



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: CH085763

Company Well Field County State COLORADO

API No: 0504520360000

Location

1 6 65 95W
PA 22-21 PAD
NABORS 673

SHL: 2600' FNL & 1403' FWL SEC 21
BHL: 756' FSL & 2298' FWL (SESW) SEC 16

SEC 16 TWP 6S RGE 95W

Other Services

RPM

Permanent Datum
Log Measured From
Drill Measured From

GL Elevation 6030 ft
KB 26 ft Above P. D.
KELLY BUSHING

Elevations
KB 6056 ft
DF
GL 6030 ft

Date	23/MAY/14	
Run	ONE	
Service Order	US085763J	
Depth Driller	9867 ft	
Depth Logger	9821 ft	
Bottom Logged Interval	9811 ft	
Top Logged Interval	26 ft	
Time Started	0800	
Time Finished	1200	
Operator Rig Time	4 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	78 ft	
Logged Cement Top	0 psi	
Wellhead Pressure	NA	
Maximum Hole Deviation	NA	
Nominal Logging Speed	66 fpm	
Maximum Recorded Temperature	259 degF	
Reference Log	NONE	
Reference Log Date	NA	
Equipment No.	4271	GRAND UCT
Recorded By	FLORIO RENEAU	
Witnessed By	GRAN JACOBS	

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

Borehole Record		
Bit Size	From	To
13.5 in	26 ft	1252 ft
8.75 in	1252 ft	9867 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in			26 ft	1252 ft
4.5 in	11.6 lbm/ft	1-80	26 ft	9867 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 12 feet.
Logged with zero PSI at wellhead.
BHT = 259°F
SJ = 6468'-6492'

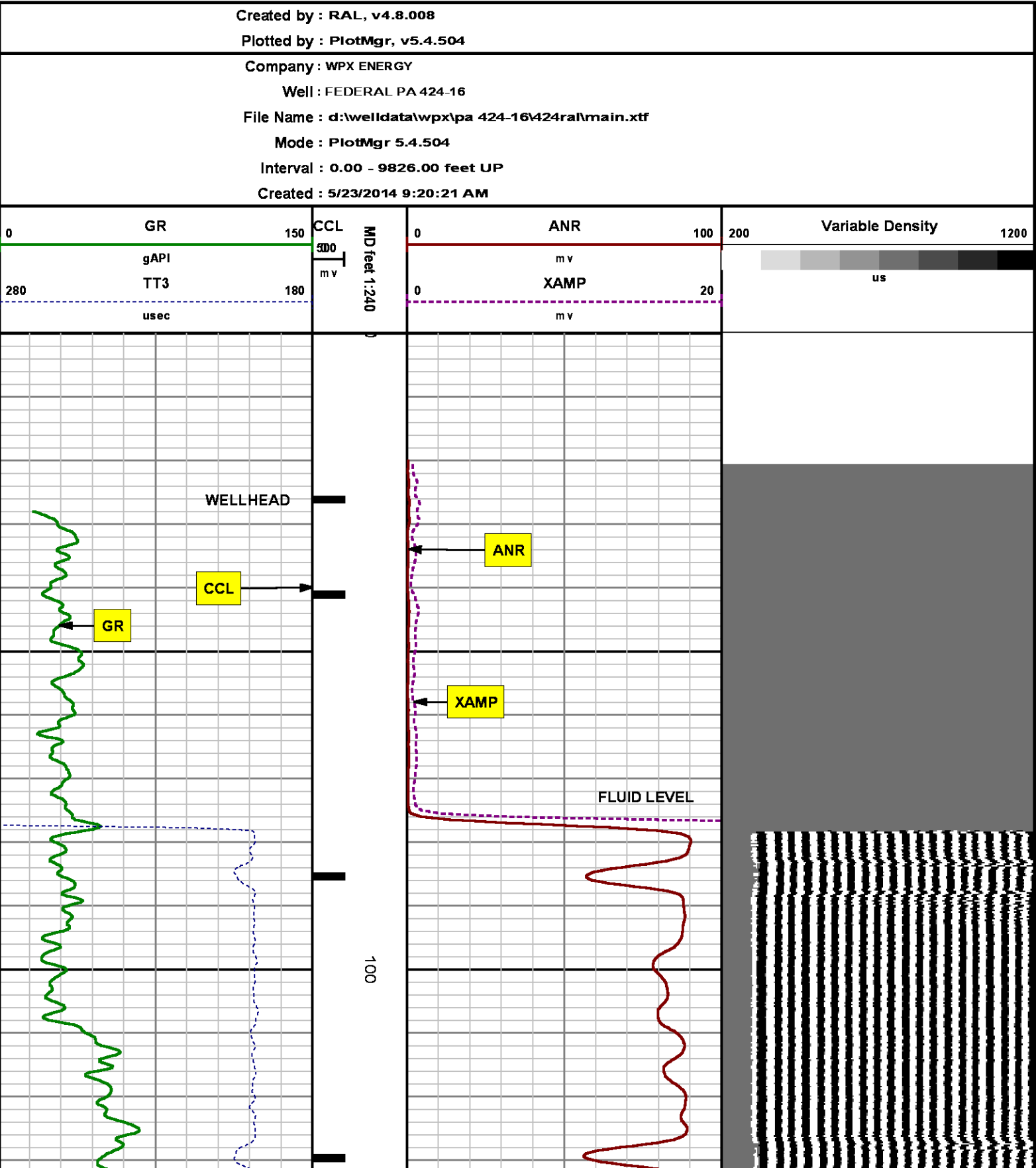
Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1426XA	10124106	CENT
1	1	GR/CCL	2459XA	10417465	CENT

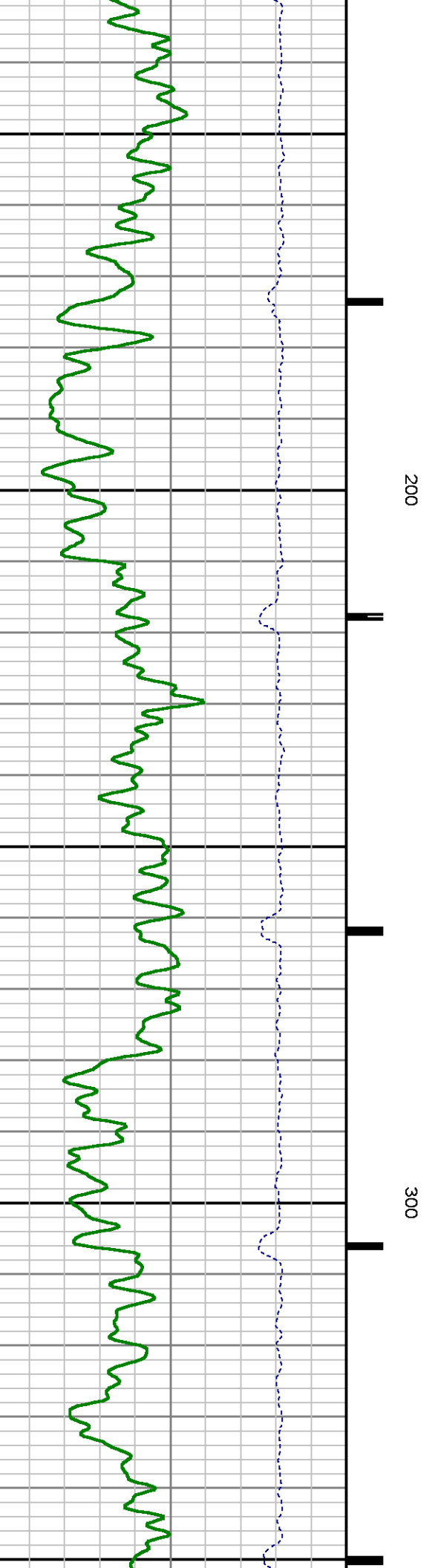
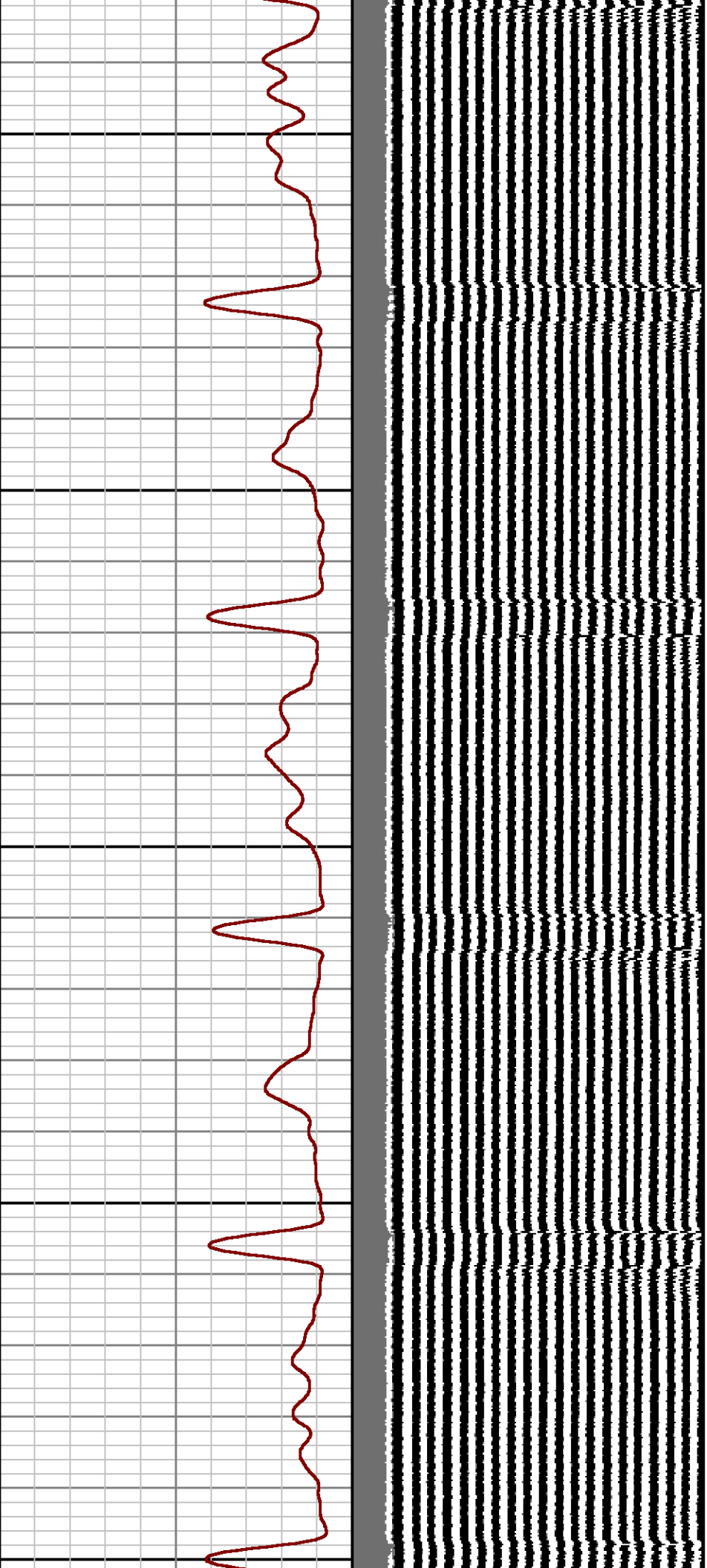
PRIMARY PRESENTATION
0 PSI

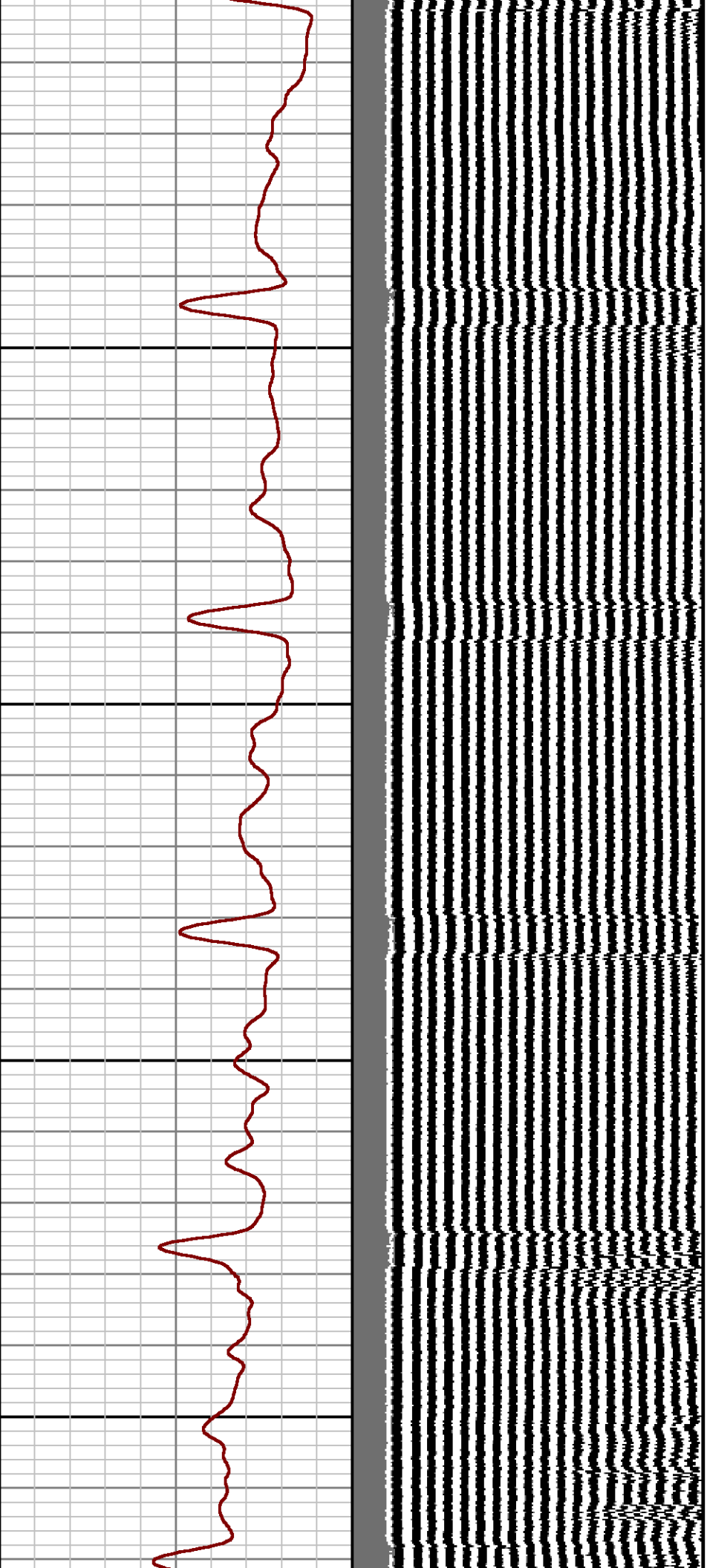
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	36.249	9826.000
RAL	Amp Gate Start Near	195.000	usec	36.249	9826.000
RAL	Amp Gate Start Radial	195.000	usec	36.249	9826.000
RAL	Amp Gate Width Far	25.000	usec	36.249	9826.000
RAL	Amp Gate Width Near	25.000	usec	36.249	9826.000
RAL	Amp Gate Width Radial	25.000	usec	36.249	9826.000
RAL	casing od	4.500	inches	36.249	9826.000
RAL	casing wt	11.600	lbm/ft	36.249	9826.000
RAL	FB Start Far	291.900	usec	36.249	9826.000
RAL	FB Start Near	180.000	usec	36.249	9826.000
RAL	FB Start Radial	180.000	usec	36.249	9826.000
RAL	FB Thresh Far	10.000	mv	36.249	9826.000
RAL	FB Thresh Near	4.000	mv	36.249	9826.000
RAL	FB Thresh Radial	4.000	mv	36.249	9826.000
RAL	Fluid Travel Time	200.000	usec/ft	36.249	9825.718

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

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

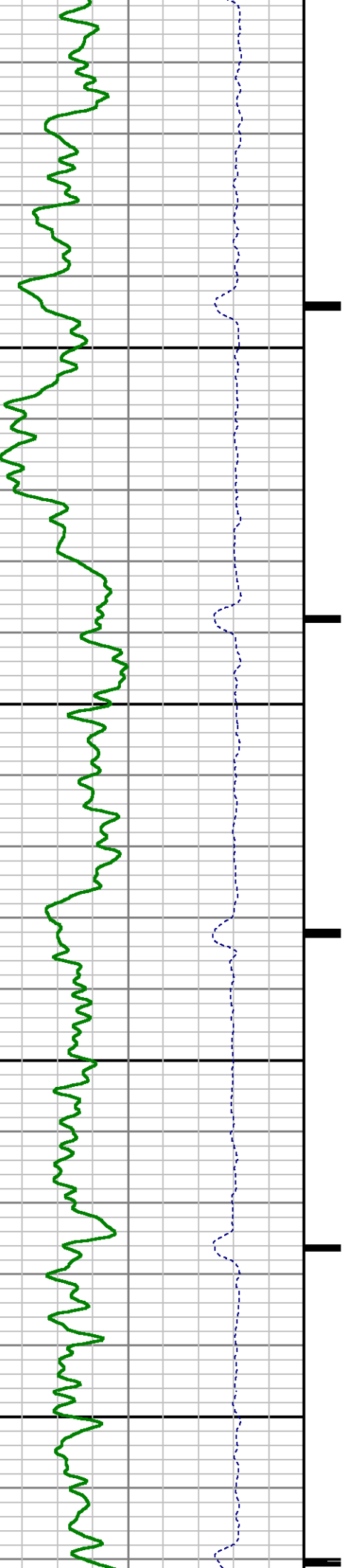


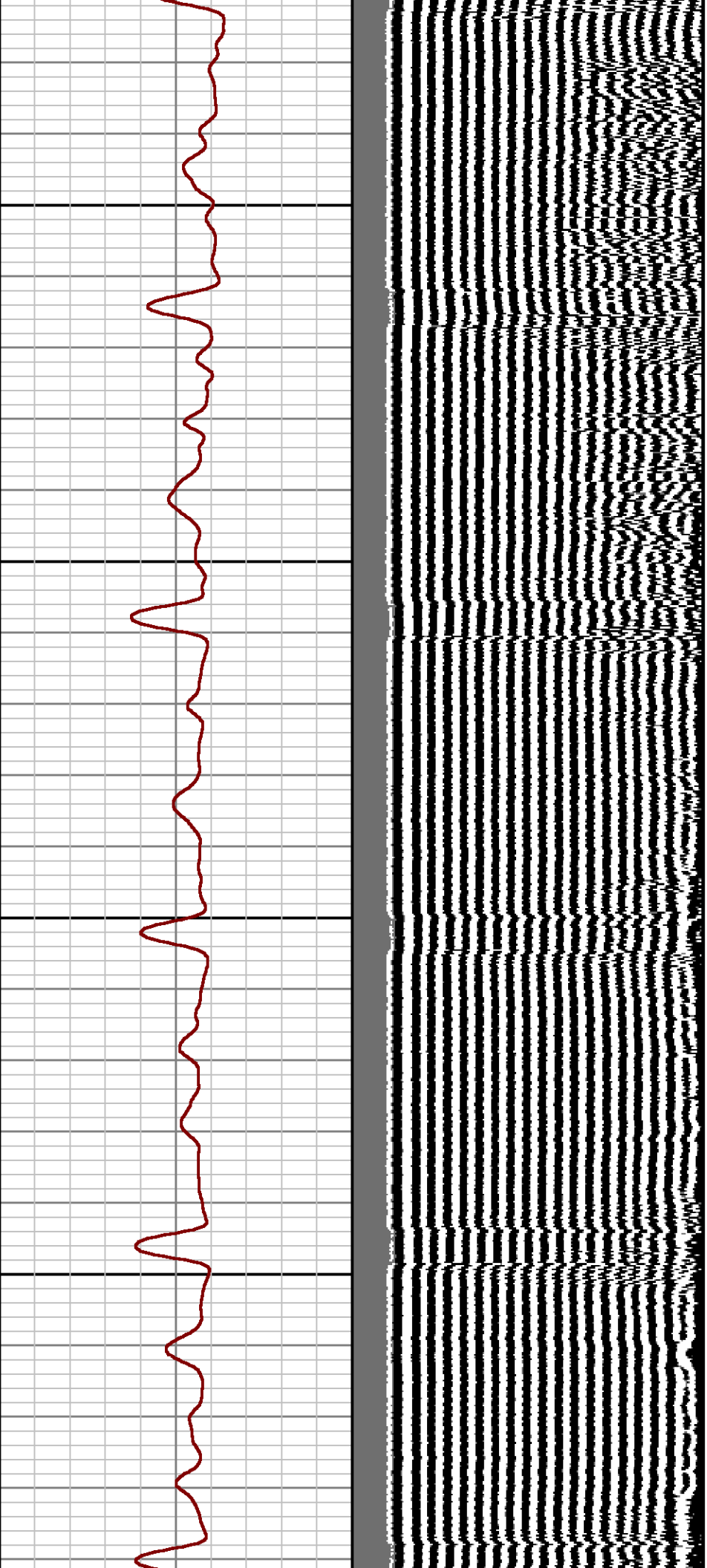




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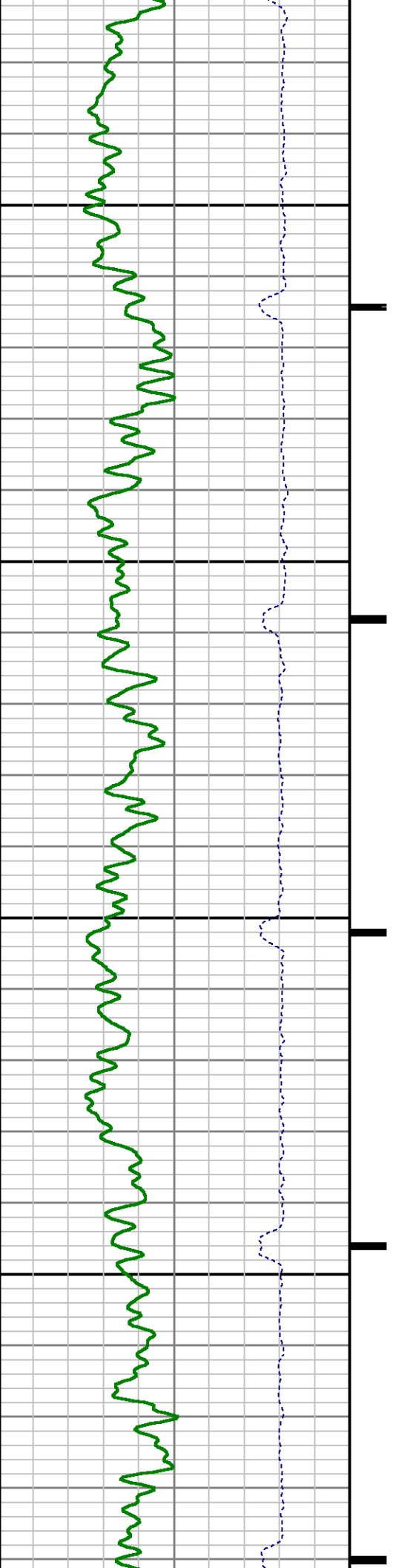
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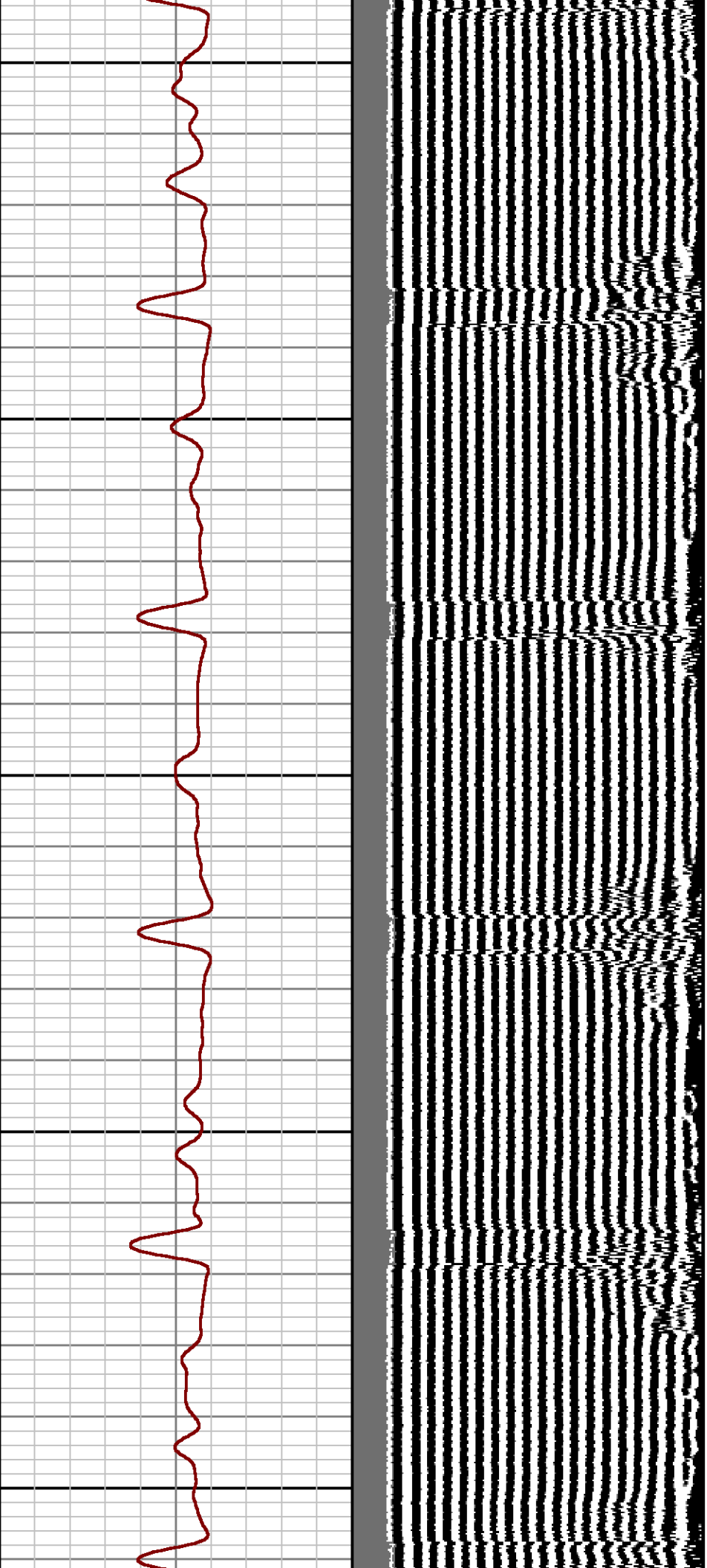




600

700

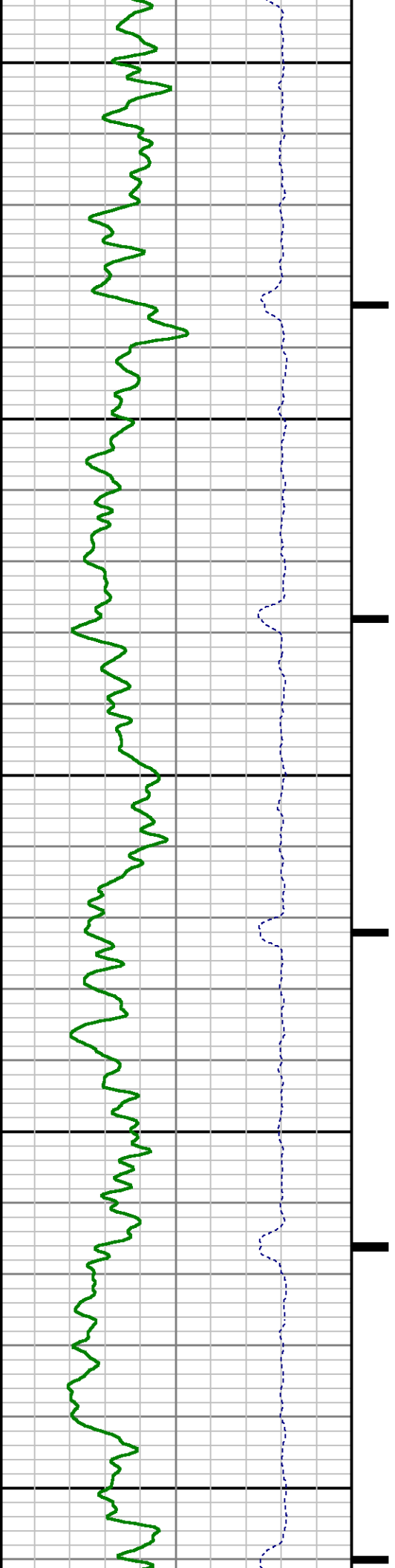


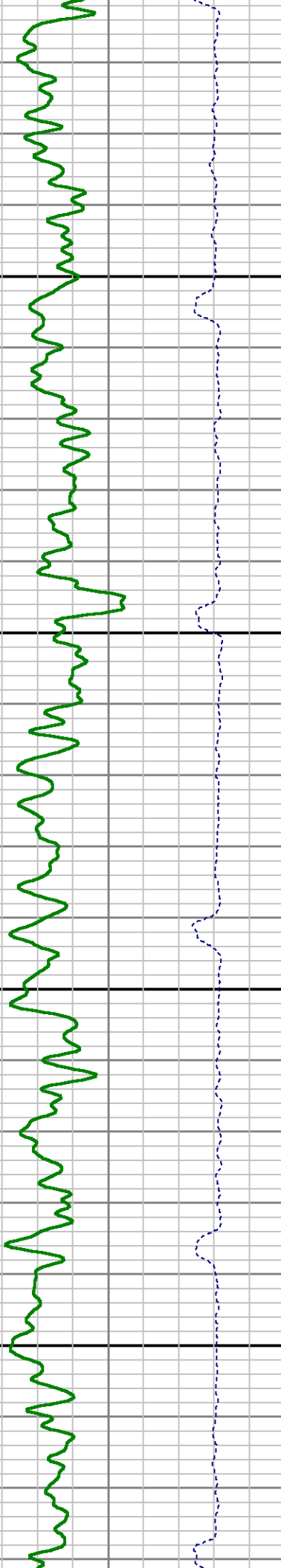
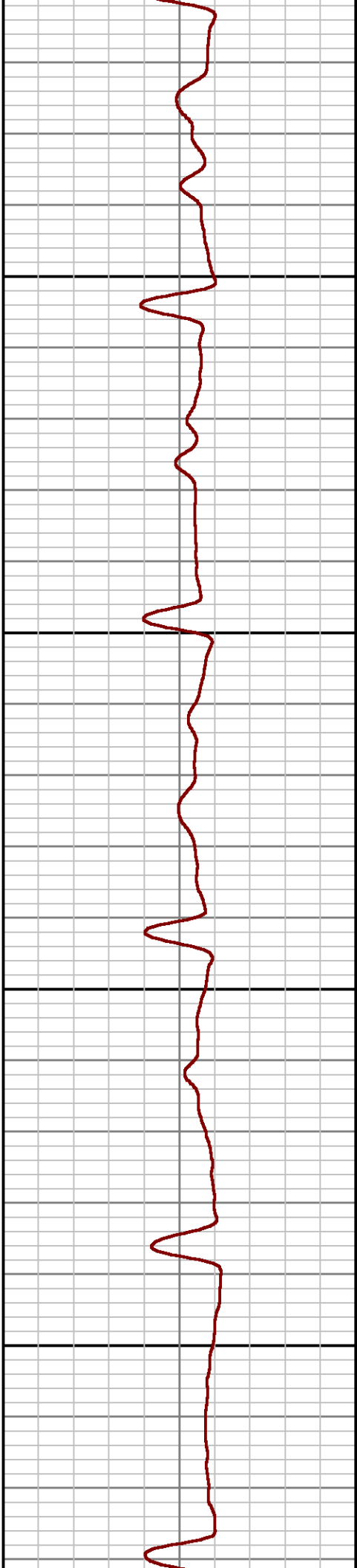
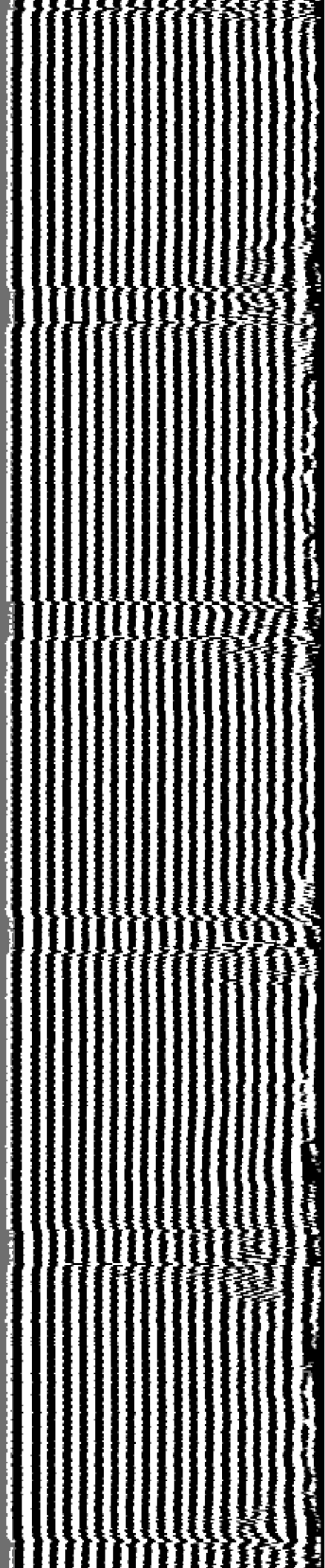


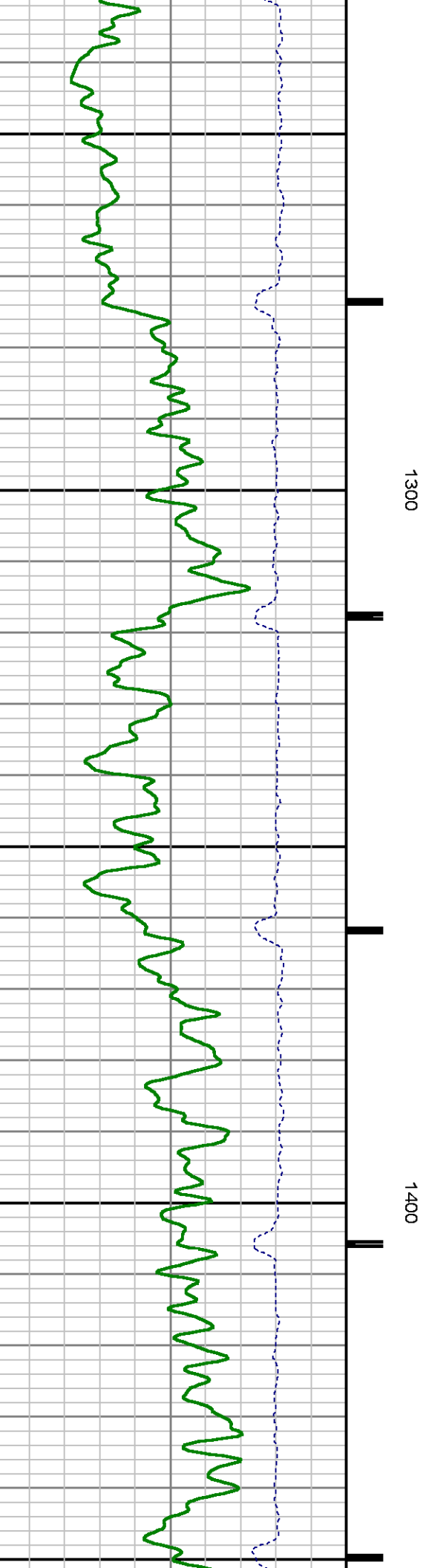
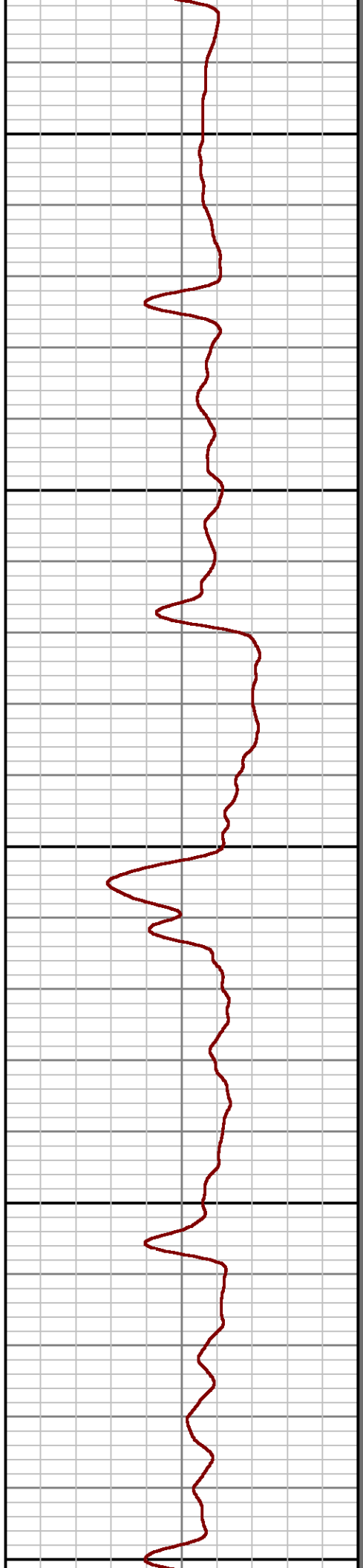
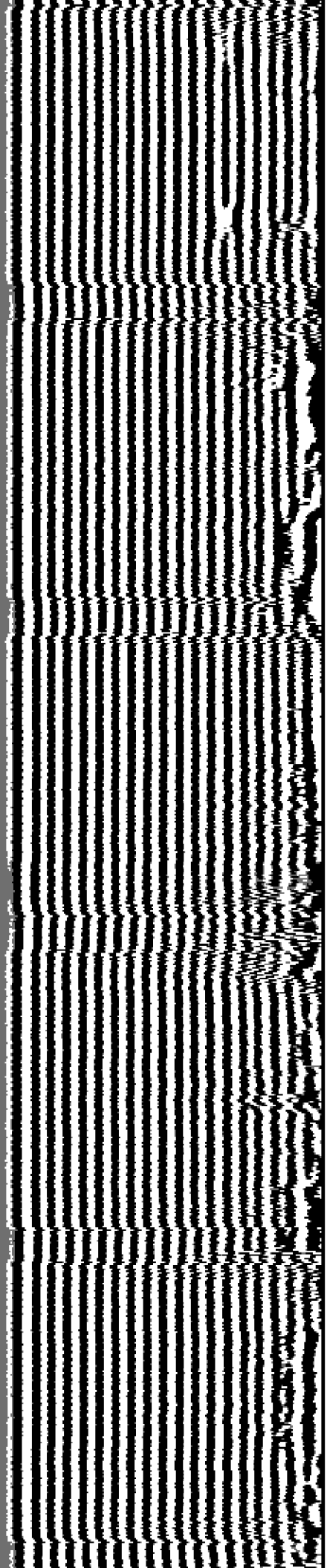
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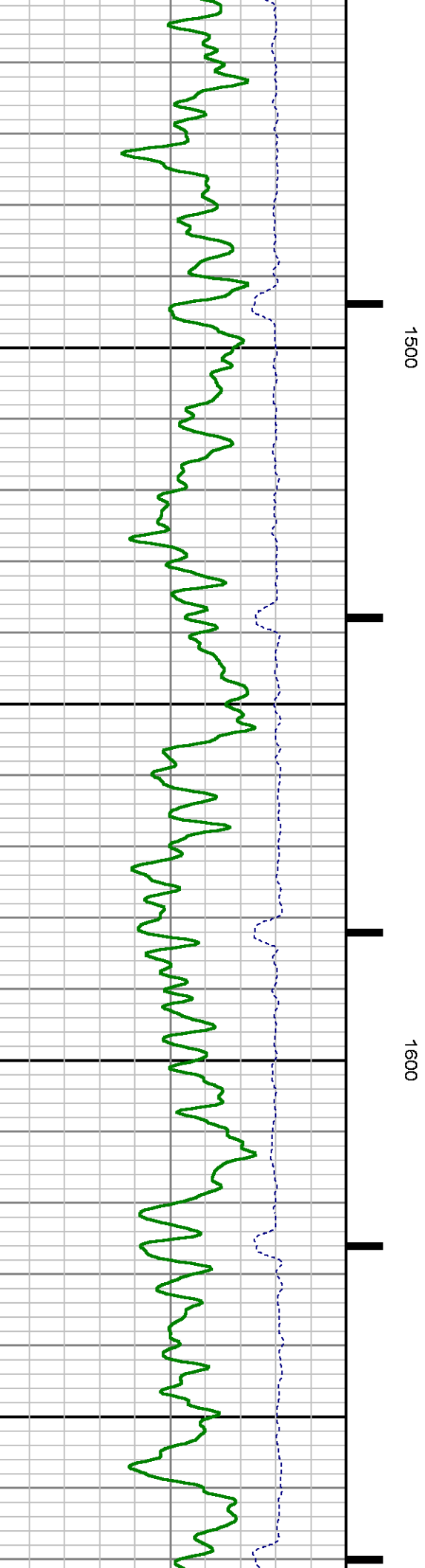
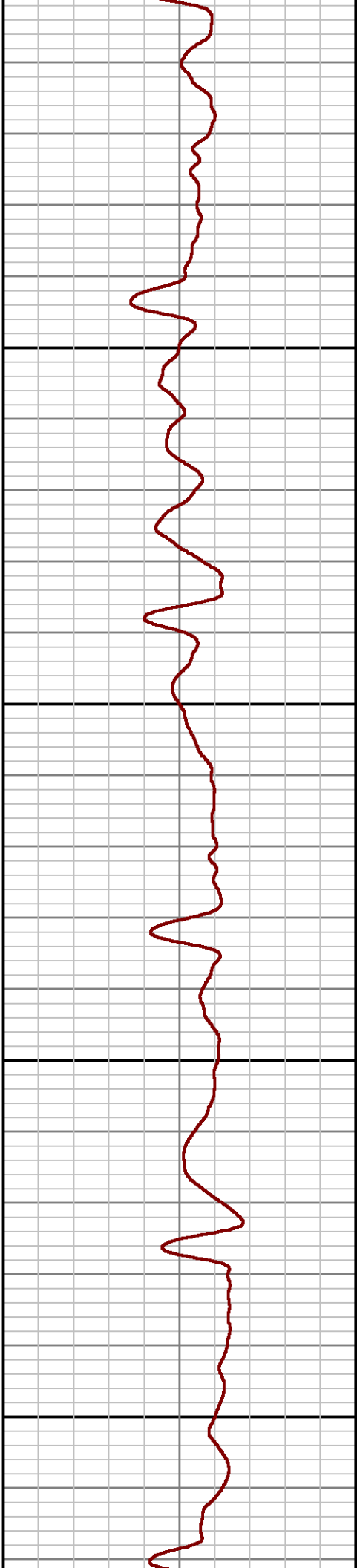
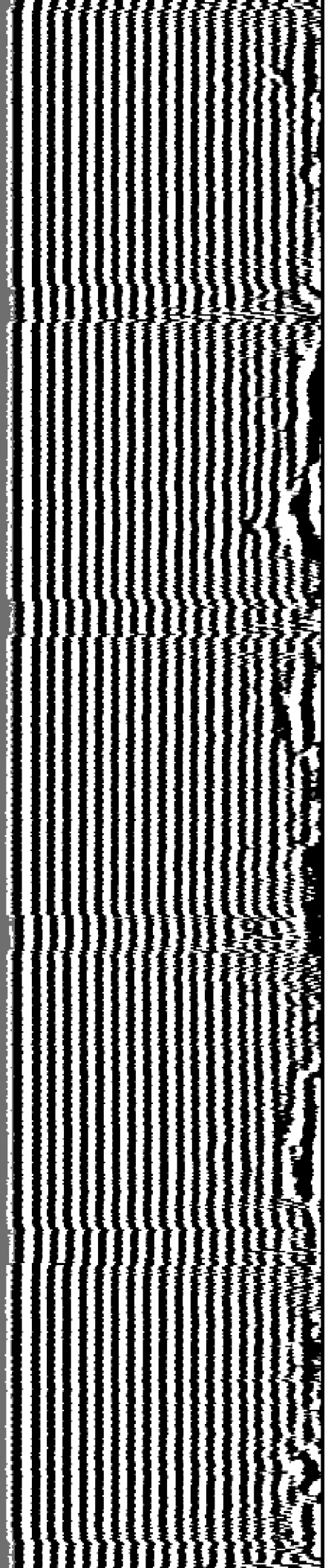
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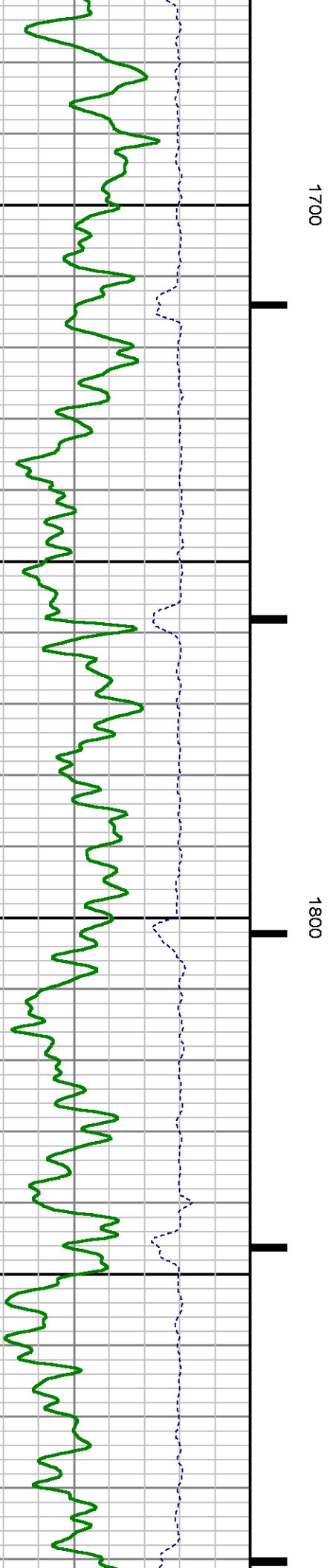
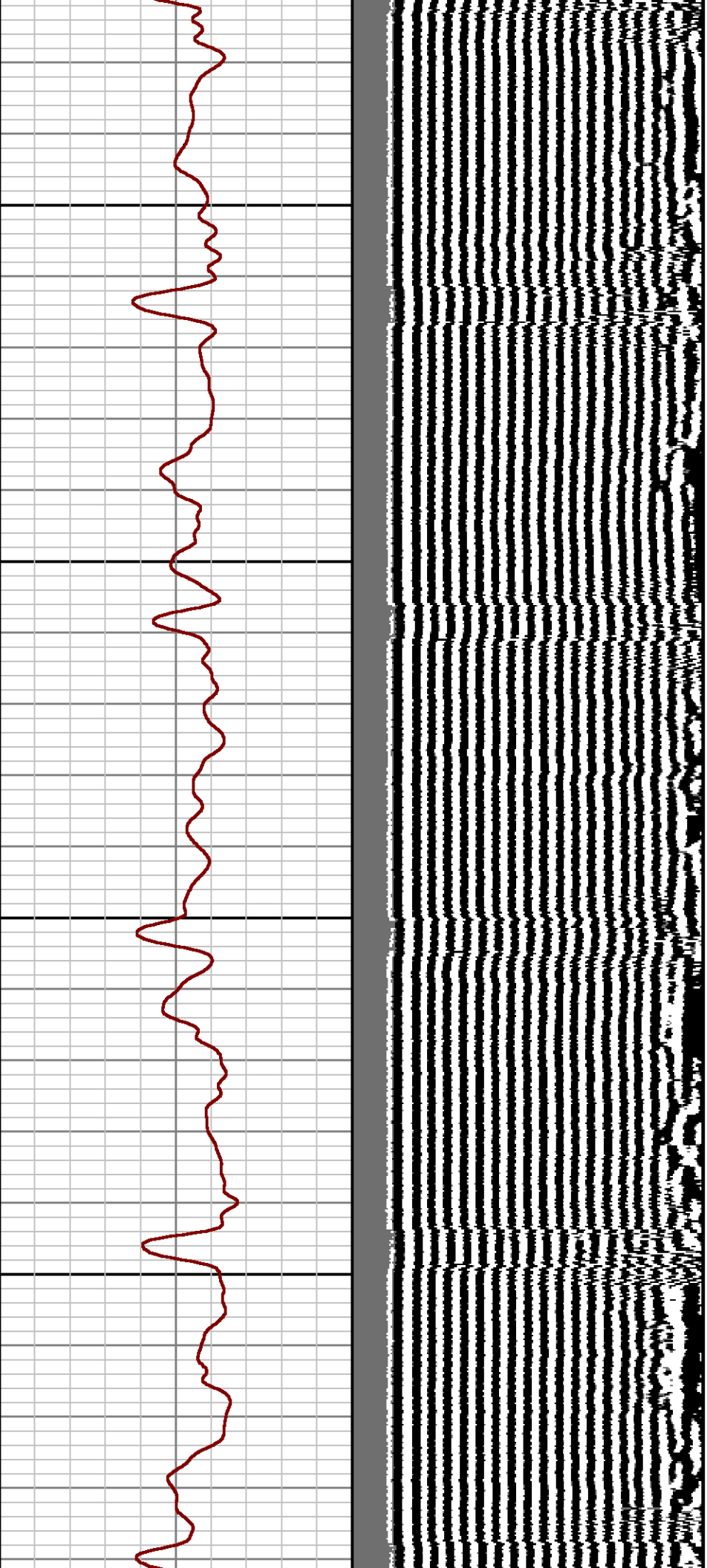
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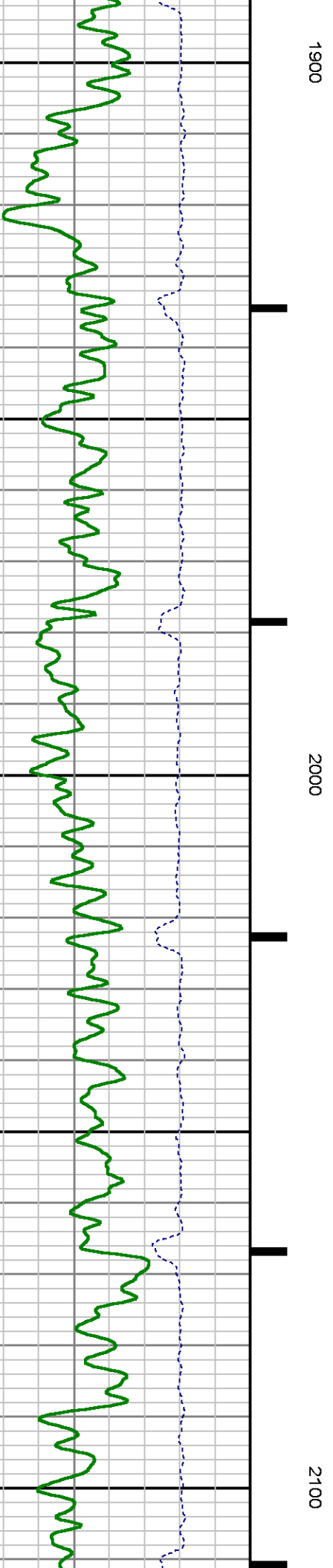
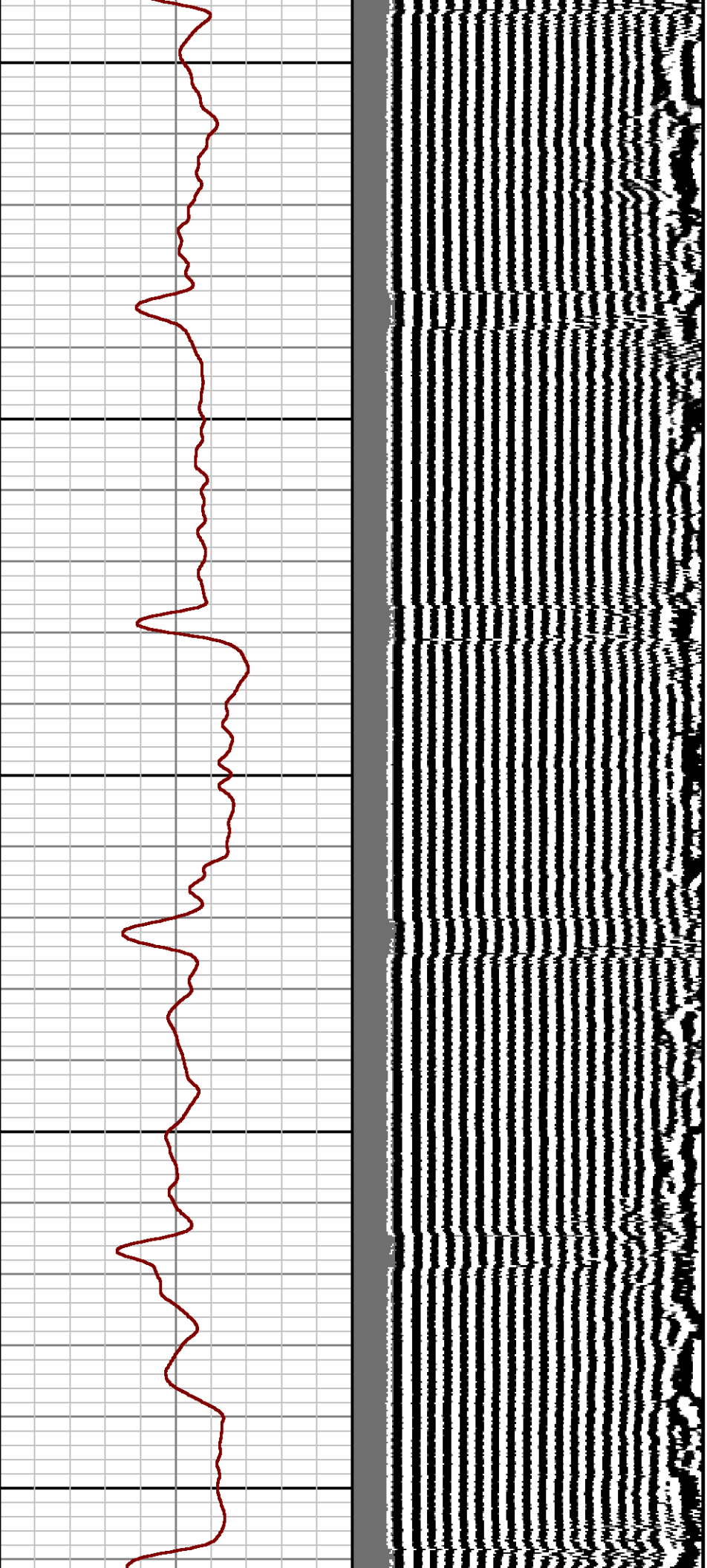


