



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: _____ Company _____ WPX ENERGY

CH08231 0 Well _____ SAVAGE RWF 311-25

API No: _____ Field _____ RULISON

05045219770000 County _____ GARFIELD State _____ COLORADO

25 6S 94W Location _____

RWF 22-25 PAD SHL: 2471' FNL & 1407' FWL

CYCLONE 17 BHL: 1148' FNL & 833' FWL (NWNW)

SEC 25 TWP 6S RGE 94W

Other Services

RPM

Permanent Datum GL _____ Elevation 6037 ft

Log Measured From KB _____ 21 ft Above P. D.

Drill Measured From _____ KELLY BUSHING

Elevations

KB 6058 ft

DF _____

GL 6037 ft

Date	04/FEB/14	
Run	ONE	
Service Order	US628278	
Depth Driller	8727 ft	
Depth Logger	8711 ft	
Bottom Logged Interval	8701 ft	
Top Logged Interval	21 ft	
Time Started	1200	
Time Finished	1630	
Operator Rig Time	3.5 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	67 ft	
Logged Cement Top	NA	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	NA	
Nominal Logging Speed	66 fpm	
Maximum Recorded Temperature	232 degF	
Reference Log	NONE	
Reference Log Date	NA	
Equipment No.	4271	GRANDUCT
Recorded By	FLYOD RENEAU	
Witnessed By	COLLEAPLEGATE	

- 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	1119 ft
8.75 in	1119 ft	8727 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in			0 ft	1119 ft
4.5 in	11.6 lbm/ft	I-80	0 ft	8727 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 13.5 feet.
Logged with zero PSI at wellhead.
BHT = 232°F
SJ = 5246'-5270'

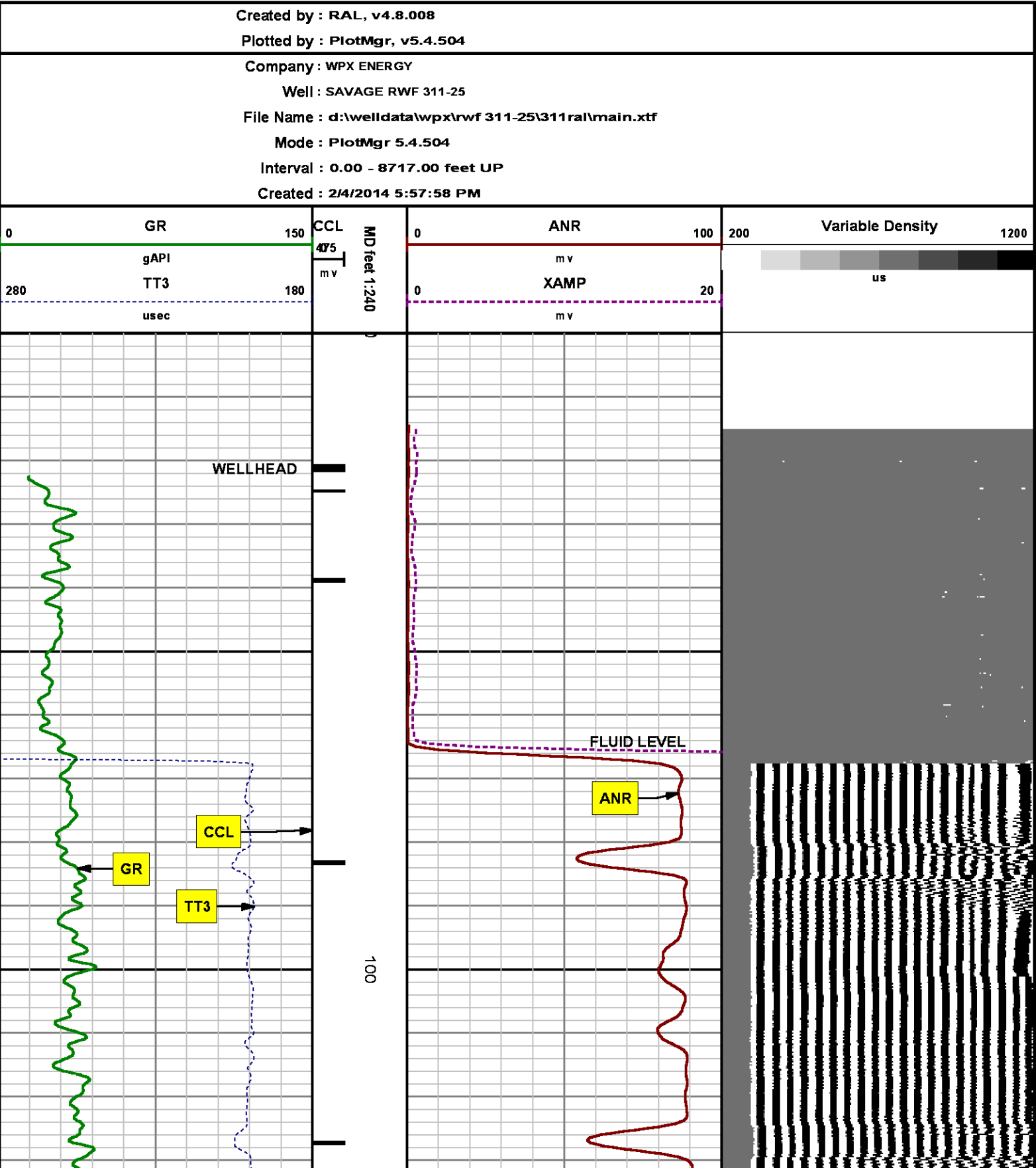
Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1426XA	10218496	CENT
1	1	GR/CCL	2459XA	10124121	CENT

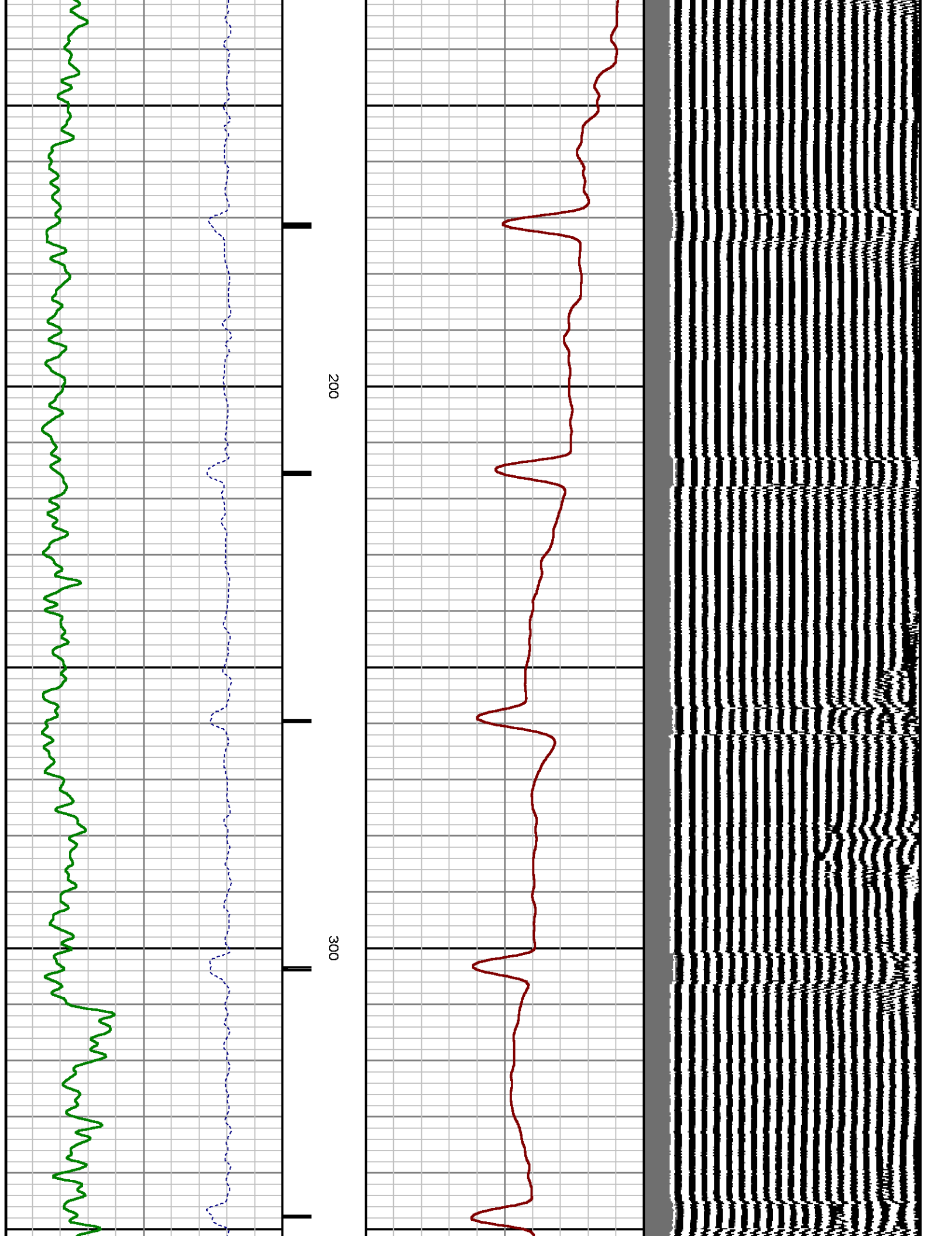
PRIMARY PRESENTATION
0 PSI

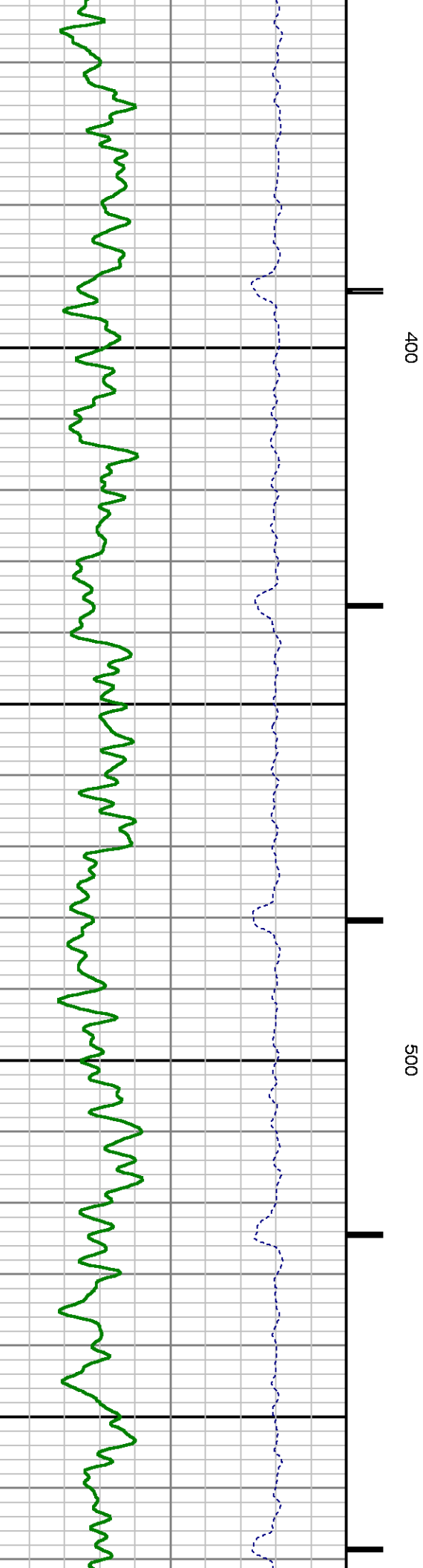
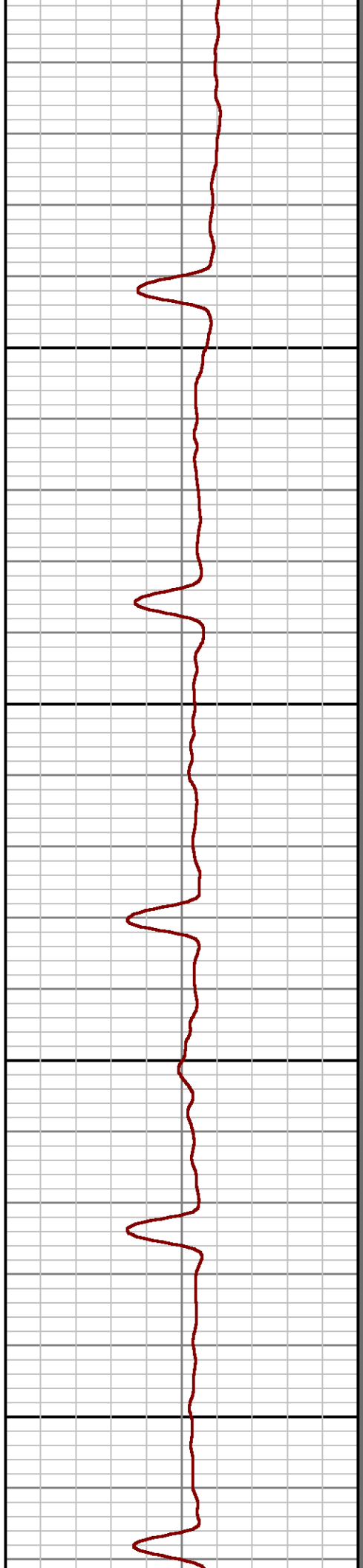
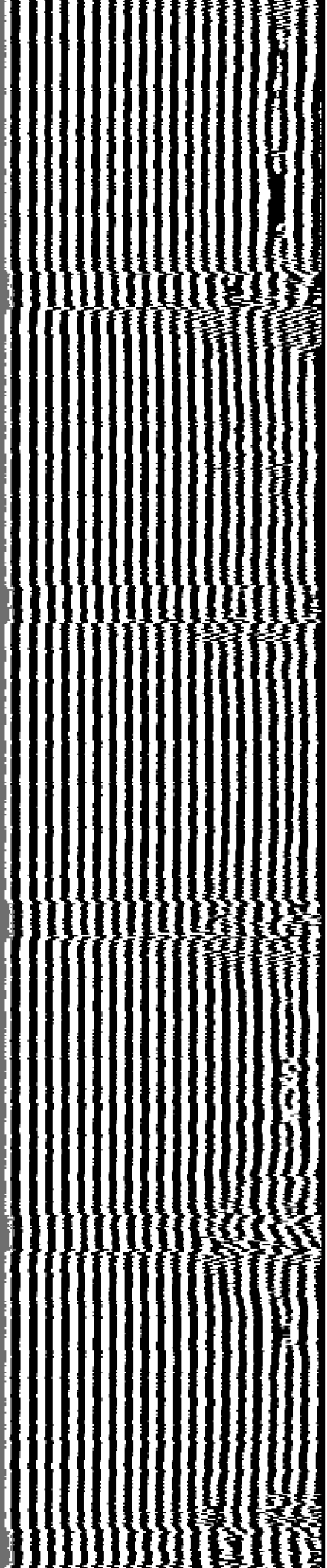
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	30.718	8712.500
RAL	Amp Gate Start Near	195.000	usec	30.718	8712.500
RAL	Amp Gate Start Radial	195.000	usec	30.718	8712.500
RAL	Amp Gate Width Far	25.000	usec	30.718	8712.500
RAL	Amp Gate Width Near	25.000	usec	30.718	8712.500
RAL	Amp Gate Width Radial	25.000	usec	30.718	8712.500
RAL	casing od	4.500	inches	30.718	8712.500
RAL	casing wt	11.600	lbm/ft	30.718	8712.500
RAL	FB Start Far	291.900	usec	30.718	8712.500
RAL	FB Start Near	175.391	usec	30.718	8712.500
RAL	FB Start Radial	175.391	usec	30.718	8712.500
RAL	FB Thresh Far	10.000	mv	30.718	8712.500
RAL	FB Thresh Near	4.000	mv	30.718	8712.500
RAL	FB Thresh Radial	4.000	mv	30.718	8712.500
RAL	Fluid Travel Time	200.000	usec/ft	30.718	8712.500

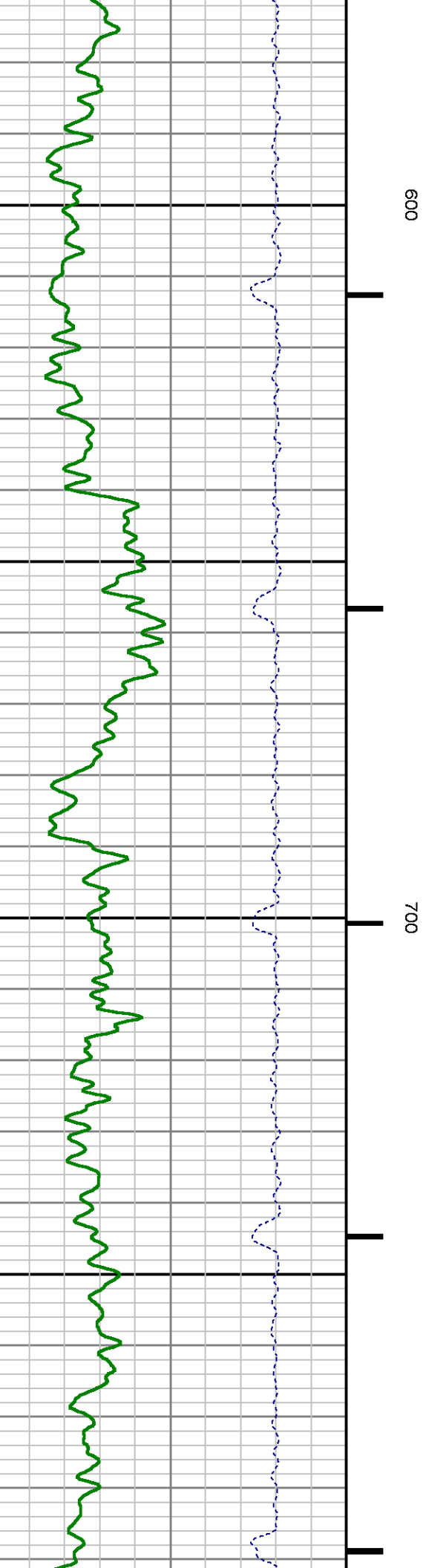
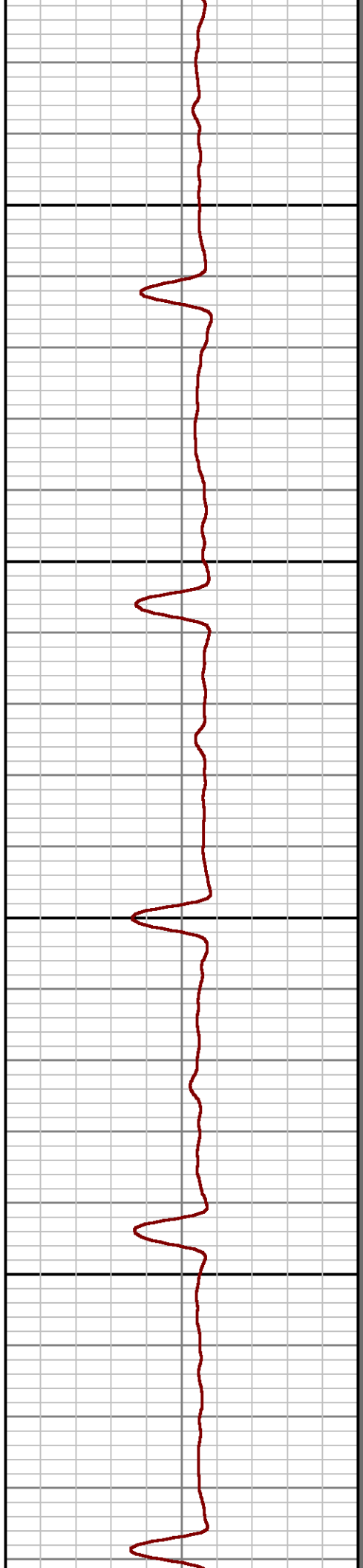
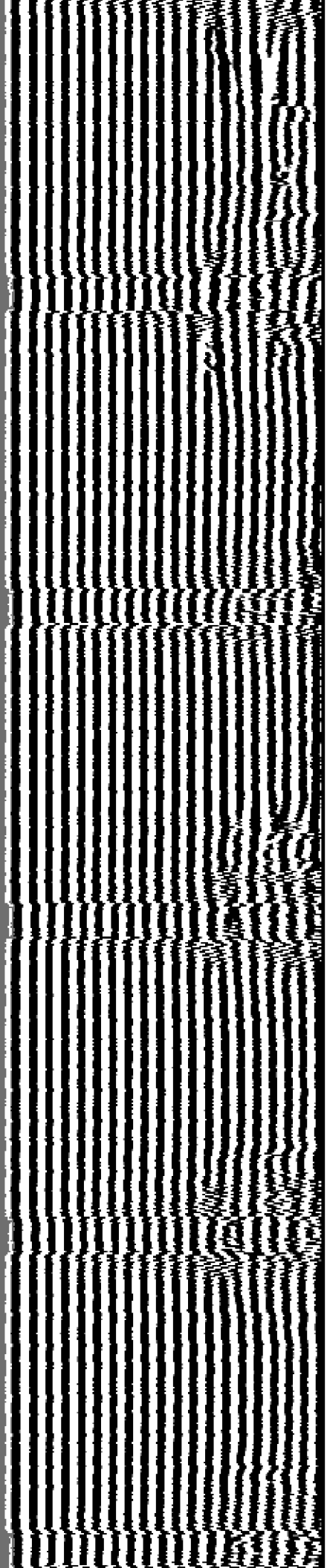
DEPTH OFFSETS							
(for Acquired Curves)							
SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-16.750	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	CHV	FPR2

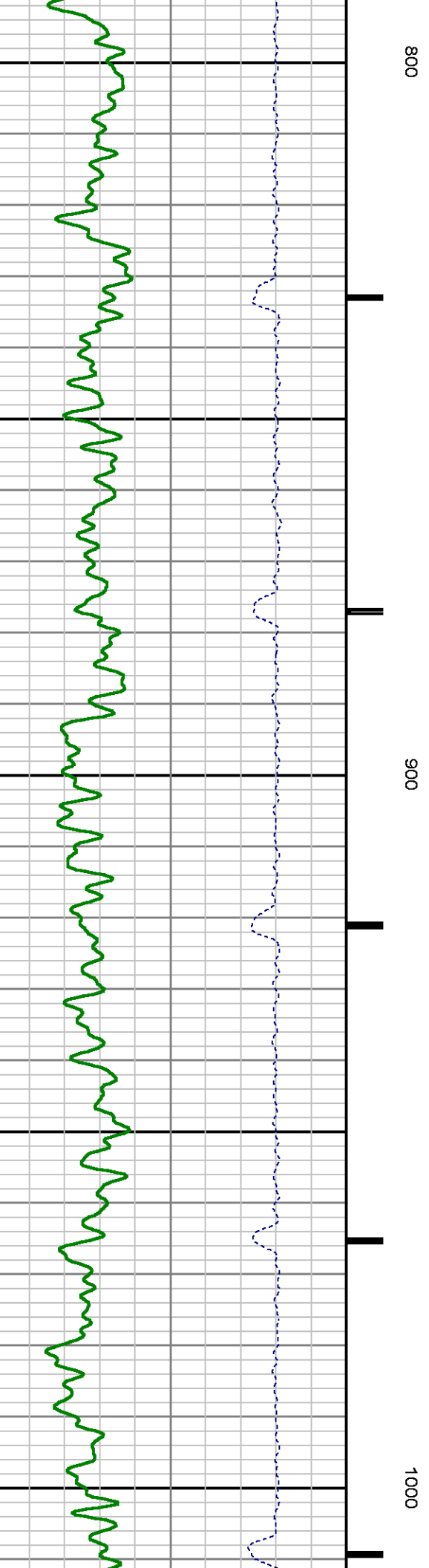
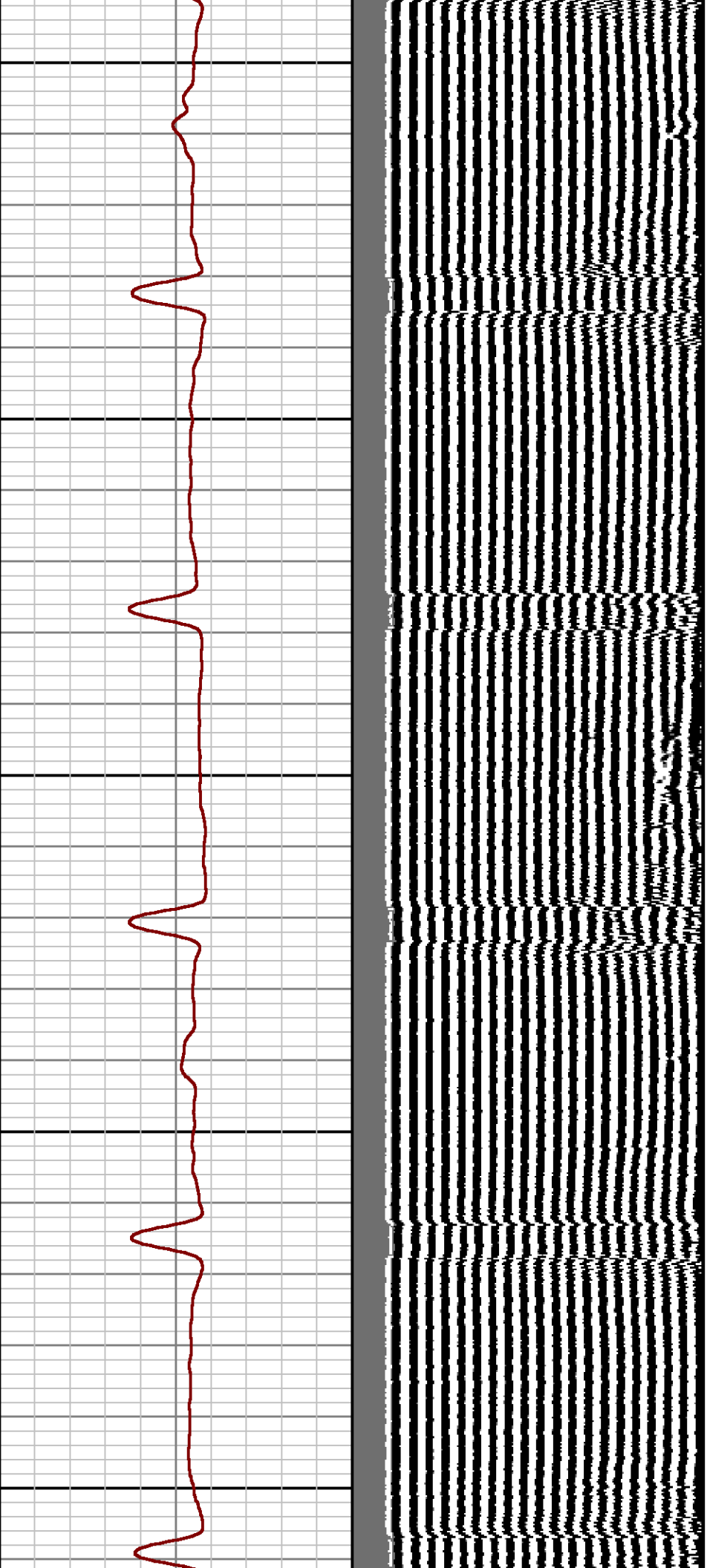
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	-15.750	AFAR	SIG	TT5			
2459XA	-11.340	CCL					
2459XA	-9.490	GR					
2459XA	-4.090	NEU					

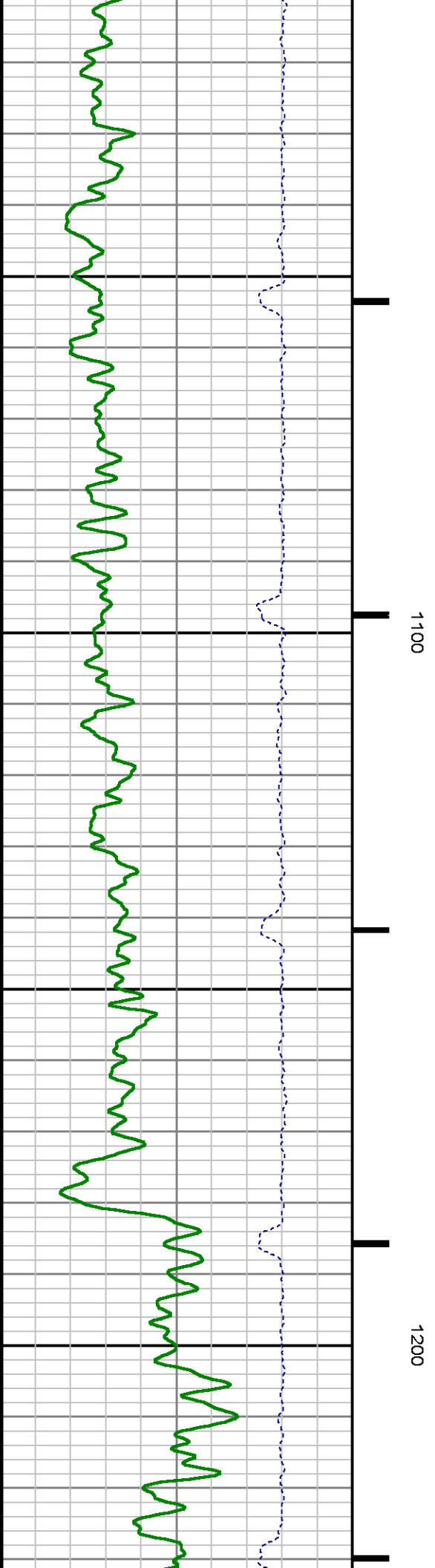
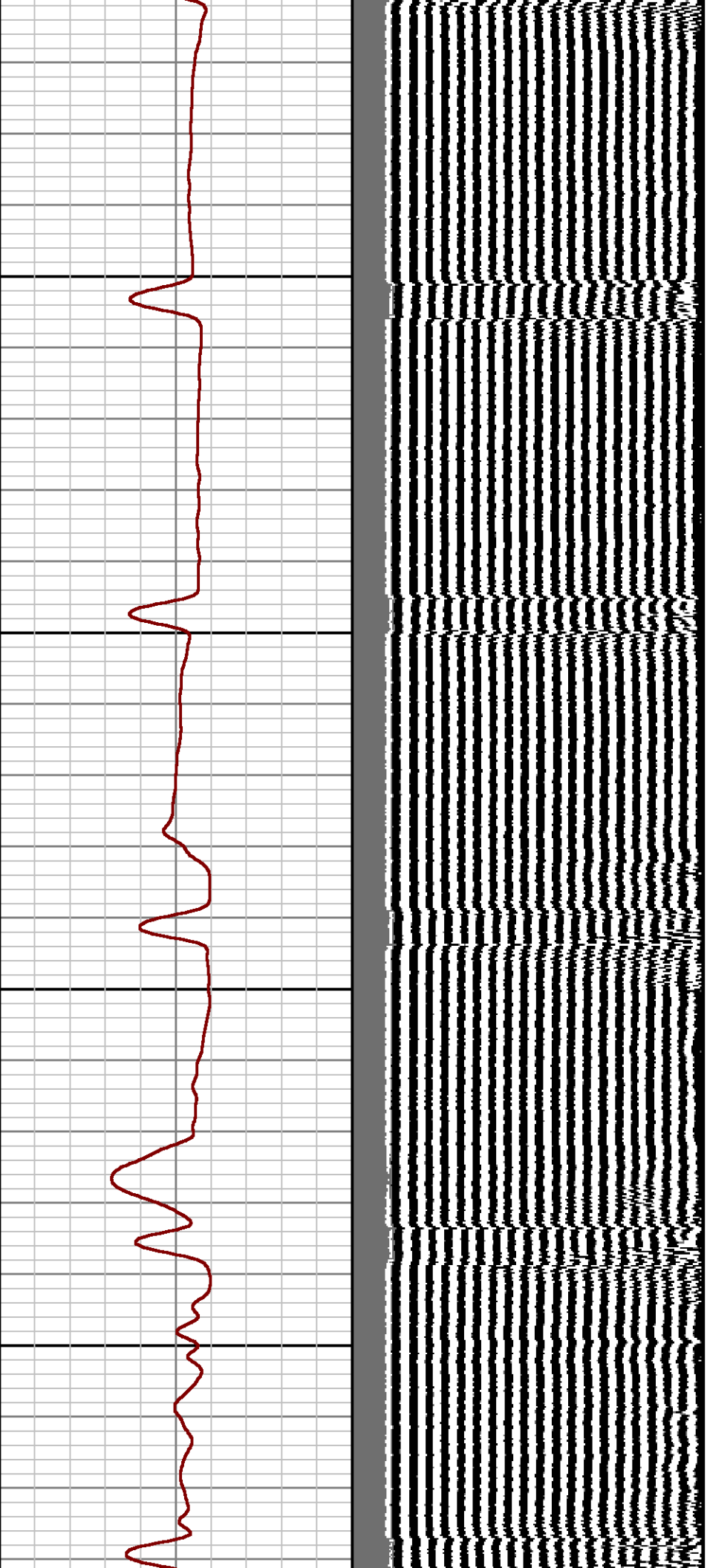


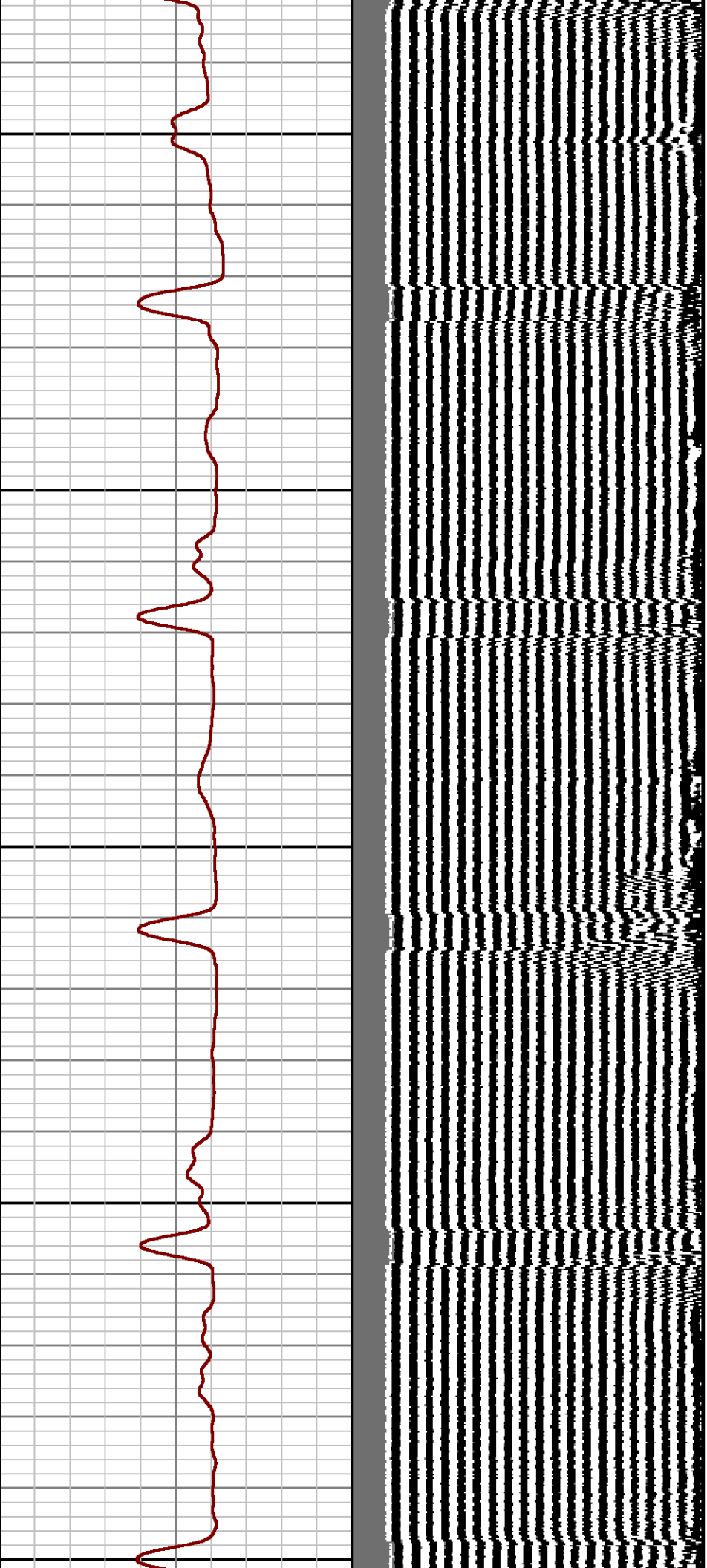






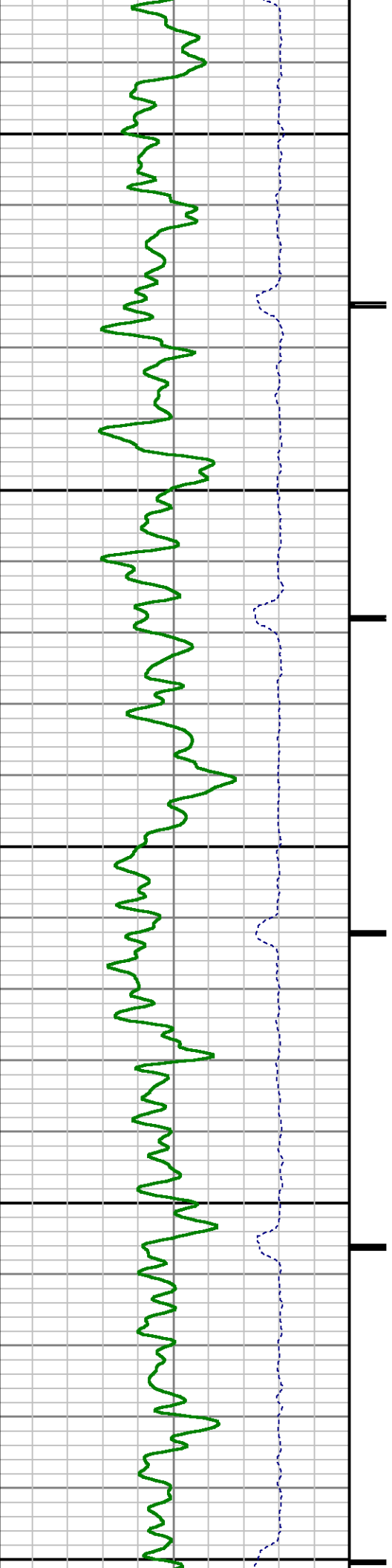


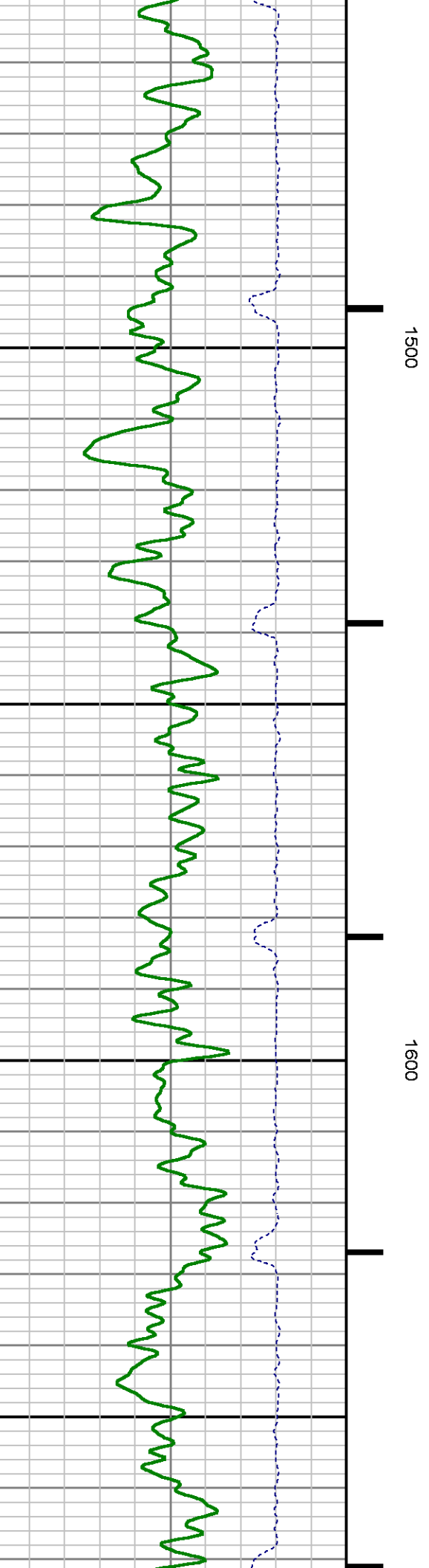
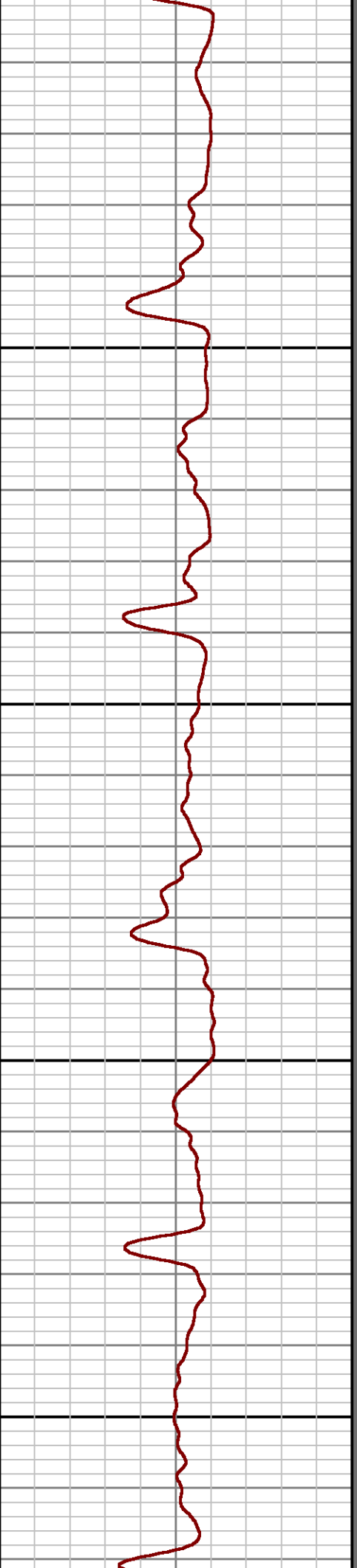
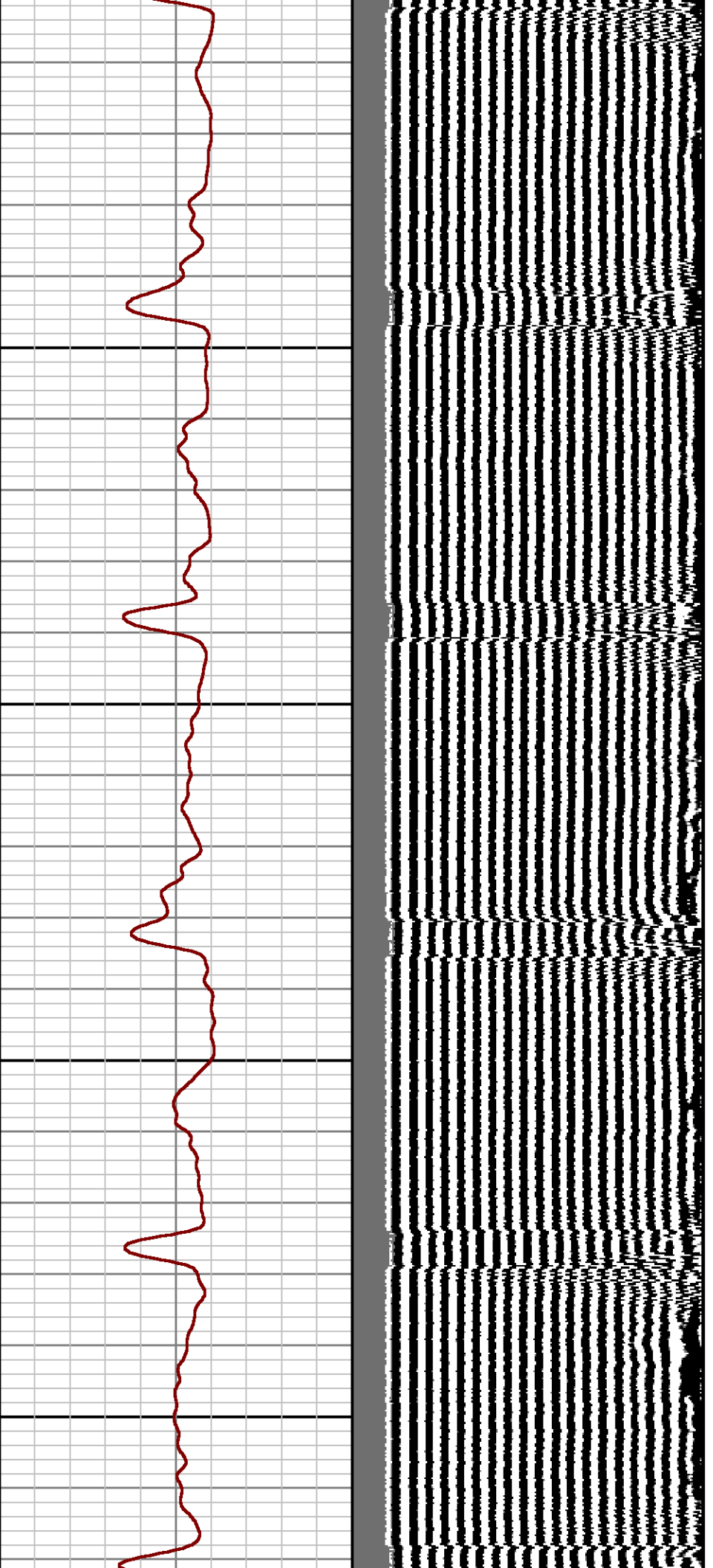


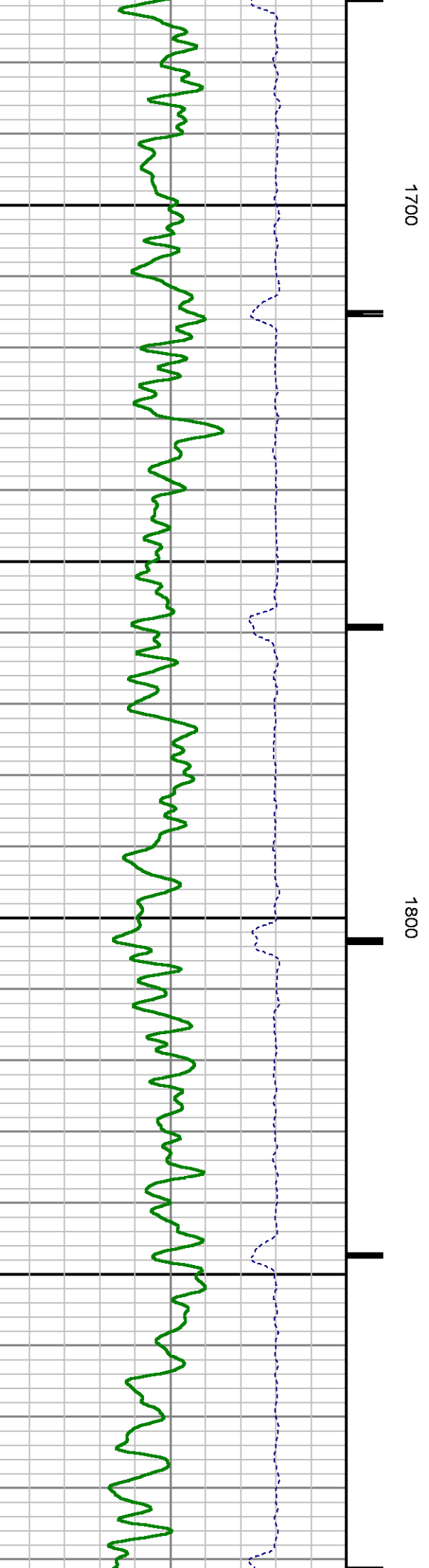
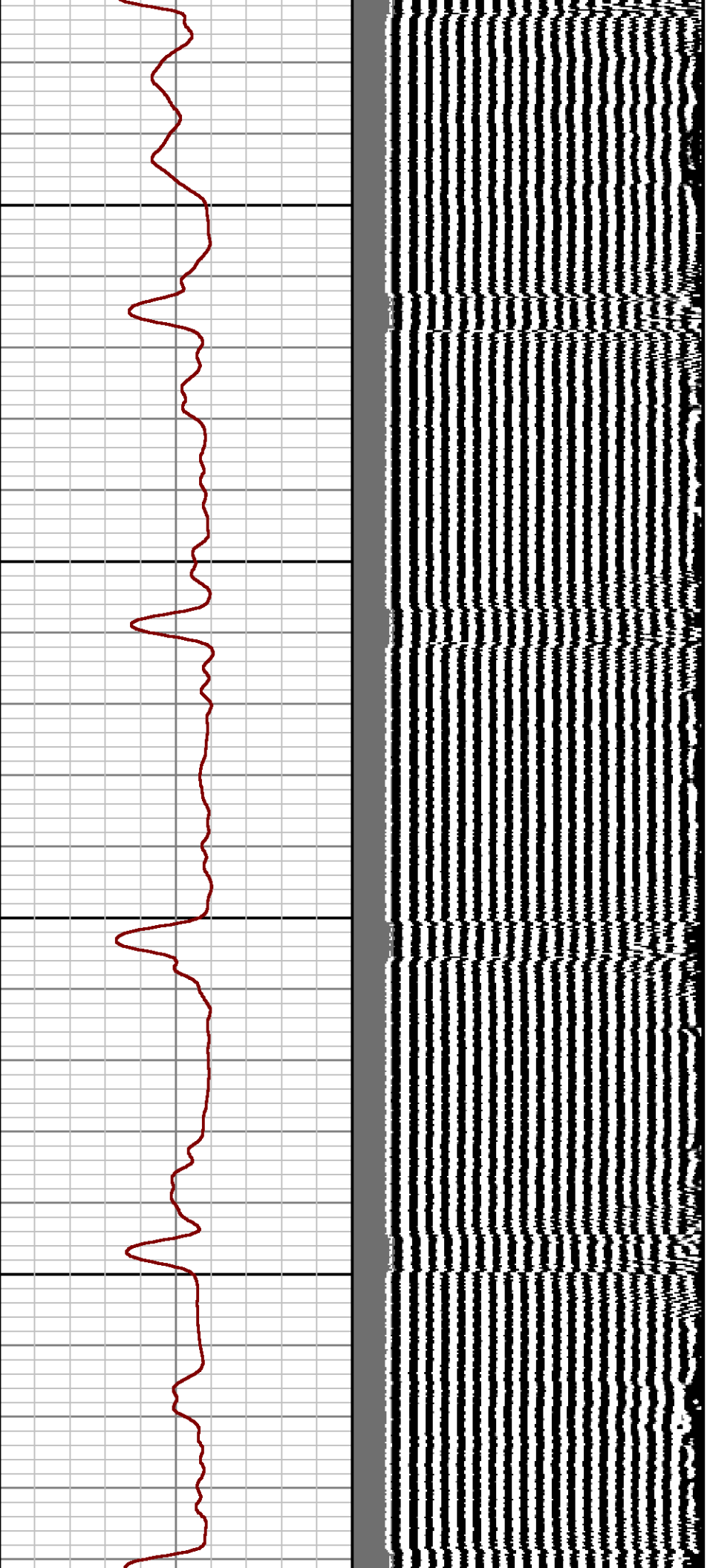


