



# RADIAL ANALYSIS BOND LOG

Baker Atlas

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

CH085018 **Well** **WPX ENERGY PA 24-2**

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

05045221480000 **County** **GARFIELD** **State** **CO**

## Location

SHL: 2014' FSL & 1567' FWL

BHL: 1134' FSL & 1964' FWL

SEC 2 TWP 7S RGE 9SW

## Other Services

RPM

GL Elevation 5821 ft

KB 25 ft Above P. D.

Elevations

KB 5846 ft

DF

GL 5821 ft

Permanent Datum  
Log Measured From  
Drill Measured From

Date 11/MAY/14

Run ONE

Service Order US085018

Depth Driller 7630 ft

Depth Logger 7600 ft

Bottom Logged Interval 7490 ft

Top Logged Interval 25 ft

Time Started 7:30

Time Finished 11:30

Operator Rig Time 4 HOURS

Type of Fluid in Hole WATER

Fluid Density NA

Salinity NA

Fluid Level 68 ft

Logged Cement Top NA

Wellhead Pressure 0 psi

Maximum Hole Deviation NA

Nominal Logging Speed 66 fpm

Maximum Recorded Temperature 225 degF

Reference Log NA

Equipment No. 4271 Location GRAND JUNCTION

Recorded By NEMELL

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	0 ft	860 ft
8.75 in	860 ft	7595 ft

## Casing Record

Size	Weight	Grade	From	To
9.625 in			0 ft	860 ft
4.5 in	11.6 lbm/ft	I-80	0 ft	7595 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 10 feet.

Logged with zero PSI at wellhead.

BHT = 225 °F

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

PRIMARY PRESENTATION

0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	35.656	7500.250
RAL	Amp Gate Start Near	195.000	usec	35.656	7500.250
RAL	Amp Gate Start Radial	195.000	usec	35.656	7500.250
RAL	Amp Gate Width Far	25.000	usec	35.656	7500.250
RAL	Amp Gate Width Near	25.000	usec	35.656	7500.250
RAL	Amp Gate Width Radial	25.000	usec	35.656	7500.250
RAL	casing od	4.500	inches	35.656	7500.250
RAL	casing wt	11.600	lbm/ft	35.656	7500.250
RAL	FB Start Far	291.900	usec	35.656	7500.250
RAL	FB Start Near	175.391	usec	35.656	7500.250
RAL	FB Start Radial	175.391	usec	35.656	7500.250
RAL	FB Thresh Far	10.000	mv	35.656	7500.250
RAL	FB Thresh Near	4.000	mv	35.656	7500.250
RAL	FB Thresh Radial	4.000	mv	35.656	7500.250
RAL	Fluid Travel Time	200.000	usec/ft	35.656	7501.219

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 PA 24-2

File Name : d:\welldata\wpx\wpx energy pa 24-2\24cbl\main.xtf

Mode : PlotMgr 5.4.504

Interval : 0.00 - 7505.00 feet UP

Created : 5/11/2014 2:20:51 PM

0

GR

150

gAPI

TT3

u sec

280

180

CCL

MD feet 1:240

0/5

m v

0

ANR

100

m v

XAMP

m v

0

20

200

Variable Density

1200

us

WELLHEAD

GR

CCL

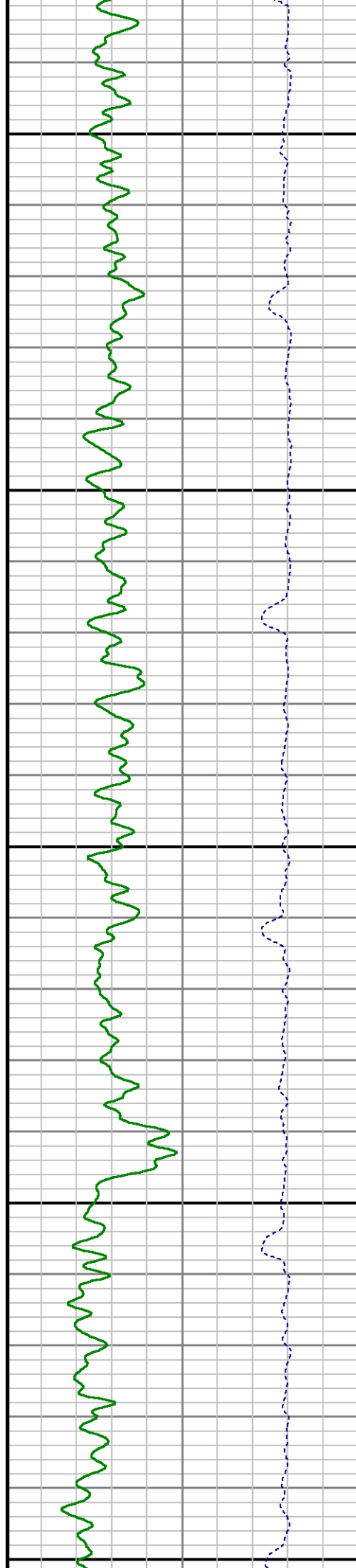
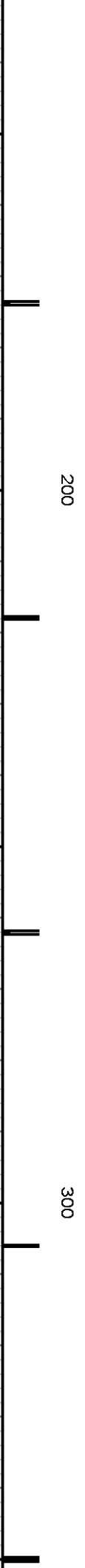
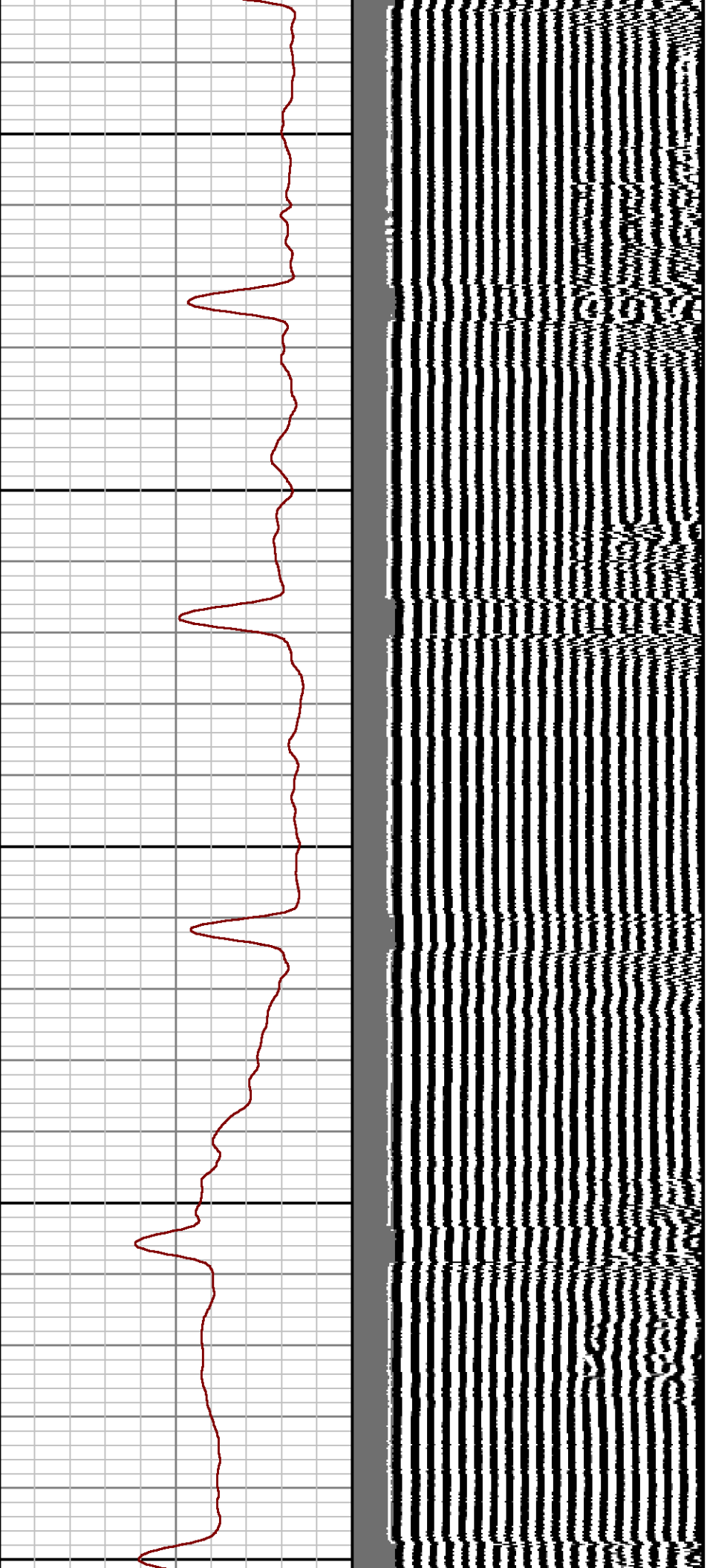
TT3

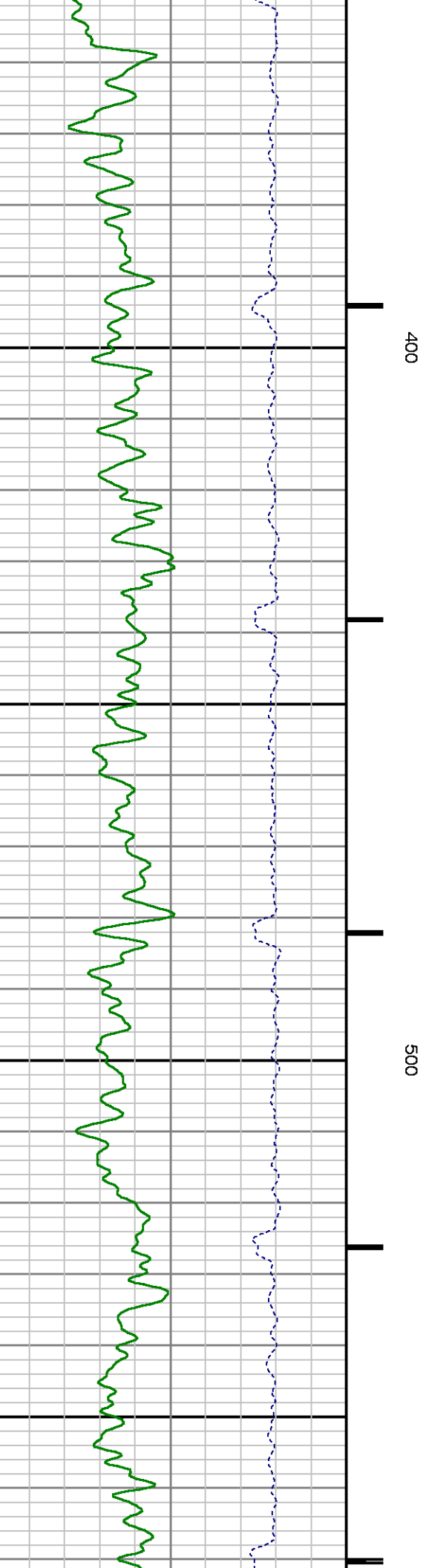
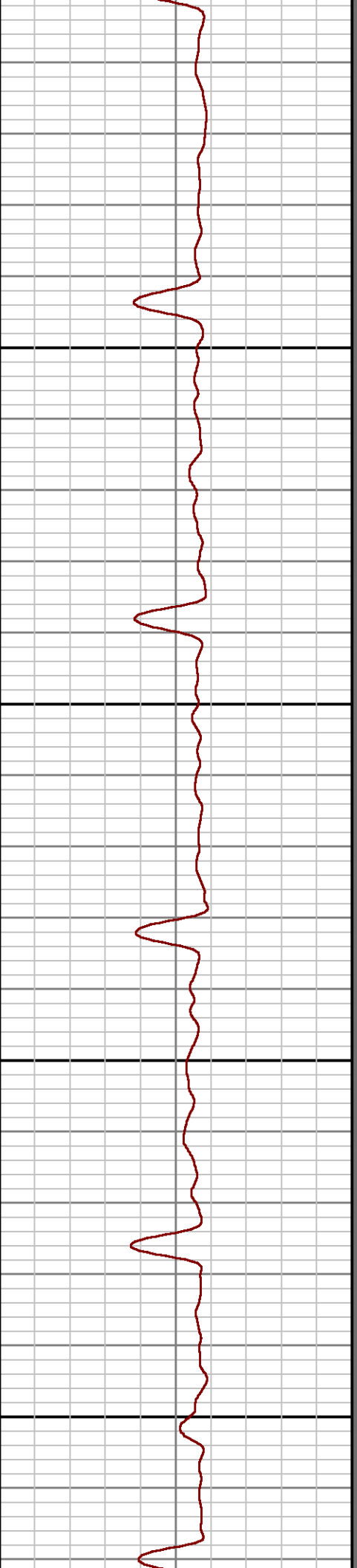
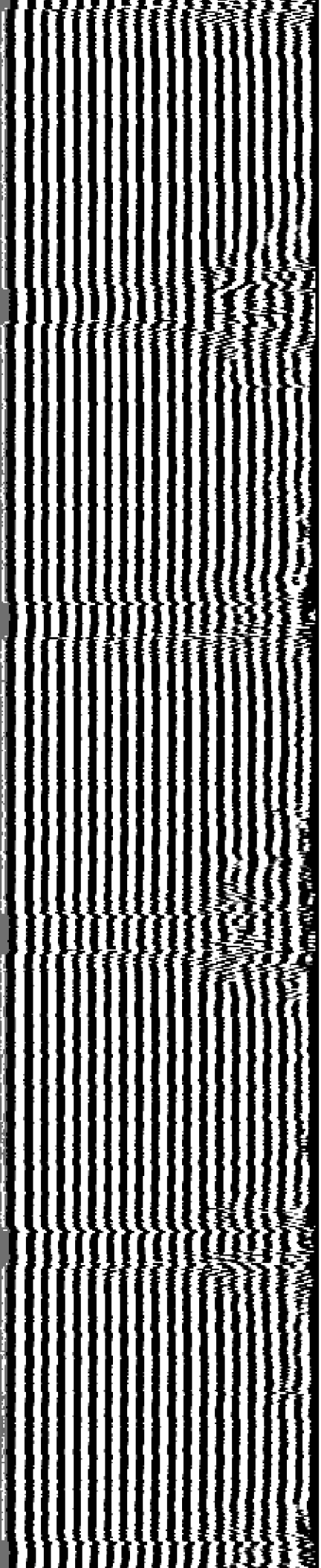
100

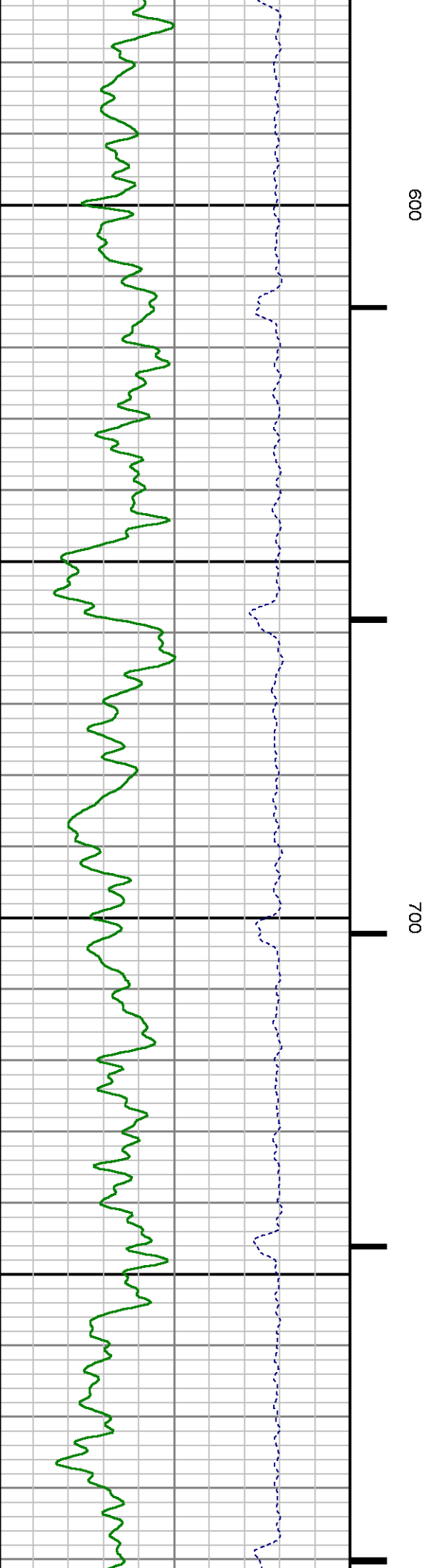
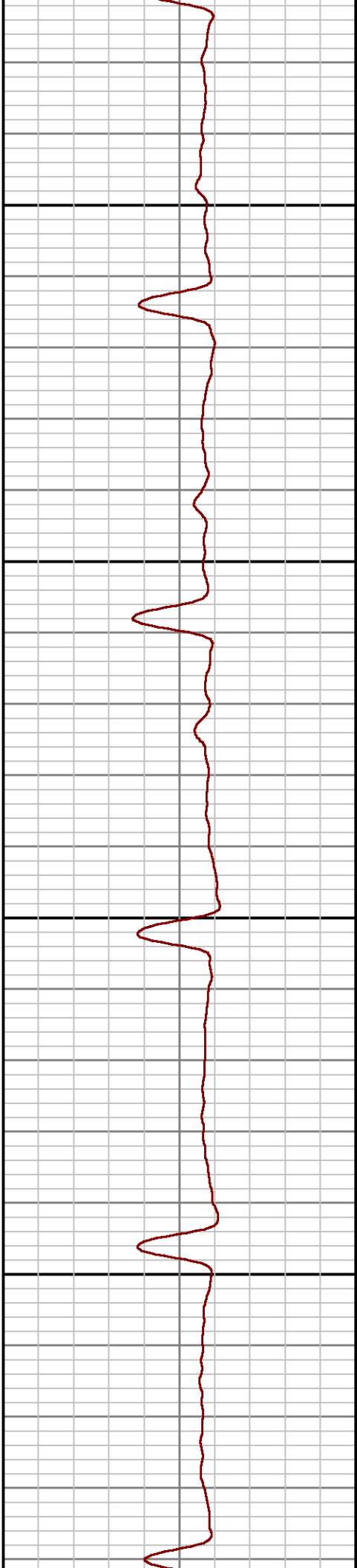
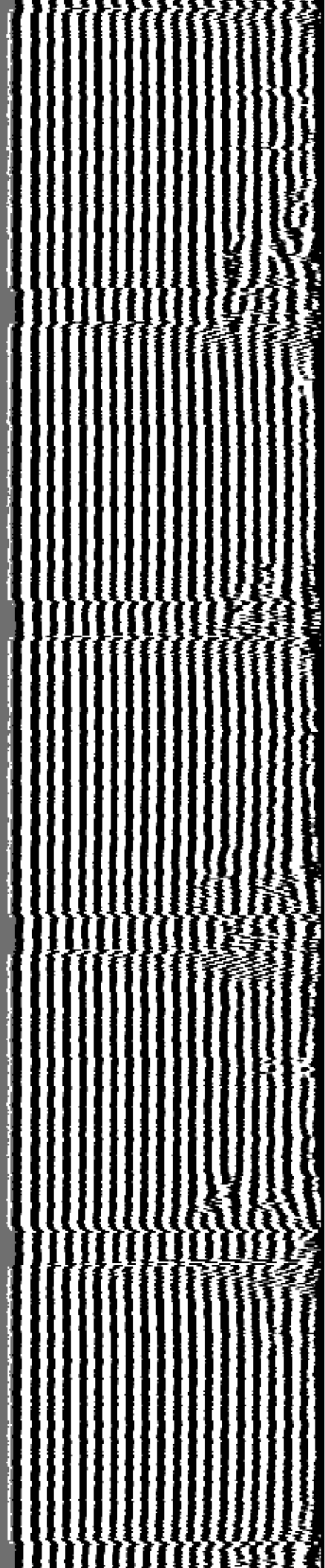
XAMP

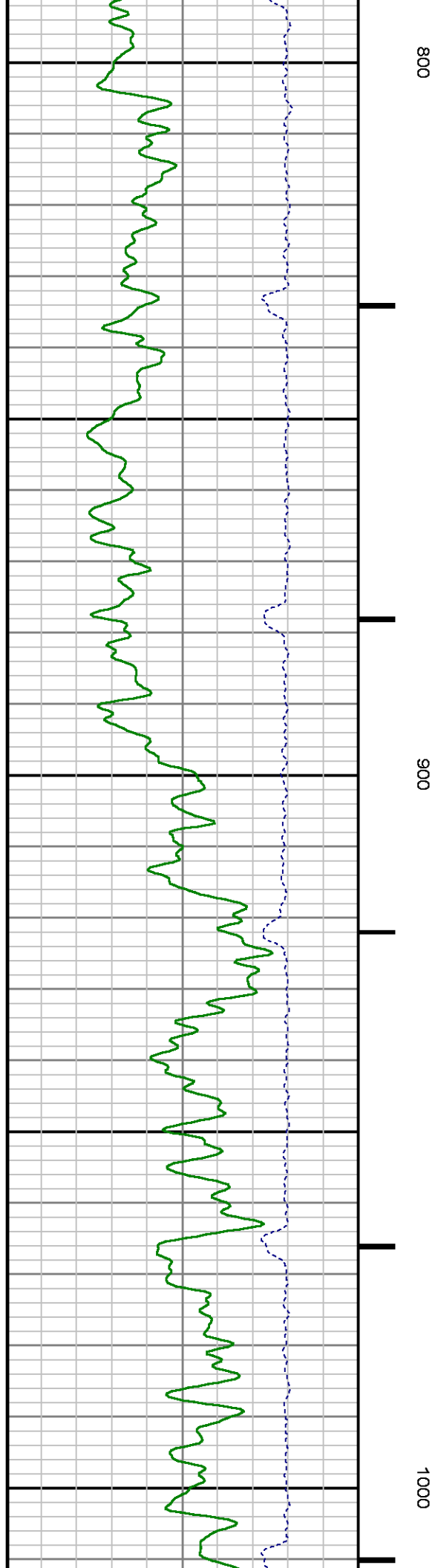
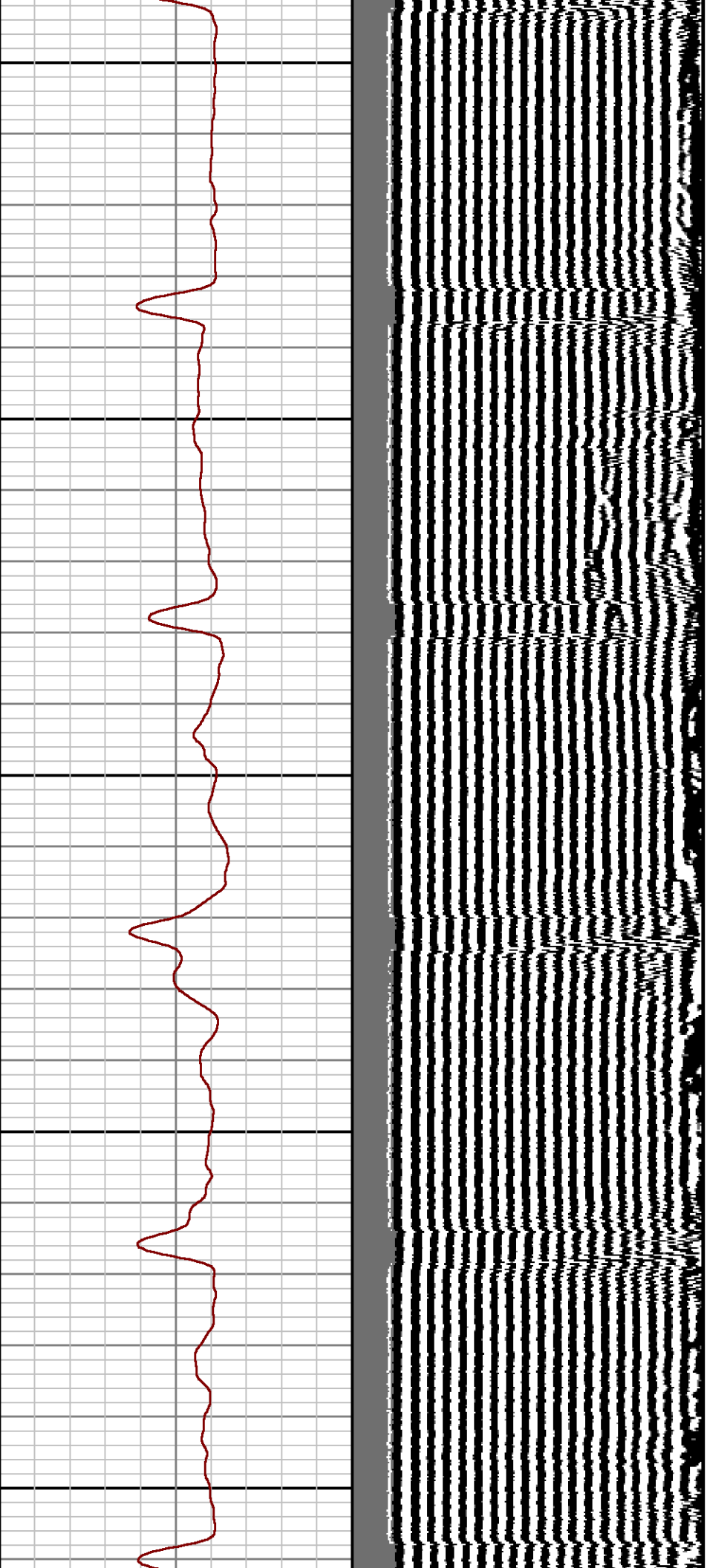
ANR

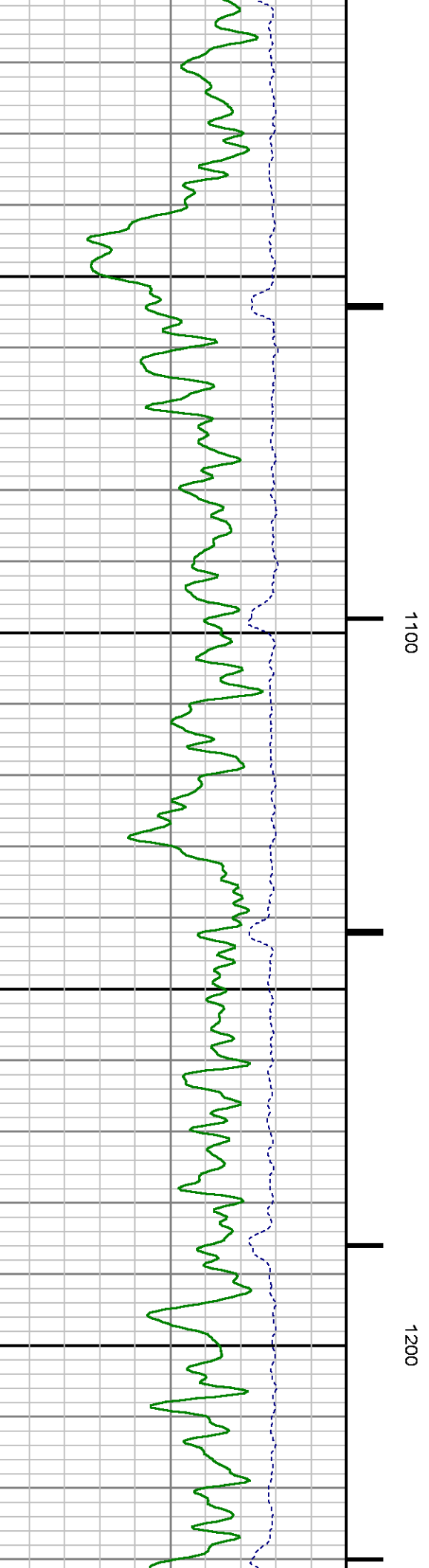
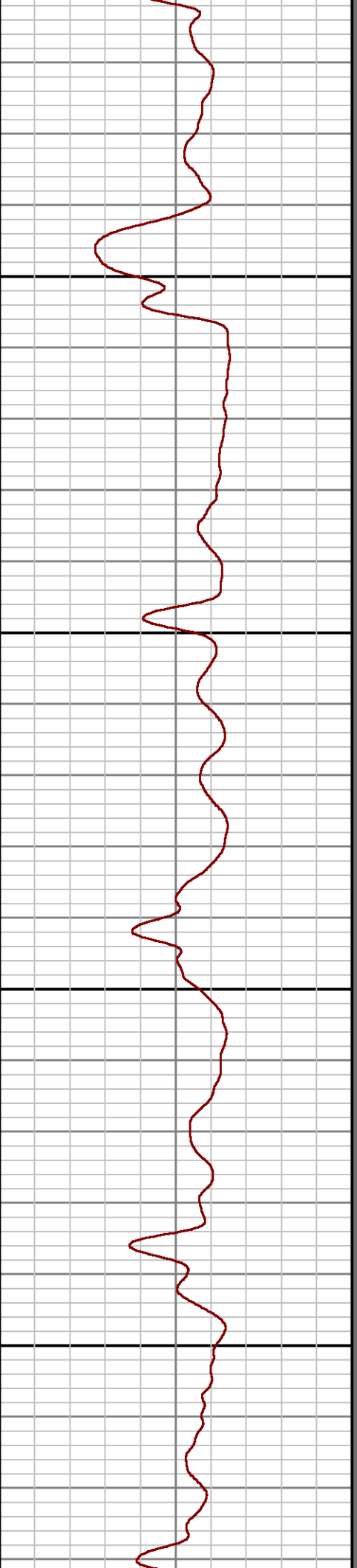
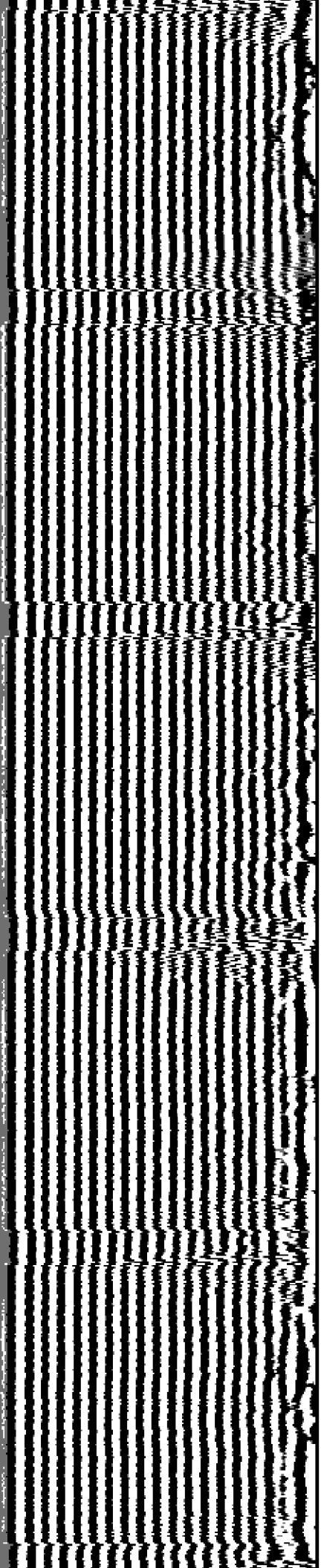
FLUID LEVEL



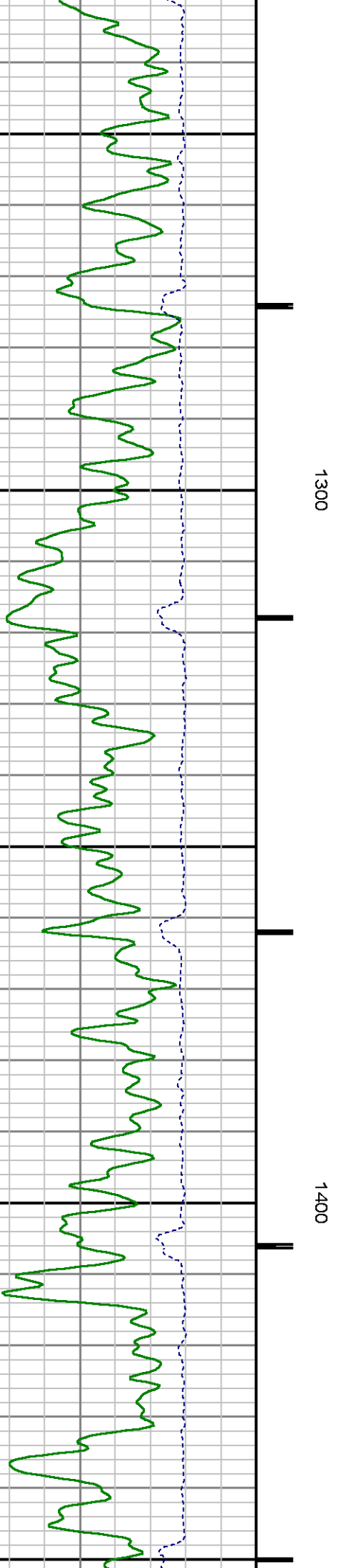
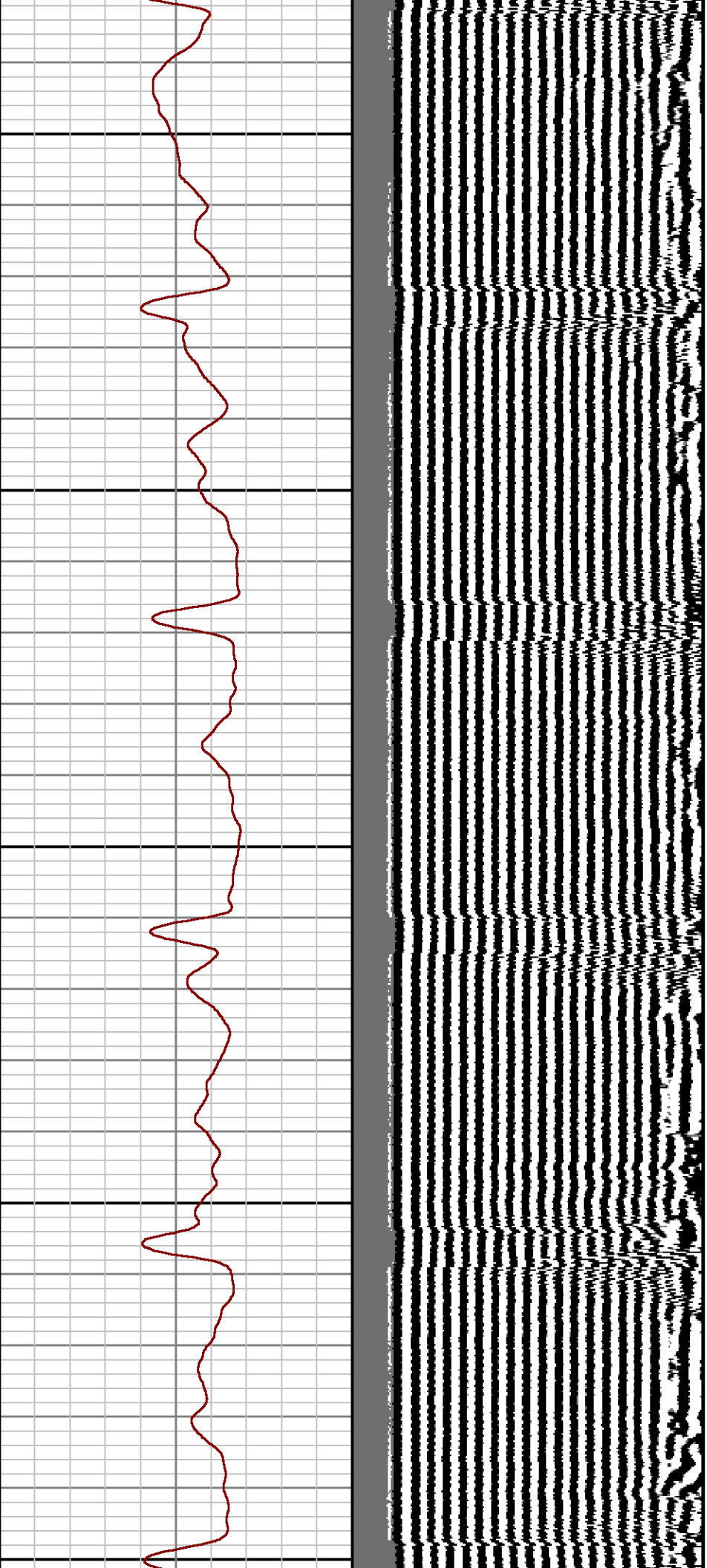


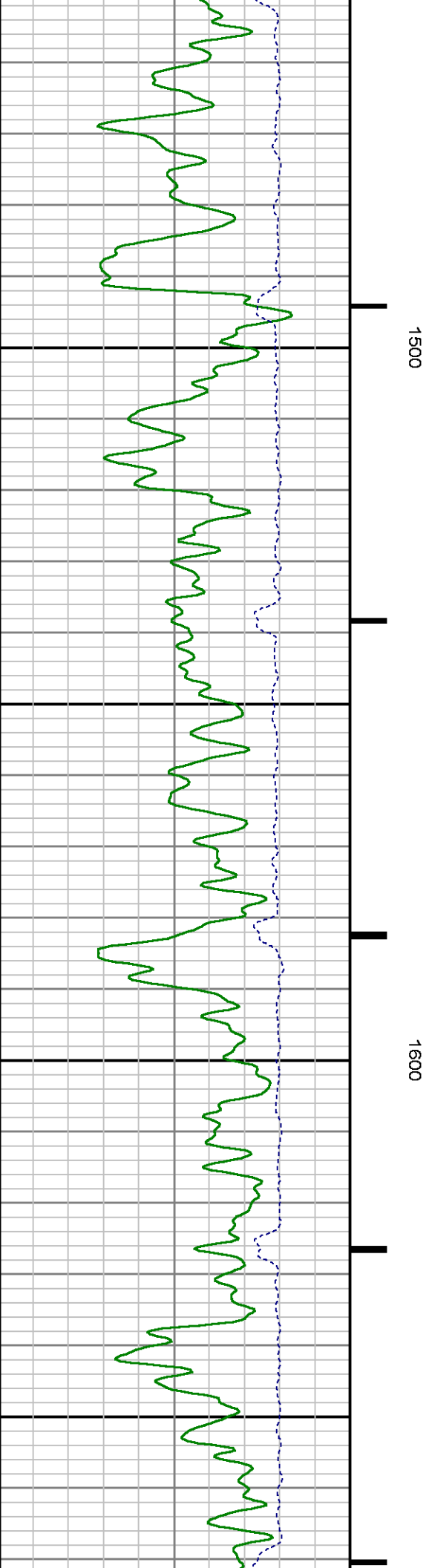
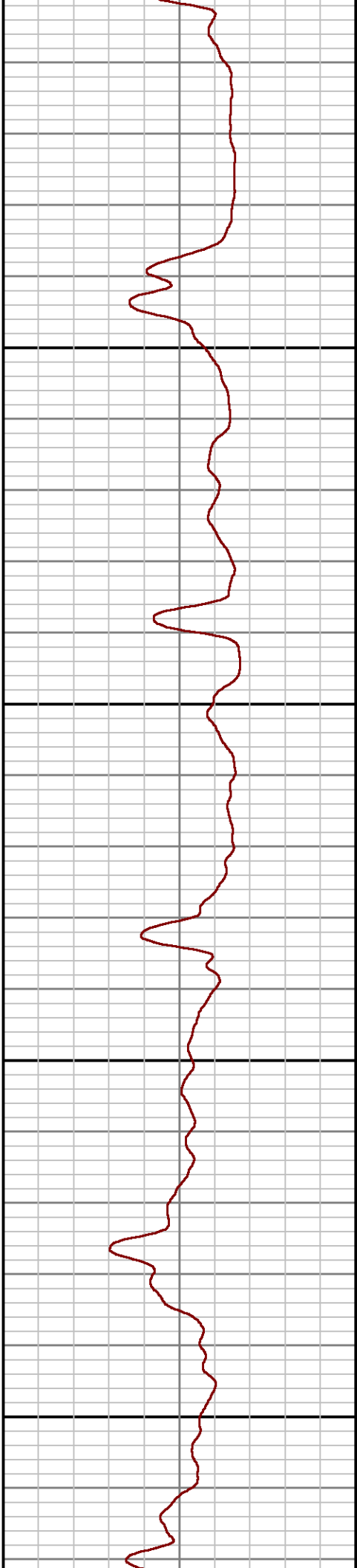
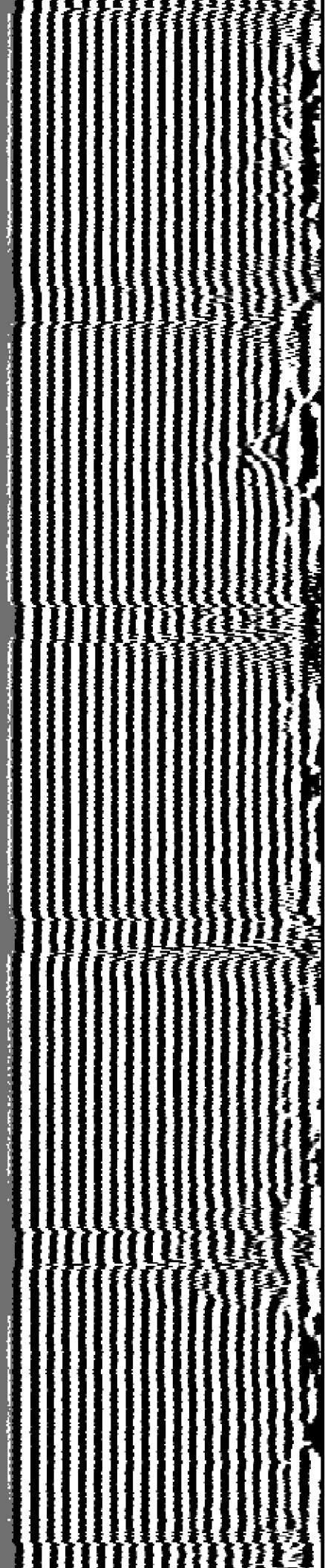


