



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: CH08911	Company Well Field County	WPX ENERGY C&C ENERGY GM 444-12 GRAND VALLEY GARFIELD	State COLORADO
API No: 05045224280000			
12 7S 96W GM 24-12 PAD H&P 318	Location SHL: 256' FSL & 1067' FWL BHT: 620' FSL & 867' FEL (SESE) SEC 12 TWP 7S RGE 96W	Other Services RPM	
Permanent Datum Log Measured From Drill Measured From	GL KB KELLY BUSHING	Elevation 24 ft Above P. D.	Elevations KB 5165 ft DF GL 5141 ft

Date	05/SEP/14	
Run	ONE	
Service Order	US089911J	
Depth Driller	7636 ft	
Depth Logger	7600 ft	
Bottom Logged Interval	7690 ft	
Top Logged Interval	24 ft	
Time Started	1200	
Time Finished	1430	
Operator Rig Time	2.5 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	66 ft	
Logged Cement Top	NA	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	NA	
Nominal Logging Speed	65 fpm	
Maximum Recorded Temperature	209 degF	
Reference Log	NONE	
Reference Log Date	NA	
Equipment No.	44271	GRAND JCT
Recorded By	FLOYD RENEAU	
Witnessed By	JEFF BRADY	

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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	24 ft	1646 ft
8.75 in	1646 ft	7636 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in			24 ft	1646 ft
4.5 in	11.6 lbm/ft	I-80	24 ft	7636 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 9 feet.
Logged with zero PSI at wellhead.
BHT = 209°F
SJ = 4277'-4299'

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

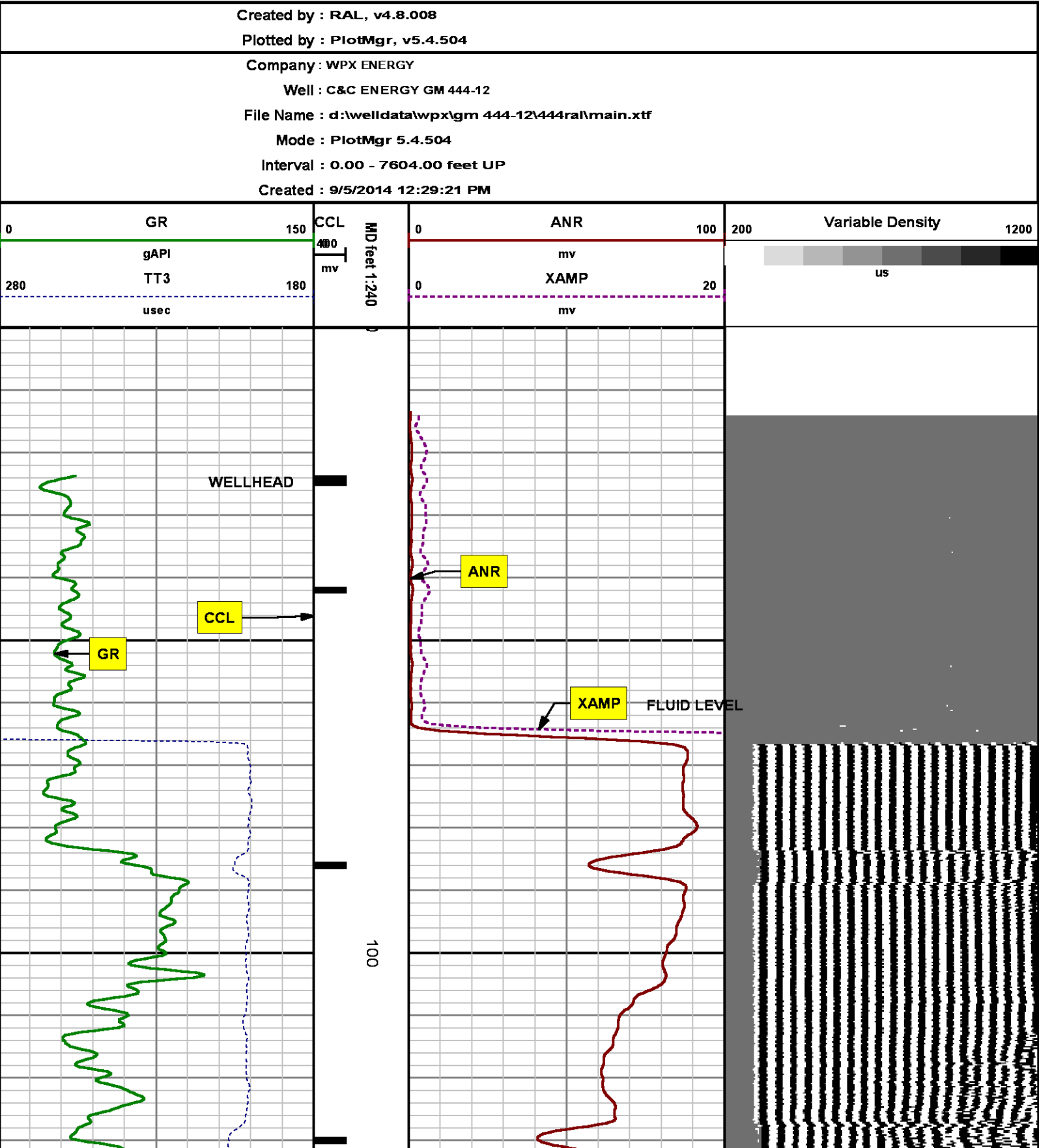
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RAL	Amp Gate Start Far	310.000	usec	23.906	7604.000
RAL	Amp Gate Start Near	195.000	usec	23.906	7604.000
RAL	Amp Gate Start Radial	195.000	usec	23.906	7604.000
RAL	Amp Gate Width Far	25.000	usec	23.906	7604.000
RAL	Amp Gate Width Near	25.000	usec	23.906	7604.000
RAL	Amp Gate Width Radial	25.000	usec	23.906	7604.000
RAL	casing od	4.500	inches	23.906	7604.000
RAL	casing wt	11.600	lbm/ft	23.906	7604.000
RAL	FB Start Far	291.900	usec	23.906	7604.000
RAL	FB Start Near	180.000	usec	23.906	7604.000
RAL	FB Start Radial	180.000	usec	23.906	7604.000
RAL	FB Thresh Far	10.000	mv	23.906	7604.000
RAL	FB Thresh Near	4.000	mv	23.906	7604.000
RAL	FB Thresh Radial	4.000	mv	23.906	7604.000
RAL	Fluid Travel Time	200.000	usec/ft	23.906	7603.938

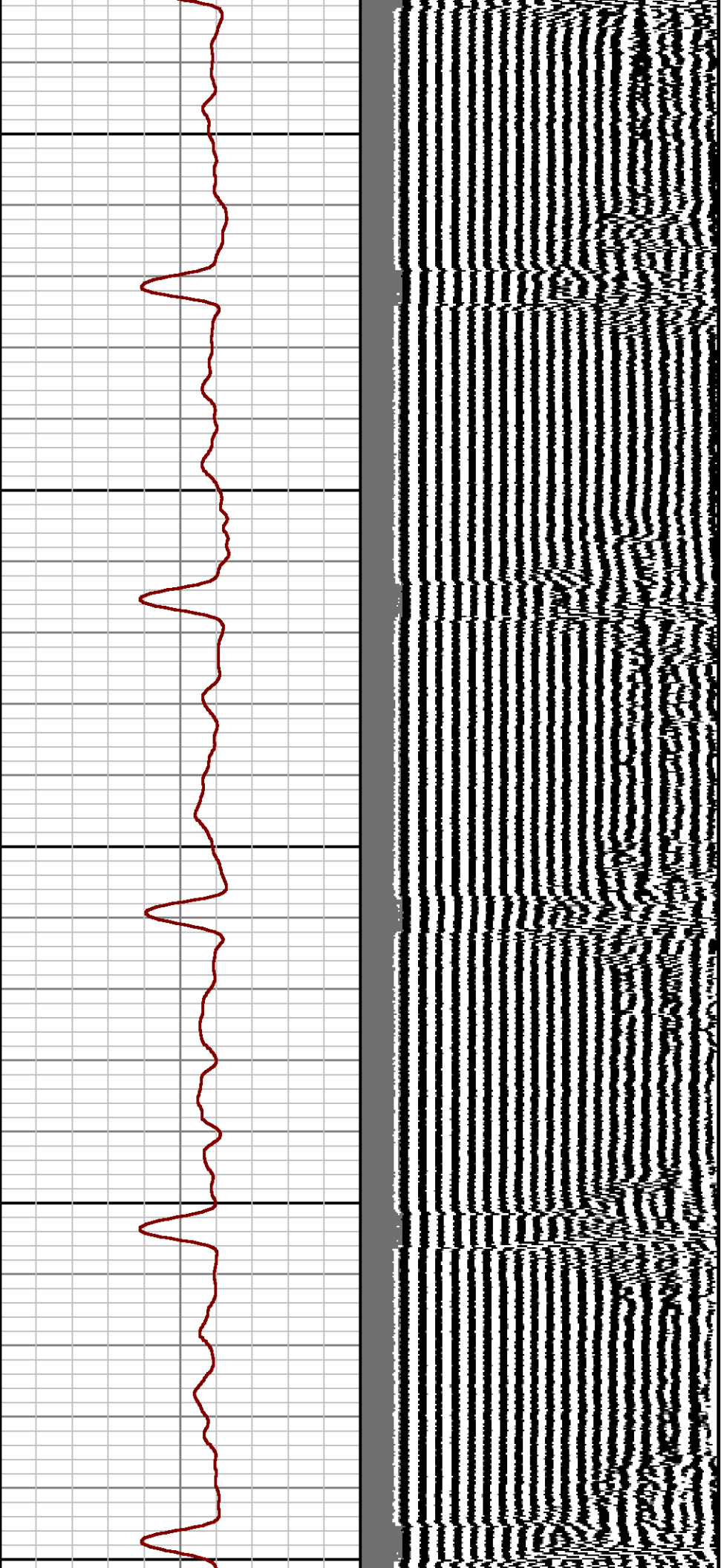
DEPTH OFFSETS

(for Acquired Curves)

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

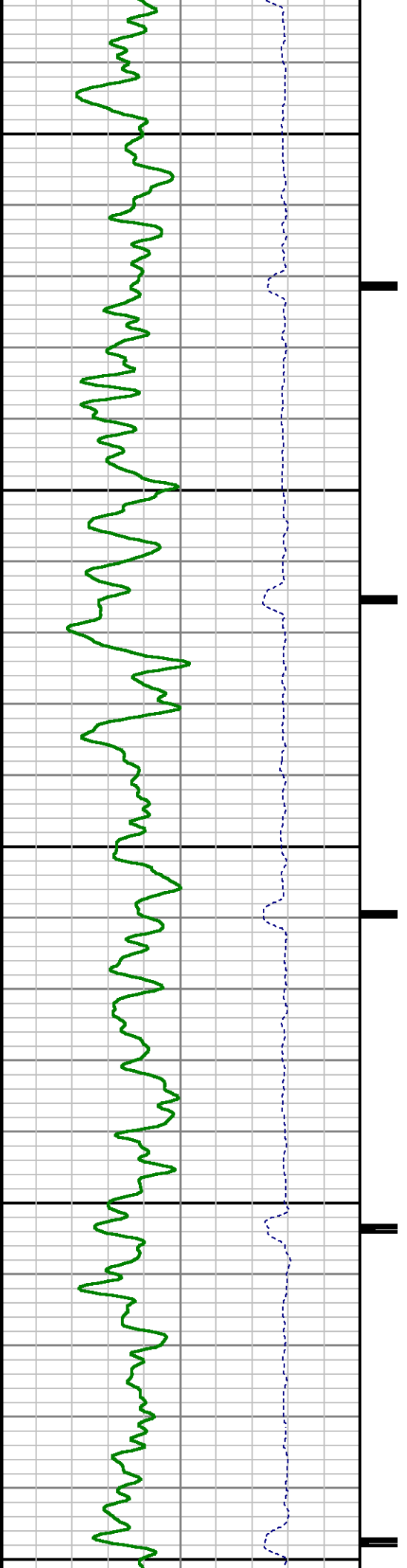
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	-10.040	AFAR	SIG	TT5			
1355XA	-5.620	CCL					
1355XA	-1.500	GR					
1355XA	0.000	TEMP					

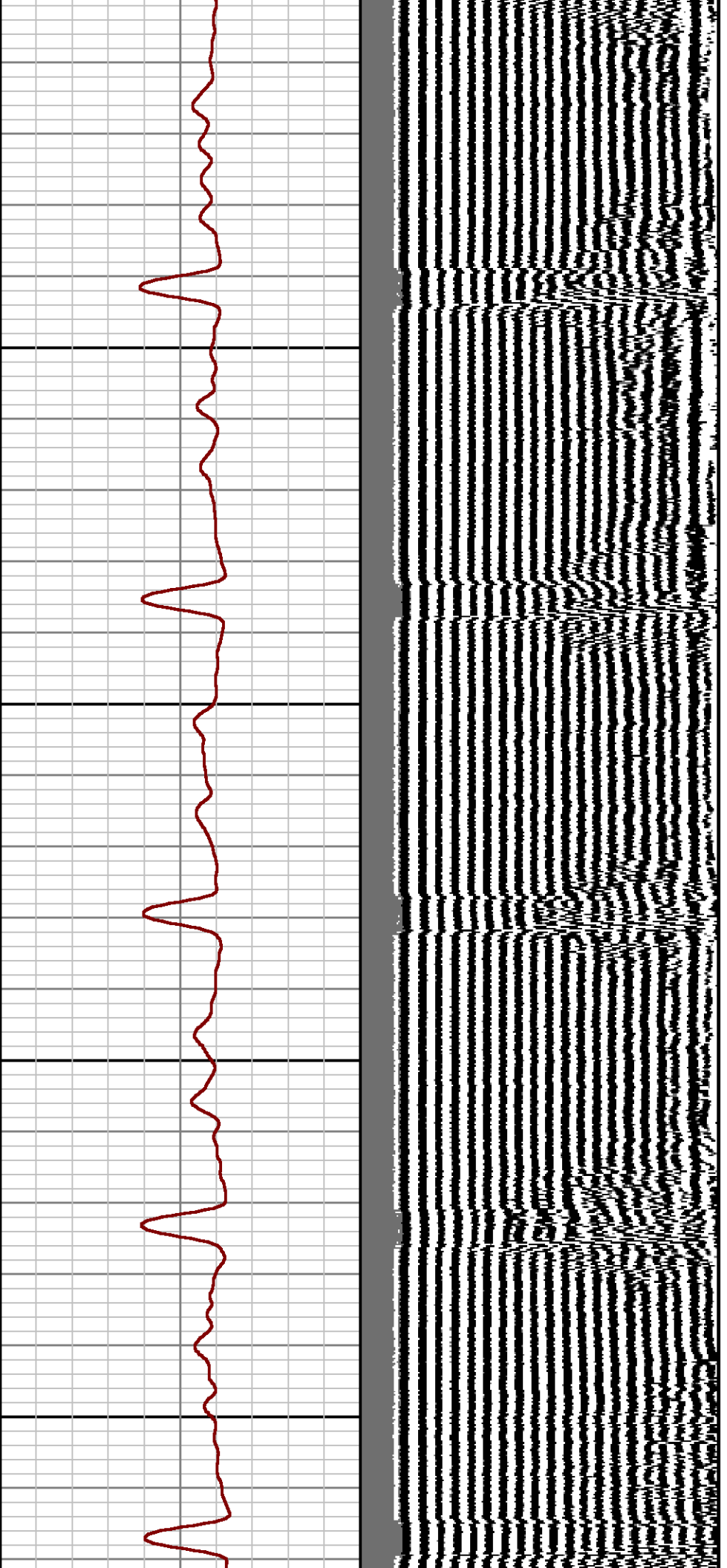




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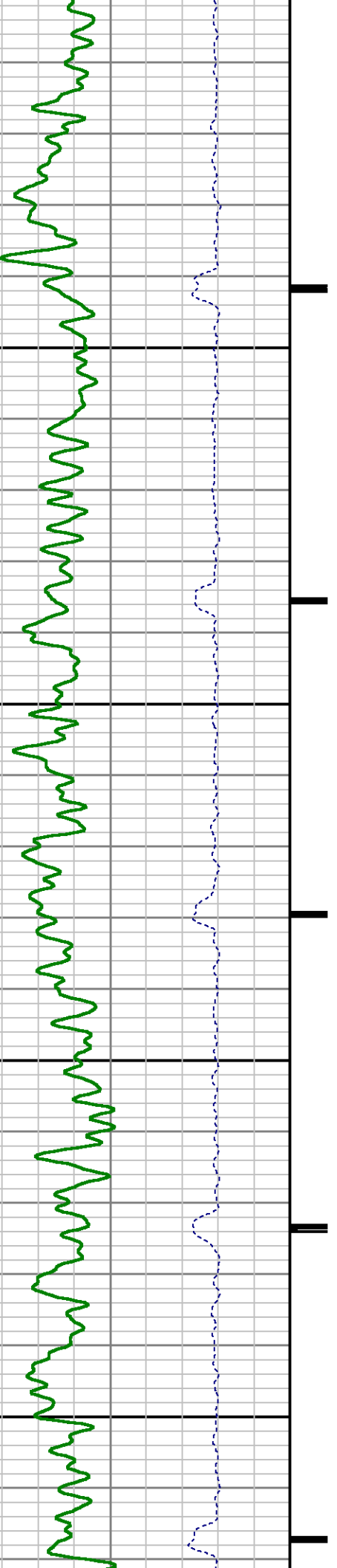
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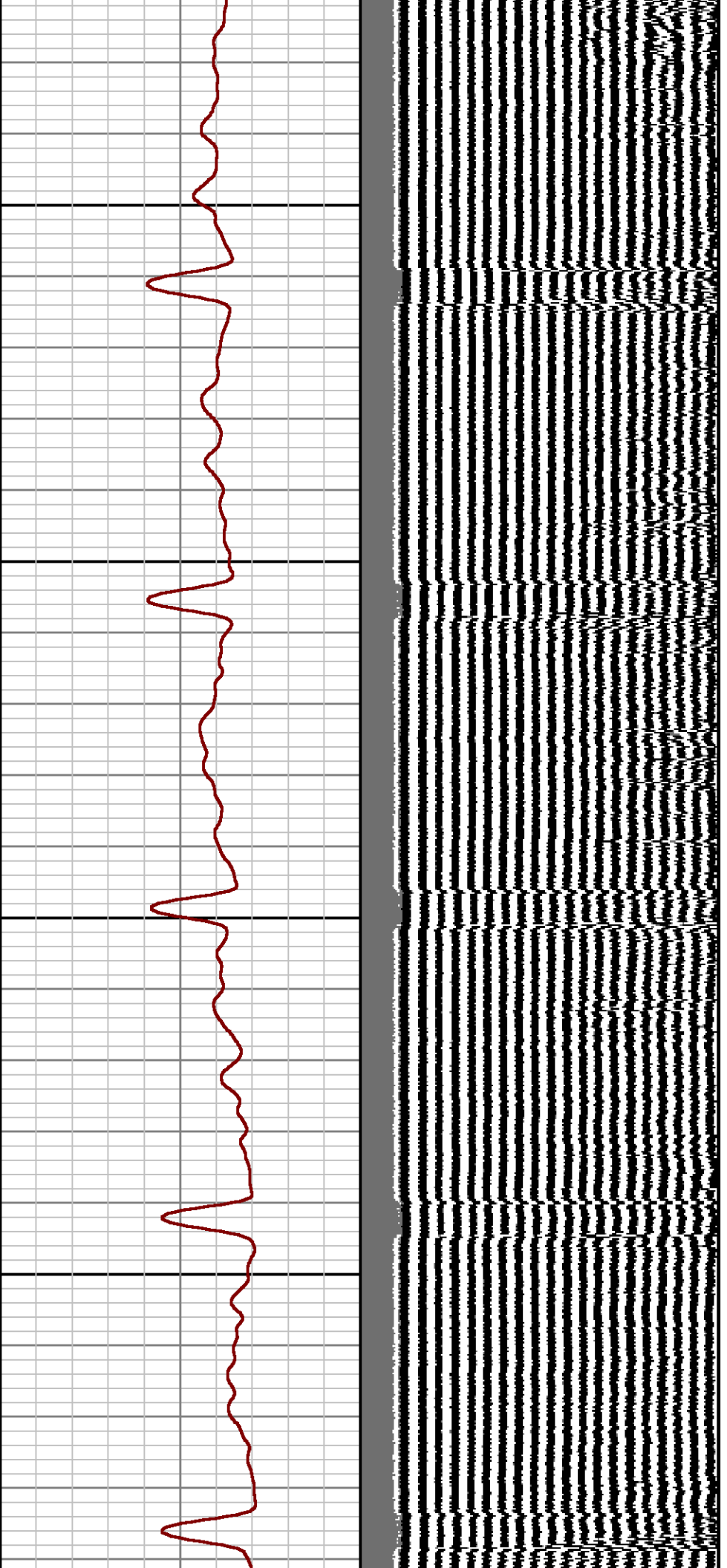




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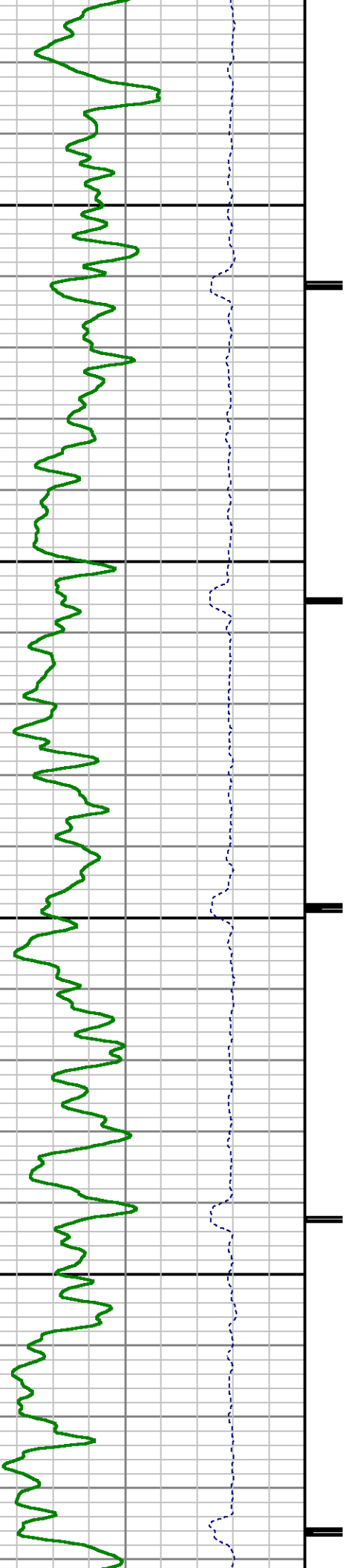
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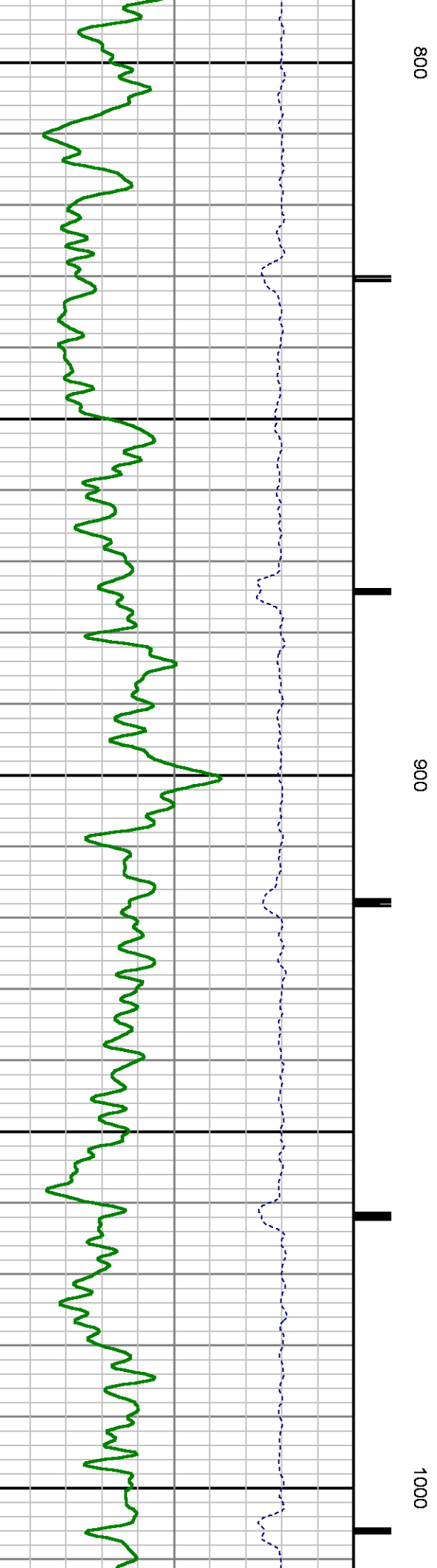
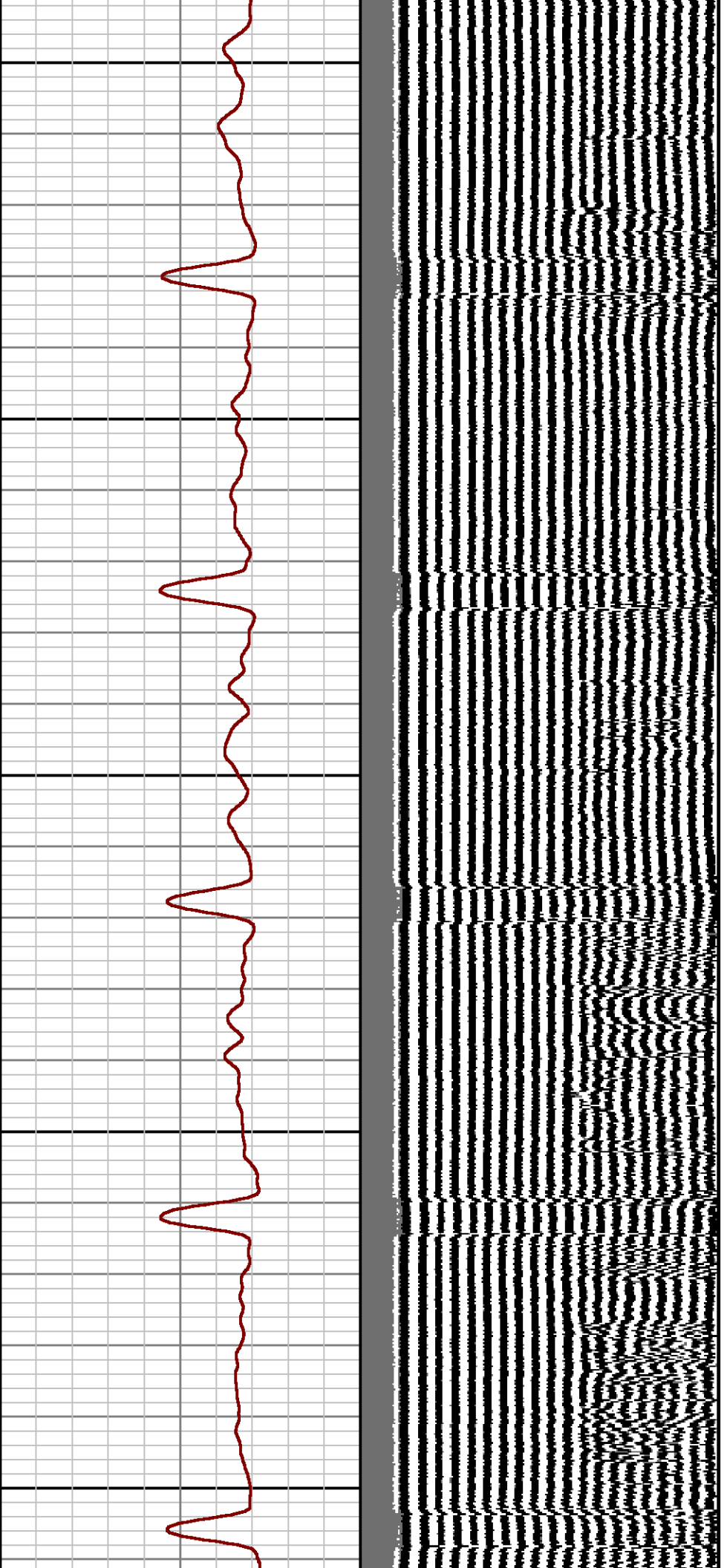


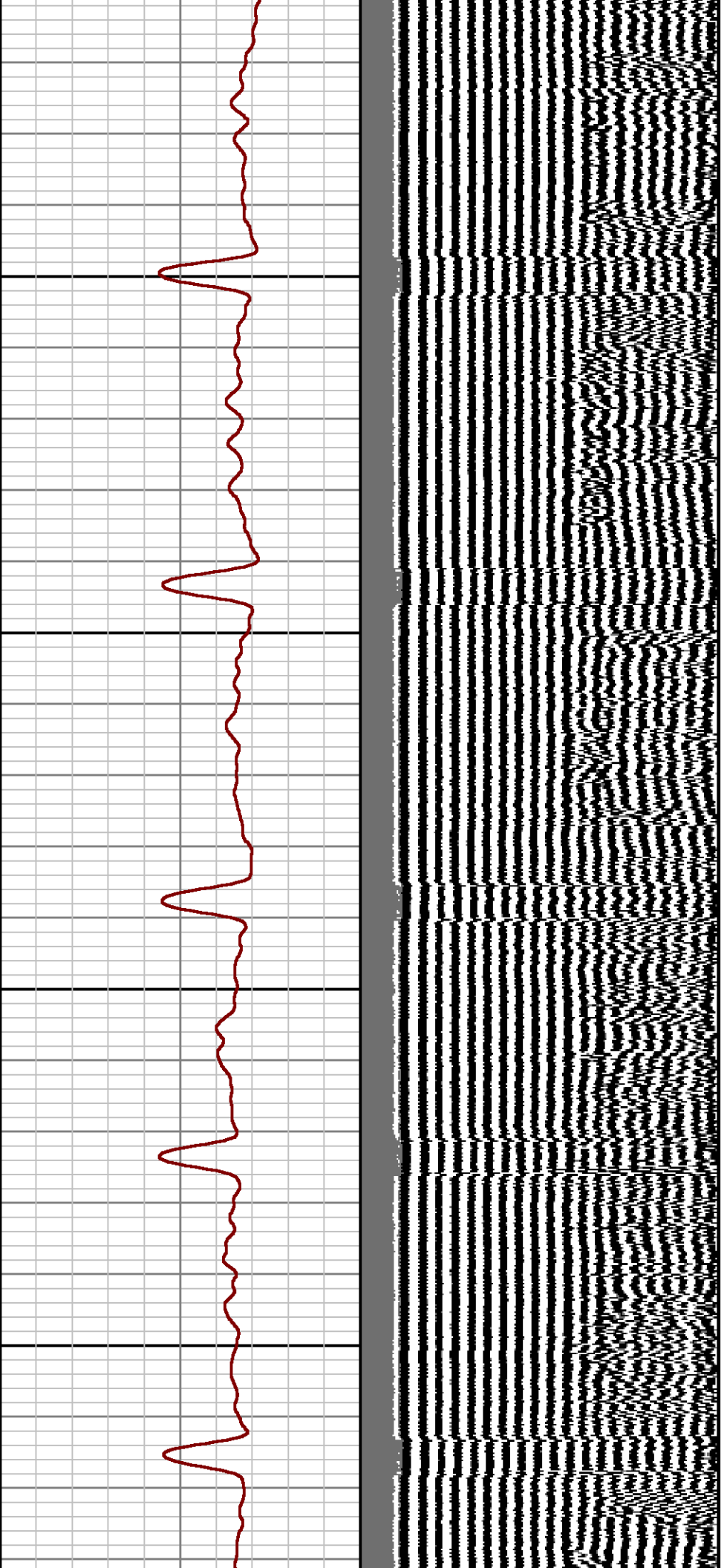


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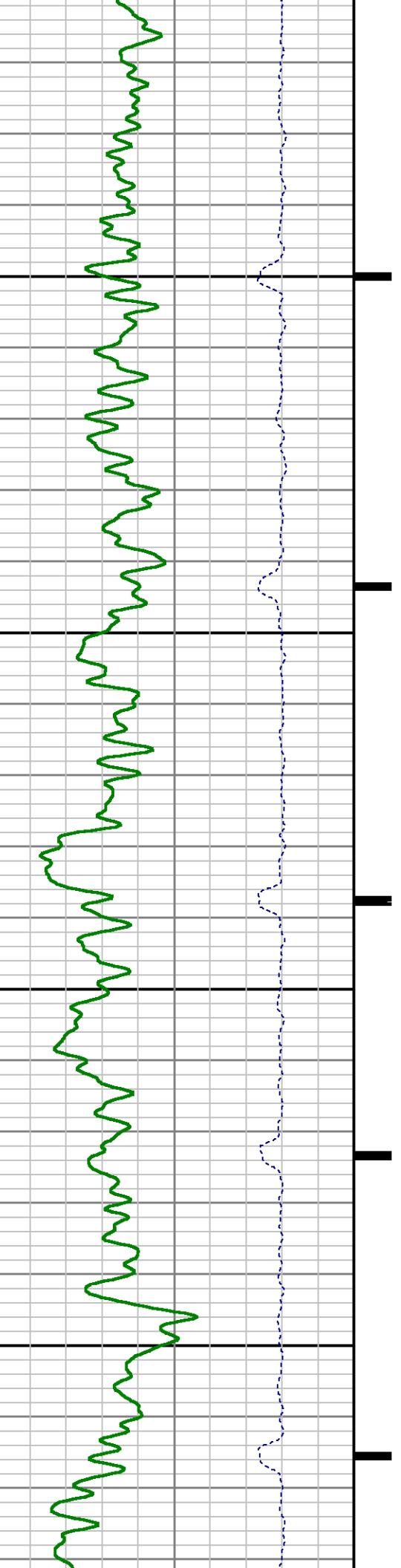


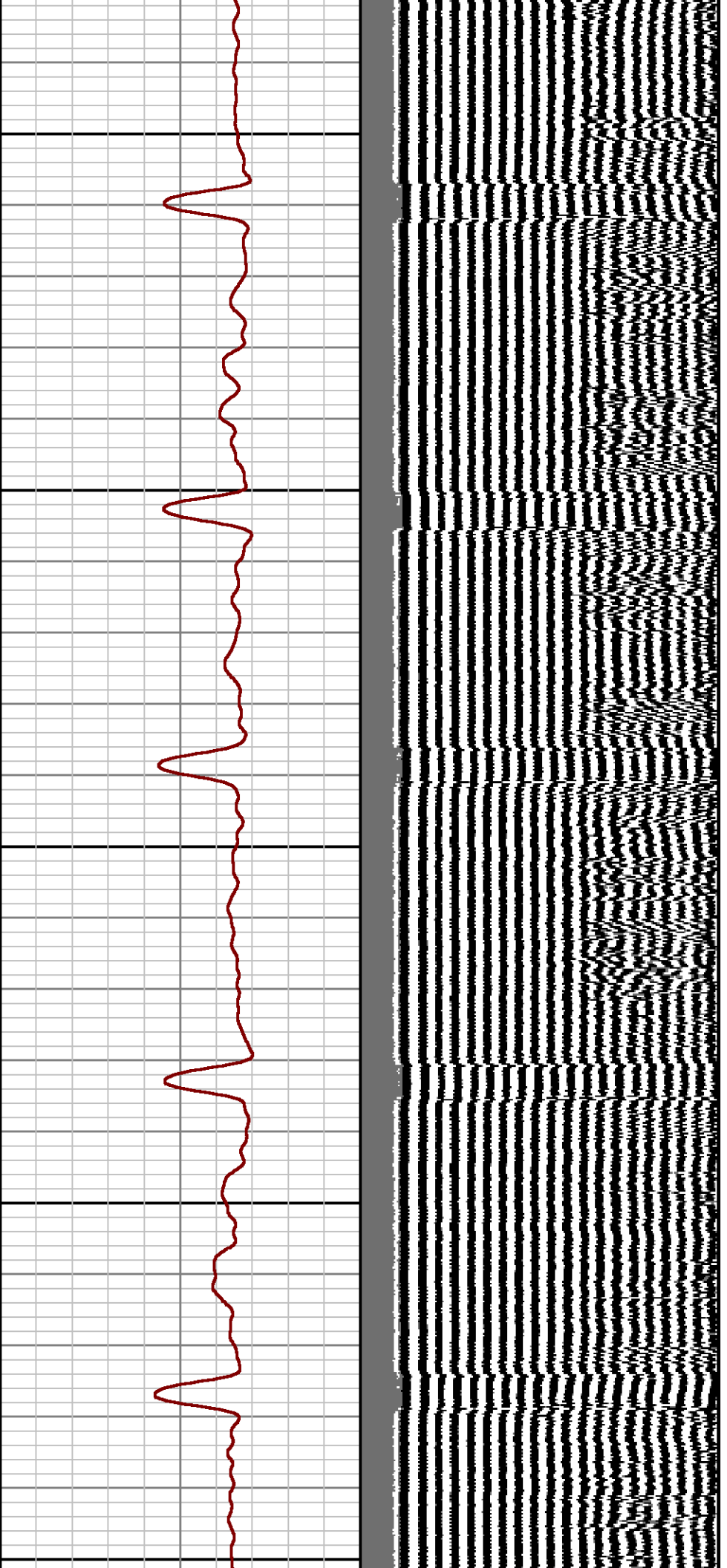




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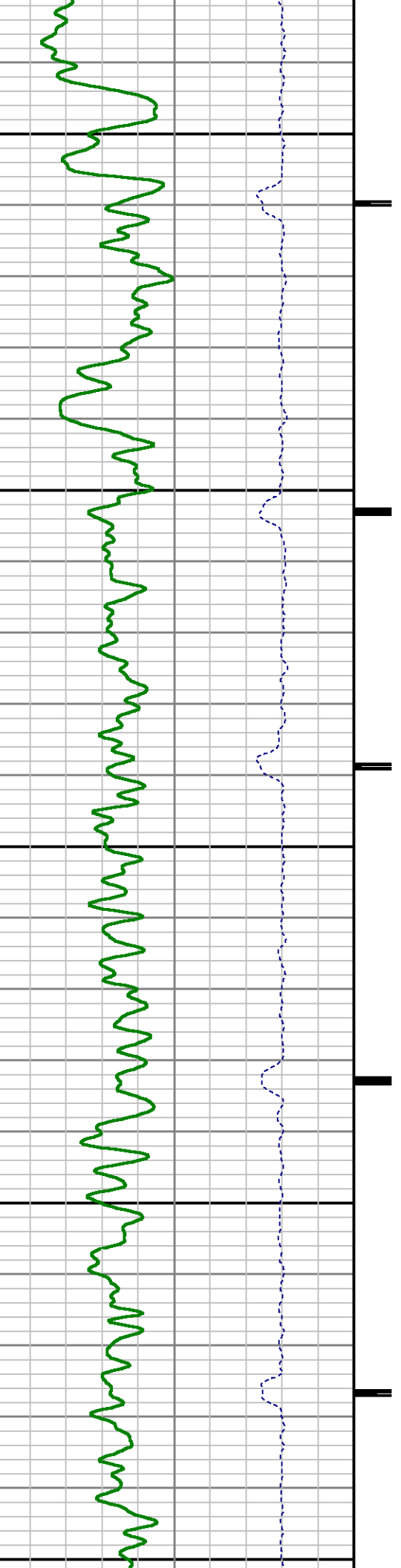
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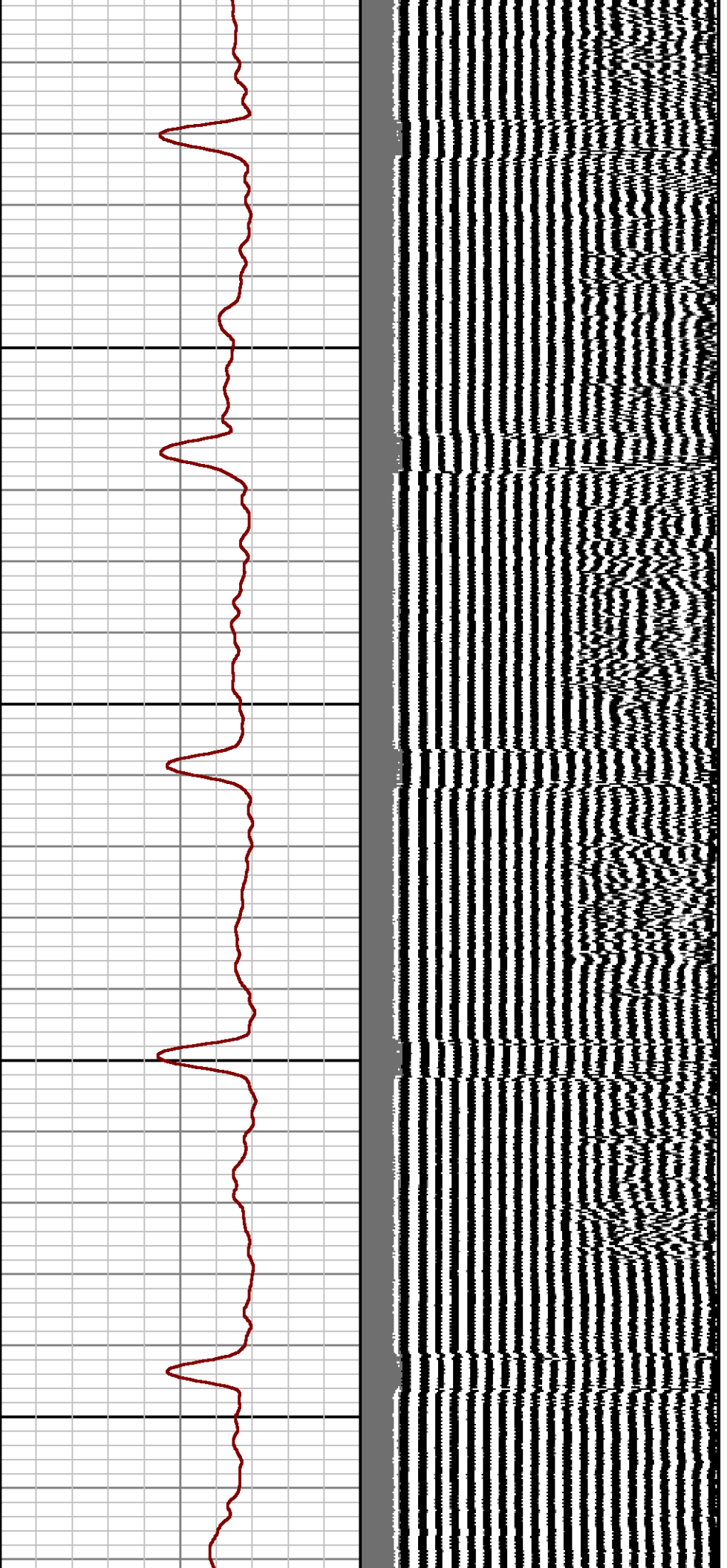