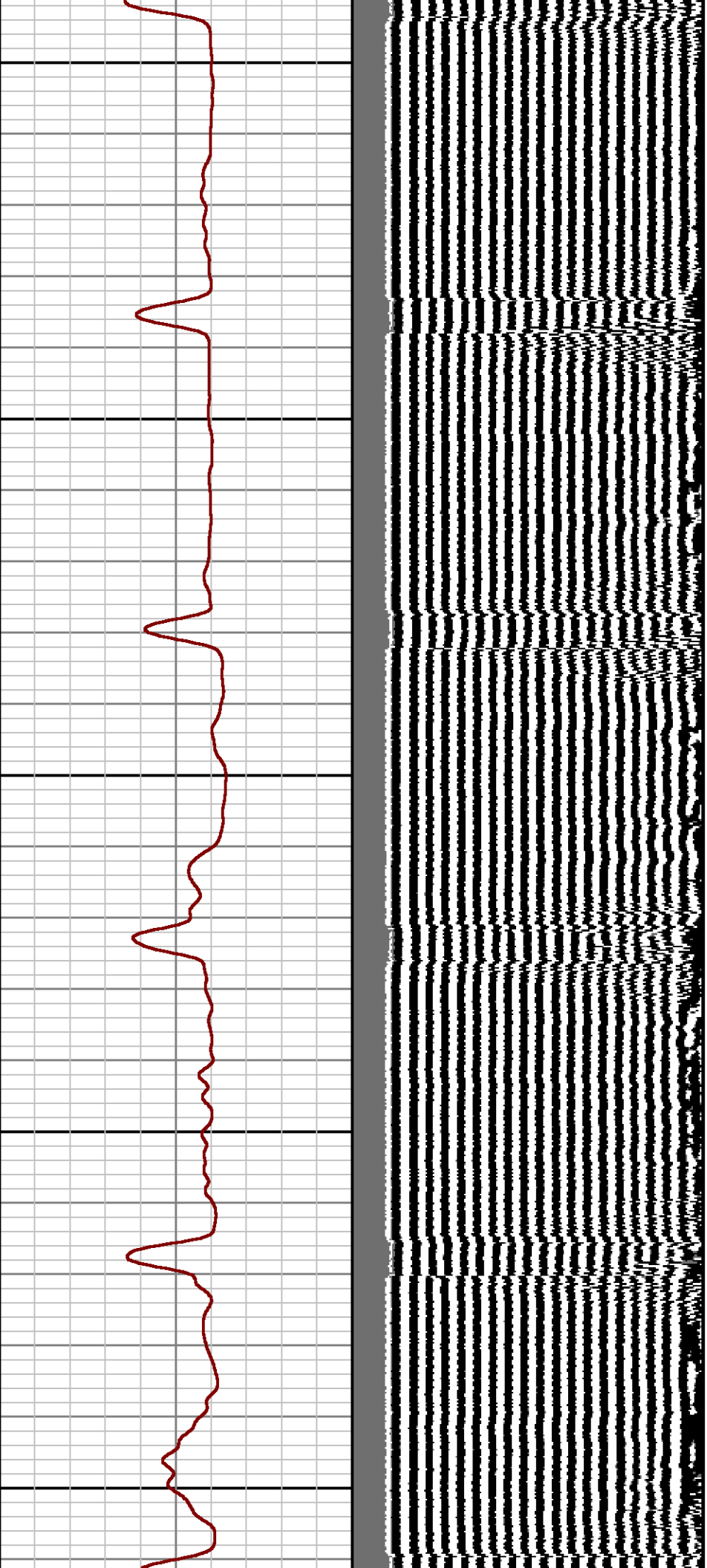
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1400





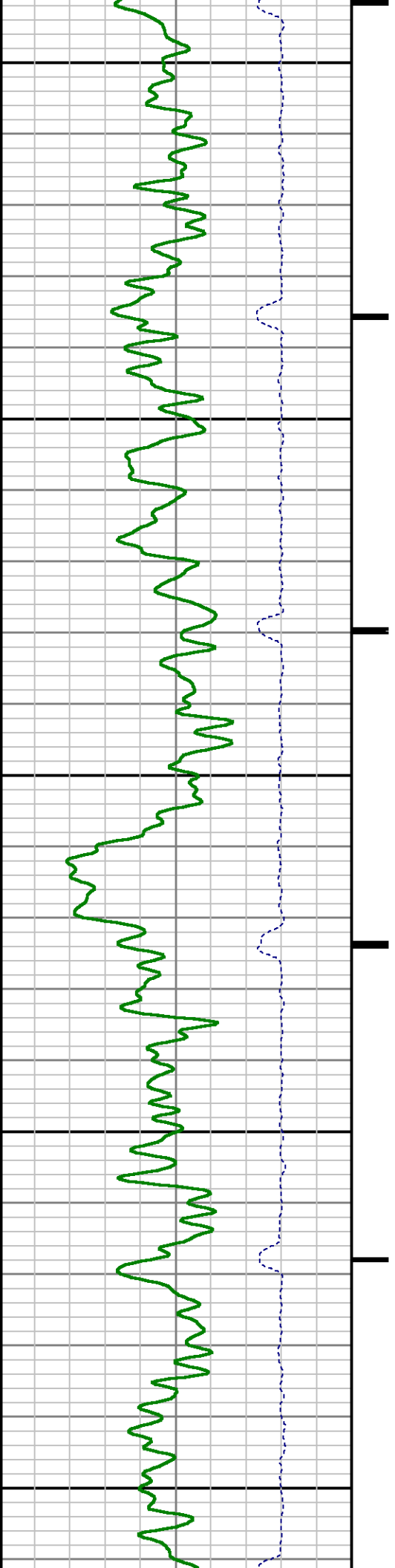


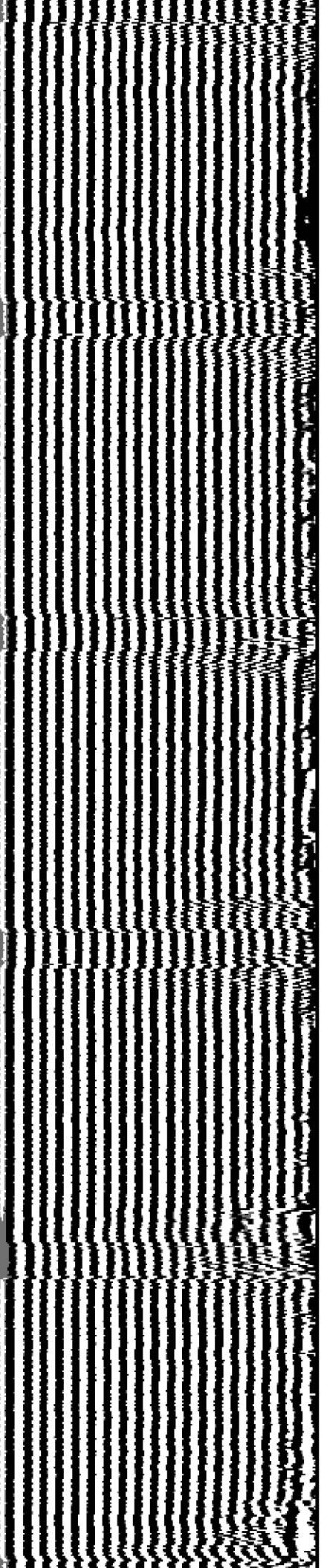
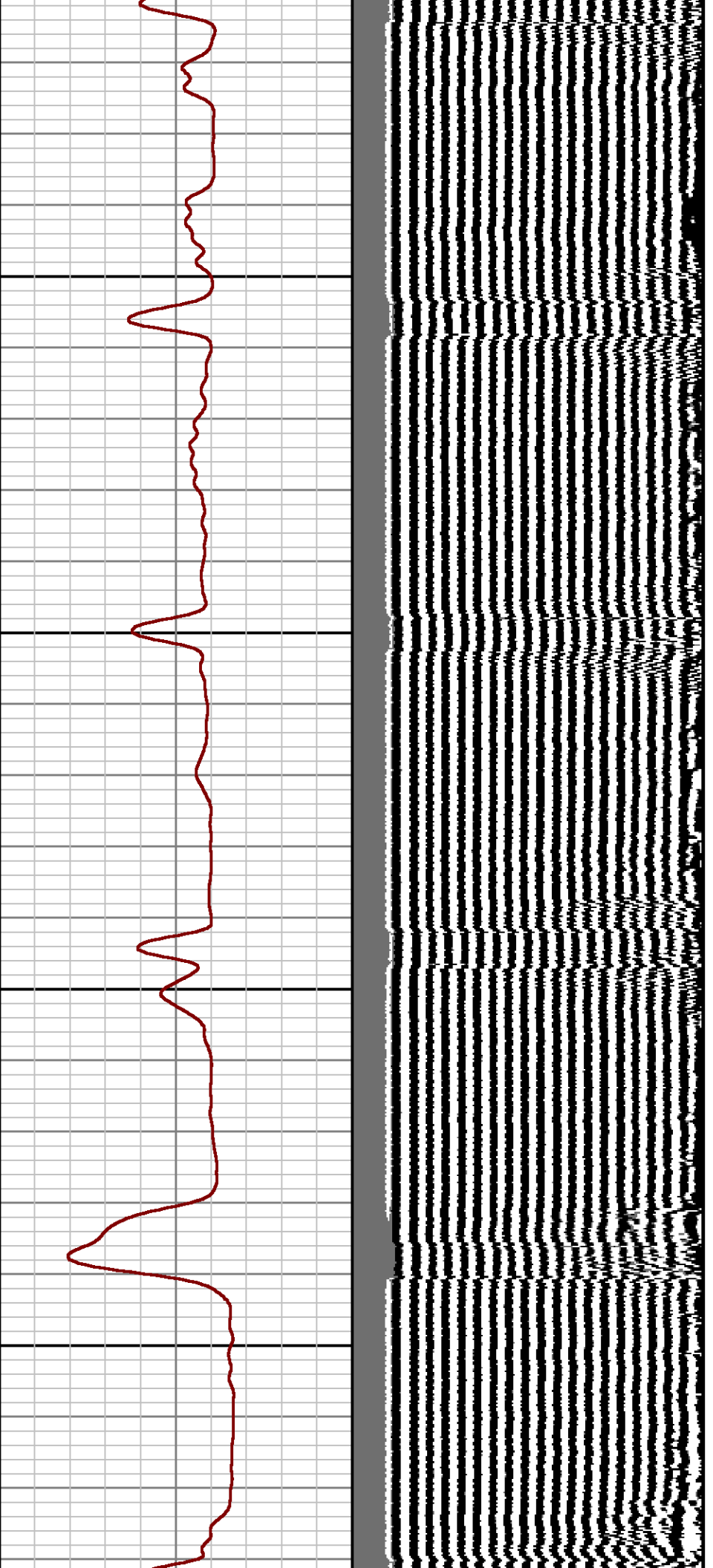


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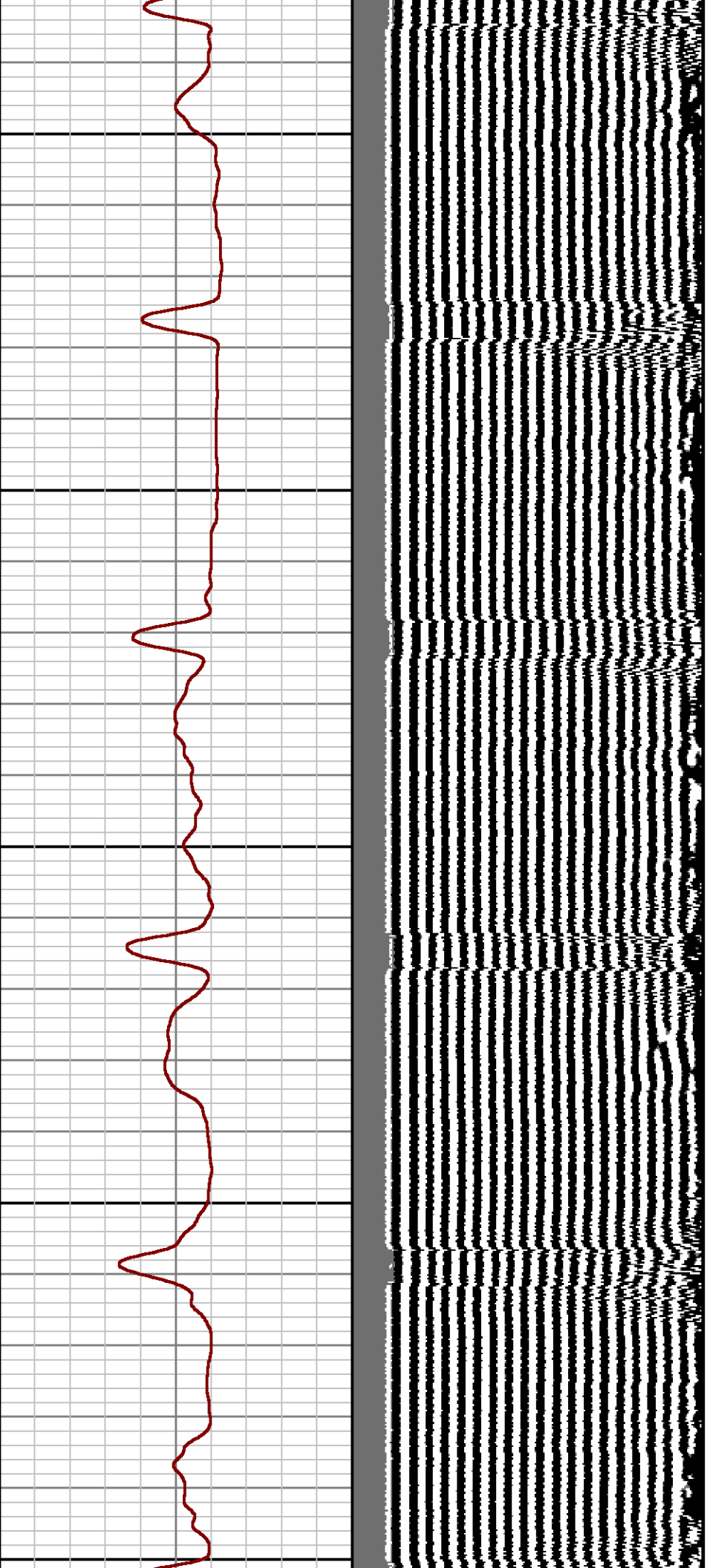
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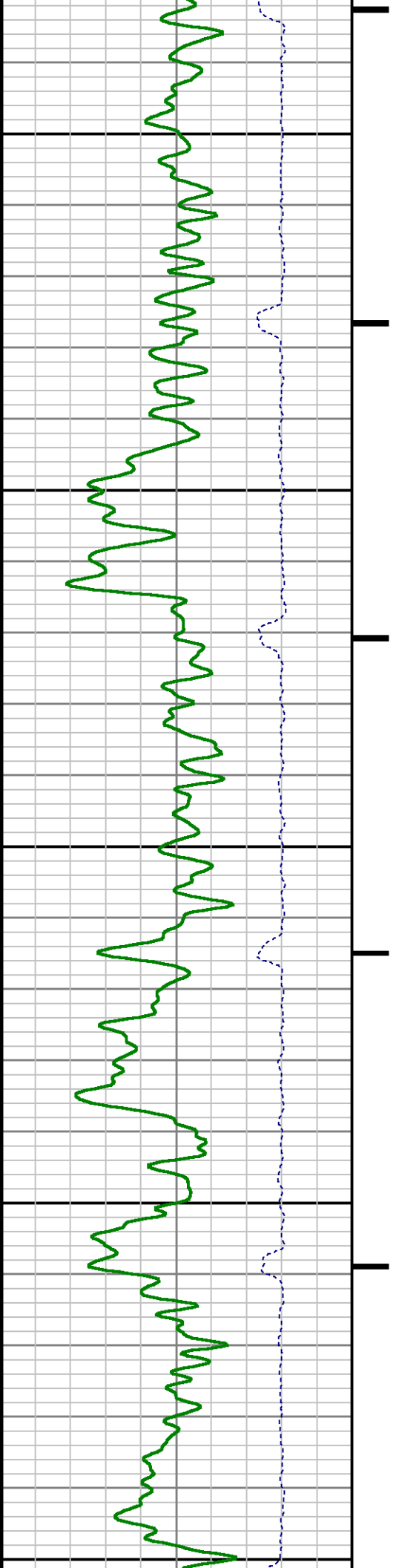
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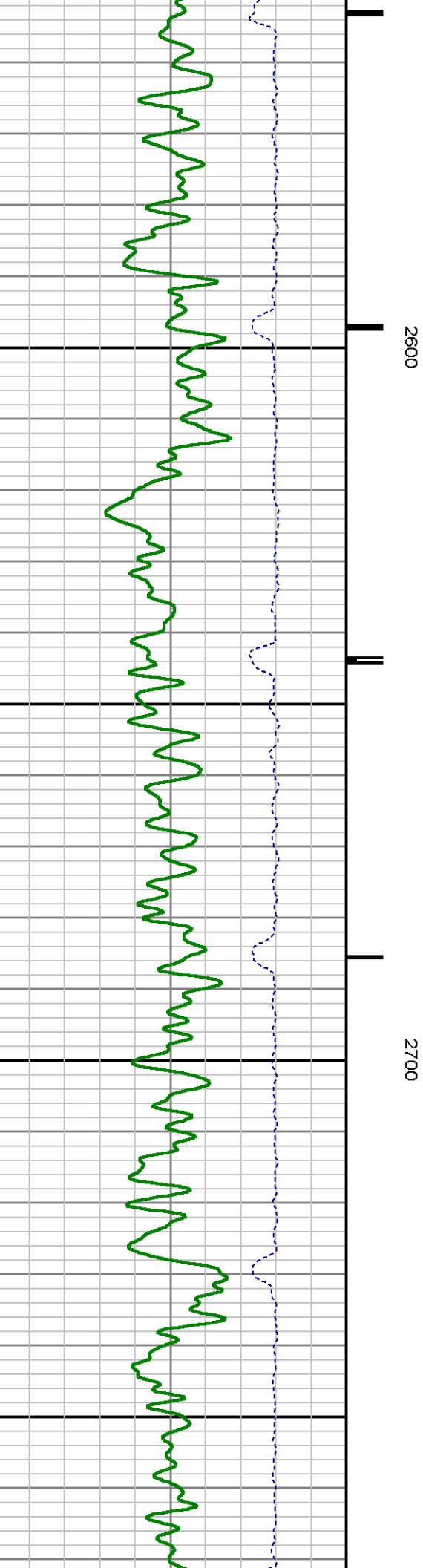
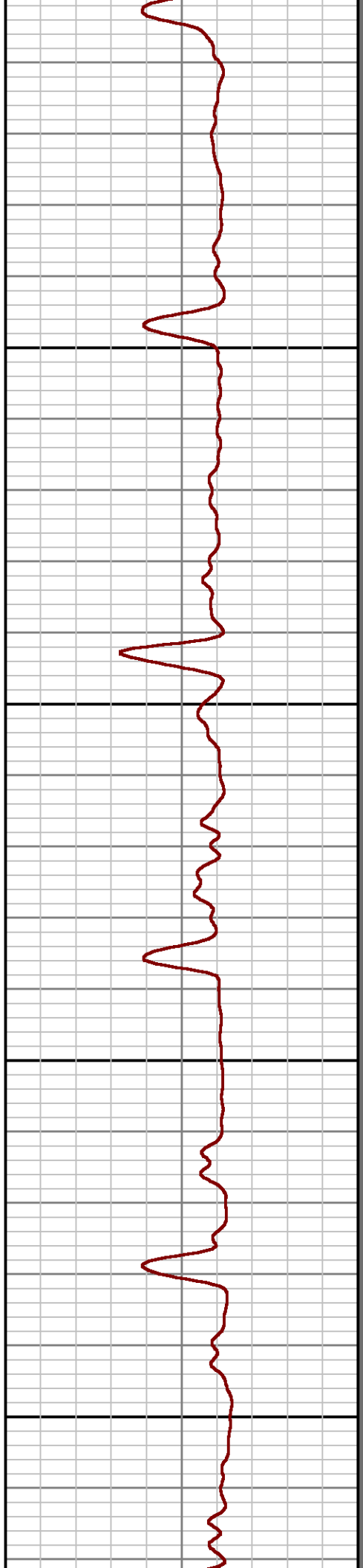
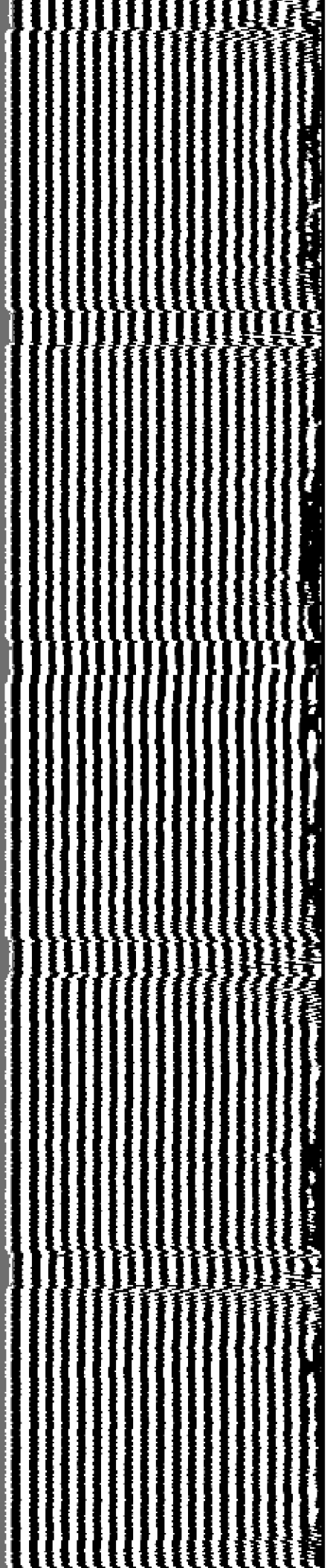
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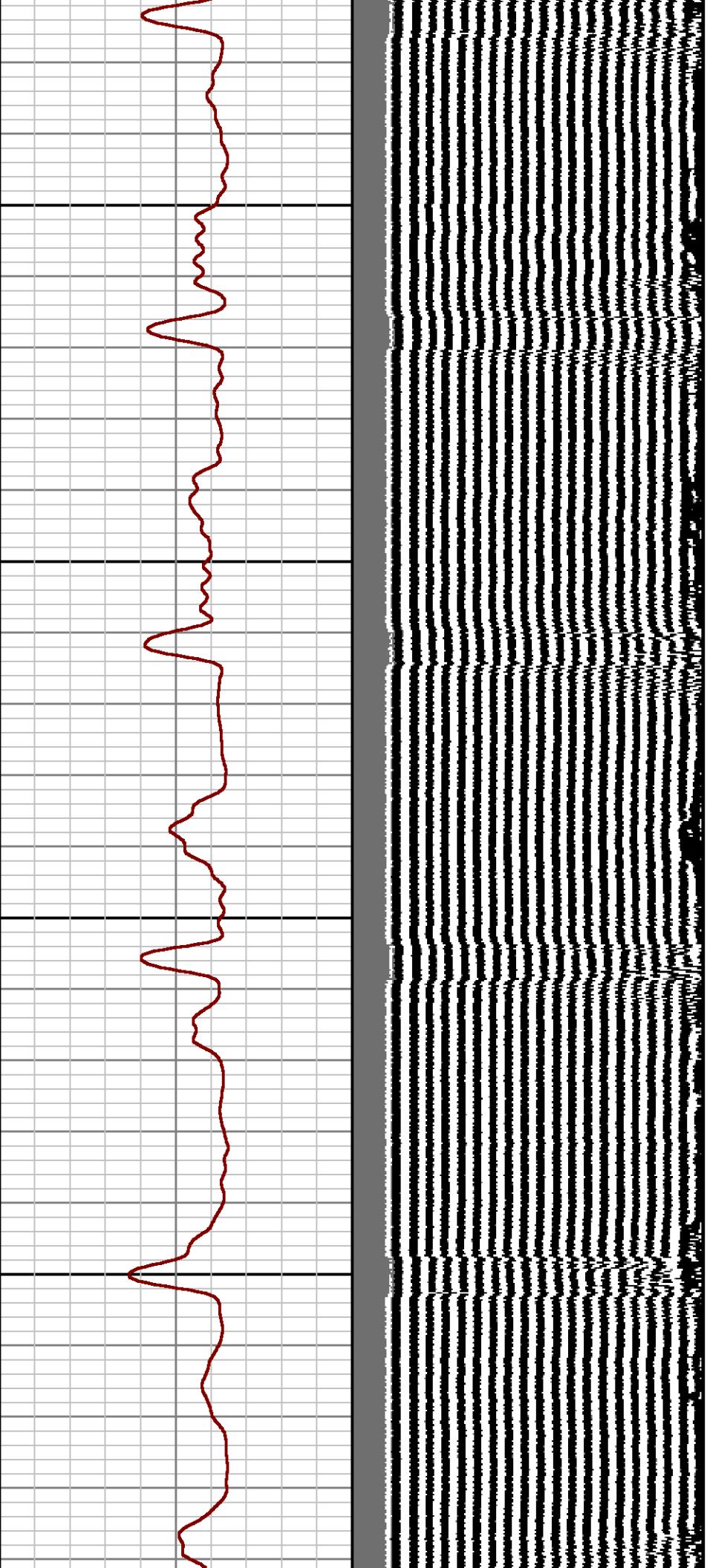


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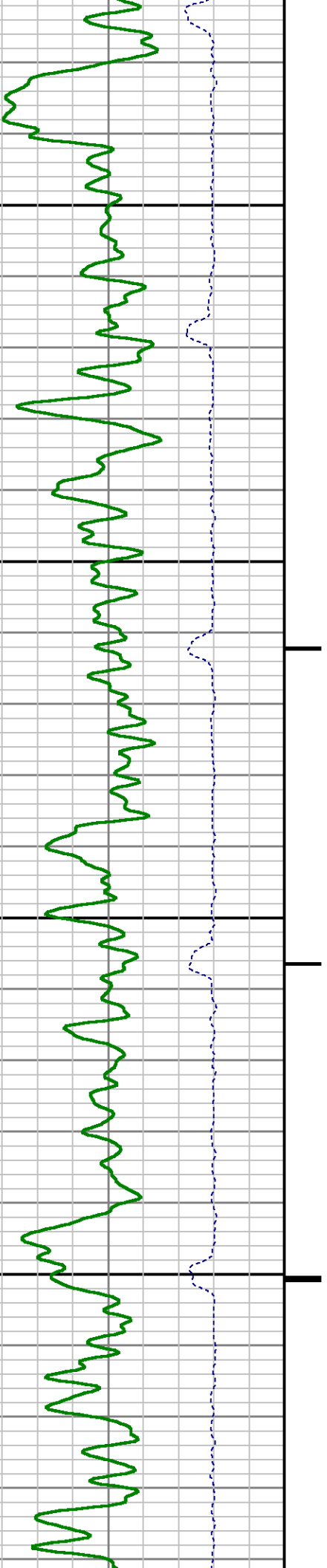


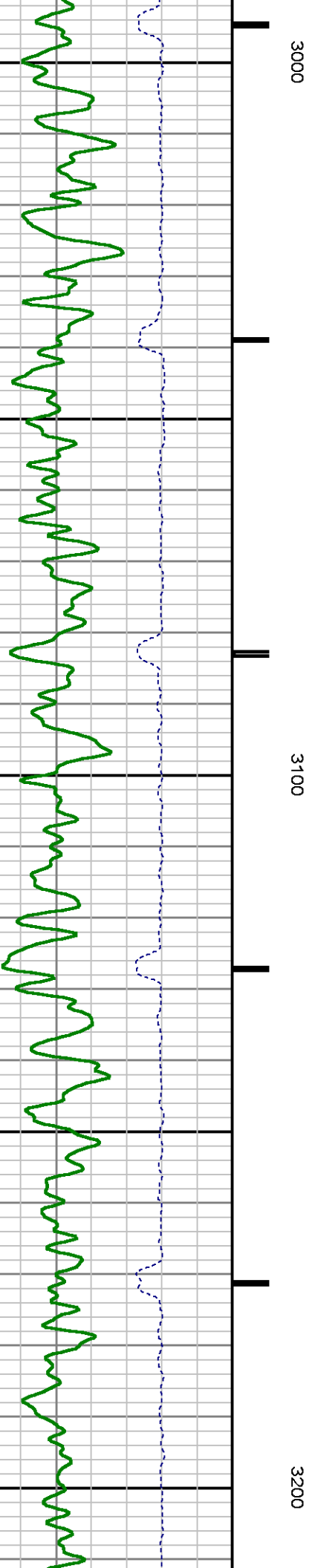
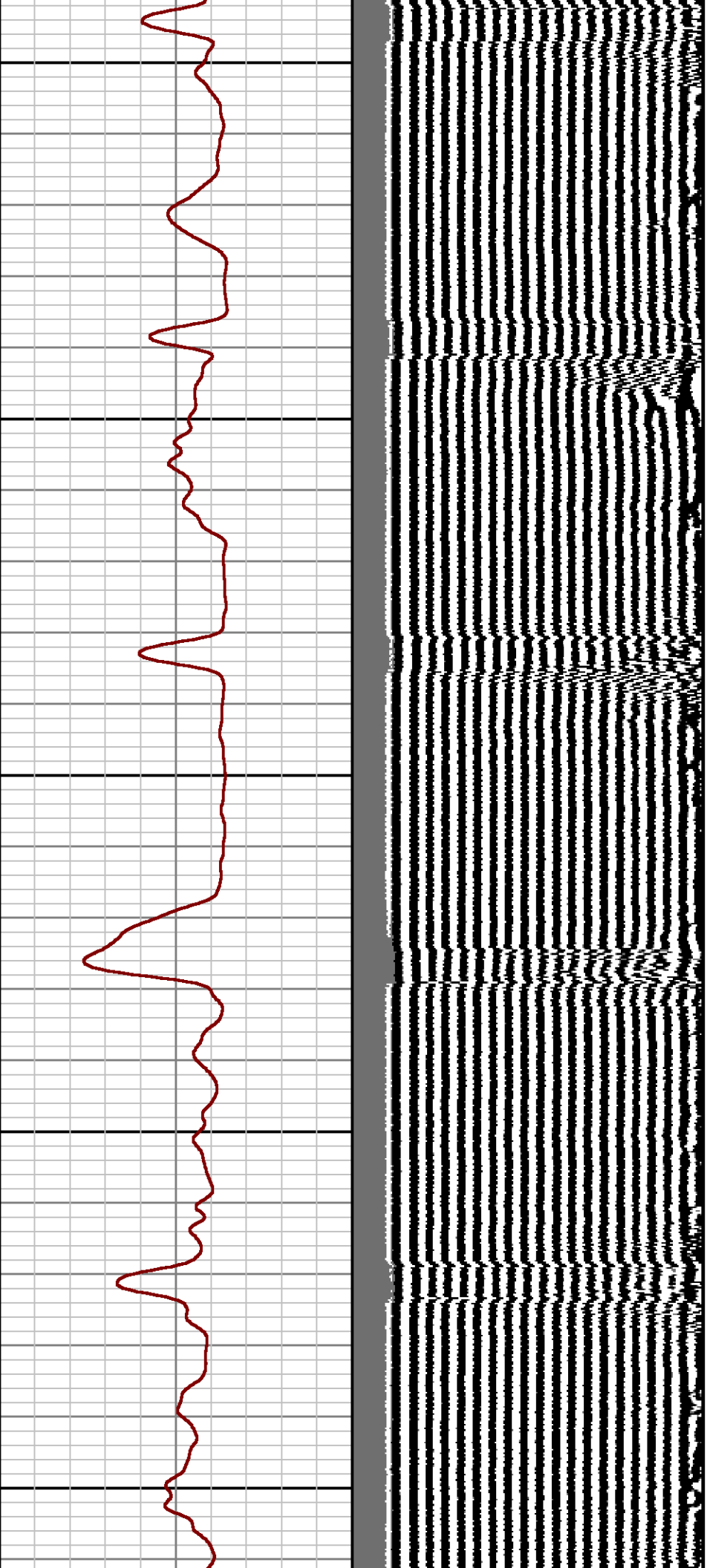


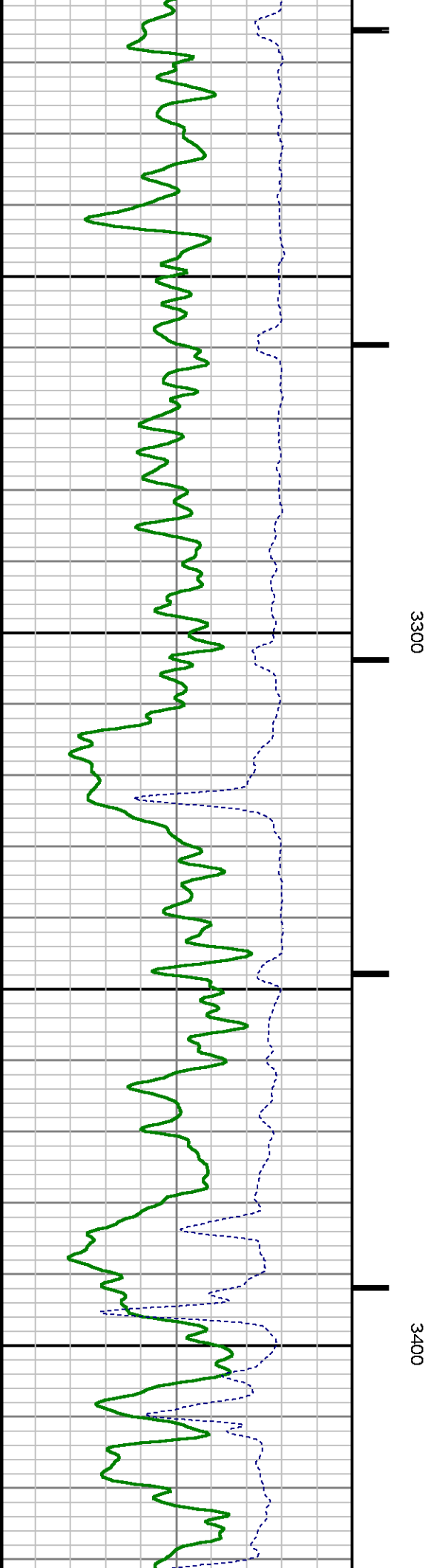
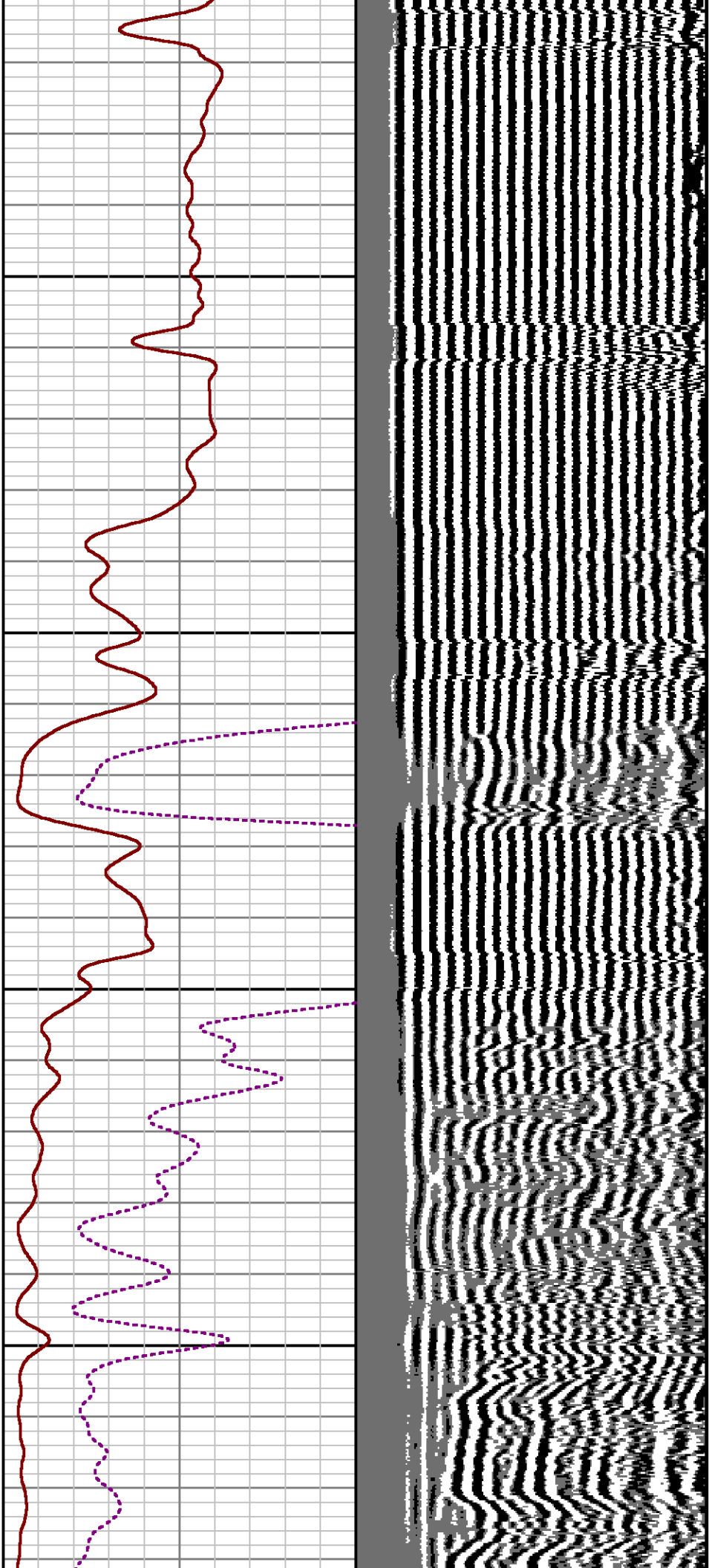


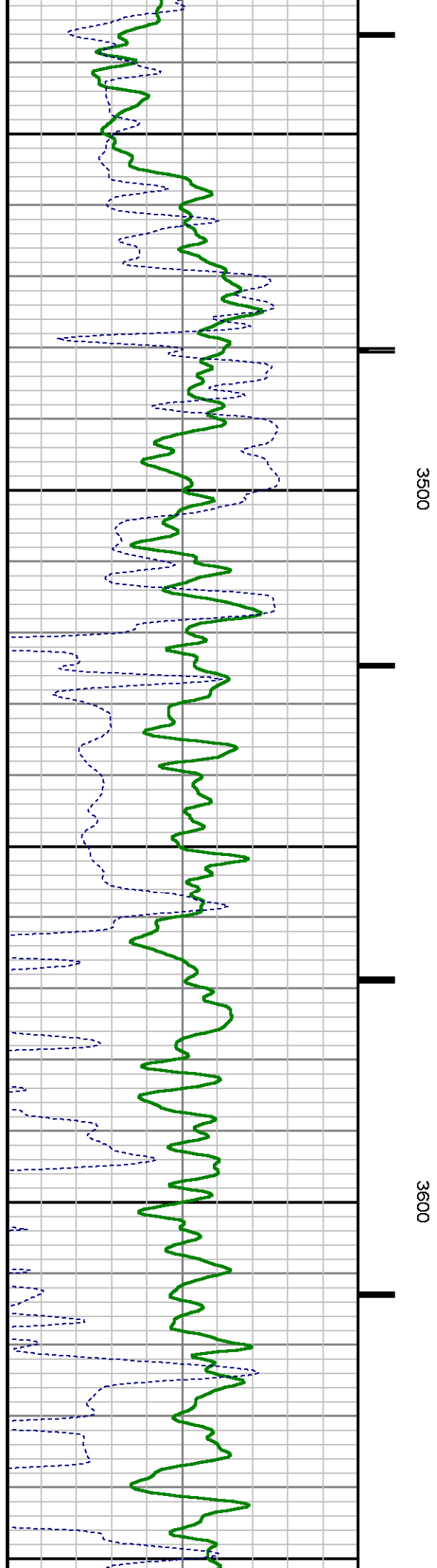
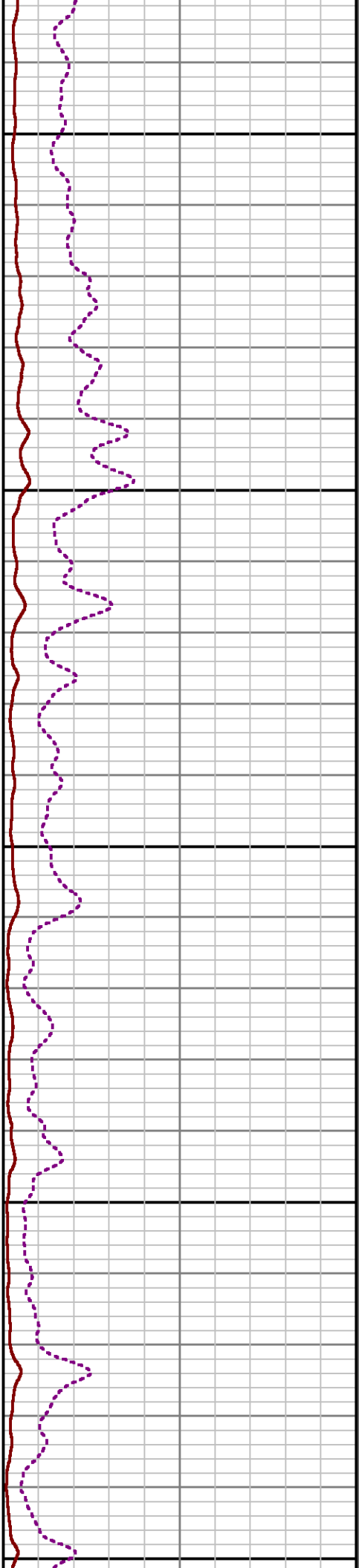
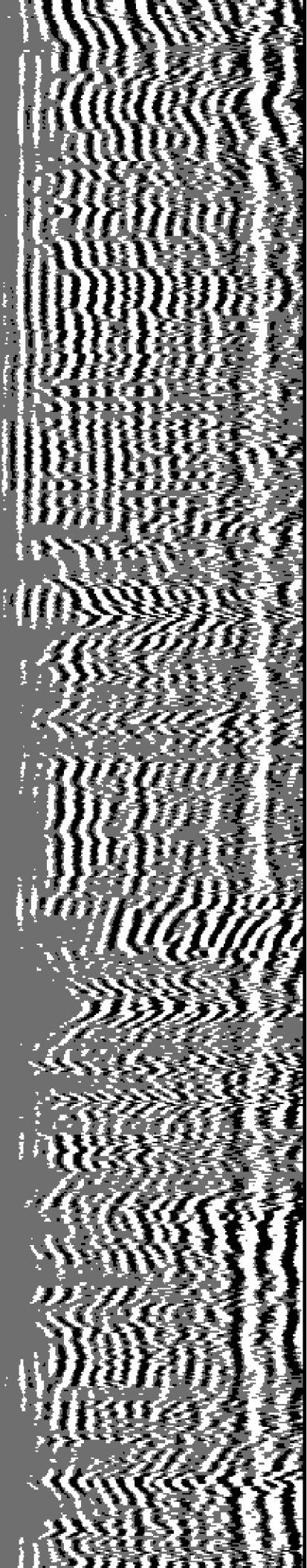
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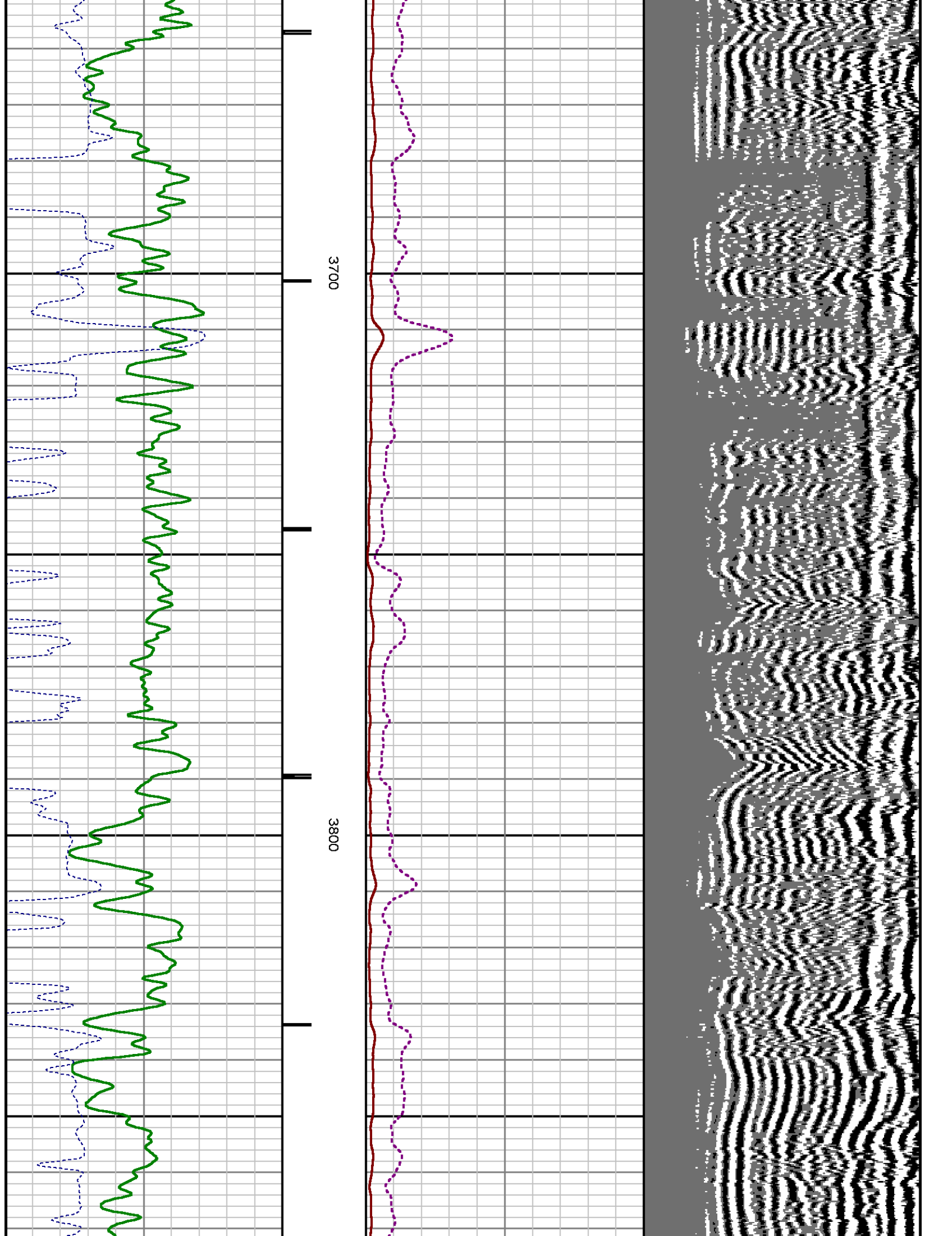
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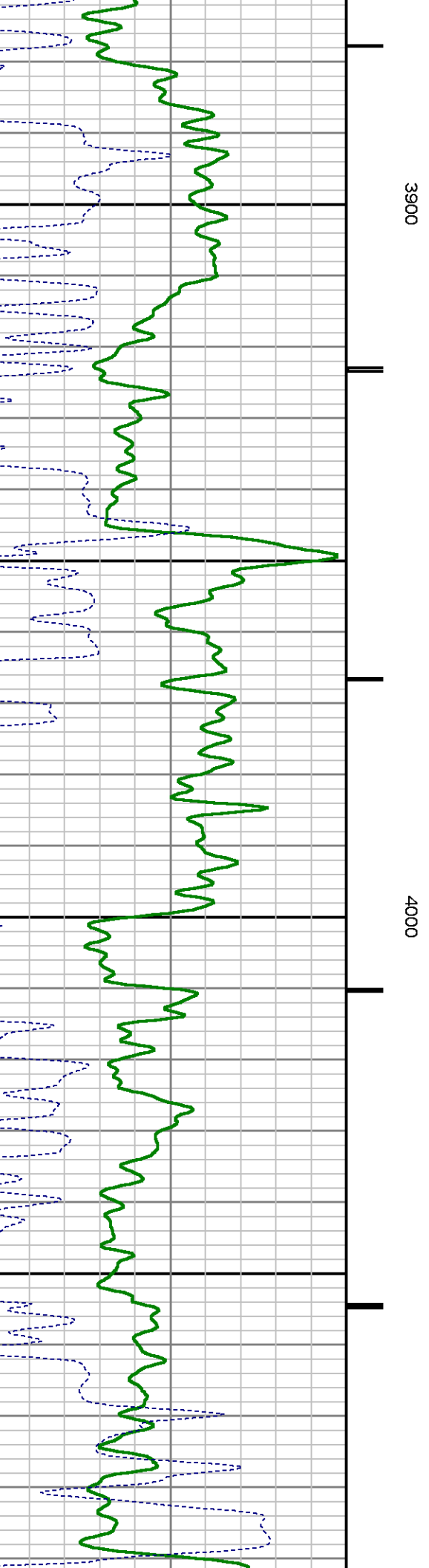
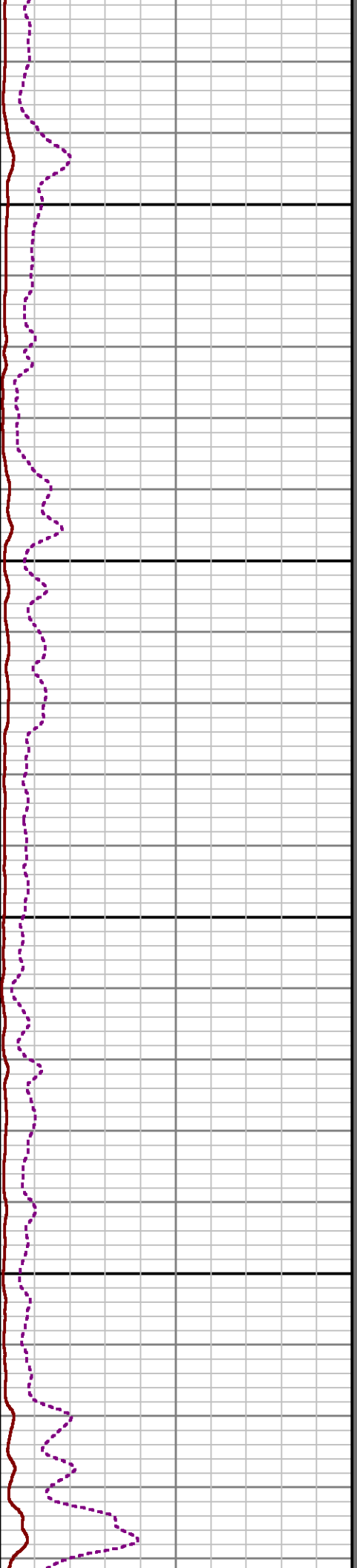
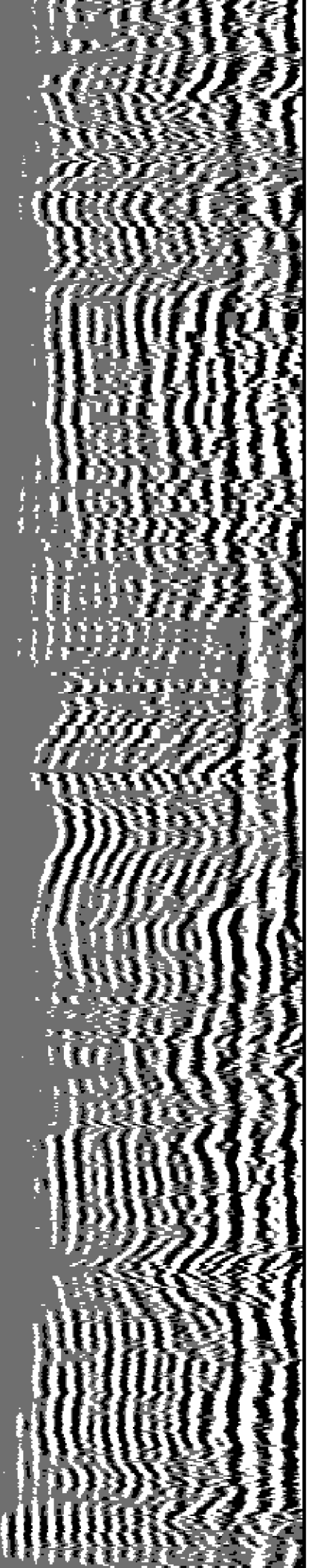