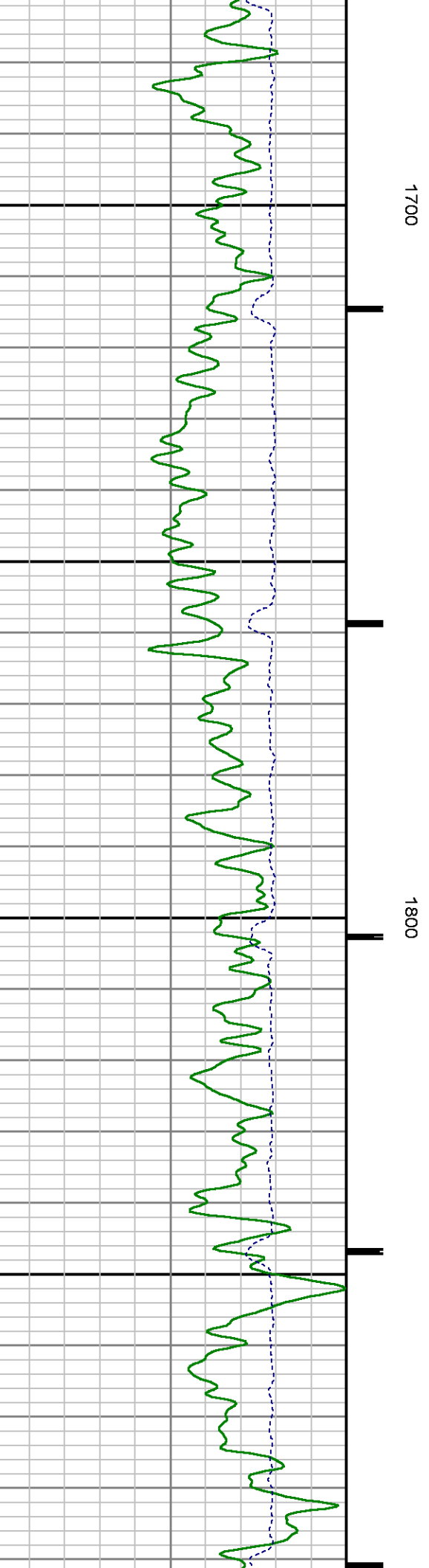
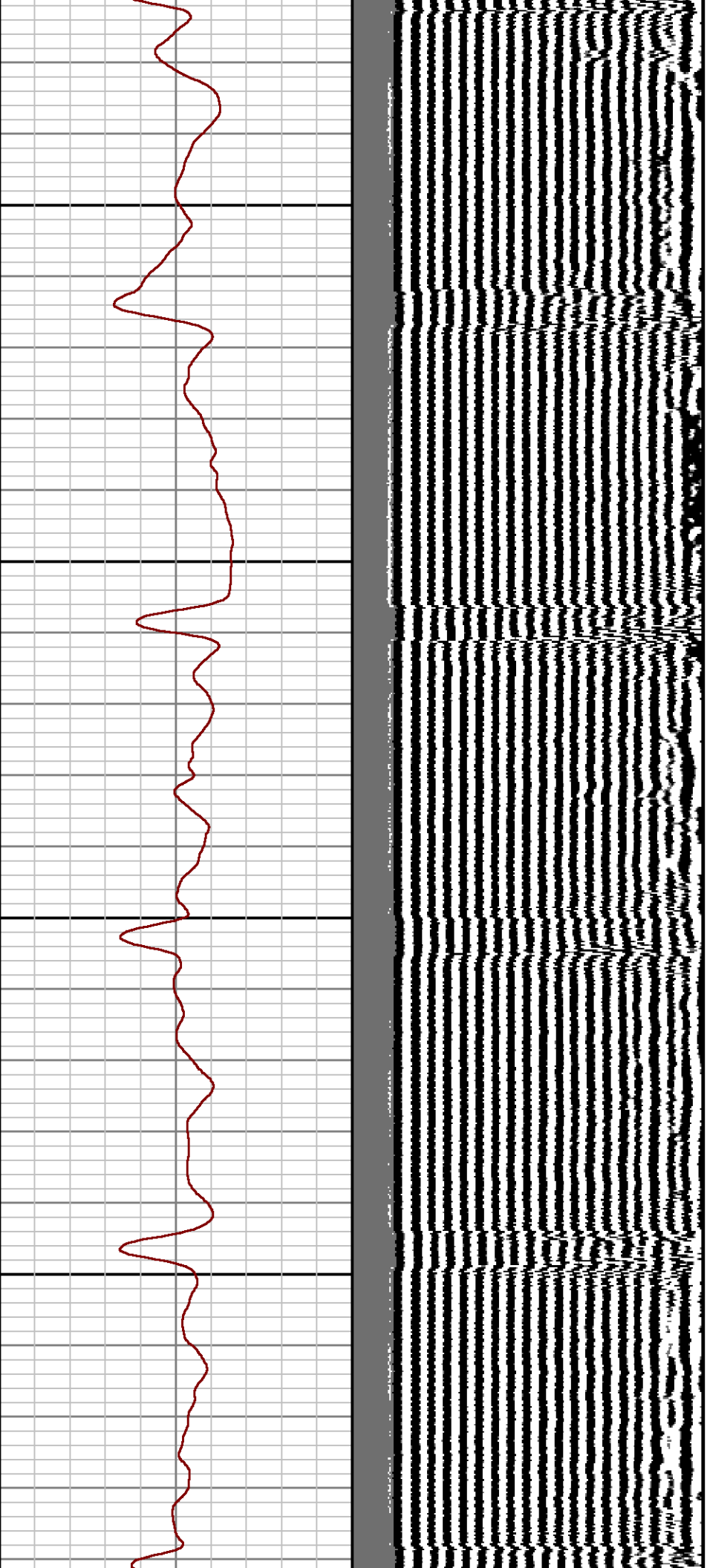


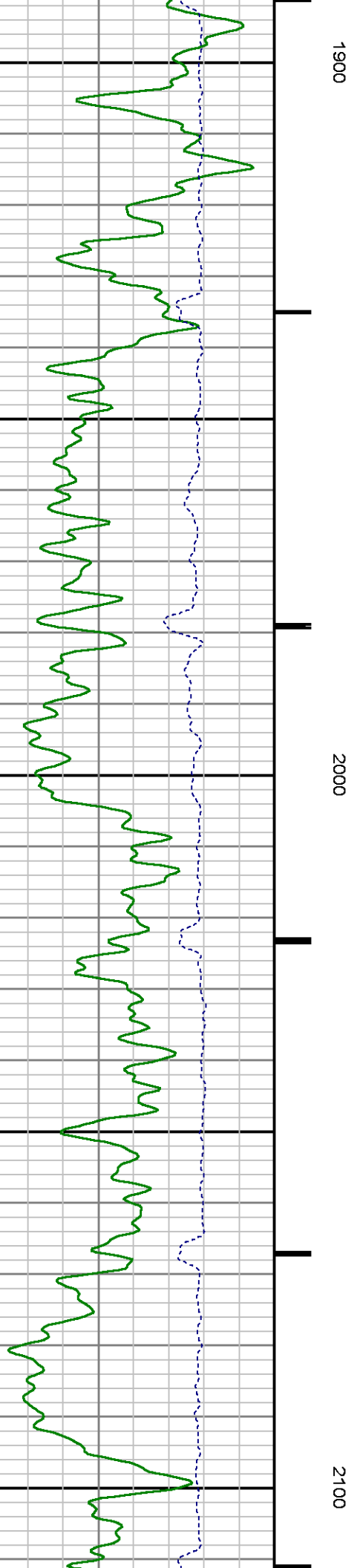
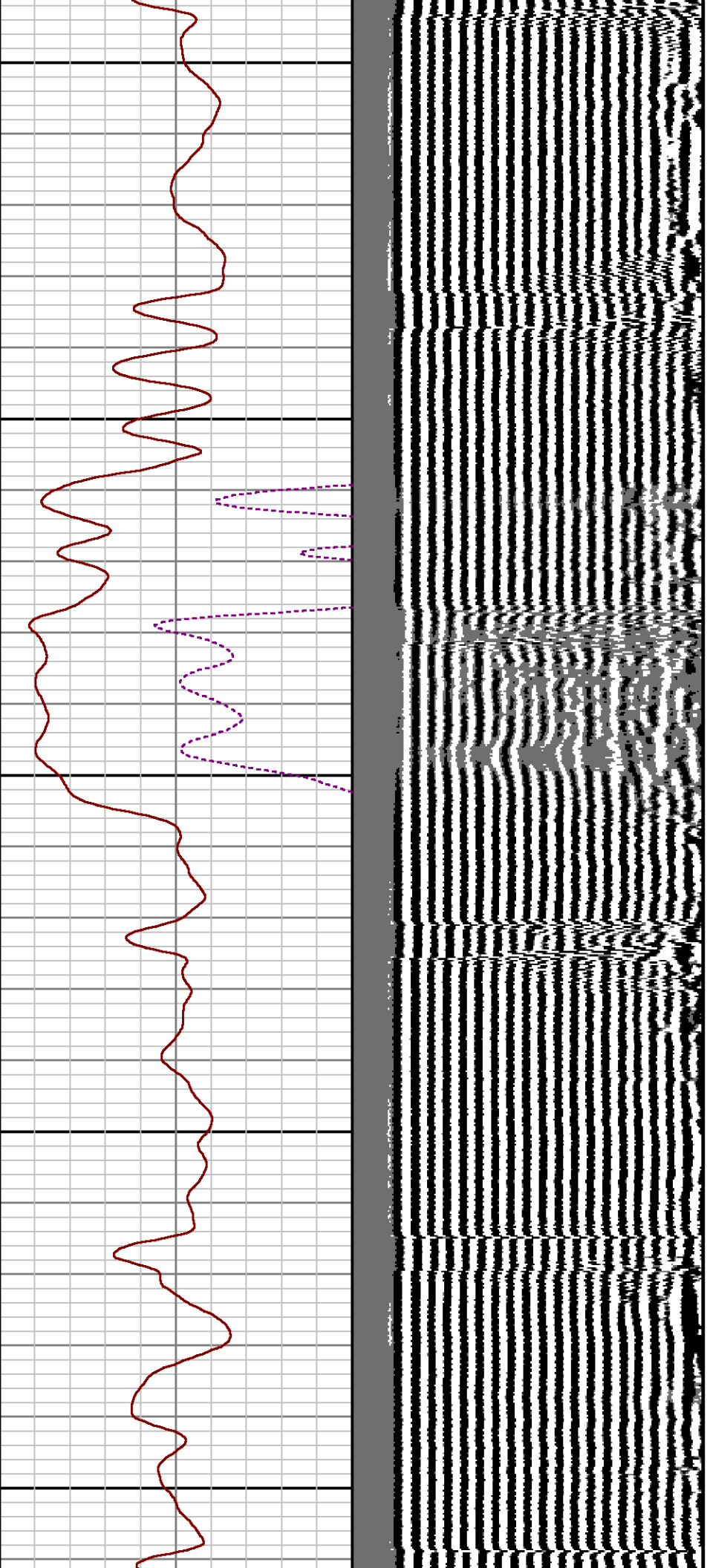


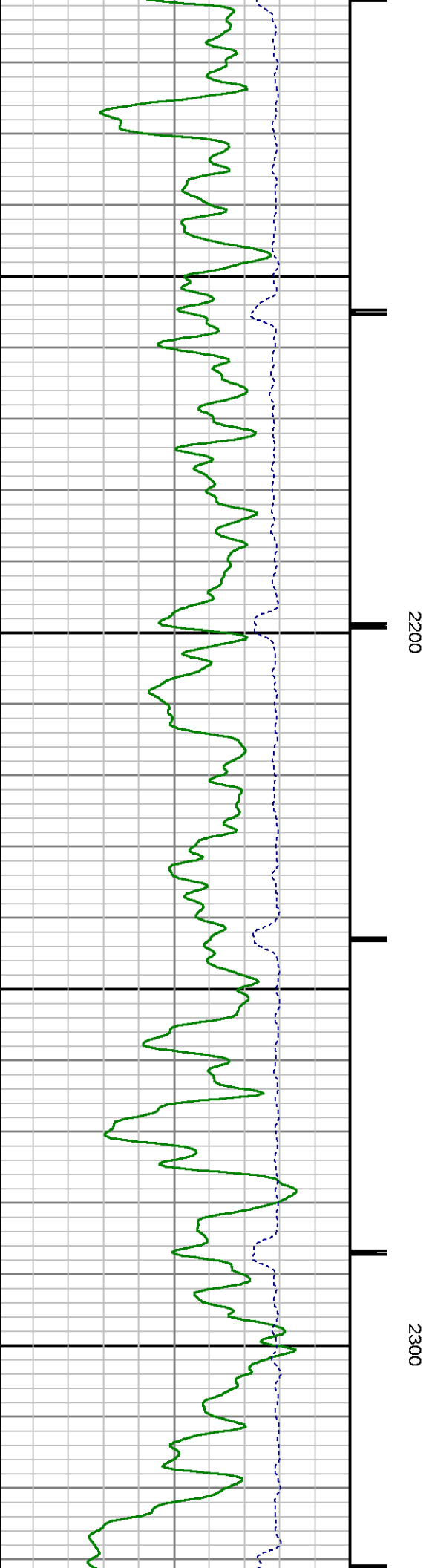
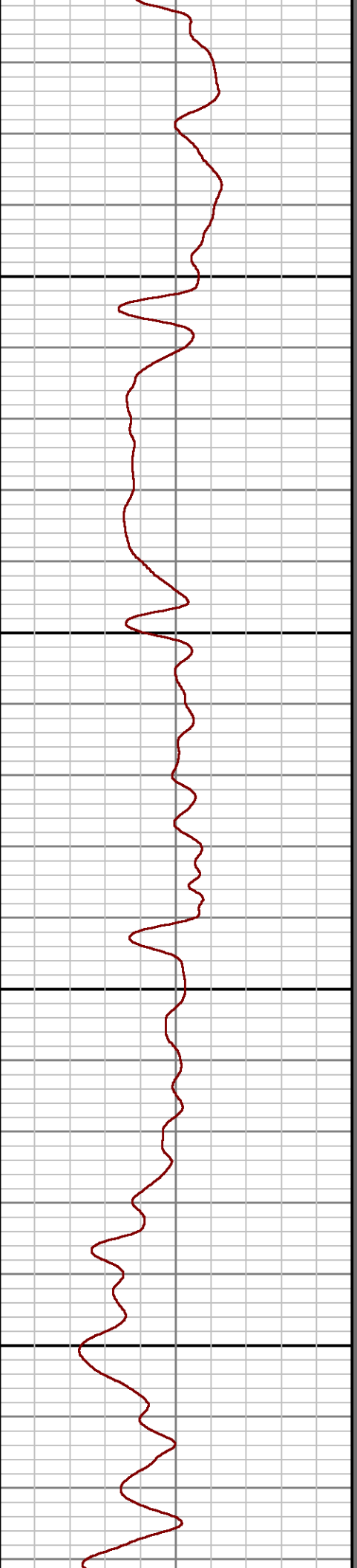
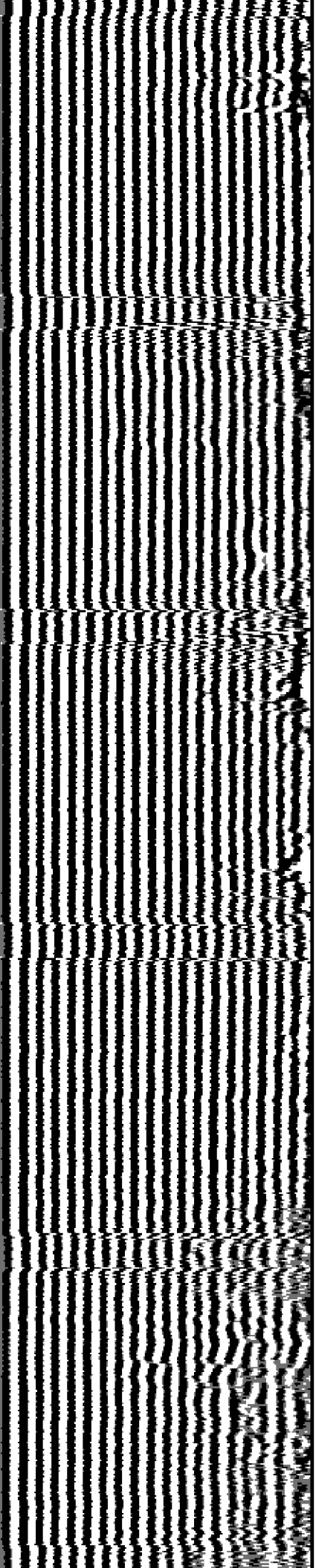




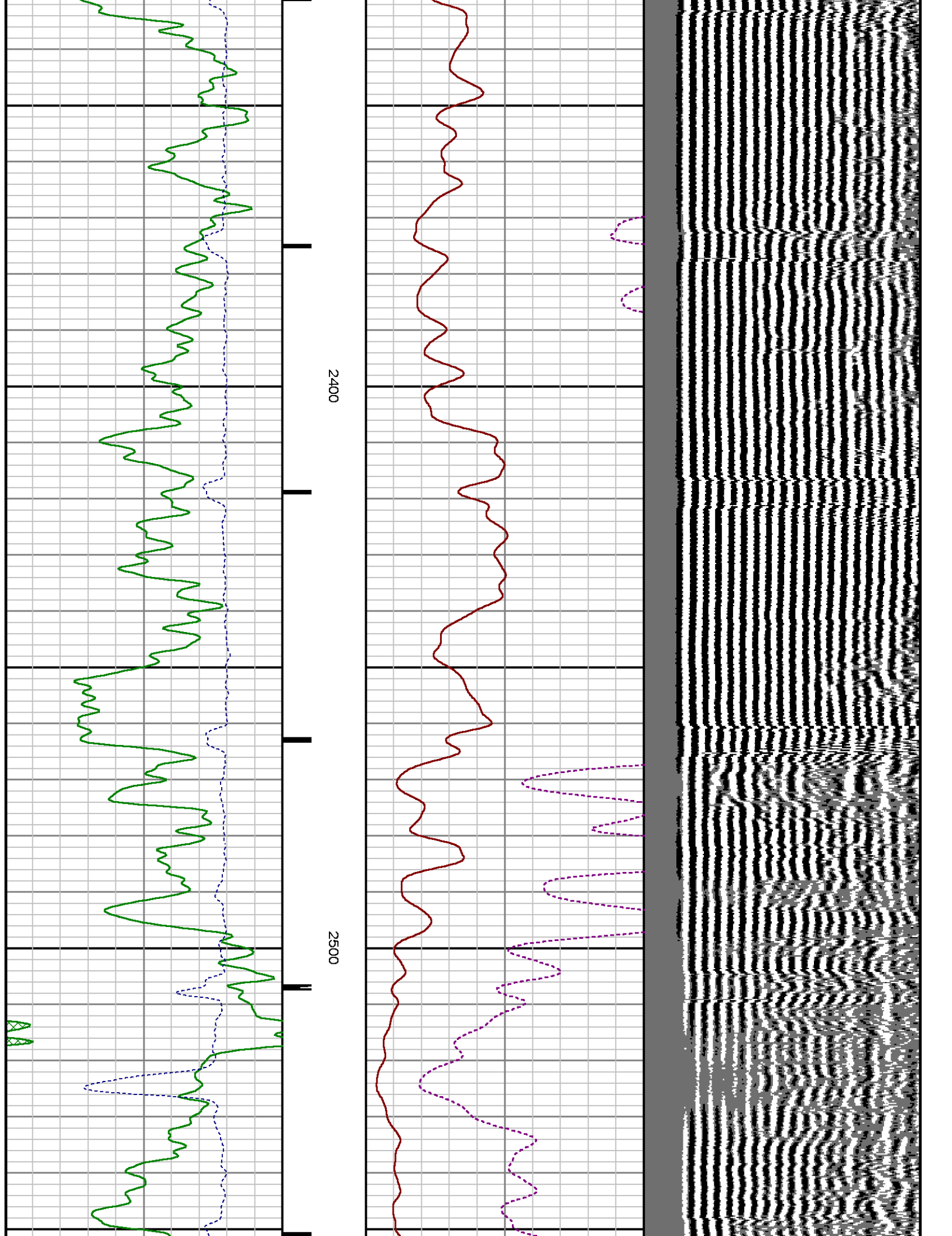


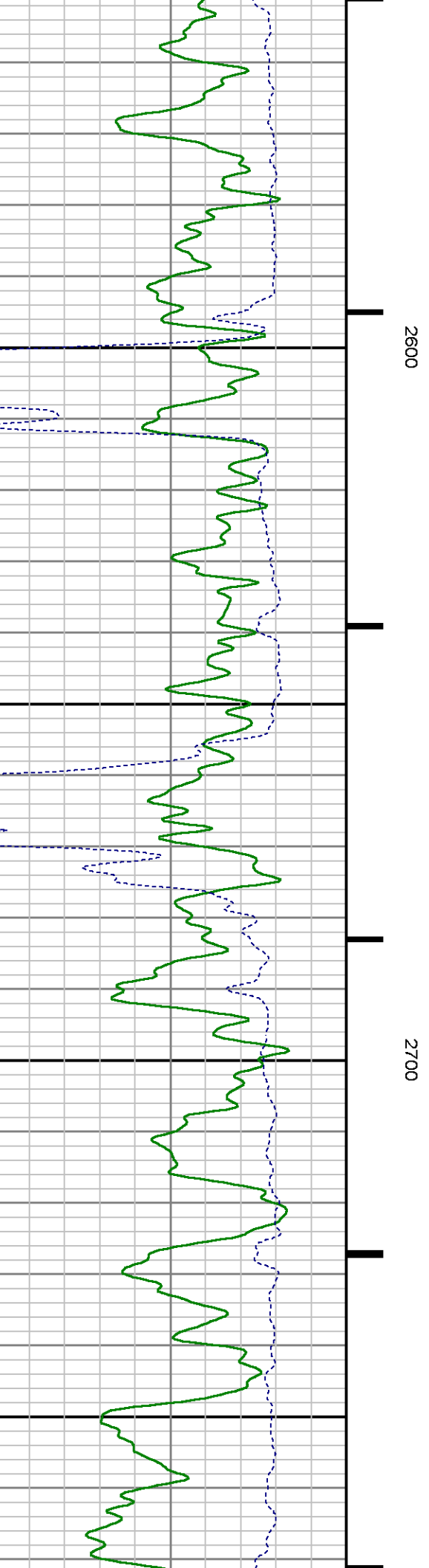
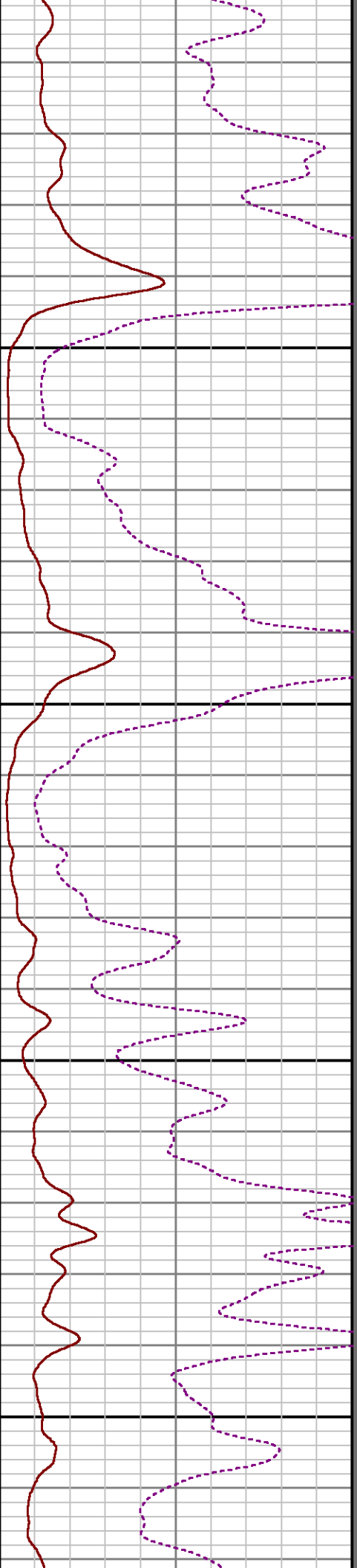
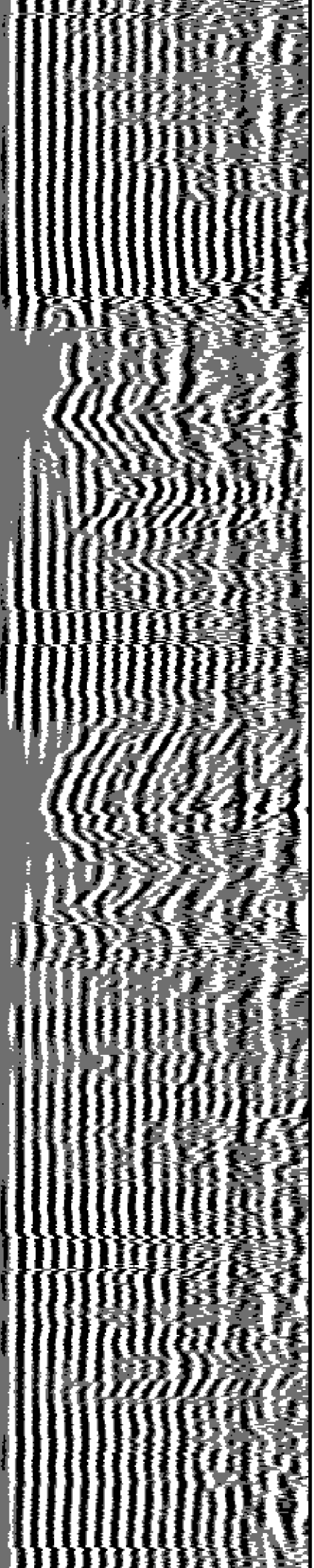


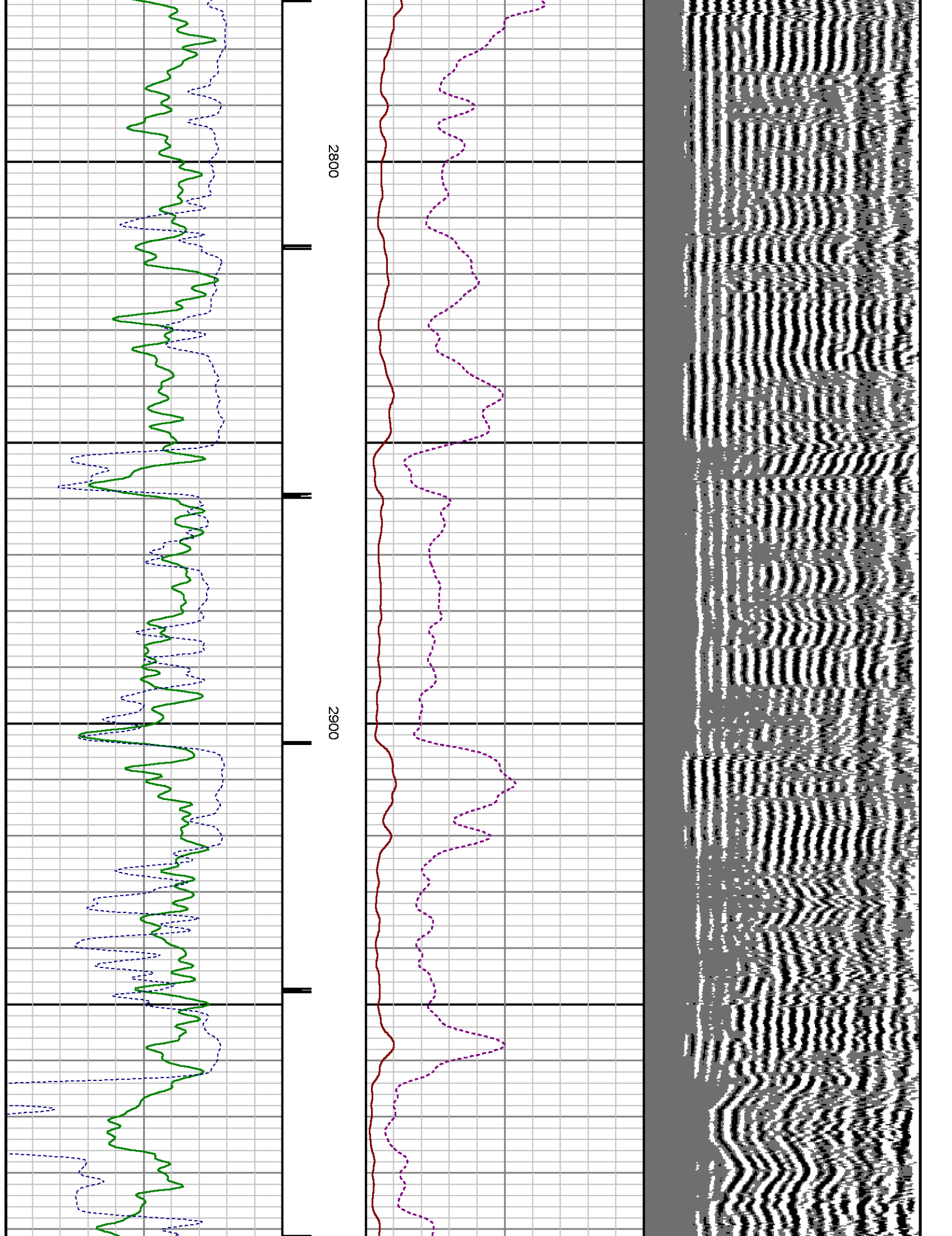




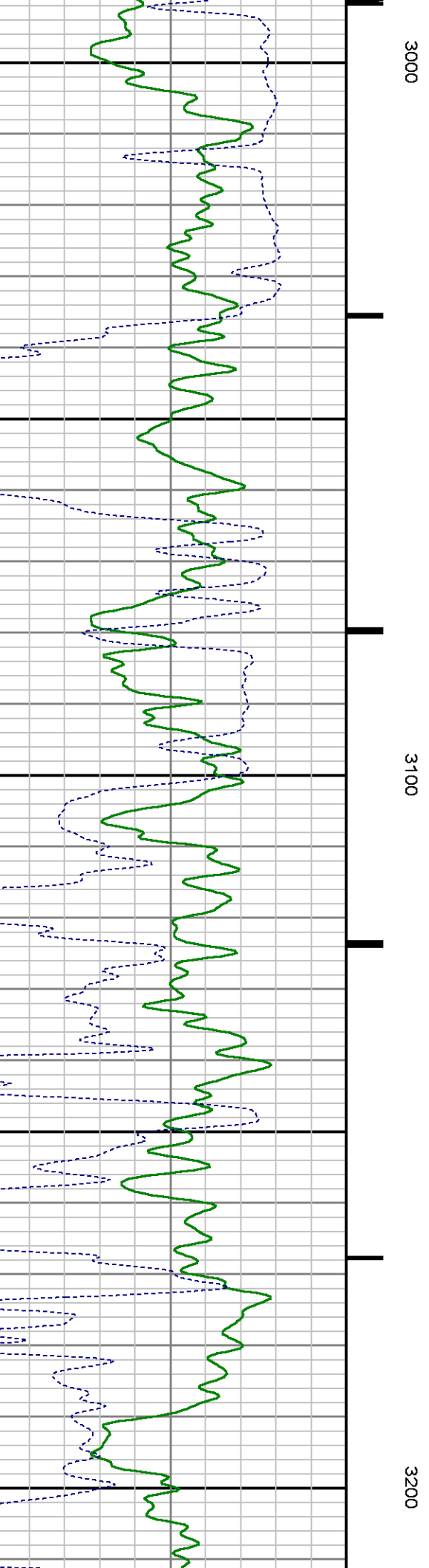
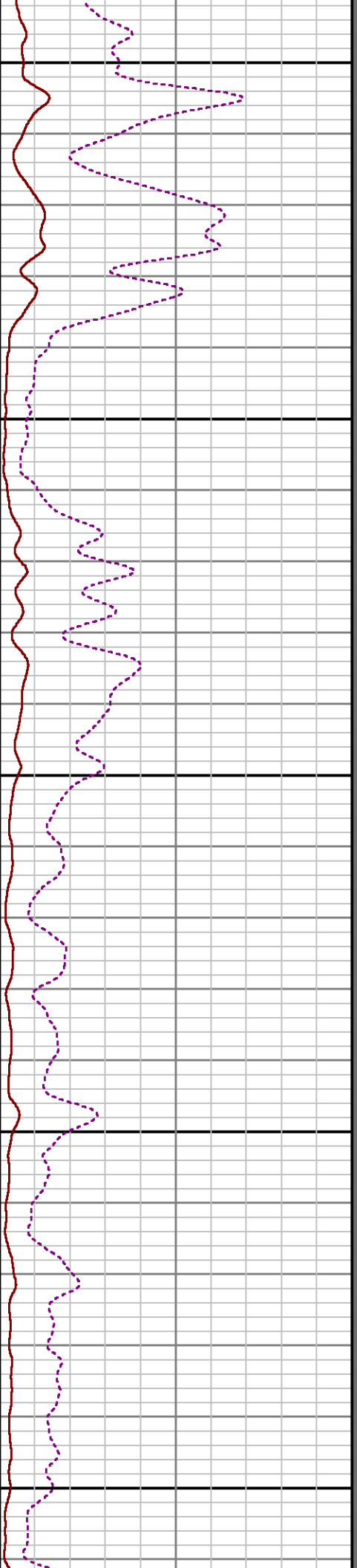
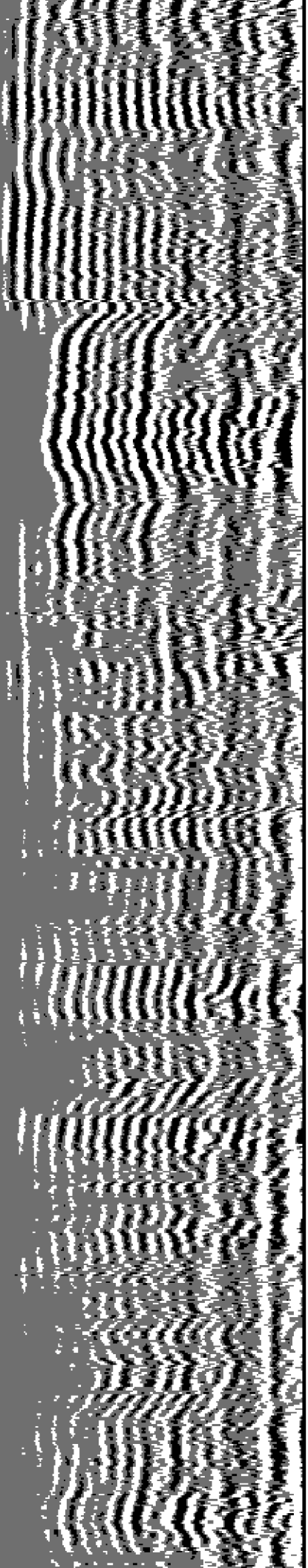


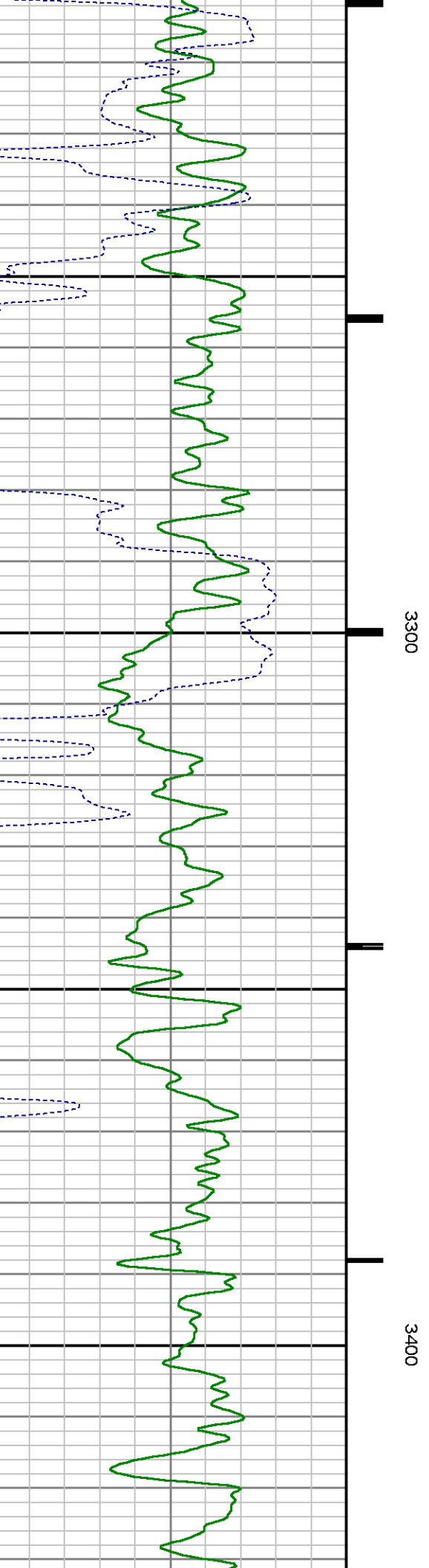
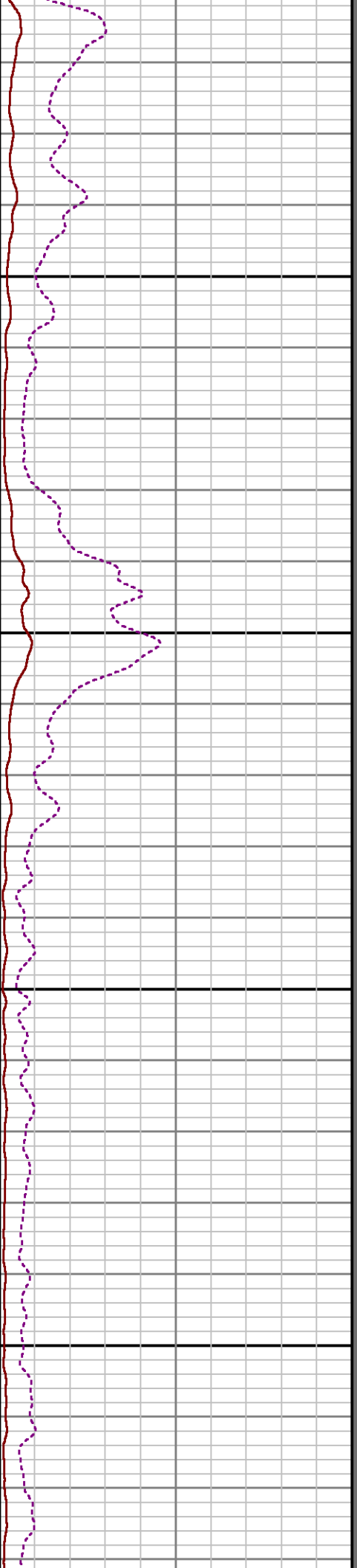
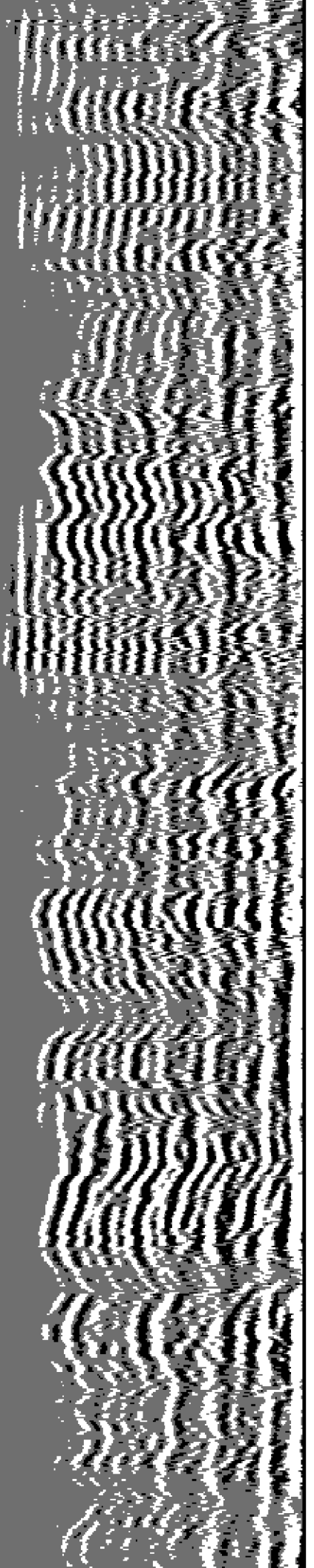


