



RADIAL ANALYSIS BOND LOG

Baker Atlas

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

CH089260 **Well** **AP 321-20-695**

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

05045213820000 **County** **GARFIELD** **State** **CO**

20 6S 95W **Location** **SHL: 64' FNL & 2493' FWL**

AP 21-20-695 PAD **BHL: 144' FNL & 715' FWL**

NABORS 573

SEC **20** **TWP** **6S** **RGE** **95W**

Other Services

RPM

Permanent Datum **GL** **Elevation** **6909**

Log Measured From **KB** **26** **Above P. D.**

Drill Measured From **KB**

Elevations

KB **6935**

DF

GL **6909**

Date **21/AUG/14**

Run **ONE**

Service Order **US089260**

Depth Driller **9603**

Depth Logger **9568**

Bottom Logged Interval **9558**

Top Logged Interval **26**

Time Started **7:30**

Time Finished **12:00**

Operator Rig Time **4.5 HOURS**

Type of Fluid in Hole **WATER**

Fluid Density **NA**

Salinity **NA**

Fluid Level **78**

Logged Cement Top **NA**

Wellhead Pressure **0**

Maximum Hole Deviation **NA**

Nominal Logging Speed **65**

Maximum Recorded Temperature **251**

Reference Log **NA**

Reference Log Date **NA**

Equipment No. **4271** **Location** **GRAND JUNCTION**

Recorded By **NEMELL**

Witnessed By **GRAN JACOBS**

- 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	0	2575
8.75	2575	9644

Casing Record

Size	Weight	Grade	From	To
9.625			0	2575
4.5	11.6	1-80	0	9644

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 1 foot.

Logged with zero PSI at wellhead.

BHT = 251 °F

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	CBL	1426XA	10218496	CENTRALIZED
1	1	GR/CCL	1355XA	11871510	CENTRALIZED

PRIMARY PRESENTATION

0 PSI

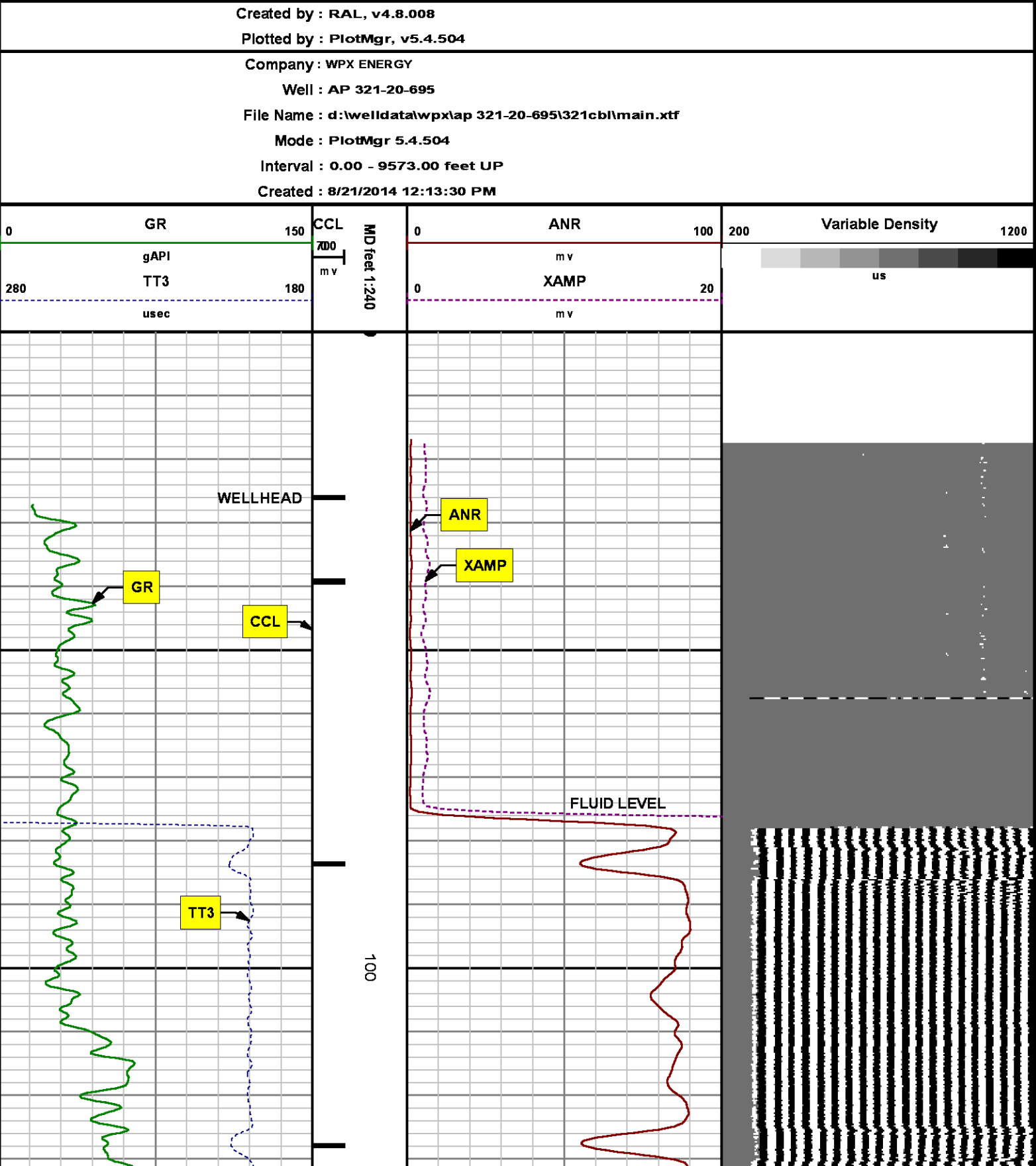
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	27.468	9573.000
RAL	Amp Gate Start Near	195.000	usec	27.468	9573.000
RAL	Amp Gate Start Radial	195.000	usec	27.468	9573.000
RAL	Amp Gate Width Far	25.000	usec	27.468	9573.000
RAL	Amp Gate Width Near	25.000	usec	27.468	9573.000
RAL	Amp Gate Width Radial	25.000	usec	27.468	9573.000
RAL	casing od	4.500	inches	27.468	9573.000
RAL	casing wt	11.600	lbm/ft	27.468	9573.000
RAL	FB Start Far	291.900	usec	27.468	9573.000
RAL	FB Start Near	175.391	usec	27.468	9573.000
RAL	FB Start Radial	175.391	usec	27.468	9573.000
RAL	FB Thresh Far	10.000	mv	27.468	9573.000
RAL	FB Thresh Near	4.000	mv	27.468	9573.000
RAL	FB Thresh Radial	4.000	mv	27.468	9573.000
RAL	Fluid Travel Time	200.000	usec/ft	27.468	9573.905

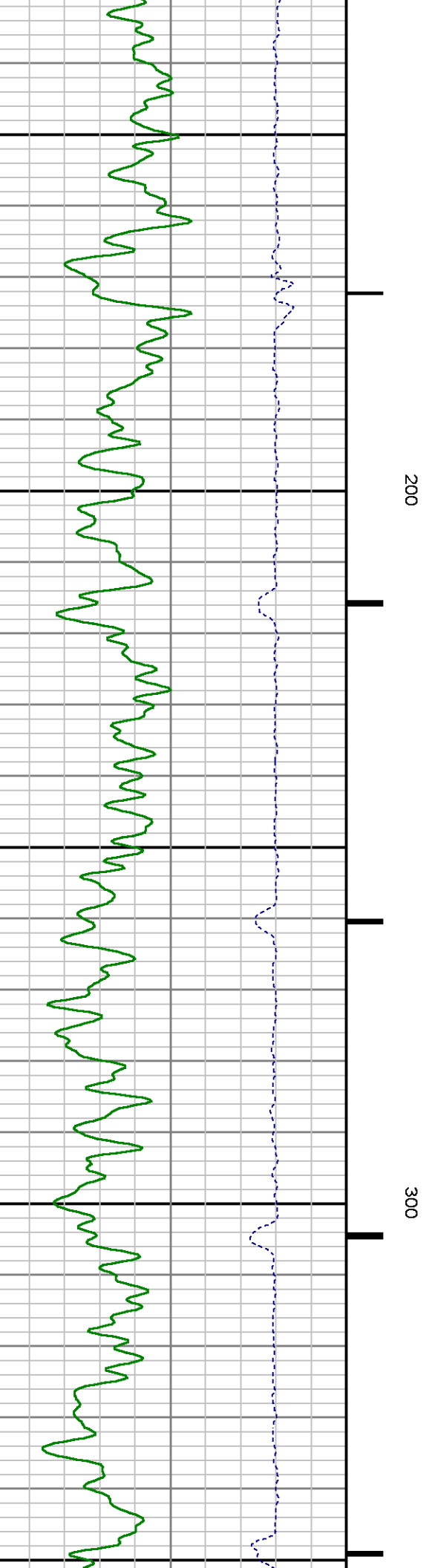
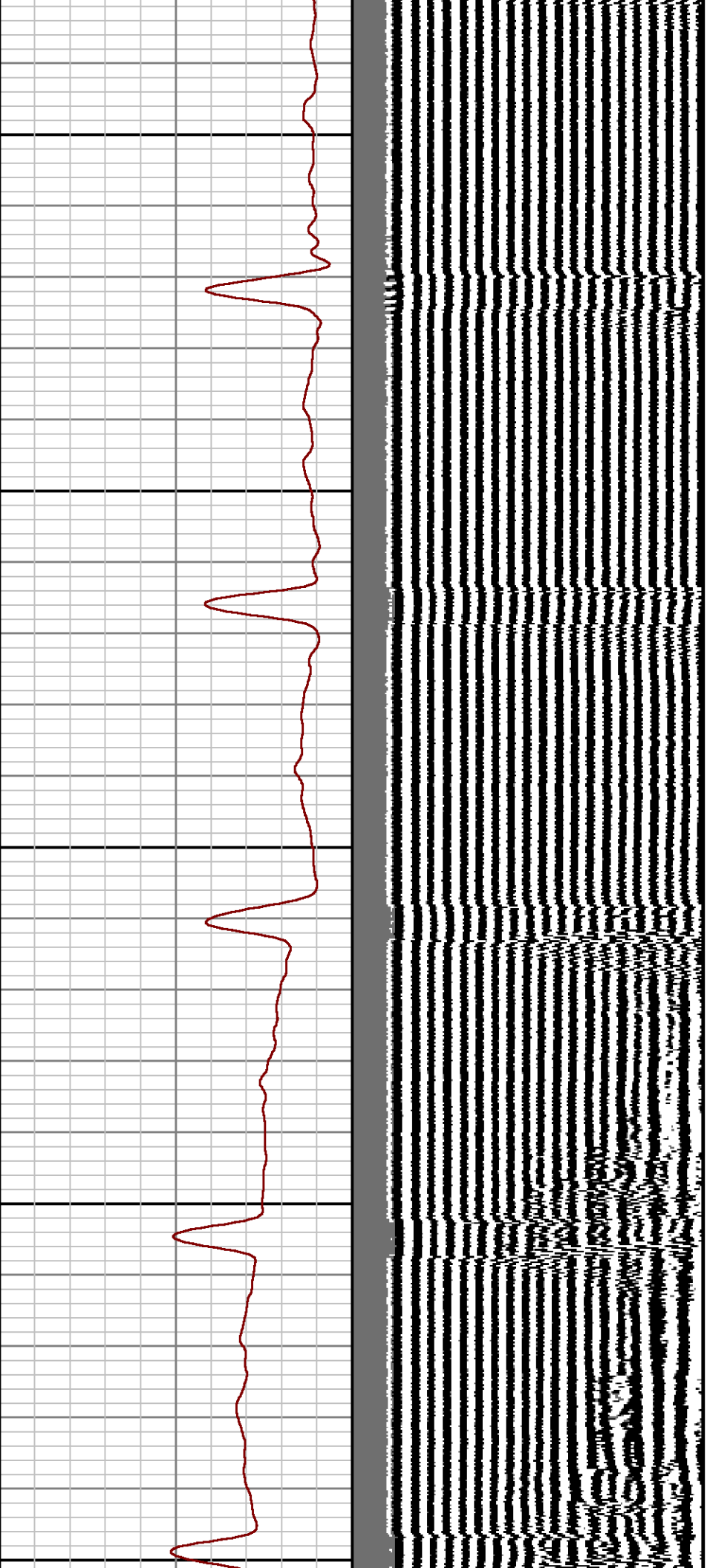
DEPTH OFFSETS

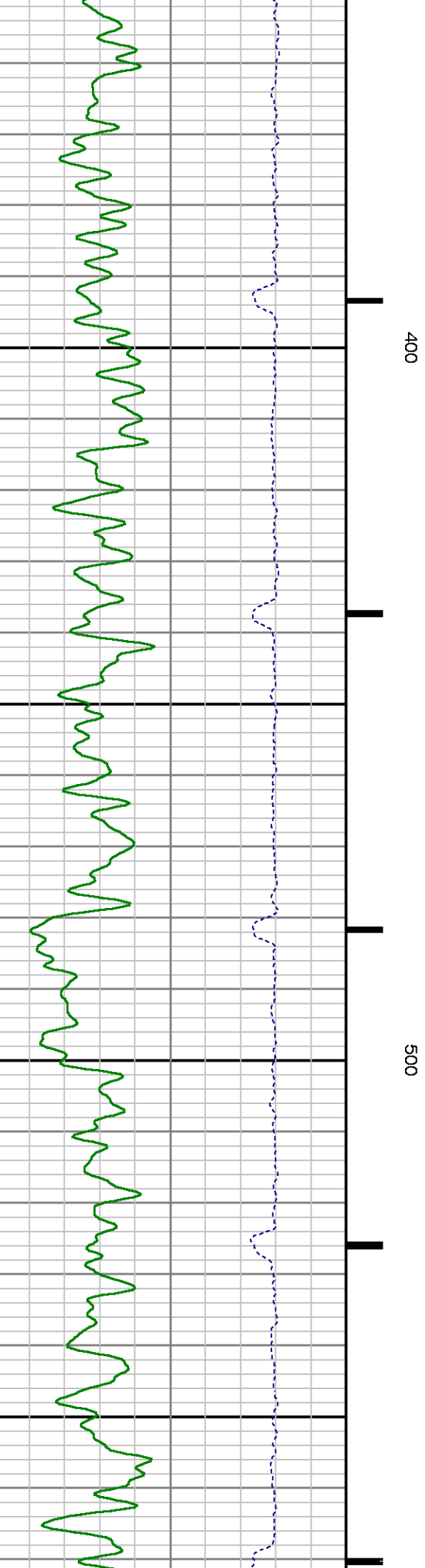
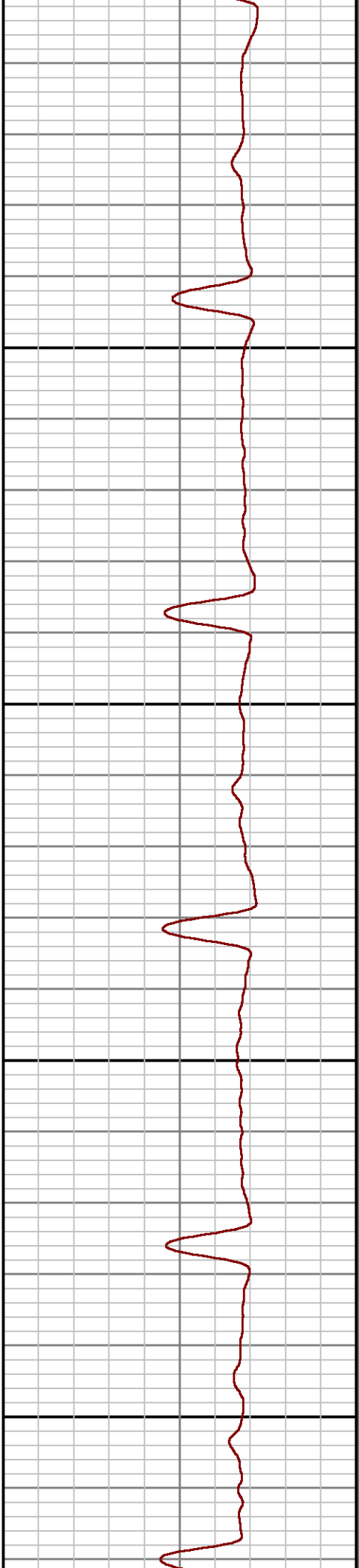
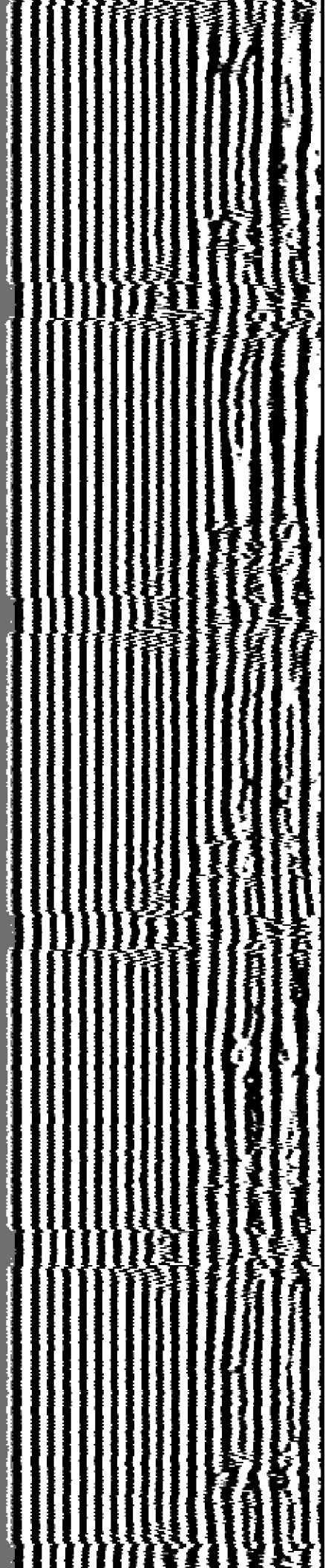
(for Acquired Curves)

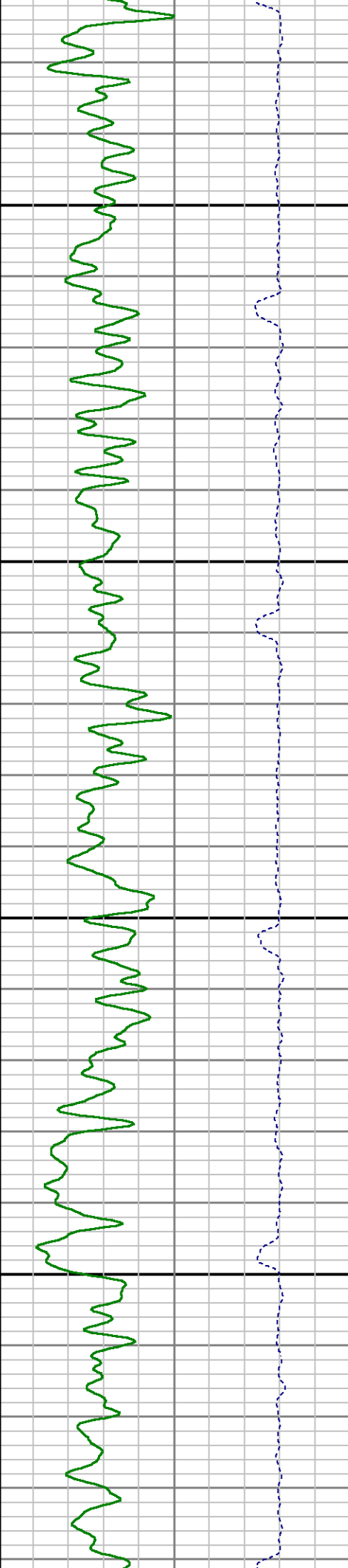
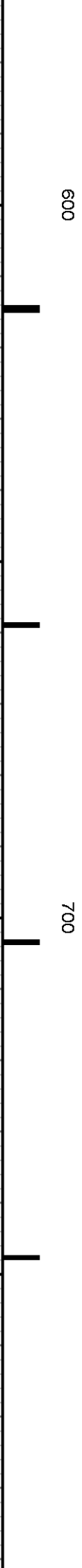
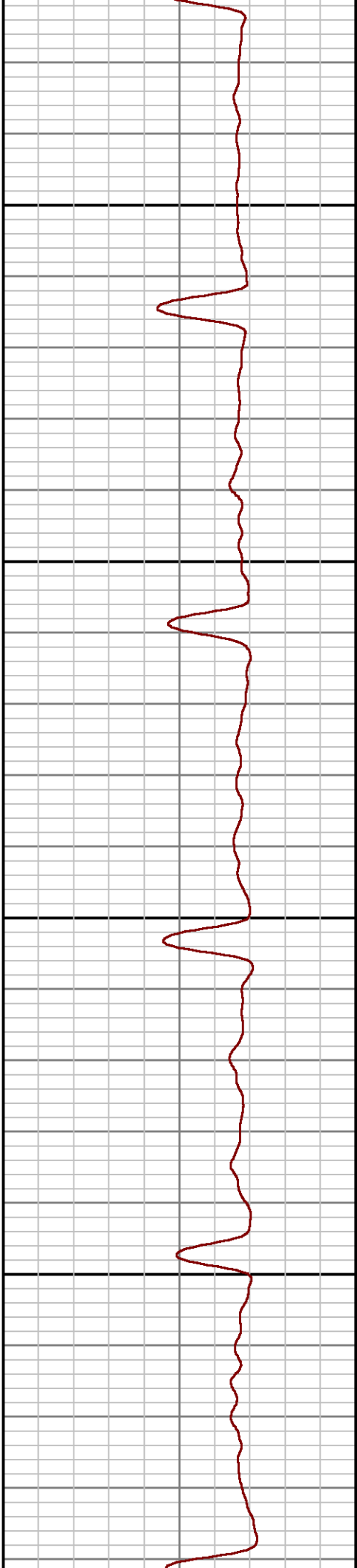
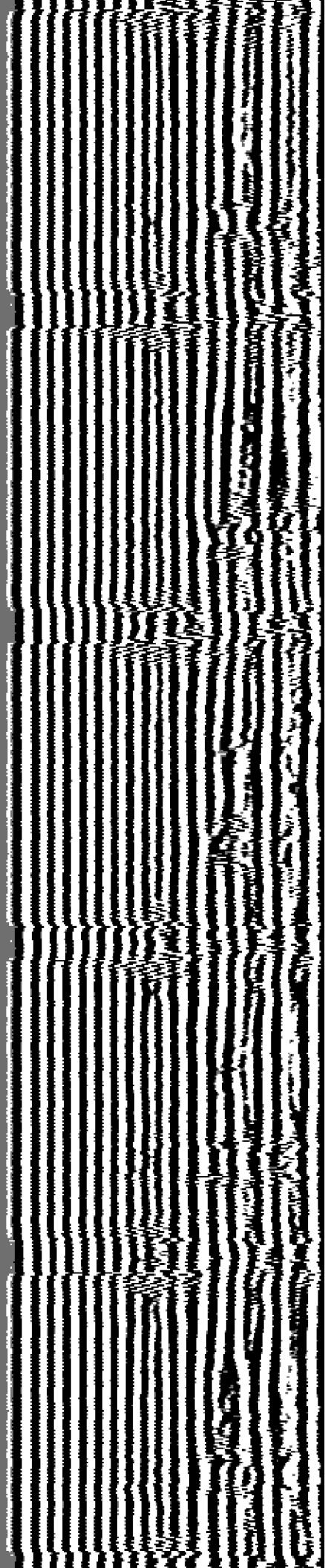
SERIES	DEPTH OFFSET	ACQUIRED CURVES							
1426XA	-11.000	ACAL	ANR	AR1	AR2	AR3	AR4		
		AR5	AR6	AR7	AR8	CHV	FPR2		

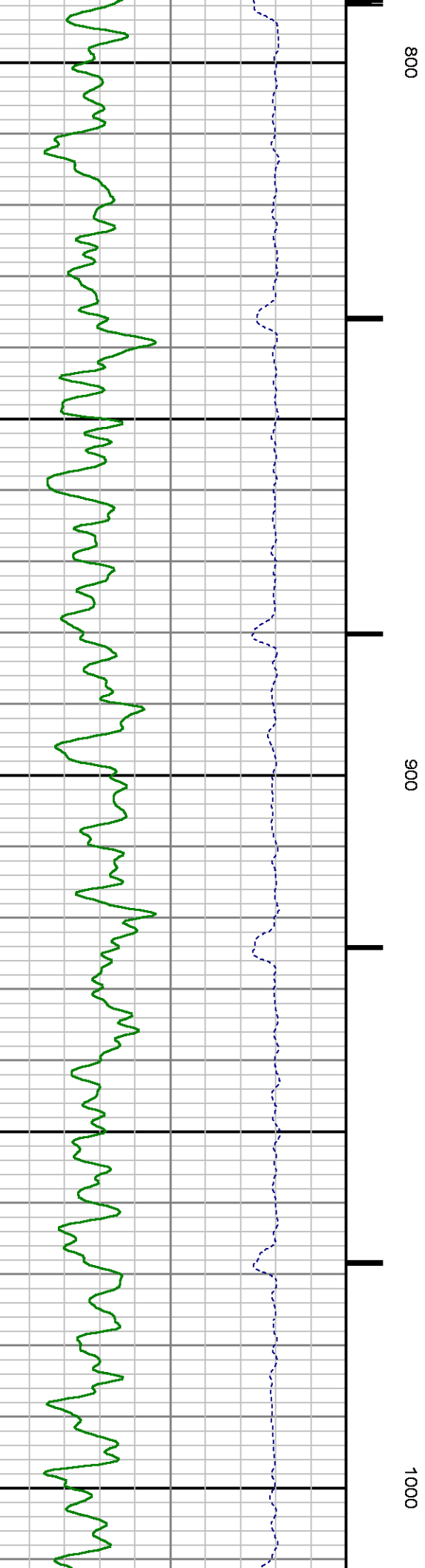
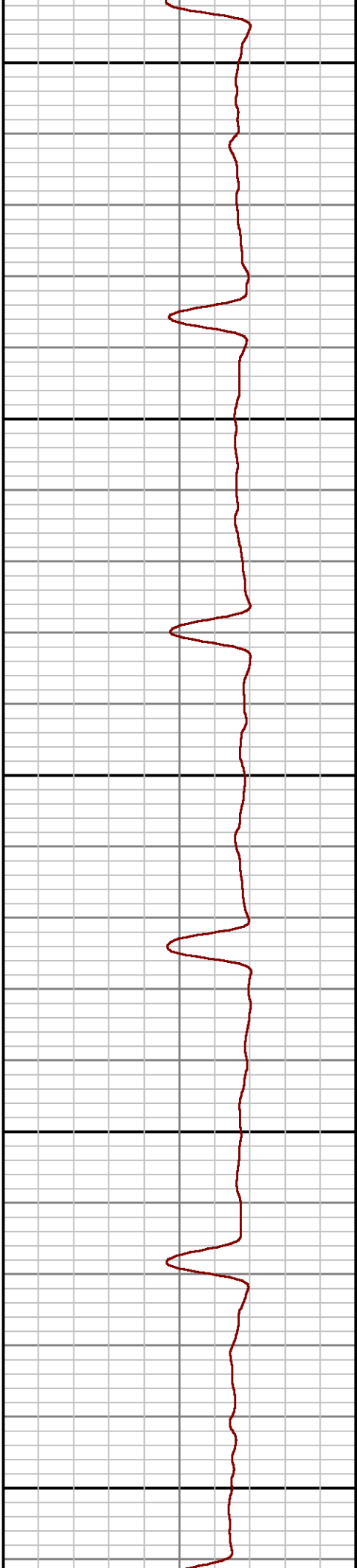
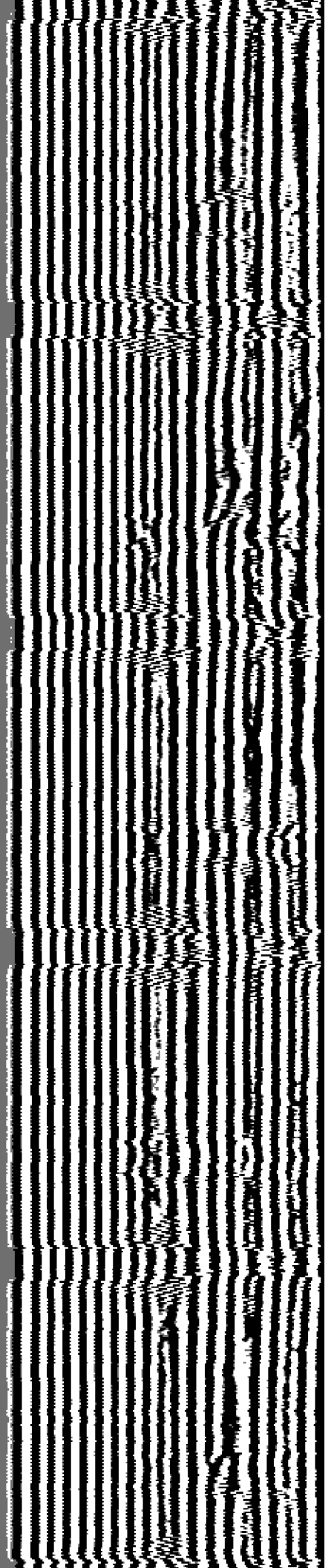
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	-10.040	AFAR	SIG	TT5			
2459XA	-5.620	CCL					
2459XA	-1.500	GR					
2459XA	0.000	NEU					

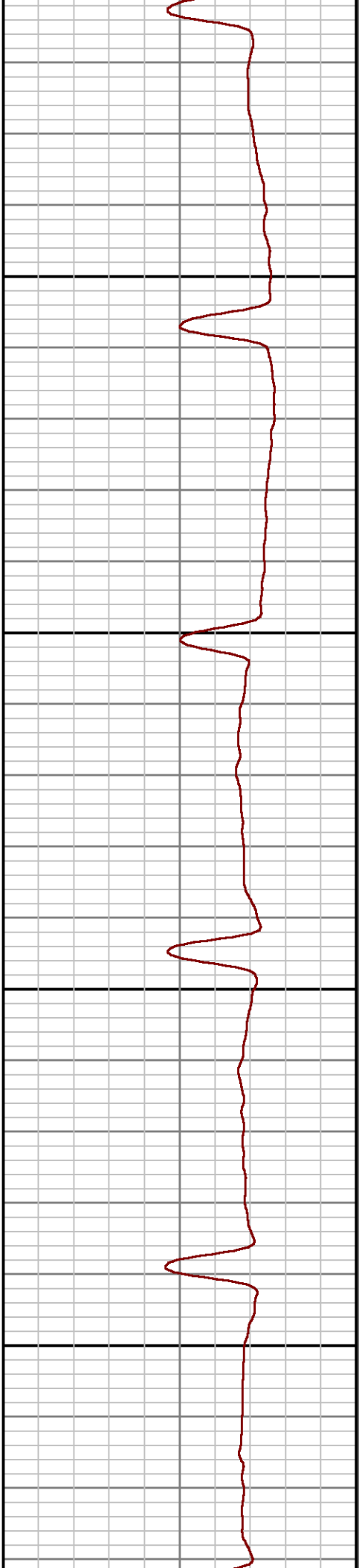
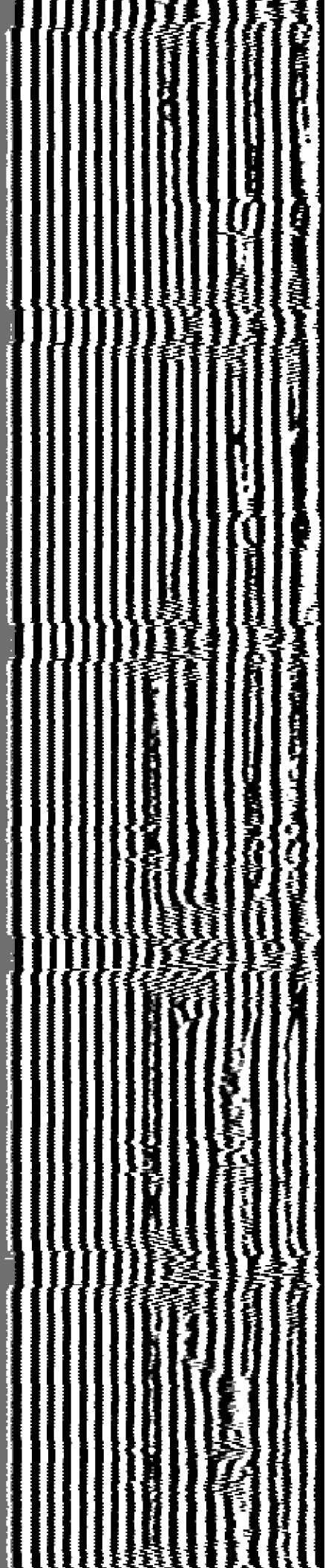






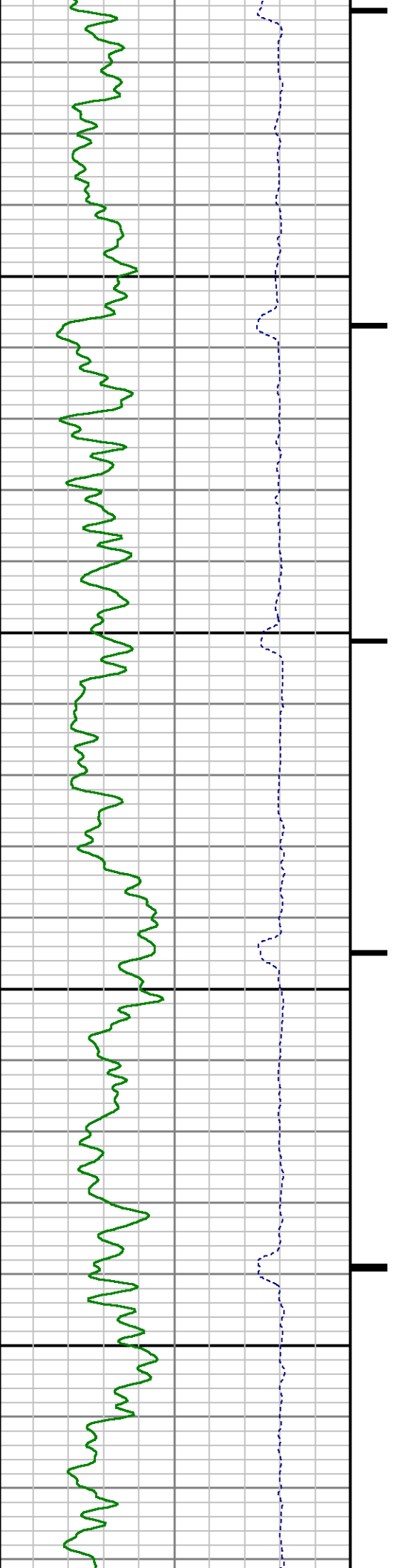


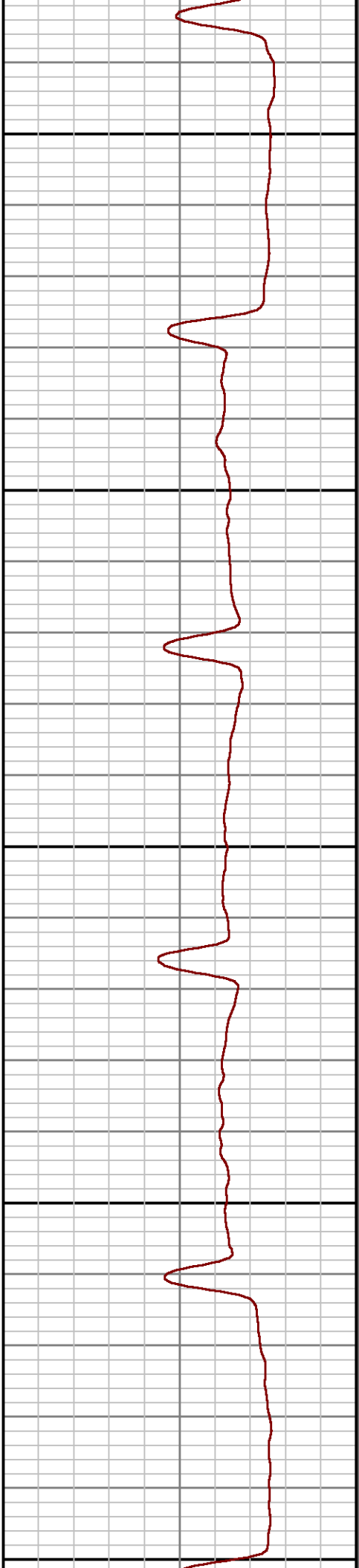
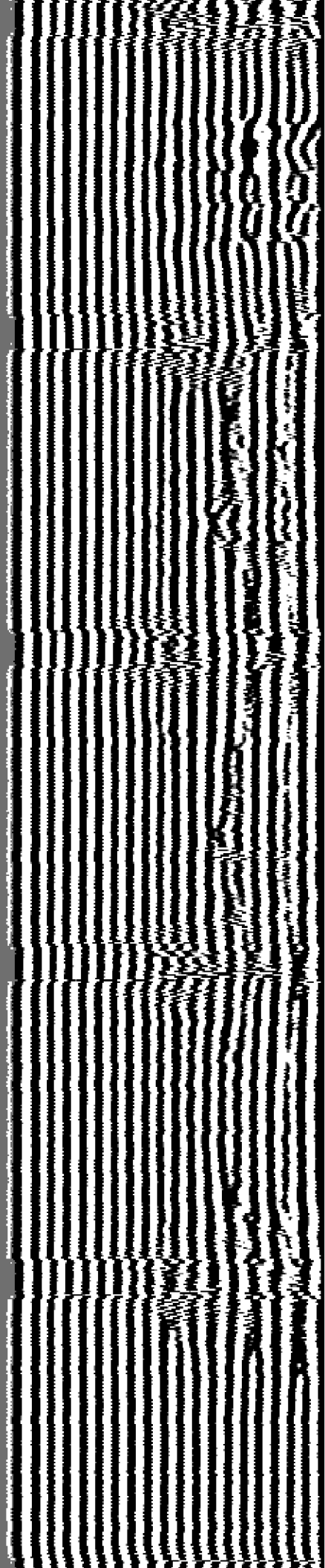




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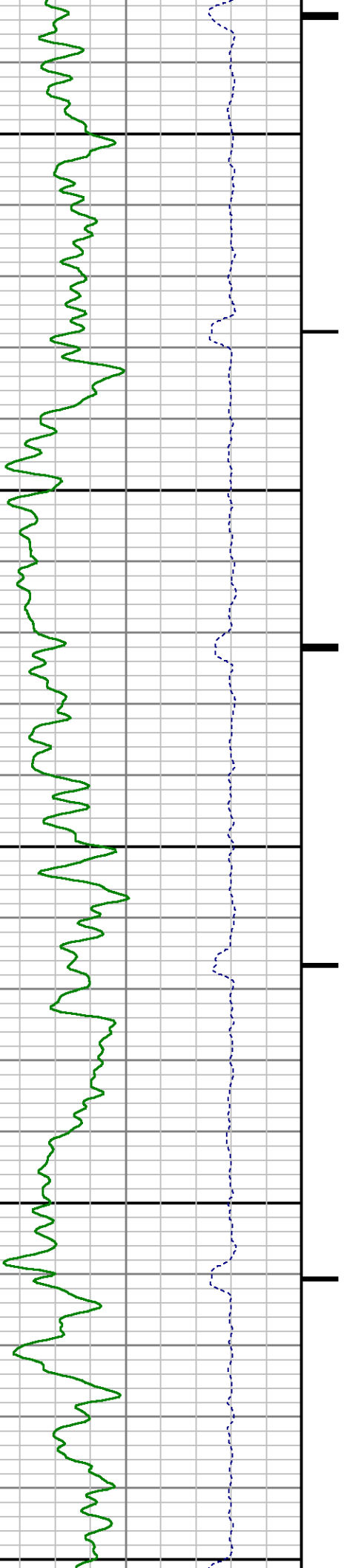
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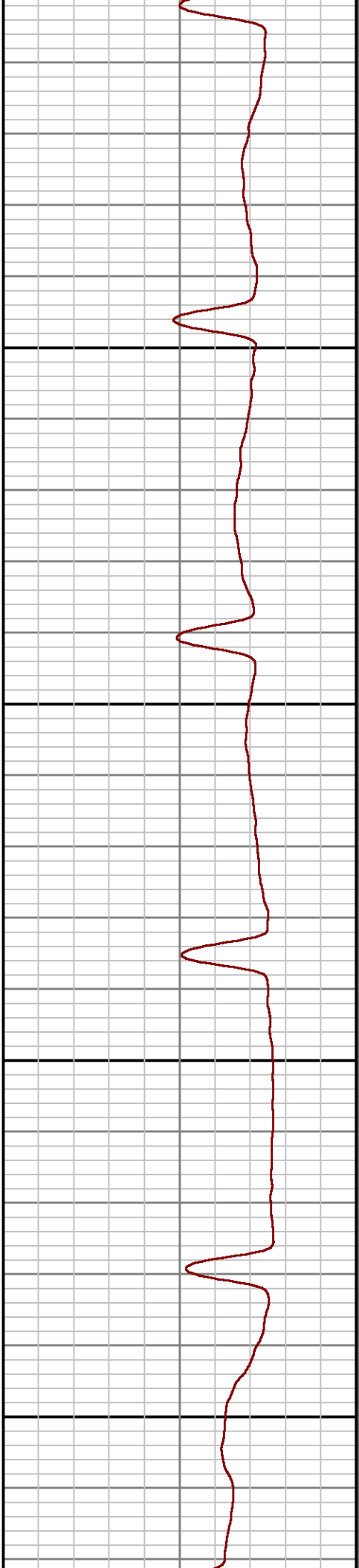
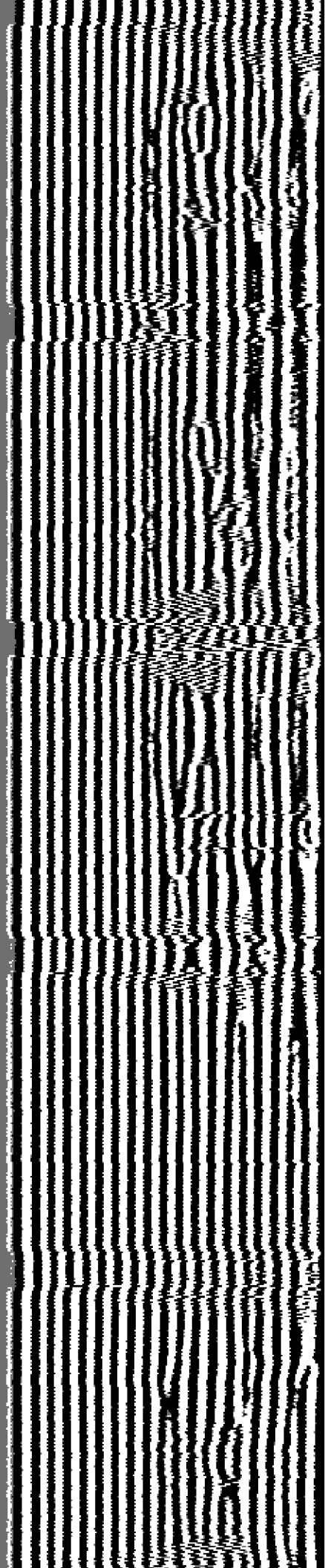




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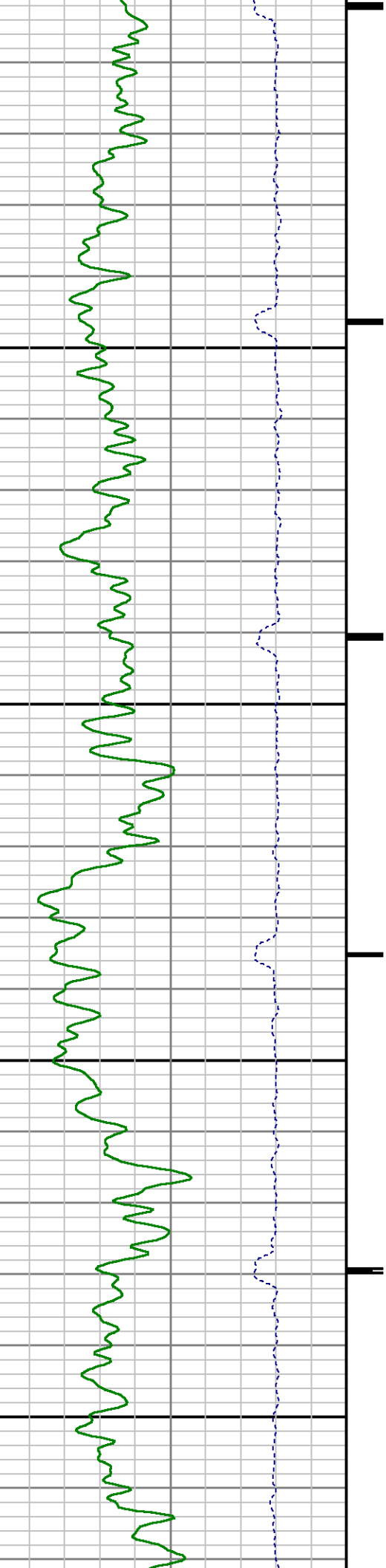
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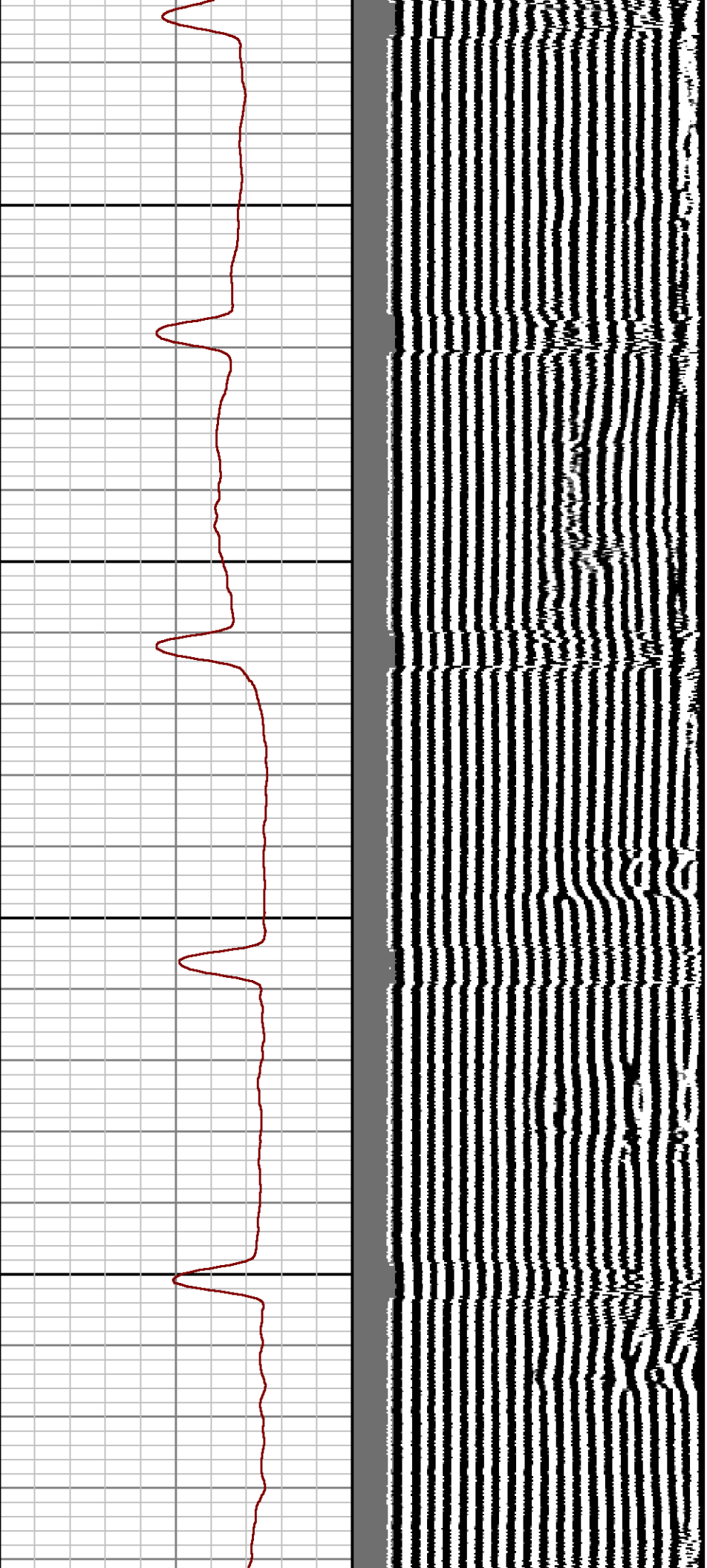




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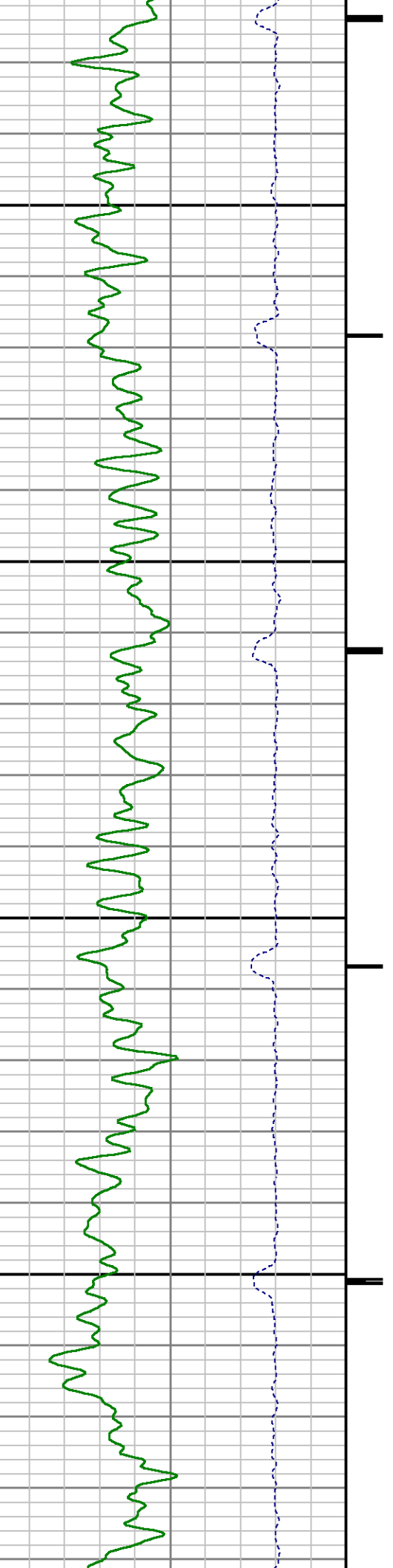
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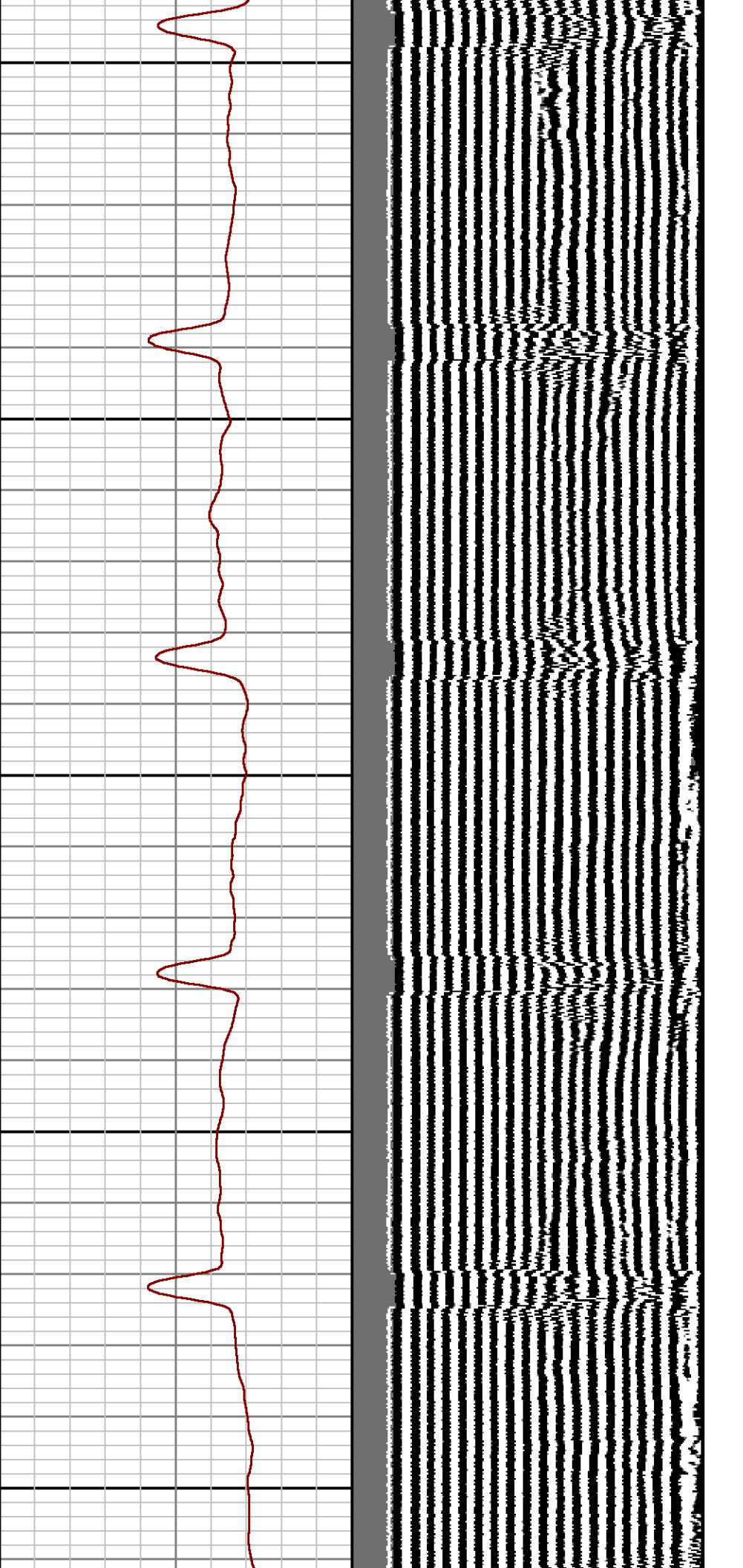




