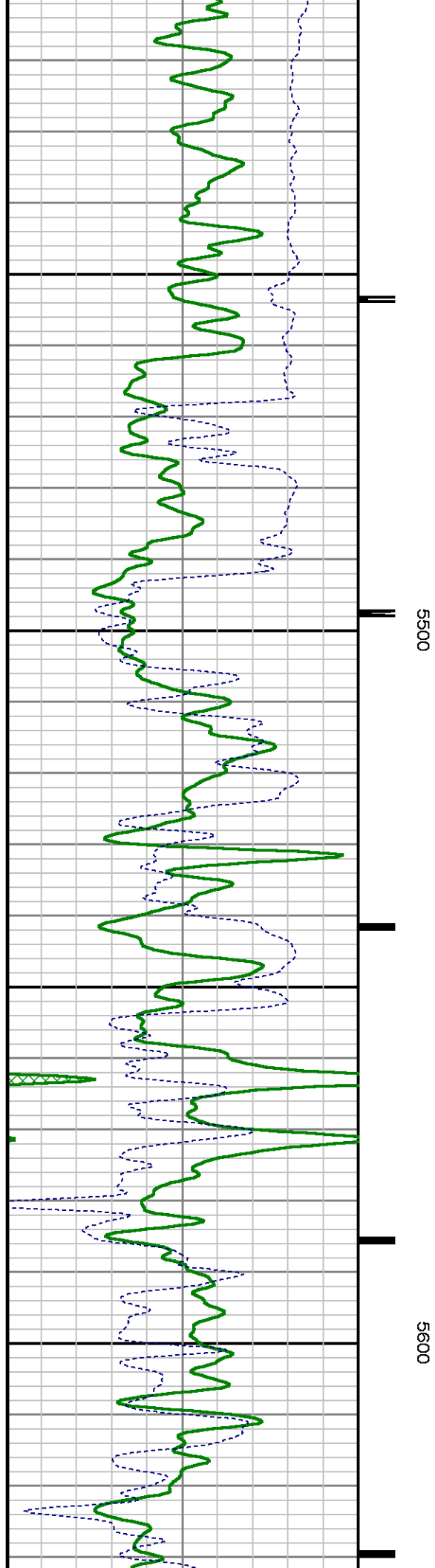
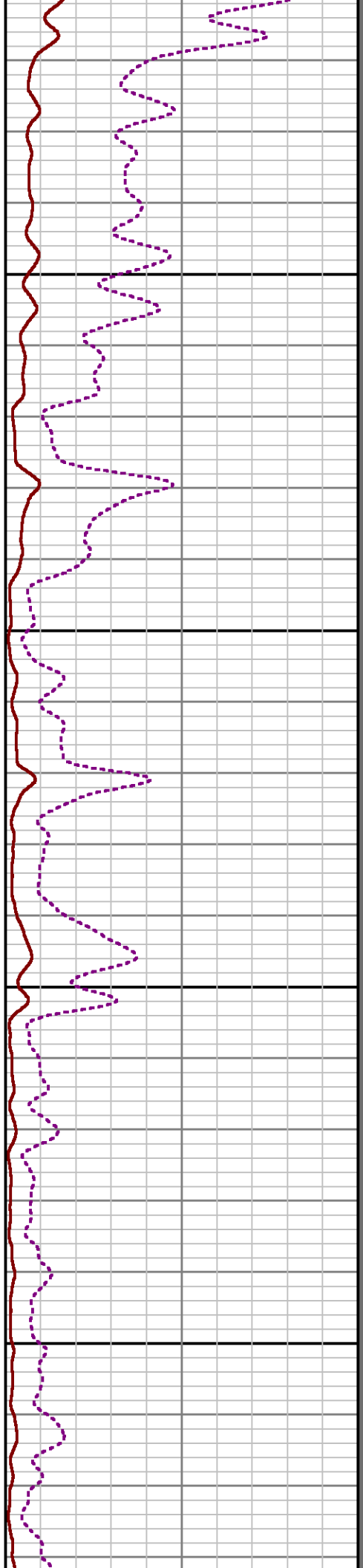
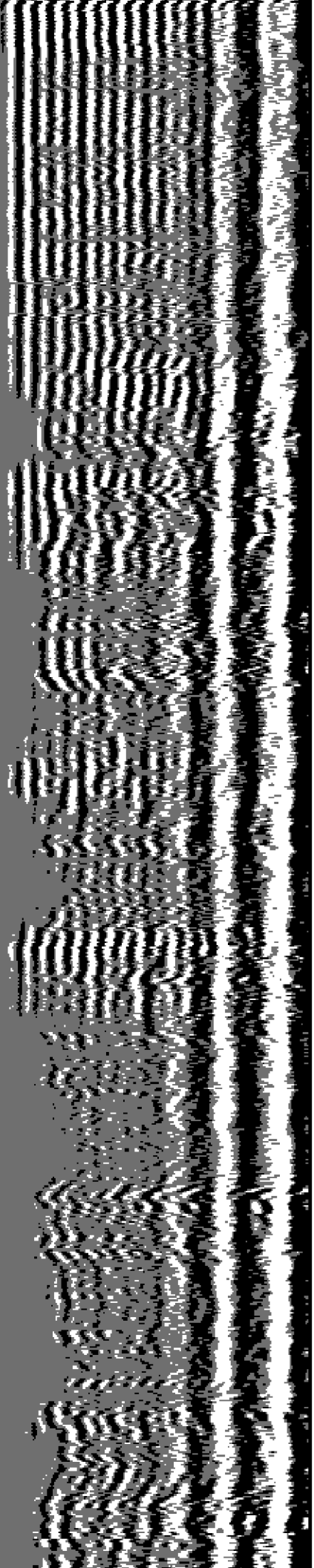


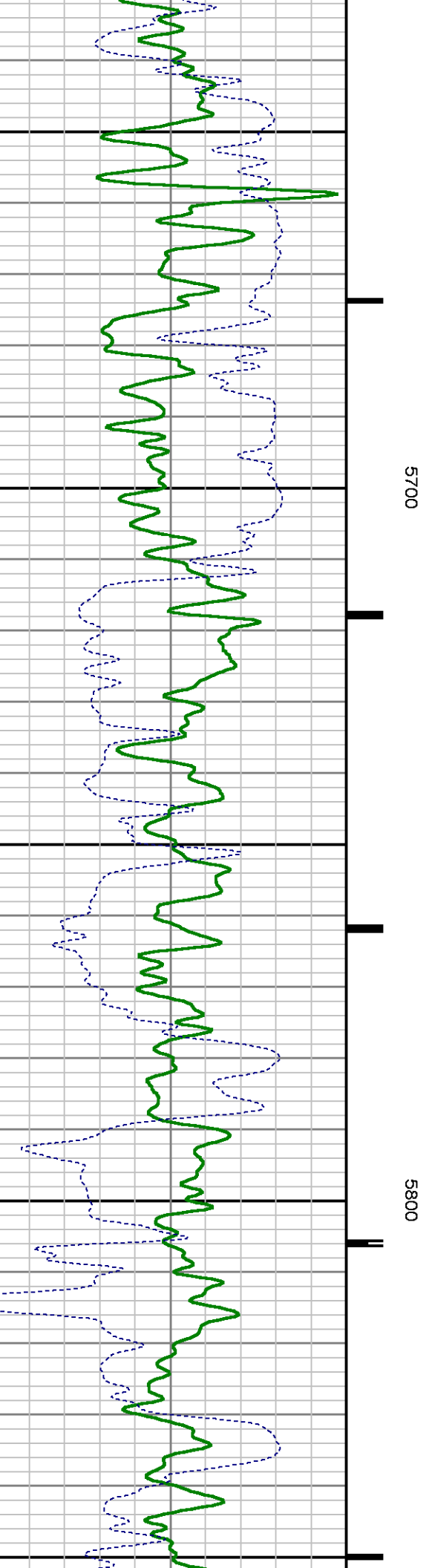
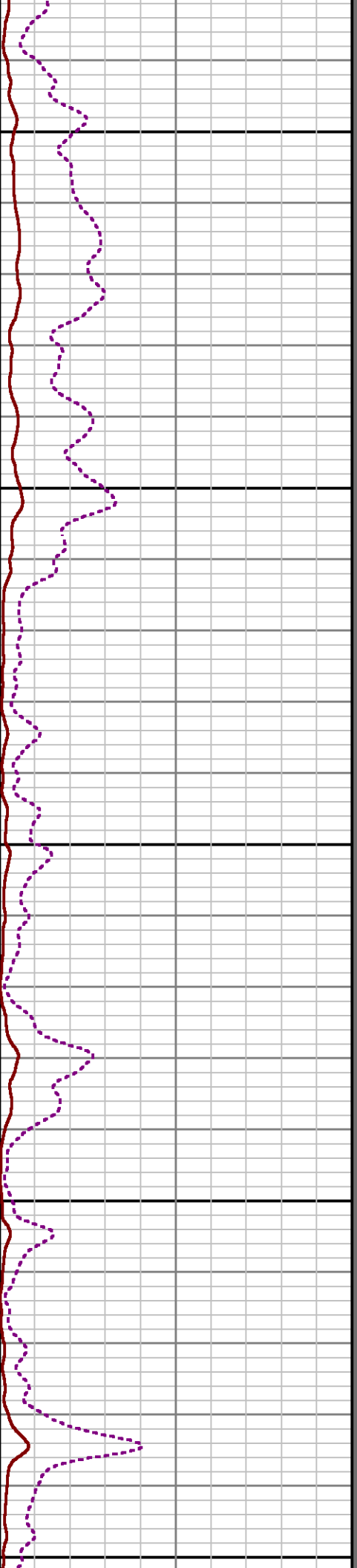
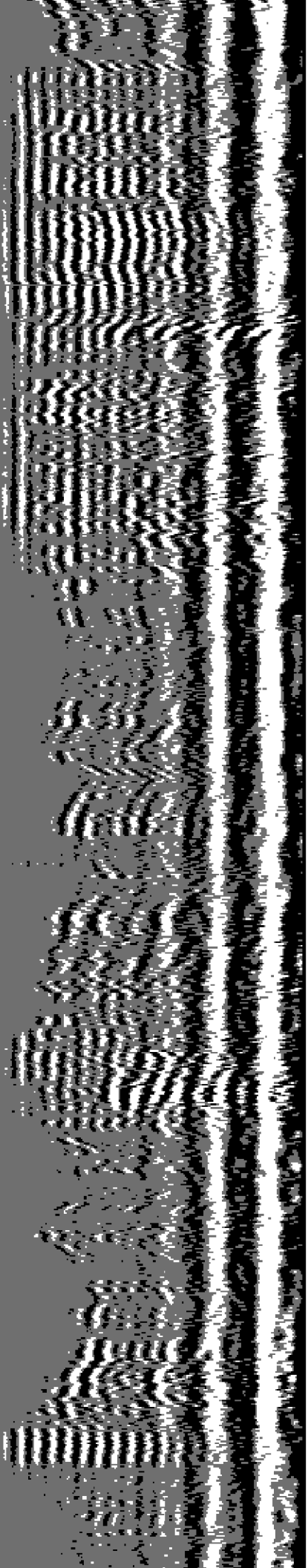


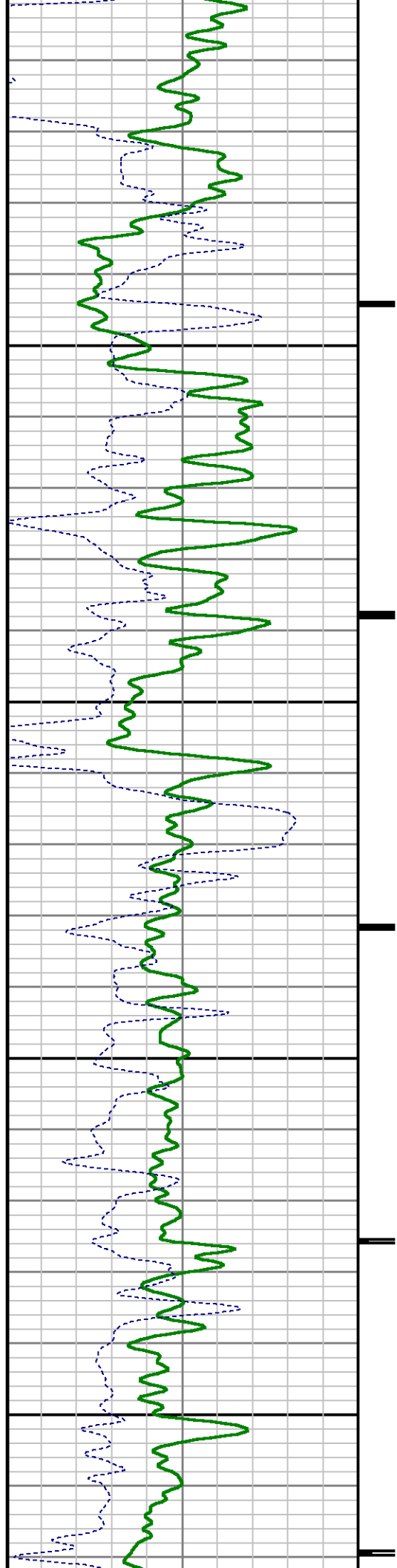
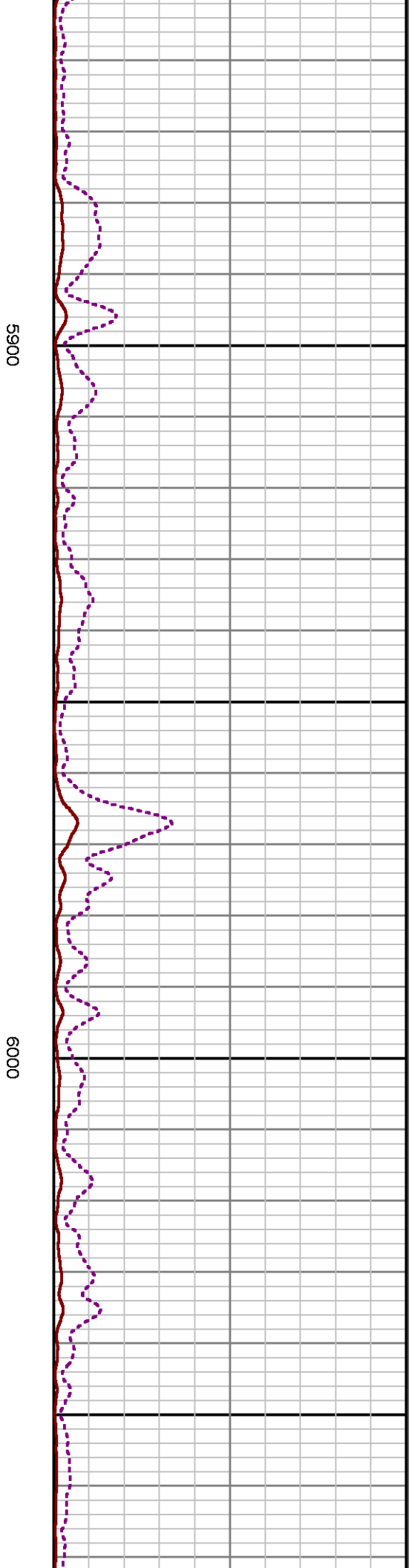
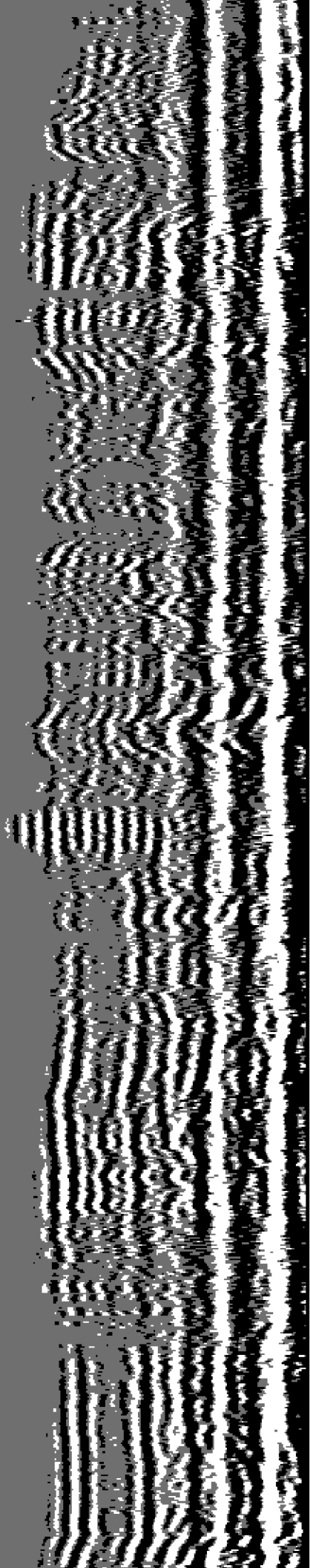


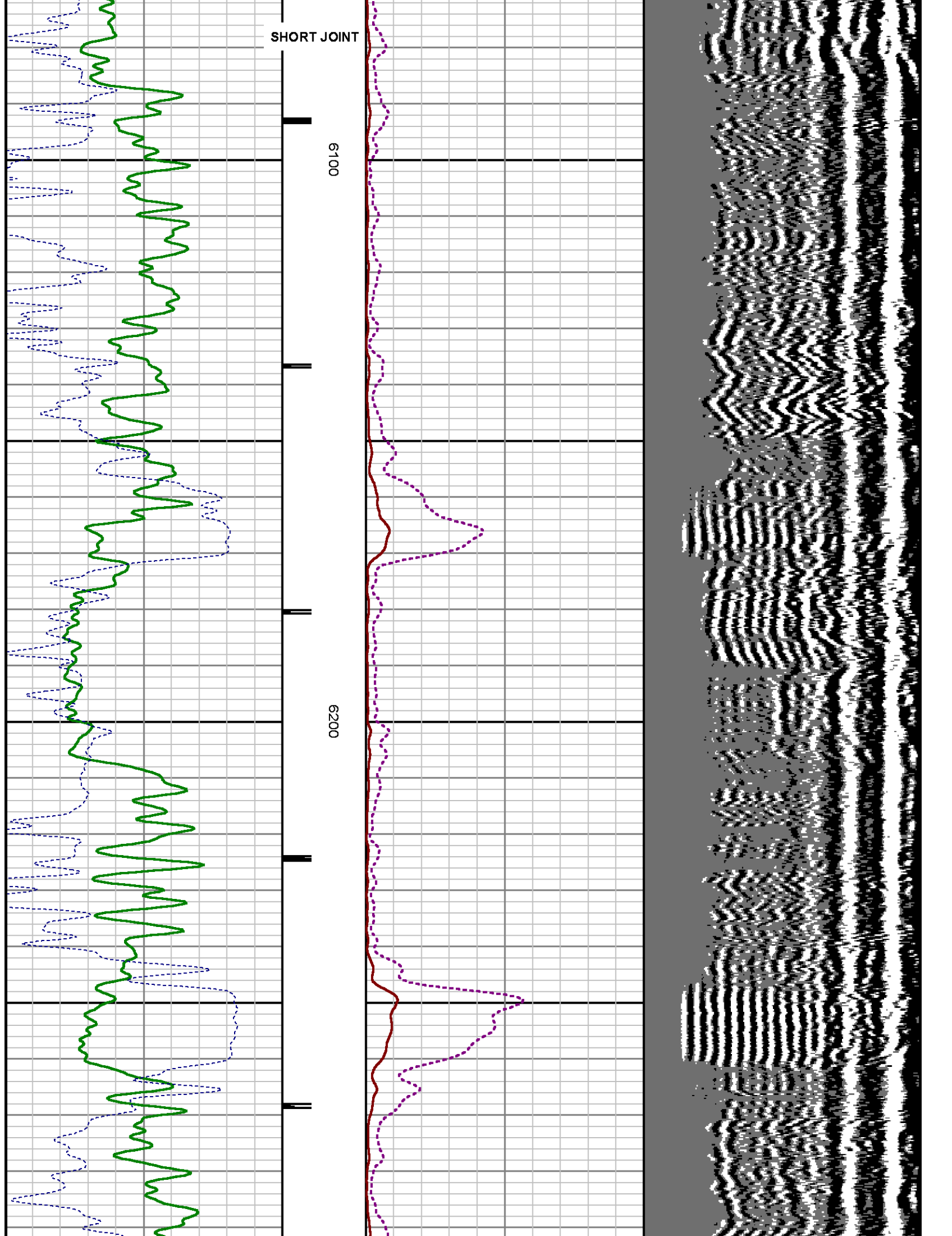


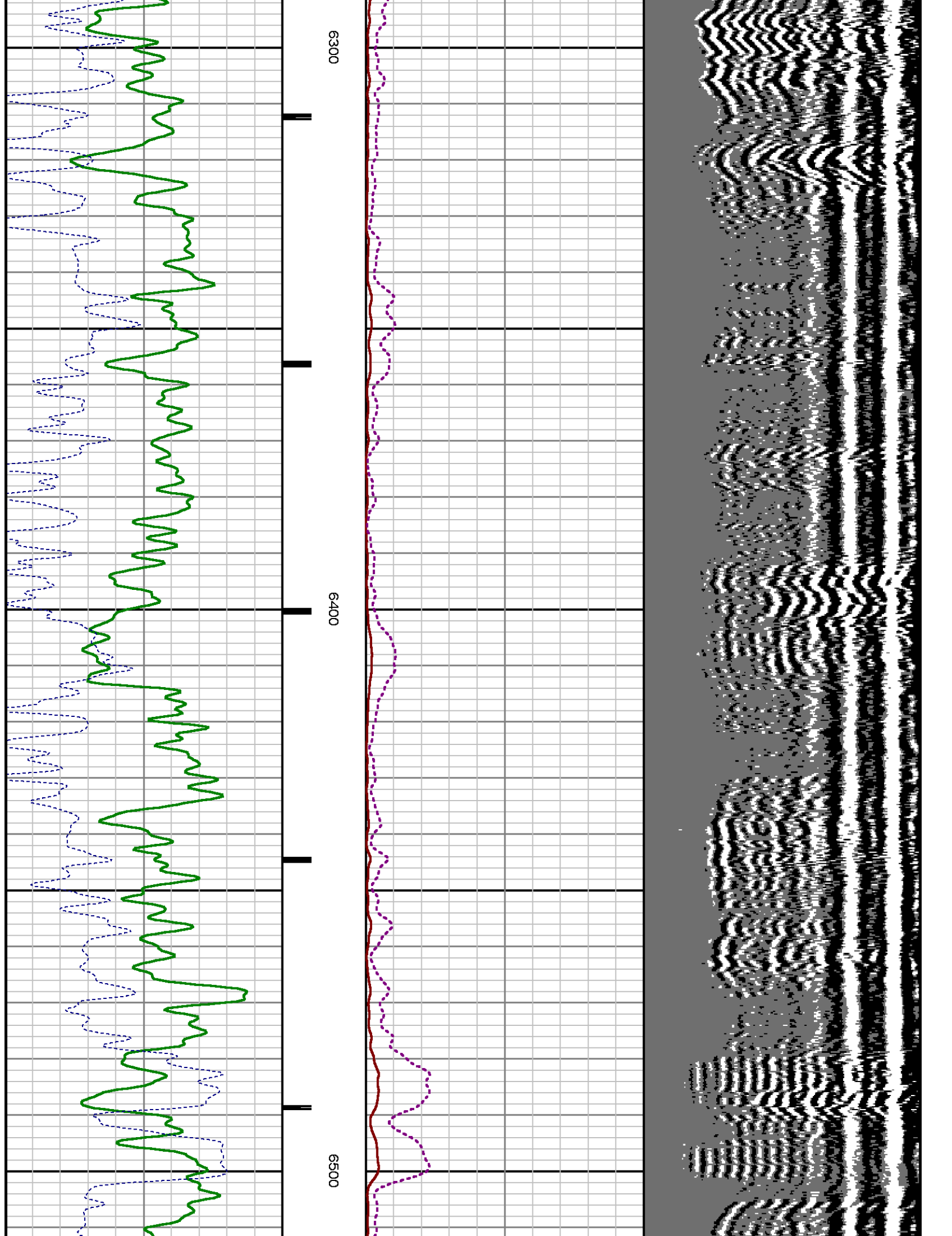


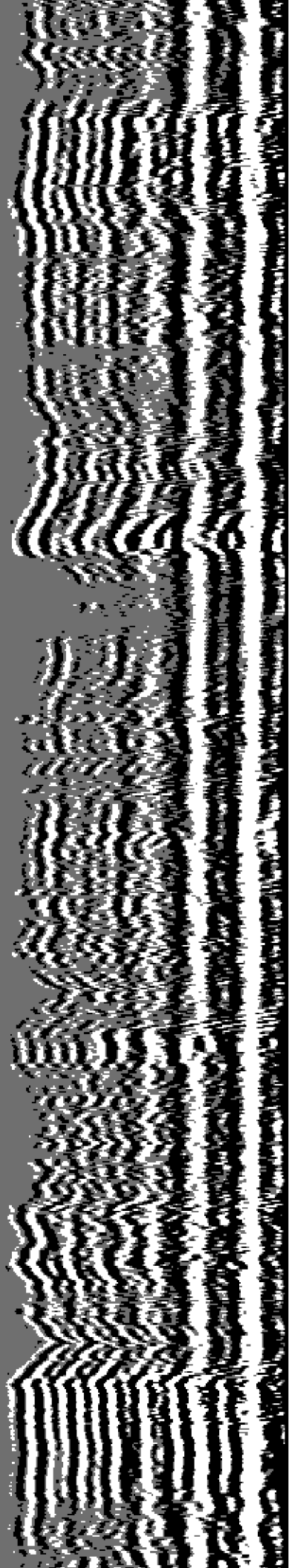






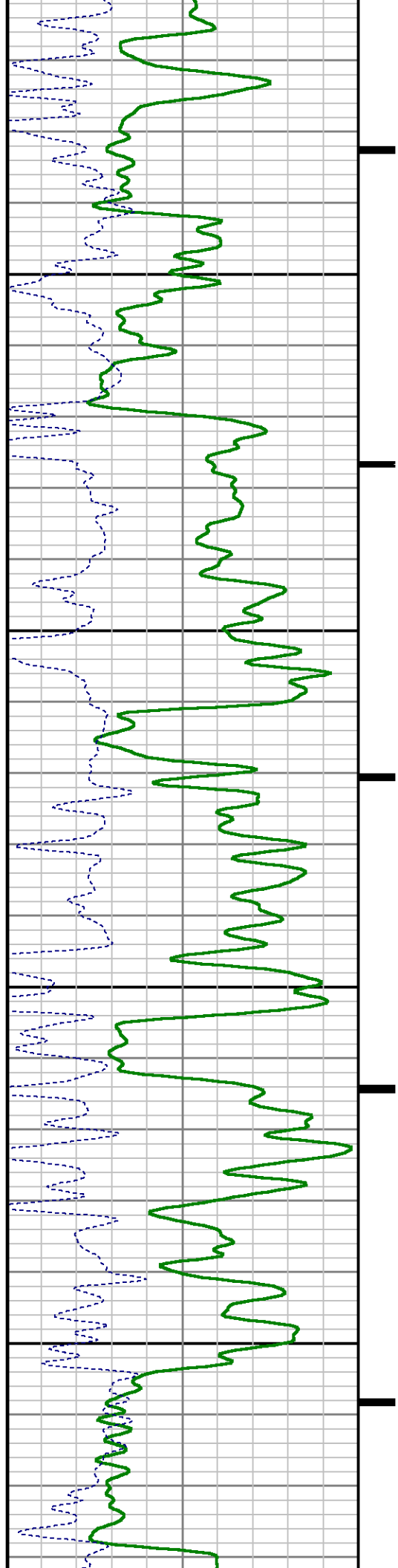


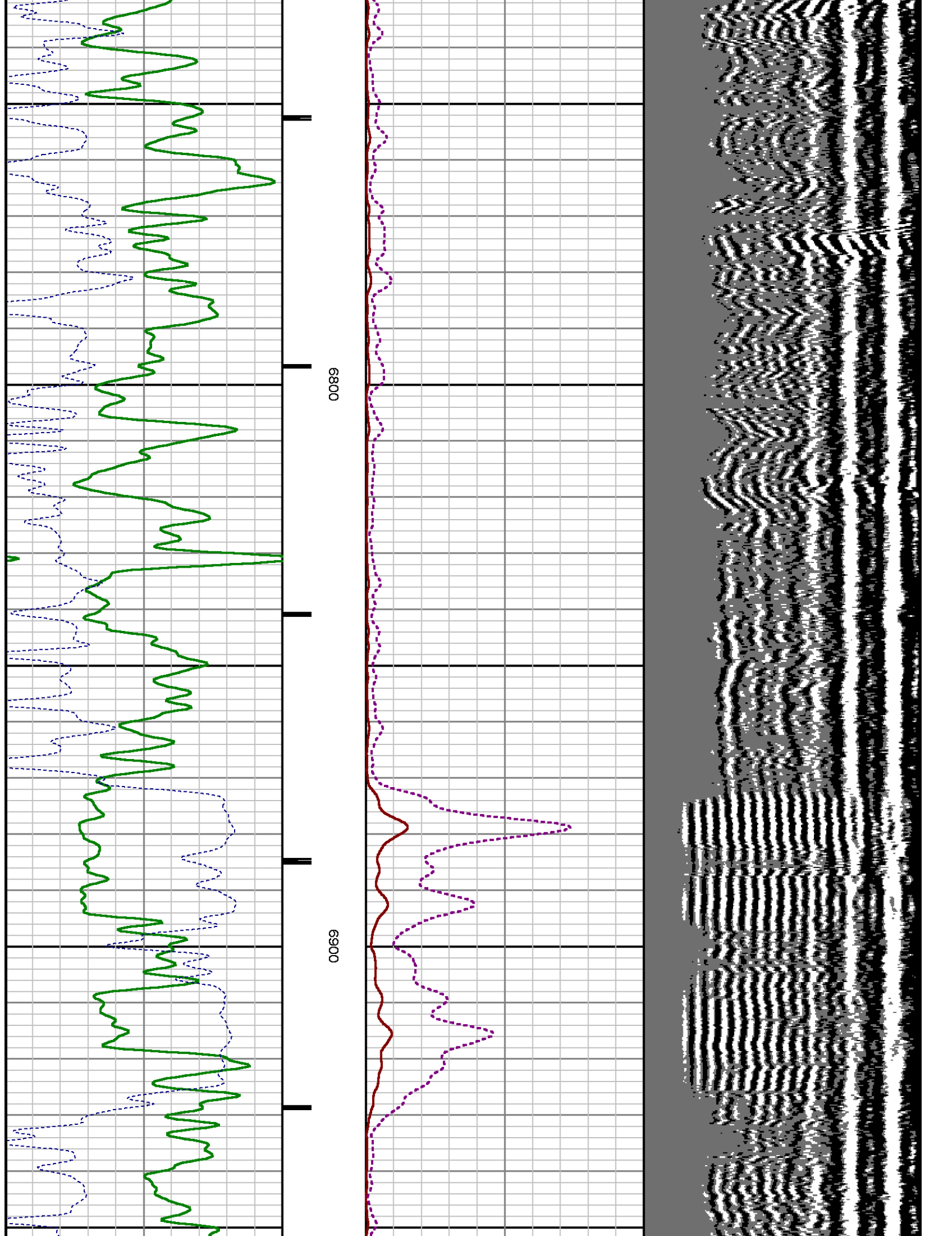


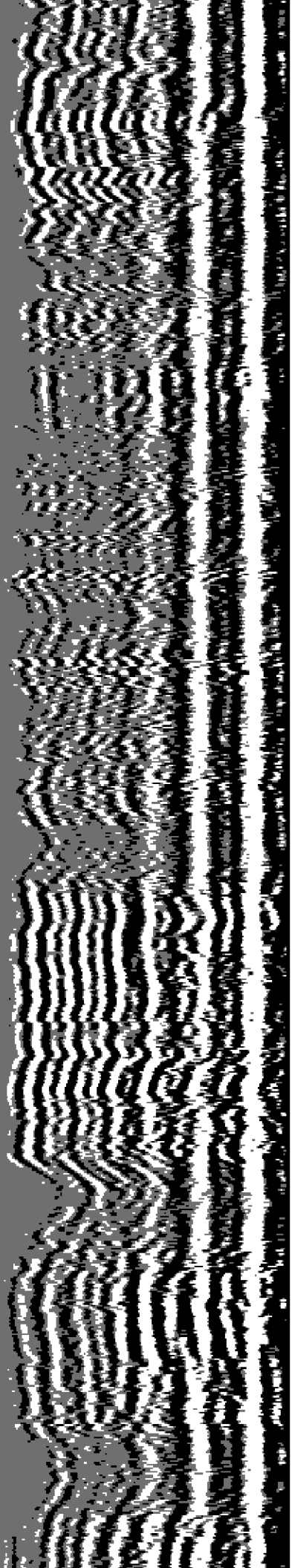


6600

6700

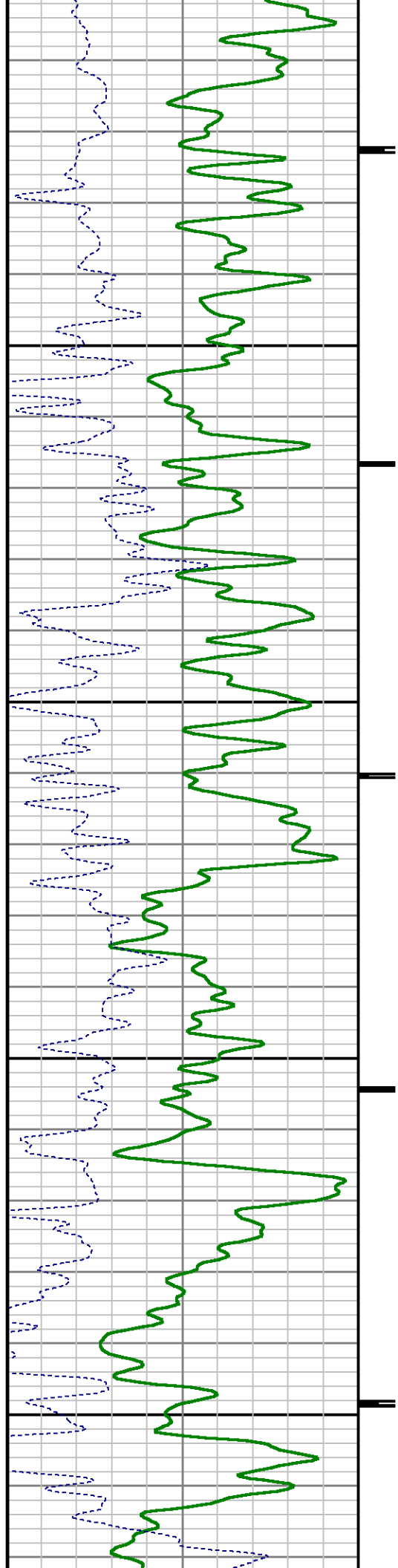


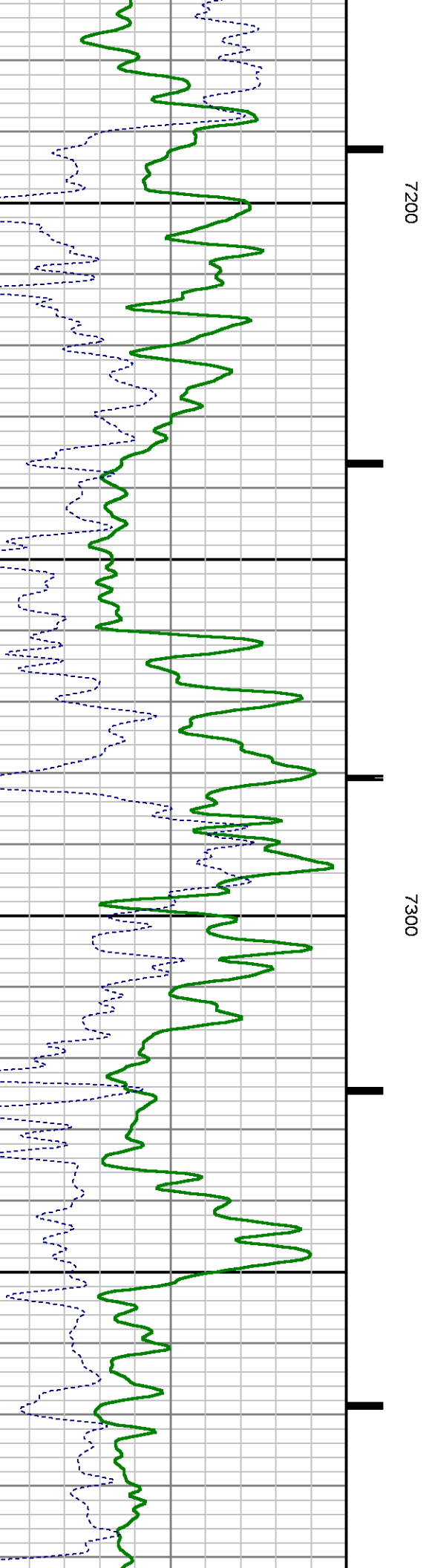
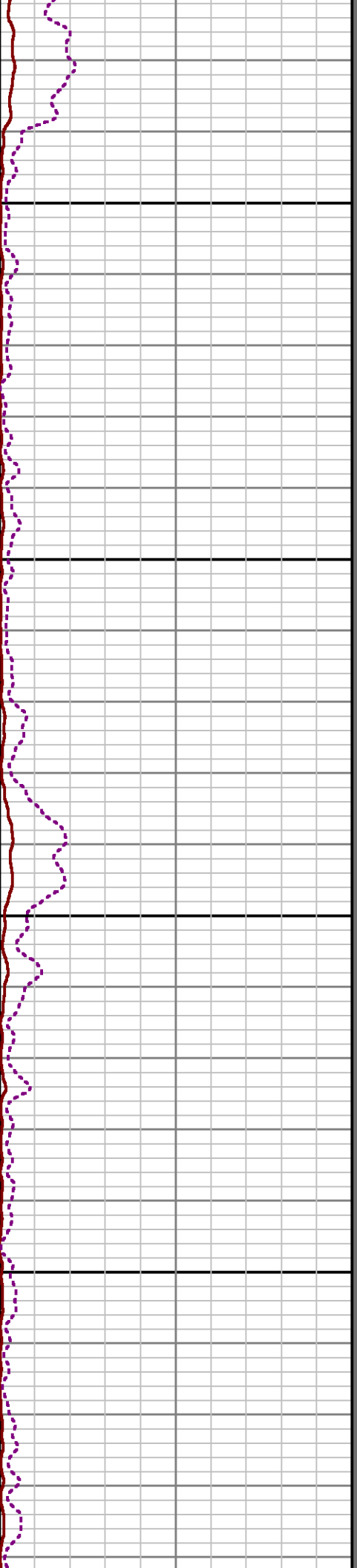
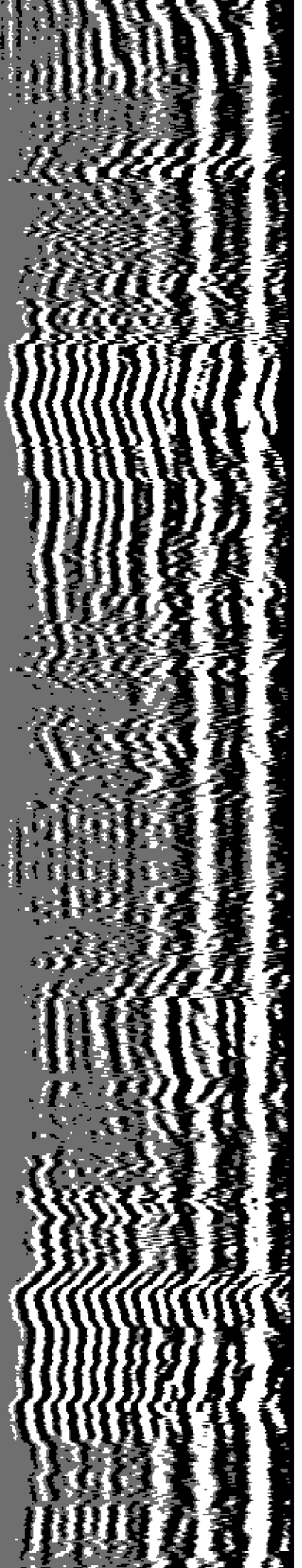


