



# RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: WPX ENERGY

CH085860 FEDERAL PA 24-16

API No: PARACHUTE

05045220430000 GARFIELD State COLORADO

16 6S 95W Location

PA 22-21 PAD SHL: 2610' FNL & 1396' FWL SEC 21

NABORS 673 BHL: 128' FSL & 2271' FWL (SESW) SEC 16

SEC 16 TWP 6S RGE 95W

Other Services

RPM

Permanent Datum GL Elevation 6030 ft

Log Measured From KB 26 ft Above P. D.

Drill Measured From KELLY BUSHING KB 6056 ft DF GL 6030 ft

Date	20/MAY/14	
Run	ONE	
Service Order	US085860J	
Depth Driller	9604 ft	
Depth Logger	9653 ft	
Bottom Logged Interval	9543 ft	
Top Logged Interval	26 ft	
Time Started	0930	
Time Finished	1400	
Operator Rig Time	4.5 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	77 ft	
Logged Cement Top	NA	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	NA	
Nominal Logging Speed	66 fpm	
Maximum Recorded Temperature	260 degF	
Reference Log	NONE	
Reference Log Date	NA	
Equipment No.	4271	GRAND ICT
Recorded By	FLYOD 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	2448 ft
8.75 in	2448 ft	9604 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in			26 ft	2448 ft
4.5 in	11.6 lbm/ft	I-80	26 ft	9604 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 15 feet.
Logged with zero PSI at wellhead.
BHT = 260 °F
SJ = 6350'-6373'

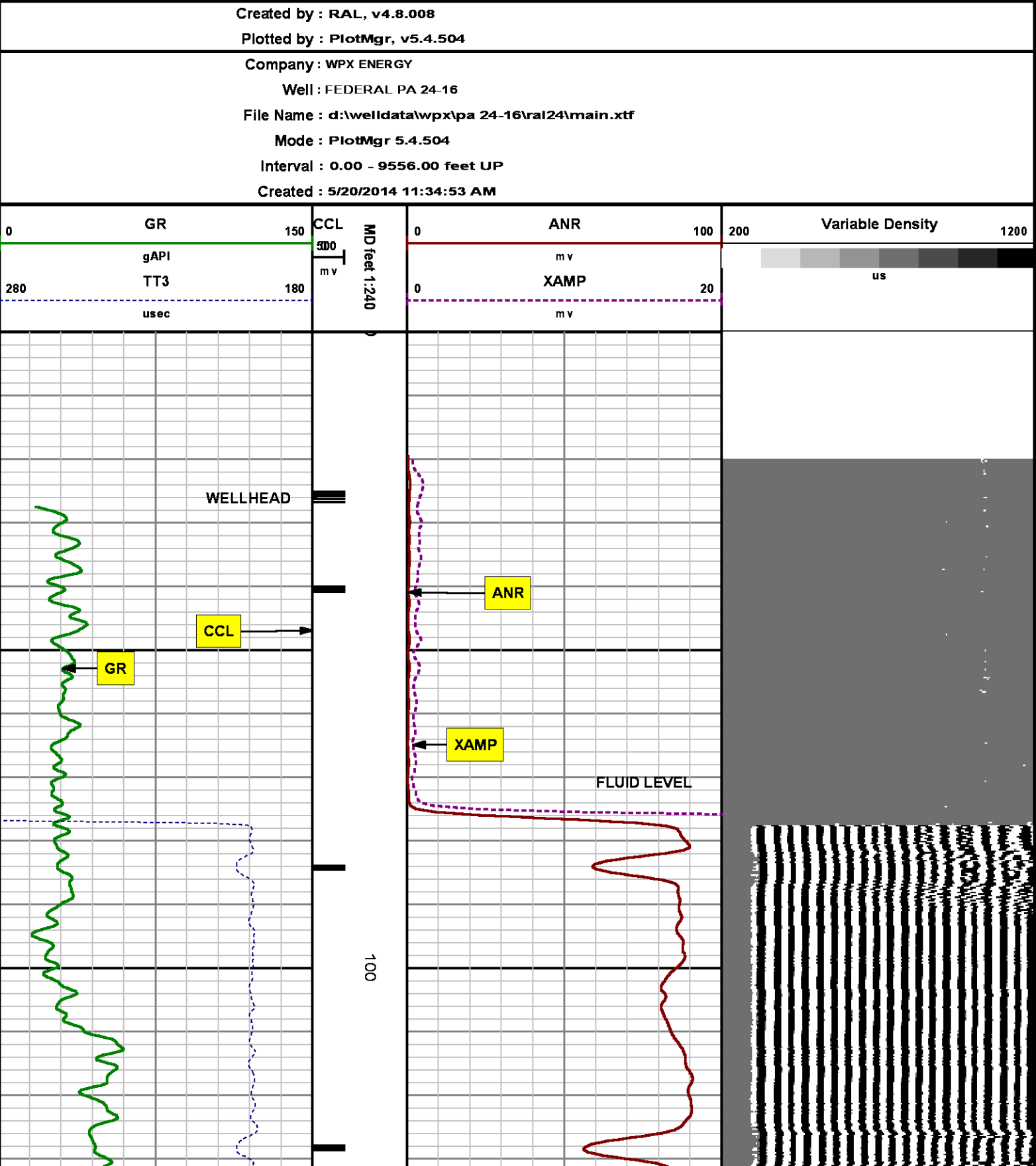
Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1426XA	10218496	CENT
1	1	GR/CCL	2459XA	10417456	CENT

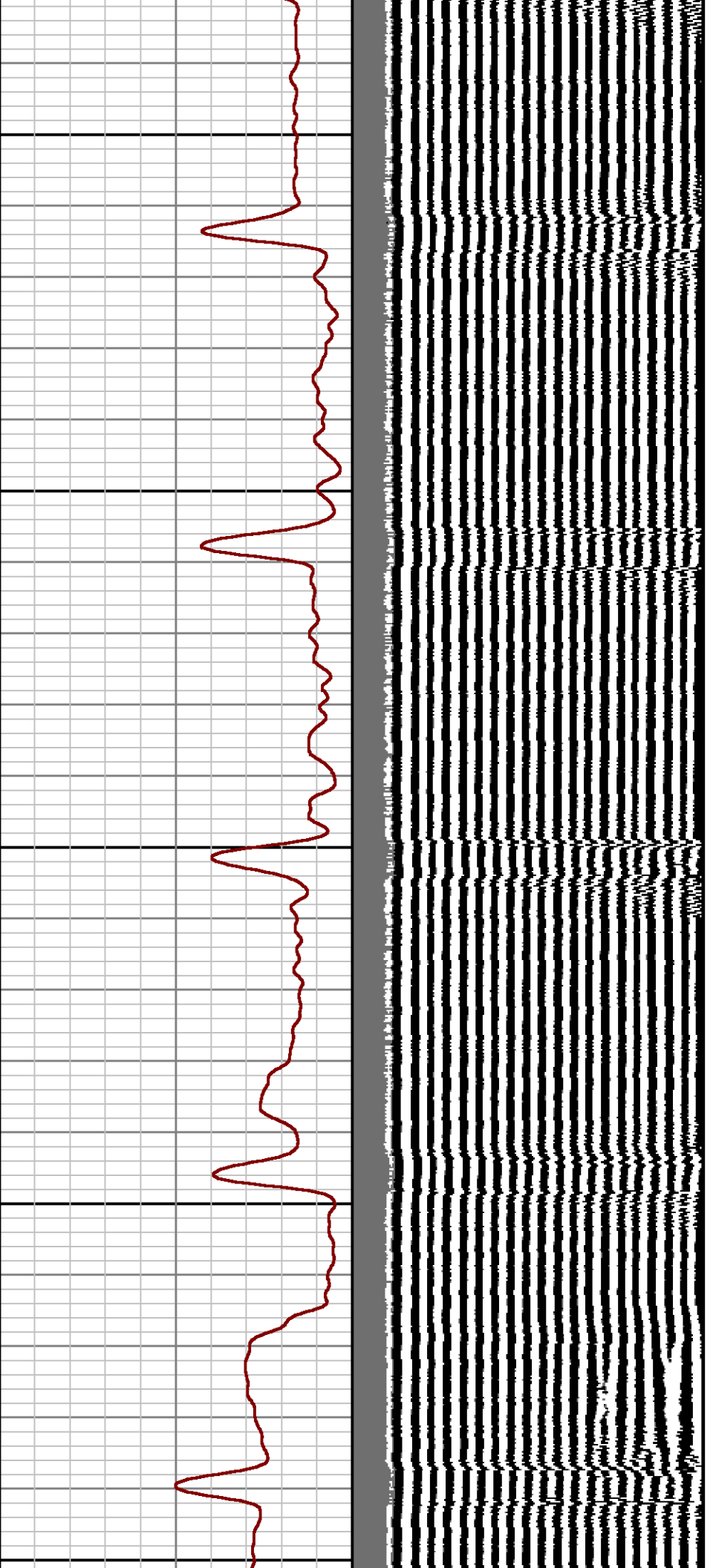
PRIMARY PRESENTATION  
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	35.687	9559.500
RAL	Amp Gate Start Near	195.000	usec	35.687	9559.500
RAL	Amp Gate Start Radial	195.000	usec	35.687	9559.500
RAL	Amp Gate Width Far	25.000	usec	35.687	9559.500
RAL	Amp Gate Width Near	25.000	usec	35.687	9559.500
RAL	Amp Gate Width Radial	25.000	usec	35.687	9559.500
RAL	casing od	4.500	inches	35.687	9559.500
RAL	casing wt	11.600	lbm/ft	35.687	9559.500
RAL	FB Start Far	291.900	usec	35.687	9559.500
RAL	FB Start Near	180.000	usec	35.687	9559.500
RAL	FB Start Radial	180.000	usec	35.687	9559.500
RAL	FB Thresh Far	10.000	mv	35.687	9559.500
RAL	FB Thresh Near	4.000	mv	35.687	9559.500
RAL	FB Thresh Radial	4.000	mv	35.687	9559.500
RAL	Fluid Travel Time	200.000	usec/ft	35.687	9559.374

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

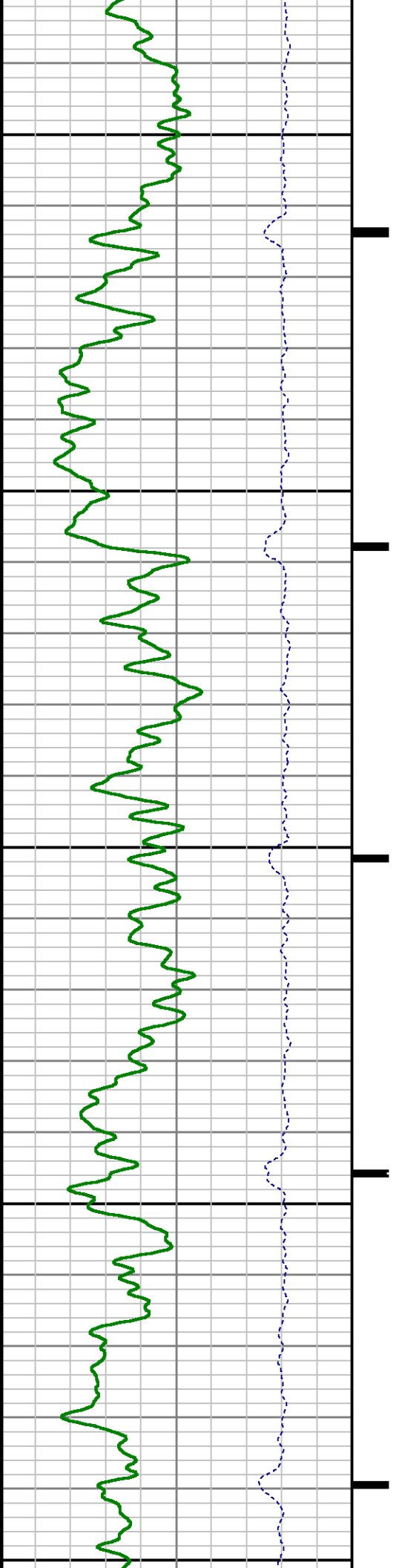
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	-15.750	AFAR	SIG	TT5			
2459XA	-11.340	CCL					
2459XA	-9.490	GR					
2459XA	-4.090	NEU					

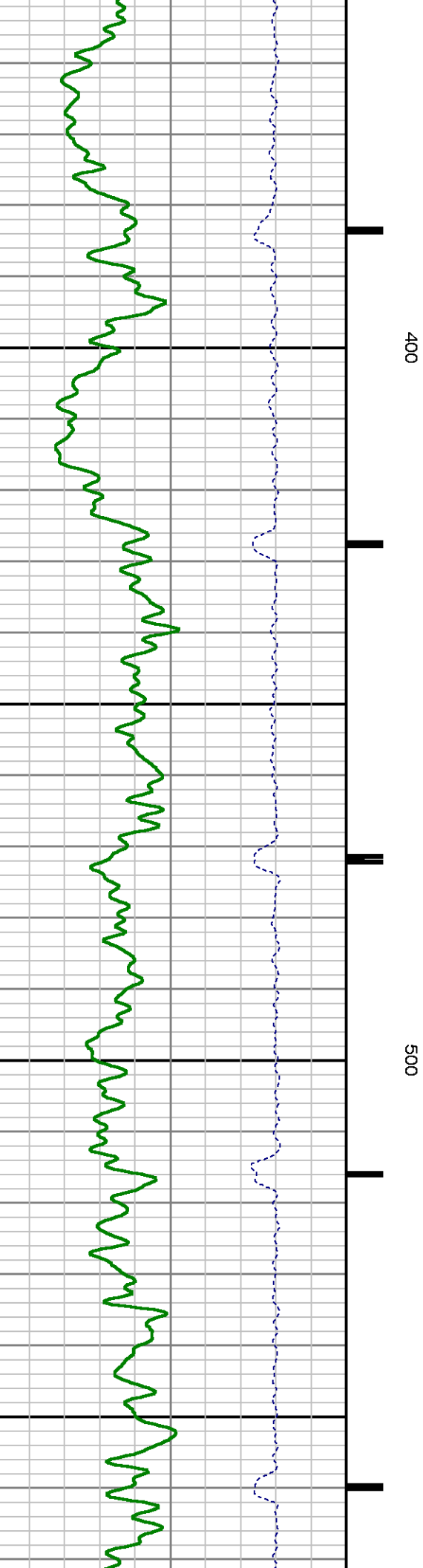
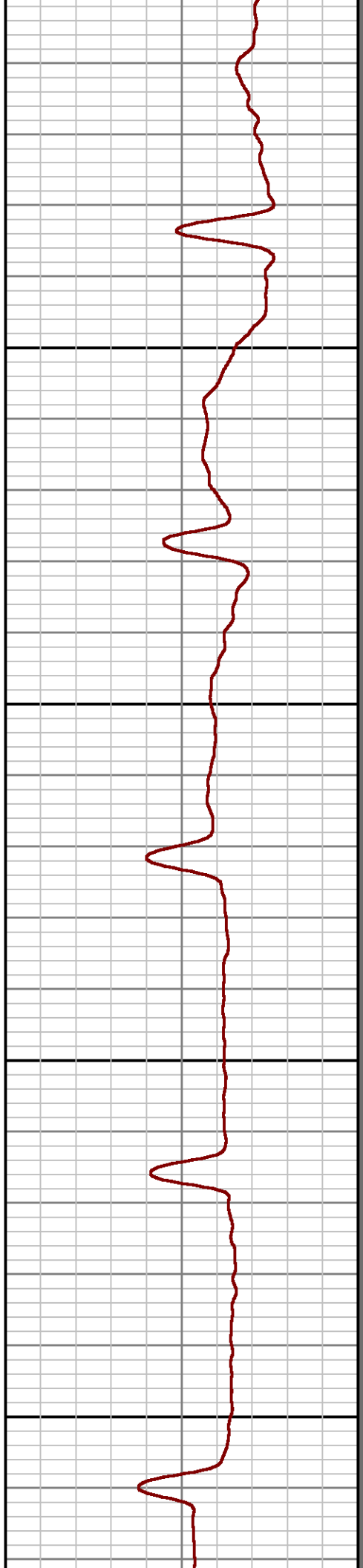
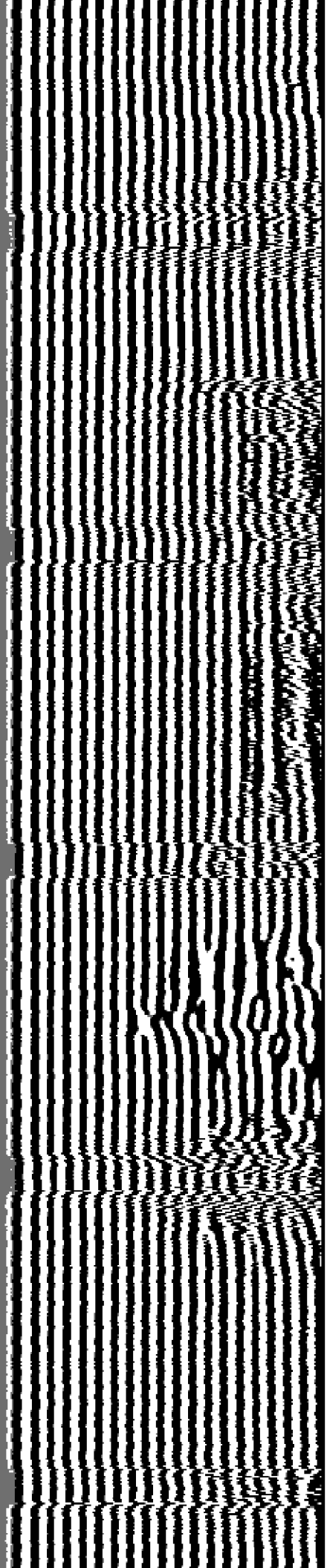


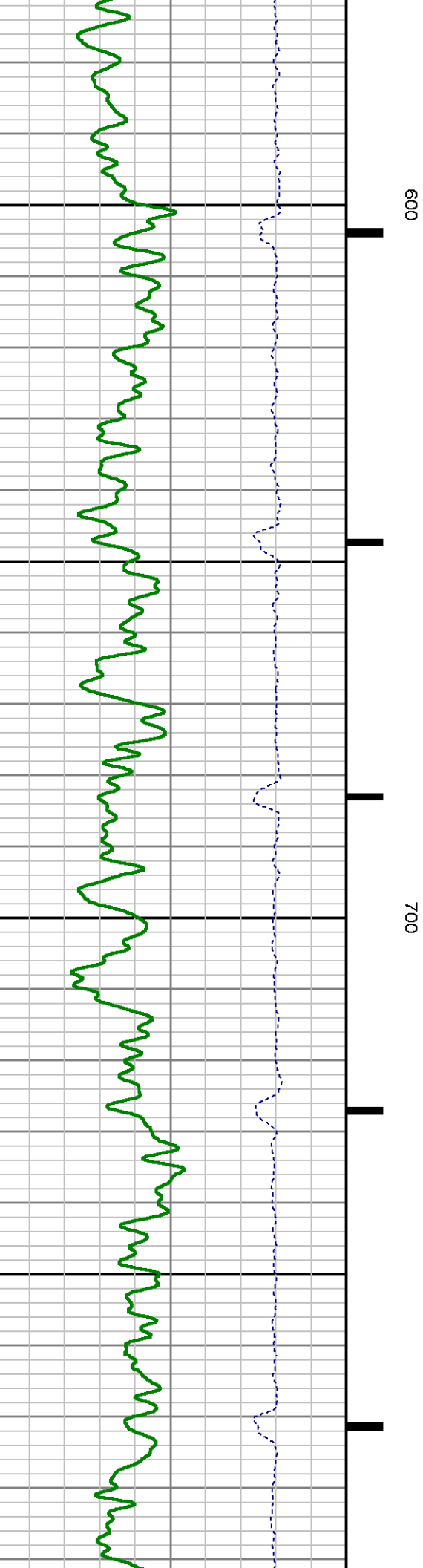
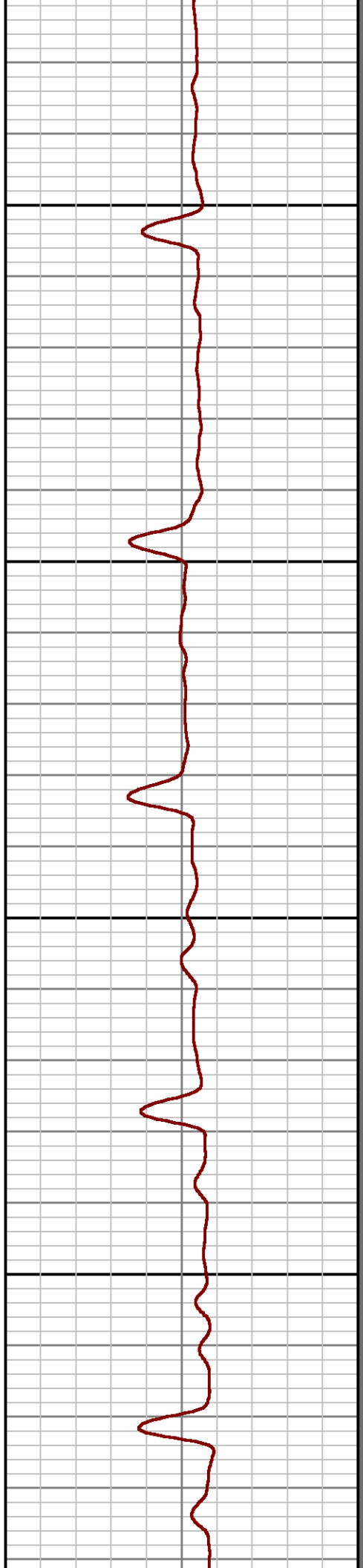
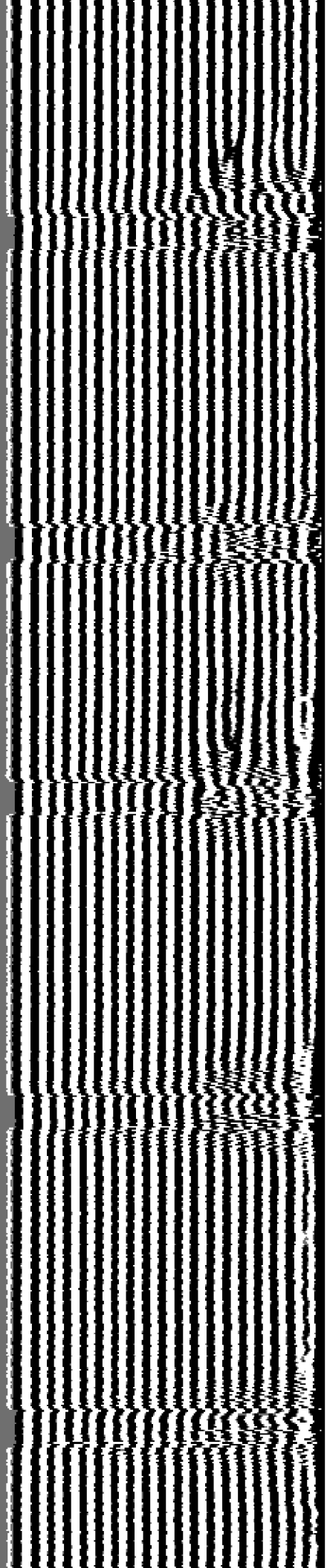


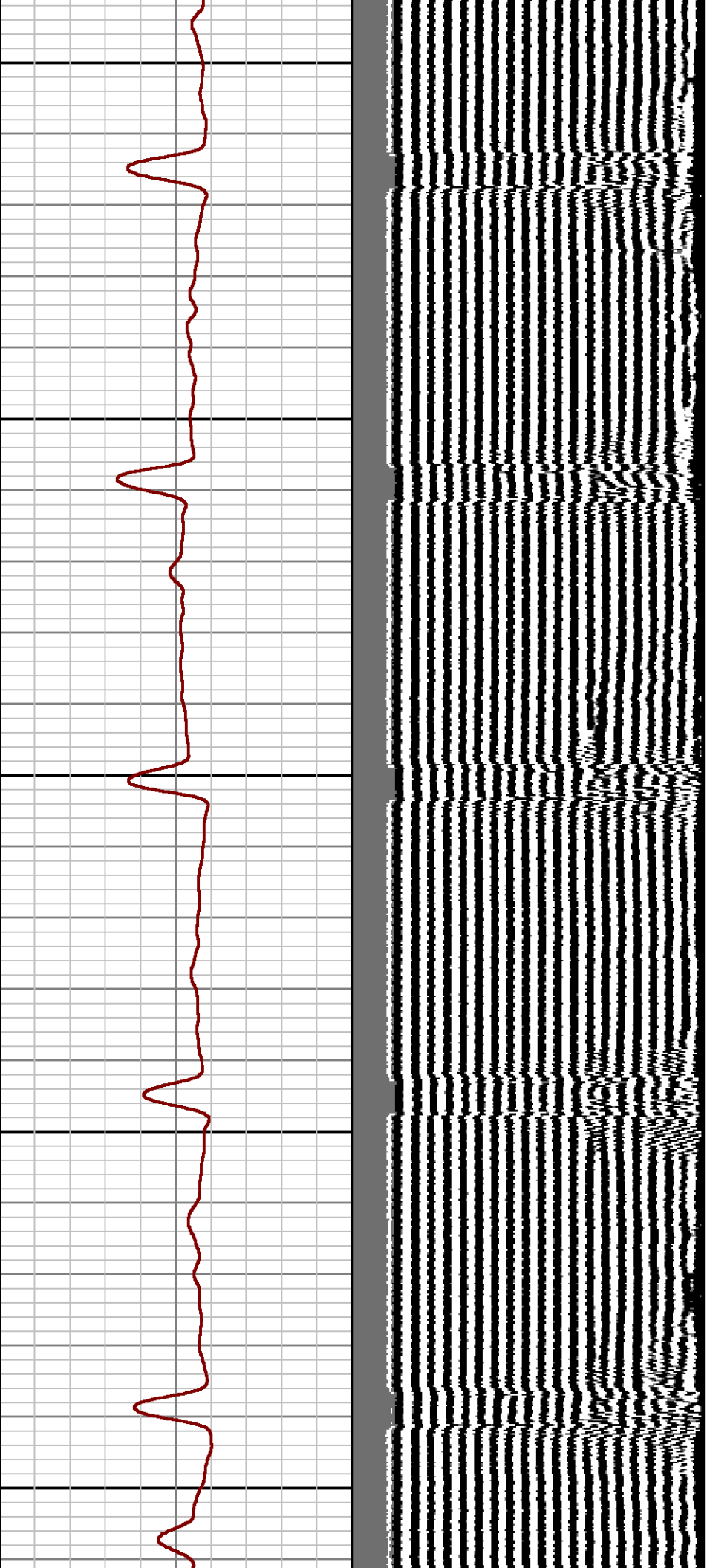
200

300





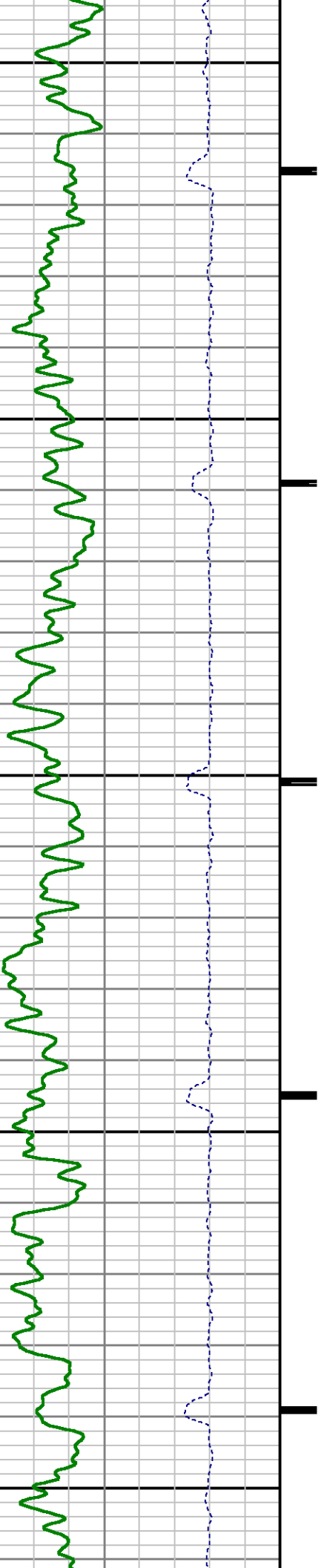


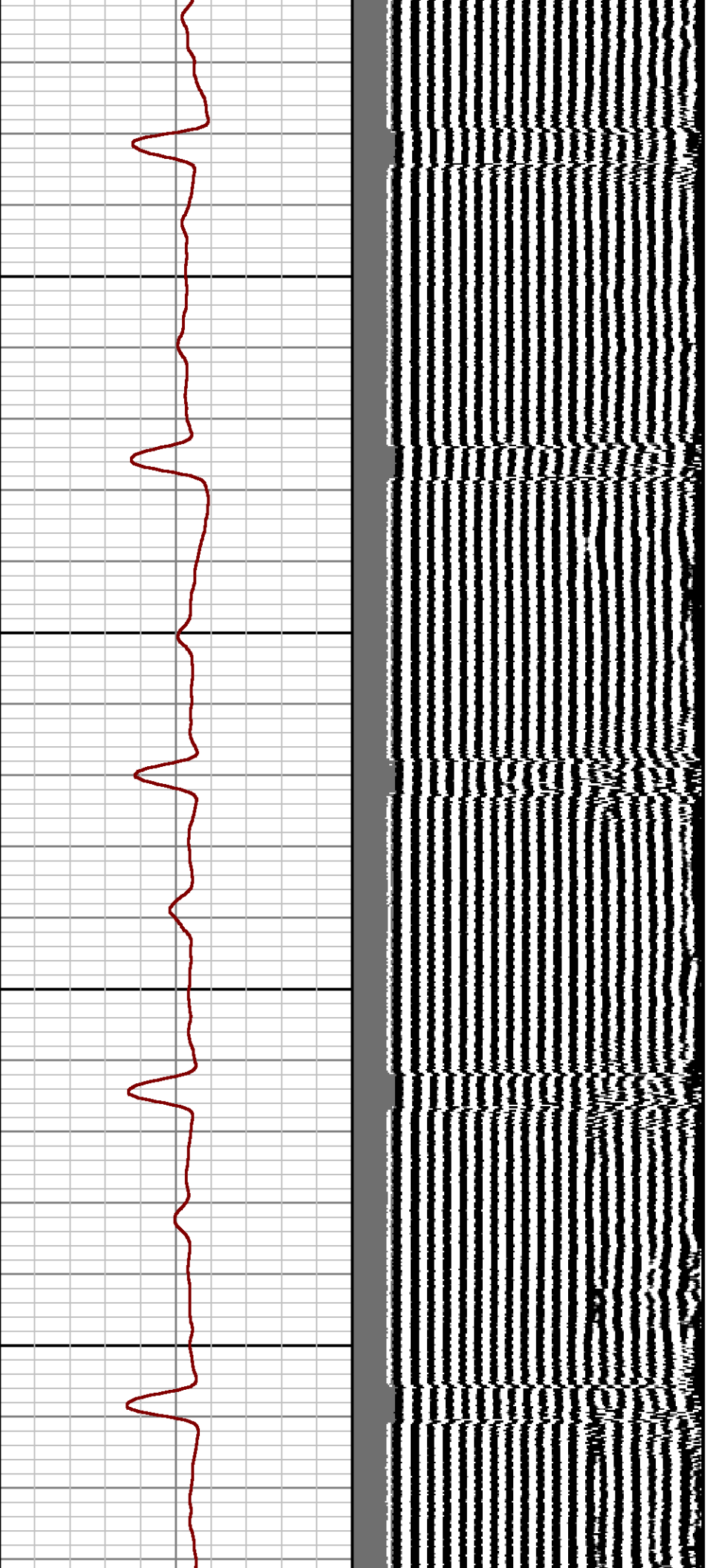


800

900

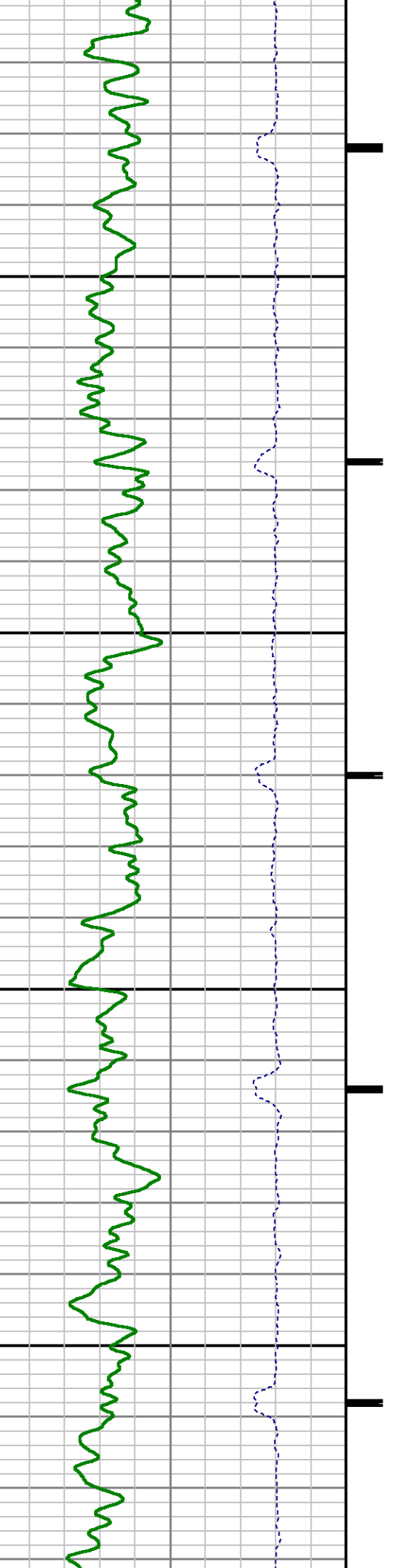
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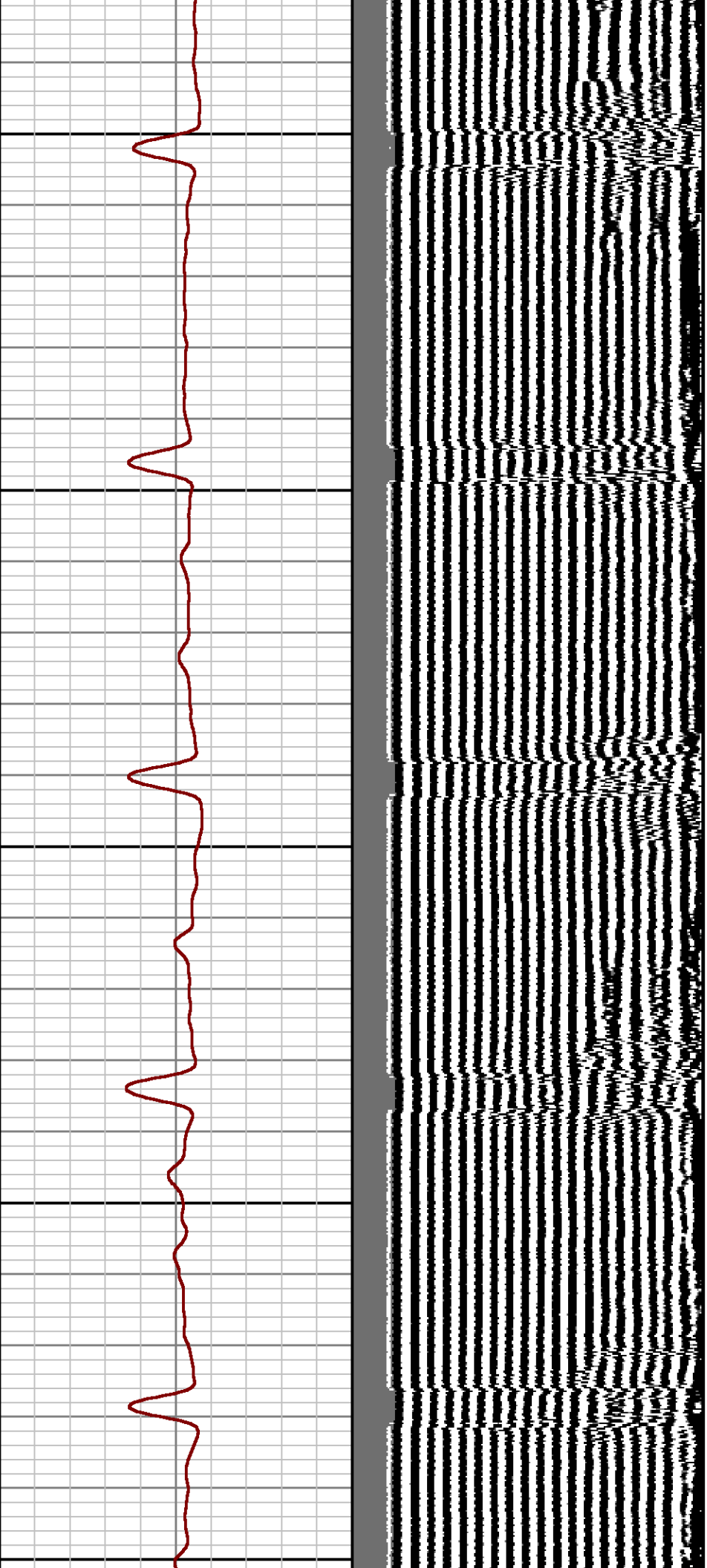


1100

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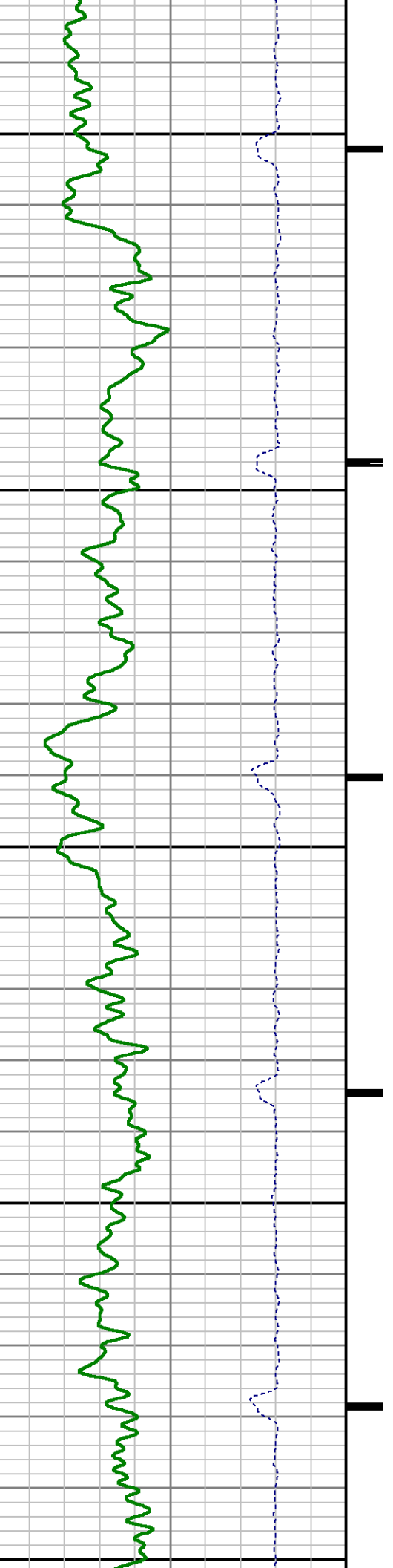


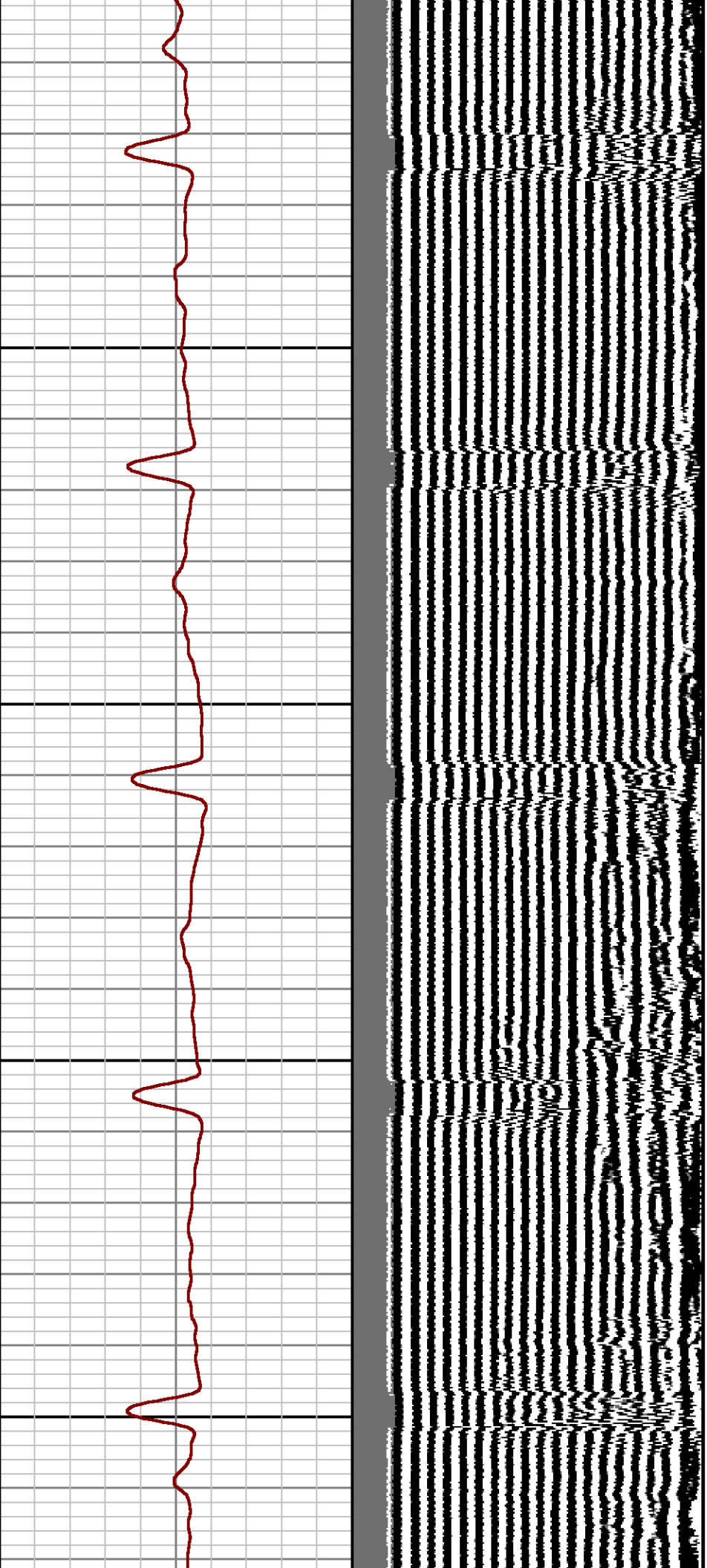




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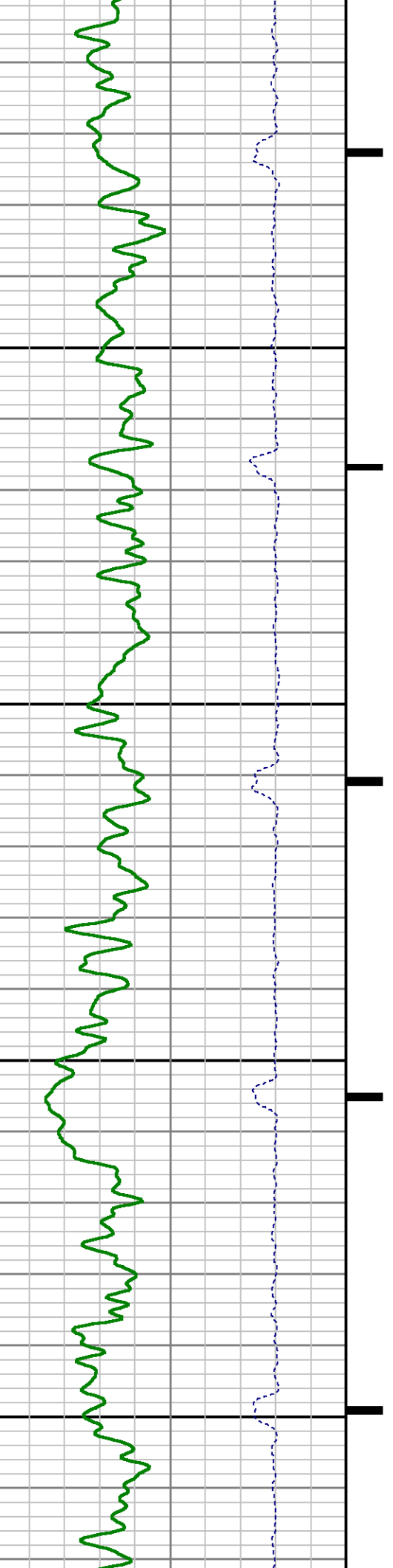
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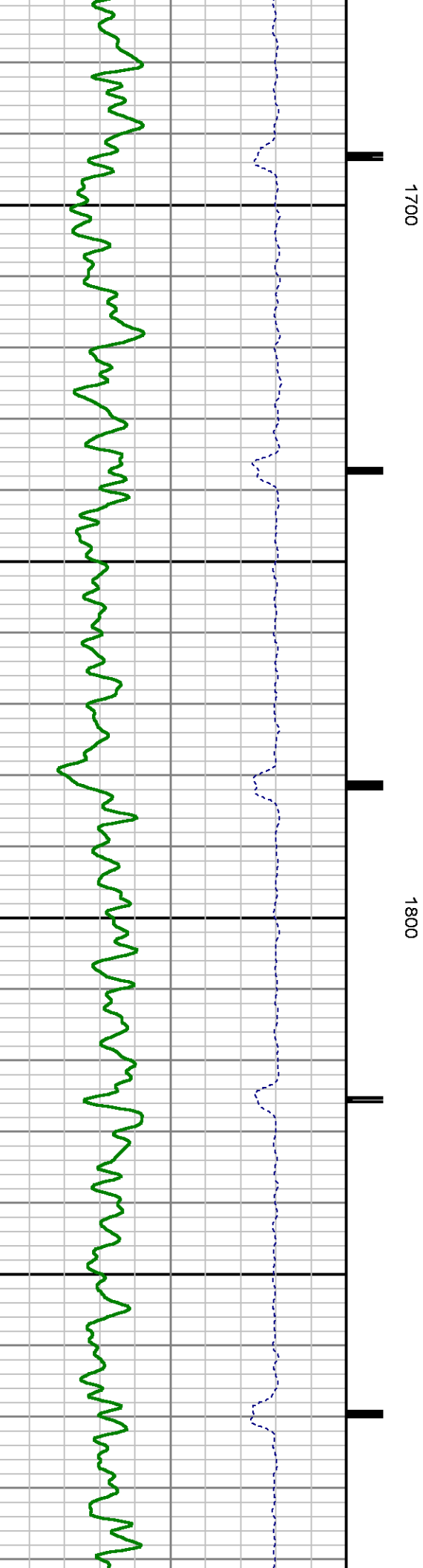
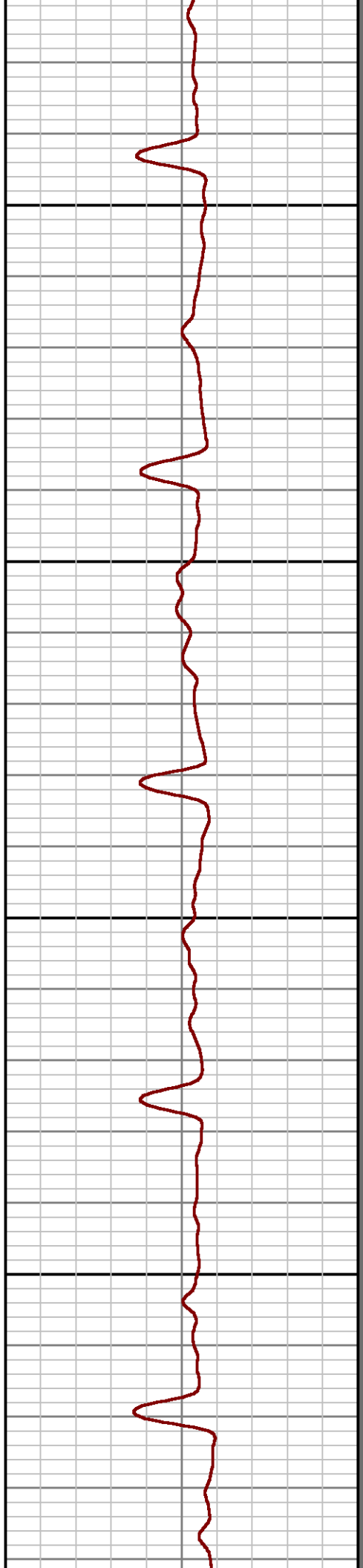
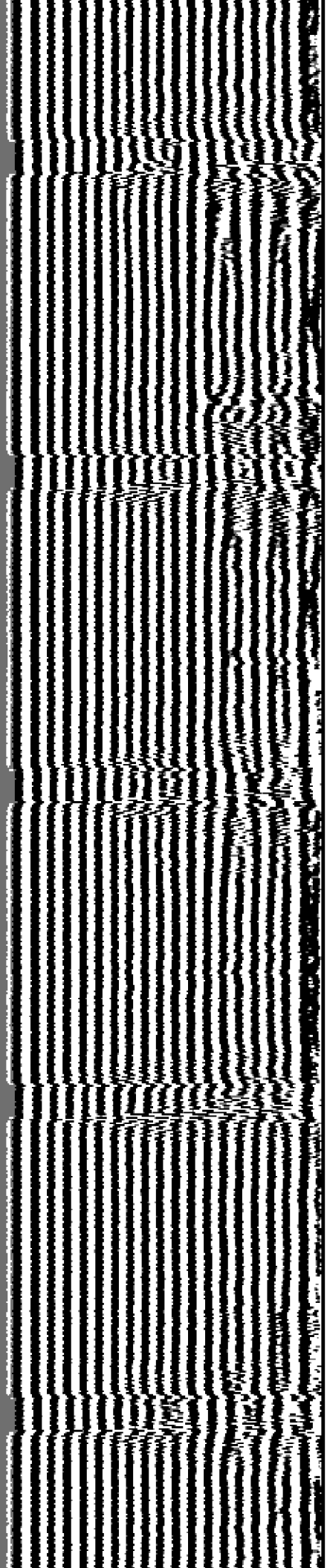