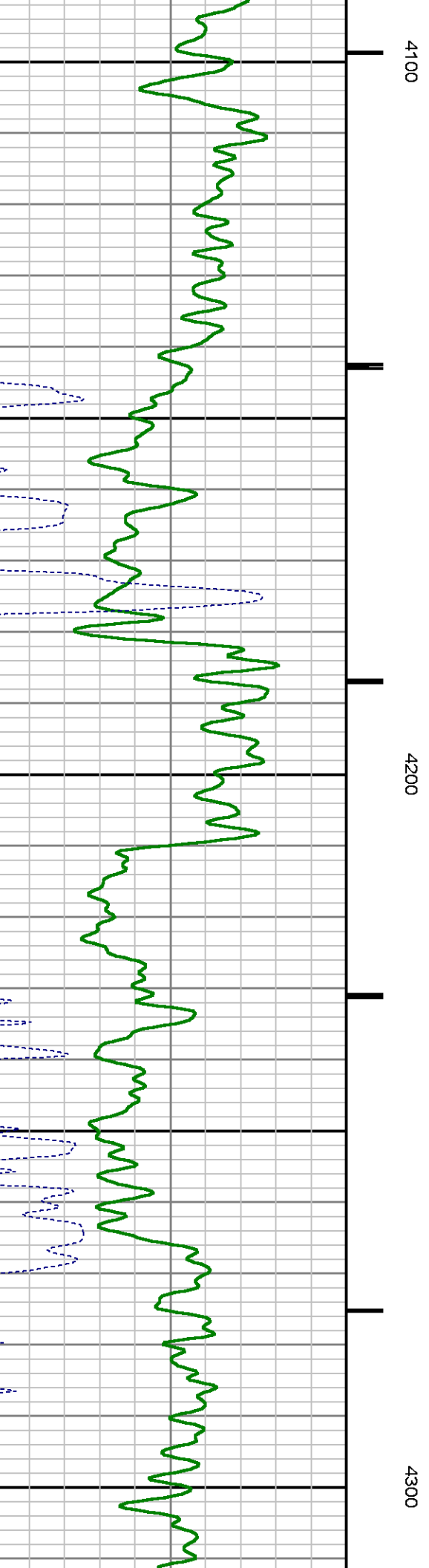
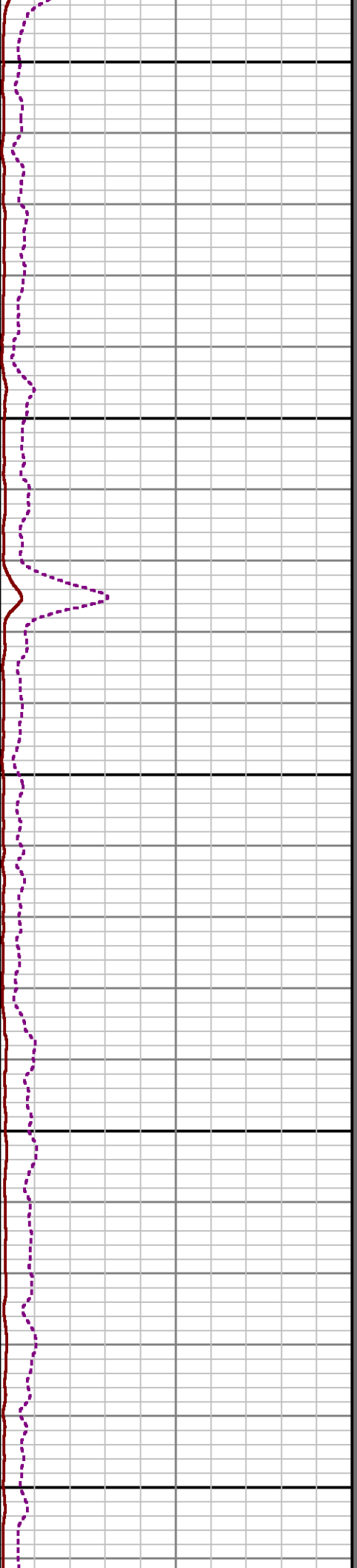
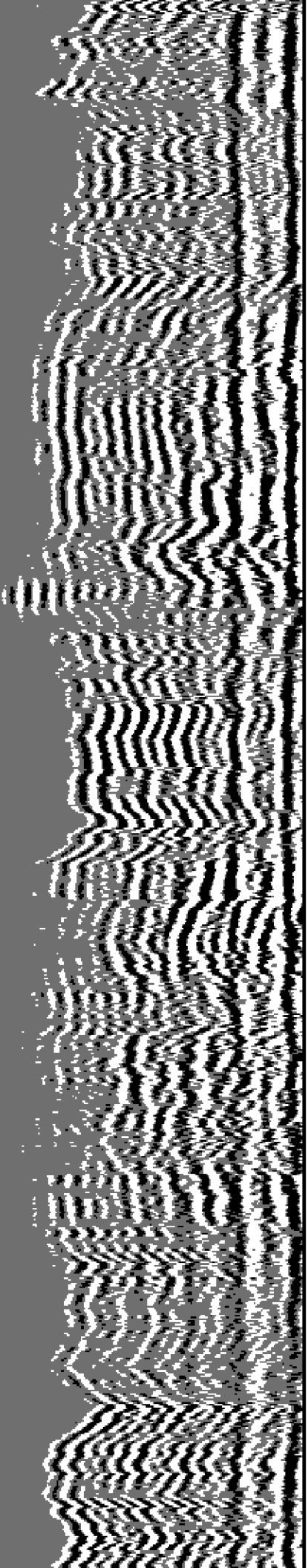


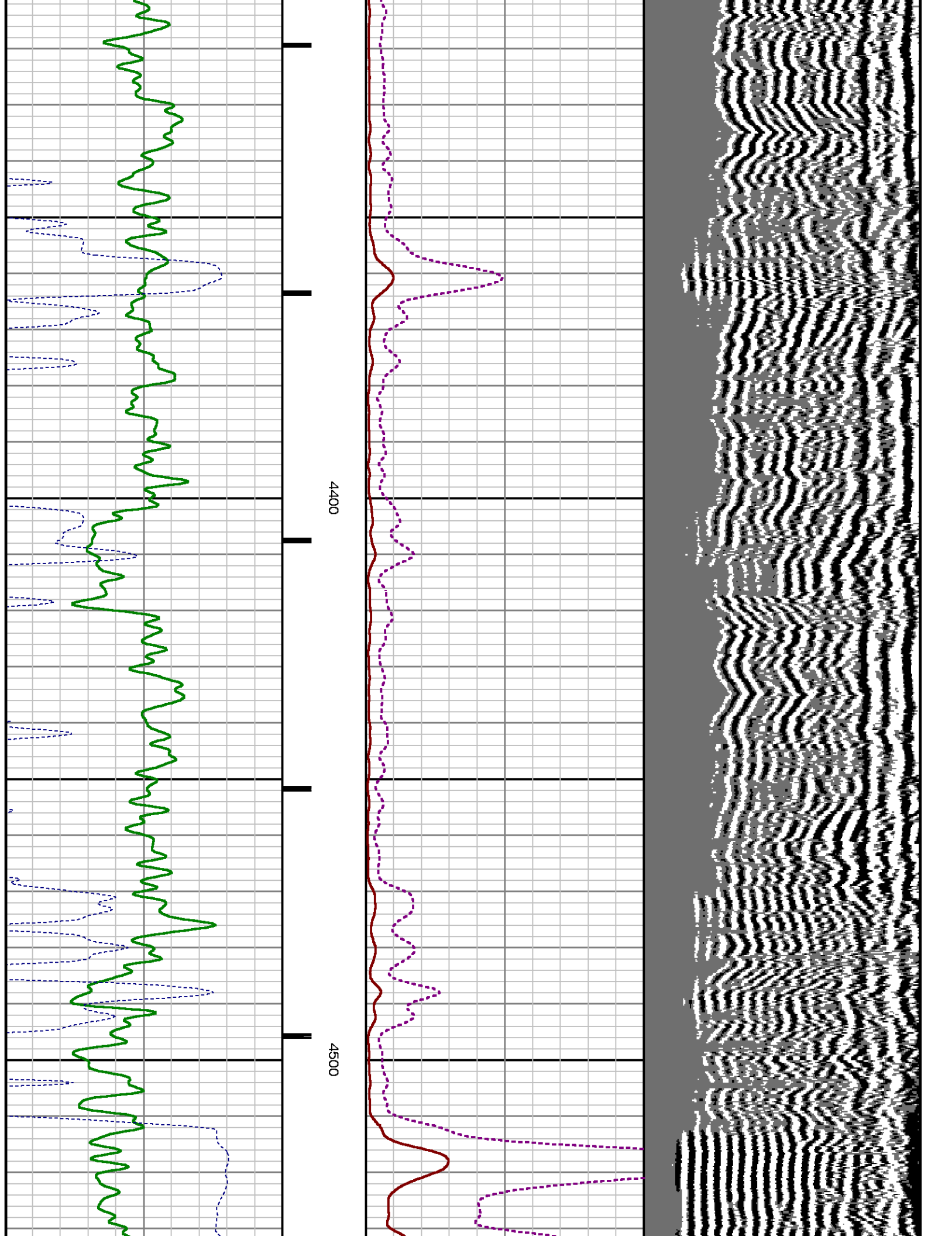


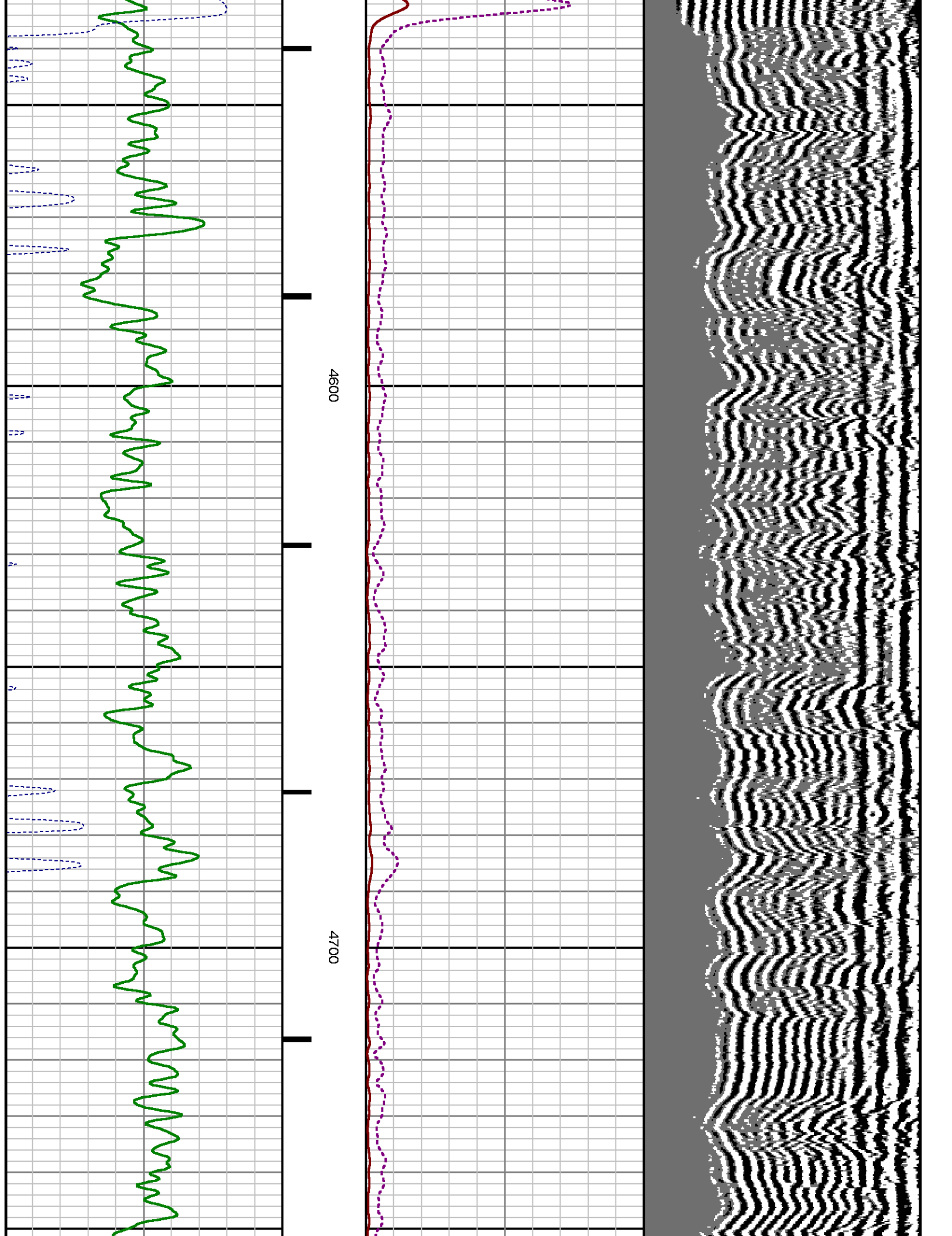


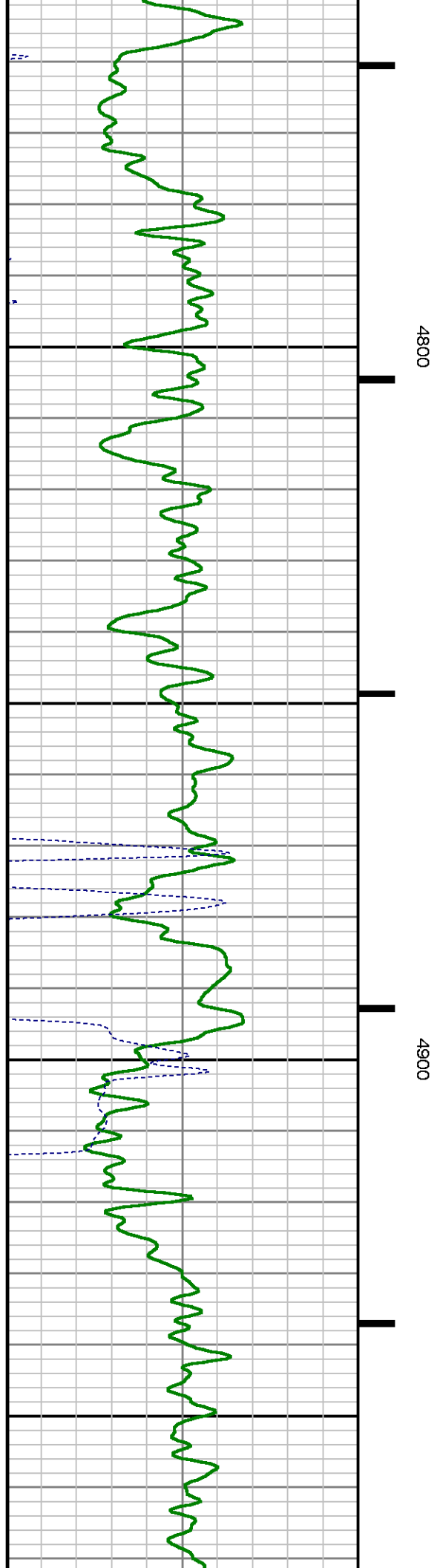
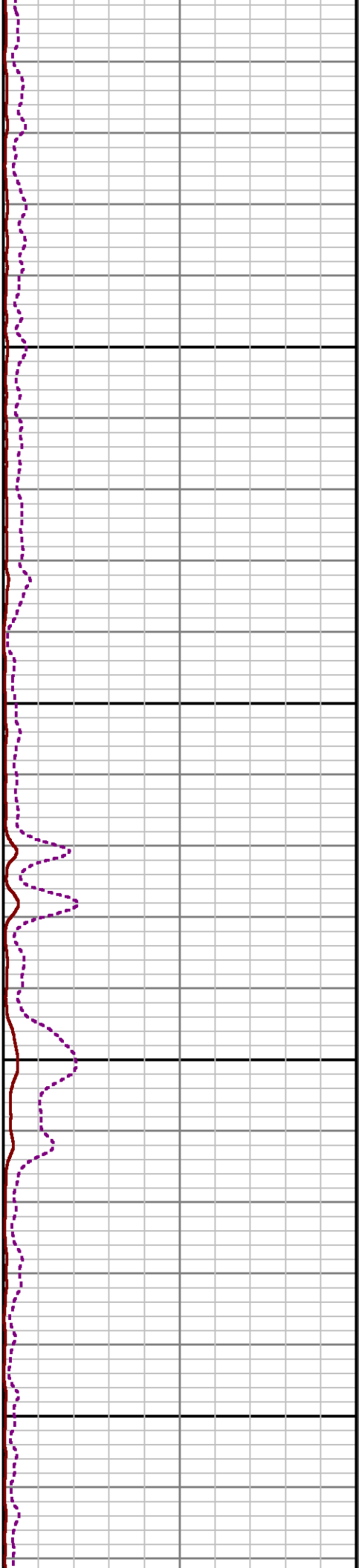
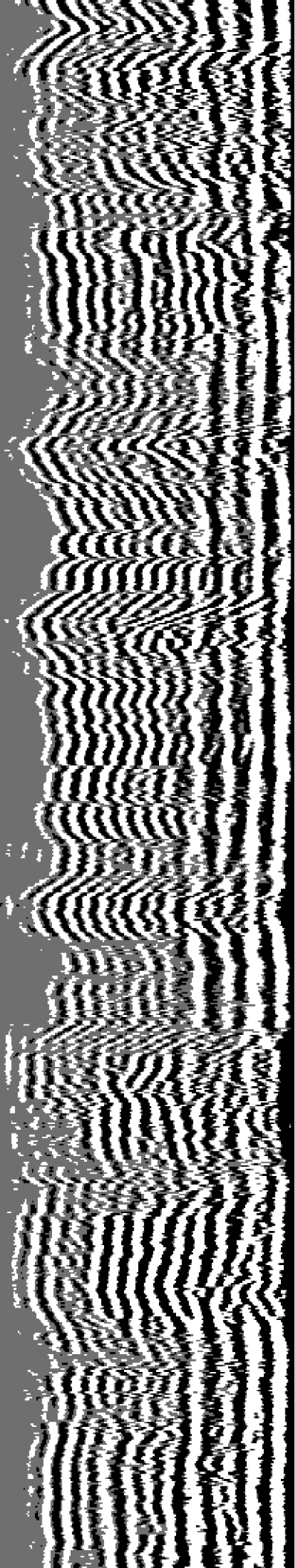


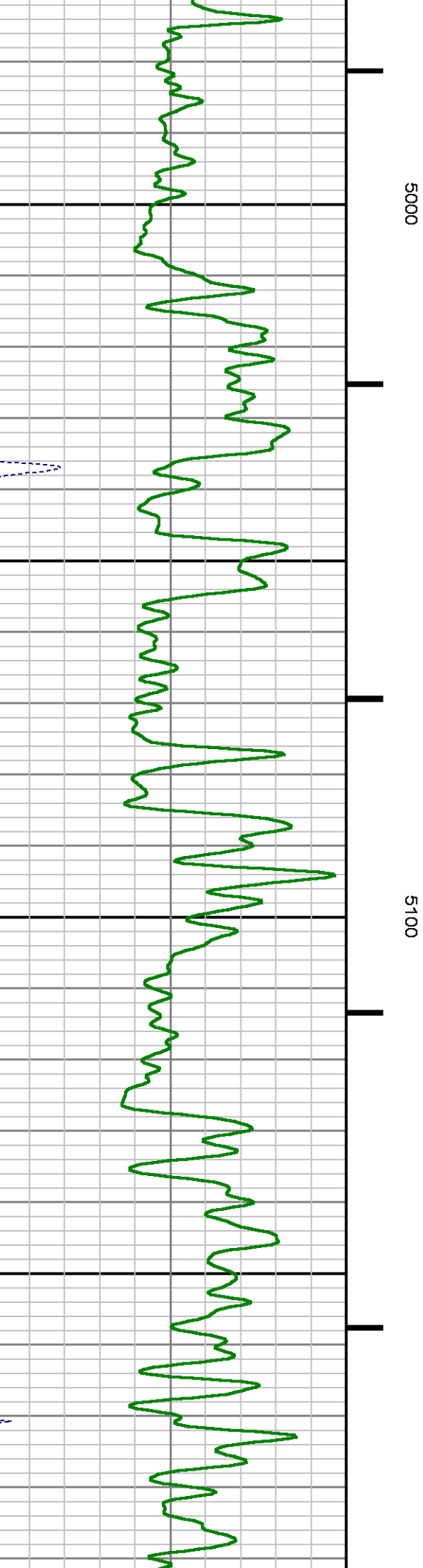
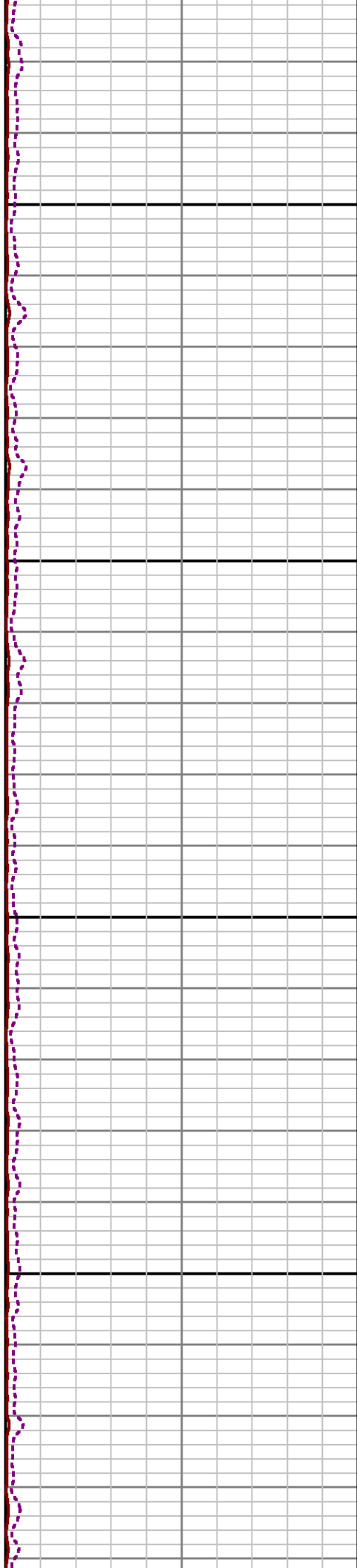
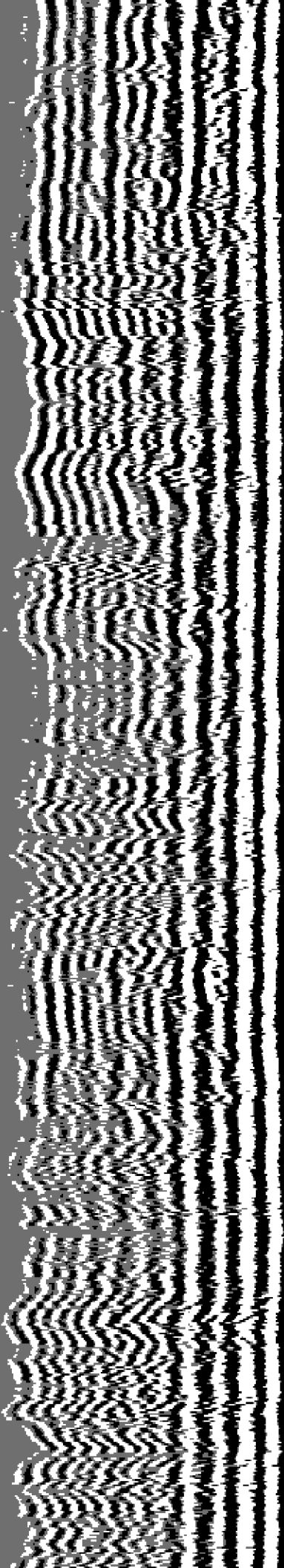


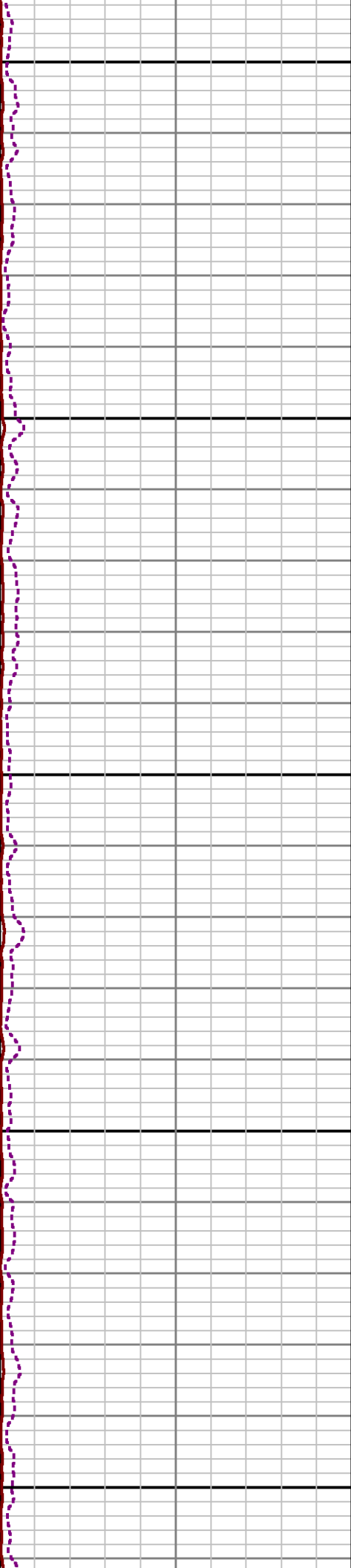
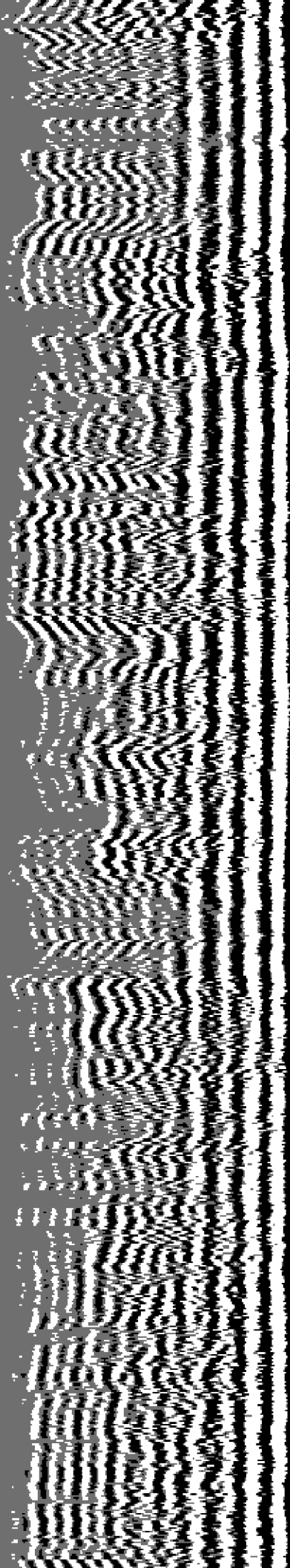










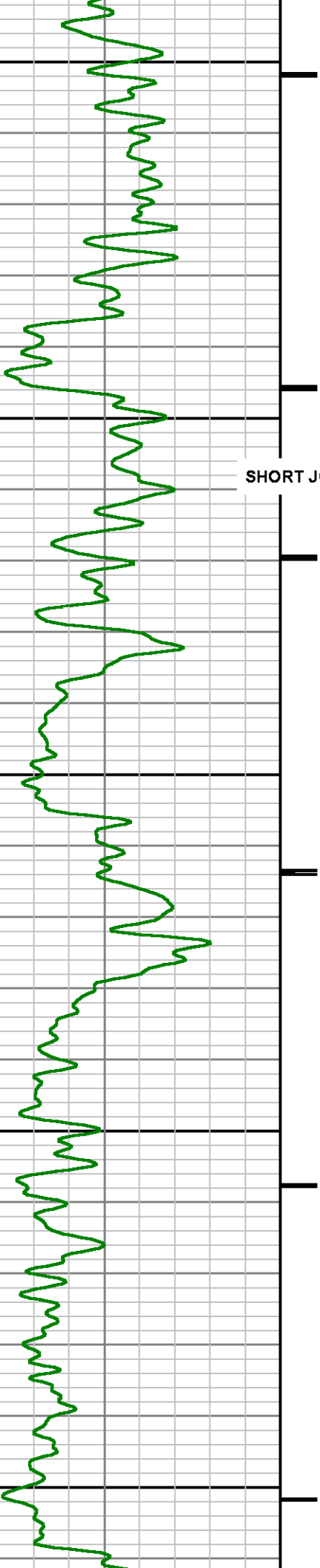


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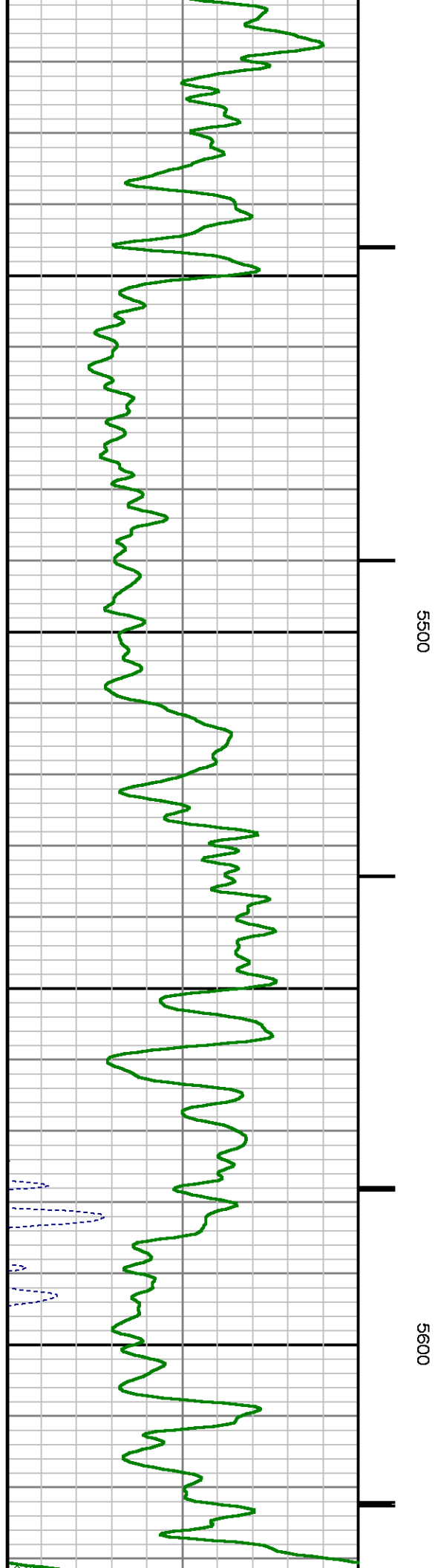
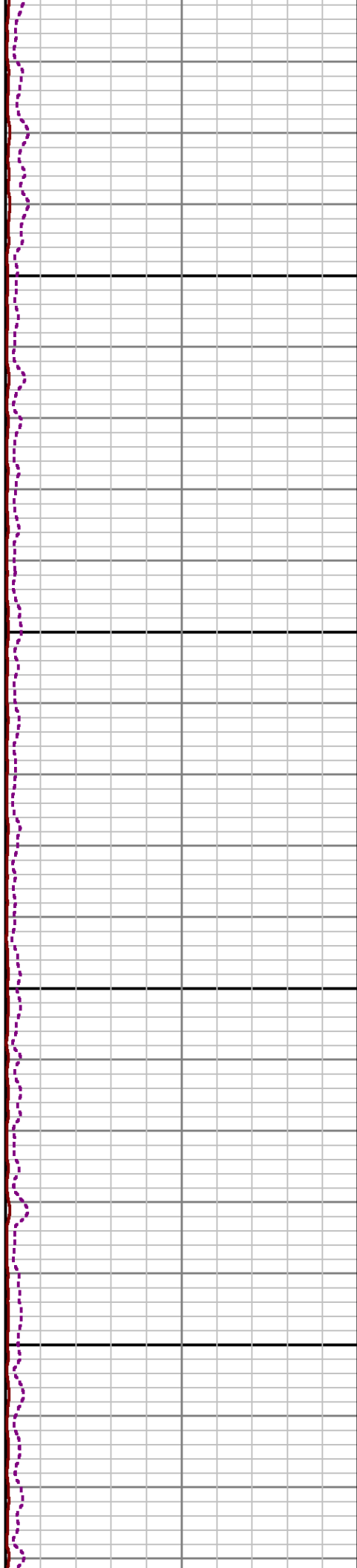
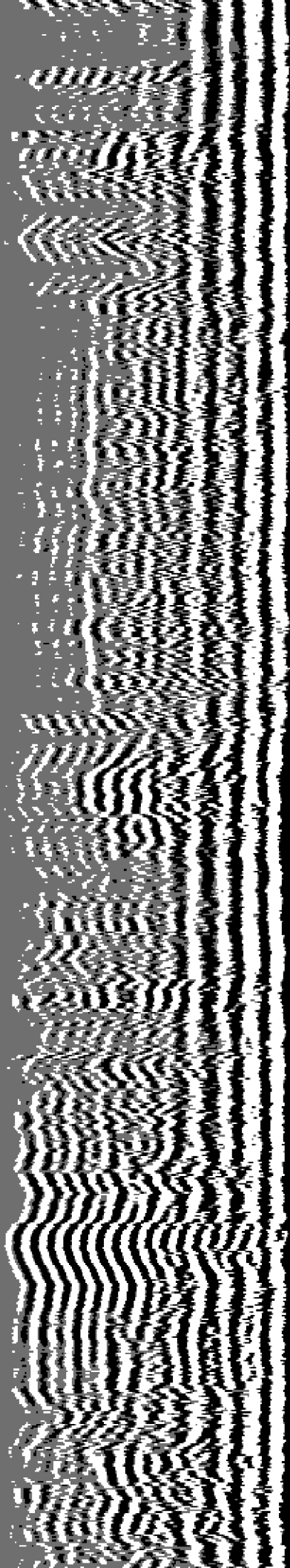
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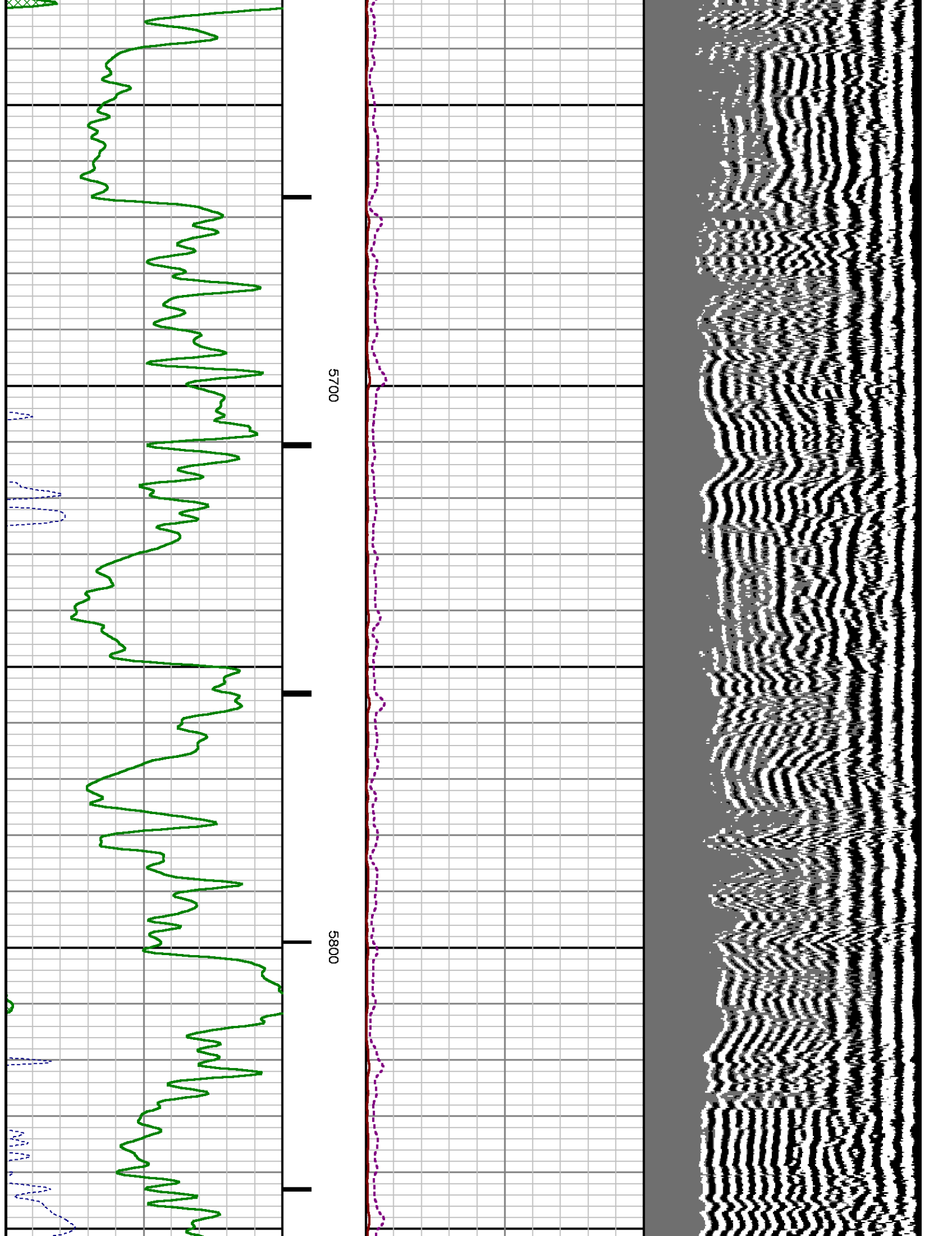
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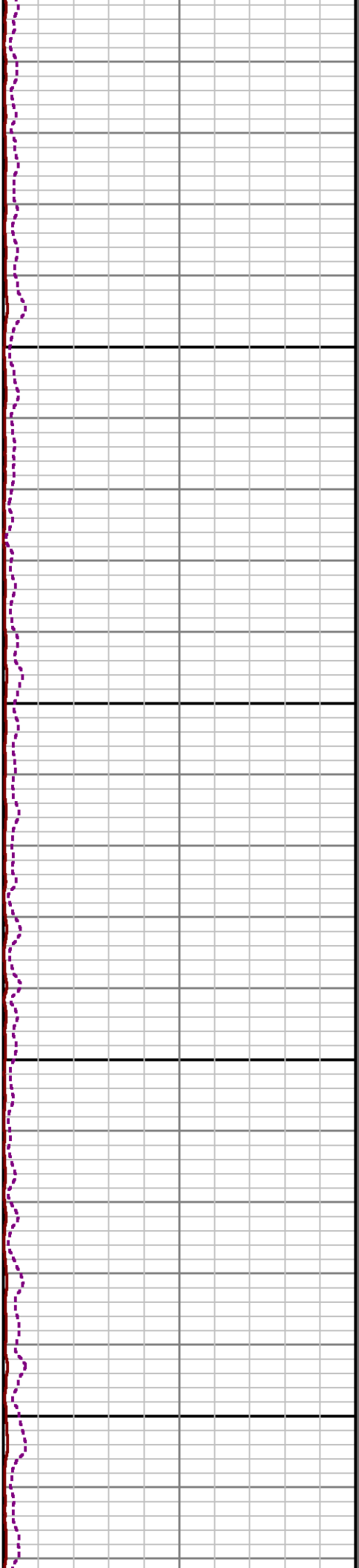
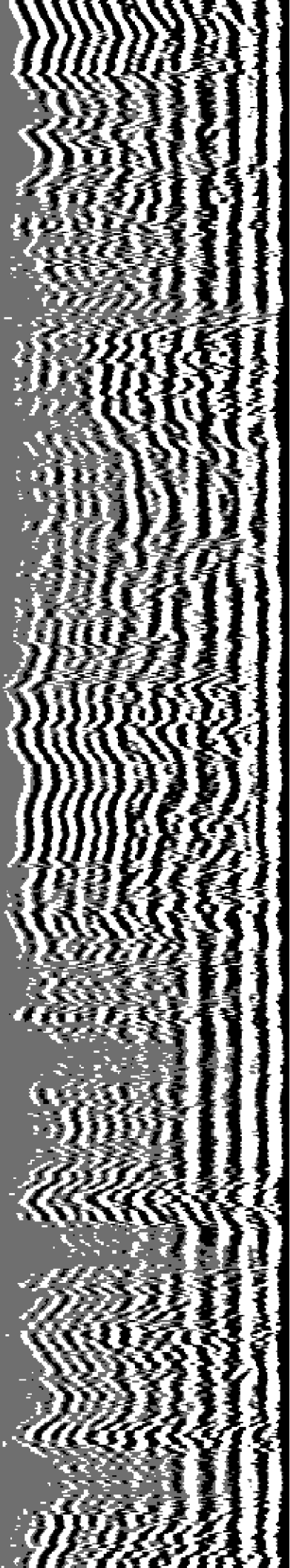
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5400

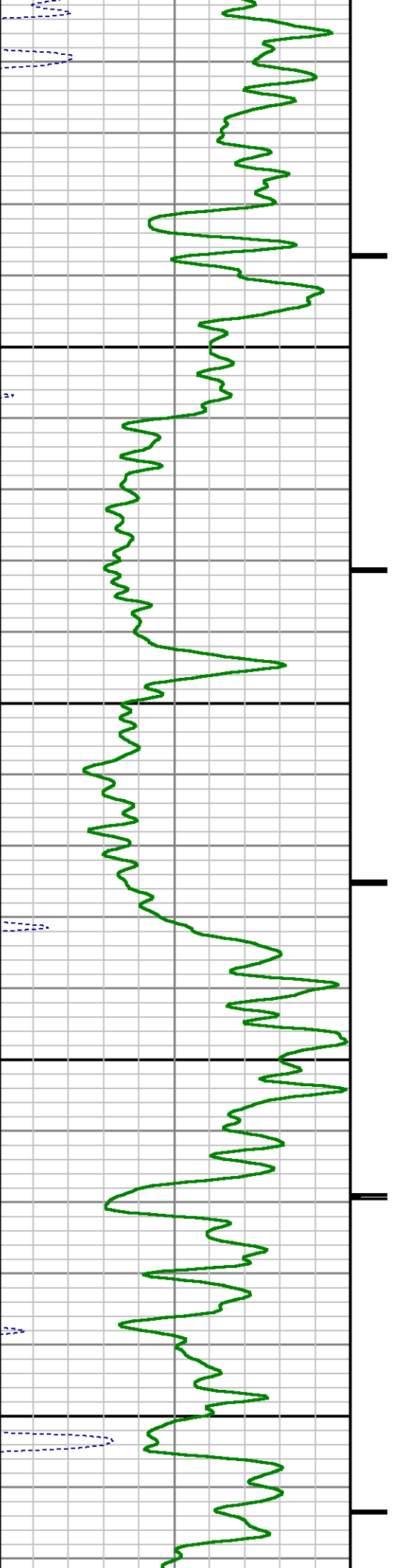


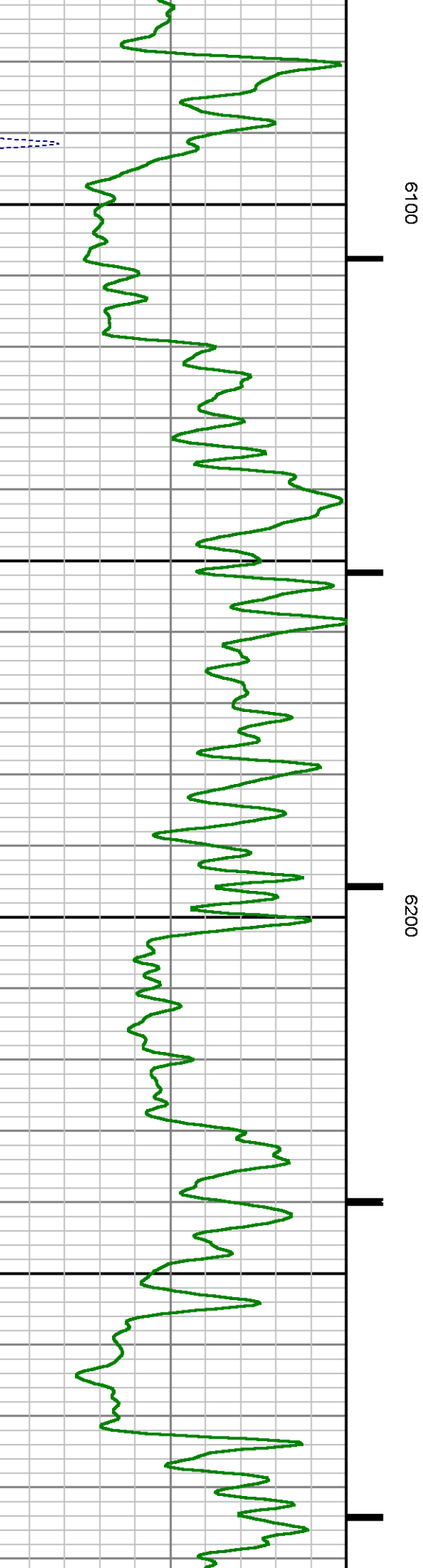
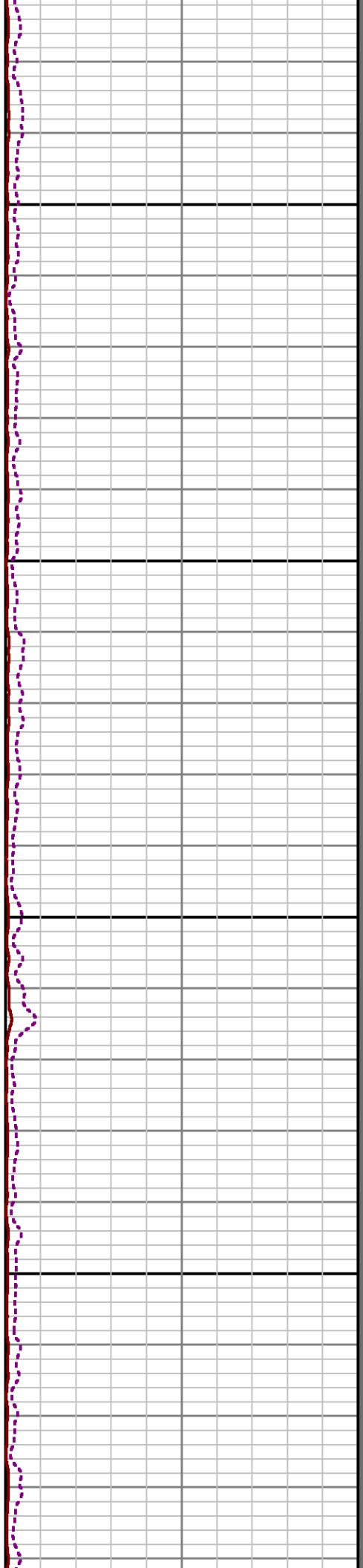
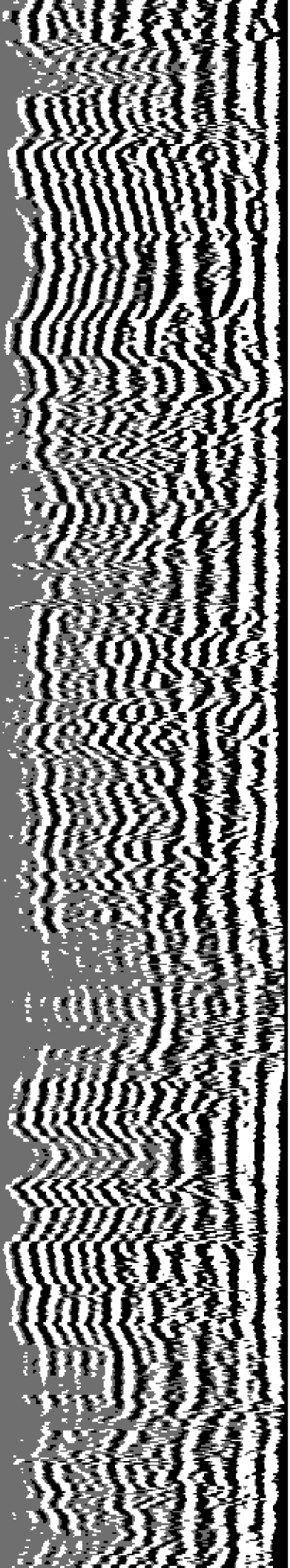