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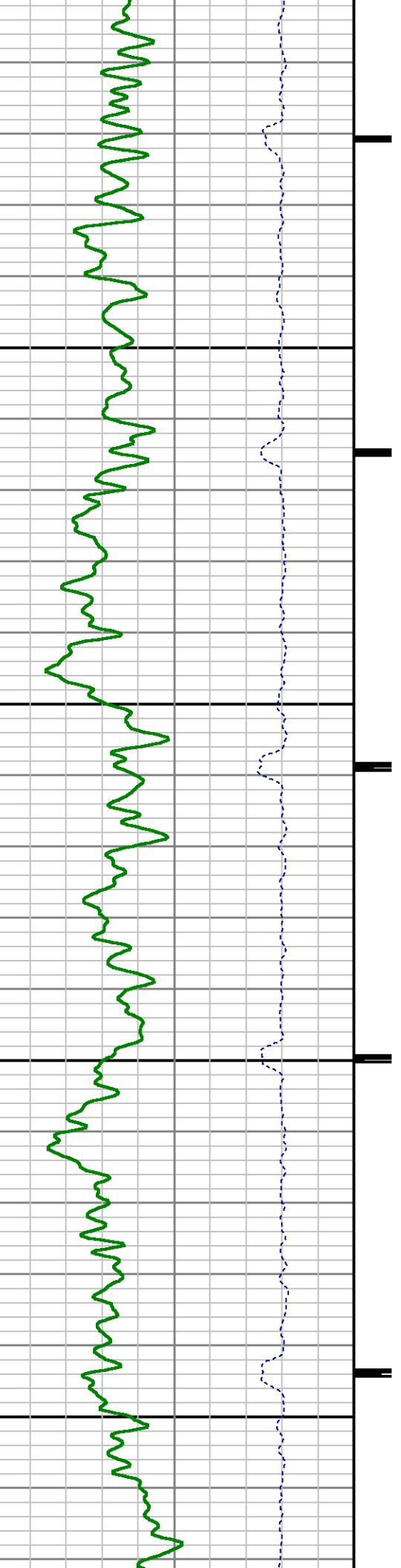
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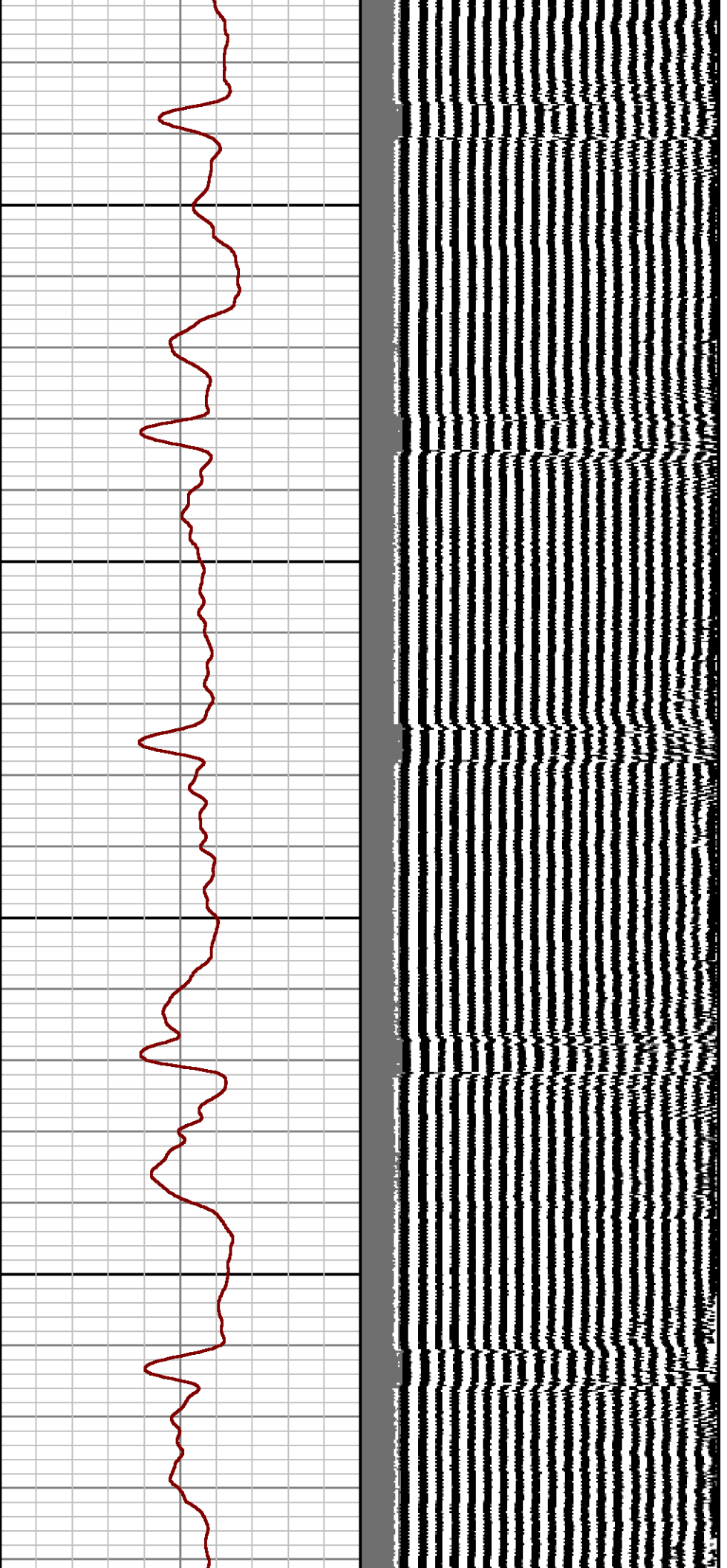




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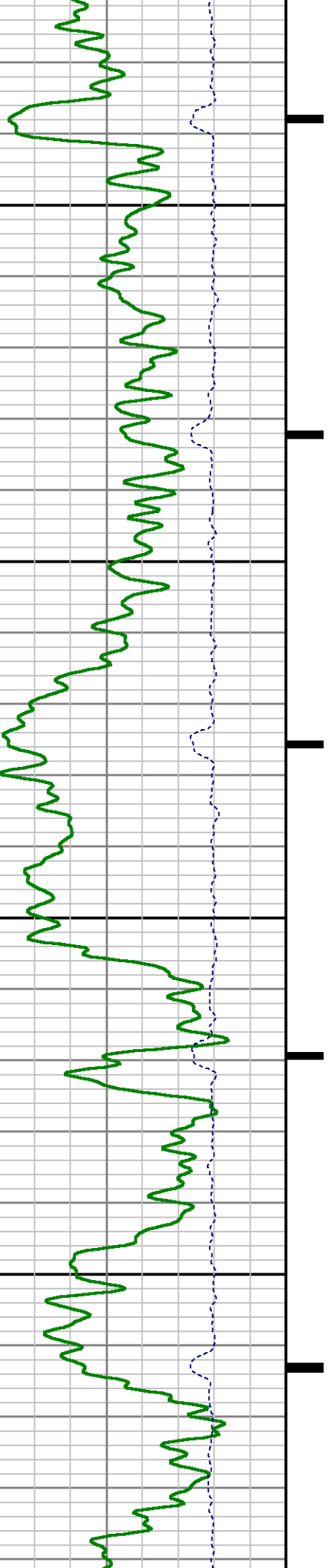
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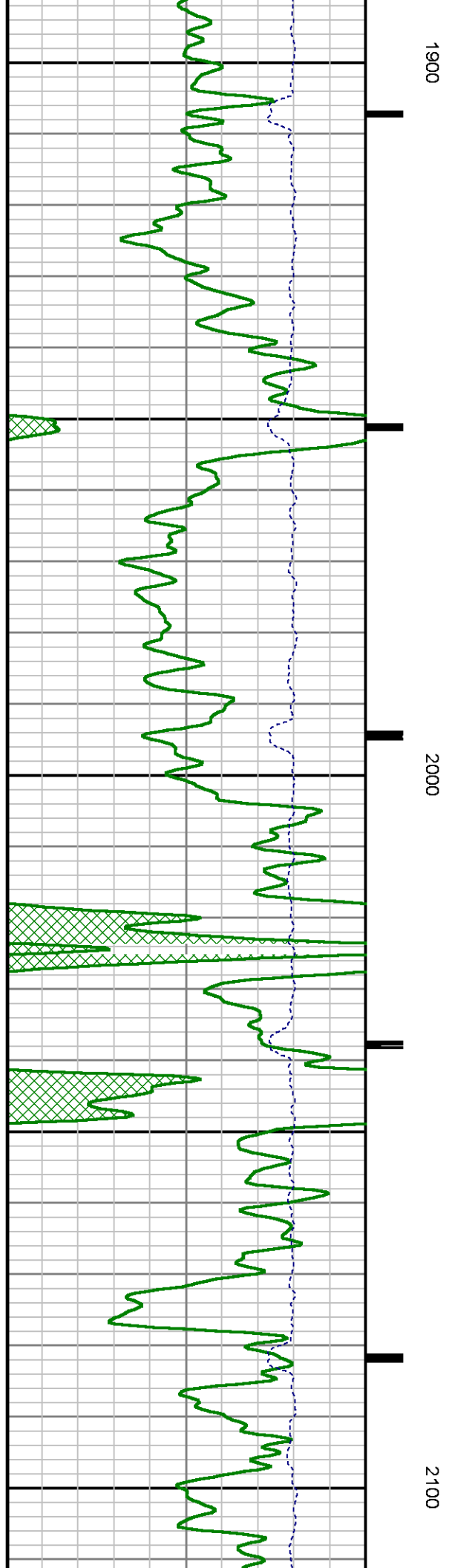
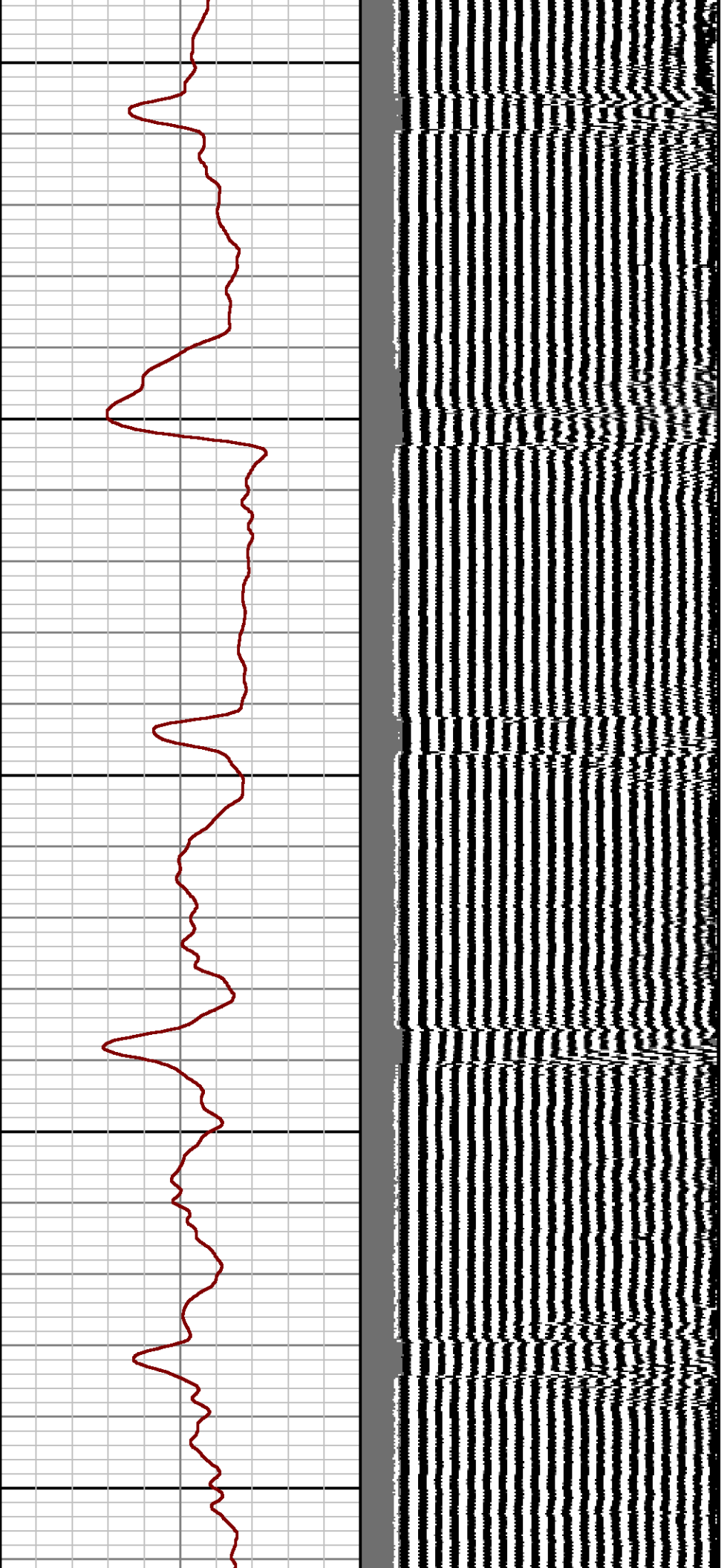


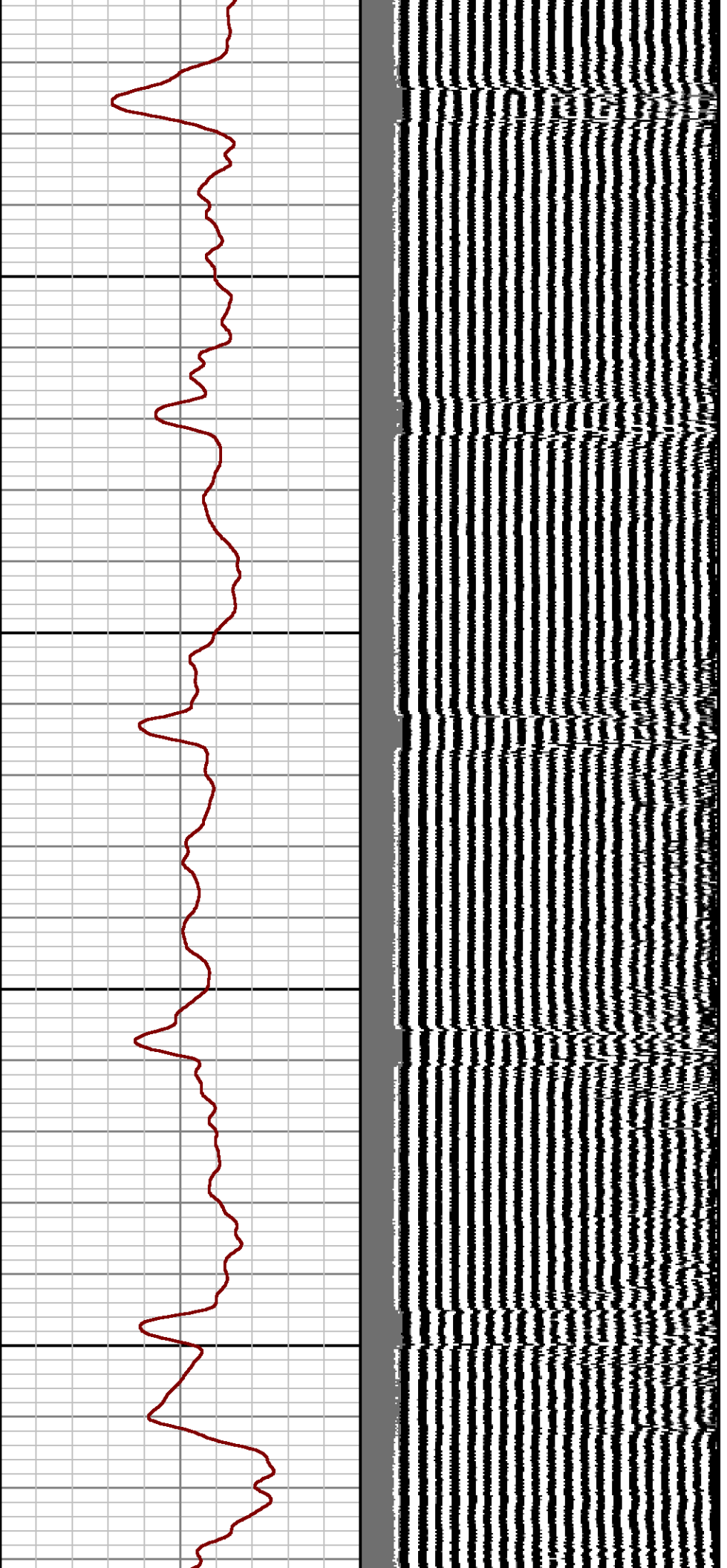


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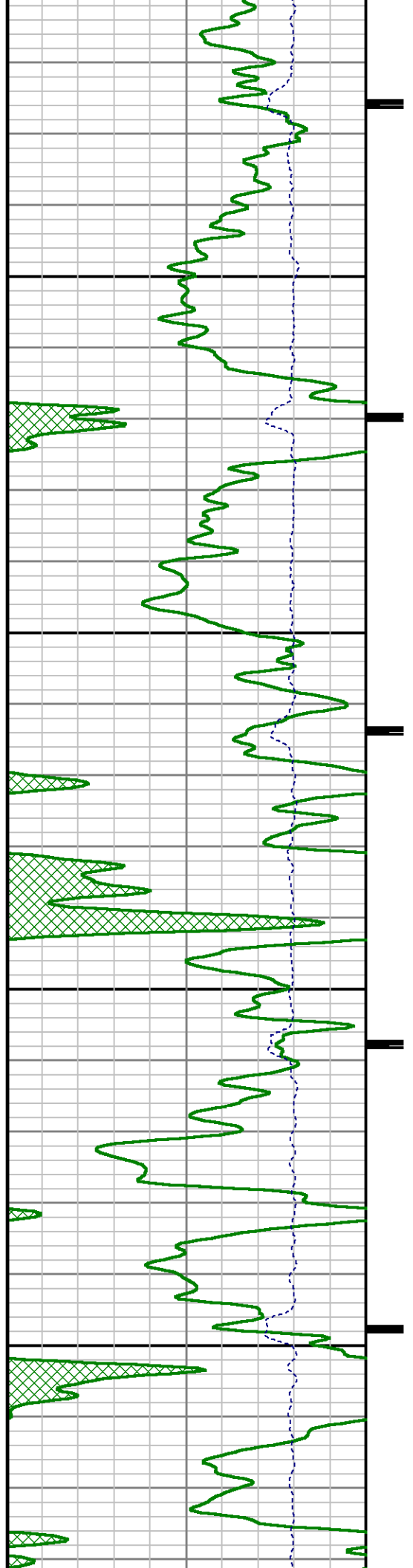


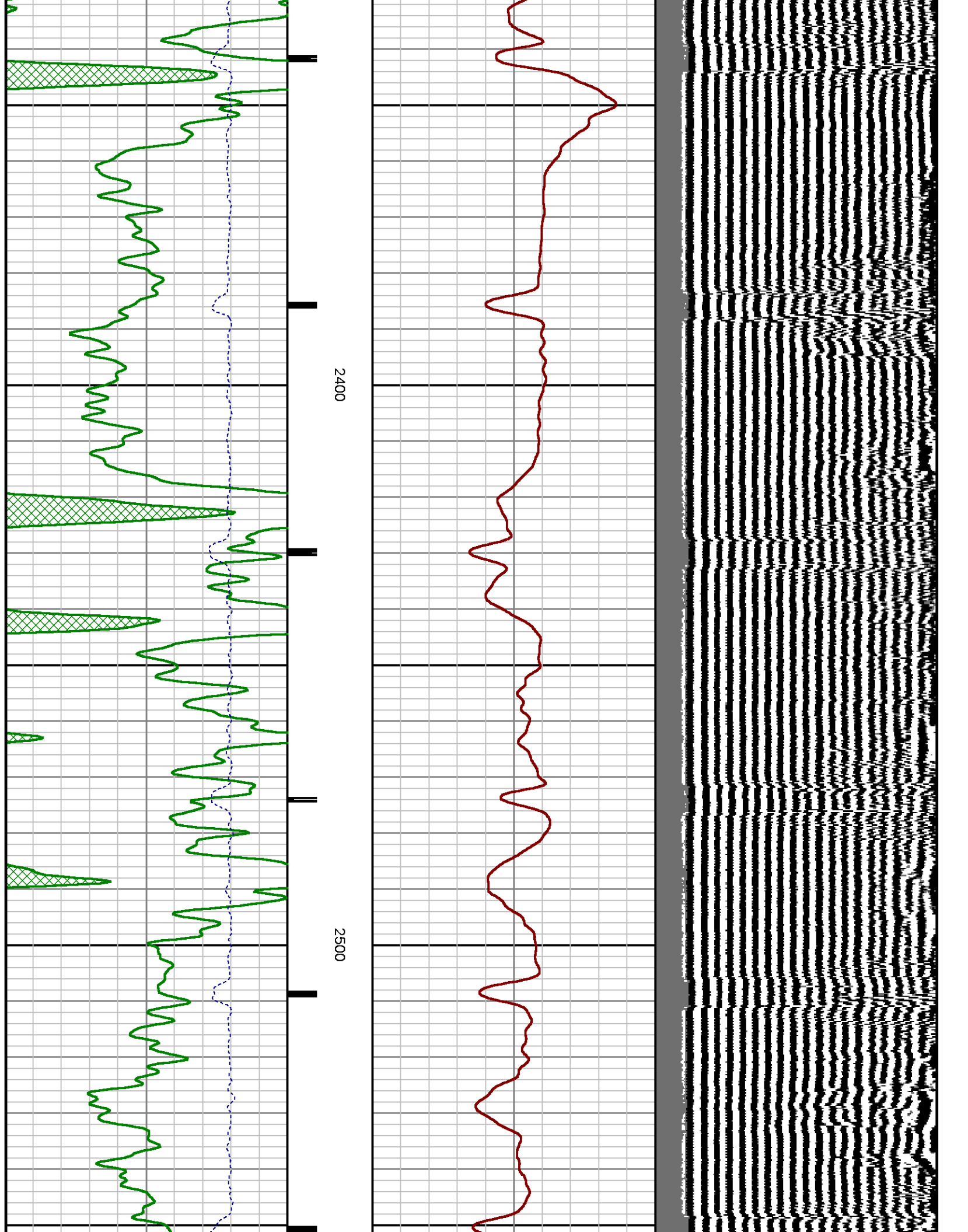


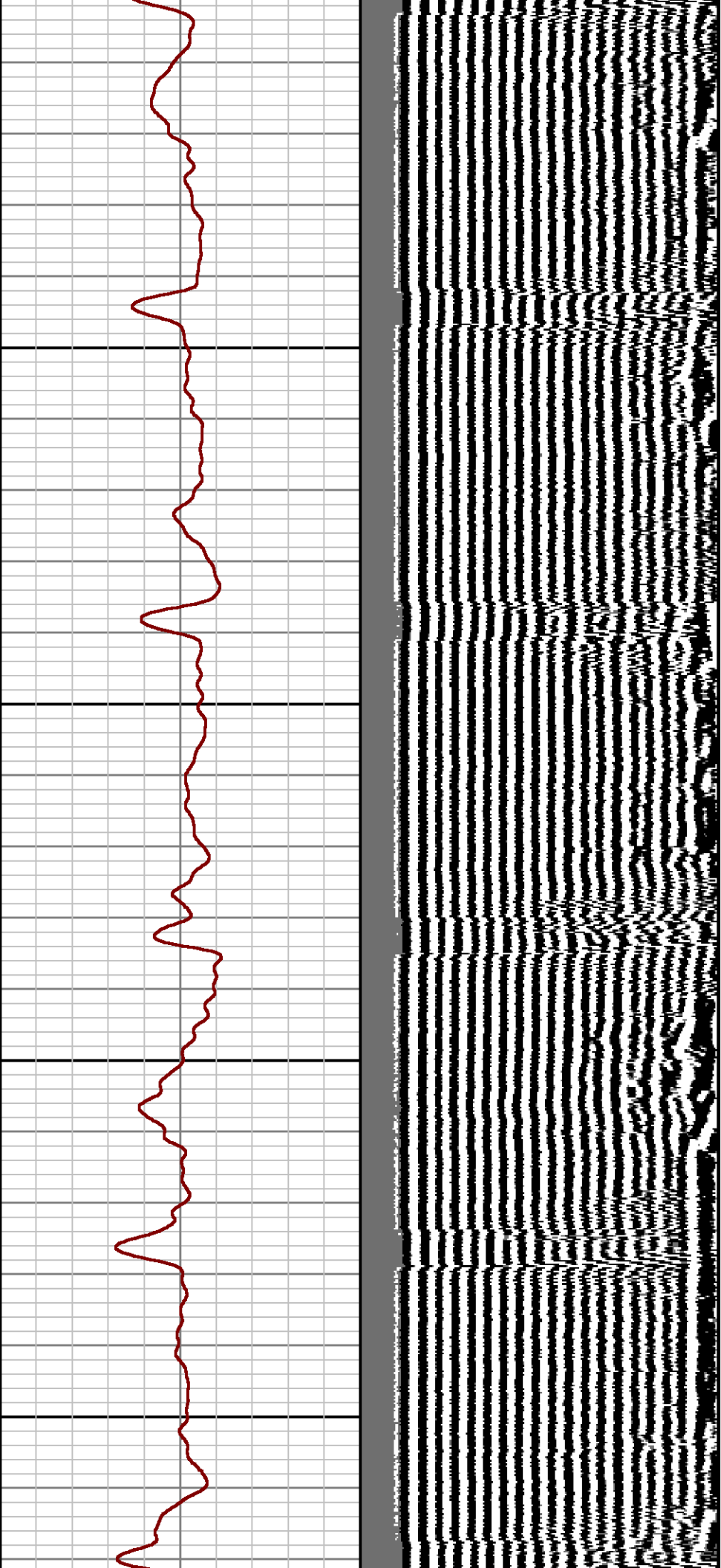


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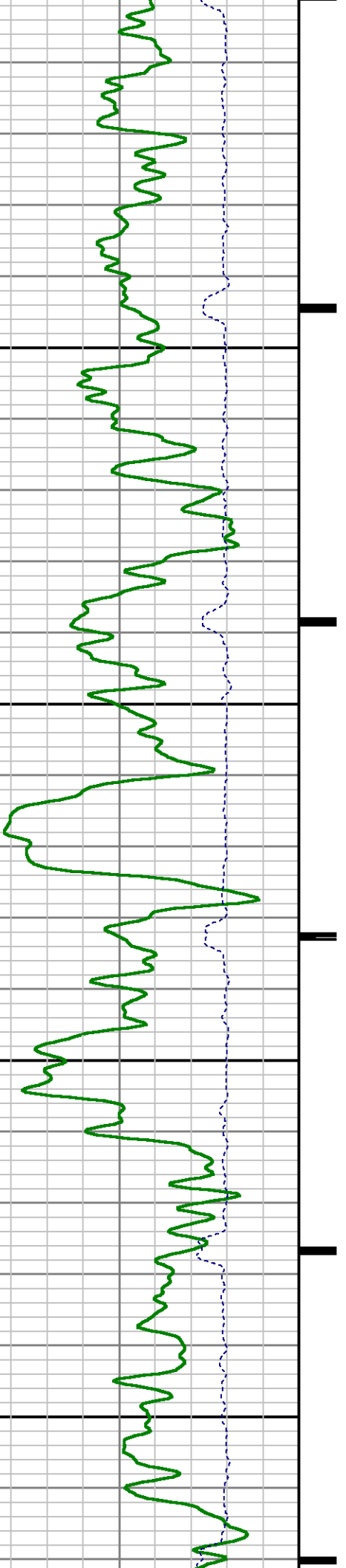


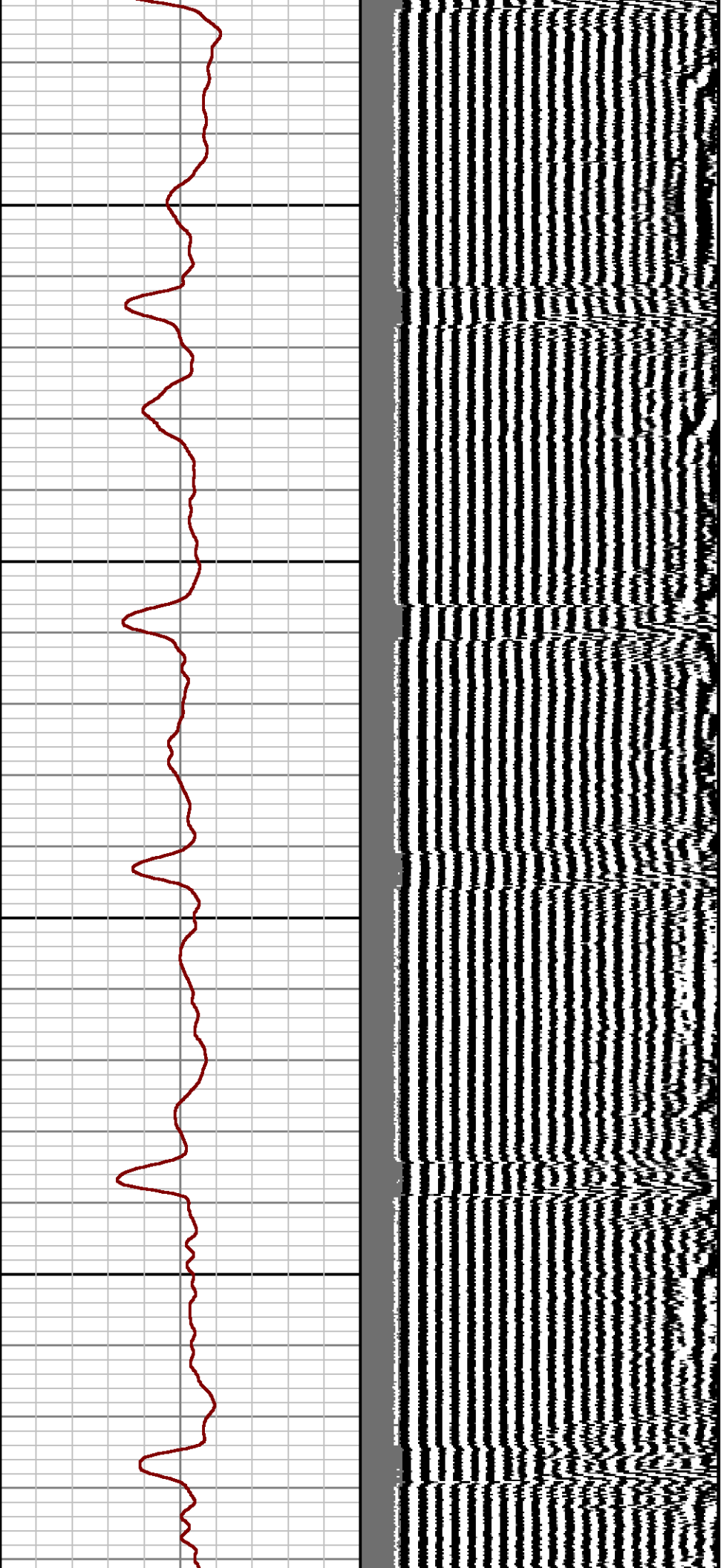




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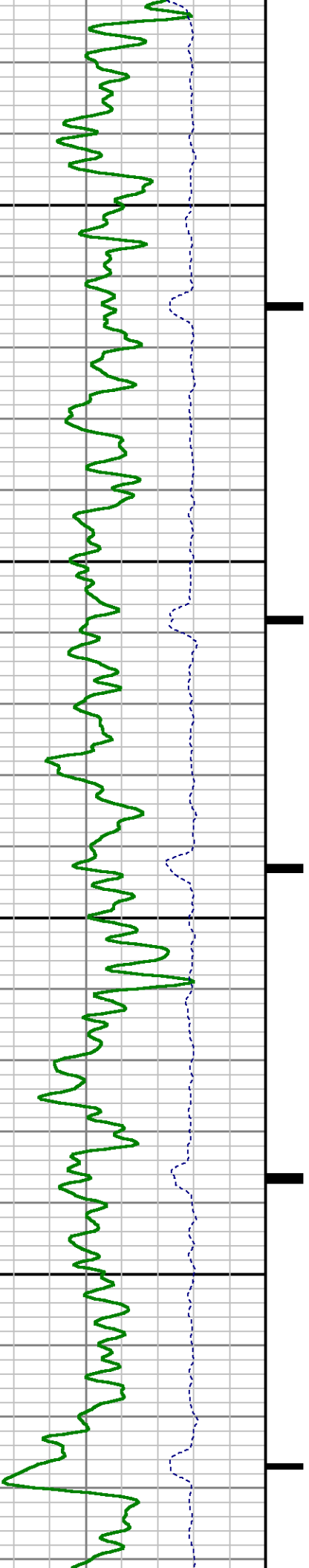
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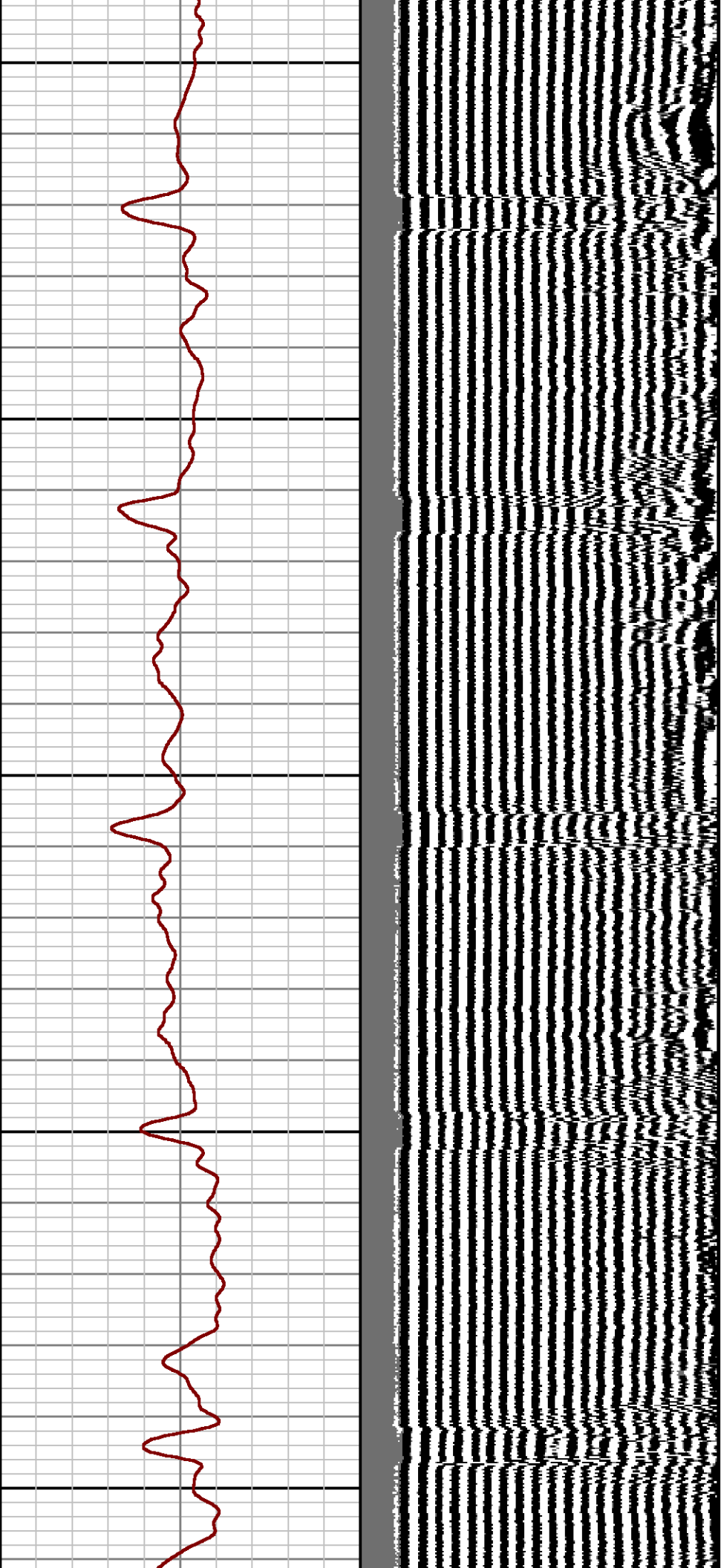




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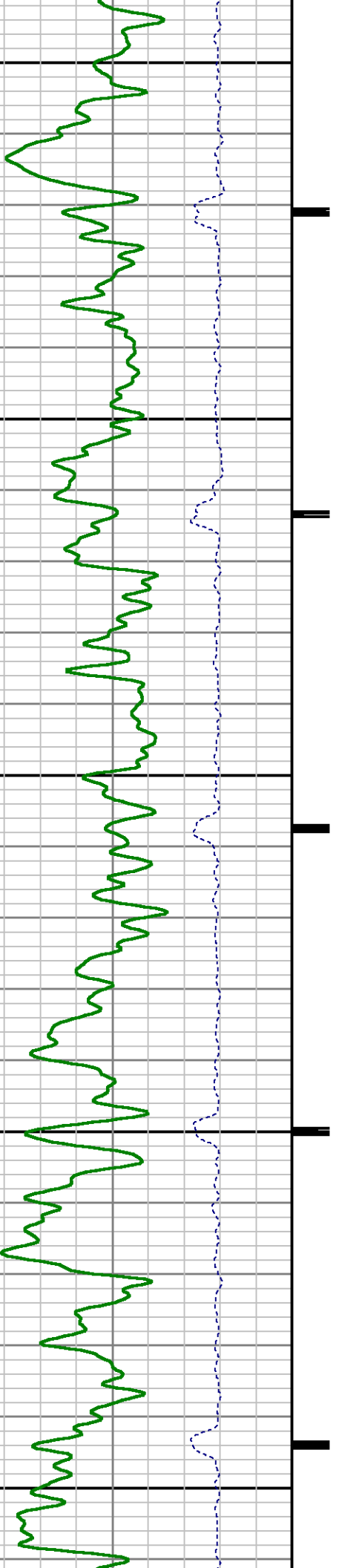