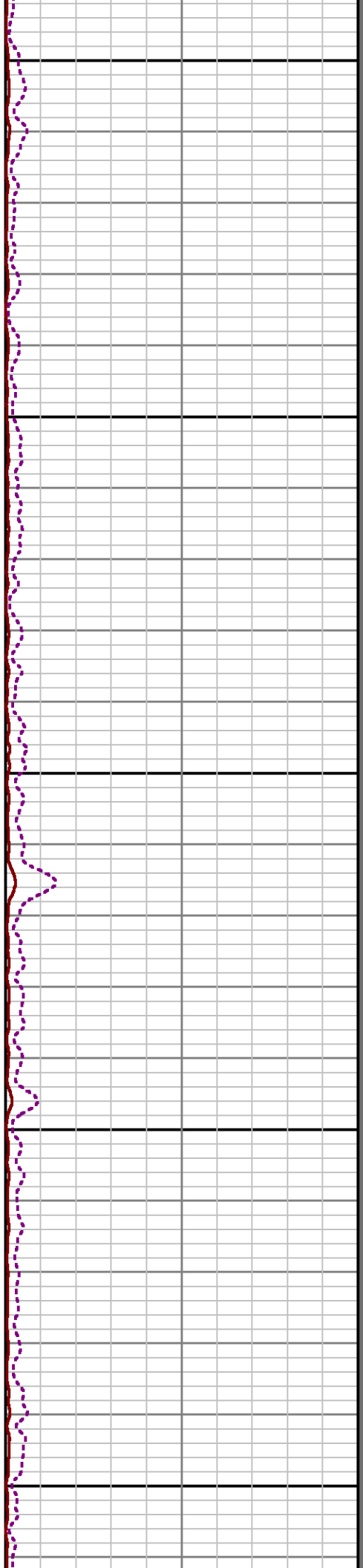
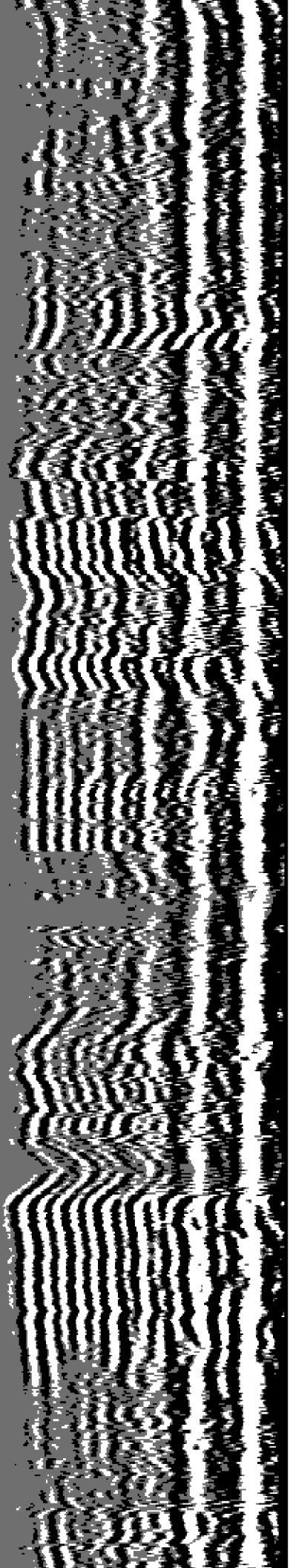


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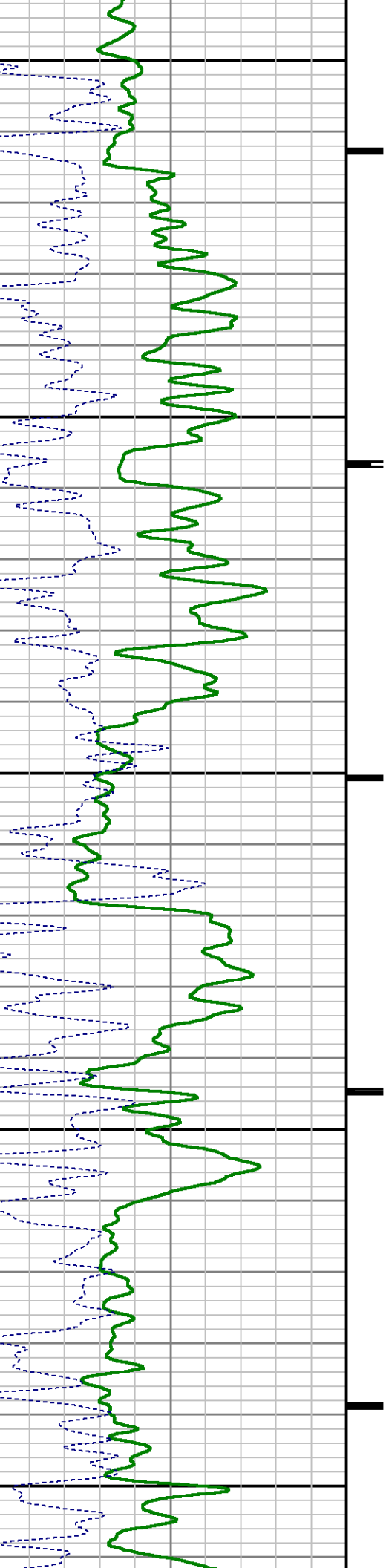


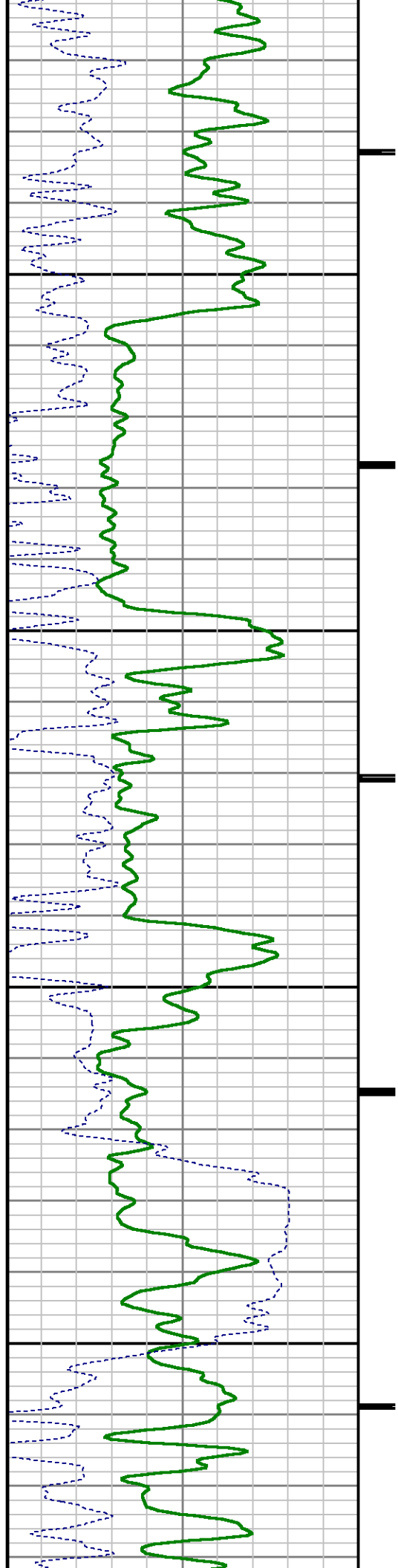
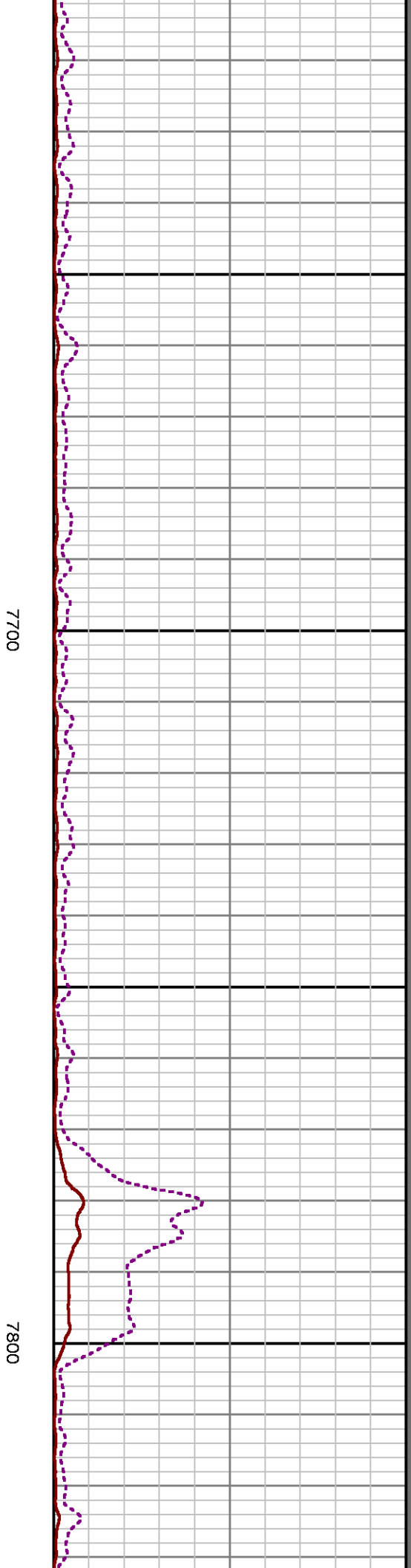
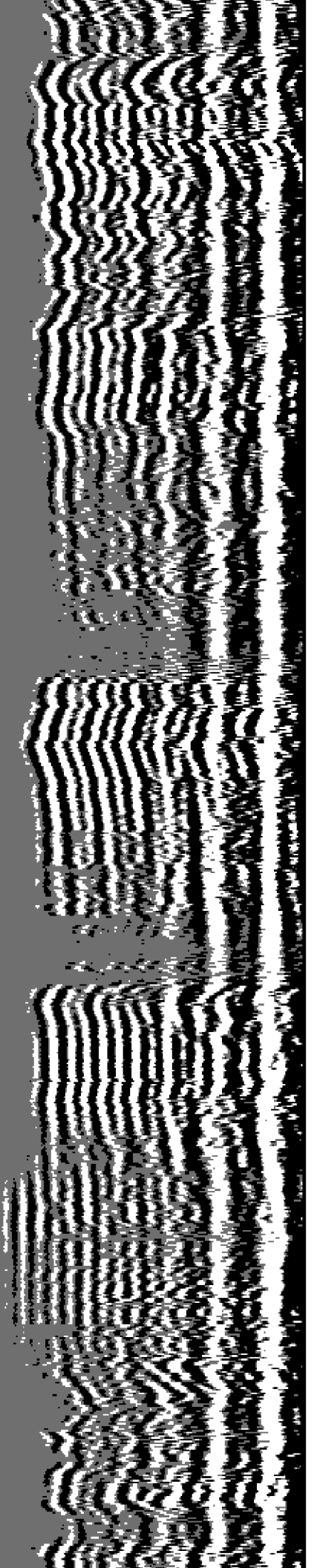


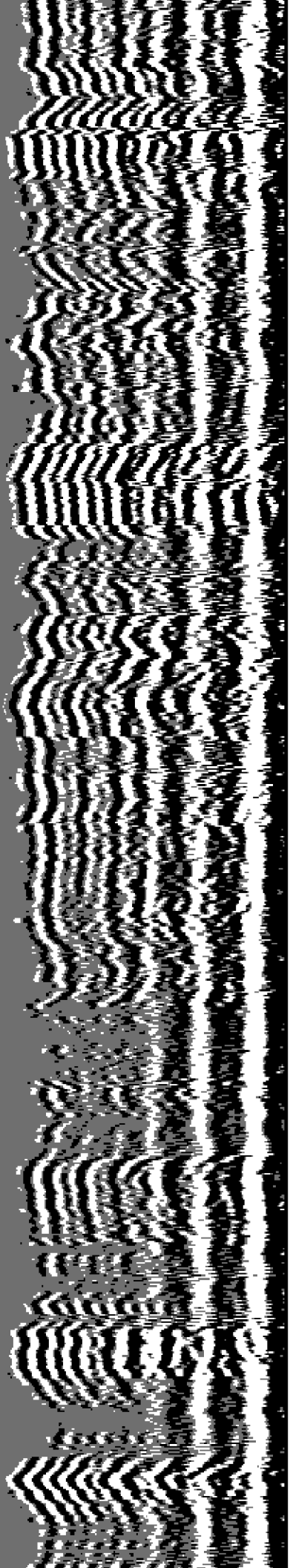
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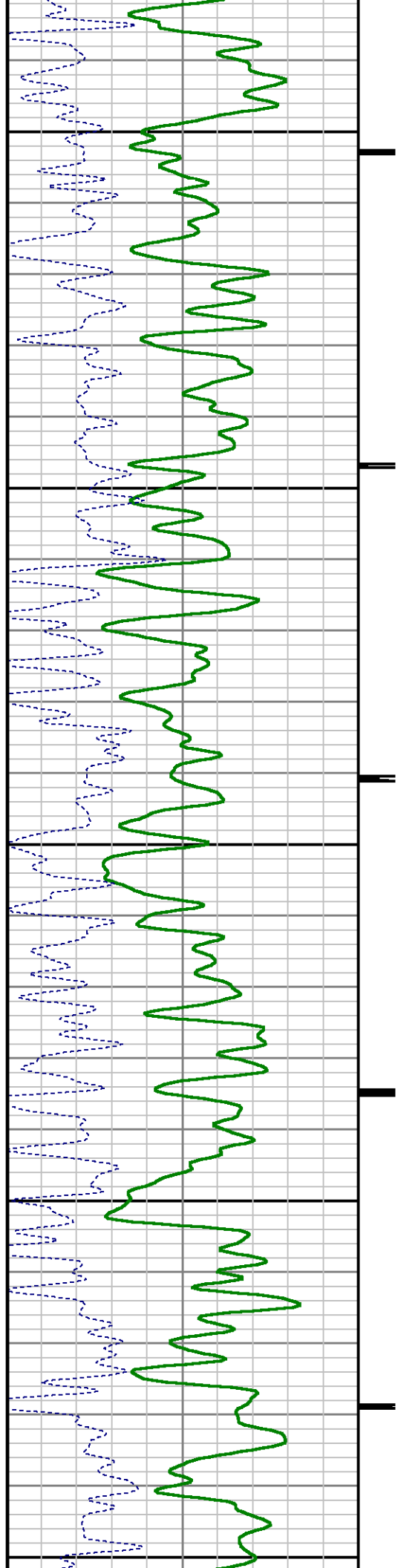


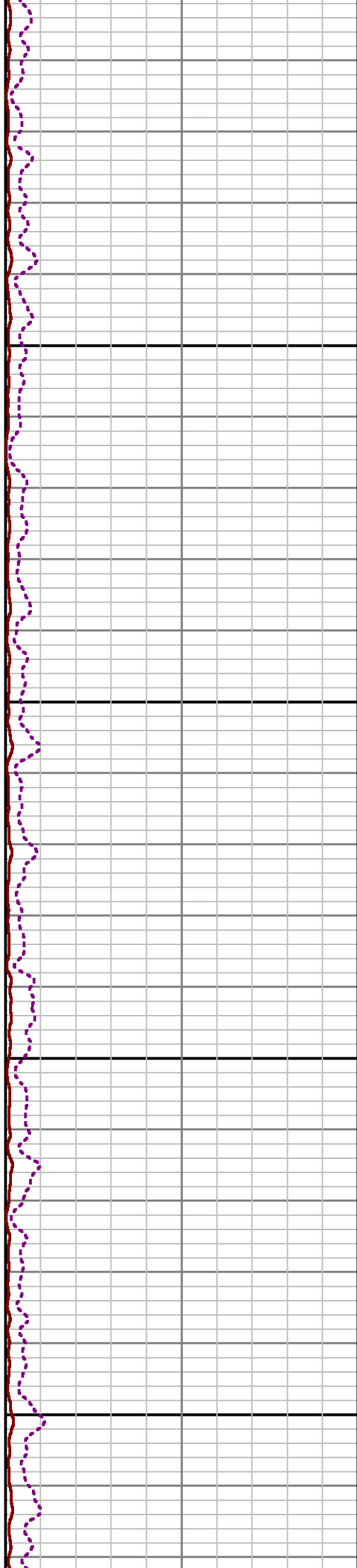
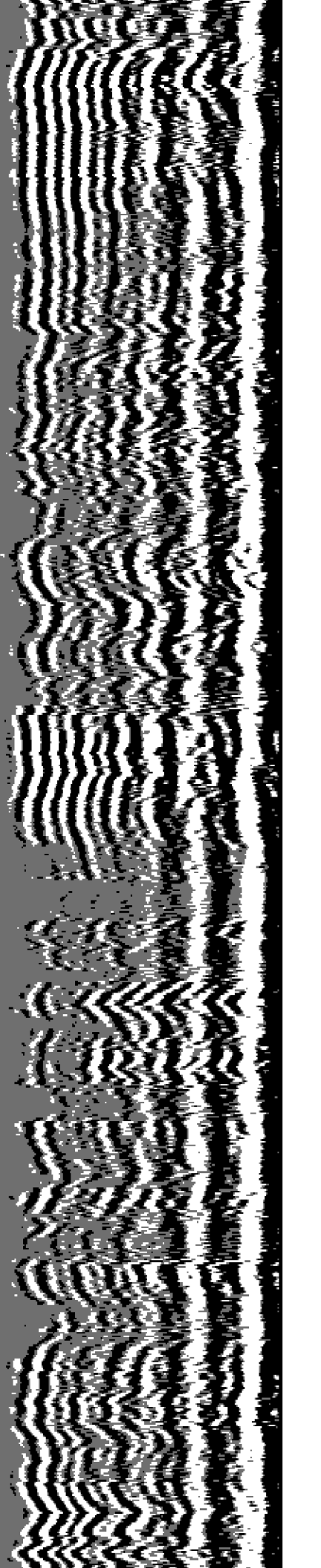




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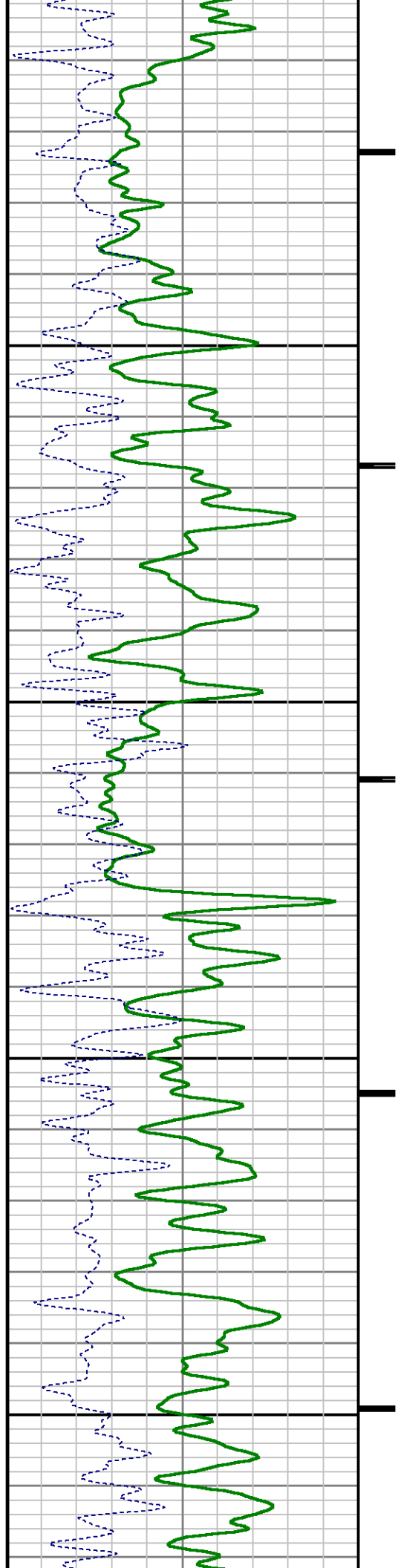
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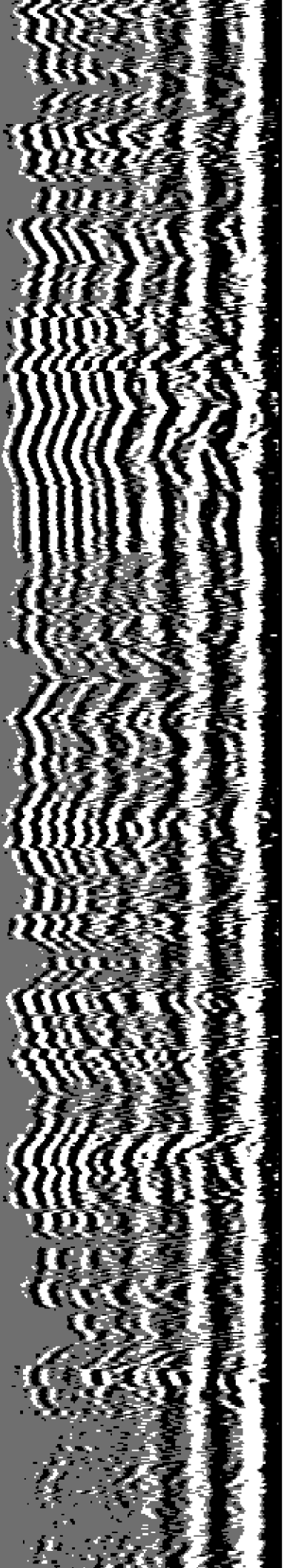




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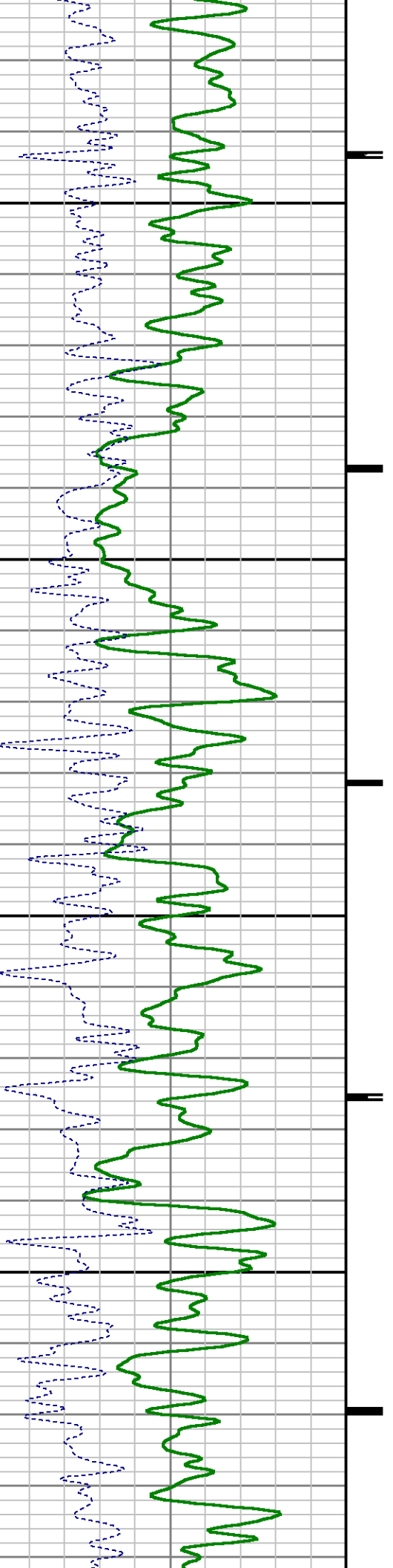
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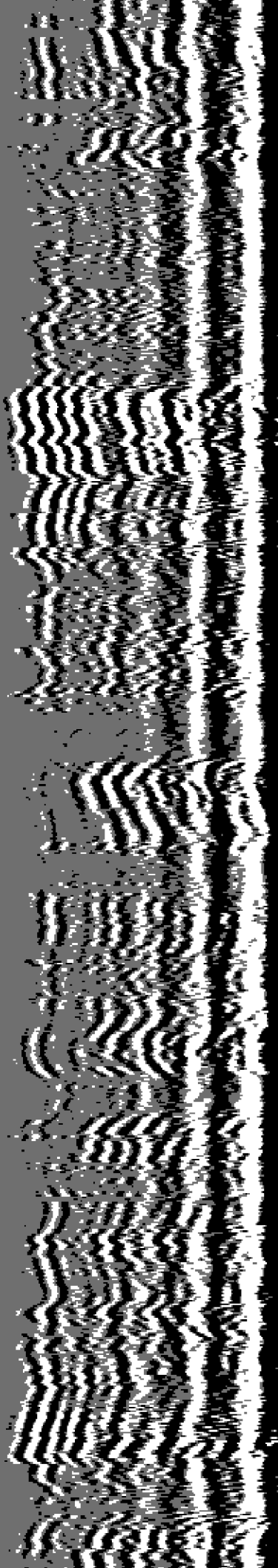




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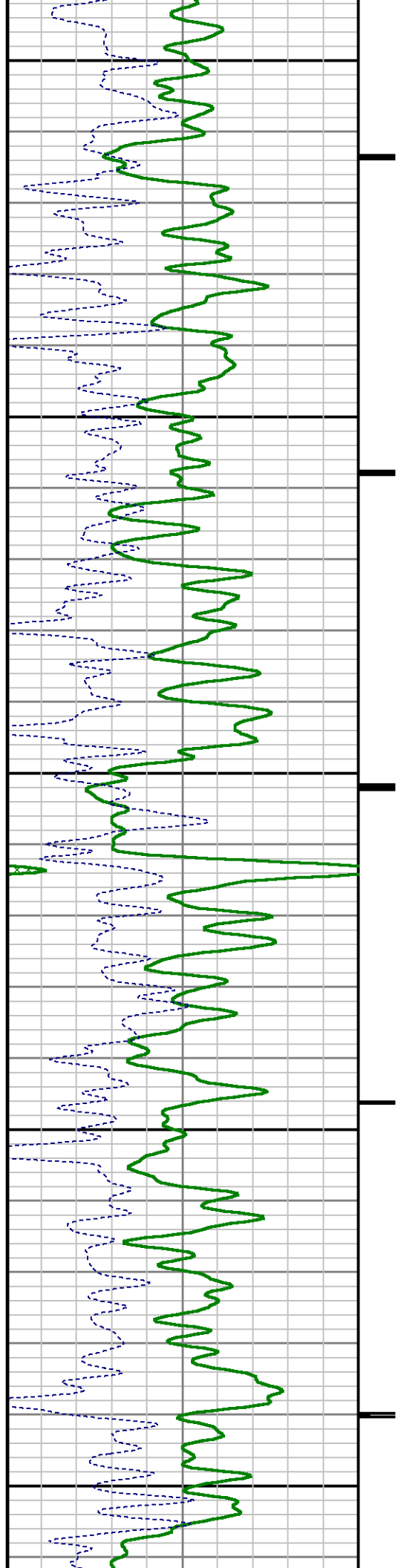


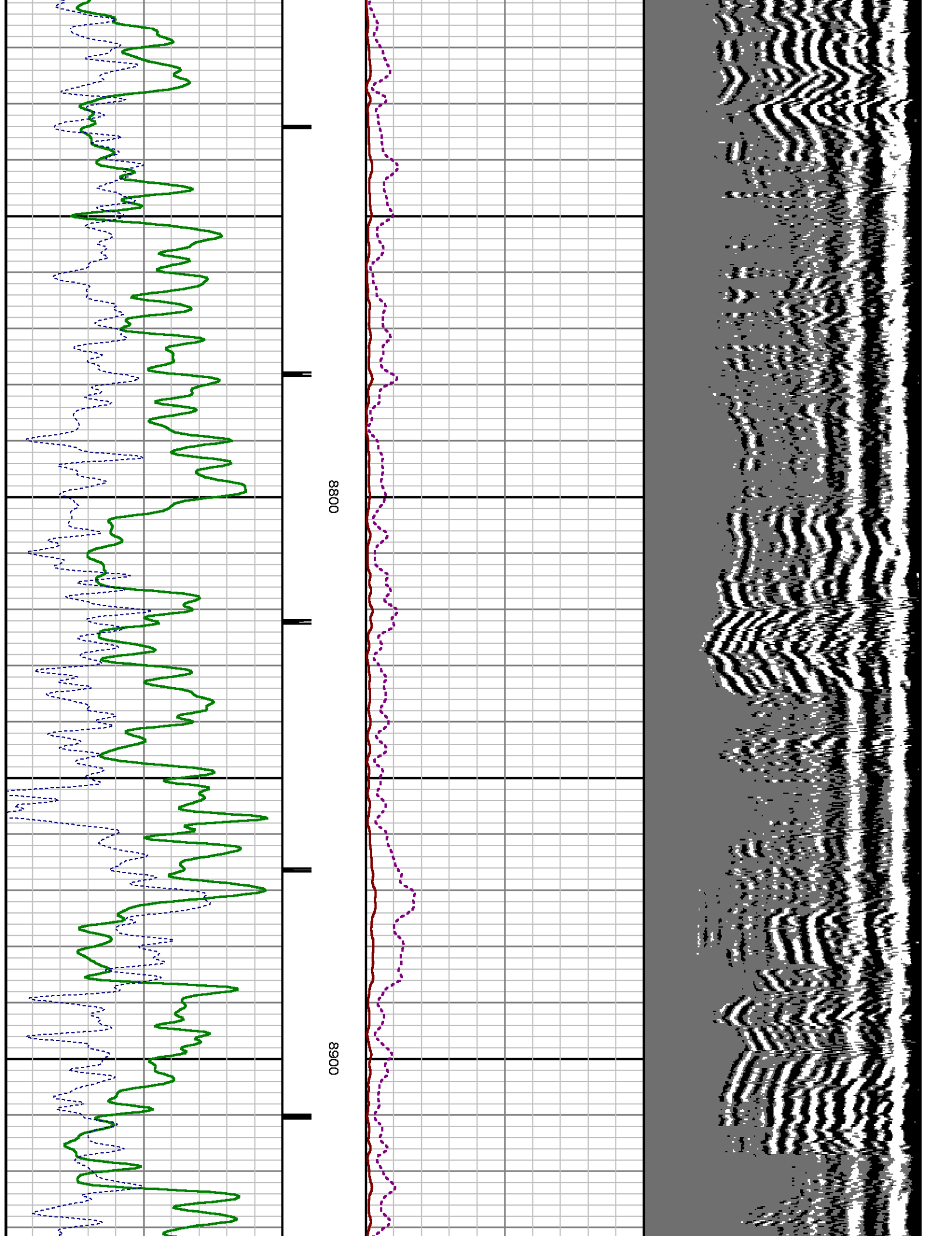


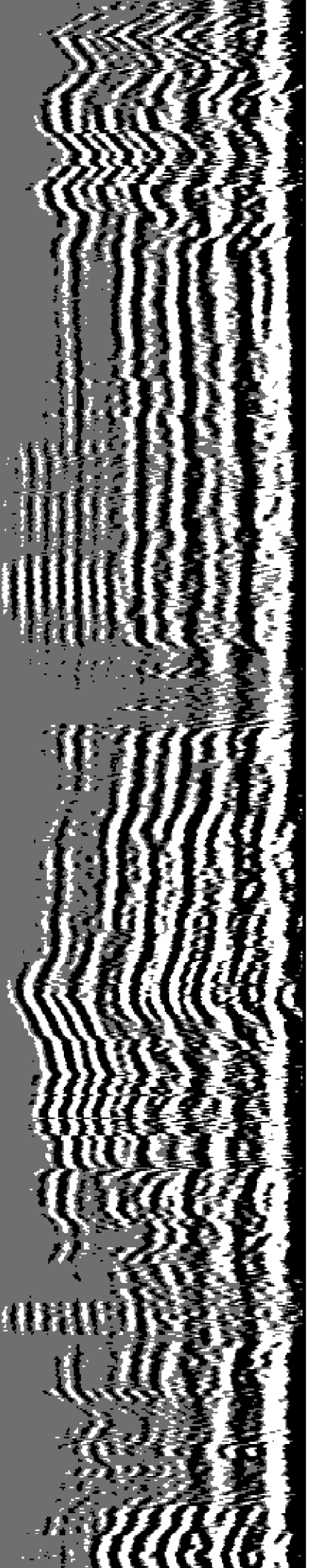
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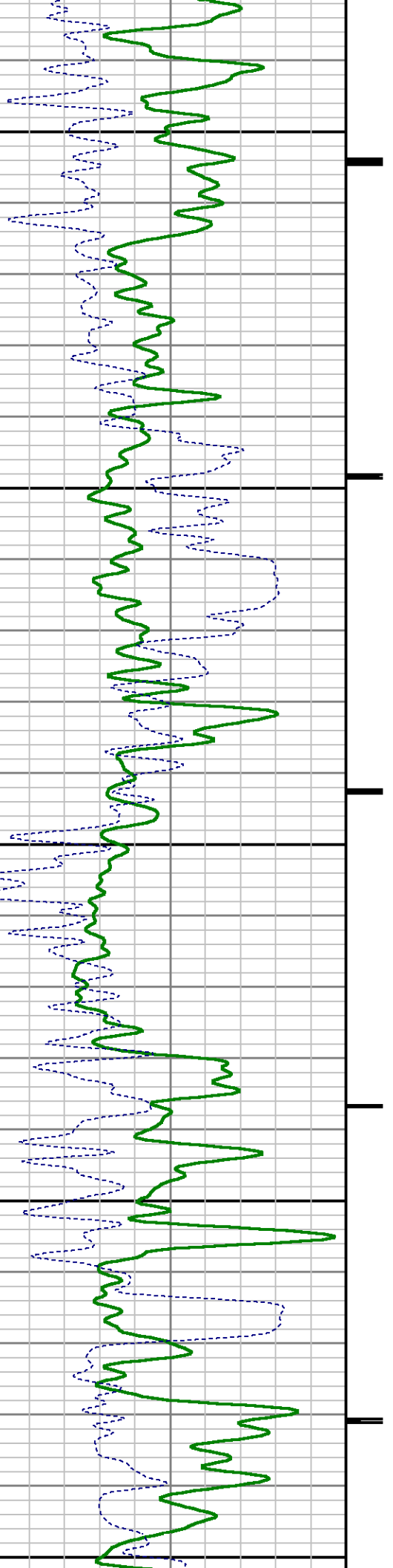