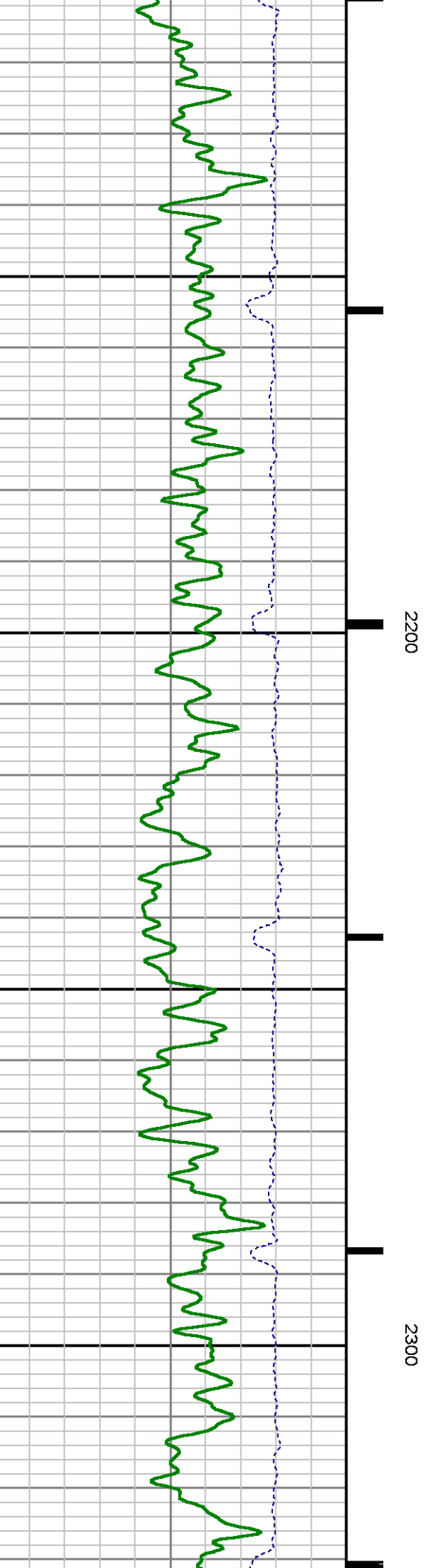
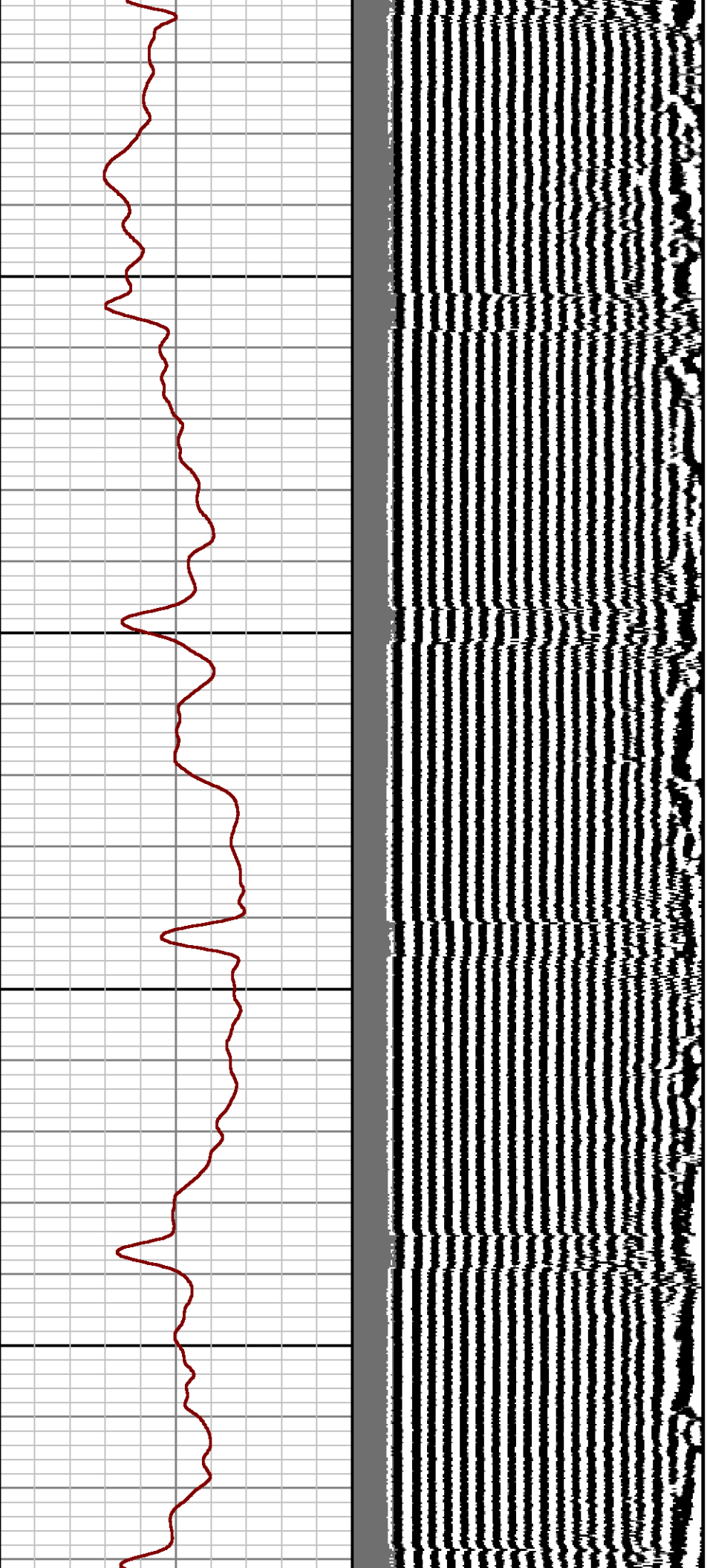


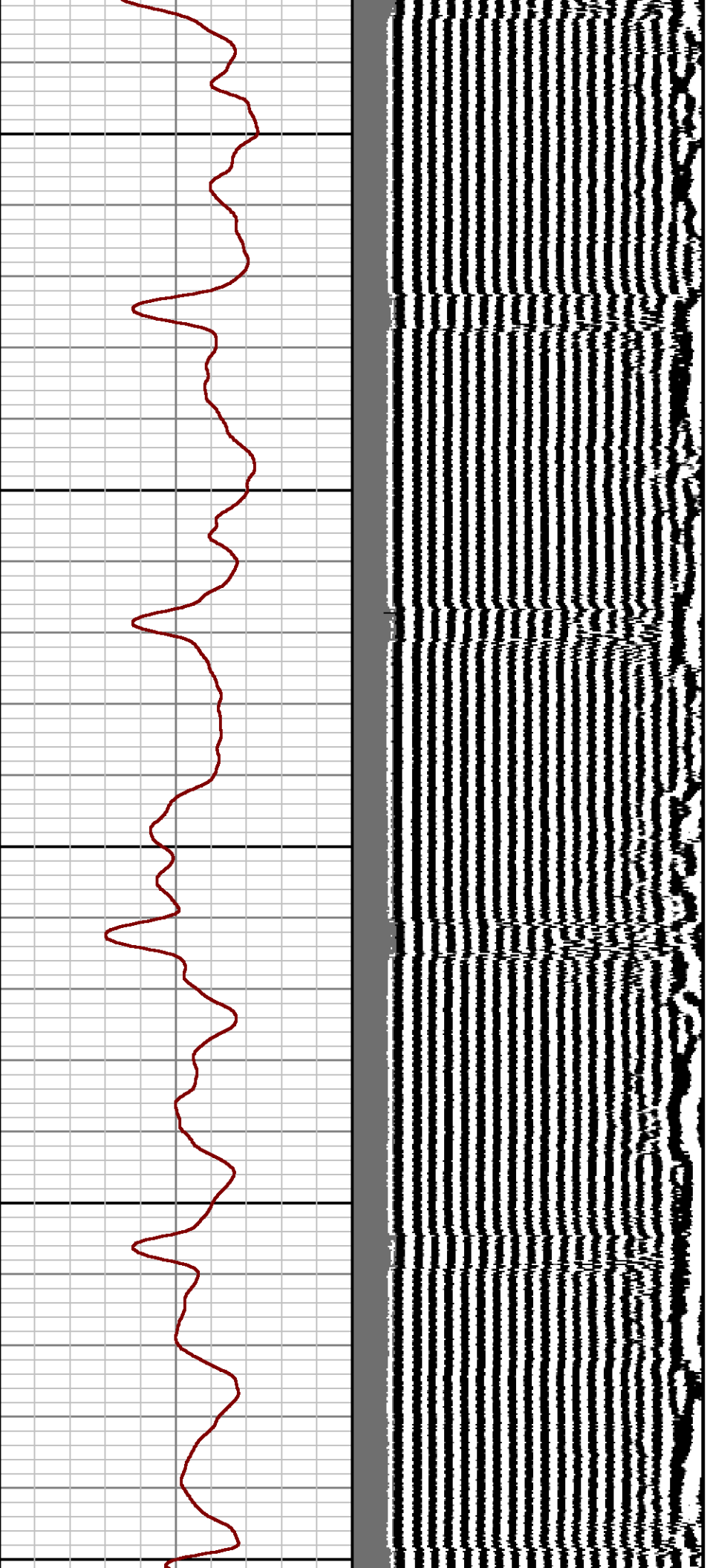






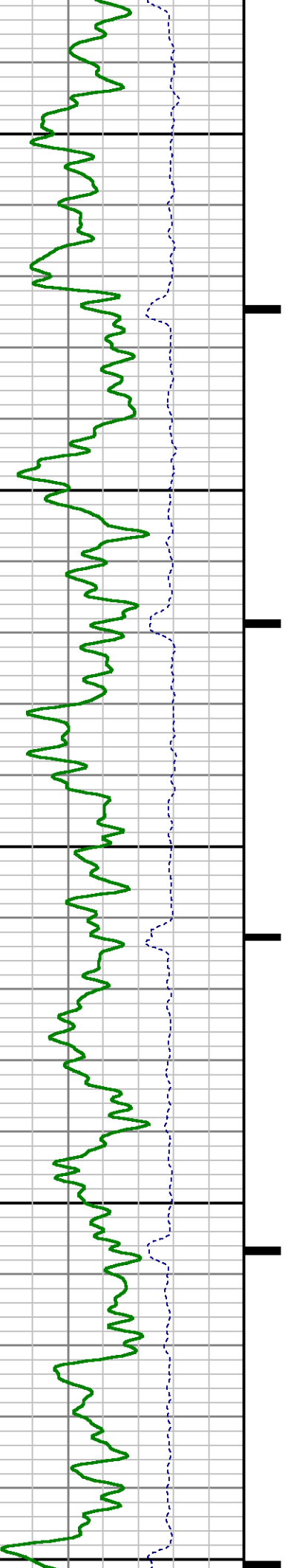


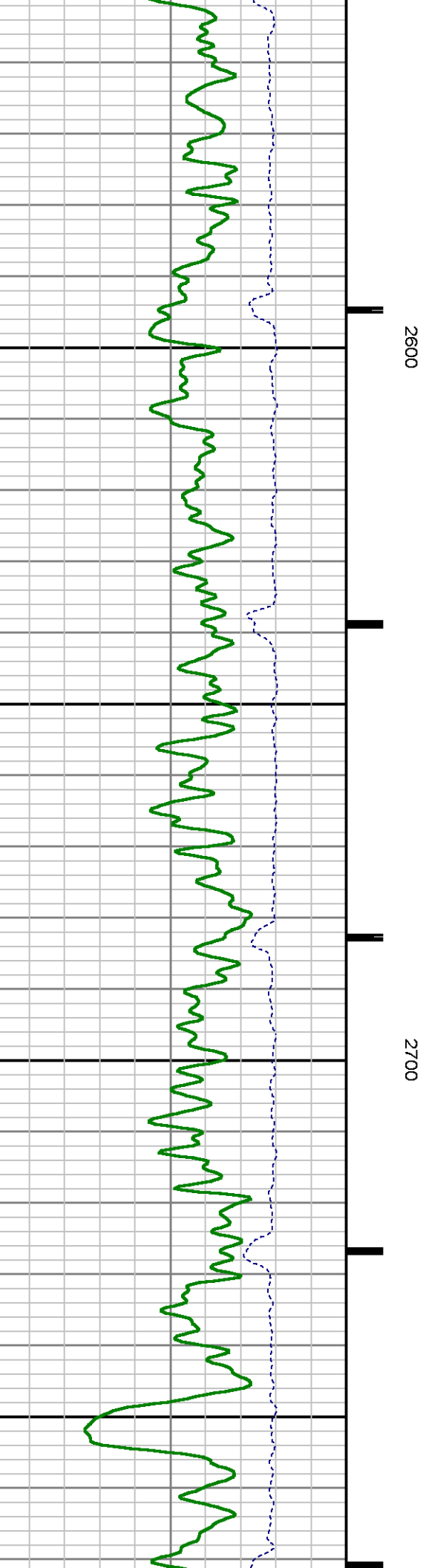
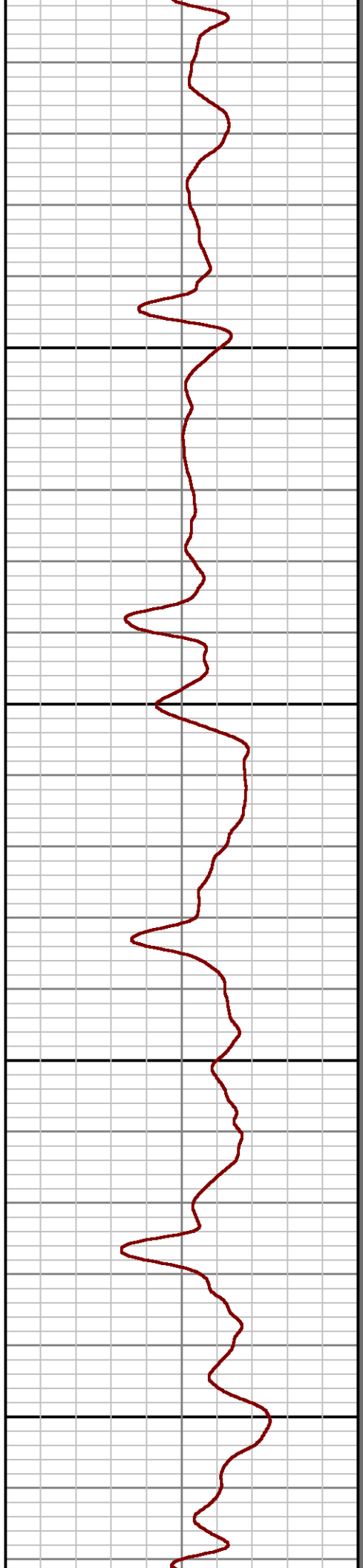
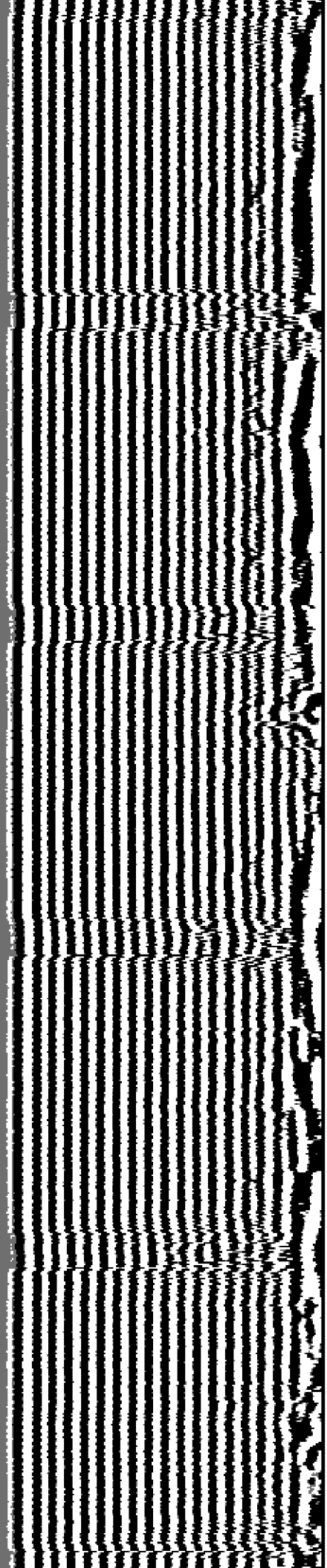


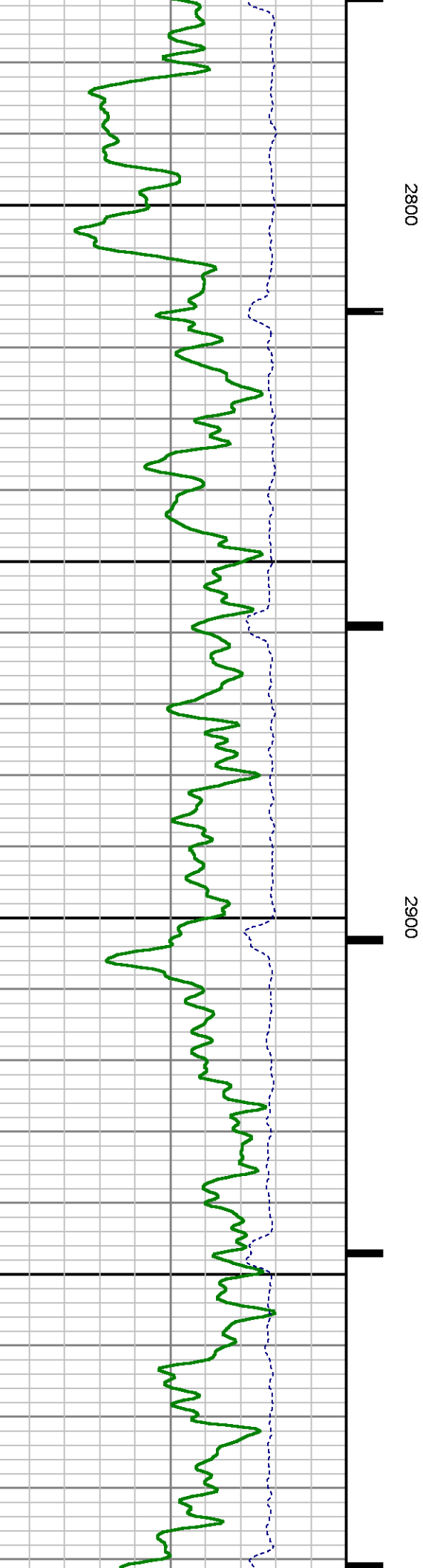
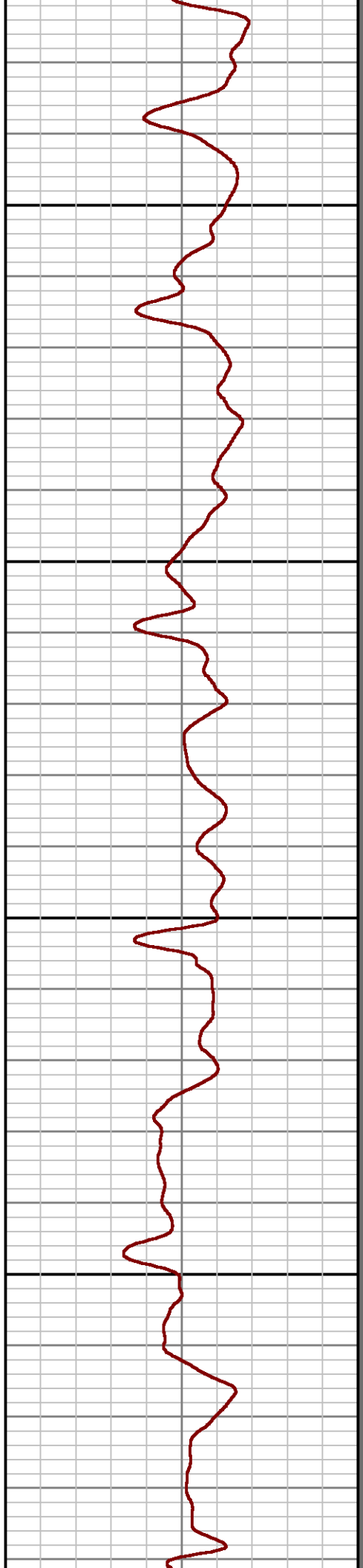
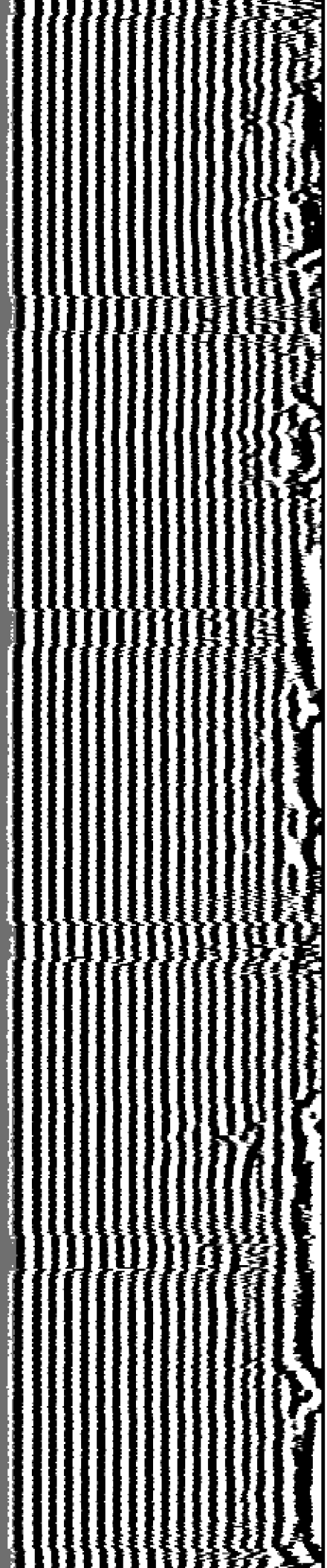


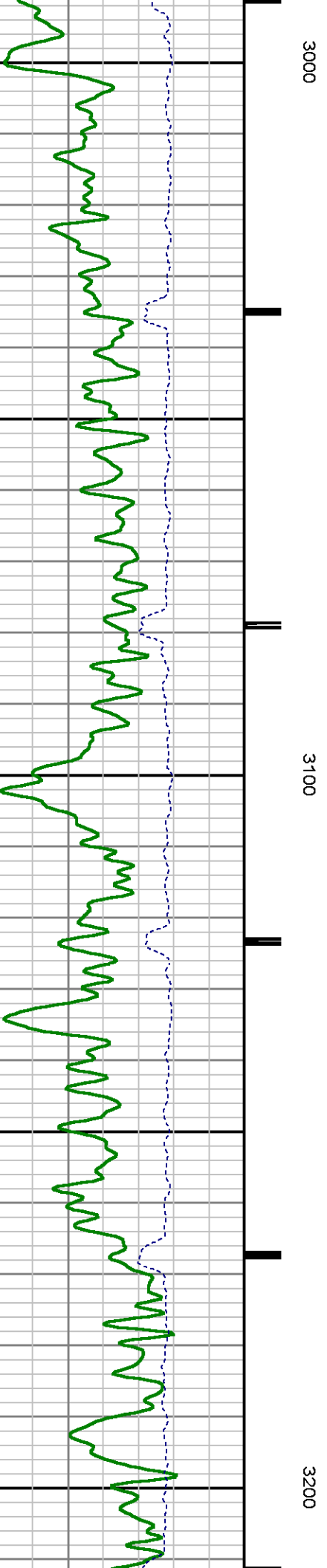
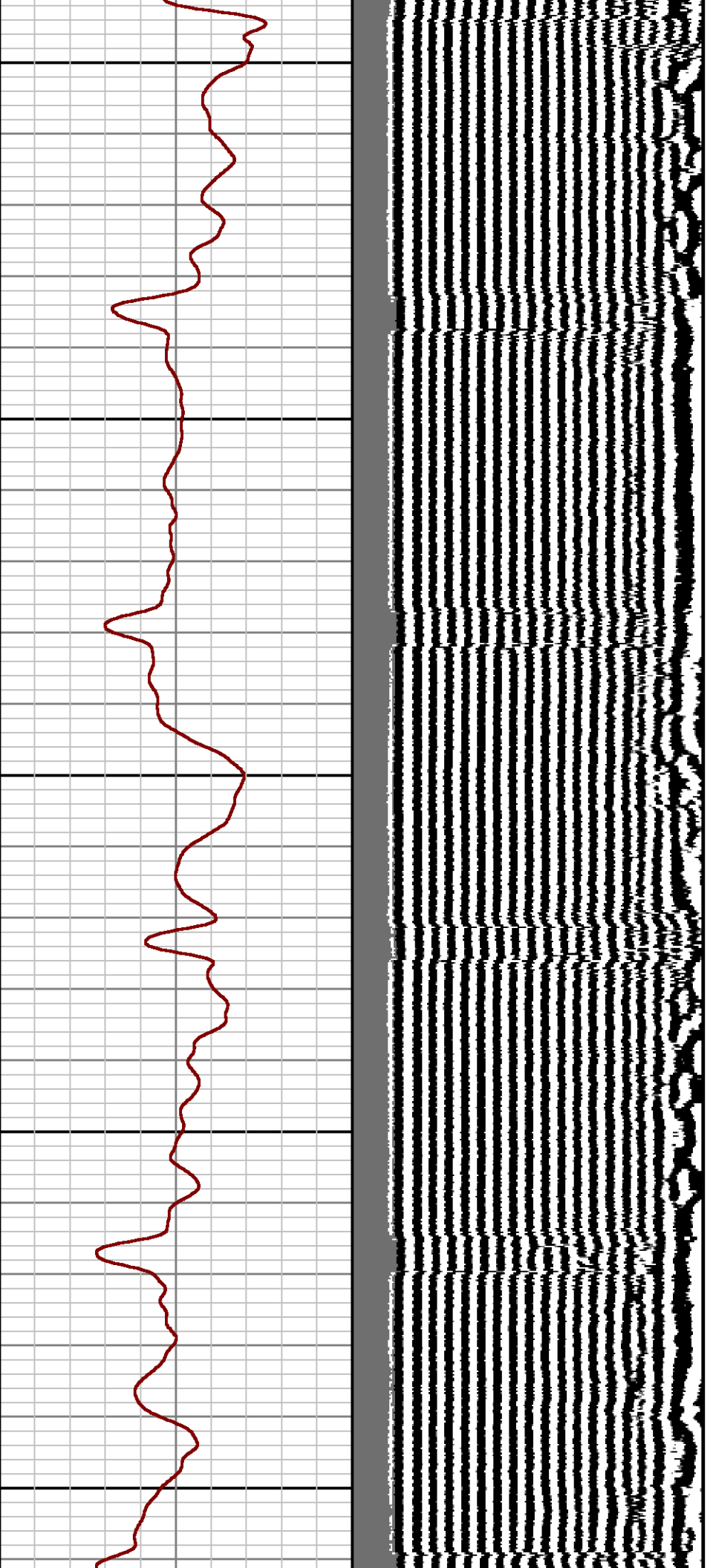
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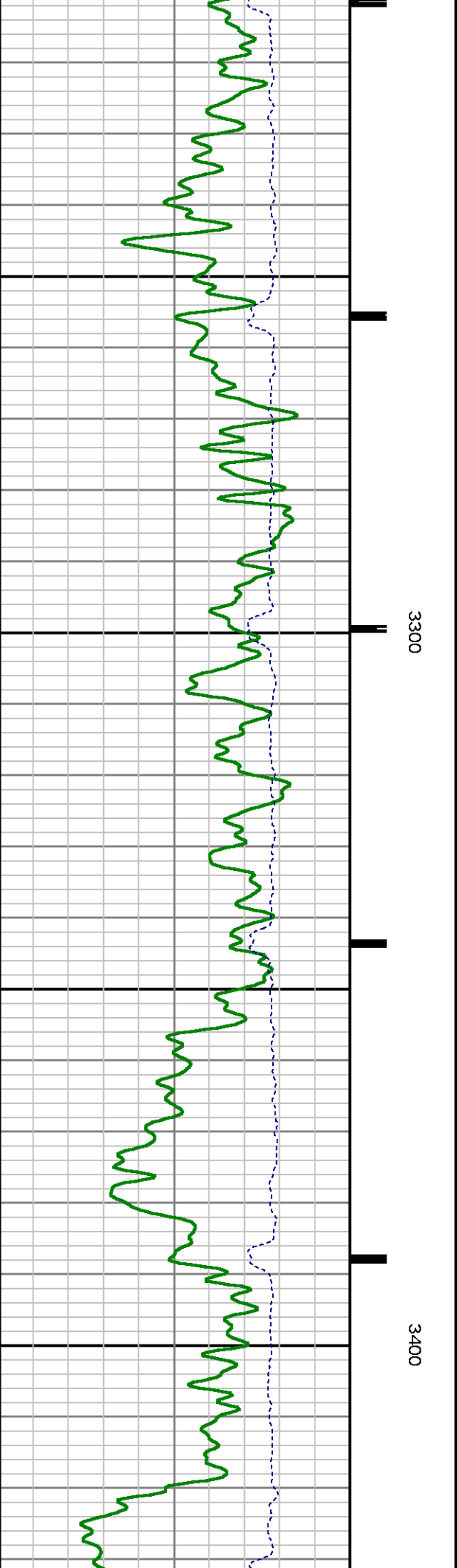
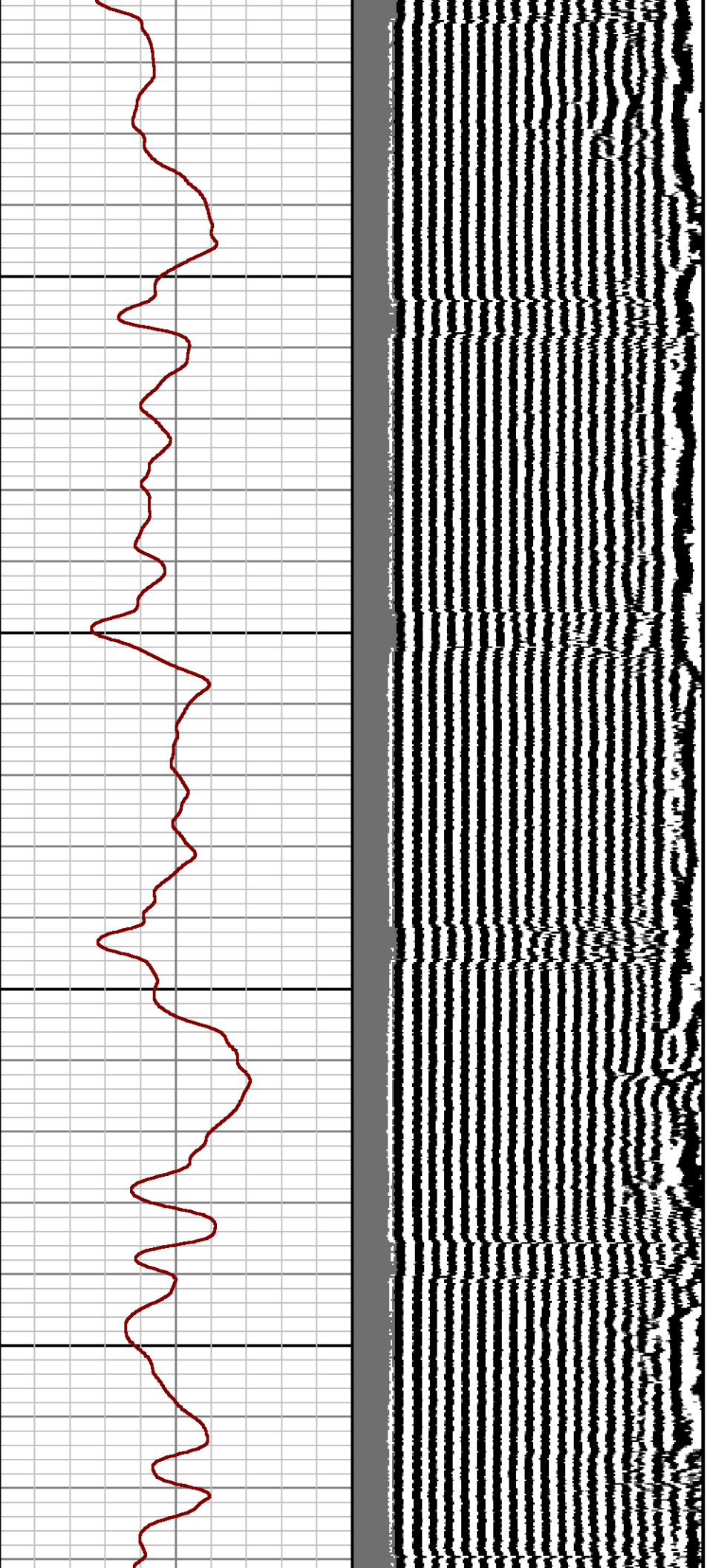
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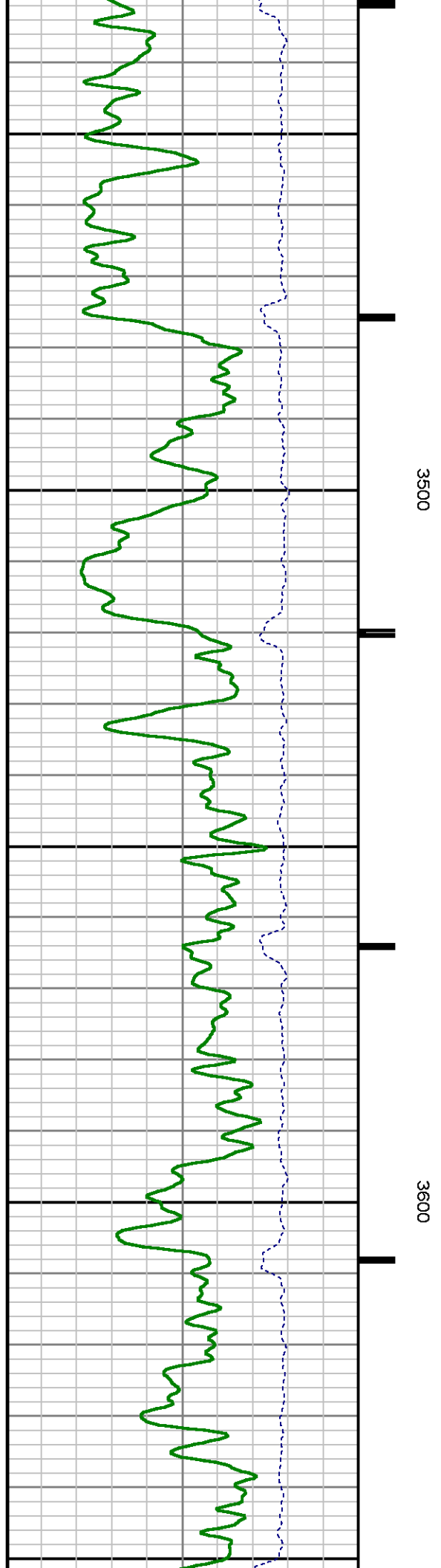
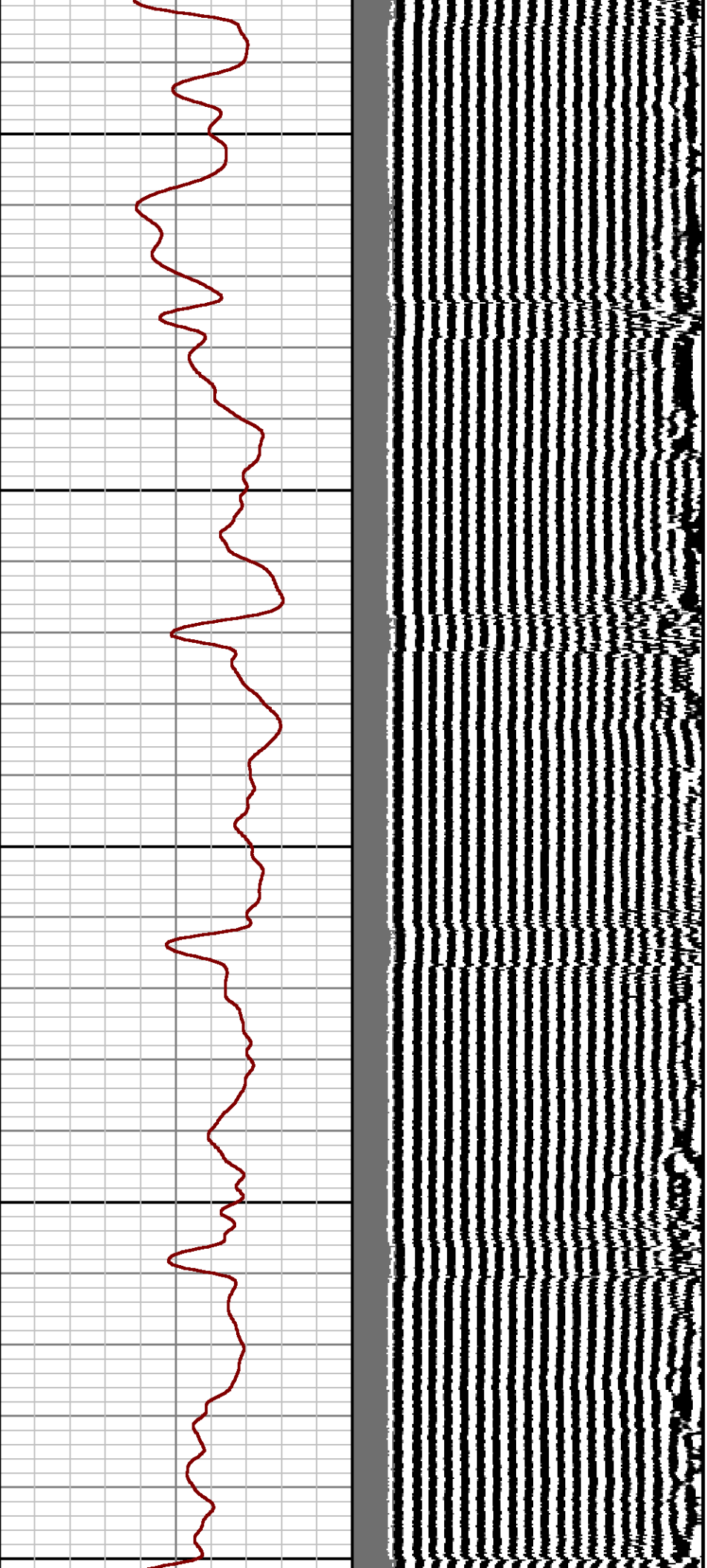


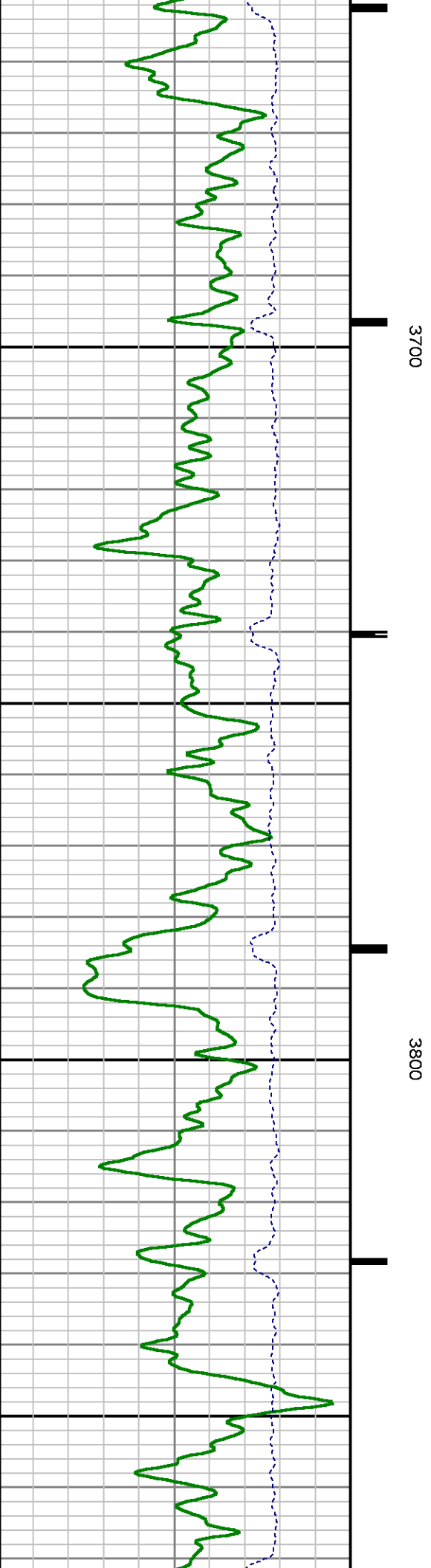
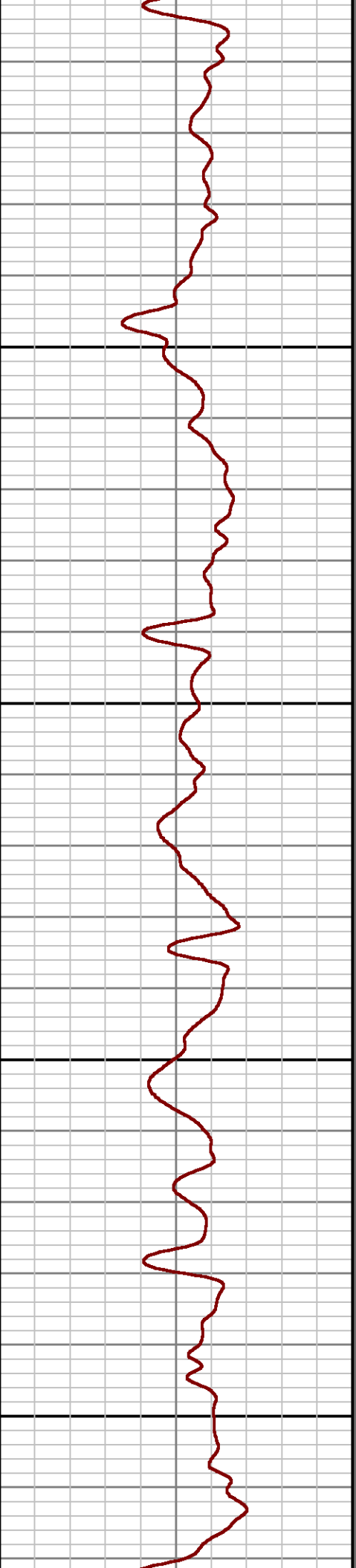
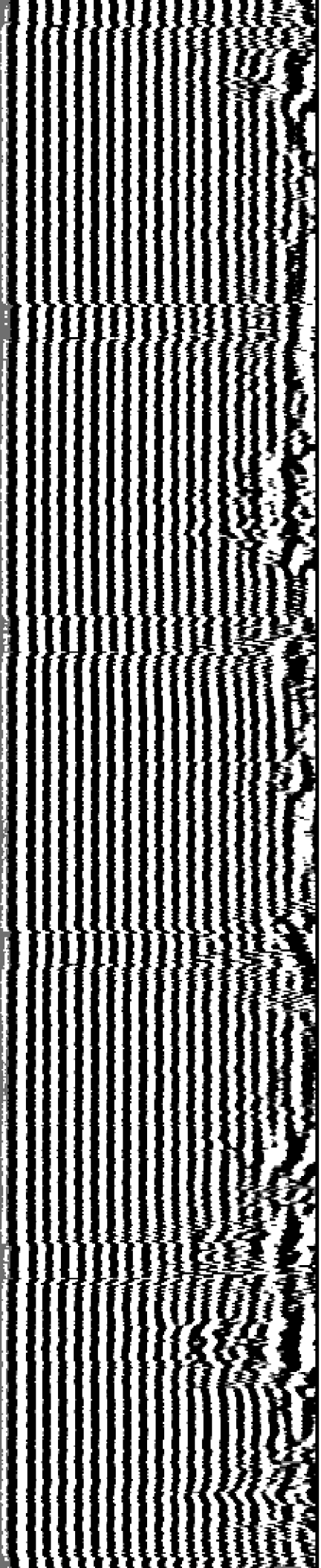


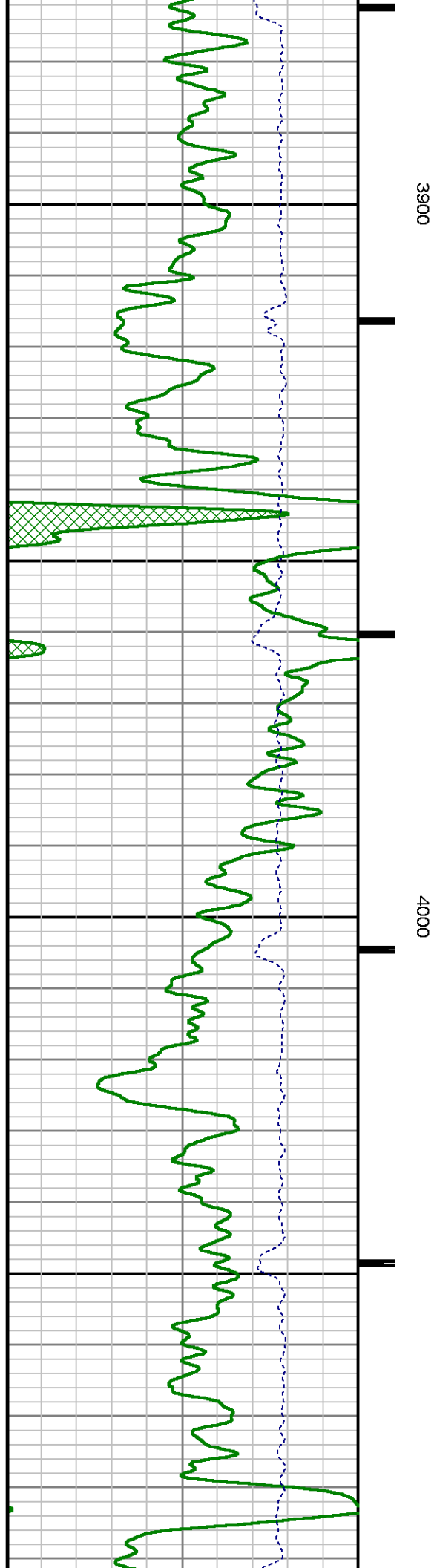
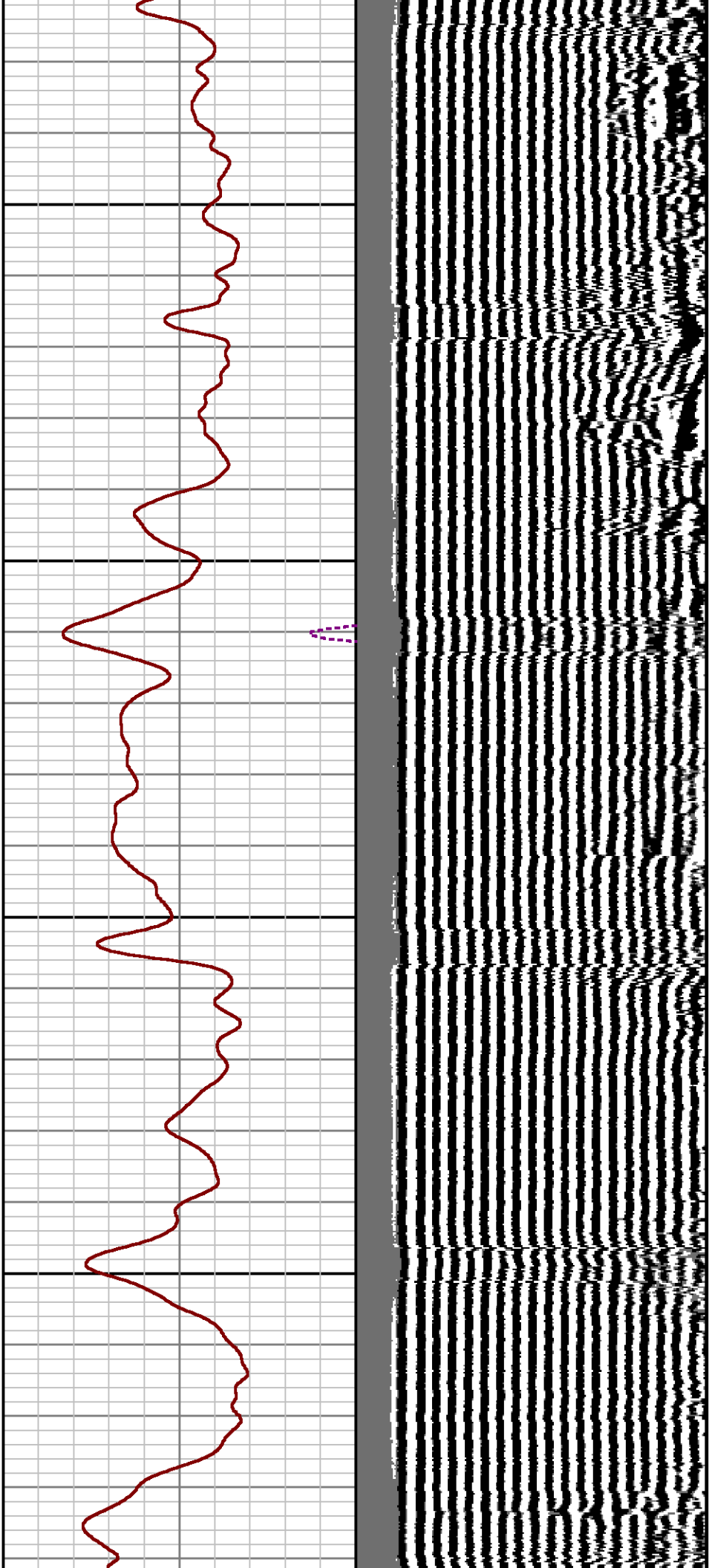


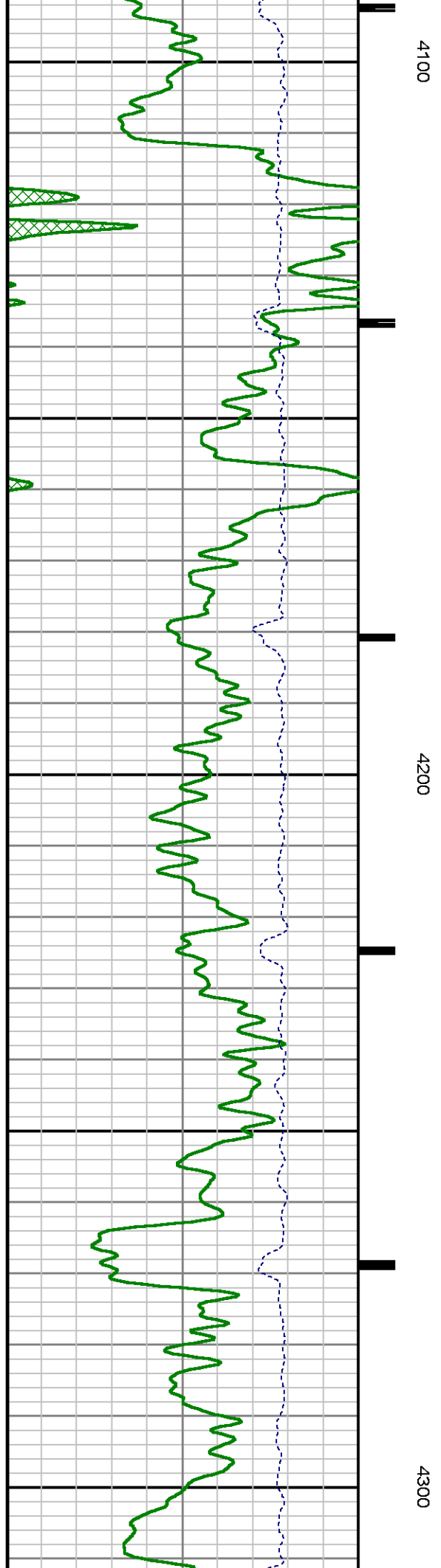
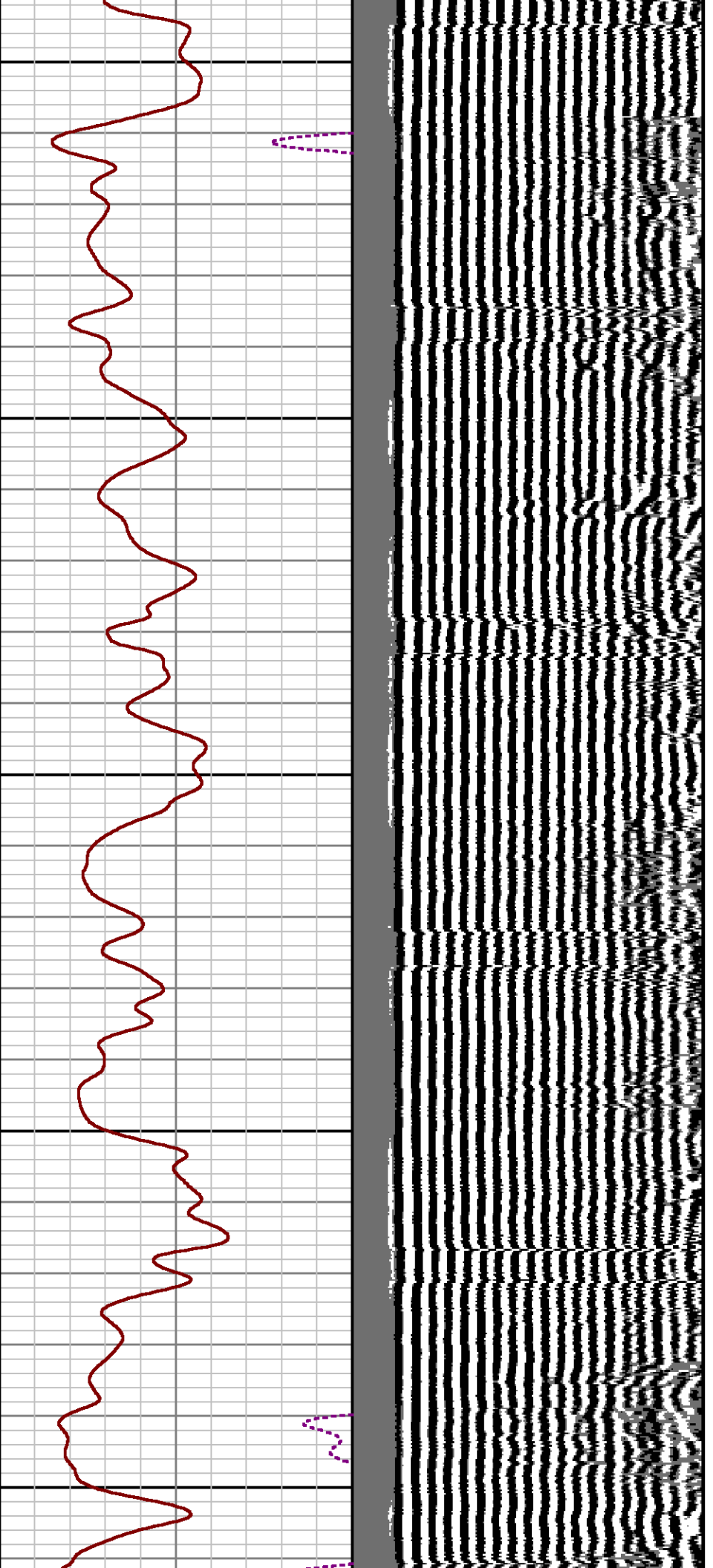