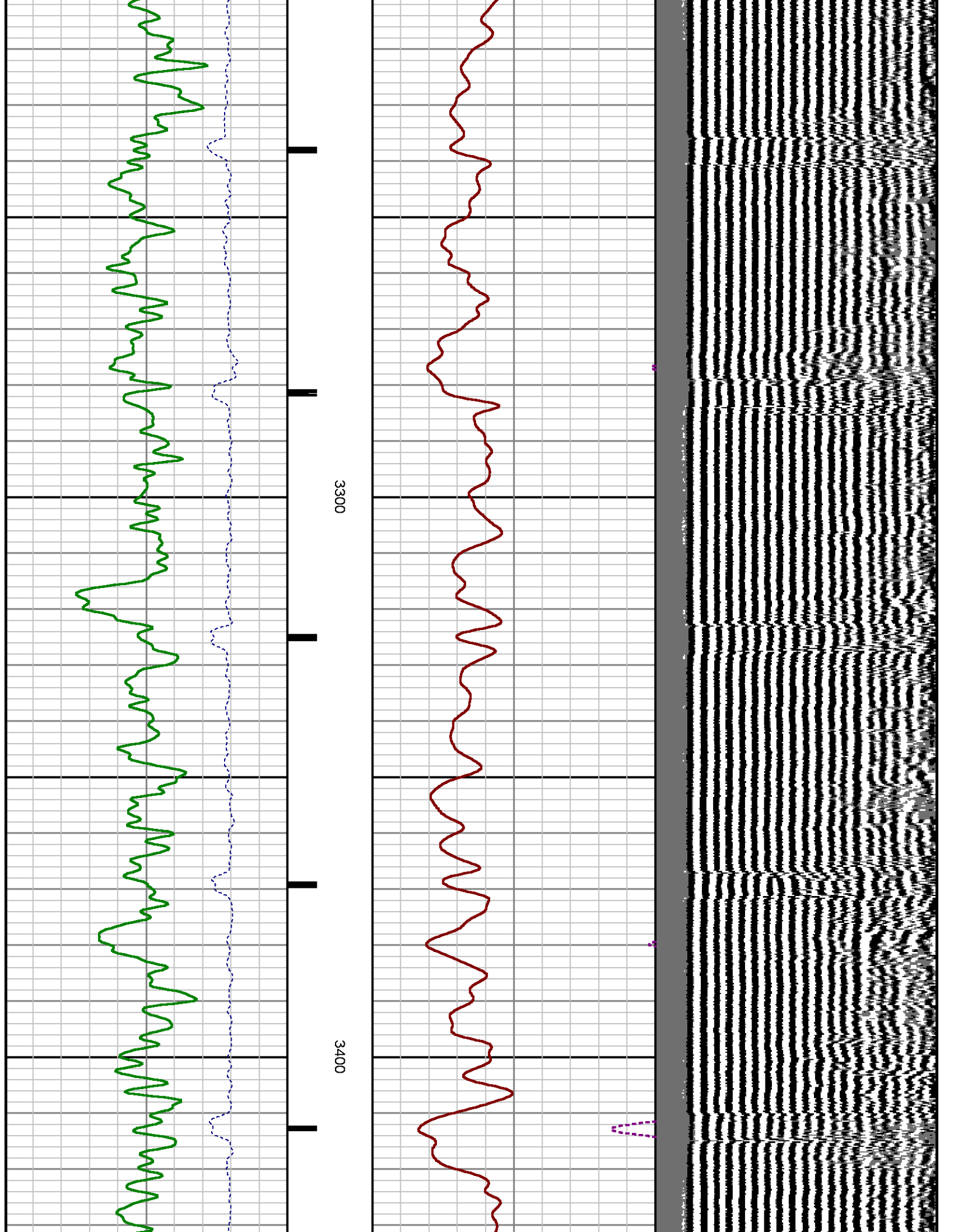


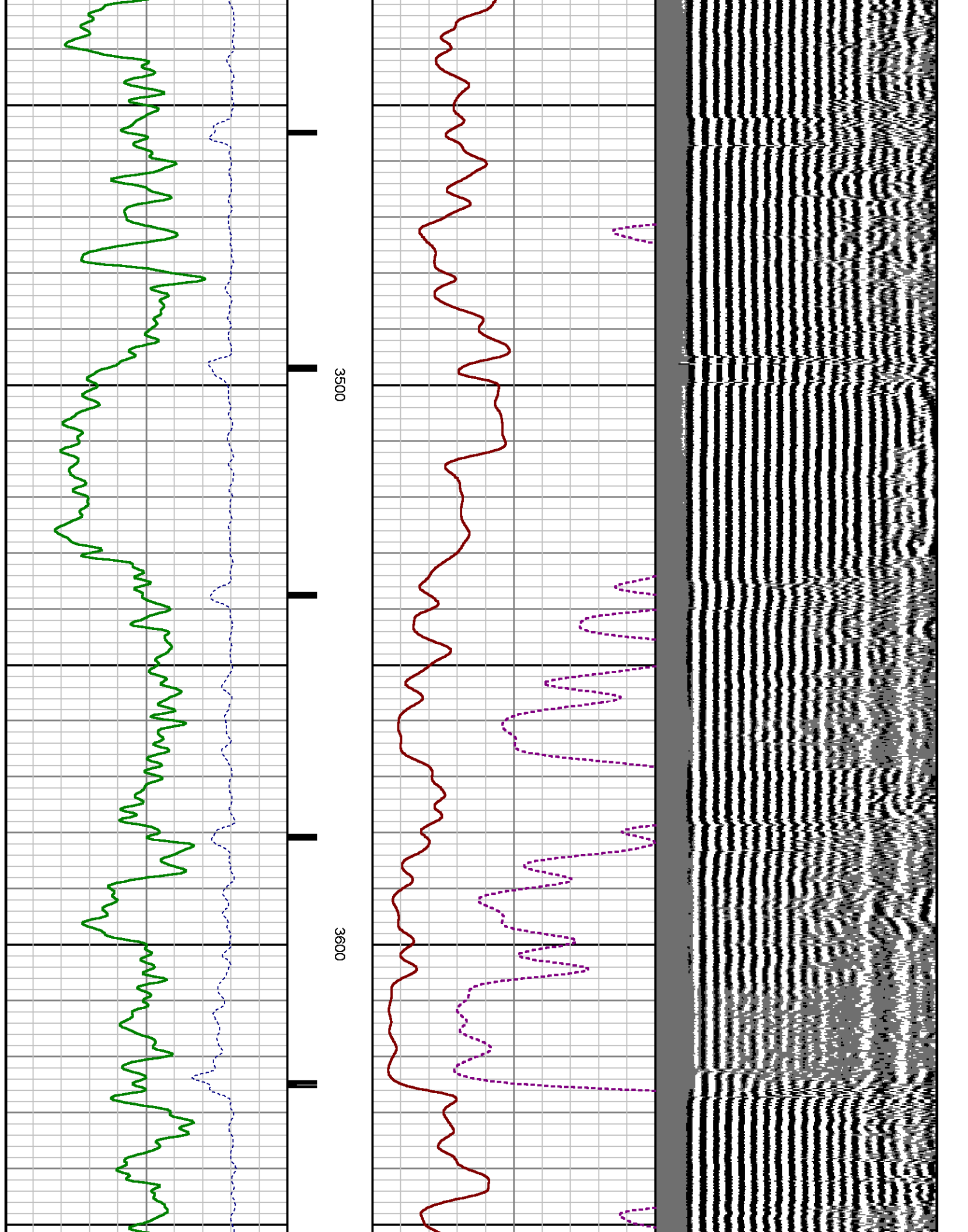
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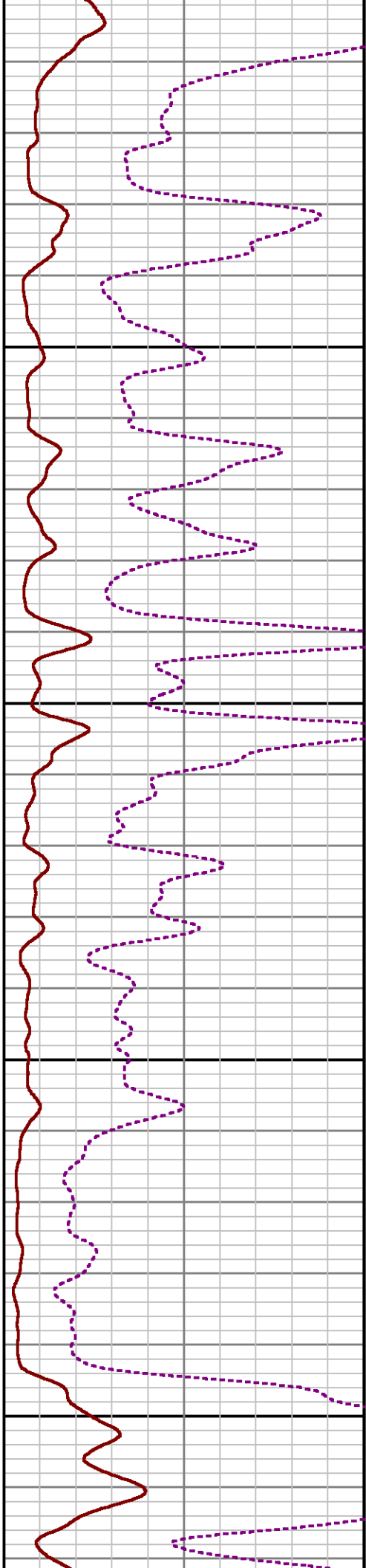
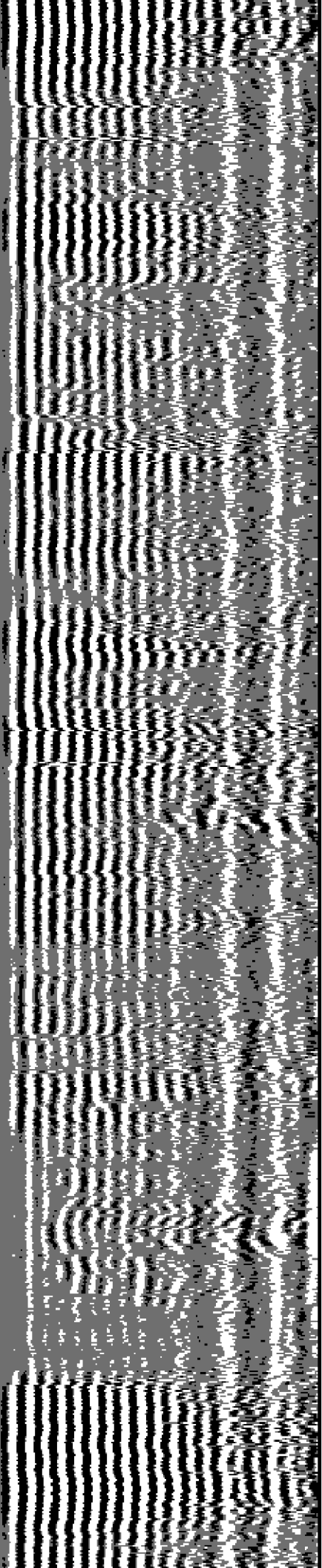
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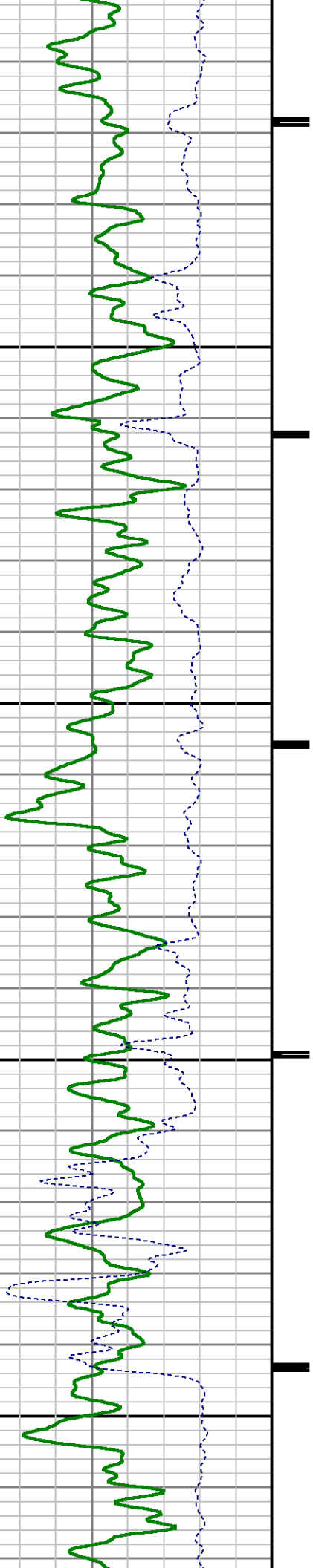


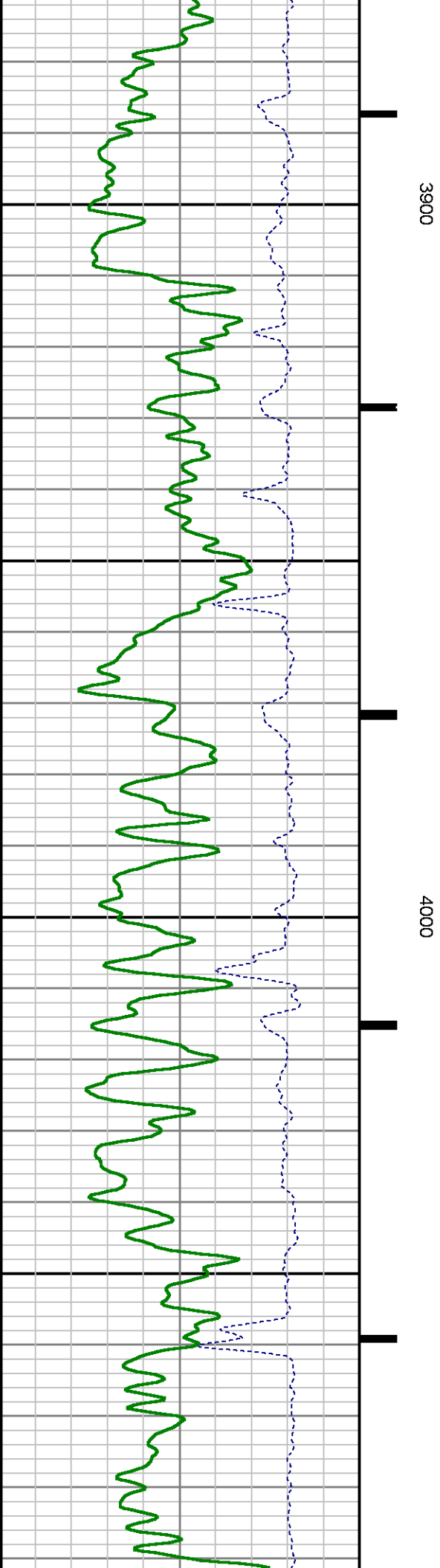
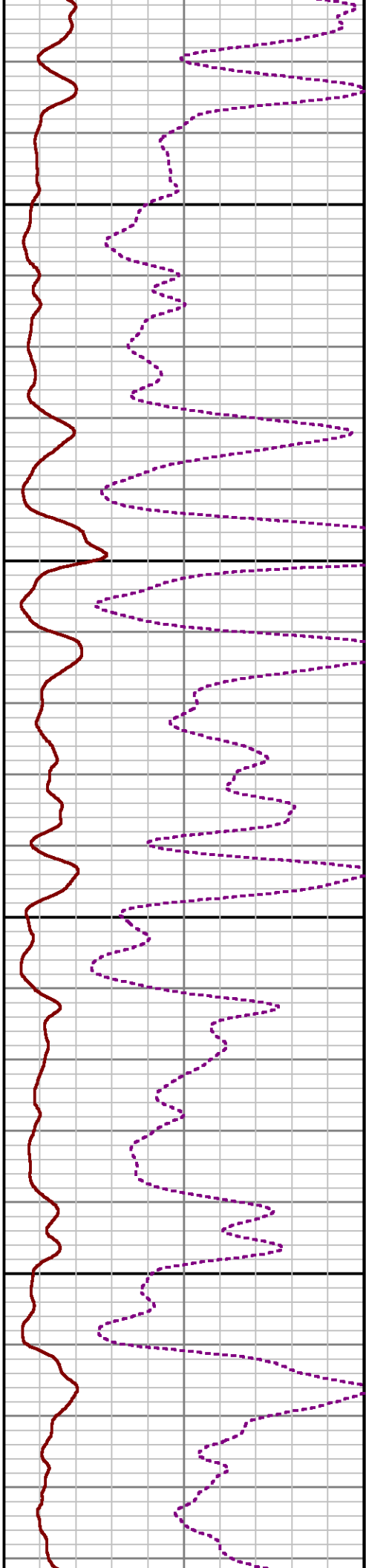
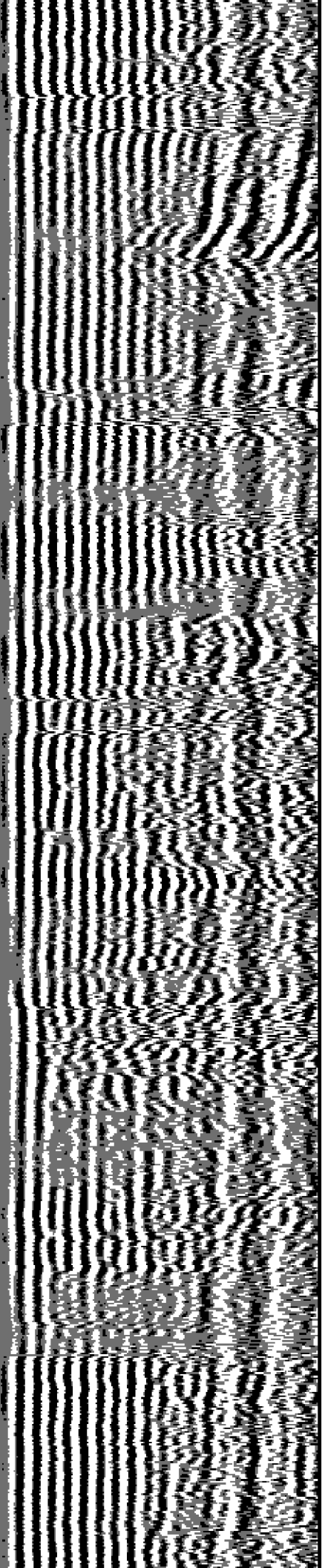


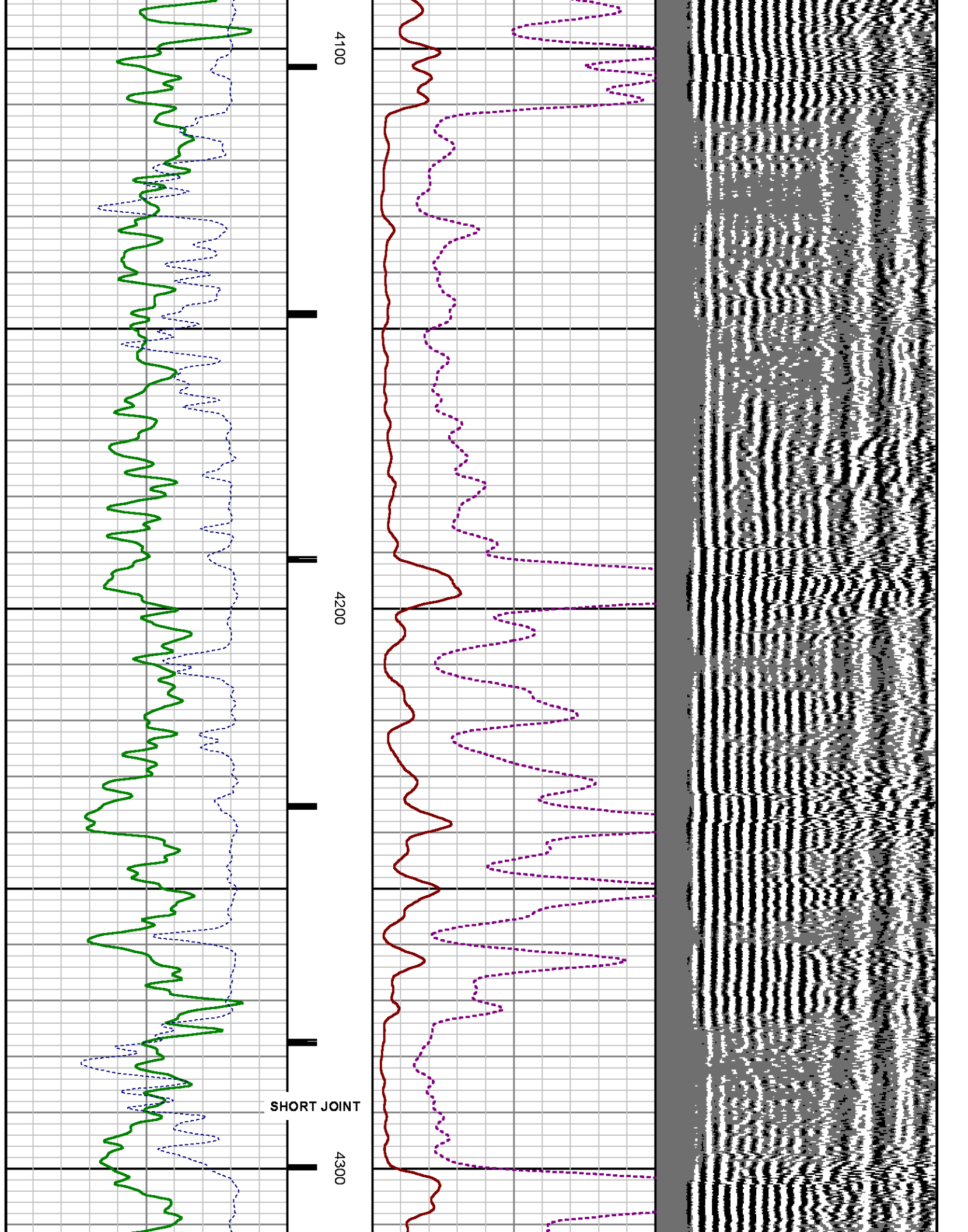


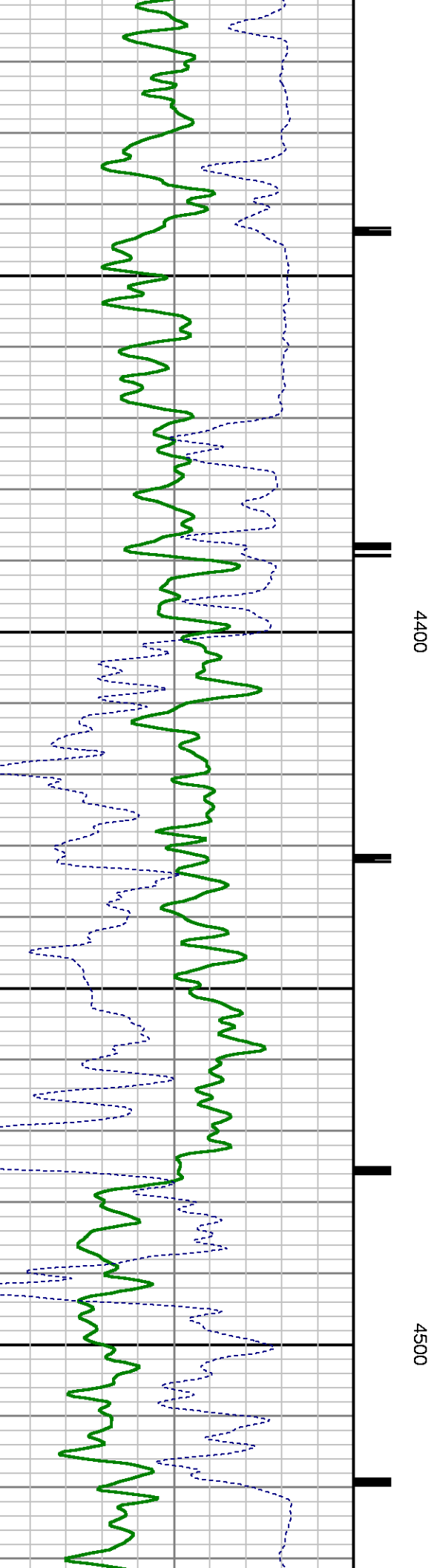
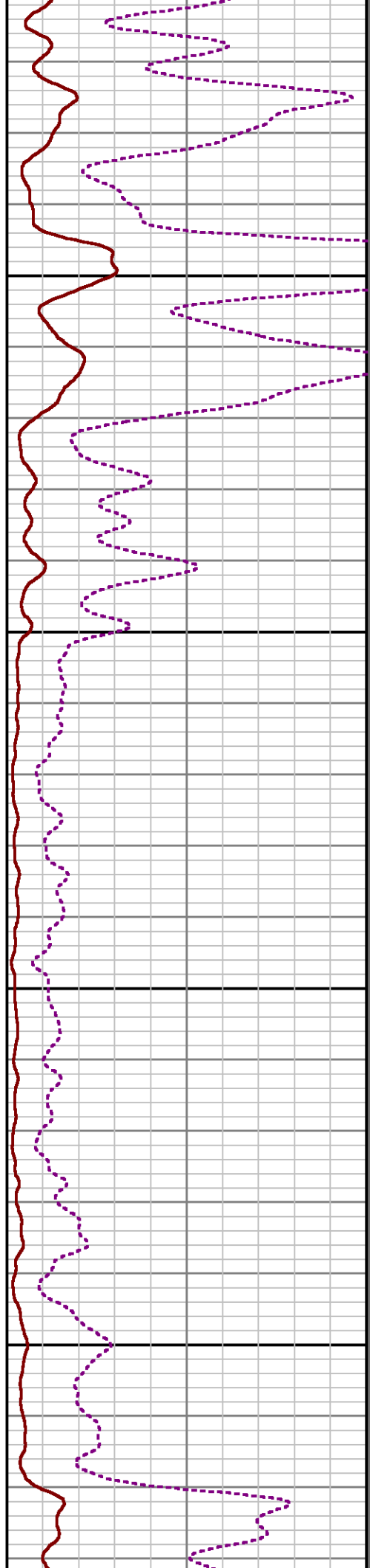
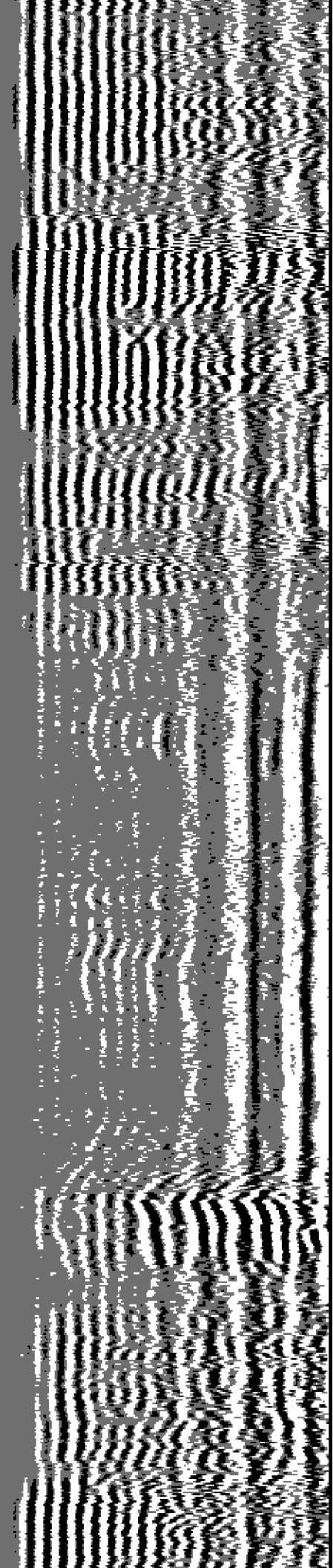
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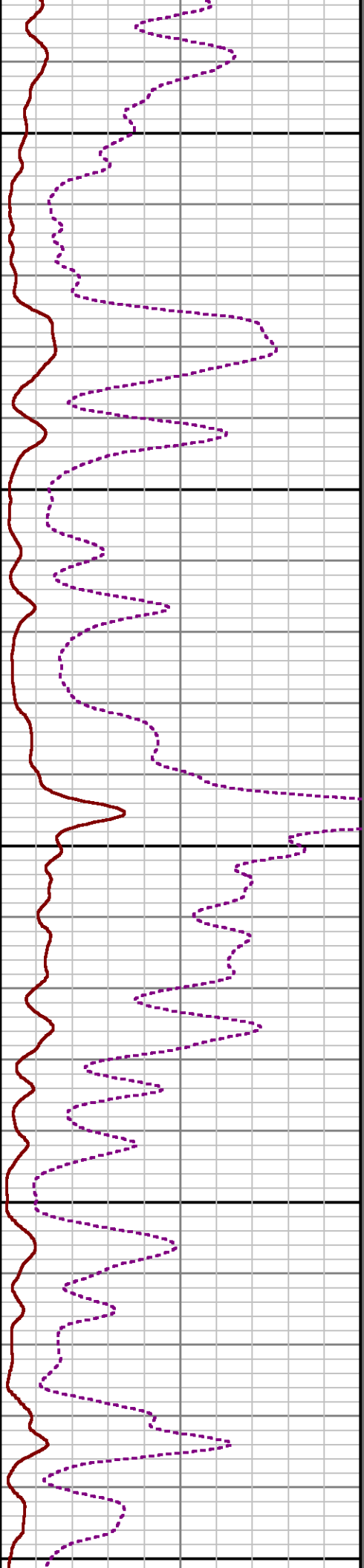
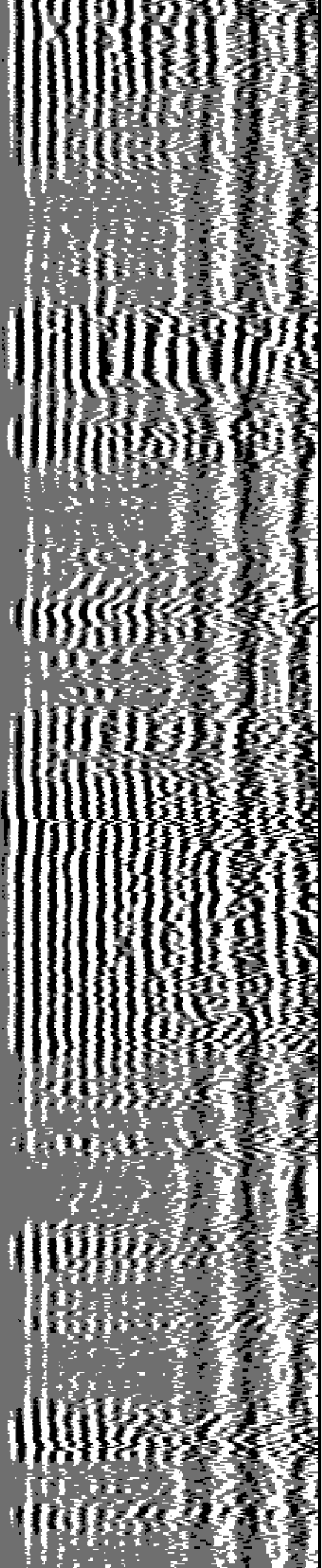
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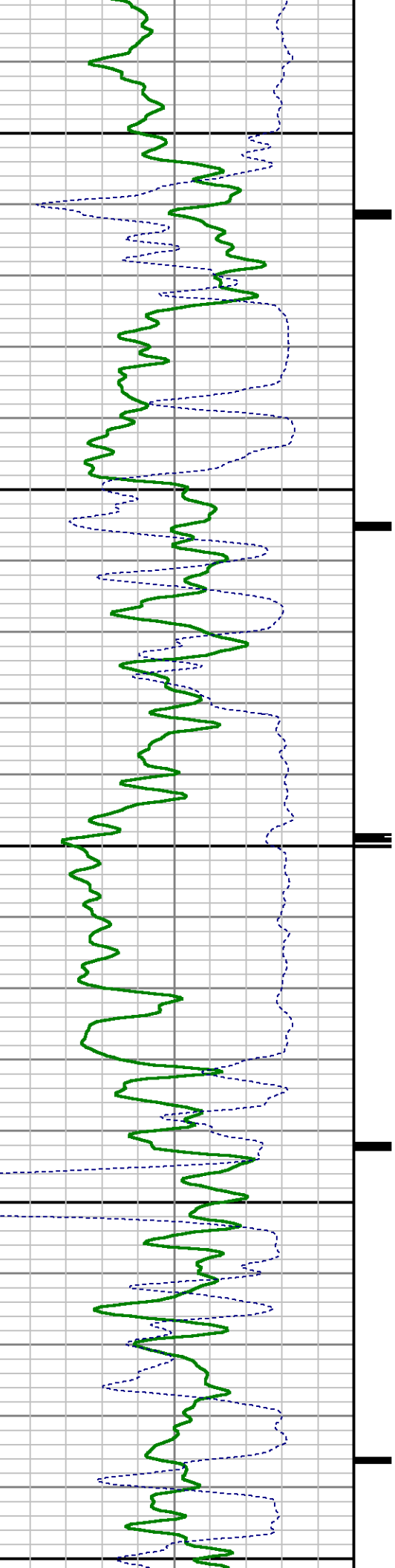


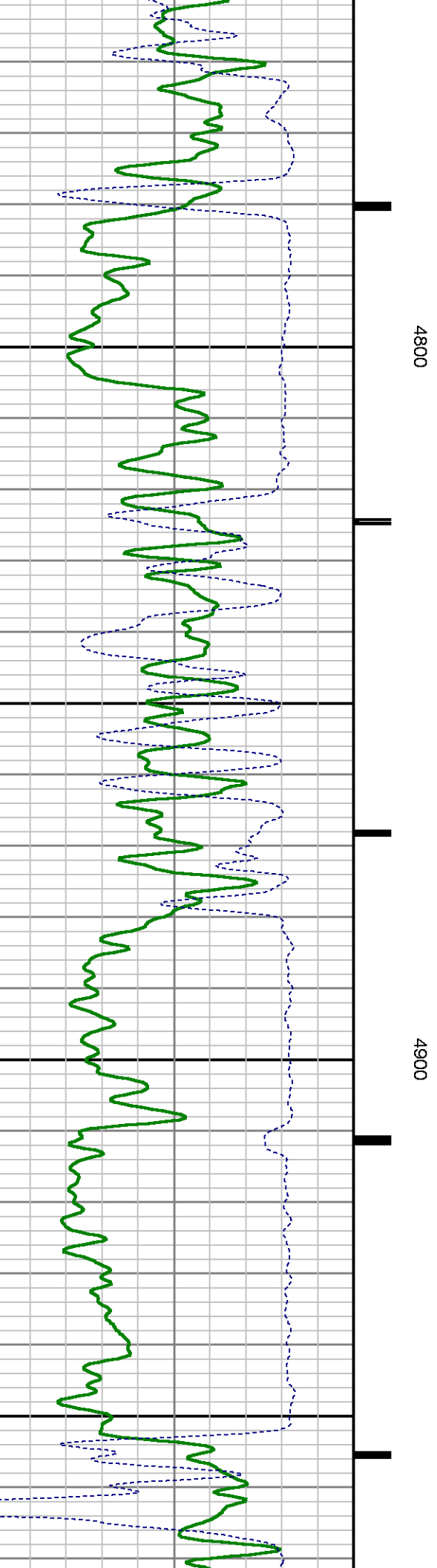
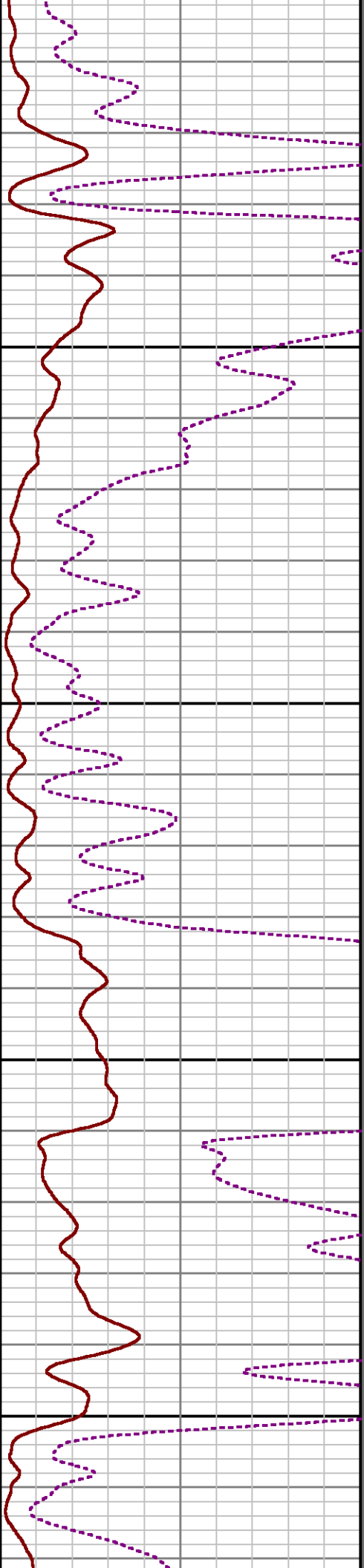
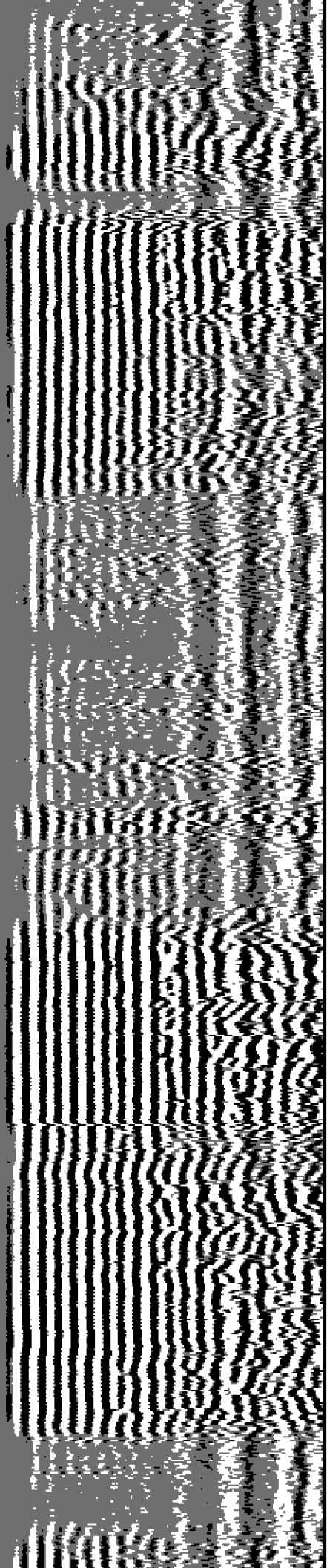