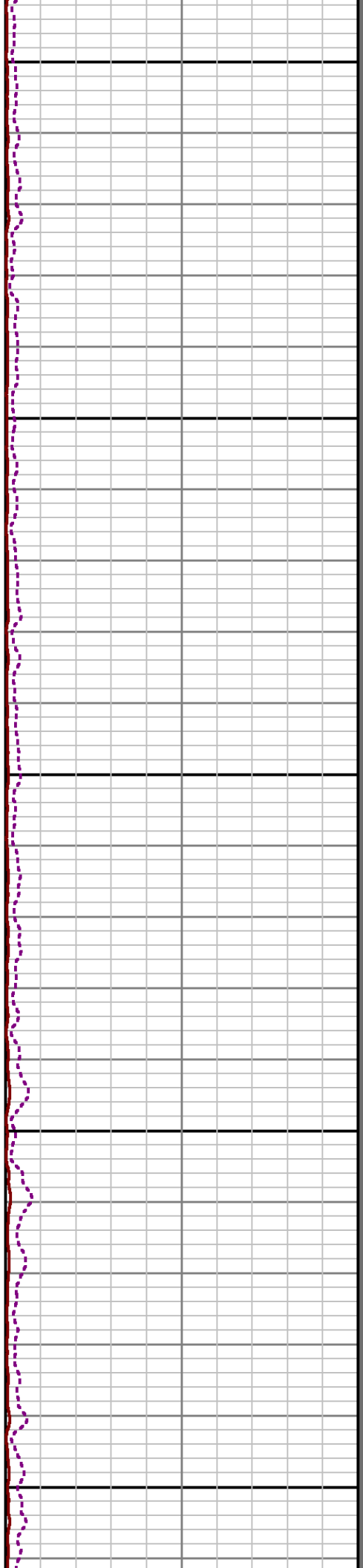
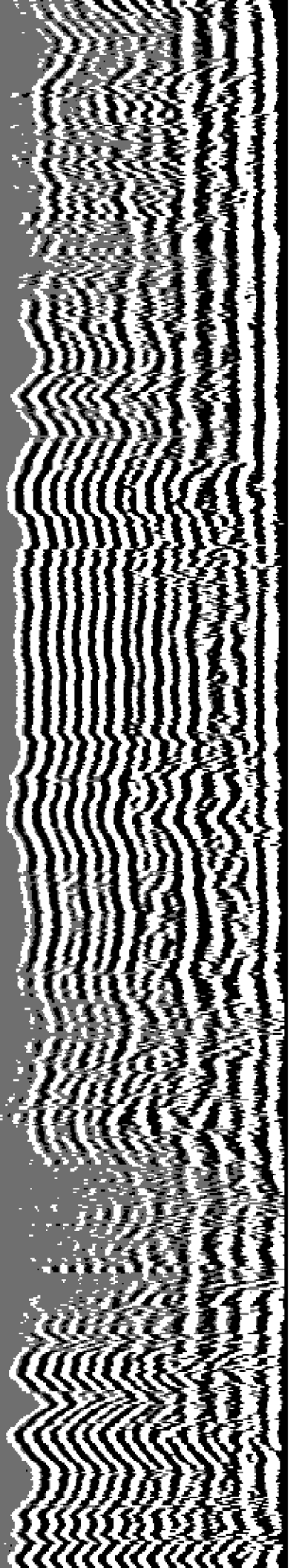


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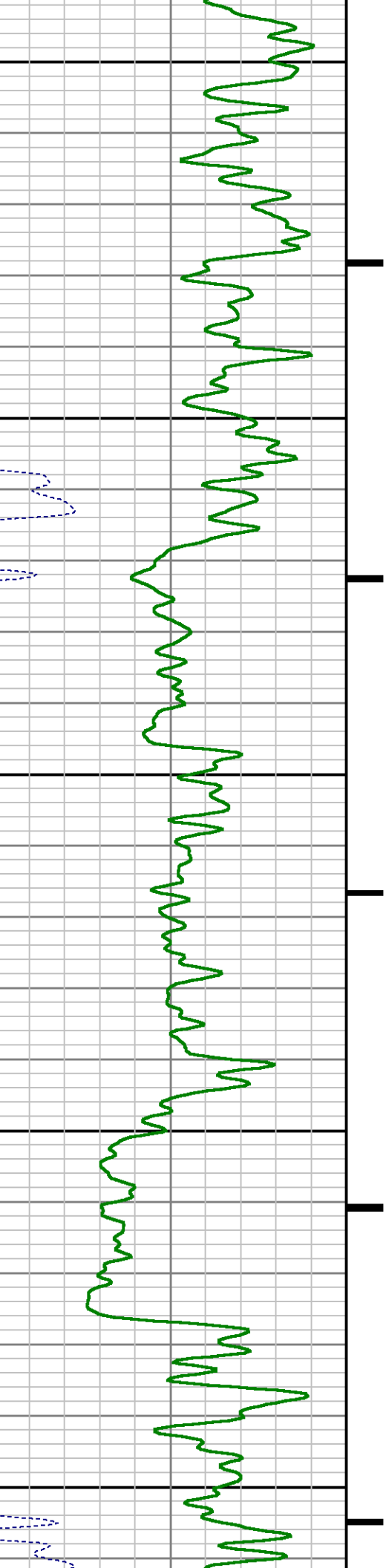


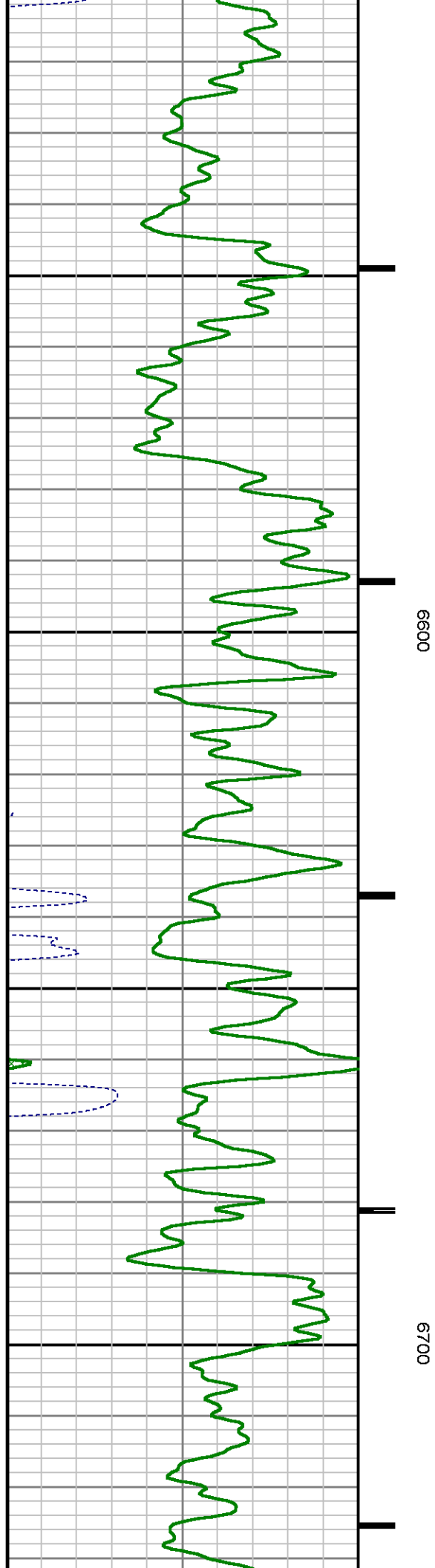
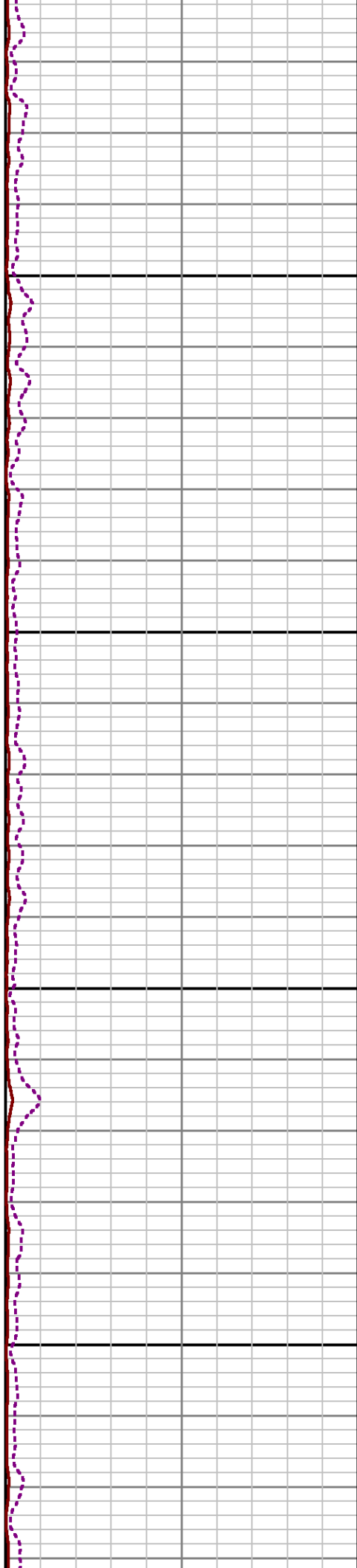
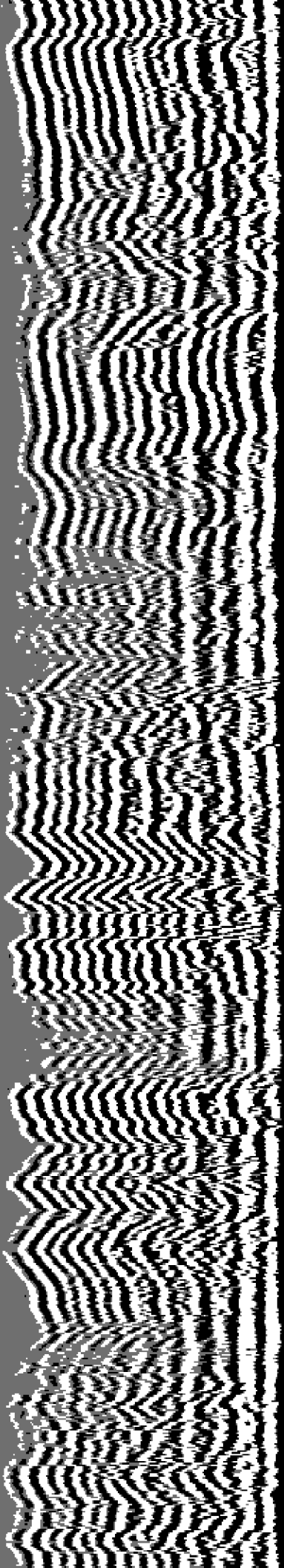


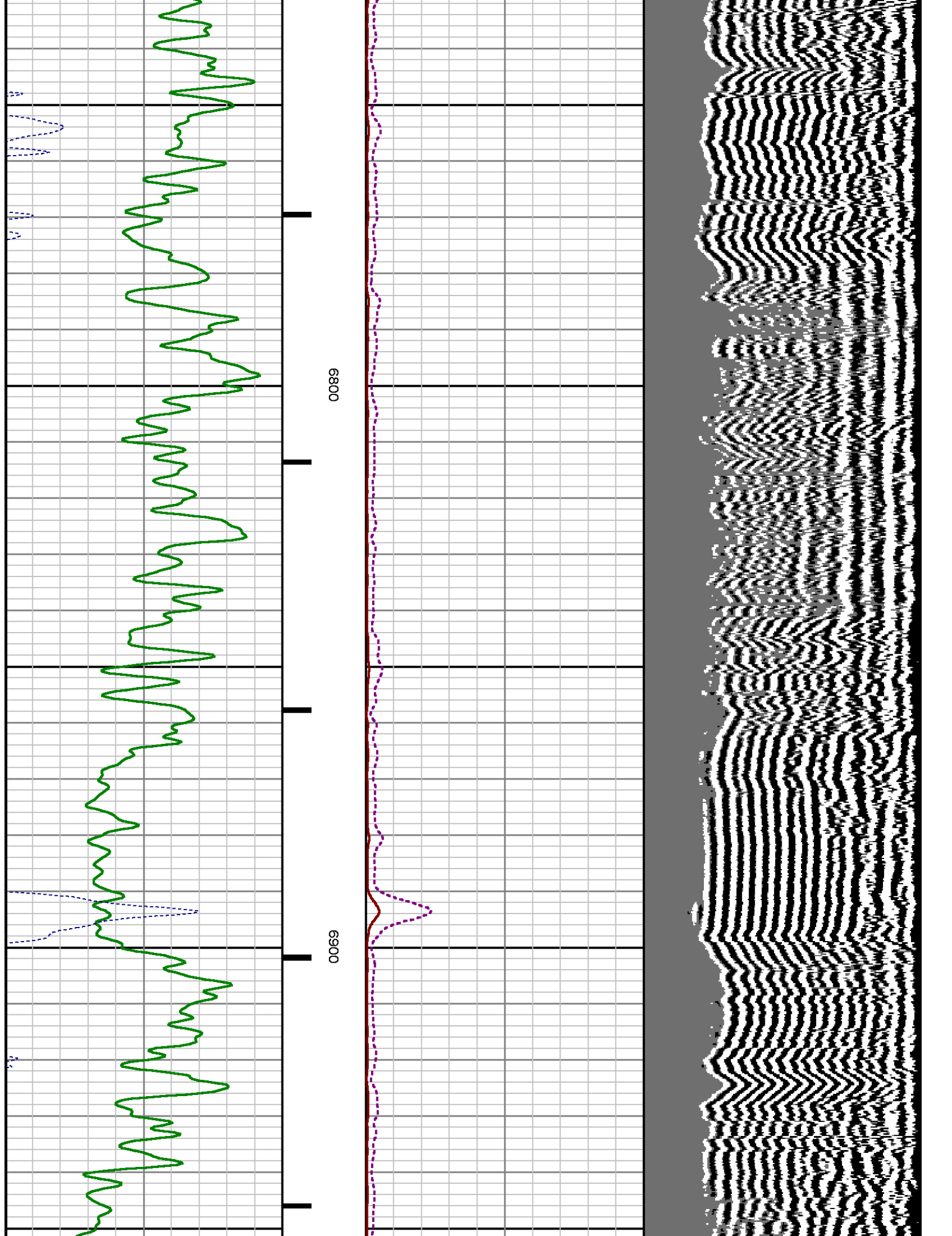
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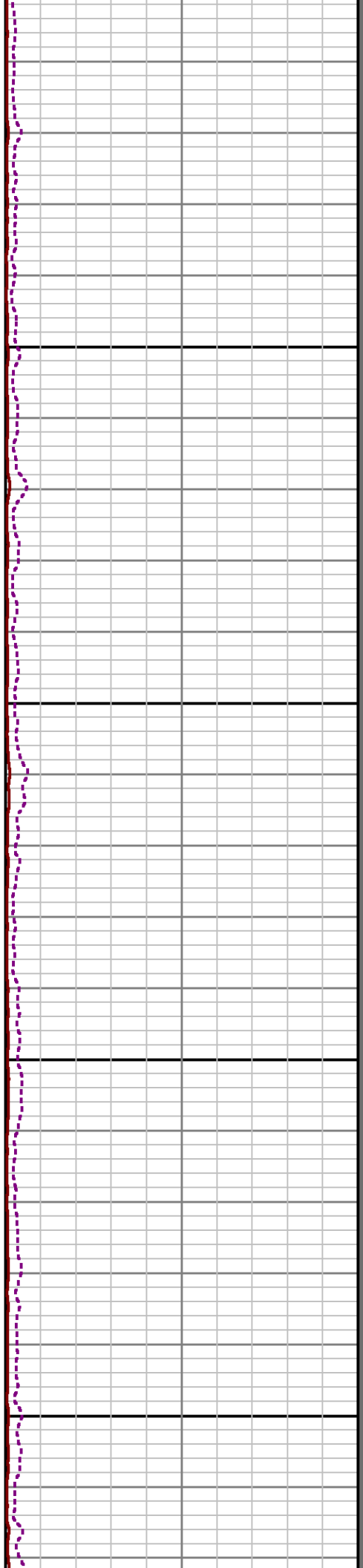
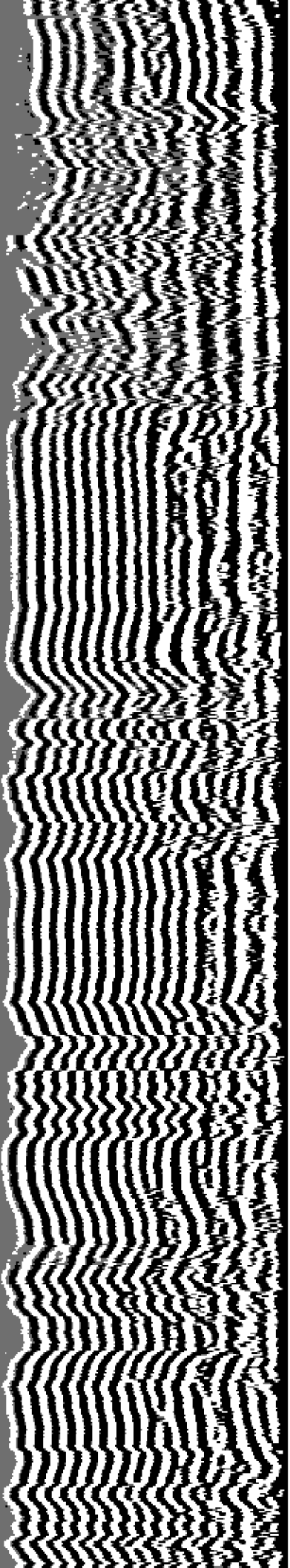
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6500



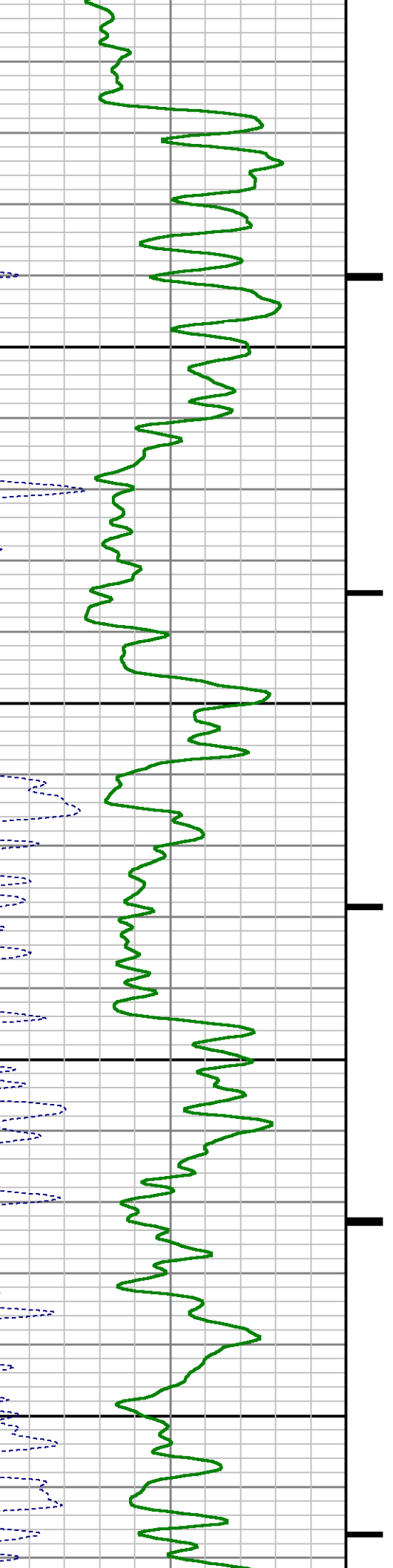


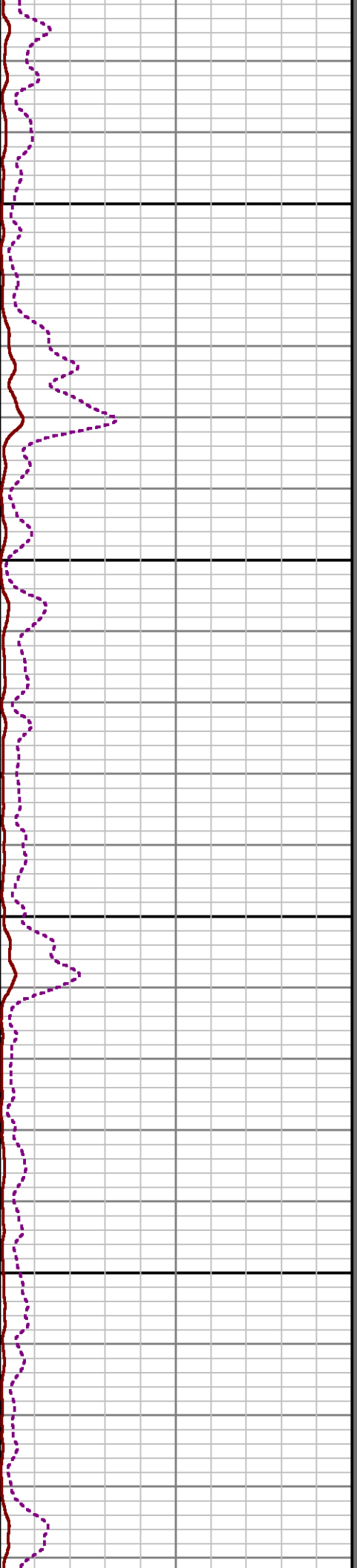
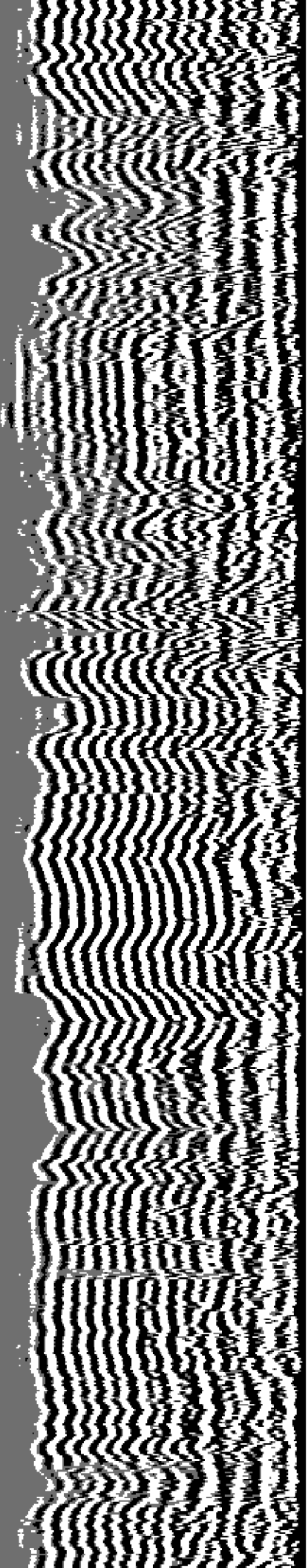




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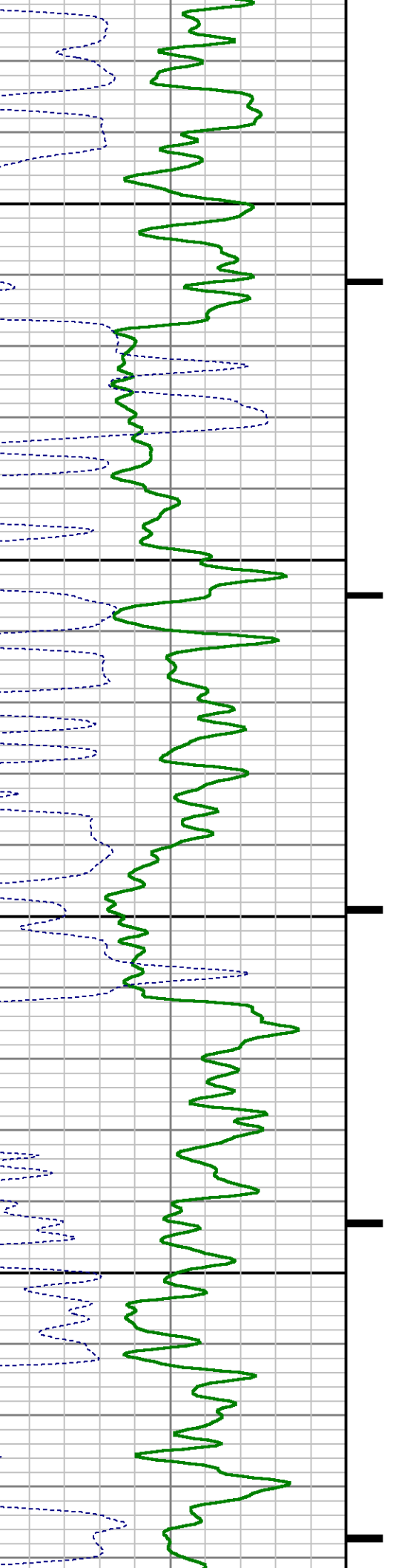
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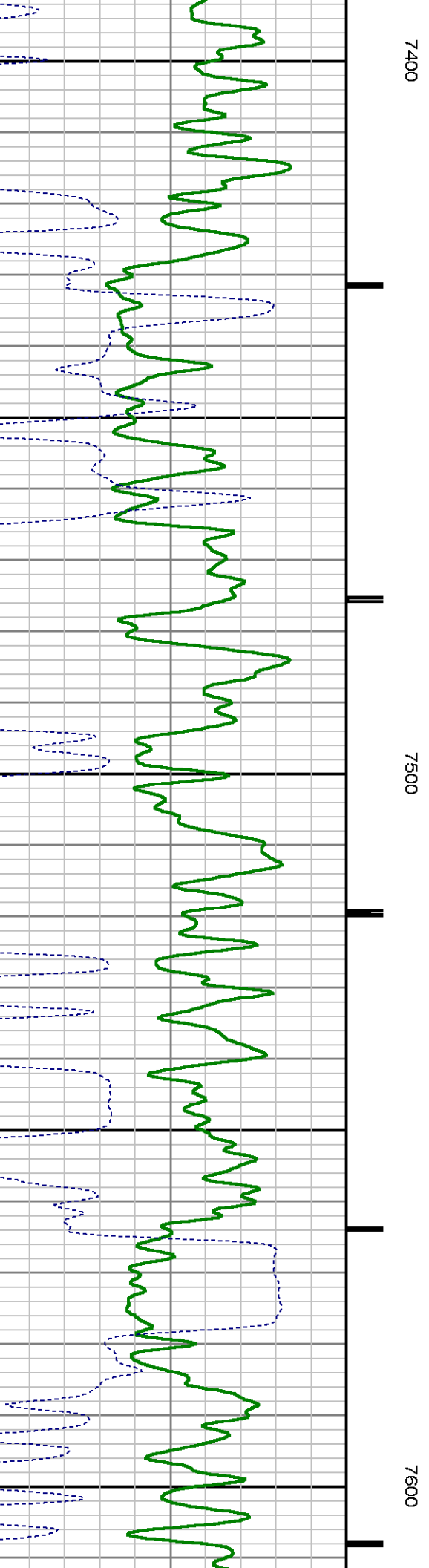
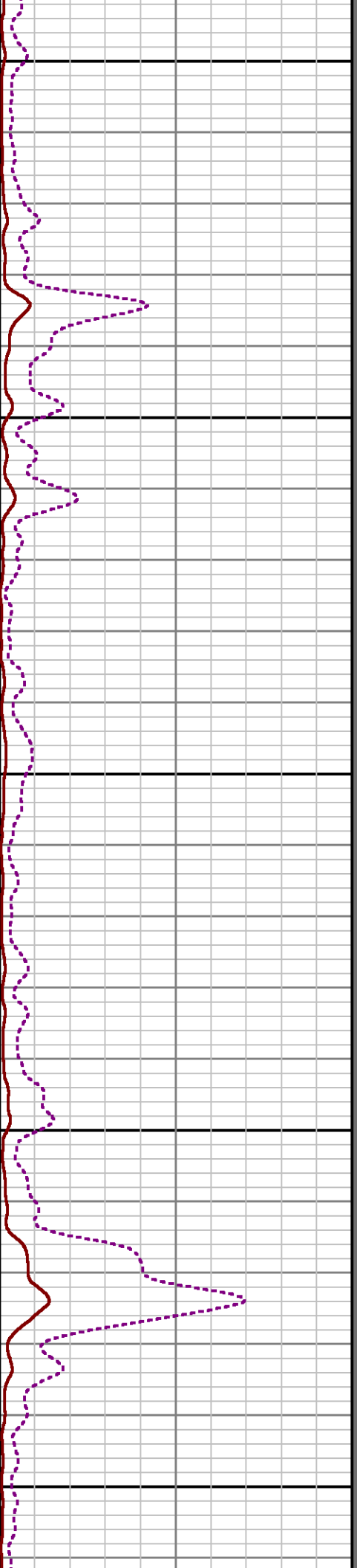
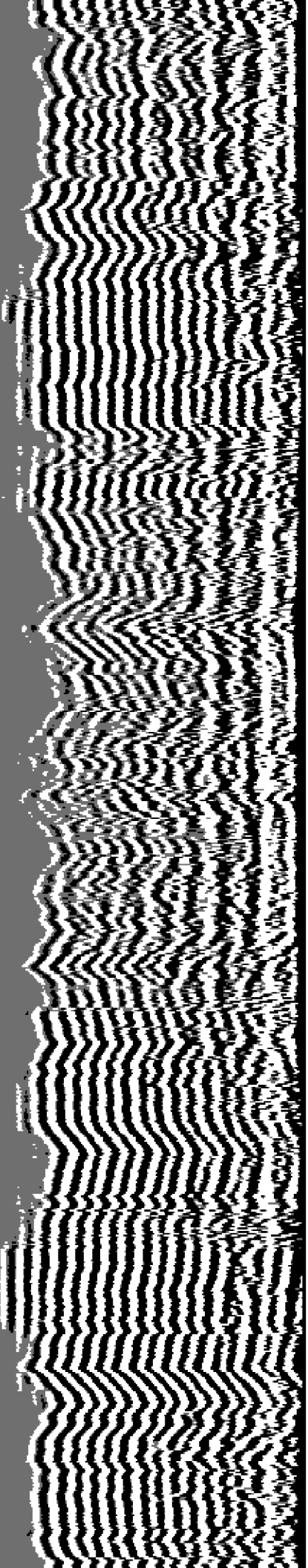


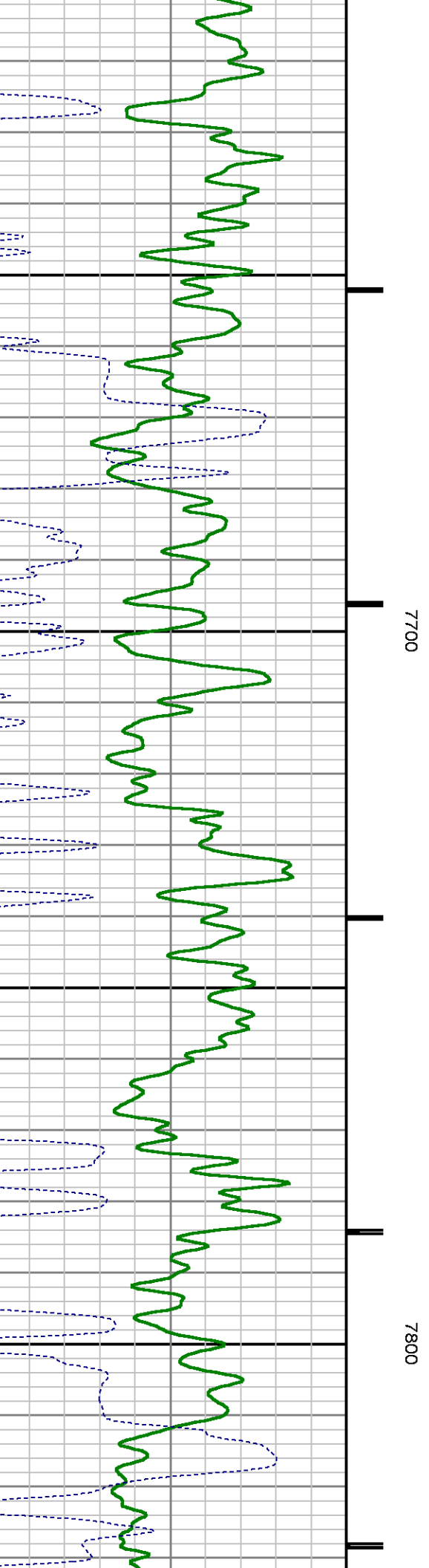
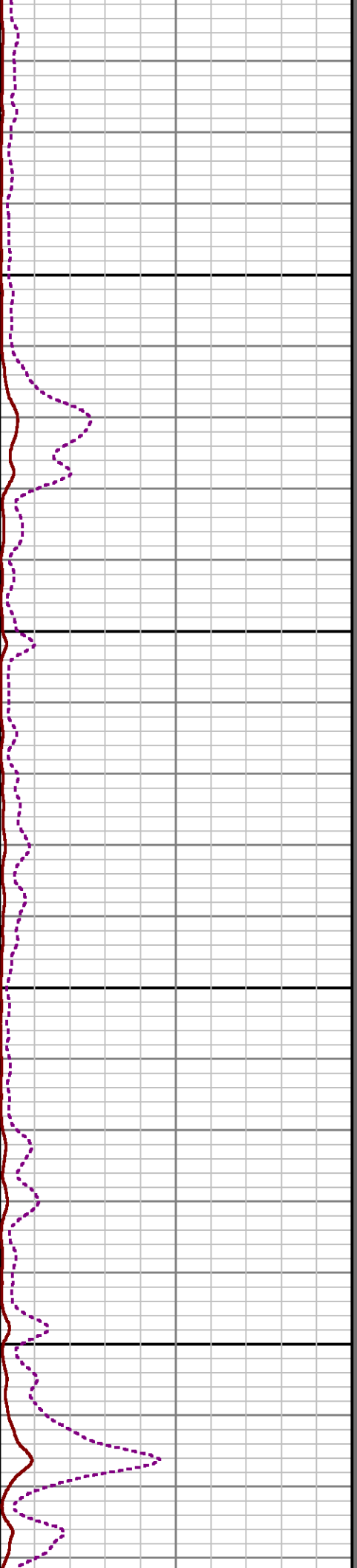
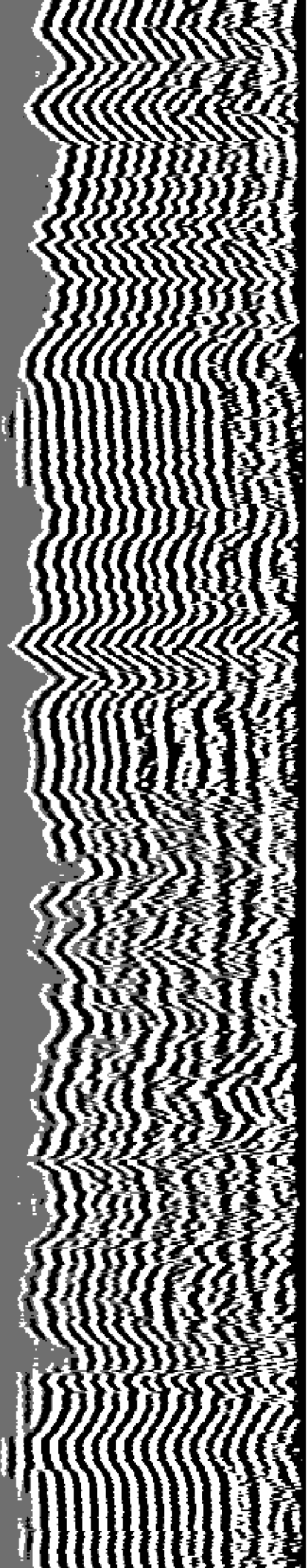


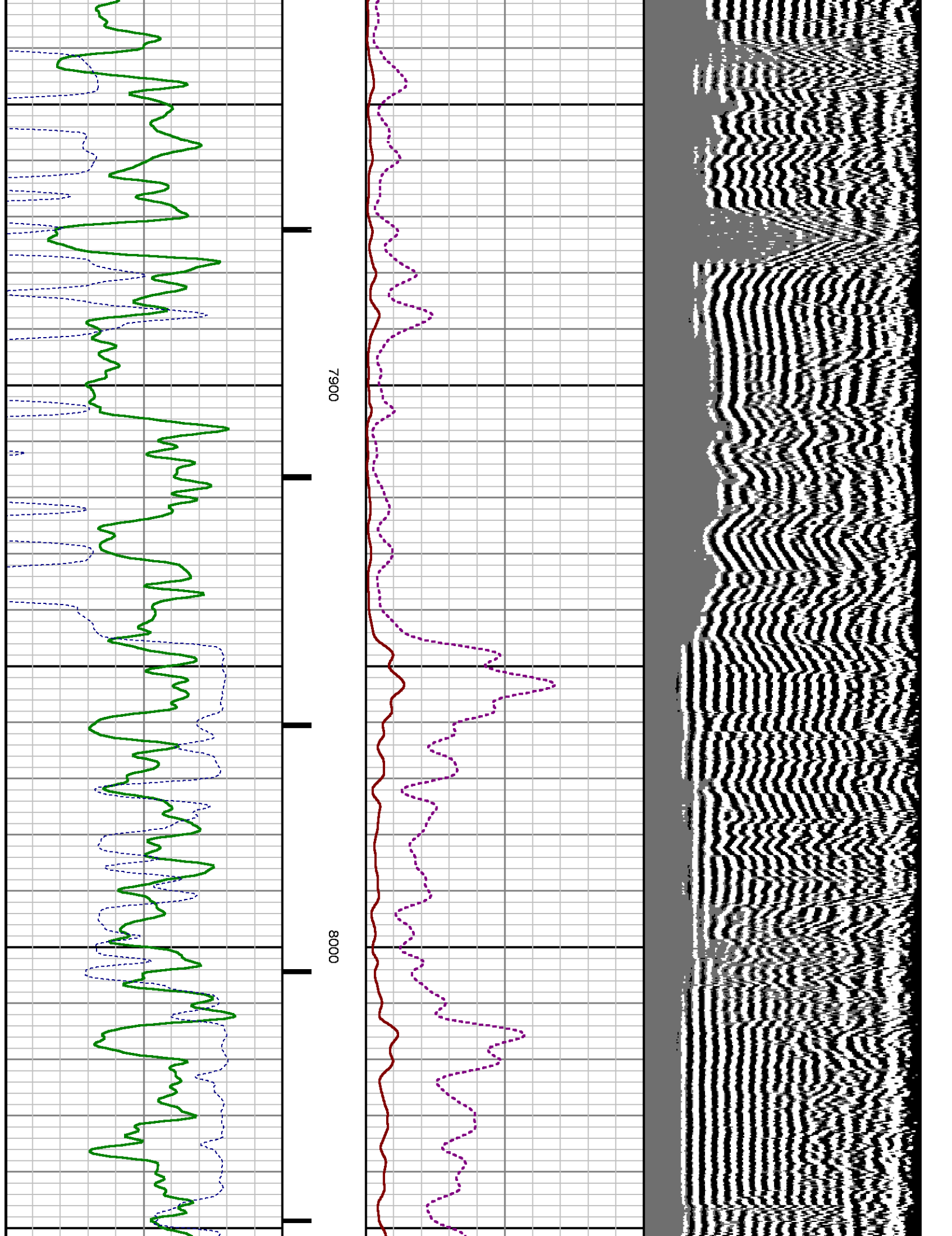
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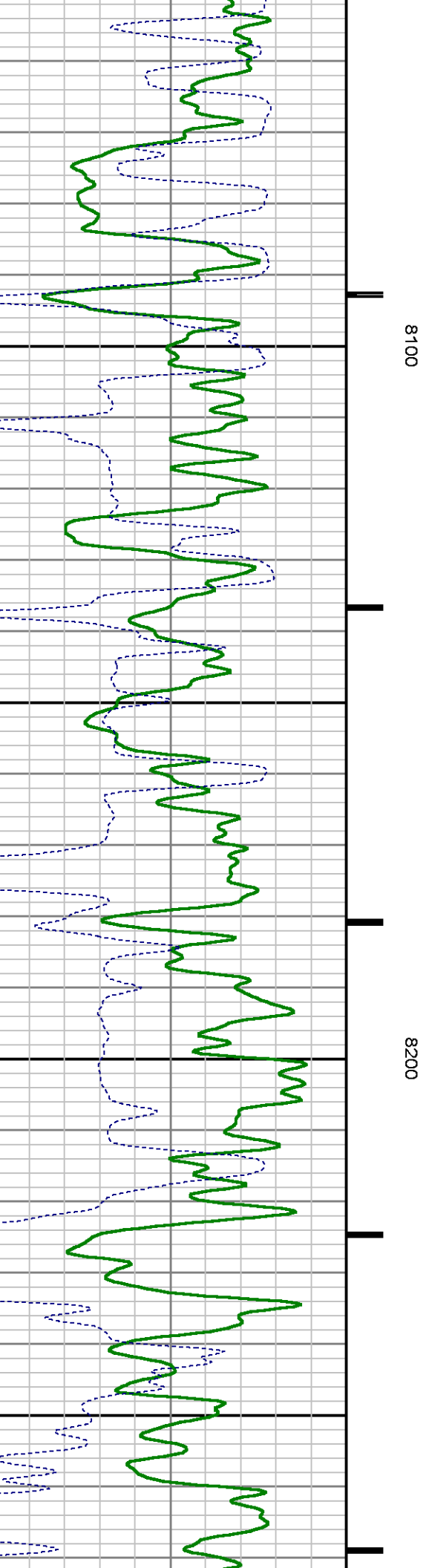
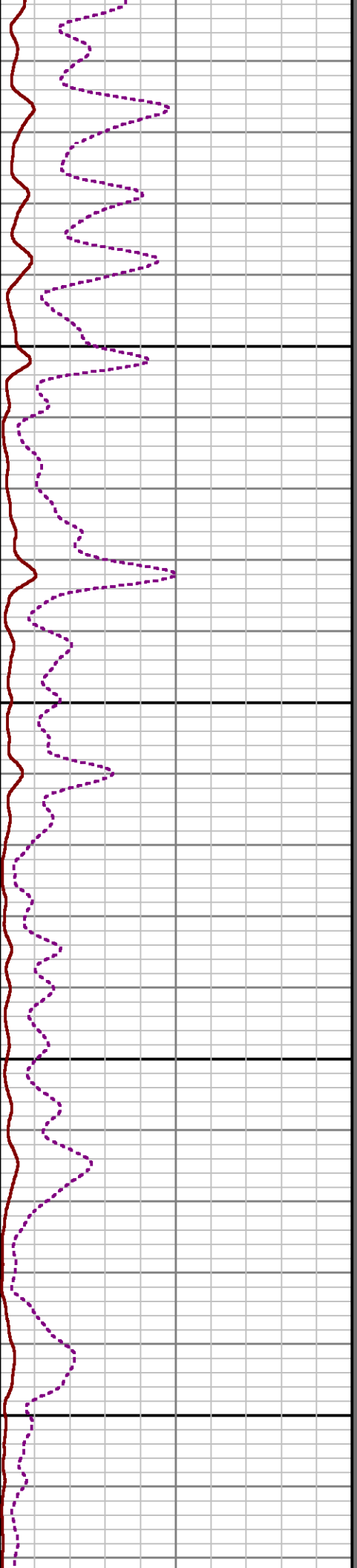
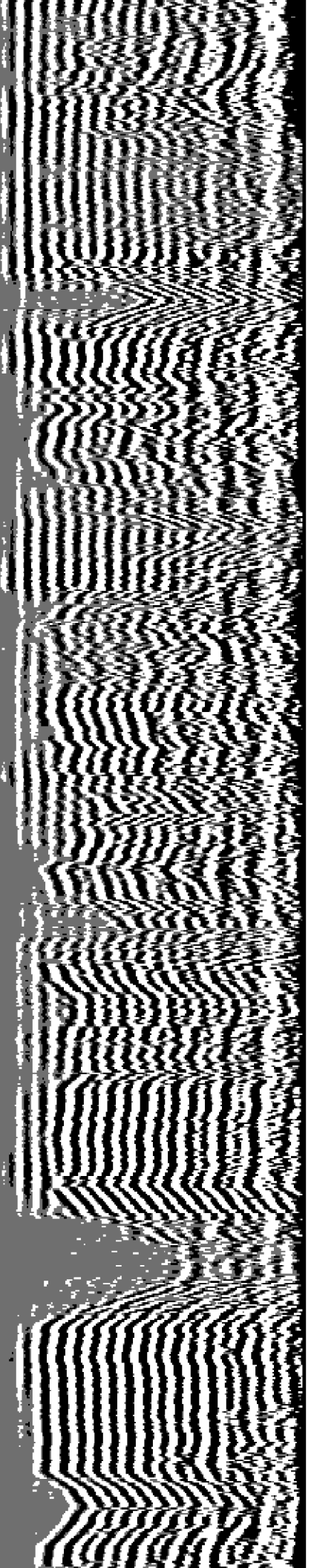
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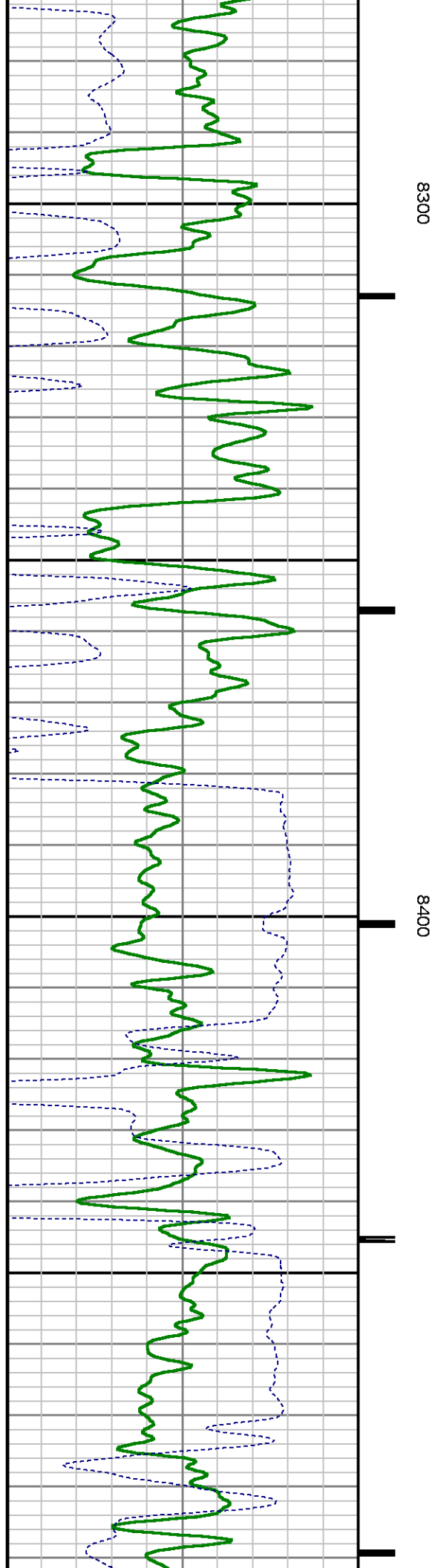
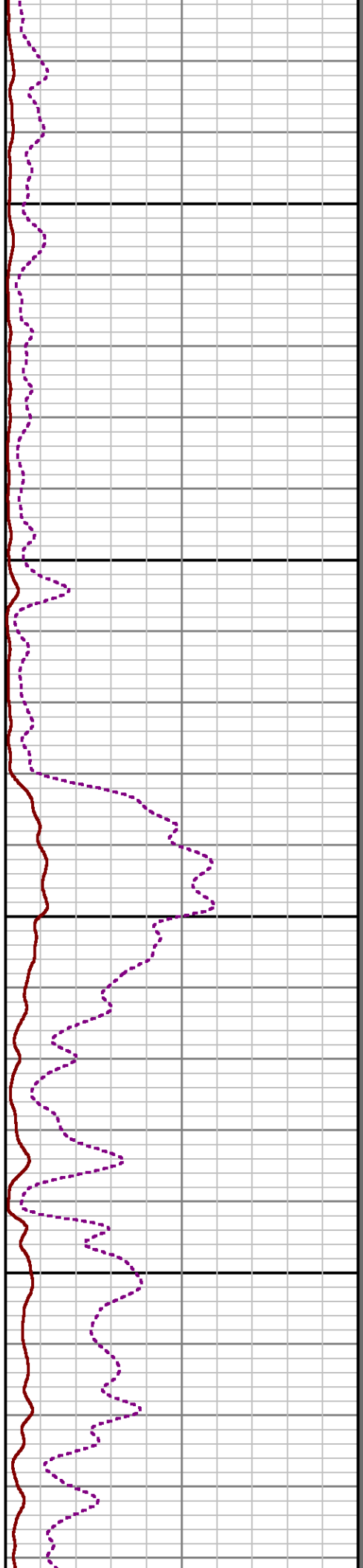
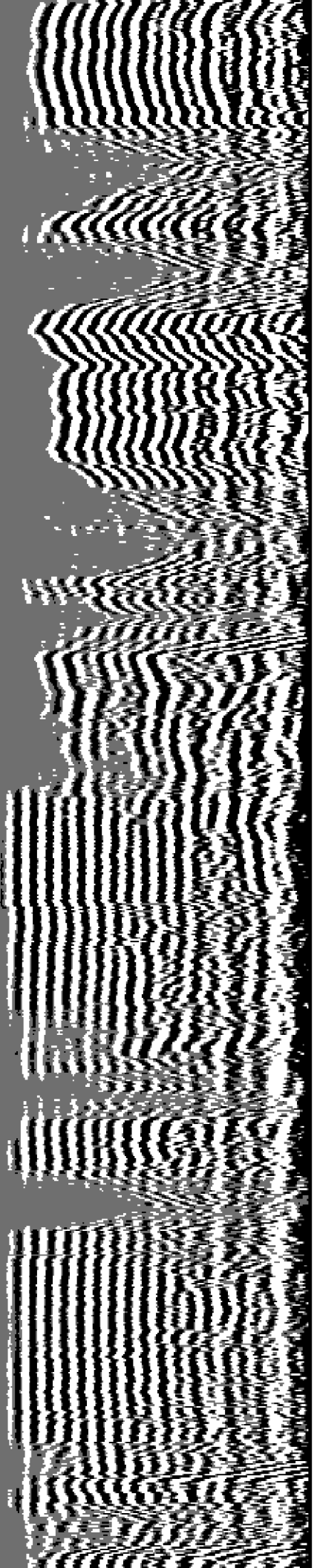