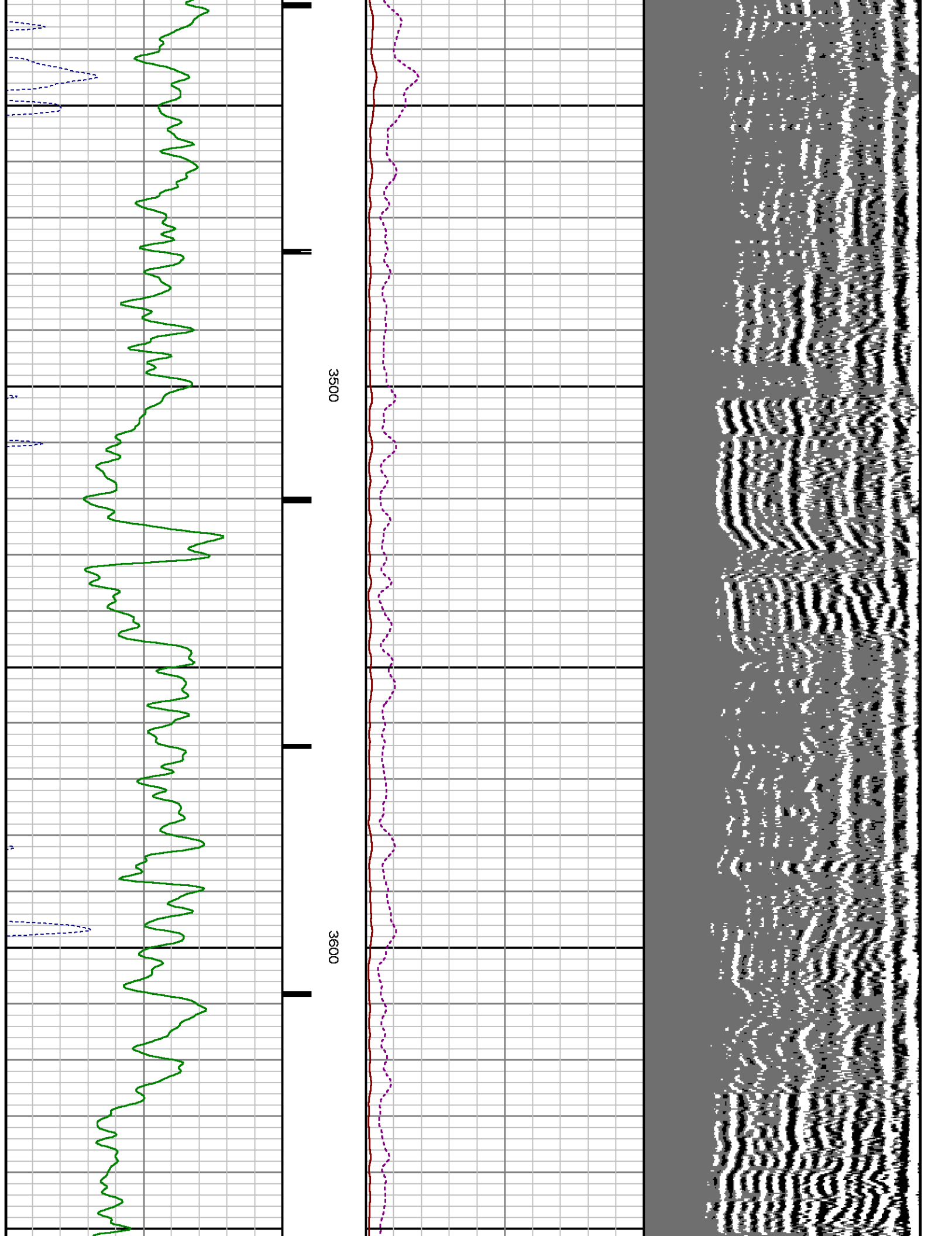


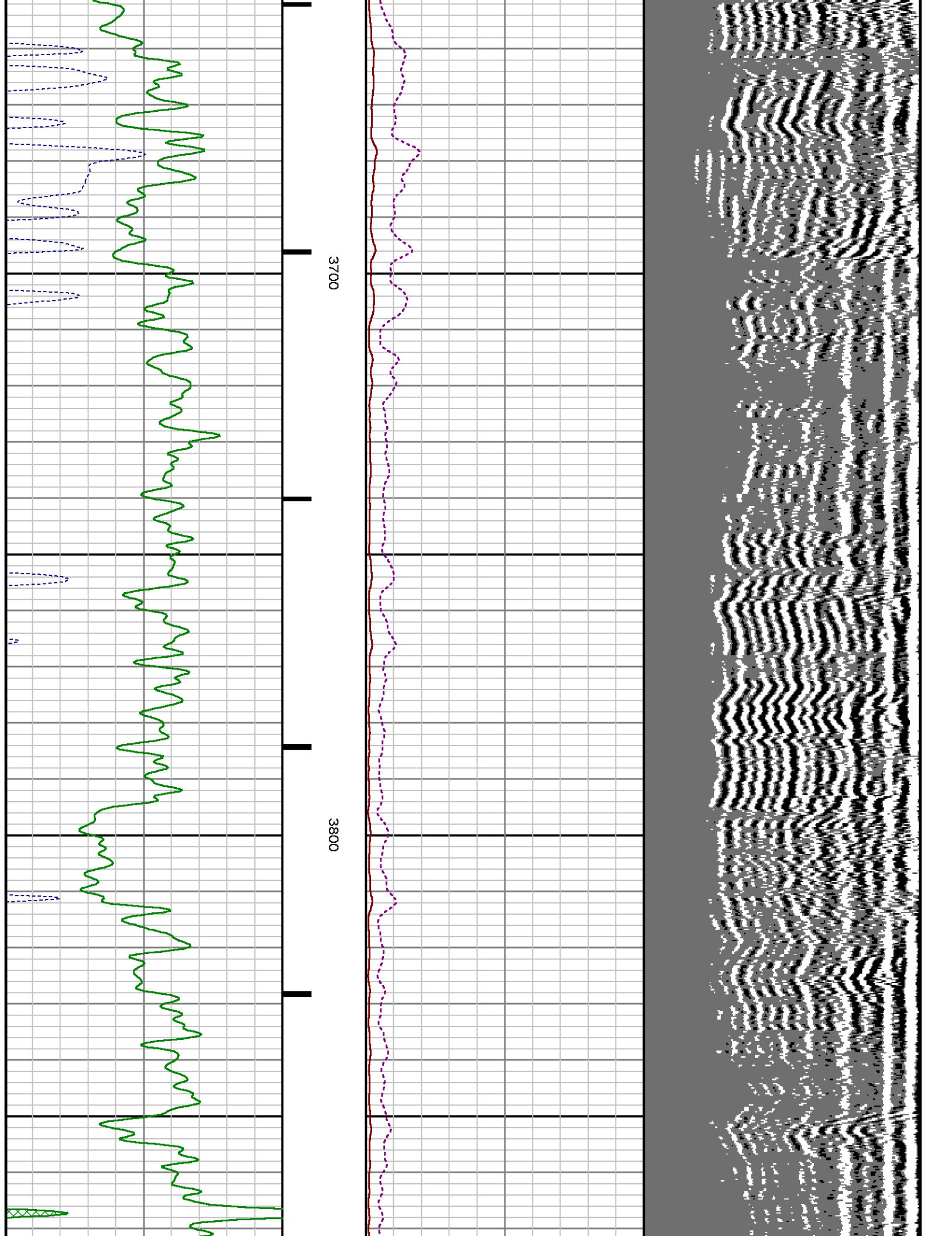


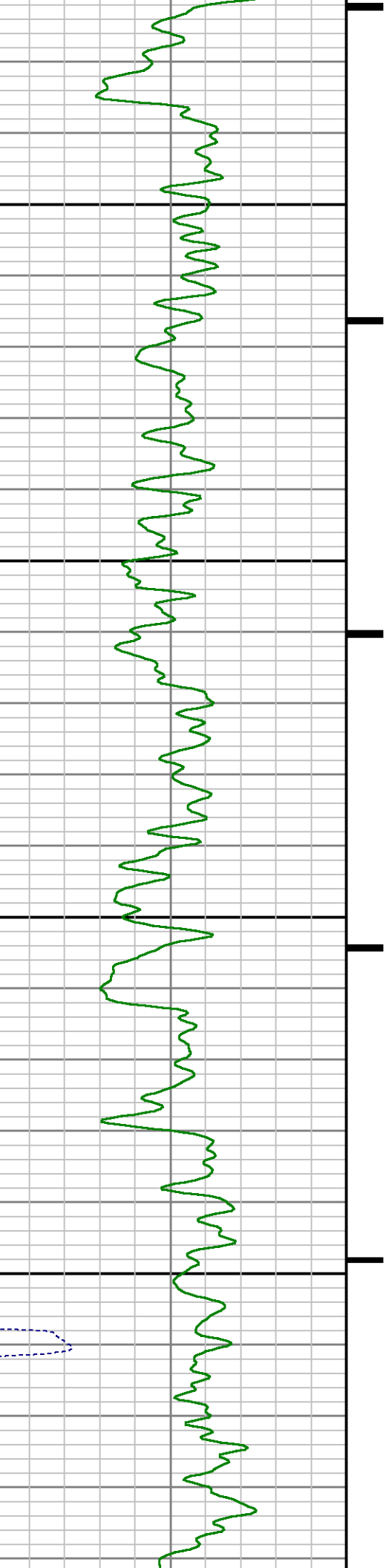
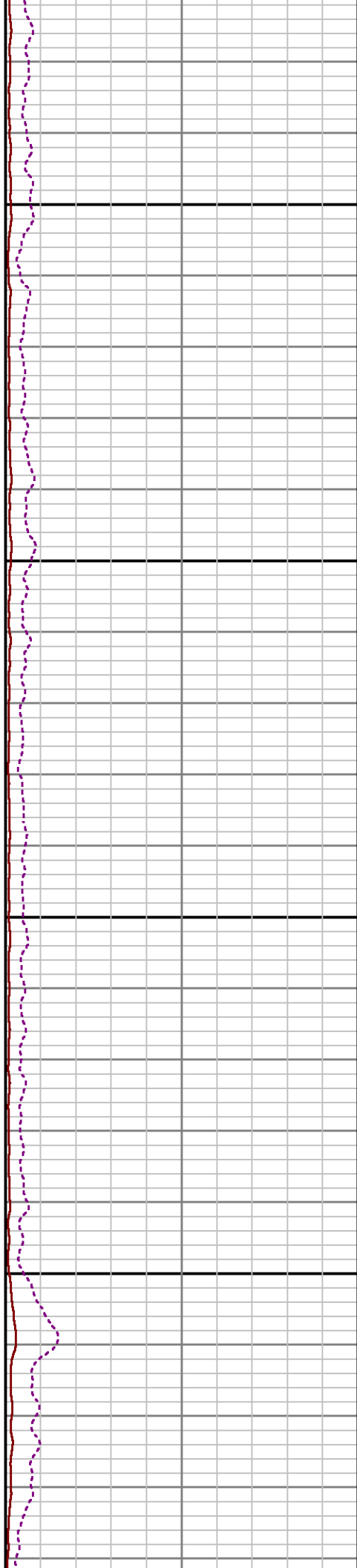
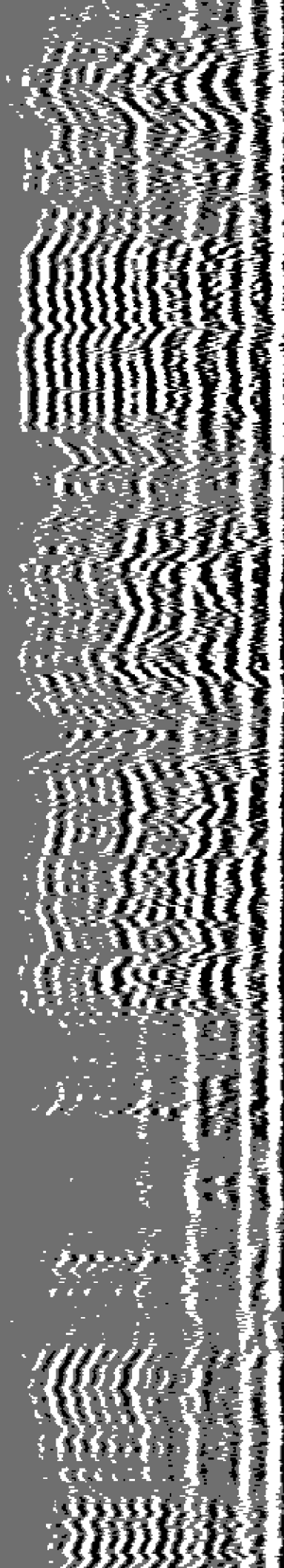


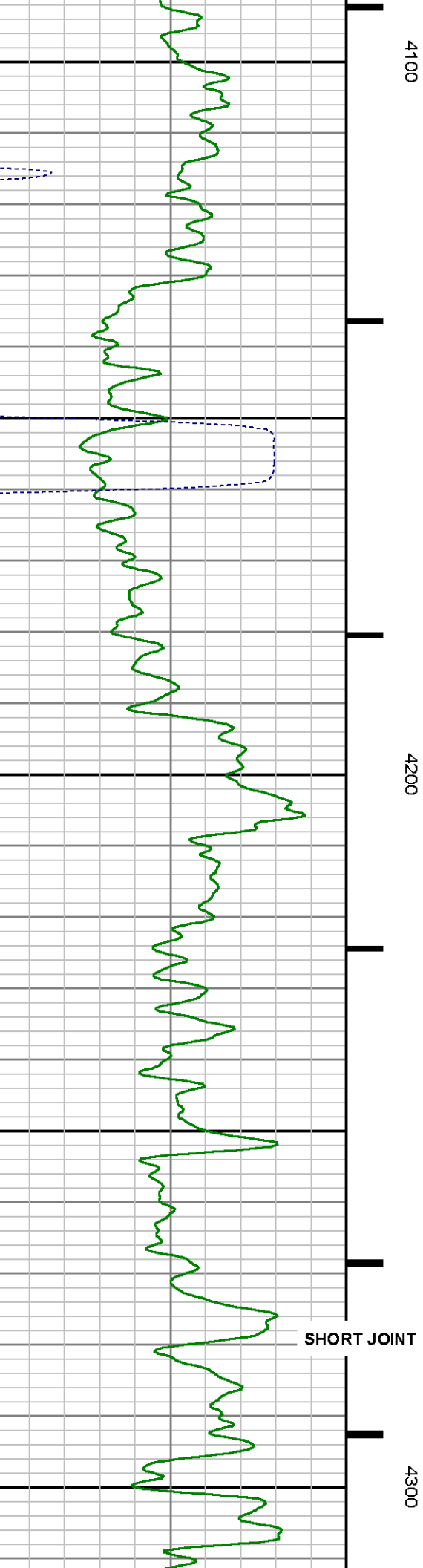
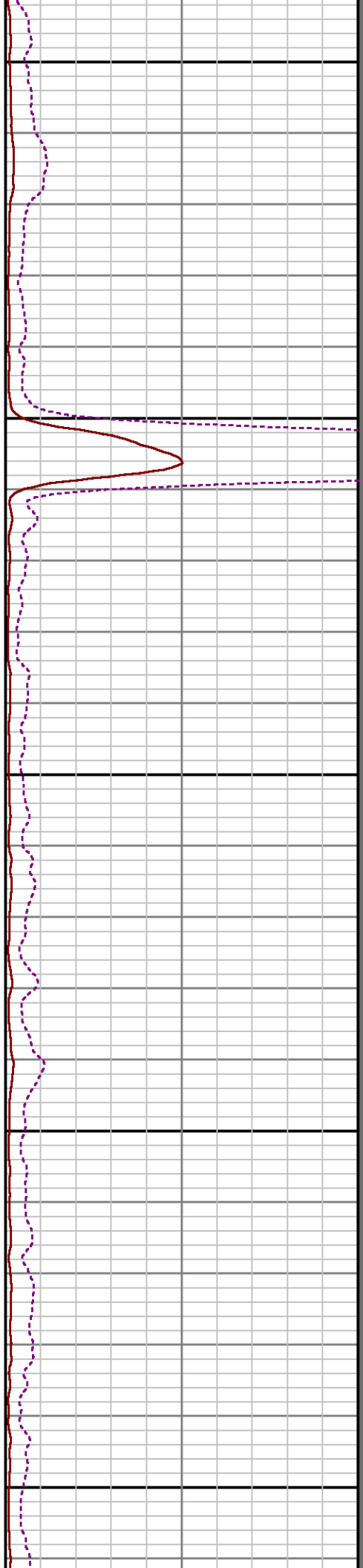
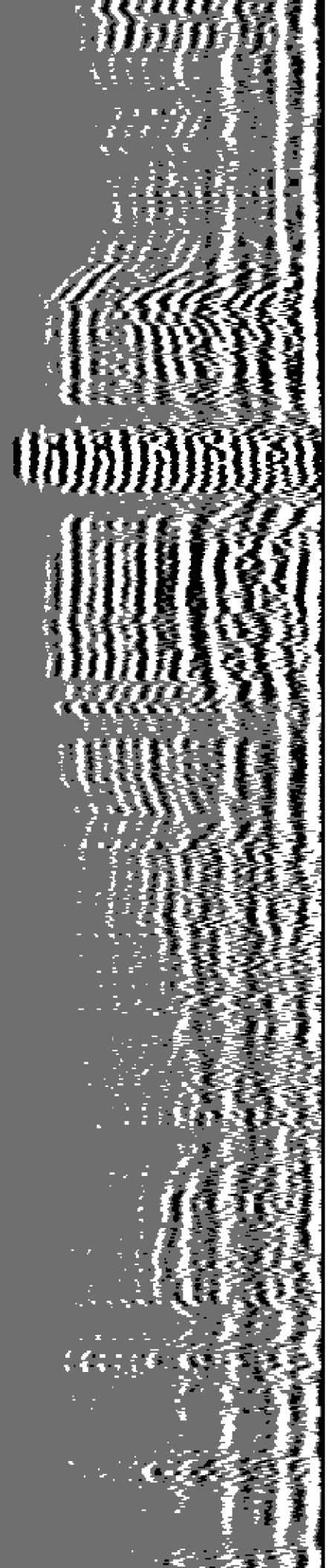




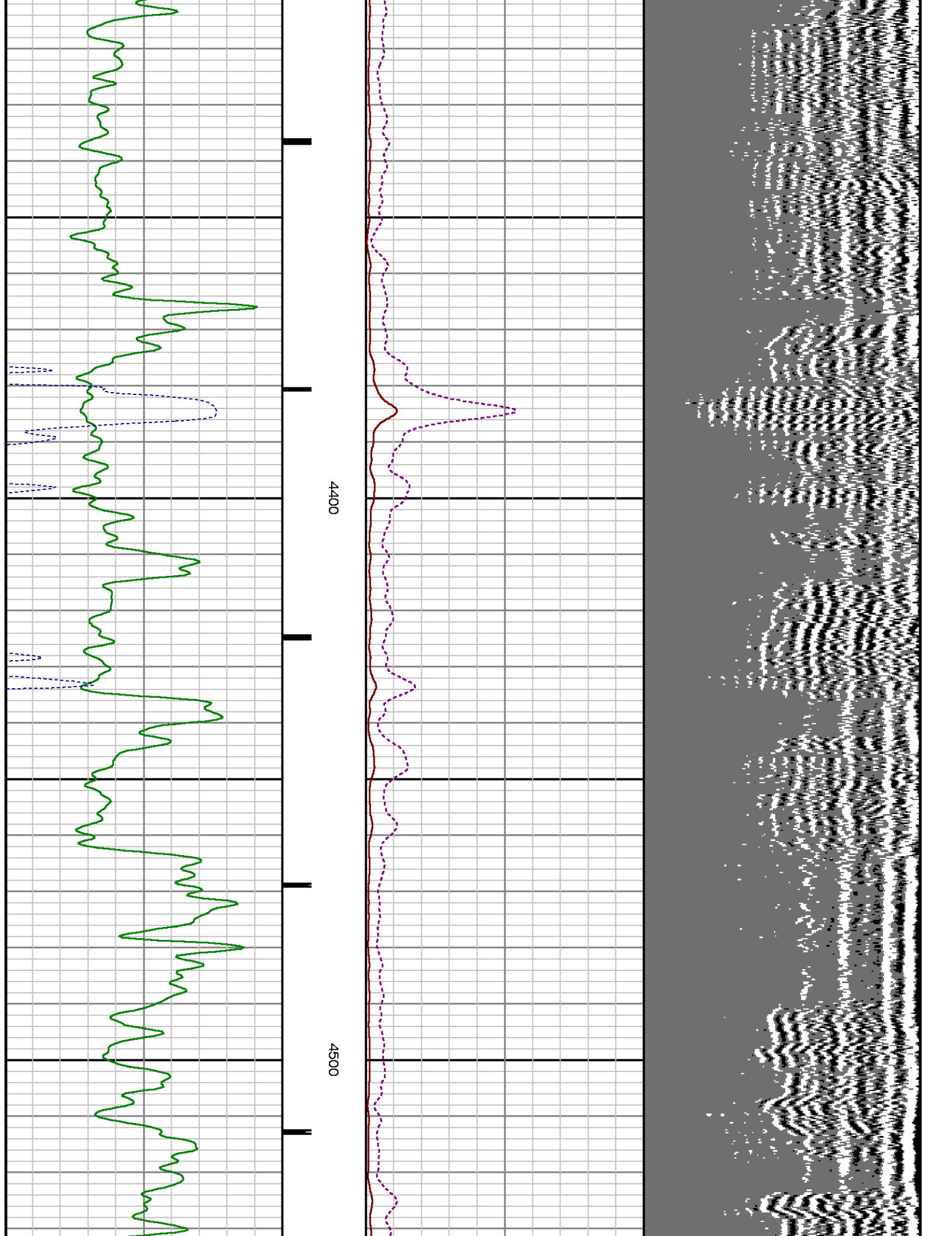


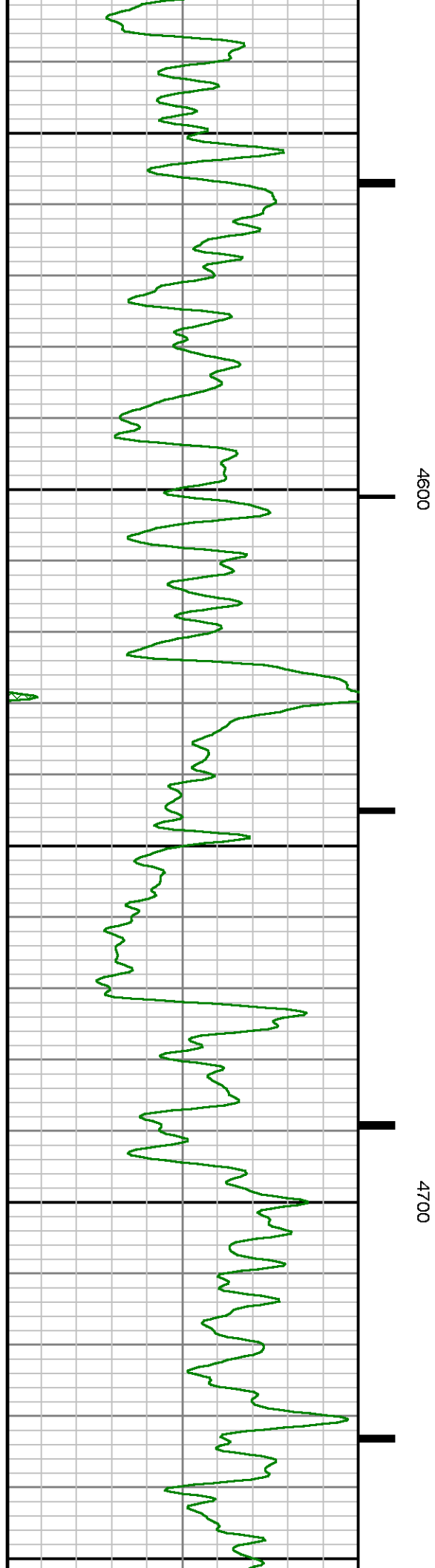
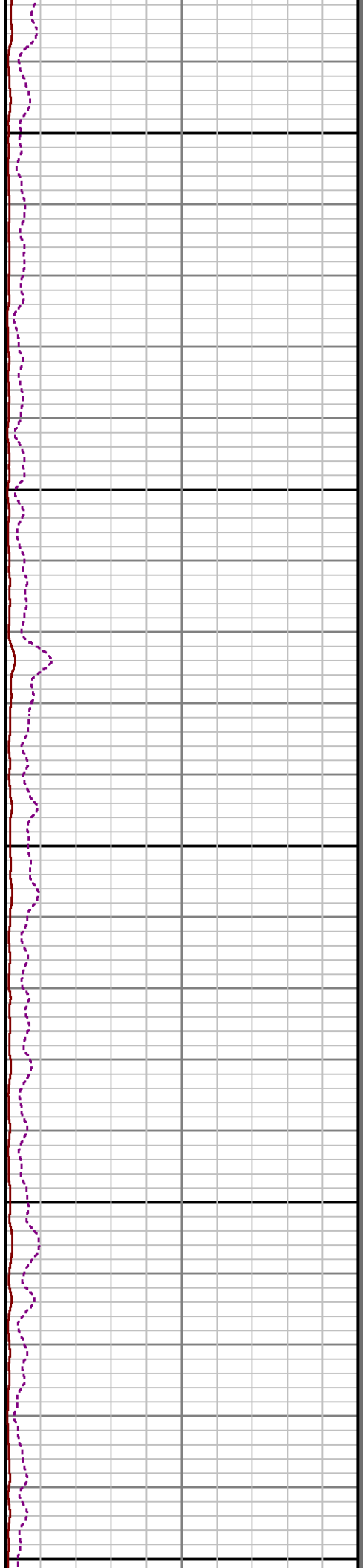
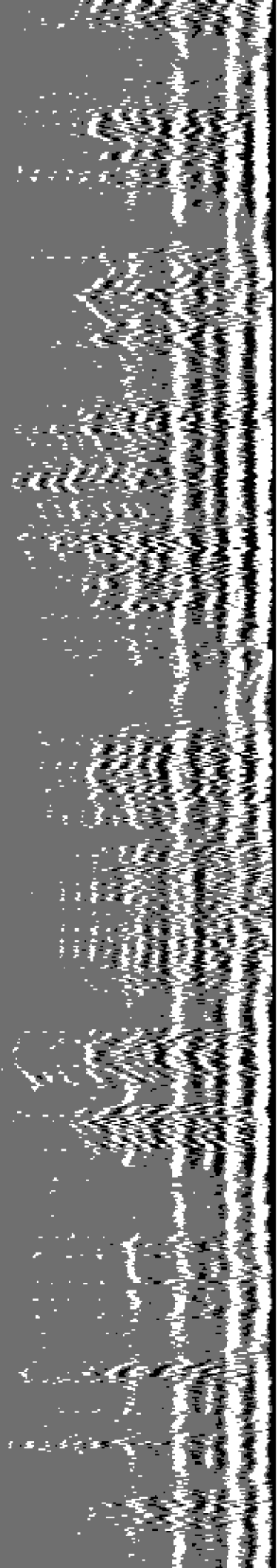