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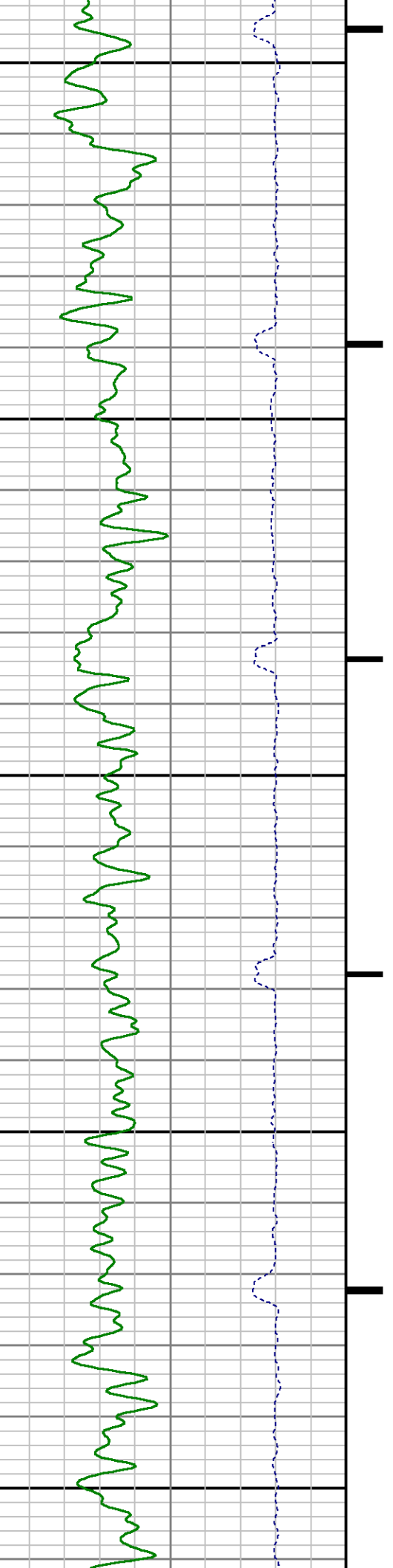


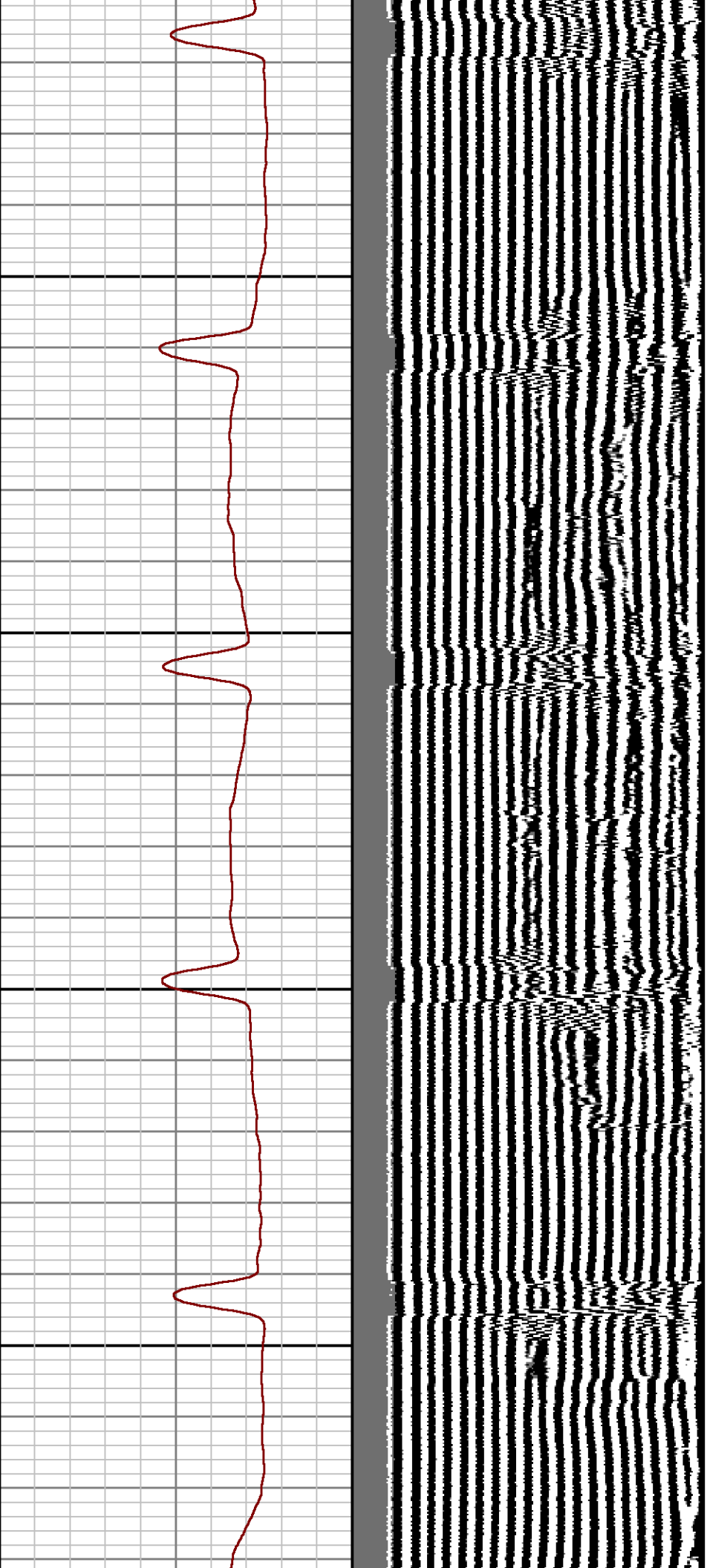


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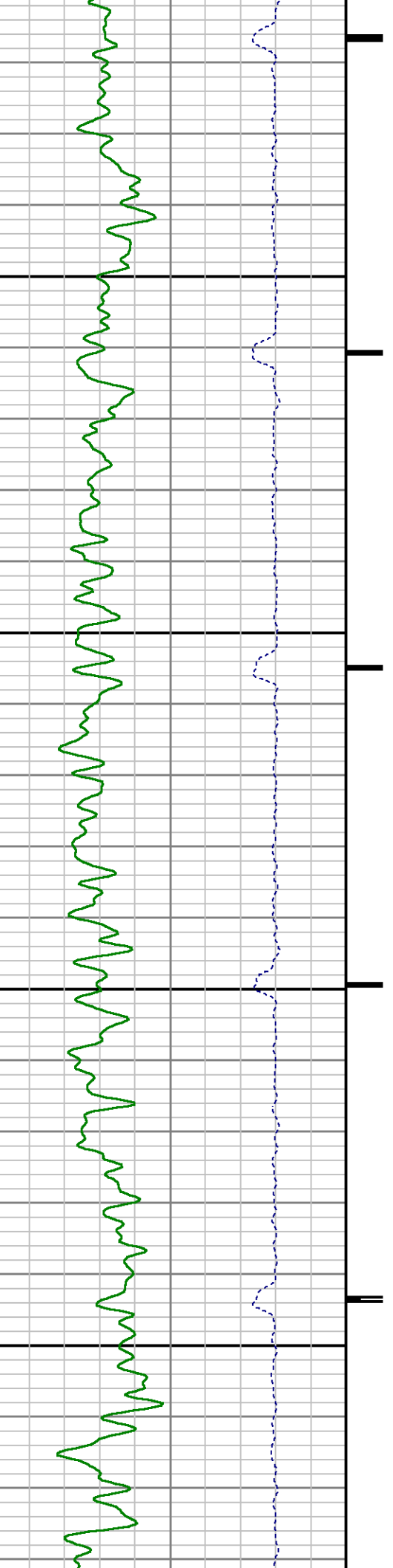
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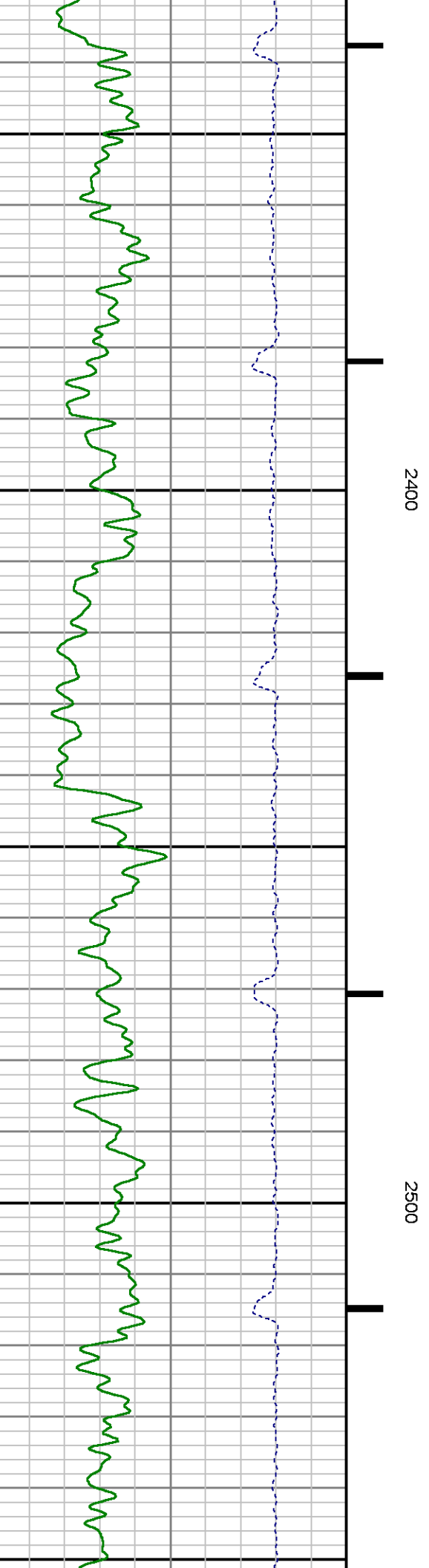
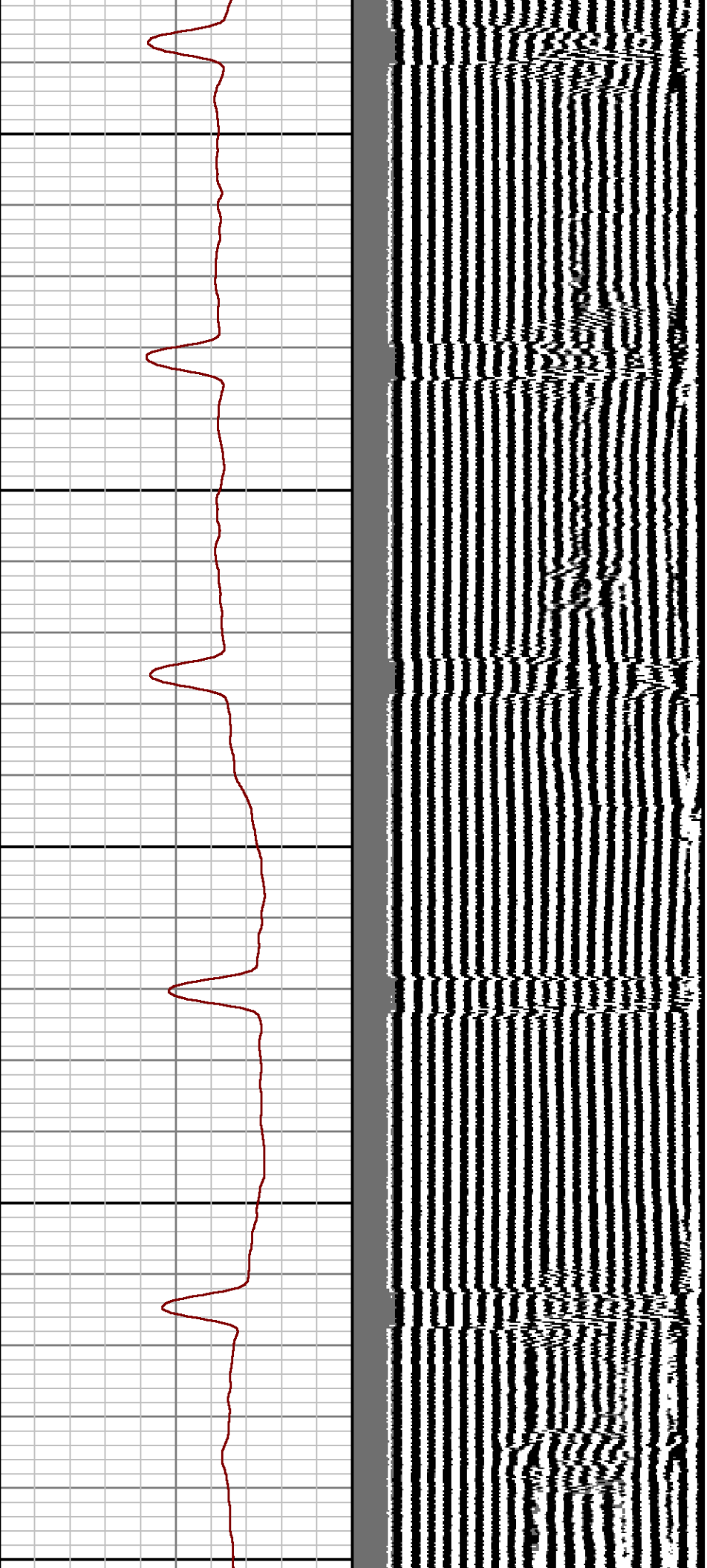


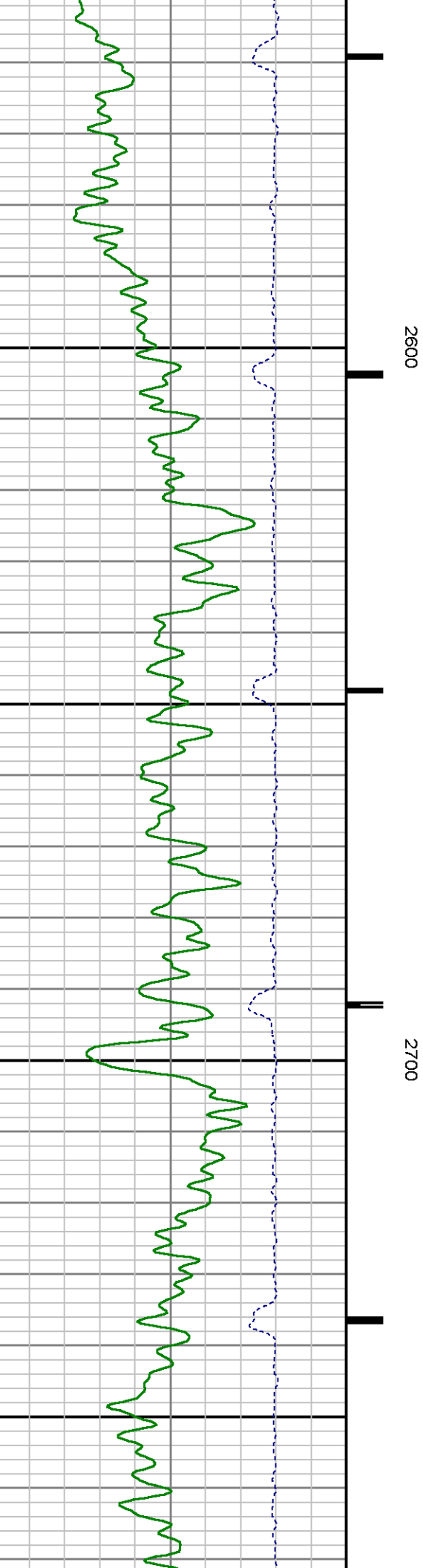
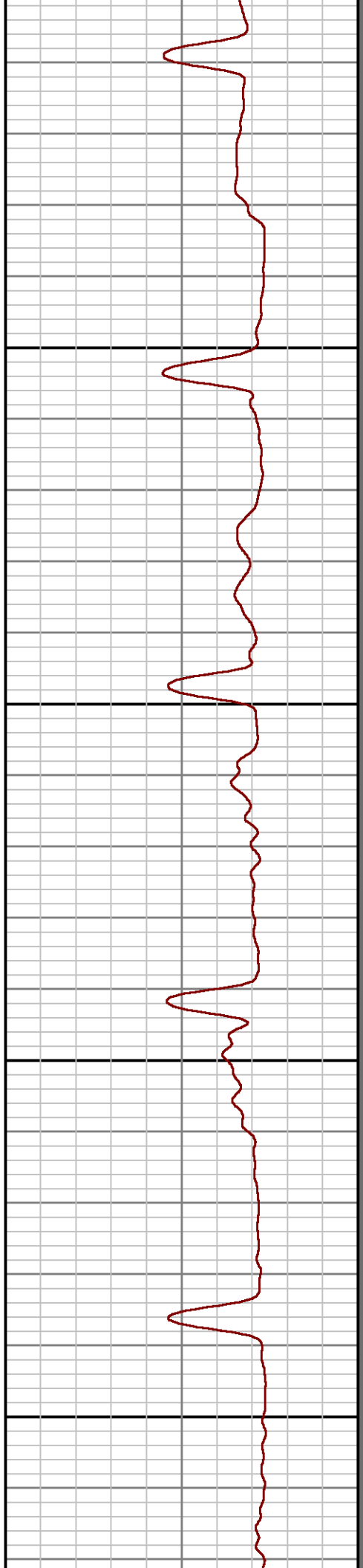
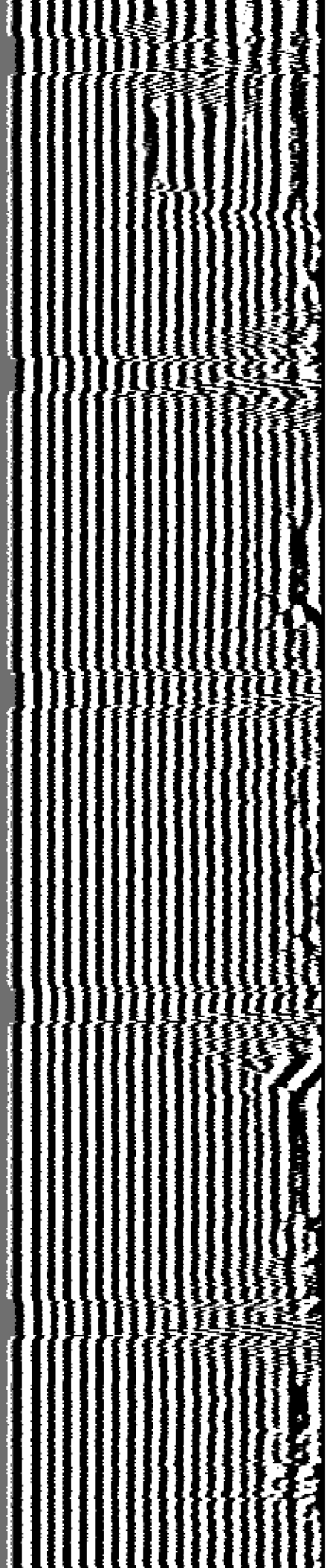


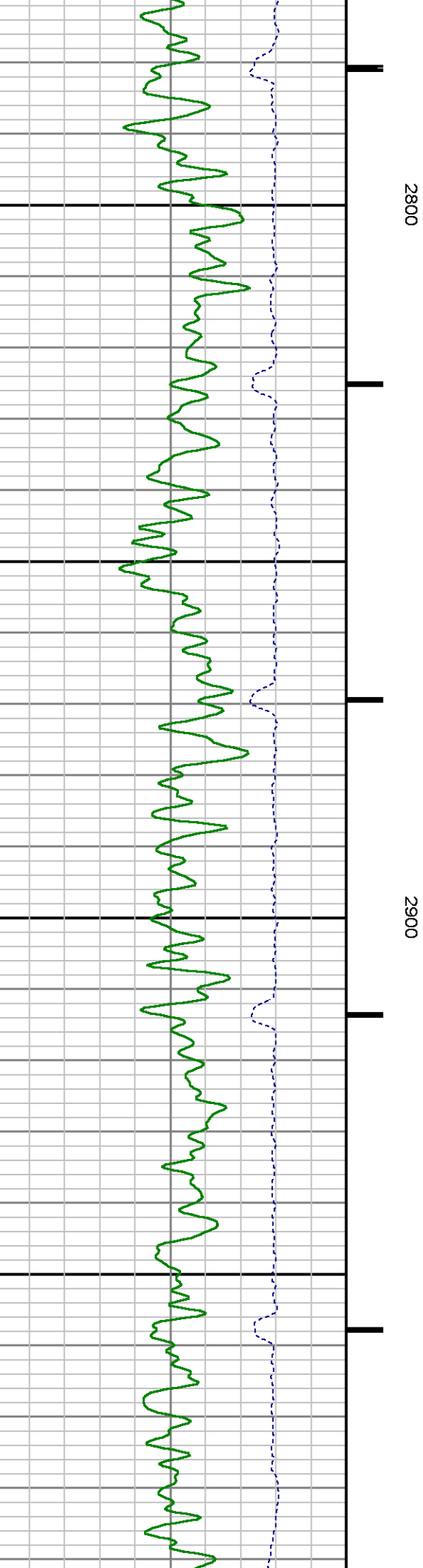
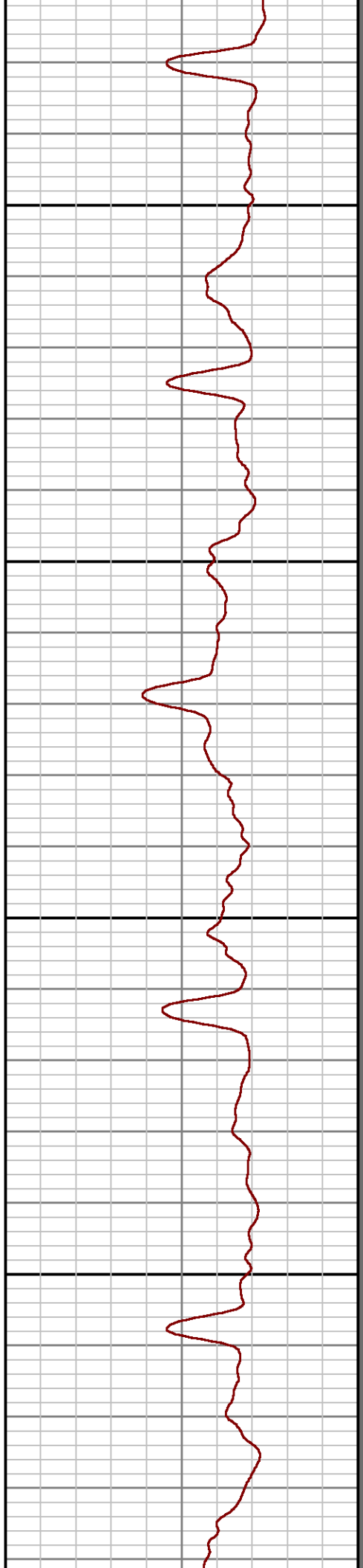
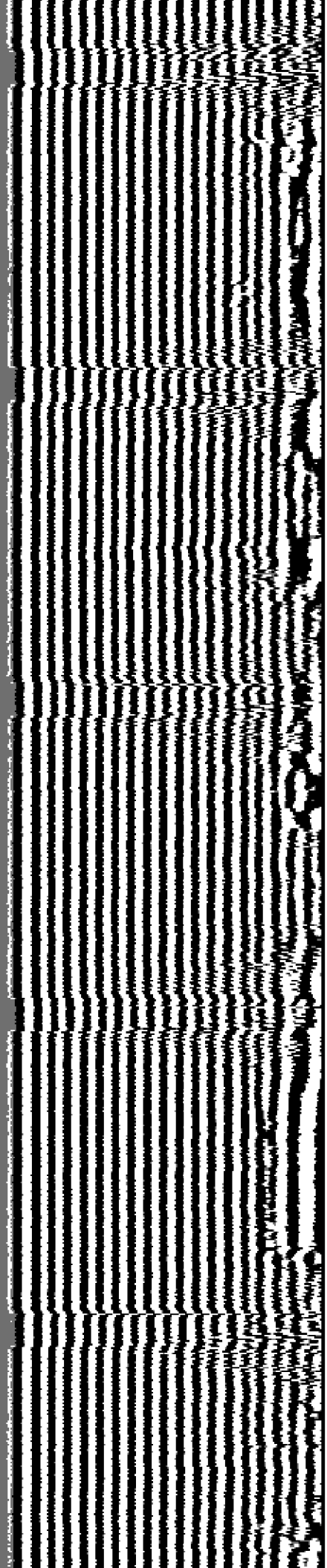
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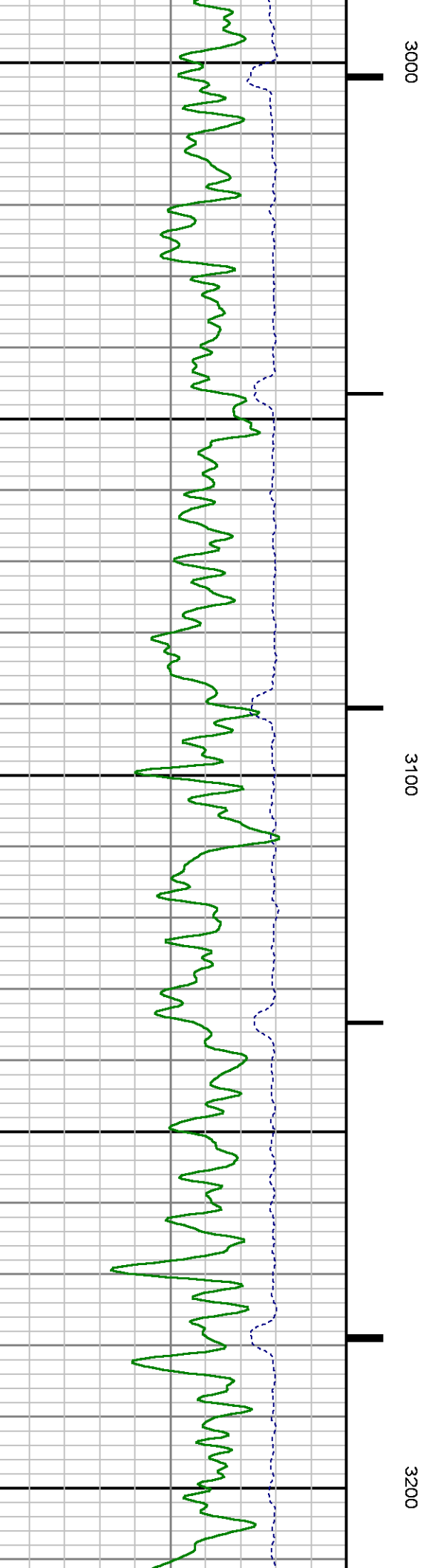
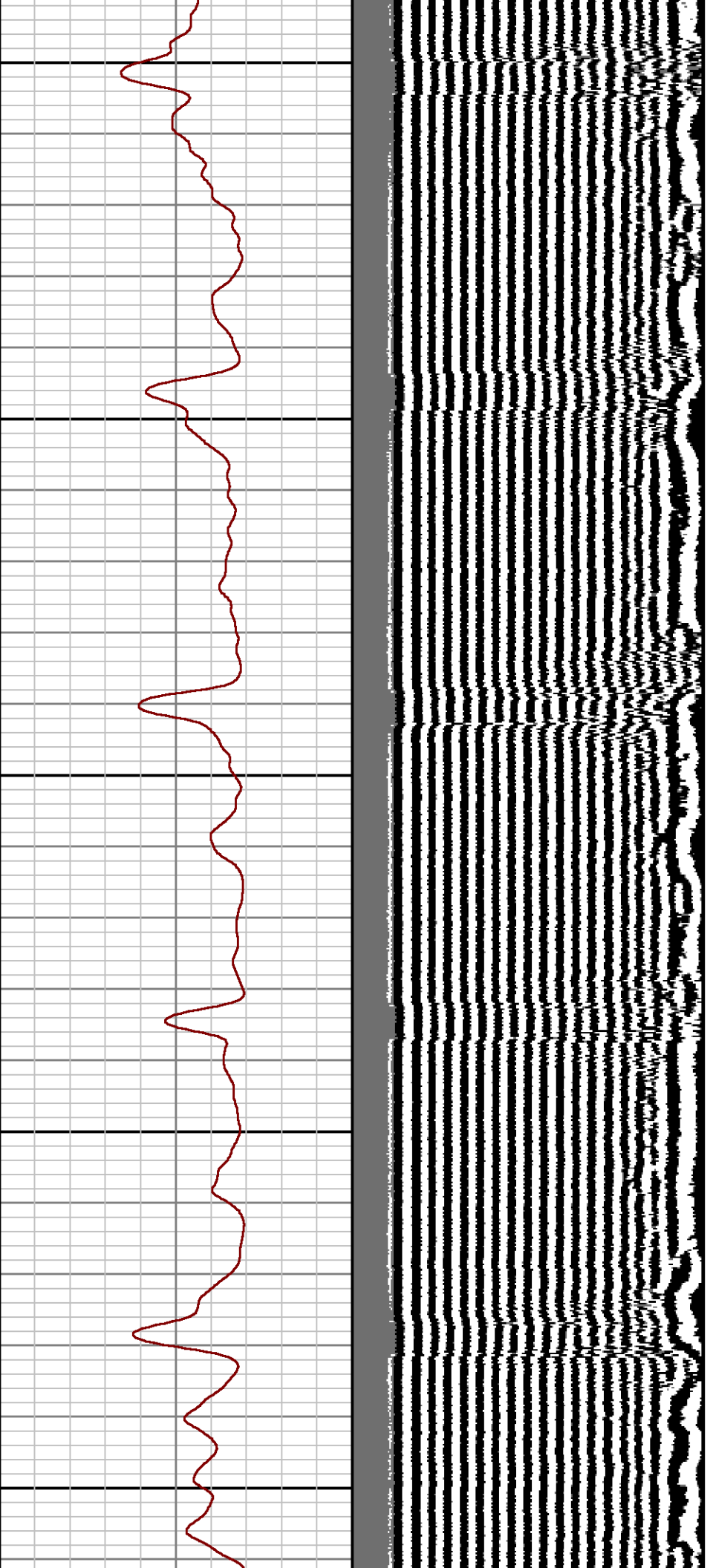
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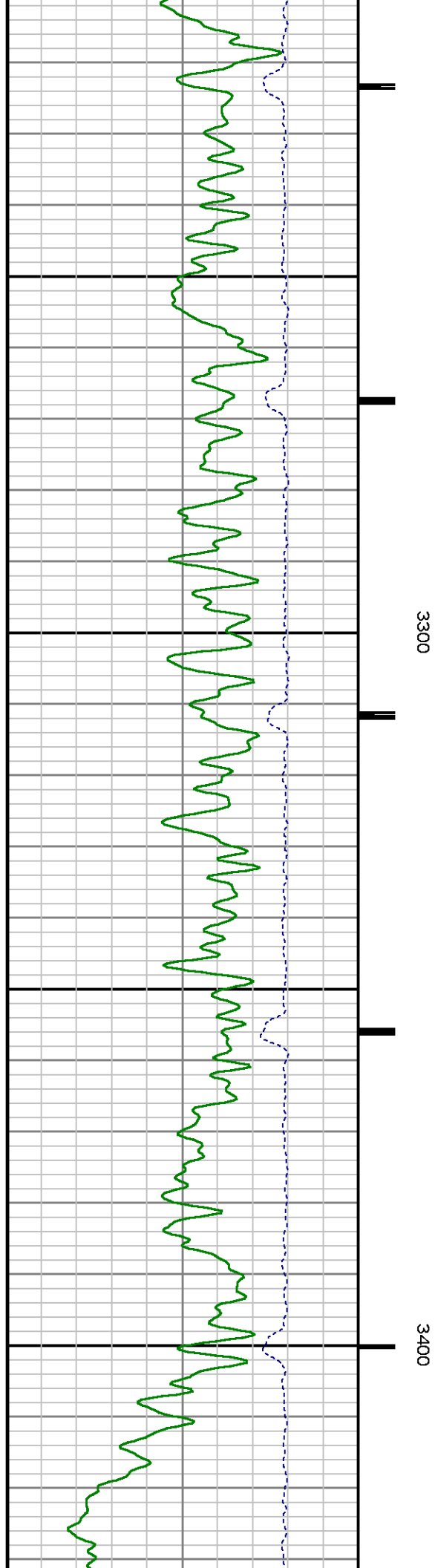
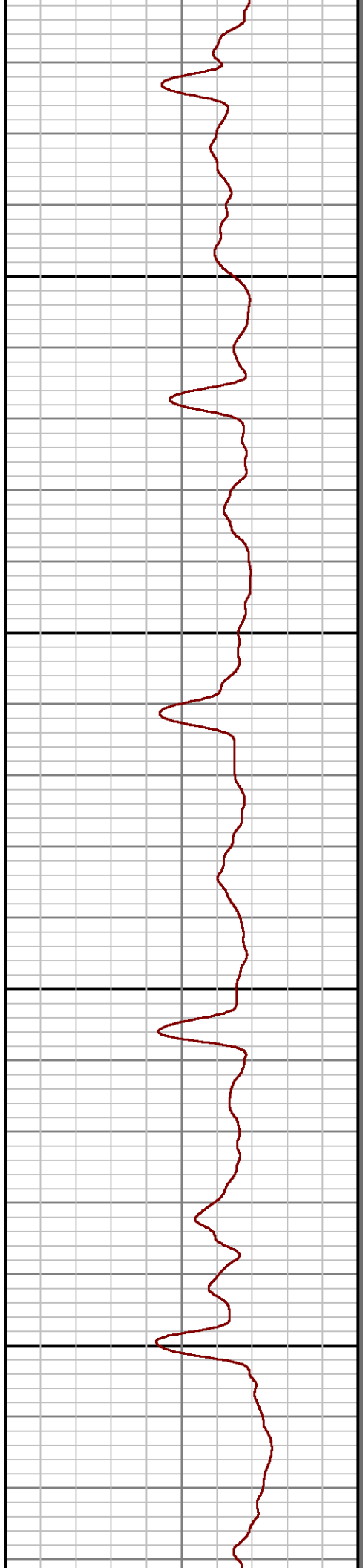
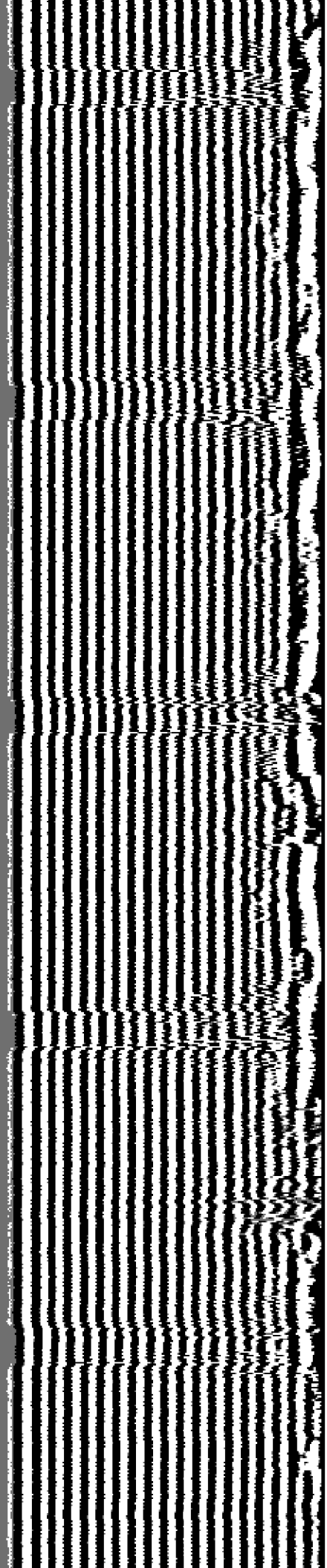


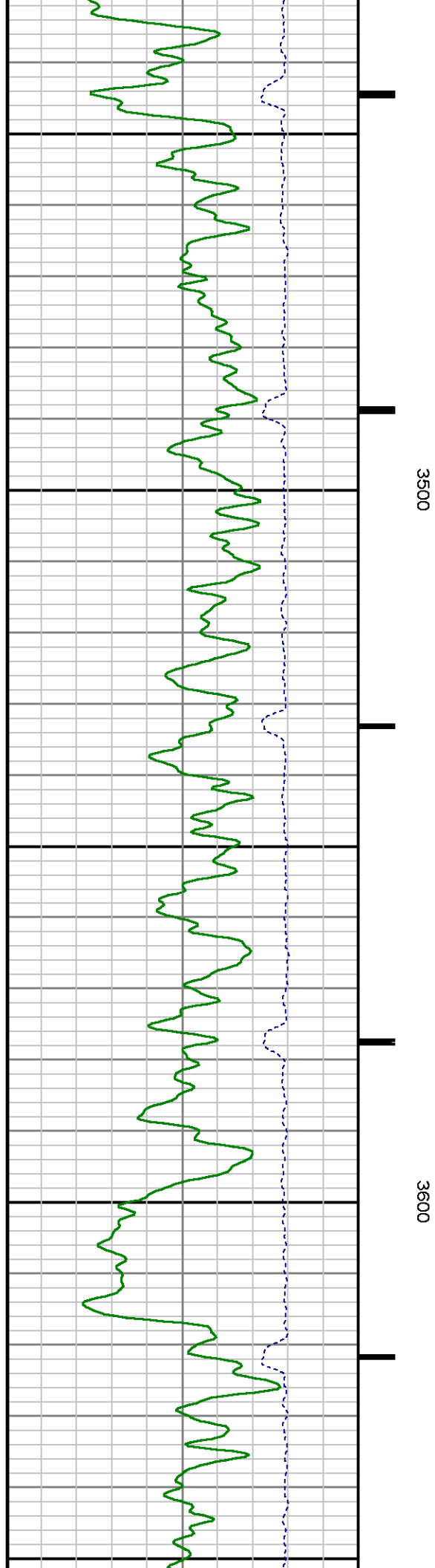
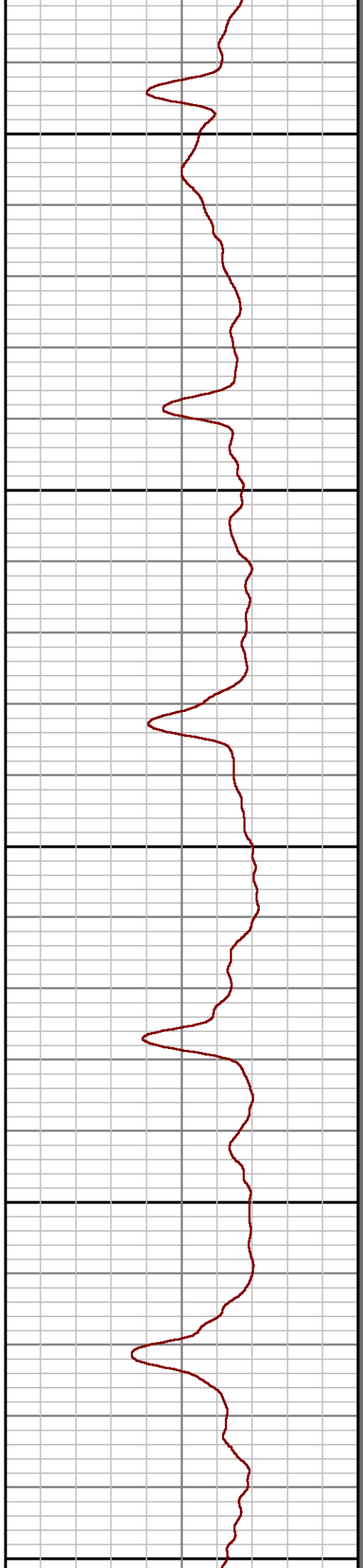
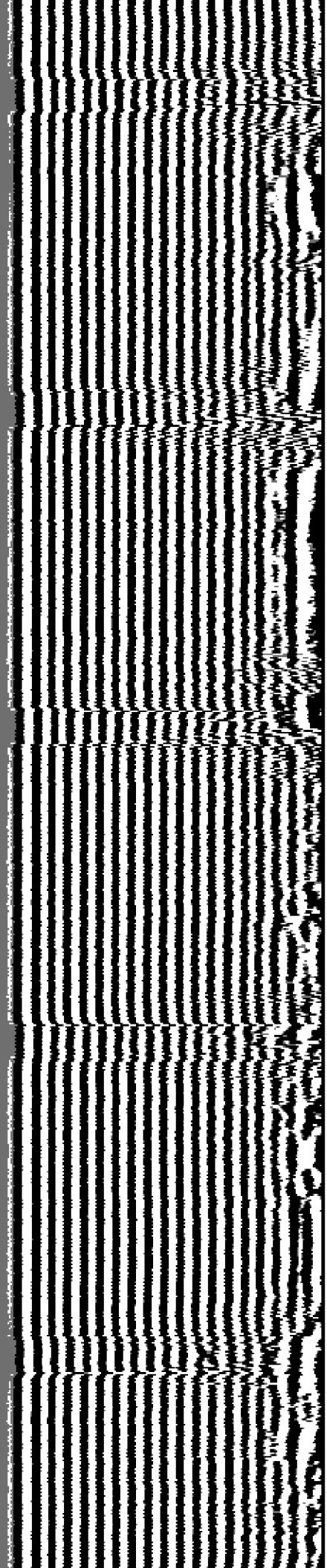


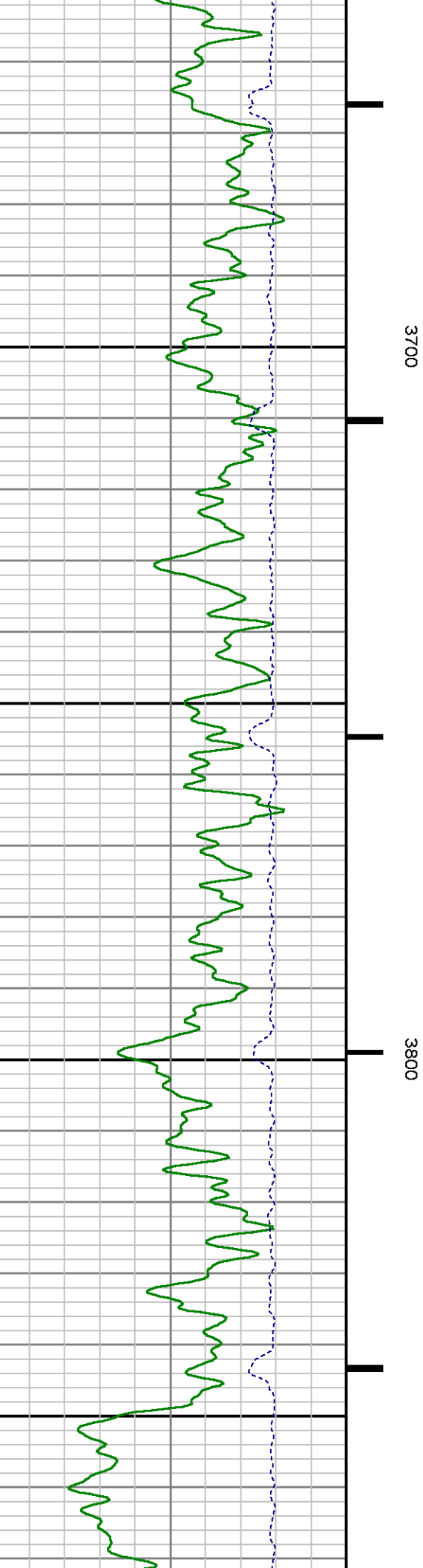
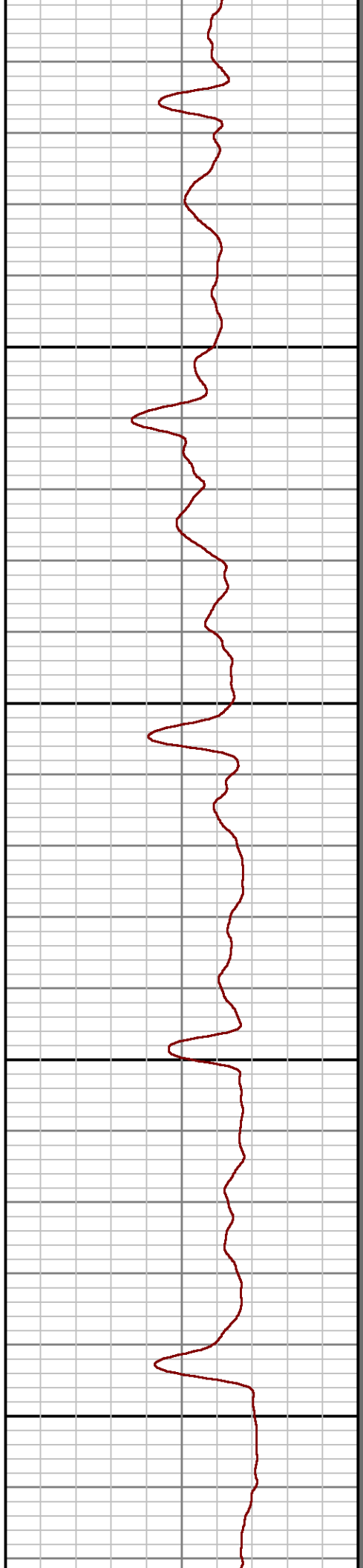
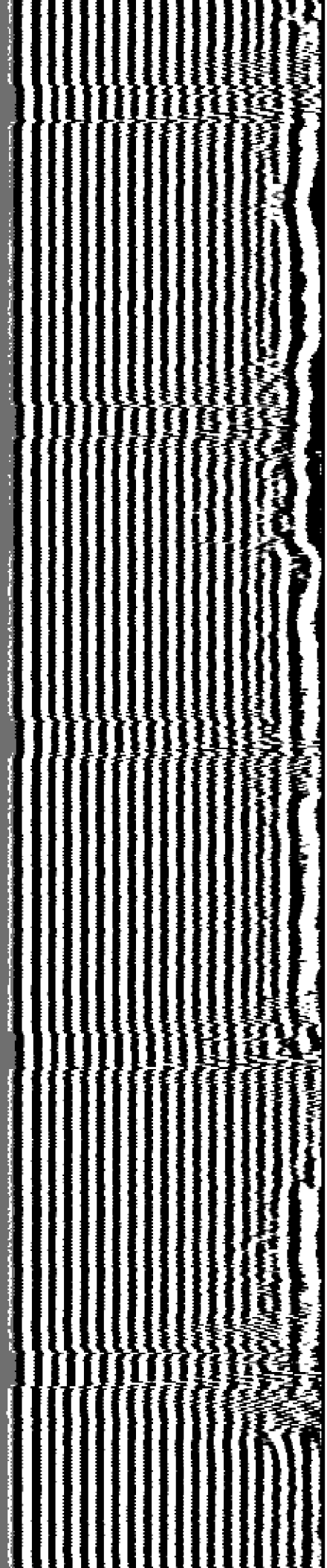


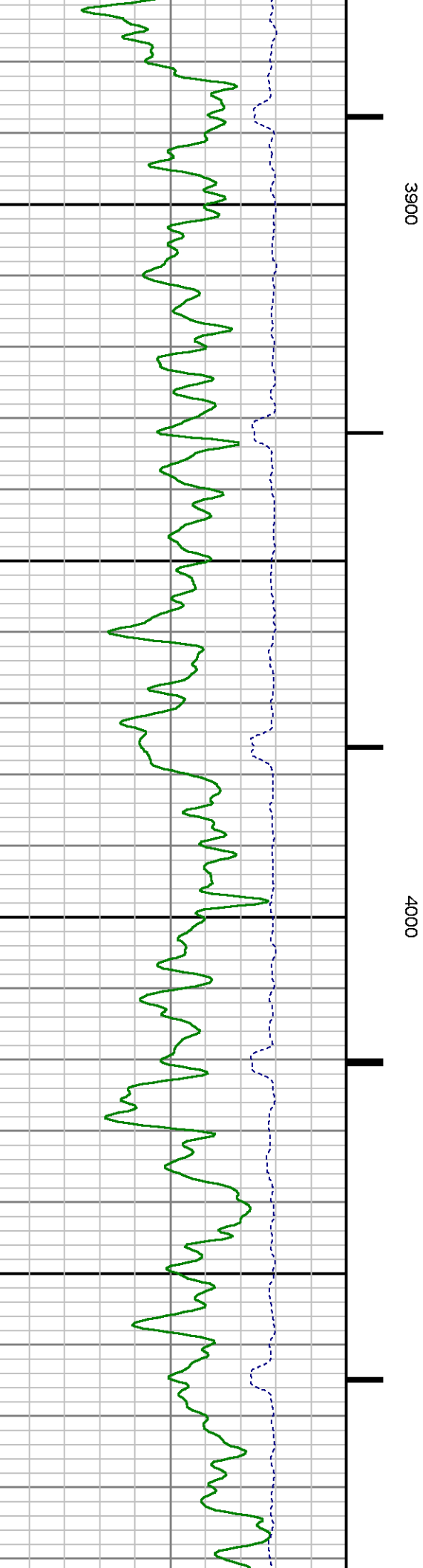
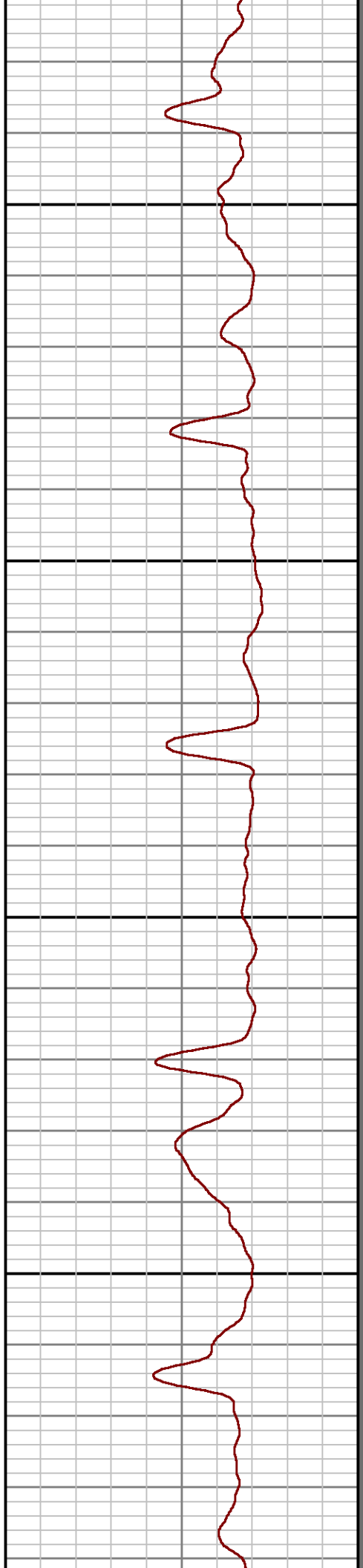
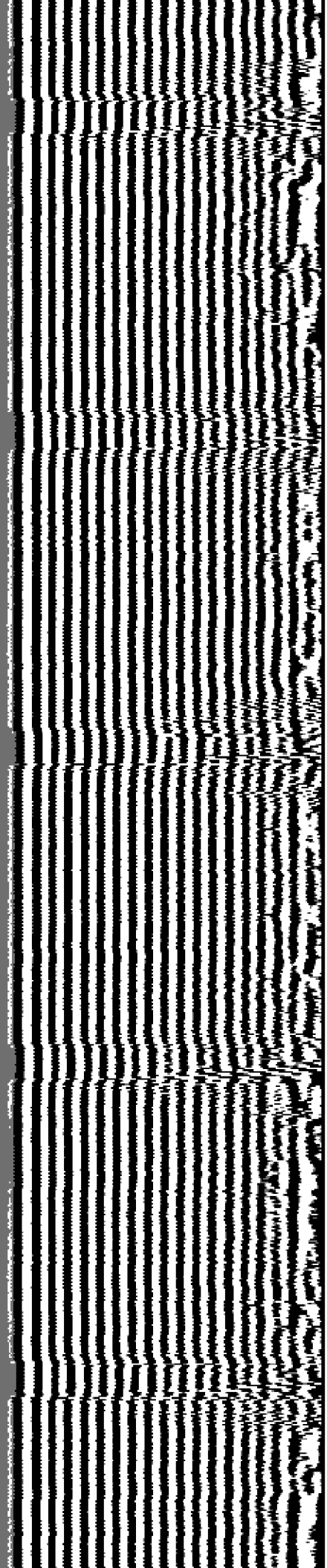