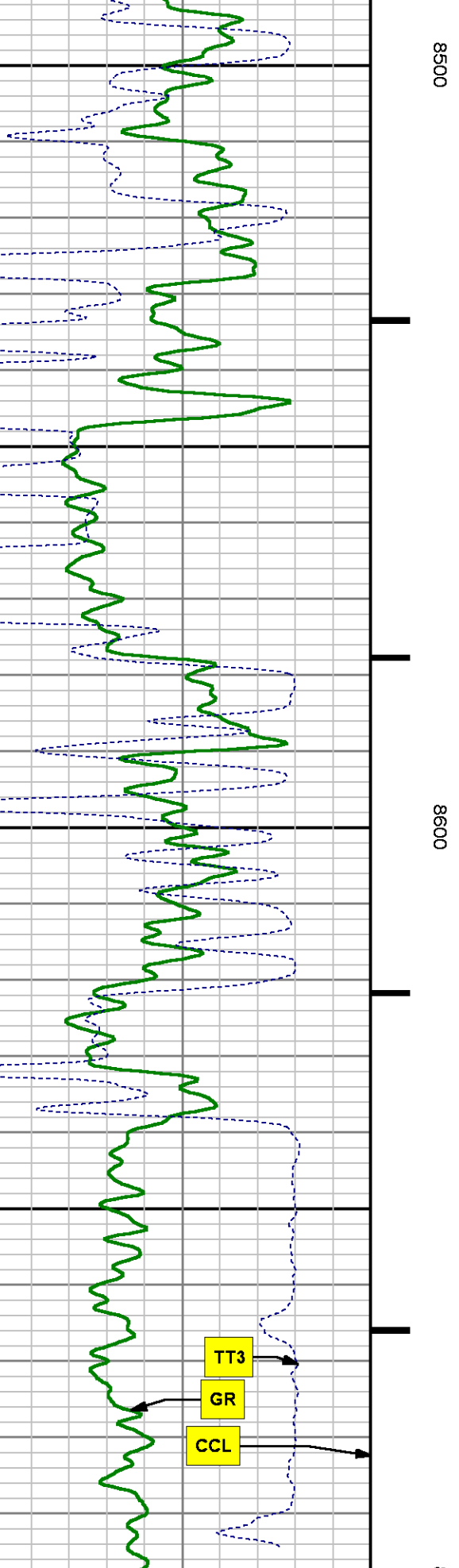
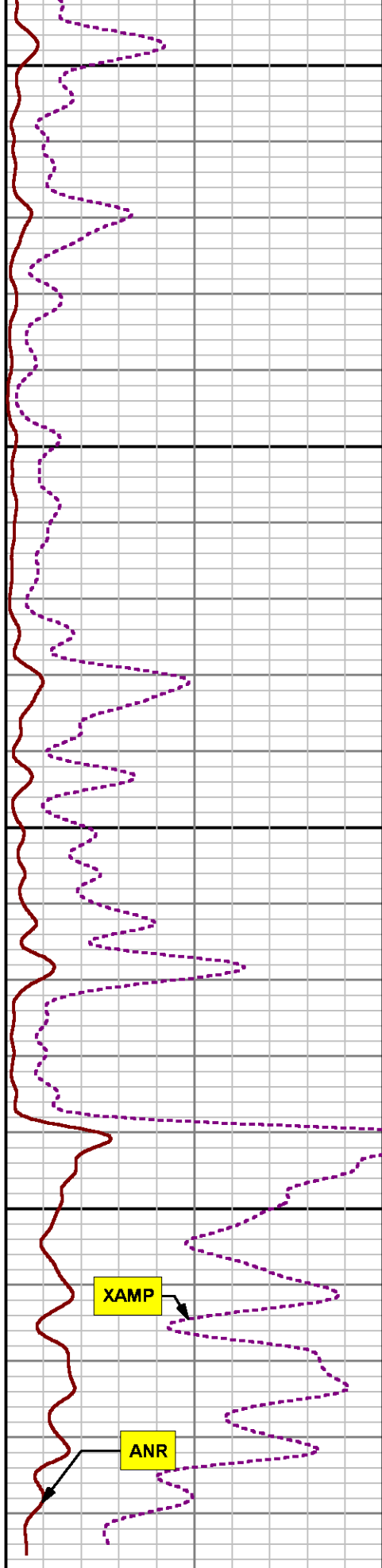
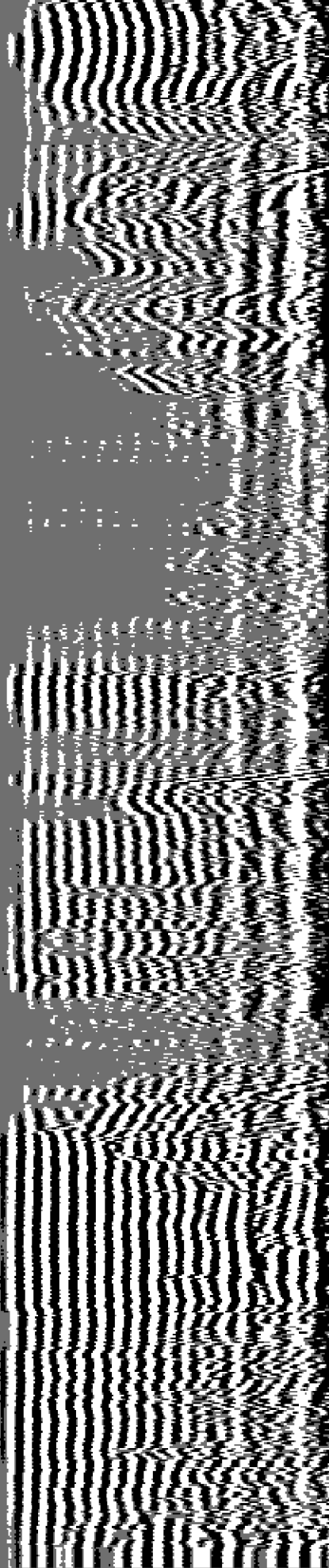


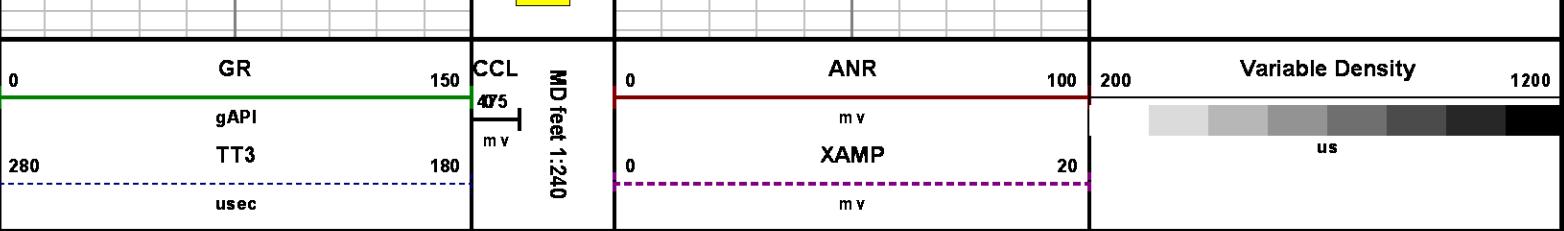












SECONDARY PRESENTATION

0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	u sec	30.718	8712.500
RAL	Amp Gate Start Near	195.000	u sec	30.718	8712.500
RAL	Amp Gate Start Radial	195.000	u sec	30.718	8712.500
RAL	Amp Gate Width Far	25.000	u sec	30.718	8712.500
RAL	Amp Gate Width Near	25.000	u sec	30.718	8712.500
RAL	Amp Gate Width Radial	25.000	u sec	30.718	8712.500
RAL	casing od	4.500	inches	30.718	8712.500
RAL	casing wt	11.600	lbm/ft	30.718	8712.500
RAL	FB Start Far	291.900	u sec	30.718	8712.500
RAL	FB Start Near	175.391	u sec	30.718	8712.500
RAL	FB Start Radial	175.391	u sec	30.718	8712.500
RAL	FB Thresh Far	10.000	m v	30.718	8712.500
RAL	FB Thresh Near	4.000	m v	30.718	8712.500
RAL	FB Thresh Radial	4.000	m v	30.718	8712.500
RAL	Fluid Travel Time	200.000	u sec/ft	30.718	8712.500

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	AEAR	SIG	TT5			

1420XA	-10.760	CCL
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

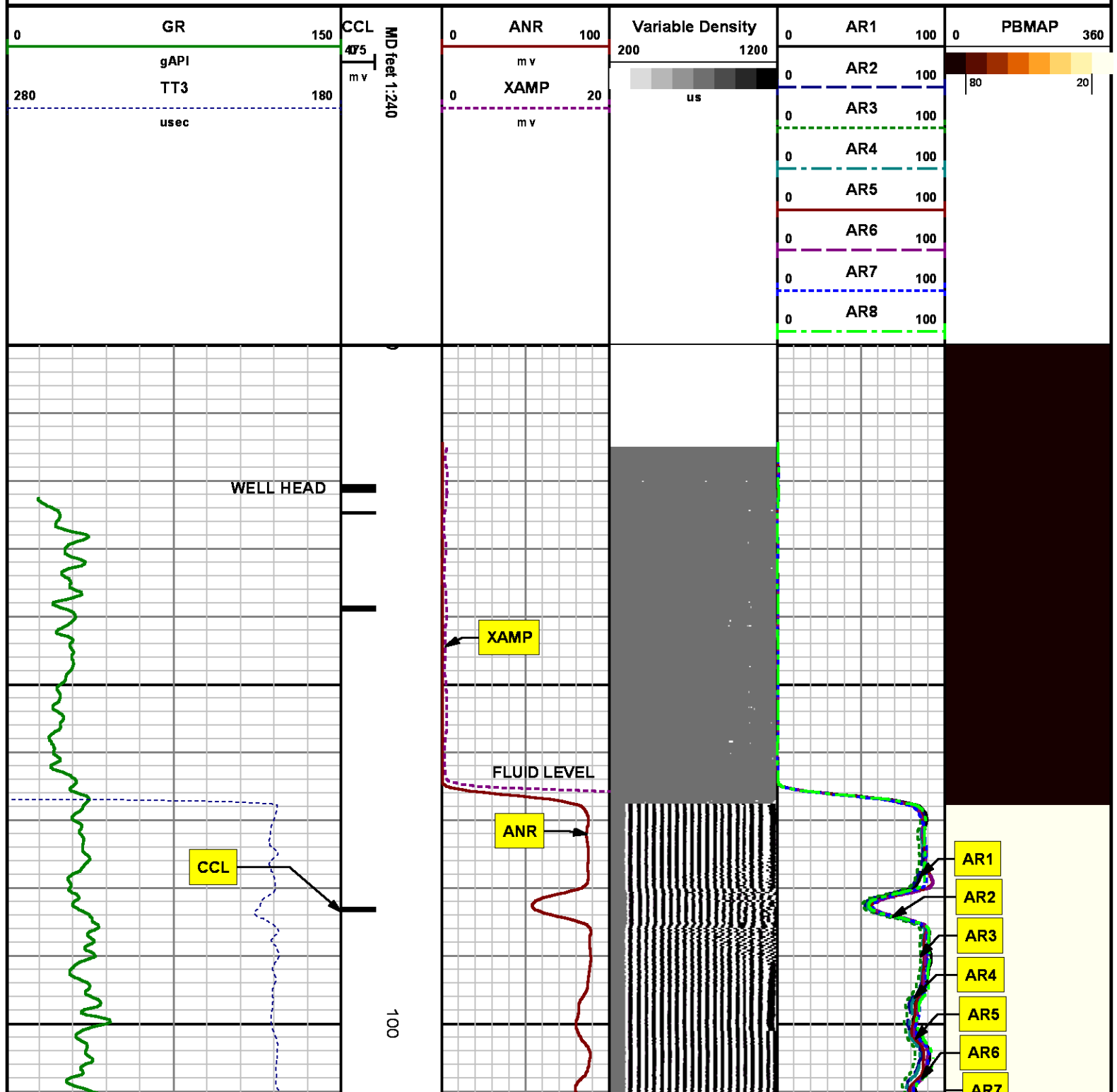
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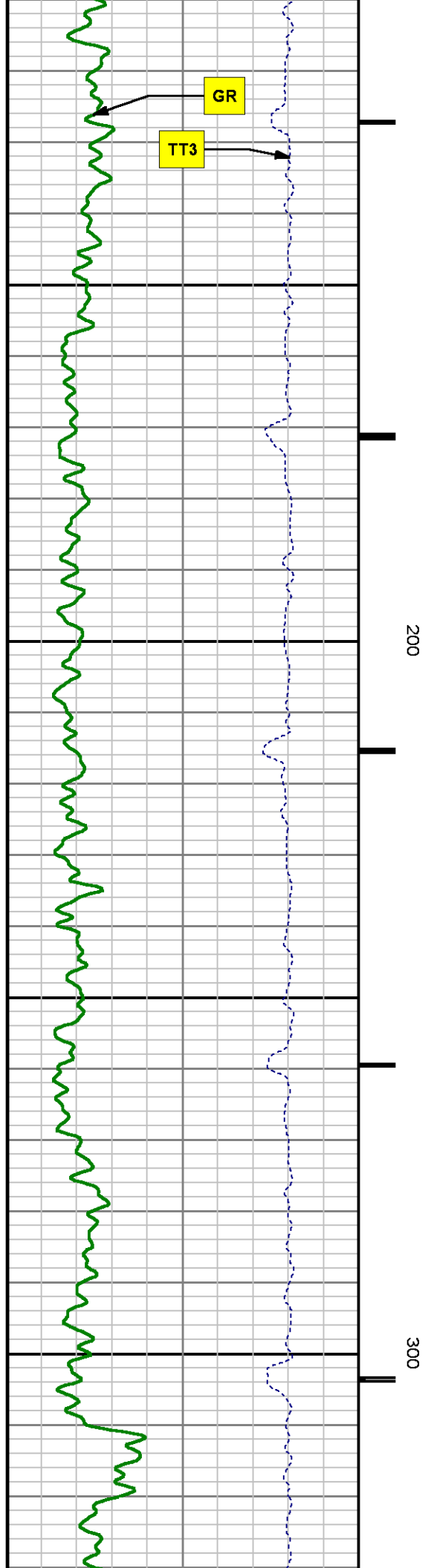
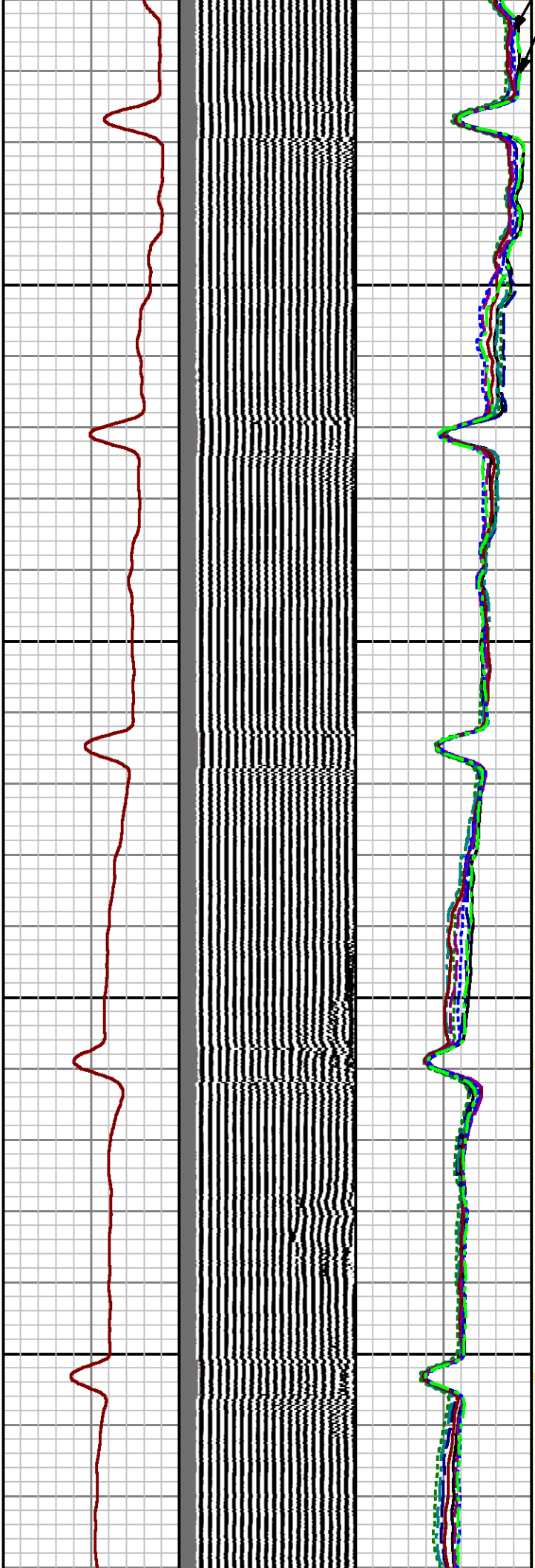
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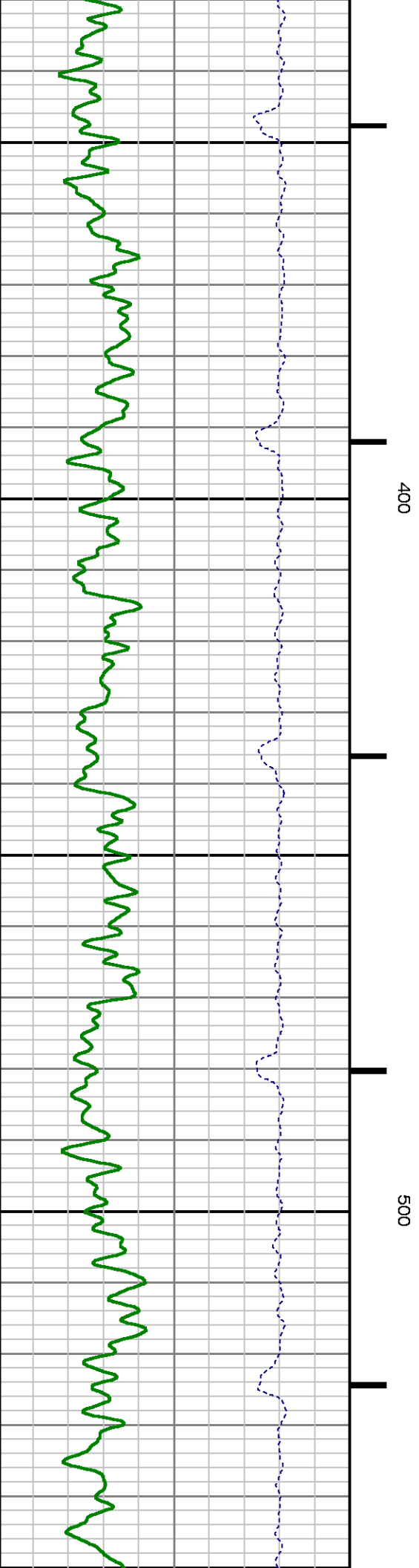
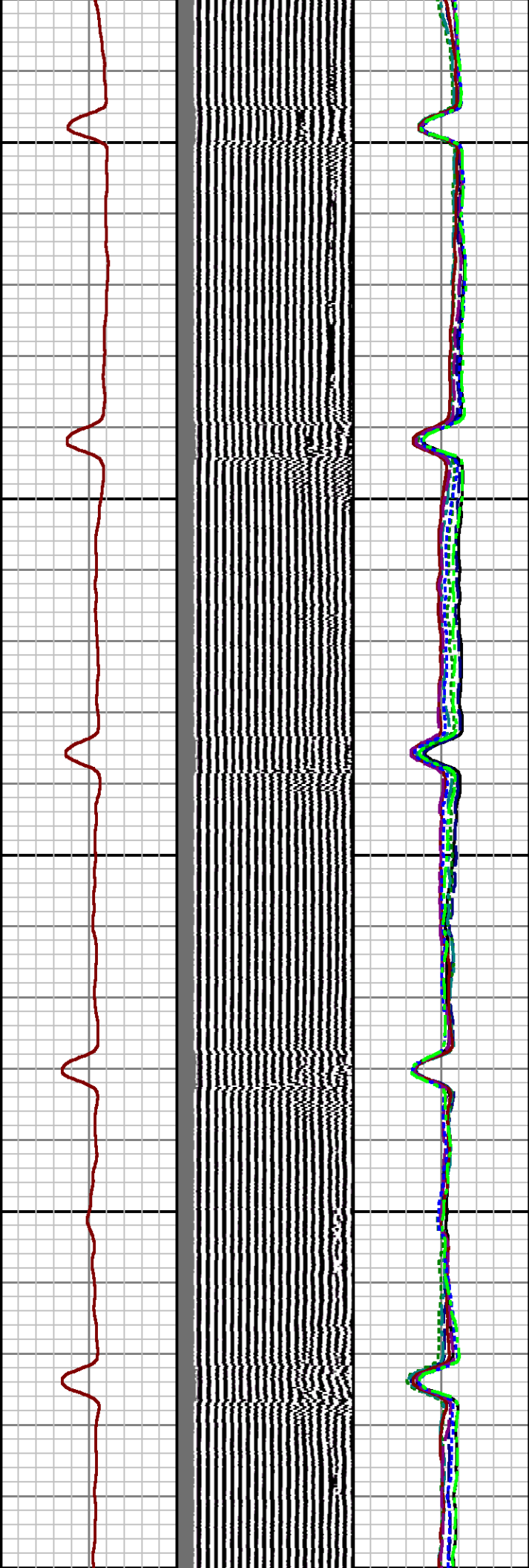
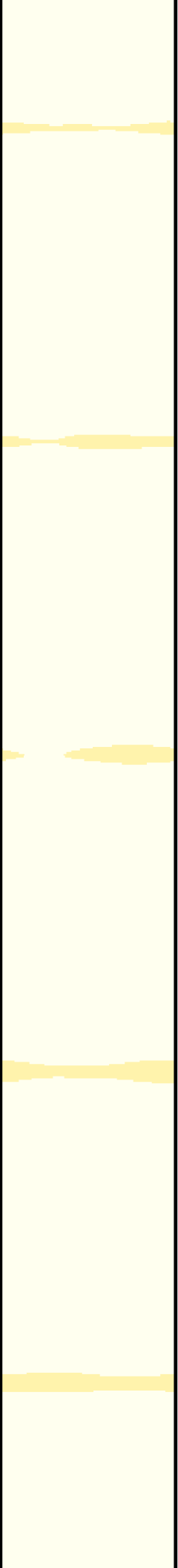
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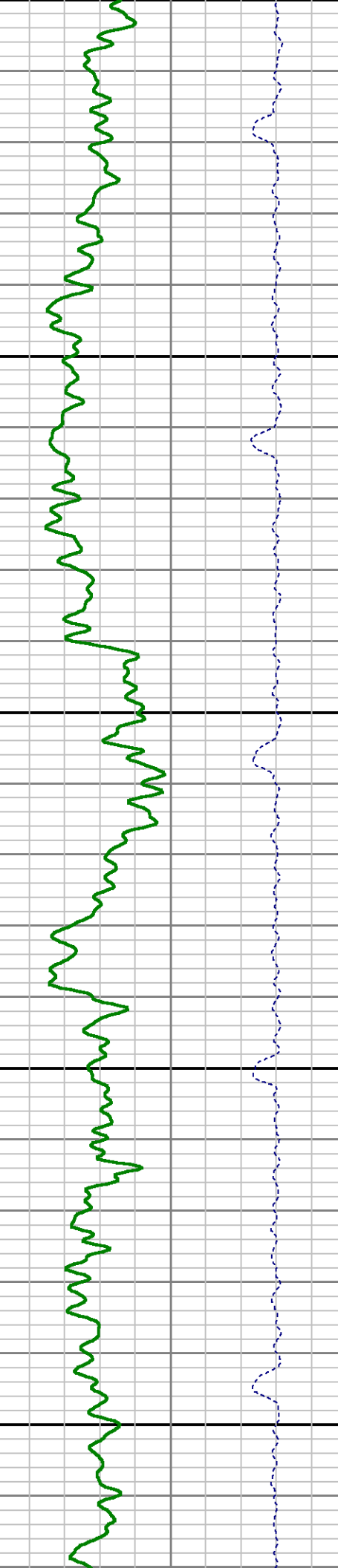
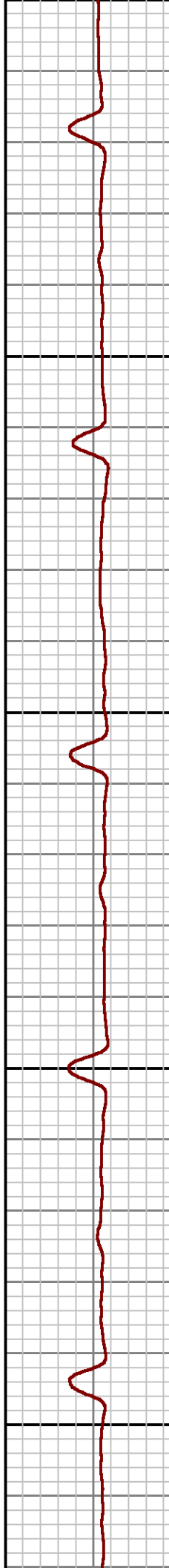
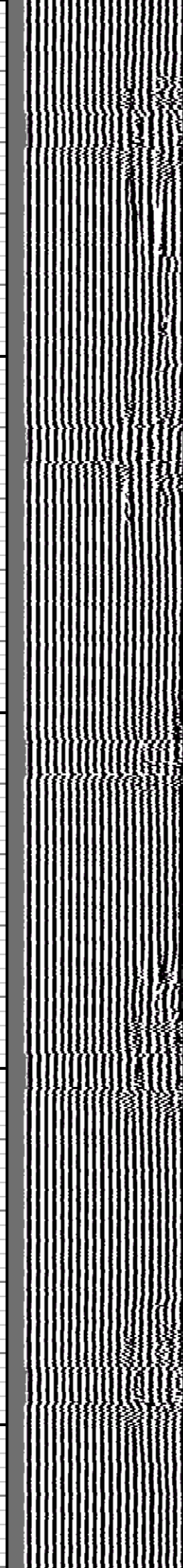
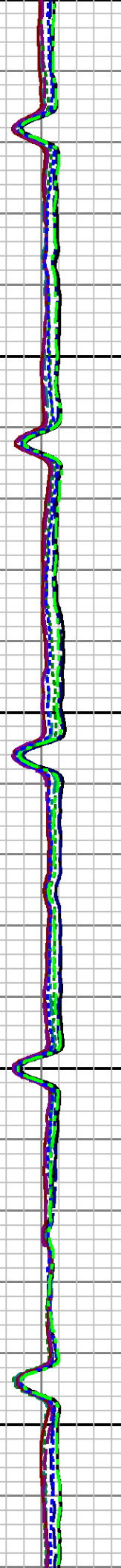
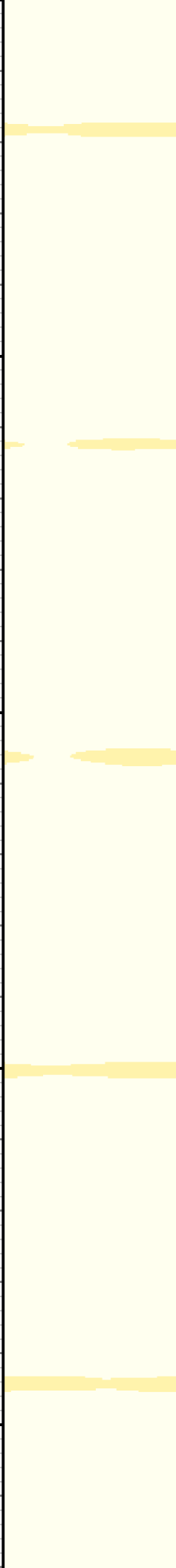
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AR7
AR8

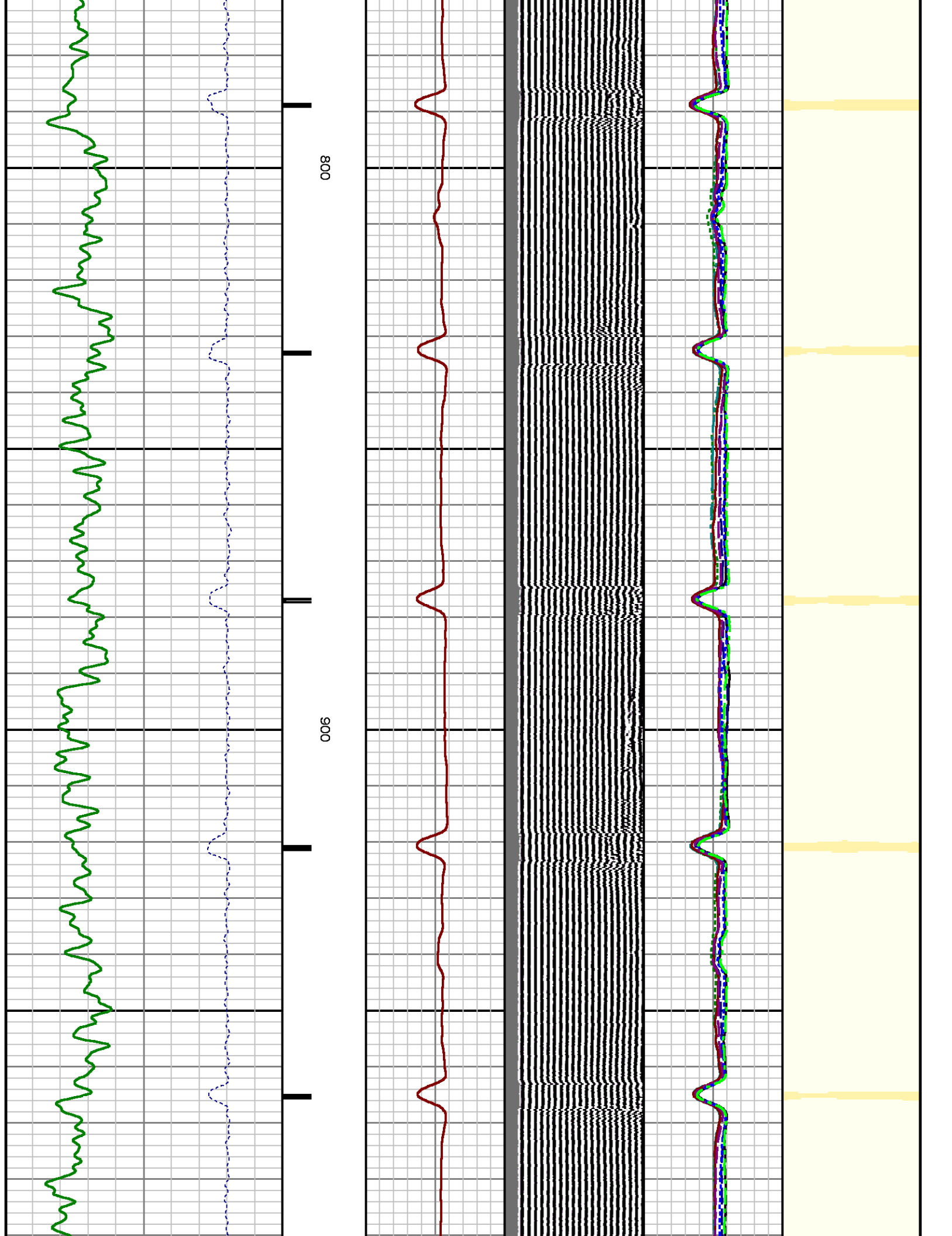


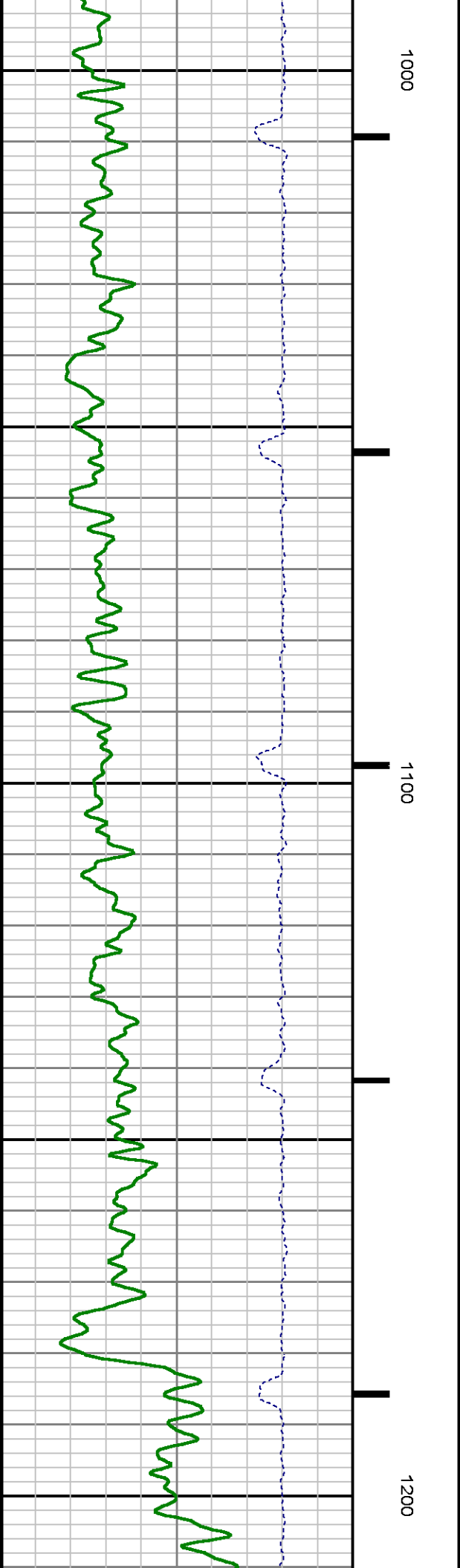
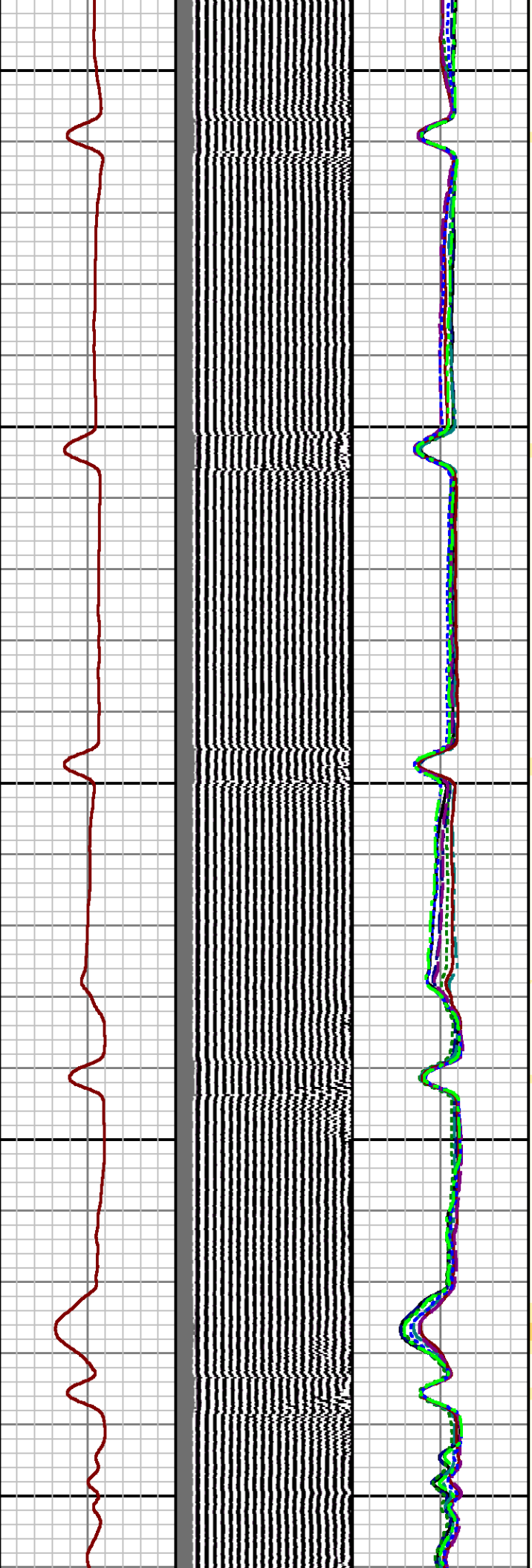
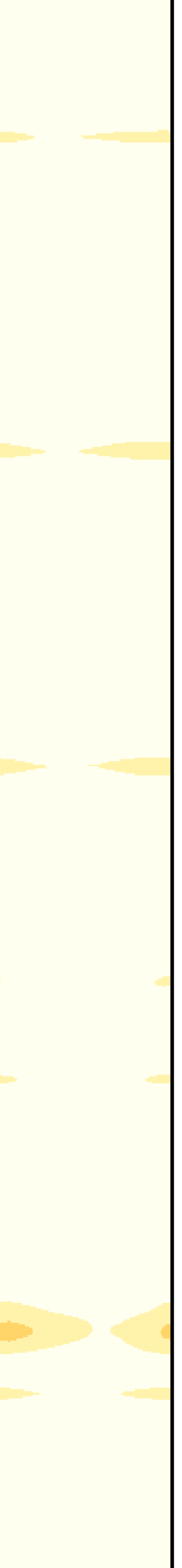


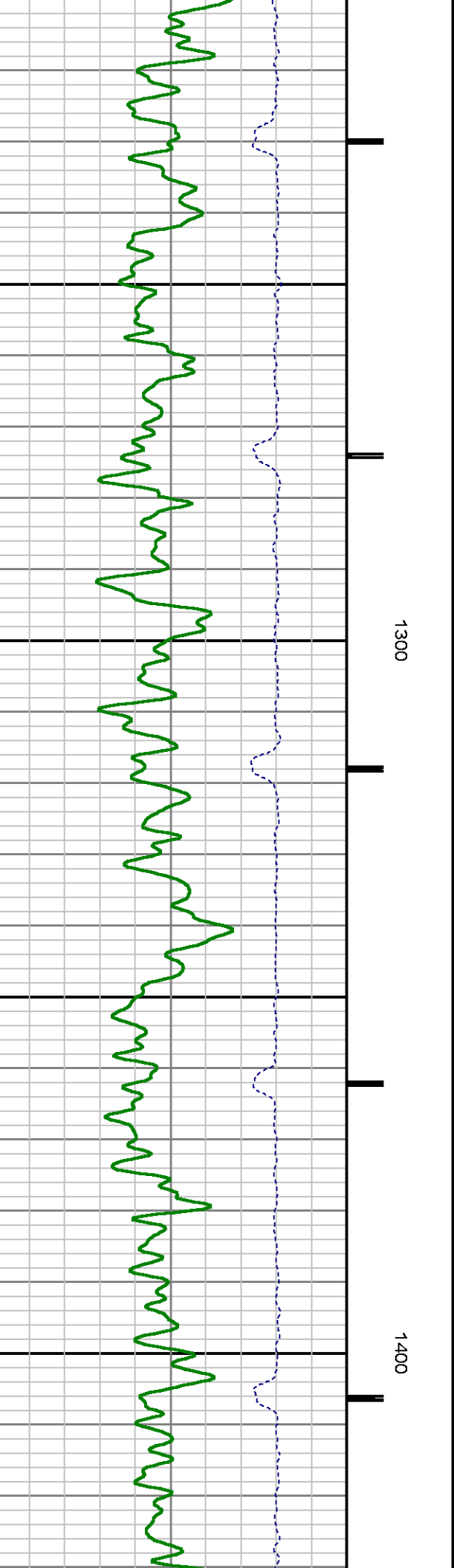
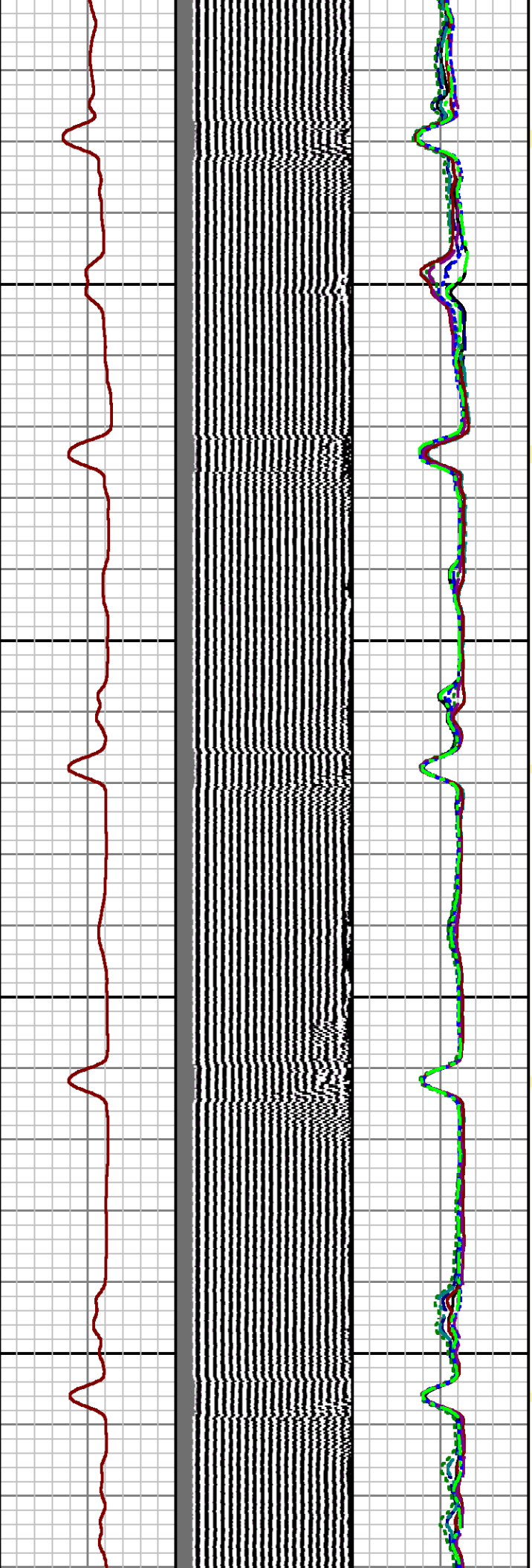
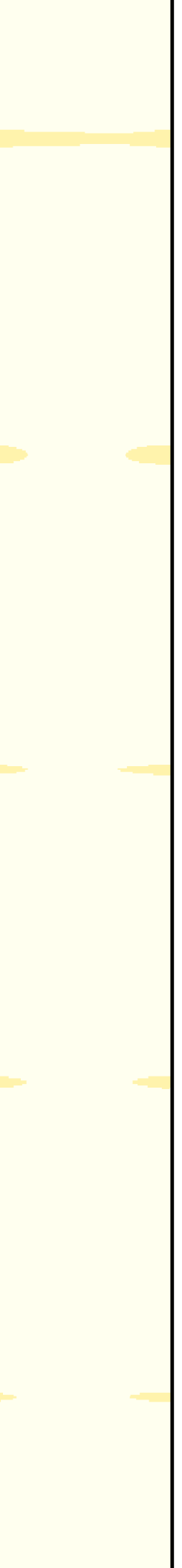


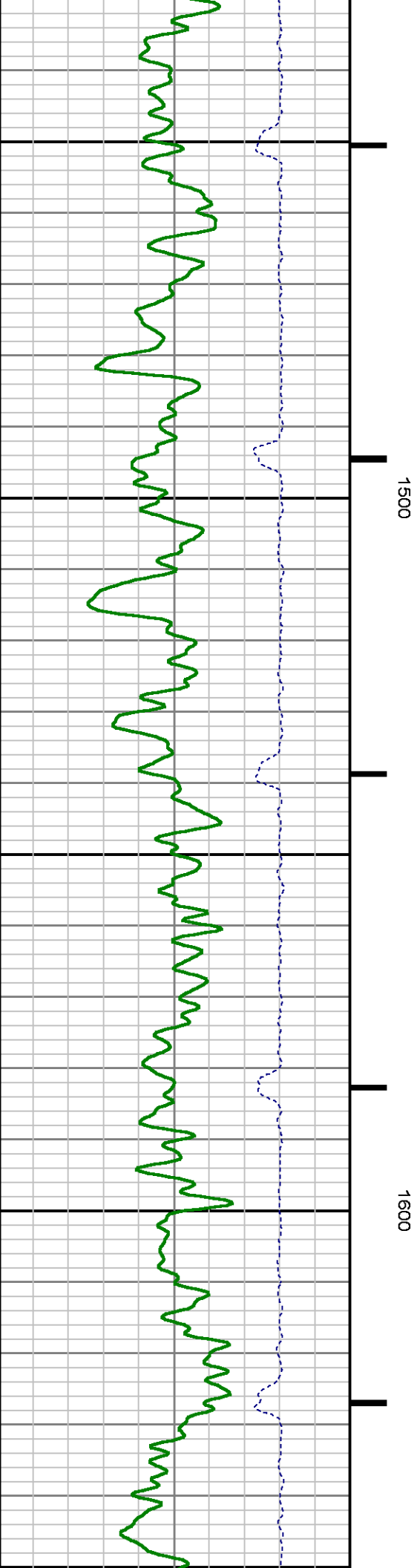
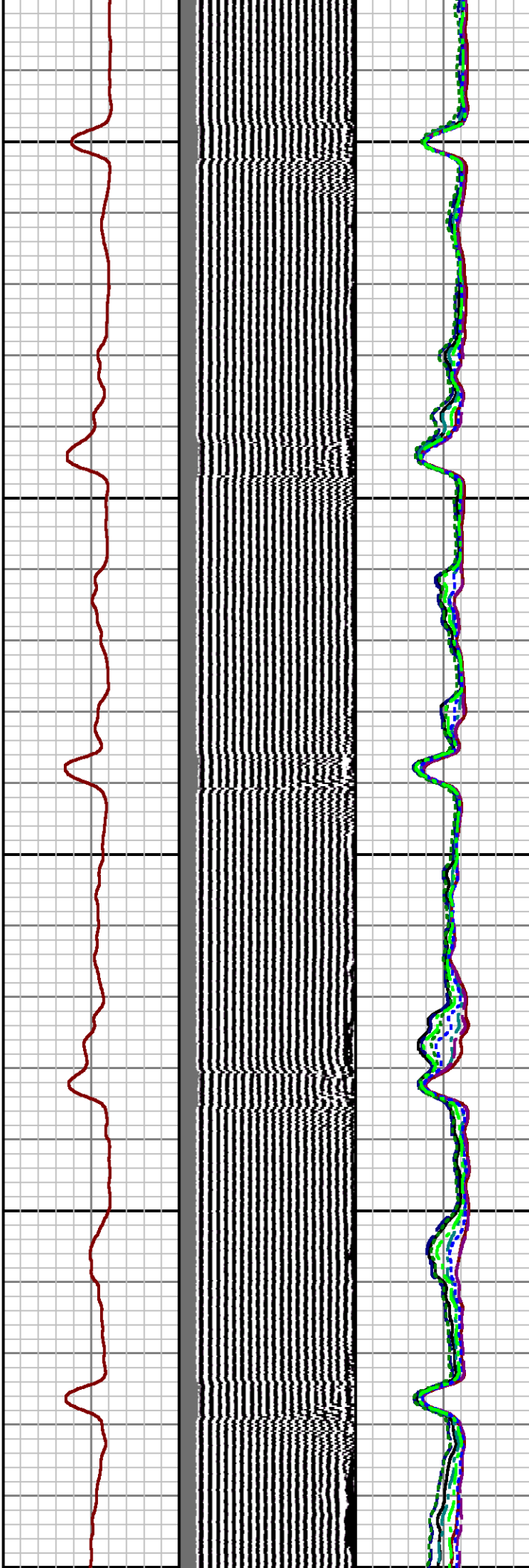
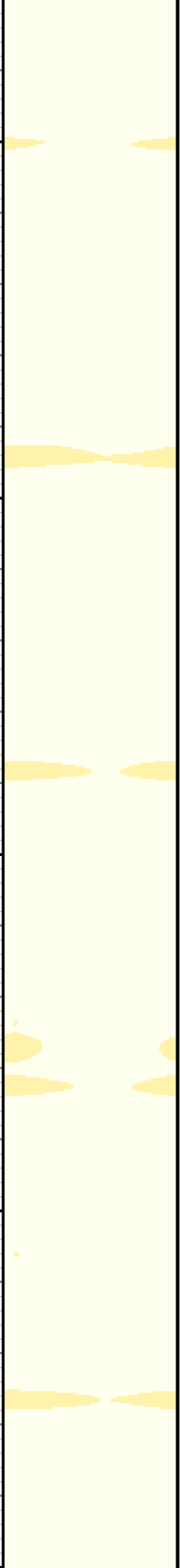
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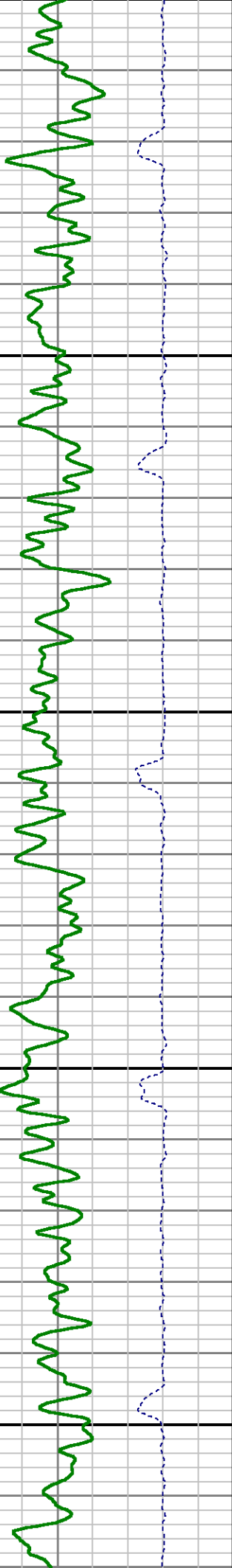
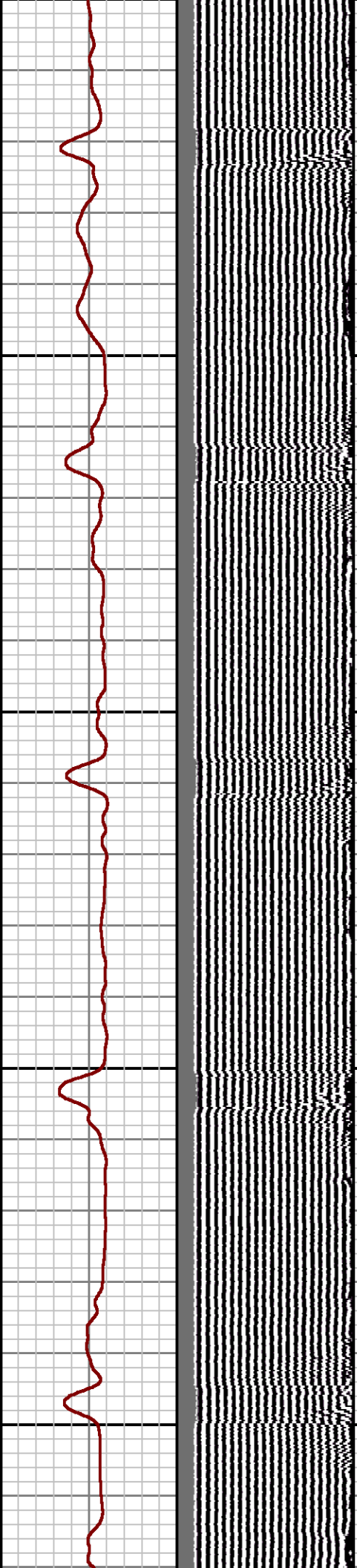
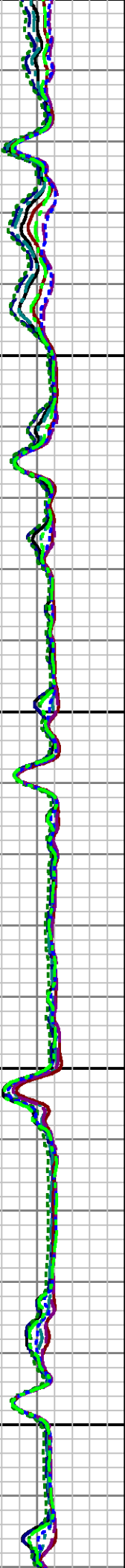
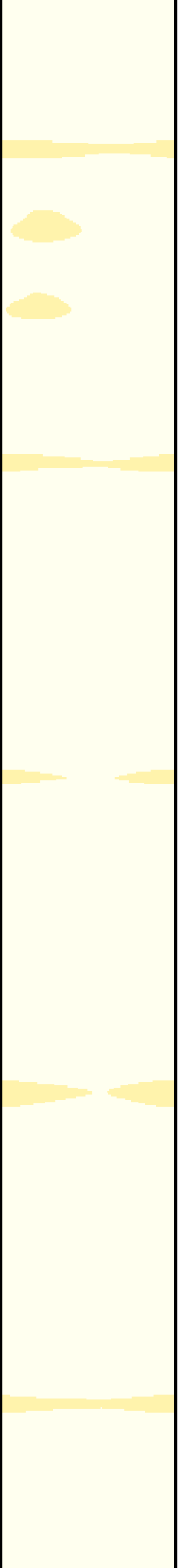
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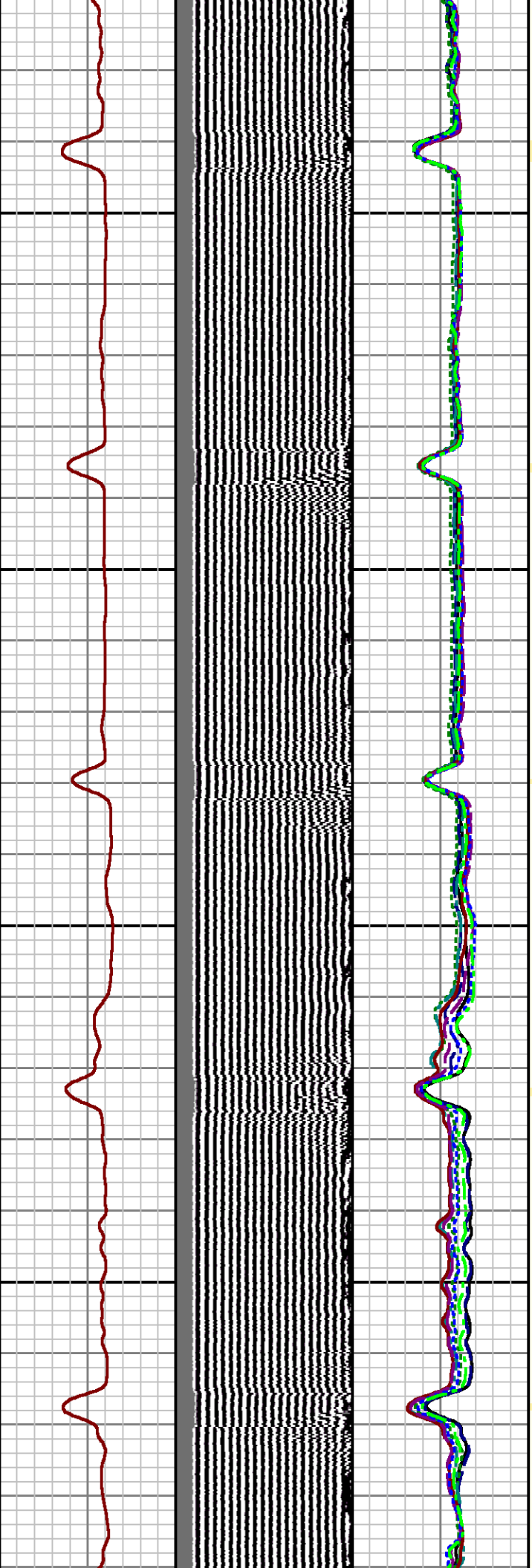
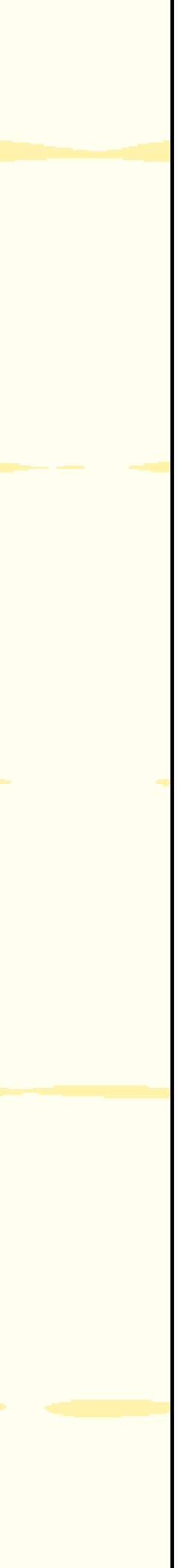






