



# RADIAL ANALYSIS BOND LOG

Baker Atlas

File No:	Company	WPX ENERGY
CH089912	Well	C&C ENERGY GM 544-12
API No:	Field	GRAND VALLEY
05045224270000	County	GARFIELD
	State	COLORADO
12 7S 96W	Location	Other Services
GM 24-12 PAD	SHL: 258' FSL & 1050' FWL	RPM
H&P 318	BHT: 172' FSL & 1250' FEL (SESE)	
	SEC 12 TWP 7S RGE 96W	
Permanent Datum	GL	Elevation 5141 ft
Log Measured From	KB	24 ft Above P. D.
Drill Measured From	KELLY BUSHING	
		Elevations
		KB 5165 ft
		DF
		GL 5141 ft

Date	05/SEP/14
Run	ONE
Service Order	US089913J
Depth Driller	7305 ft
Depth Logger	7275 ft
Bottom Logged Interval	7265 ft
Top Logged Interval	24 ft
Time Started	1430
Time Finished	1700
Operator Rig Time	2.5 HRS
Type of Fluid in Hole	WATER
Fluid Density	NA
Salinity	NA
Fluid Level	74 ft
Logged Cement Top	NA
Wellhead Pressure	0 psi
Maximum Hole Deviation	NA
Nominal Logging Speed	65 fpm
Maximum Recorded Temperature	208 degF
Reference Log	NONE
Reference Log Date	NA
Equipment No.	44271
Location	GRAND JCT
Recorded By	FLOYD RENEAU
Witnessed By	JEFF BRADY

- FOLD HERE

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

Borehole Record		
Bit Size	From	To
13.5 in	24 ft	1857 ft
8.75 in	1857 ft	7305 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in			24 ft	1857 ft
4.5 in	11.6 lbm/ft	I-80	24 ft	7305 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 5.5 feet.
Logged with zero PSI at wellhead.
BHT = 208°F
SJ = 3815'-3837'

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

PRIMARY PRESENTATION  
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	310.000	usec	28.719	7278.500
RAL	Amp Gate Start Near	195.000	usec	28.719	7278.500
RAL	Amp Gate Start Radial	195.000	usec	28.719	7278.500
RAL	Amp Gate Width Far	25.000	usec	28.719	7278.500
RAL	Amp Gate Width Near	25.000	usec	28.719	7278.500
RAL	Amp Gate Width Radial	25.000	usec	28.719	7278.500
RAL	casing od	4.500	inches	28.719	7278.500
RAL	casing wt	11.600	lbm/ft	28.719	7278.500
RAL	FB Start Far	291.900	usec	28.719	7278.500
RAL	FB Start Near	180.000	usec	28.719	7278.500
RAL	FB Start Radial	180.000	usec	28.719	7278.500
RAL	FB Thresh Far	10.000	mv	28.719	7278.500
RAL	FB Thresh Near	4.000	mv	28.719	7278.500
RAL	FB Thresh Radial	4.000	mv	28.719	7278.500
RAL	Fluid Travel Time	200.000	usec/ft	28.719	7278.031

DEPTH OFFSETS							
(for Acquired Curves)							
SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-11.000	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	CHV	FPR2

		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	-10.040	AFAR	SIG	TT5			
1355XA	-5.620	CCL					
1355XA	-1.500	GR					
1355XA	0.000	TEMP					

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

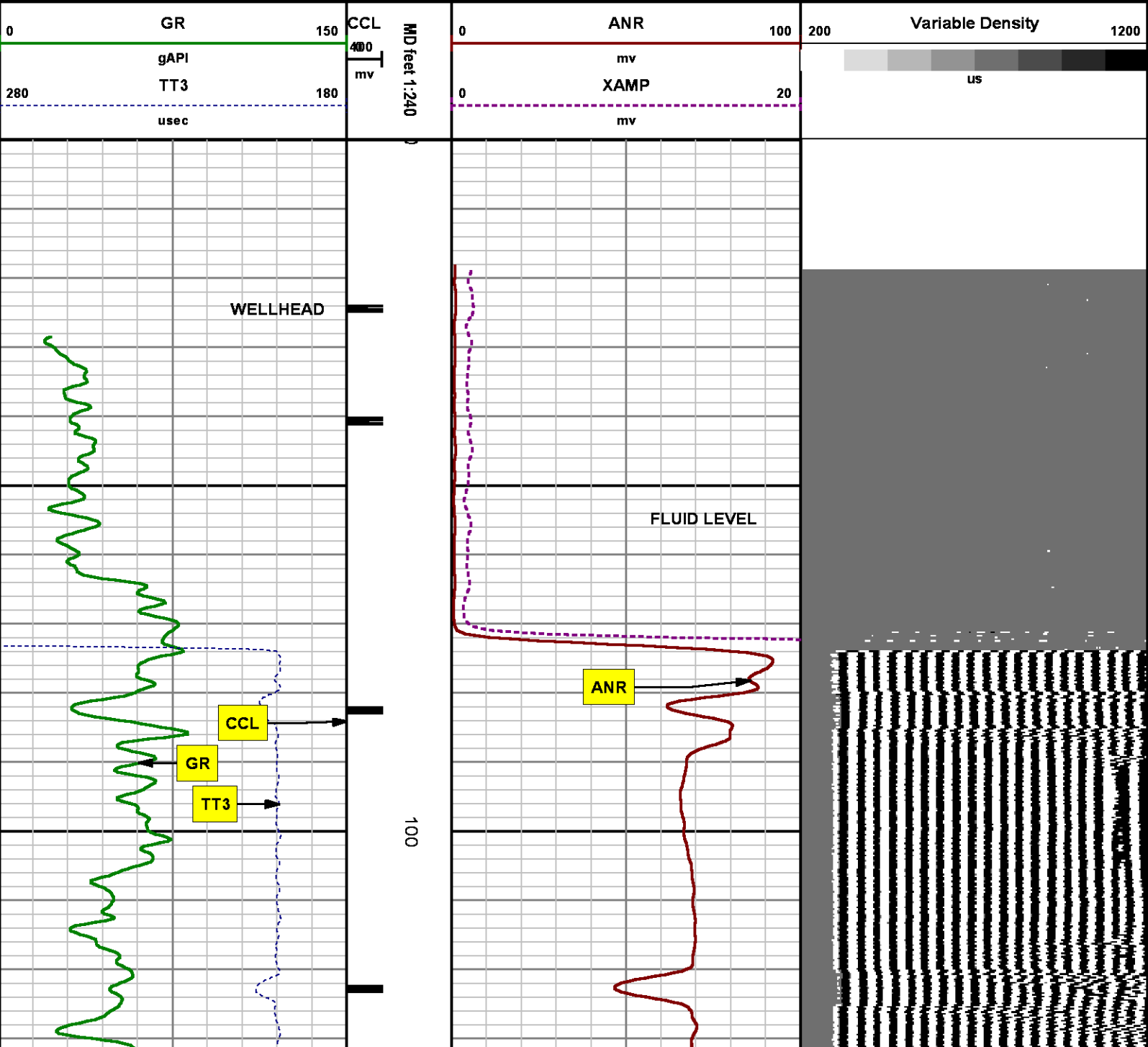
Well : C&C ENERGY GM 544-12

File Name : d:\welldata\wpx\gm 544-12\ral544\main.xtf

Mode : PlotMgr 5.4.504

Interval : 0.00 - 7278.50 feet UP

Created : 9/5/2014 3:12:31 PM

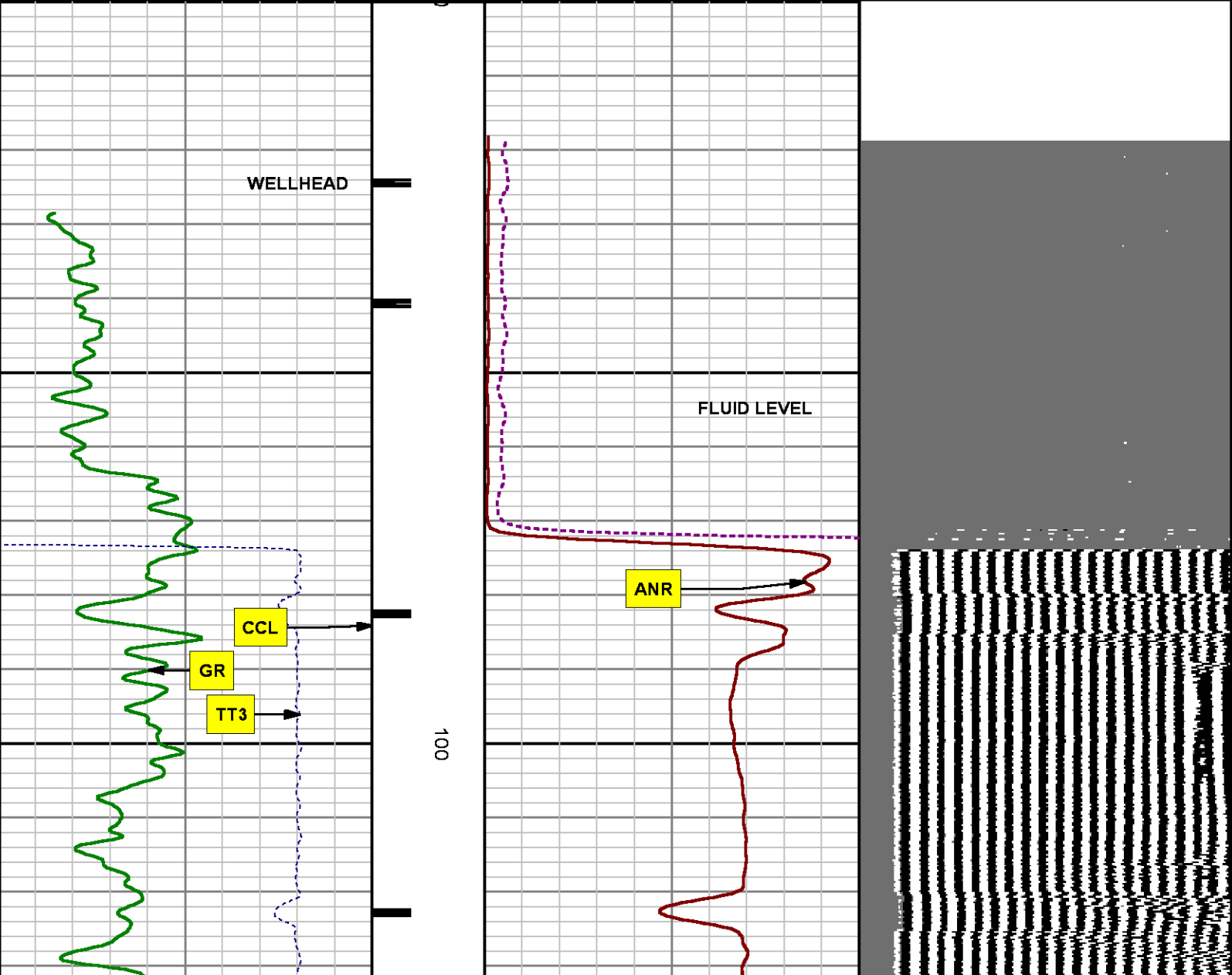


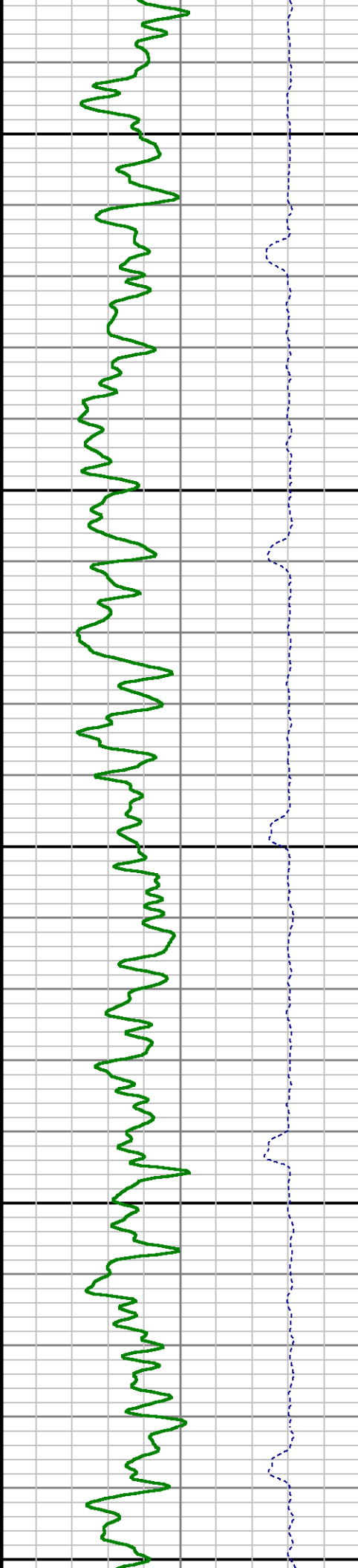
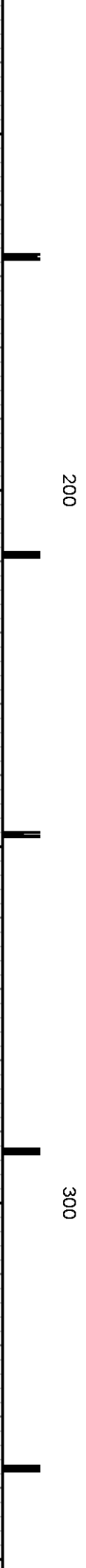
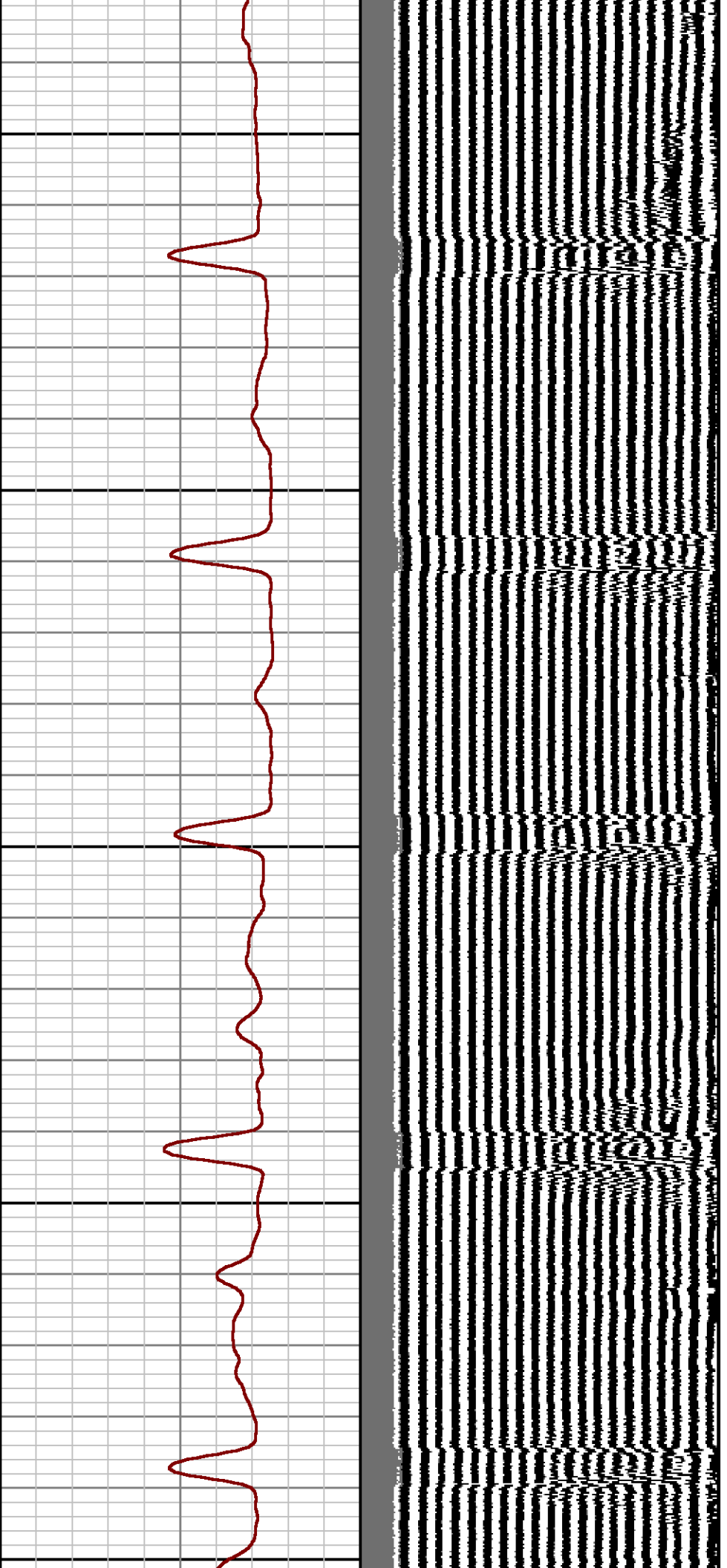
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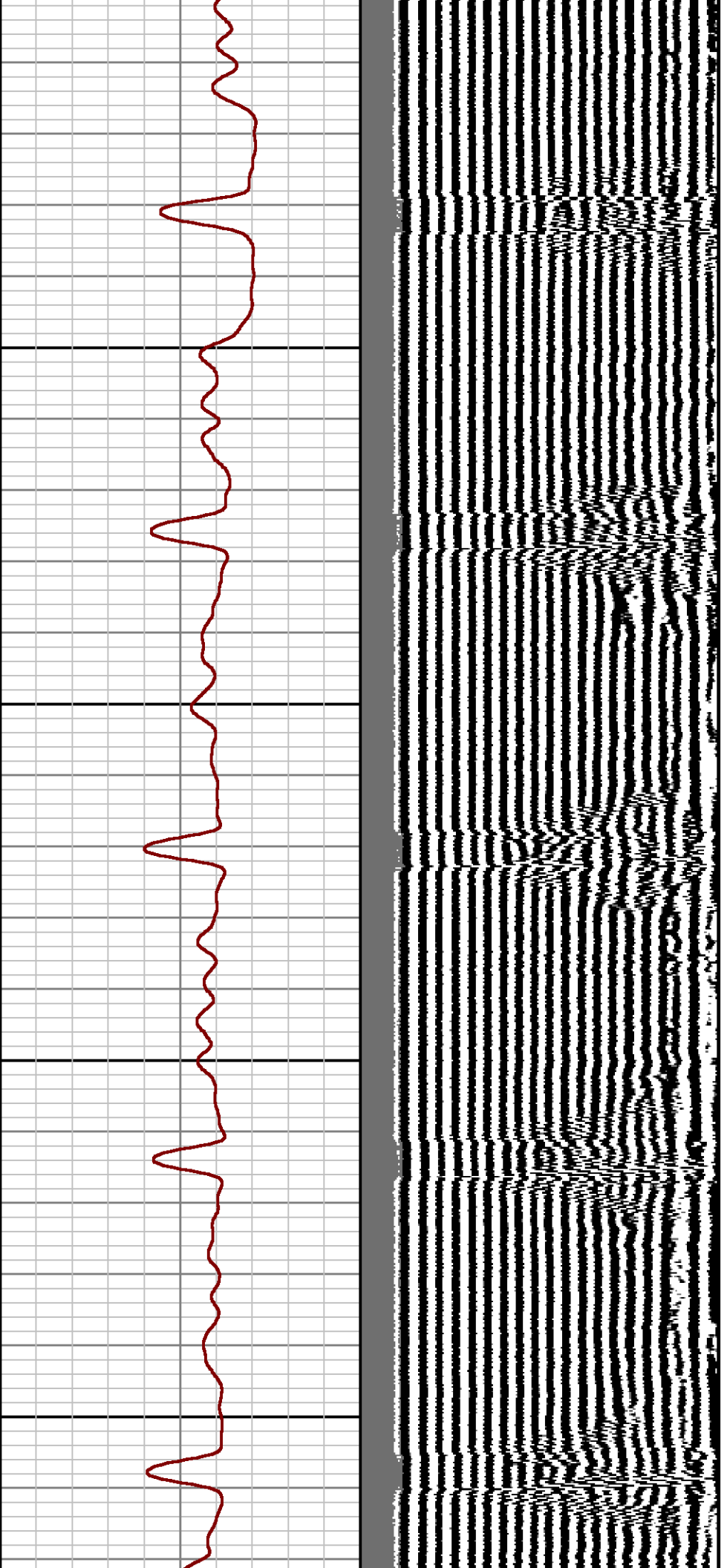
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1200

US

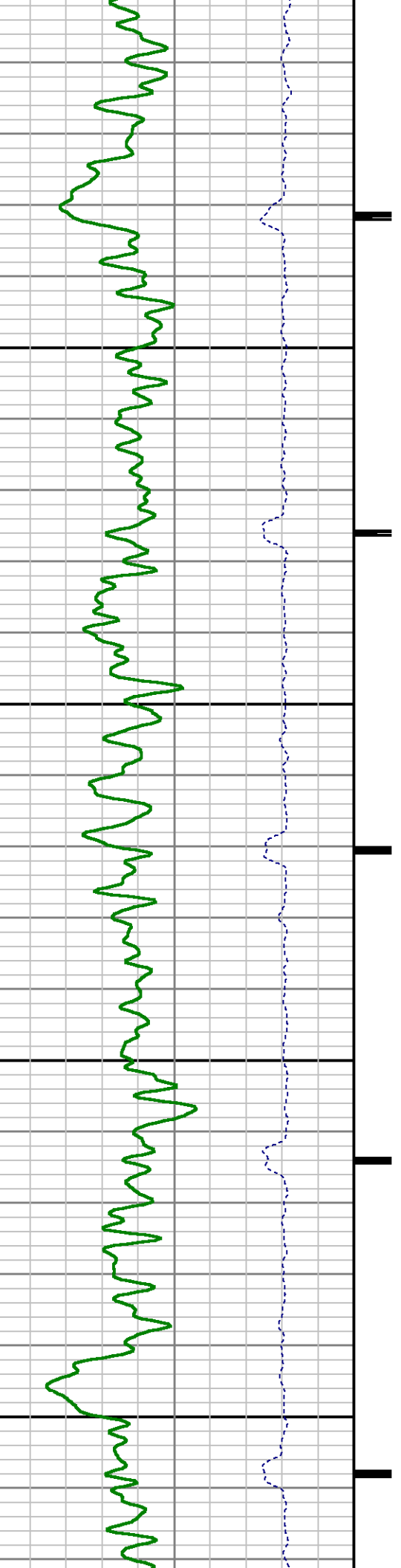


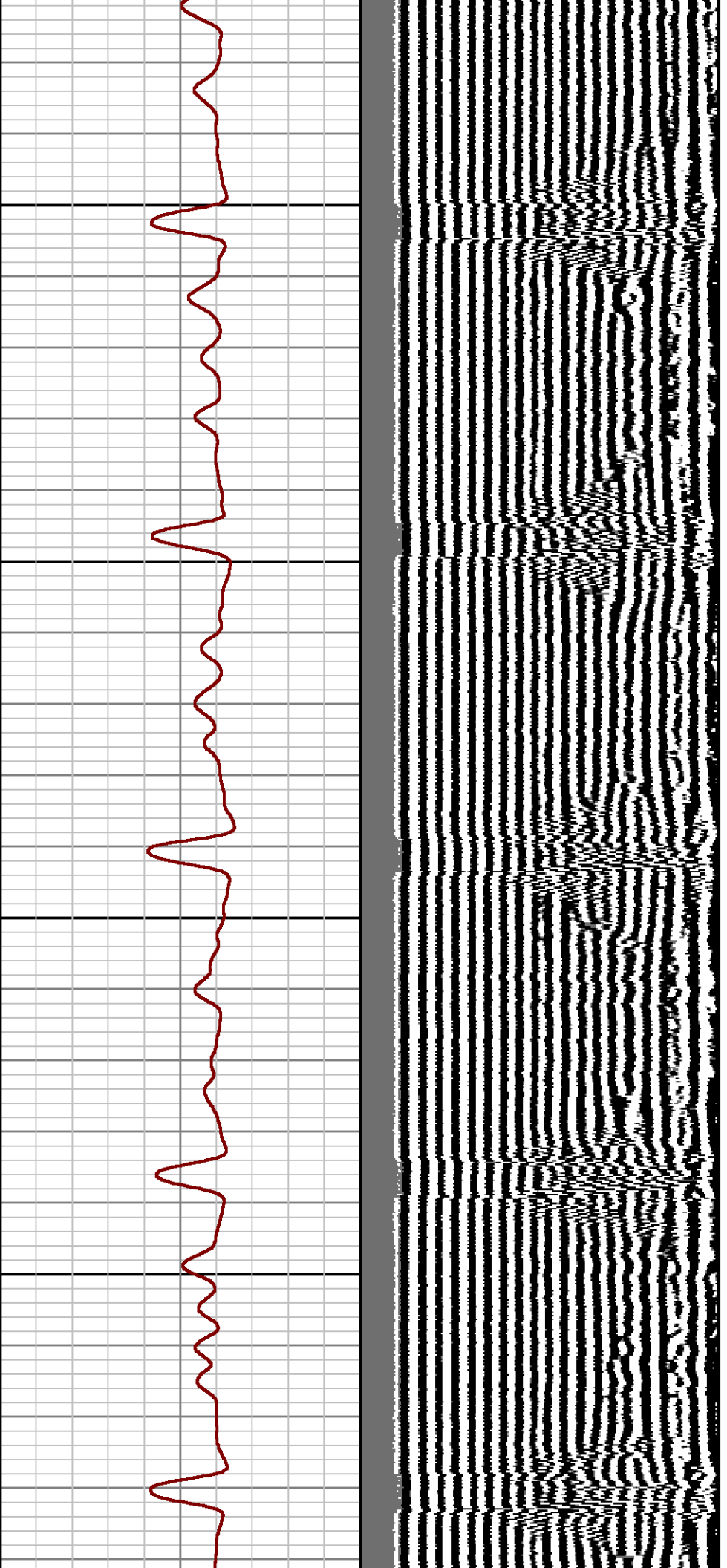




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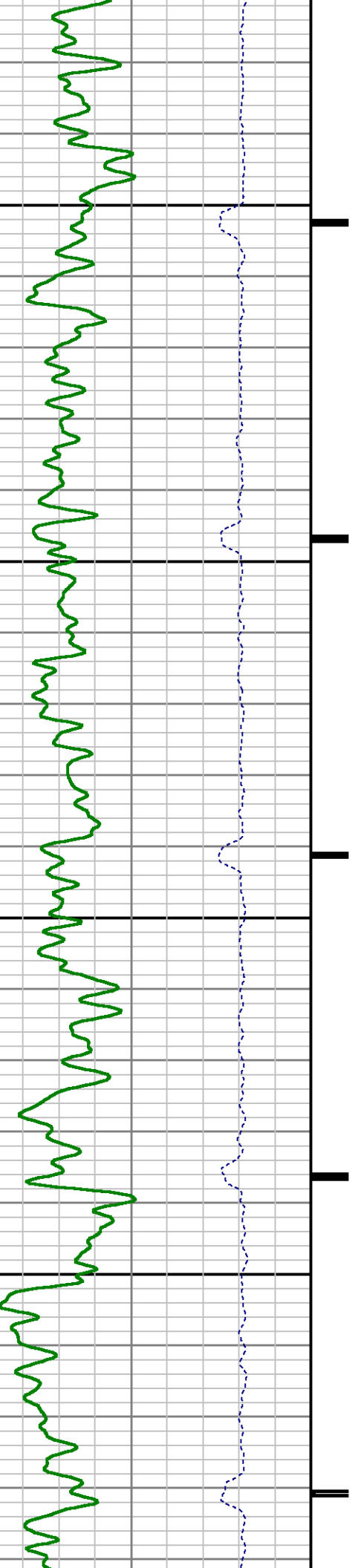
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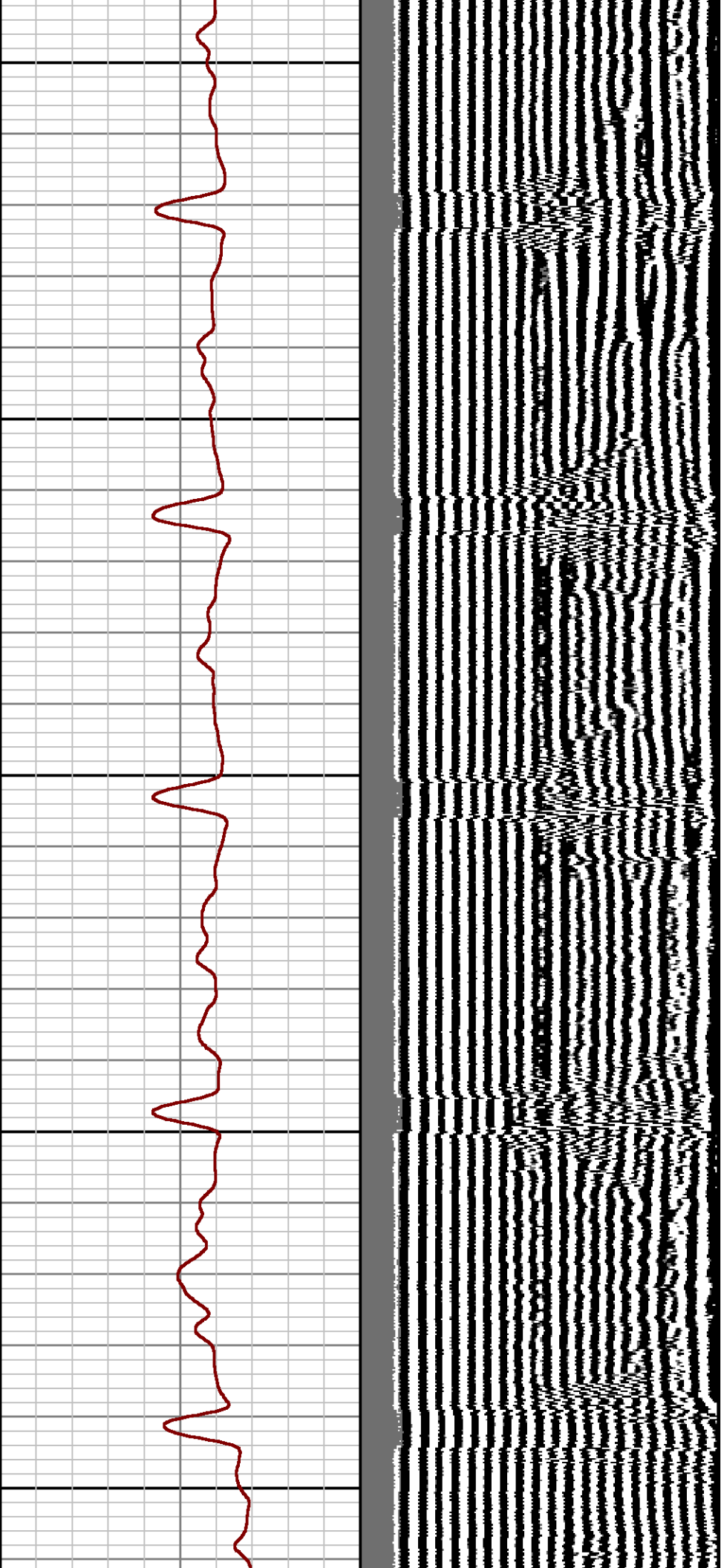




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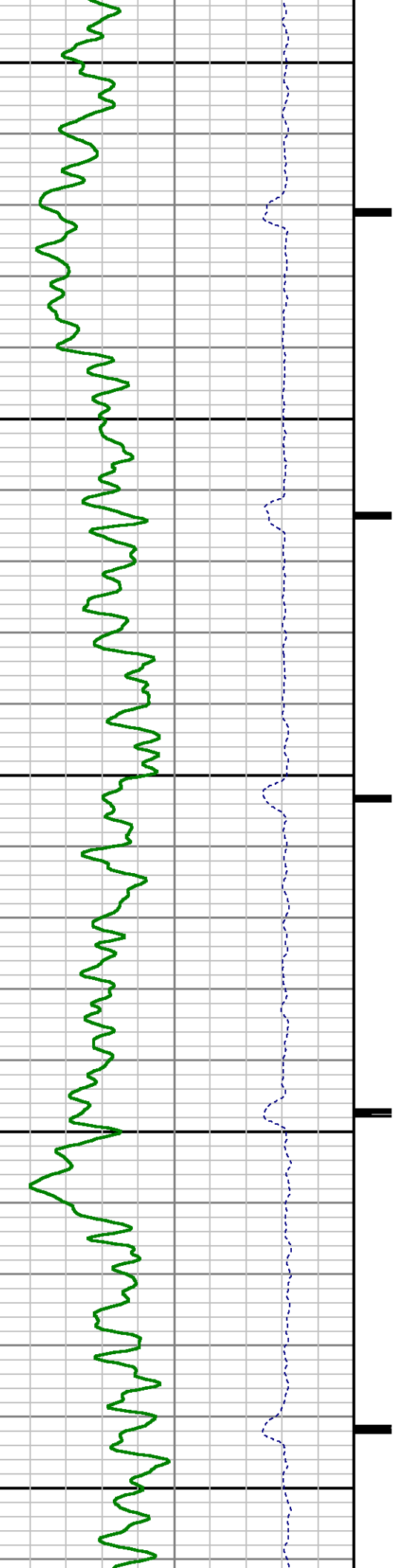




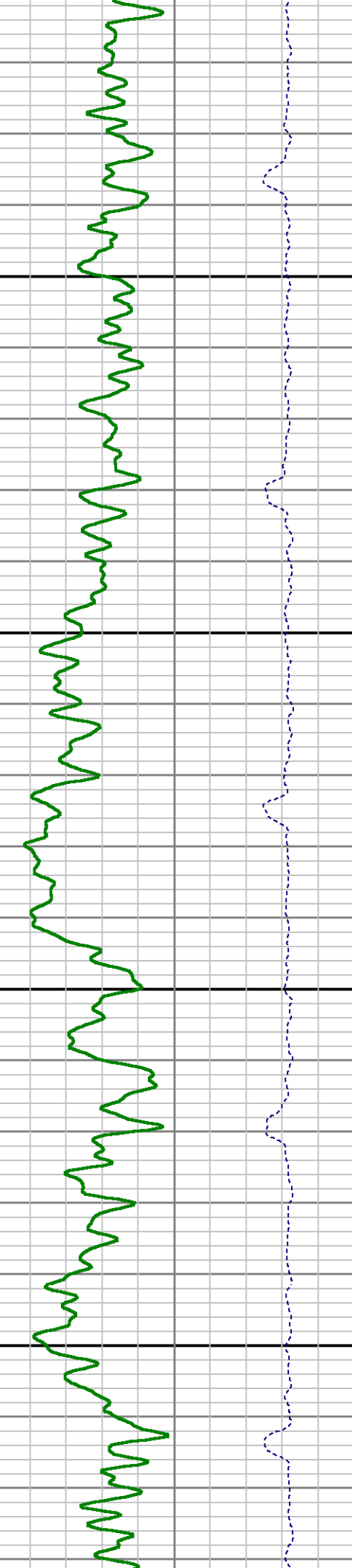
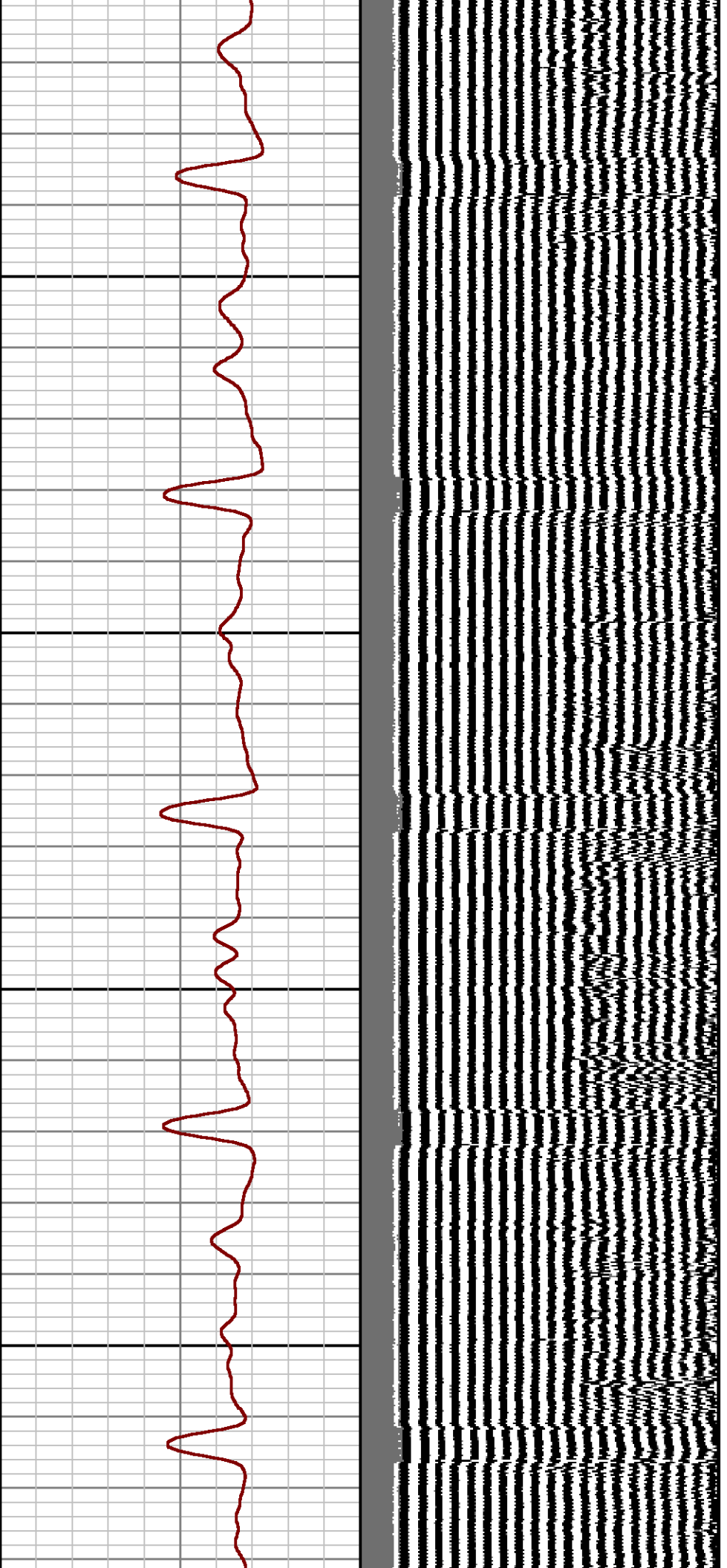
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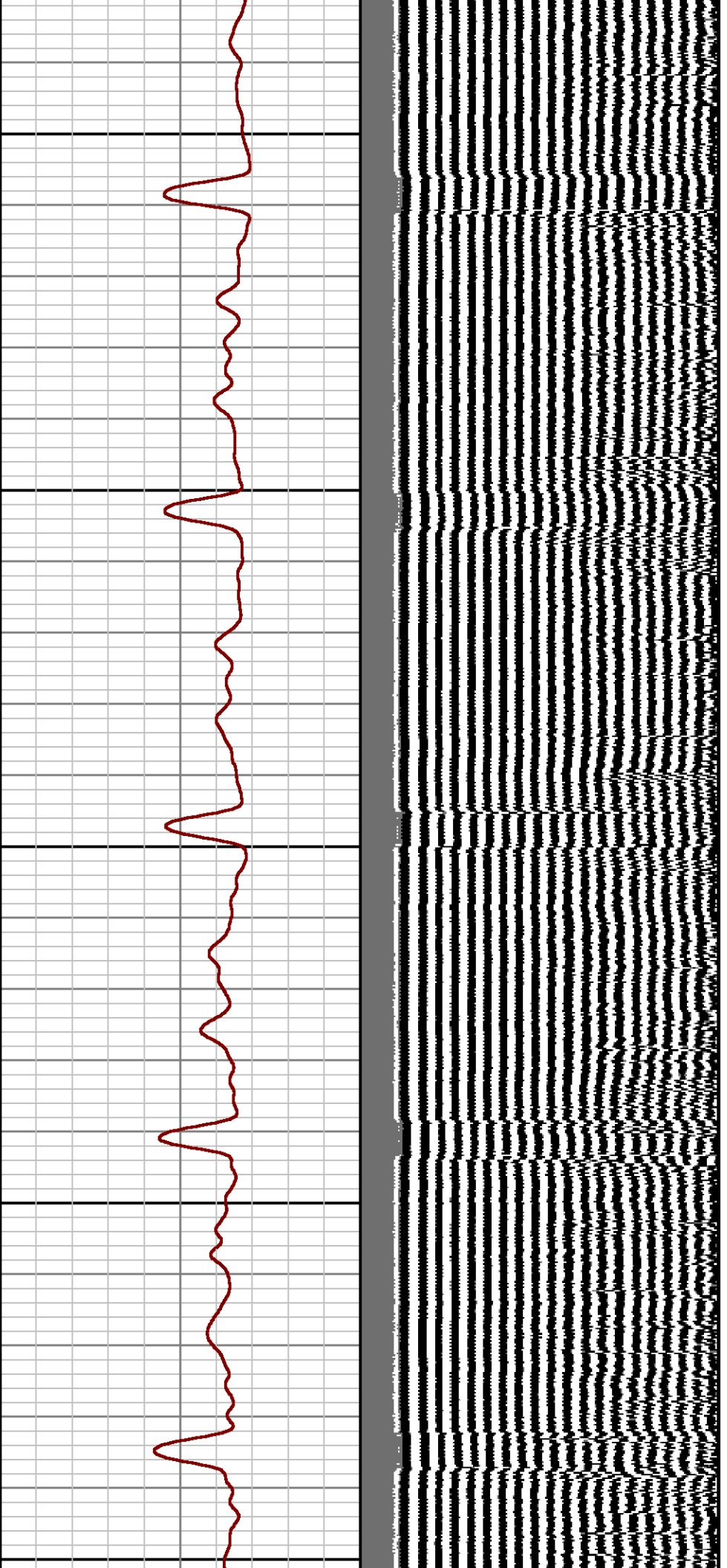
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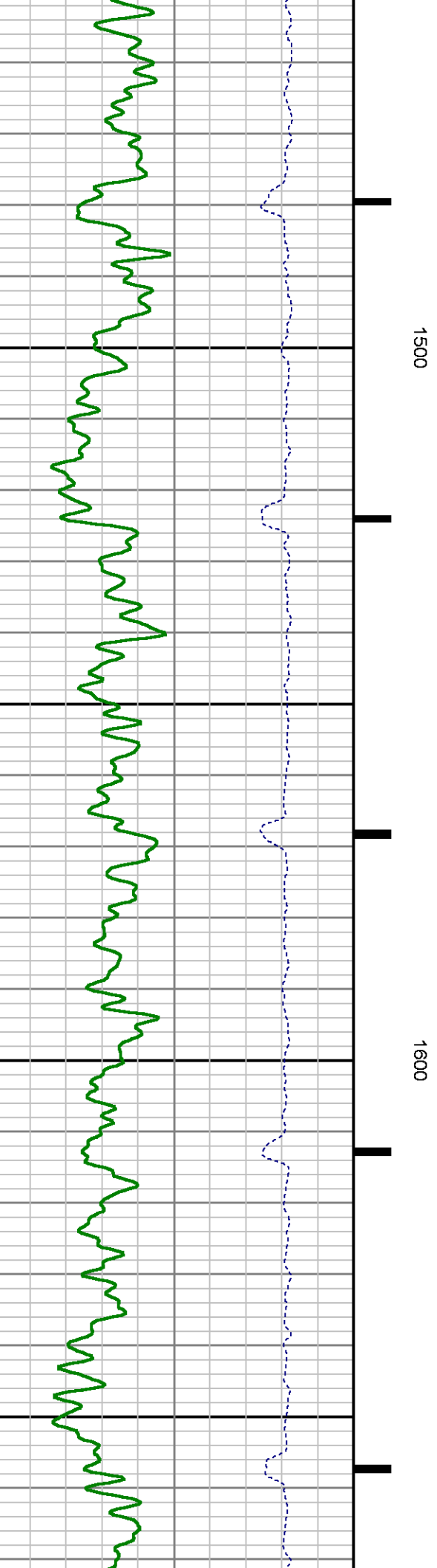
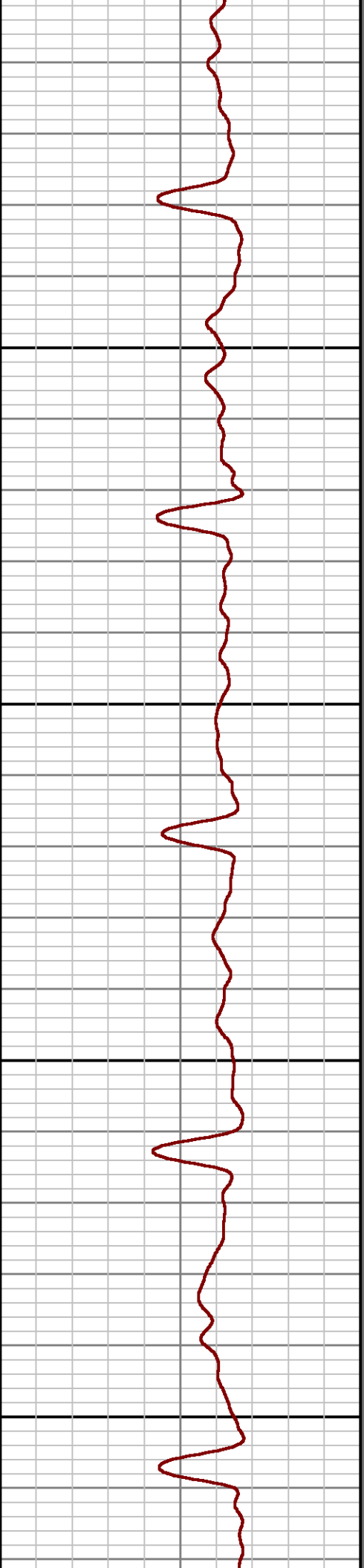
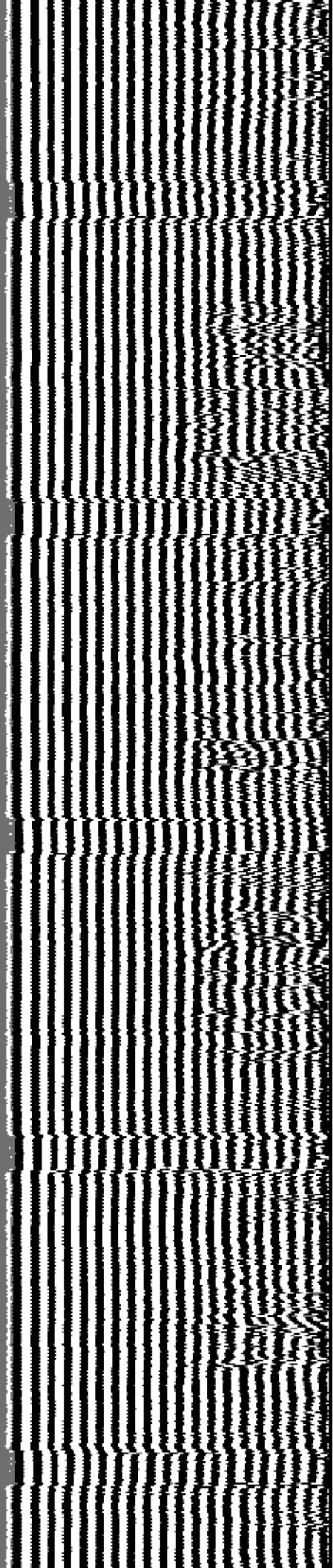


