



# RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: WPX ENERGY

CH085988 PA 23-6

API No: PARACHUTE

05045222390000 GARFIELD

State COLORADO

## Location

SHL: 746' FSL & 749' FWL

BHL: 2474' FSL & 1391' FWL (NESW)

SEC 6 TWP 7S RGE 9SW

## Other Services

RPM

Permanent Datum GL Elevation 5153 ft

Log Measured From KB 26 ft Above P. D.

Drill Measured From KELLY BUSING

## Elevations

KB 5179 ft

DF

GL 5153 ft

Date	14/MAY/14	
Run	ONE	
Service Order	US085988J	
Depth Driller	6971 ft	
Depth Logger	6923 ft	
Bottom Logged Interval	6913 ft	
Top Logged Interval	26 ft	
Time Started	0930	
Time Finished	1300	
Operator Rig Time	3.5 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	65 ft	
Logged Cement Top	NA	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	NA	
Nominal Logging Speed	65 fpm	
Maximum Recorded Temperature	209 degF	
Reference Log	NONE	
Reference Log Date	NA	
Equipment No.	4271	GRAND UCT
Recorded By	FLYOD RENEAU	
Witnessed By	CHRIS TILLER	

- 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	26 ft	1156 ft
8.75 in	1156 ft	6971 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in			26 ft	1156 ft
4.5 in	11.6 lbm/ft	I-80	26 ft	6971 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 11 feet.
Logged with zero PSI at wellhead.
BHT = 209°F
SJ = 3477'-3499'

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

PRIMARY PRESENTATION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	35.812	6924.750
RAL	Amp Gate Start Near	195.000	usec	35.812	6924.750
RAL	Amp Gate Start Radial	195.000	usec	35.812	6924.750
RAL	Amp Gate Width Far	25.000	usec	35.812	6924.750
RAL	Amp Gate Width Near	25.000	usec	35.812	6924.750
RAL	Amp Gate Width Radial	25.000	usec	35.812	6924.750
RAL	casing od	4.500	inches	35.812	6924.750
RAL	casing wt	11.600	lbm/ft	35.812	6924.750
RAL	FB Start Far	291.900	usec	35.812	6924.750
RAL	FB Start Near	175.391	usec	35.812	6924.750
RAL	FB Start Radial	175.391	usec	35.812	6924.750
RAL	FB Thresh Far	10.000	mv	35.812	6924.750
RAL	FB Thresh Near	4.000	mv	35.812	6924.750
RAL	FB Thresh Radial	4.000	mv	35.812	6924.750
RAL	Fluid Travel Time	200.000	usec/ft	35.812	6925.718

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 : PA 23-6

File Name : d:\welldata\wpx\pa 23-6\26ral\main.xtf

Mode : PlotMgr 5.4.504

Interval : 1.75 - 6928.00 feet UP

Created : 5/30/2014 12:19:47 PM

0

GR

150

gAPI

TT3

u sec

280

180

CCL

700

m v

MD feet 1:240

0

ANR

100

m v

XAMP

m v

0

20

200

Variable Density

1200

us

WELLHEAD

CCL

GR

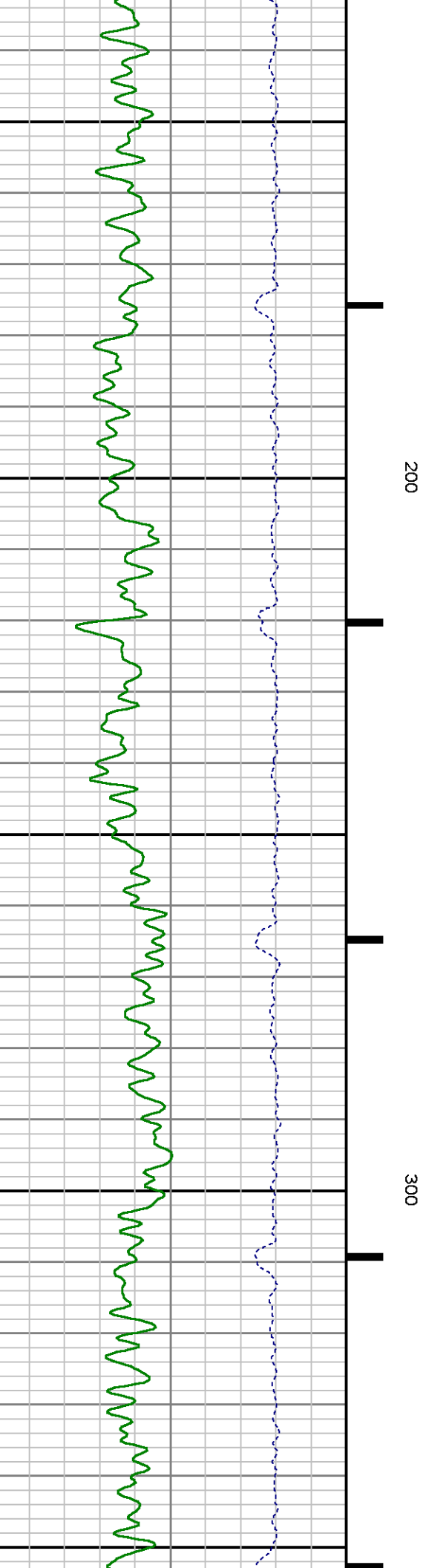
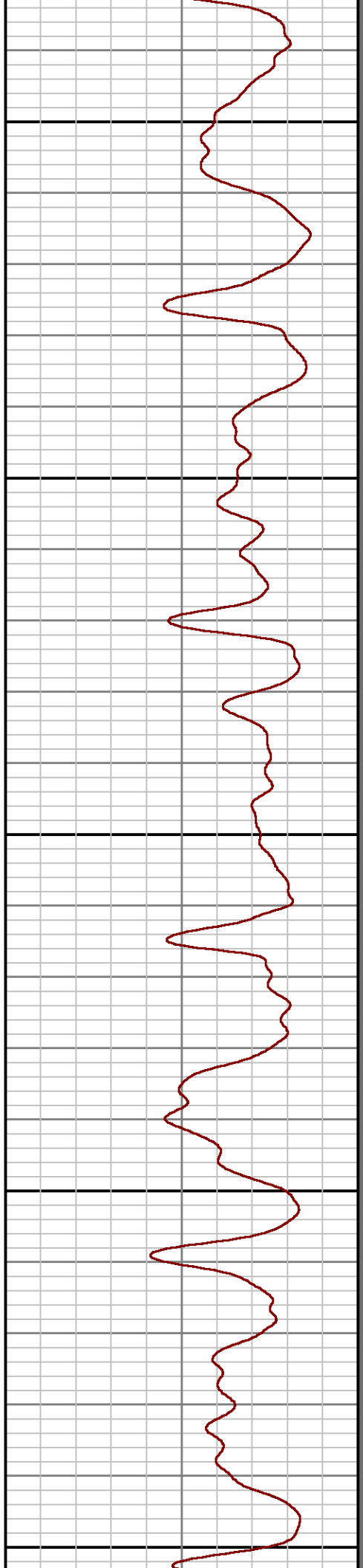
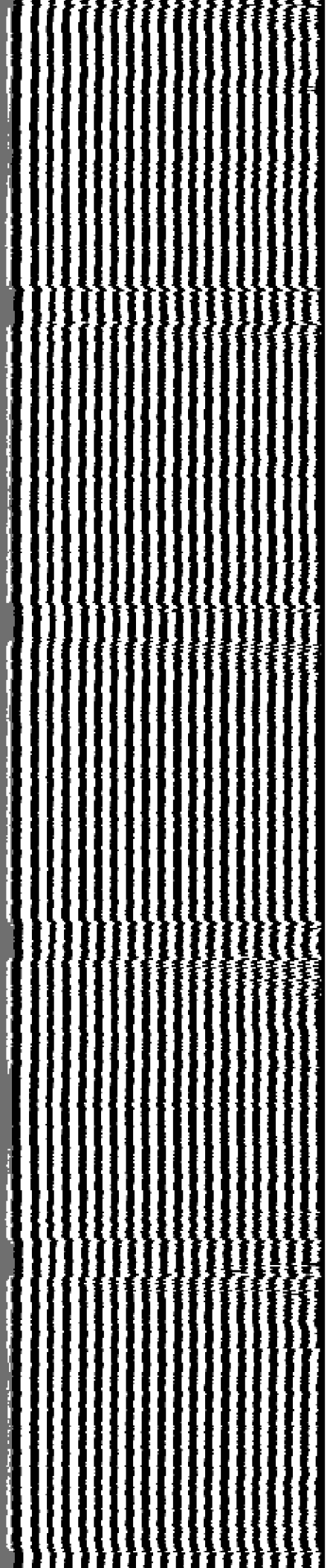
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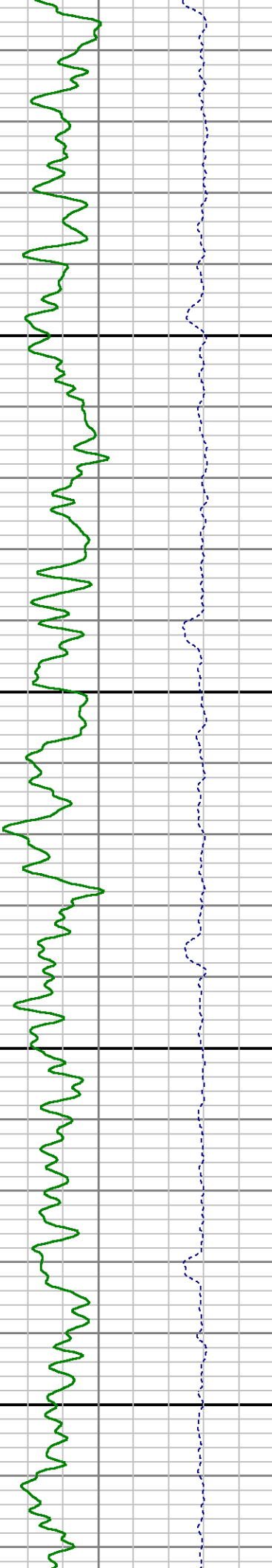
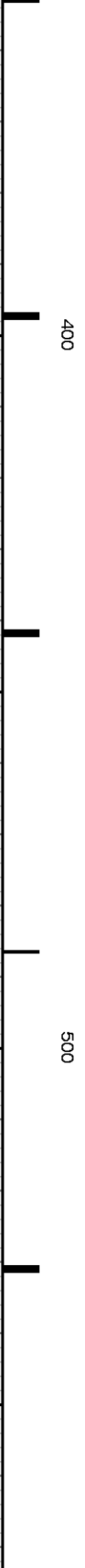
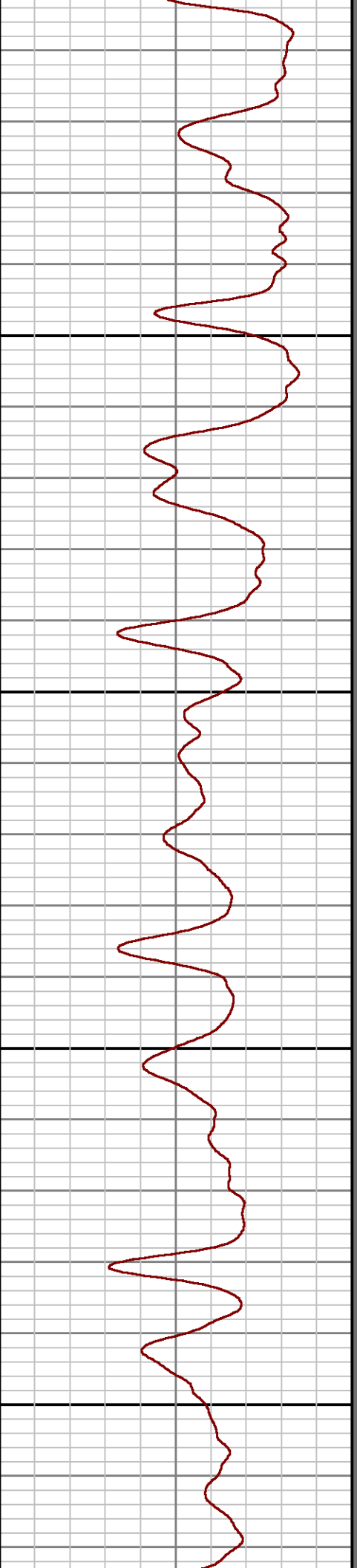
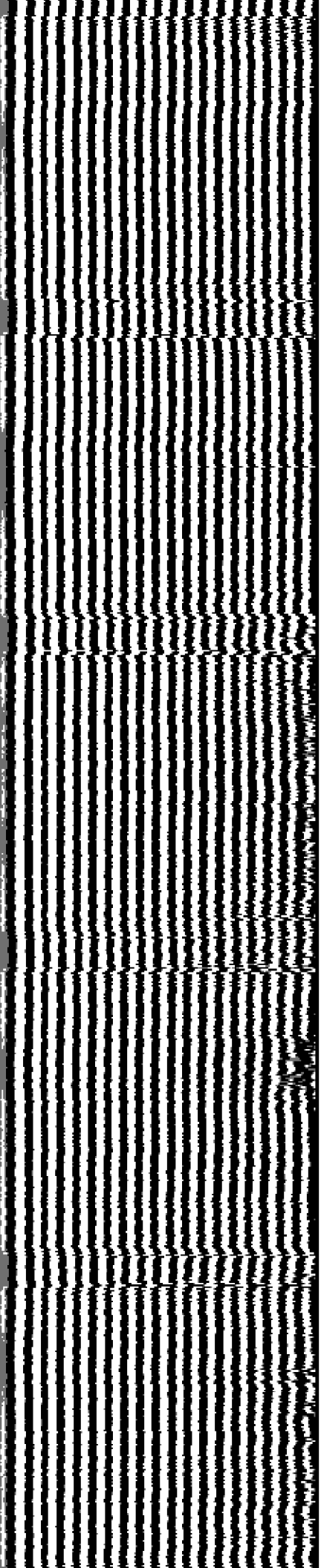
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ANR

XAMP

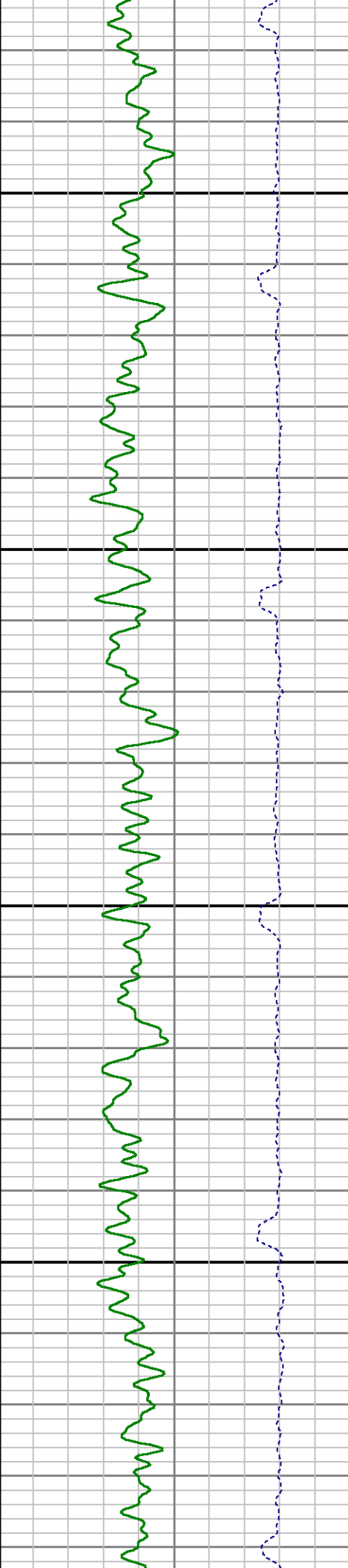
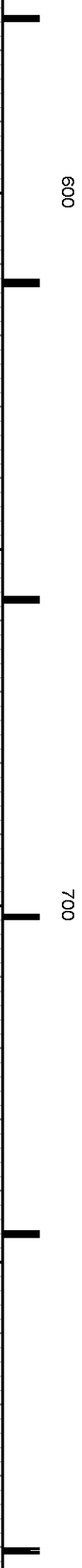
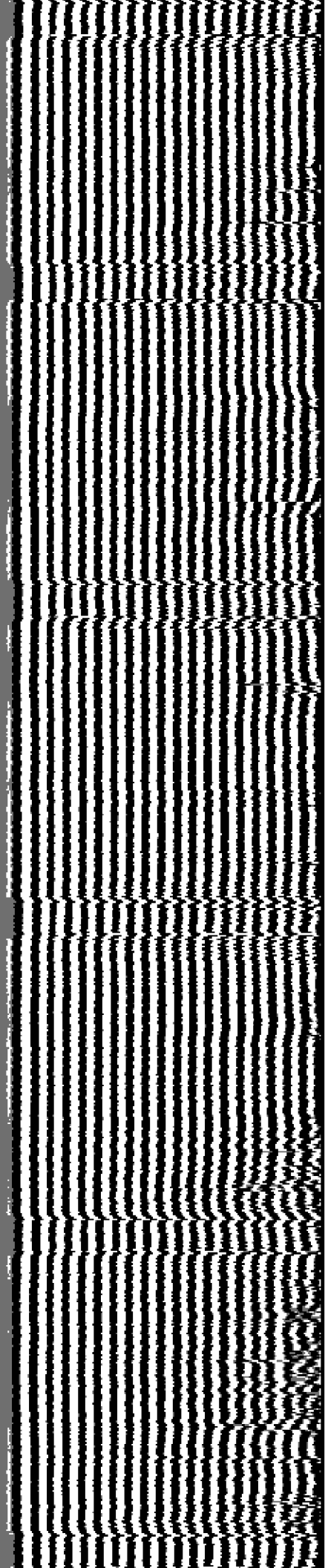
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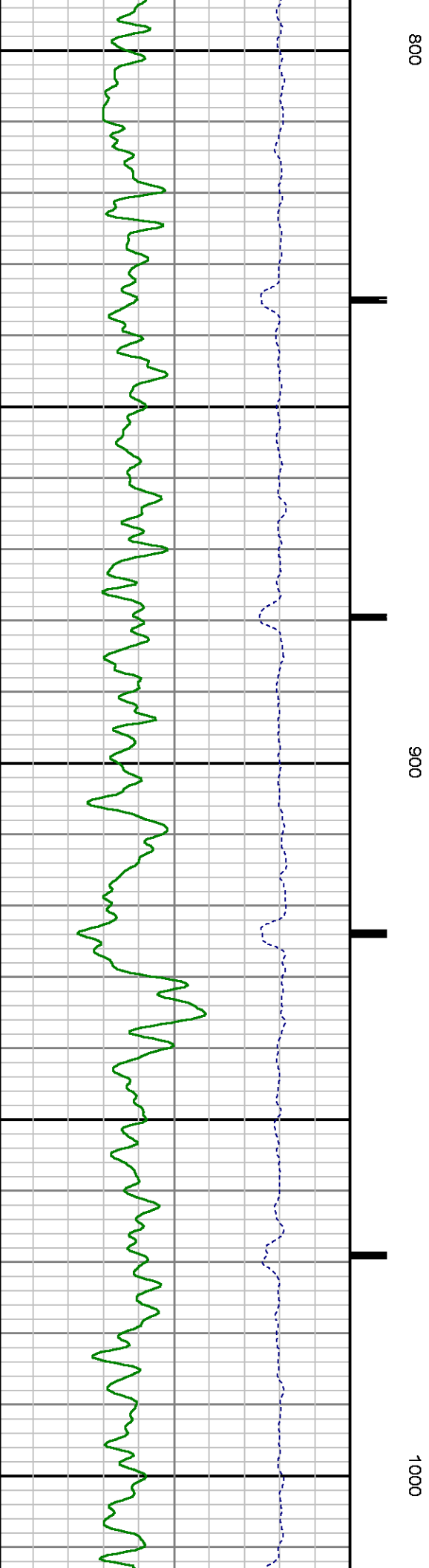
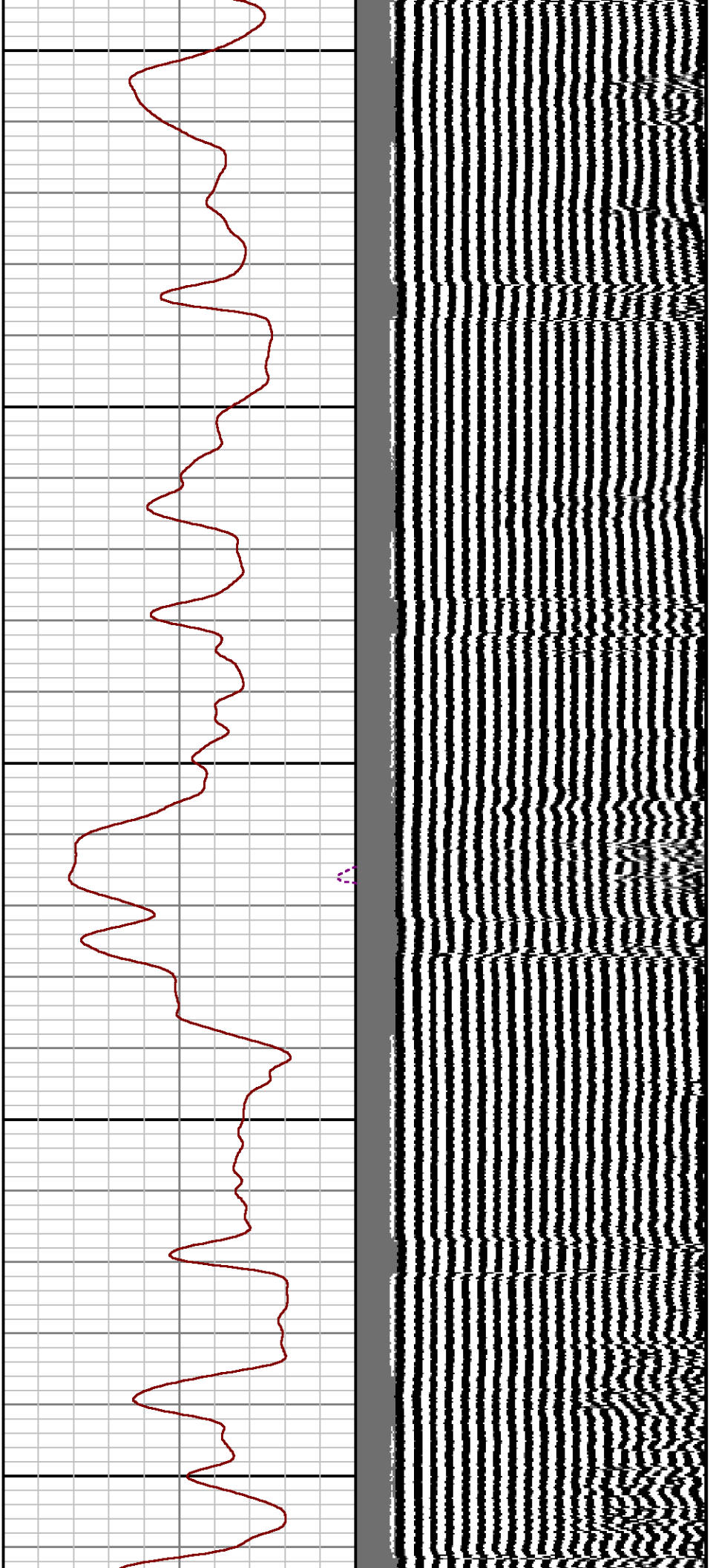




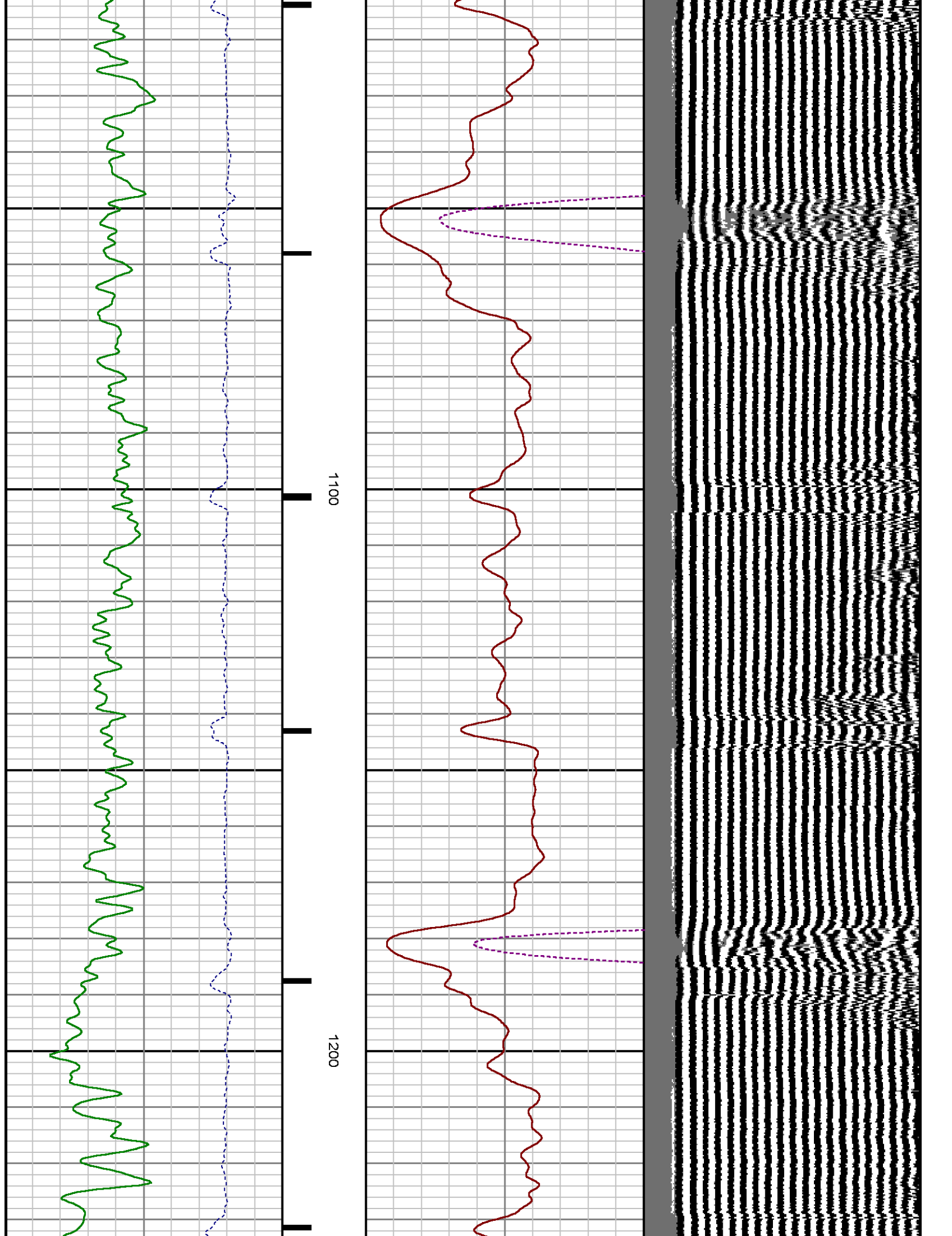
400

500

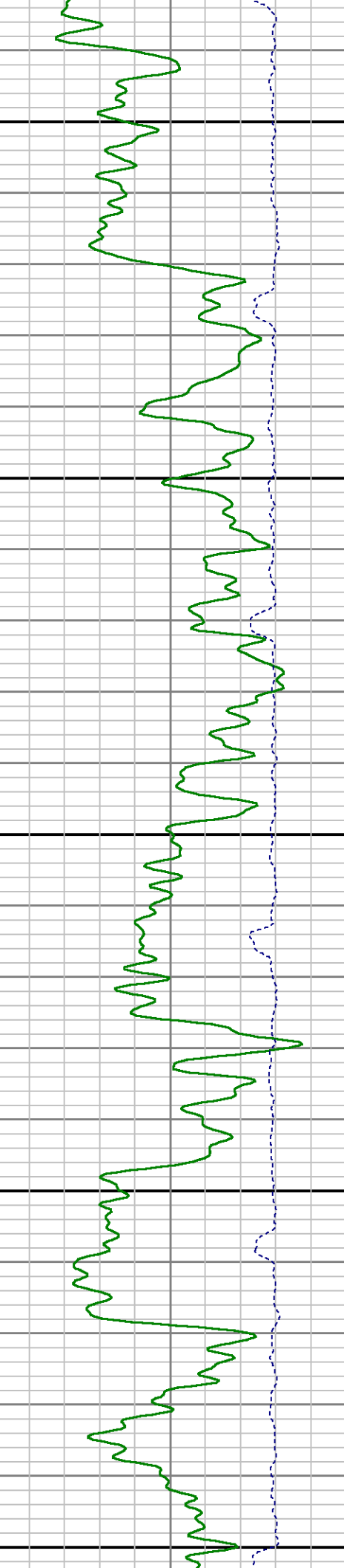
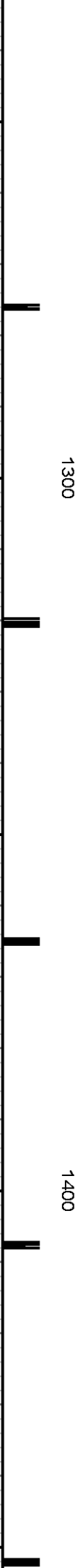
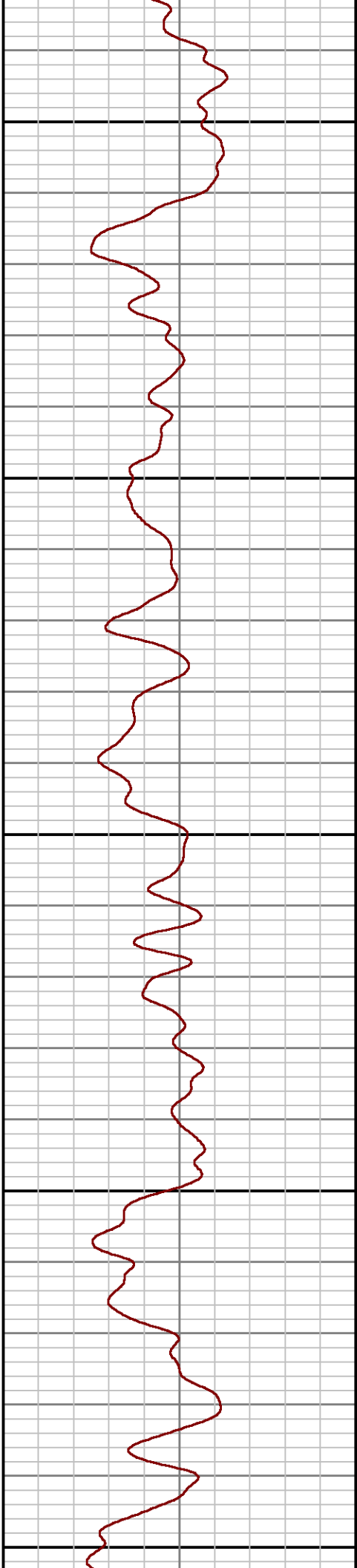
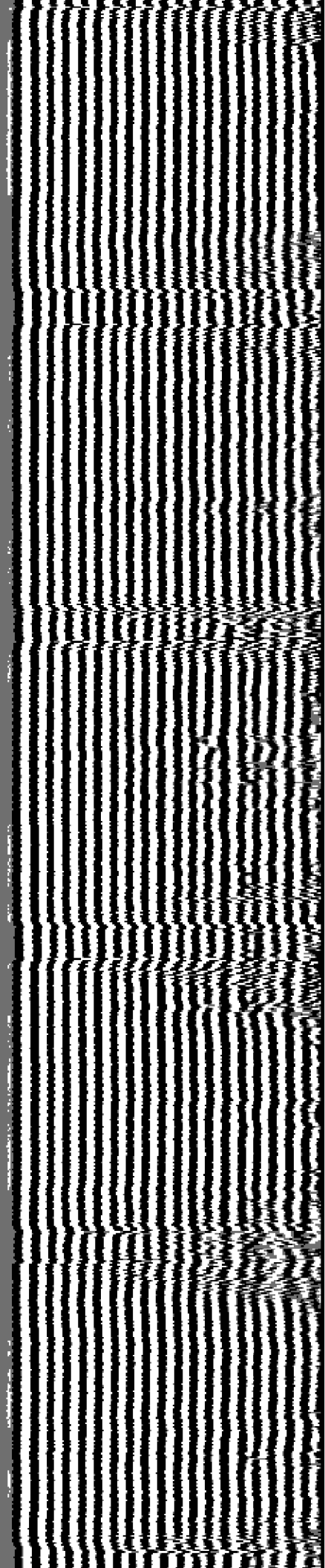


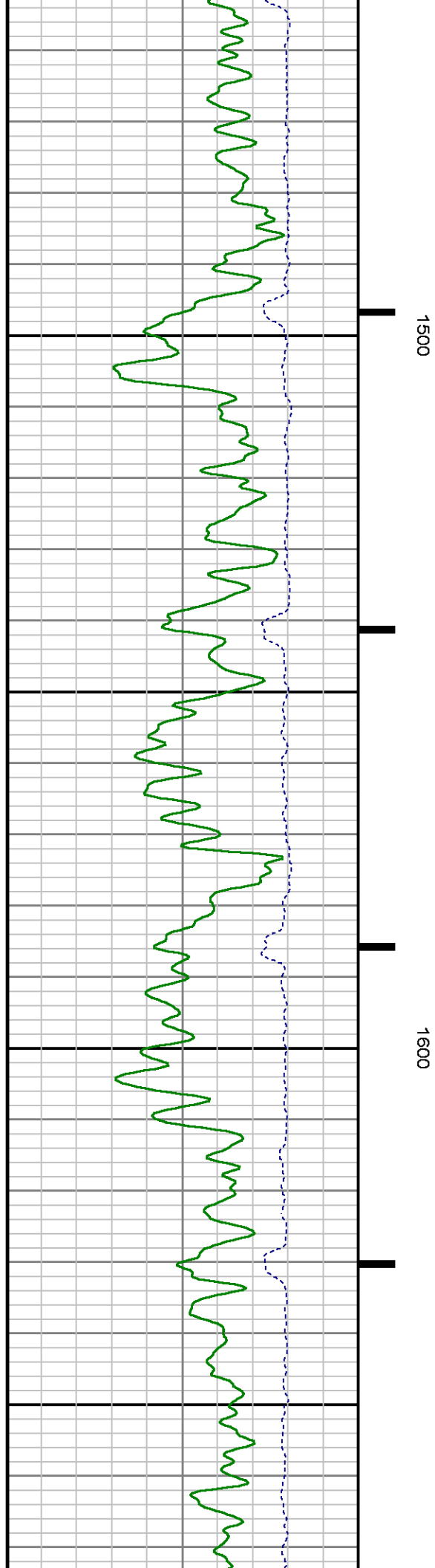
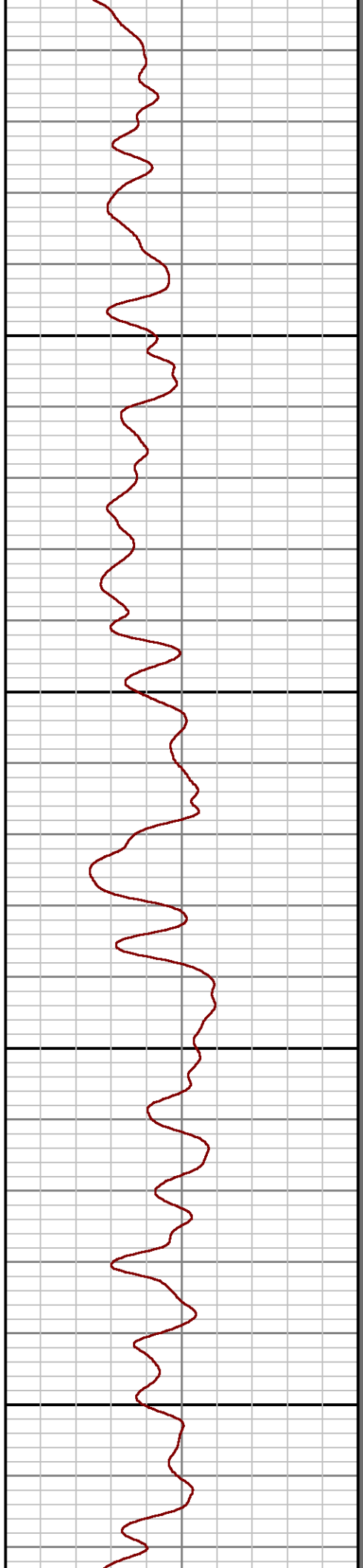
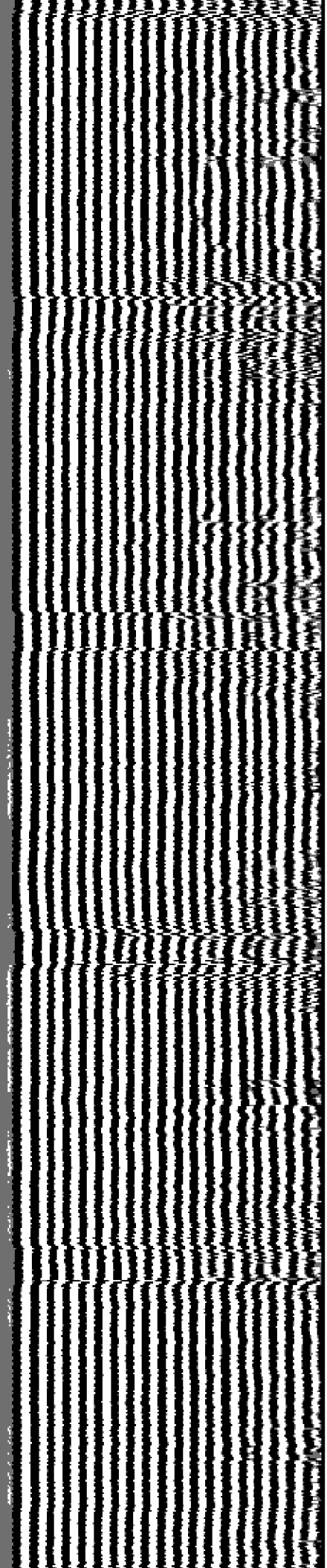