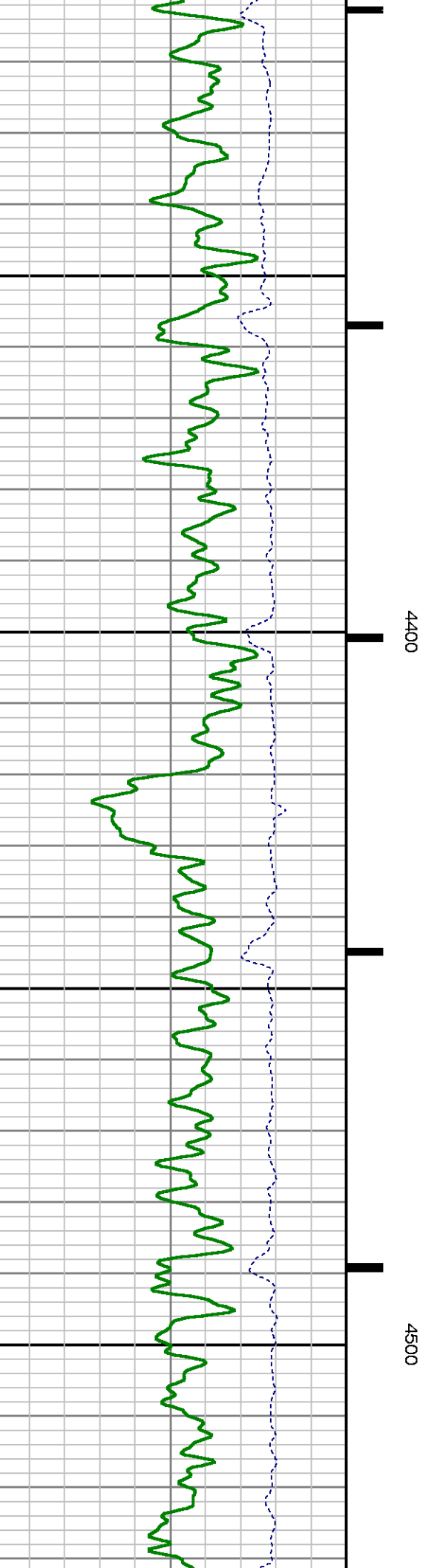
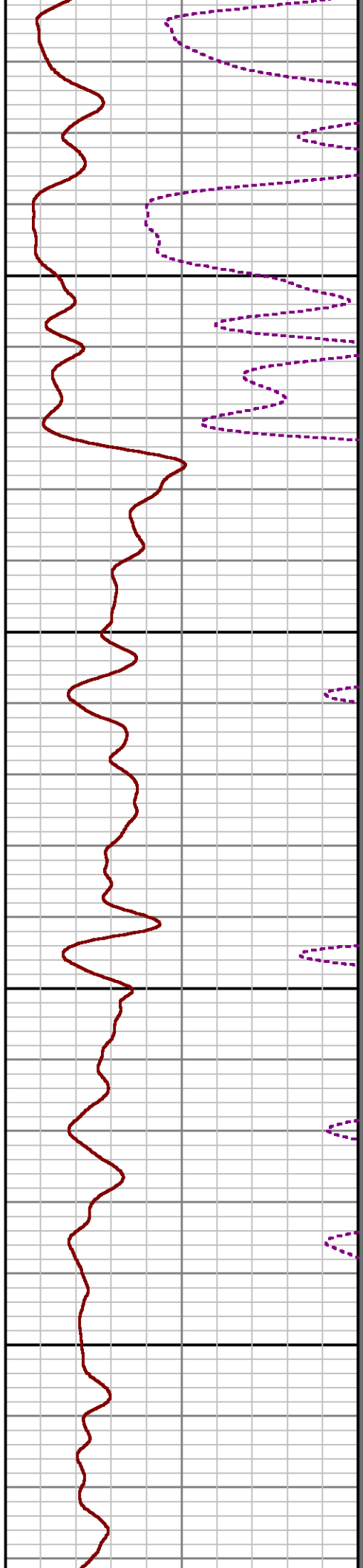
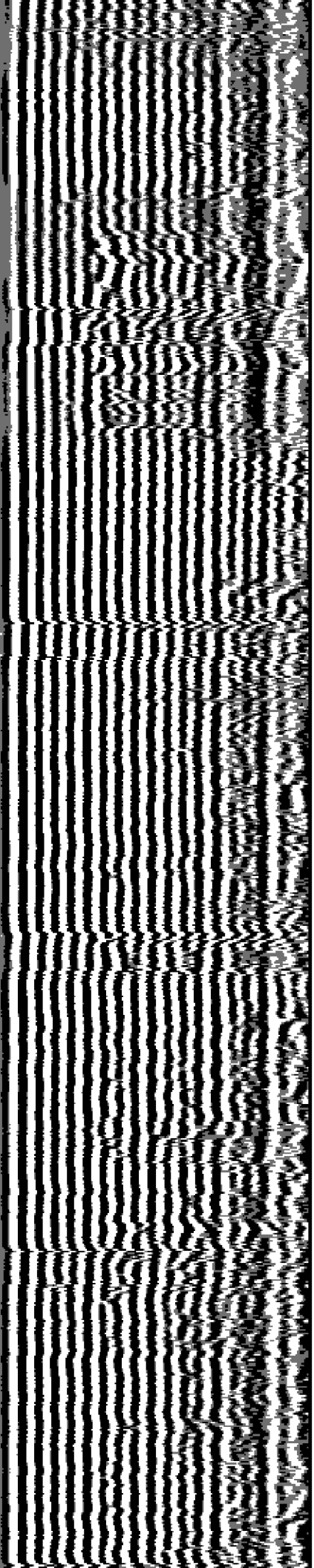


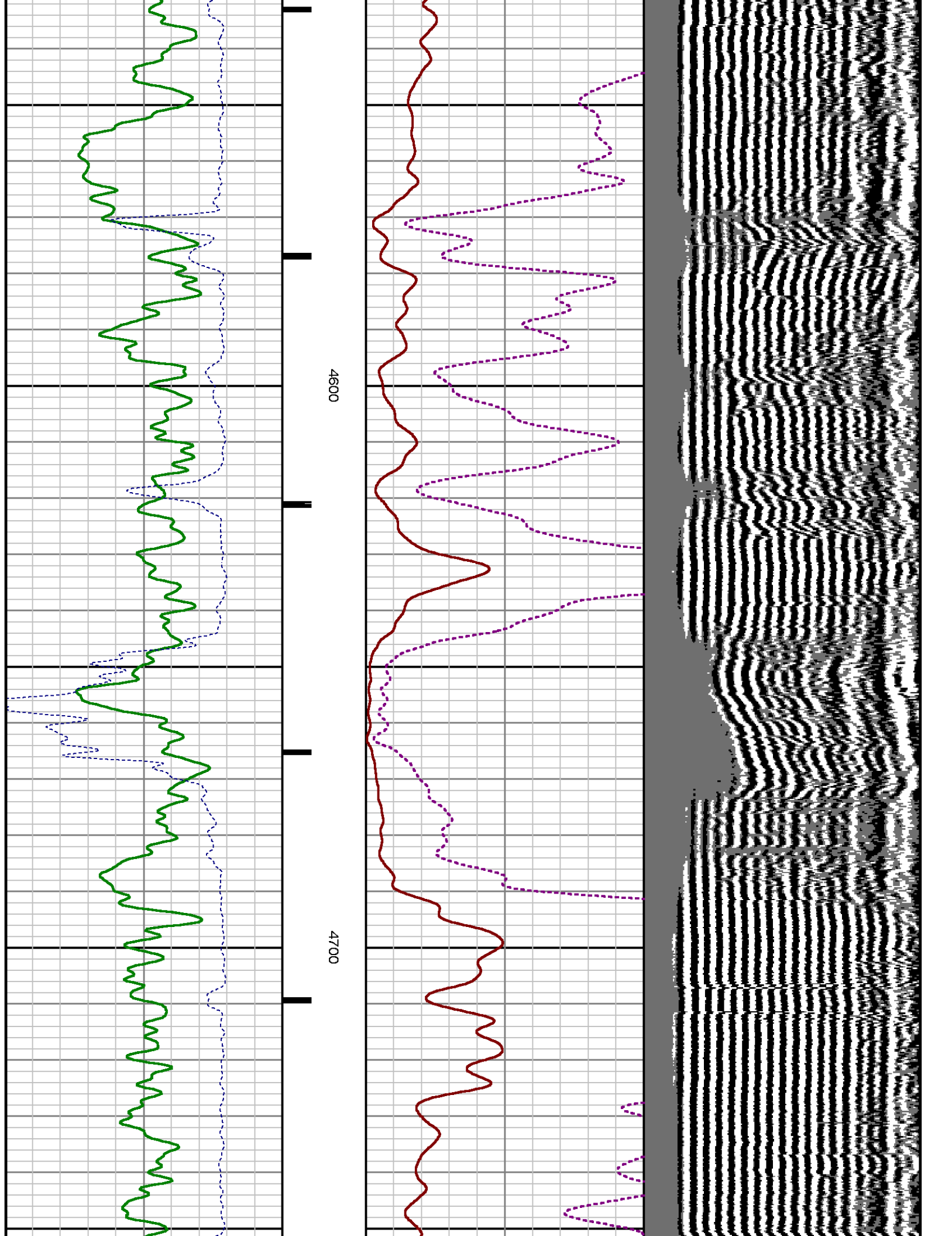


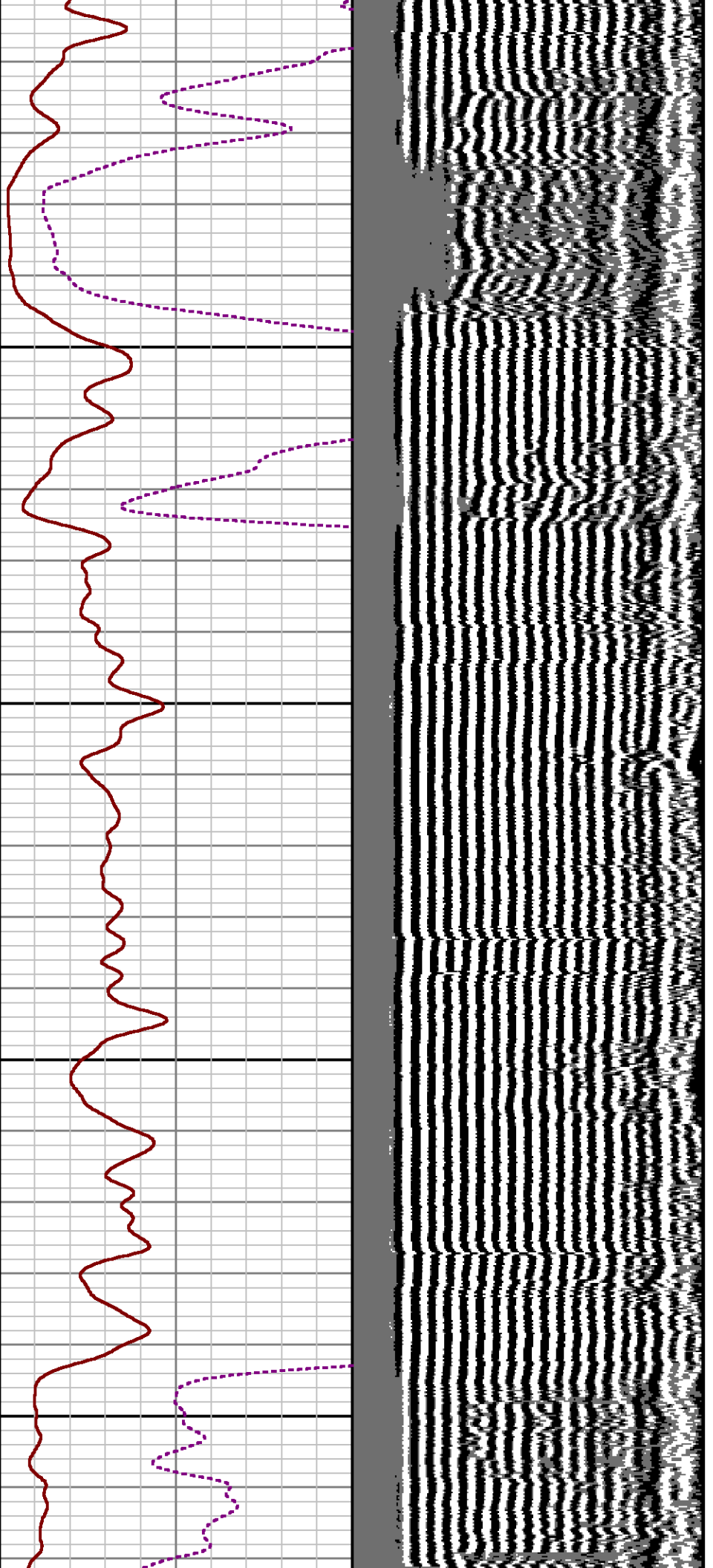






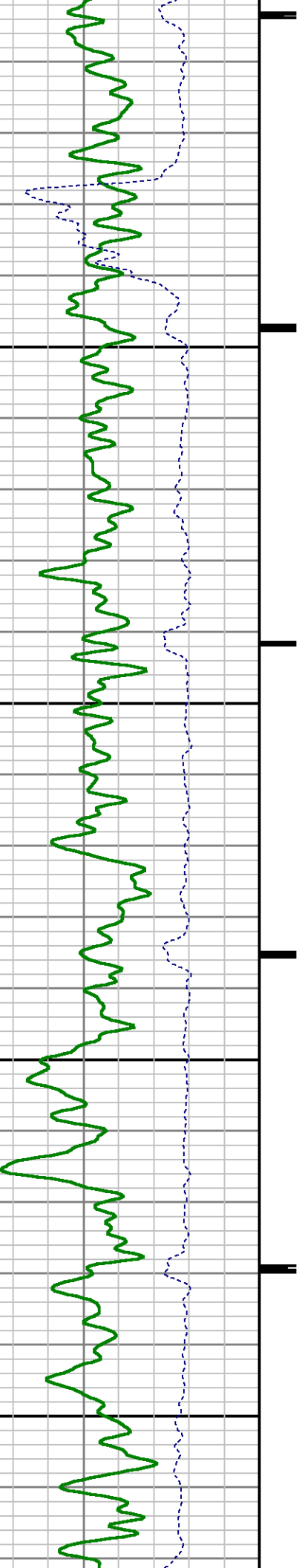


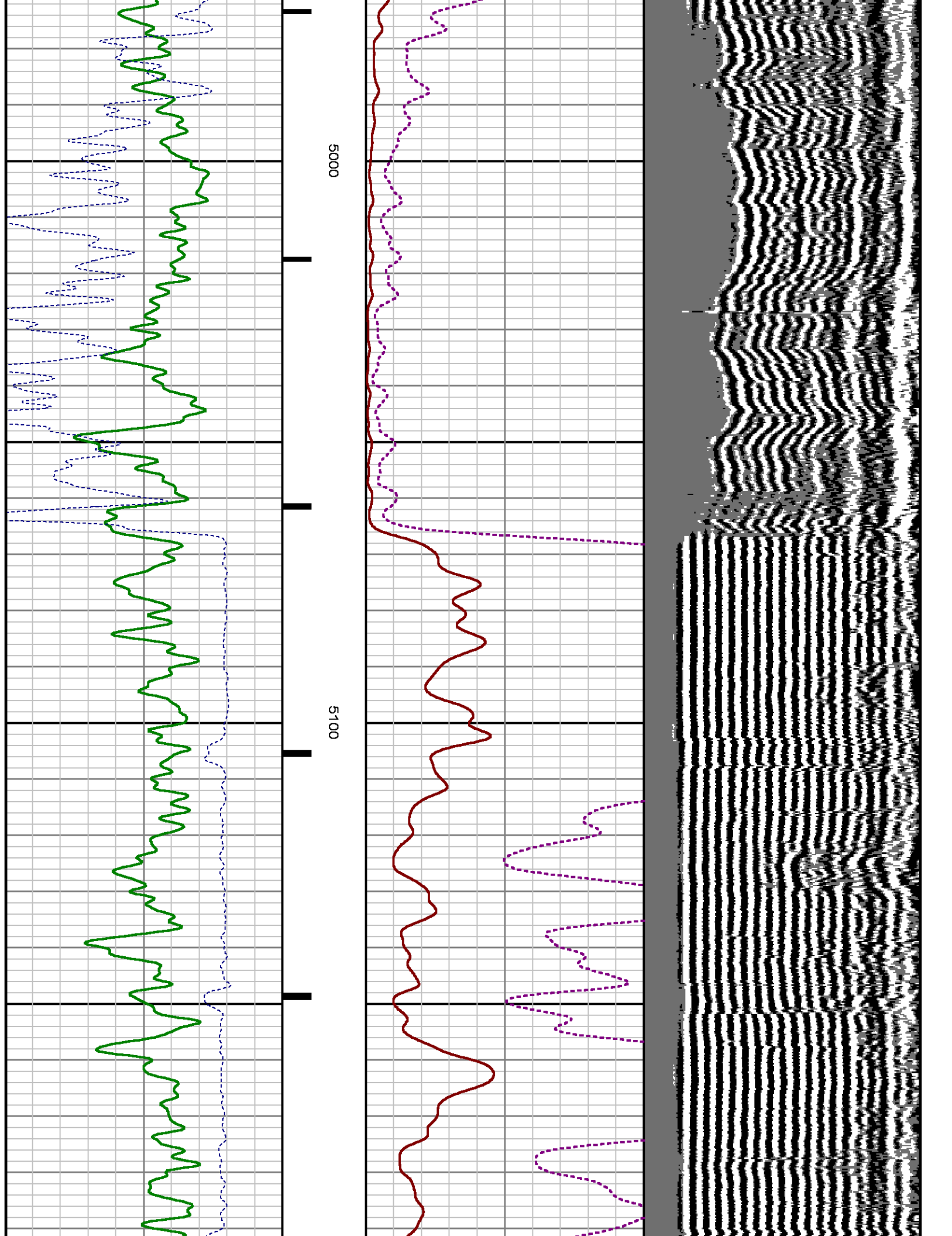


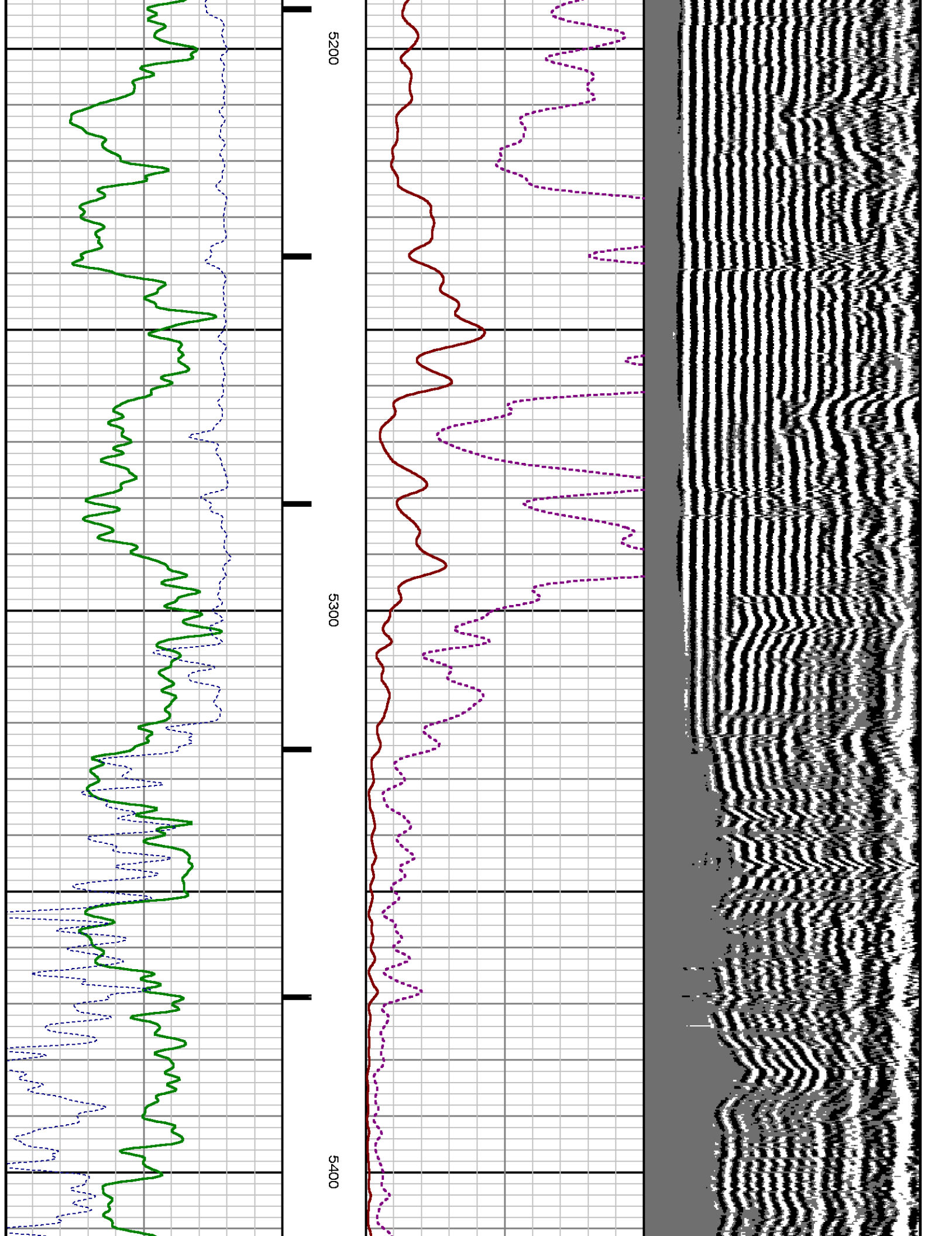


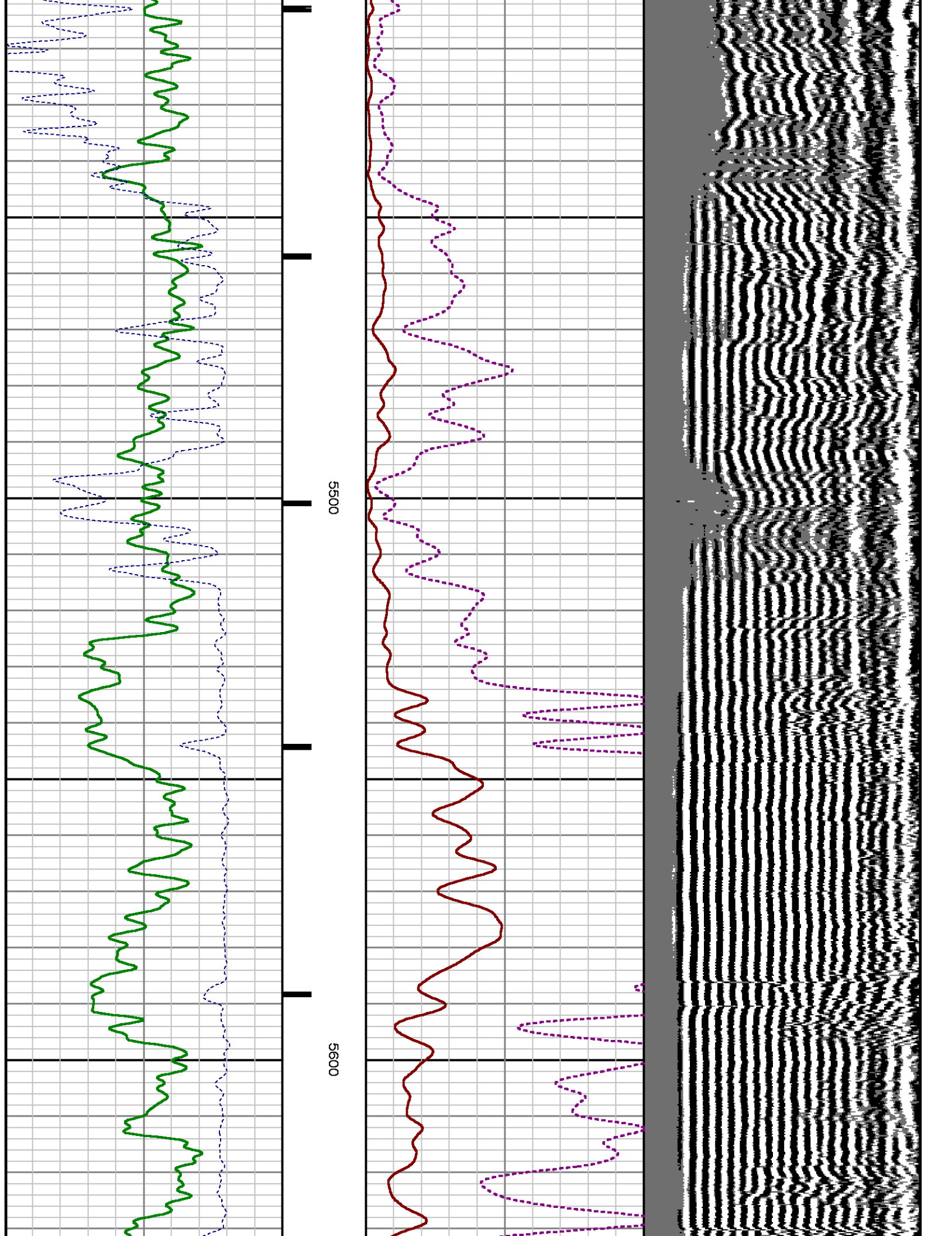
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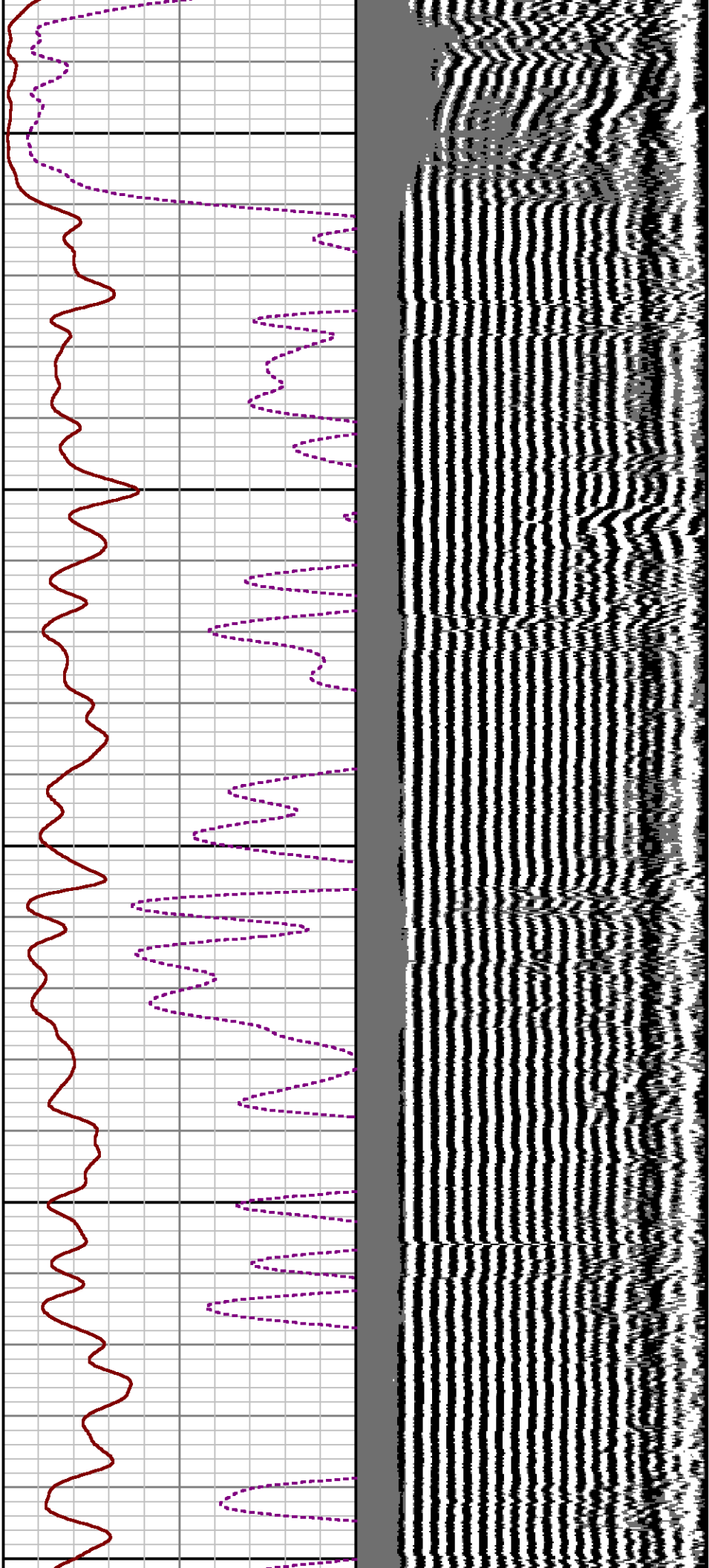
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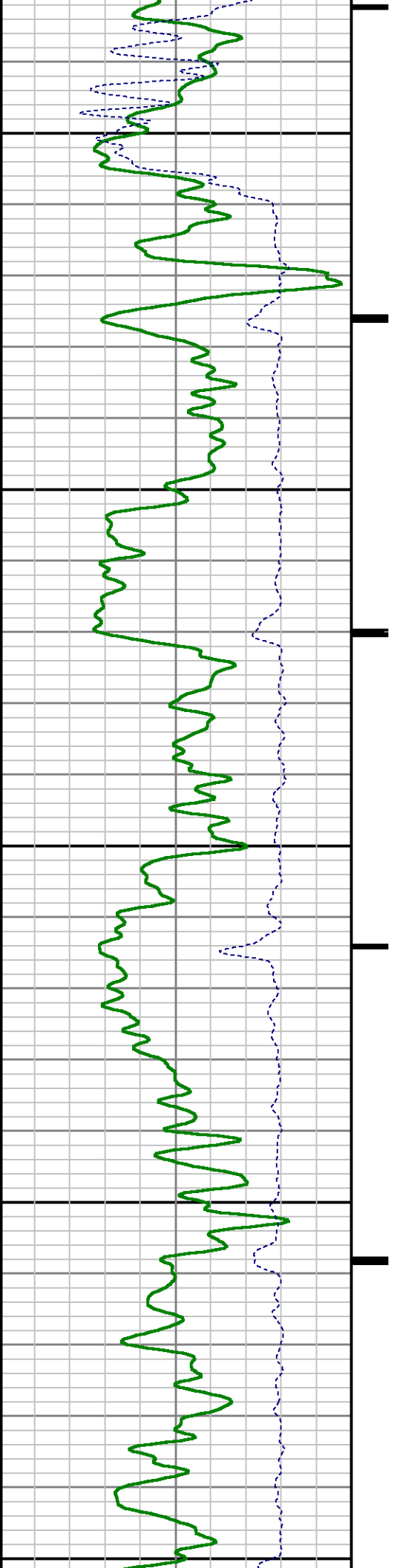


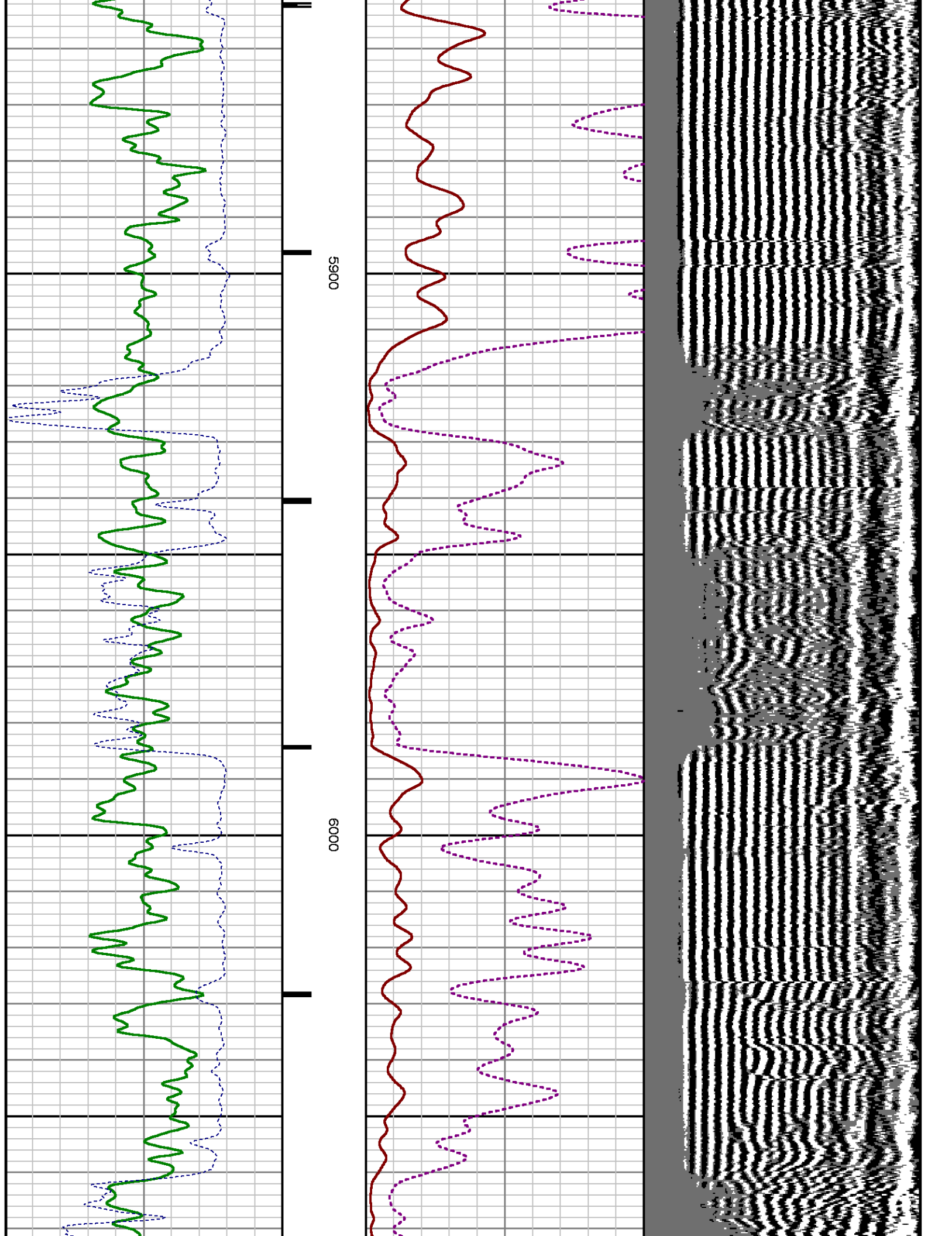


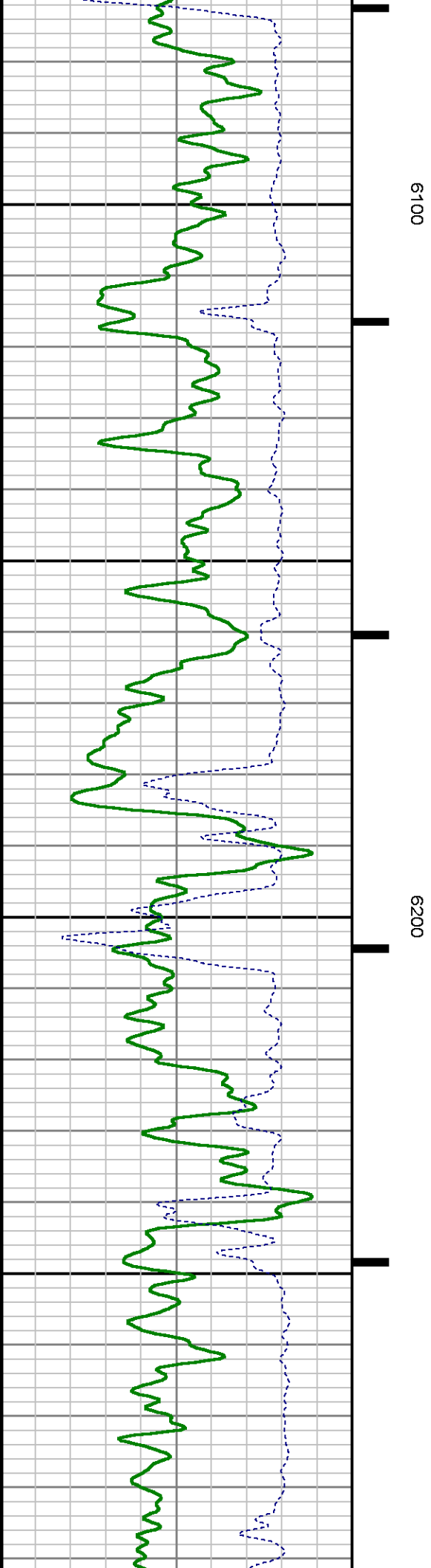
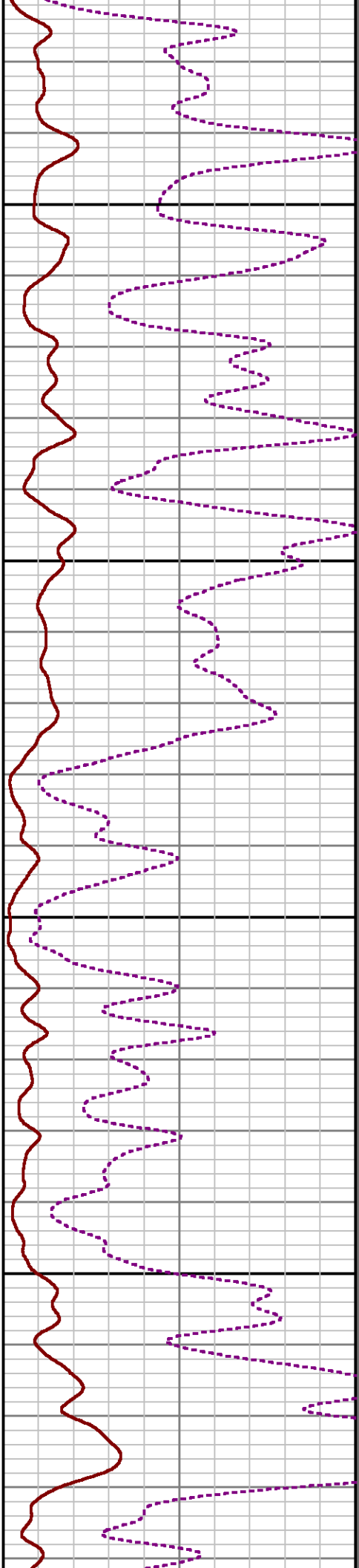
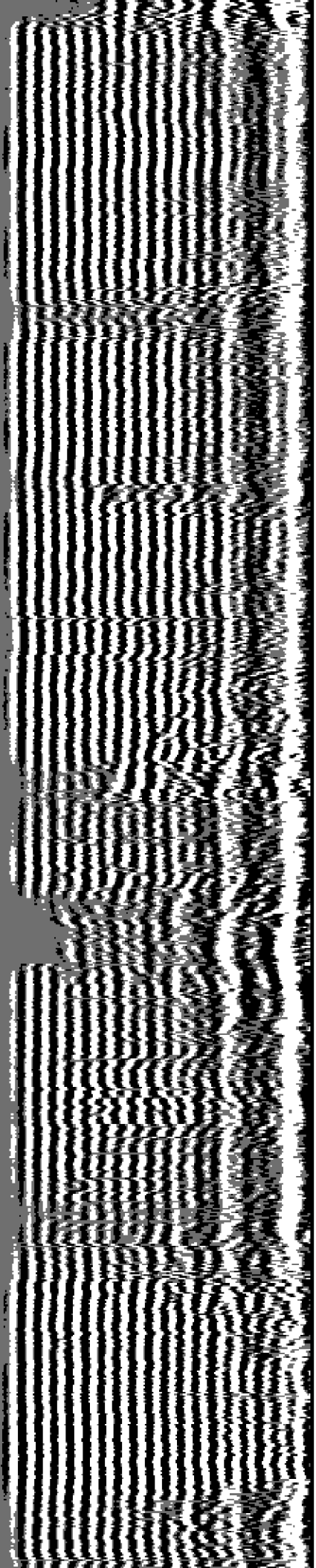


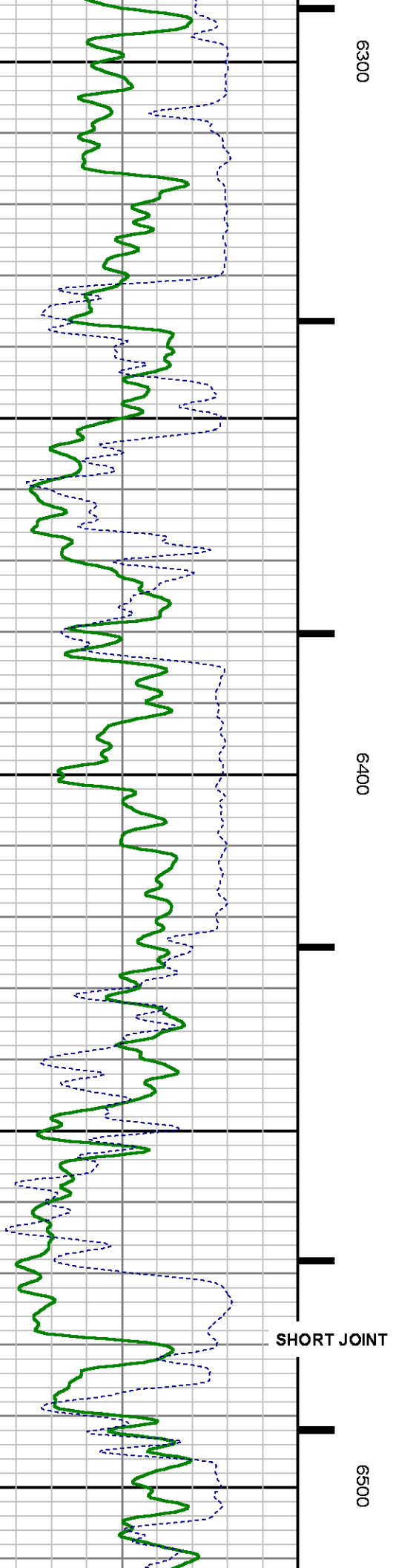
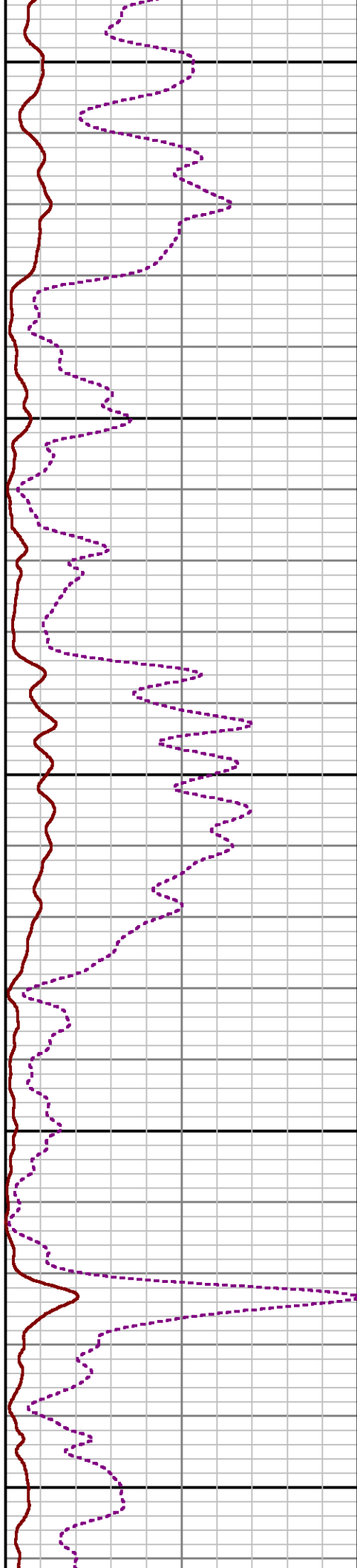
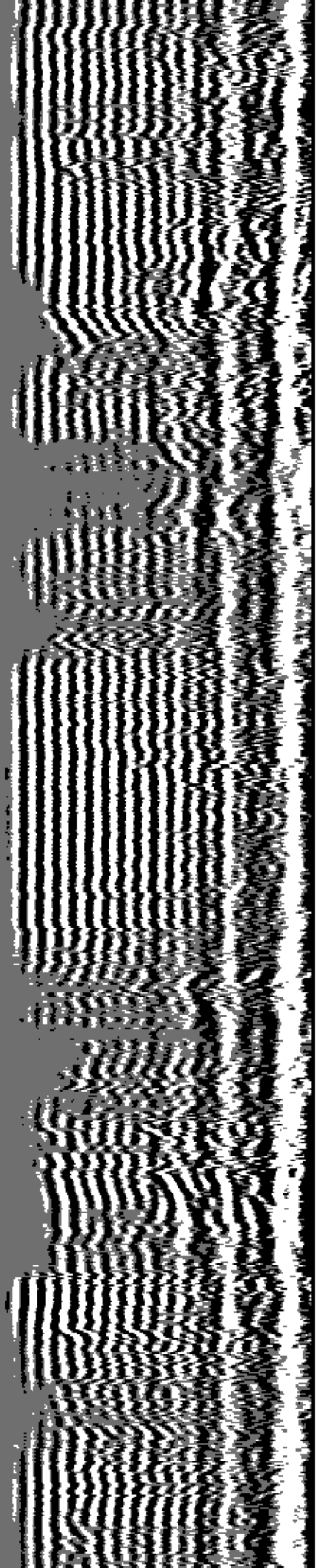
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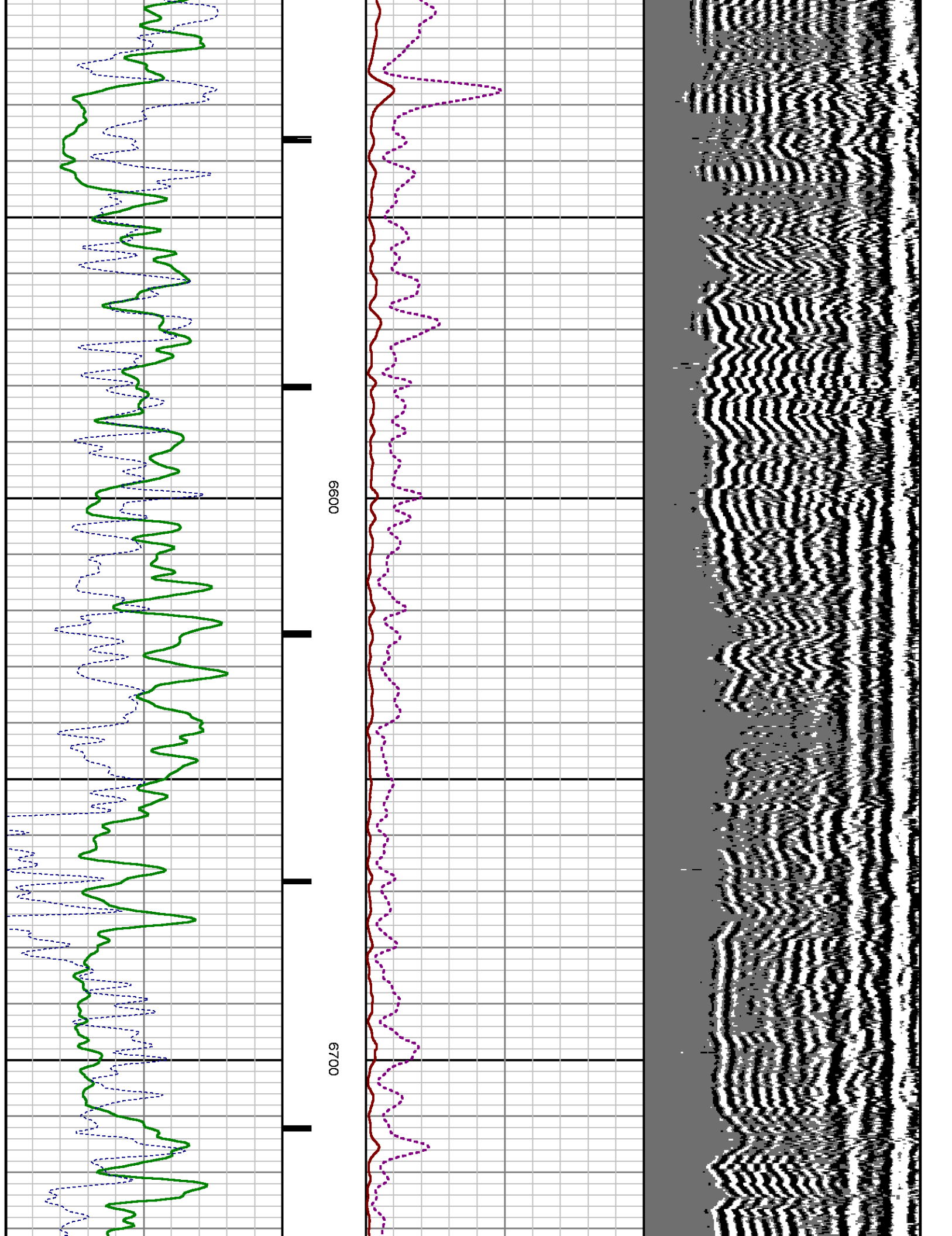
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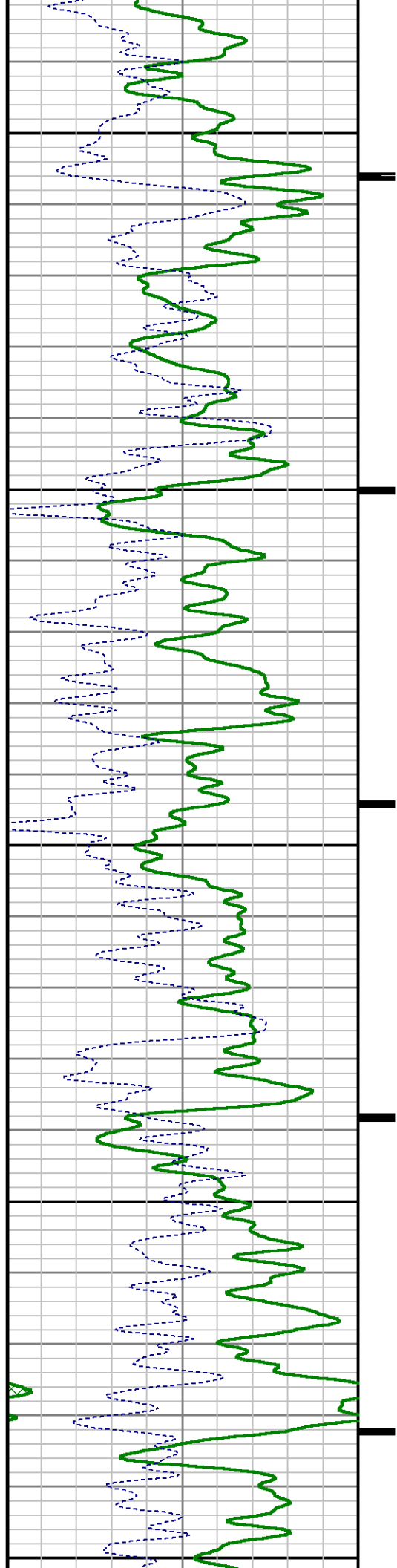






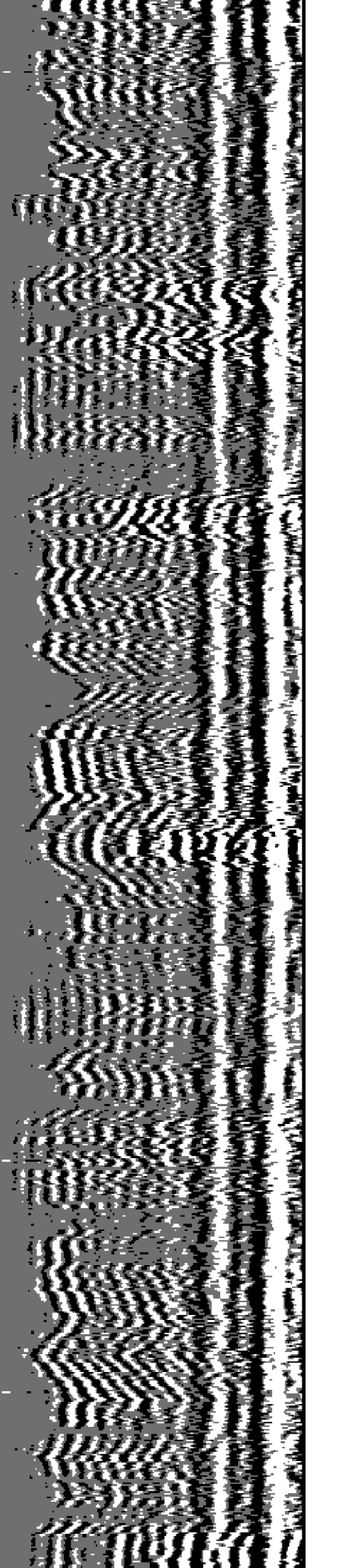
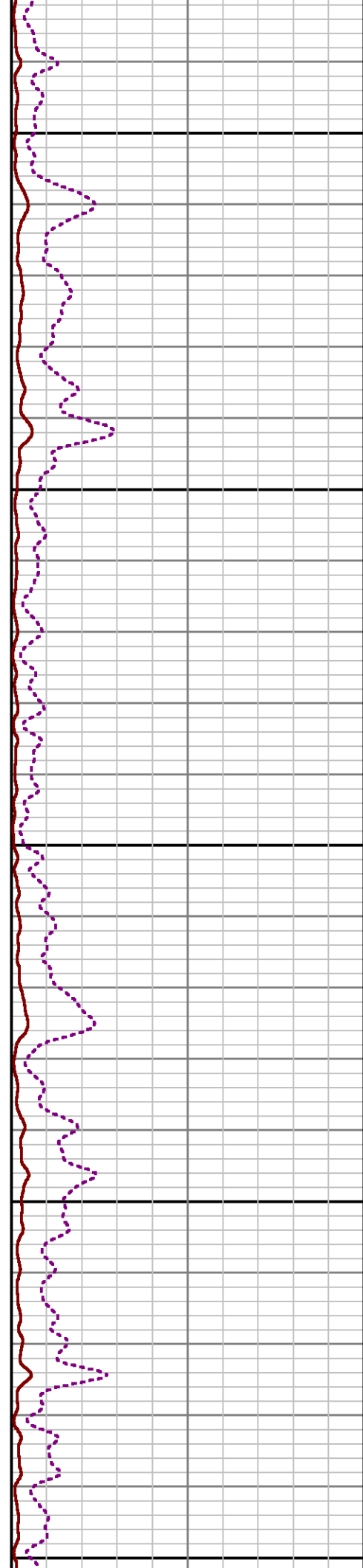