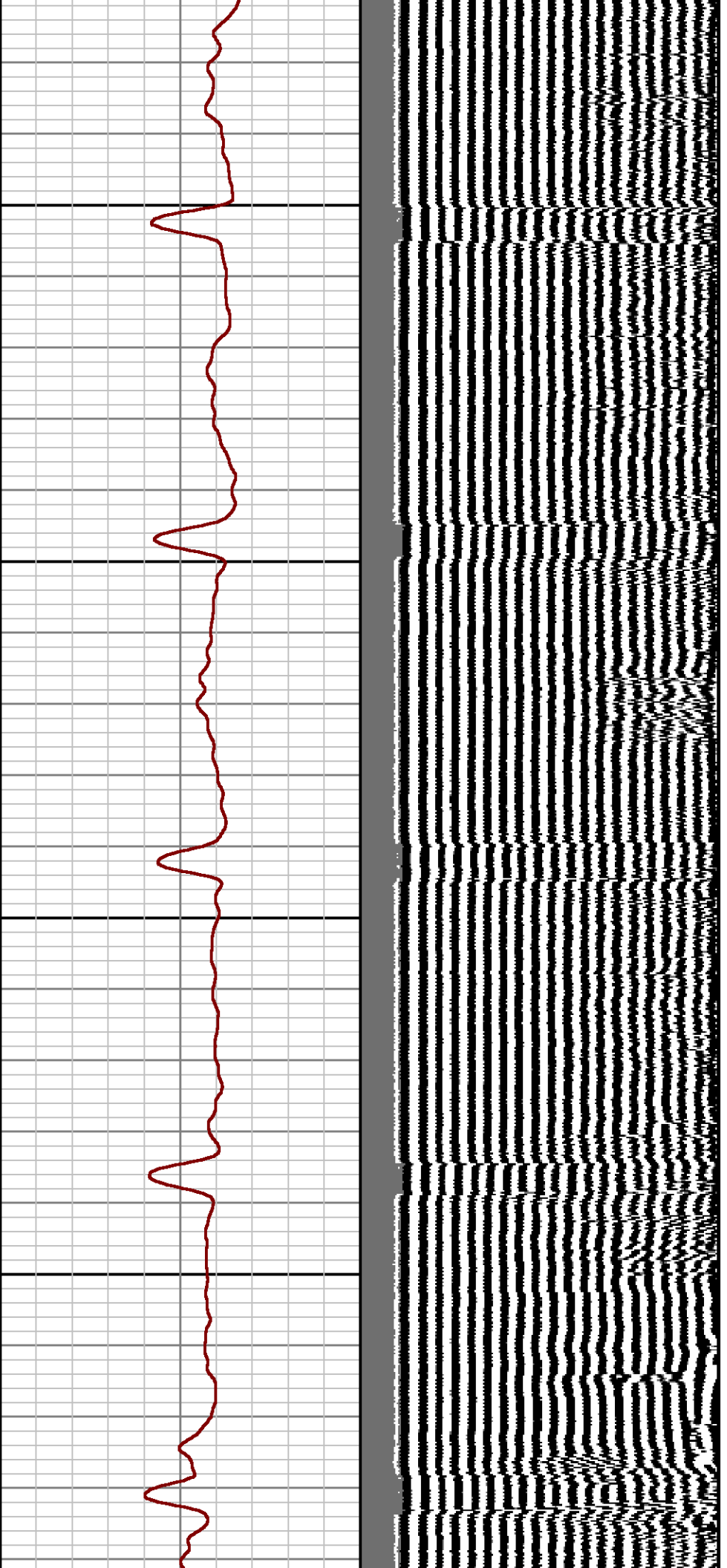


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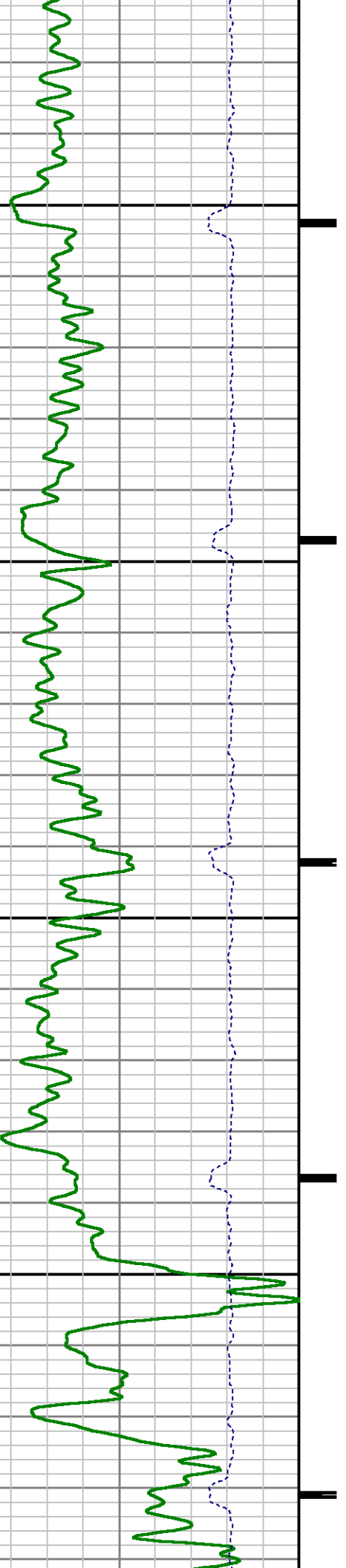


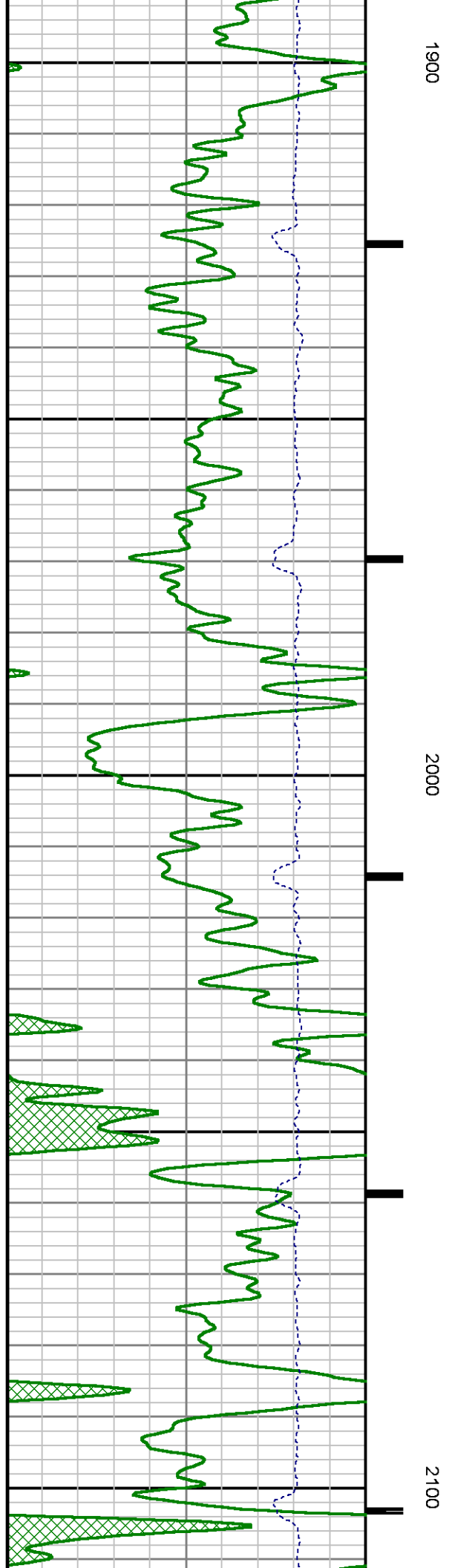
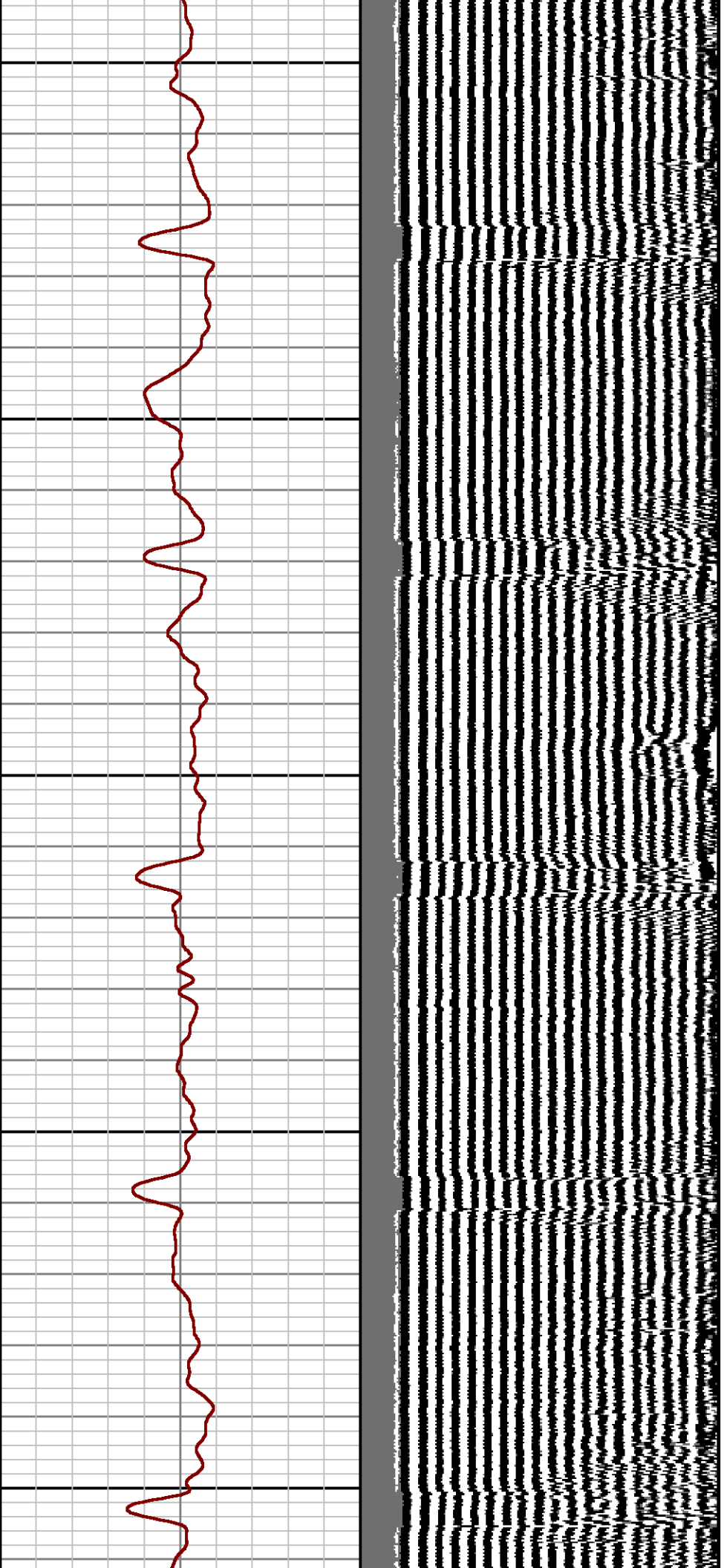


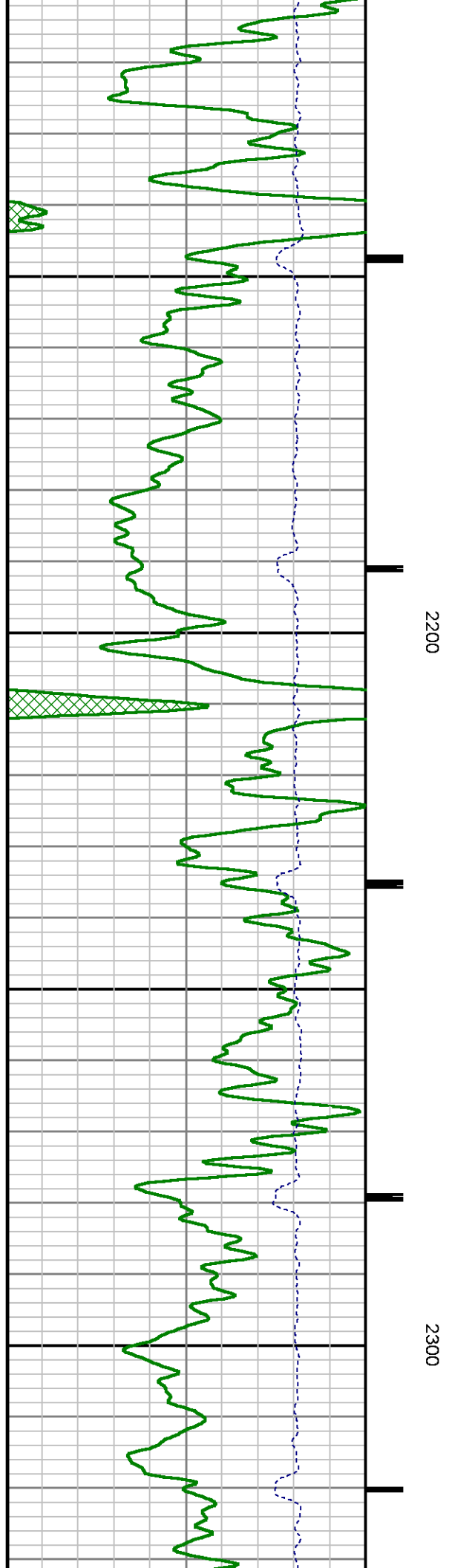
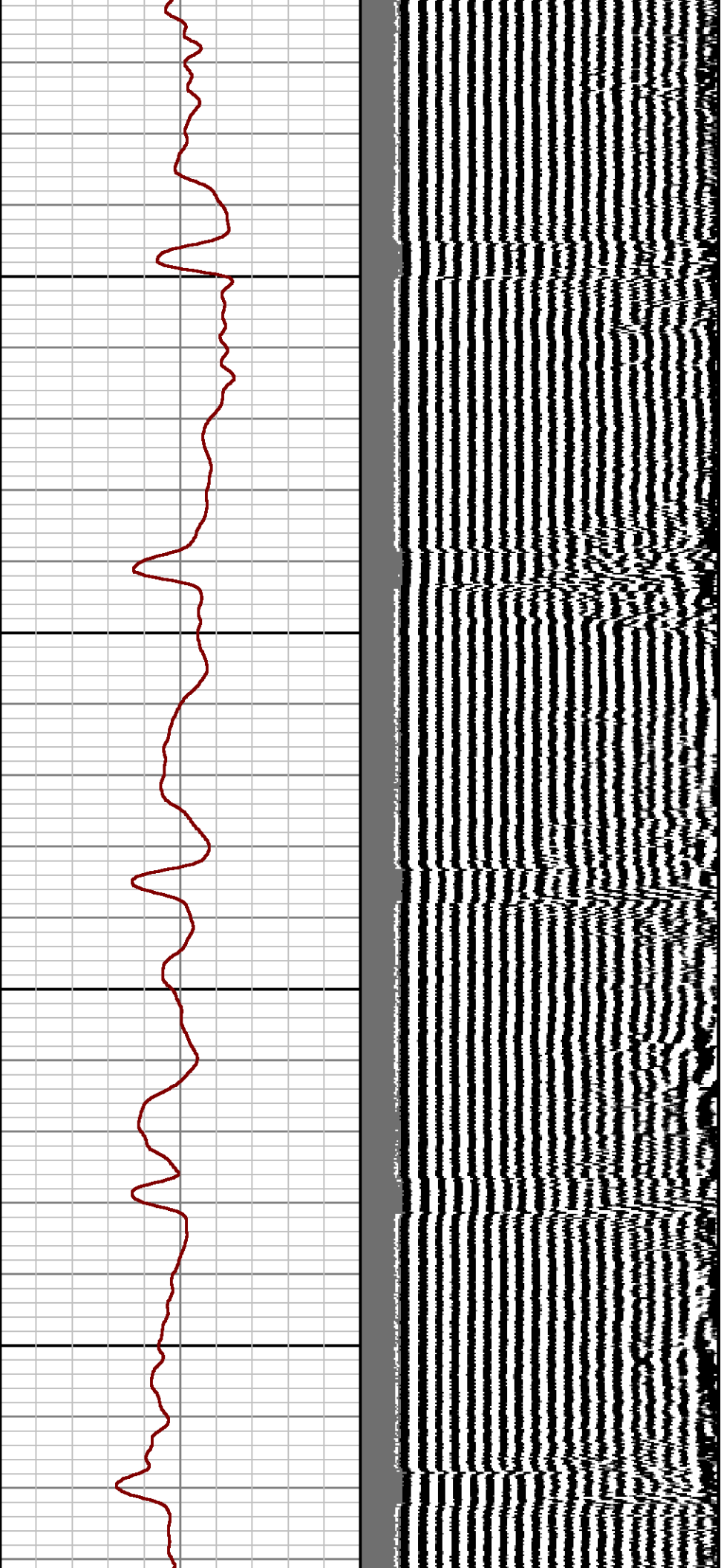


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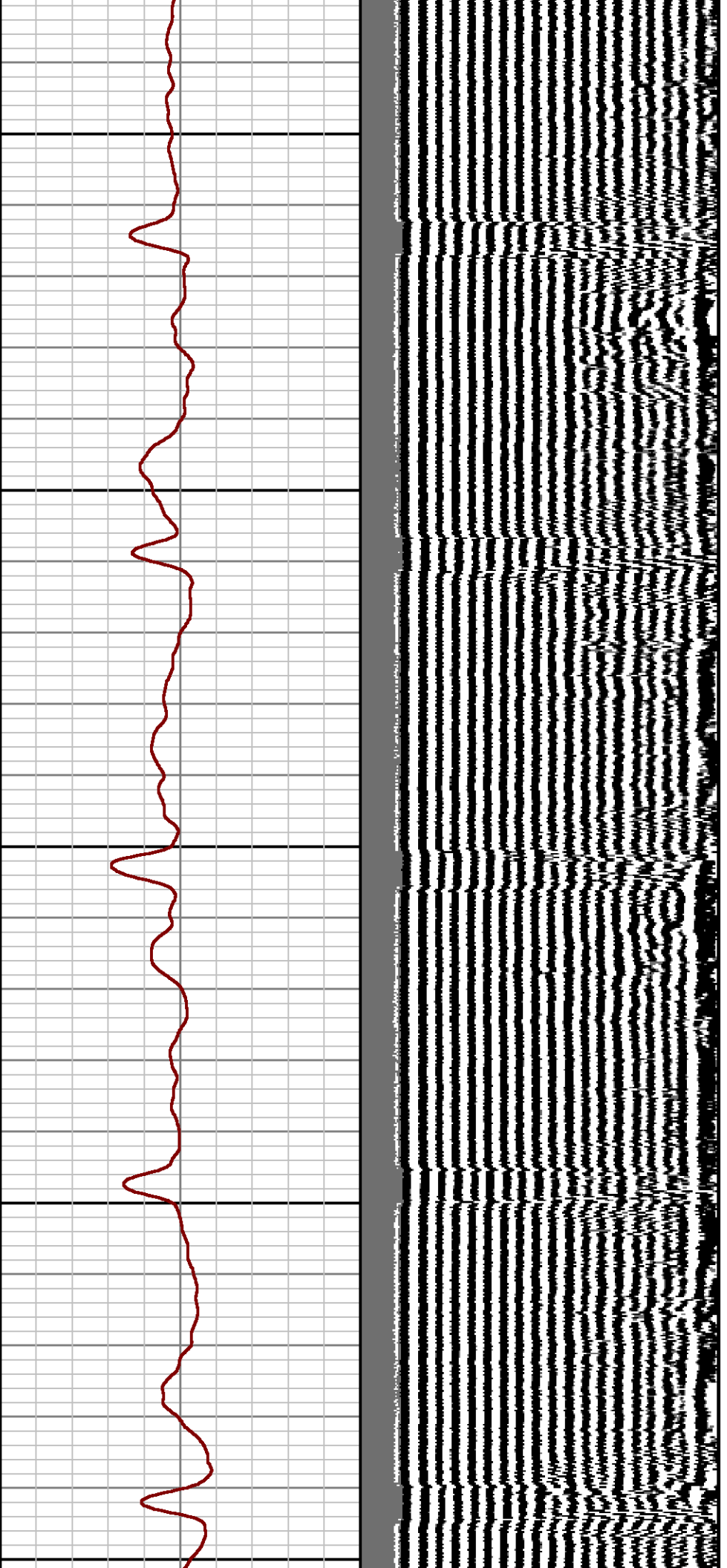
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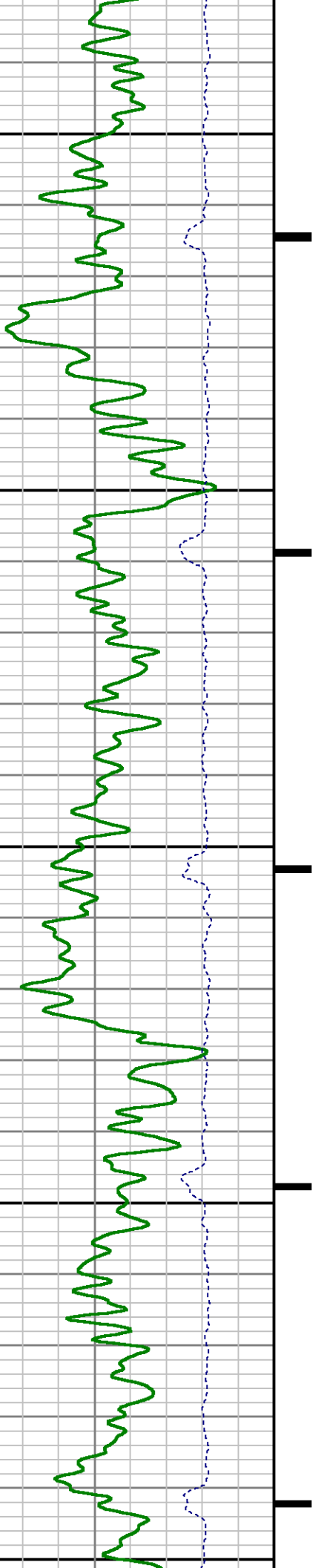


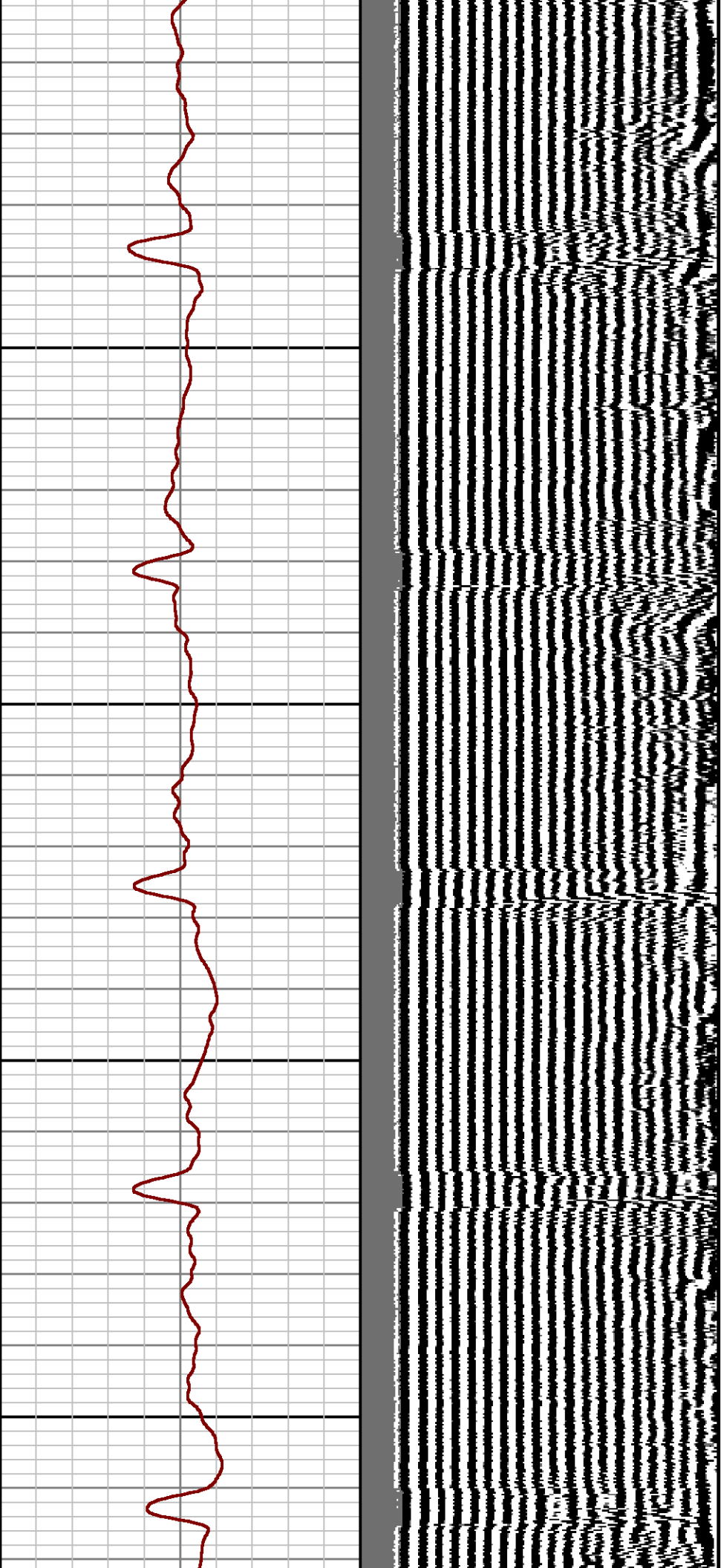




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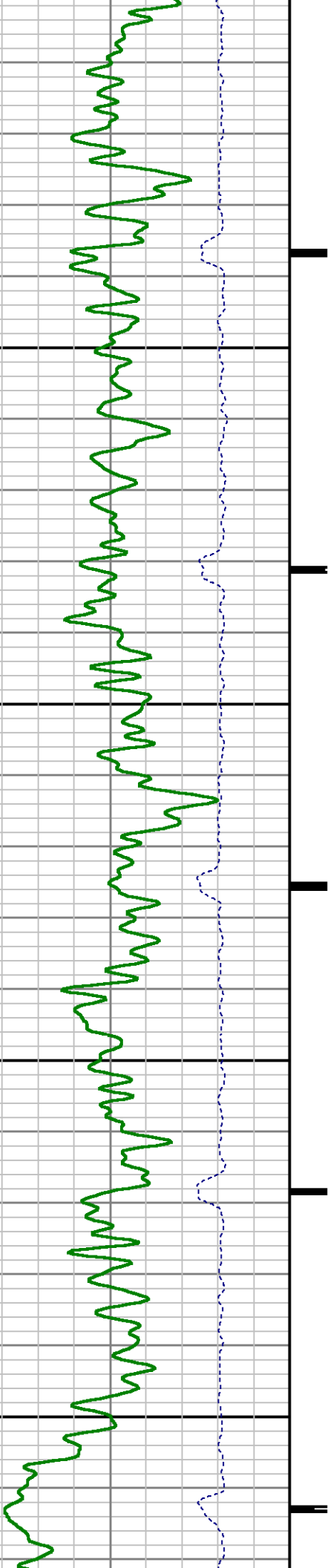
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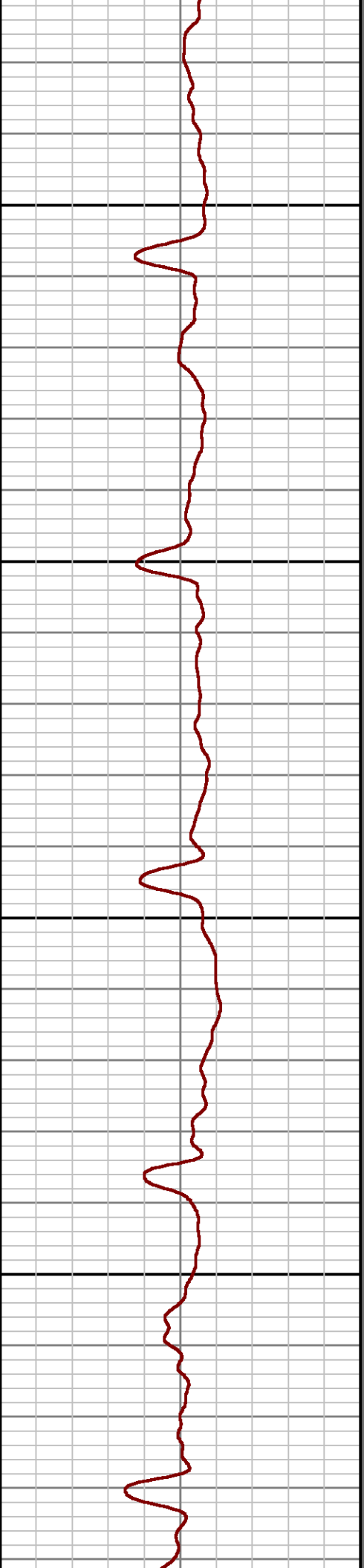
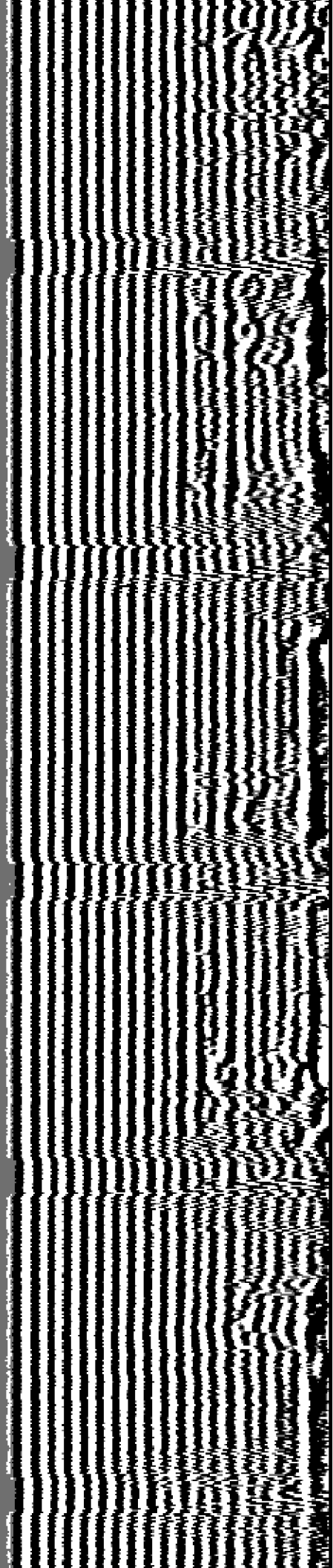


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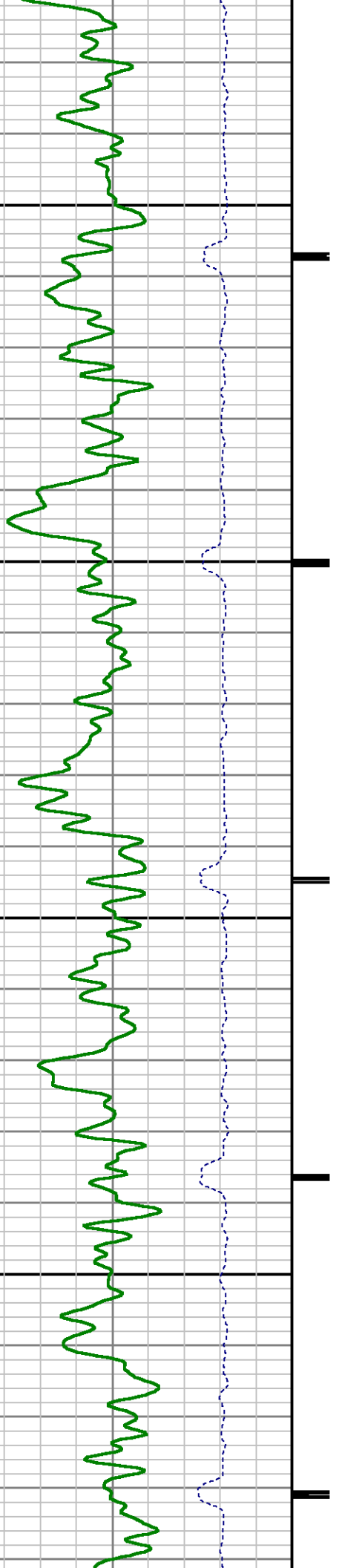


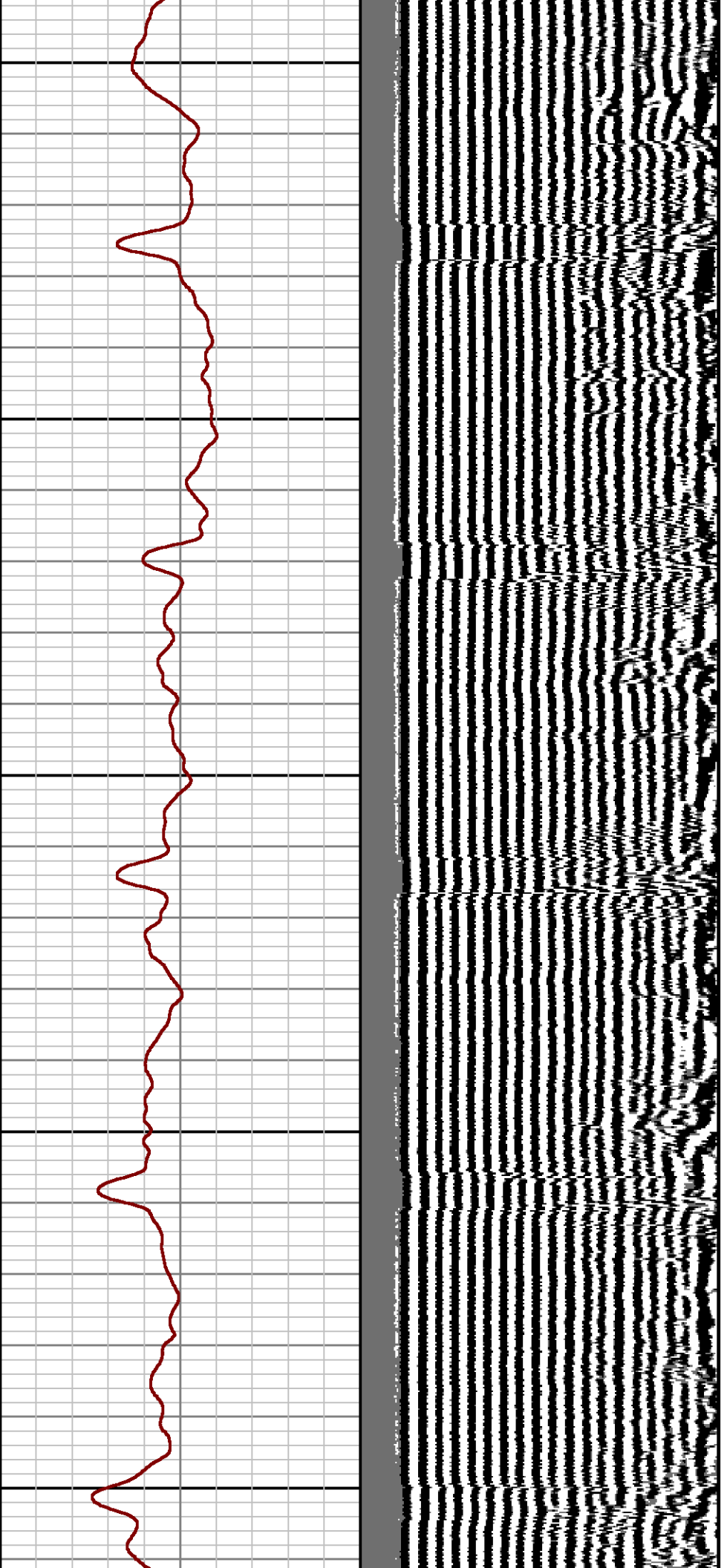




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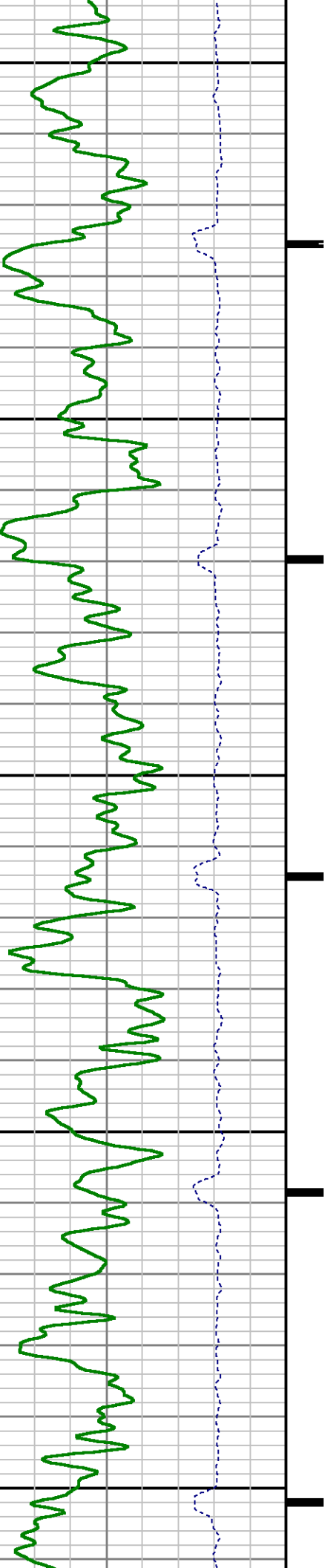