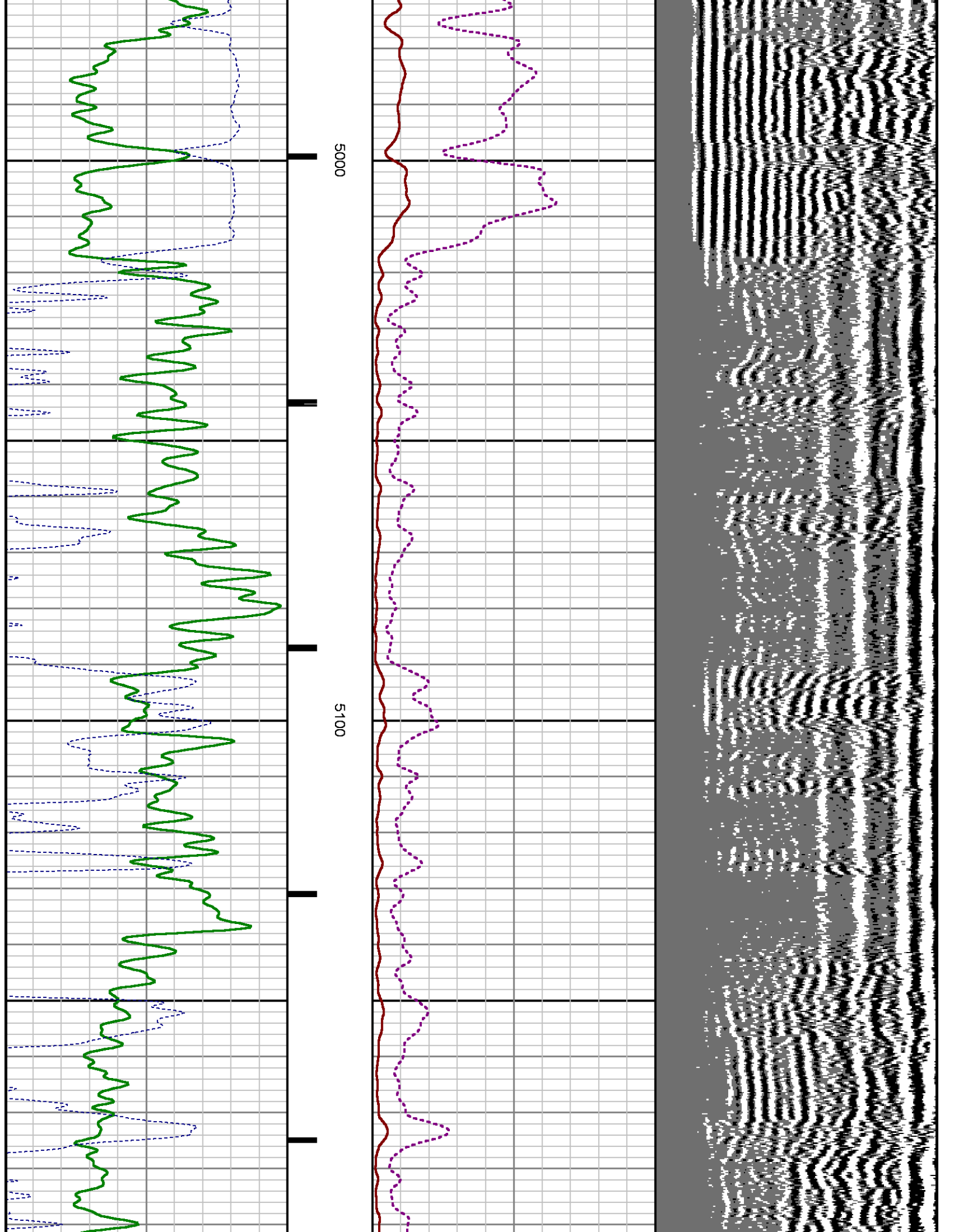


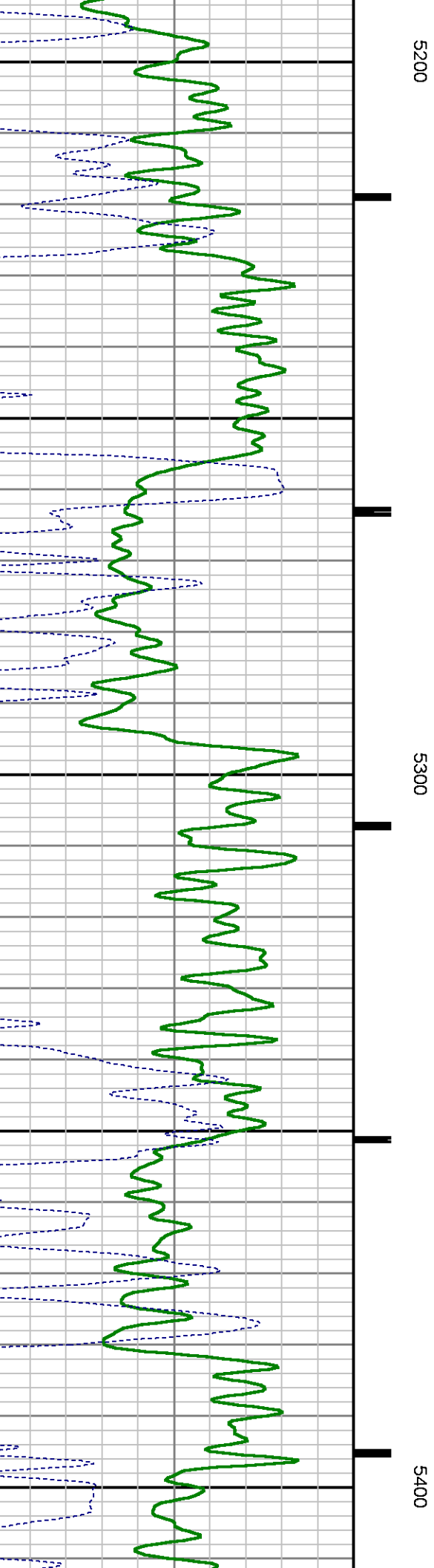
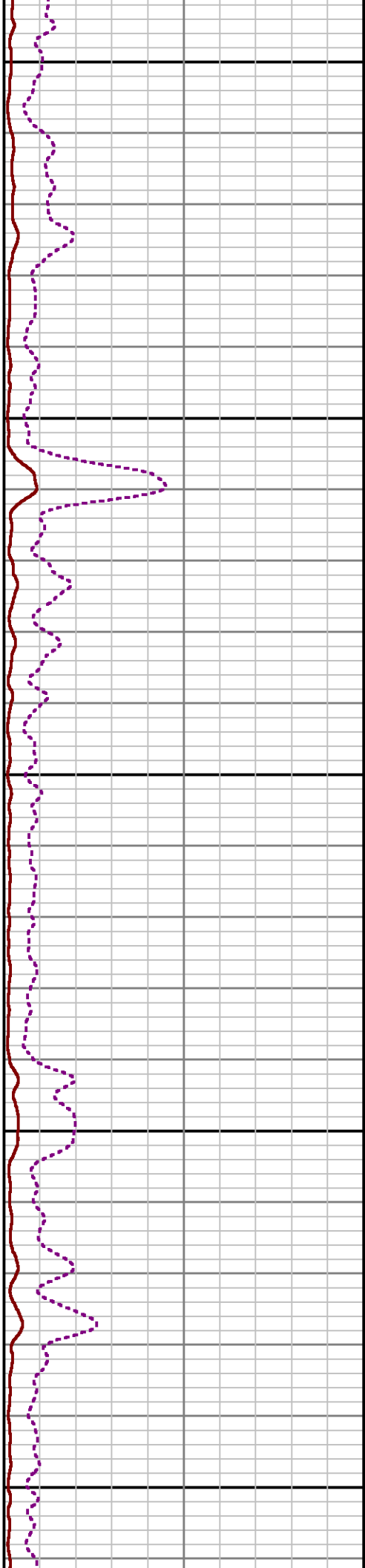
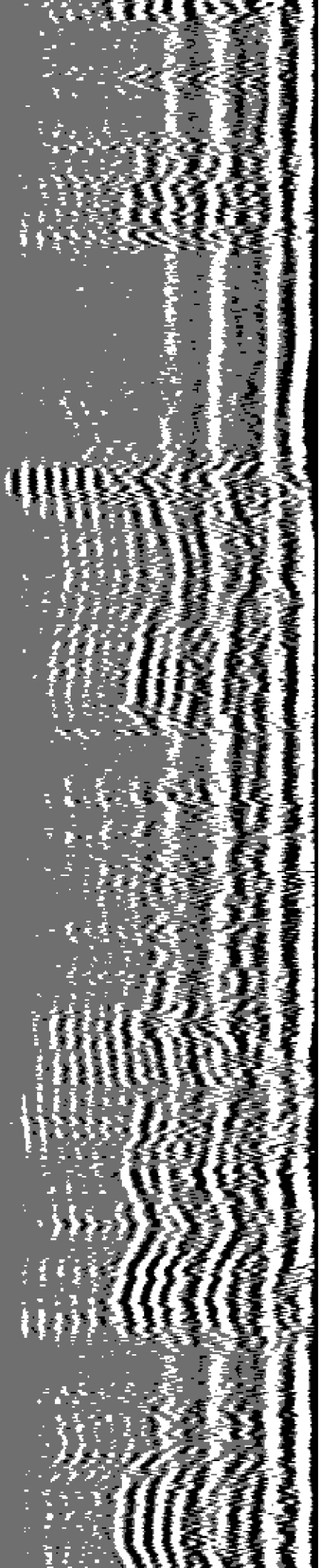
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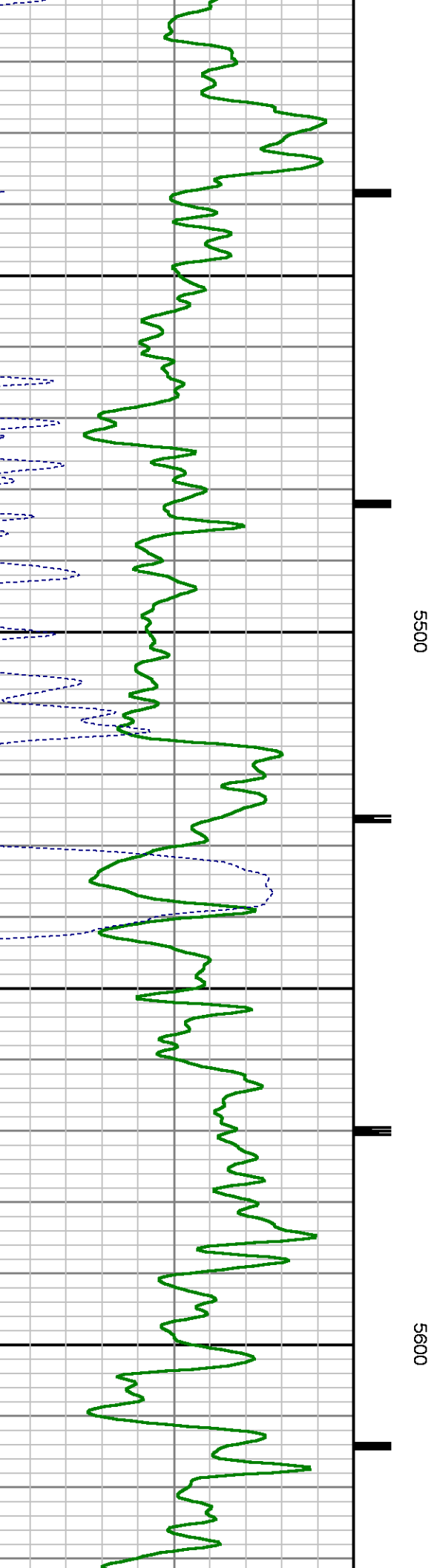
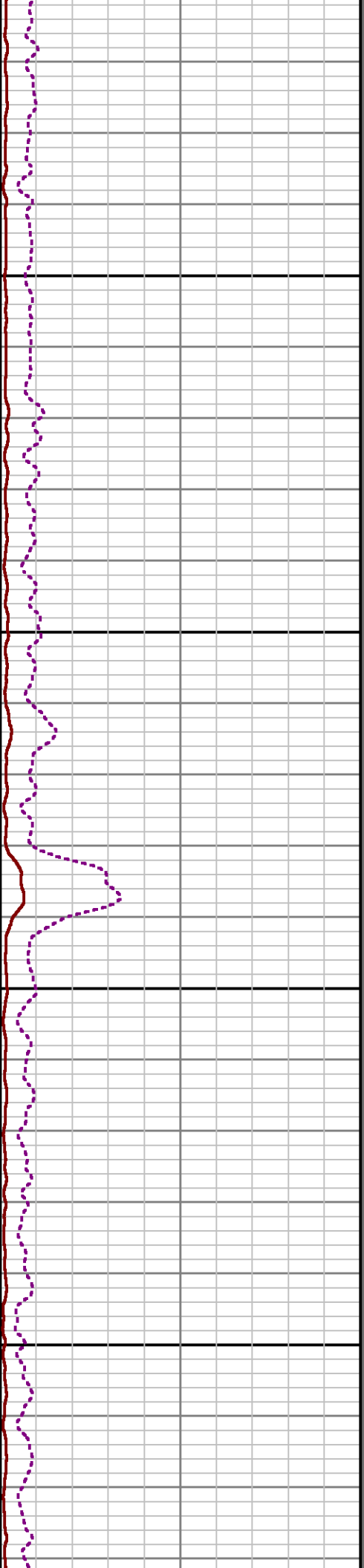
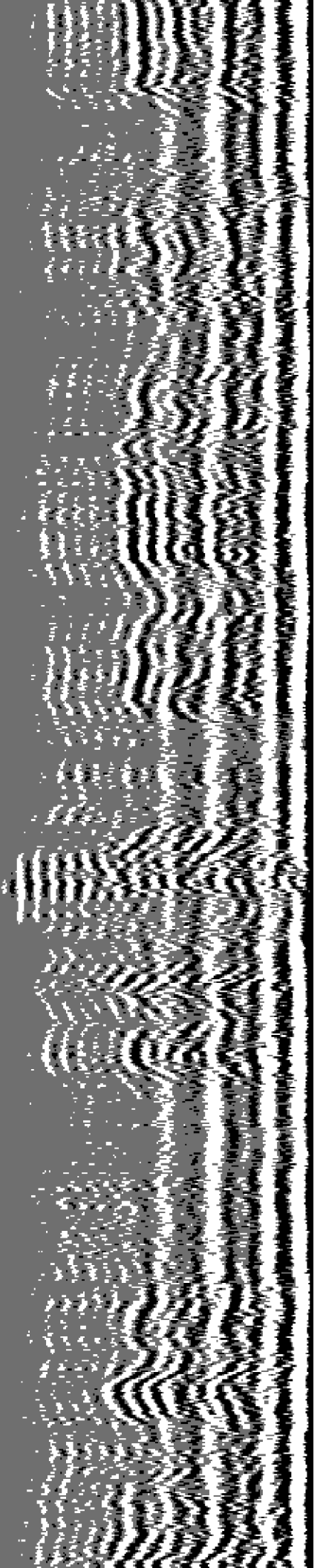
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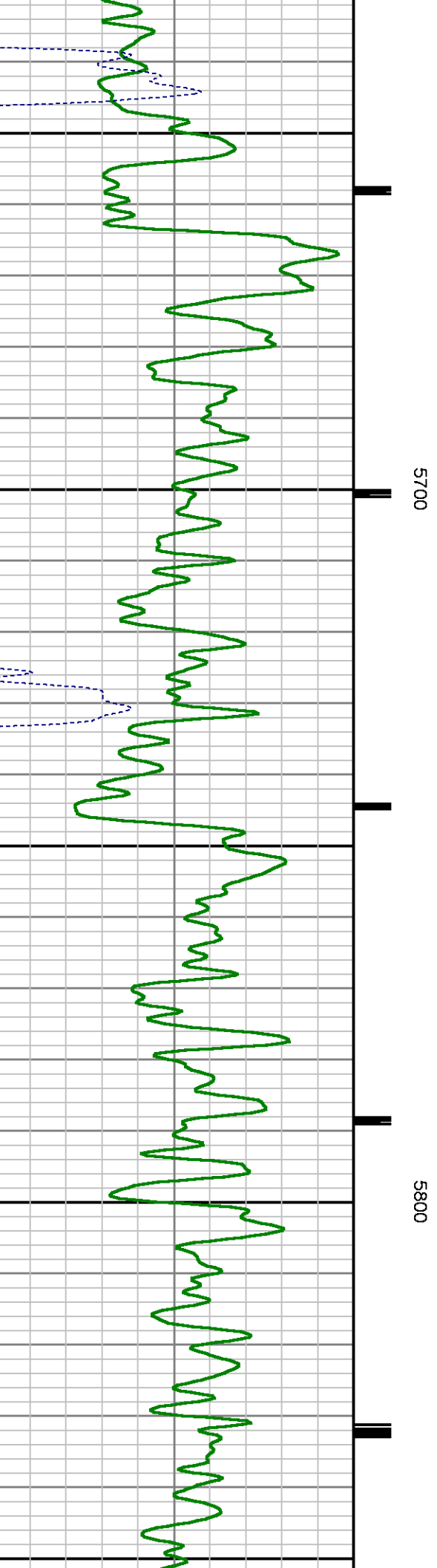
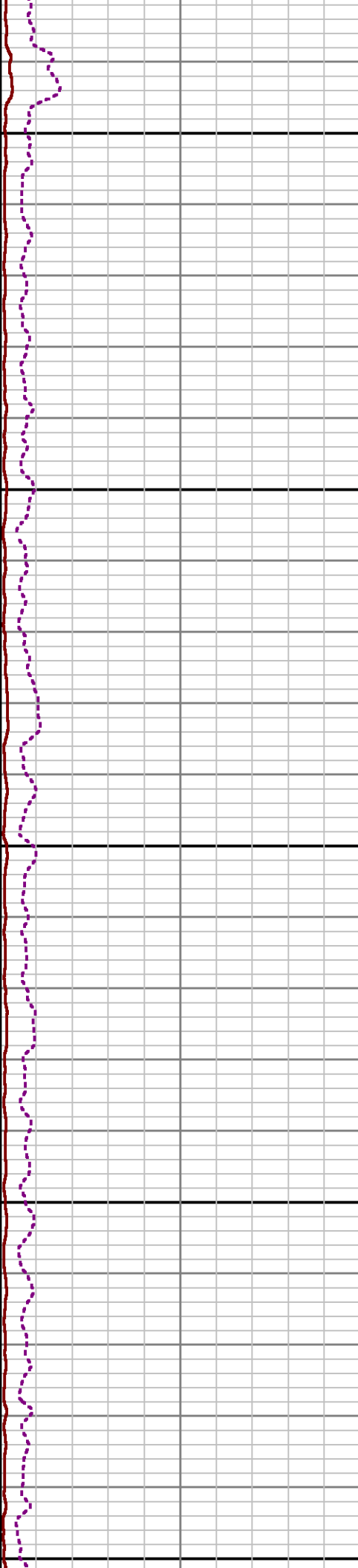
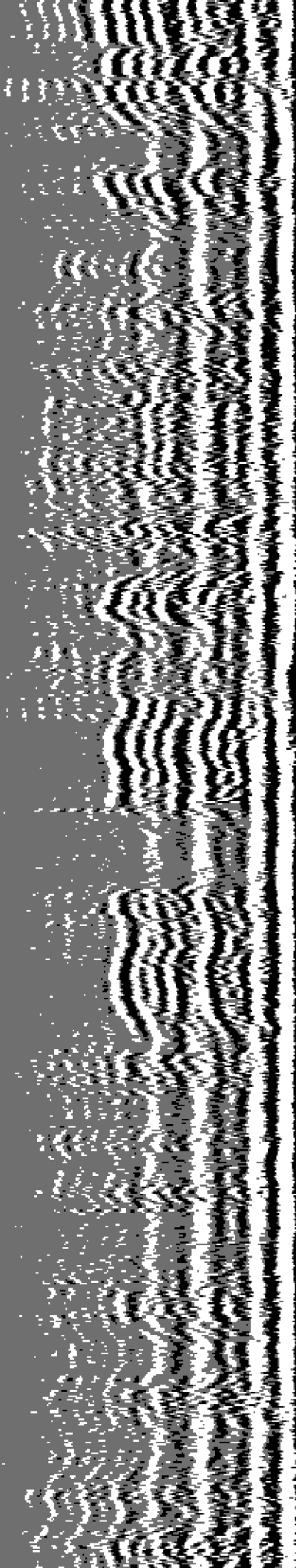


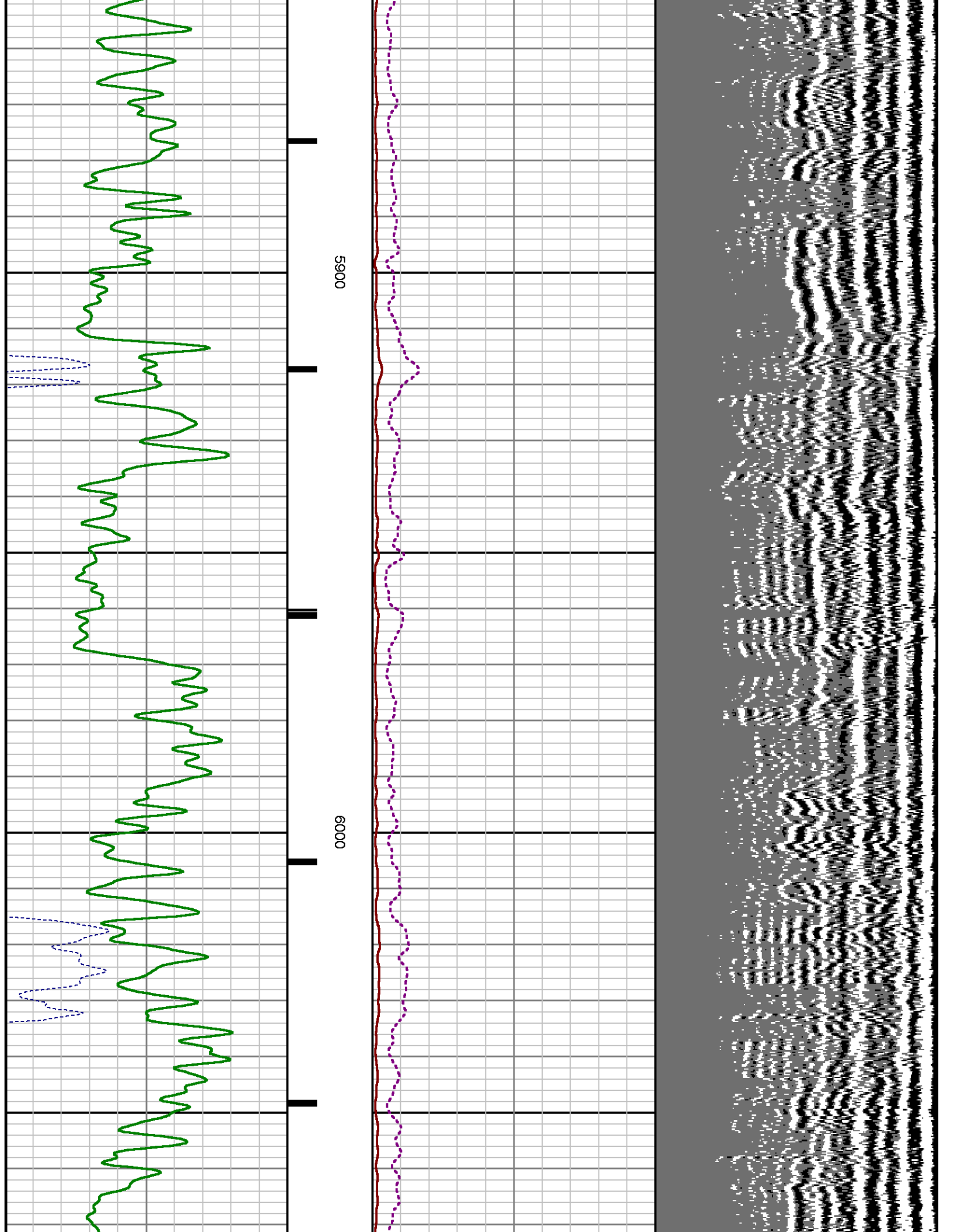


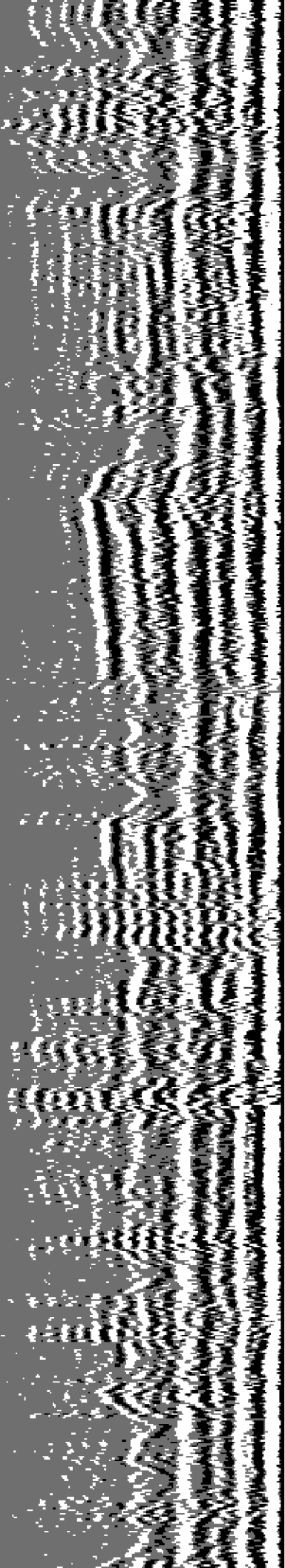






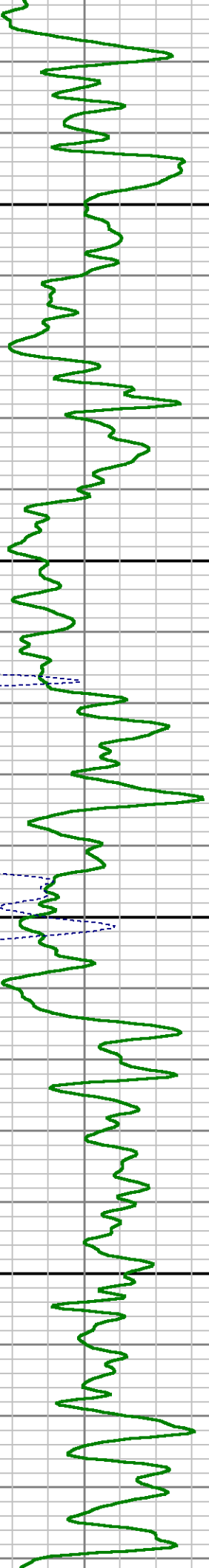






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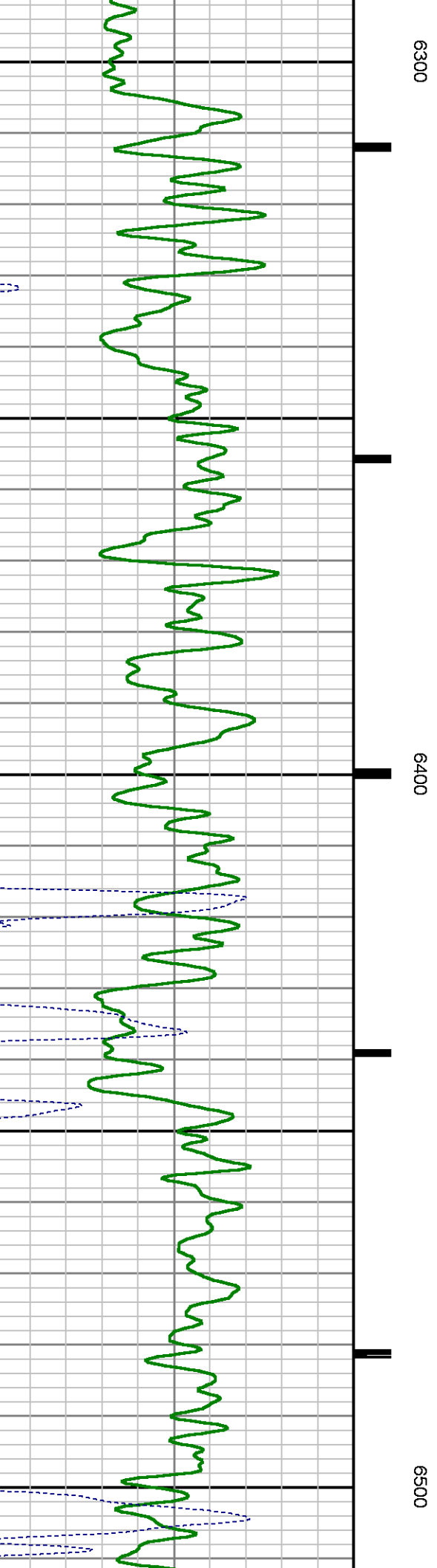
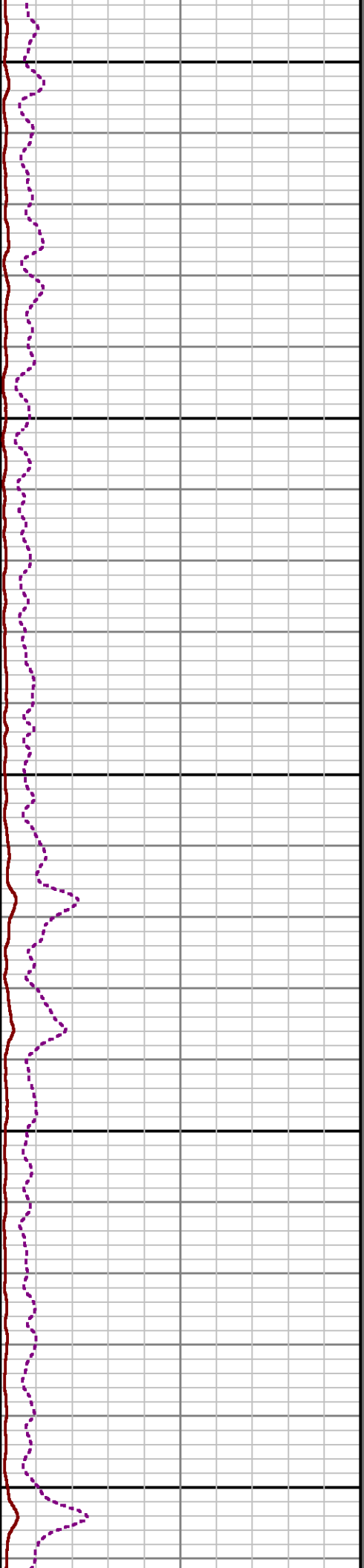
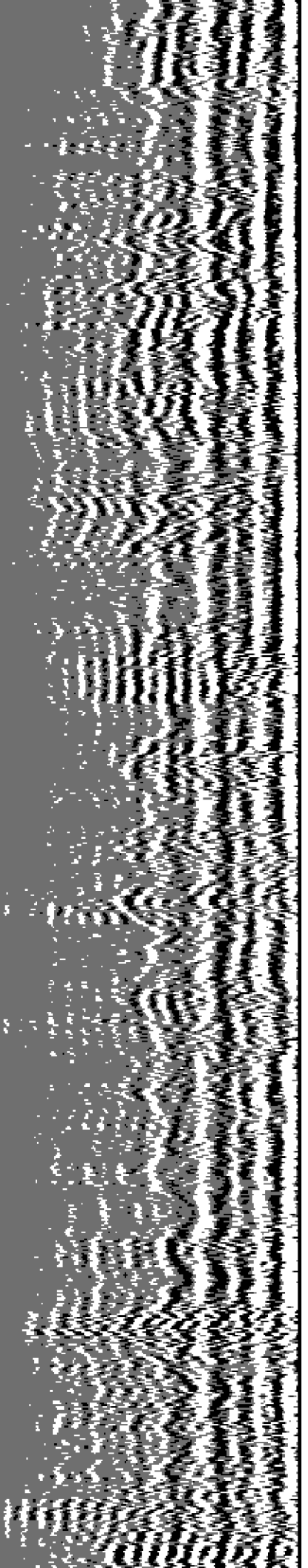
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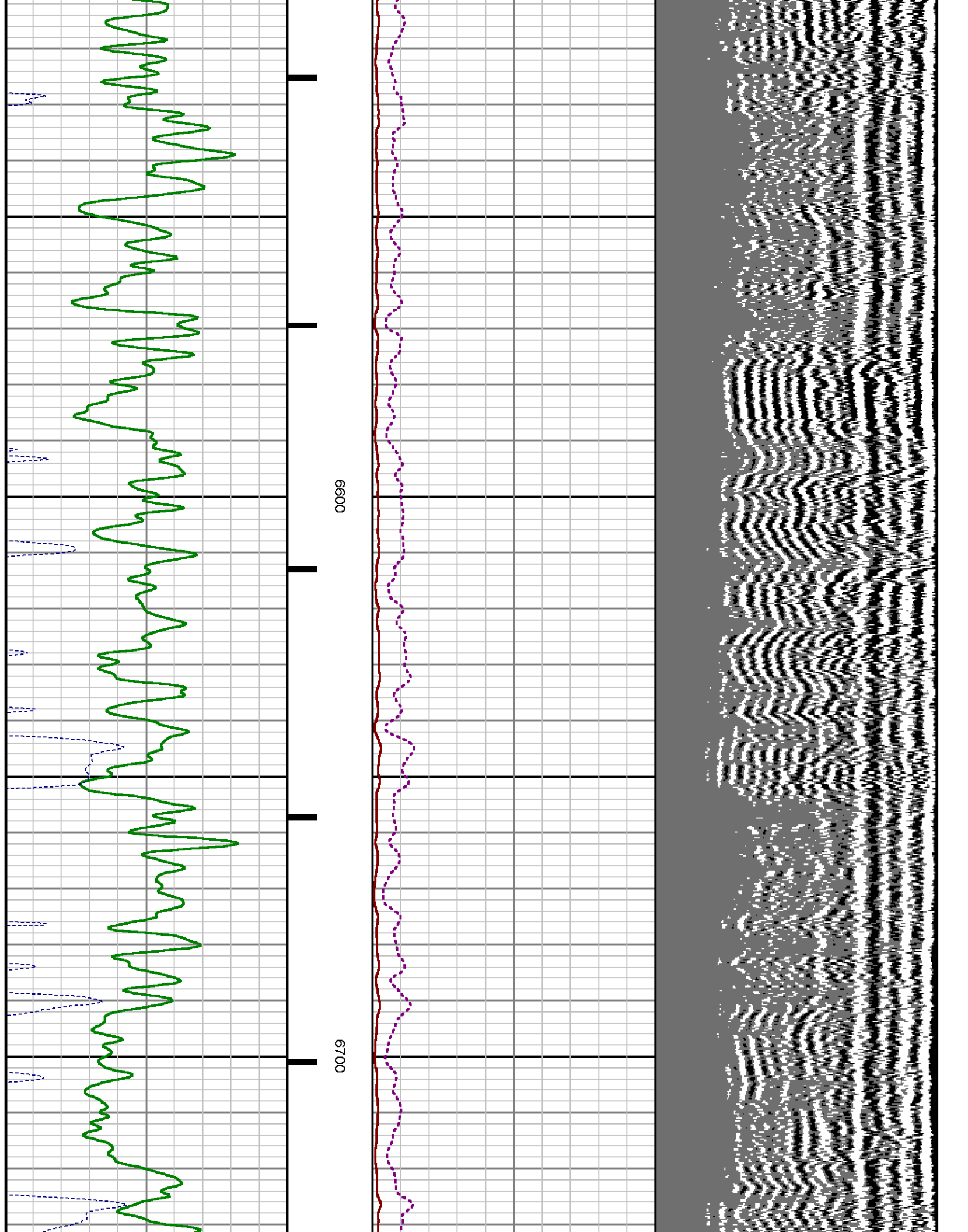


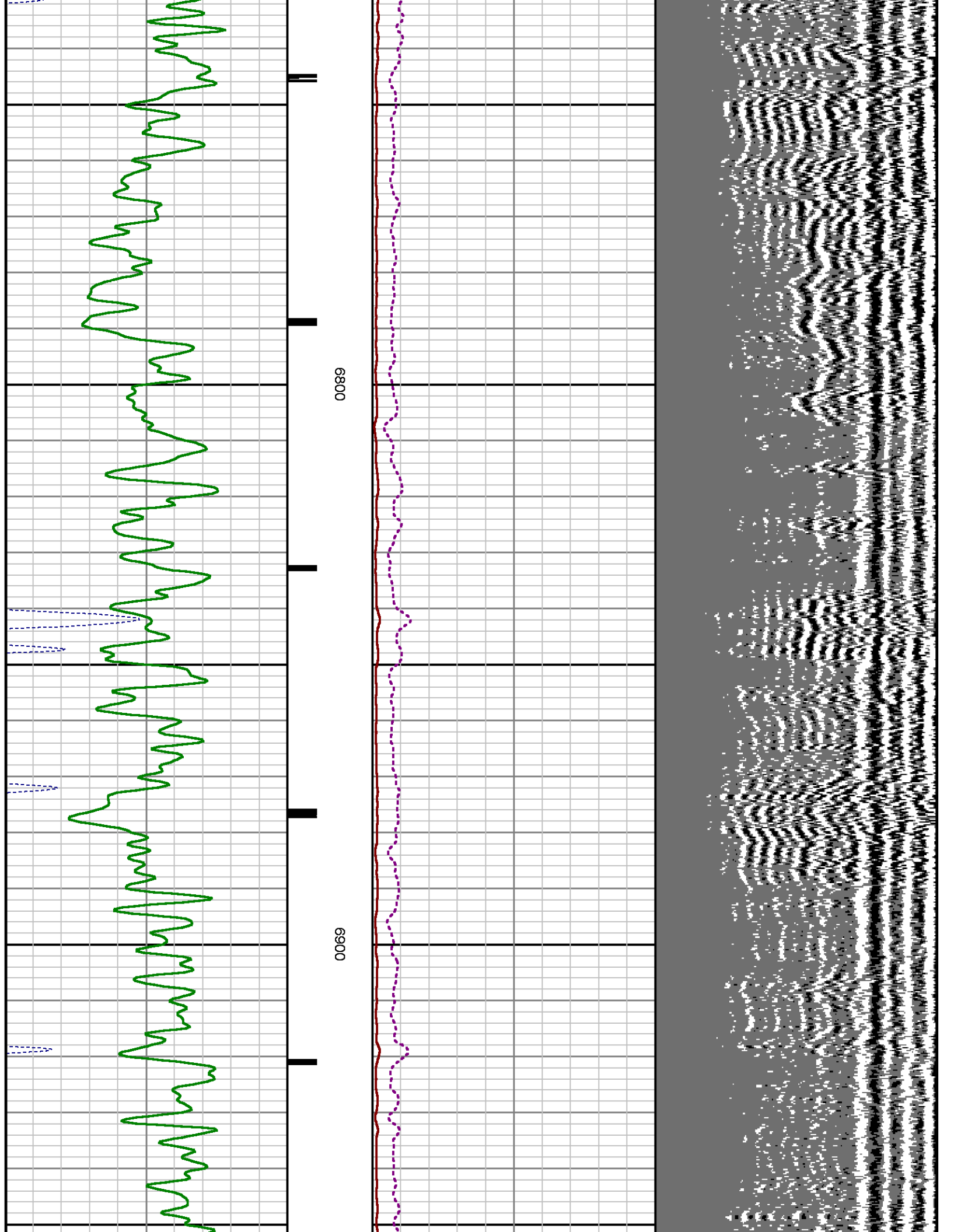
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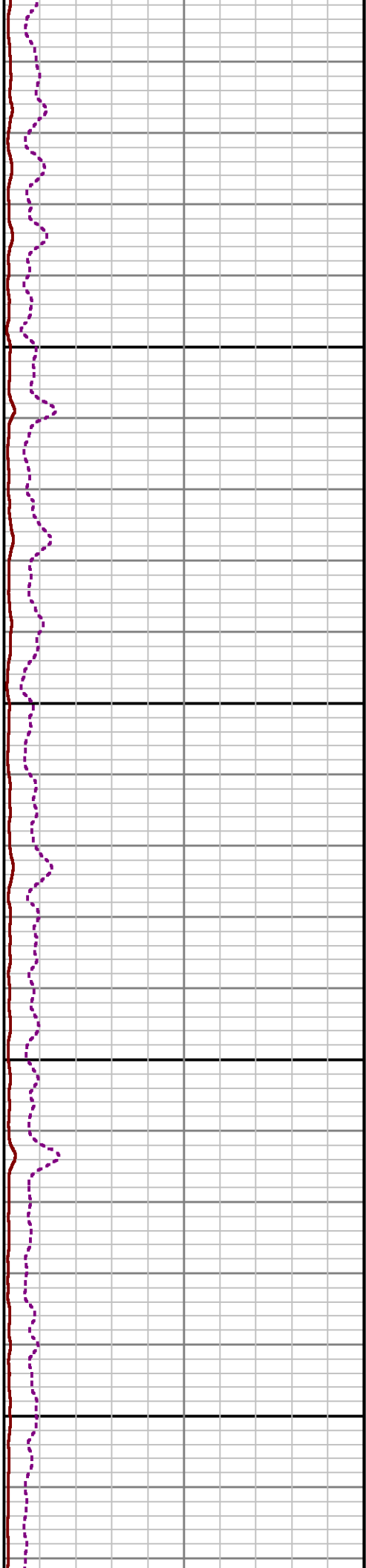
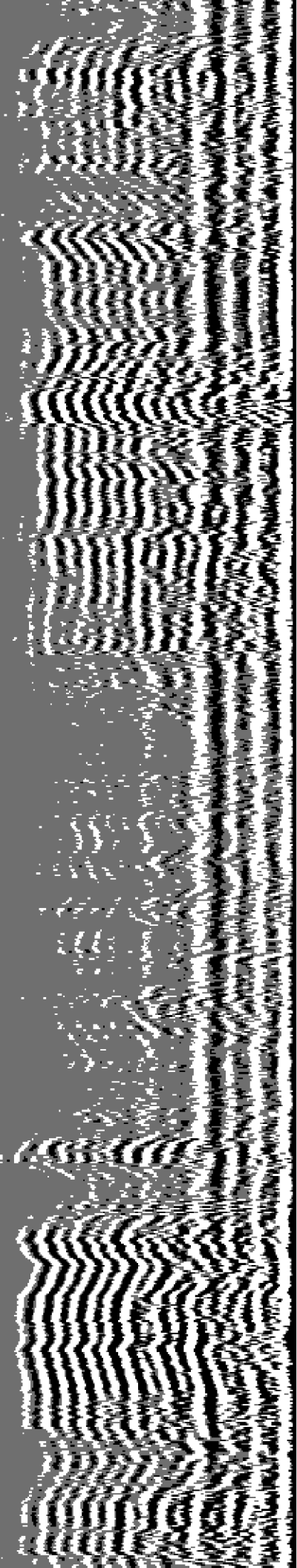
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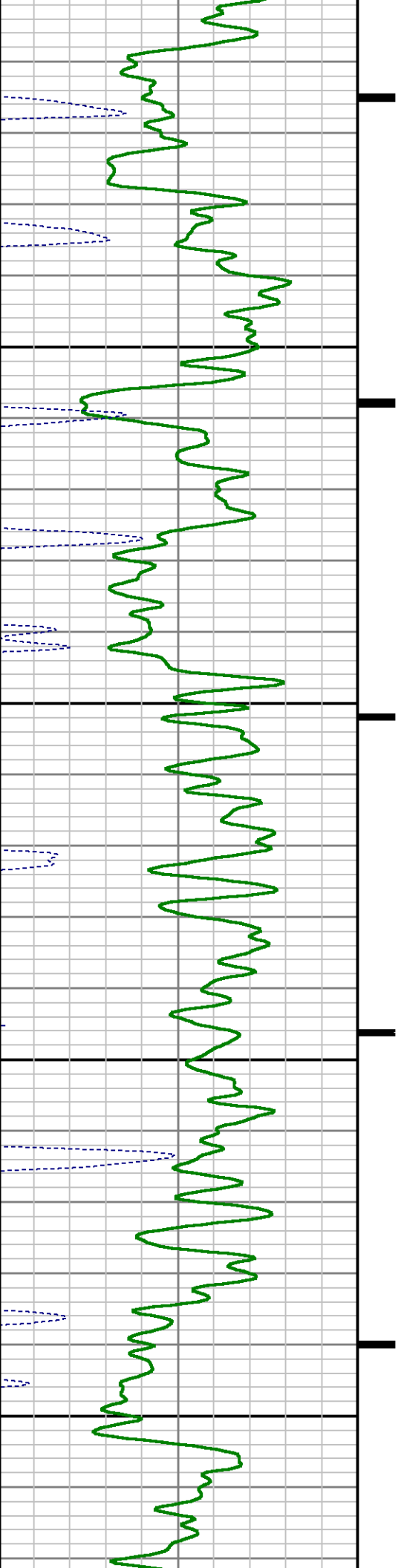