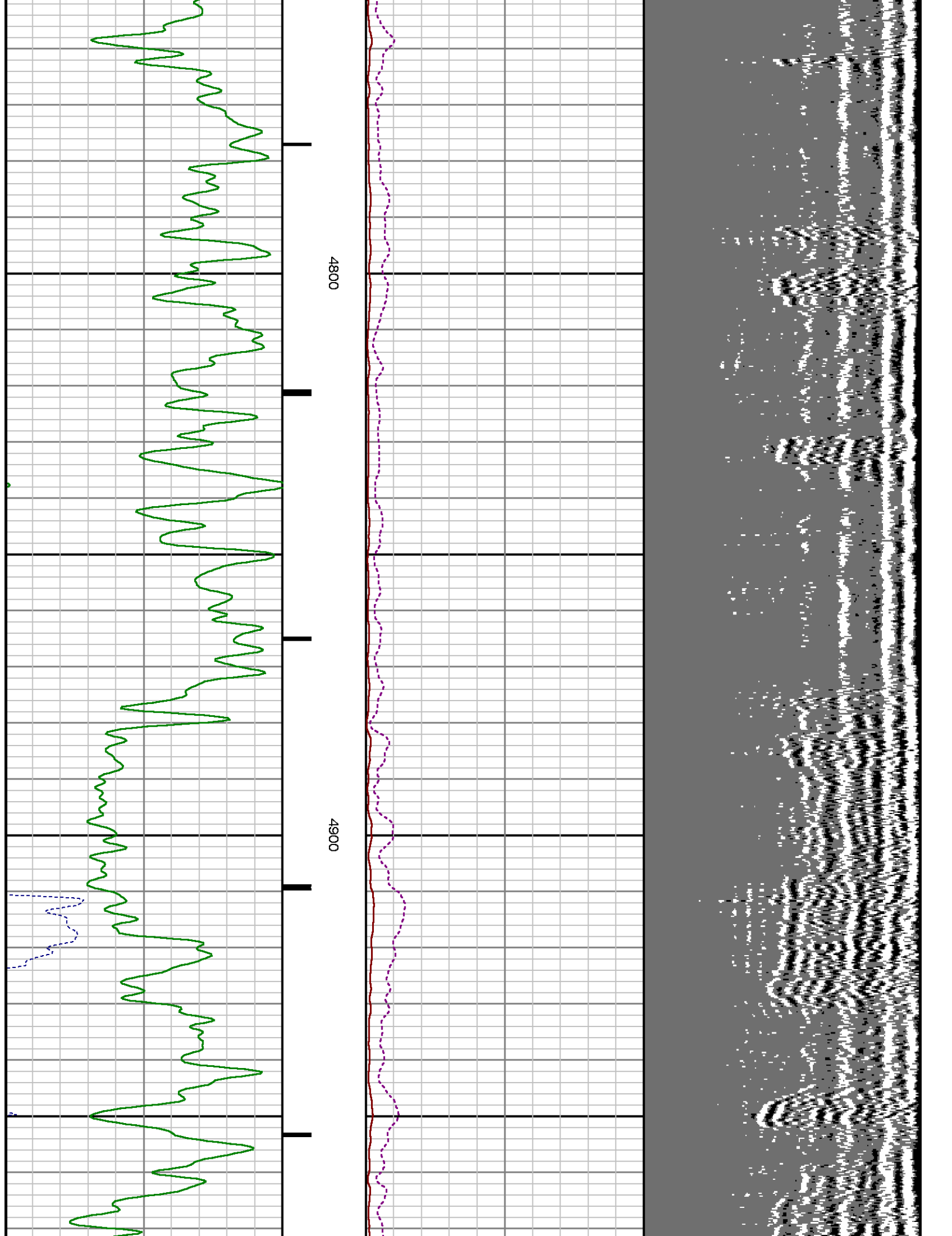


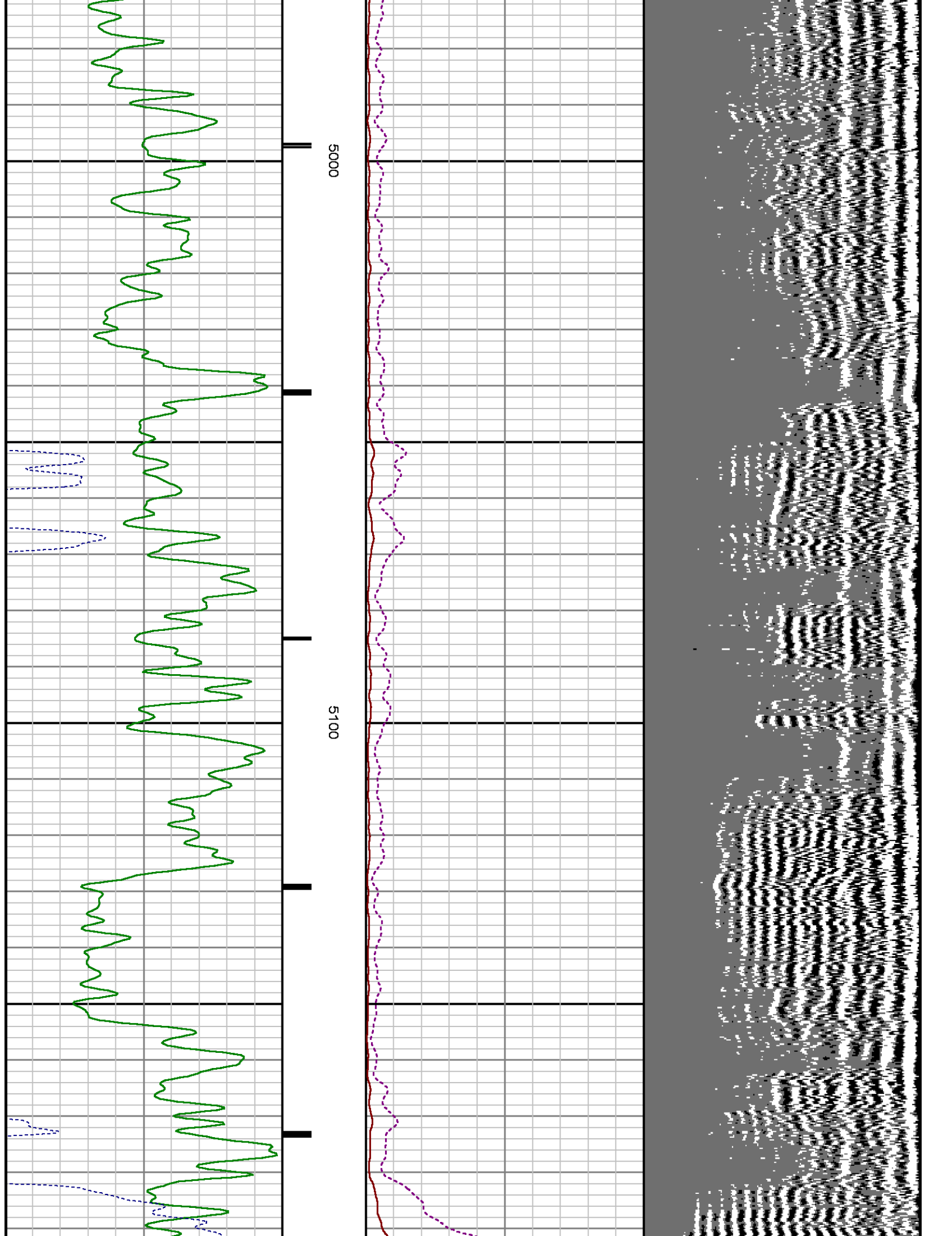


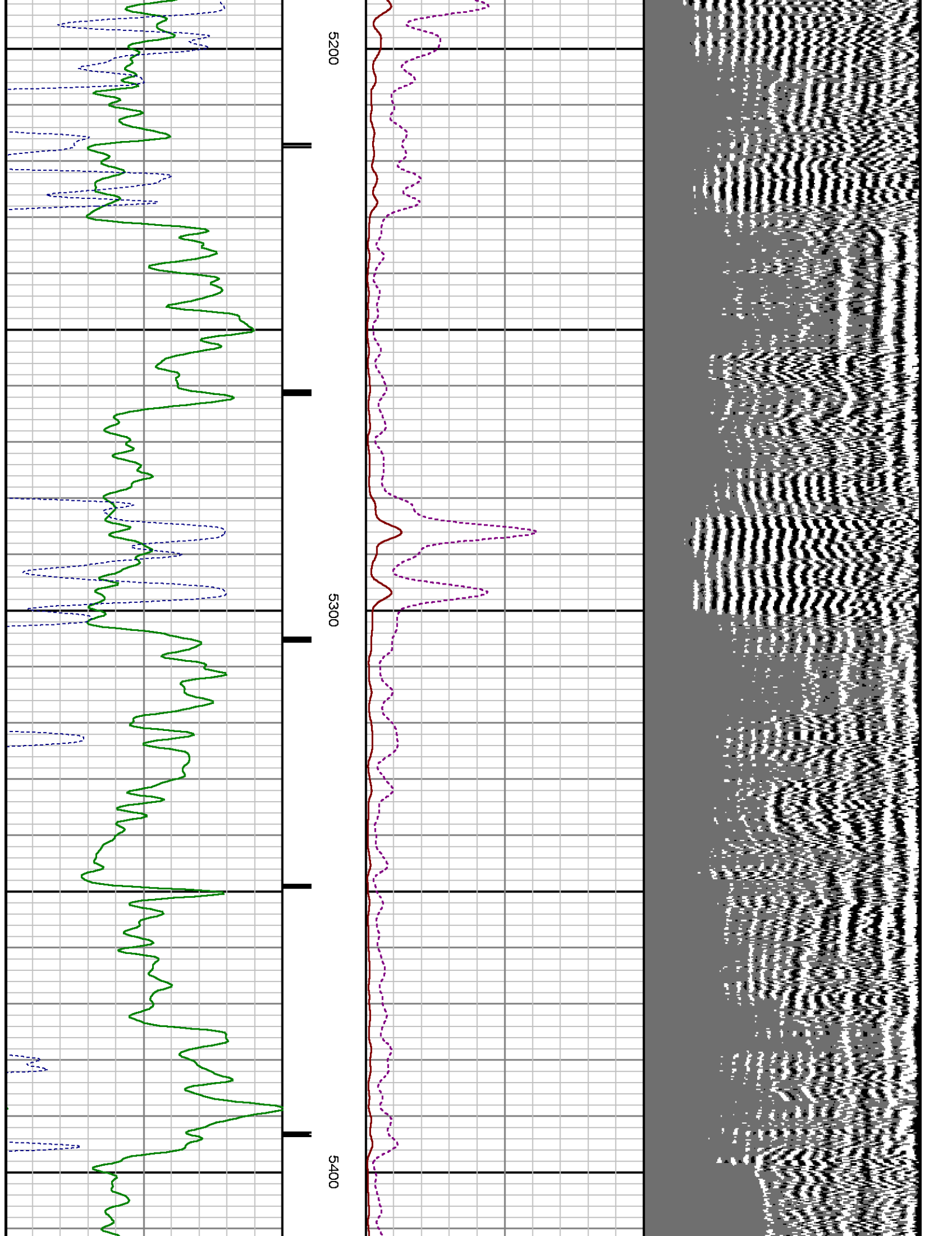


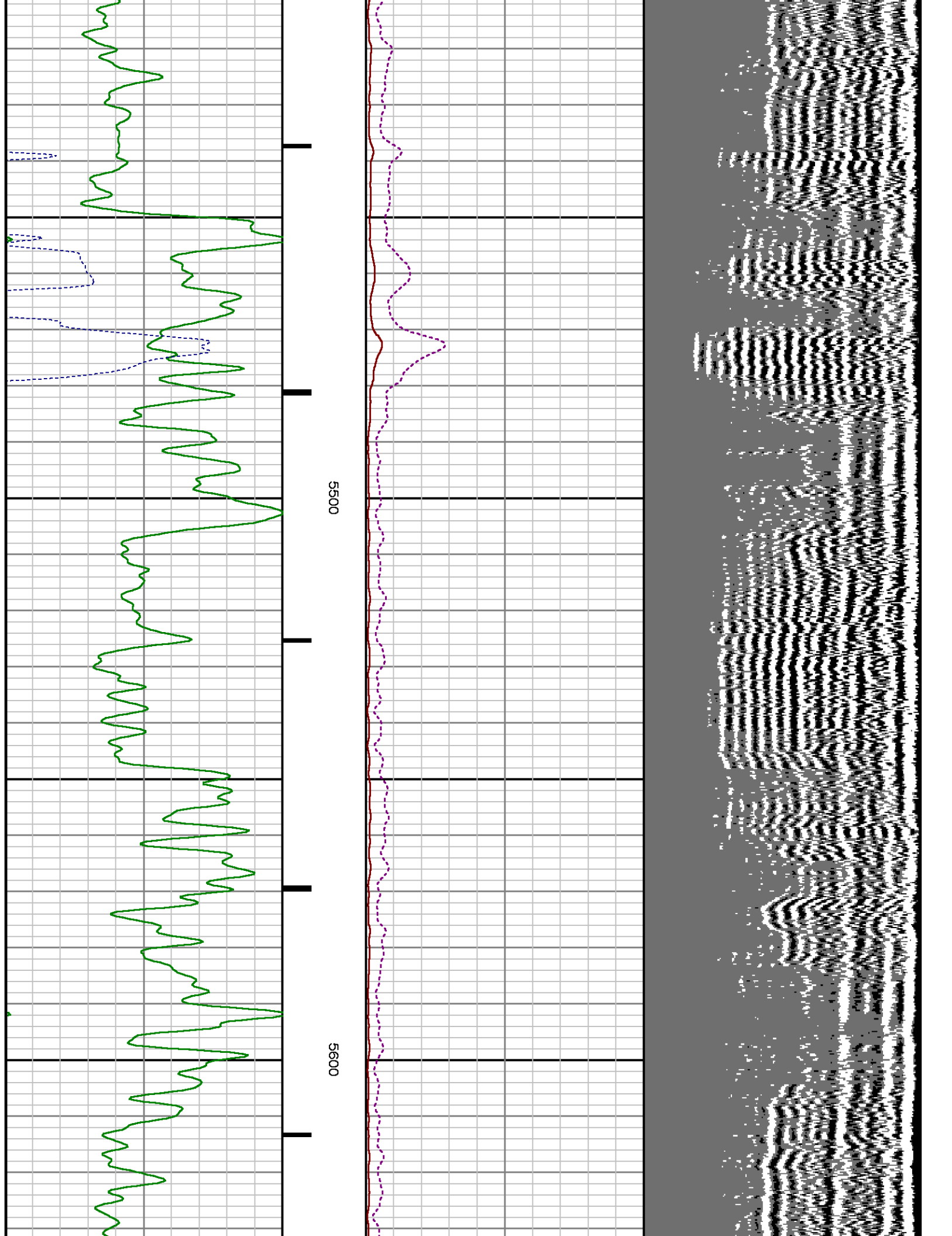


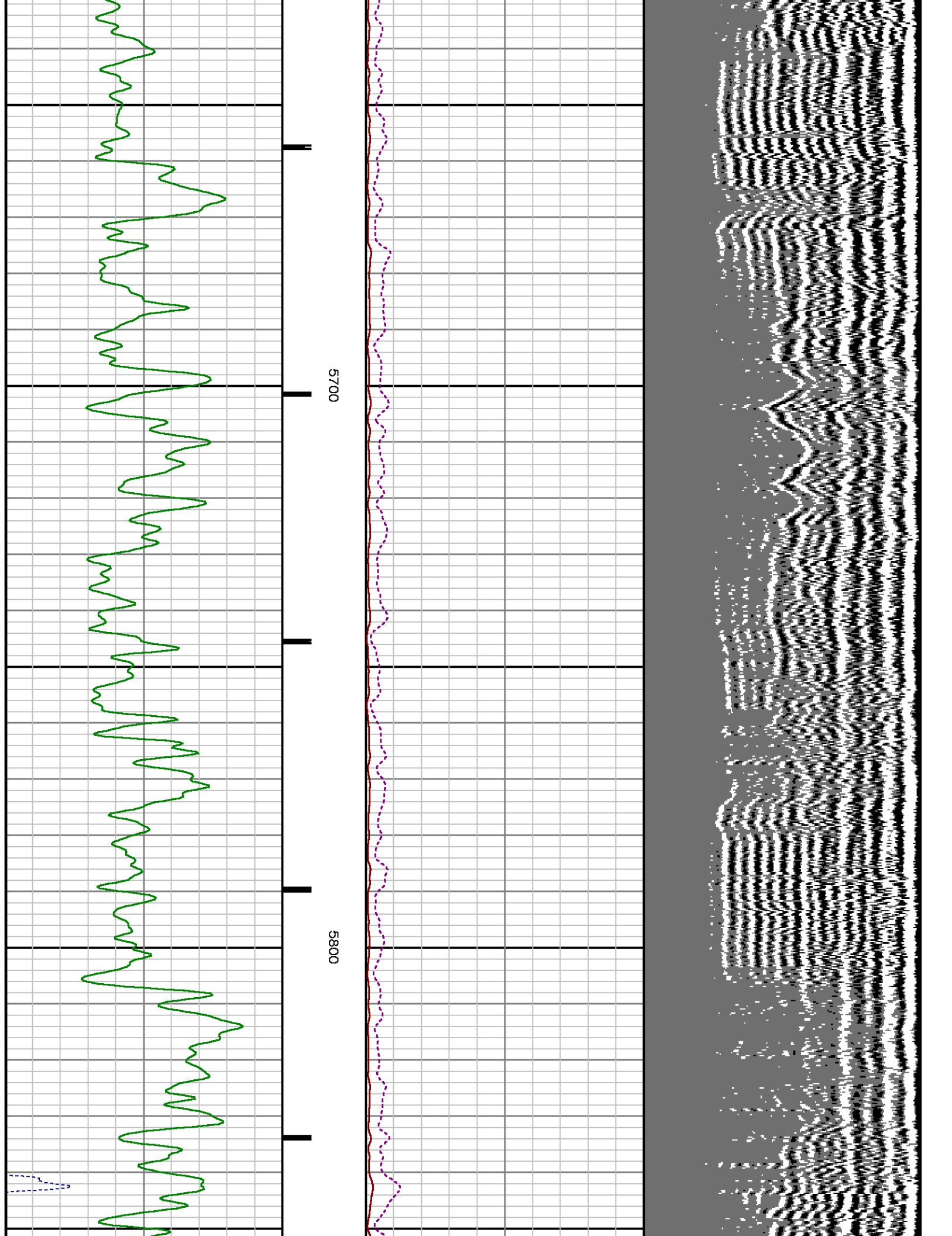


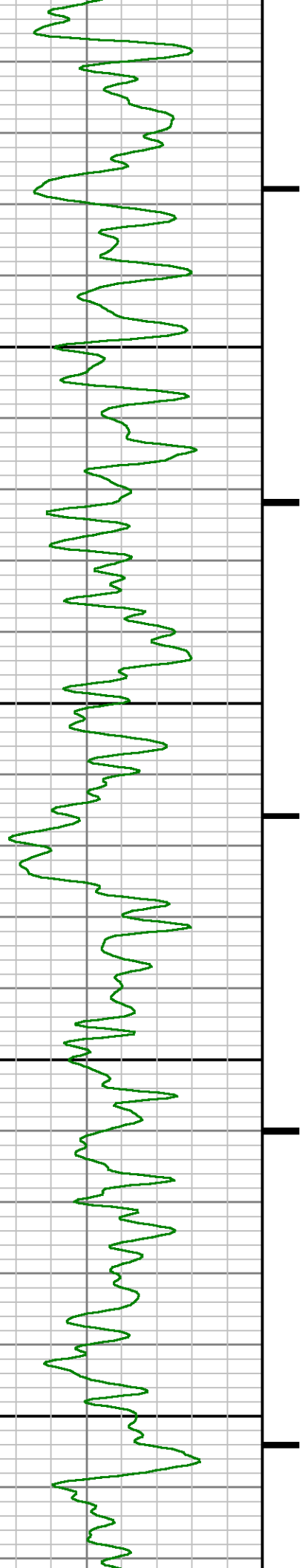
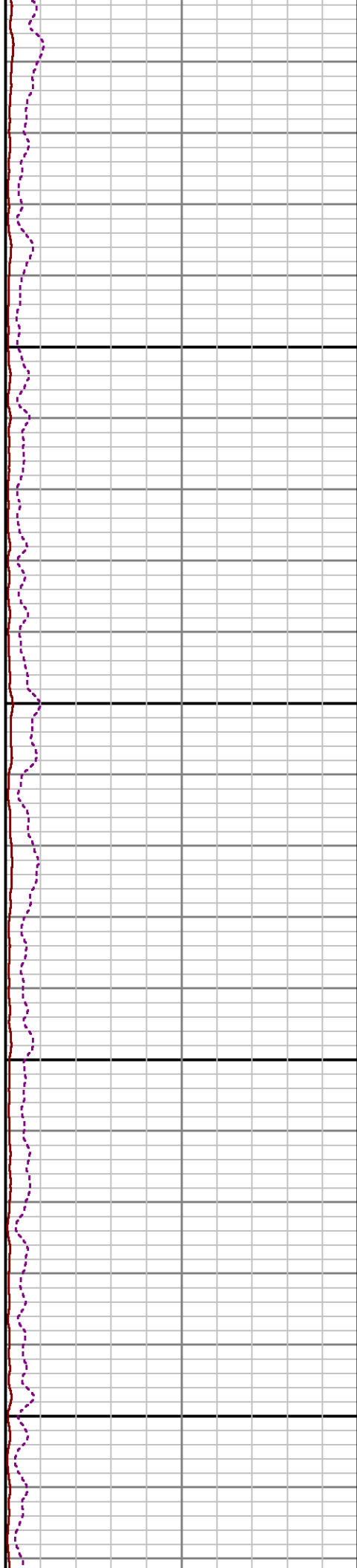
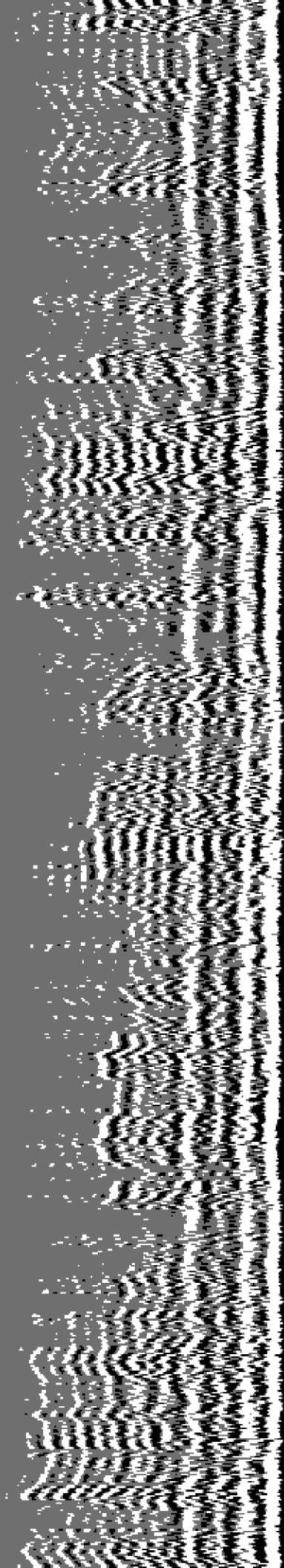




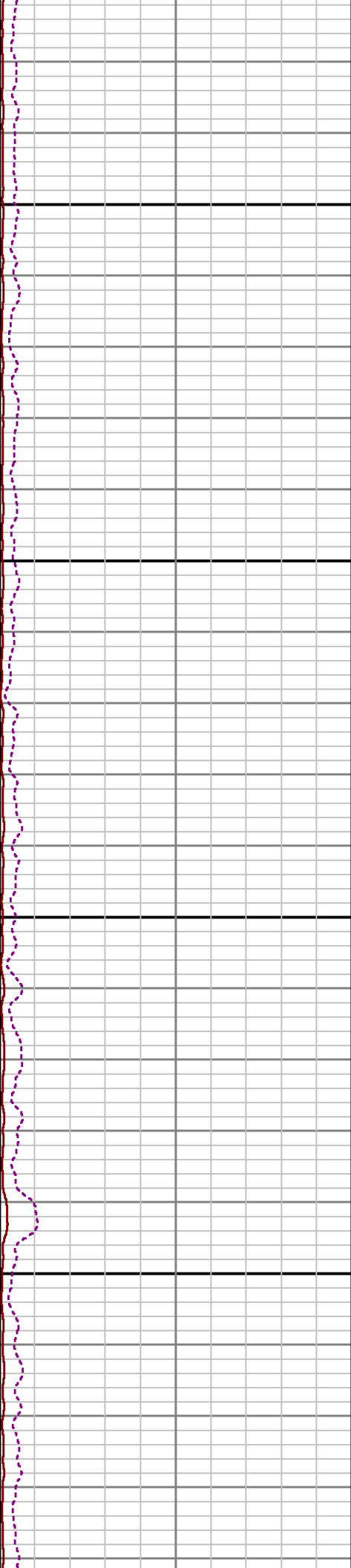
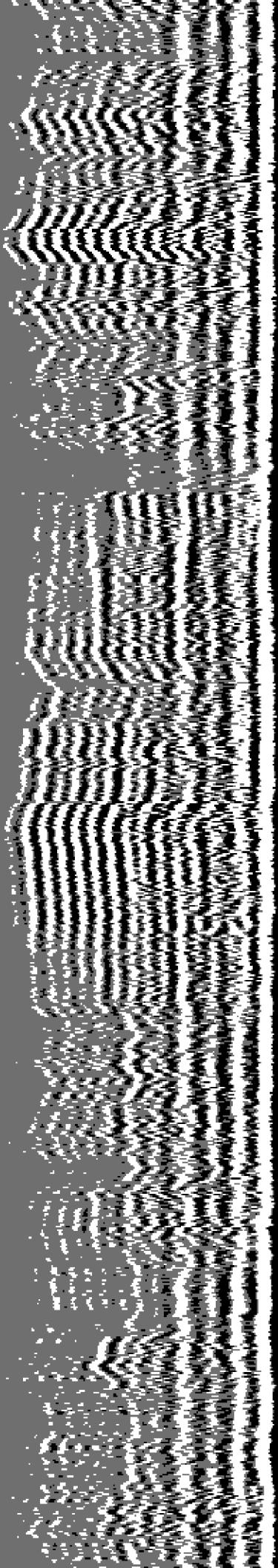






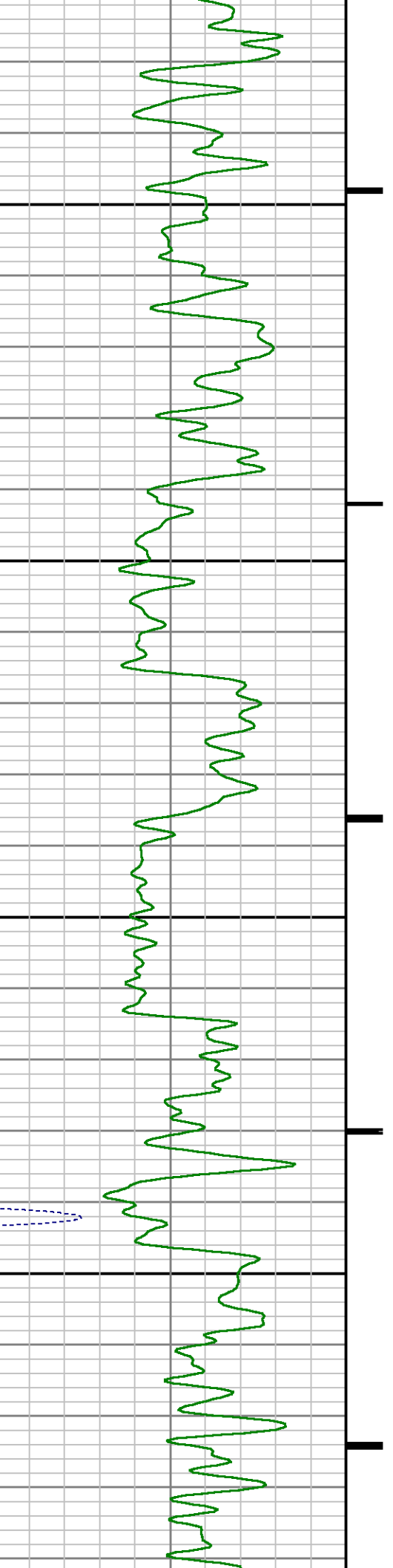




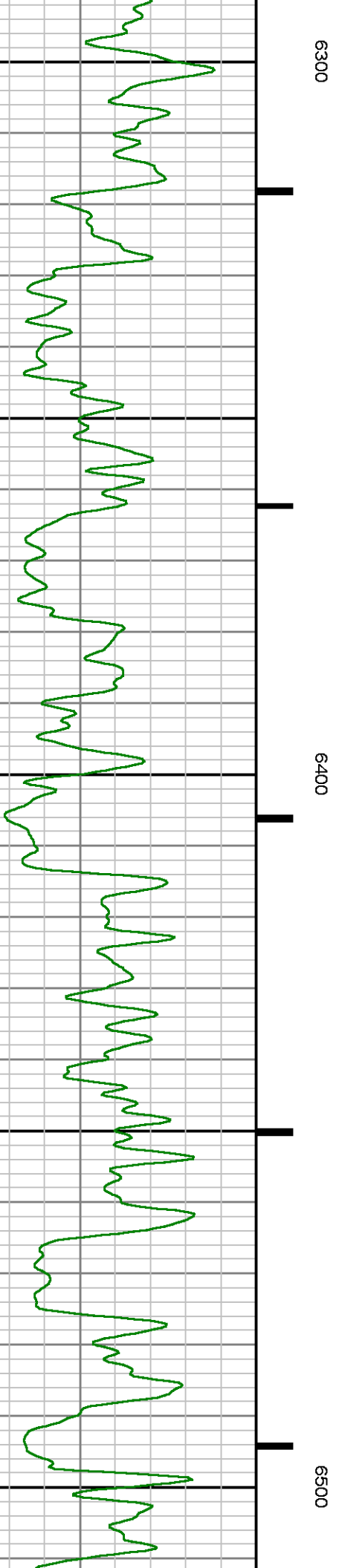
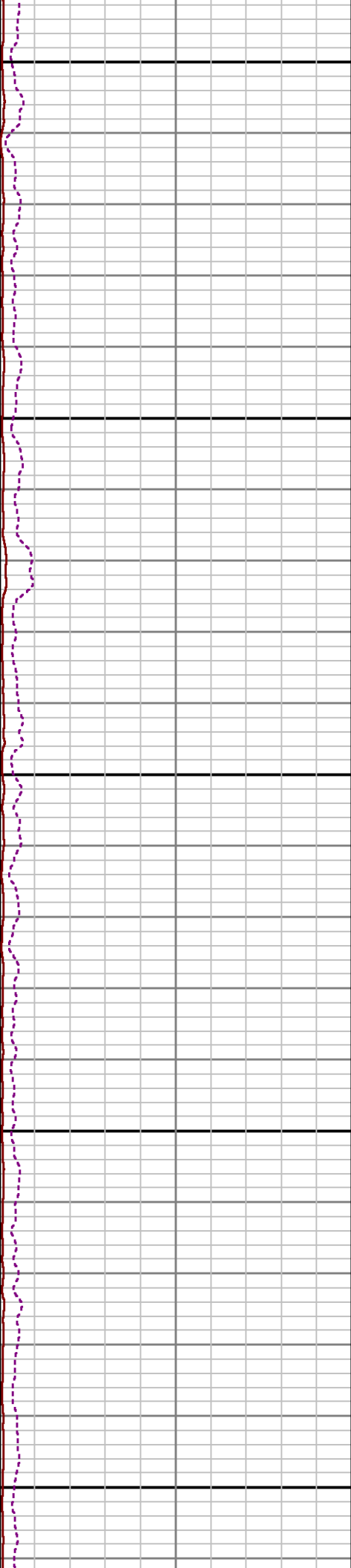
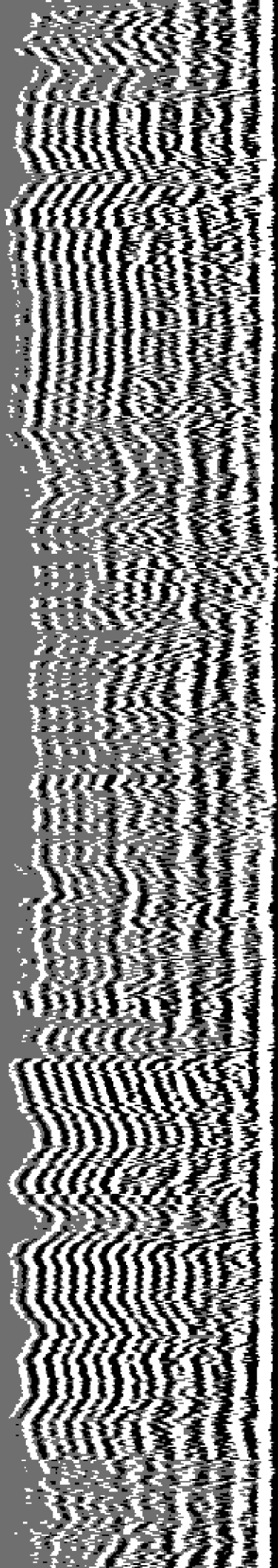


6100

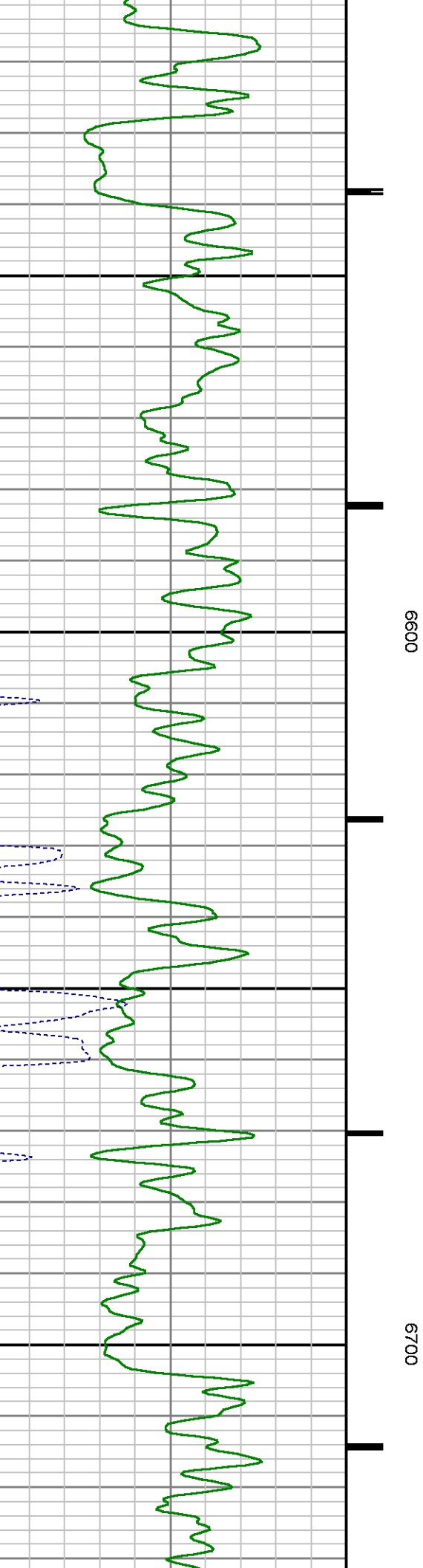
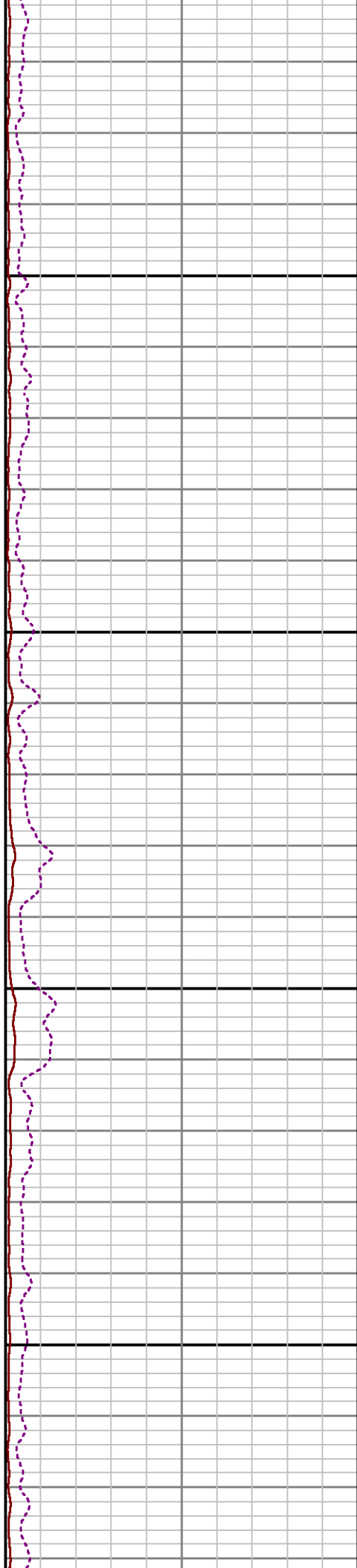
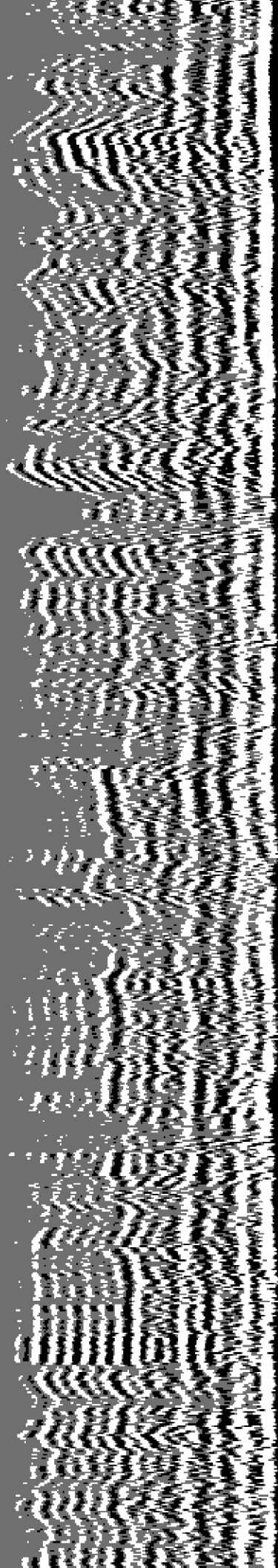
6200

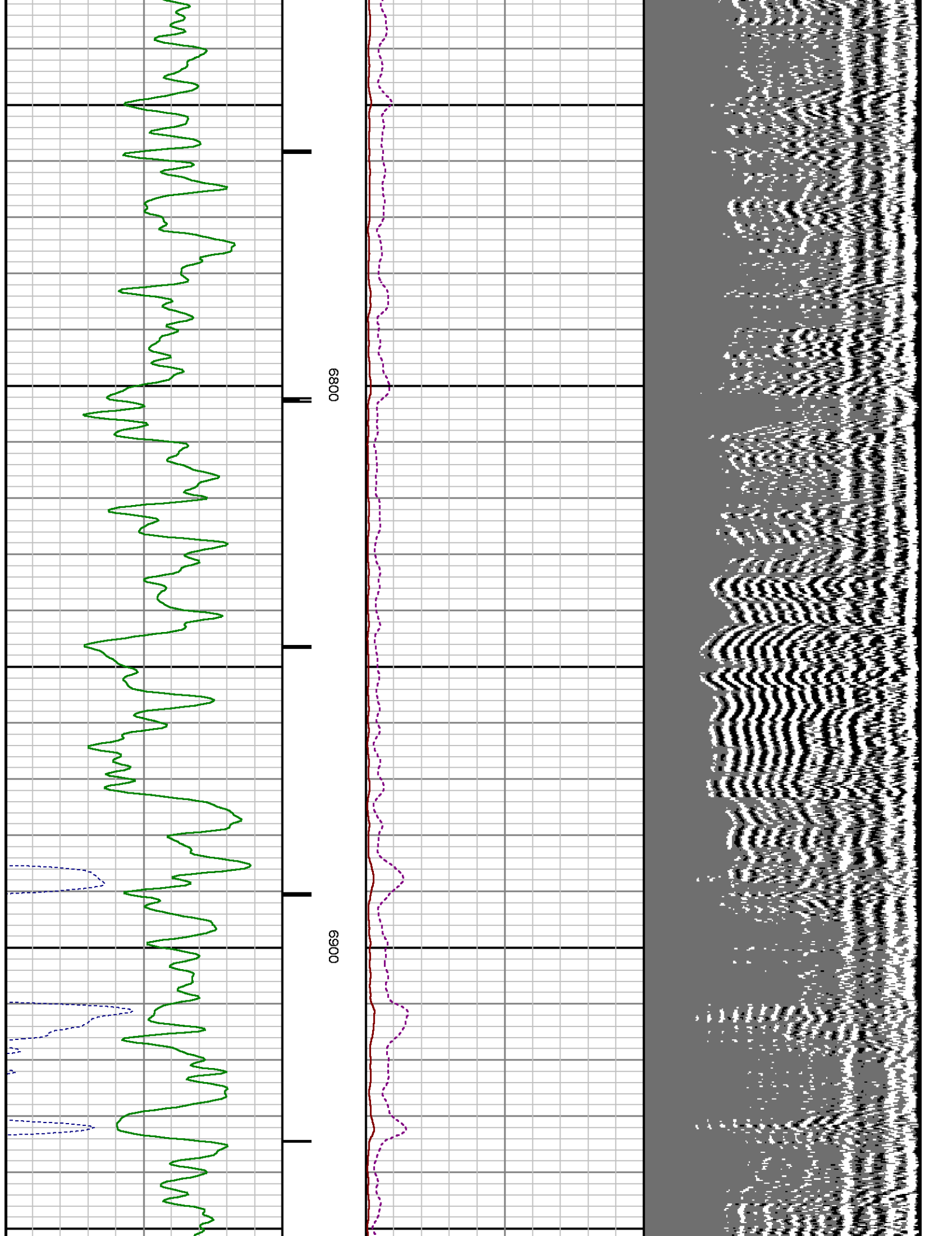


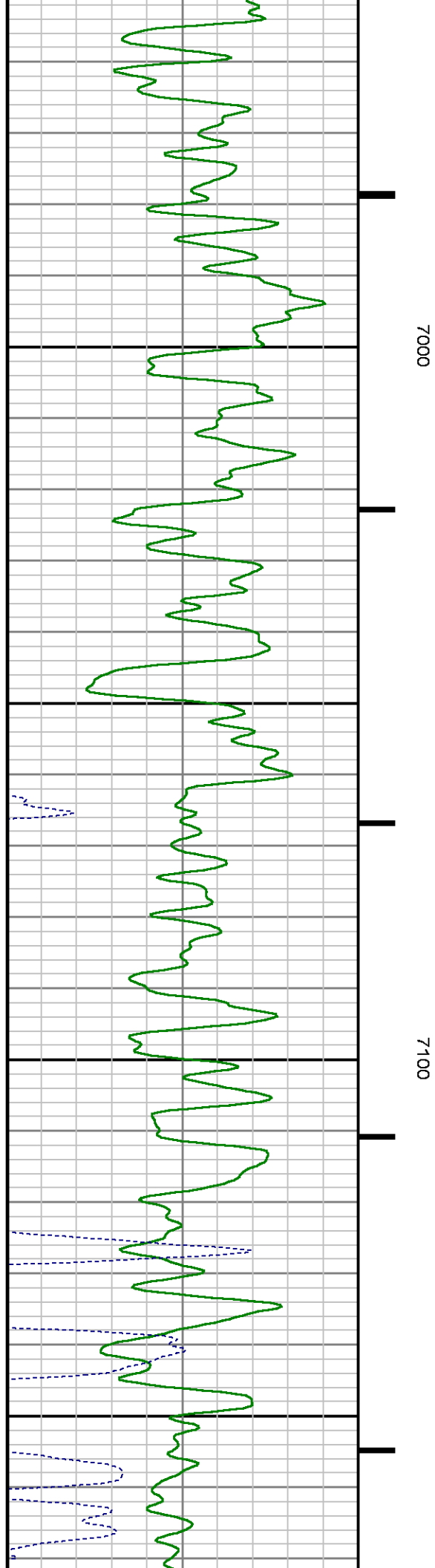
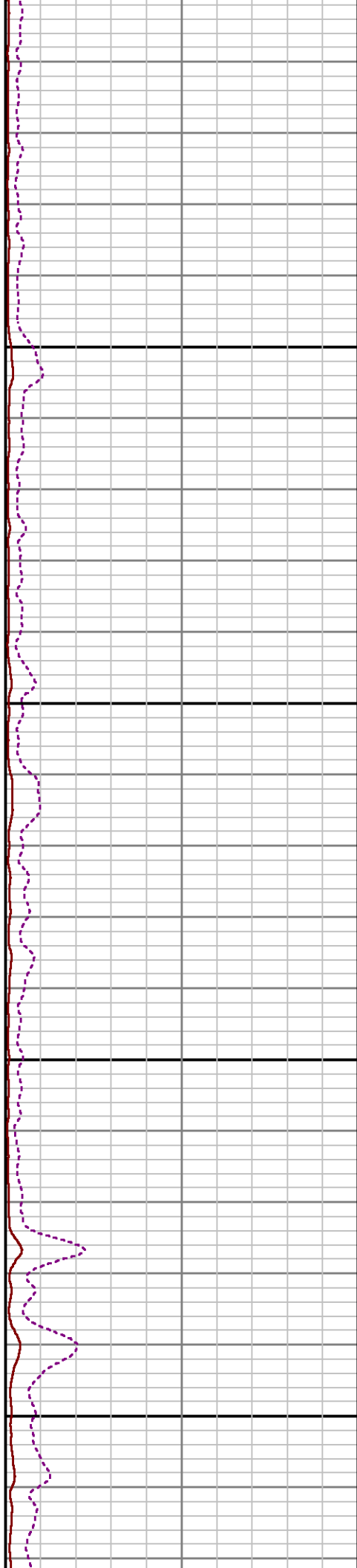
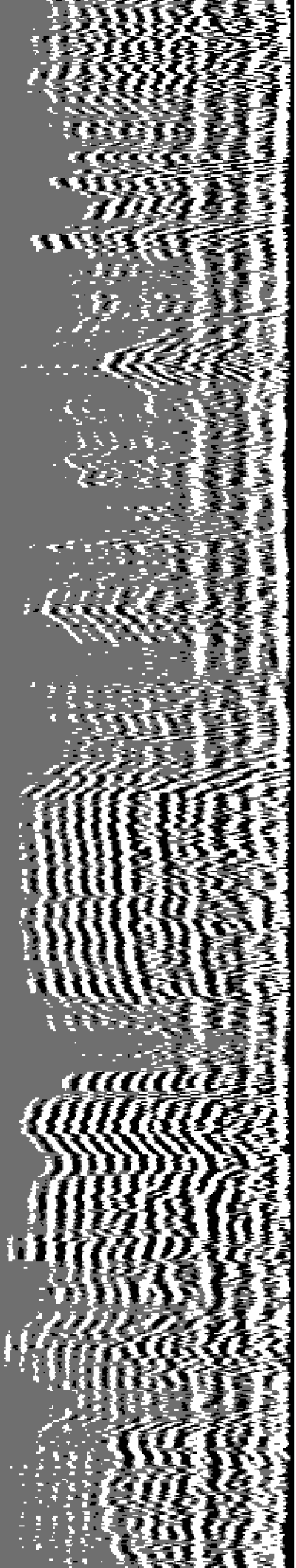
6300

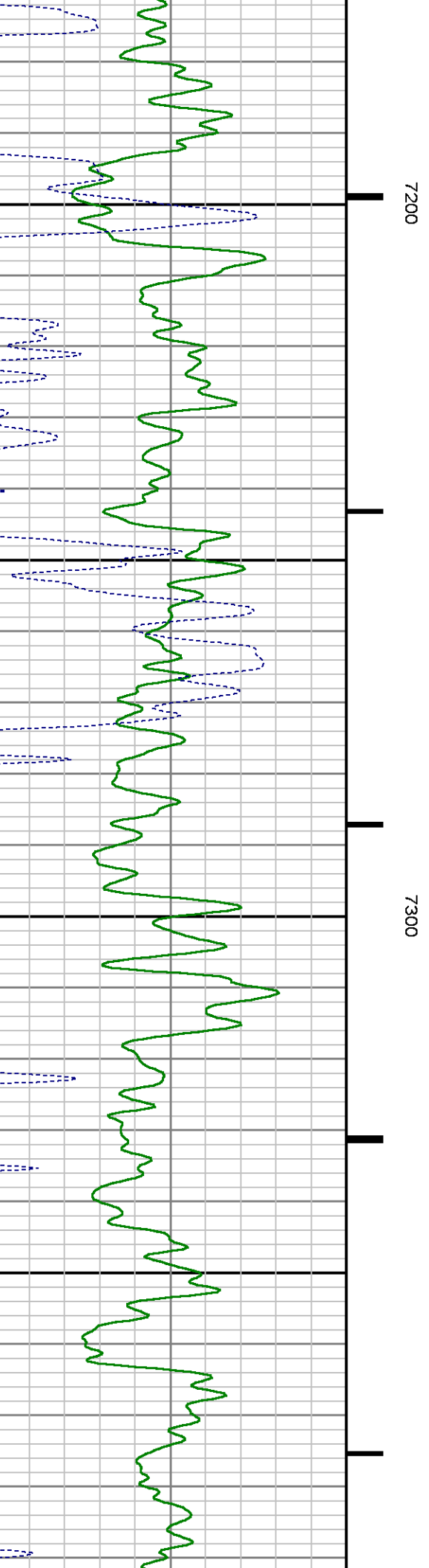
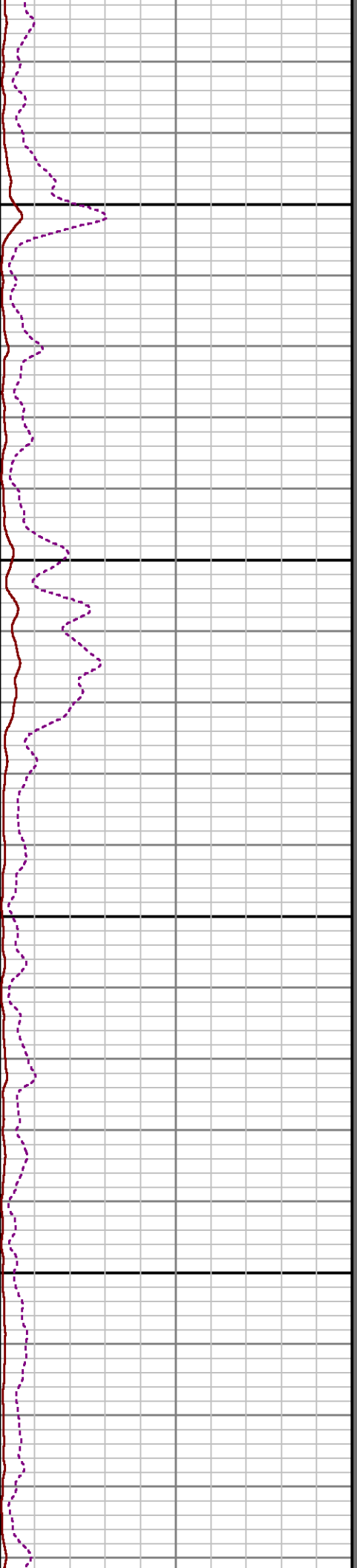
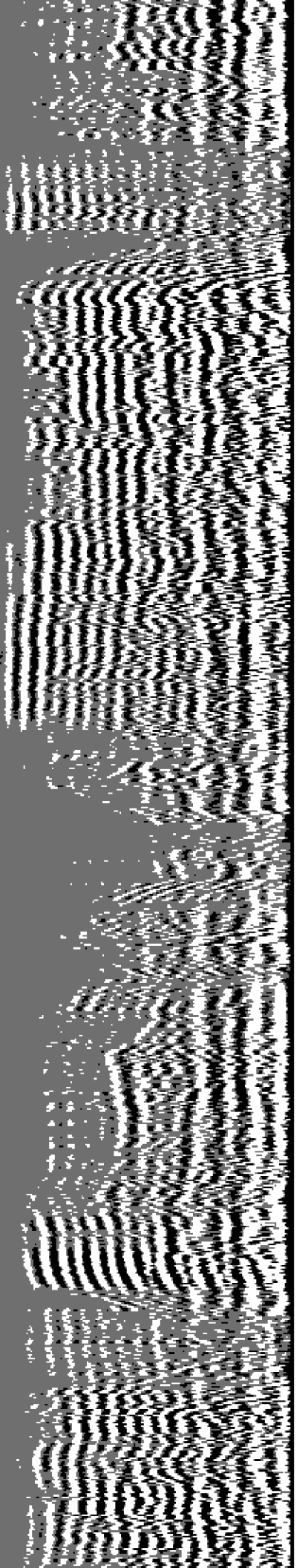


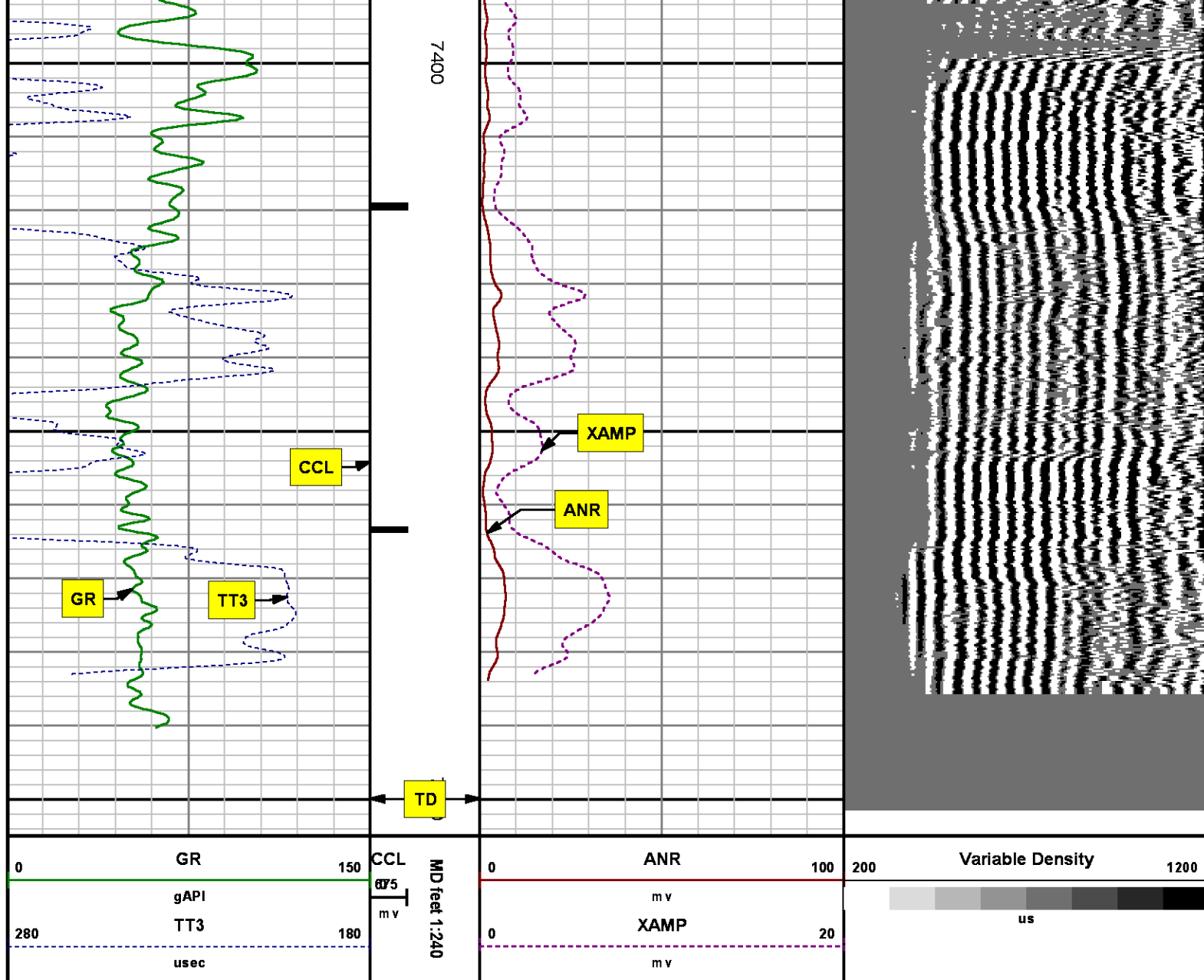












## SECONDARY PRESENTATION

### 0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	u sec	35.656	7500.250
RAL	Amp Gate Start Near	195.000	u sec	35.656	7500.250
RAL	Amp Gate Start Radial	195.000	u sec	35.656	7500.250