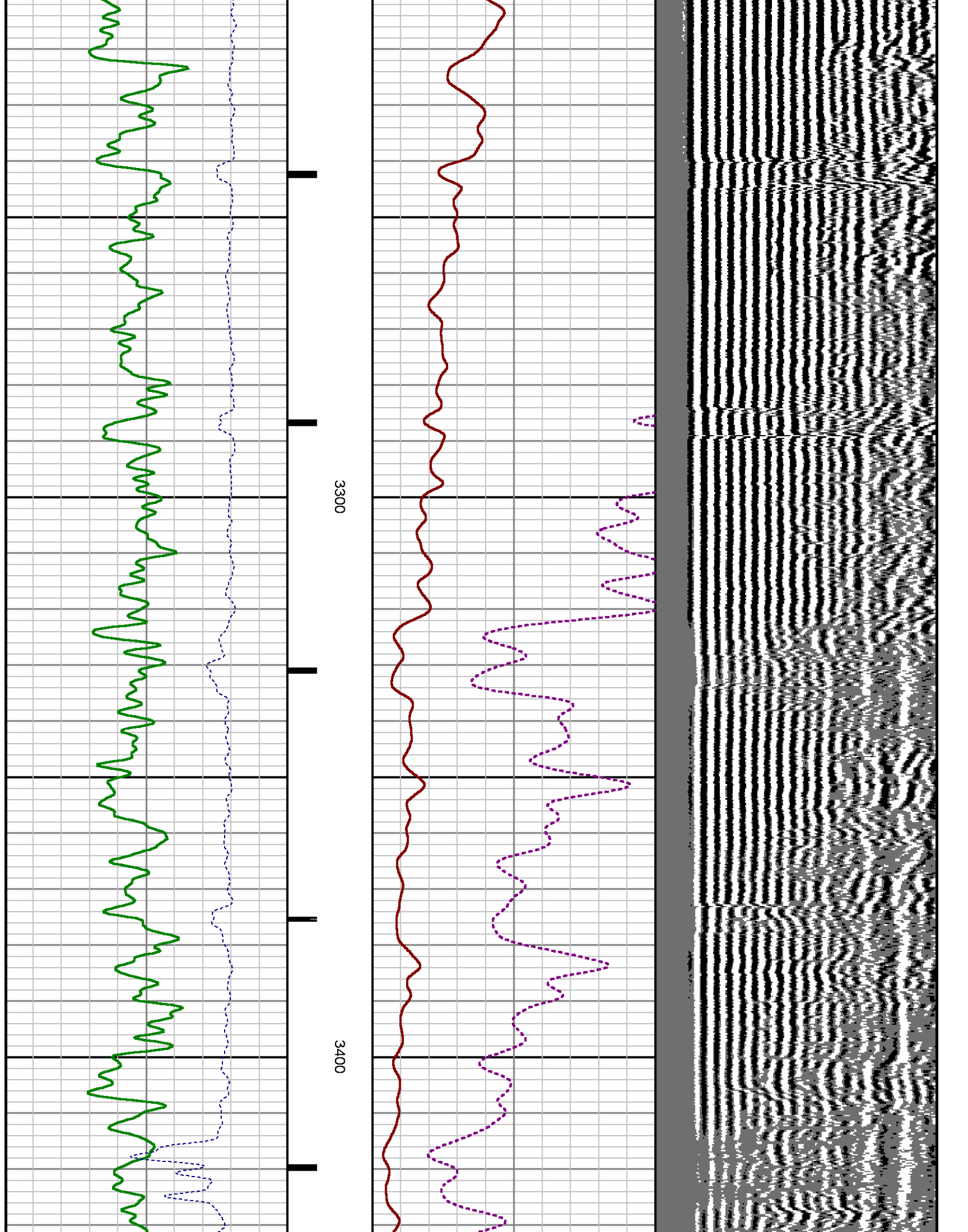


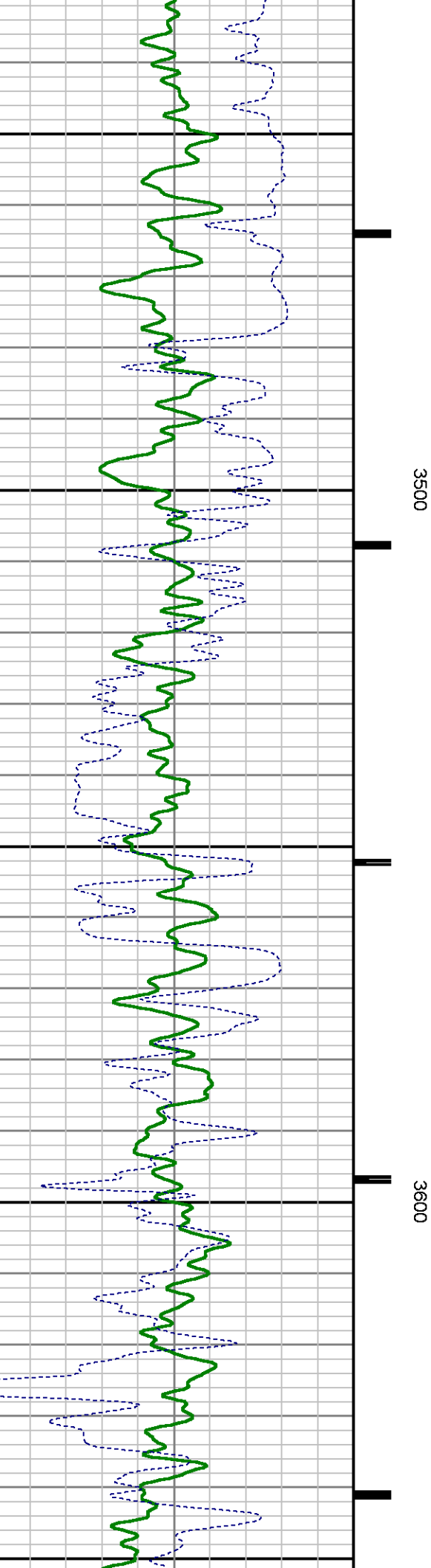
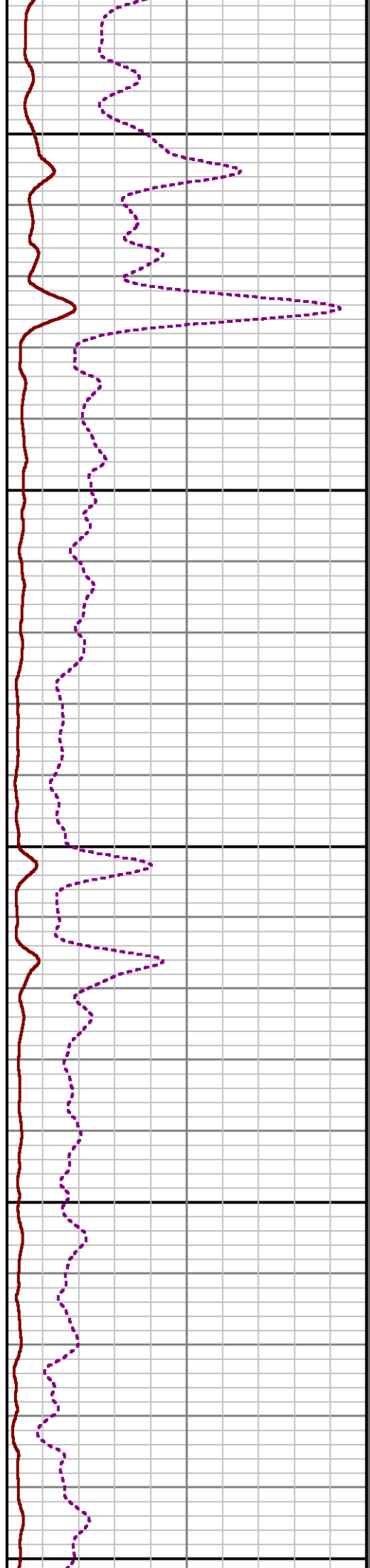
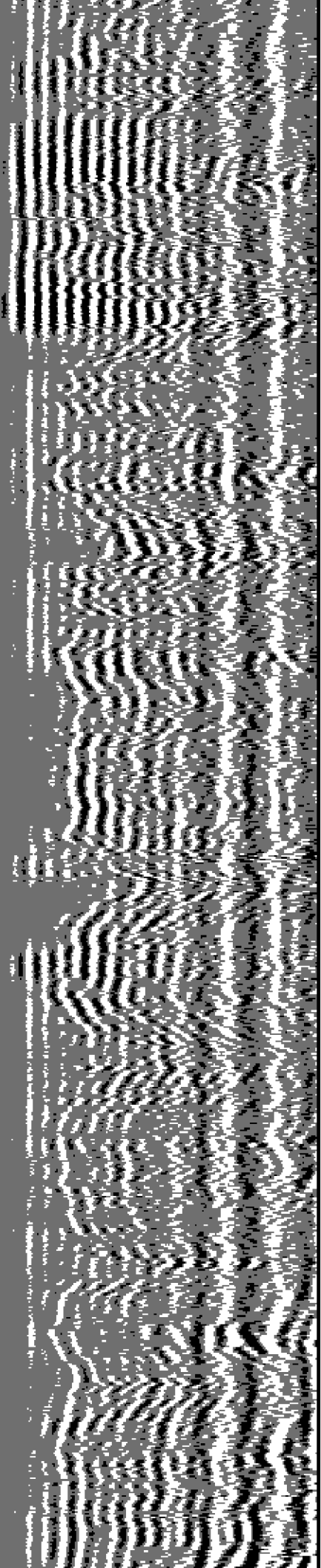
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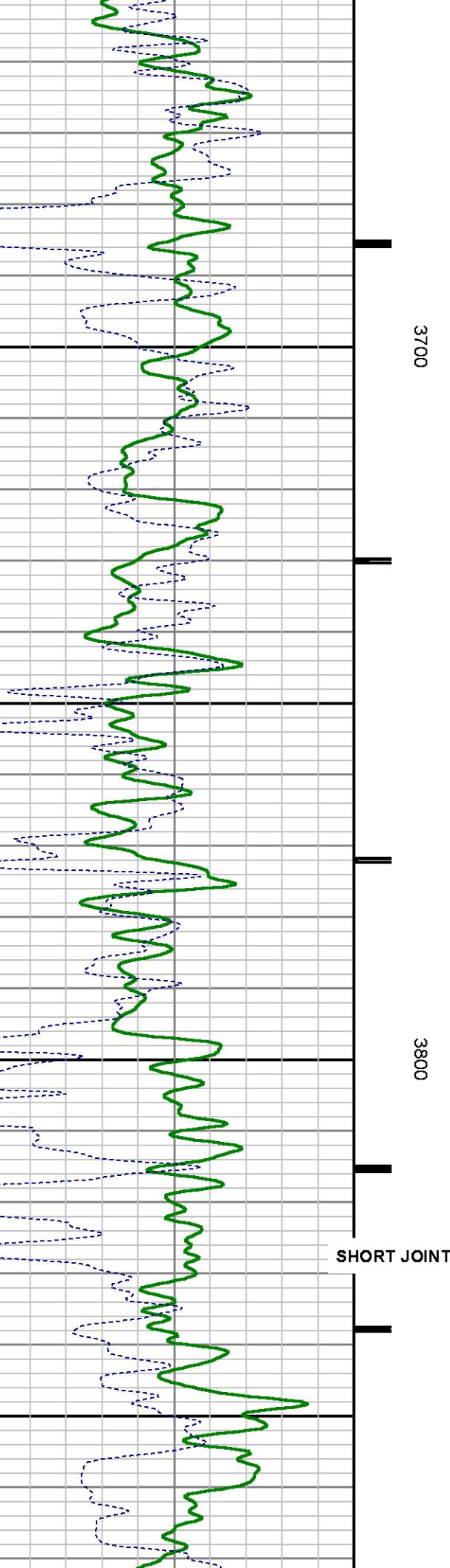
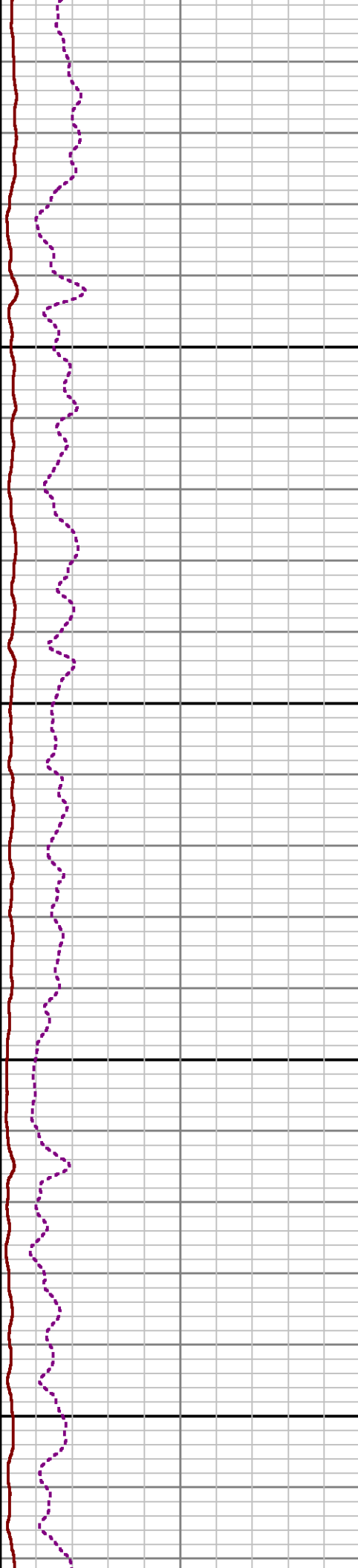
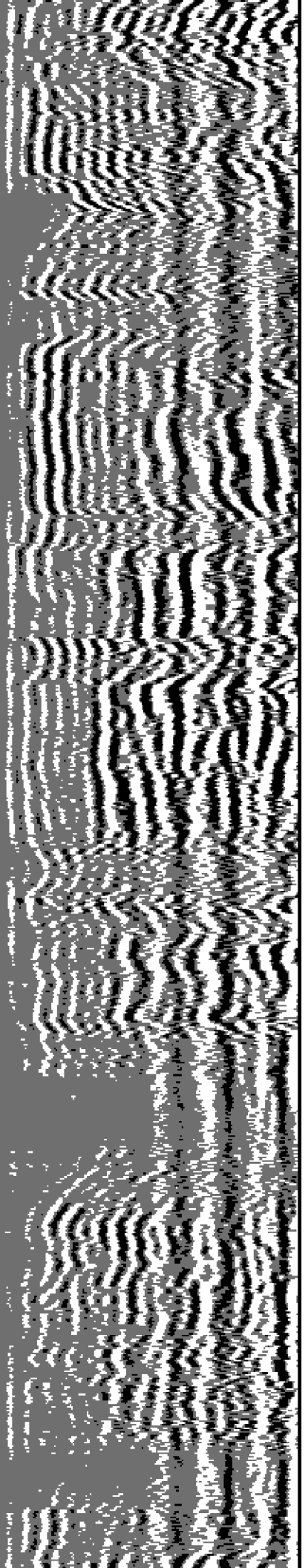
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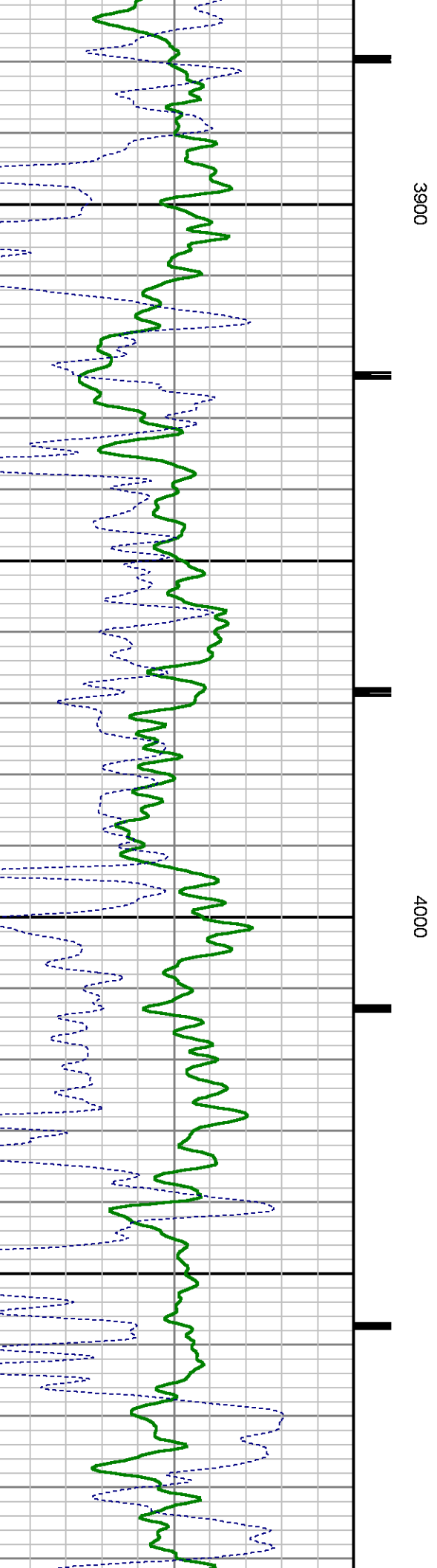
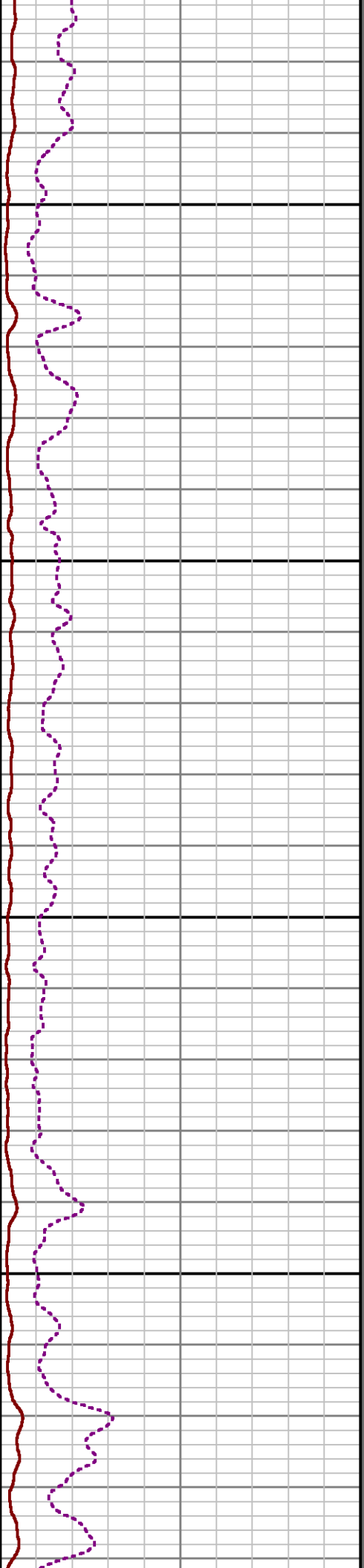
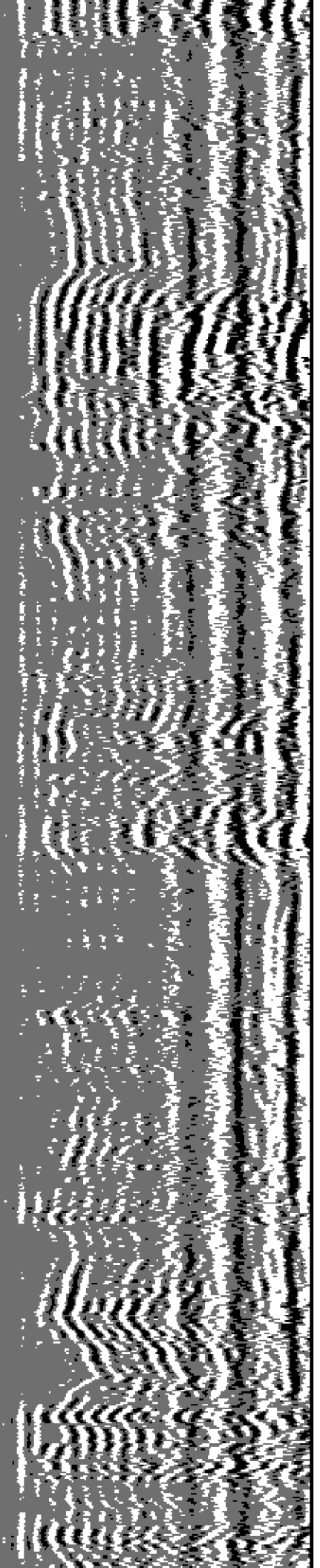


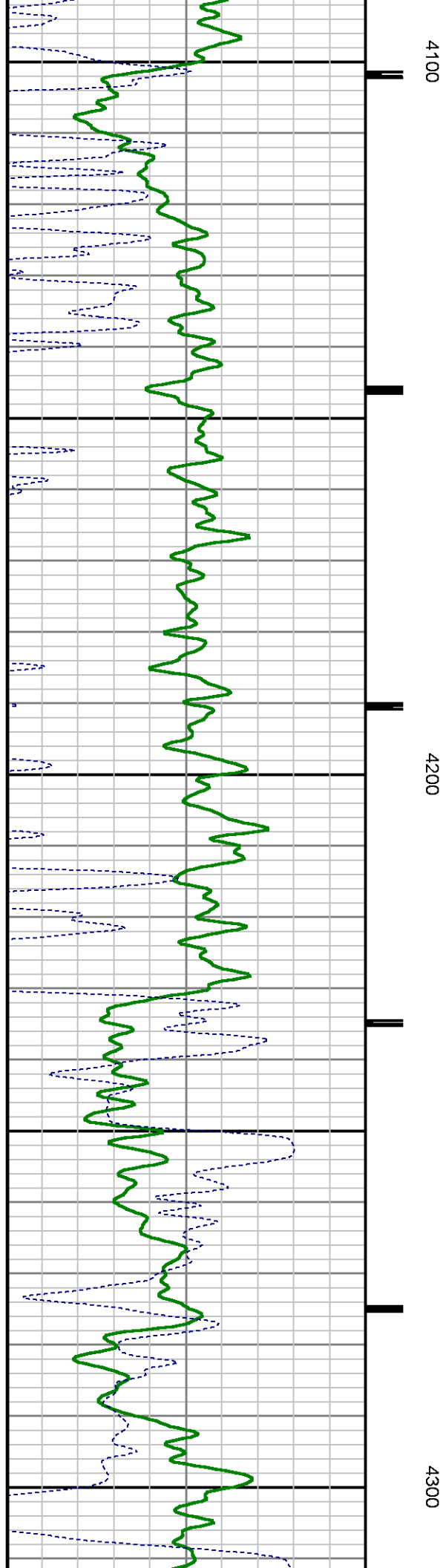
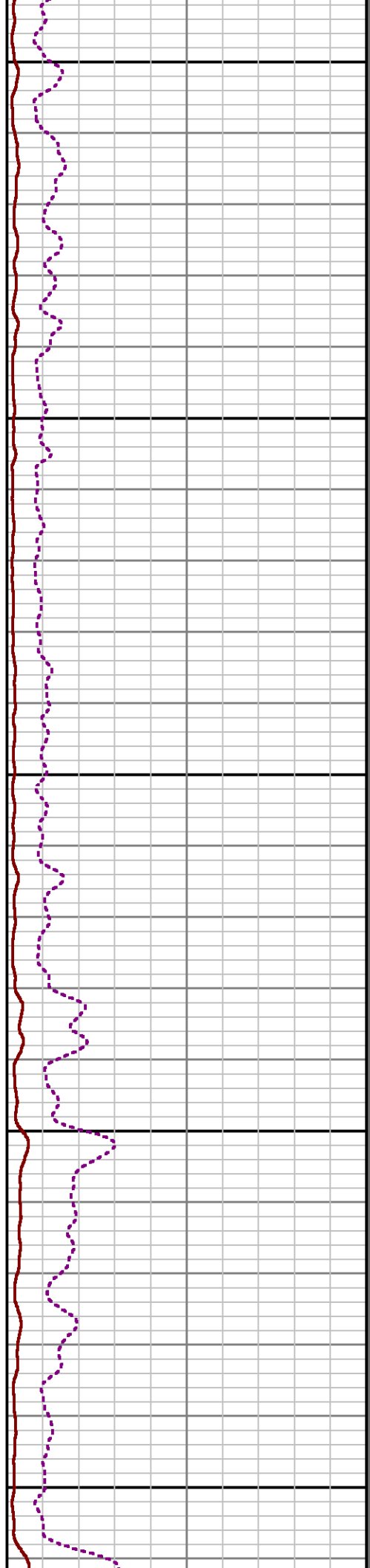
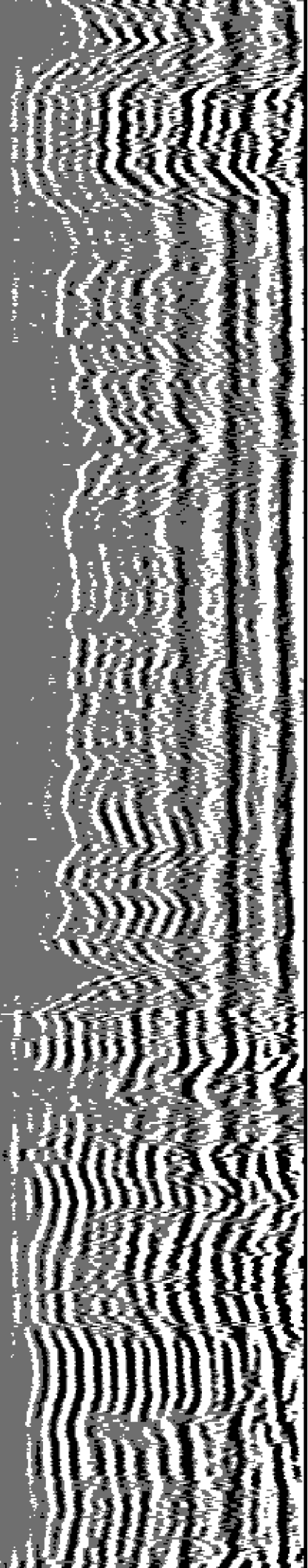




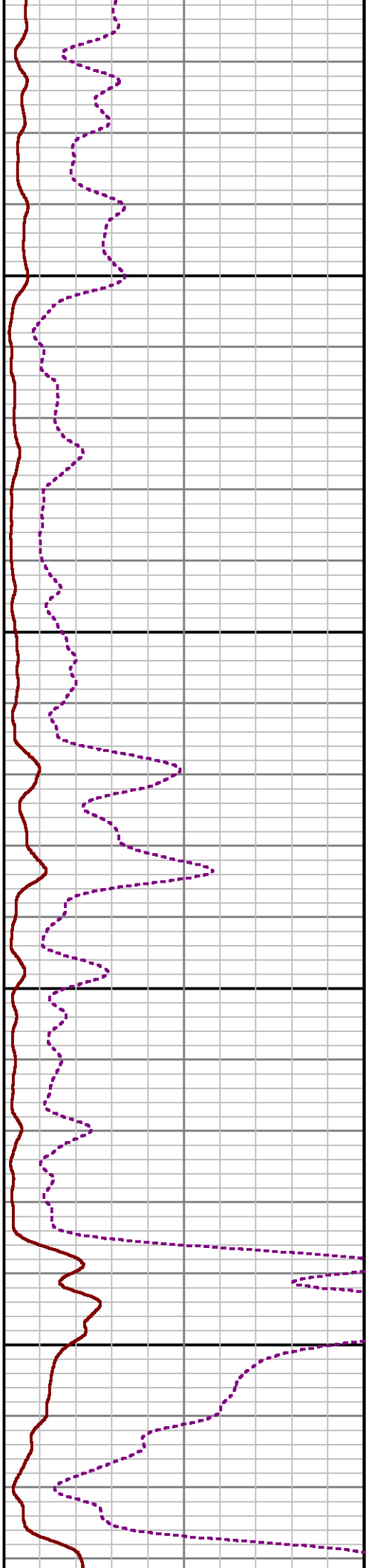
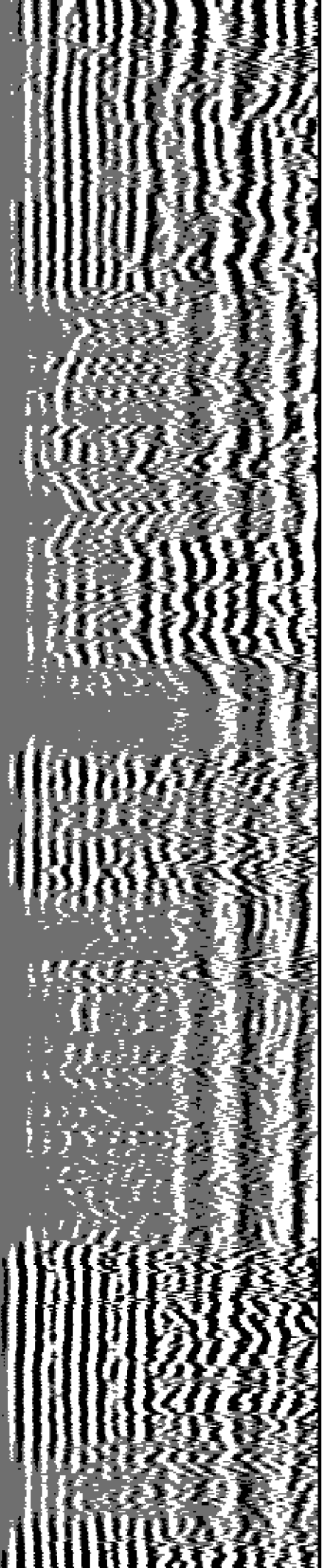






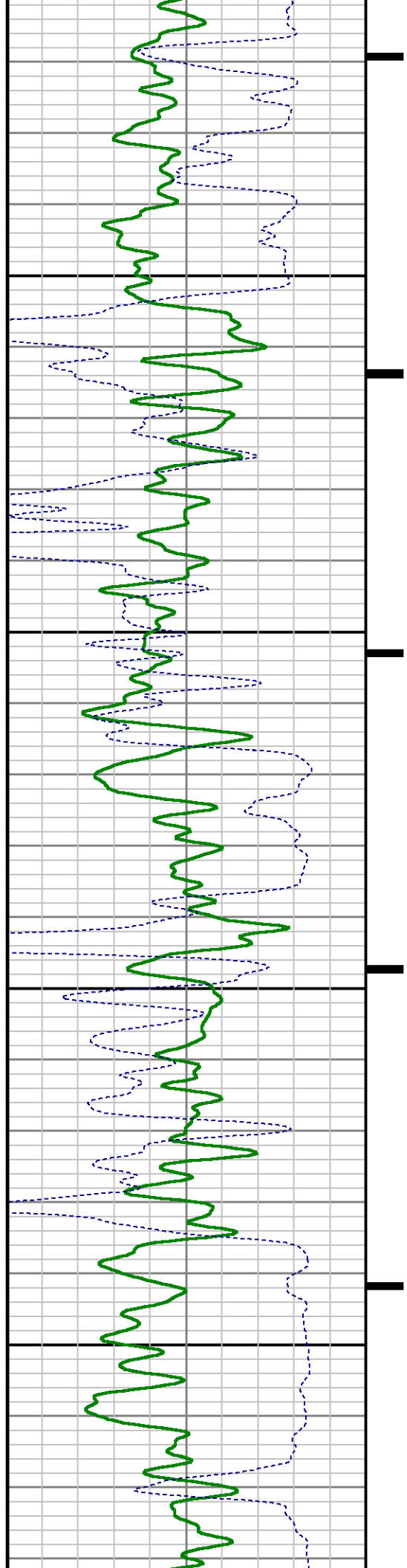


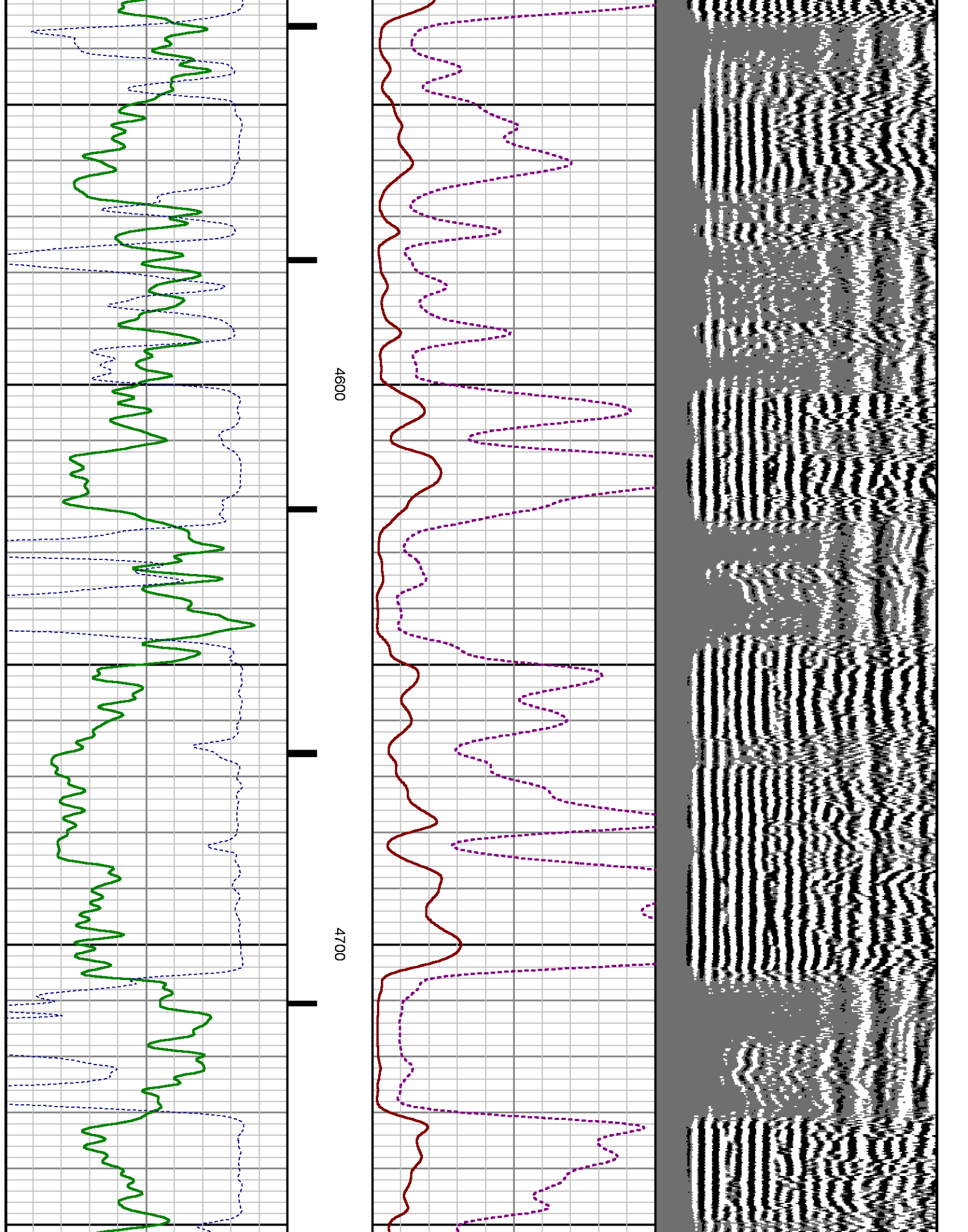


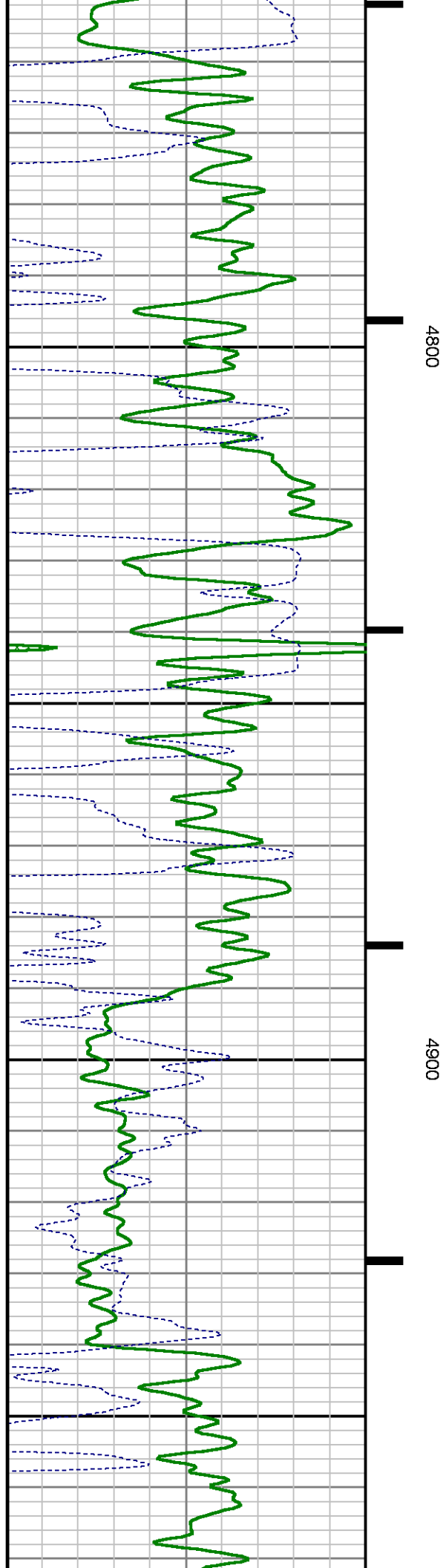
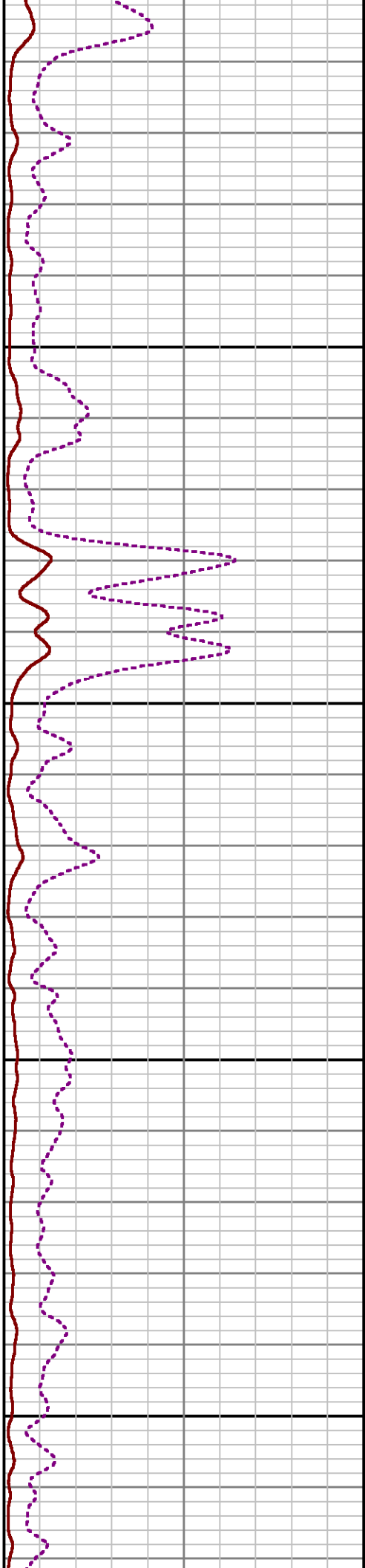
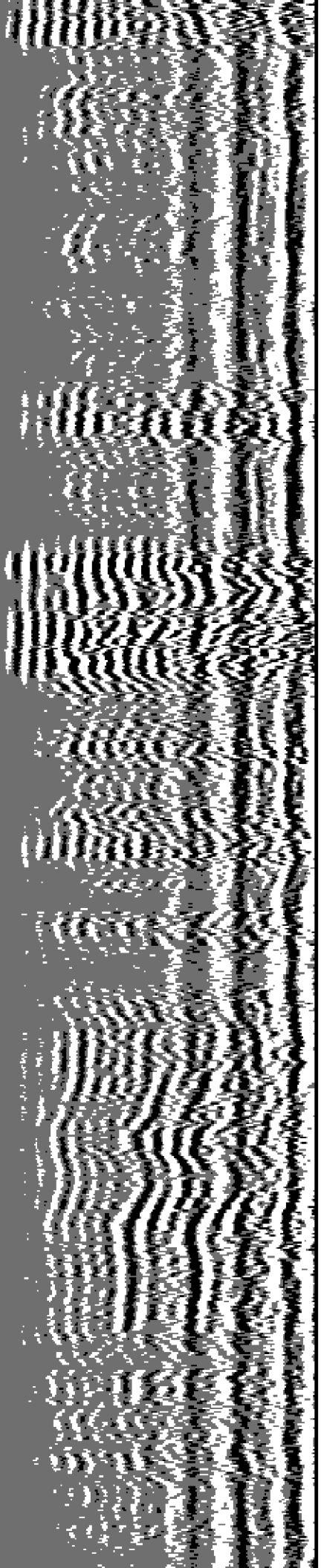