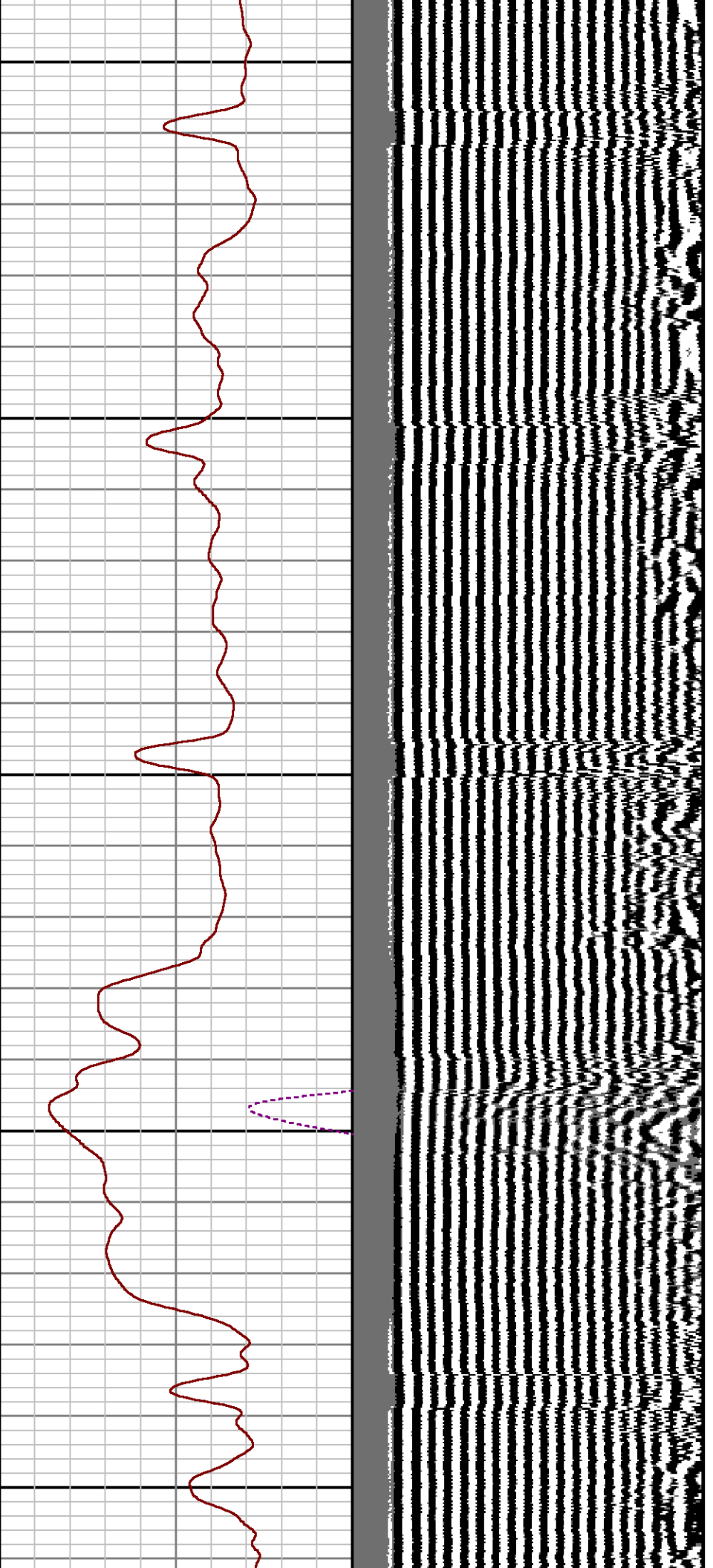








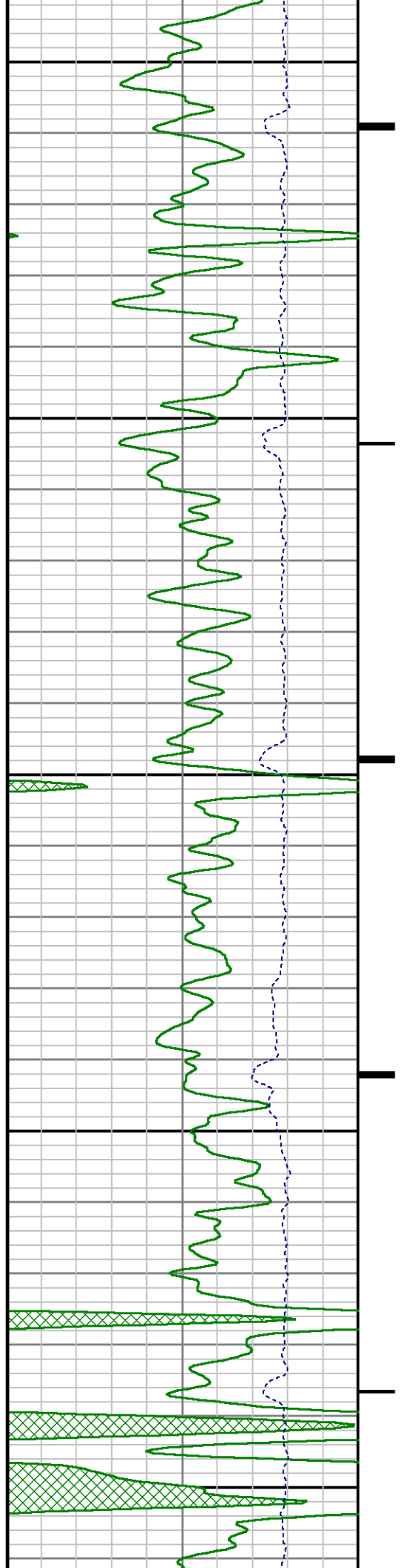


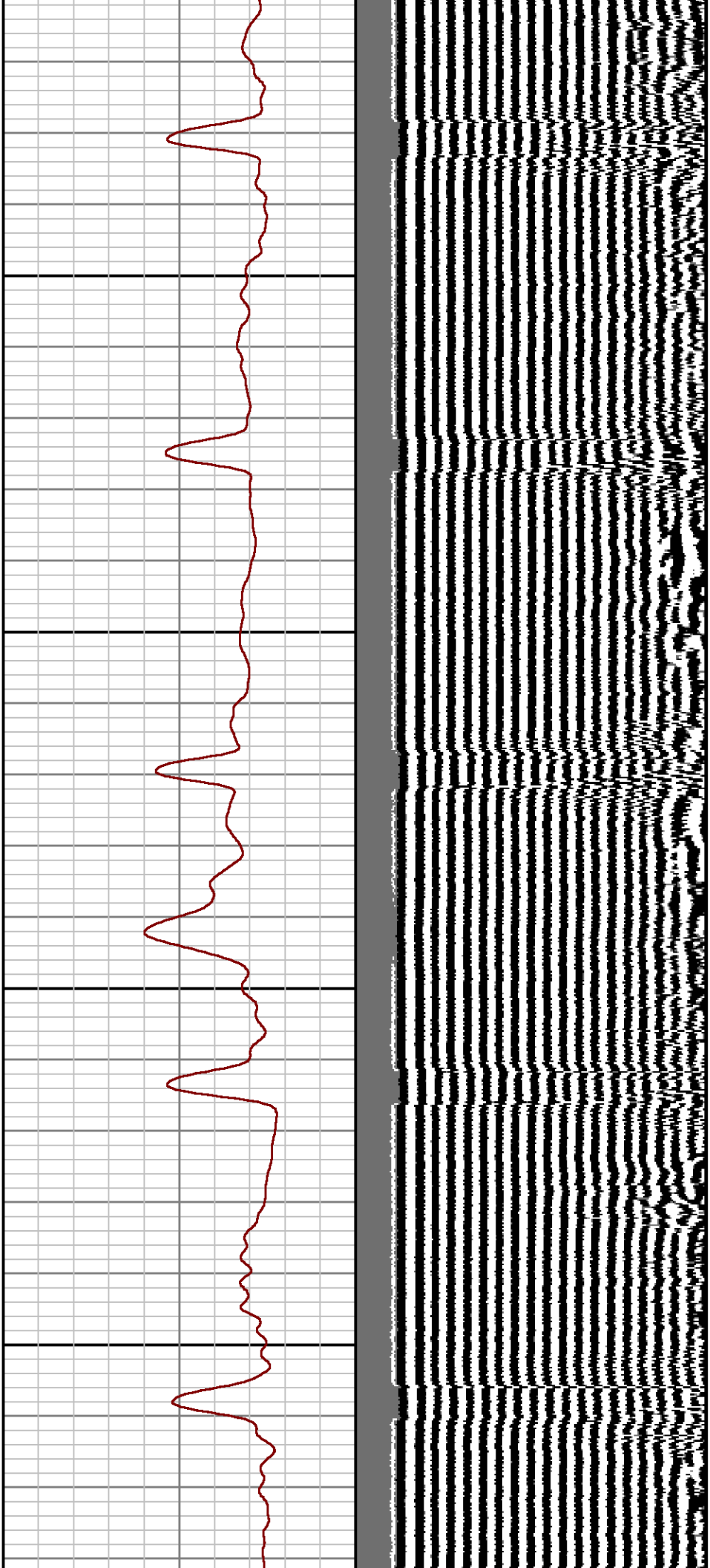


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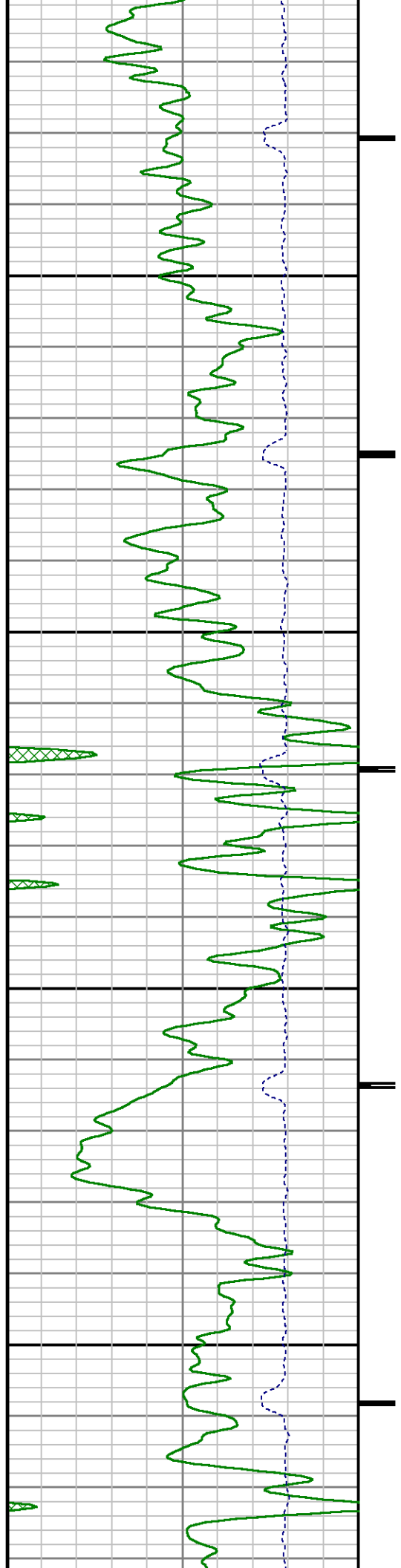
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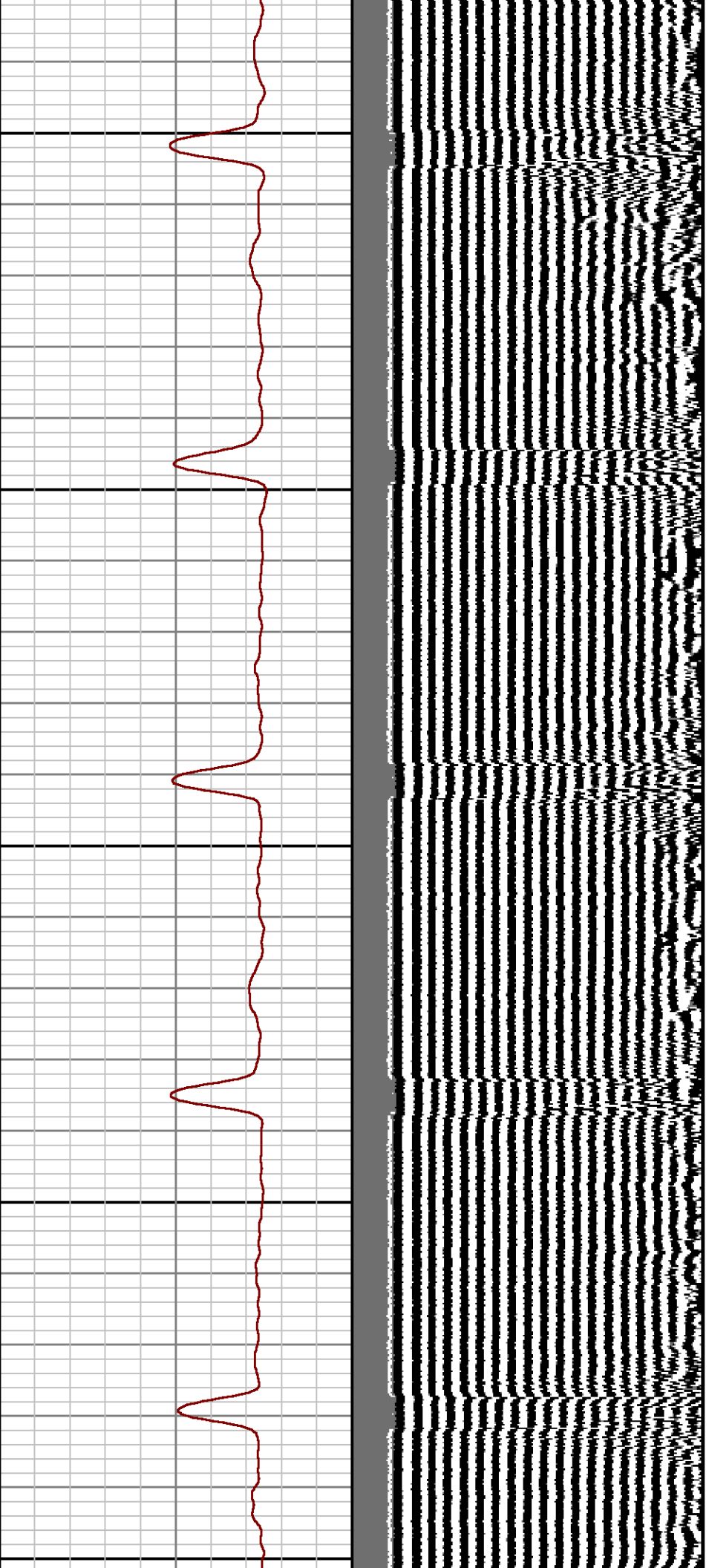




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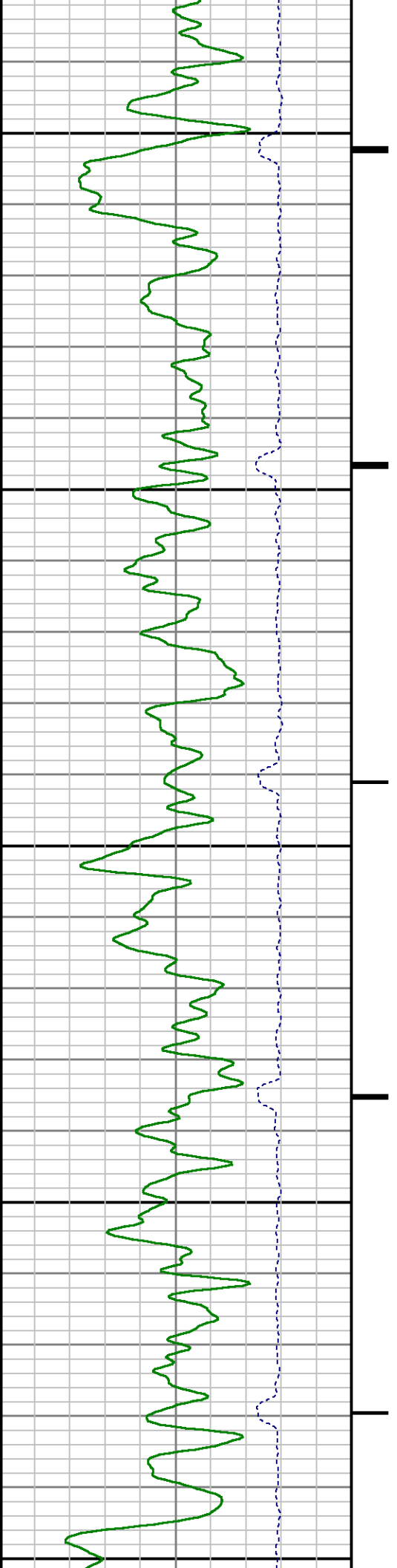
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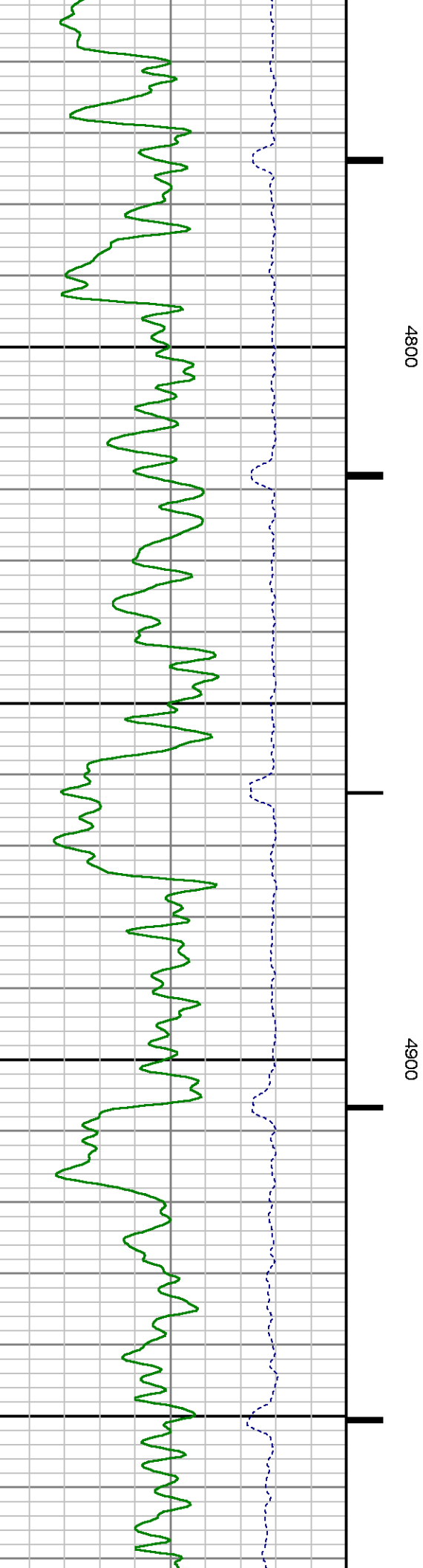
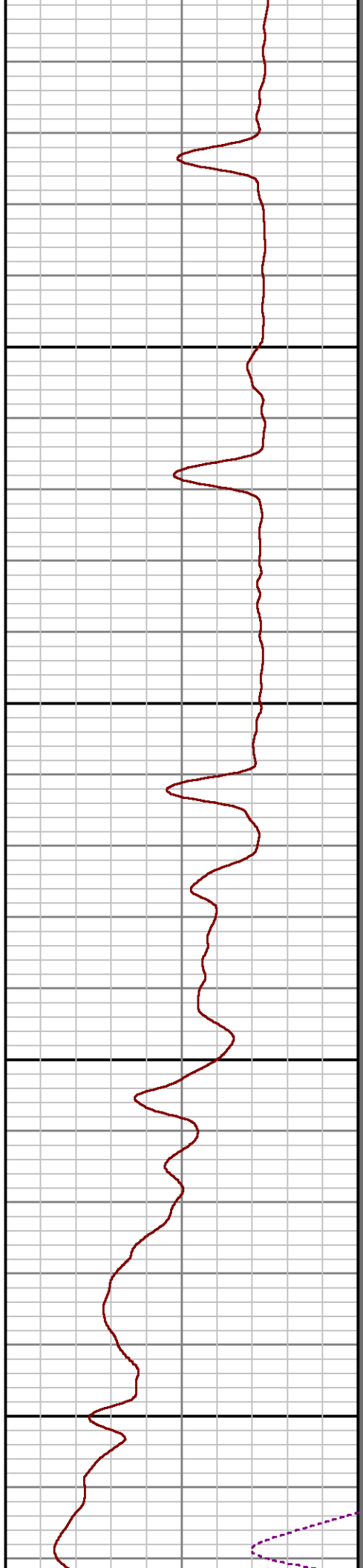
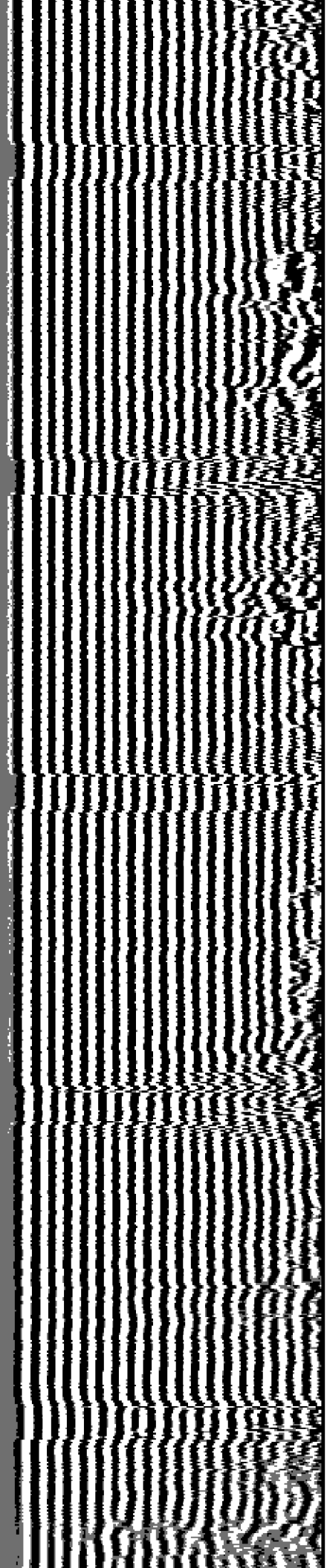


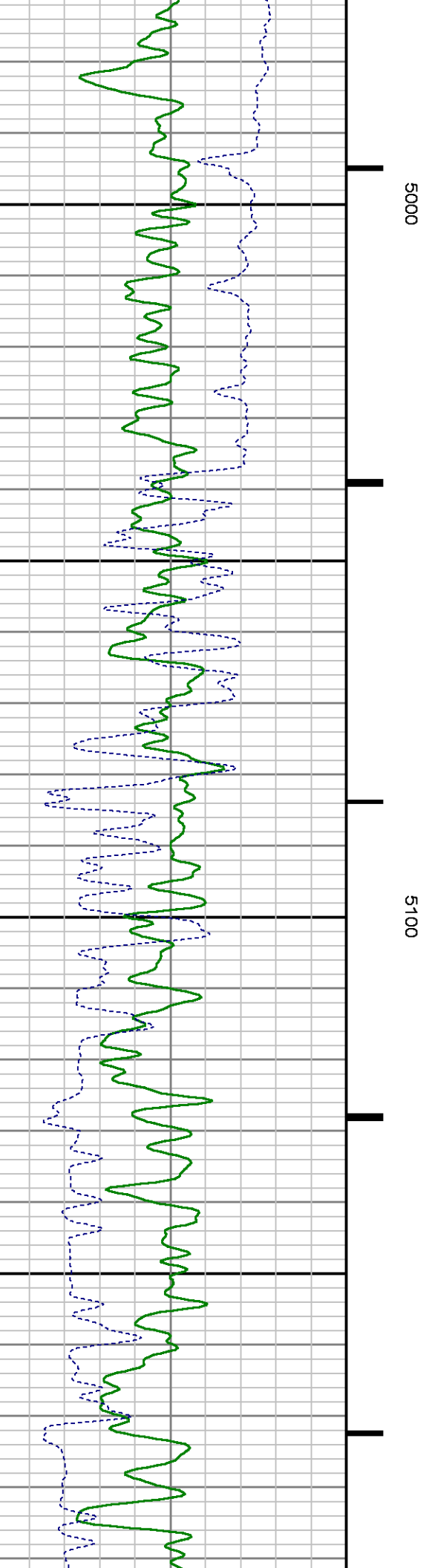
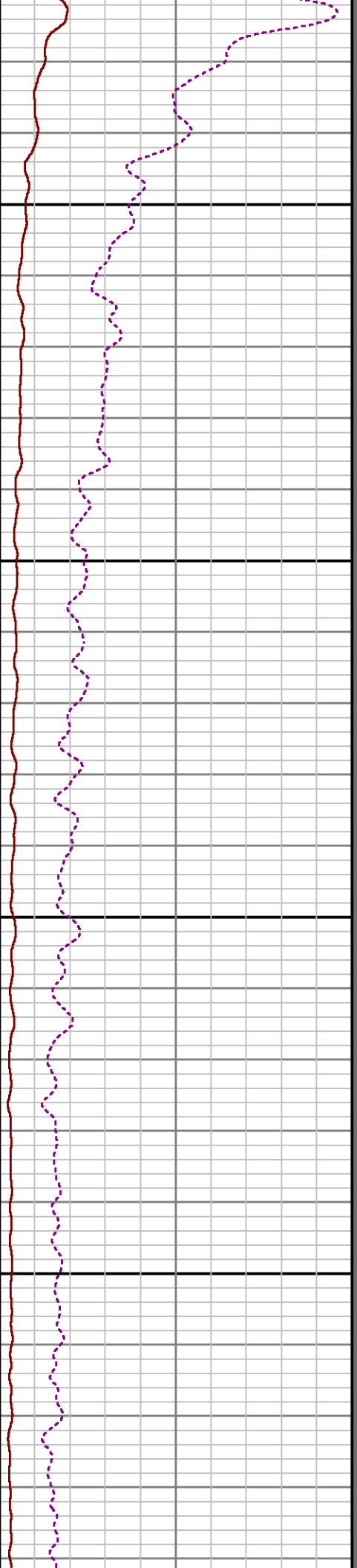
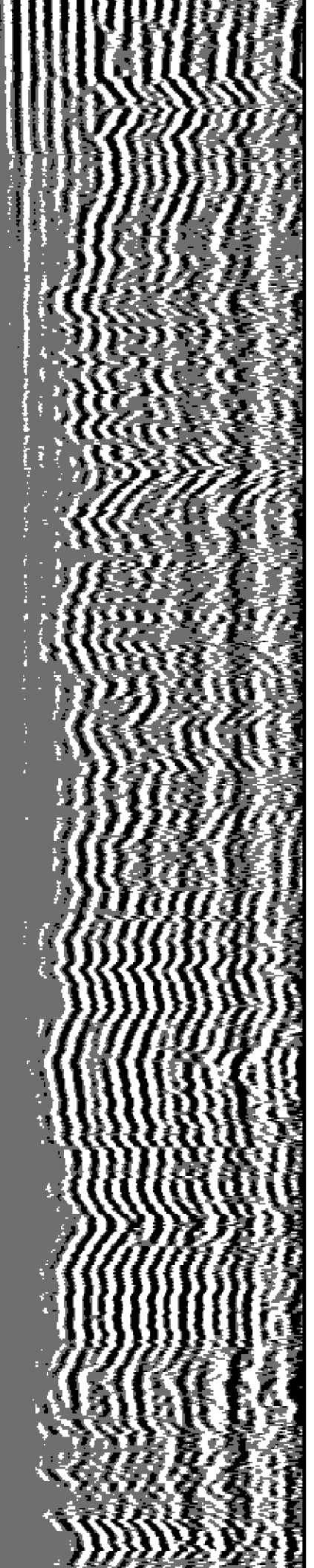


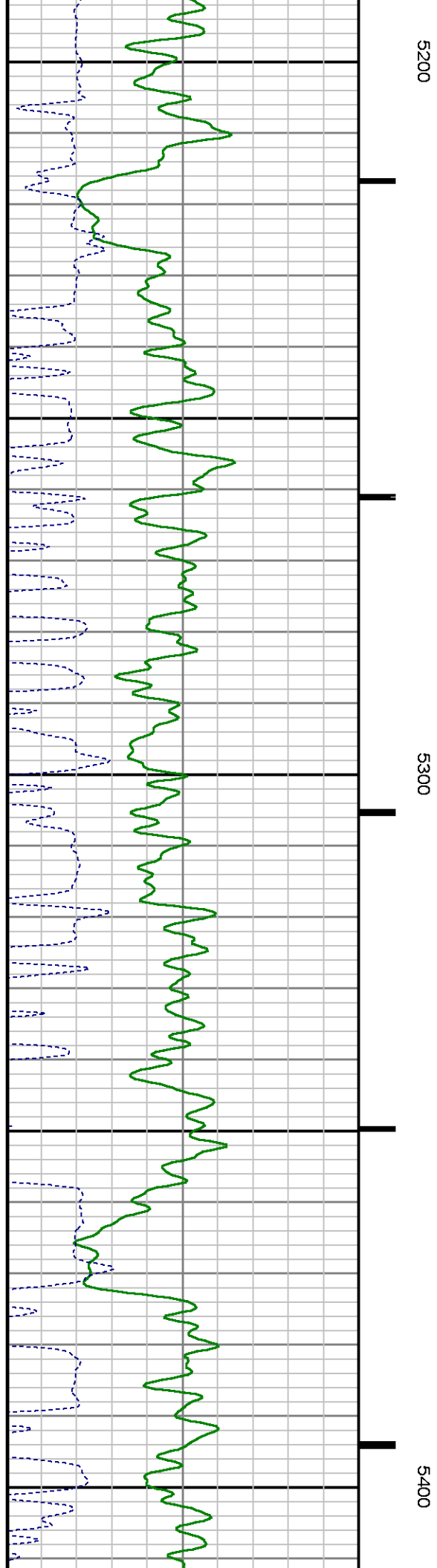
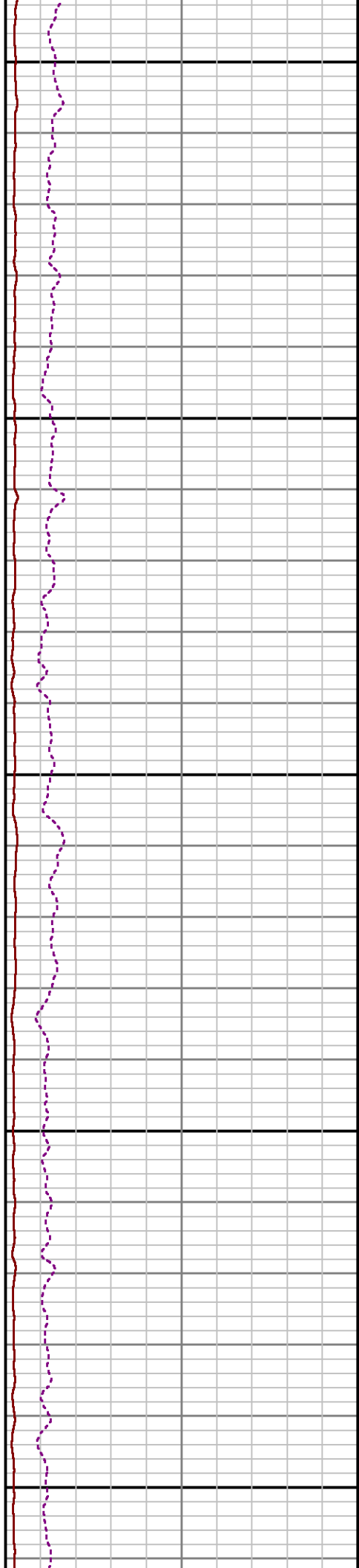
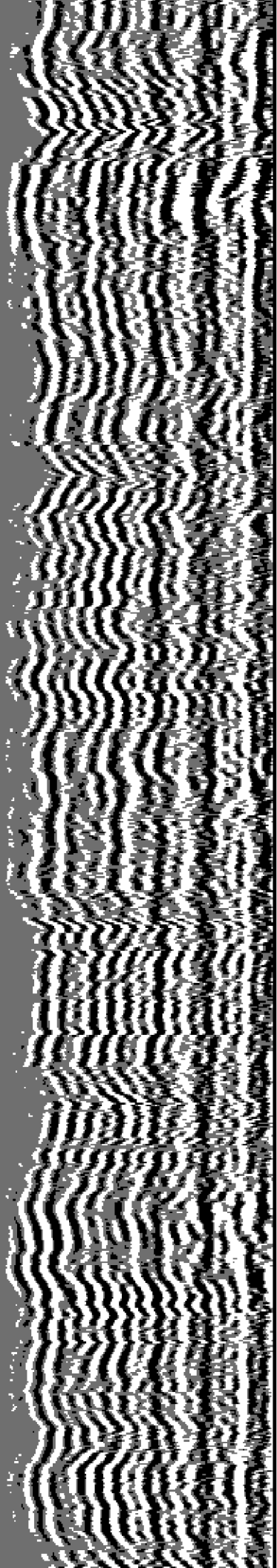
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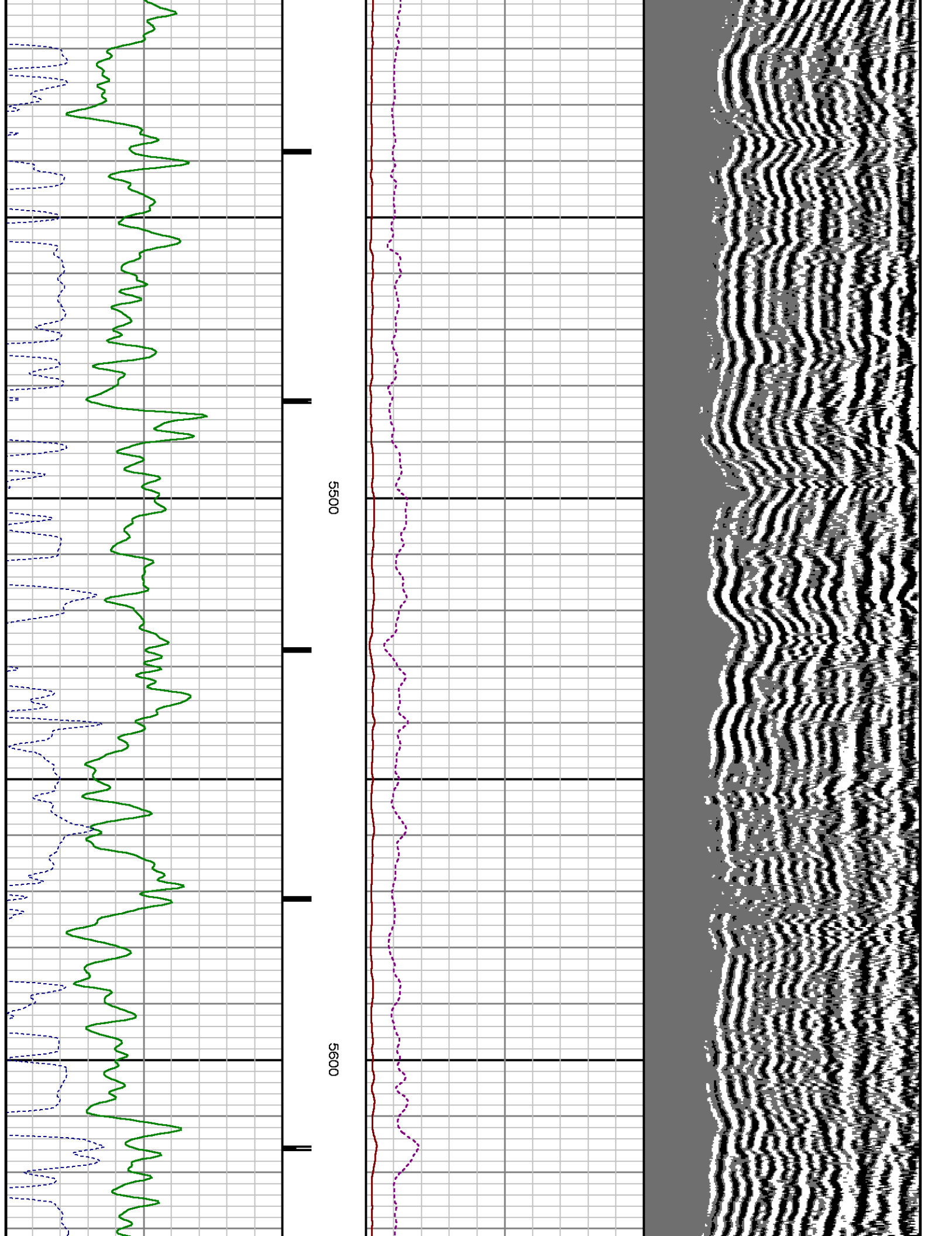
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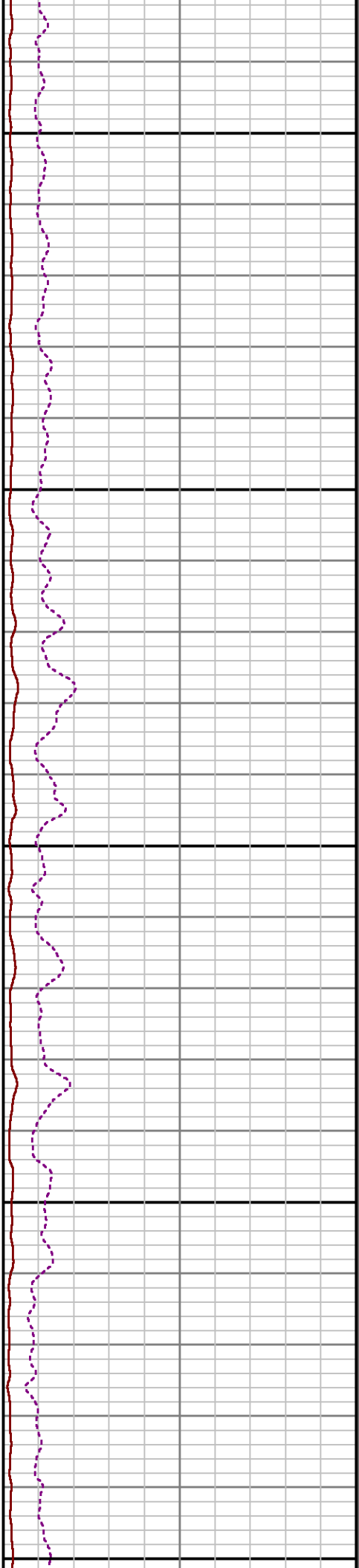
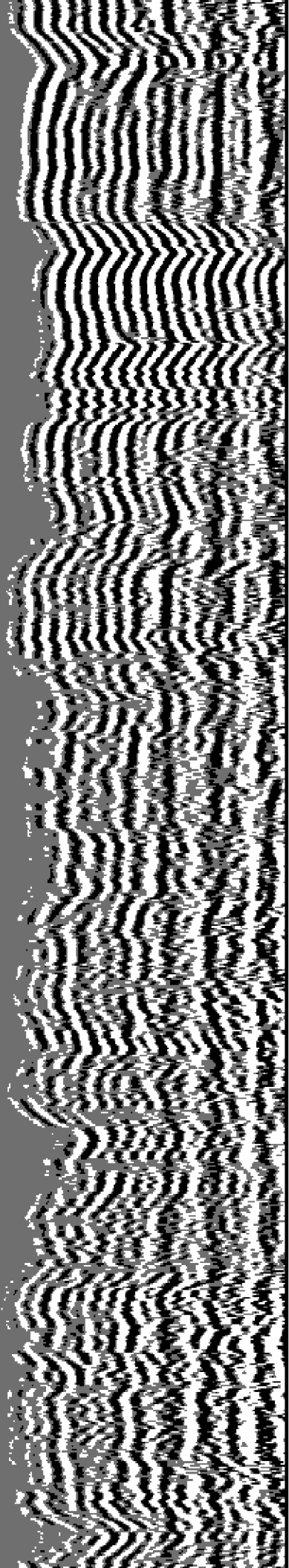






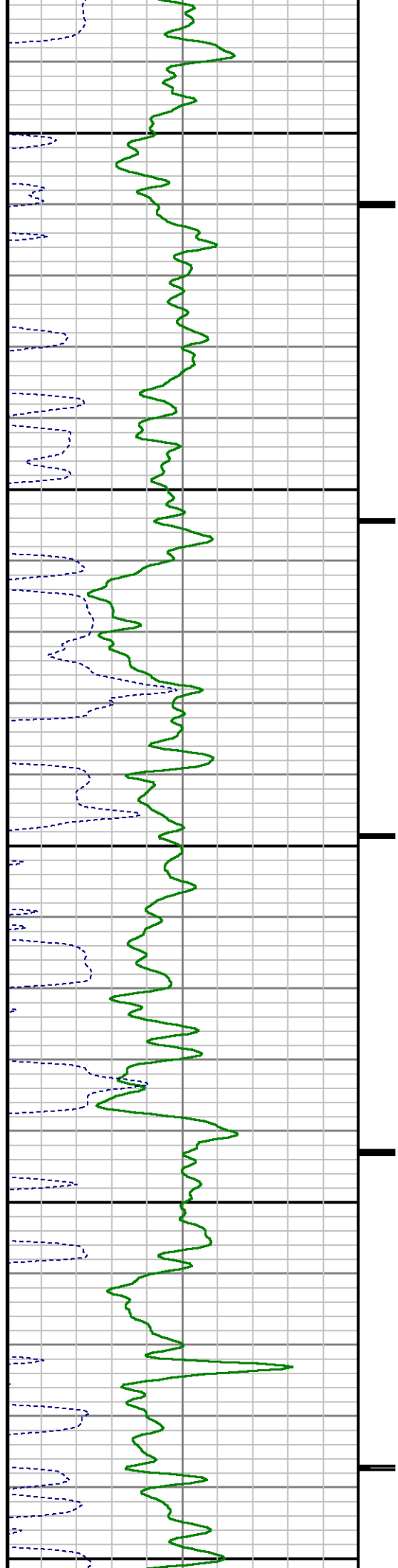


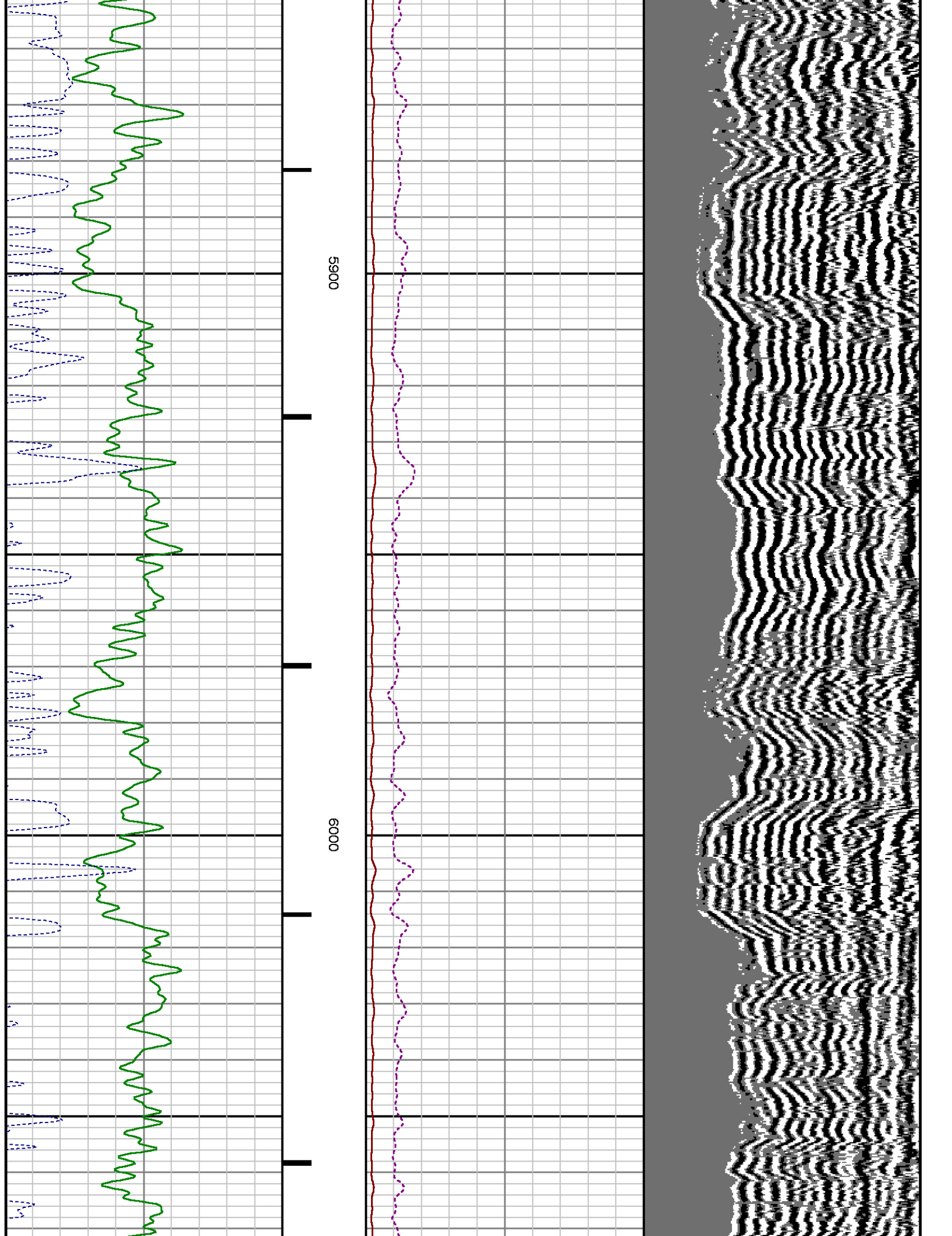


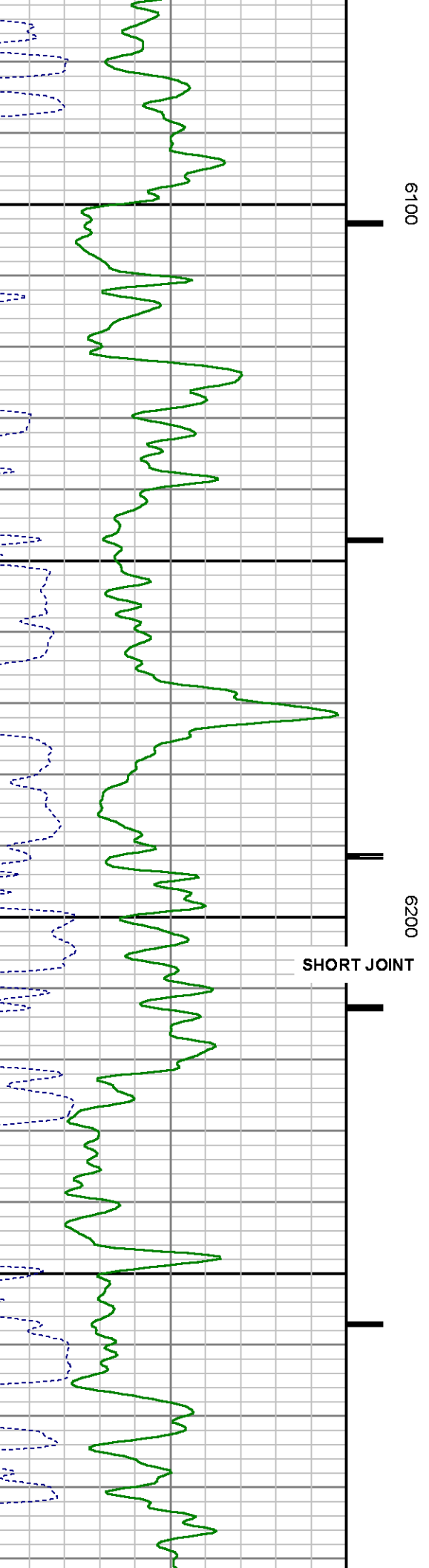
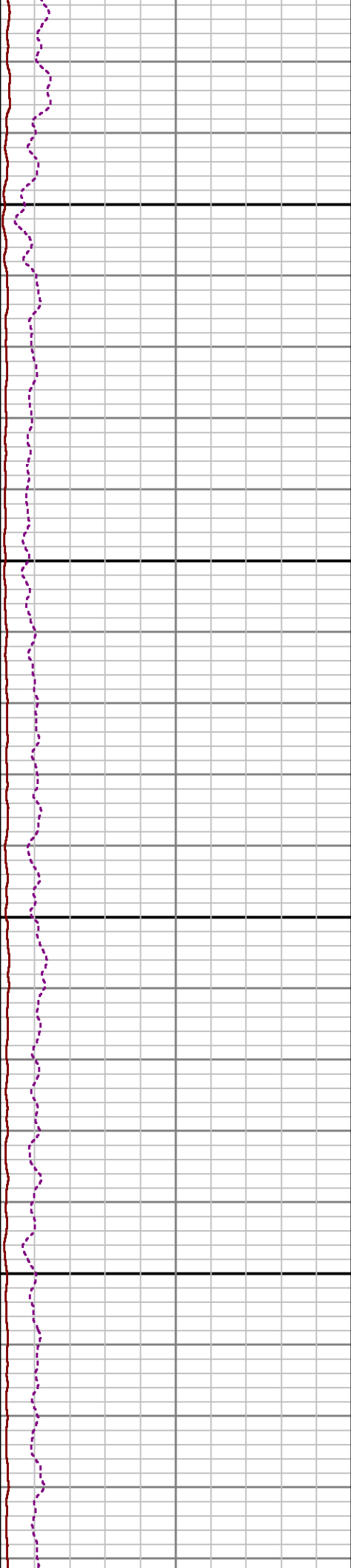
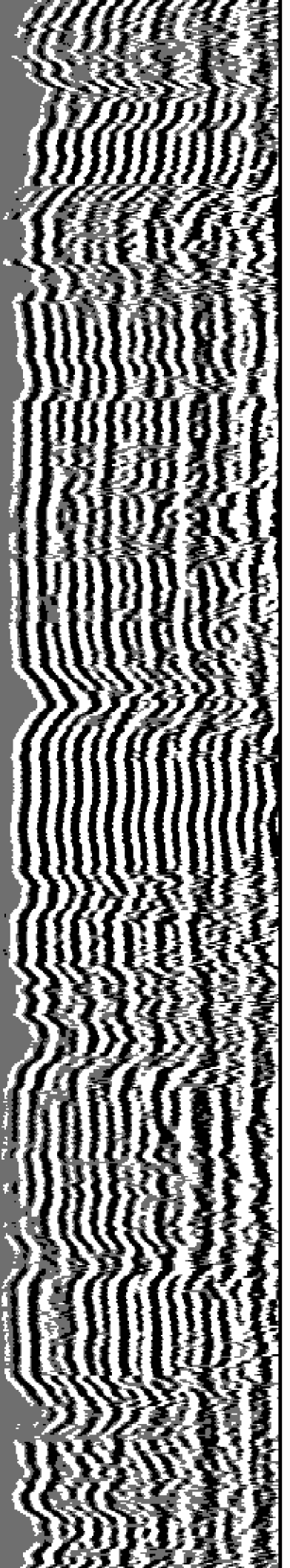