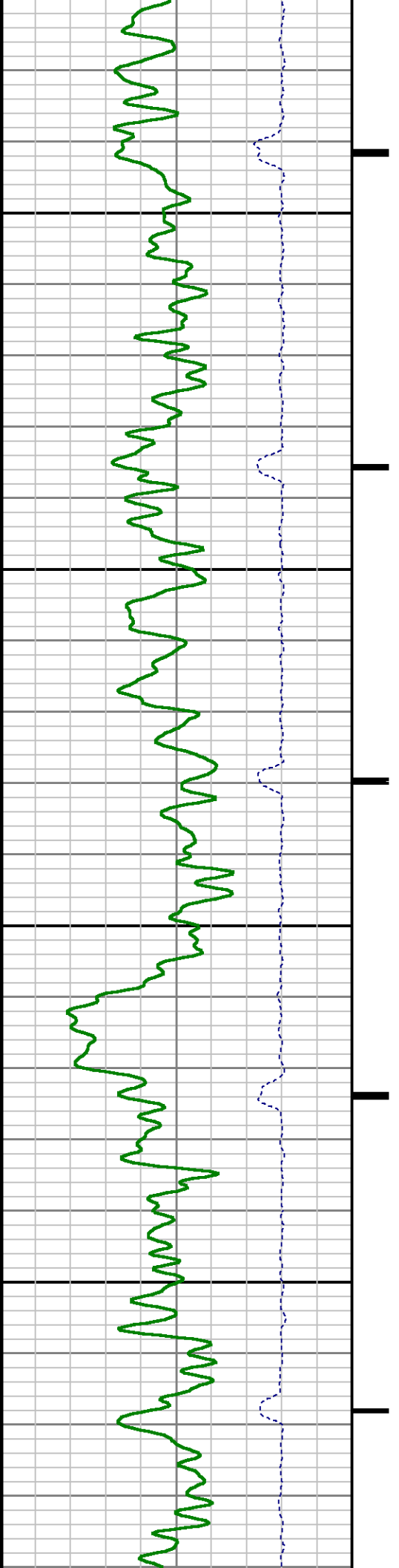
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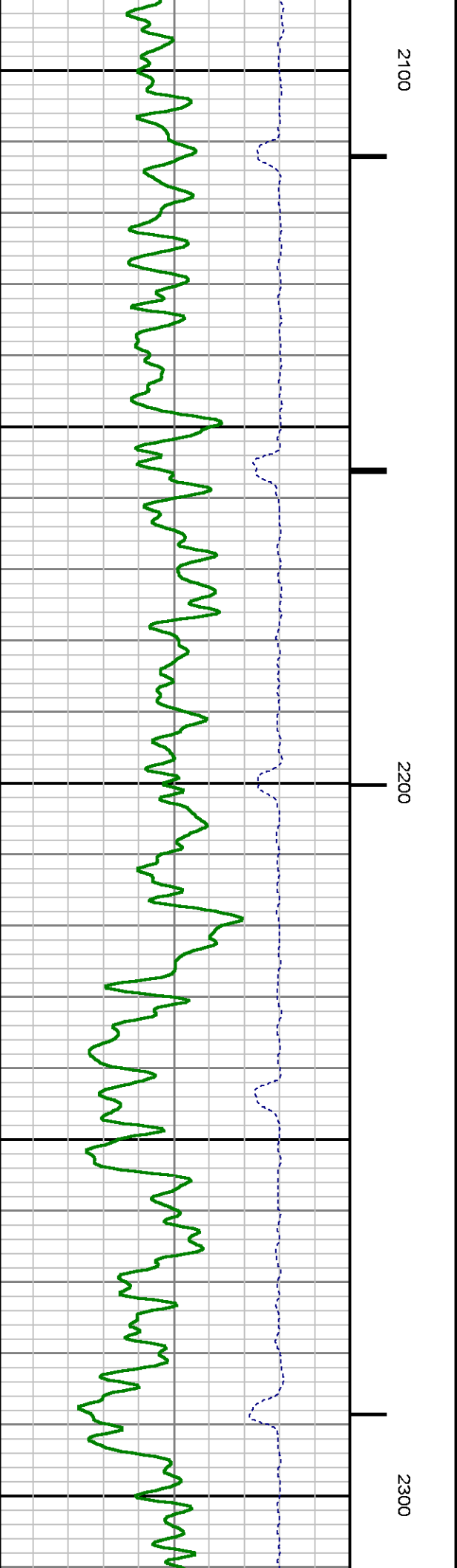
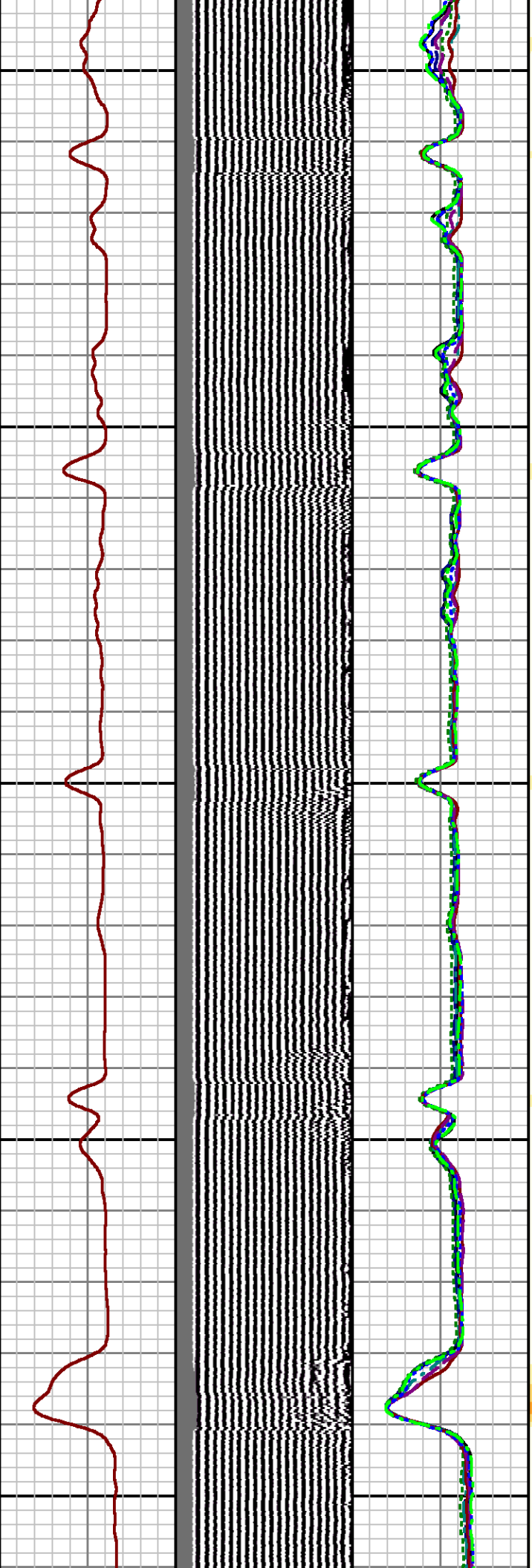
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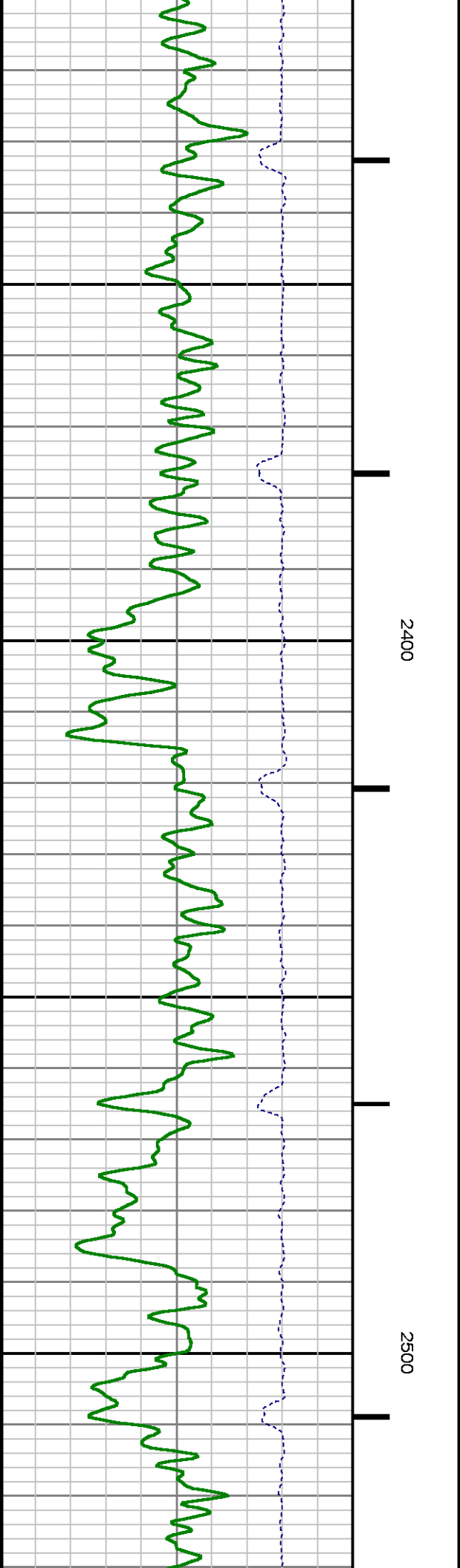
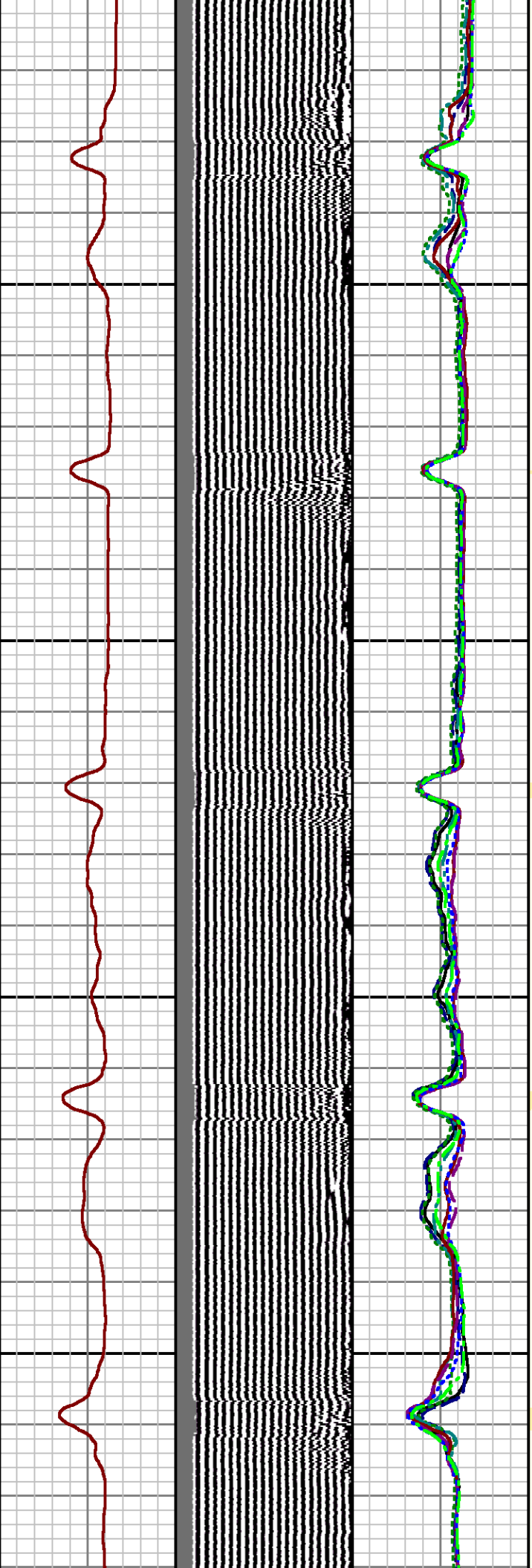
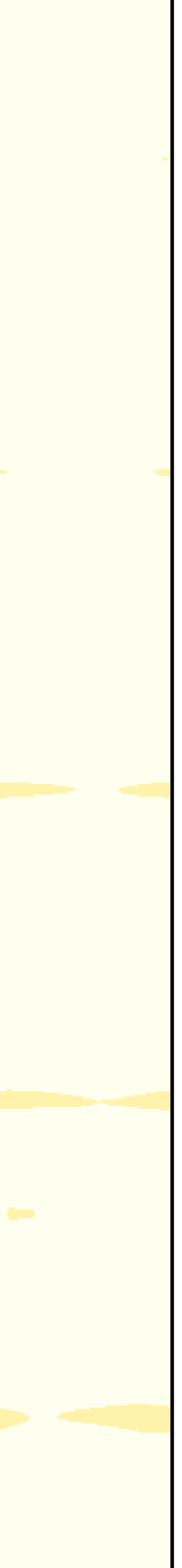


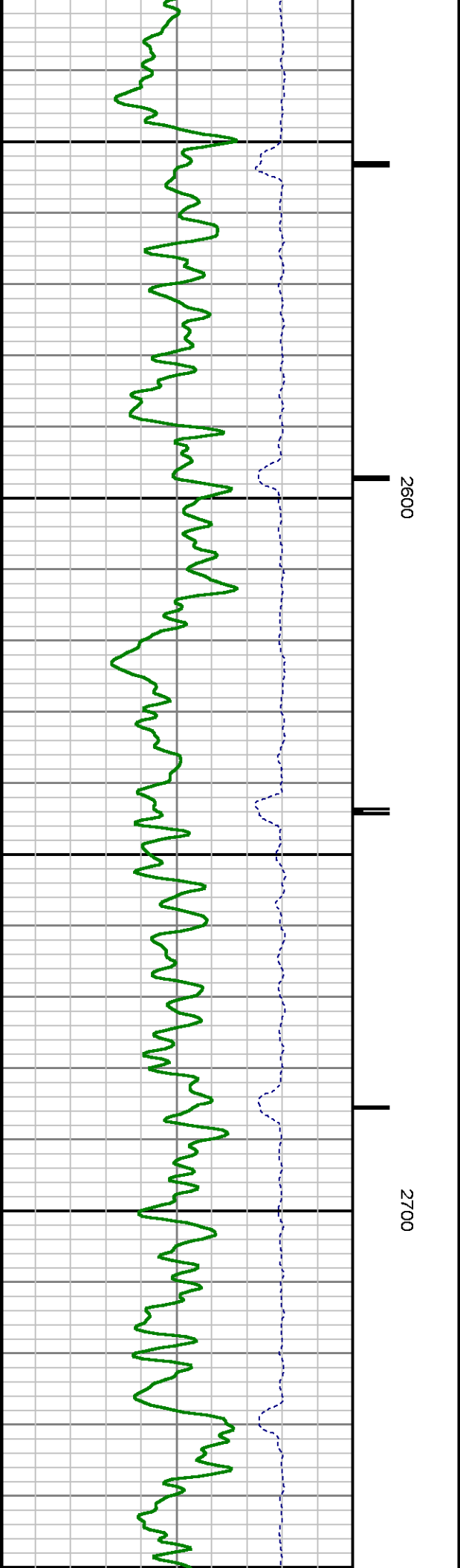
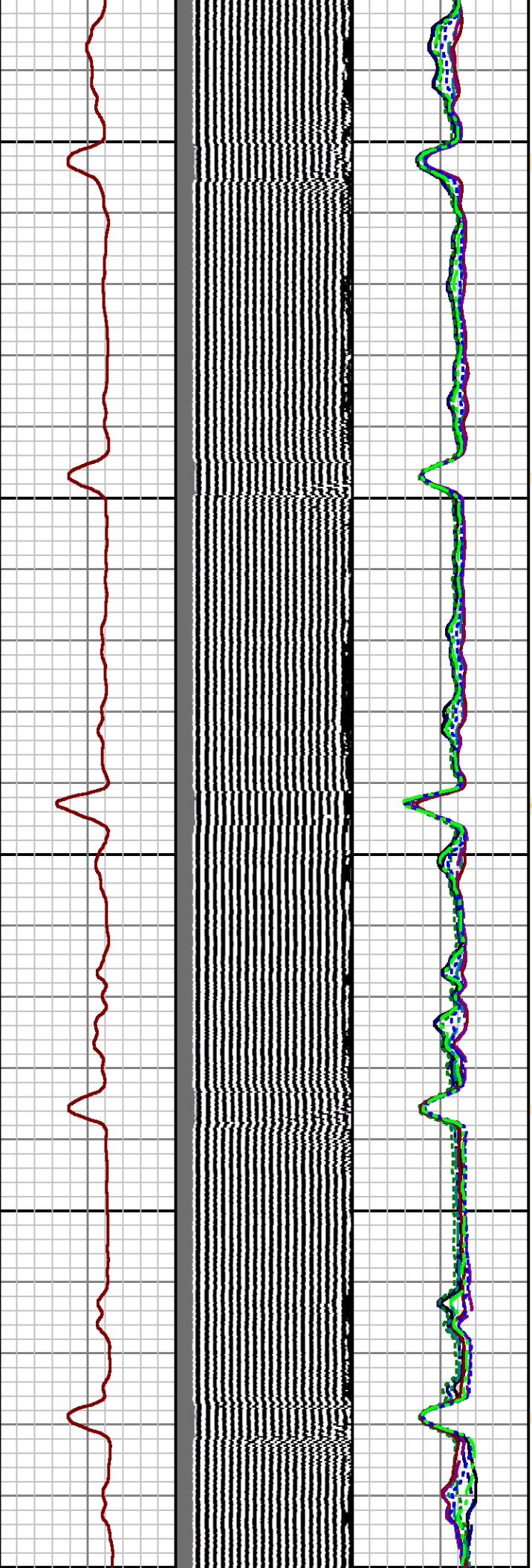
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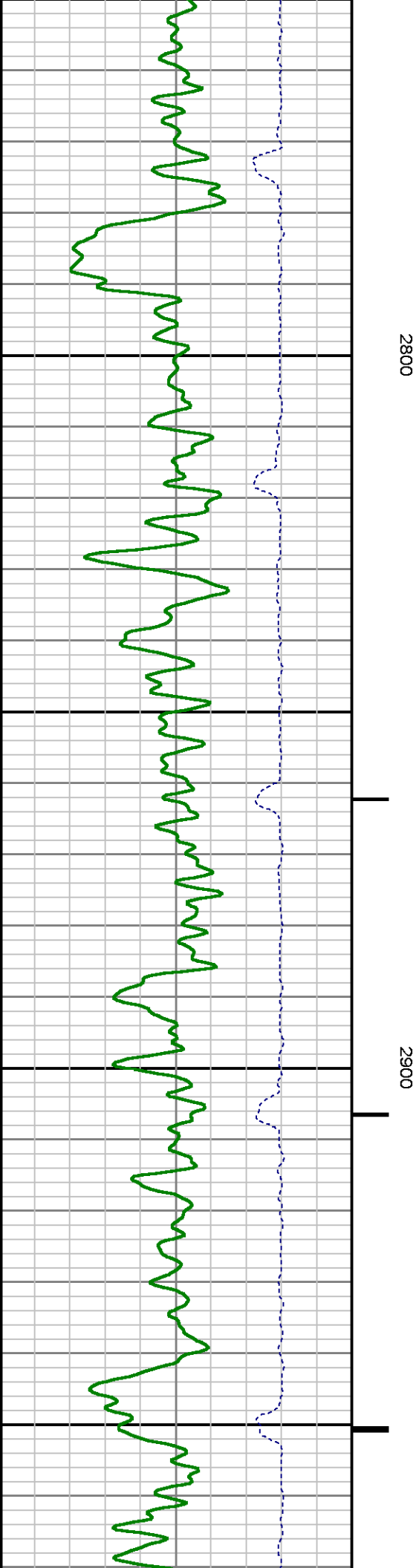
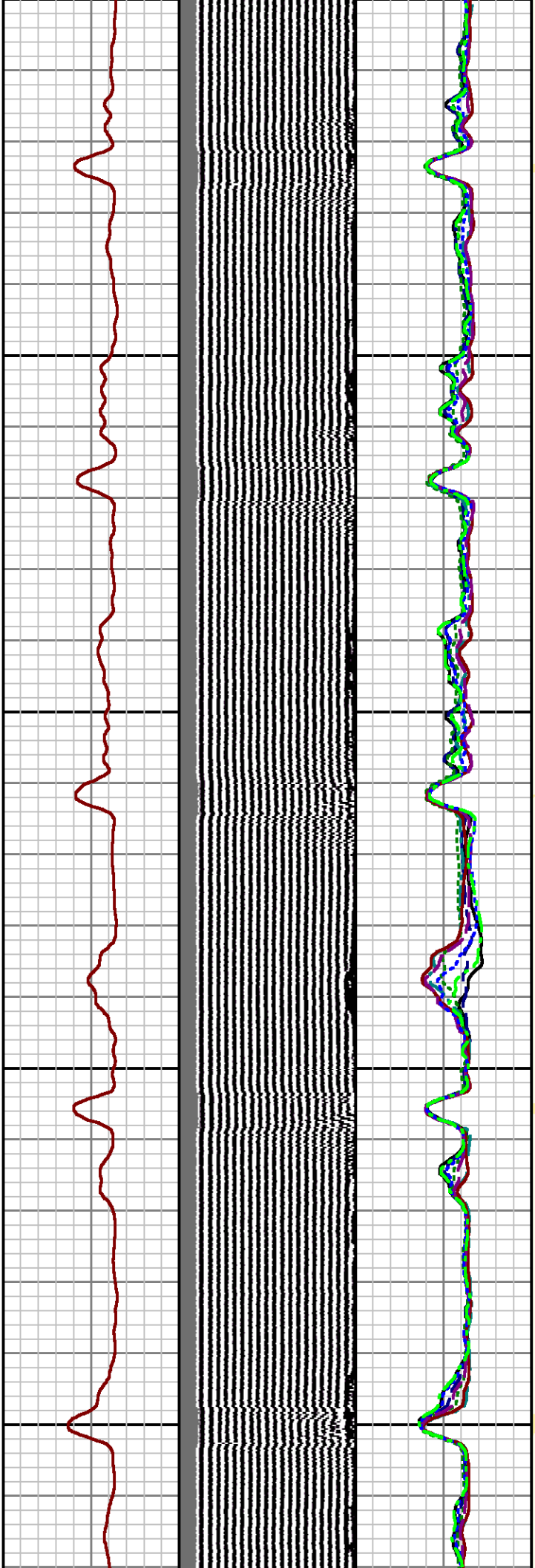
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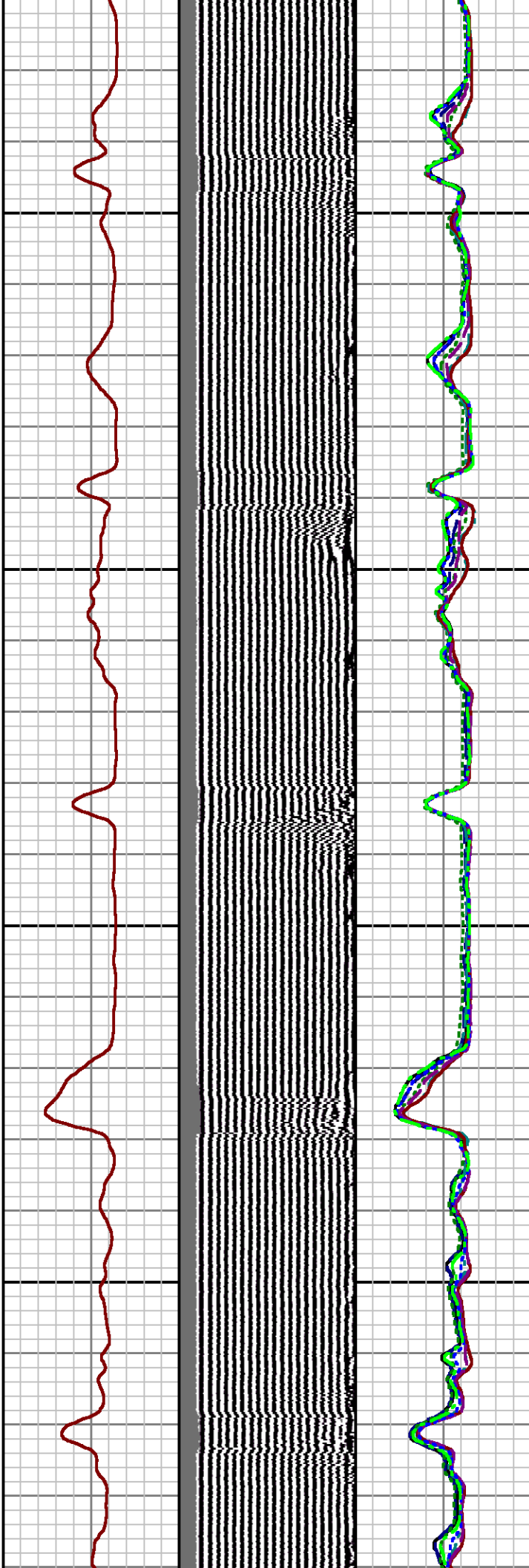
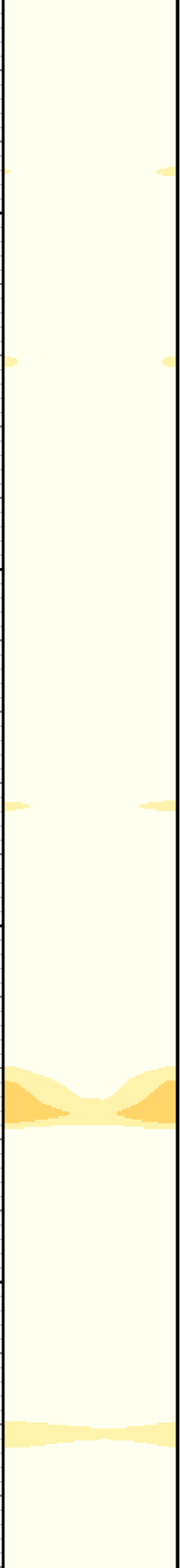






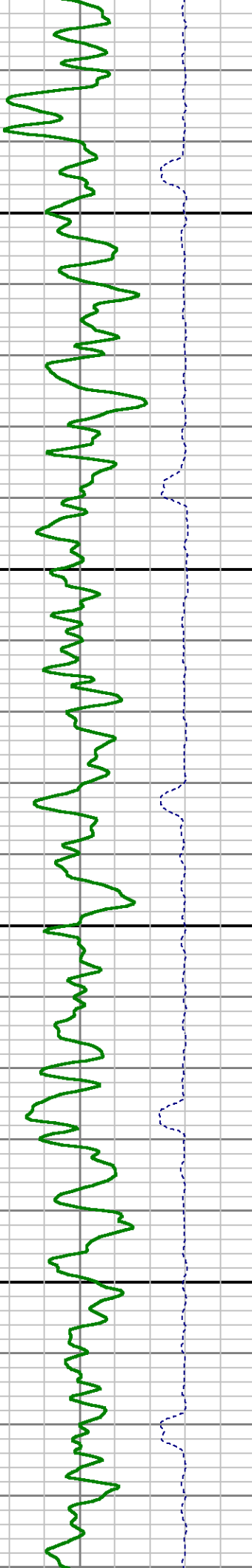


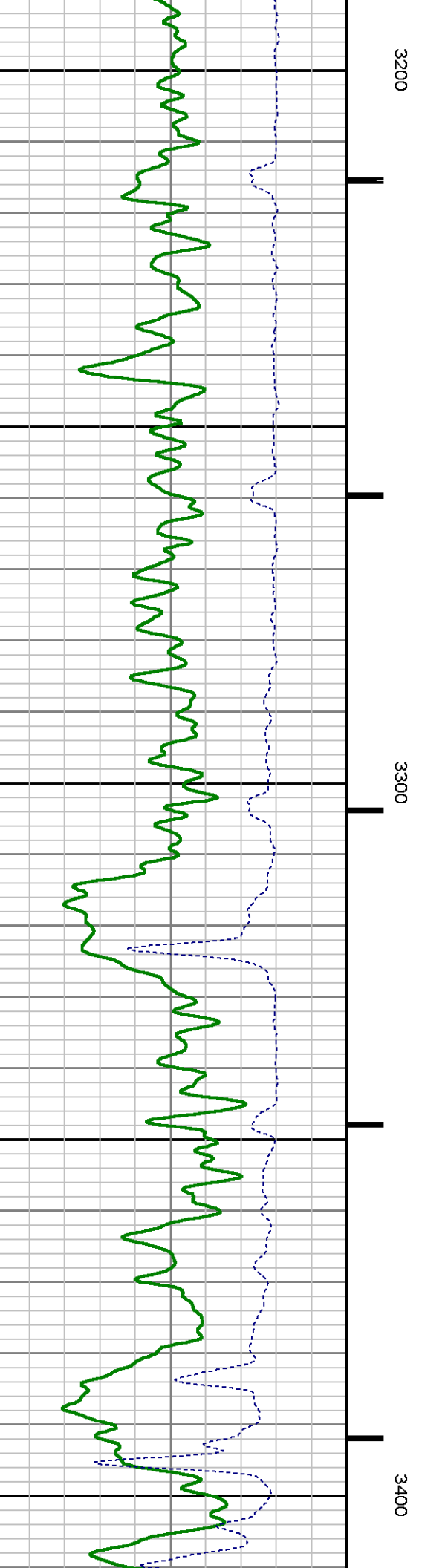
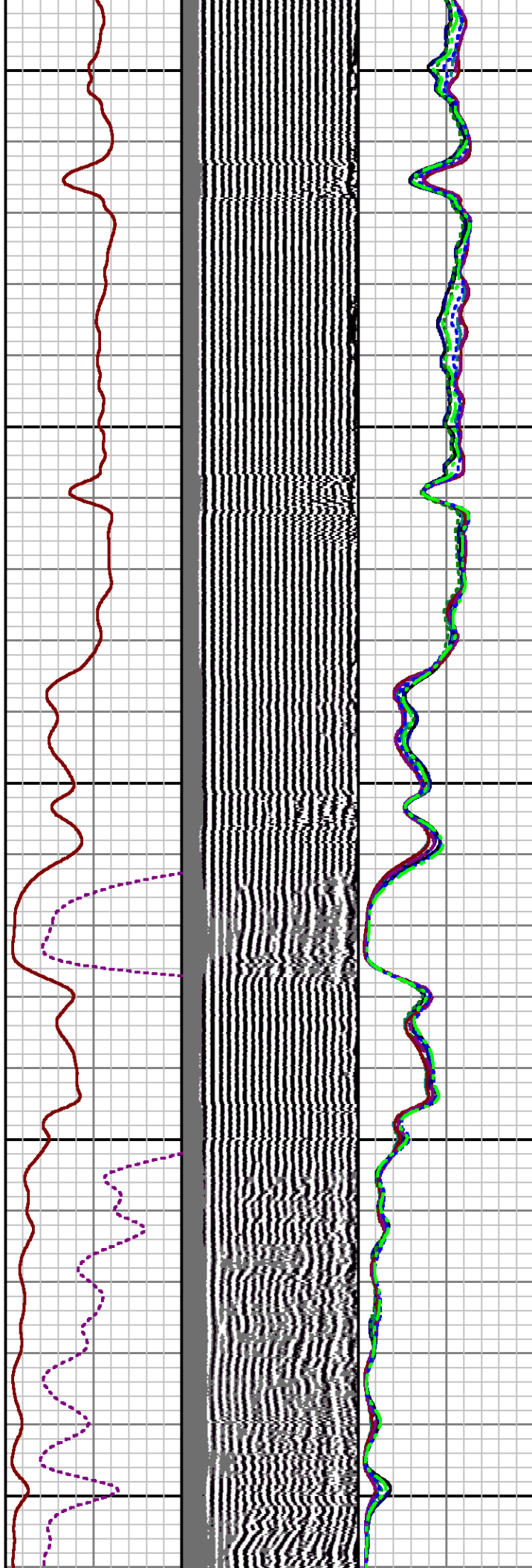


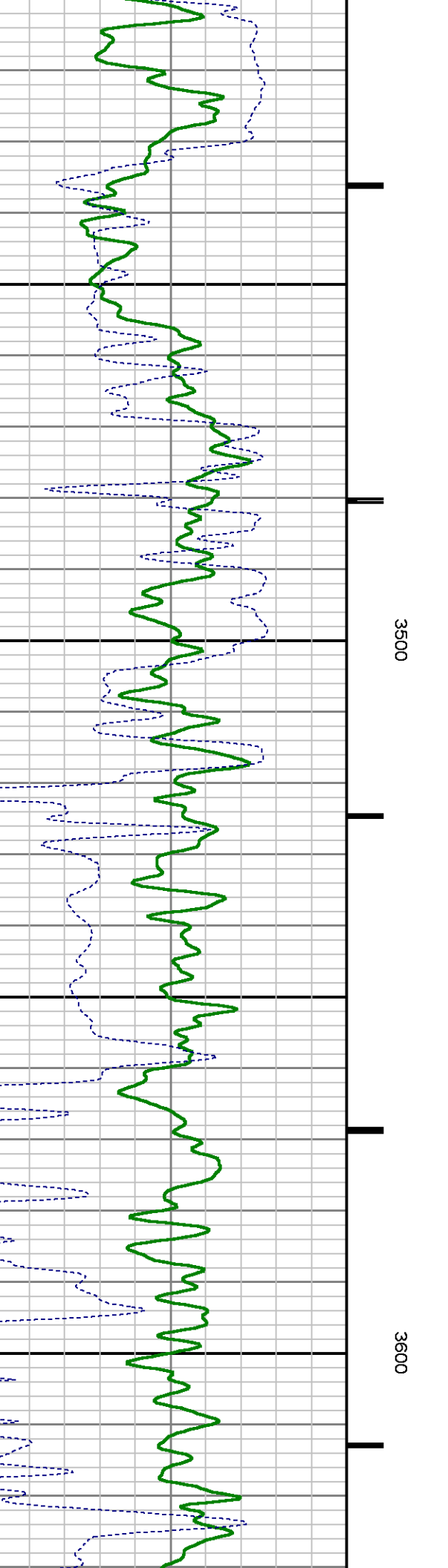
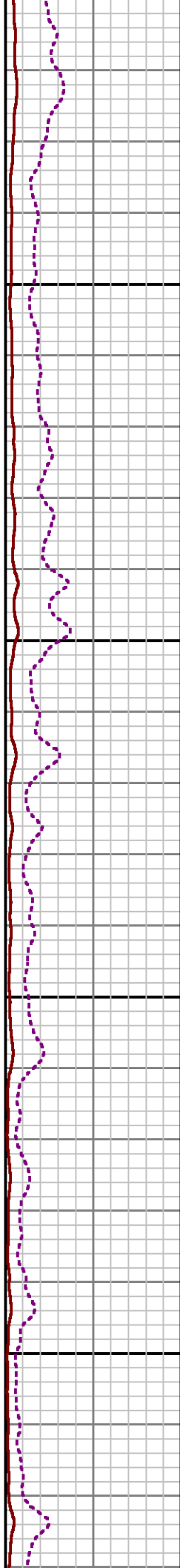
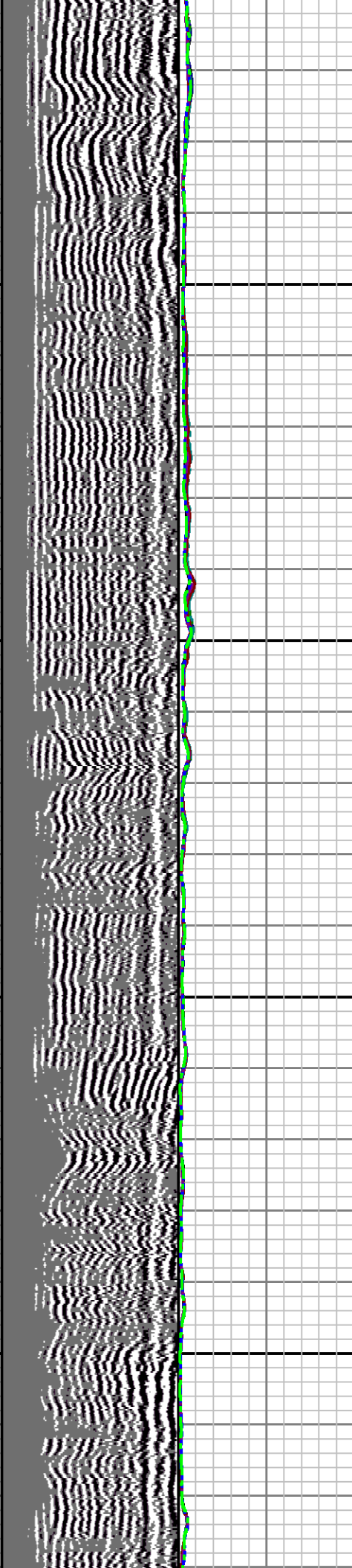
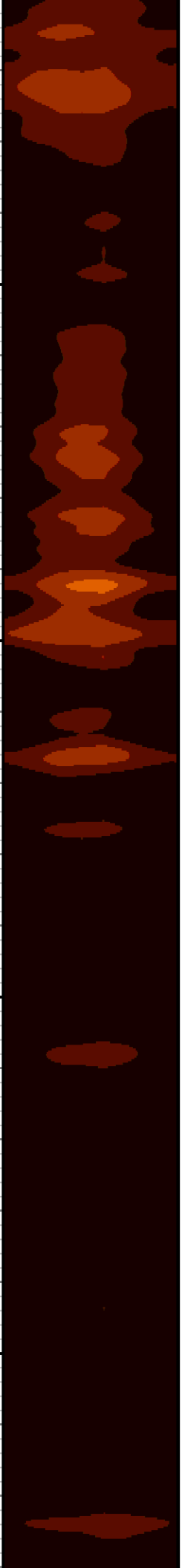


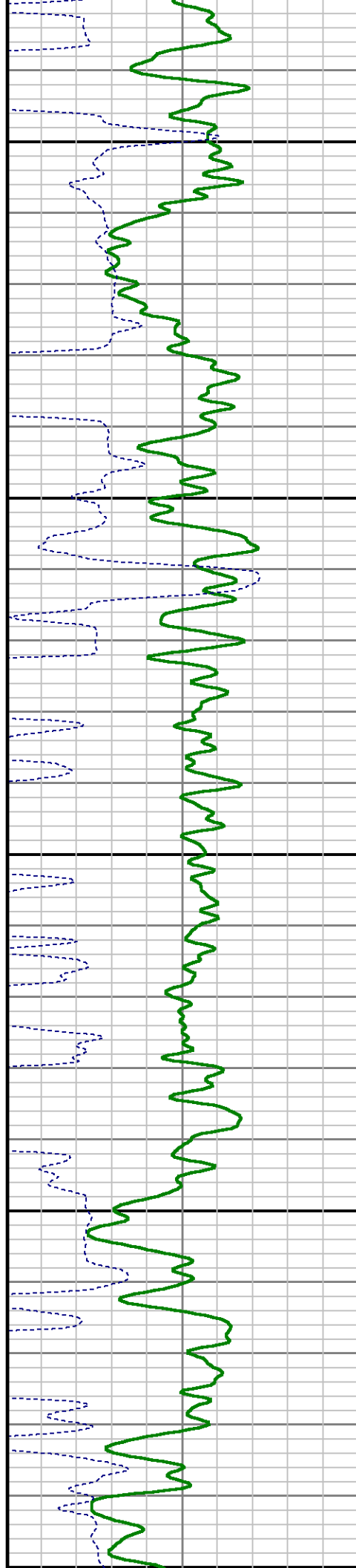
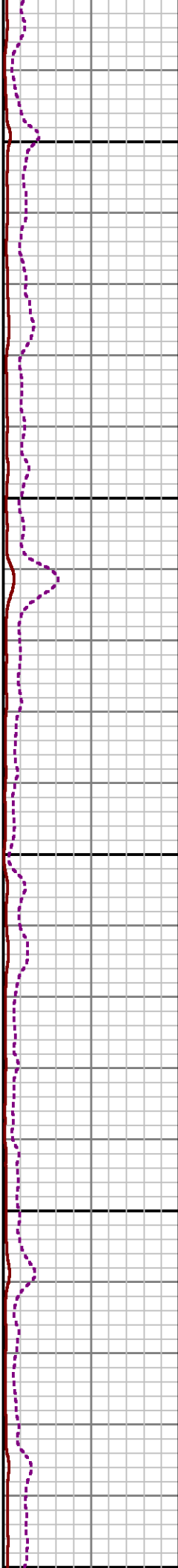
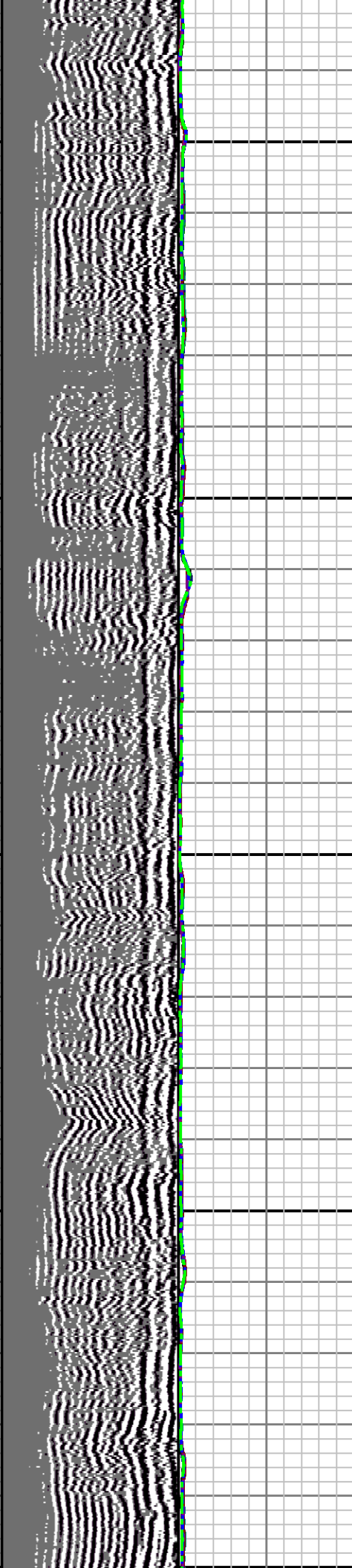
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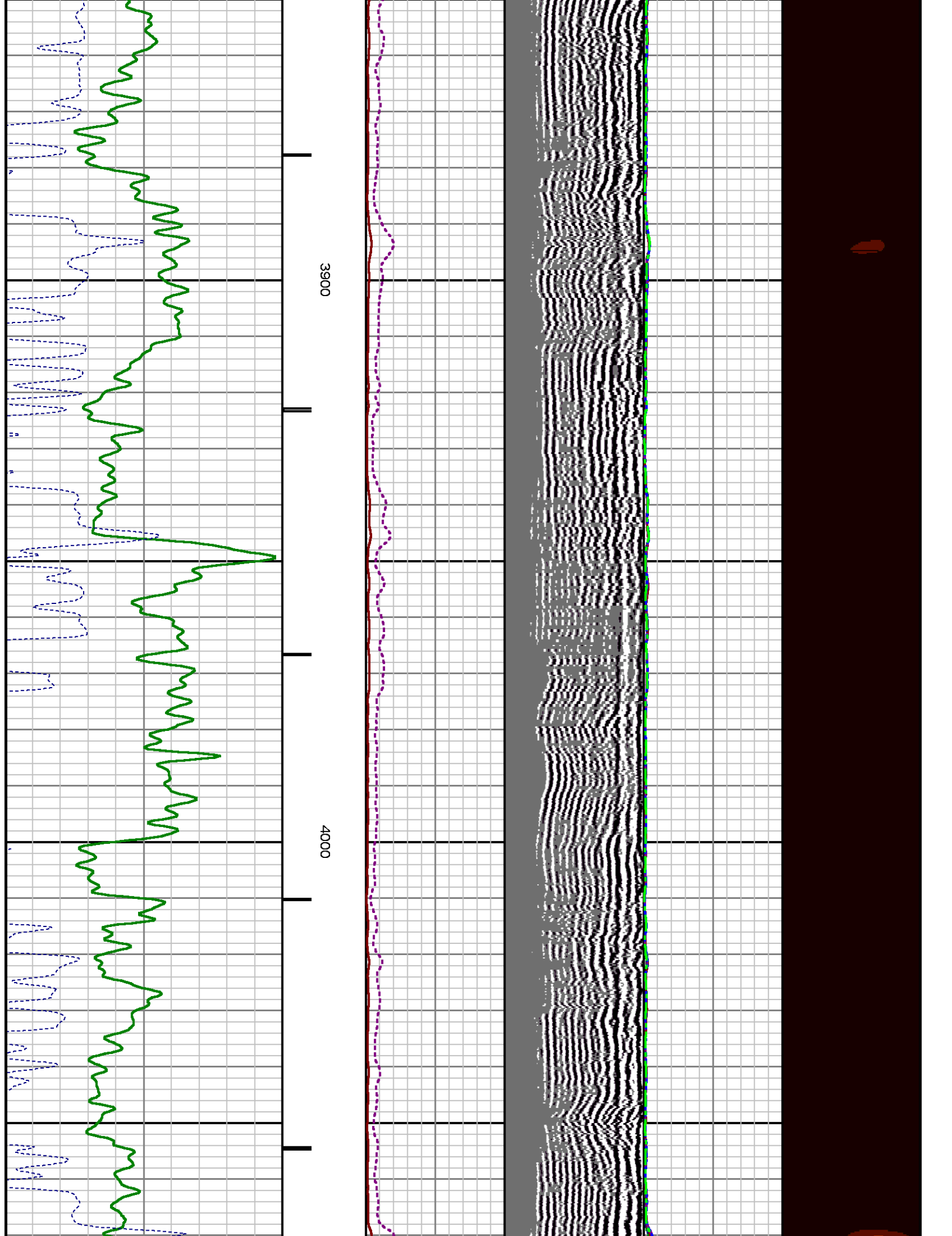
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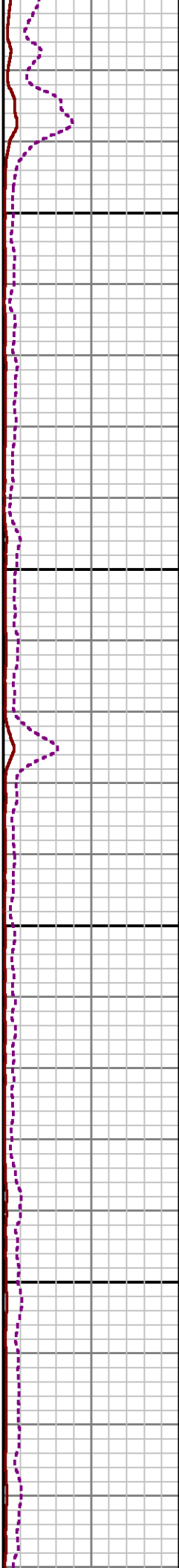
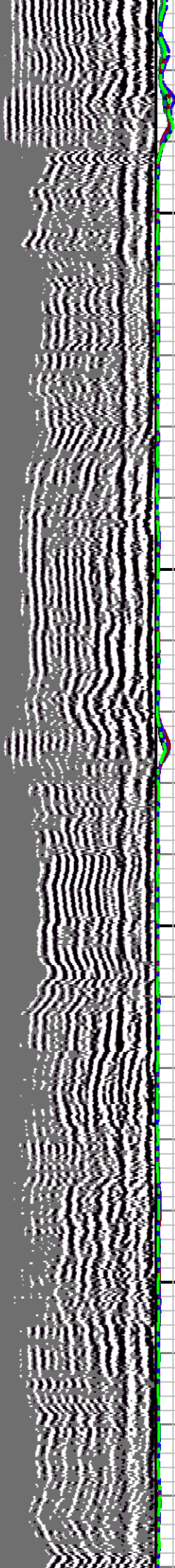
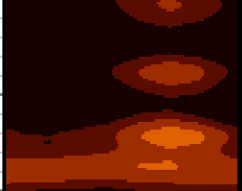