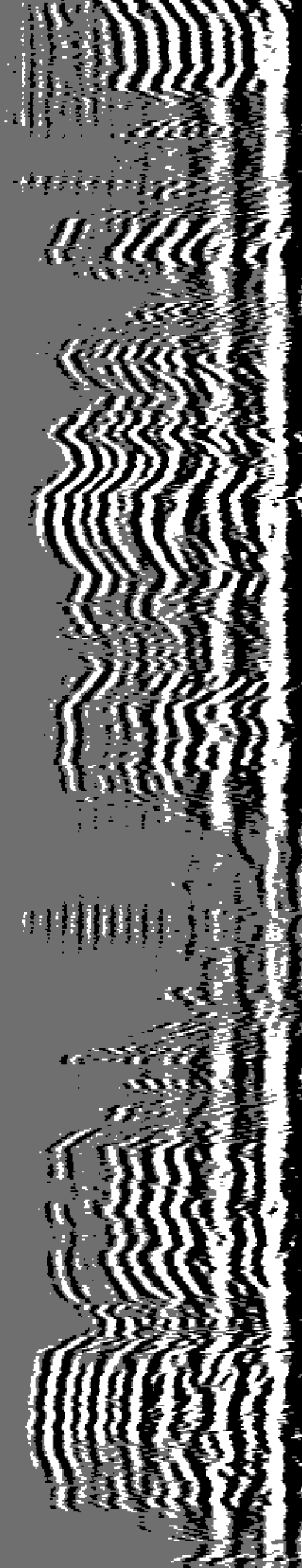




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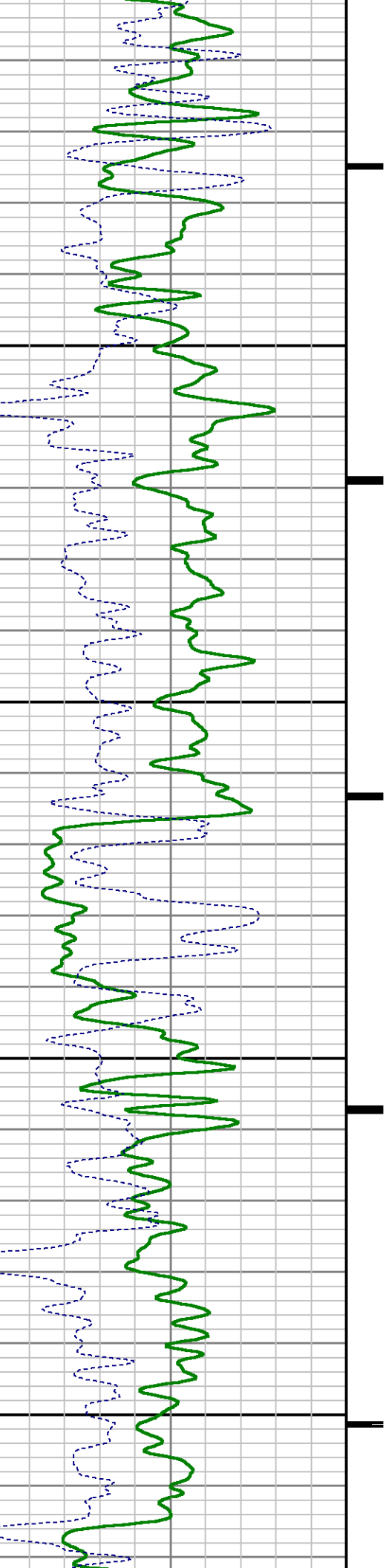
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9200

9300



RAL	Amp Gate Width Near	25.000	usec	29.905	9478.500
RAL	Amp Gate Width Radial	25.000	usec	29.905	9478.500
RAL	casing od	4.500	inches	29.905	9478.500
RAL	casing wt	11.600	lbm/ft	29.905	9478.500
RAL	FB Start Far	291.900	usec	29.905	9478.500
RAL	FB Start Near	180.000	usec	29.905	9478.500
RAL	FB Start Radial	180.000	usec	29.905	9478.500
RAL	FB Thresh Far	10.000	mv	29.905	9478.500
RAL	FB Thresh Near	4.000	mv	29.905	9478.500
RAL	FB Thresh Radial	4.000	mv	29.905	9478.500
RAL	Fluid Travel Time	200.000	usec/ft	29.905	9478.062

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

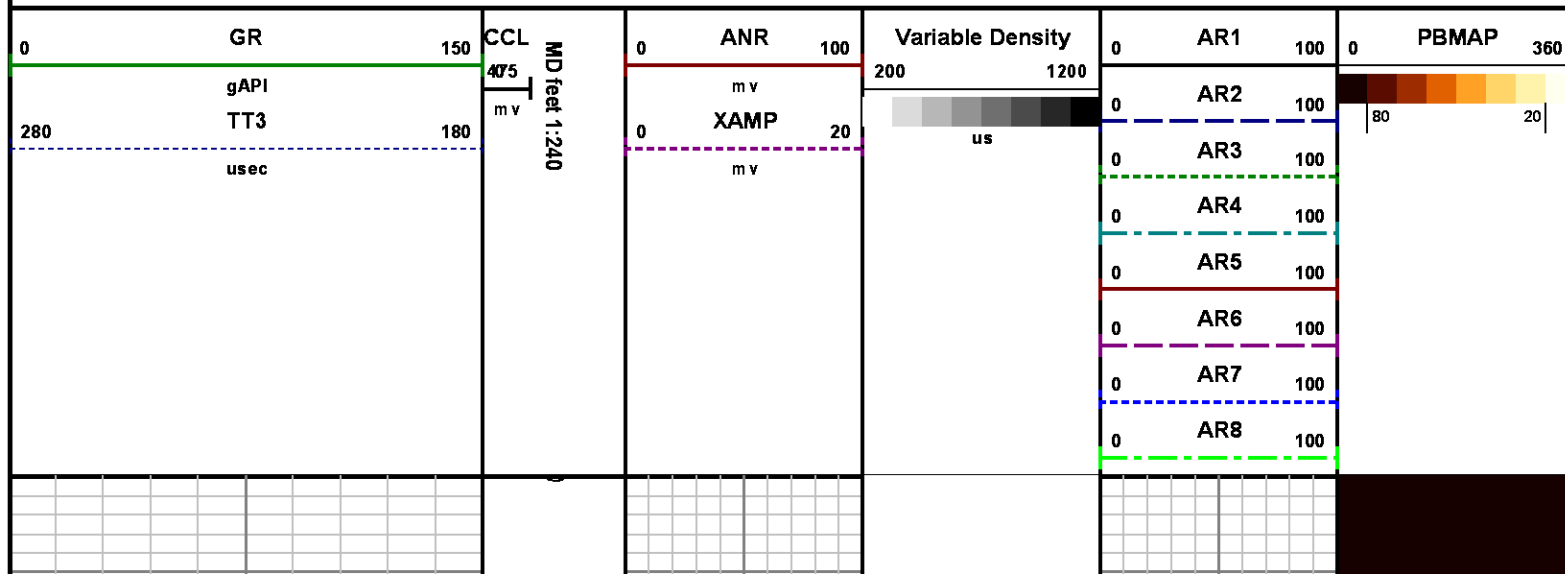
Well : FEDERAL PA 331-21

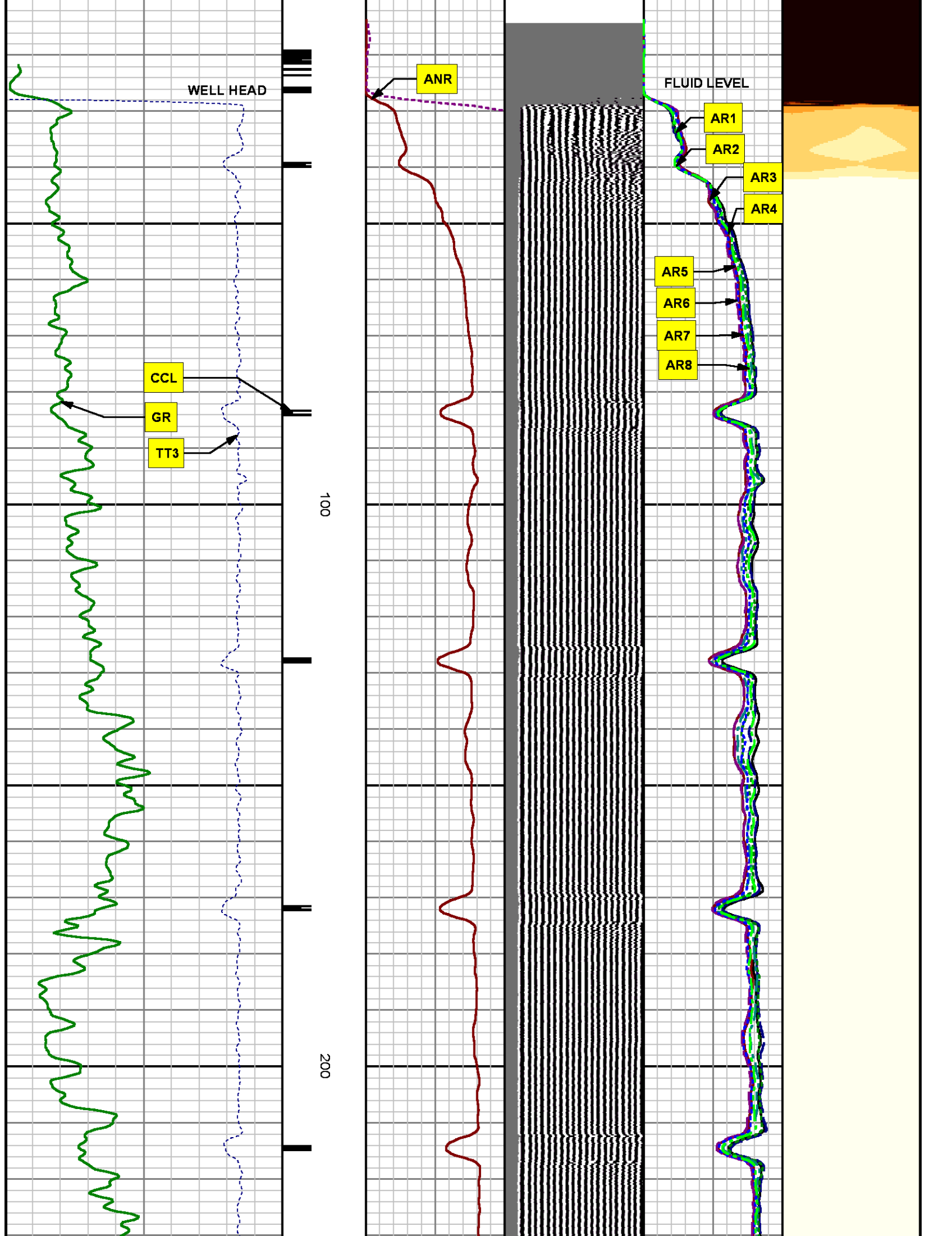
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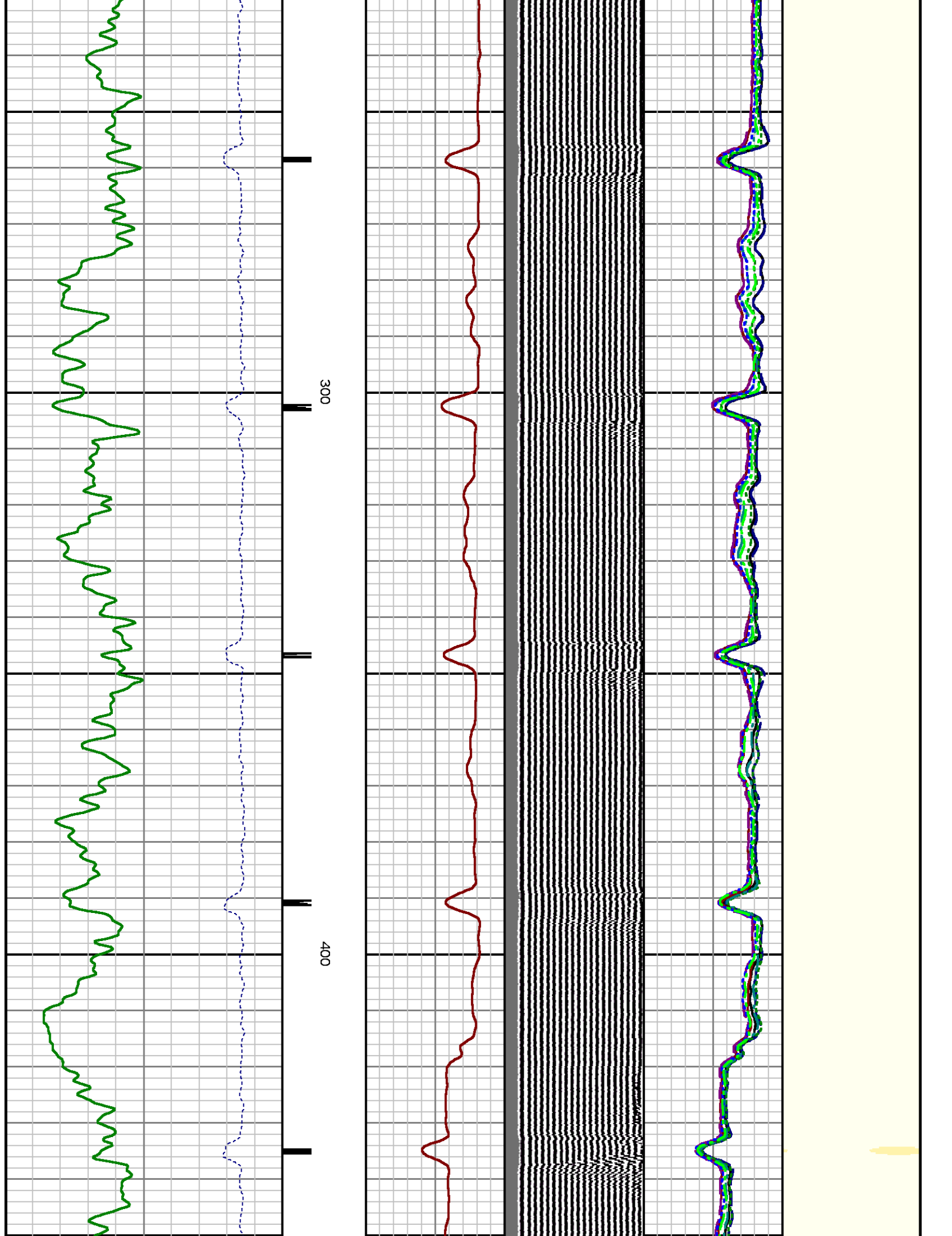
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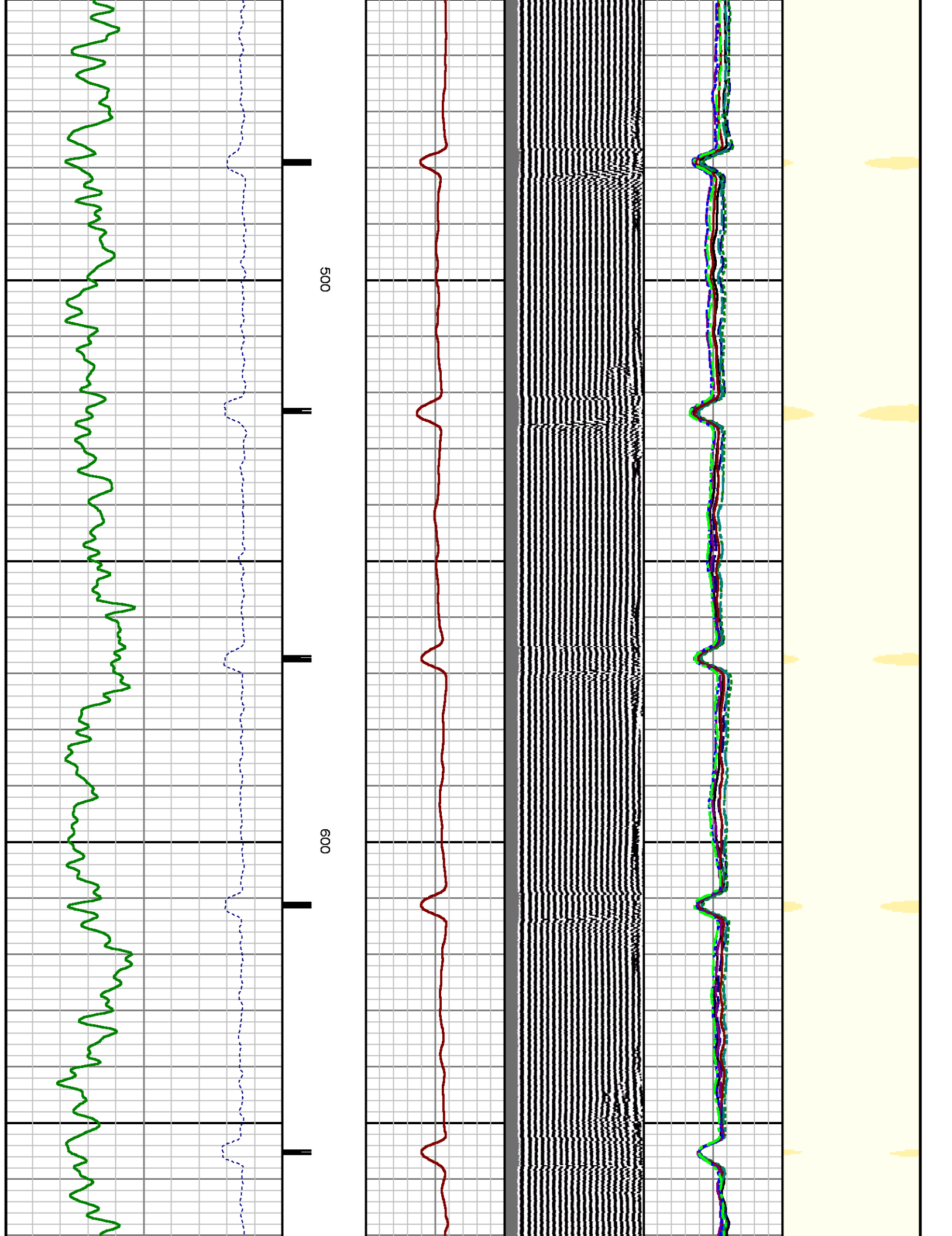
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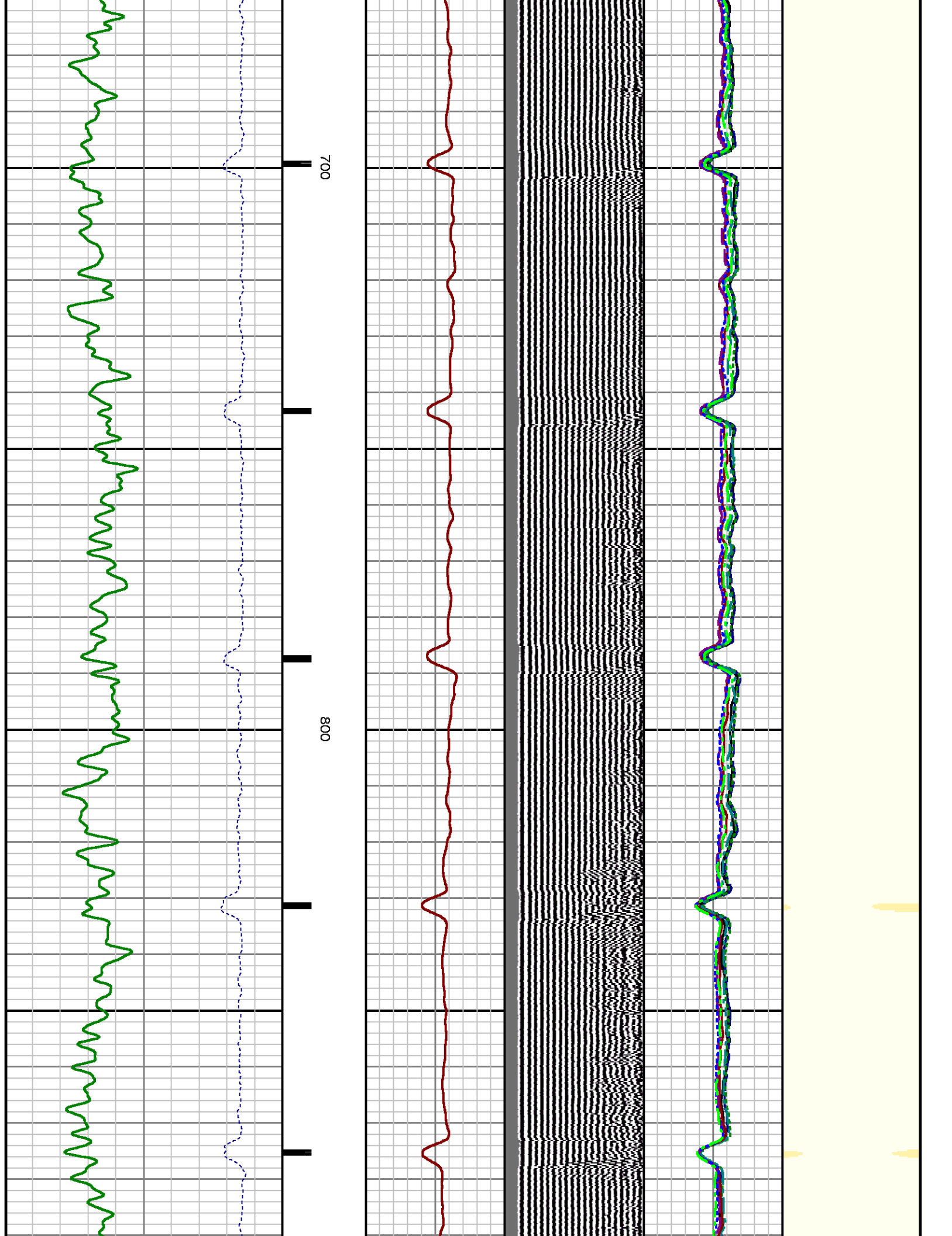
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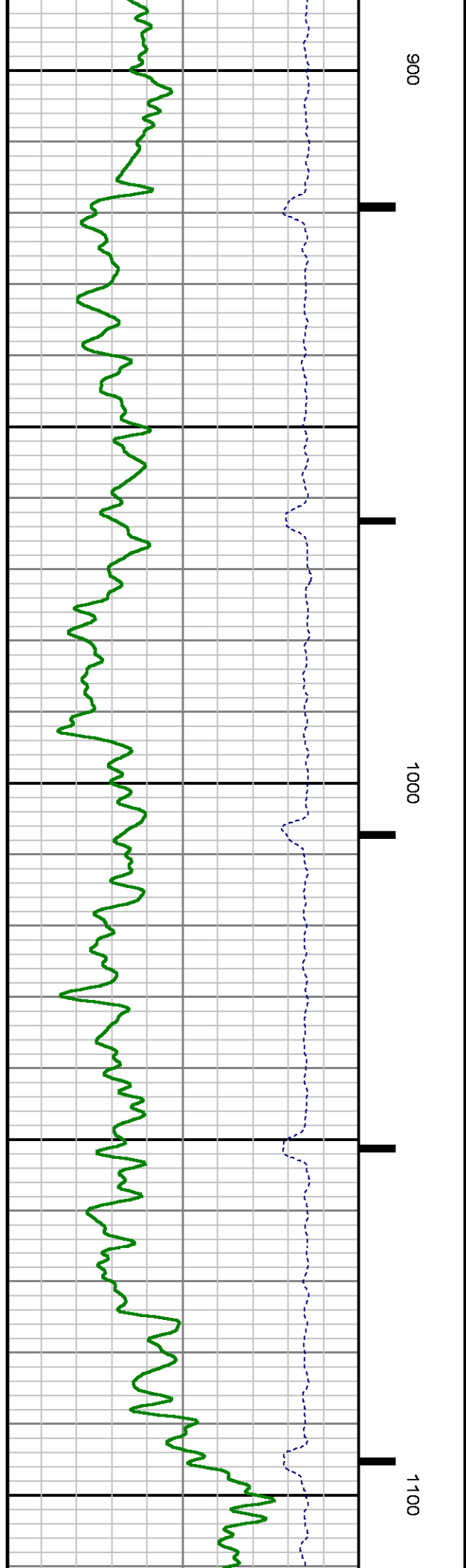
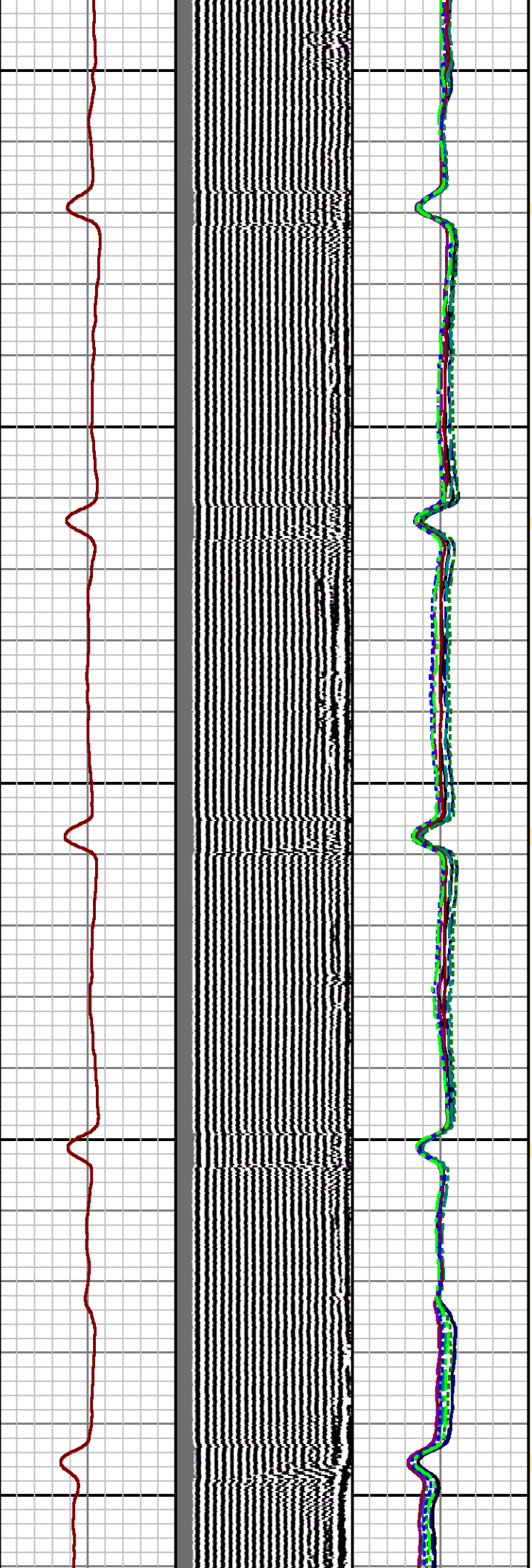
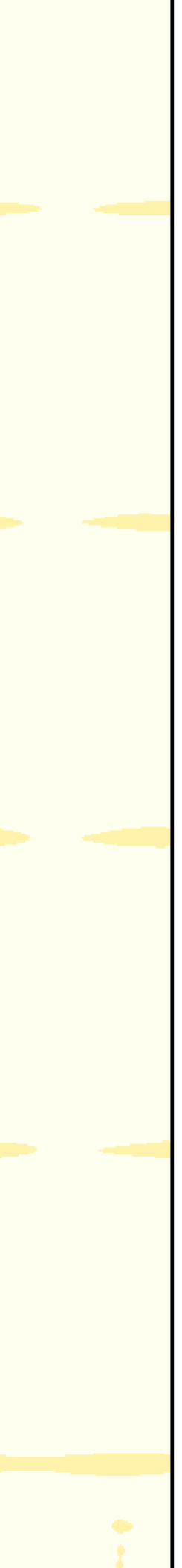


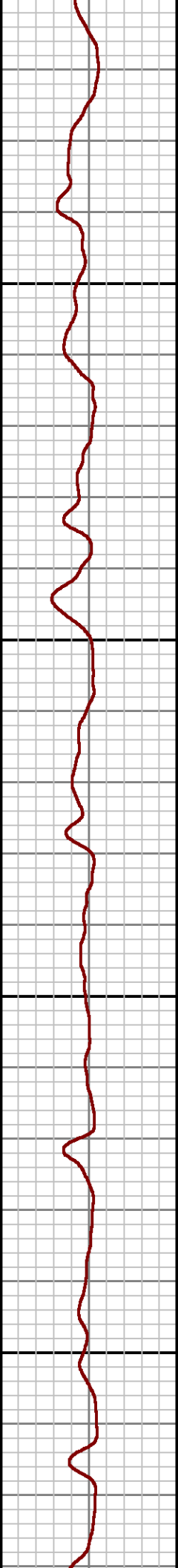
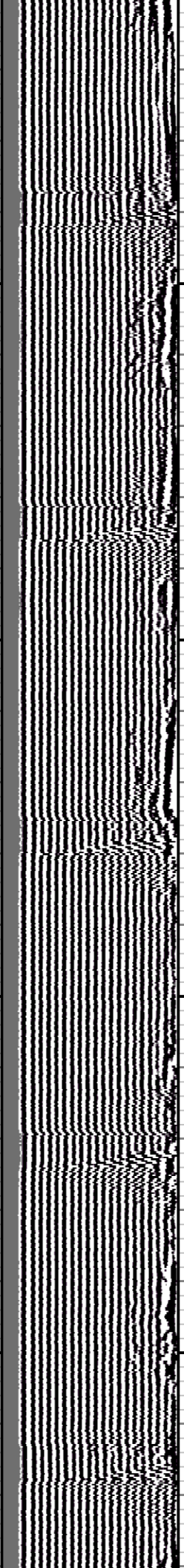
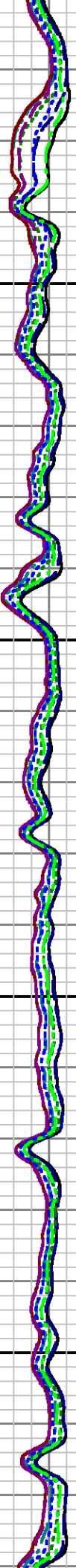
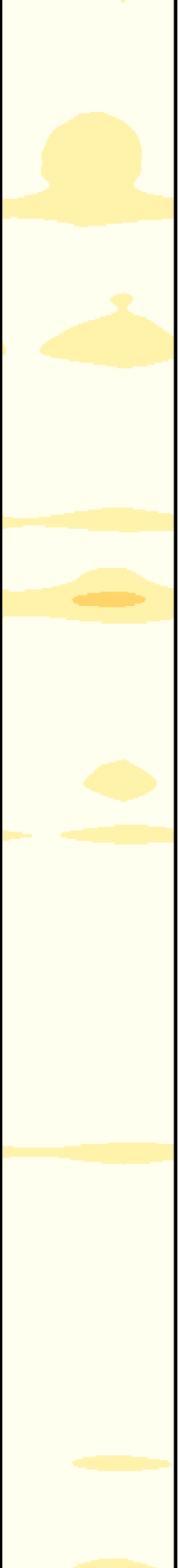






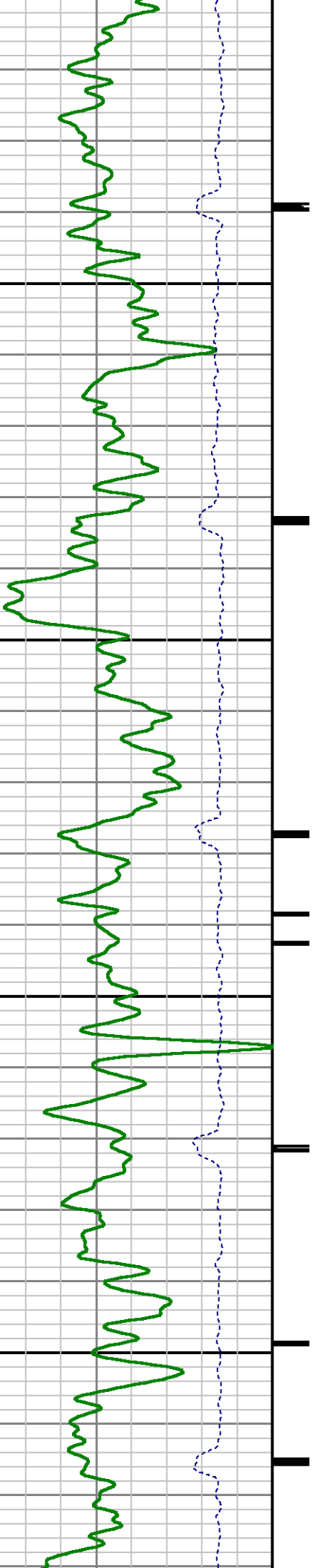


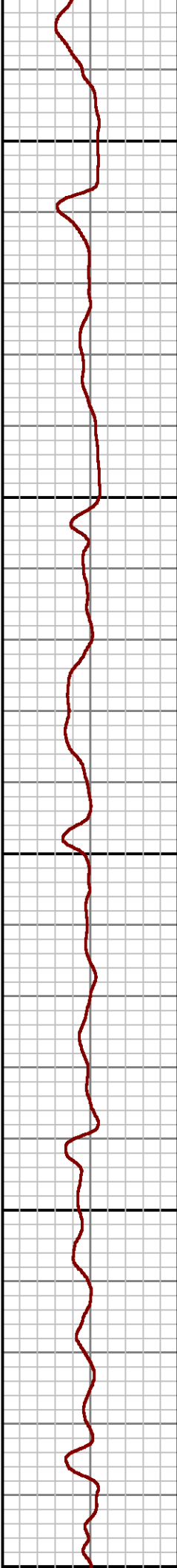
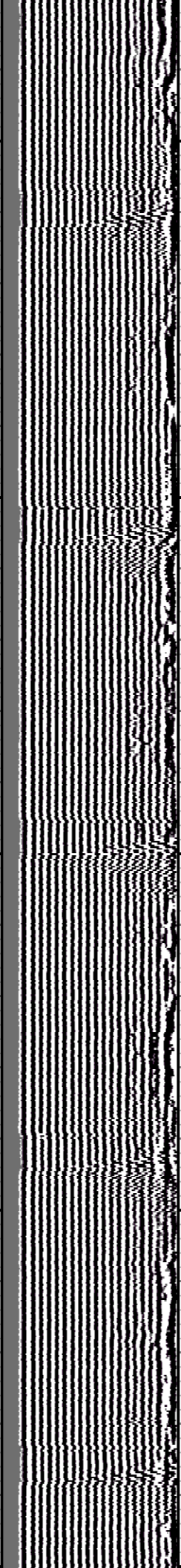
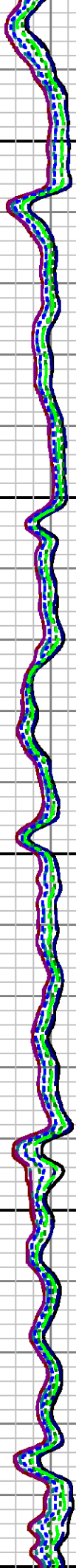