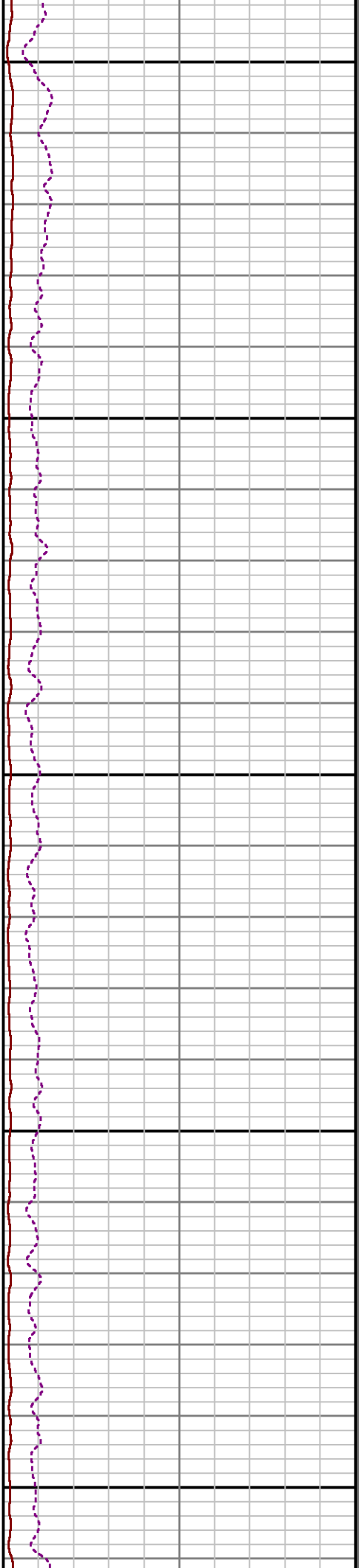
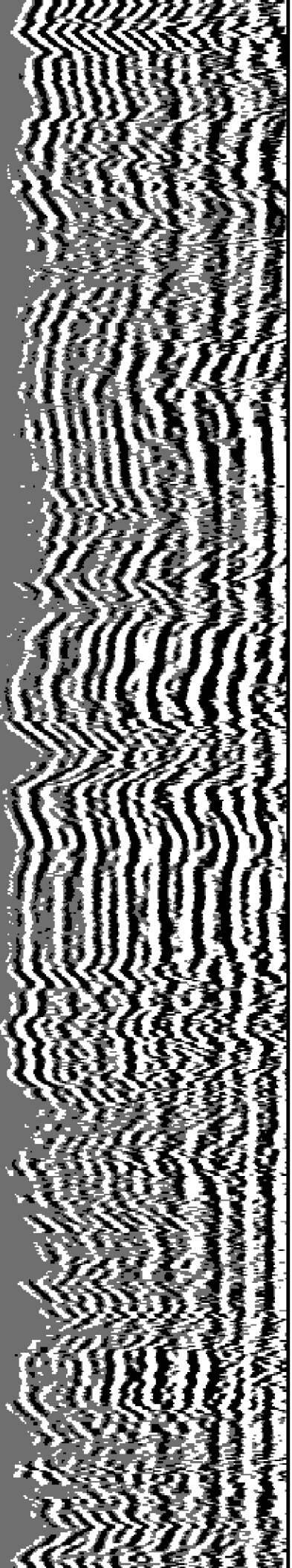
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5800





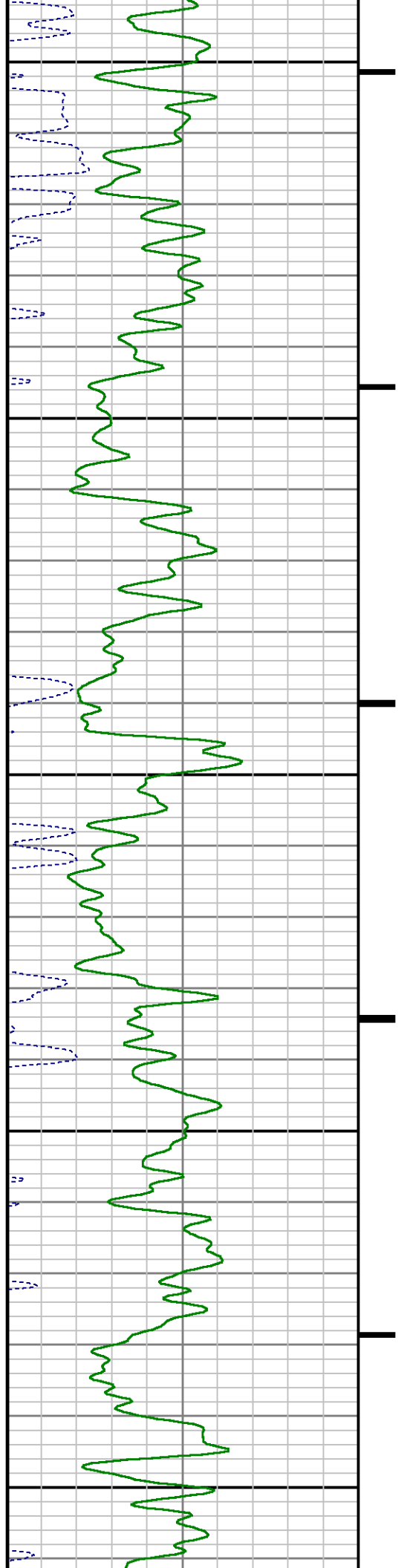


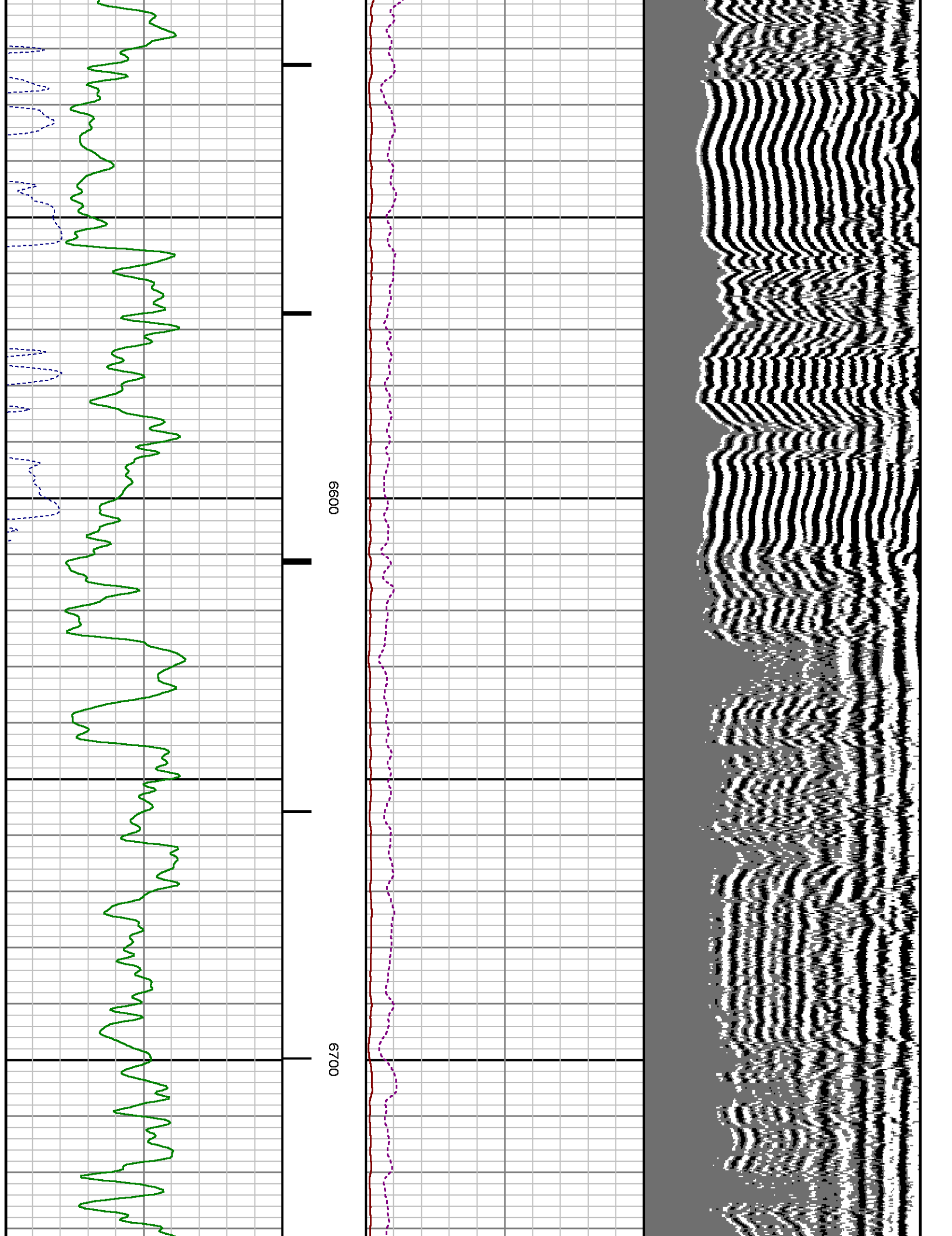


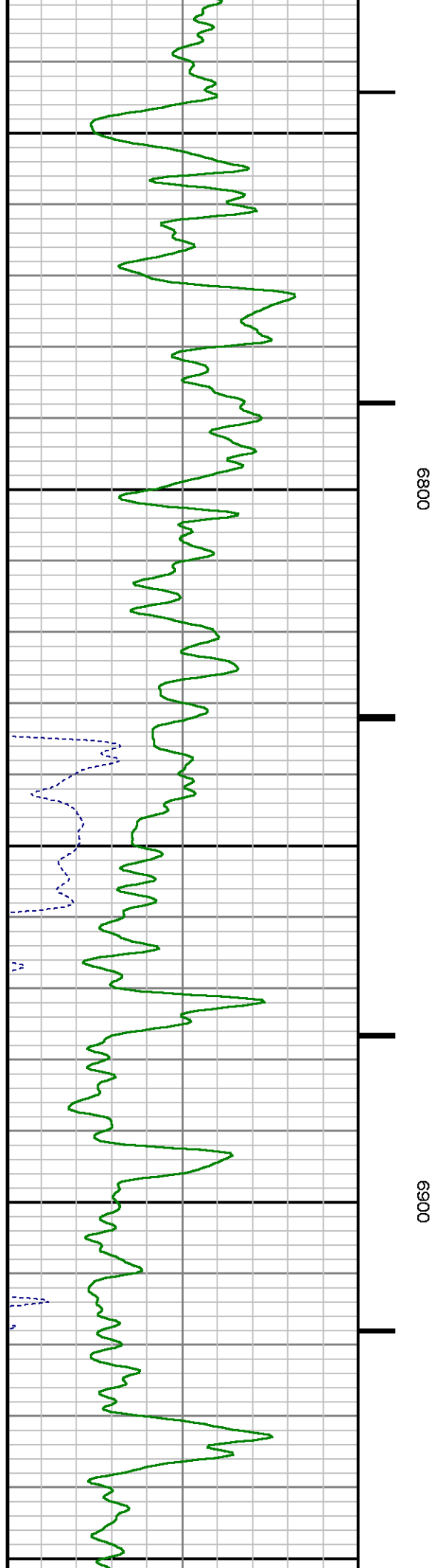
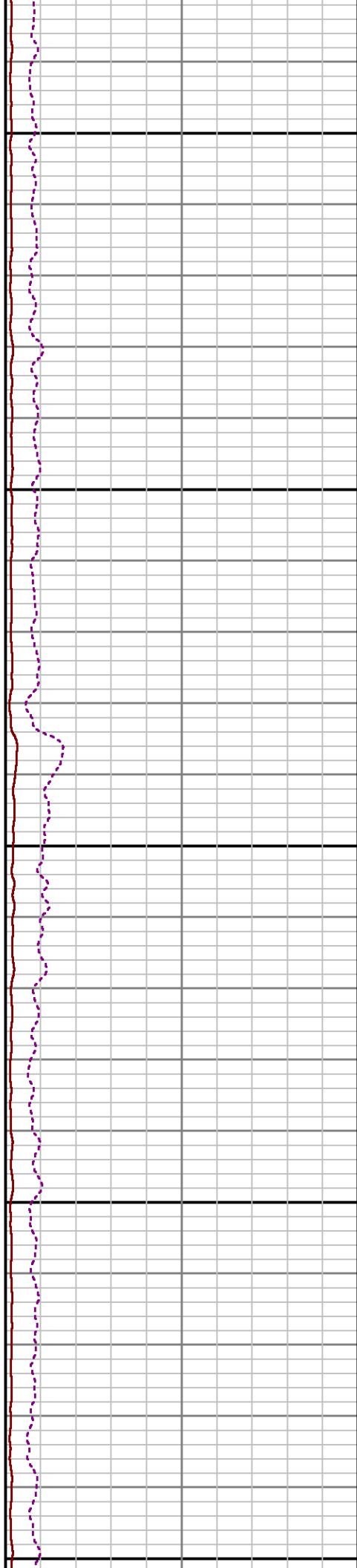
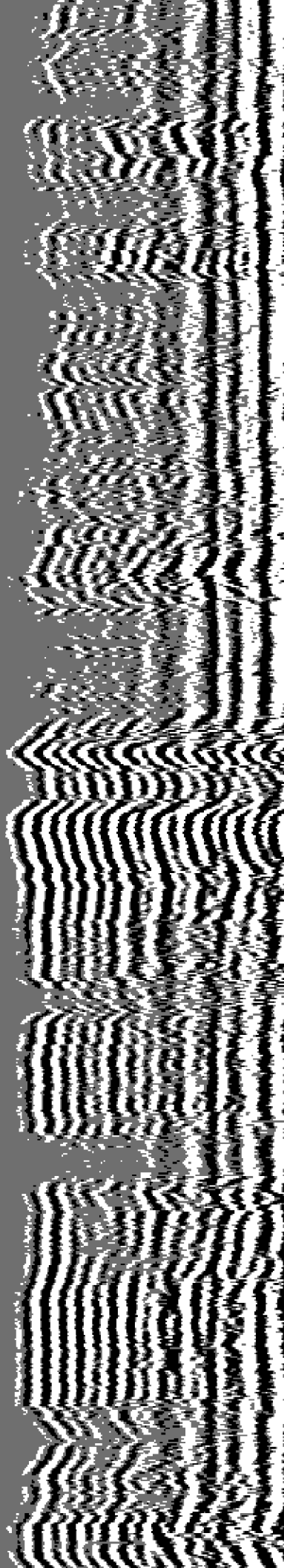
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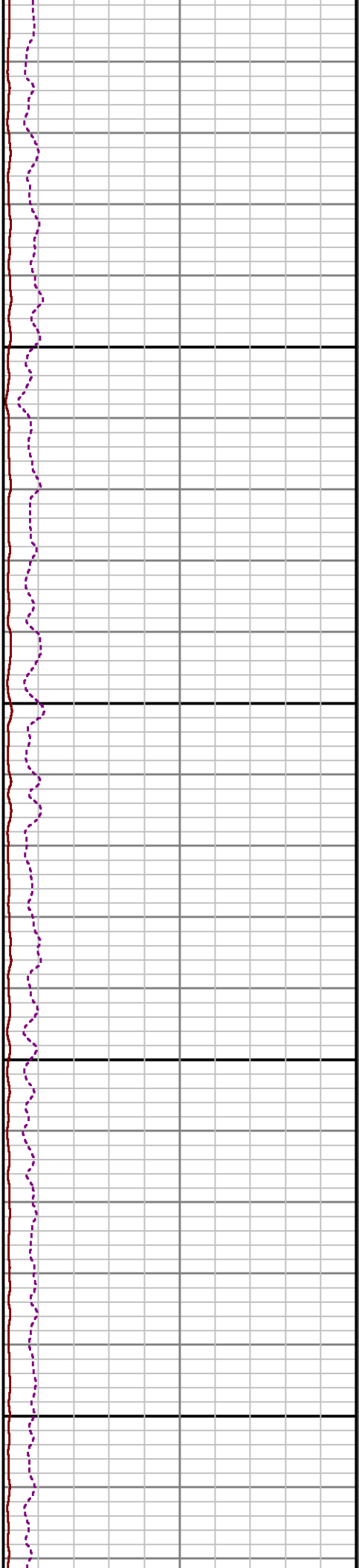
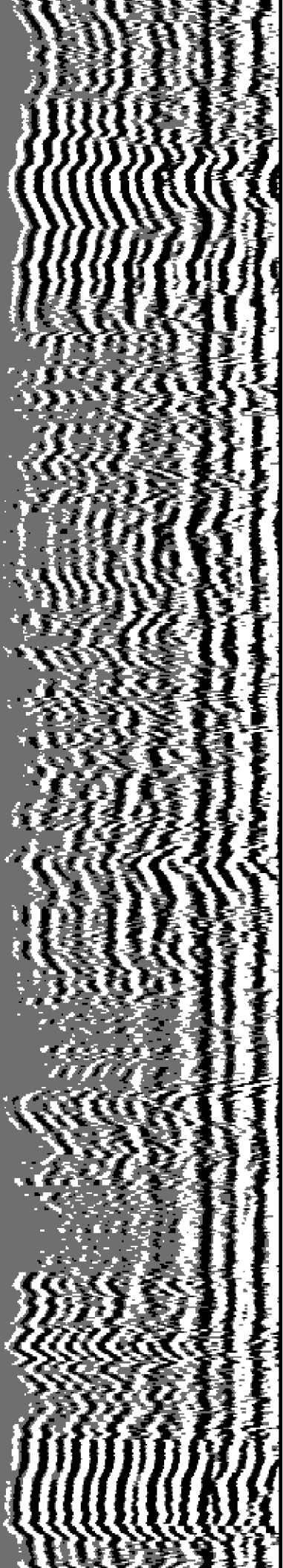
6400

6500



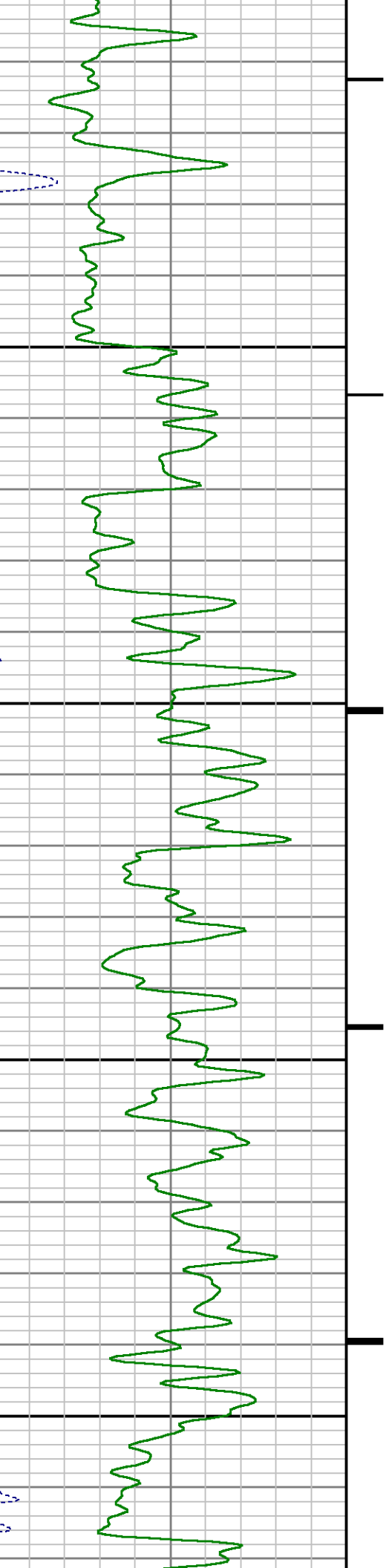


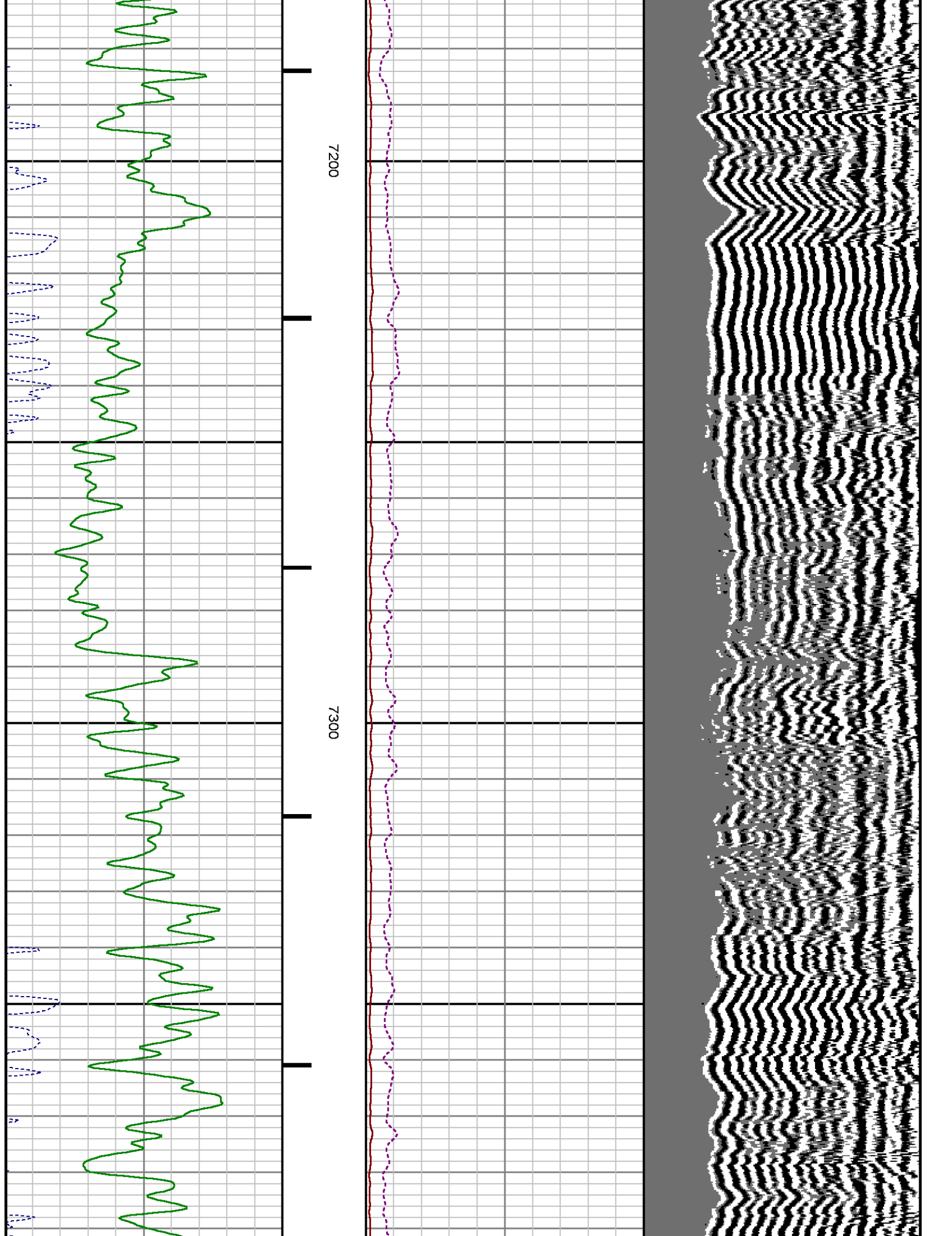


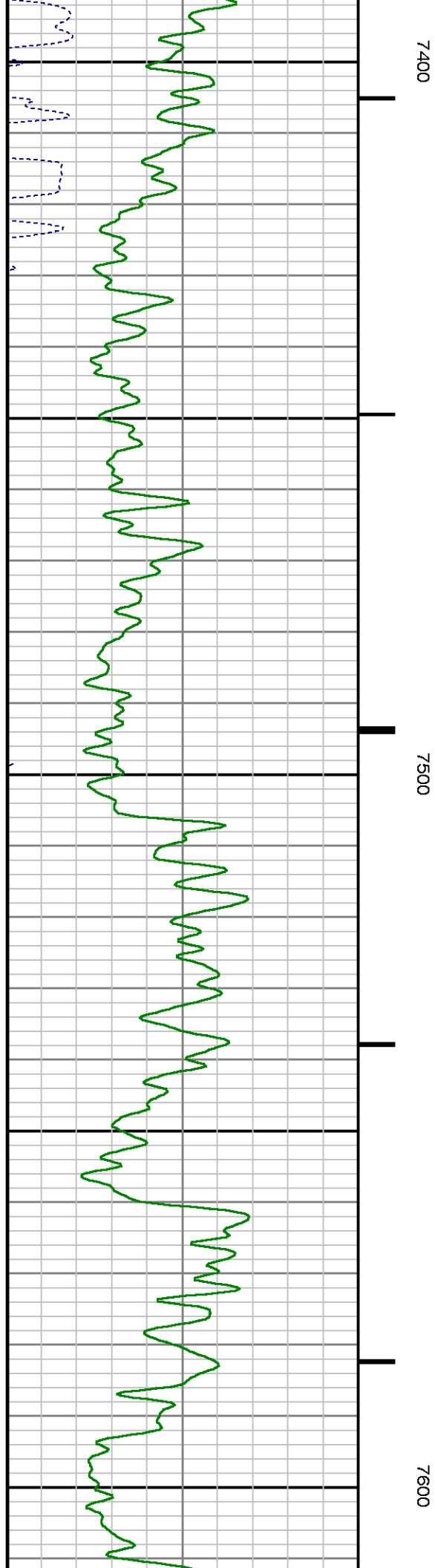
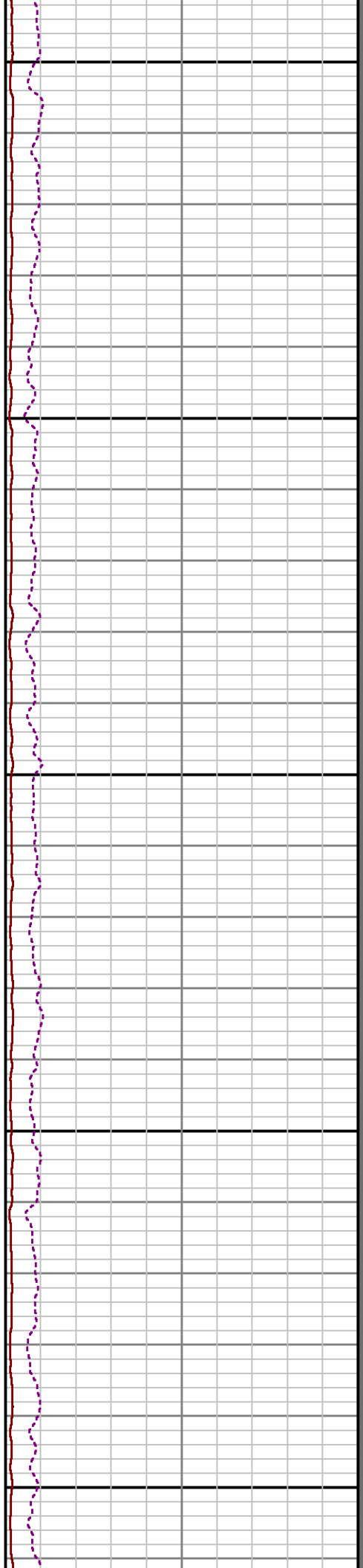
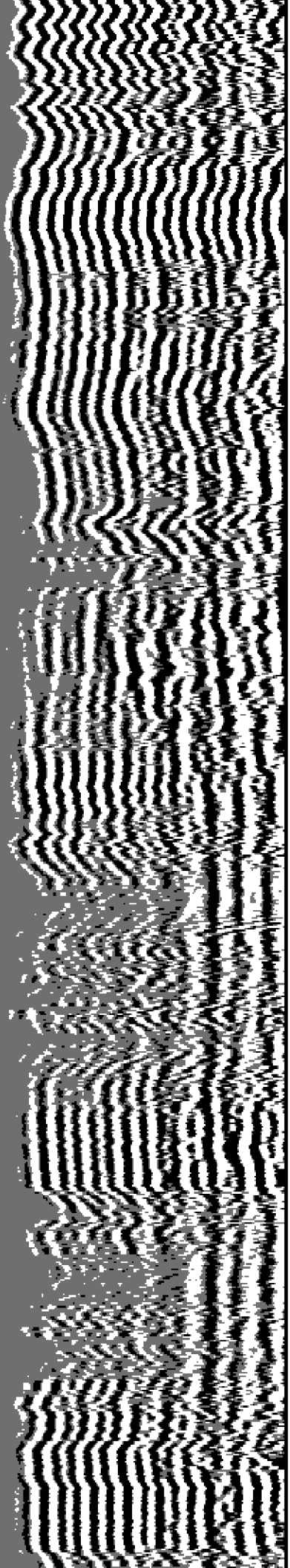


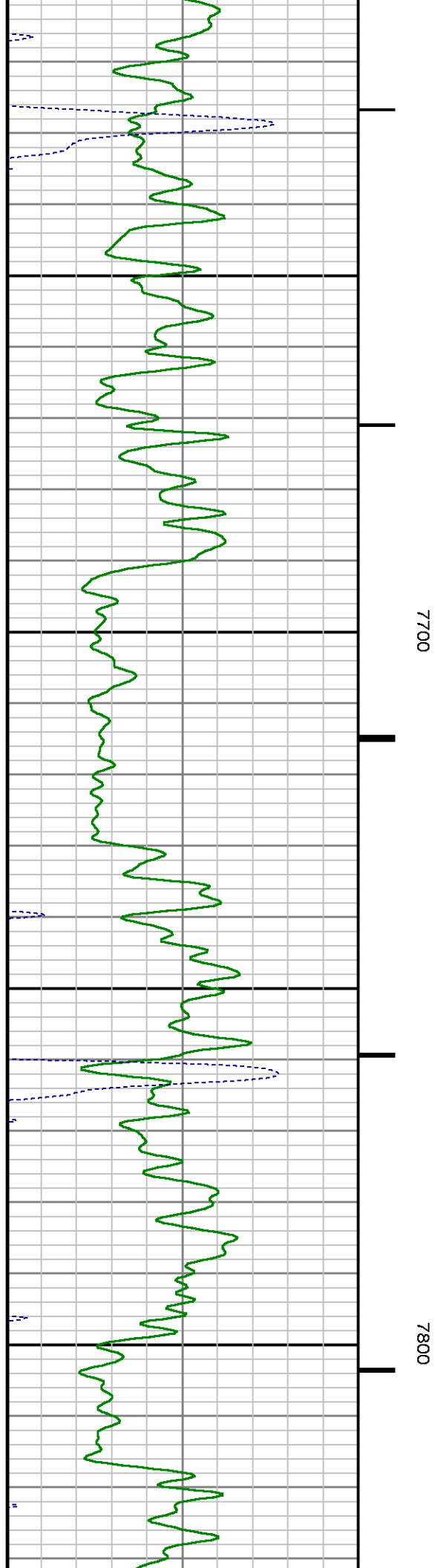
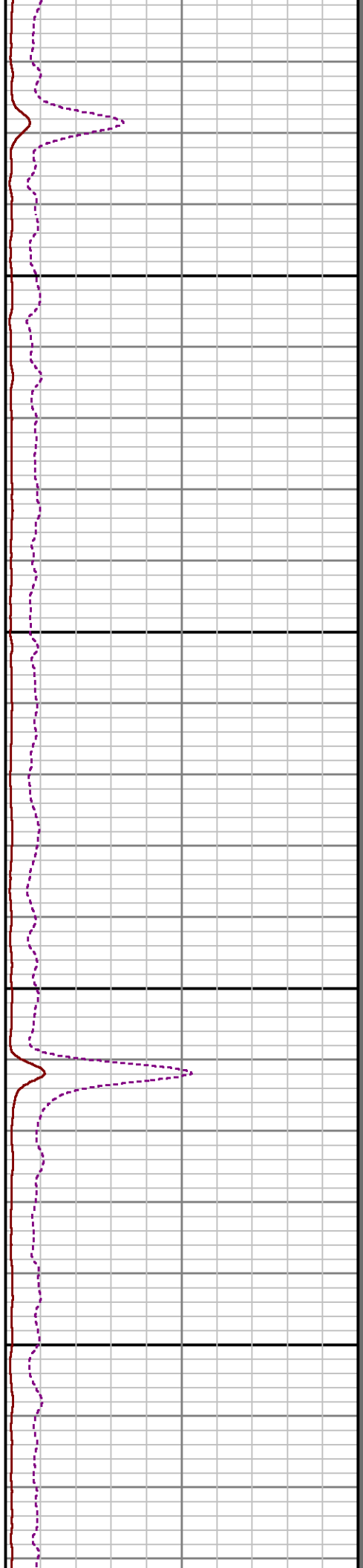
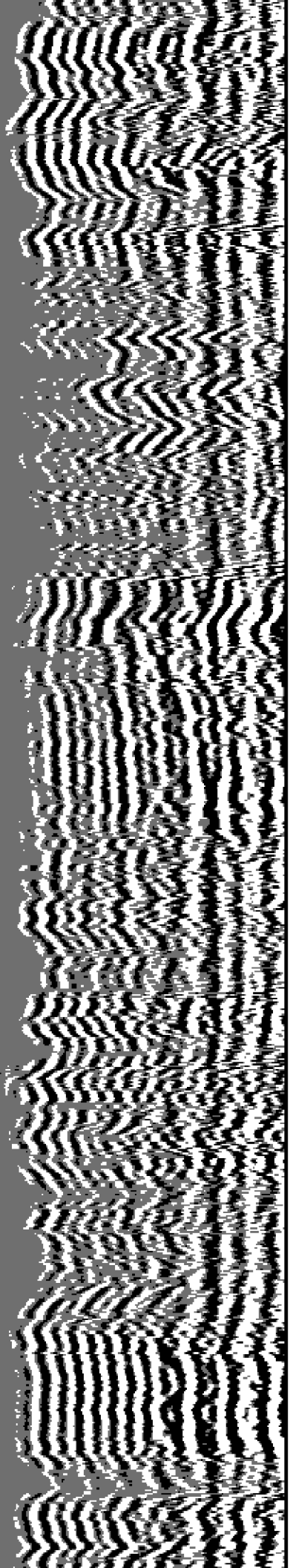
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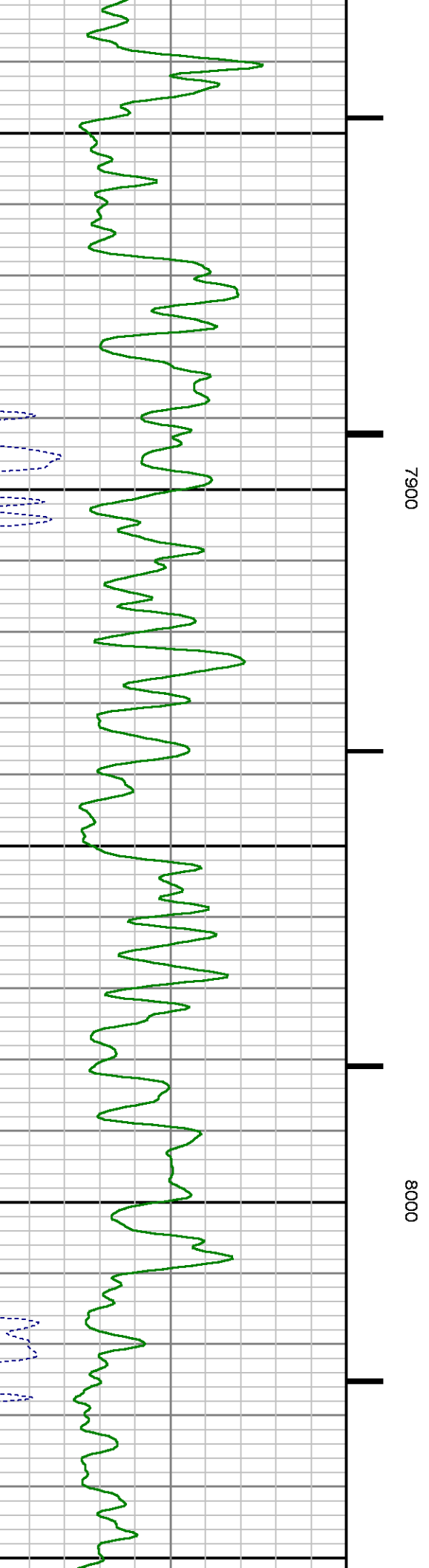
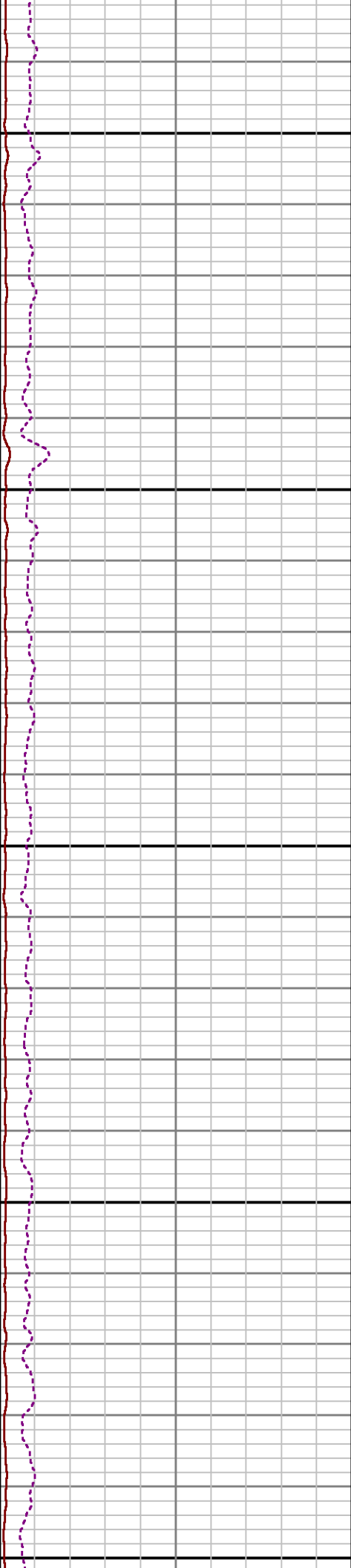
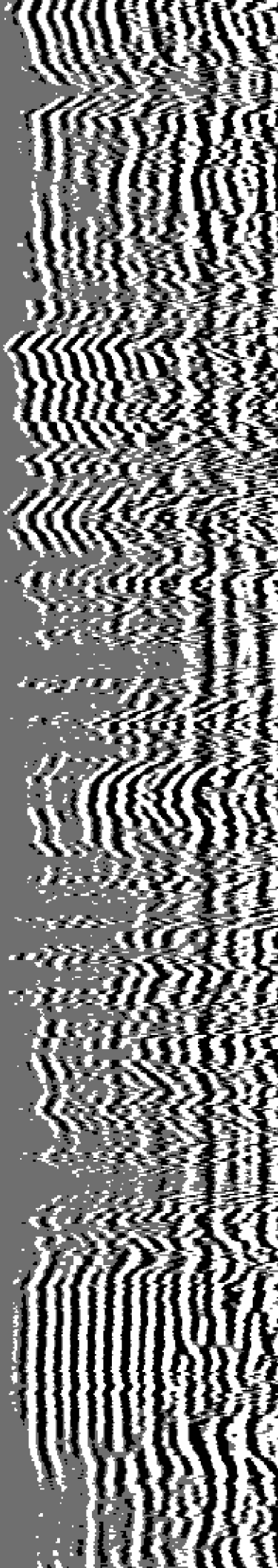
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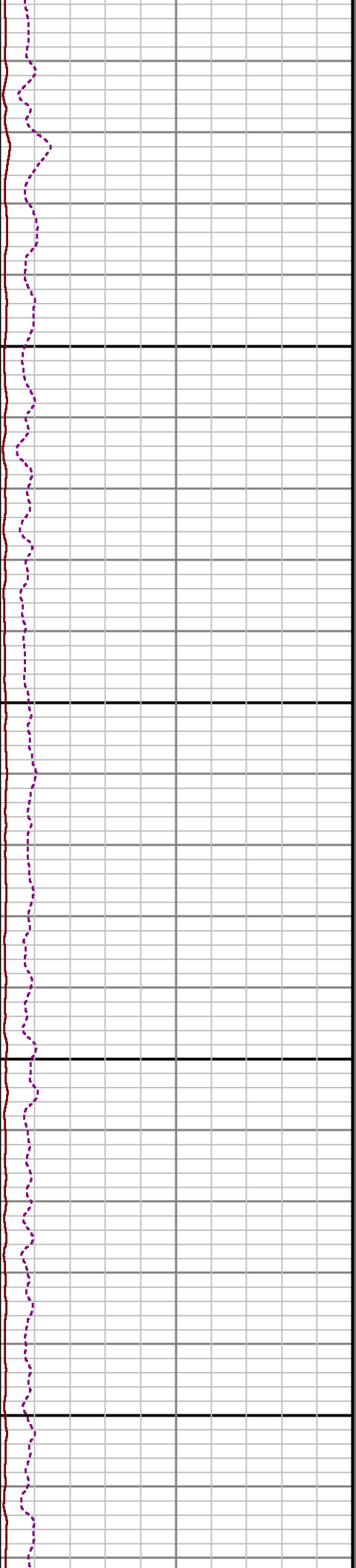
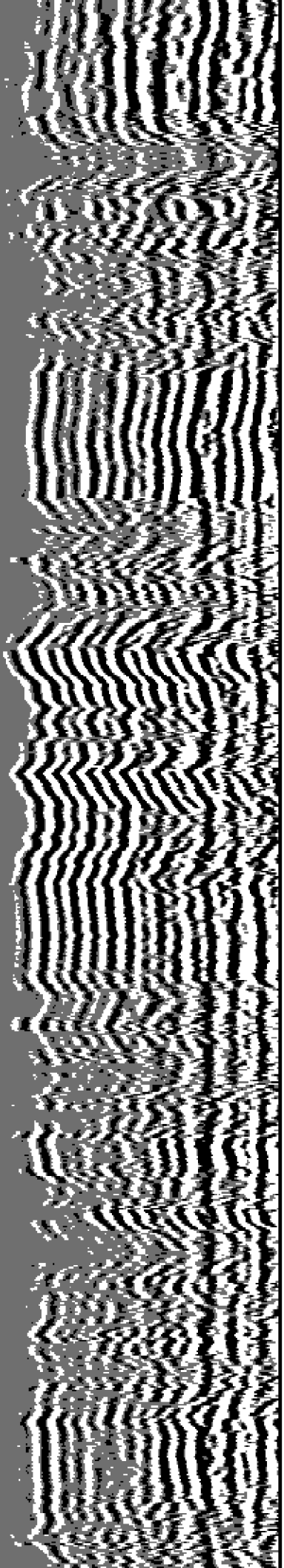






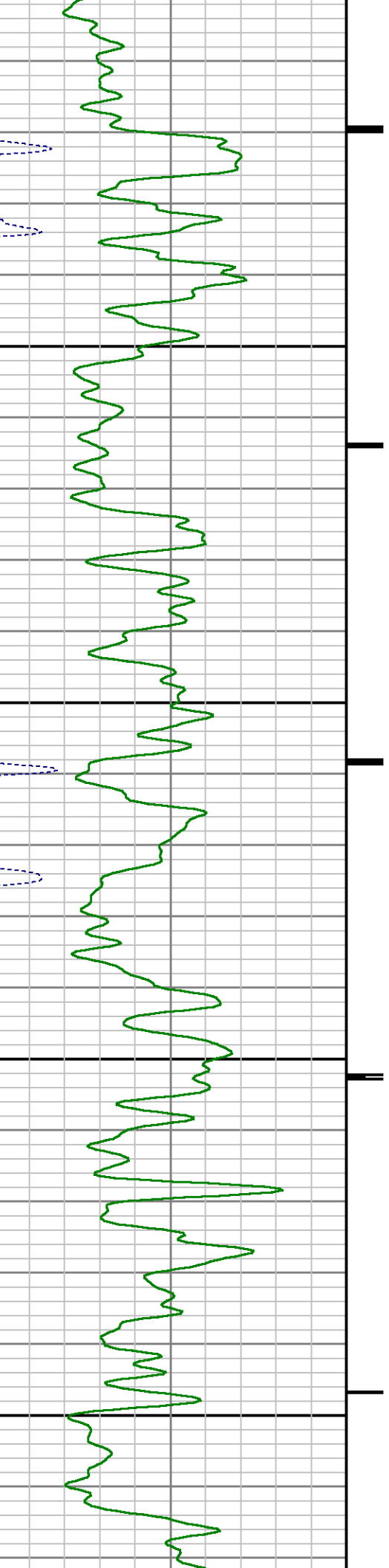


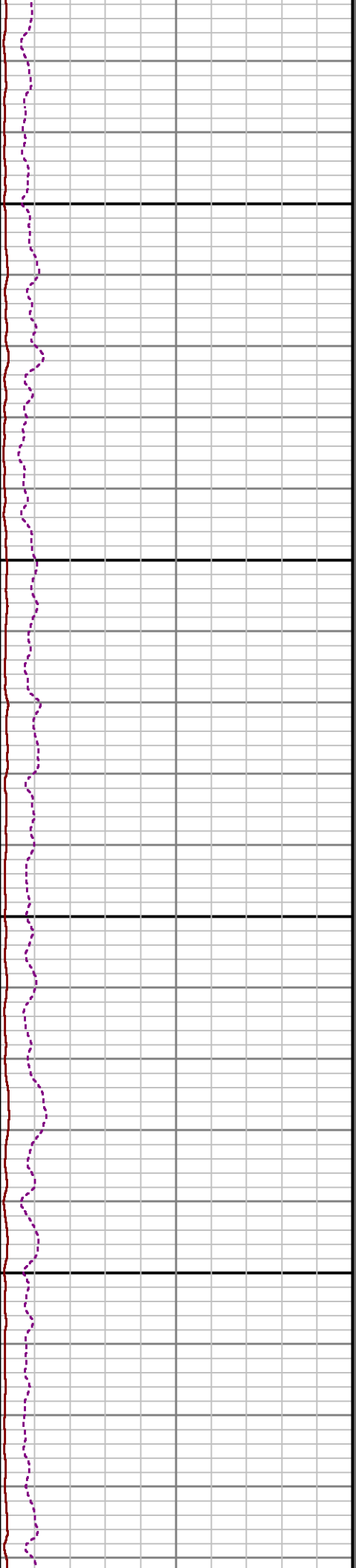
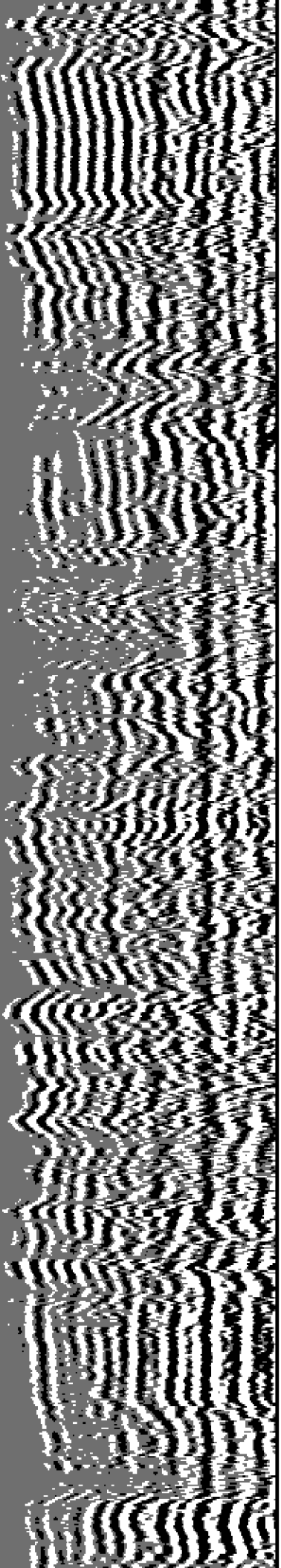




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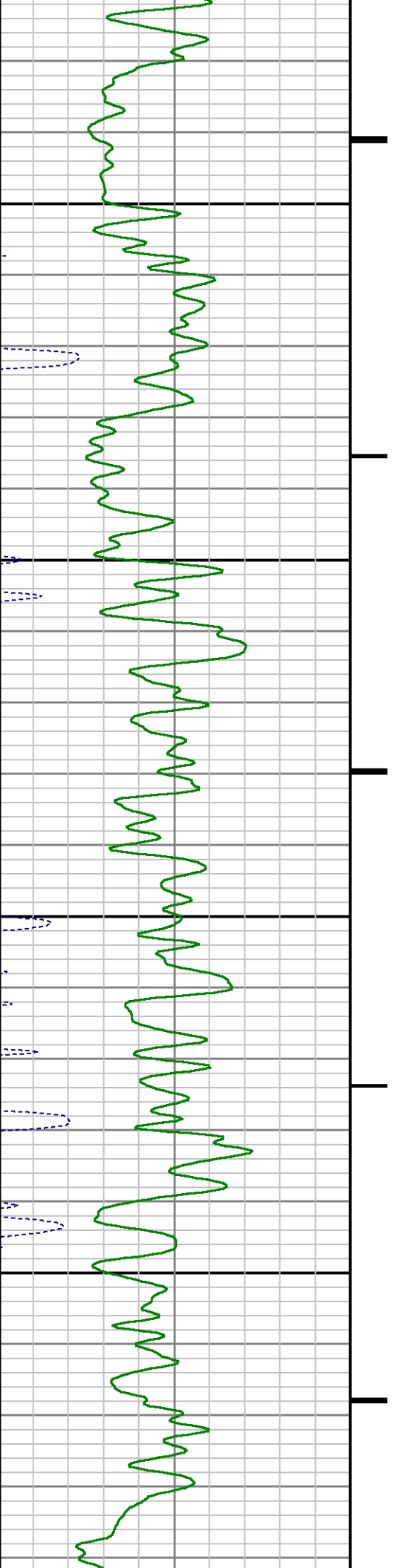
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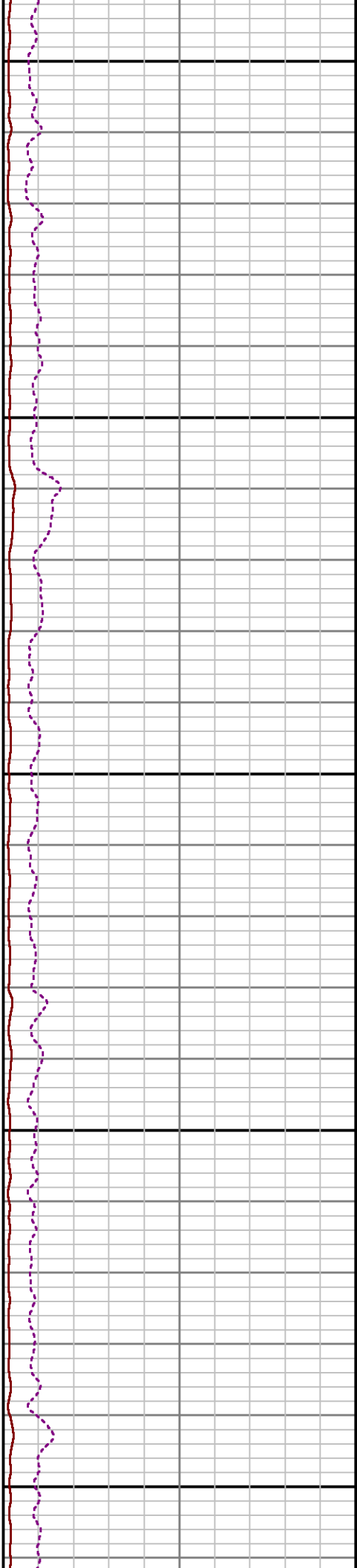
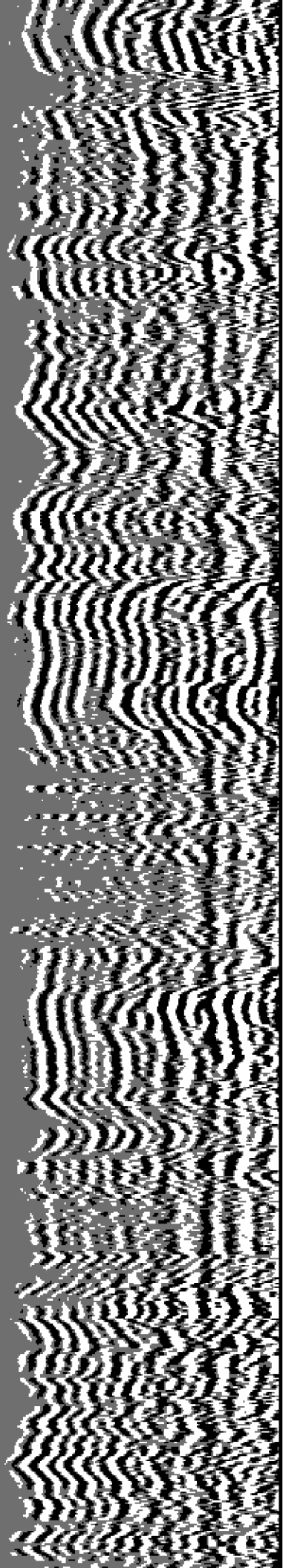