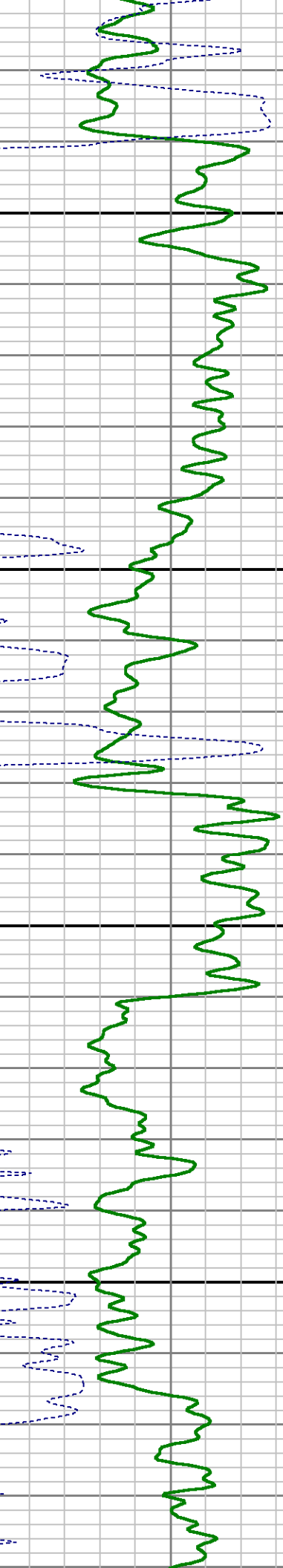


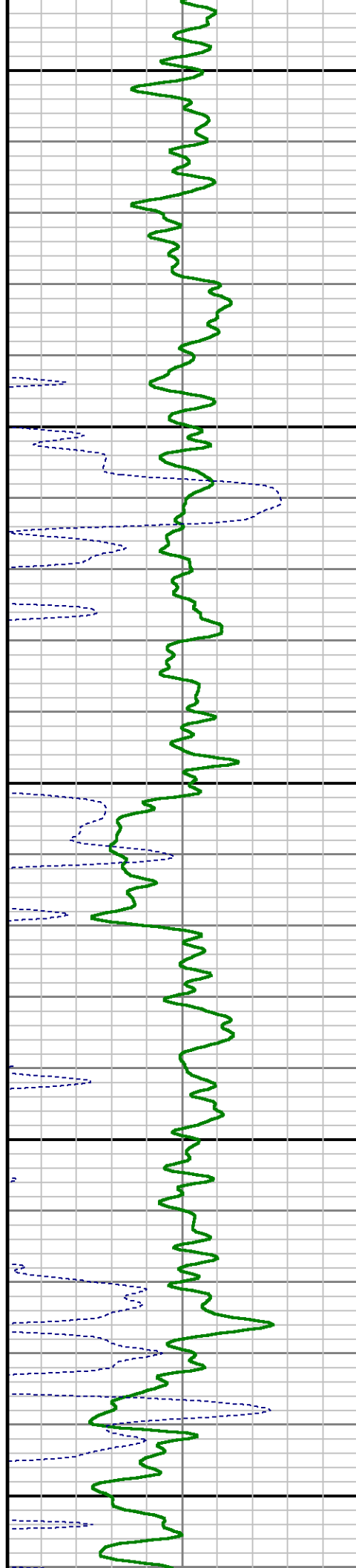
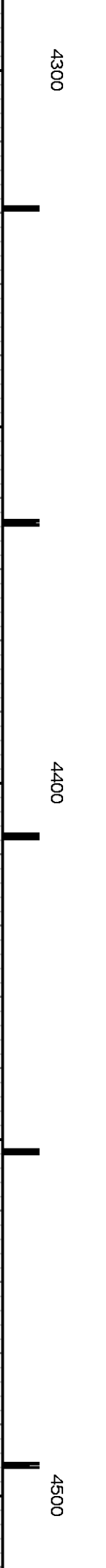
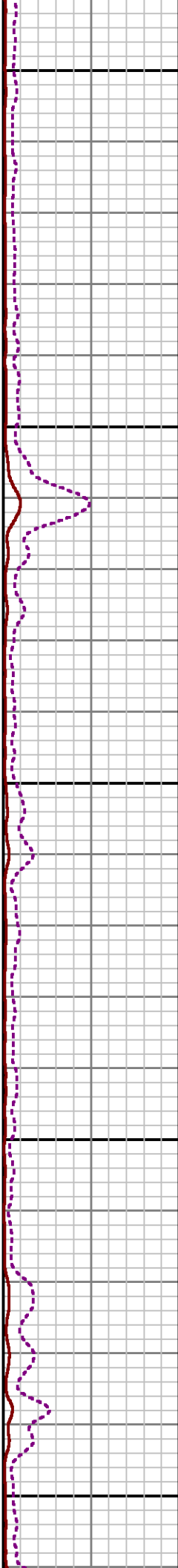
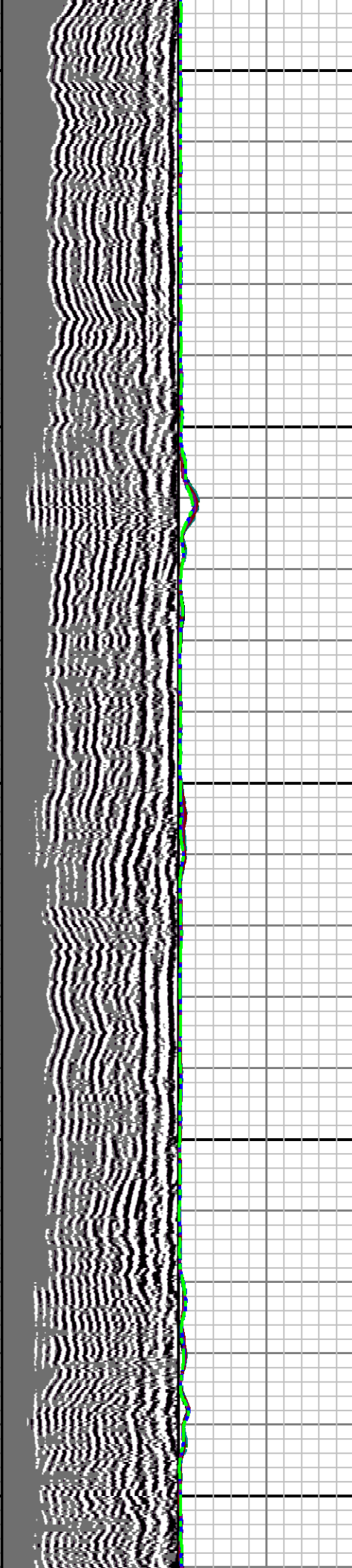


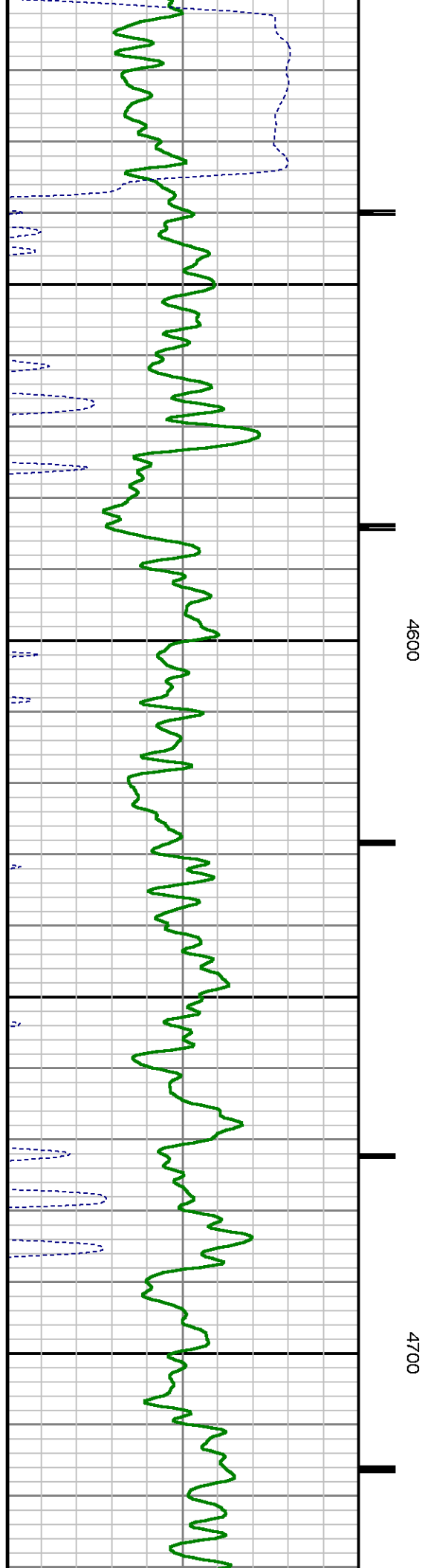
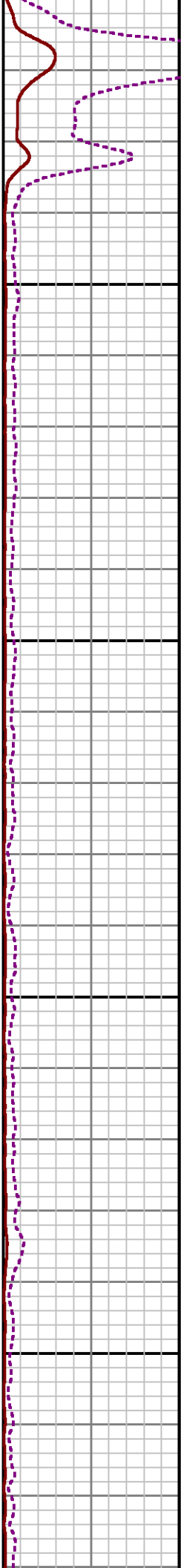
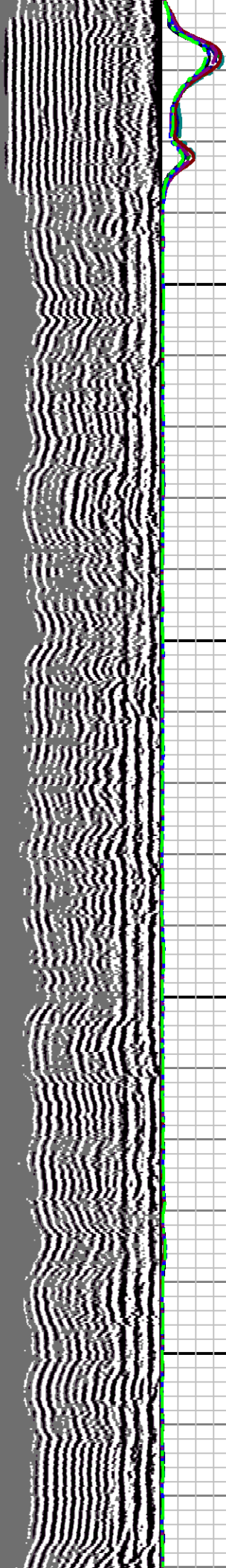


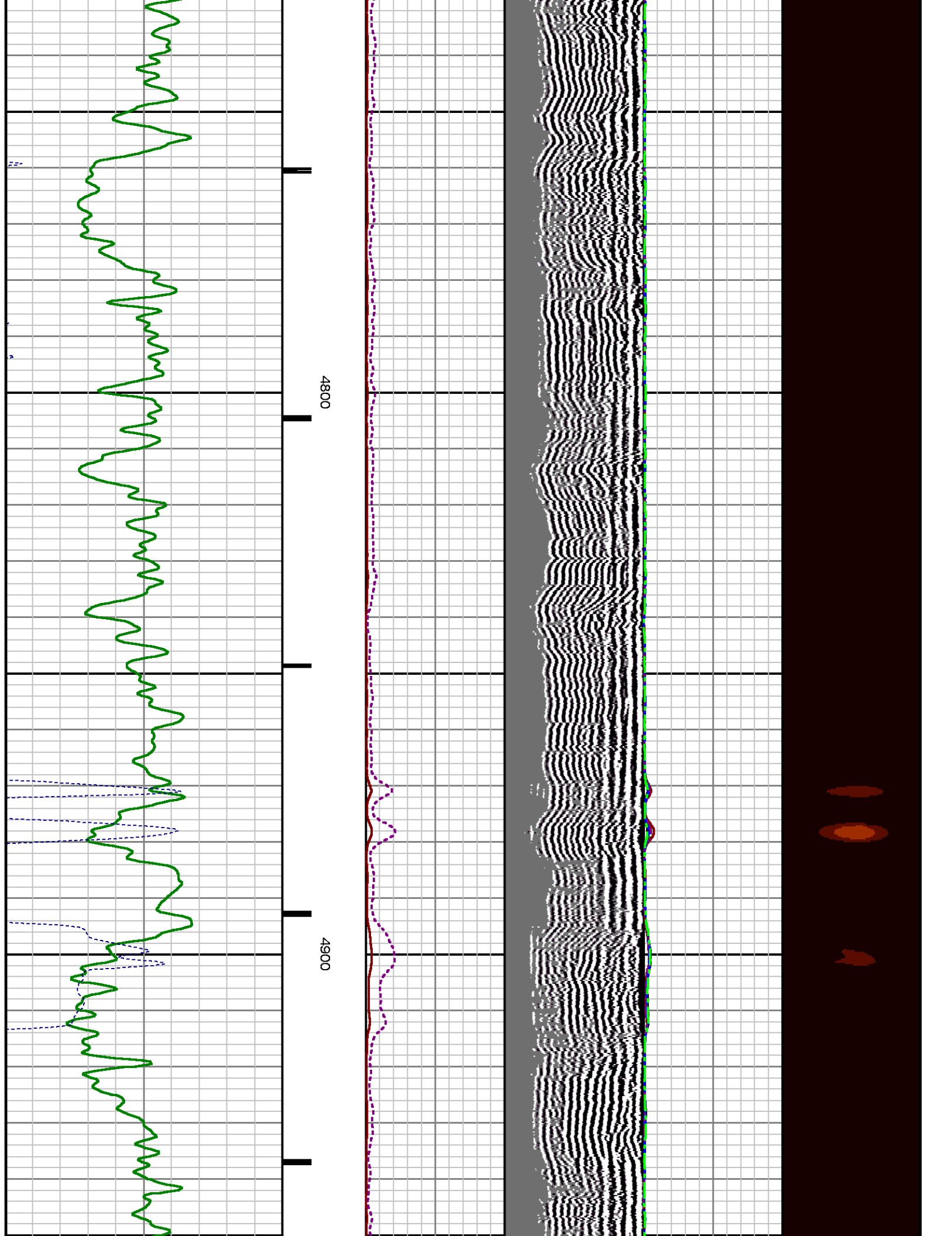
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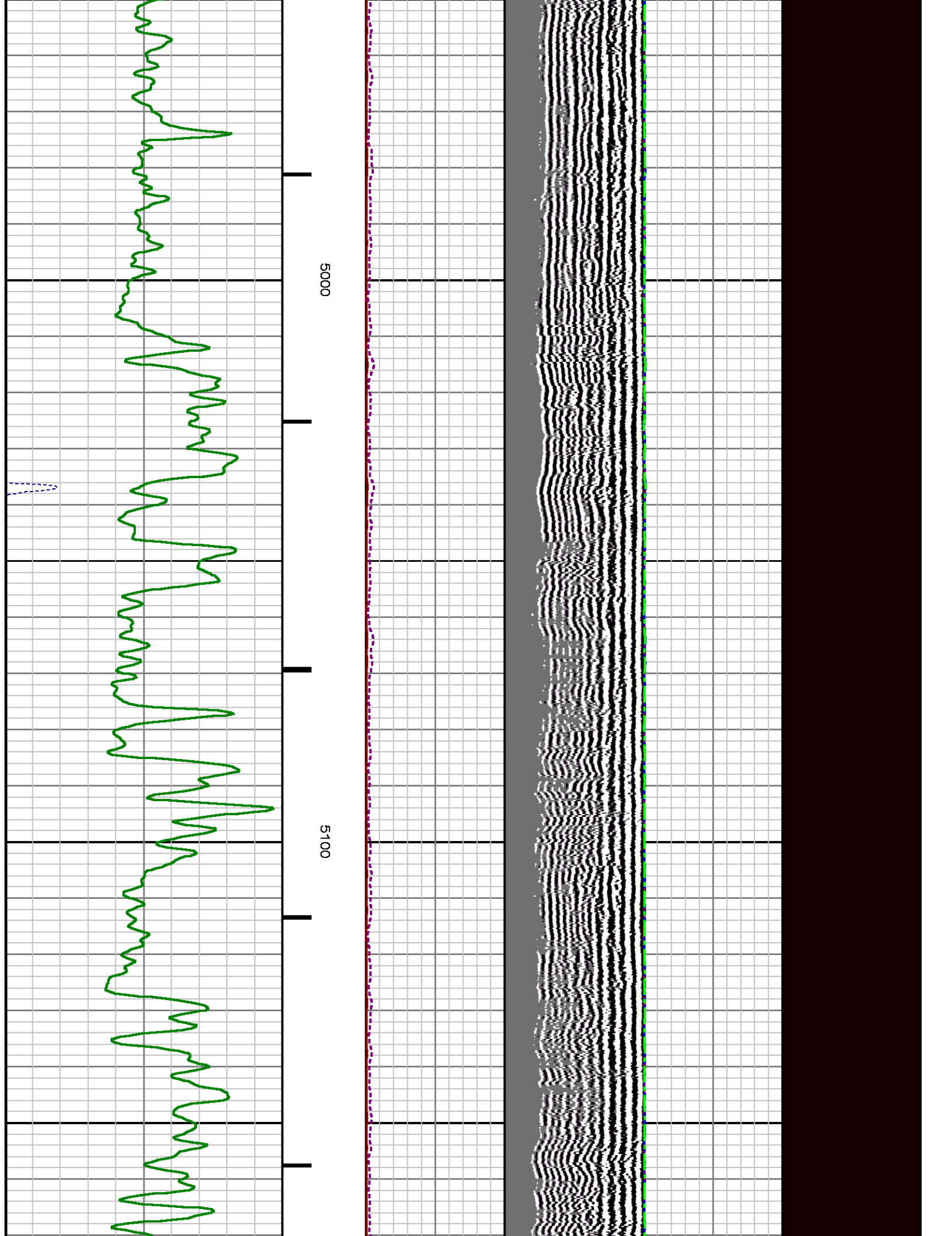
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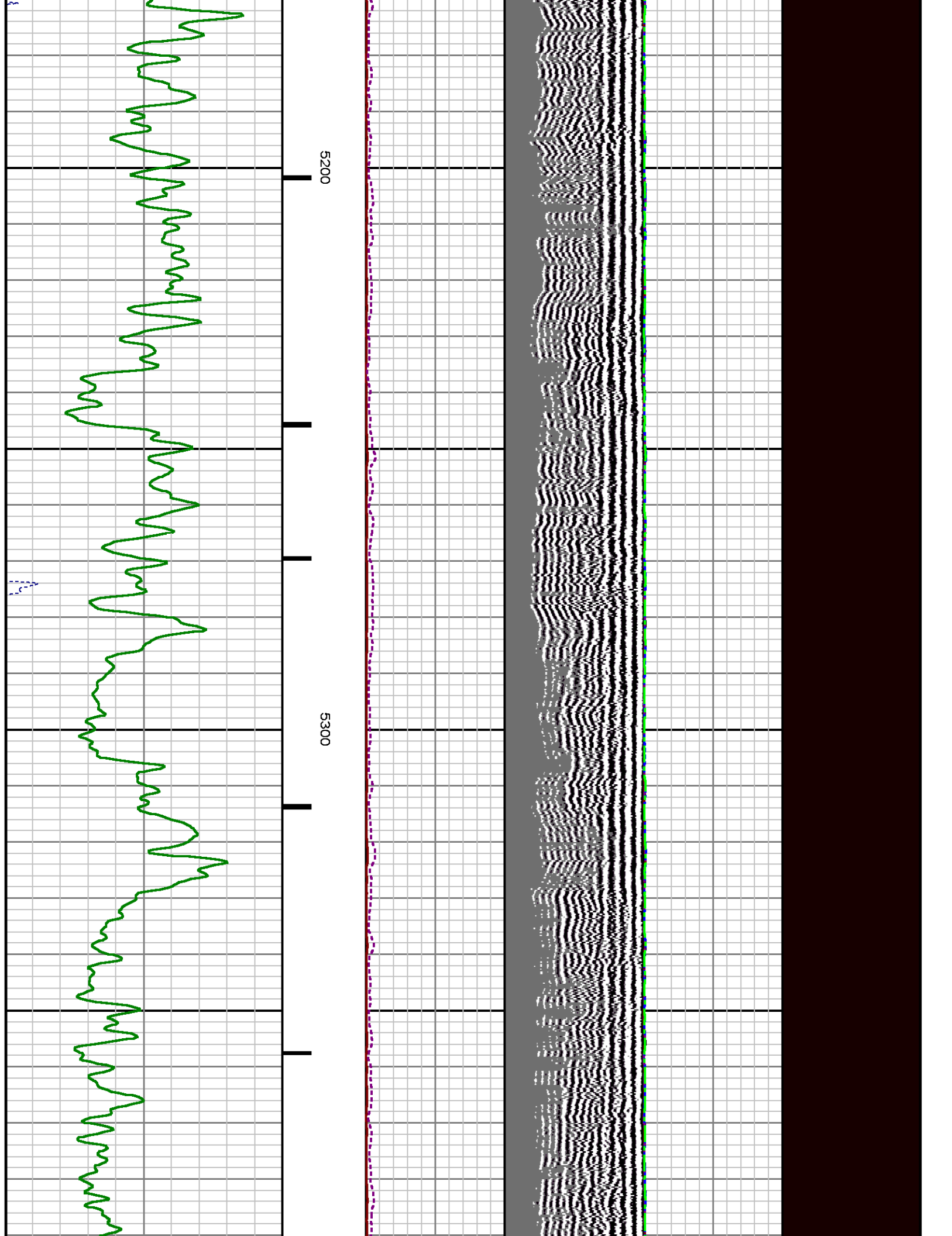