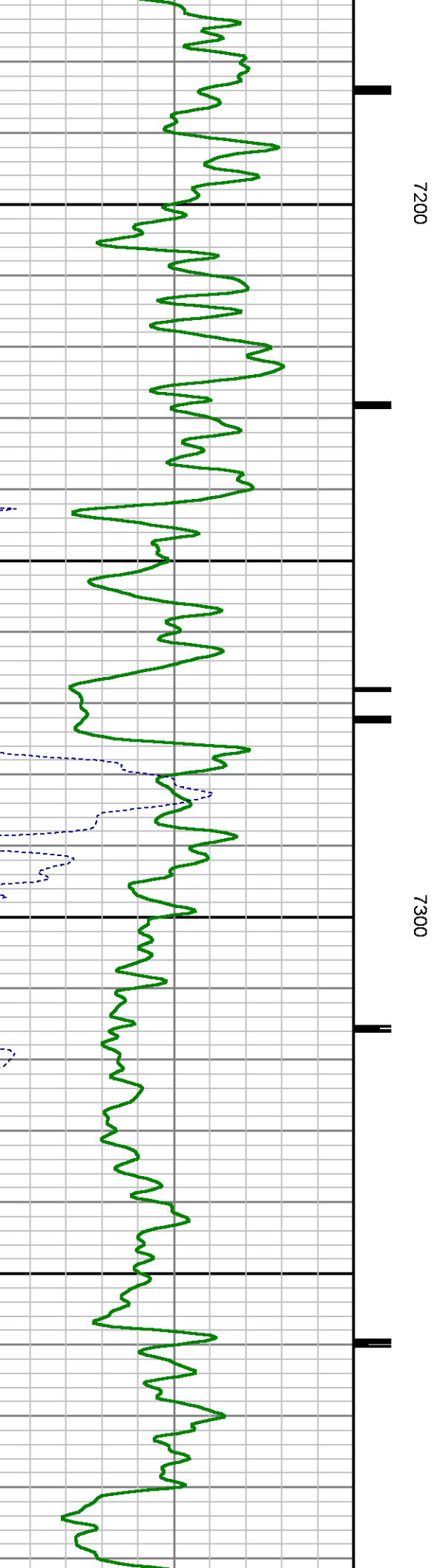
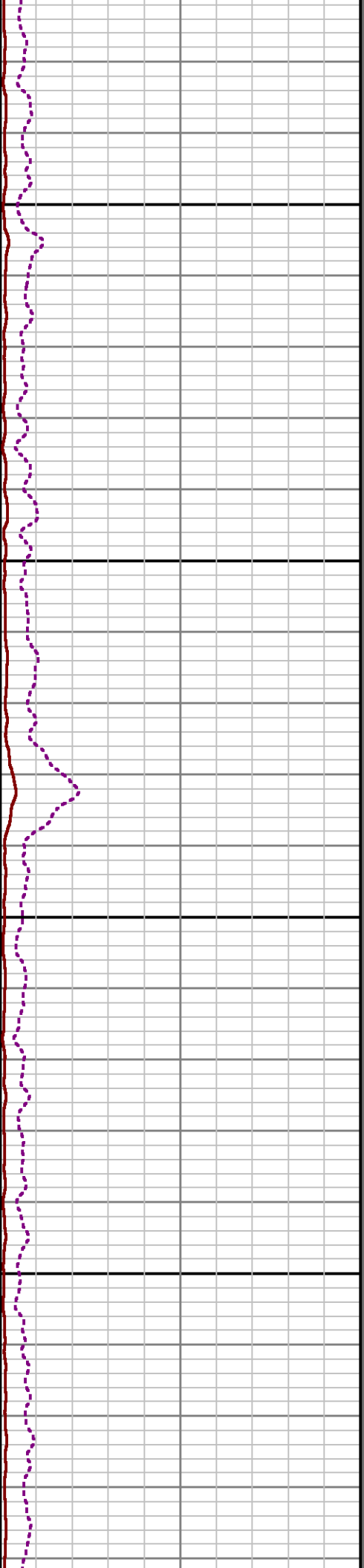
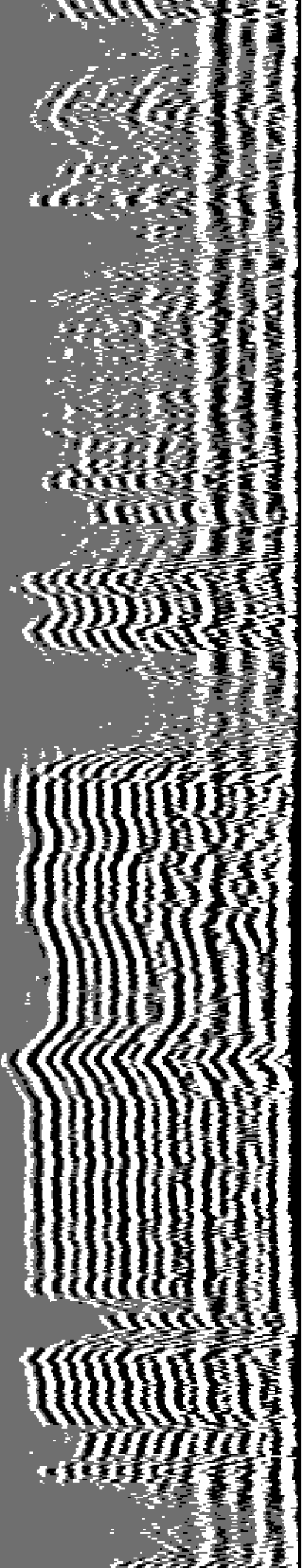


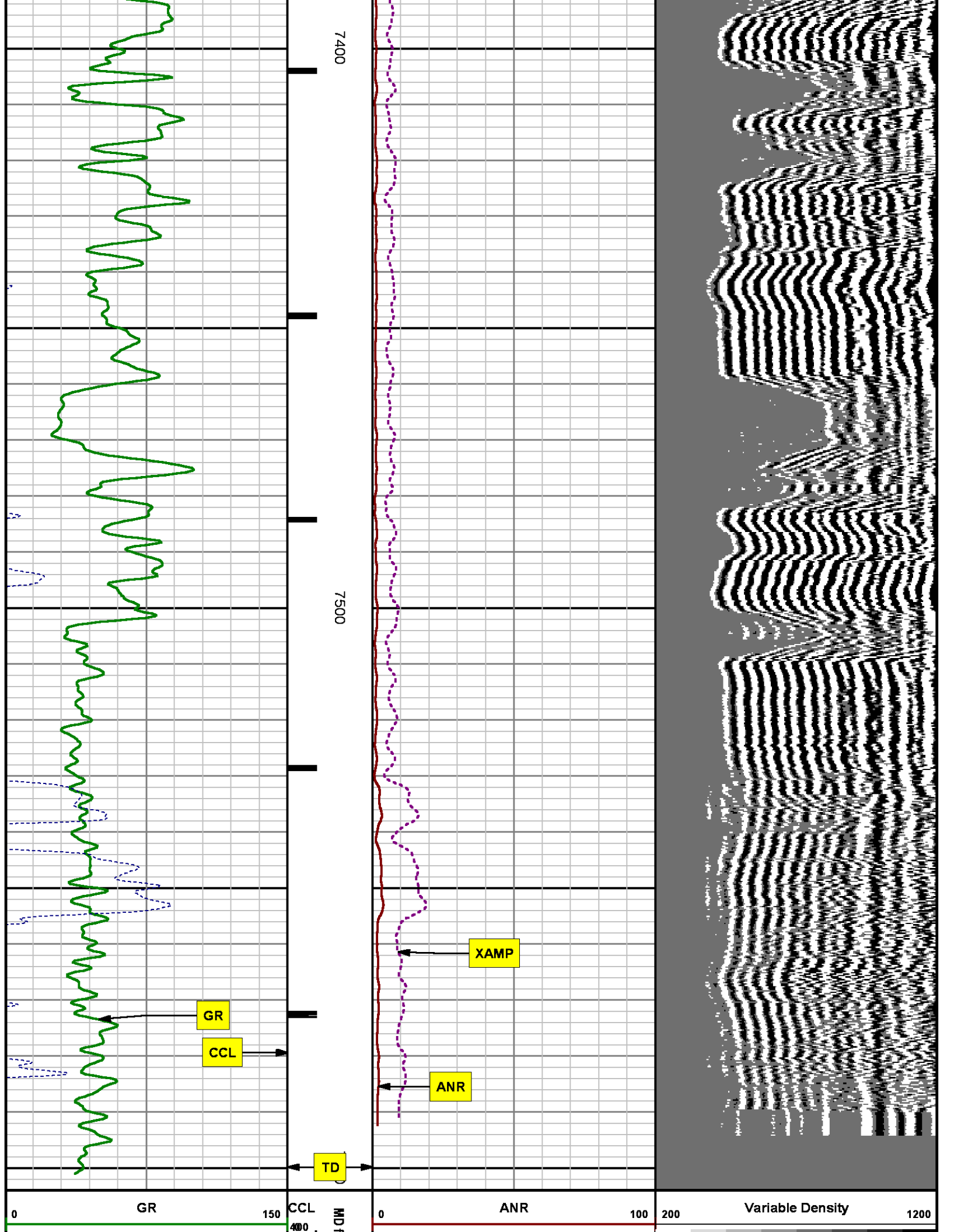


7000

7100









SECONDARY PRESENTATION

0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	310.000	u sec	23.906	7604.000
RAL	Amp Gate Start Near	195.000	u sec	23.906	7604.000
RAL	Amp Gate Start Radial	195.000	u sec	23.906	7604.000
RAL	Amp Gate Width Far	25.000	u sec	23.906	7604.000
RAL	Amp Gate Width Near	25.000	u sec	23.906	7604.000
RAL	Amp Gate Width Radial	25.000	u sec	23.906	7604.000
RAL	casing od	4.500	inches	23.906	7604.000
RAL	casing wt	11.600	lbm/ft	23.906	7604.000
RAL	FB Start Far	291.900	u sec	23.906	7604.000
RAL	FB Start Near	180.000	u sec	23.906	7604.000
RAL	FB Start Radial	180.000	u sec	23.906	7604.000
RAL	FB Thresh Far	10.000	mv	23.906	7604.000
RAL	FB Thresh Near	4.000	mv	23.906	7604.000
RAL	FB Thresh Radial	4.000	mv	23.906	7604.000
RAL	Fluid Travel Time	200.000	u sec/ft	23.906	7603.938

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

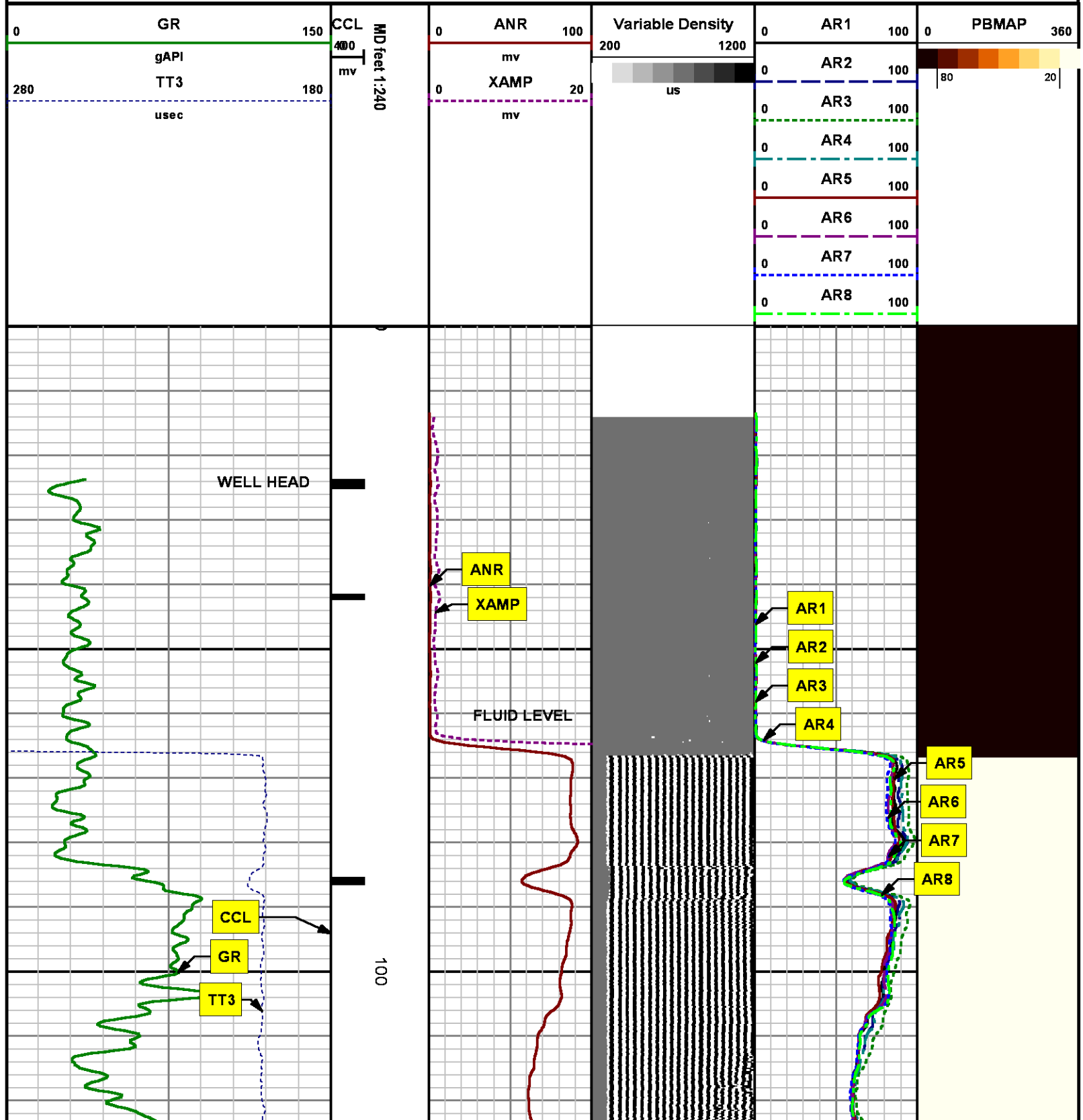
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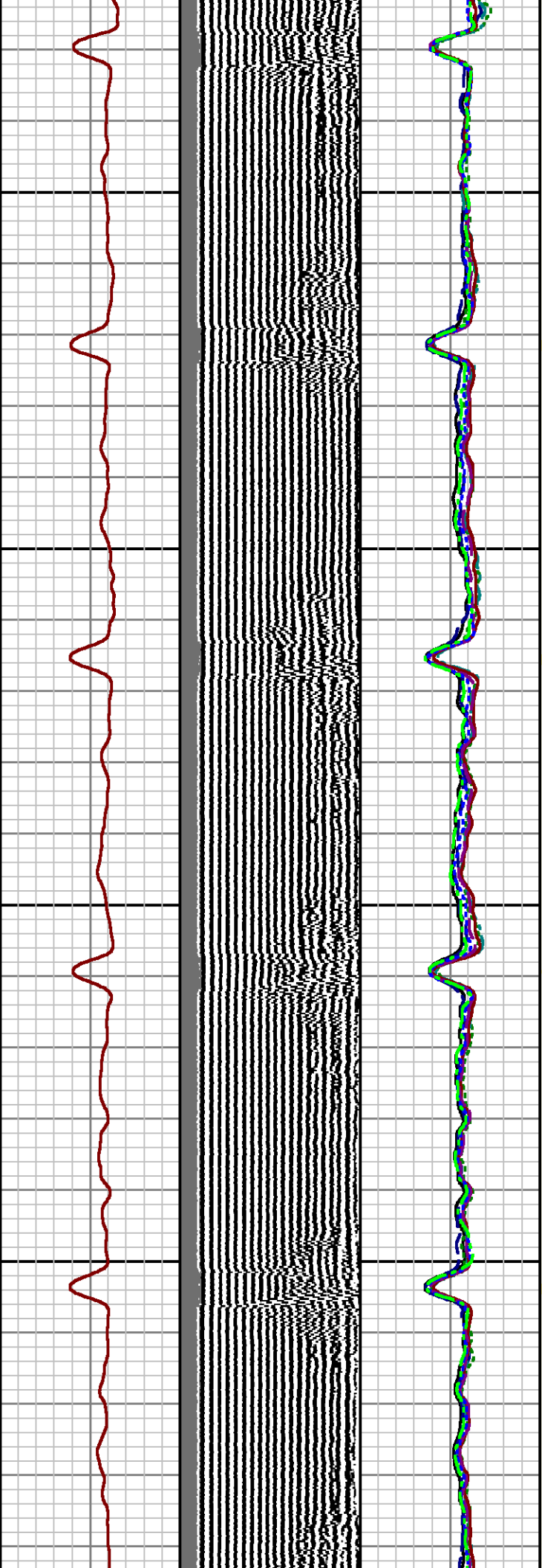
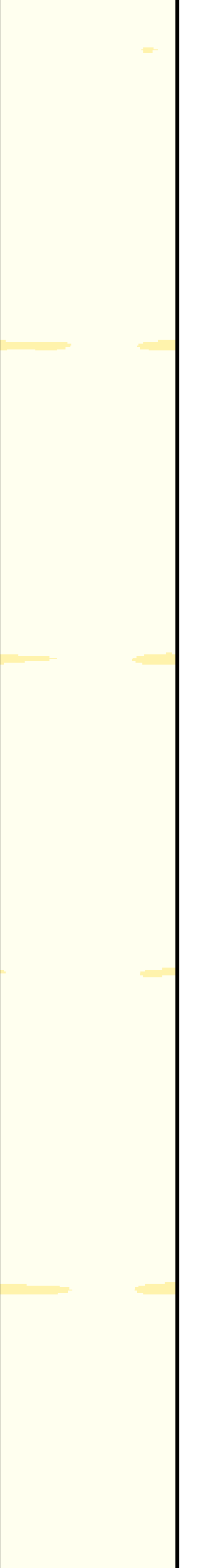
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Mode : PlotMgr 5.4.504

Interval : 0.00 - 7604.00 feet UP

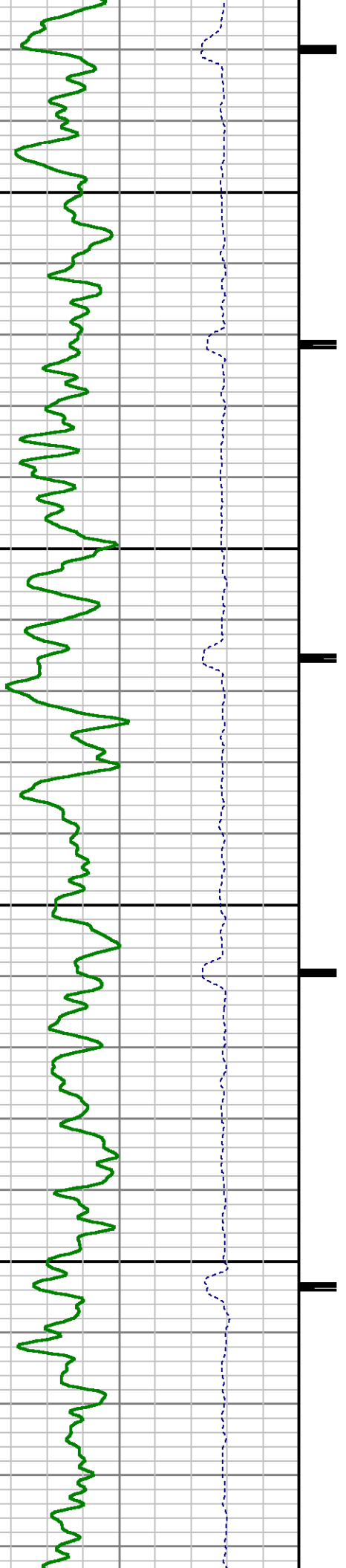
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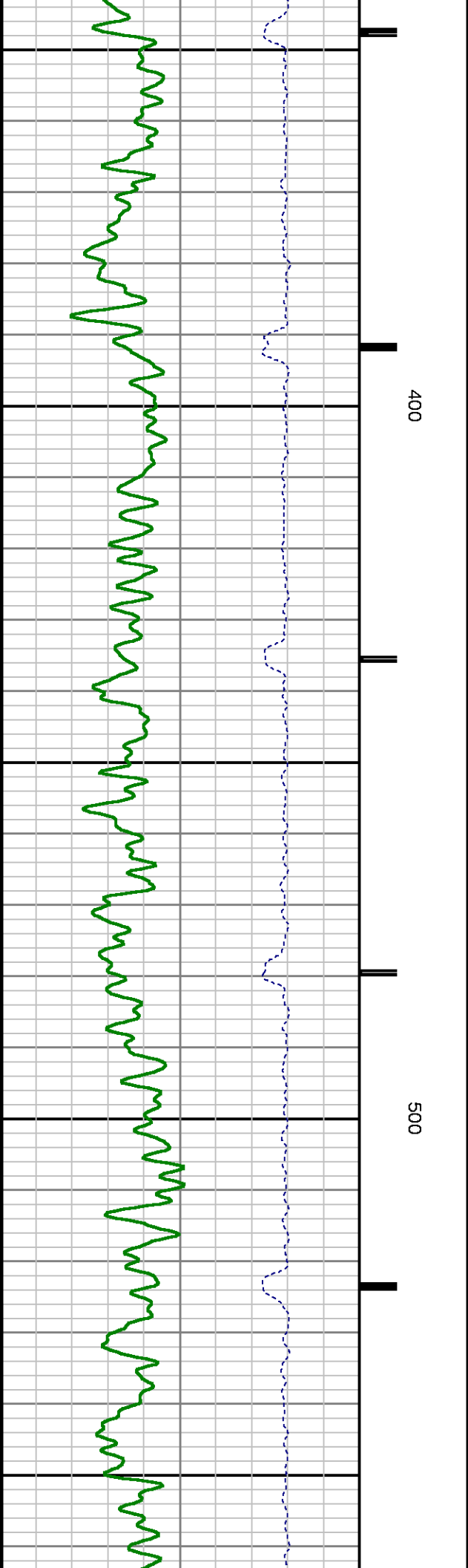
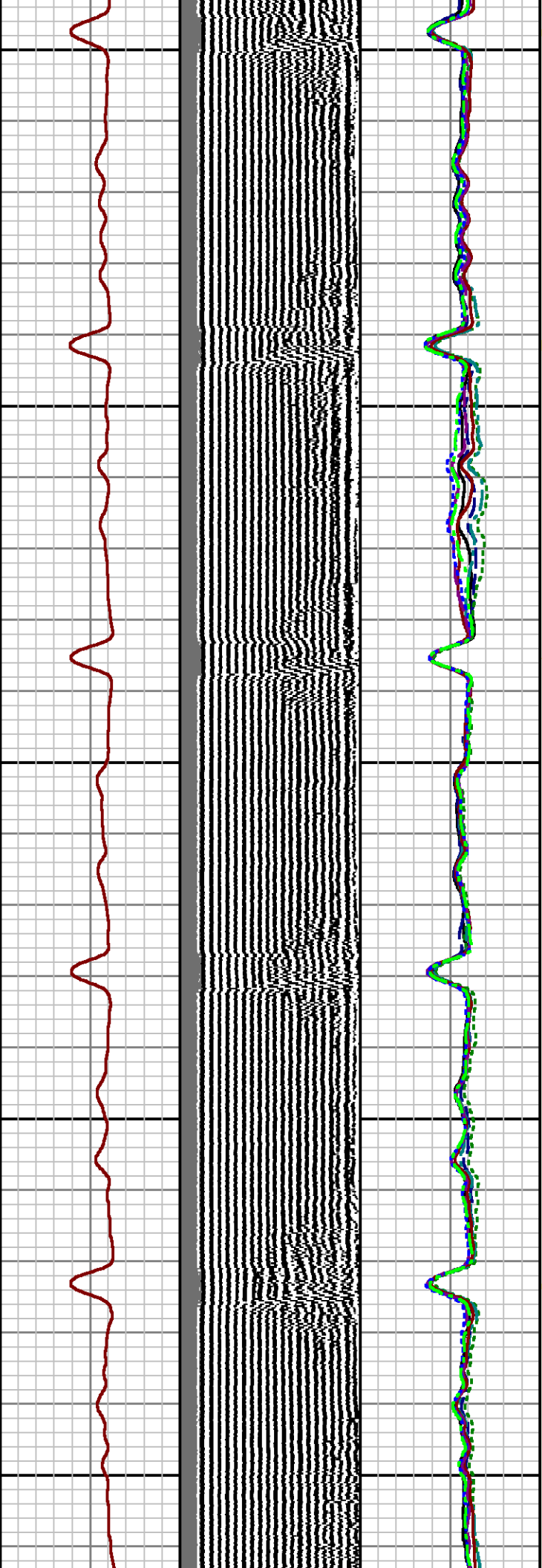
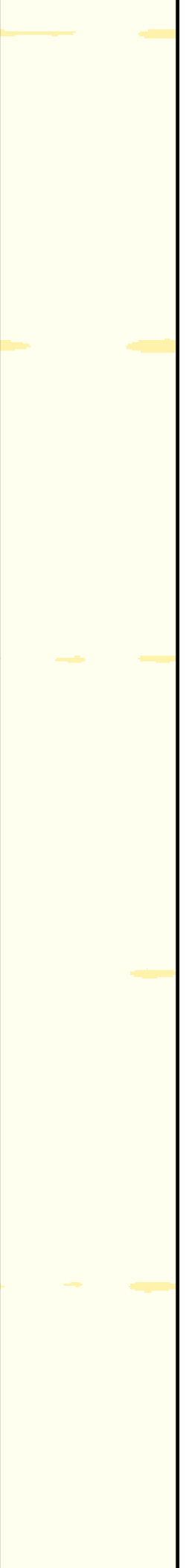


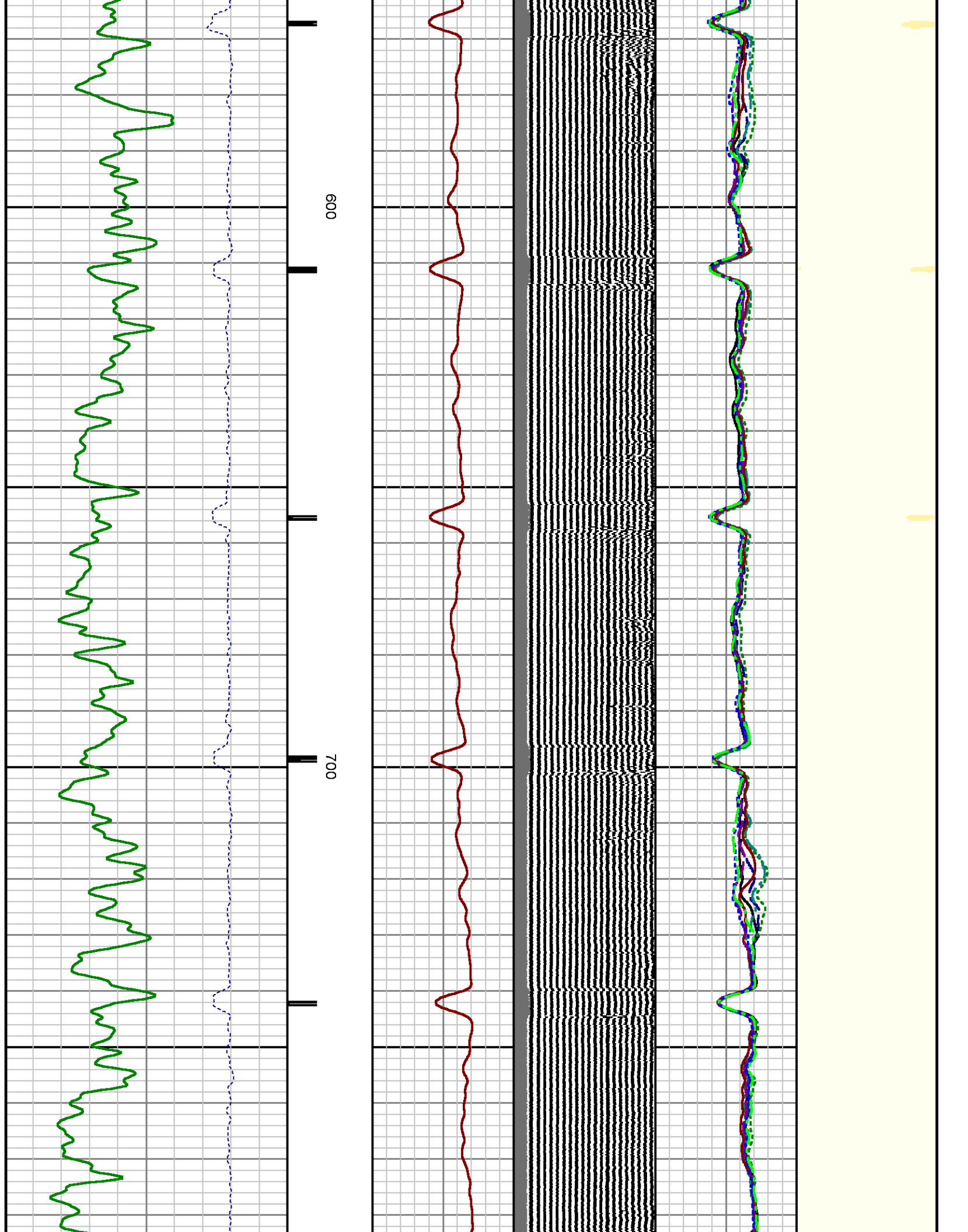


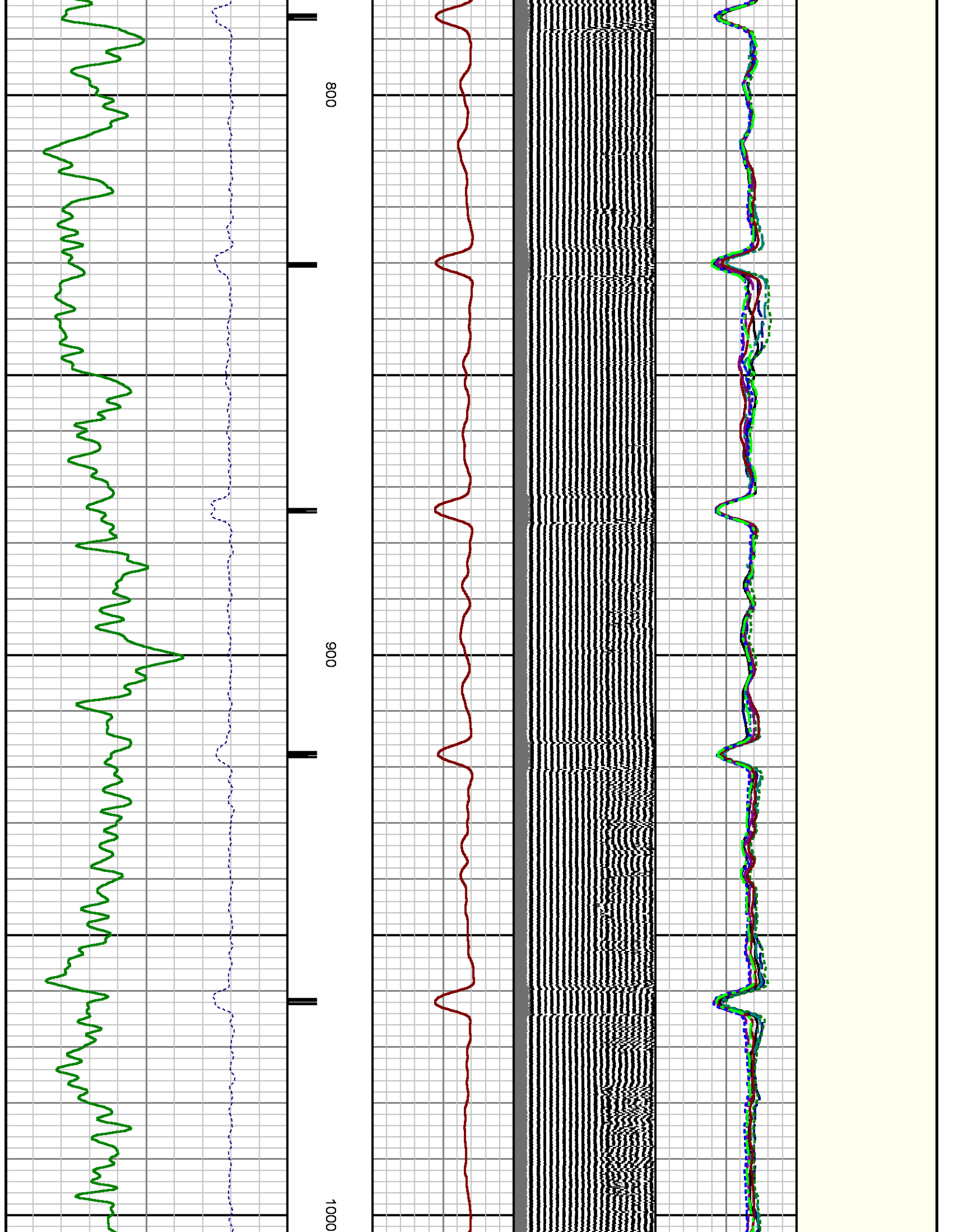
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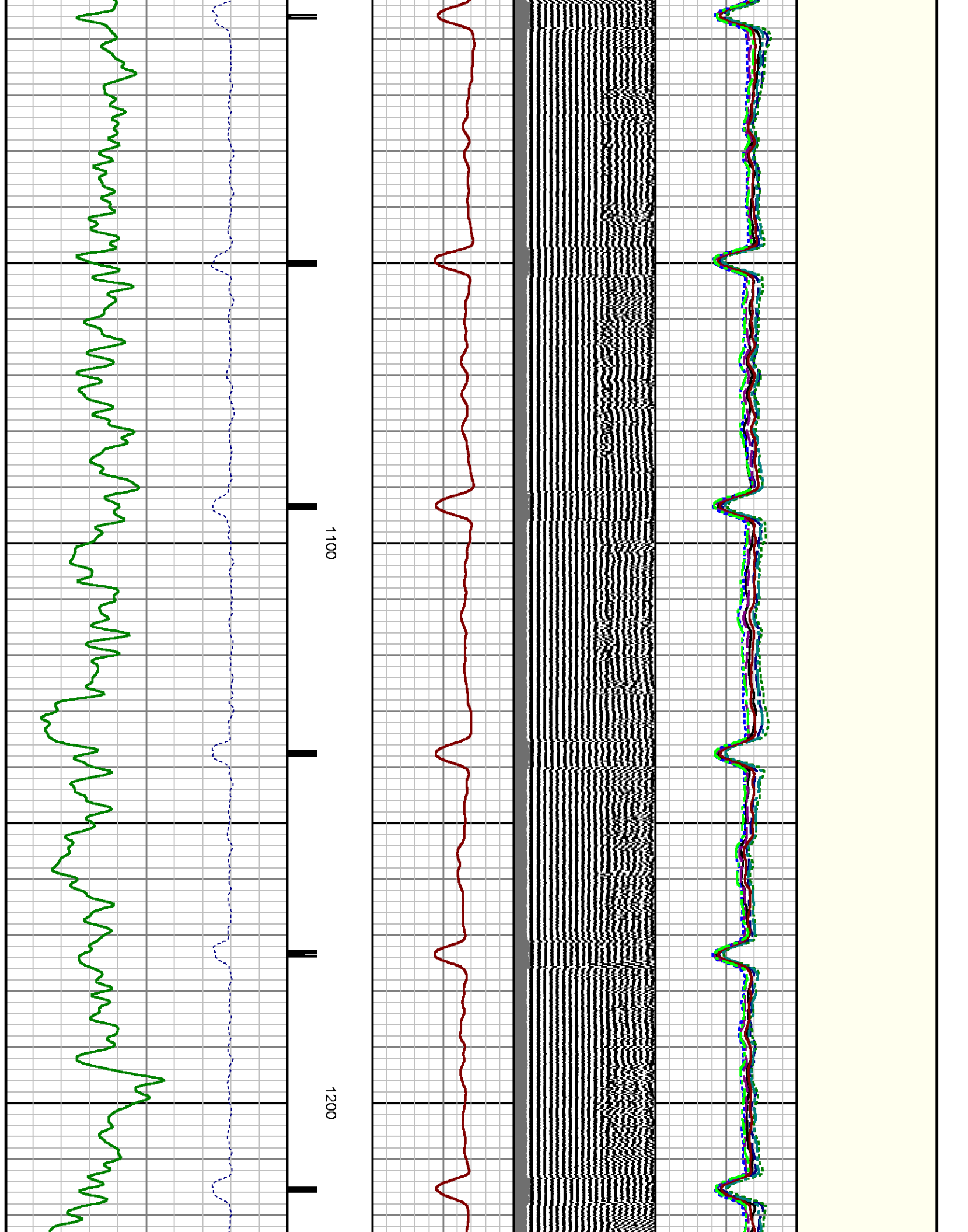
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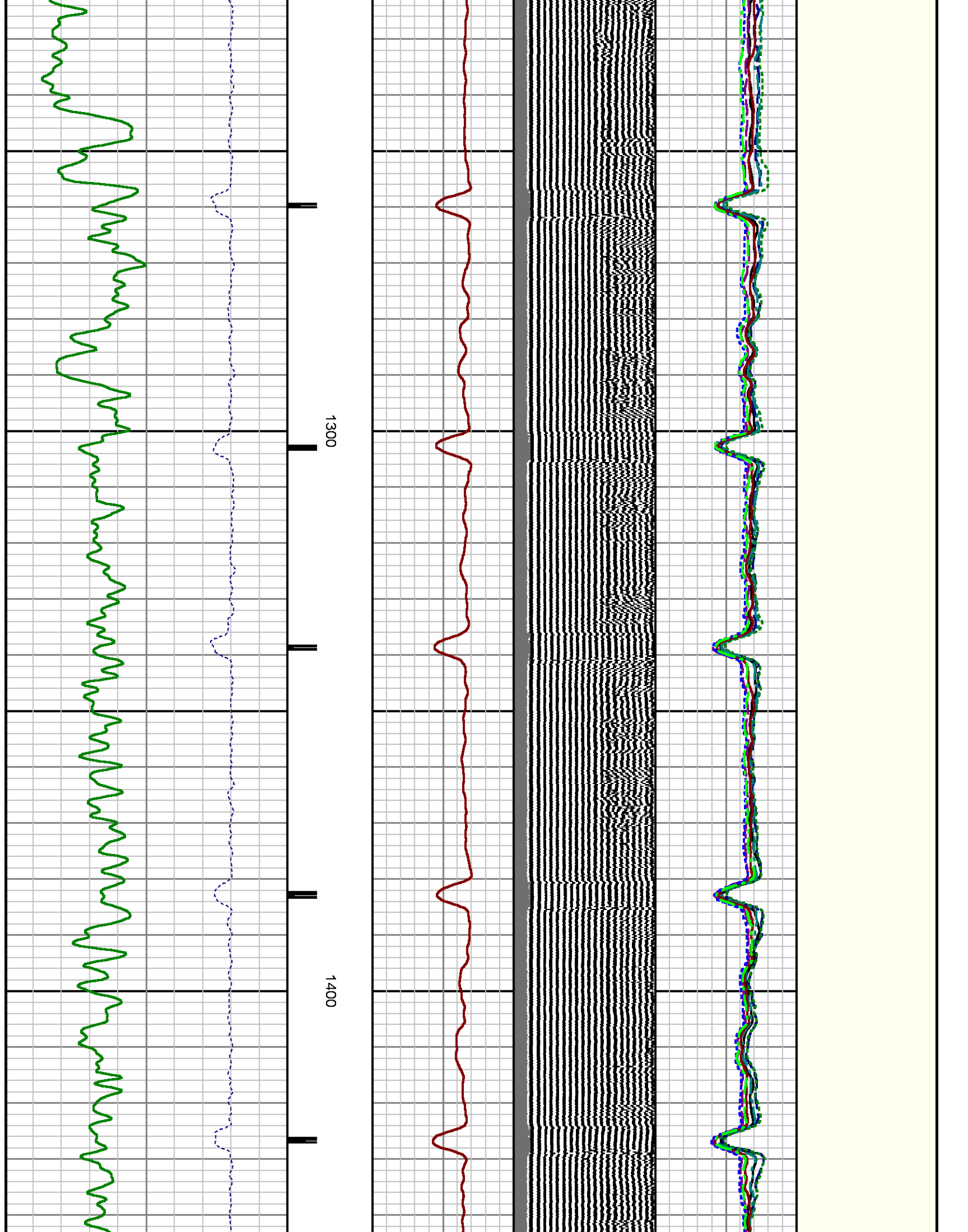


