



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: CH082079

Company Well WPX ENERGY BOSELY SG 311-27

API No: Field GRAND VALLEY

05045221300000 County GARFIELD State CO

Location

SHL: 598' FNL & 1974' FWL

BHL: 435' FNL & 134' FWL

SEC 2 TWP 7S RGE 96W

Other Services

RPM

27 7S 96W
SG 21-27 PAD
AZTEC 1000

Permanent Datum

Log Measured From

Drill Measured From

GL Elevation 5258 ft

KB 25 ft Above P. D.

KB

Elevations

KB 5253 ft

DF

GL 5258 ft

Date 01/FEB/14

Run ONE

Service Order US625100

Depth Driller 5789 ft

Depth Logger 5752 ft

Bottom Logged Interval 5742 ft

Top Logged Interval 25 ft

Time Started 15:00

Time Finished 18:30

Operator Rig Time 3.5 HOURS

Type of Fluid in Hole WATER

Fluid Density NA

Salinity NA

Fluid Level 57 ft

Logged Cement Top NA

Wellhead Pressure 0 psi

Maximum Hole Deviation NA

Nominal Logging Speed 65 fpm

Maximum Recorded Temperature 184 degF

Reference Log NA

Equipment No. 4271 Location GRAND JCT.

Recorded By FLOYD RENEAU

Witnessed By DUSTIN WELSH

- FOLD HERE

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

Borehole Record

Bit Size	From	To
13.5 in	0 ft	1645 ft
8.75 in	1645 ft	5807 ft

Casing Record

Size	Weight	Grade	From	To
9.625 in			0 ft	1645 ft
4.5 in	11.6 lbm/ft	1-80	0 ft	5807 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 = 184 °F

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	CBL	1426XA	10218496	CENTRALIZED
1	1	GR/CCL	2459XA	10124121	CENTRALIZED

PRIMARY PRESENTATION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	34.325	5770.250
RAL	Amp Gate Start Near	195.000	usec	34.325	5770.250
RAL	Amp Gate Start Radial	195.000	usec	34.325	5770.250
RAL	Amp Gate Width Far	25.000	usec	34.325	5770.250
RAL	Amp Gate Width Near	25.000	usec	34.325	5770.250
RAL	Amp Gate Width Radial	25.000	usec	34.325	5770.250
RAL	casing od	4.500	inches	34.325	5770.250
RAL	casing wt	11.600	lbm/ft	34.325	5770.250
RAL	FB Start Far	291.900	usec	34.325	5770.250
RAL	FB Start Near	175.391	usec	34.325	5770.250
RAL	FB Start Radial	175.391	usec	34.325	5770.250
RAL	FB Thresh Far	10.000	mv	34.325	5770.250
RAL	FB Thresh Near	4.000	mv	34.325	5770.250
RAL	FB Thresh Radial	4.000	mv	34.325	5770.250
RAL	Fluid Travel Time	200.000	usec/ft	34.325	5771.200

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

1426XA -15.750
2459XA -11.340
2459XA -9.490
2459XA -4.090

FPR3	FPR5	TT3	TTR1	TTR2	TTR3
TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
AFAR	SIG	TT5			
CCL					
GR					
NEU					

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

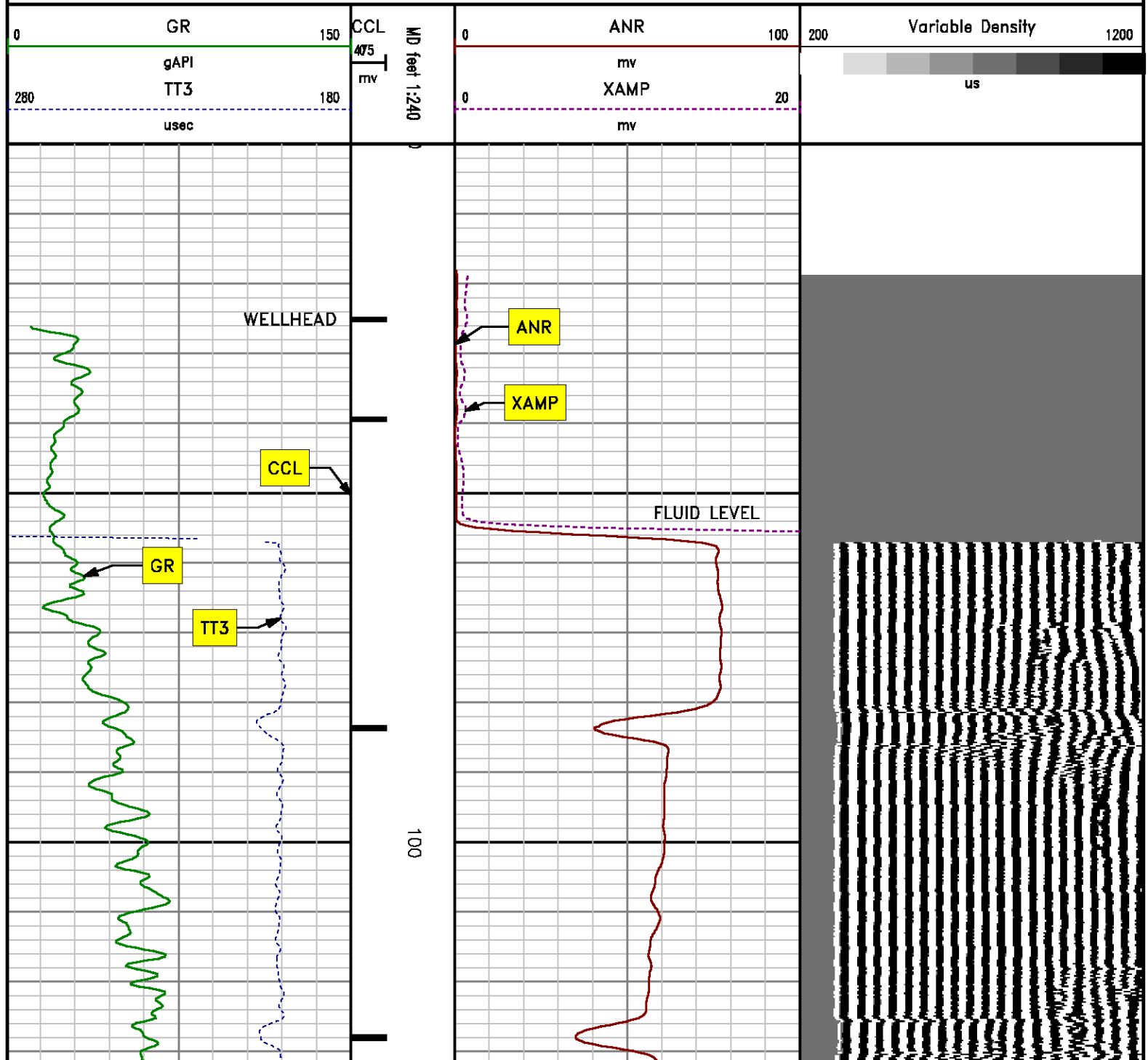
Well : BOSELY SG 311-27

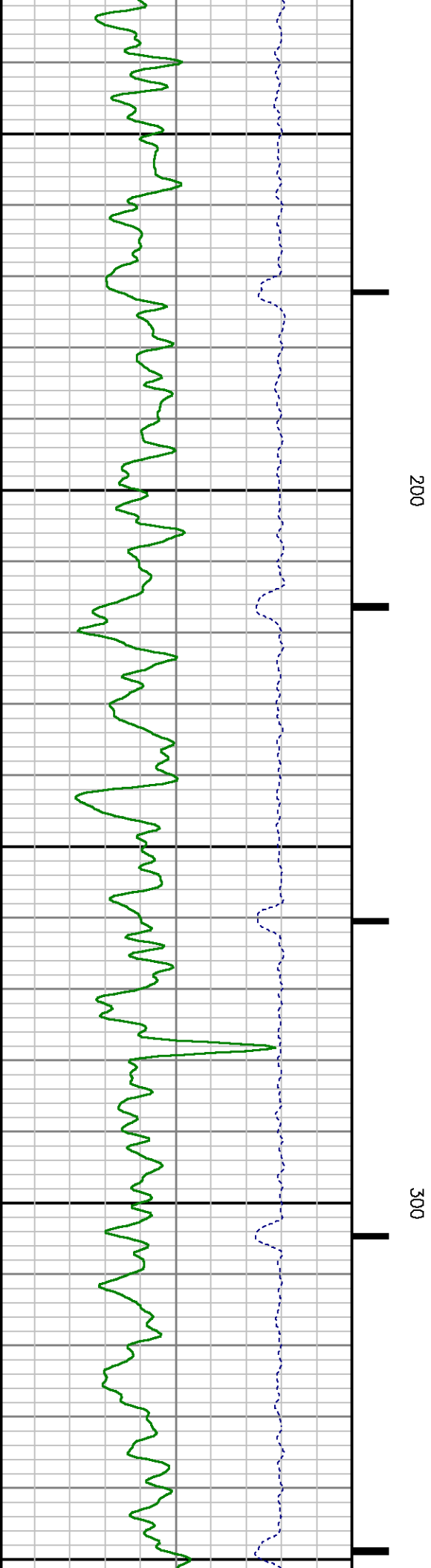
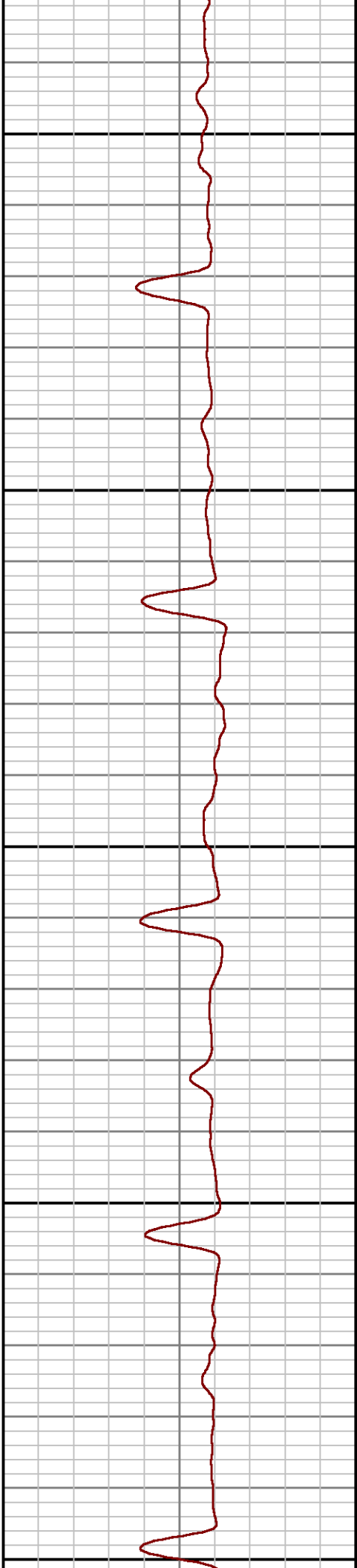
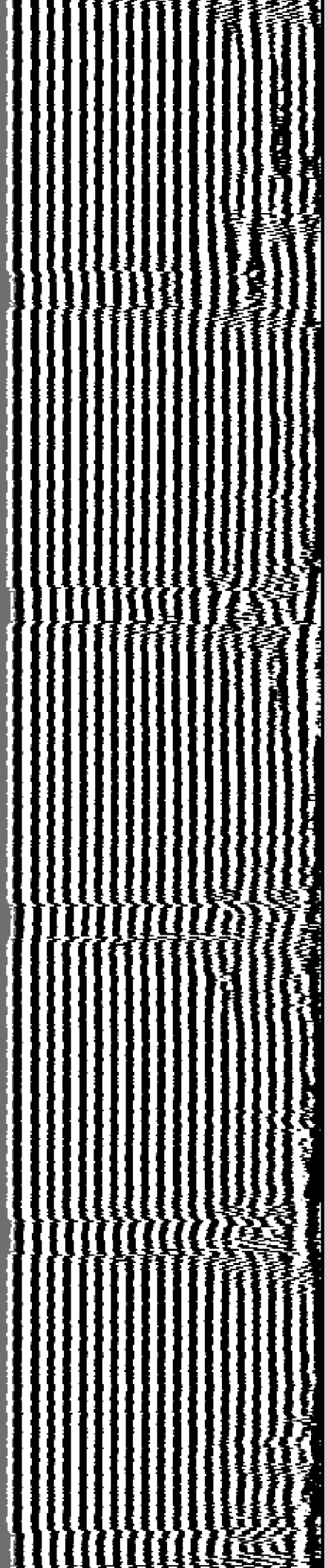
File Name : d:\welldata\wp\bosely sg 311-27\cbl311\main.tif

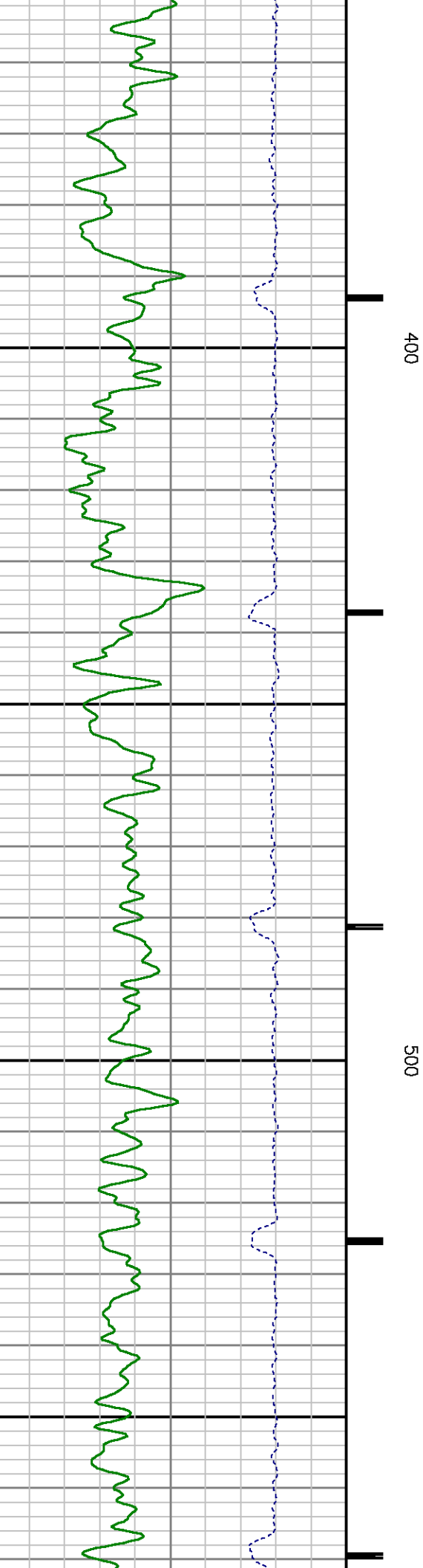
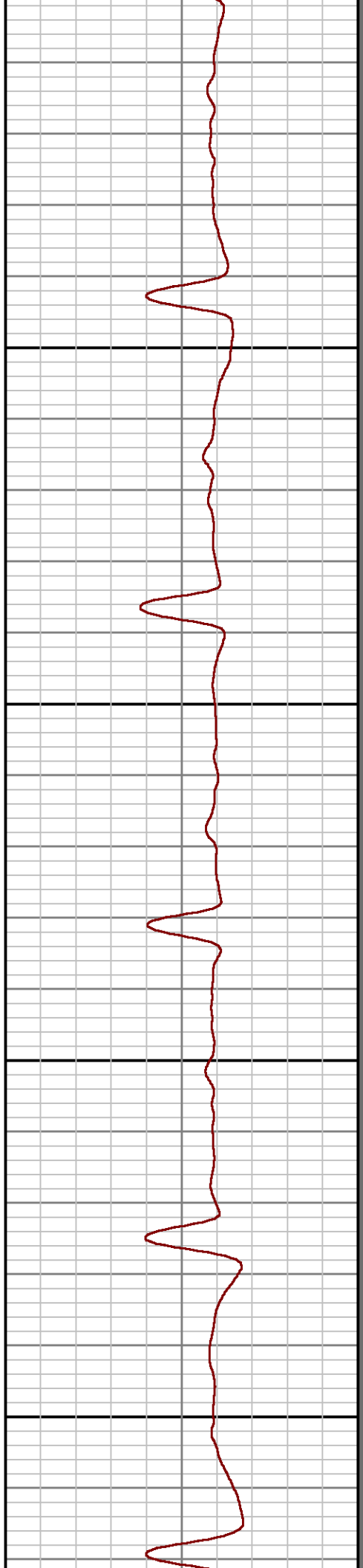
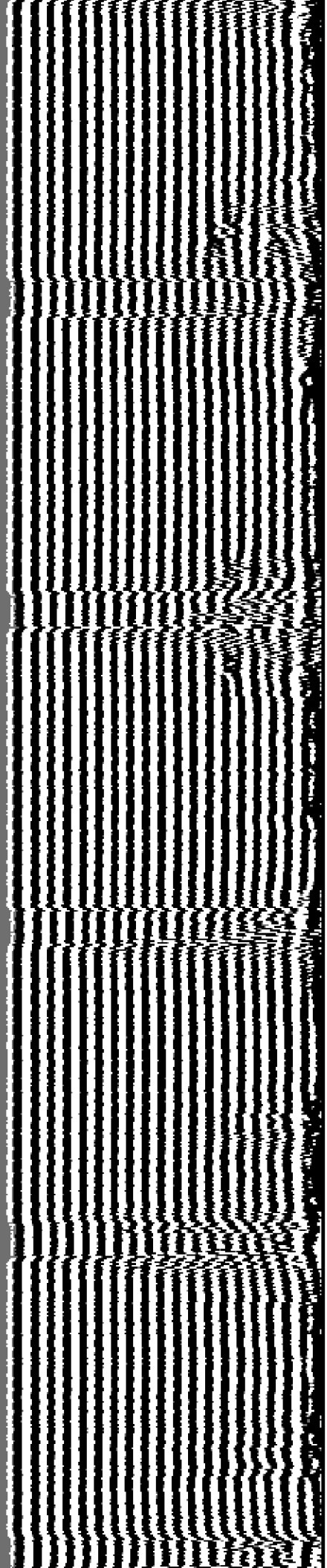
Mode : PlotMgr 5.4.504

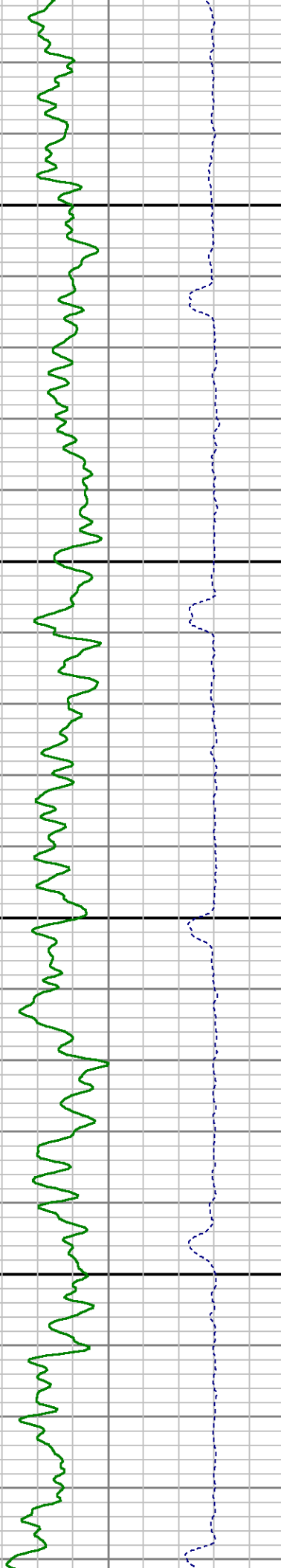
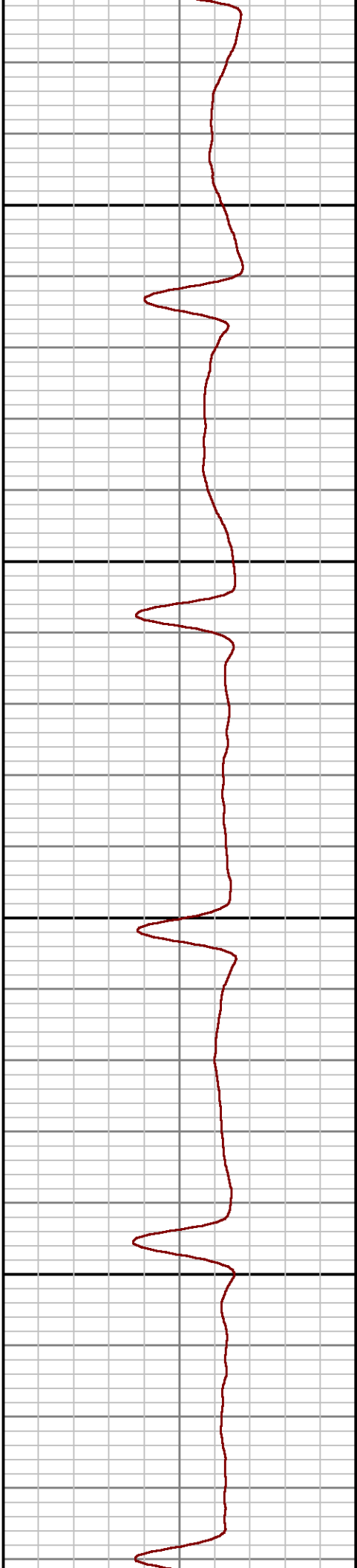
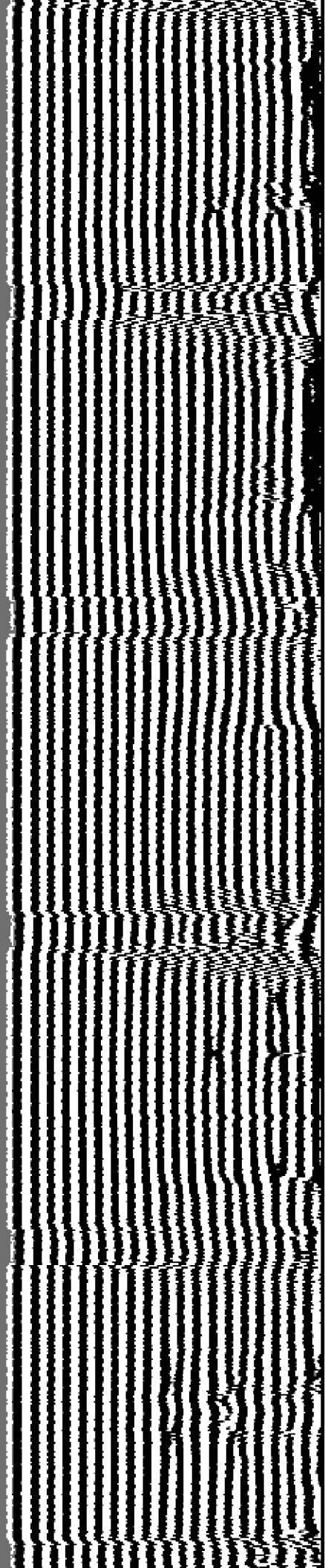
Interval : 0.00 - 5757.00 feet UP

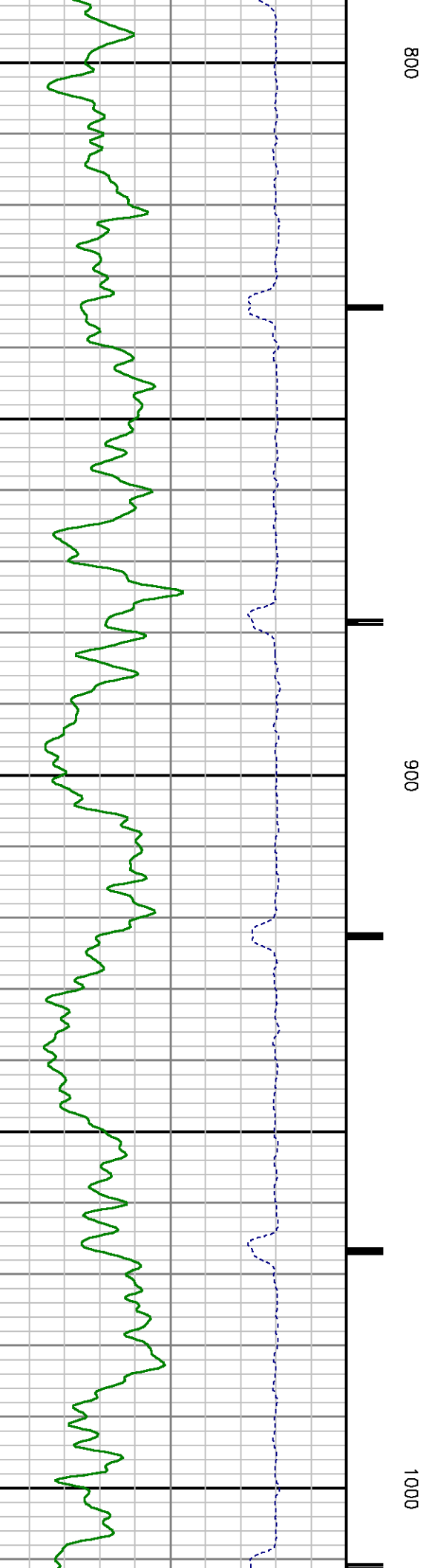
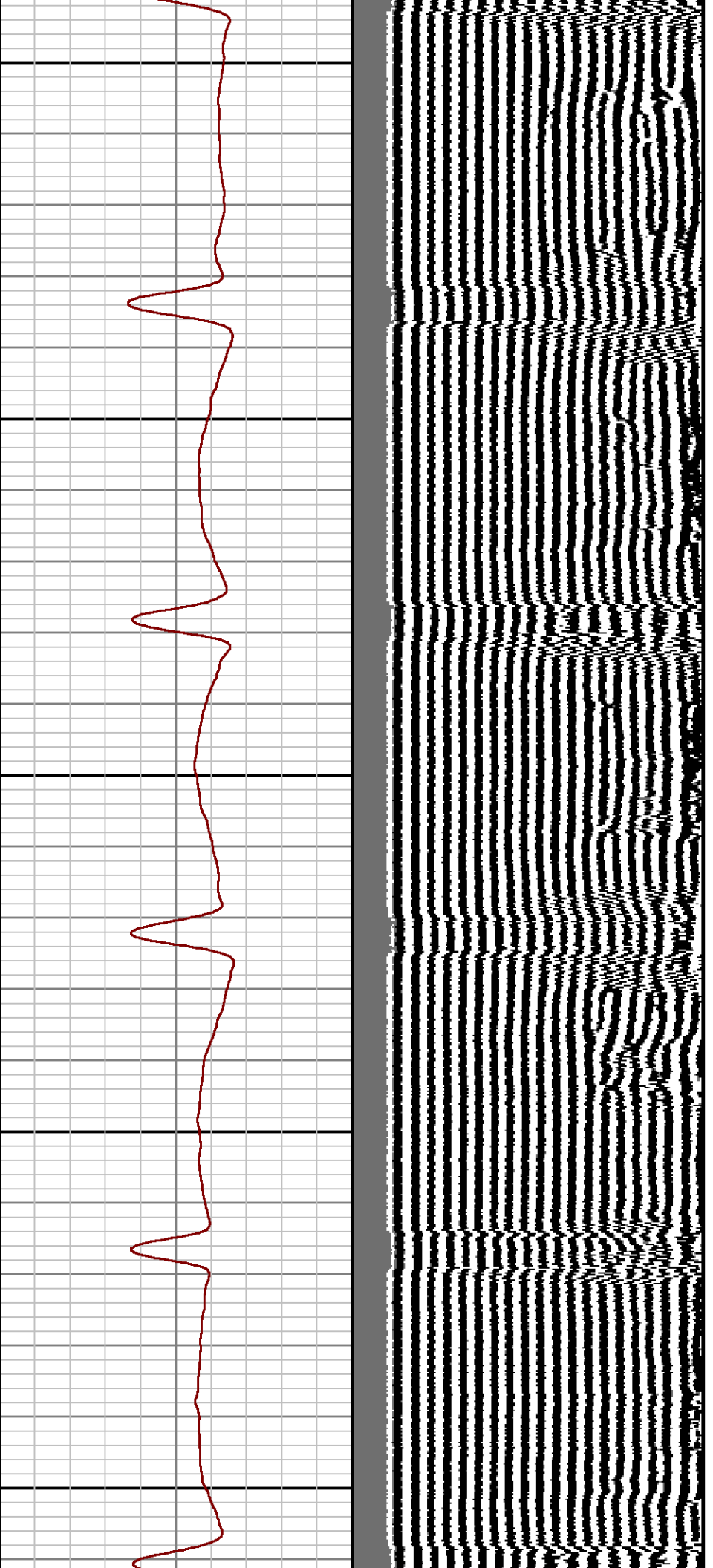
Created : 2/2/2014 8:33:57 AM