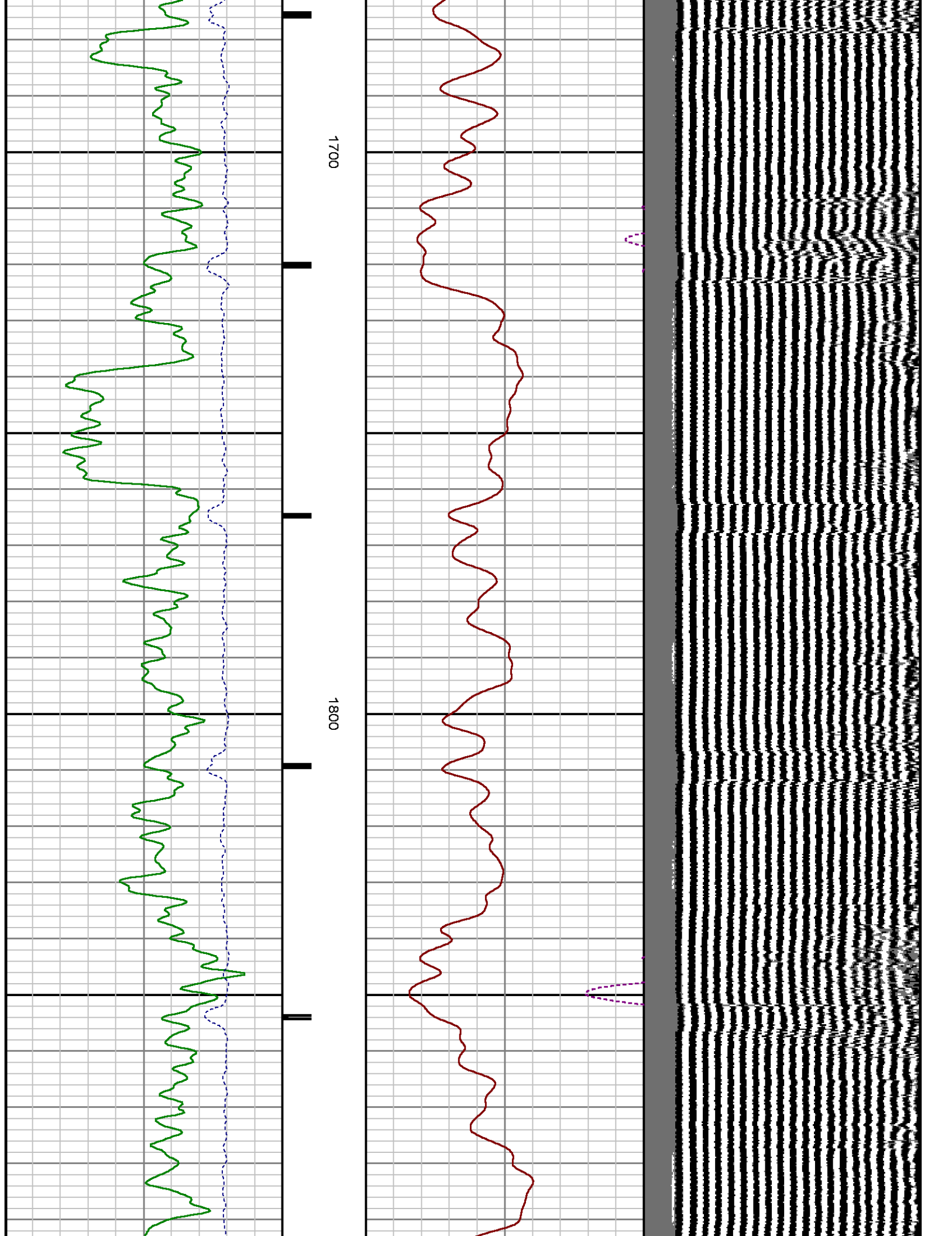


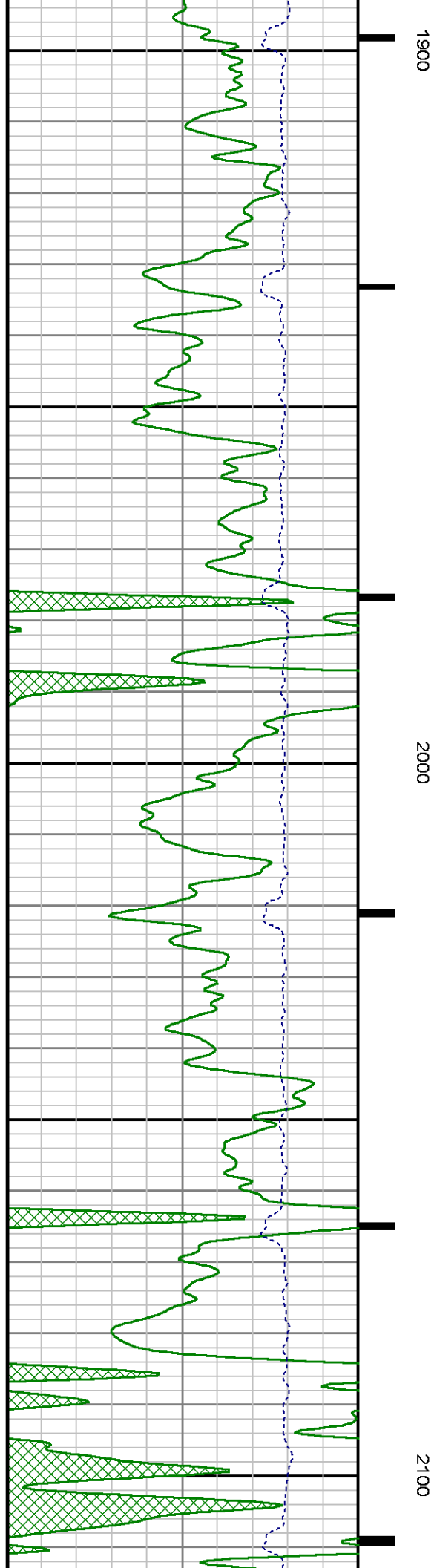
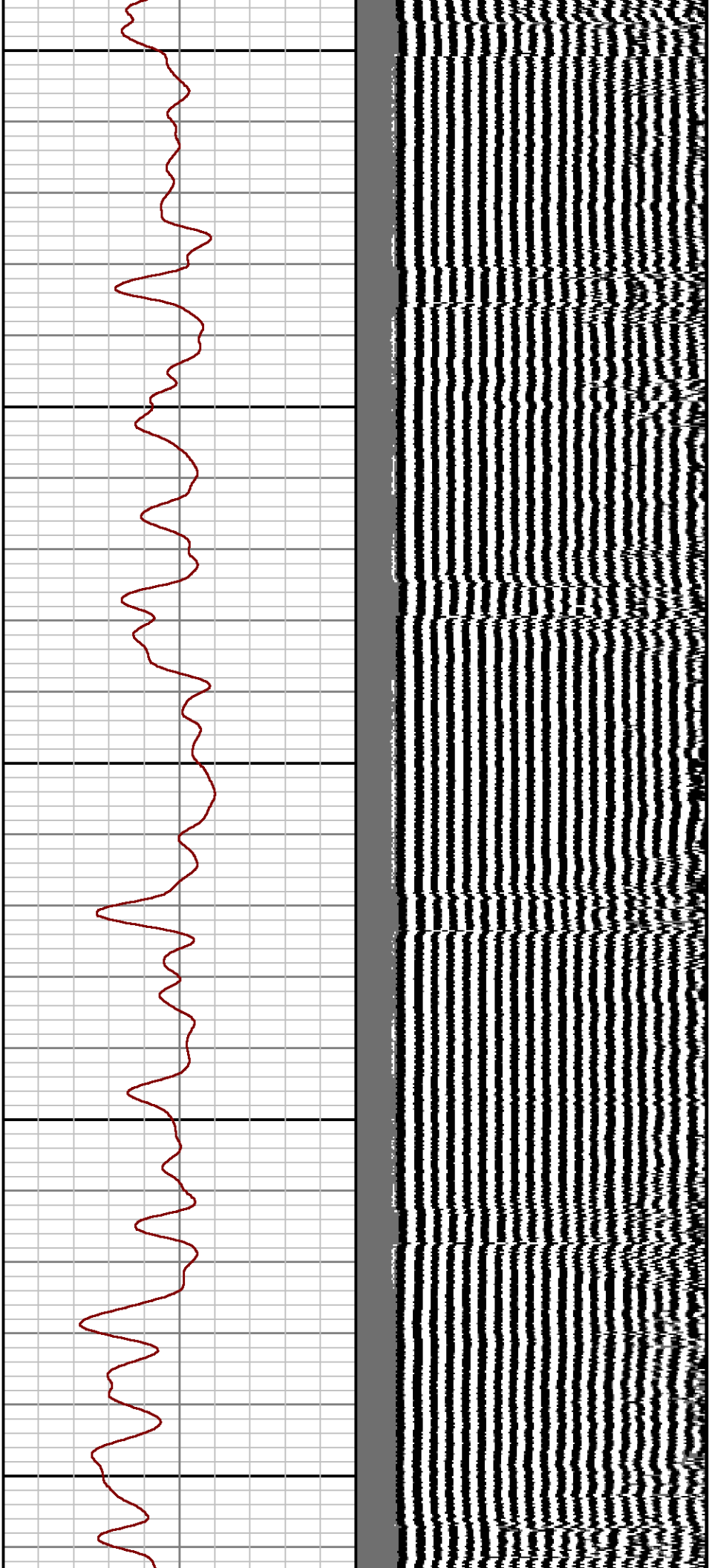


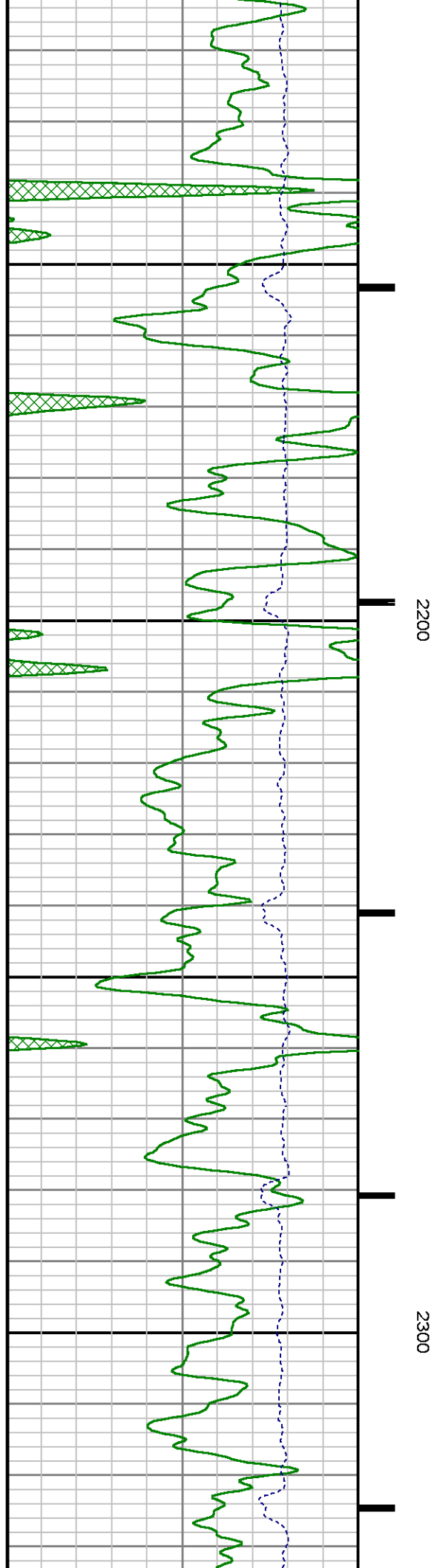
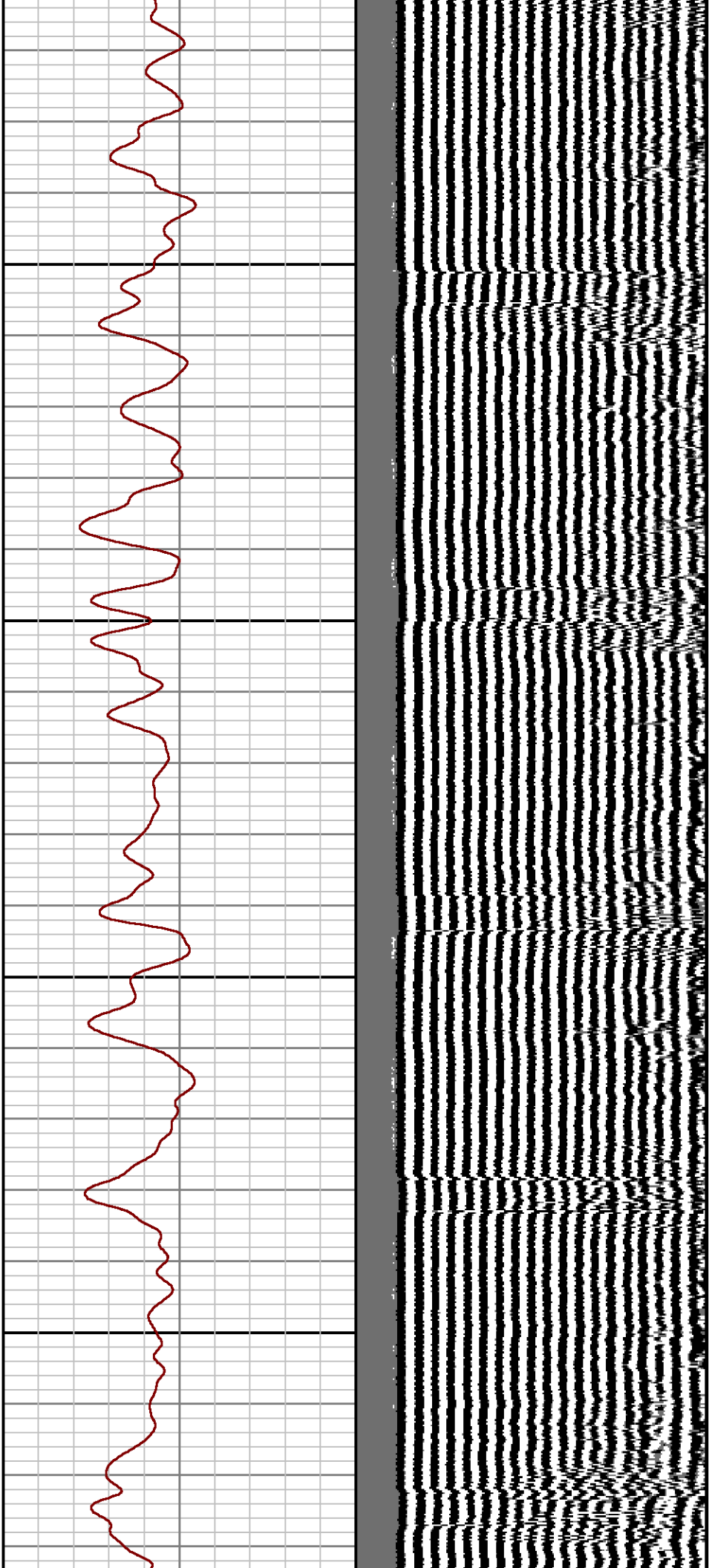




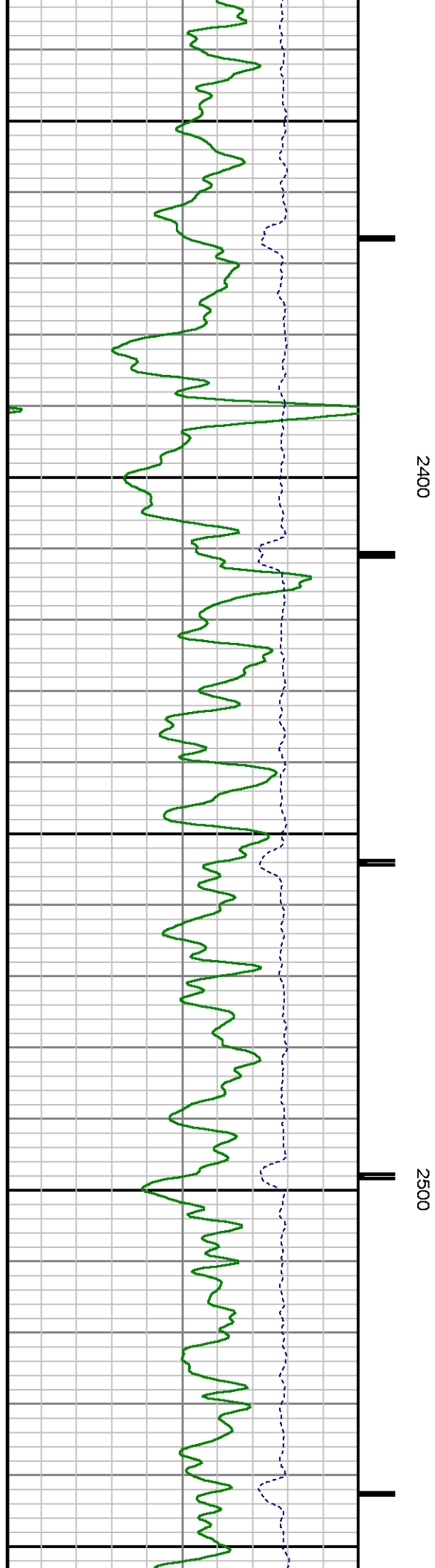
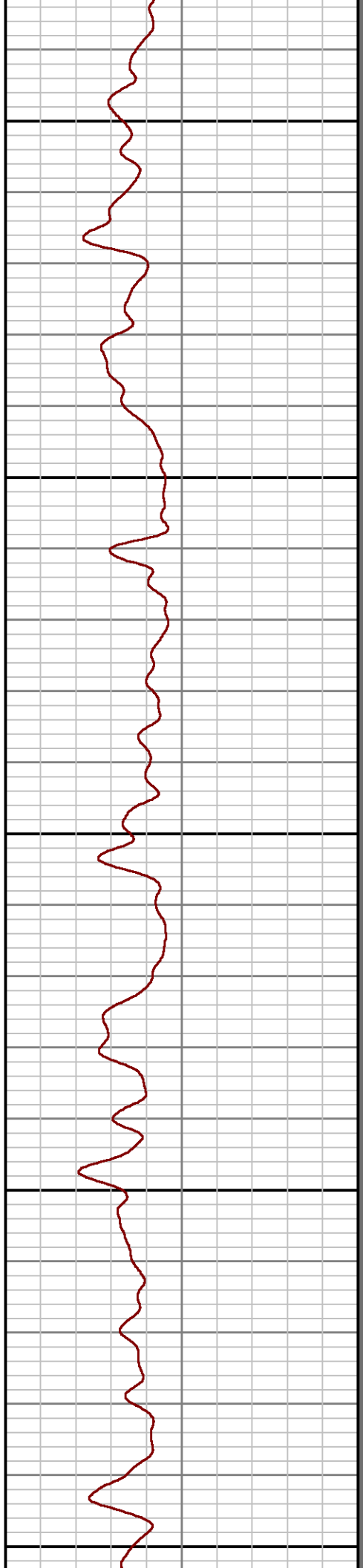
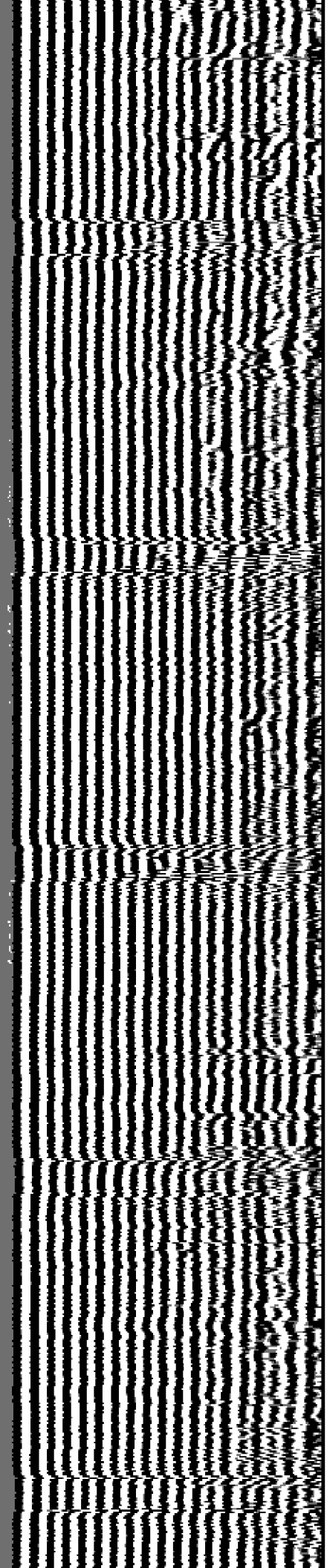


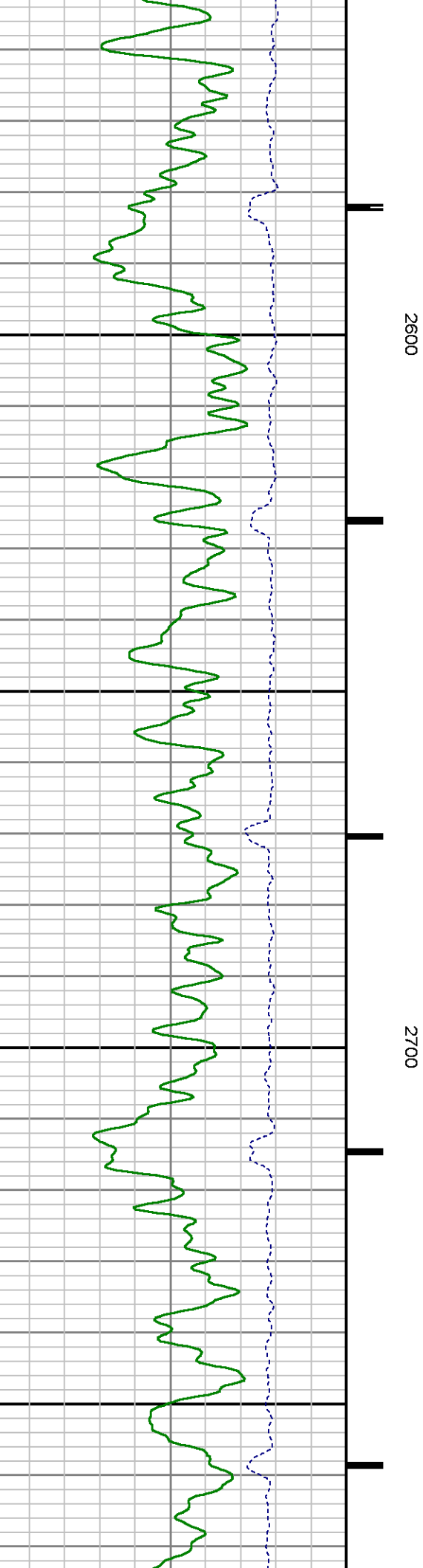
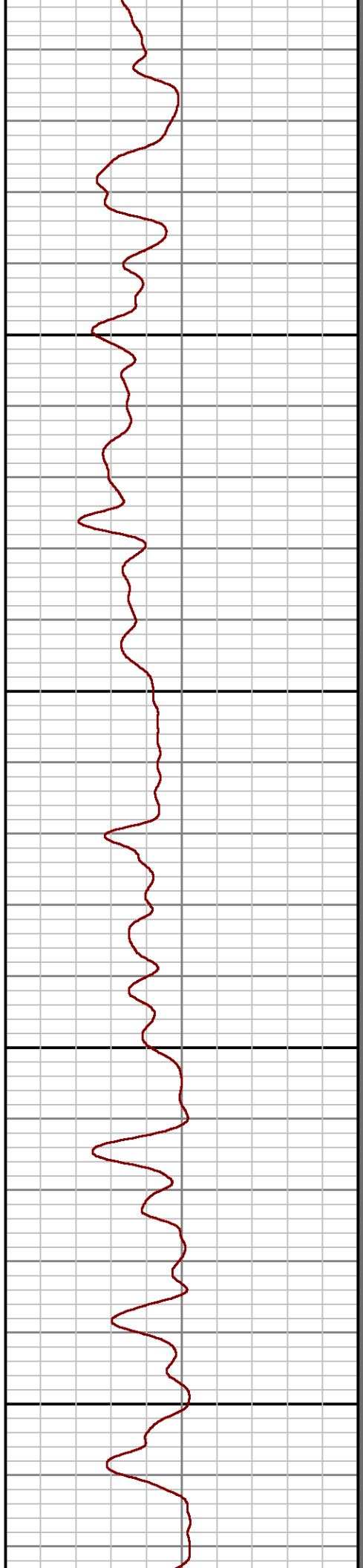
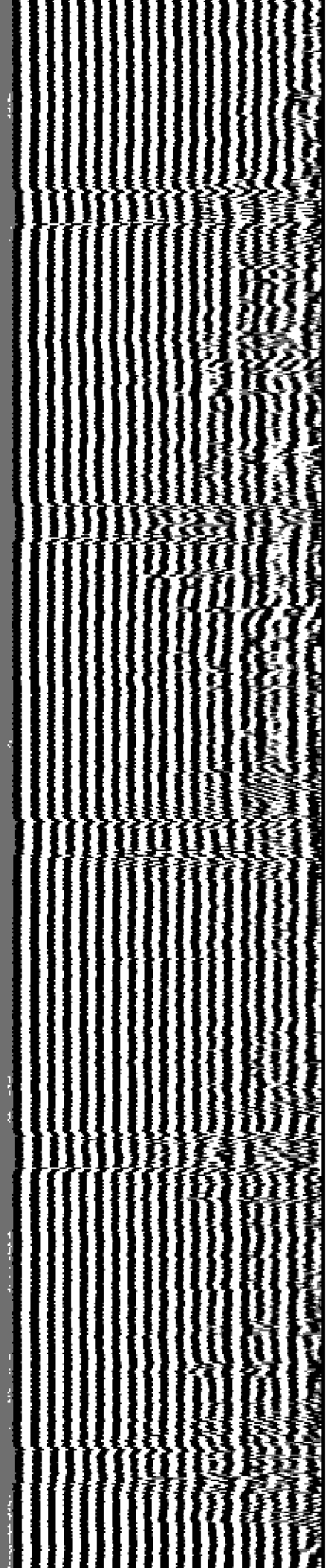




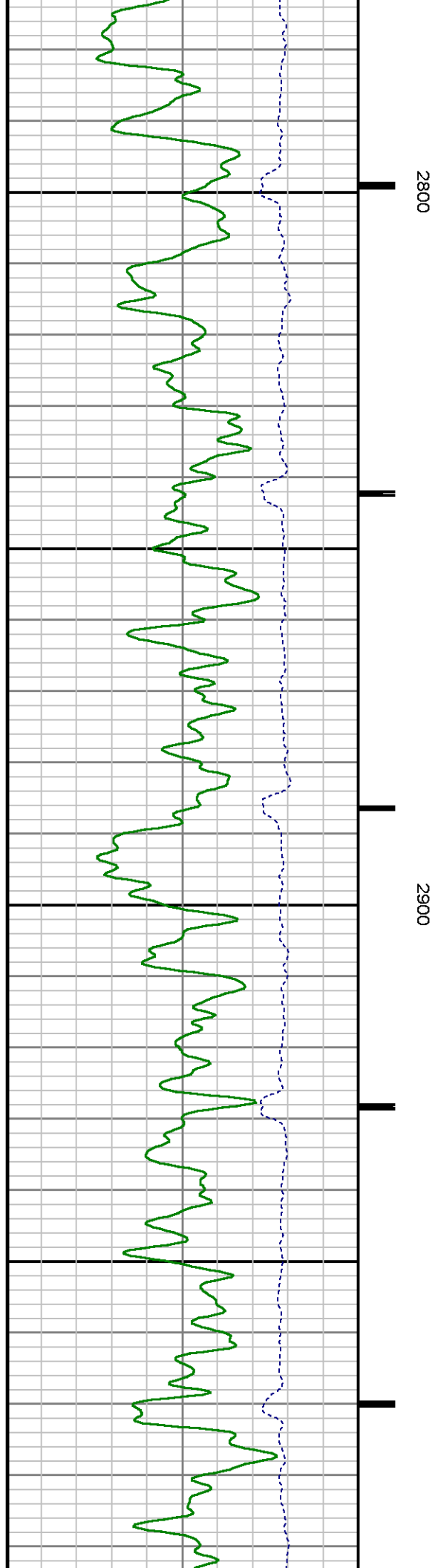
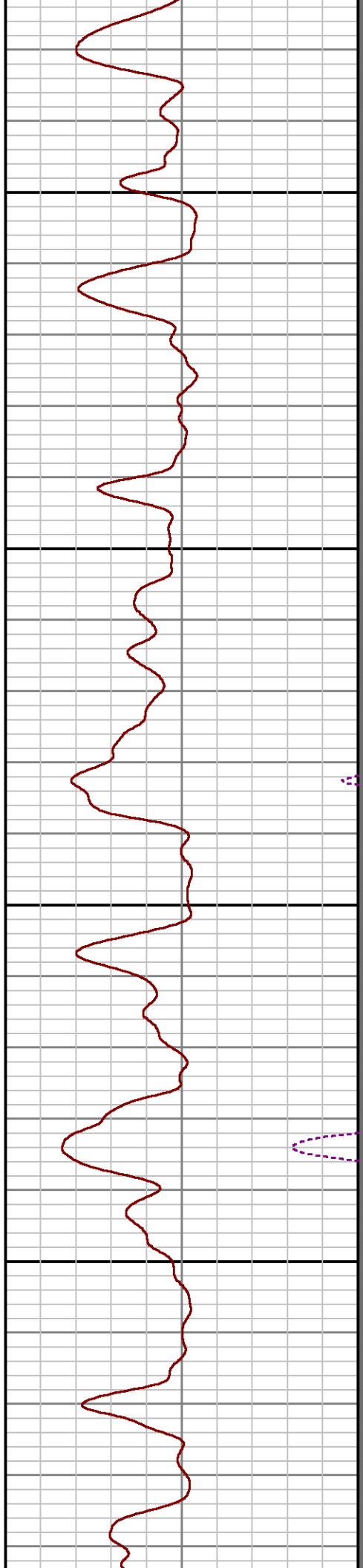
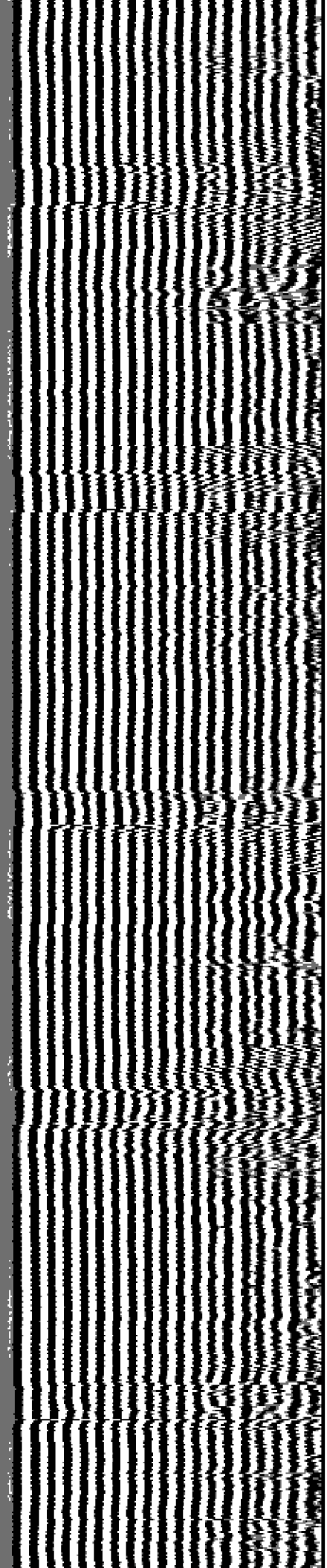