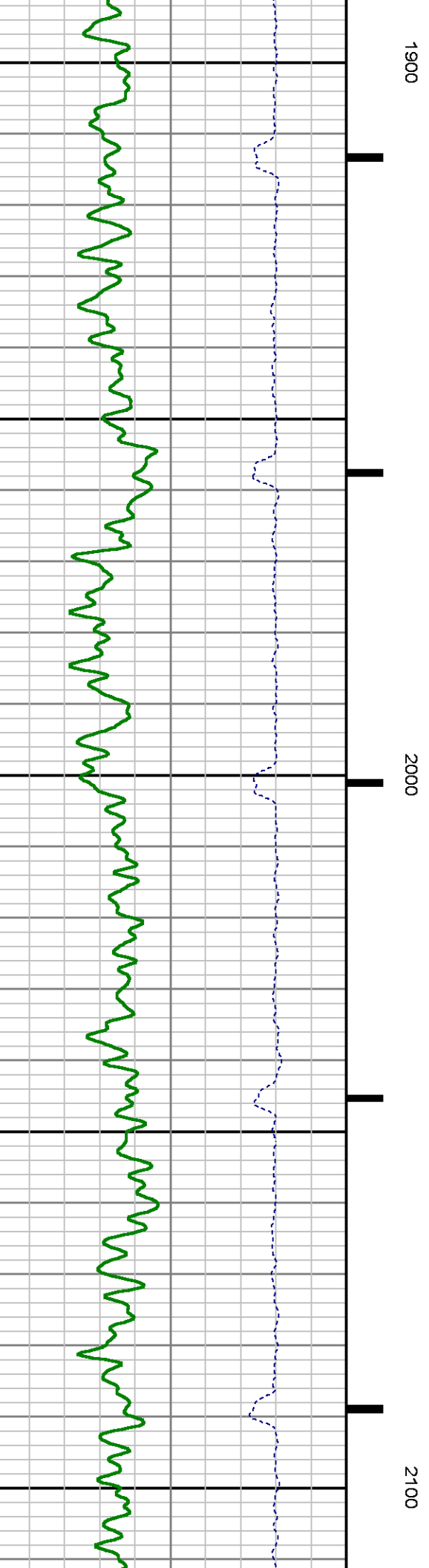
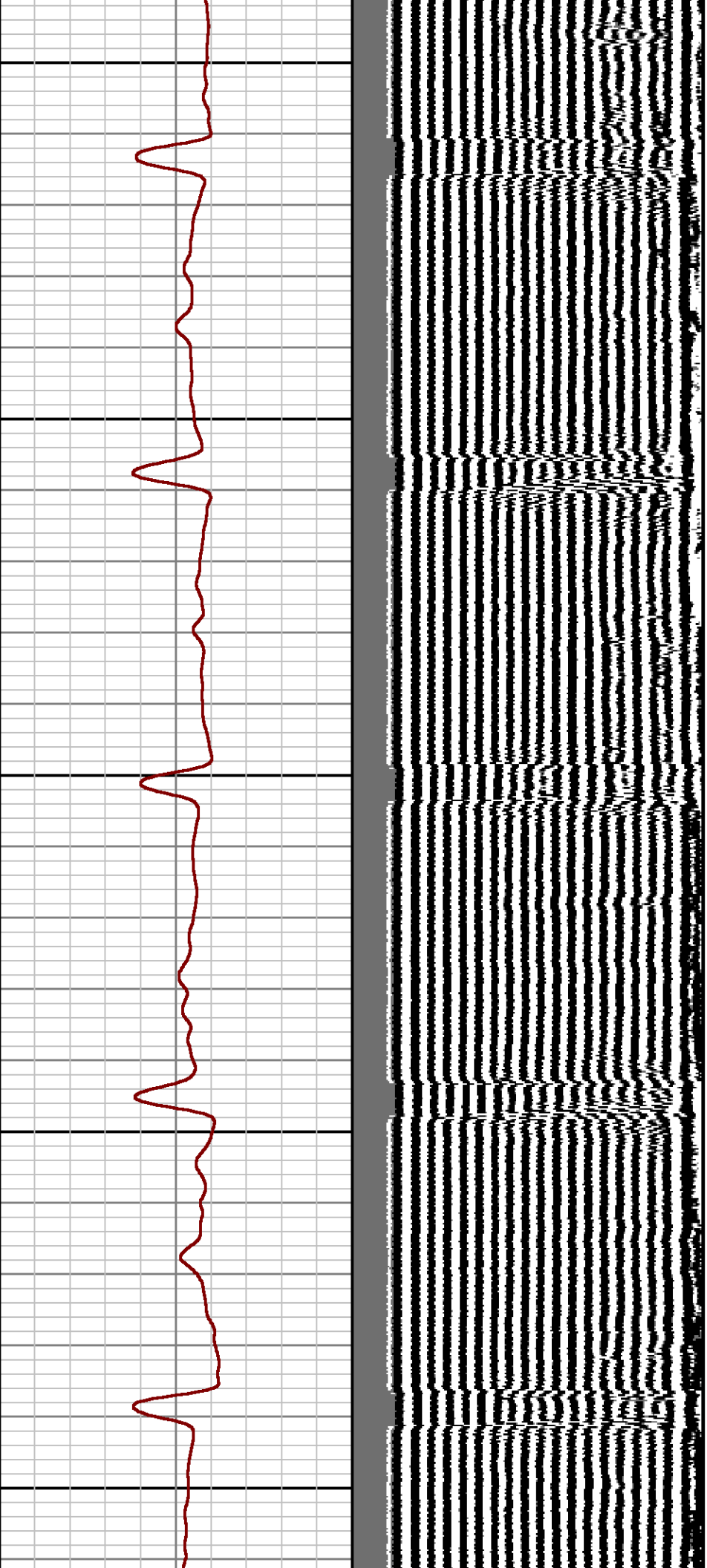


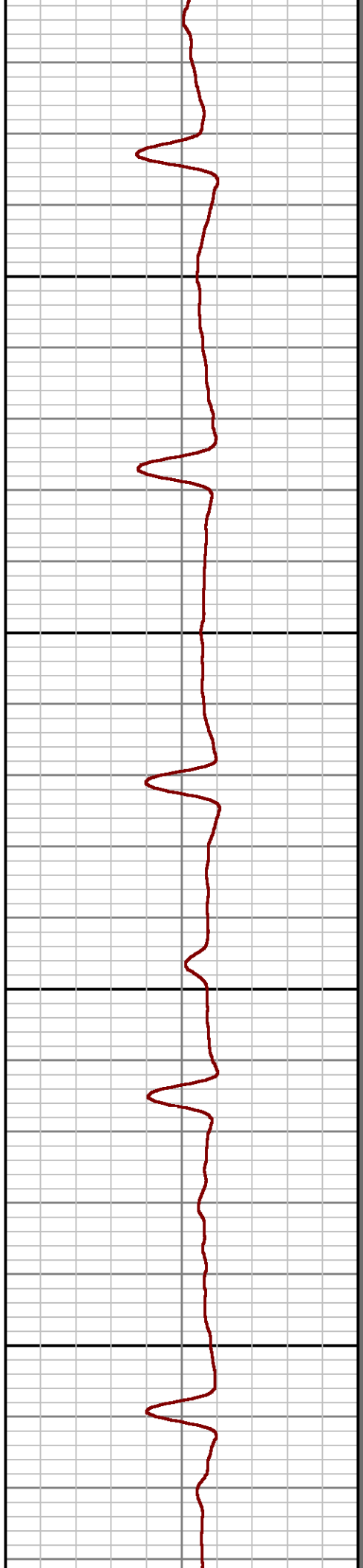
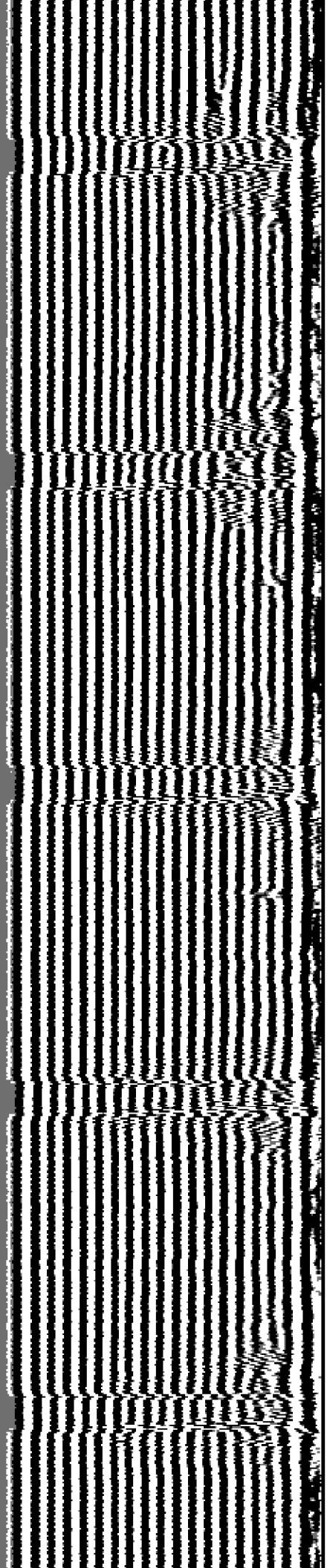
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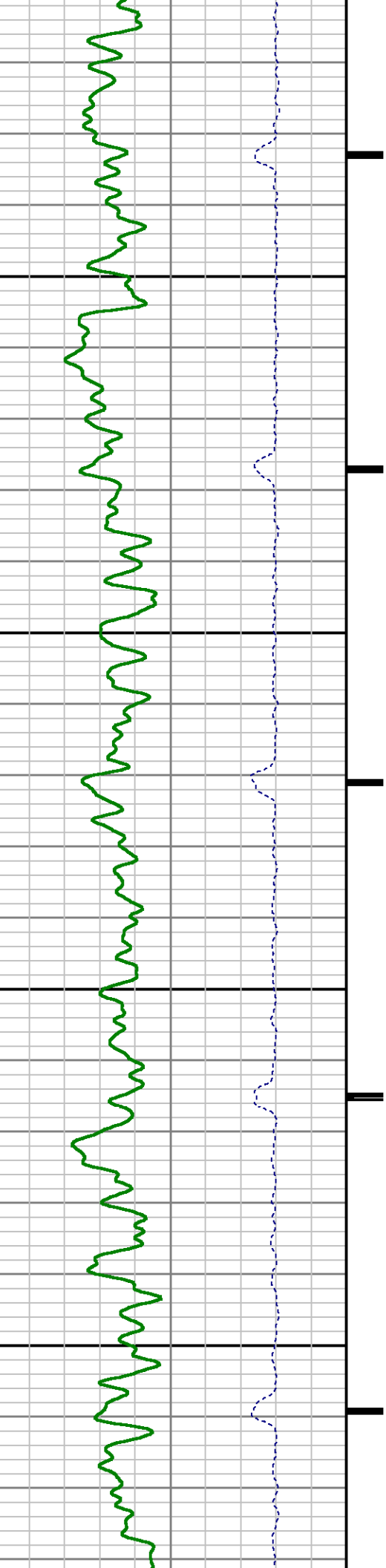


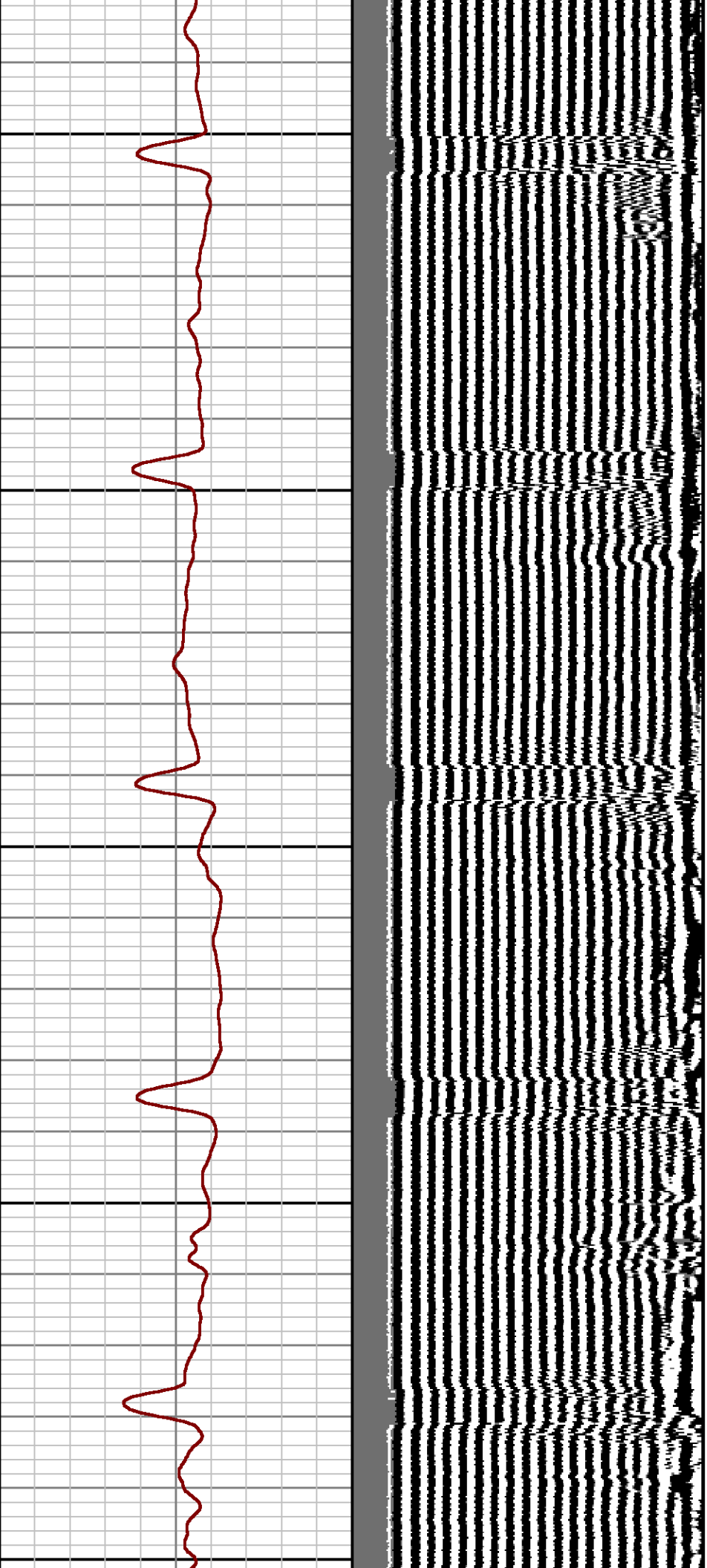




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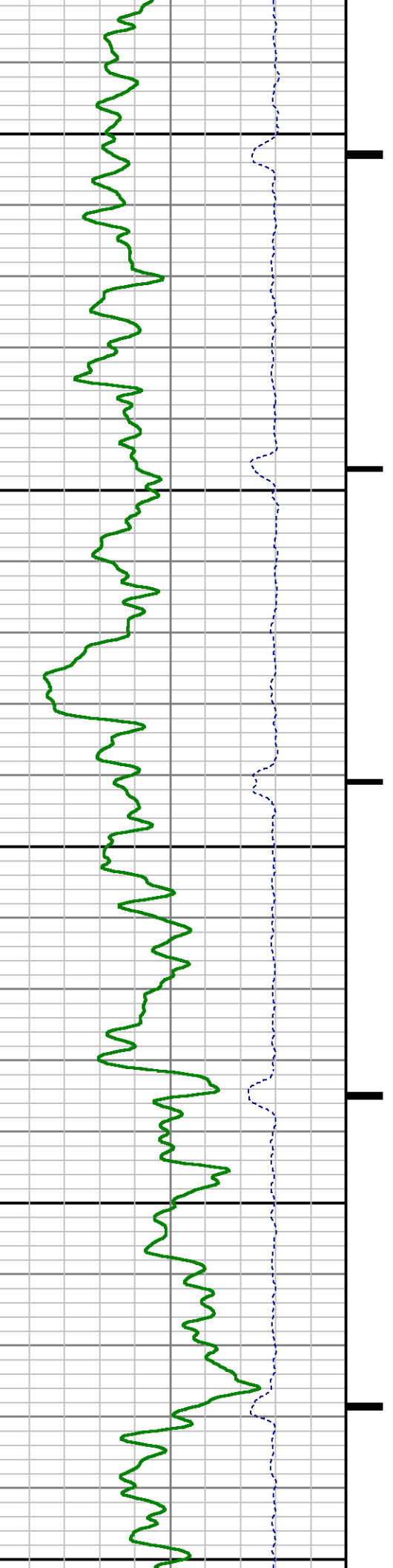
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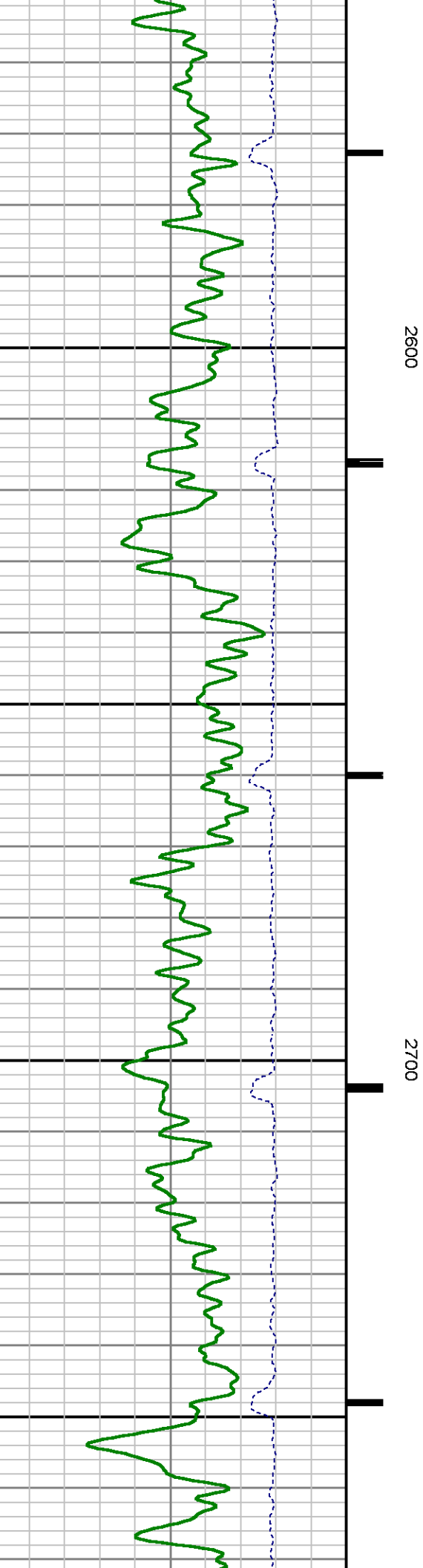
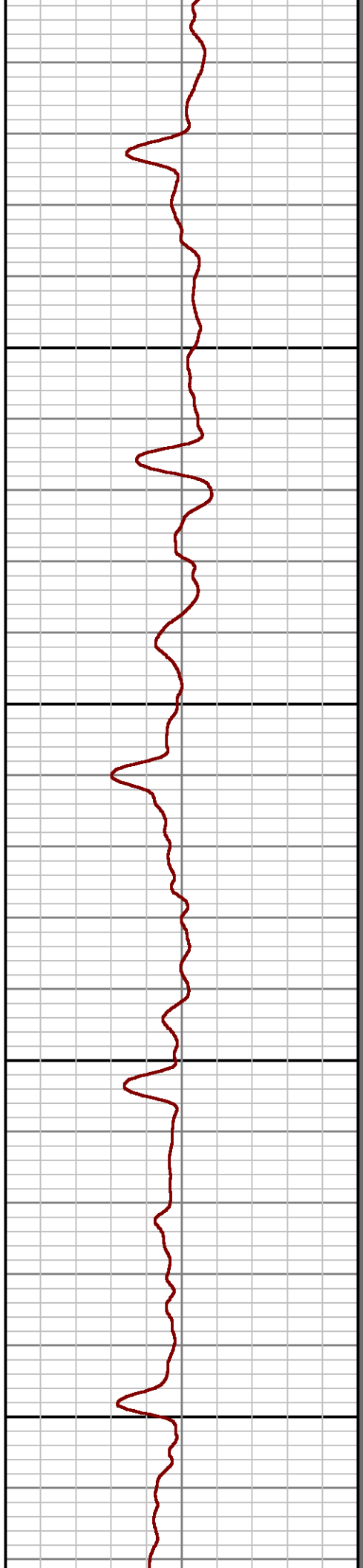
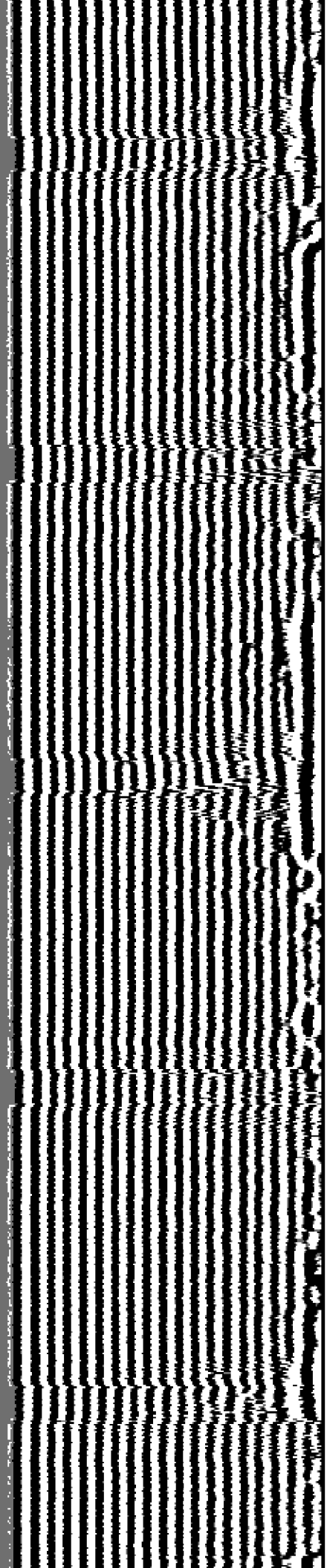


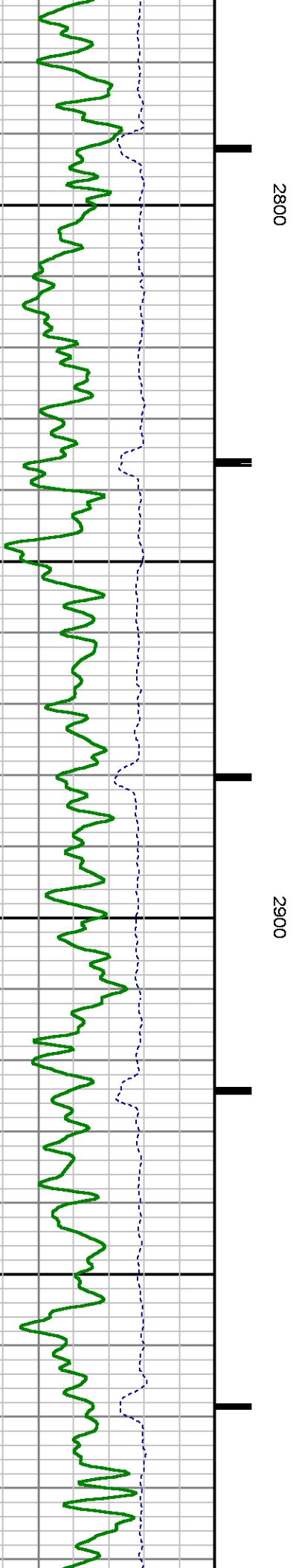
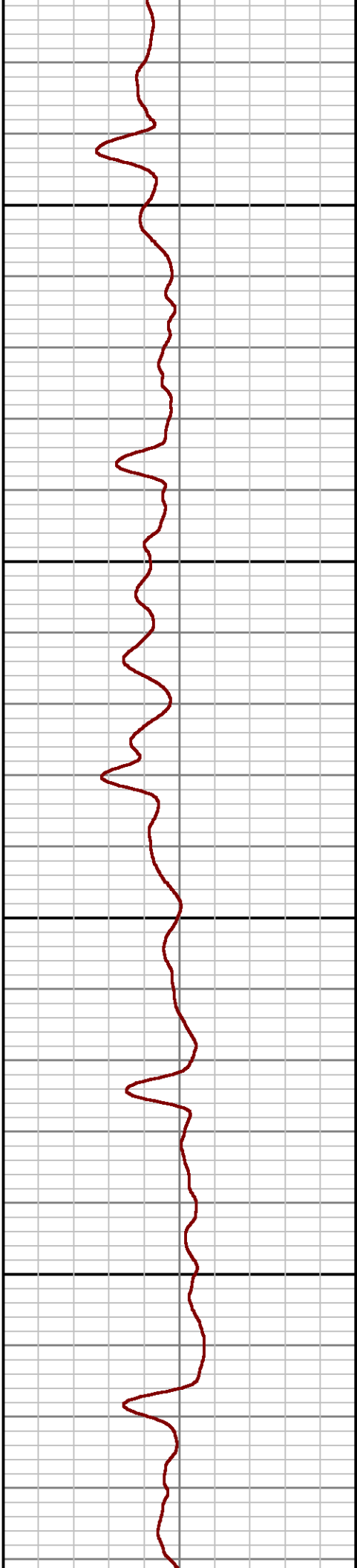
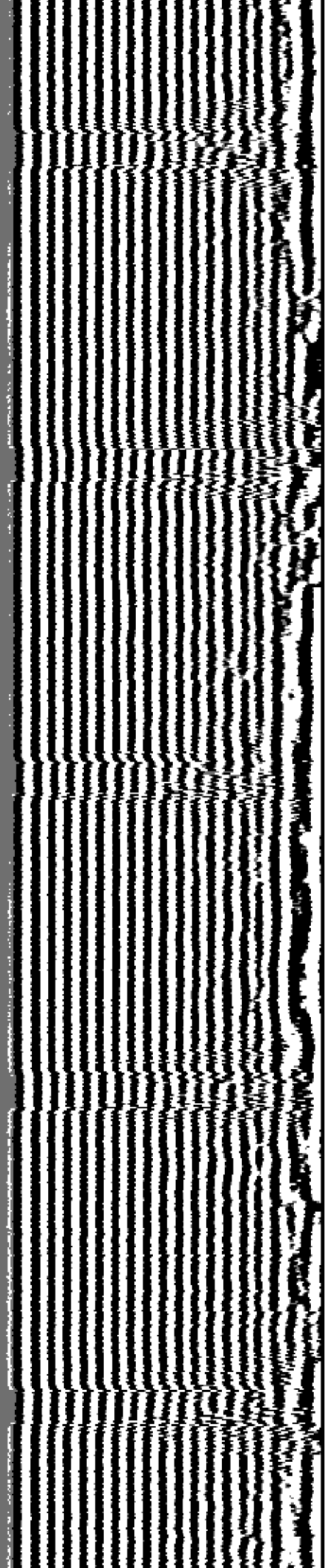
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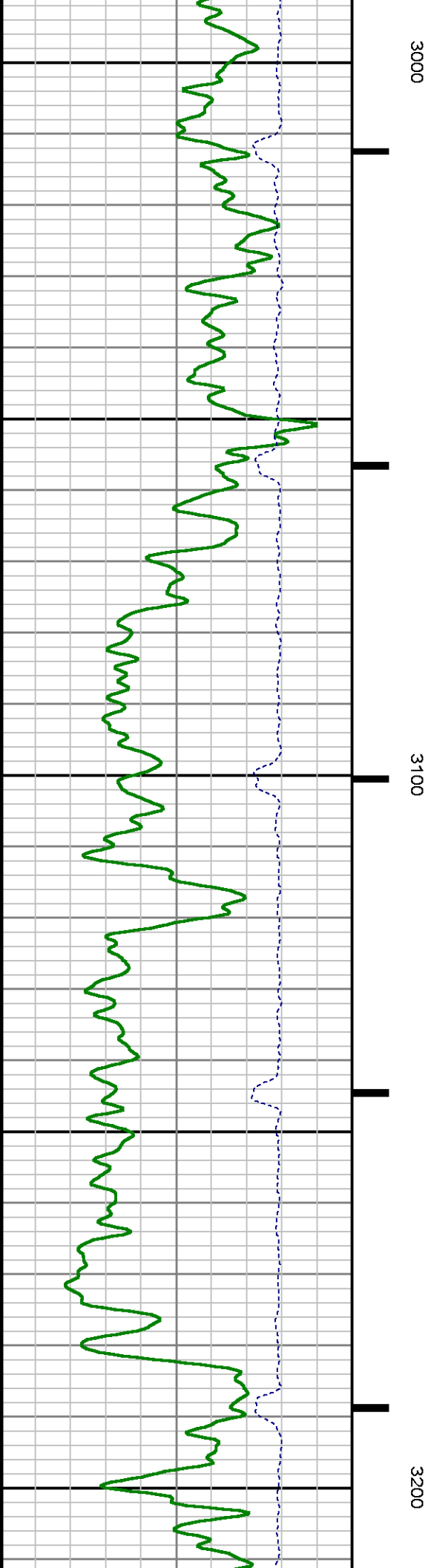
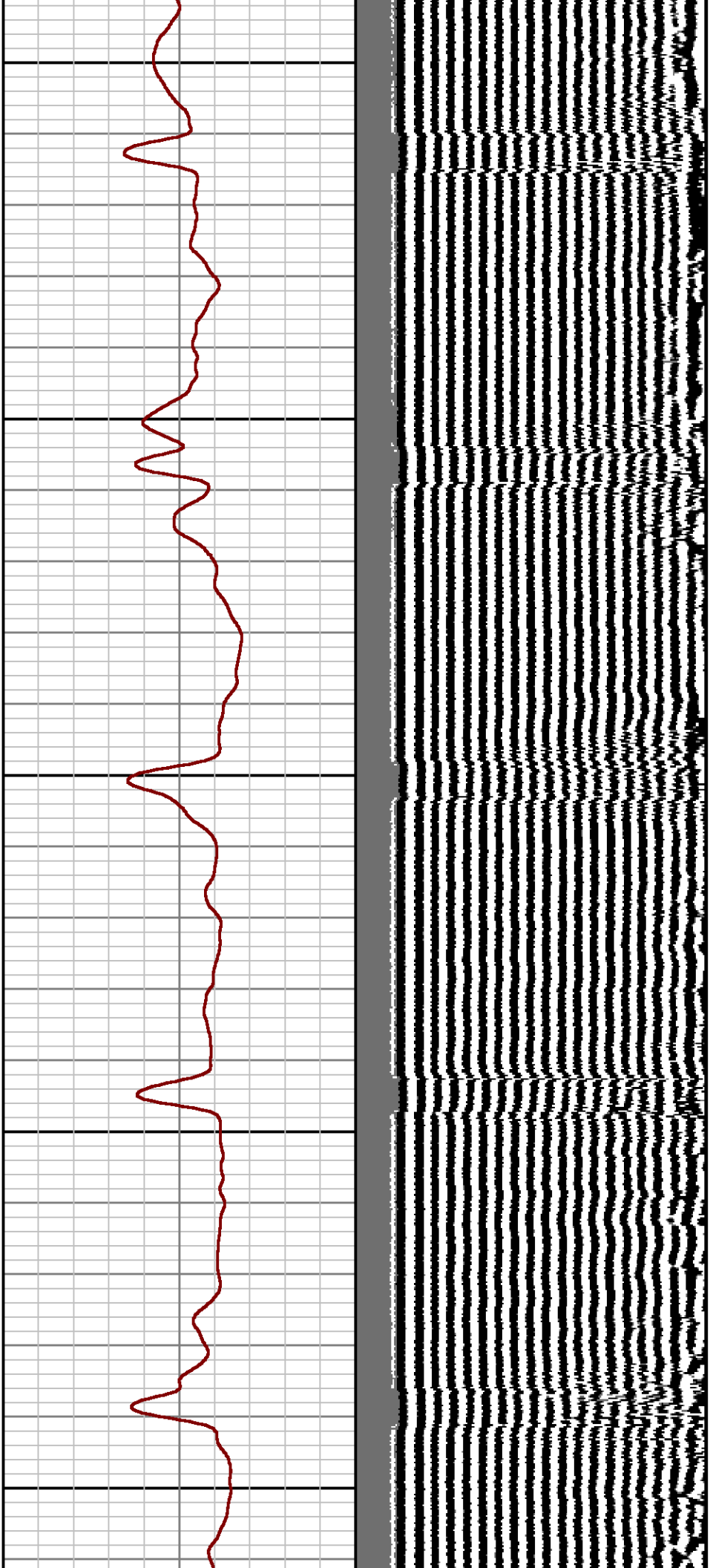


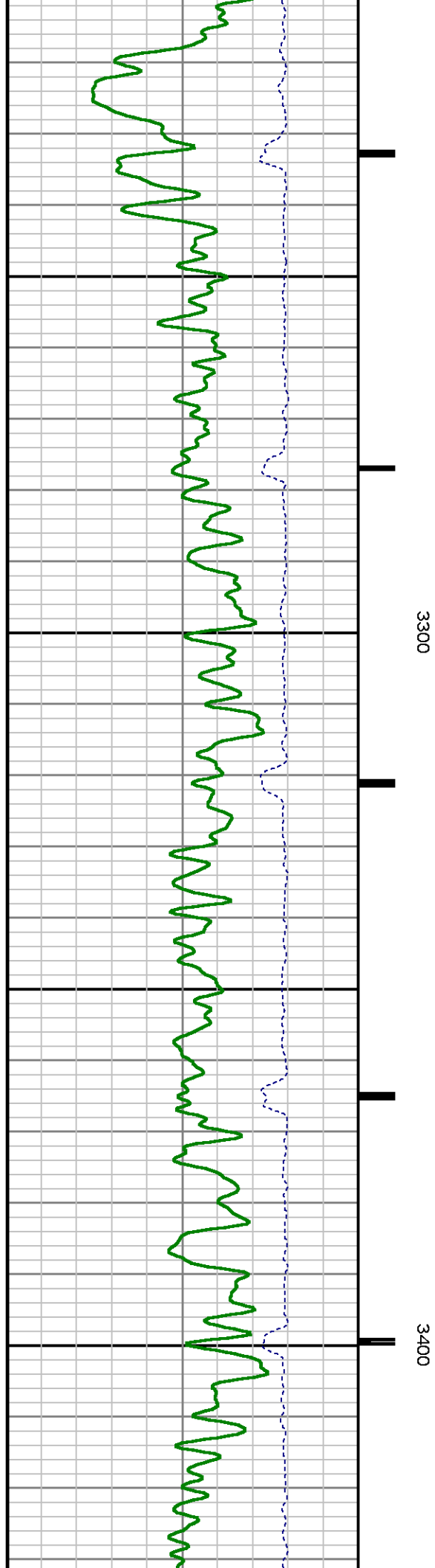
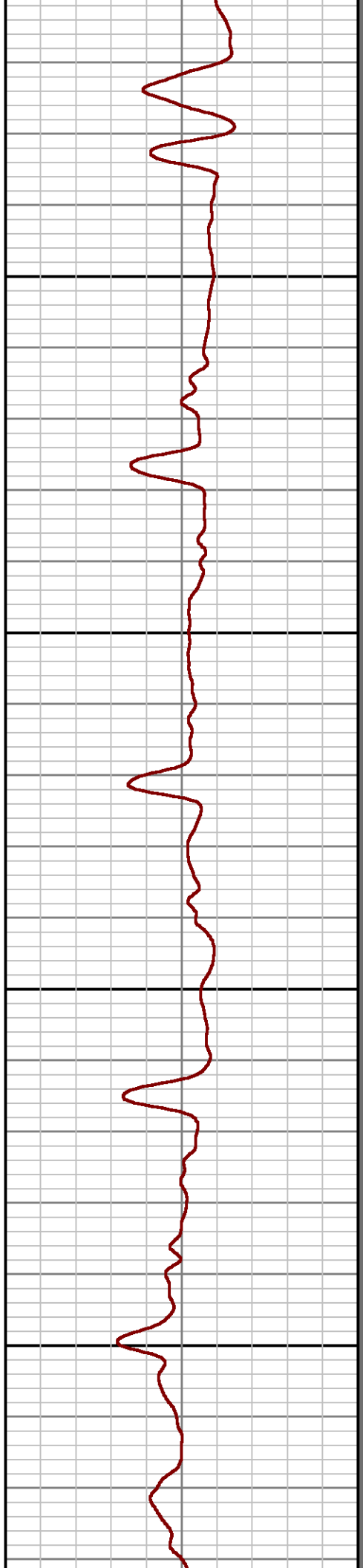
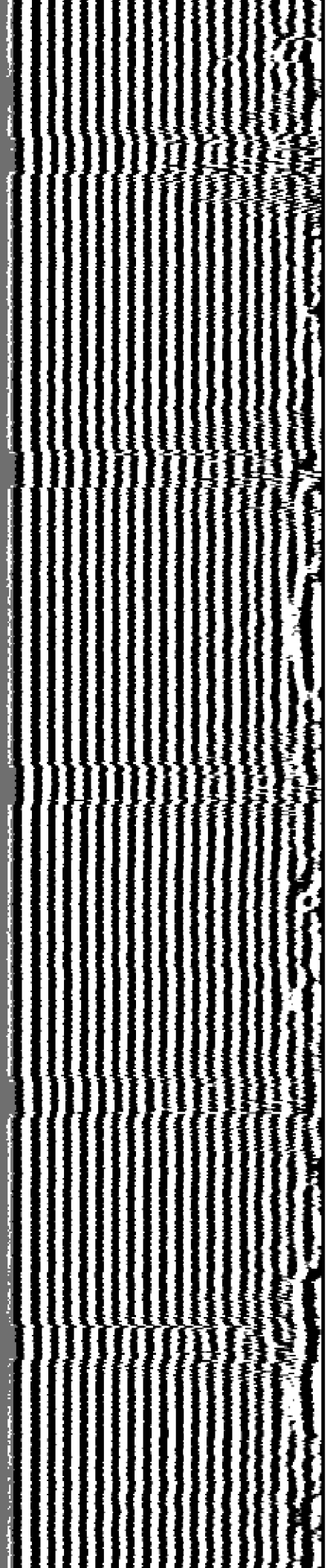


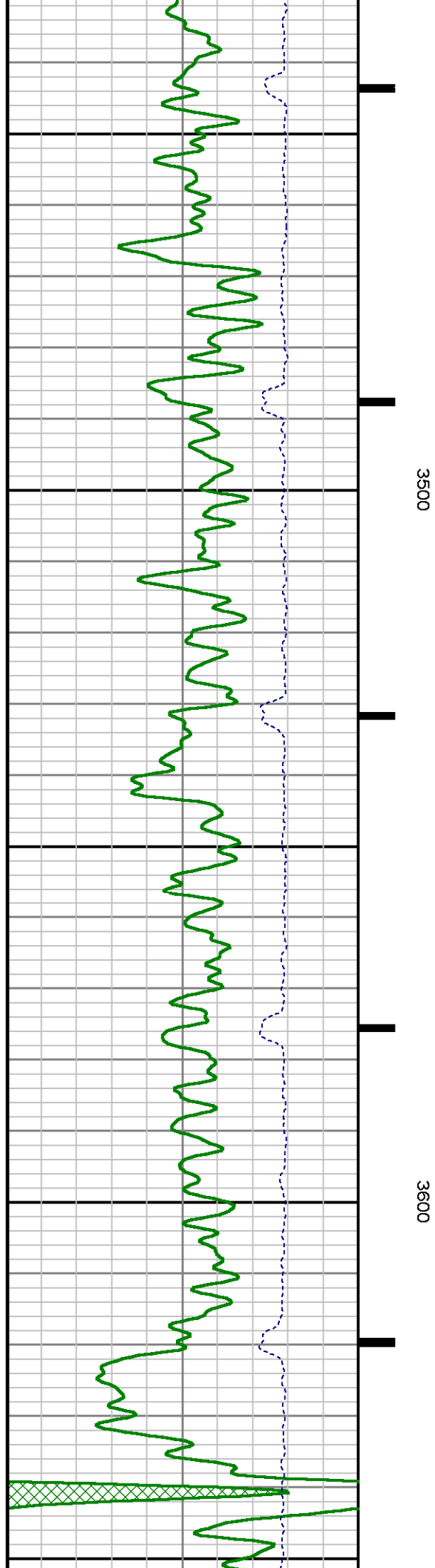
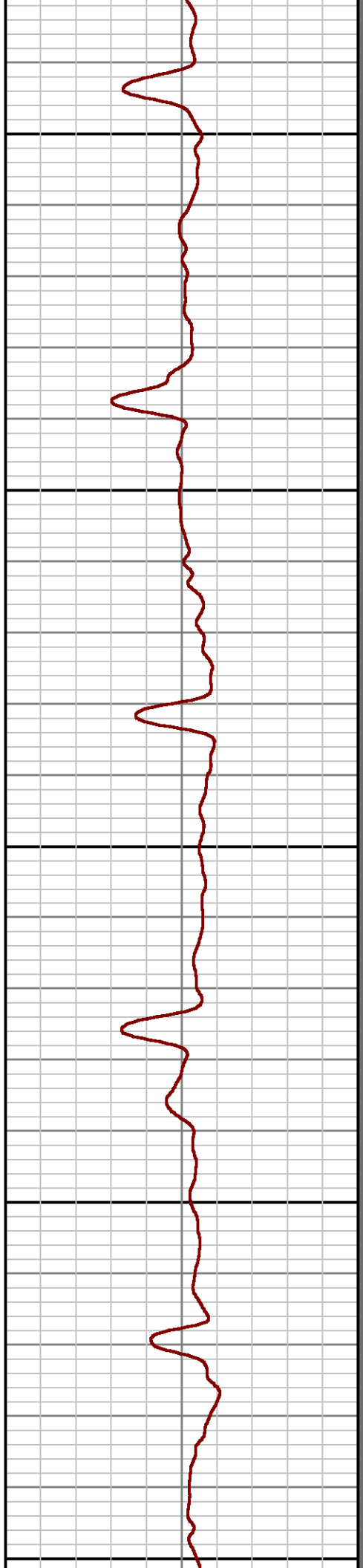
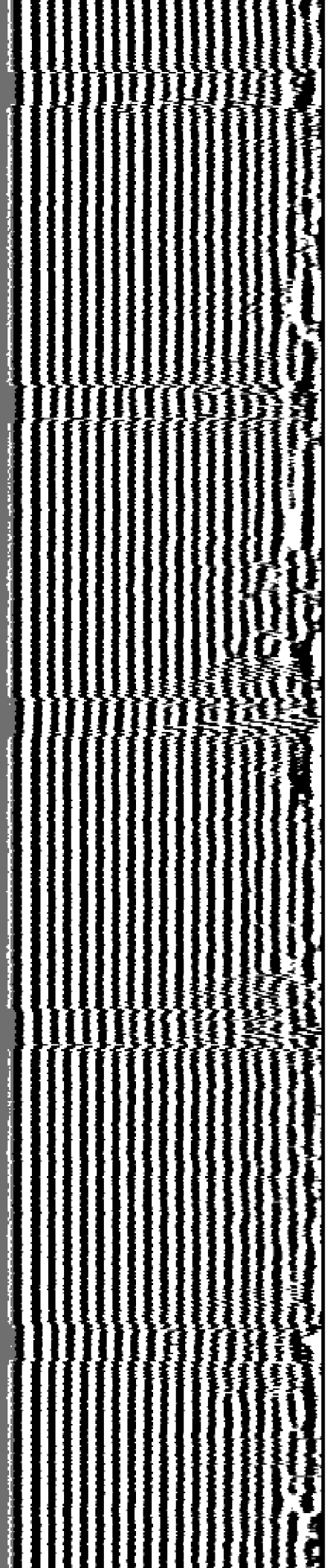


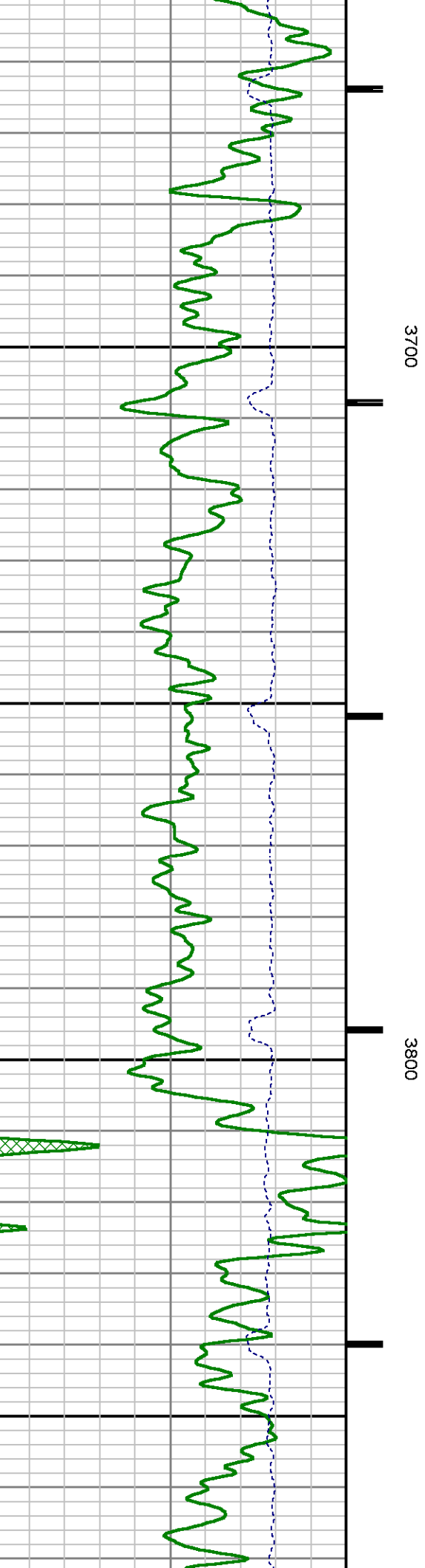
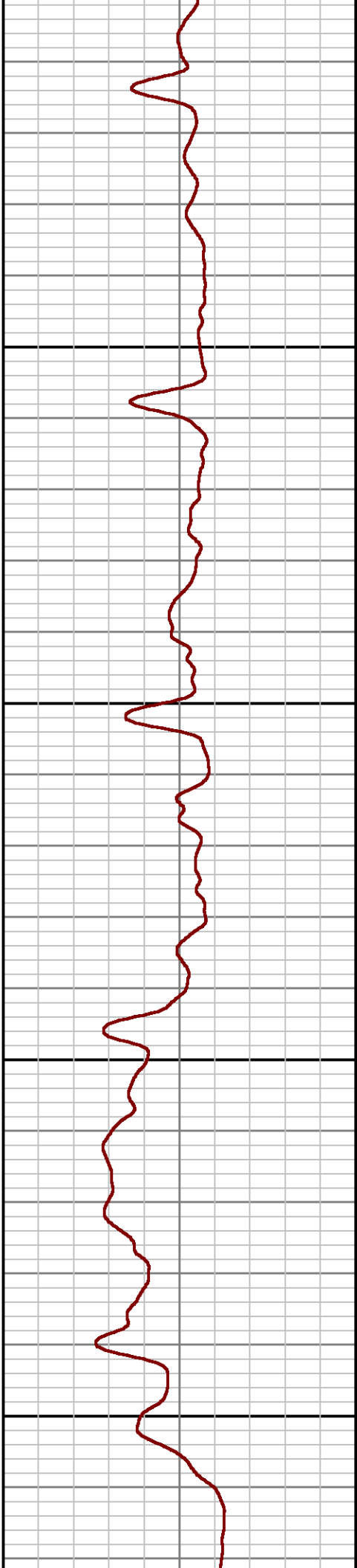
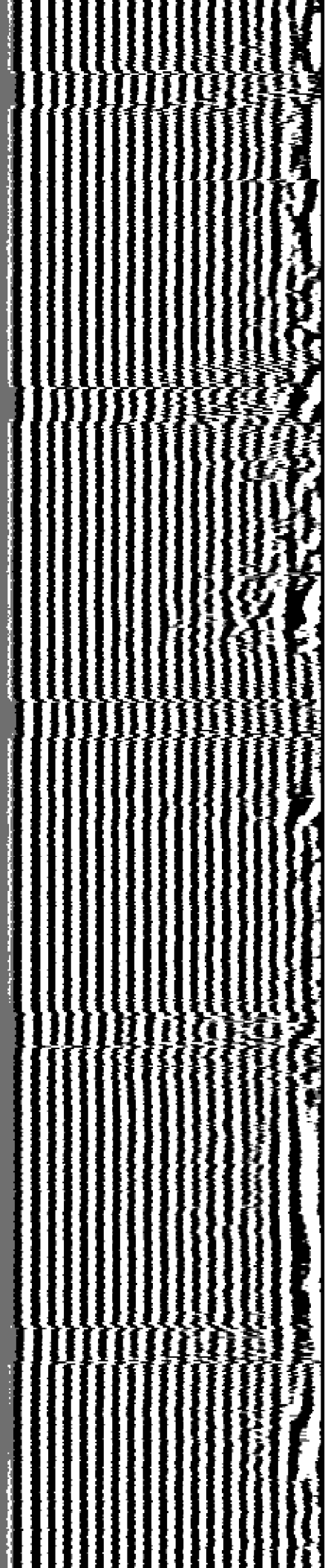