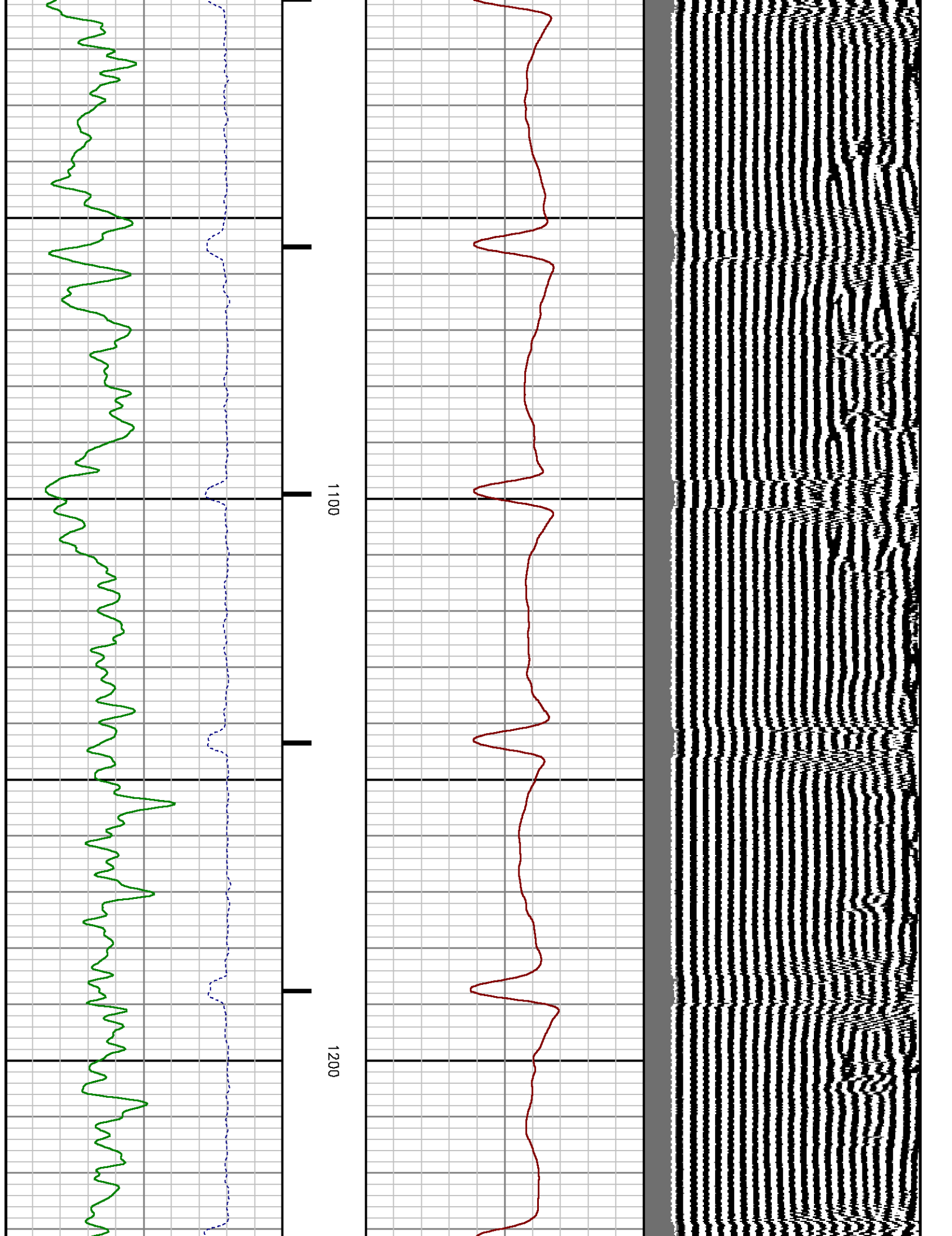


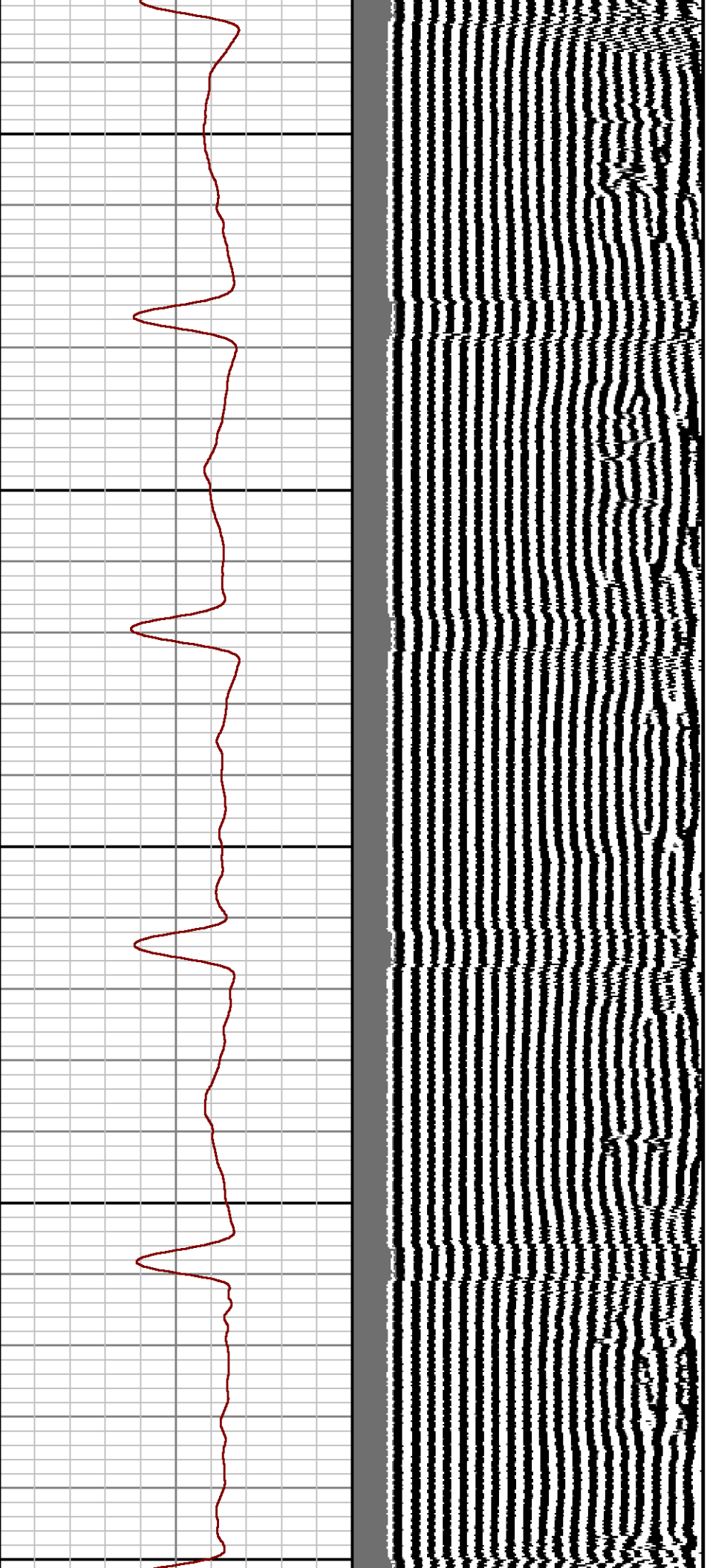






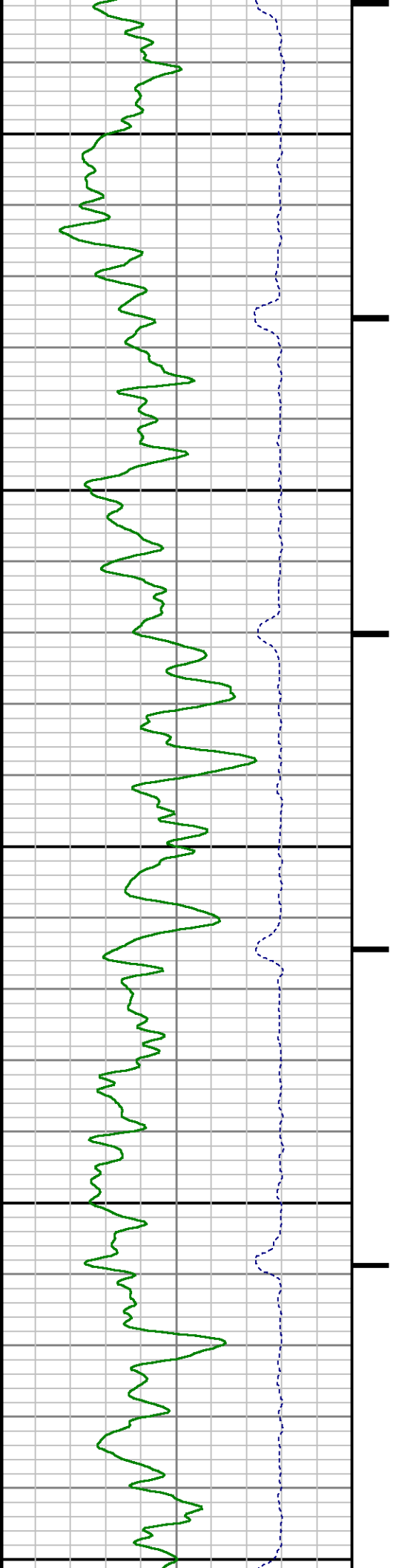


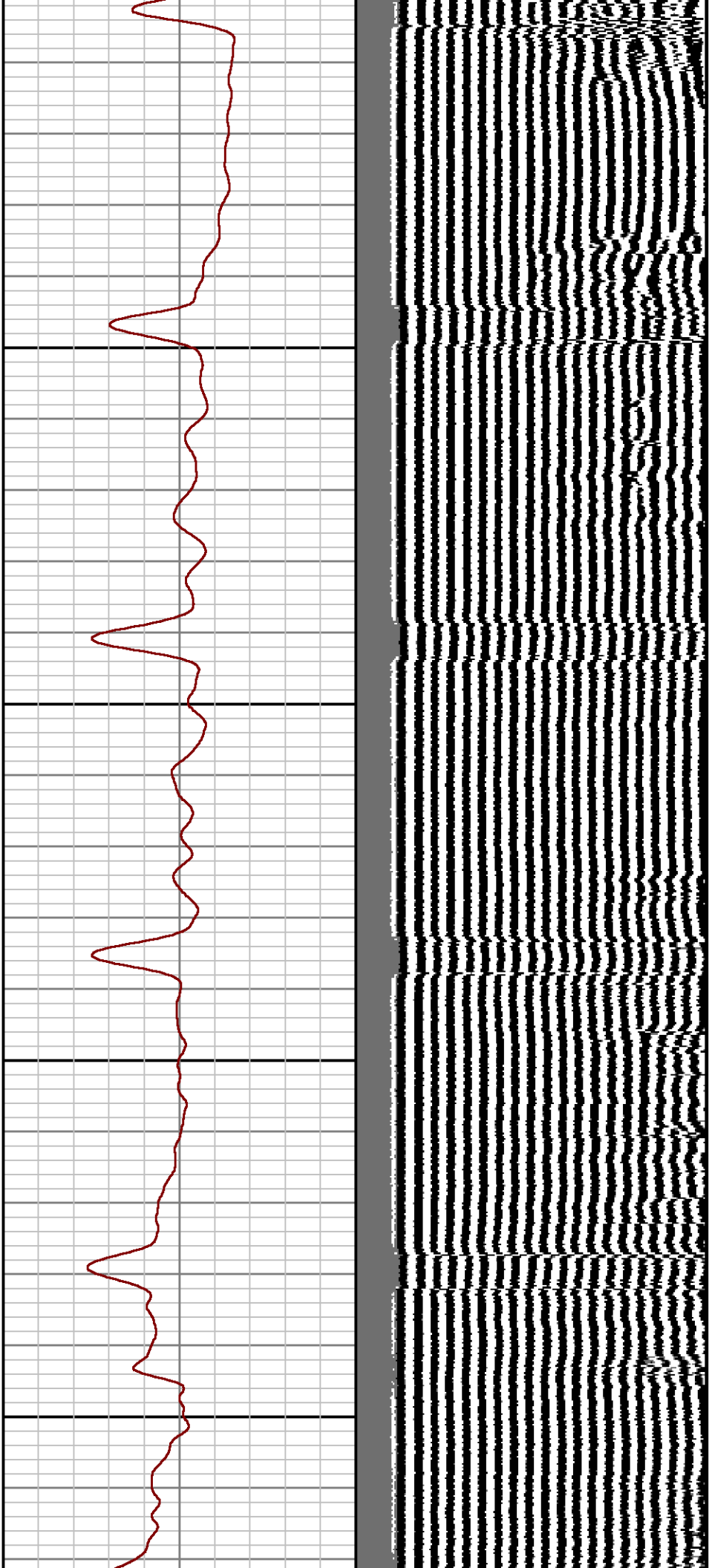




1300

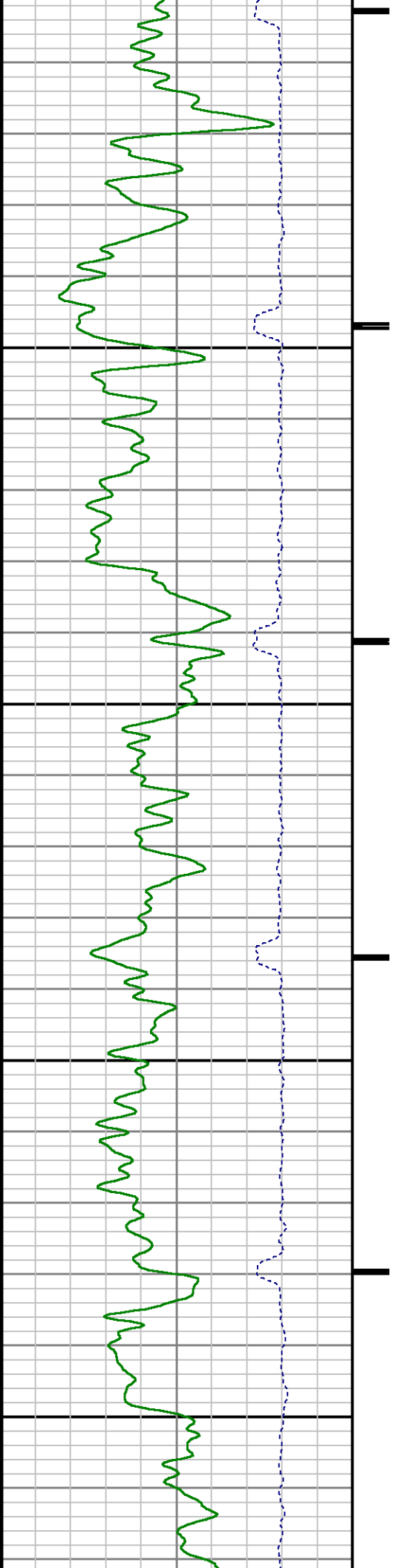
1400

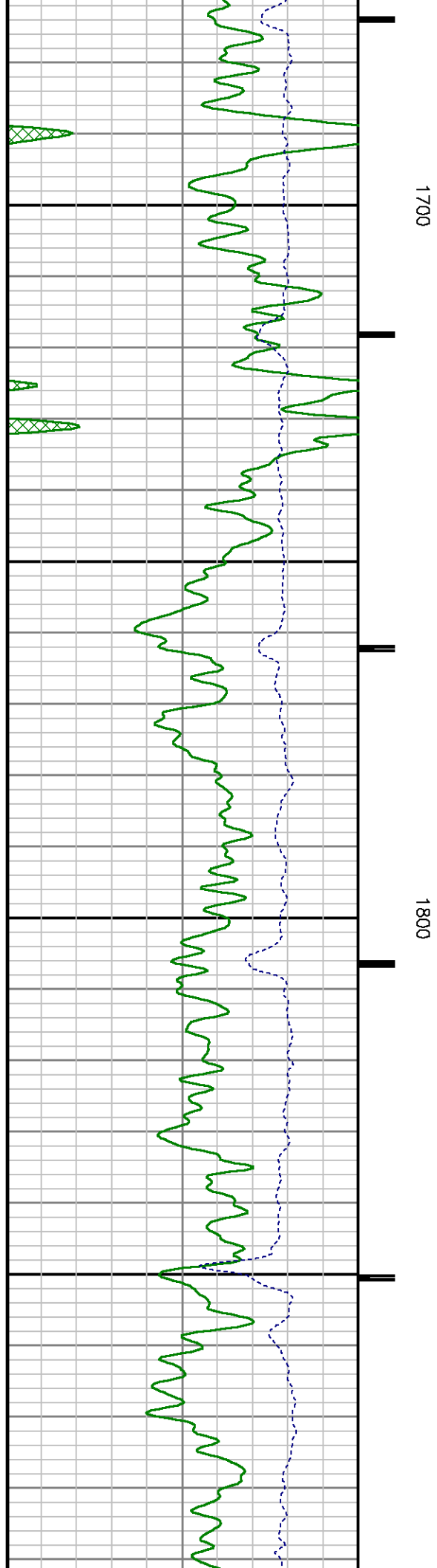
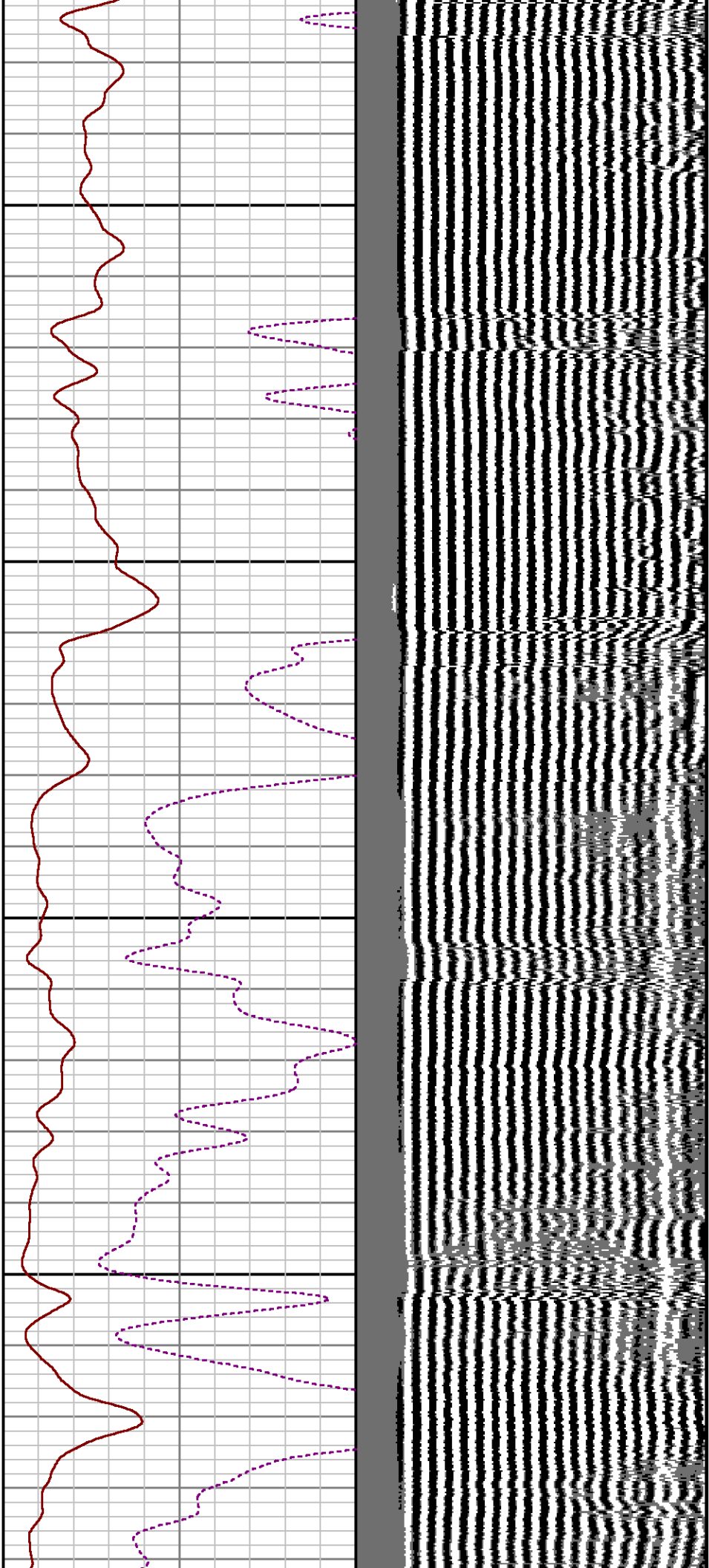


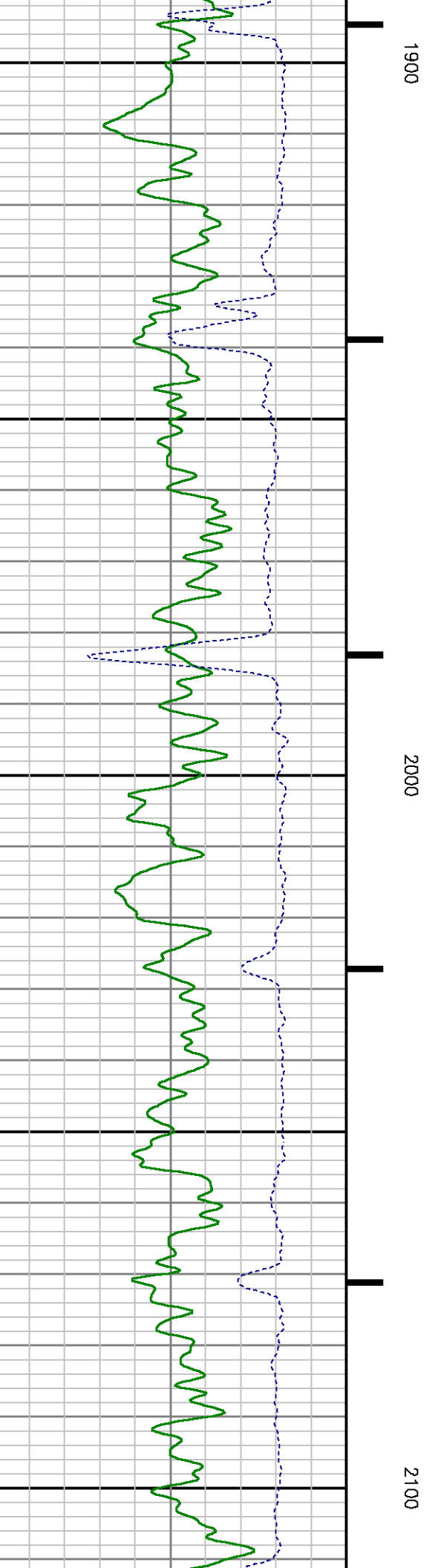
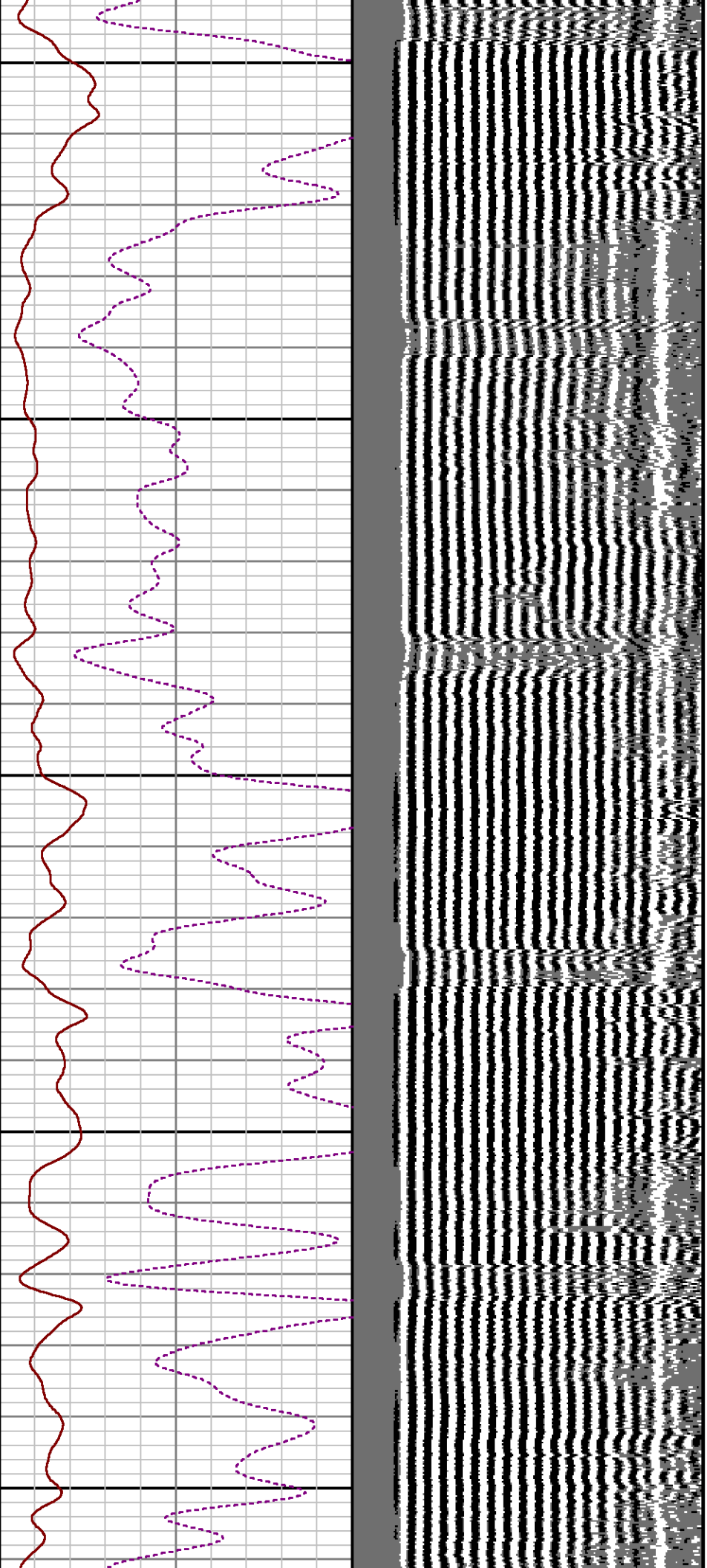


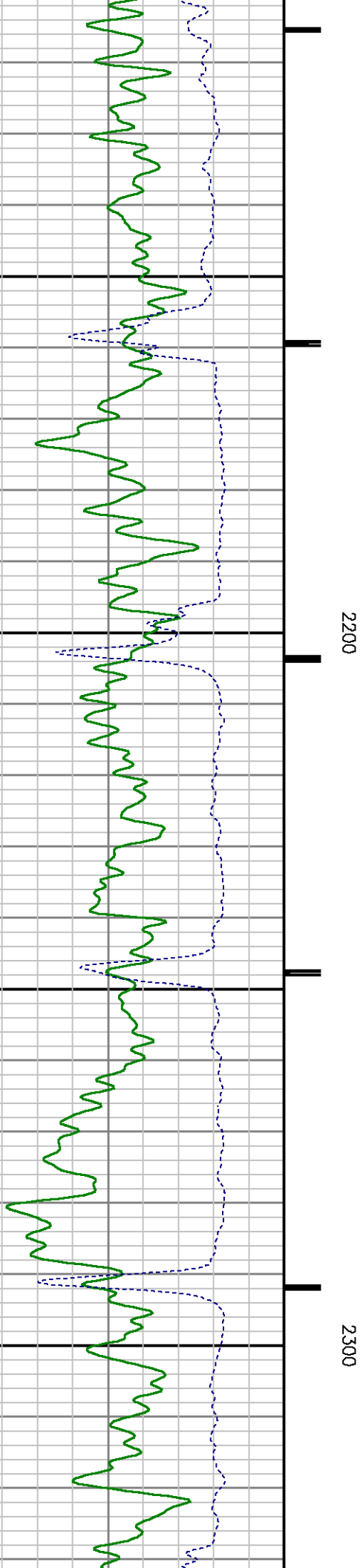
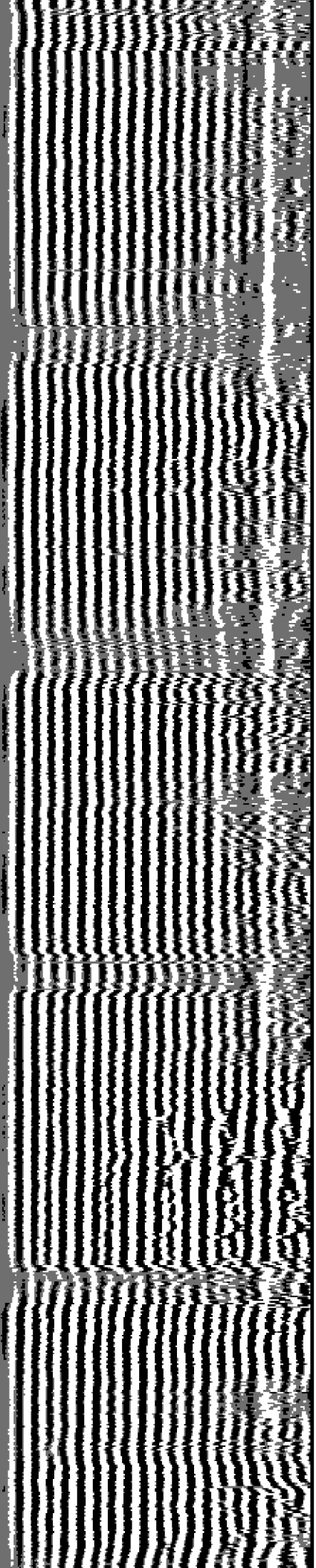
1500

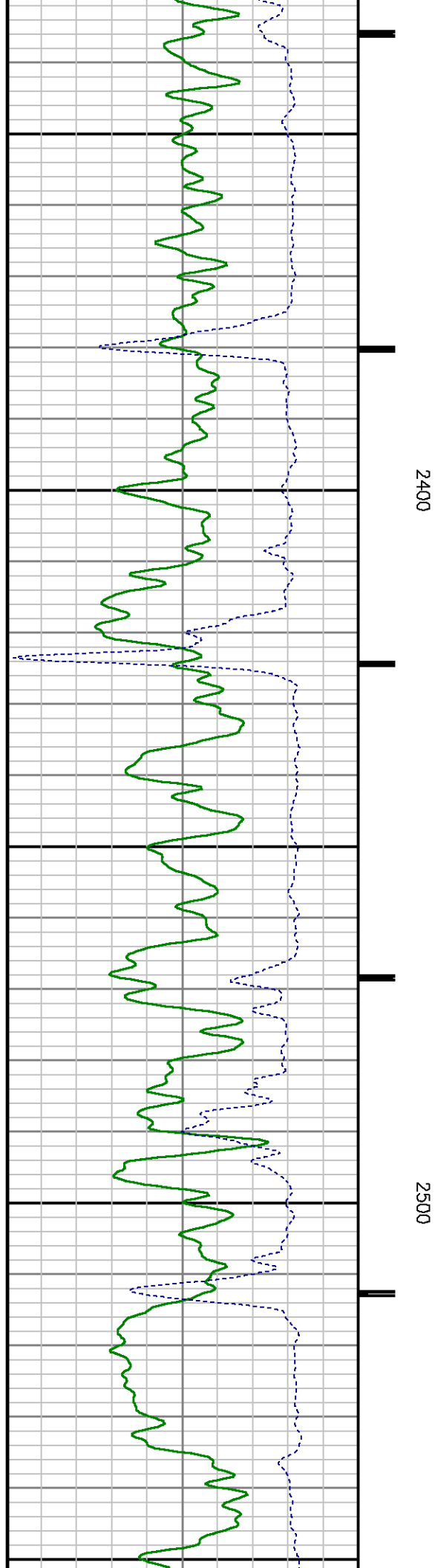
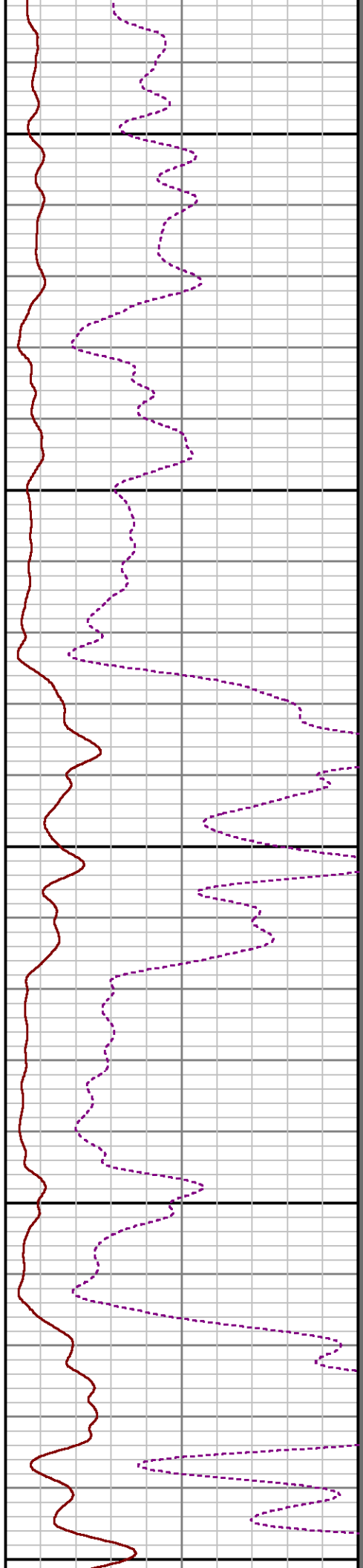
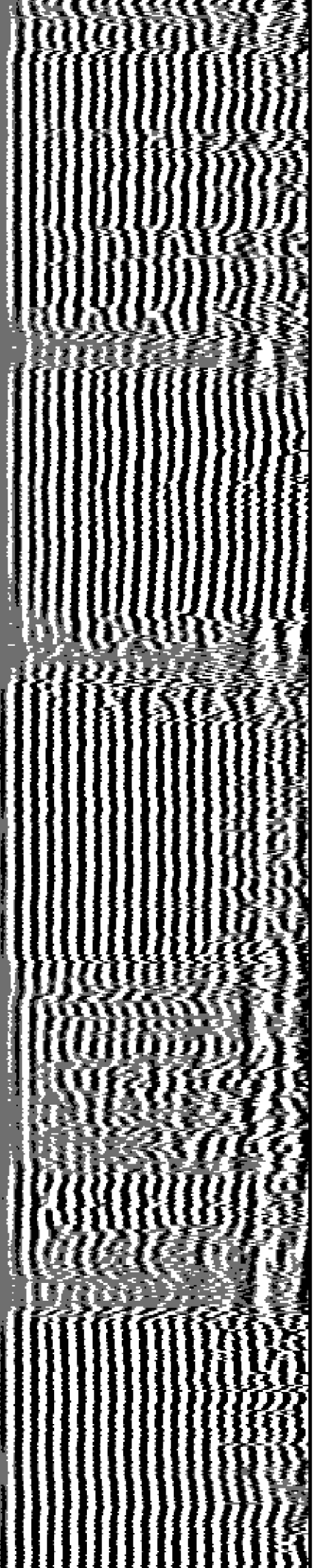
1600

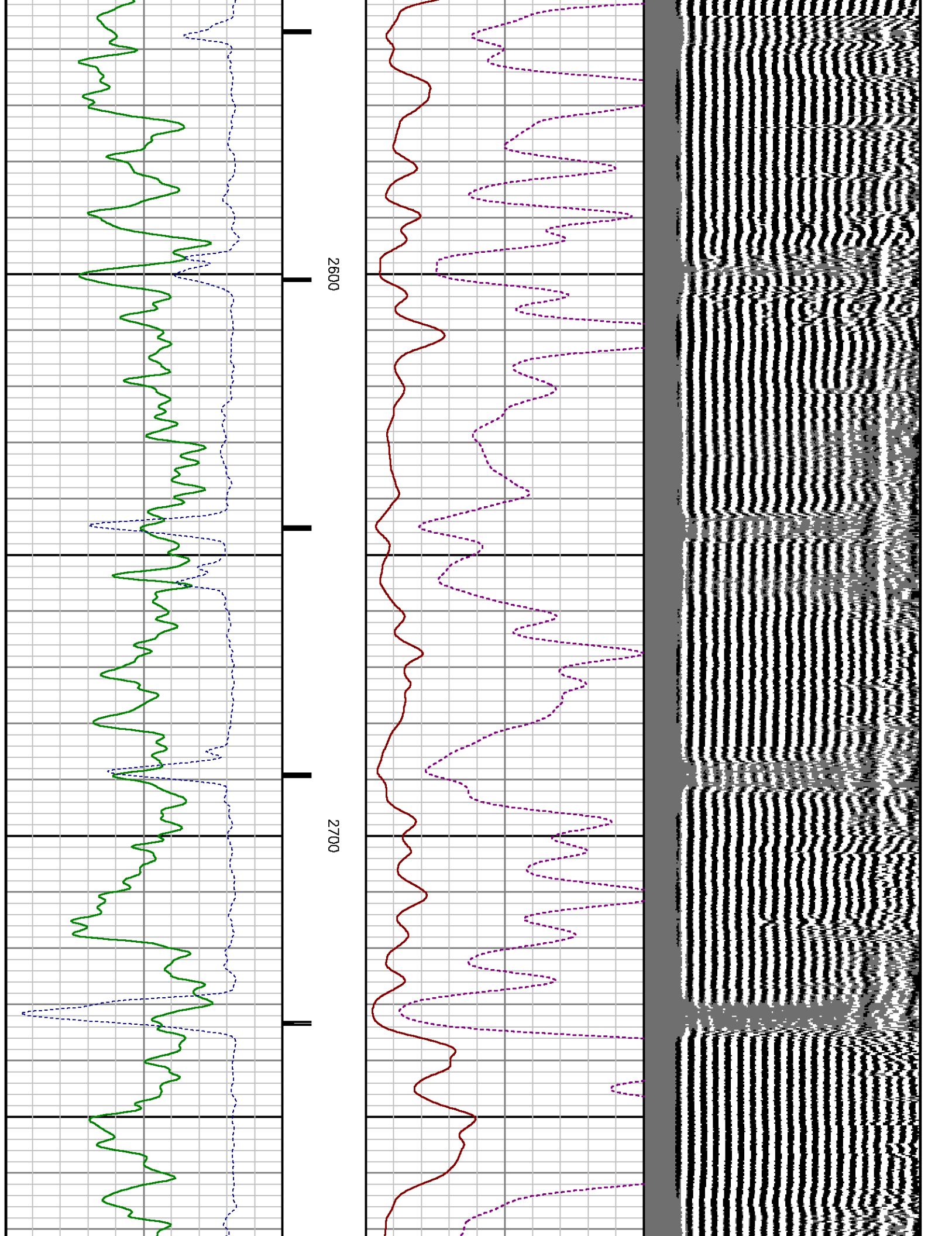


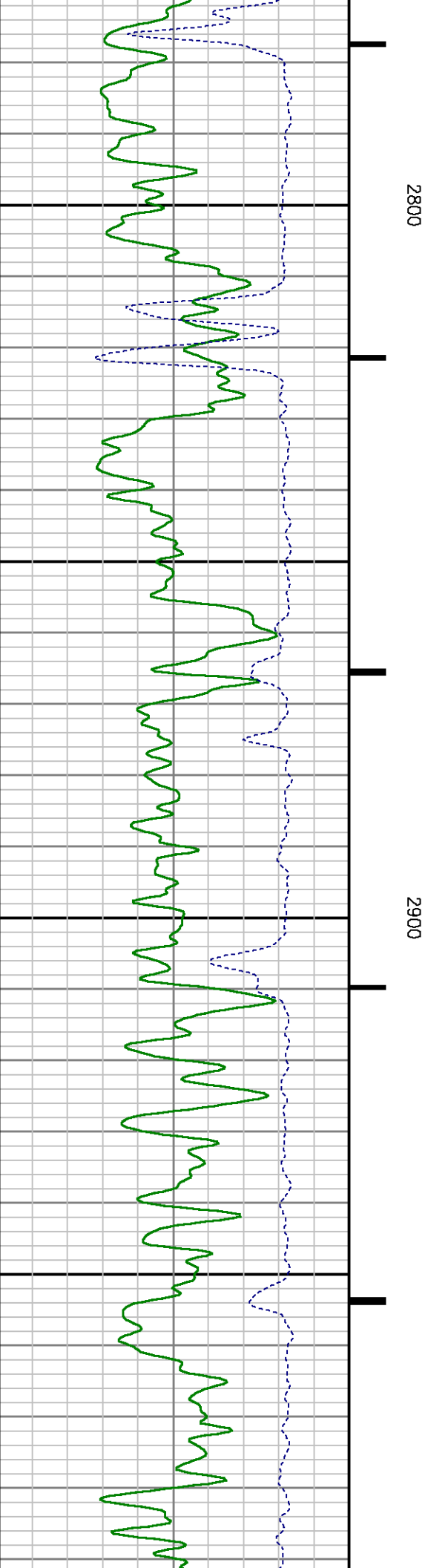
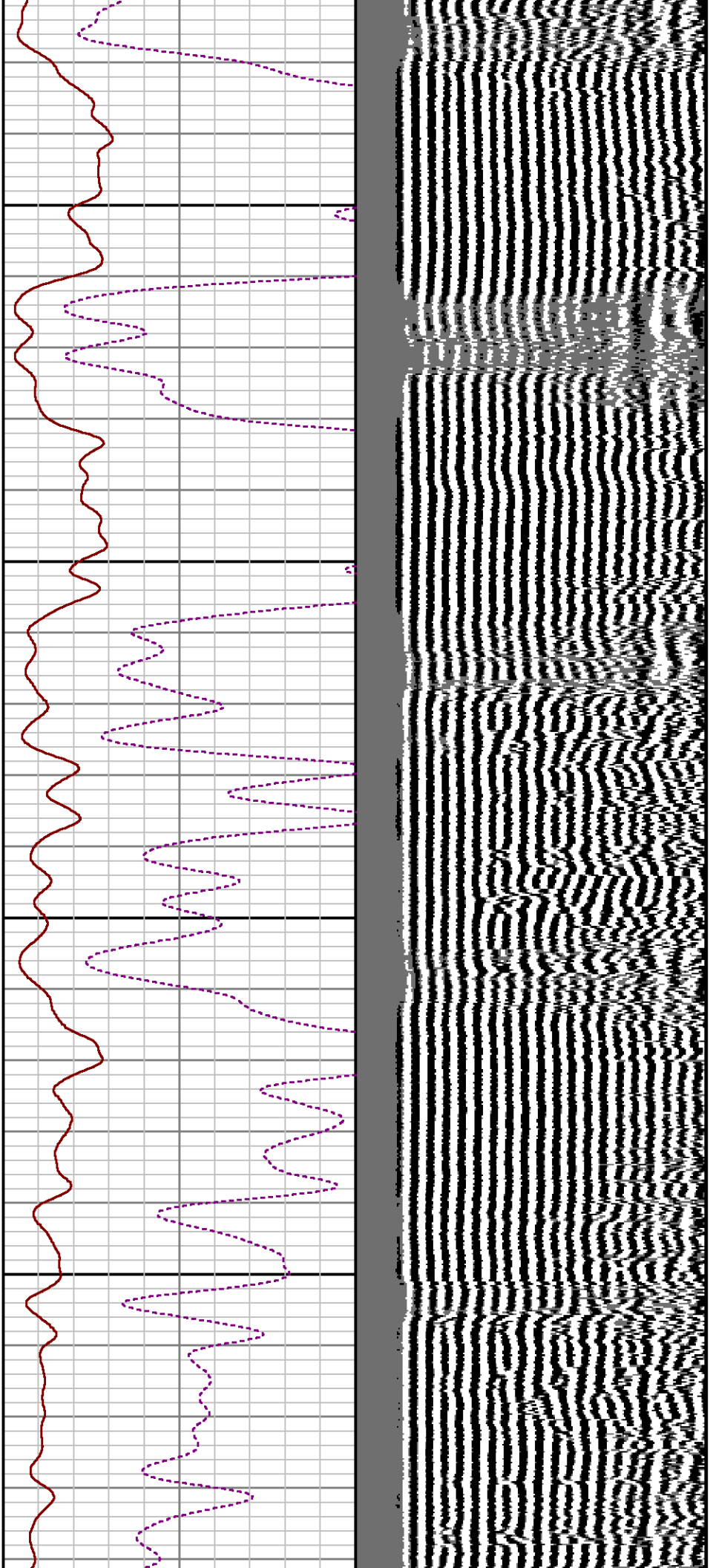