RAL	Amp Gate Start Radial	155.000	usec	35.656	7500.250
RAL	Amp Gate Width Far	25.000	usec	35.656	7500.250
RAL	Amp Gate Width Near	25.000	usec	35.656	7500.250
RAL	Amp Gate Width Radial	25.000	usec	35.656	7500.250
RAL	casing od	4.500	inches	35.656	7500.250
RAL	casing wt	11.600	lbm/ft	35.656	7500.250
RAL	FB Start Far	291.900	usec	35.656	7500.250
RAL	FB Start Near	175.391	usec	35.656	7500.250
RAL	FB Start Radial	175.391	usec	35.656	7500.250
RAL	FB Thresh Far	10.000	mv	35.656	7500.250
RAL	FB Thresh Near	4.000	mv	35.656	7500.250
RAL	FB Thresh Radial	4.000	mv	35.656	7500.250
RAL	Fluid Travel Time	200.000	usec/ft	35.656	7501.219

## 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

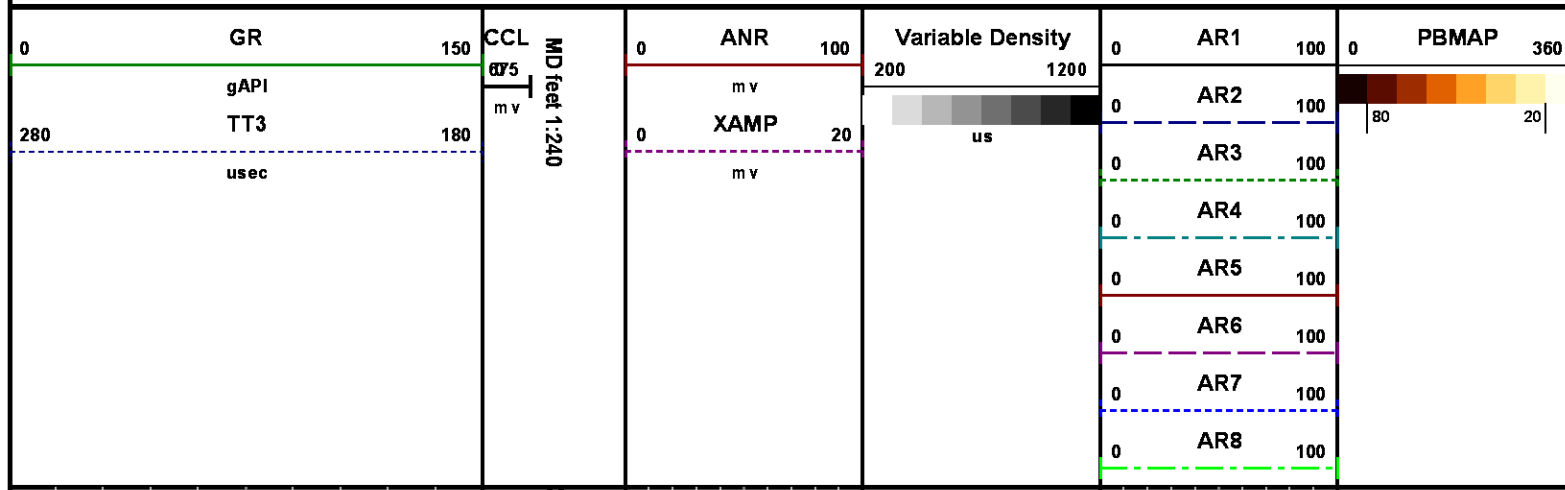
Well : WPX ENERGY PA 24-2

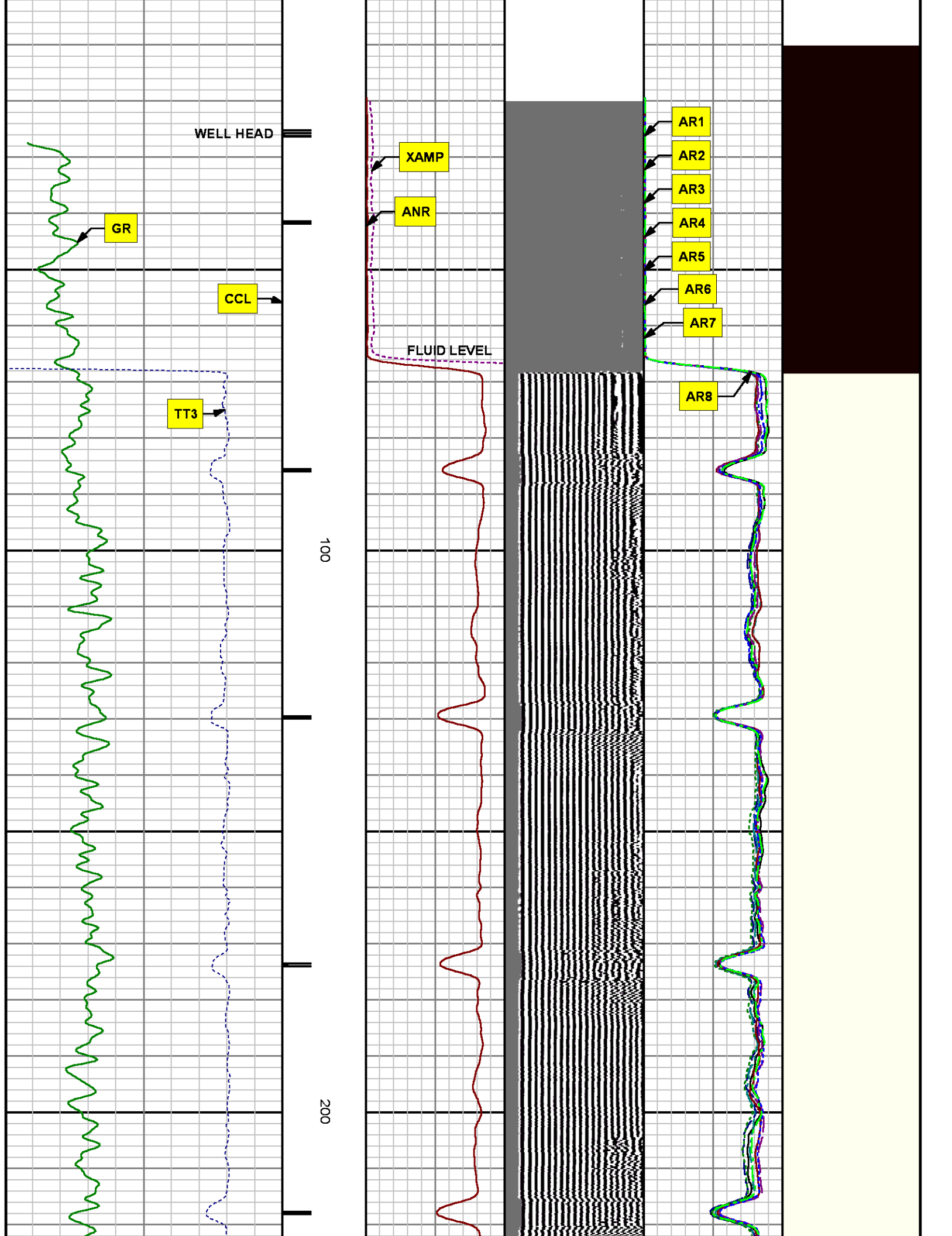
File Name : d:\well\data\wpx\wpx energy pa 24-2\24cbl\main.xtf

Mode : PlotMgr 5.4.504

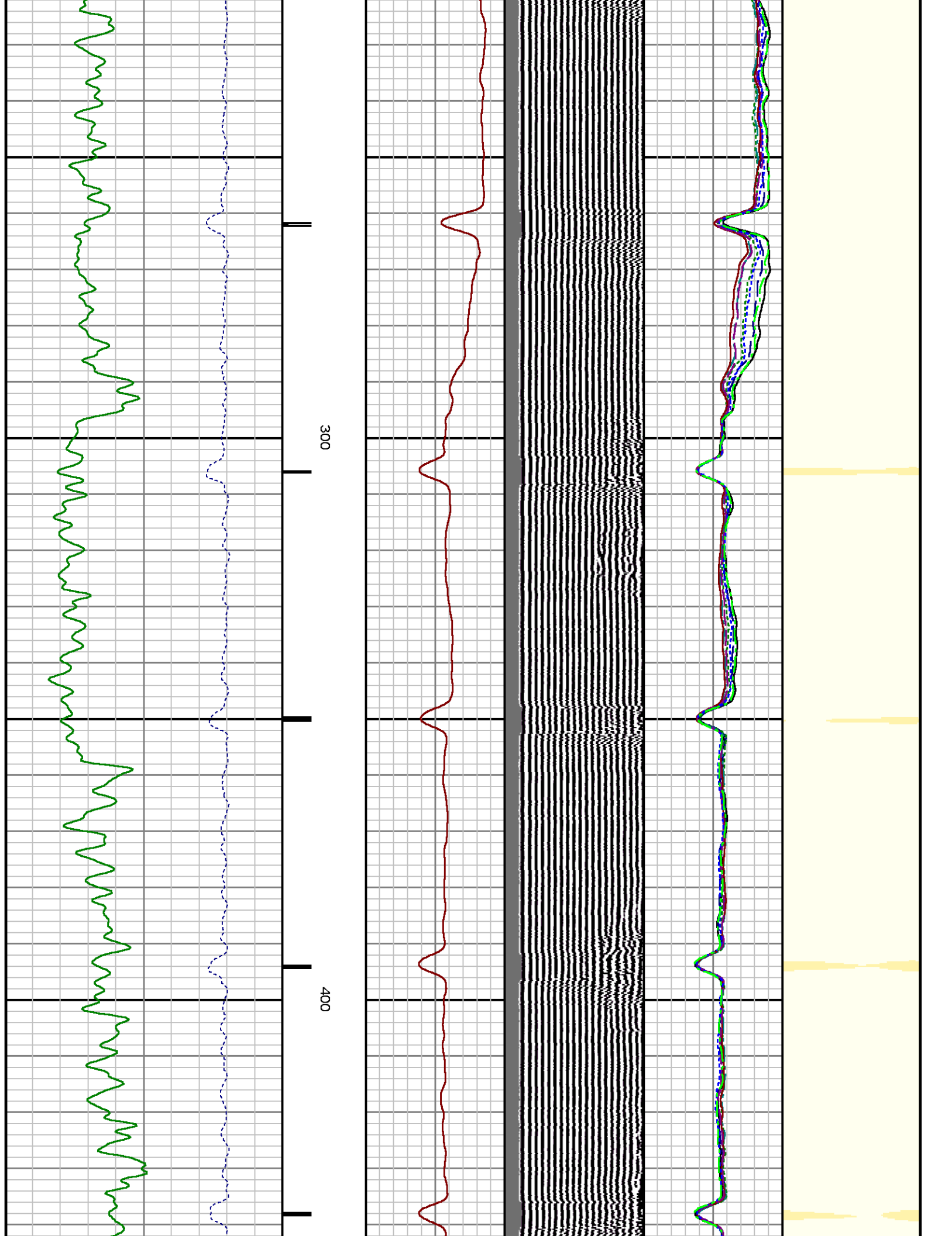
Interval : 0.00 - 7505.00 feet UP

Created : 5/11/2014 2:20:51 PM

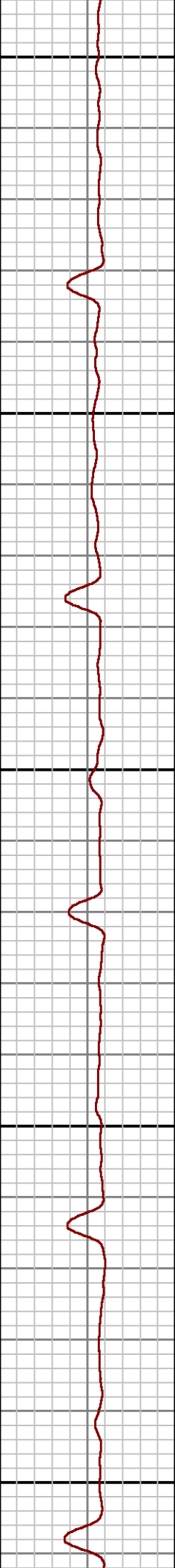
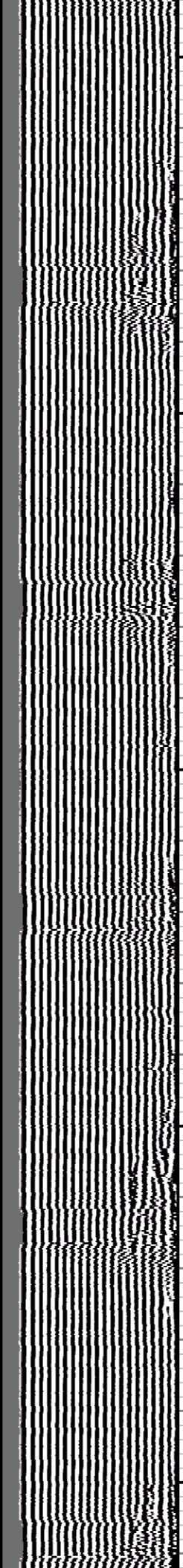
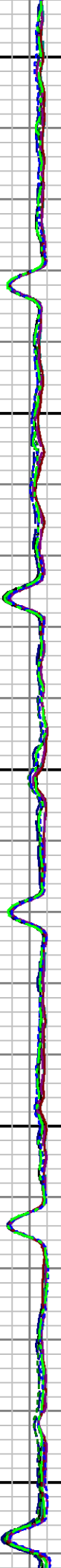








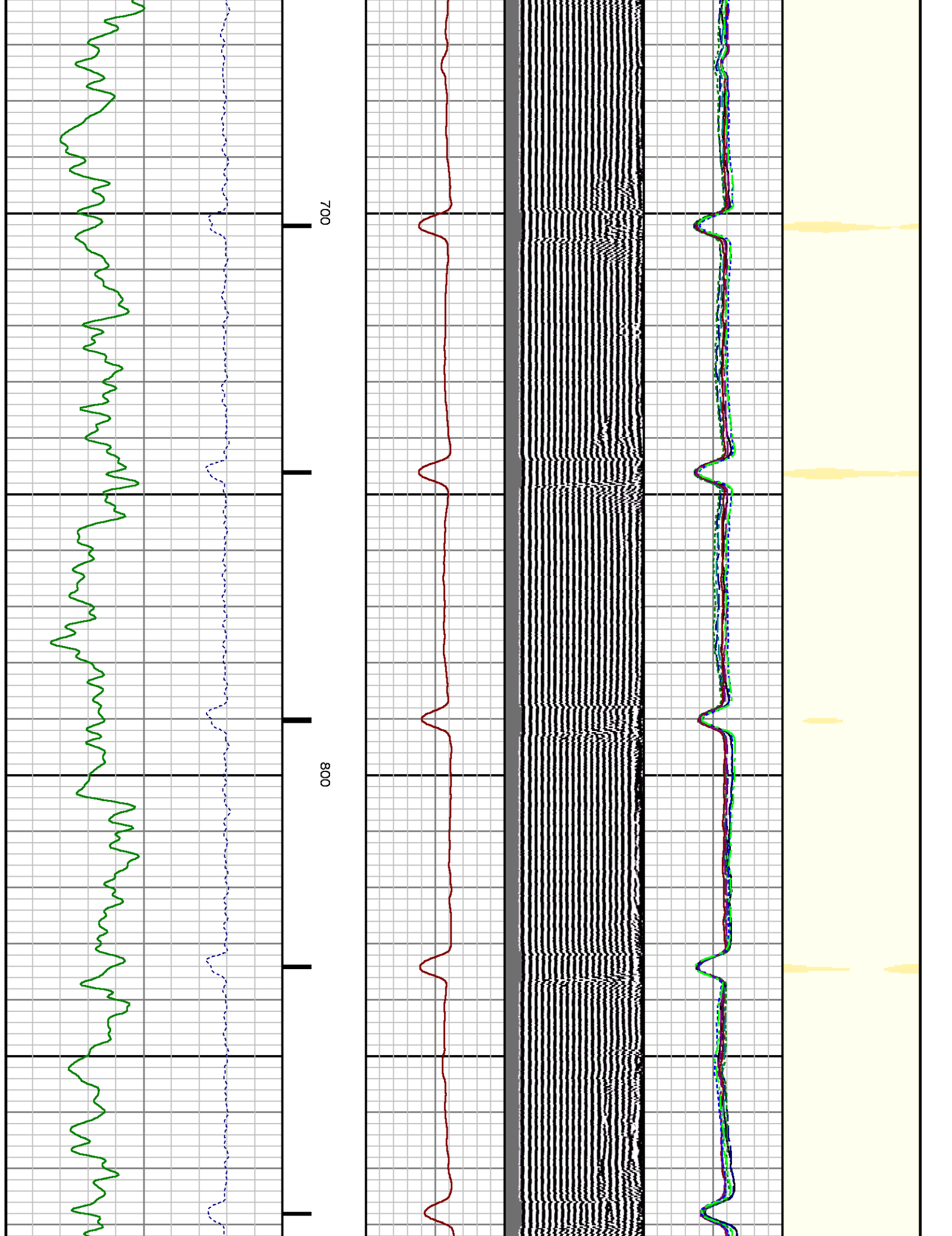


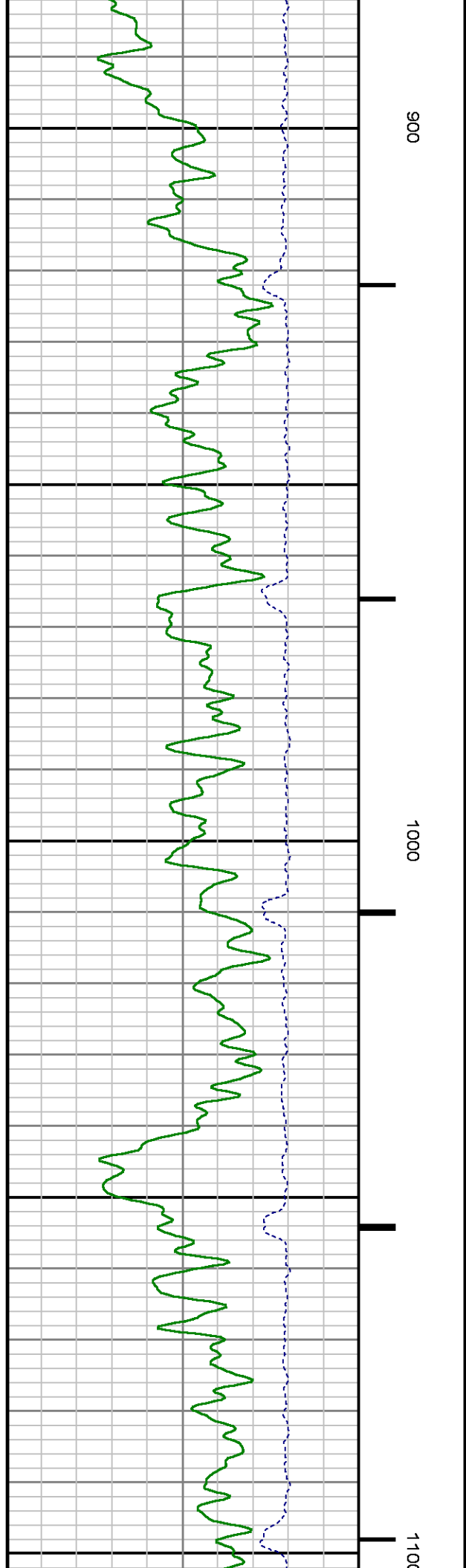
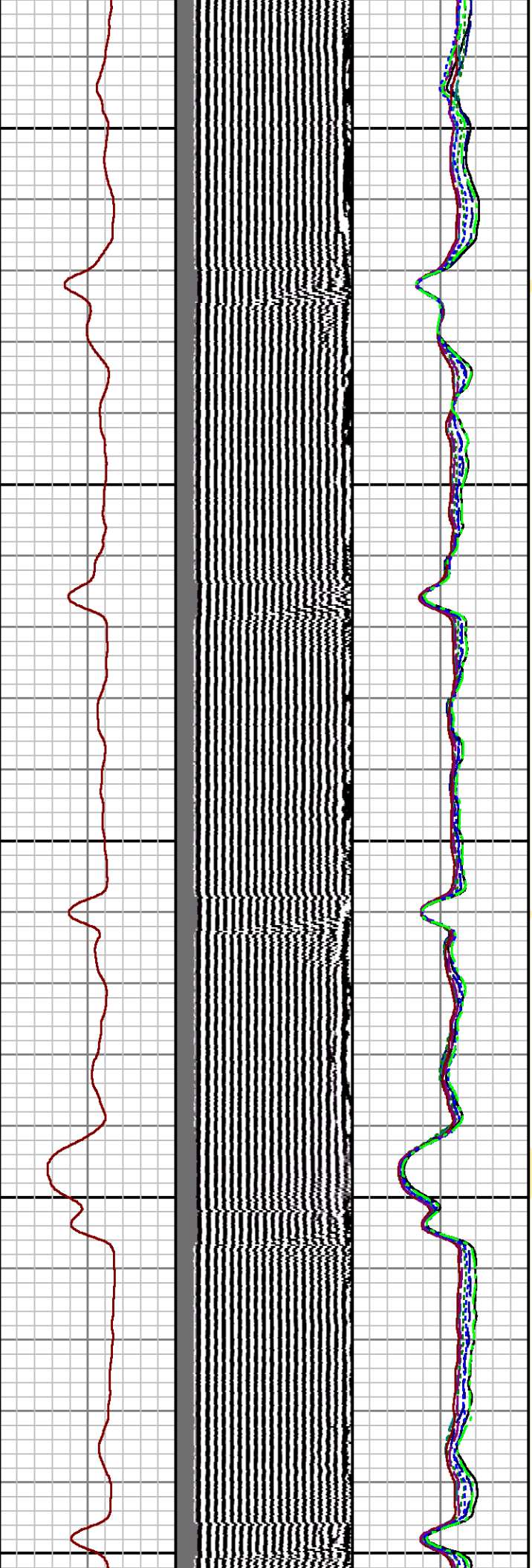
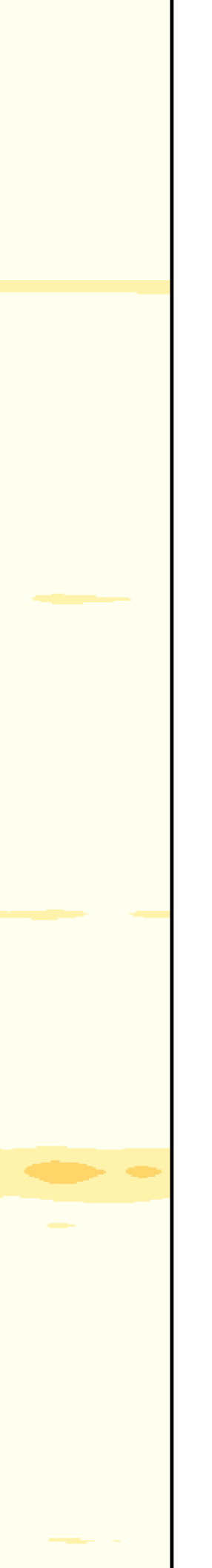


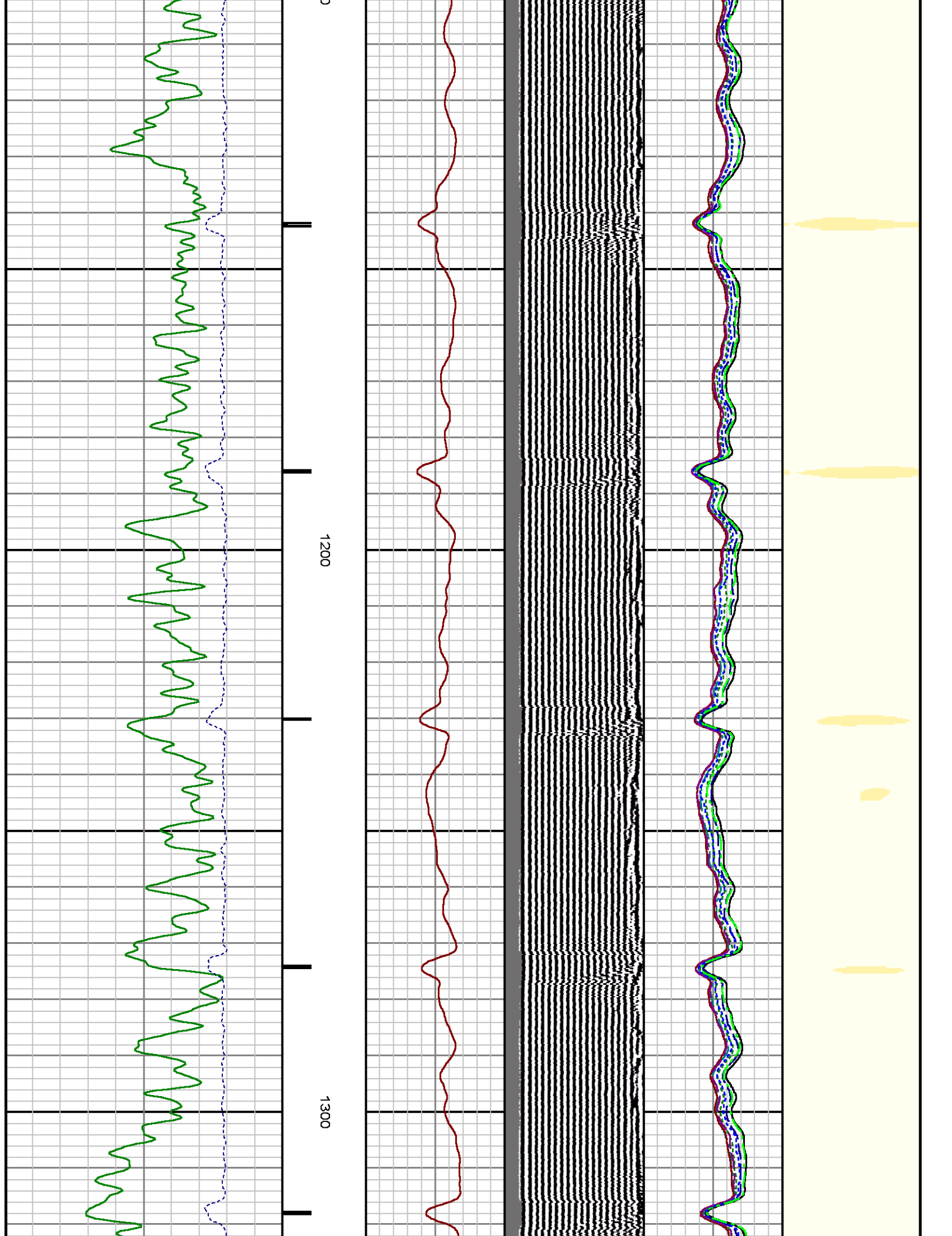
500

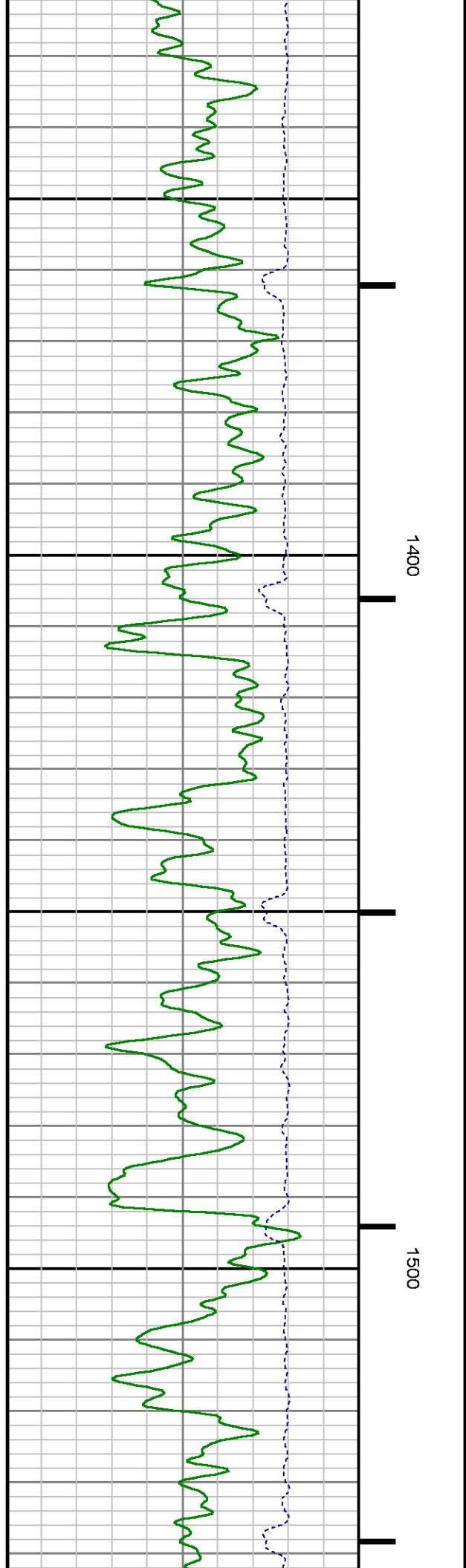
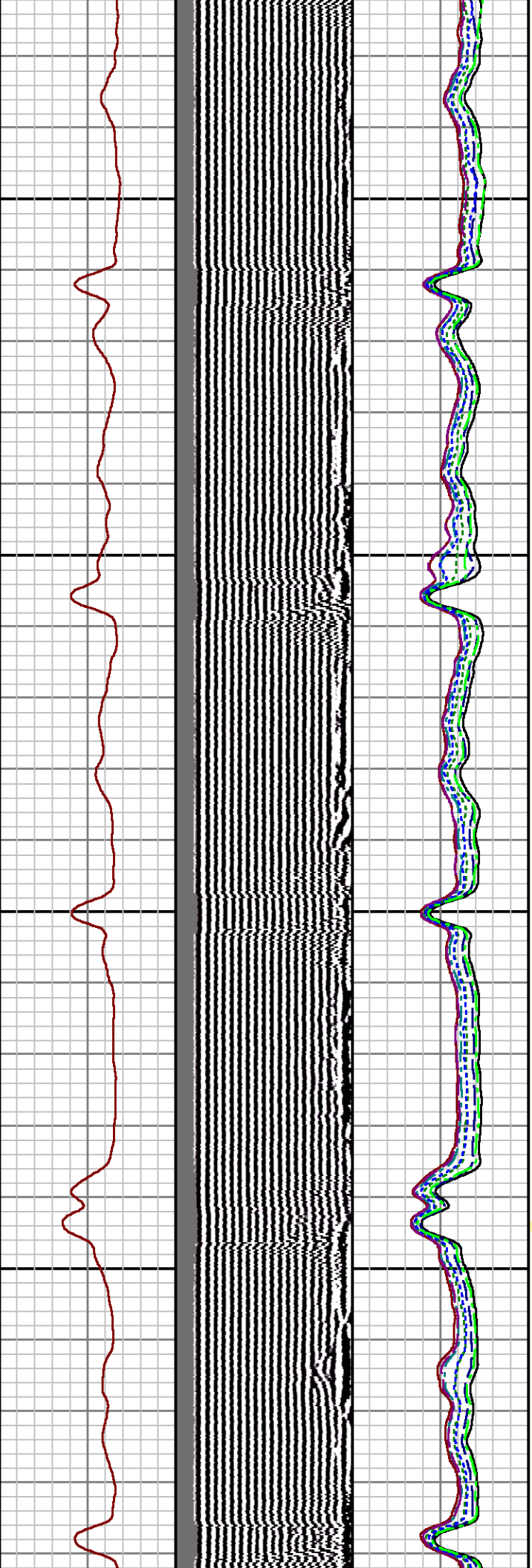
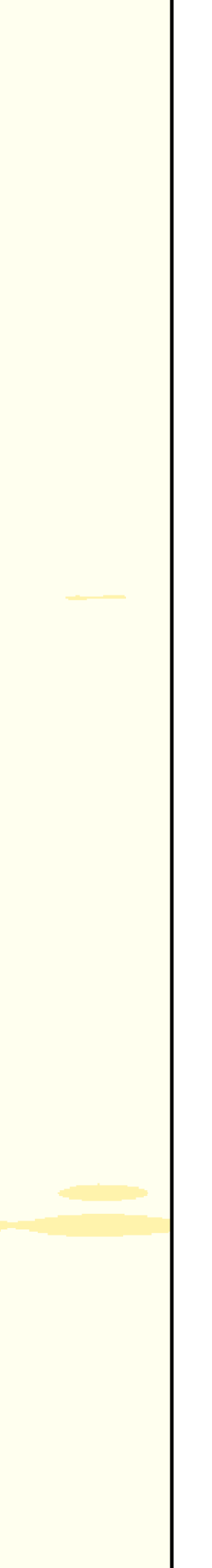
600



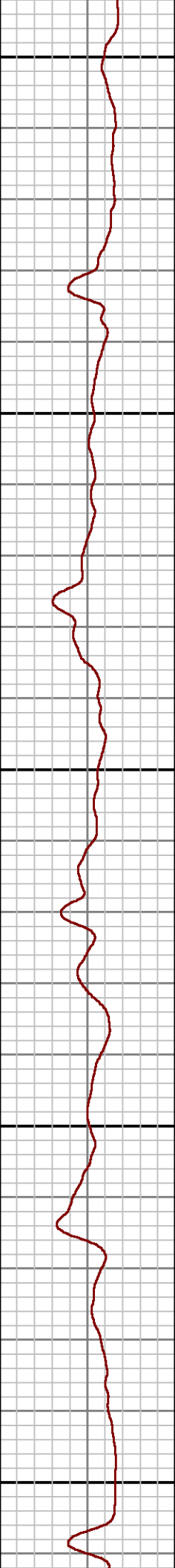
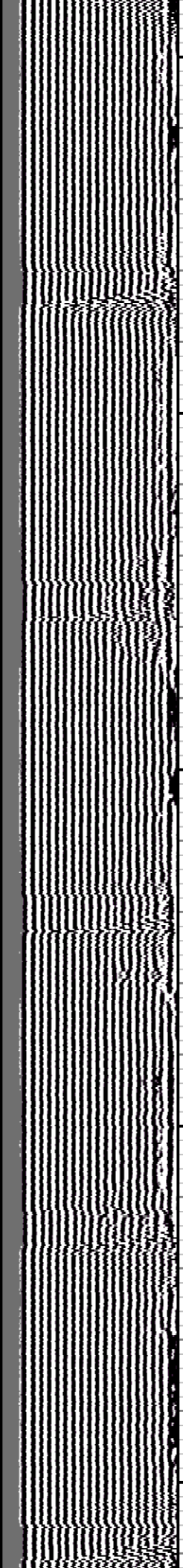
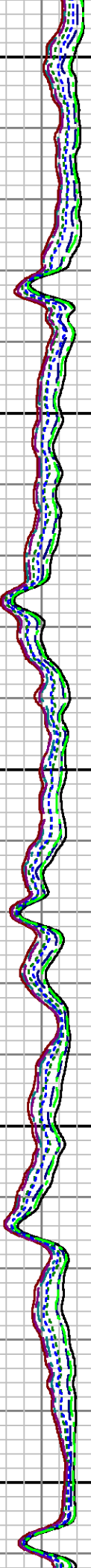






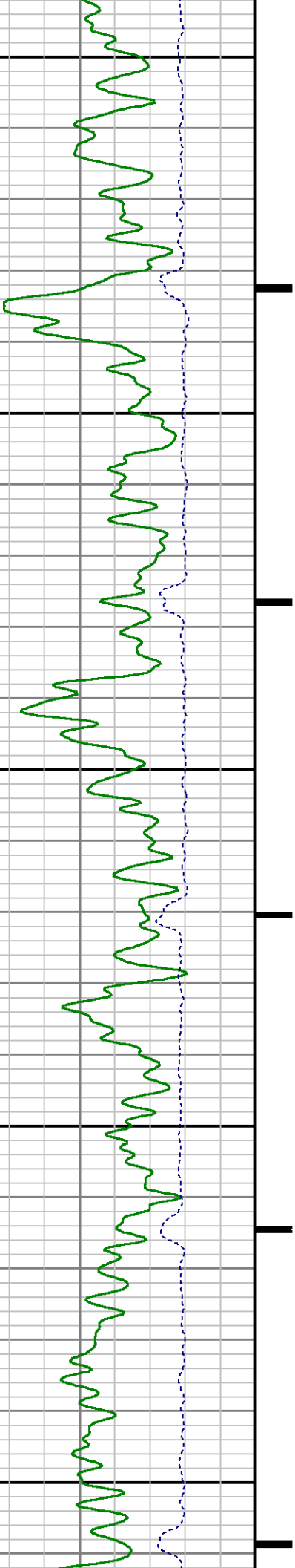




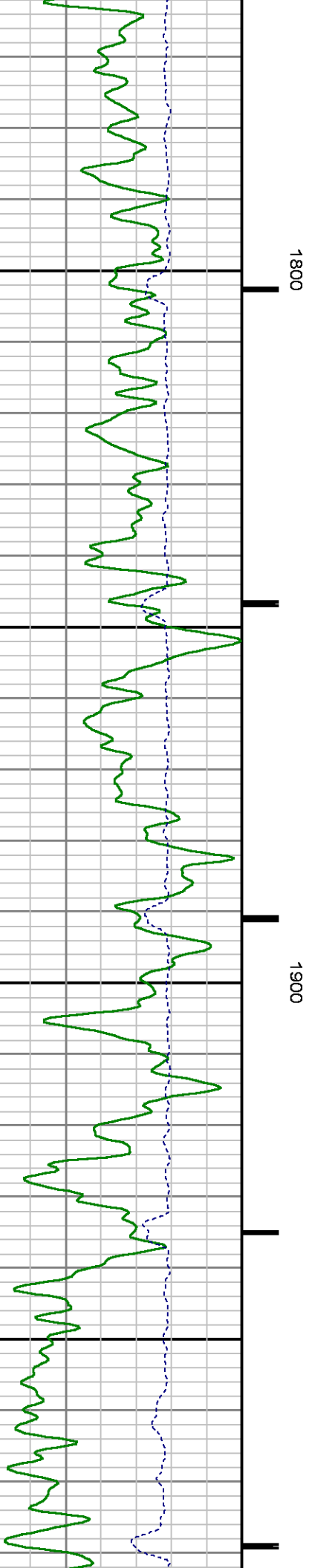
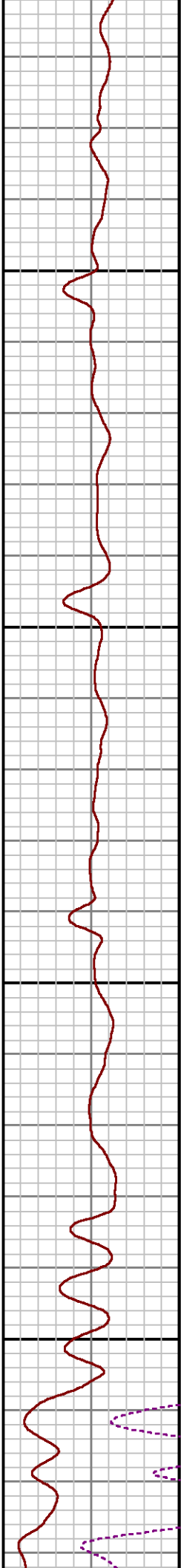
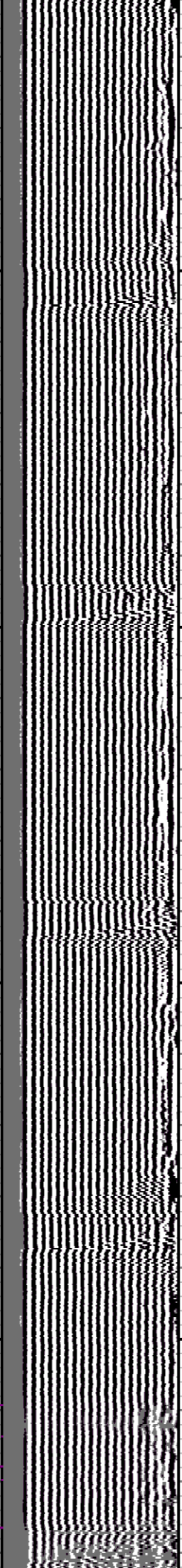
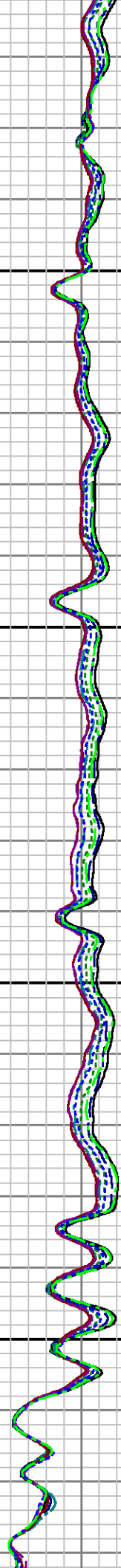
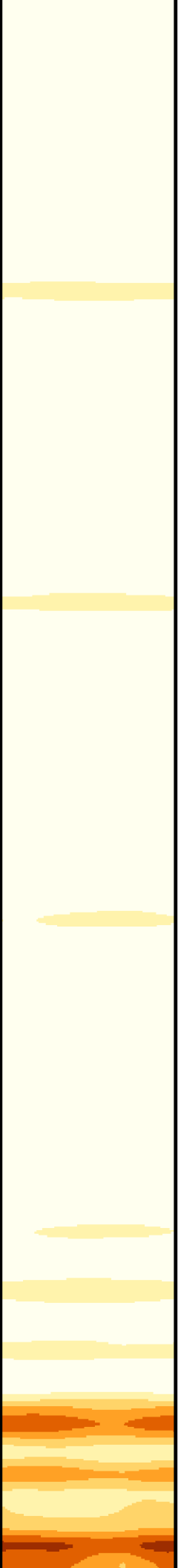