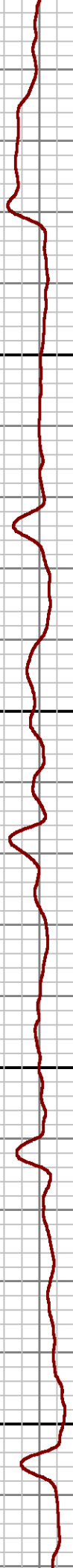
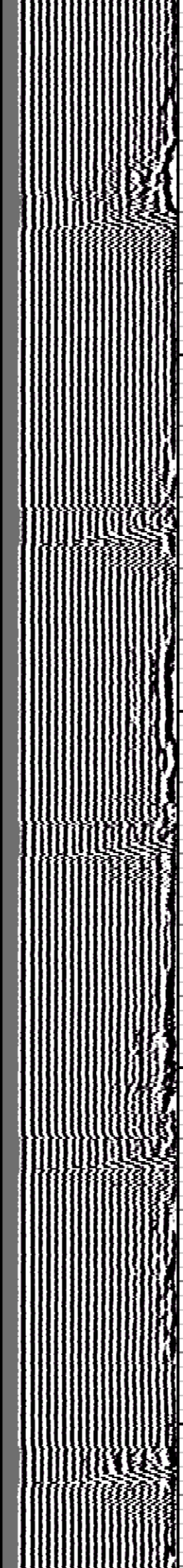
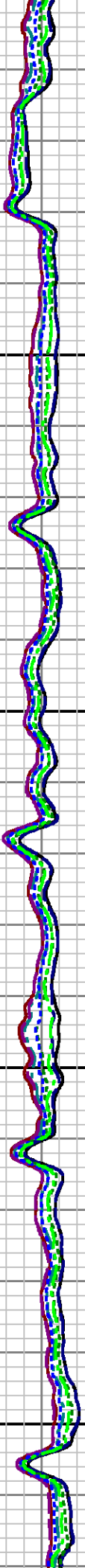


1200

1300

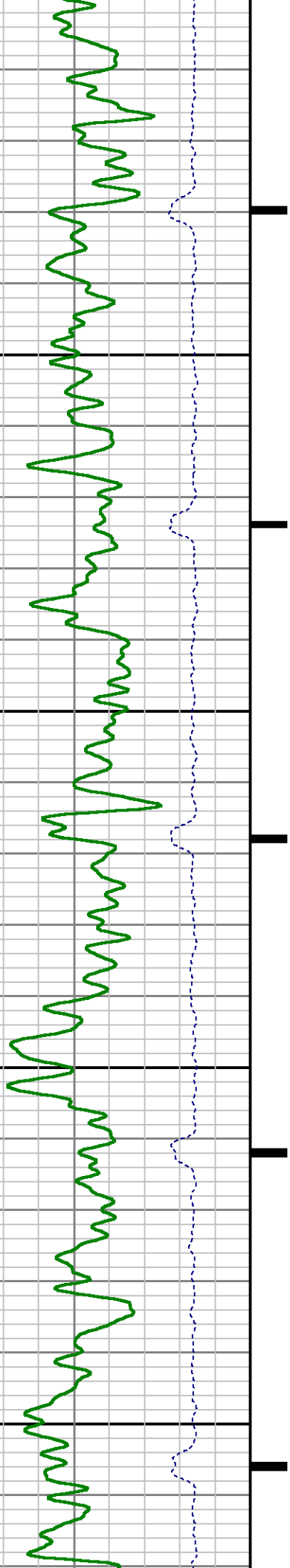


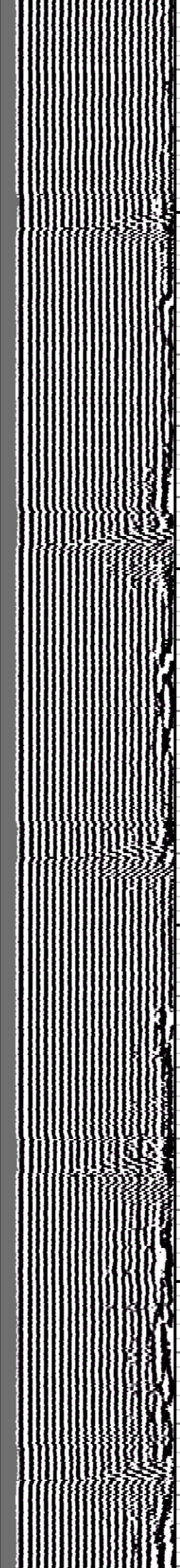
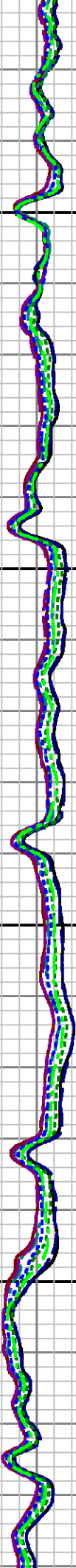
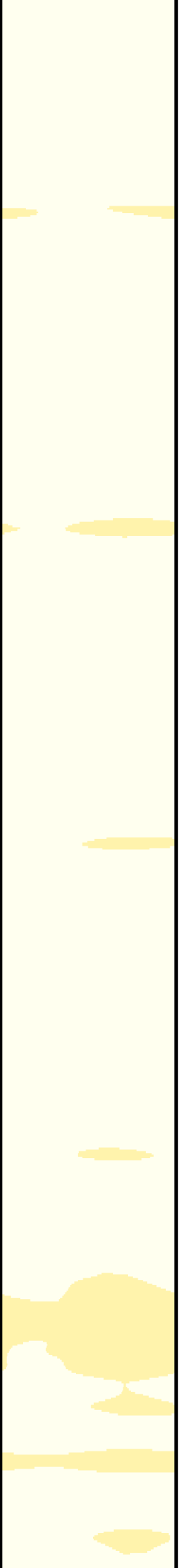




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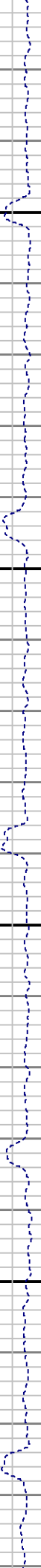
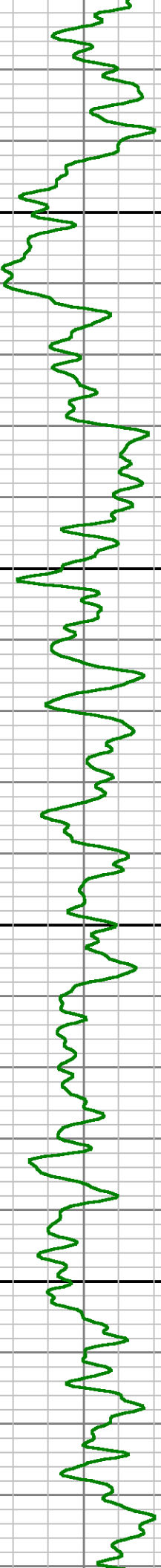
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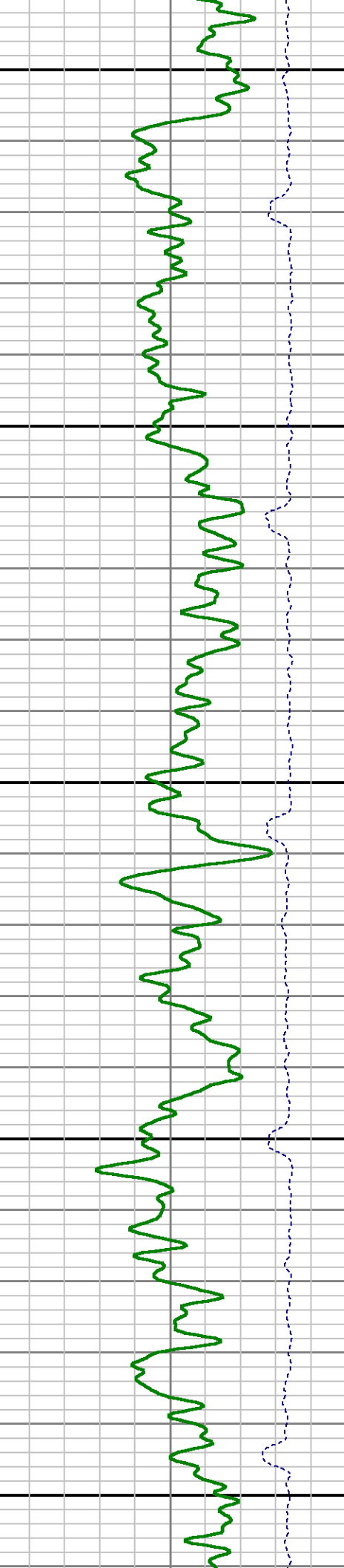
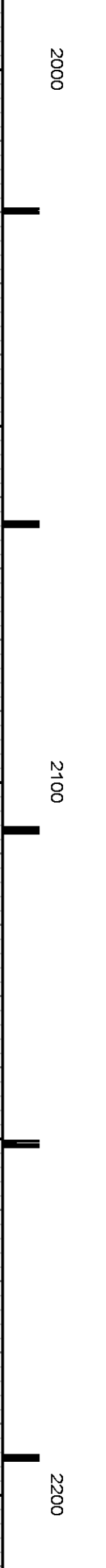
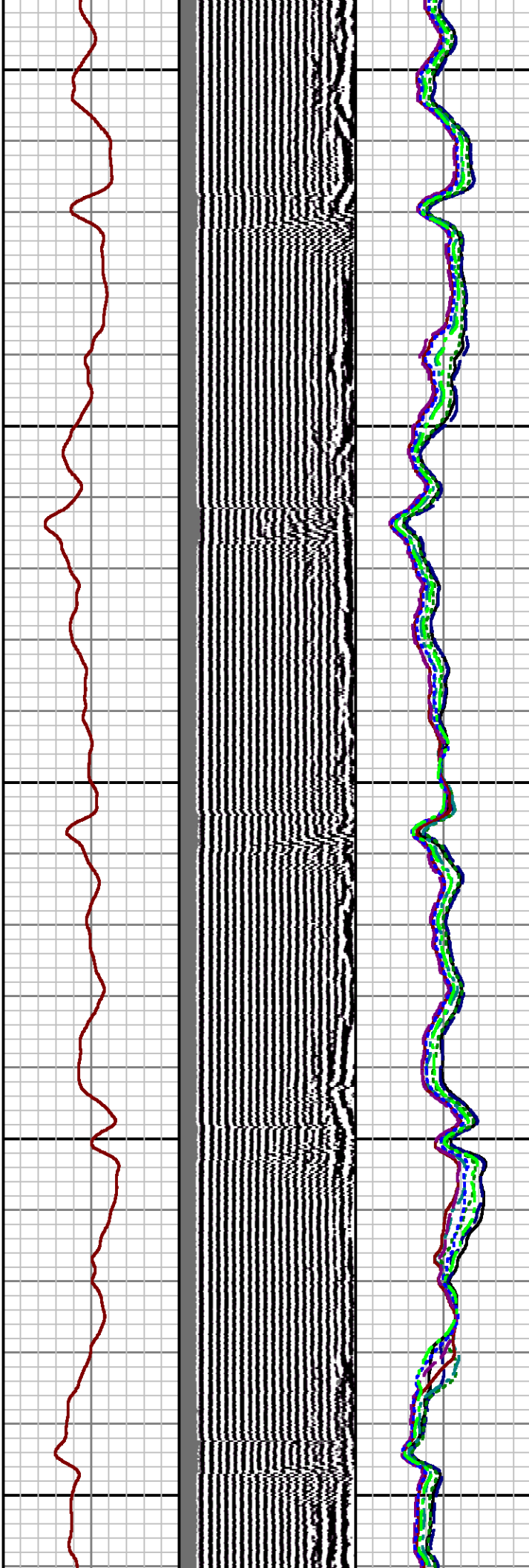
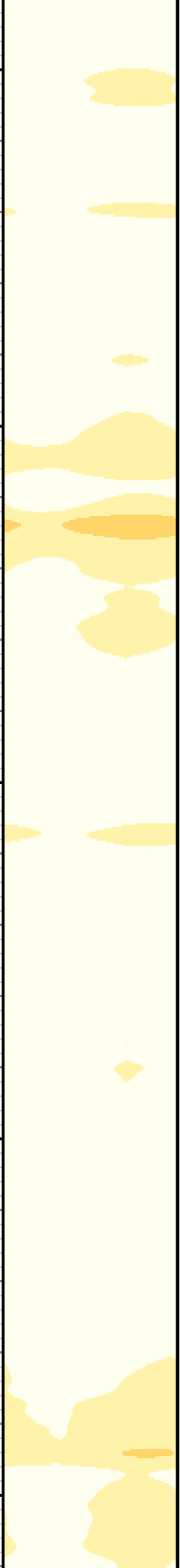


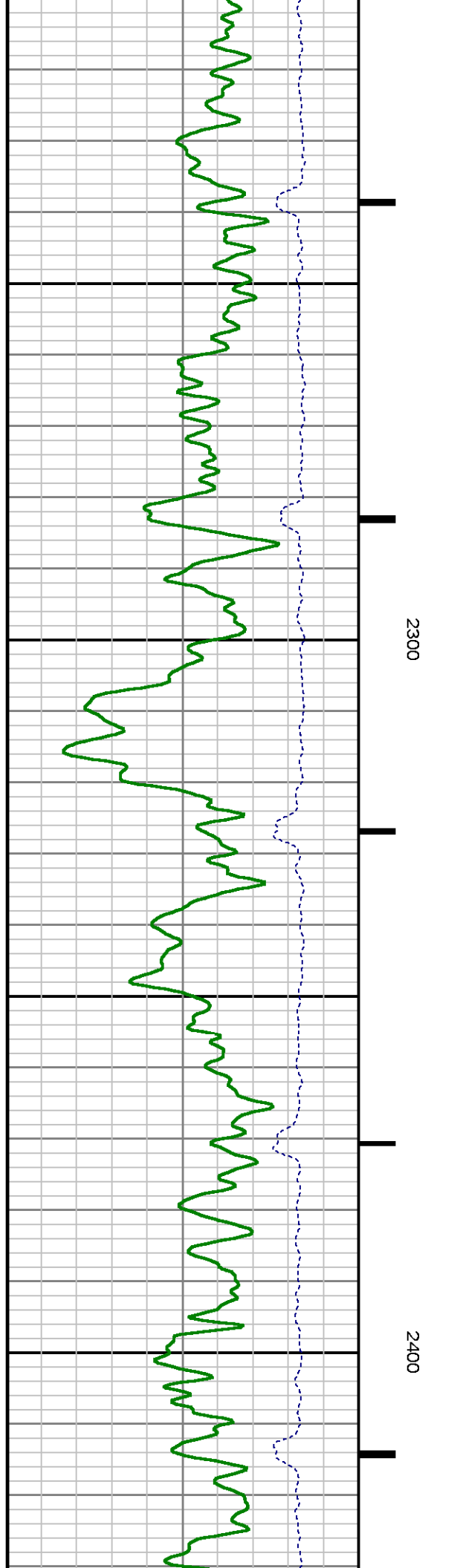
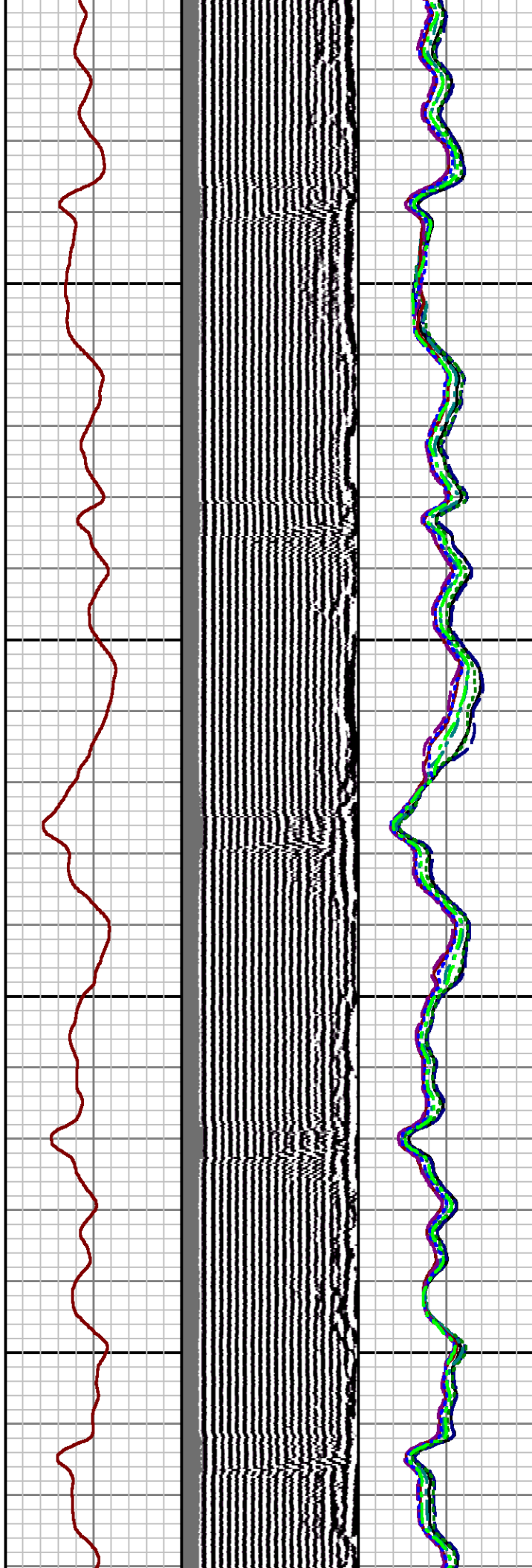
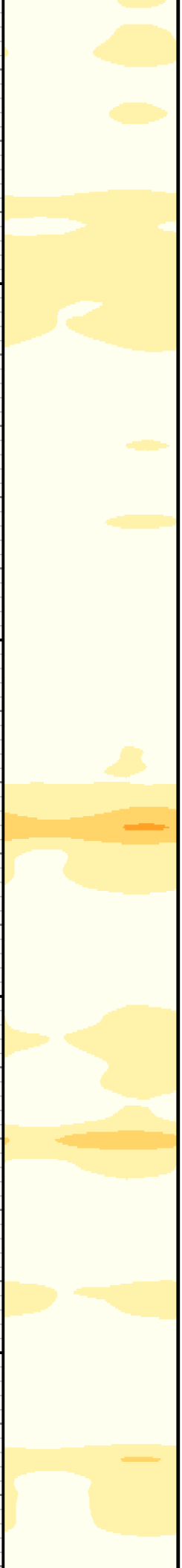


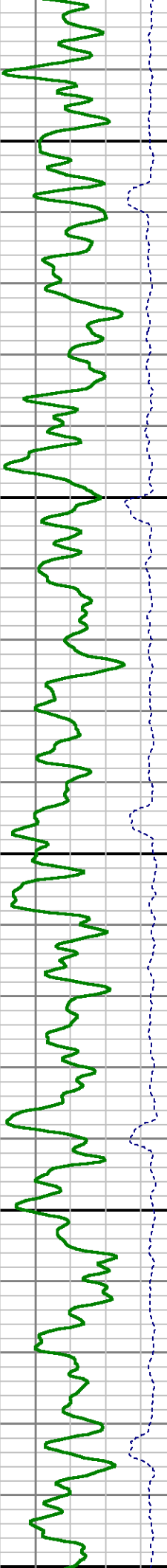
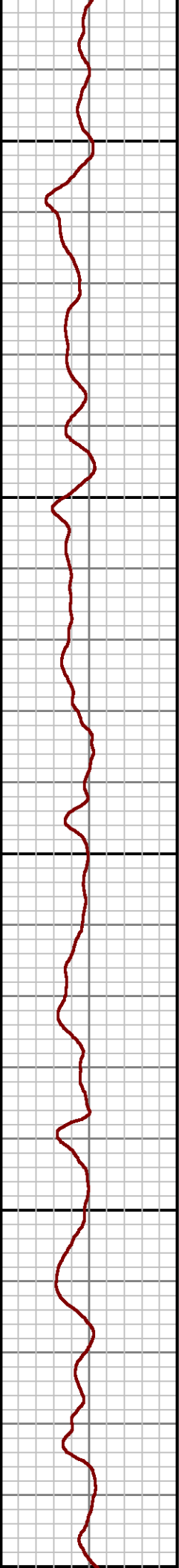
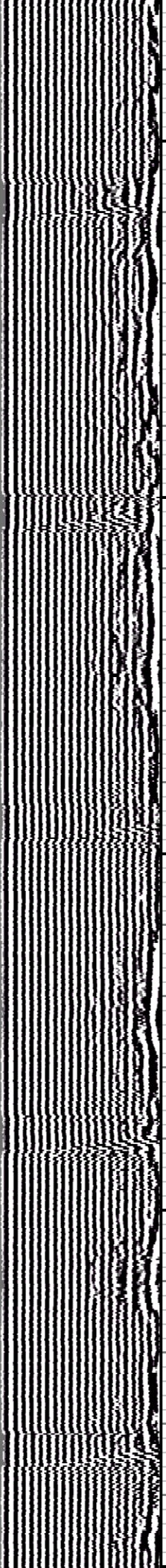
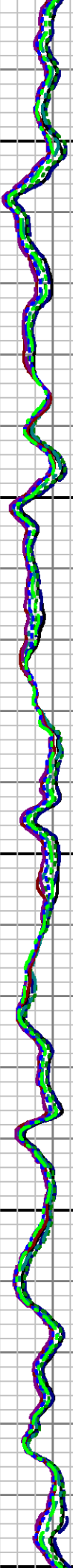
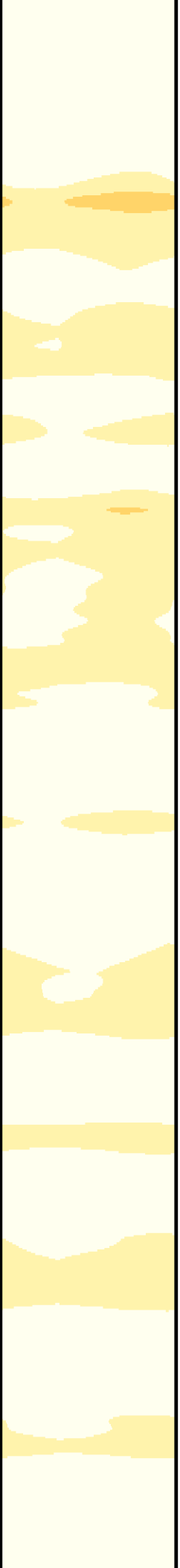
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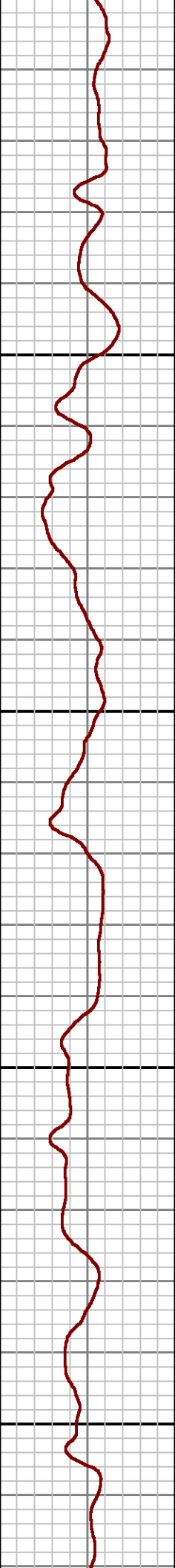
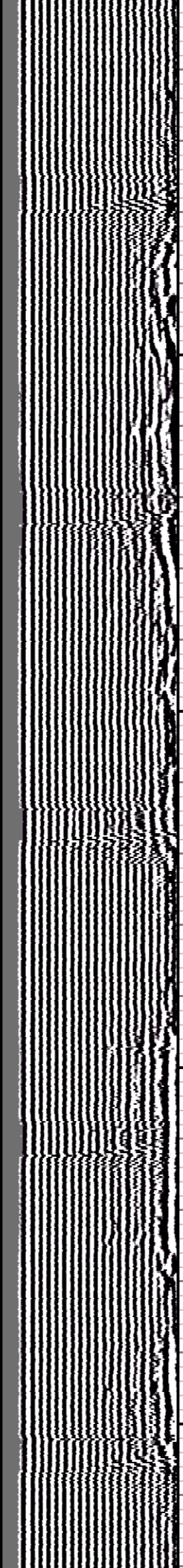
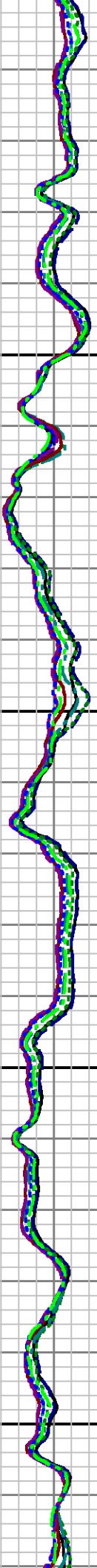
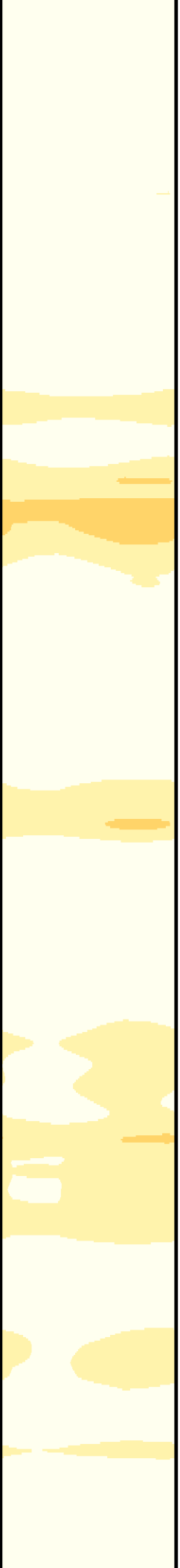
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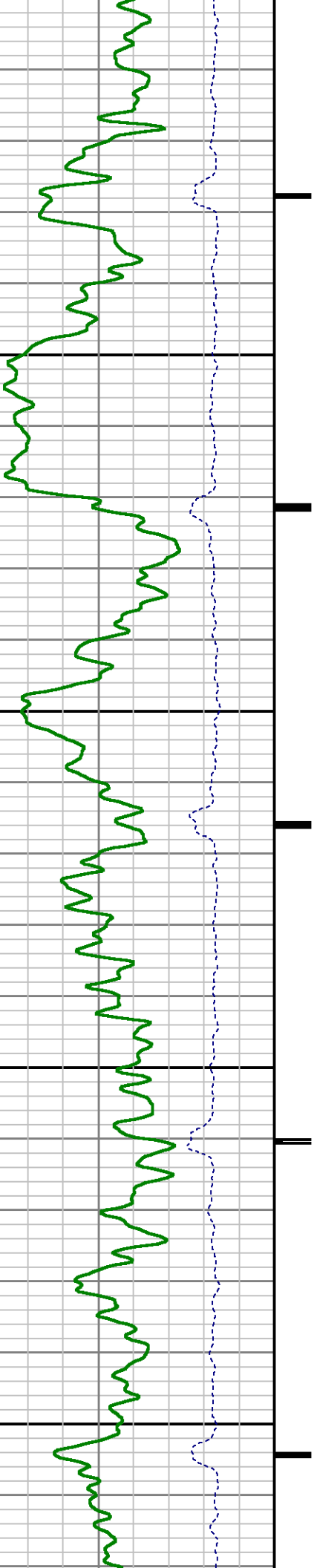


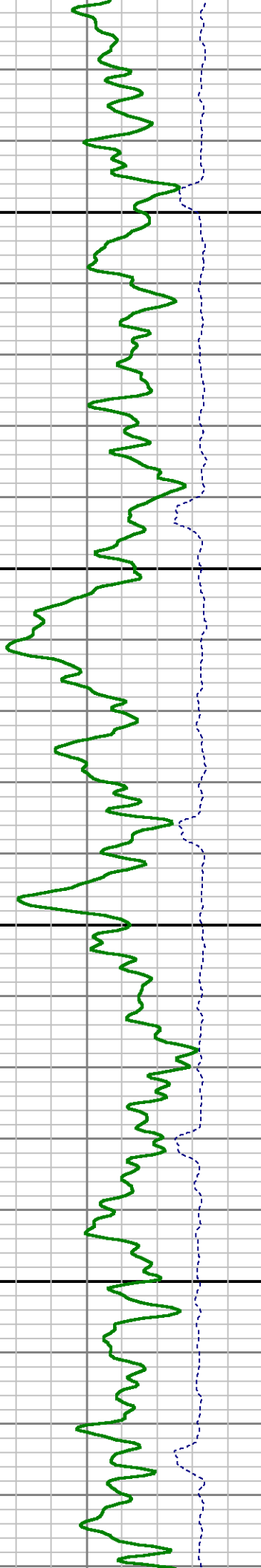
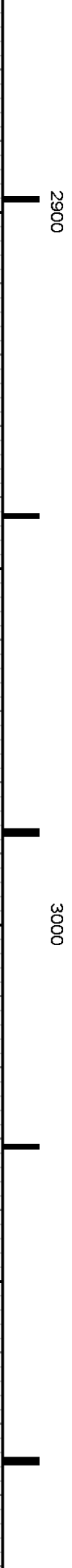
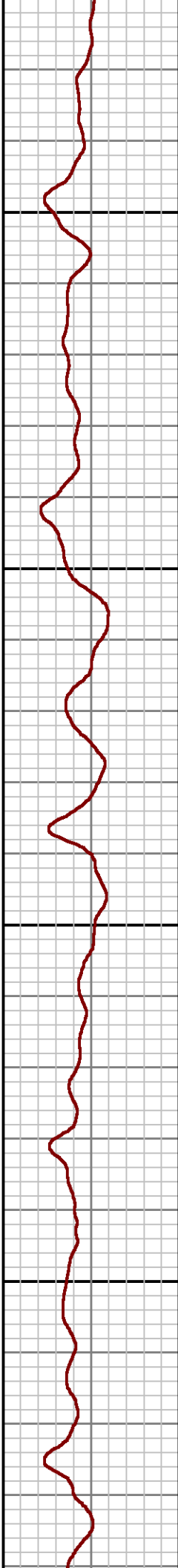
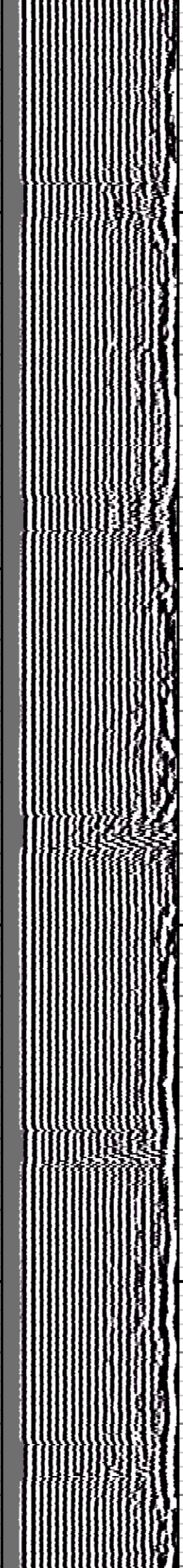
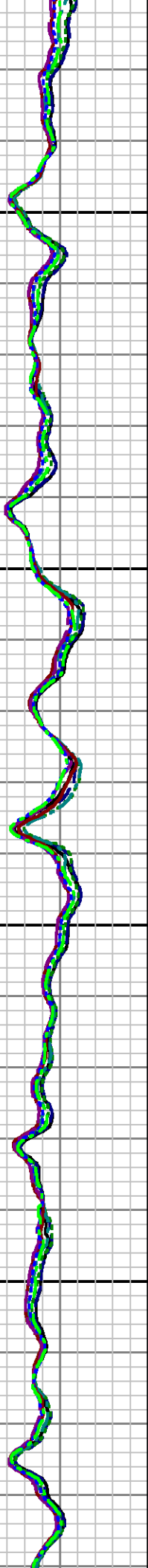
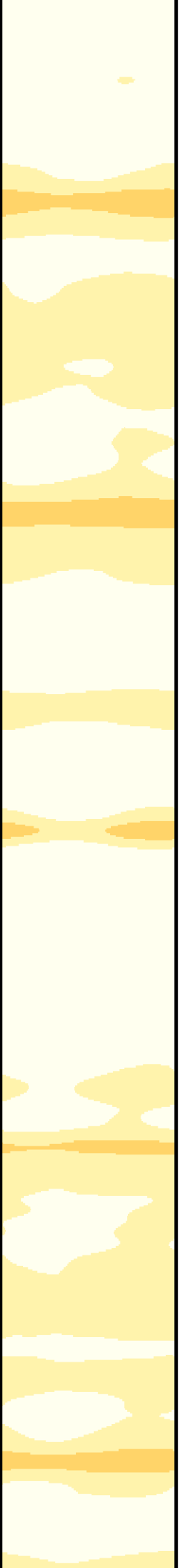


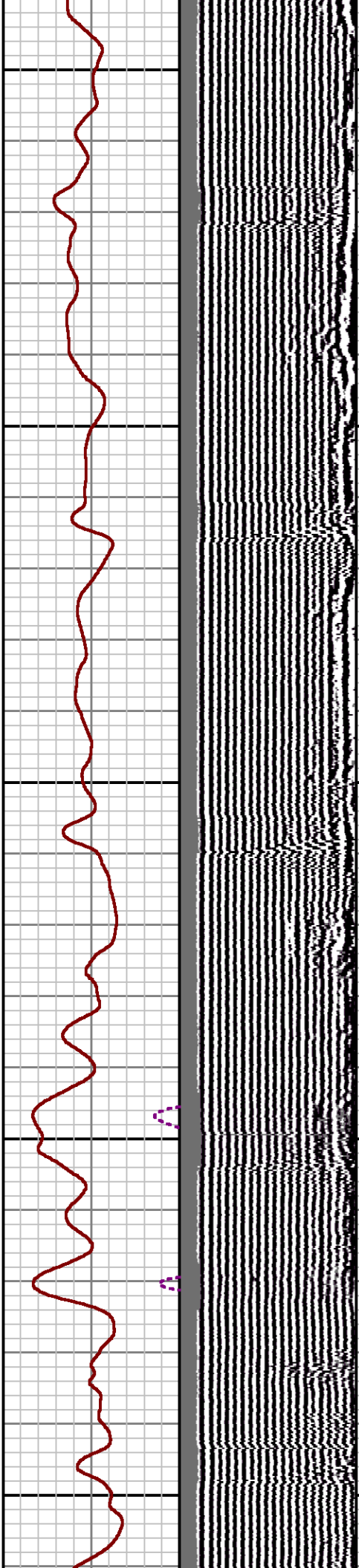
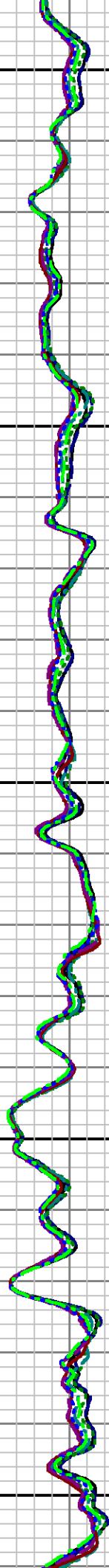
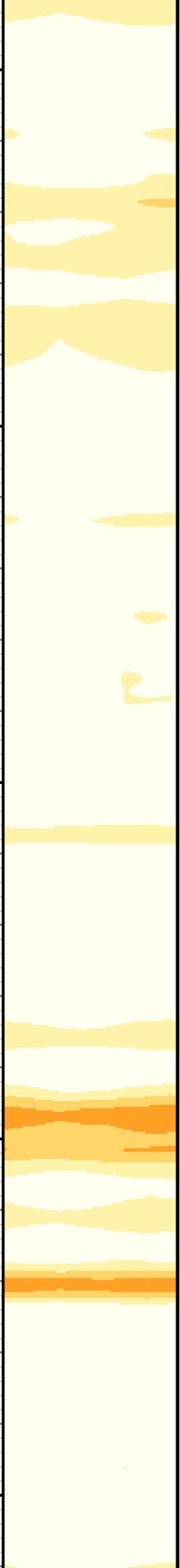