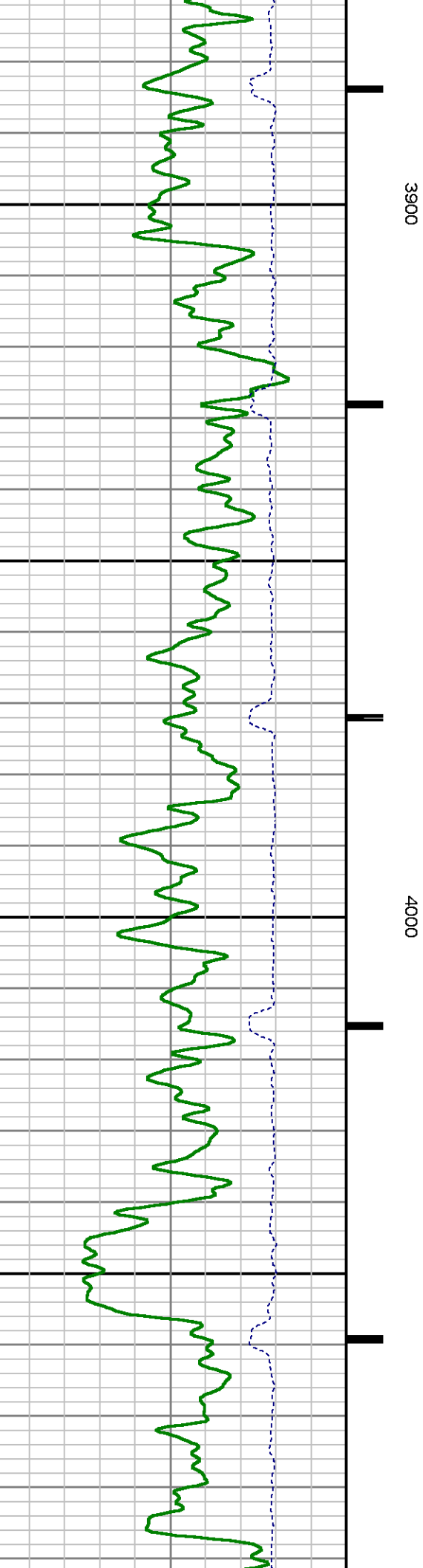
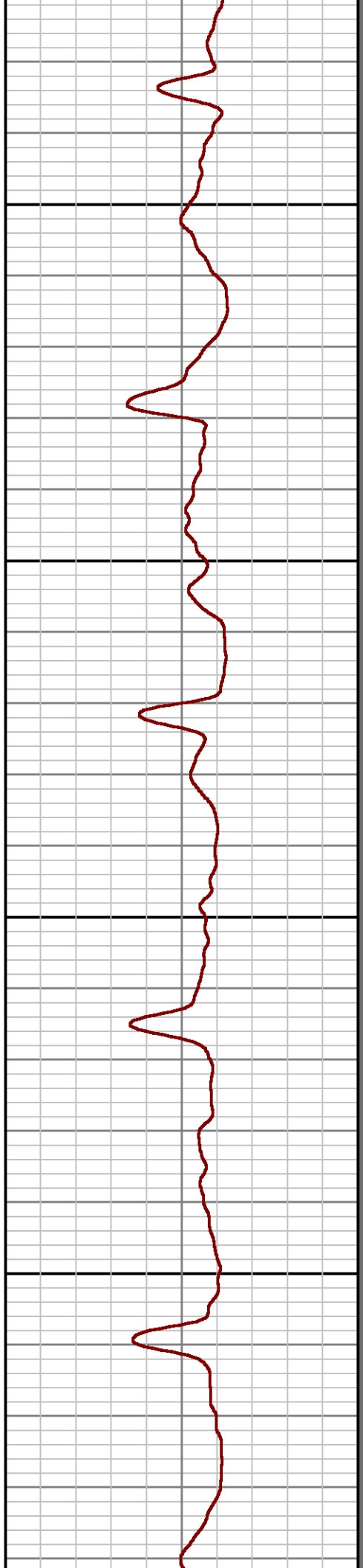
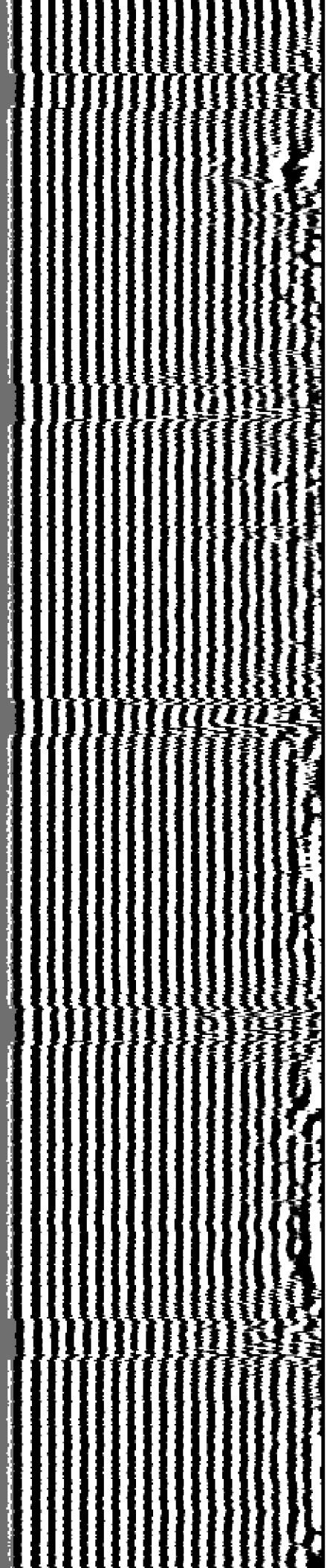


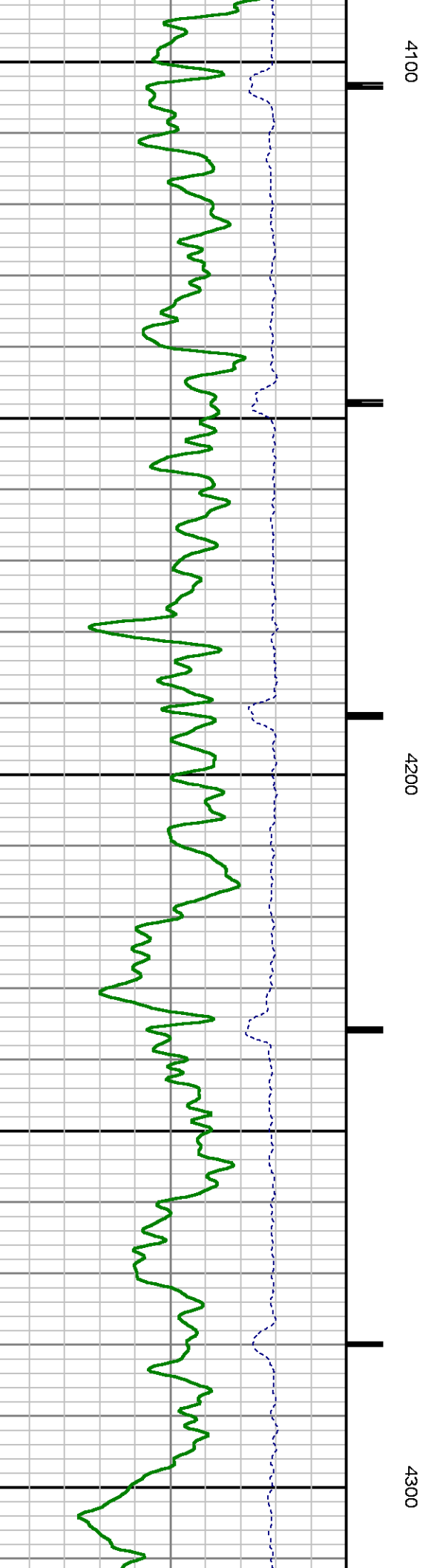
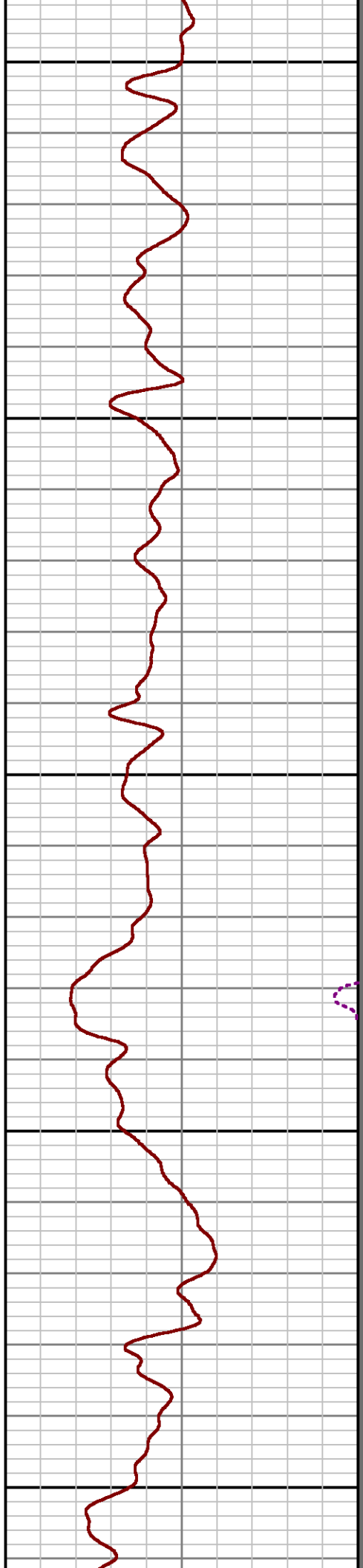
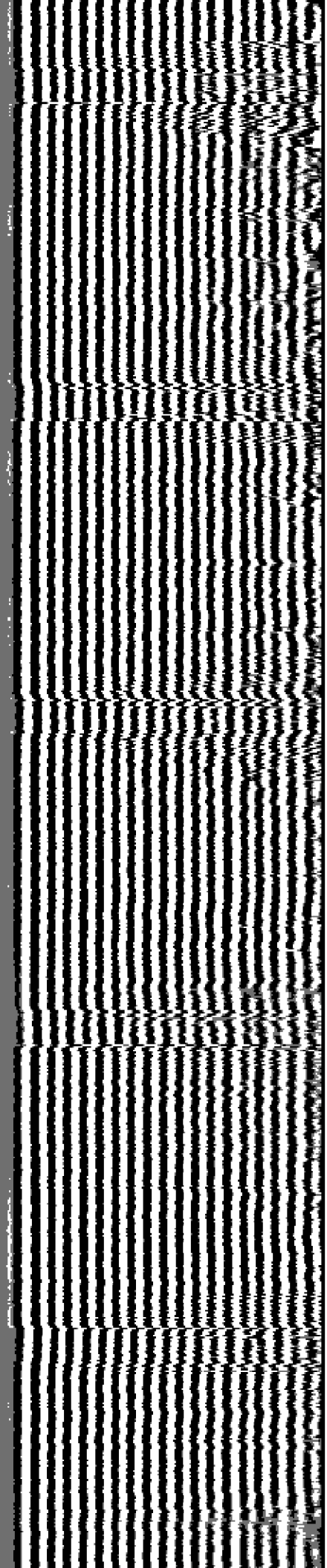




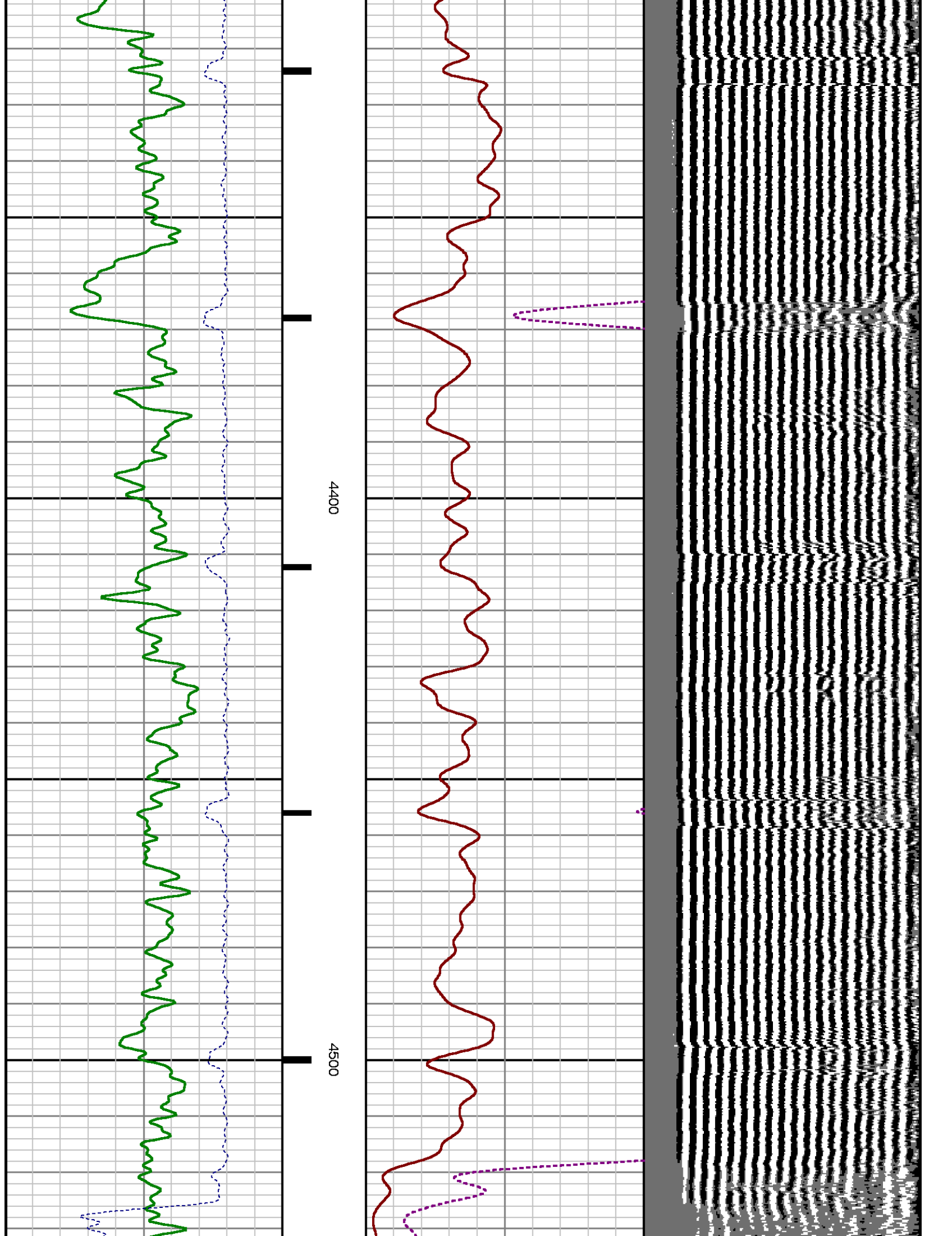


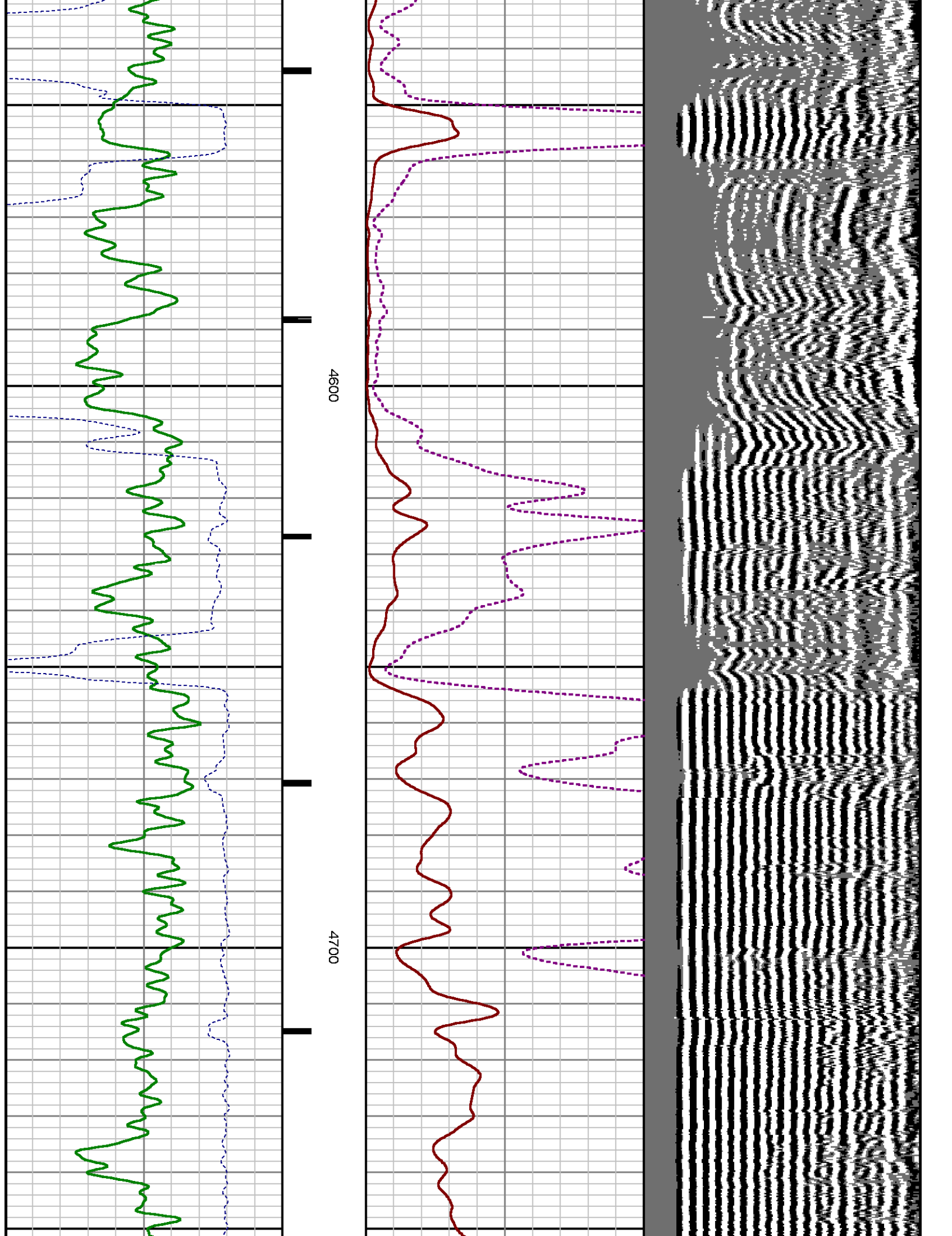




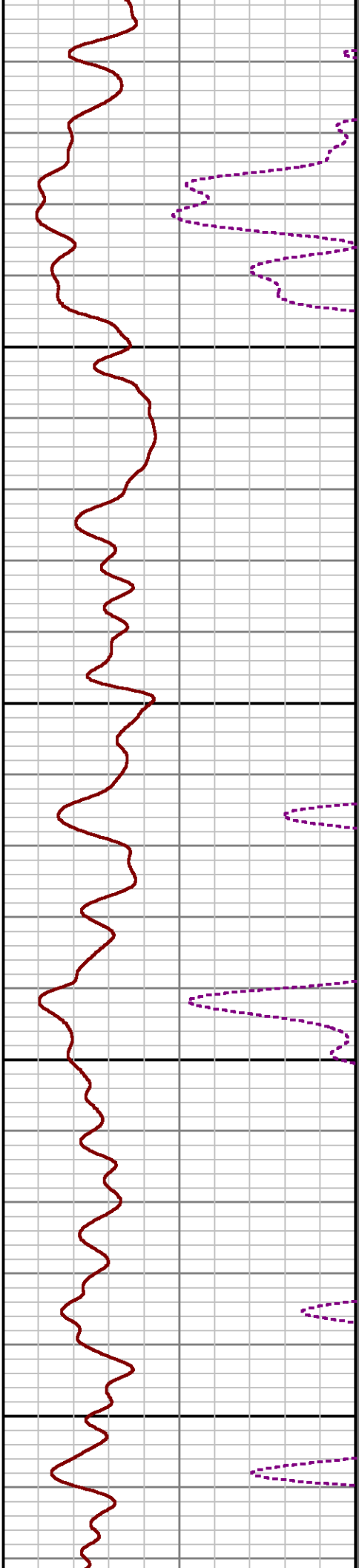
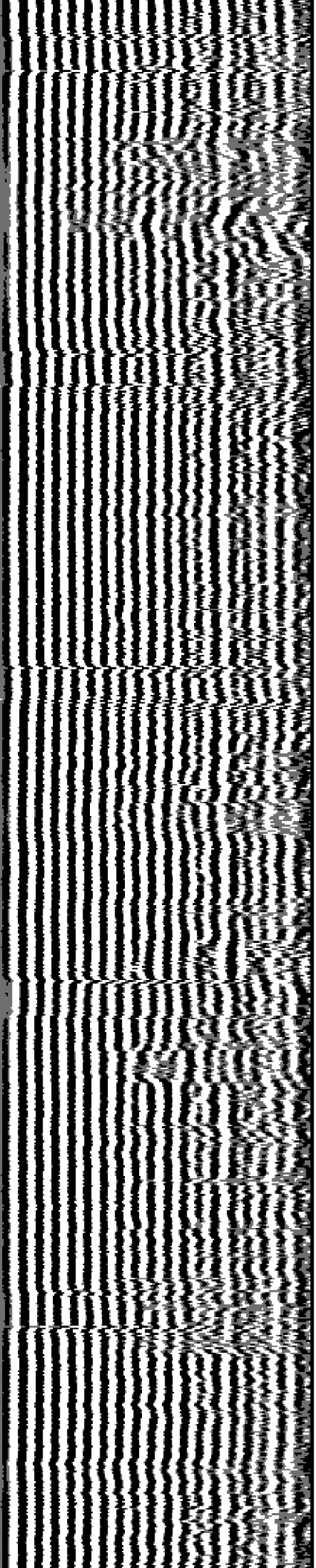






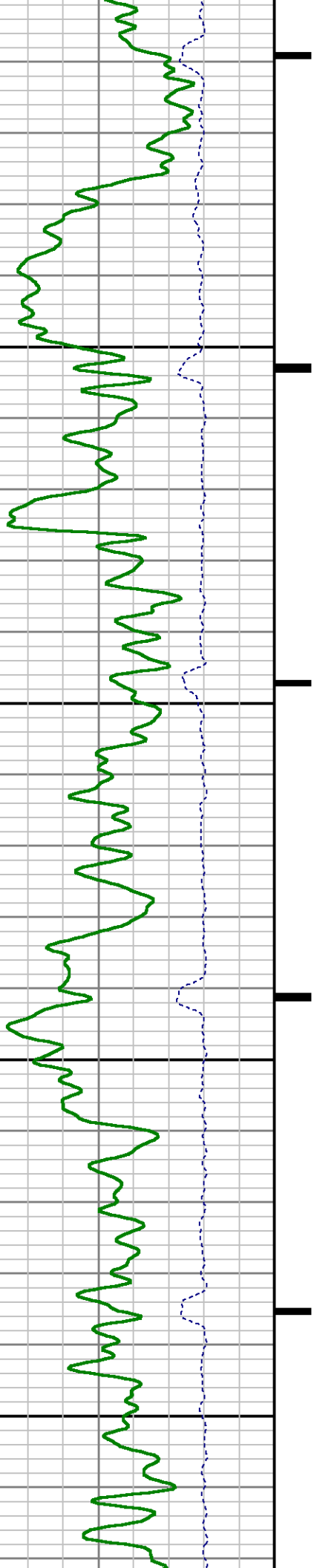


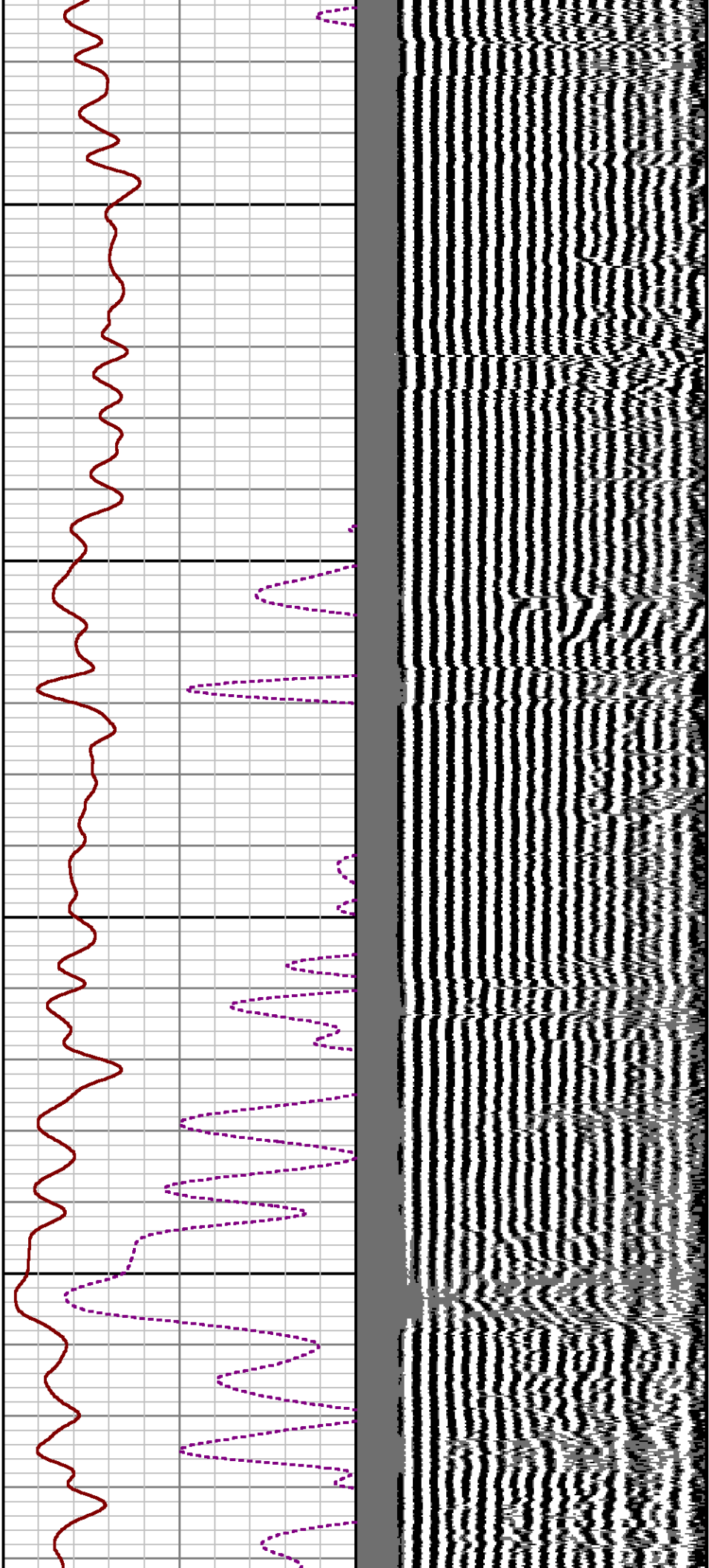




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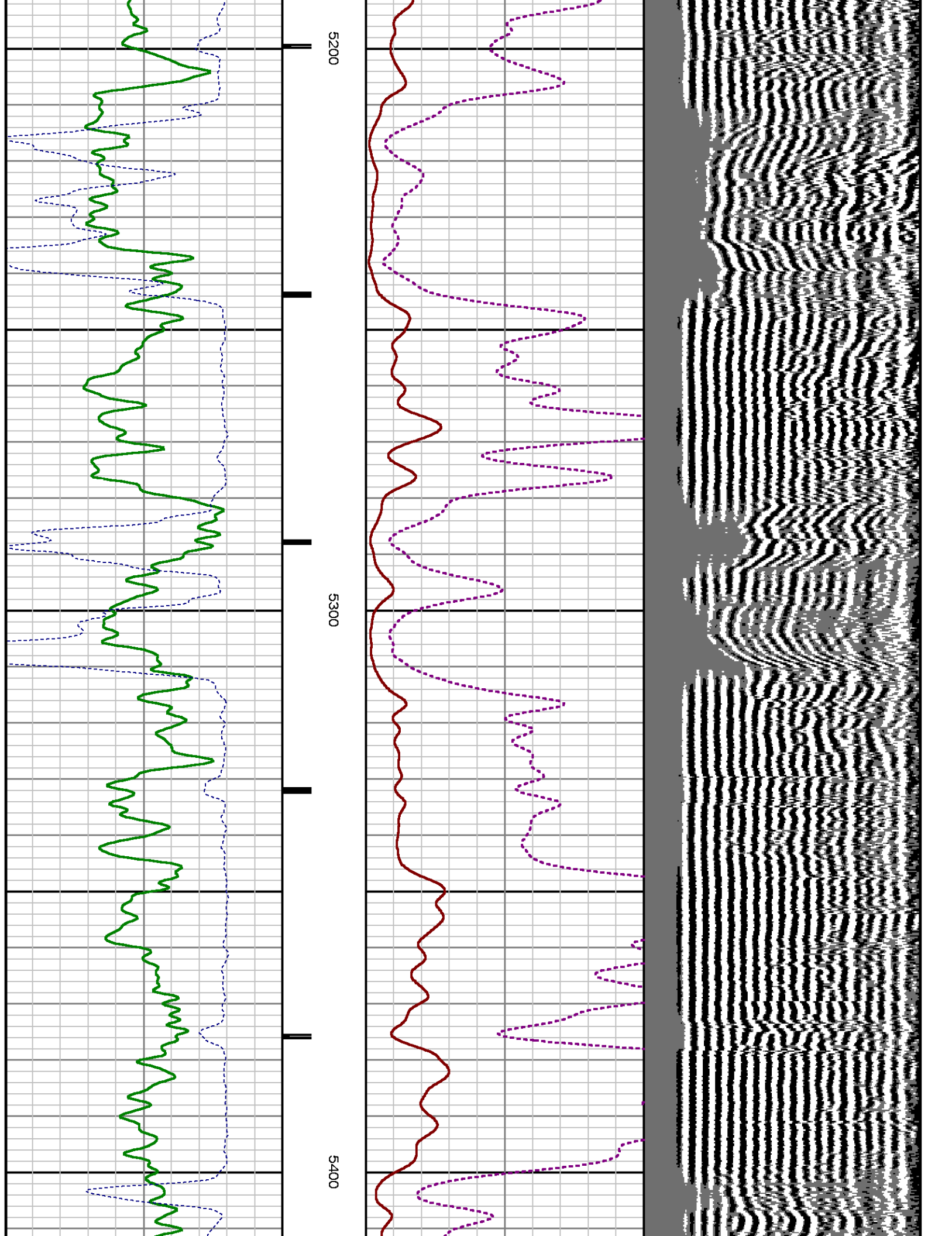
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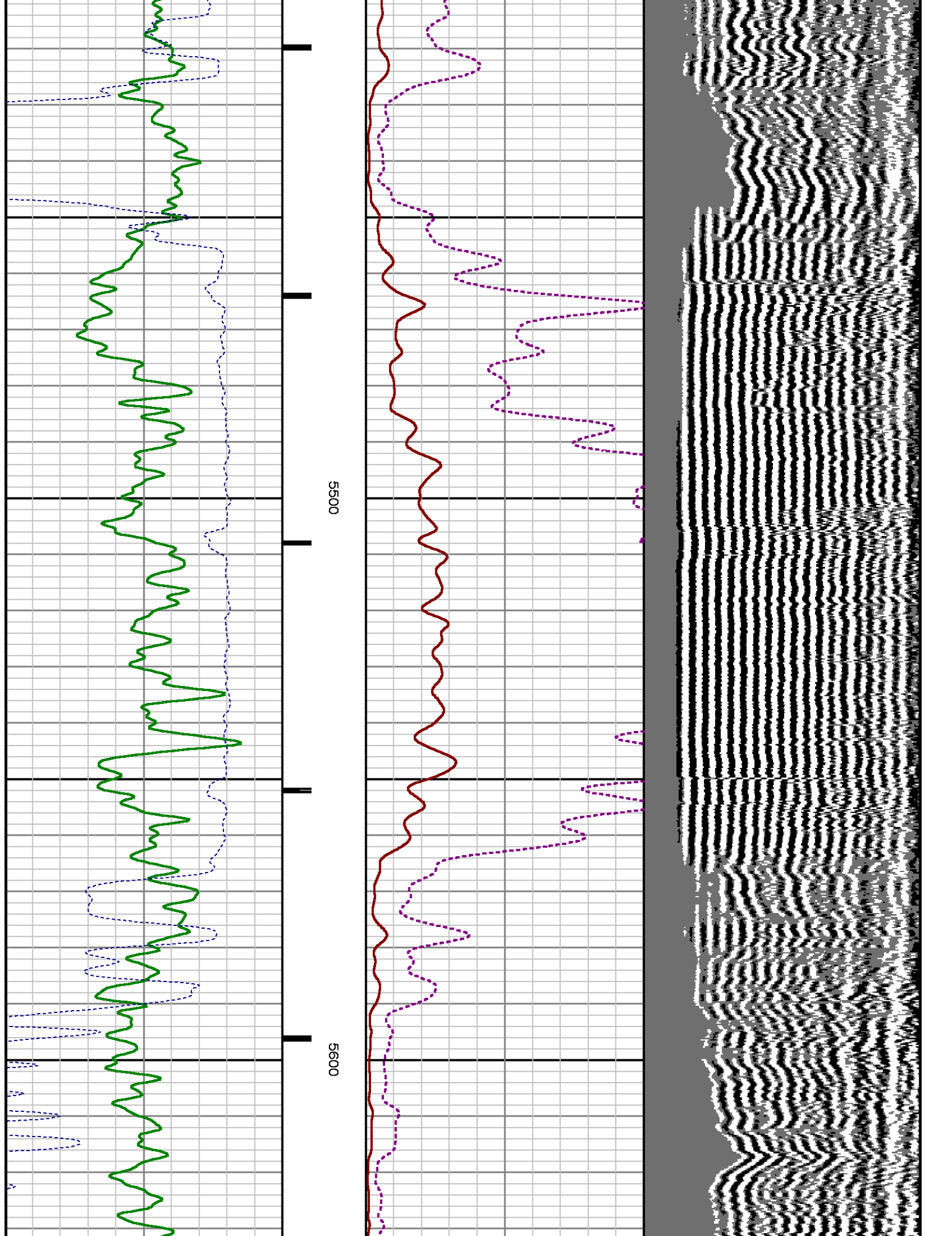




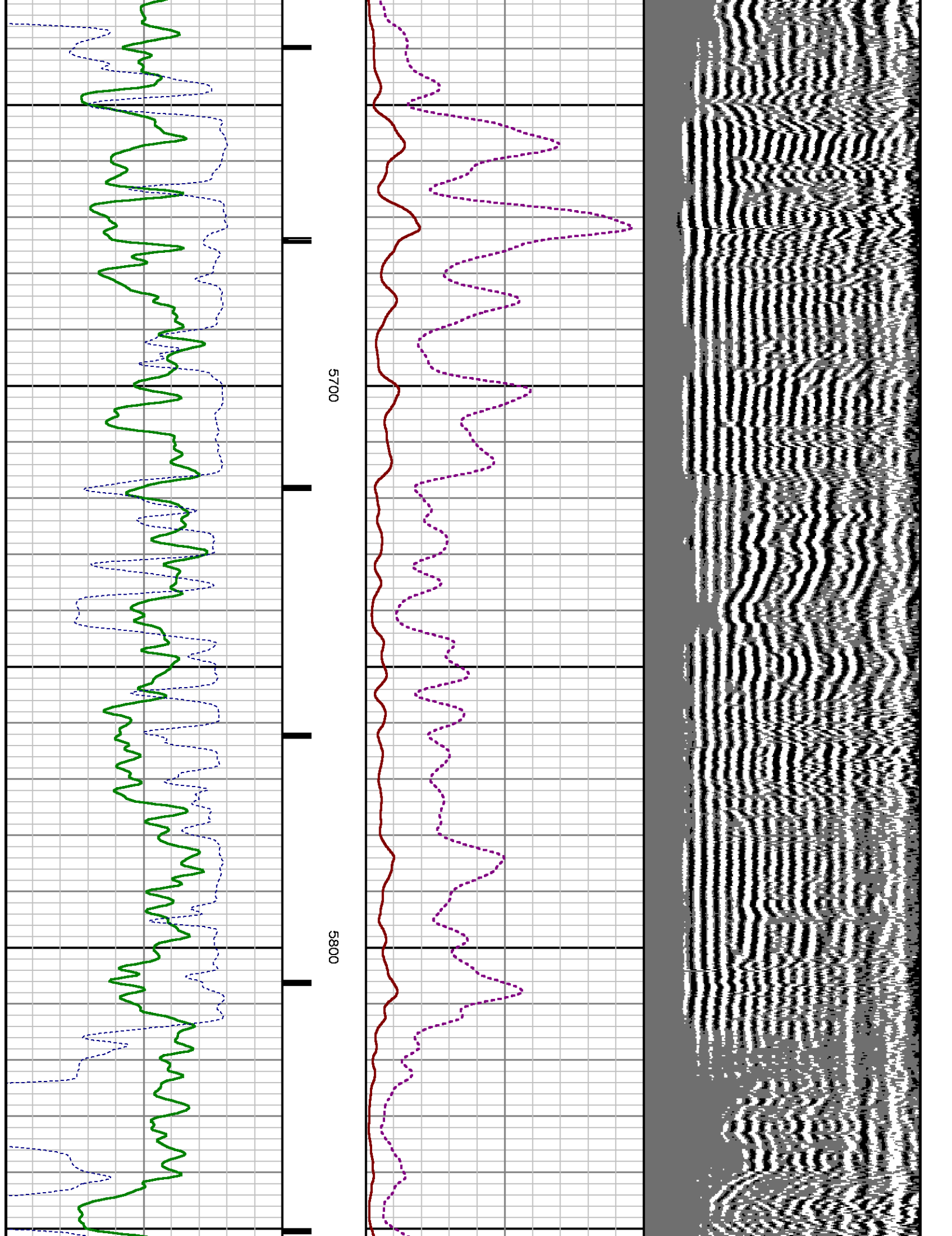
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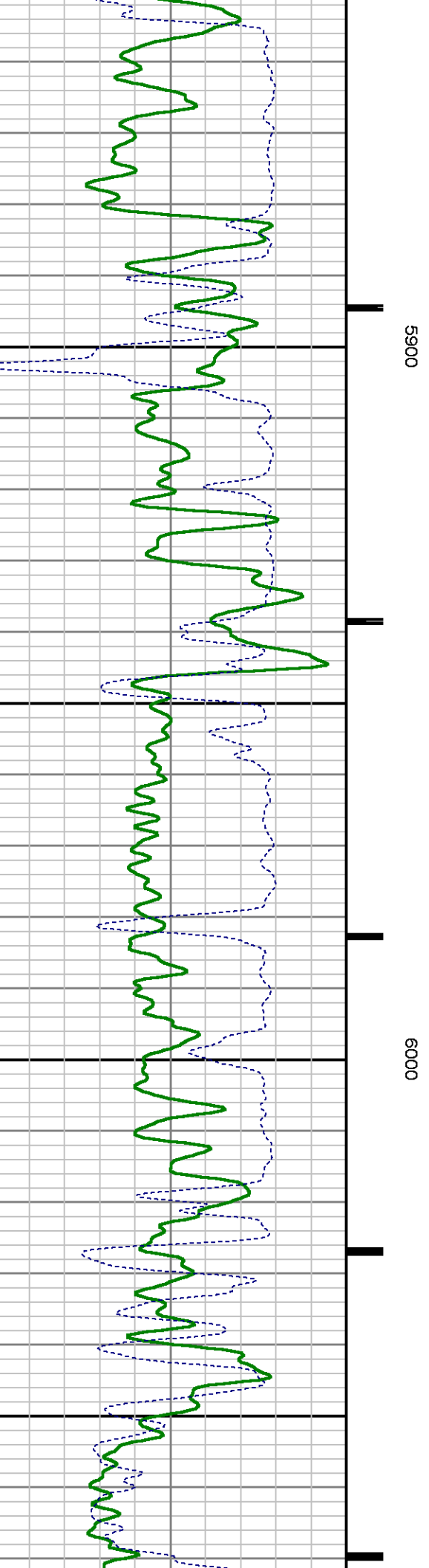
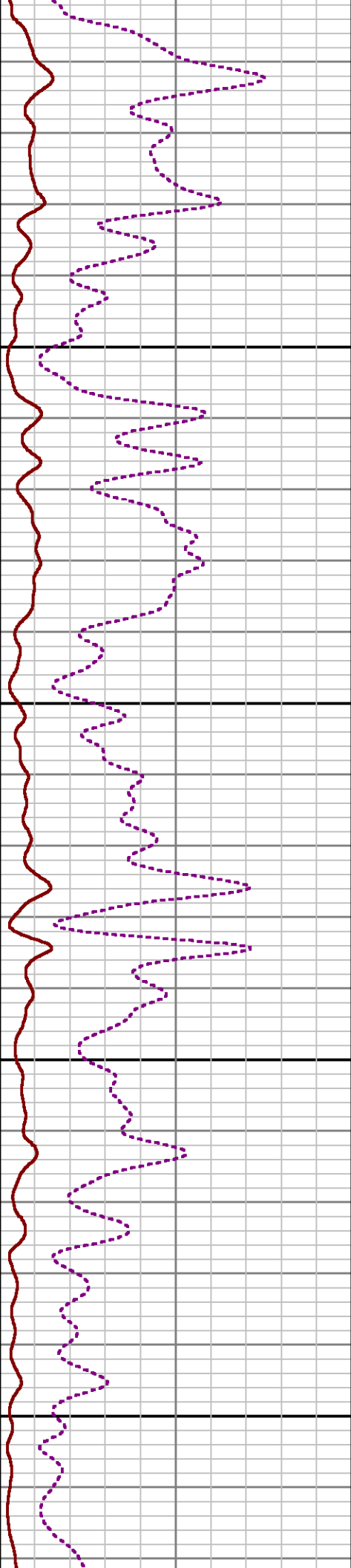
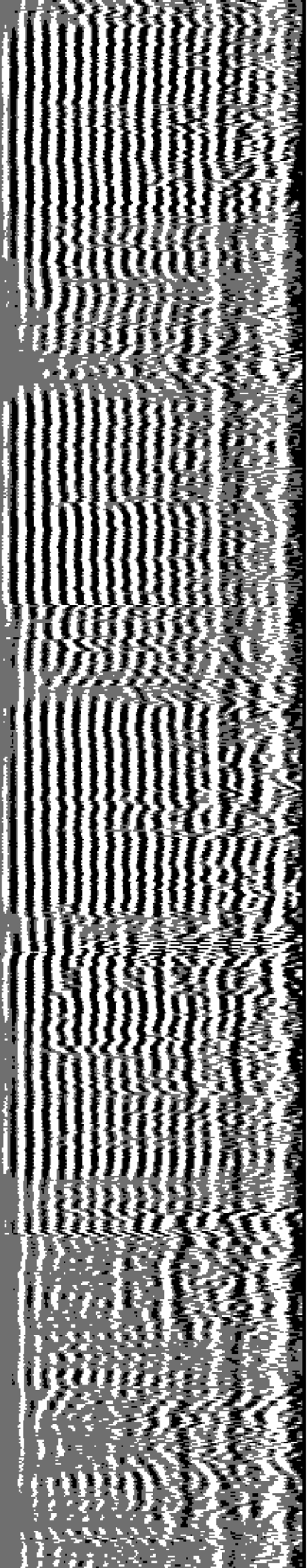
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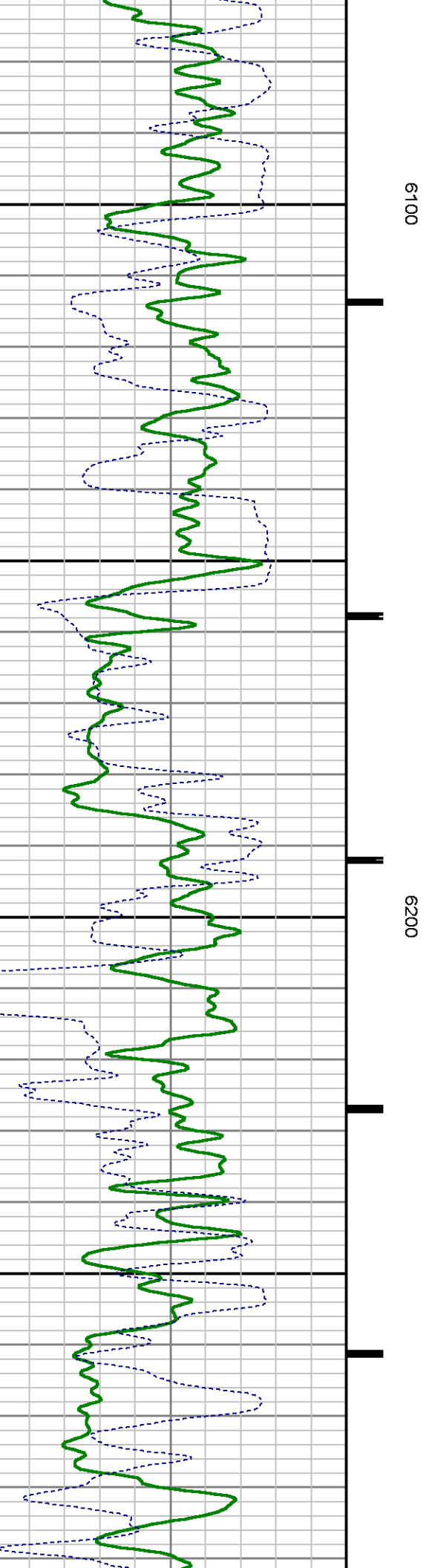
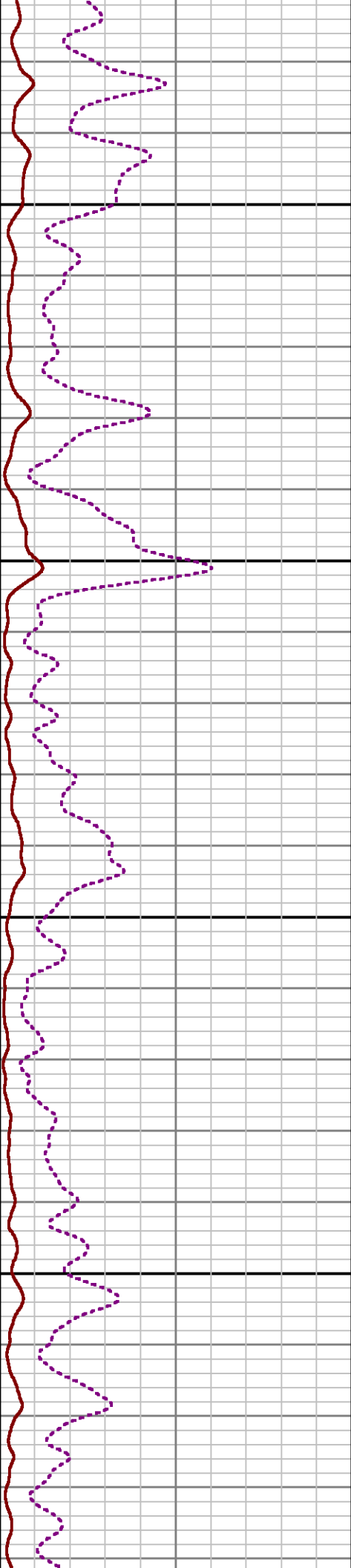
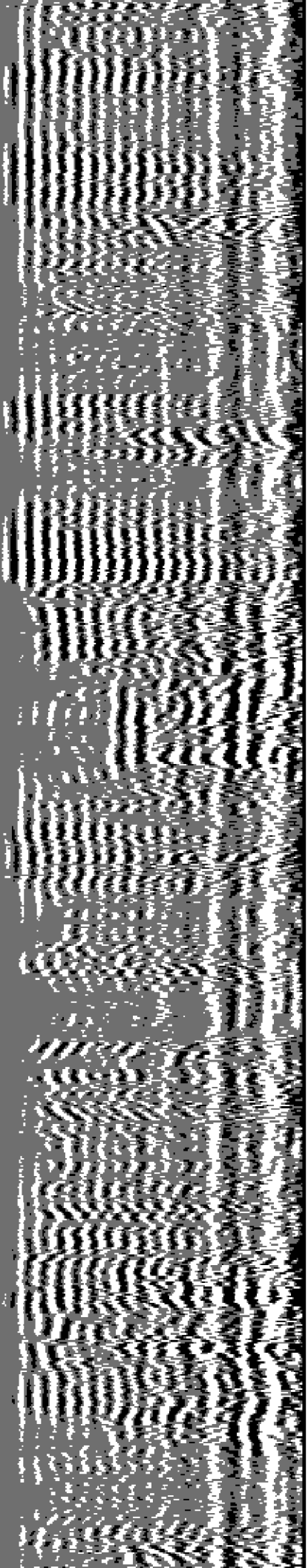