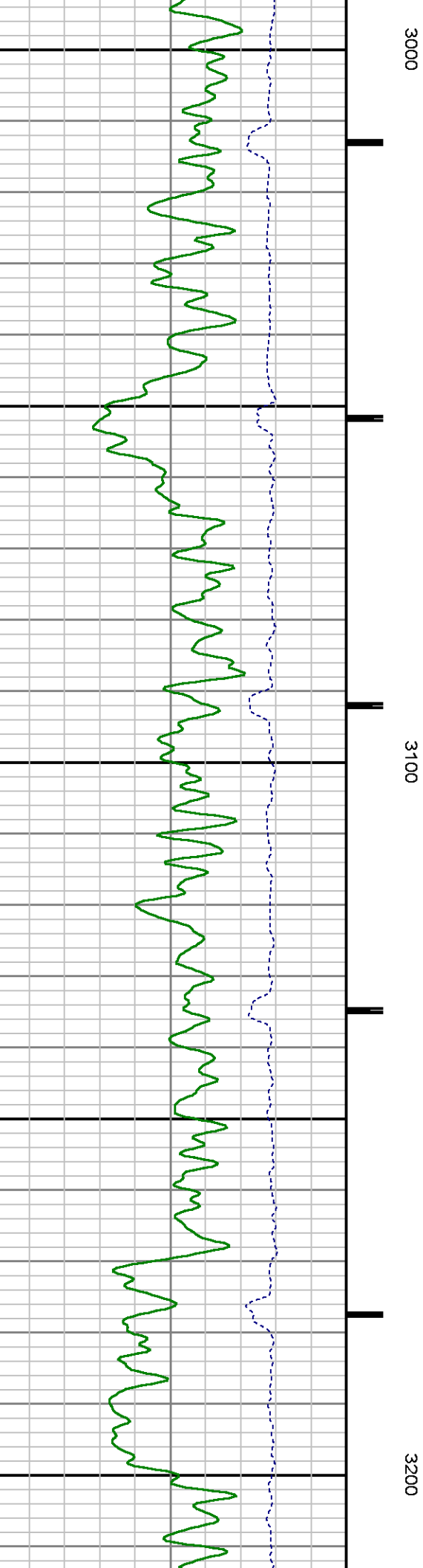
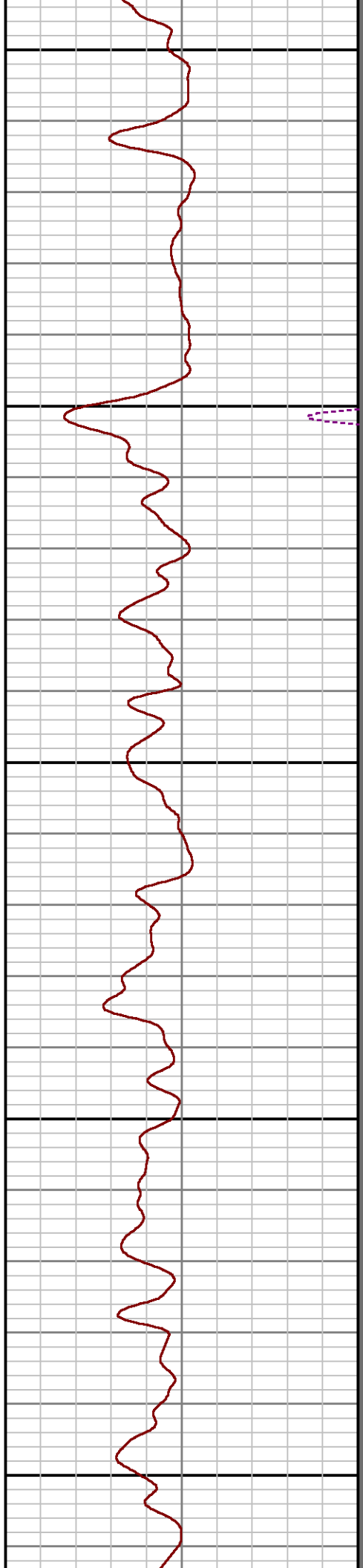
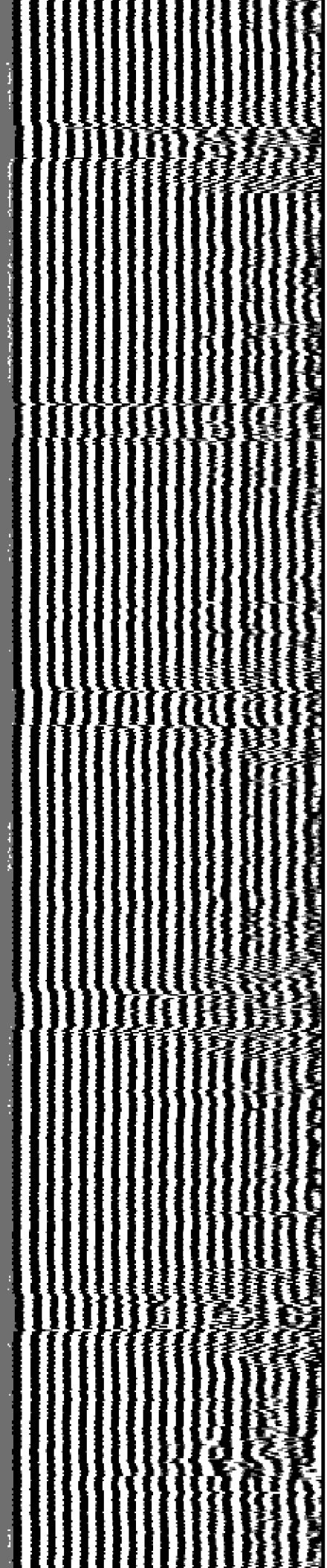


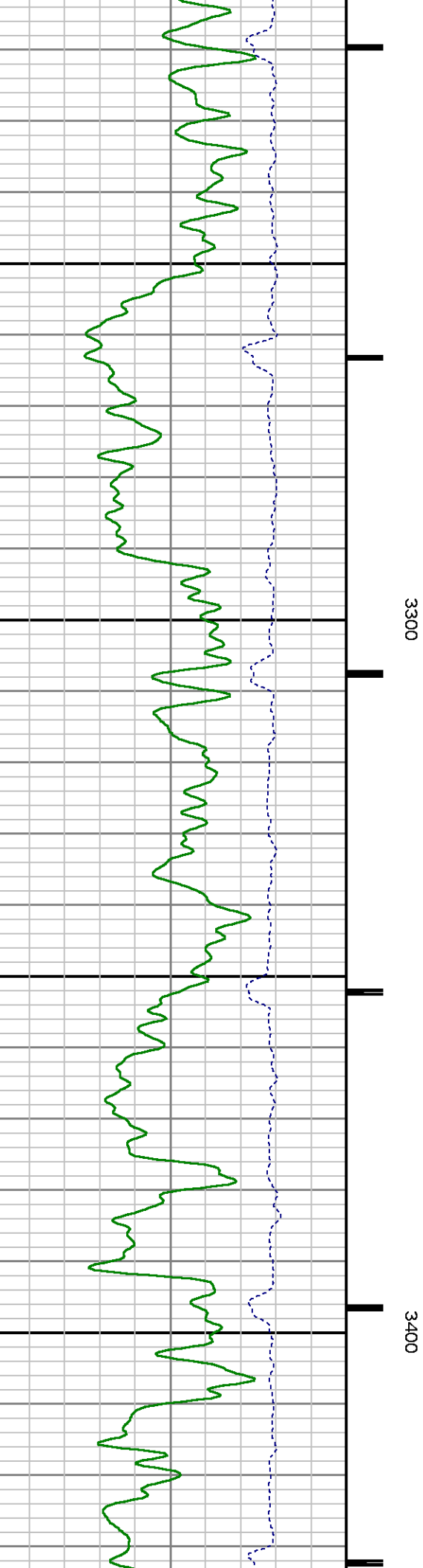
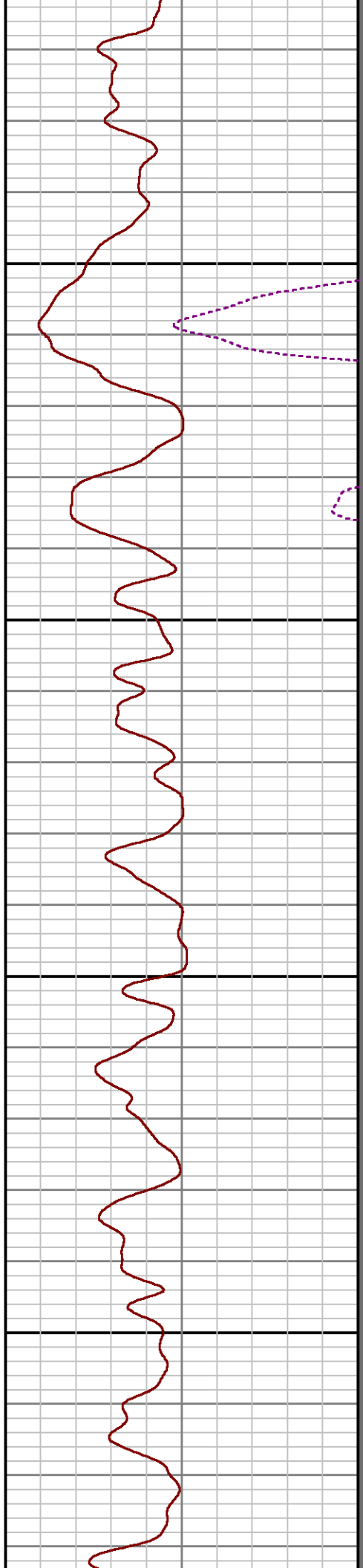
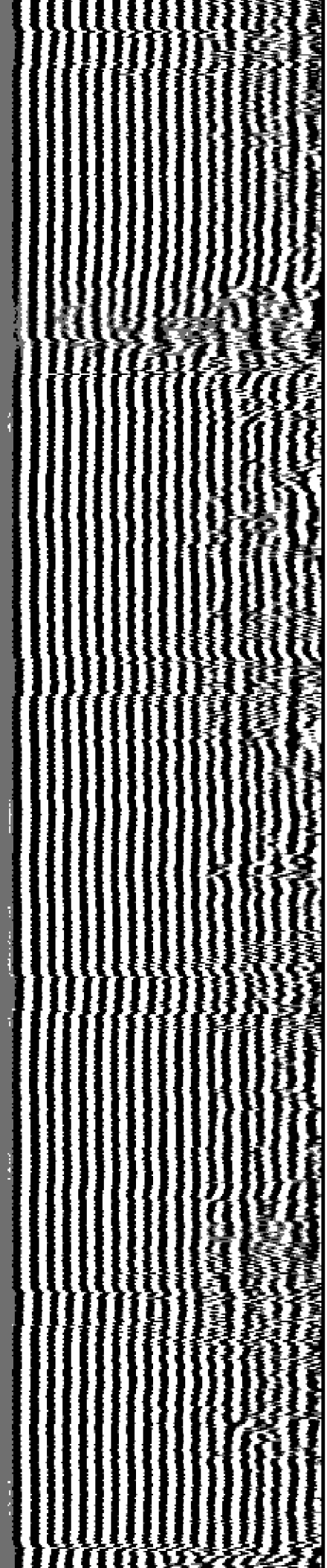


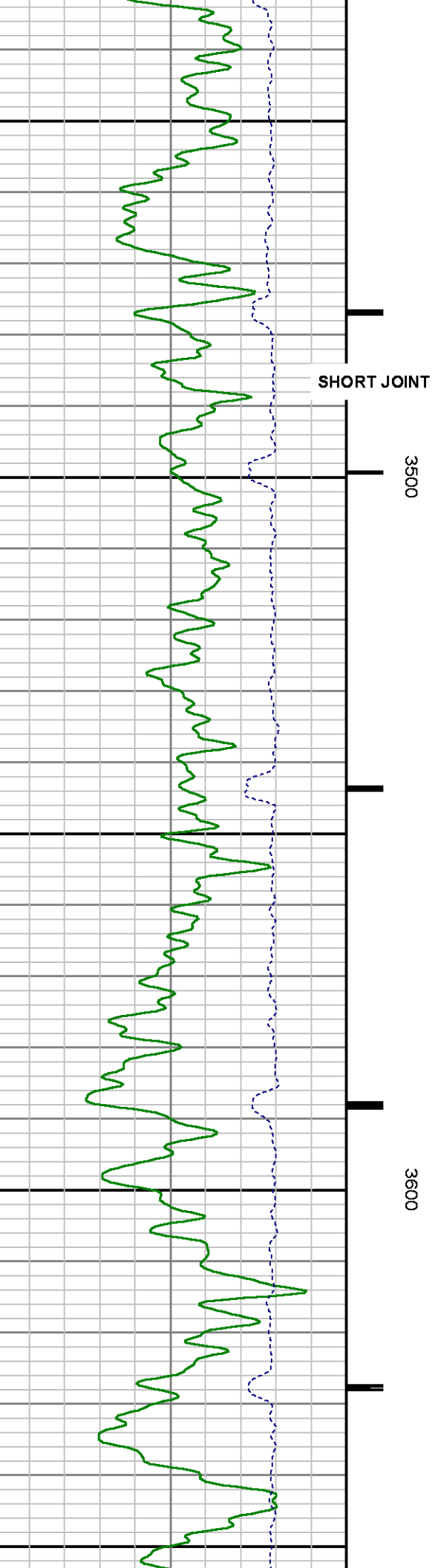
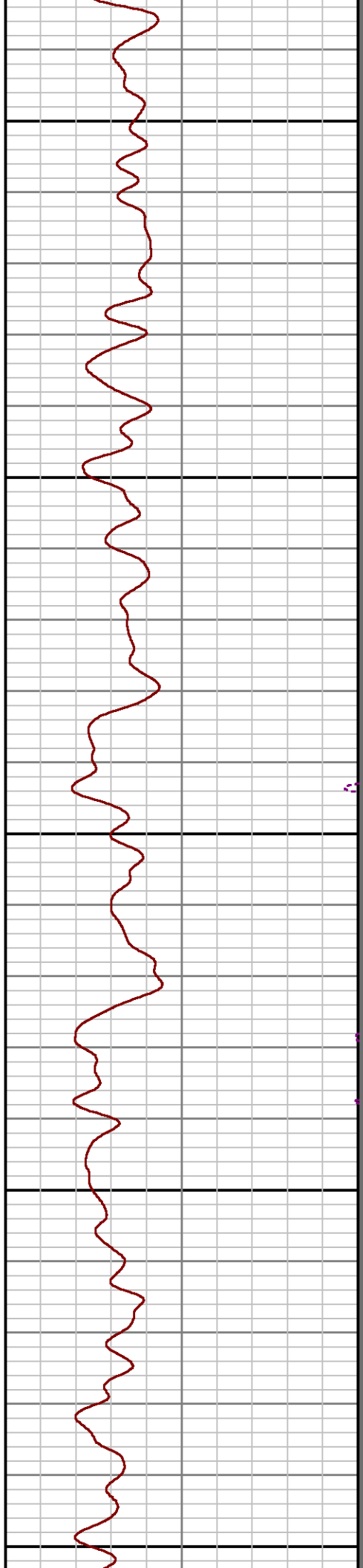
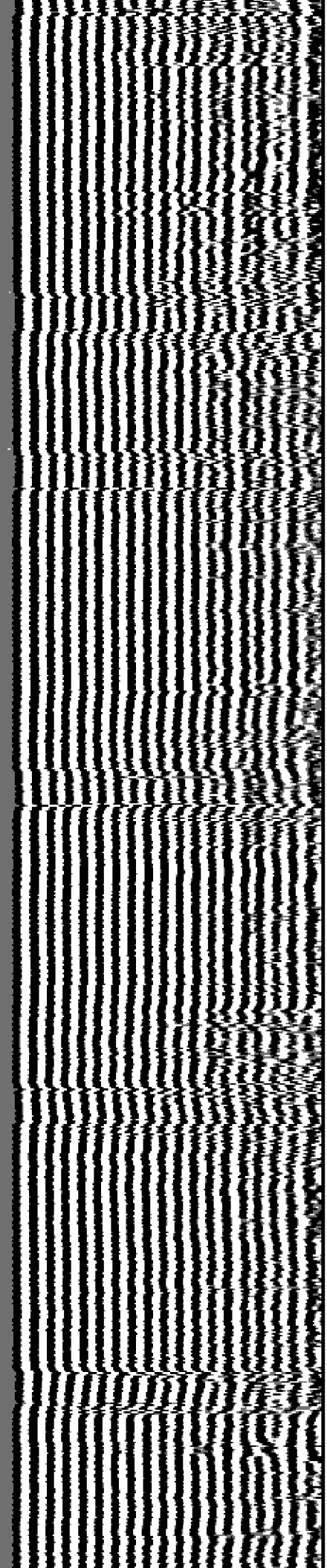


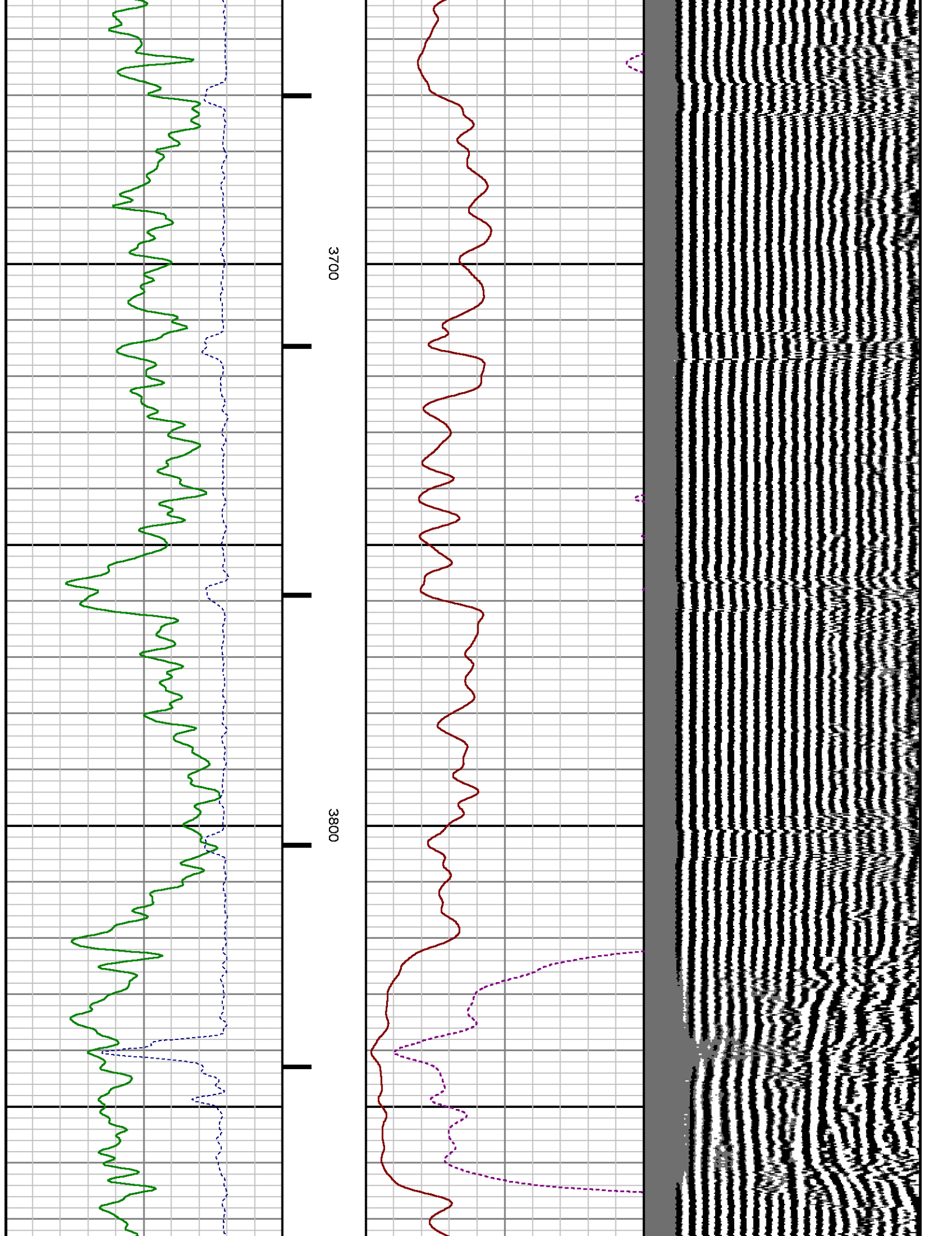




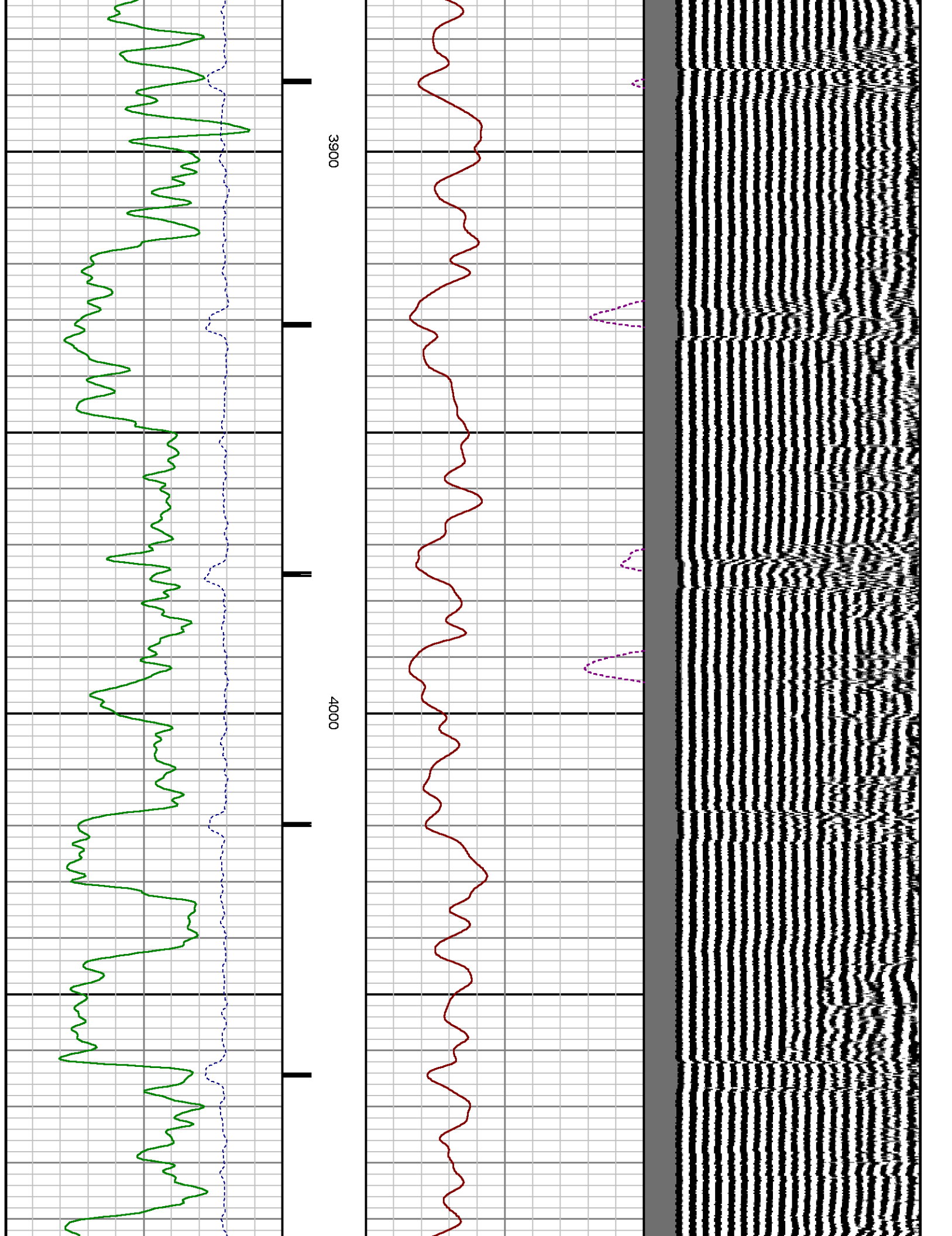


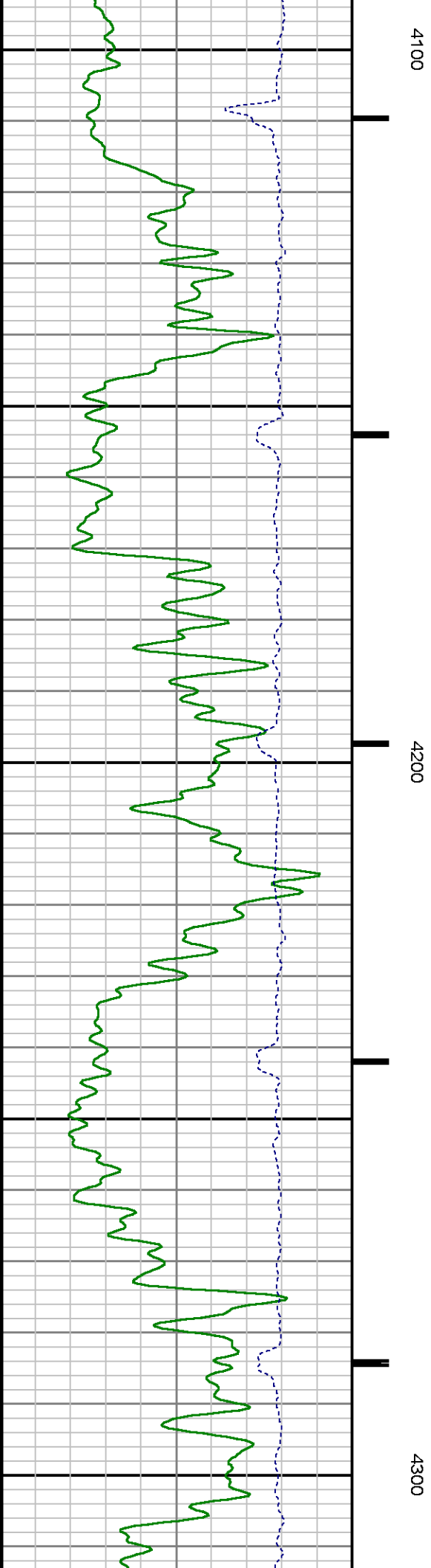
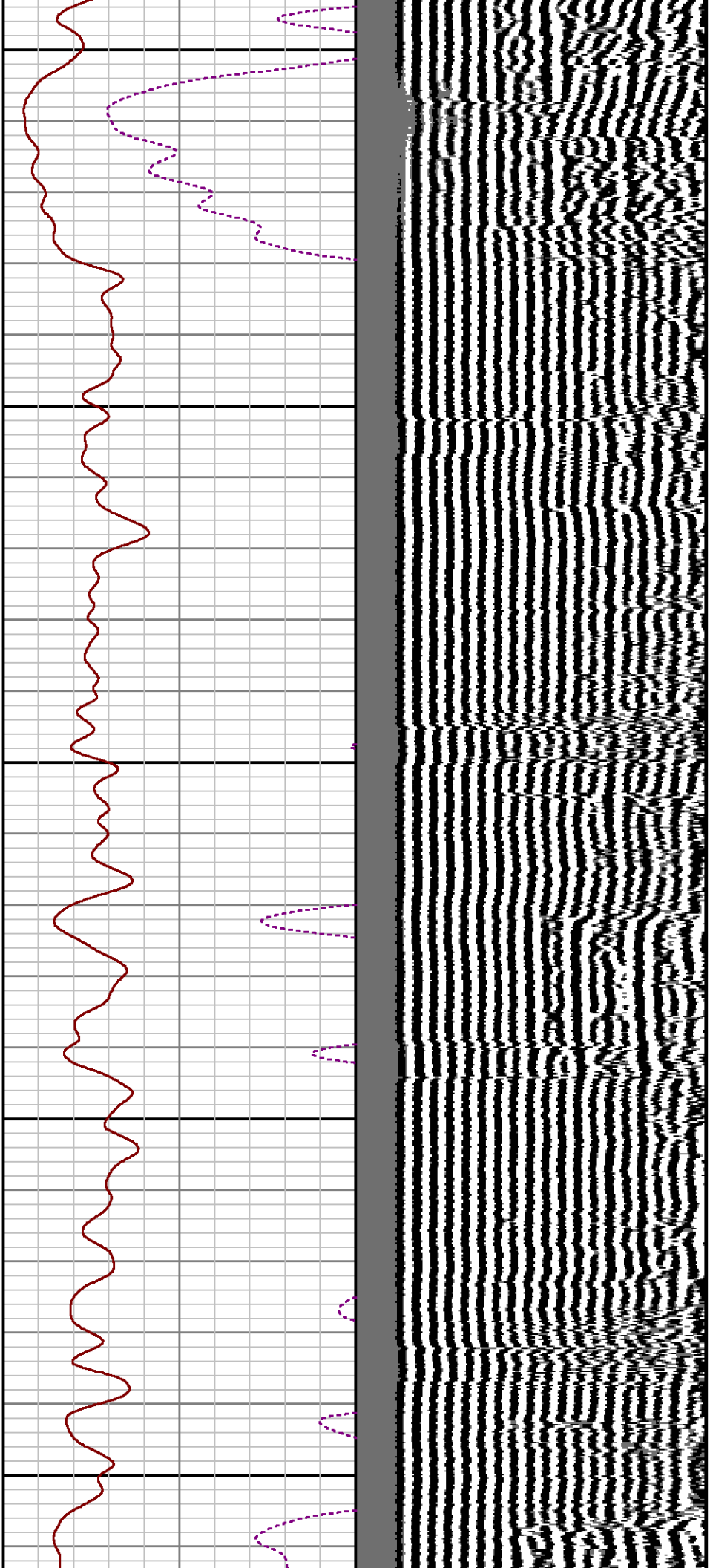




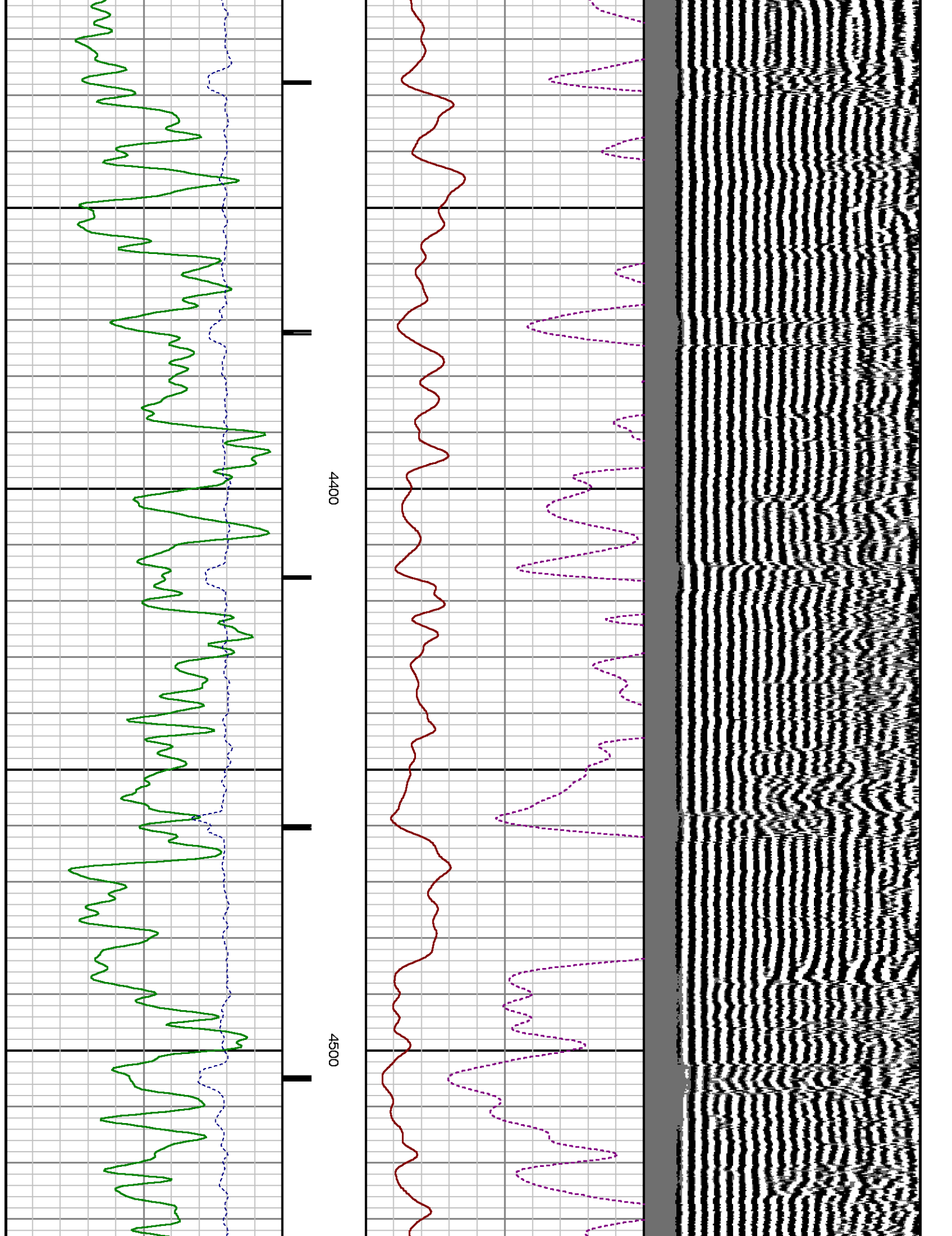


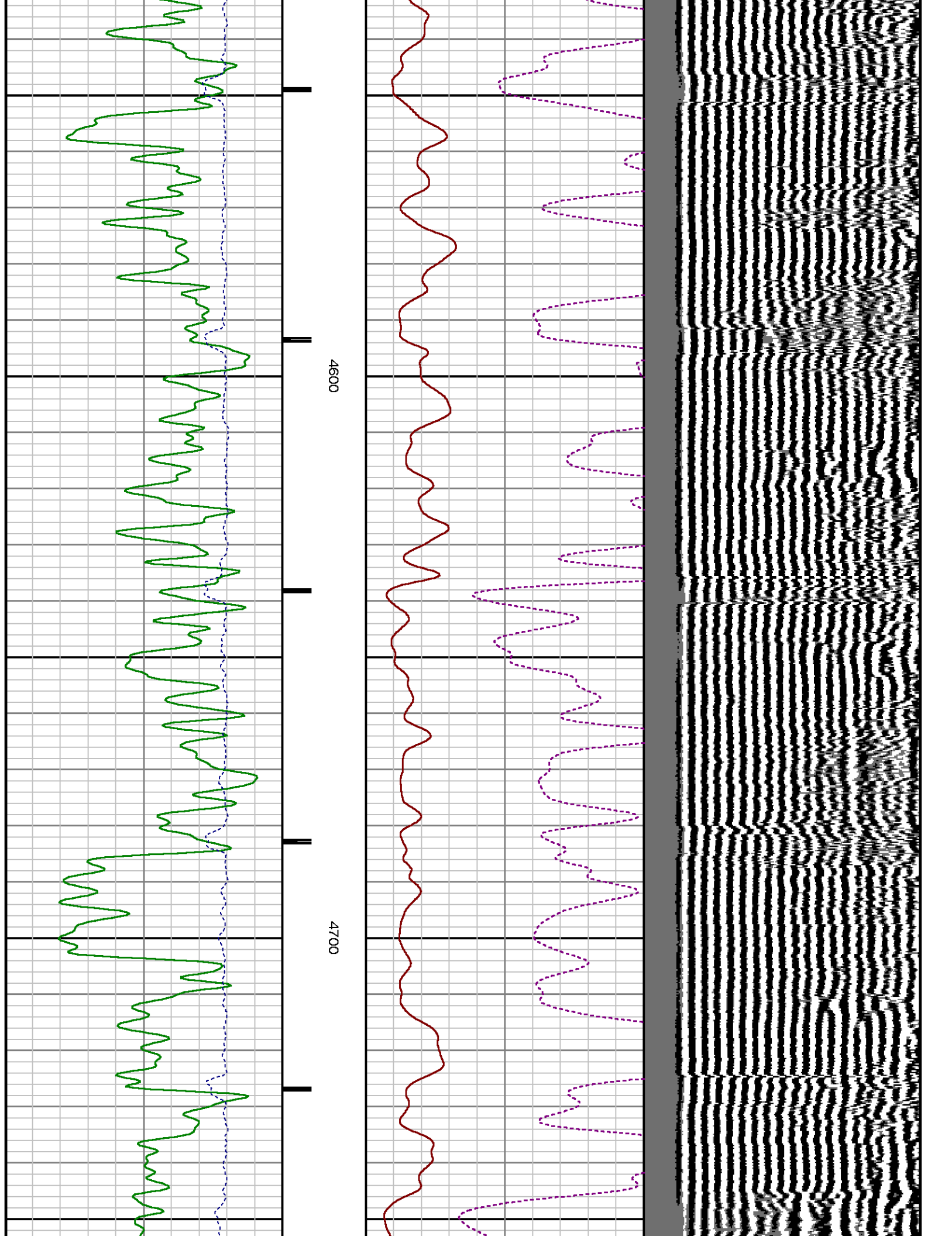


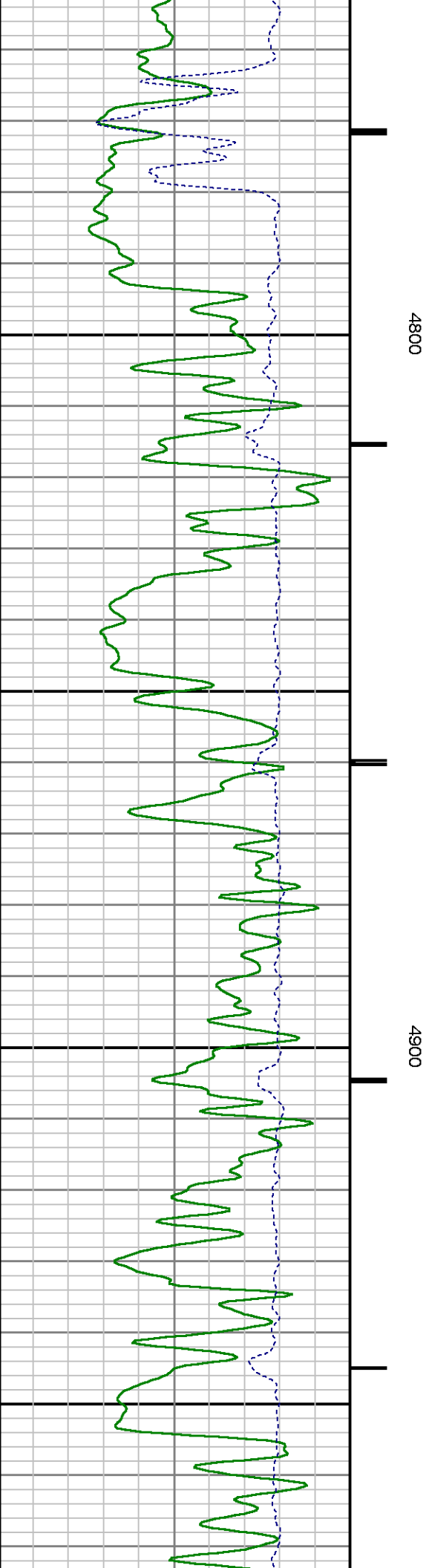
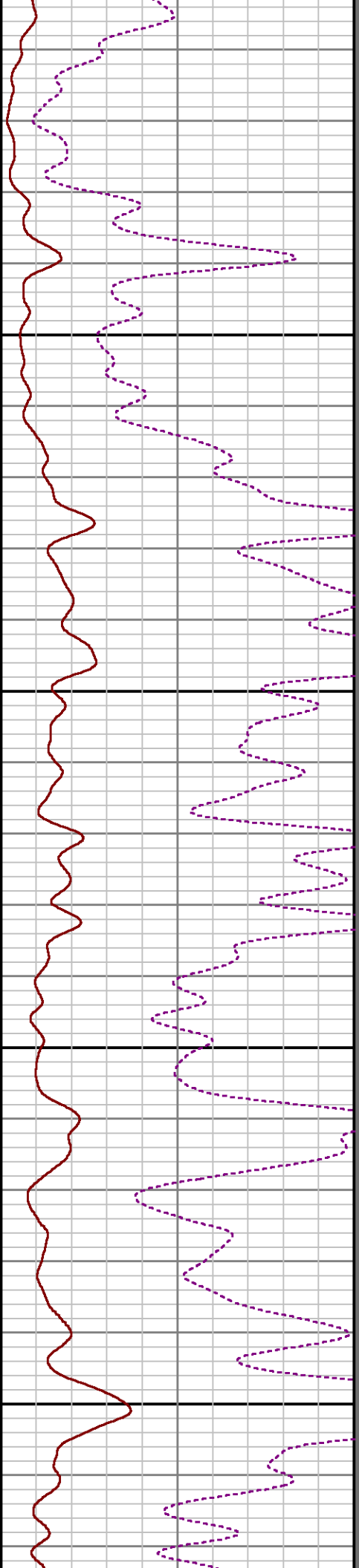
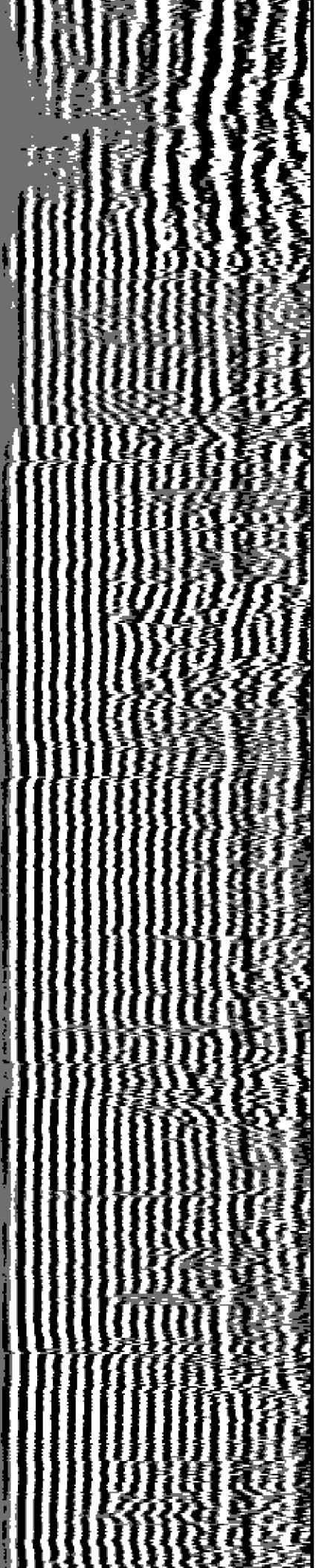