1600

1700

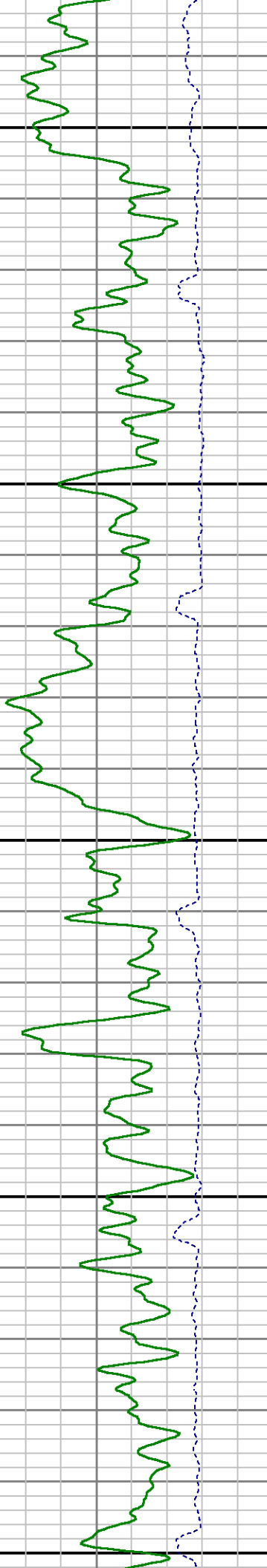
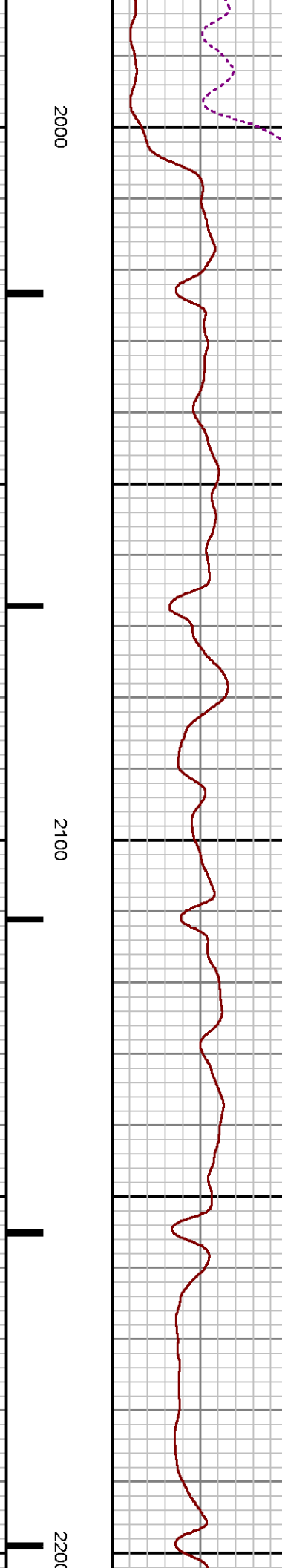
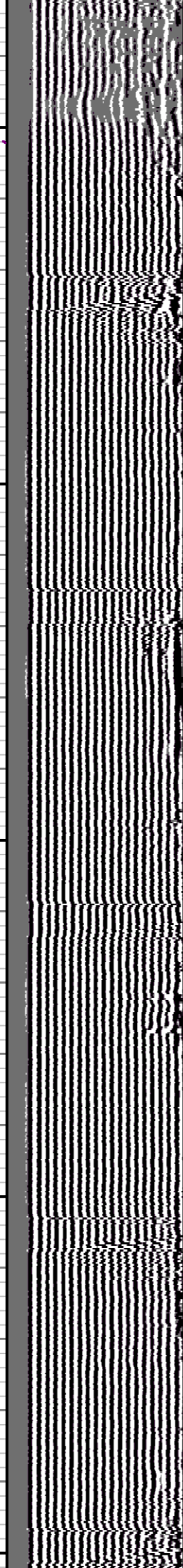
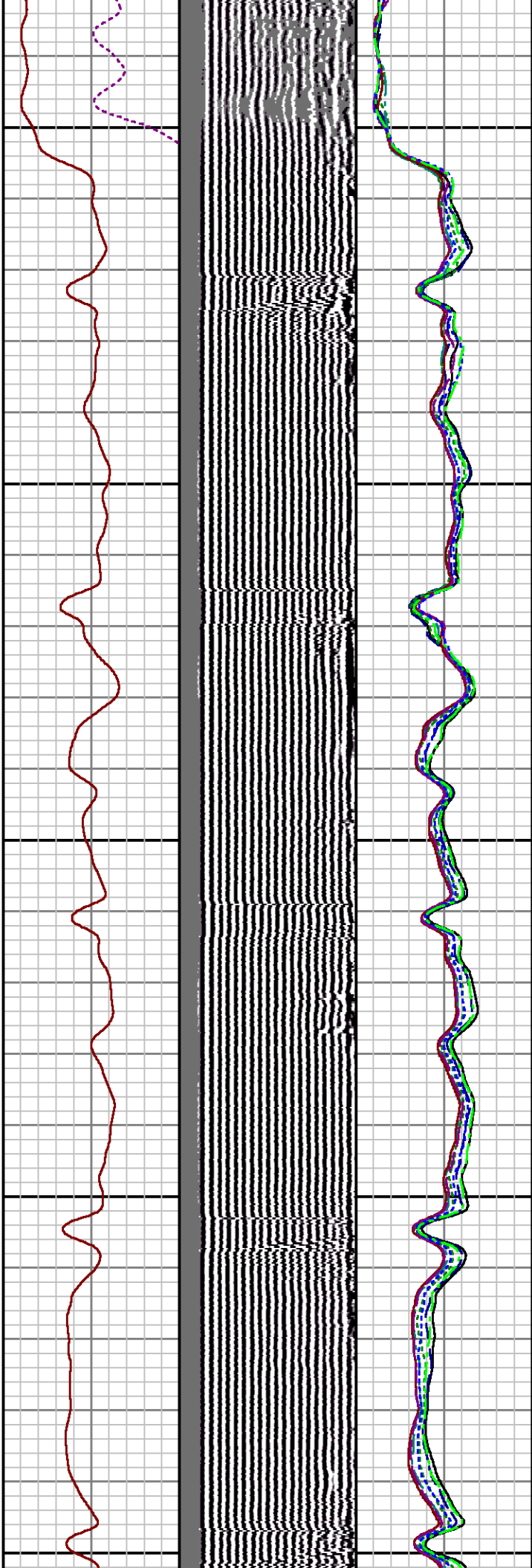
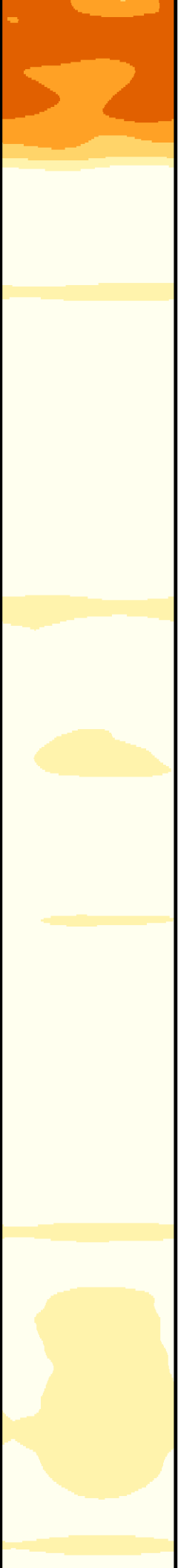






1800

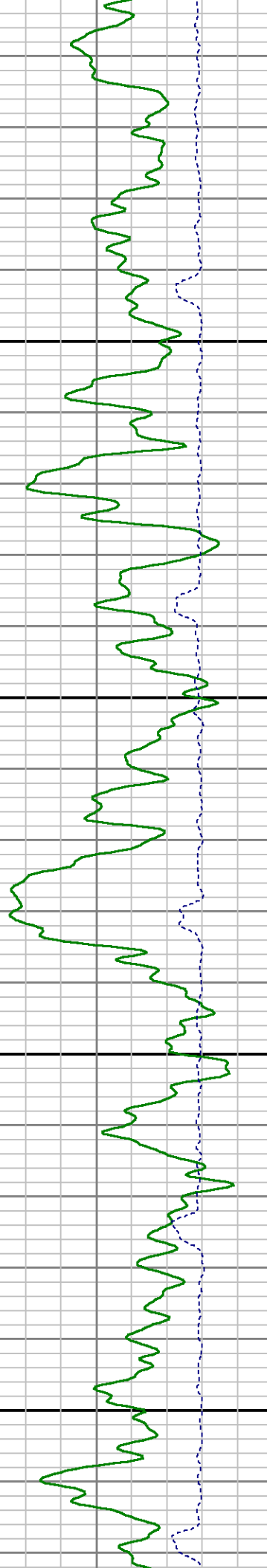
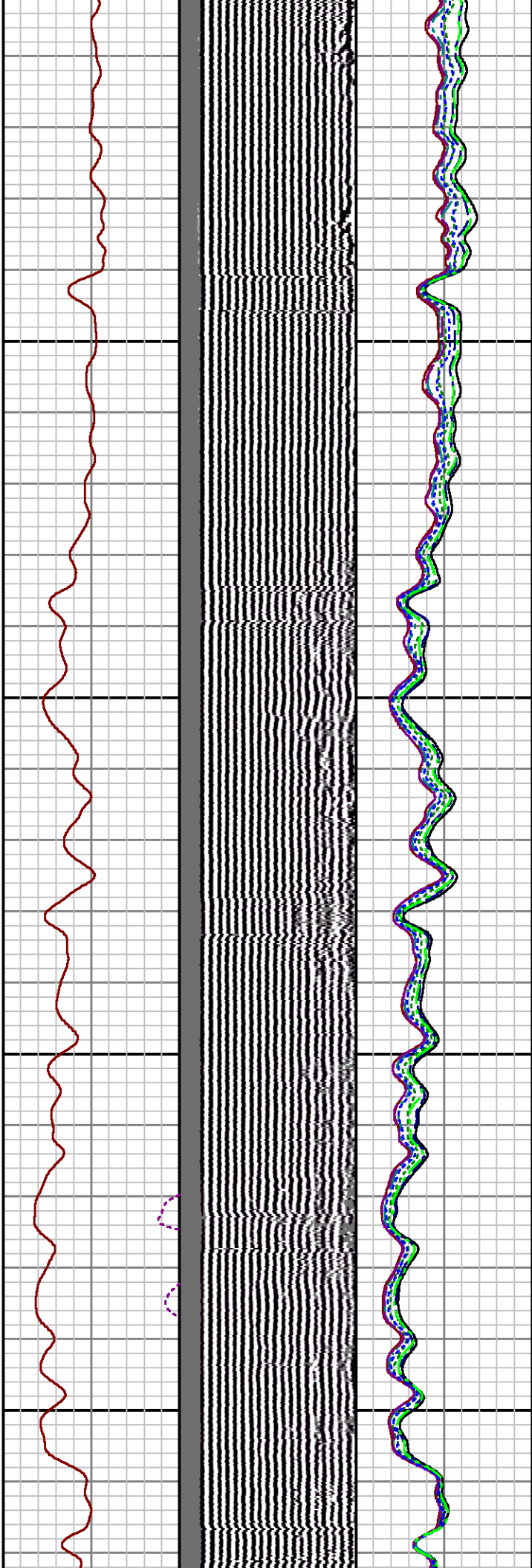
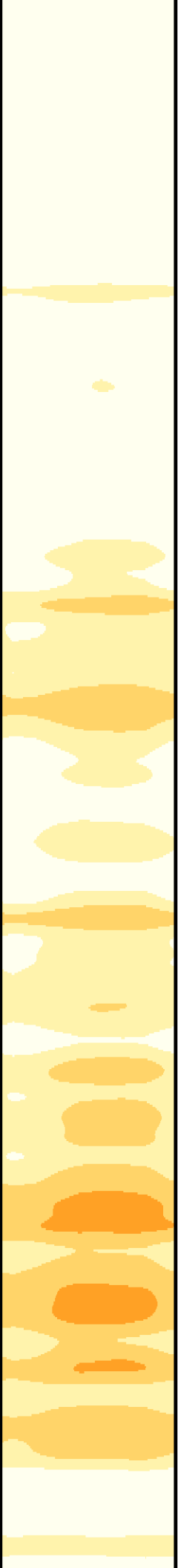
1900

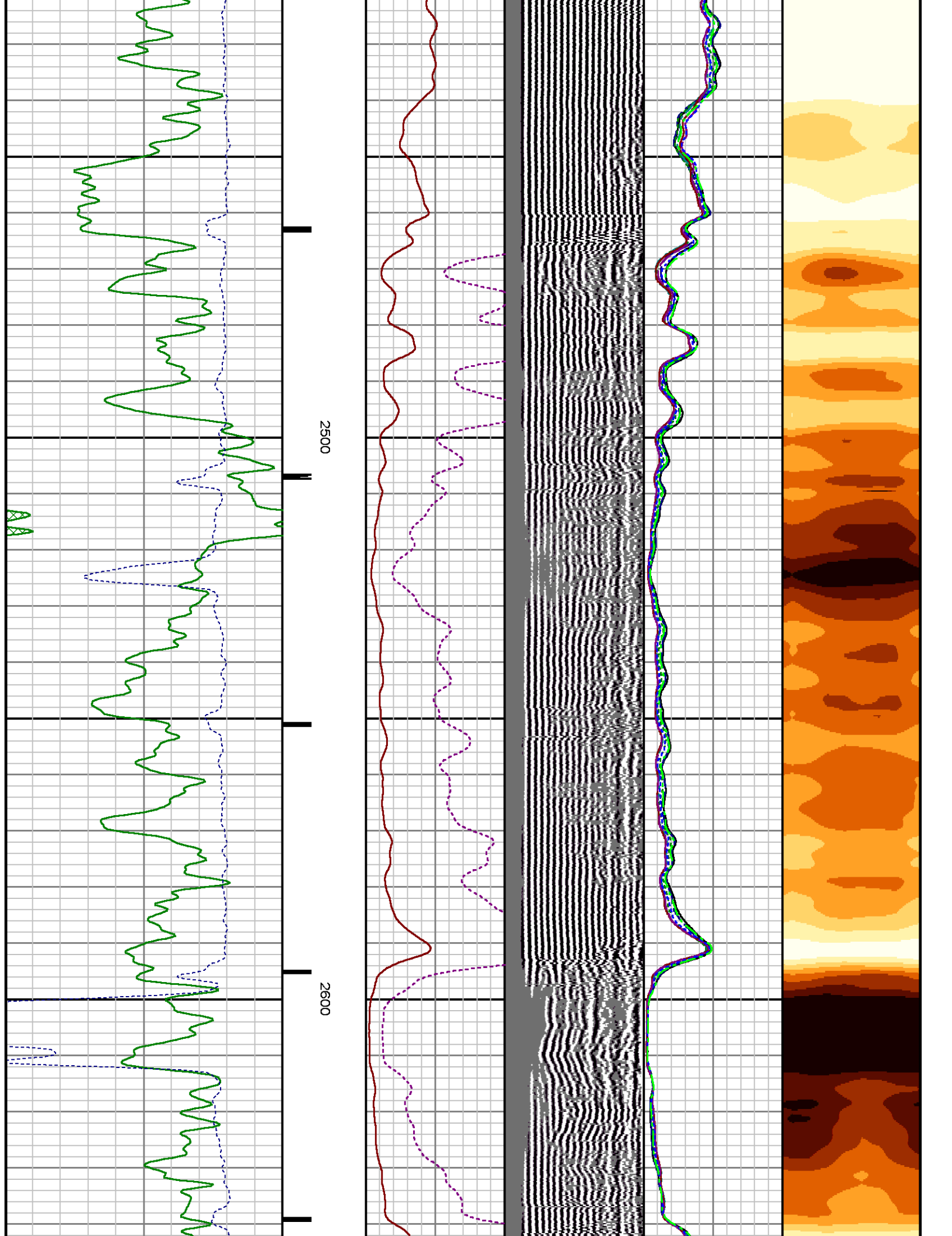


2000

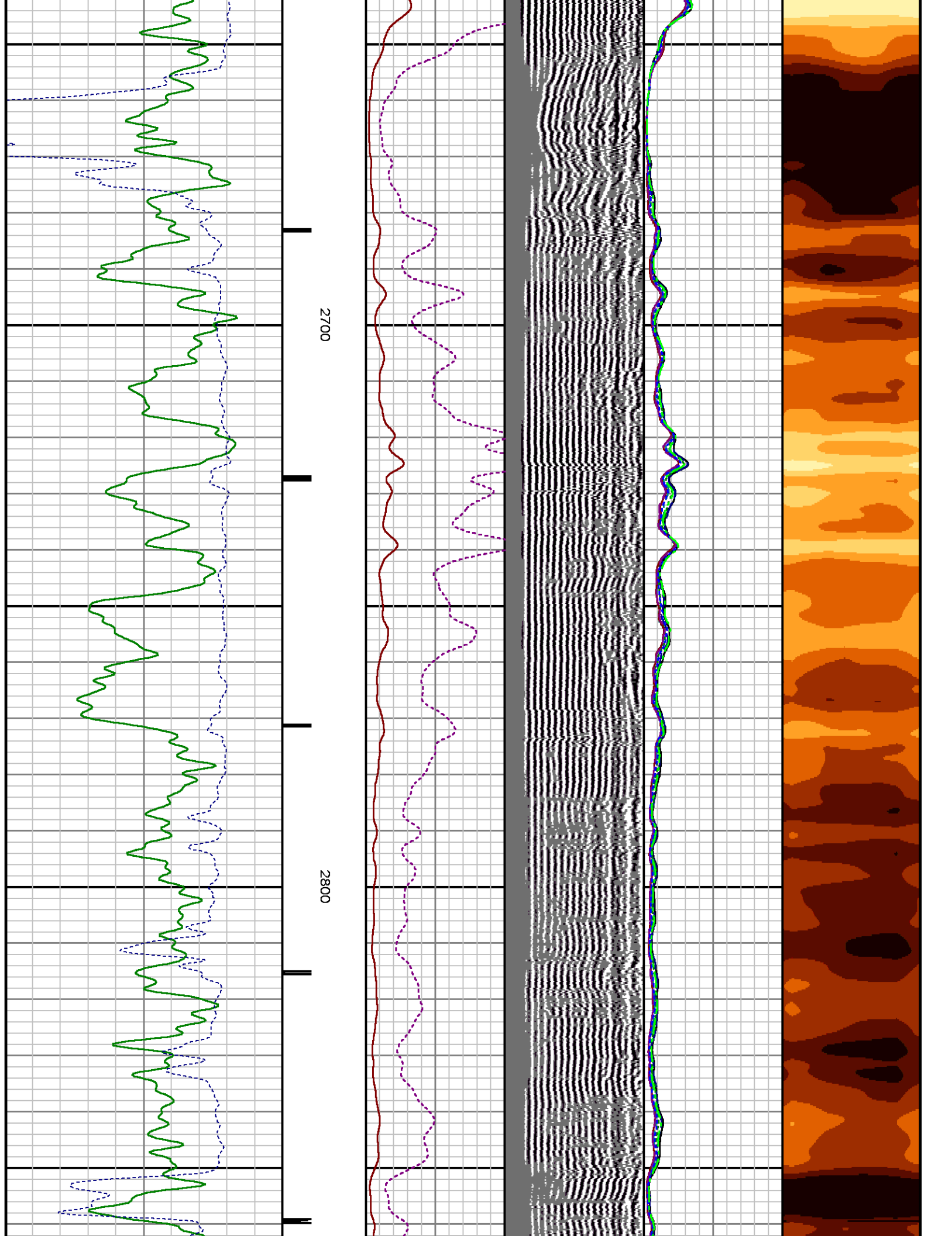
2100

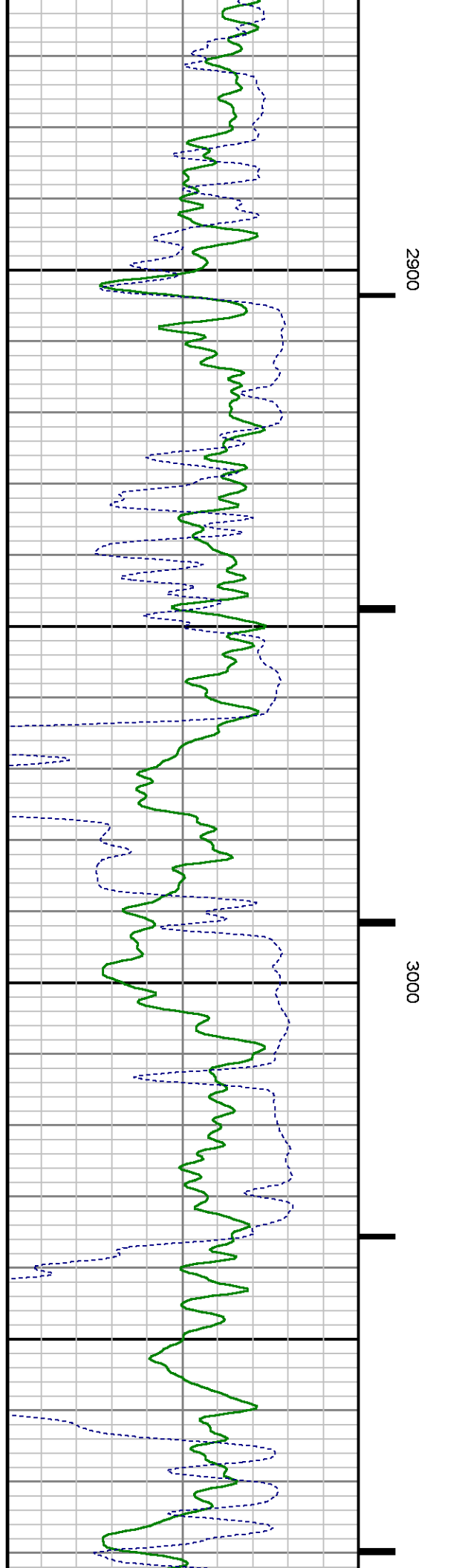
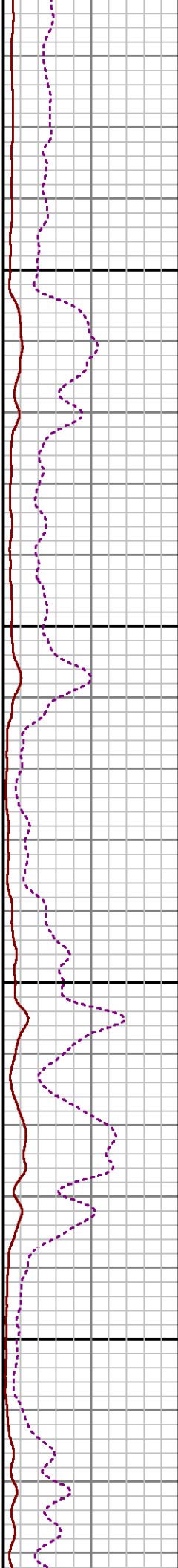
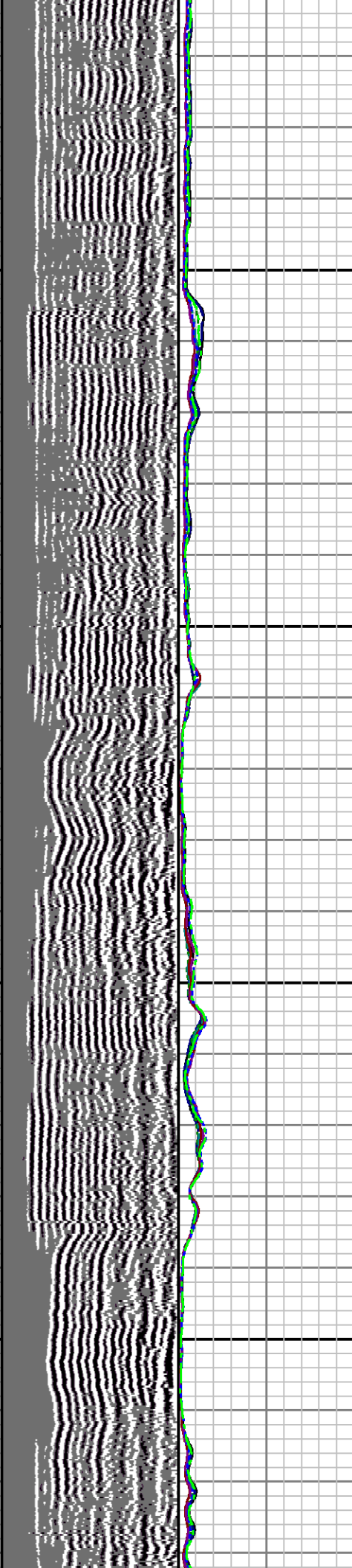
2200



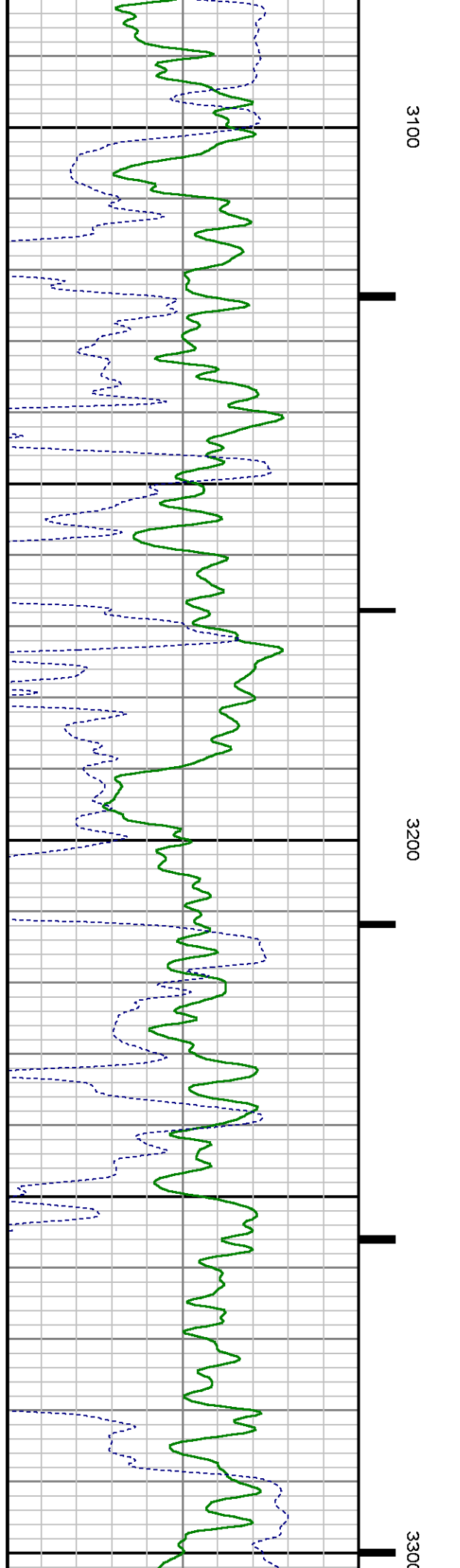
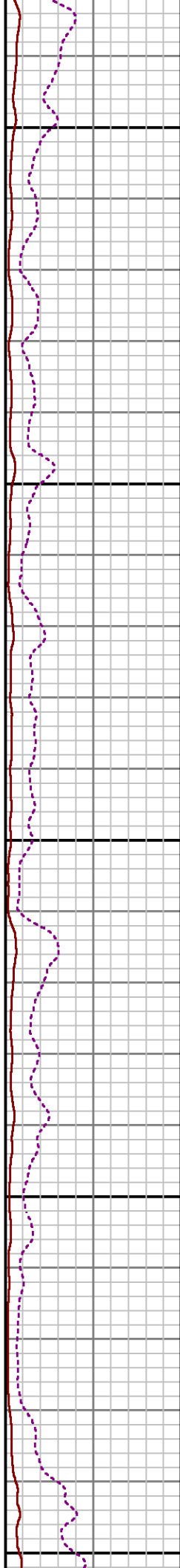
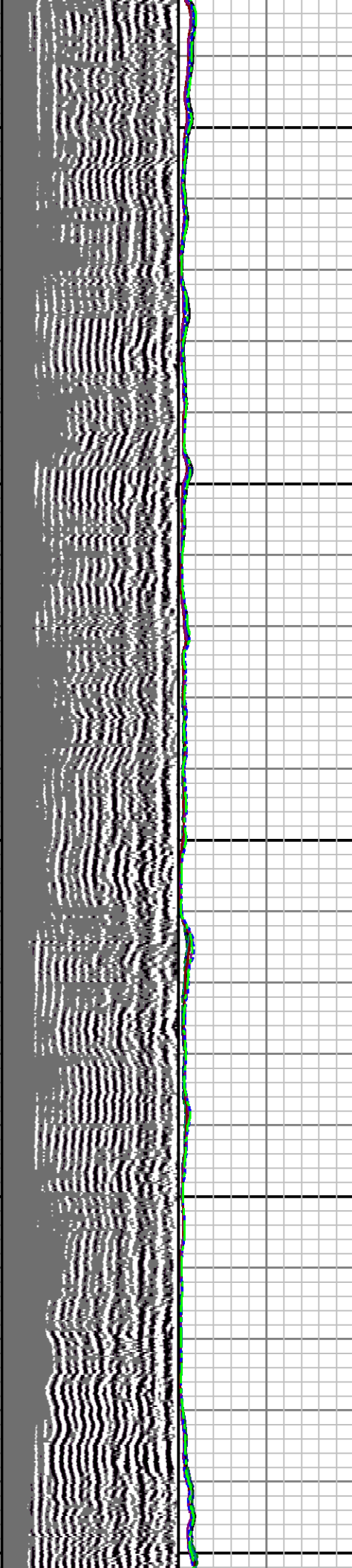