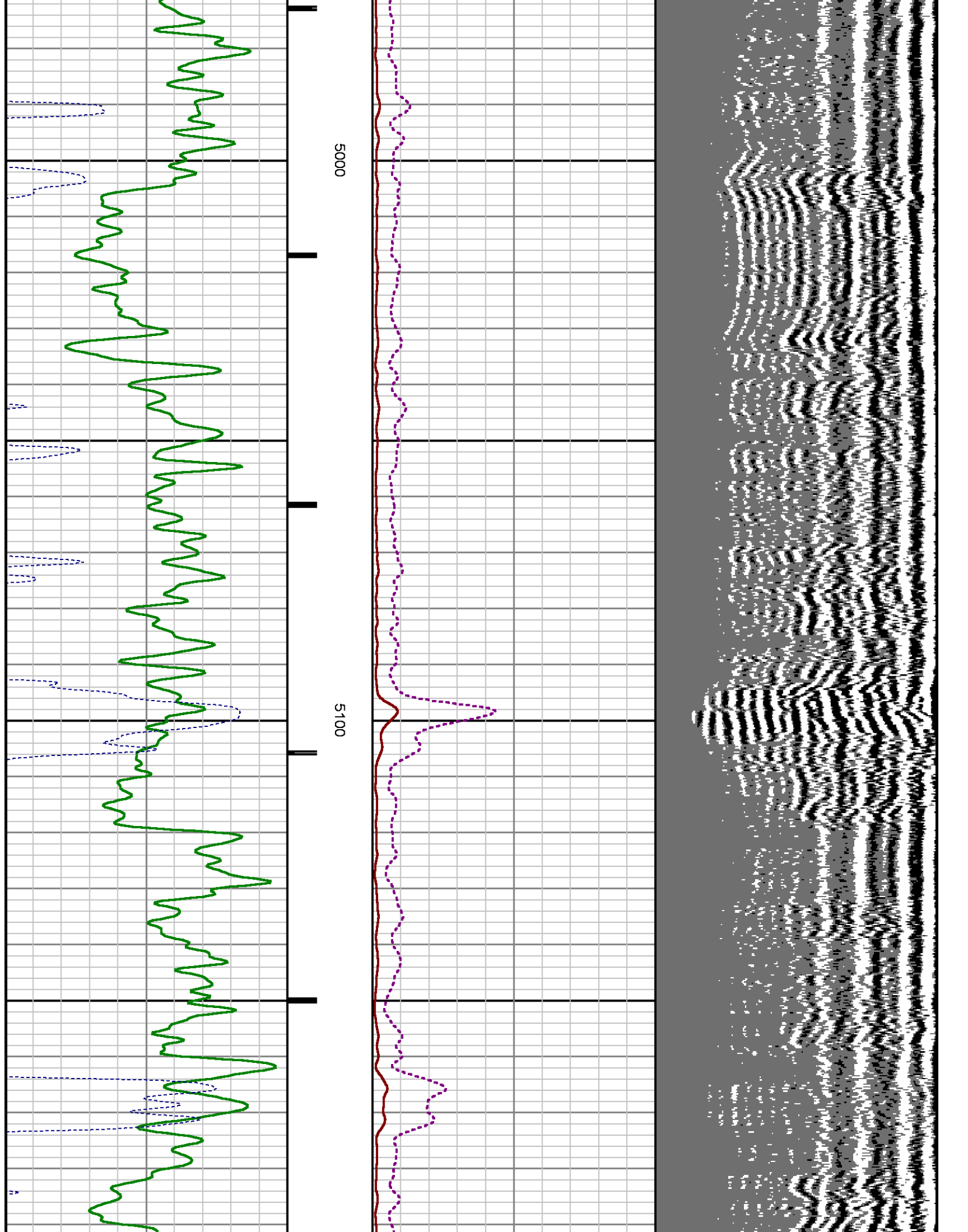
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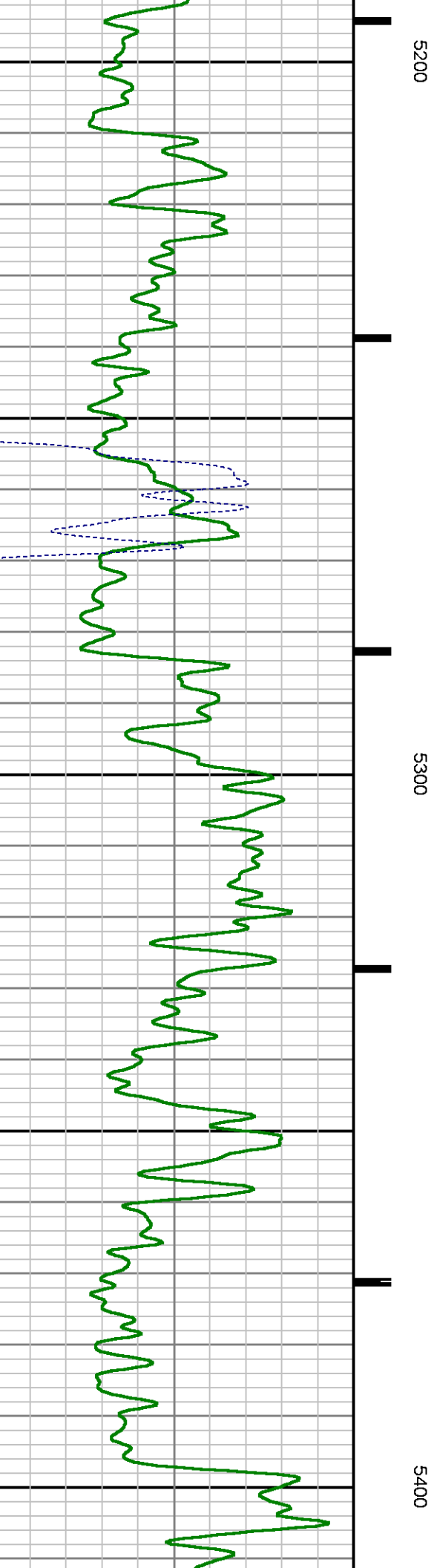
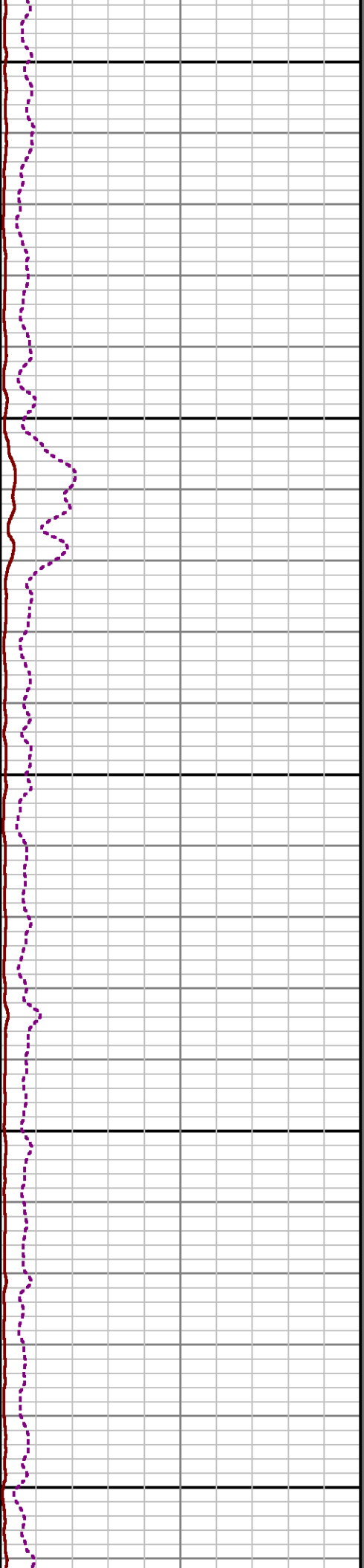
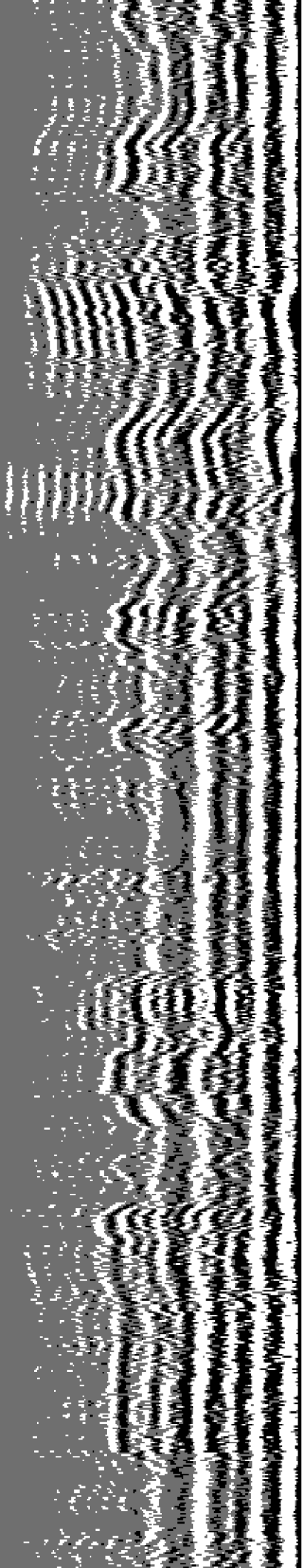
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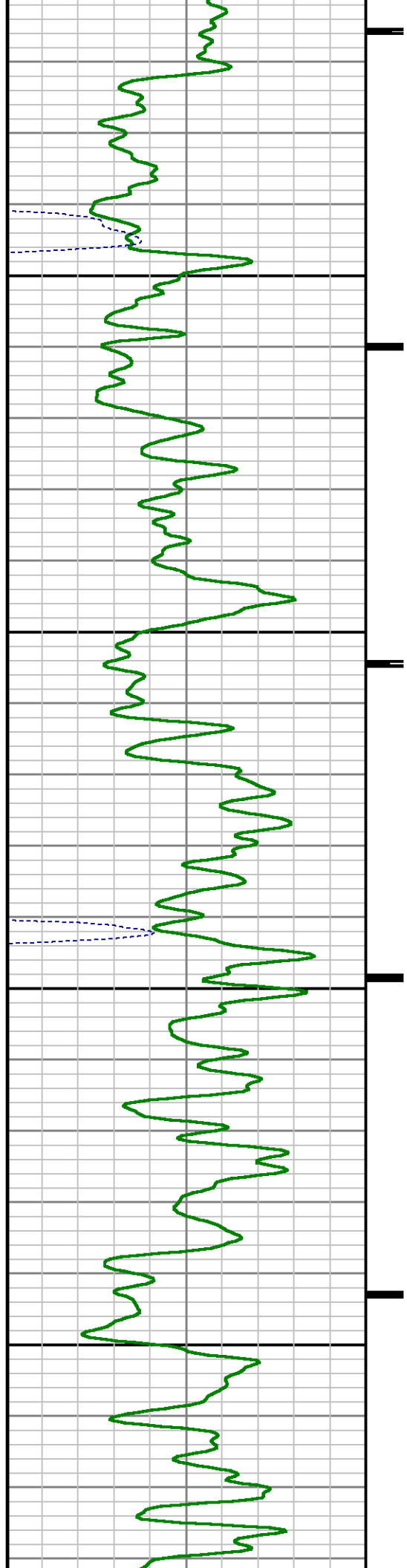
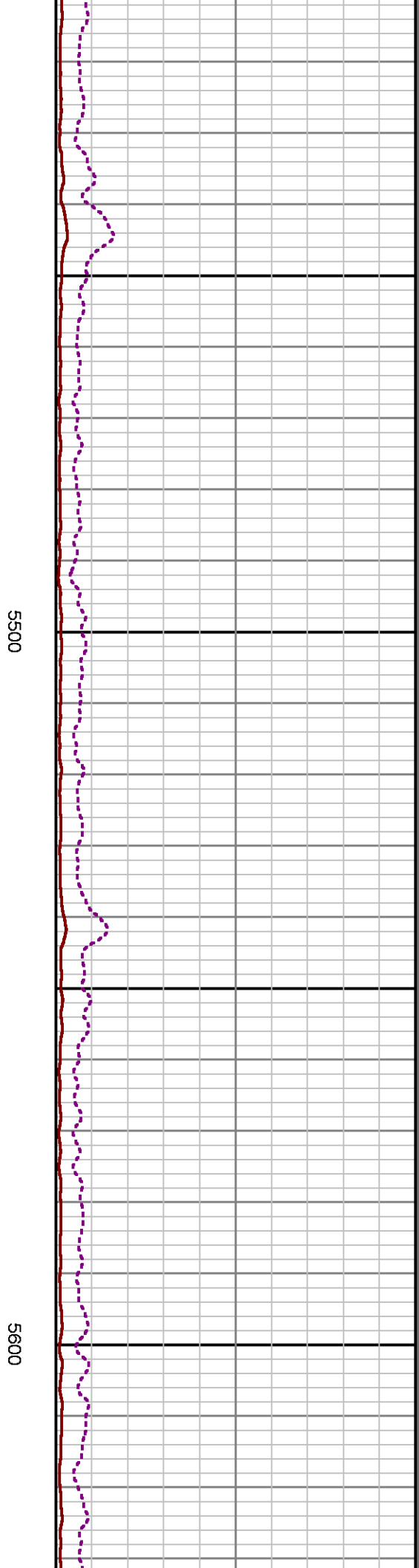
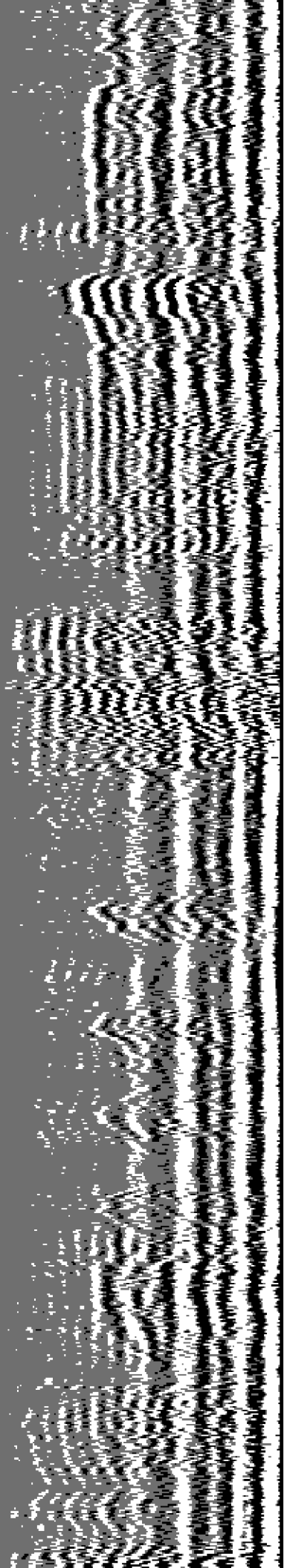


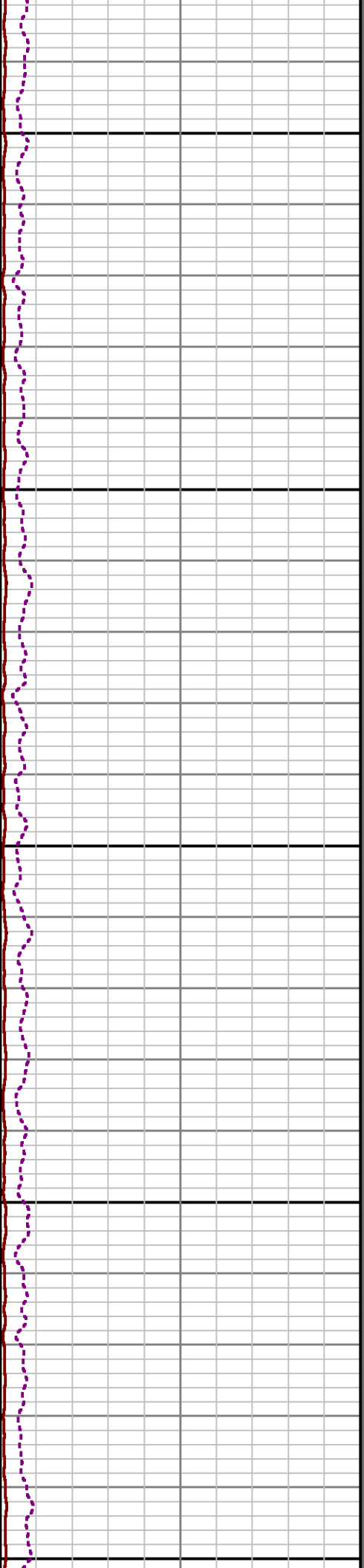
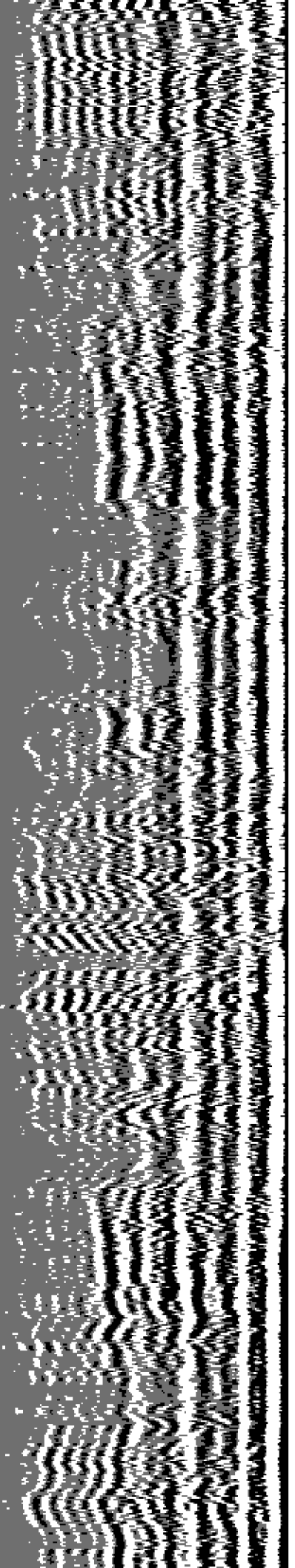






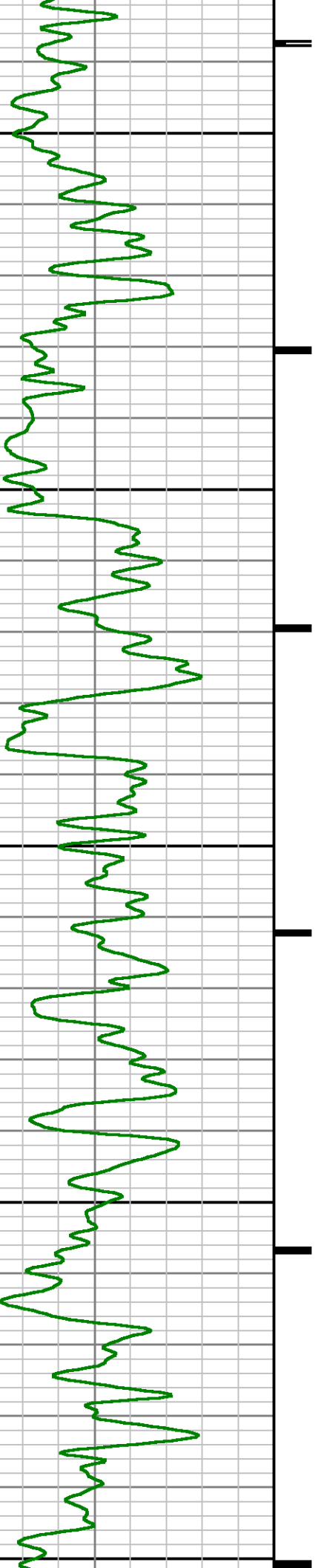




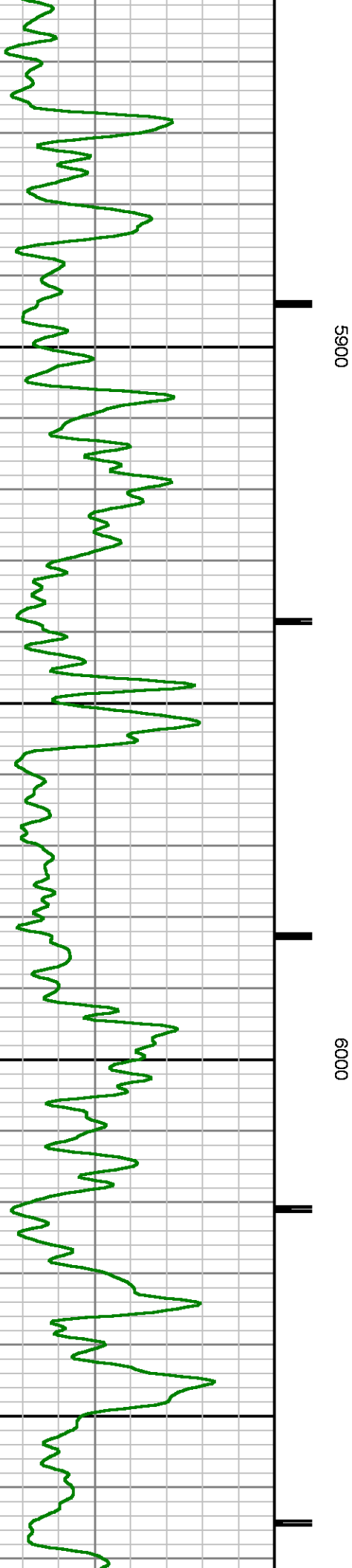
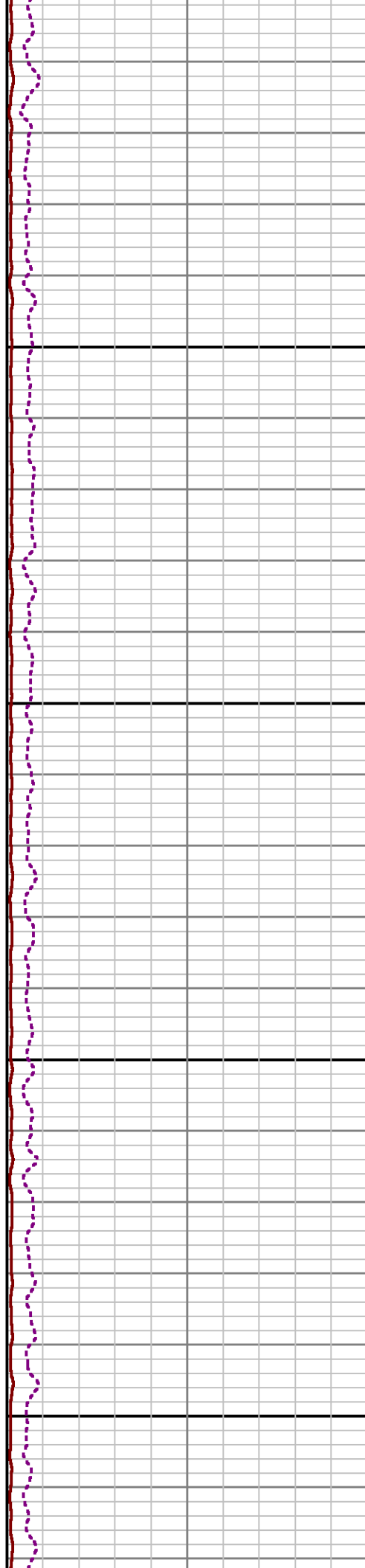
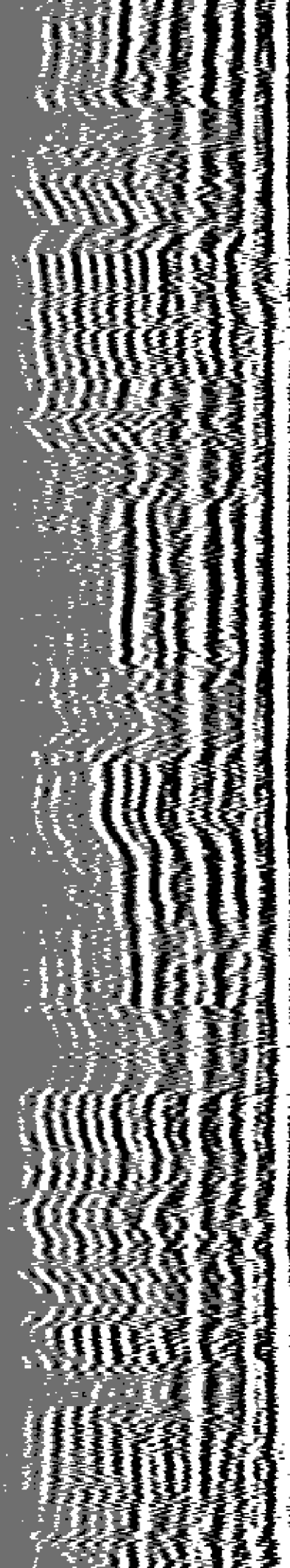


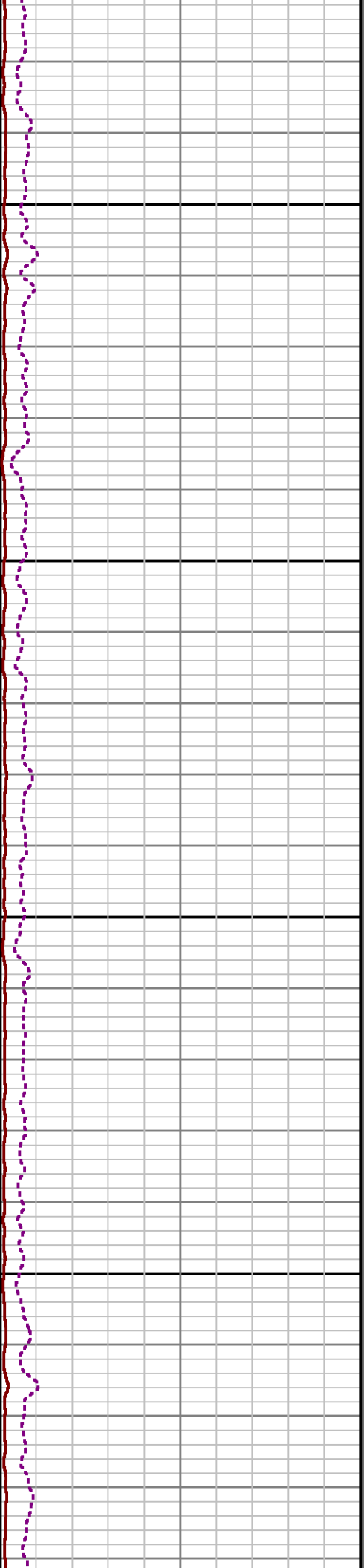
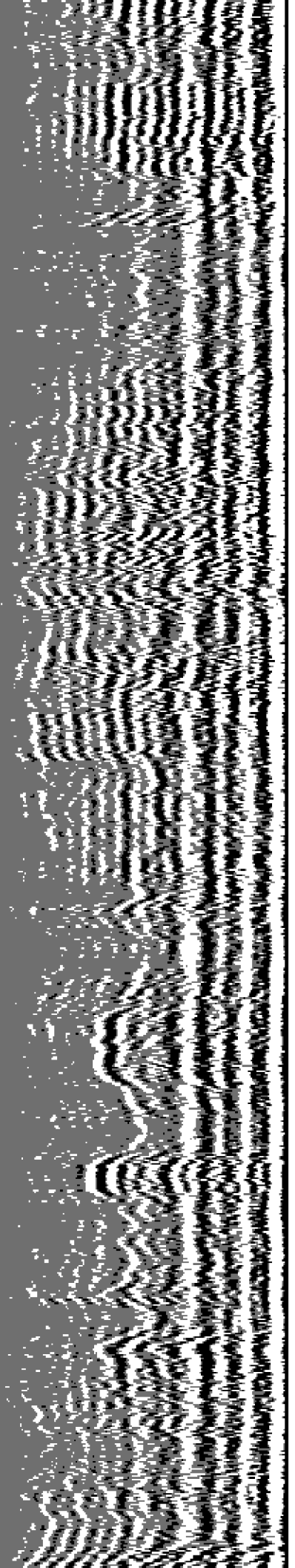
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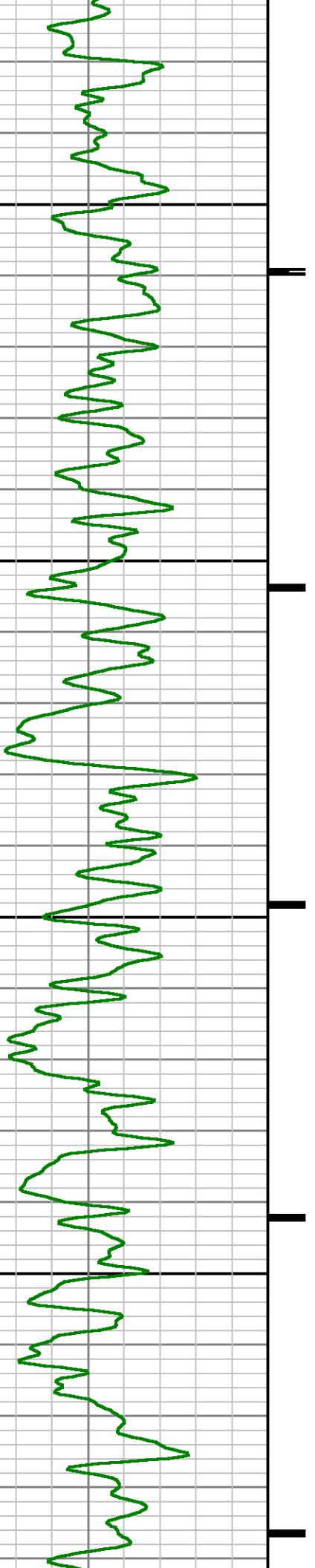


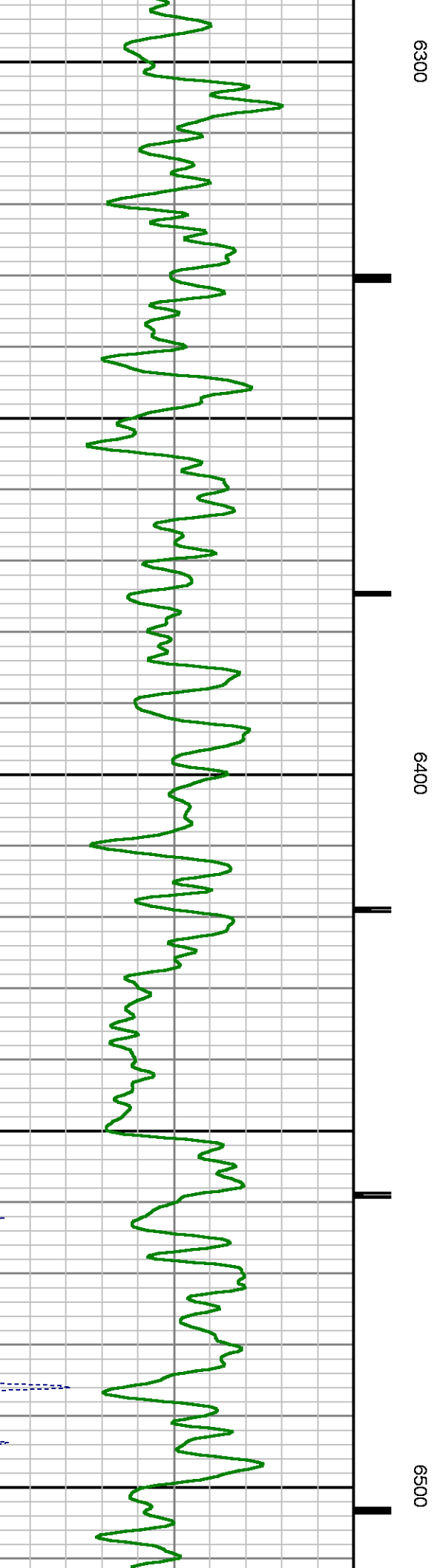
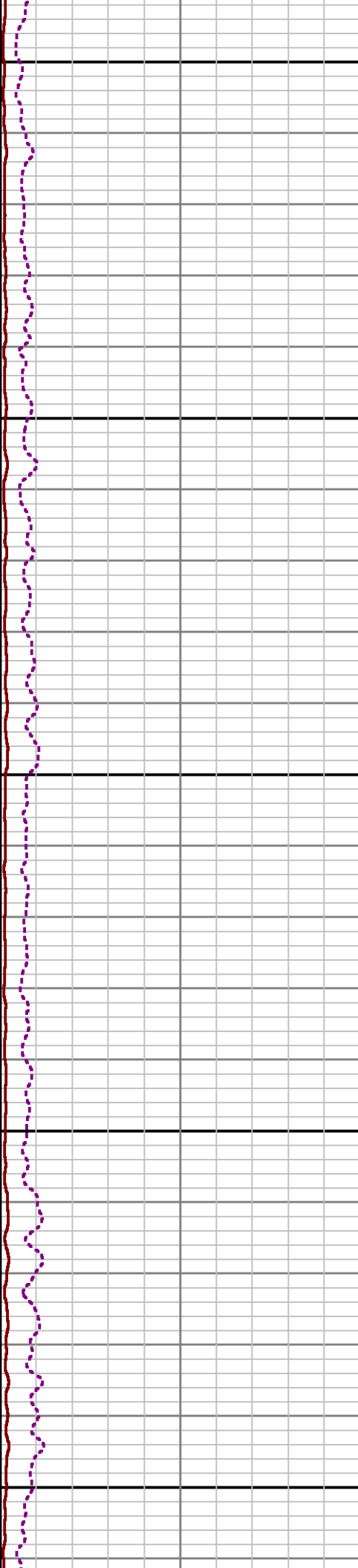
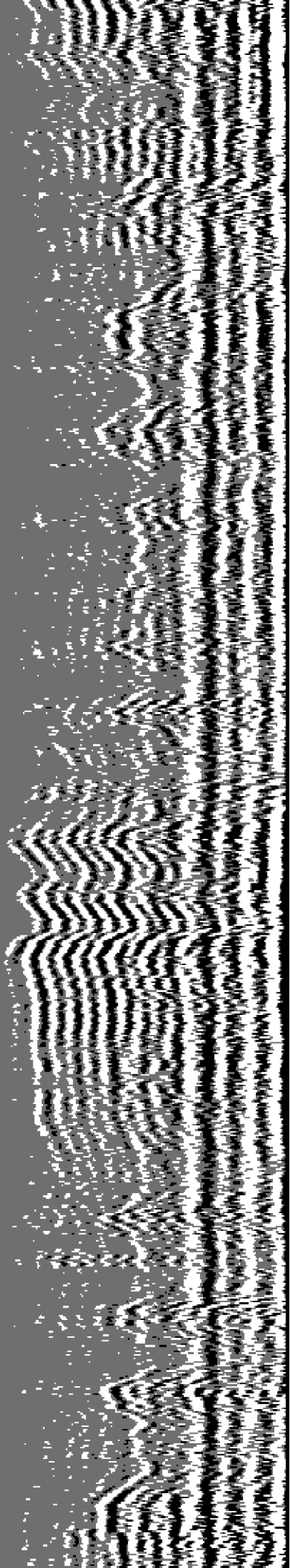


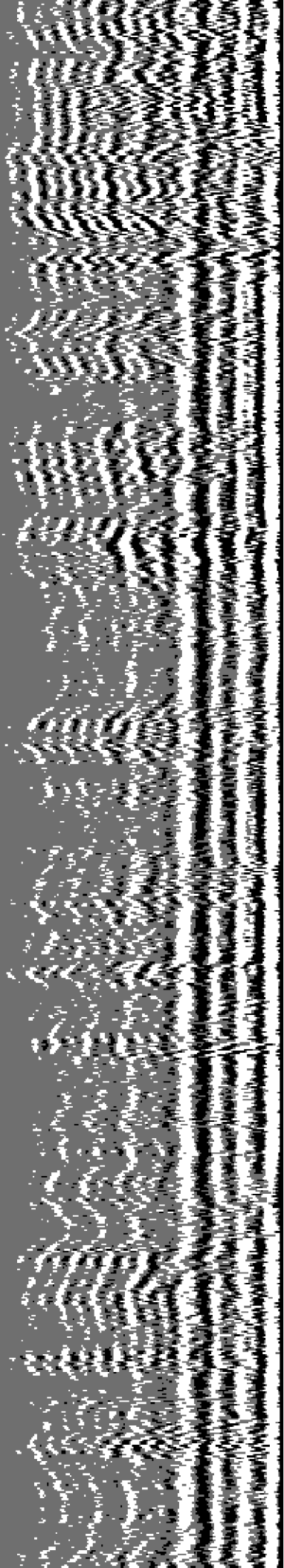


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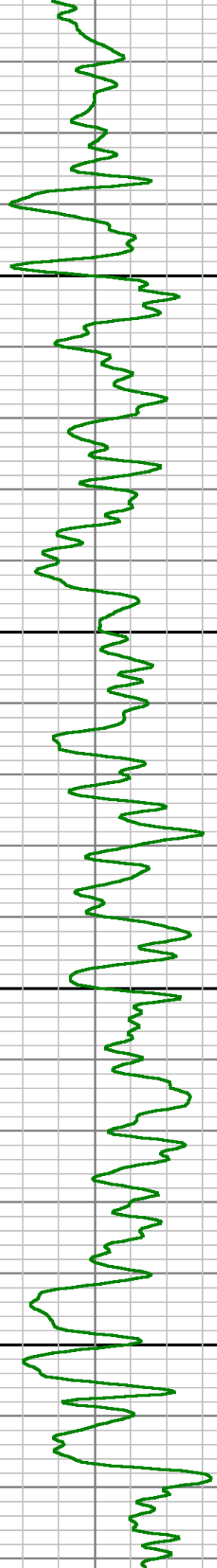