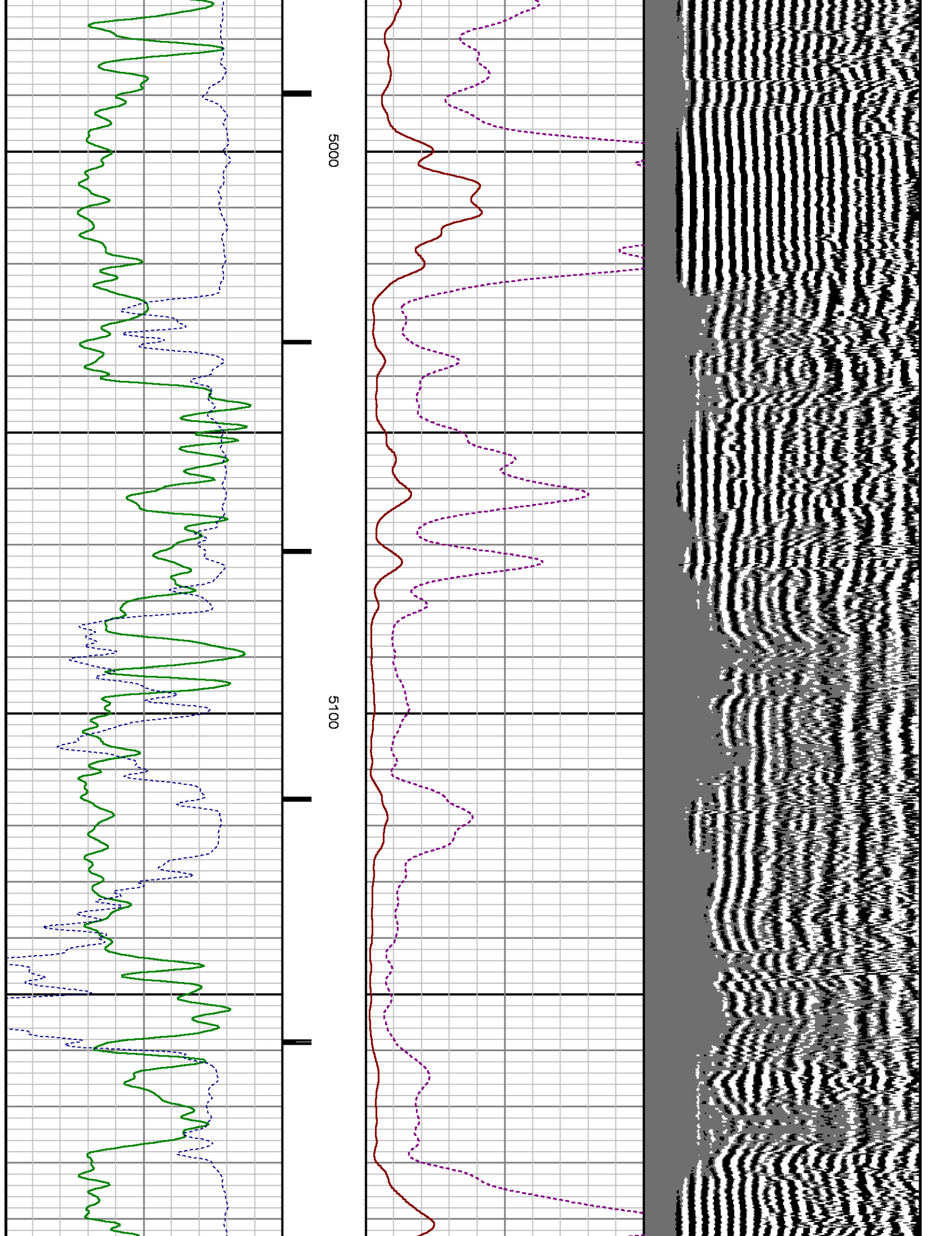




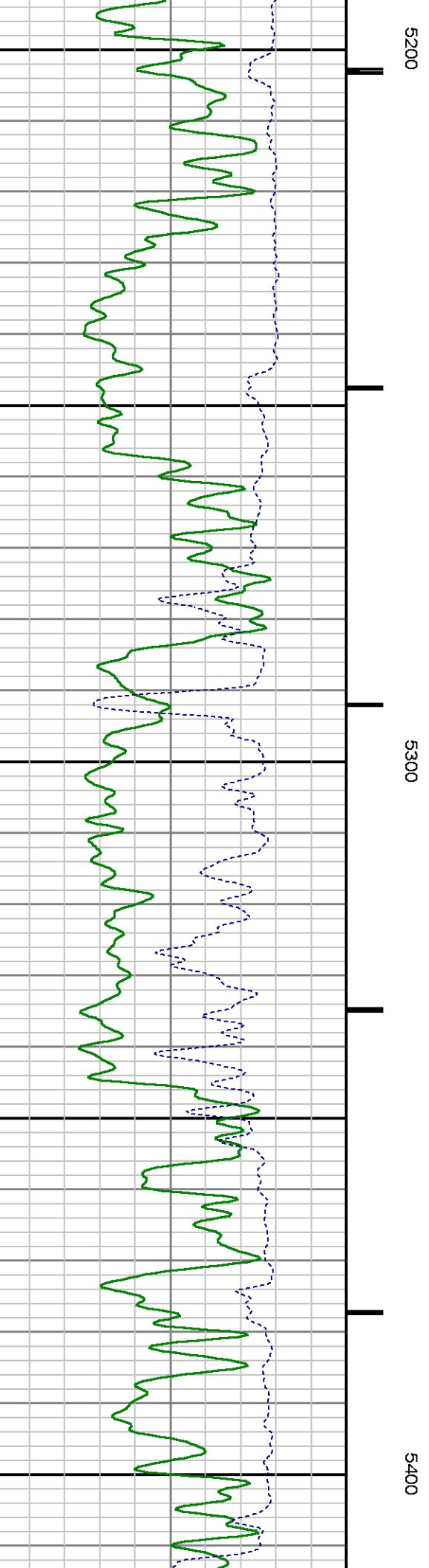
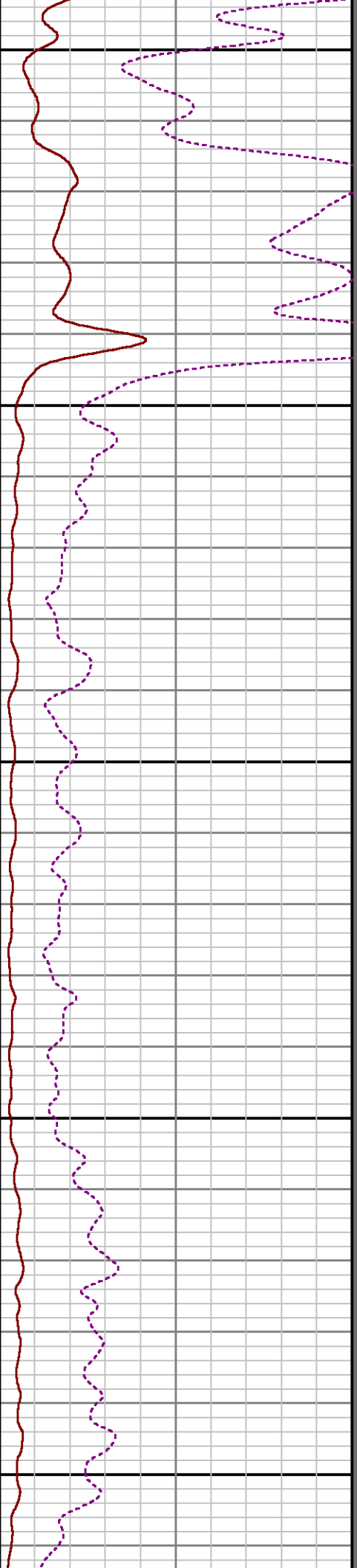
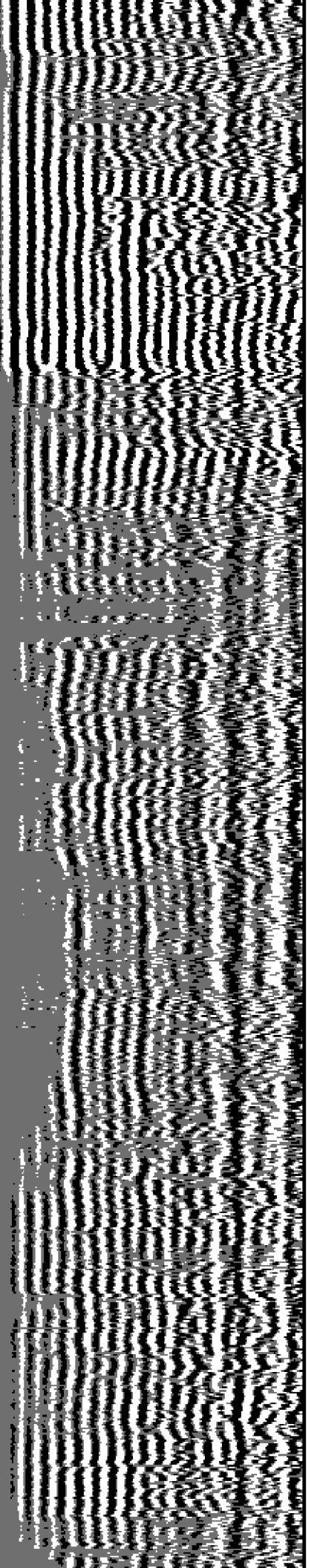


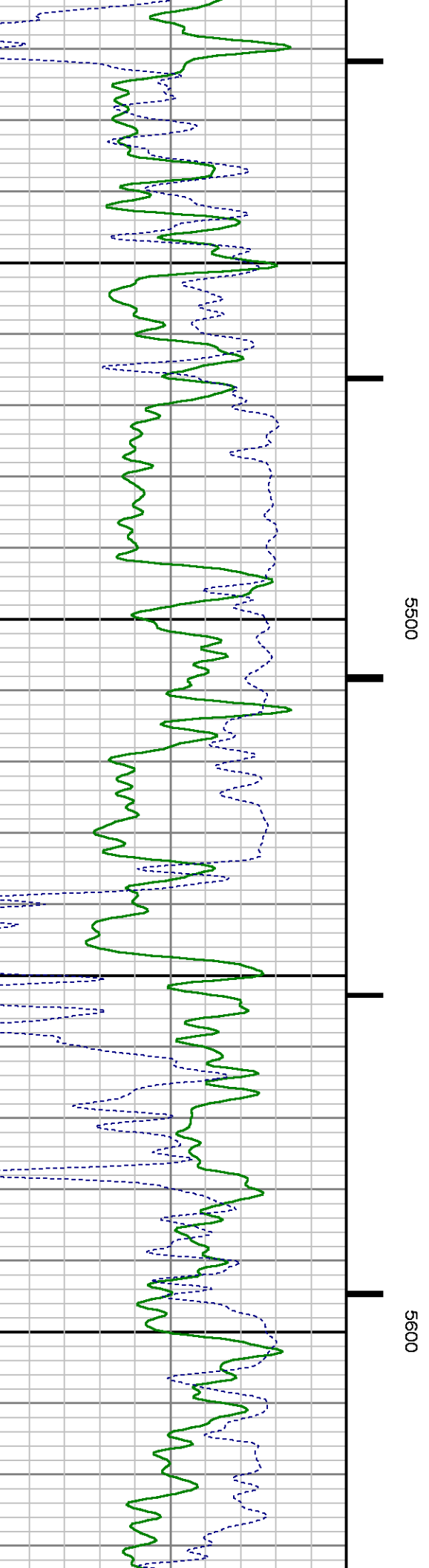
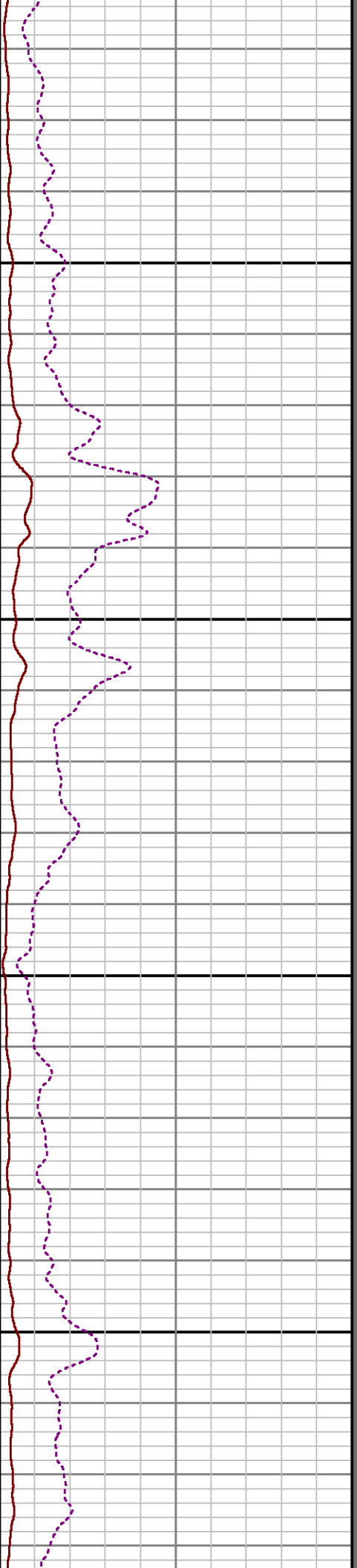
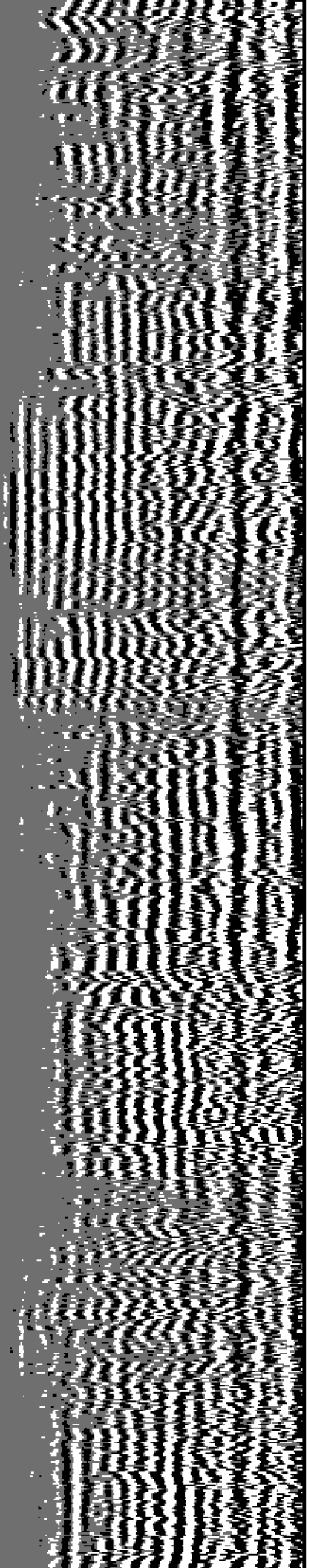


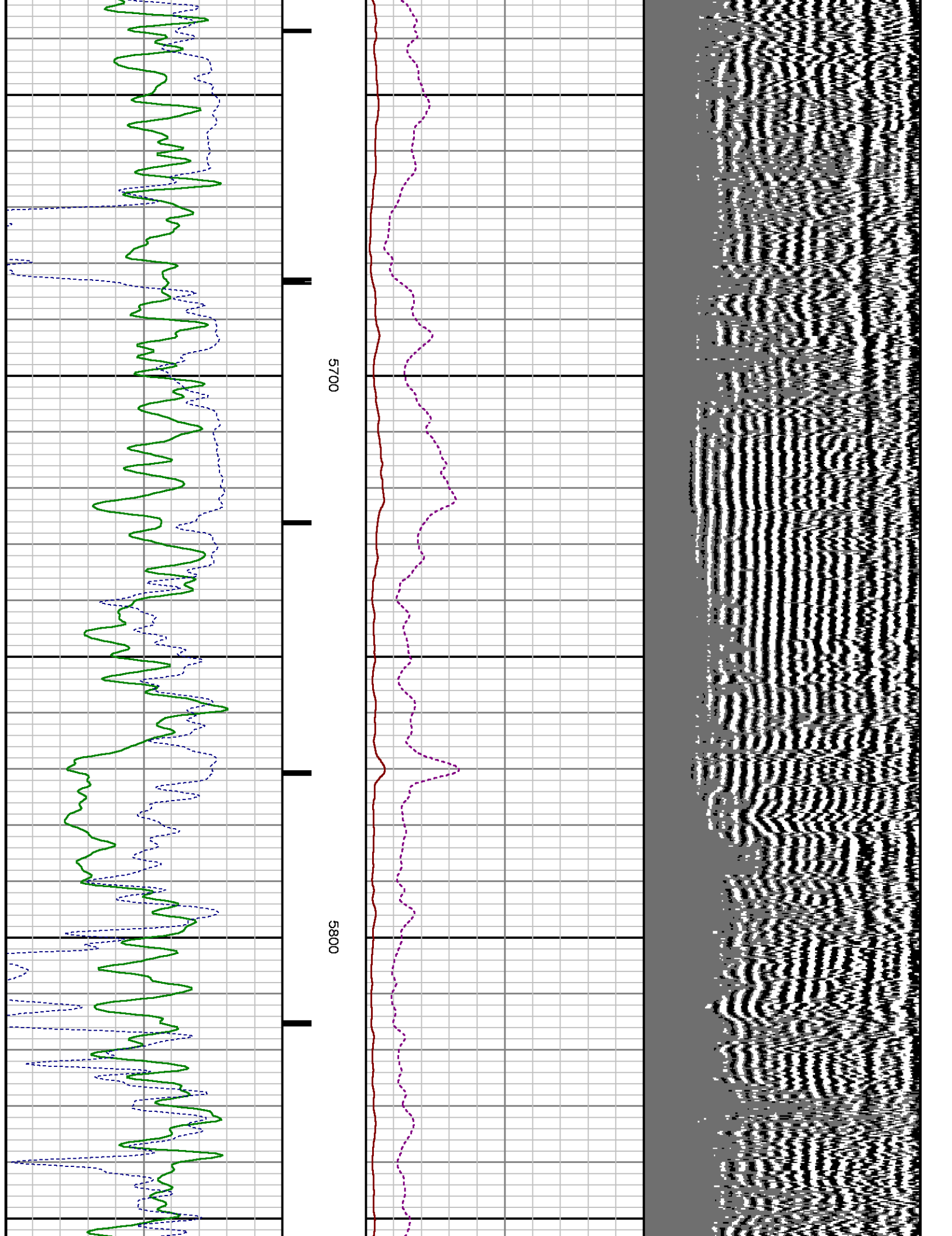




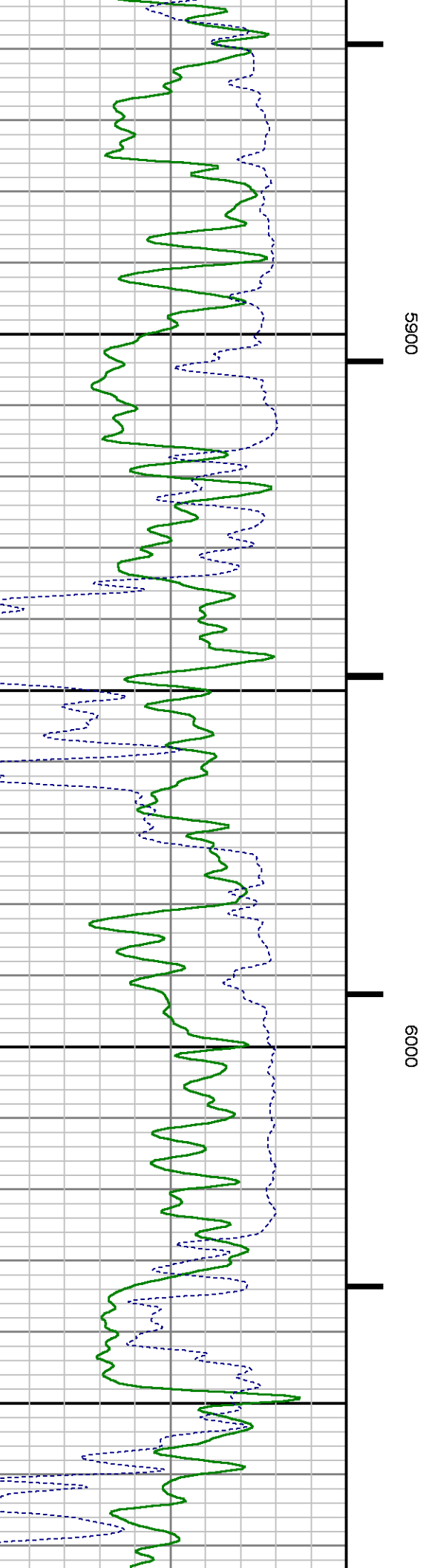
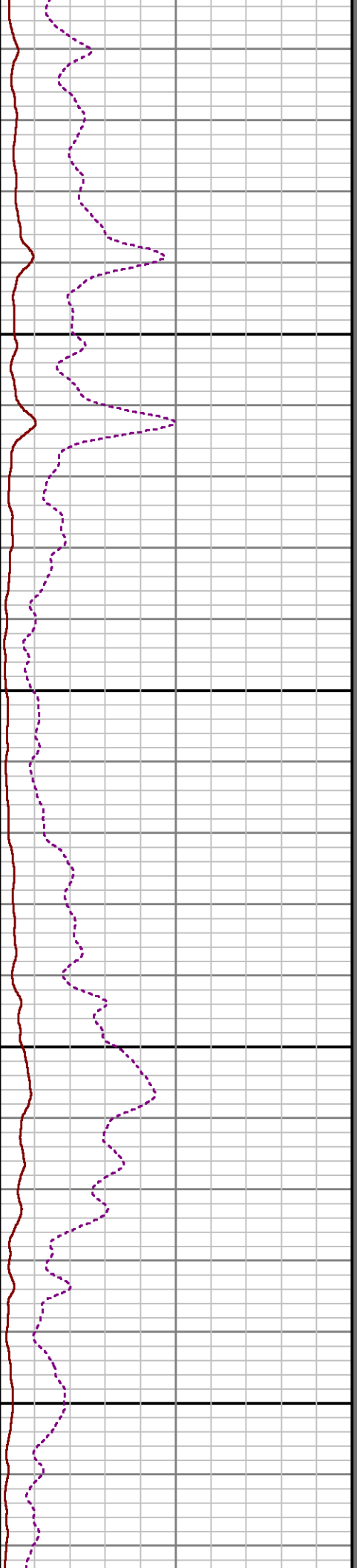
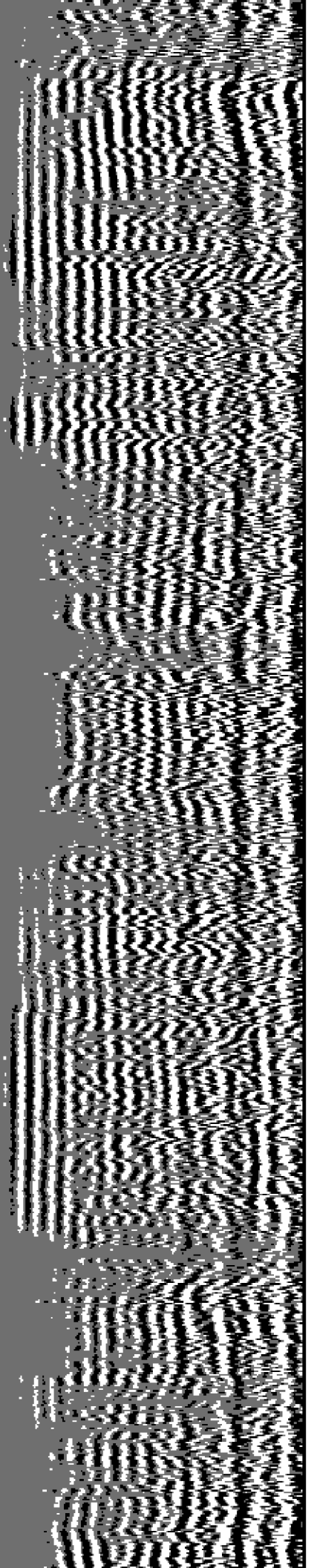


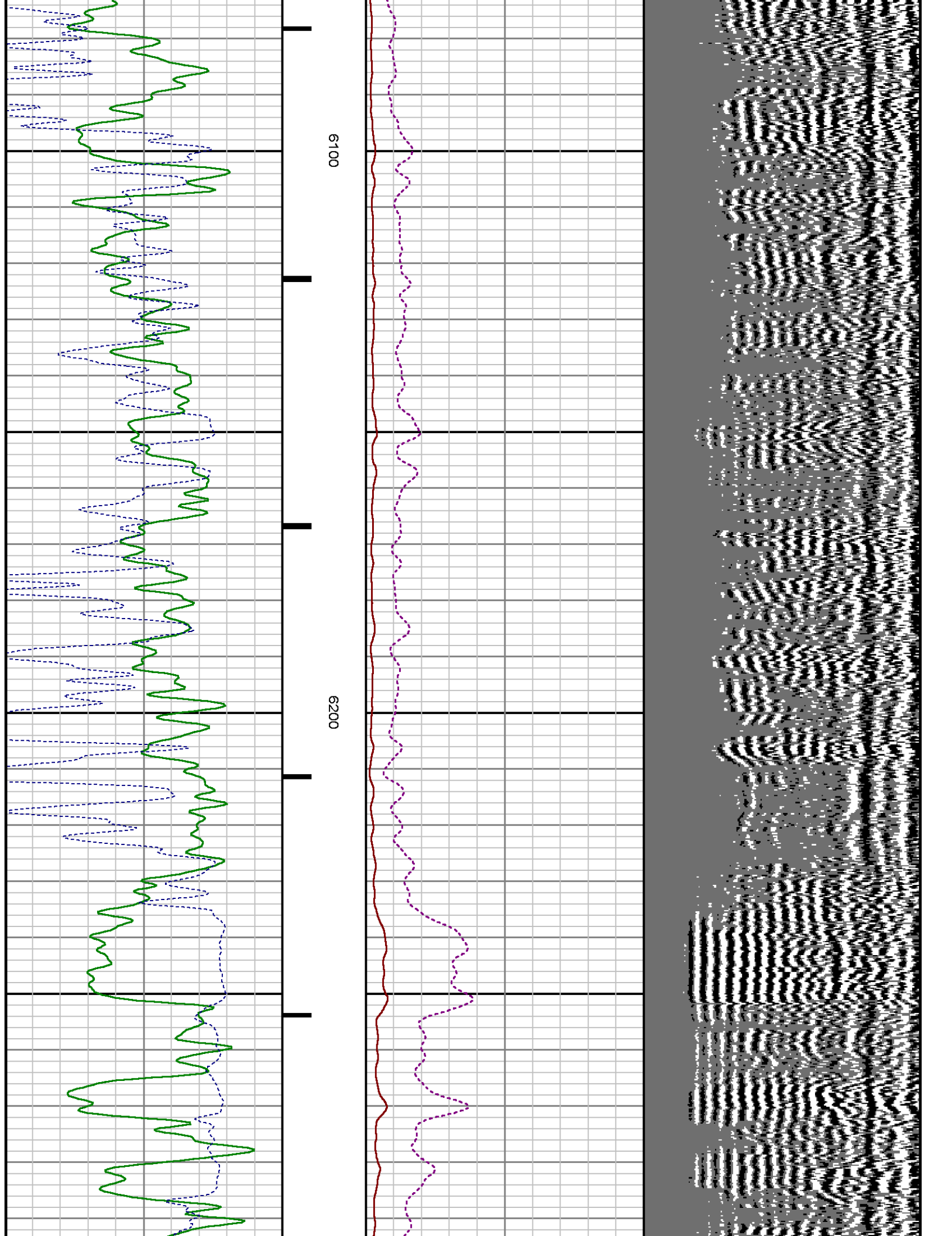


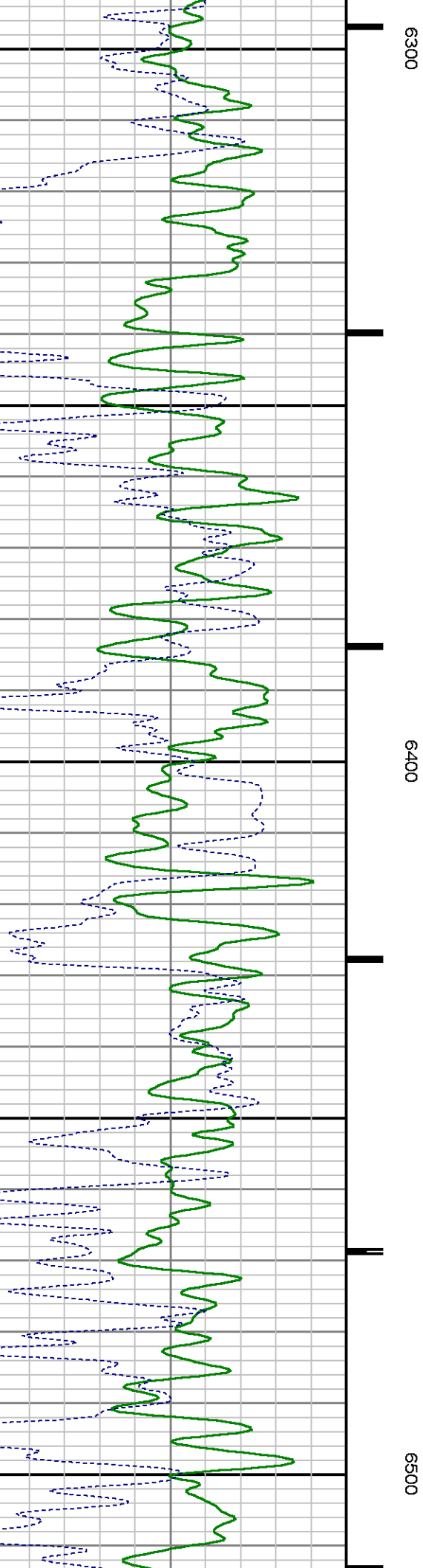
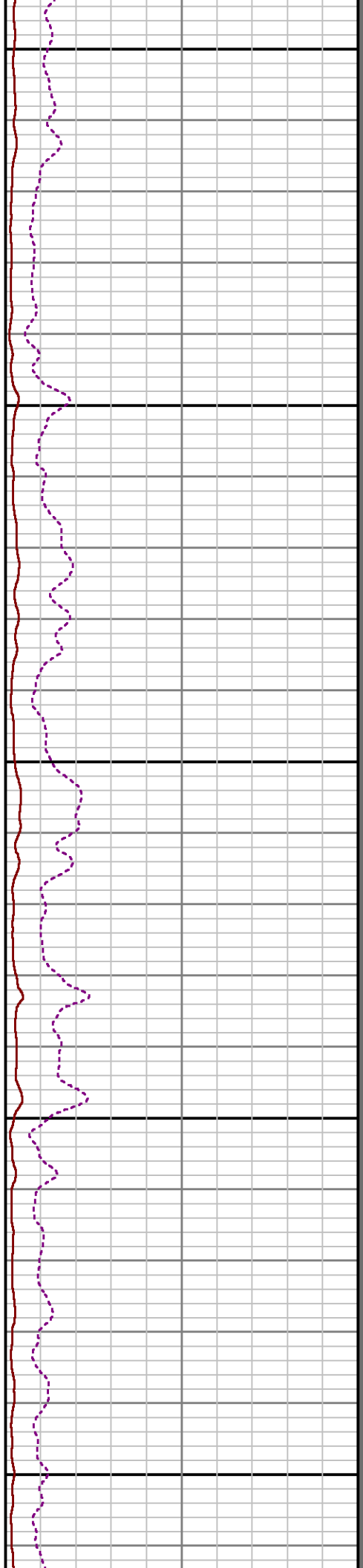
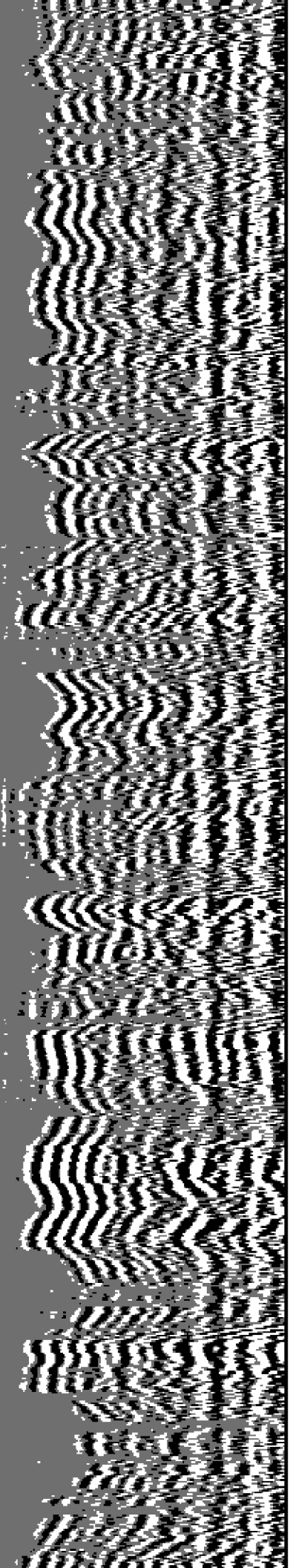