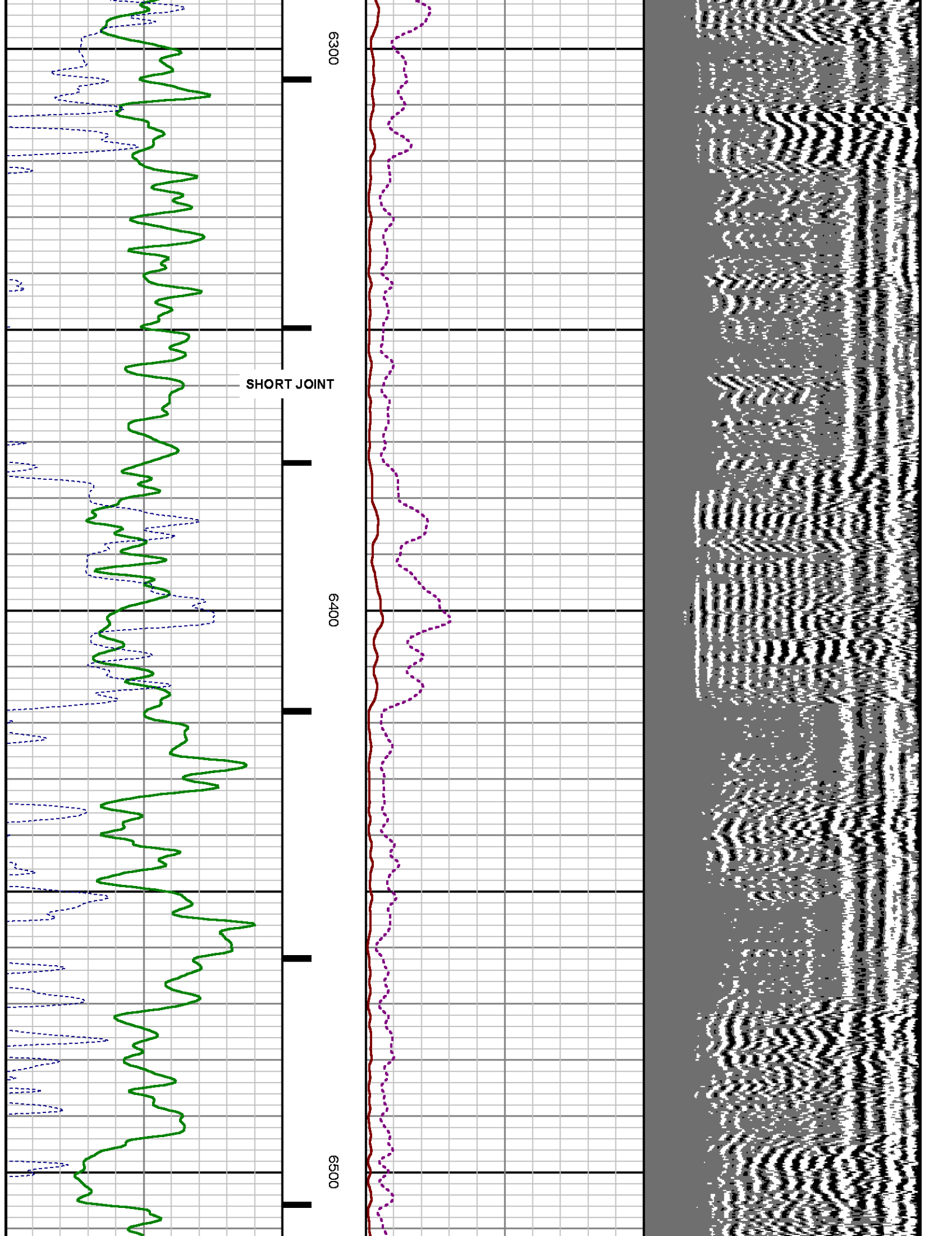




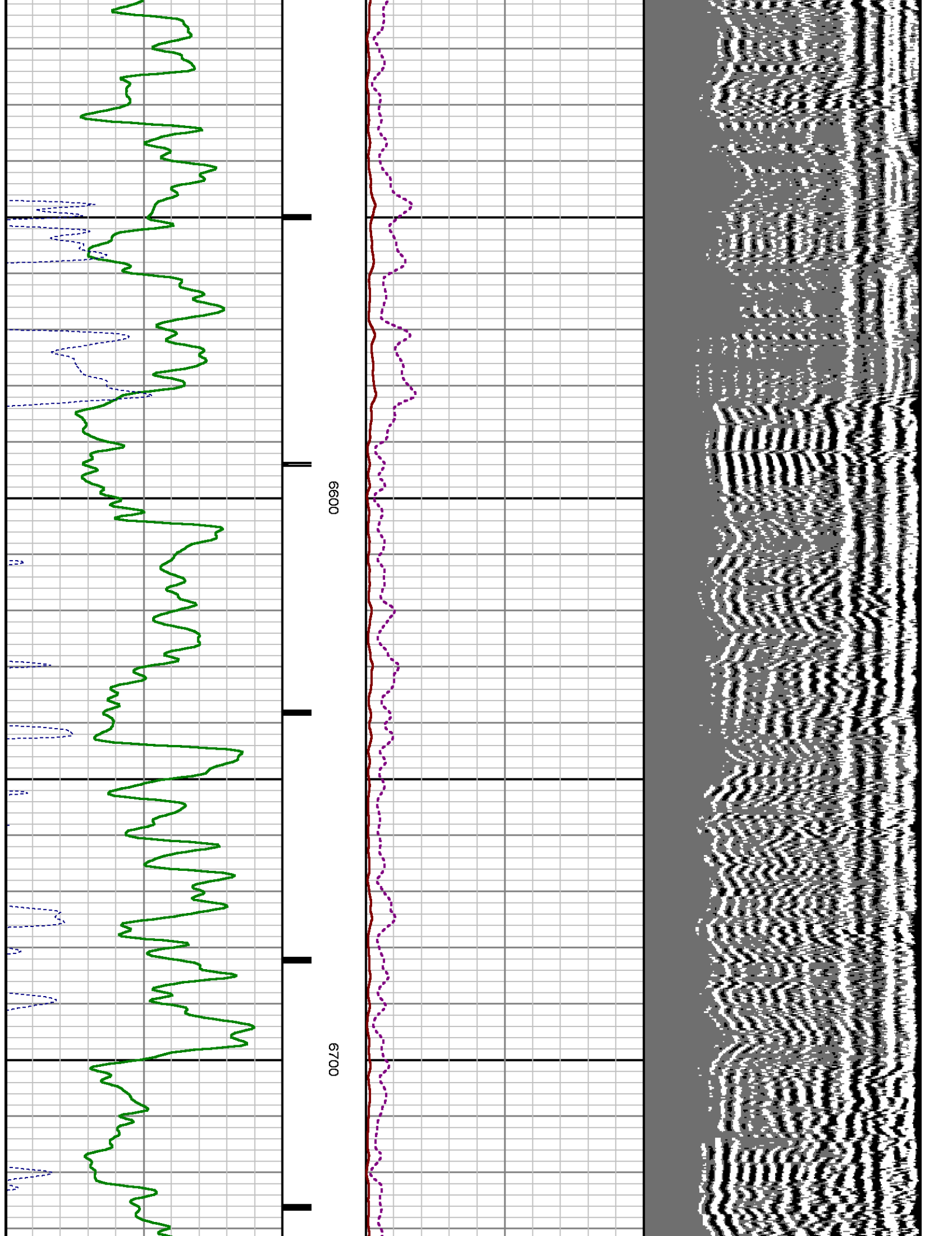


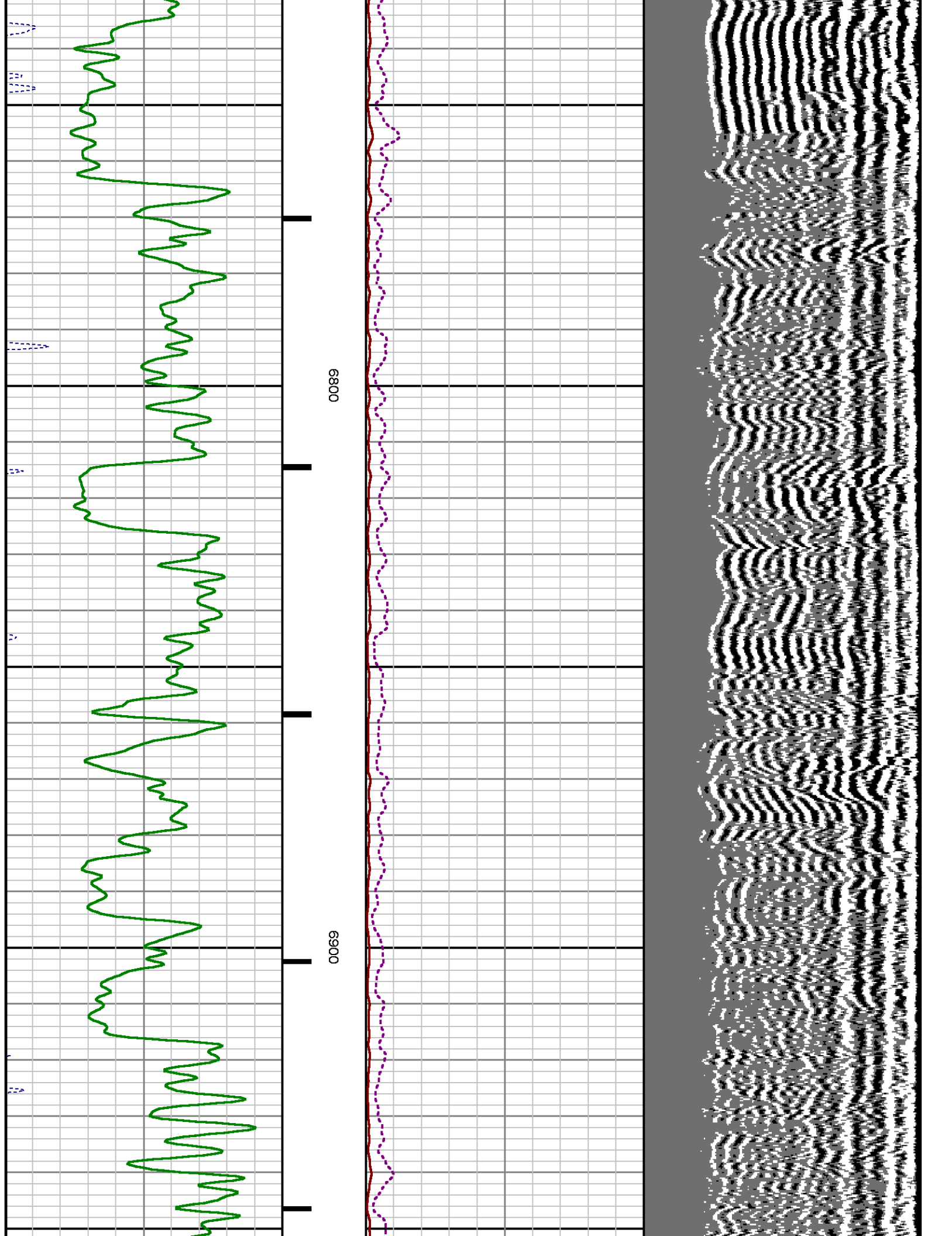


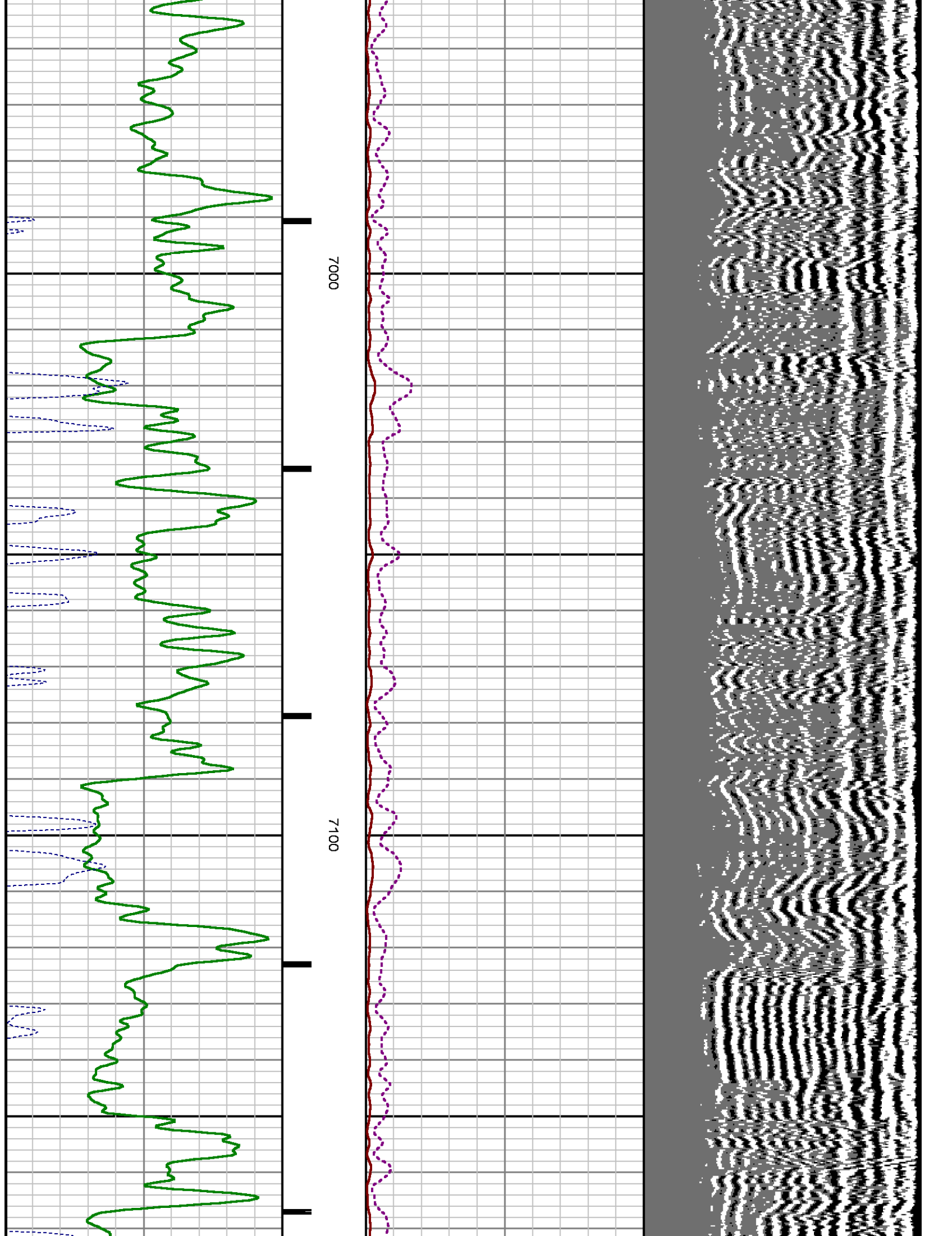


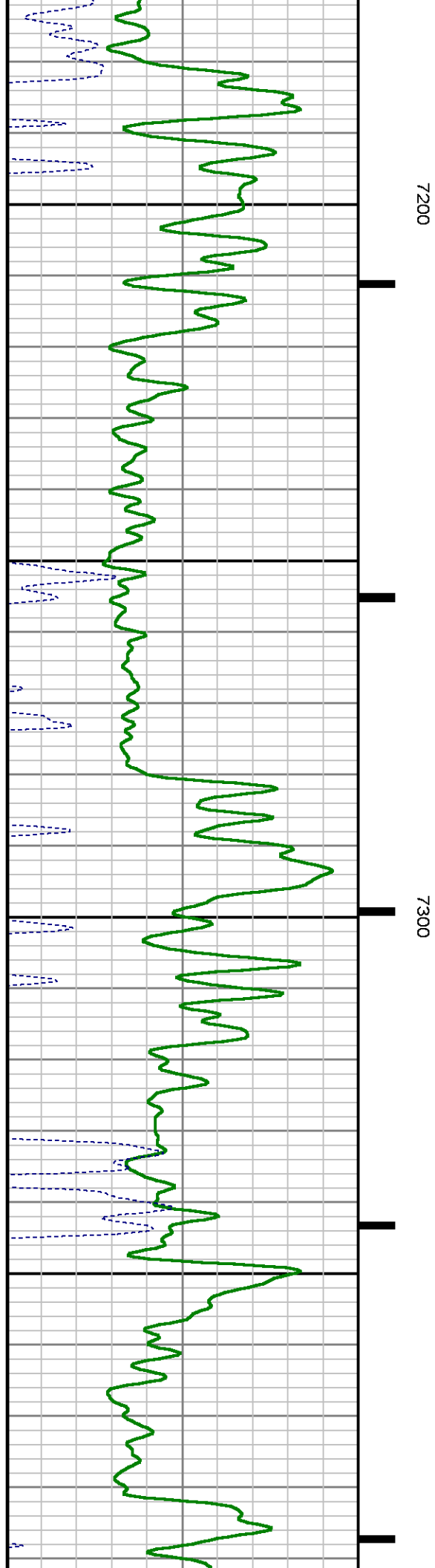
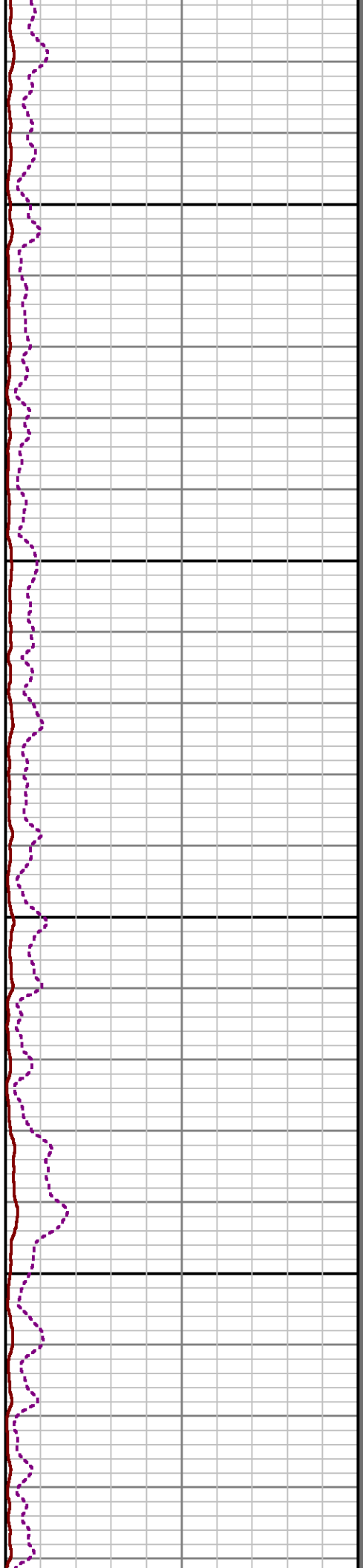
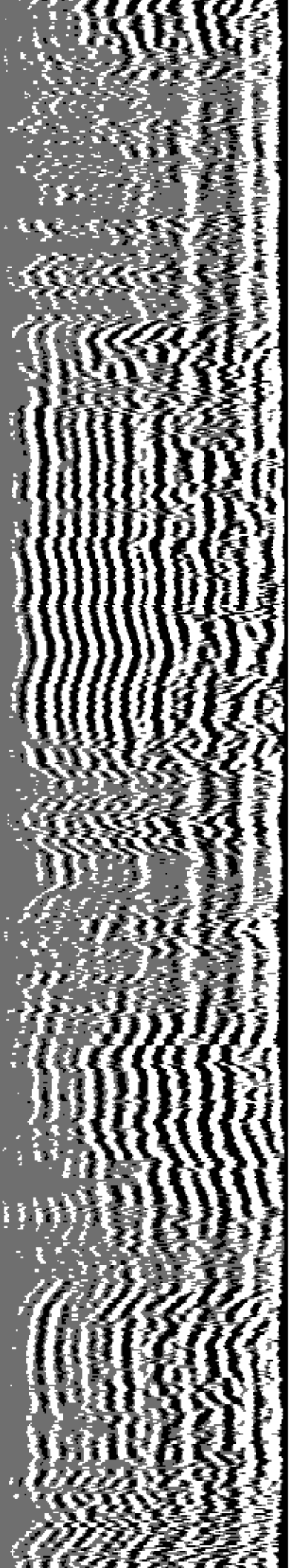


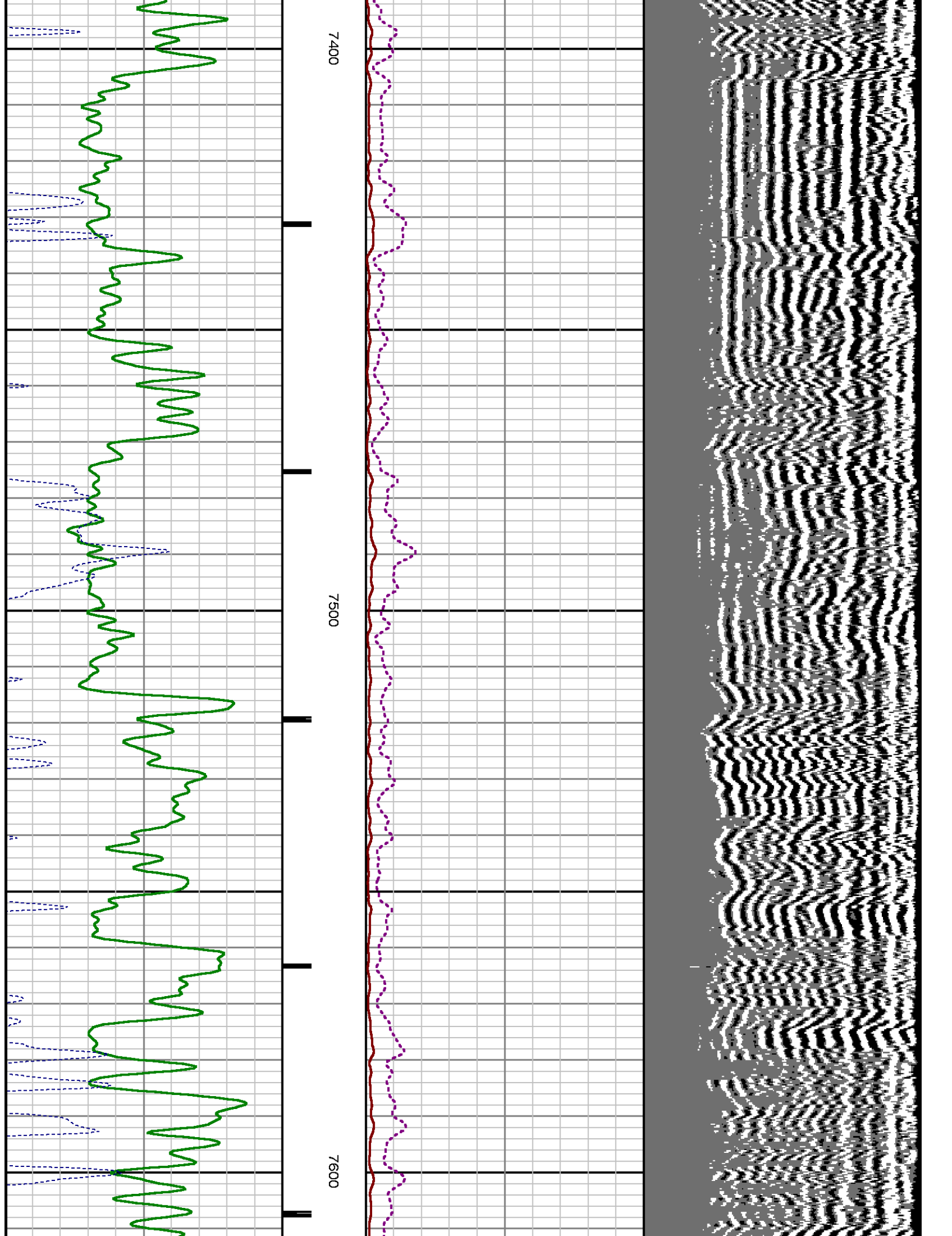




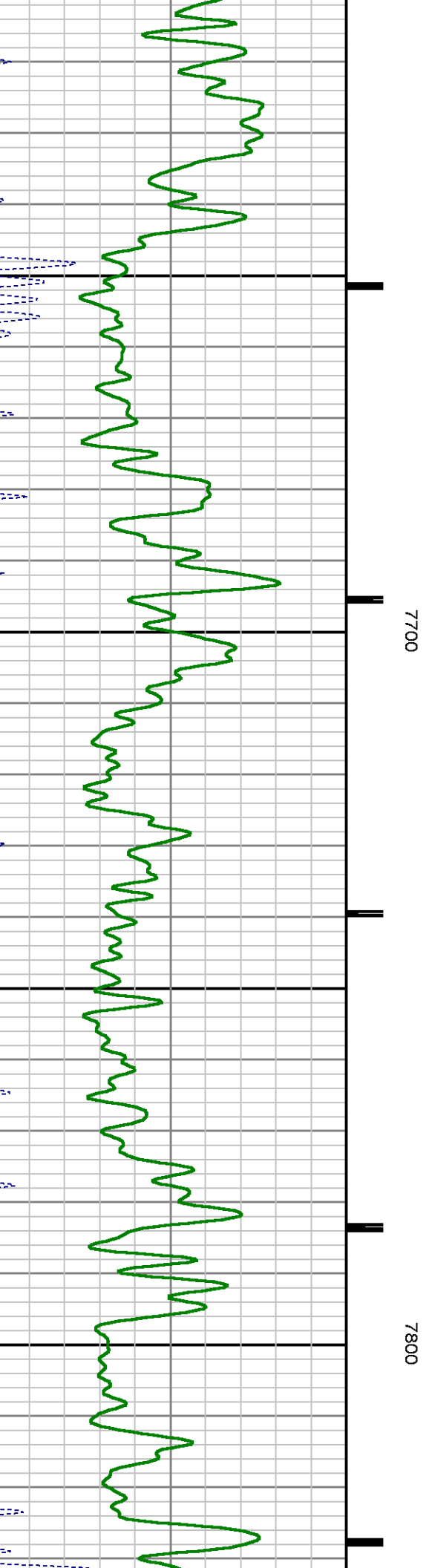
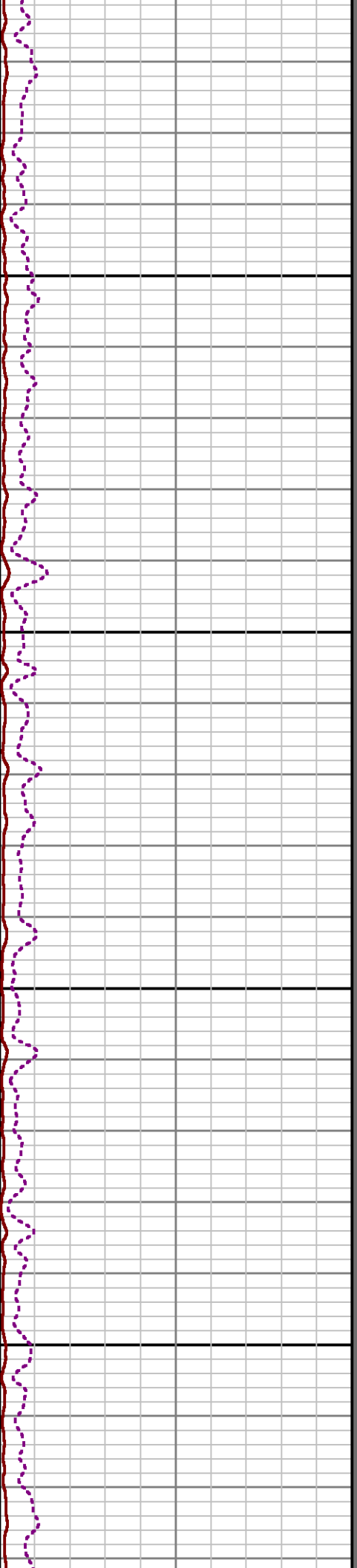
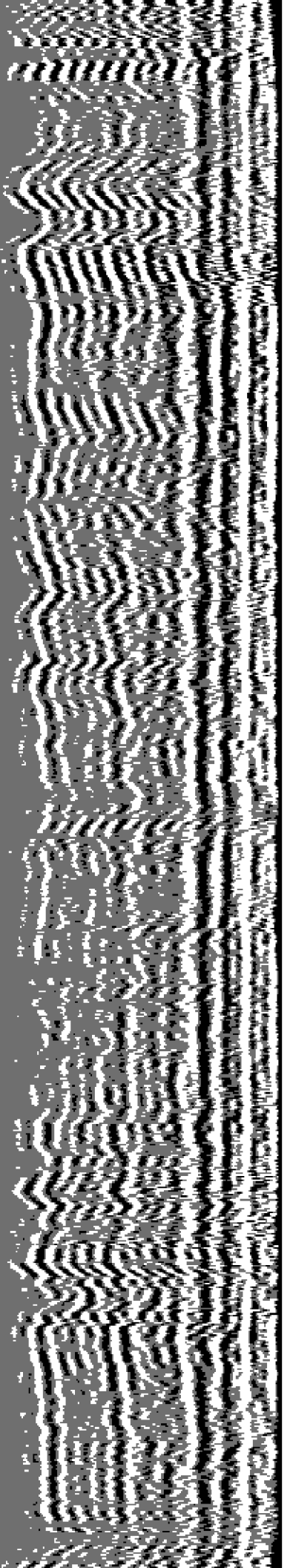


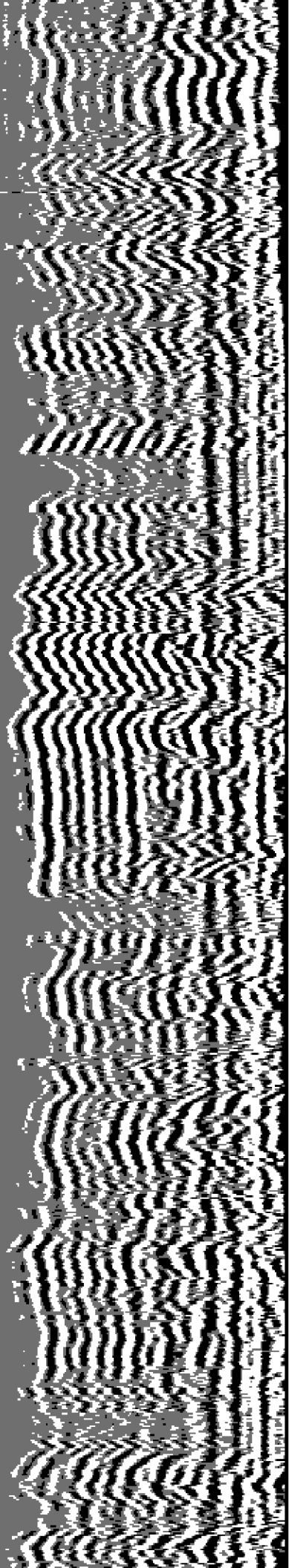






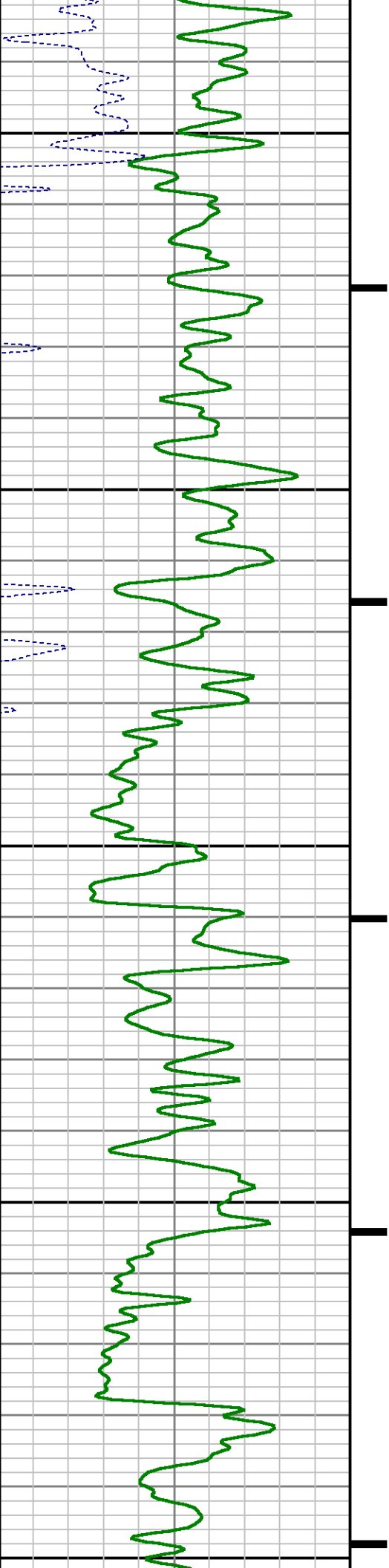
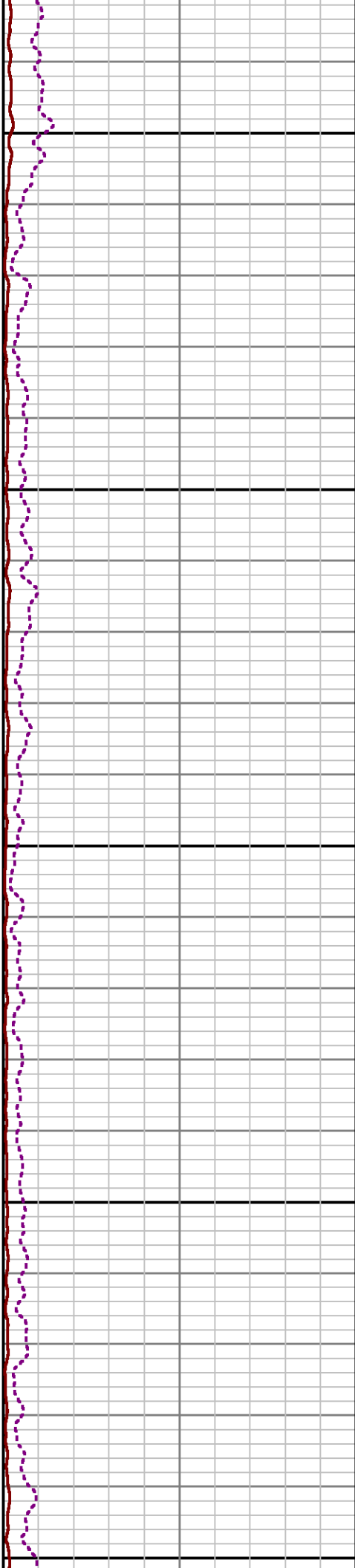


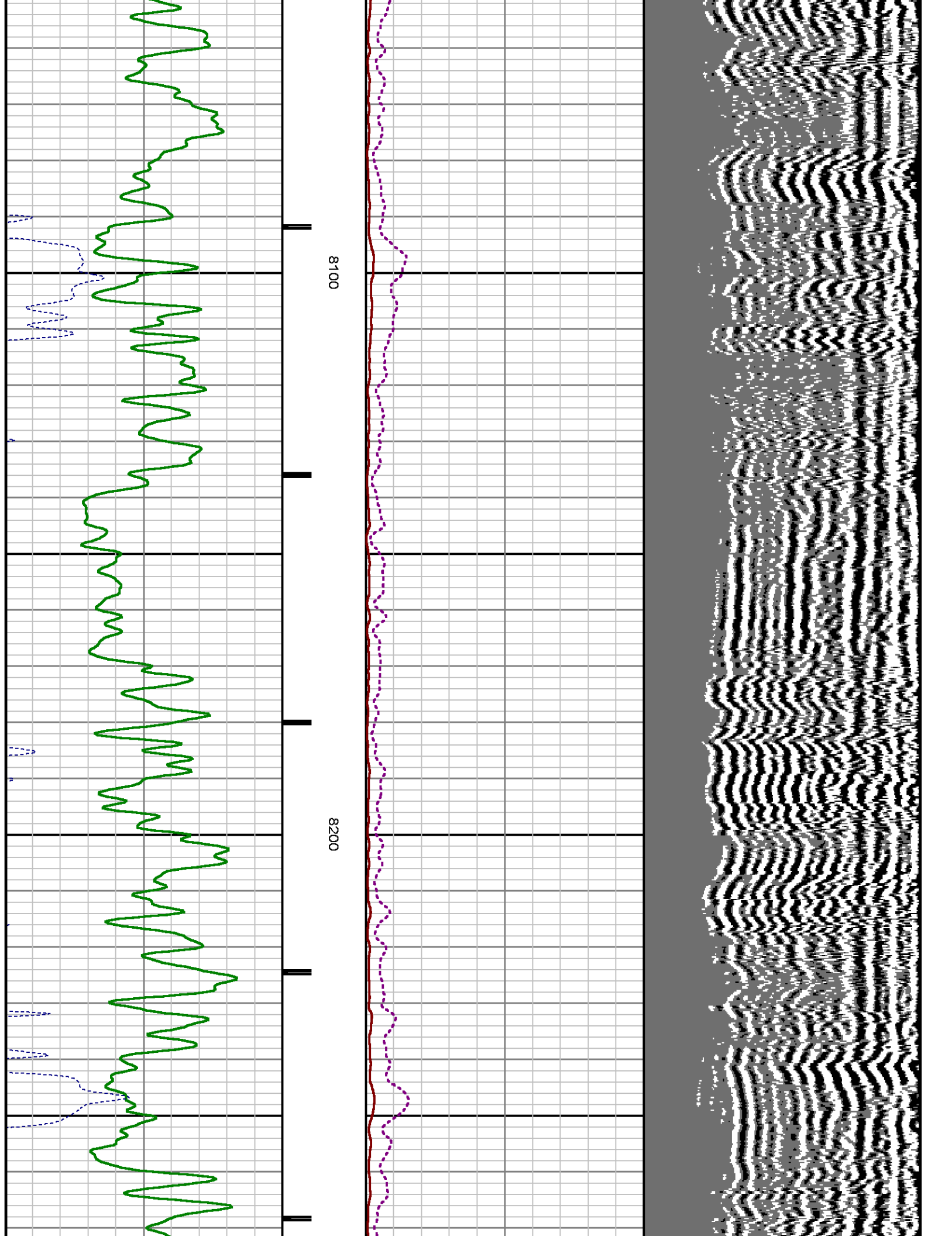




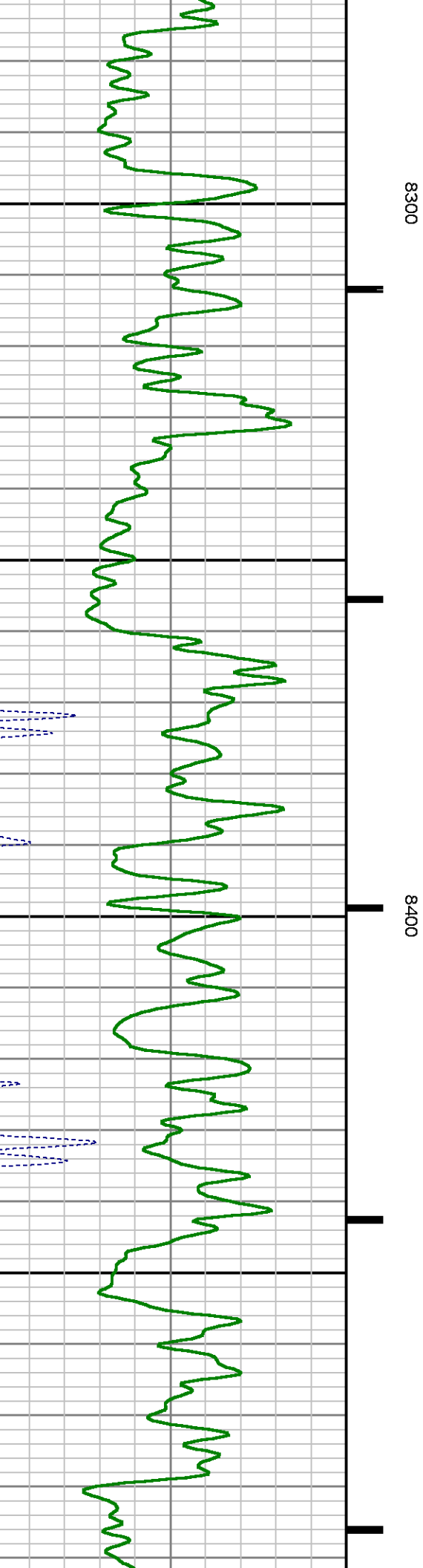
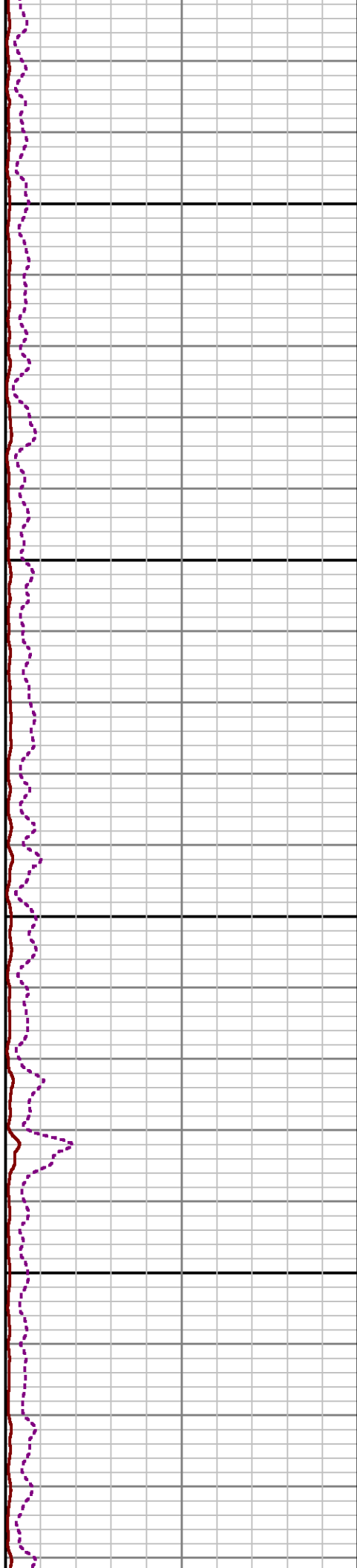
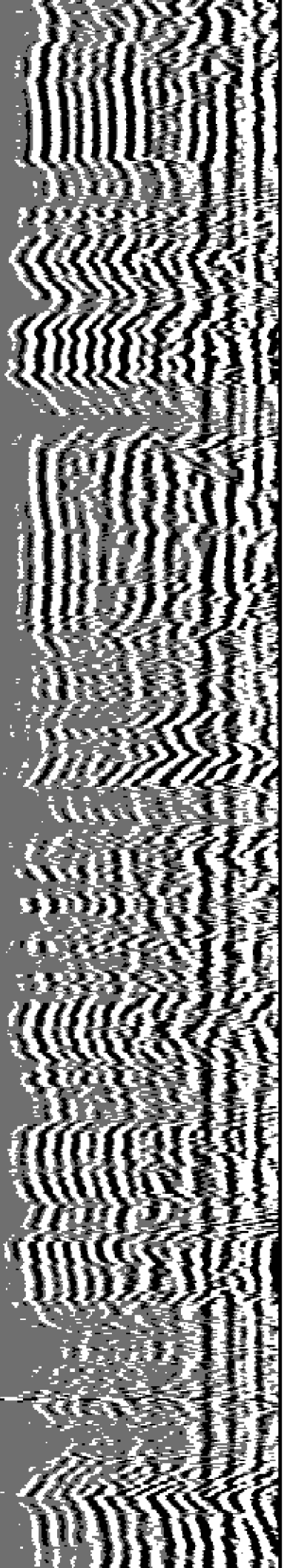
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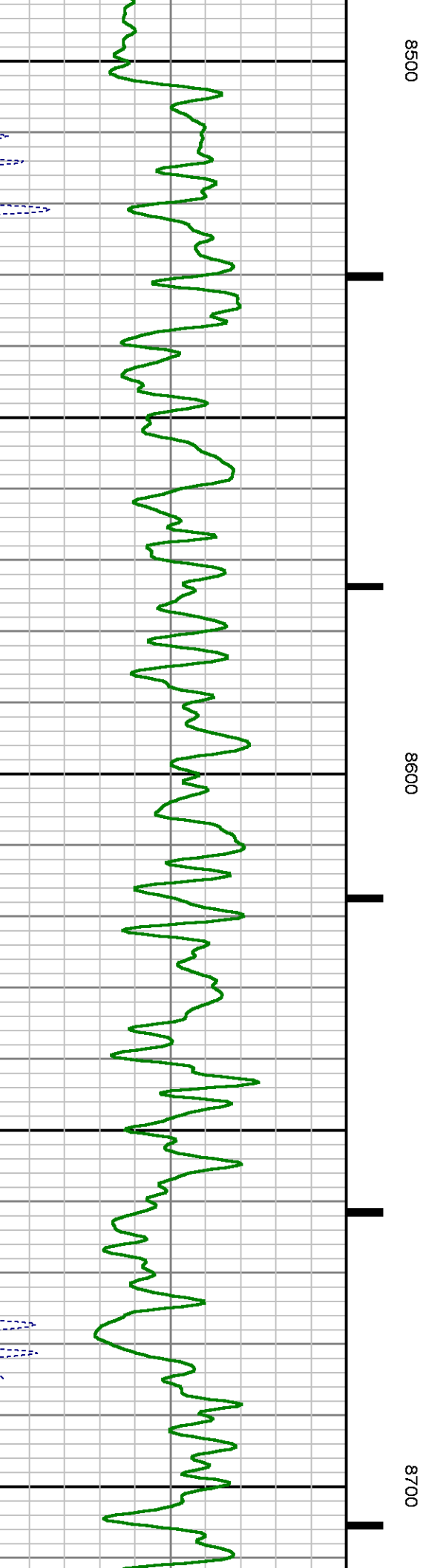
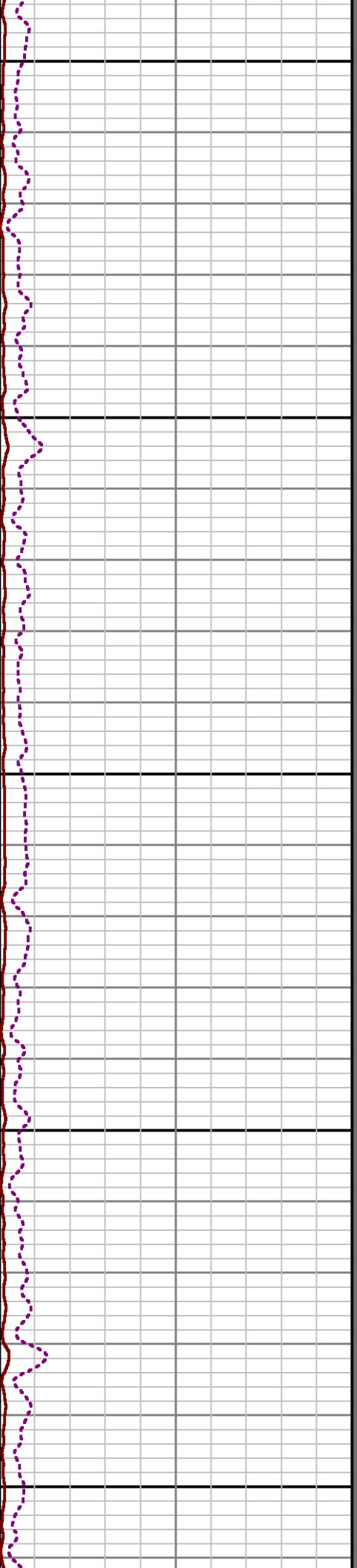
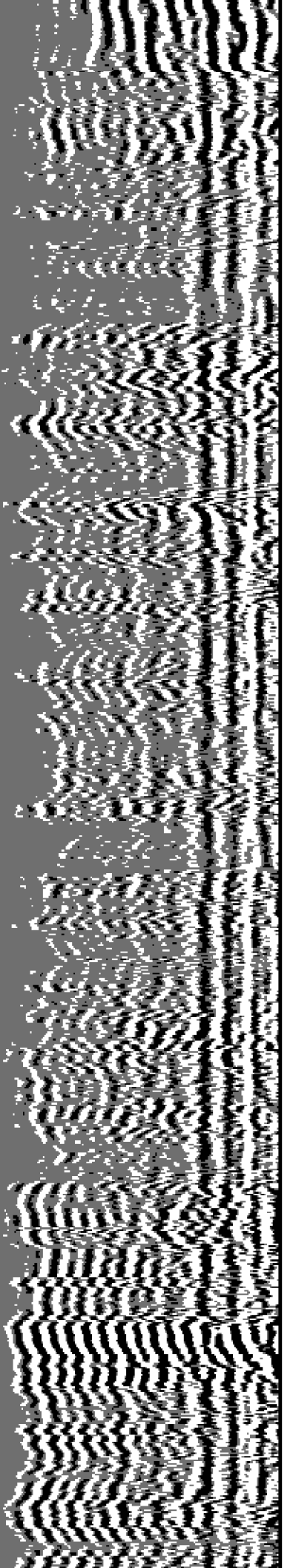
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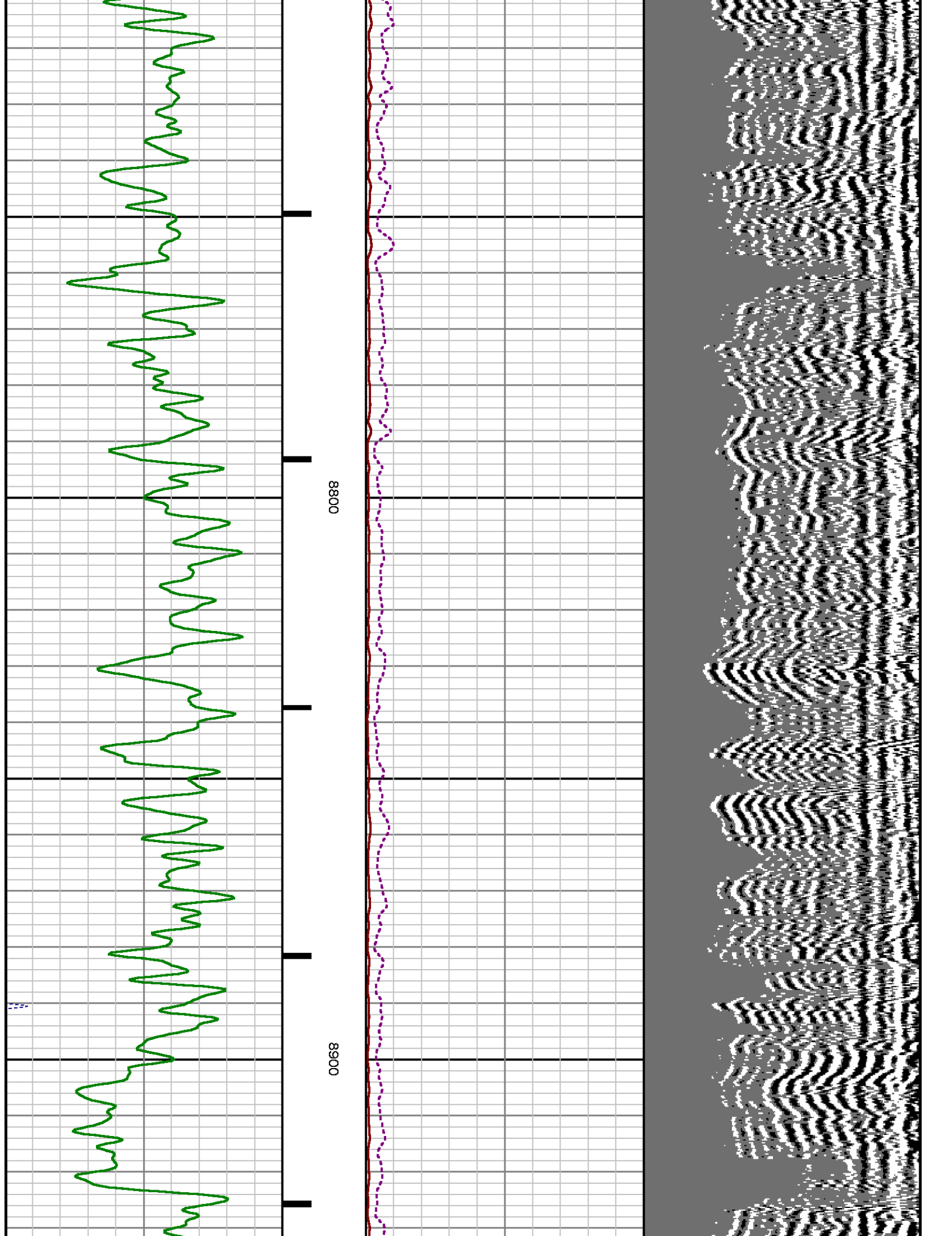