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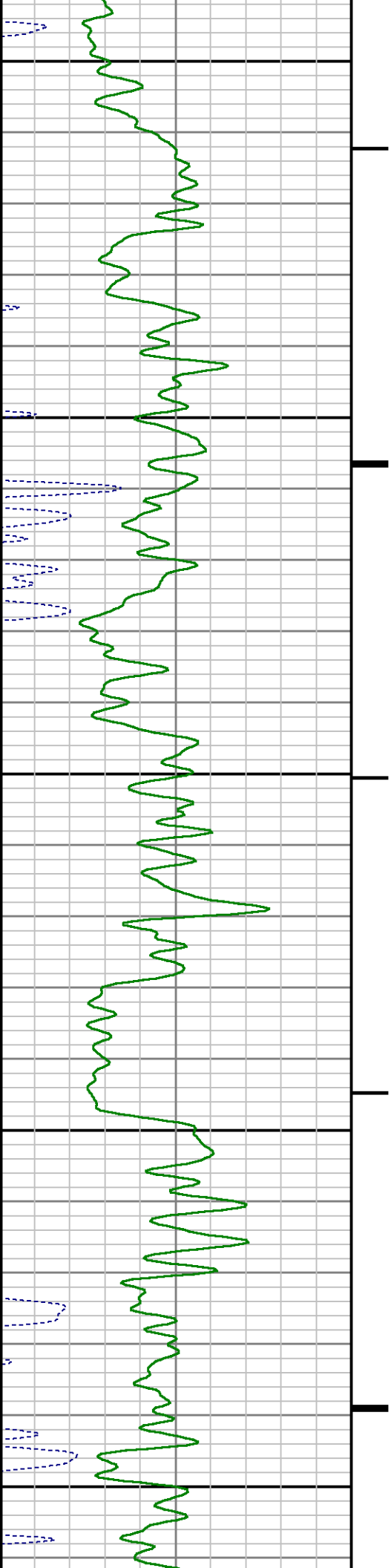


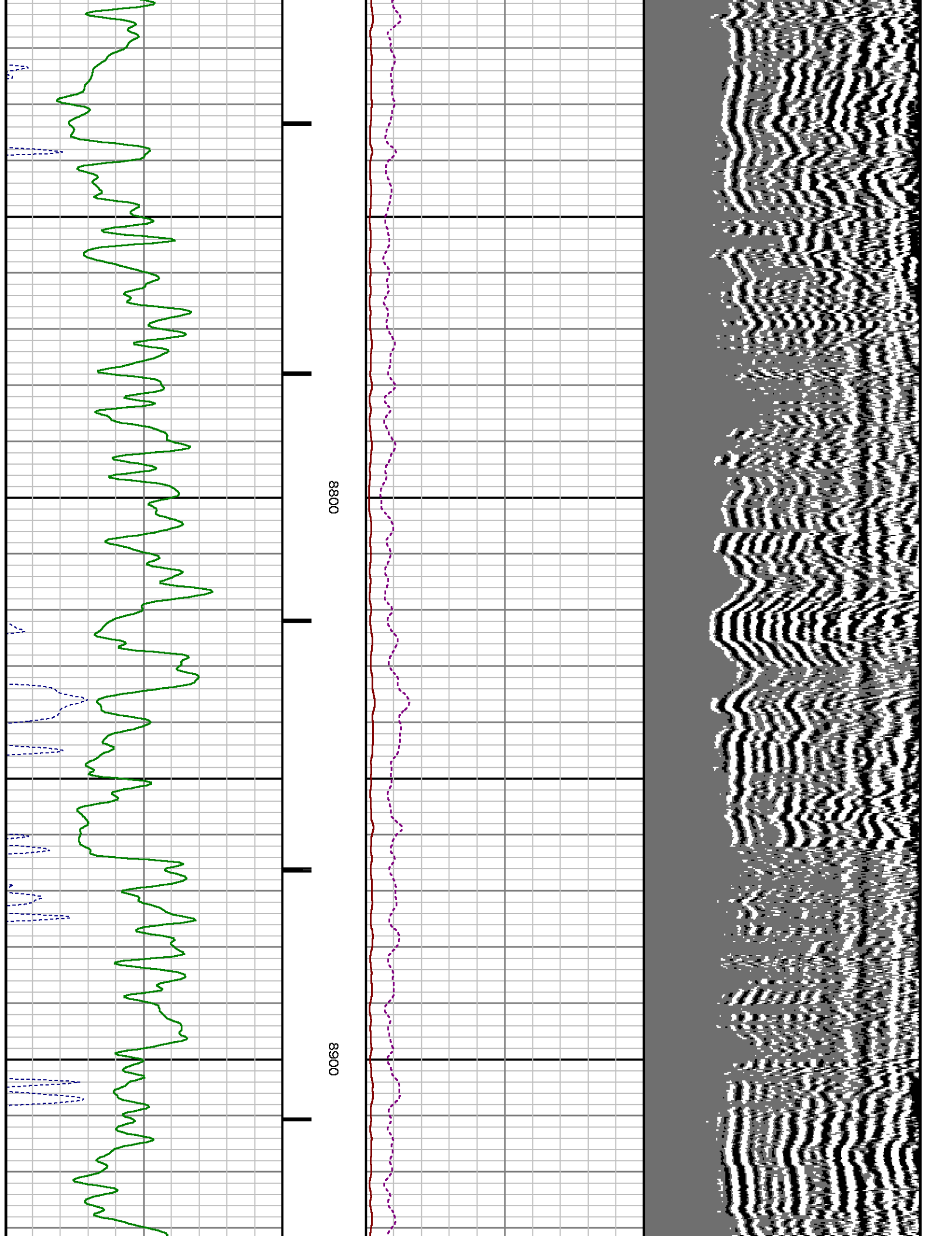


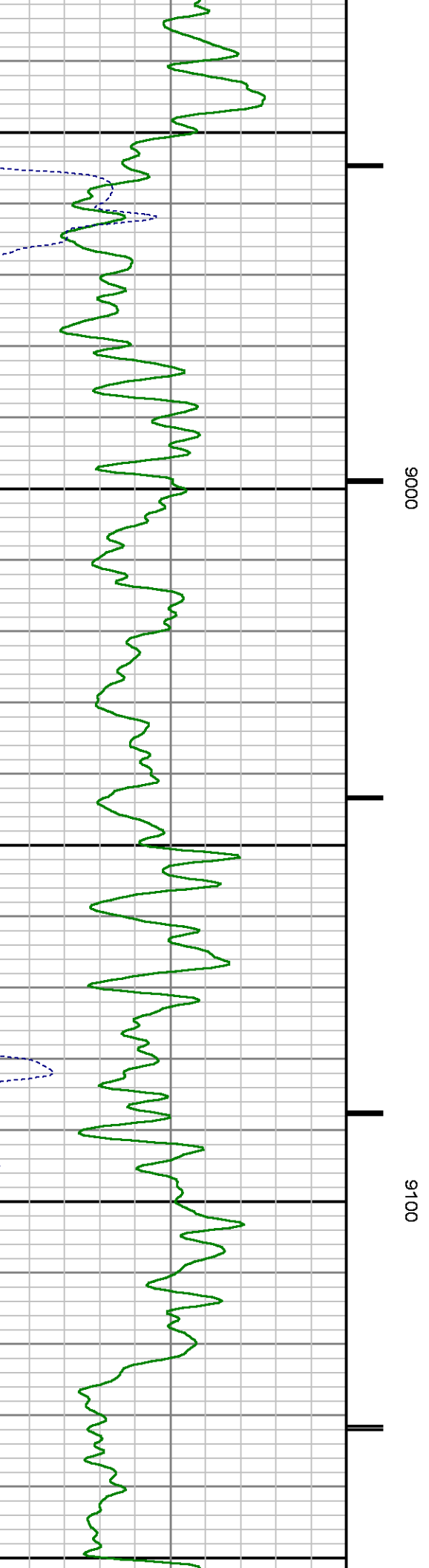
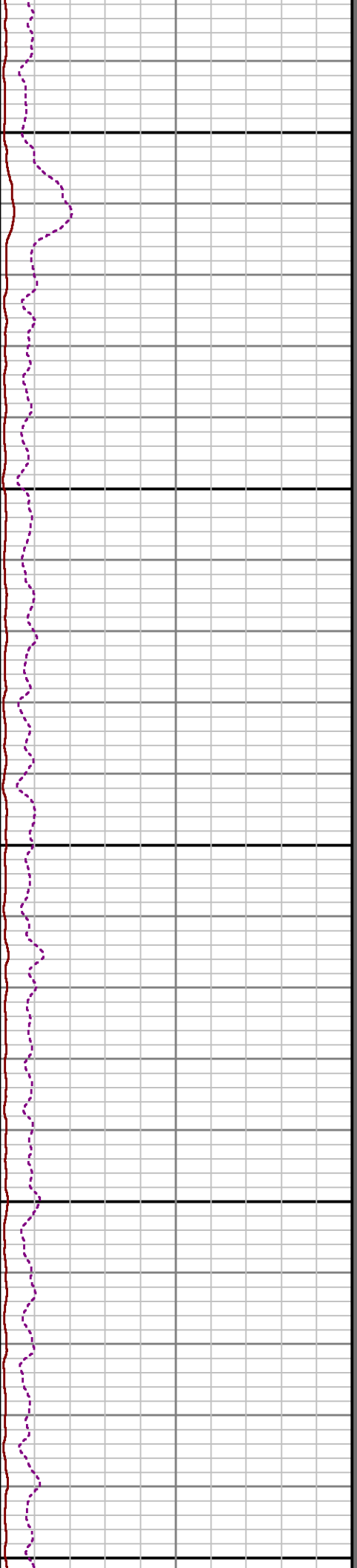
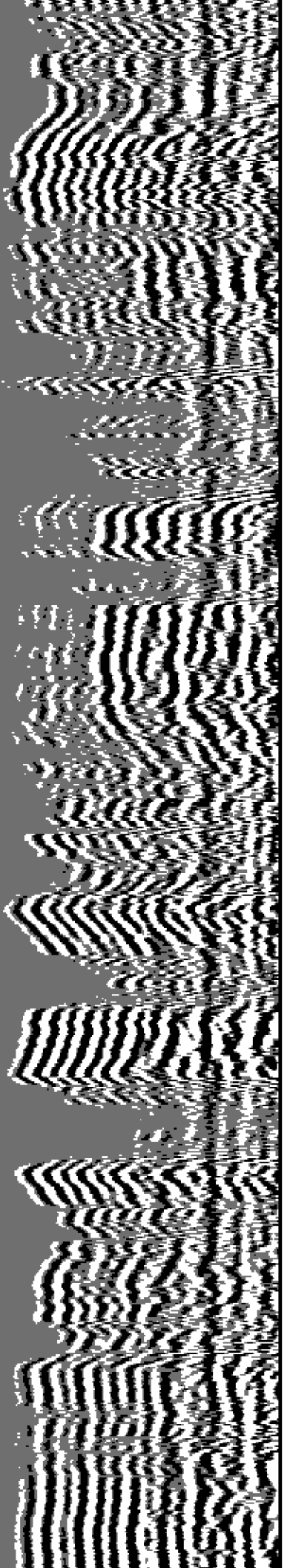
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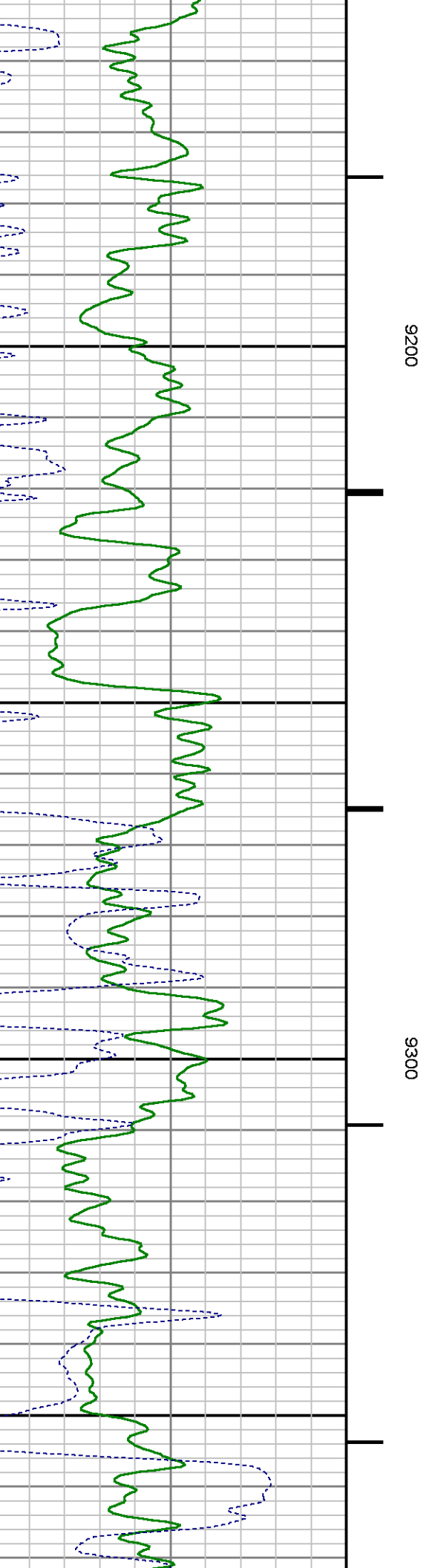
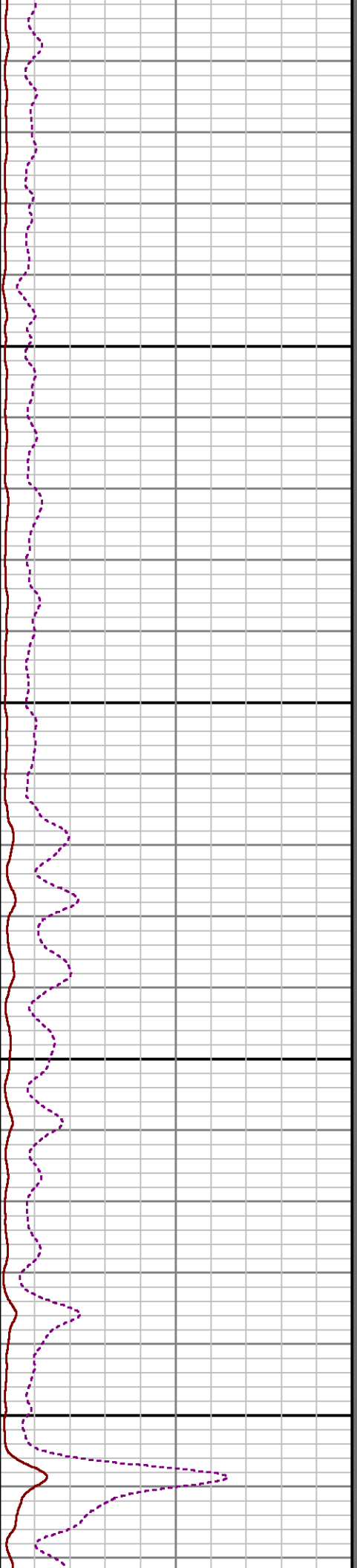
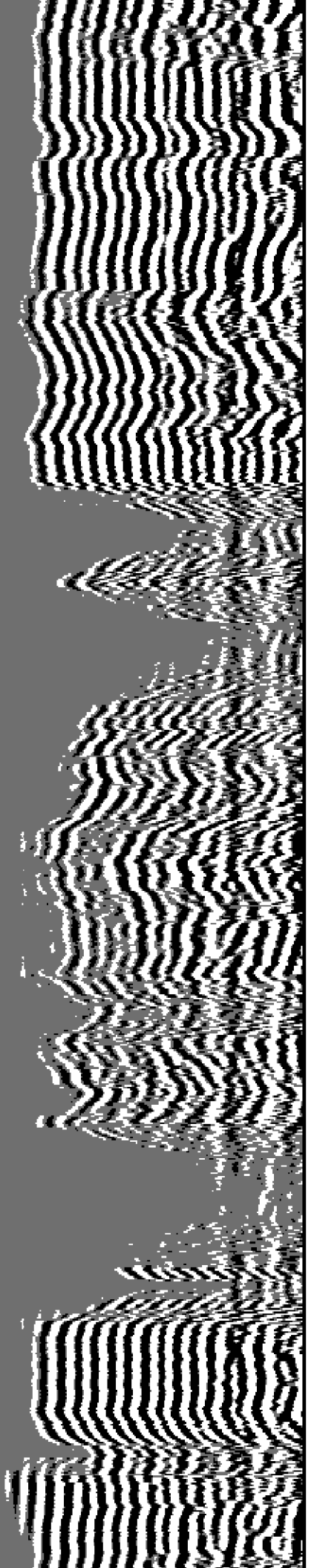
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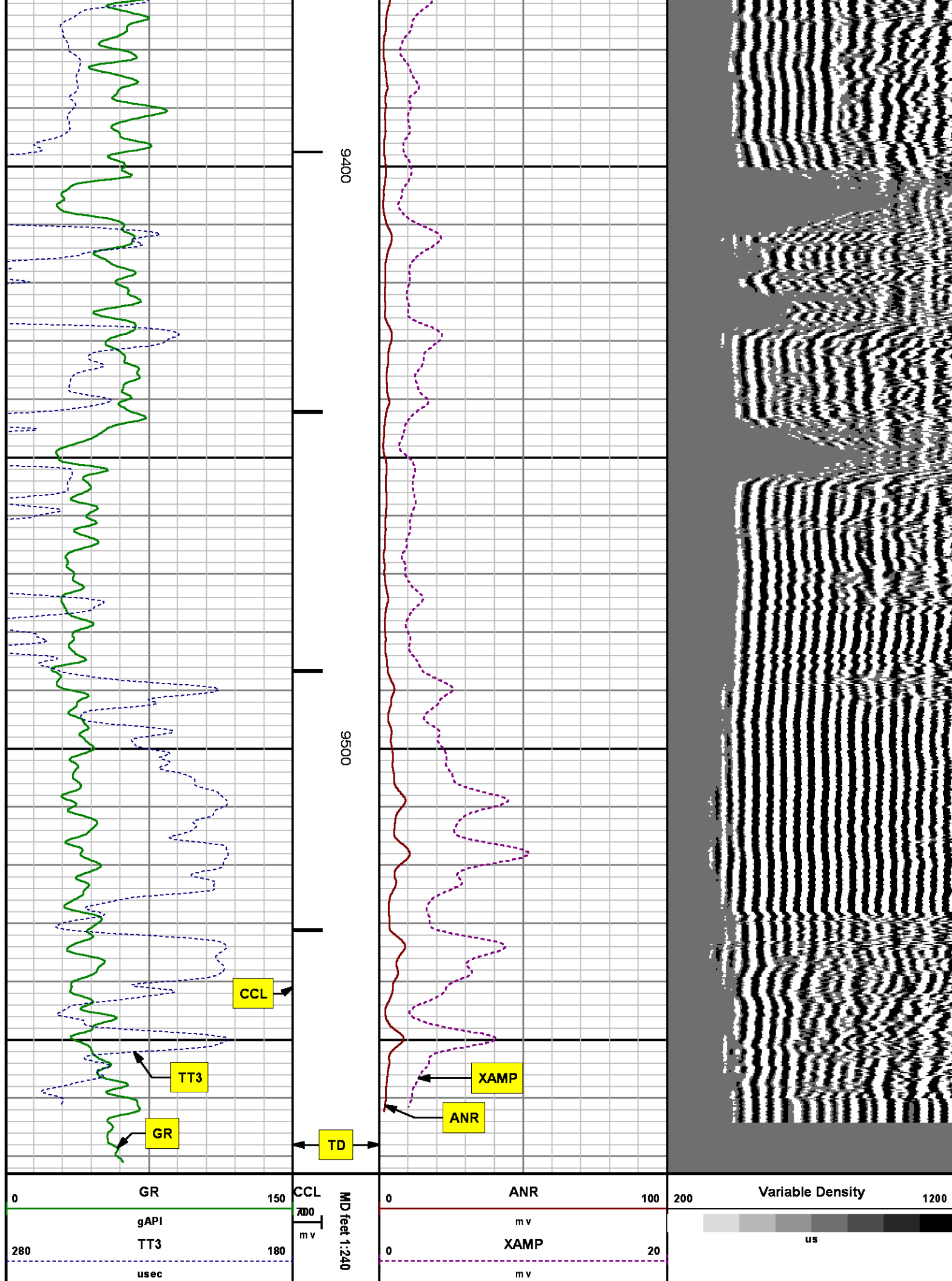
8700











SECONDARY PRESENTATION

0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	27.468	9573.000
RAL	Amp Gate Start Near	195.000	usec	27.468	9573.000
RAL	Amp Gate Start Radial	195.000	usec	27.468	9573.000
RAL	Amp Gate Width Far	25.000	usec	27.468	9573.000
RAL	Amp Gate Width Near	25.000	usec	27.468	9573.000
RAL	Amp Gate Width Radial	25.000	usec	27.468	9573.000
RAL	casing od	4.500	inches	27.468	9573.000
RAL	casing wt	11.600	lbm/ft	27.468	9573.000
RAL	FB Start Far	291.900	usec	27.468	9573.000
RAL	FB Start Near	175.391	usec	27.468	9573.000
RAL	FB Start Radial	175.391	usec	27.468	9573.000
RAL	FB Thresh Far	10.000	mv	27.468	9573.000
RAL	FB Thresh Near	4.000	mv	27.468	9573.000
RAL	FB Thresh Radial	4.000	mv	27.468	9573.000
RAL	Fluid Travel Time	200.000	usec/ft	27.468	9573.905

DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-11.000	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	-10.040	AFAR	SIG	TT5			
2459XA	-5.620	CCL					
2459XA	-1.500	GR					
2459XA	0.000	NEU					

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

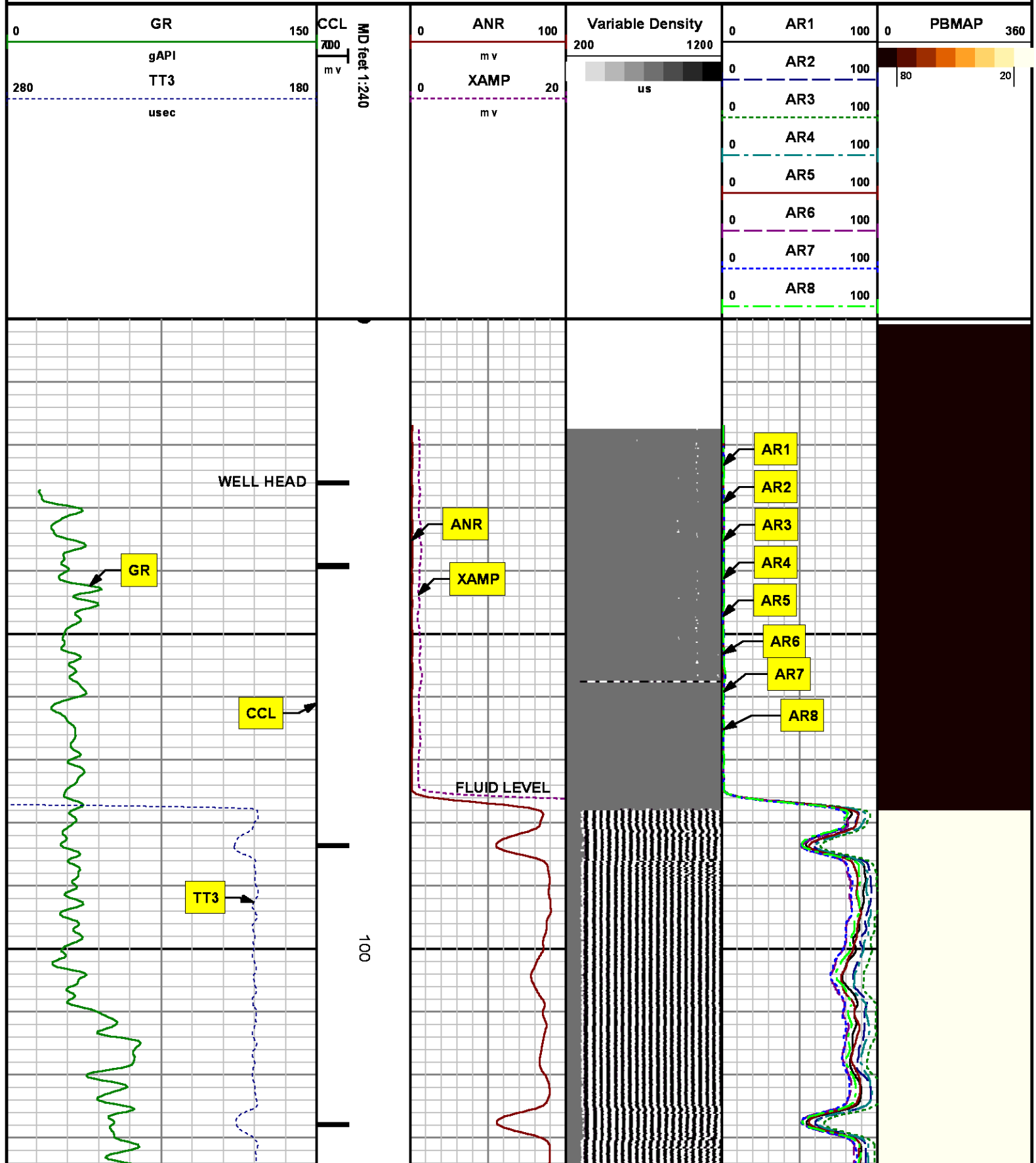
Well : AP 321-20-695

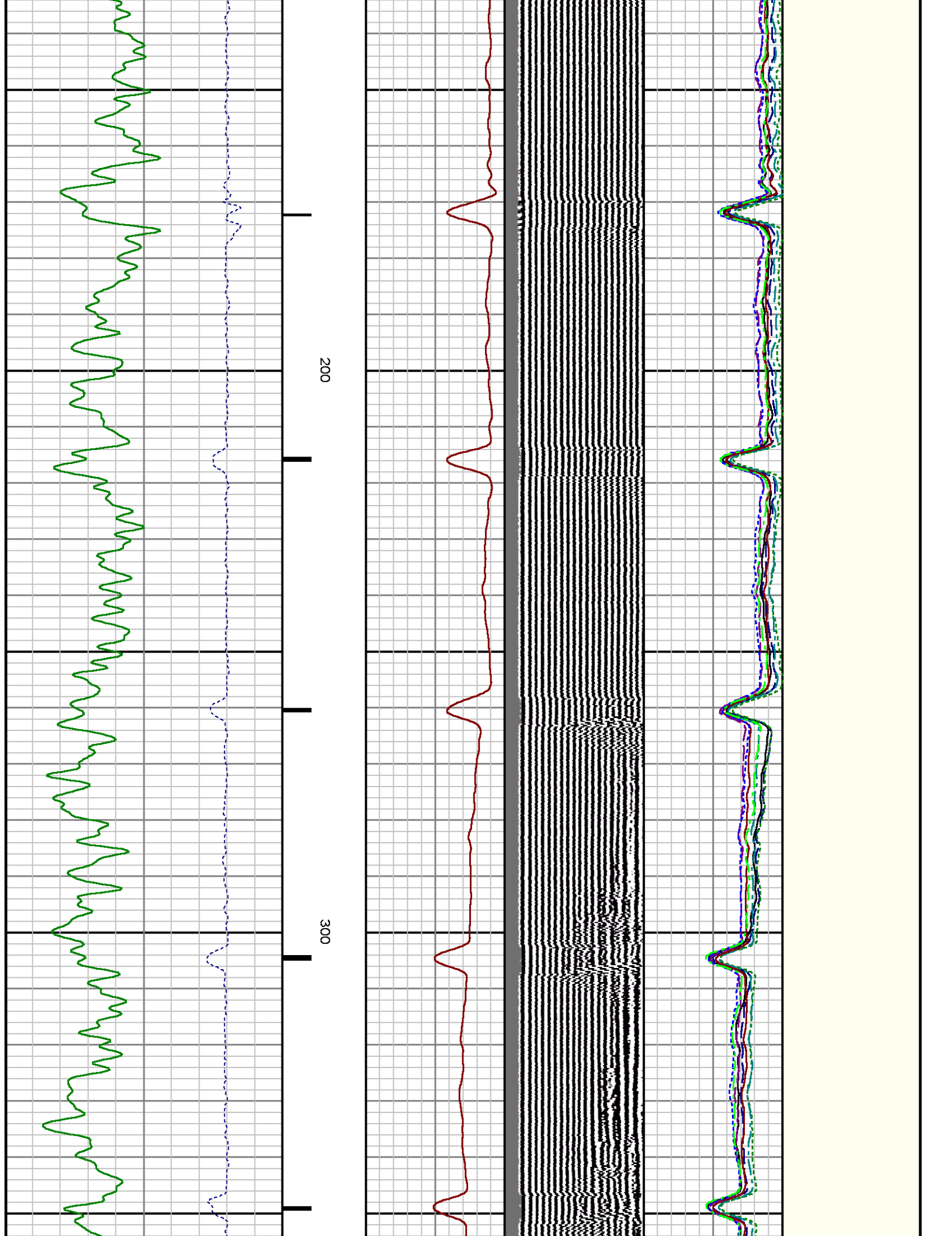
File Name : d:\welldata\wpx\ap 321-20-695\321cbl\main.xtf

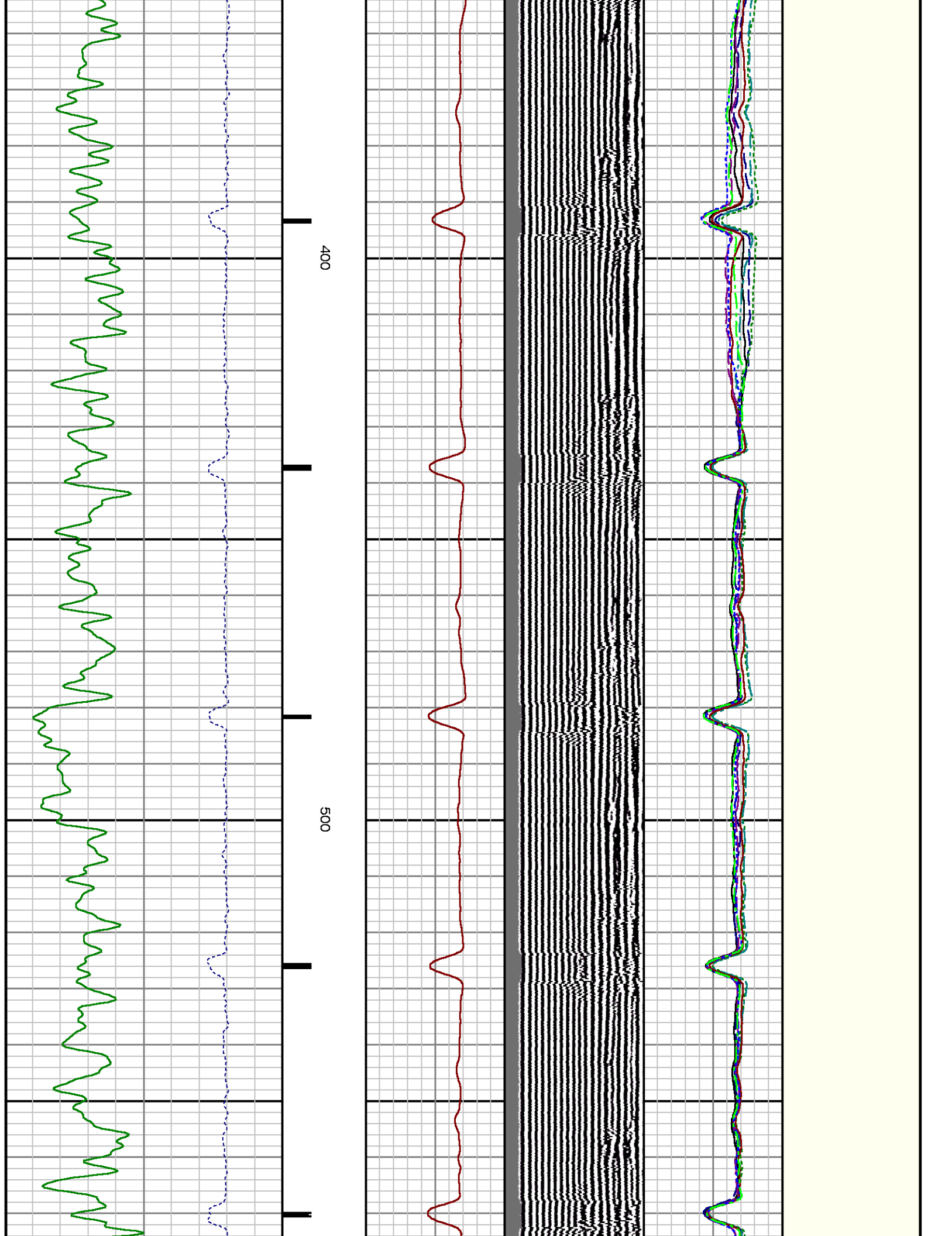
Mode : PlotMgr 5.4.504

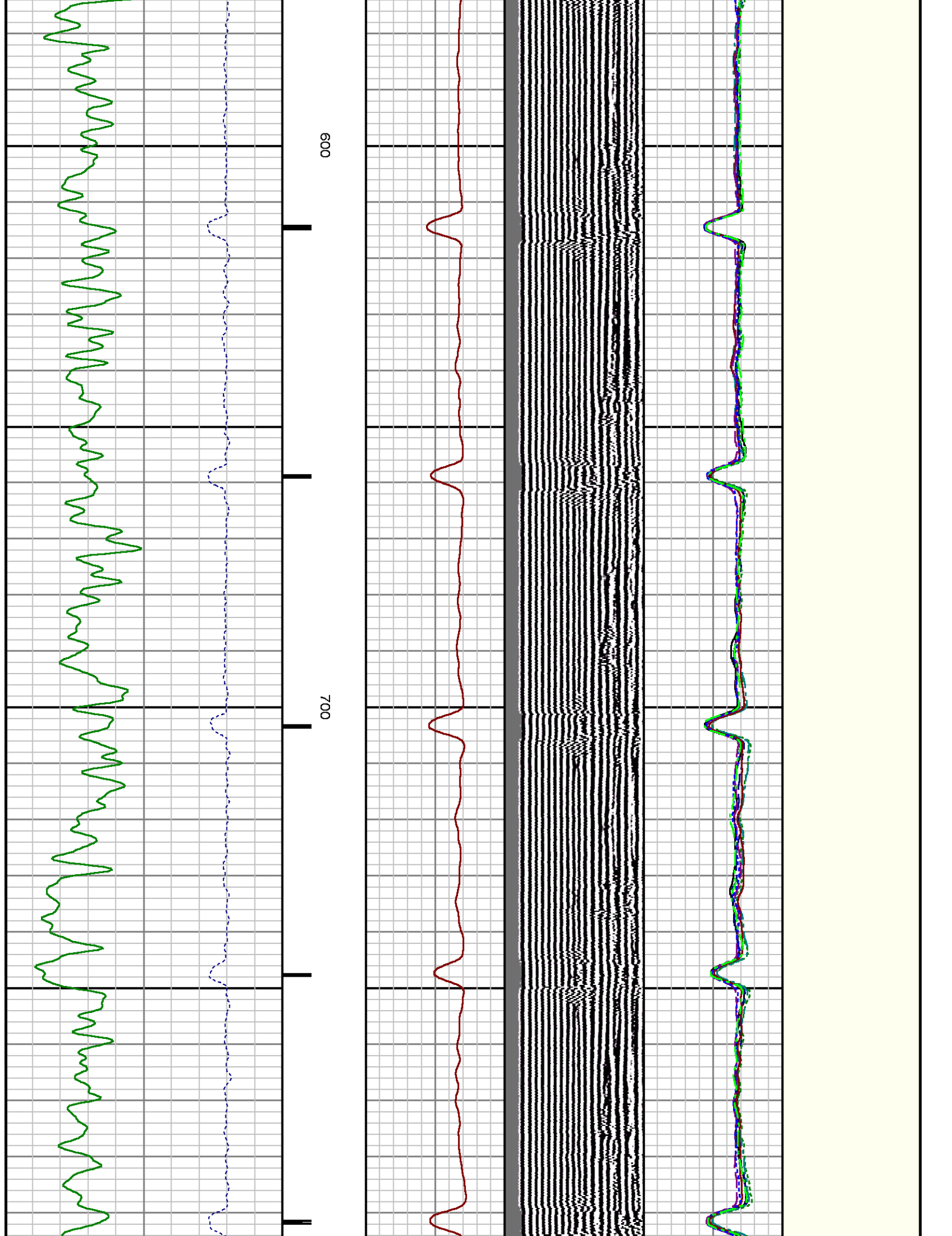
Interval : 0.00 - 9573.00 feet UP

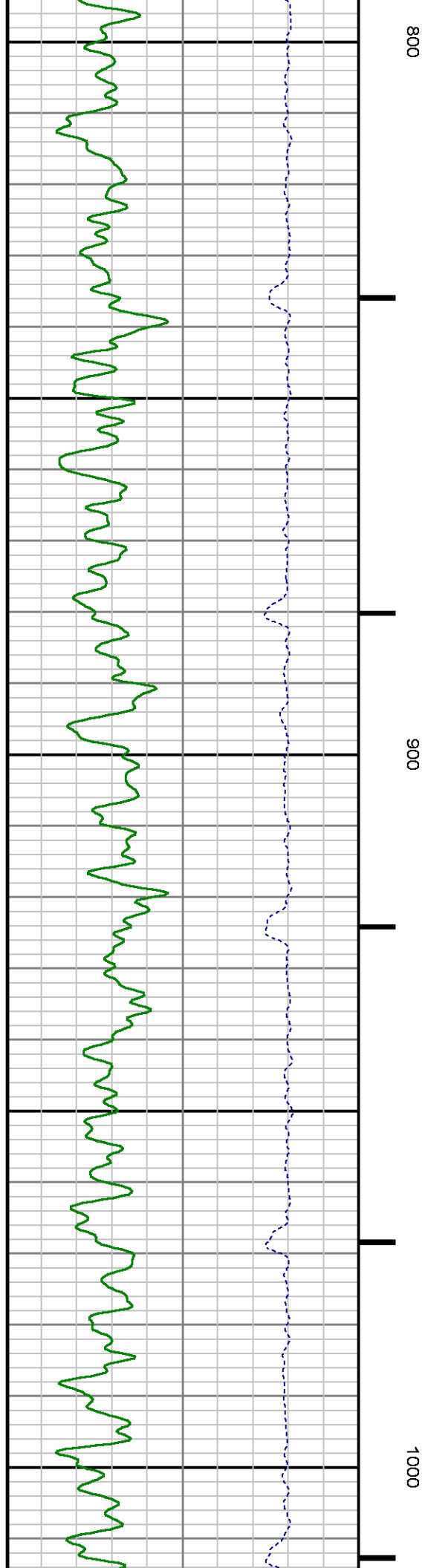
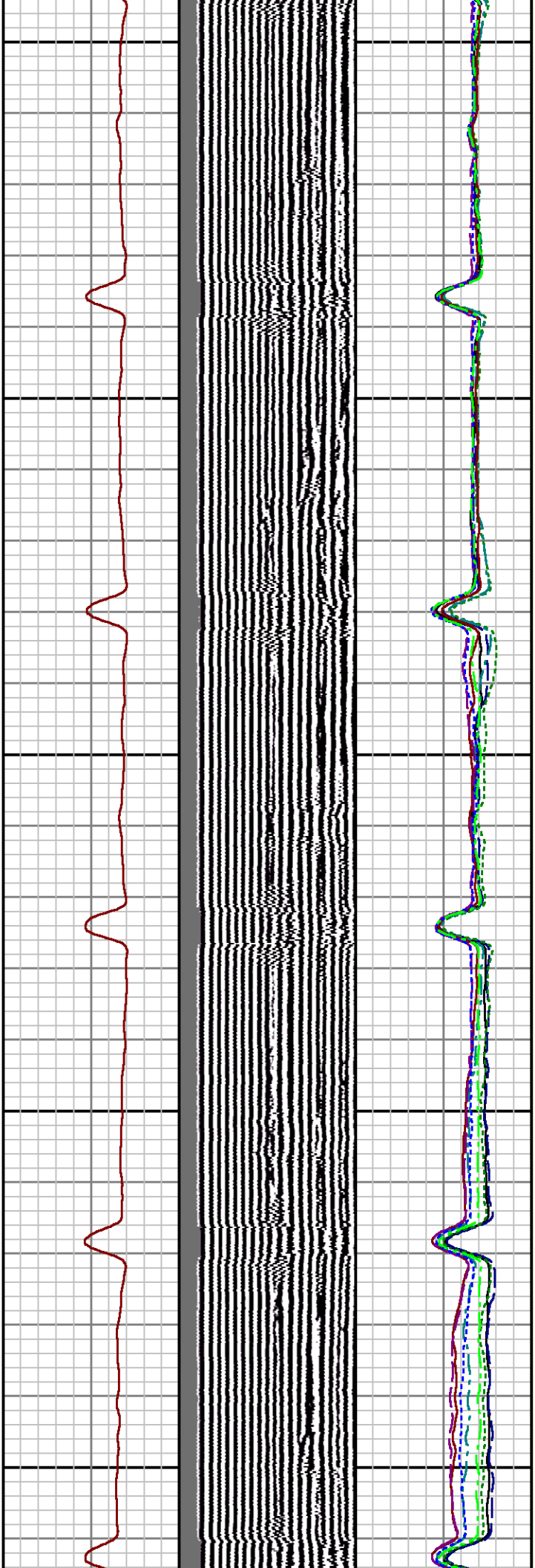
Created : 8/21/2014 12:13:30 PM