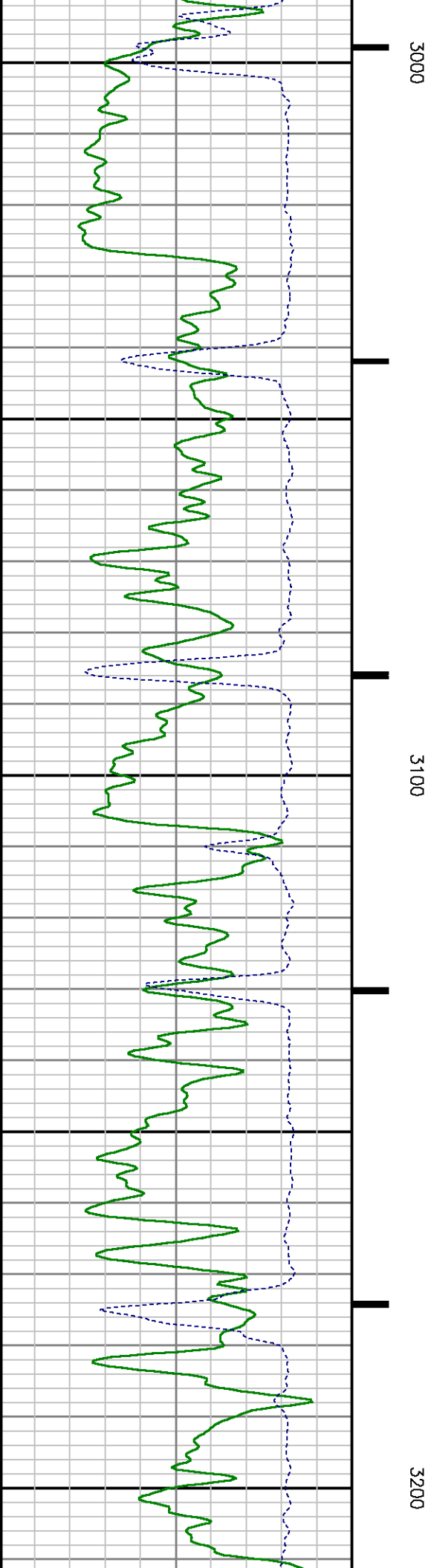
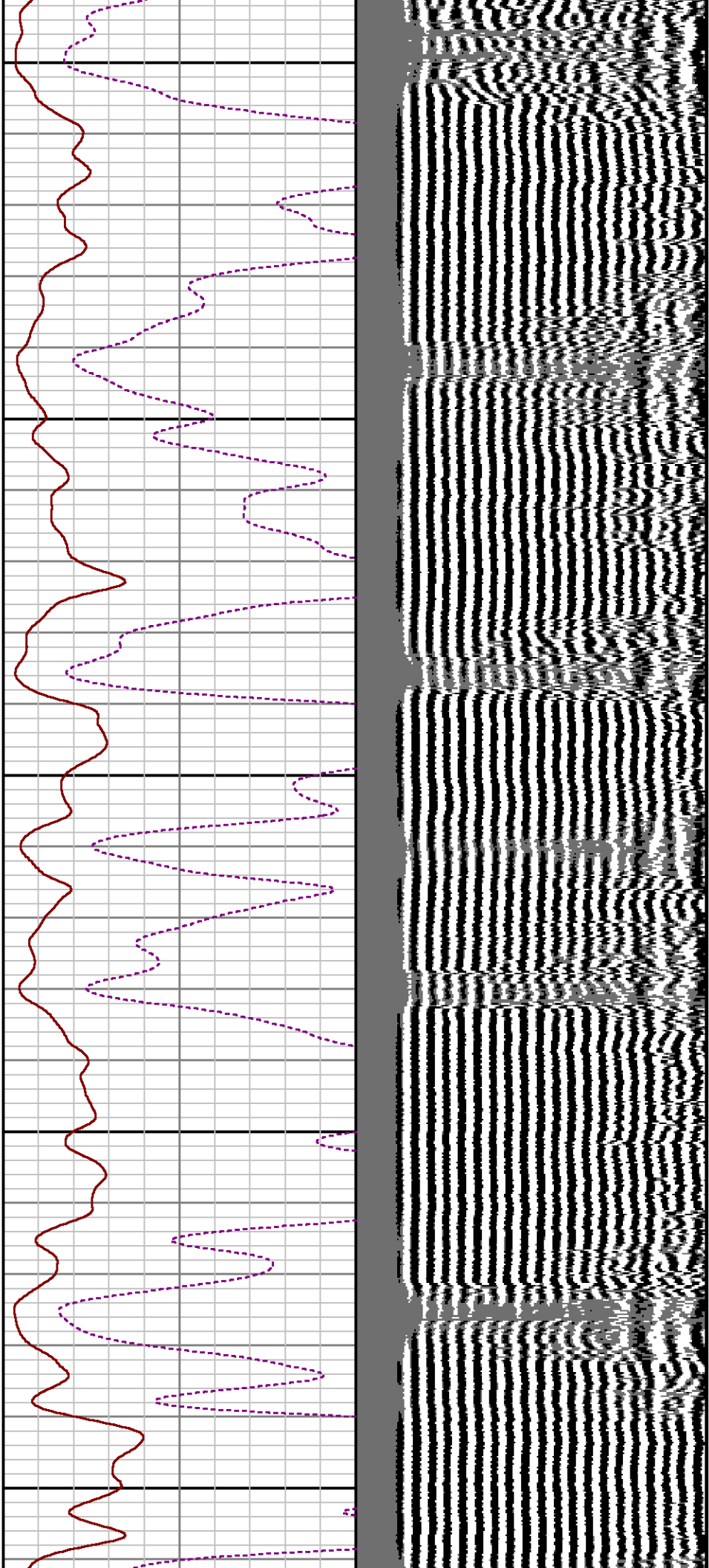


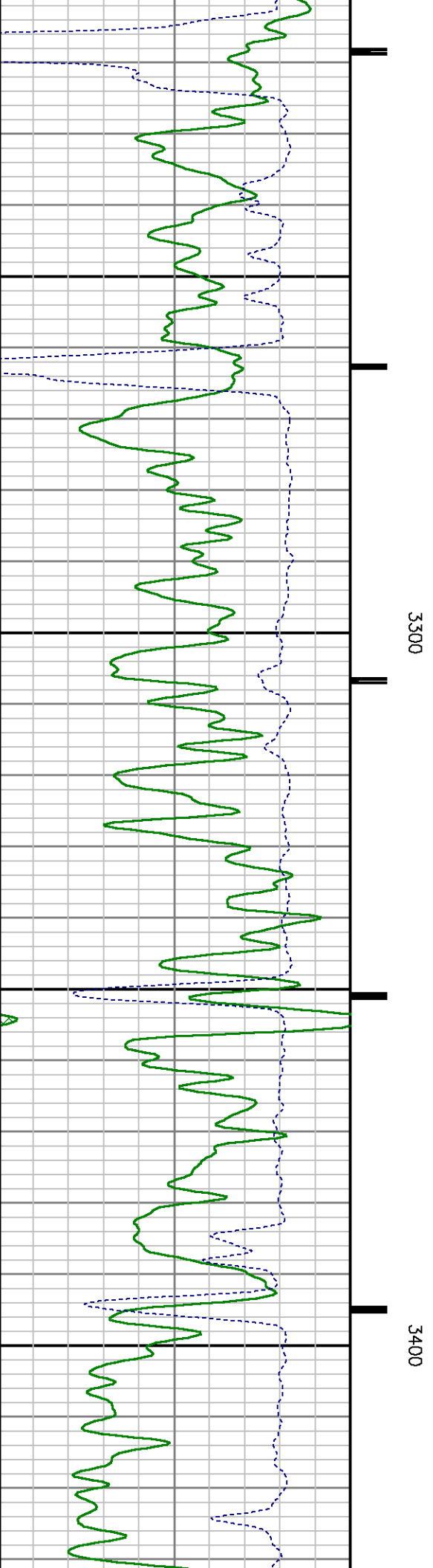
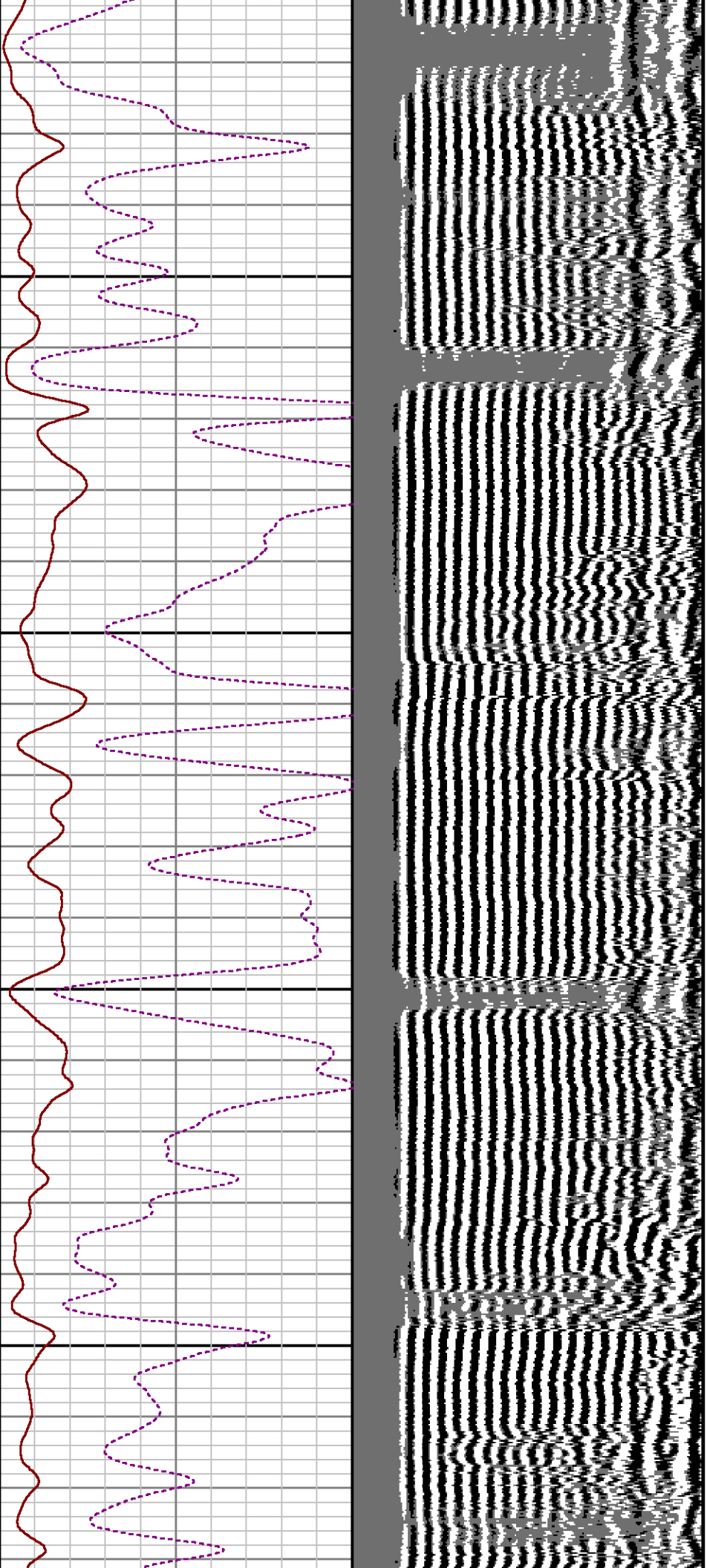


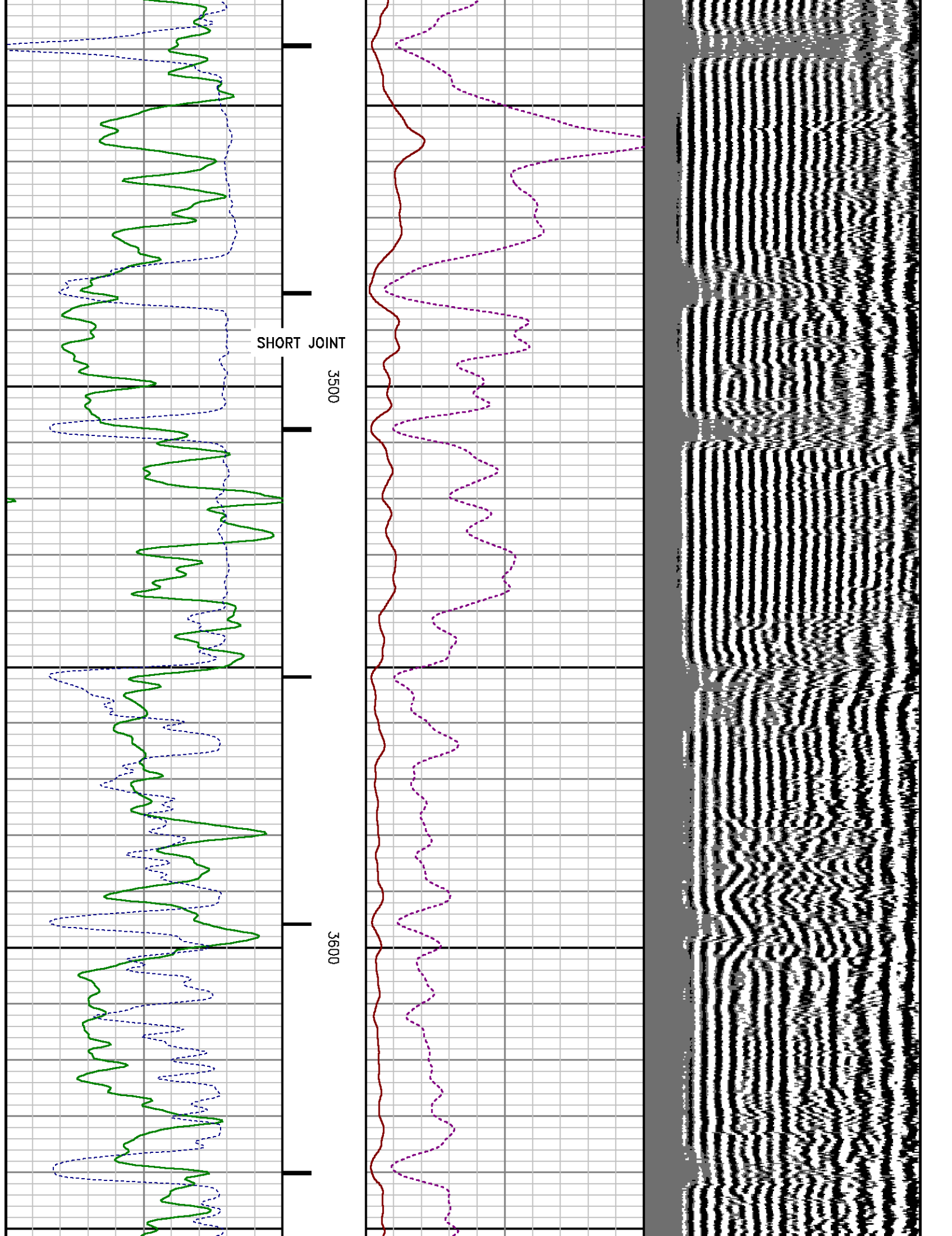


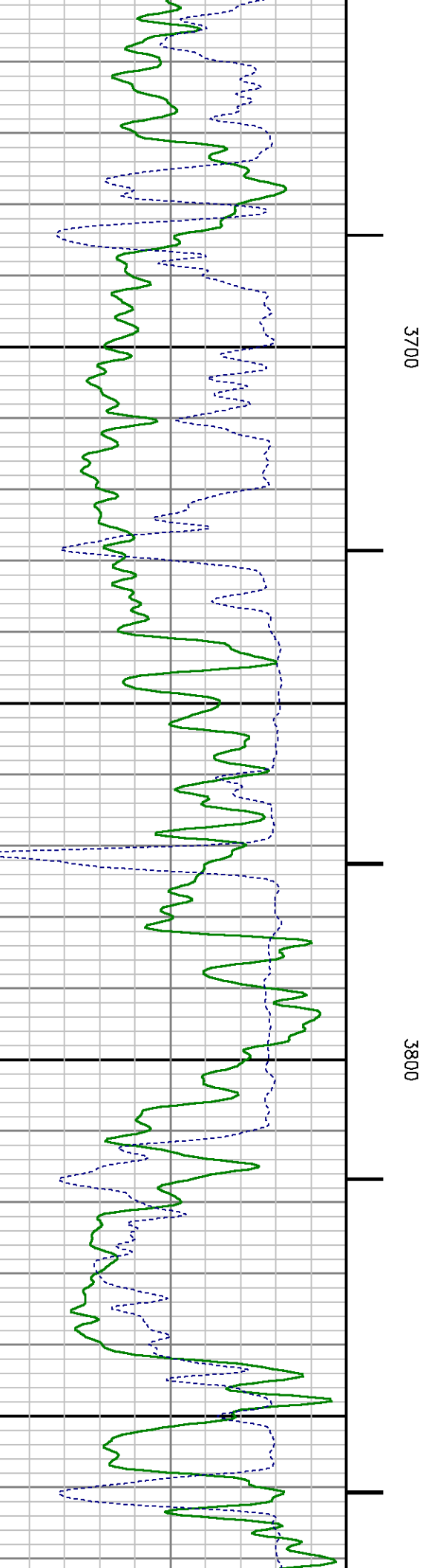
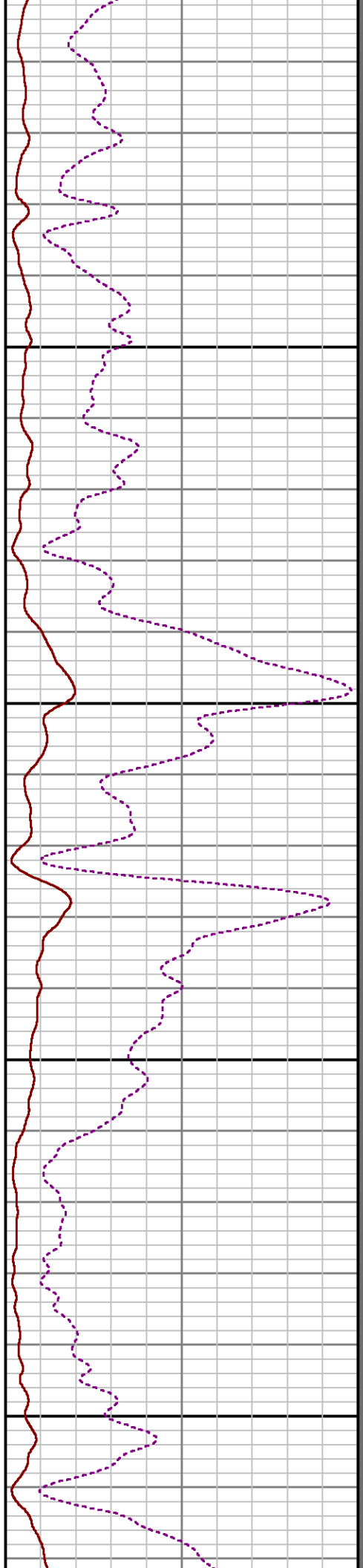
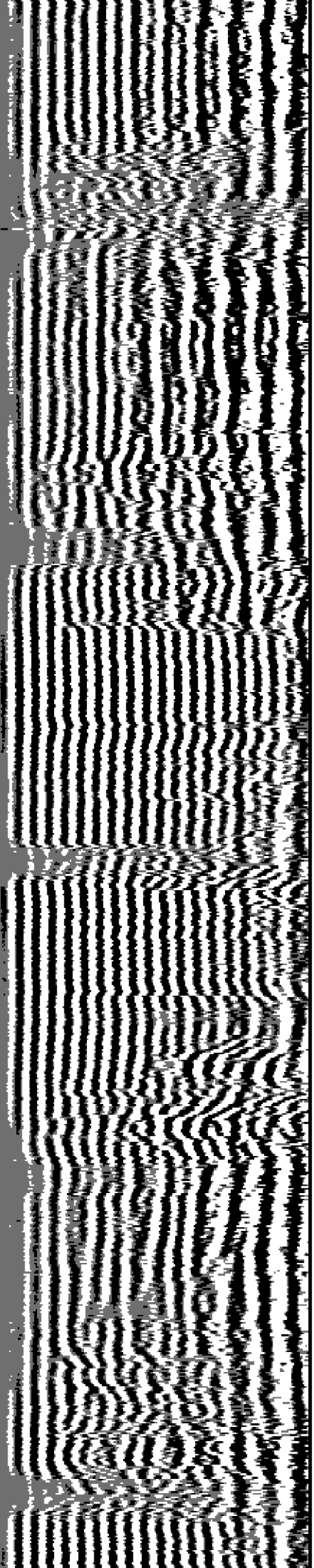


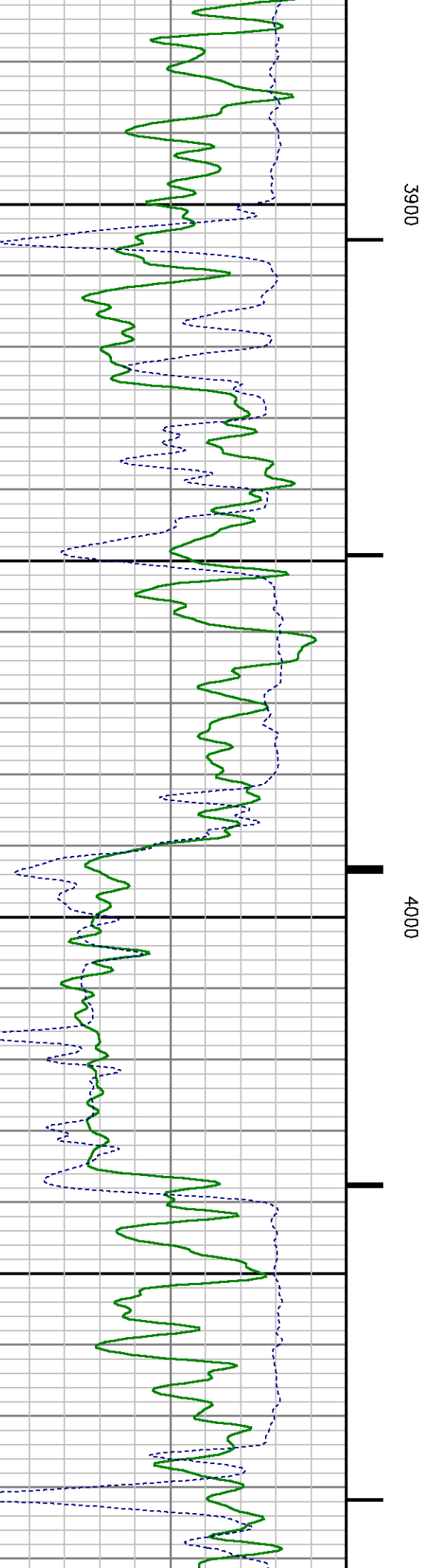
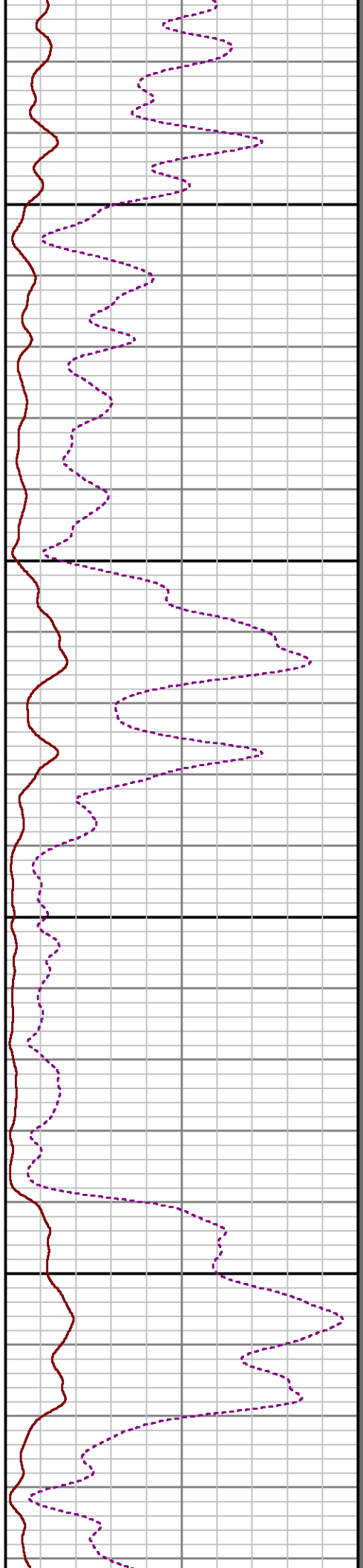
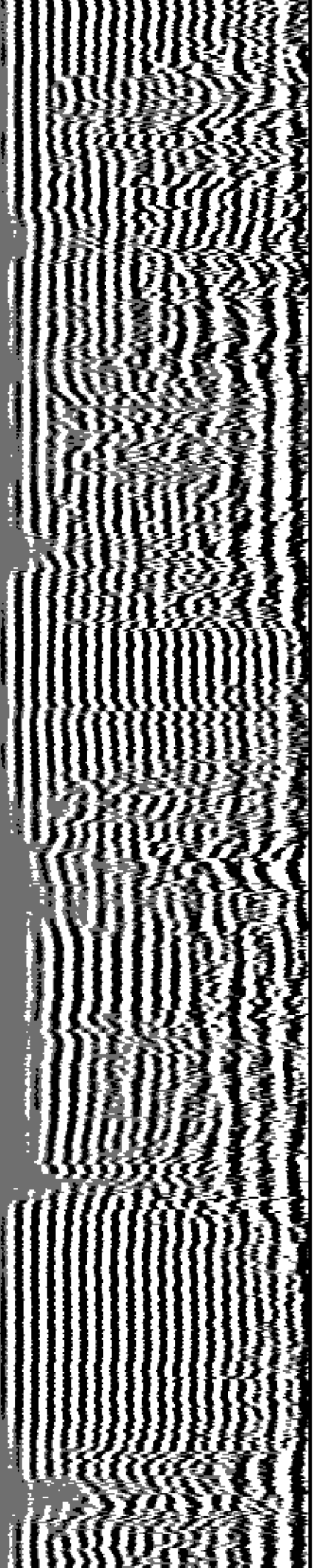


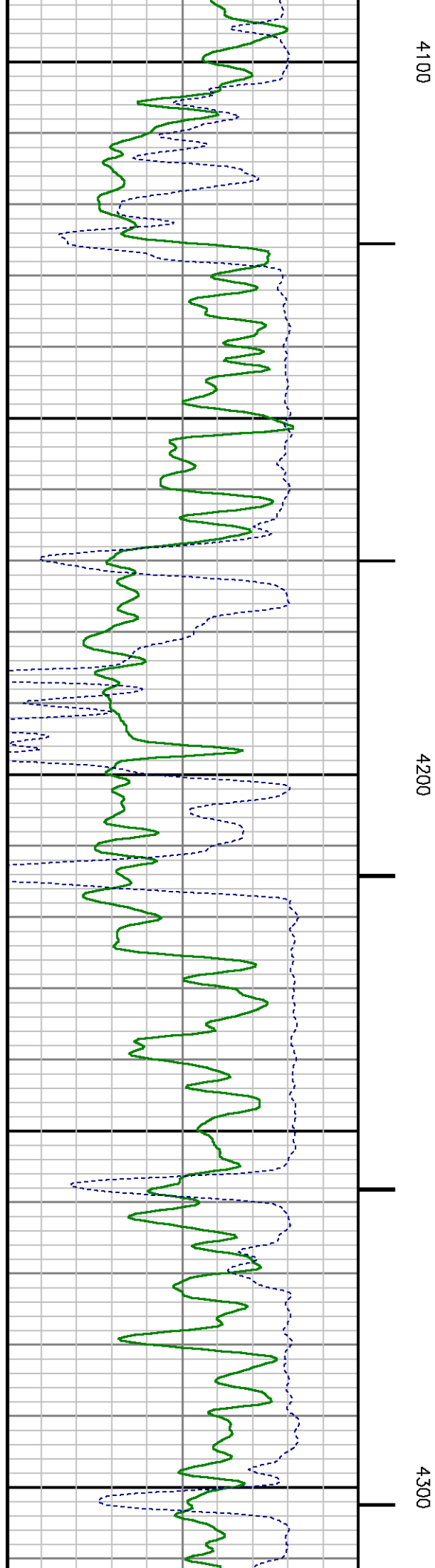
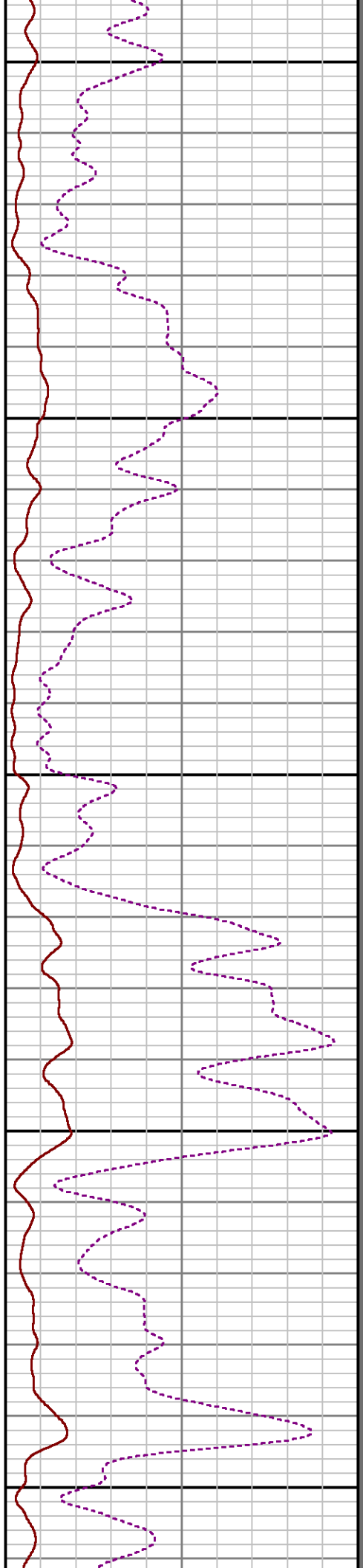
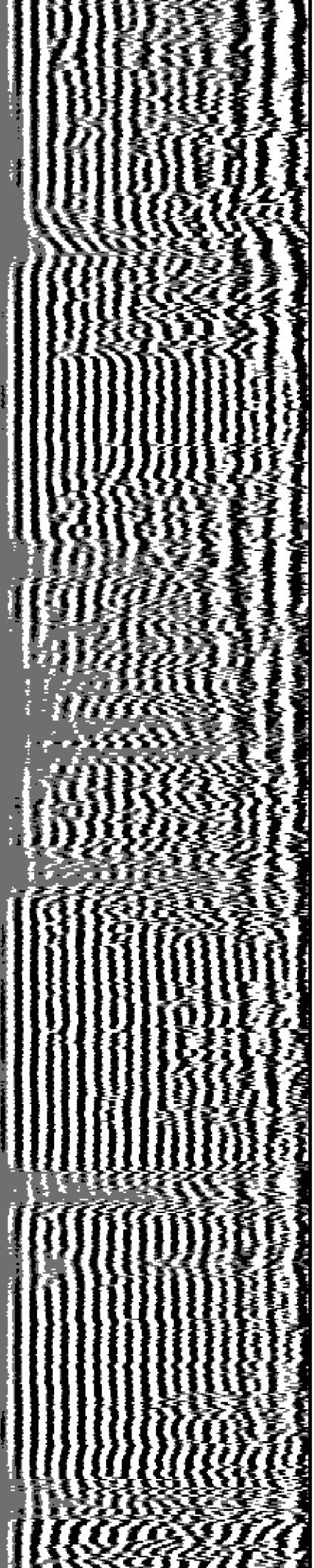


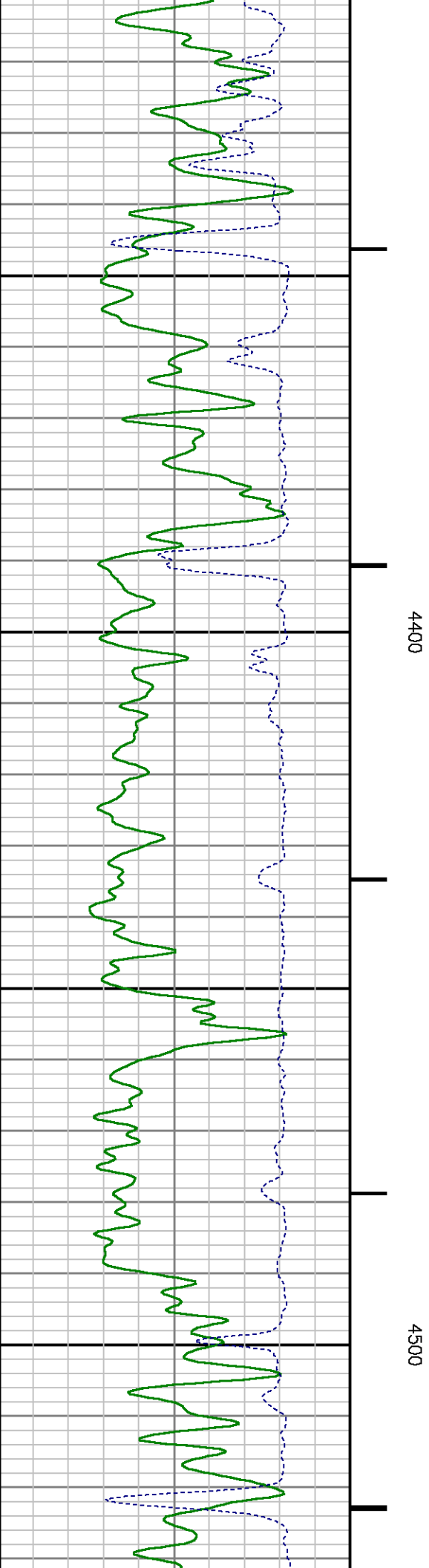
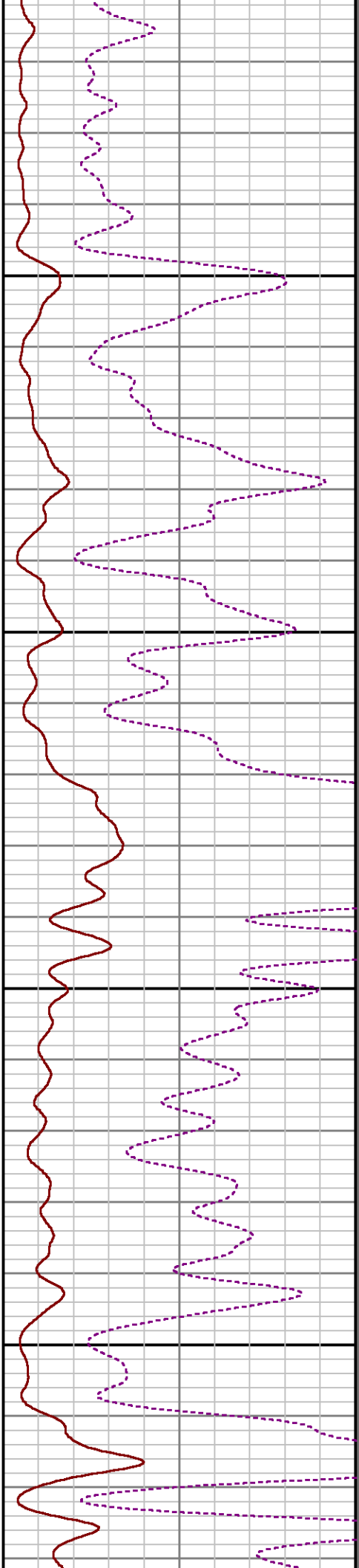
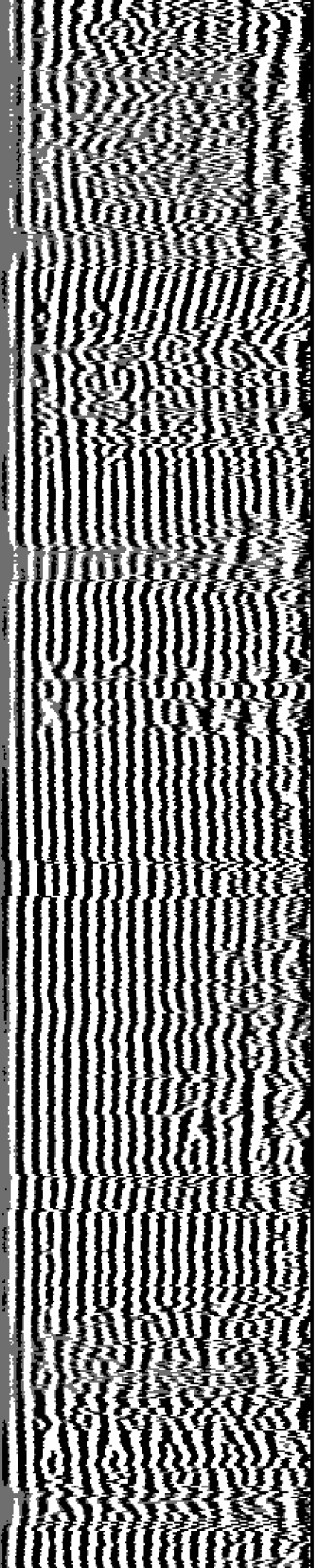