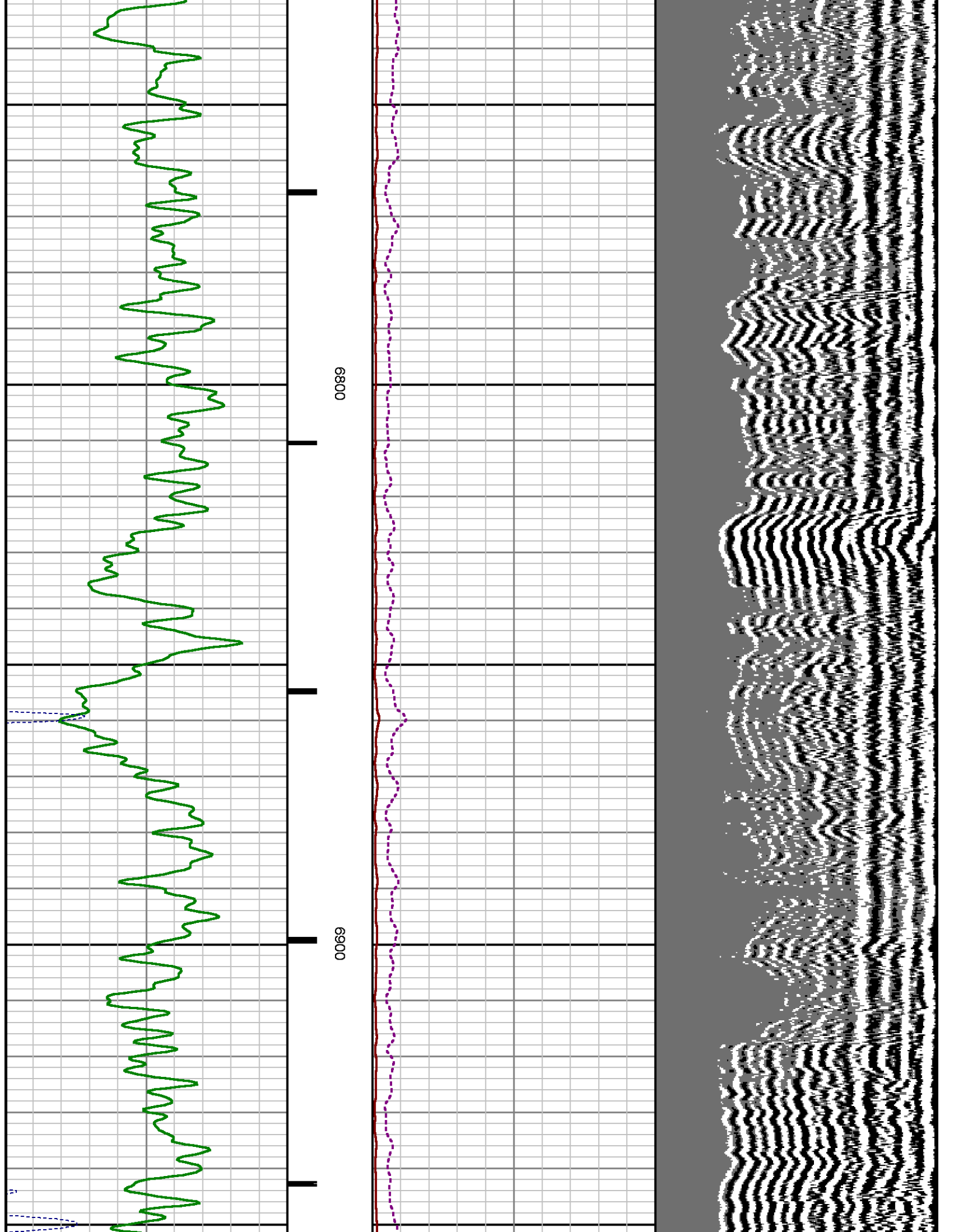


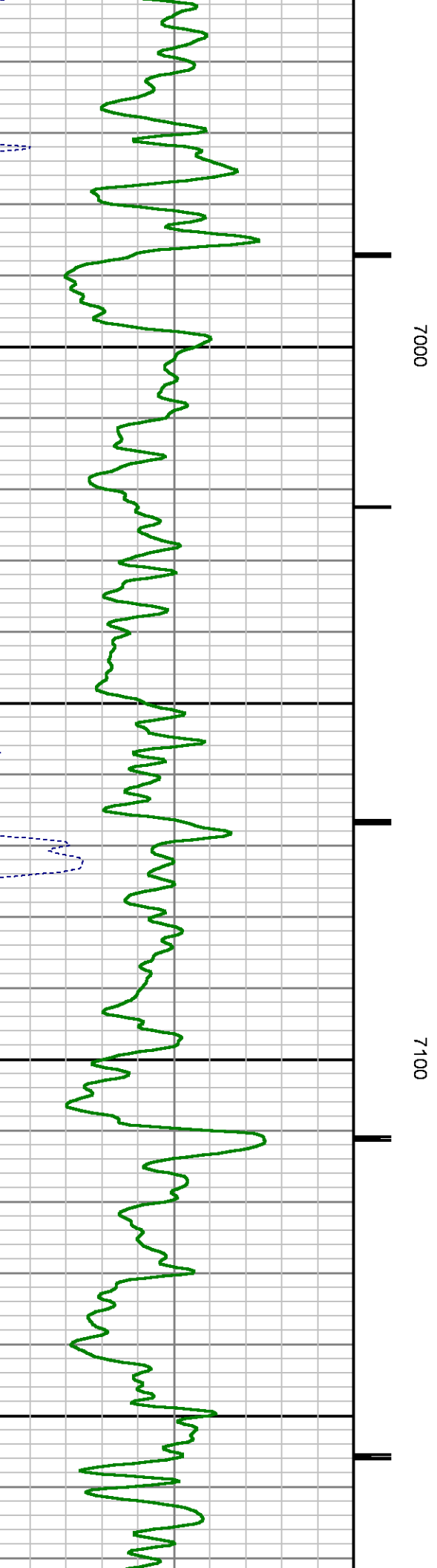
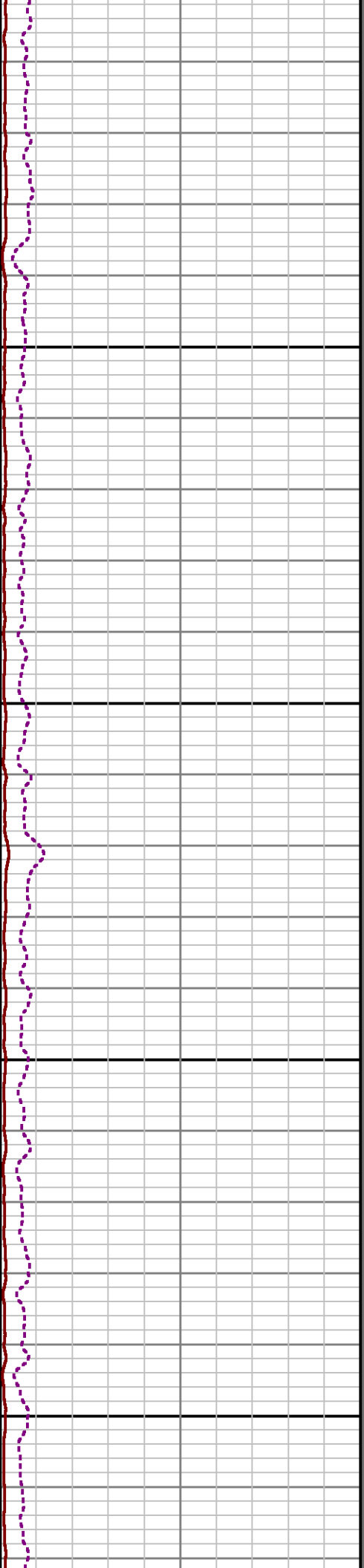
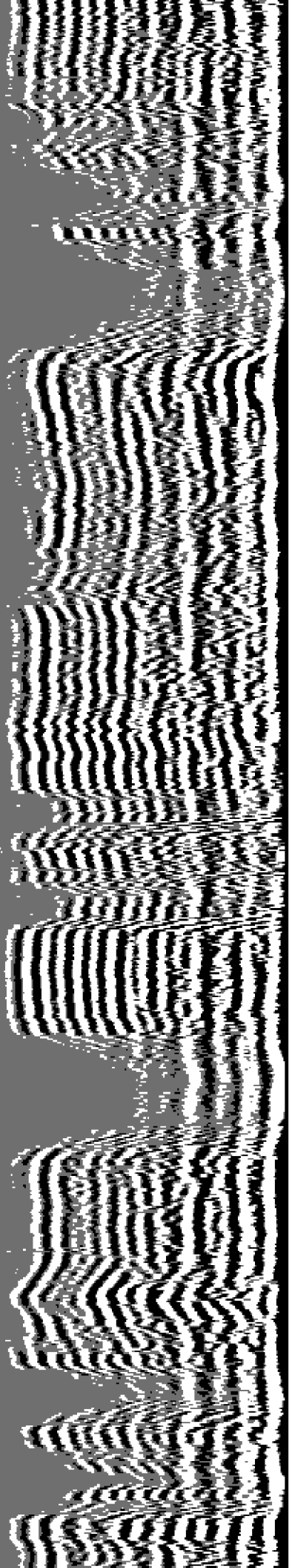
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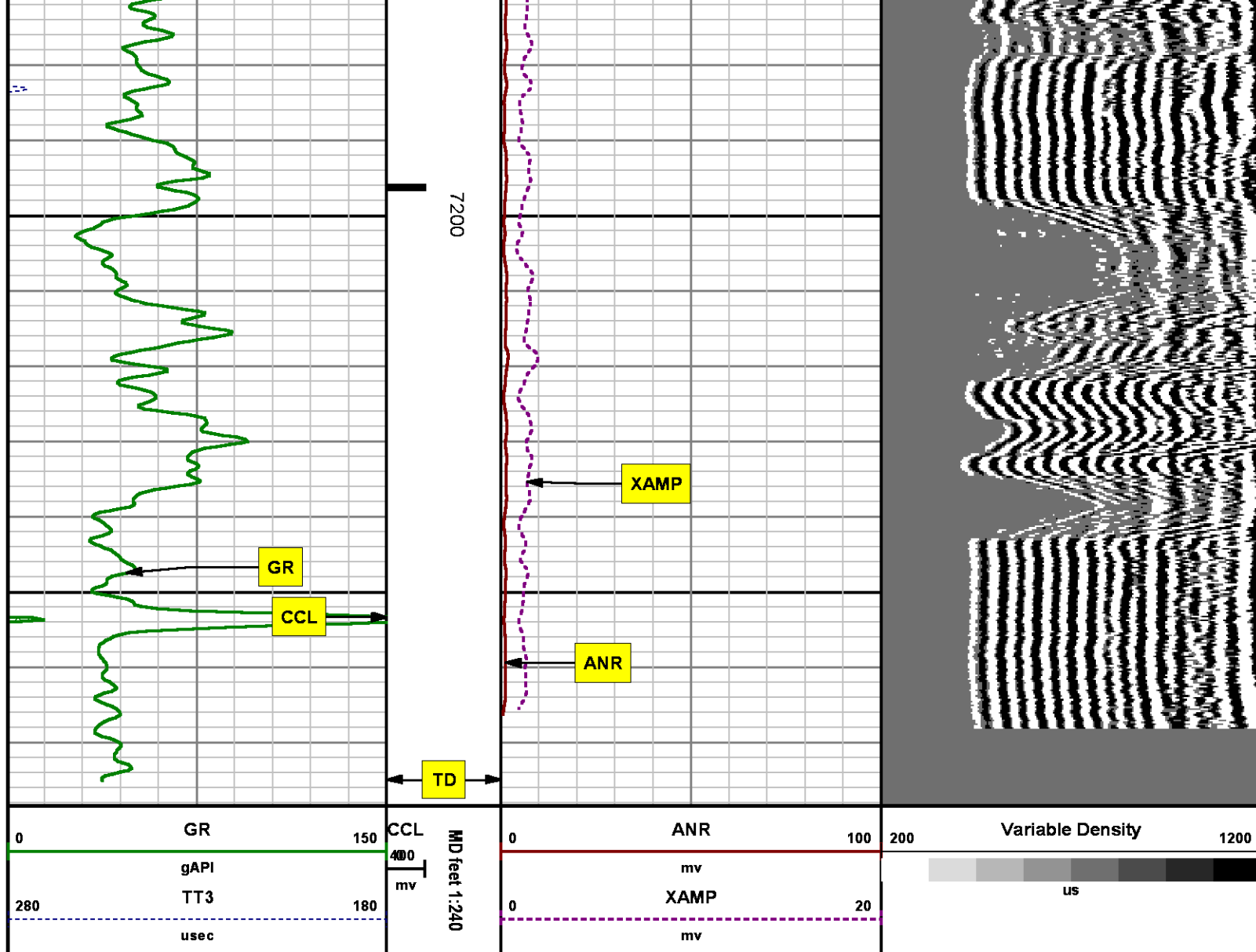


1









## SECONDARY PRESENTATION

### 0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	310.000	u sec	28.719	7278.500
RAL	Amp Gate Start Near	195.000	u sec	28.719	7278.500
RAL	Amp Gate Start Radial	195.000	u sec	28.719	7278.500
RAL	Amp Gate Width Far	25.000	u sec	28.719	7278.500



RAL	Amp Gate Width Near	25.000	usec	28.719	7278.500
RAL	Amp Gate Width Radial	25.000	usec	28.719	7278.500
RAL	casing od	4.500	inches	28.719	7278.500
RAL	casing wt	11.600	lbm/ft	28.719	7278.500
RAL	FB Start Far	291.900	usec	28.719	7278.500
RAL	FB Start Near	180.000	usec	28.719	7278.500
RAL	FB Start Radial	180.000	usec	28.719	7278.500
RAL	FB Thresh Far	10.000	mv	28.719	7278.500
RAL	FB Thresh Near	4.000	mv	28.719	7278.500
RAL	FB Thresh Radial	4.000	mv	28.719	7278.500
RAL	Fluid Travel Time	200.000	usec/ft	28.719	7278.031

## DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-11.000	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	CHV	FPR2
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	-10.040	AFAR	SIG	TT5			
1355XA	-5.620	CCL					
1355XA	-1.500	GR					
1355XA	0.000	TEMP					

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

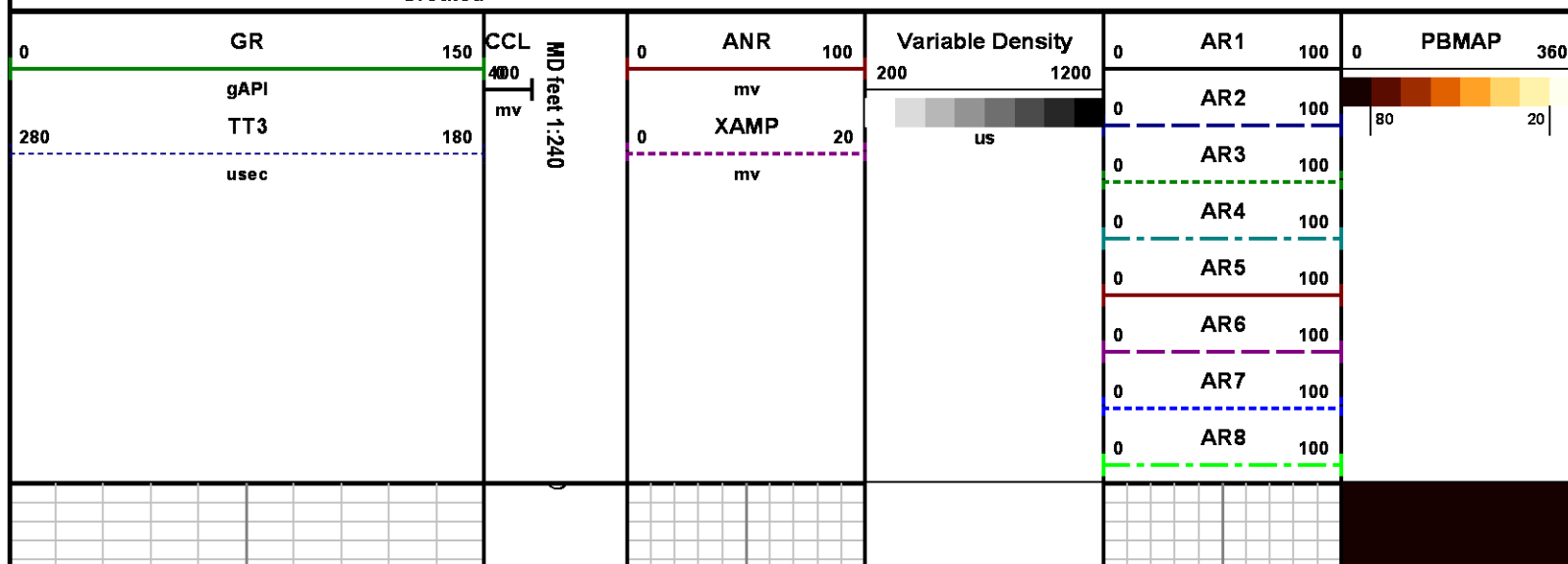
Well : C&C ENERGY GM 544-12

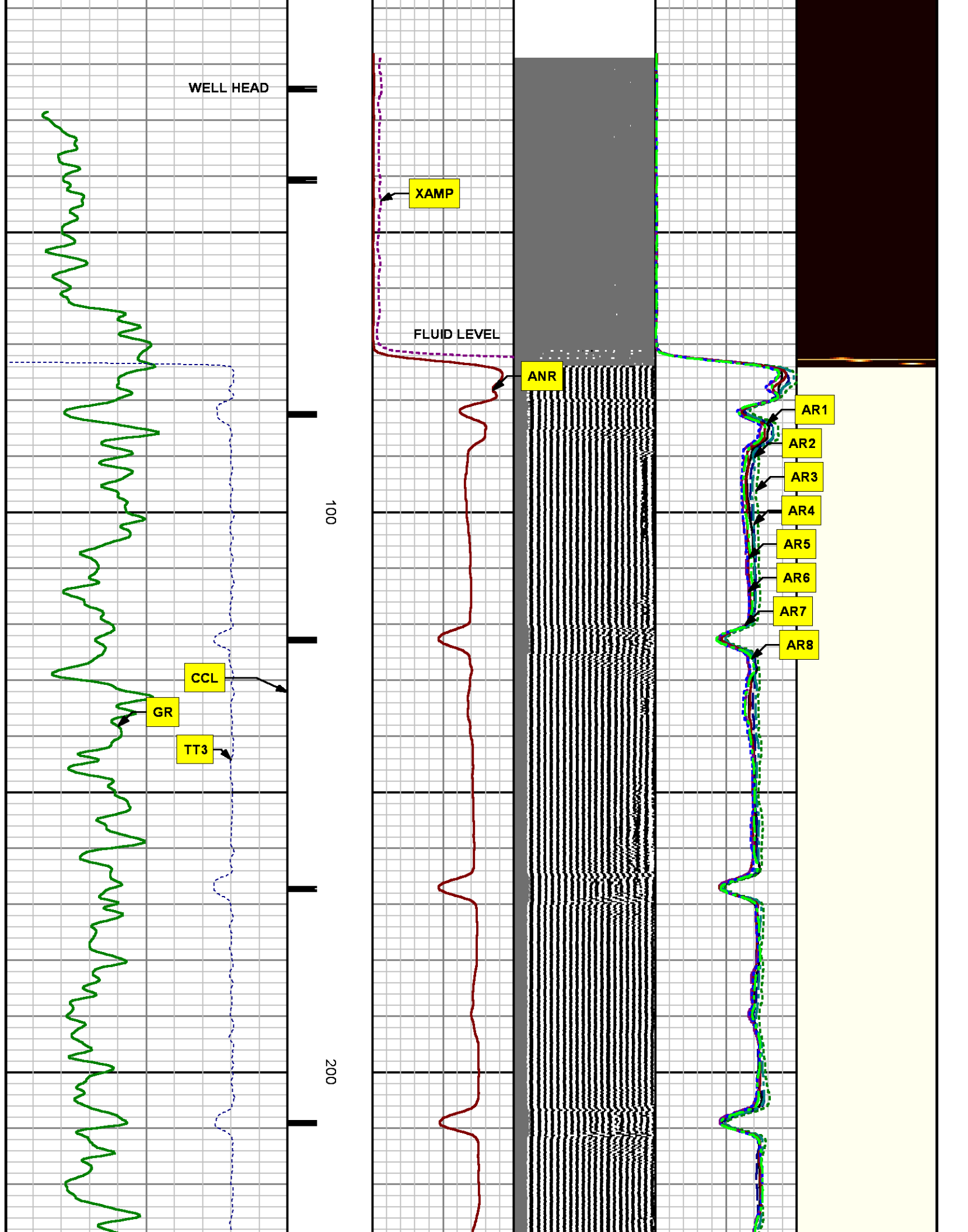
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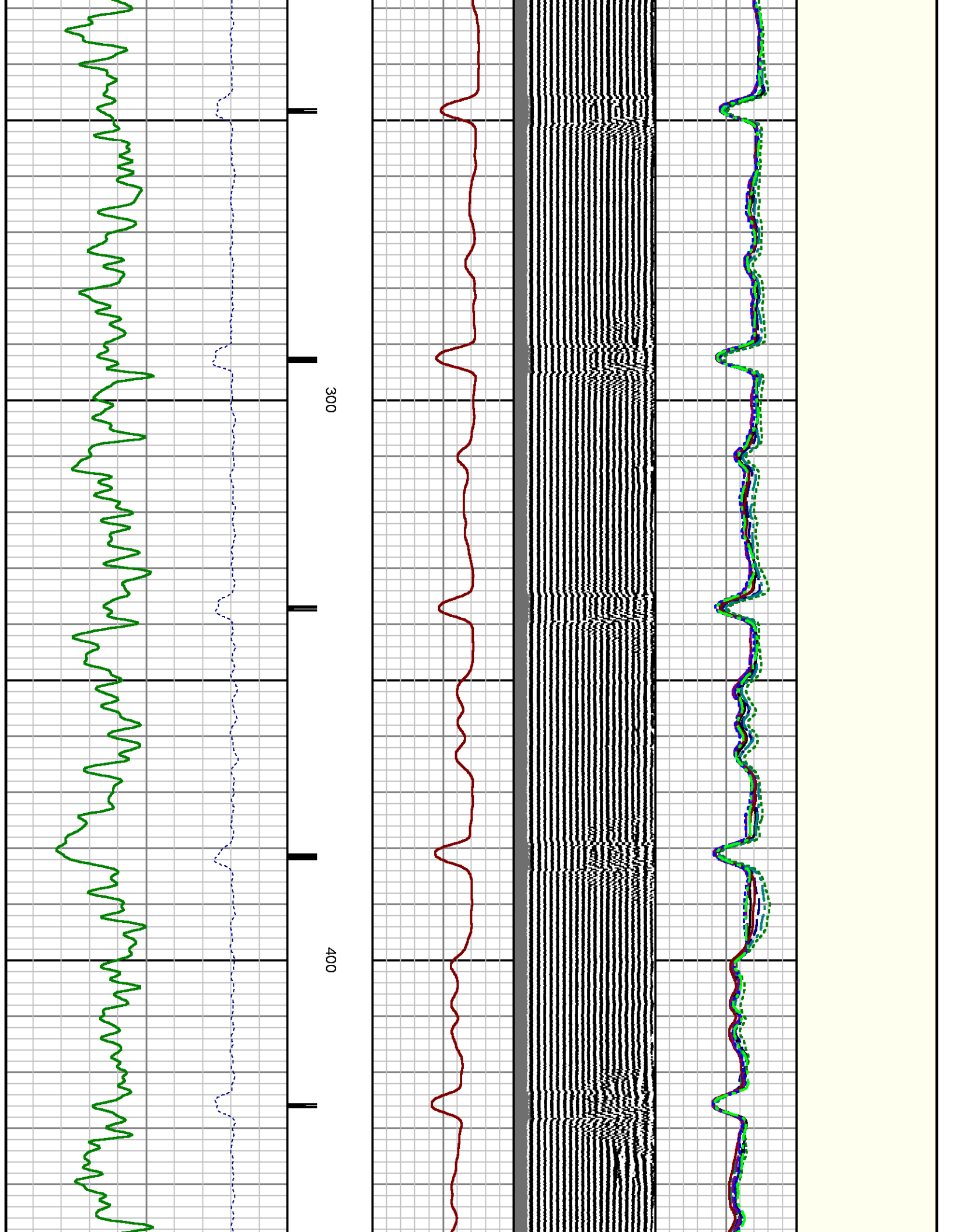
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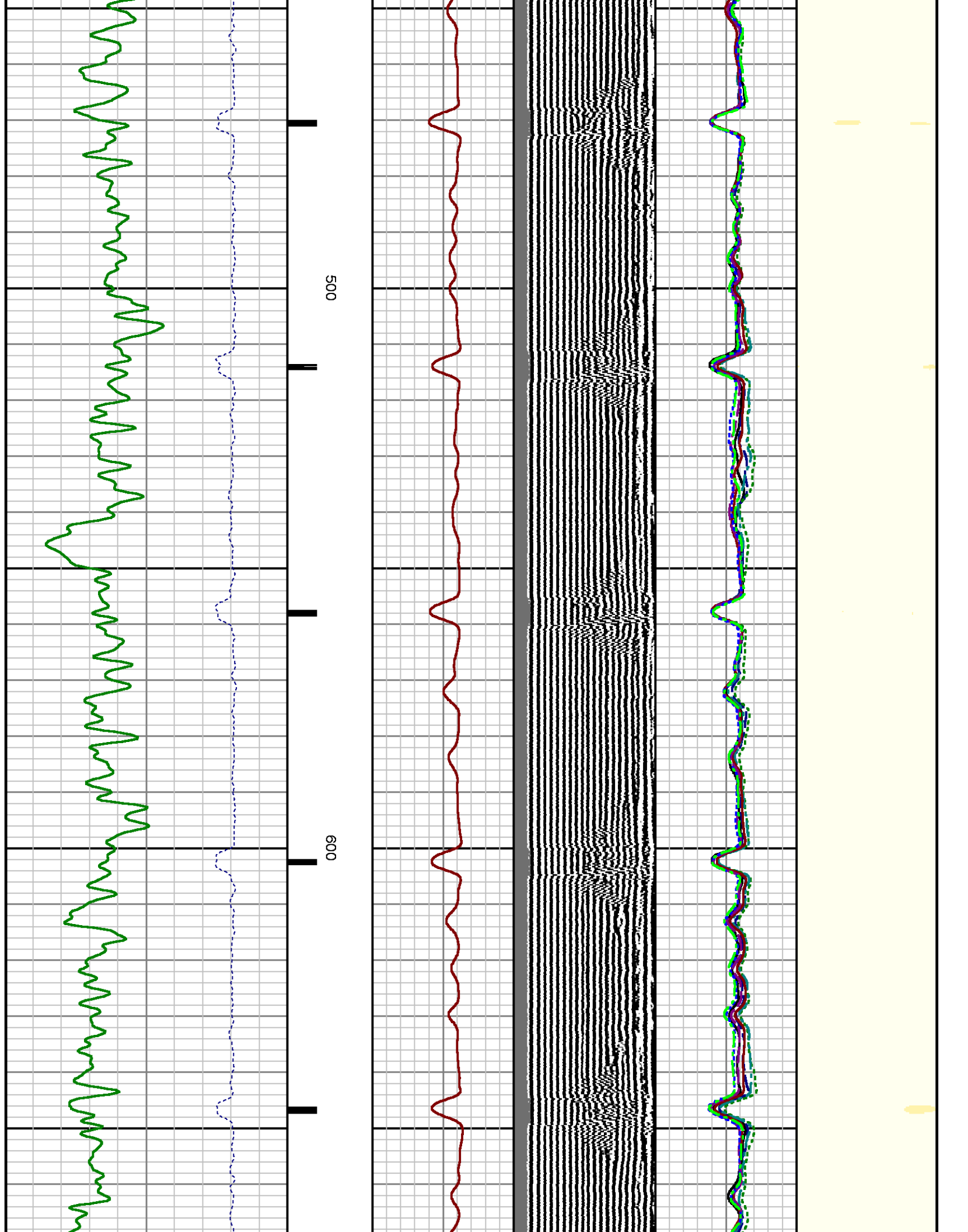
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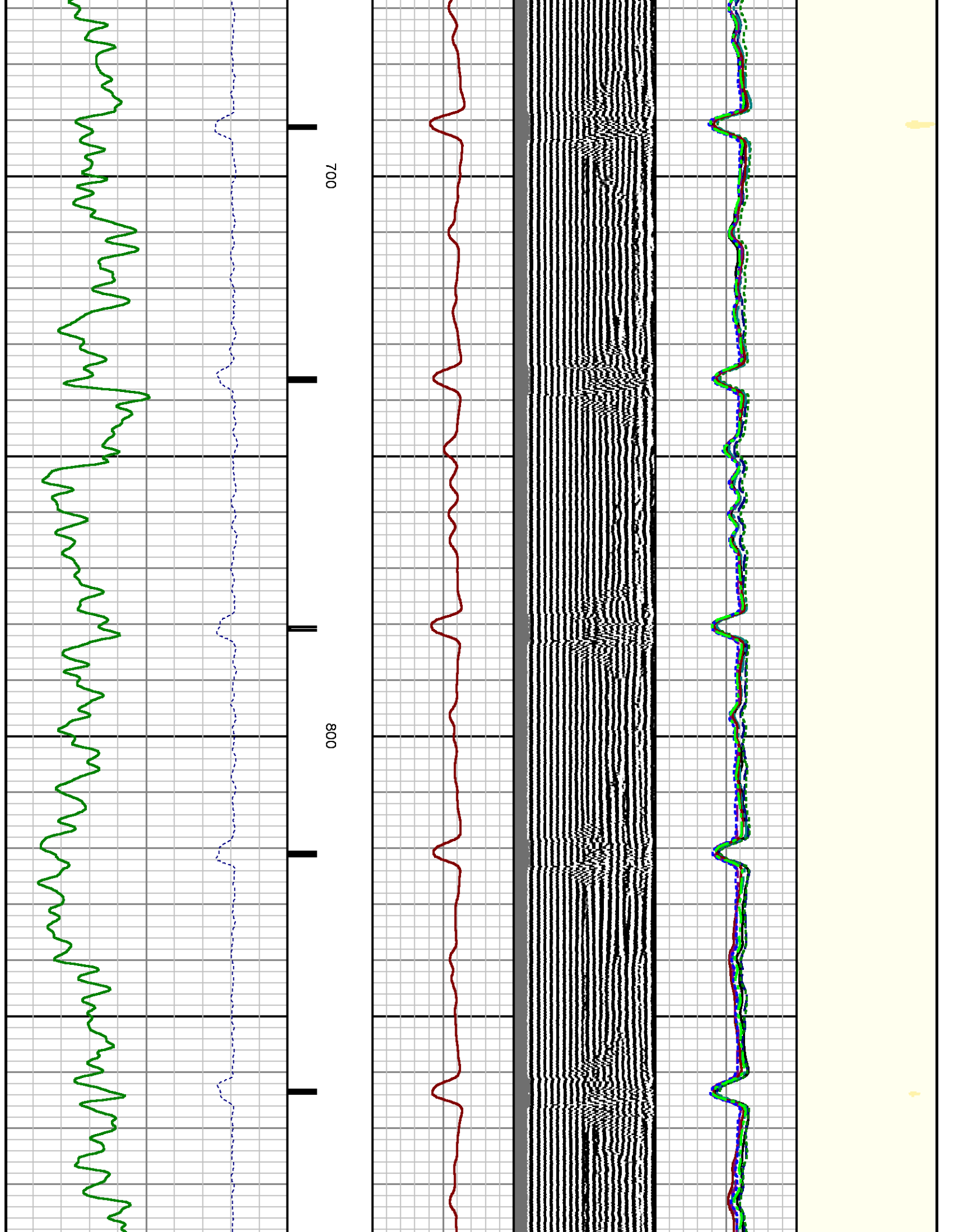
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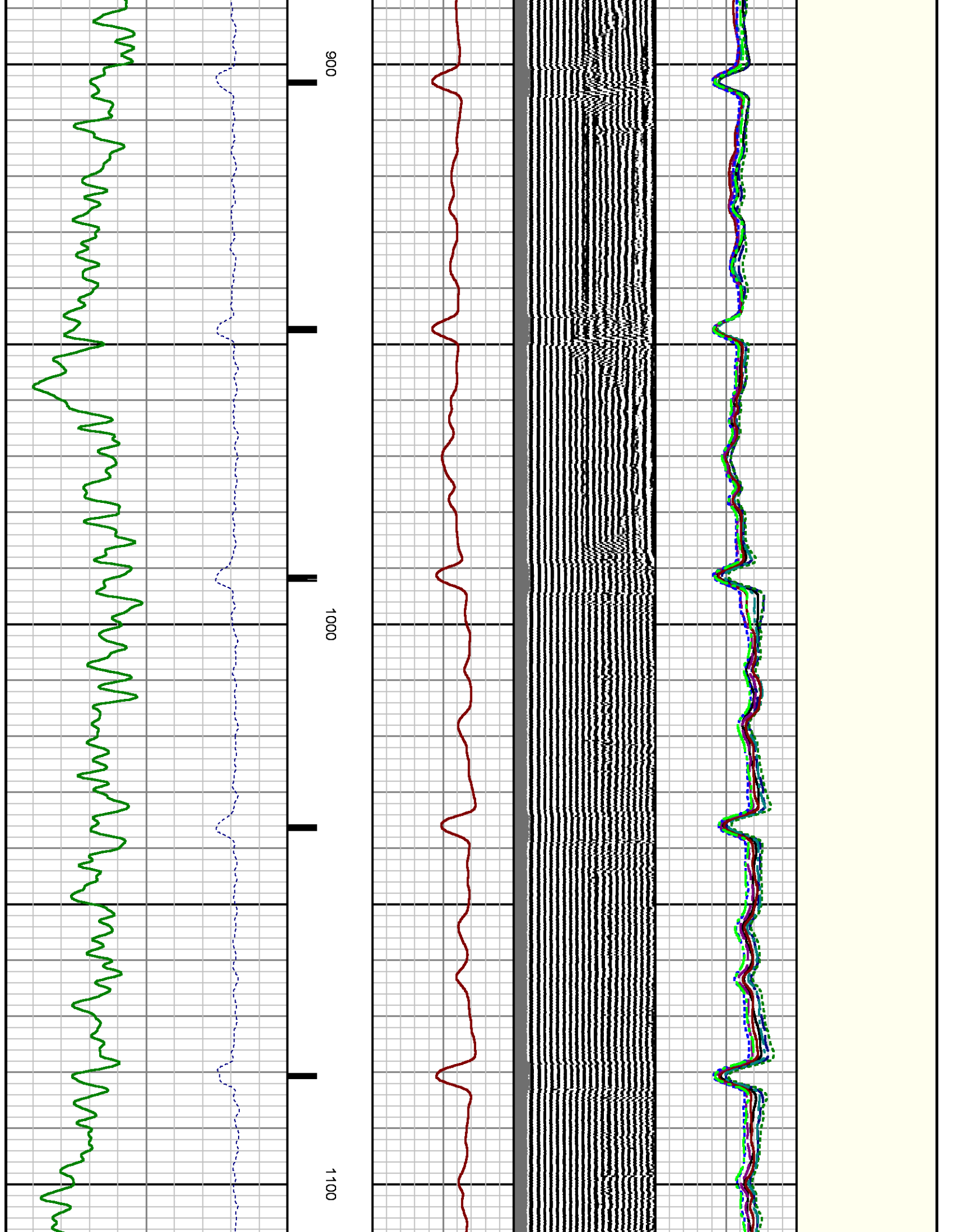