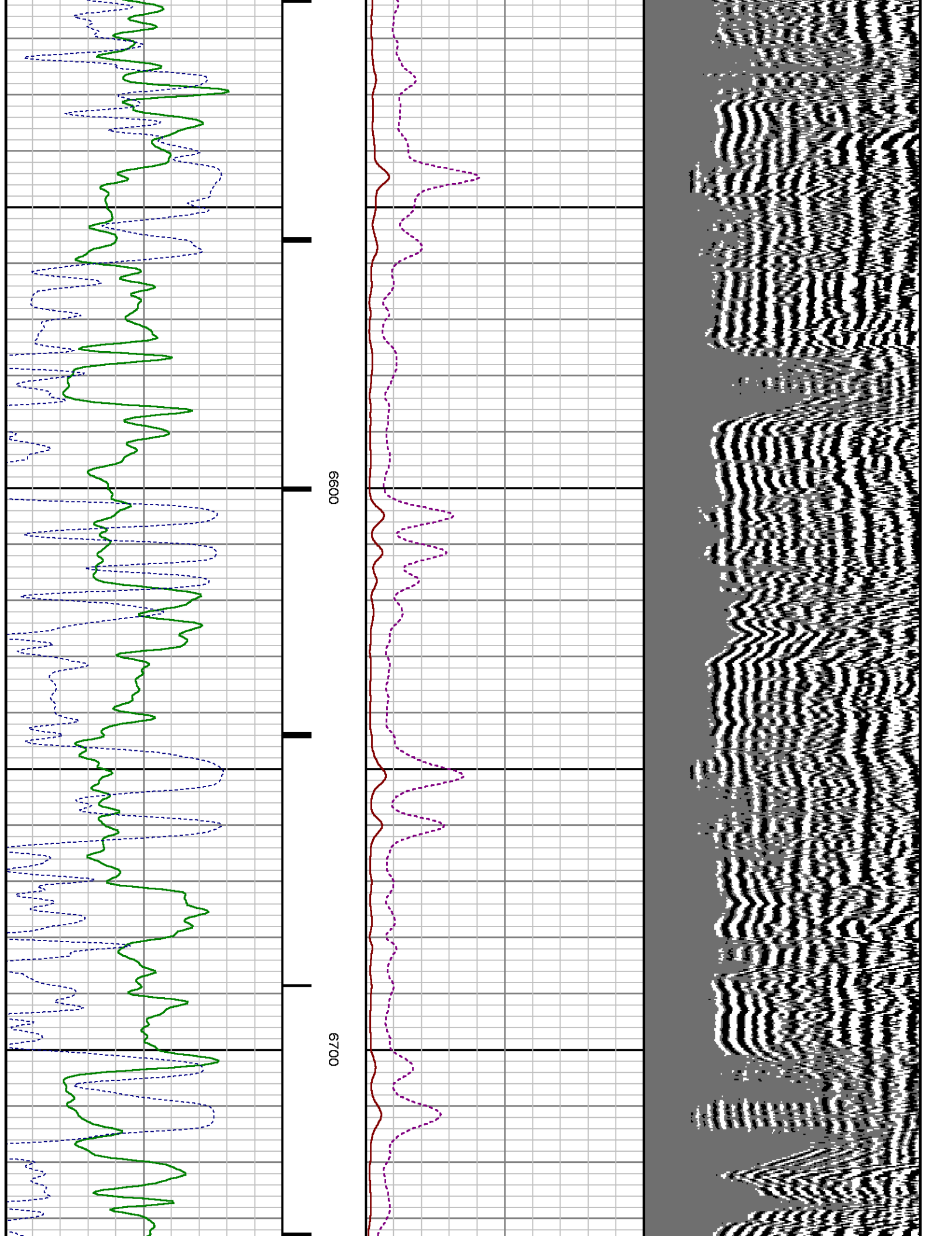


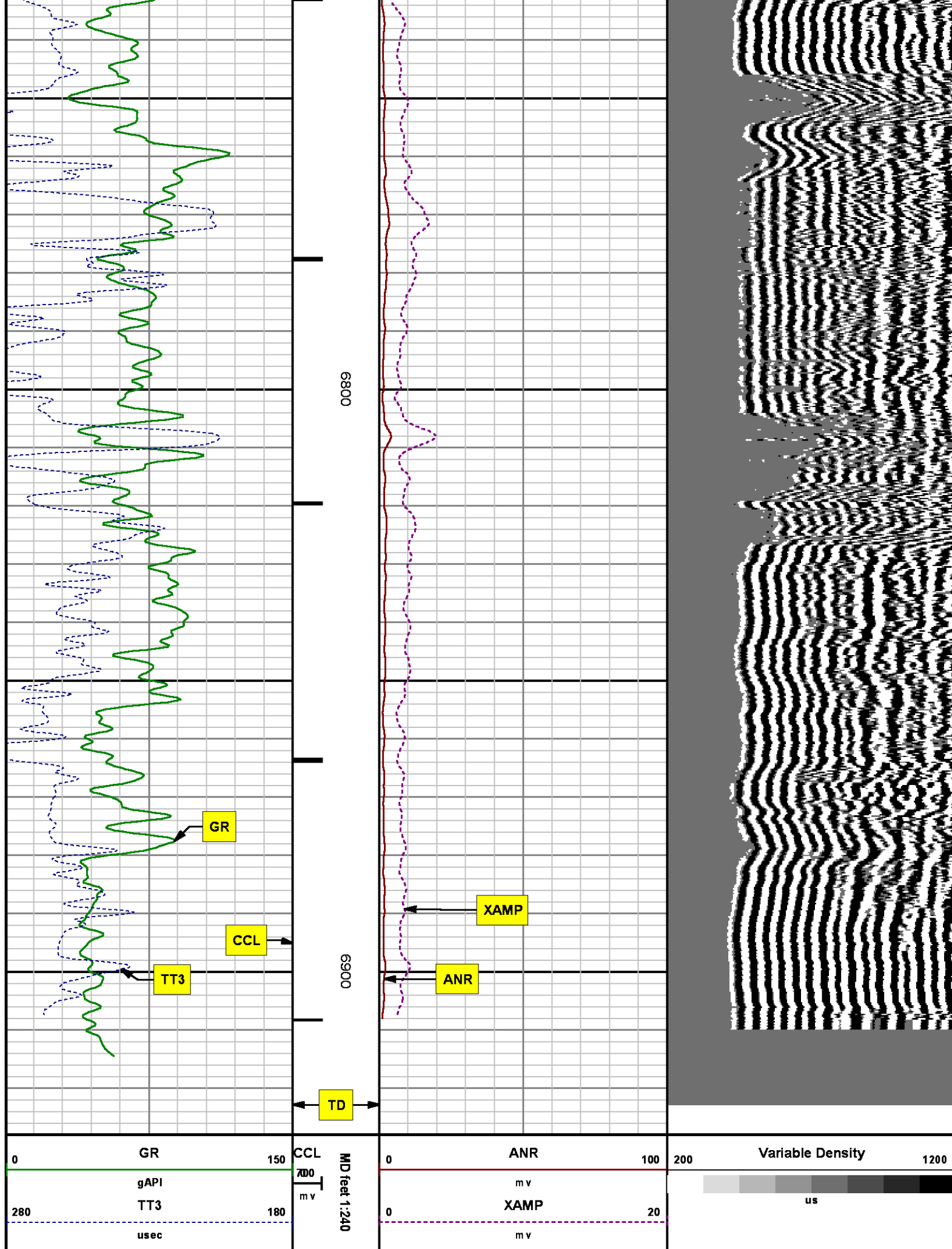












# SECONDARY PRESENTATION

## O PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	35.812	6924.750
RAL	Amp Gate Start Near	195.000	usec	35.812	6924.750
RAL	Amp Gate Start Radial	195.000	usec	35.812	6924.750
RAL	Amp Gate Width Far	25.000	usec	35.812	6924.750
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RAL	casing od	4.500	inches	35.812	6924.750
RAL	casing wt	11.600	lbm/ft	35.812	6924.750
RAL	FB Start Far	291.900	usec	35.812	6924.750
RAL	FB Start Near	175.391	usec	35.812	6924.750
RAL	FB Start Radial	175.391	usec	35.812	6924.750
RAL	FB Thresh Far	10.000	mv	35.812	6924.750
RAL	FB Thresh Near	4.000	mv	35.812	6924.750
RAL	FB Thresh Radial	4.000	mv	35.812	6924.750
RAL	Fluid Travel Time	200.000	usec/ft	35.812	6925.718

### 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					



Company : WPX ENERGY

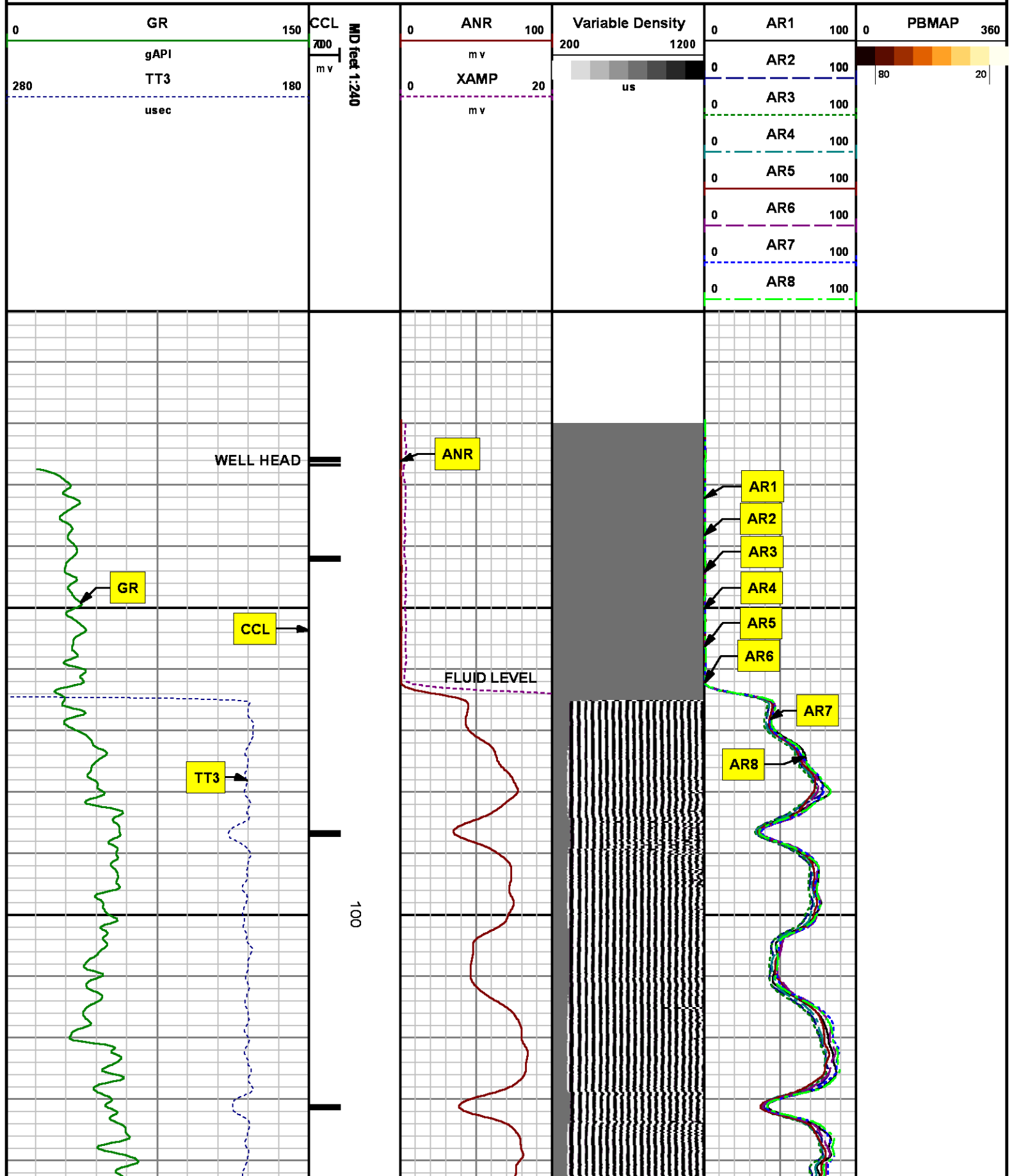
Well : PA 23-6

File Name : d:\welldata\wpx\pa 23-6\26ra\main.xtf

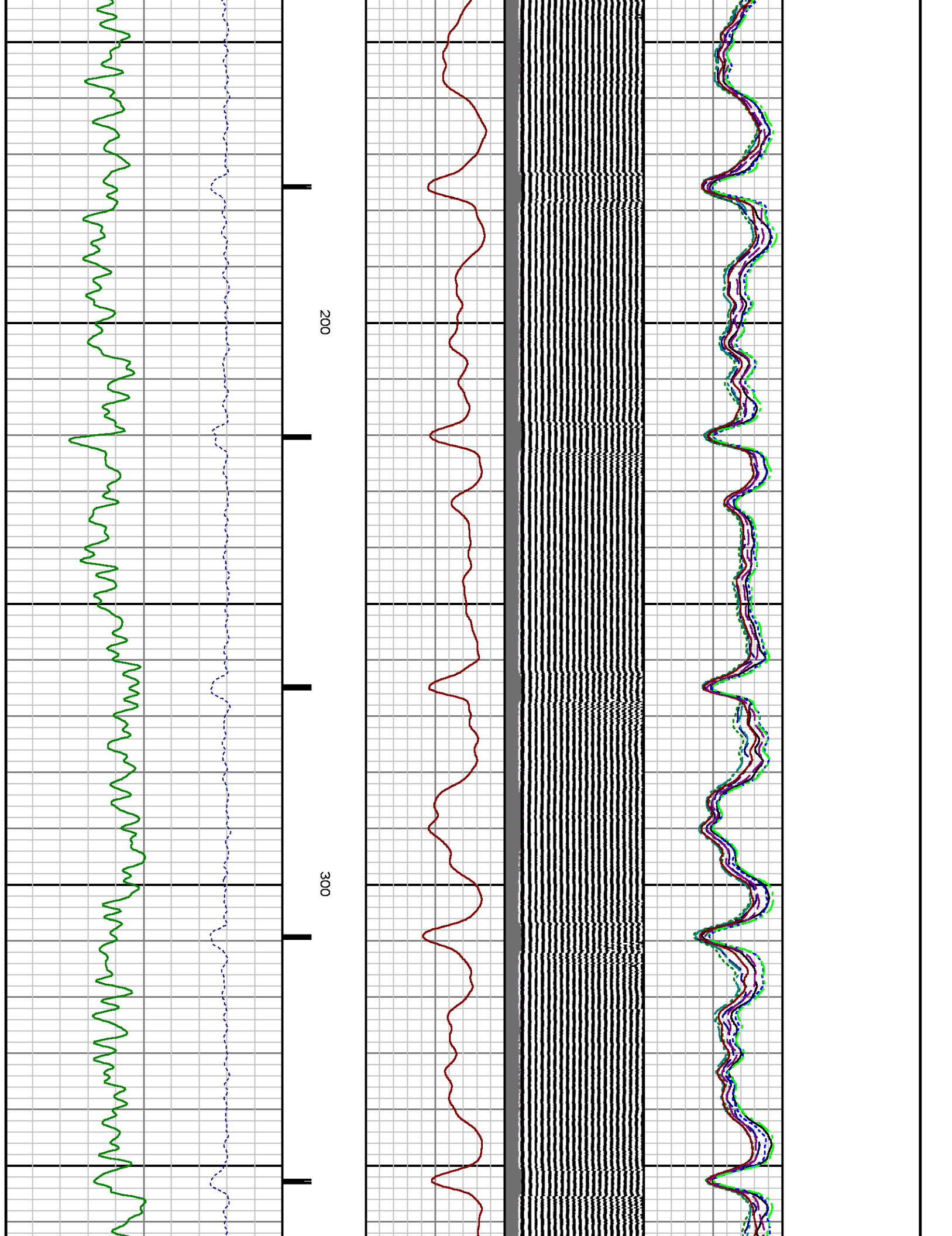
Mode : PlotMgr 5.4.504

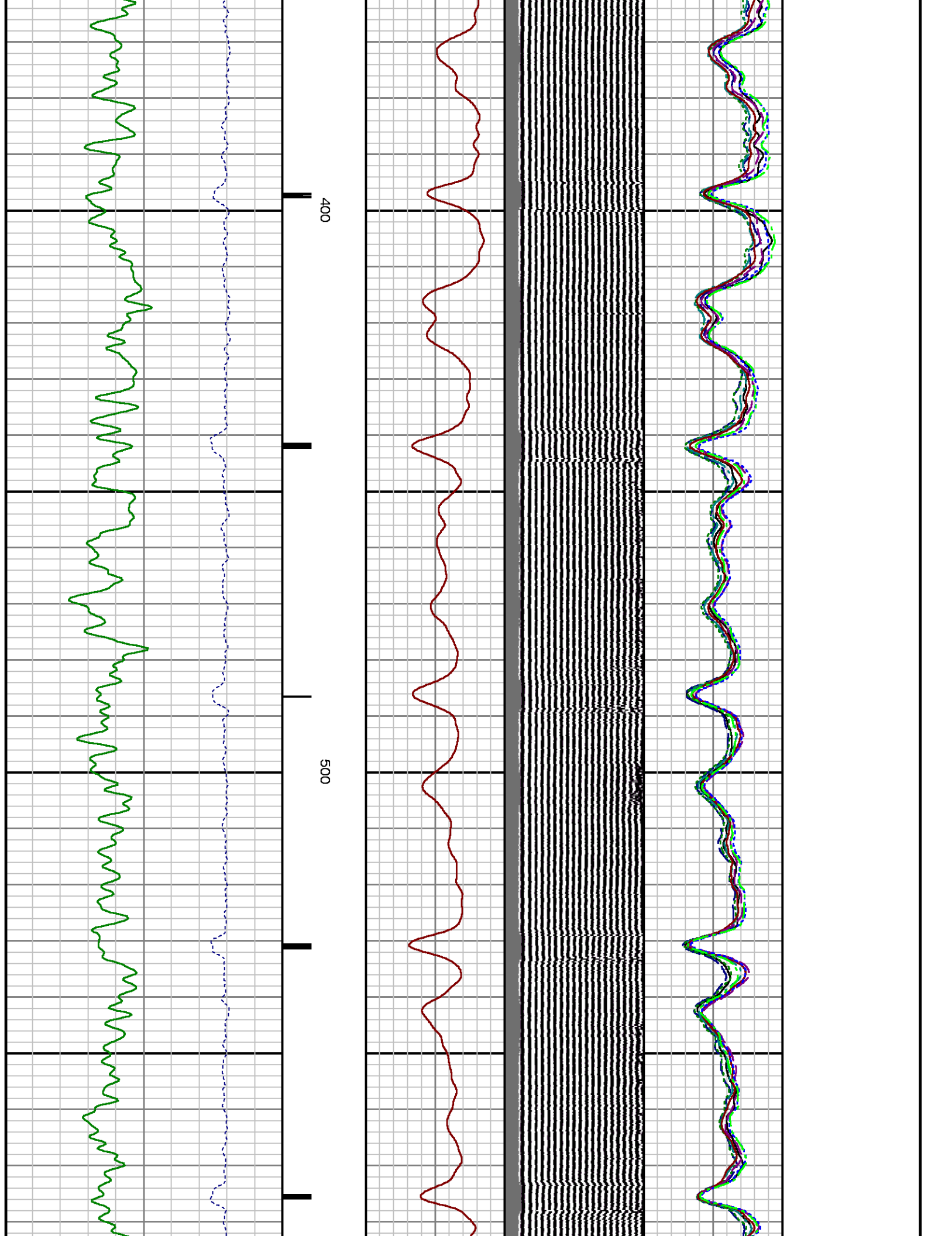
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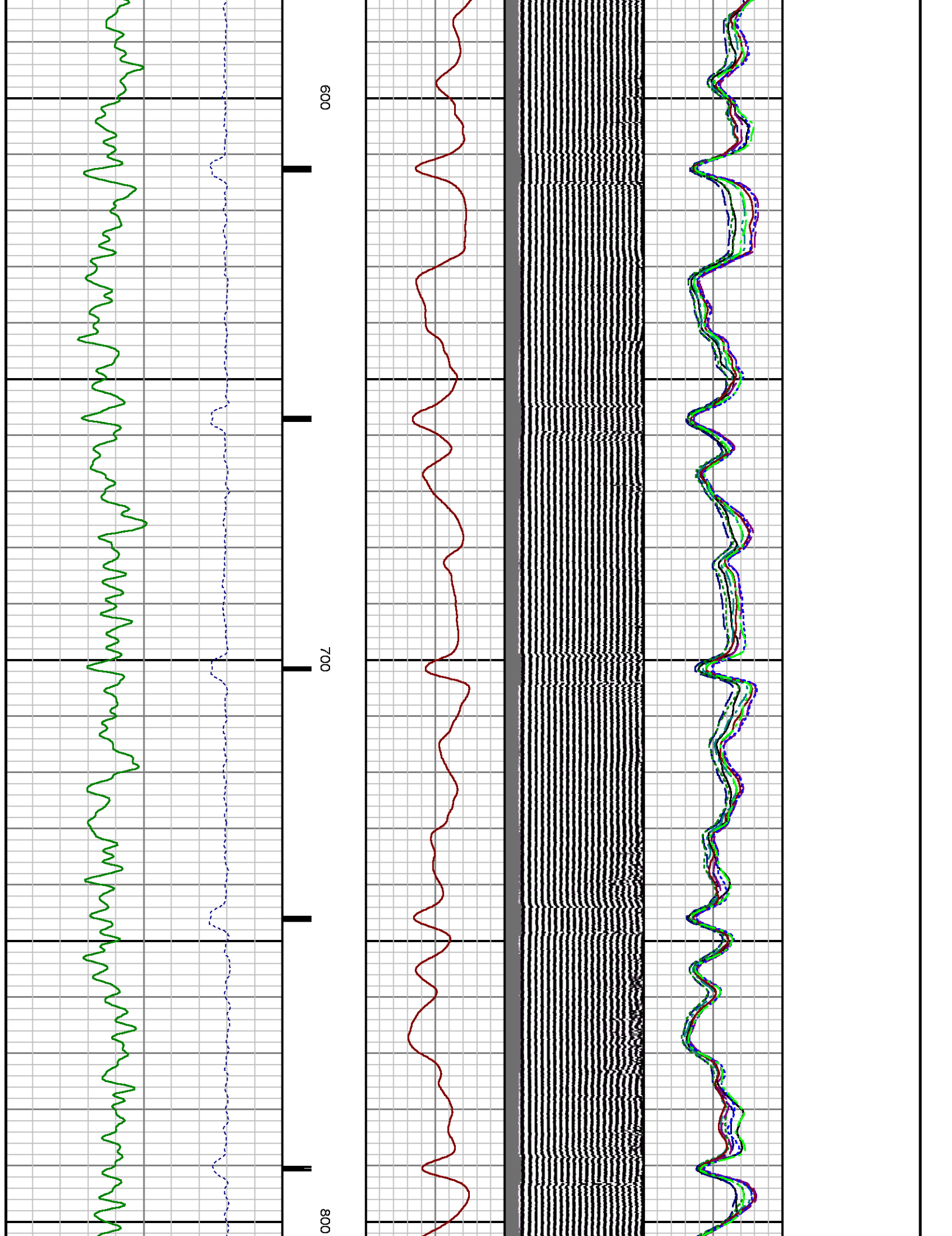
Created : 5/30/2014 12:19:47 PM