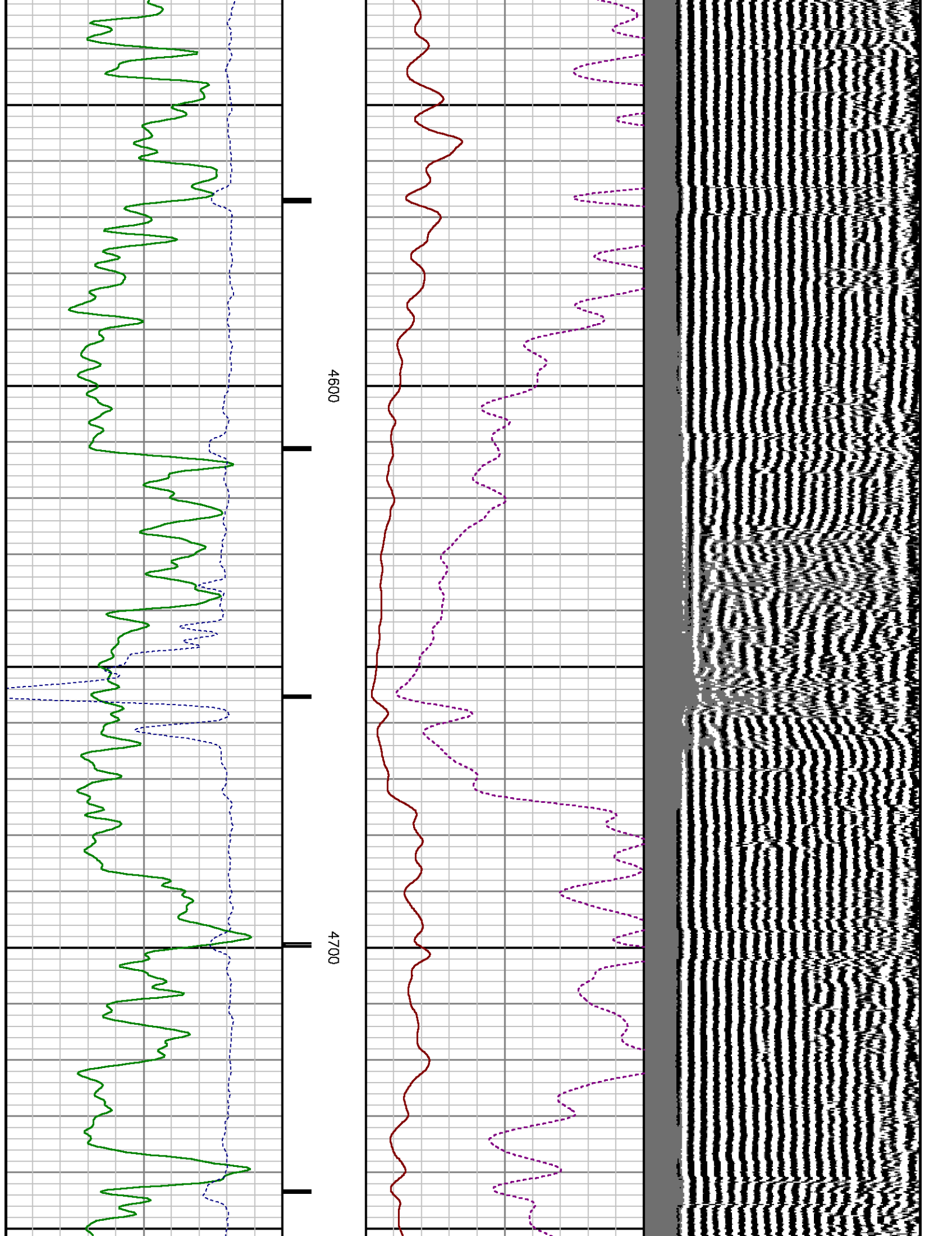


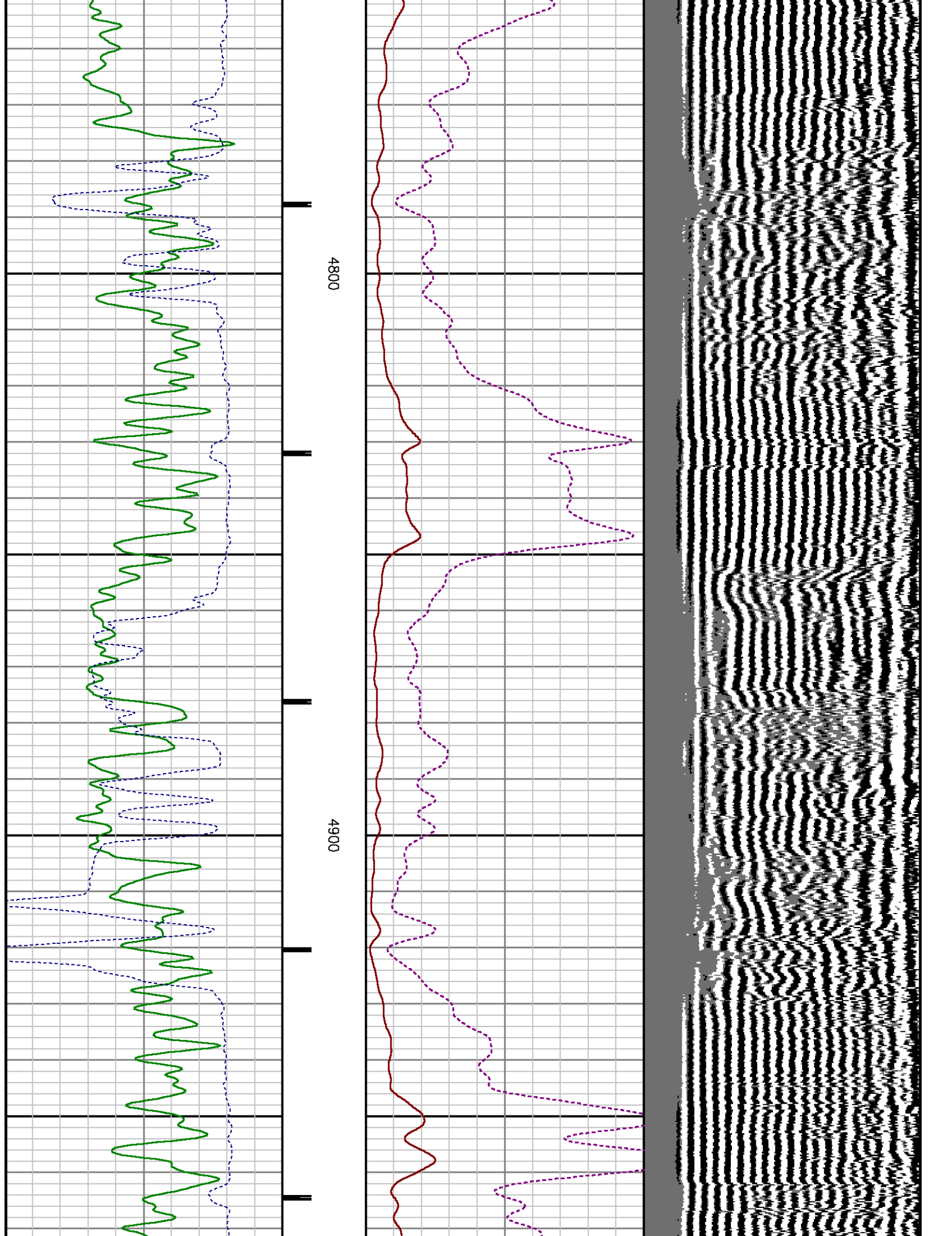


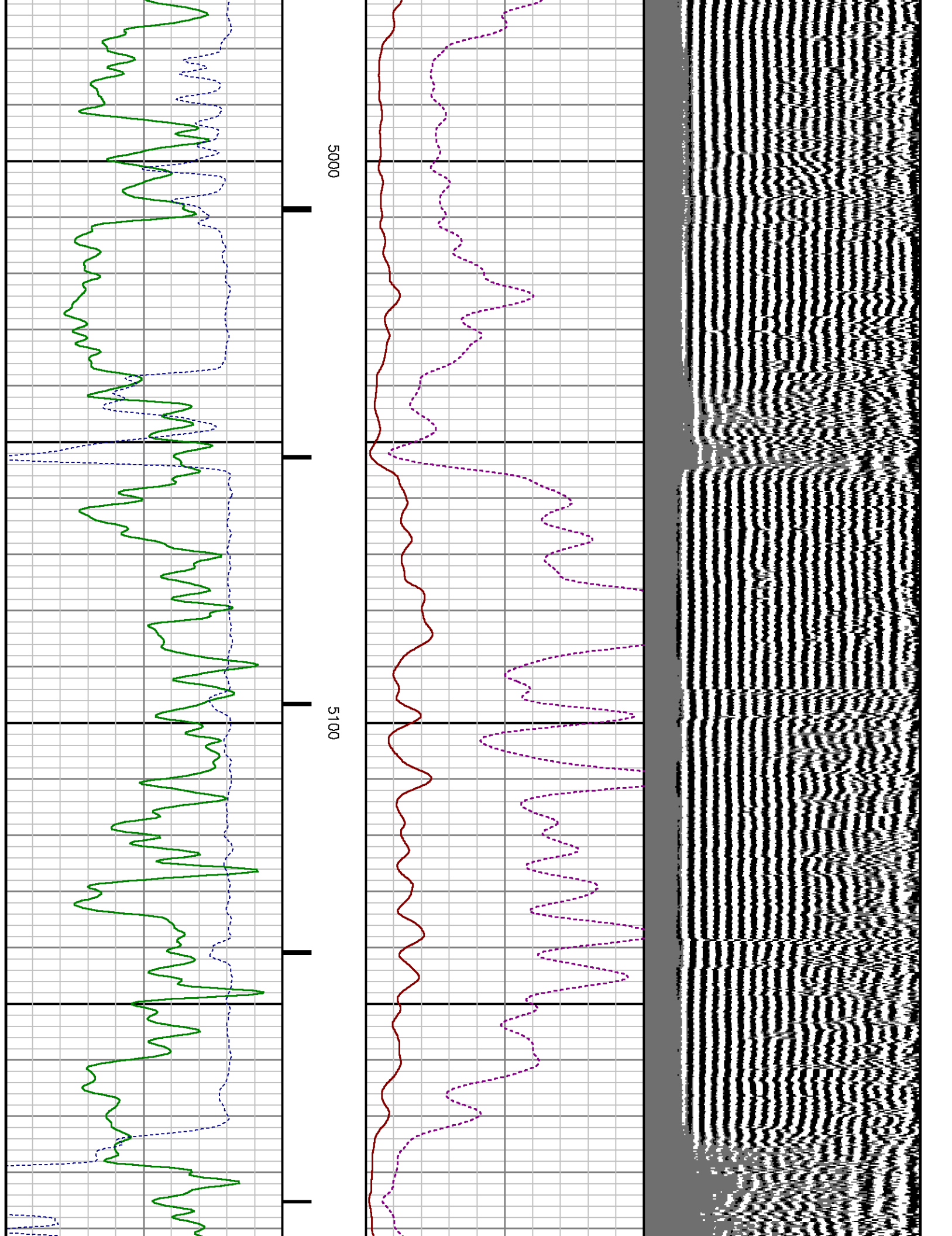


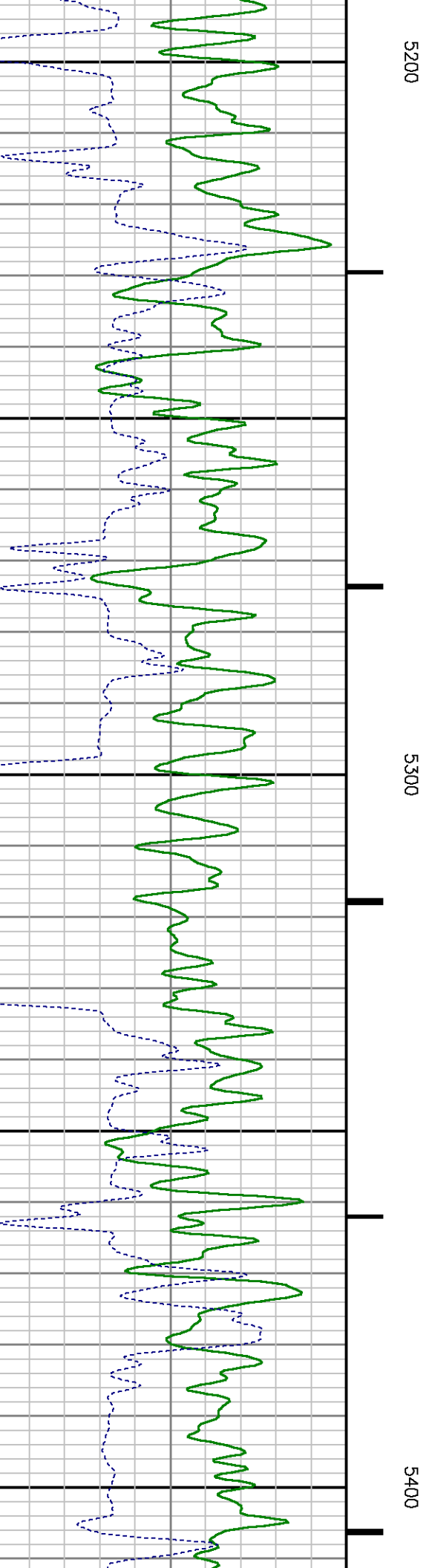
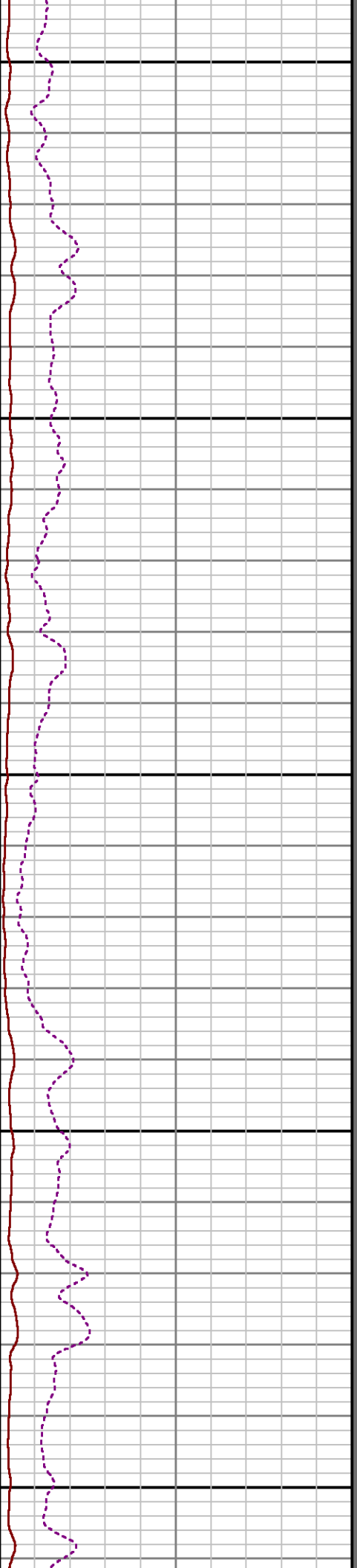
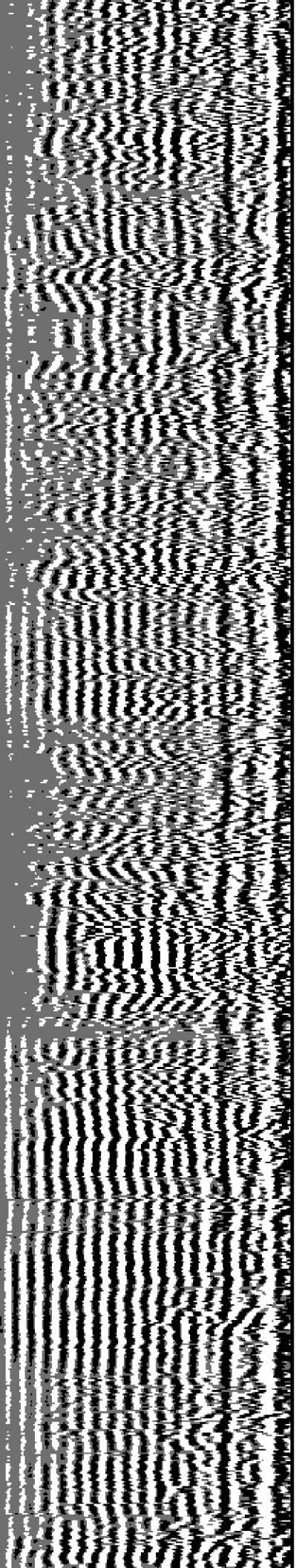


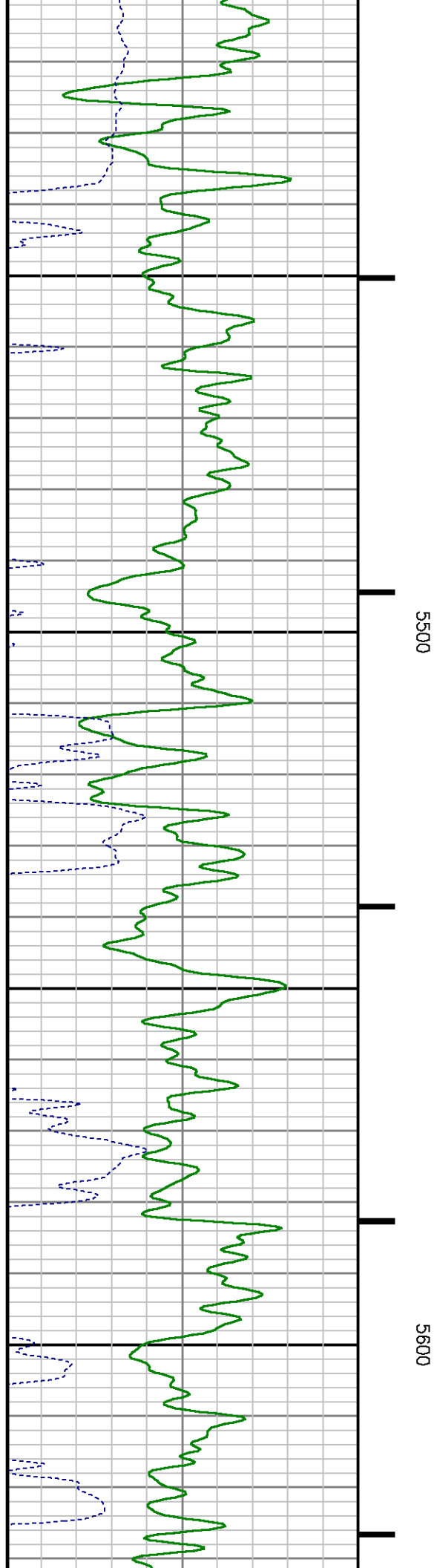
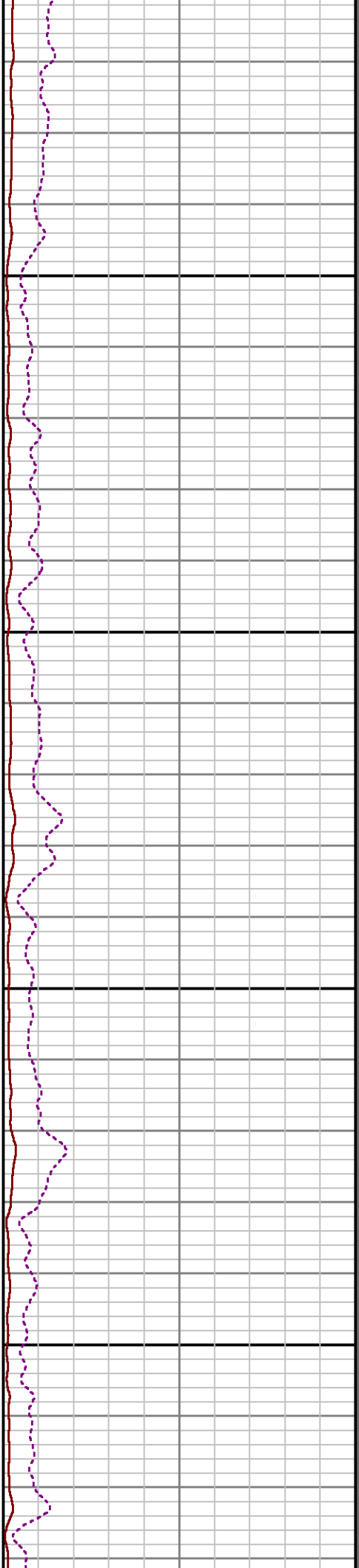
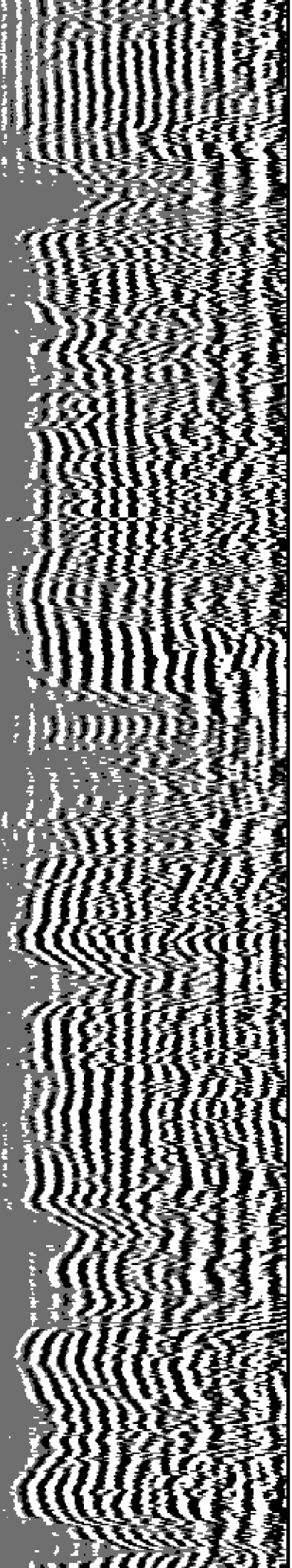


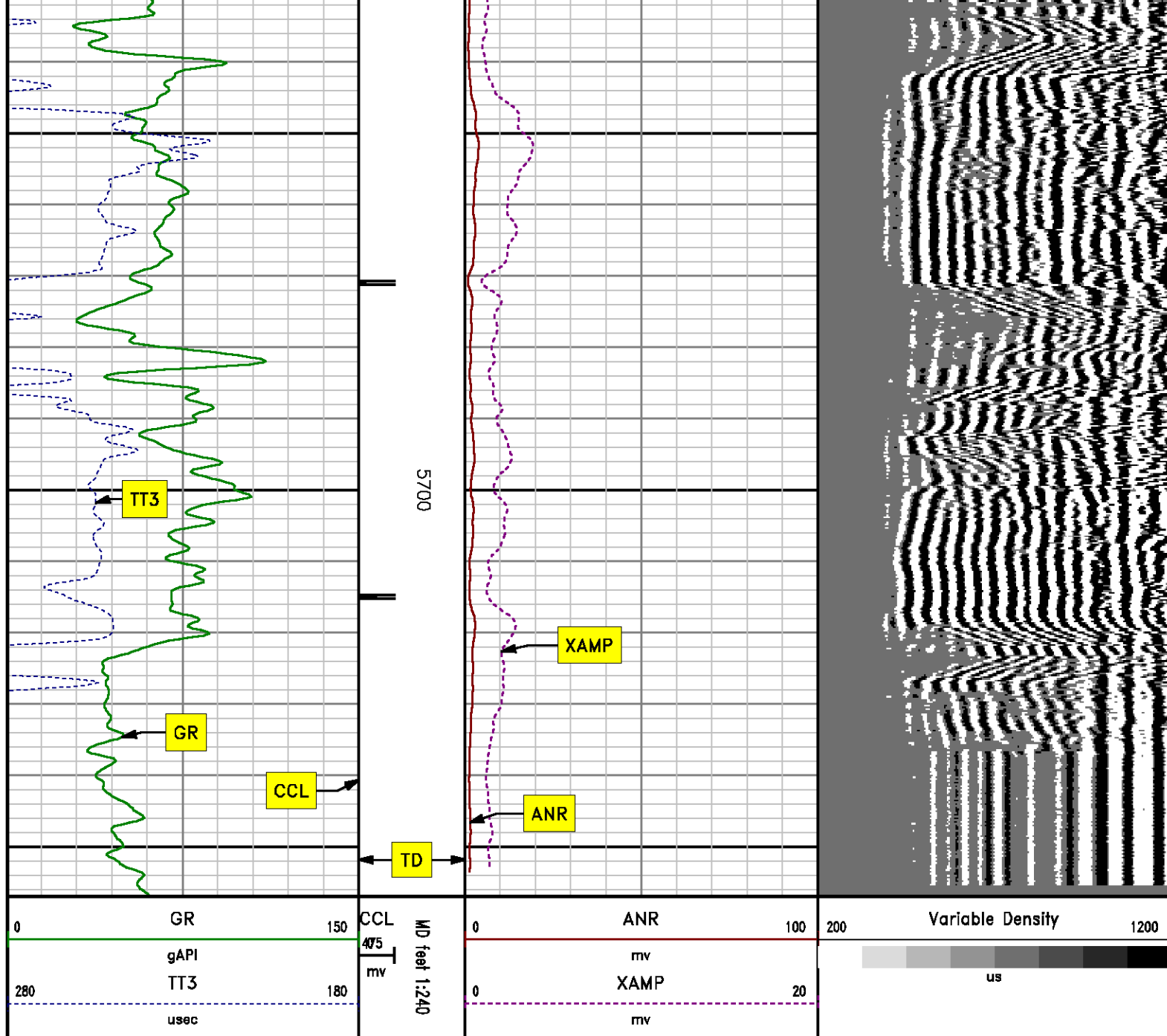












SECONDARY PRESENTATION

0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
------------------	-----------	-------	-------	-----	--------

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	34.325	5770.250
RAL	Amp Gate Start Near	195.000	usec	34.325	5770.250
RAL	Amp Gate Start Radial	195.000	usec	34.325	5770.250
RAL	Amp Gate Width Far	25.000	usec	34.325	5770.250
RAL	Amp Gate Width Near	25.000	usec	34.325	5770.250
RAL	Amp Gate Width Radial	25.000	usec	34.325	5770.250
RAL	casing od	4.500	inches	34.325	5770.250
RAL	casing wt	11.600	lbm/ft	34.325	5770.250
RAL	FB Start Far	291.900	usec	34.325	5770.250
RAL	FB Start Near	175.391	usec	34.325	5770.250
RAL	FB Start Radial	175.391	usec	34.325	5770.250
RAL	FB Thresh Far	10.000	mv	34.325	5770.250
RAL	FB Thresh Near	4.000	mv	34.325	5770.250
RAL	FB Thresh Radial	4.000	mv	34.325	5770.250
RAL	Fluid Travel Time	200.000	usec/ft	34.325	5771.200

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

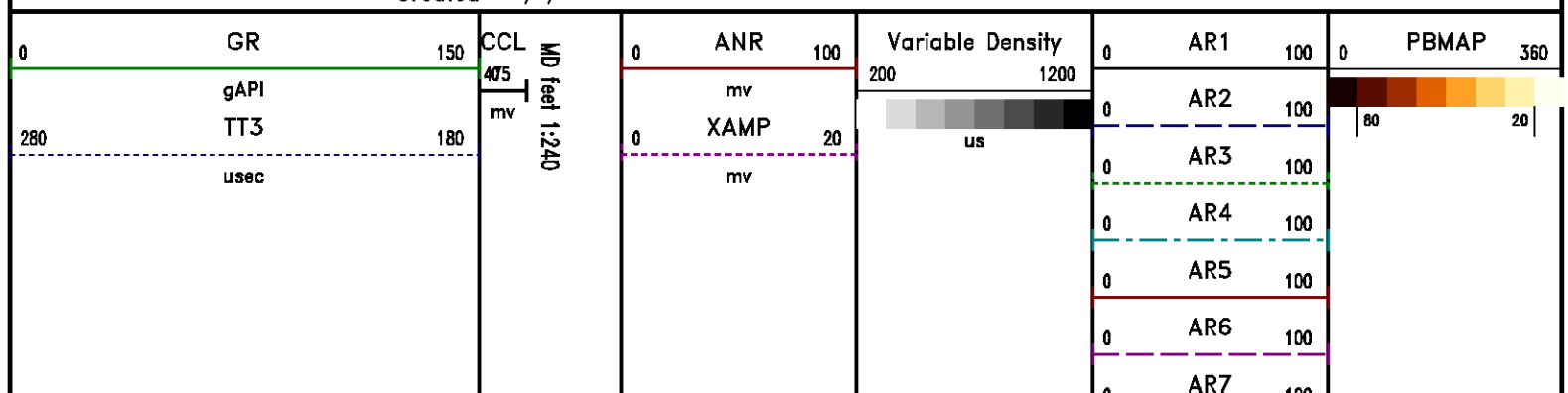
Well : BOSELY SG 311-27

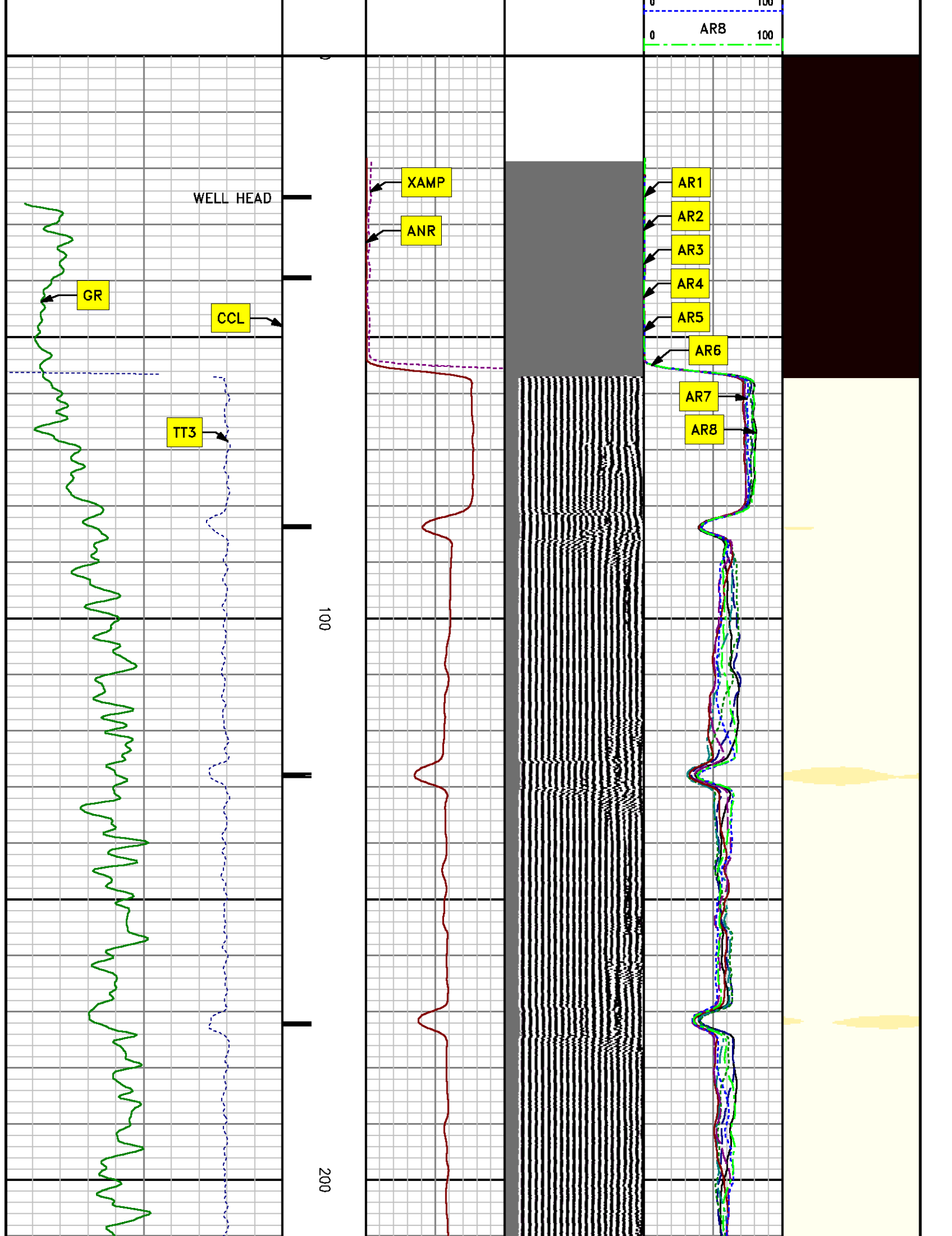
File Name : d:\welldata\wpx\bosely sg 311-27\cbl311\main.xtf