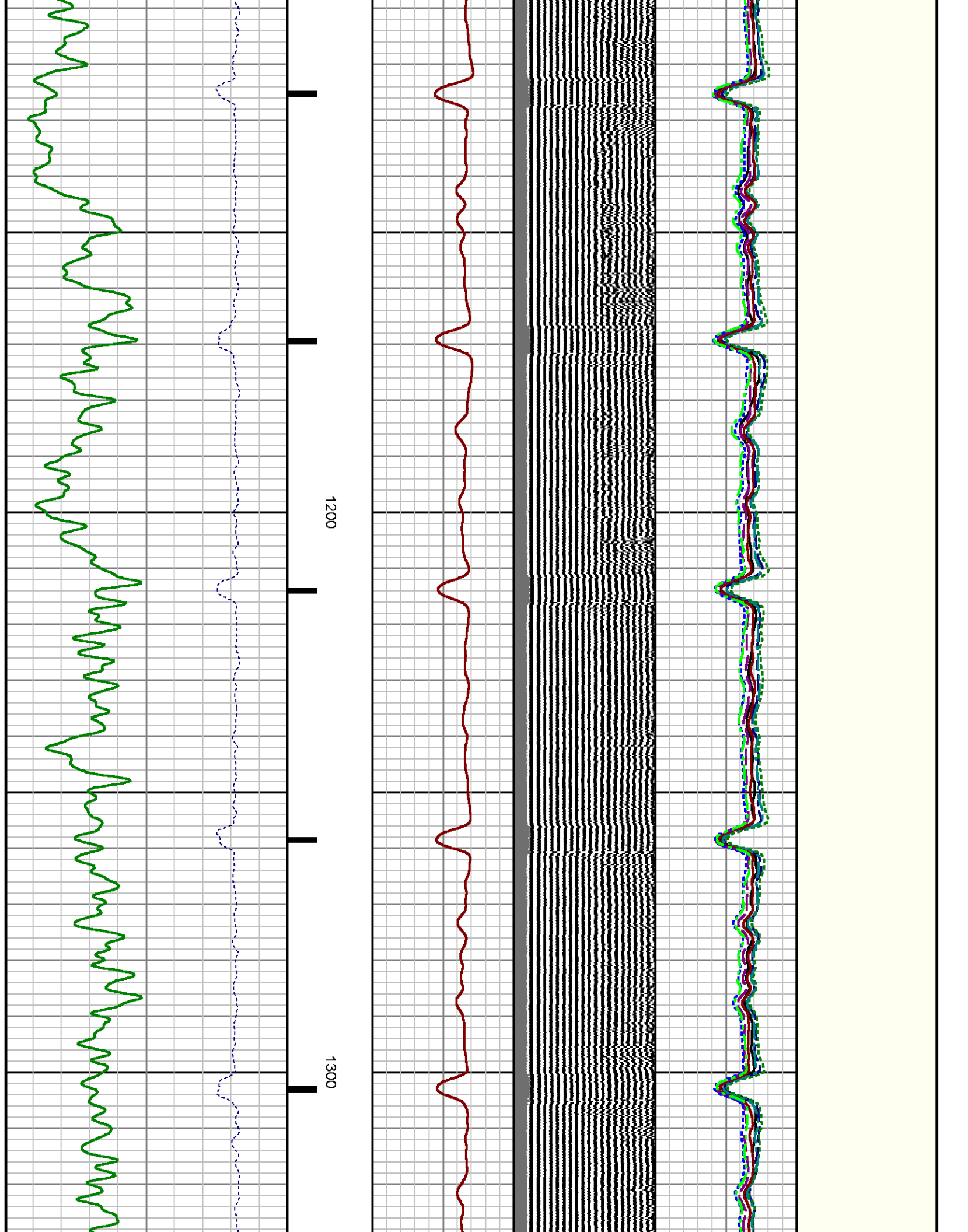


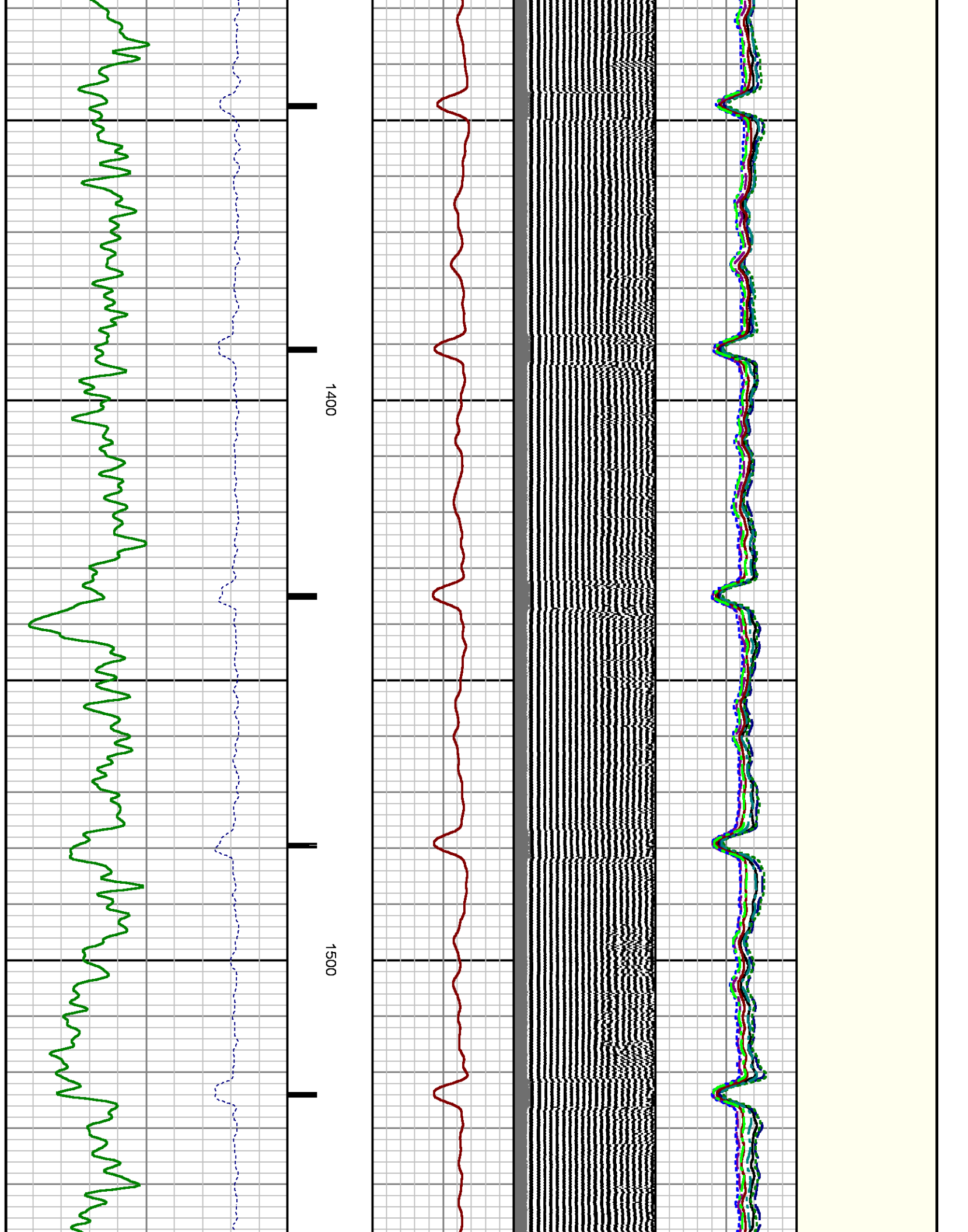


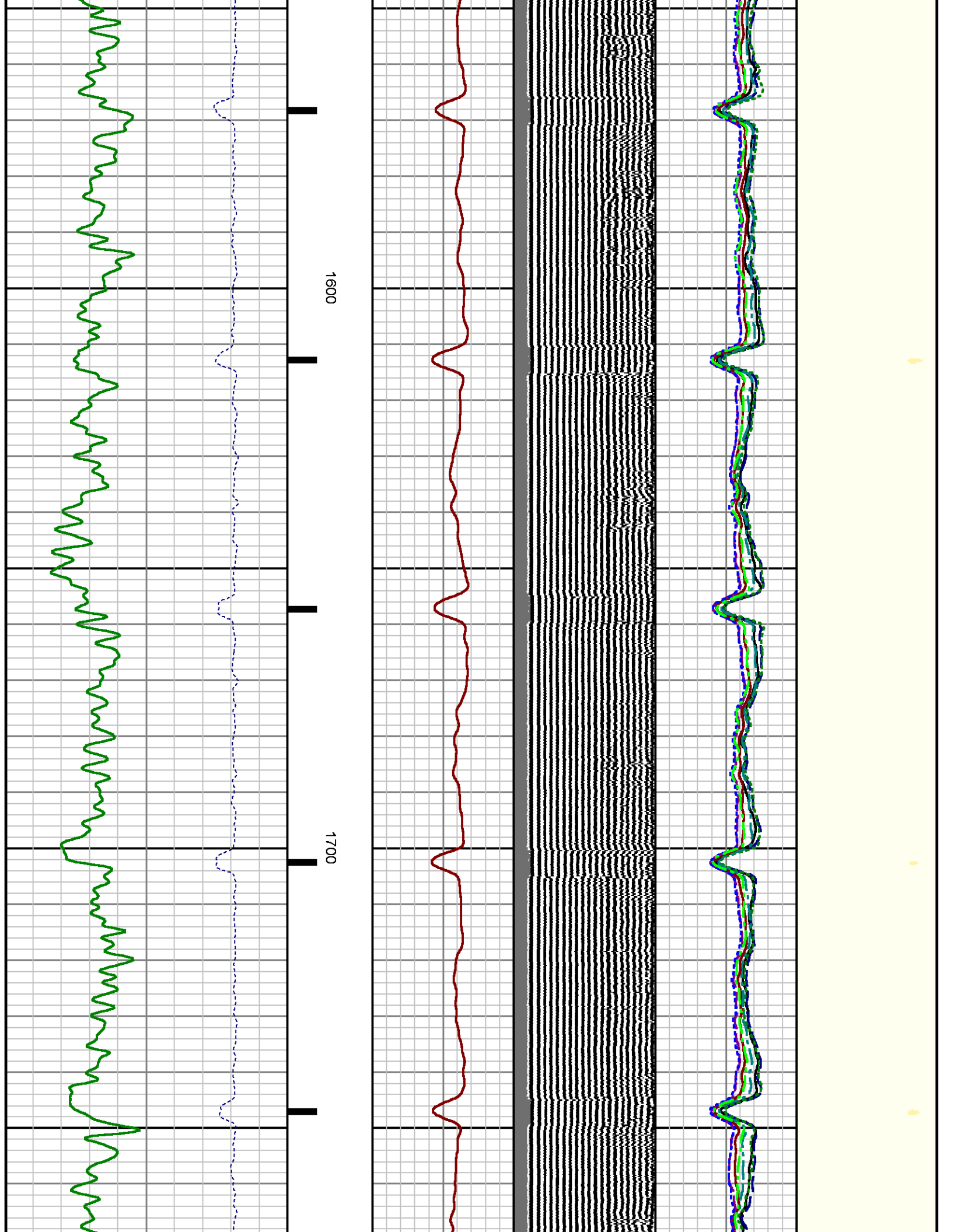


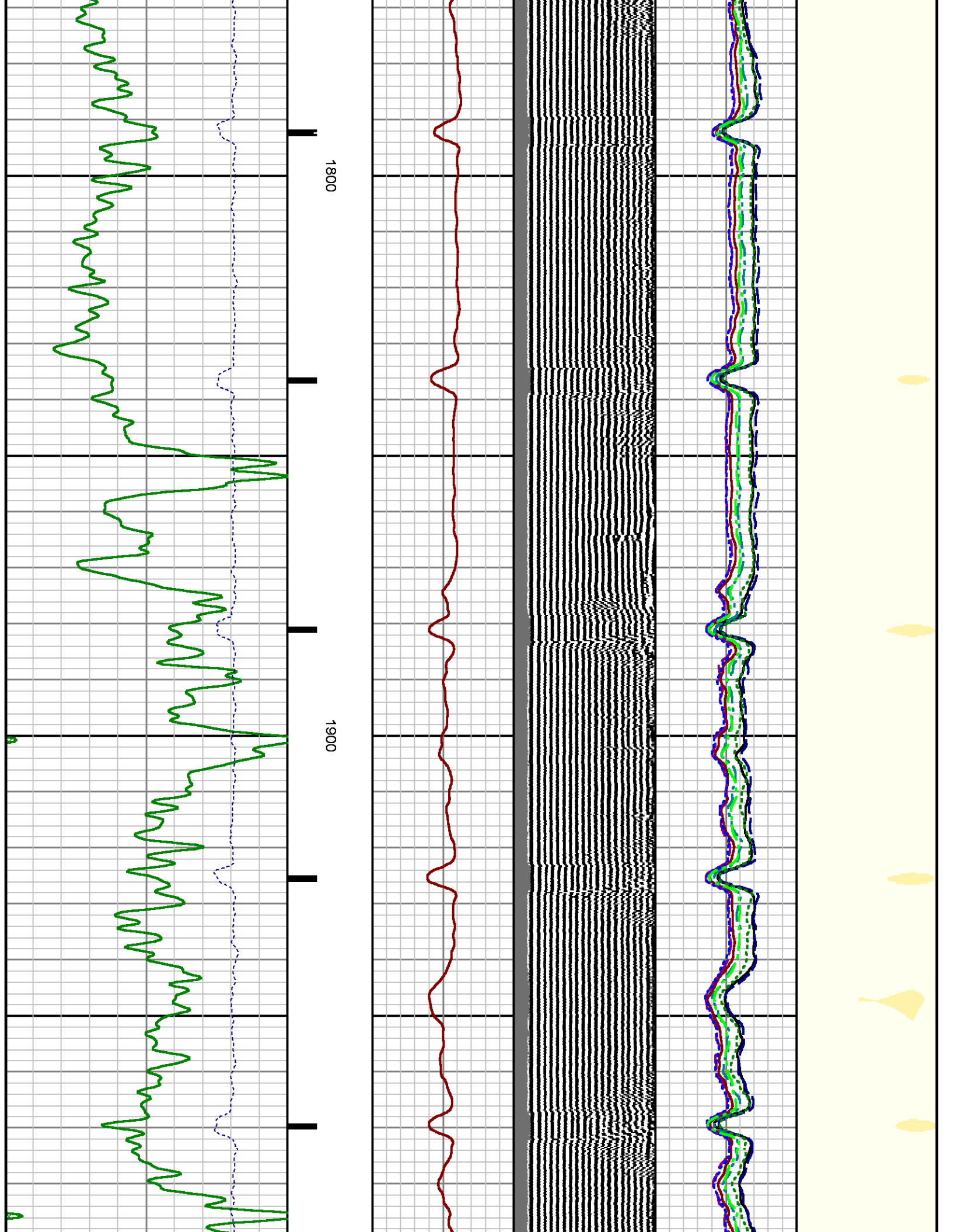




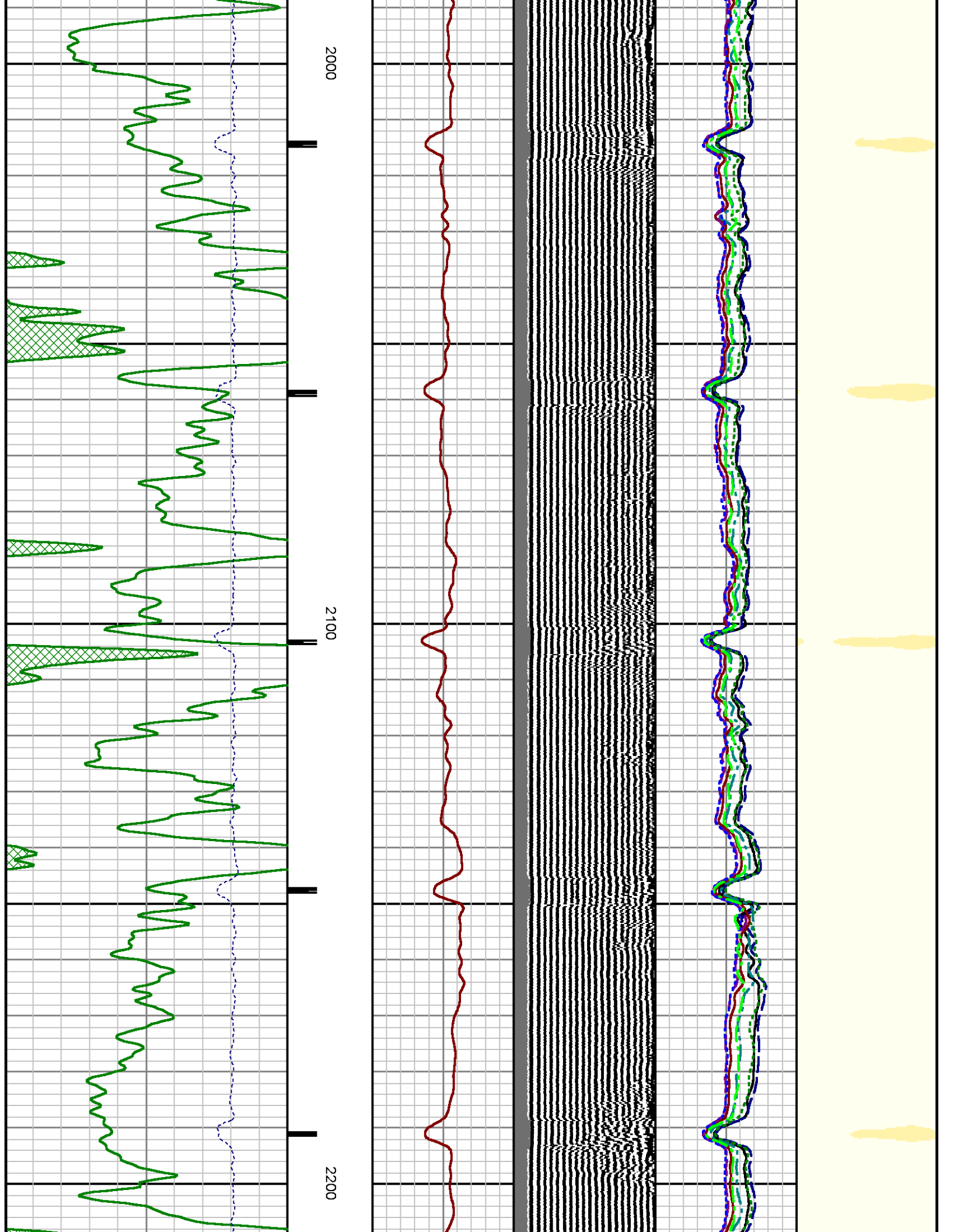


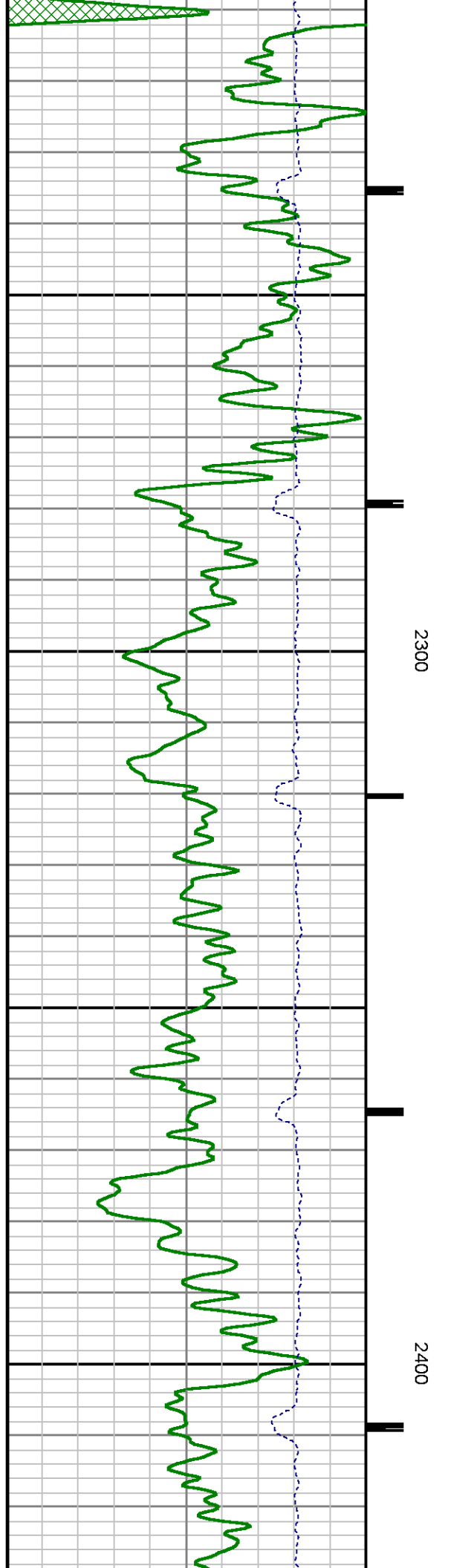
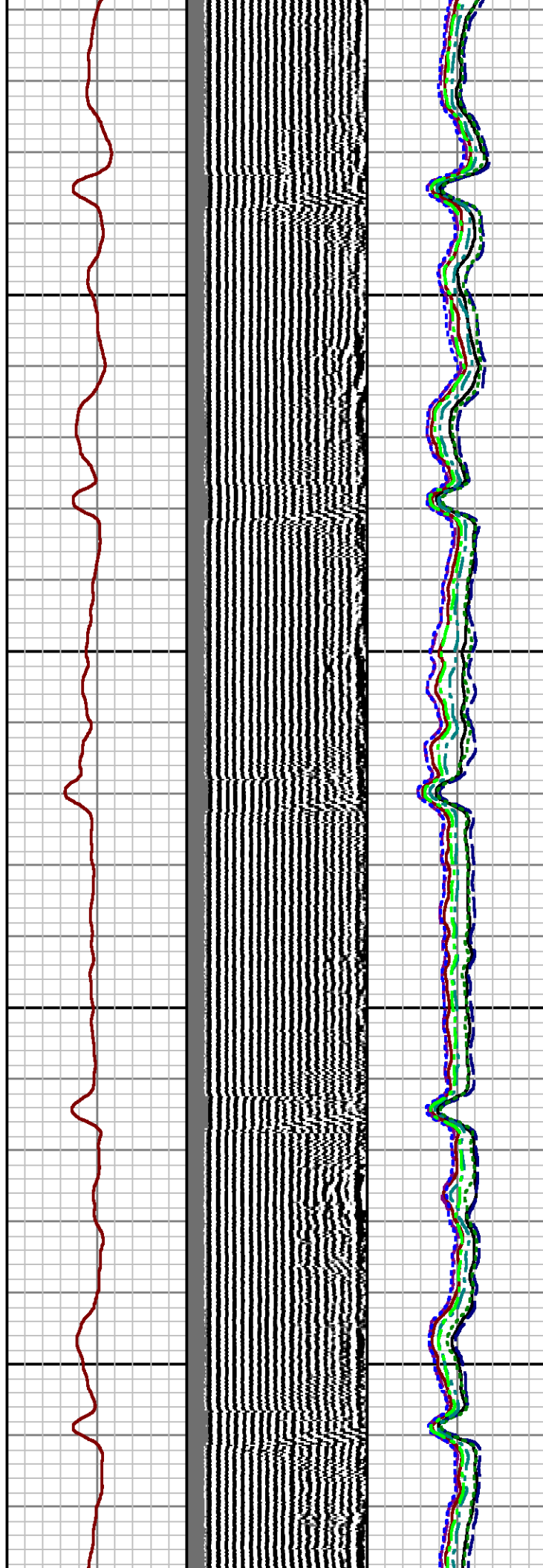
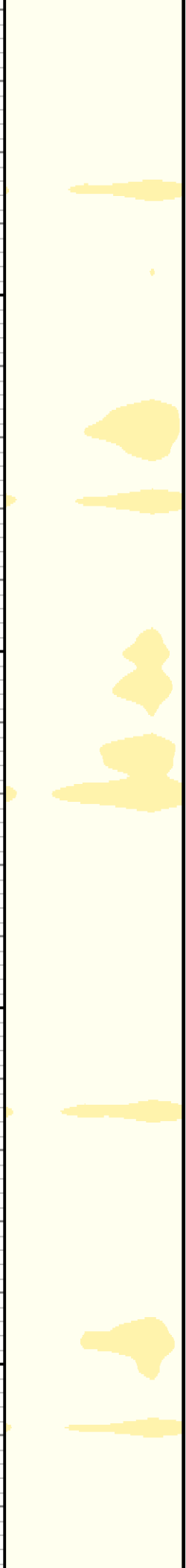


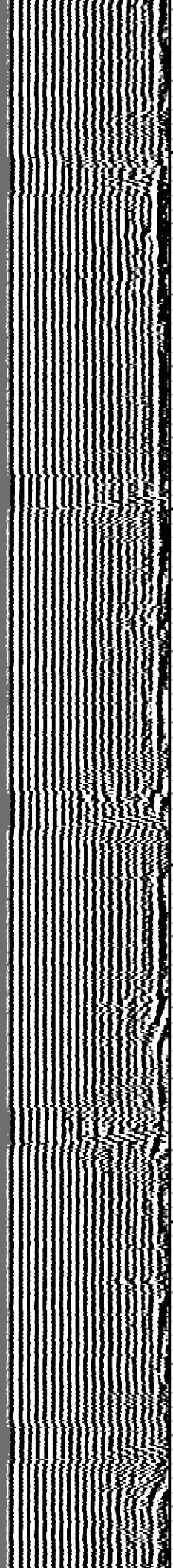
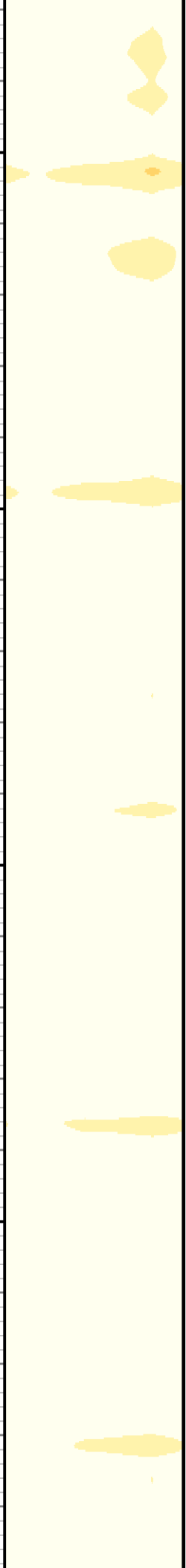






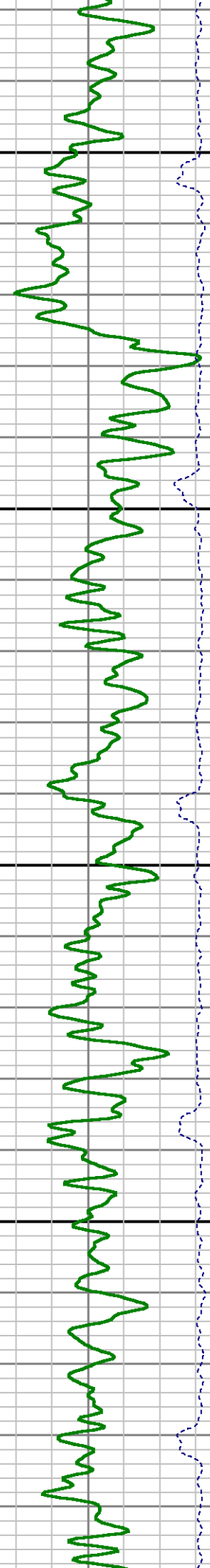


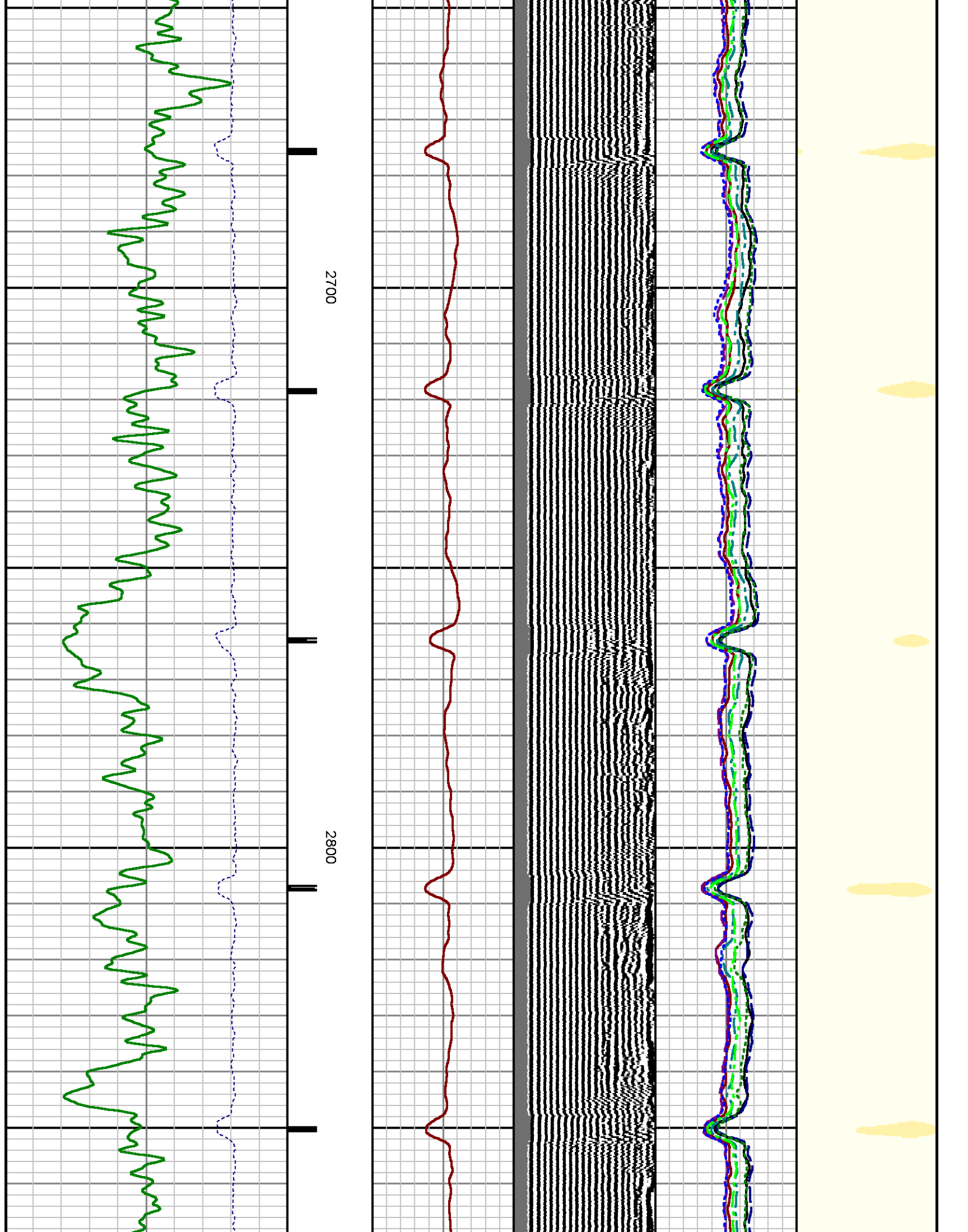


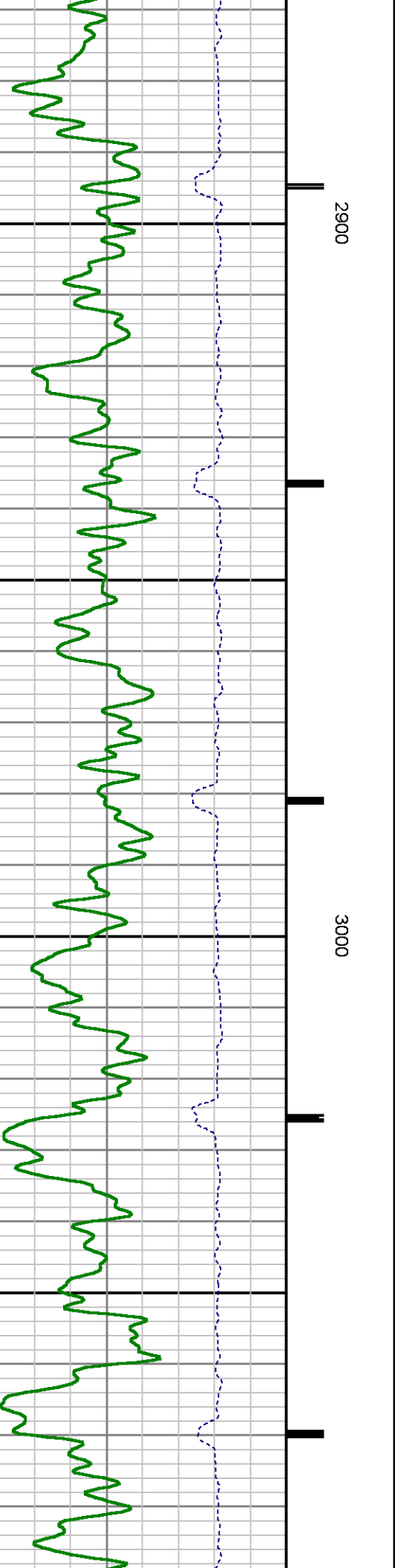
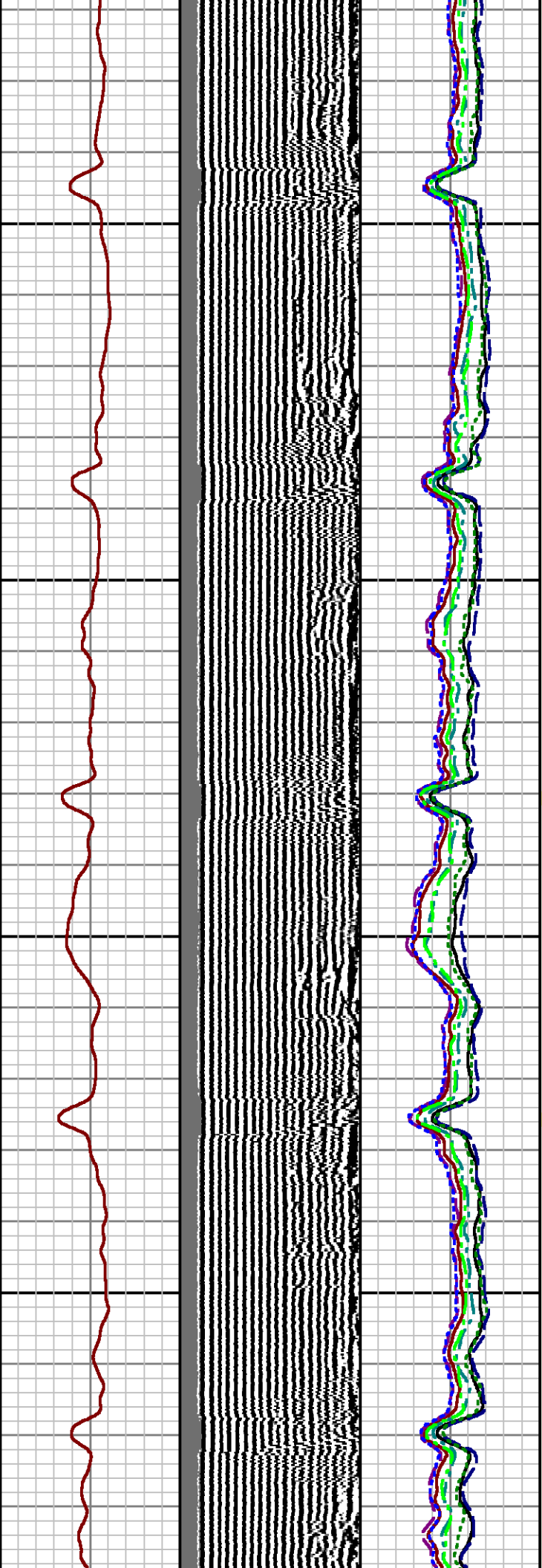
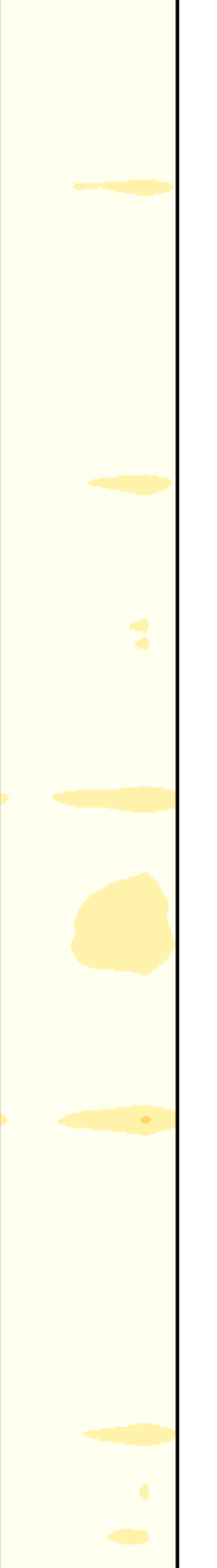


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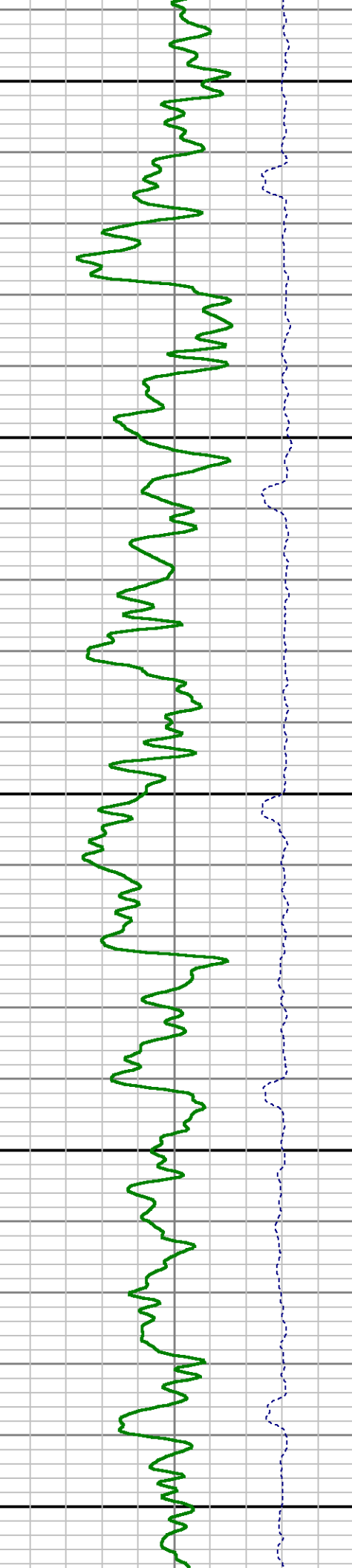
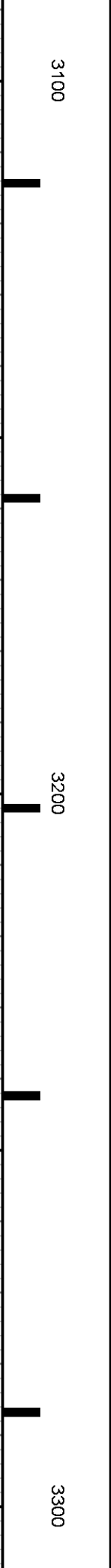
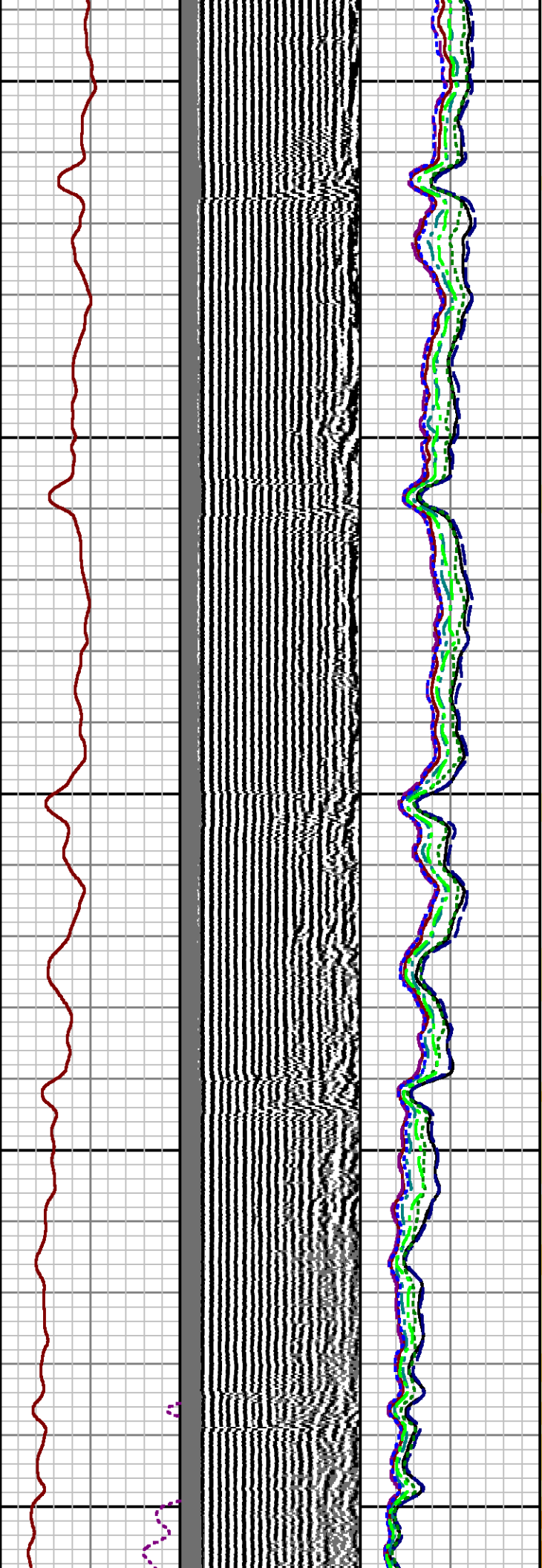
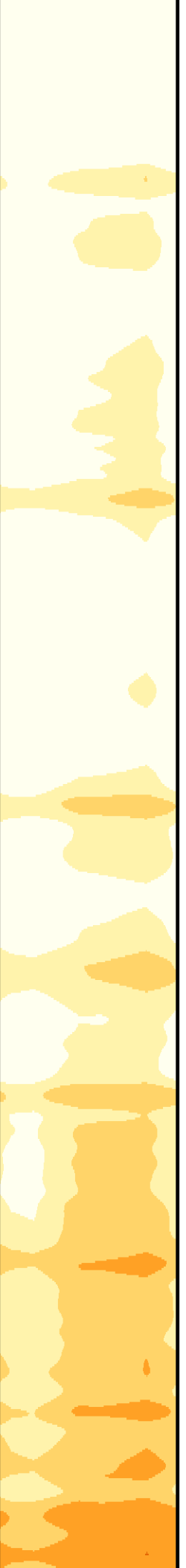
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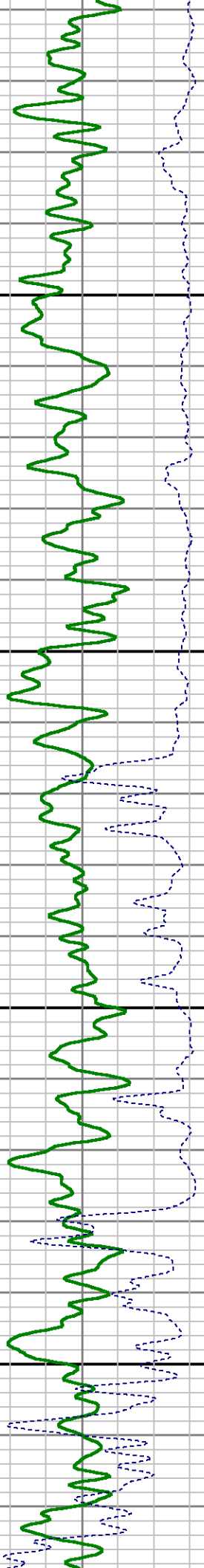
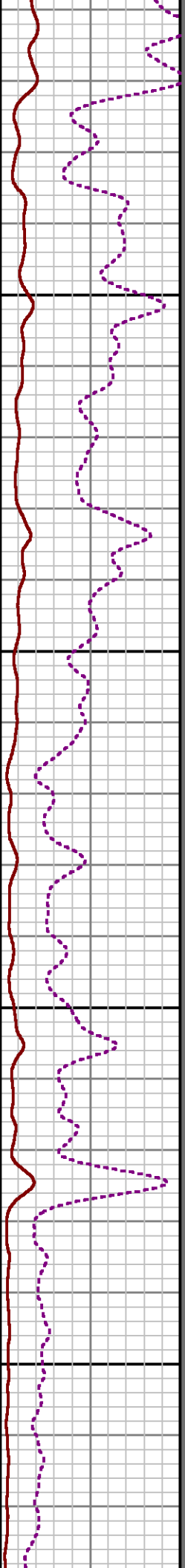
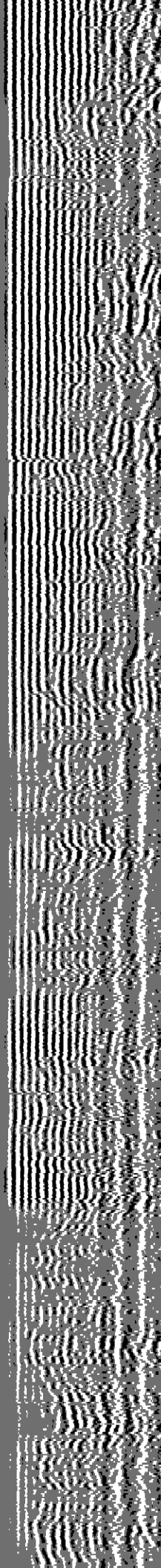
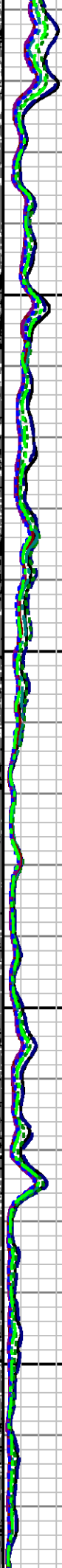
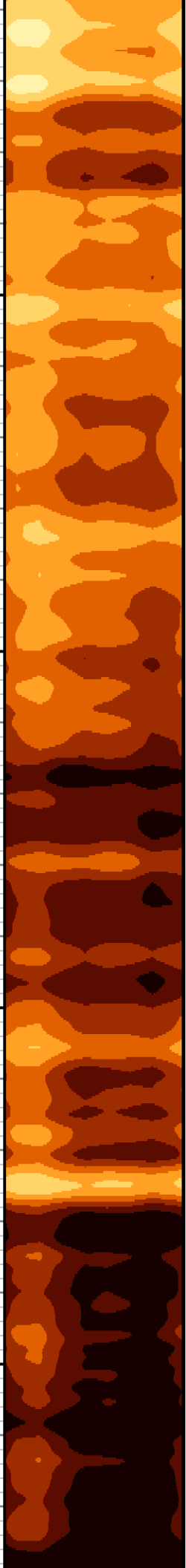


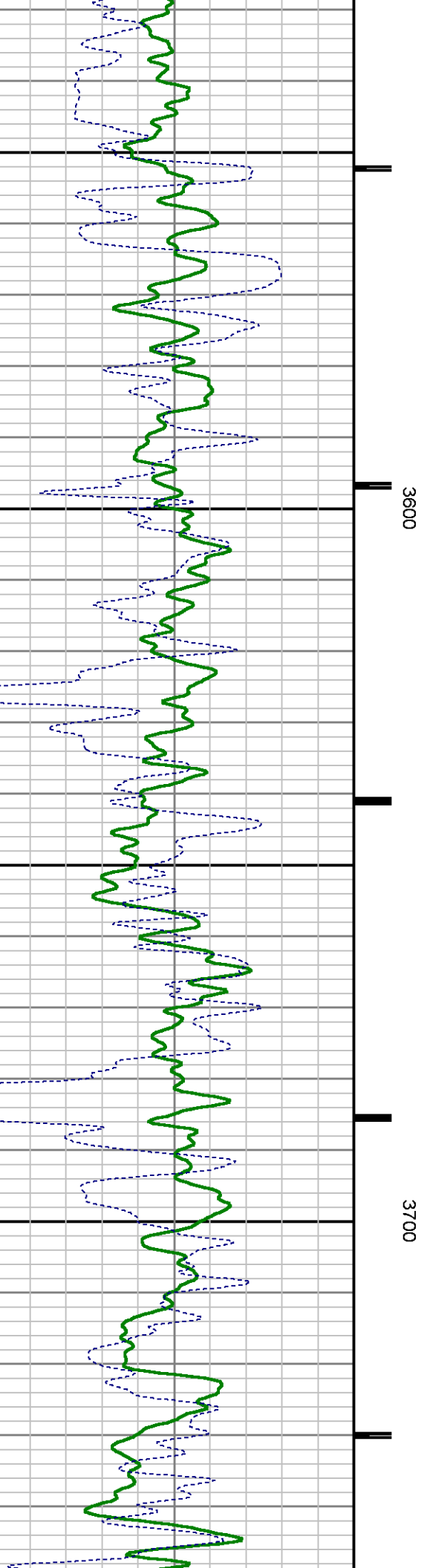
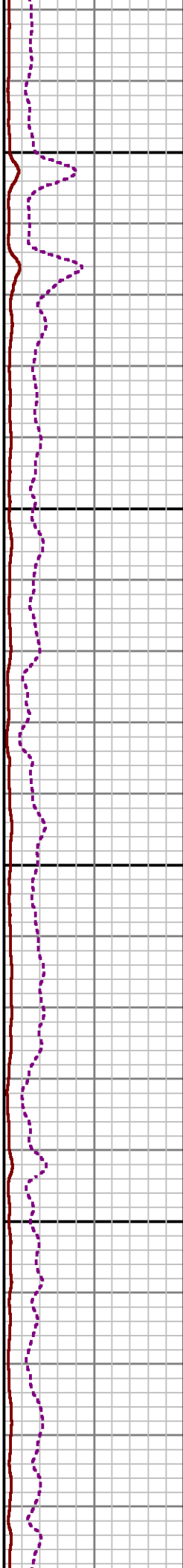
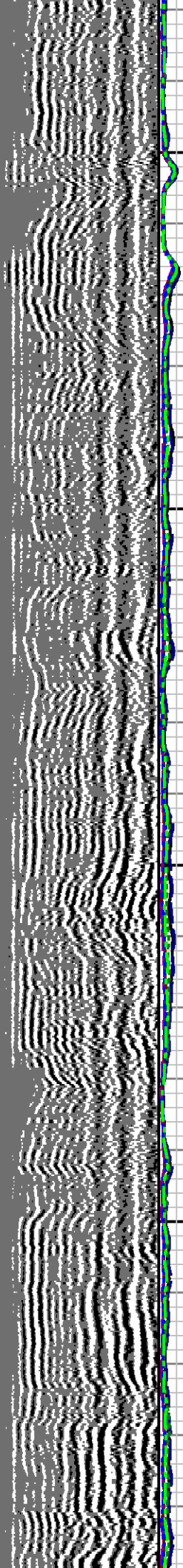


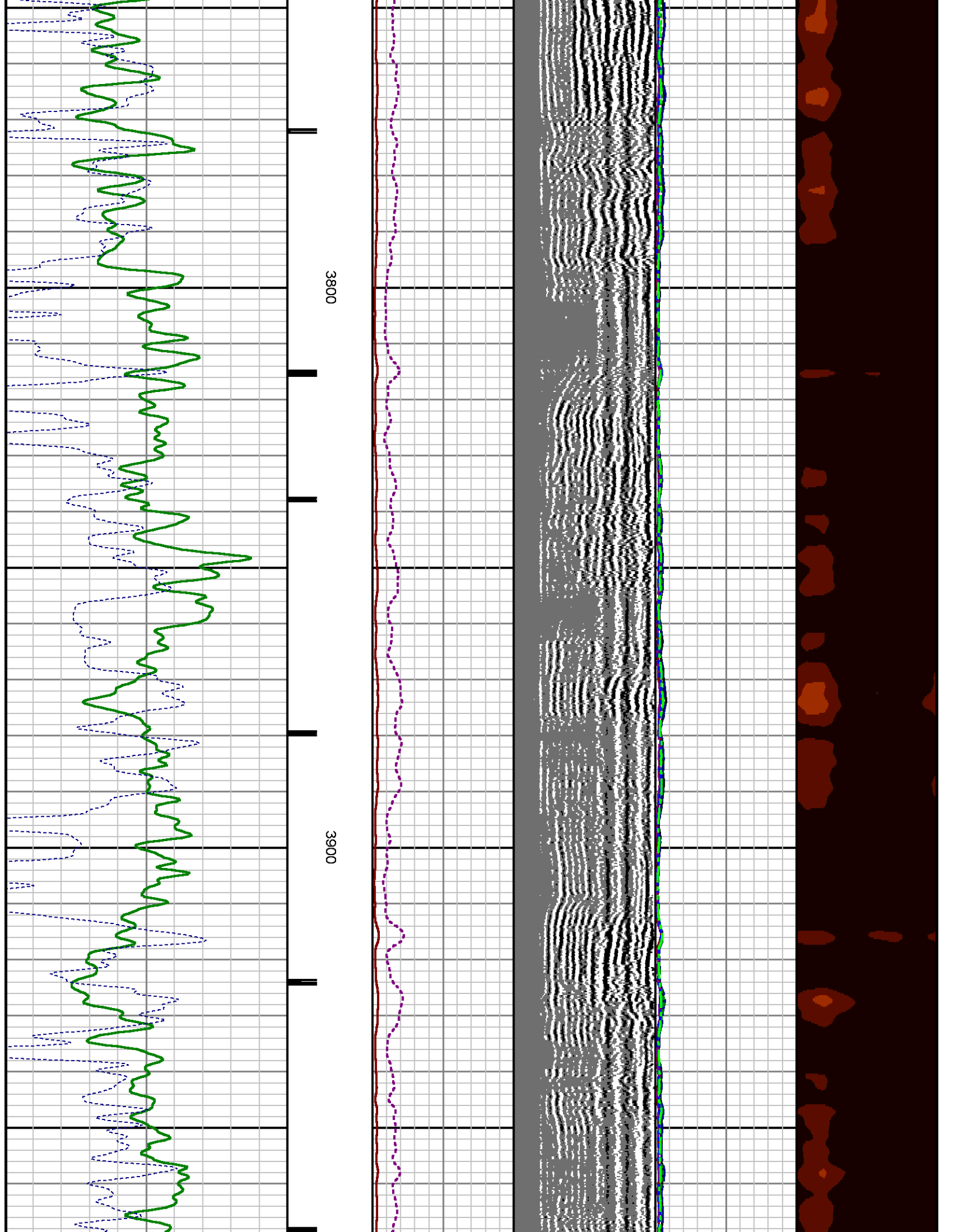


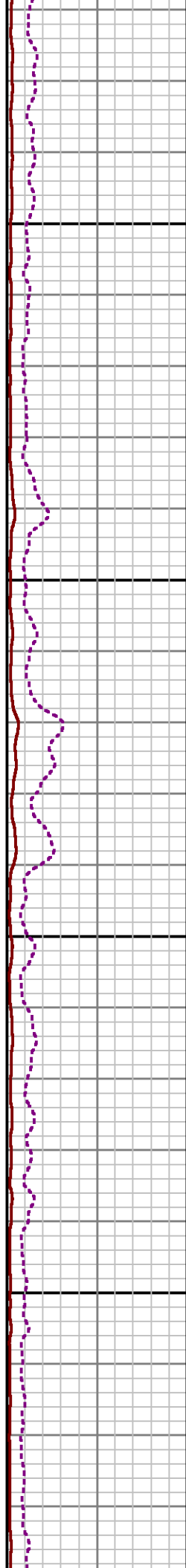
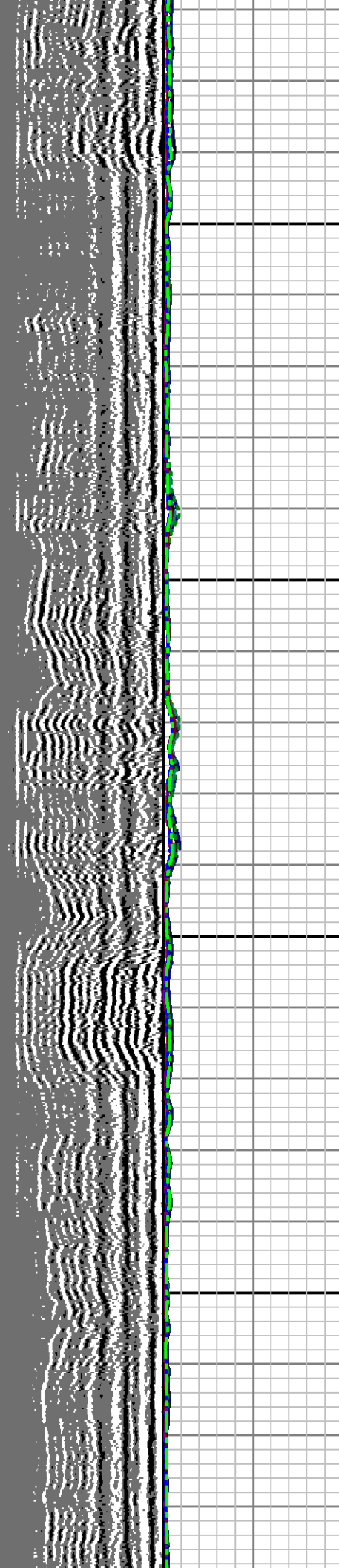
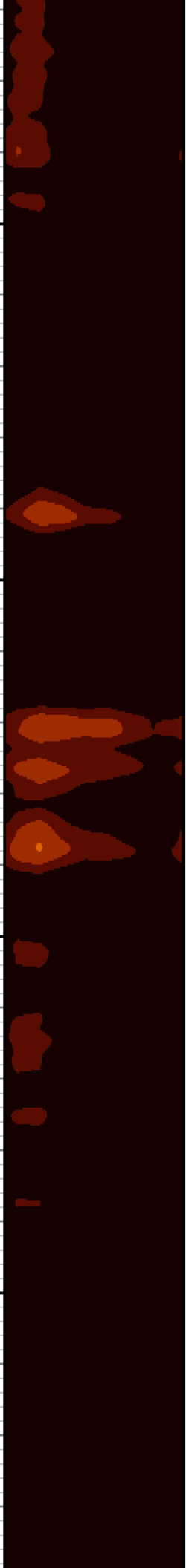