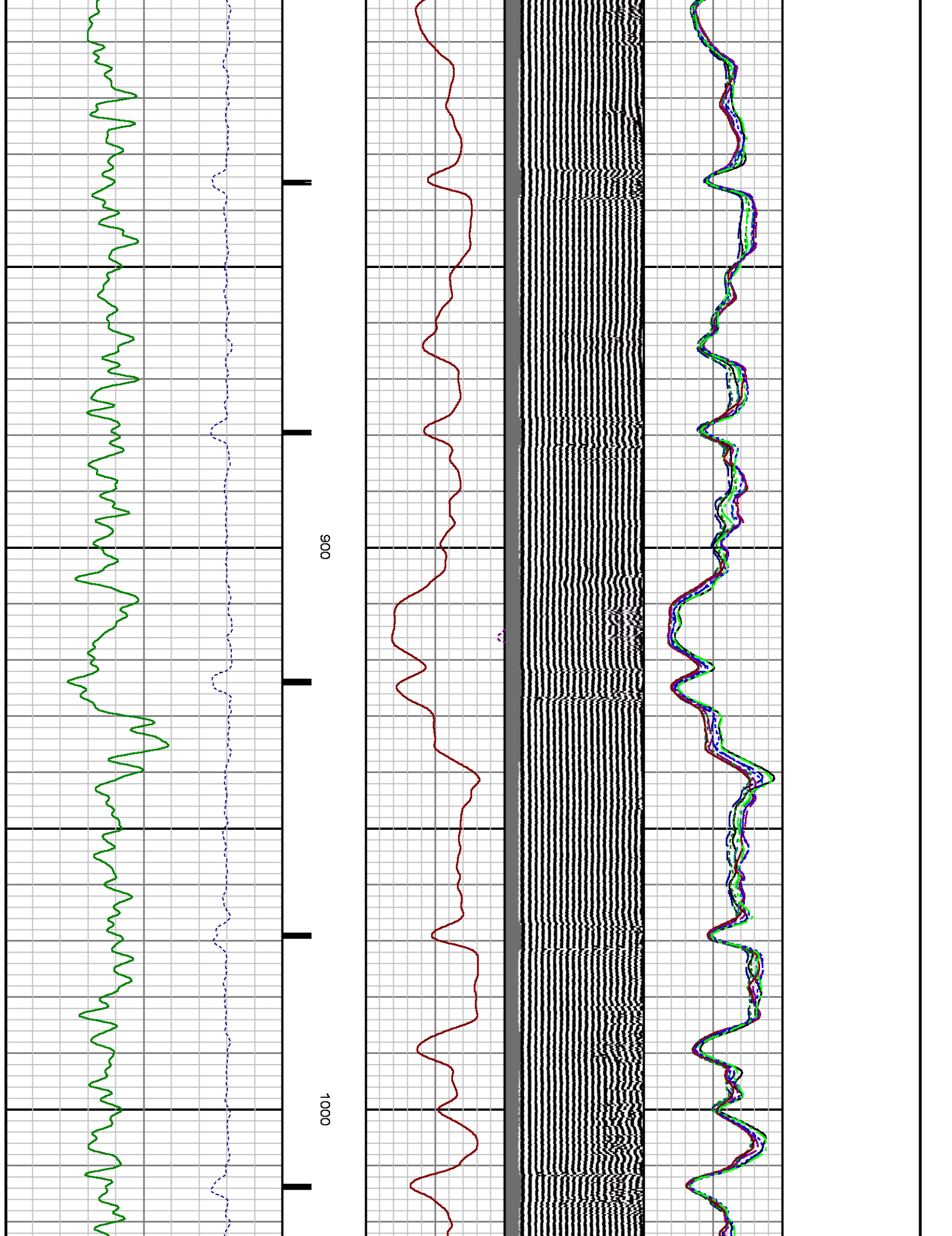


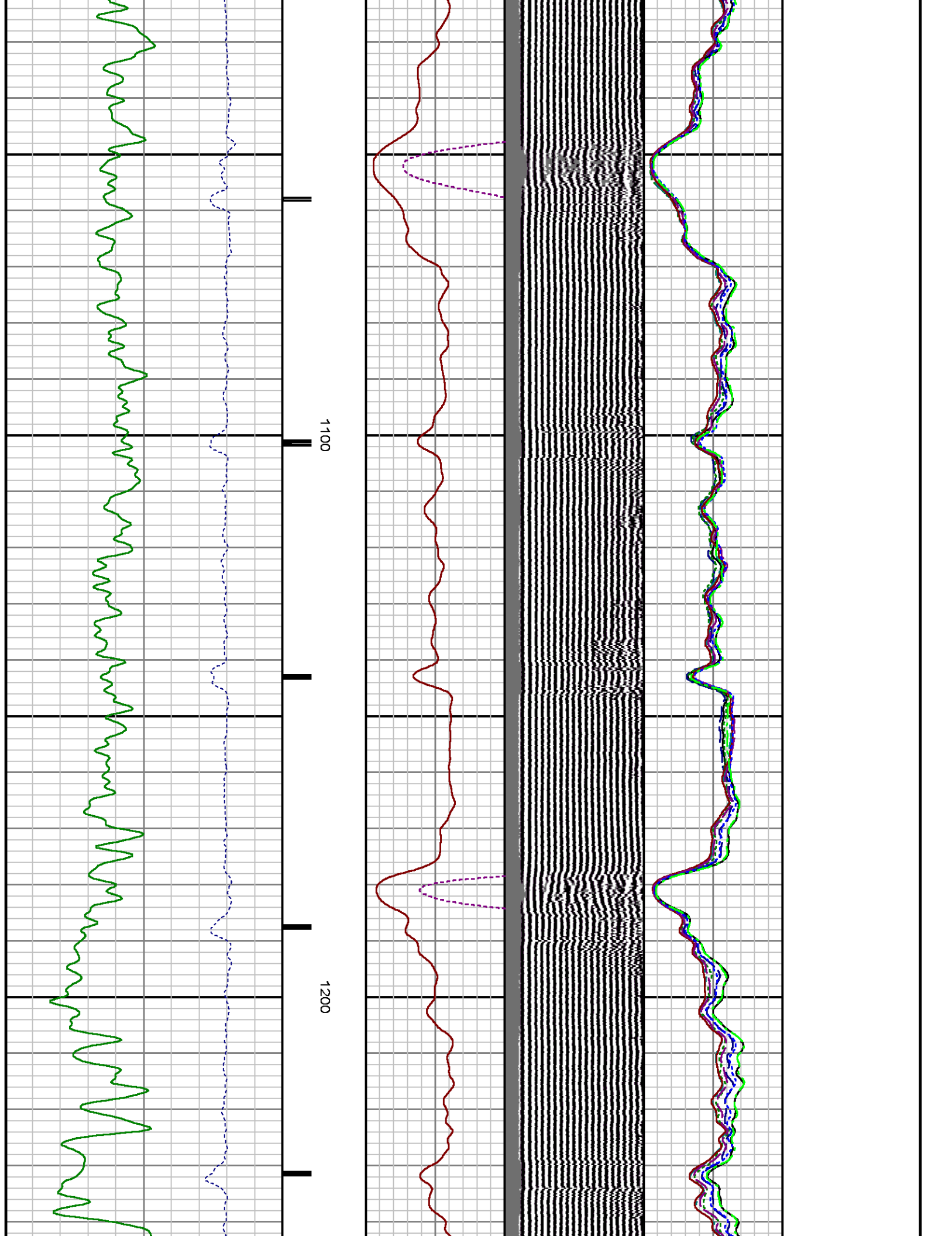




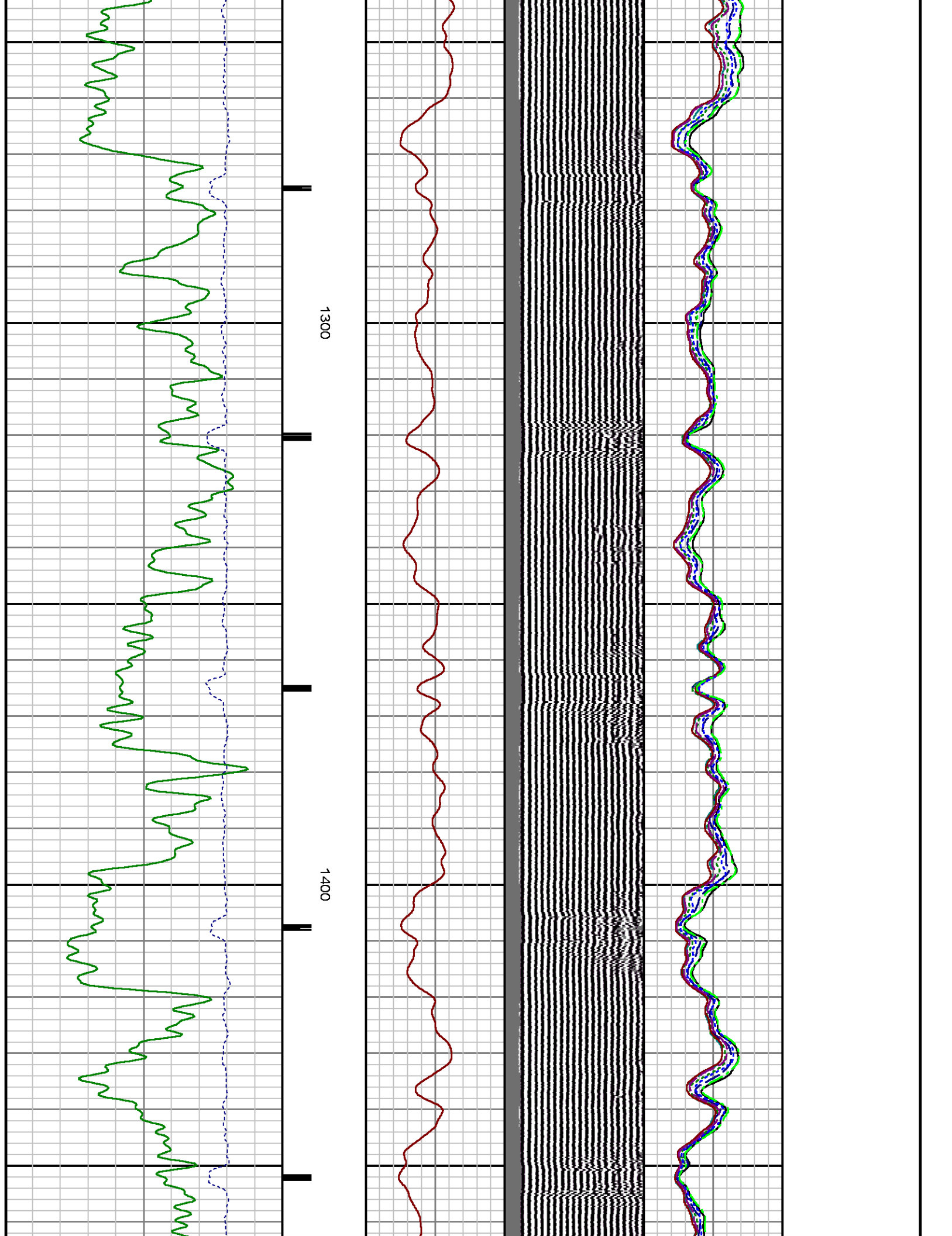


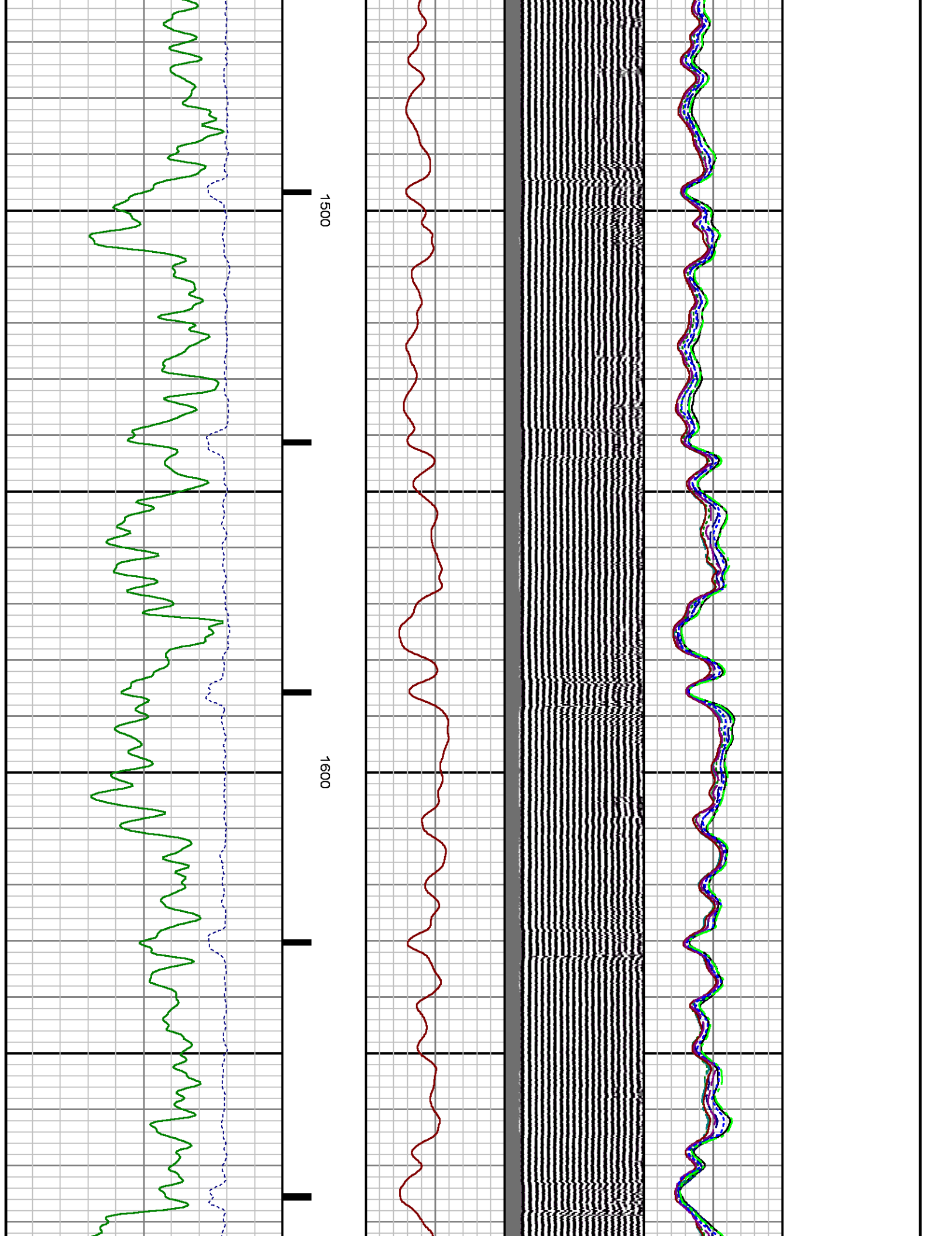


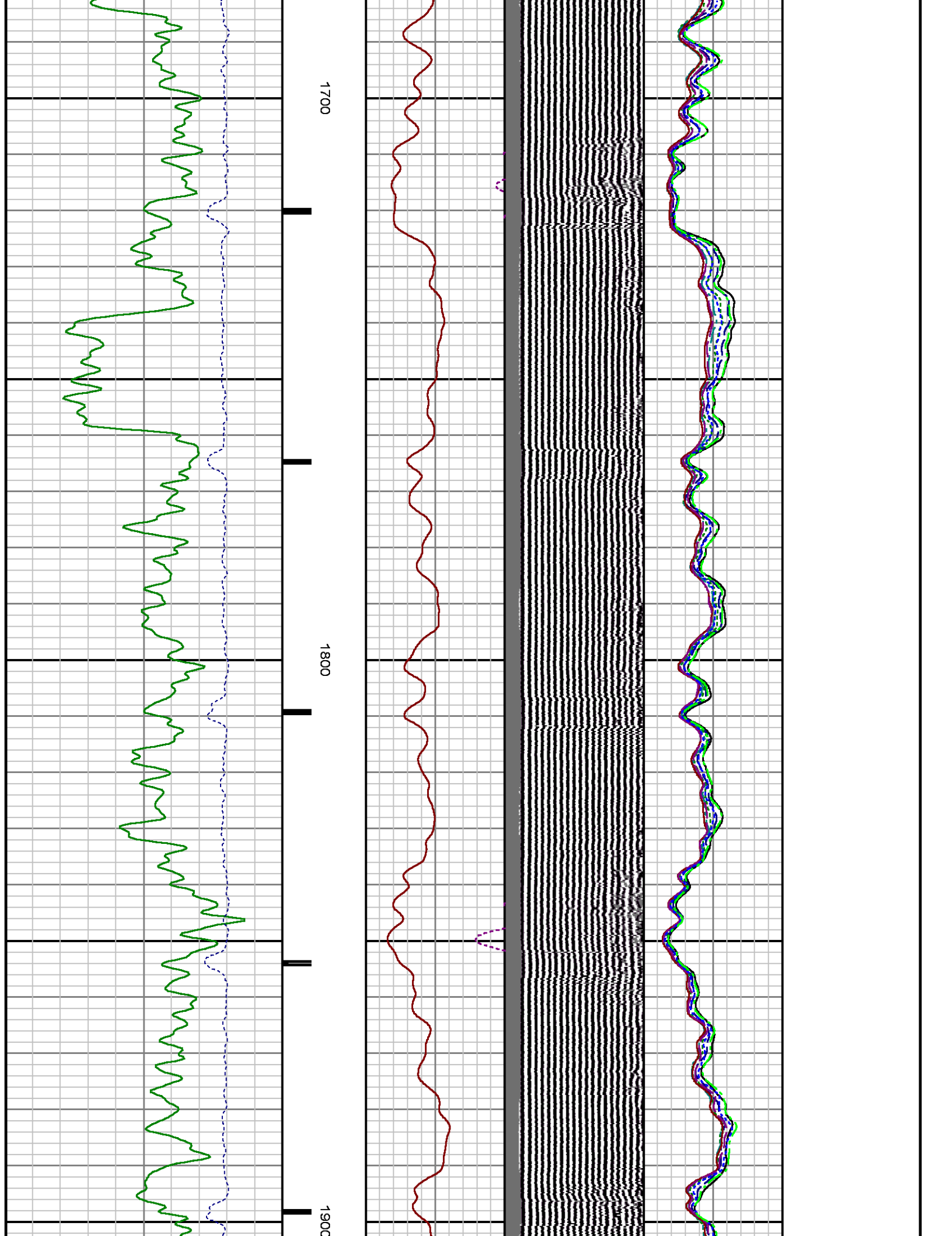


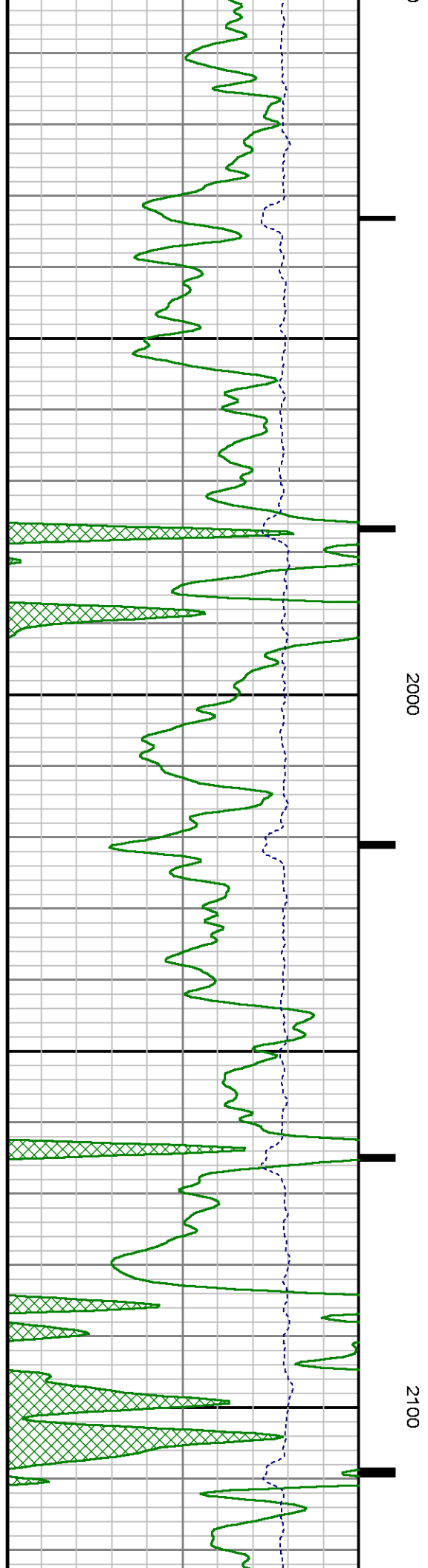
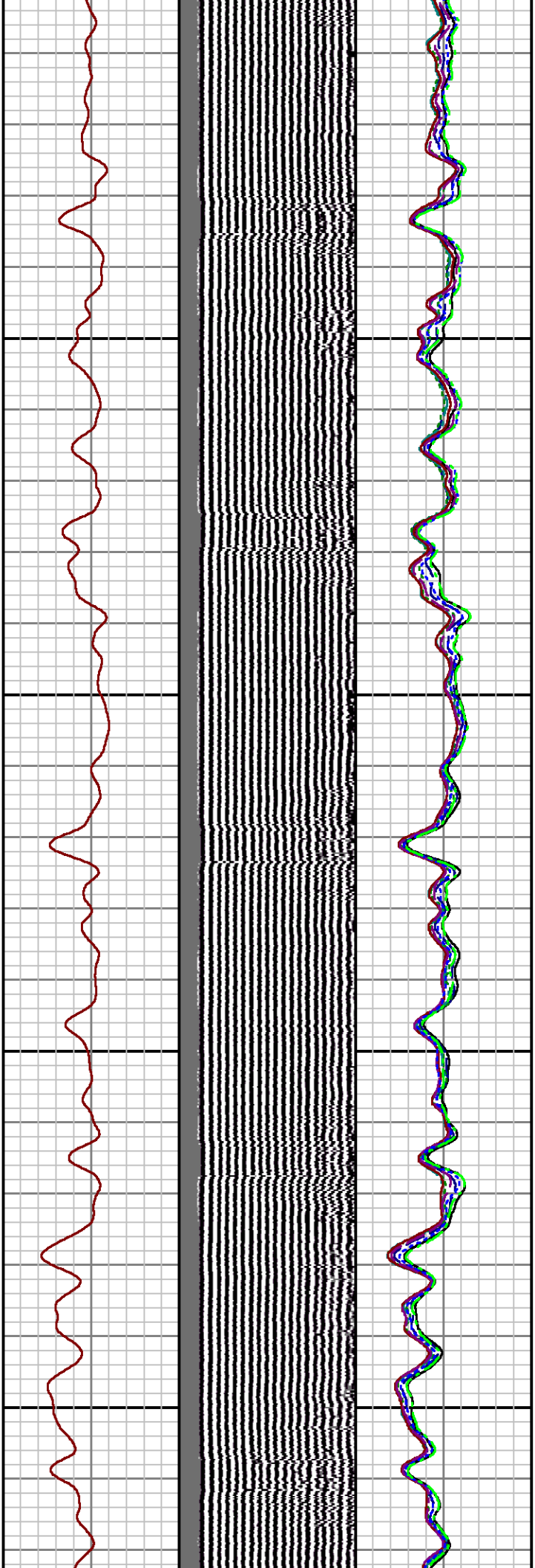