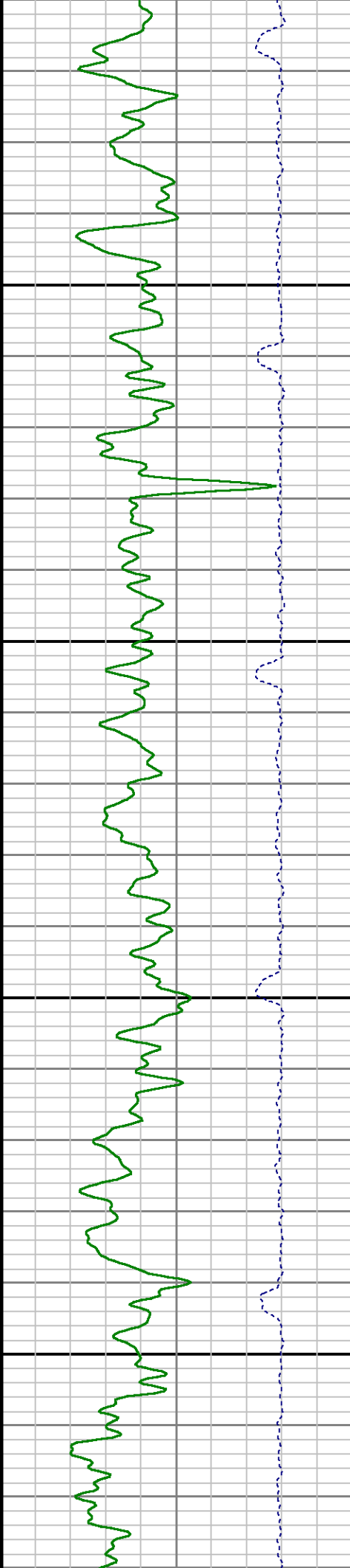
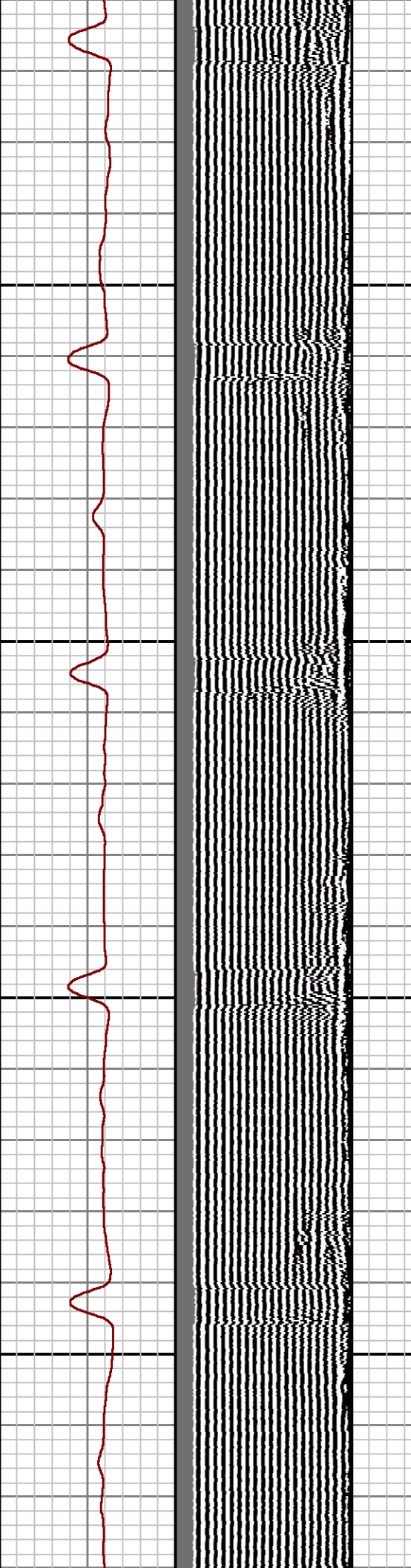
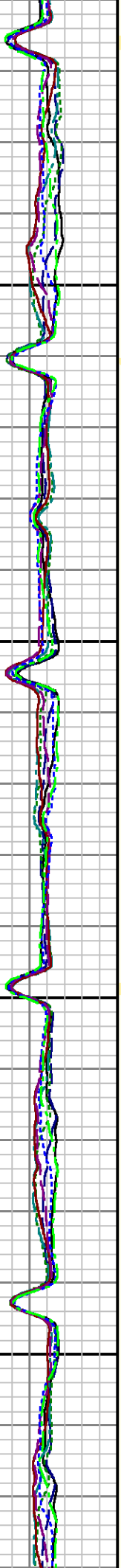
Mode : PlotMgr 5.4.504

Interval : 0.00 - 5757.00 feet UP

Created : 2/2/2014 8:33:57 AM

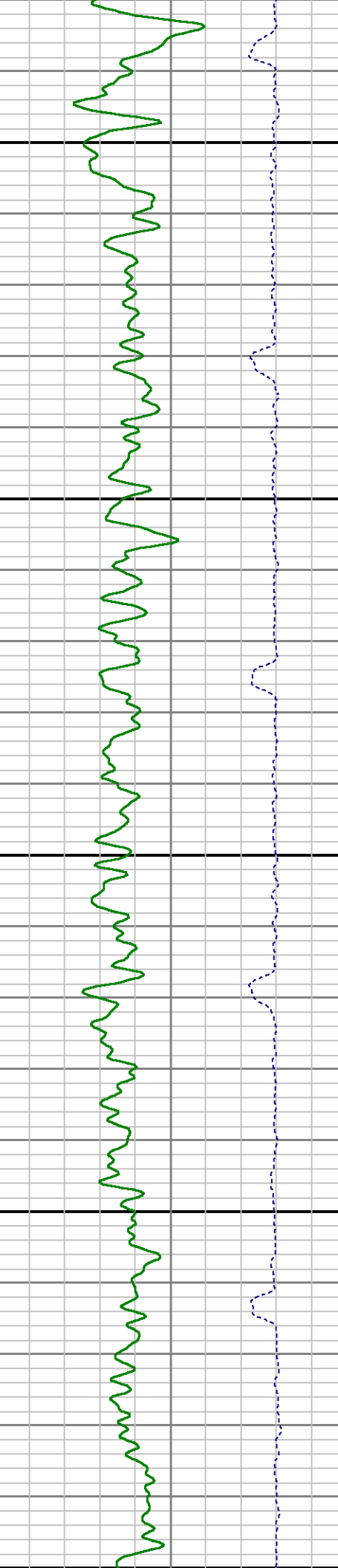
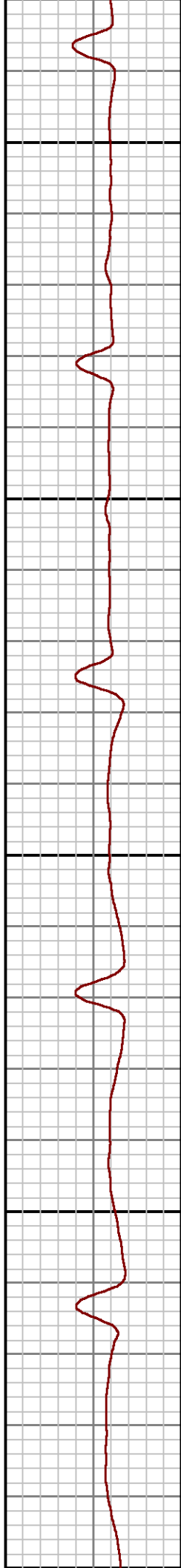
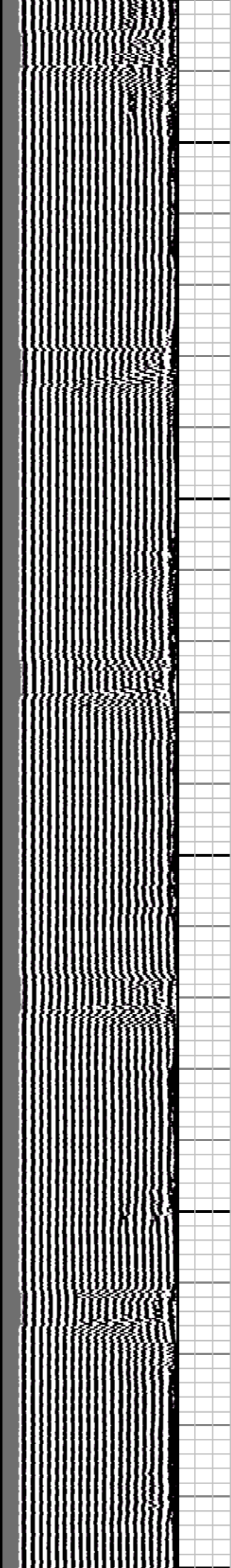
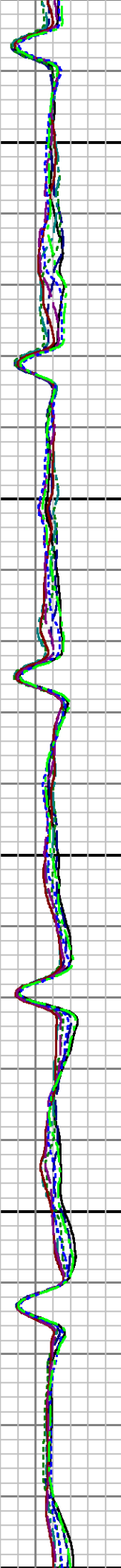
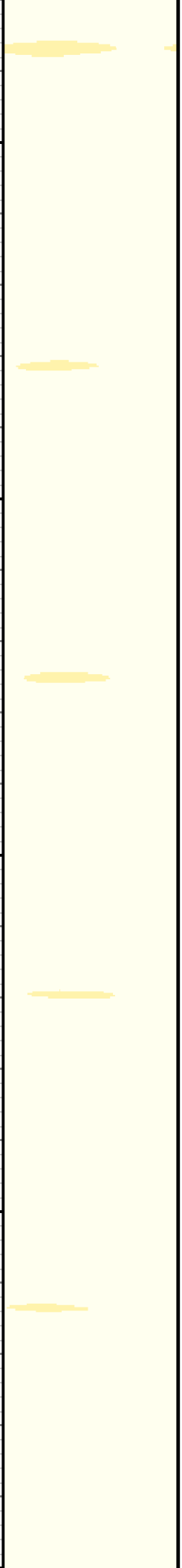






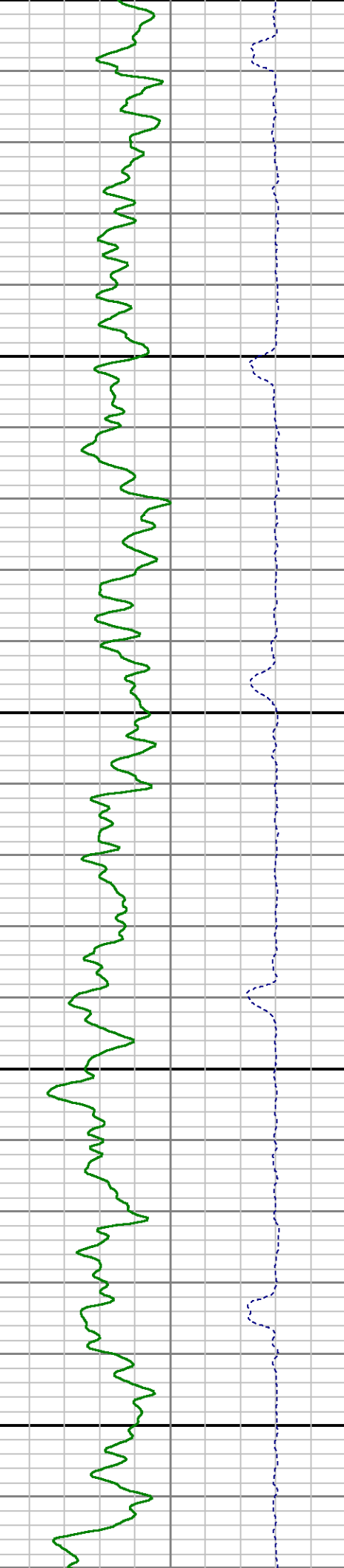
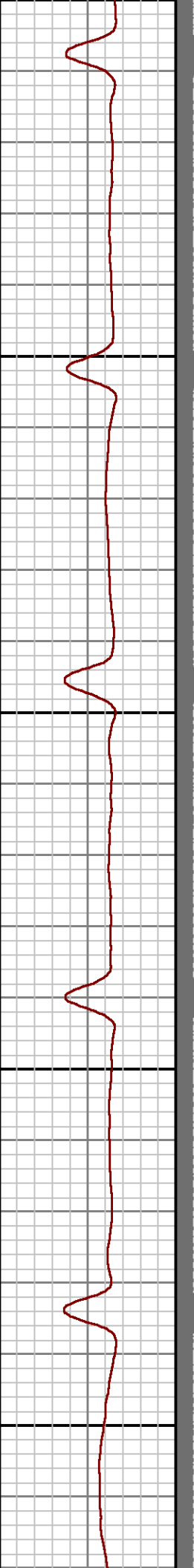
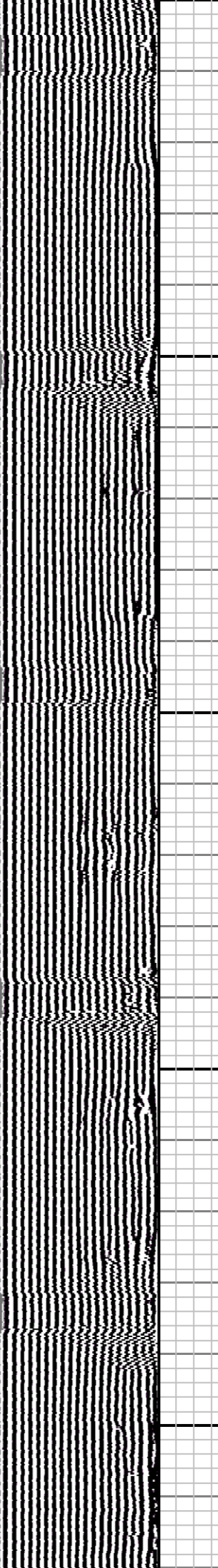
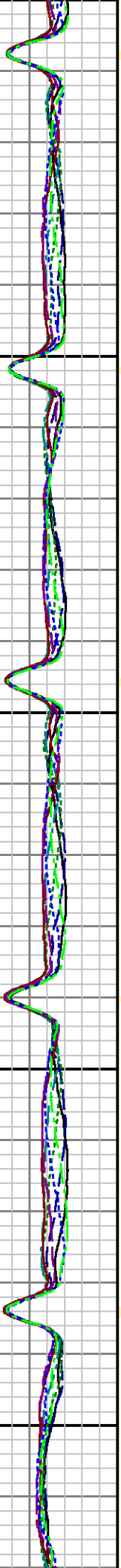
300

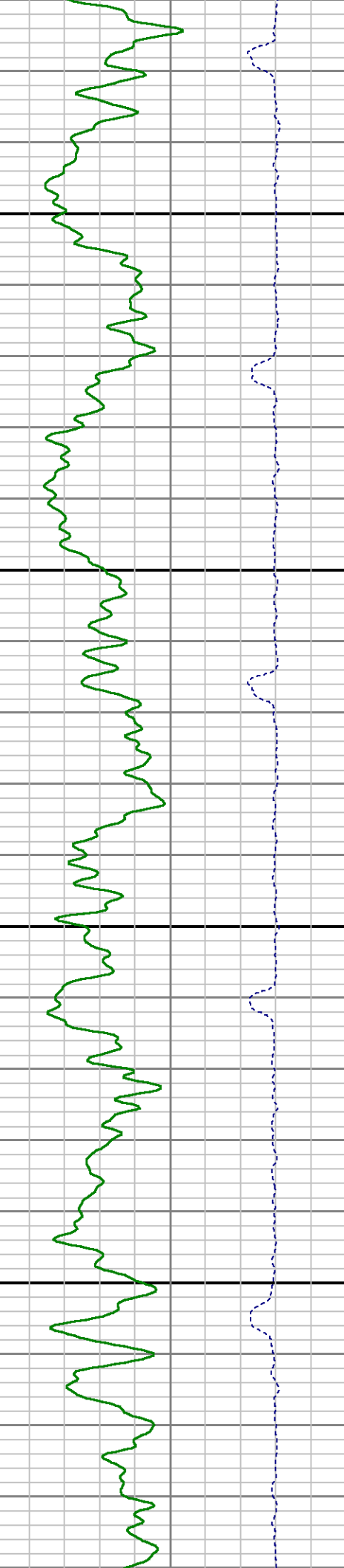
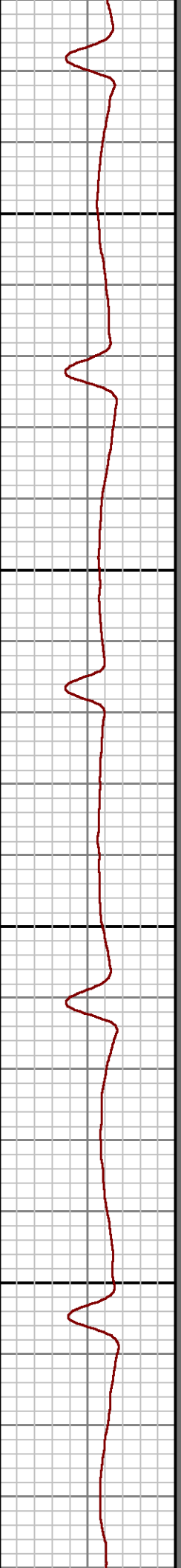
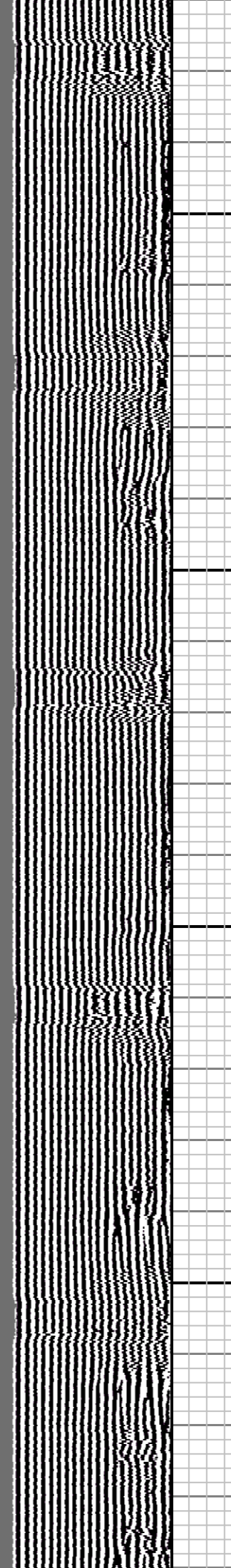
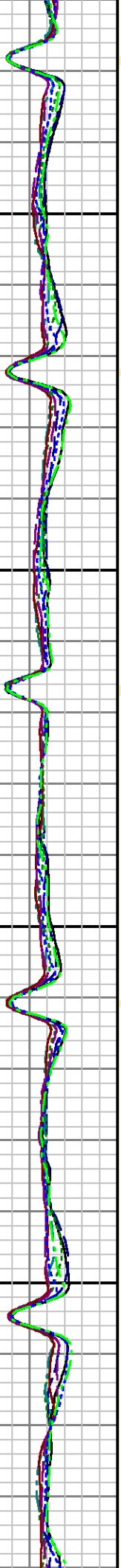
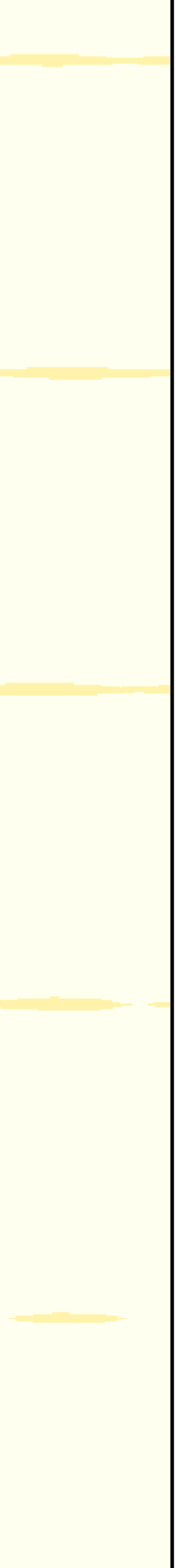
400



500

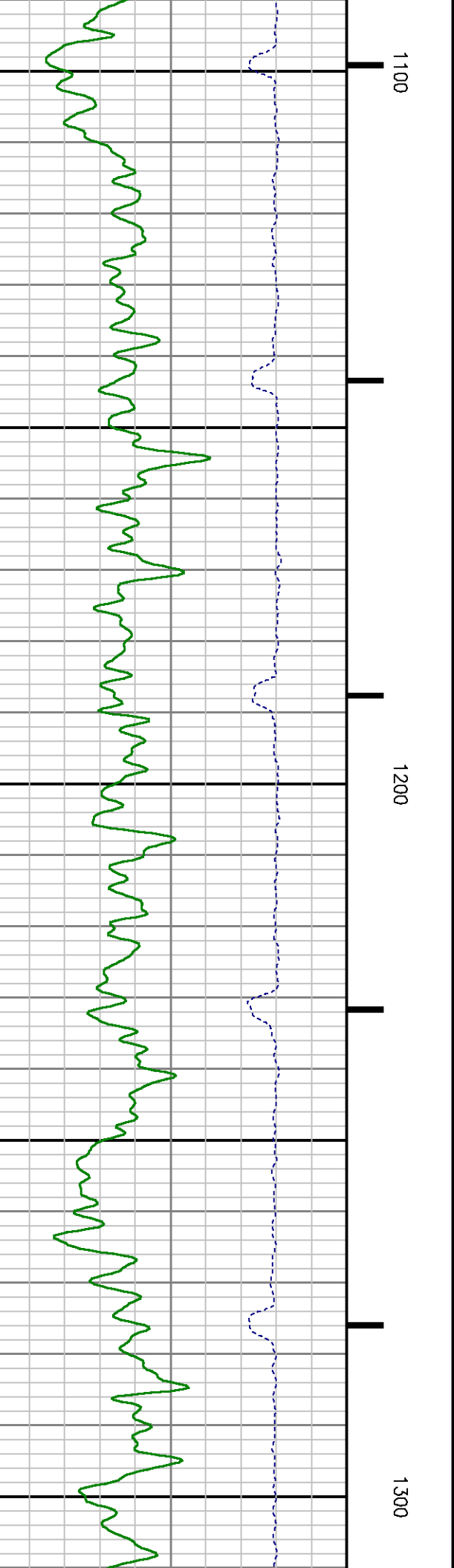
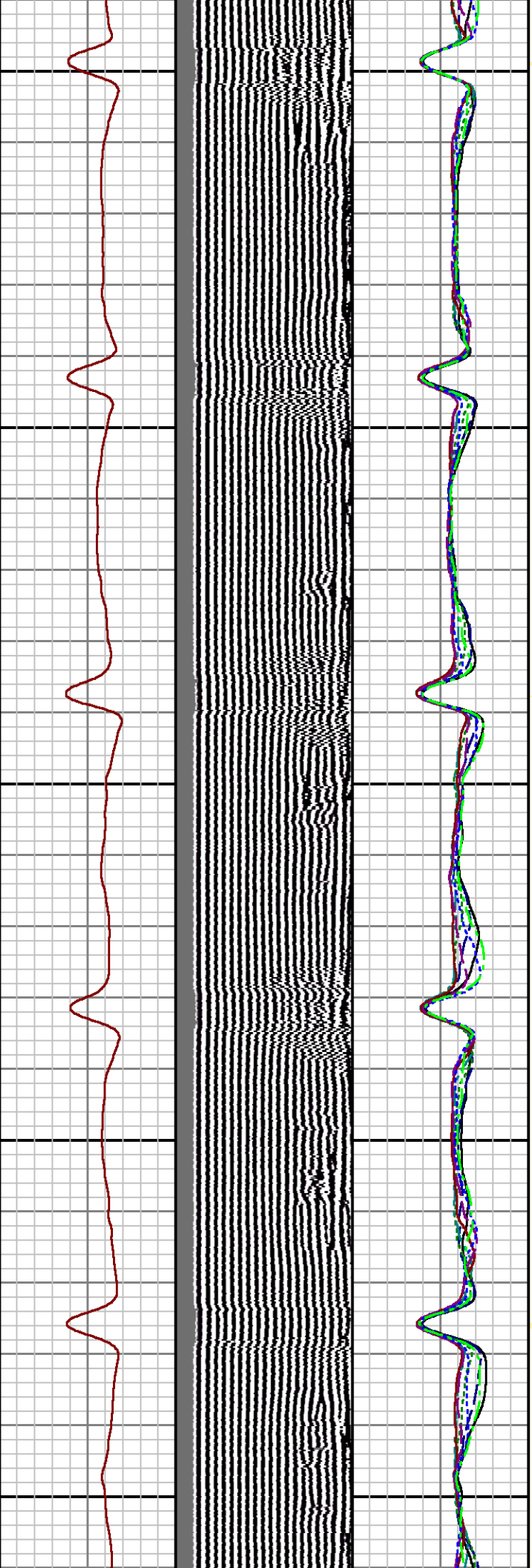
600

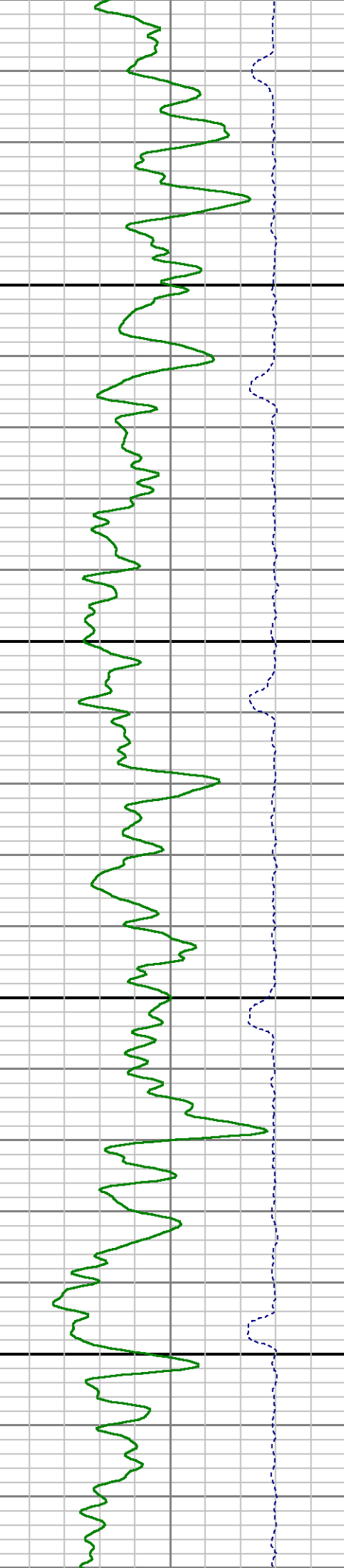
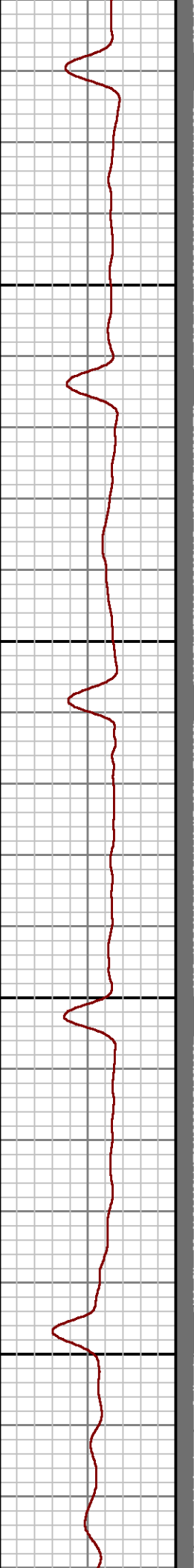
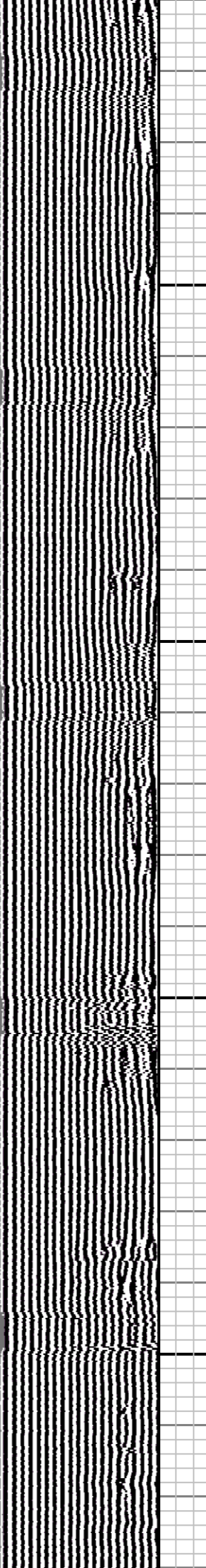
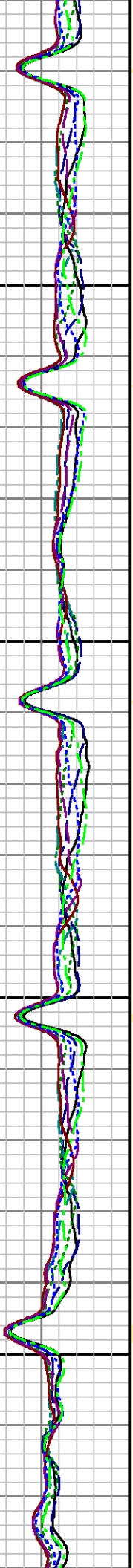


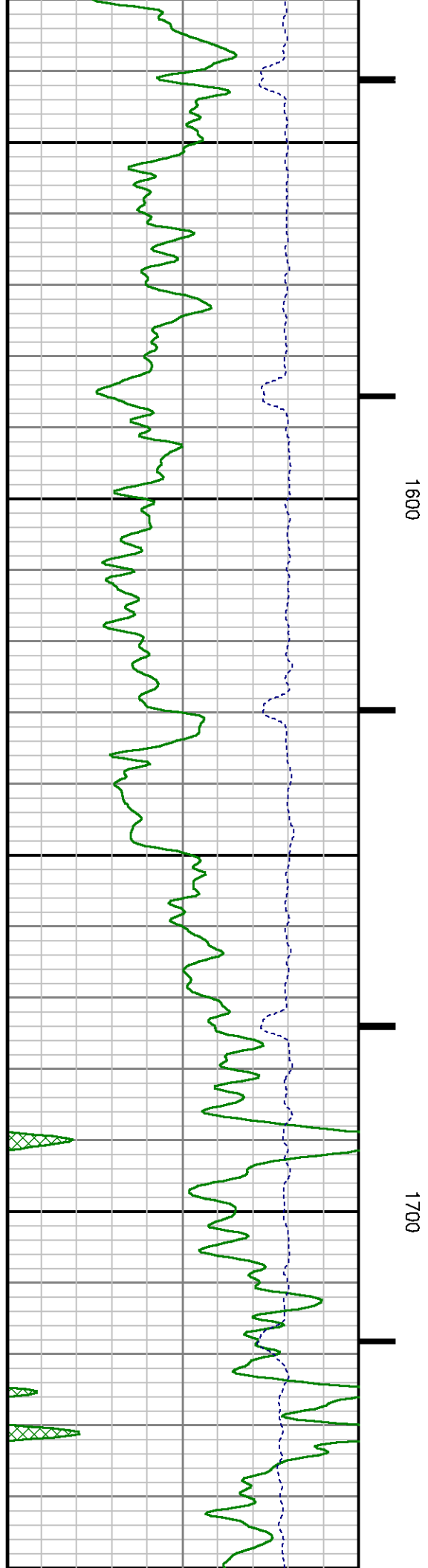
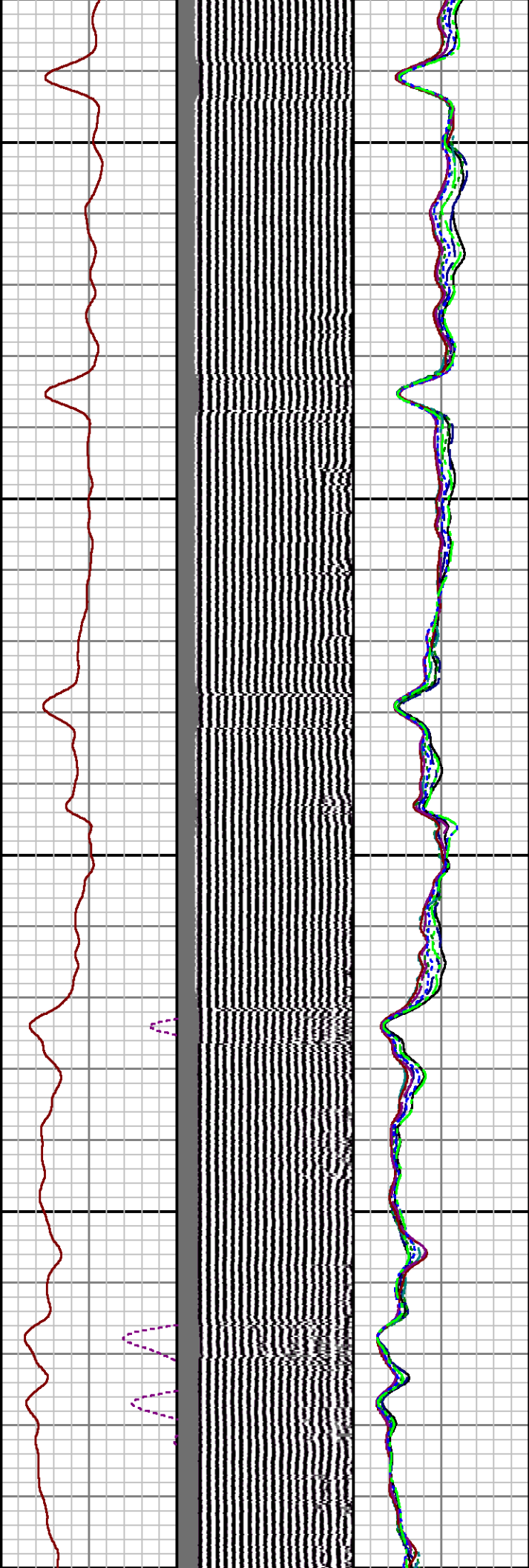
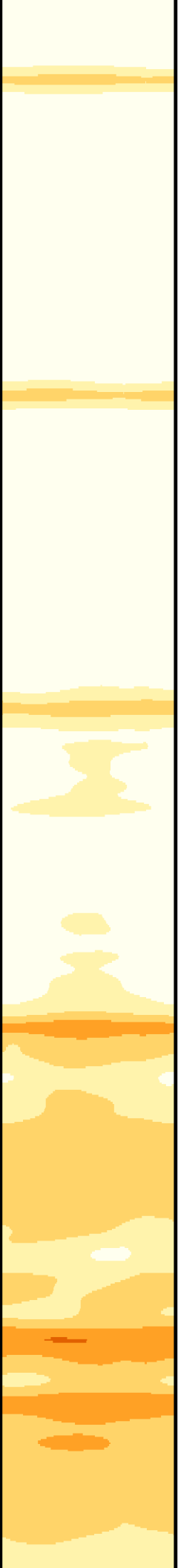