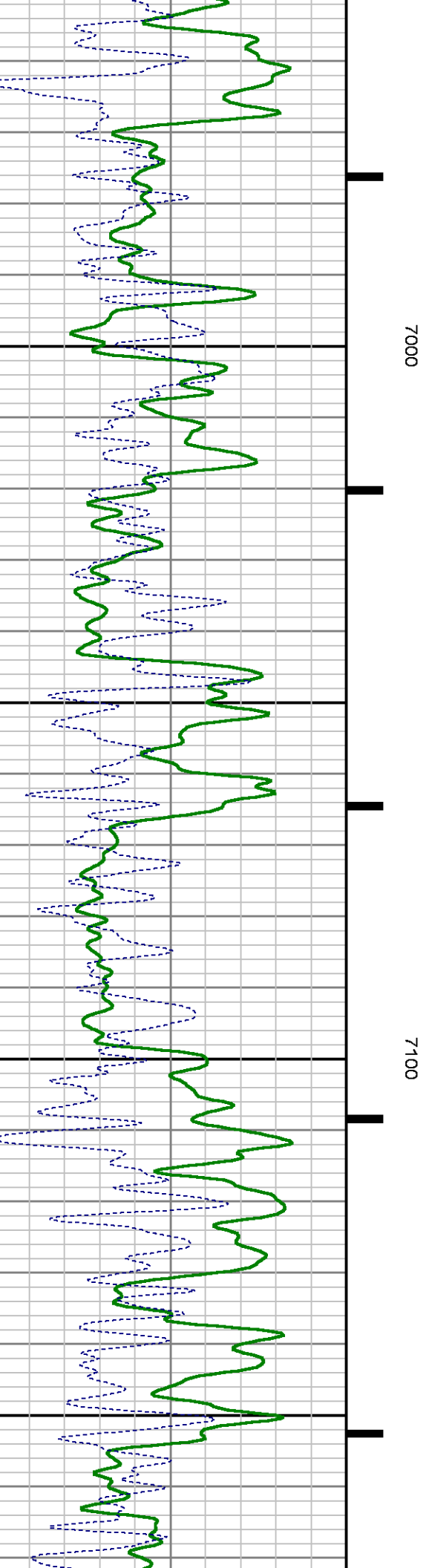
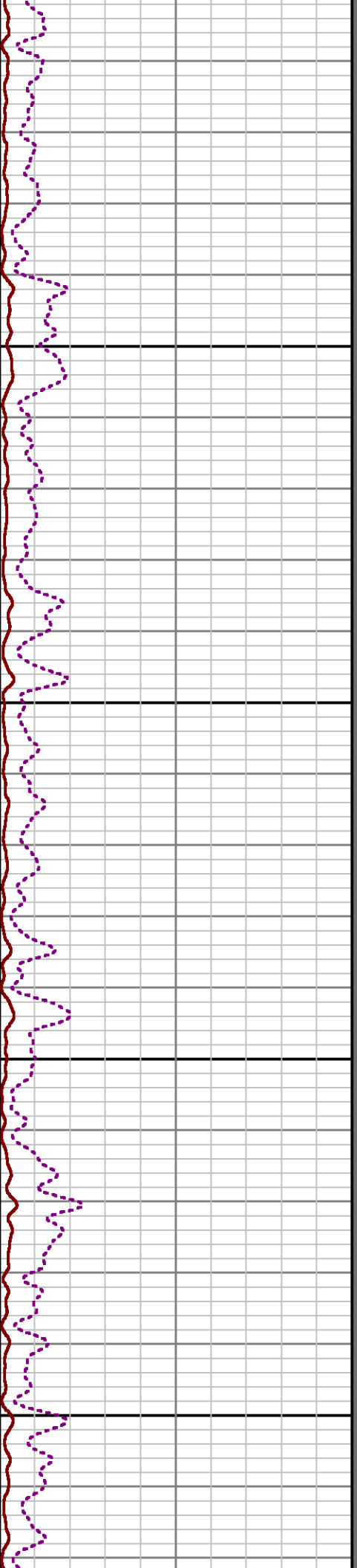
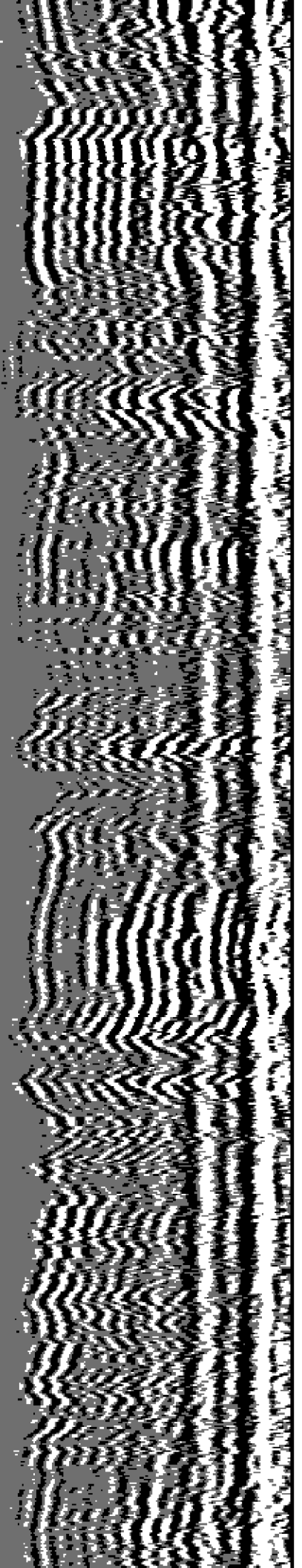


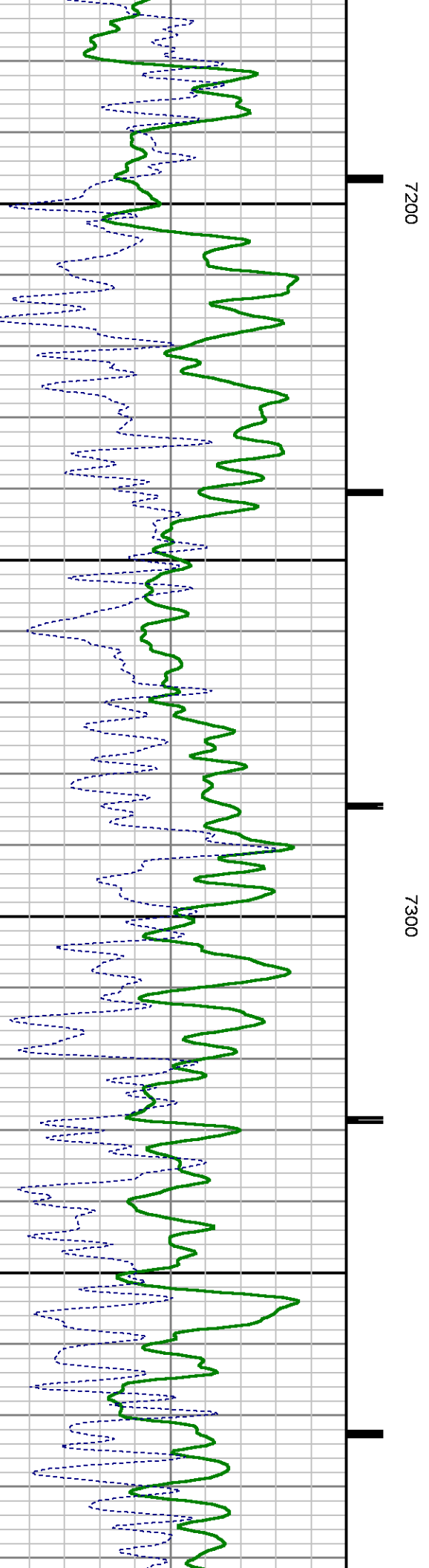
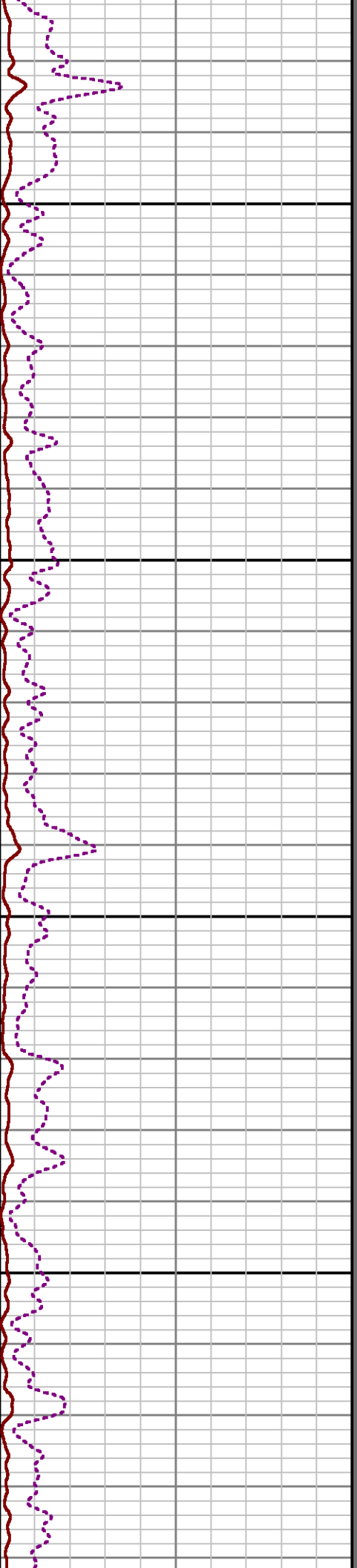
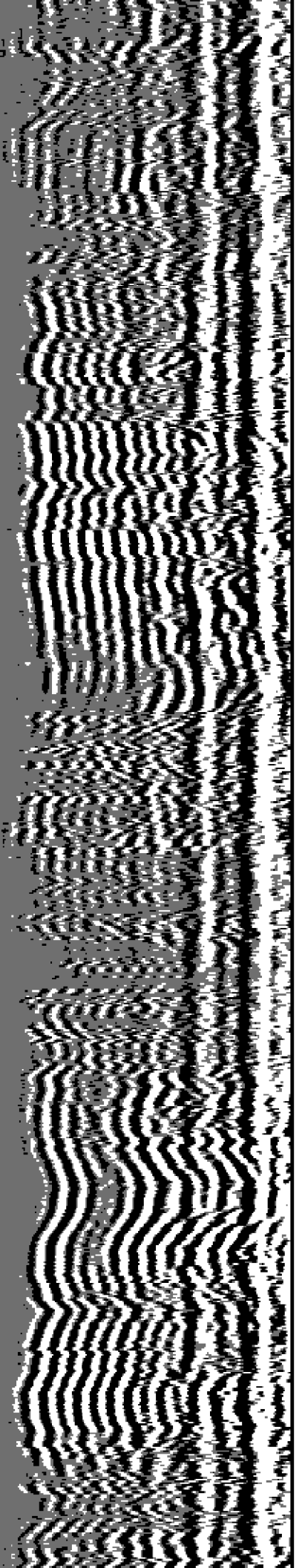


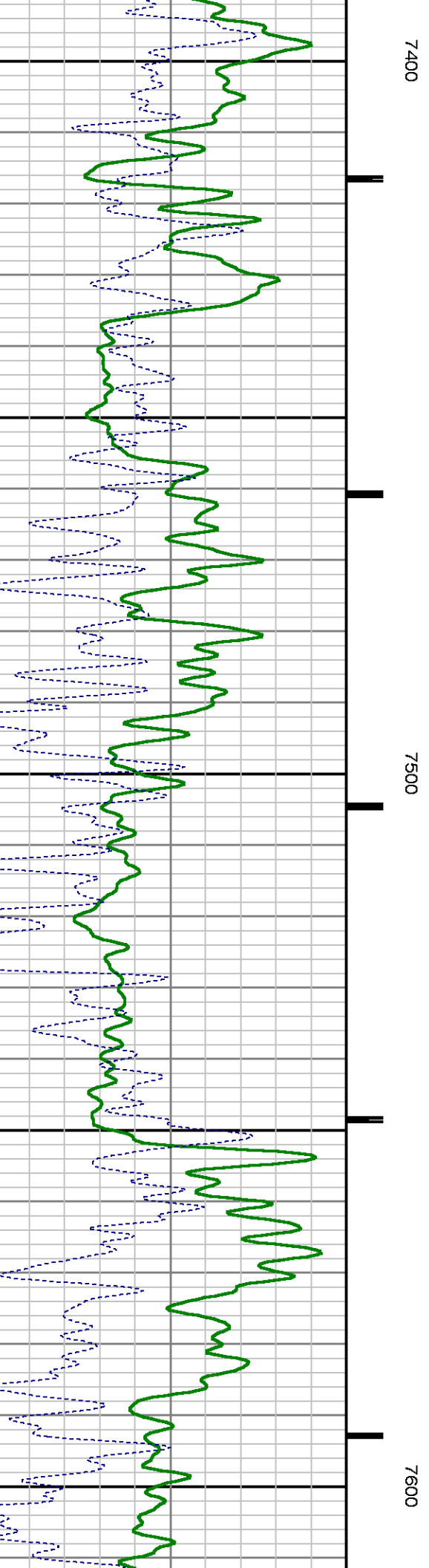
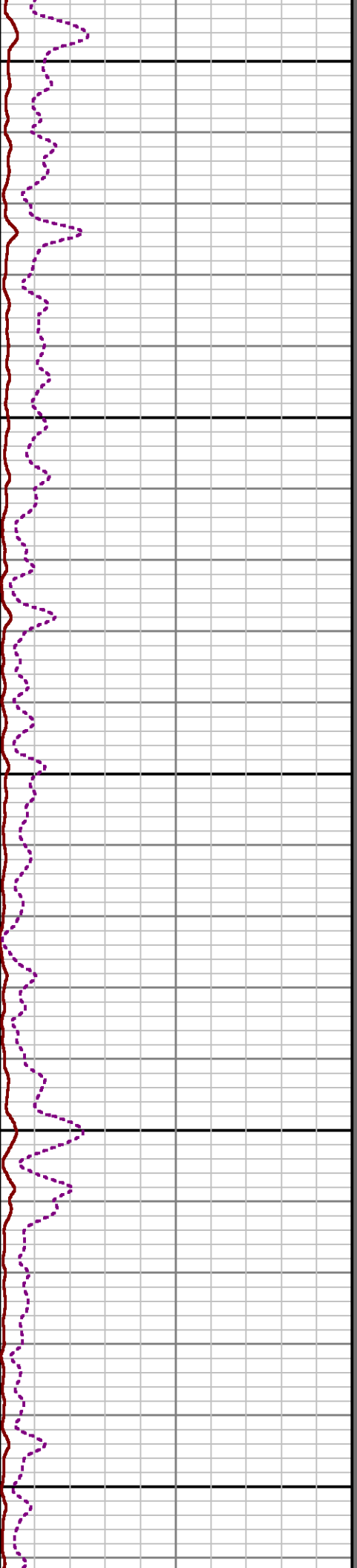
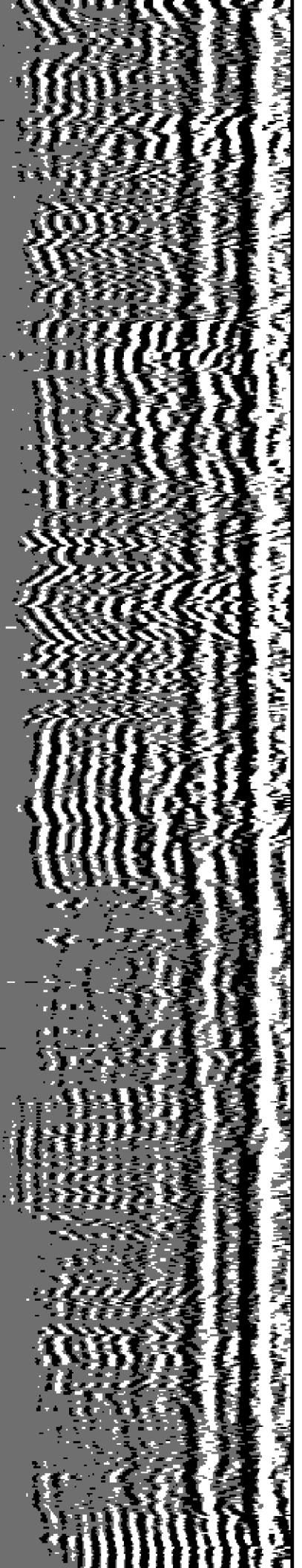
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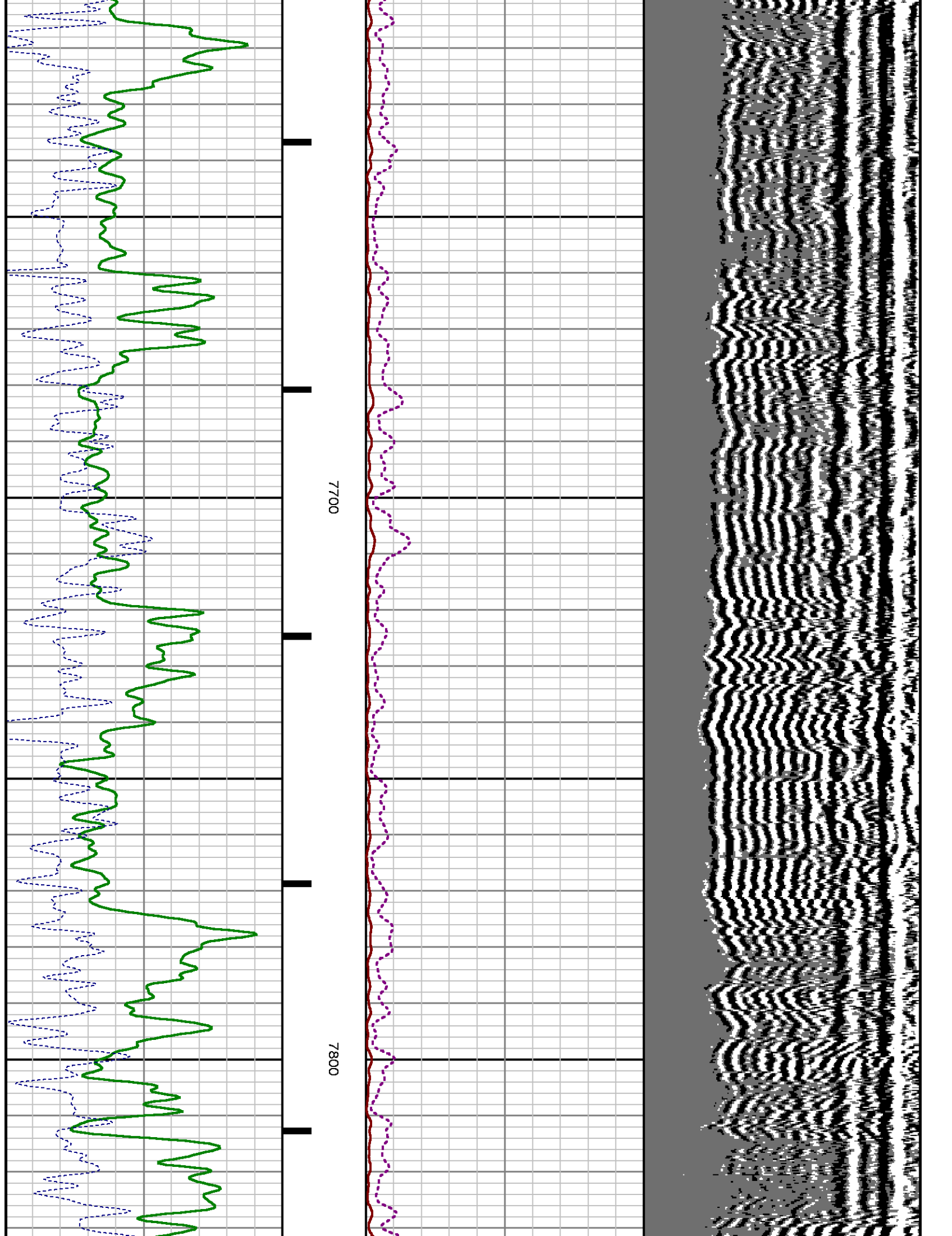
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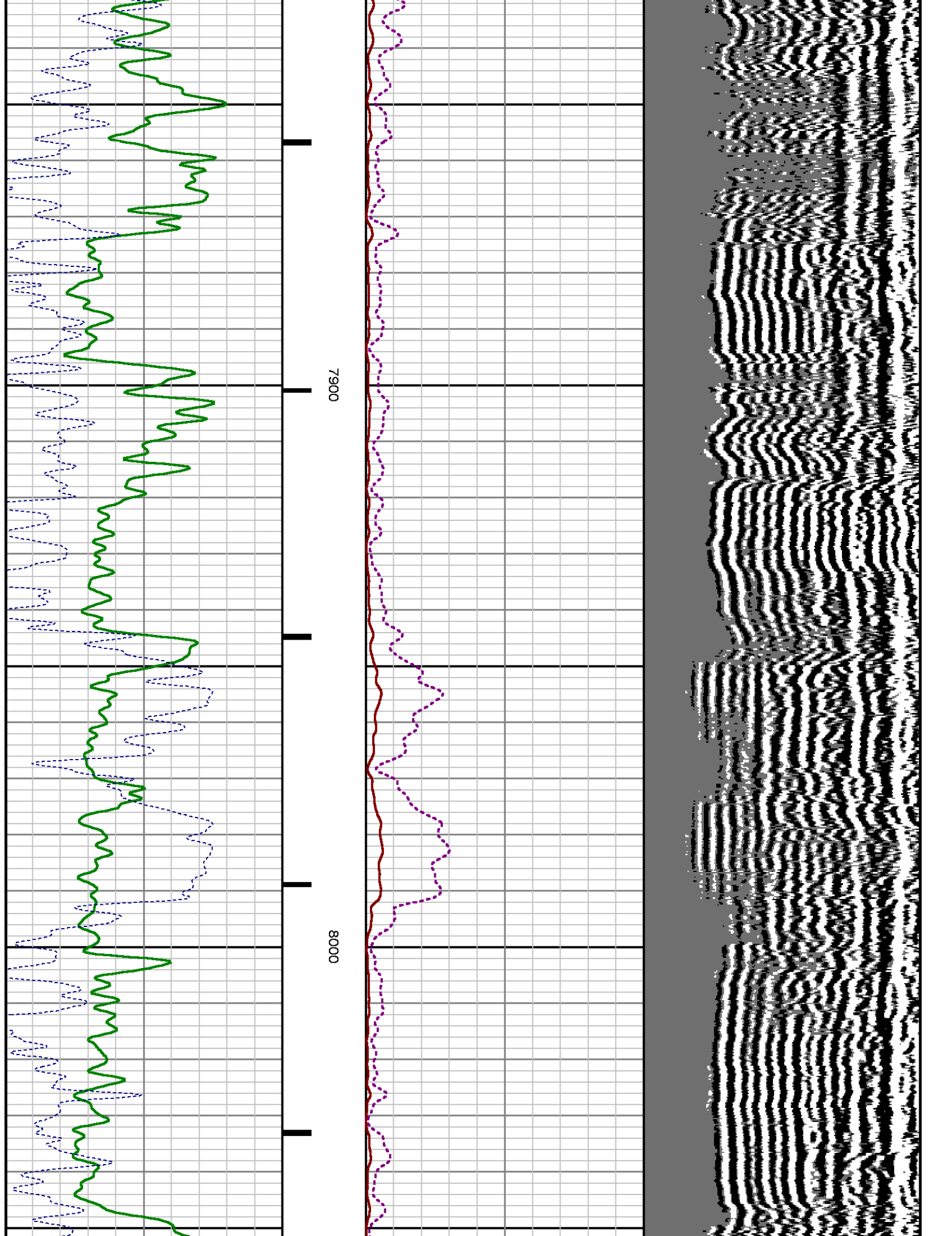


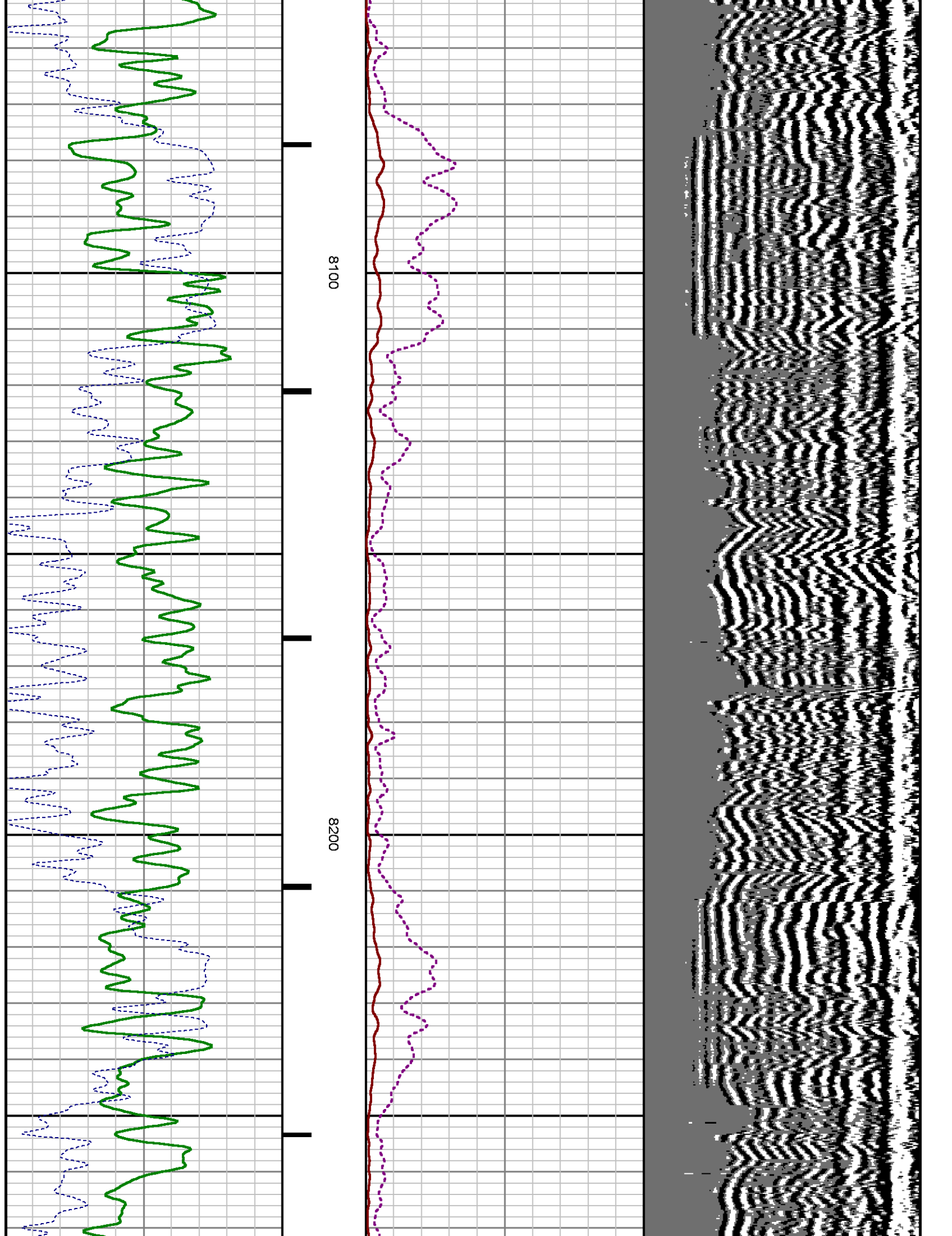


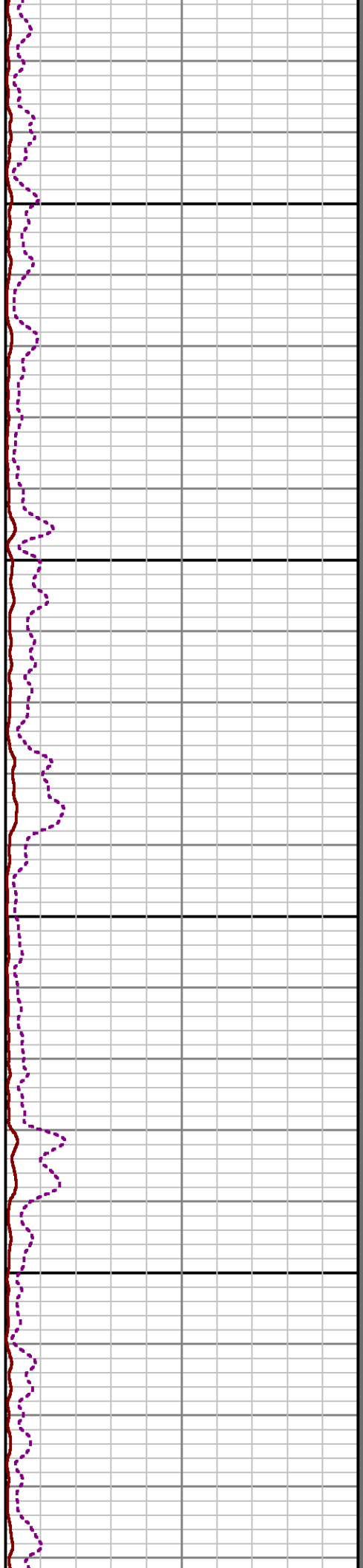
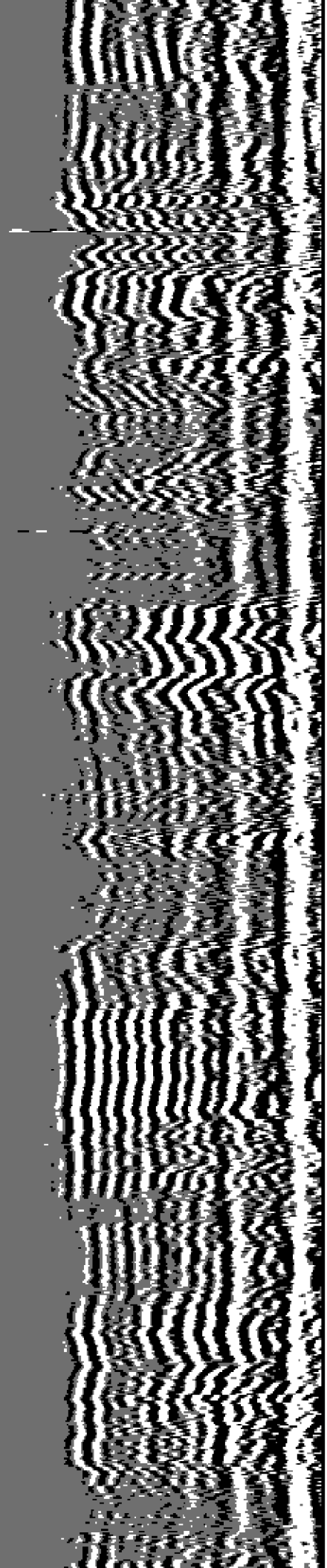






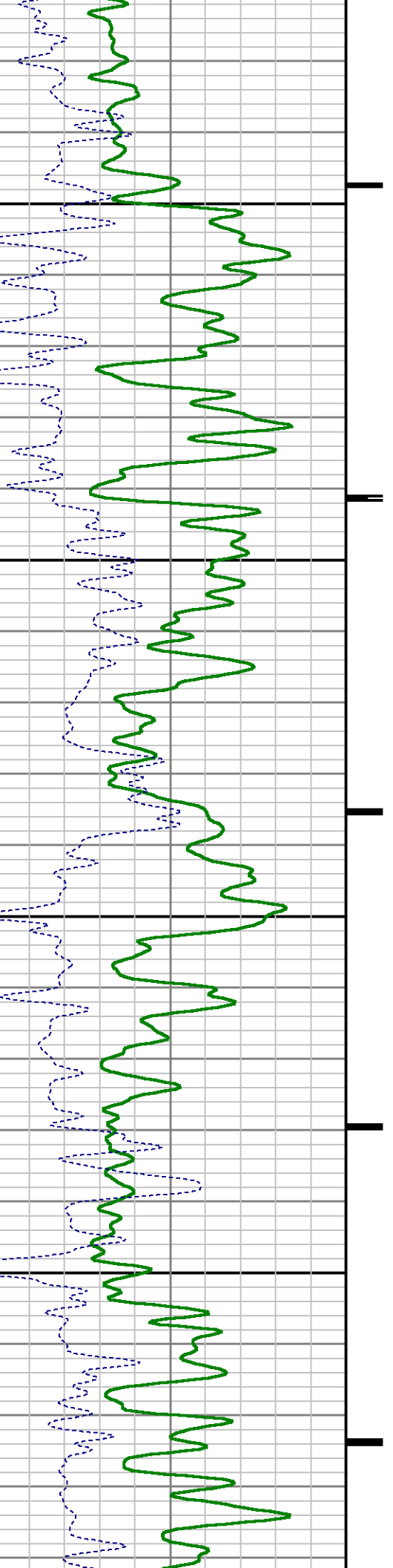


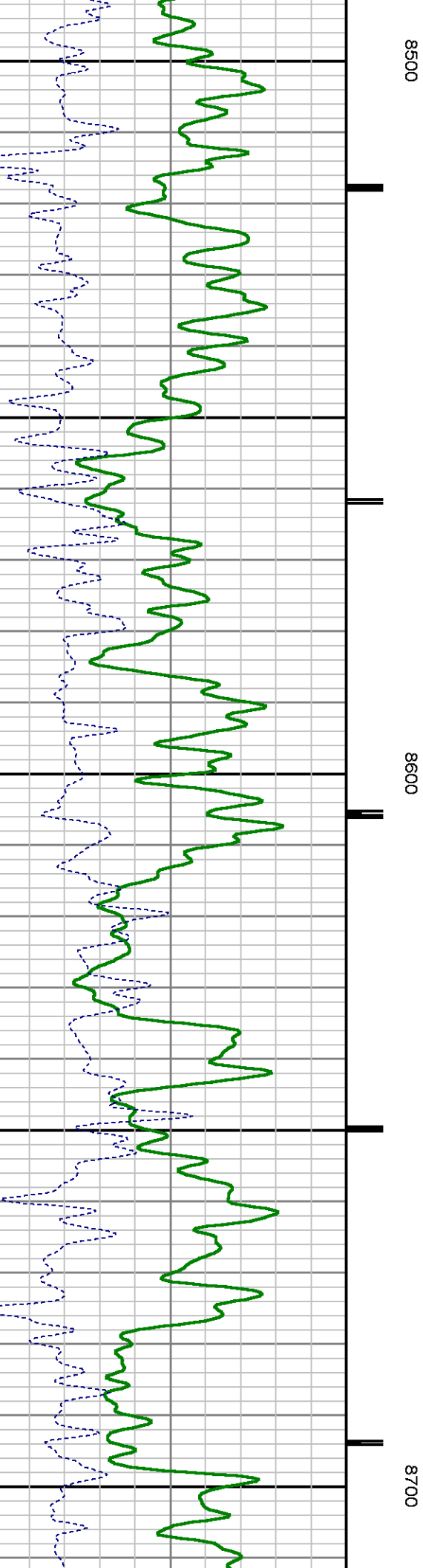
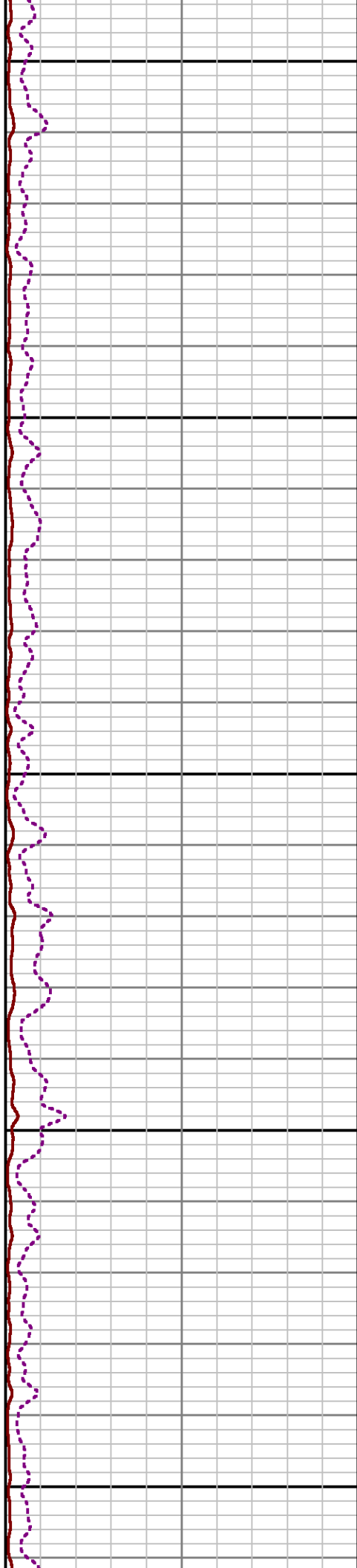
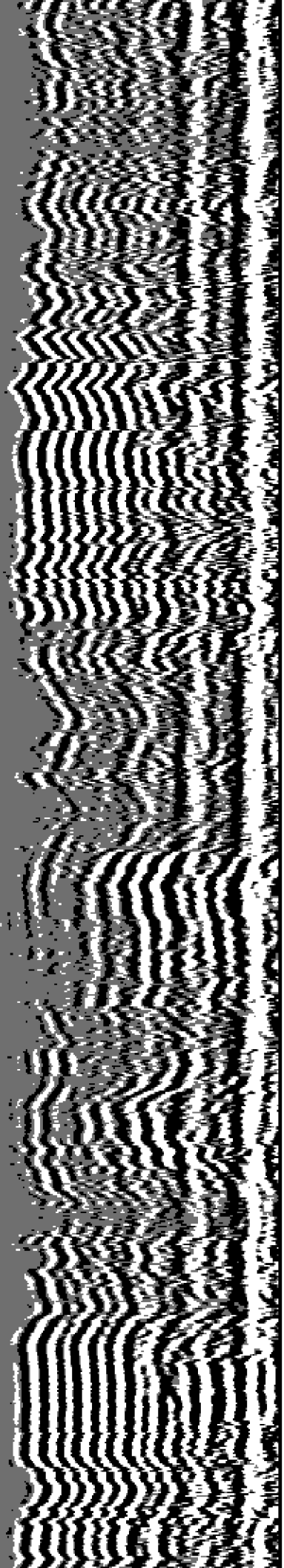


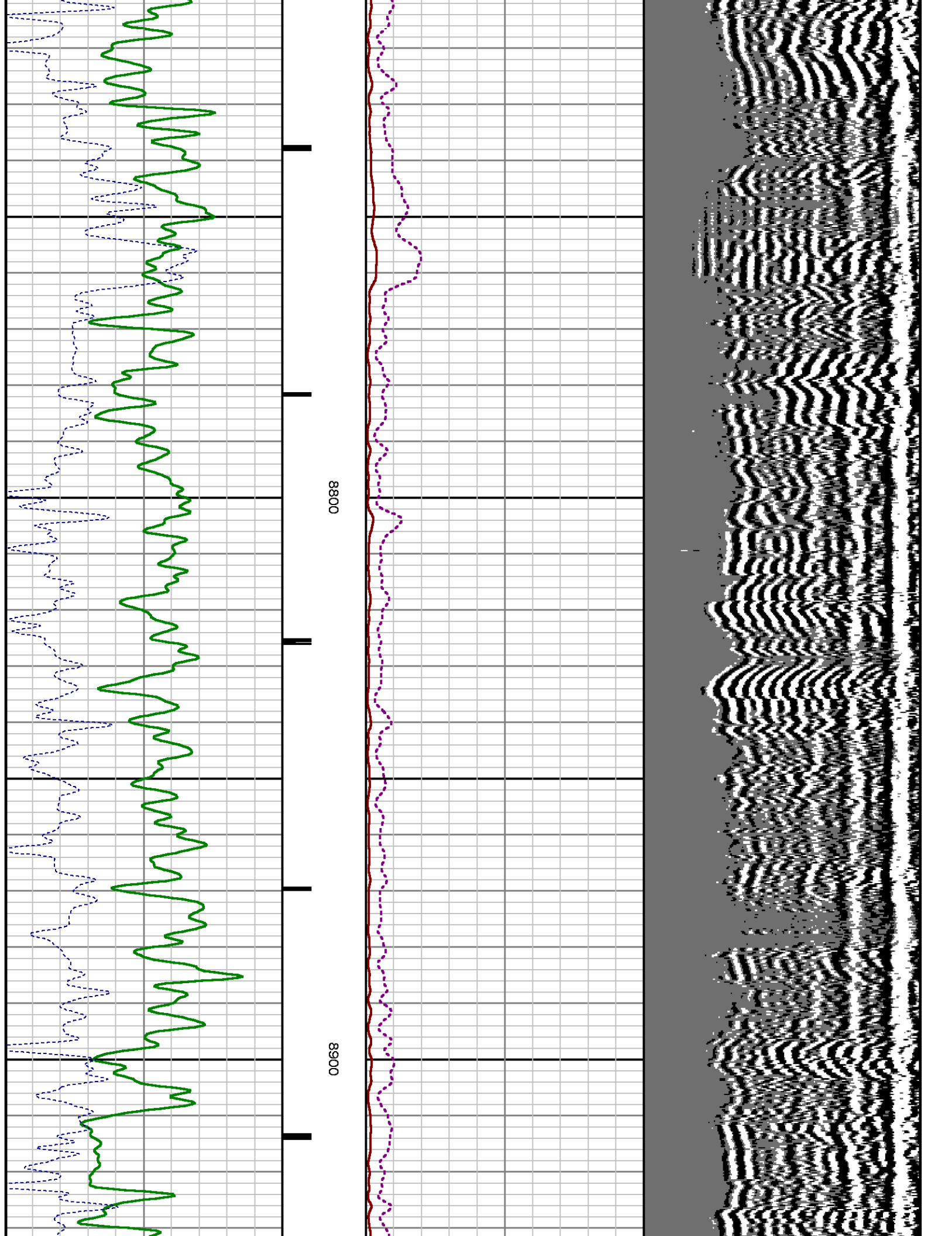


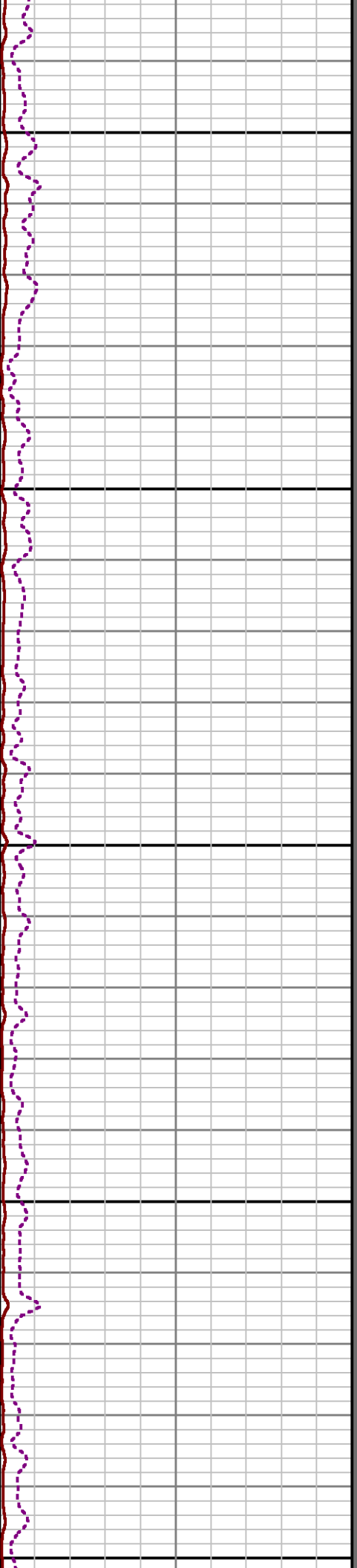
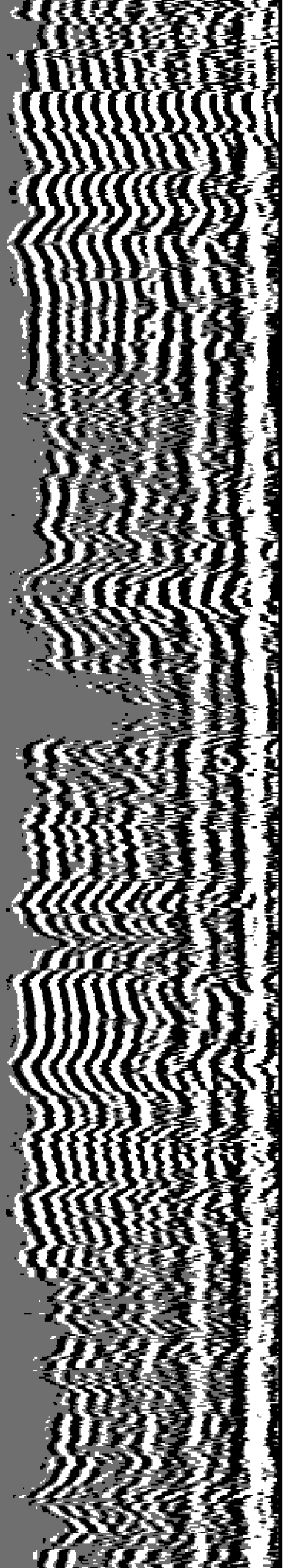
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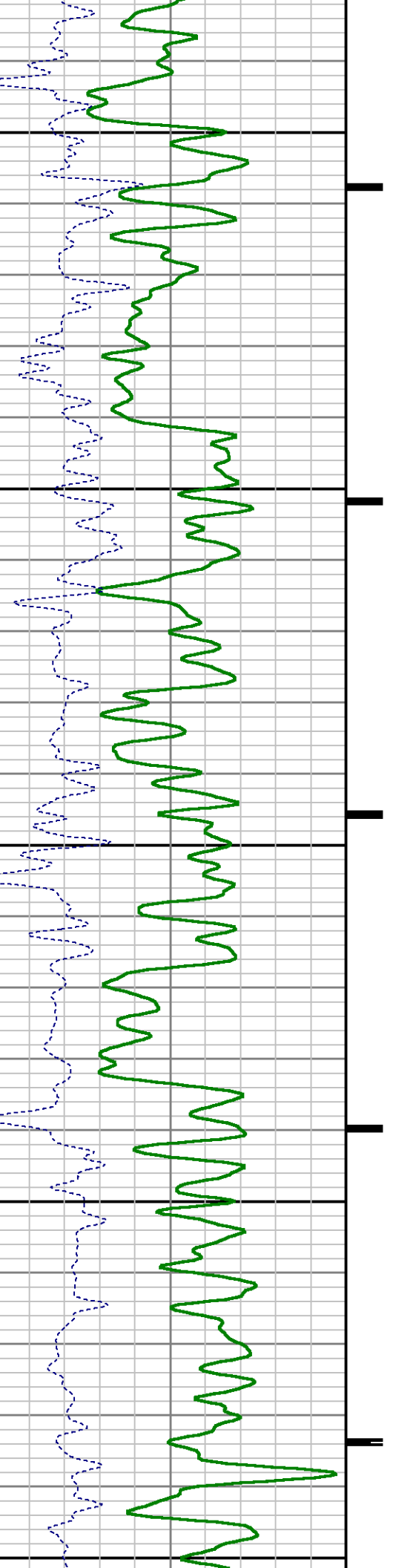


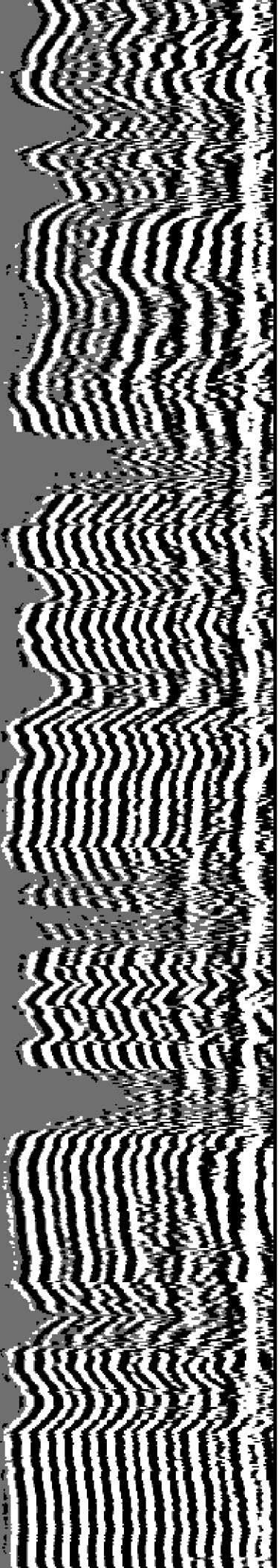




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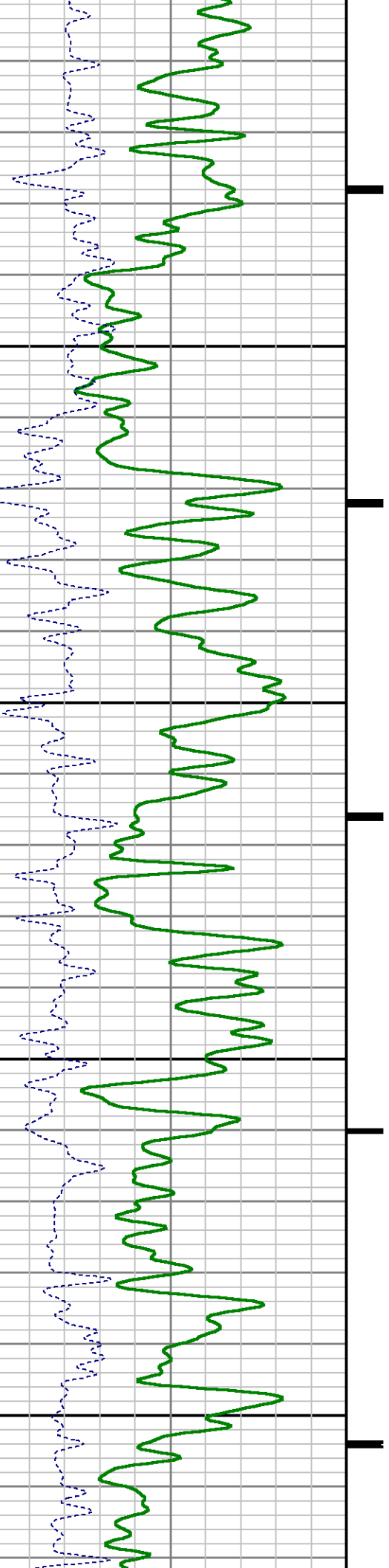
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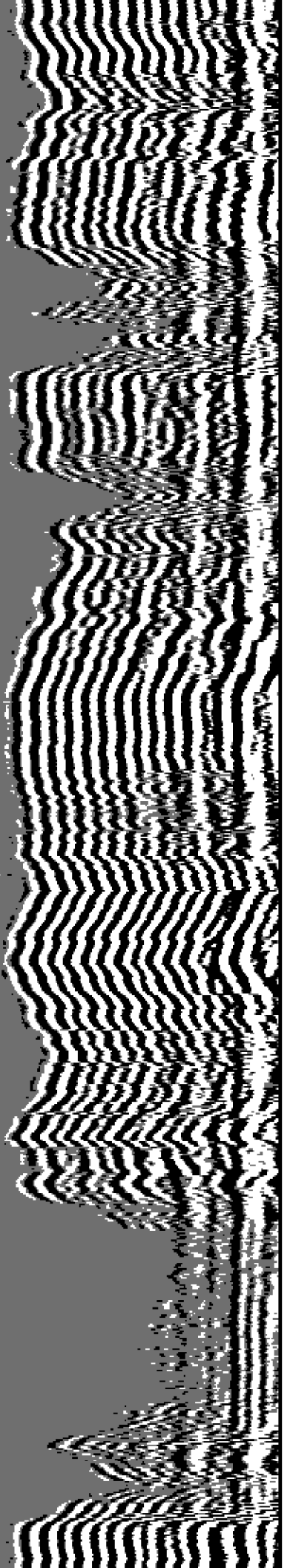