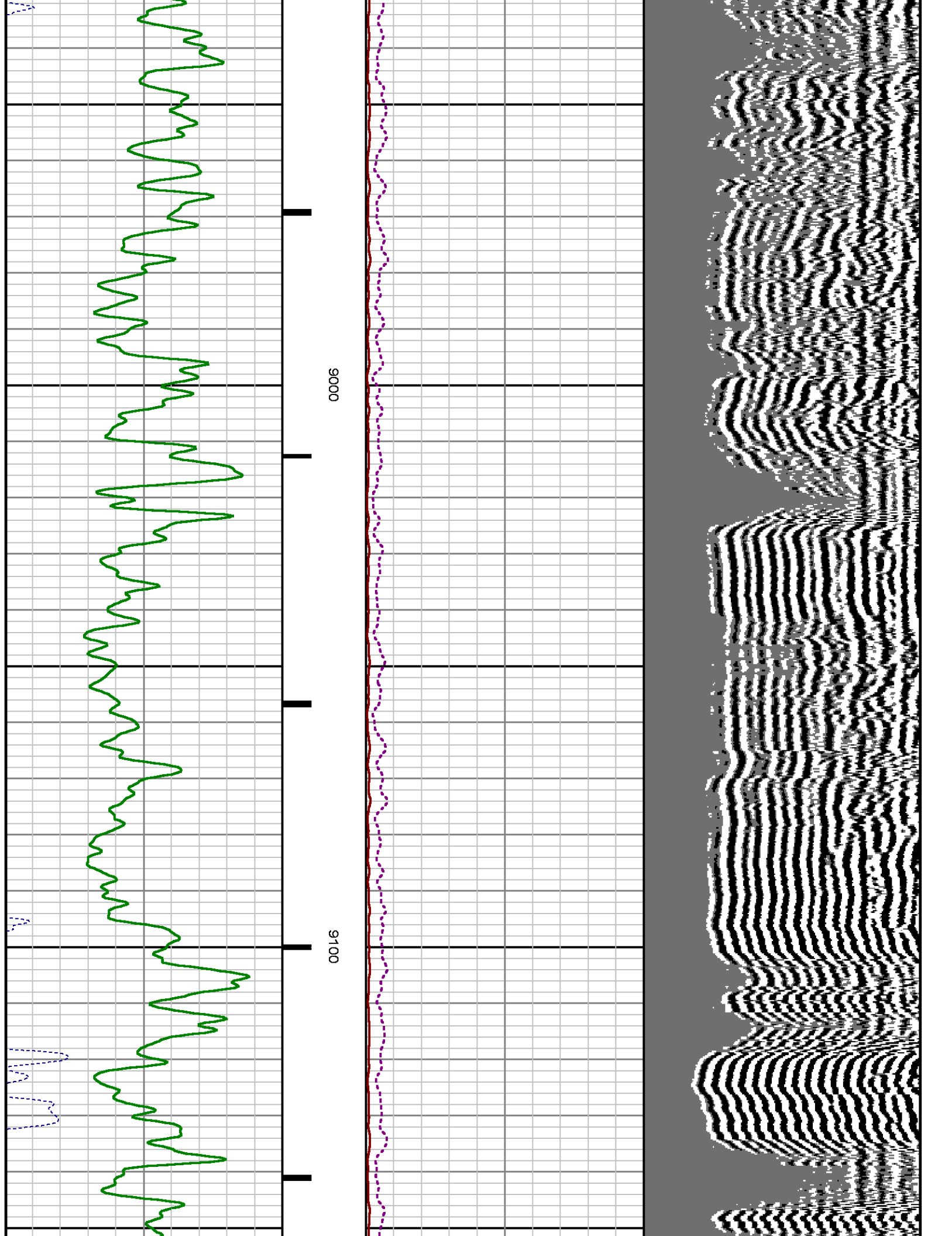


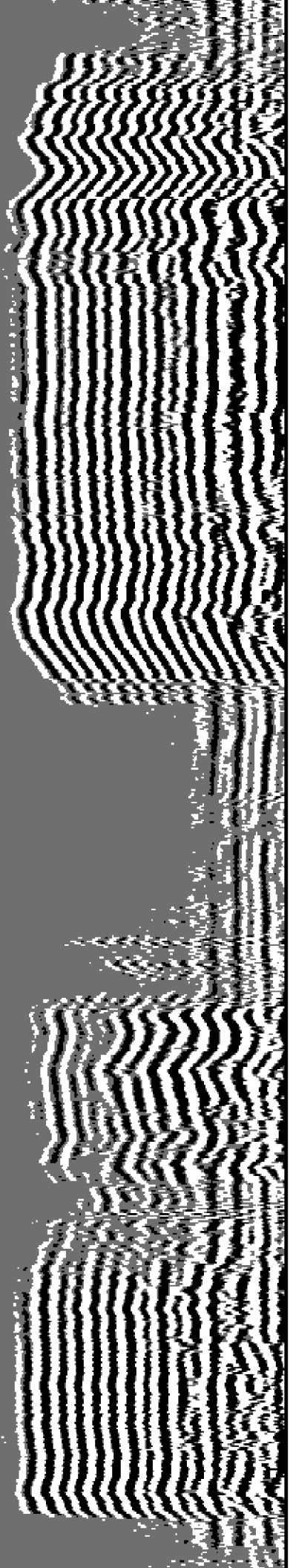






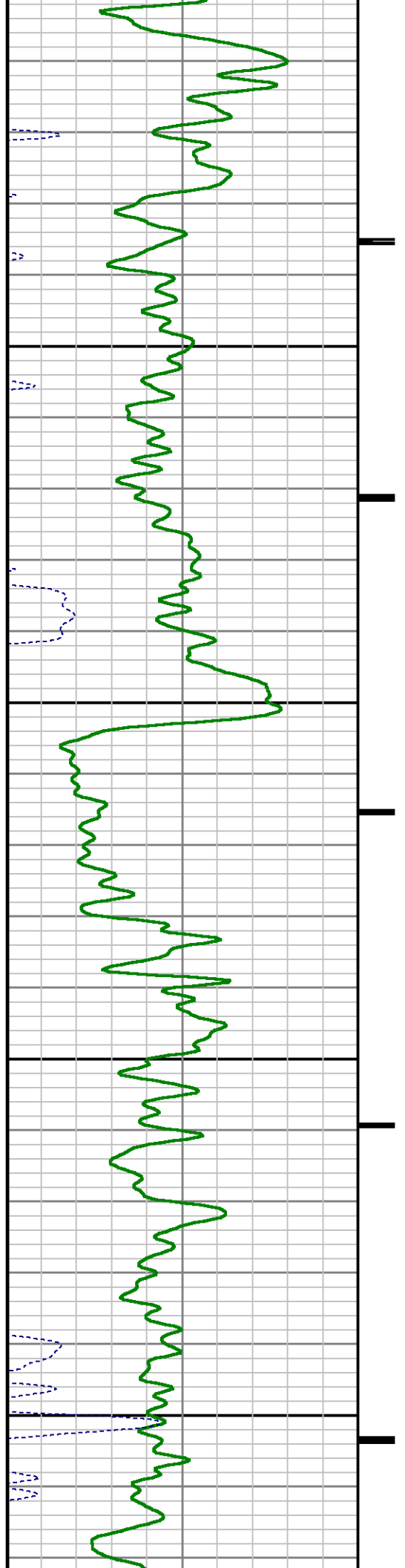


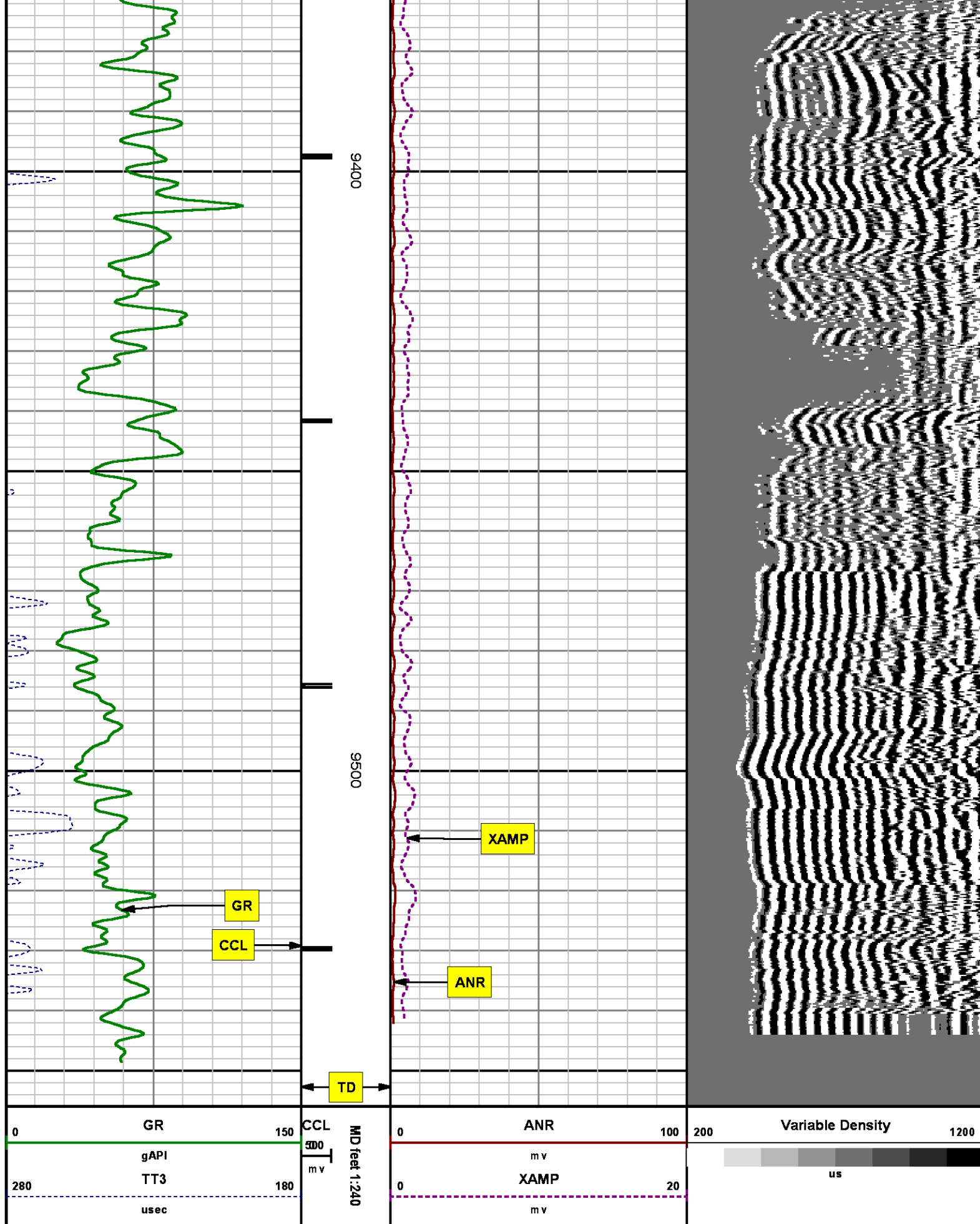




9200

9300







# SECONDARY PRESENTATION

## O PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	35.687	9559.500
RAL	Amp Gate Start Near	195.000	usec	35.687	9559.500
RAL	Amp Gate Start Radial	195.000	usec	35.687	9559.500
RAL	Amp Gate Width Far	25.000	usec	35.687	9559.500
RAL	Amp Gate Width Near	25.000	usec	35.687	9559.500
RAL	Amp Gate Width Radial	25.000	usec	35.687	9559.500
RAL	casing od	4.500	inches	35.687	9559.500
RAL	casing wt	11.600	lbm/ft	35.687	9559.500
RAL	FB Start Far	291.900	usec	35.687	9559.500
RAL	FB Start Near	180.000	usec	35.687	9559.500
RAL	FB Start Radial	180.000	usec	35.687	9559.500
RAL	FB Thresh Far	10.000	mv	35.687	9559.500
RAL	FB Thresh Near	4.000	mv	35.687	9559.500
RAL	FB Thresh Radial	4.000	mv	35.687	9559.500
RAL	Fluid Travel Time	200.000	usec/ft	35.687	9559.374

### DEPTH OFFSETS

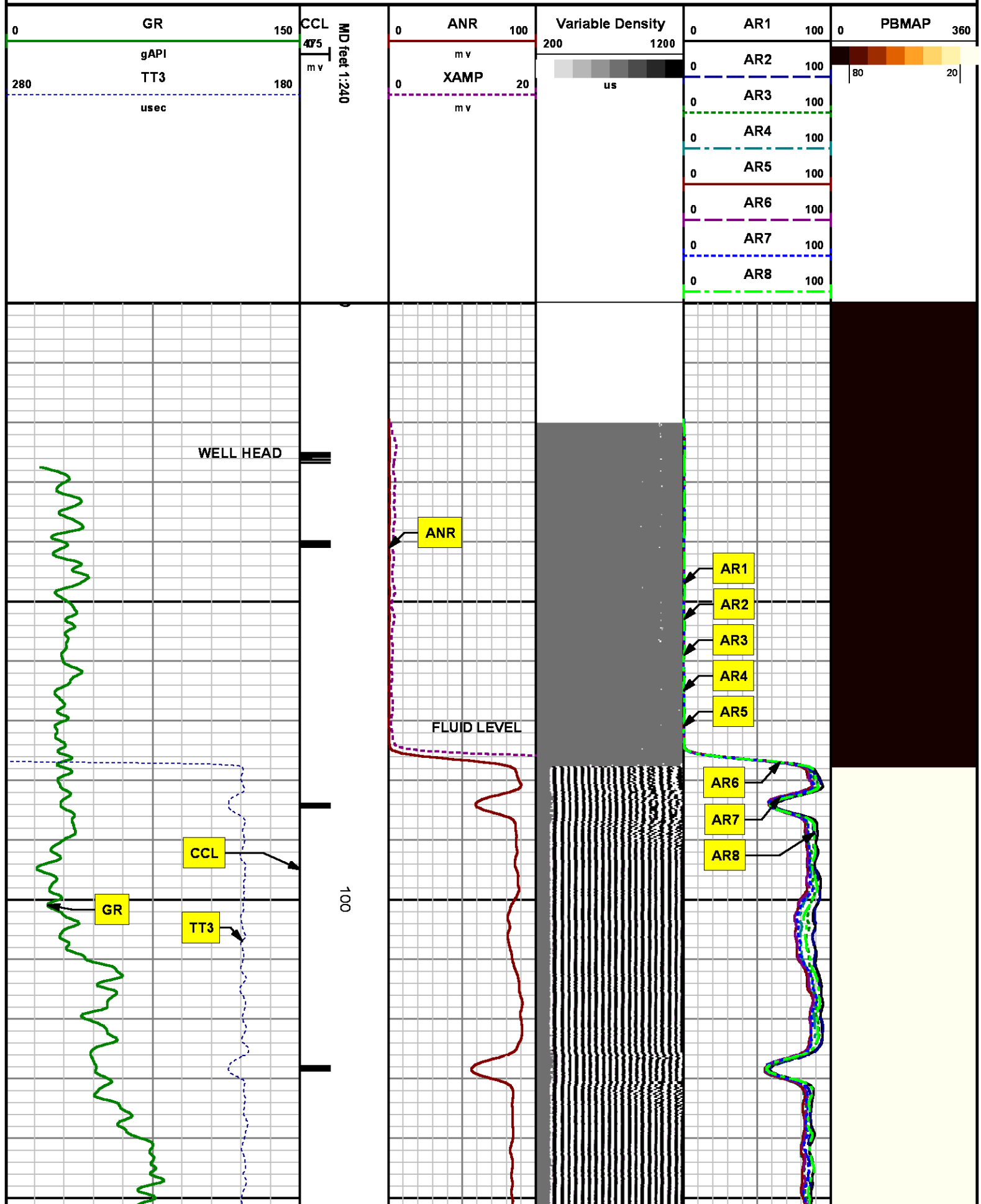
(for Acquired Curves)

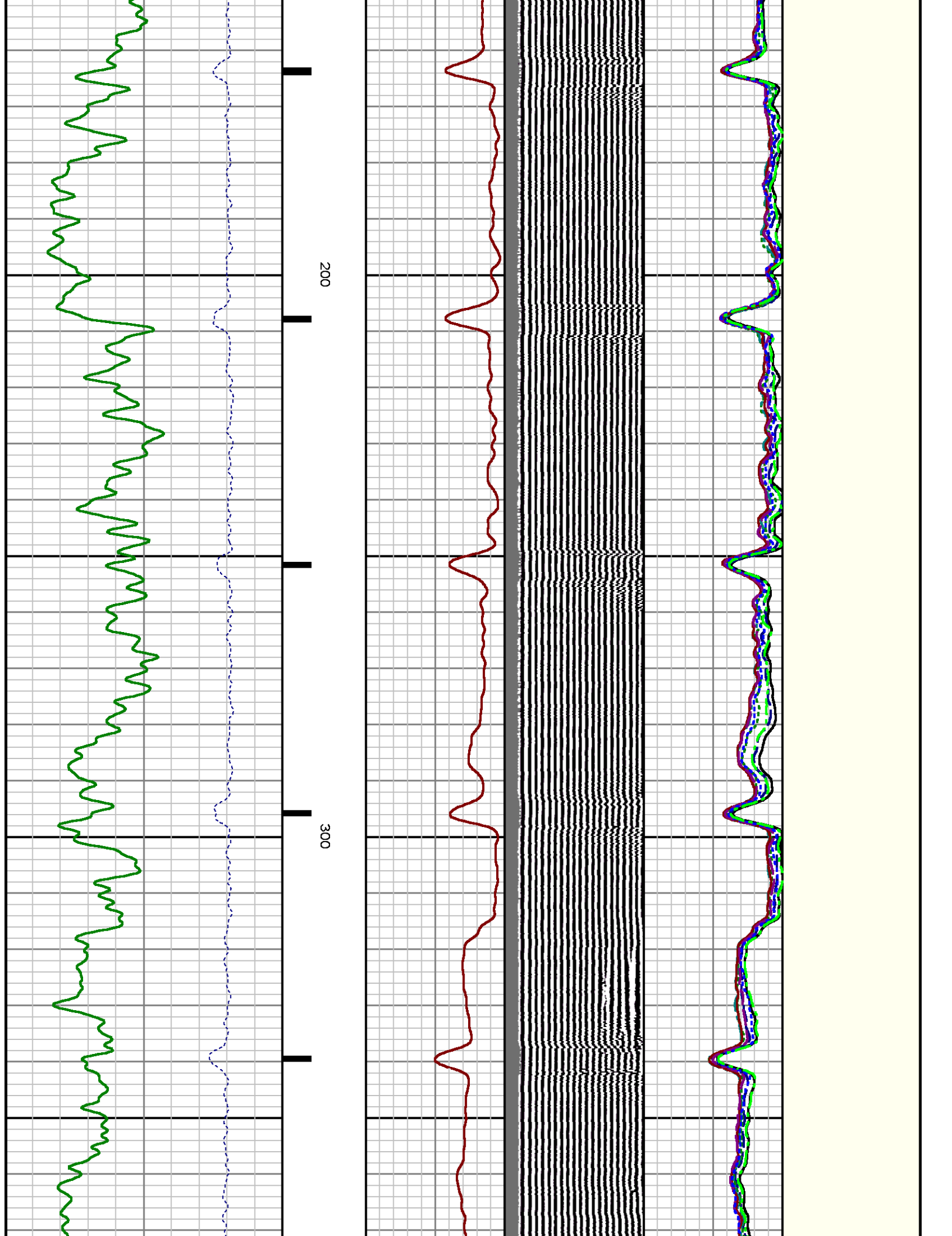
SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-16.750	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	CHV	FPR2
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	-15.750	AFAR	SIG	TT5			
2459XA	-11.340	CCL					
2459XA	-9.490	GR					
2459XA	-4.090	NEU					

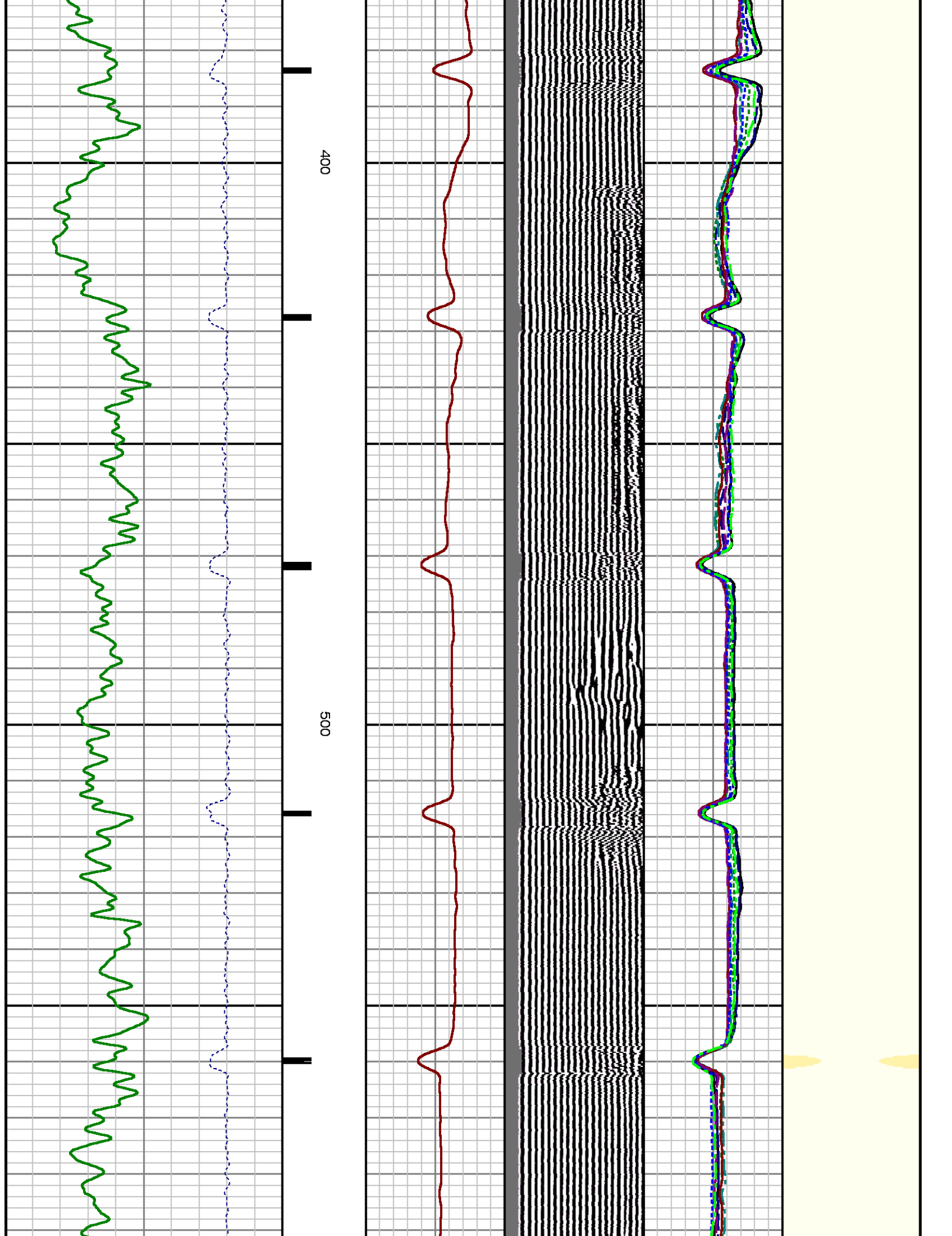
Created by : RAL, v4.8.008

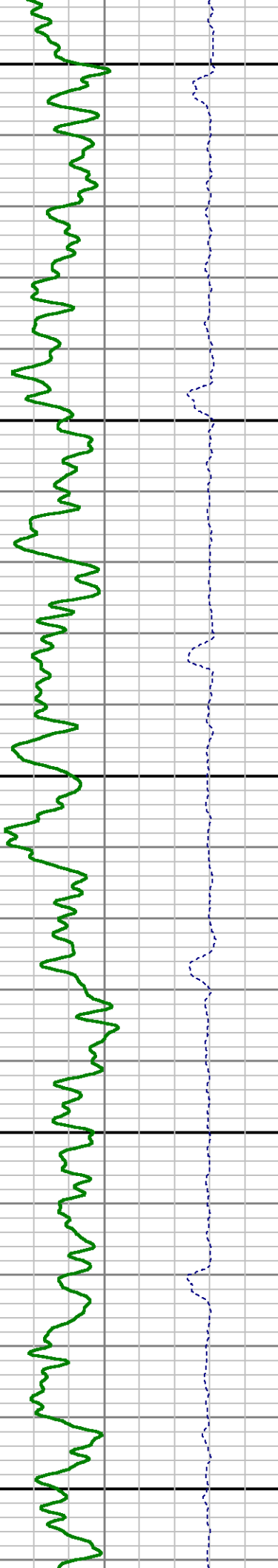
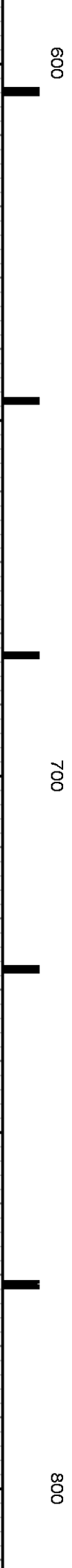
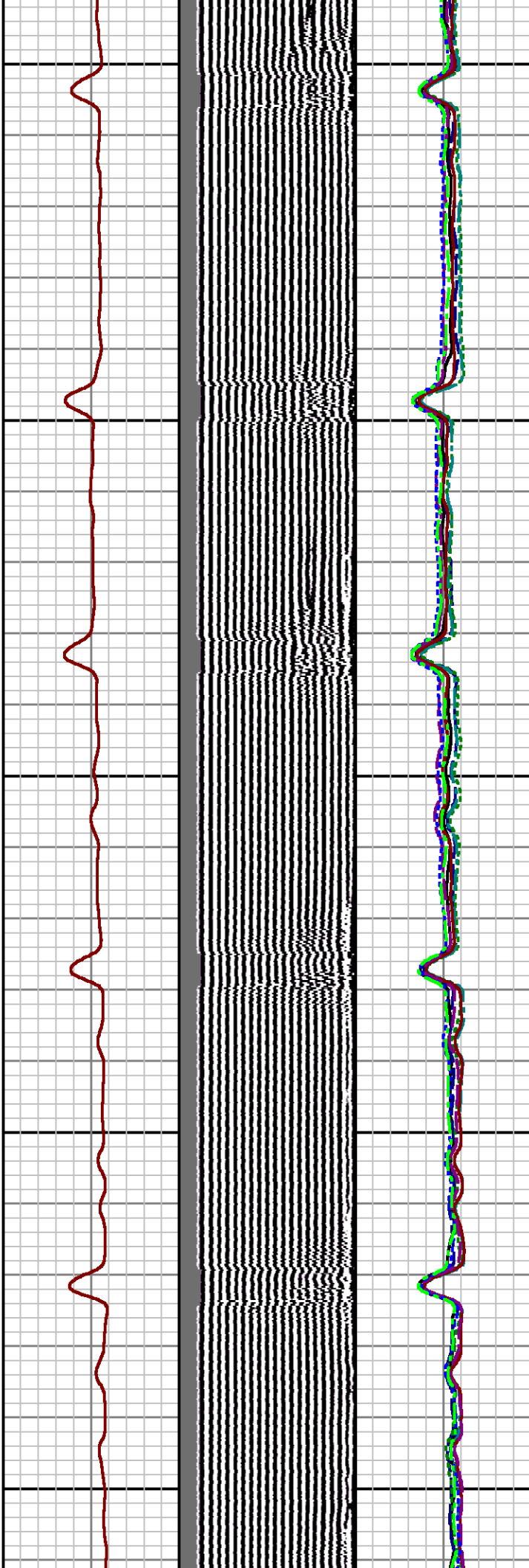
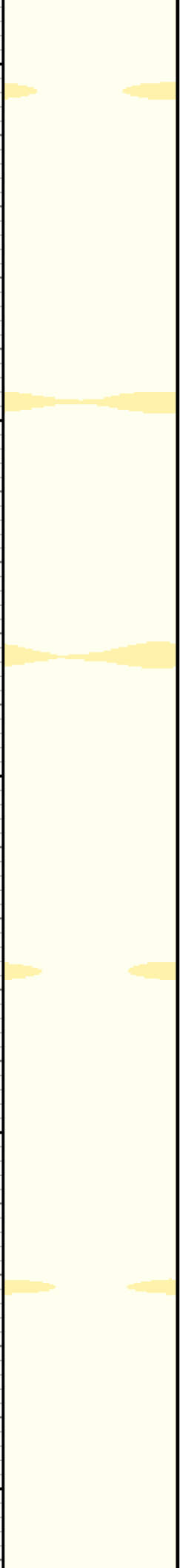
Plotted by : PlotMgr, v5.4.504

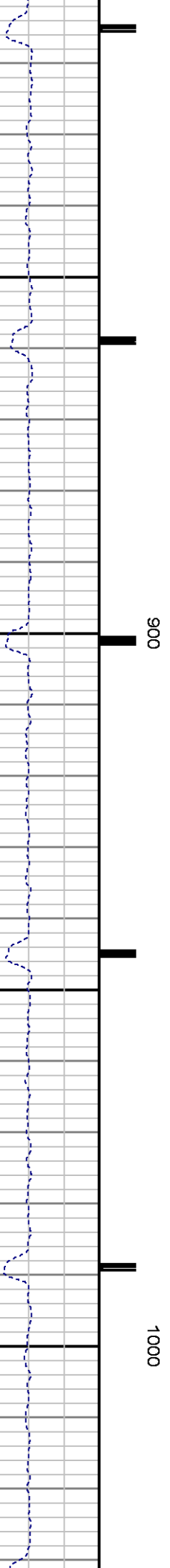
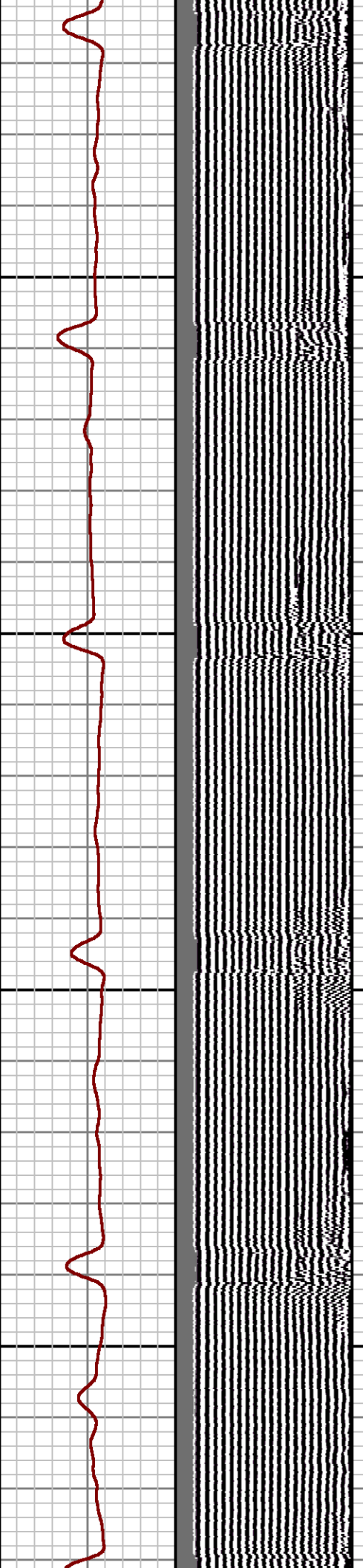
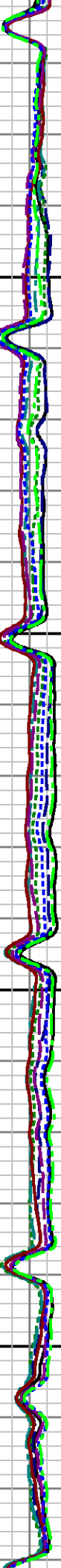
Company : WPX ENERGY







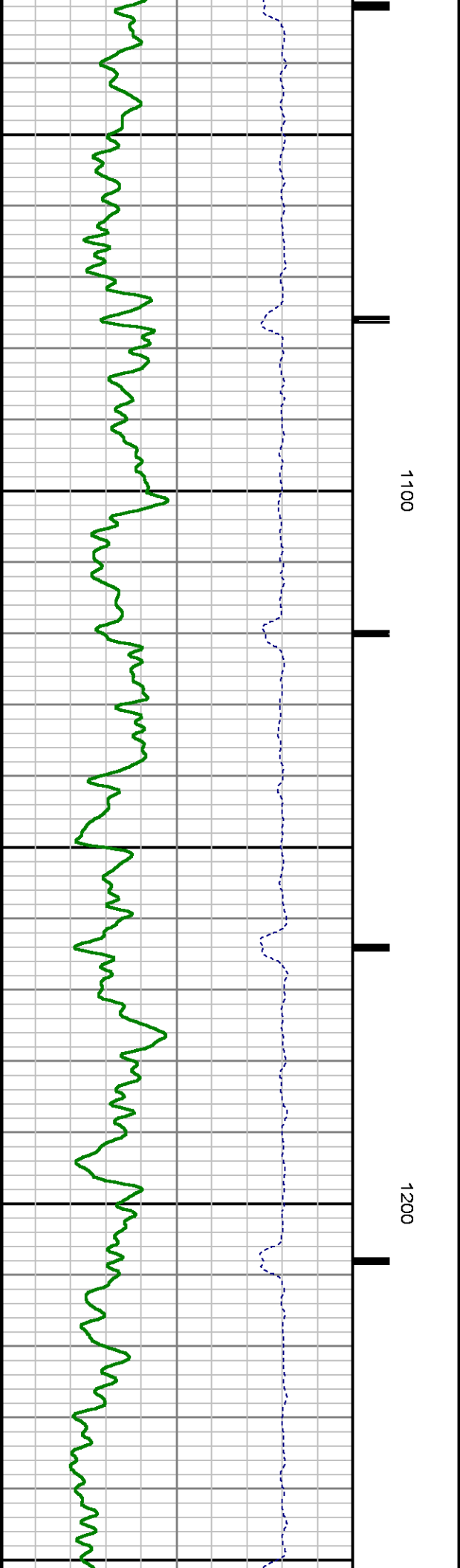
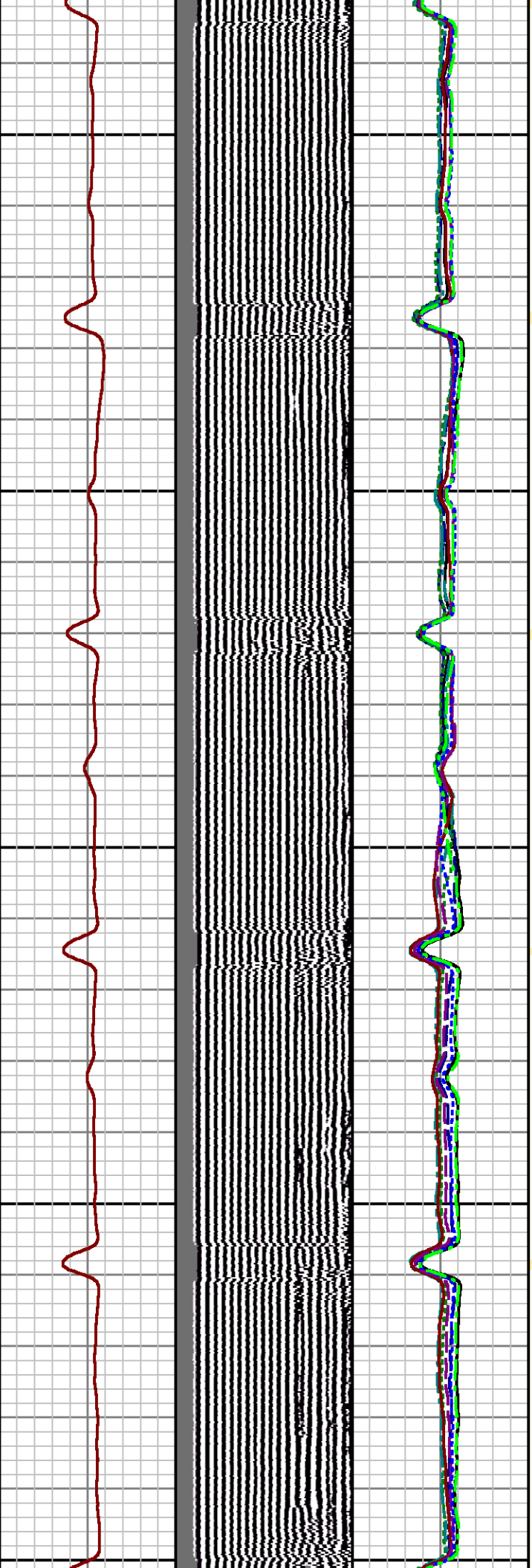


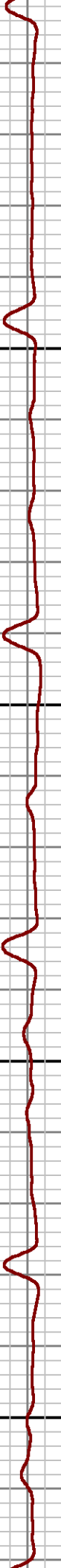
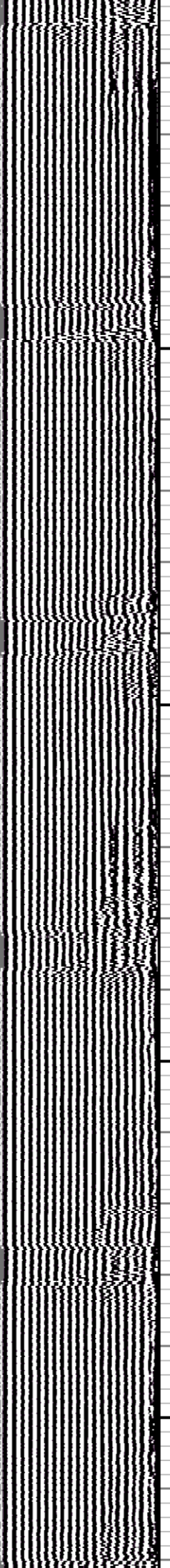
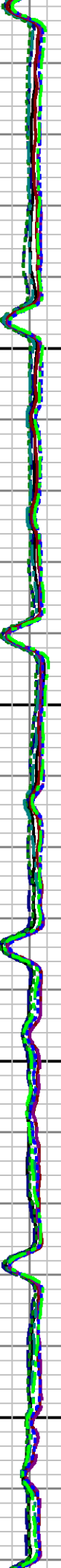


900

1000

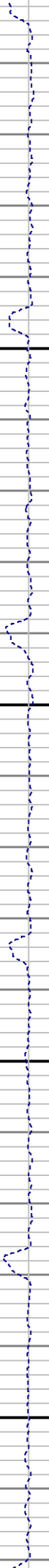


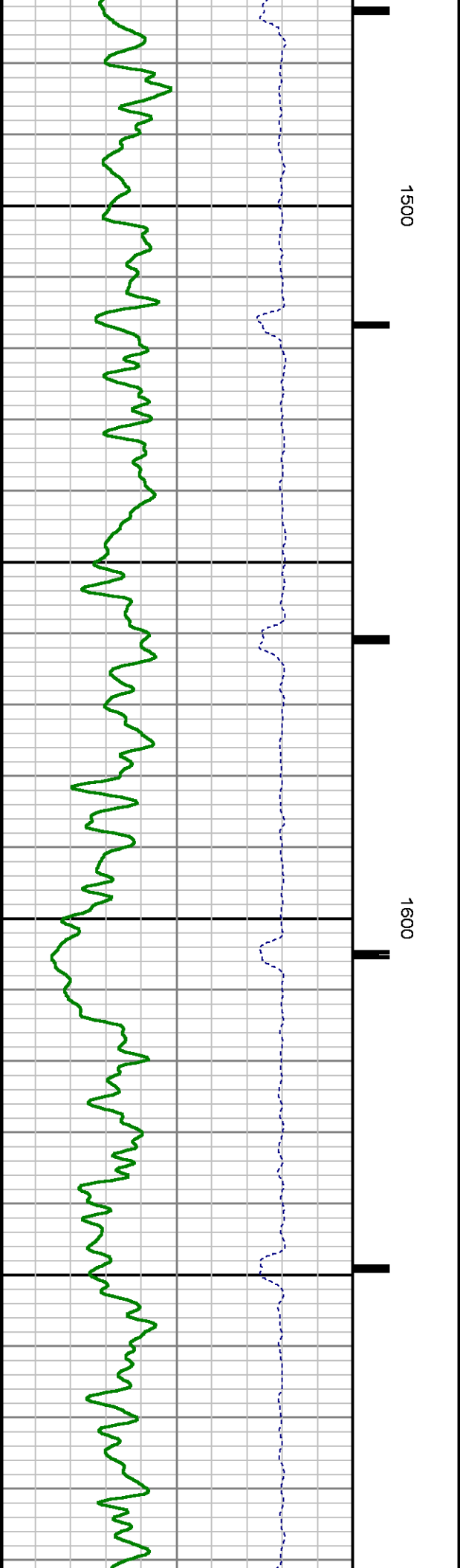
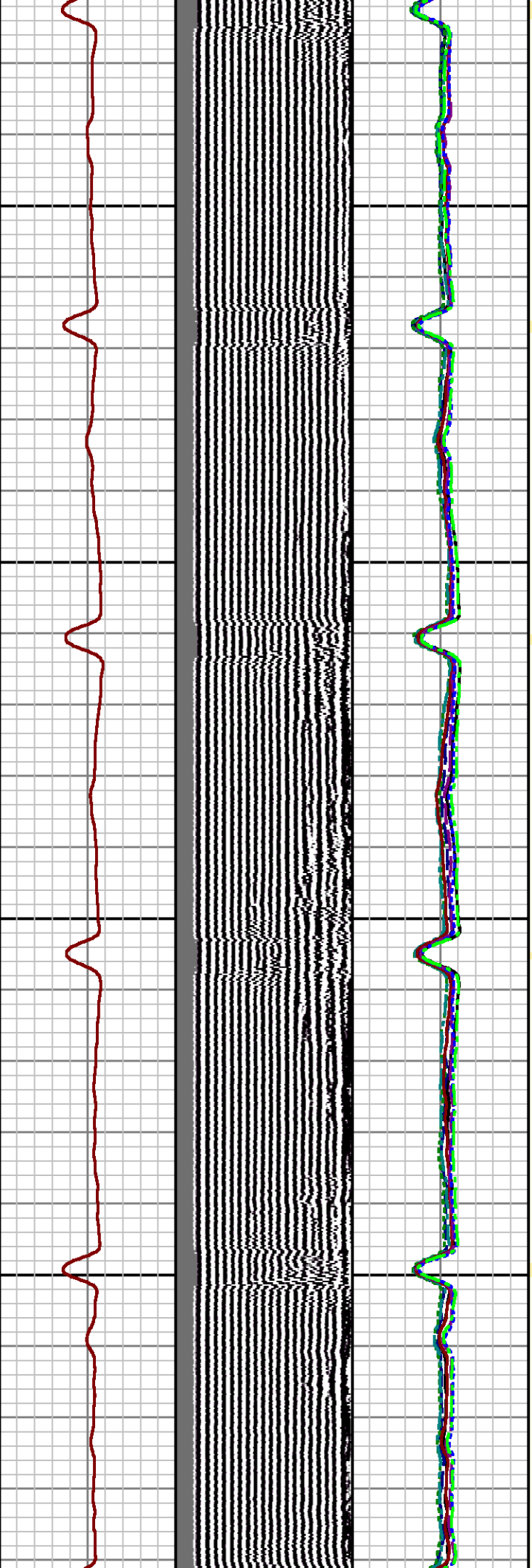


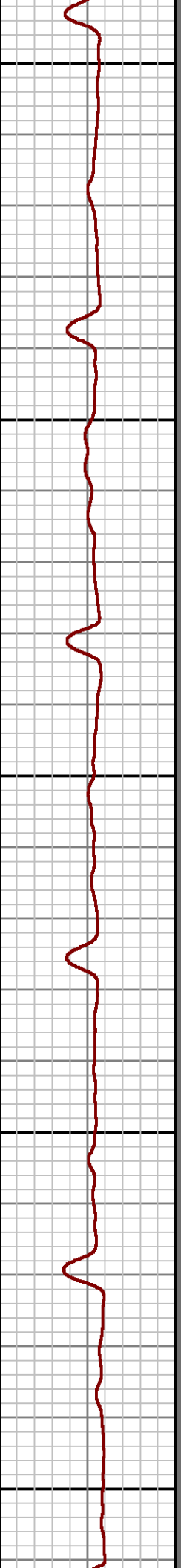
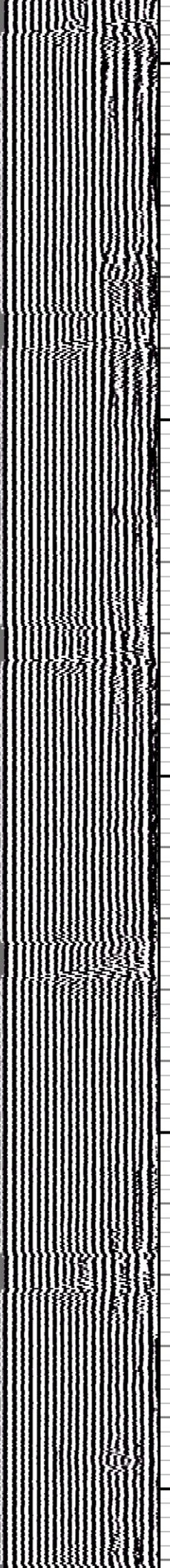
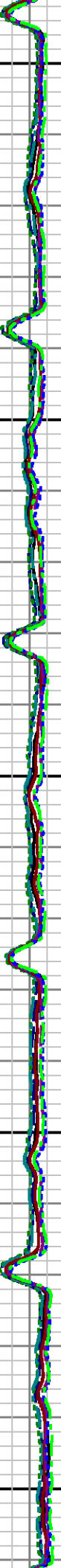


1300

1400





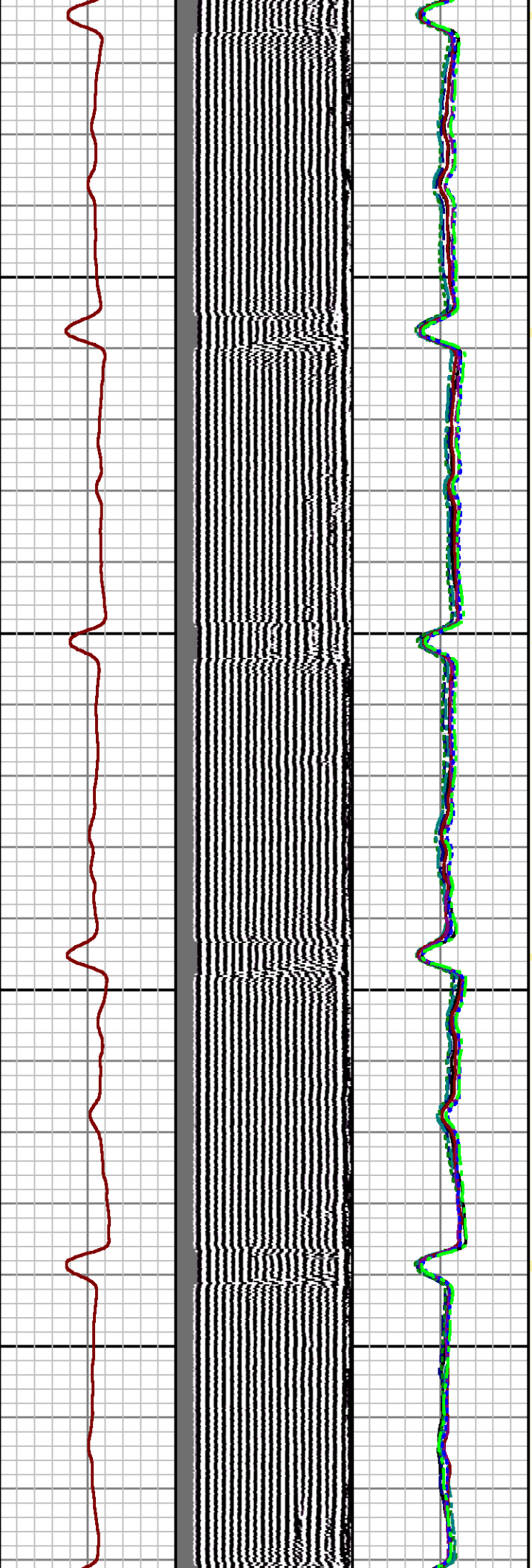


1700

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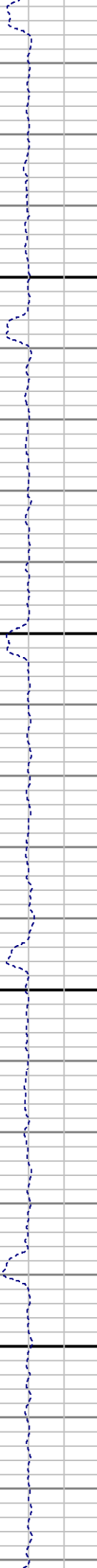
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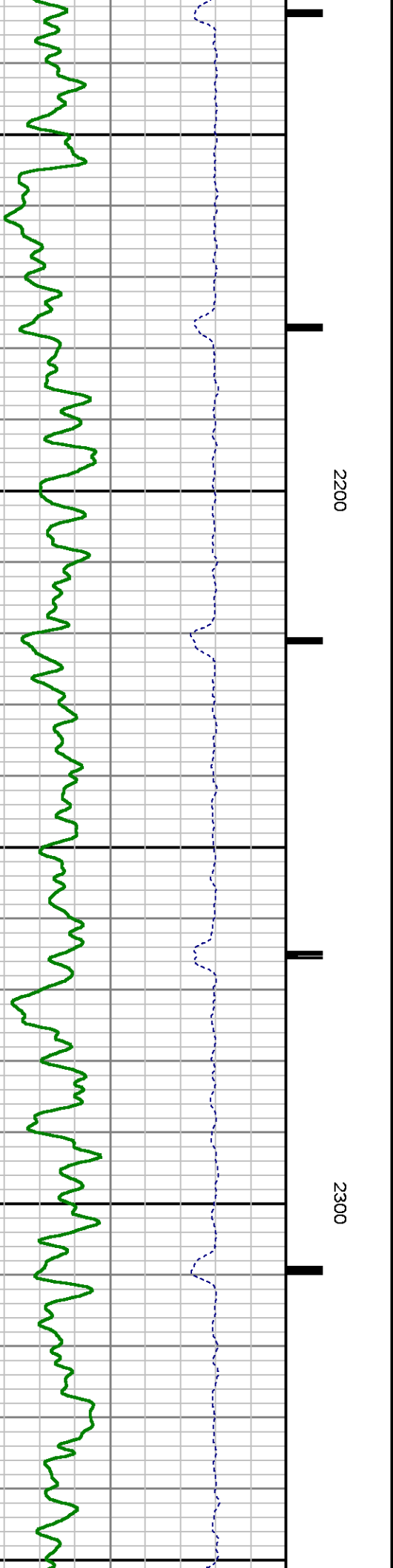
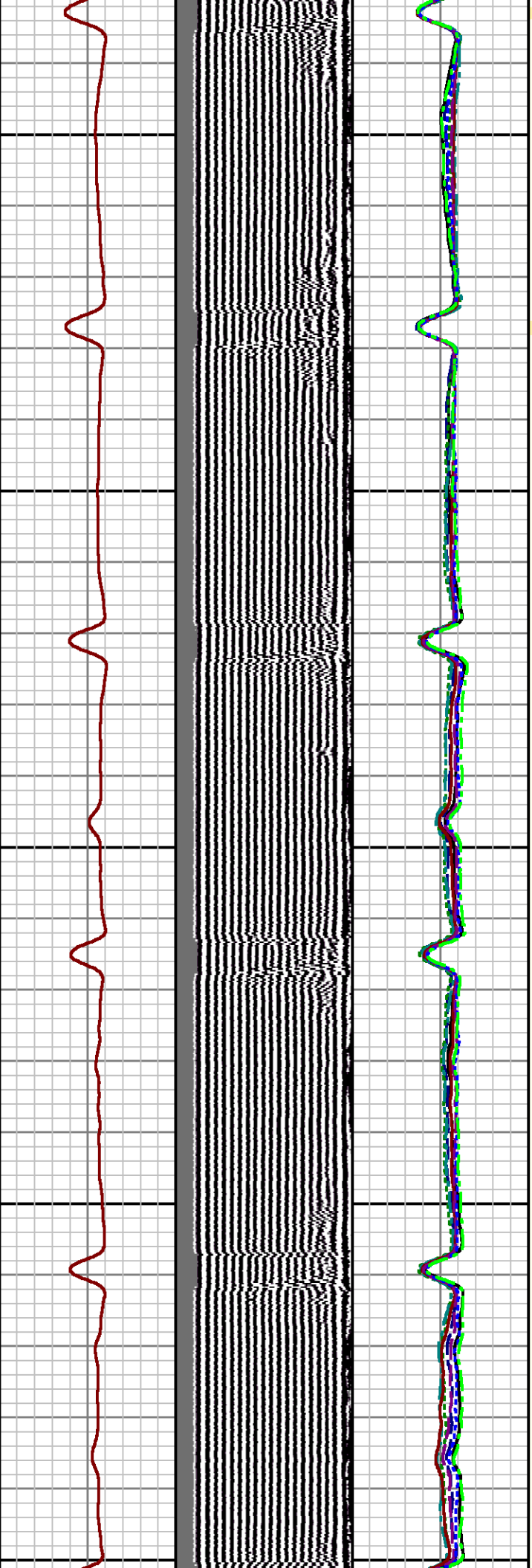
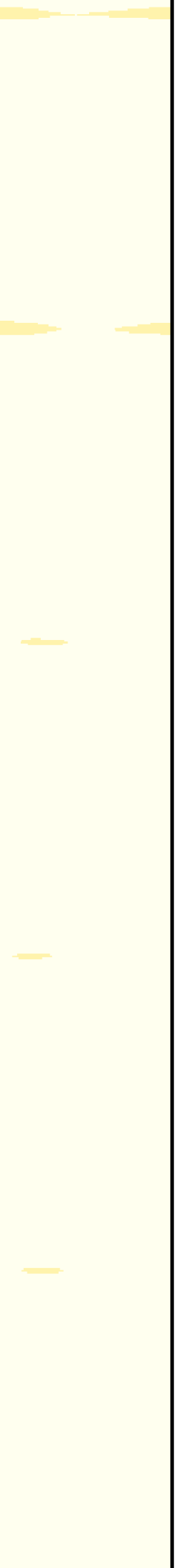