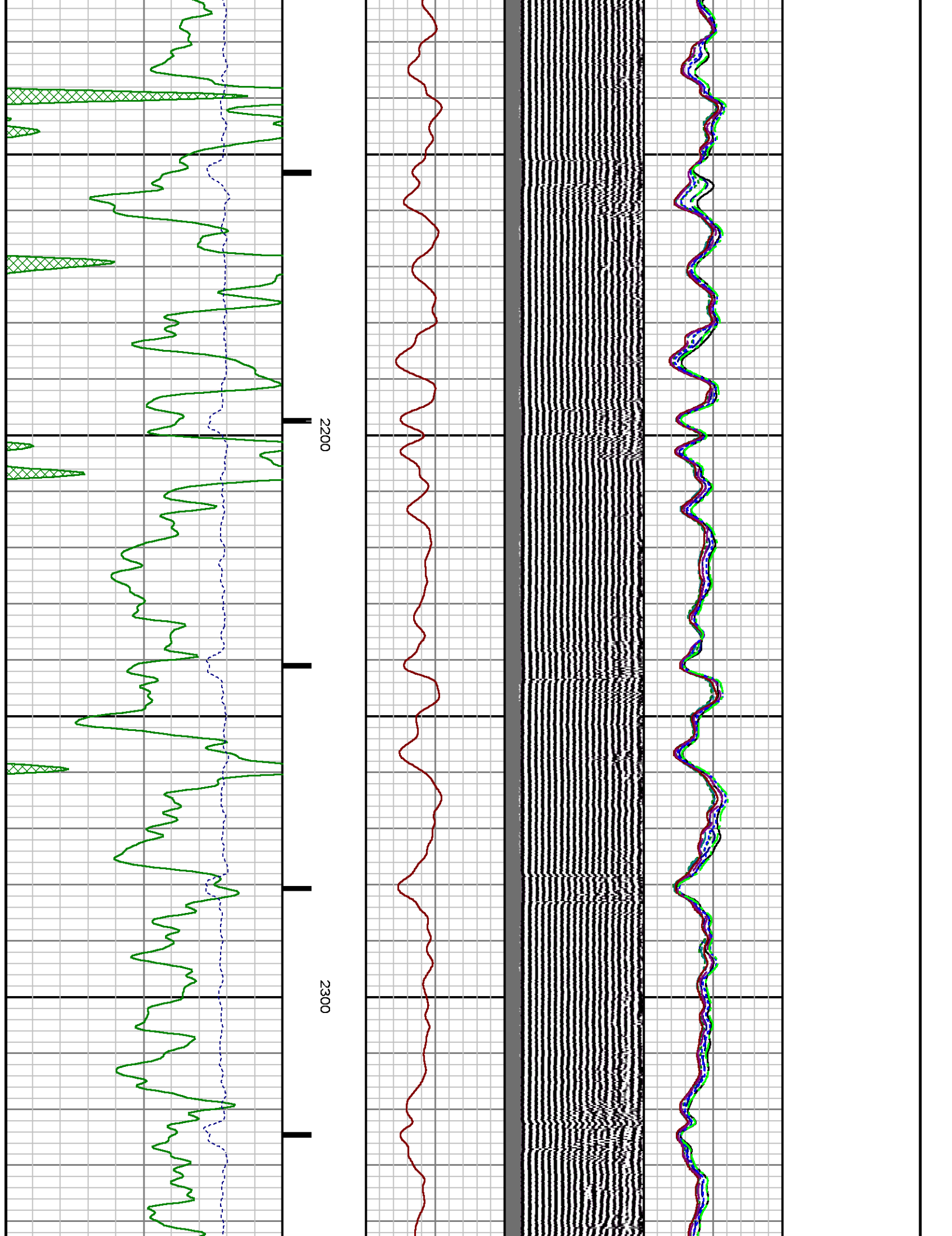




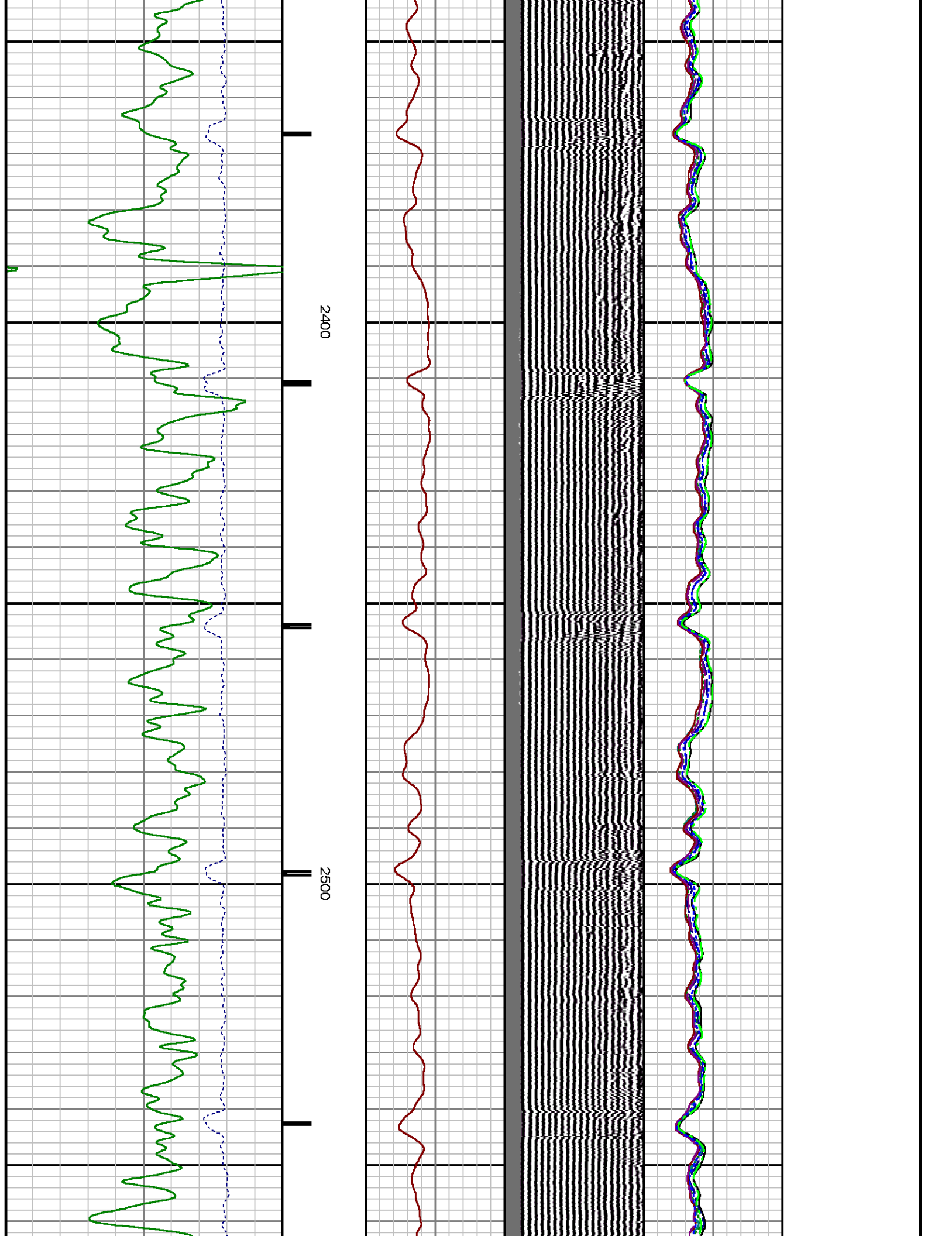


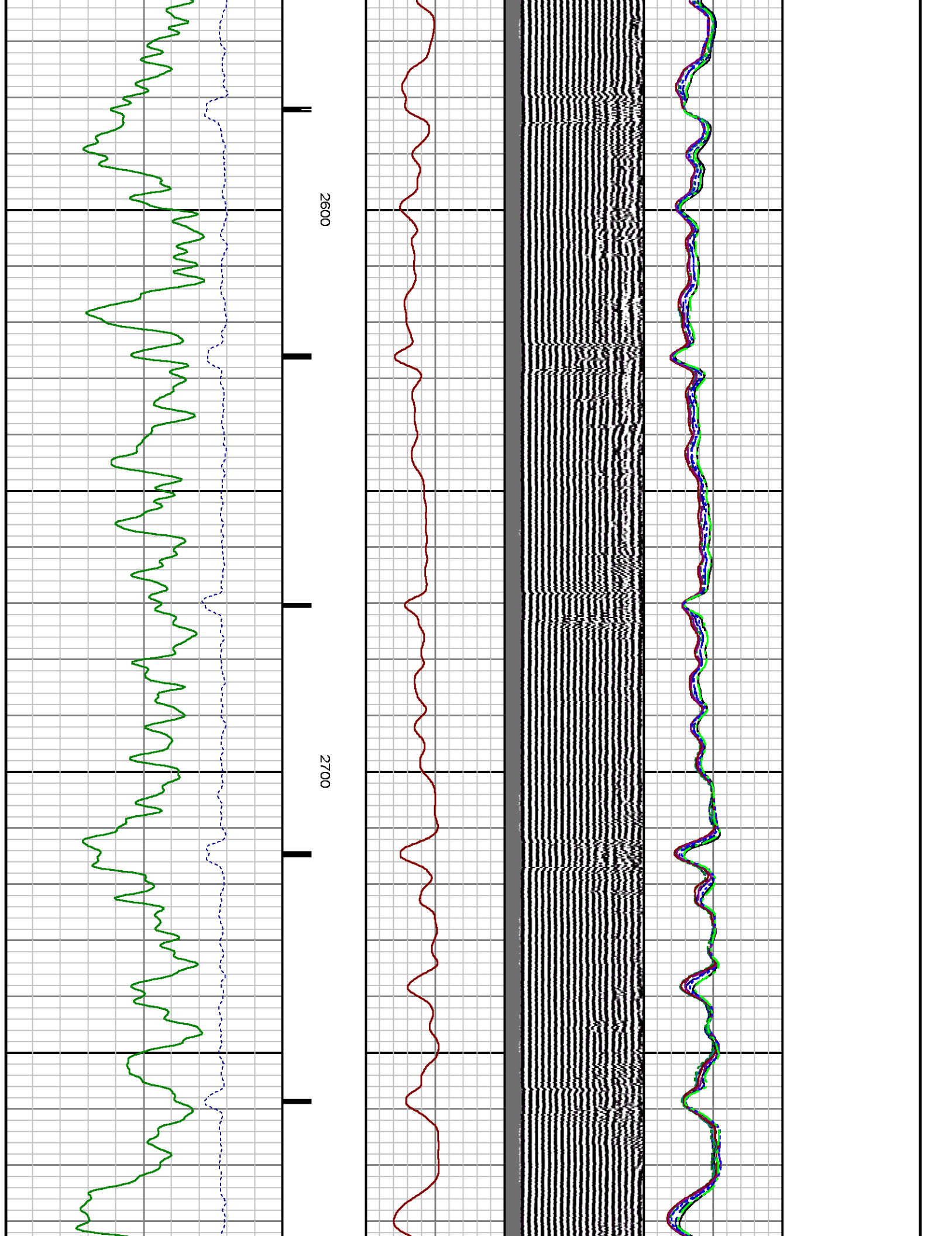


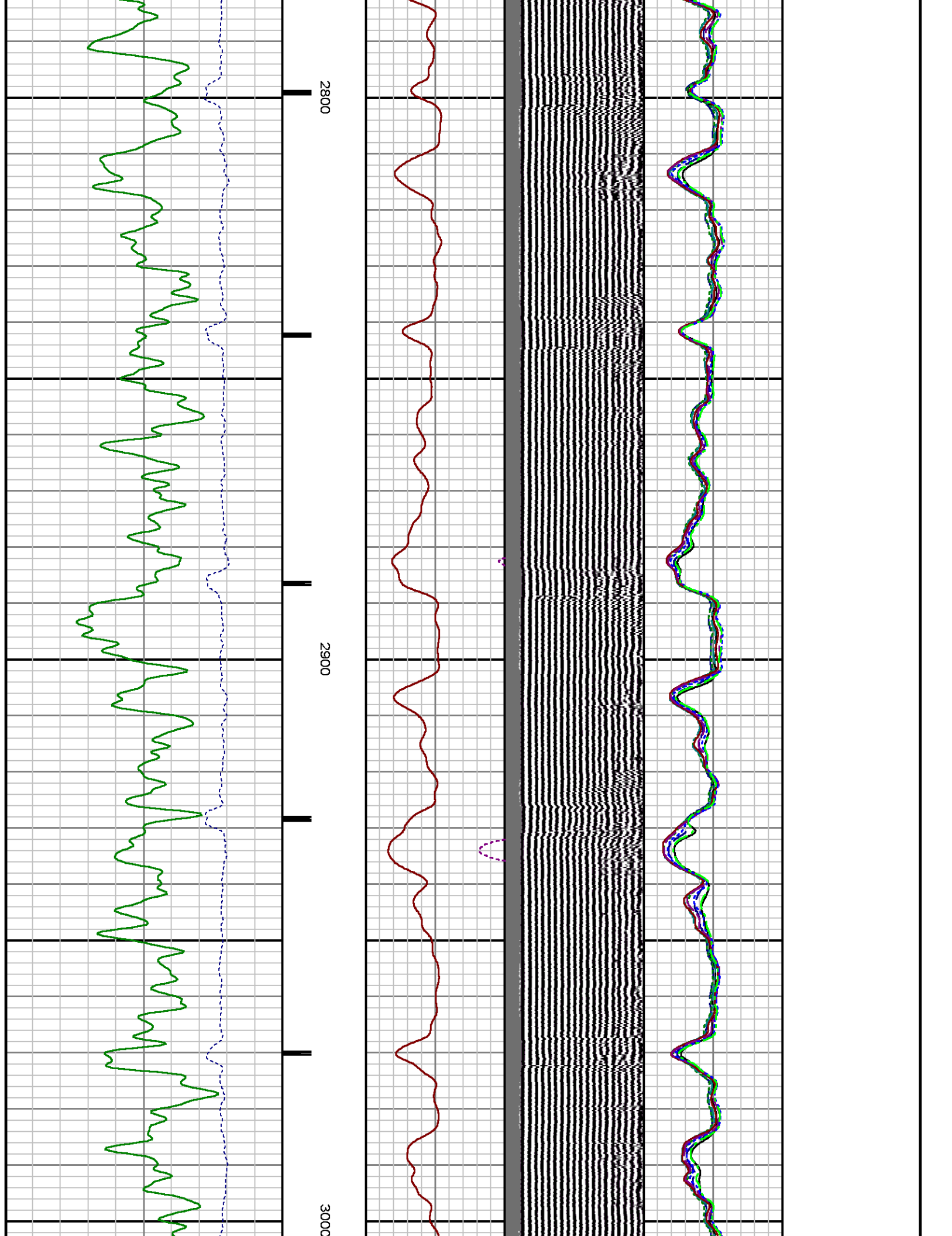


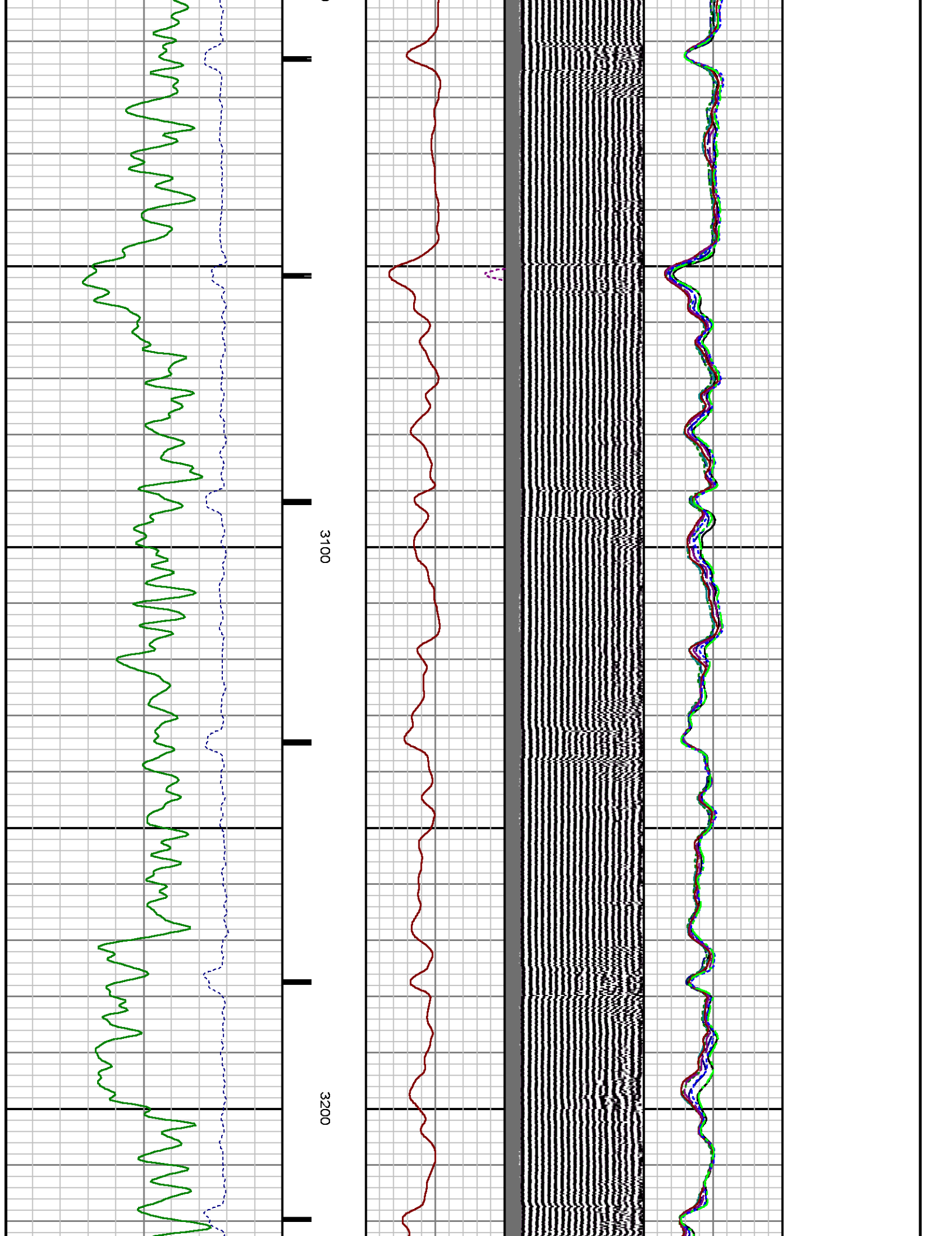




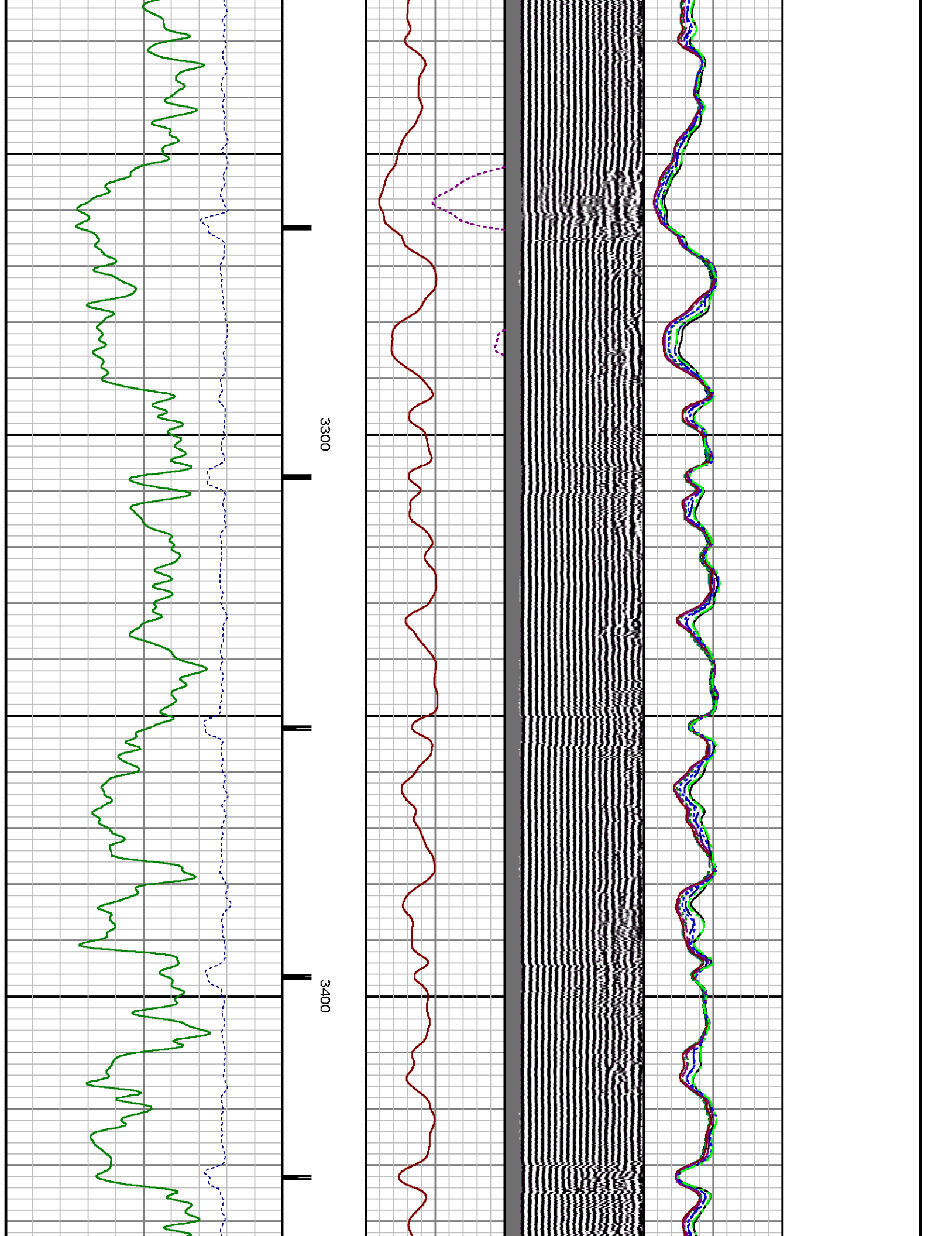




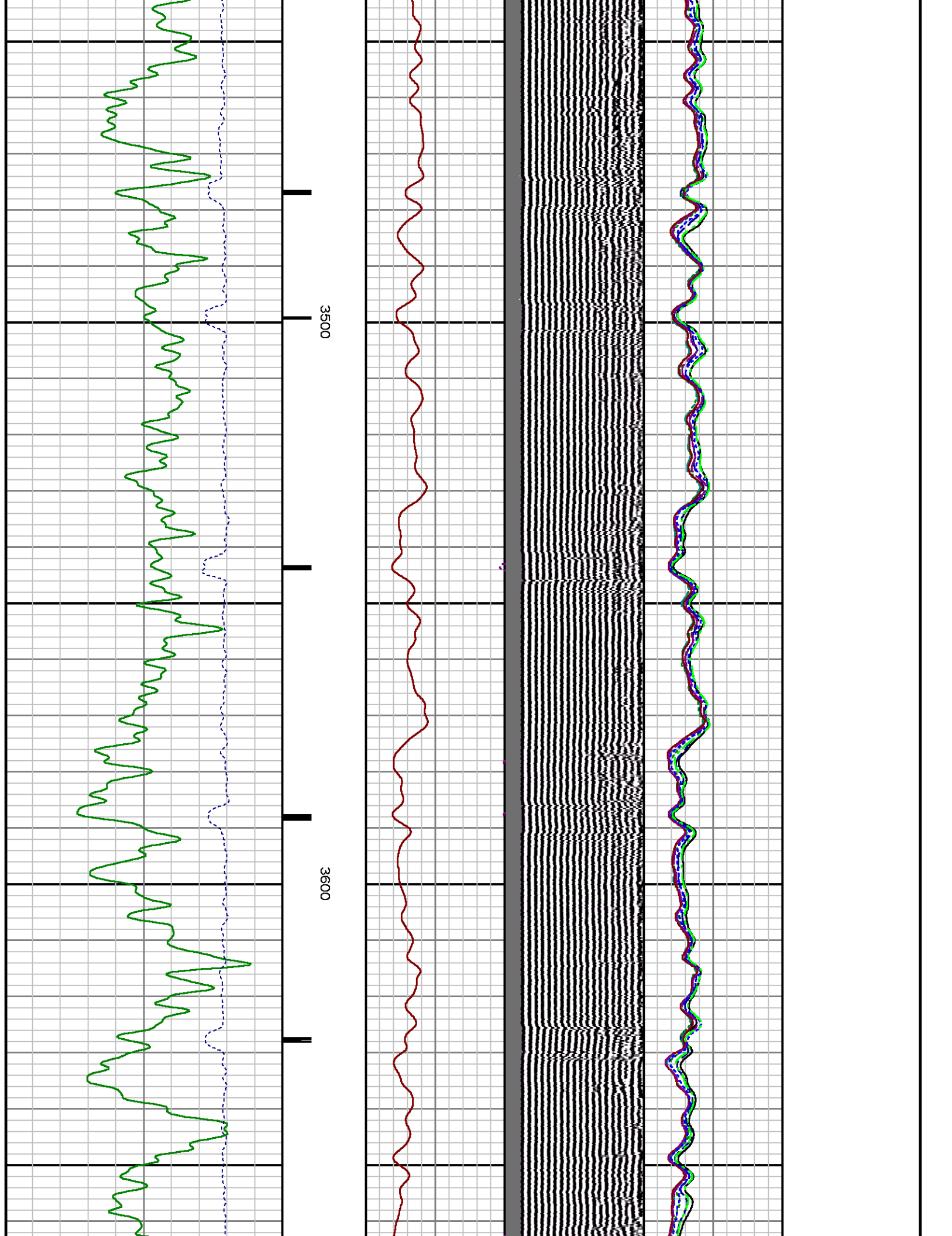


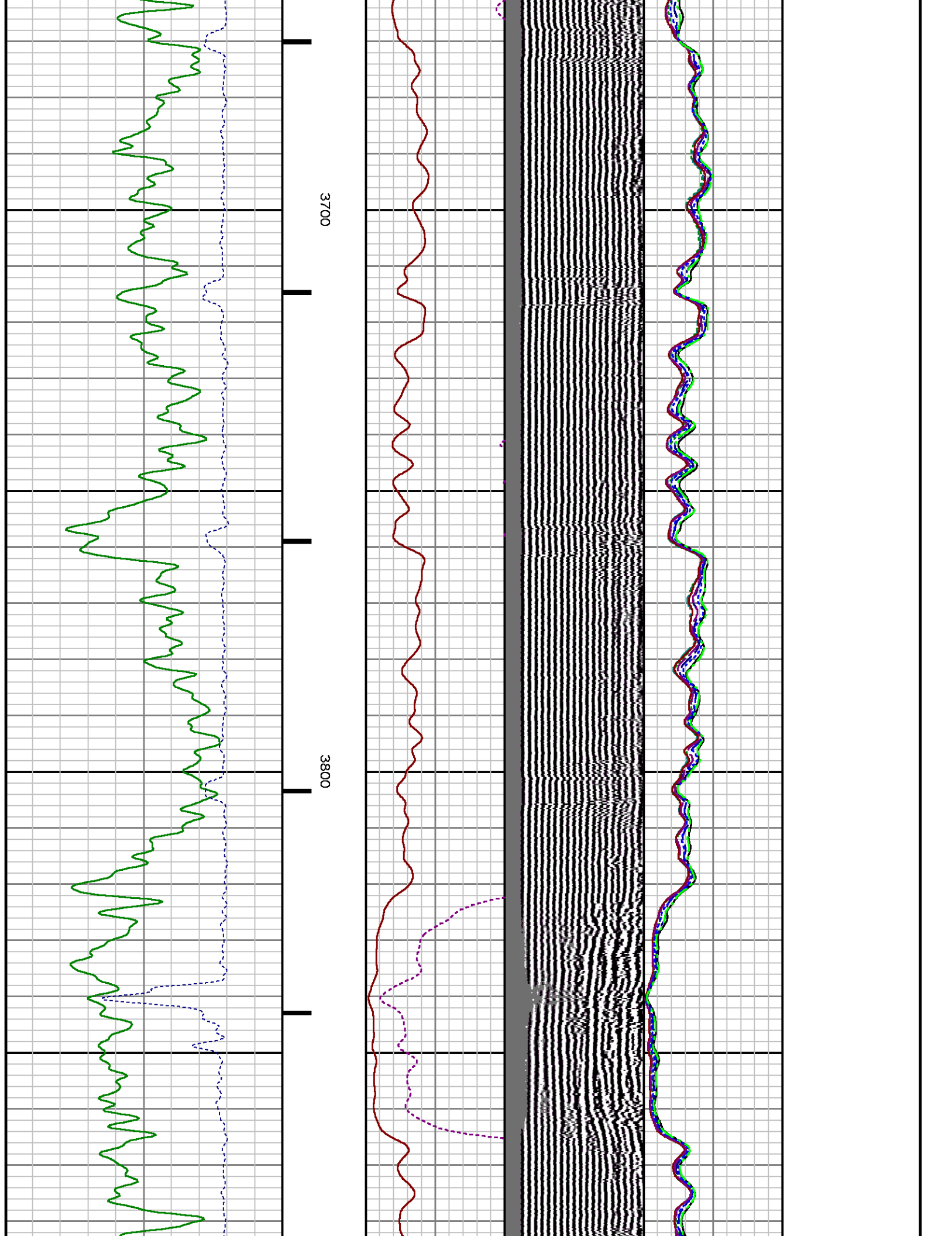


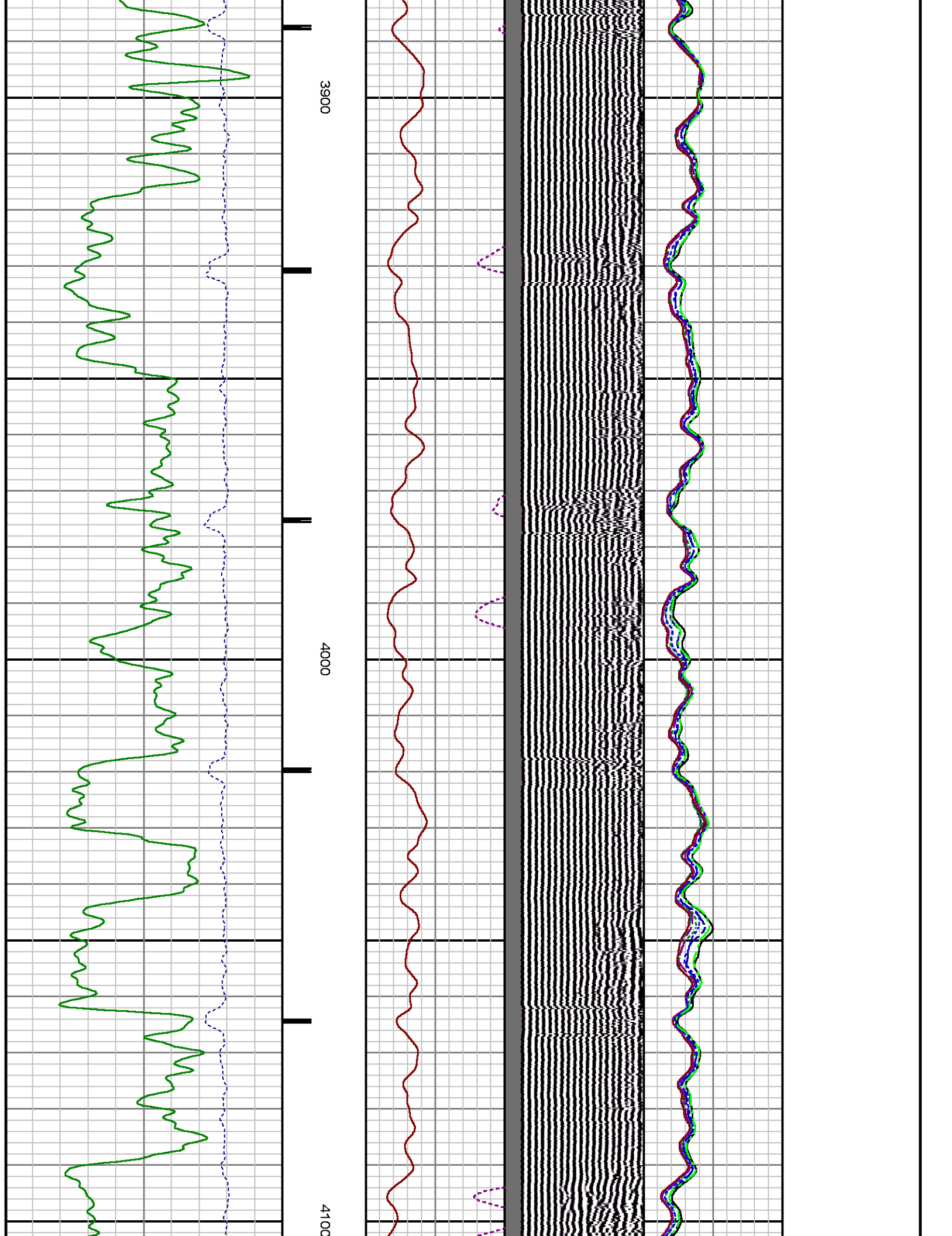


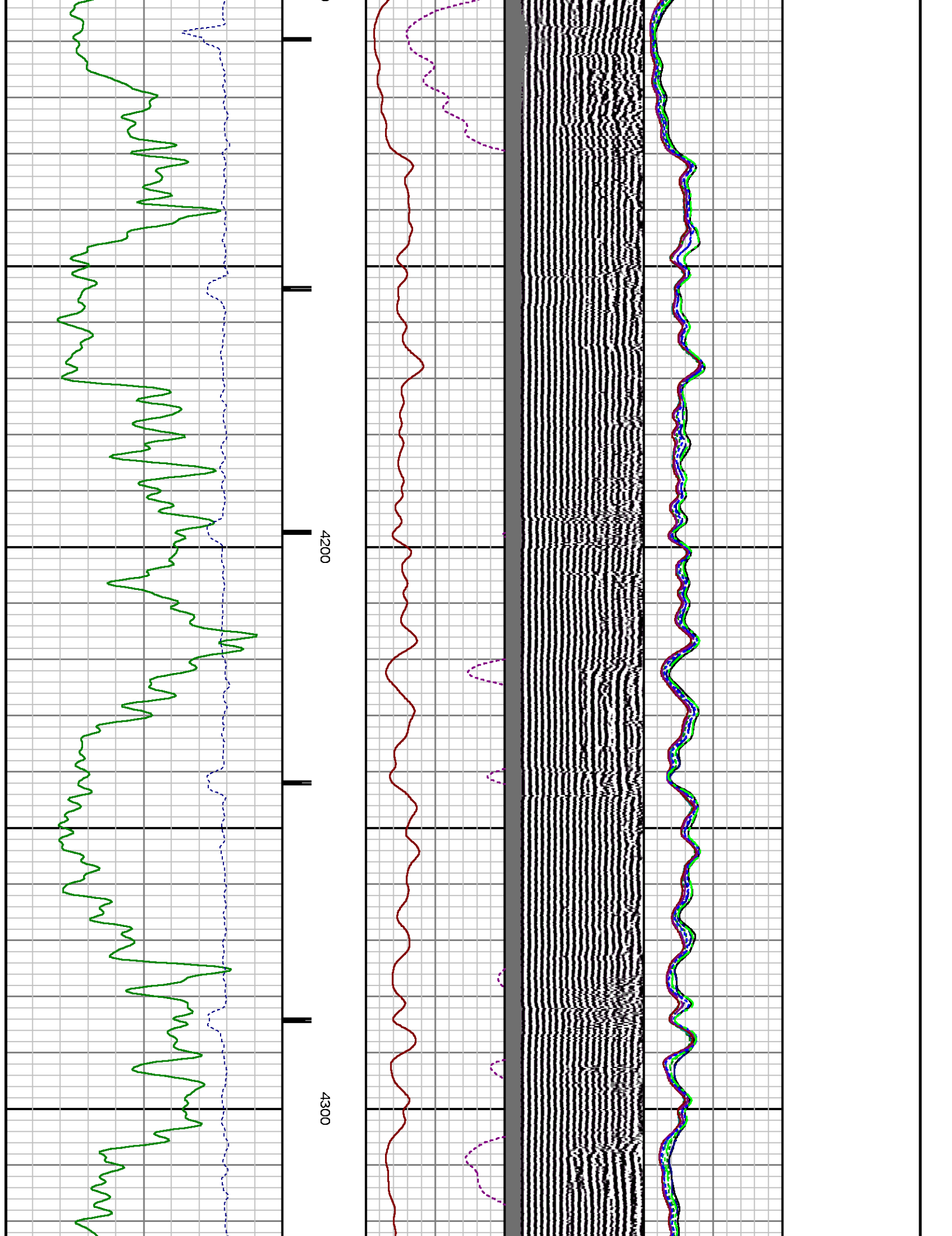




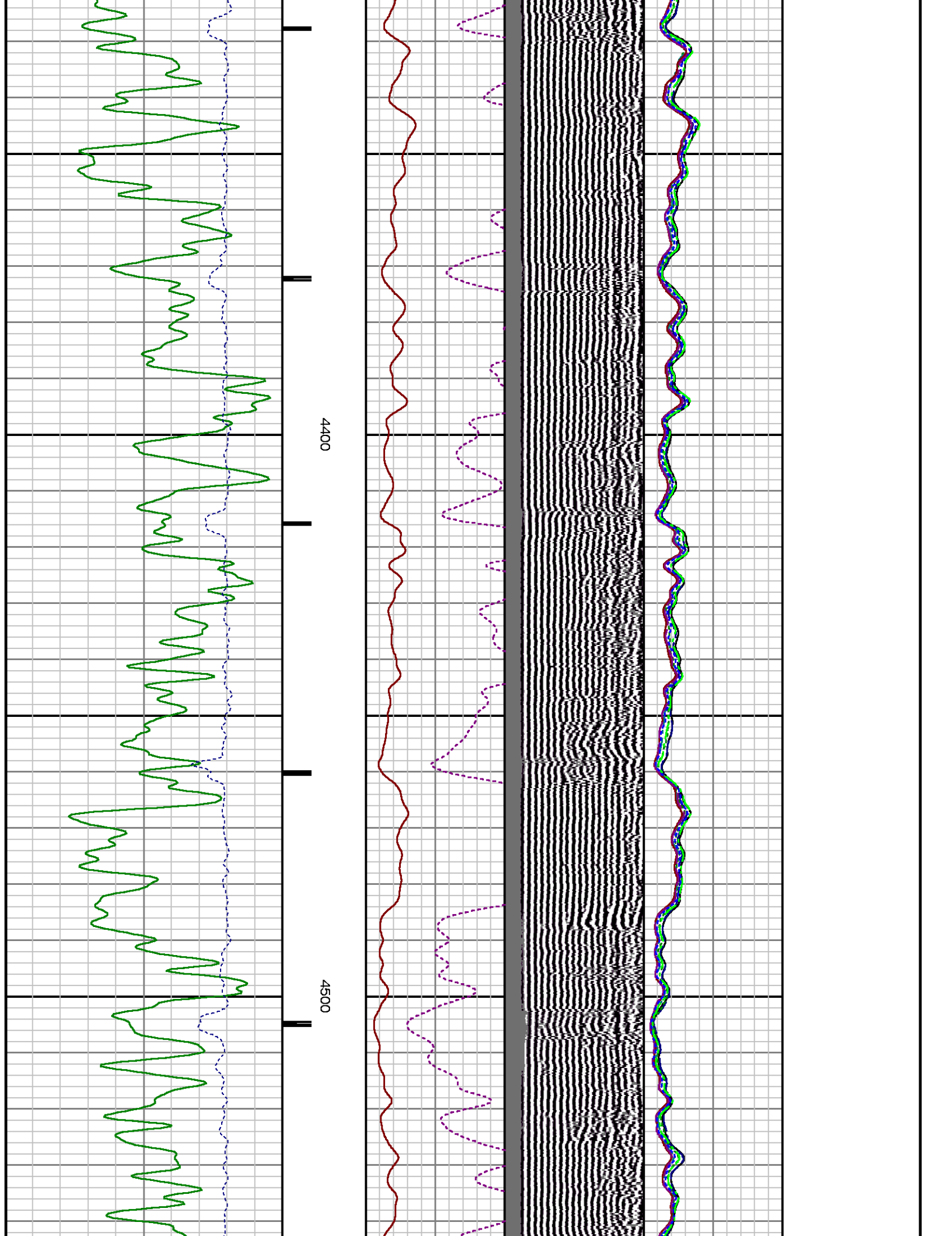




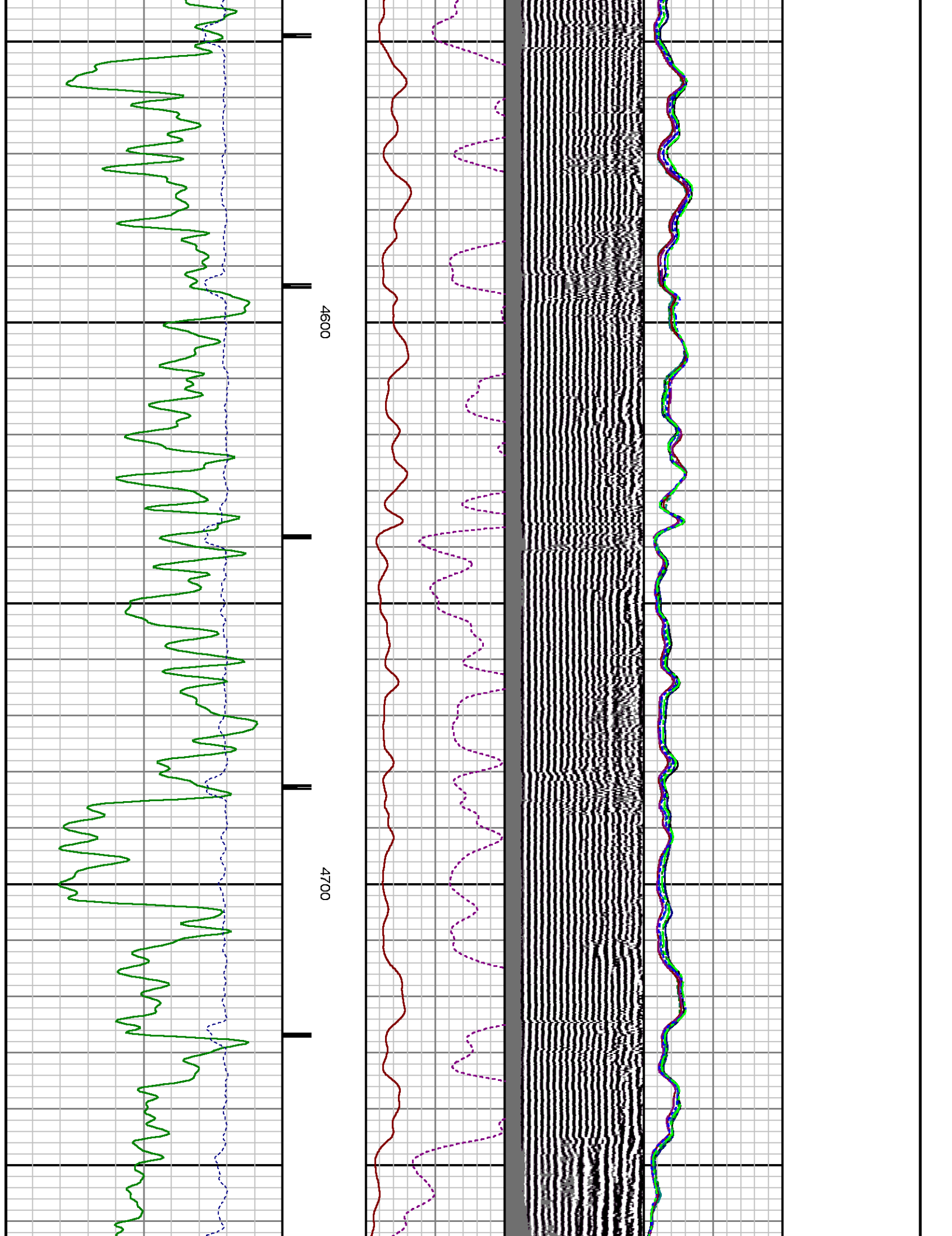


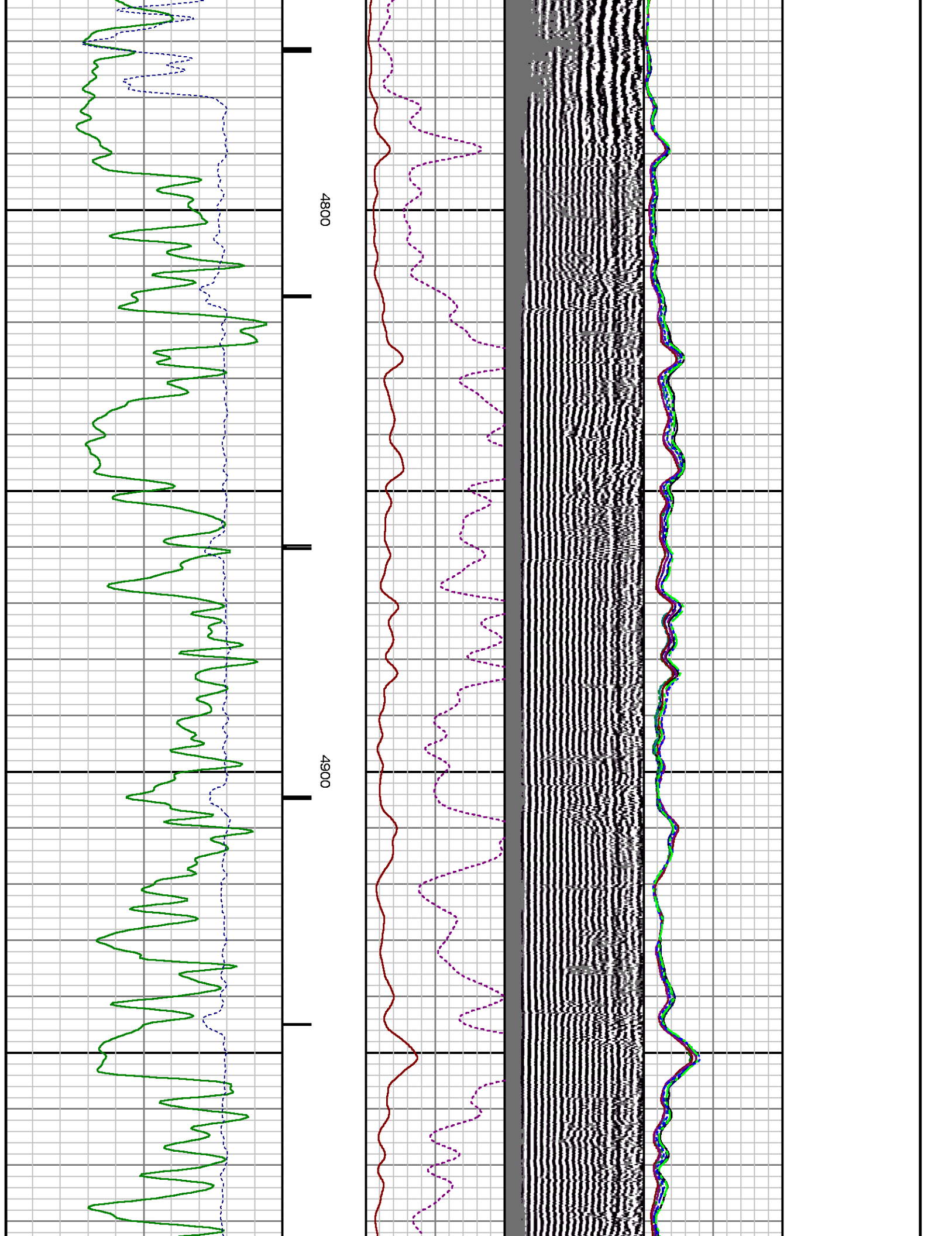


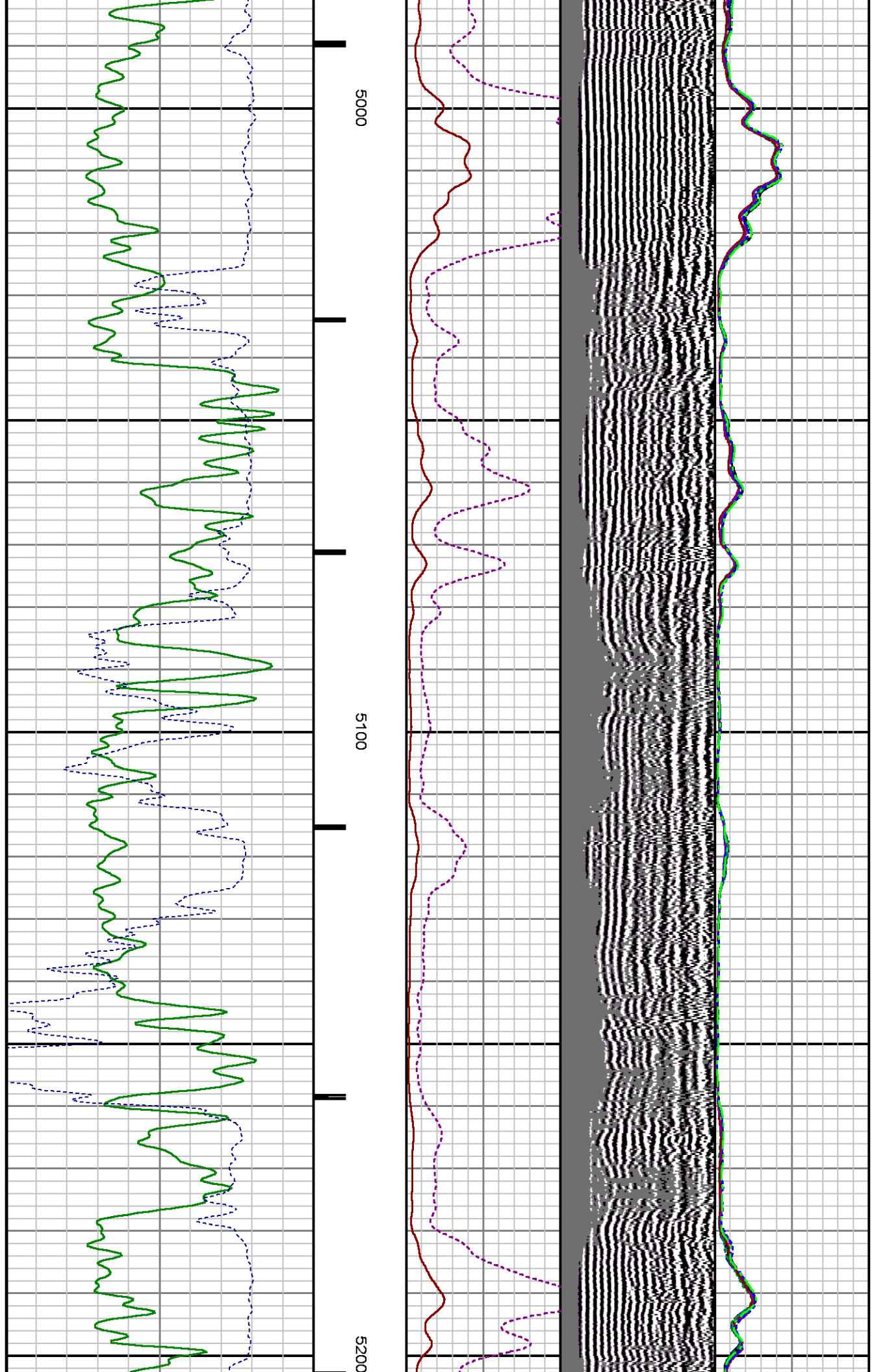


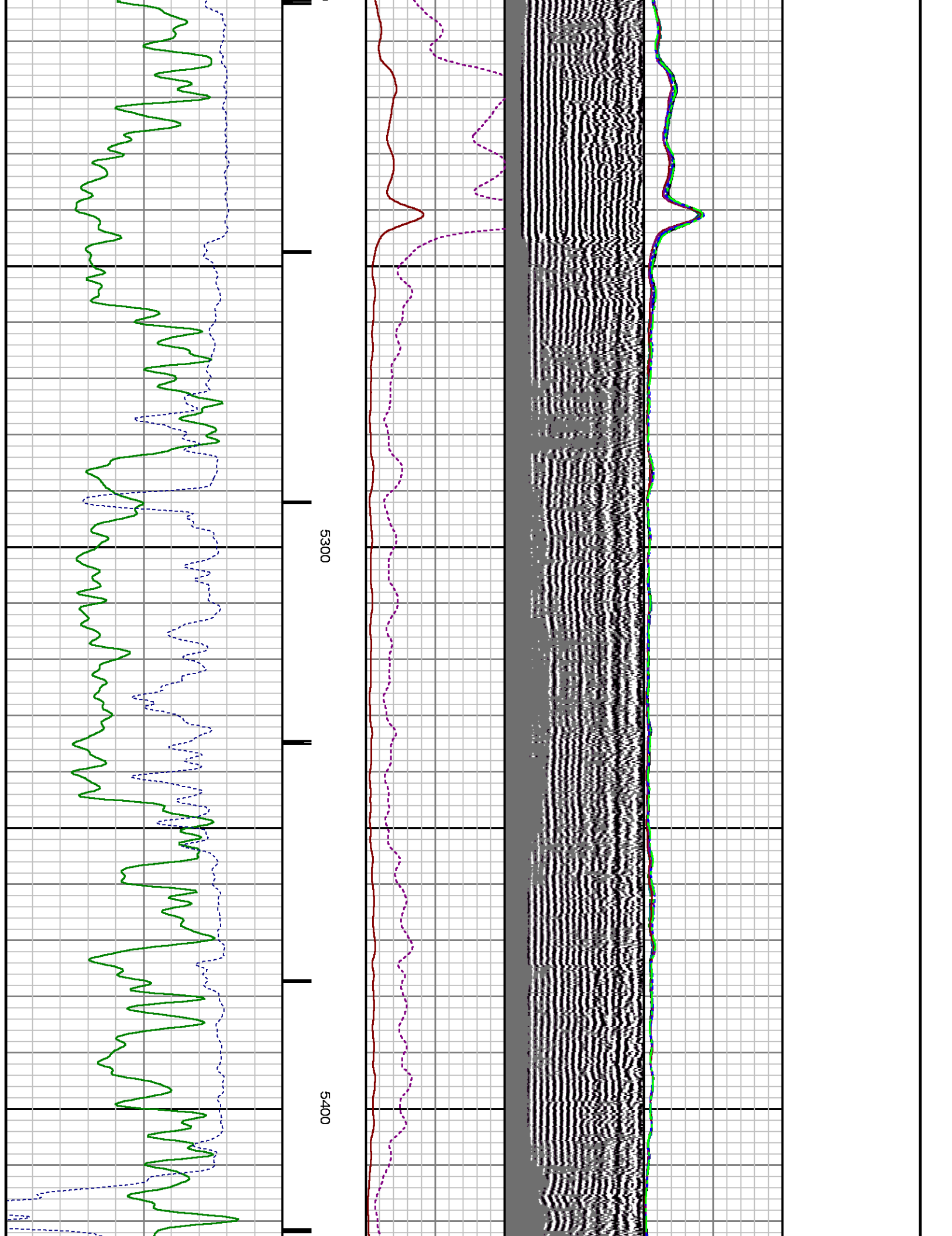




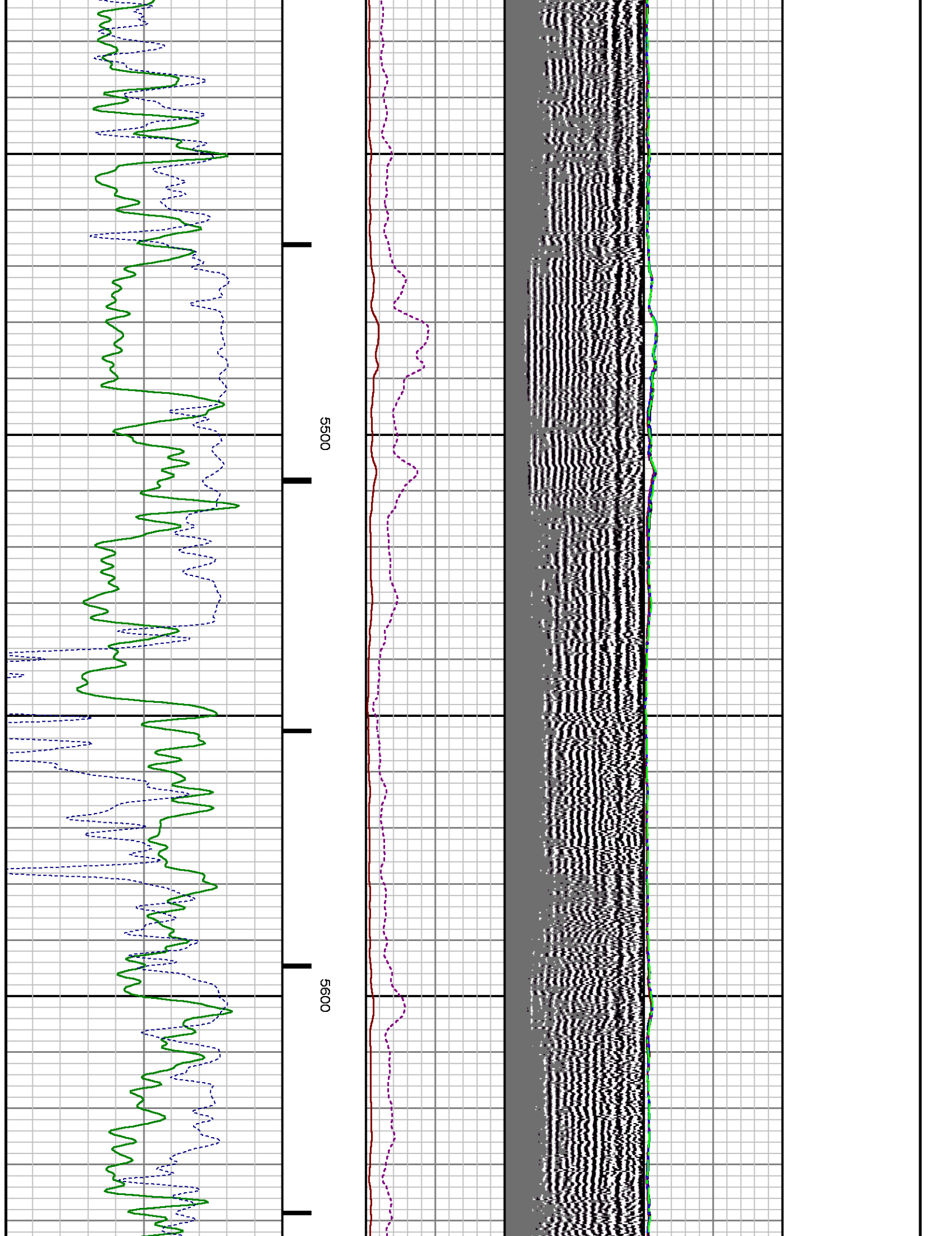




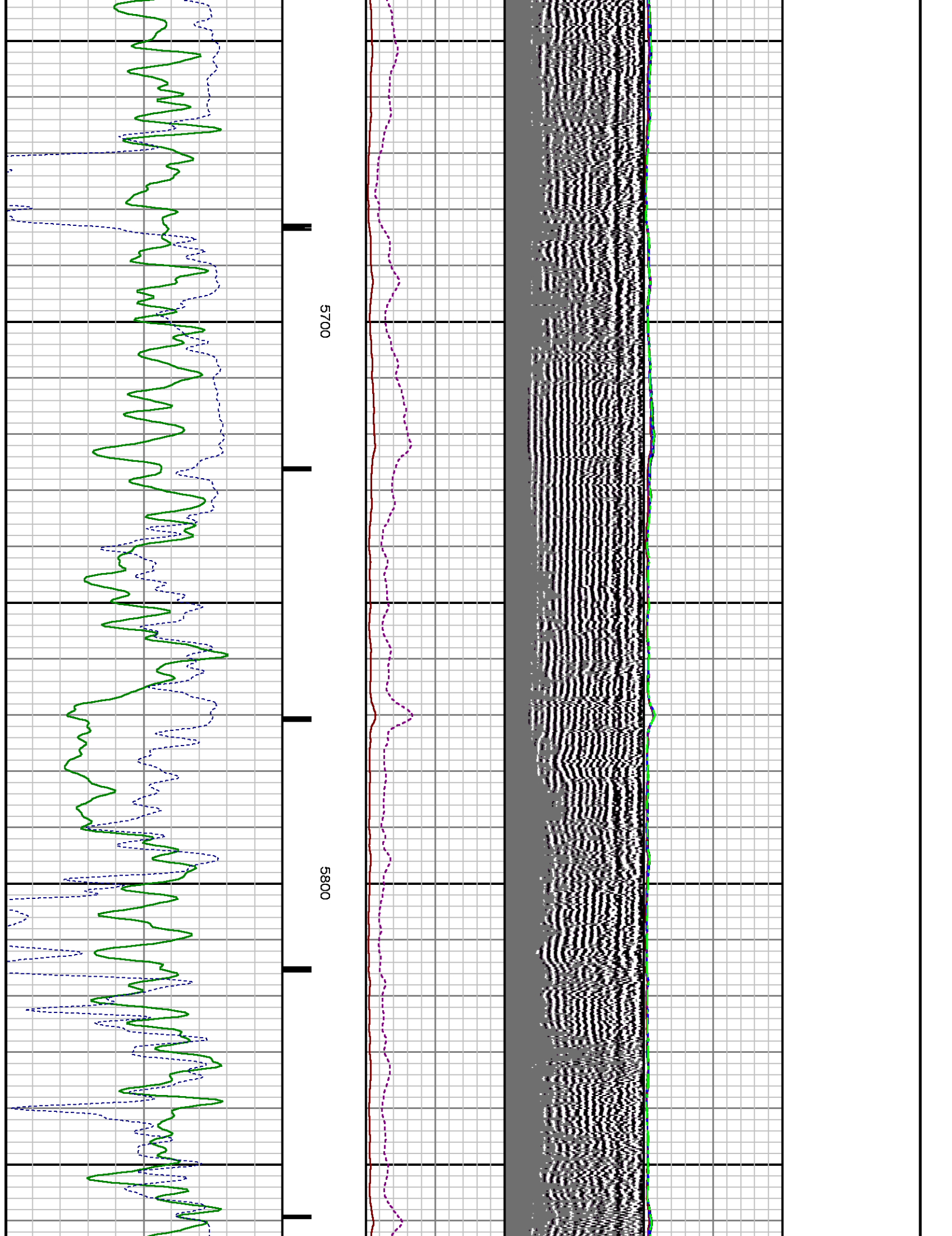


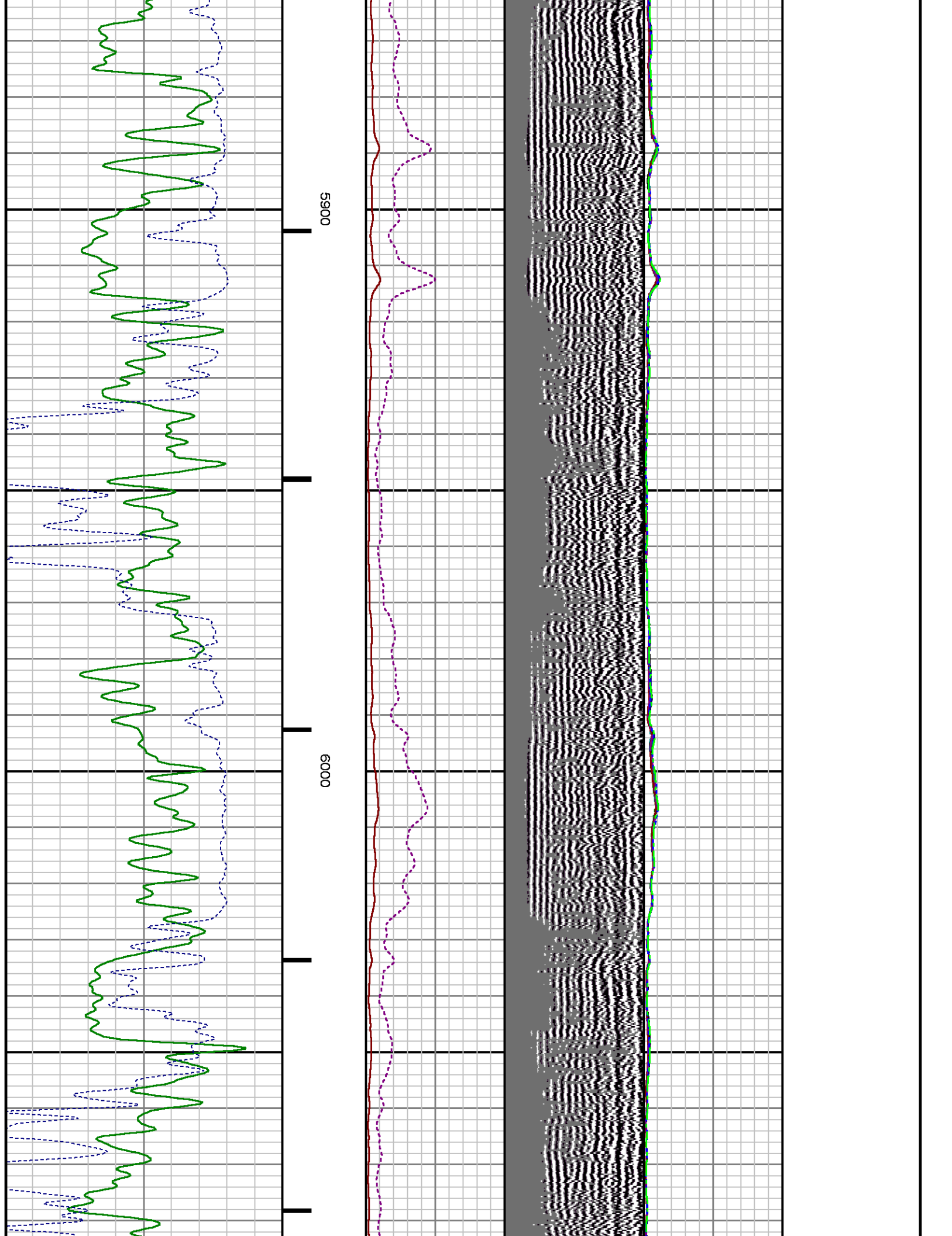


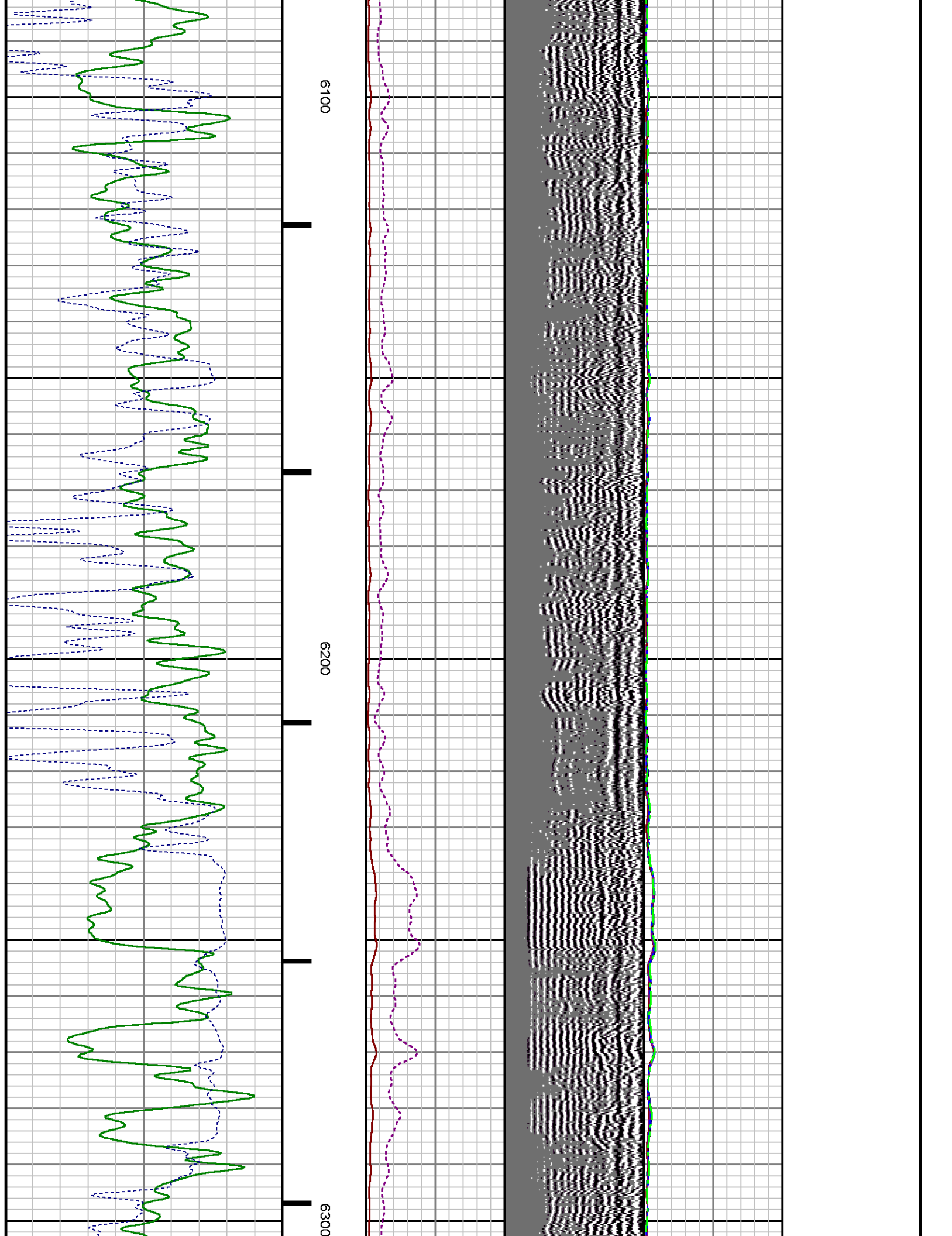


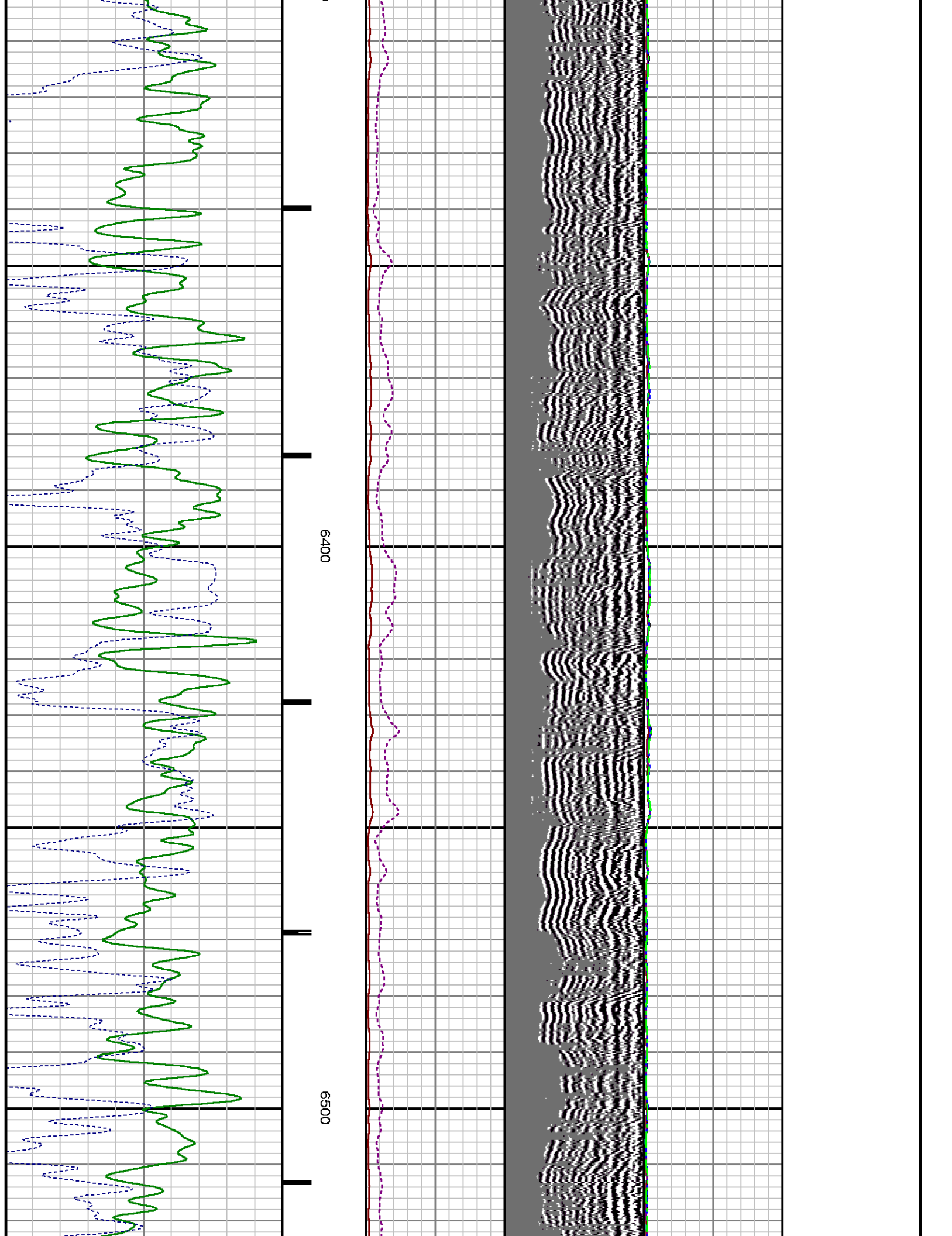




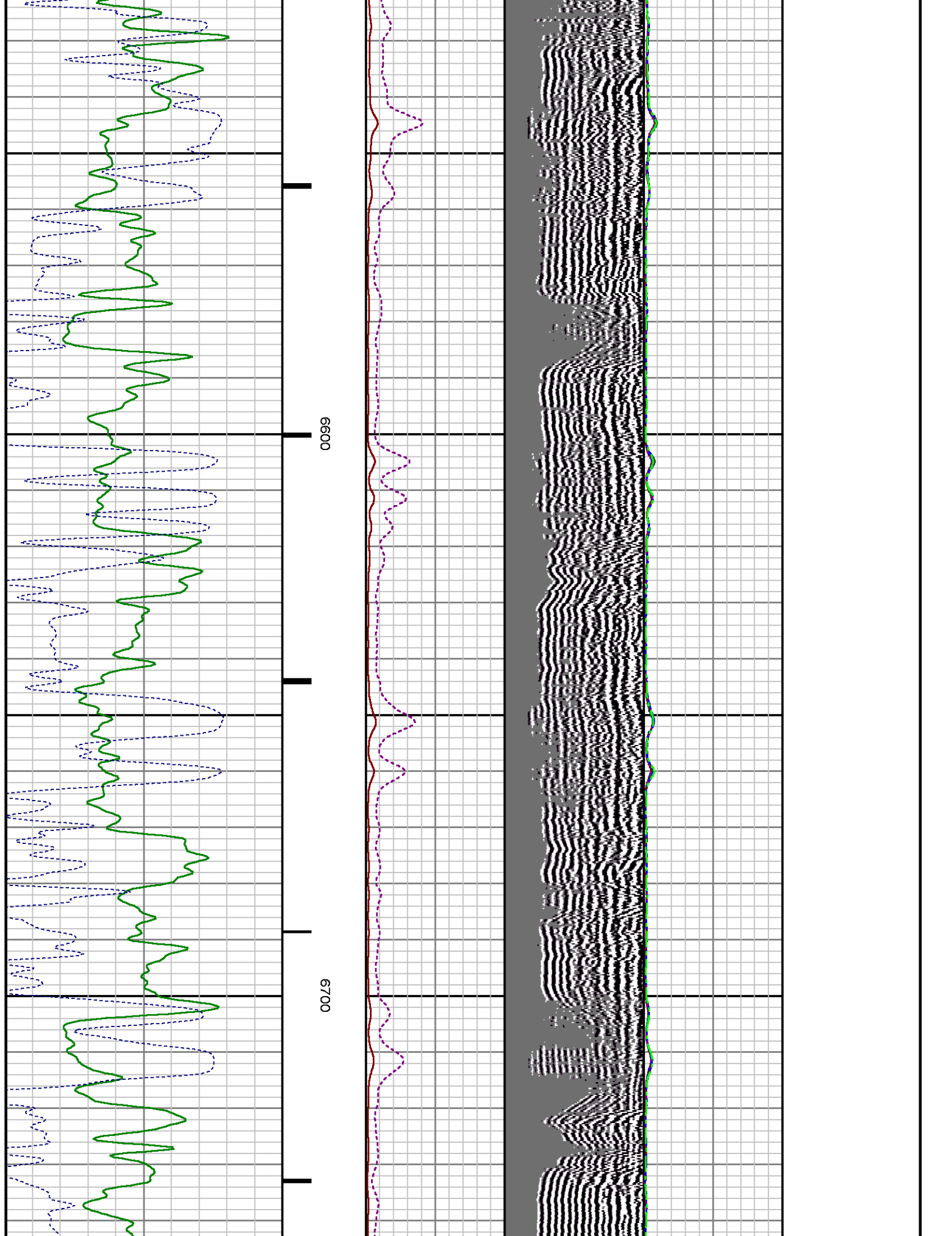




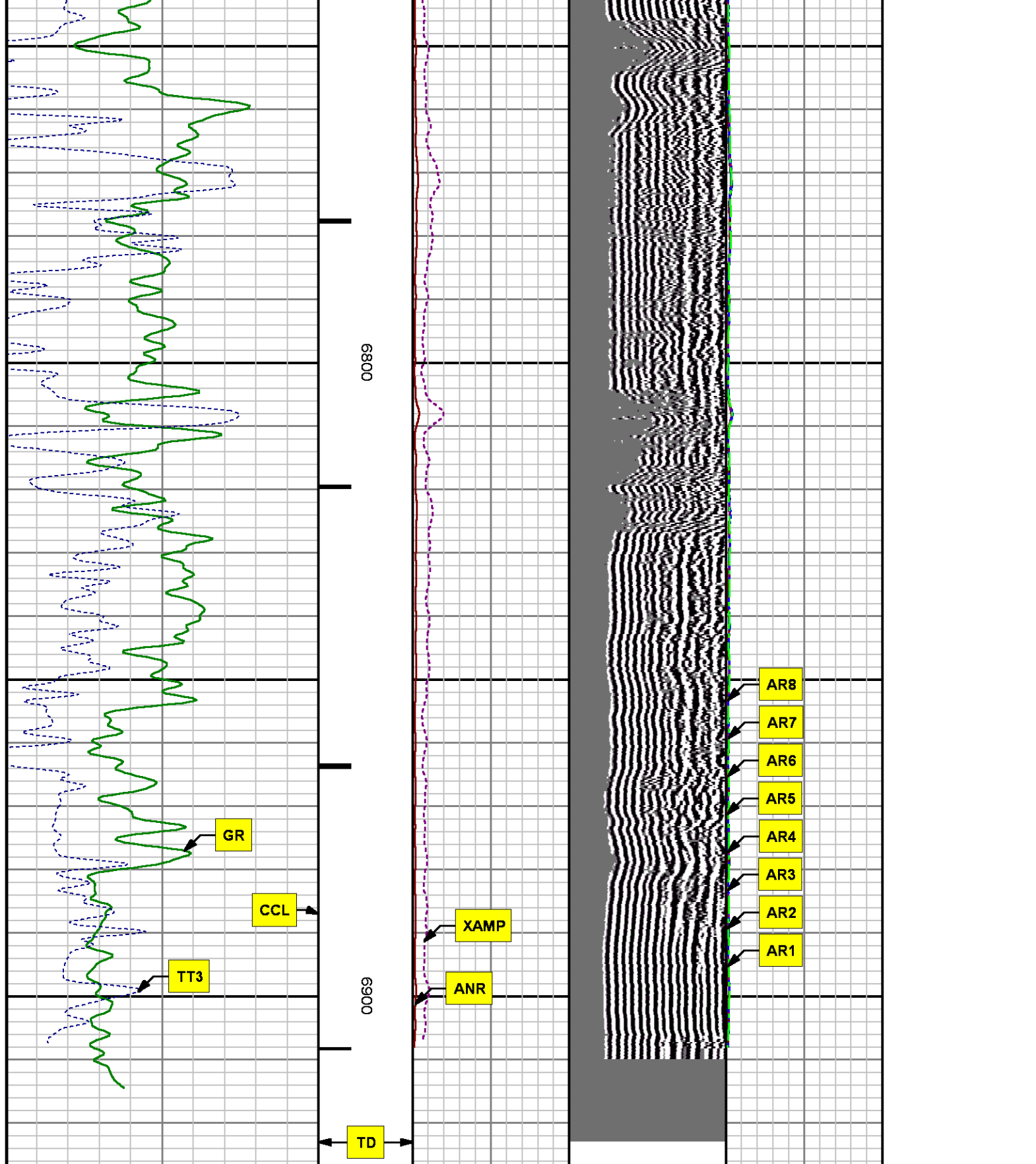












GR		150	CCL	MD feet 1:240	700	m v	ANR		100	Variable Density		200	1200	AR1		100	PBMAP		360
gAPI							m v			us				AR2		100	80		20
TT3		180					m v		20					AR3		100			
u sec														AR4		100			
			TD											AR5		100			
														AR6		100			

0	AR7	100
0	AR8	100

*REPEAT SECTION  
0 PSI*

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	6580.440	6922.440
RAL	Amp Gate Start Near	195.000	usec	6580.440	6922.440
RAL	Amp Gate Start Radial	195.000	usec	6580.440	6922.440
RAL	Amp Gate Width Far	25.000	usec	6580.440	6922.440
RAL	Amp Gate Width Near	25.000	usec	6580.440	6922.440
RAL	Amp Gate Width Radial	25.000	usec	6580.440	6922.440
RAL	casing od	4.500	inches	6580.440	6922.440
RAL	casing wt	11.600	lbm/ft	6580.440	6922.440
RAL	FB Start Far	291.900	usec	6580.440	6922.440
RAL	FB Start Near	175.391	usec	6580.440	6922.440
RAL	FB Start Radial	175.391	usec	6580.440	6922.440
RAL	FB Thresh Far	10.000	mv	6580.440	6922.440
RAL	FB Thresh Near	4.000	mv	6580.440	6922.440
RAL	FB Thresh Radial	4.000	mv	6580.440	6922.440
RAL	Fluid Travel Time	200.000	usec/ft	6580.440	6923.127

## 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					

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

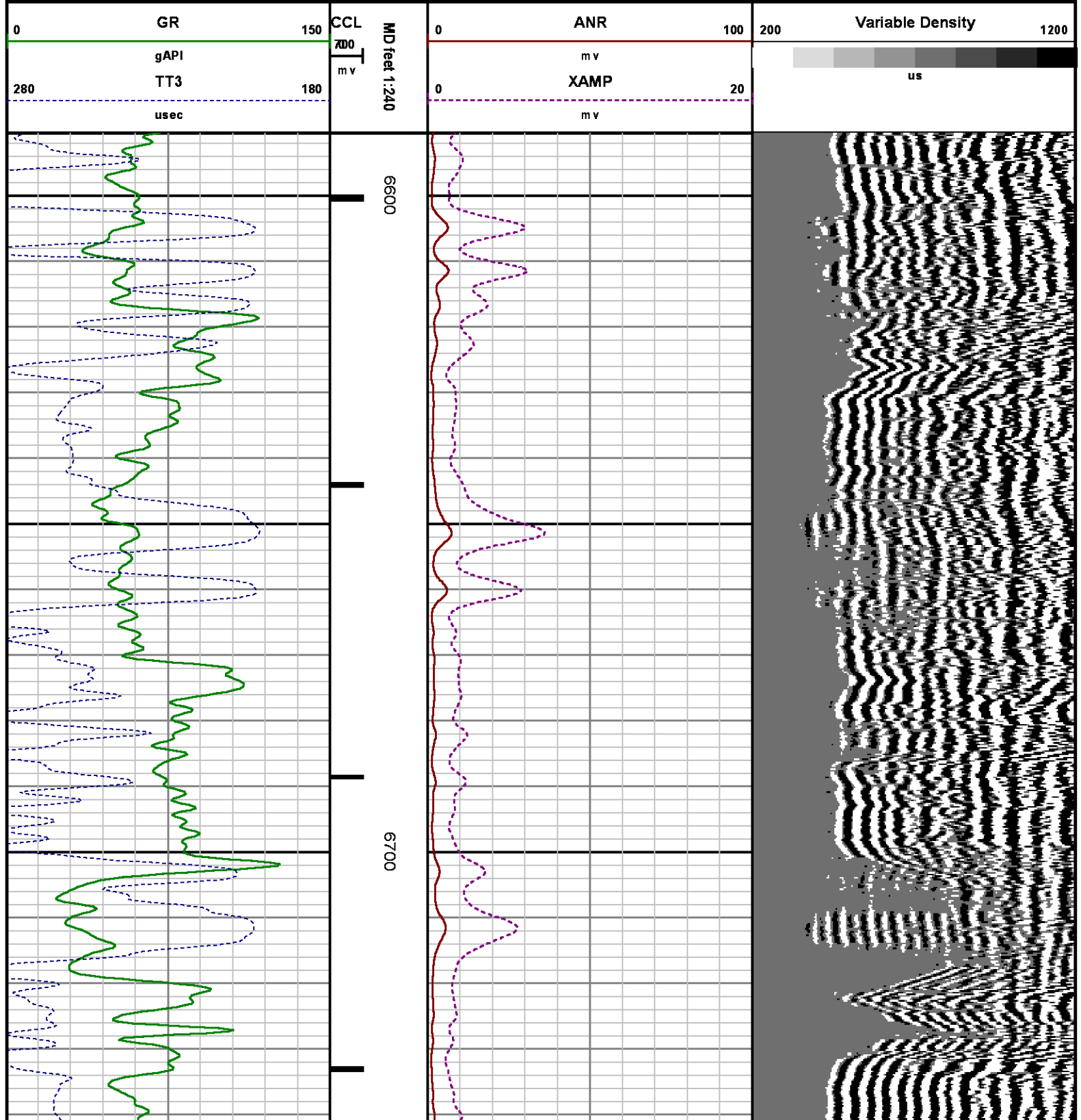
Well : PA 23-6

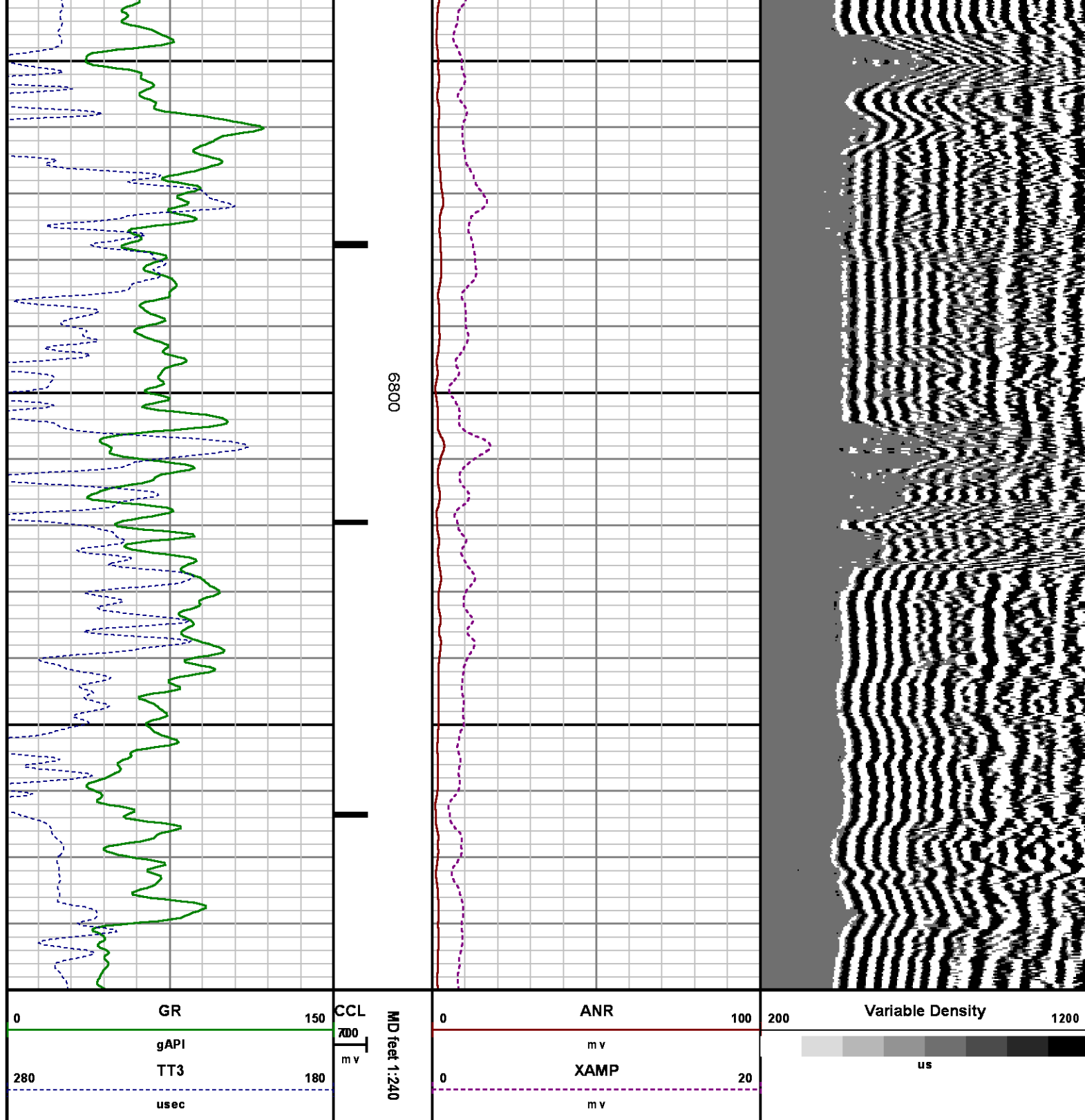
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Mode : PlotMgr 5.4.504