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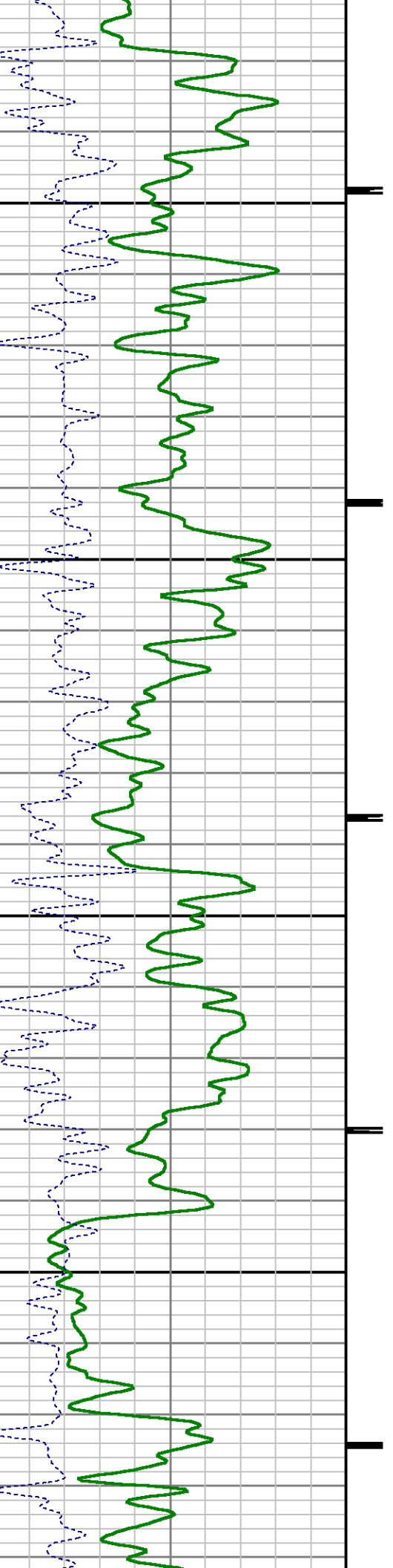
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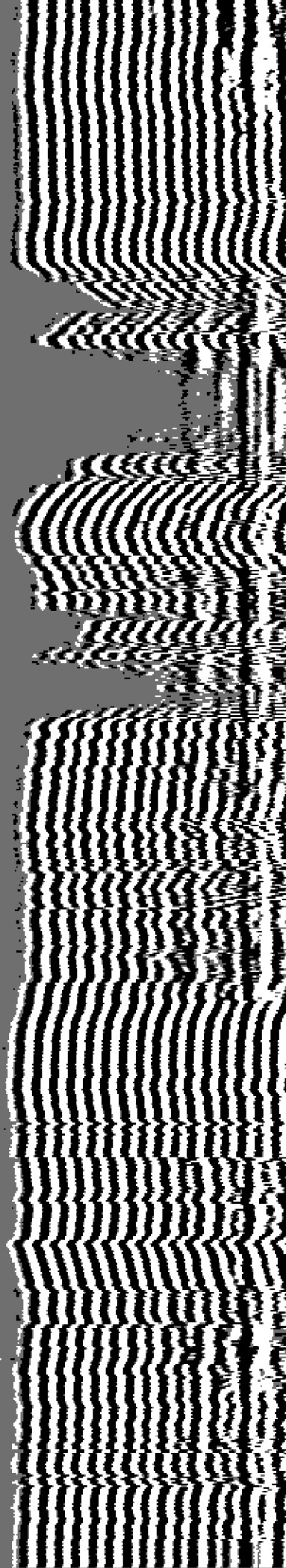




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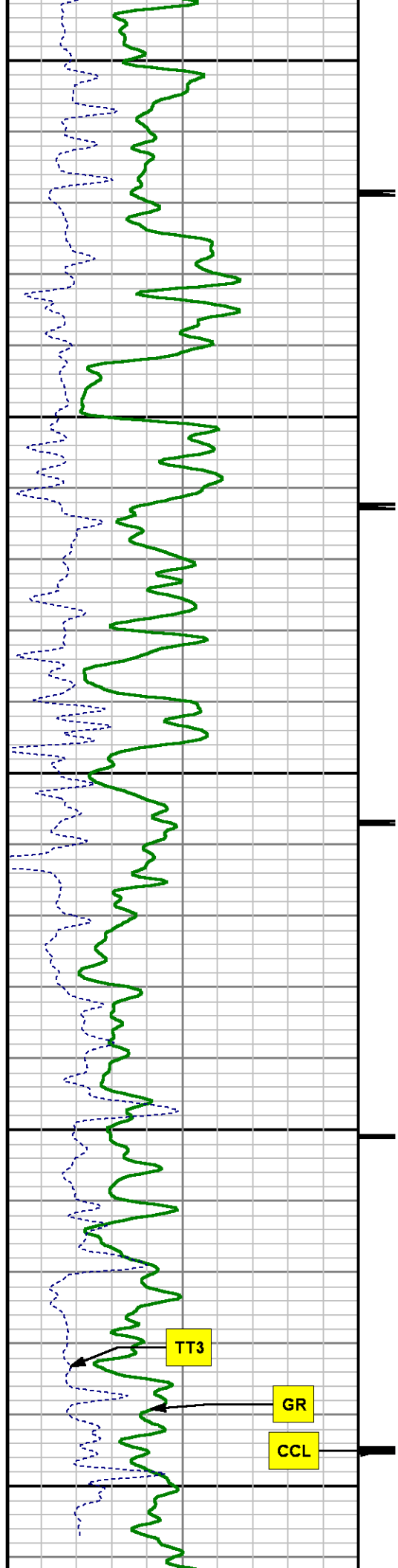
XAMP

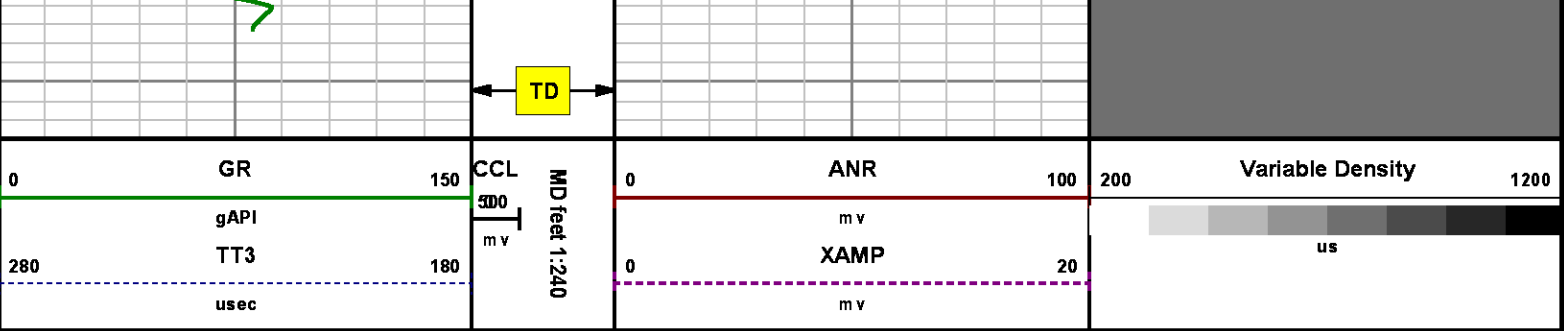
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GR

CCL

TT3





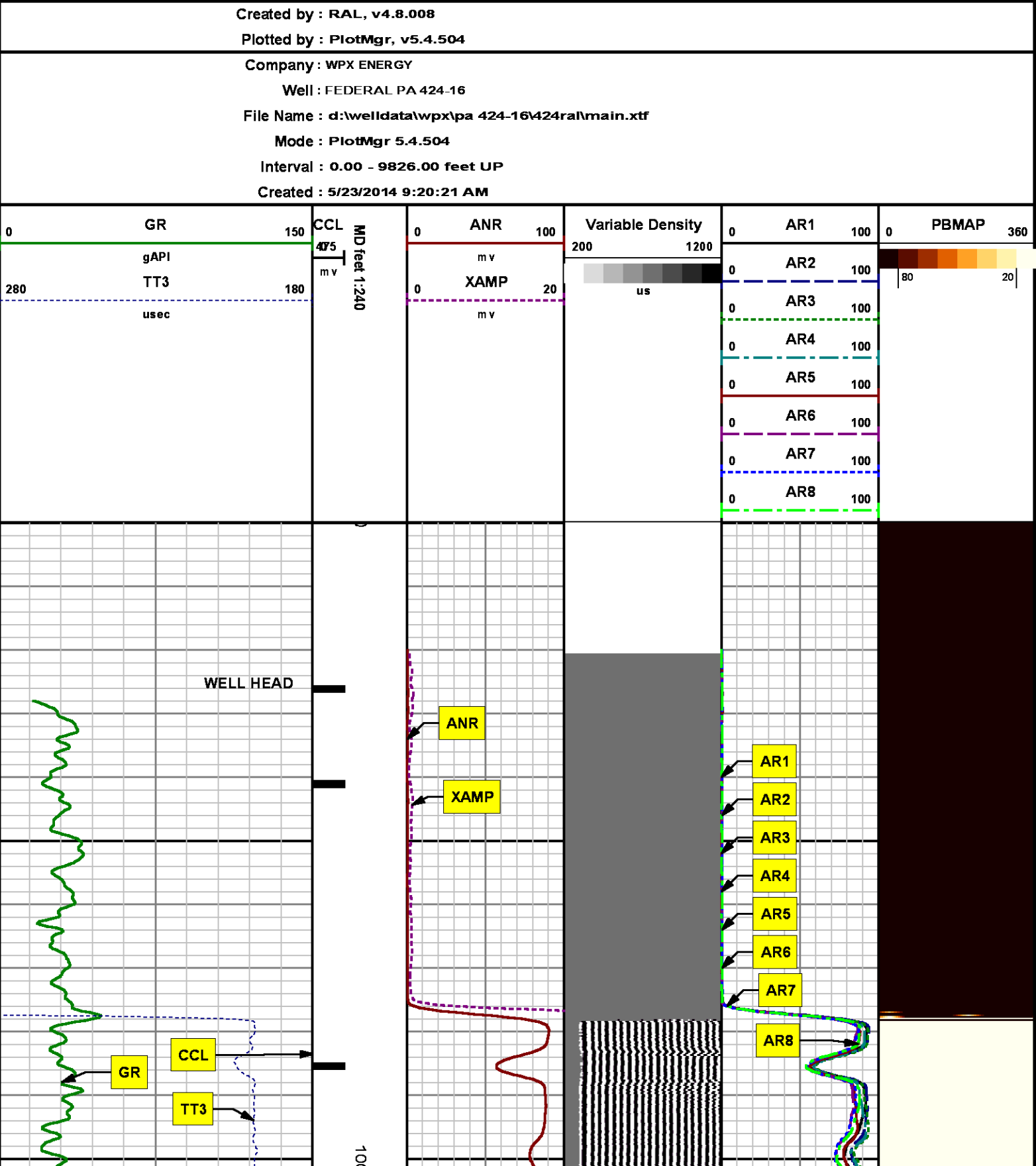
SECONDARY PRESENTATION
0 PSI

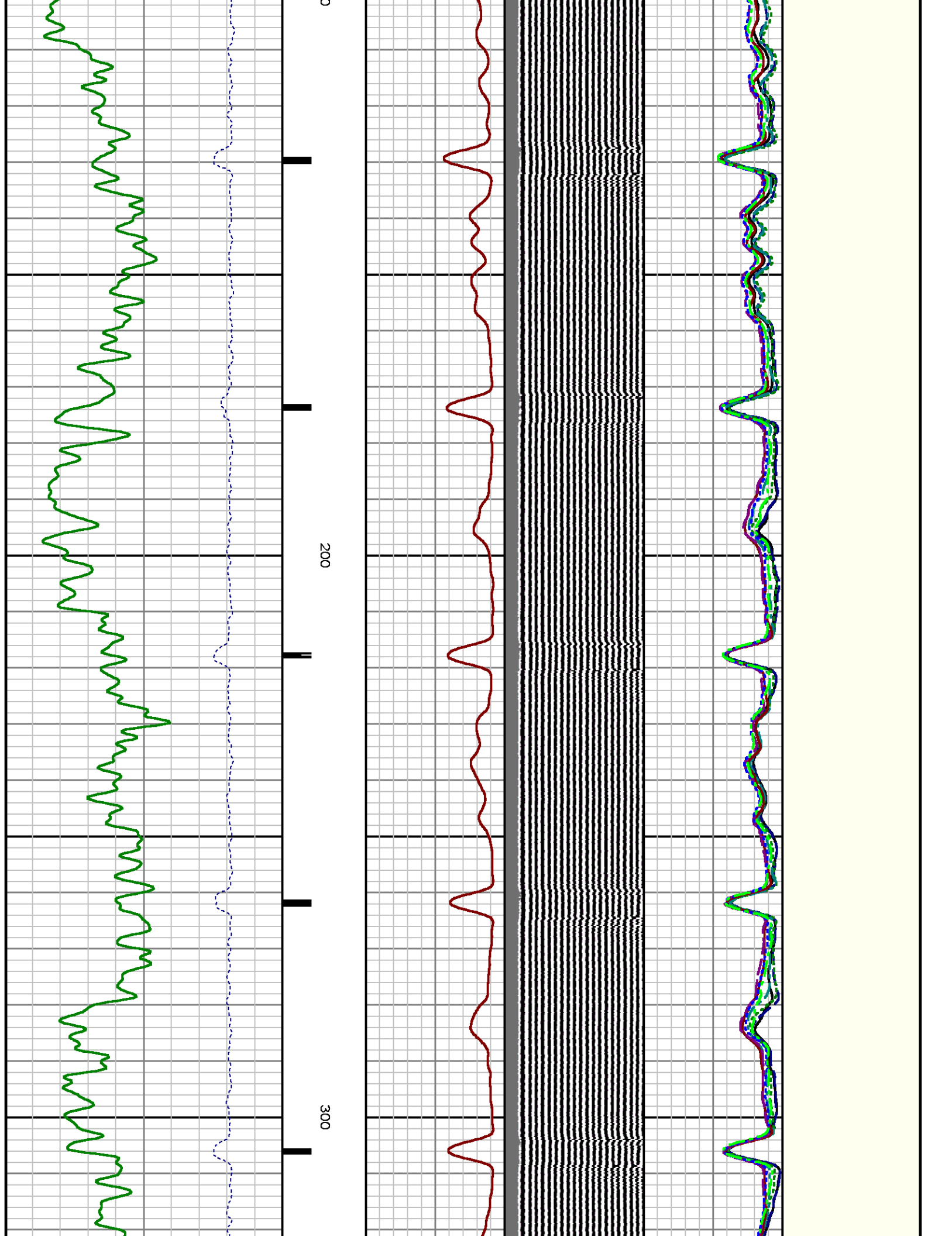
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	36.249	9826.000
RAL	Amp Gate Start Near	195.000	usec	36.249	9826.000
RAL	Amp Gate Start Radial	195.000	usec	36.249	9826.000
RAL	Amp Gate Width Far	25.000	usec	36.249	9826.000
RAL	Amp Gate Width Near	25.000	usec	36.249	9826.000
RAL	Amp Gate Width Radial	25.000	usec	36.249	9826.000
RAL	casing od	4.500	inches	36.249	9826.000
RAL	casing wt	11.600	lbm/ft	36.249	9826.000
RAL	FB Start Far	291.900	usec	36.249	9826.000
RAL	FB Start Near	180.000	usec	36.249	9826.000
RAL	FB Start Radial	180.000	usec	36.249	9826.000
RAL	FB Thresh Far	10.000	mv	36.249	9826.000
RAL	FB Thresh Near	4.000	mv	36.249	9826.000
RAL	FB Thresh Radial	4.000	mv	36.249	9826.000
RAL	Fluid Travel Time	200.000	usec/ft	36.249	9825.718

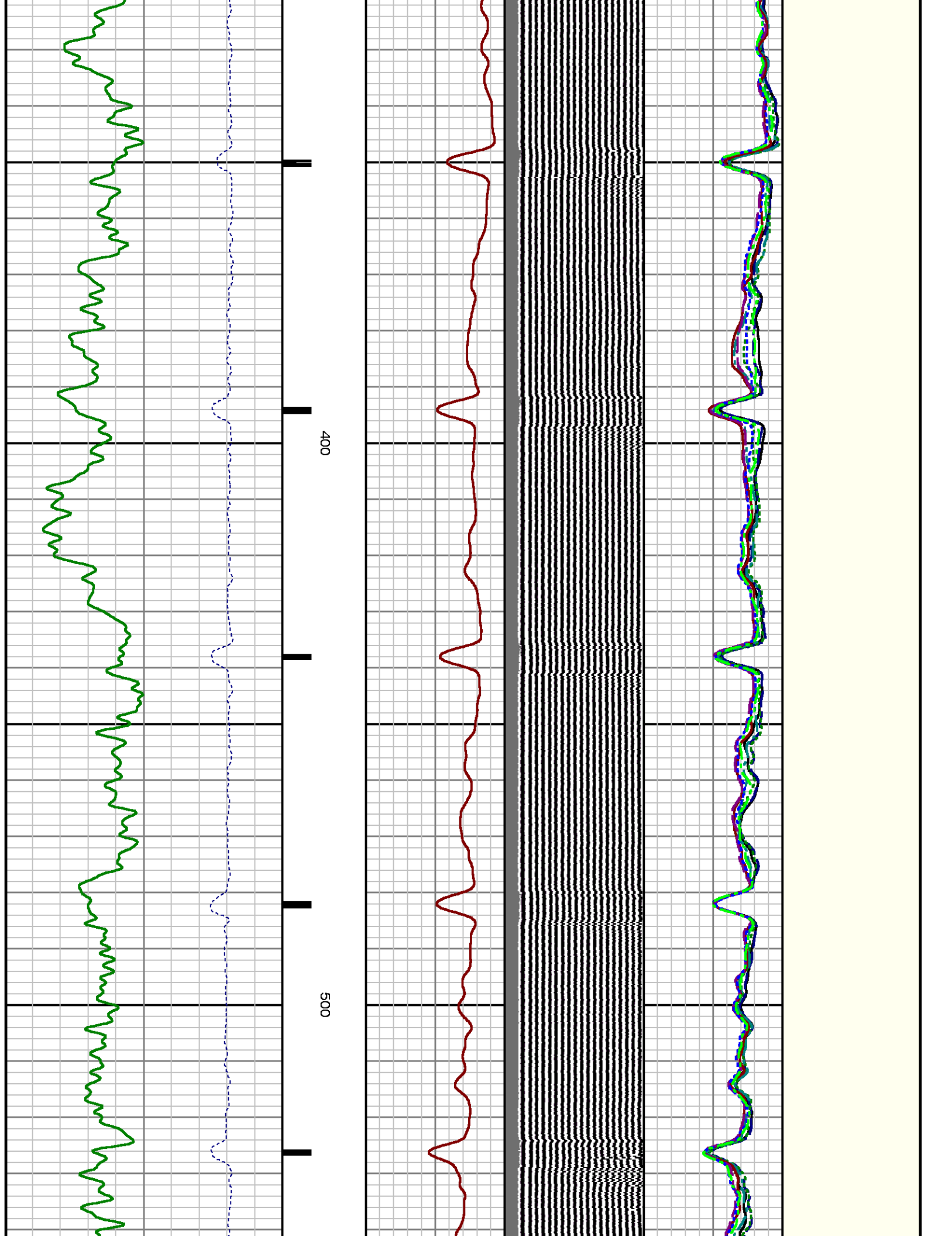
DEPTH OFFSETS
(for Acquired Curves)

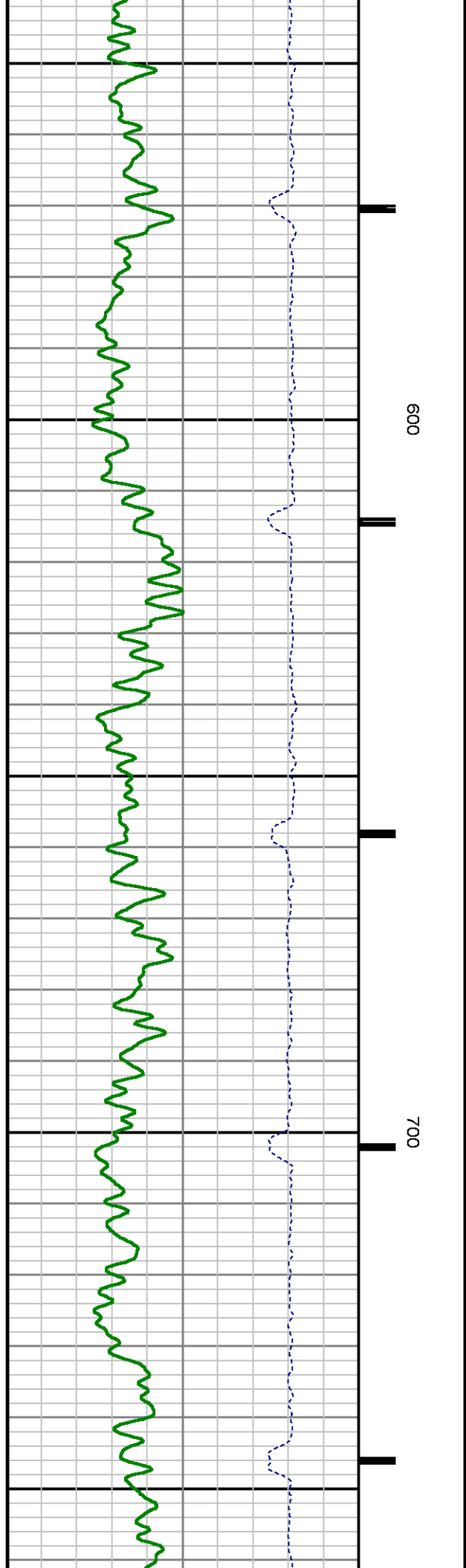
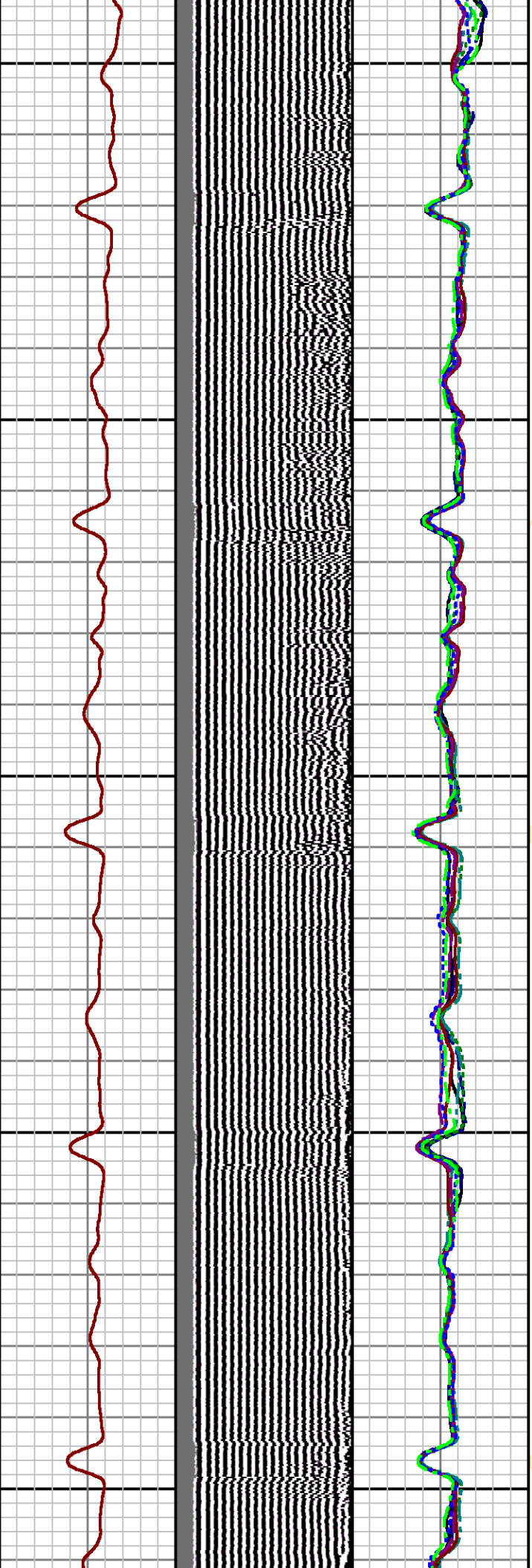
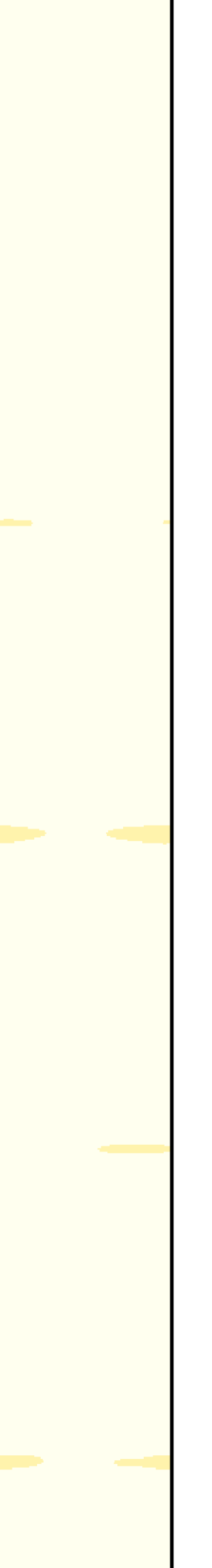
SERIES	DEPTH OFFSET	ACQUIRED CURVES							
1426XA	-16.750	ACAL	ANR	AR1	AR2	AR3	AR4		
		AR5	AR6	AR7	AR8	CHV	FPR2		

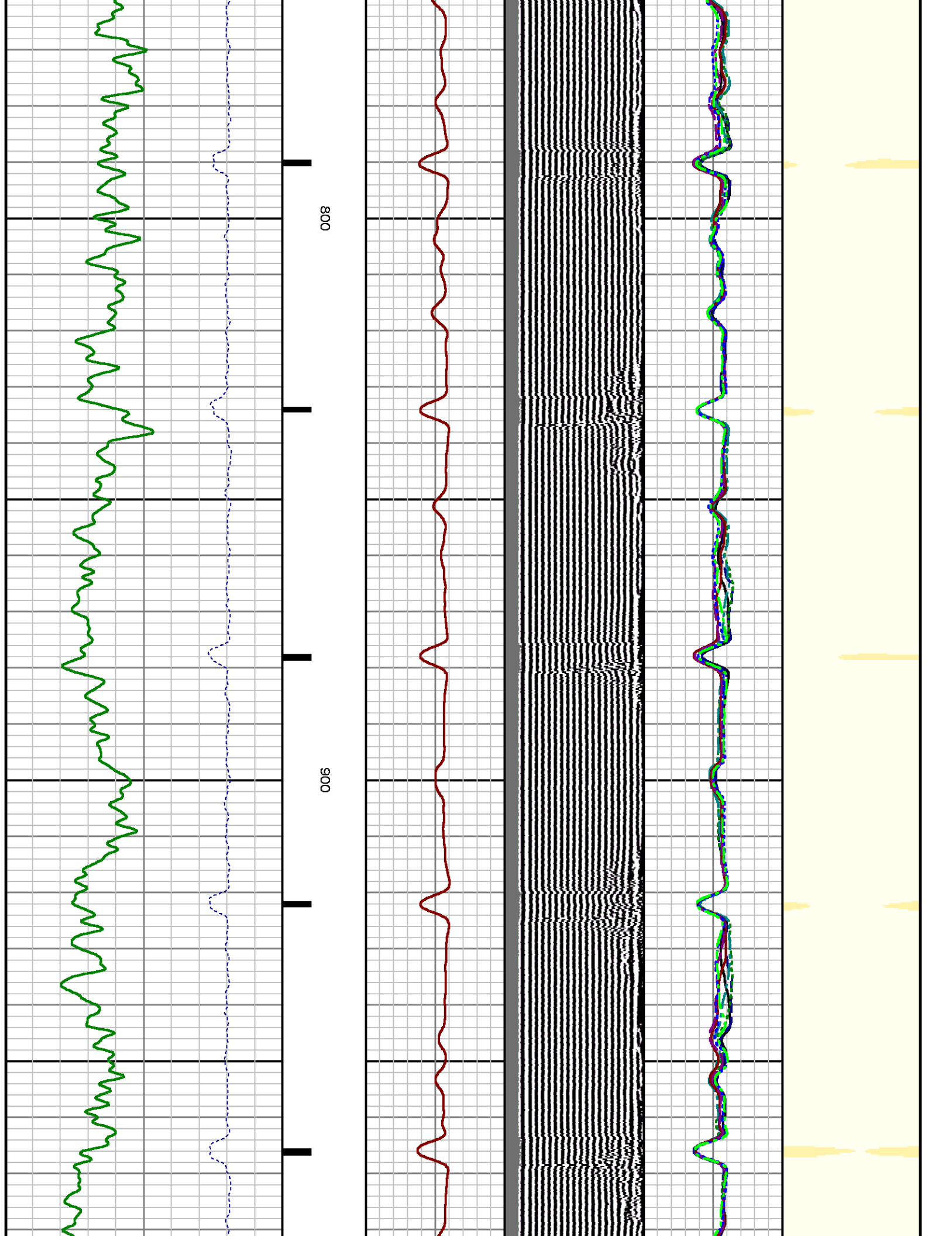
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	-15.750	AFAR	SIG	TT5			
2459XA	-11.340	CCL					
2459XA	-9.490	GR					
2459XA	-4.090	NEU					

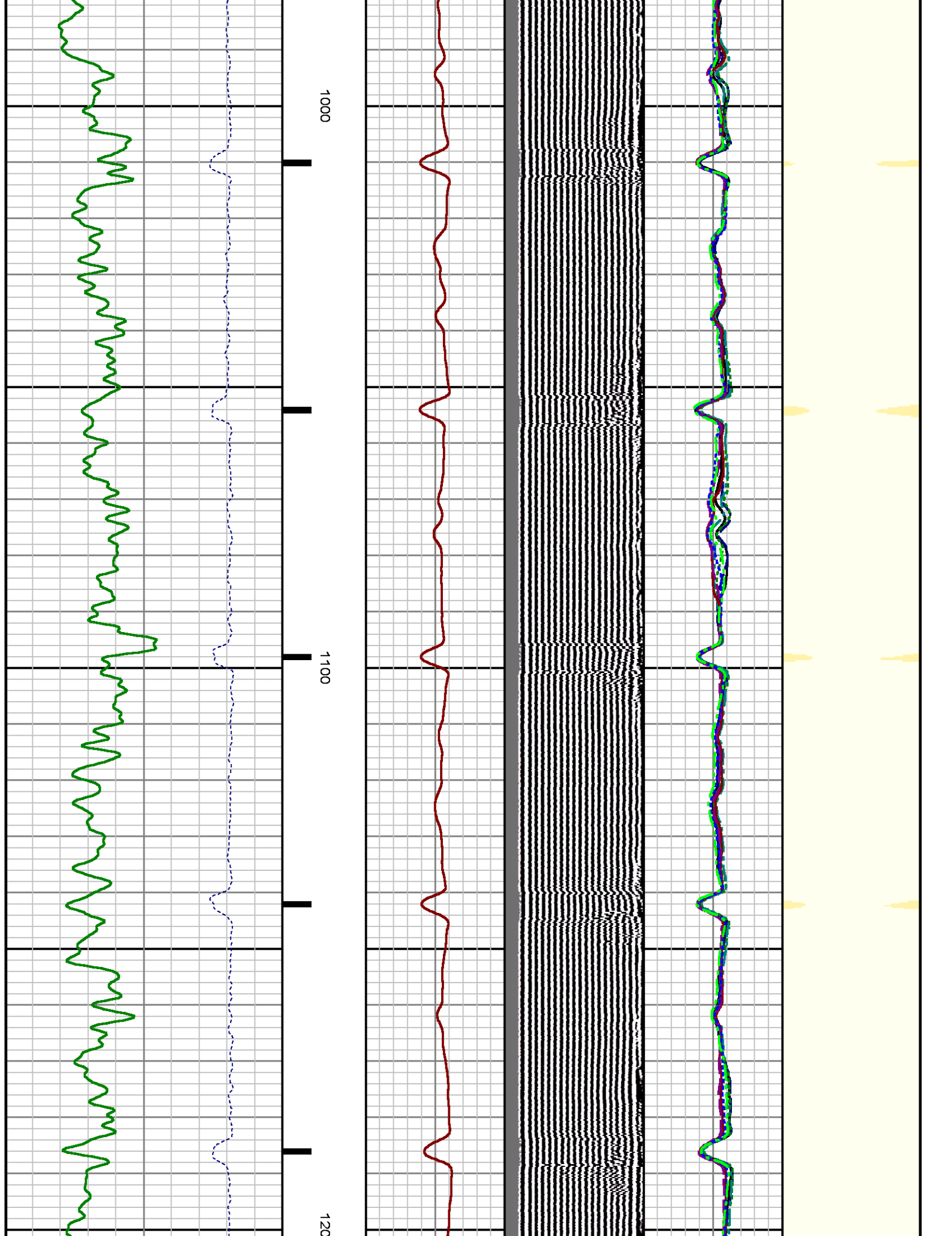


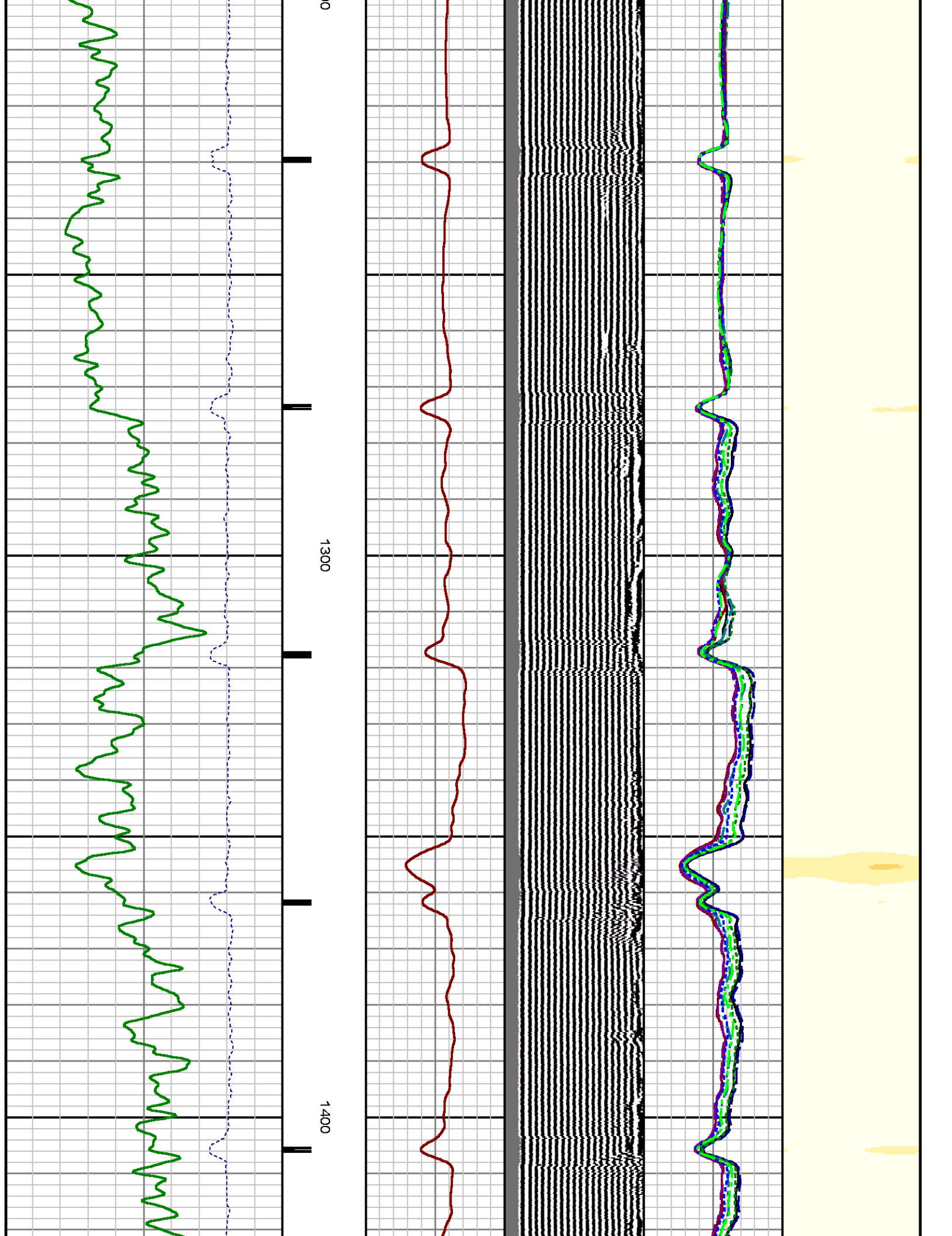


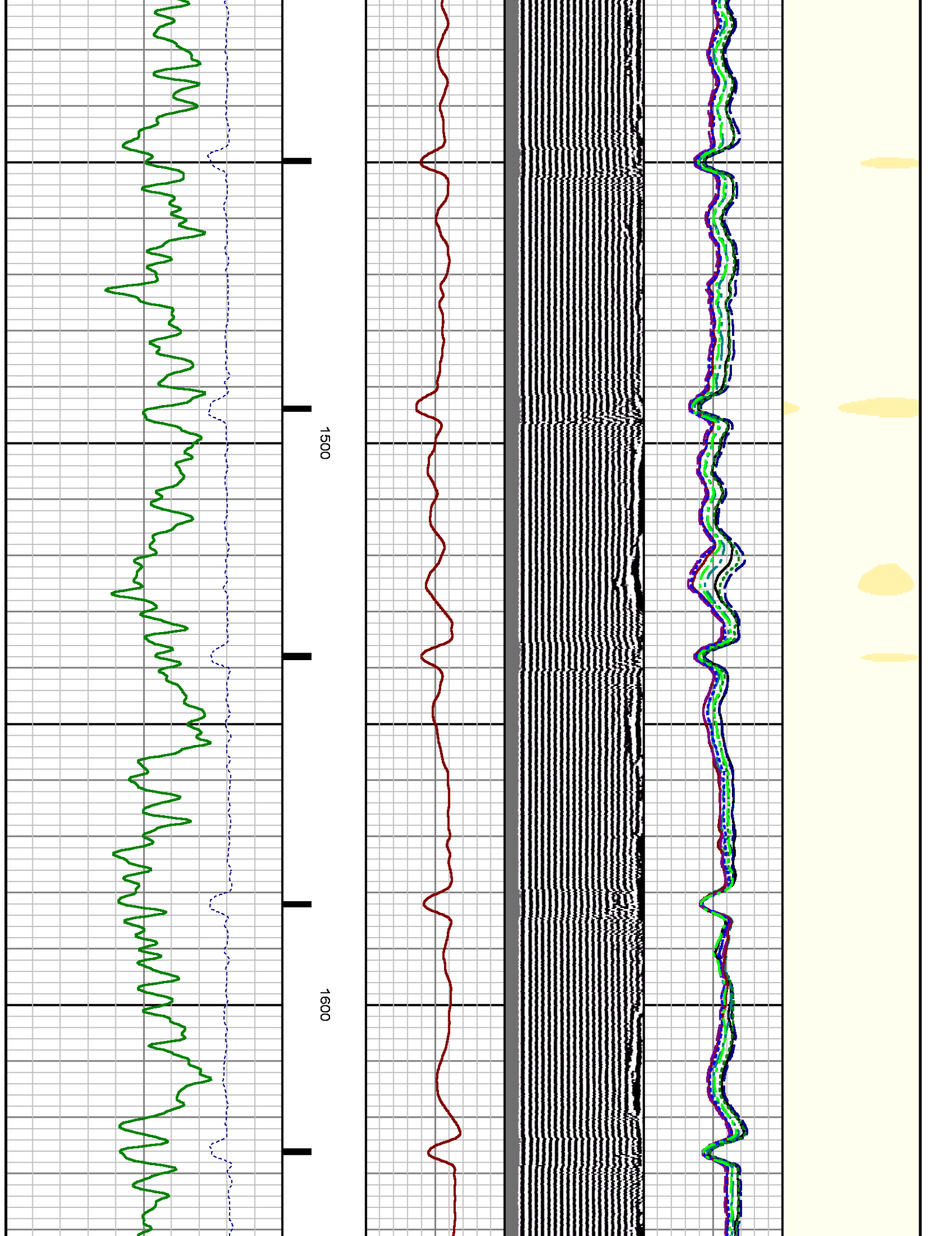


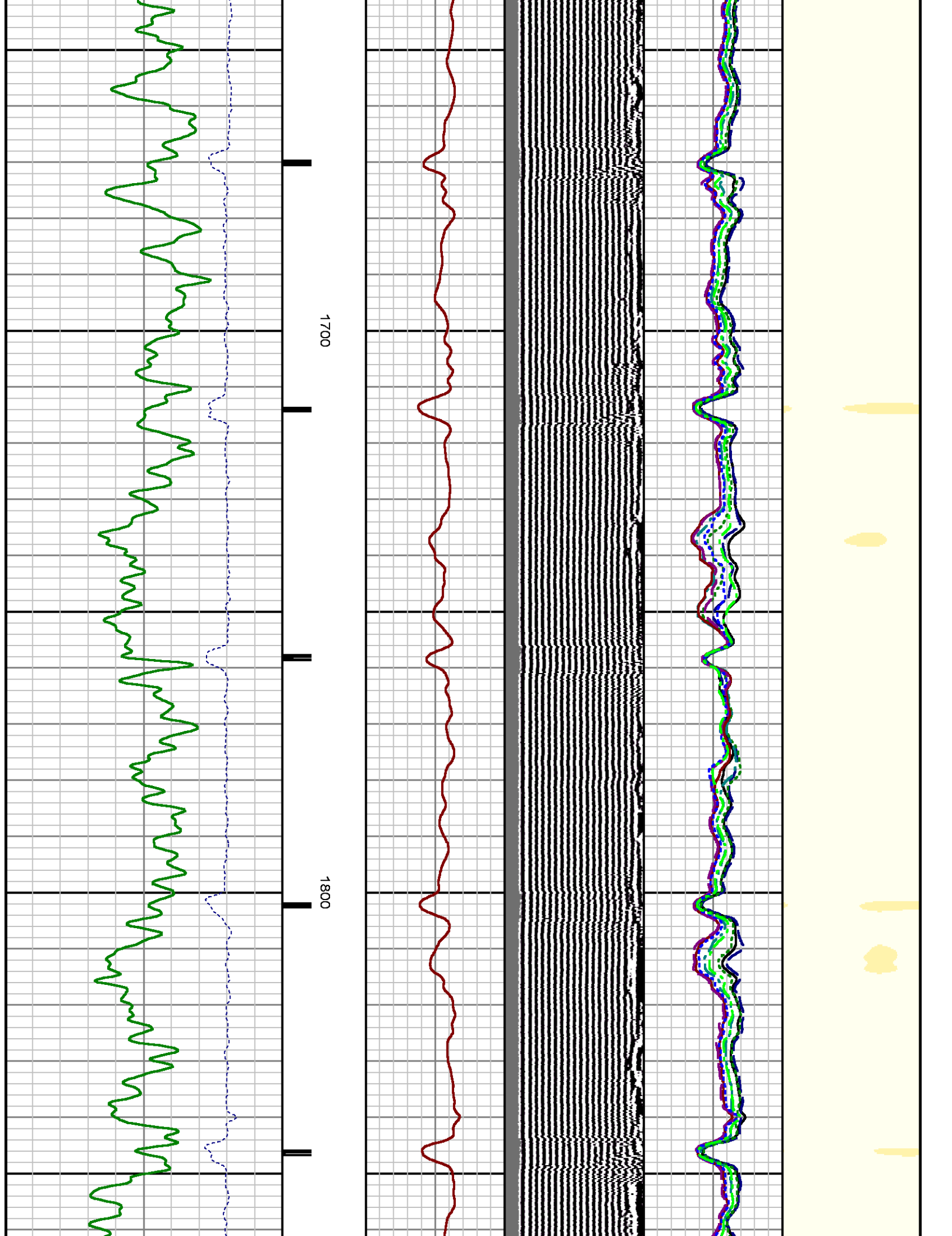


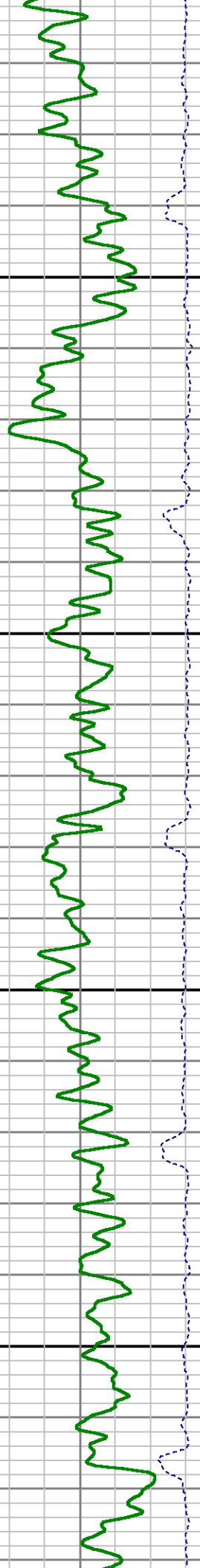
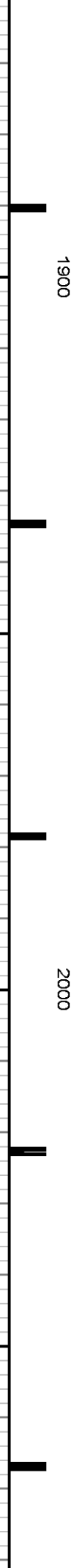
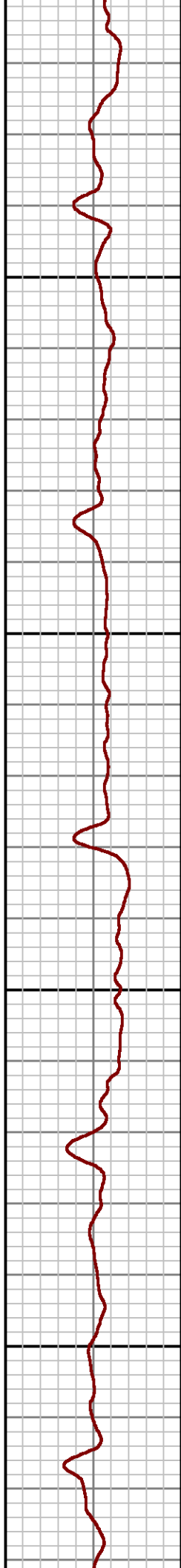
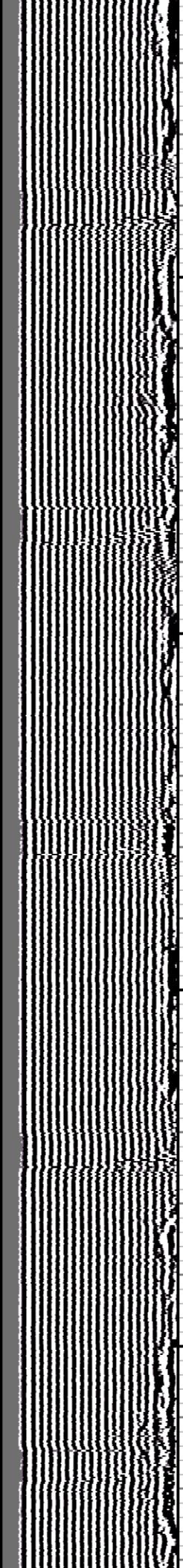
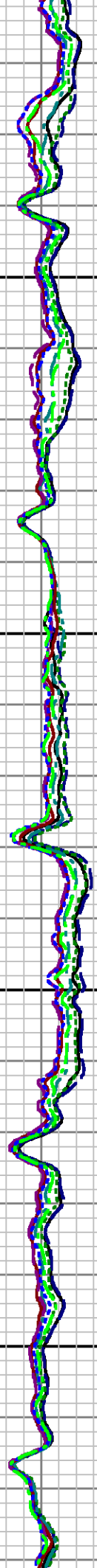
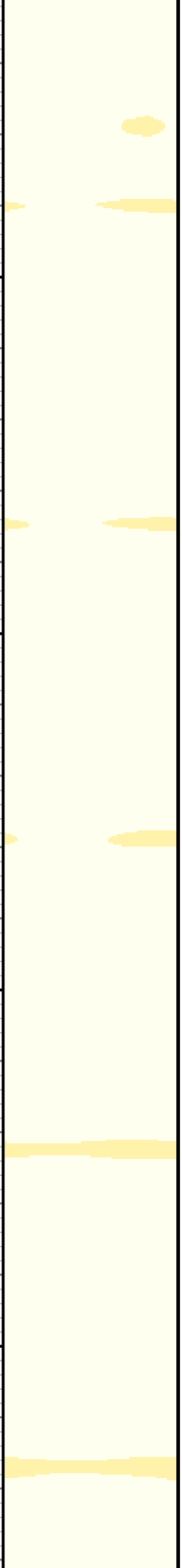


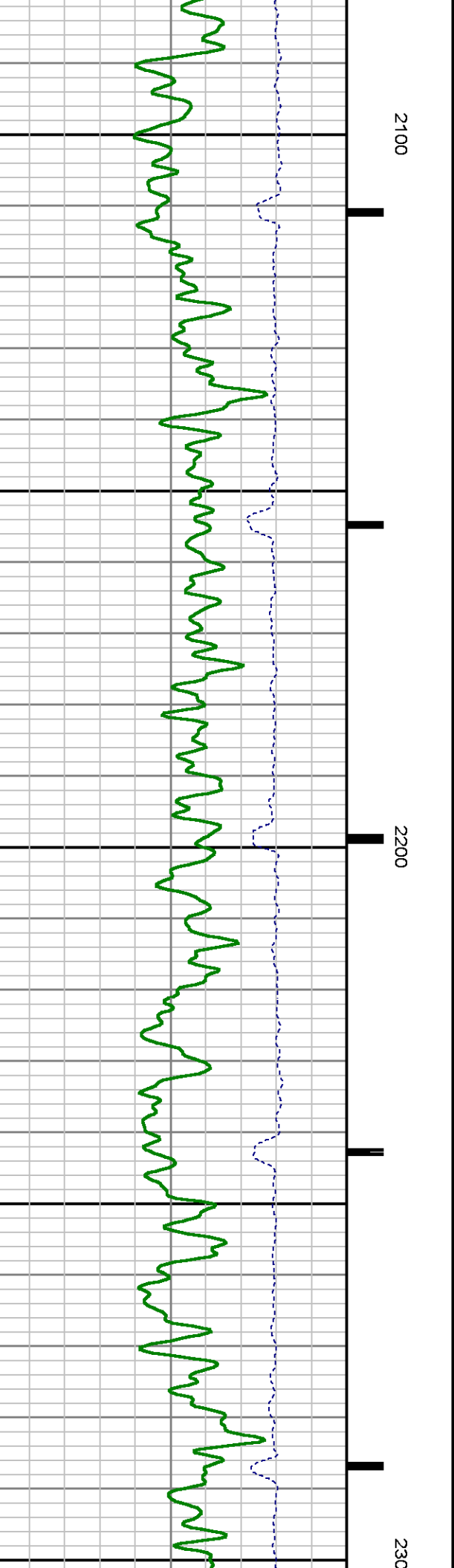
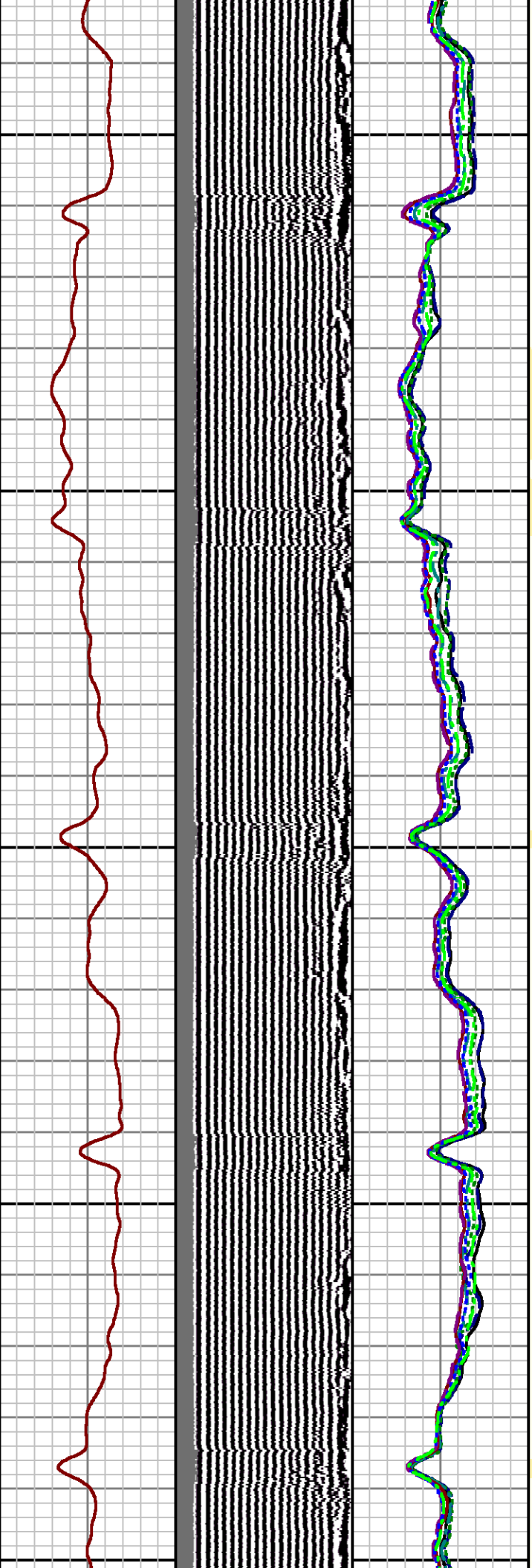