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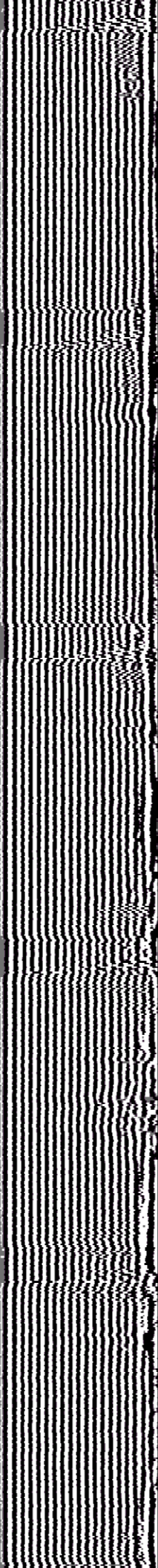
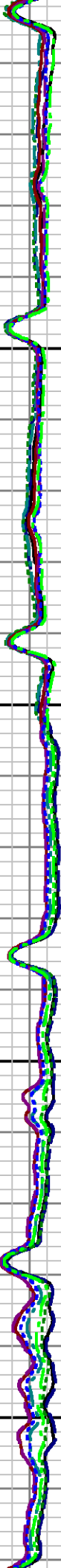
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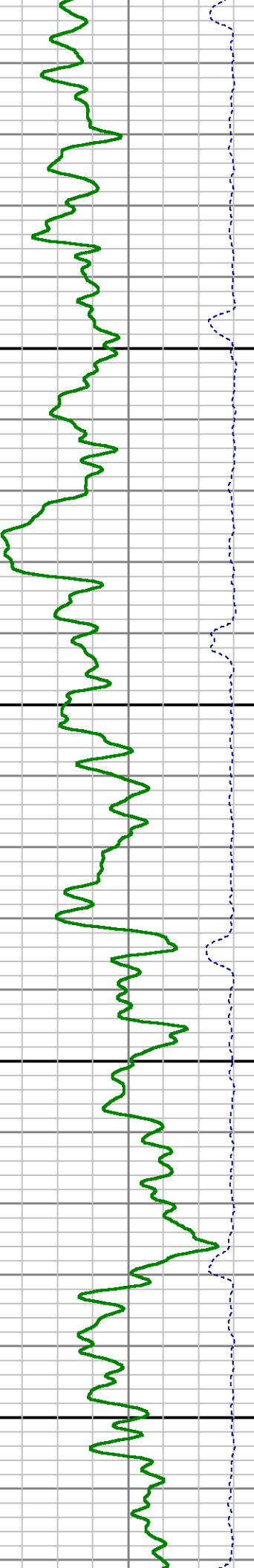


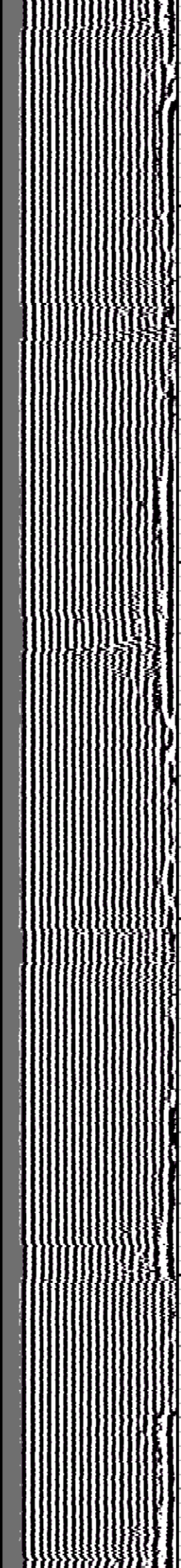
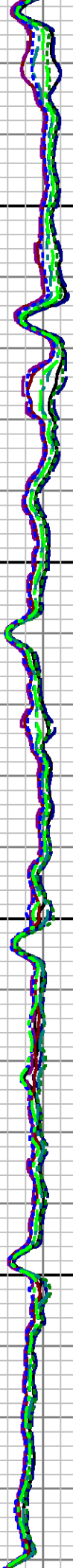
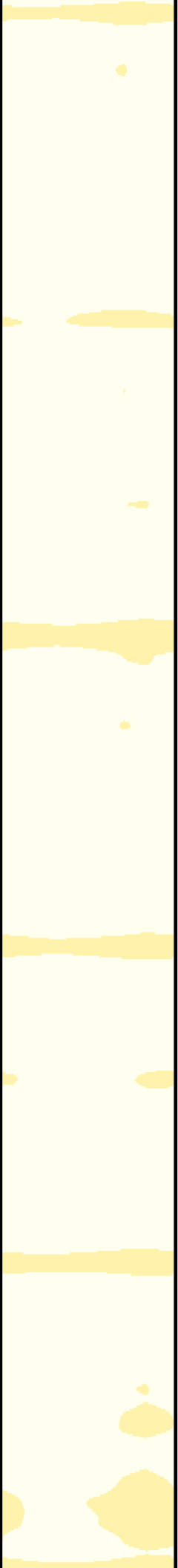




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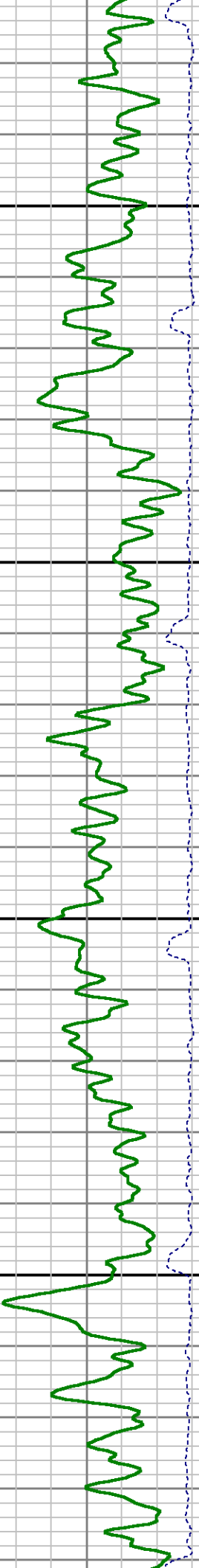
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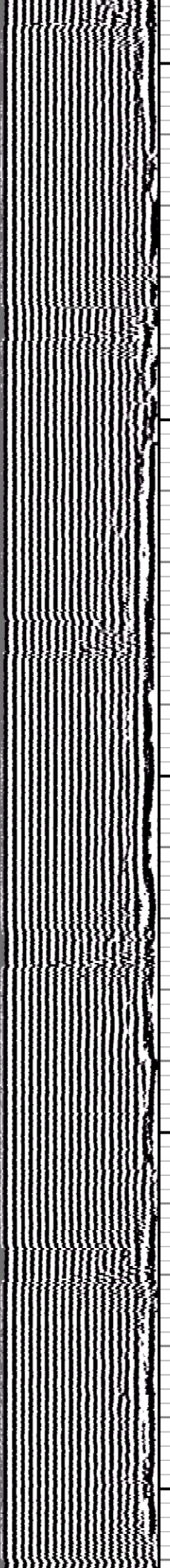
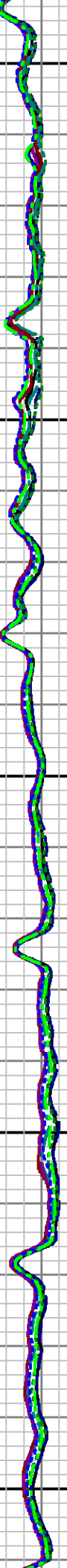




2600

2700



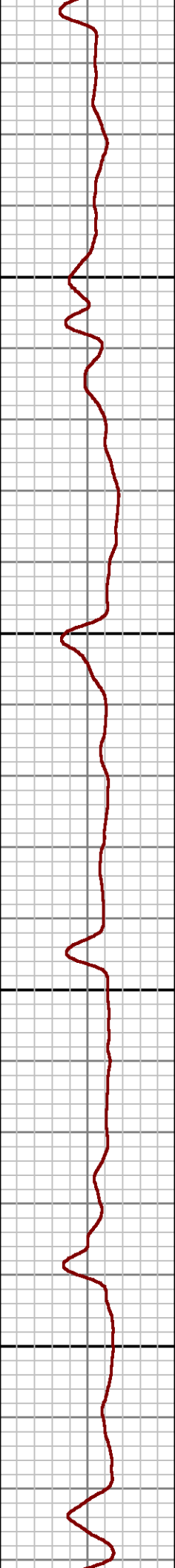
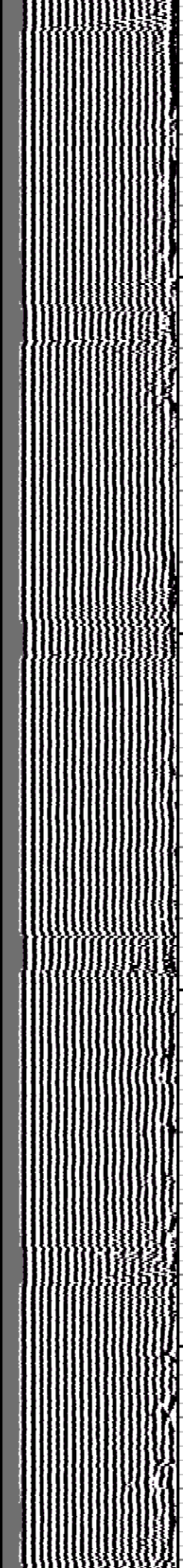
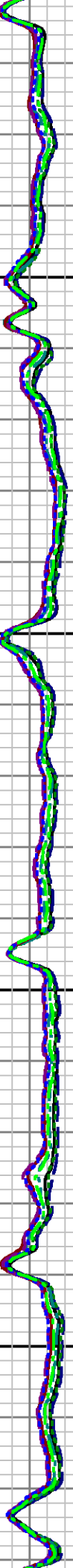
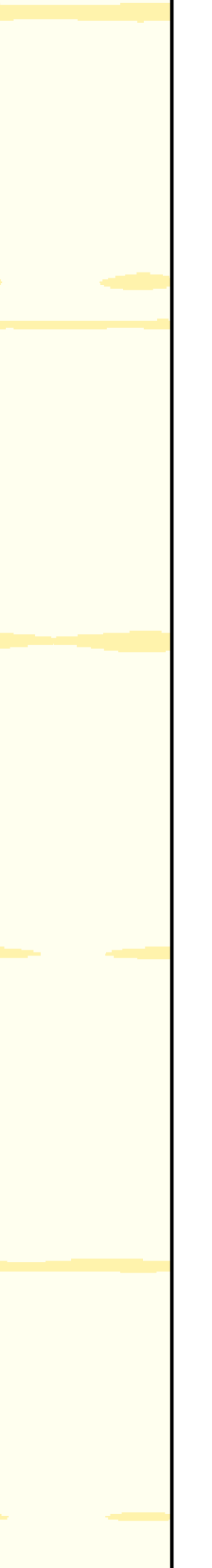


2800

2900

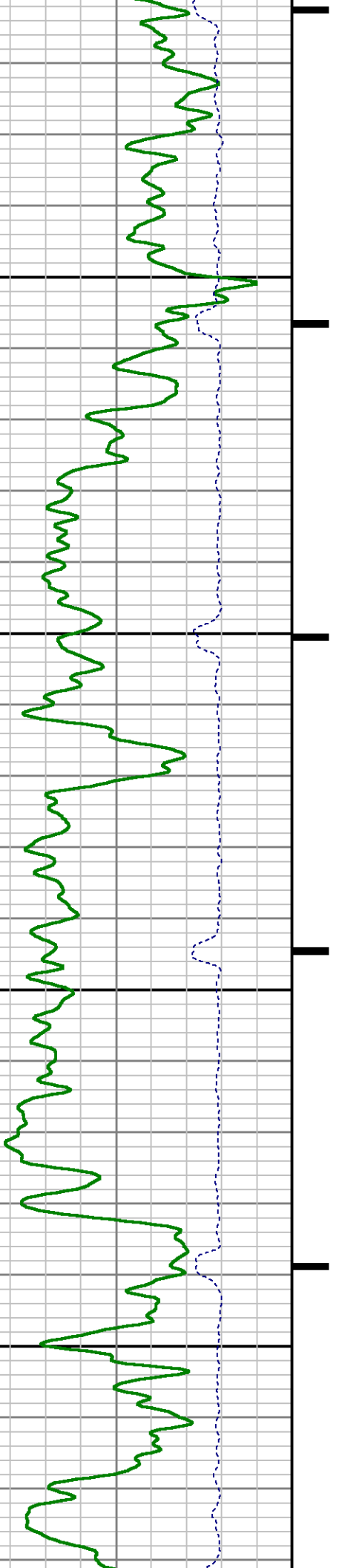
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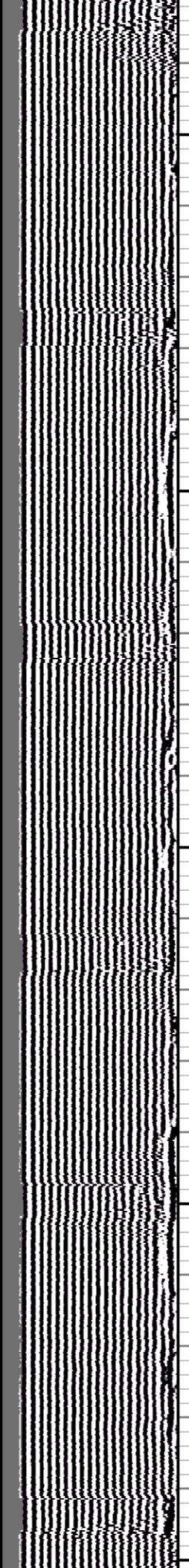
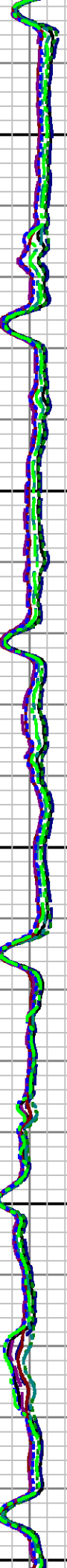




3100

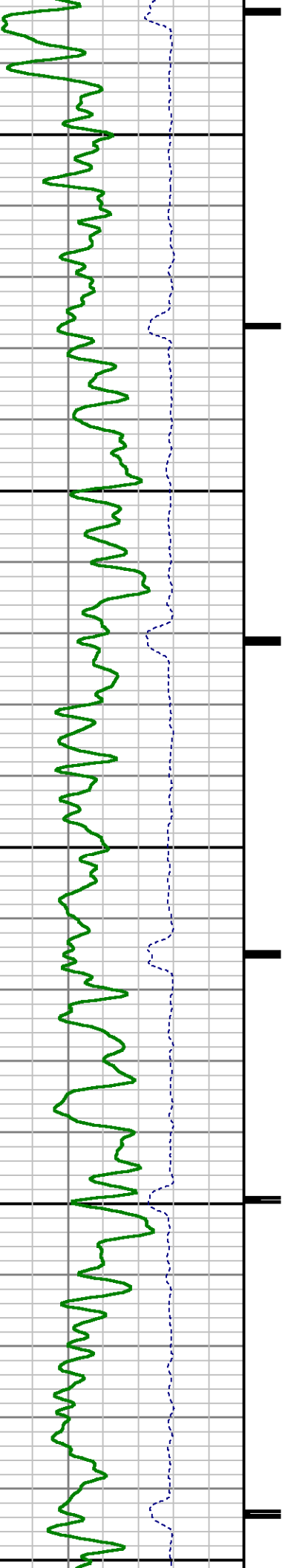
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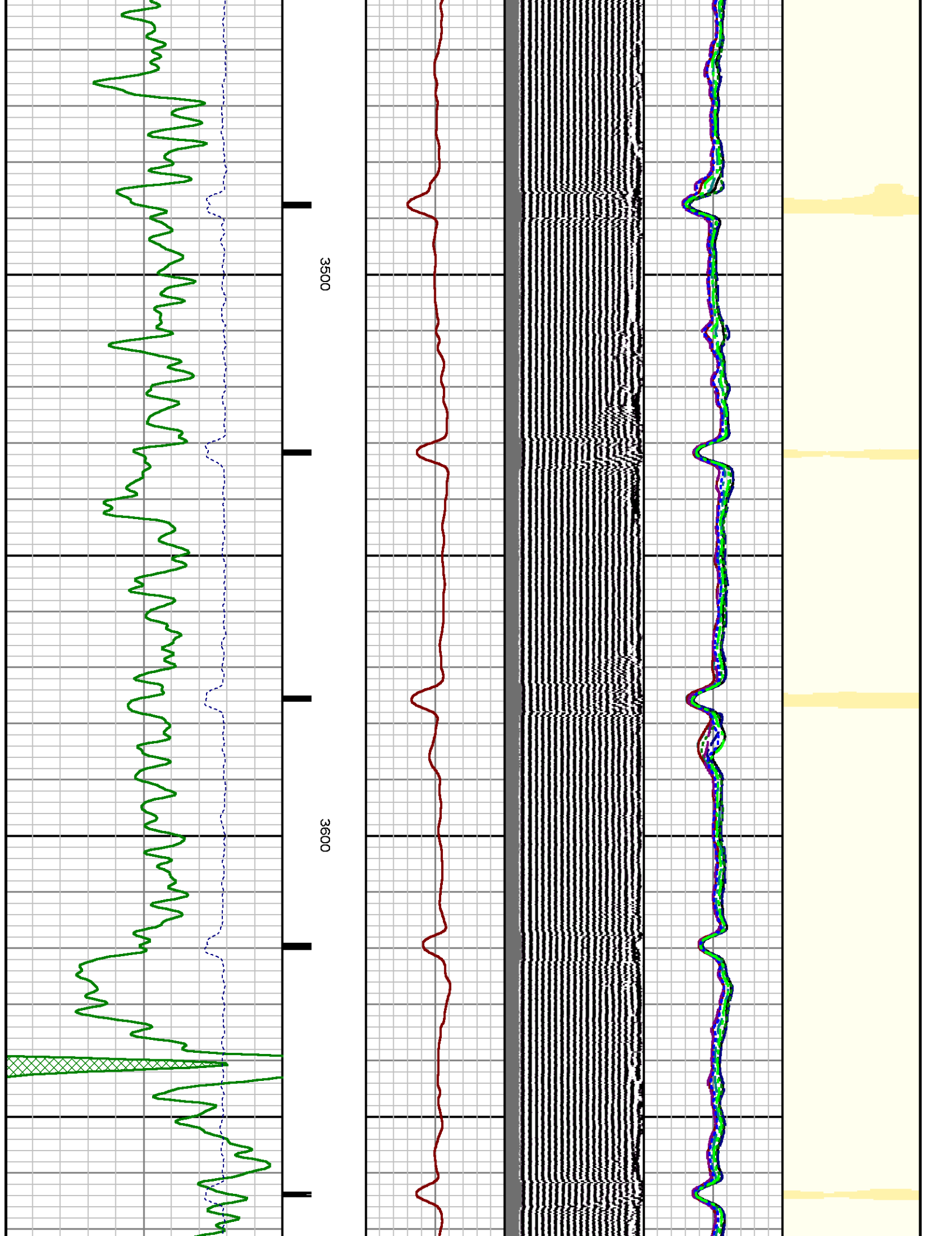


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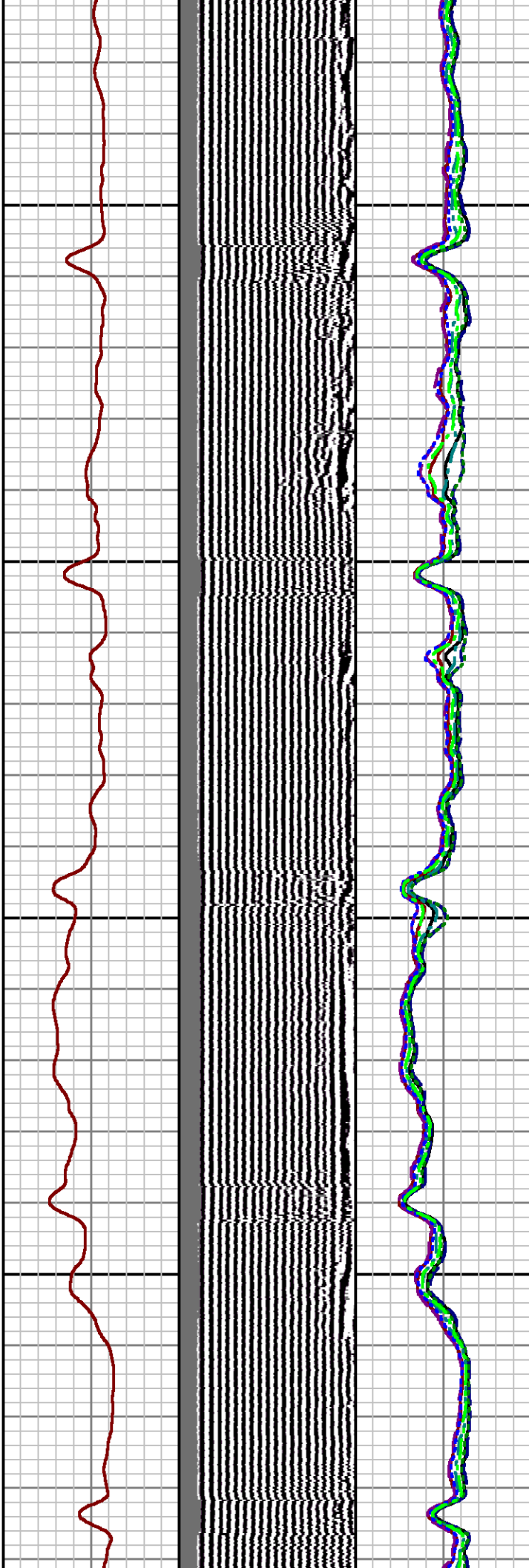
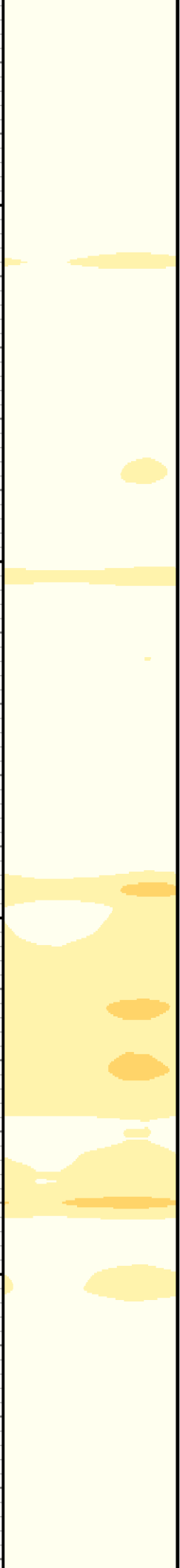
3400





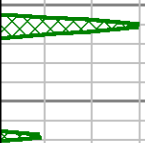
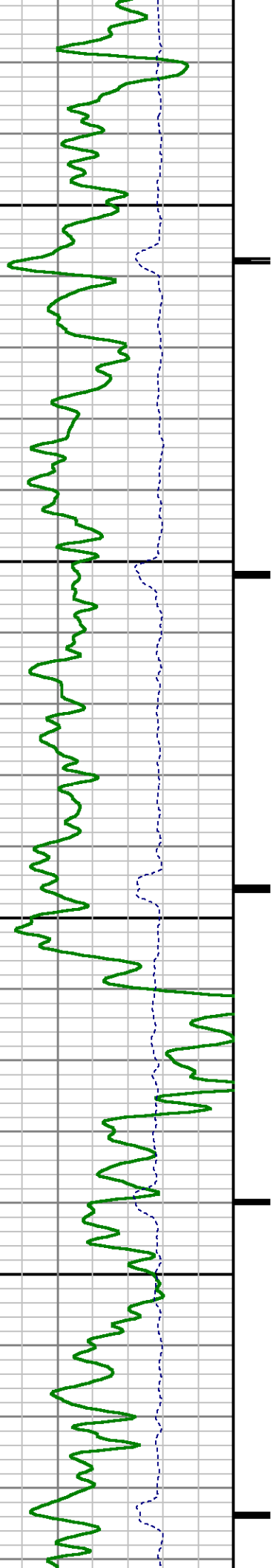


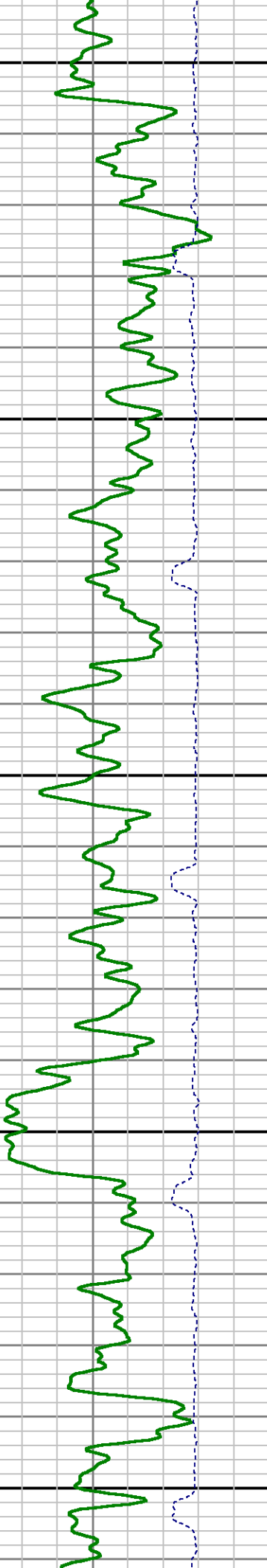
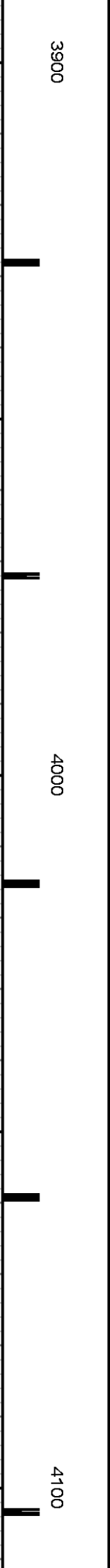
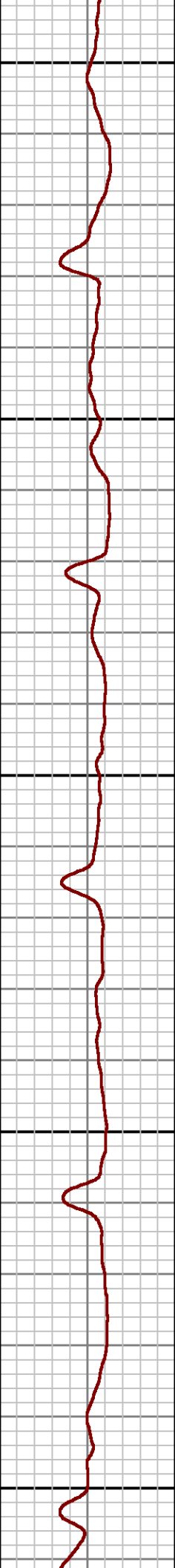
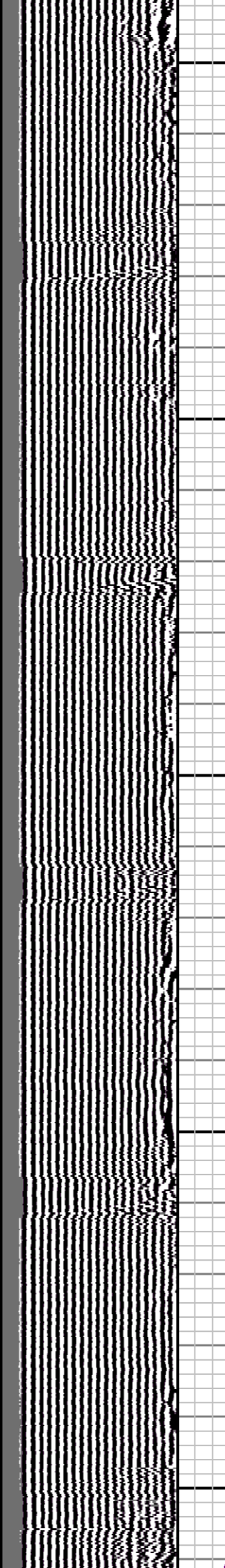
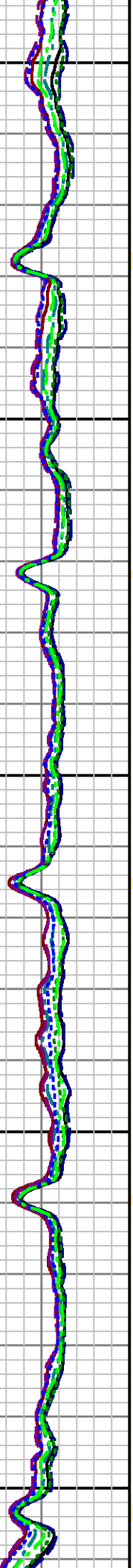
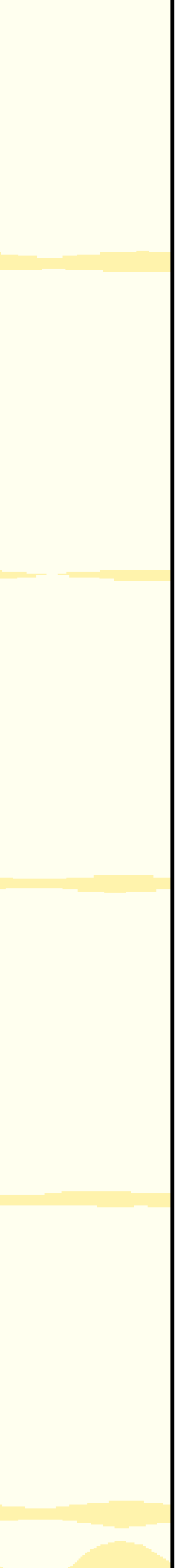


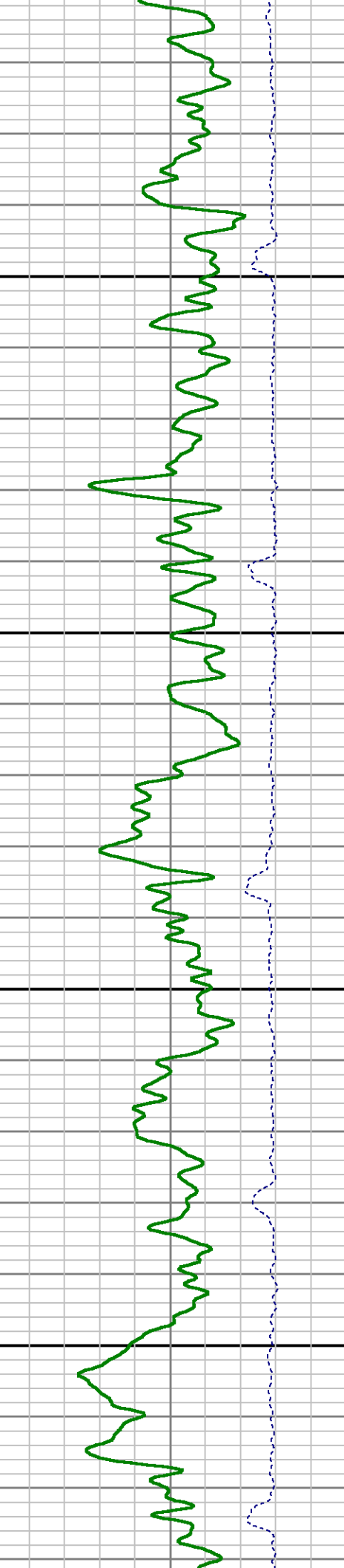
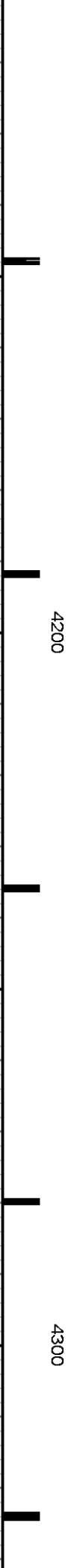
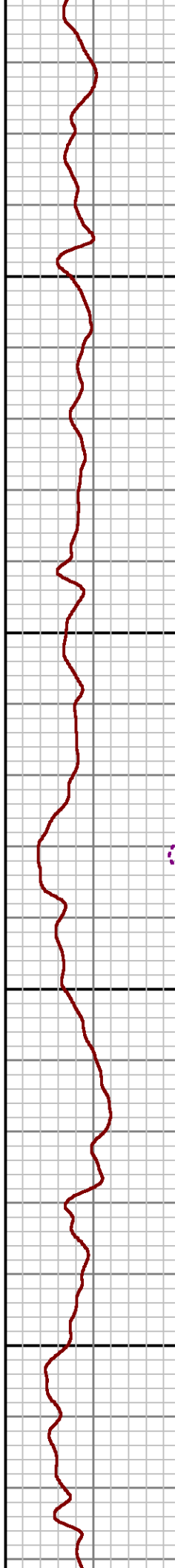
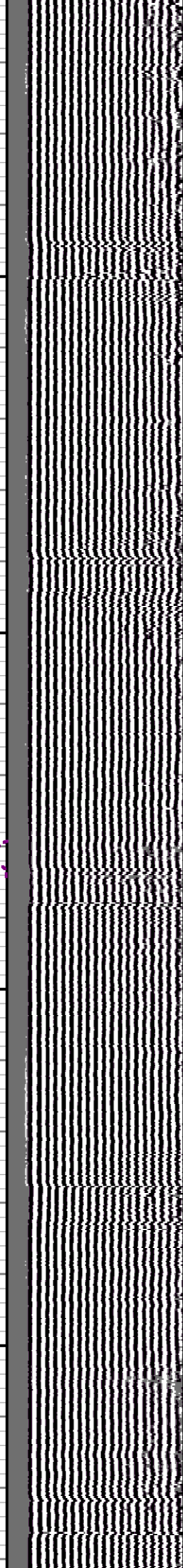
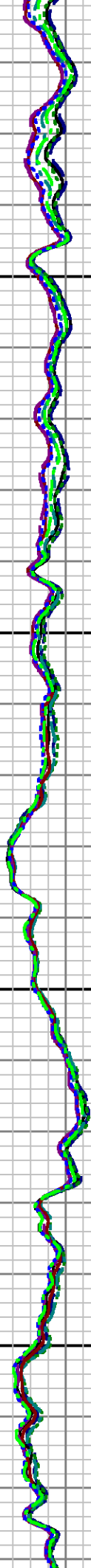
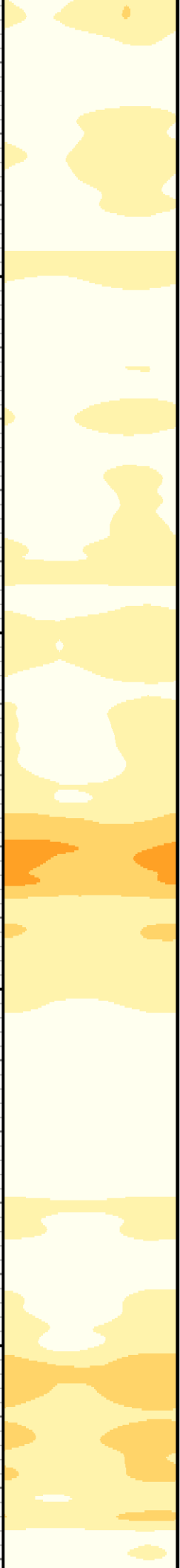


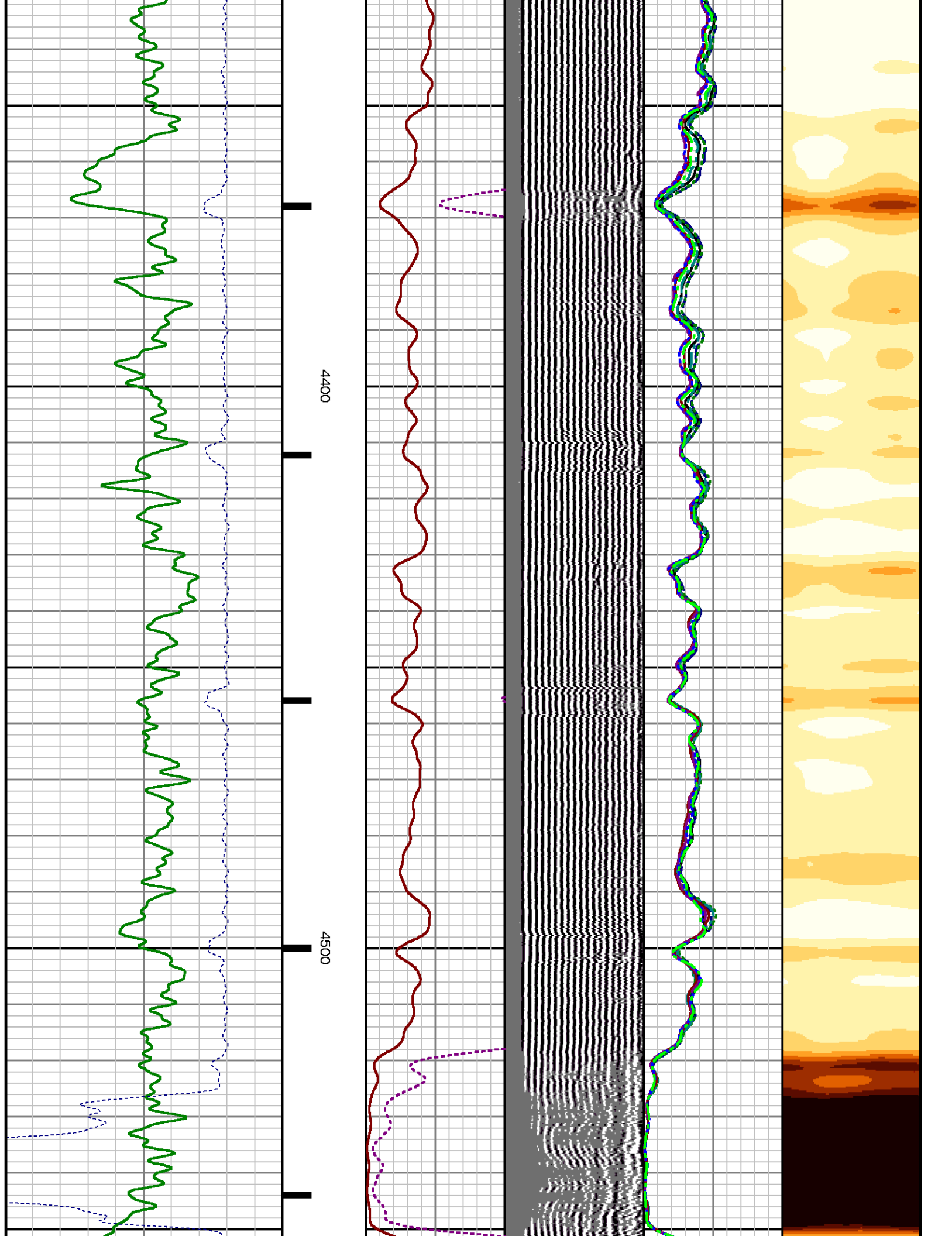
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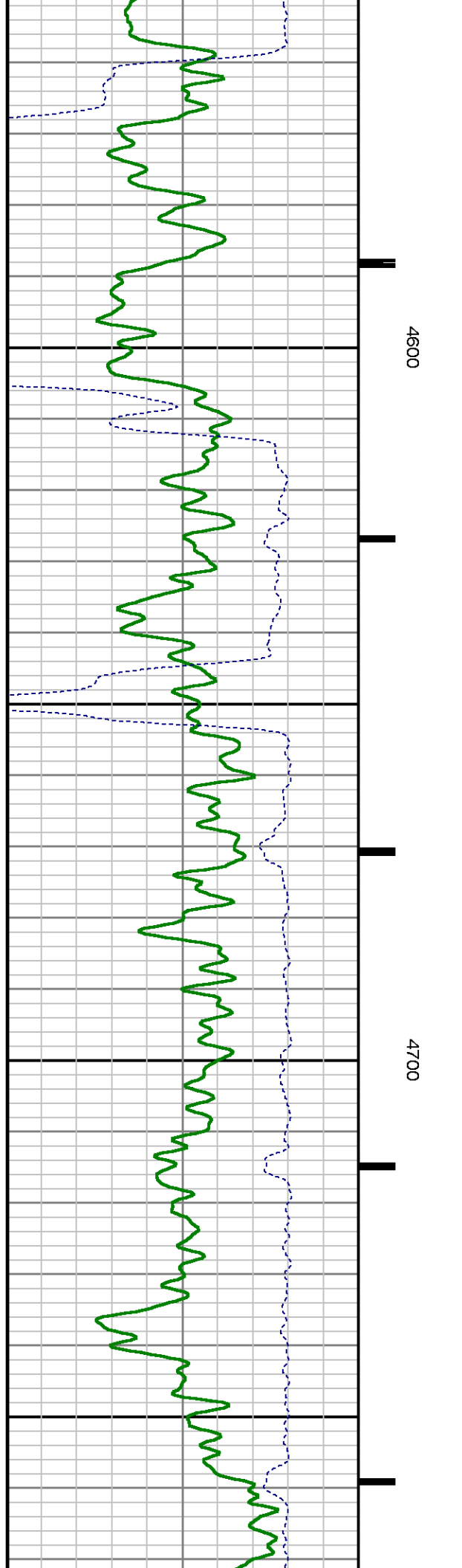
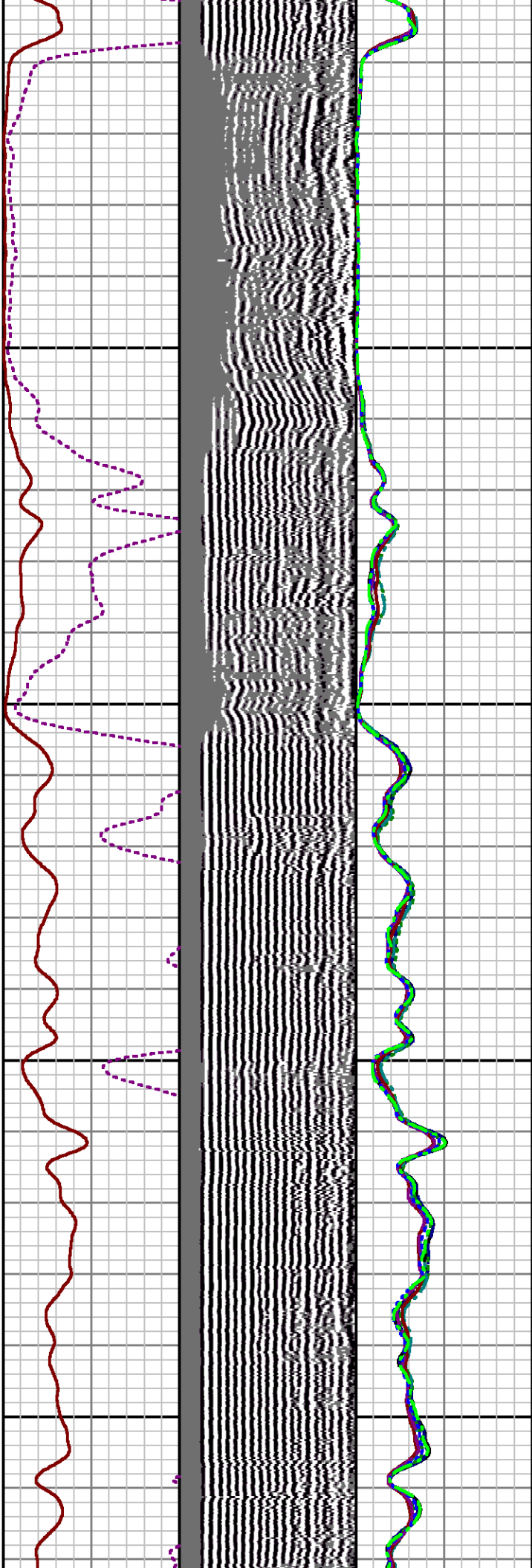
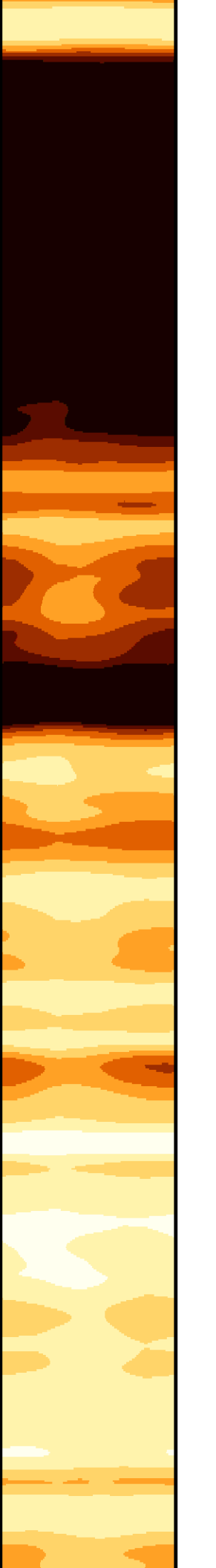
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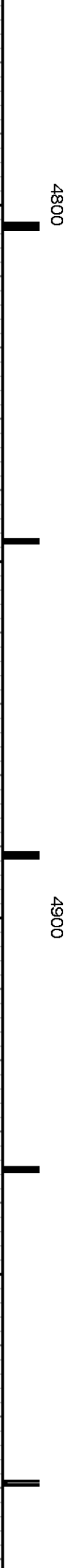
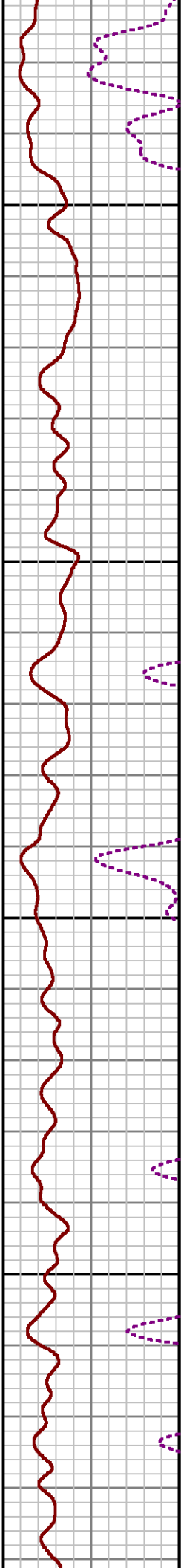
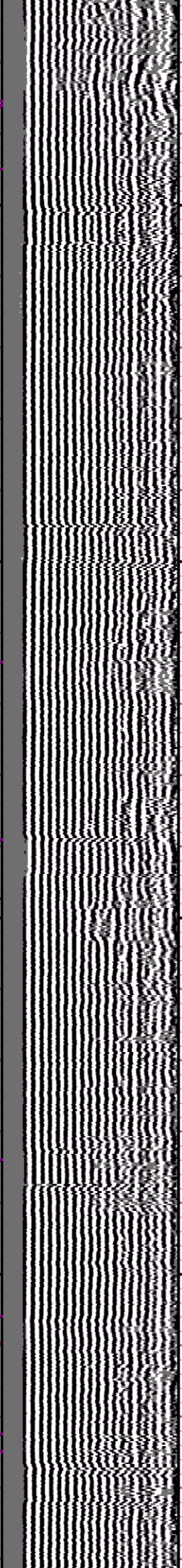
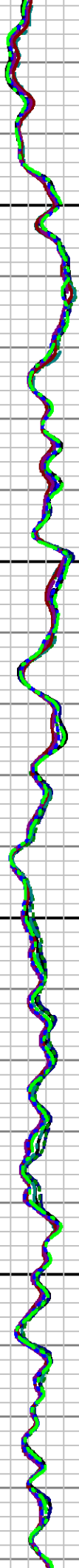
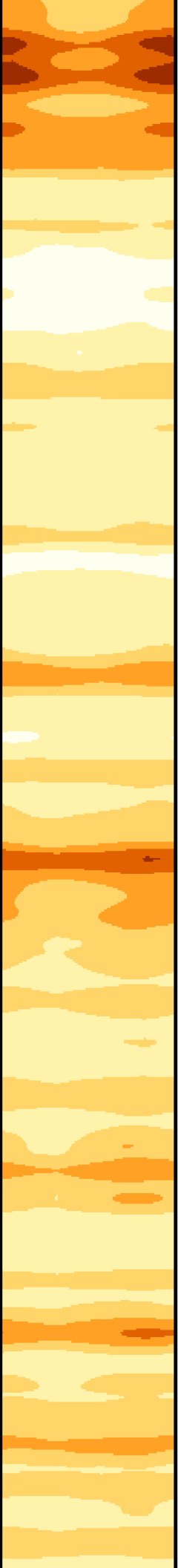