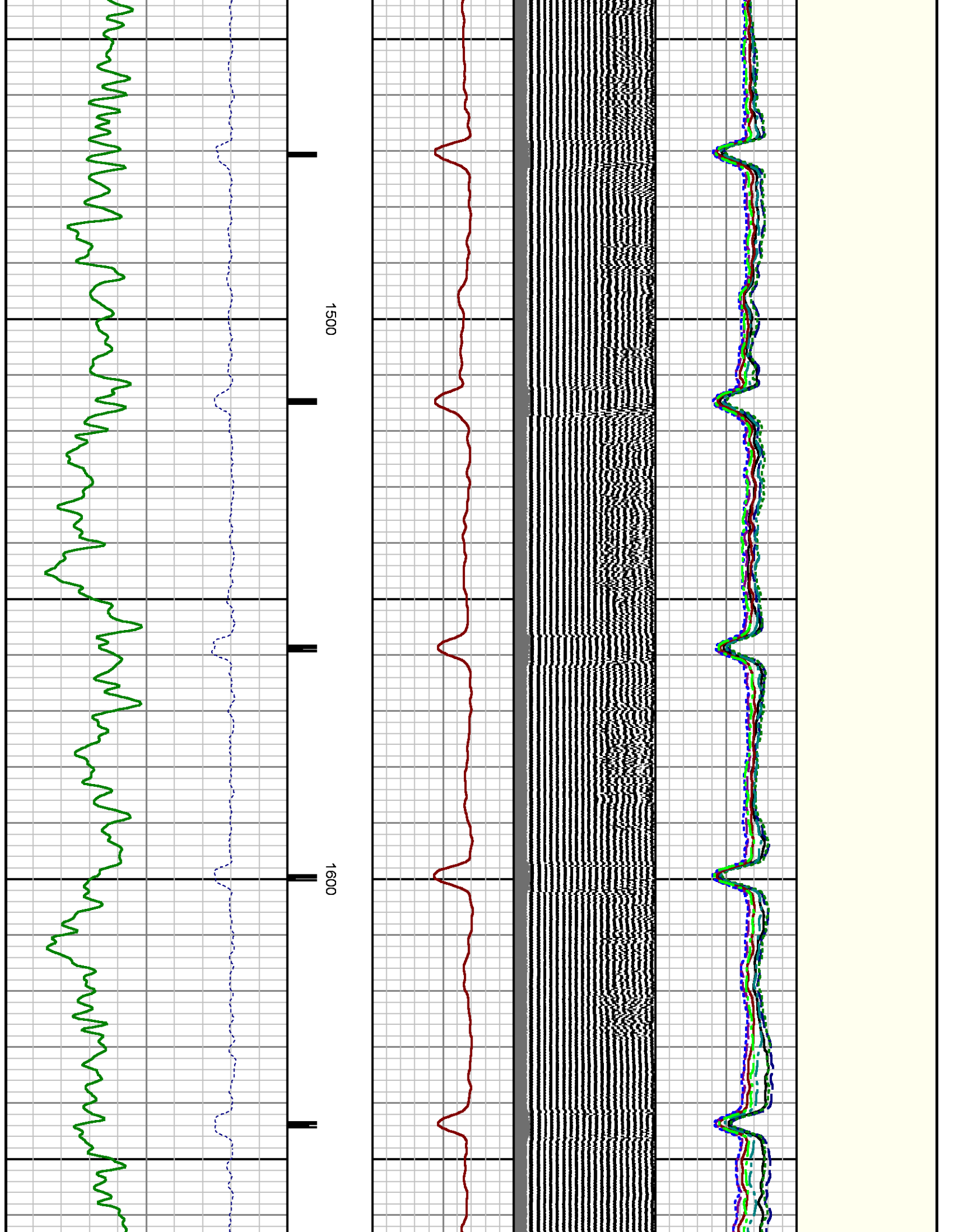


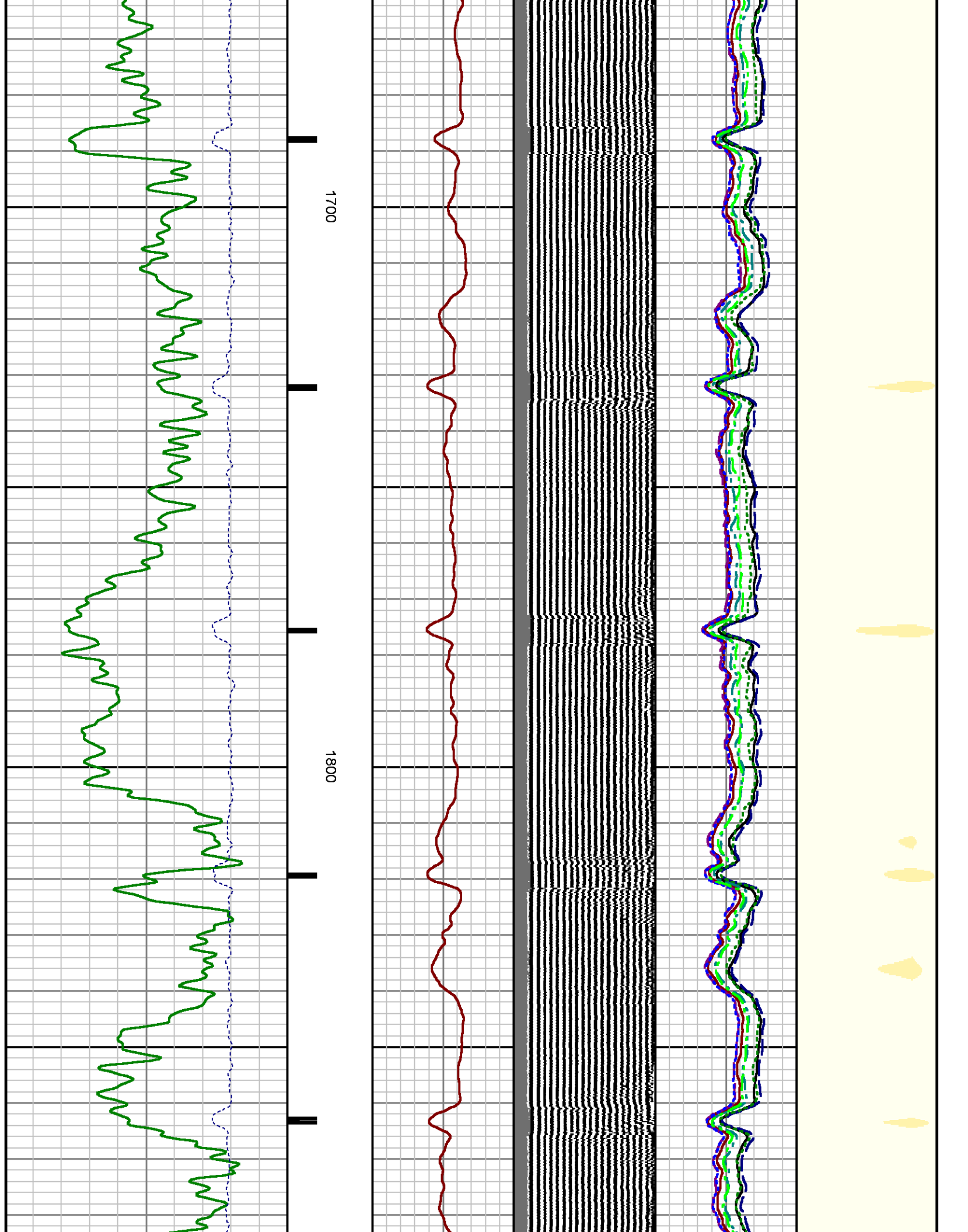


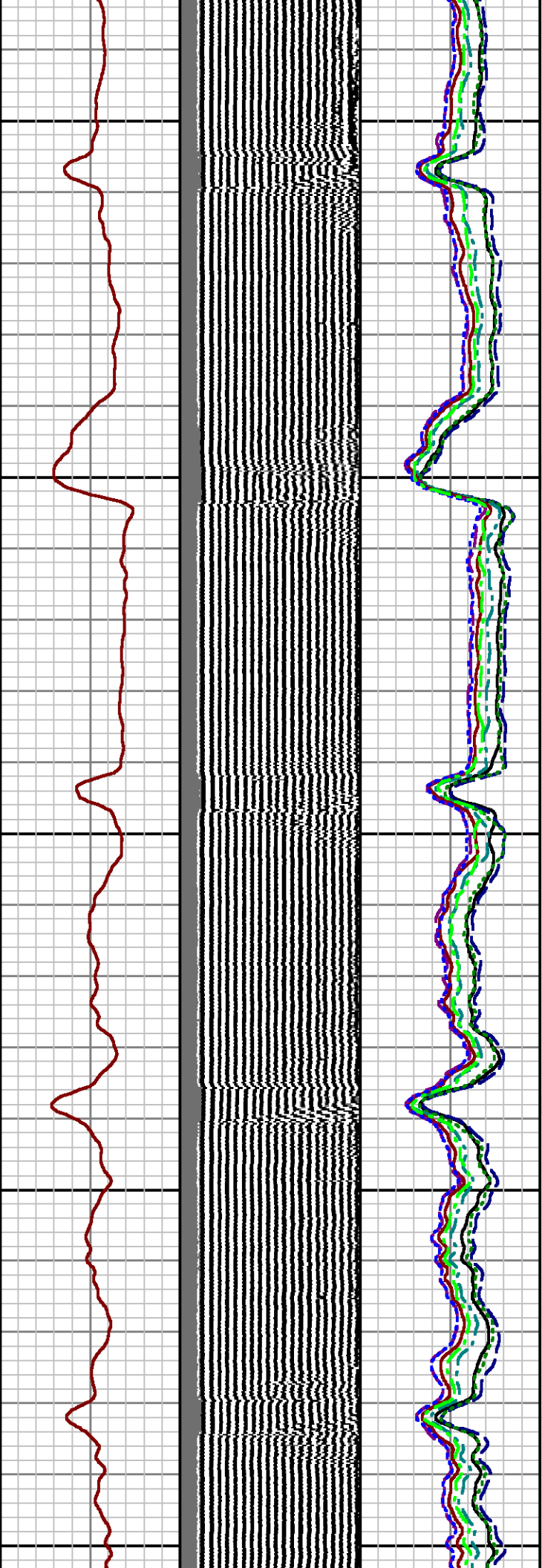
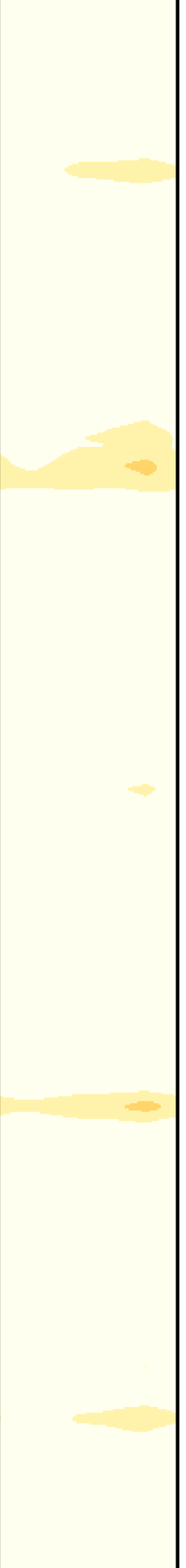








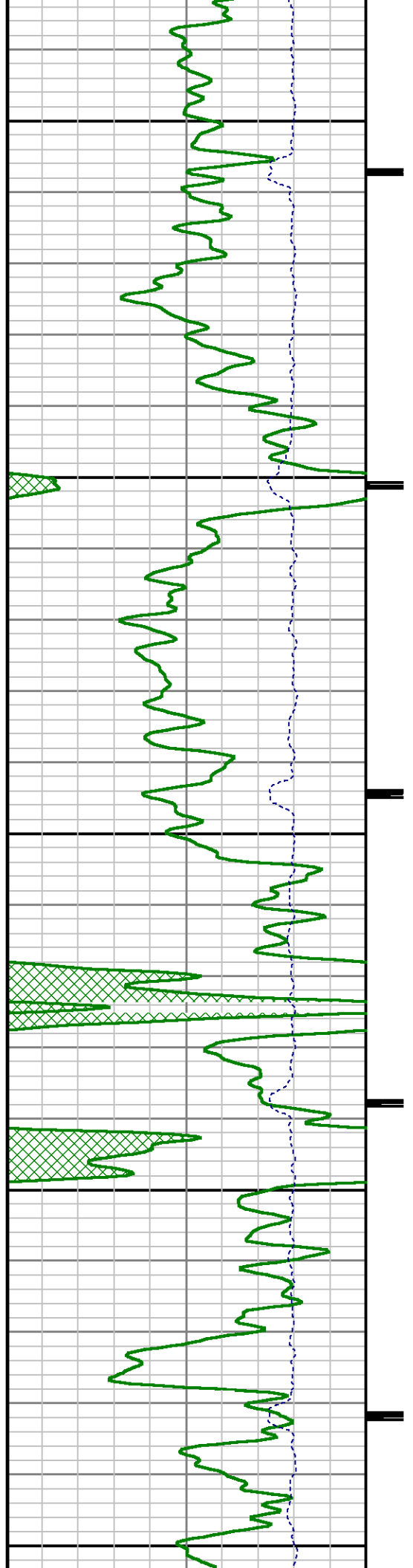


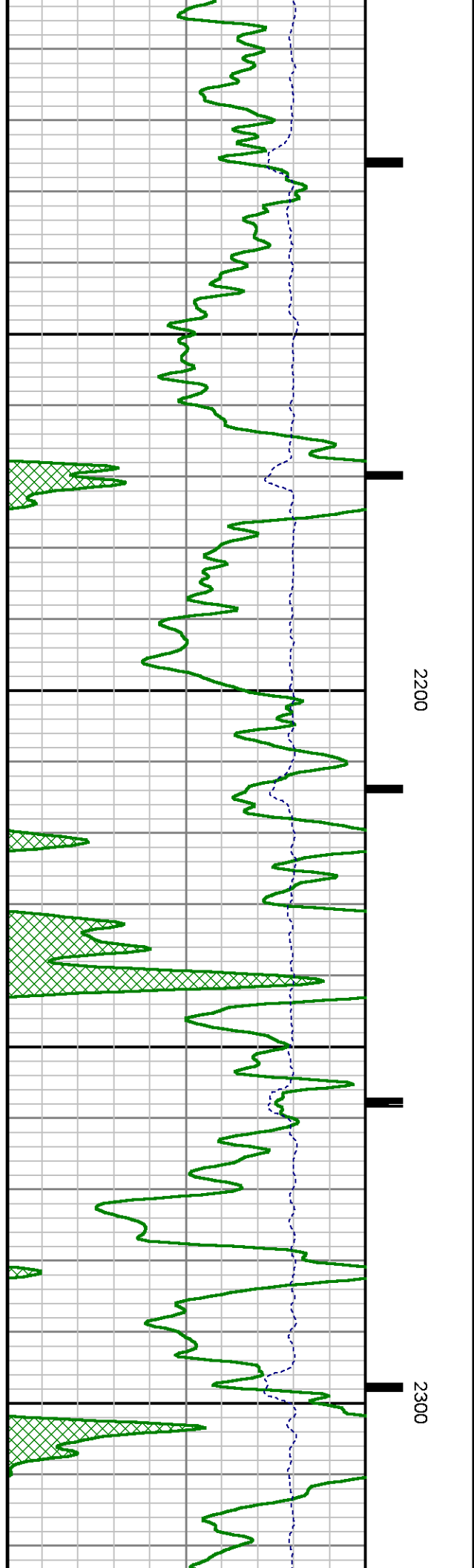
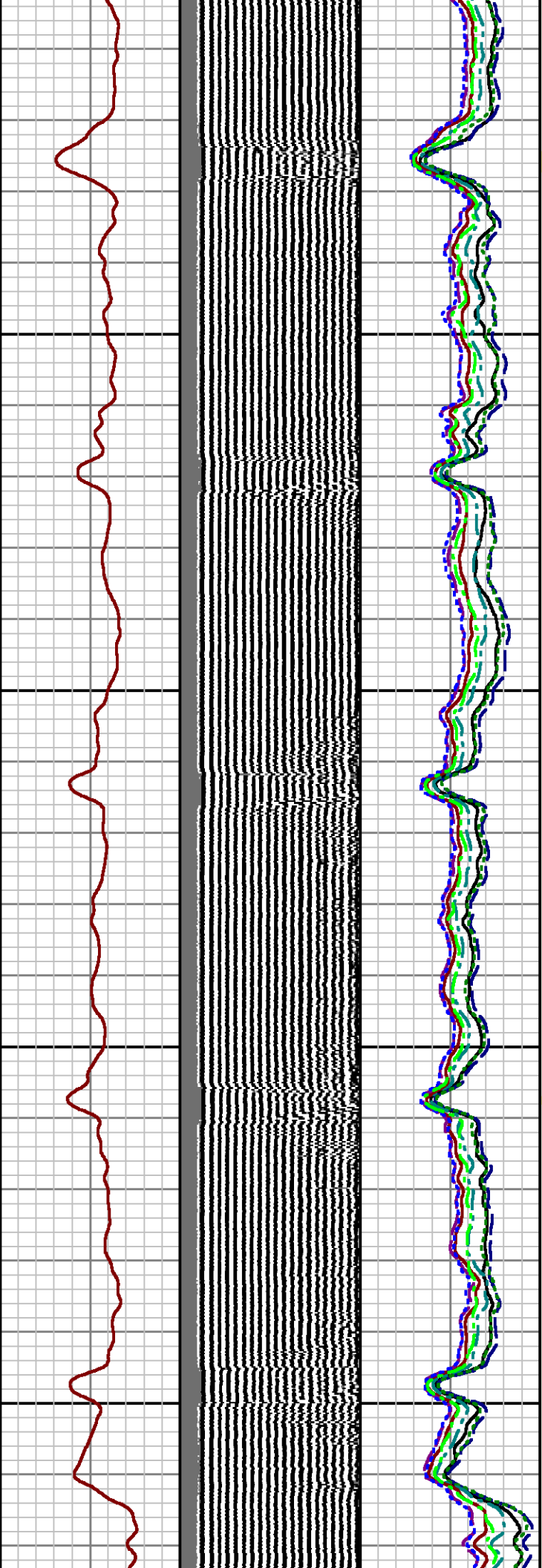
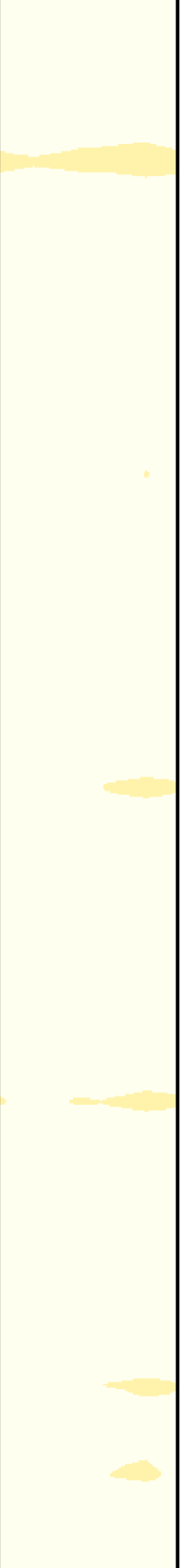


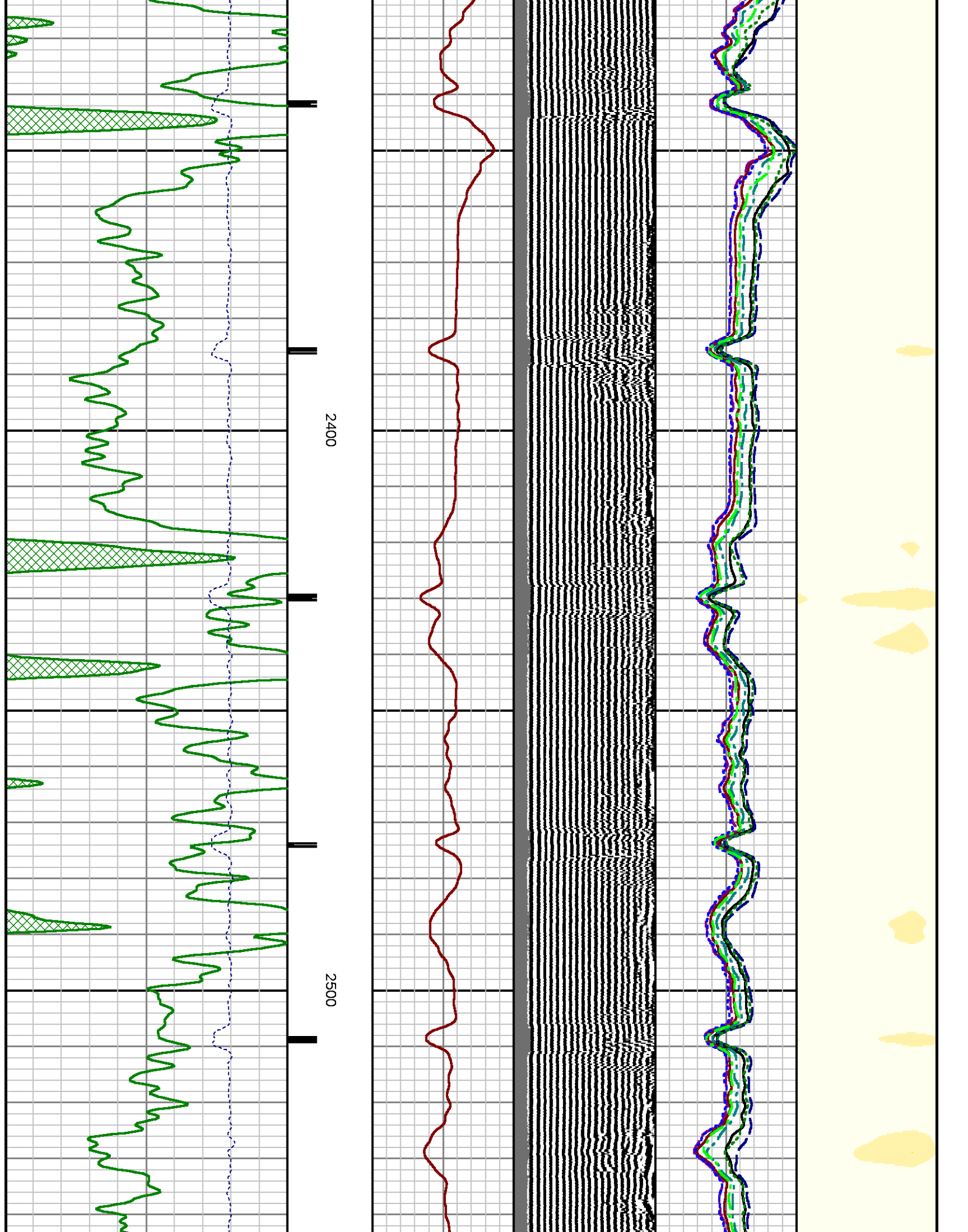
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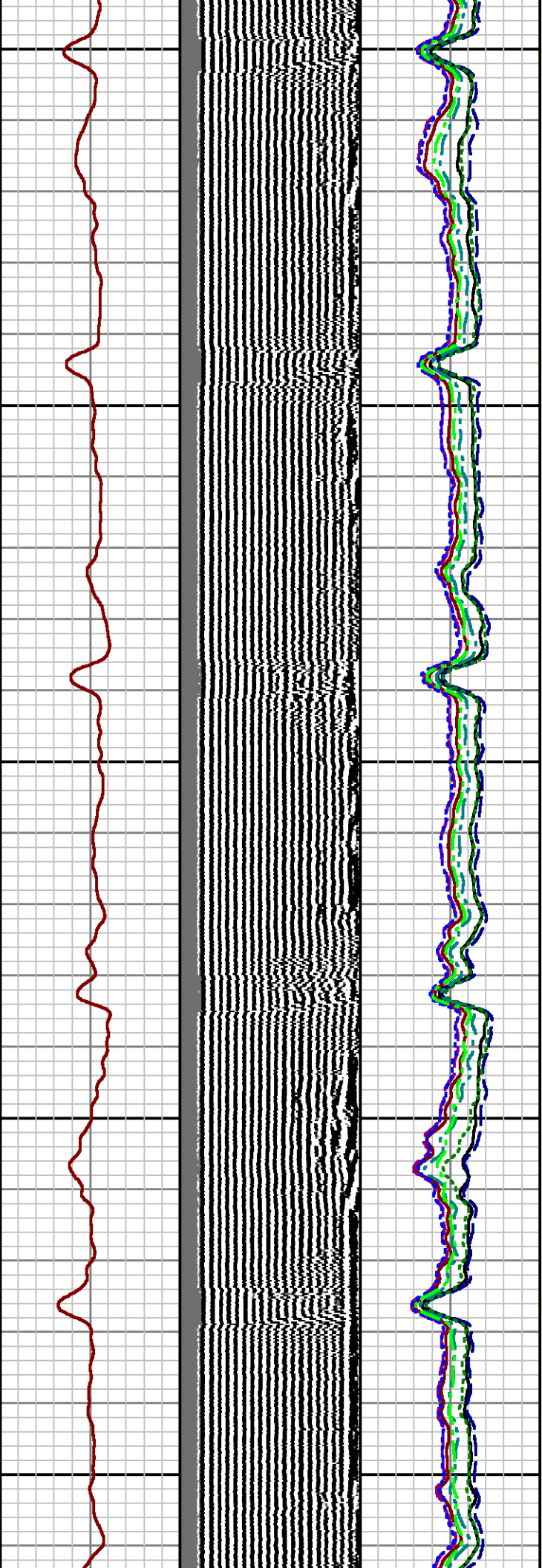
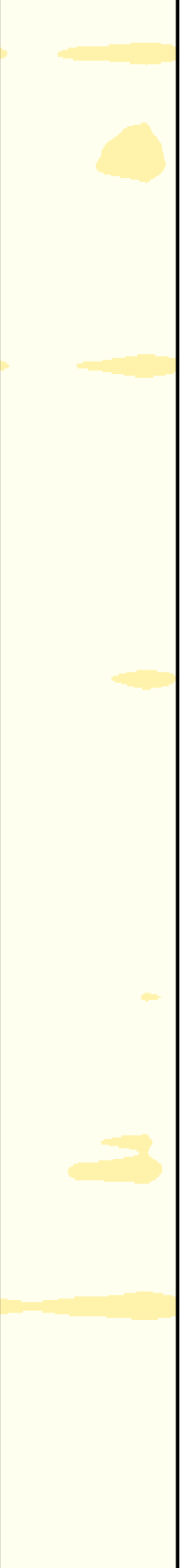
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2100



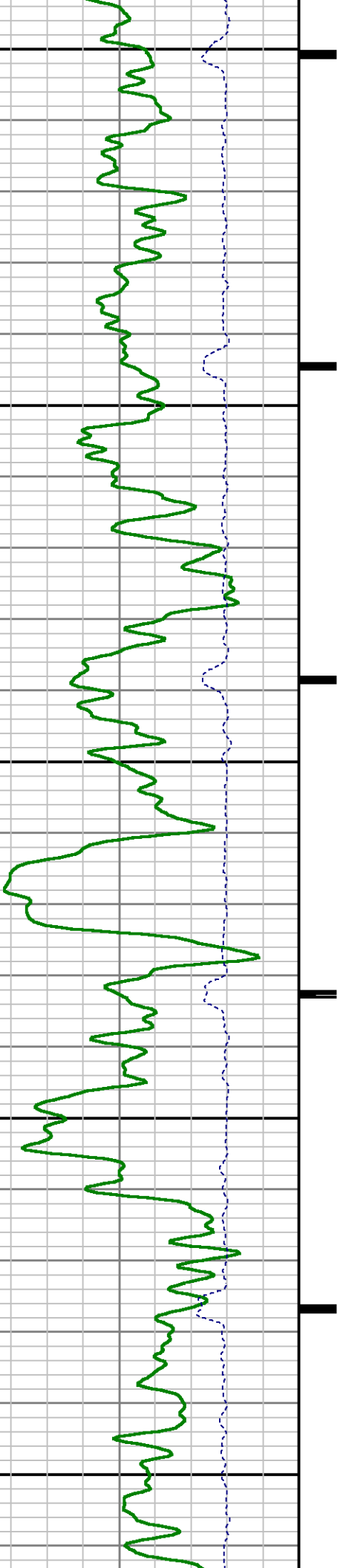


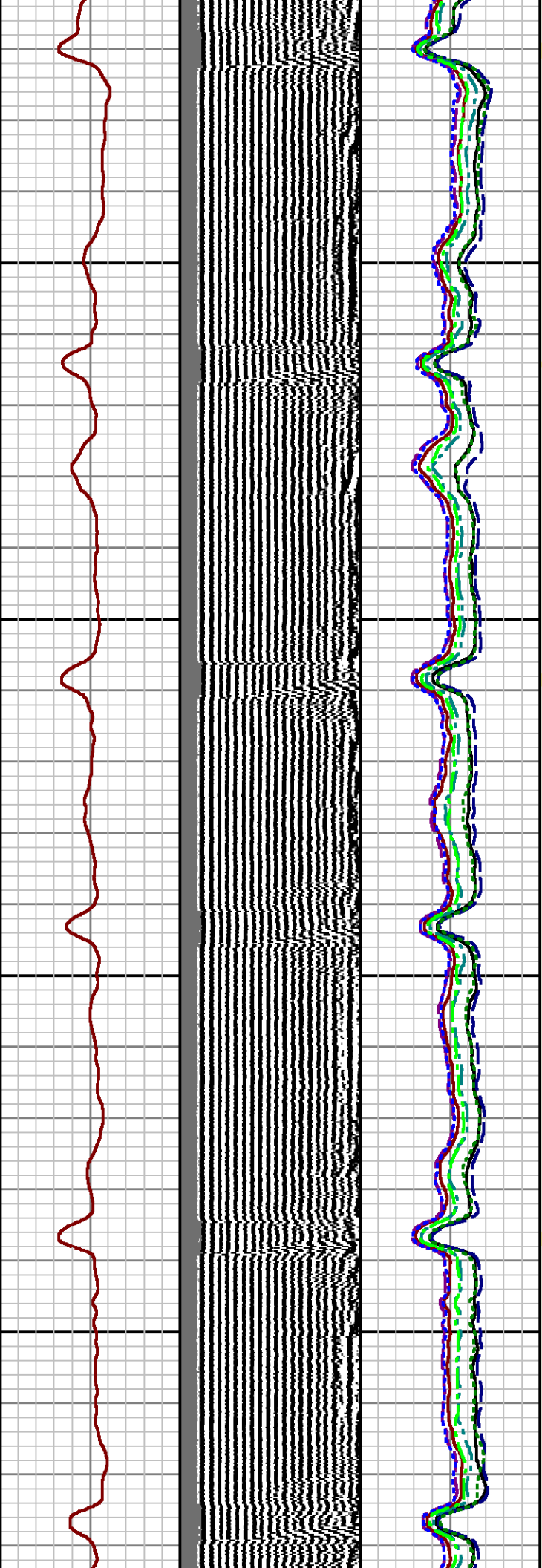
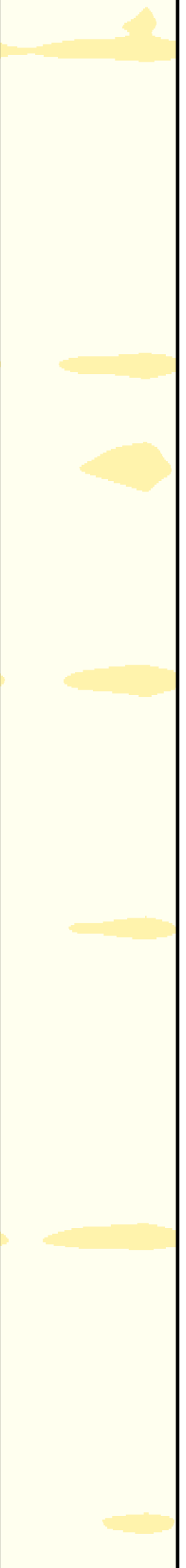




2600

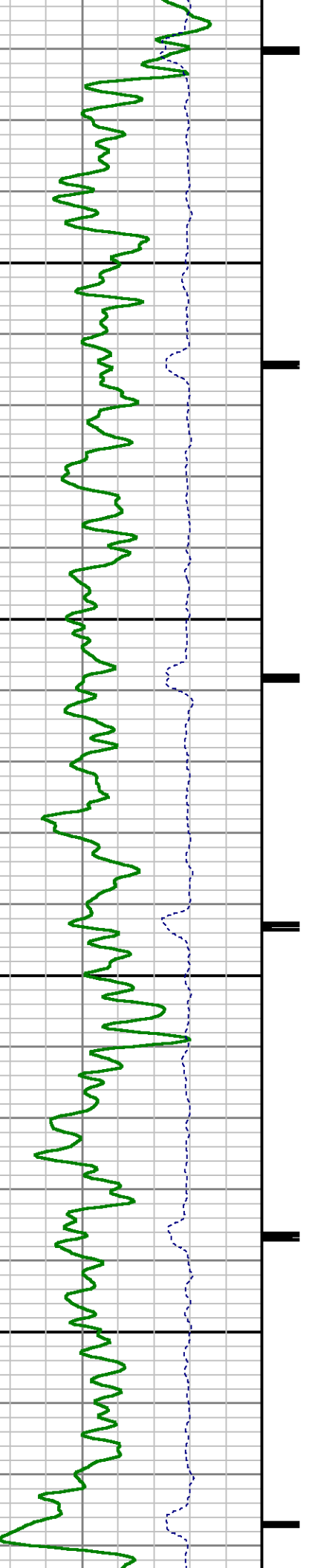
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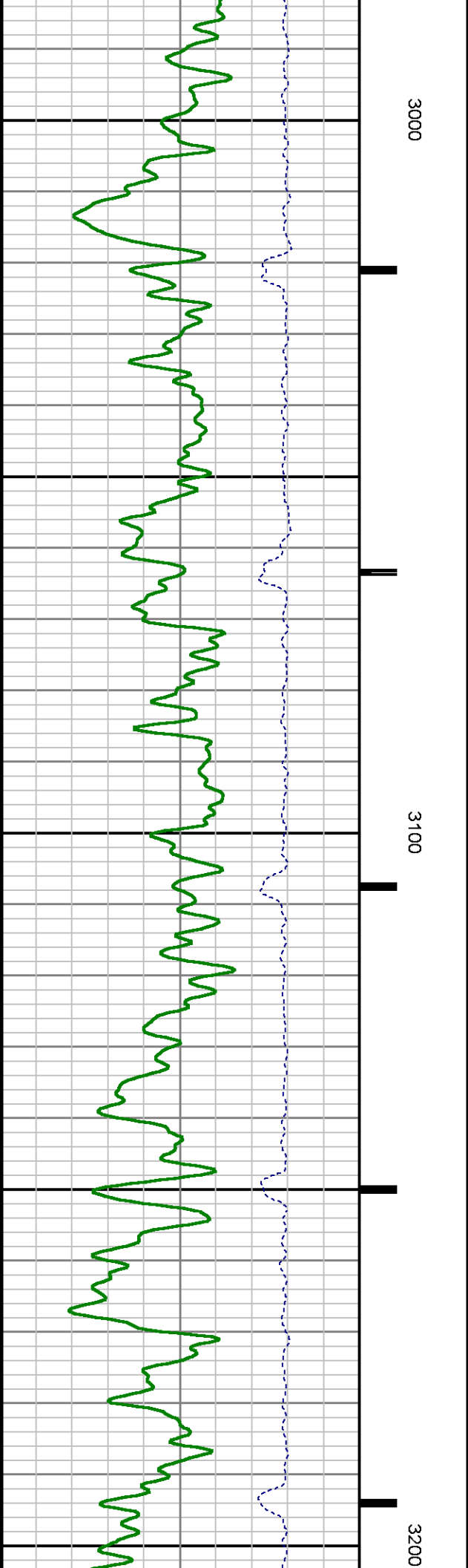
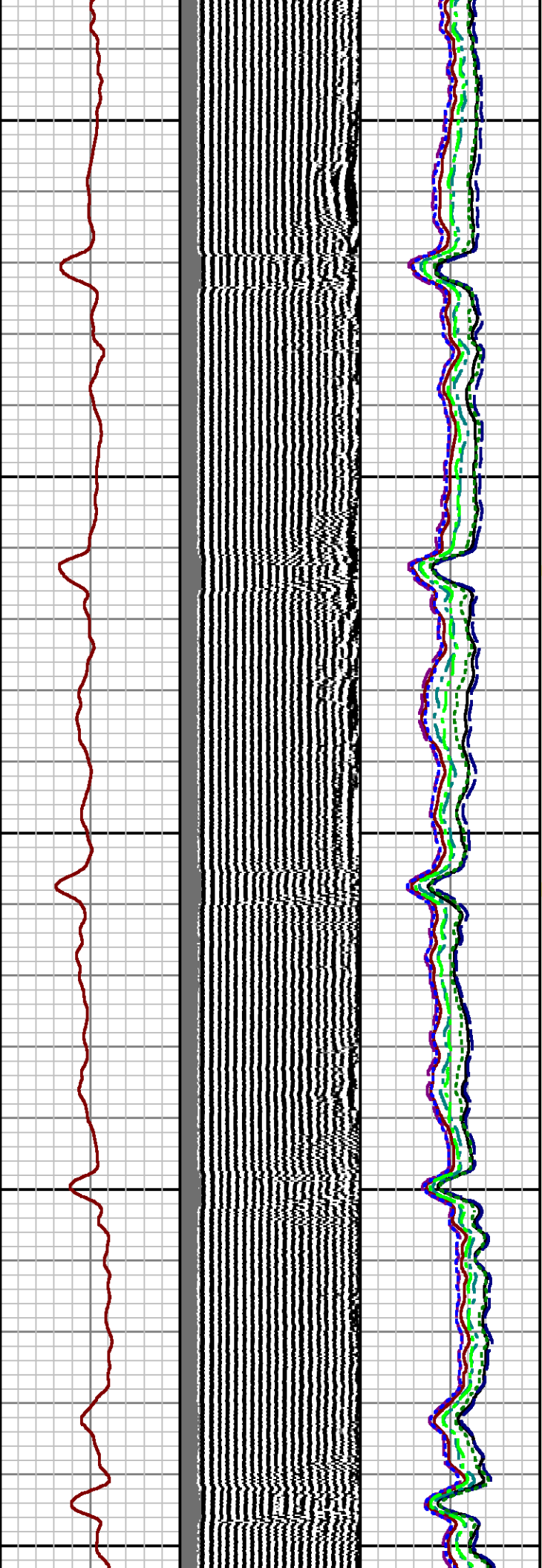
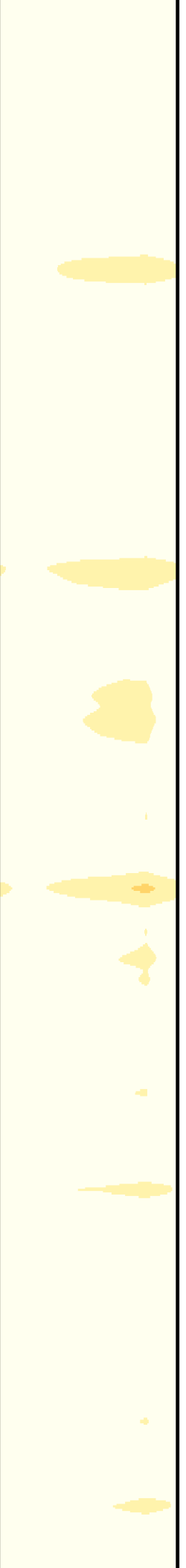


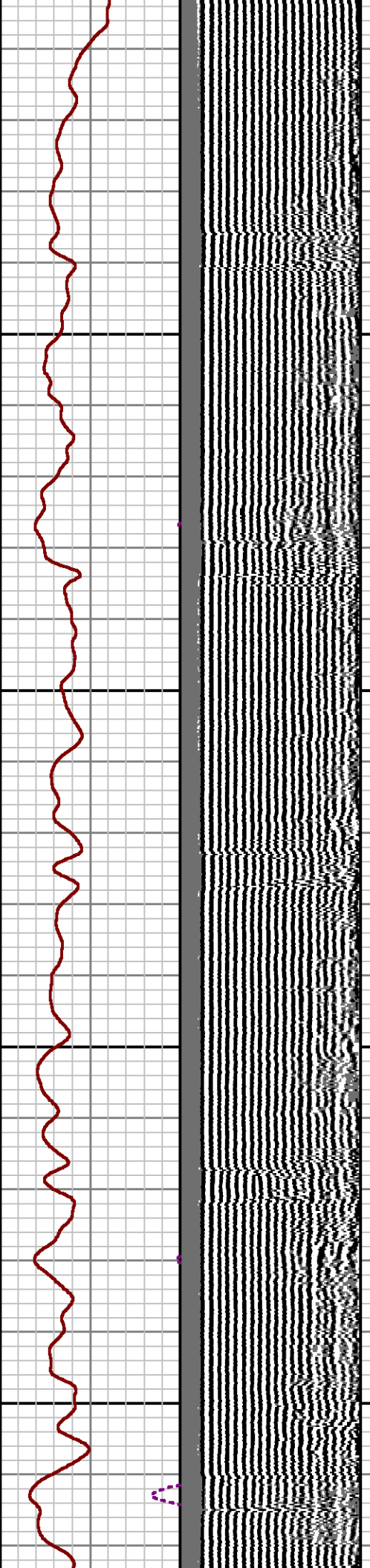
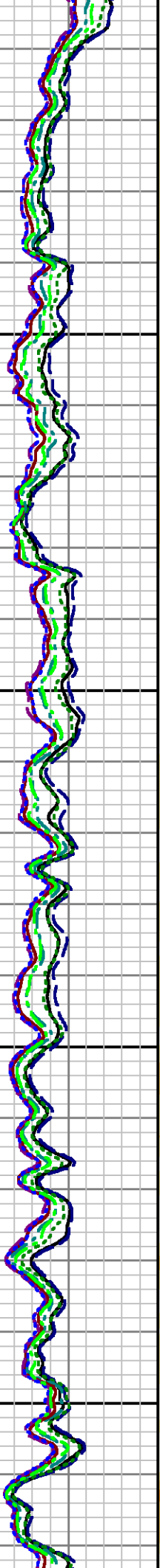
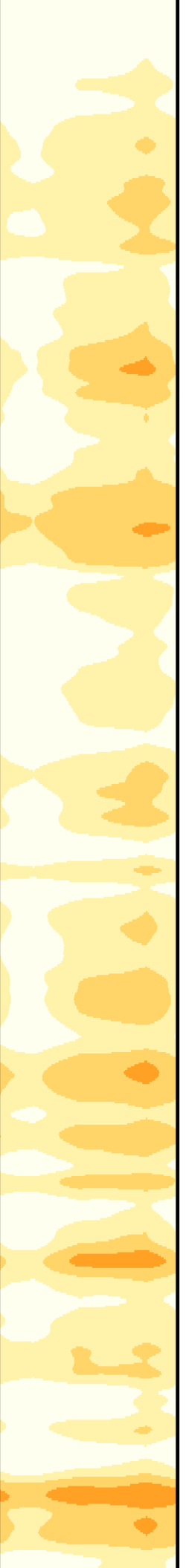