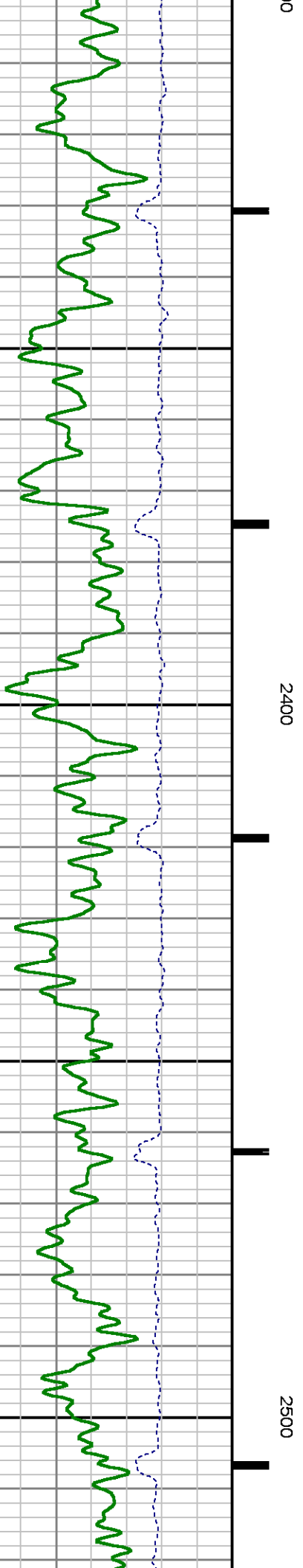
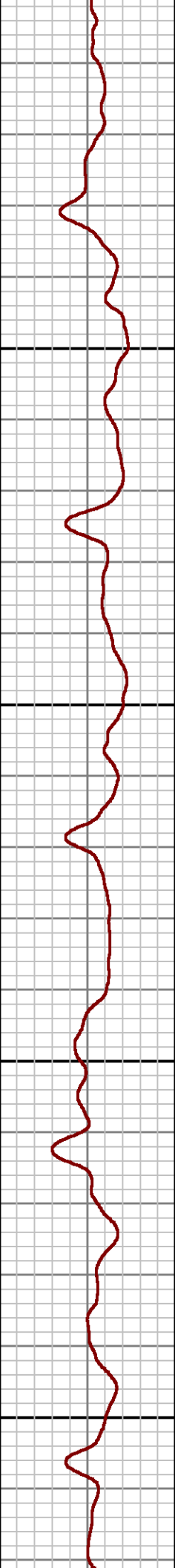
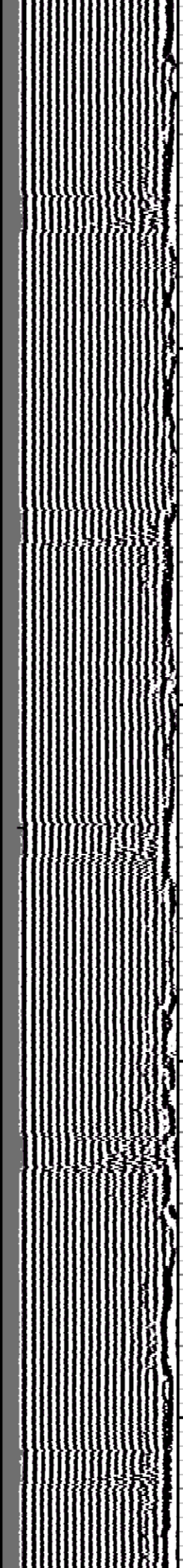
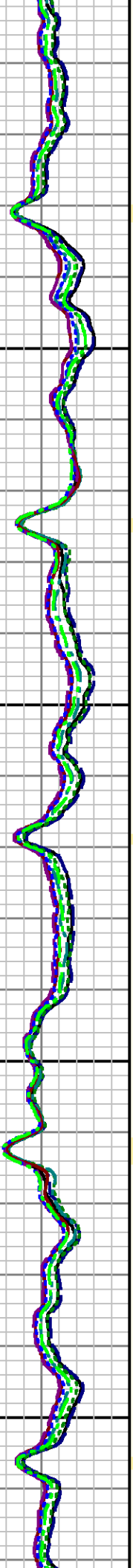


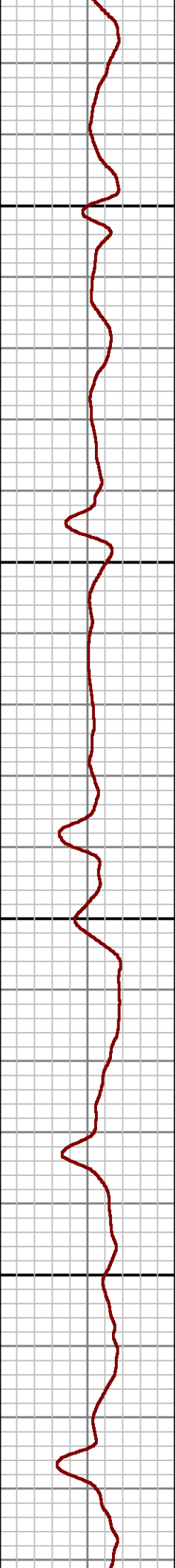
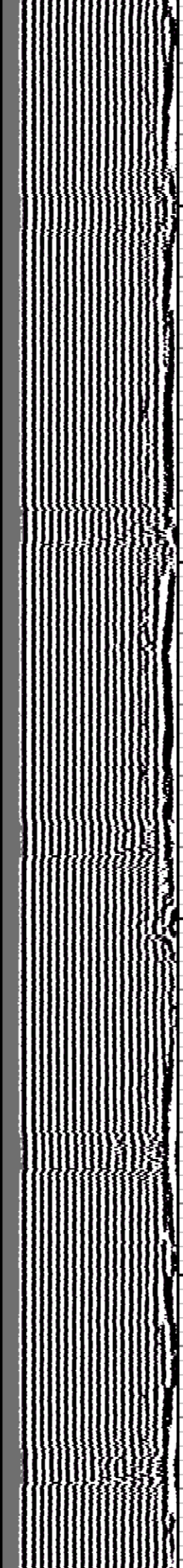
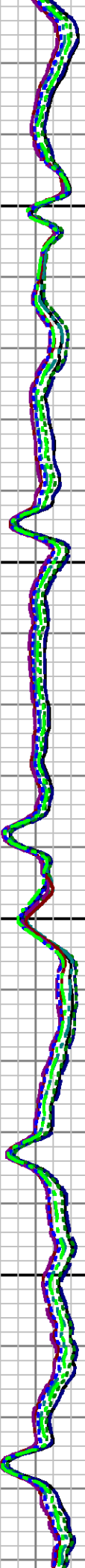






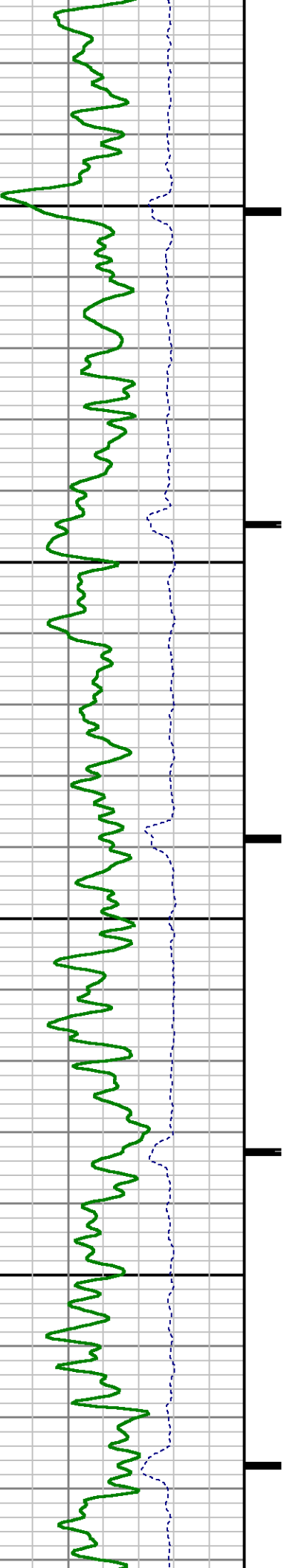


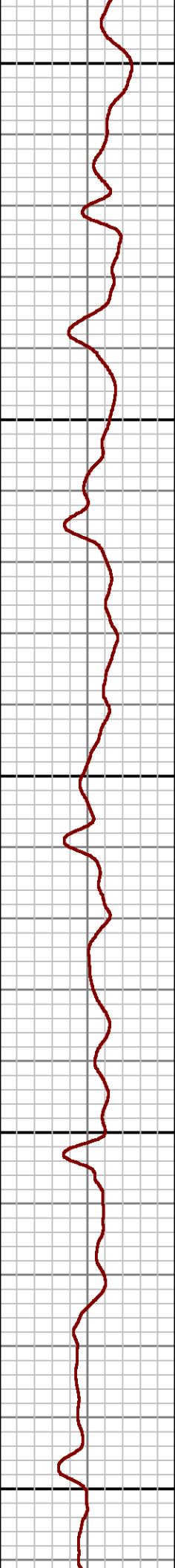
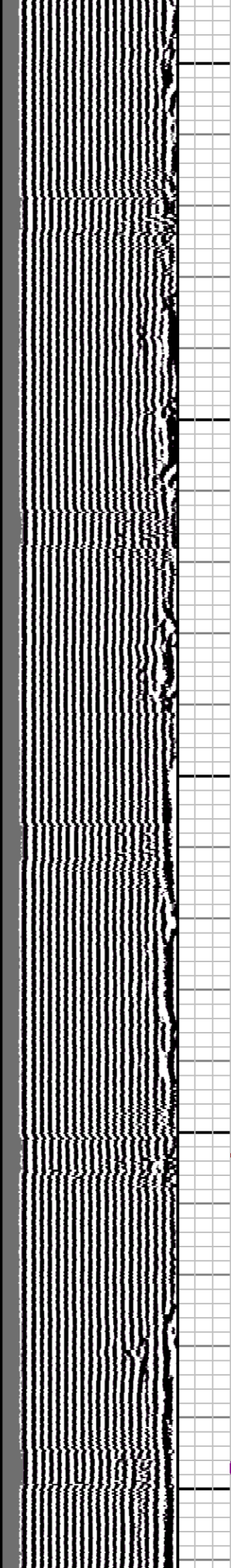
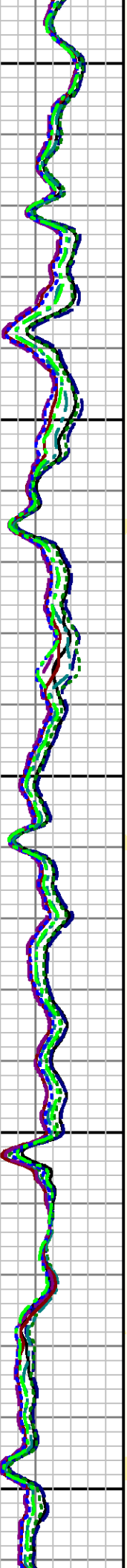
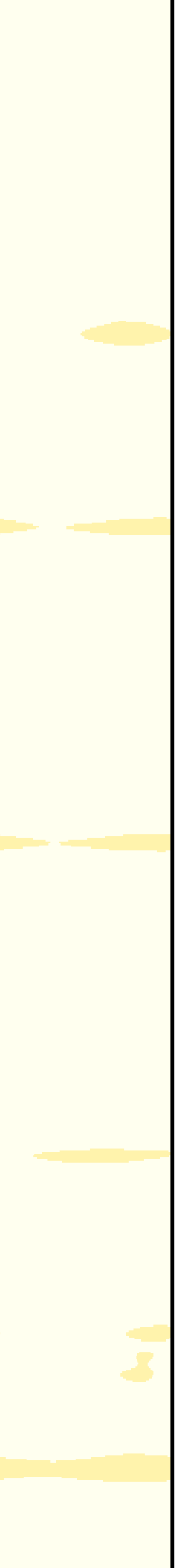




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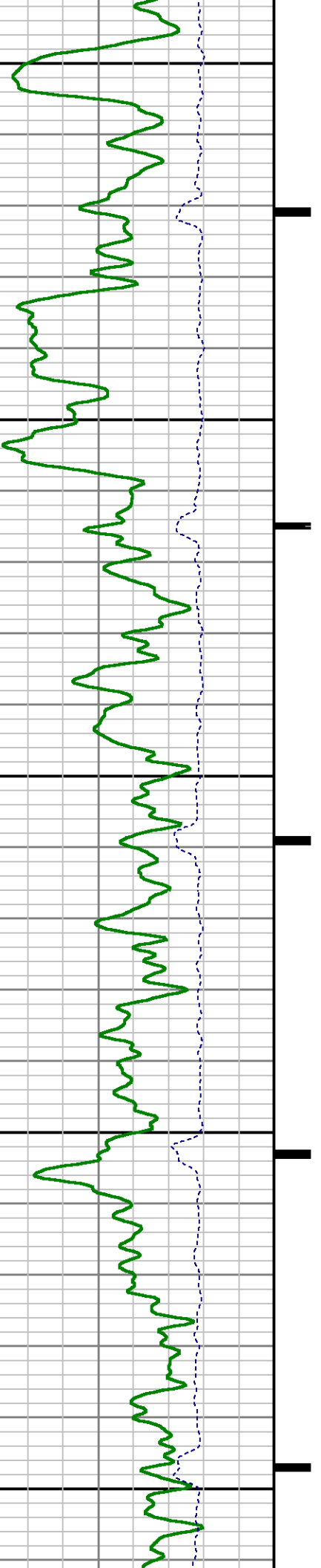
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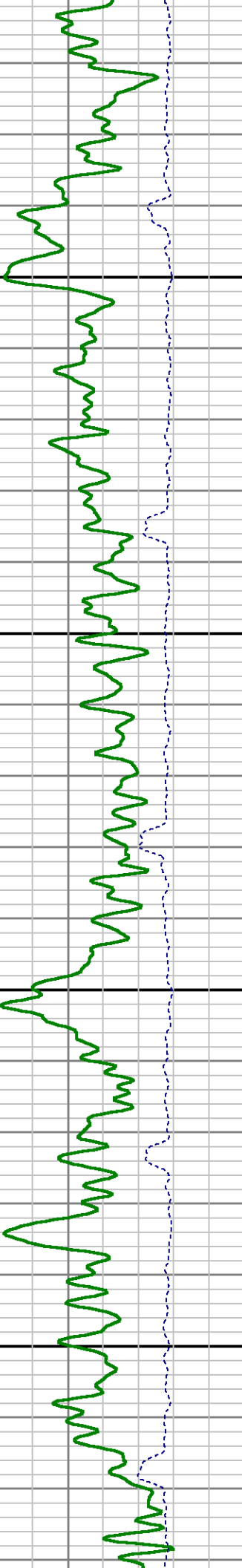
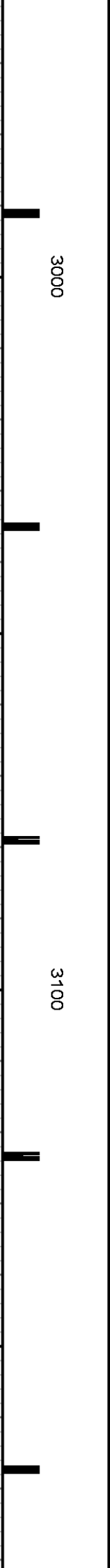
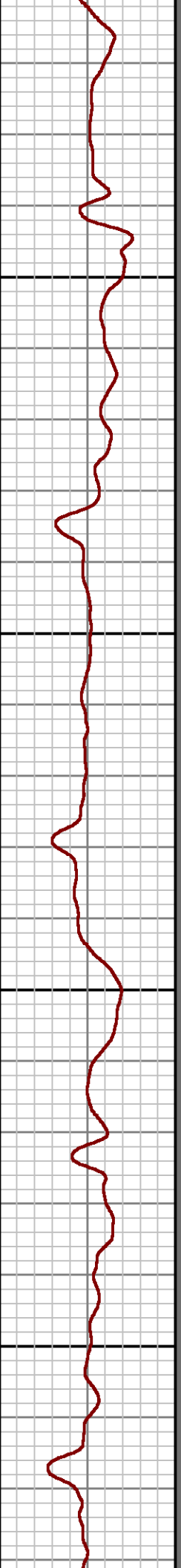
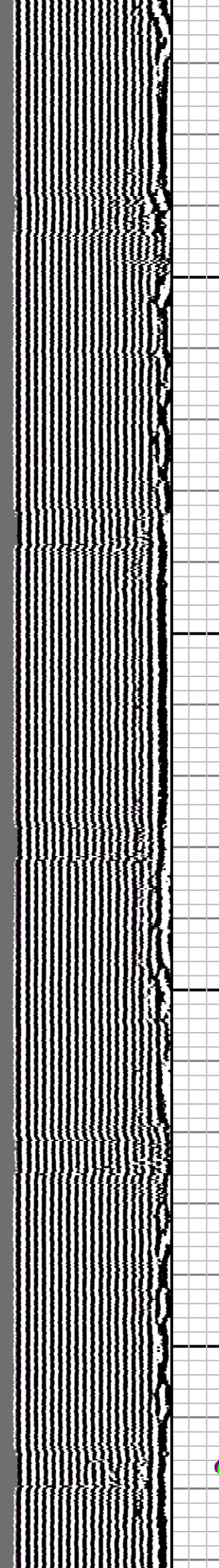
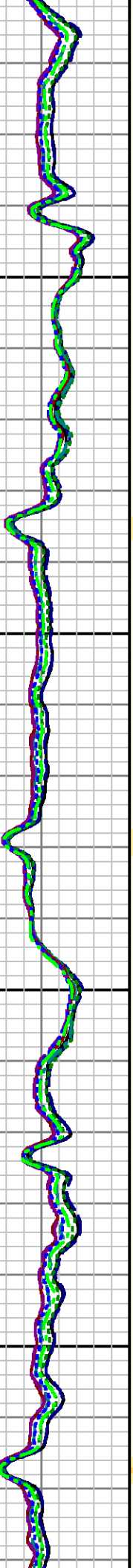


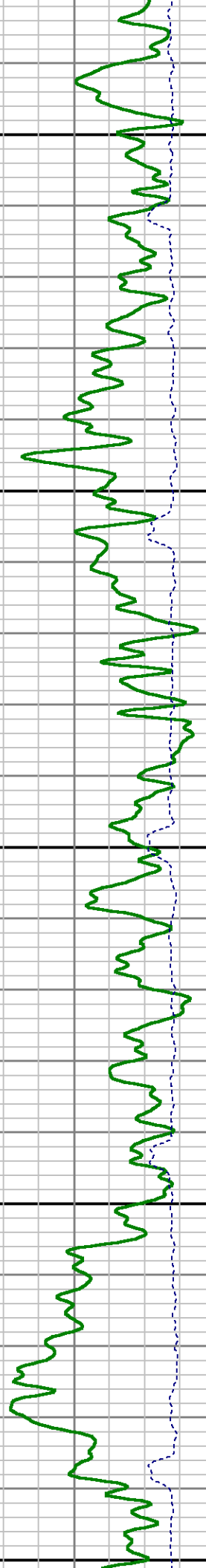
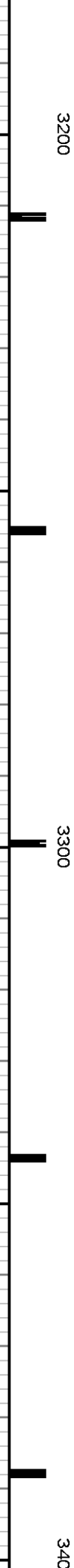
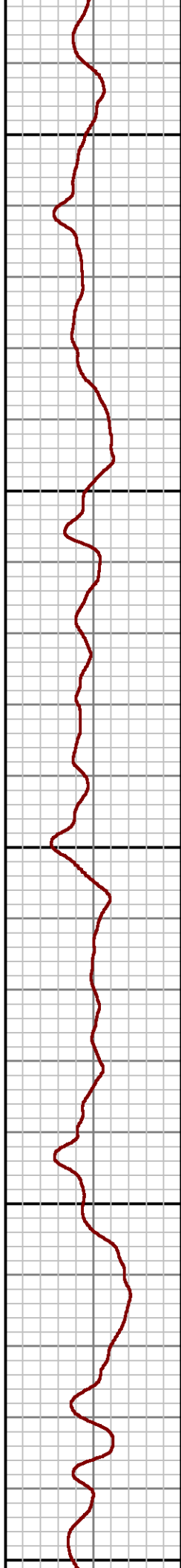
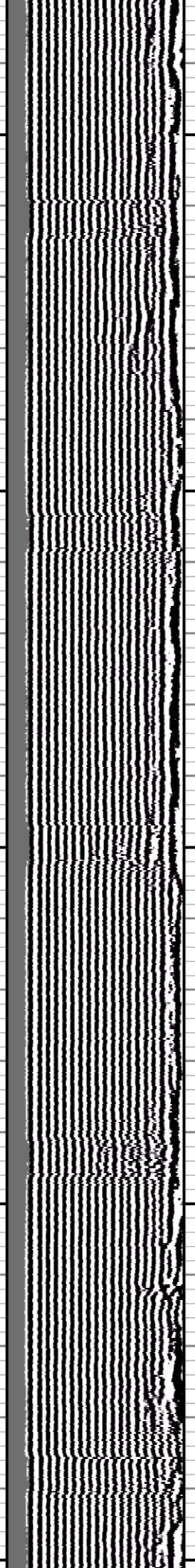
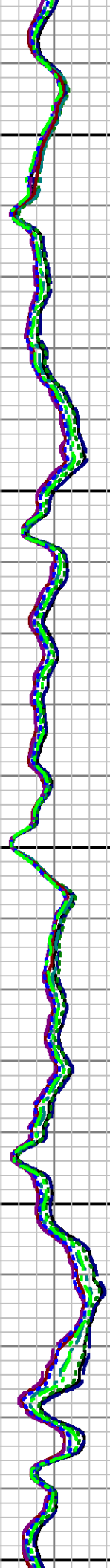
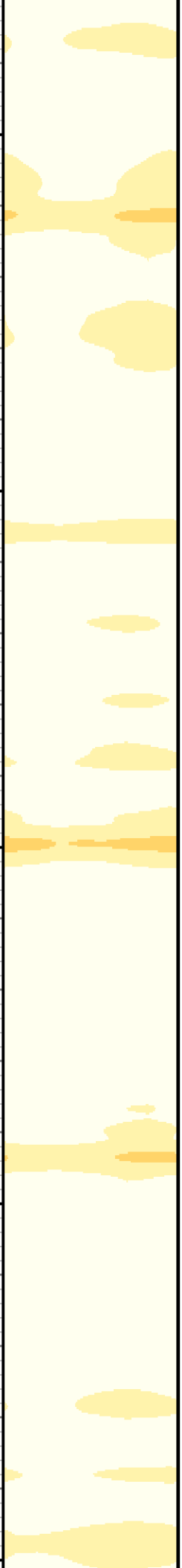


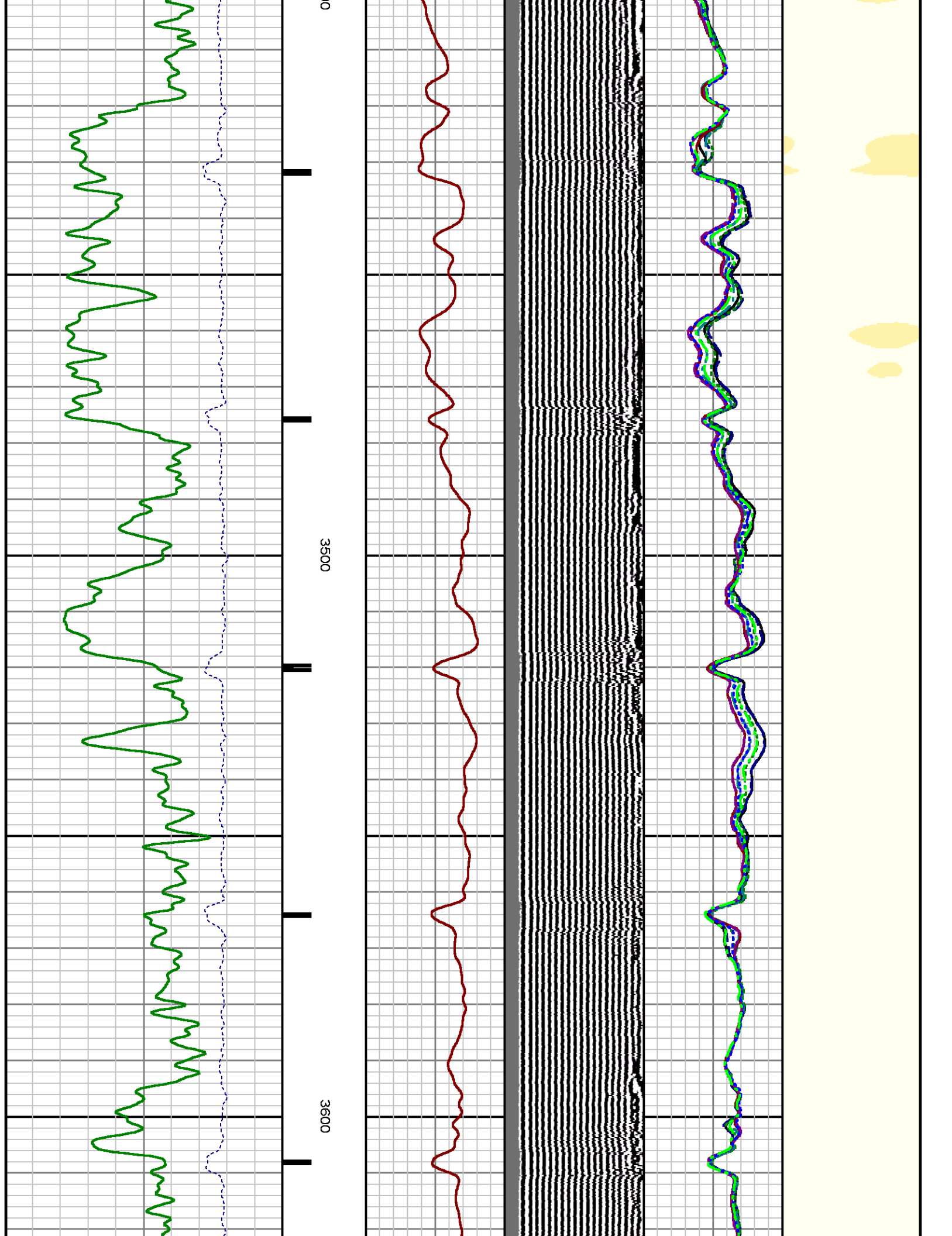
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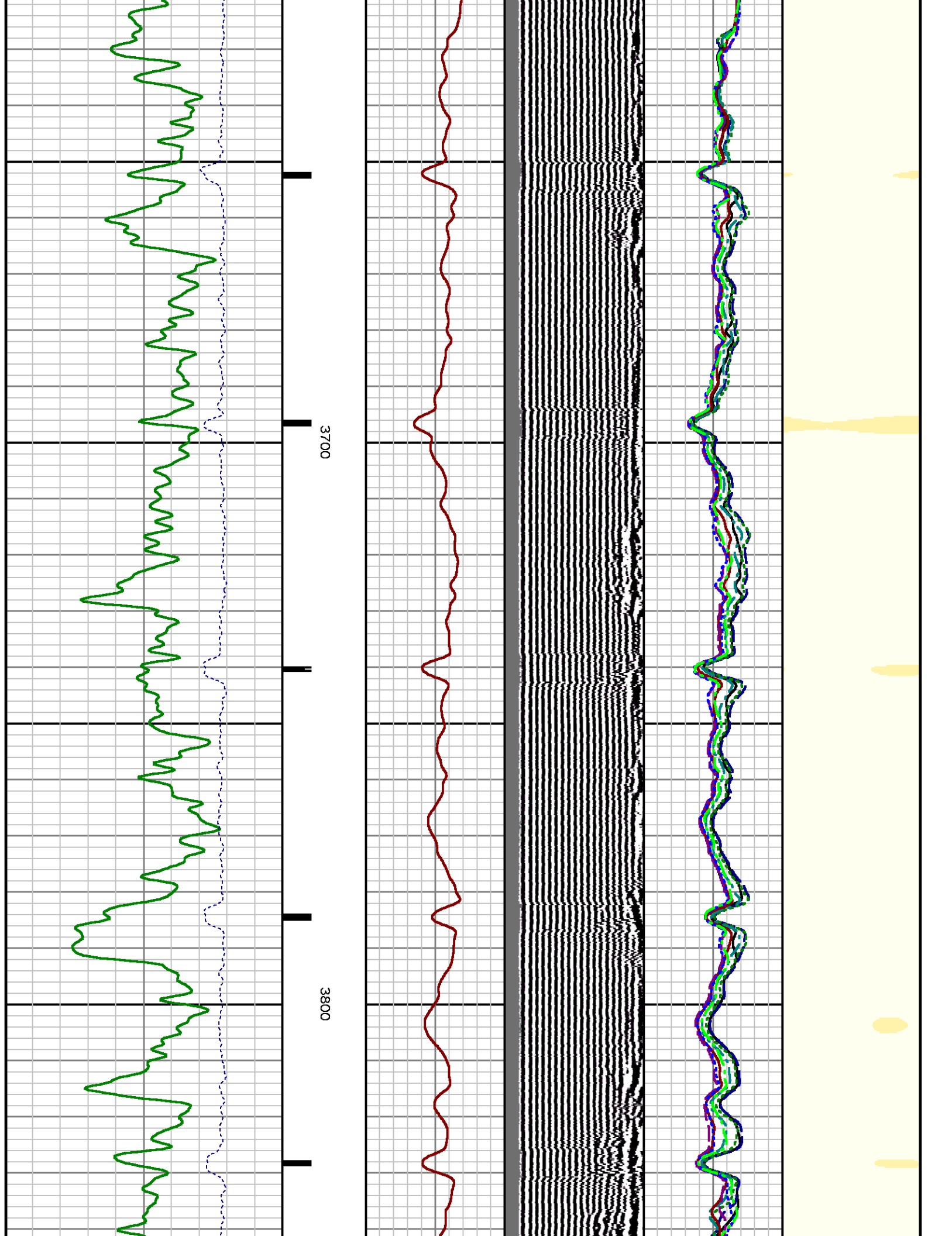
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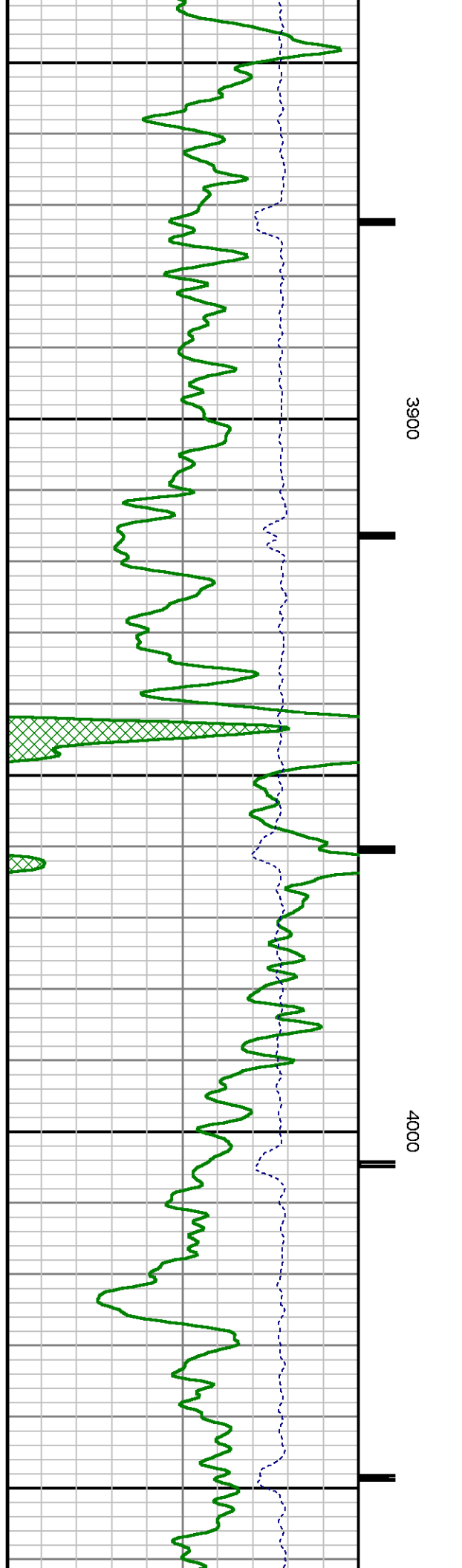
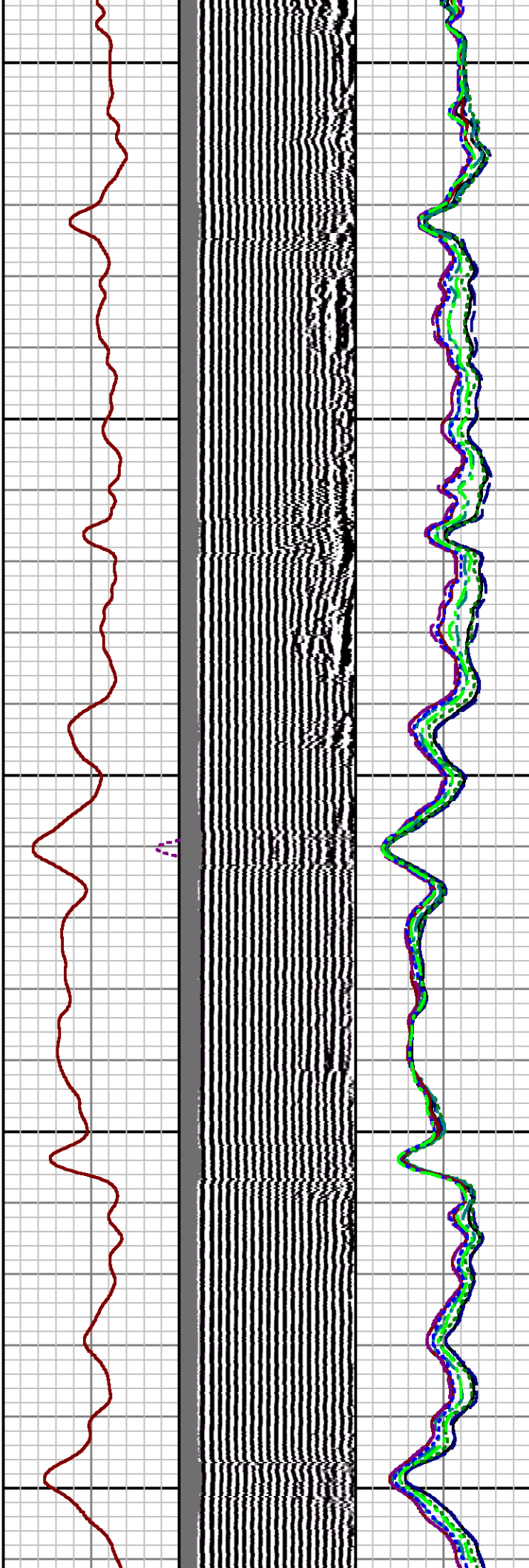
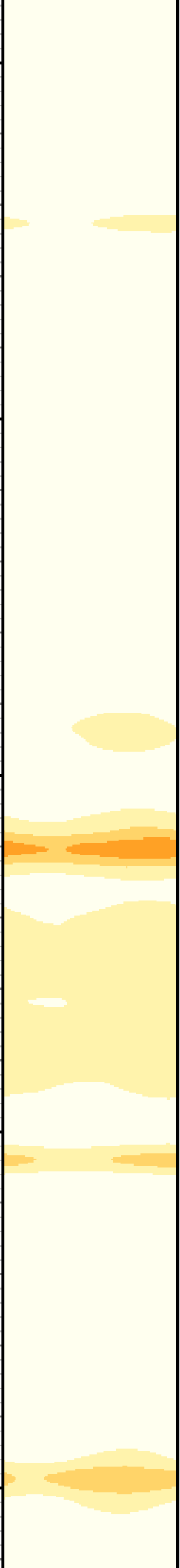


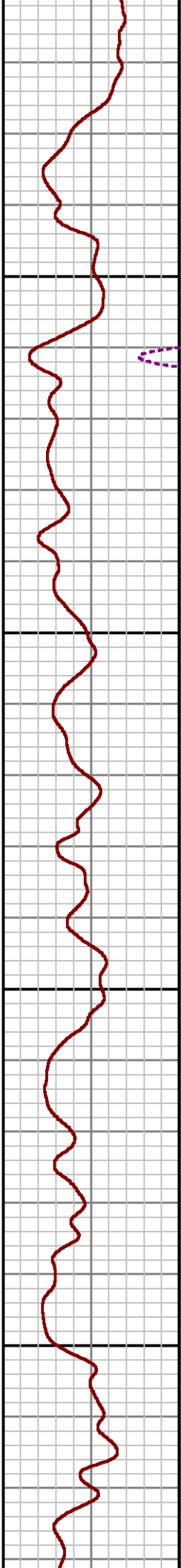
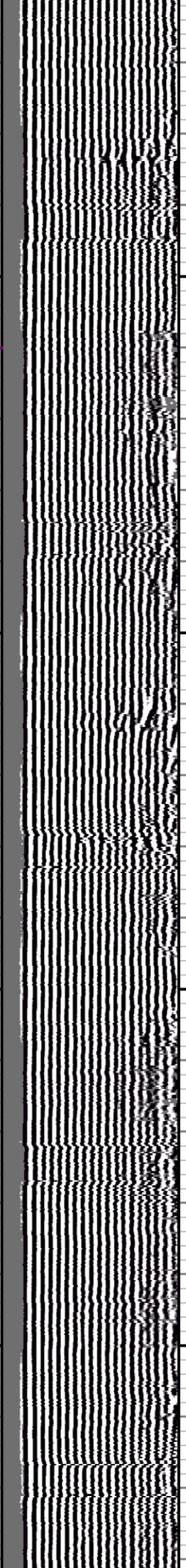
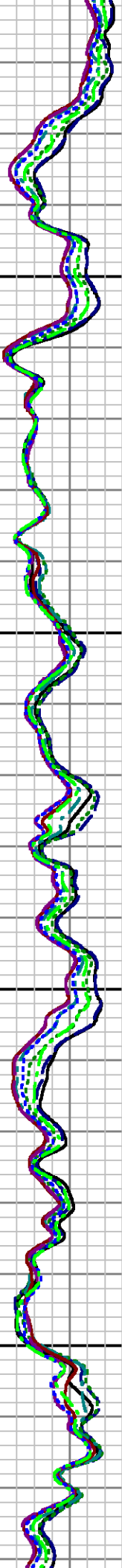
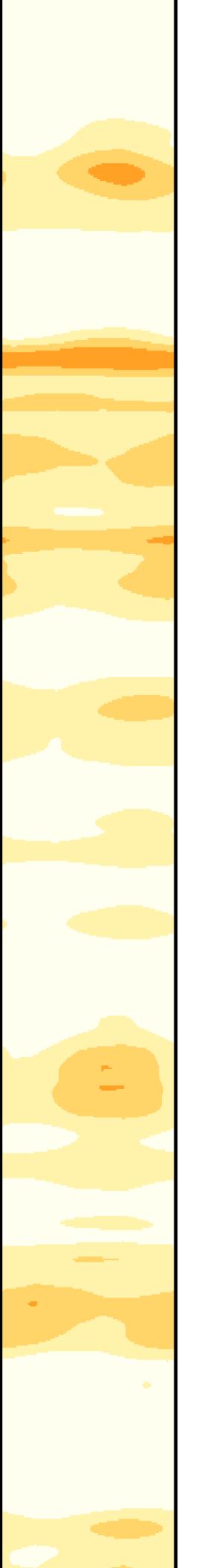






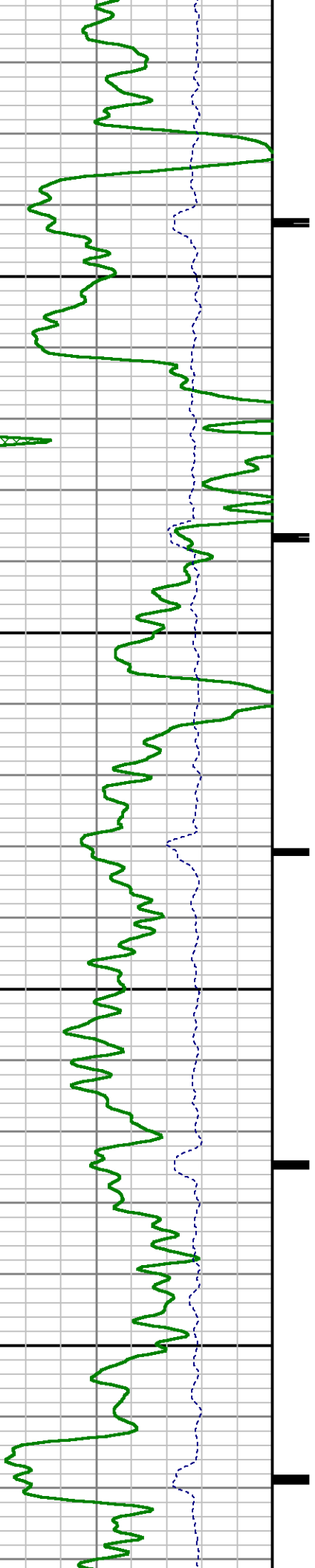


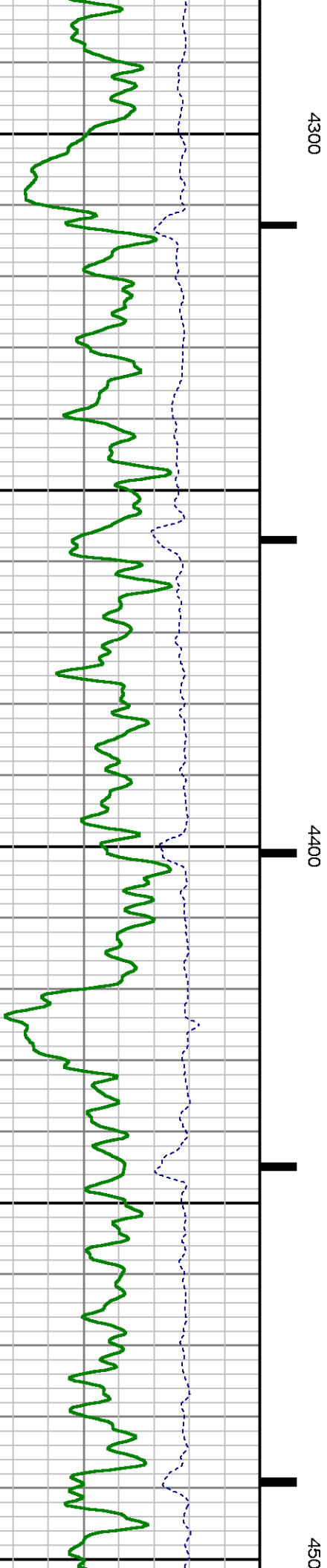
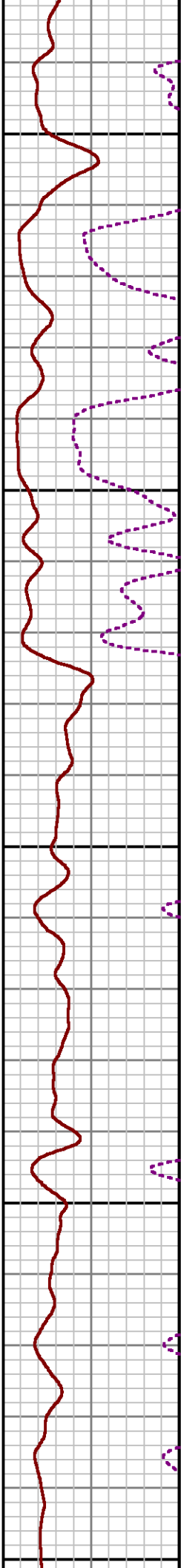
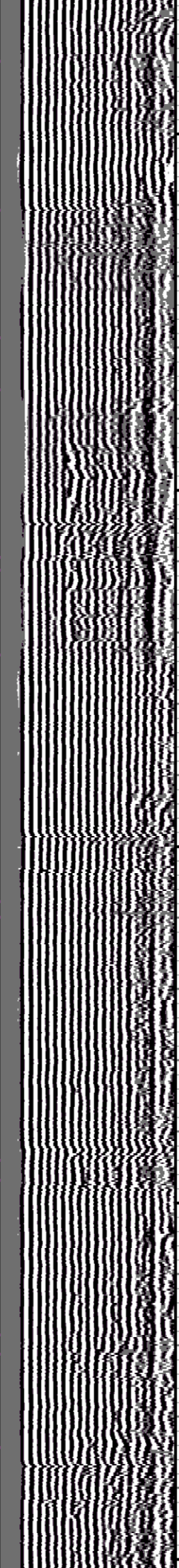
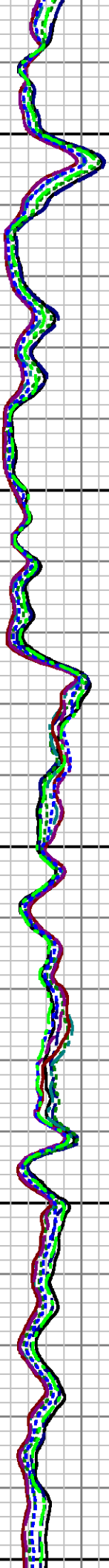
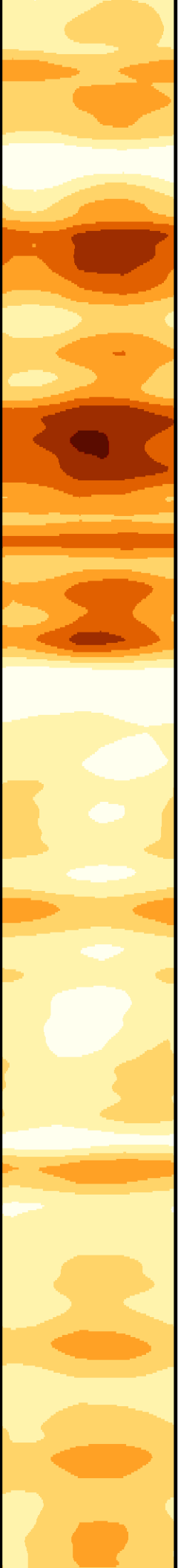


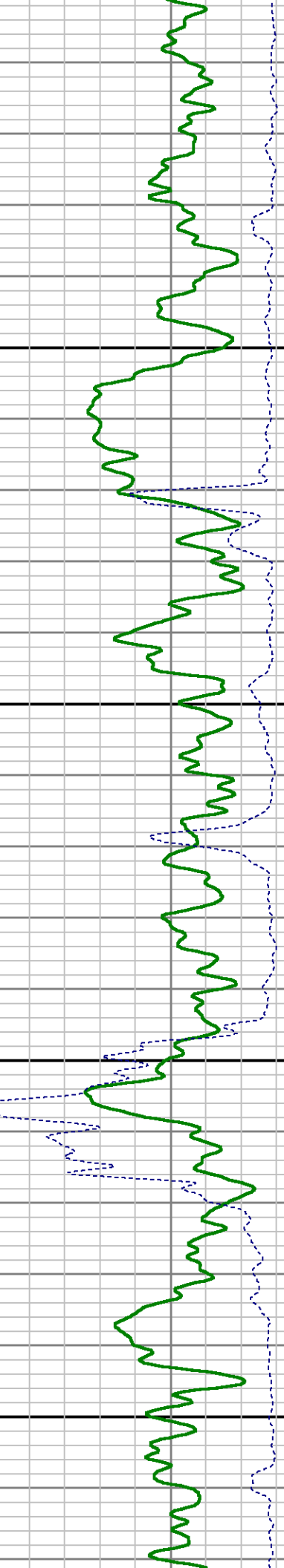
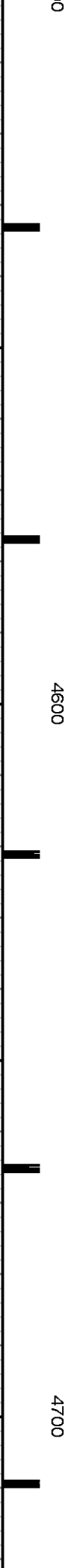
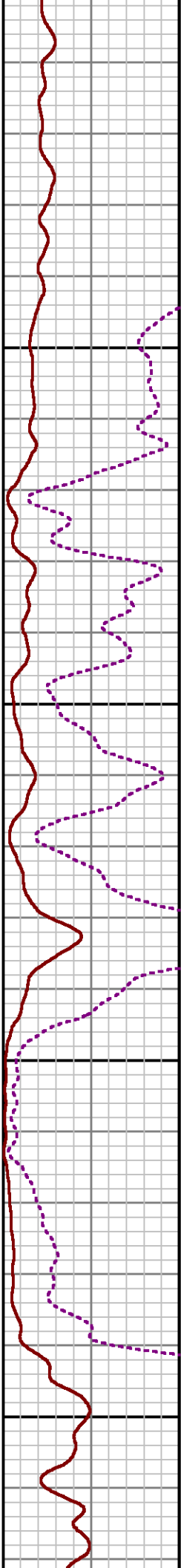
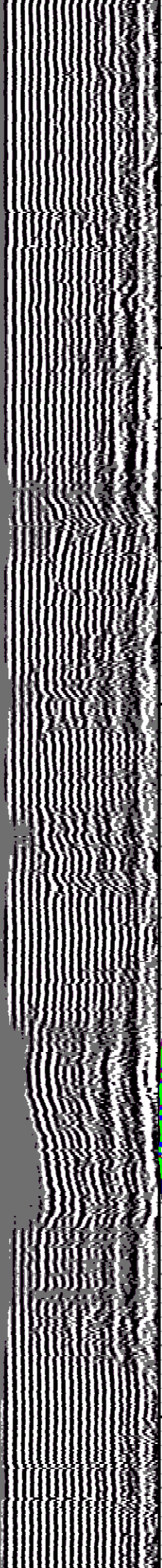
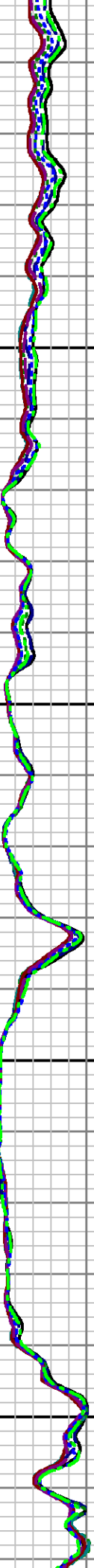
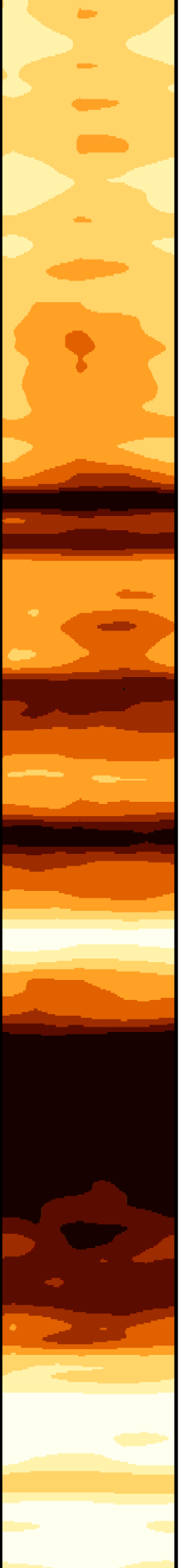