2700

2800



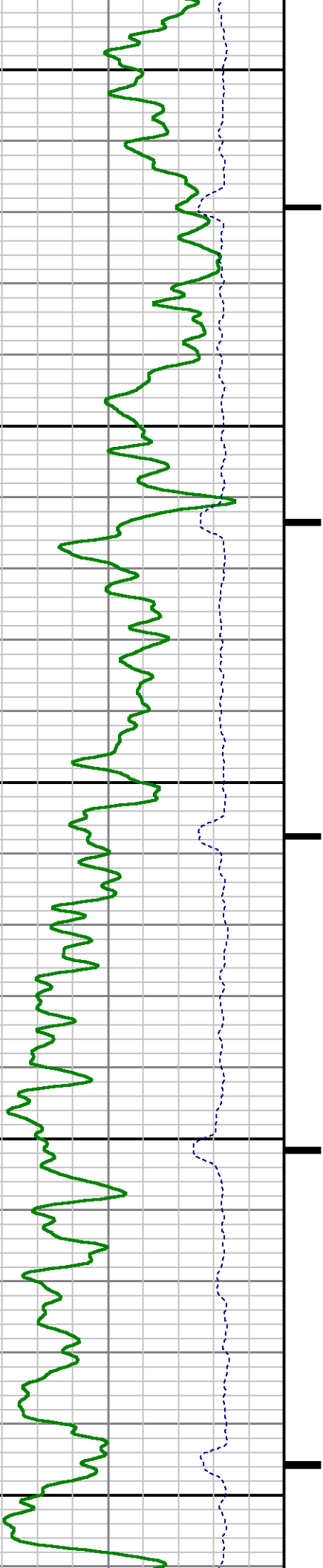


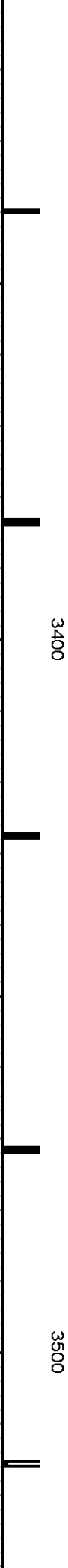
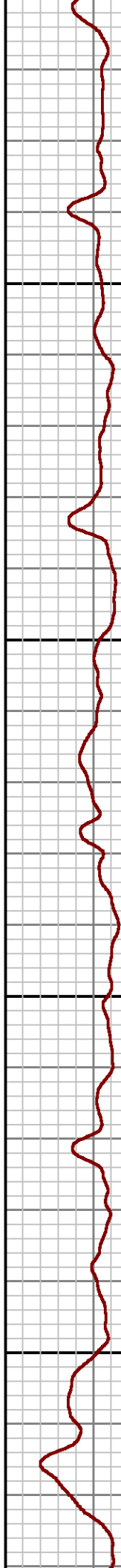
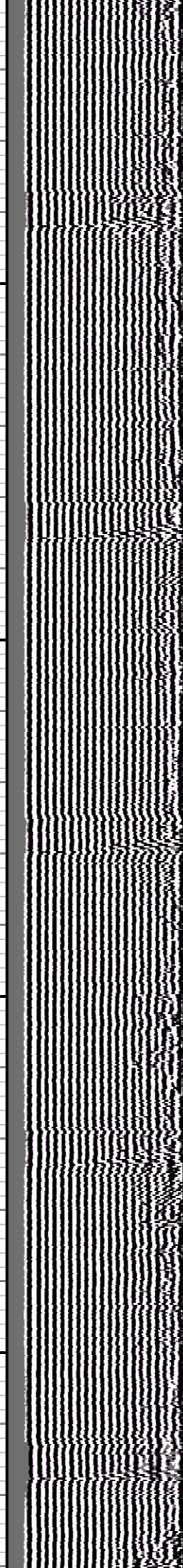
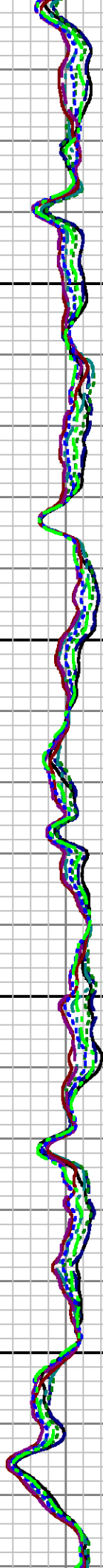


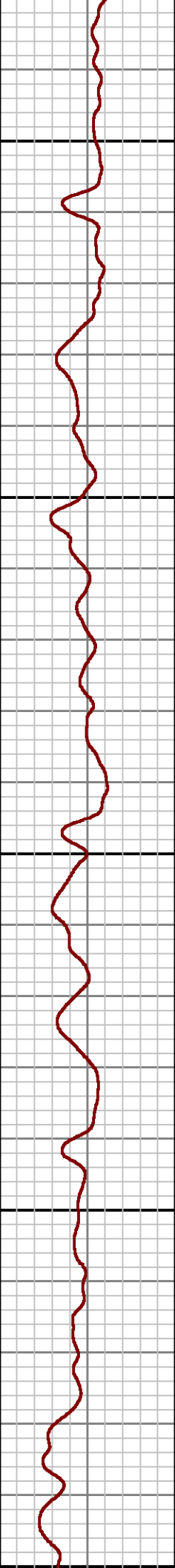
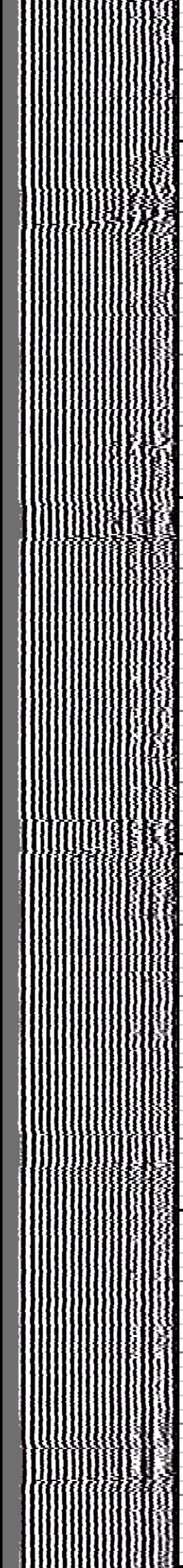
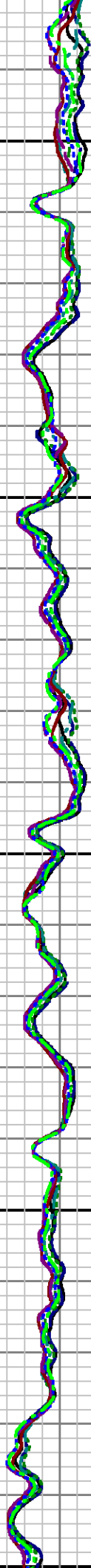
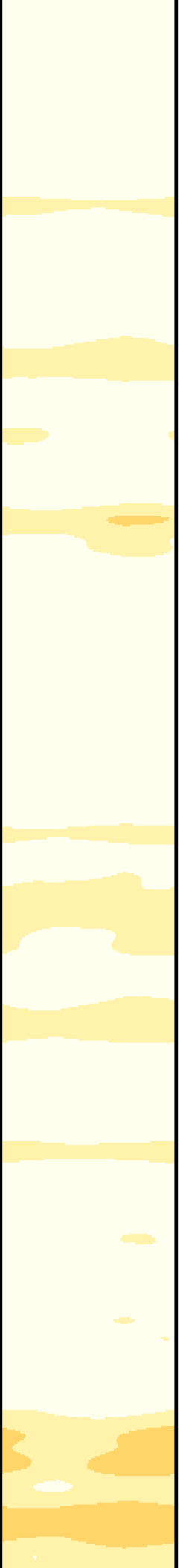
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3200

3300

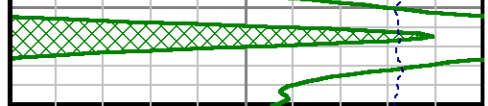
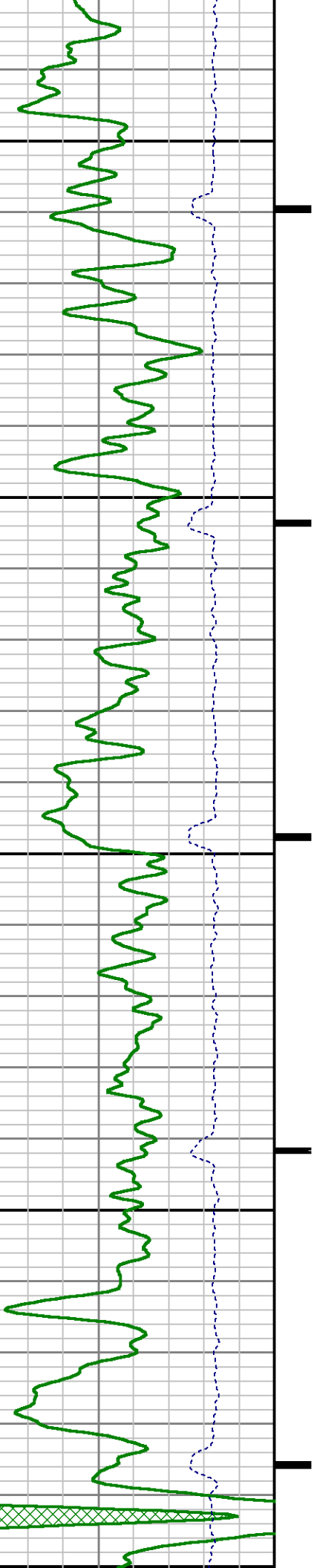


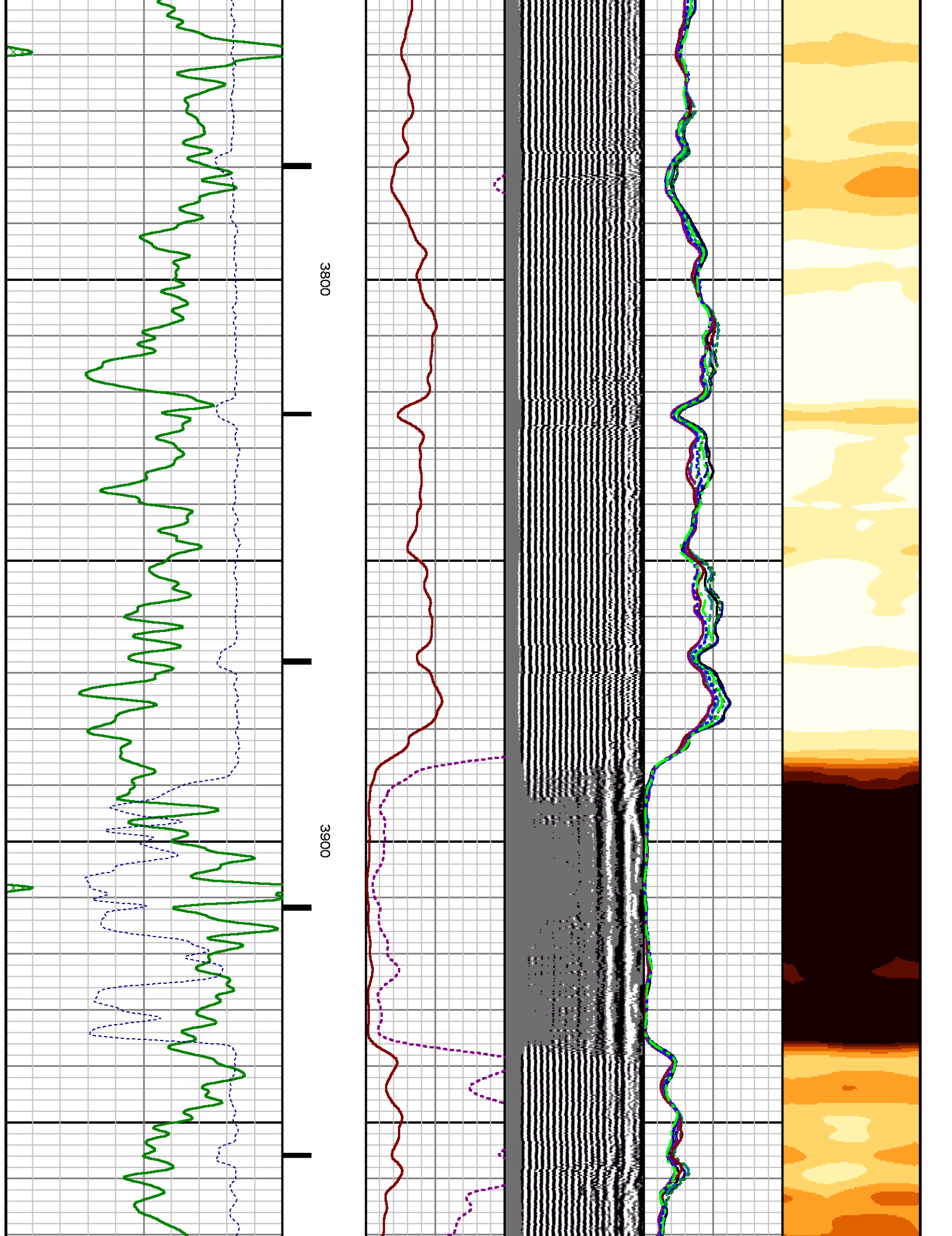


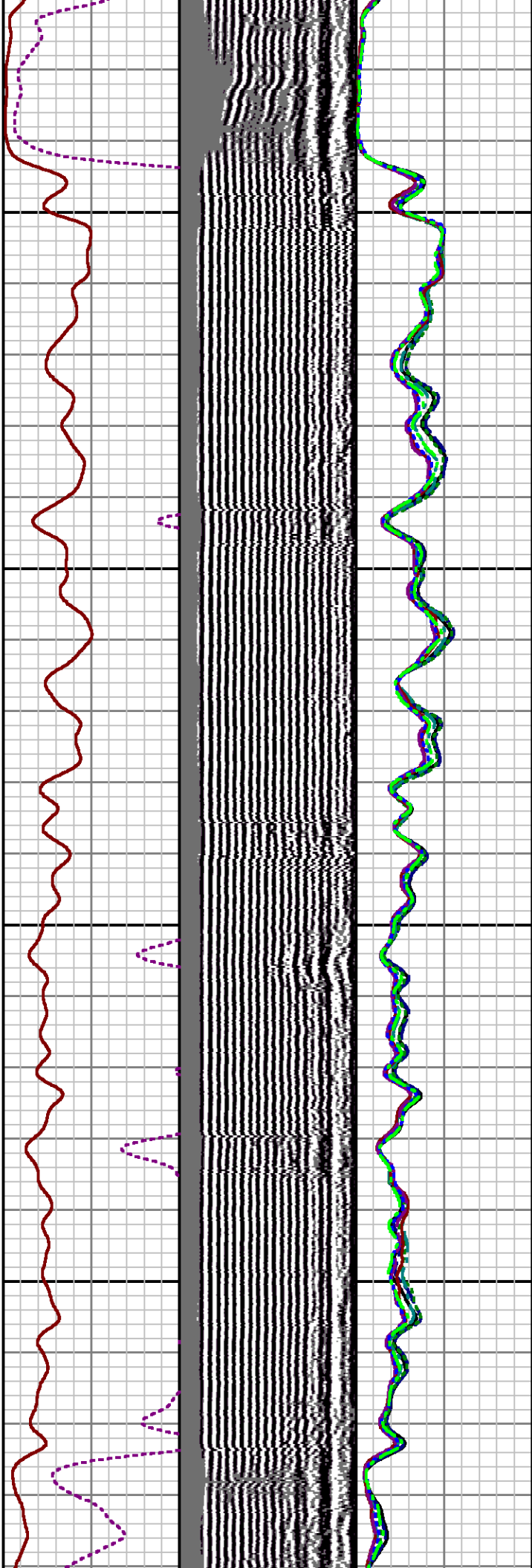
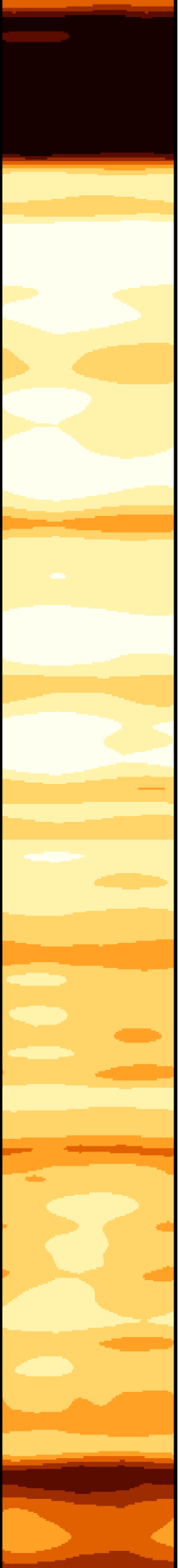


3600

3700

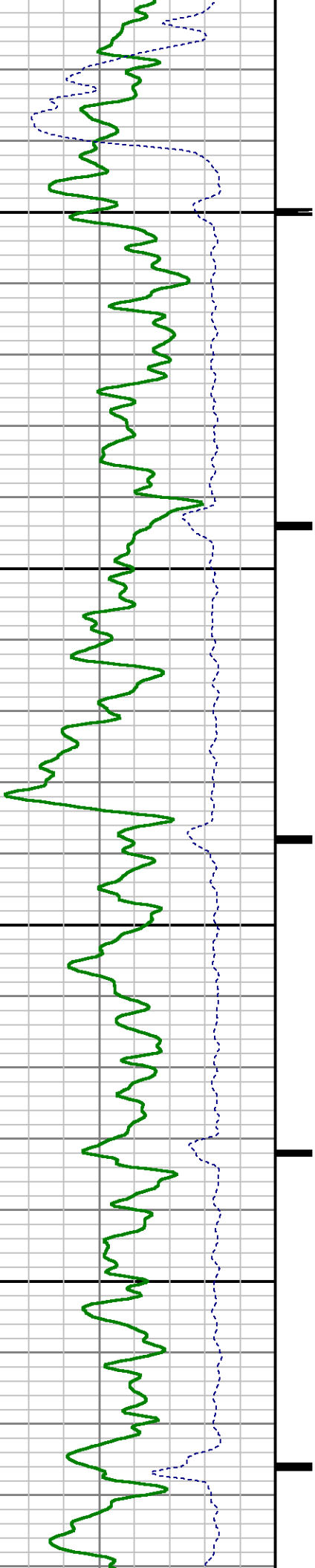


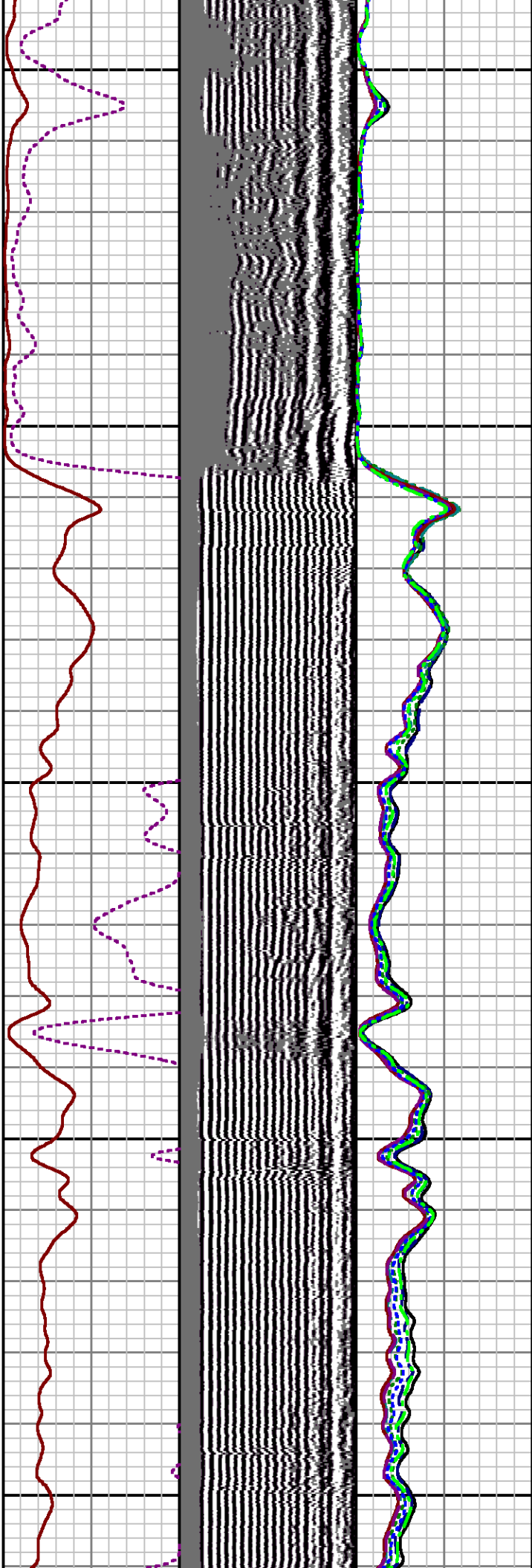
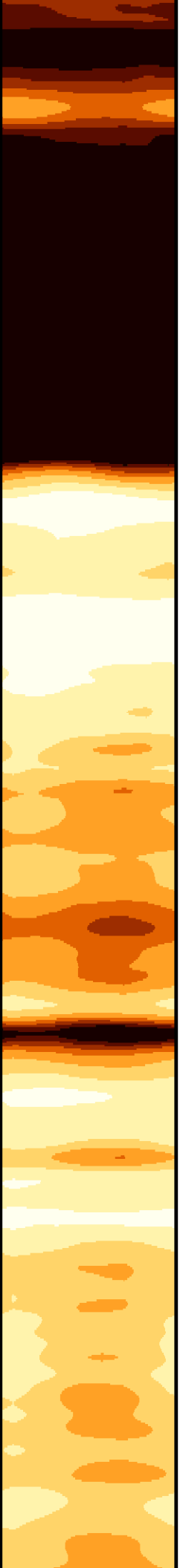




4000

4100

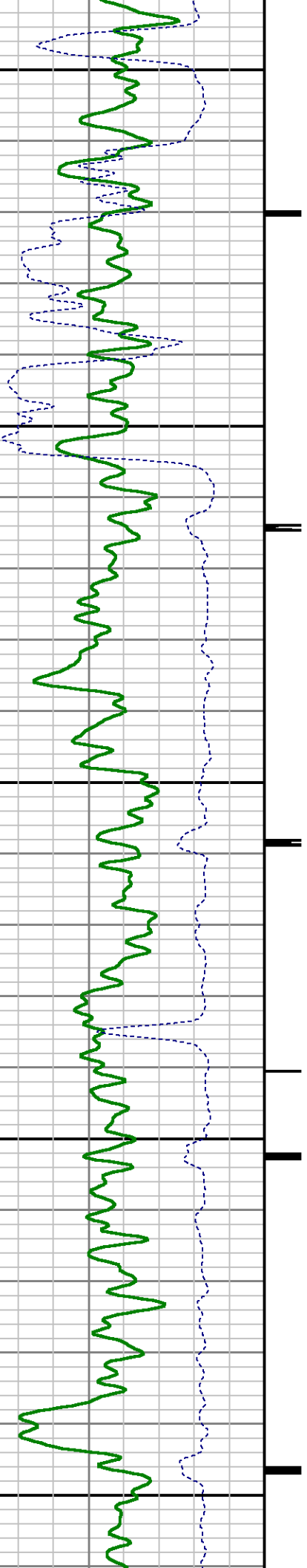


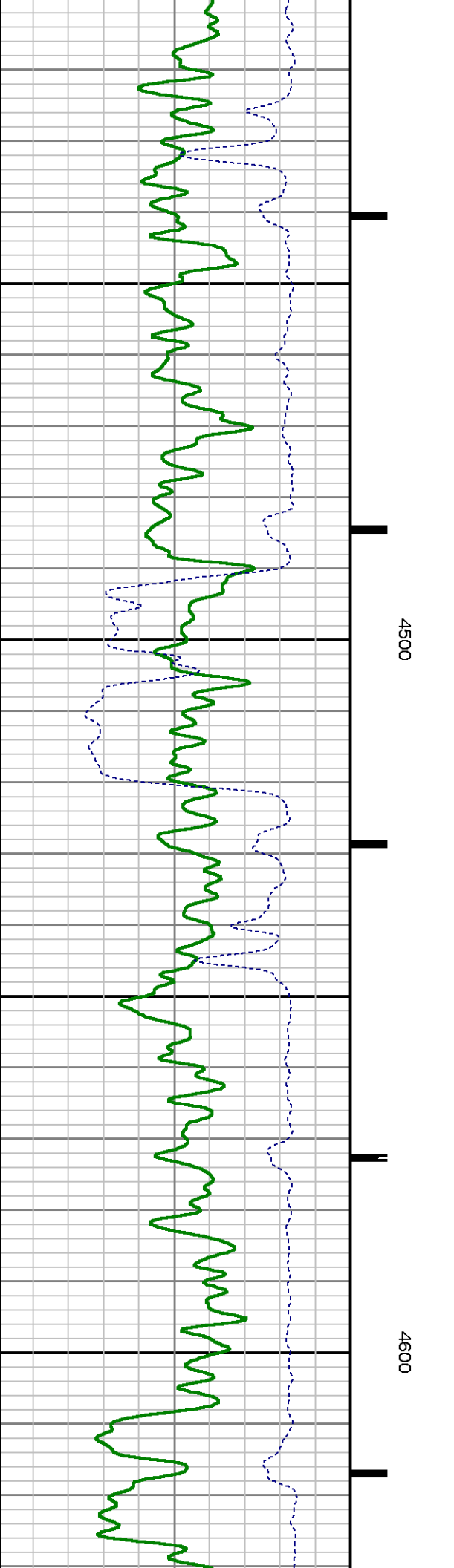
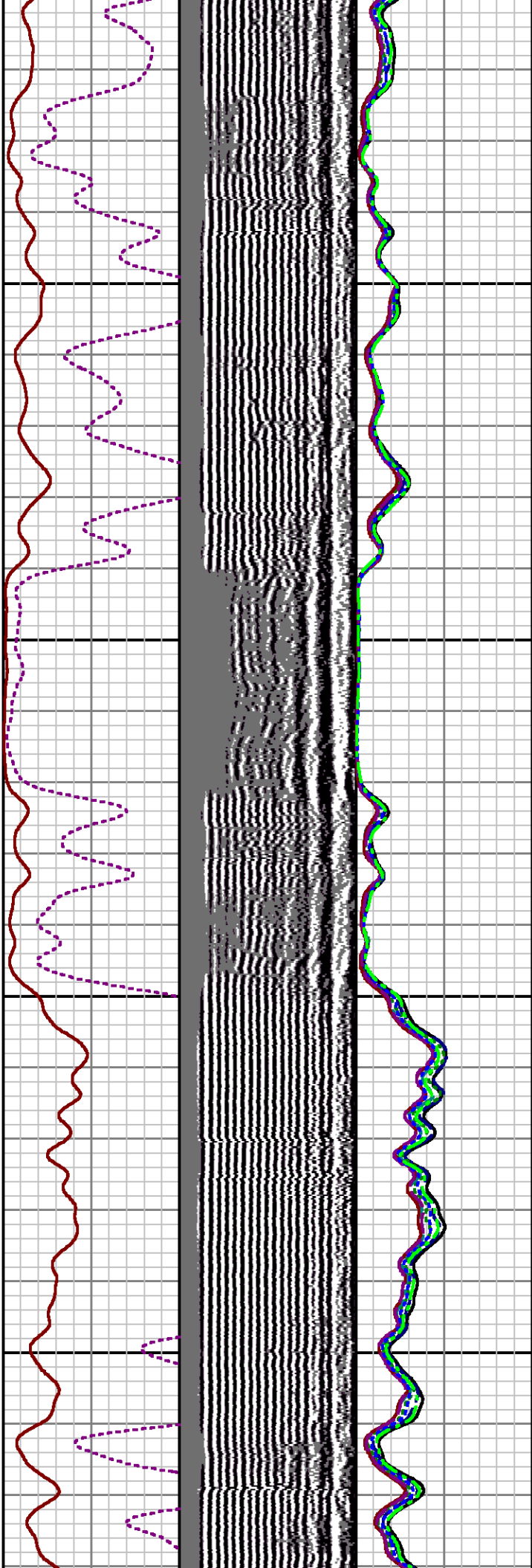