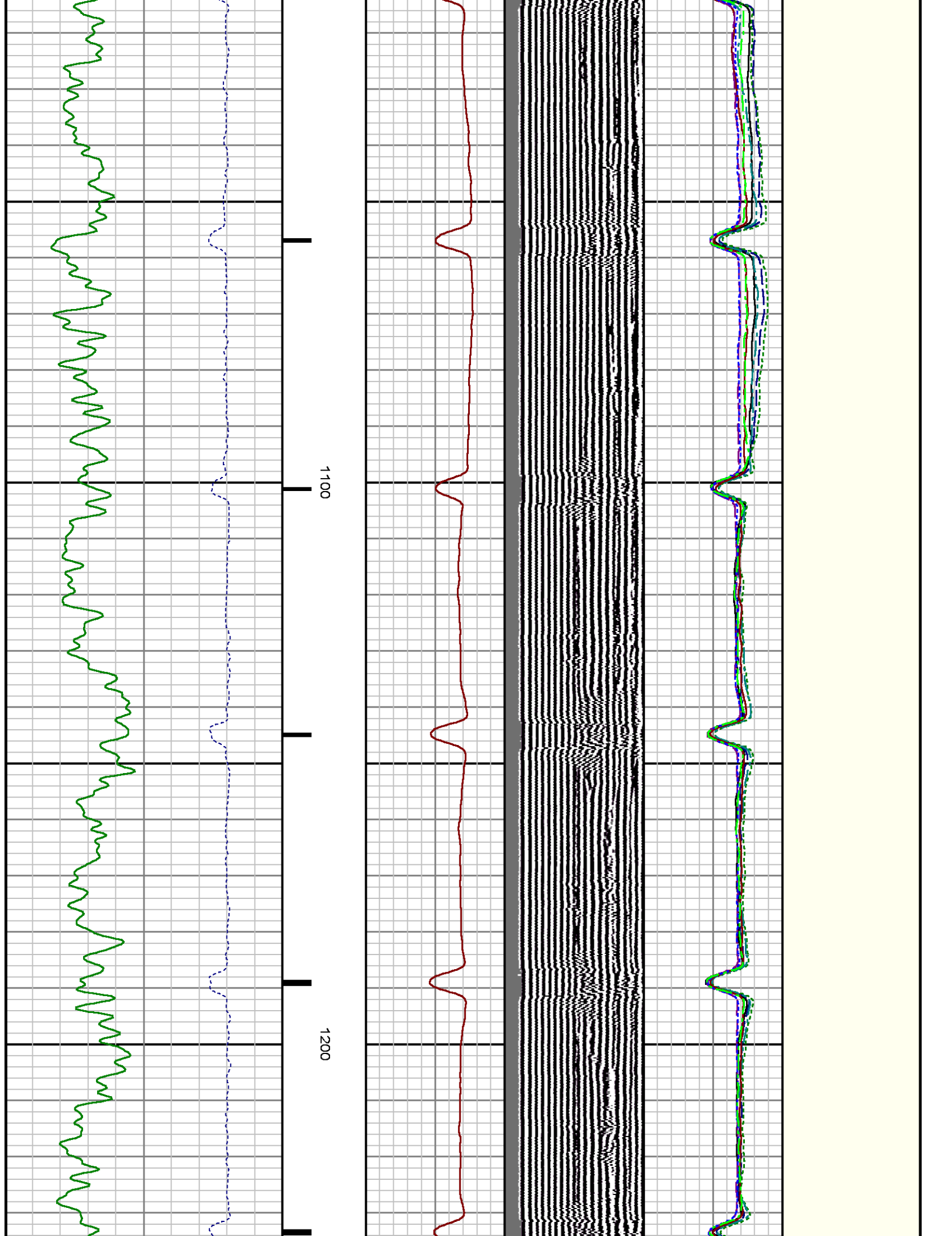


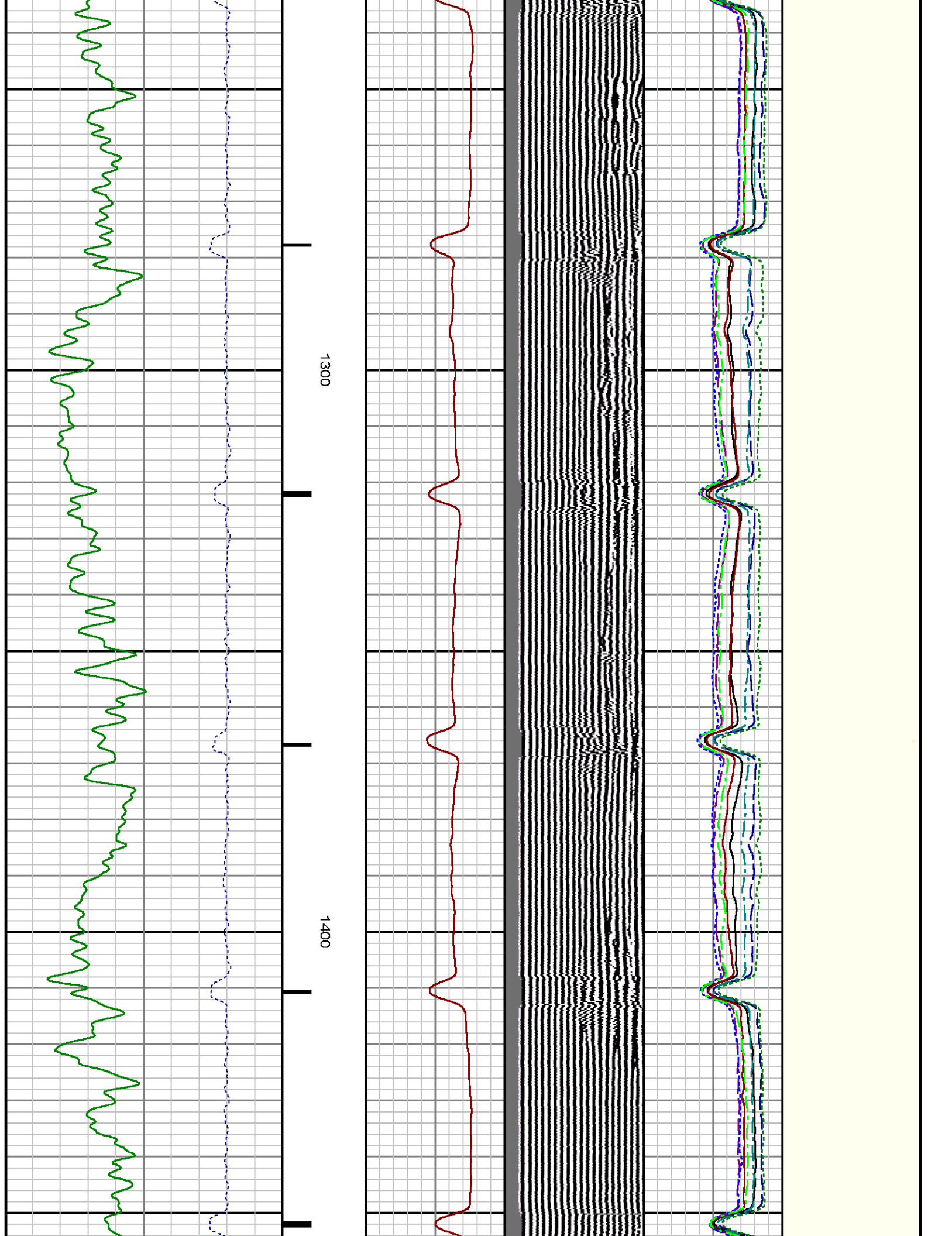


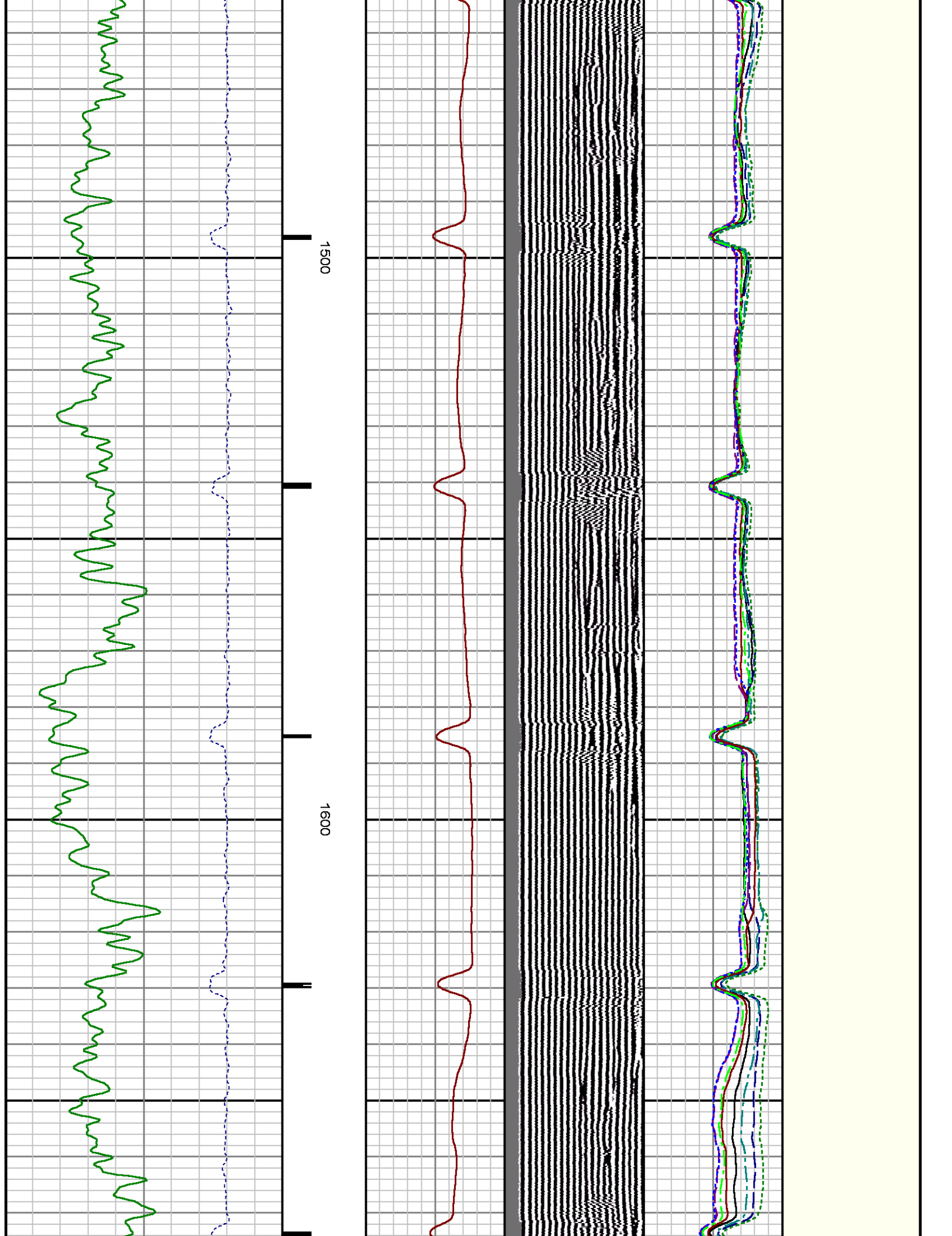


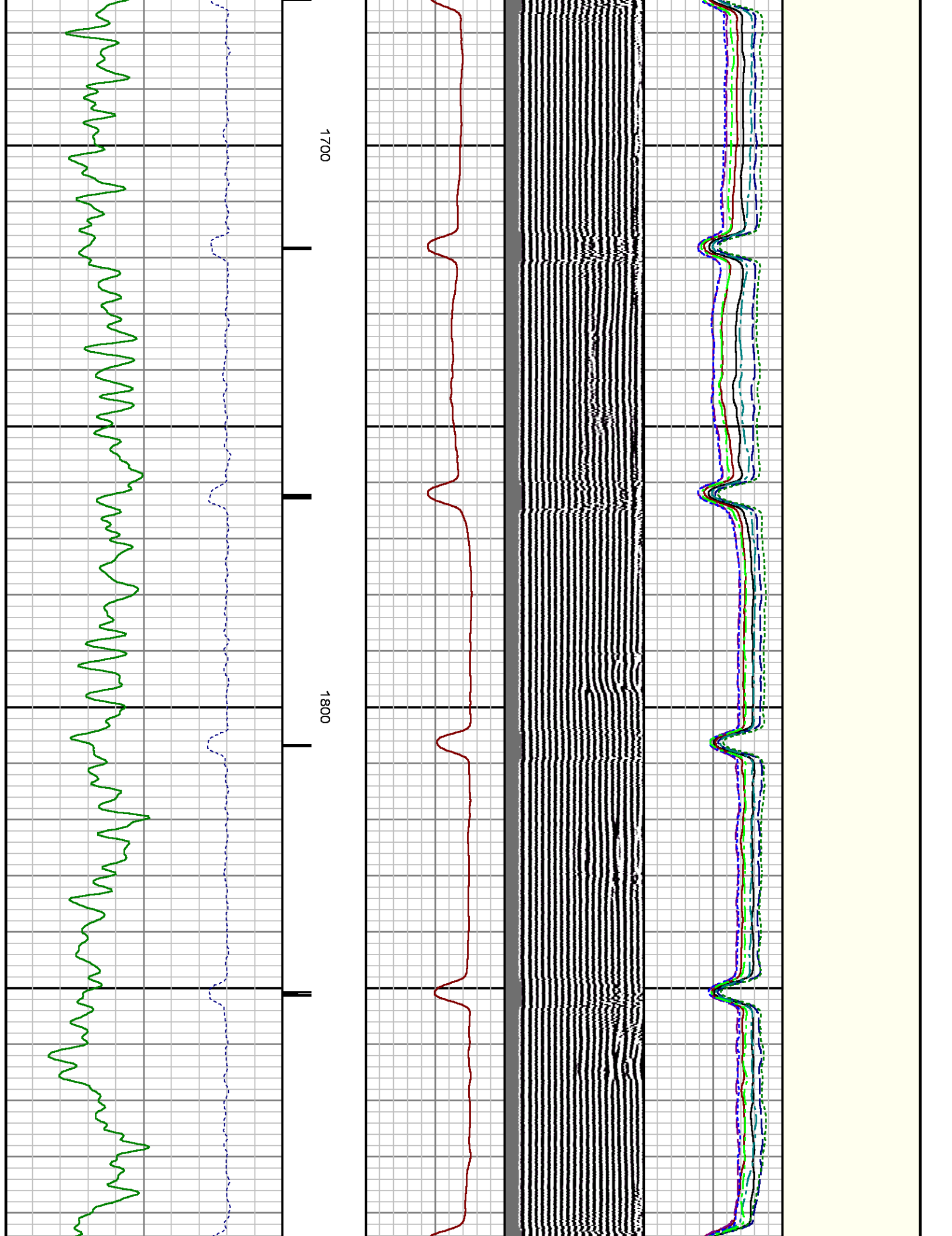


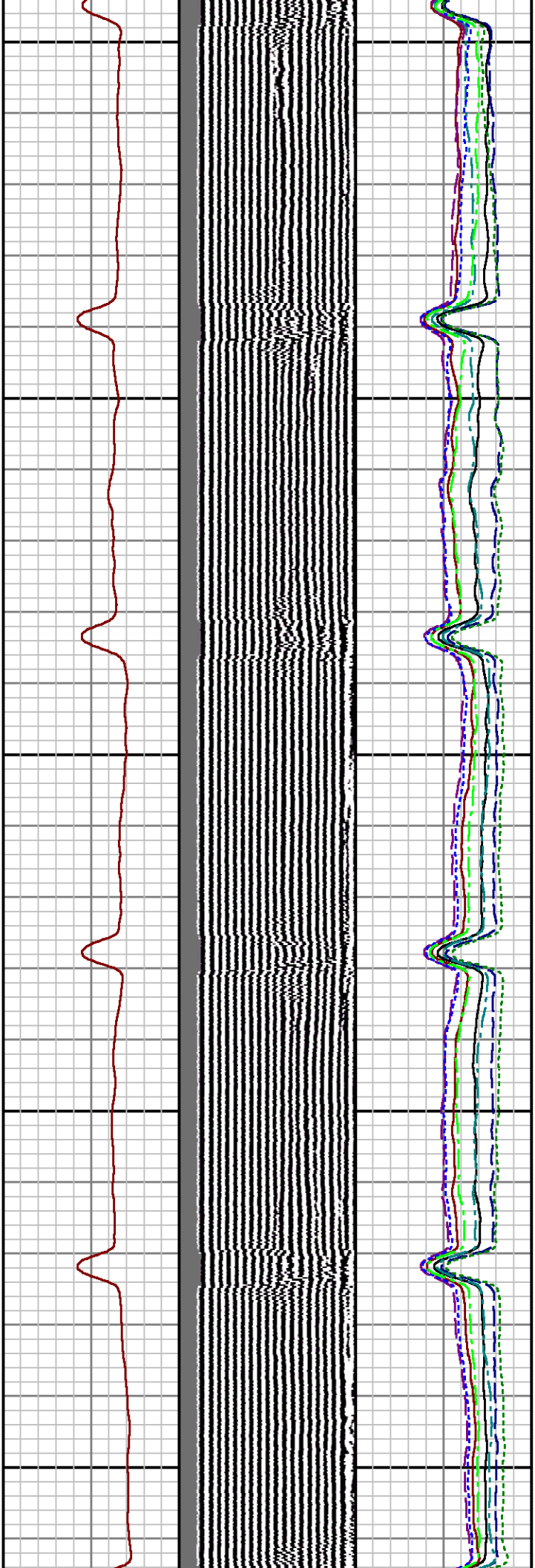








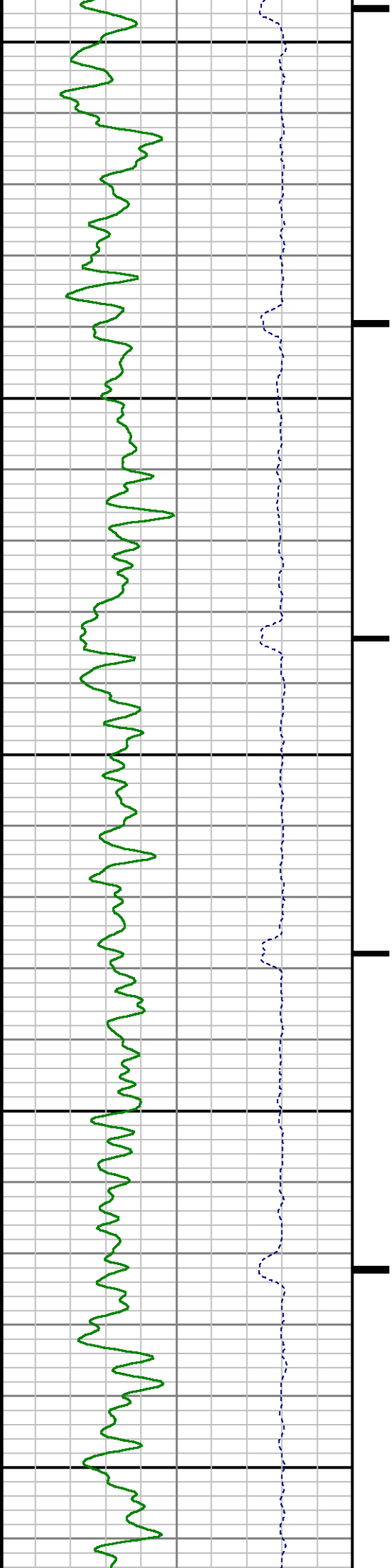


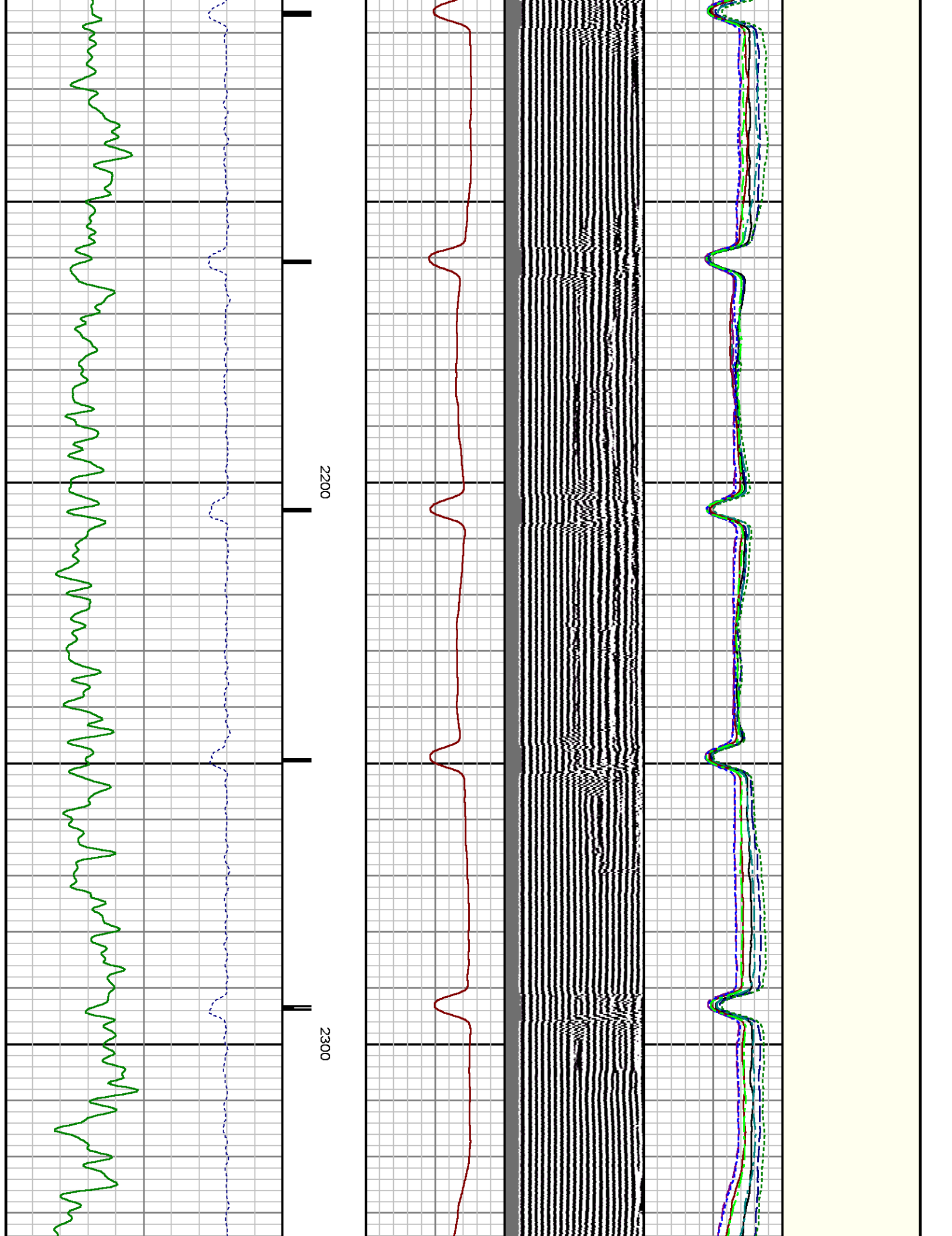


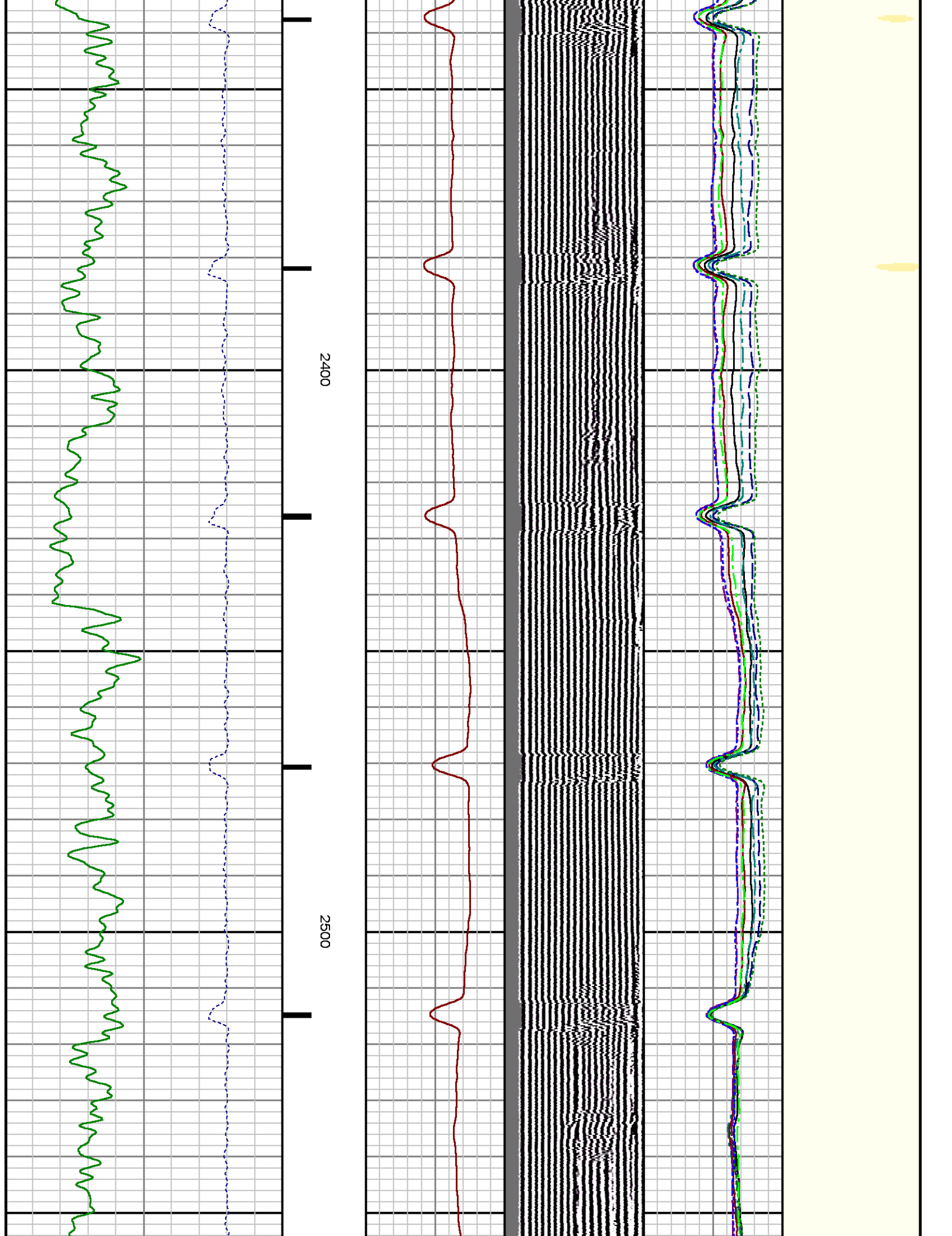
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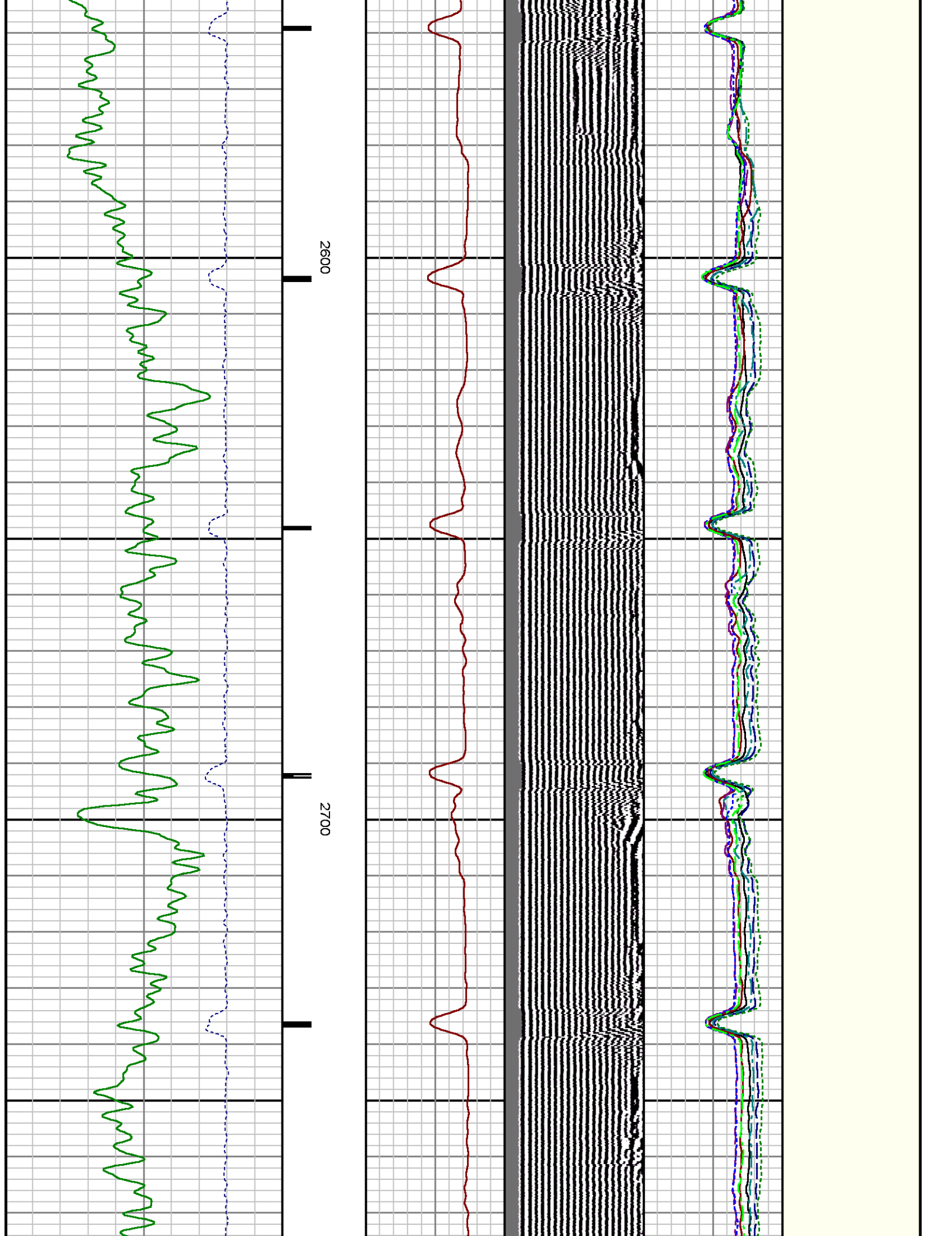
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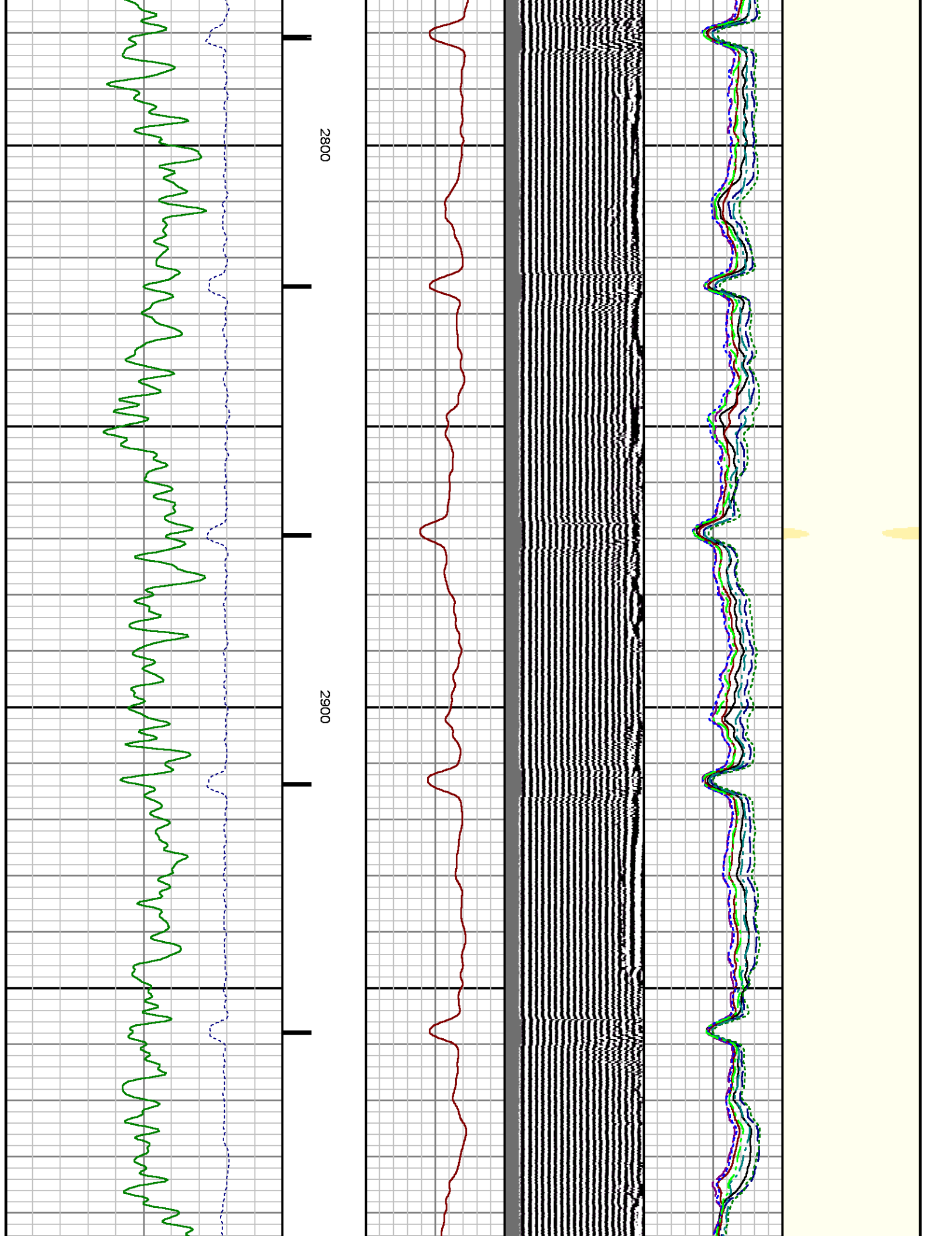
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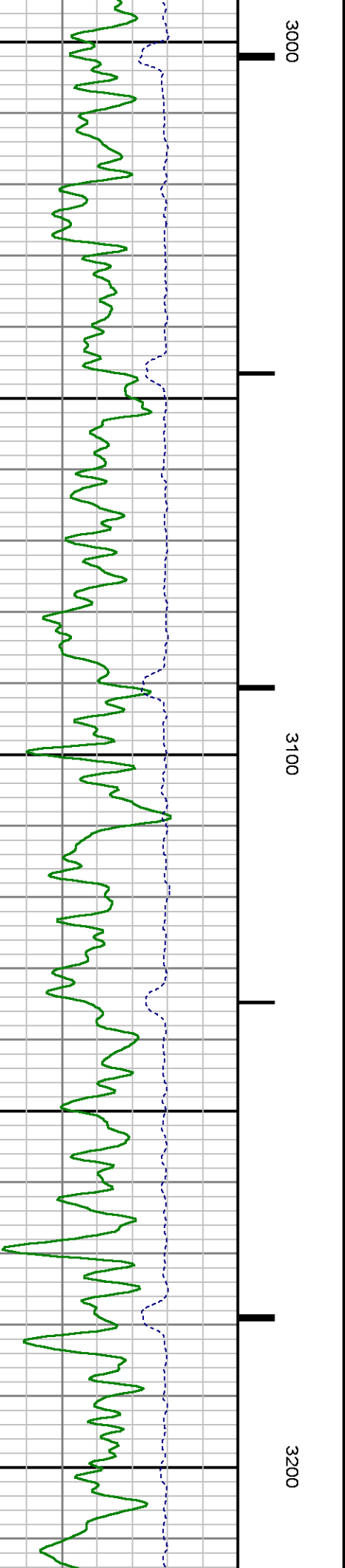
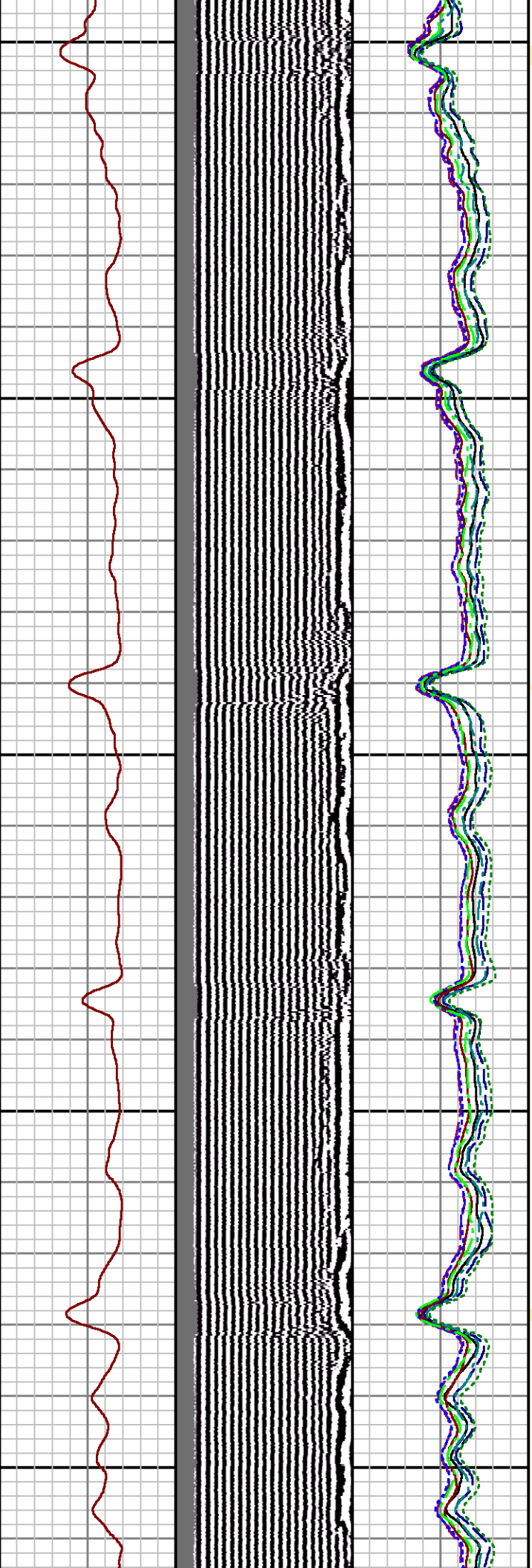


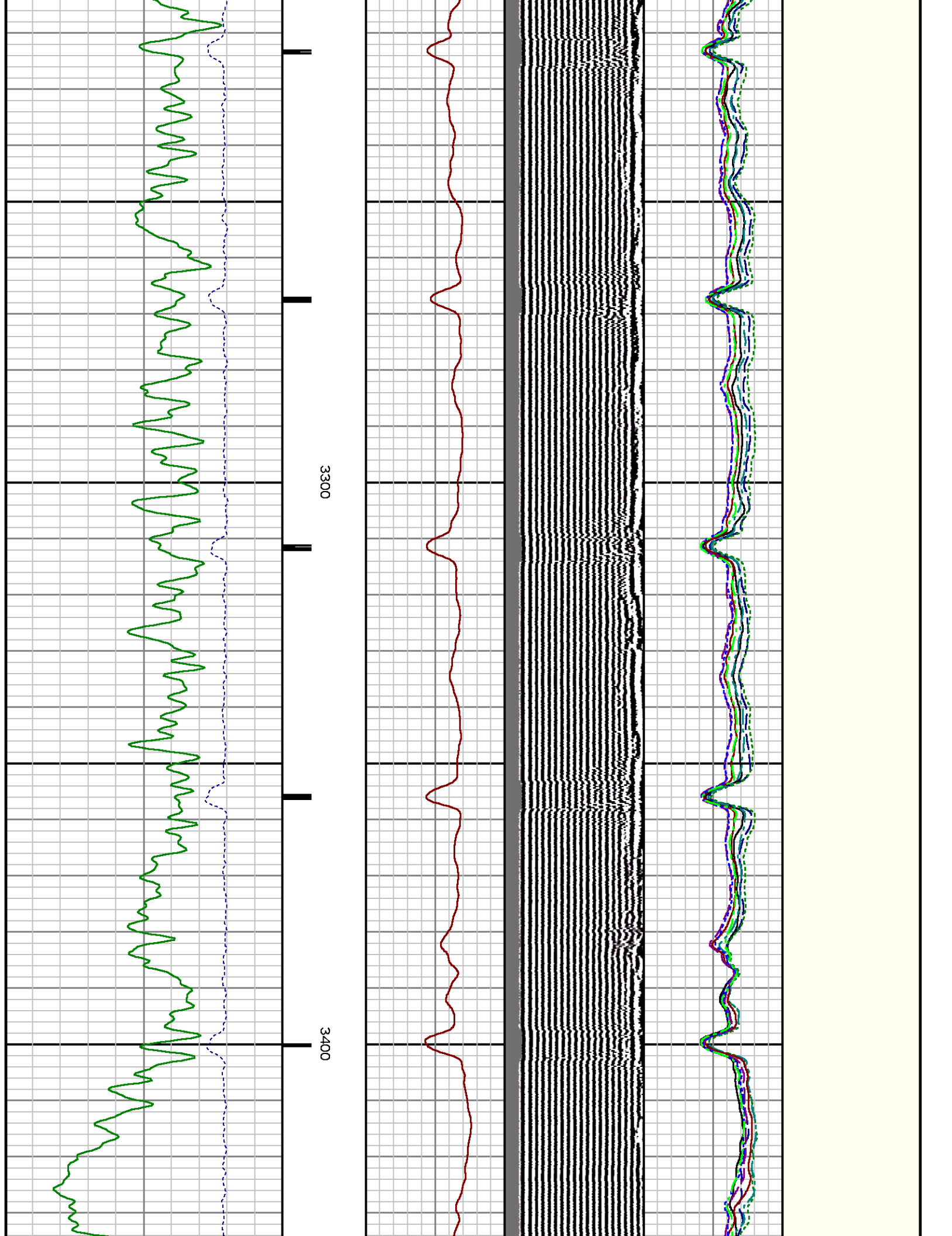


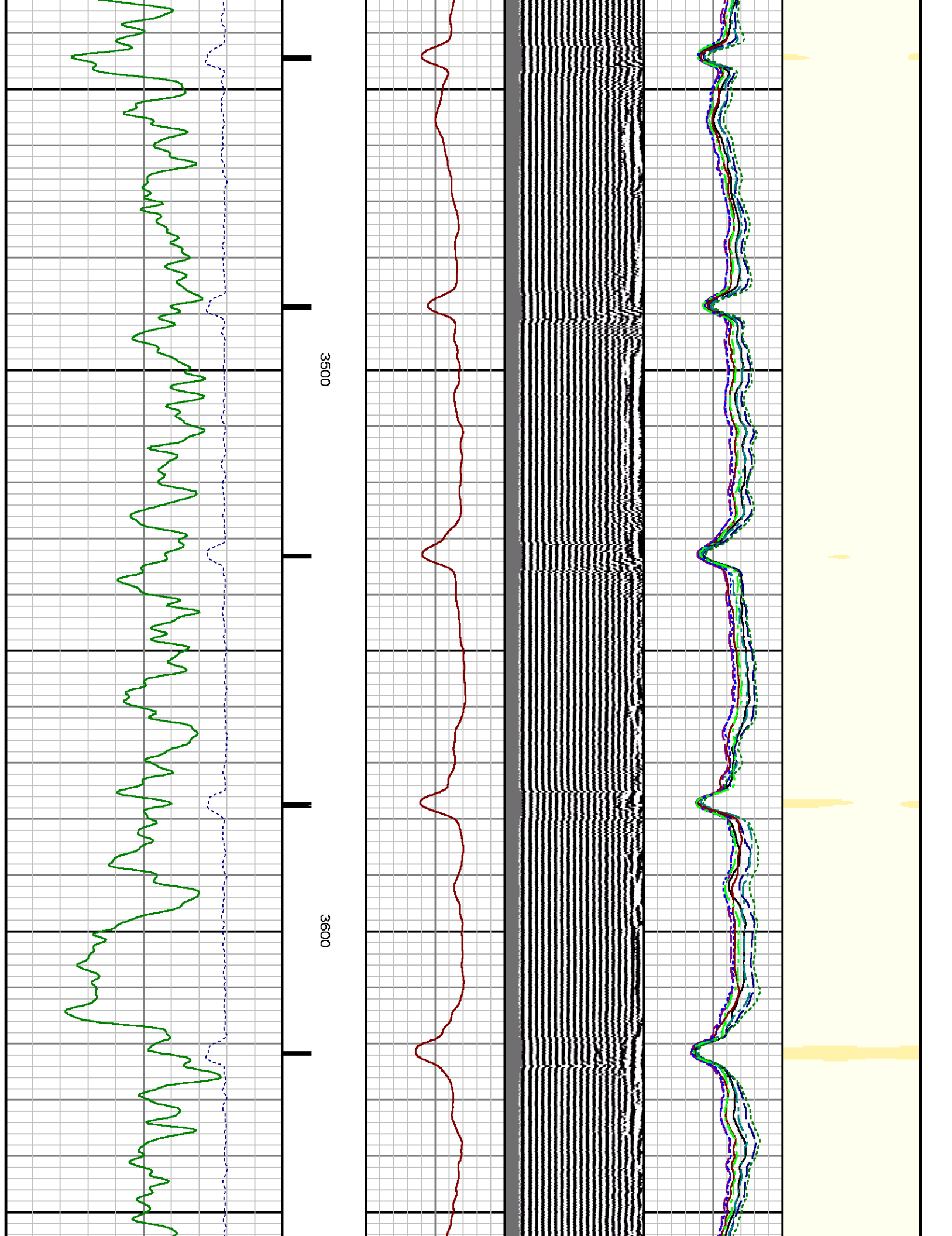


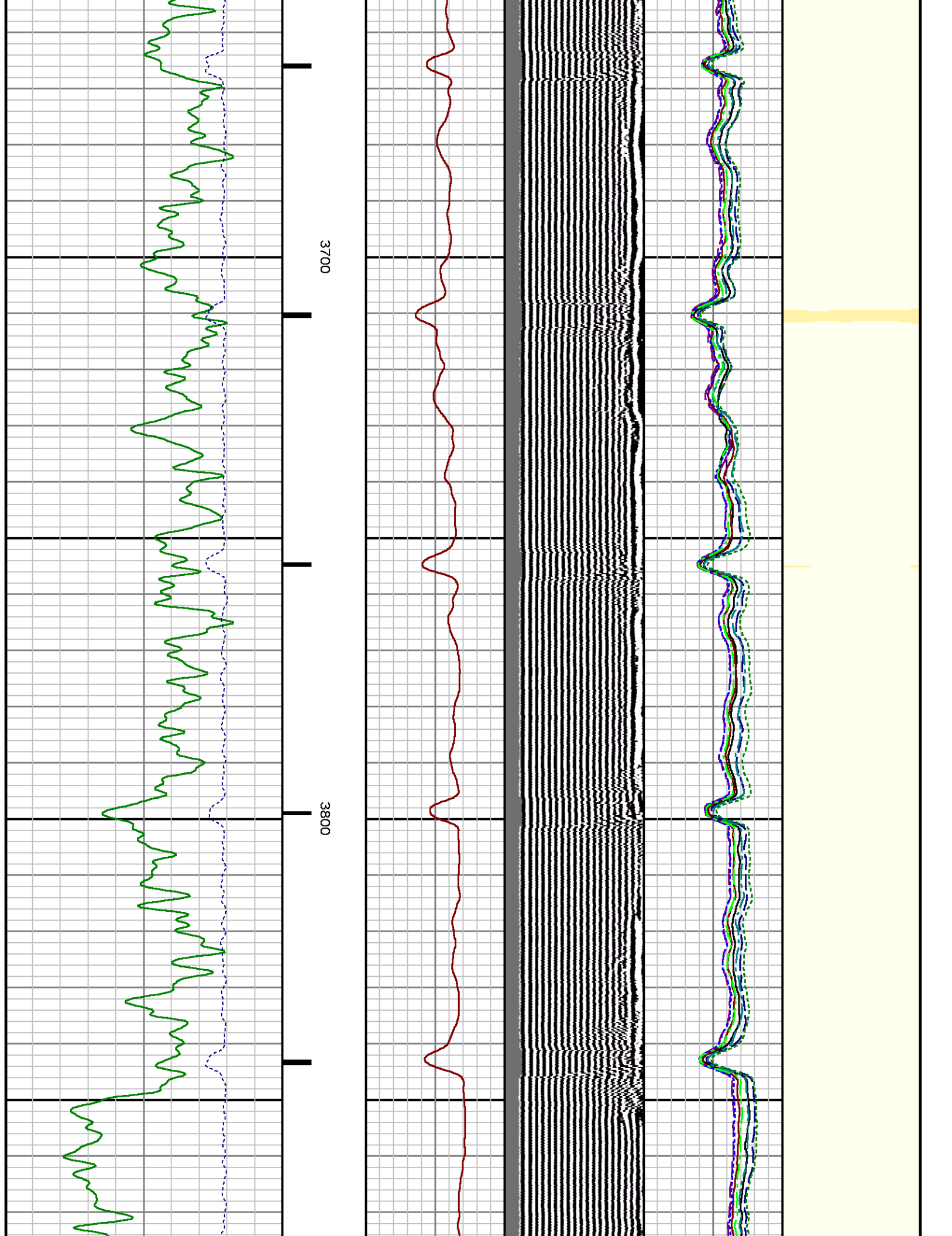


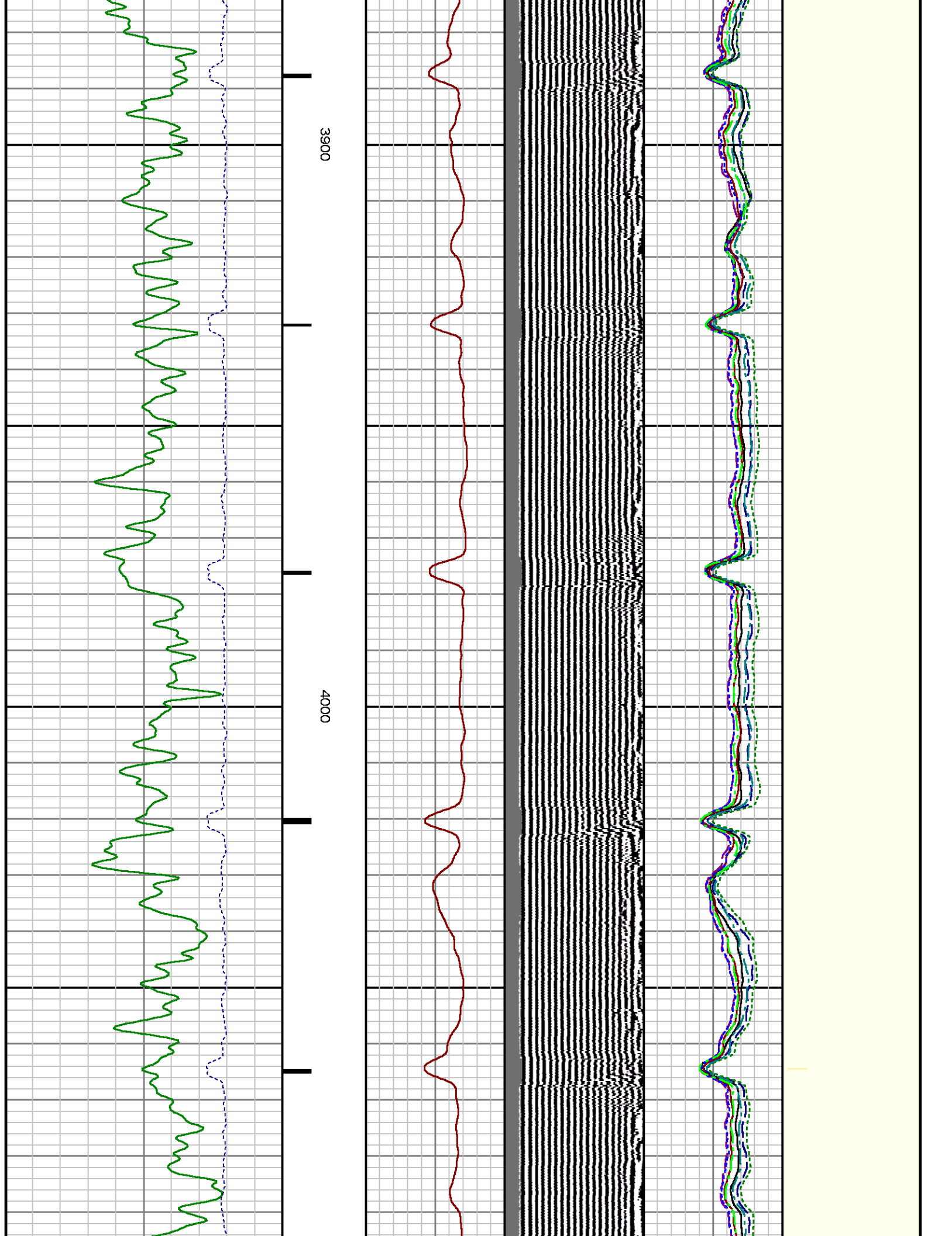


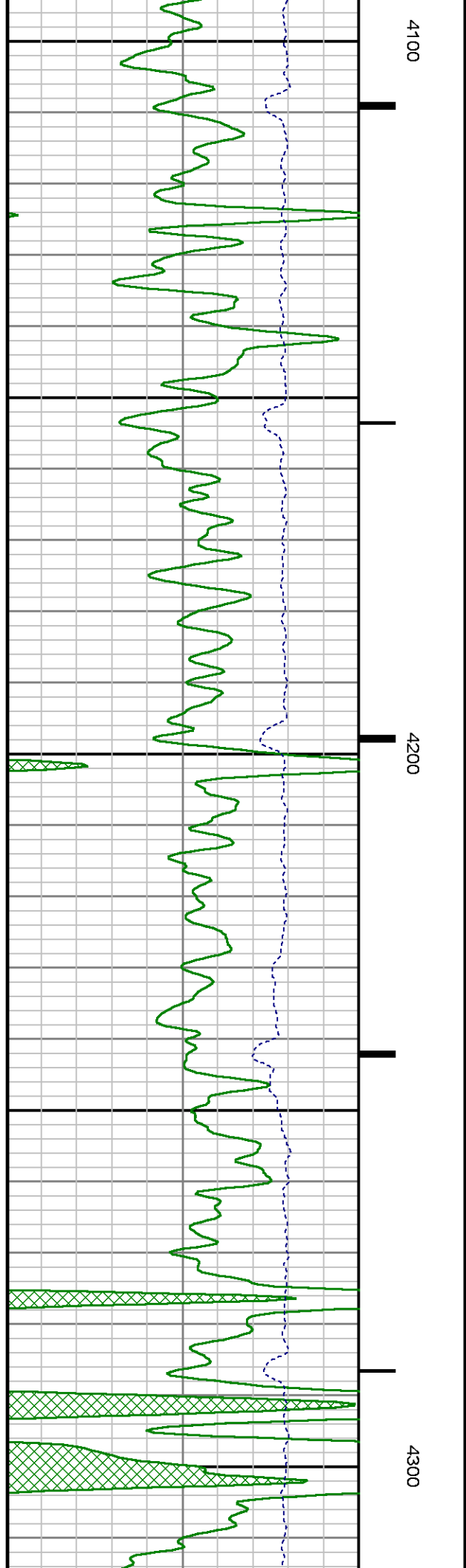
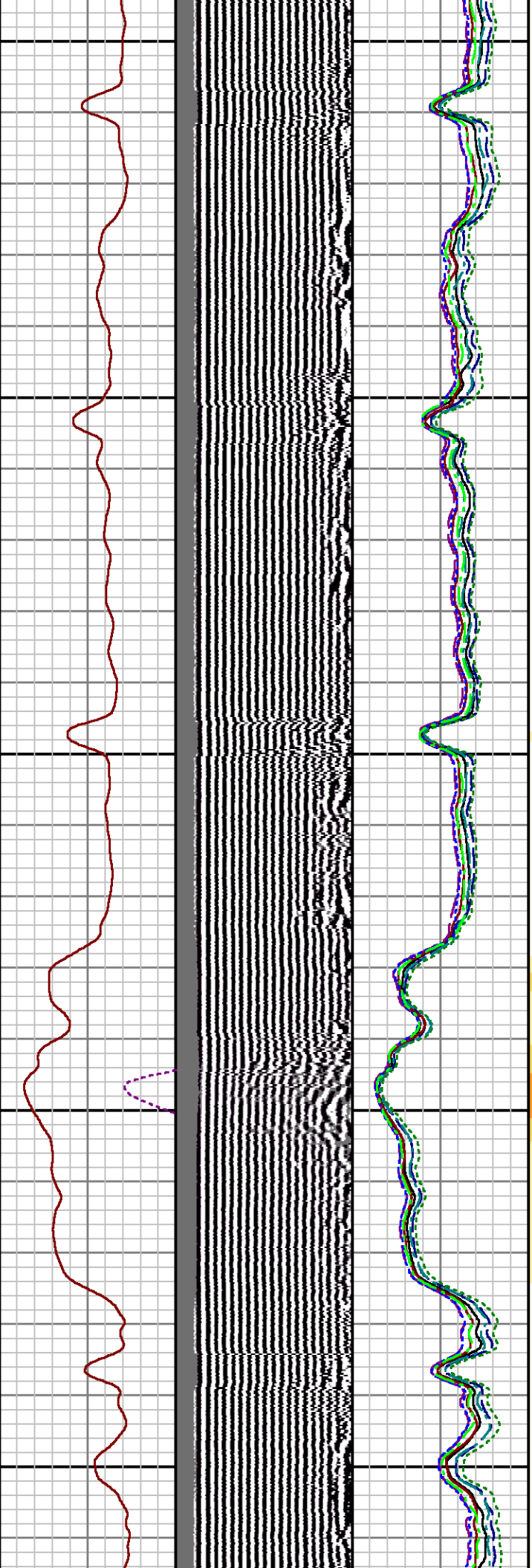