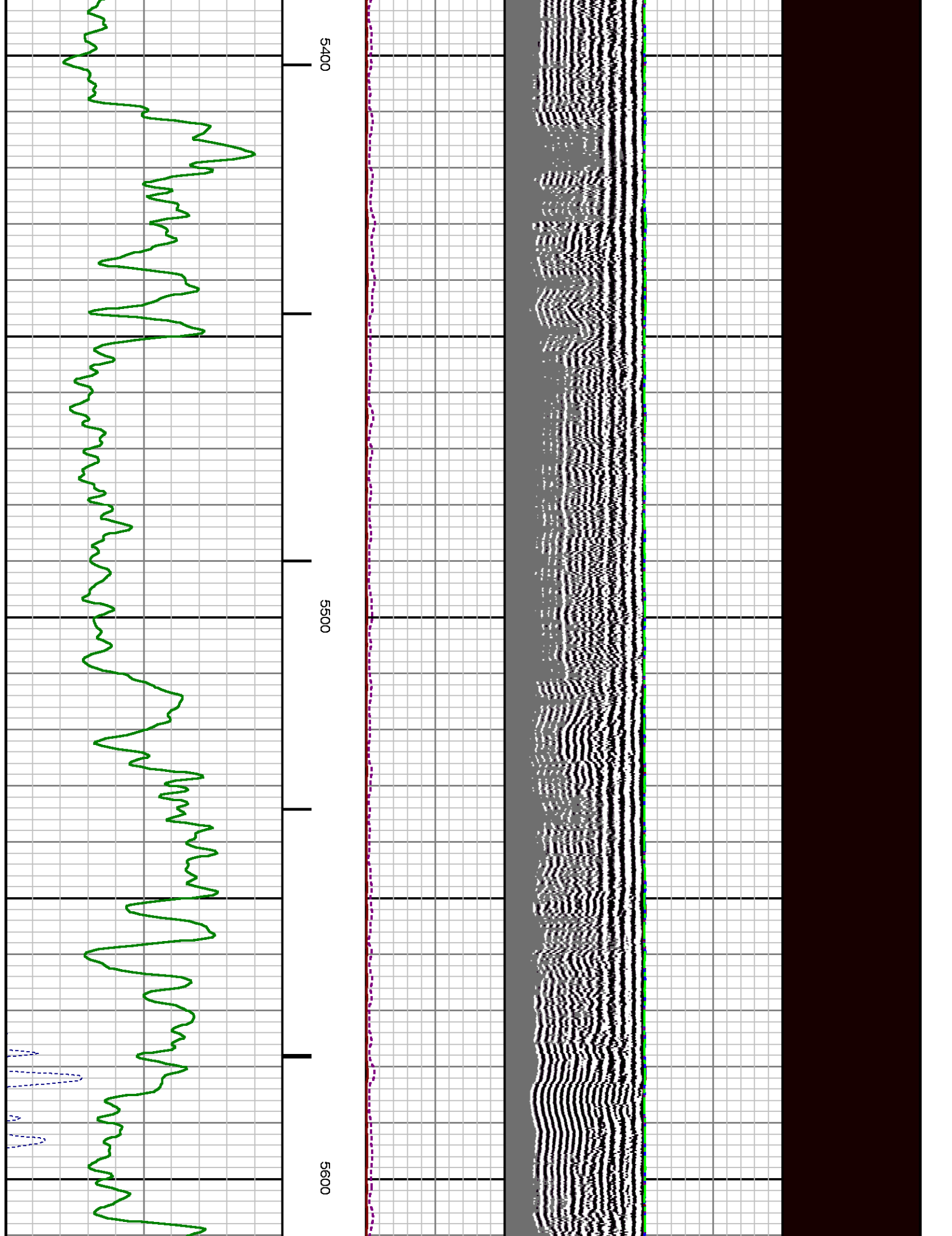


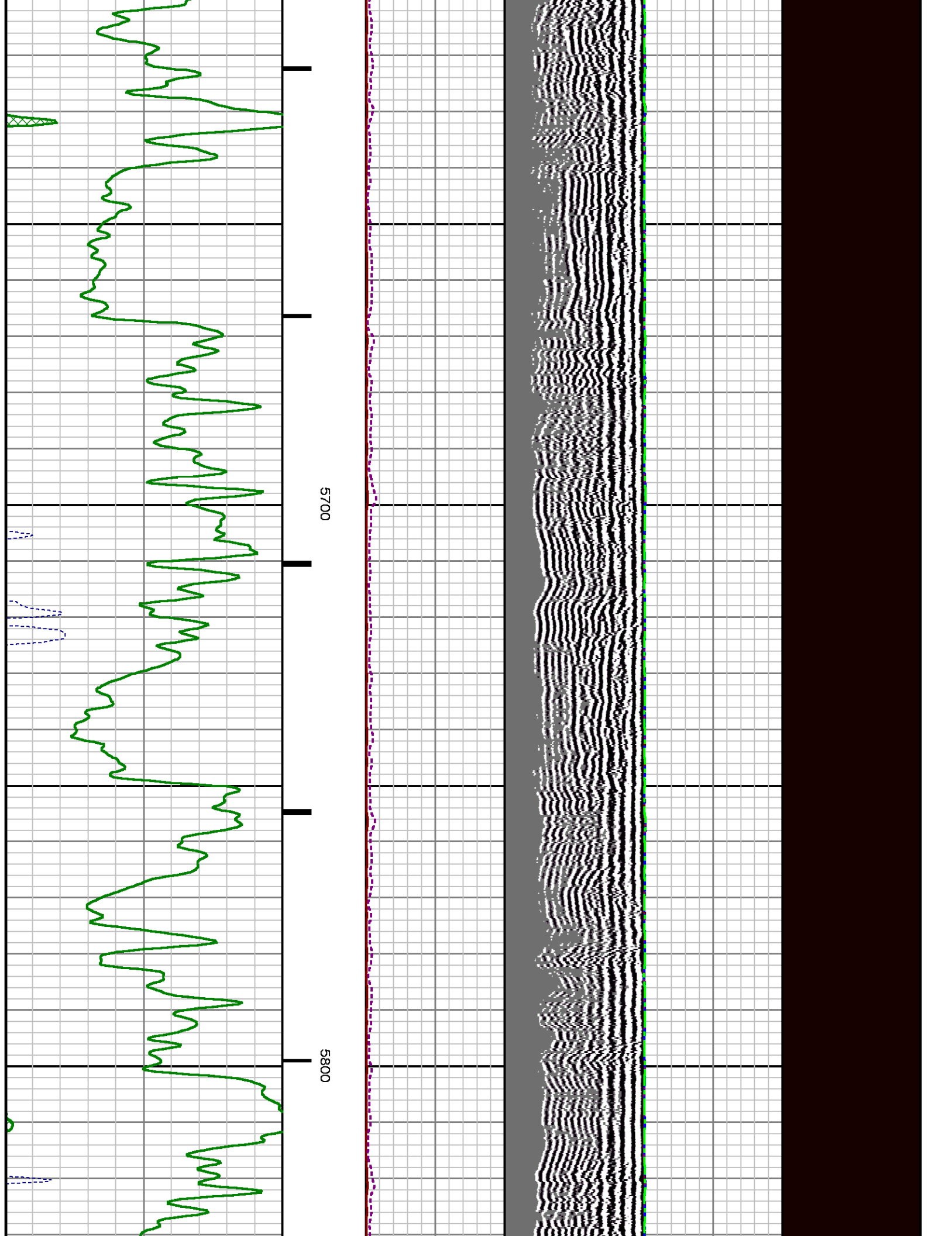


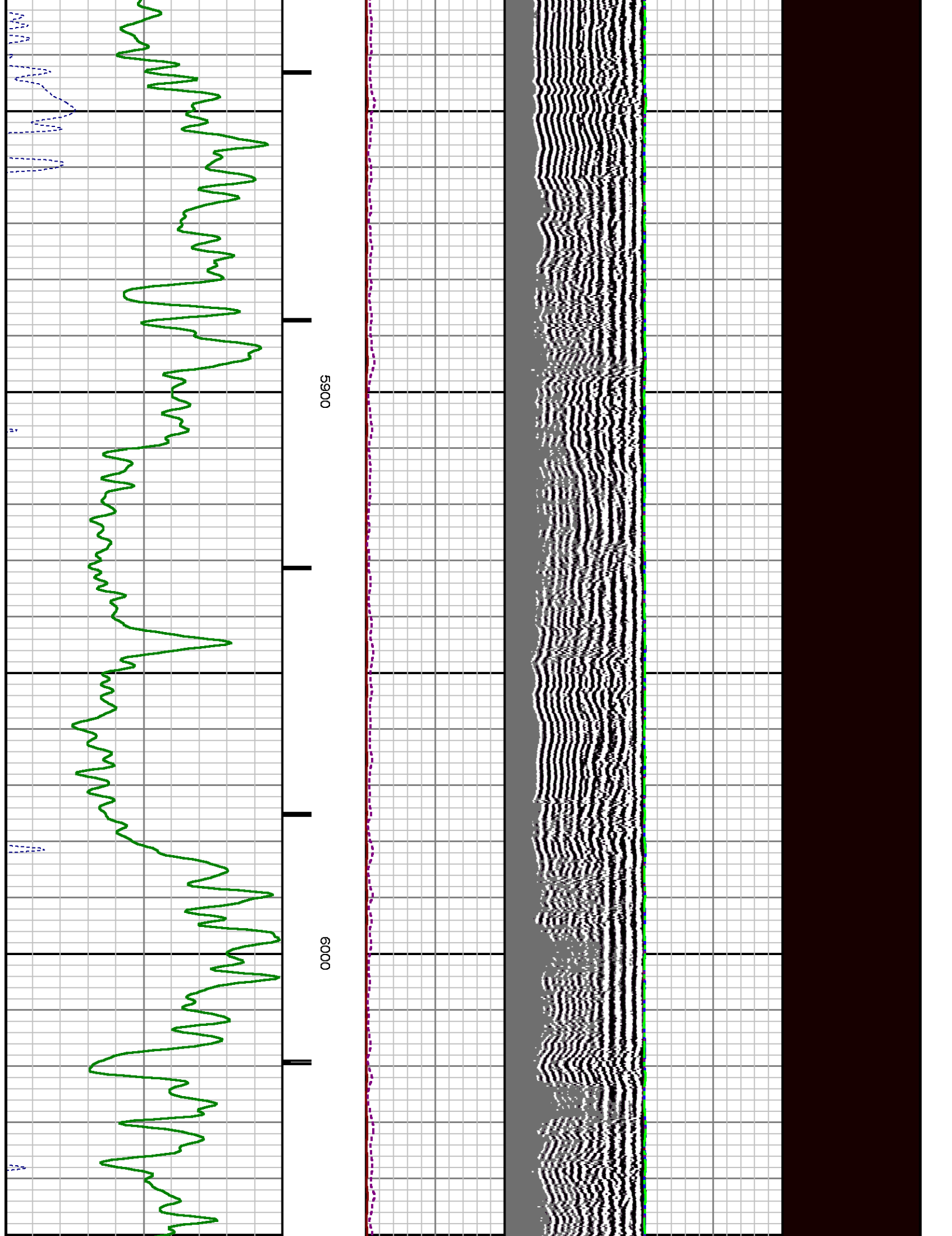


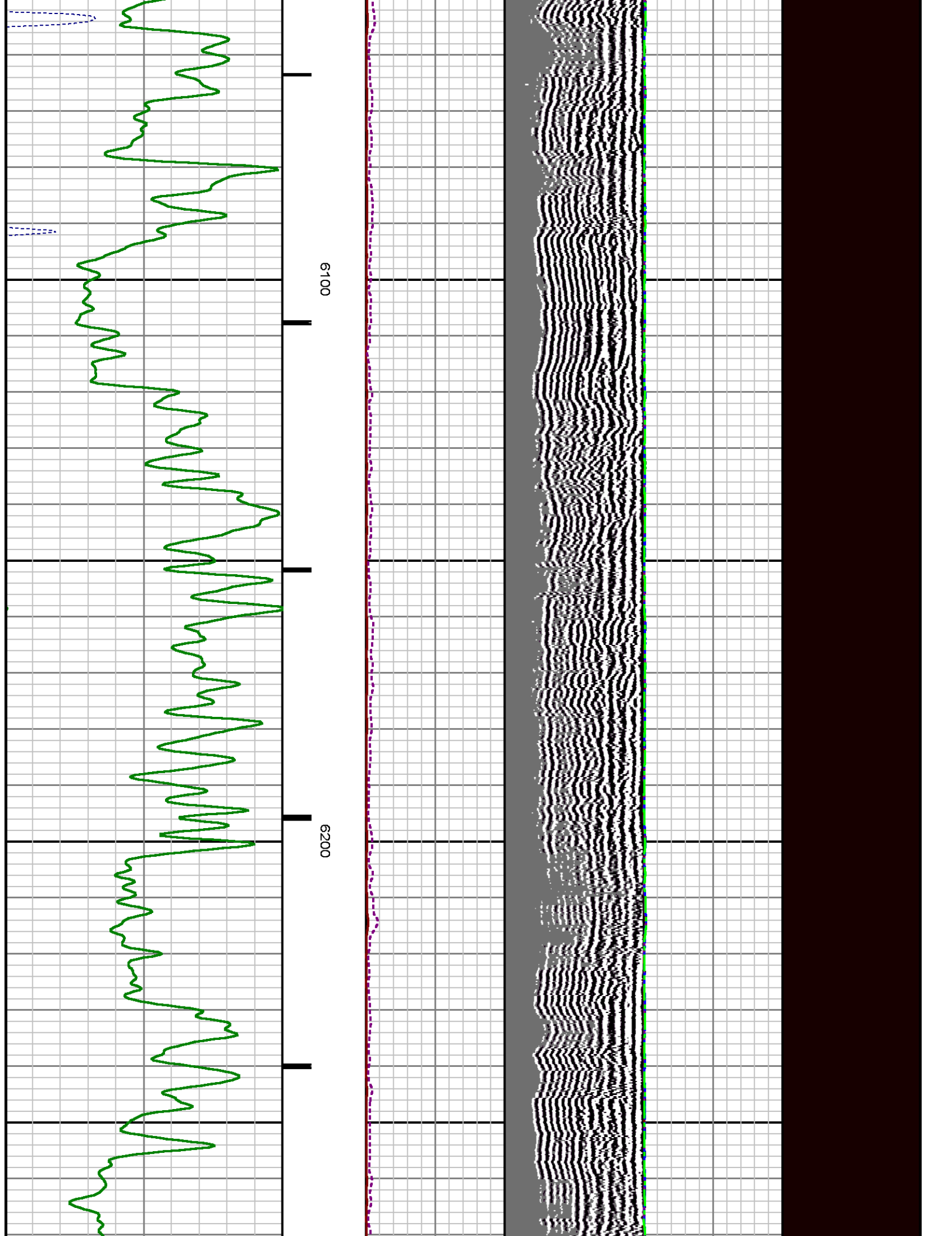


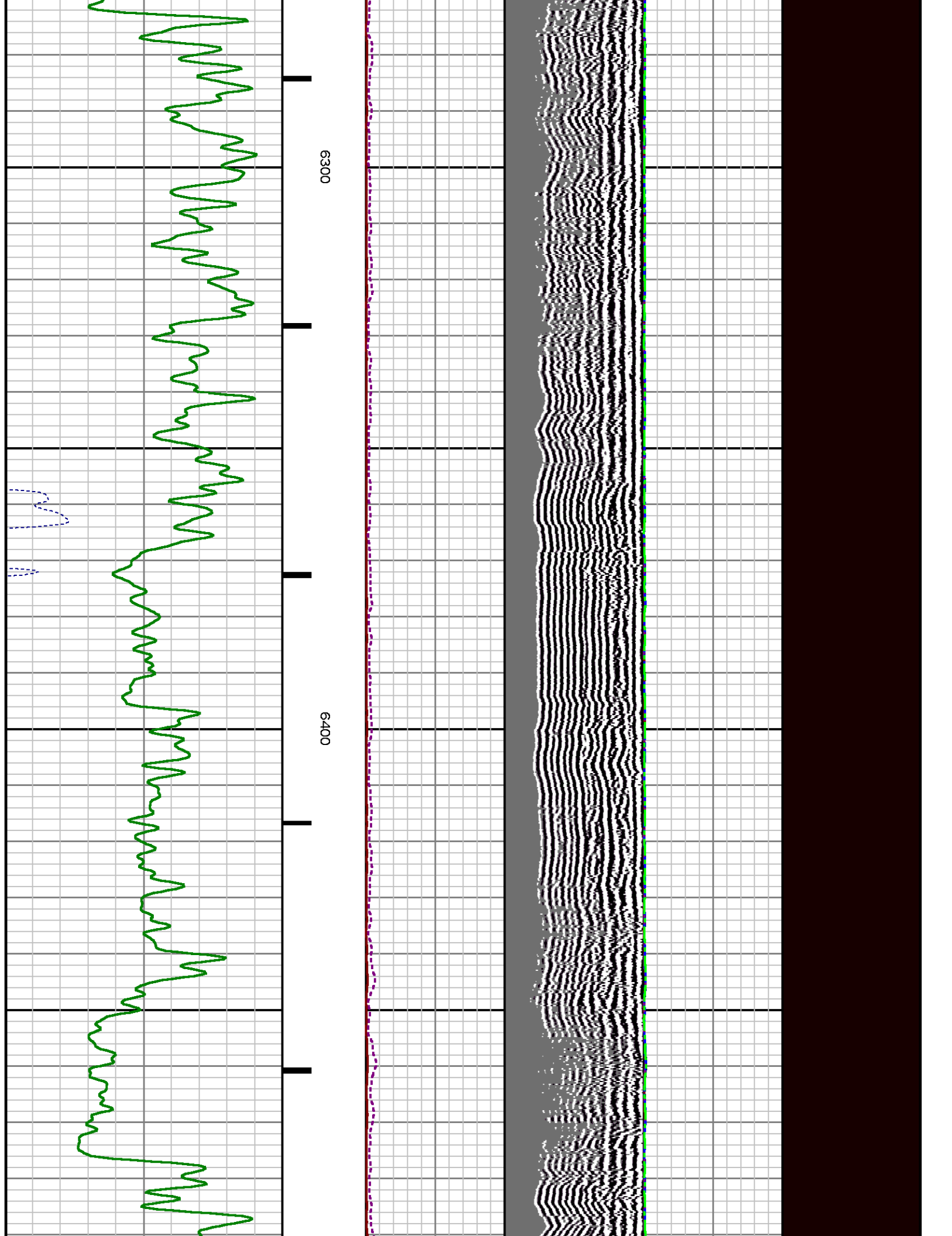


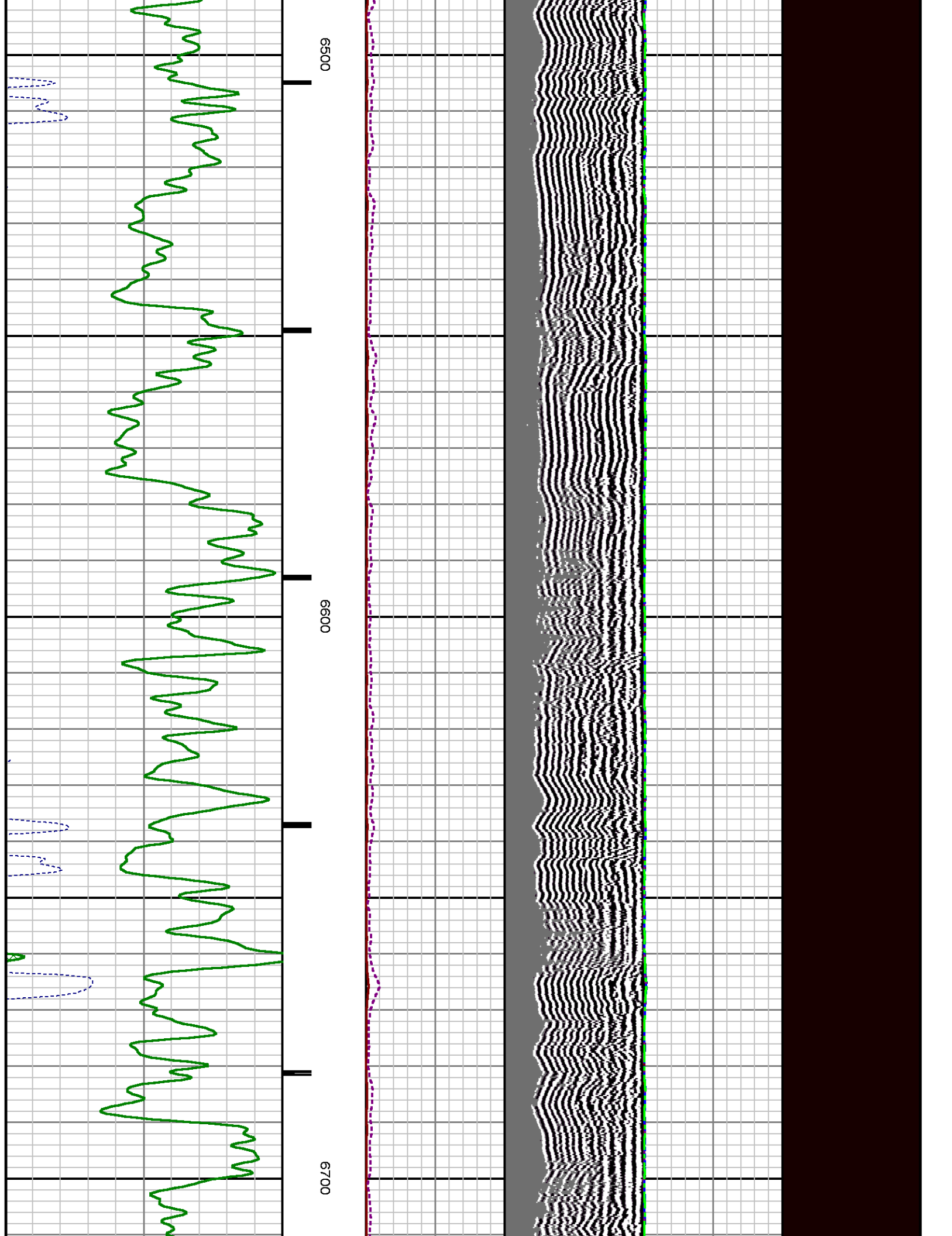


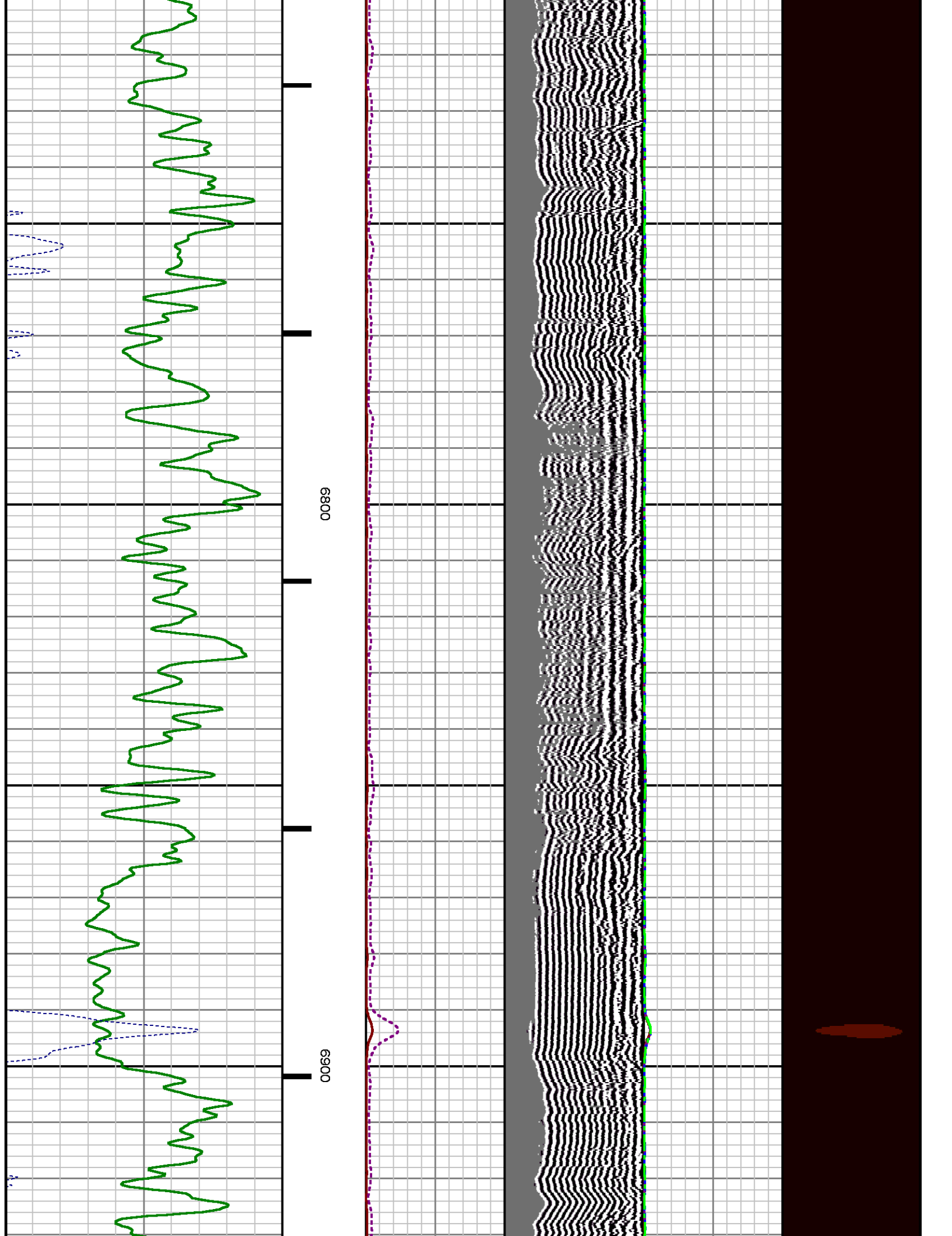


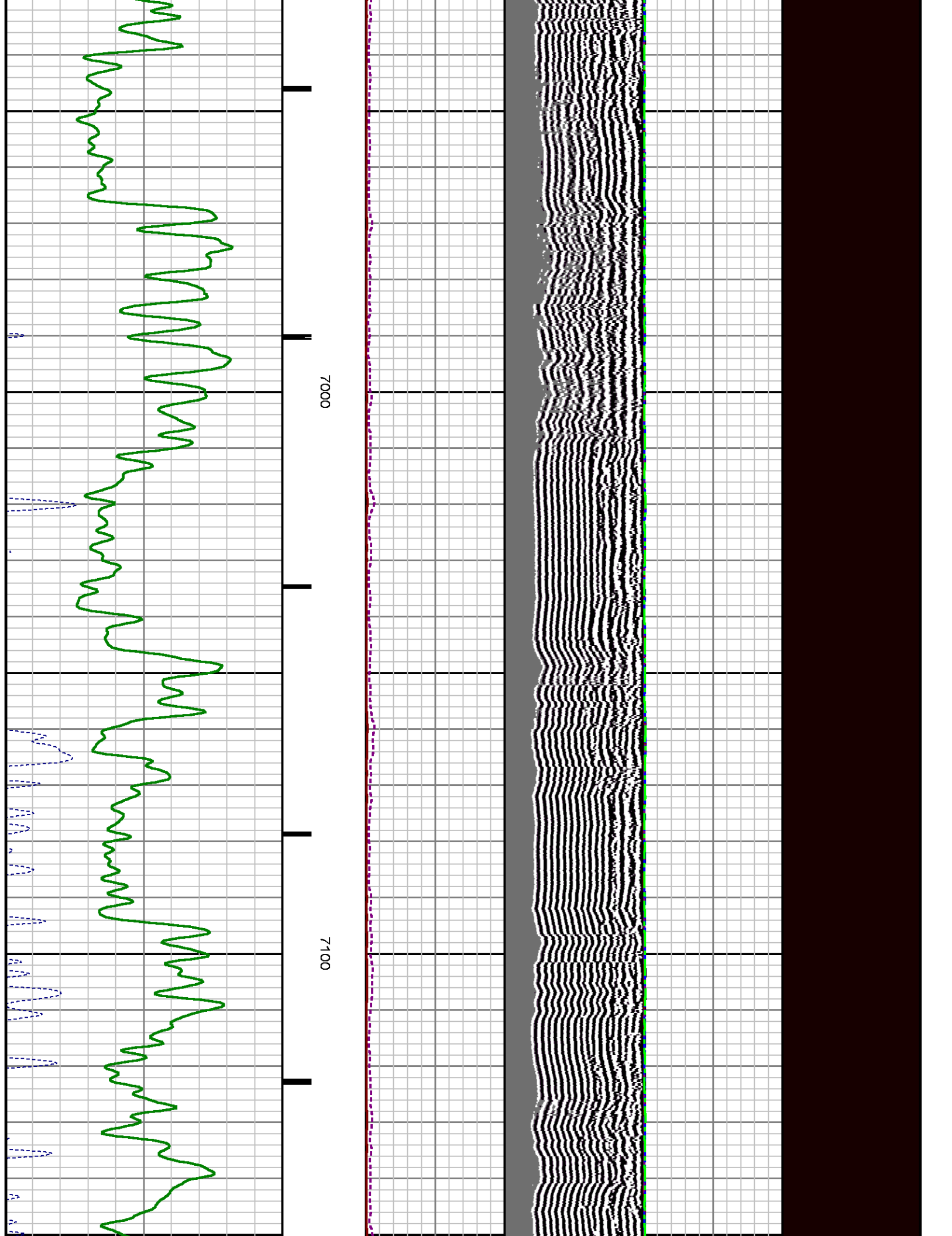


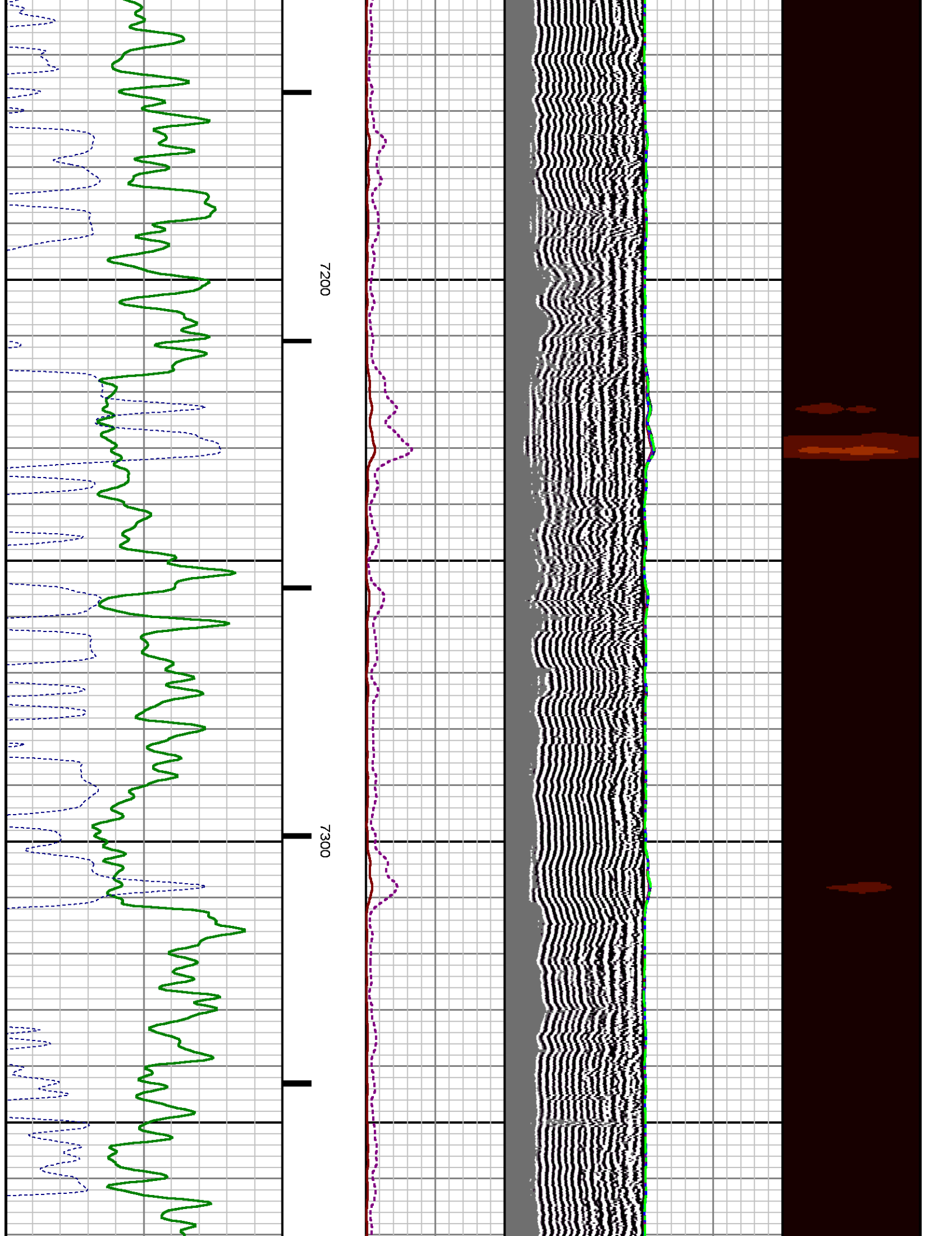


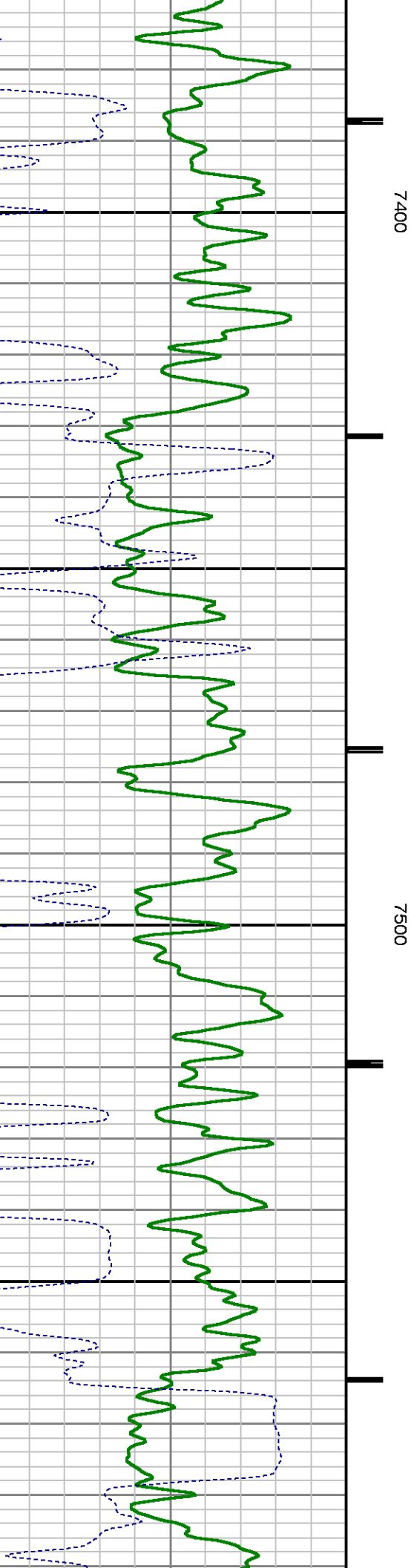
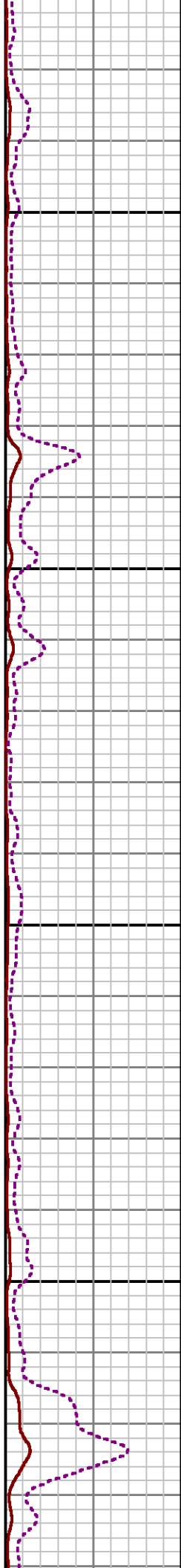
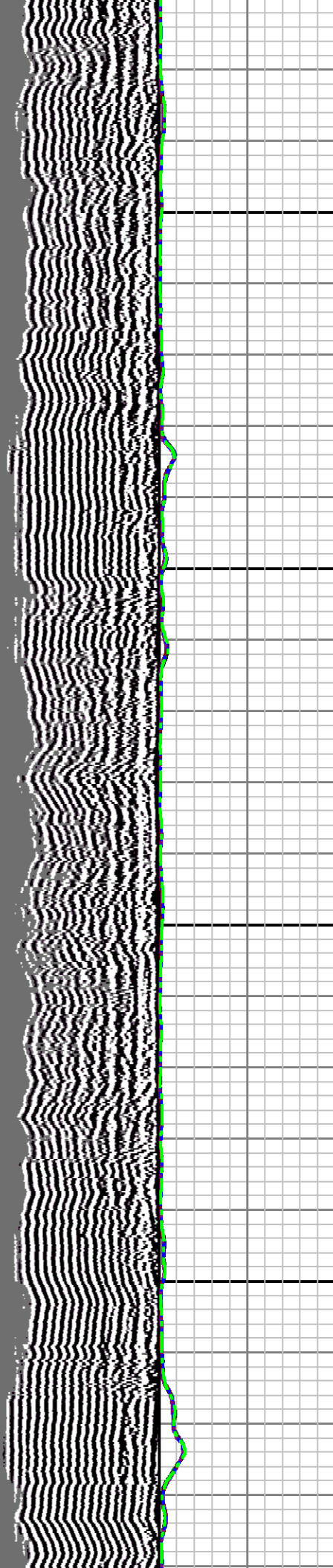


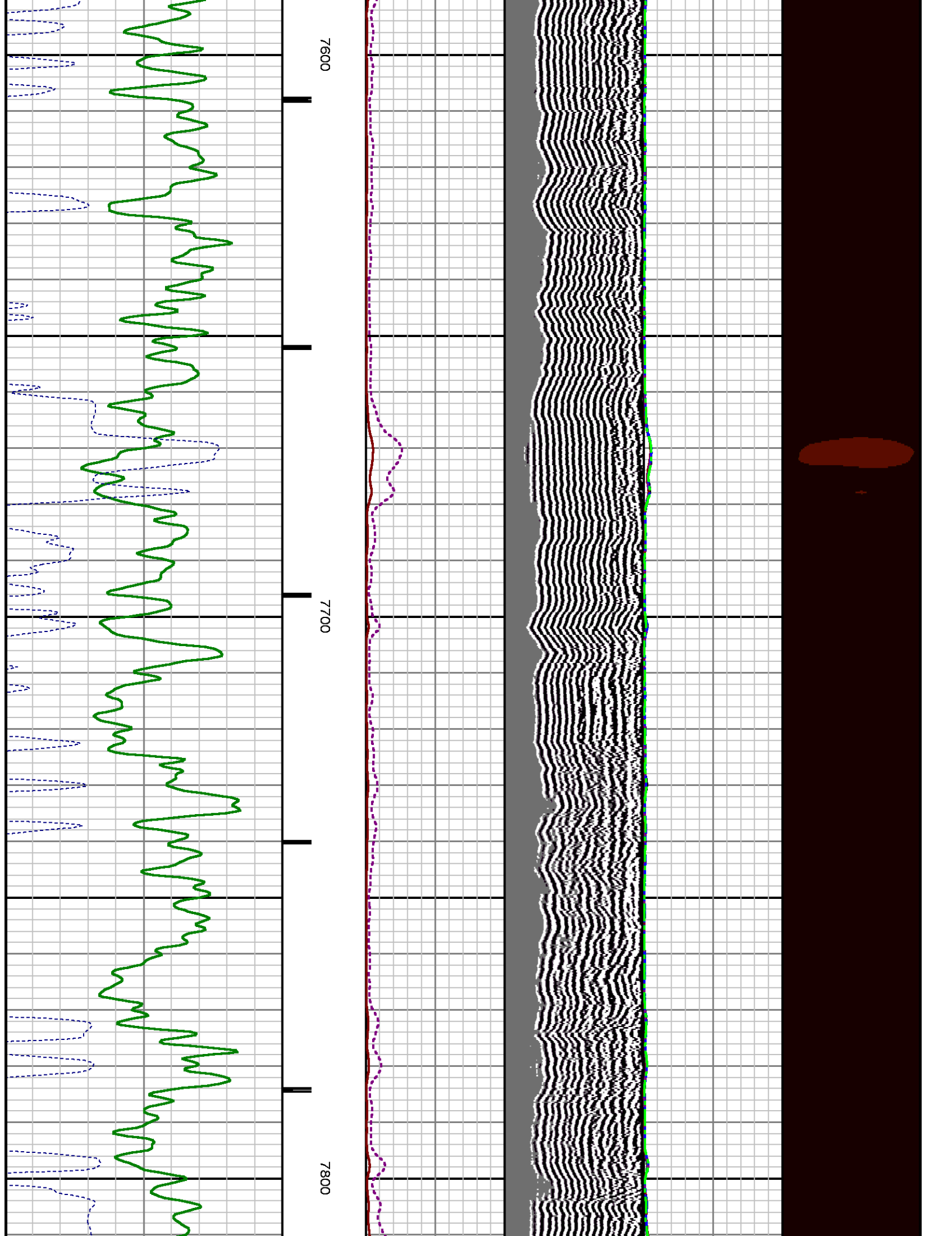


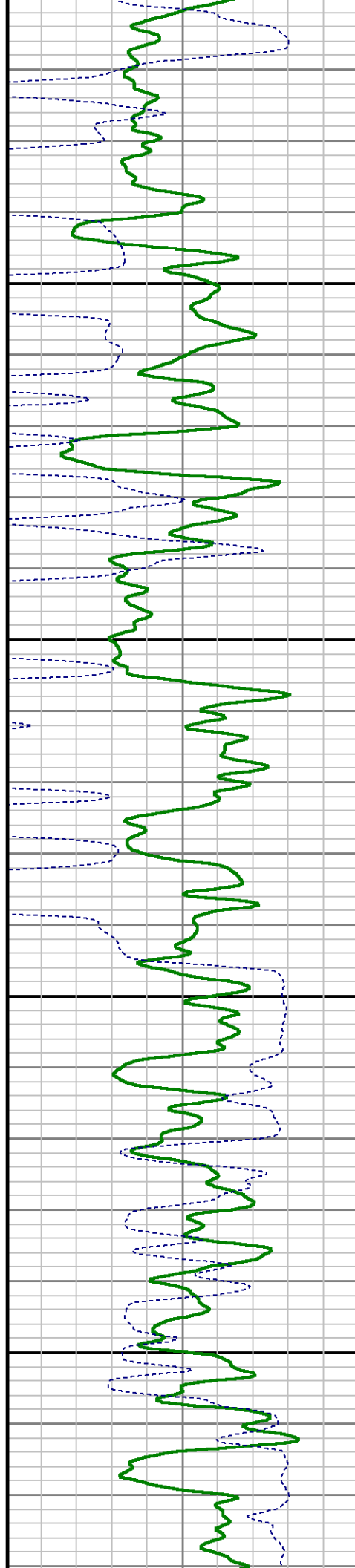
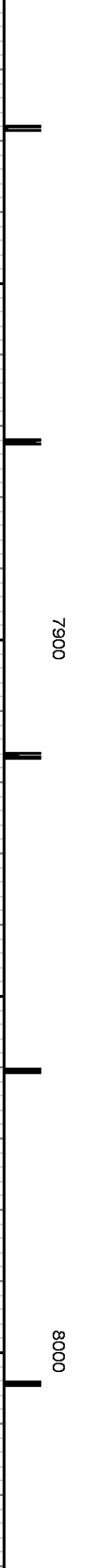
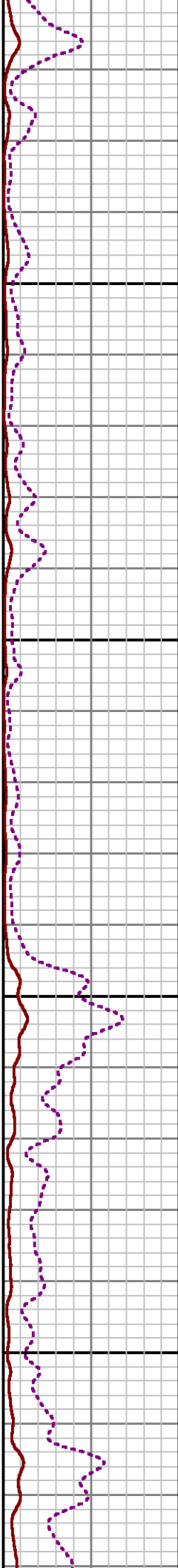
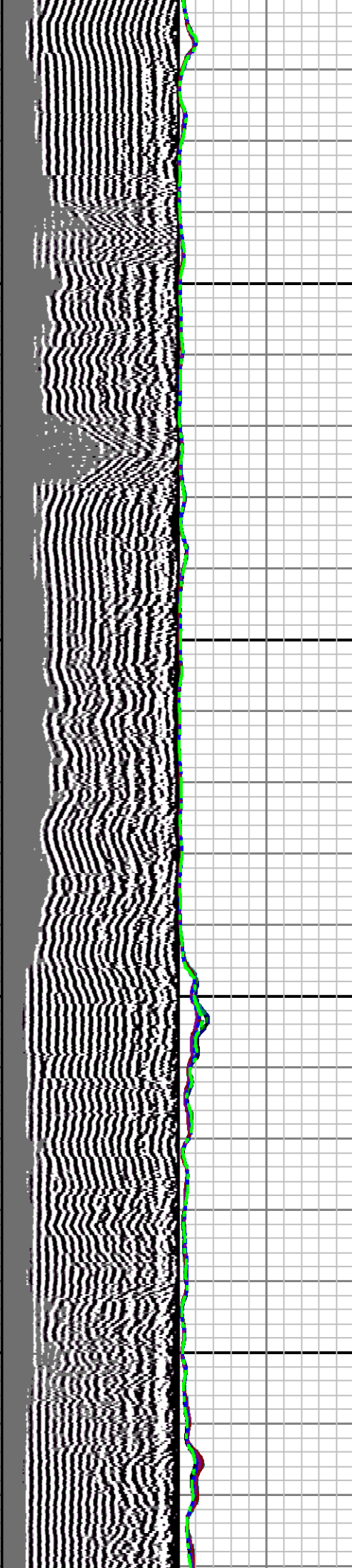


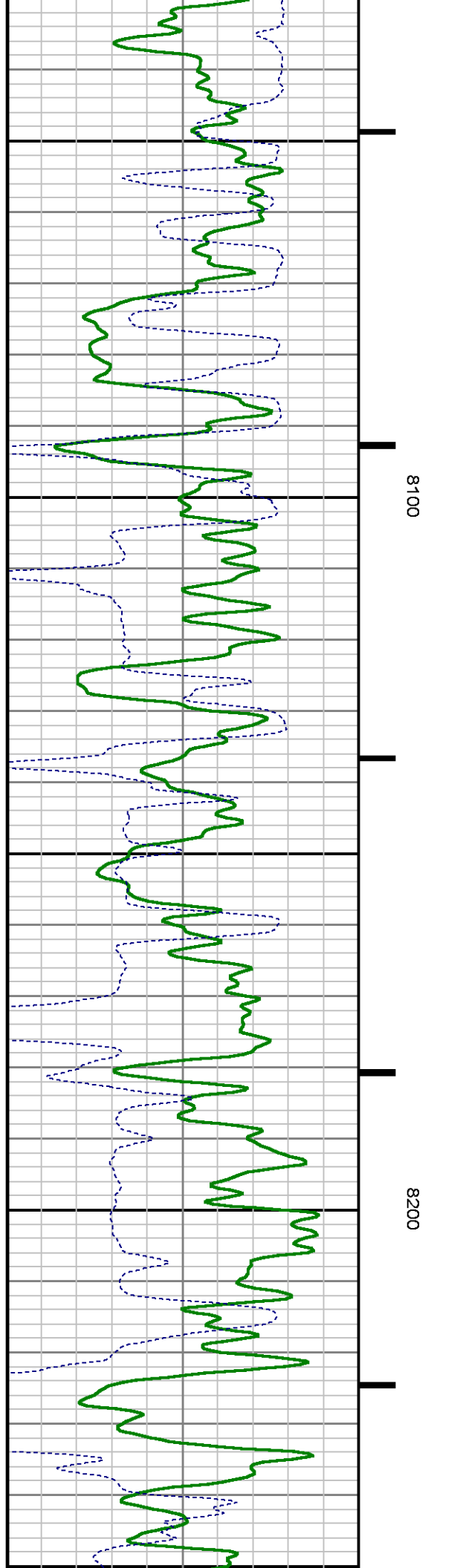
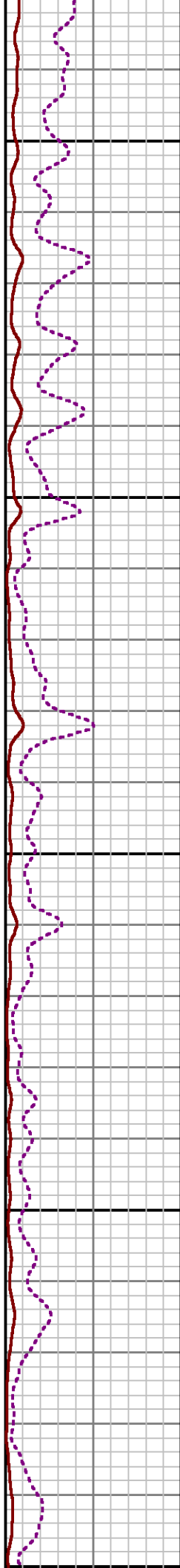
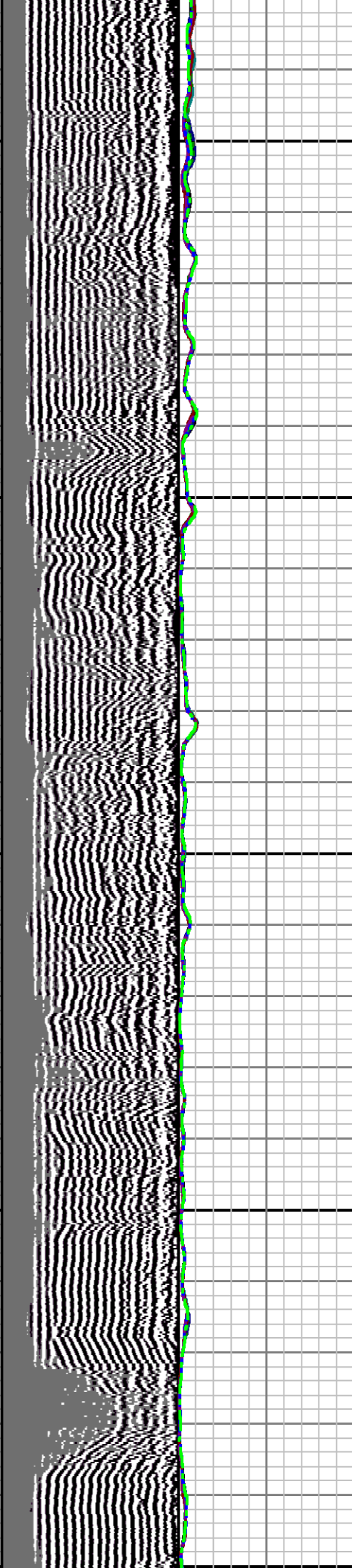


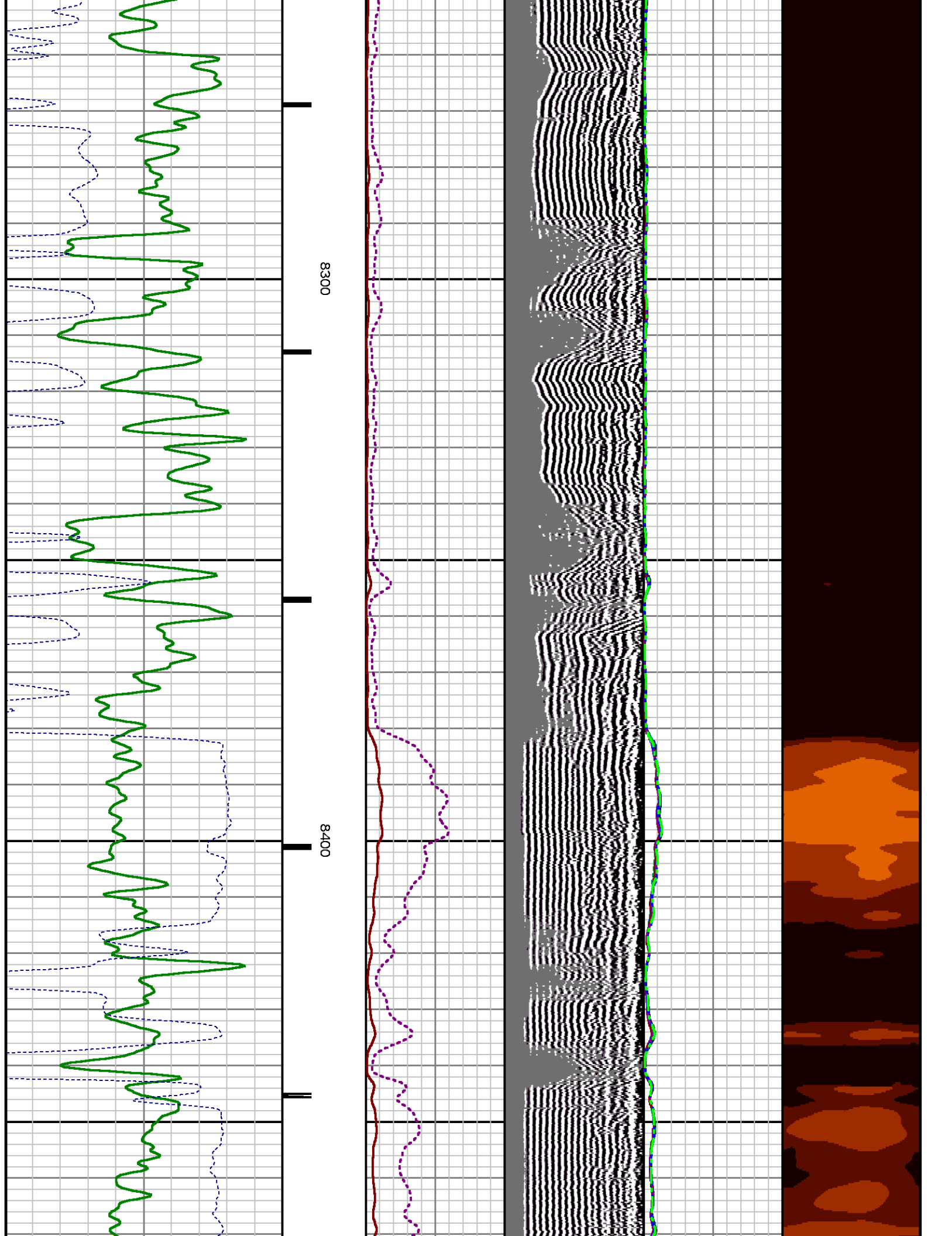


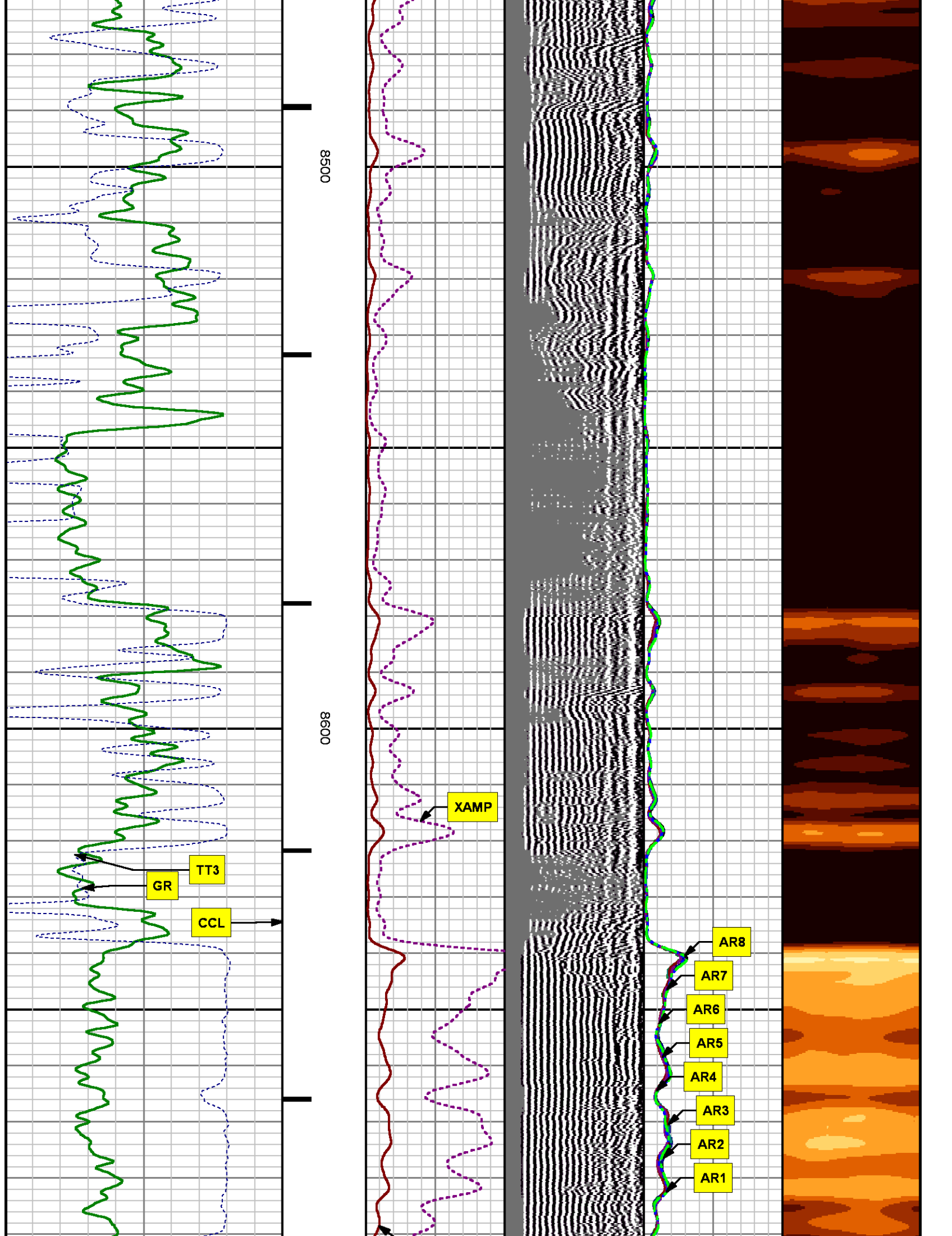


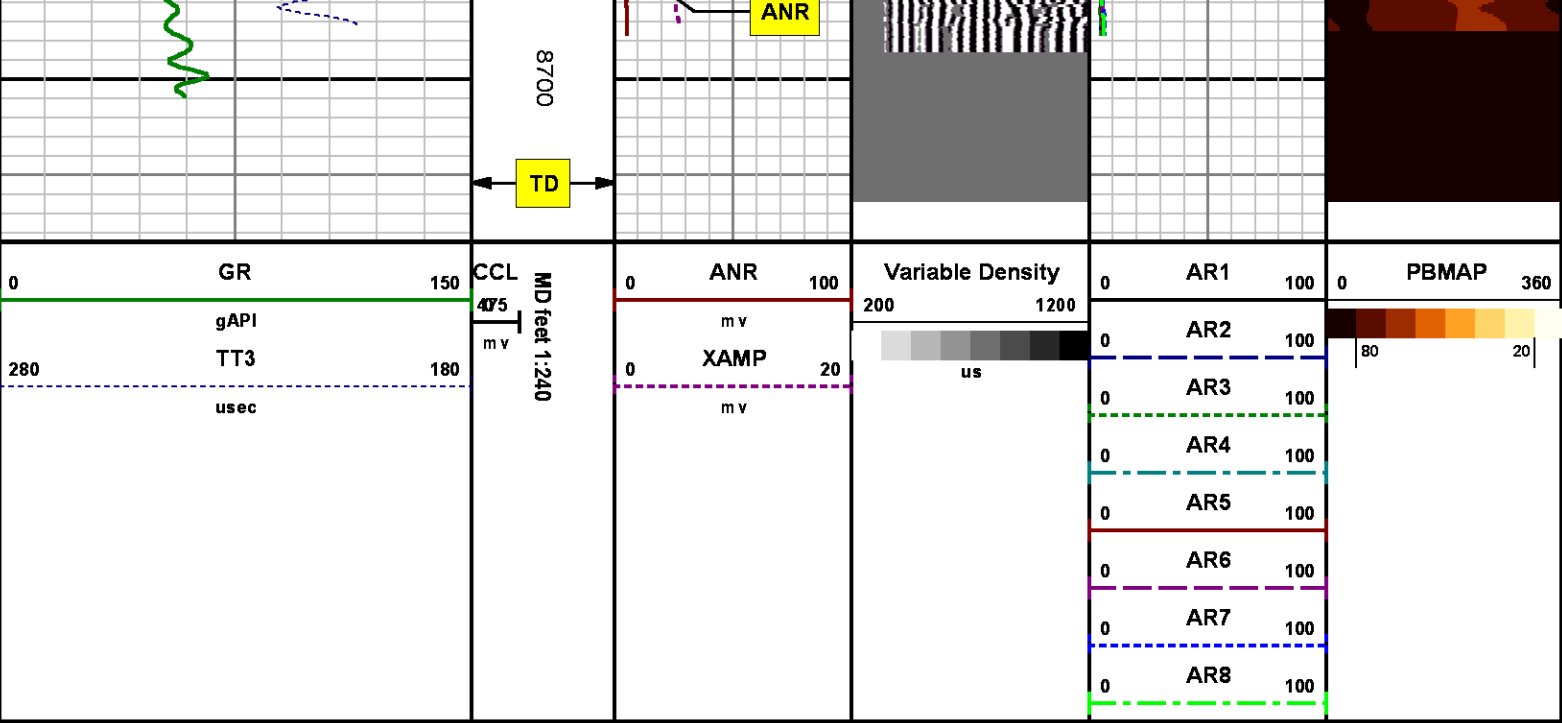












REPEAT SECTION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	8402.850	8714.850
RAL	Amp Gate Start Near	195.000	usec	8402.850	8714.850
RAL	Amp Gate Start Radial	195.000	usec	8402.850	8714.850
RAL	Amp Gate Width Far	25.000	usec	8402.850	8714.850
RAL	Amp Gate Width Near	25.000	usec	8402.850	8714.850
RAL	Amp Gate Width Radial	25.000	usec	8402.850	8714.850
RAL	casing od	4.500	inches	8402.850	8714.850
RAL	casing wt	11.600	lbm/ft	8402.850	8714.850
RAL	FB Start Far	291.900	usec	8402.850	8714.850
RAL	FB Start Near	175.391	usec	8402.850	8714.850
RAL	FB Start Radial	175.391	usec	8402.850	8714.850
RAL	FB Thresh Far	10.000	mv	8402.850	8714.850
RAL	FB Thresh Near	4.000	mv	8402.850	8714.850
RAL	FB Thresh Radial	4.000	mv	8402.850	8714.850
RAL	Fluid Travel Time	200.000	usec/ft	8402.850	8715.849

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

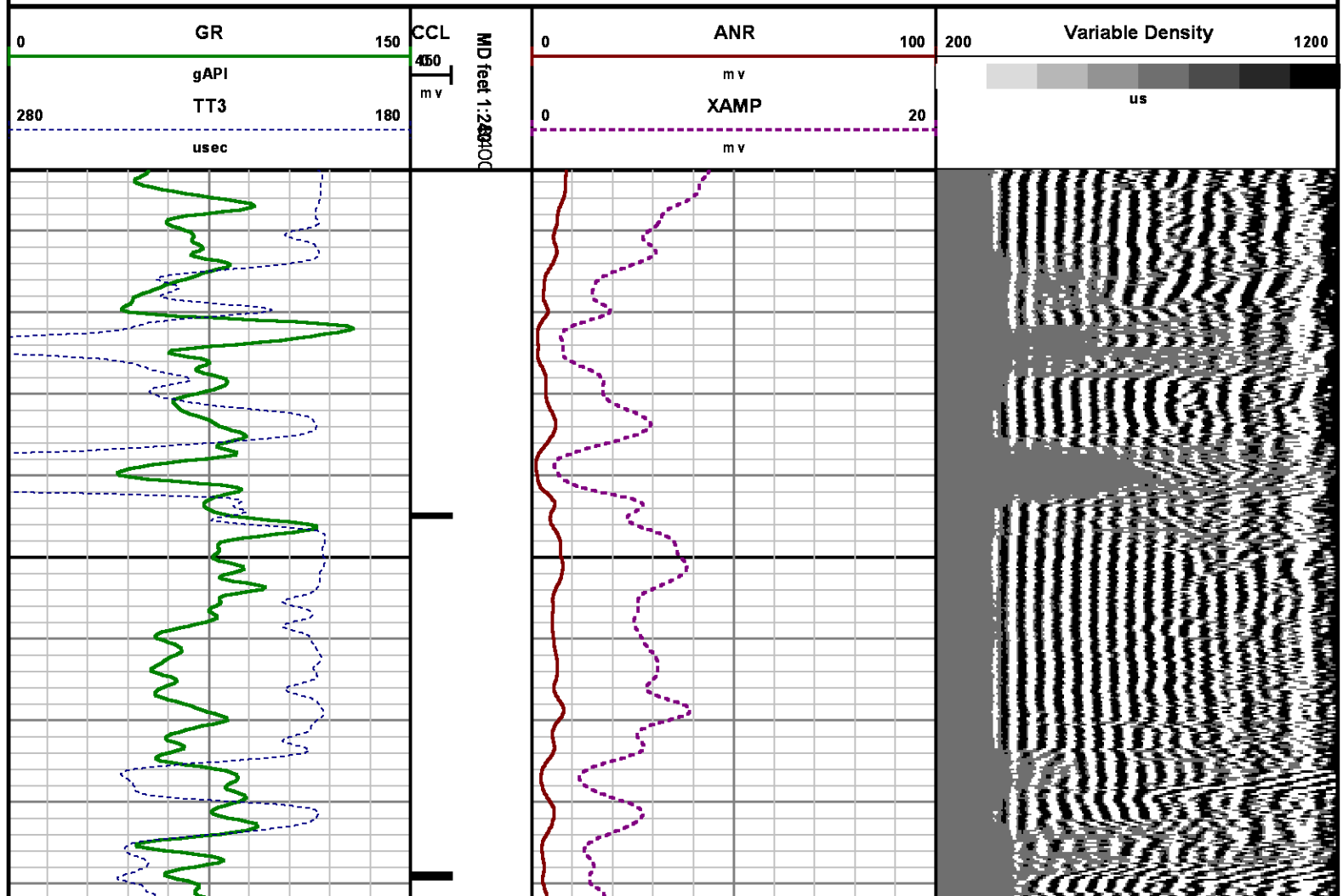
Well : SAVAGE RWF 311-25

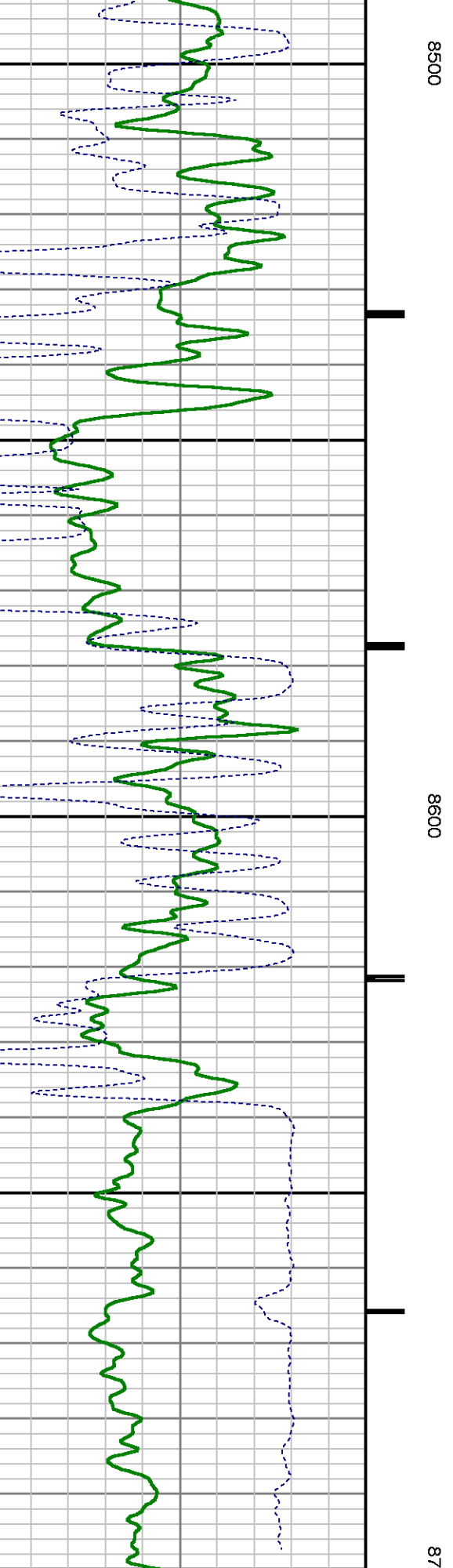
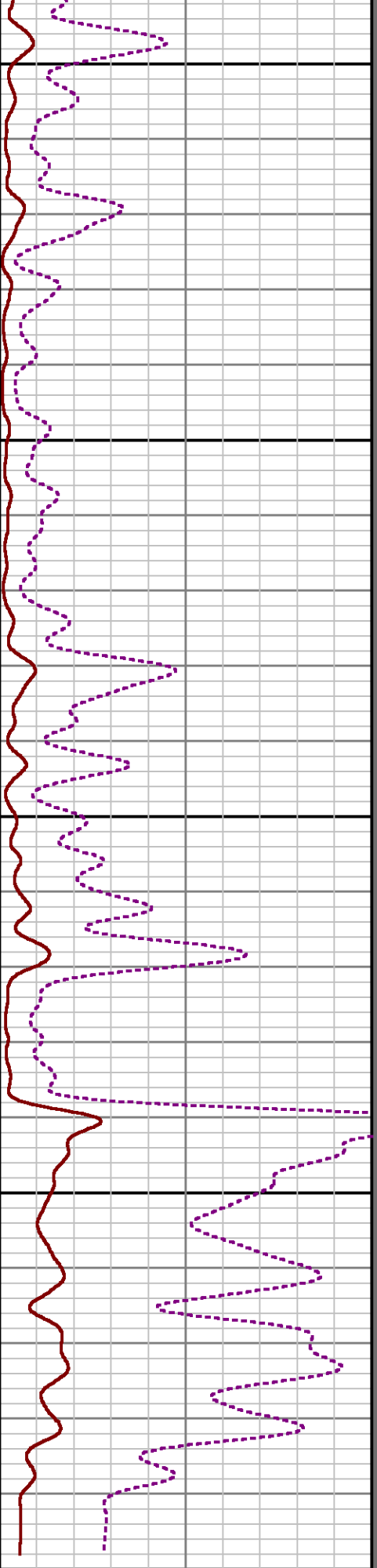
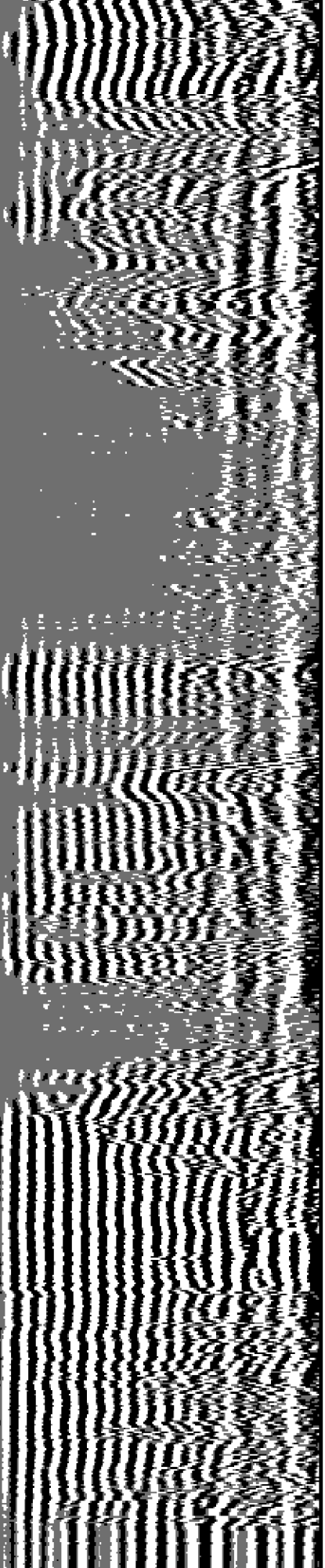
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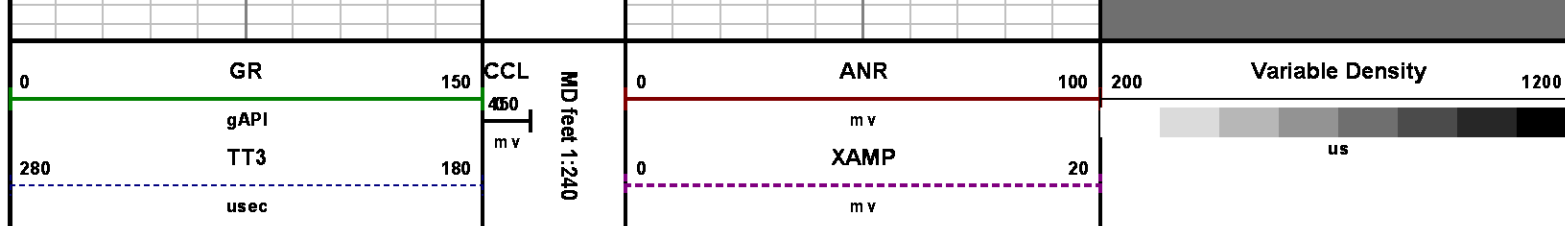
Mode : PlotMgr 5.4.504

Interval : 8402.60 - 8715.85 feet UP

Created : 2/4/2014 6:05:26 PM







CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP\496F4_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Tue Feb 04 15:15:41 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: F4

Tool Delay [usec]	-54.00	Tank OD in	5.50	Tank Wt lbm/ft	15.50	Tank ID in	4.95
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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	-0.108	100.00	0.17
3 Ft. Receiver	218	216	30	153	25	-0.125	100.00	0.17
5 Ft. Receiver	327	324	30	232	25	0.106	150.00	0.19
Radial #1	218	216	30	148	25	-0.165	100.00	0.16
Radial #2	218	216	30	148	25	-0.297	100.00	0.16
Radial #3	218	216	30	148	25	-0.315	100.00	0.17
Radial #4	218	216	30	148	25	-0.338	100.00	0.17
Radial #5	218	216	30	148	25	-0.250	100.00	0.17
Radial #6	217	216	30	148	25	-0.111	100.00	0.17
Radial #7	216	216	30	148	25	-0.136	100.00	0.16
Radial #8	218	216	30	148	25	-0.203	100.00	0.16

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\496F4 fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Tue Feb 04 15:22:19 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: F4

Tool Delay [usec]	-54.00	Casing OD in	4.50	Casing Wt lbm/ft	11.60	Casing ID in	4.00
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RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	166	25	0.022	0.000	0.99	100.000
3 Ft. Receiver	195	25	1.952			
5 Ft. Receiver	305	25	2.360			
Radial #1	195	25	1.335			
Radial #2	195	25	1.383			
Radial #3	195	25	1.541			
Radial #4	195	25	1.566			
Radial #5	195	25	1.784			
Radial #6	195	25	1.873			
Radial #7	195	25	1.505			
Radial #8	195	25	1.477			

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

XMIT—18.05'

NEAR RCVR—14.97'

FAR RCVR—13.05'

CCL—11.34'

GR—9.49'

NEU—4.09'

0.00'

Total Length: 24.23'**Total Weight: Not Available****Max Diameter: 0' 3.12"****Baker Atlas***CASE***Company**

WPX ENERGY

Well

SAVAGE RWF 311-25

Field

RULISON

County

GARFIELD

State

COLORADO

Location

SHL: 2471' FNL & 1407' FWL

BHL: 1148' FNL & 833' FWL (NWNW)

SEC

25

TWP

6S

RGE

94W

Elevations

KB 6058 ft

DF

GL 6037 ft

File No:

CH082310

API No:

05045219770000

25 6S 94W

RWF 22-25 PAD

CYCLONE 17