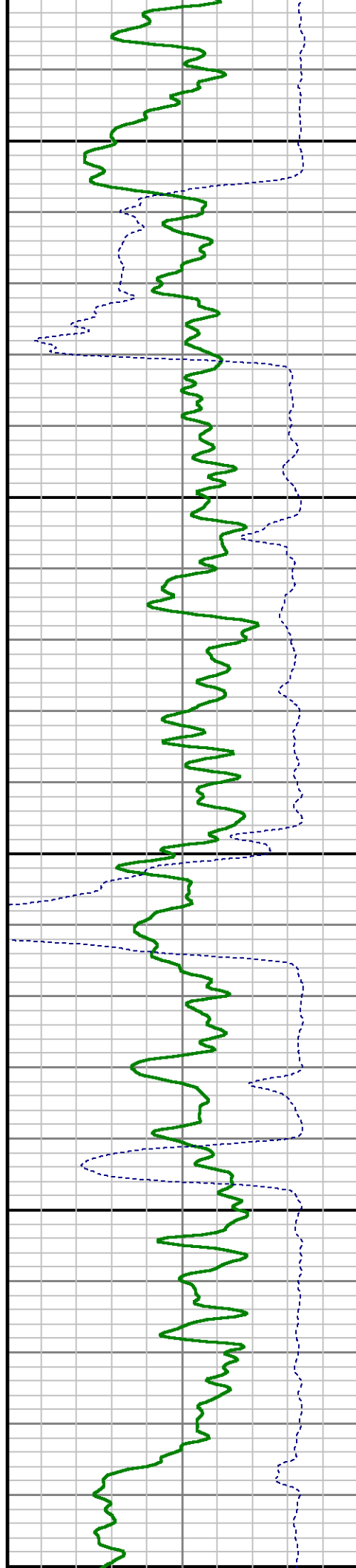
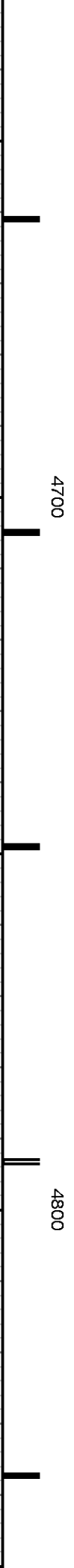
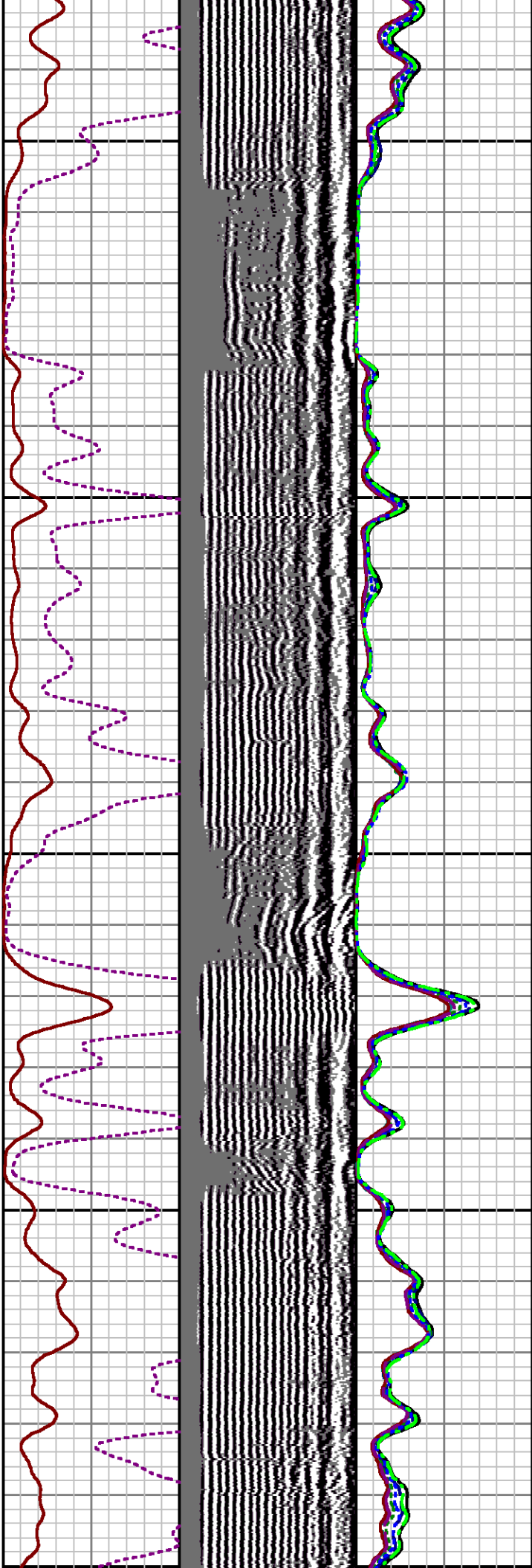
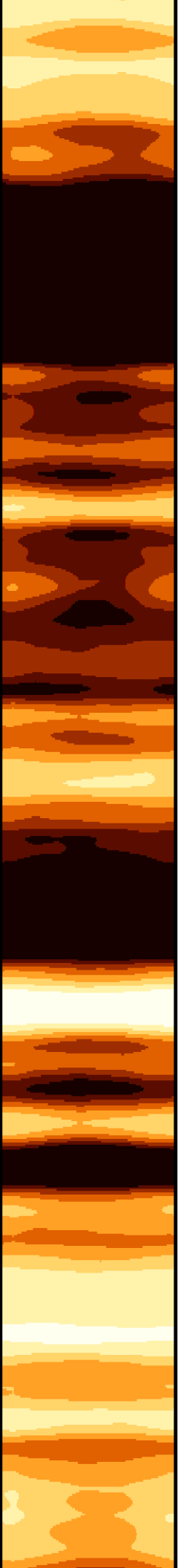
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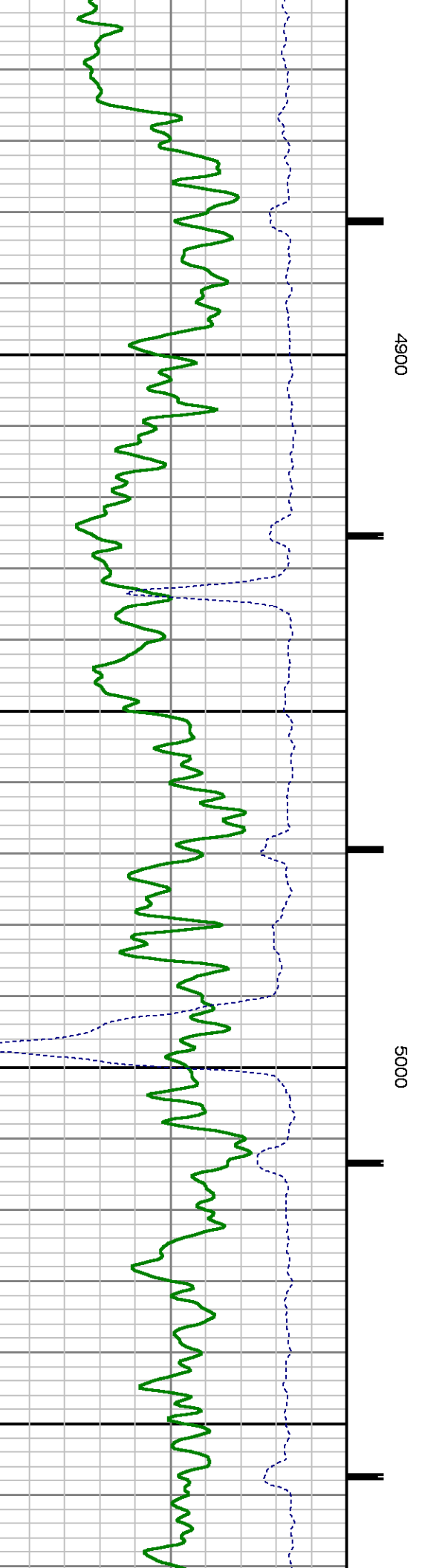
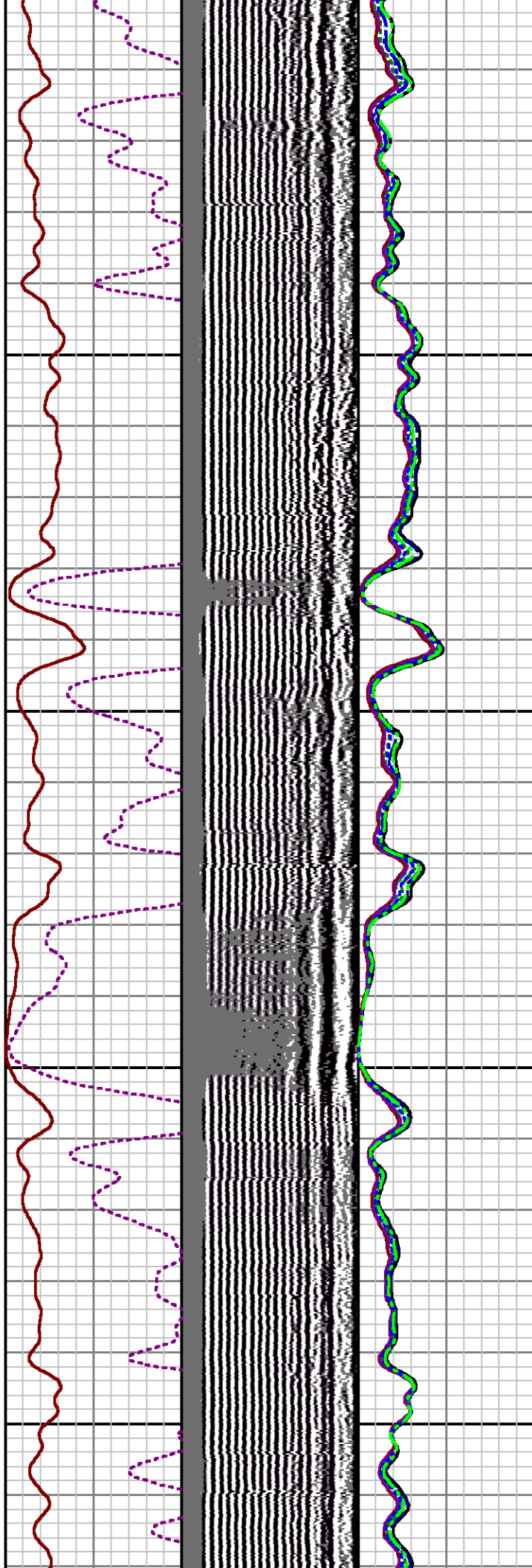
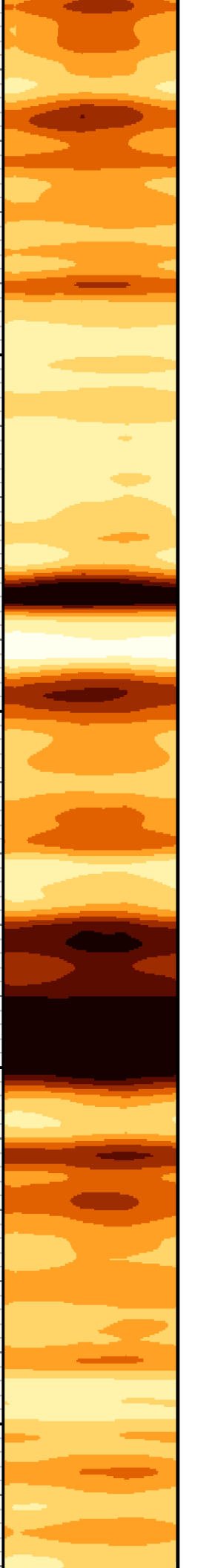
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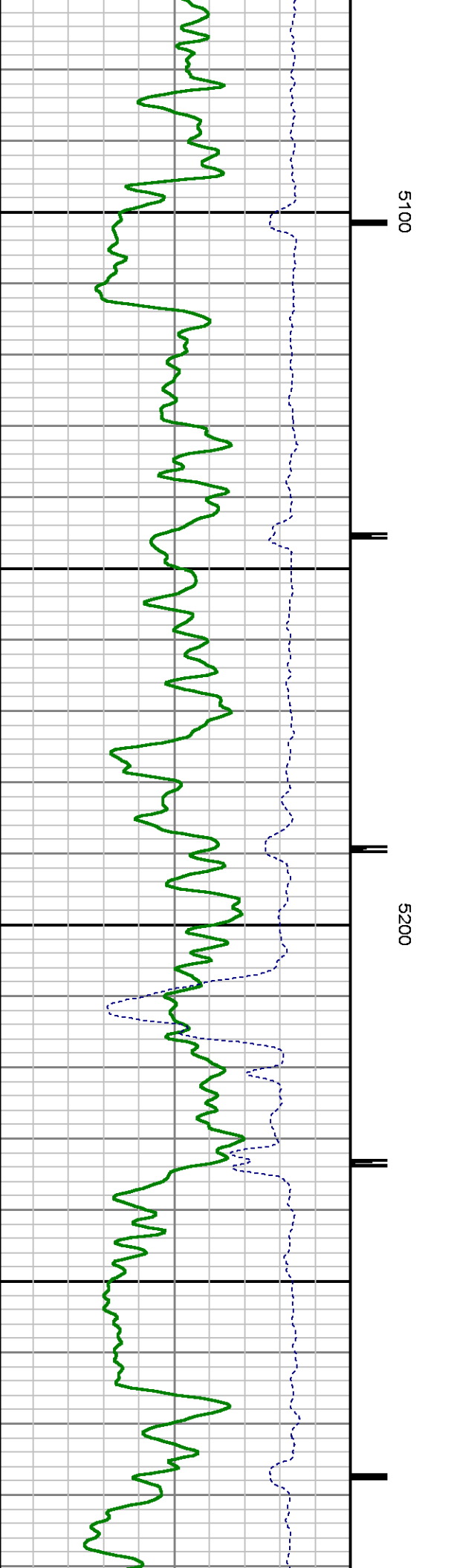
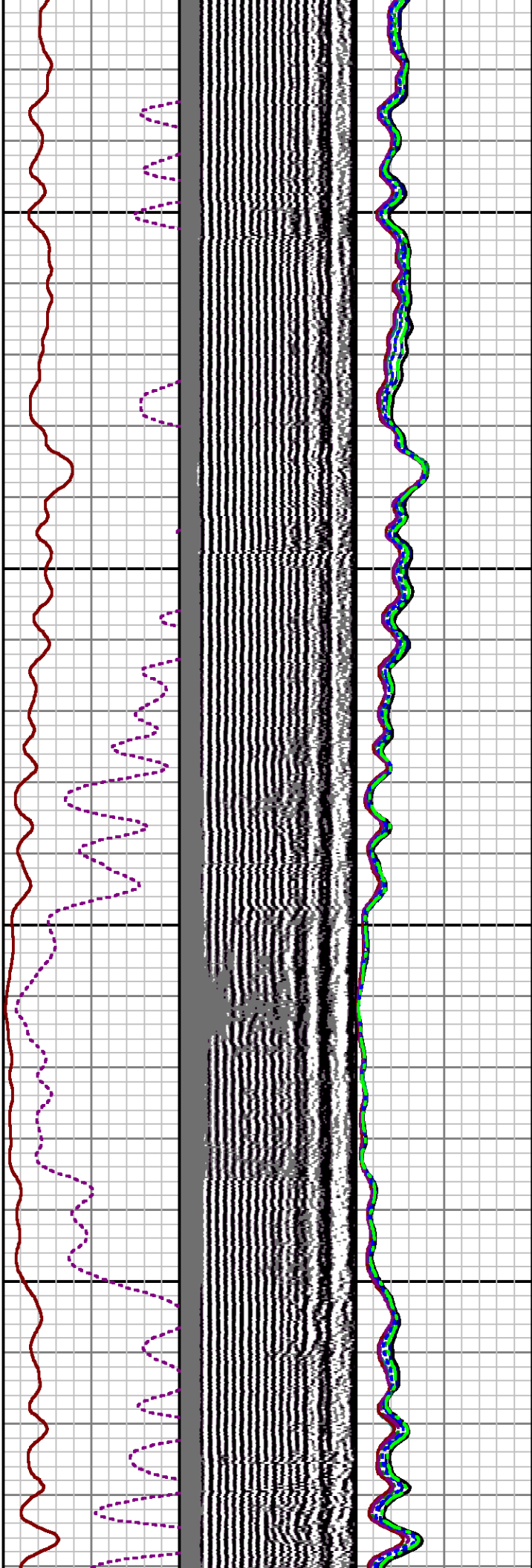
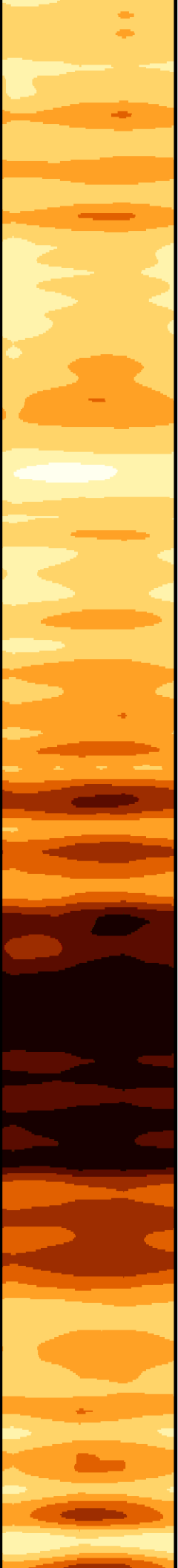
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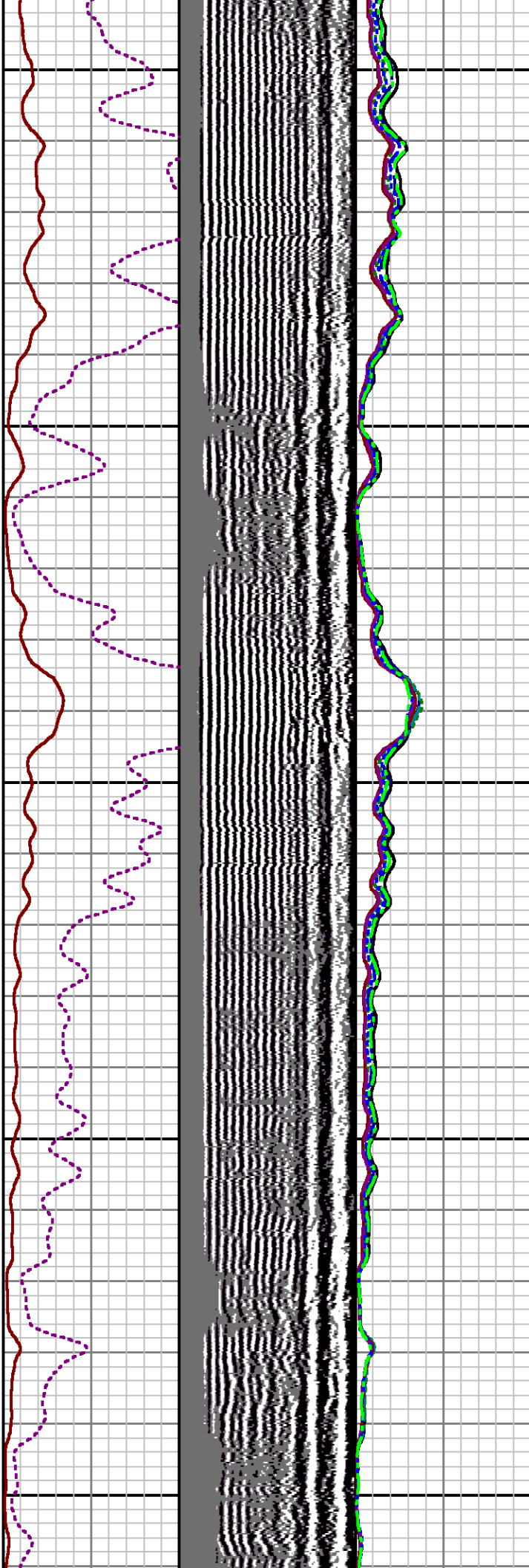
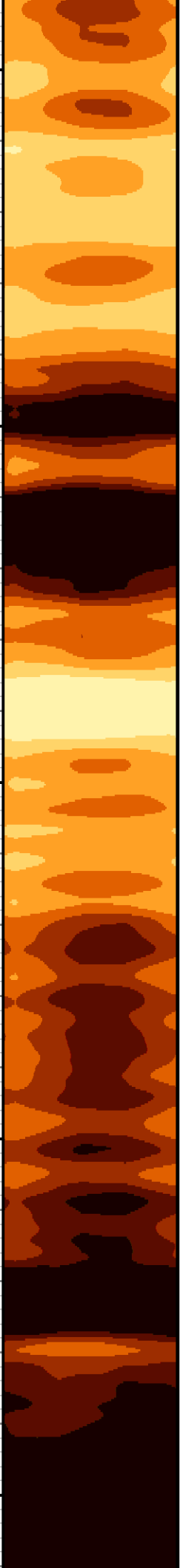








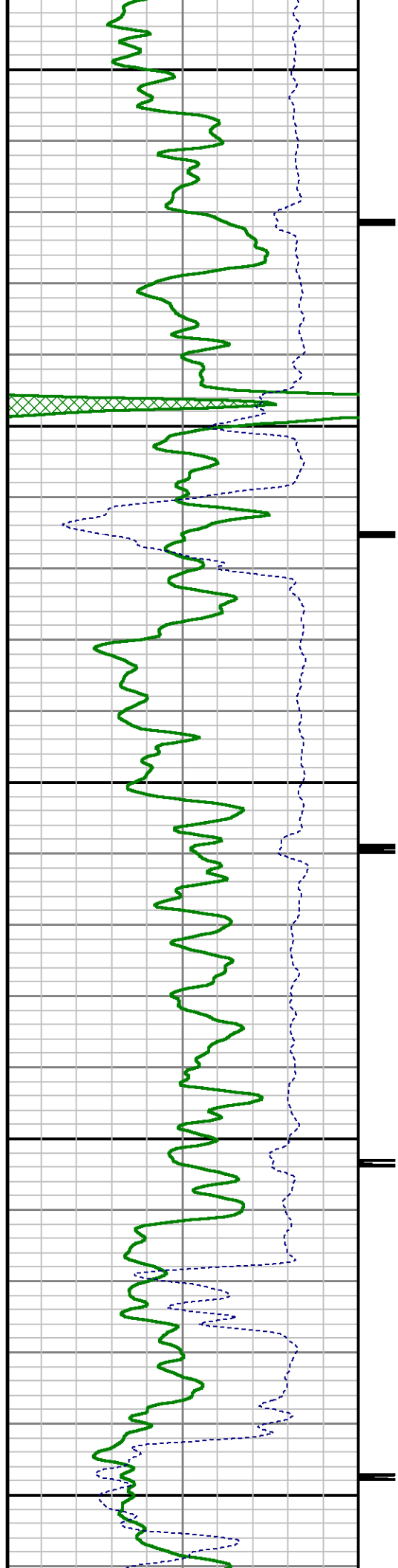


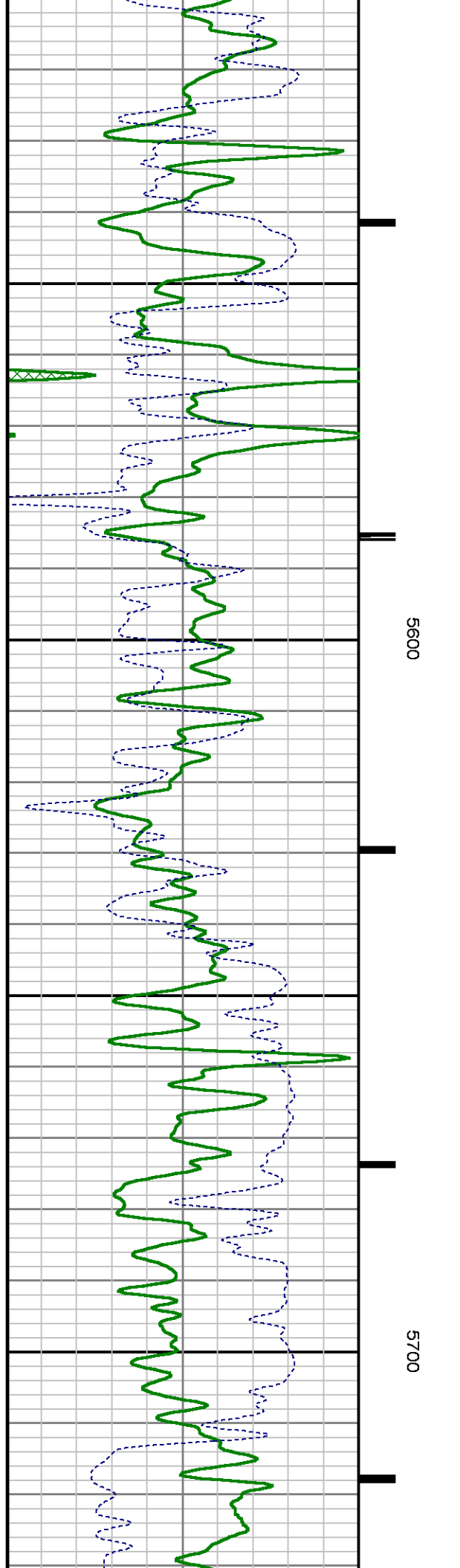
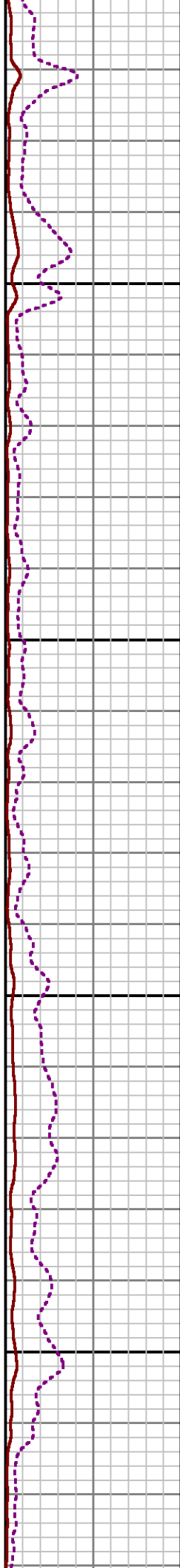
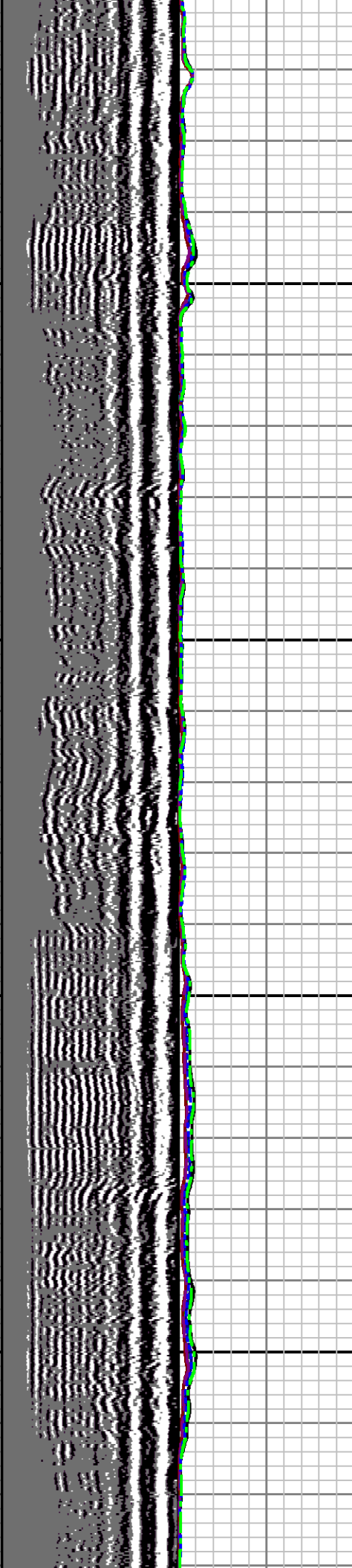


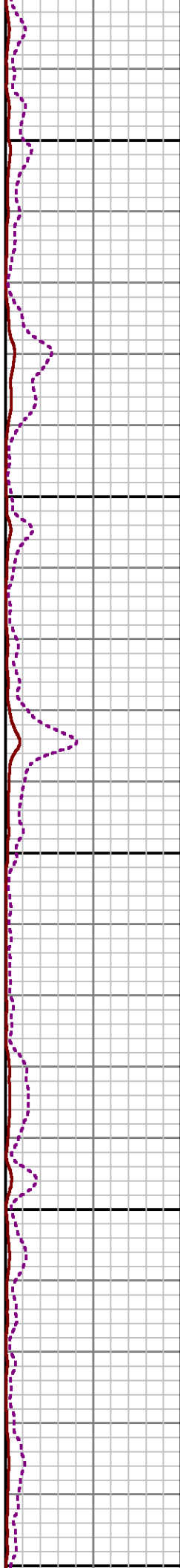
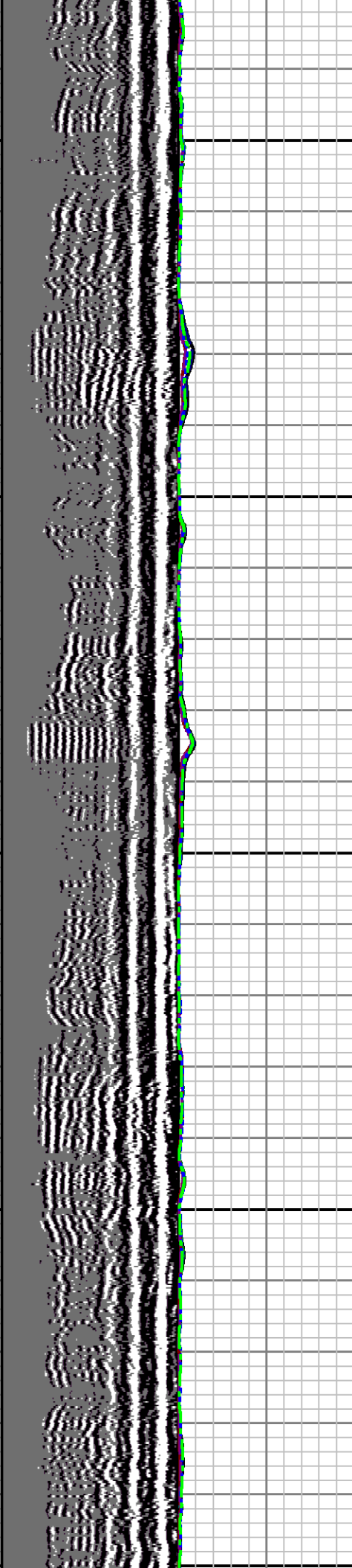
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5400

5500

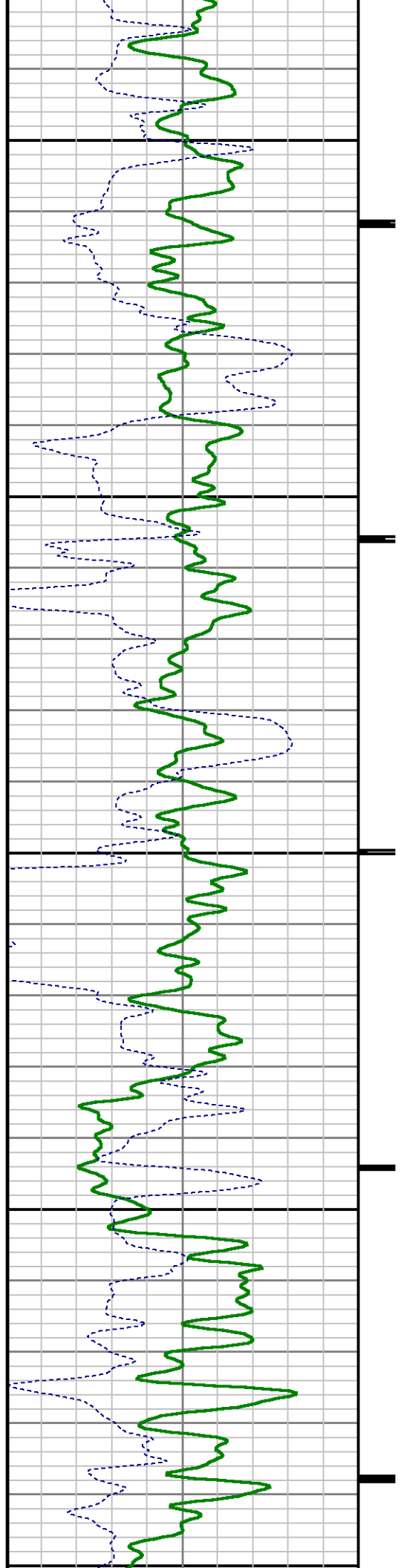


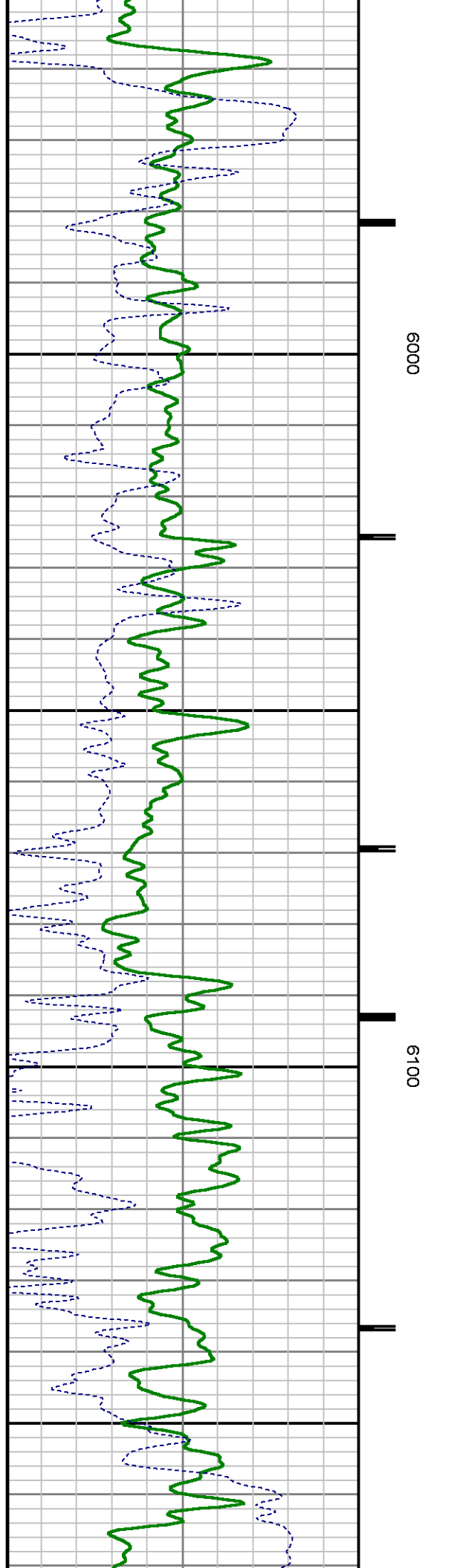
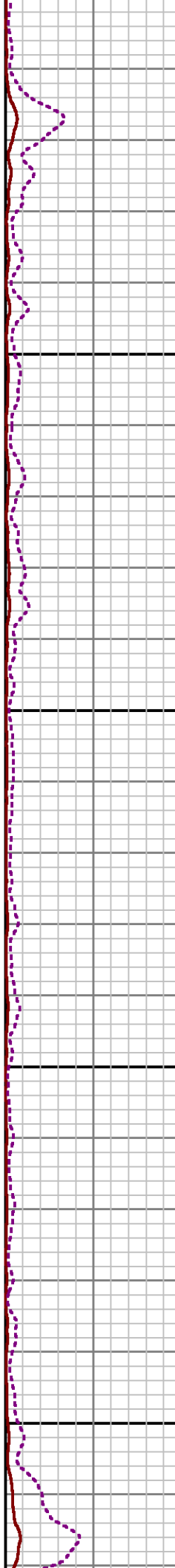
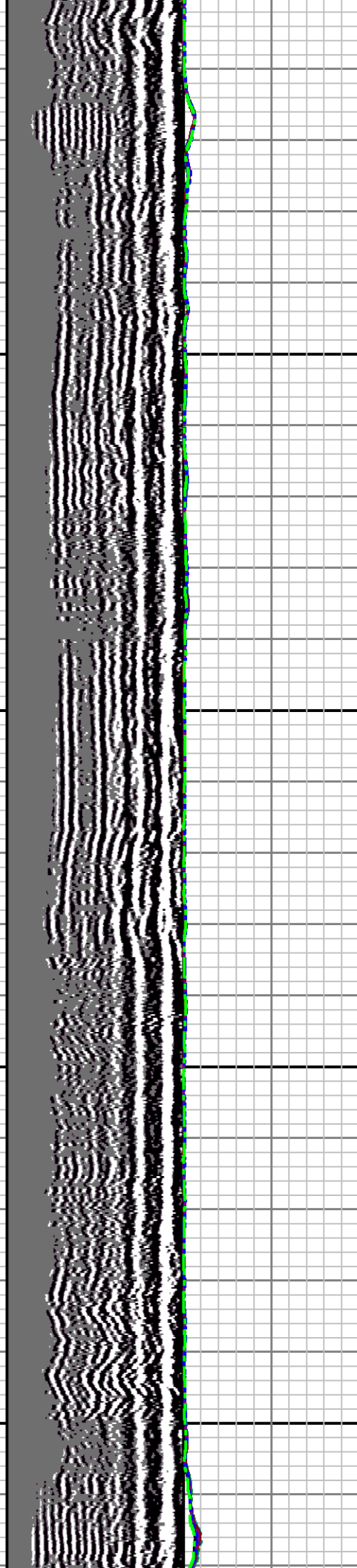


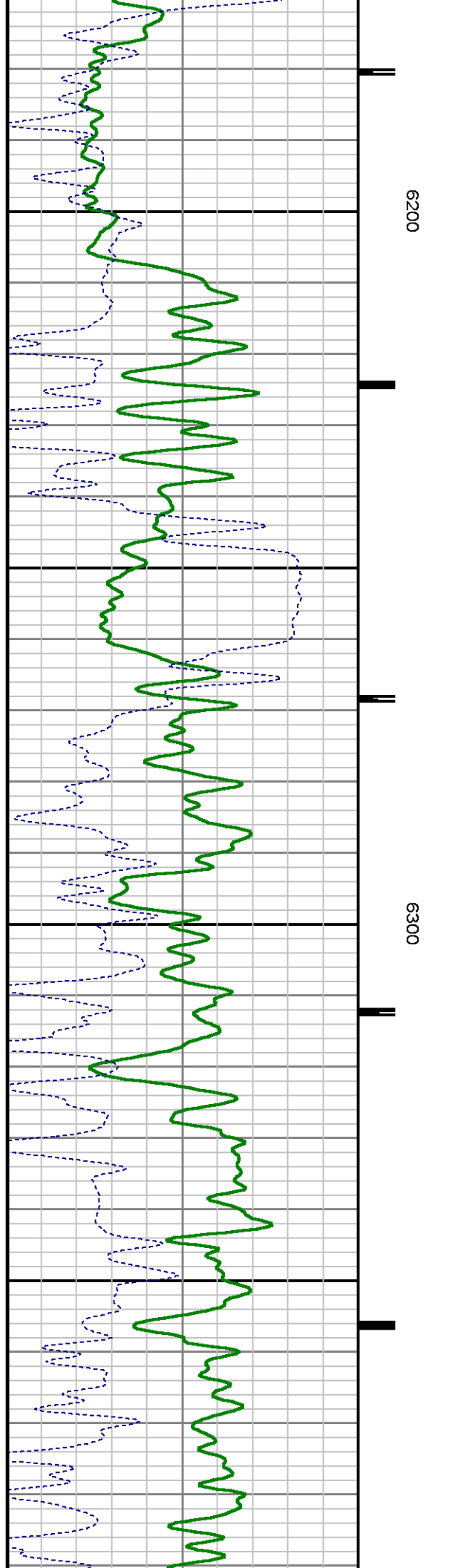
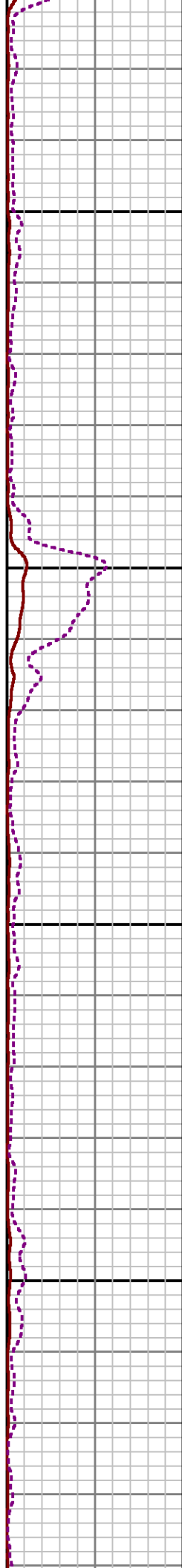
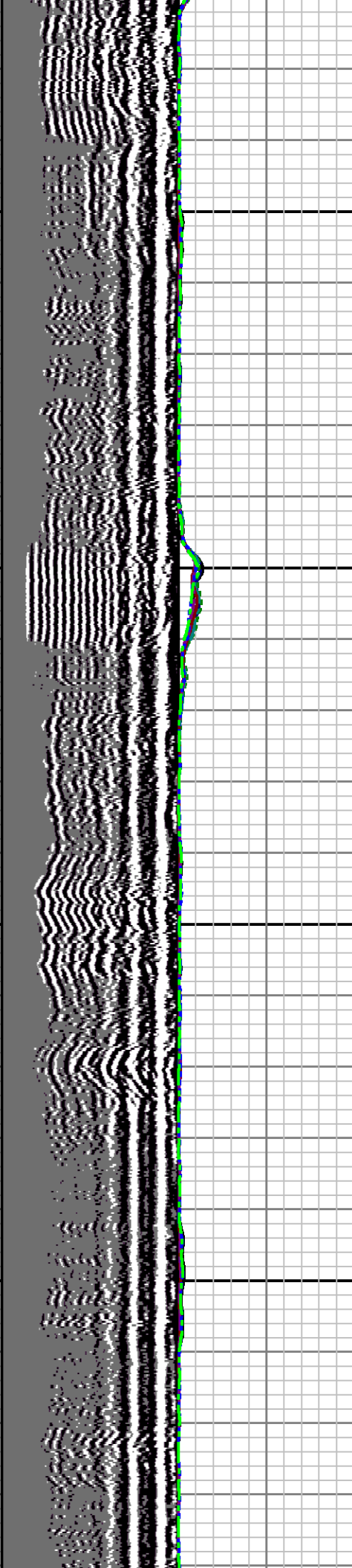