Interval : 6590.50 - 6890.00 feet UP

Created : 5/30/2014 12:53:06 PM





CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSH49629\_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu May 29 10:14:00 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: 29

Tool Delay [usec] -53.00 Tank OD in 5.50 Tank Wt lbm/ft 15.50 Tank ID in 4.95

RECEIVER	Travel Time [usec]	Amp. Gate Start [usec]	Amp. Gate Width [usec]	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Amp Ref. [mV]	Shop Factor
CAL Pulse	219	216	30	166	25	0.022	100.00	0.34
3 Ft. Receiver	218	216	30	166	19	0.953	100.00	0.34
5 Ft. Receiver	327	325	30	261	25	0.653	150.00	0.39
Radial #1	219	216	30	166	17	0.540	100.00	0.34
Radial #2	217	216	30	166	17	0.505	100.00	0.33
Radial #3	217	216	30	166	17	0.864	100.00	0.34
Radial #4	217	216	30	166	17	0.632	100.00	0.34
Radial #5	217	216	30	166	17	0.862	100.00	0.34
Radial #6	218	216	30	166	17	0.752	100.00	0.34
Radial #7	218	216	30	166	17	0.598	100.00	0.34
Radial #8	220	216	30	166	17	0.677	100.00	0.35

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\49628 fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu May 29 10:20:38 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: 28

Tool Delay [usec] -53.00 Casing OD in 5.50 Casing Wt lbm/ft 15.50 Casing ID in 4.95

RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	166	25	0.006	0.000	1.04	100.000
3 Ft. Receiver	216	30	1.477			
5 Ft. Receiver	332	30	0.515			
Radial #1	216	30	0.814			
Radial #2	216	30	0.832			
Radial #3	216	30	1.131			
Radial #4	216	30	1.148			
Radial #5	216	30	1.314			
Radial #6	216	30	1.357			
Radial #7	216	30	1.077			
Radial #8	216	30	0.986			

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

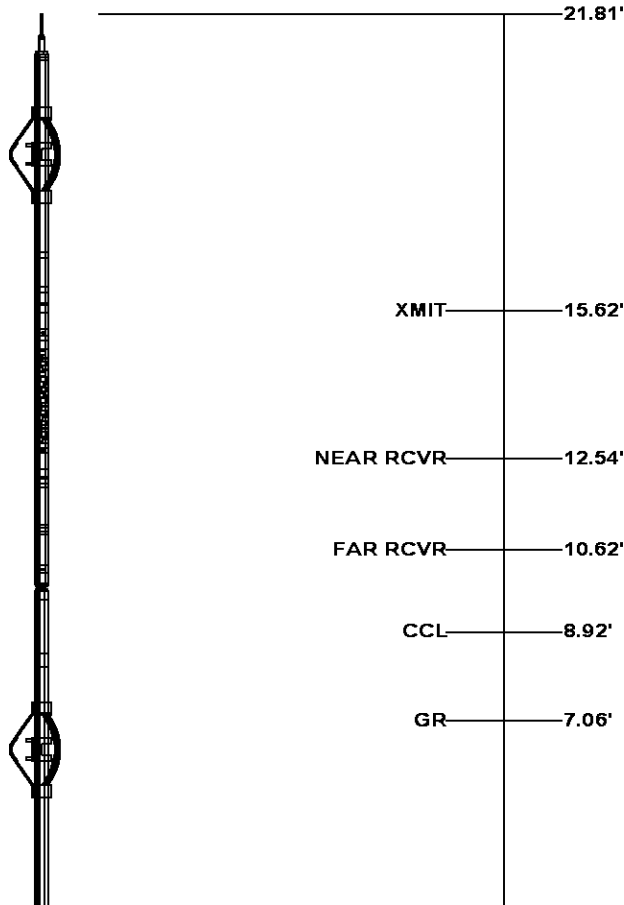
### OTA SHORT CABLE HEAD

### 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
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



NEU 1.67'

0.00'

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



Baker Atlas

CASE

Company

WPX ENERGY

Well

PA 23-6

Field

PARACHUTE

County

GARFIELD

State

COLORADO

File No:

CH085988

API No:

05045222290000

Location

SHL: 746' FSL & 749' FWL

BHL: 2474' FSL & 1391' FWL (NESW)

Elevations

KB 5179 ft

DF

GL 5153 ft

6 7S 95W

PA 14-6 PAD

NABORS 574

SEC 6 TWP 7S RGE 95W