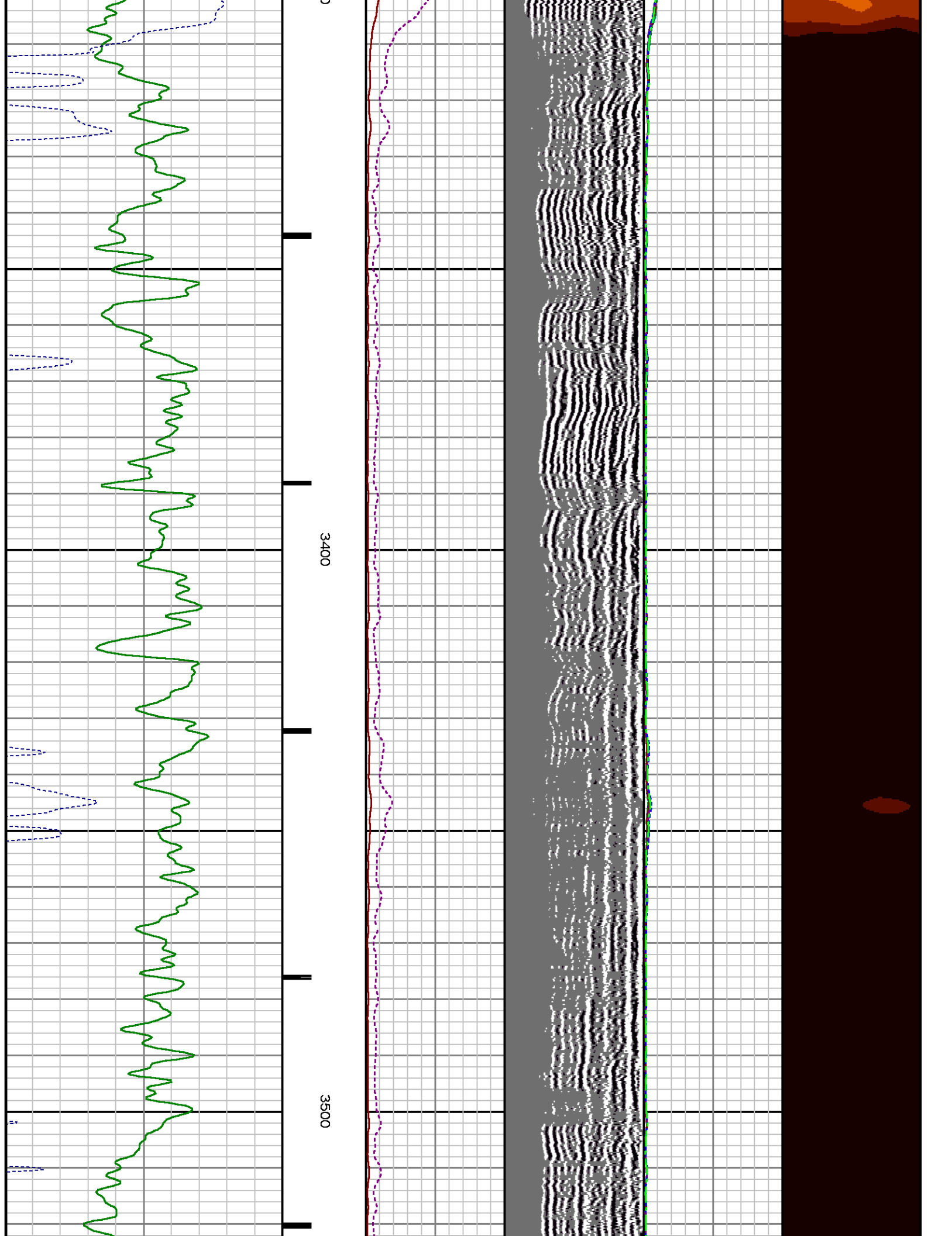


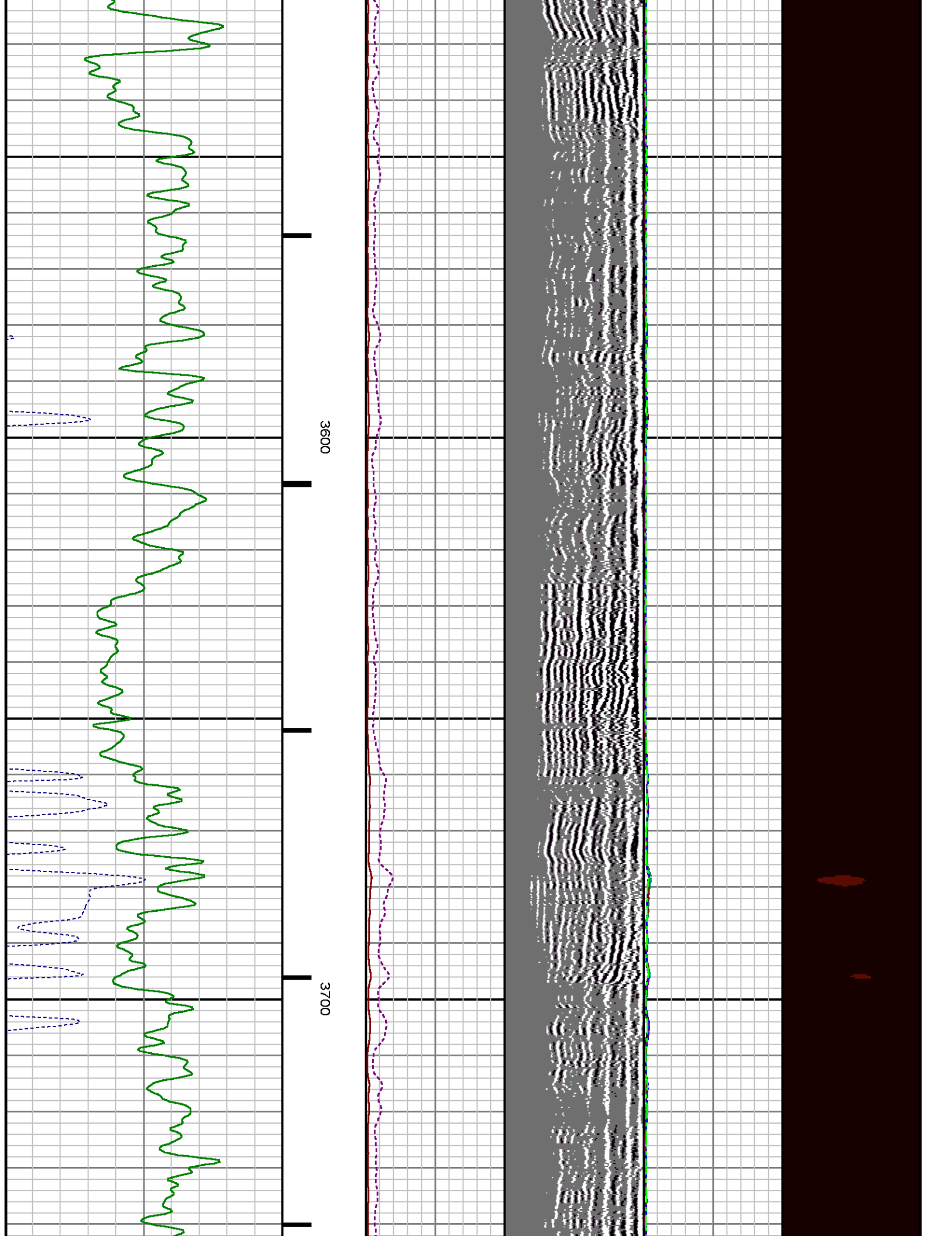


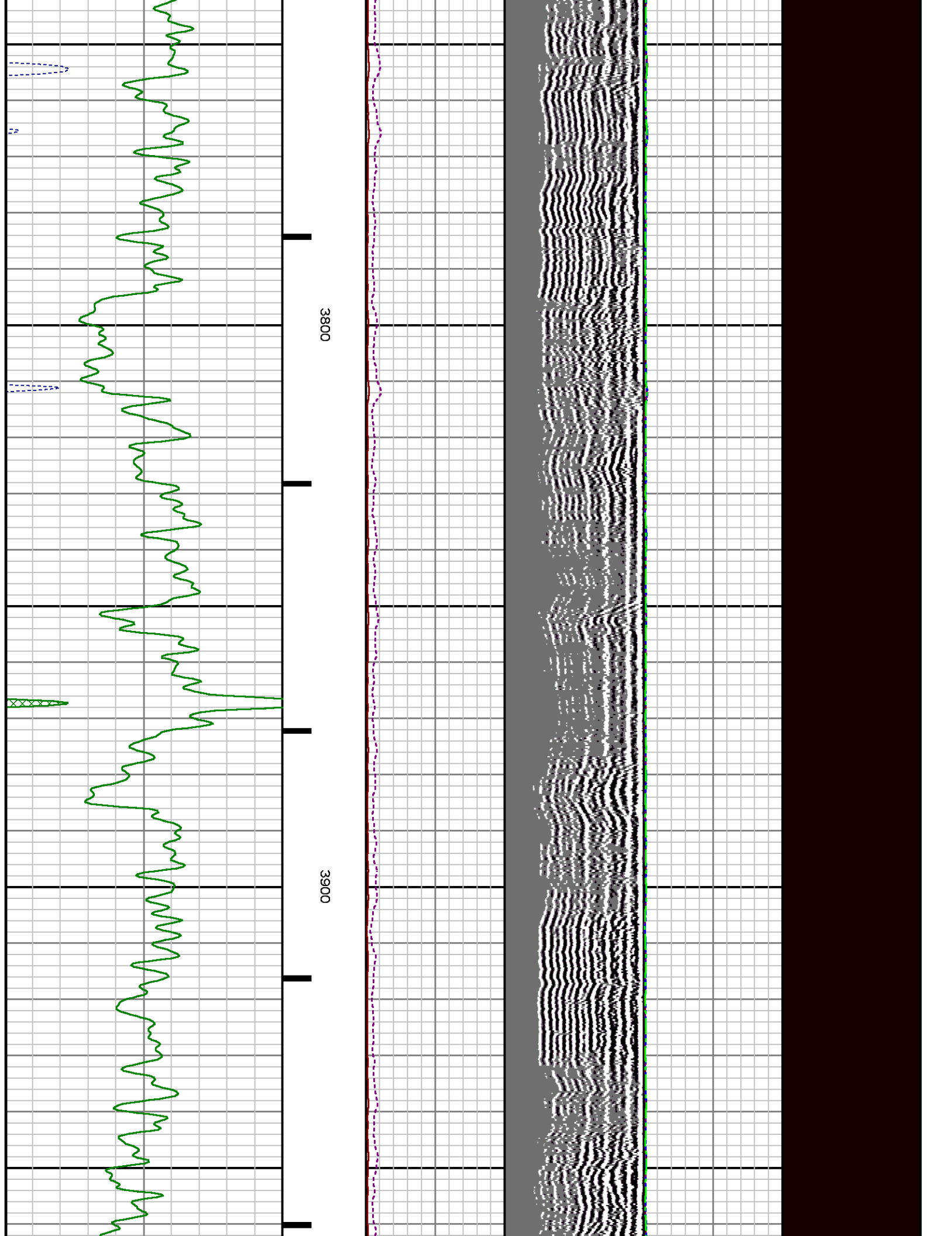


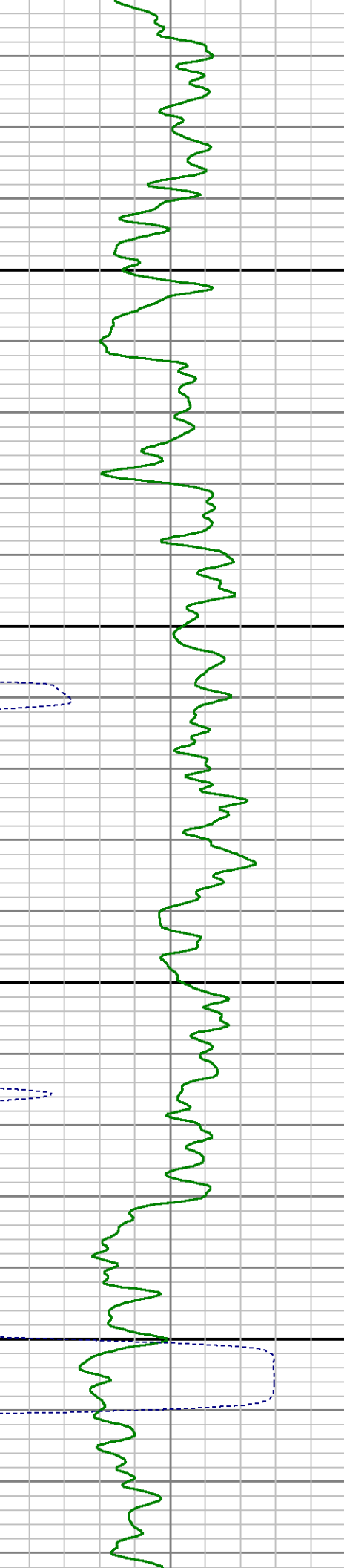
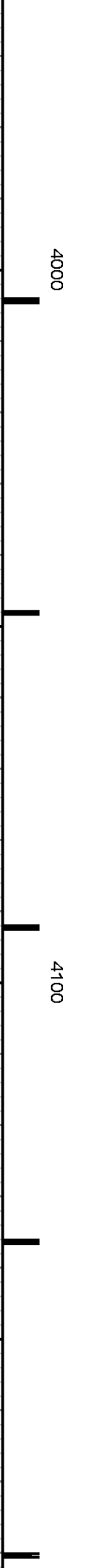
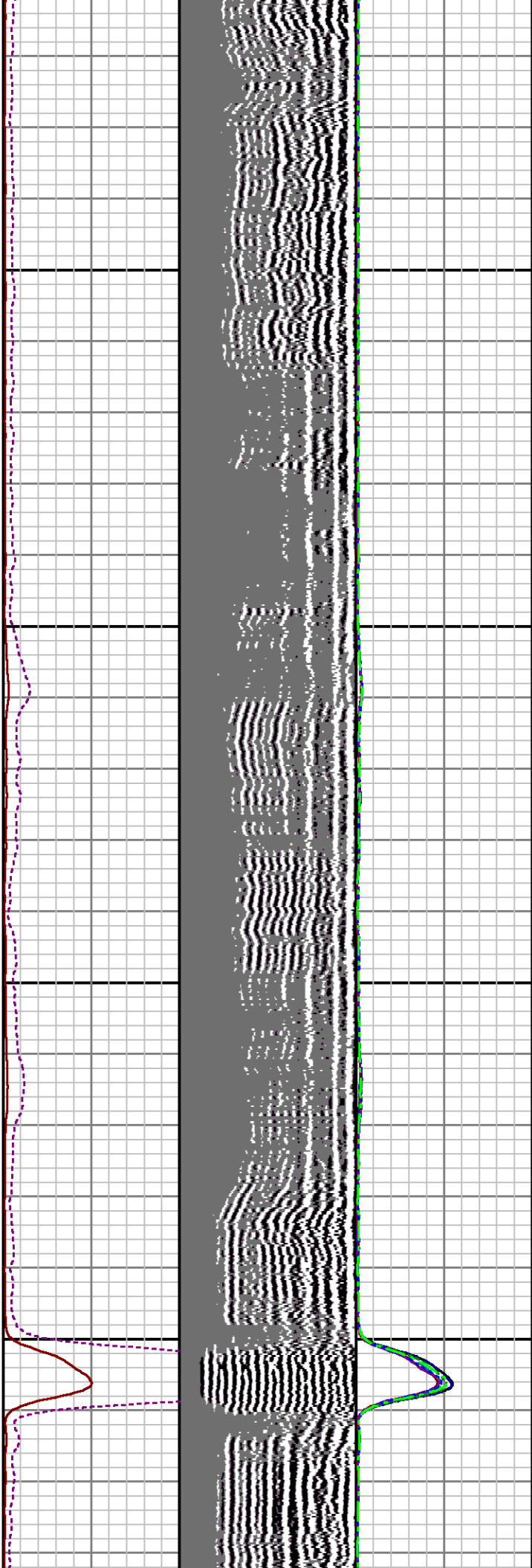


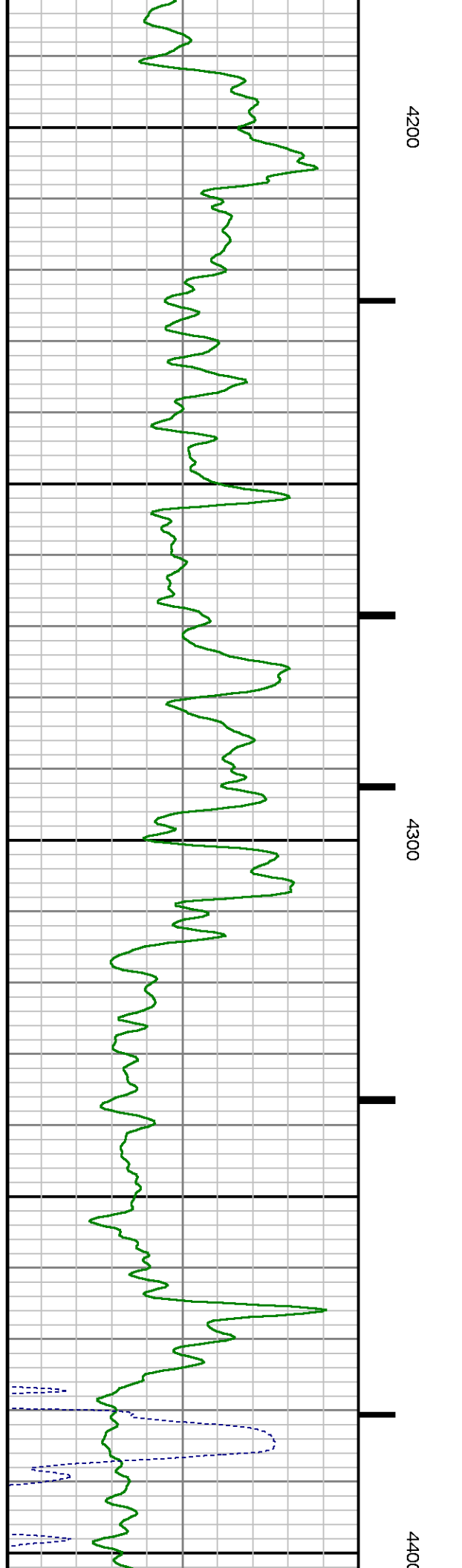
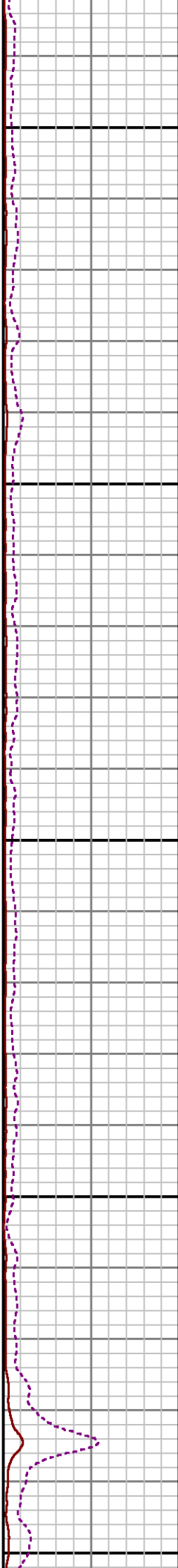
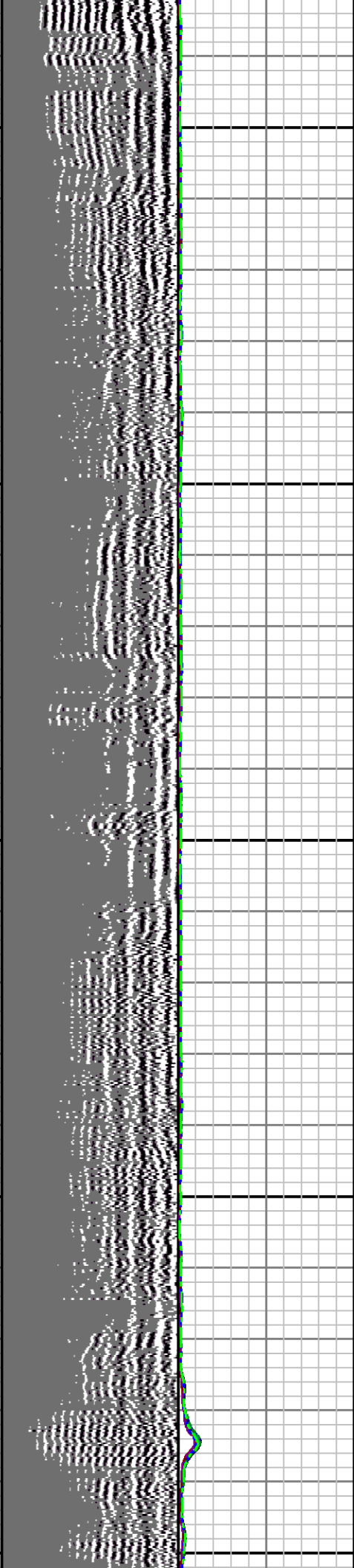
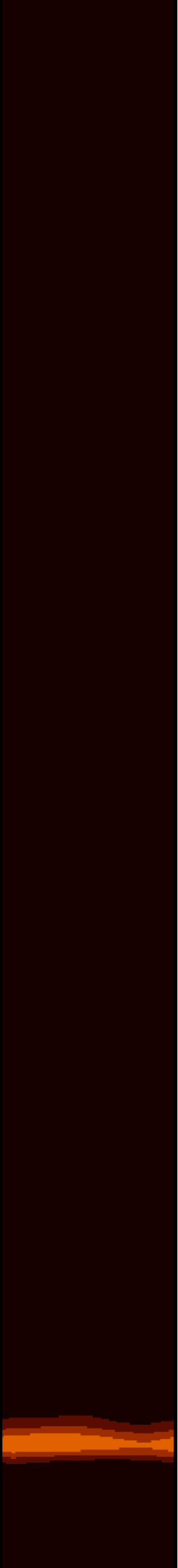




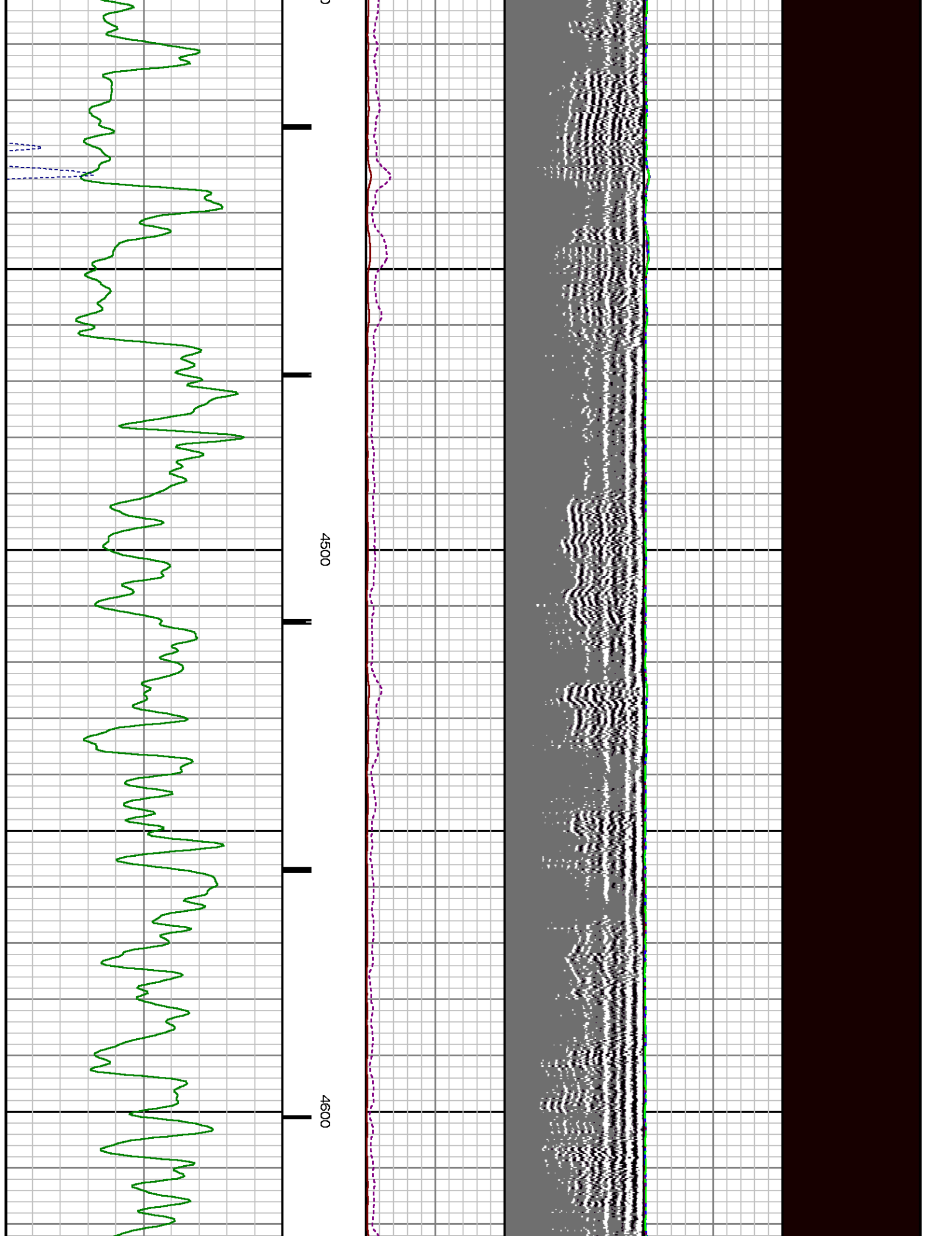


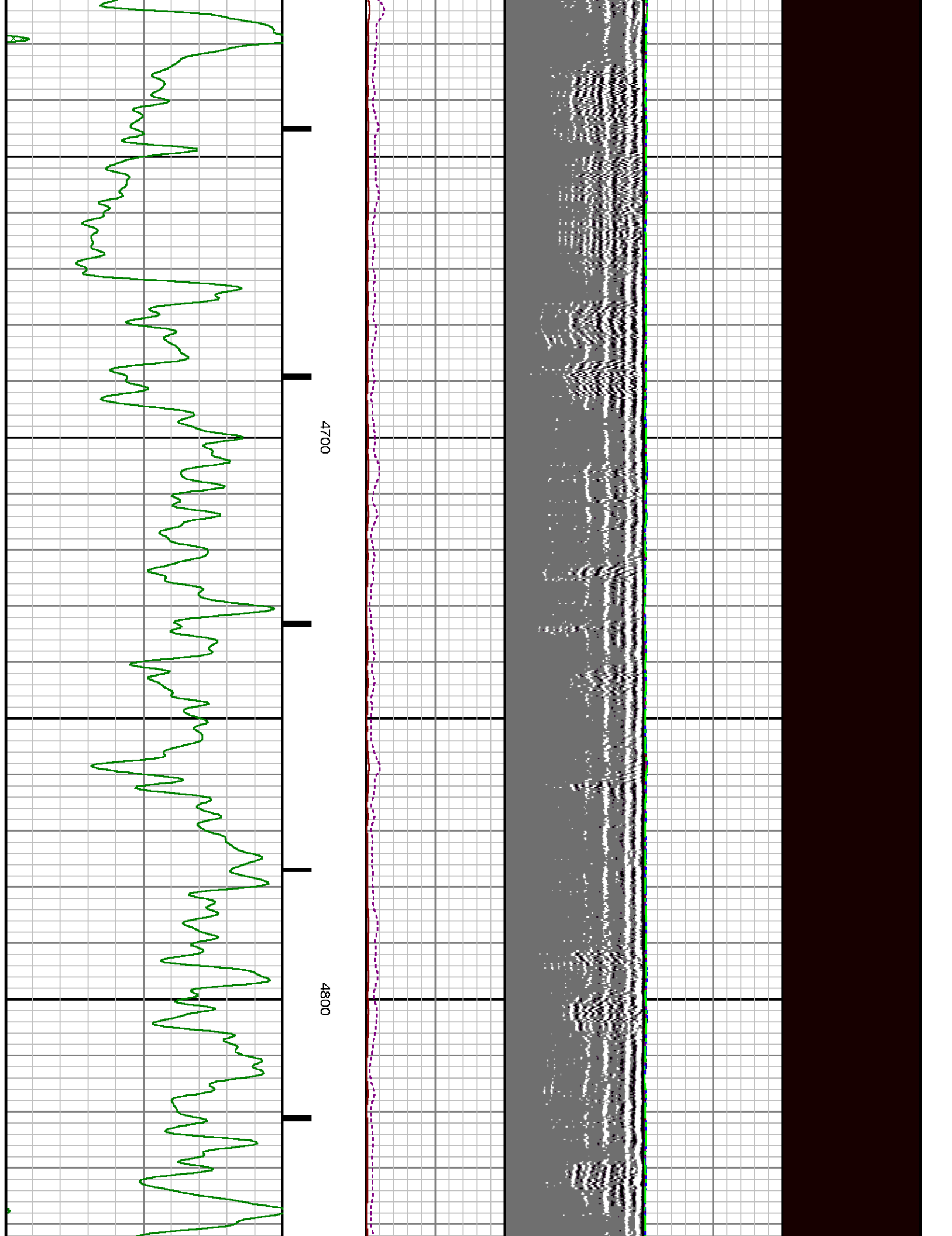


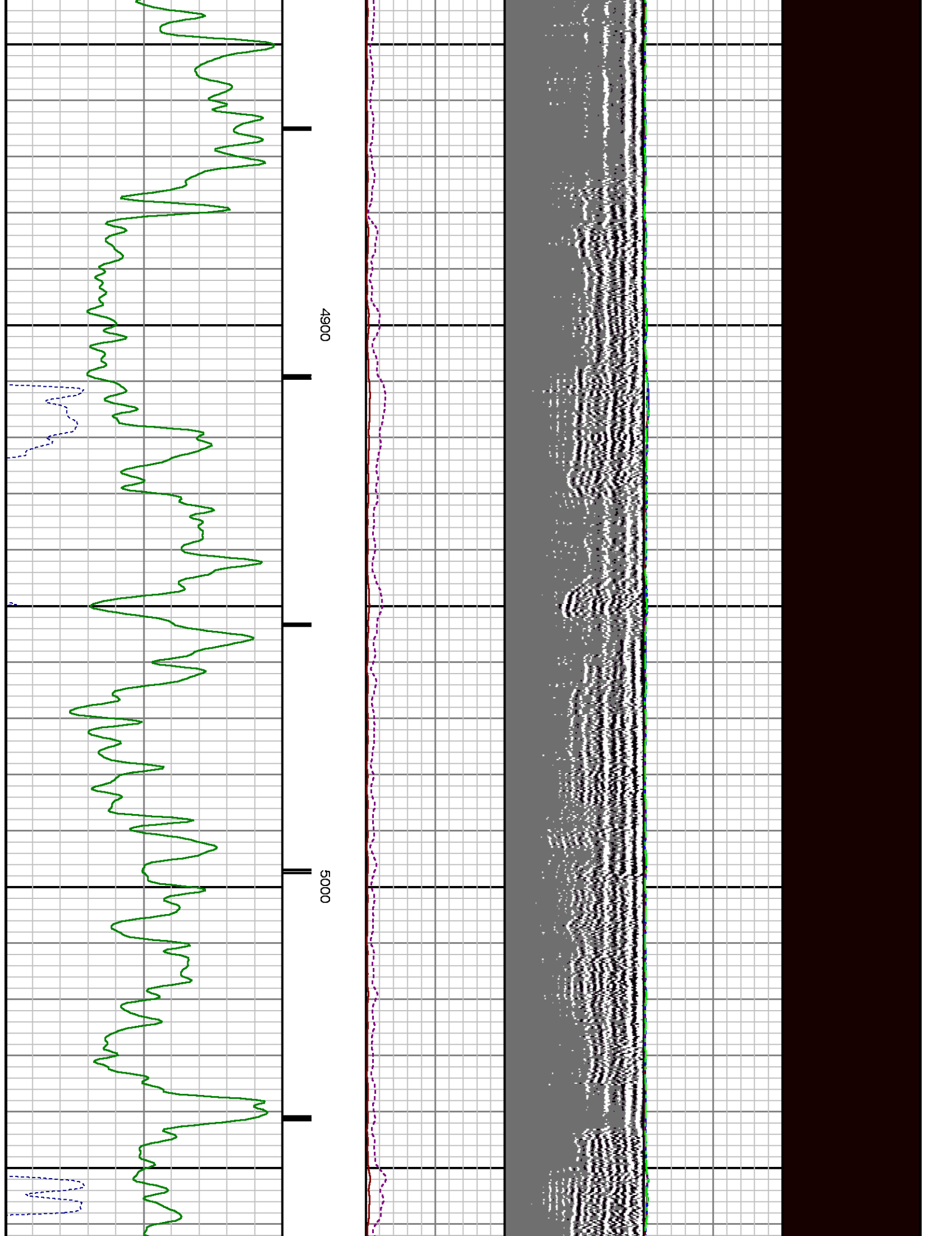


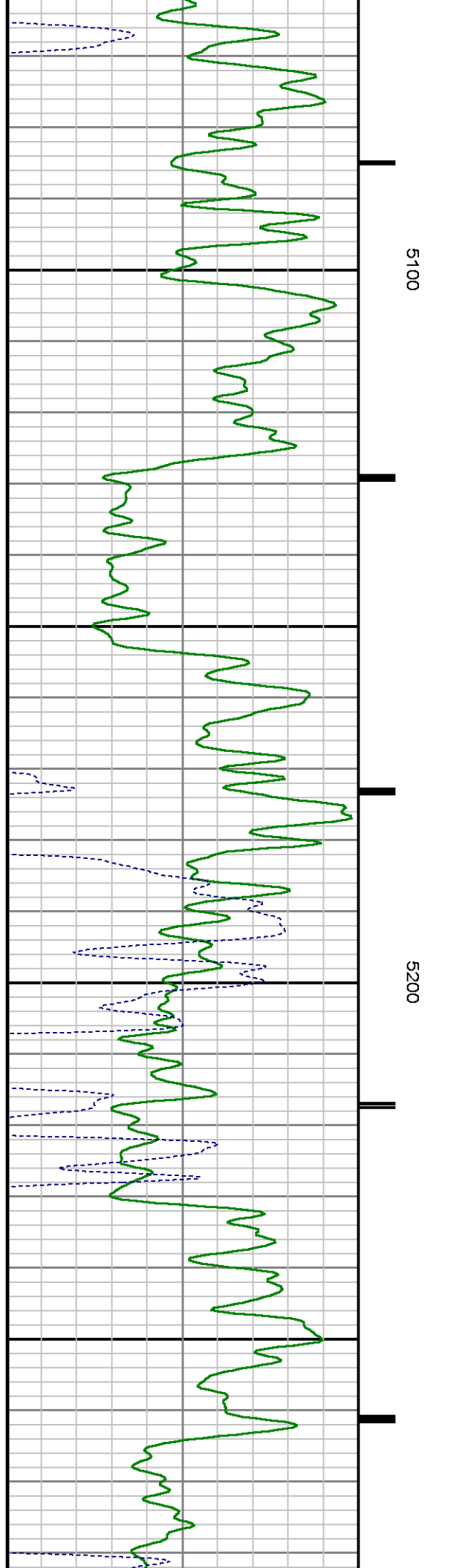
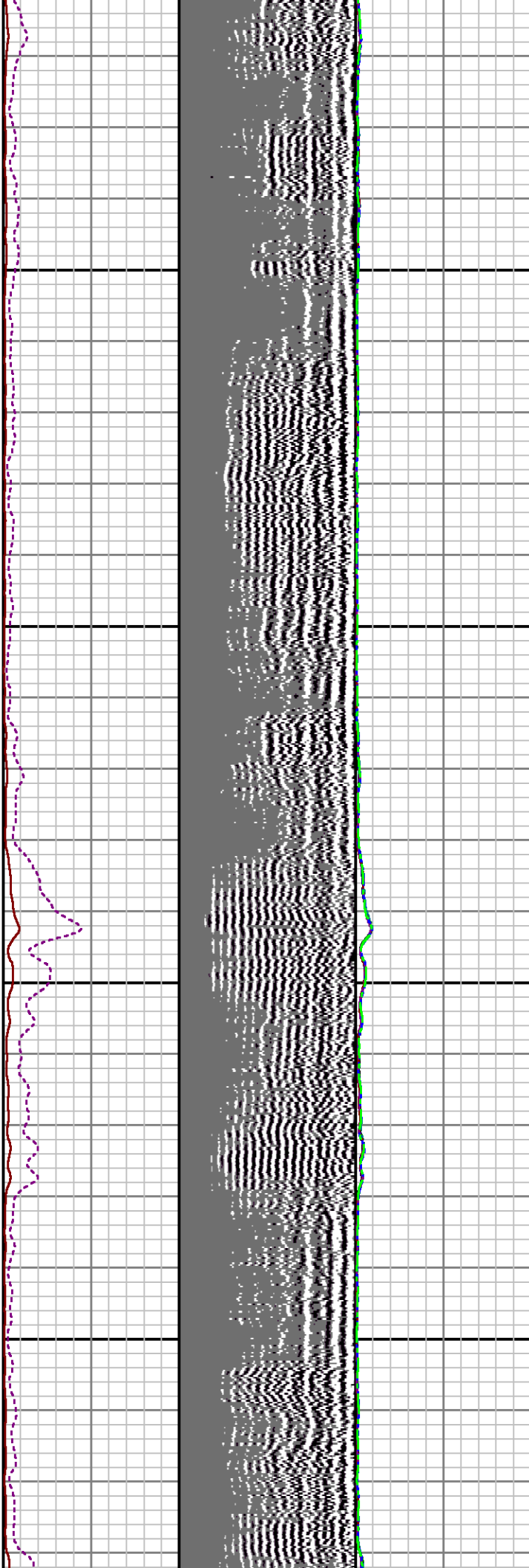


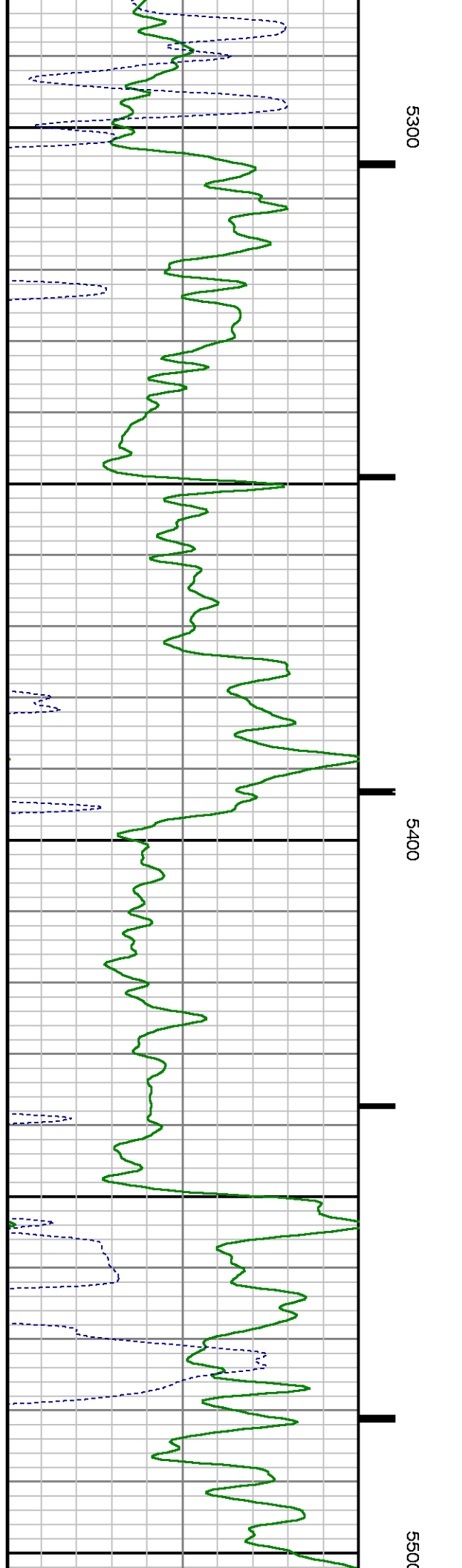
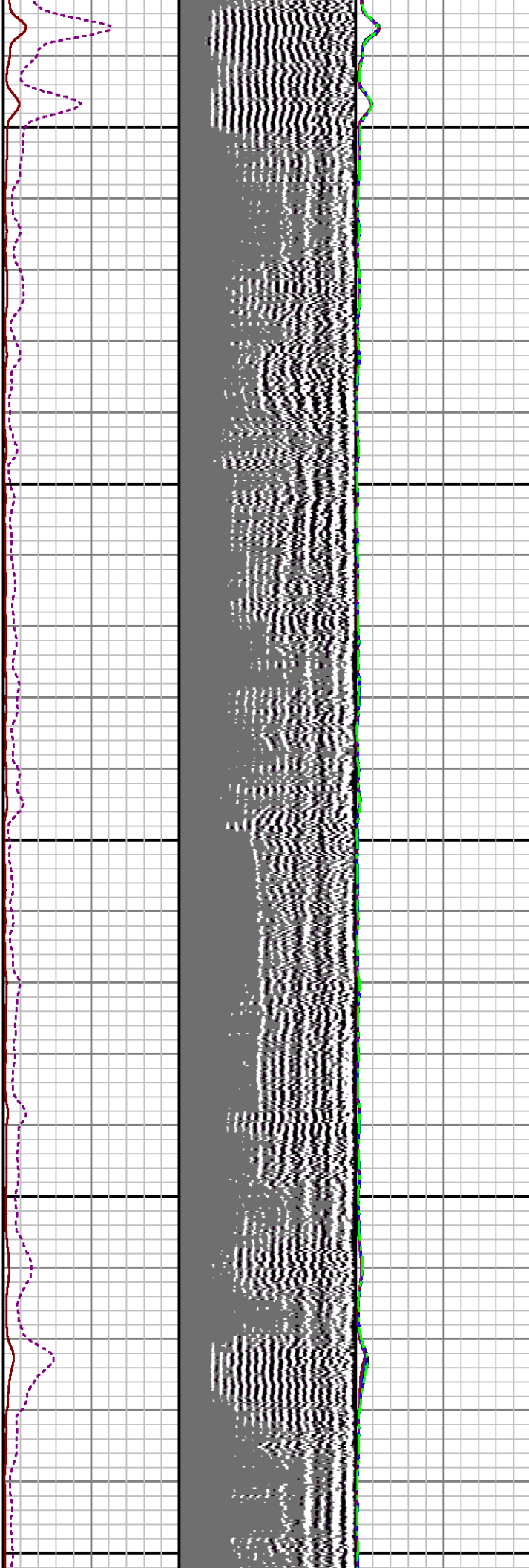