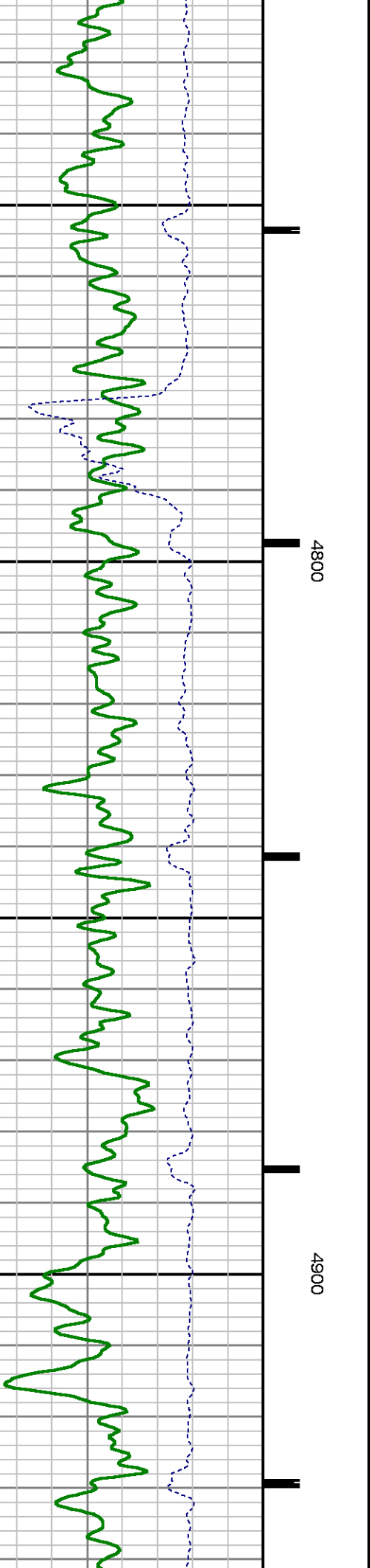
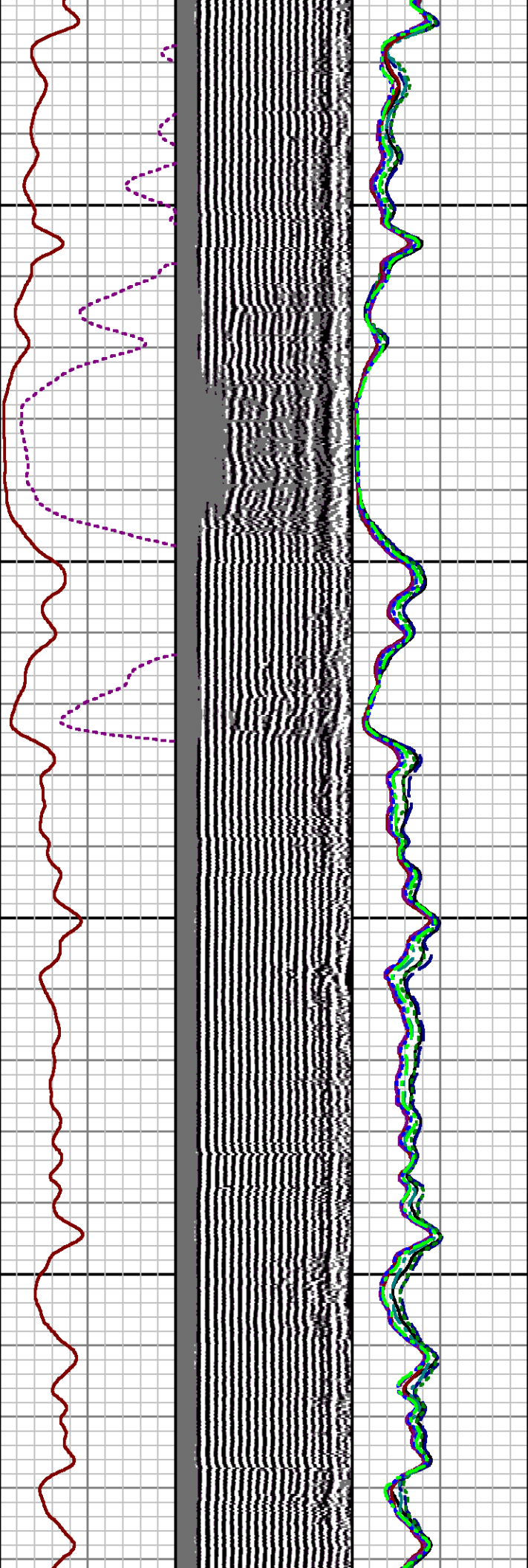
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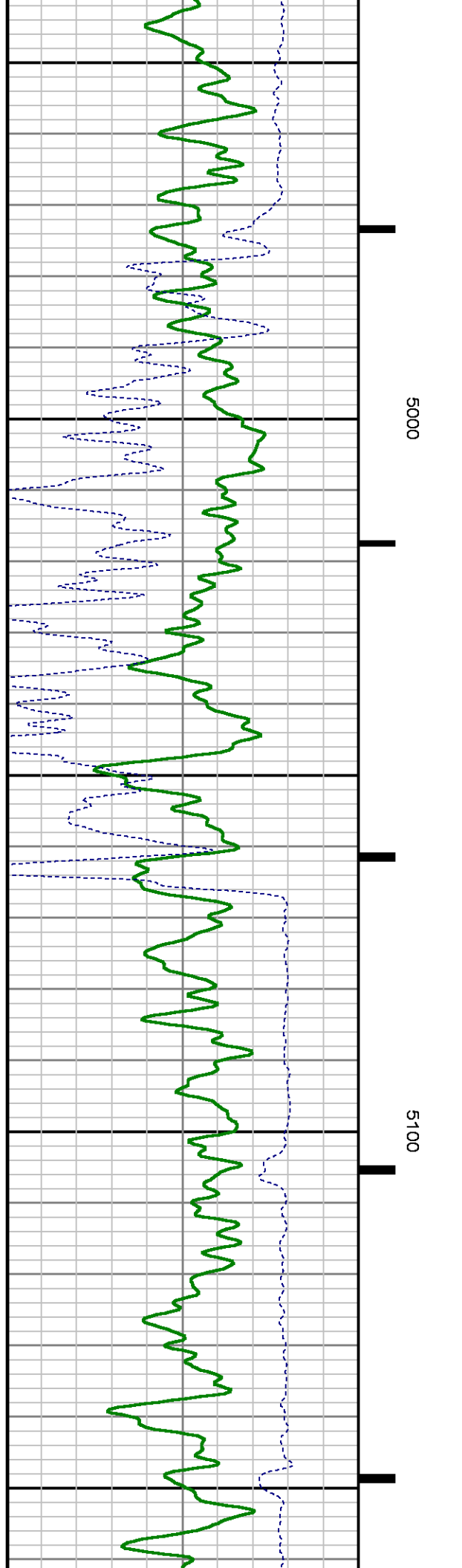
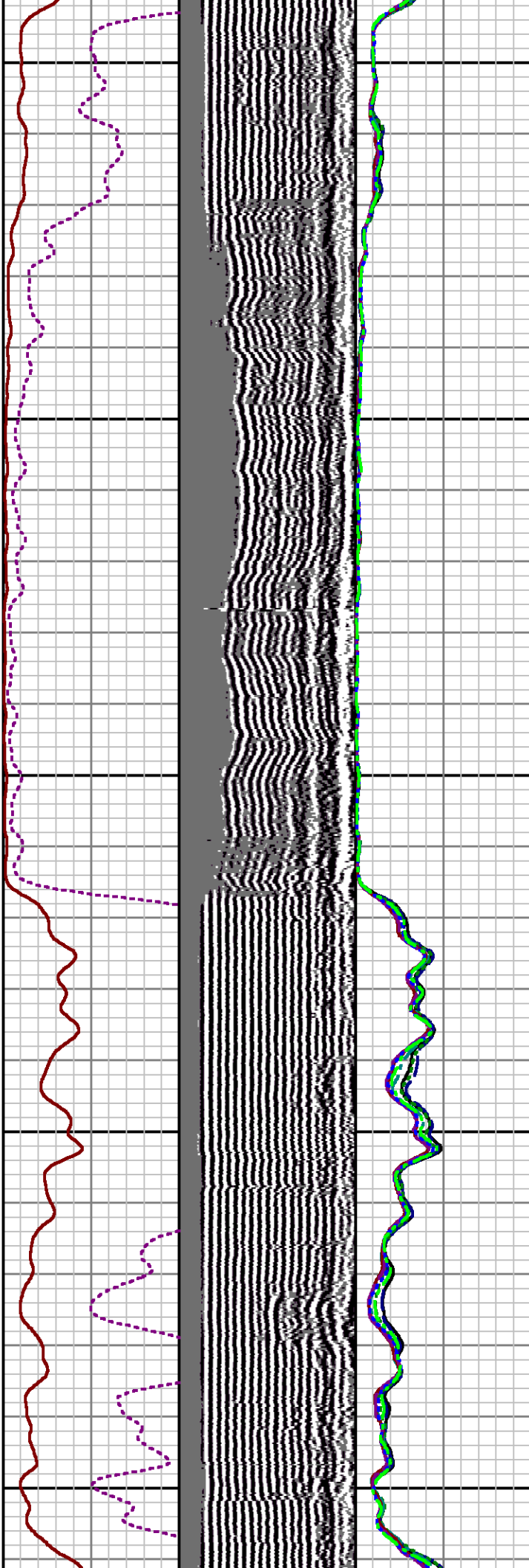
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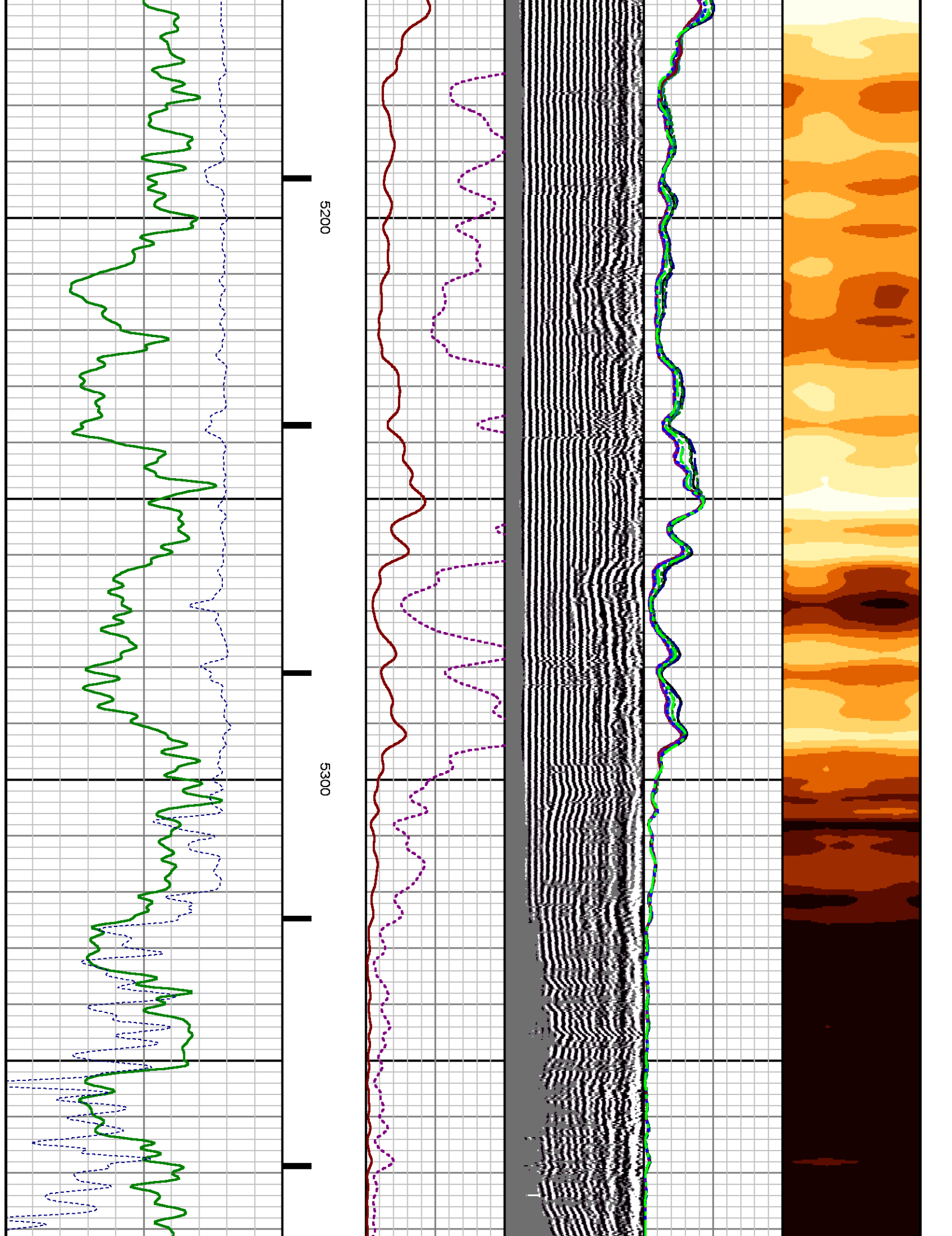


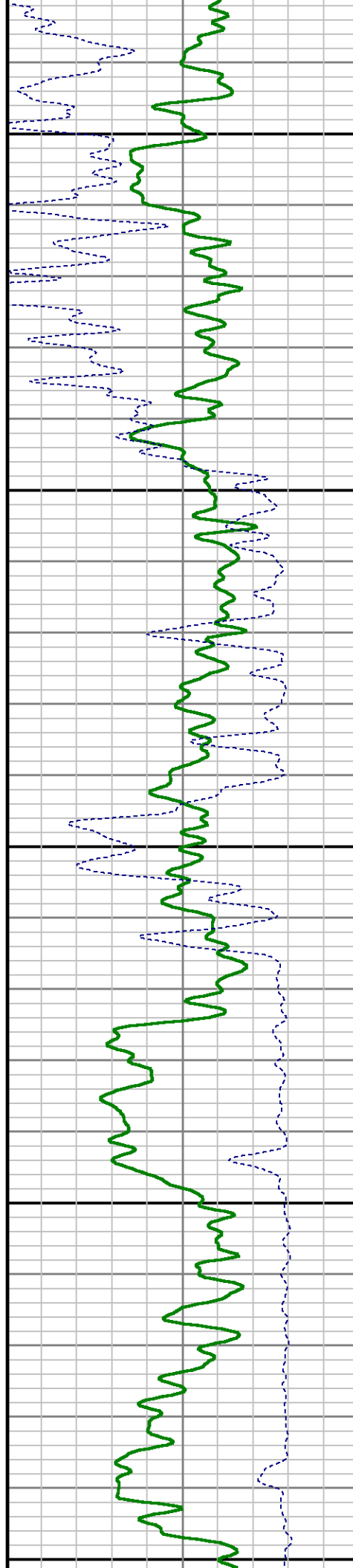
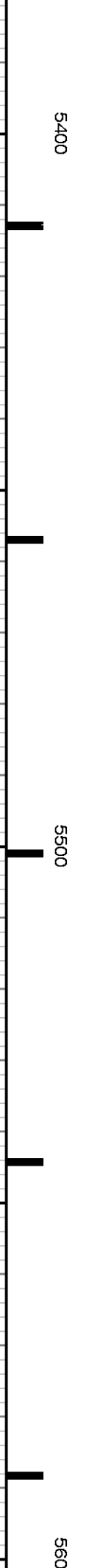
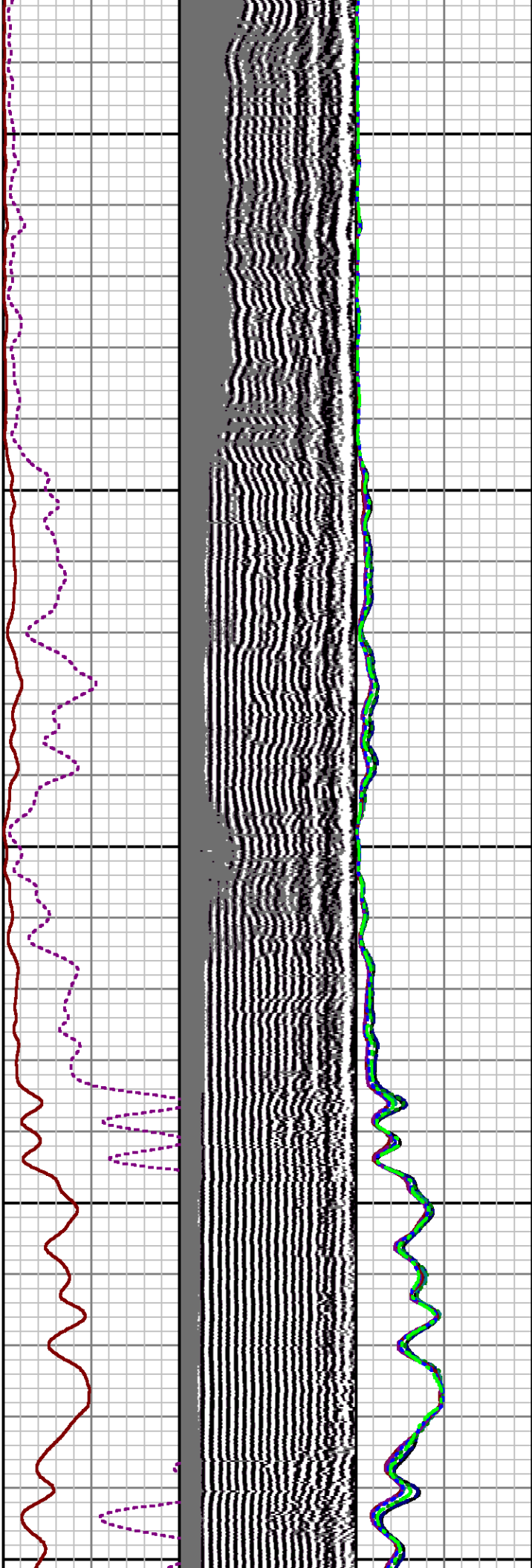


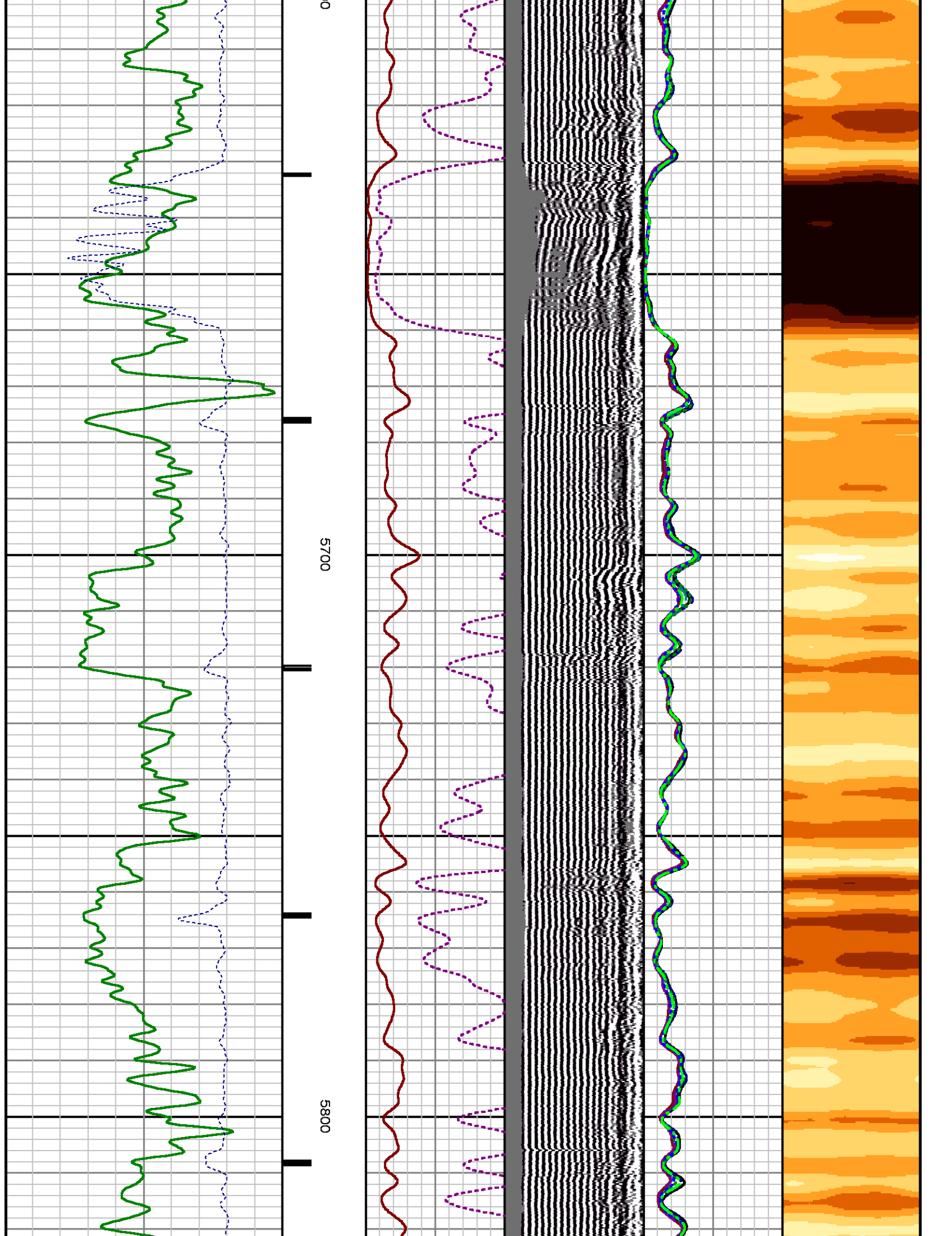


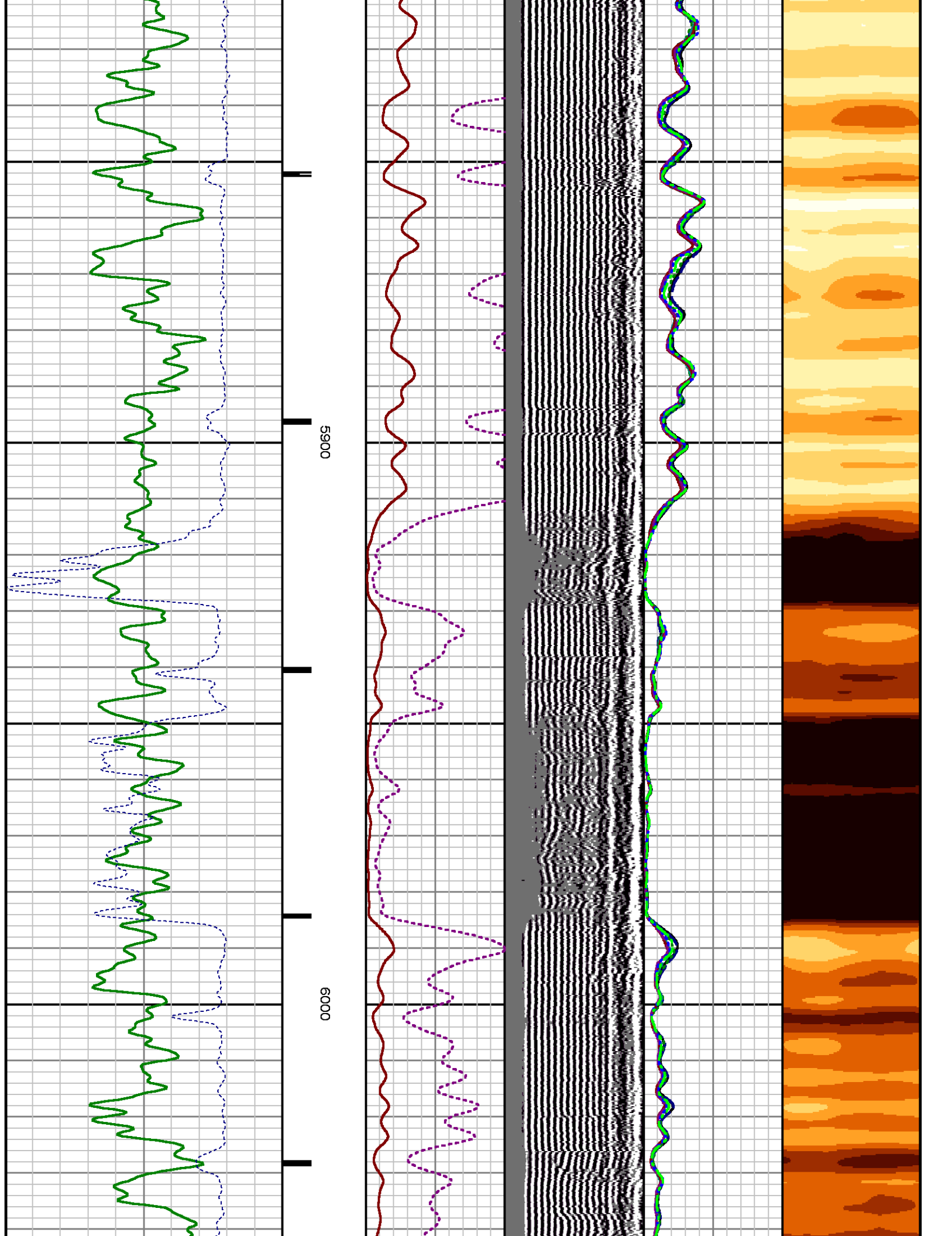


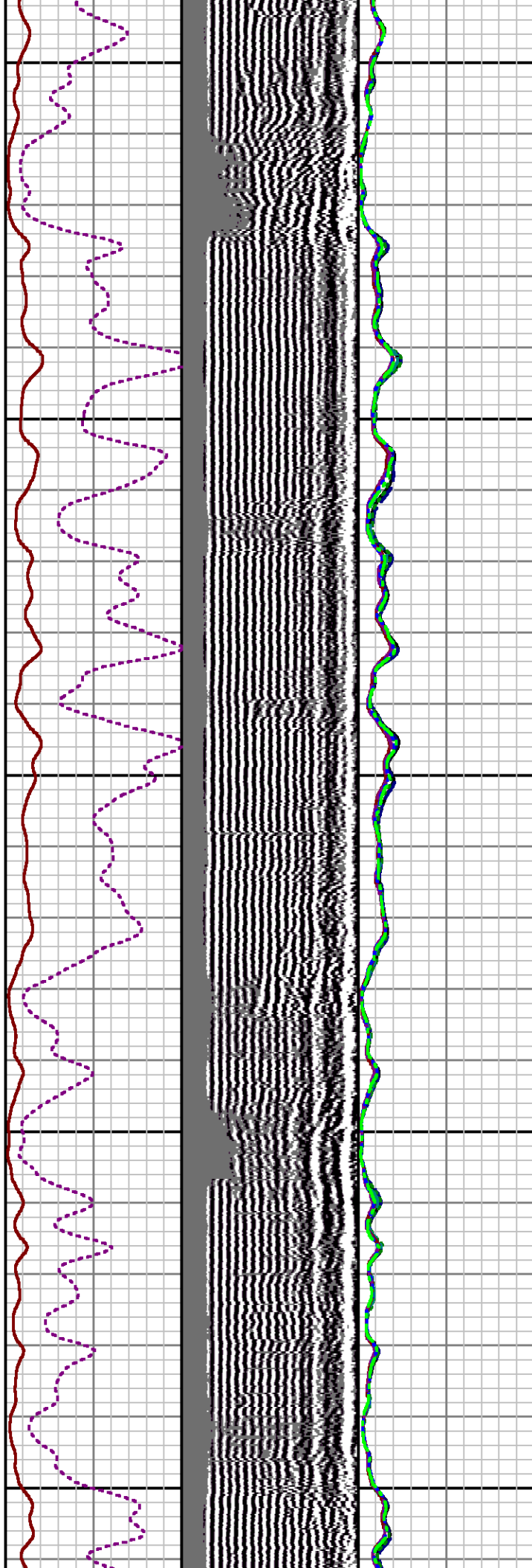






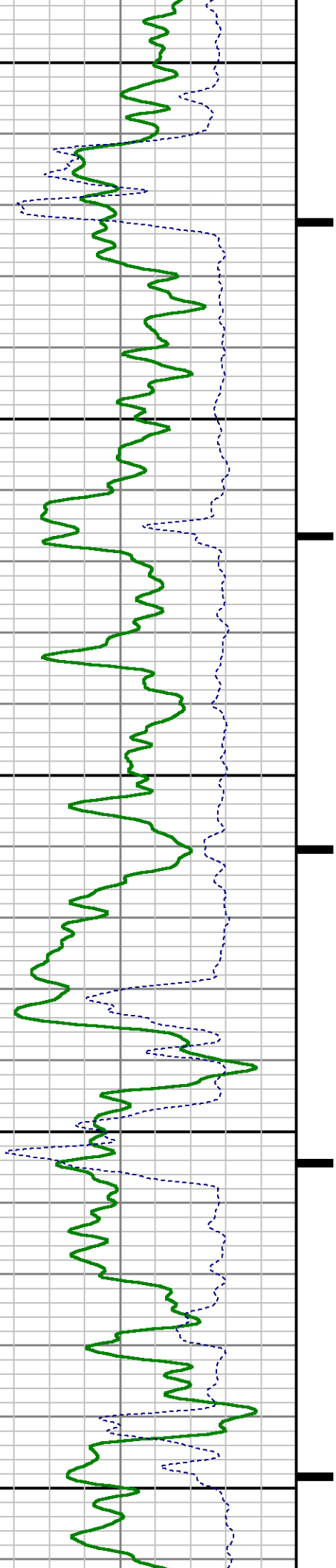


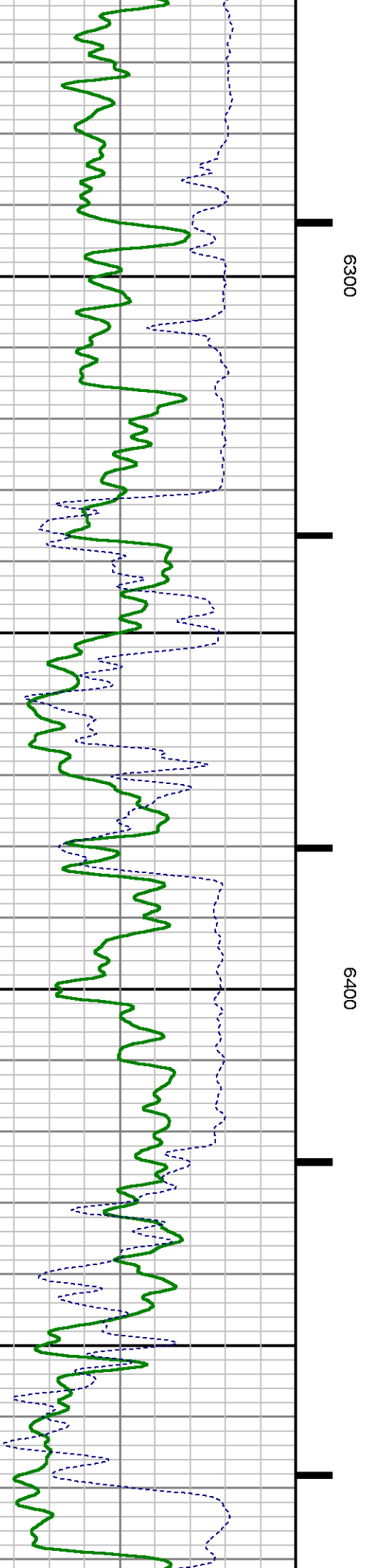
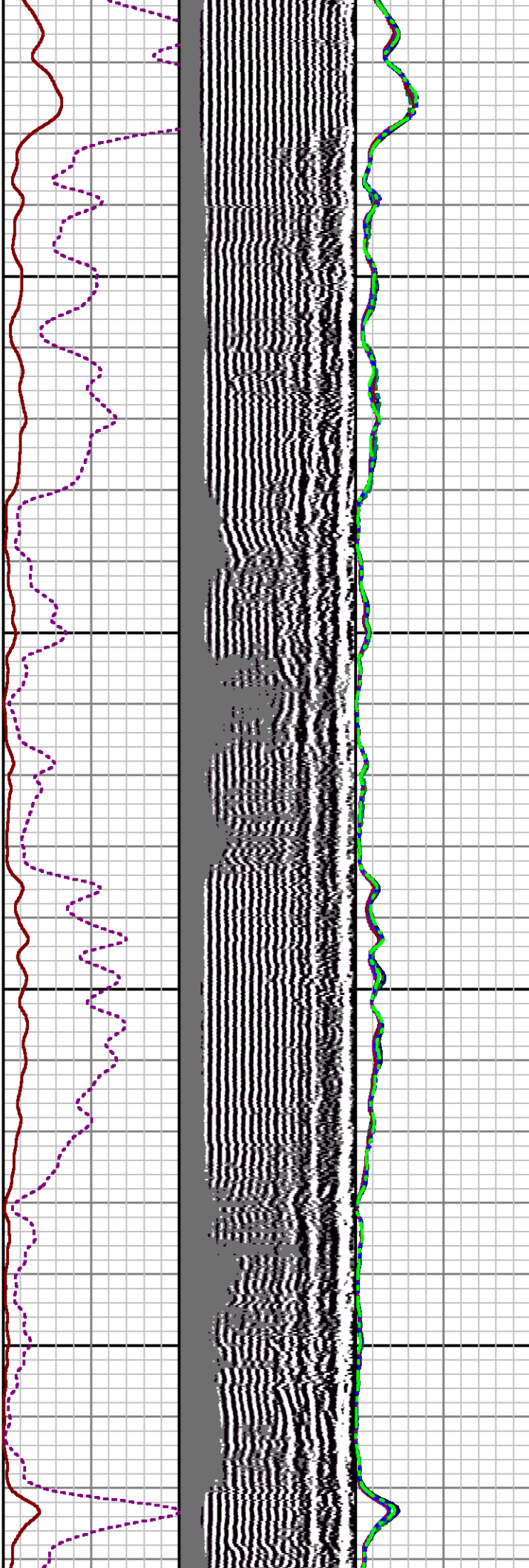


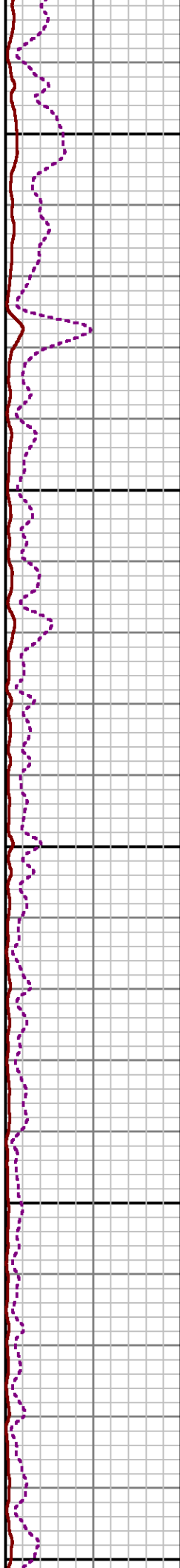
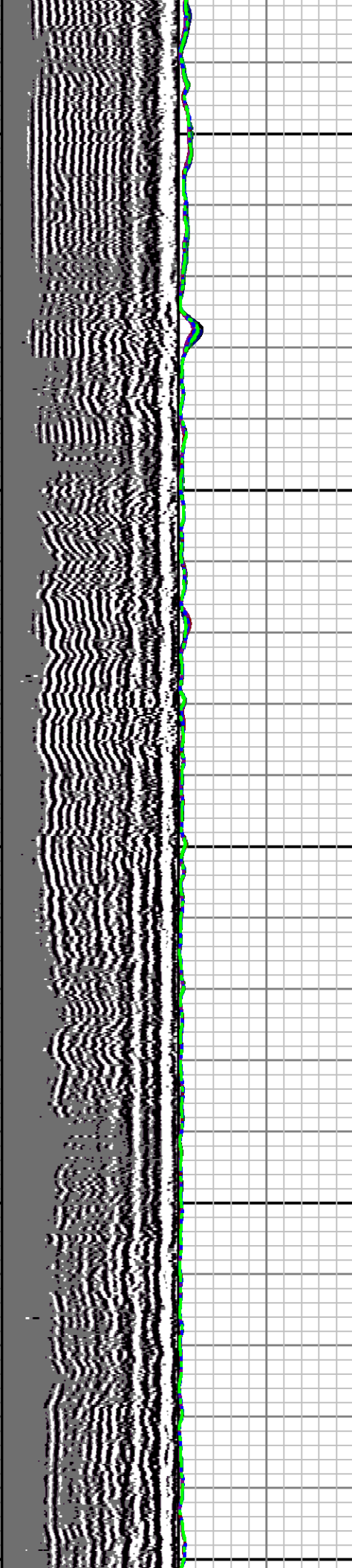
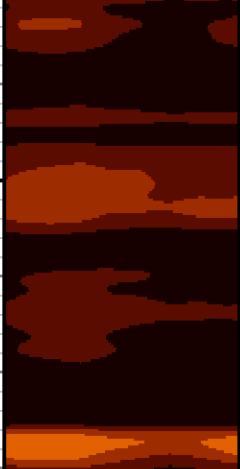


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6200



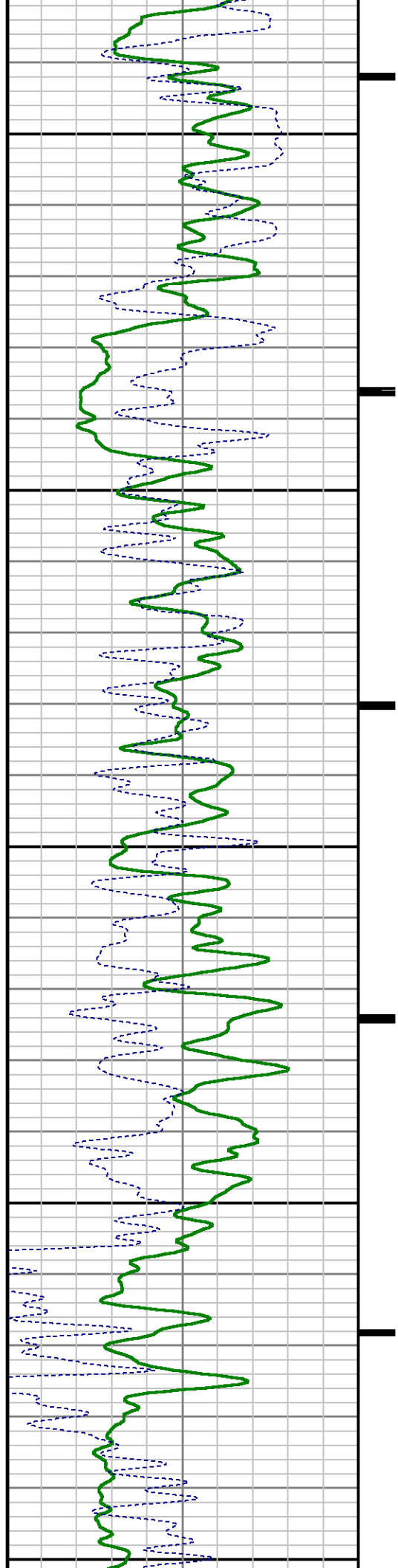


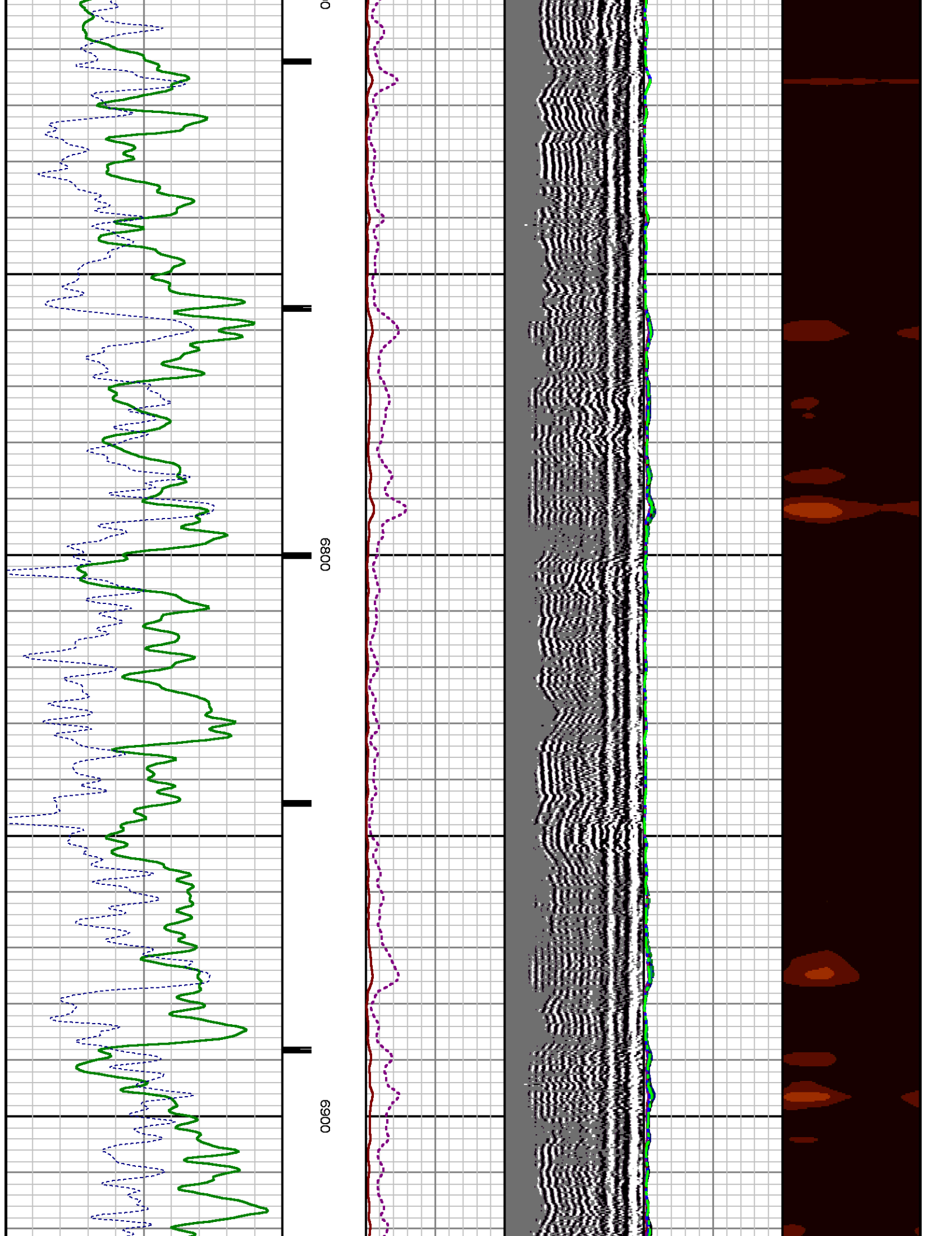


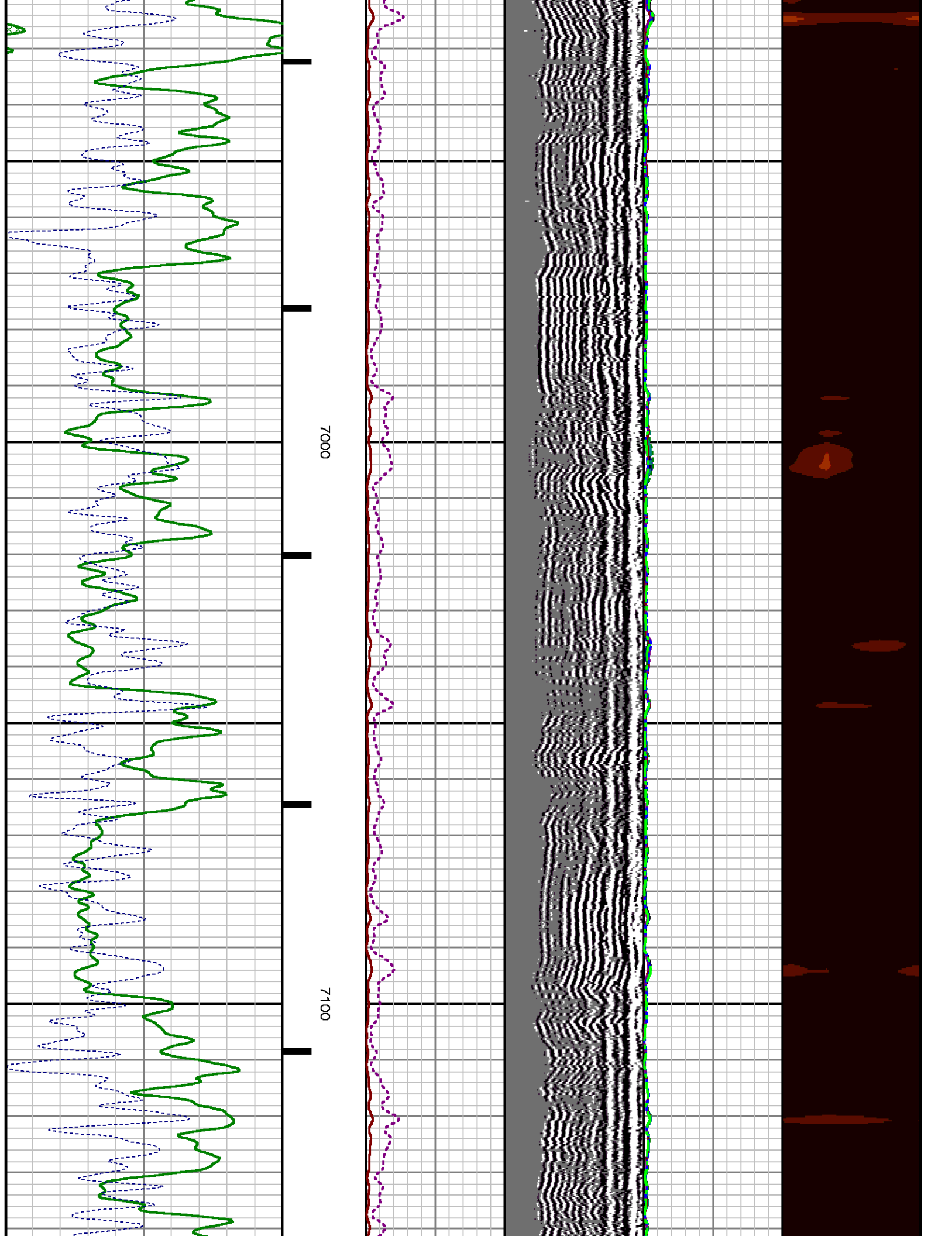
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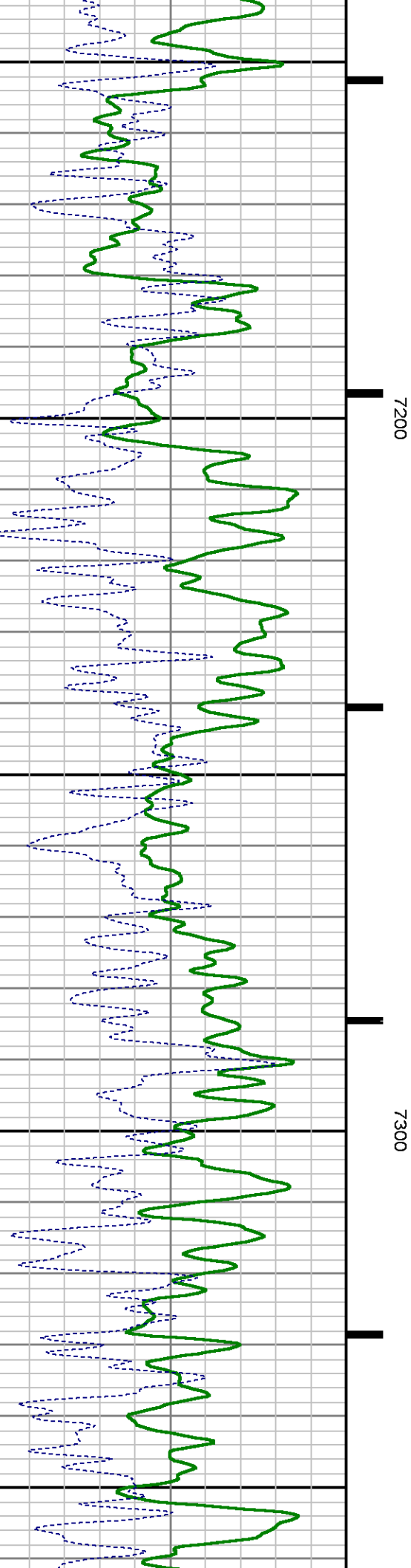
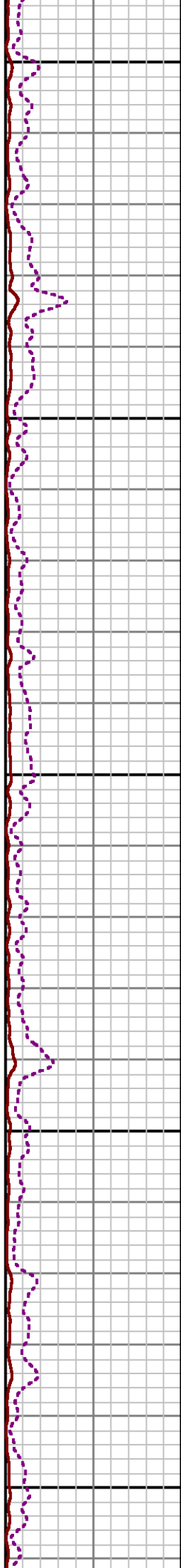
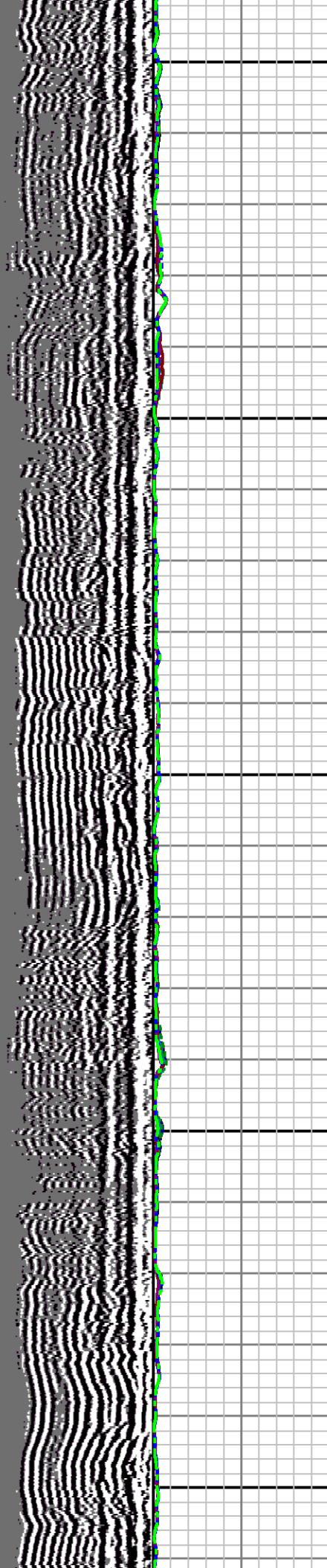
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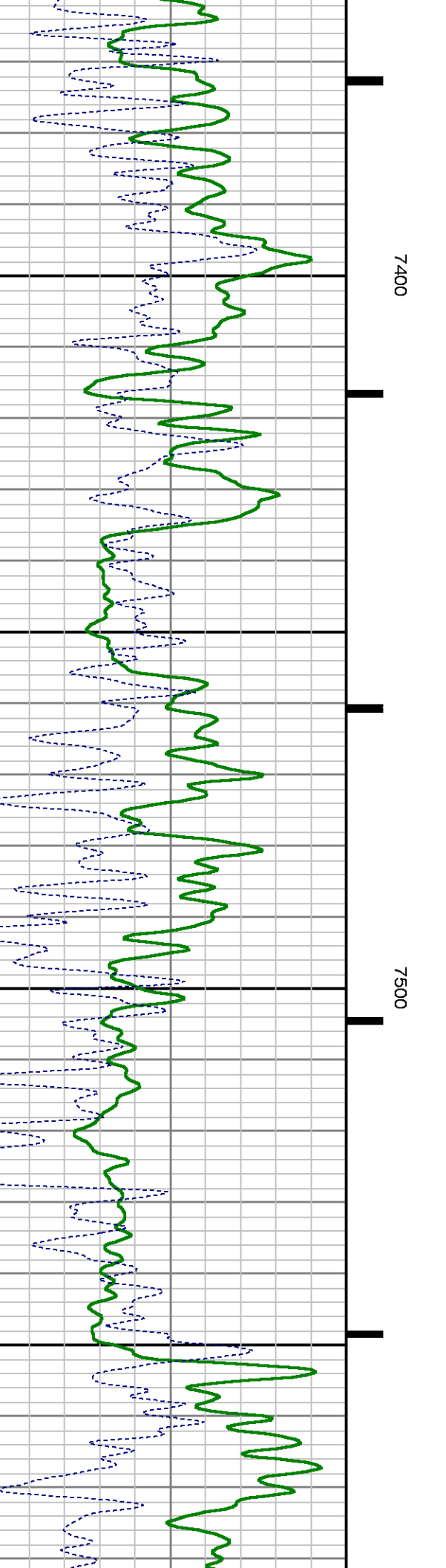
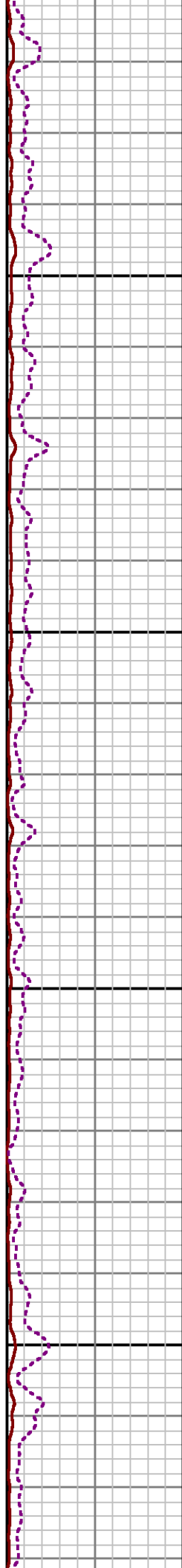
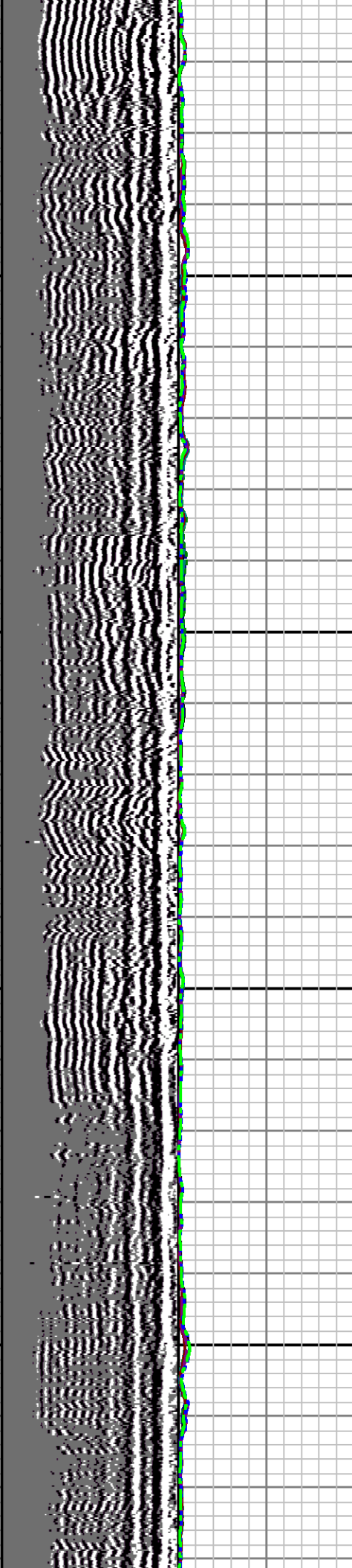
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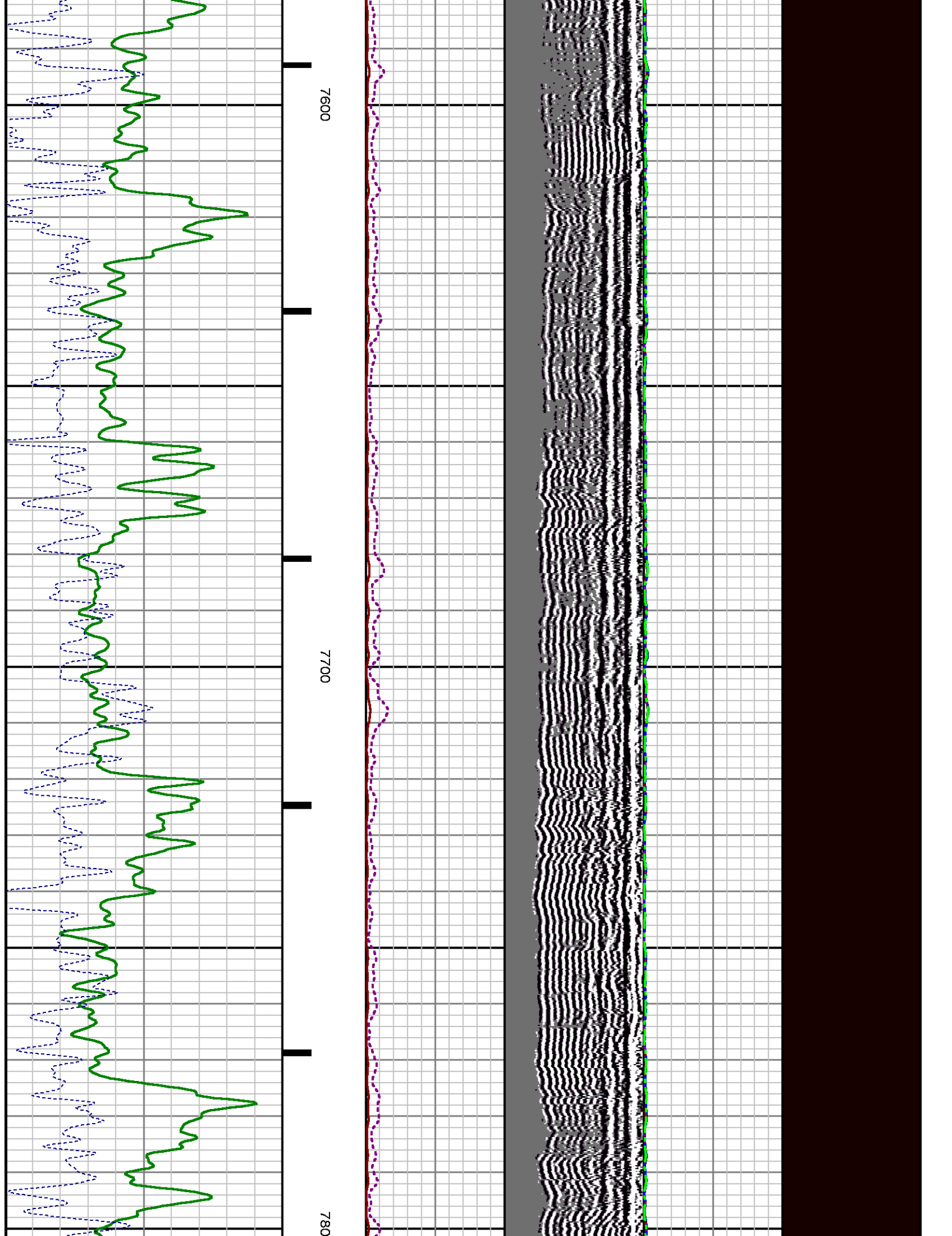