2800

2900

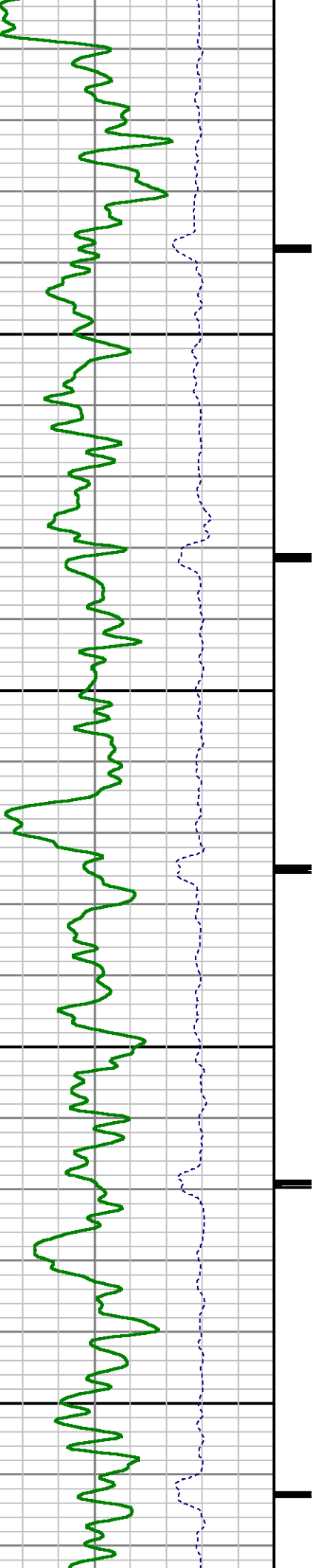


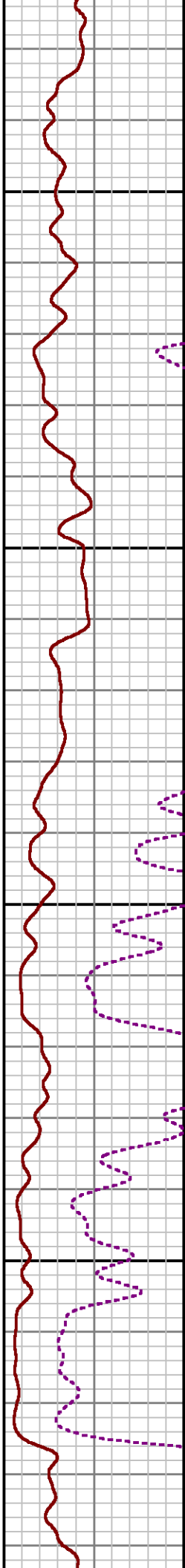
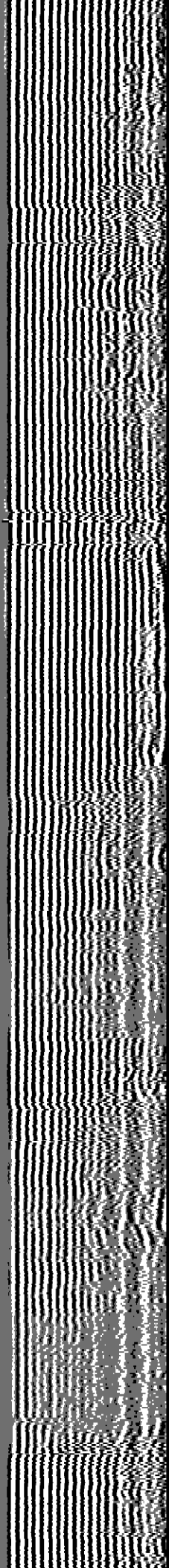
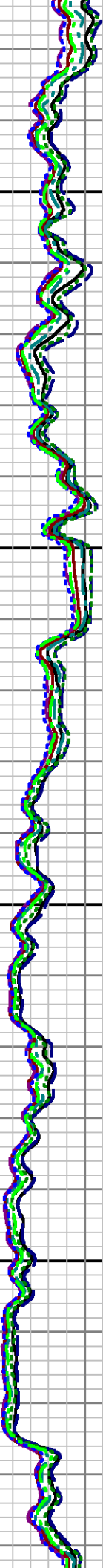
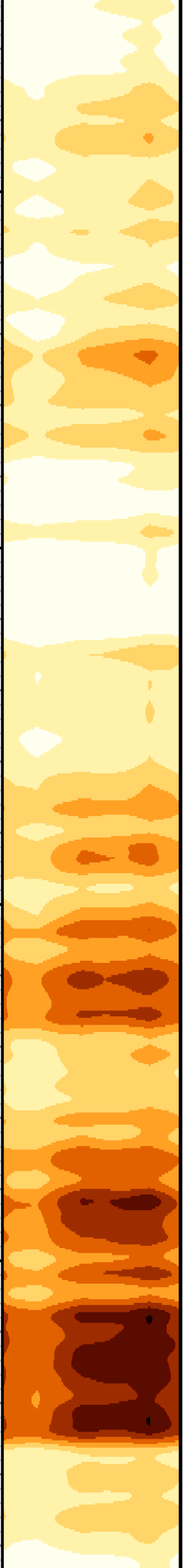




3300

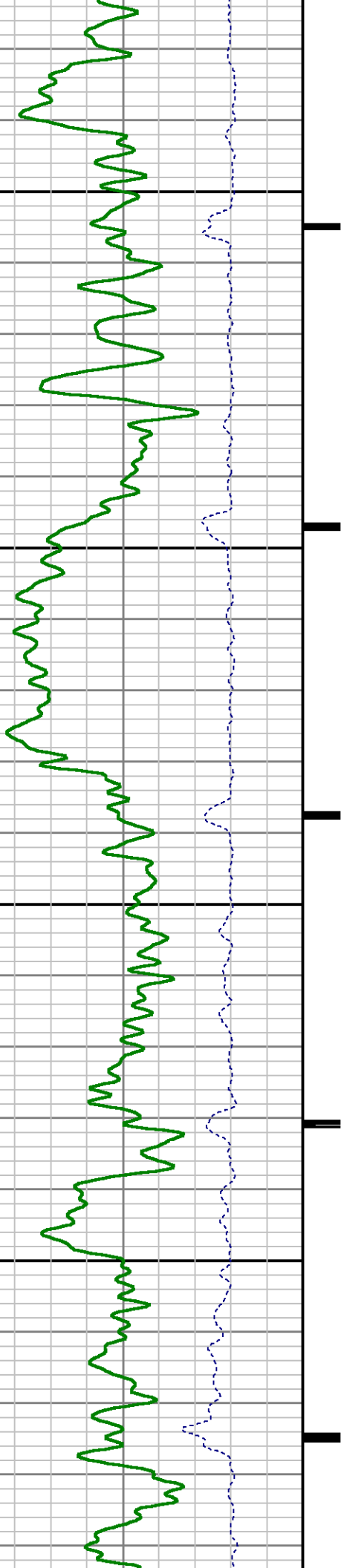
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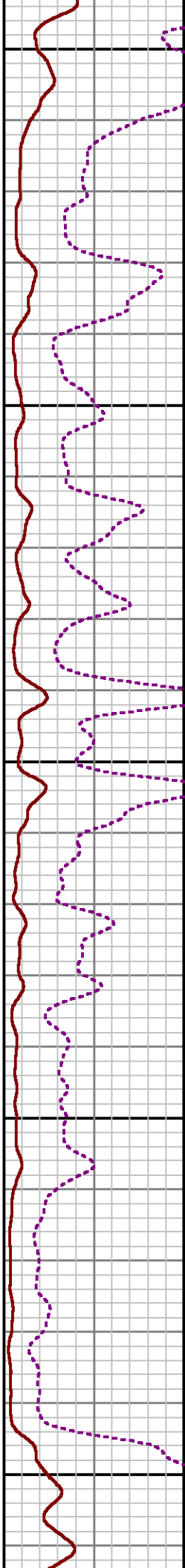
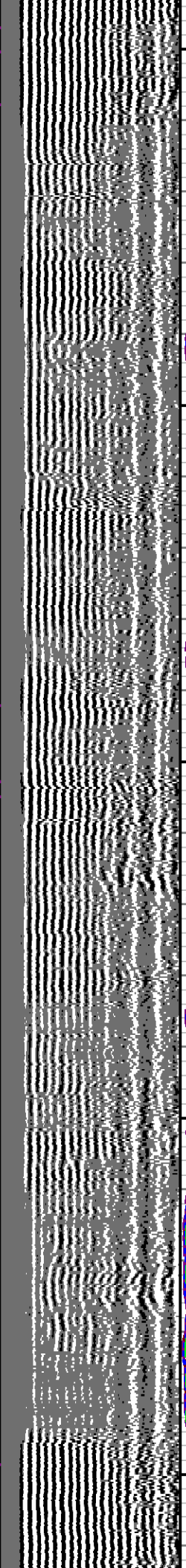
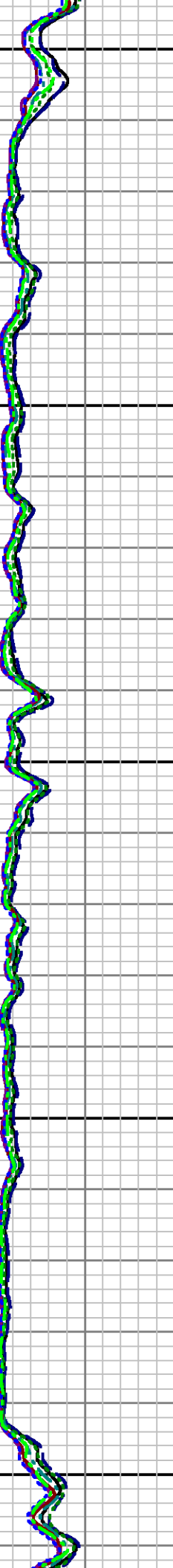




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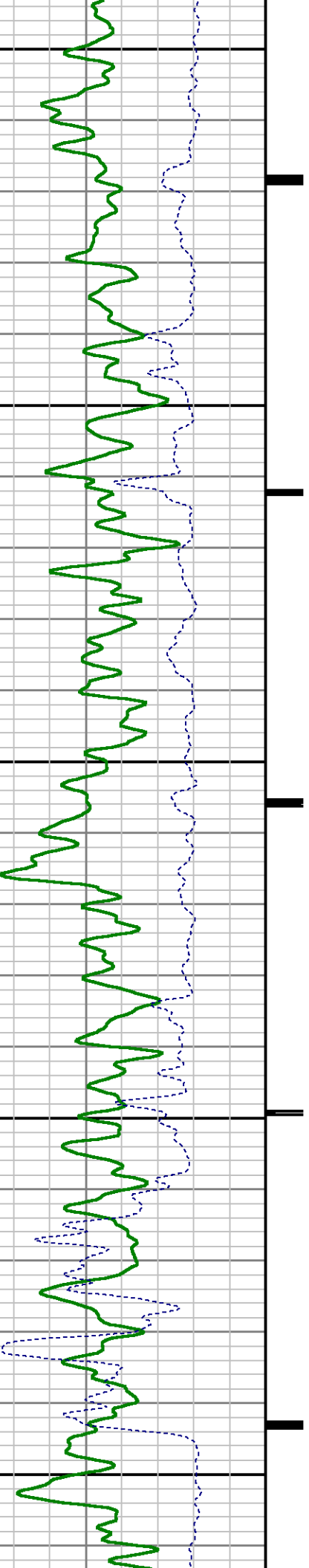
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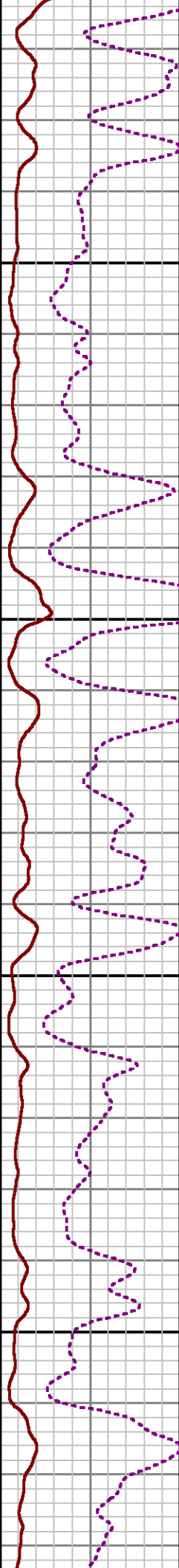
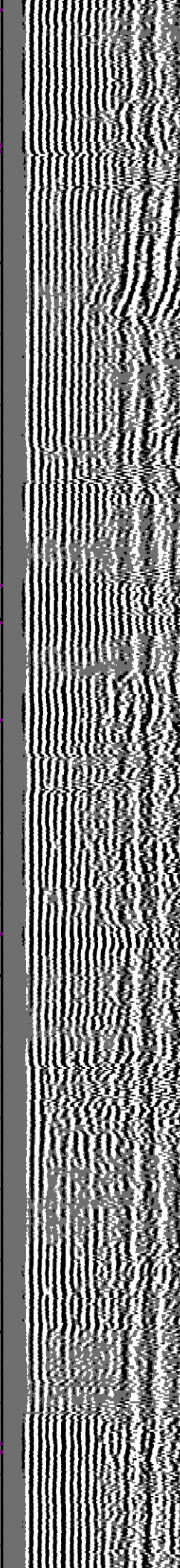
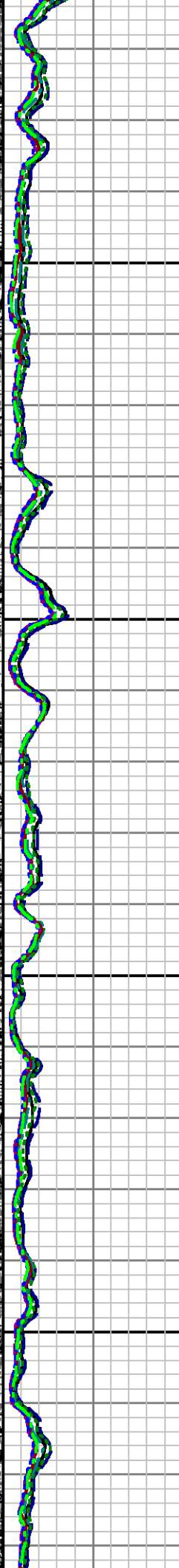
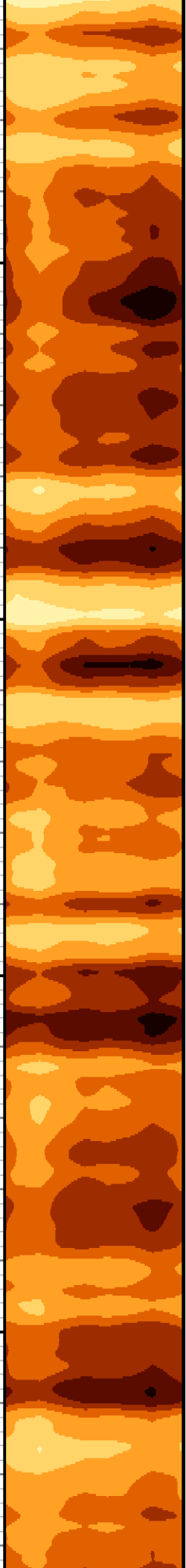




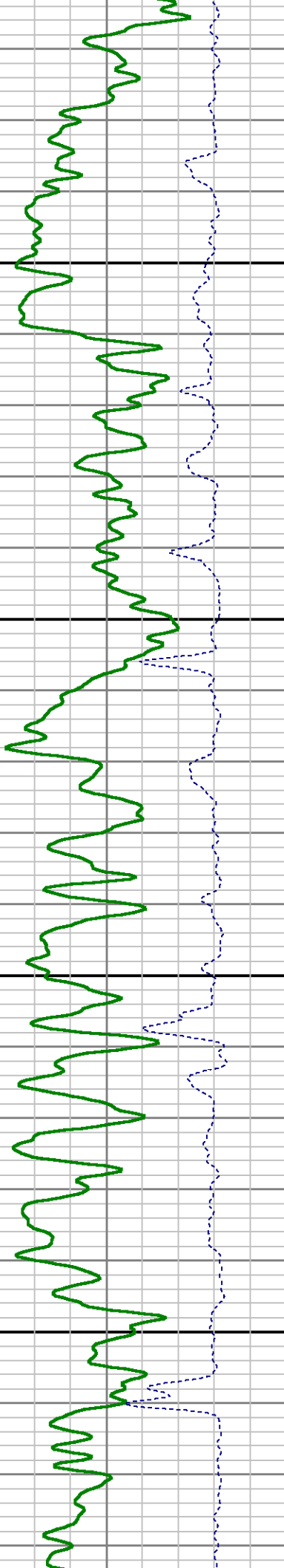
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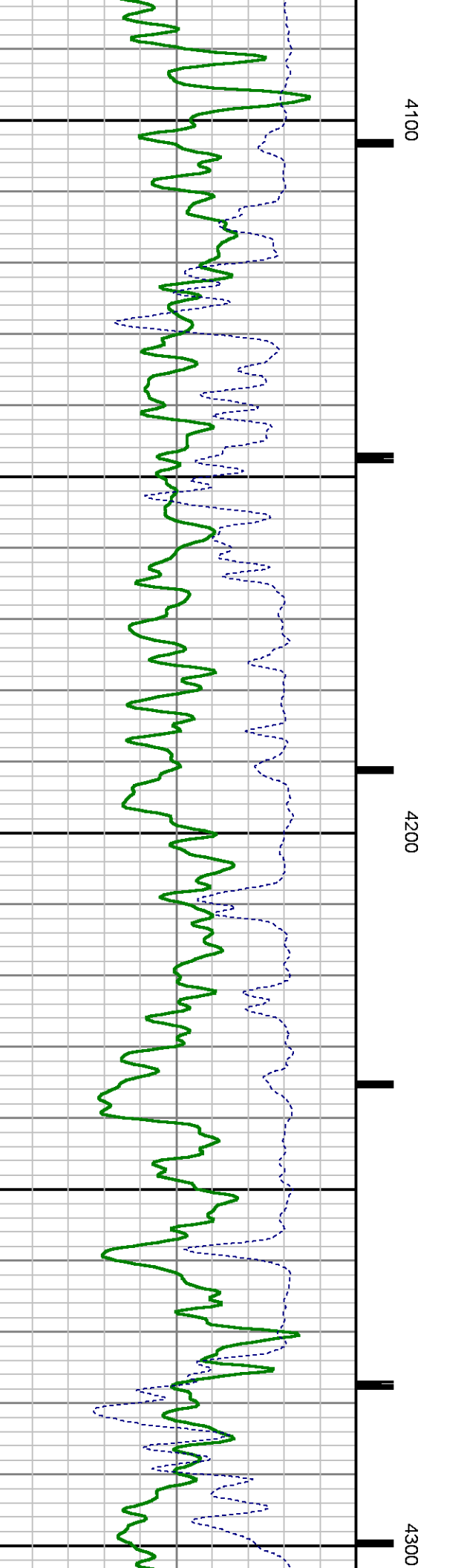
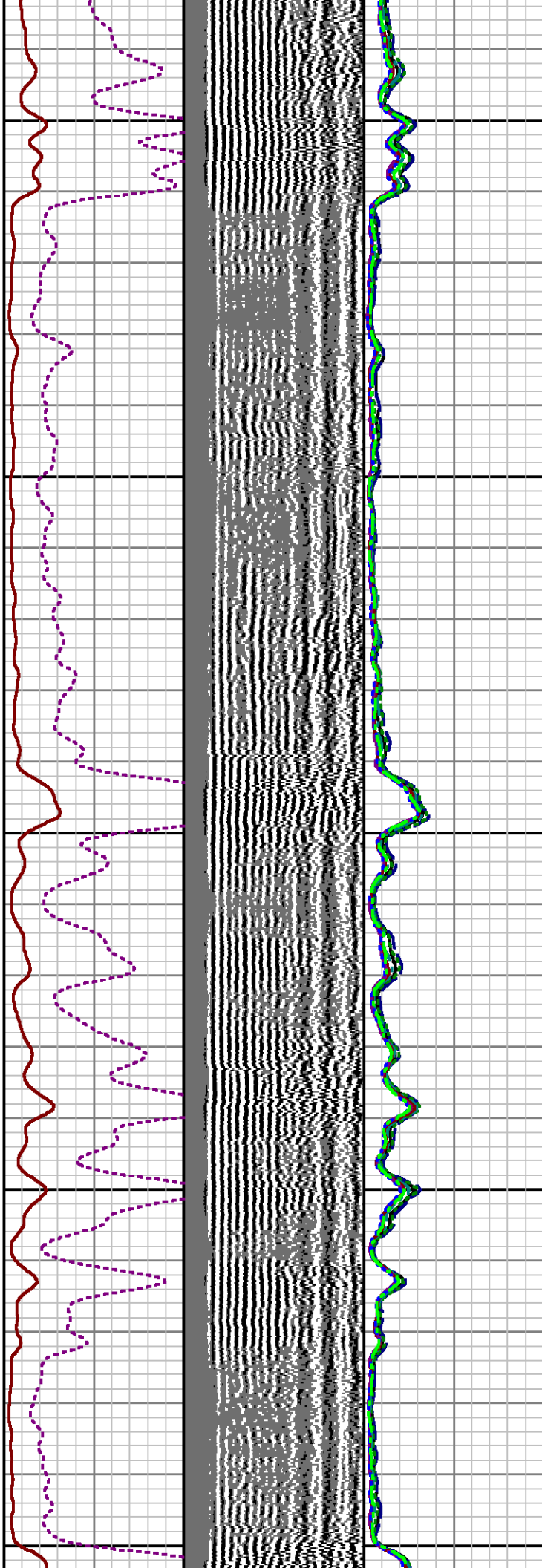
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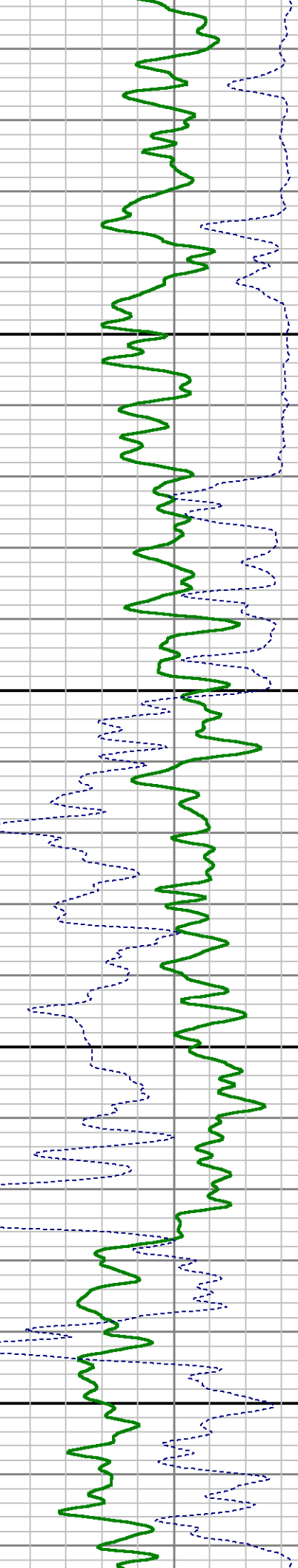
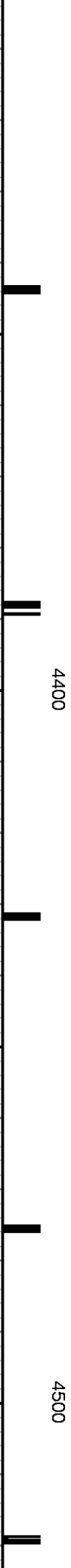
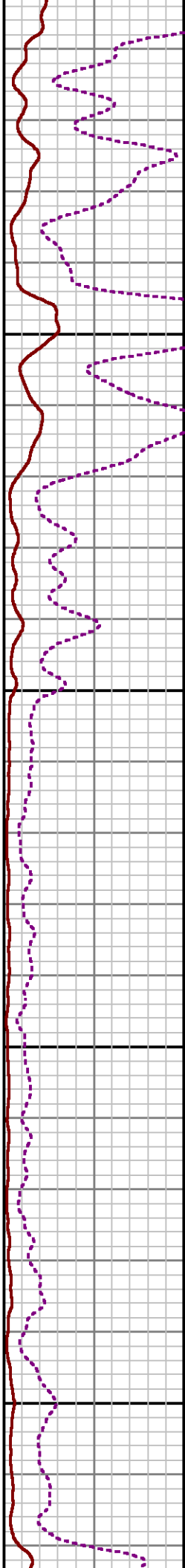
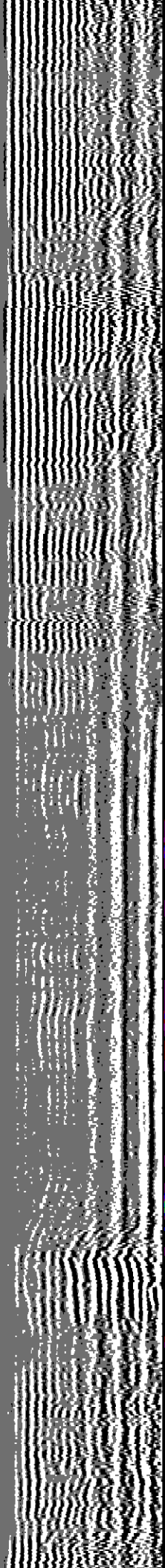
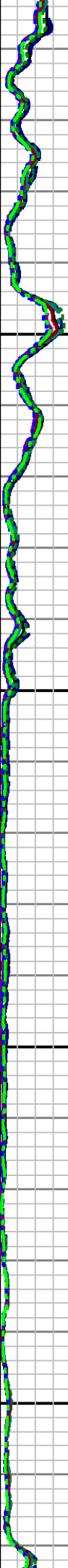


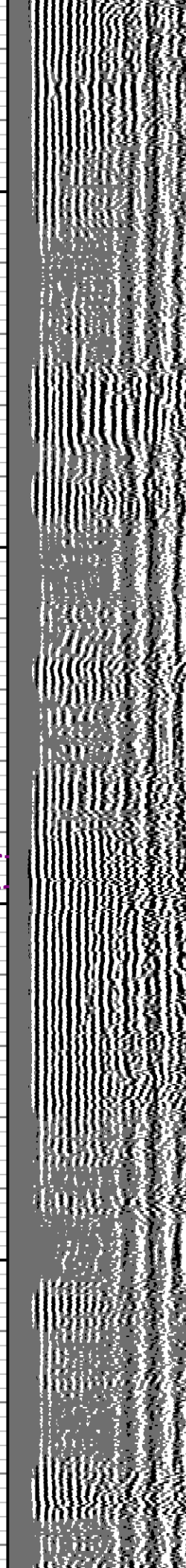
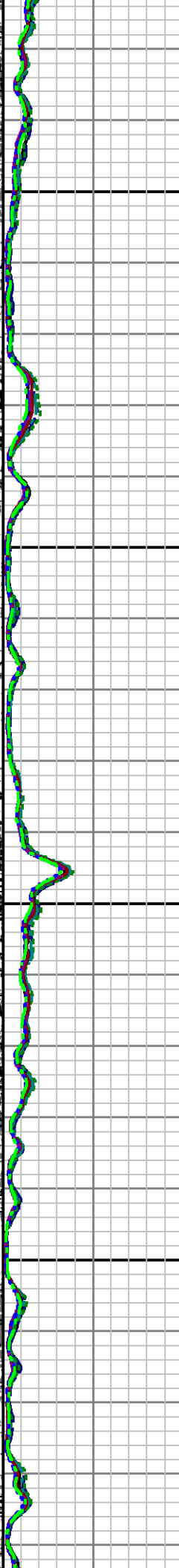
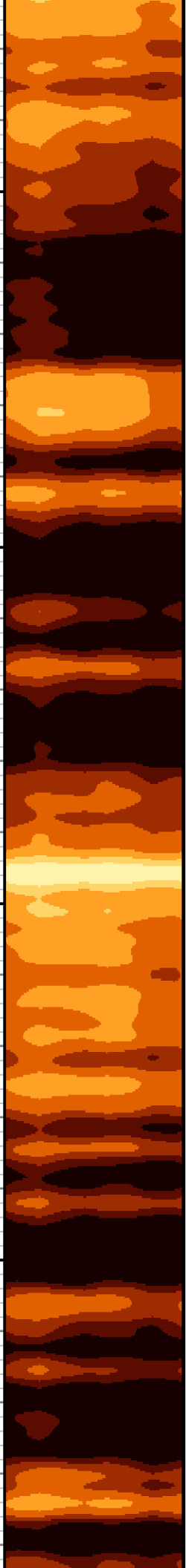


3900 4000



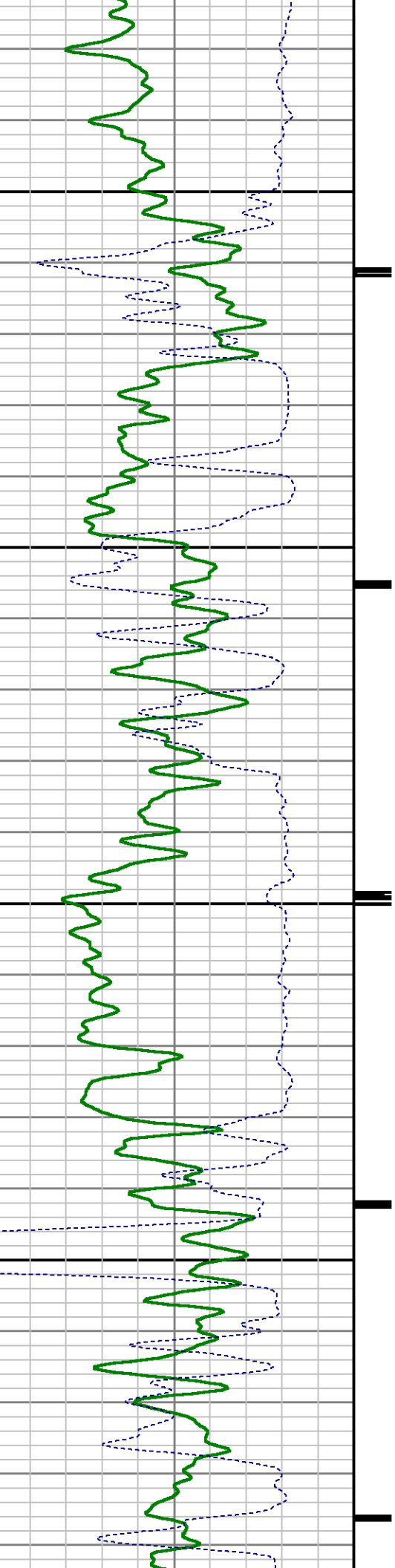


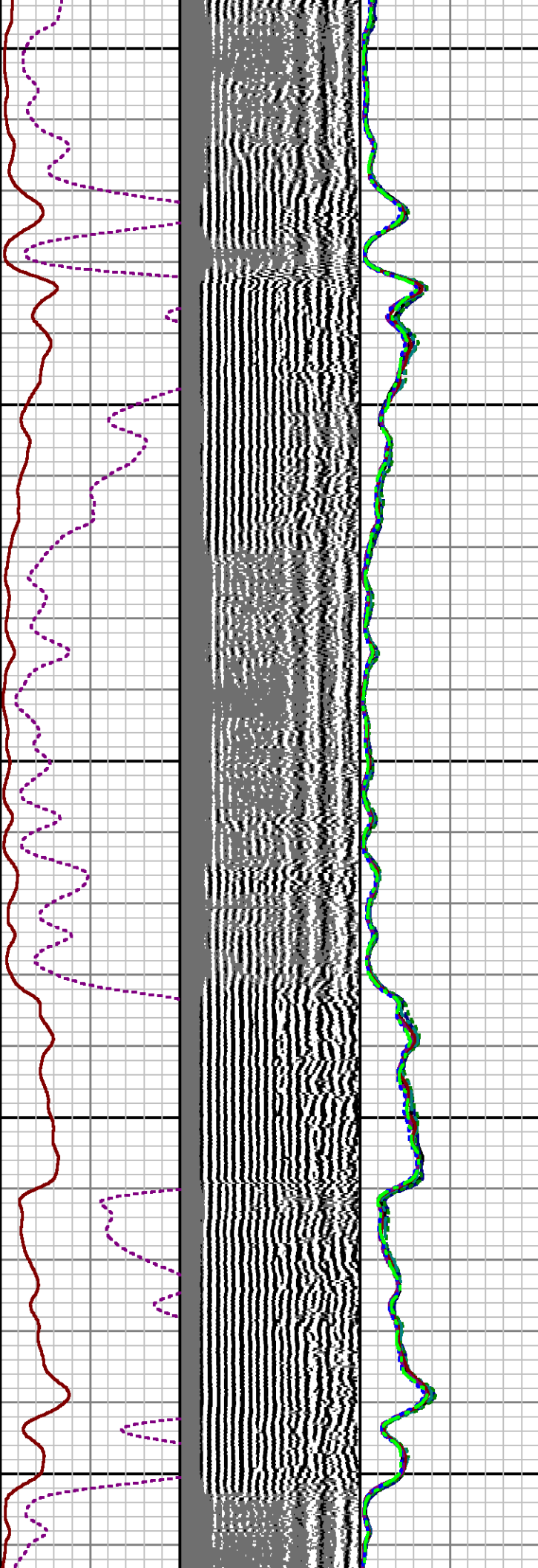




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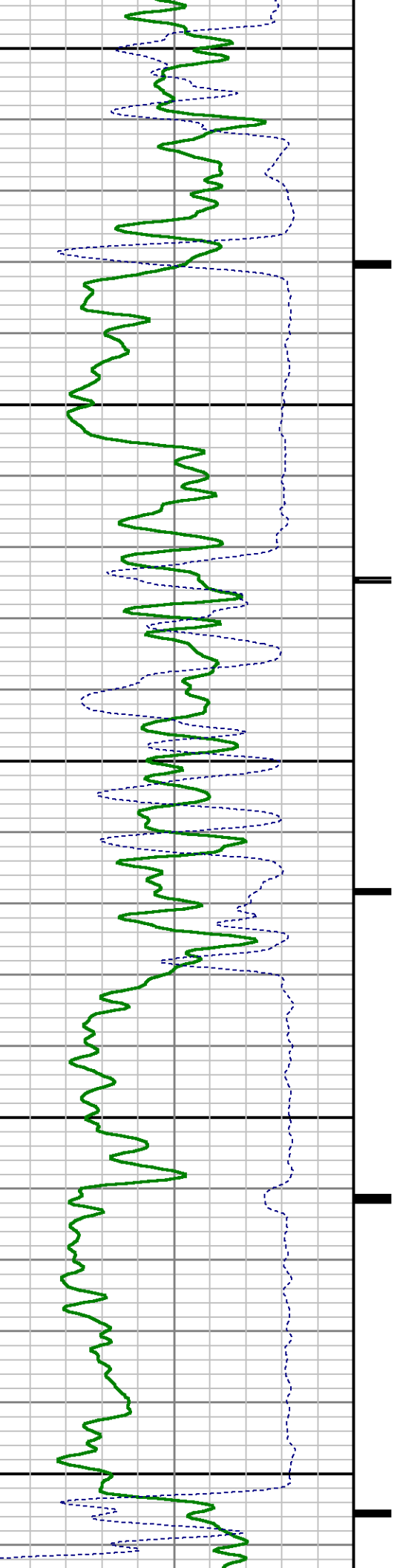
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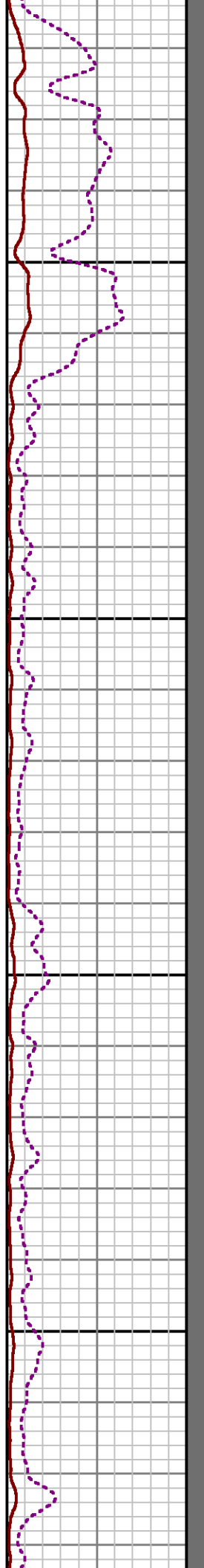
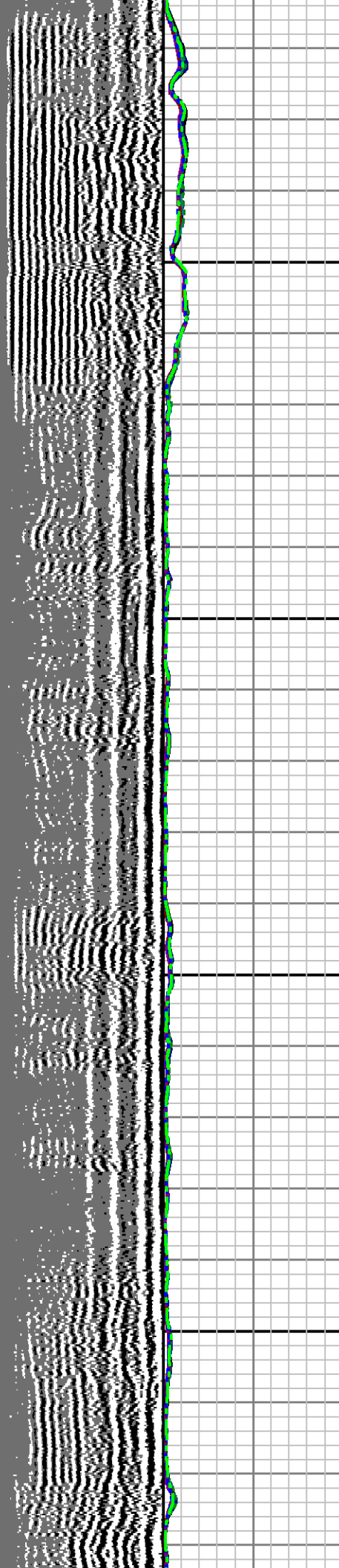




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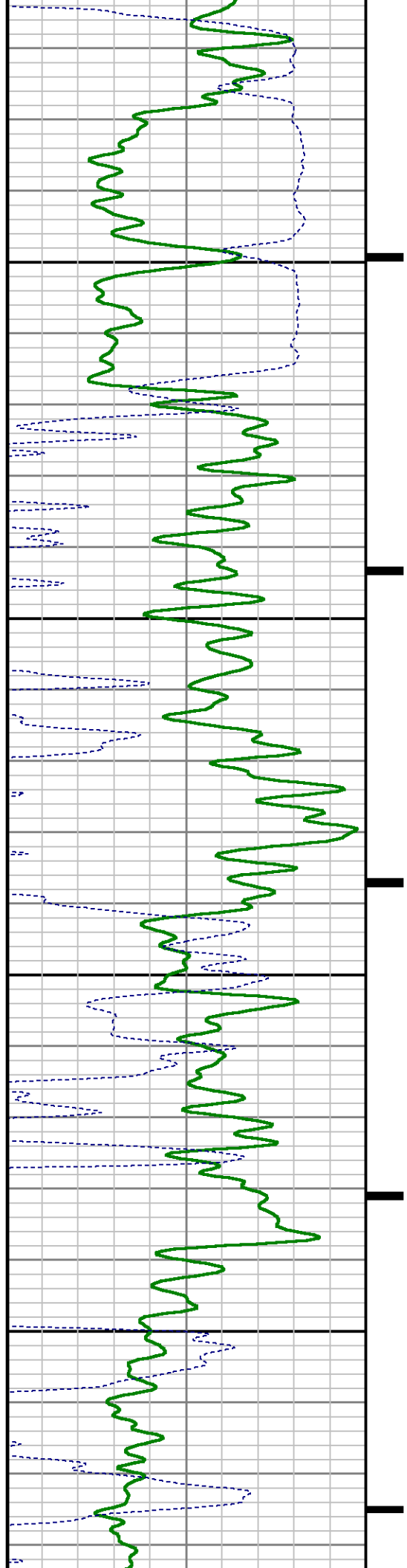
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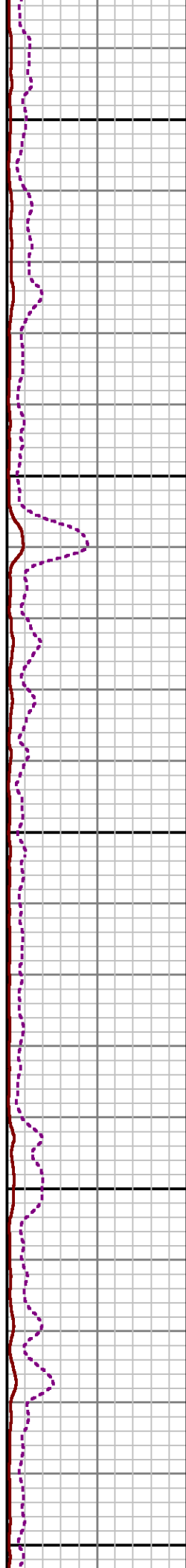
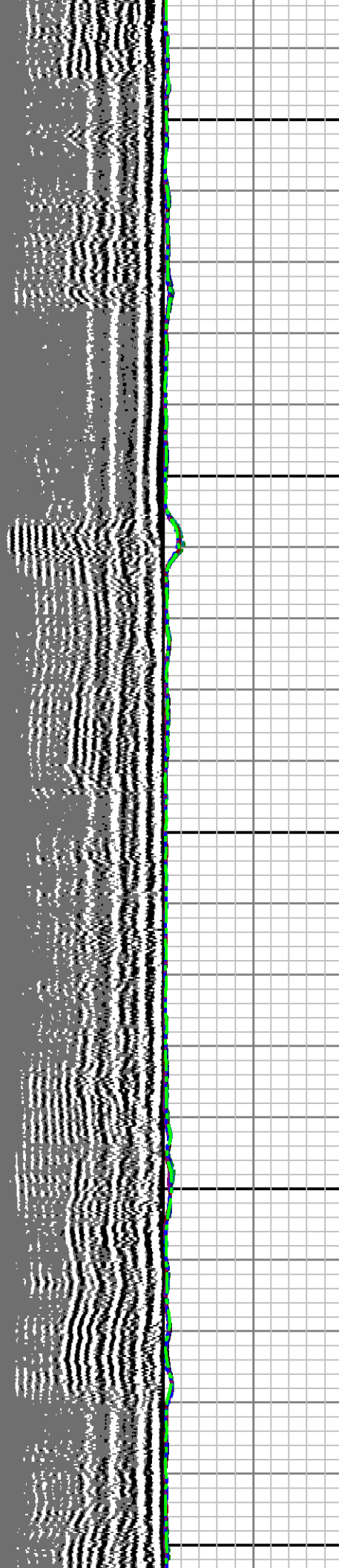