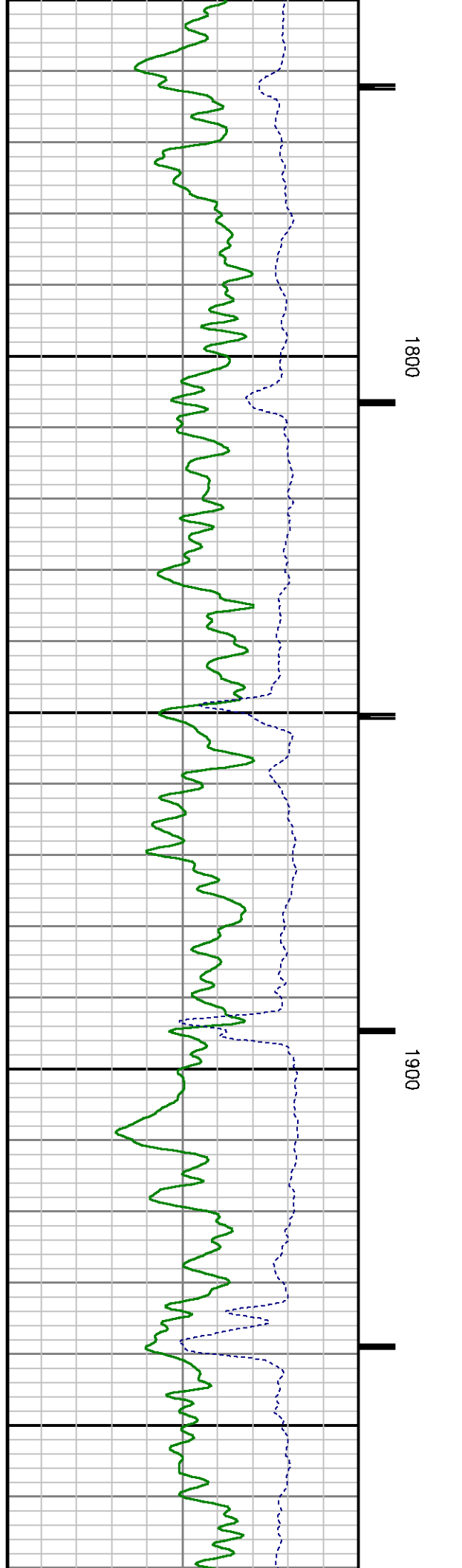
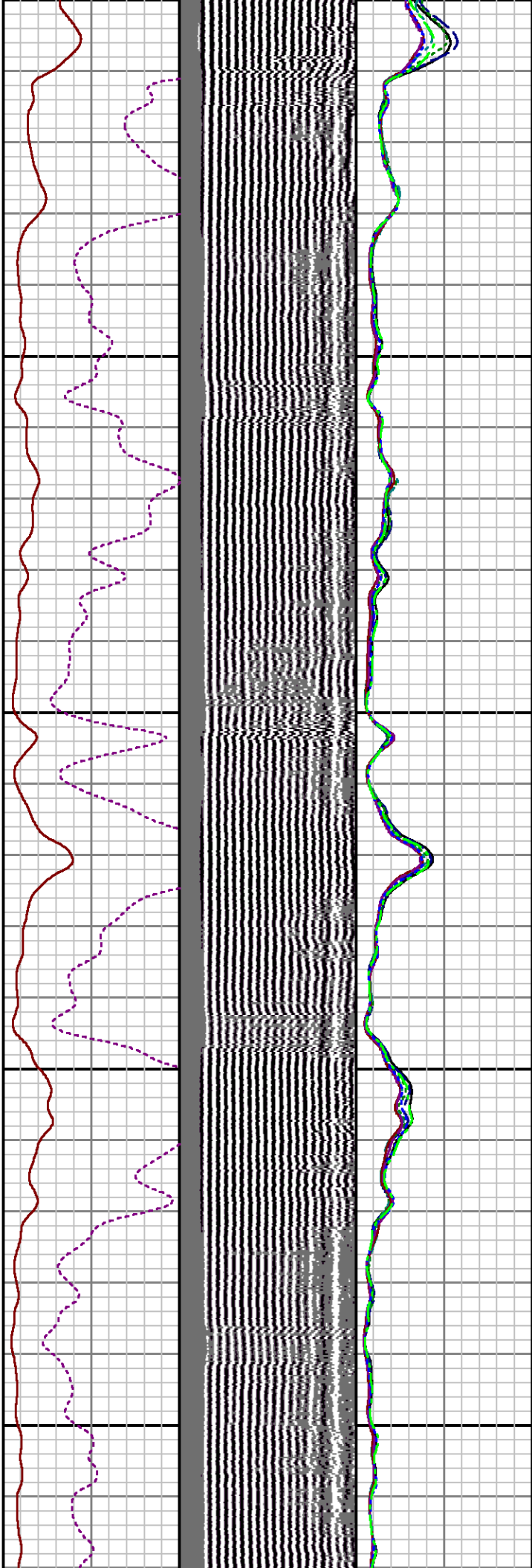
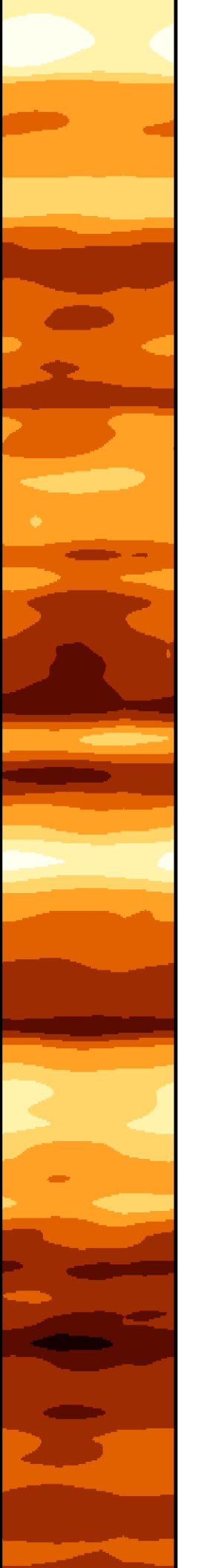
900

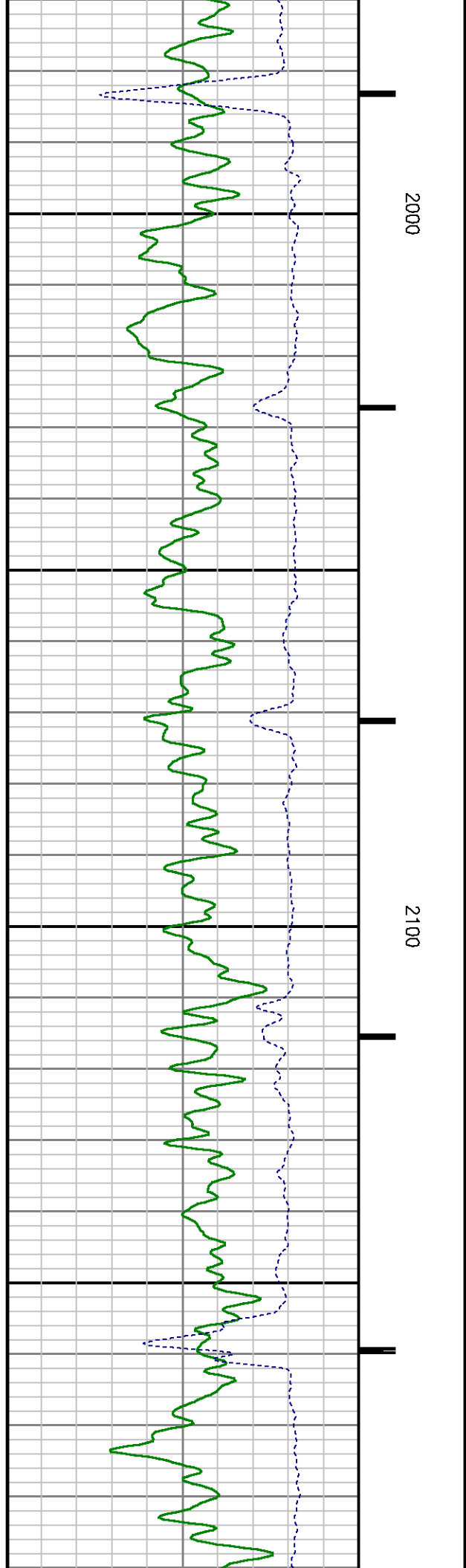
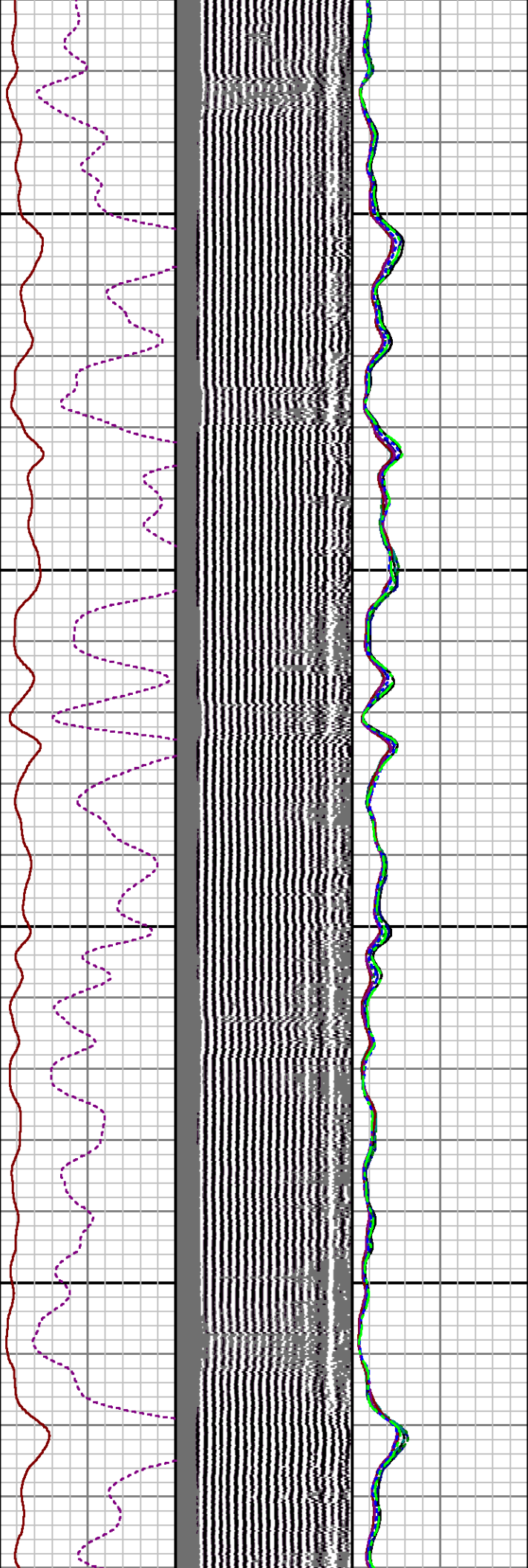
1000

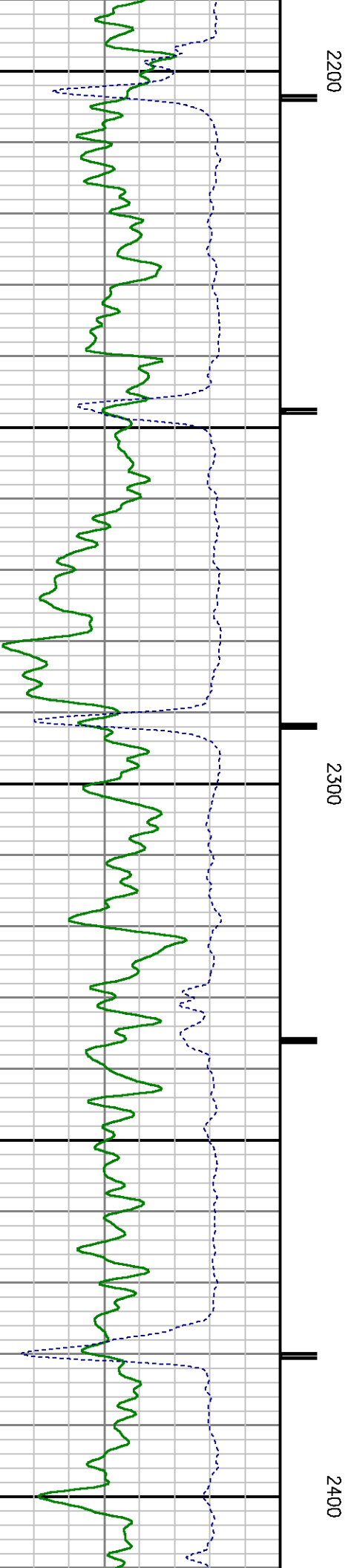
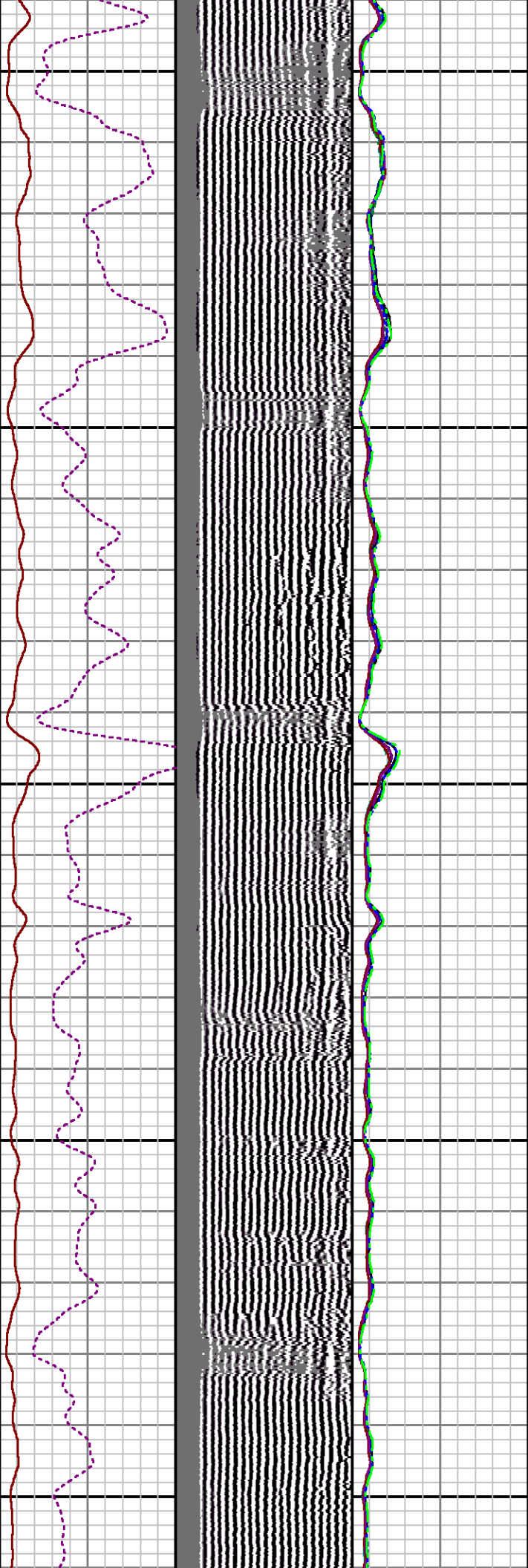


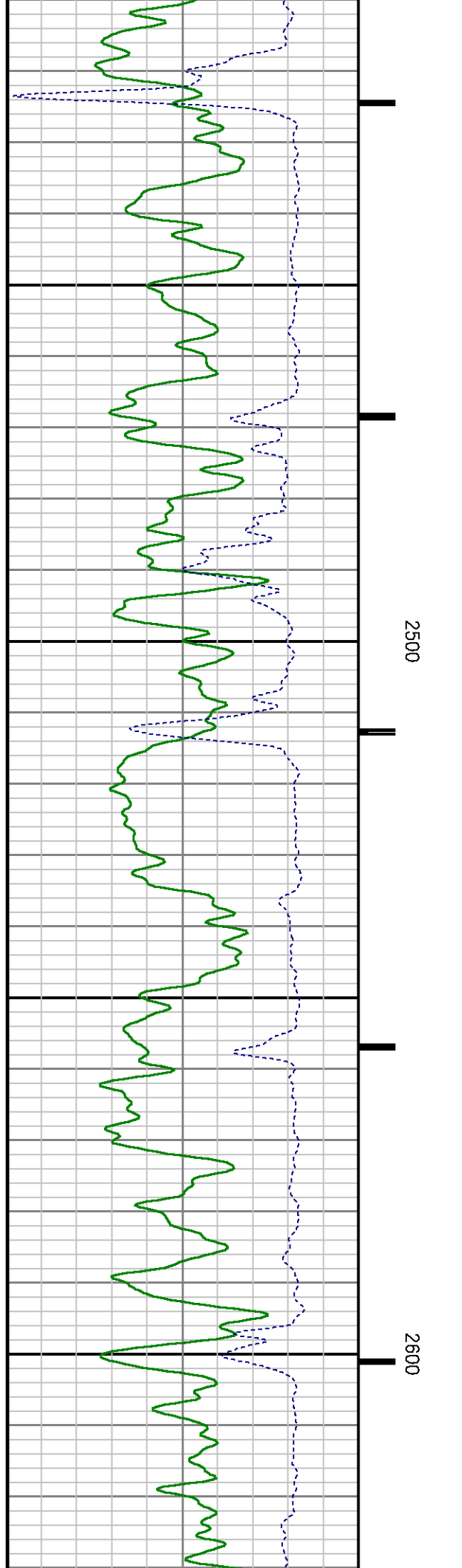
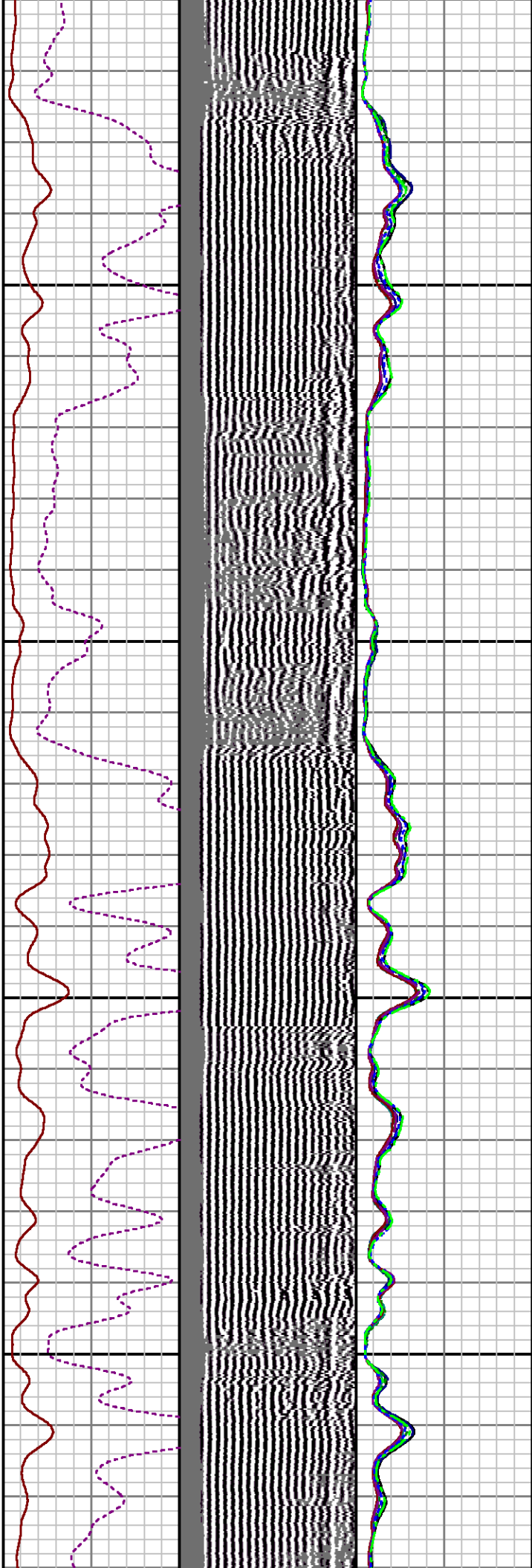


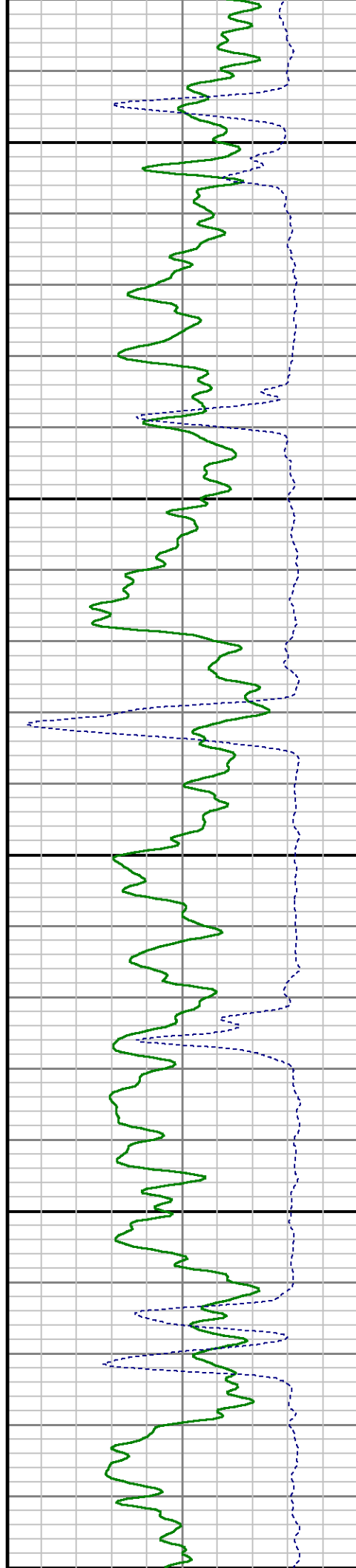
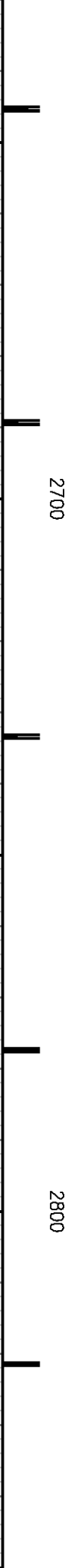
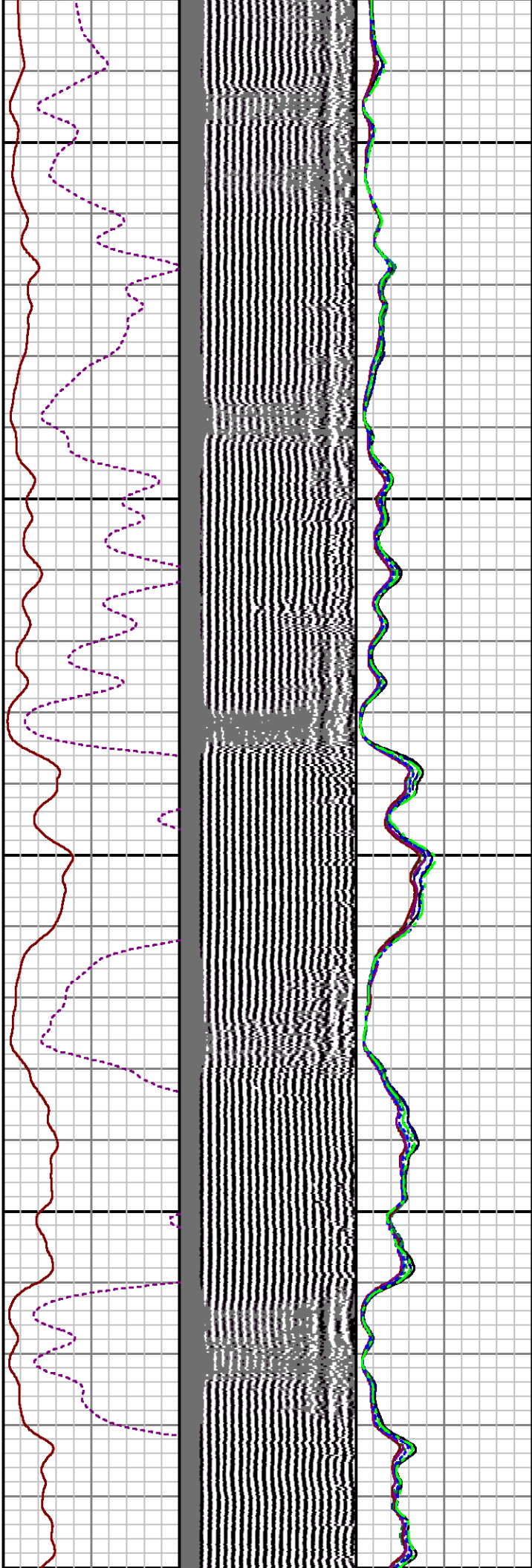


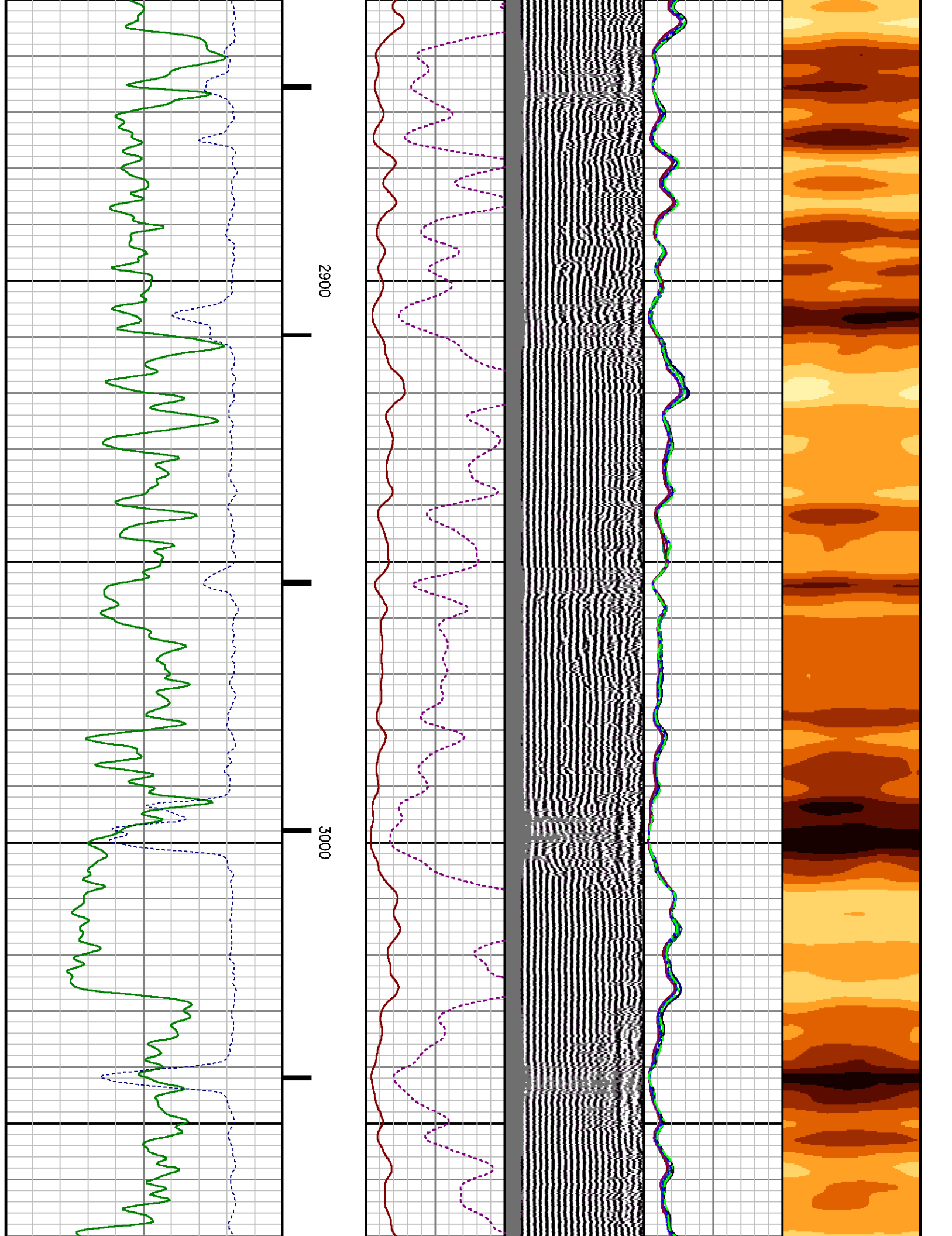


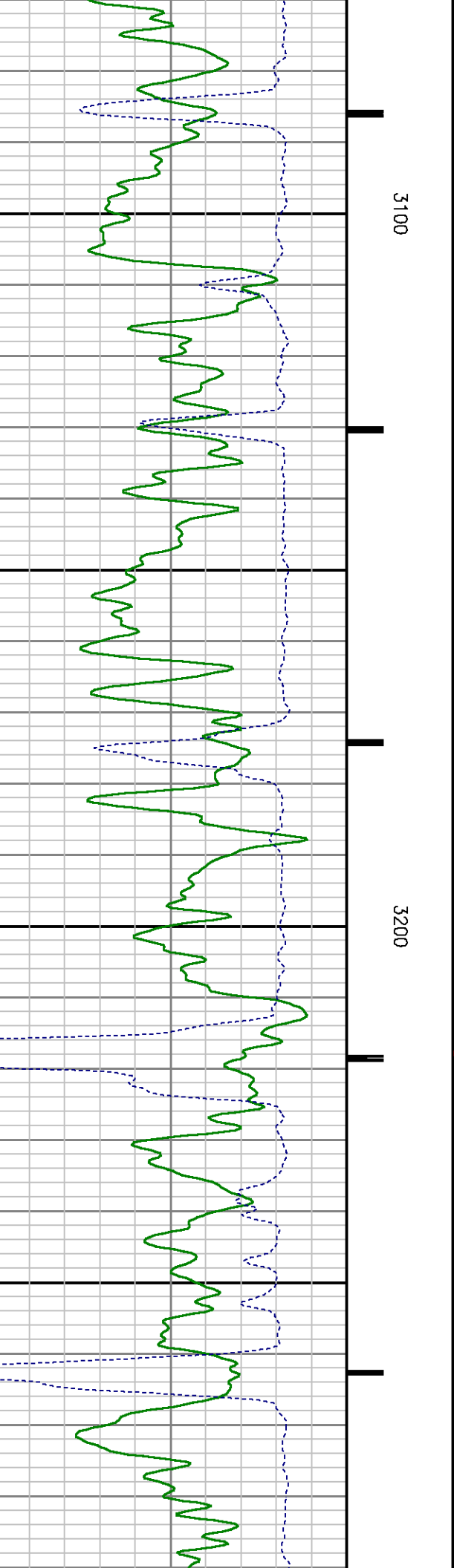
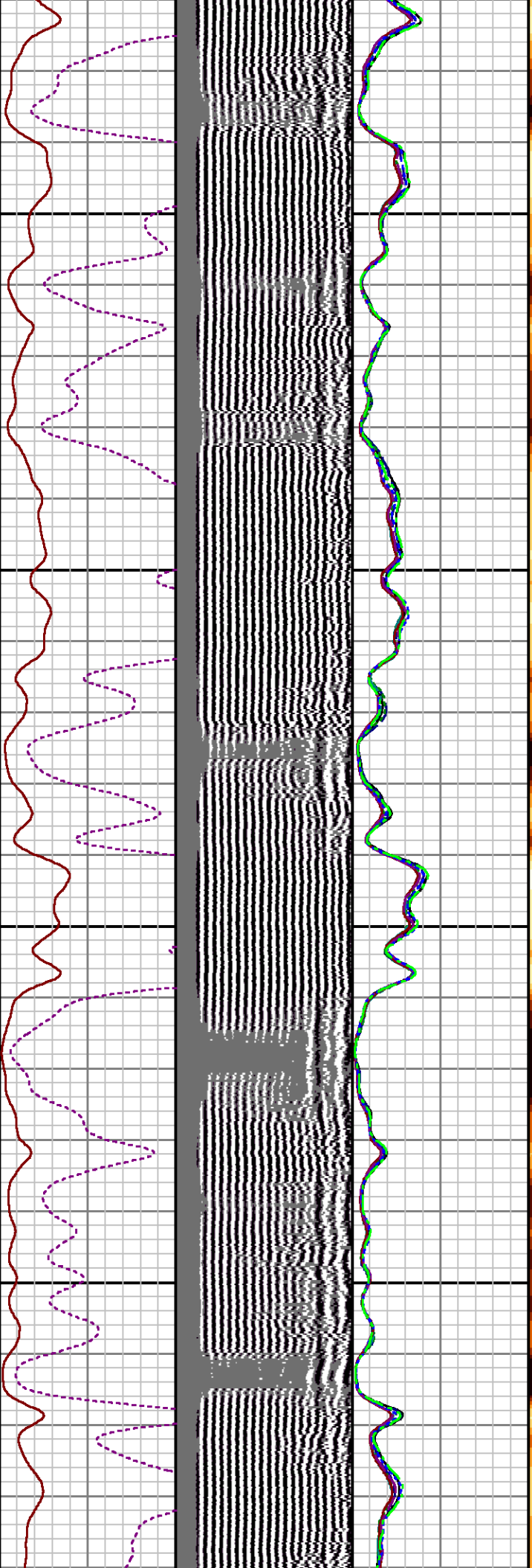
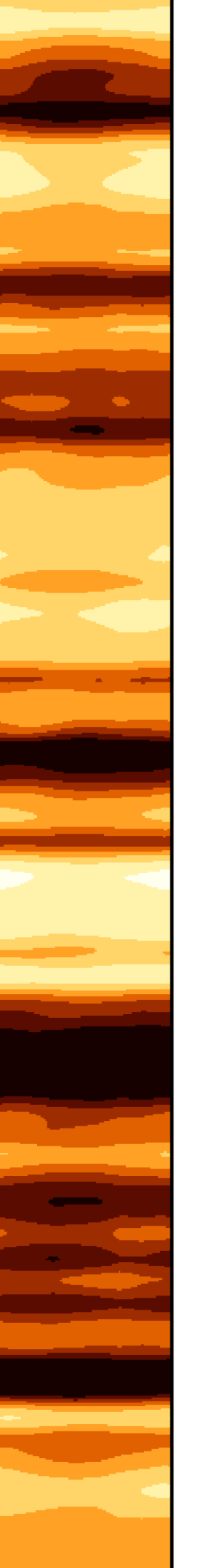


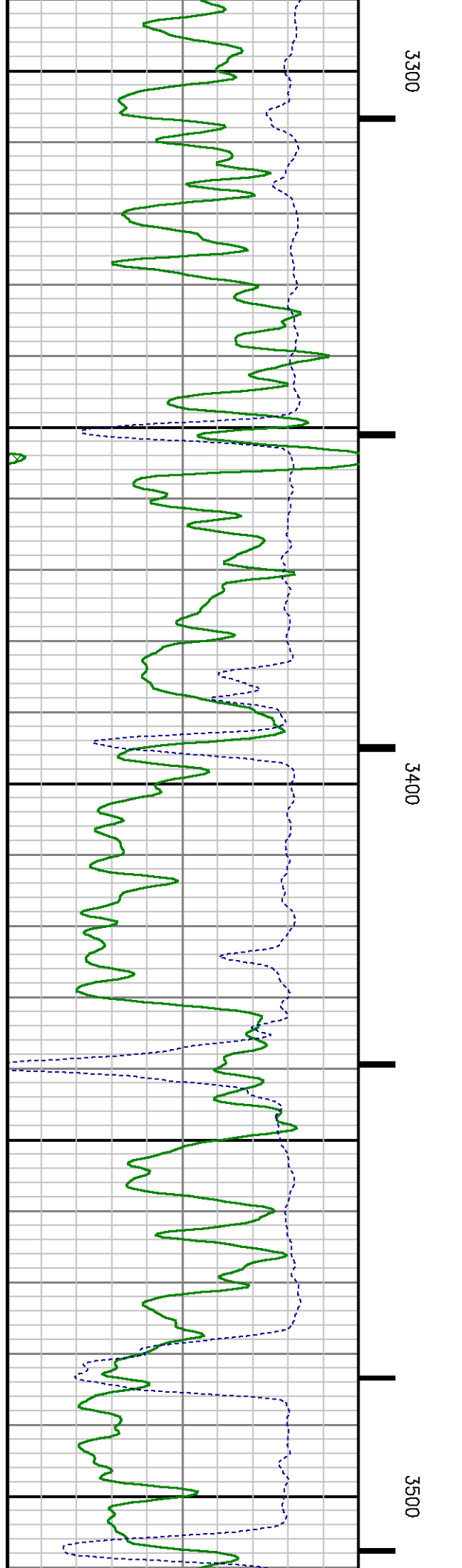
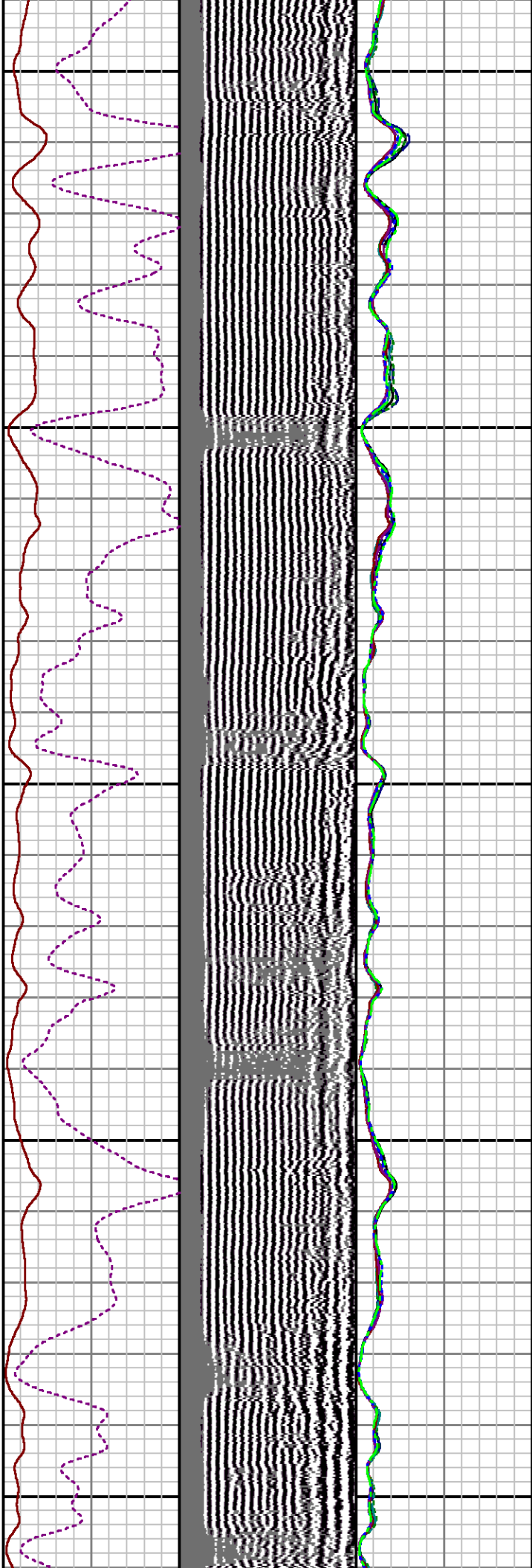