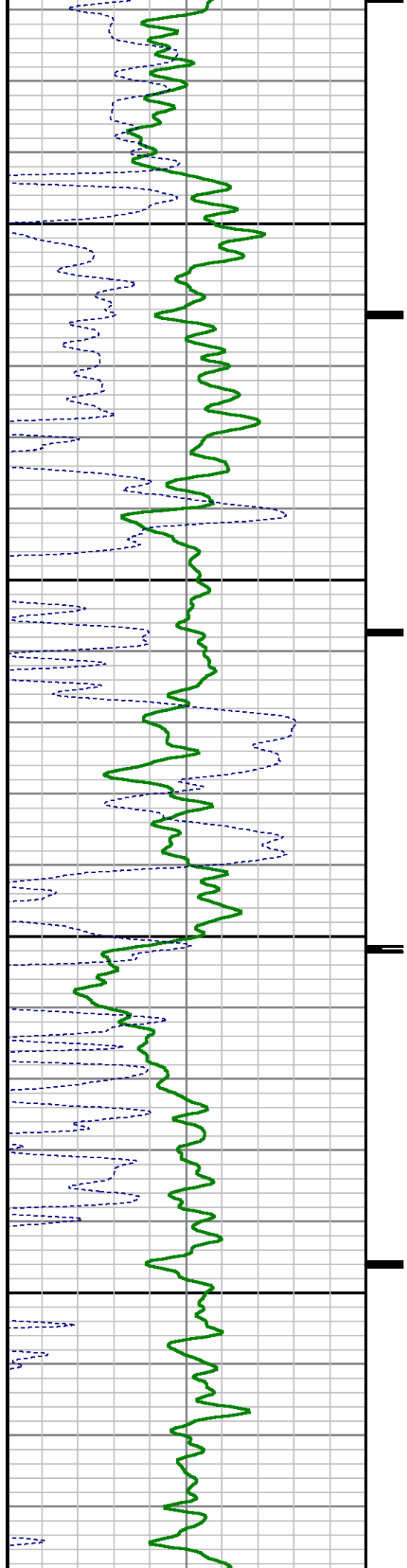




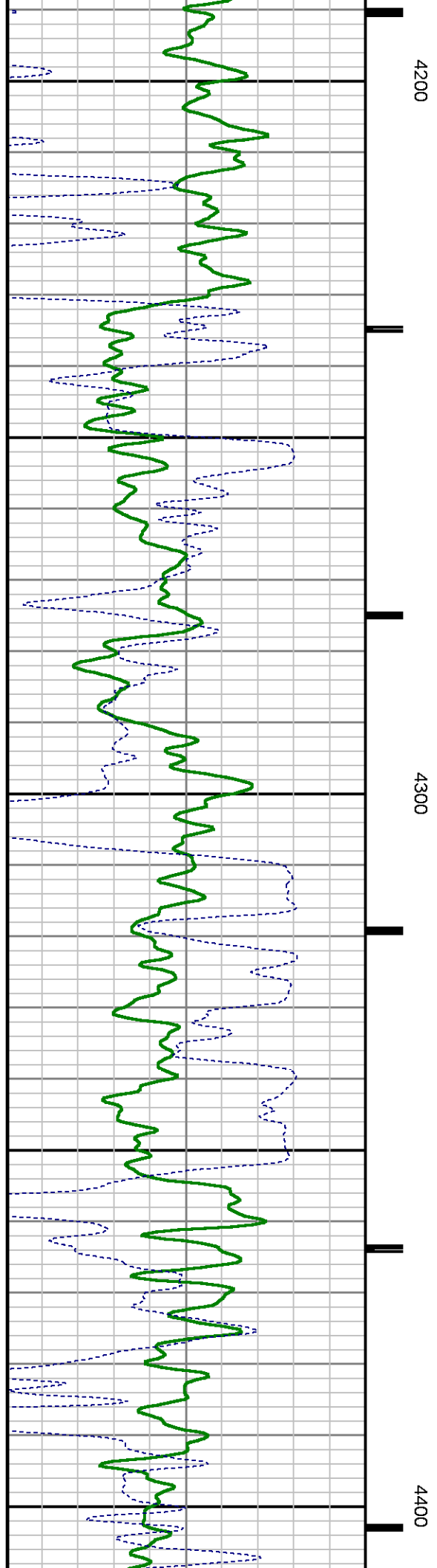
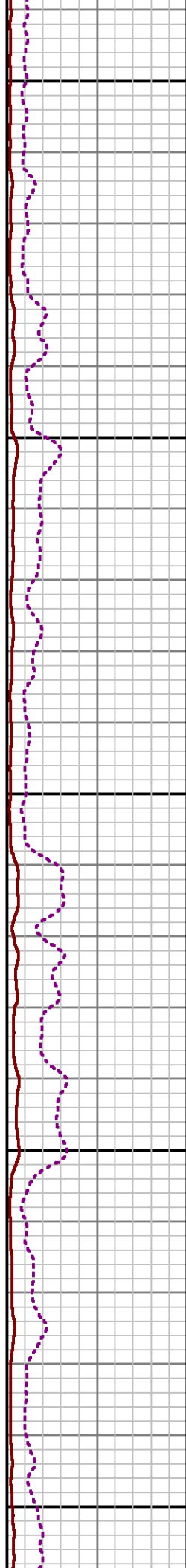
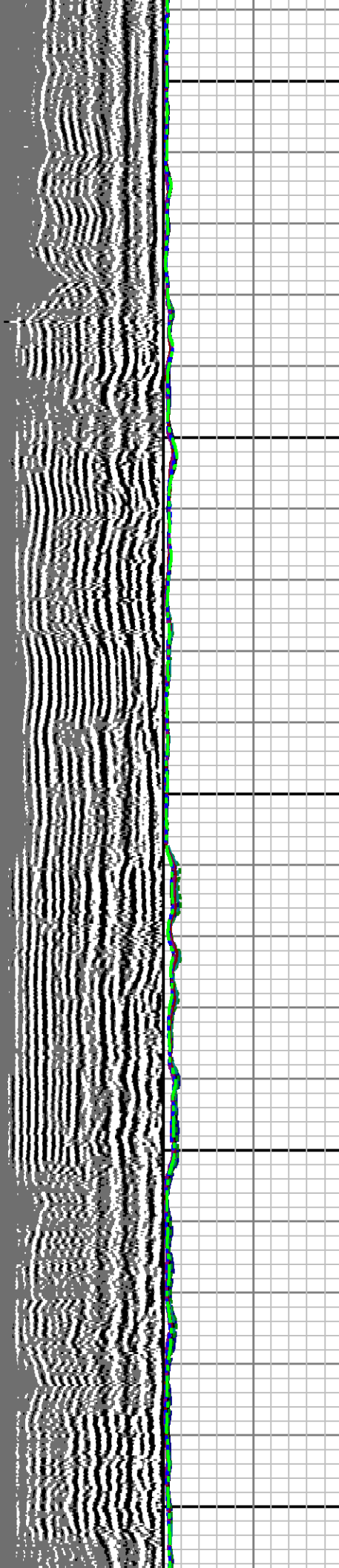
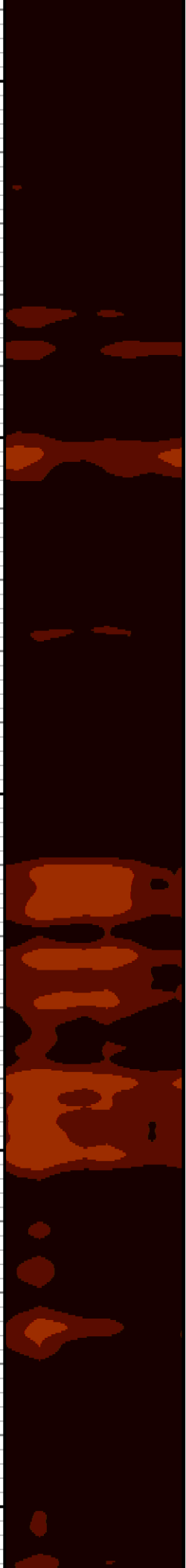


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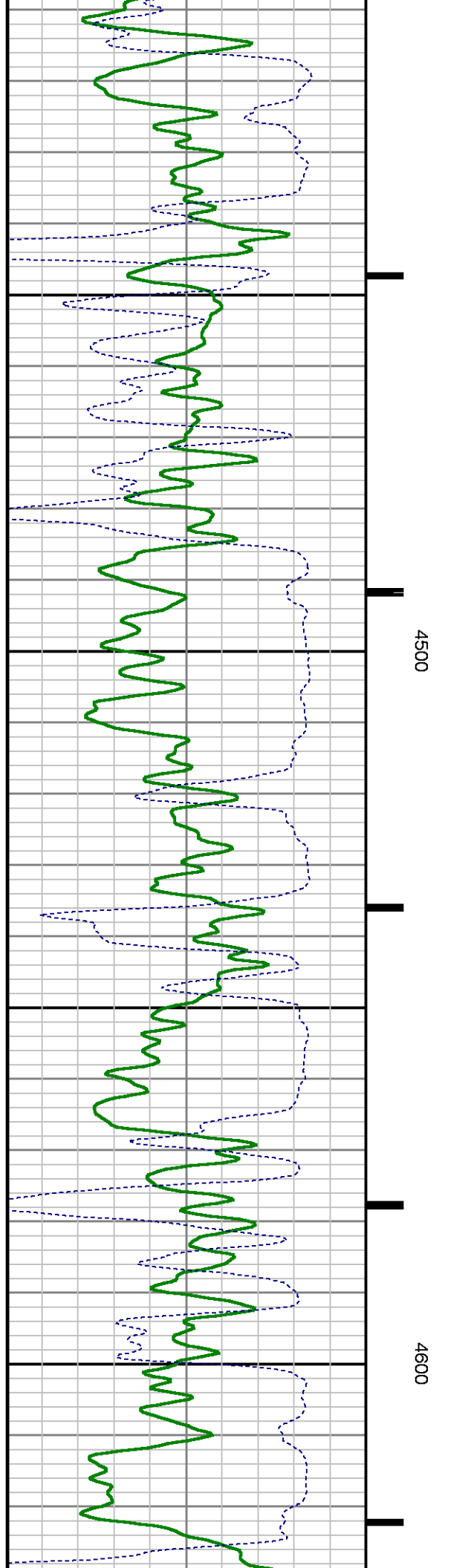
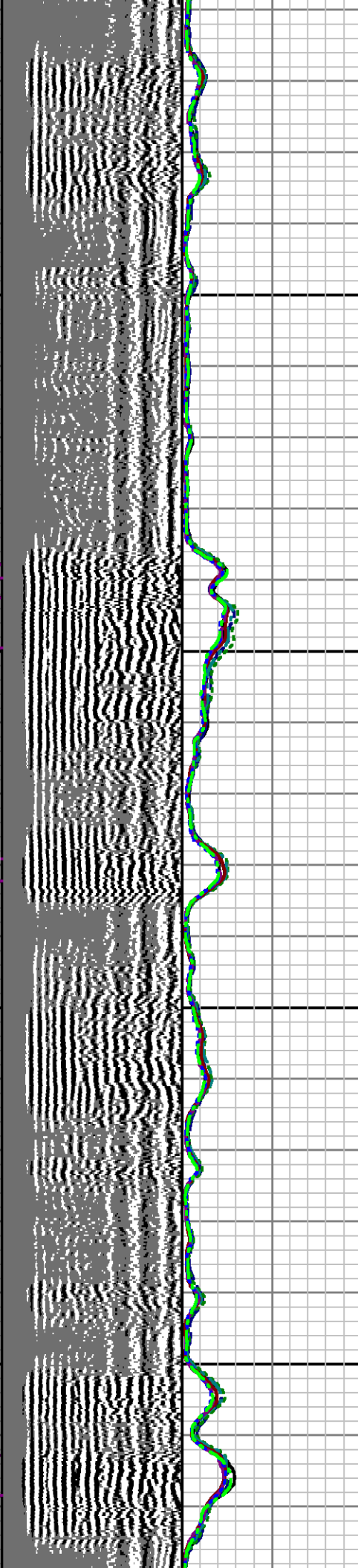
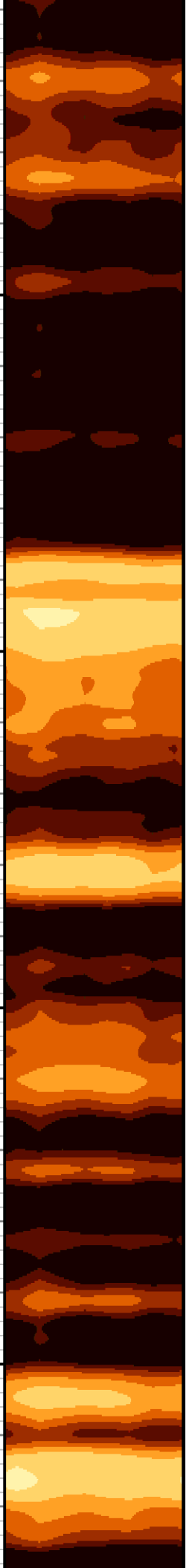
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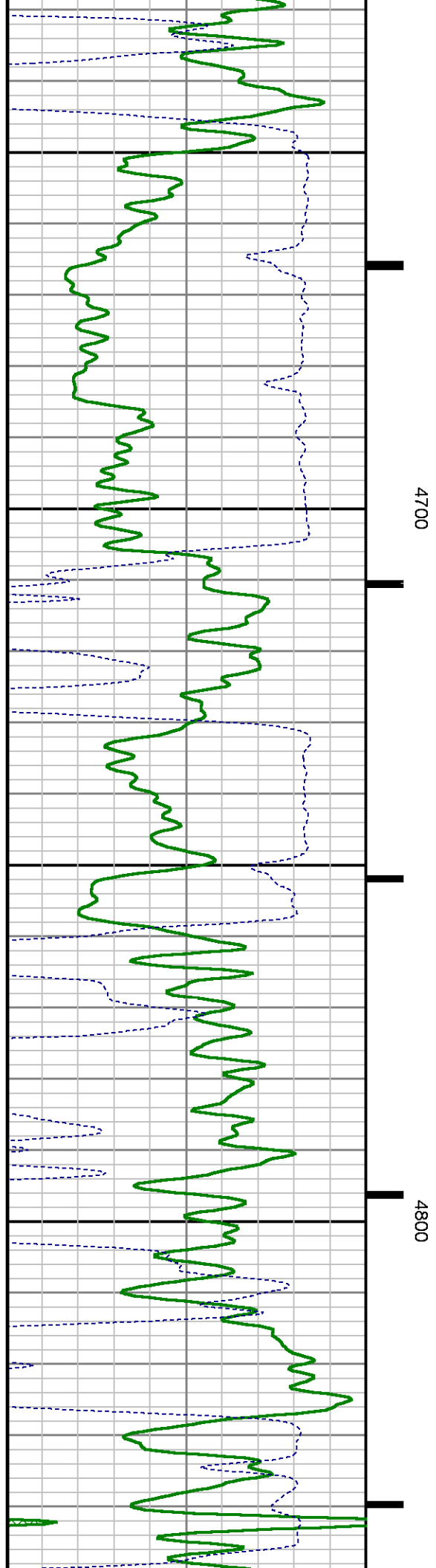
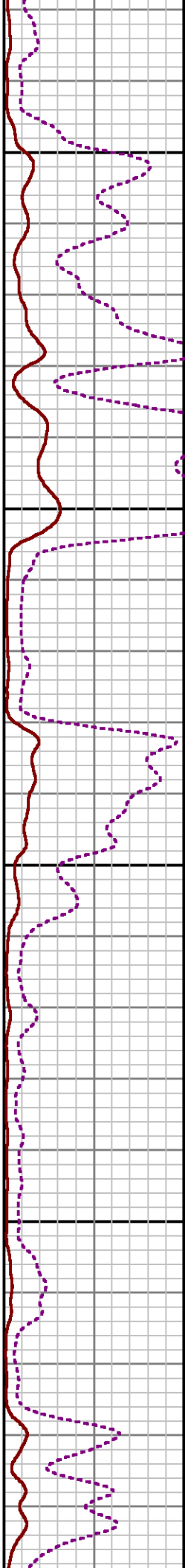
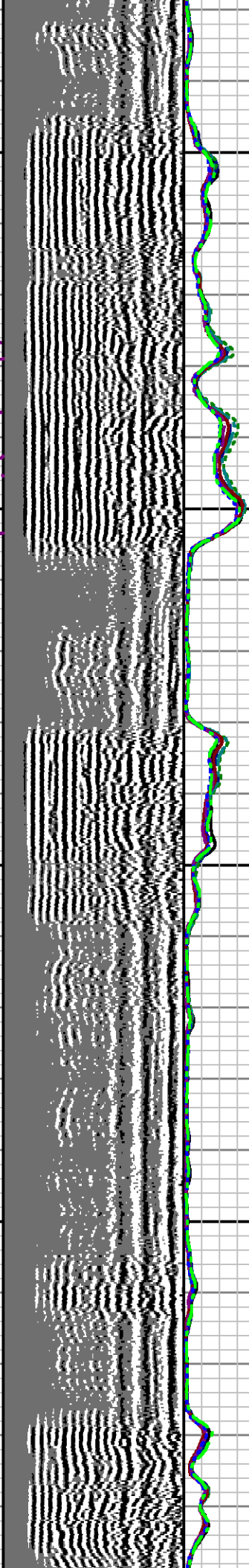


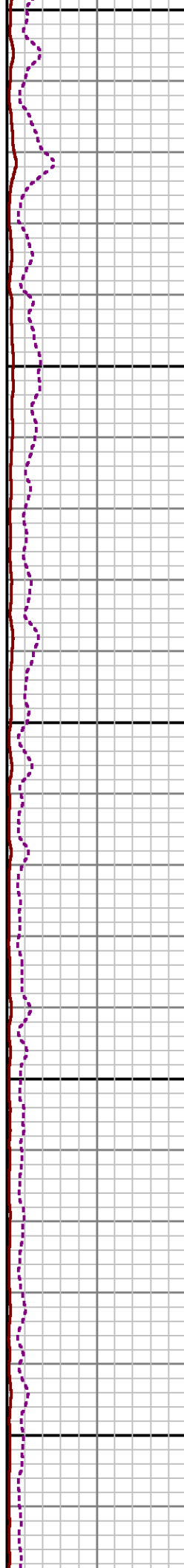
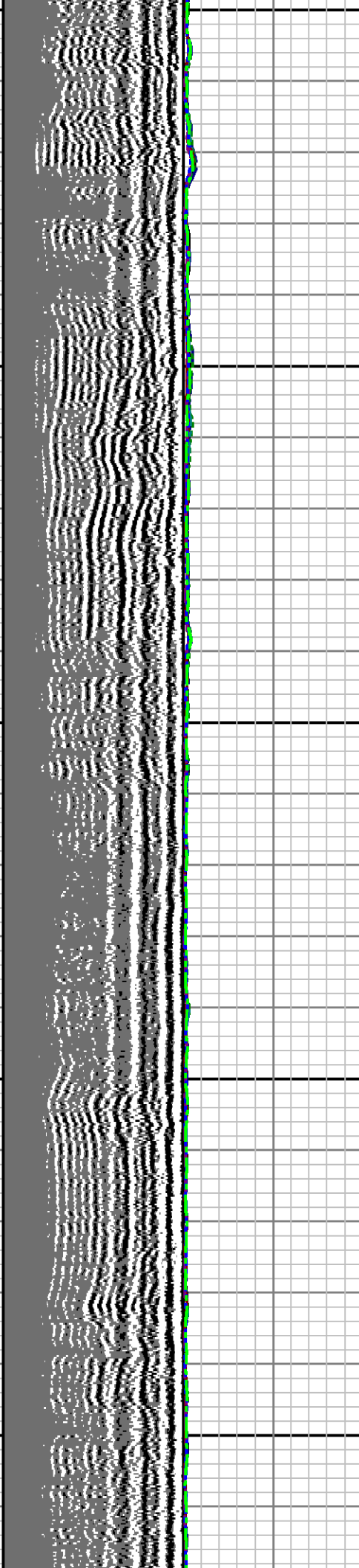
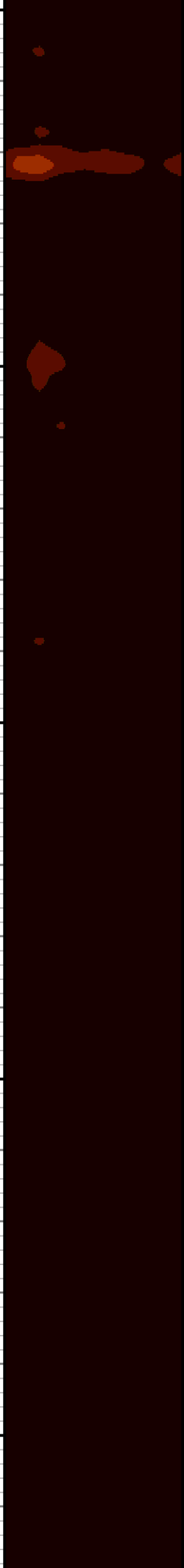






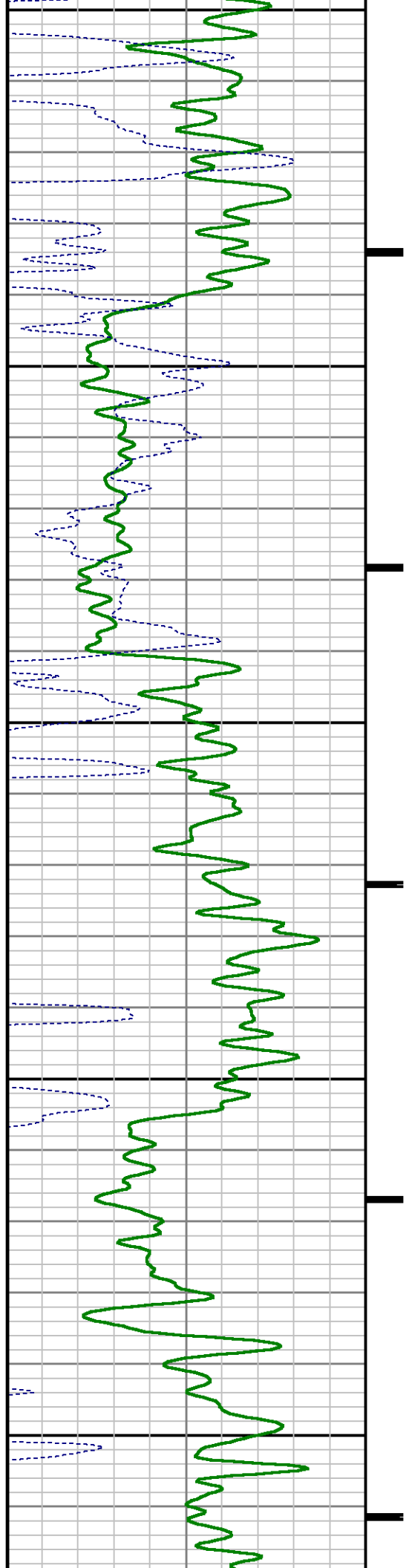


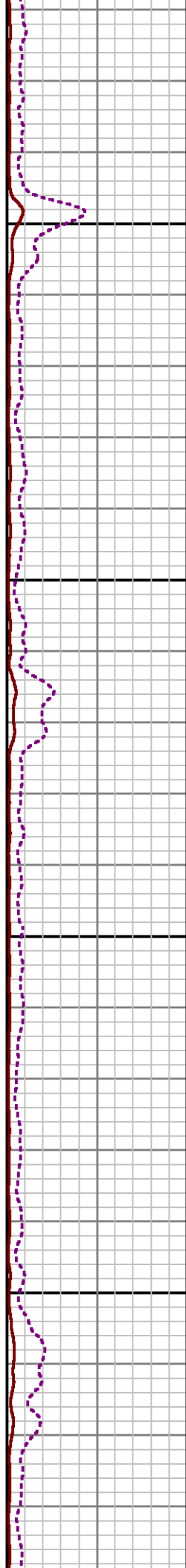
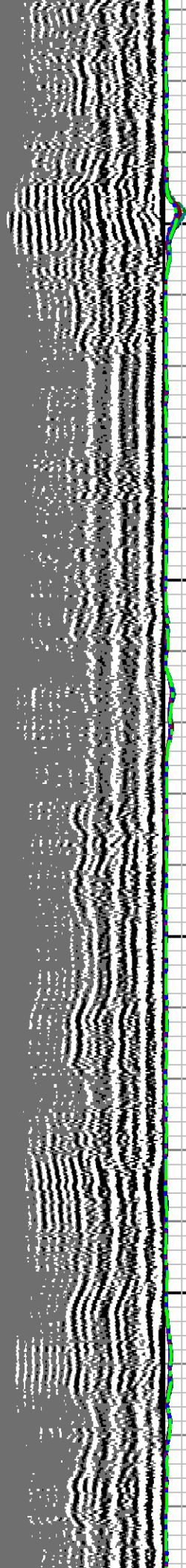
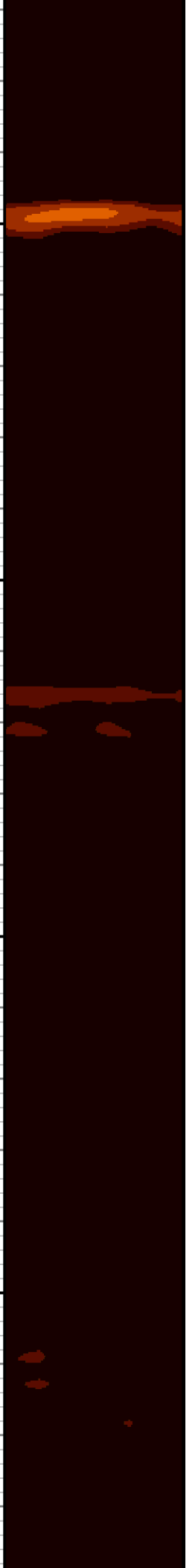




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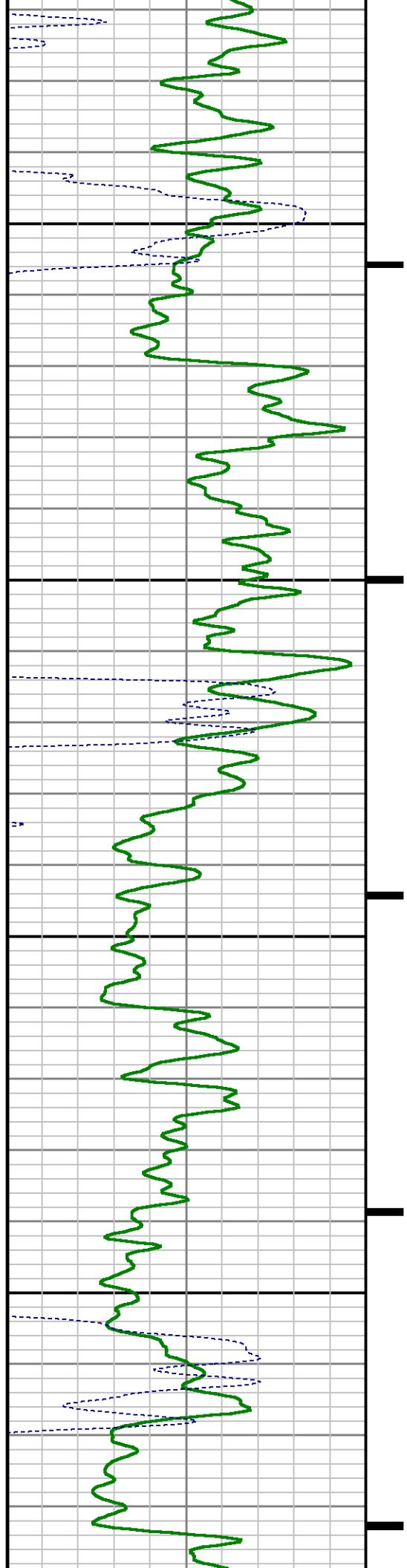
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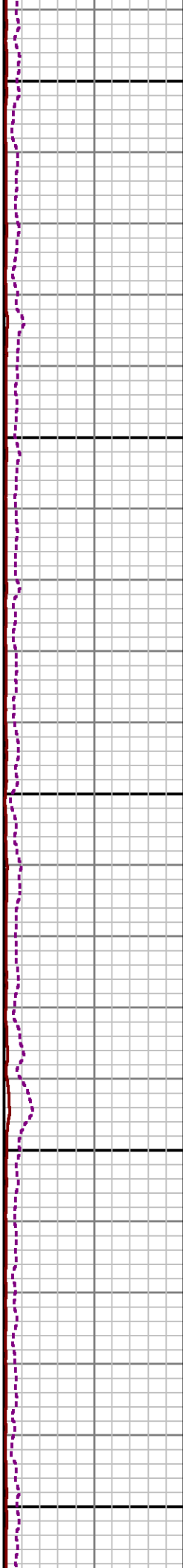
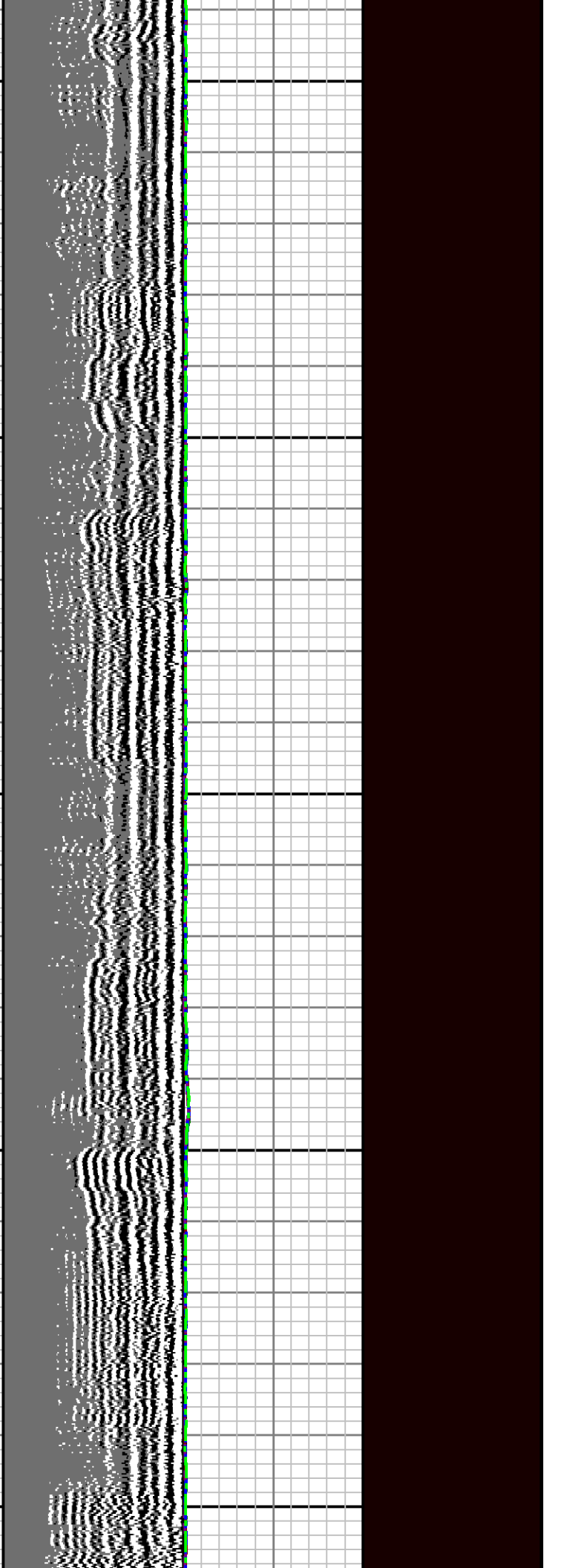




5100

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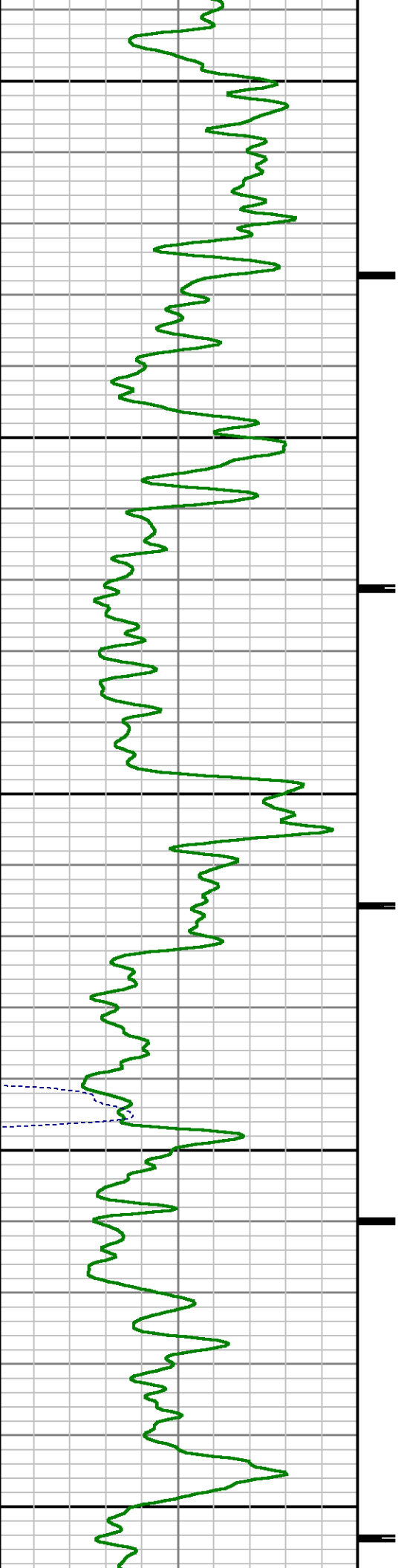