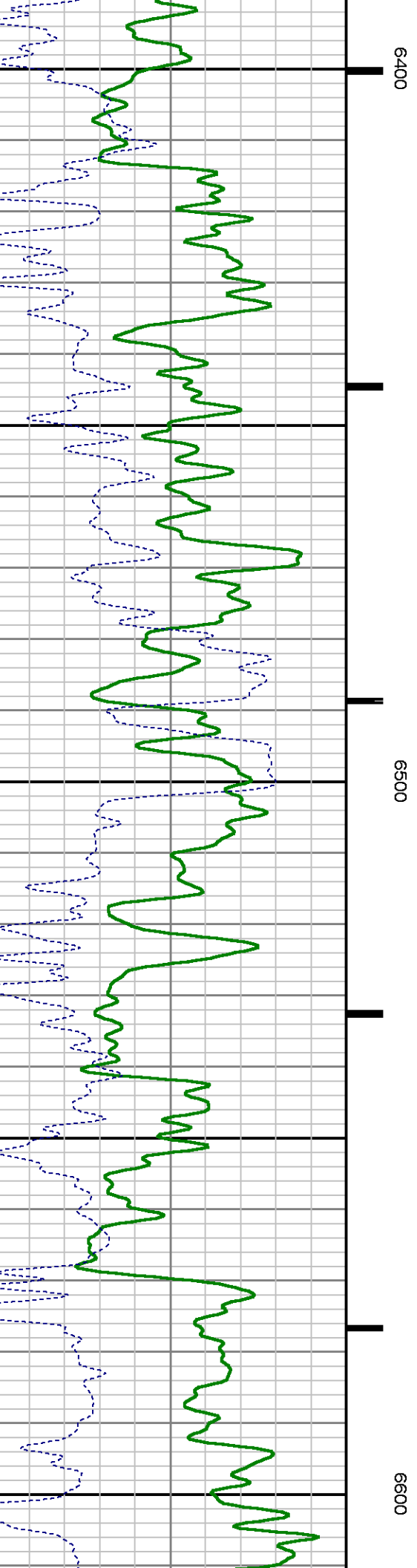
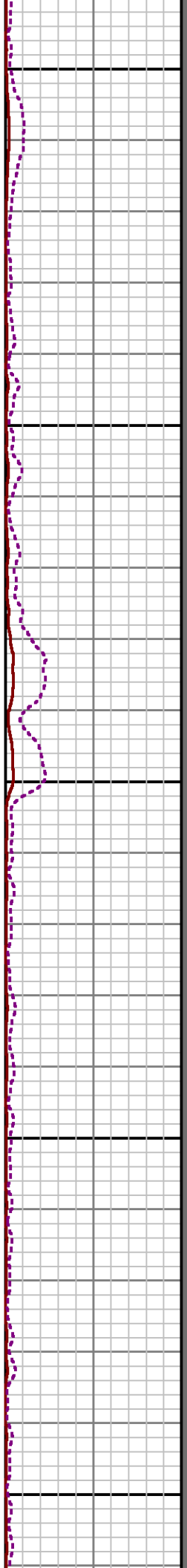
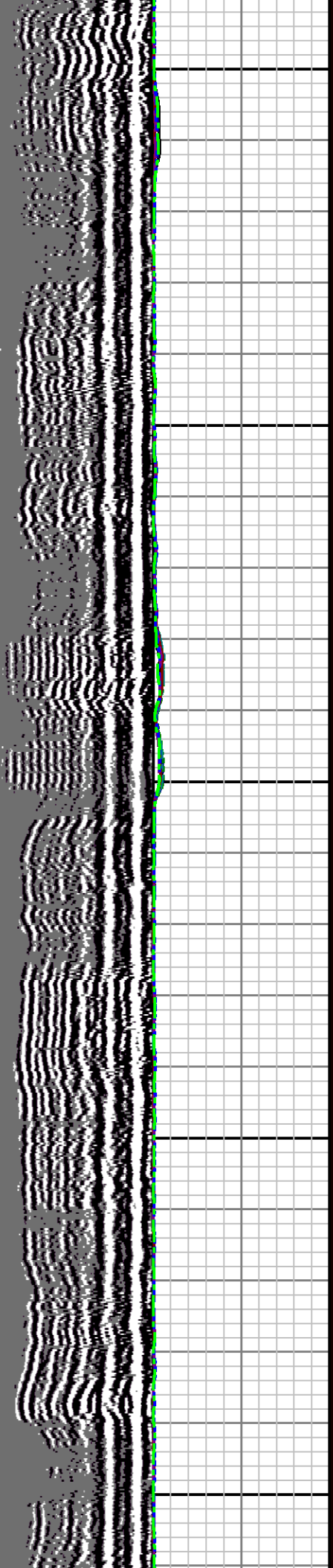
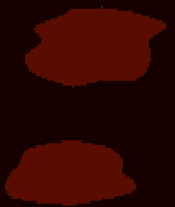
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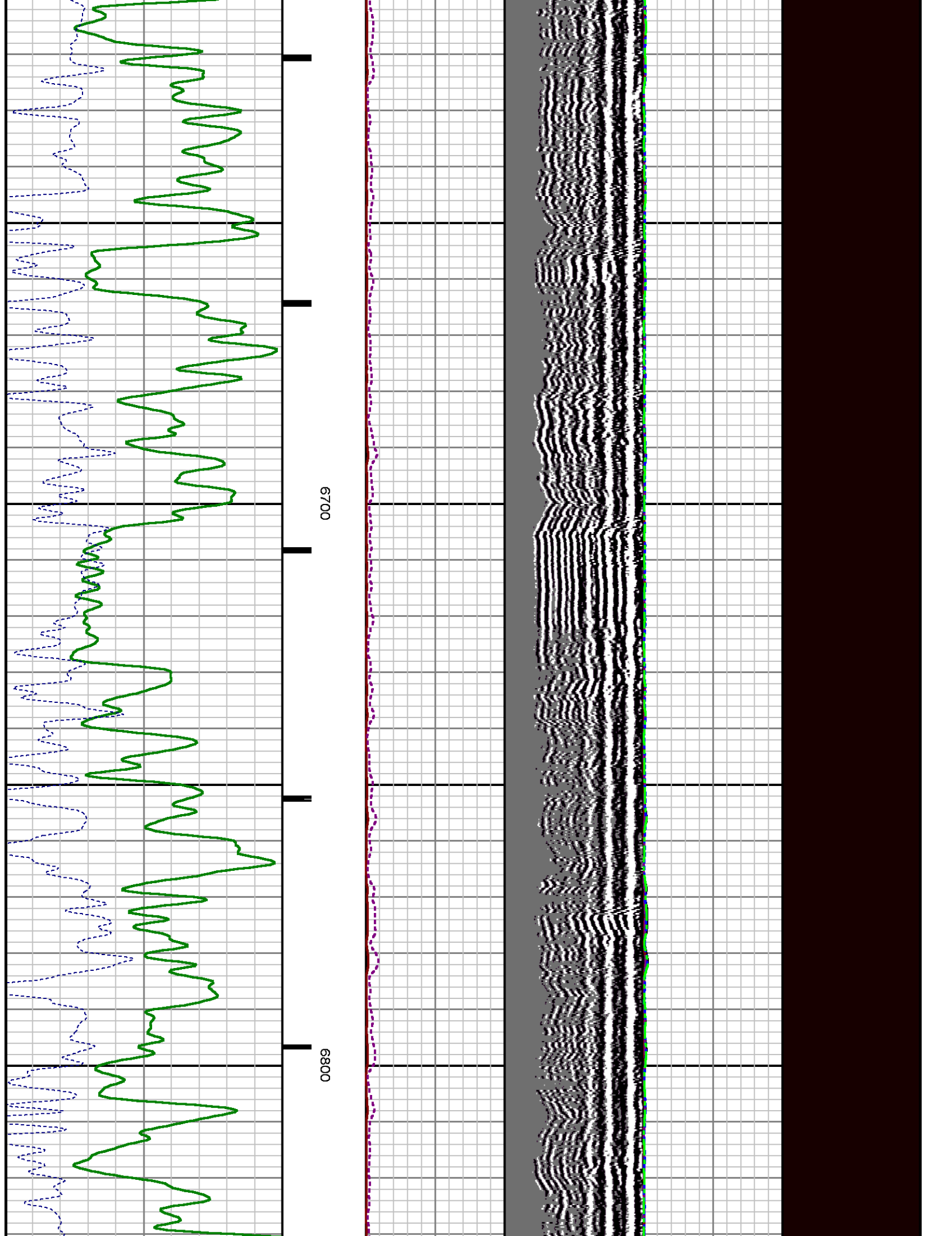
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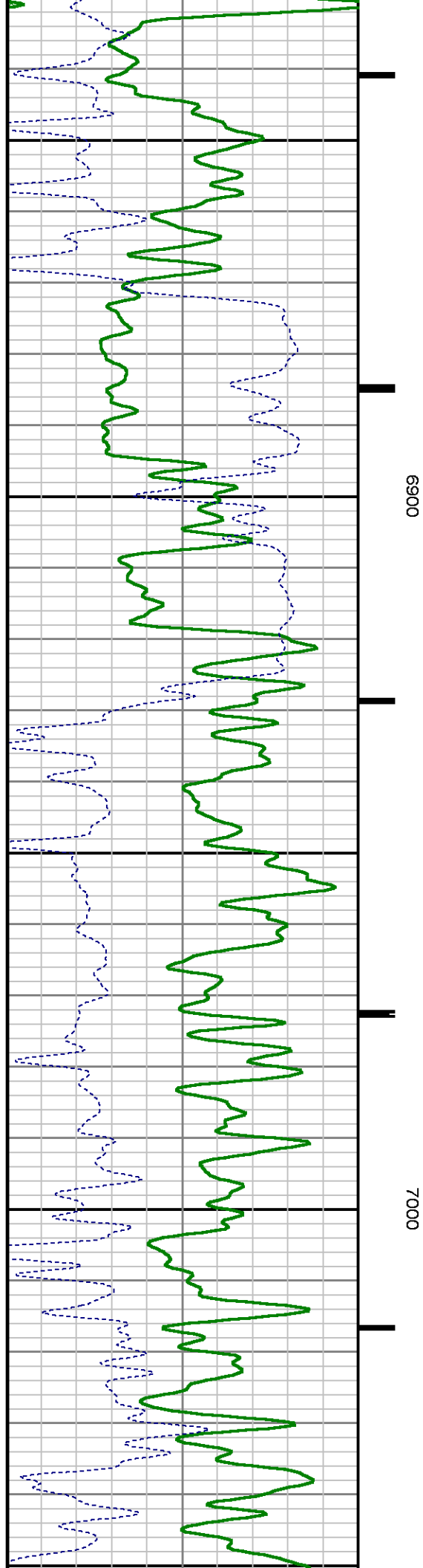
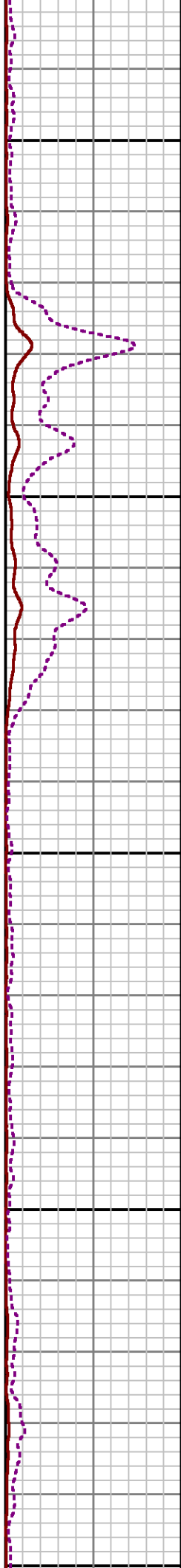
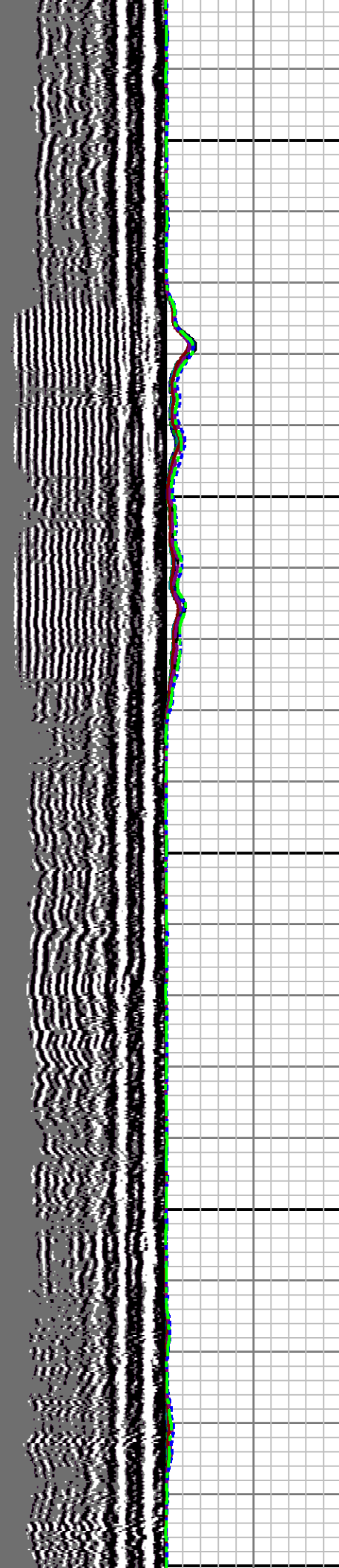
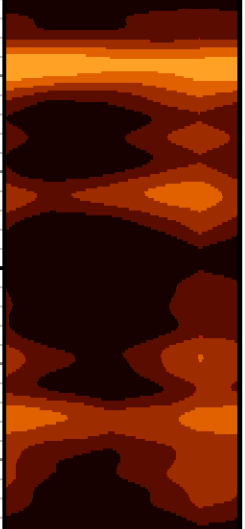


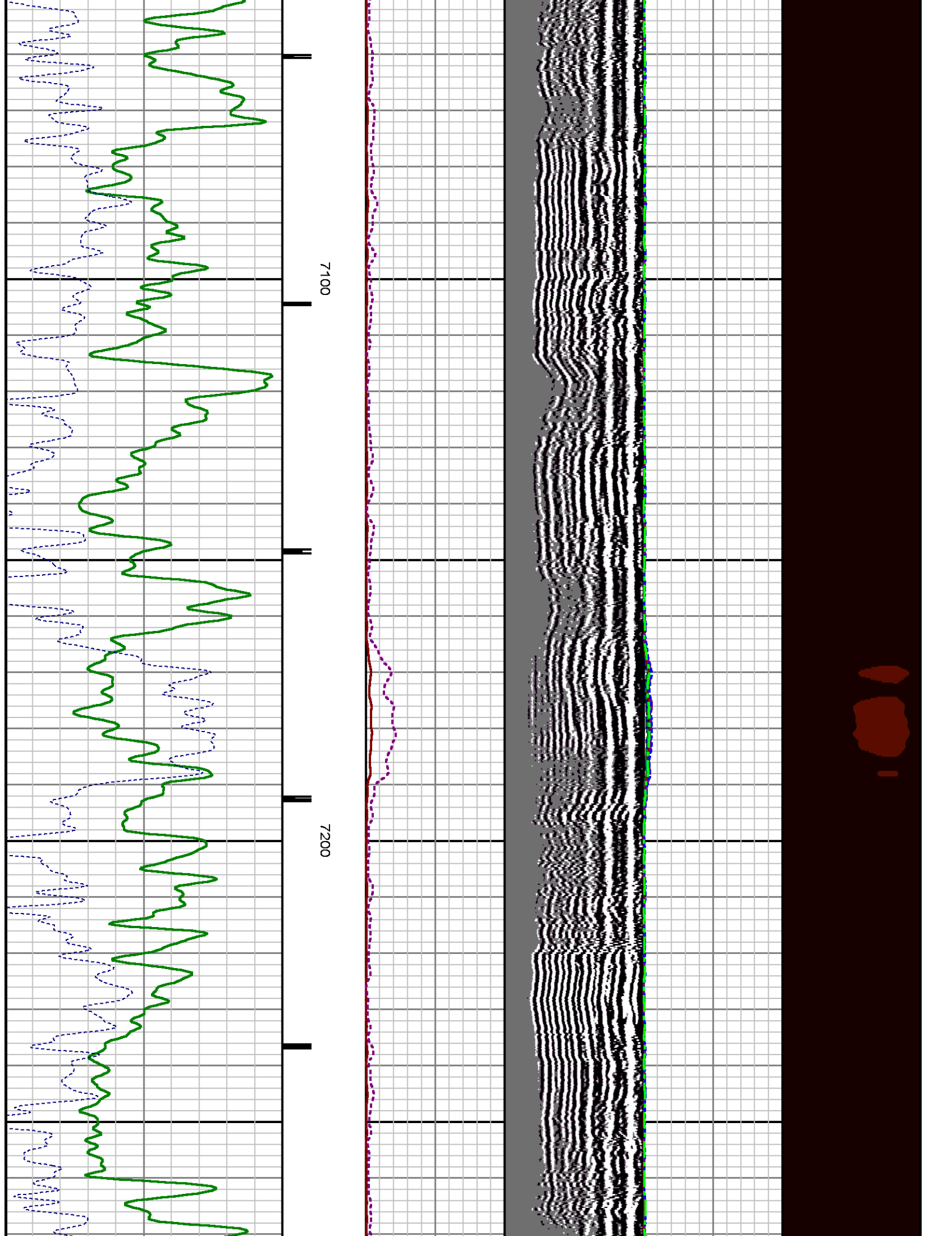


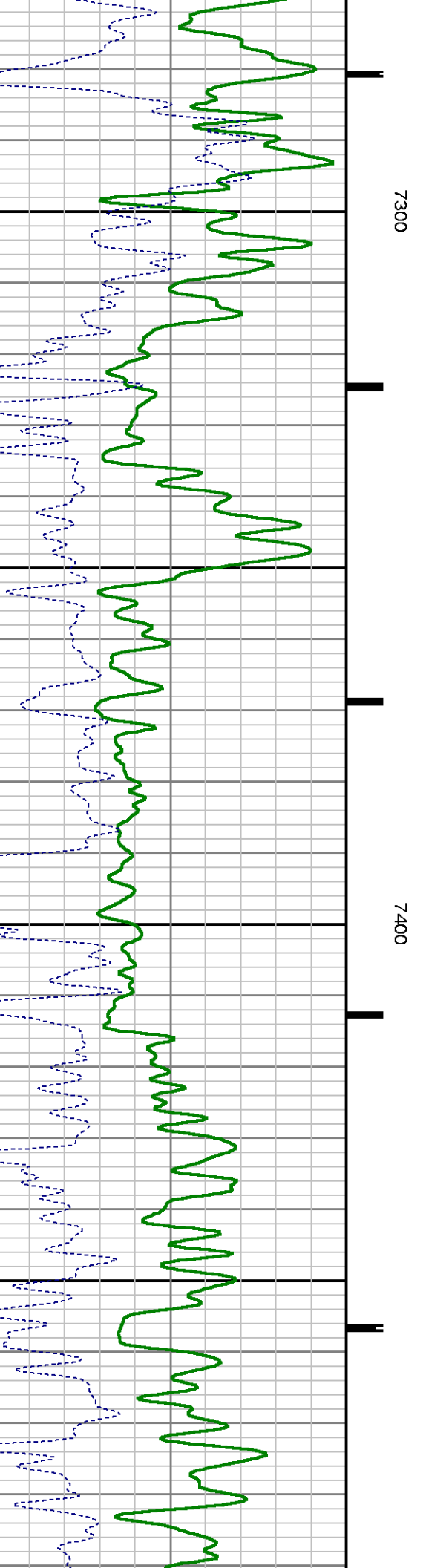
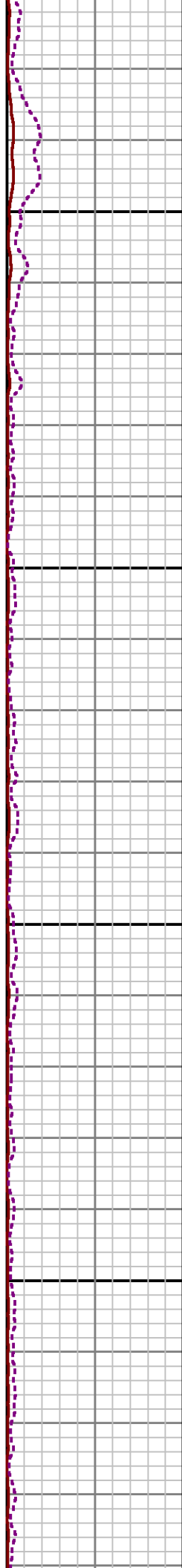
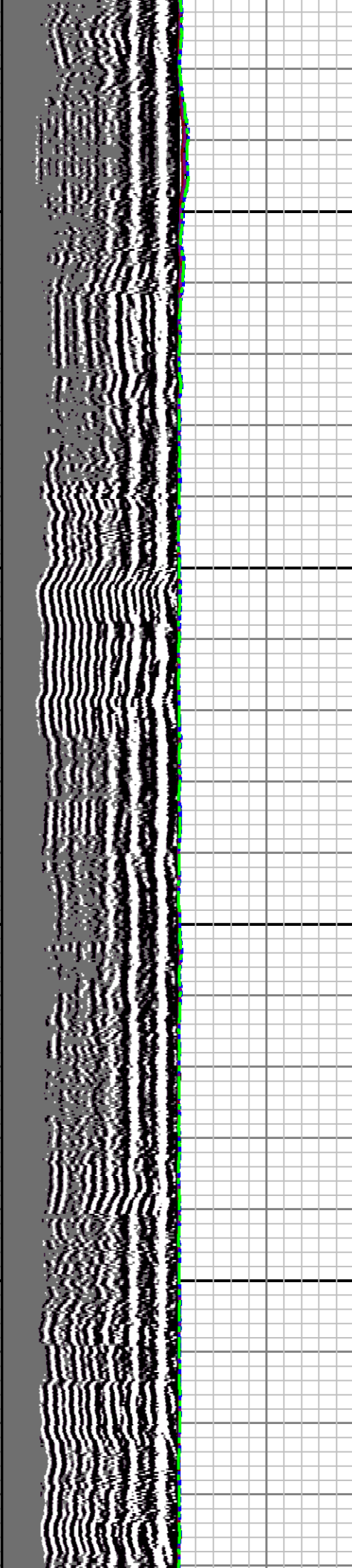


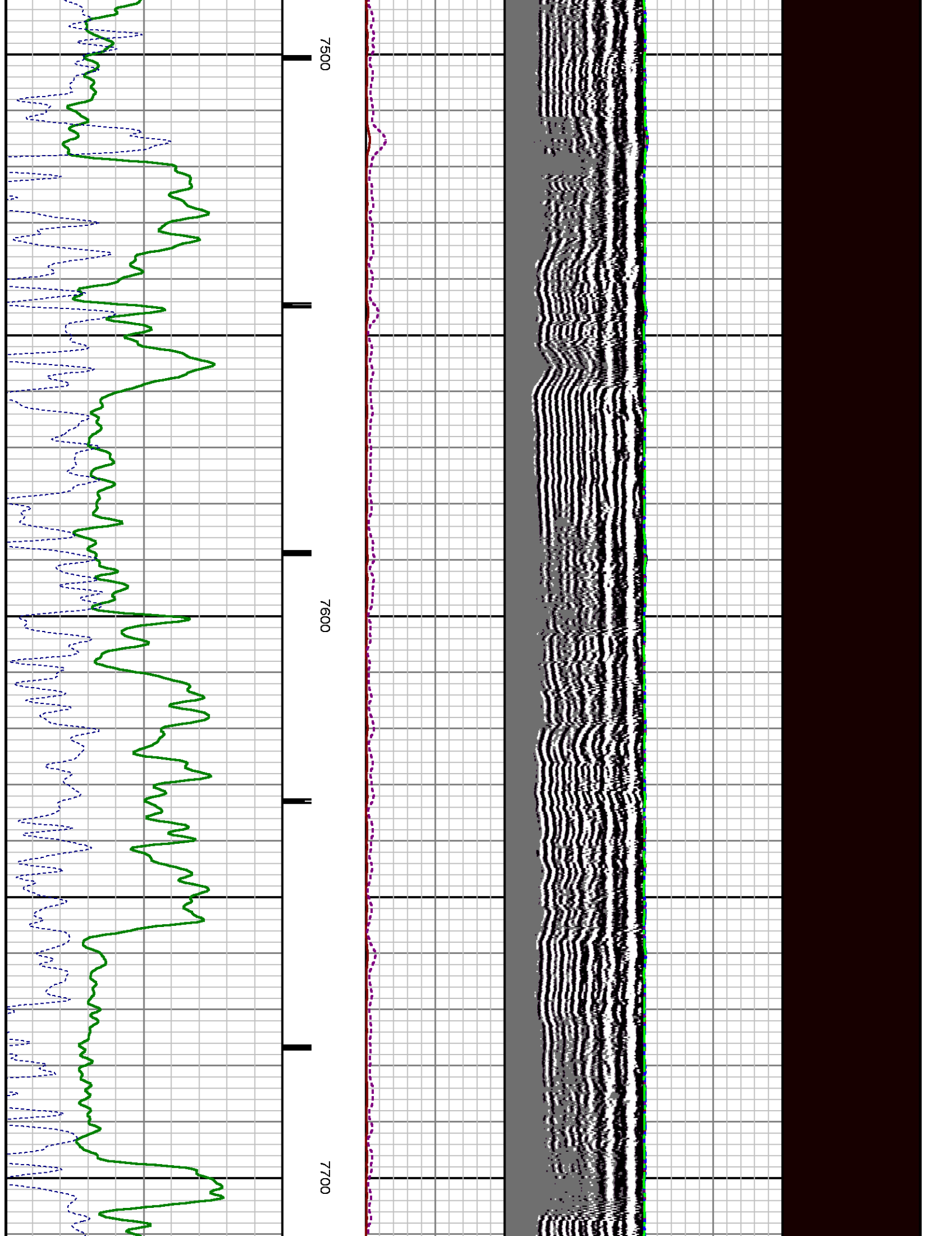


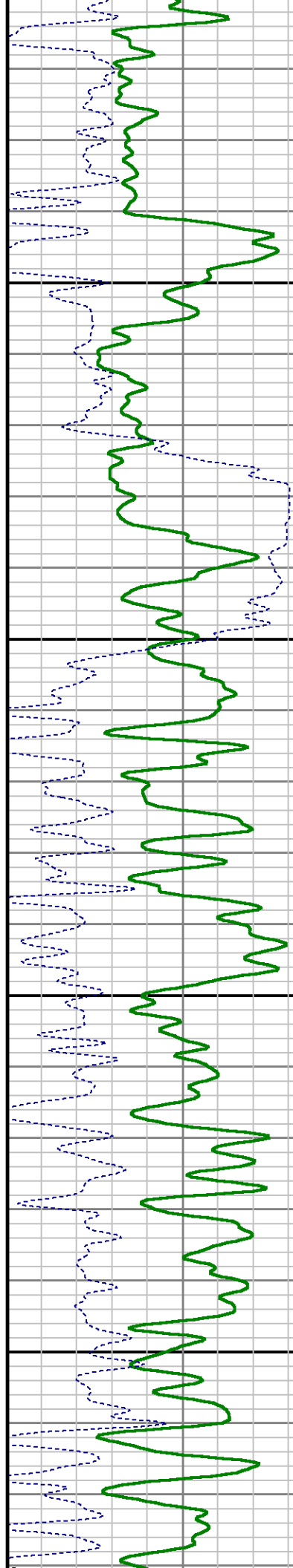
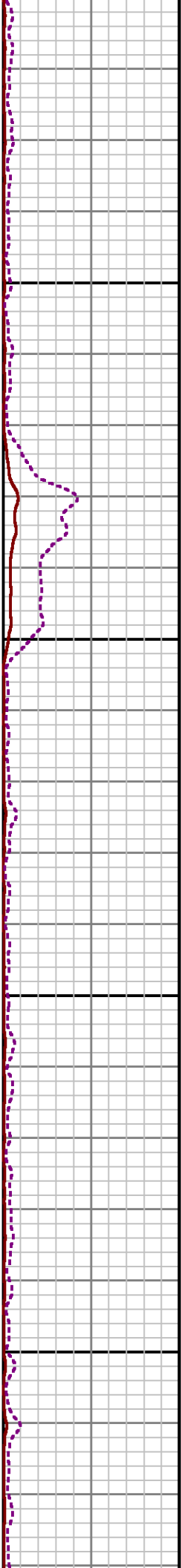
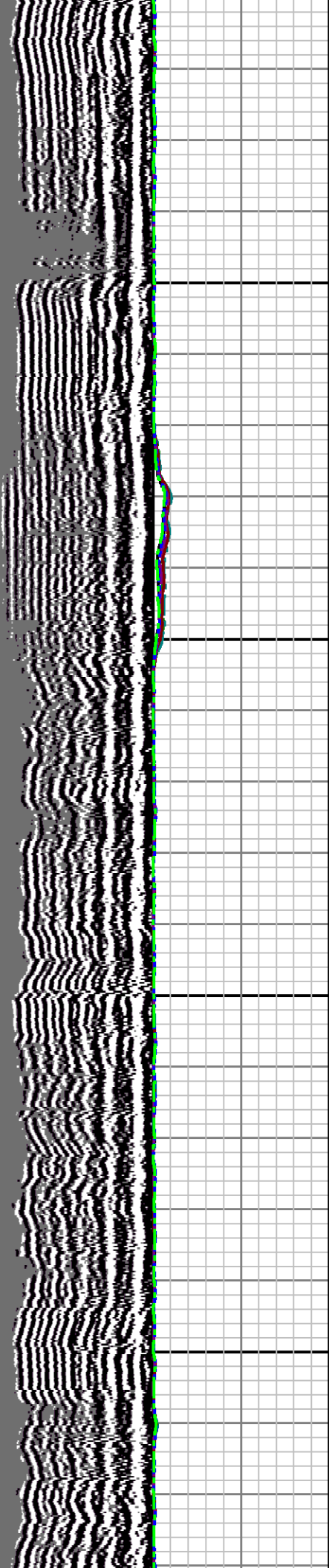
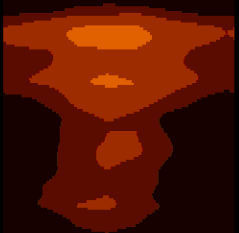