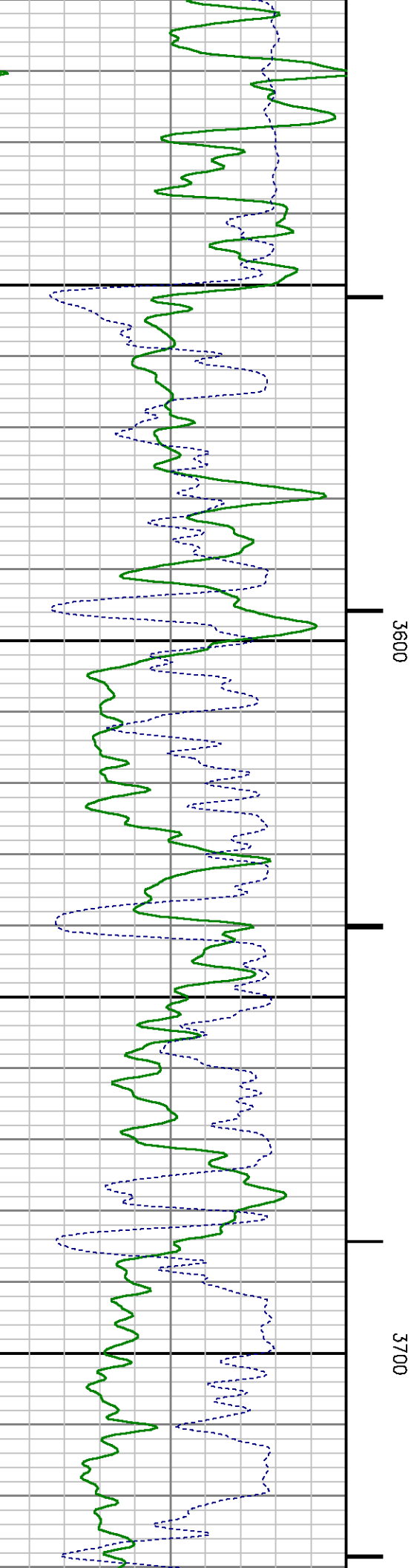
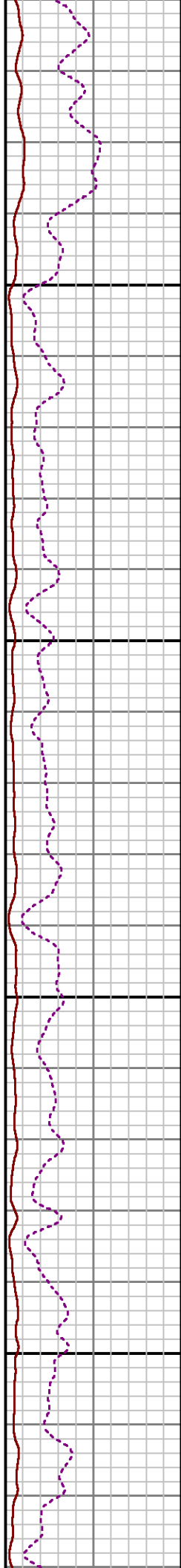
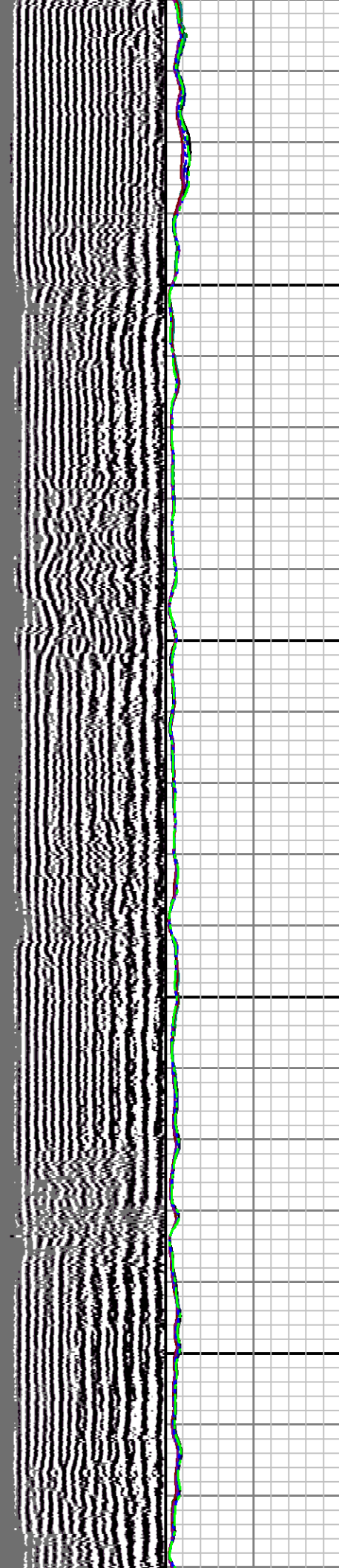


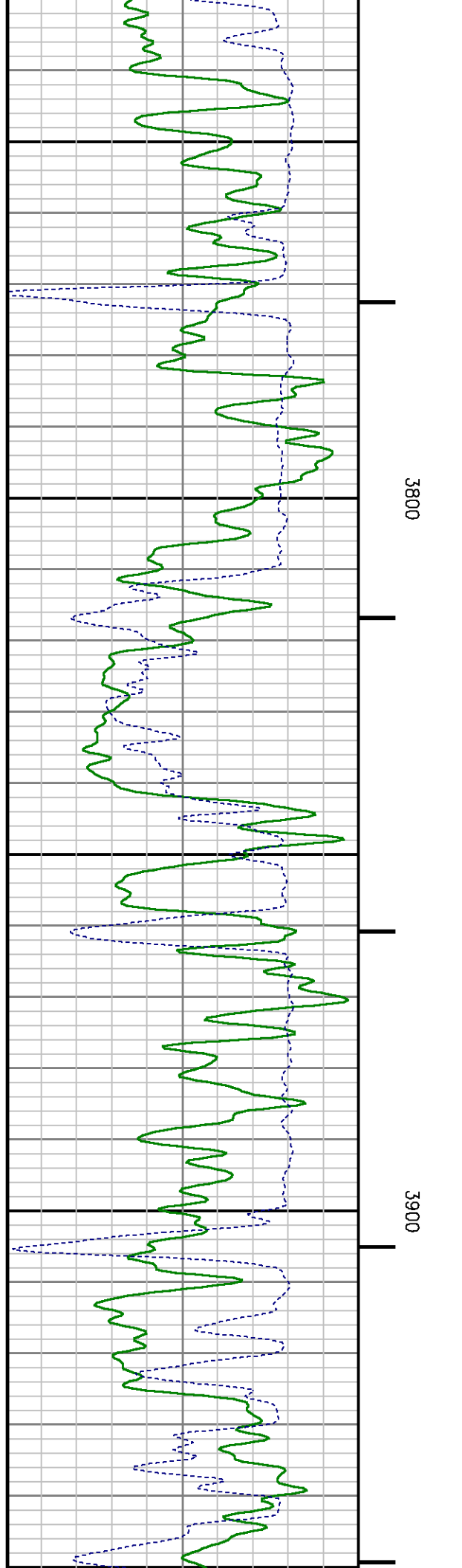
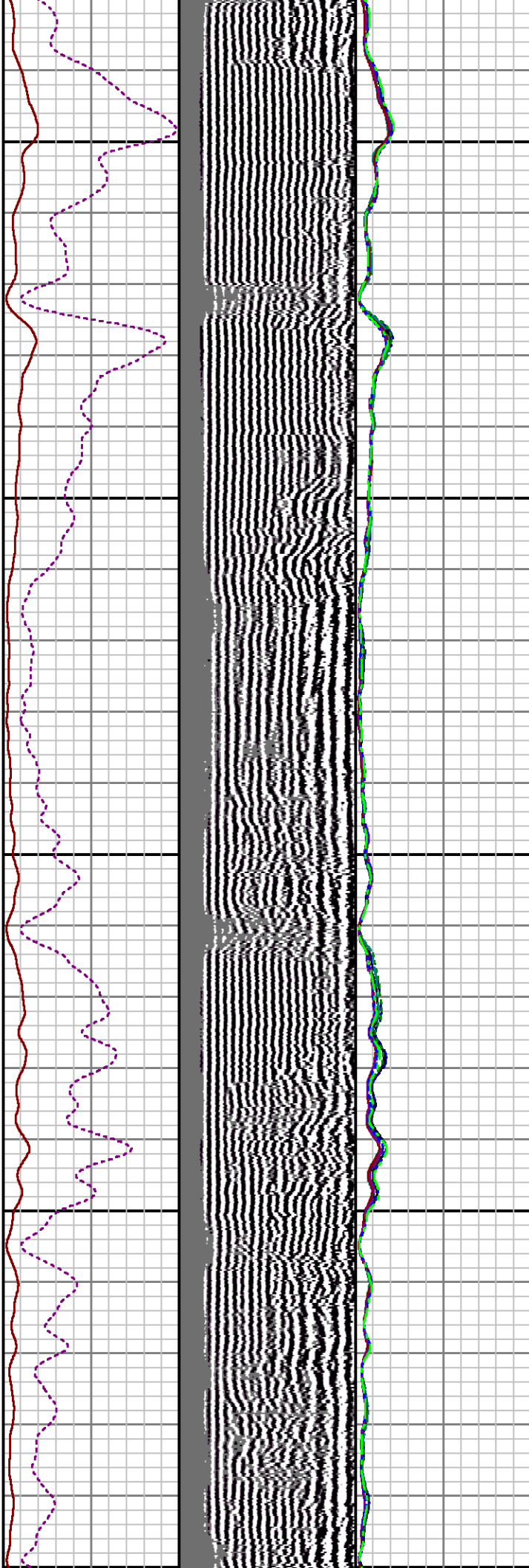
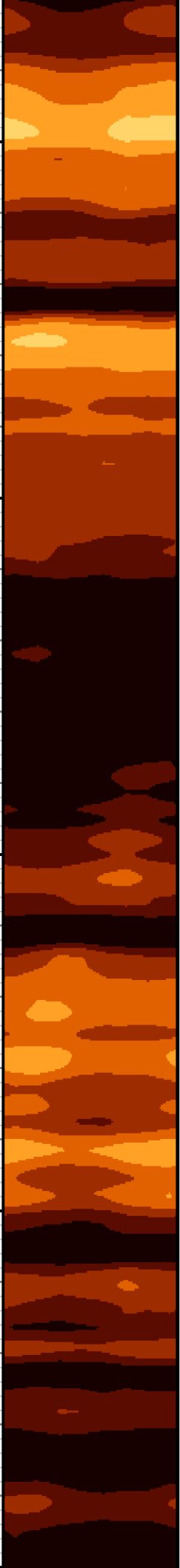


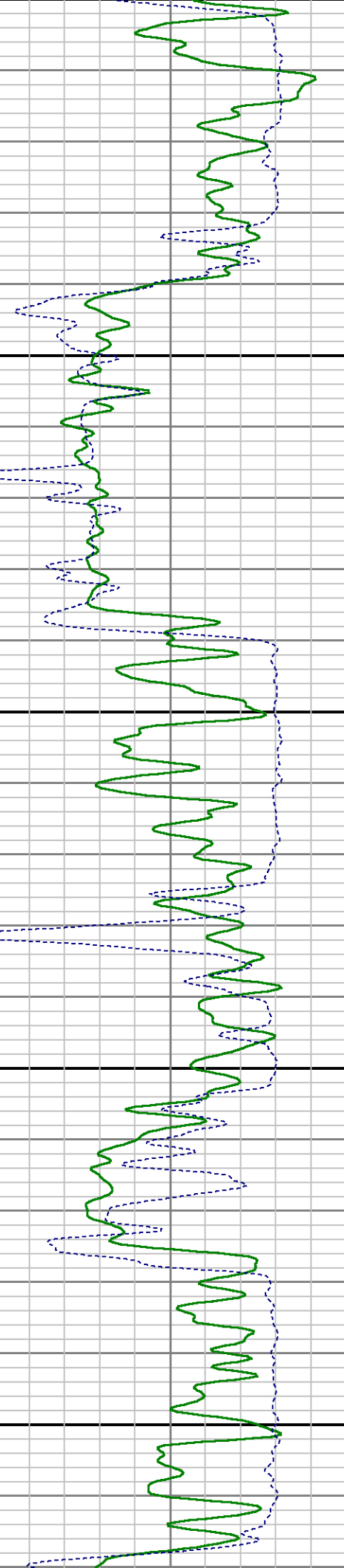
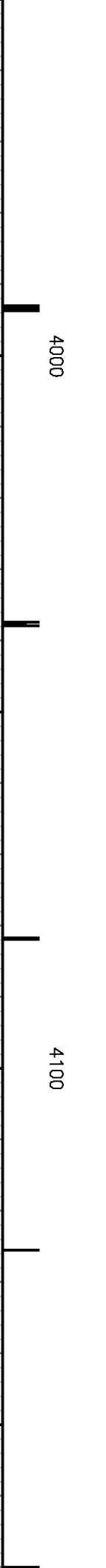
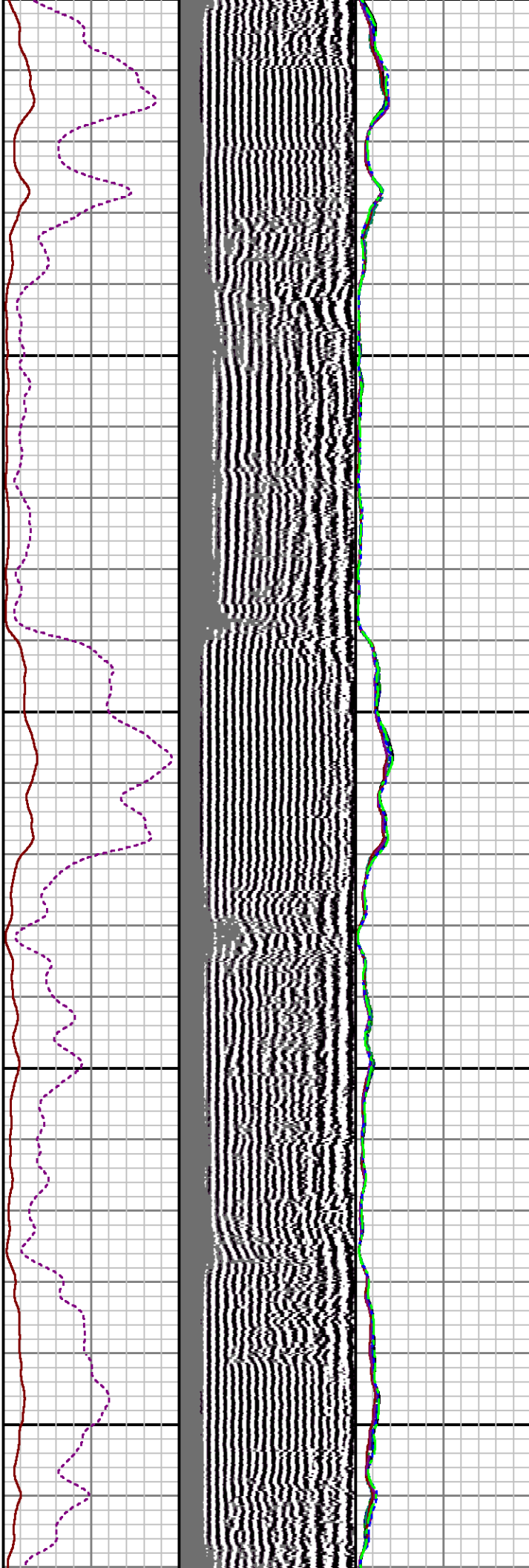
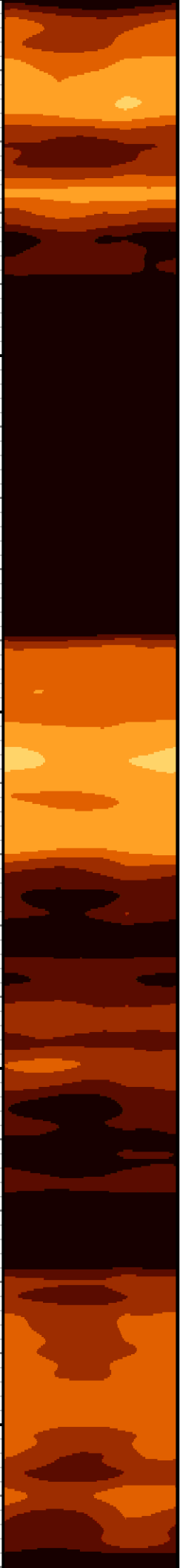


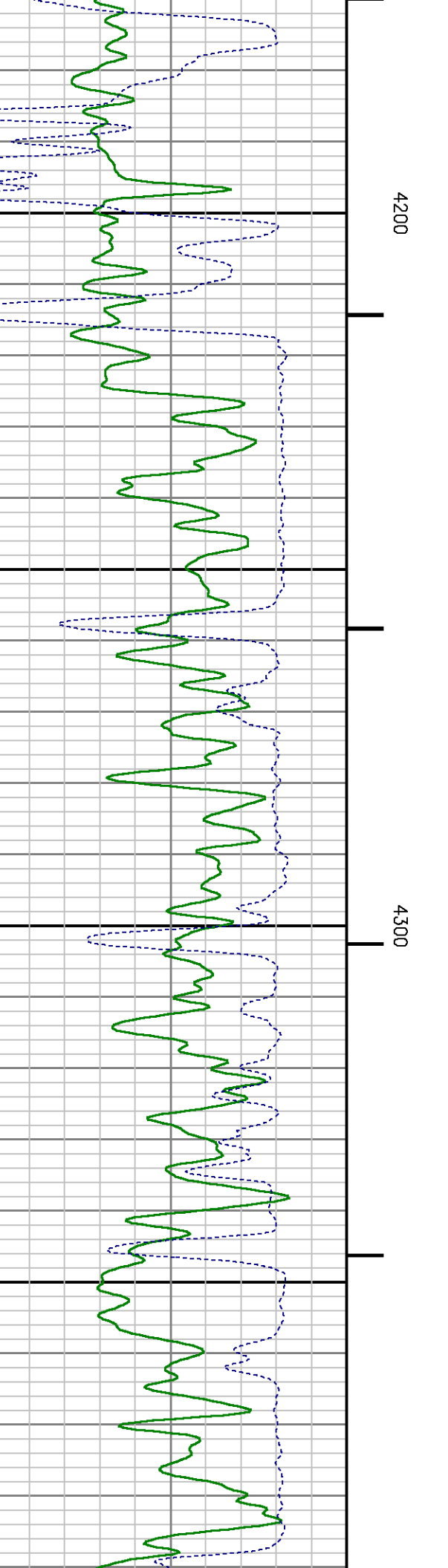
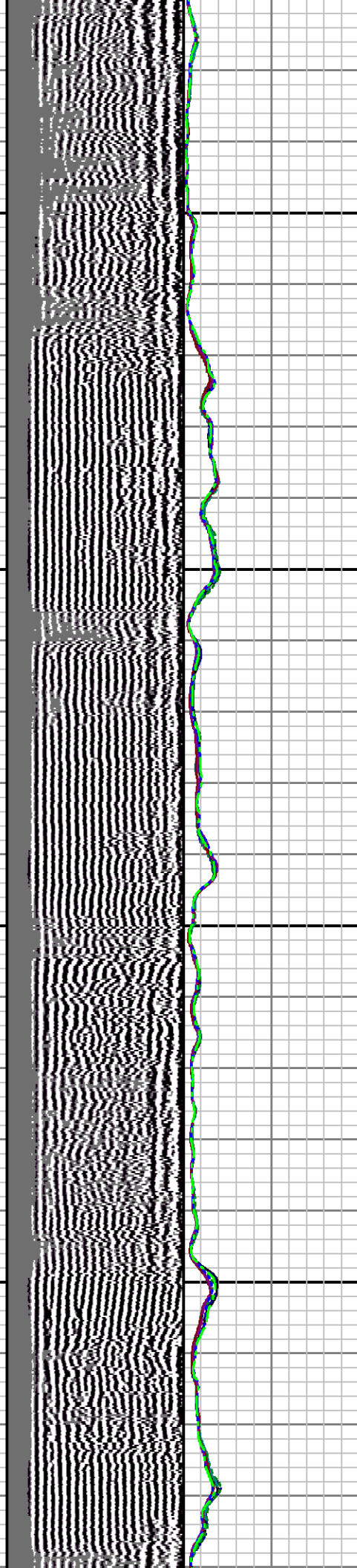
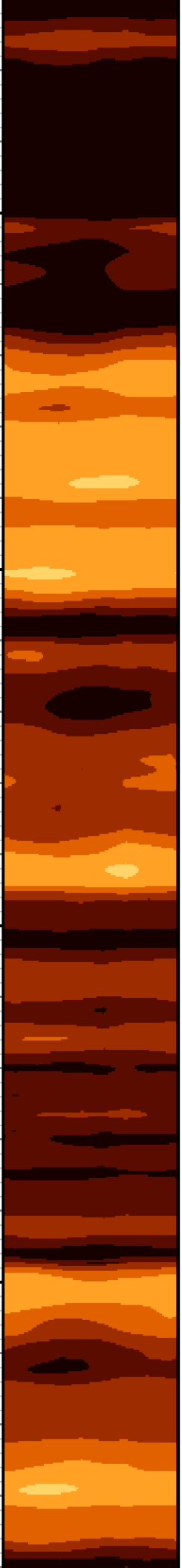


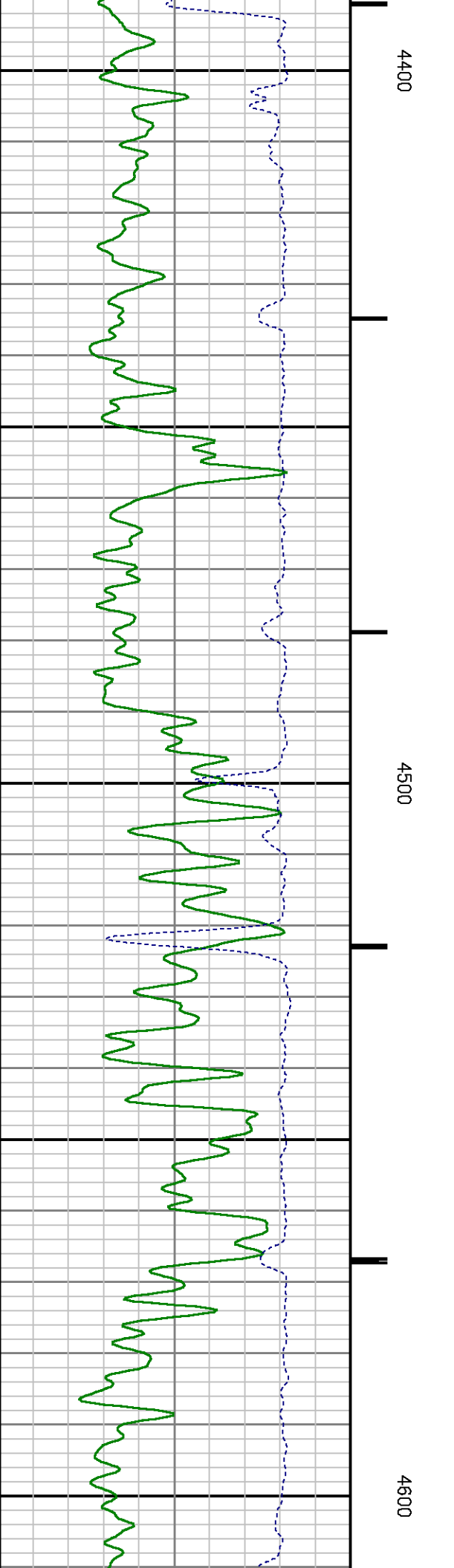
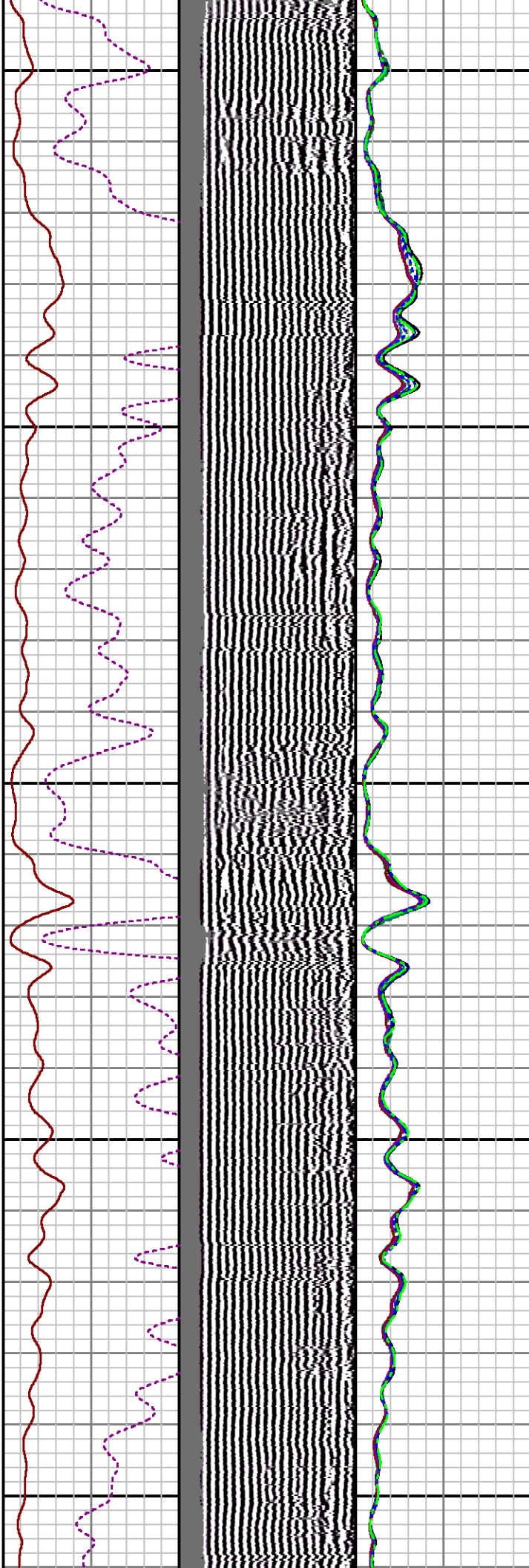
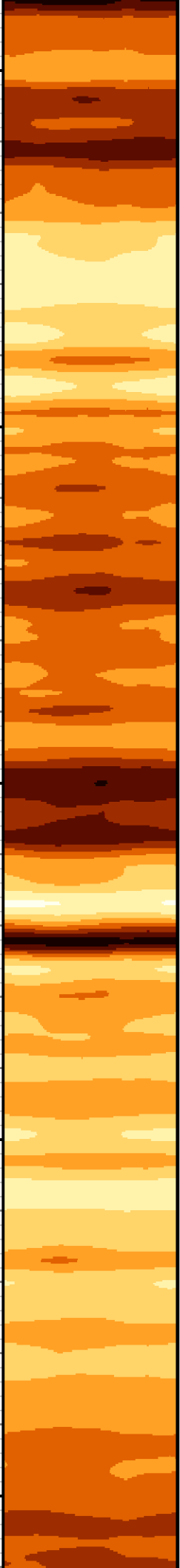


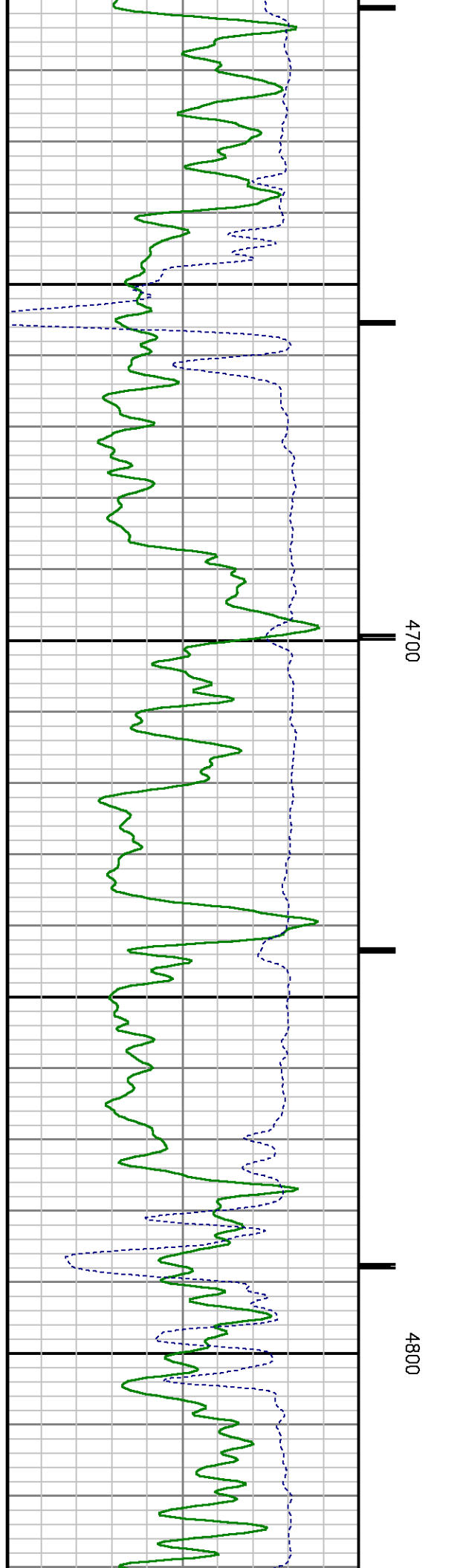
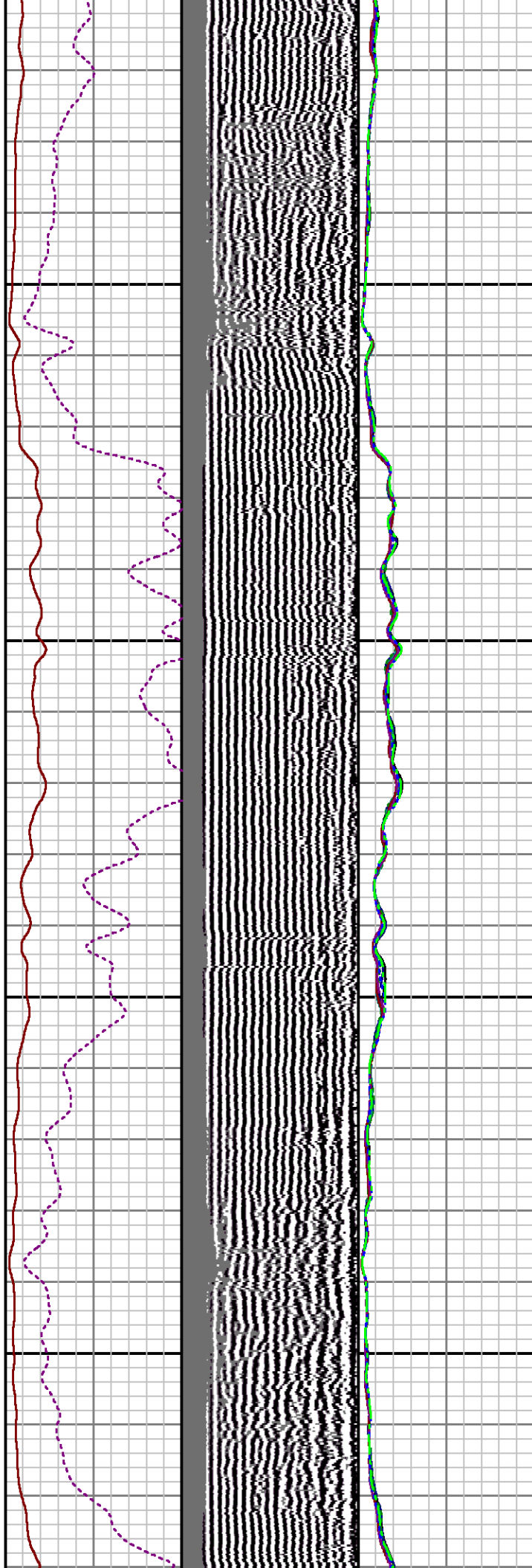
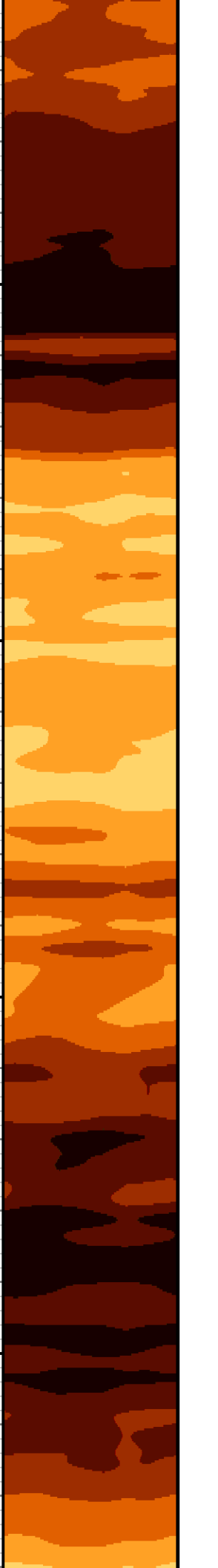


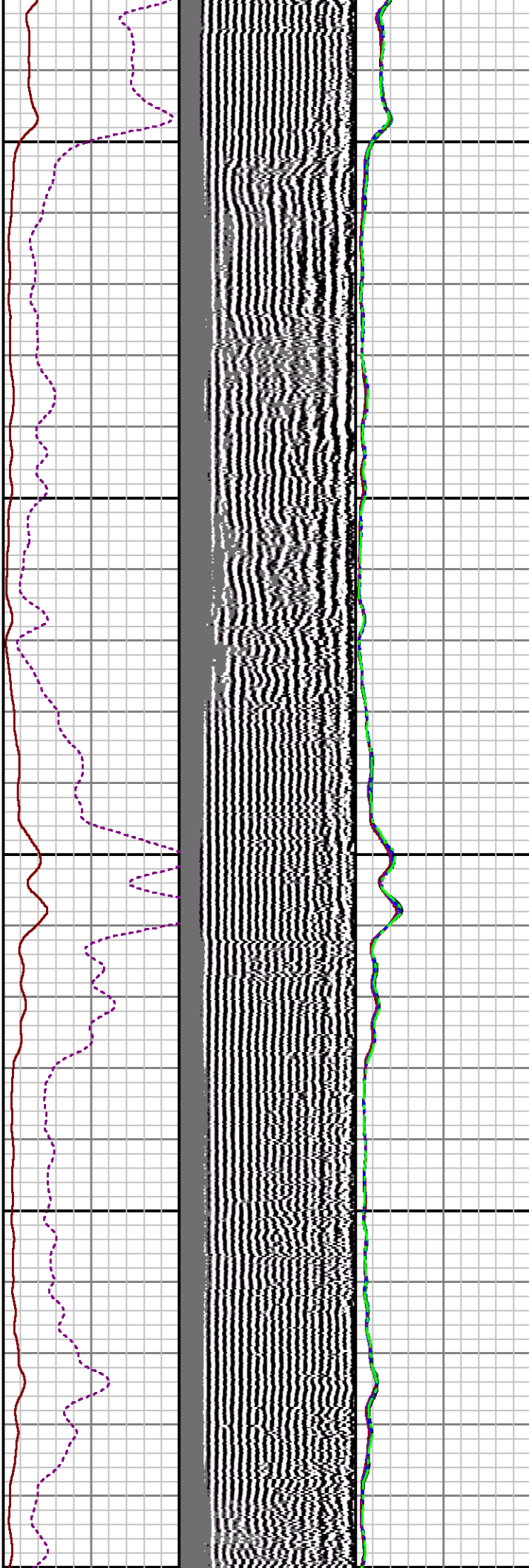
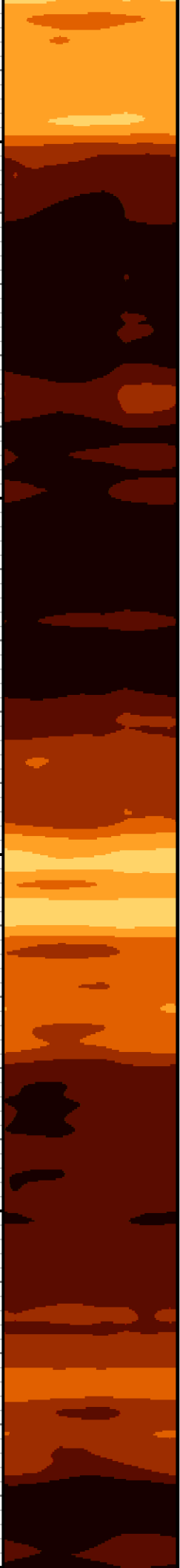