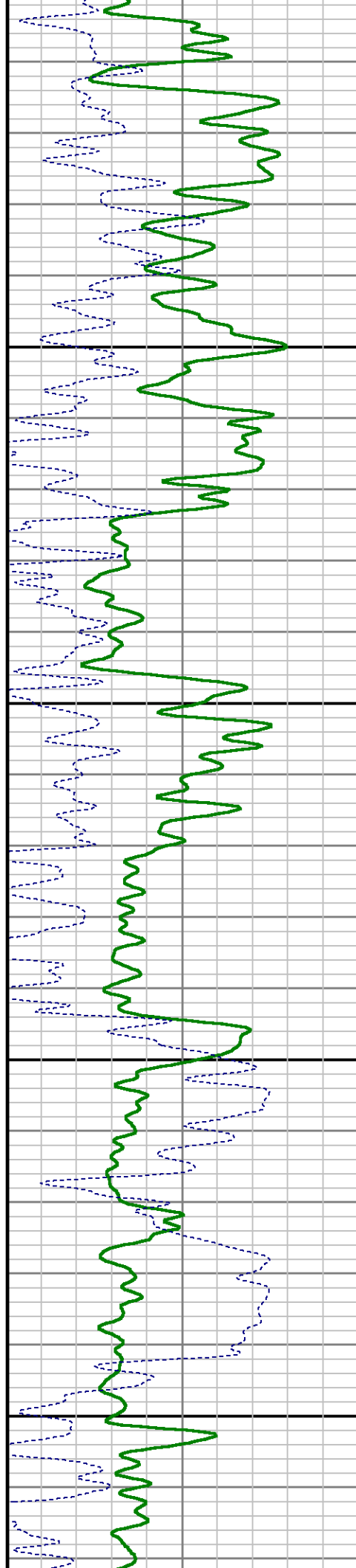
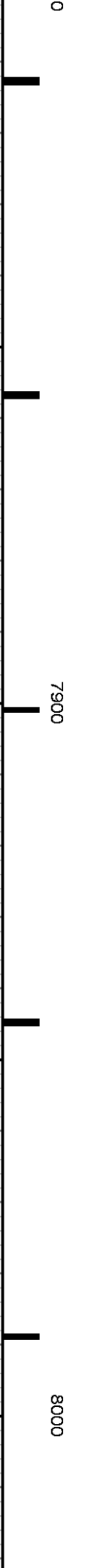
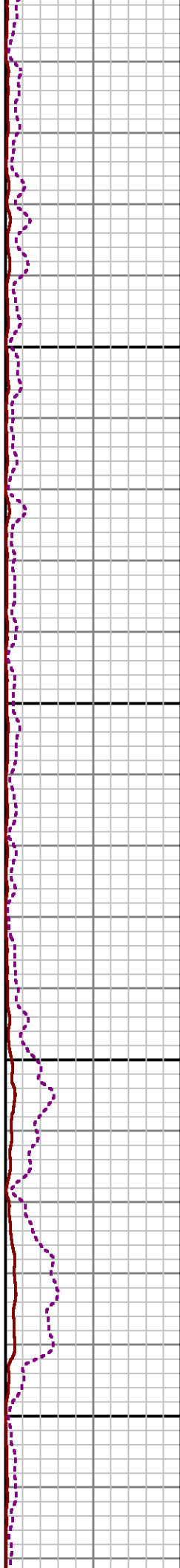
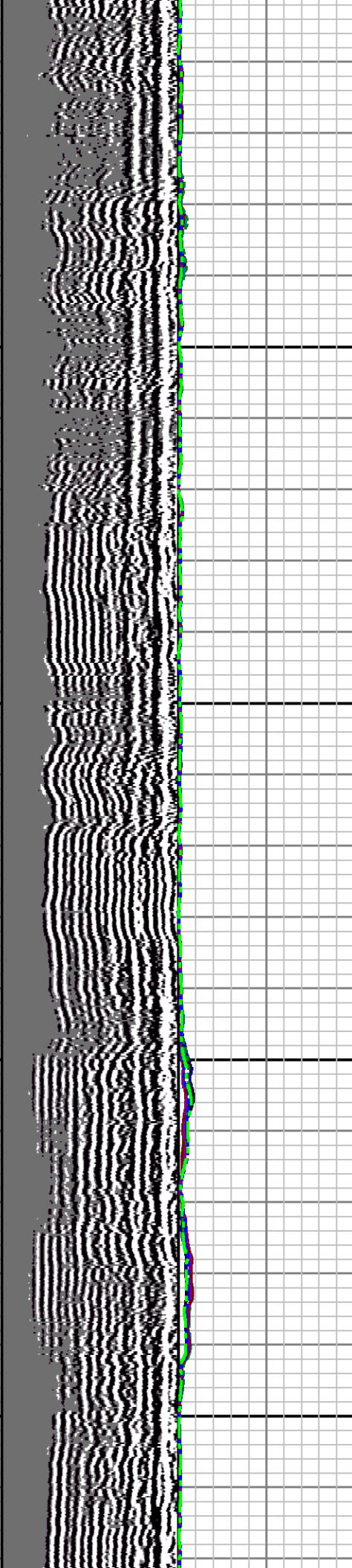


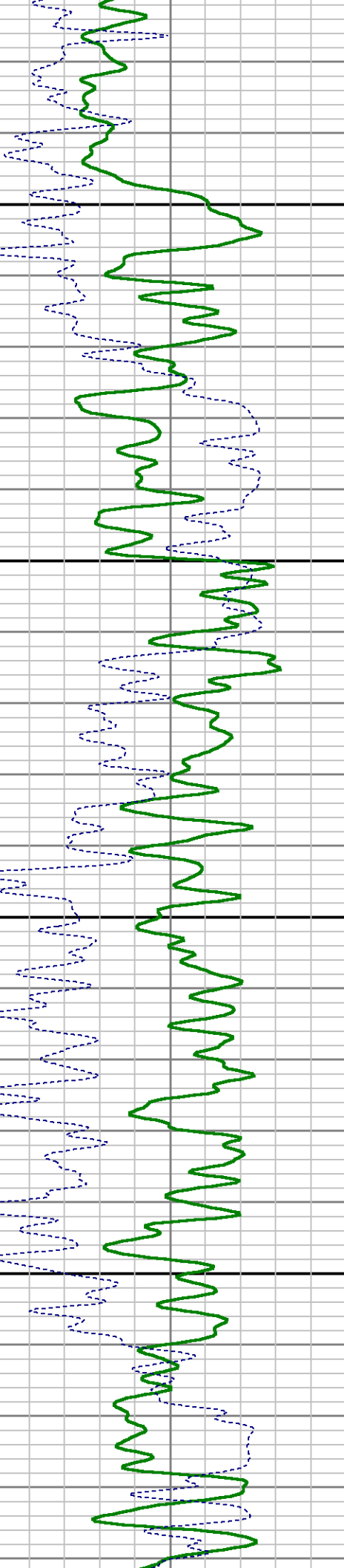
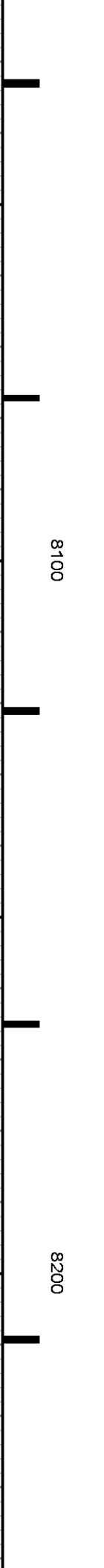
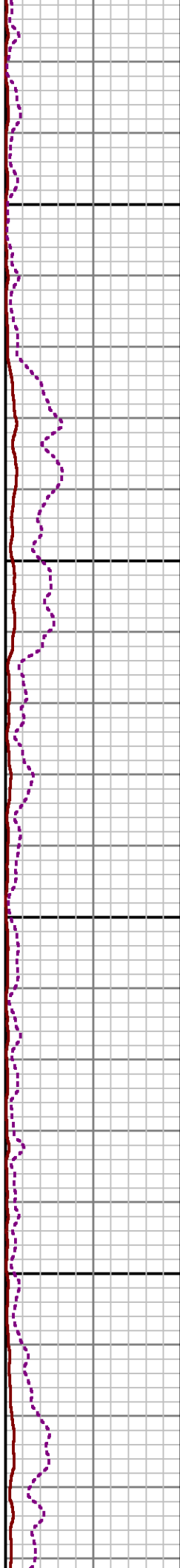
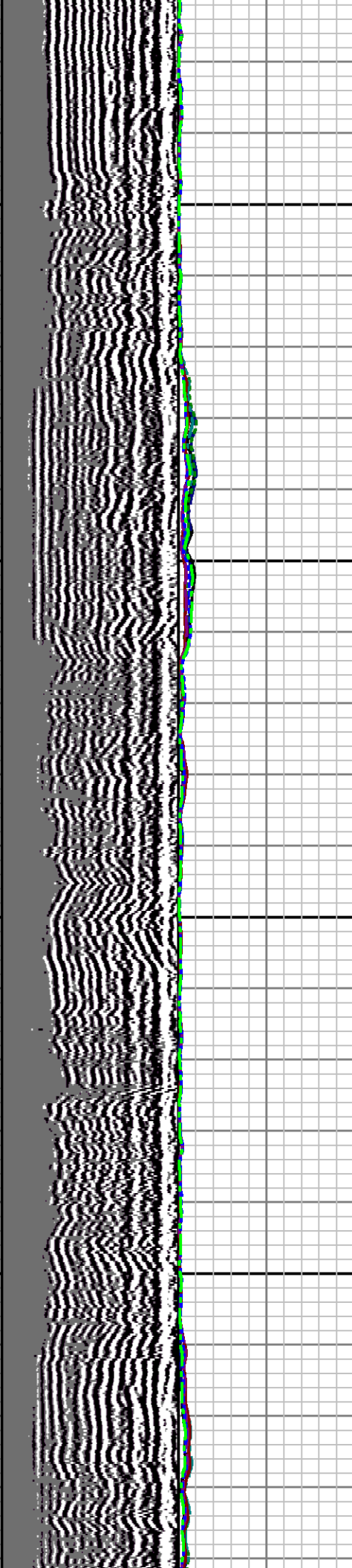
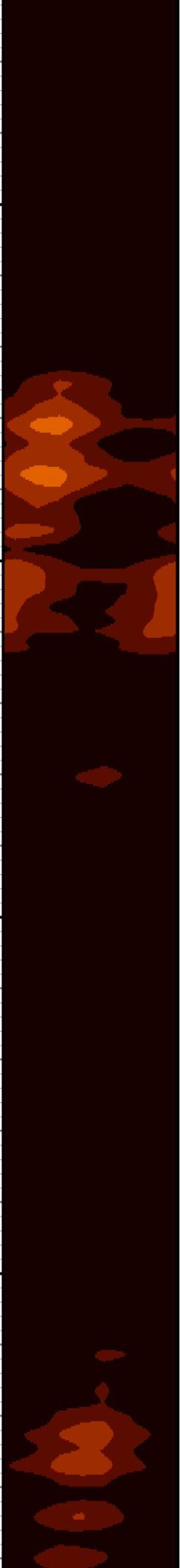


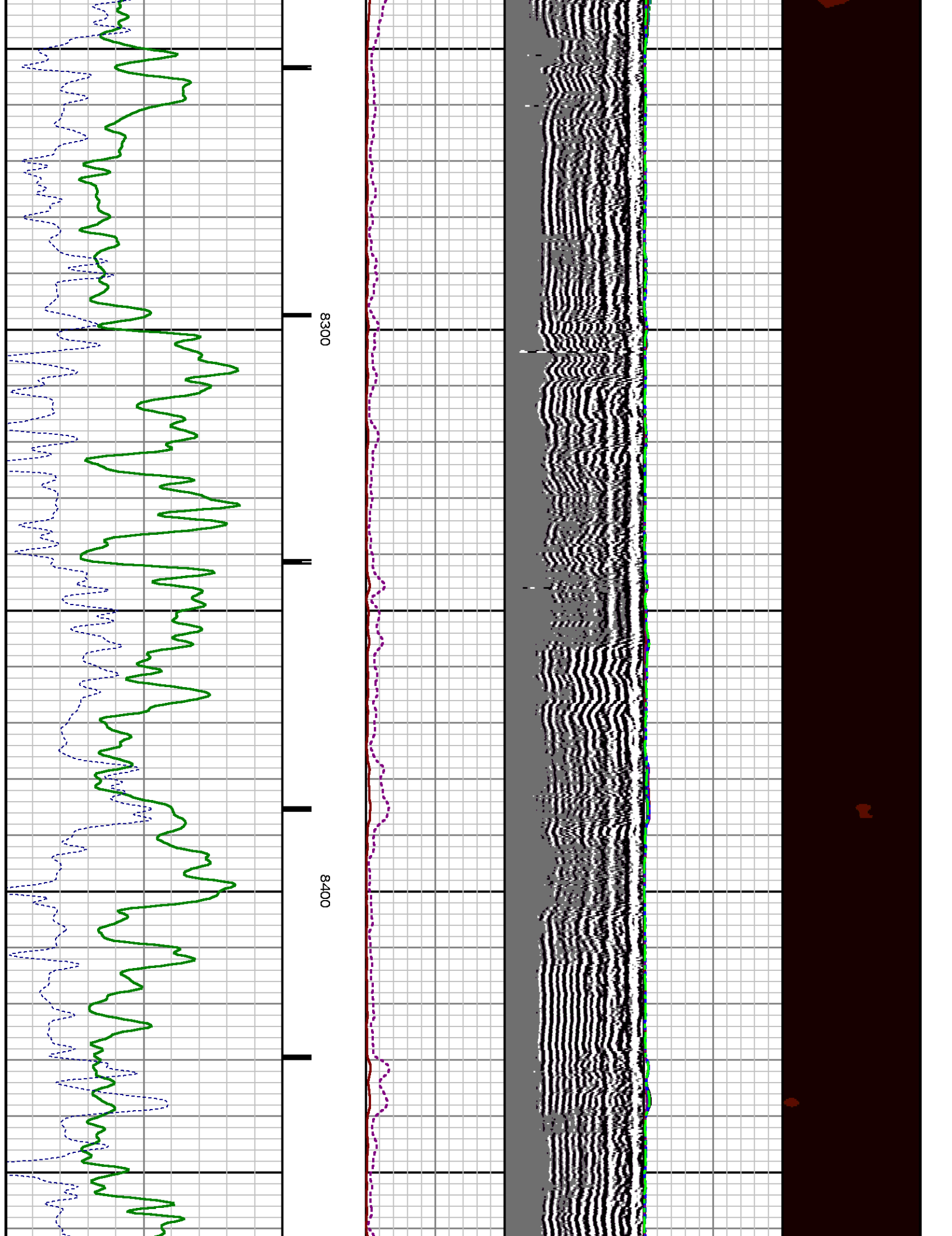


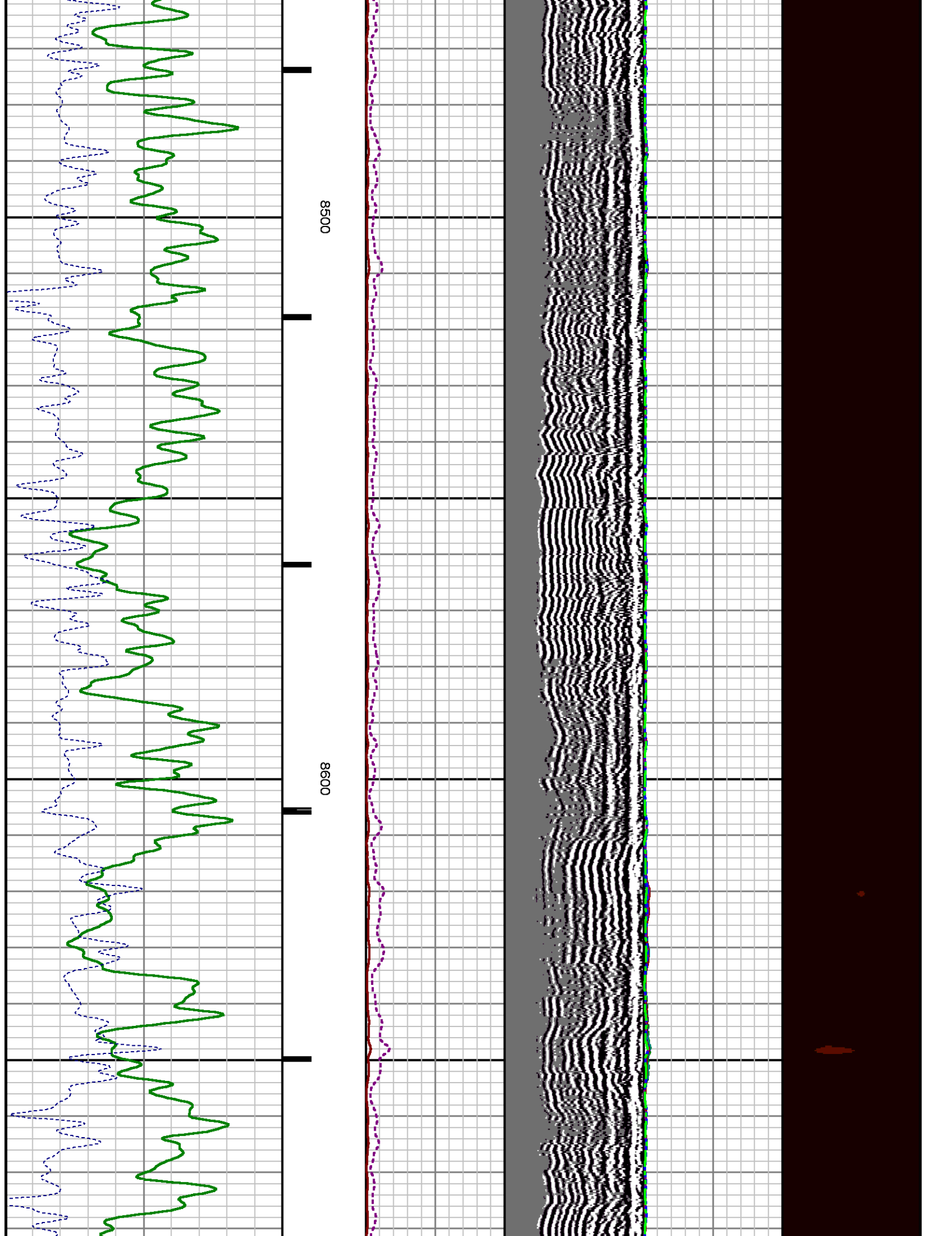


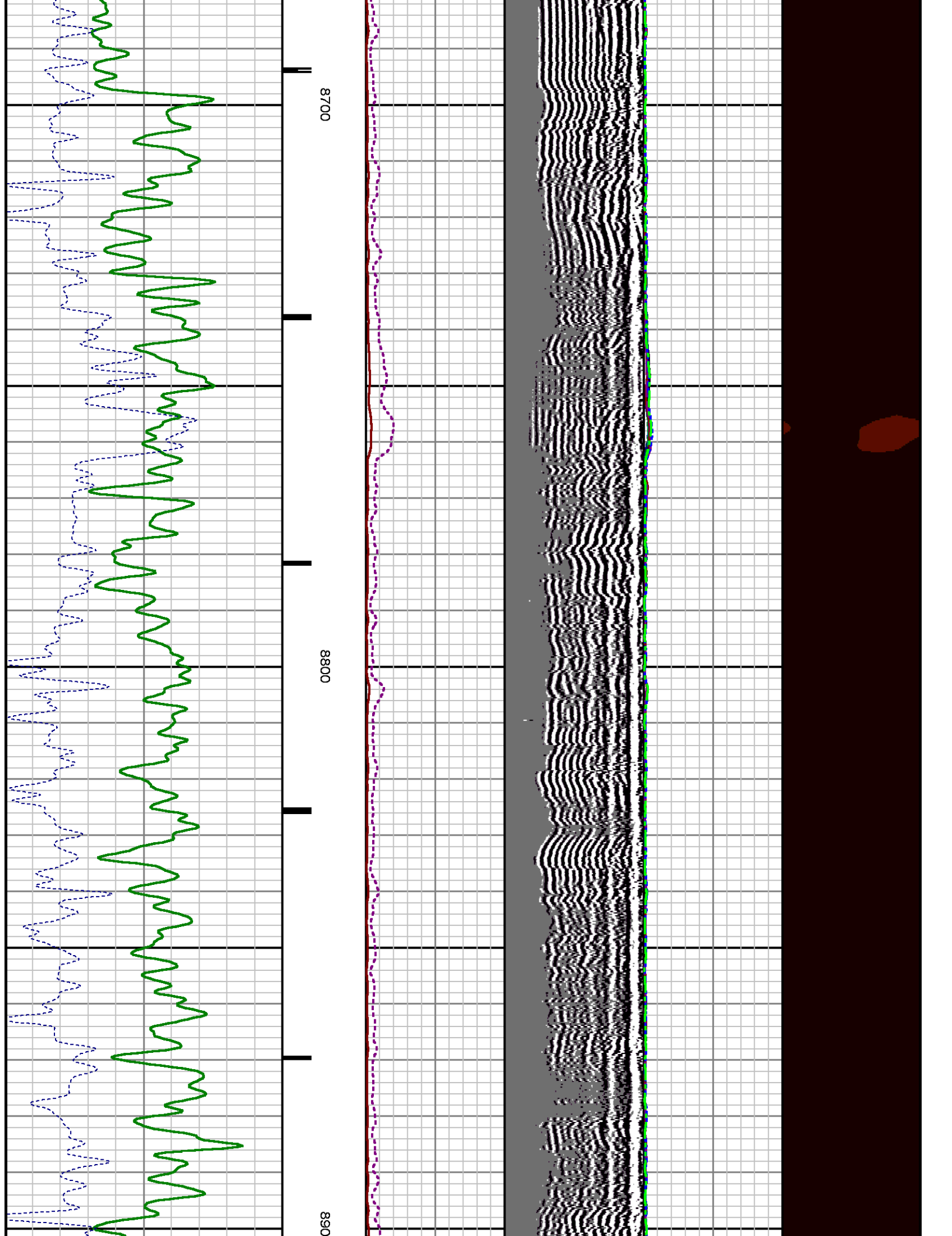


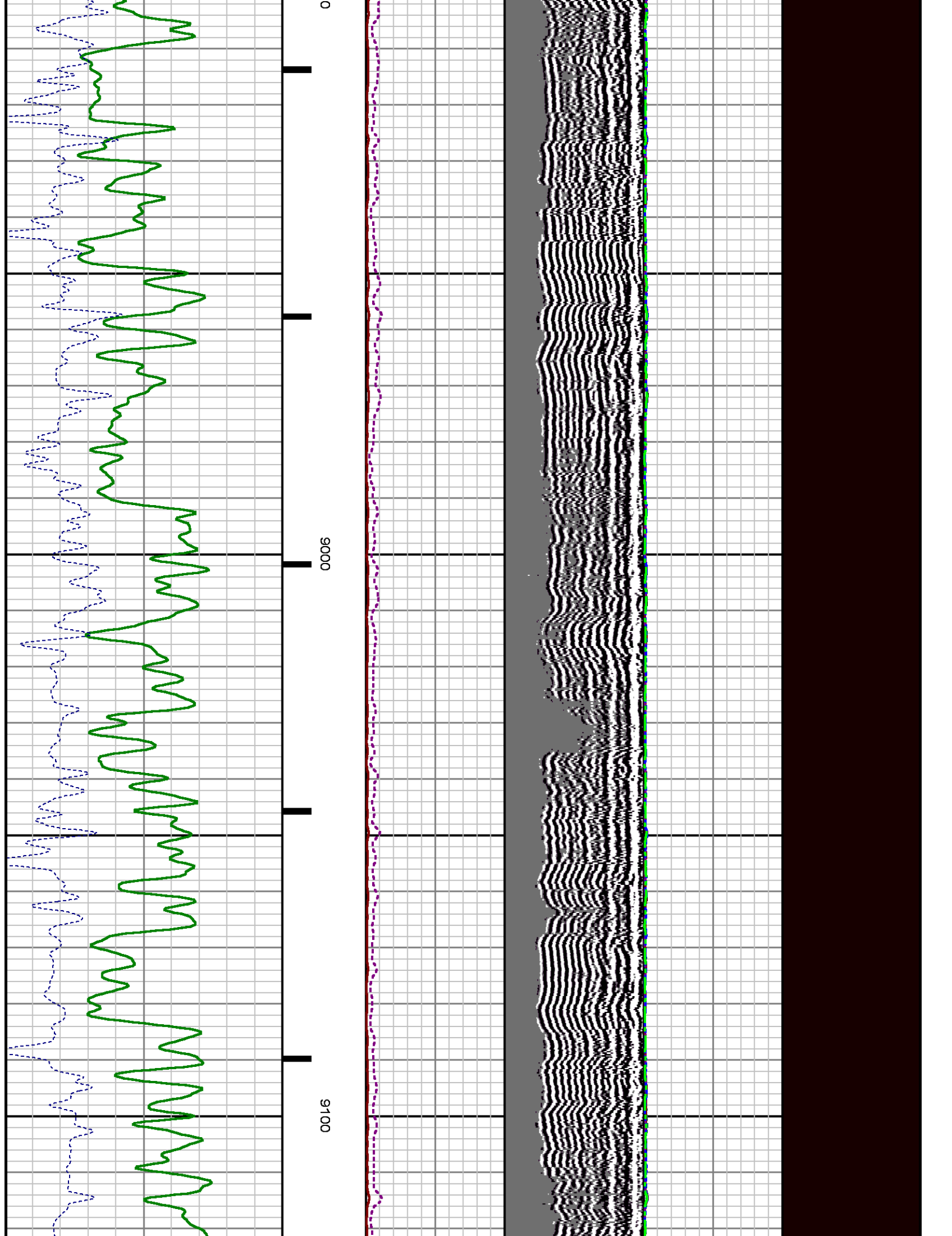


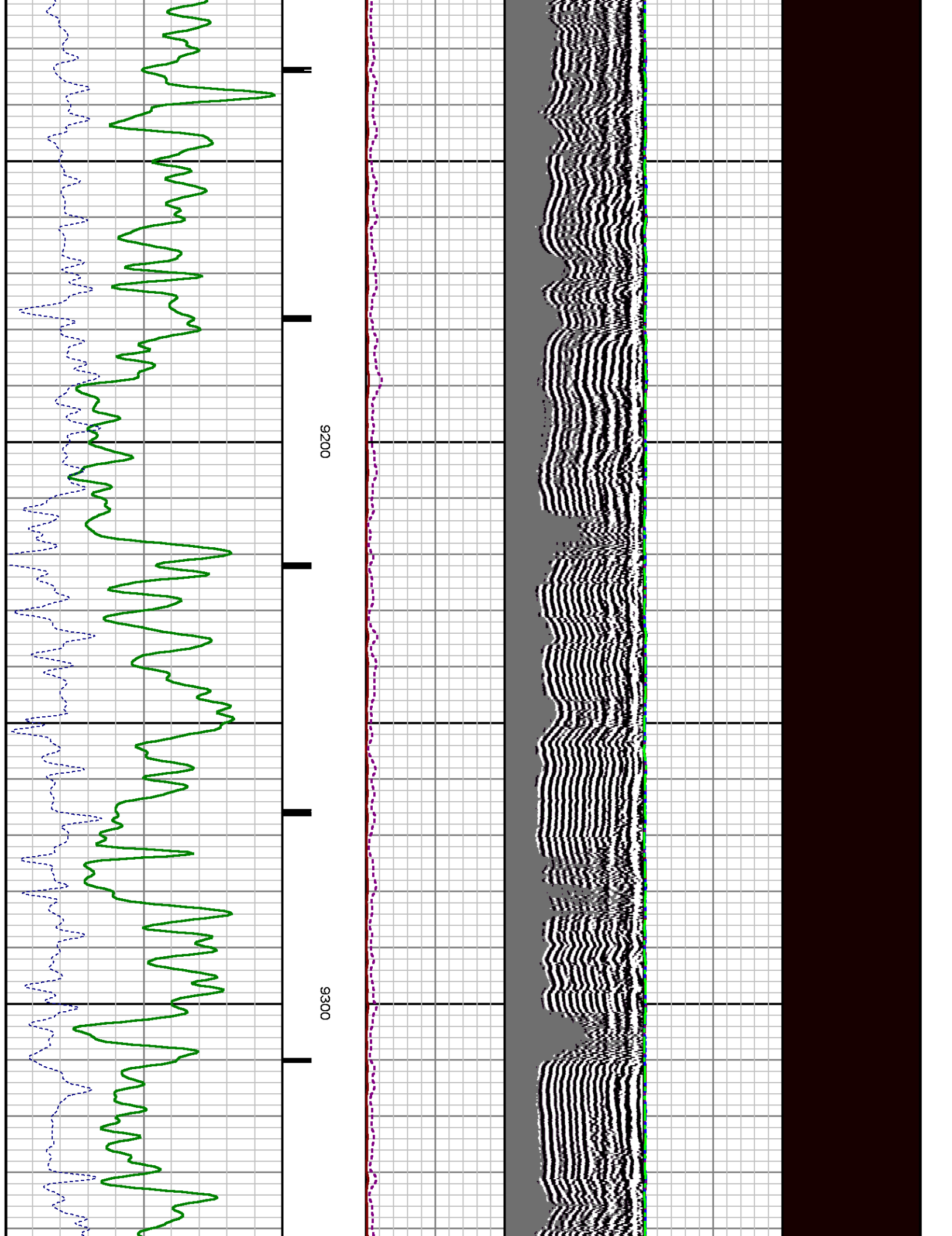


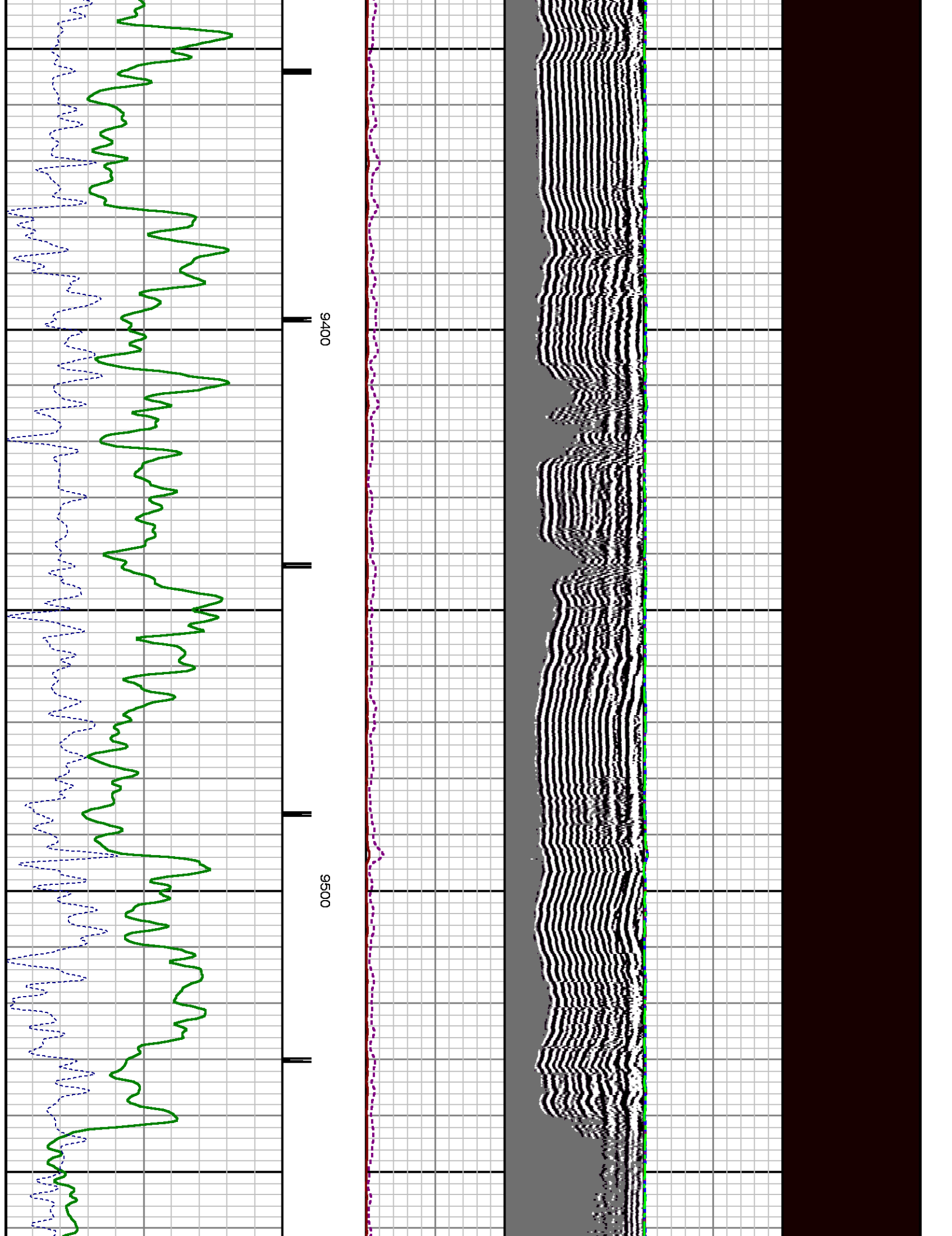


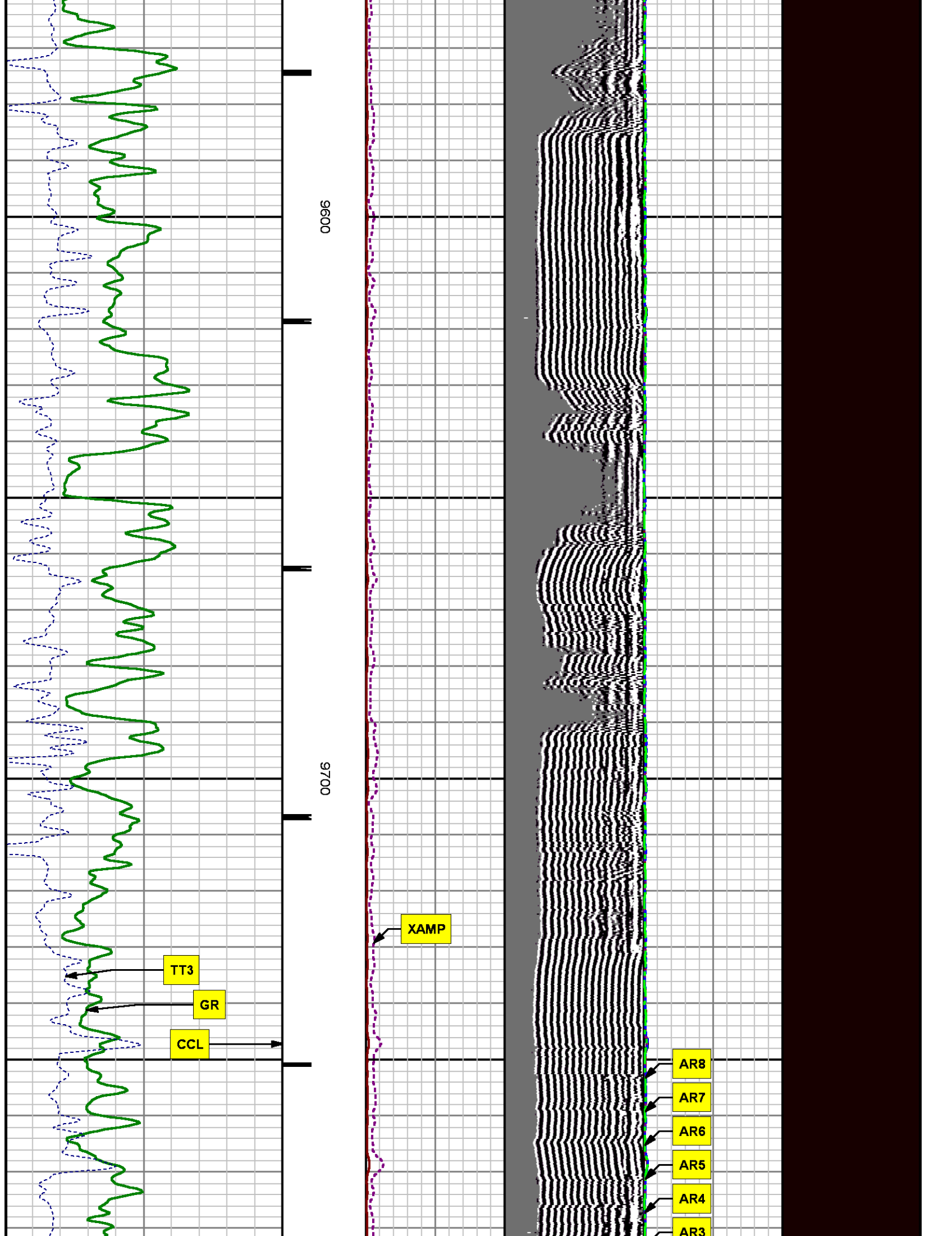


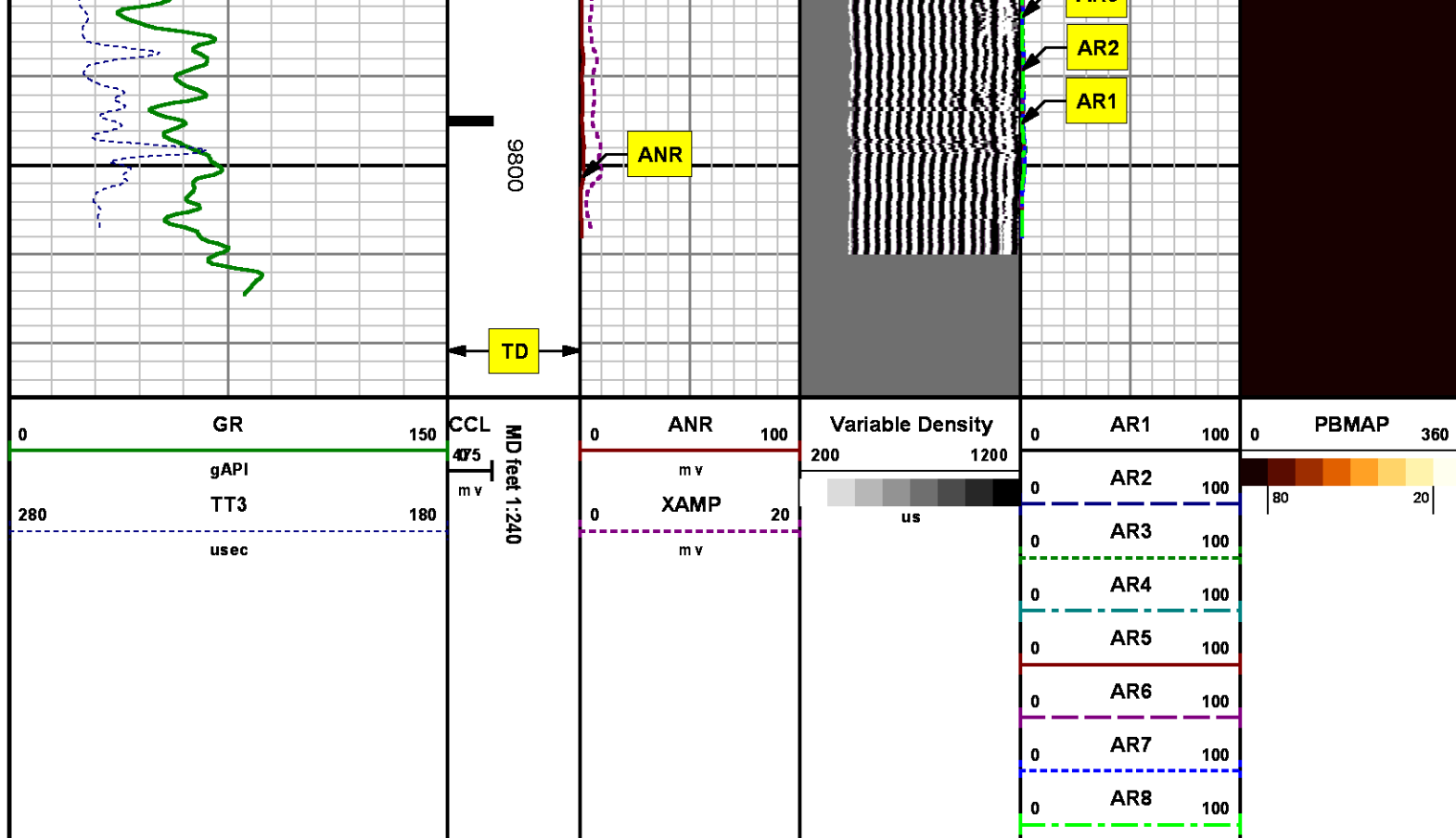












REPEAT SECTION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	9502.980	9821.230
RAL	Amp Gate Start Near	195.000	usec	9502.980	9821.230
RAL	Amp Gate Start Radial	195.000	usec	9502.980	9821.230
RAL	Amp Gate Width Far	25.000	usec	9502.980	9821.230
RAL	Amp Gate Width Near	25.000	usec	9502.980	9821.230
RAL	Amp Gate Width Radial	25.000	usec	9502.980	9821.230
RAL	casing od	4.500	inches	9502.980	9821.230
RAL	casing wt	11.600	lbm/ft	9502.980	9821.230
RAL	FB Start Far	291.900	usec	9502.980	9821.230
RAL	FB Start Near	180.000	usec	9502.980	9821.230
RAL	FB Start Radial	180.000	usec	9502.980	9821.230
RAL	FB Thresh Far	10.000	mv	9502.980	9821.230

RAL	FB Thresh Near	4.000	mv	9502.980	9821.230
RAL	FB Thresh Radial	4.000	mv	9502.980	9821.230
RAL	Fluid Travel Time	200.000	usec/ft	9502.980	9821.230

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

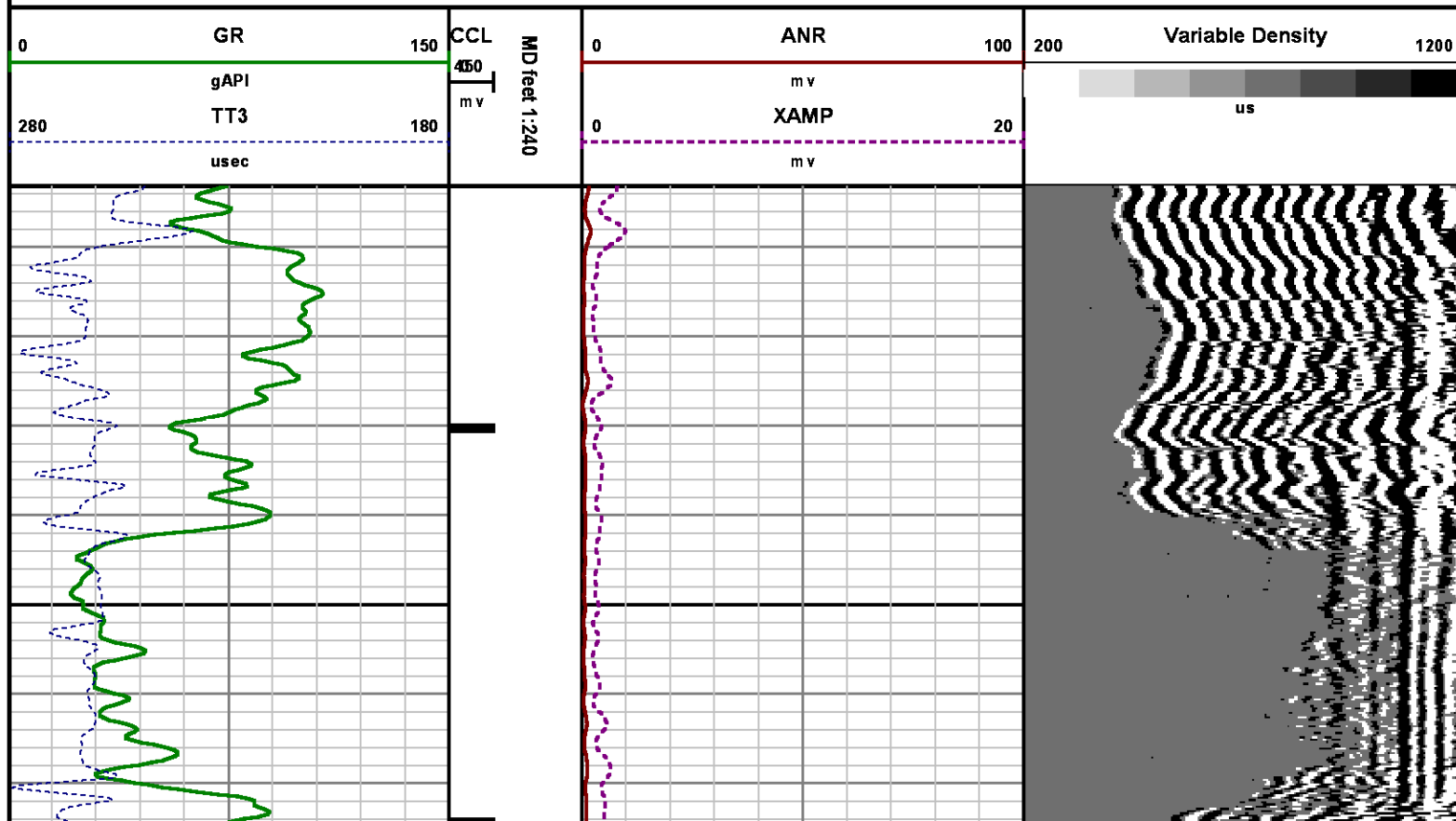
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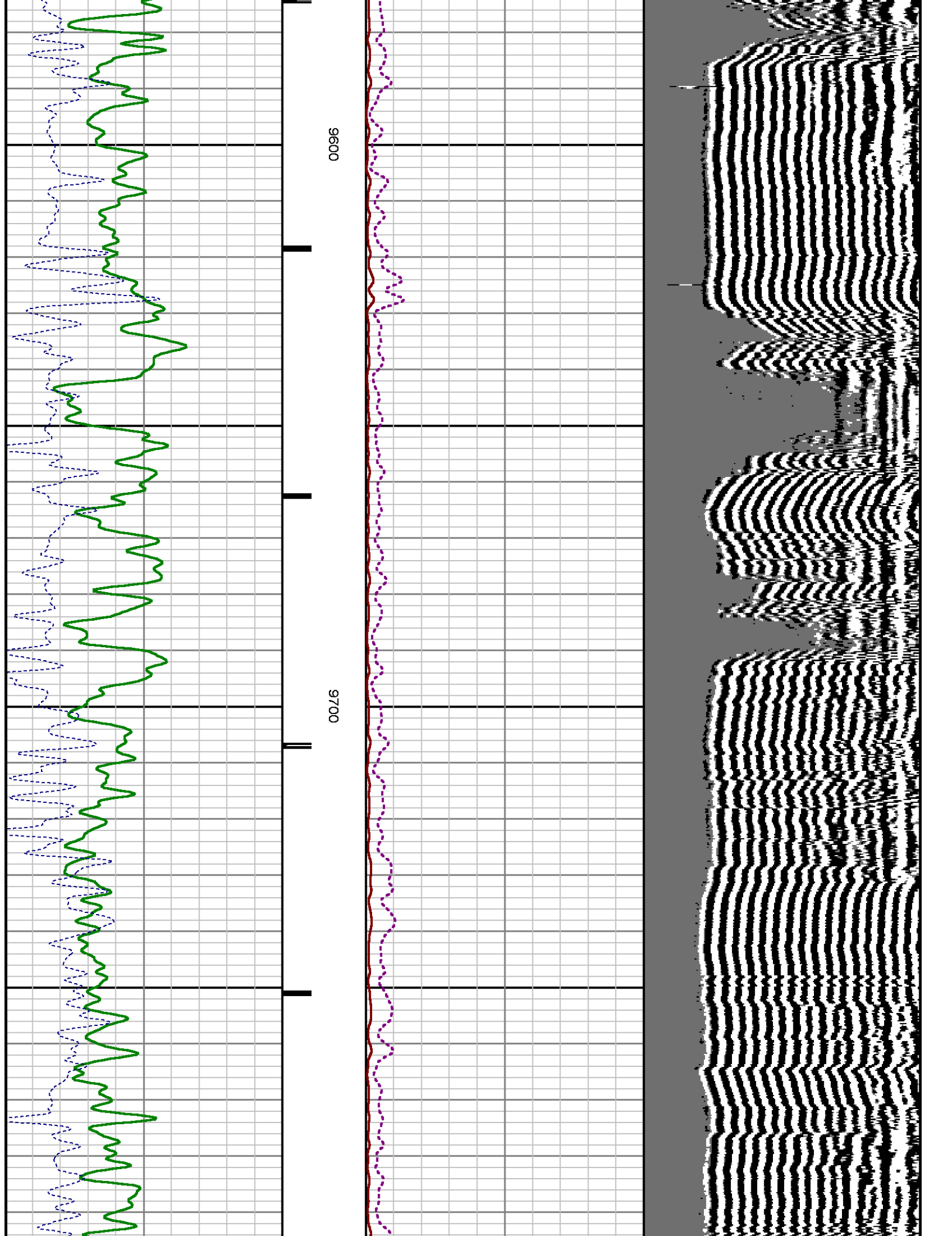
File Name : d:\well\data\wpx\pa 424-16\424ral\repeat.xtf

Mode : PlotMgr 5.4.504

Interval : 9503.23 - 9821.23 feet UP

Created : 5/23/2014 9:13:22 AM







RALSHP

SHOP CALIBRATION SUMMARY

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	215	216	30	166	25	-0.561	100.00	0.45
3 Ft. Receiver	217	216	30	166	25	-0.390	100.00	0.45
5 Ft. Receiver	324	325	30	248	25	0.070	150.00	0.48
Radial #1	217	216	30	166	25	-1.017	100.00	0.45
Radial #2	215	216	30	166	25	-0.629	100.00	0.45
Radial #3	215	216	30	166	25	-0.699	100.00	0.45
Radial #4	215	216	30	166	25	-0.619	100.00	0.45
Radial #5	217	216	30	166	25	-0.533	100.00	0.45
Radial #6	217	216	30	166	25	-0.237	100.00	0.46
Radial #7	216	216	30	166	25	-0.613	100.00	0.46
Radial #8	217	216	30	166	25	-0.484	100.00	0.45

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\106MAY21 fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Wed May 21 07:43:42 2014 TOOL SERIES: 1426XA ASSET: 106 SEQ: MAY21

Tool Delay [usec] Casing OD Casing Wt Casing ID
in lbm/ft in

RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.273"/>	<input type="text" value="0.000"/>	<input type="text" value="1.00"/>	<input type="text" value="100.000"/>
3 Ft. Receiver	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-1.296"/>			
5 Ft. Receiver	<input type="text" value="305"/>	<input type="text" value="25"/>	<input type="text" value="-1.355"/>			
Radial #1	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-2.265"/>			
Radial #2	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-1.665"/>			
Radial #3	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-1.368"/>			
Radial #4	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-1.645"/>			
Radial #5	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-1.233"/>			
Radial #6	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-1.276"/>			
Radial #7	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-0.983"/>			
Radial #8	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-1.033"/>			

GAMMA RAY

Calibration File: C:\case\calver\GR\45608.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu May 08 09:48:12 2014 TOOL SERIES: 2459XA ASSET: 456 SEQ: 08

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	<input type="text" value="97.82"/>	<input type="text" value="367.47"/>	<input type="text" value="0.686"/>	<input type="text" value="67.11"/>	<input type="text" value="252.11"/>	<input type="text" value="185.00"/>

Verification File: C:\case\calver\GR\45608.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Thu May 08 09:49:43 2014 TOOL SERIES: 2459XA ASSET: 456 SEQ: 08

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	<input type="text" value="98.76"/>	<input type="text" value="372.44"/>	<input type="text" value="0.686"/>	<input type="text" value="67.76"/>	<input type="text" value="255.53"/>	<input type="text" value="187.77"/>

TOOL DIAGRAM

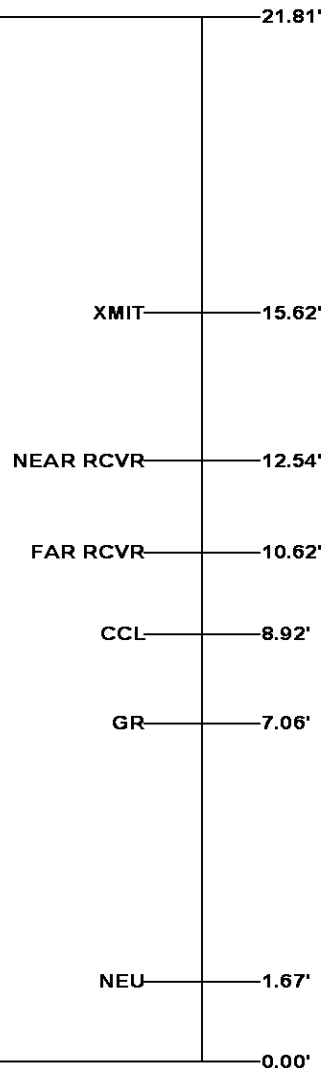
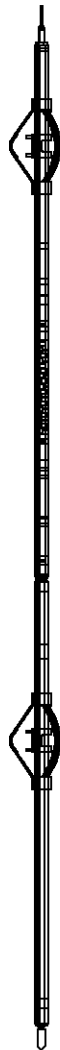
OTA SHORT CABLE HEAD**PROBE 2 3/4 DUAL RECEIVER RADII**

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

Probe GR/CCL/NEU

Series 2459XA
Mnemonic PROB
Diameter 2.75"
Length 9.42'
Measure Point 1.21' NEU
Measure Point 6.60' GR
Measure Point 8.46' CCL

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

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

WPX ENERGY

Well

FEDERAL PA 424-16

Field

PARACHUTE

County

GARFIELD

State

COLORADO

Location

SHL: 2600' FNL & 1403' FWL SEC 21

BHL: 756' FSL & 2298' FWL (SESW) SEC 16

SEC 16

TWP 6S

RGE 95W

Elevations

KB 6056 ft

DF

GL 6030 ft

File No:

CH085763

API No:

05045220360000

16 6S 95W

PA 22-21 PAD

NABORS 573