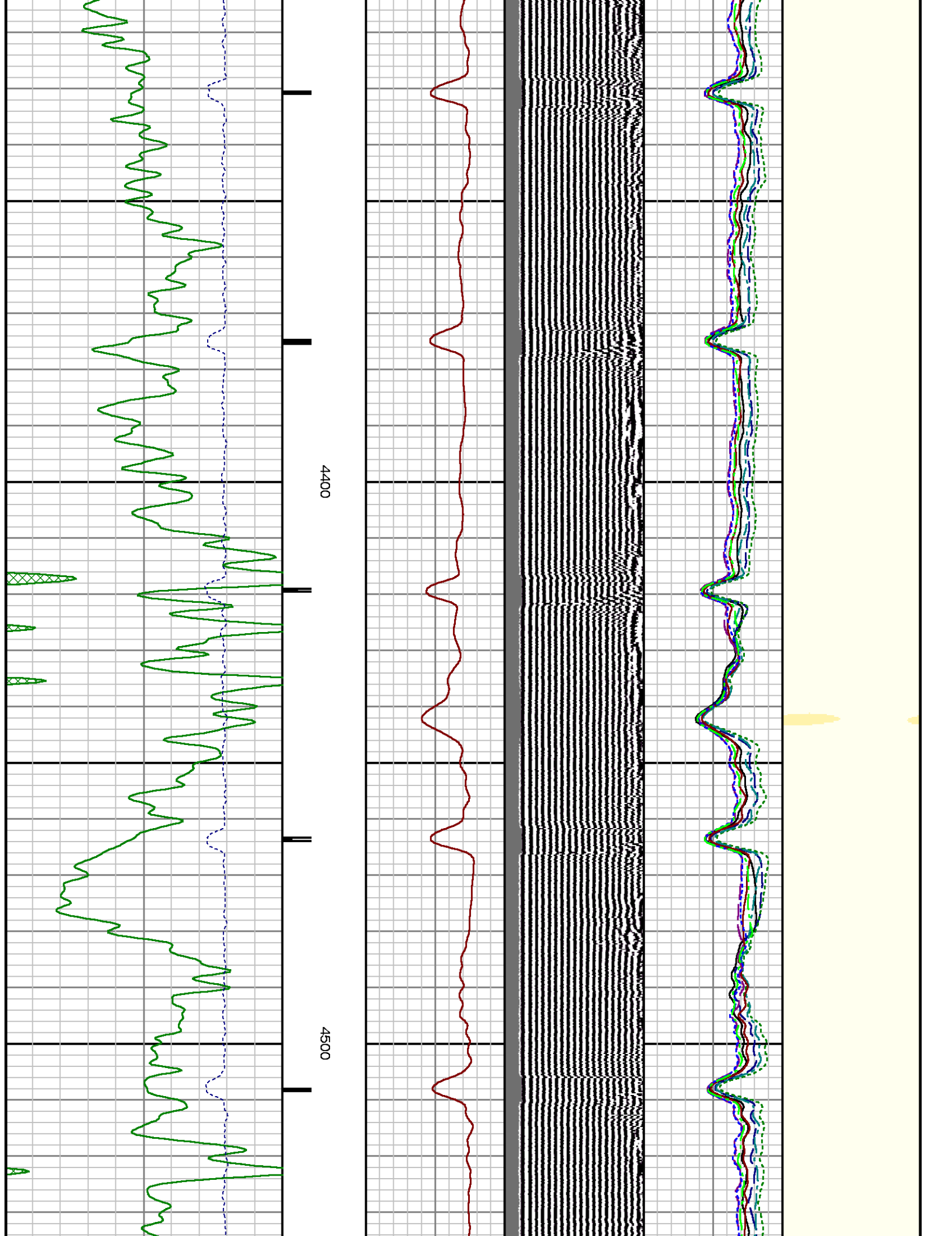


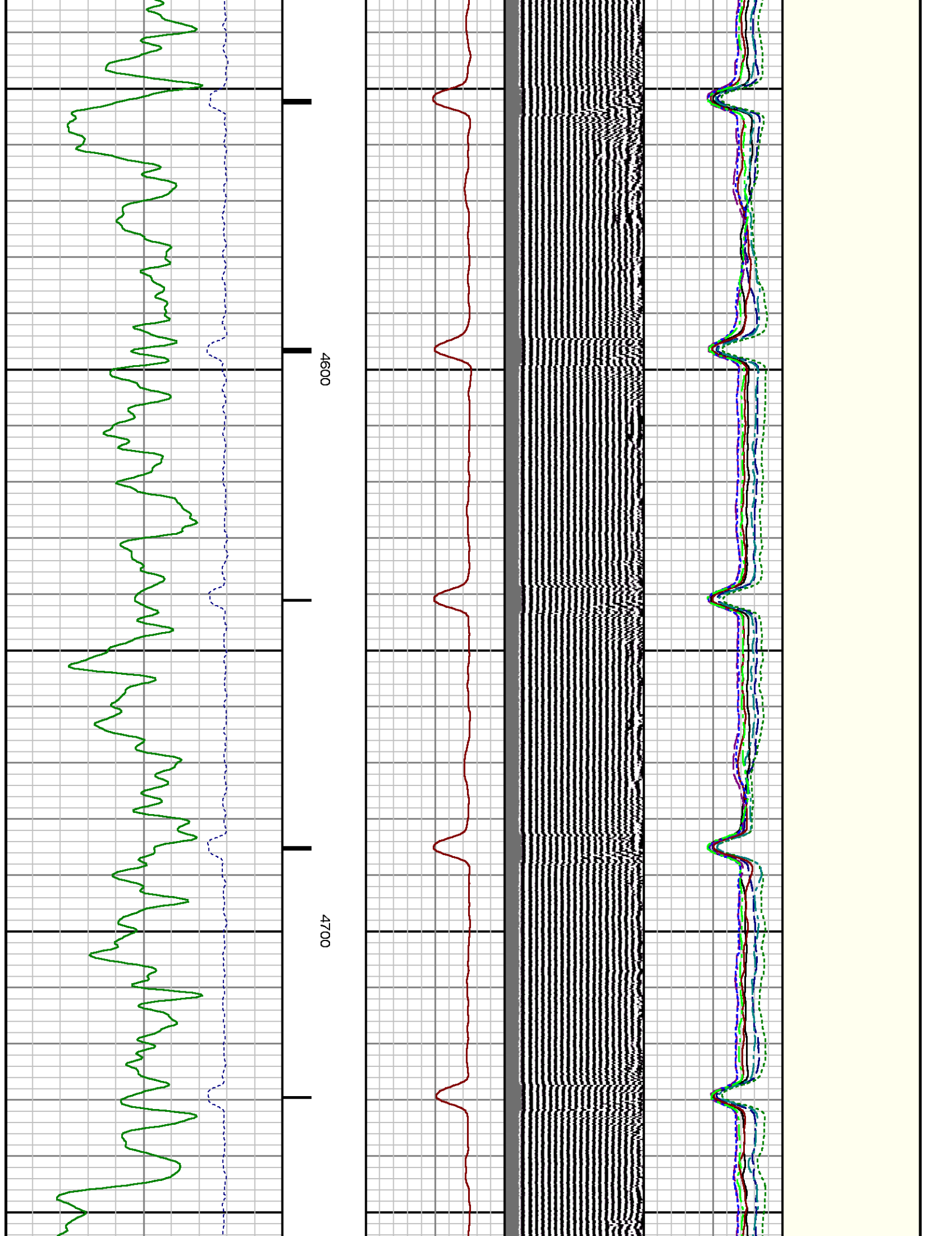


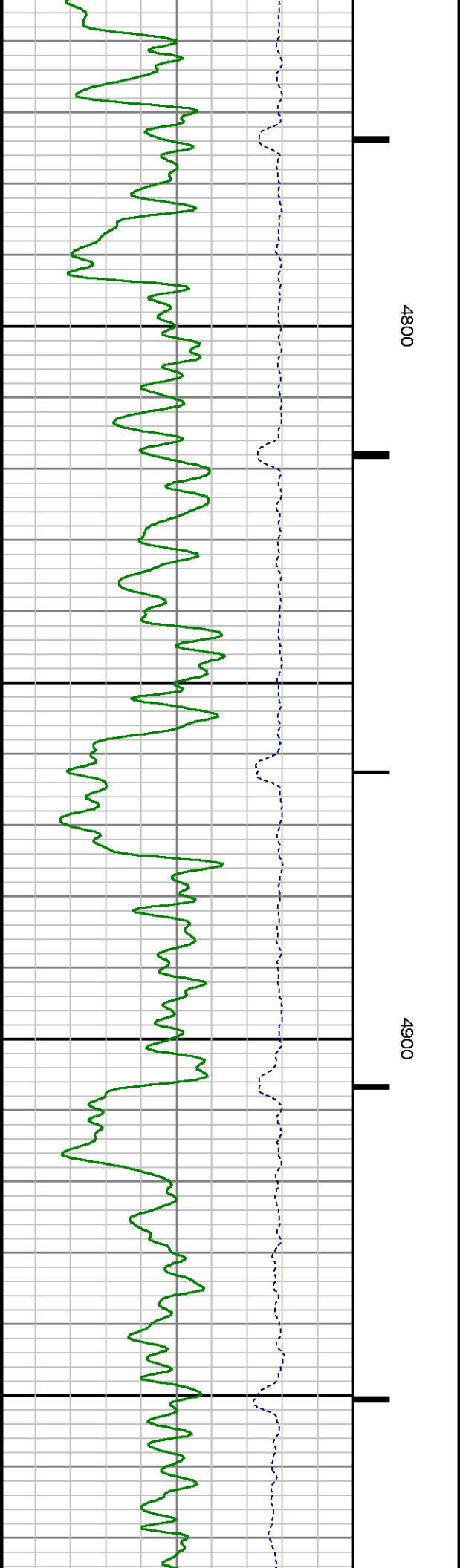
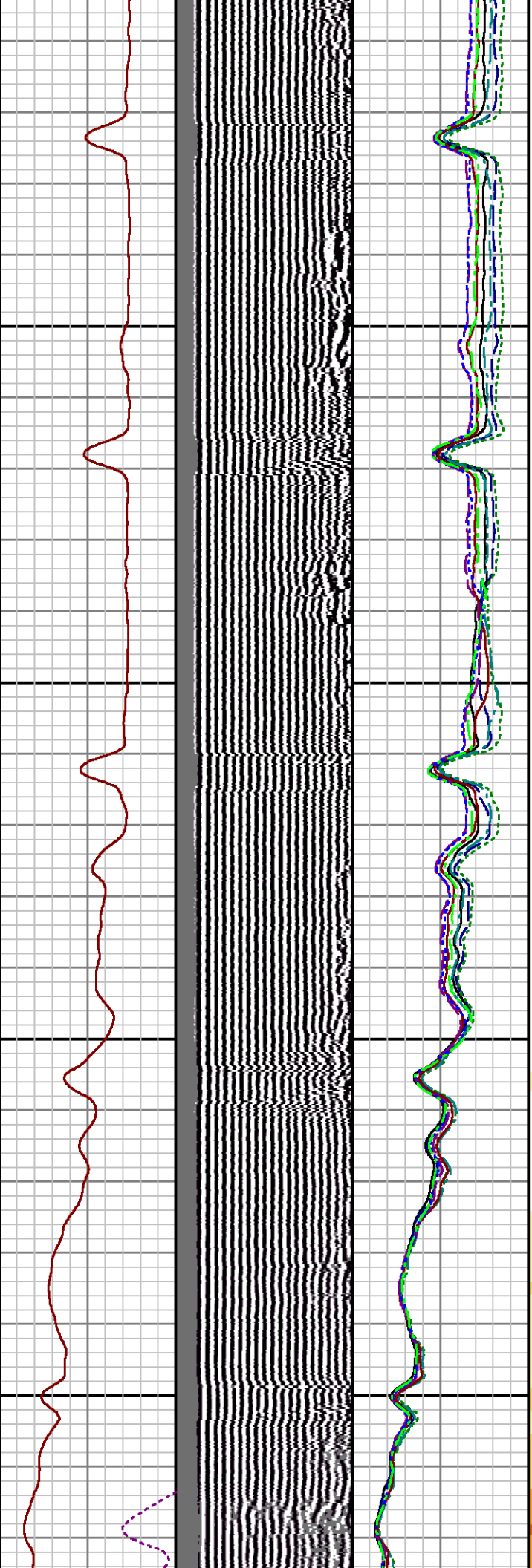
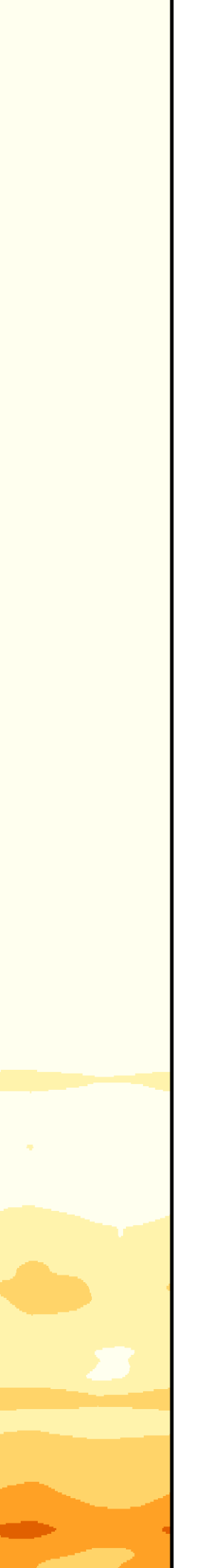


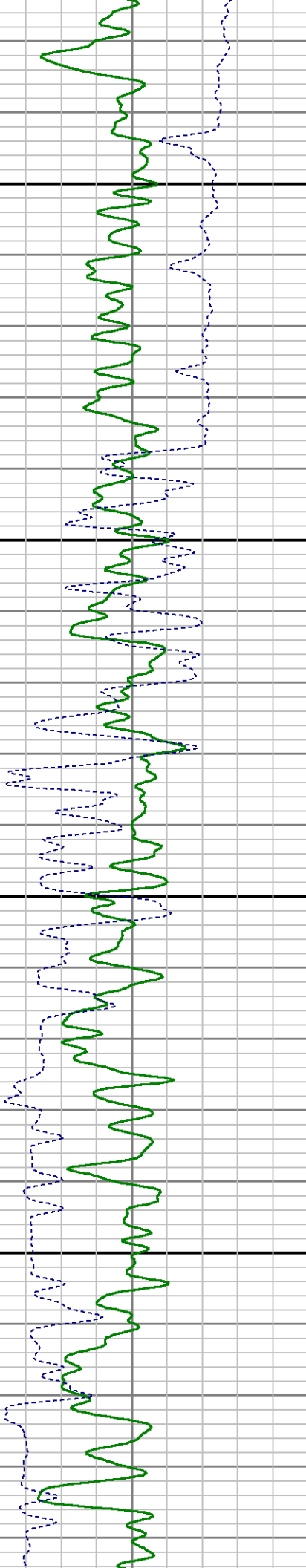
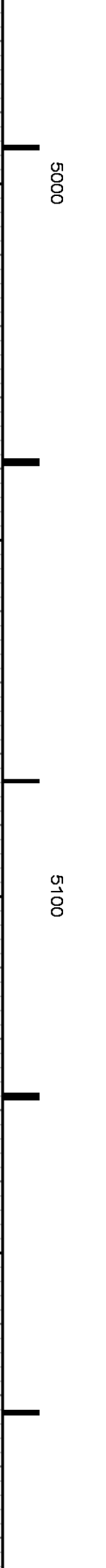
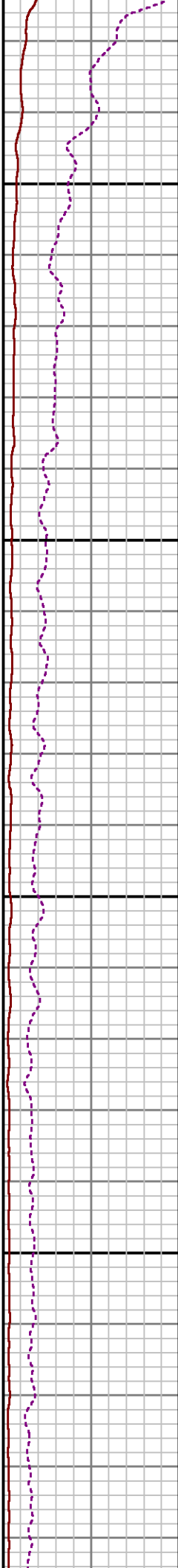
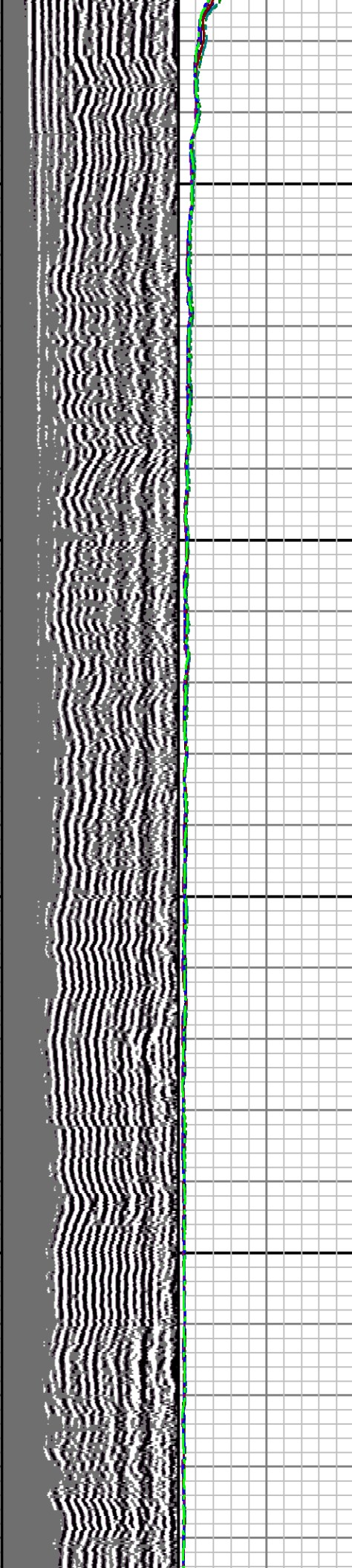
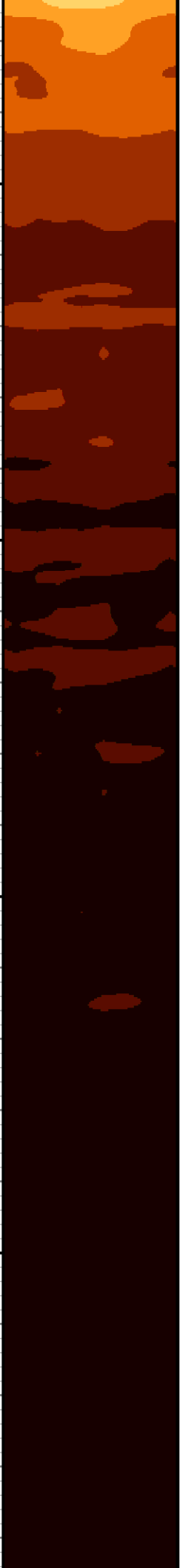