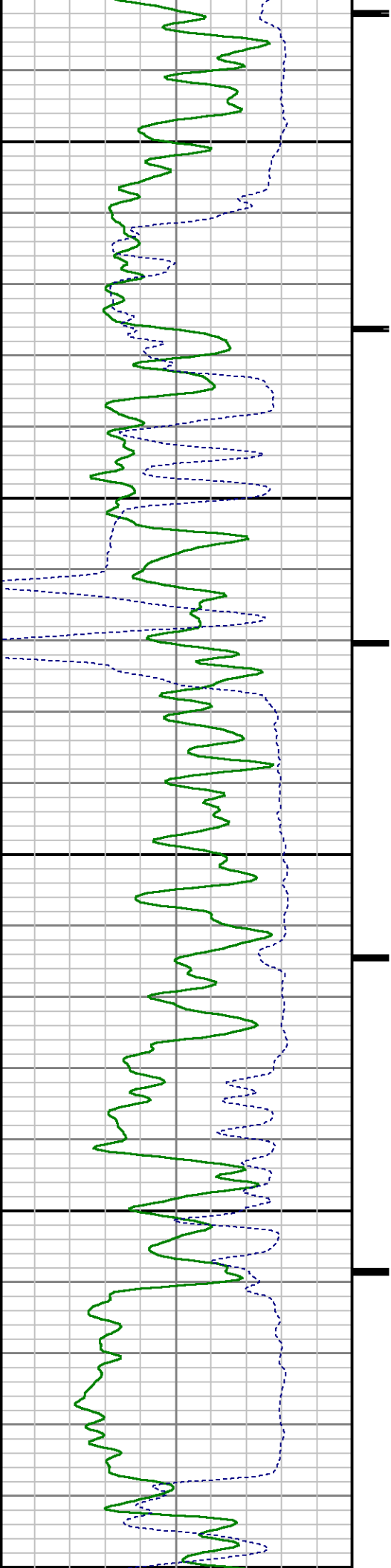


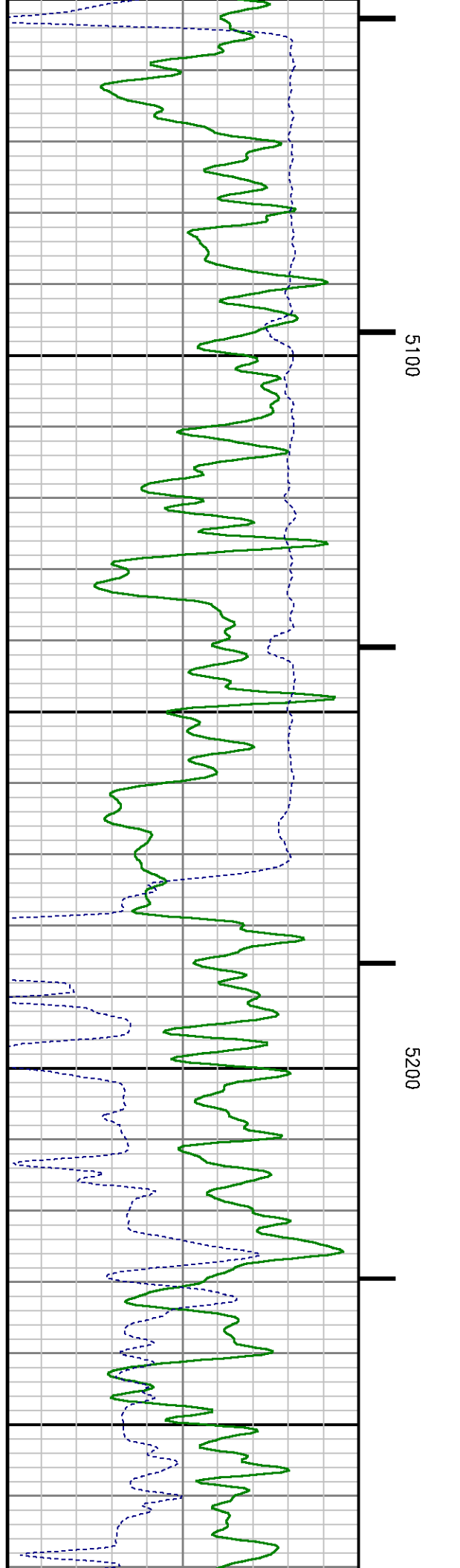
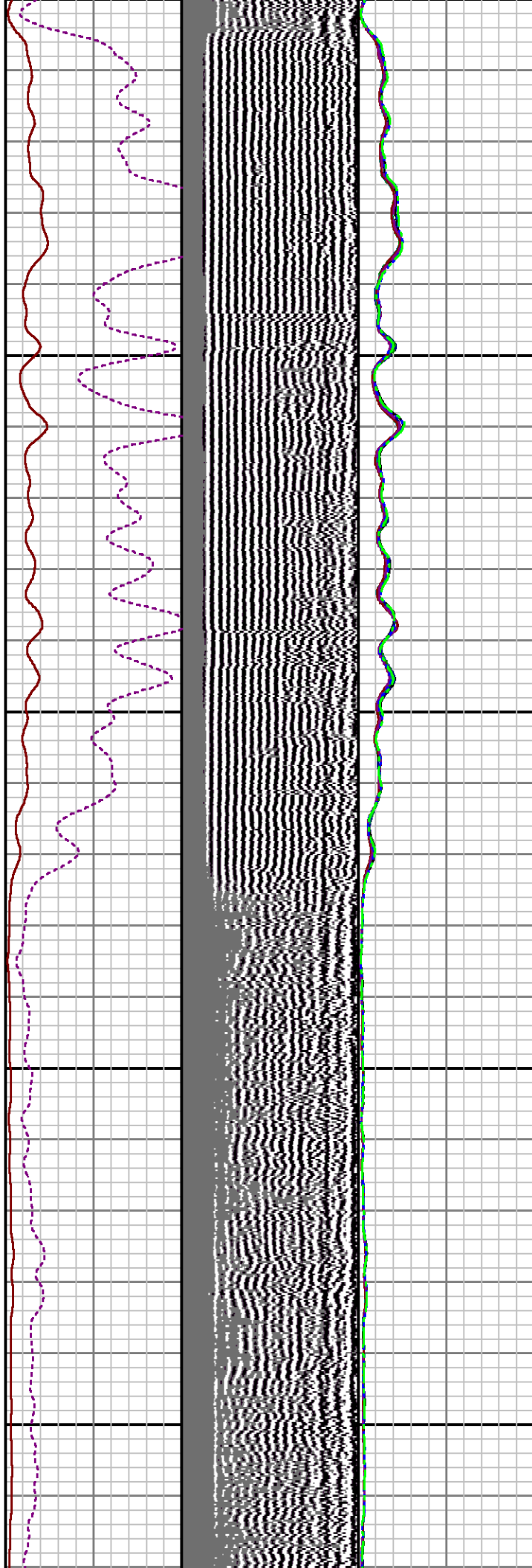


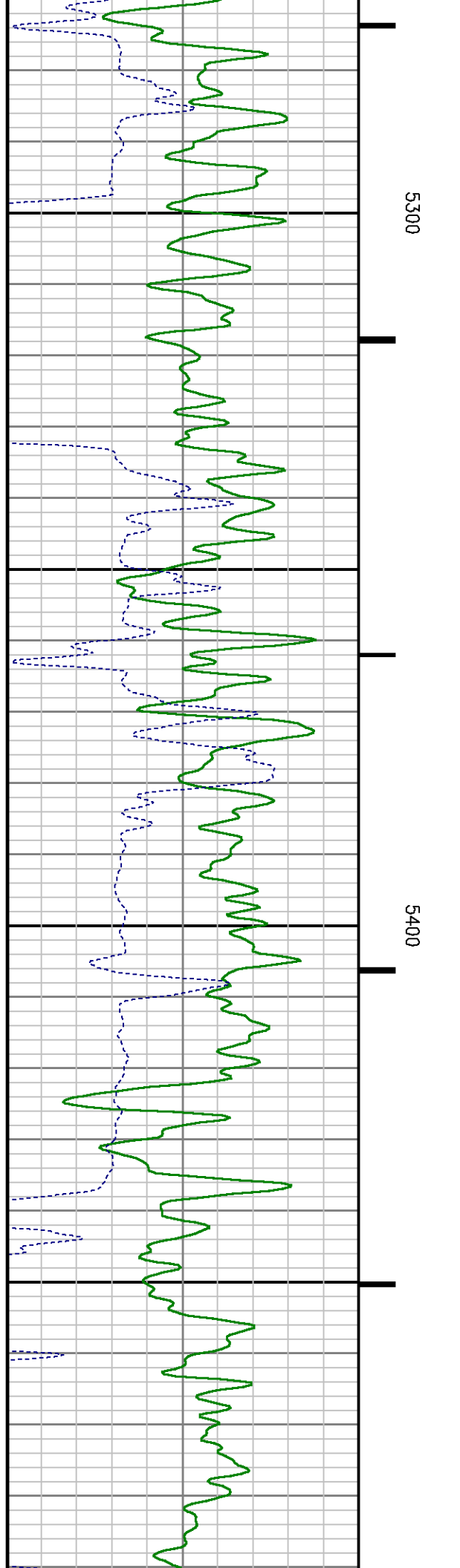
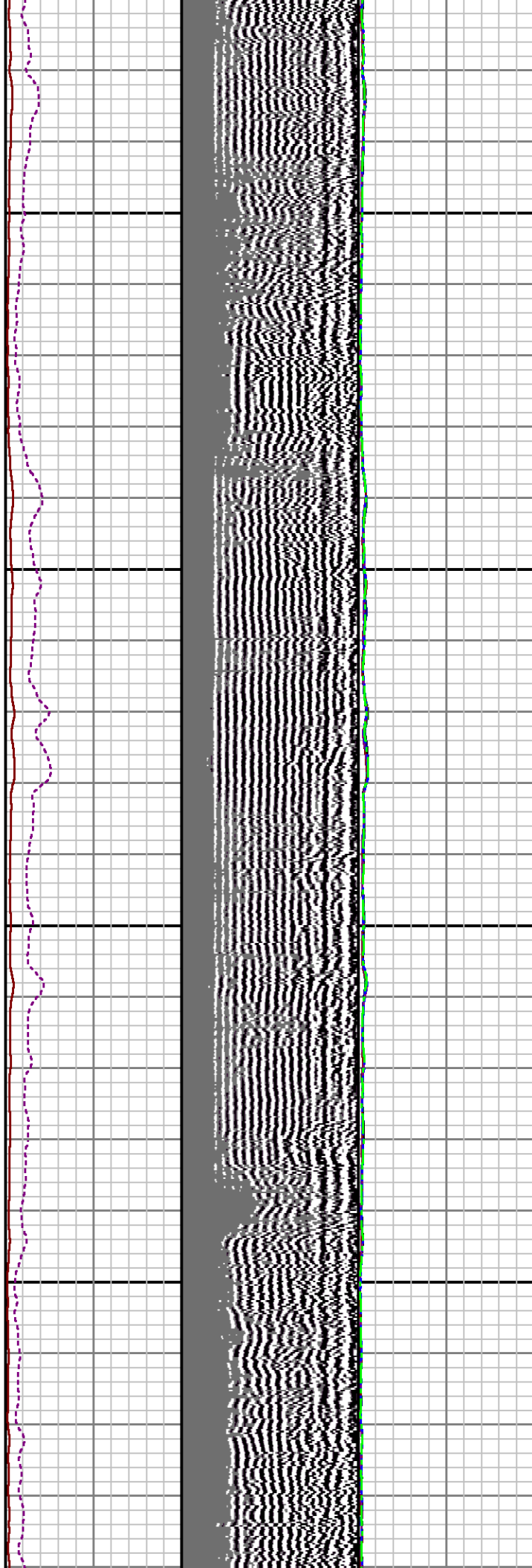


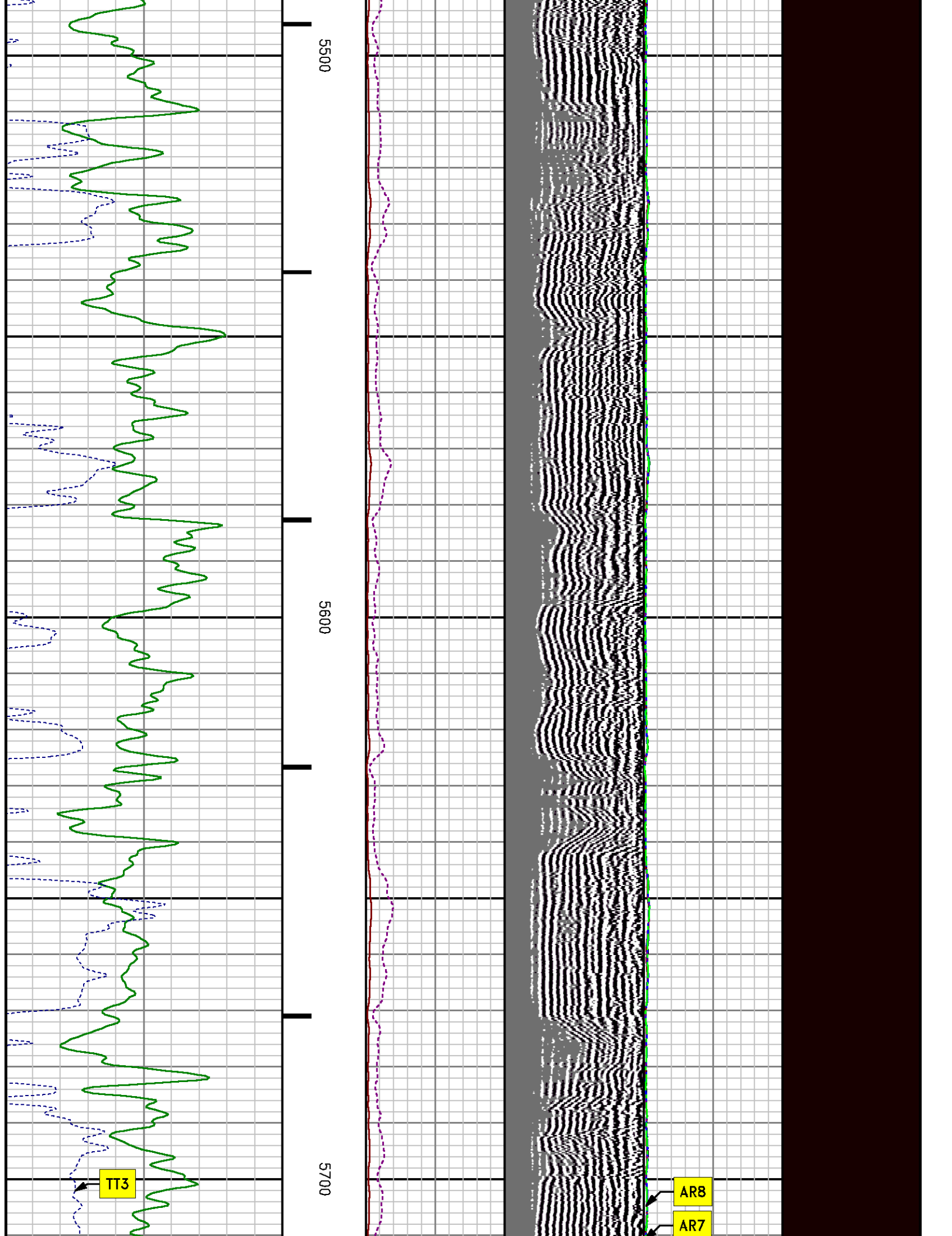
4900

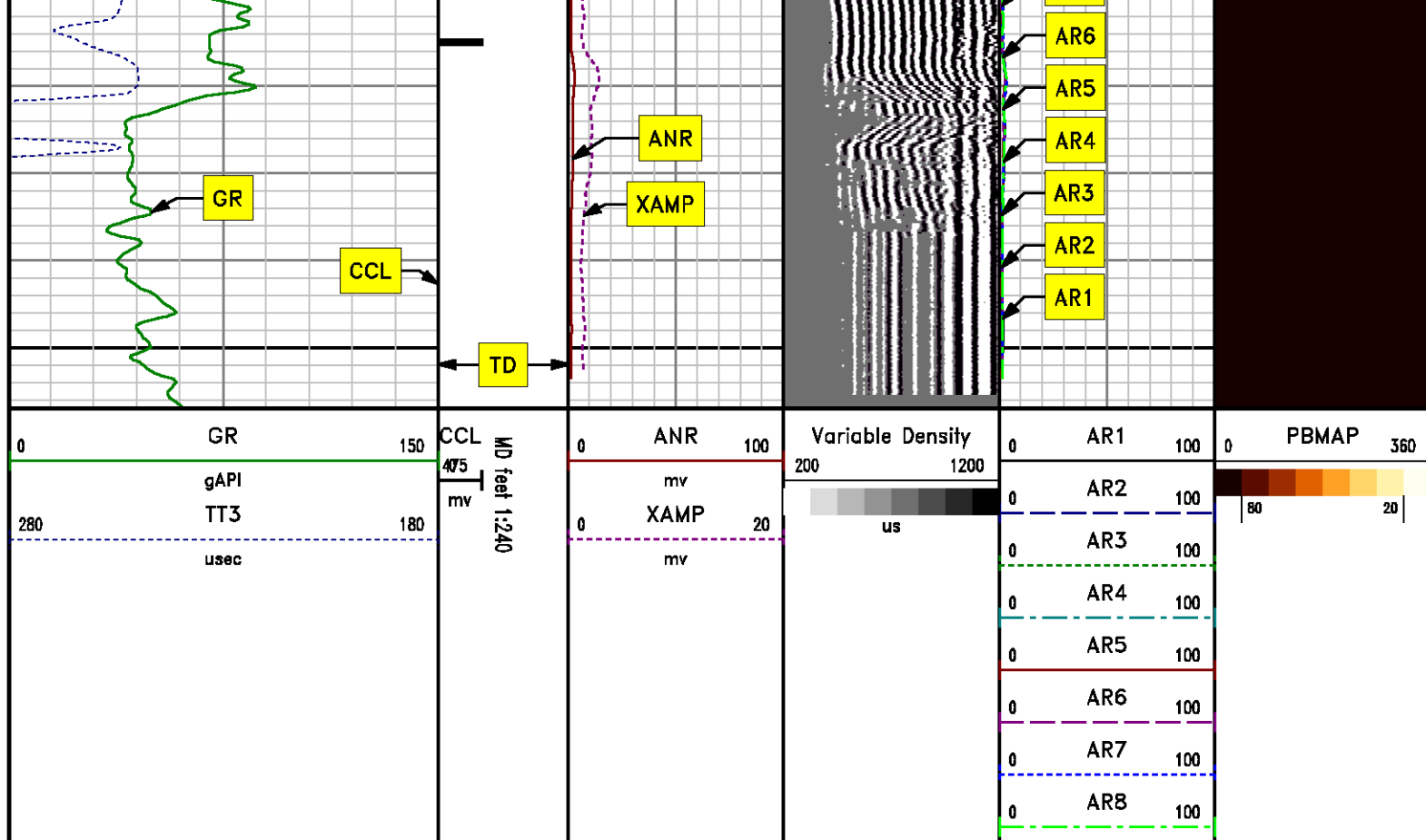
5000











REPEAT SECTION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	5440.860	5770.860
RAL	Amp Gate Start Near	195.000	usec	5440.860	5770.860
RAL	Amp Gate Start Radial	195.000	usec	5440.860	5770.860
RAL	Amp Gate Width Far	25.000	usec	5440.860	5770.860
RAL	Amp Gate Width Near	25.000	usec	5440.860	5770.860
RAL	Amp Gate Width Radial	25.000	usec	5440.860	5770.860
RAL	casing od	4.500	inches	5440.860	5770.860
RAL	casing wt	11.600	lbm/ft	5440.860	5770.860
RAL	FB Start Far	291.900	usec	5440.860	5770.860
RAL	FB Start Near	175.391	usec	5440.860	5770.860
RAL	FB Start Radial	175.391	usec	5440.860	5770.860
RAL	FB Thresh Far	10.000	mv	5440.860	5770.860

RAL	FB Thresh Near	4.000	mv	5440.860	5770.860
RAL	FB Thresh Radial	4.000	mv	5440.860	5770.860
RAL	Fluid Travel Time	200.000	usec/ft	5440.860	5771.435

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

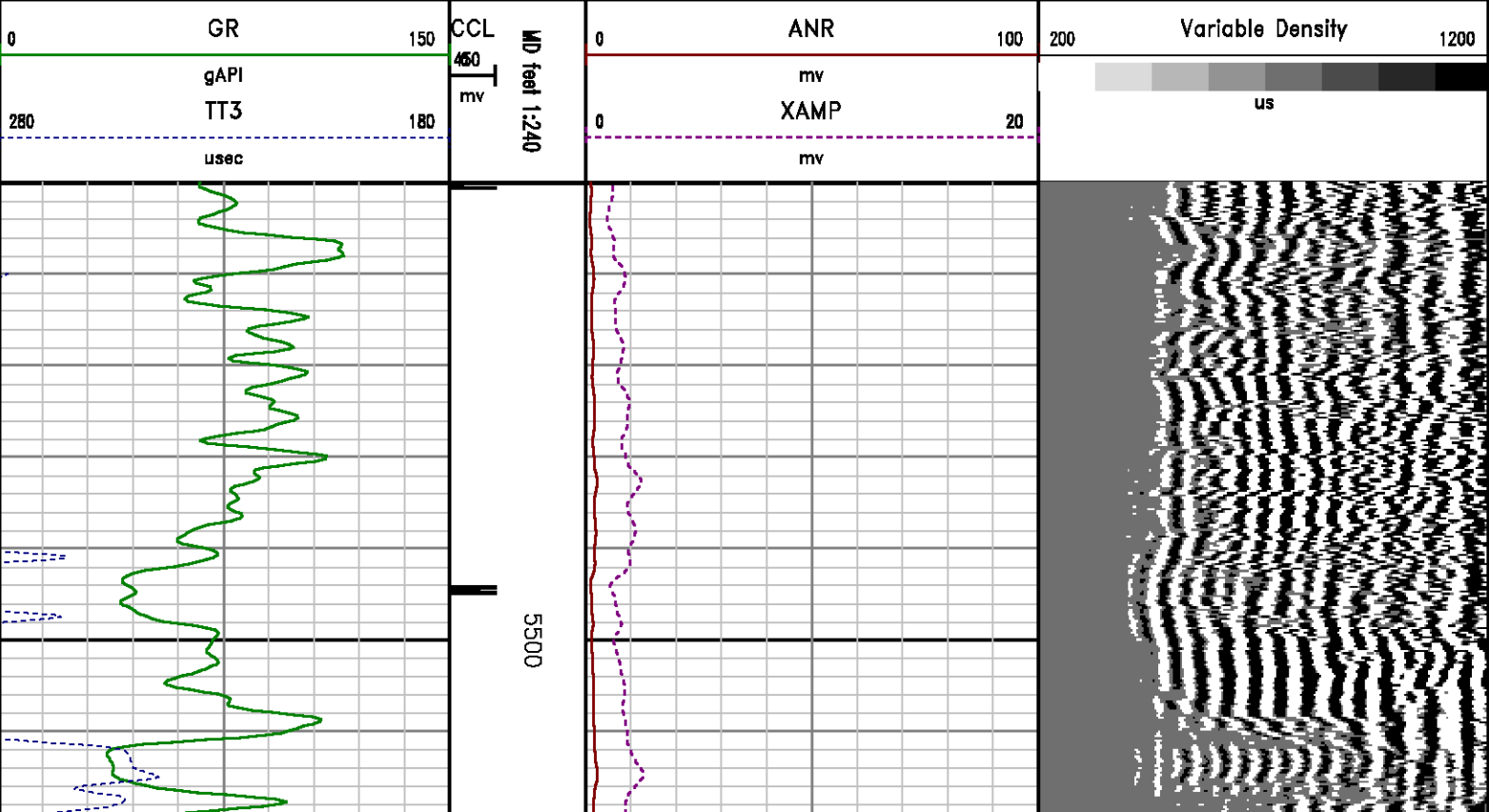
Well : BOSELY SG 311-27

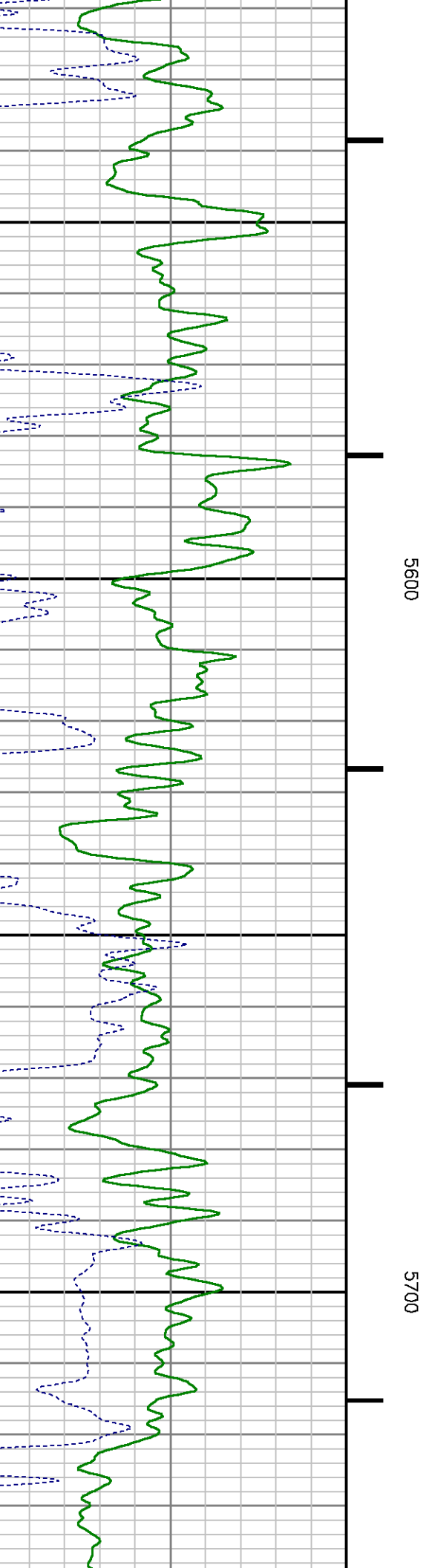
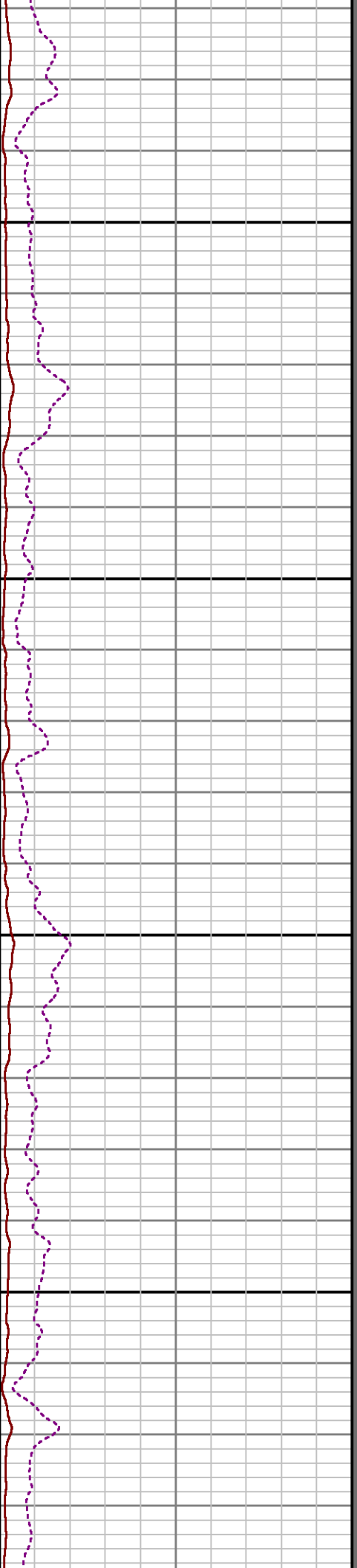
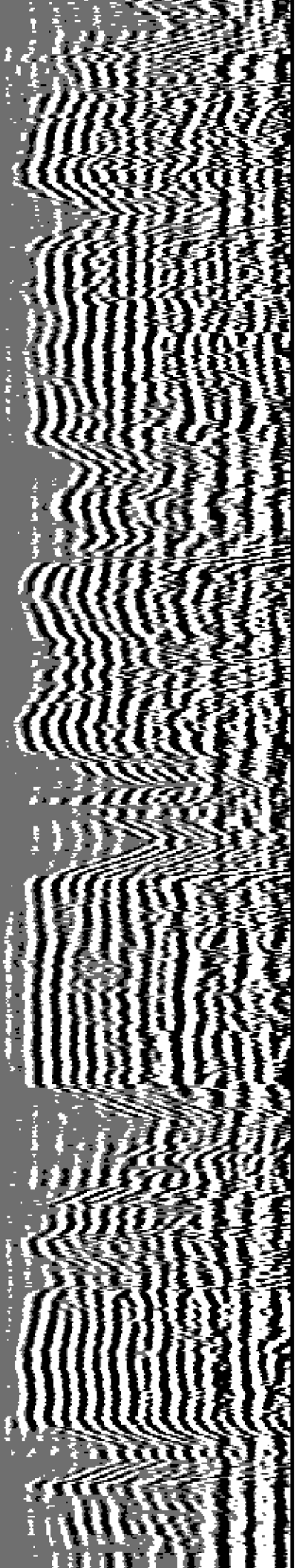
File Name : d:\welldata\wpx\bosely sg 311-27\cb1311\repeat.xtf

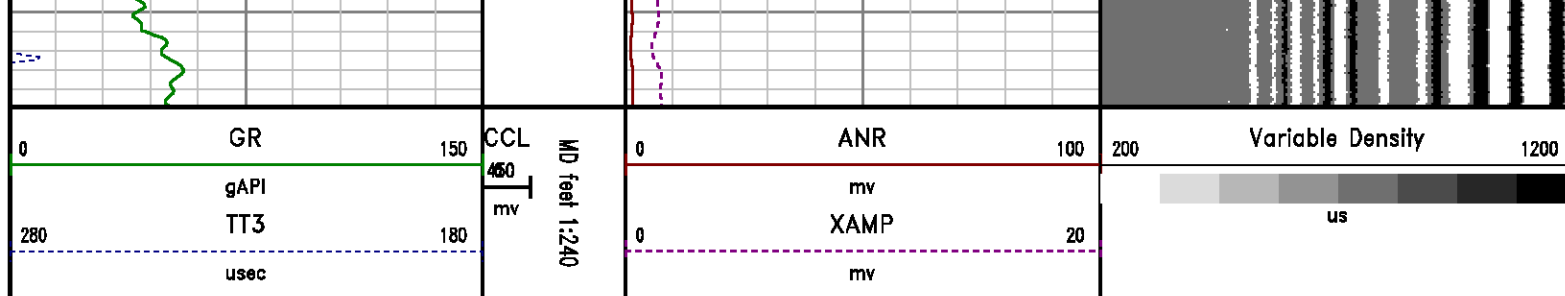
Mode : PlotMgr 5.4.504

Interval : 5450.00 - 5750.00 feet UP

Created : 2/2/2014 8:37:05 AM







CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP\496F1_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sat Feb 01 17:53:28 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: F1

Tool Delay [usec] -54.00 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	218	216	30	166	25	-0.248	100.00	0.17
3 Ft. Receiver	218	216	30	166	25	2.268	100.00	0.17
5 Ft. Receiver	327	324	30	232	25	0.315	150.00	0.22
Radial #1	217	216	30	149	25	-0.067	100.00	0.17
Radial #2	217	216	30	149	25	-0.370	100.00	0.17
Radial #3	218	216	30	149	25	-0.327	100.00	0.17
Radial #4	218	216	30	149	25	-0.309	100.00	0.17
Radial #5	217	216	30	149	25	-0.120	100.00	0.17
Radial #6	217	216	30	149	25	-0.185	100.00	0.17
Radial #7	215	216	30	149	25	-0.346	100.00	0.17
Radial #8	217	216	30	149	25	-0.269	100.00	0.16

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\496F1 fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sat Feb 01 17:55:36 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: F1

Tool Delay [usec]	-54.00	Casing OD In	4.50	Casing Wt lbm/ft	11.60	Casing ID In	4.00
----------------------	--------	-----------------	------	---------------------	-------	-----------------	------

RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	166	25	0.020	0.000	1.00	100.000
3 Ft. Receiver	195	25	1.940			
5 Ft. Receiver	305	25	2.654			
Radial #1	195	25	1.354			
Radial #2	195	25	1.448			
Radial #3	195	25	1.469			
Radial #4	195	25	1.546			
Radial #5	195	25	1.761			
Radial #6	195	25	1.848			
Radial #7	195	25	1.489			
Radial #8	195	25	1.507			

GAMMA RAY

Calibration File: C:\case\calver\GR\121J2.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED:	Tue Jan 21 14:45:39 2014	TOOL SERIES:	2459XA	ASSET:	121	SEQ:	J2
Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]	
SK2 WA612	71.78	314.67	0.762	54.67	239.67	185.00	

Verification File: C:\case\calver\GR\121J2.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED:	Tue Jan 21 14:46:51 2014	TOOL SERIES:	2459XA	ASSET:	121	SEQ:	J2
Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]	
SK2 WA612	74.22	316.93	0.762	56.53	241.40	184.86	

TOOL DIAGRAM

OTA SHORT CABLE HEAD

24.23'

PROBE 2 3/4 DUAL RECEIVER RADII

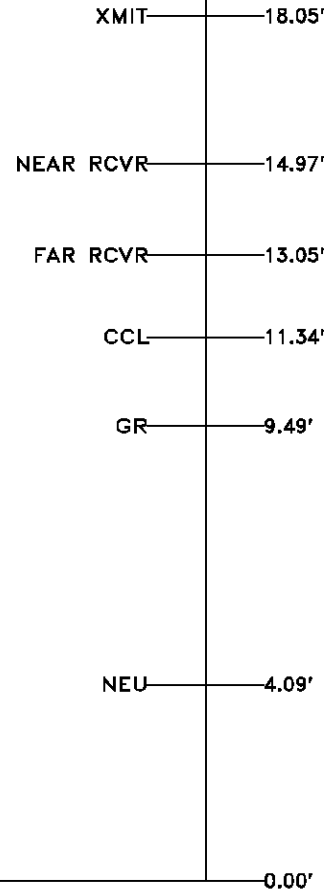
Series	1426XA
Mnemonic	PROB
Diameter	2.75"
Length	11.17'
Measure Point	0.75' FAR RCVR
Measure Point	2.67' NEAR RCVR
Measure Point	5.75' XMIT
Temp Rating	350.00 °F
Press Rating	18000.00 PSI

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

CENTRALIZER

Series	RALCENT
Mnemonic	CENT
Diameter	3.12"
Weight	20.00 lb



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

**Baker Atlas****CASE****Company**

WPX ENERGY

Well

BOSELY SG 311-27

Field

GRAND VALLEY

County

GARFIELD

State

CO

Location

SHL: 598' FNL & 1974' FWL

BHL: 435' FNL & 134' FWL

Elevations

KB 5283 ft

DF

GL 5258 ft

File No:

CH082079

API No:

05045221300000

27 7S 96W

SG 21-27 PAD

AZTEC 1000

SEC 2 TWP 7S RGE 96W