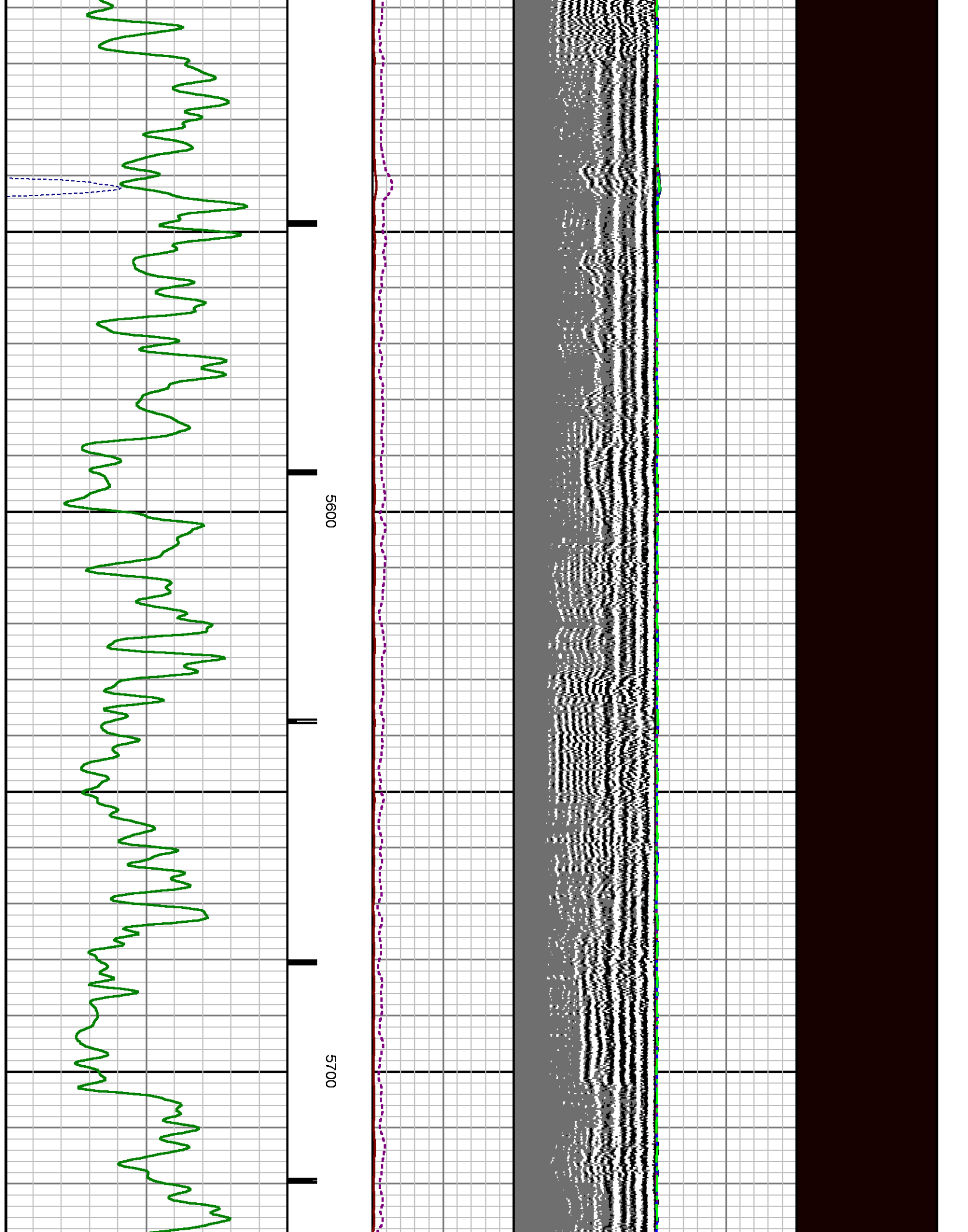


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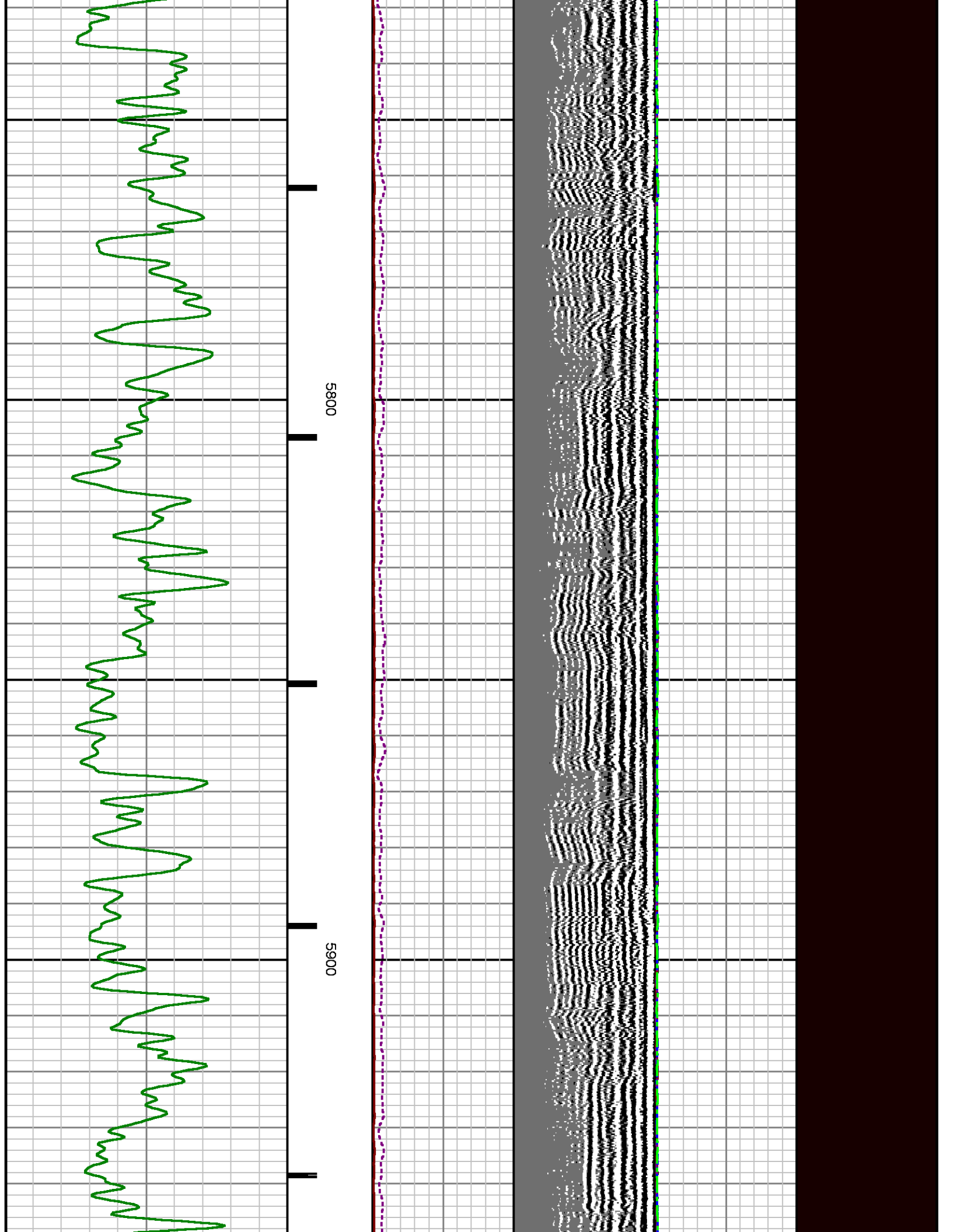
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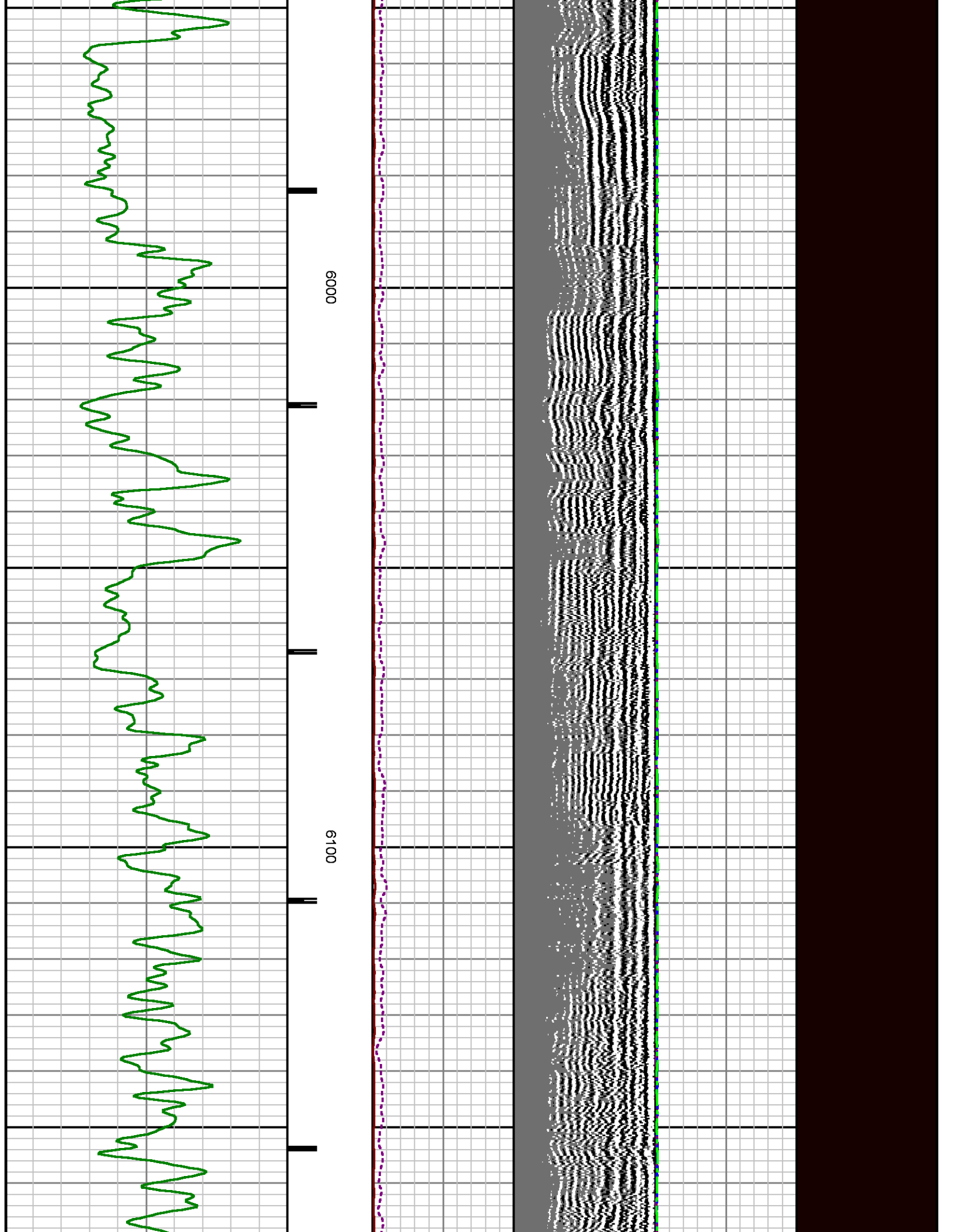
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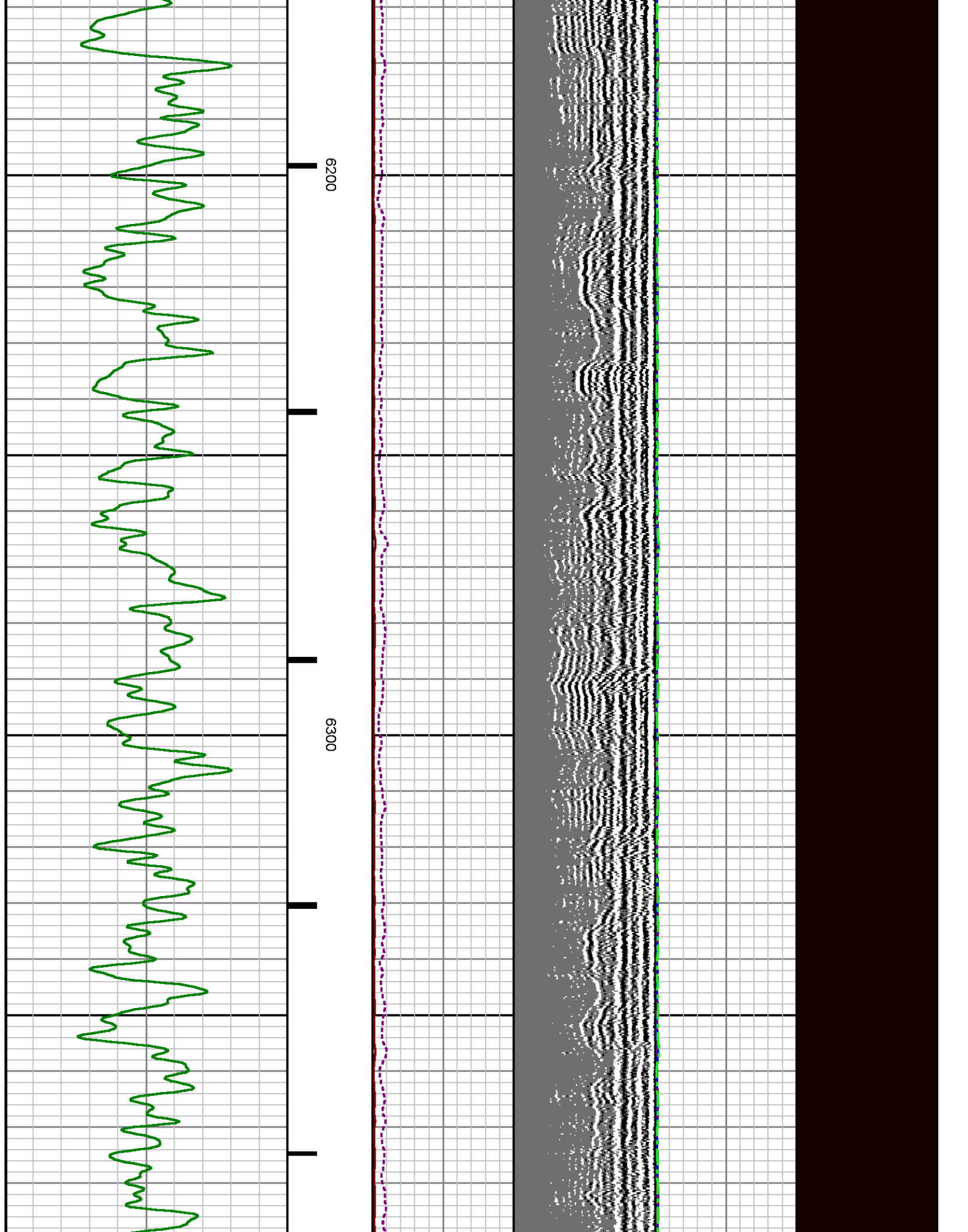


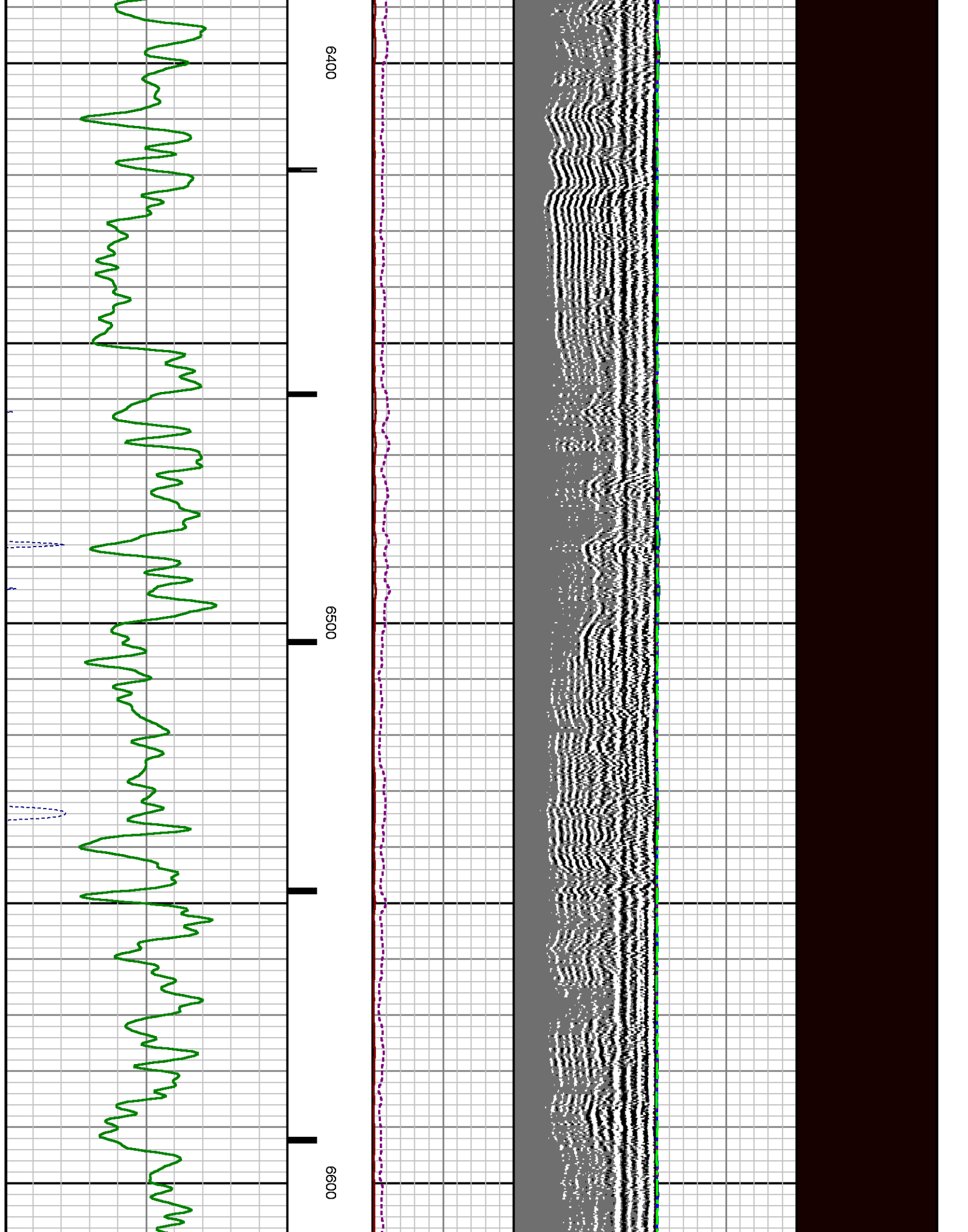


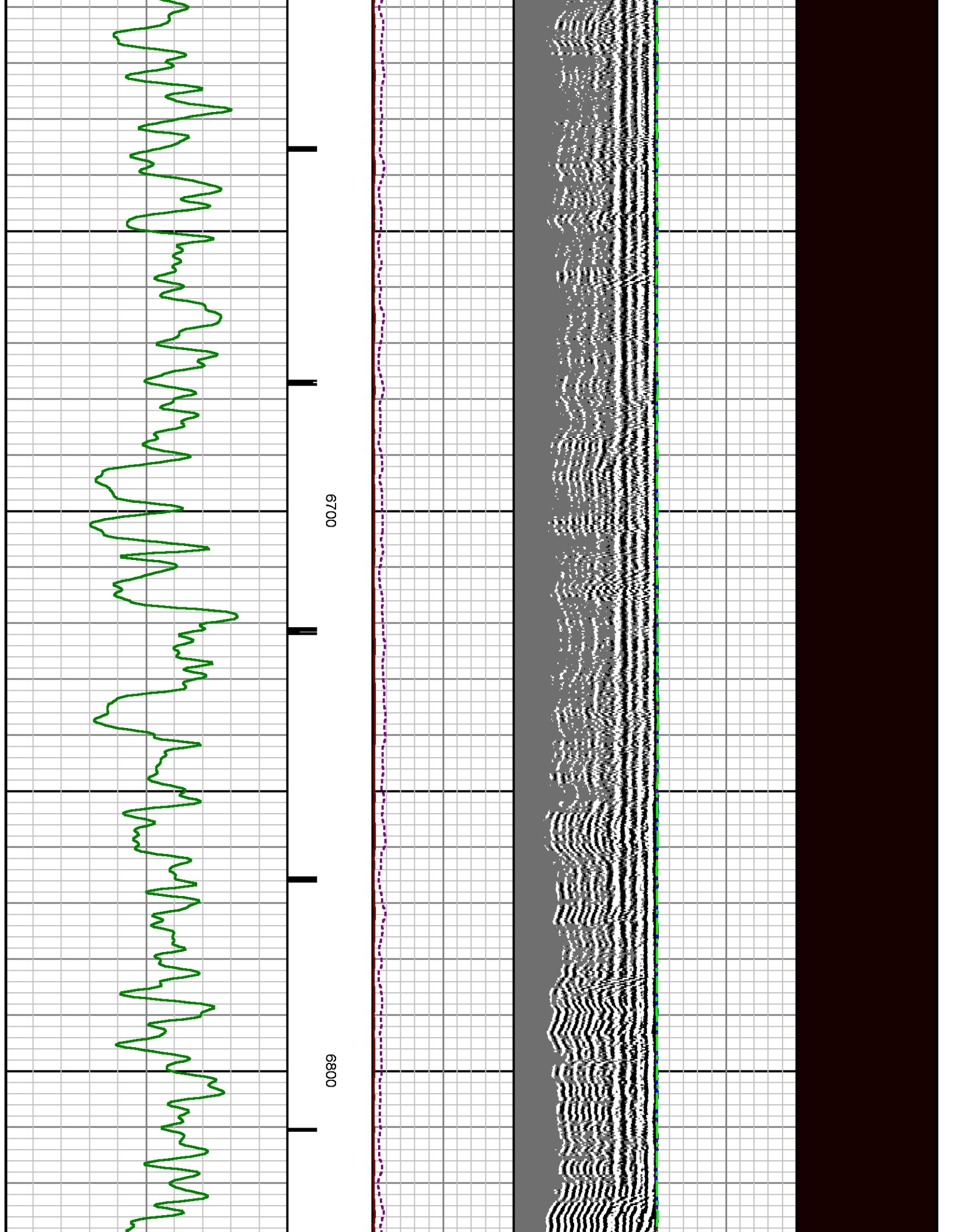


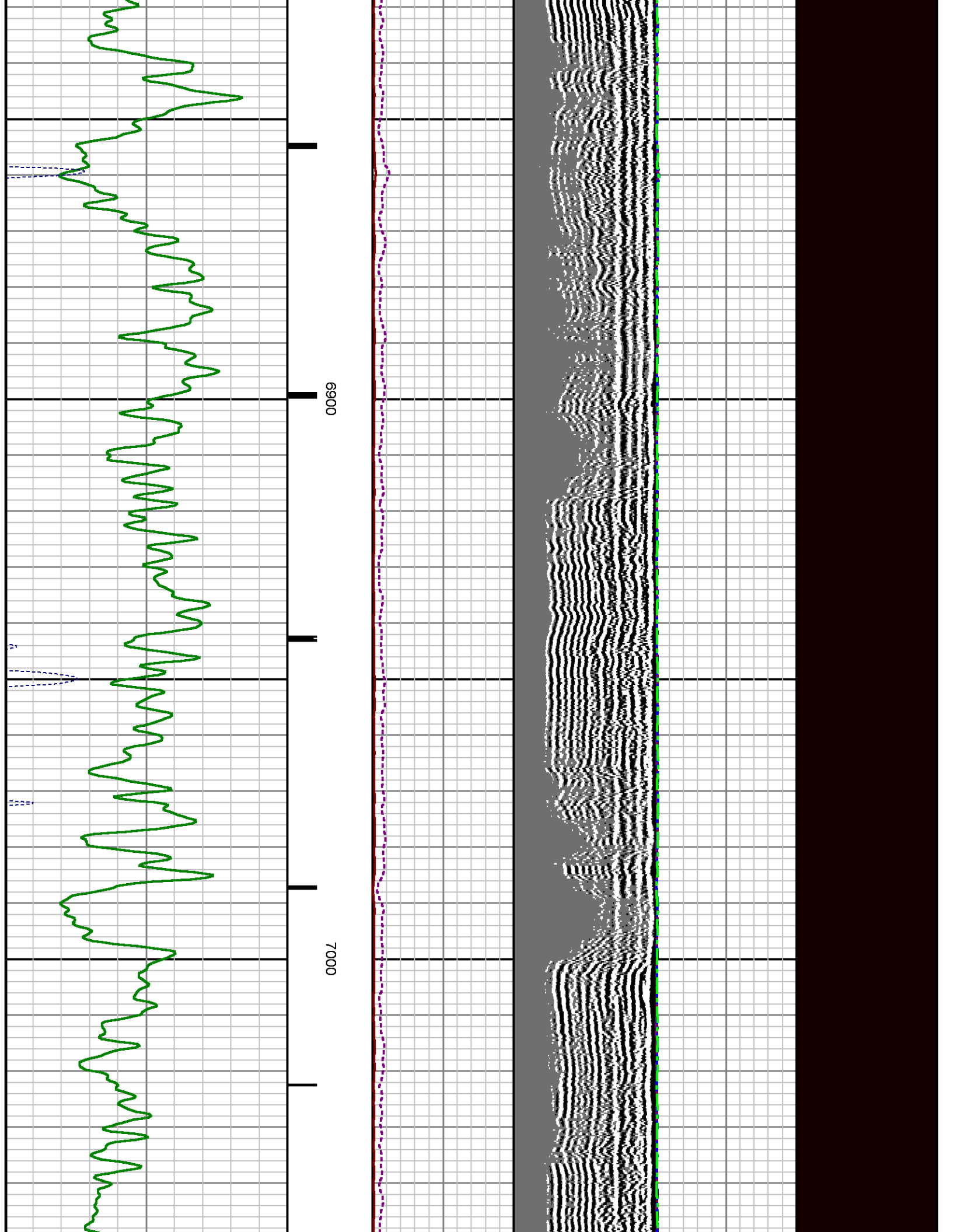




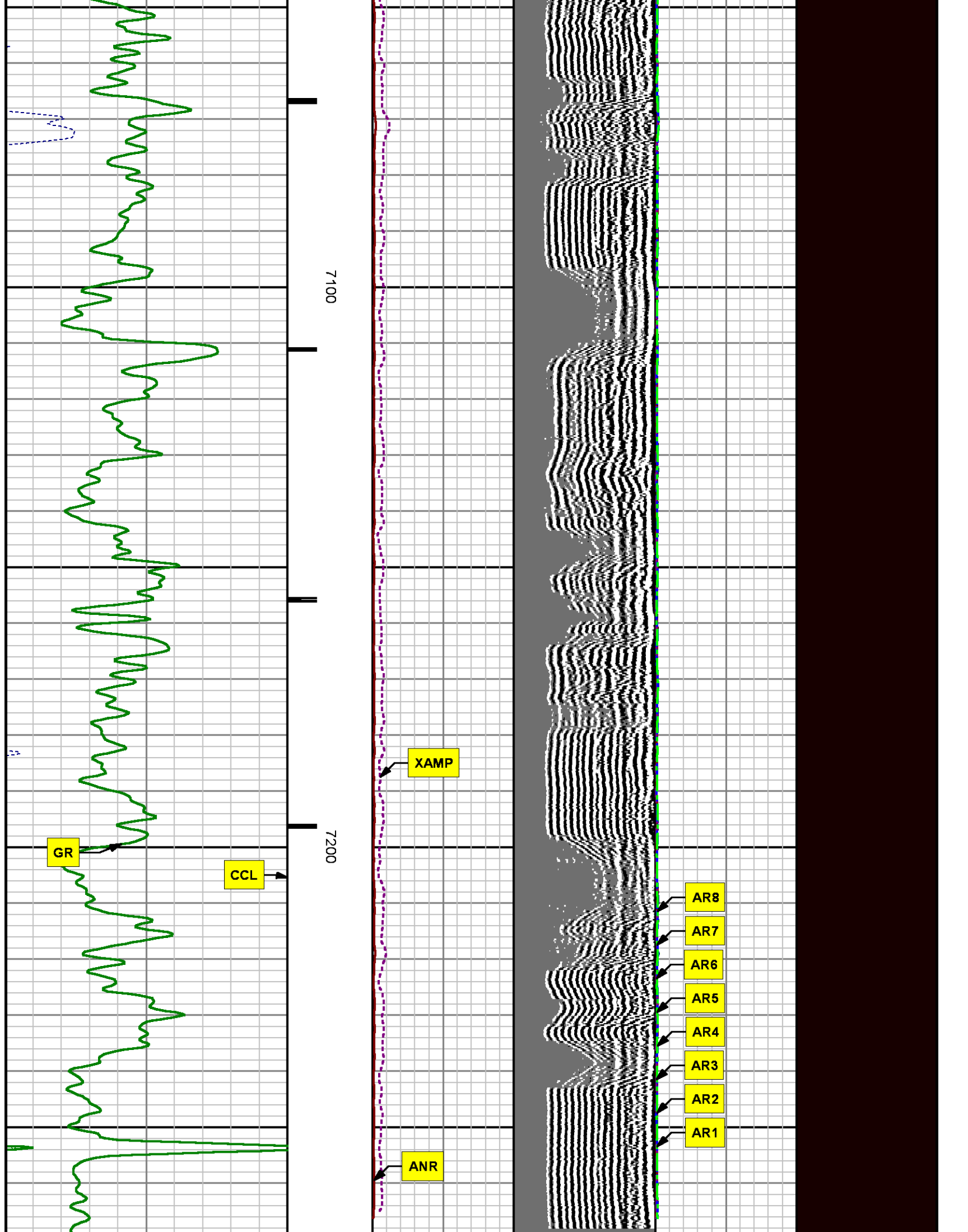


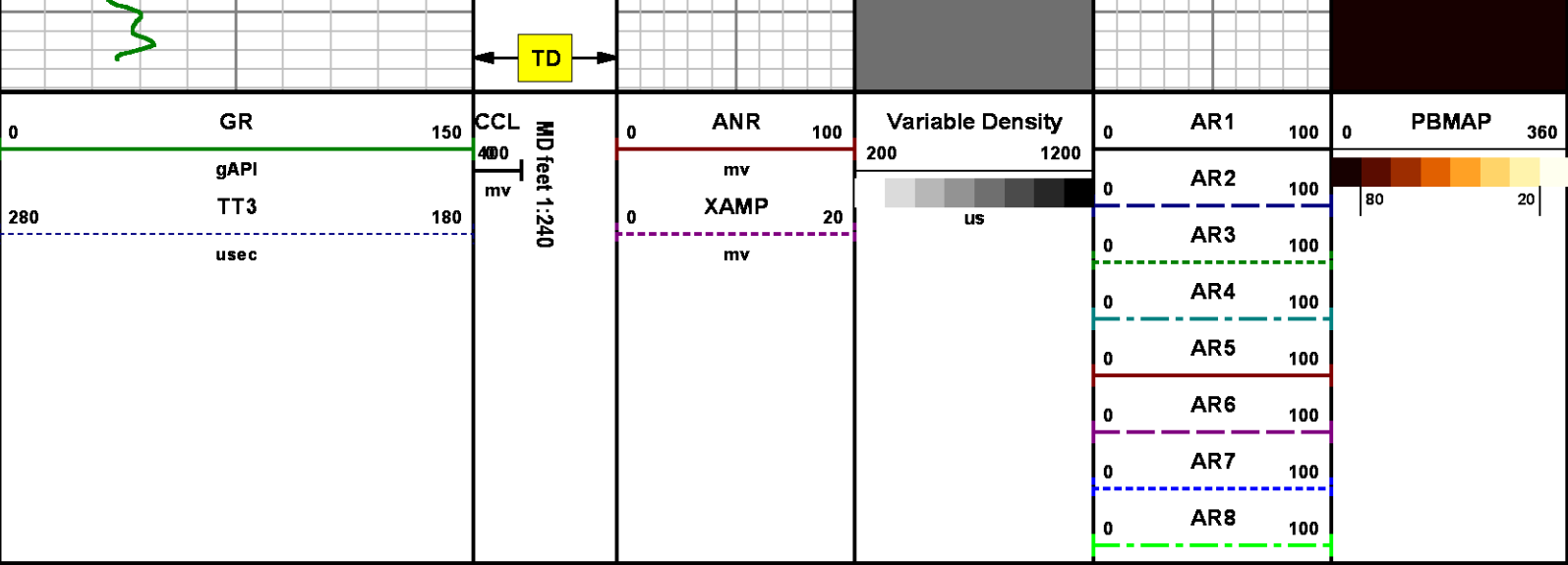












REPEAT SECTION  
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	310.000	usec	6954.640	7283.890
RAL	Amp Gate Start Near	195.000	usec	6954.640	7283.890
RAL	Amp Gate Start Radial	195.000	usec	6954.640	7283.890
RAL	Amp Gate Width Far	25.000	usec	6954.640	7283.890
RAL	Amp Gate Width Near	25.000	usec	6954.640	7283.890
RAL	Amp Gate Width Radial	25.000	usec	6954.640	7283.890
RAL	casing od	4.500	inches	6954.640	7283.890
RAL	casing wt	11.600	lbm/ft	6954.640	7283.890
RAL	FB Start Far	291.900	usec	6954.640	7283.890
RAL	FB Start Near	180.000	usec	6954.640	7283.890
RAL	FB Start Radial	180.000	usec	6954.640	7283.890
RAL	FB Thresh Far	10.000	mv	6954.640	7283.890
RAL	FB Thresh Near	4.000	mv	6954.640	7283.890
RAL	FB Thresh Radial	4.000	mv	6954.640	7283.890
RAL	Fluid Travel Time	200.000	usec/ft	6954.640	7283.484

DEPTH OFFSETS
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# DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-11.000	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	CHV	FPR2
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	-10.040	AFAR	SIG	TT5			
1355XA	-5.620	CCL					
1355XA	-1.500	GR					
1355XA	0.000	TEMP					

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

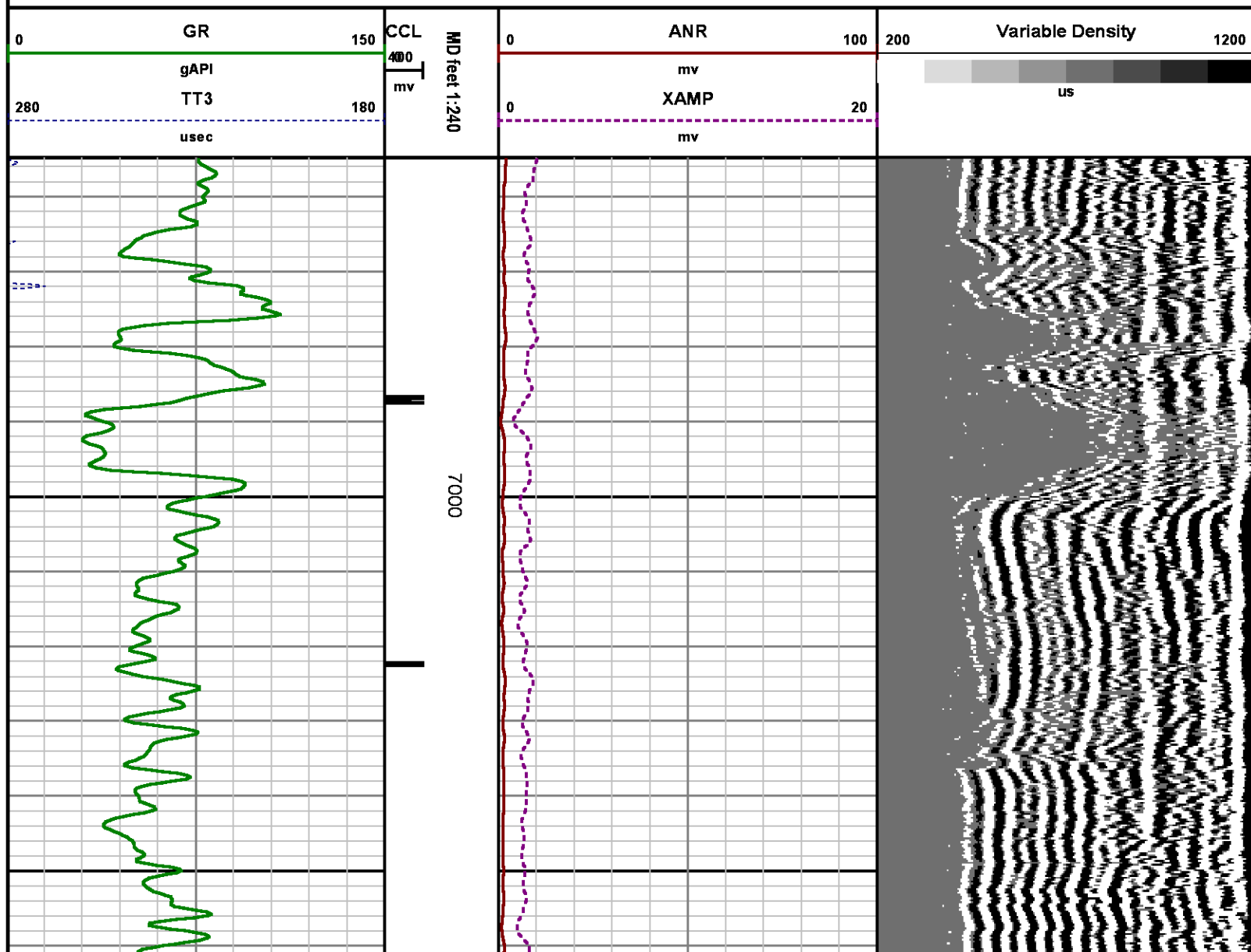
Well : C&C ENERGY GM 544-12

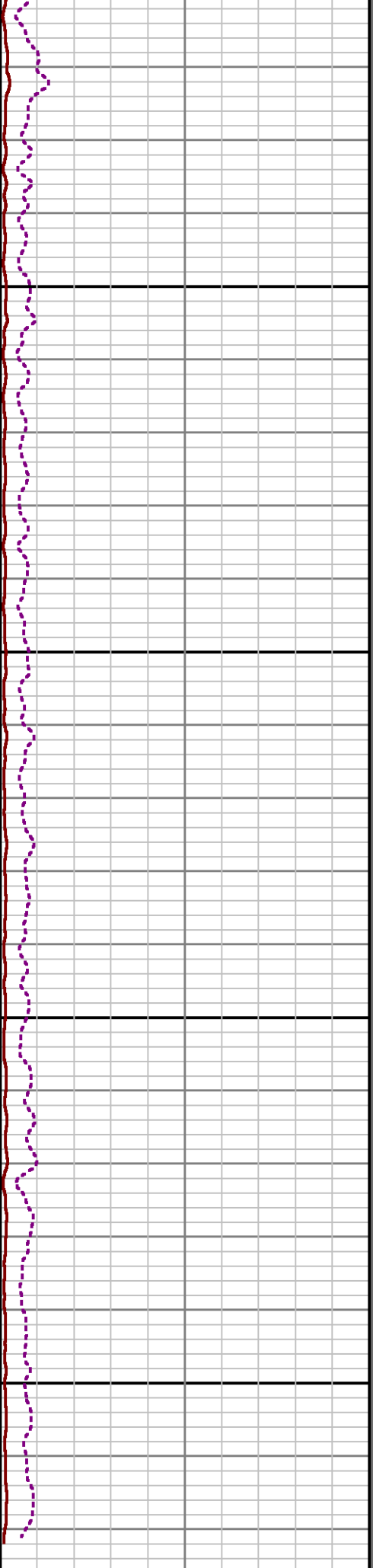
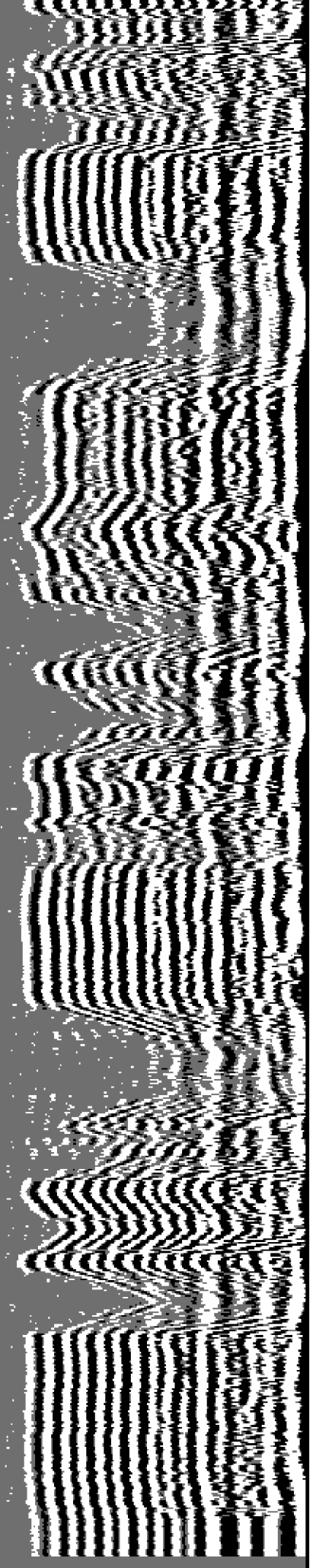
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Mode : PlotMgr 5.4.504

Interval : 6954.89 - 7283.89 feet UP

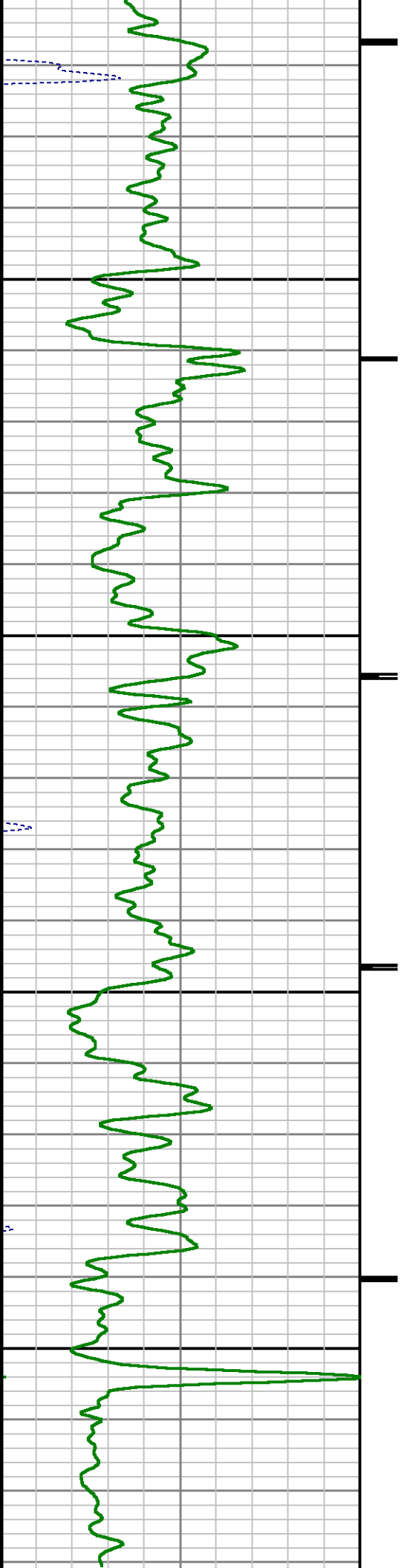
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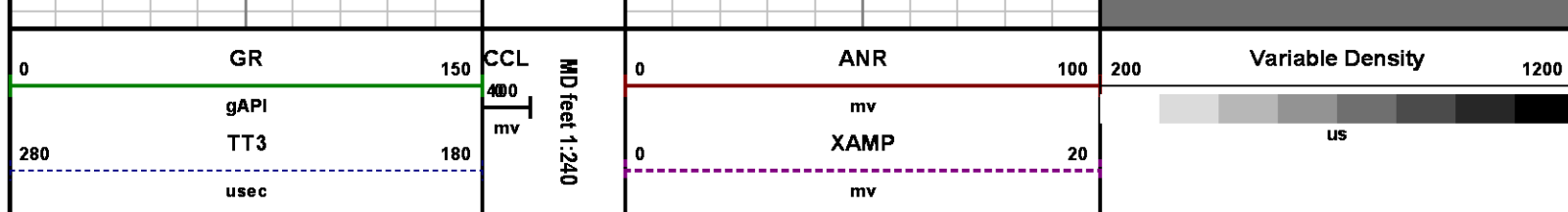




7100

7200





## CALIBRATION SUMMARY

# RALSHP

Shop Calibration: C:\case\calver\RALSHP\496SEP5\_shp.cal

### SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Fri Sep 05 08:55:51 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: SEP5

Tool Delay [usec] -55.00 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	216	216	30	166	25	-0.104	100.00	0.31
3 Ft. Receiver	216	216	30	166	25	2.654	100.00	0.31
5 Ft. Receiver	325	325	30	245	25	-0.049	150.00	0.35
Radial #1	216	216	30	166	25	1.746	100.00	0.31
Radial #2	215	216	30	166	25	1.438	100.00	0.31
Radial #3	215	216	30	166	25	2.742	100.00	0.31
Radial #4	214	216	30	166	25	3.024	100.00	0.31
Radial #5	215	216	30	166	25	1.746	100.00	0.31
Radial #6	216	216	30	166	25	3.051	100.00	0.31
Radial #7	216	216	30	166	25	2.260	100.00	0.31
Radial #8	218	216	30	166	25	2.400	100.00	0.32

# RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\496SEP5 fld.cal

### WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Fri Sep 05 08:58:30 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: SEP5

Tool Delay [usec] -55.00 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	-0.145	0.000	1.00	100.000
3 Ft. Receiver	195	25	2.396			
5 Ft. Receiver	305	25	3.549			
Radial #1	195	25	1.788			
Radial #2	195	25	1.940			
Radial #3	195	25	2.393			
Radial #4	195	25	2.286			
Radial #5	195	25	2.446			
Radial #6	195	25	2.603			
Radial #7	195	25	2.010			
Radial #8	195	25	1.835			

## GAMMA RAY

Calibration File: C:\case\calver\GR\11871510A1.cal

### CALIBRATION SUMMARY

DATE/TIME PERFORMED: Fri Aug 15 09:48:50 2014		TOOL SERIES: 1355XA		ASSET: 11871510		SEQ: A1	
Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]	
S2K WA612	78.09	460.84	0.483	37.74	222.74	185.00	

Verification File: C:\case\calver\GR\11871510A1.VP

### PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Fri Aug 15 09:50:00 2014		TOOL SERIES: 1355XA		ASSET: 11871510		SEQ: A1	
Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]	
S2K WA612	85.91	455.51	0.483	41.52	220.17	178.64	

## TOOL DIAGRAM

OTA SHORT CABLE HEAD

18.89'



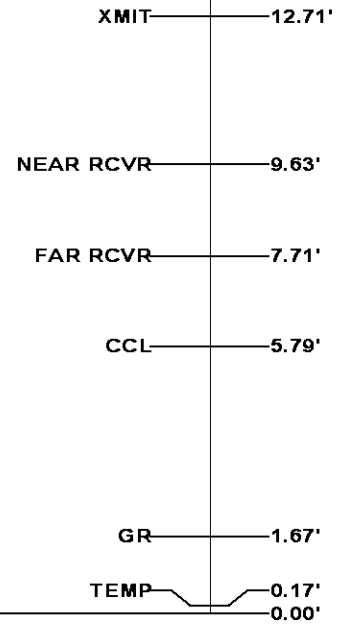


**PROBE 2 3/4 DUAL RECEIVER RADII**

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

**RAL GR/TEMP/CCL/CHV DETECTOR**

Series	1355XA
Mnemonic	RAL
Diameter	2.75"
Weight	85.00 lb
Length	6.96'
Measure Point	0.17' TEMP
Measure Point	1.67' GR
Measure Point	5.79' CCL
Temp Rating	400.00 °F
Press Rating	20000.00 PSI



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

**Baker Atlas***CASE***Company****WPX ENERGY****Well****C&C ENERGY GM 544-12****Field****GRAND VALLEY****County****GARFIELD****State****COLORADO****Location**

SHL: 258' FSL &amp; 1050' FWL

BHT: 172' FSL &amp; 1250' FEL (SESE)

**Elevations****KB** 5165 ft**DF****GL** 5141 ft**File No:**

CH089912

**API No:**

05045224270000

**SEC** 12 **TWP** 7S **RGE** 96W**12 7S 96W**

GM 24-12 PAD

H&amp;P 318