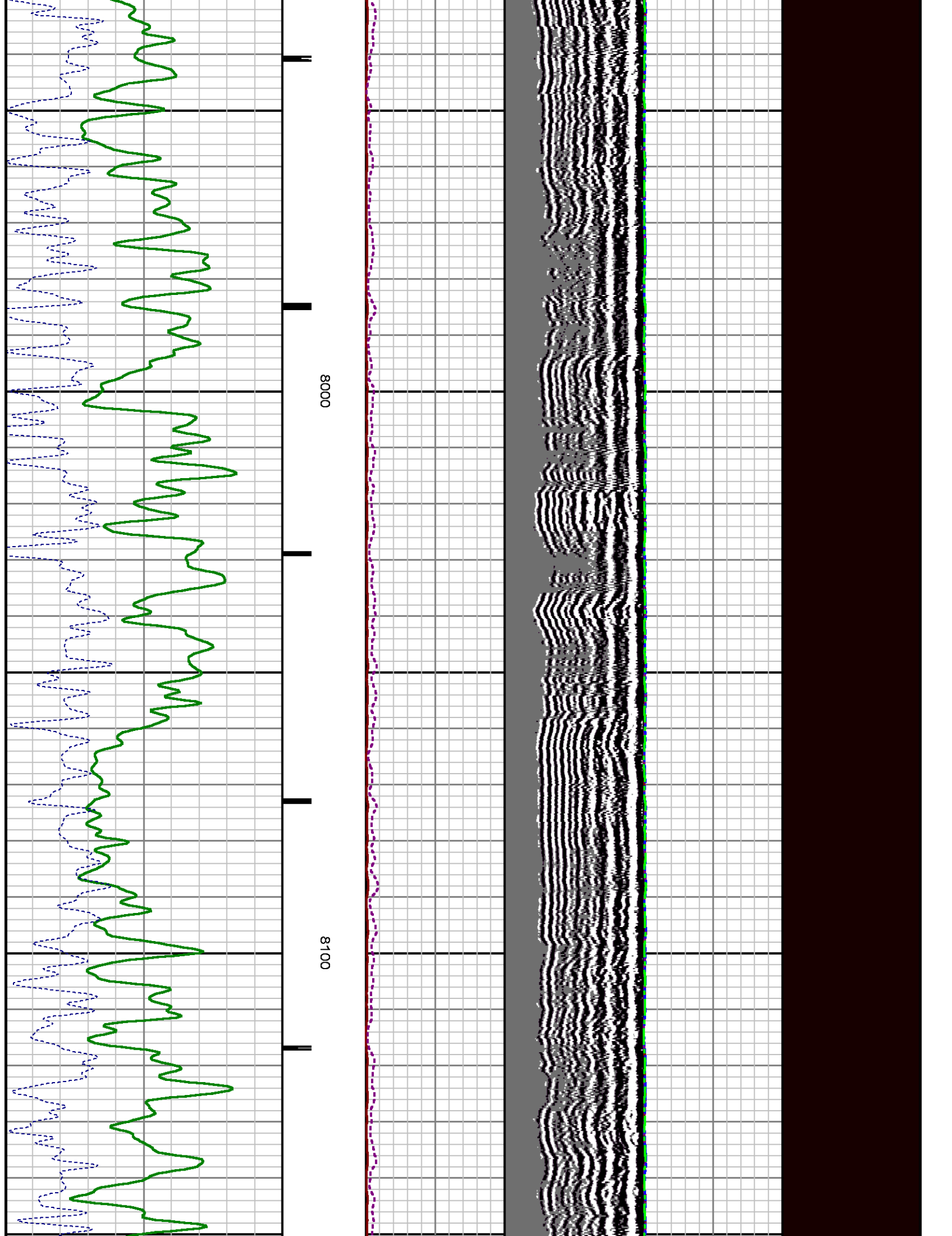


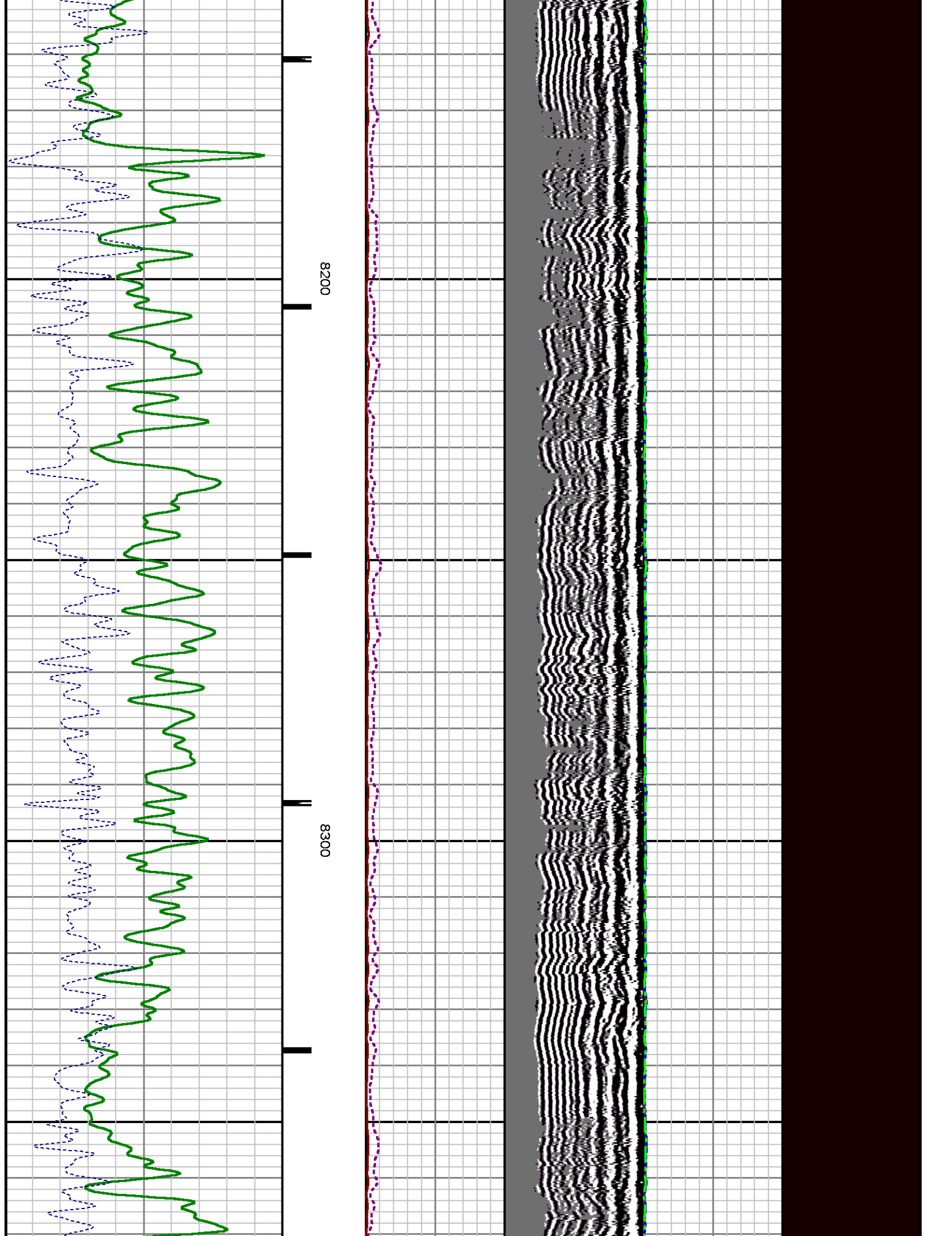


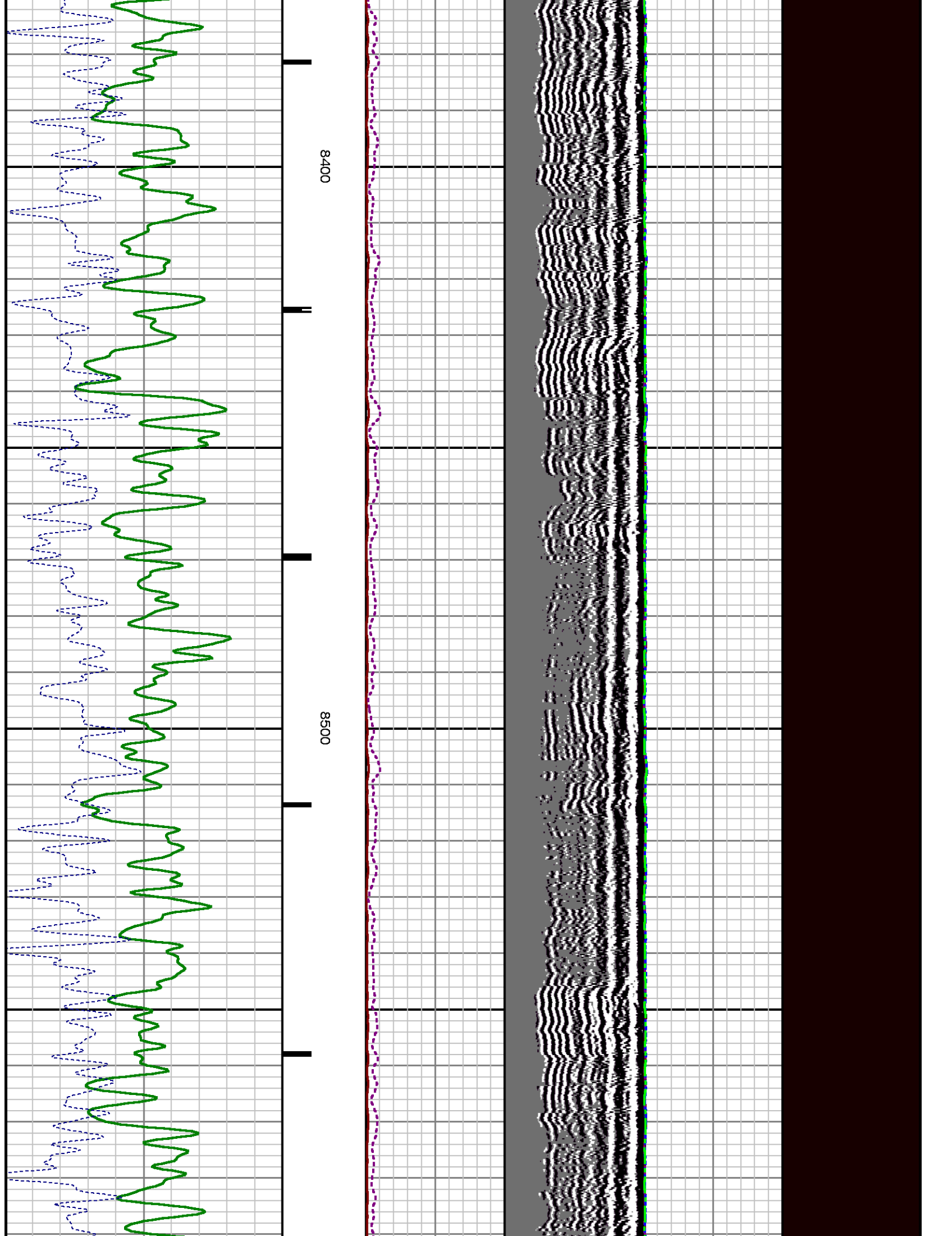


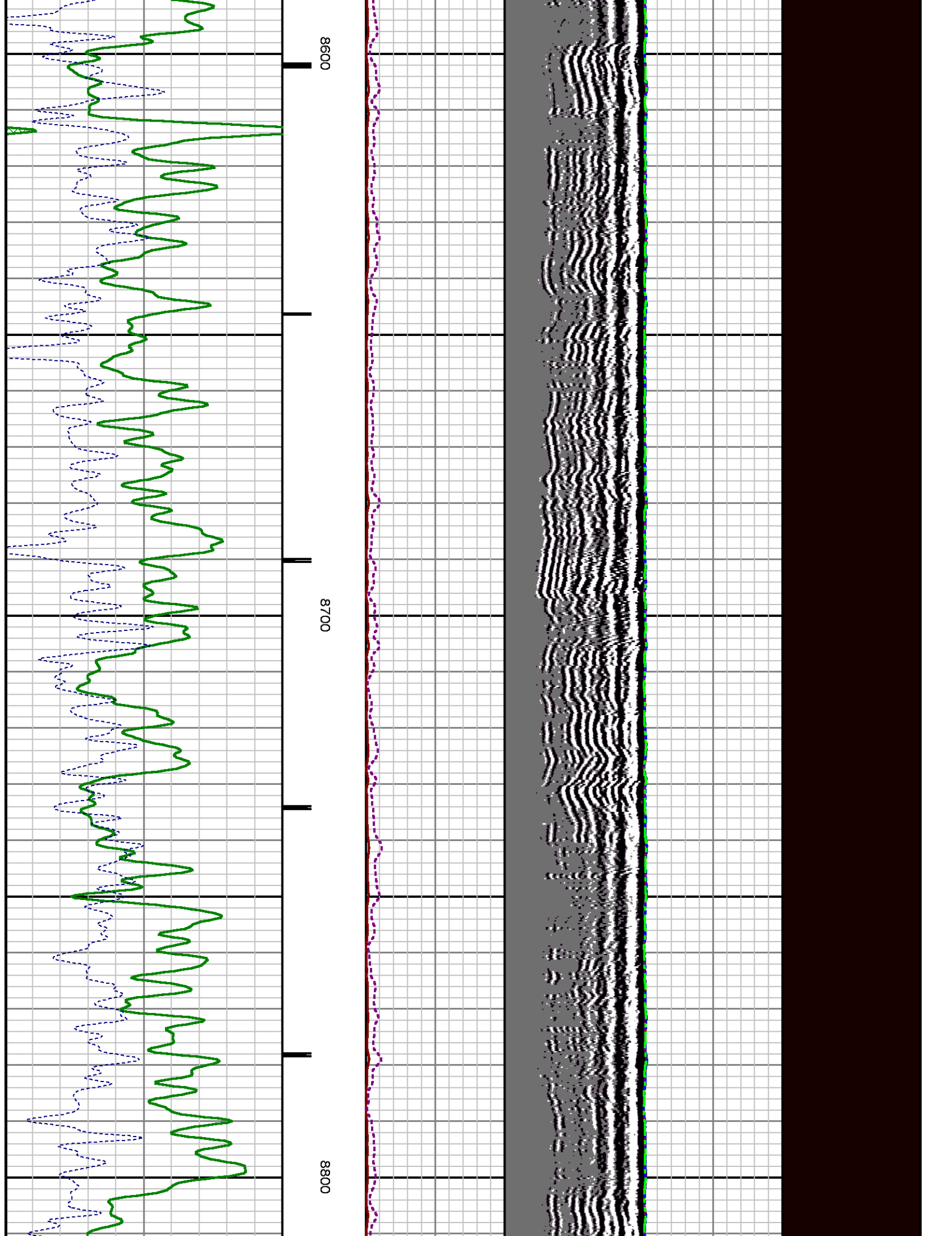


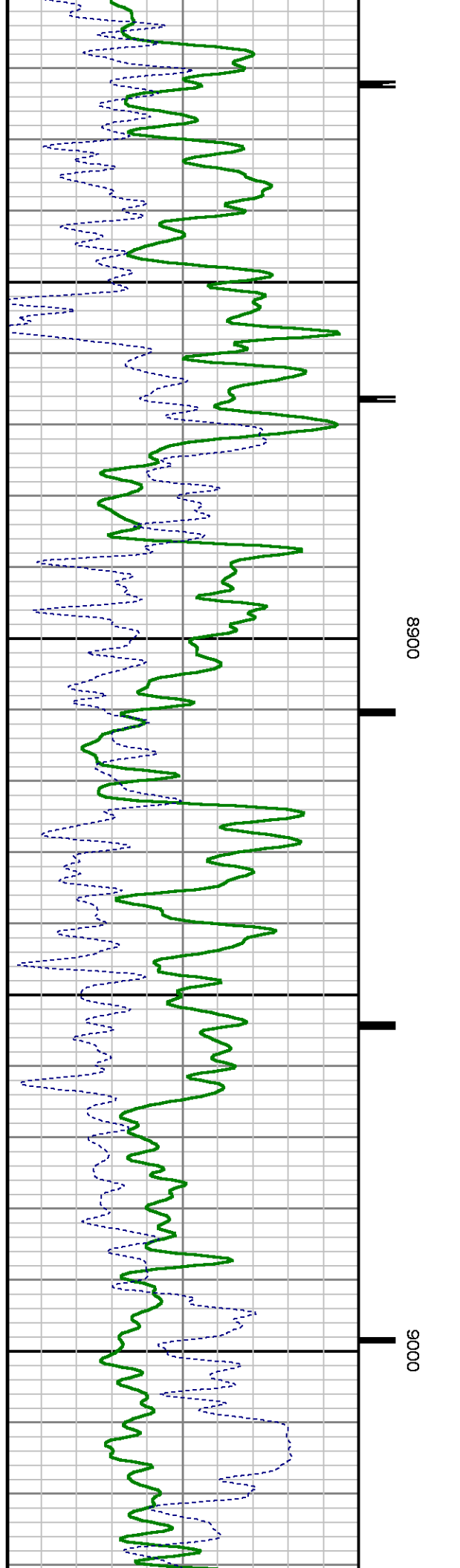
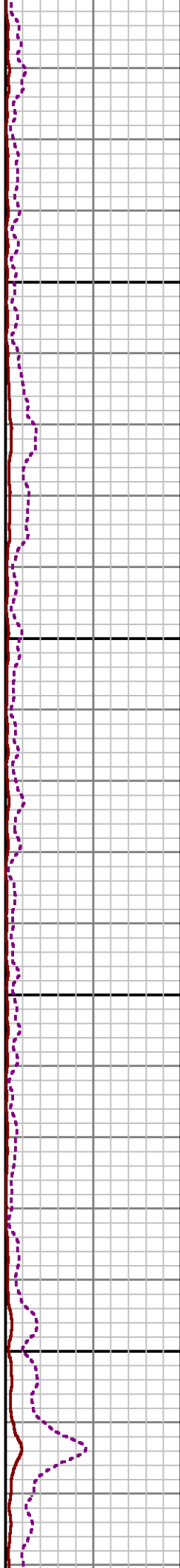
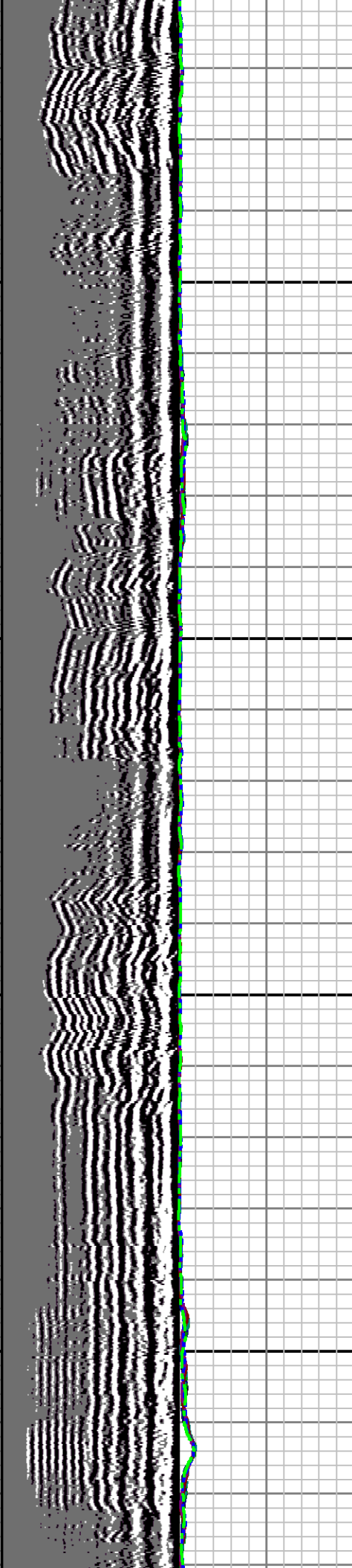


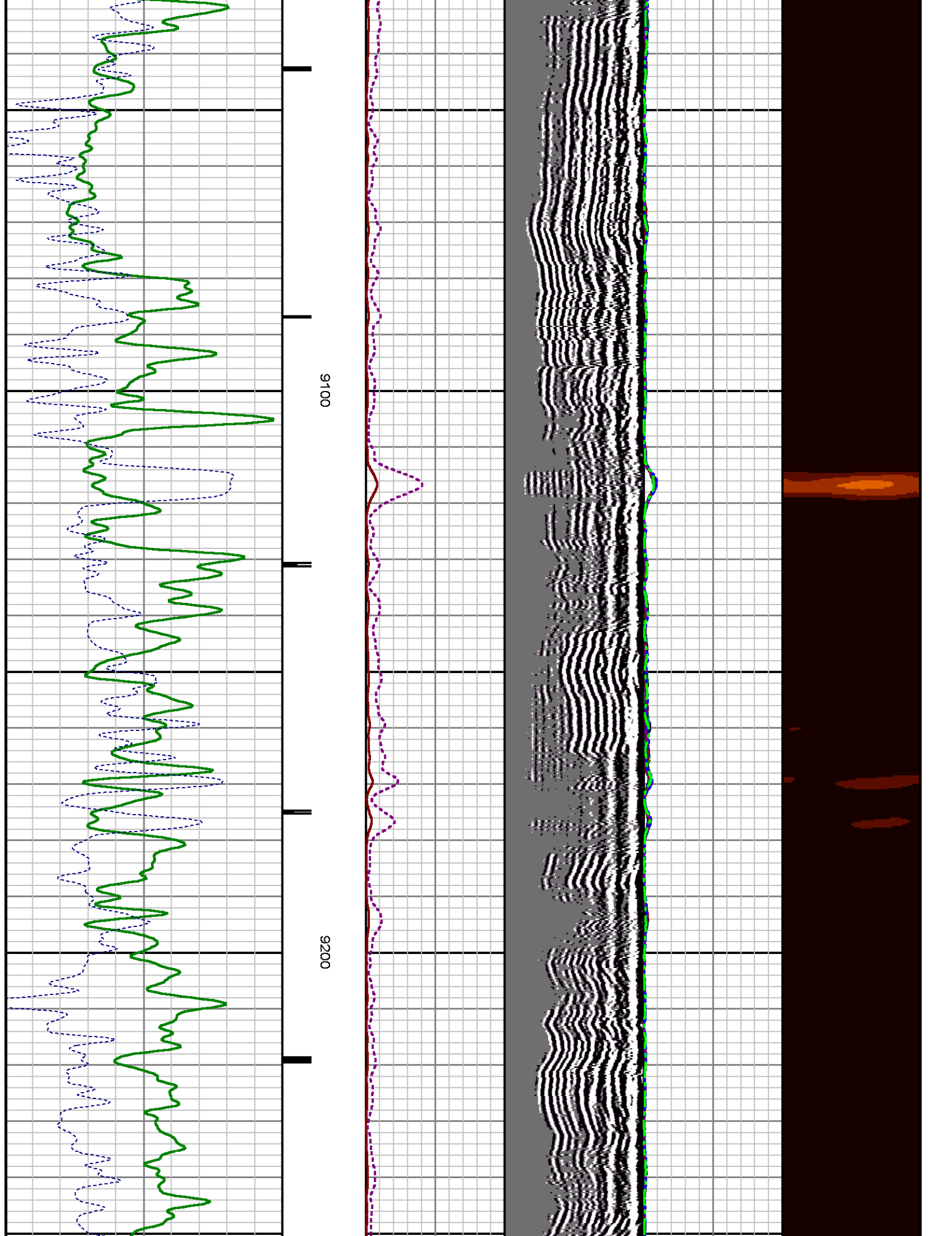


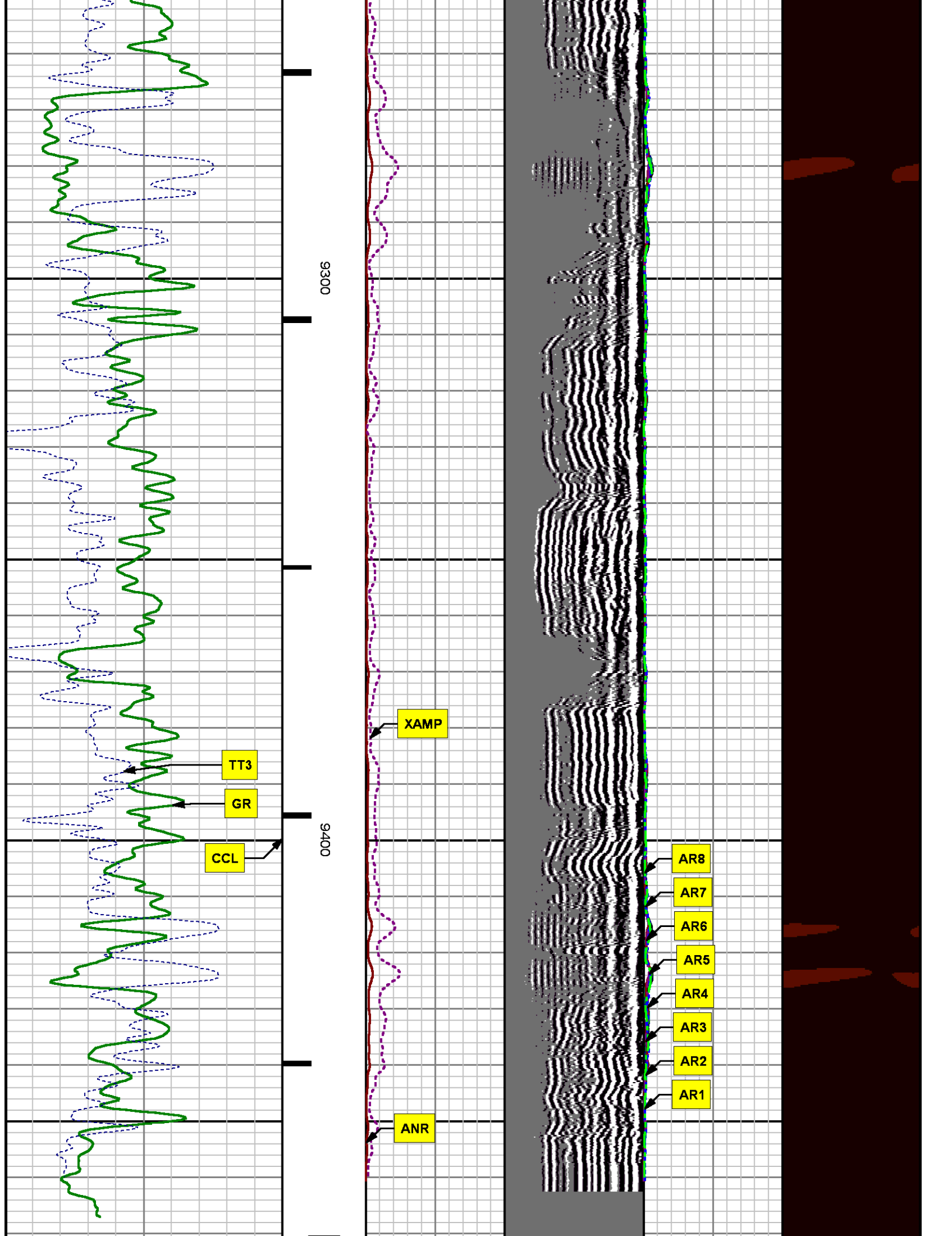


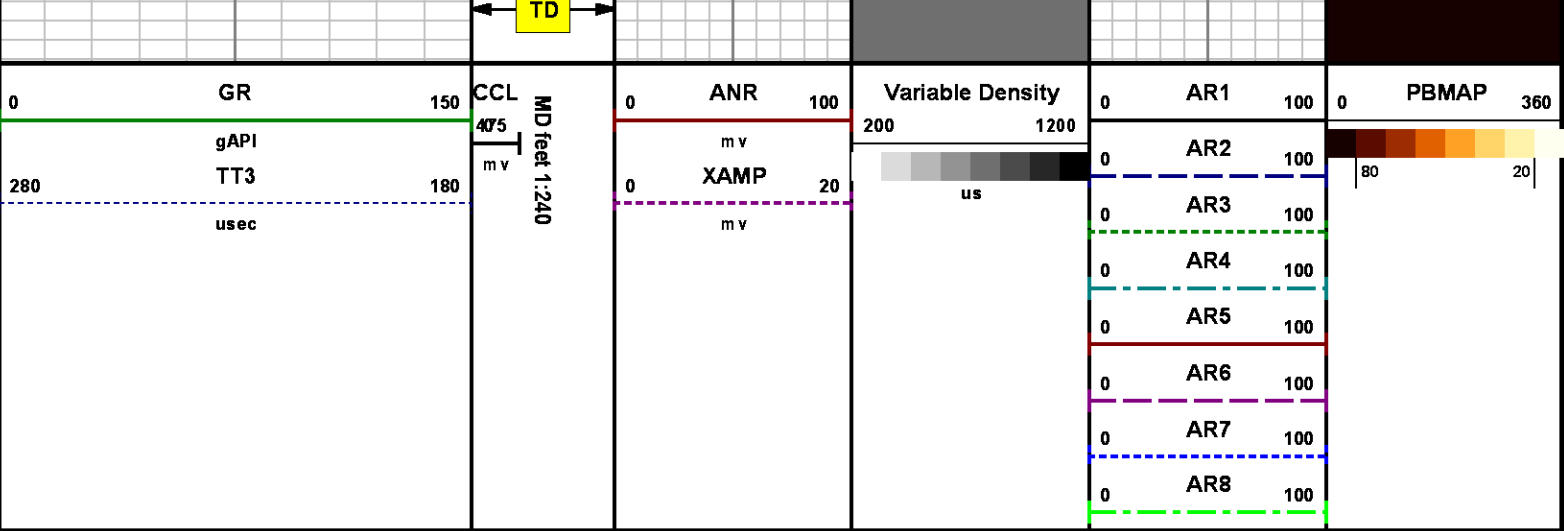












REPEAT SECTION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	uSec	9147.720	9474.970
RAL	Amp Gate Start Near	195.000	uSec	9147.720	9474.970
RAL	Amp Gate Start Radial	195.000	uSec	9147.720	9474.970
RAL	Amp Gate Width Far	25.000	uSec	9147.720	9474.970
RAL	Amp Gate Width Near	25.000	uSec	9147.720	9474.970
RAL	Amp Gate Width Radial	25.000	uSec	9147.720	9474.970
RAL	casing od	4.500	inches	9147.720	9474.970
RAL	casing wt	11.600	lbm/ft	9147.720	9474.970
RAL	FB Start Far	291.900	uSec	9147.720	9474.970
RAL	FB Start Near	180.000	uSec	9147.720	9474.970
RAL	FB Start Radial	180.000	uSec	9147.720	9474.970
RAL	FB Thresh Far	10.000	mV	9147.720	9474.970
RAL	FB Thresh Near	4.000	mV	9147.720	9474.970
RAL	FB Thresh Radial	4.000	mV	9147.720	9474.970
RAL	Fluid Travel Time	200.000	uSec/ft	9147.720	9474.563

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

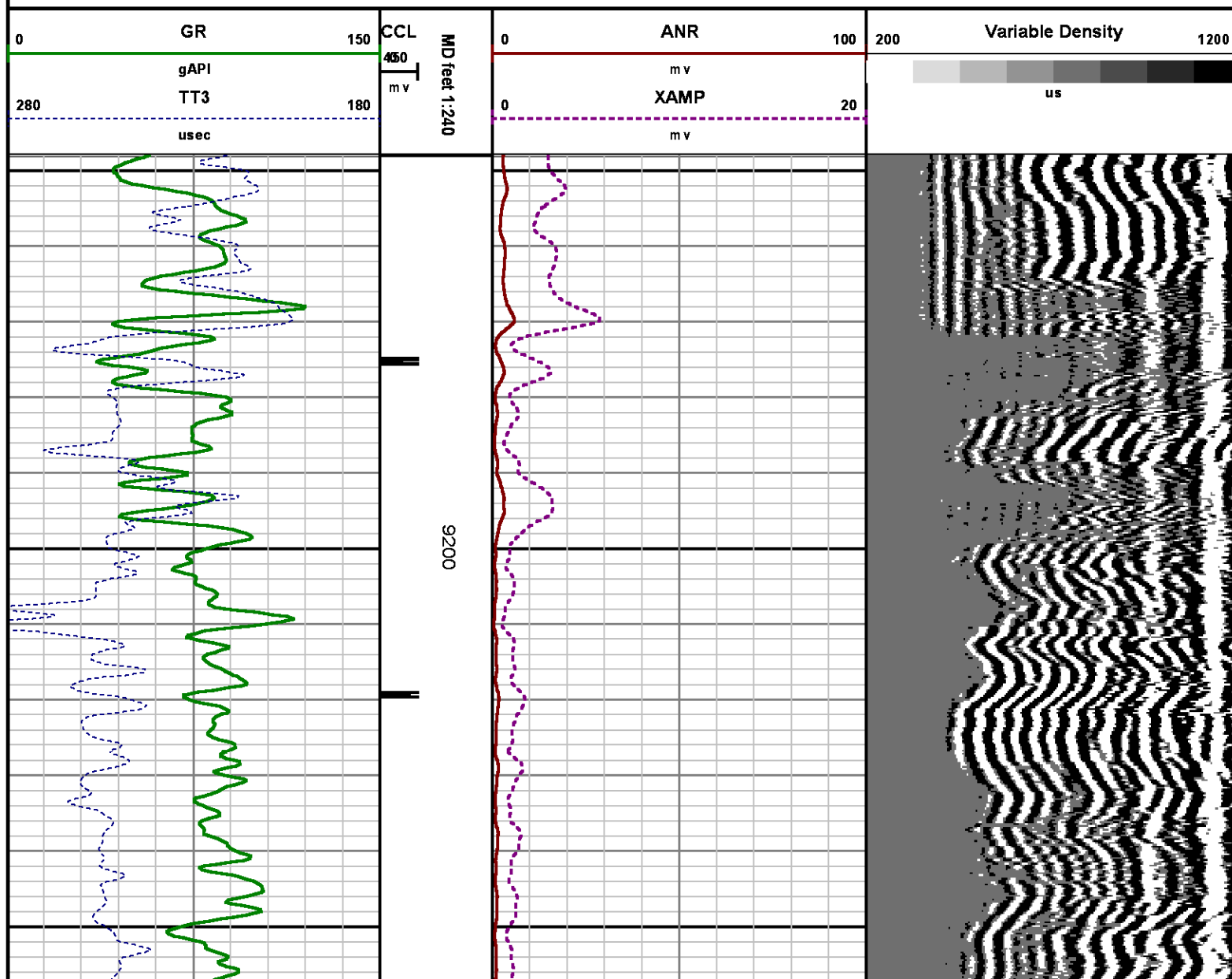
Well : FEDERAL PA 331-21

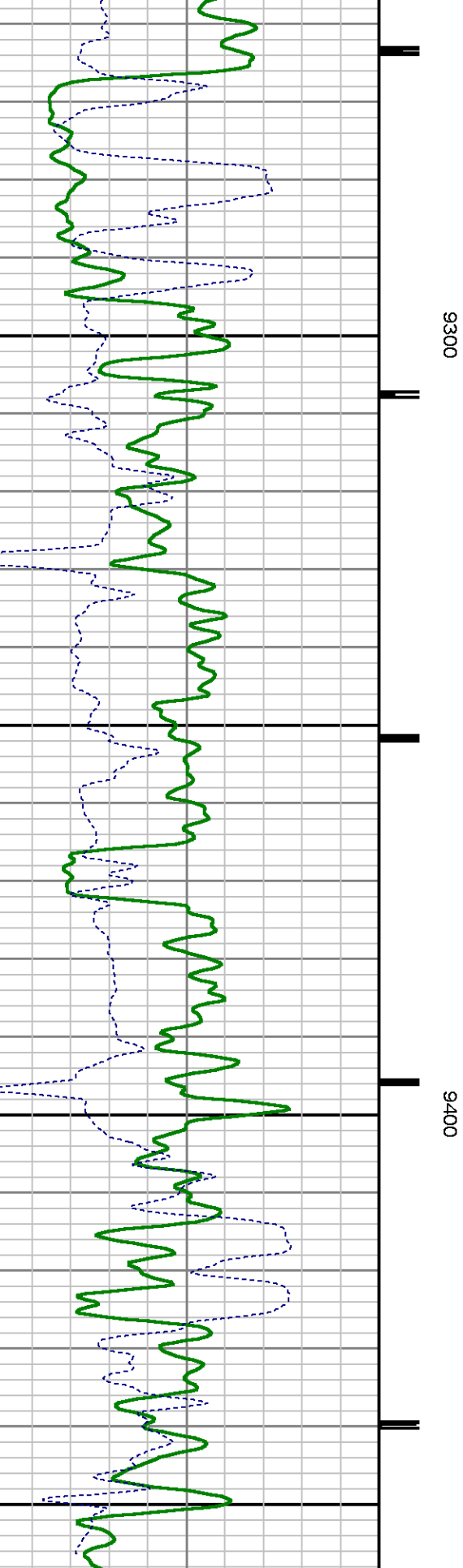
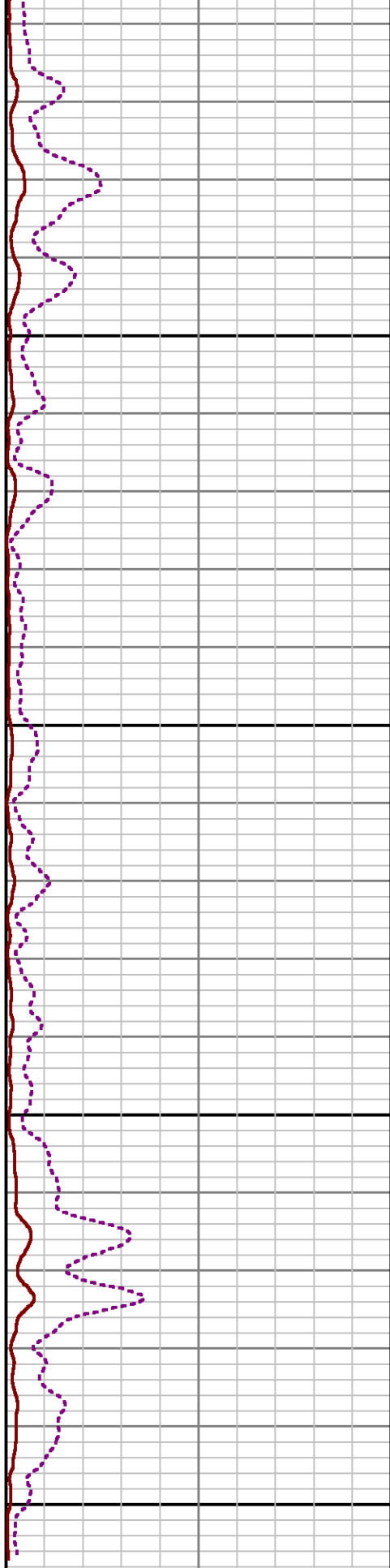
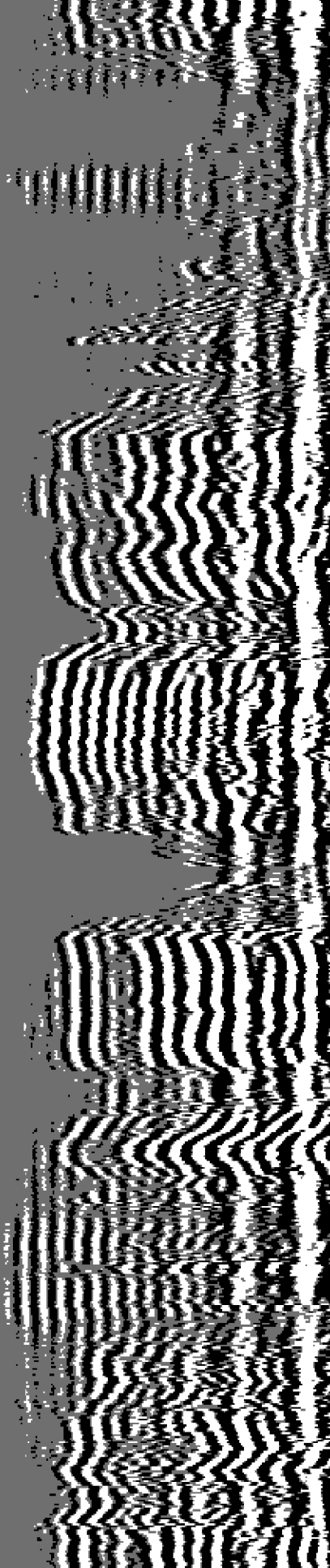
File Name : d:\welldata\wpx\pa 331-21\331ral\repeat.xtf

Mode : PlotMgr 5.4.504

Interval : 9147.97 - 9474.97 feet UP

Created : 5/23/2014 3:48:35 PM







CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP\106MAY21_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Wed May 21 07:40:54 2014 TOOL SERIES: 1426XA ASSET: 106 SEQ: MAY21

Tool Delay [usec] Tank OD in Tank Wt lbm/ft Tank ID in

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	<input type="text" value="215"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.561"/>	<input type="text" value="100.00"/>	<input type="text" value="0.45"/>
3 Ft. Receiver	<input type="text" value="217"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.390"/>	<input type="text" value="100.00"/>	<input type="text" value="0.45"/>
5 Ft. Receiver	<input type="text" value="324"/>	<input type="text" value="325"/>	<input type="text" value="30"/>	<input type="text" value="248"/>	<input type="text" value="25"/>	<input type="text" value="0.070"/>	<input type="text" value="150.00"/>	<input type="text" value="0.48"/>
Radial #1	<input type="text" value="217"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-1.017"/>	<input type="text" value="100.00"/>	<input type="text" value="0.45"/>
Radial #2	<input type="text" value="215"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.629"/>	<input type="text" value="100.00"/>	<input type="text" value="0.45"/>
Radial #3	<input type="text" value="215"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.699"/>	<input type="text" value="100.00"/>	<input type="text" value="0.45"/>
Radial #4	<input type="text" value="215"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.619"/>	<input type="text" value="100.00"/>	<input type="text" value="0.45"/>
Radial #5	<input type="text" value="217"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.533"/>	<input type="text" value="100.00"/>	<input type="text" value="0.45"/>
Radial #6	<input type="text" value="217"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.237"/>	<input type="text" value="100.00"/>	<input type="text" value="0.46"/>
Radial #7	<input type="text" value="216"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.613"/>	<input type="text" value="100.00"/>	<input type="text" value="0.46"/>
Radial #8	<input type="text" value="217"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.484"/>	<input type="text" value="100.00"/>	<input type="text" value="0.45"/>

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\106MAY21 fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Wed May 21 07:43:42 2014 TOOL SERIES: 1426XA ASSET: 106 SEQ: MAY21

Tool Delay [usec] Casing OD in Casing Wt lbm/ft Casing ID in

RECEIVER Zero Gate Zero Gate Zero Amp Full Amp Wellsite Factor Amp Ref

RECEIVER	Start [usec]	Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wentz Factor	Amp. Ref [mV]
CAL Pulse	166	25	-0.273	0.000	1.00	100.000
3 Ft. Receiver	195	25	-1.296			
5 Ft. Receiver	305	25	-1.355			
Radial #1	195	25	-2.265			
Radial #2	195	25	-1.665			
Radial #3	195	25	-1.368			
Radial #4	195	25	-1.645			
Radial #5	195	25	-1.233			
Radial #6	195	25	-1.276			
Radial #7	195	25	-0.983			
Radial #8	195	25	-1.033			

GAMMA RAY

Calibration File: C:\case\calver\GR45608.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu May 08 09:48:12 2014 TOOL SERIES: 2459XA ASSET: 456 SEQ: 08

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	97.82	367.47	0.686	67.11	252.11	185.00

Verification File: C:\case\calver\GR45608.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Thu May 08 09:49:43 2014 TOOL SERIES: 2459XA ASSET: 456 SEQ: 08

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	98.76	372.44	0.686	67.76	255.53	187.77

TOOL DIAGRAM

OTA SHORT CABLE HEAD

PROBE 2 3/4 DUAL RECEIVER RADII
Series 1426XA



21.81'

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

XMIT	15.62'
NEAR RCVR	12.54'
FAR RCVR	10.62'
CCL	8.92'
GR	7.06'
NEU	1.67'
	0.00'

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



Baker Atlas

CASE

Company
Well
Field
County

WPX ENERGY
FEDERAL PA 331-21
PARACHUTE
GARFIELD

State

COLORADO

Location

SHL: 2600' FNL & 1411' FWL
BHL: 582' FNL & 1620' FEL (NWNE)

SEC 21 TWP 6S RGE 95W

Elevations

KB 6056 ft
DF
GL 6030 ft

File No:

CH084825

API No:

05045220290000

21 6S 95W

PA 22-21 PAD

NABORS 573