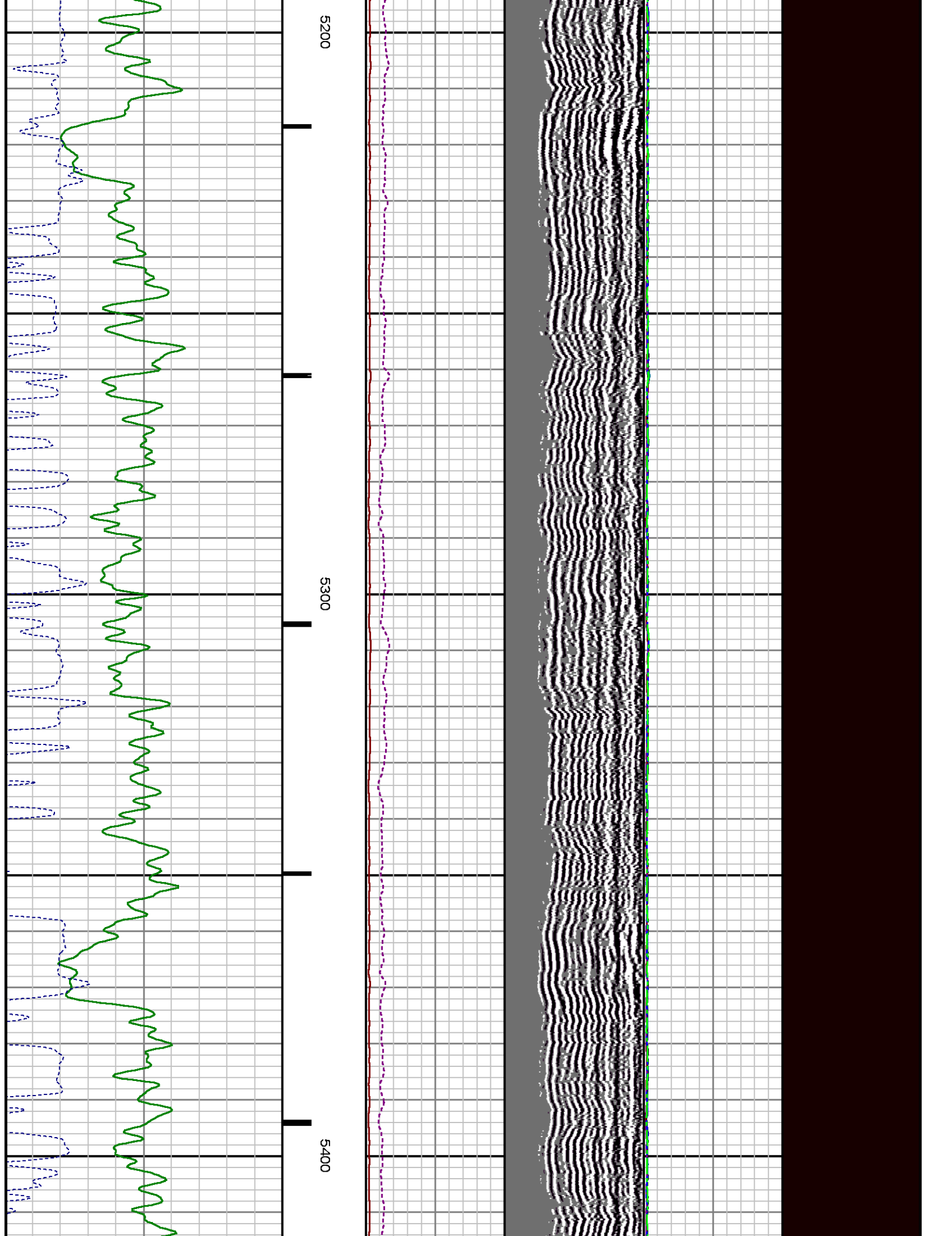


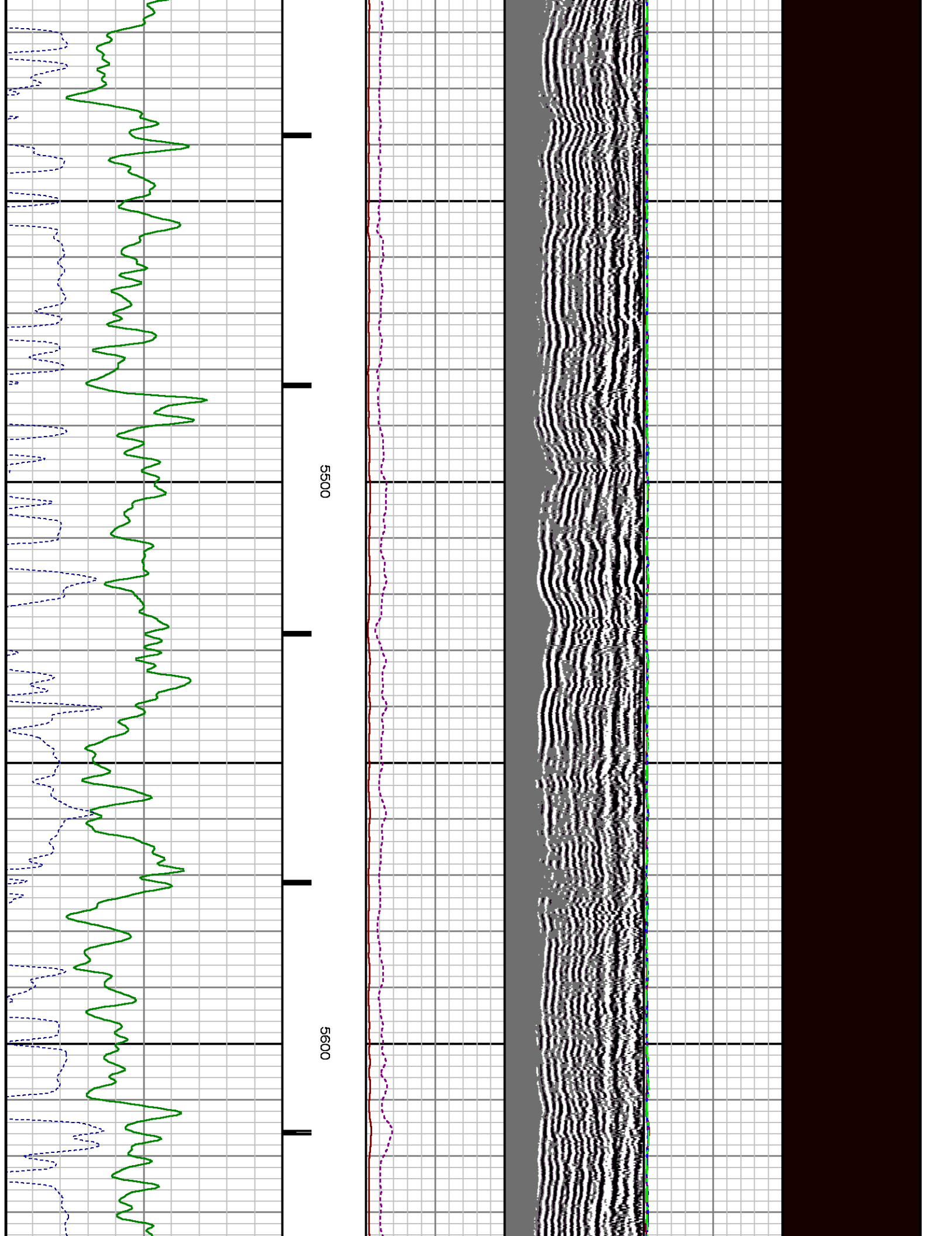


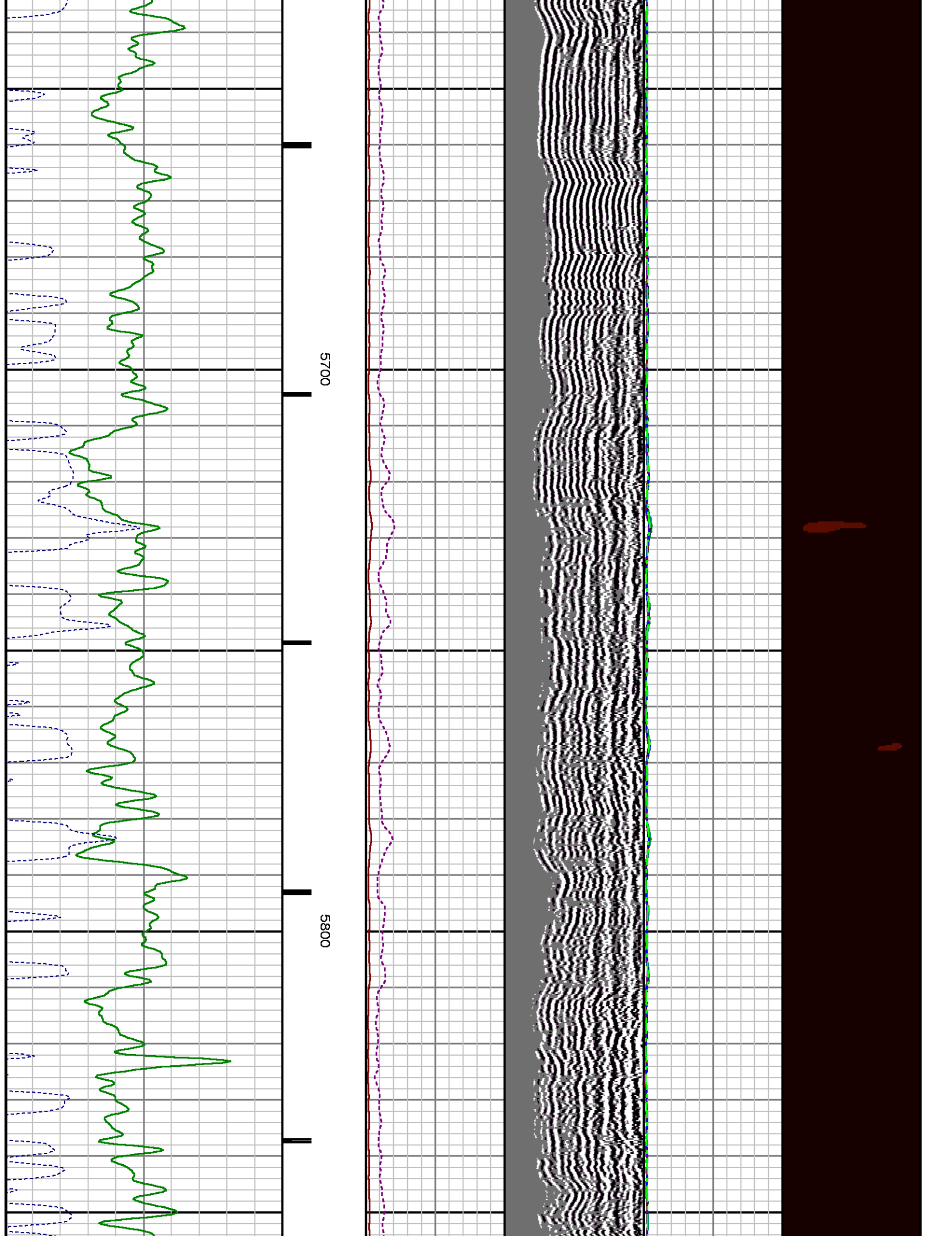


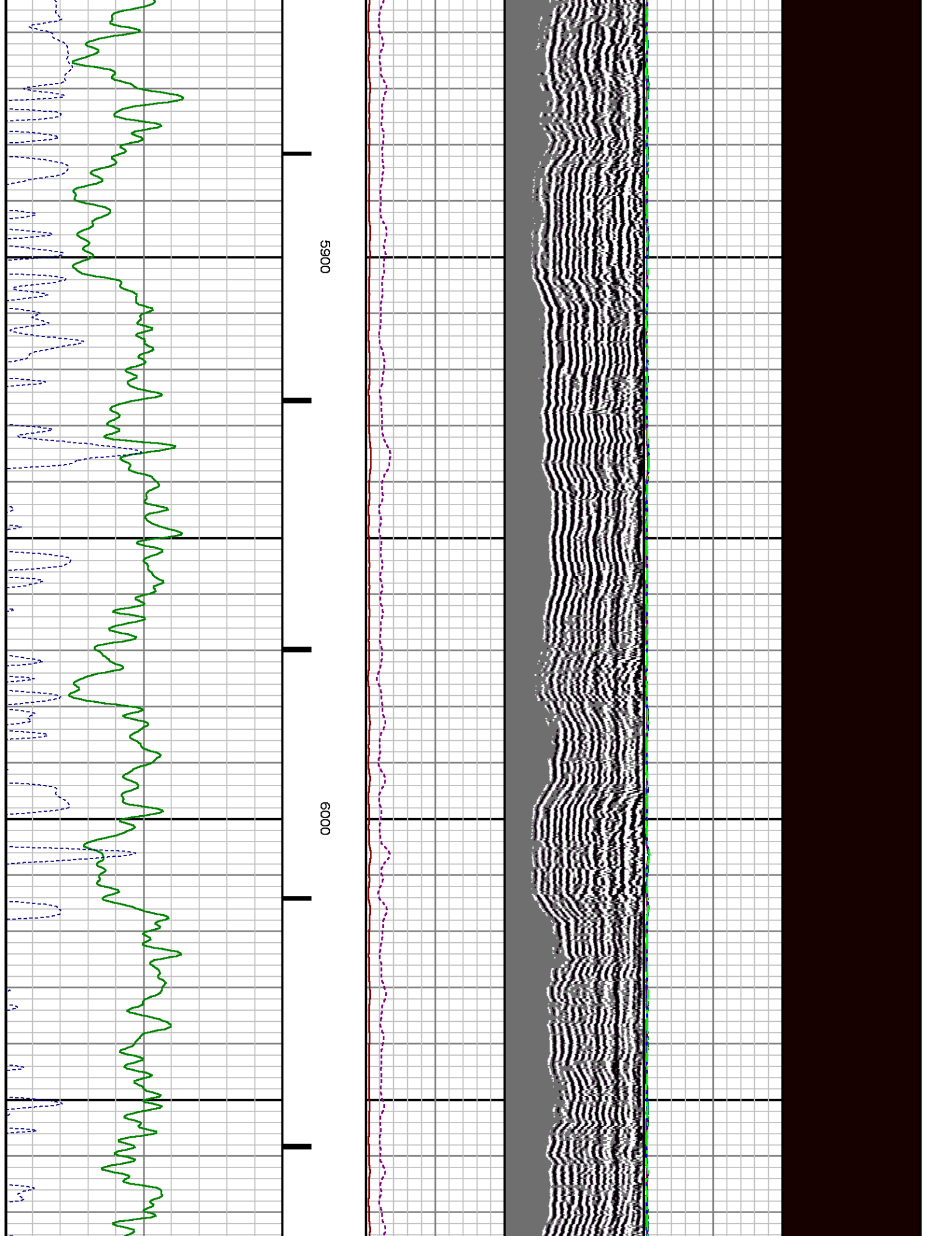


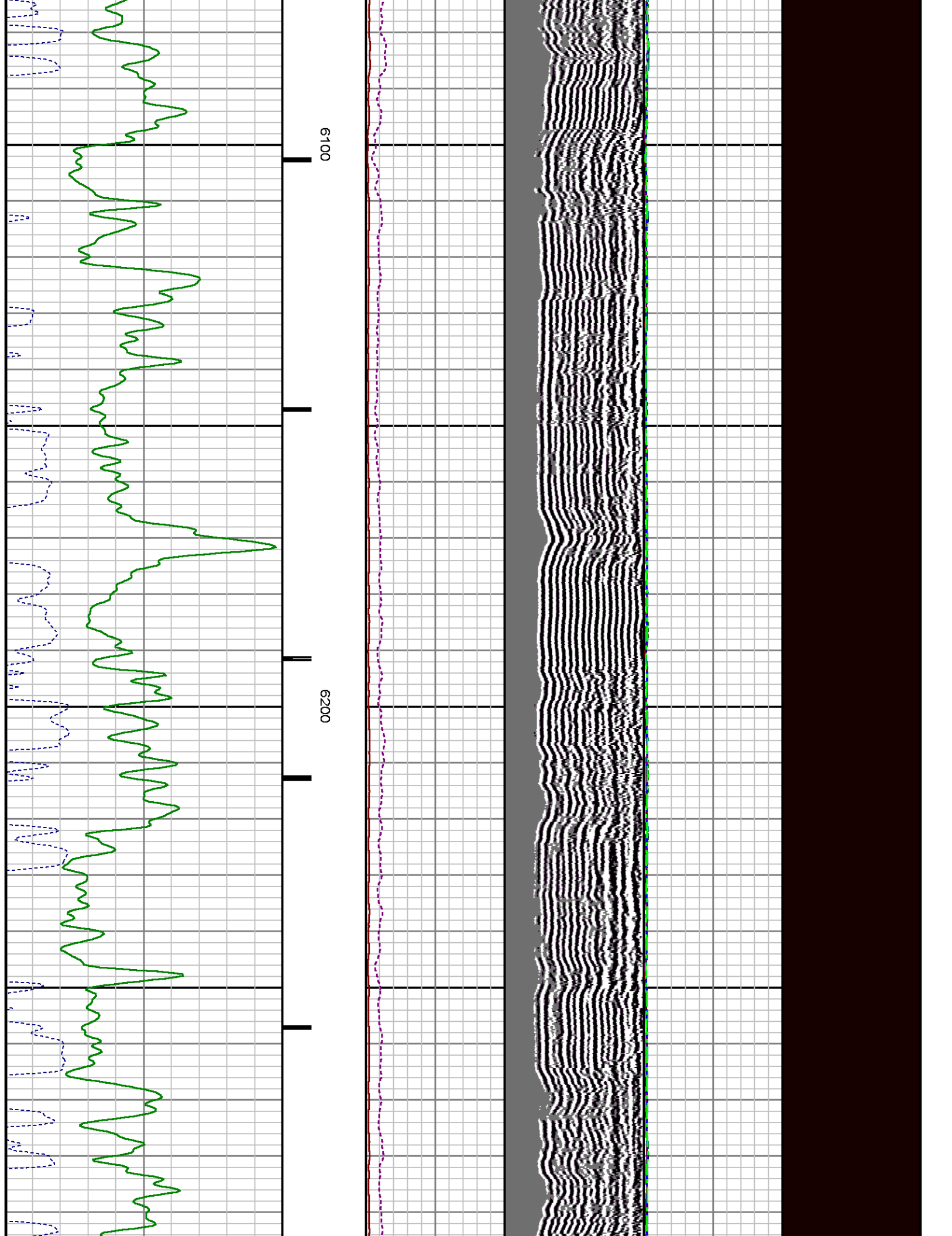


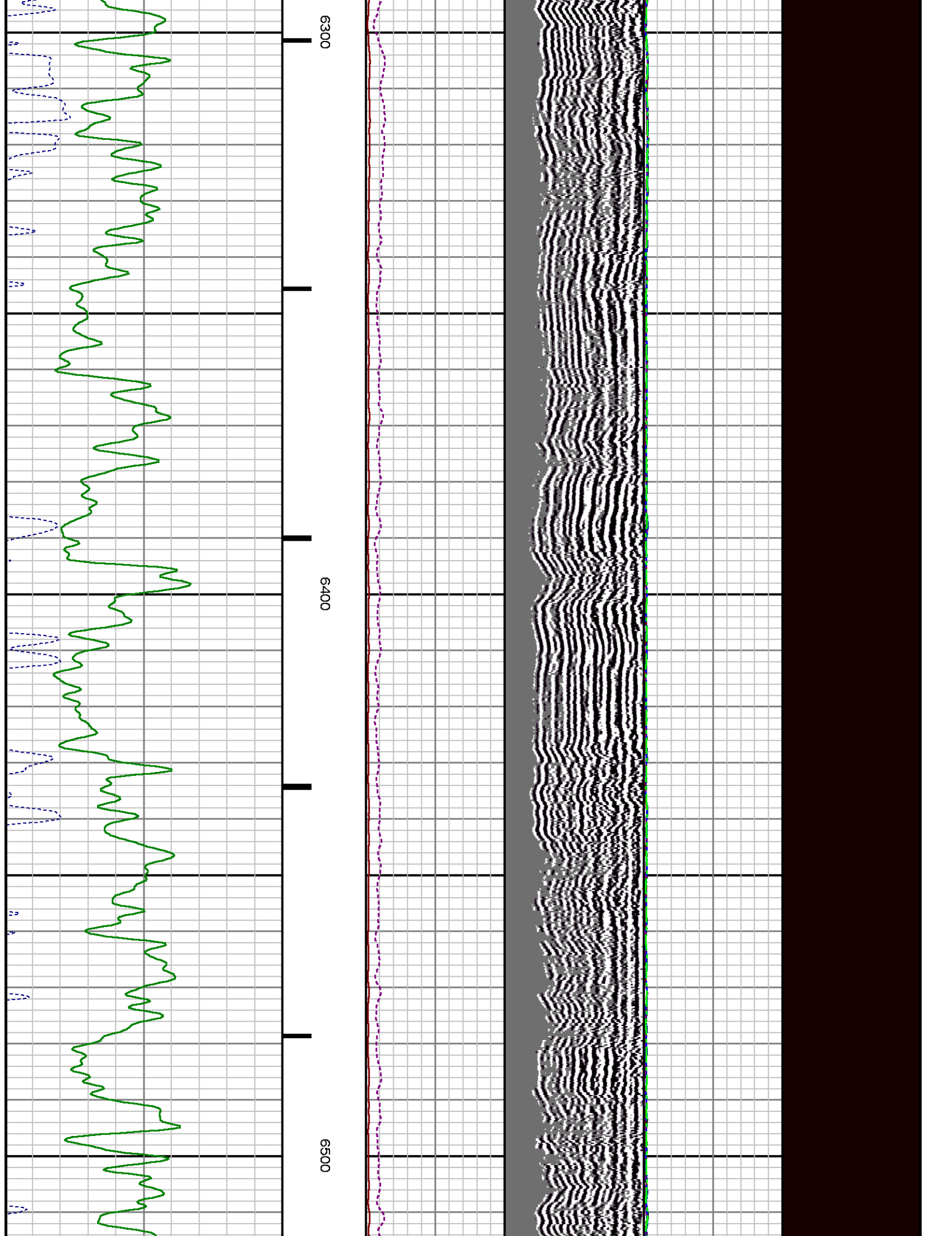


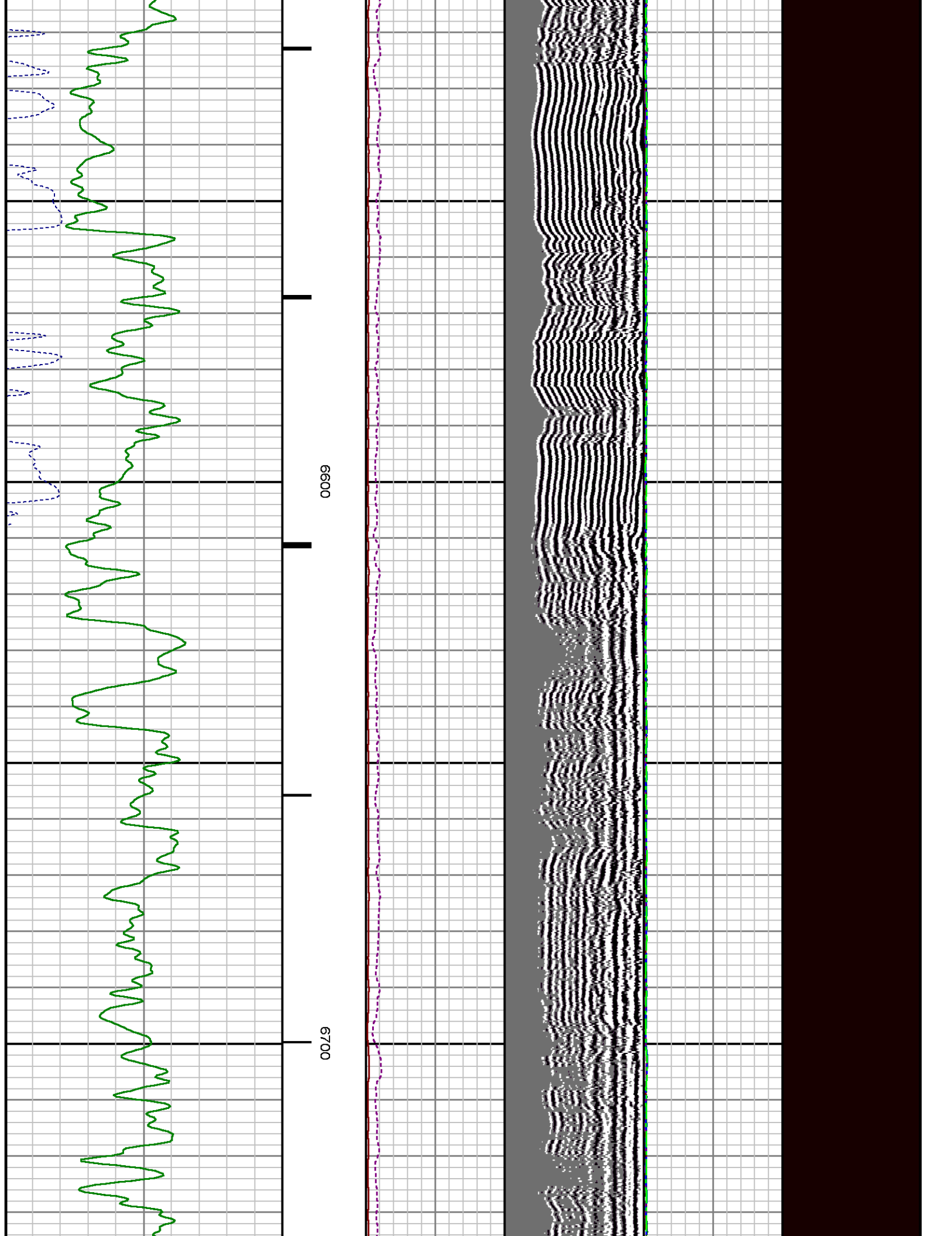


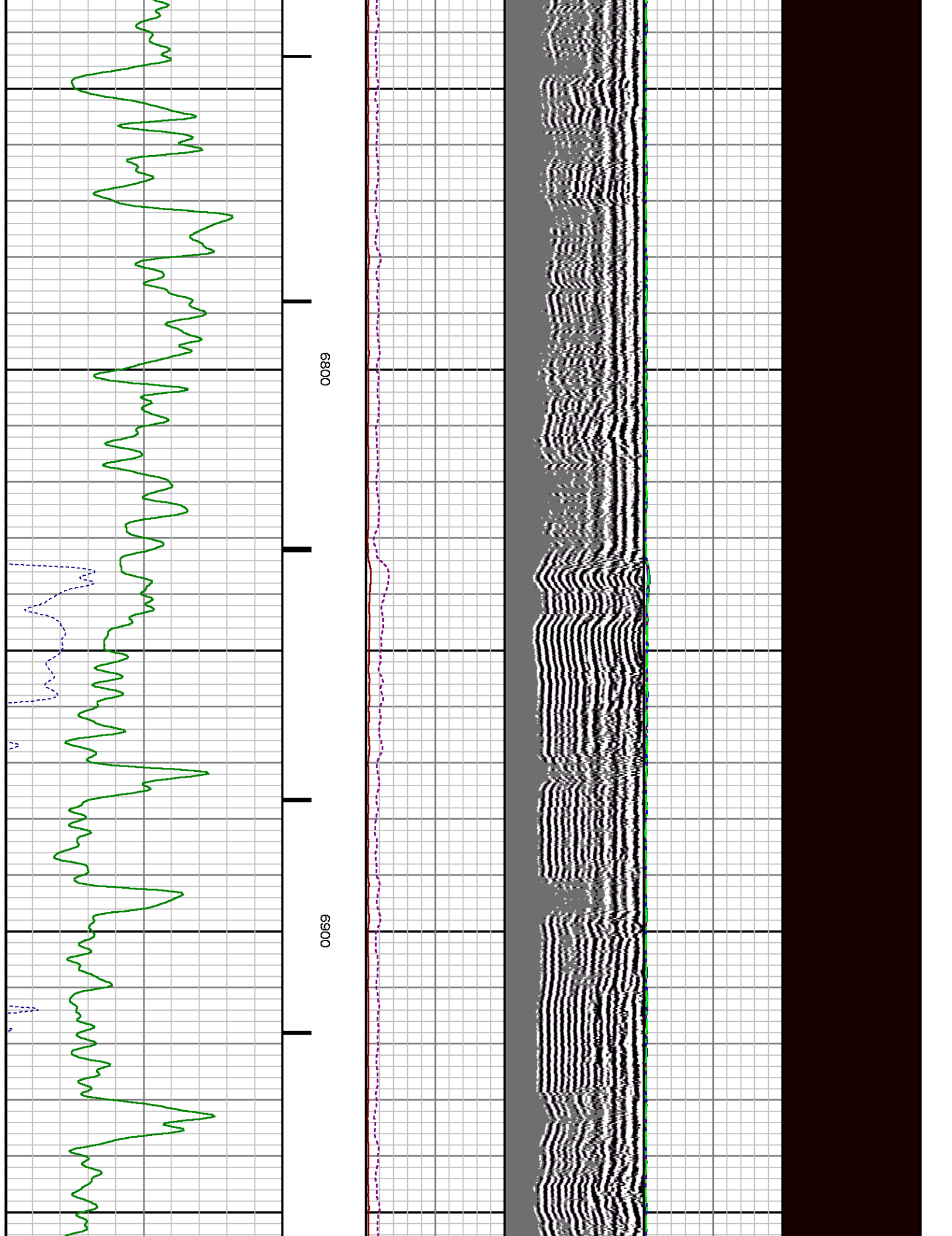


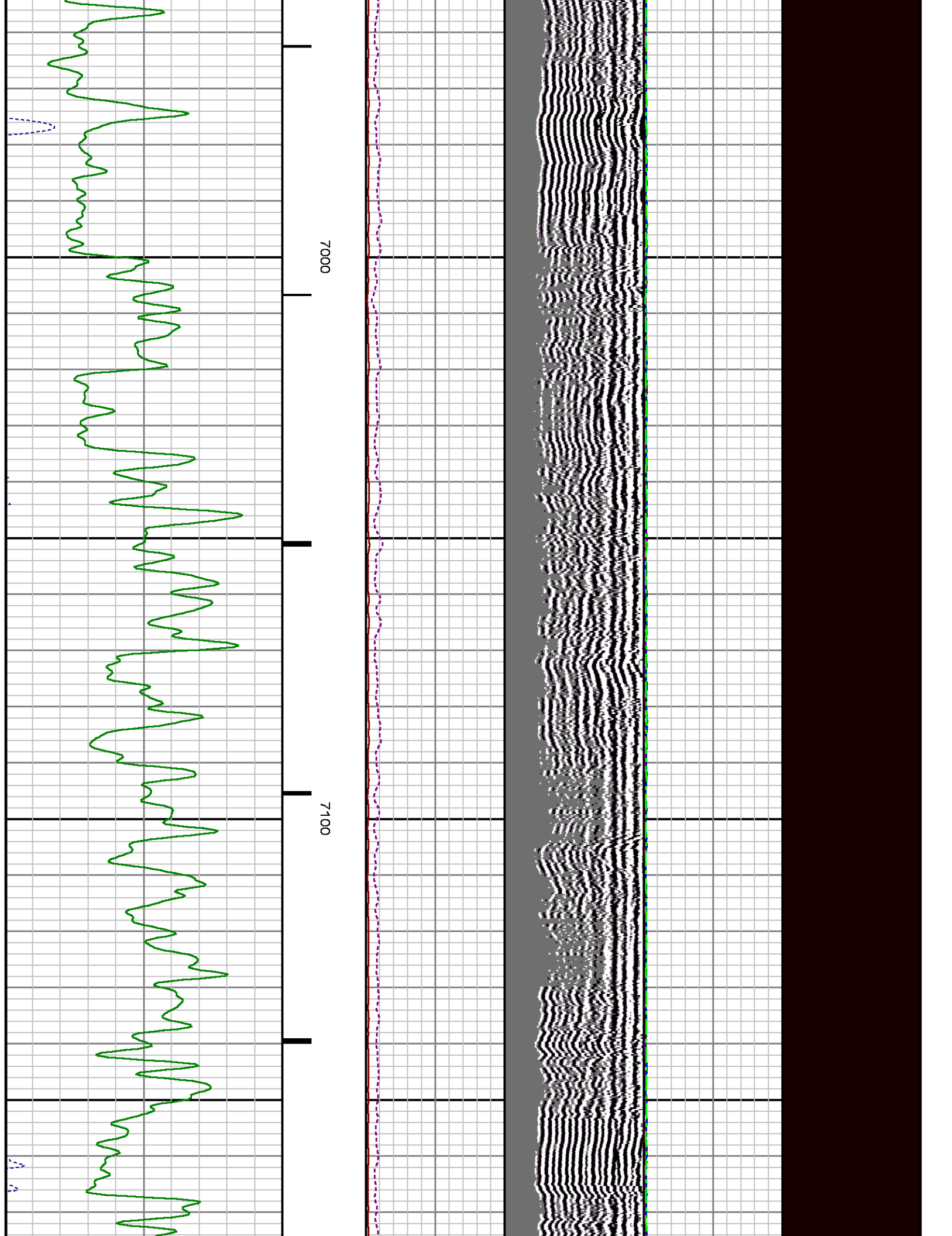


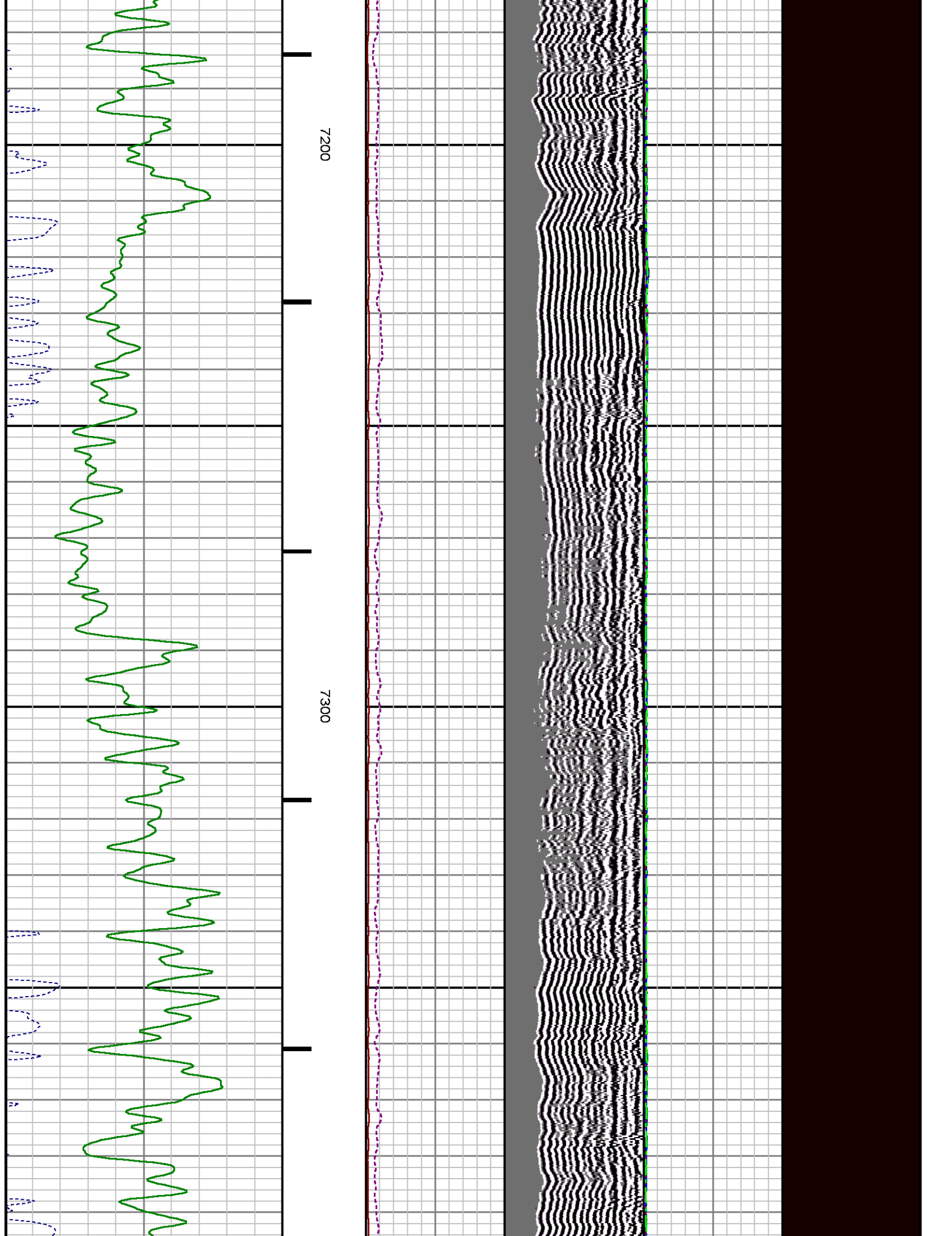


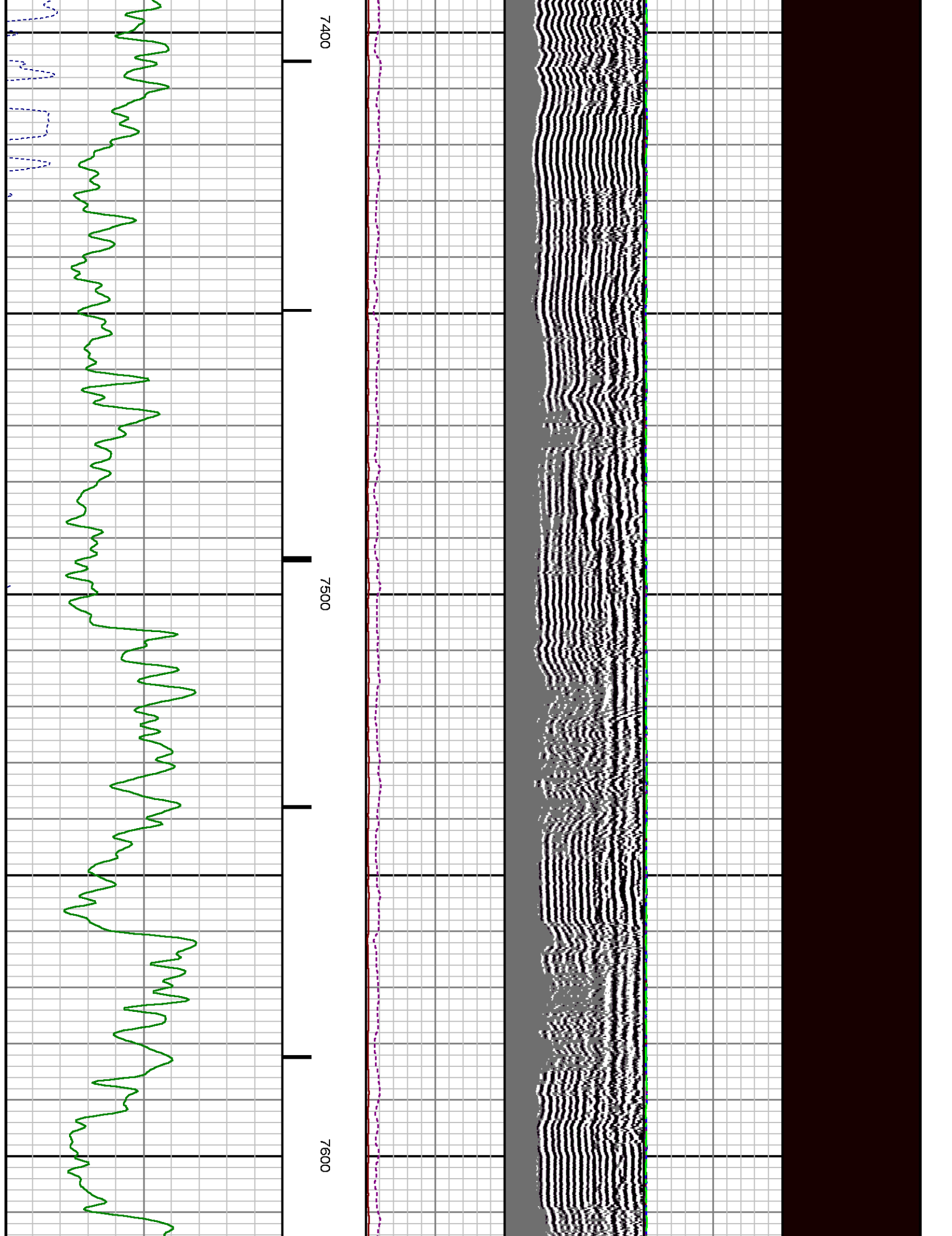


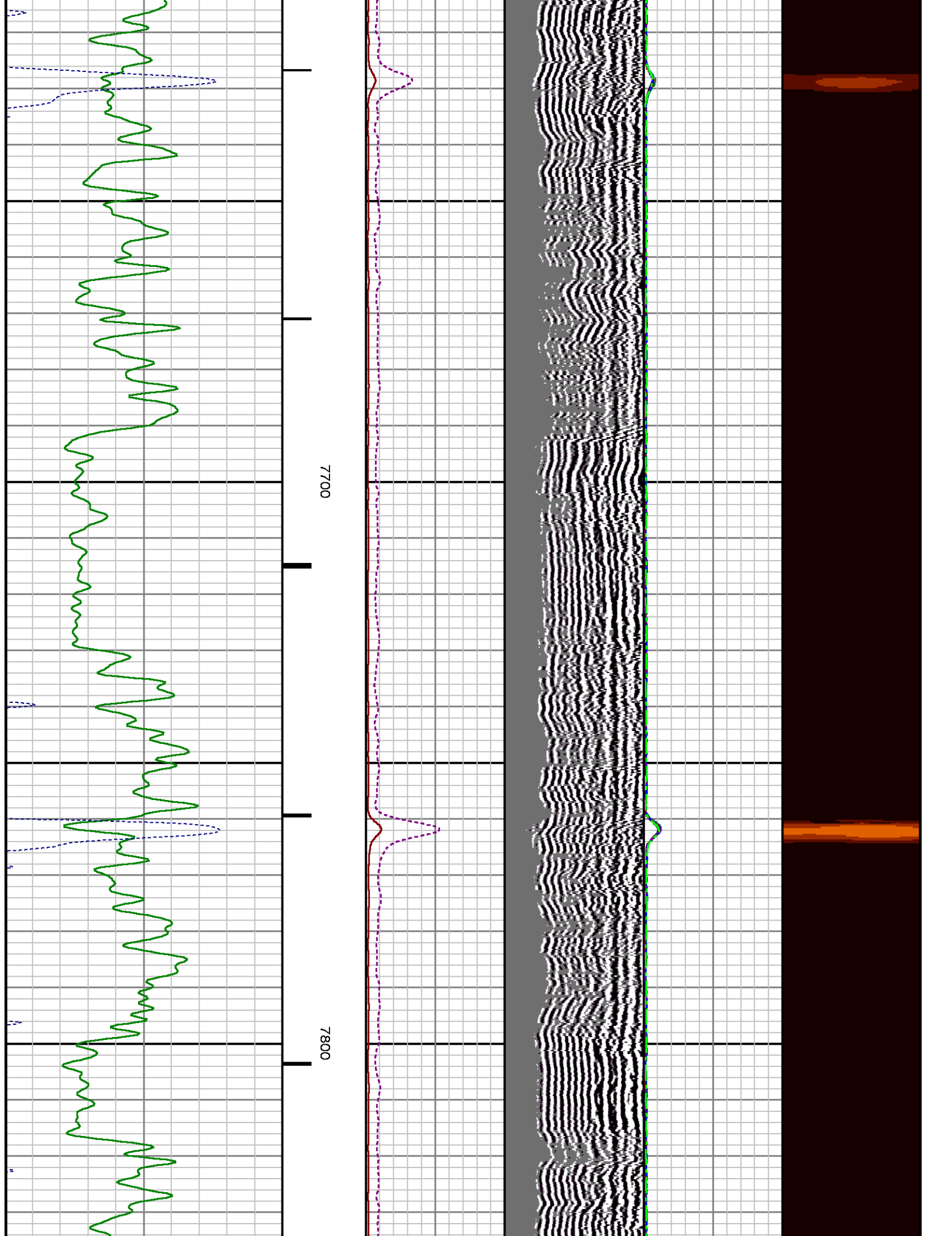


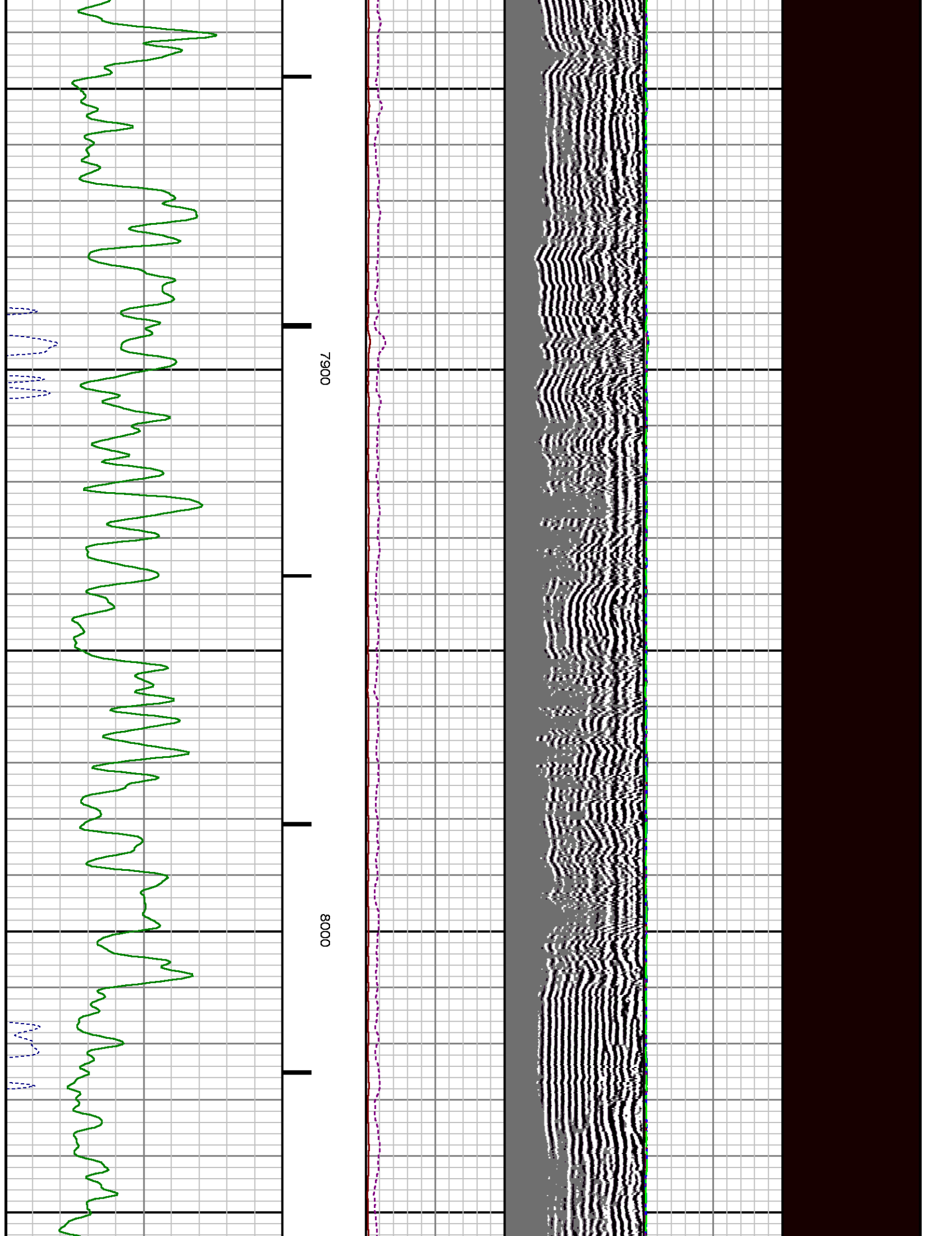


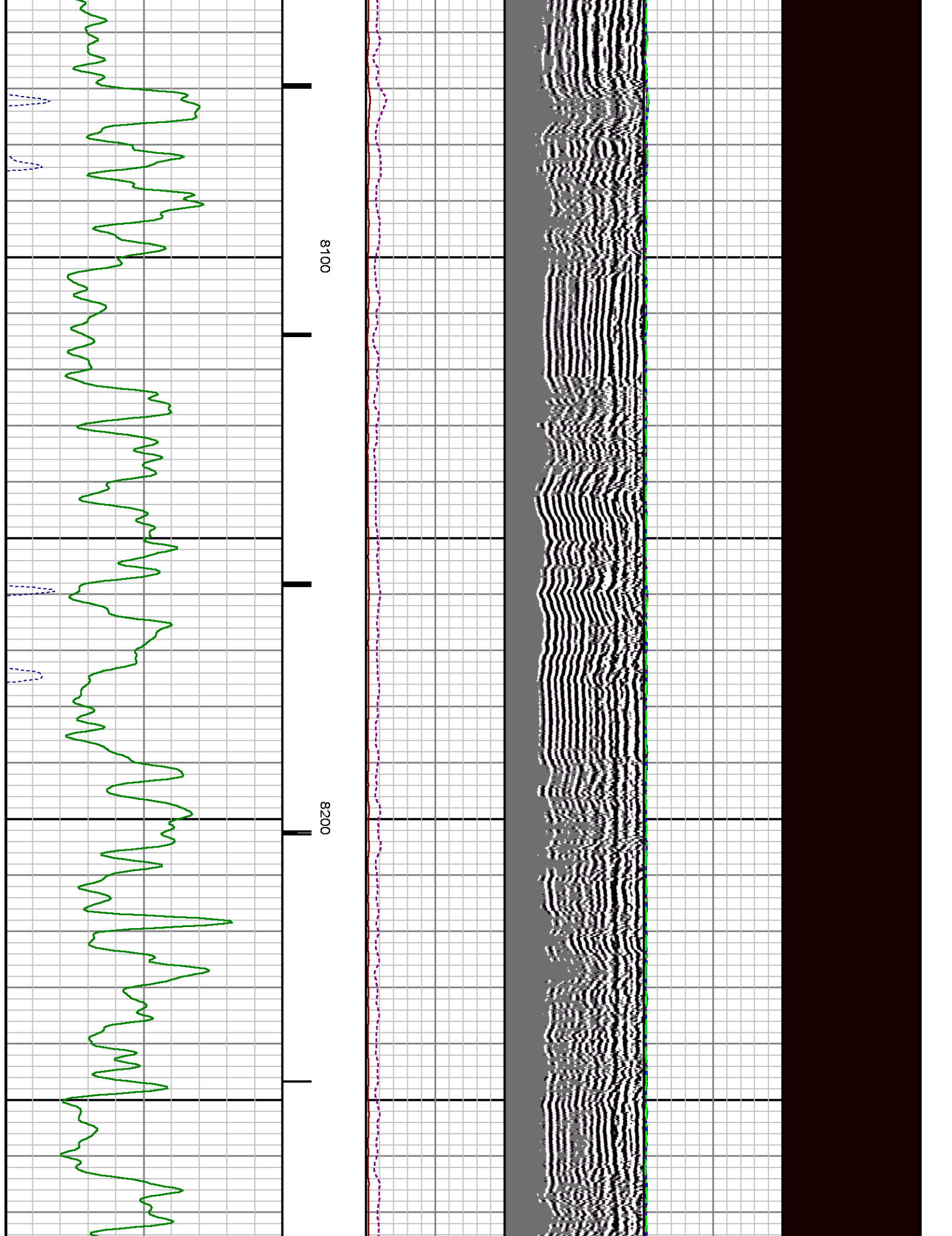


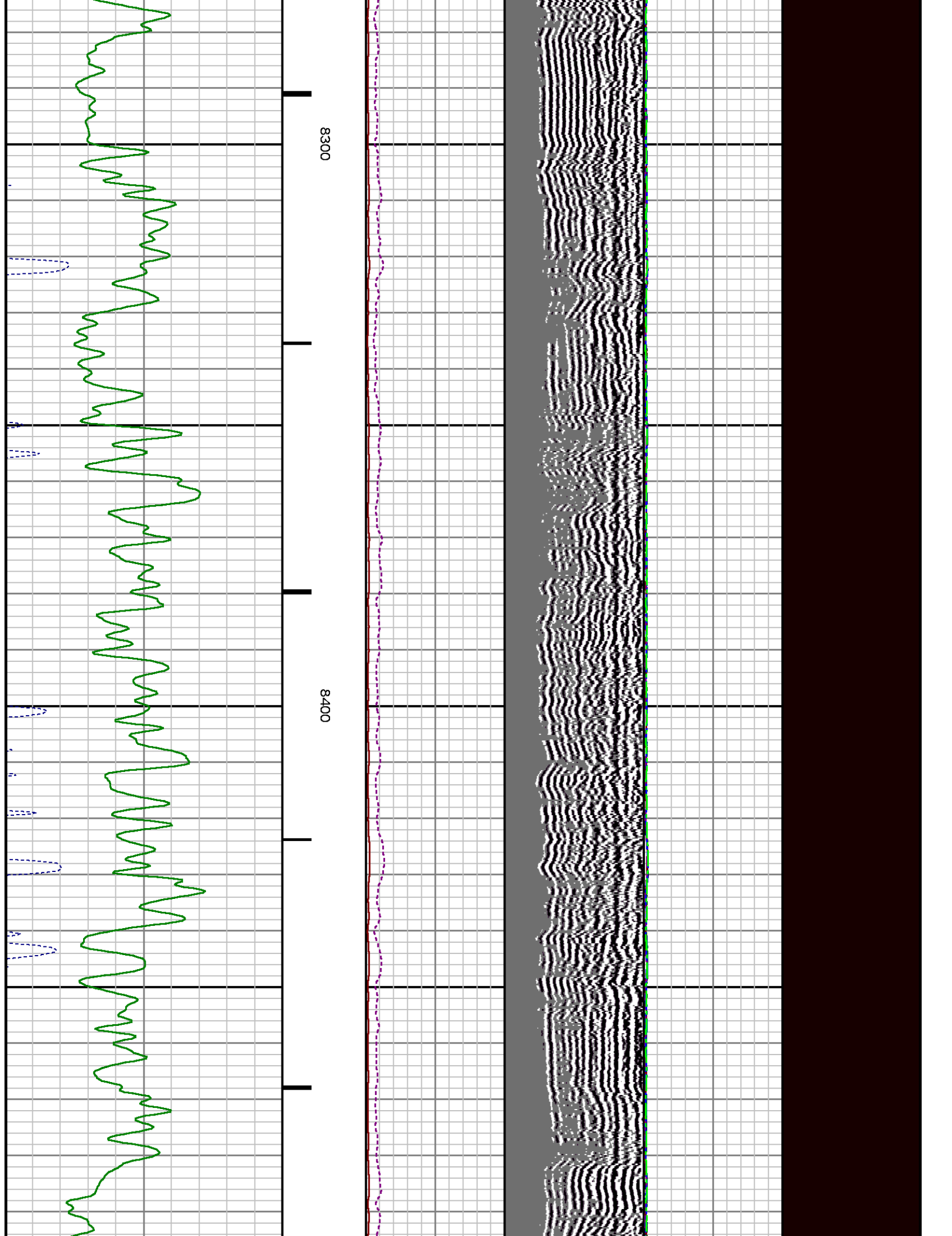


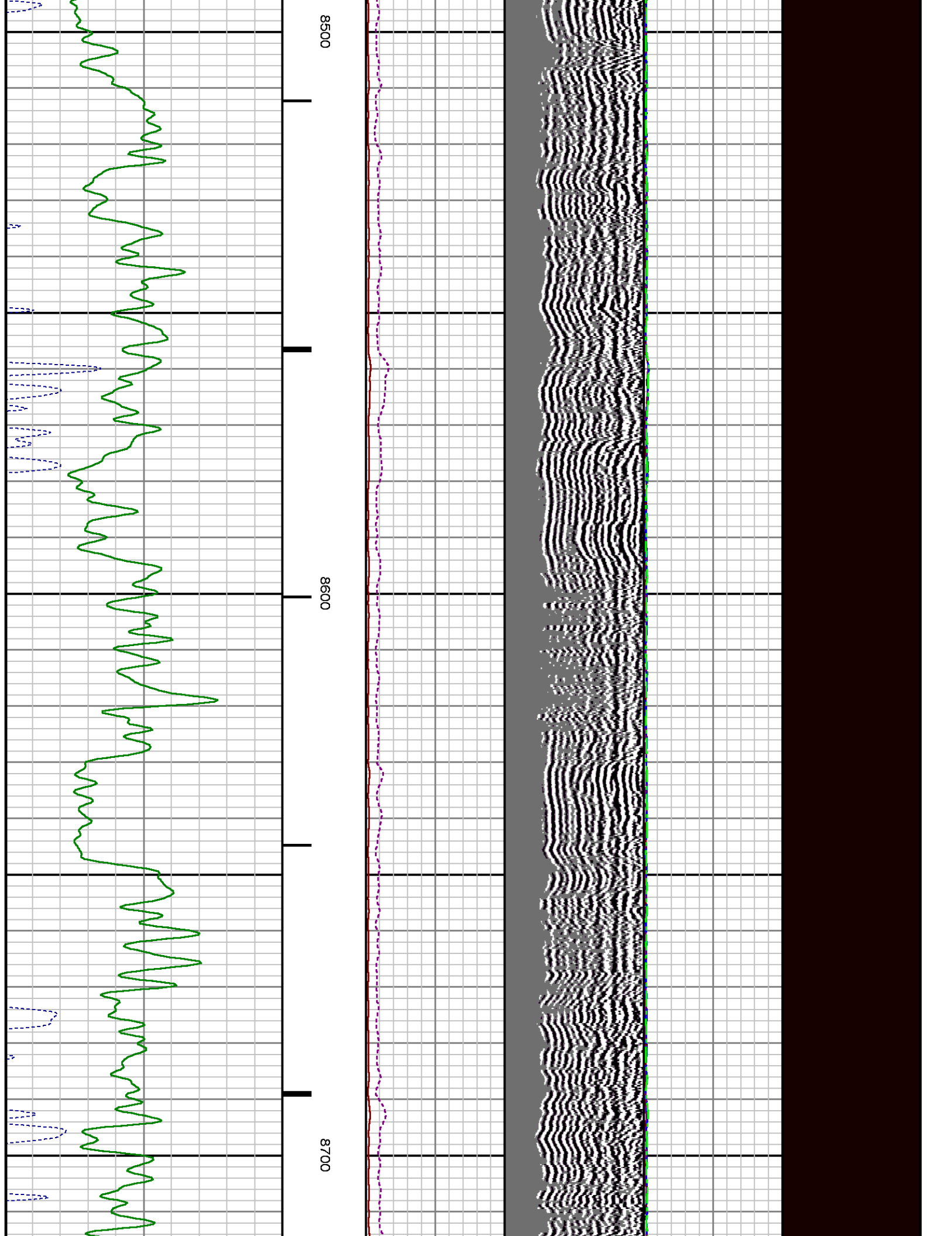


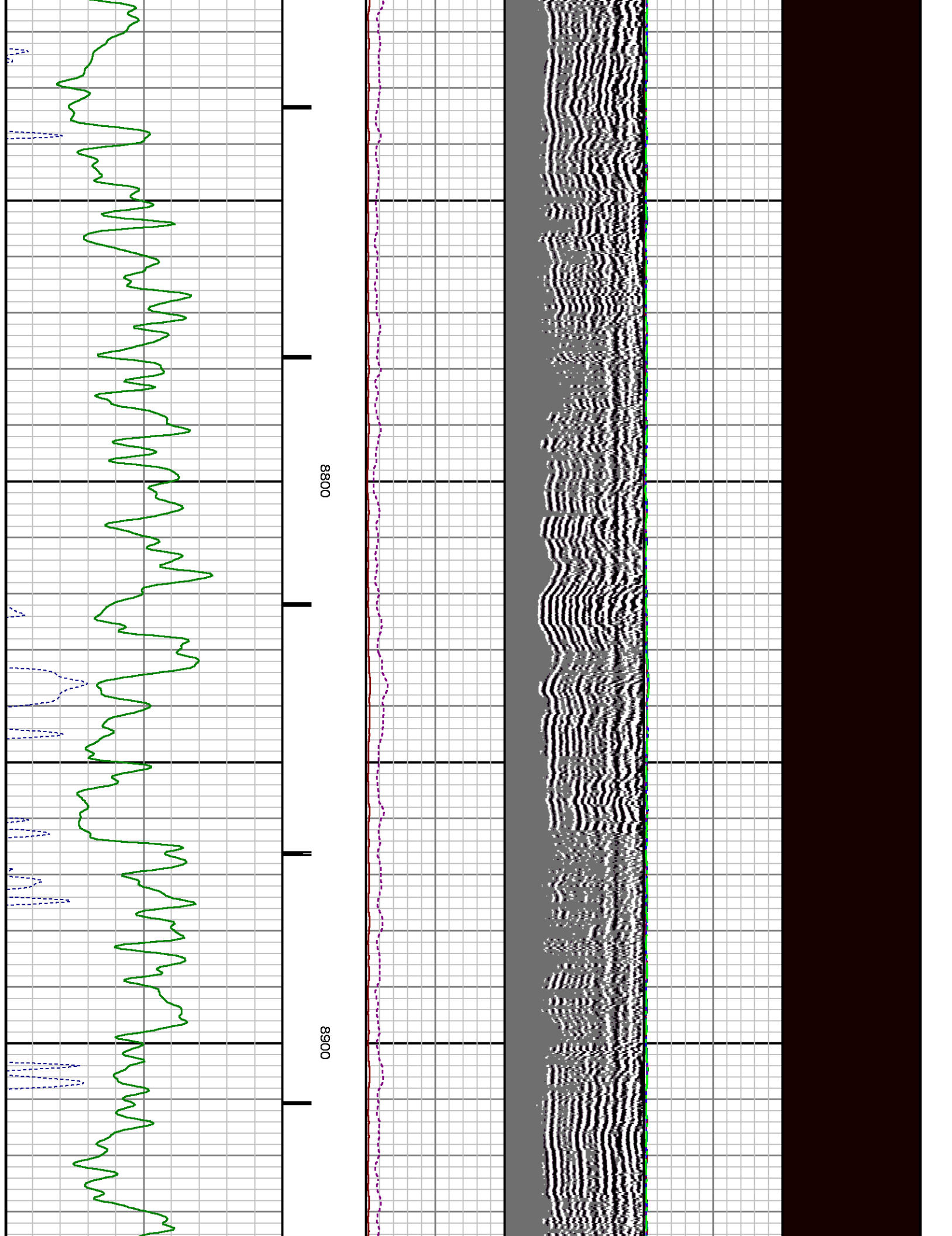


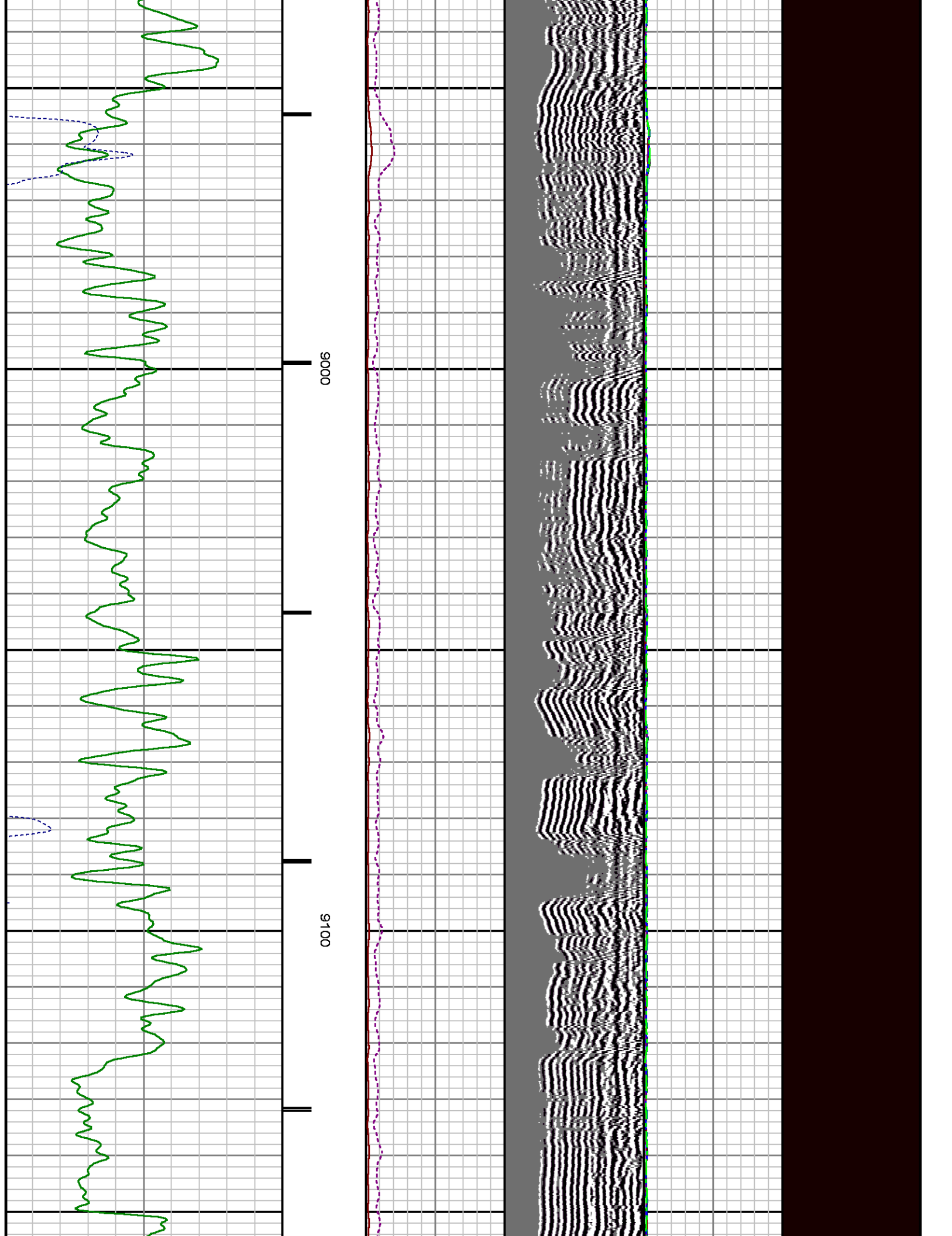


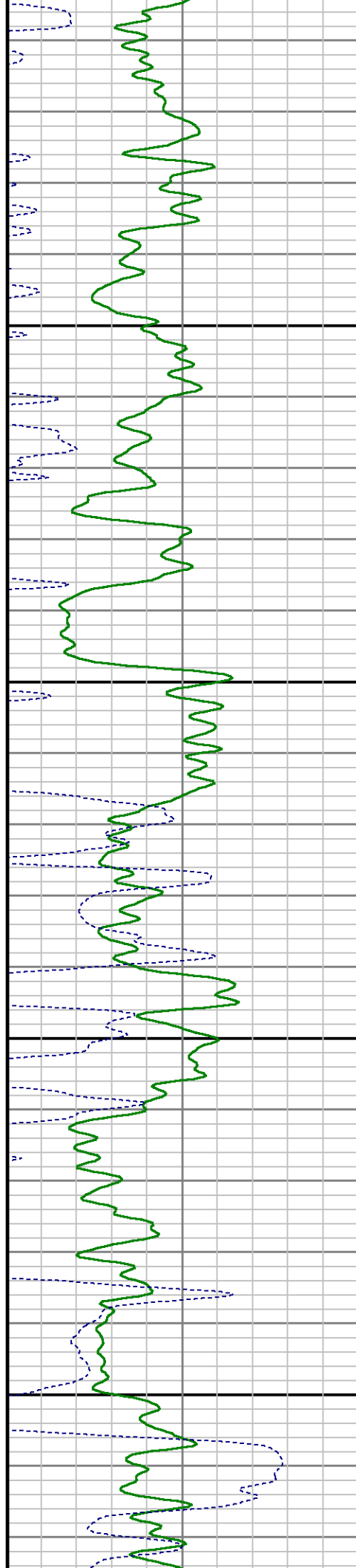
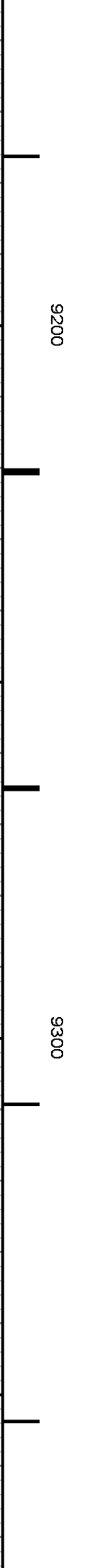
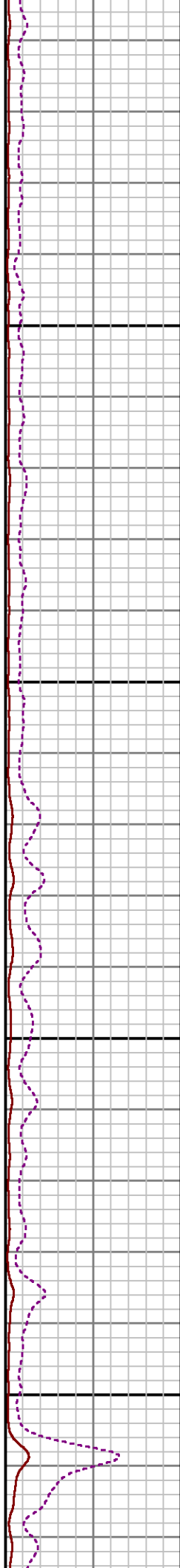
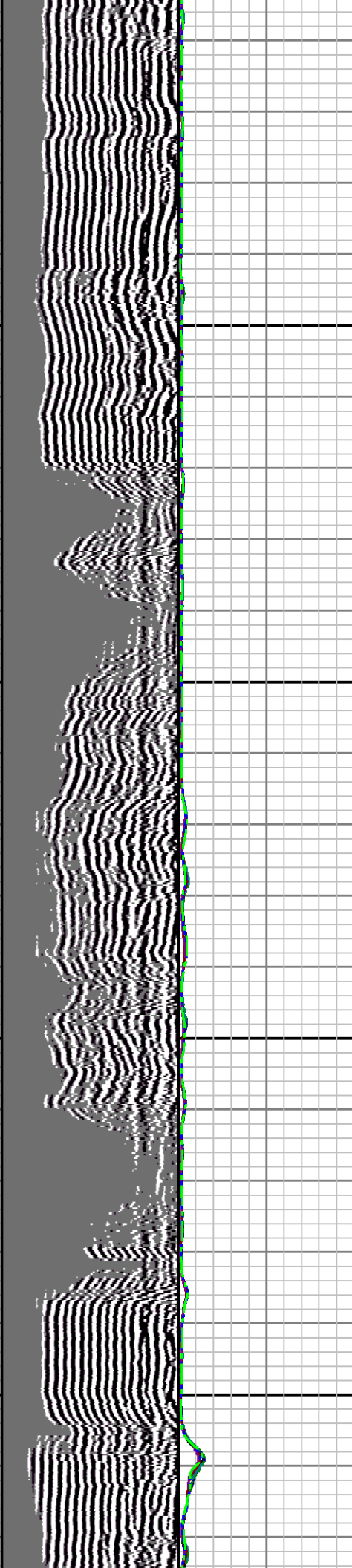


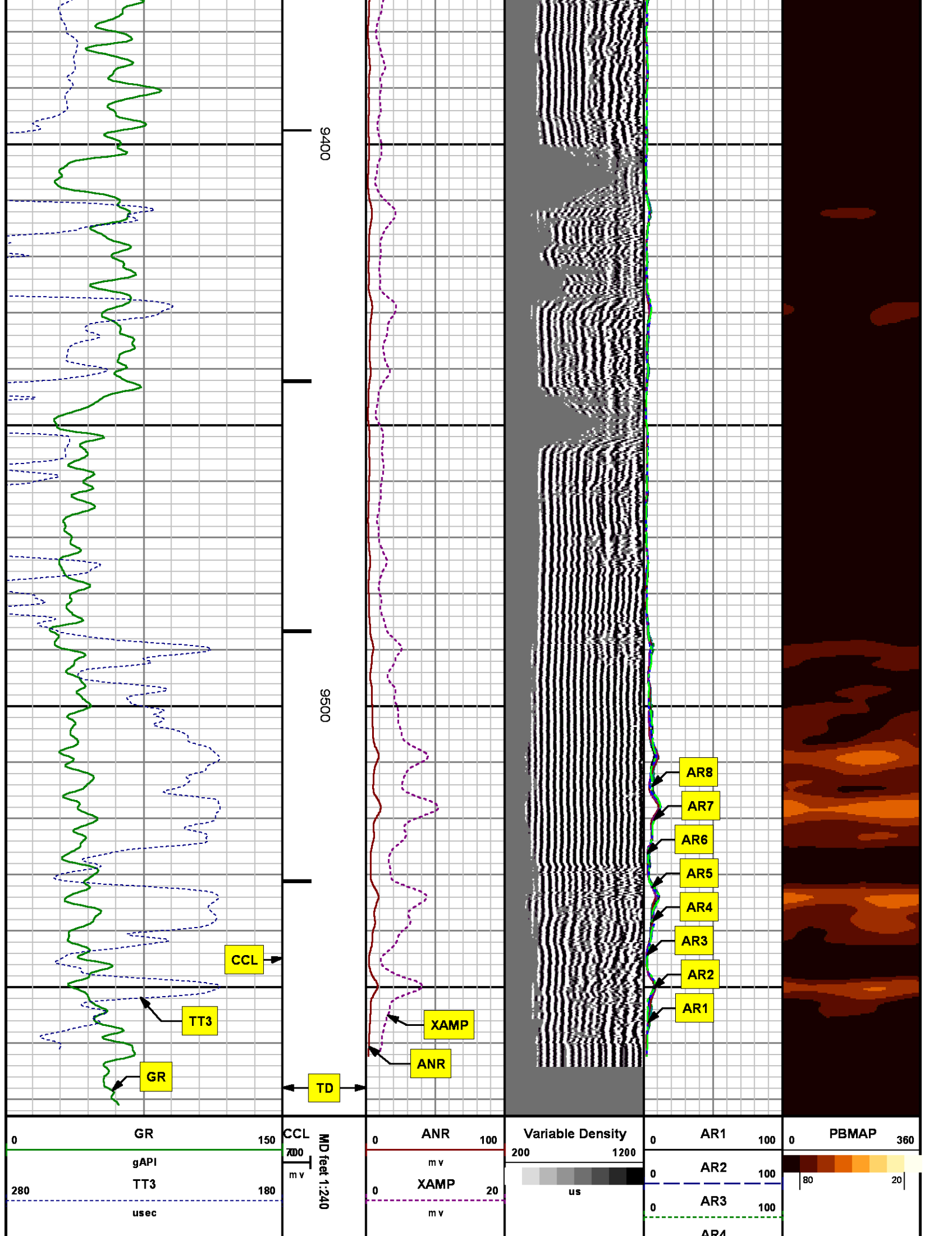












9400

9500

CCL

TT3

GR

TD

XAMP

ANR

AR8

AR7

AR6

AR5

AR4

AR3

AR2

AR1

0	GR	150
	gAPI	
280	TT3	180
	usec	

MD feet 1:240

0	ANR	100
	m v	
0	XAMP	20
	m v	

Variable Density

200 1200

us

0	AR1	100
0	AR2	100
0	AR3	100
	AR4	

PBMAP

0 360

80 20

0	AR4	100
0	AR5	100
0	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	9235.640	9568.640
RAL	Amp Gate Start Near	195.000	usec	9235.640	9568.640
RAL	Amp Gate Start Radial	195.000	usec	9235.640	9568.640
RAL	Amp Gate Width Far	25.000	usec	9235.640	9568.640
RAL	Amp Gate Width Near	25.000	usec	9235.640	9568.640
RAL	Amp Gate Width Radial	25.000	usec	9235.640	9568.640
RAL	casing od	4.500	inches	9235.640	9568.640
RAL	casing wt	11.600	lbm/ft	9235.640	9568.640
RAL	FB Start Far	291.900	usec	9235.640	9568.640
RAL	FB Start Near	175.391	usec	9235.640	9568.640
RAL	FB Start Radial	175.391	usec	9235.640	9568.640
RAL	FB Thresh Far	10.000	mv	9235.640	9568.640
RAL	FB Thresh Near	4.000	mv	9235.640	9568.640
RAL	FB Thresh Radial	4.000	mv	9235.640	9568.640
RAL	Fluid Travel Time	200.000	usec/ft	9235.640	9568.640

DEPTH OFFSETS
(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-11.000	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	-10.040	AFAR	SIG	TT5
2459XA	-5.620	CCL		
2459XA	-1.500	GR		
2459XA	0.000	NEU		

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

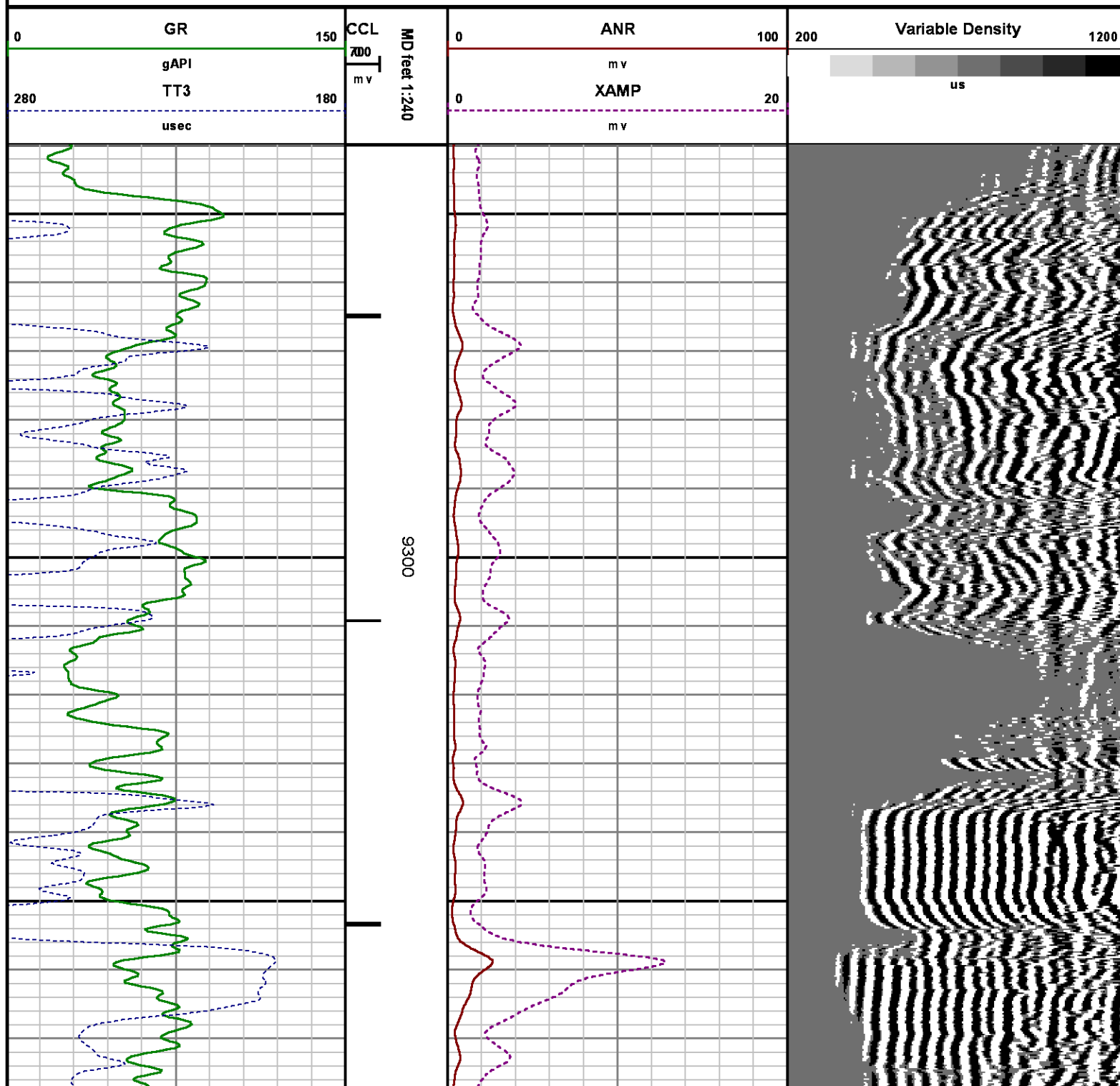
Well : AP 321-20-695

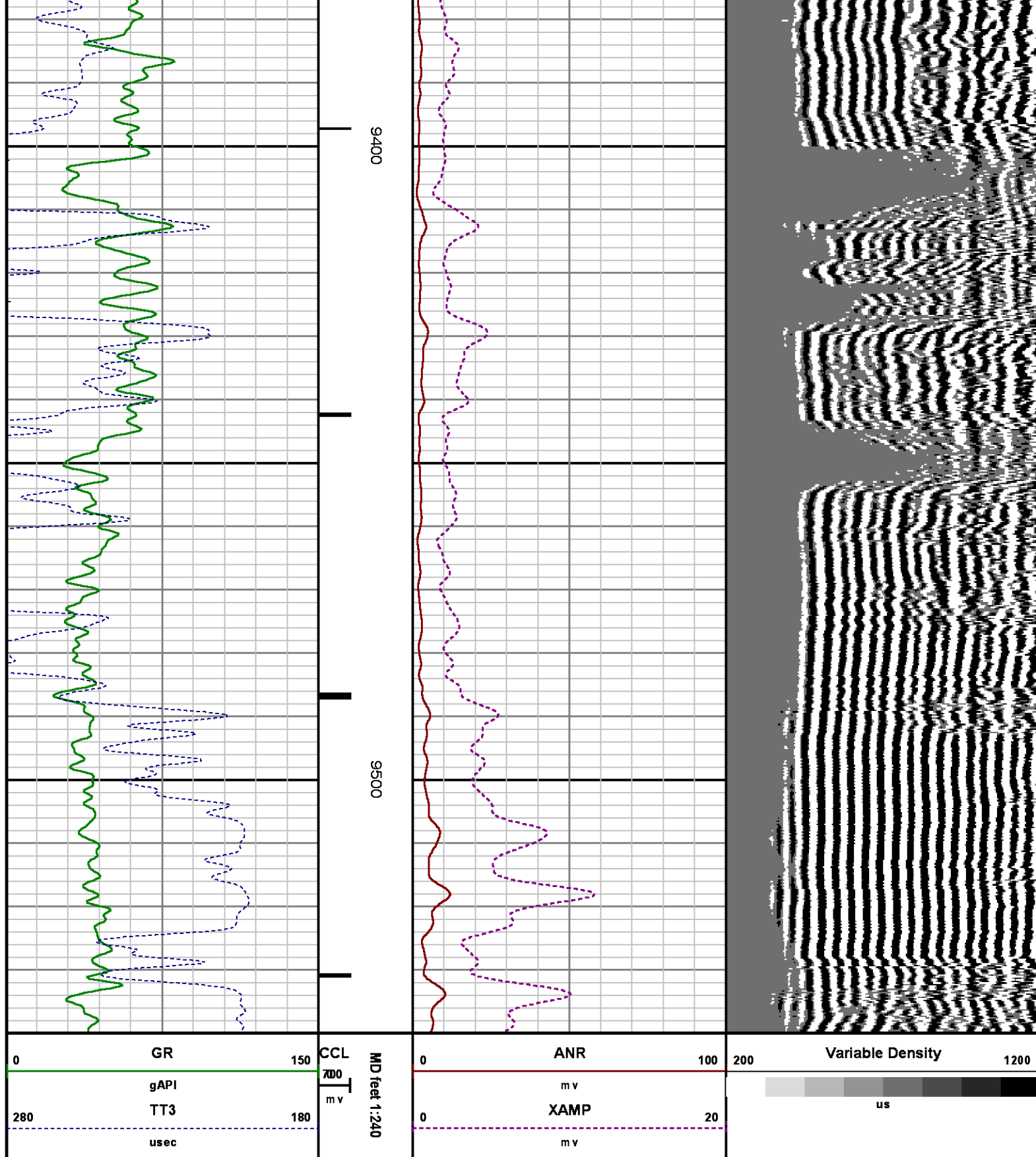
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Mode : PlotMgr 5.4.504

Interval : 9240.00 - 9540.00 feet UP

Created : 8/21/2014 12:18:28 PM





CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP496AA_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Aug 21 08:38:46 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: AA

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	-0.072	100.00	0.31
3 Ft. Receiver	219	216	30	166	16	0.293	100.00	0.31
5 Ft. Receiver	327	325	30	263	25	1.135	150.00	0.35
Radial #1	219	216	30	166	17	0.687	100.00	0.32
Radial #2	218	216	30	166	17	0.492	100.00	0.31
Radial #3	217	216	30	166	17	0.972	100.00	0.31
Radial #4	217	216	30	166	17	0.942	100.00	0.31
Radial #5	219	216	30	166	17	1.052	100.00	0.31
Radial #6	219	216	30	166	17	1.000	100.00	0.32
Radial #7	219	216	30	166	17	0.470	100.00	0.32
Radial #8	220	216	30	166	17	0.652	100.00	0.32

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD496AA fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Aug 21 08:44:52 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: AA

Tool Delay [usec] -53.00 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	-0.121	0.000	1.00	100.000
3 Ft. Receiver	200	30	2.235			
5 Ft. Receiver	317	30	2.229			
Radial #1	200	30	1.530			
Radial #2	200	30	1.538			
Radial #3	200	30	1.939			
Radial #4	200	30	2.041			
Radial #5	200	30	2.188			
Radial #6	200	30	2.202			
Radial #7	200	30	1.742			
Radial #8	200	30	1.608			

GAMMA RAY #2

Calibration File: C:\case\calver\GR\51021.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Aug 21 08:27:45 2014 TOOL SERIES: 2459XA ASSET: 510 SEQ: 21

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	59.20	389.20	0.561	33.19	218.19	185.00

Verification File: C:\case\calver\GR\51021.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Thu Aug 21 08:31:11 2014 TOOL SERIES: 2459XA ASSET: 510 SEQ: 21

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	60.31	384.76	0.561	33.81	215.70	181.89

TOOL DIAGRAM

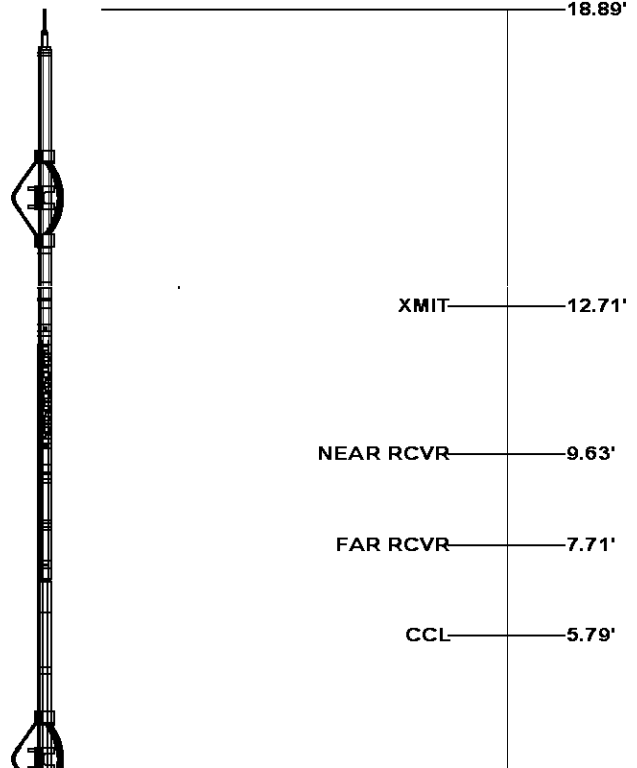
OTA SHORT CABLE HEAD

PROBE 2 3/4 DUAL RECEIVER RADII

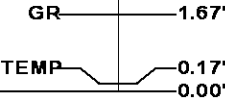
Series 1426XA
Mnemonic PROB
Diameter 2.75"
Length 11.17'
Measure Point 0.75' FAR RCVR
Measure Point 2.67' NEAR RCVR
Measure Point 5.75' XMIT
Temp Rating 350.00 °F
Press Rating 18000.00 PSI

RAL GR/TEMP/CCL/CHV DETECTOR

Series 1355XA
Mnemonic RAL
Diameter 2.75"
Weight 85.00 lb
Length 6.96'
Measure Point 0.17' TEMP



Measure Point	1.67' GR
Measure Point	5.79' CCL
Temp Rating	400.00 °F
Press Rating	20000.00 PSI



Total Length: 18.89'
Total Weight: Not Available
Max Diameter: 0' 2.75"



Baker Atlas



Company	WPX ENERGY		
Well	AP 321-20-695		
Field	PARACHUTE		
County	GARFIELD	State	CO

File No:
CH089260
API No:
05045213820000

Location	Elevations
SHL: 54' FNL & 2493' FWL	KB 6935
BHL: 144' FNL & 715' FWL	DF
	GL 6909
SEC 20 TWP 6S RGE 95W	

20 6S 95W
AP 21-20-695 PAD
NABORS 573