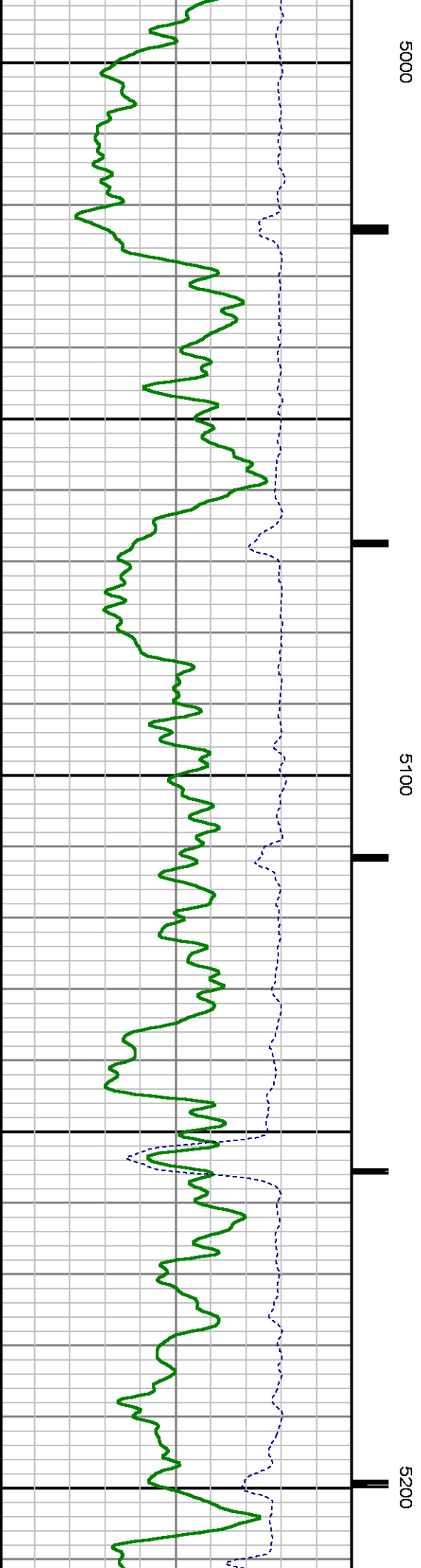
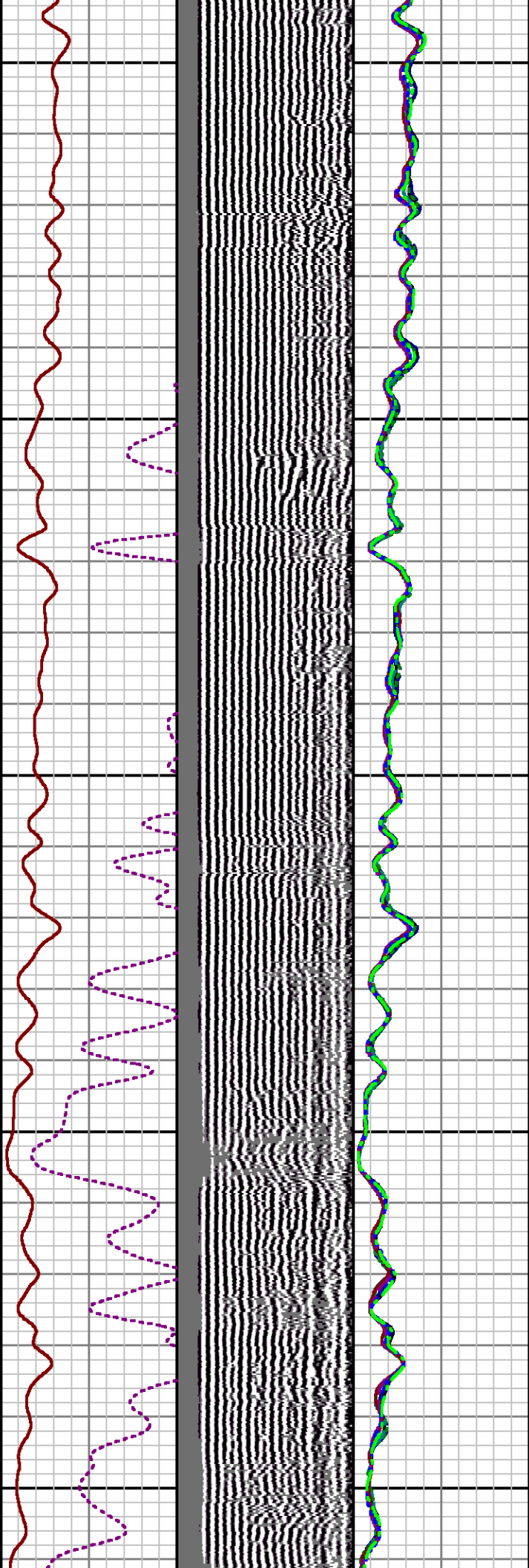
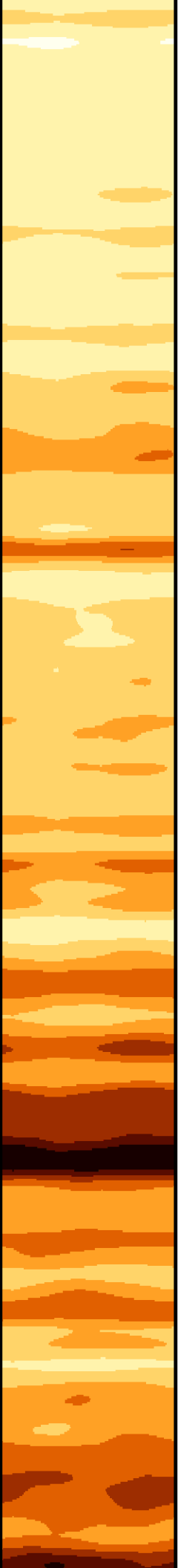


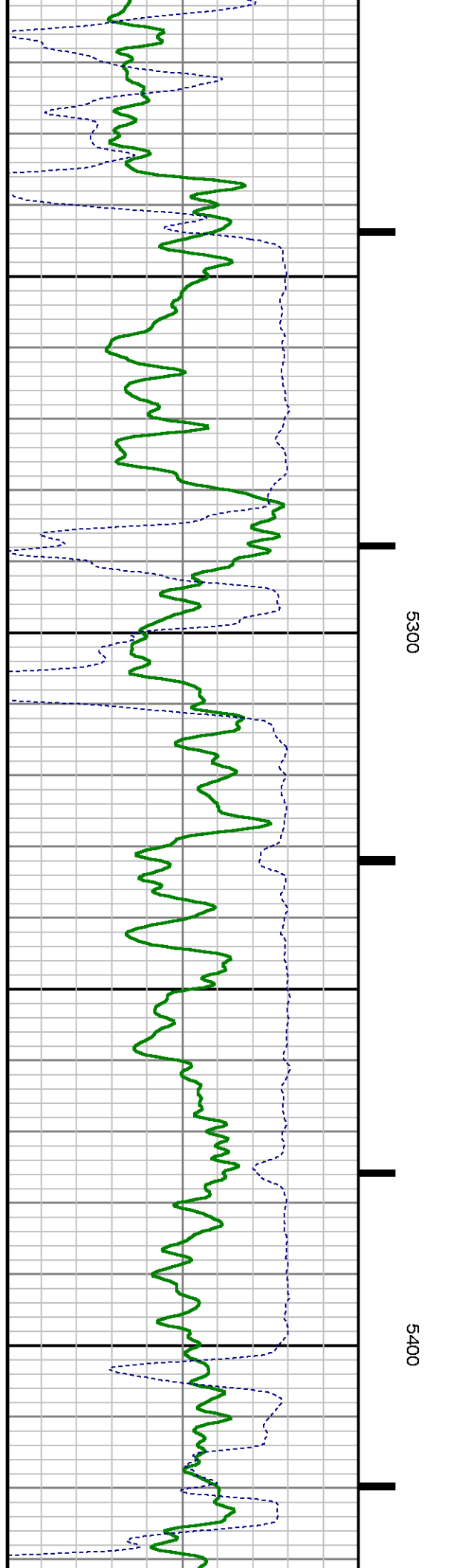
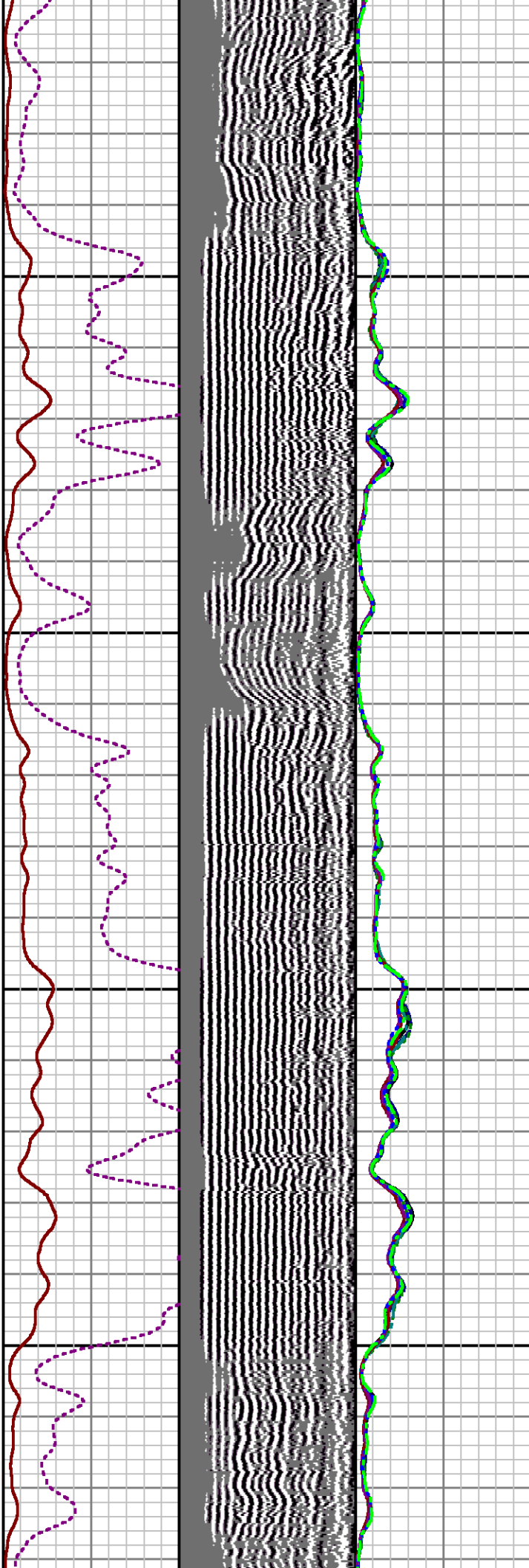


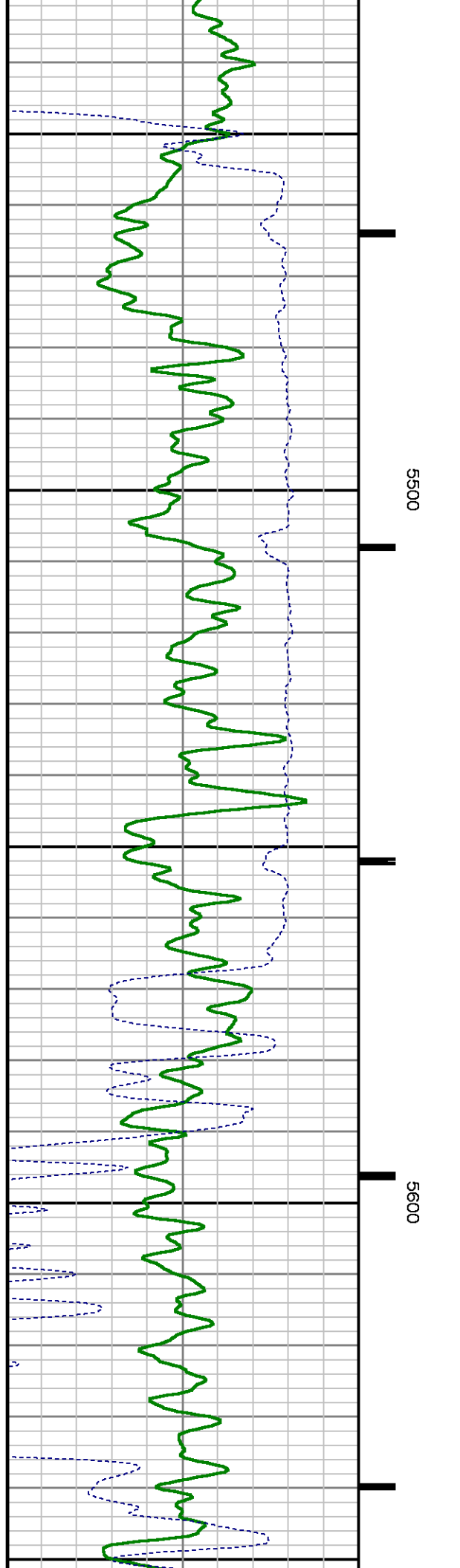
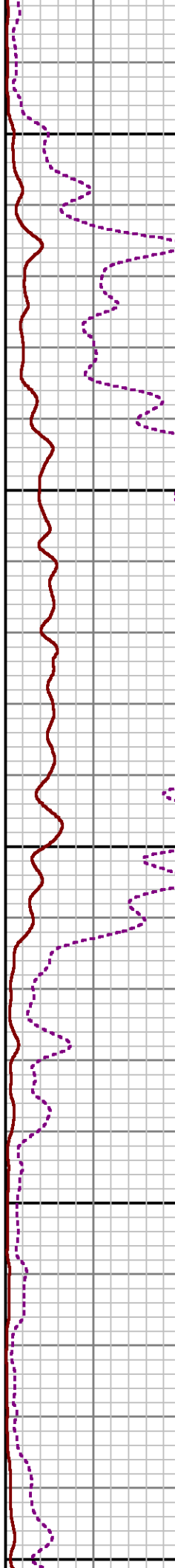
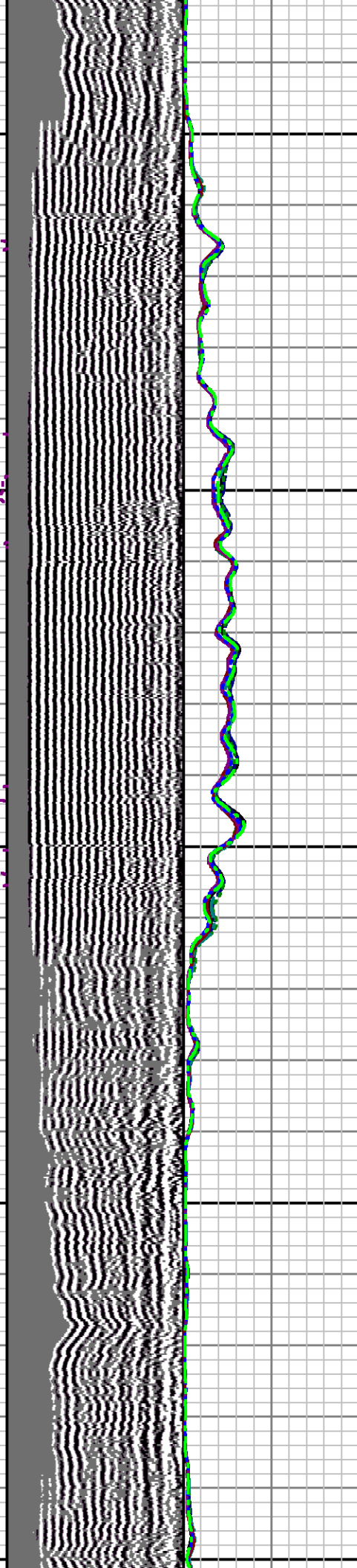
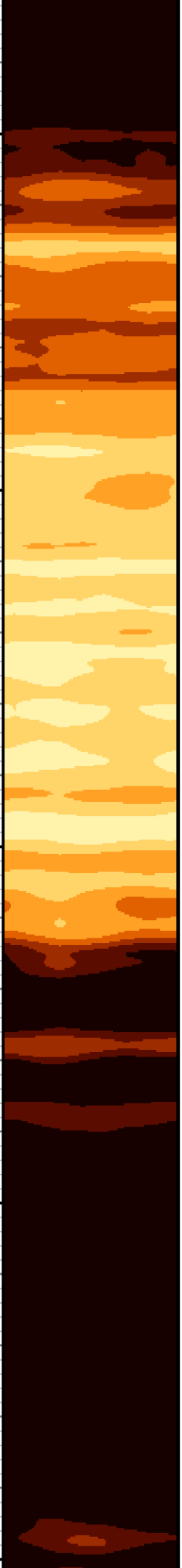


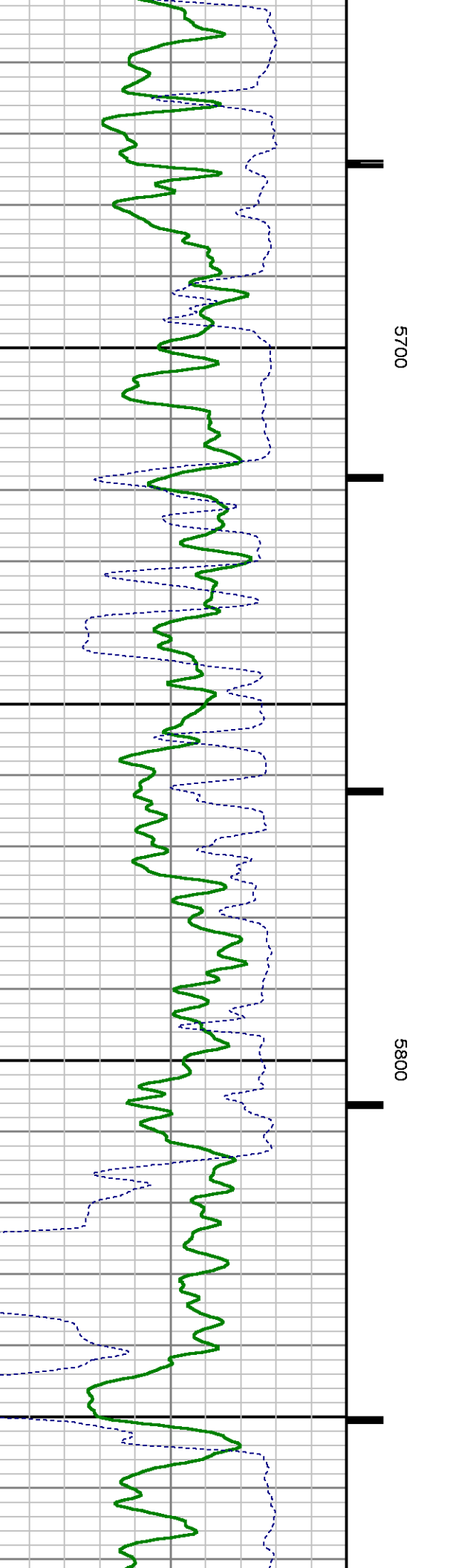
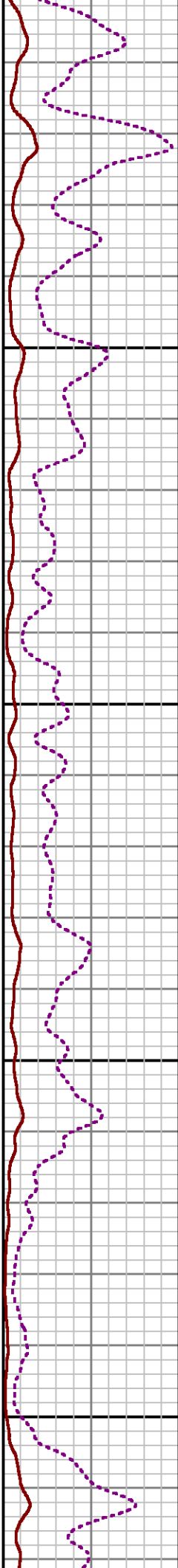
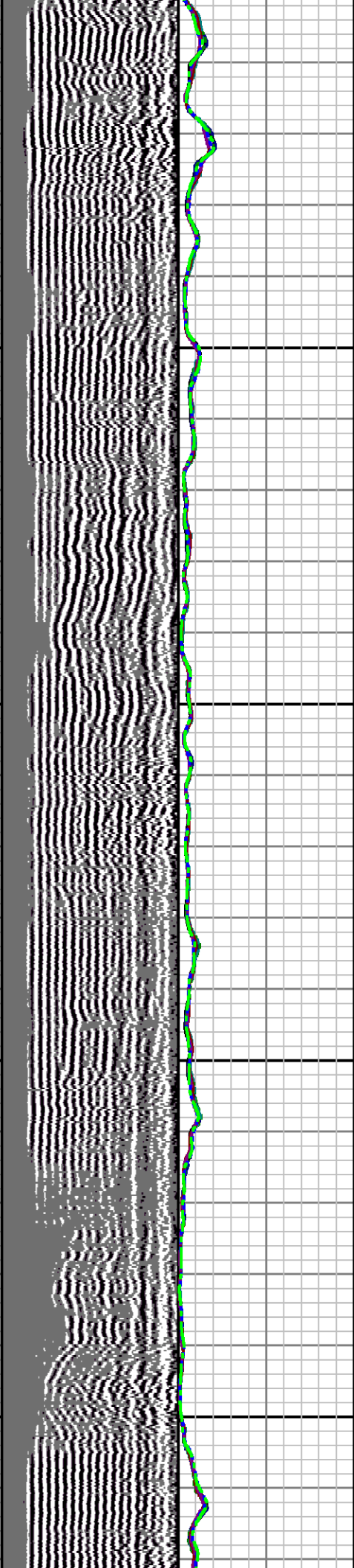




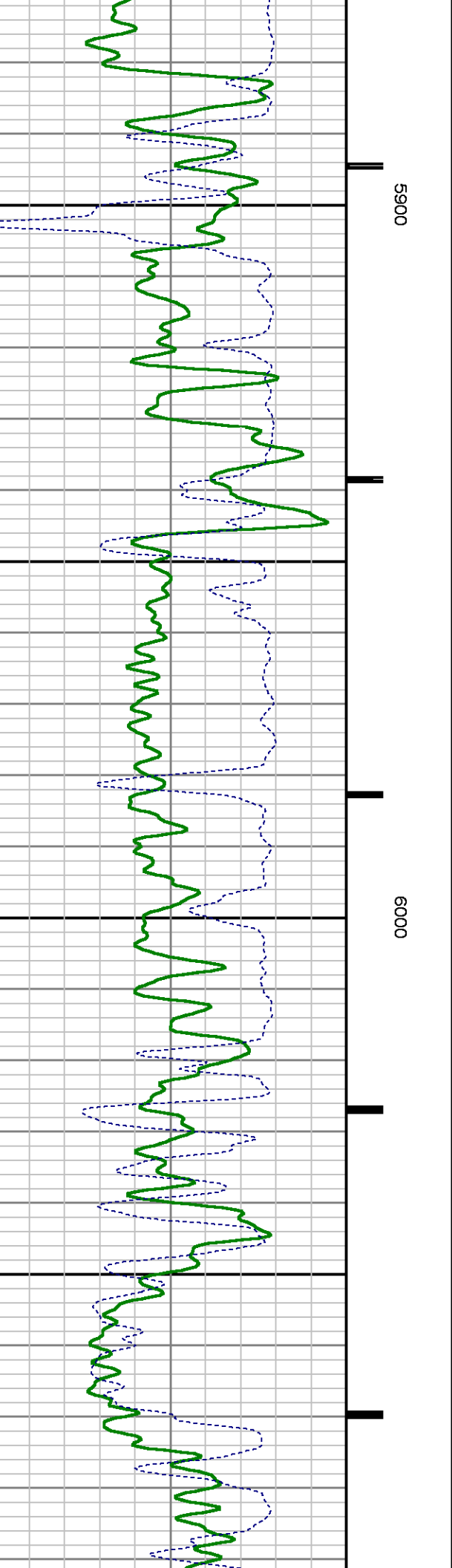
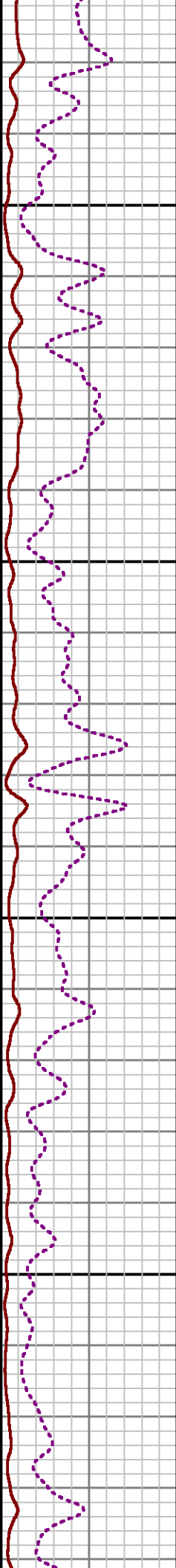
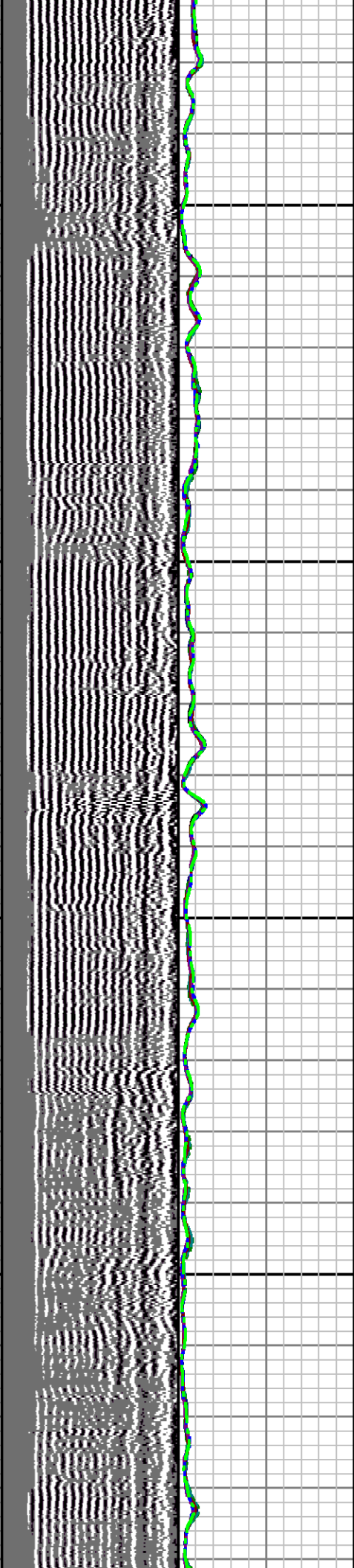


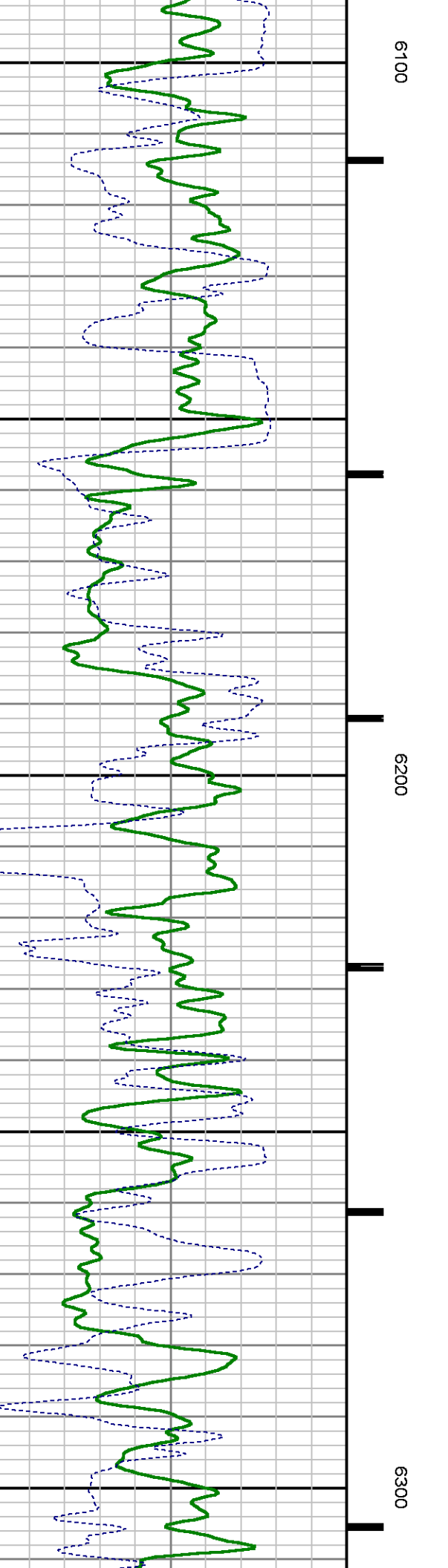
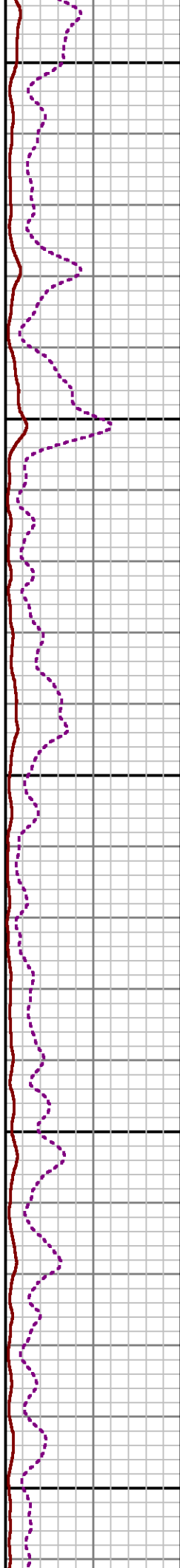
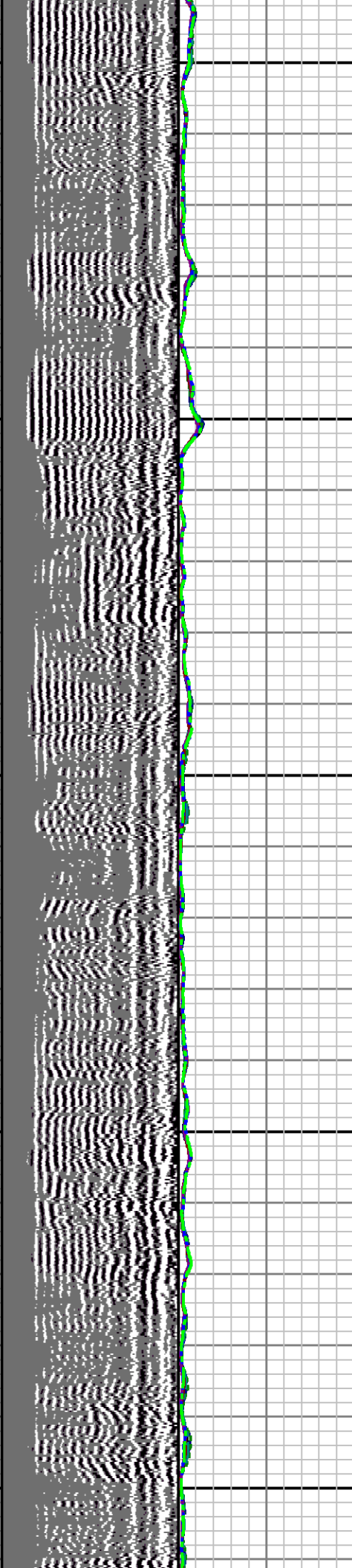




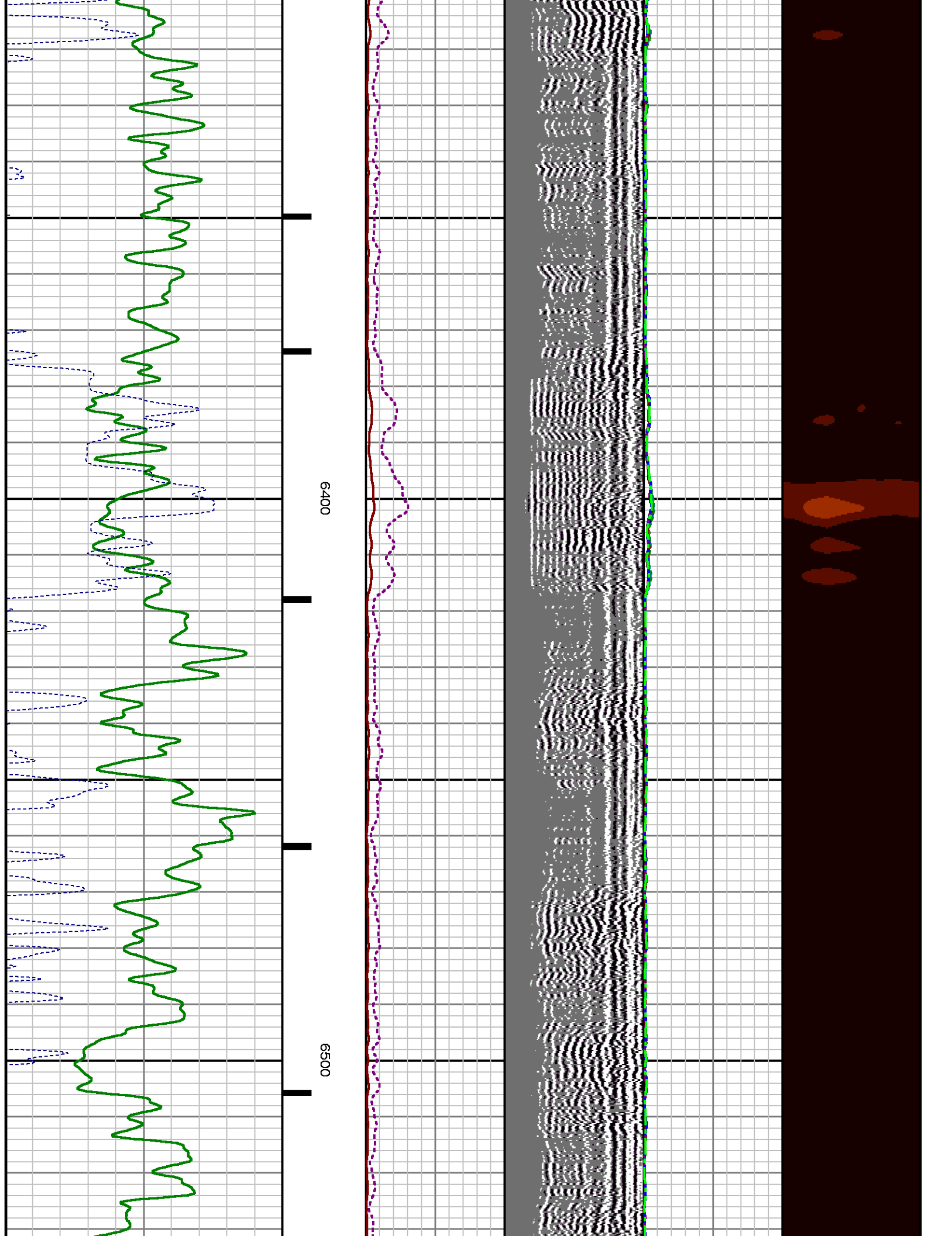


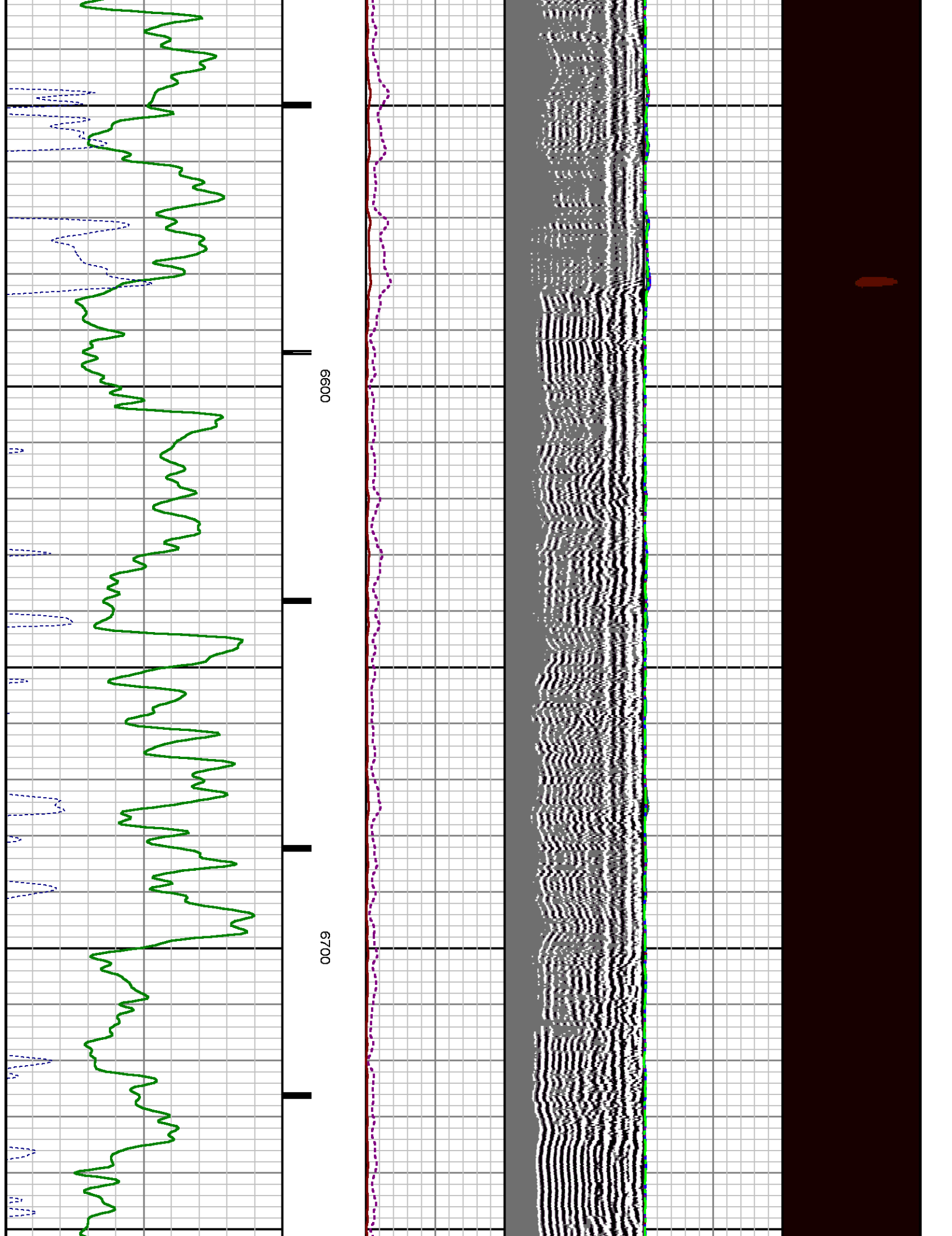


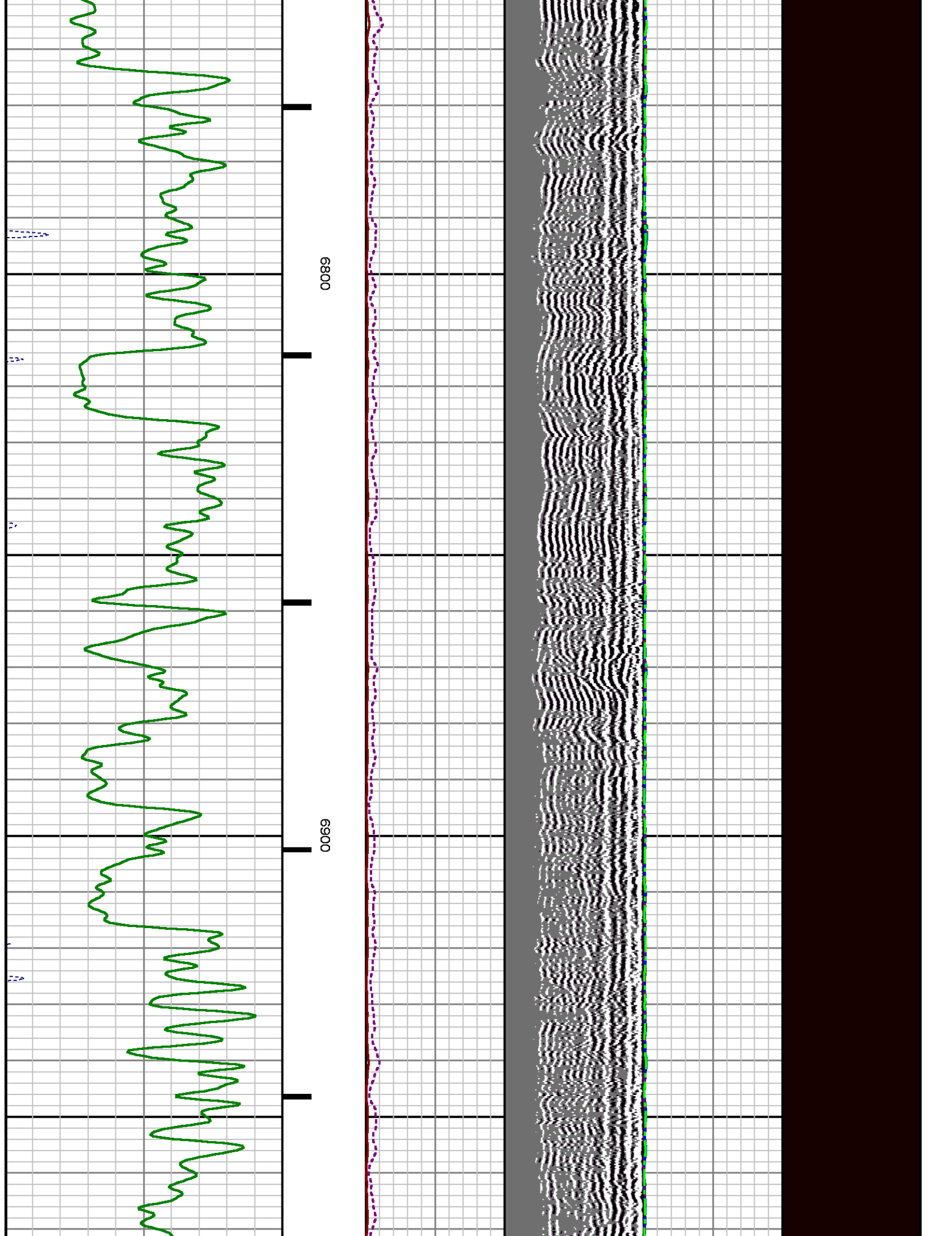




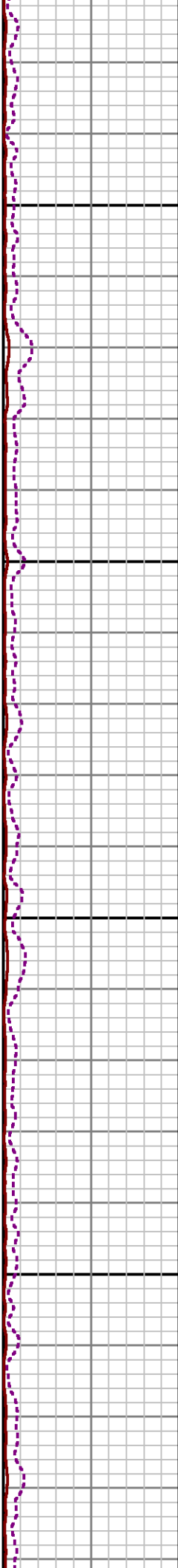
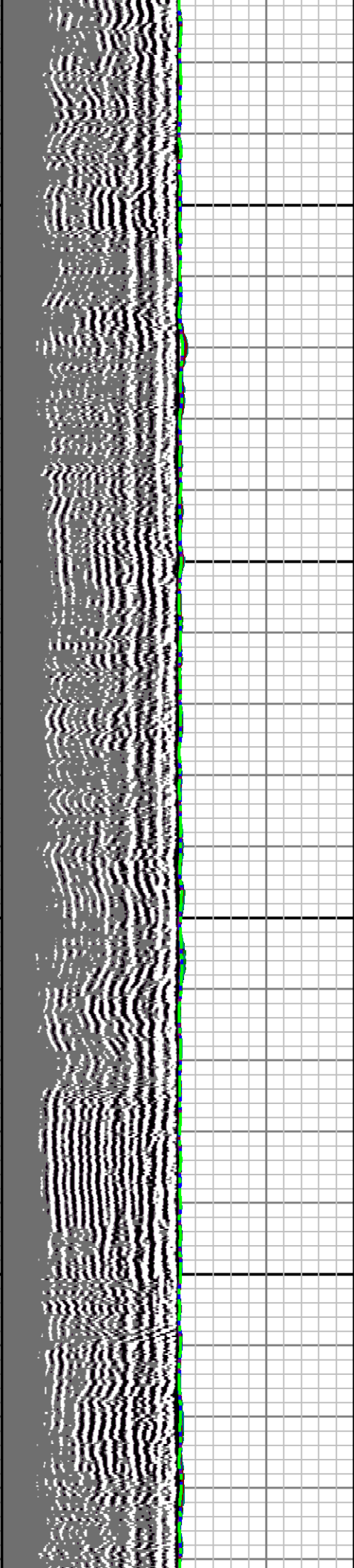