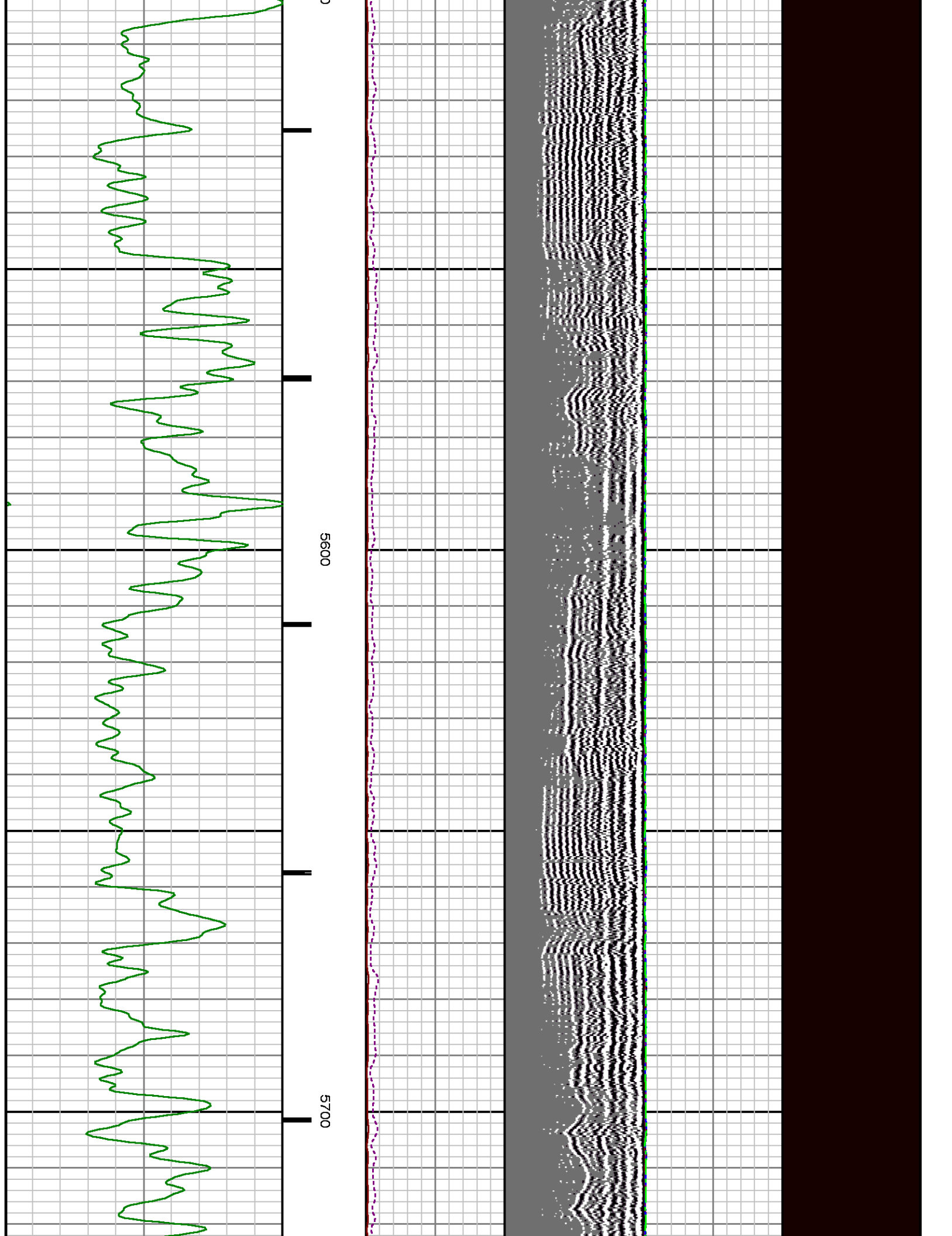




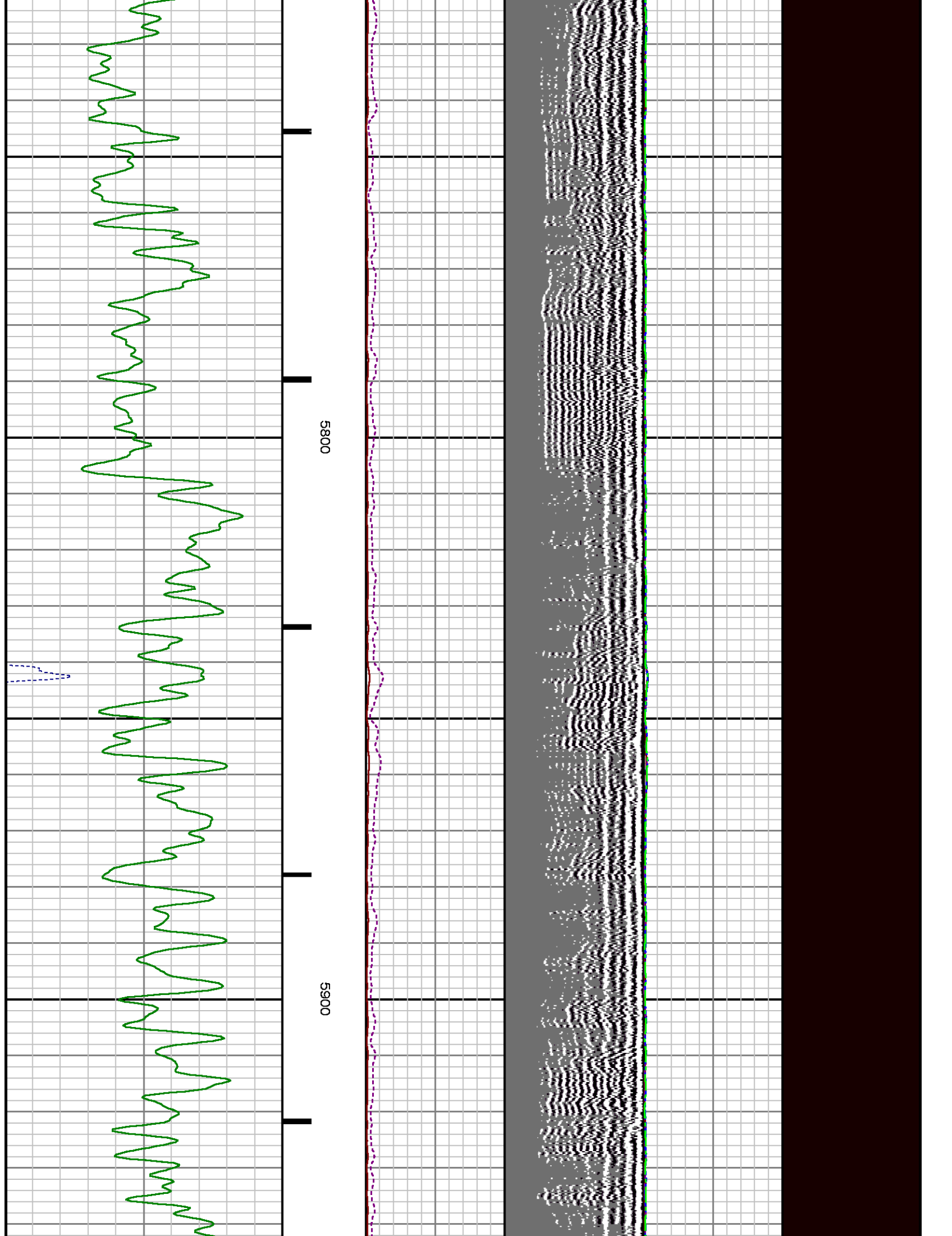


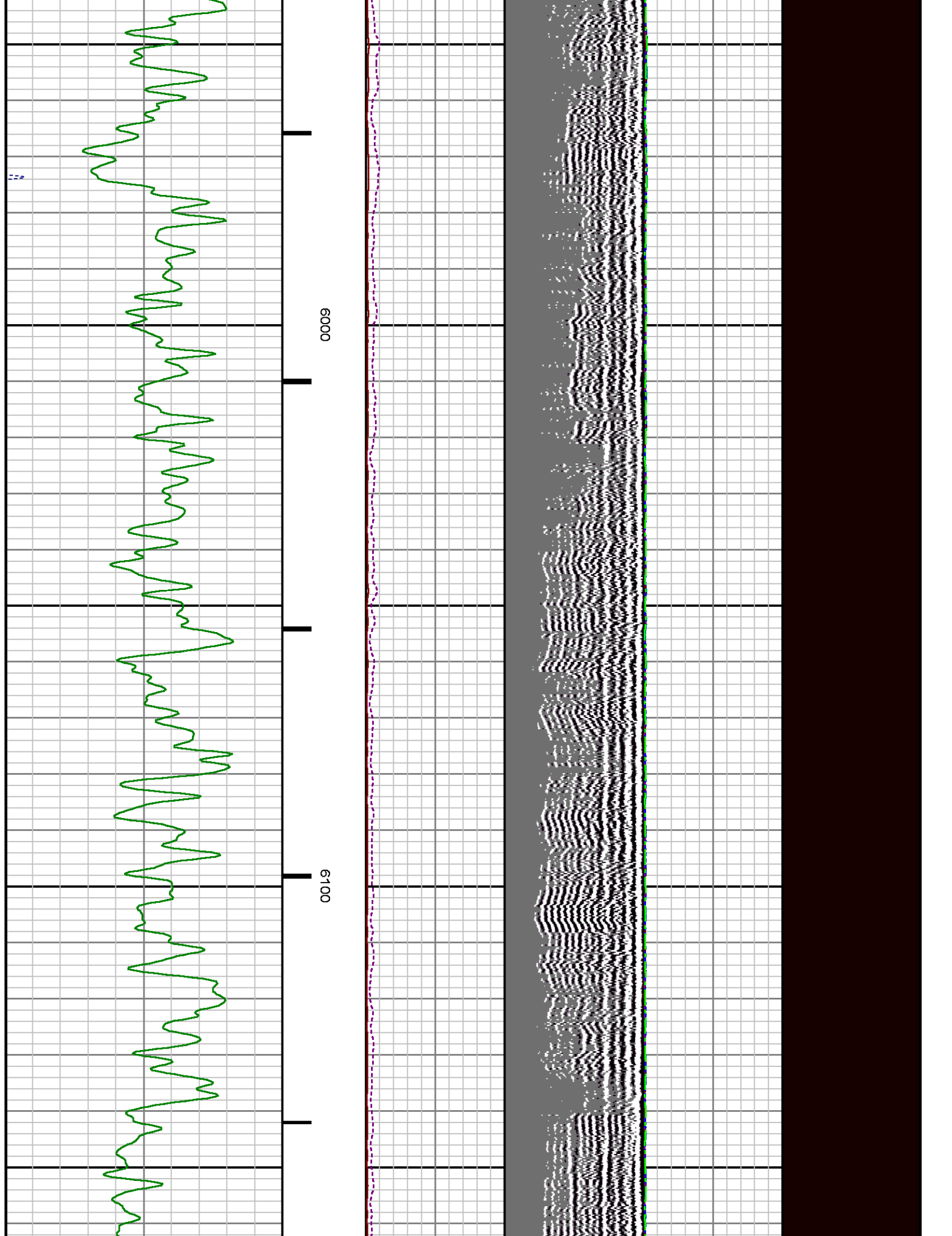


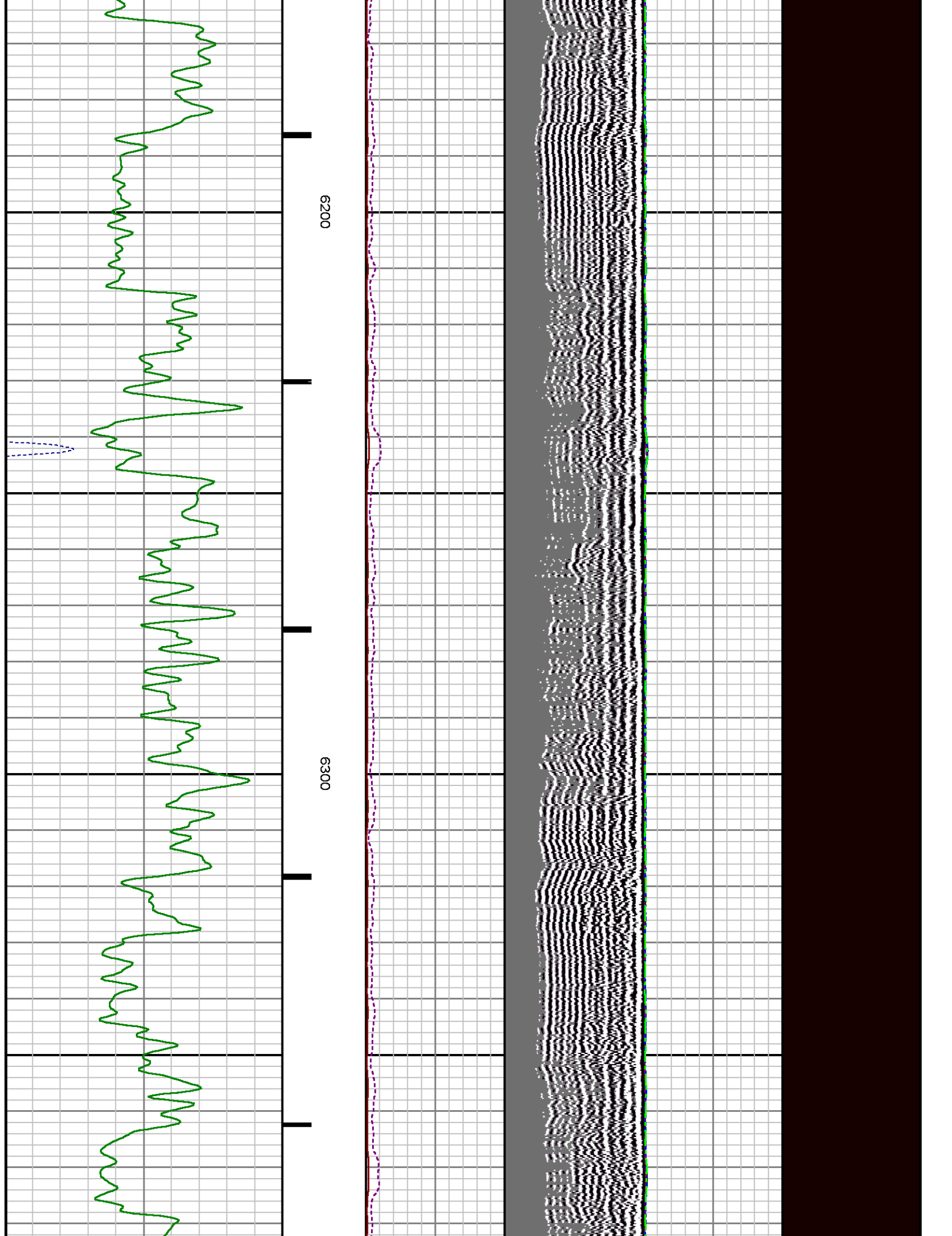


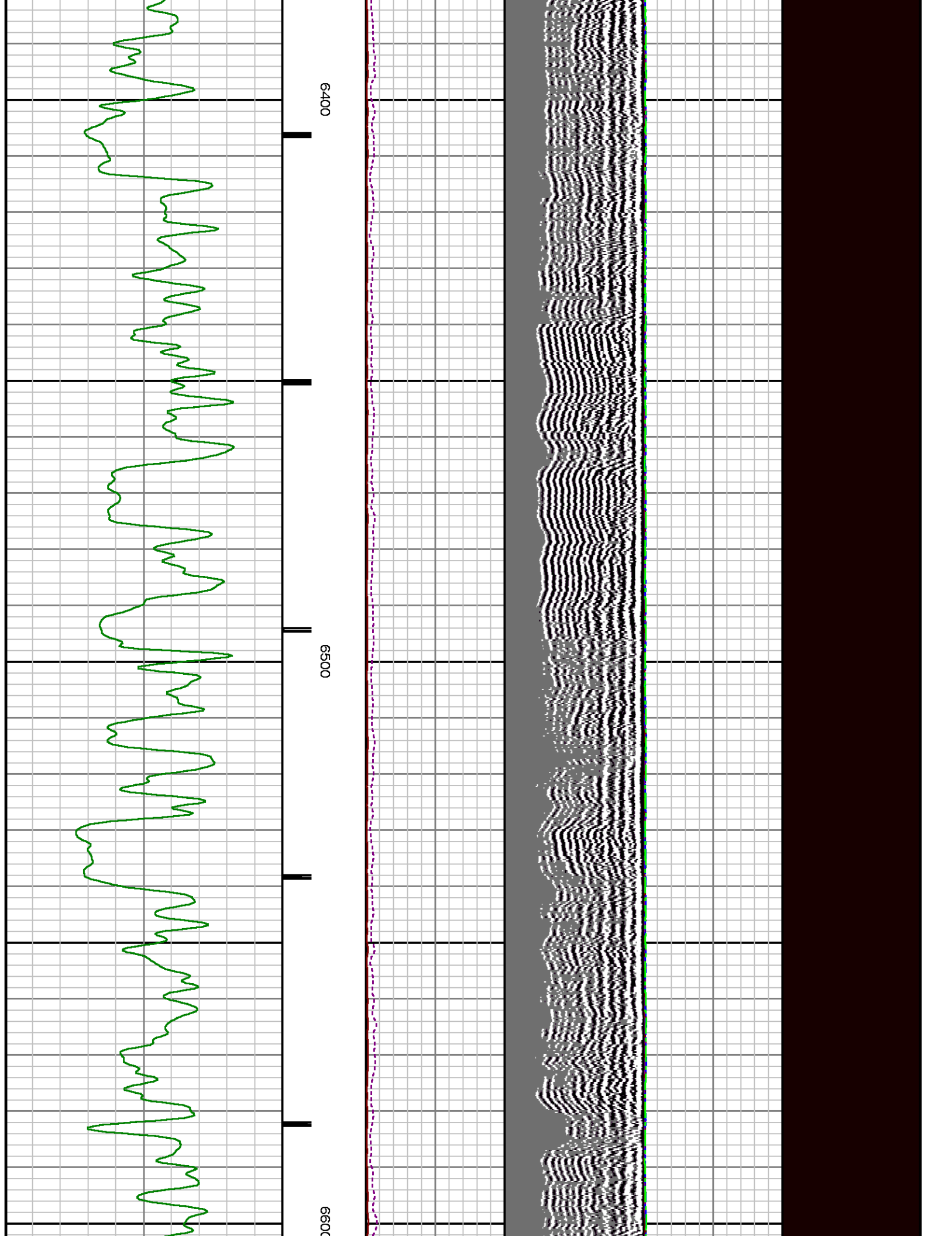


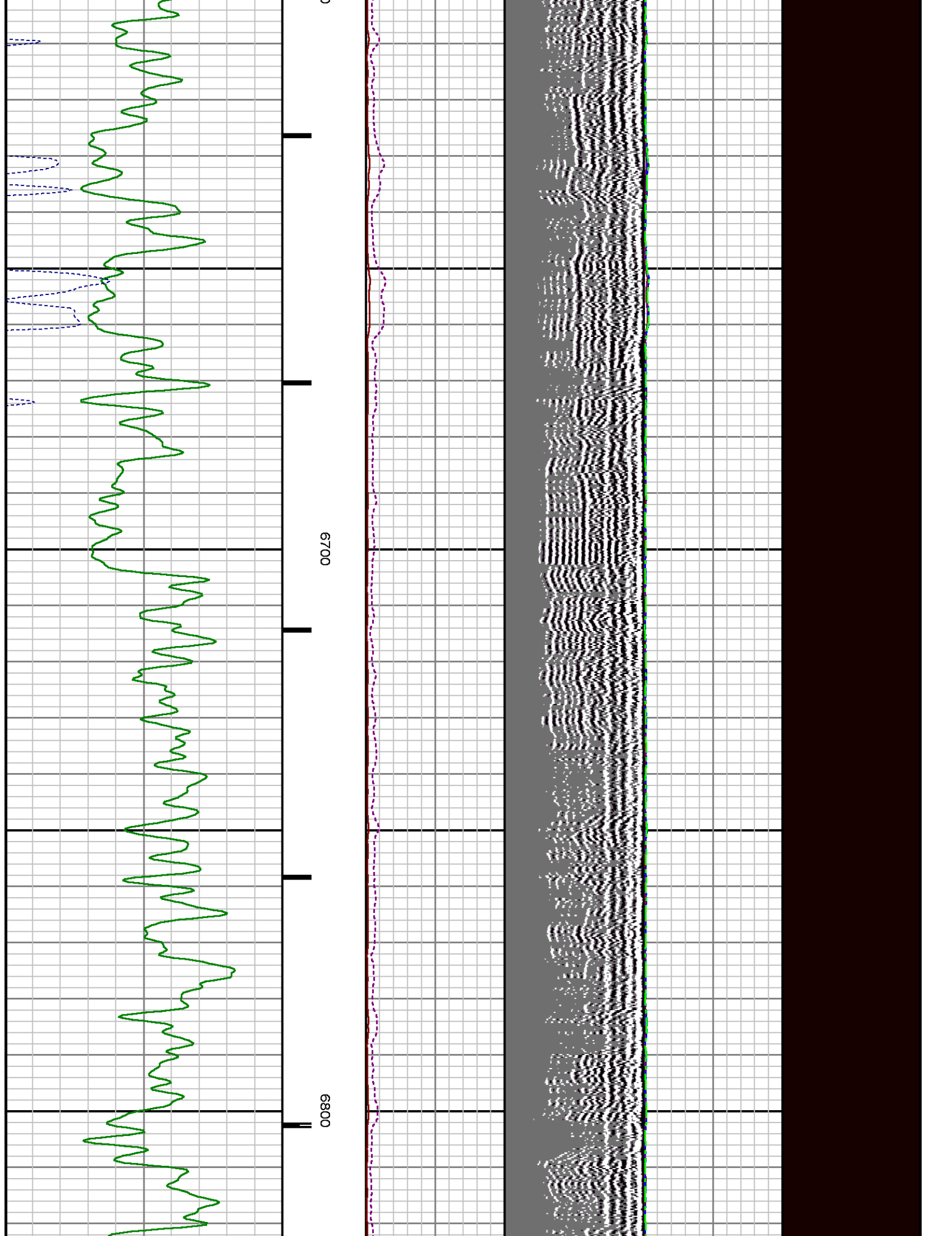




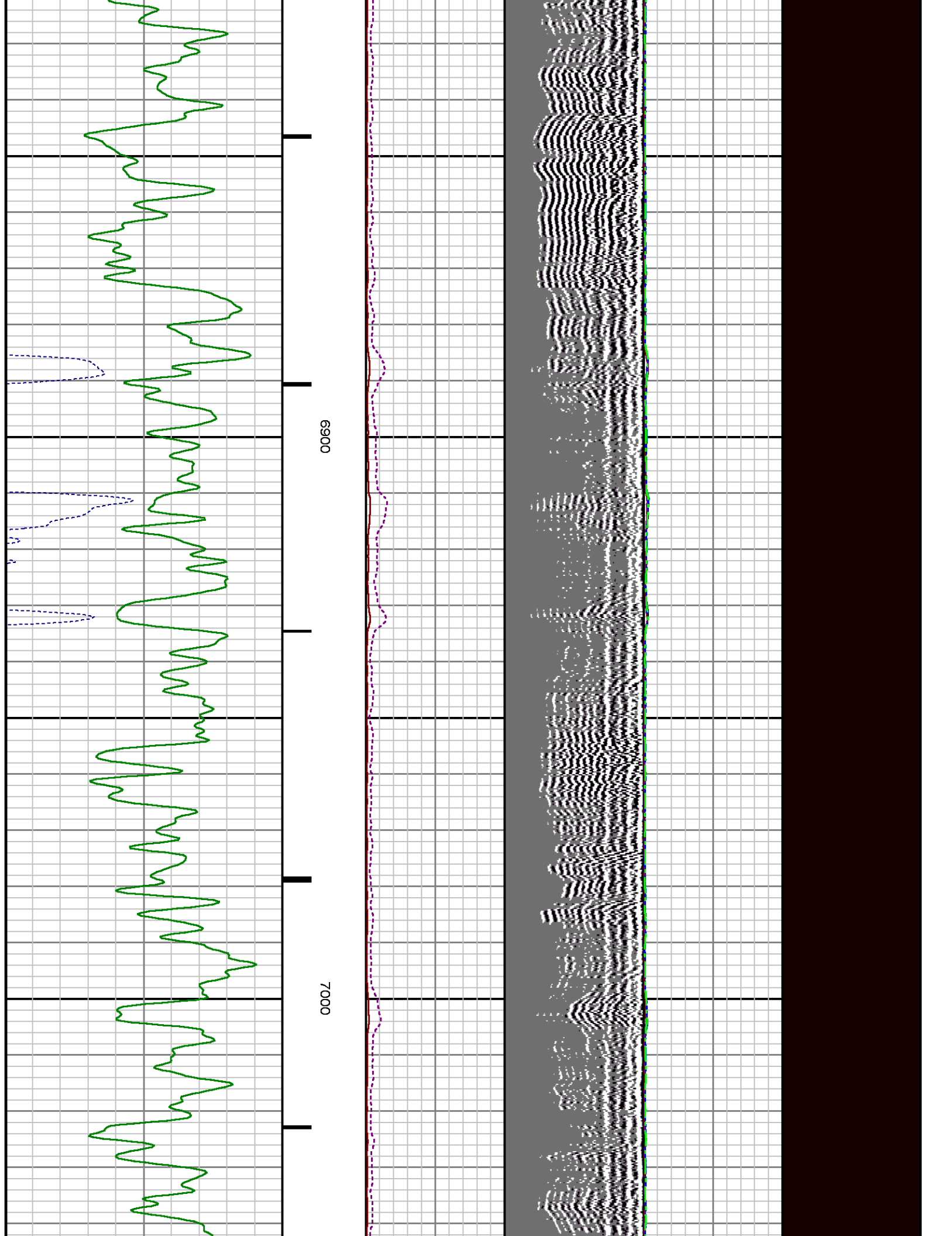




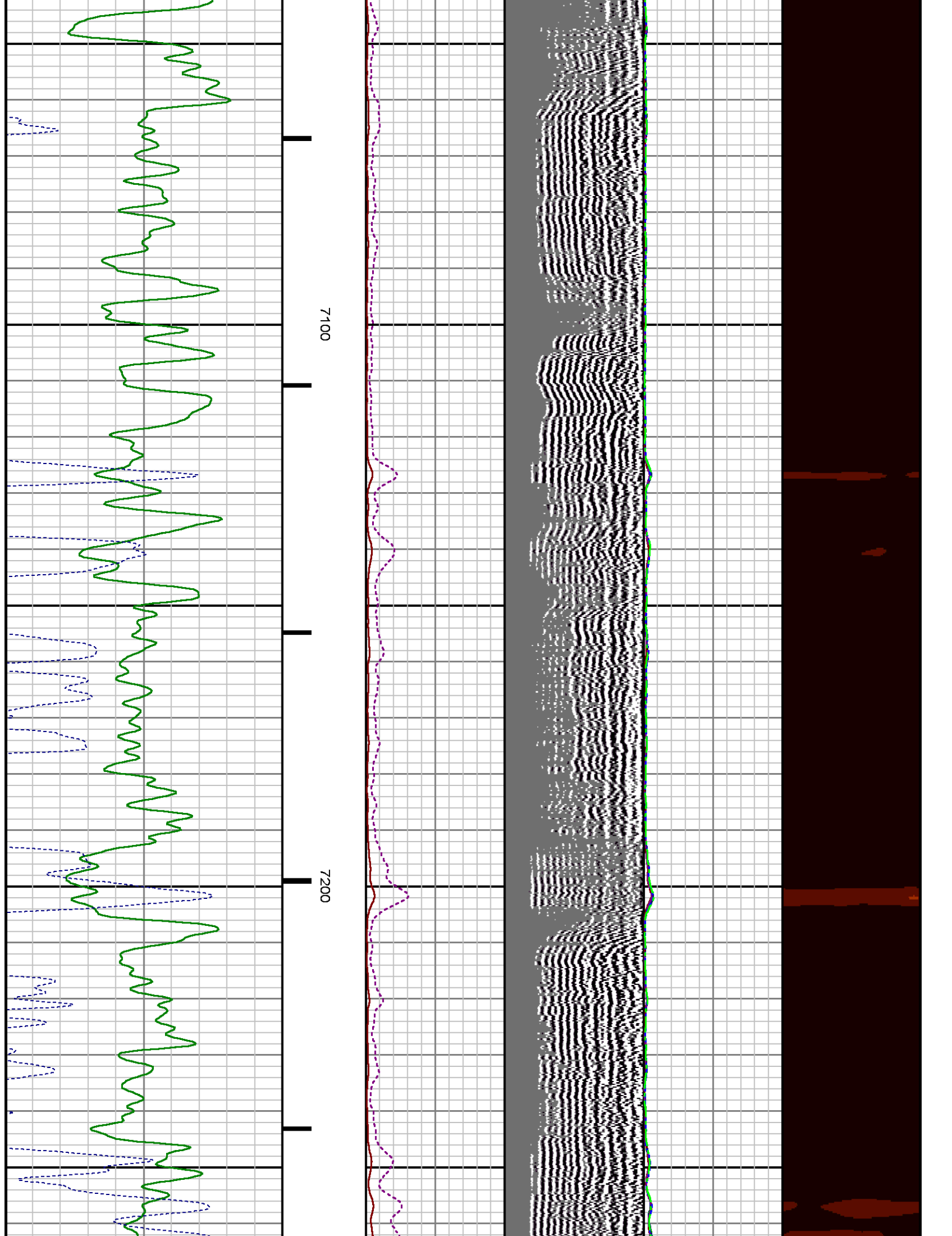


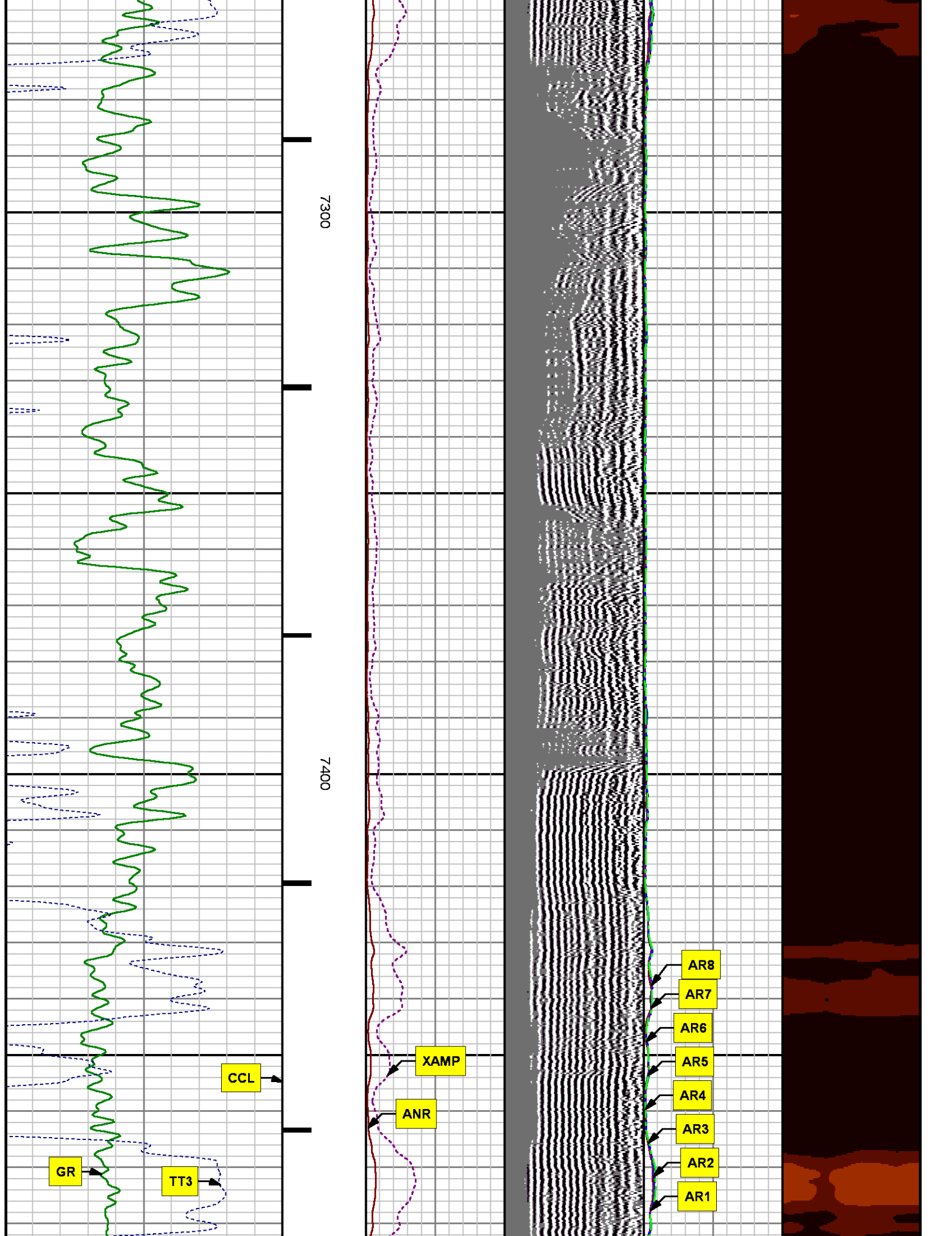


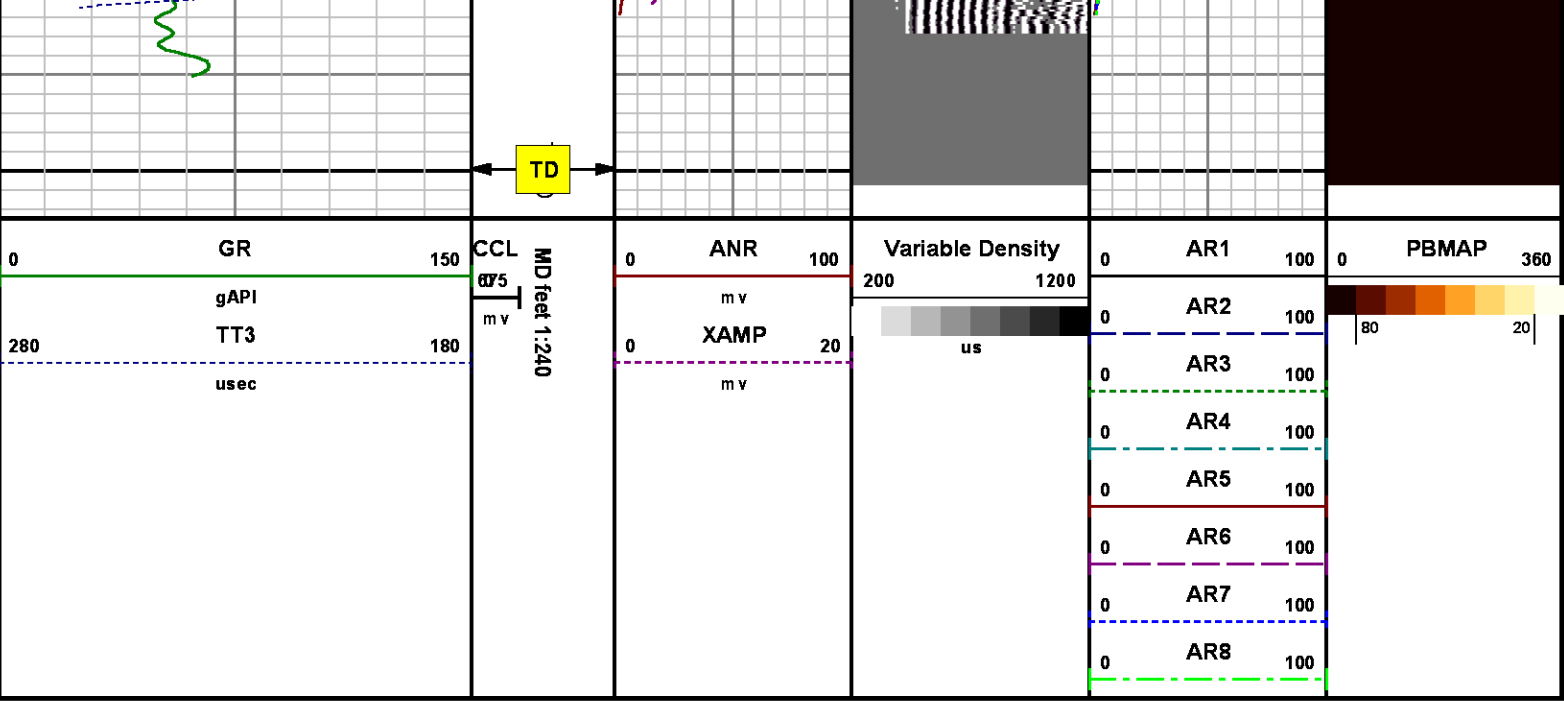












*REPEAT SECTION*  
*0 PSI*

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	7169.430	7499.430
RAL	Amp Gate Start Near	195.000	usec	7169.430	7499.430
RAL	Amp Gate Start Radial	195.000	usec	7169.430	7499.430
RAL	Amp Gate Width Far	25.000	usec	7169.430	7499.430
RAL	Amp Gate Width Near	25.000	usec	7169.430	7499.430
RAL	Amp Gate Width Radial	25.000	usec	7169.430	7499.430
RAL	casing od	4.500	inches	7169.430	7499.430
RAL	casing wt	11.600	lbm/ft	7169.430	7499.430
RAL	FB Start Far	291.900	usec	7169.430	7499.430
RAL	FB Start Near	175.391	usec	7169.430	7499.430
RAL	FB Start Radial	175.391	usec	7169.430	7499.430
RAL	FB Thresh Far	10.000	mv	7169.430	7499.430
RAL	FB Thresh Near	4.000	mv	7169.430	7499.430
RAL	FB Thresh Radial	4.000	mv	7169.430	7499.430
RAL	Fluid Travel Time	200.000	usec/ft	7169.430	7500.305

# 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

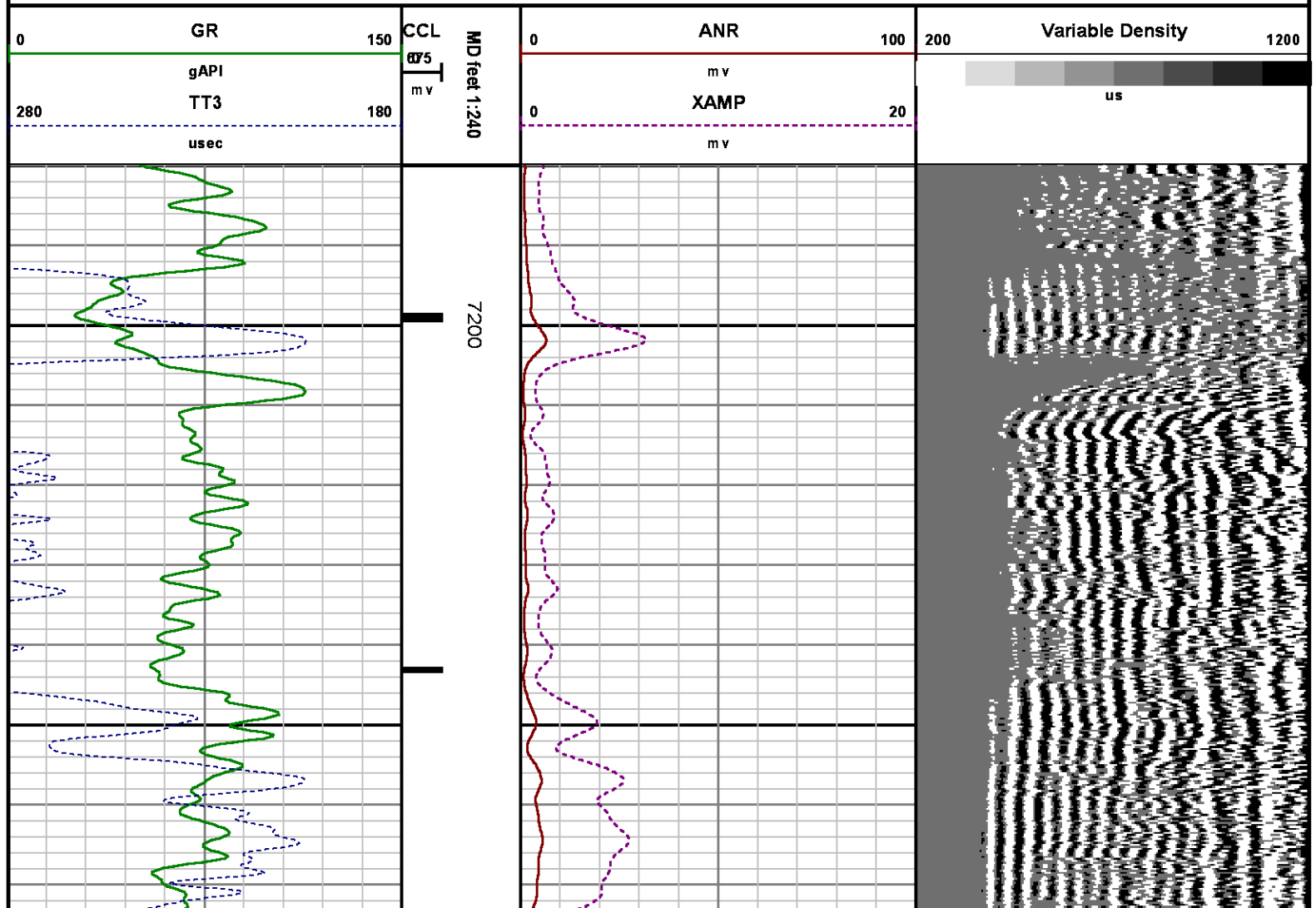
Well : WPX ENERGY PA 24-2

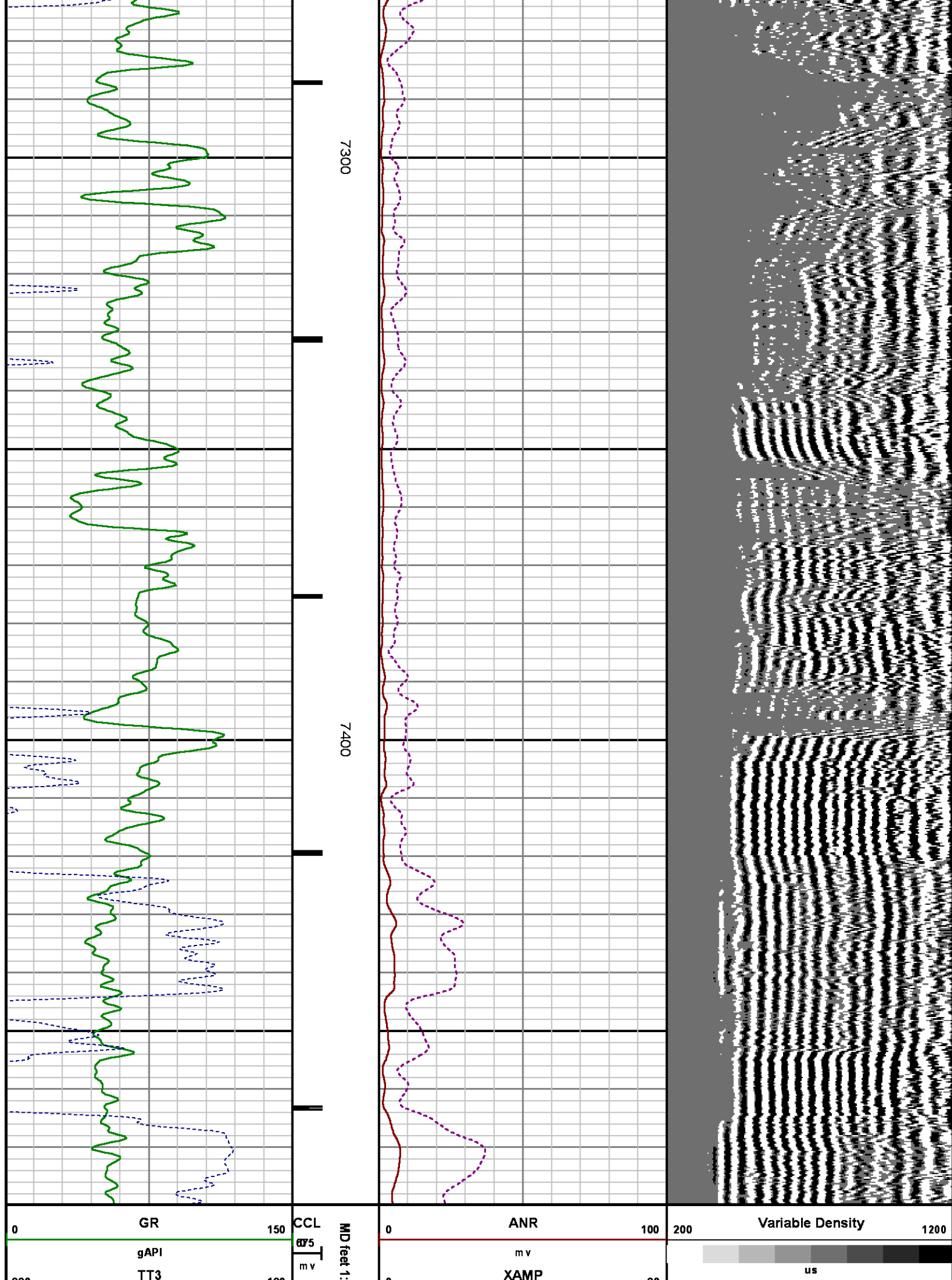
File Name : d:\welldata\wpx\wpx energy pa 24-2\24cbl\repeat.xtf

Mode : PlotMgr 5.4.504

Interval : 7180.00 - 7480.00 feet UP

Created : 5/11/2014 3:14:04 PM





280  
u sec

180

240

0

m v

20

# CALIBRATION SUMMARY

## RALSHP

Shop Calibration: C:\case\calver\RALSHP\49611\_shp.cal

## SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sun May 11 11:50:04 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: 11

Tool Delay [u sec] -52.00 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	219	216	30	166	25	0.177	100.00	0.31
3 Ft. Receiver	219	216	30	166	25	1.065	100.00	0.31
5 Ft. Receiver	327	325	30	264	25	0.672	150.00	0.35
Radial #1	219	216	30	166	25	1.131	100.00	0.31
Radial #2	219	216	30	166	25	0.801	100.00	0.31
Radial #3	219	216	30	166	25	0.815	100.00	0.31
Radial #4	219	216	30	166	25	0.756	100.00	0.31
Radial #5	219	216	30	166	25	0.897	100.00	0.31
Radial #6	218	216	30	166	25	0.892	100.00	0.31
Radial #7	217	216	30	166	25	0.374	100.00	0.30
Radial #8	219	216	30	166	25	0.694	100.00	0.31

## RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\49611 fld.cal

## WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sun May 11 11:51:40 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: 11

Tool Delay [u sec] -52.00 Casing OD in 4.50 Casing Wt lbm/ft 11.60 Casing ID in 4.00

RECEIVER	Zero Gate Start [u sec]	Zero Gate Width [u sec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	166	25	0.054	0.000	1.00	100.000
3 Ft. Receiver	200	30	3.288			



5 Ft. Receiver	317	30	3.668
Radial #1	200	30	3.178
Radial #2	200	30	3.225
Radial #3	200	30	3.303
Radial #4	200	30	3.247
Radial #5	200	30	3.683
Radial #6	200	30	3.861
Radial #7	200	30	3.020
Radial #8	200	30	3.097

## GAMMA RAY

Calibration File: C:\case\calver\GR\45608.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\GR\45608.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  
Mnemonic PROB  
Diameter 2.75"  
Length 11.17'  
Measure Point 0.75' FAR RCVR  
Measure Point 2.67' NEAR RCVR



24.23'

XMIT 18.05'

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

#### CENTRALIZER

Series	RALCENT
Mnemonic	CENT
Diameter	3.12"
Weight	20.00 lb

NEAR RCVR	14.97'
FAR RCVR	13.05'
CCL	11.34'
GR	9.49'
NEU	4.09'
	0.00'

Total Length: 24.23'  
Total Weight: Not Available  
Max Diameter: 0' 3.12"



Baker Atlas

CASE

Company

WPX ENERGY

Well

WPX ENERGY PA 24-2

Field

PARACHUTE

County

GARFIELD

State

CO

Location

SHL: 2014' FSL & 1567' FWL

BHL: 1134' FSL & 1964' FWL

SEC

2

TWP

7S

RGE

95W

Elevations

KB 5846 ft

DF

GL 5821 ft

File No:

CH085018

API No:

05045221480000

2 7S 95W

GV 86-2 PAD

AZTEC 1000