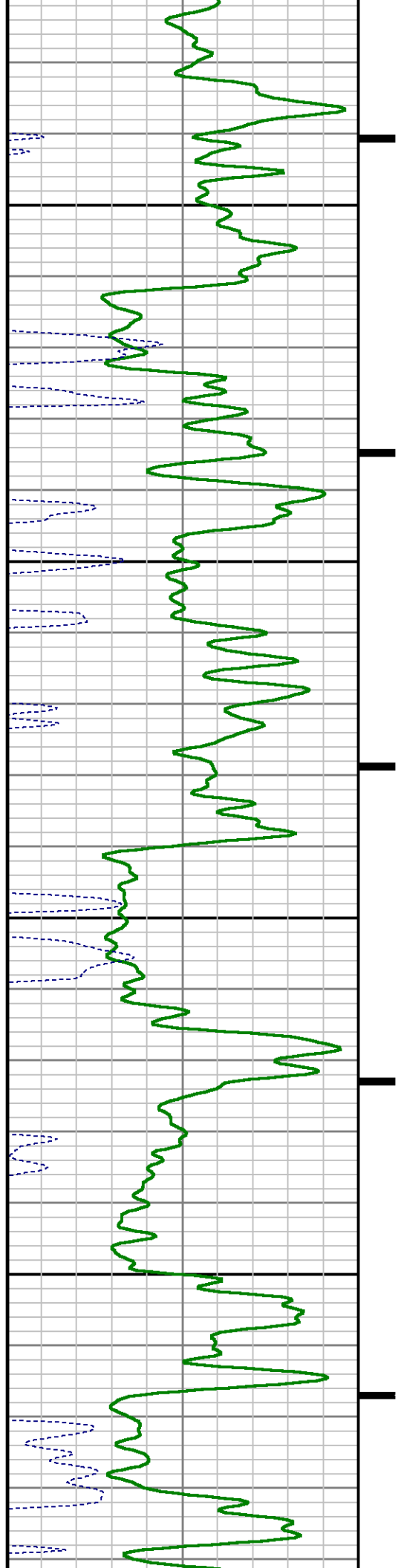


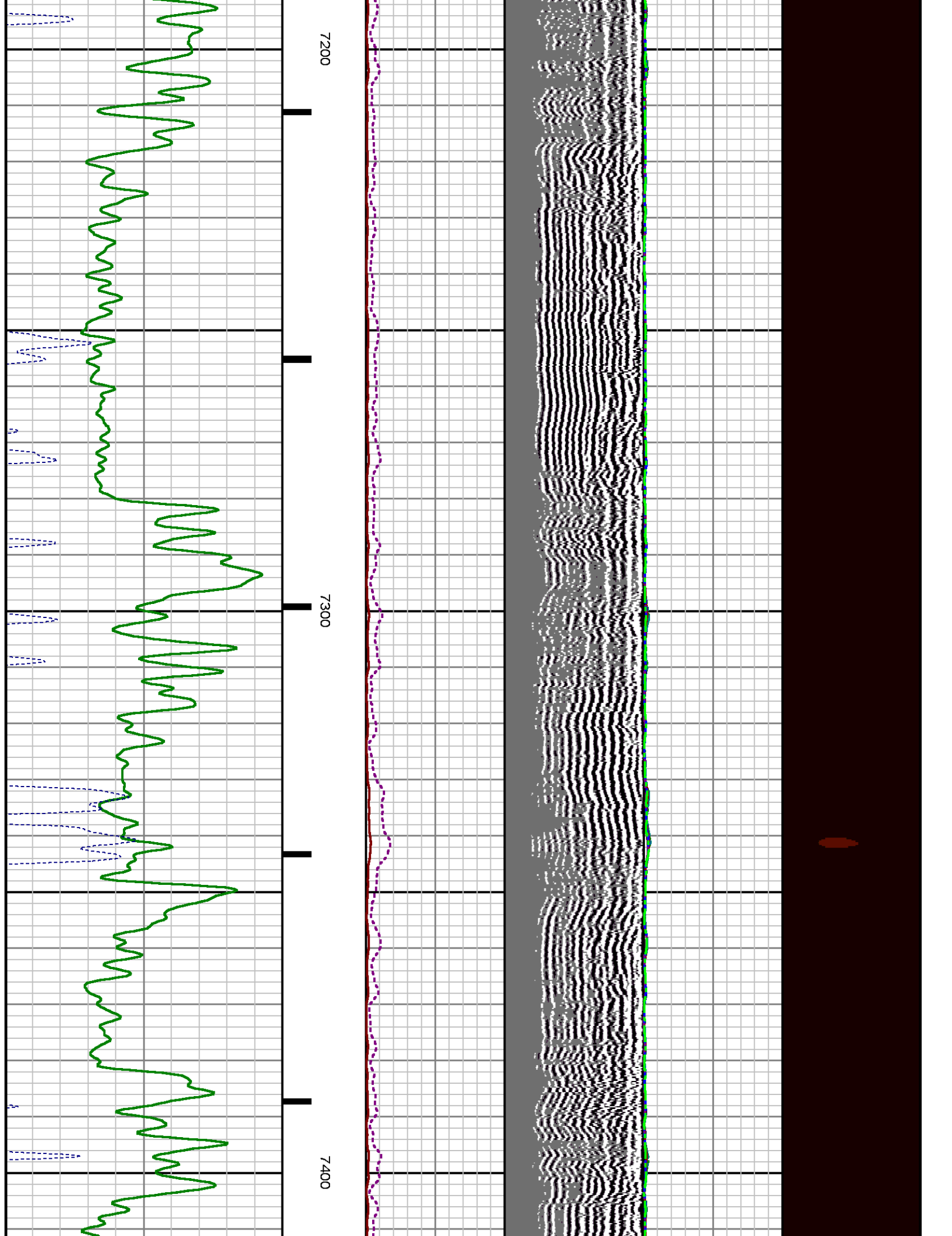
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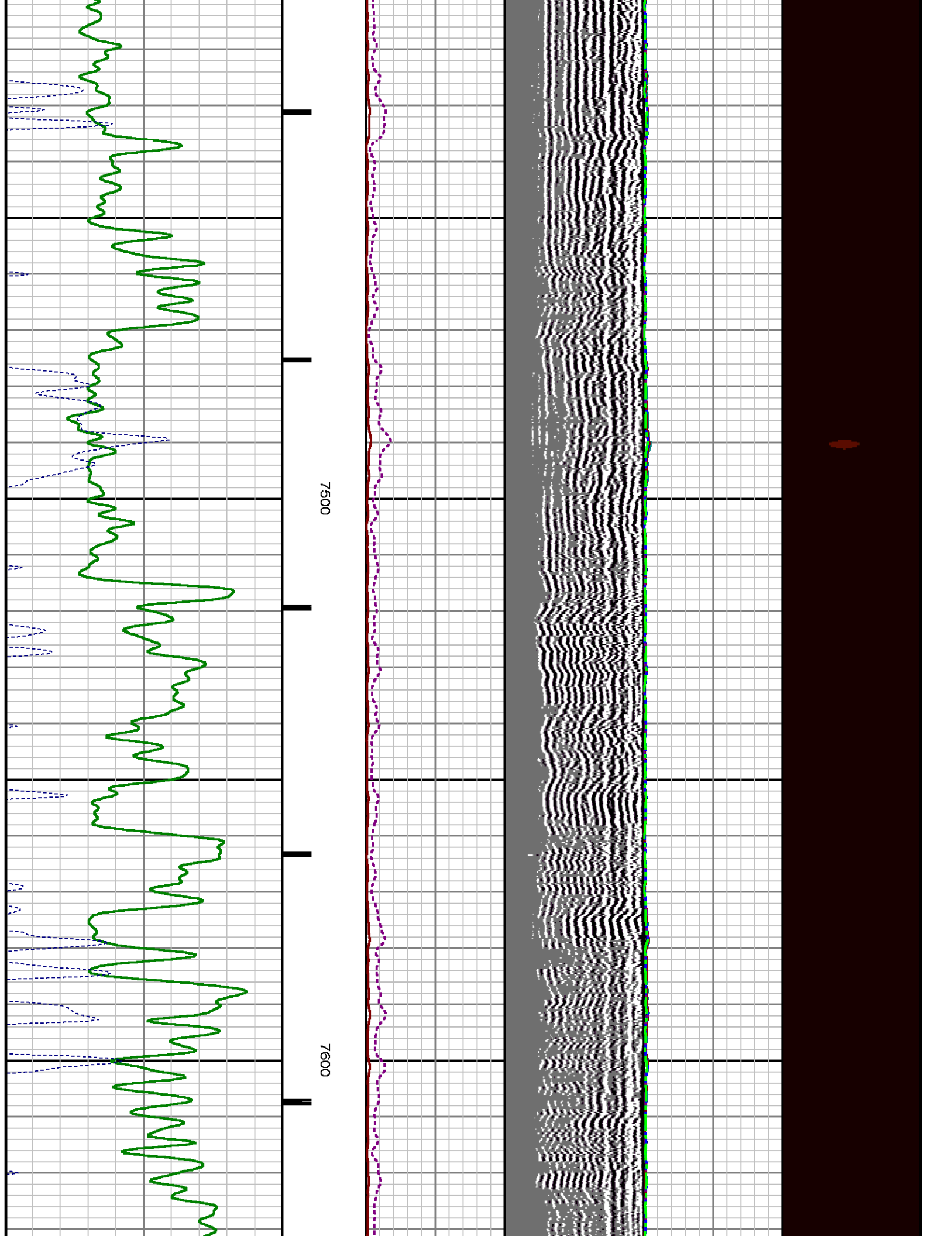
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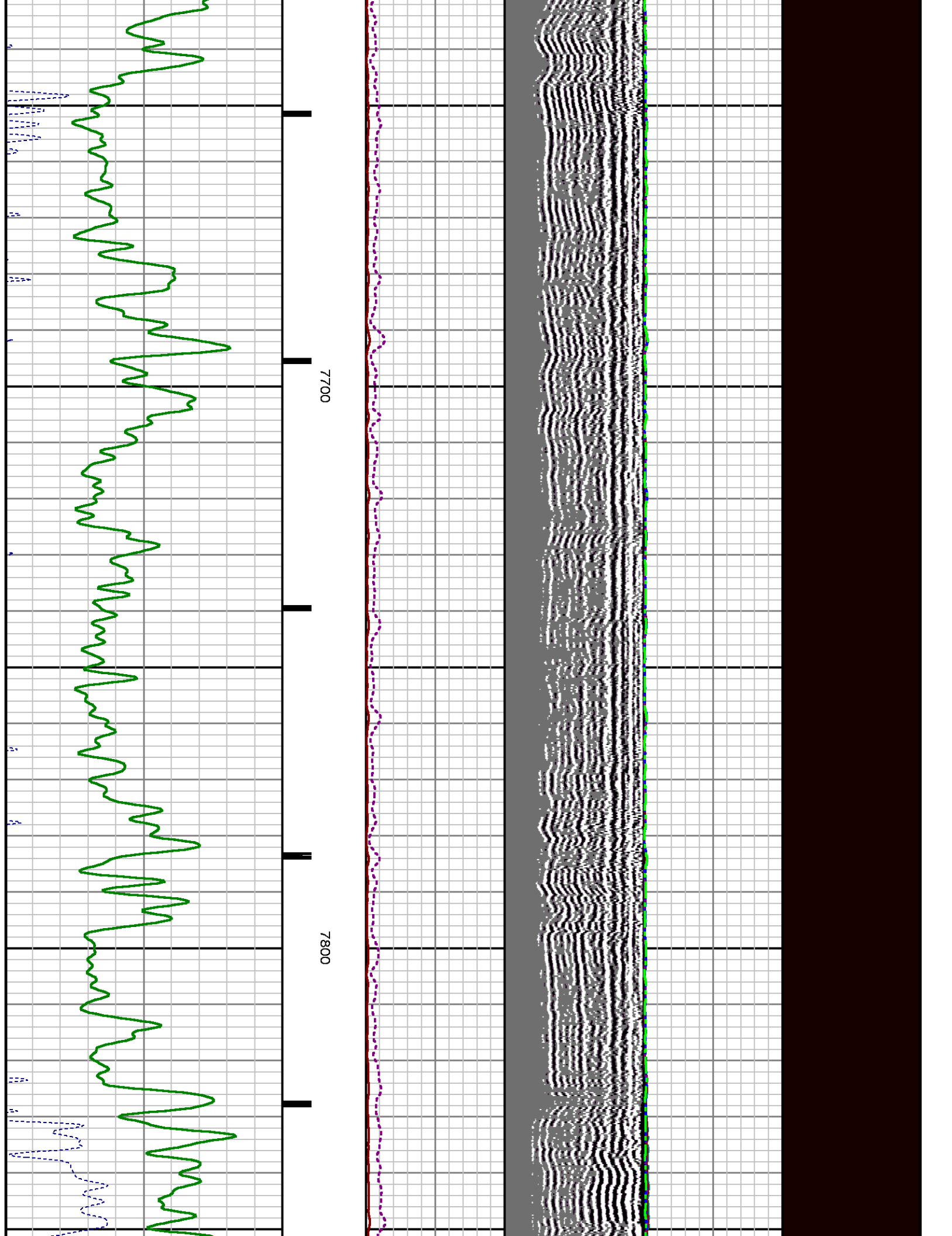


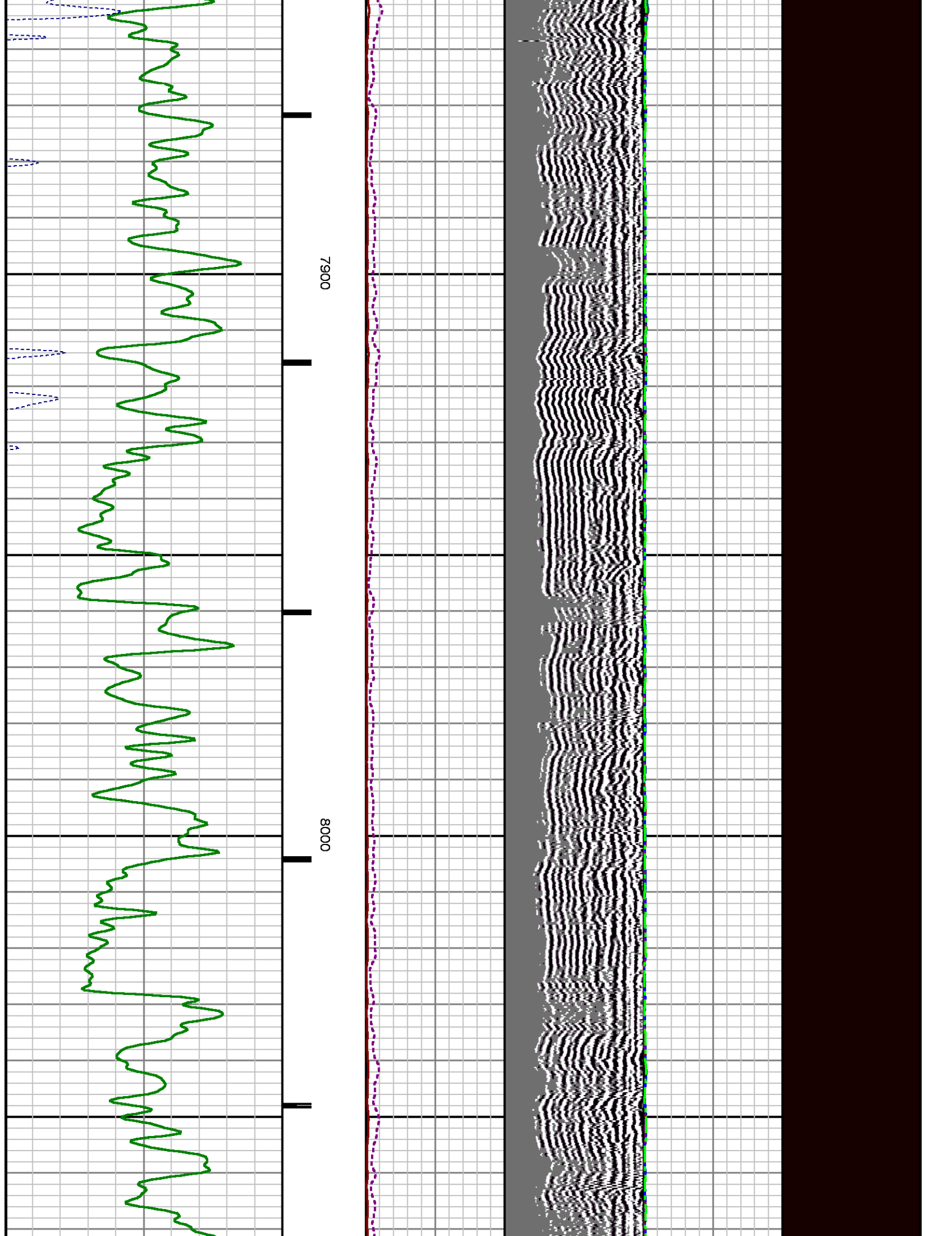


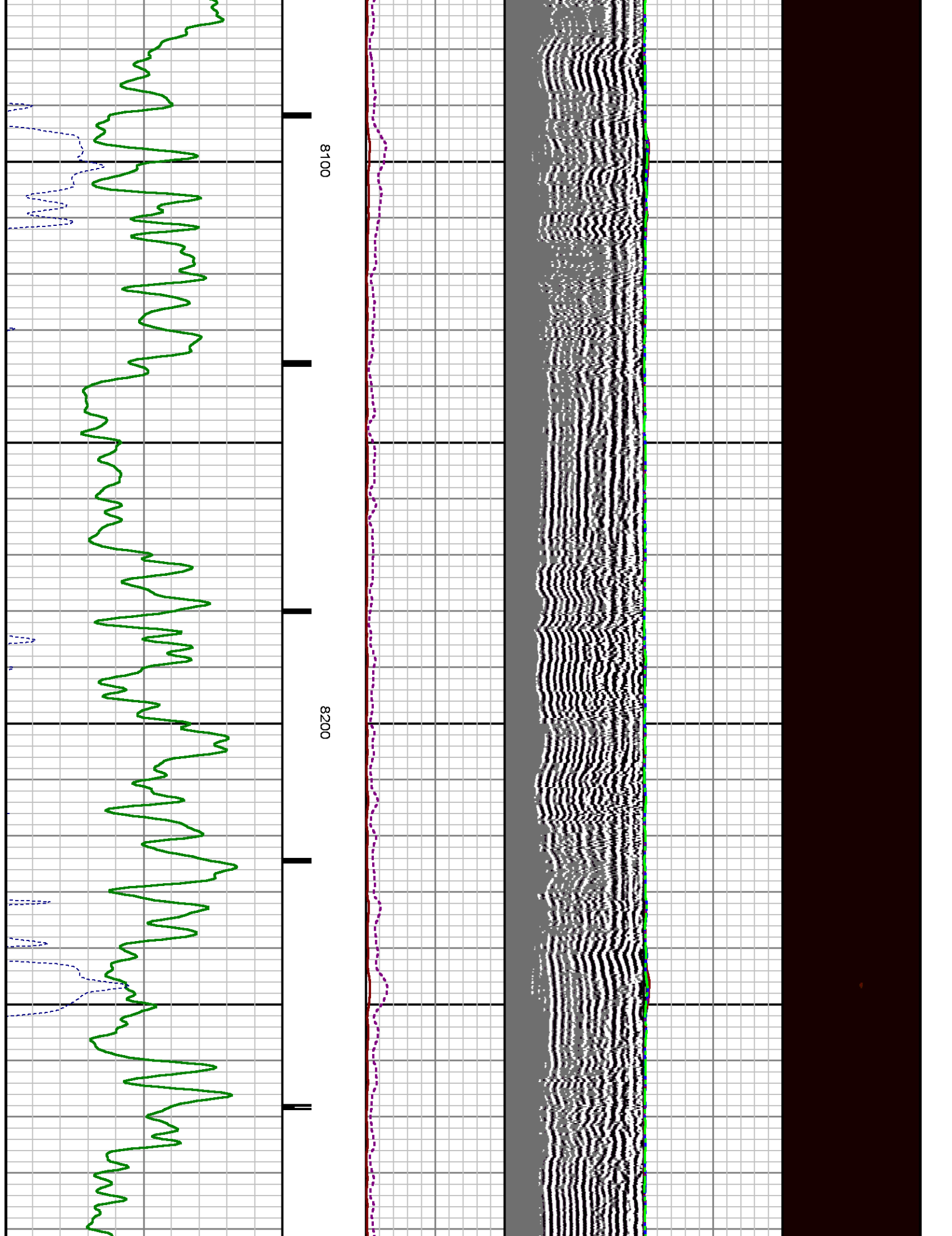


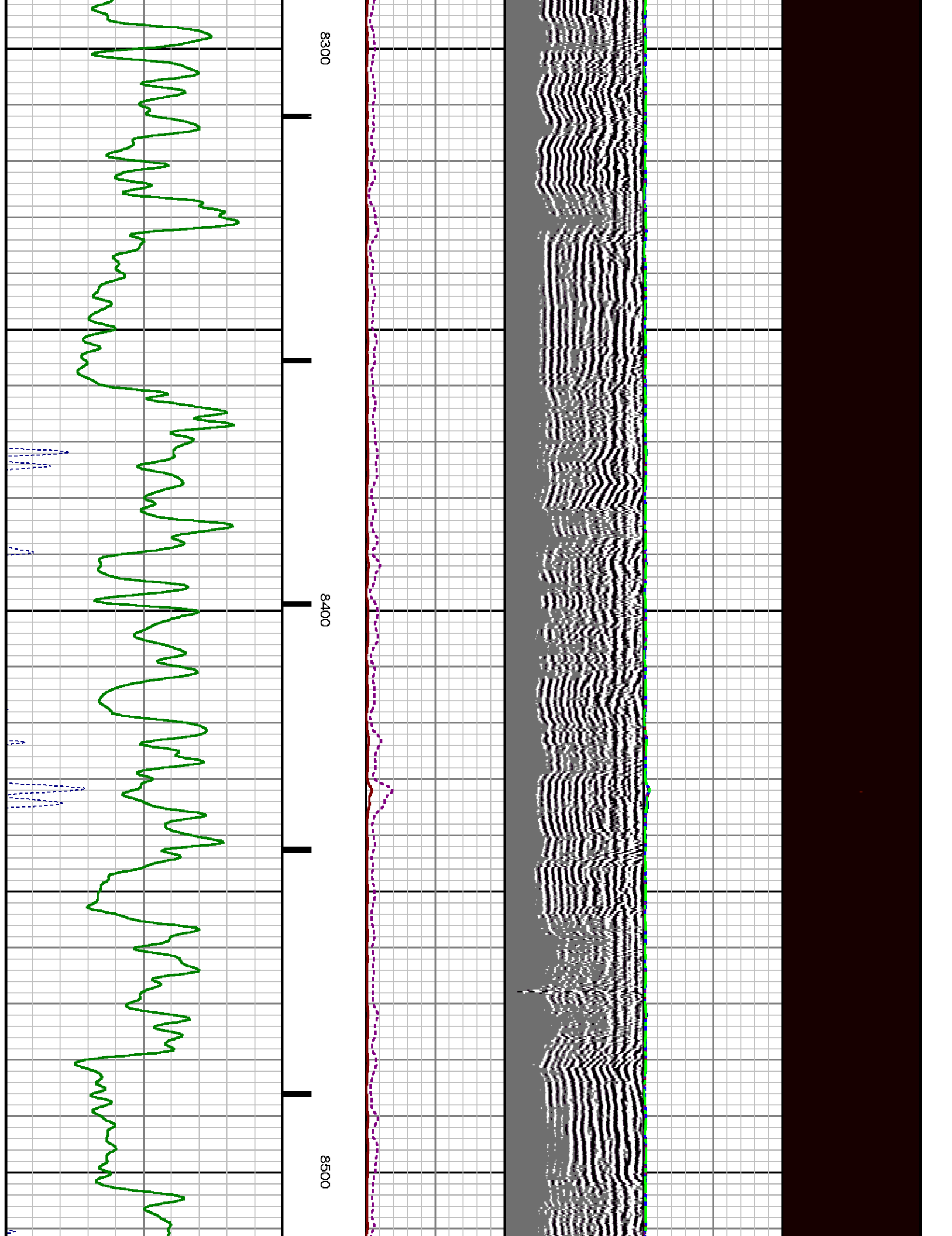


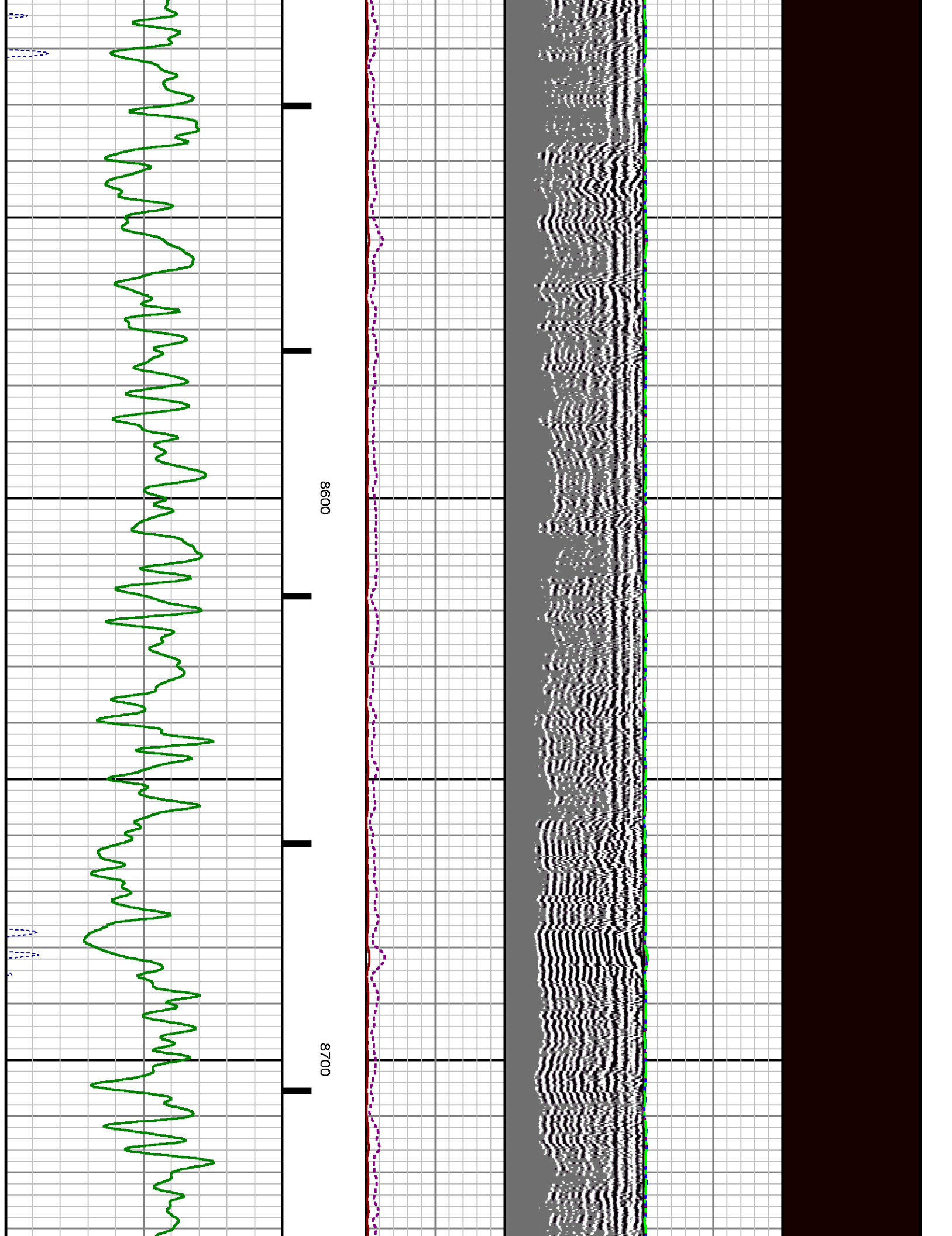




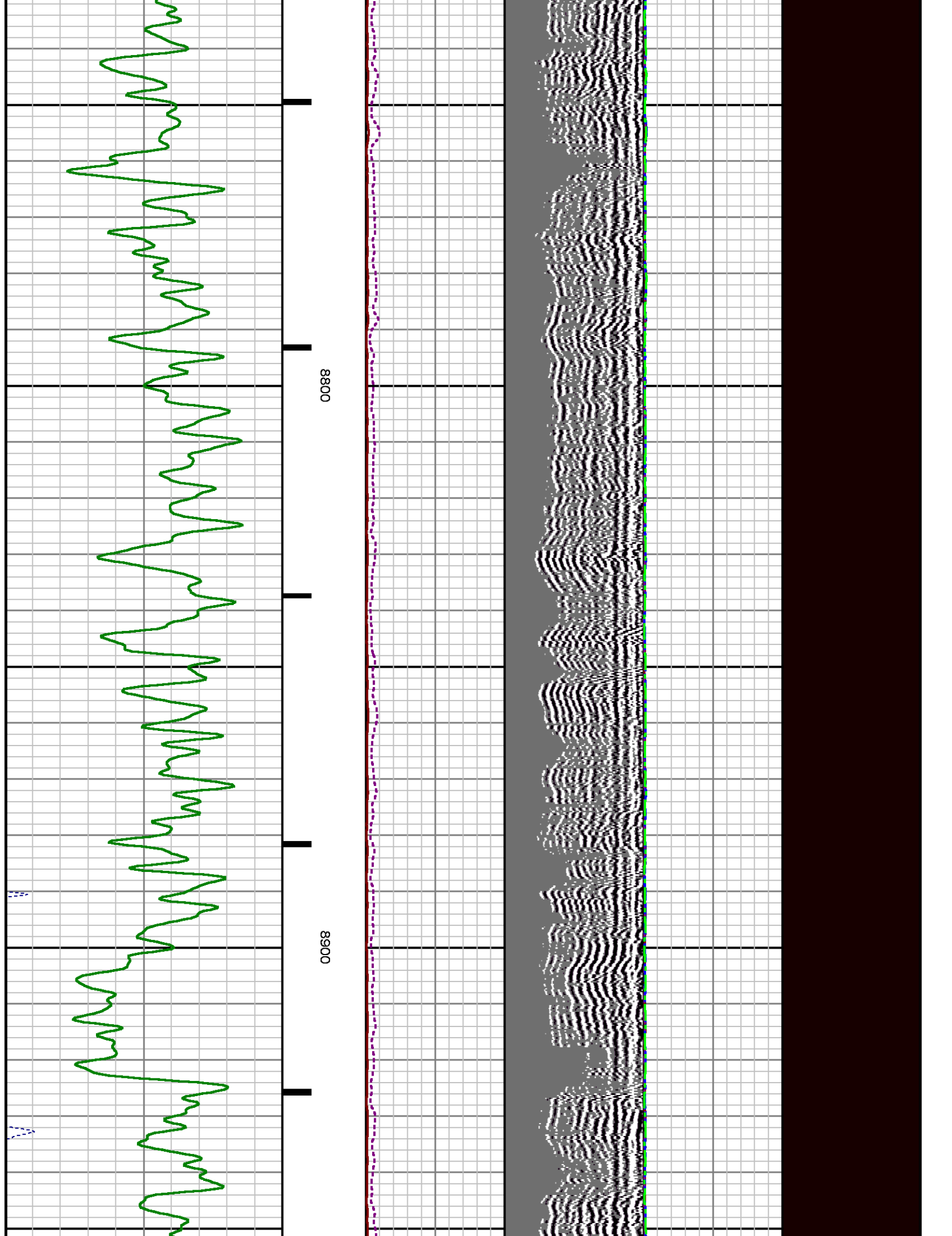




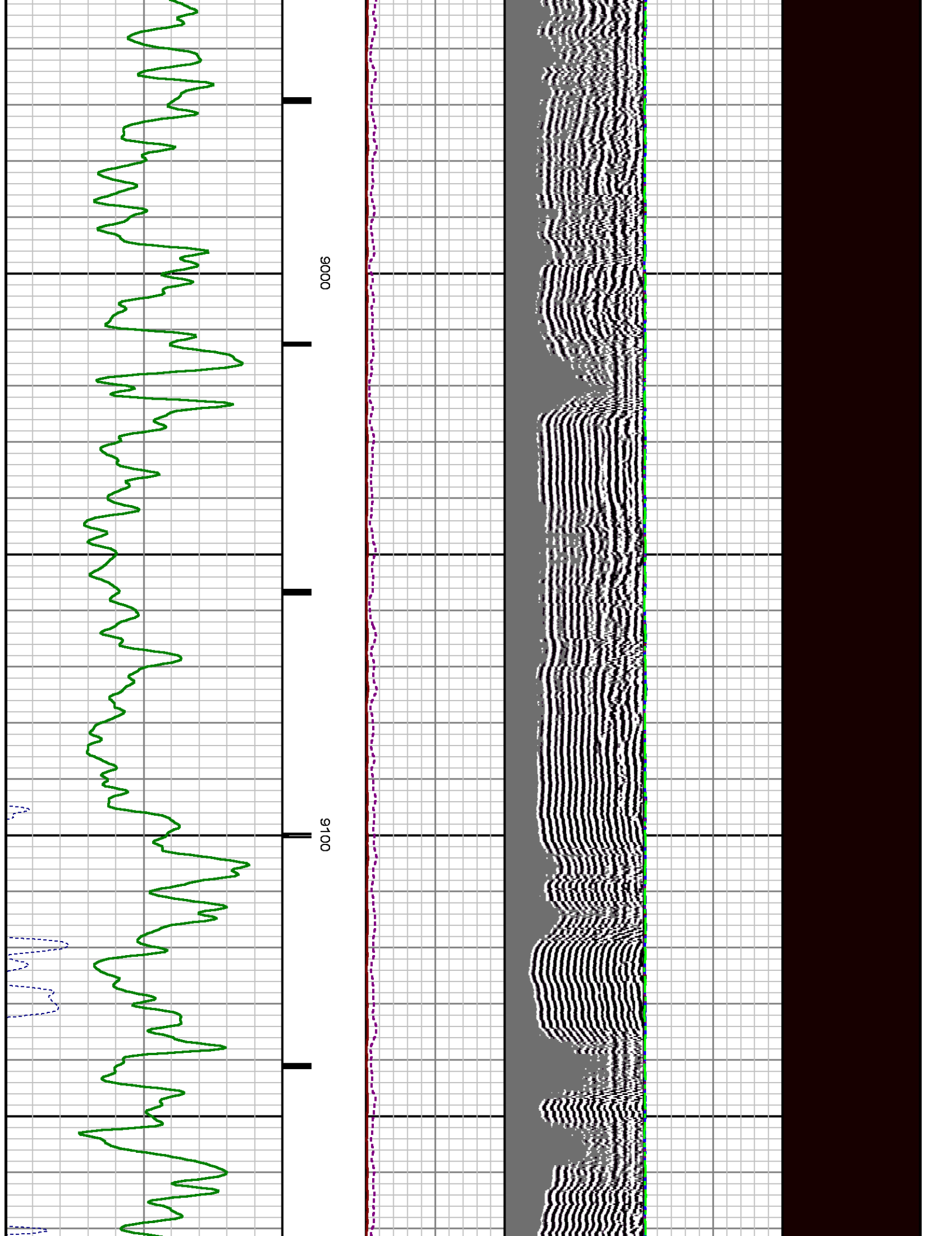


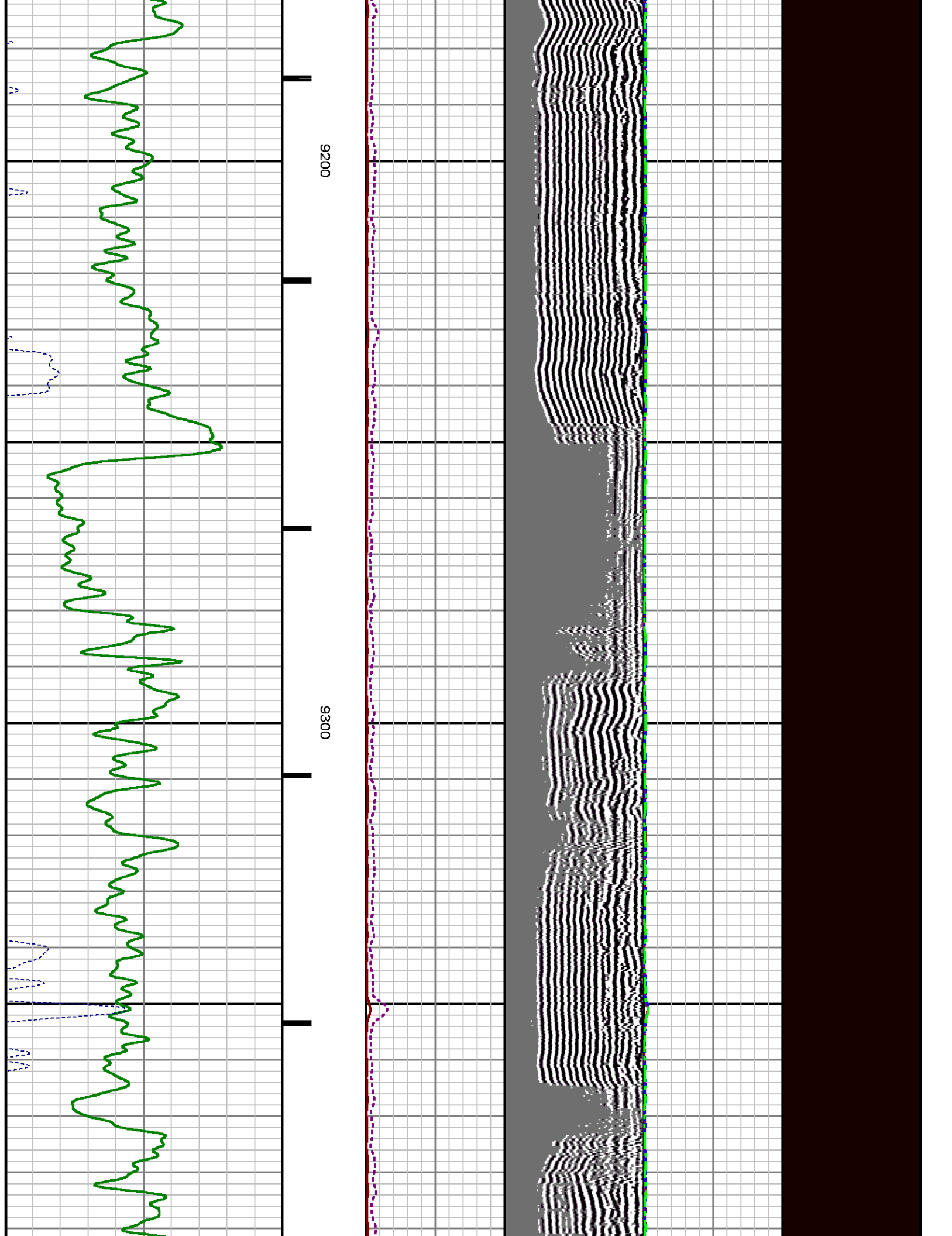


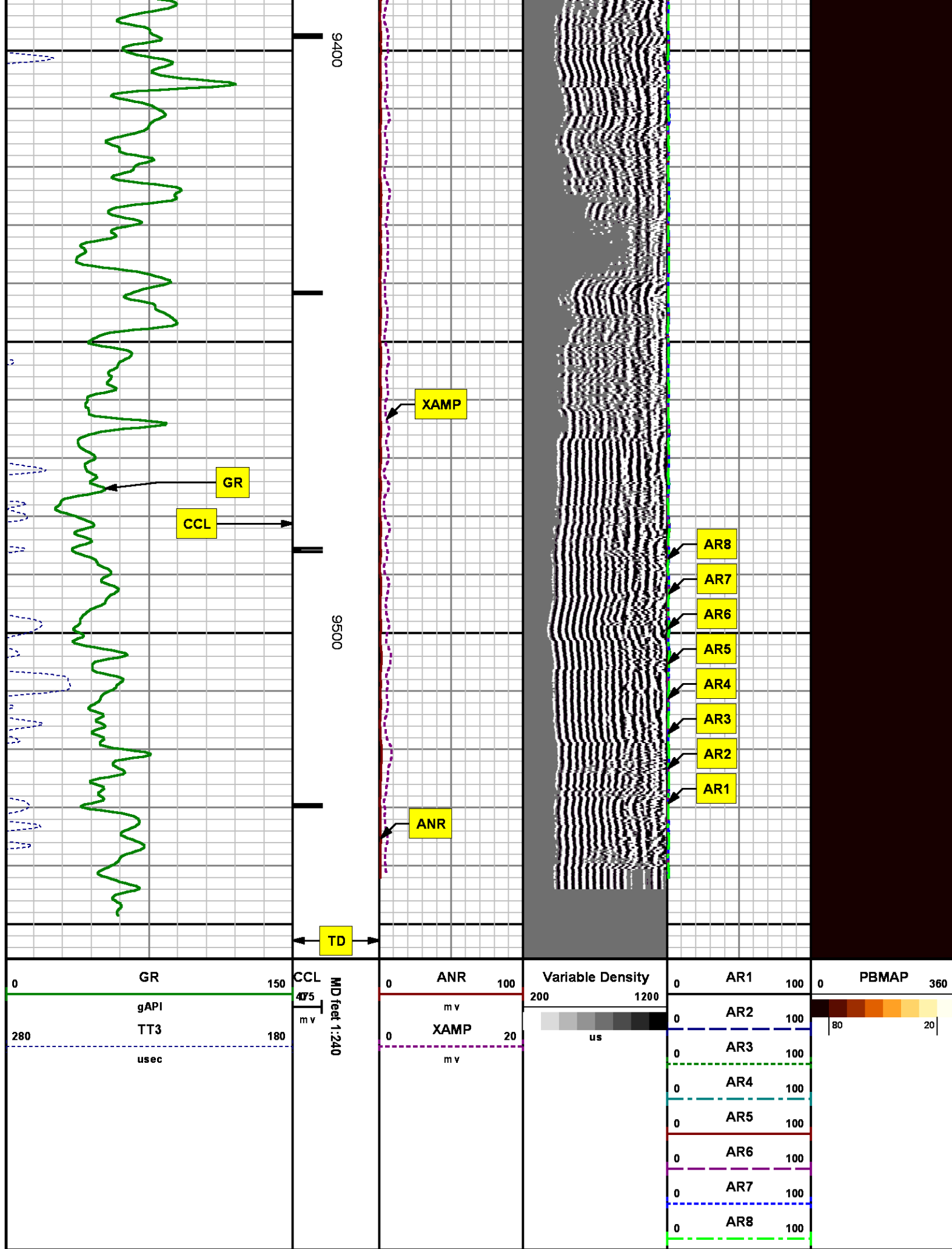












# REPEAT SECTION

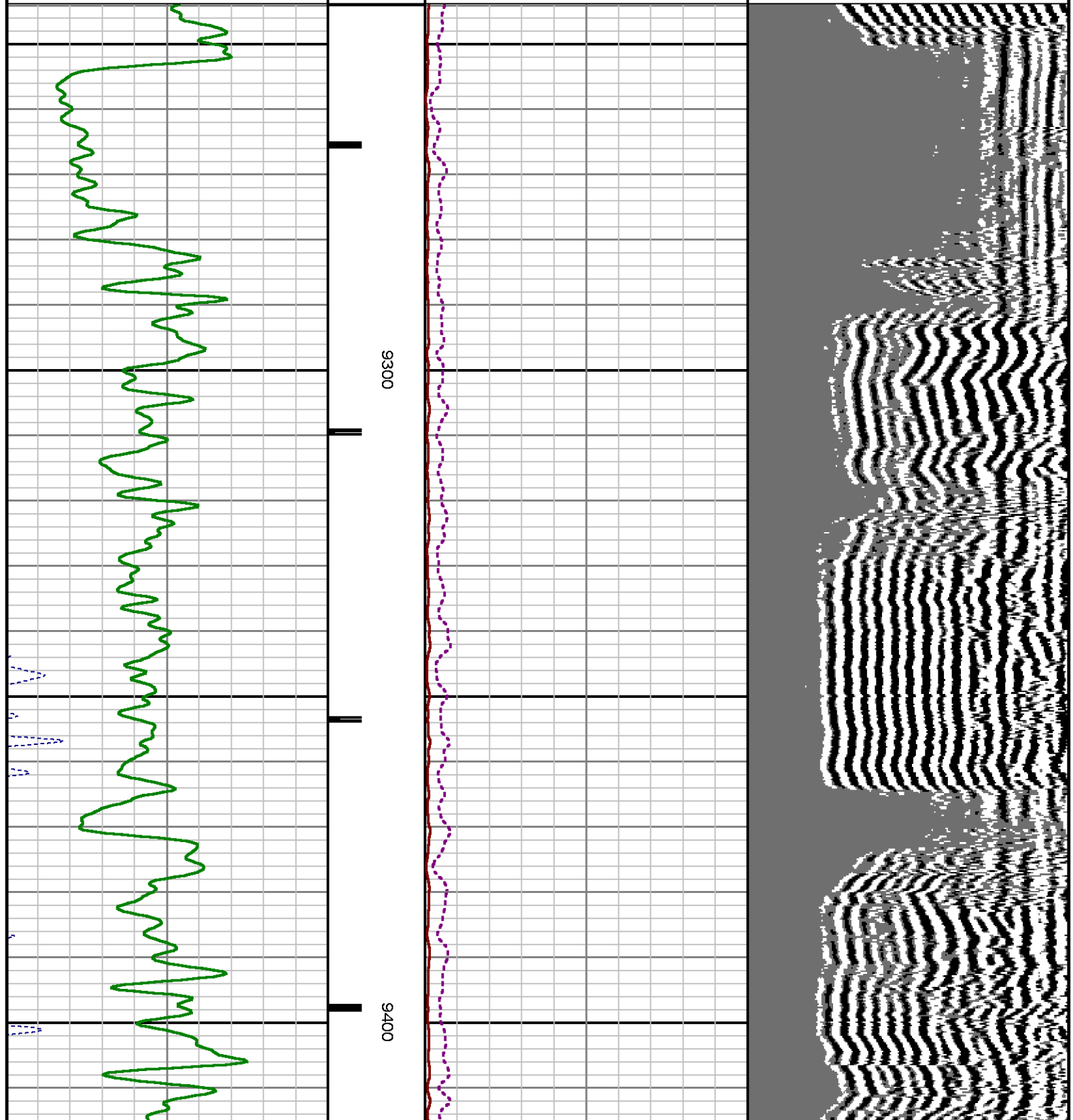
## 0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	9243.801	9563.989
RAL	Amp Gate Start Near	195.000	usec	9243.801	9563.989
RAL	Amp Gate Start Radial	195.000	usec	9243.801	9563.989
RAL	Amp Gate Width Far	25.000	usec	9243.801	9563.989
RAL	Amp Gate Width Near	25.000	usec	9243.801	9563.989
RAL	Amp Gate Width Radial	25.000	usec	9243.801	9563.989
RAL	casing od	4.500	inches	9243.801	9563.989
RAL	casing wt	11.600	lbm/ft	9243.801	9563.989
RAL	FB Start Far	291.900	usec	9243.801	9563.989
RAL	FB Start Near	180.000	usec	9243.801	9563.989
RAL	FB Start Radial	180.000	usec	9243.801	9563.989
RAL	FB Thresh Far	10.000	mv	9243.801	9563.989
RAL	FB Thresh Near	4.000	mv	9243.801	9563.989
RAL	FB Thresh Radial	4.000	mv	9243.801	9563.989
RAL	Fluid Travel Time	200.000	usec/ft	9243.801	9563.957

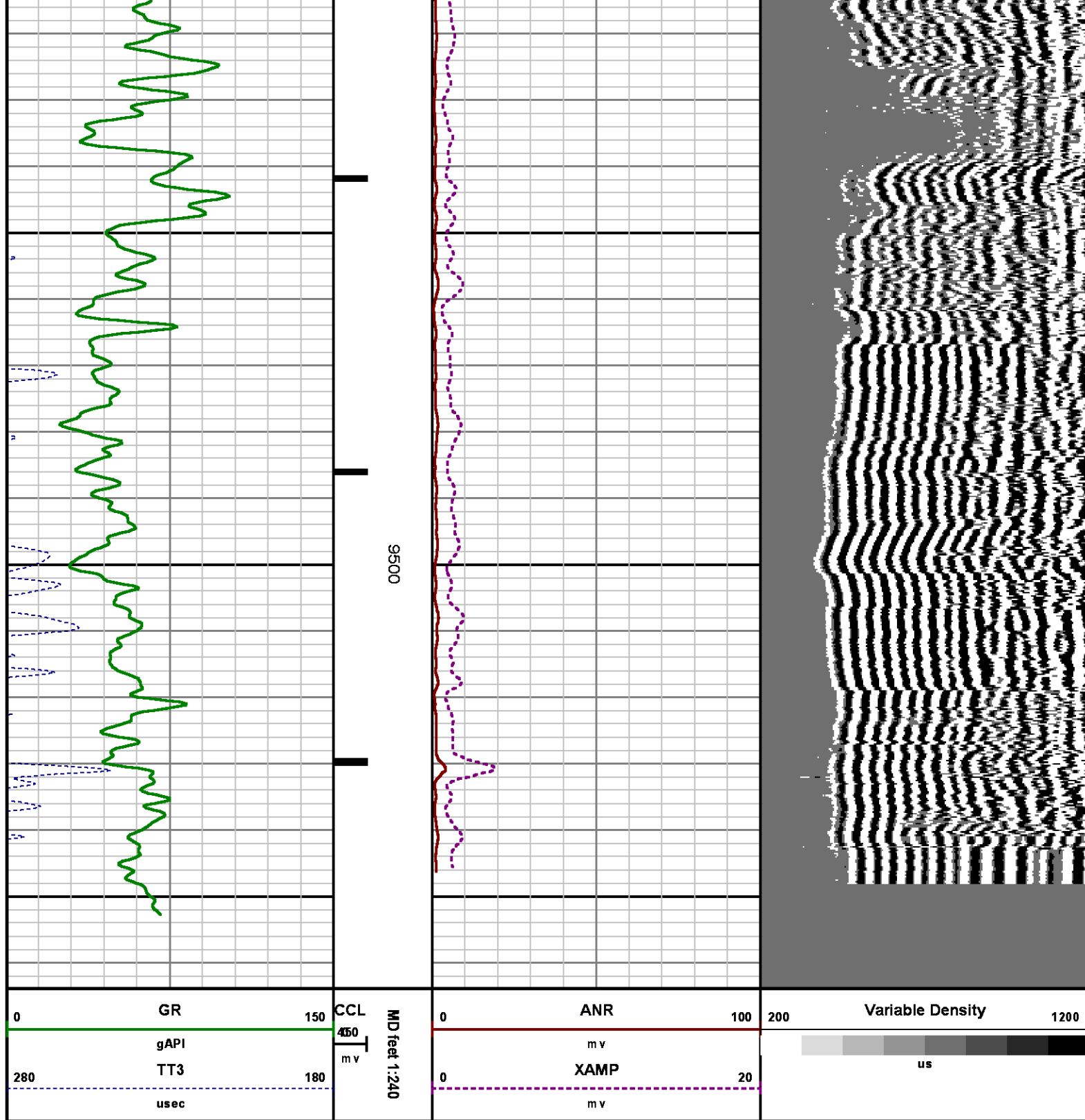
### DEPTH OFFSETS

(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					







CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHPV496MAY20\_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Tue May 20 10:44:33 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: MAY20

Tool Delay [usec] -52.00 Tank OD in 5.50 Tank Wt lbm/ft 15.50 Tank ID in 4.95

RECEIVER	Travel Time [usec]	Amp. Gate Start [usec]	Amp. Gate Width [usec]	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Amp Ref. [mV]	Shop Factor
CAL Pulse	218	216	30	166	25	0.034	100.00	0.32
3 Ft. Receiver	218	216	30	166	25	1.262	100.00	0.32
5 Ft. Receiver	327	332	30	282	25	2.635	150.00	0.36
Radial #1	217	216	30	166	25	0.827	100.00	0.32
Radial #2	218	216	30	166	25	0.704	100.00	0.31
Radial #3	218	216	30	166	25	0.647	100.00	0.32
Radial #4	218	216	30	166	25	1.029	100.00	0.32
Radial #5	217	216	30	166	25	1.033	100.00	0.32
Radial #6	217	216	30	166	25	1.350	100.00	0.32
Radial #7	216	216	30	166	25	0.415	100.00	0.31
Radial #8	218	216	30	166	25	0.865	100.00	0.31

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\496MAY20\_fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Tue May 20 10:47:28 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: MAY20

Tool Delay [usec] -52.00 Casing OD in 4.50 Casing Wt lbm/ft 11.60 Casing ID in 4.00

RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	166	25	-0.000	0.000	1.00	100.000
3 Ft. Receiver	195	25	2.527			
5 Ft. Receiver	305	25	3.406			
Radial #1	195	25	2.031			
Radial #2	195	25	1.969			
Radial #3	195	25	2.187			
Radial #4	195	25	2.219			
Radial #5	195	25	2.378			
Radial #6	195	25	2.610			
Radial #7	195	25	2.057			
Radial #8	195	25	2.084			

GAMMA RAY

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

## CALIBRATION SUMMARY

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

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	97.82	367.47	0.686	67.11	252.11	185.00

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

## PRIMARY LOG VERIFICATION

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

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	98.76	372.44	0.686	67.76	255.53	187.77

# TOOL DIAGRAM

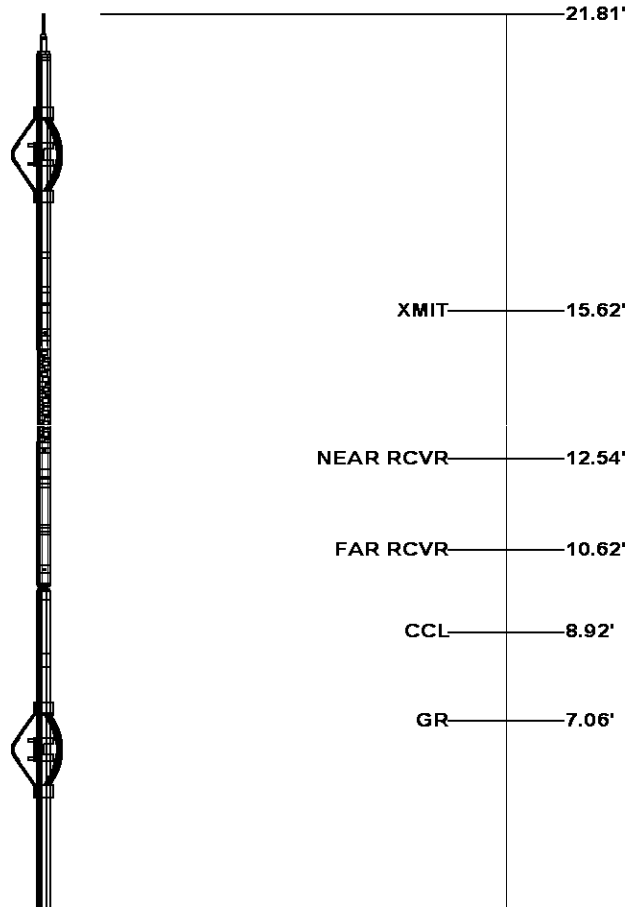
## OTA SHORT CABLE HEAD

## PROBE 2 3/4 DUAL RECEIVER RADII

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

## Probe GR/CCL/NEU

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



NEU 1.67'

0.00'

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



Baker Atlas

CASE

Company

WPX ENERGY

Well

FEDERAL PA 24-16

Field

PARACHUTE

County

GARFIELD

State

COLORADO

File No:

CH085860

API No:

05045220430000

Location

SHL: 2610' FNL & 1396' FWL SEC 21

BHL: 128' FSL & 2271' FWL (SESW) SEC 16

Elevations

KB 6056 ft

DF

GL 6030 ft

16 6S 95W

PA 22-21 PAD

NABORS 573

SEC 16 TWP 6S RGE 95W