5000

5100

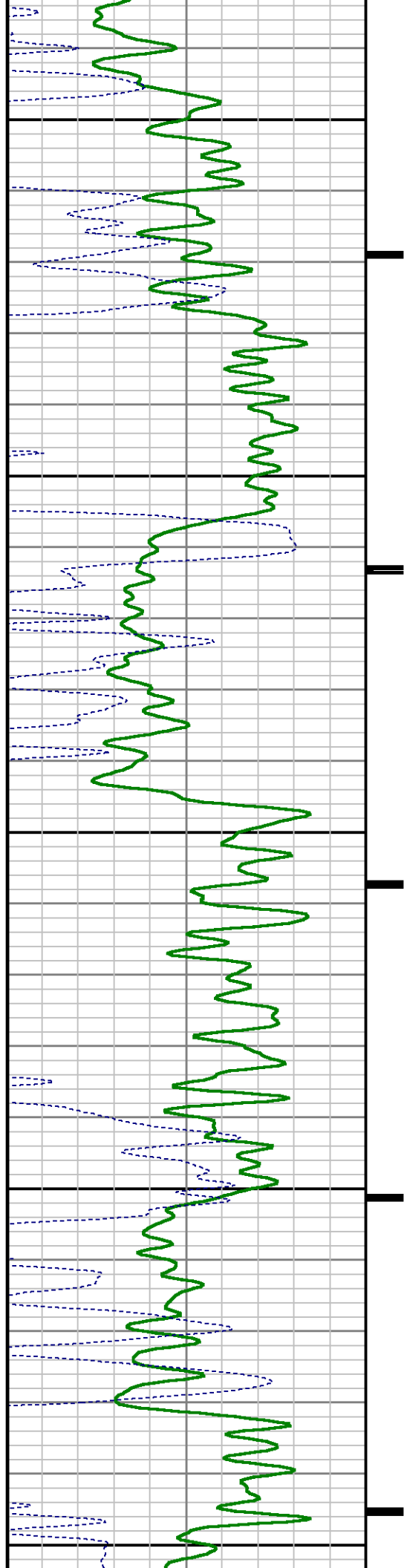


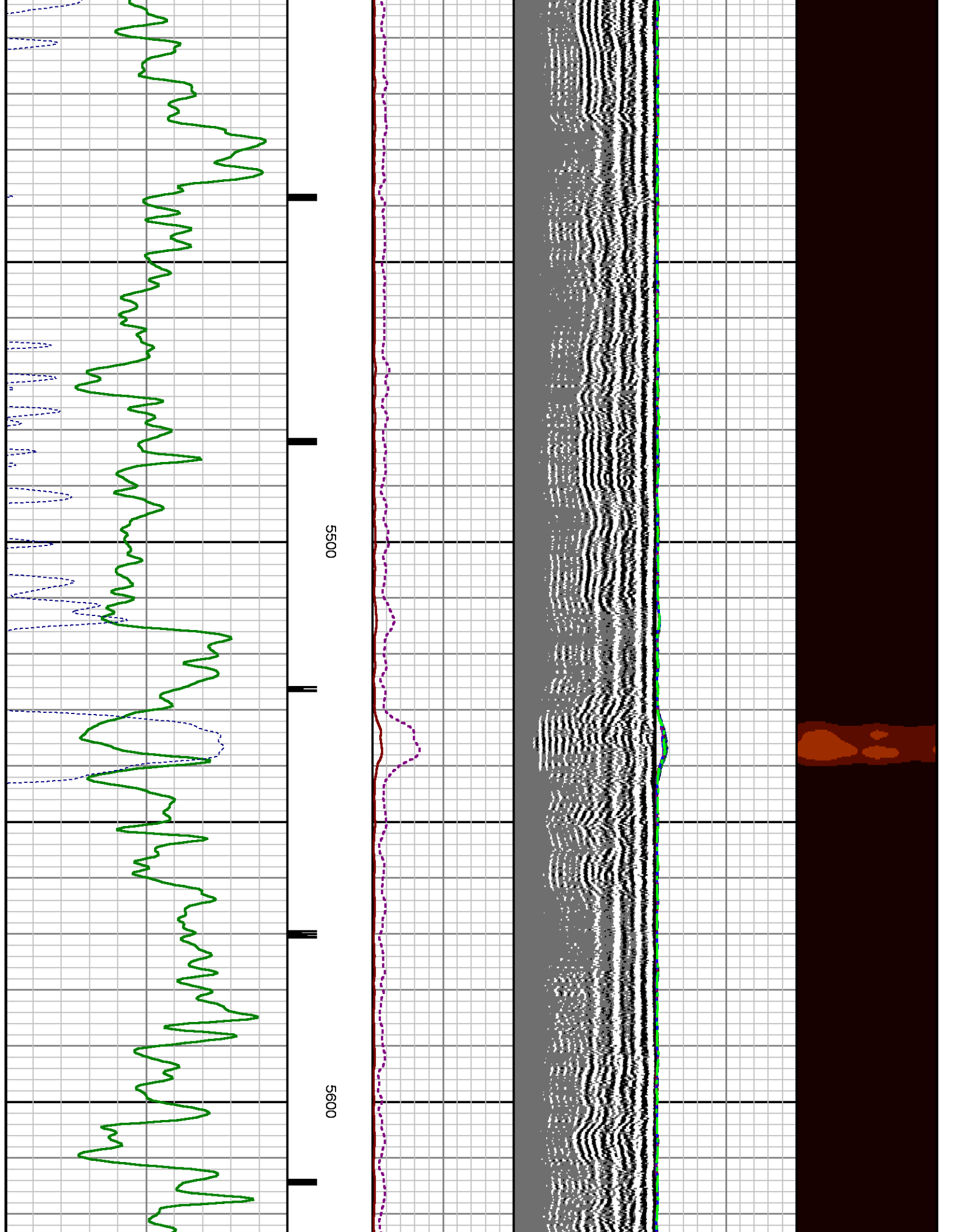


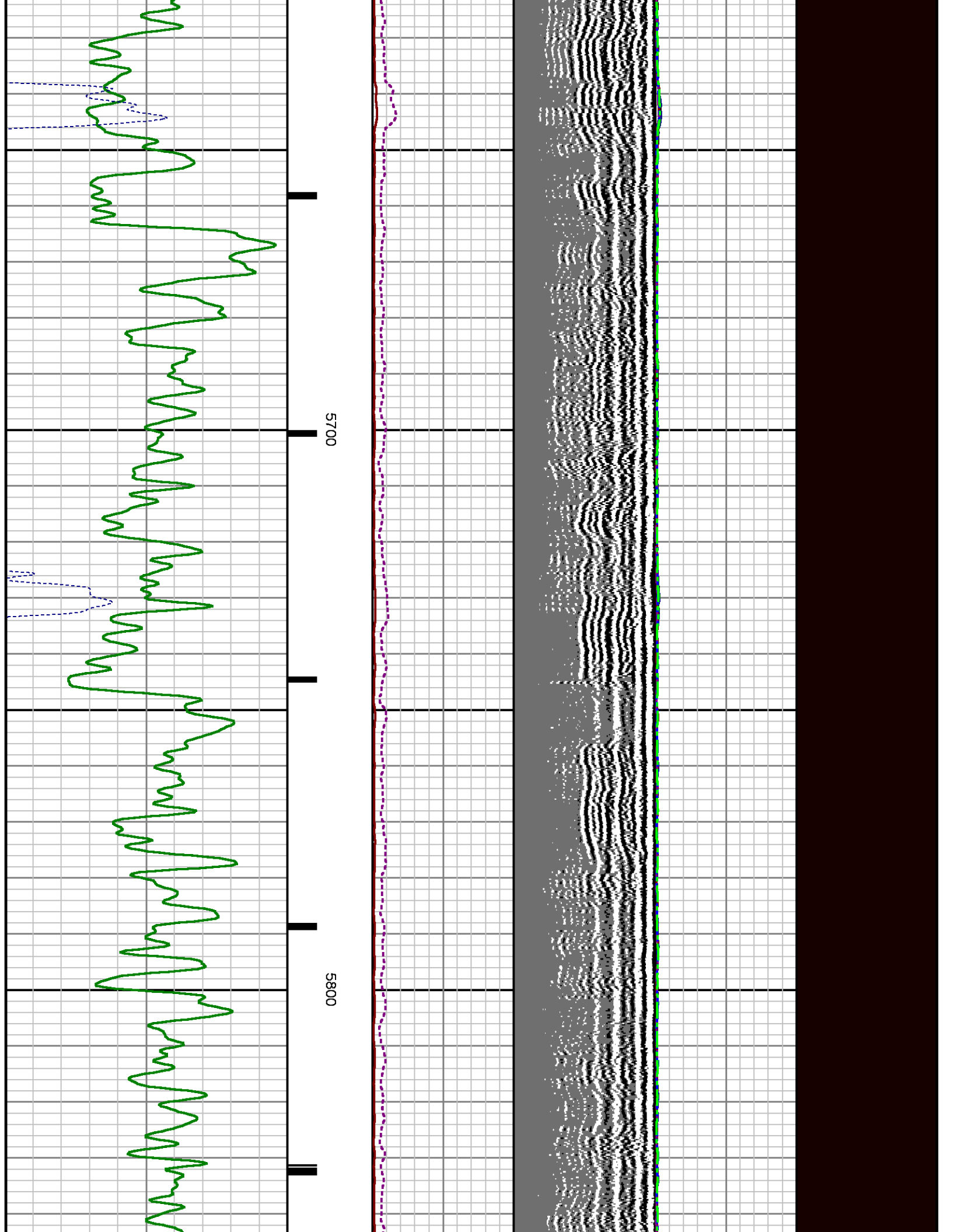
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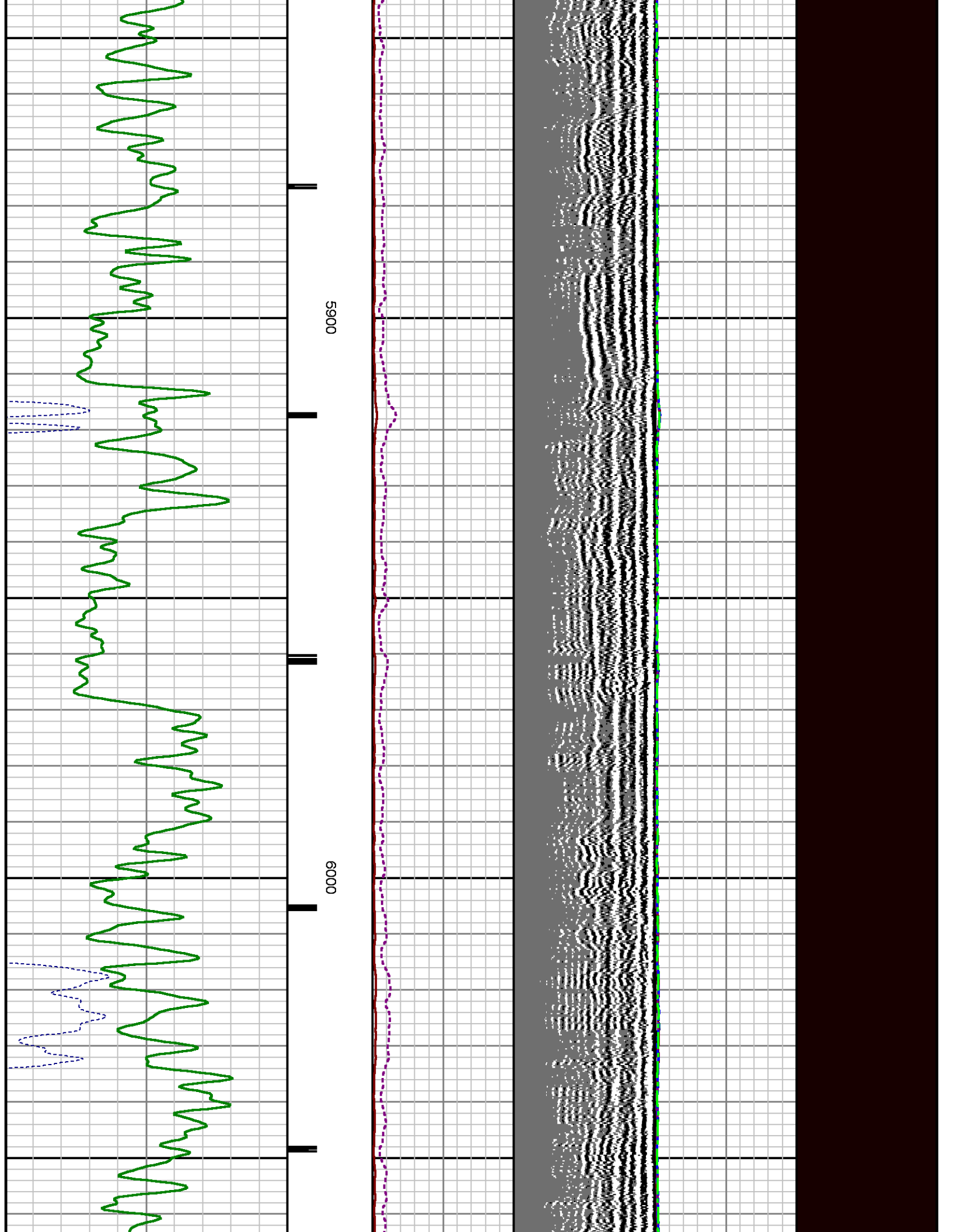
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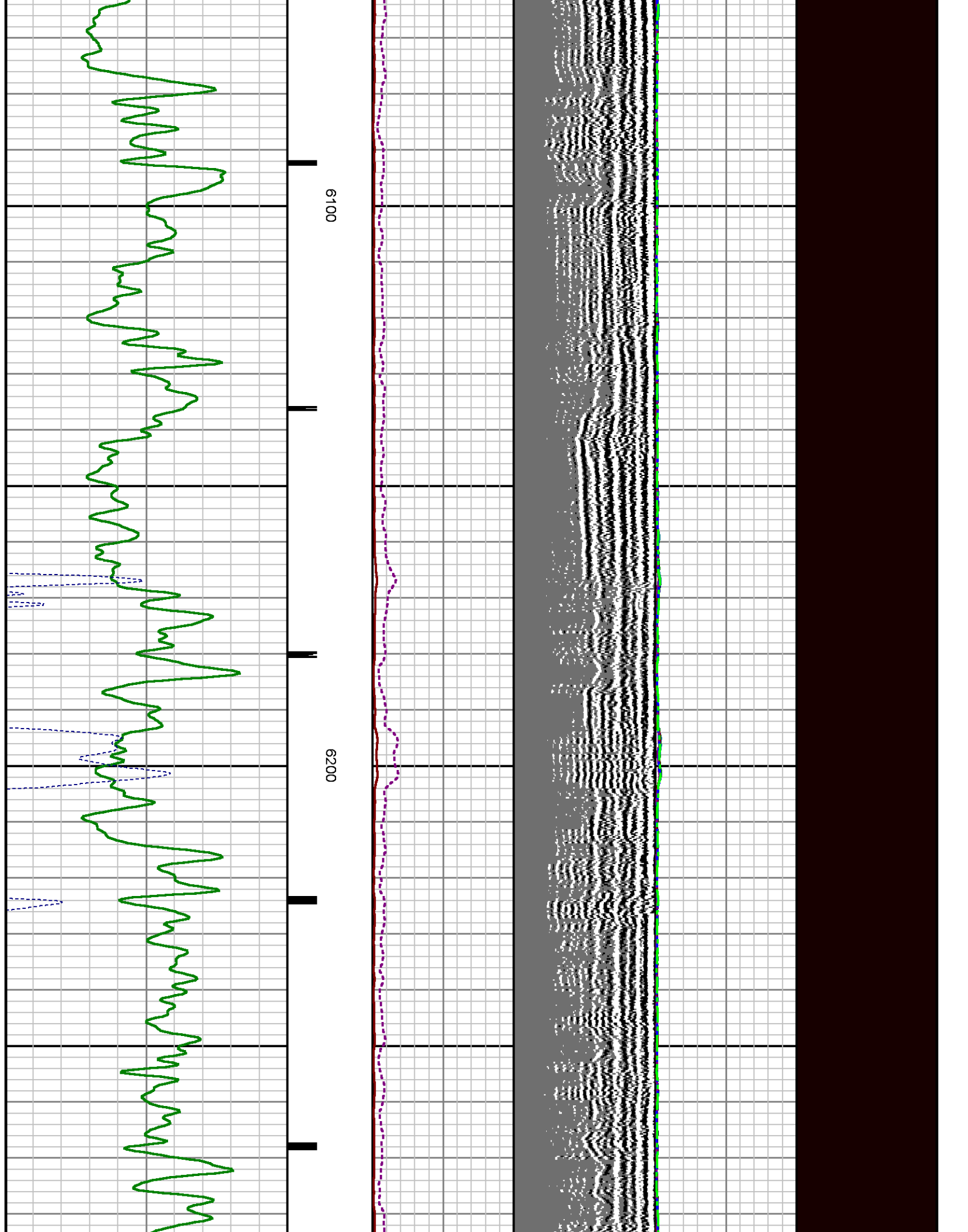
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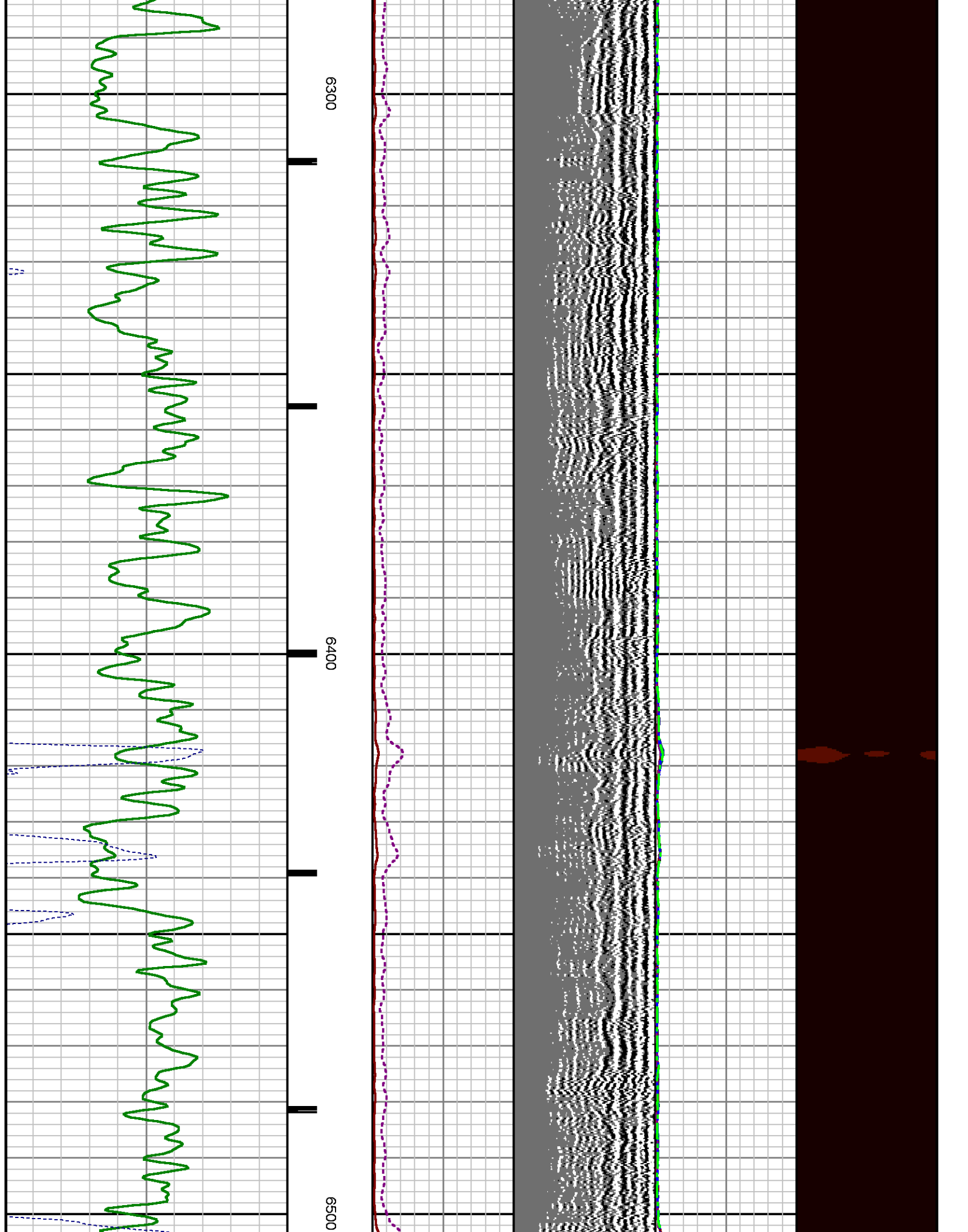


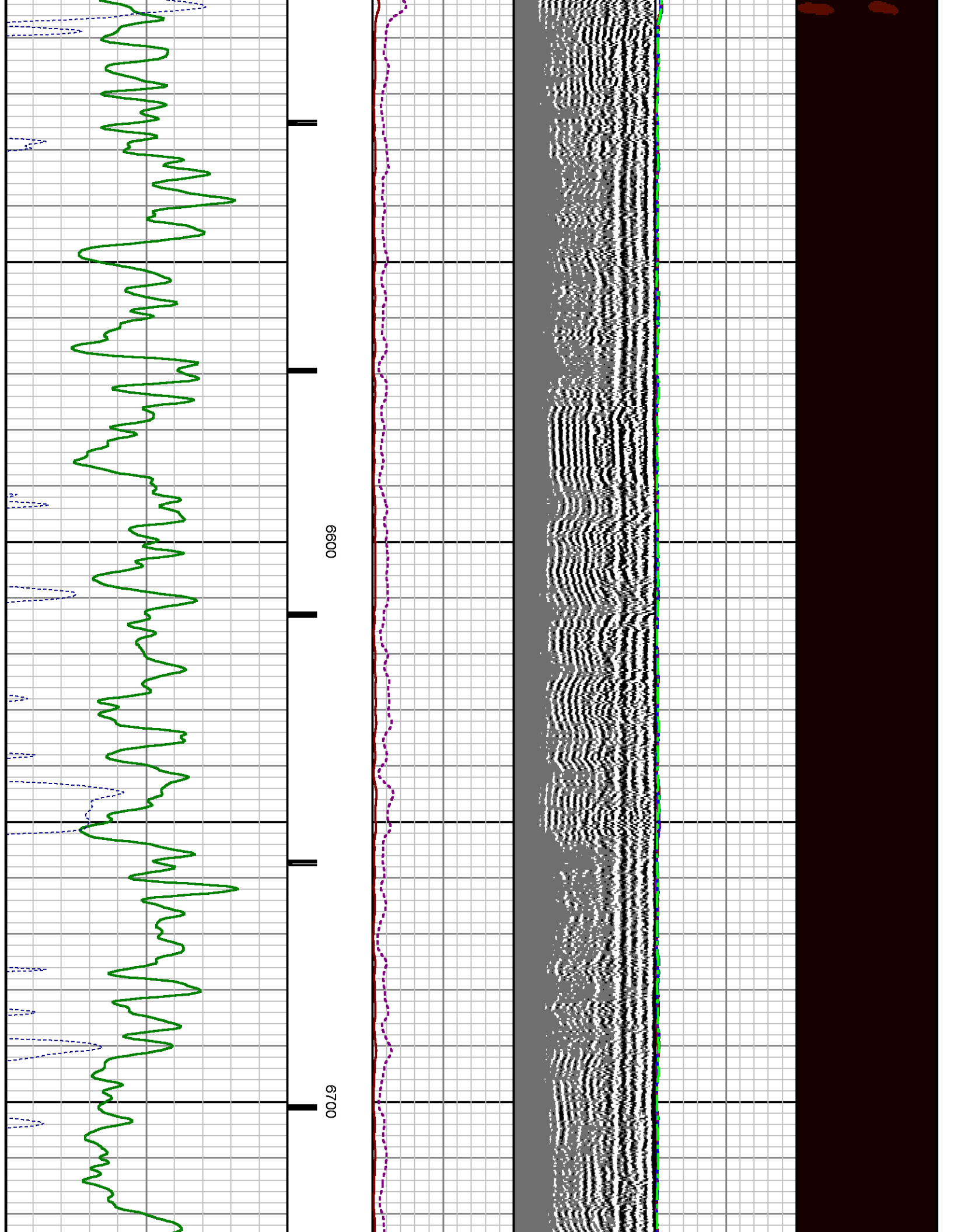


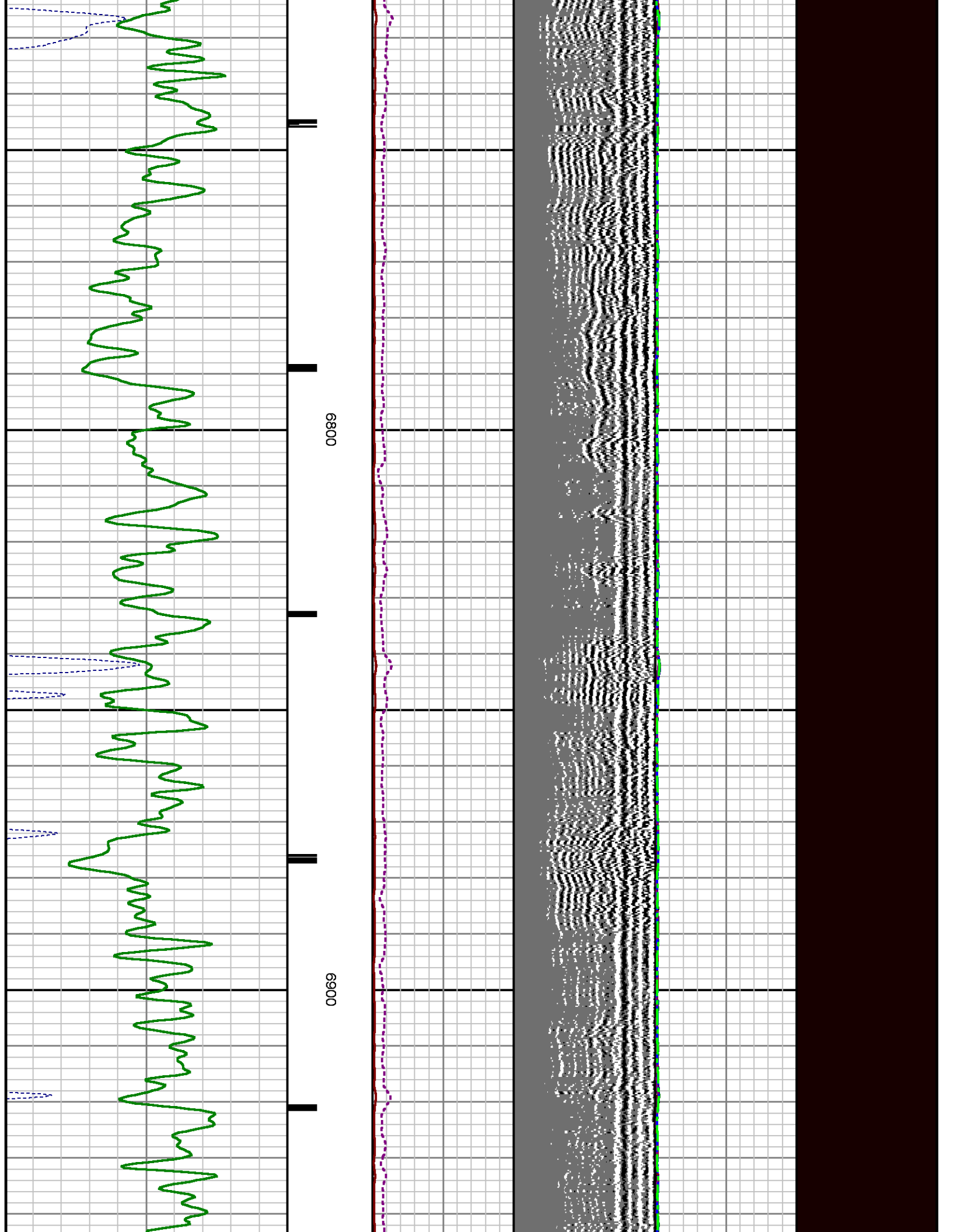


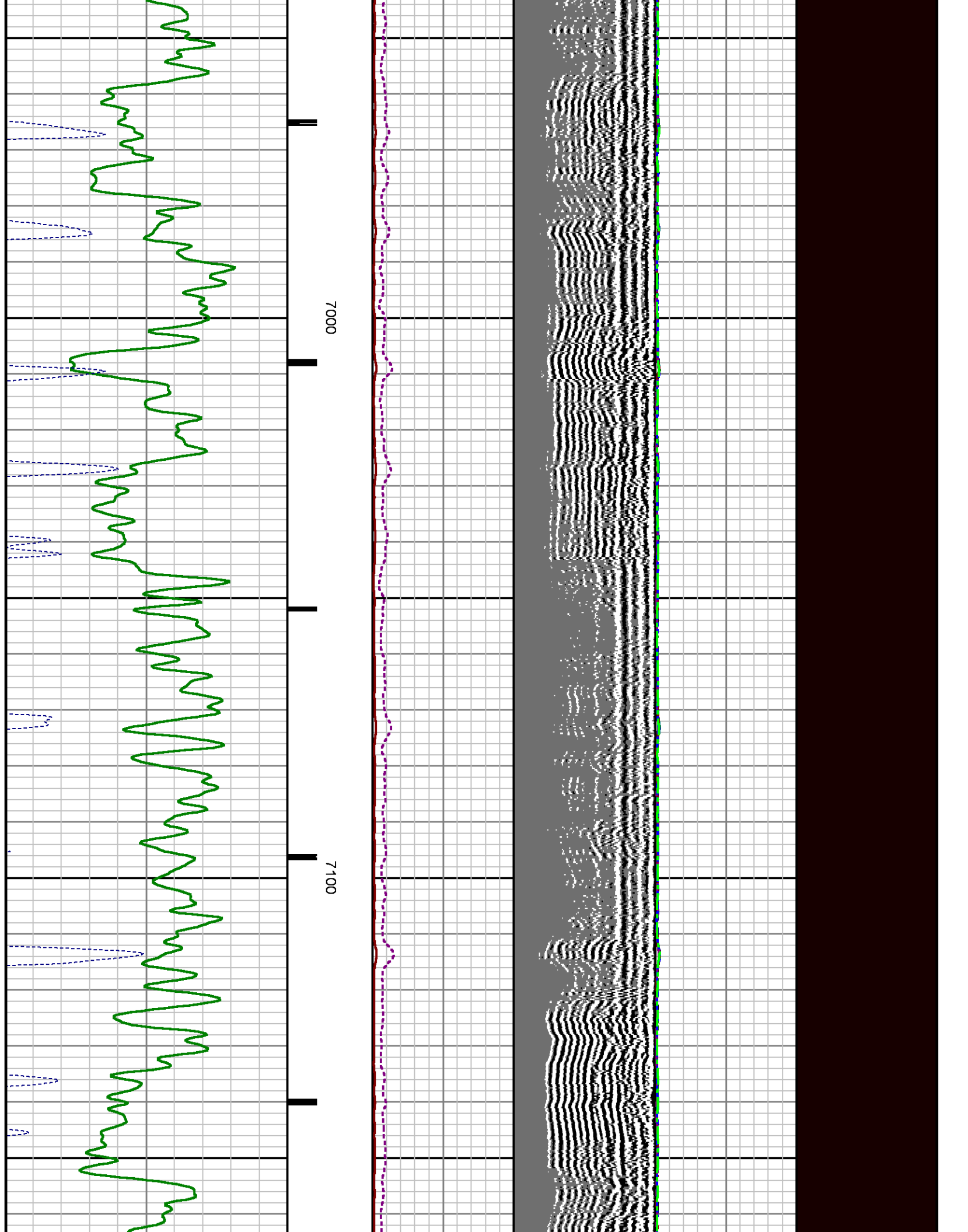




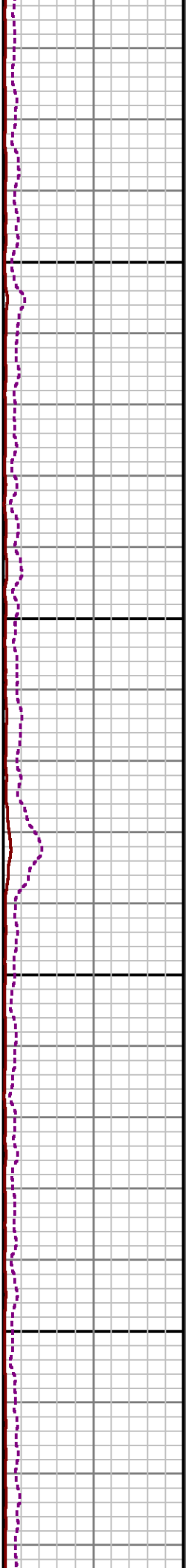
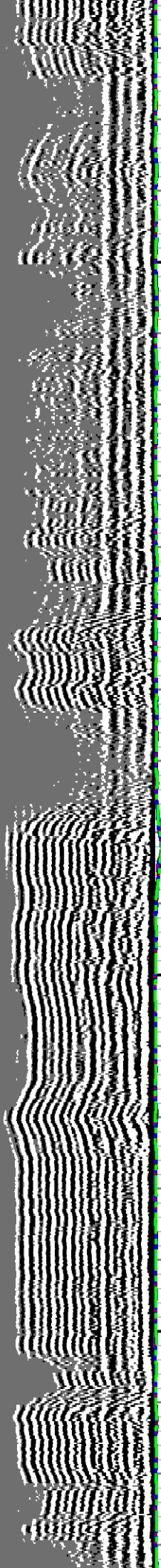






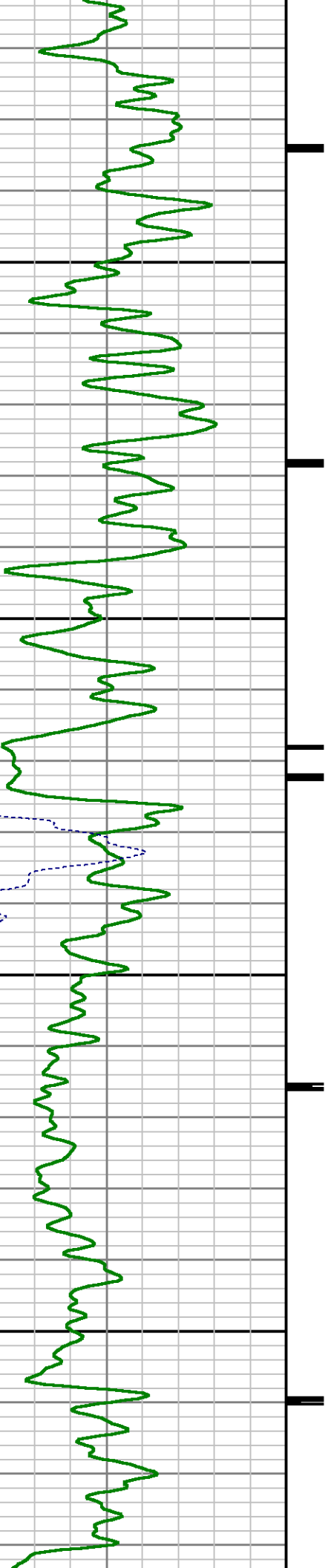


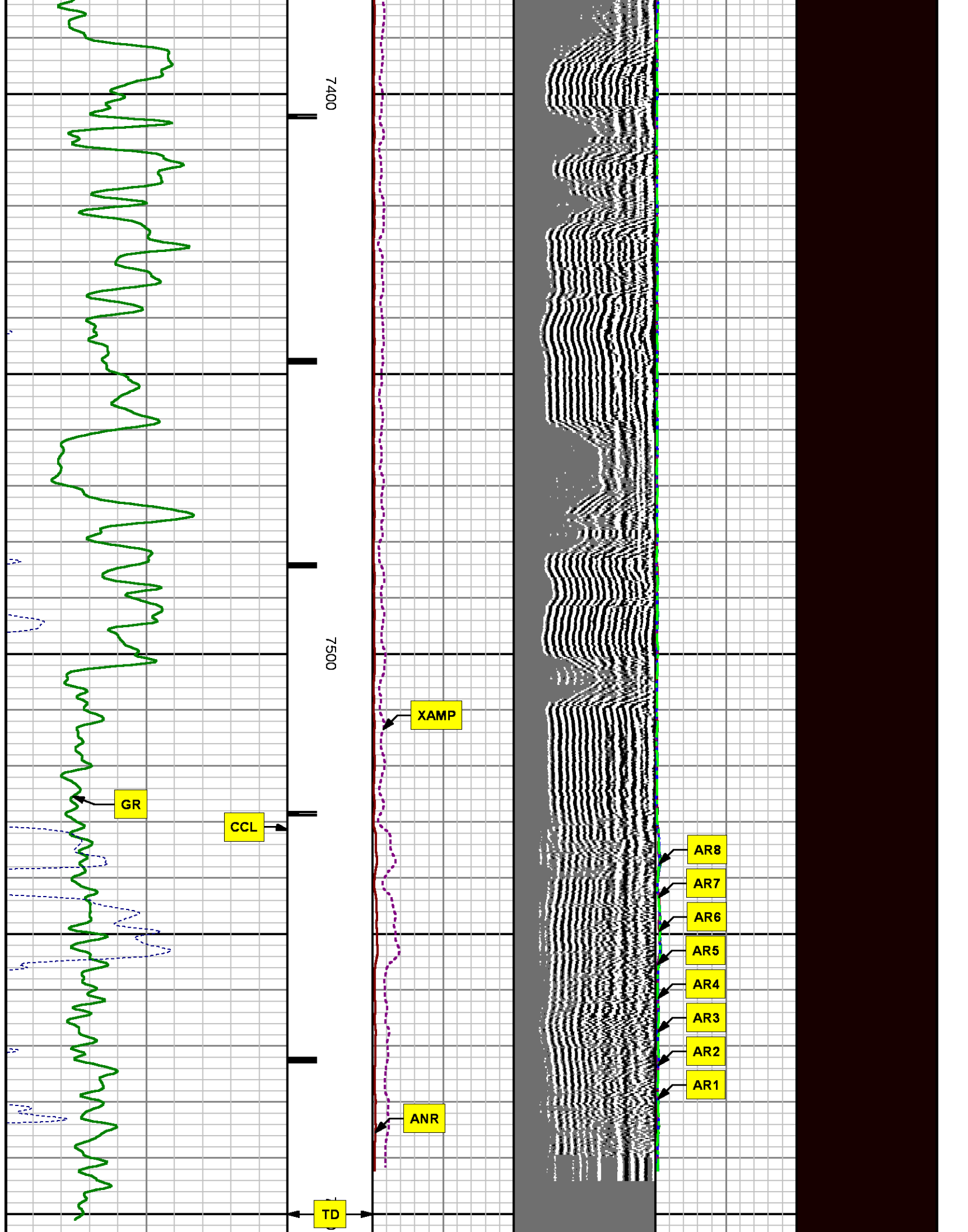
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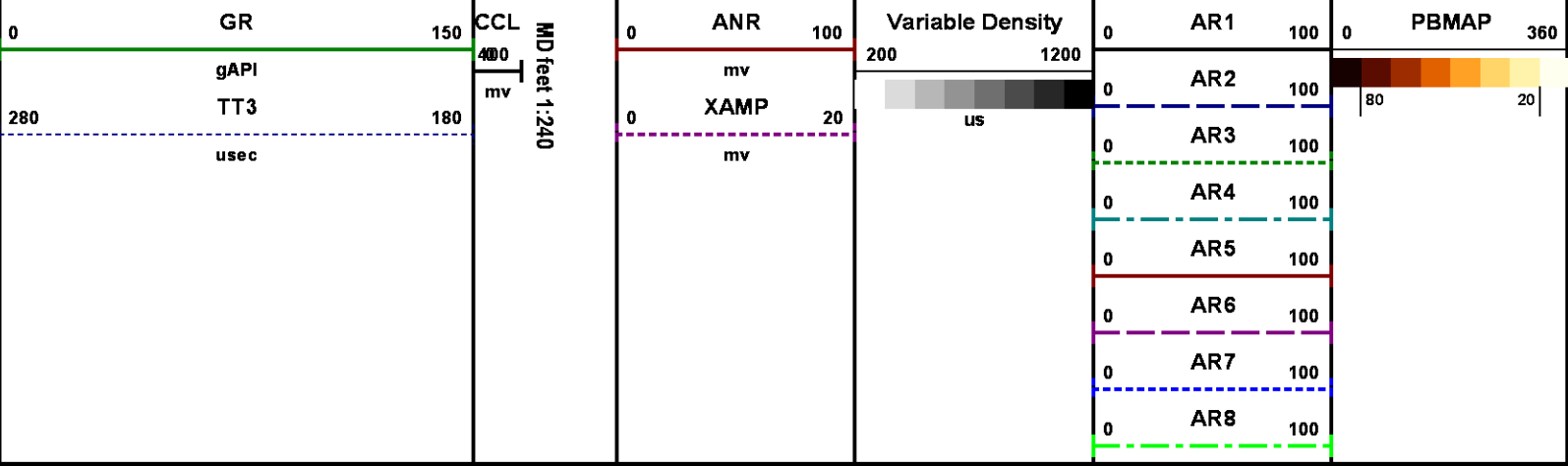


7200

7300





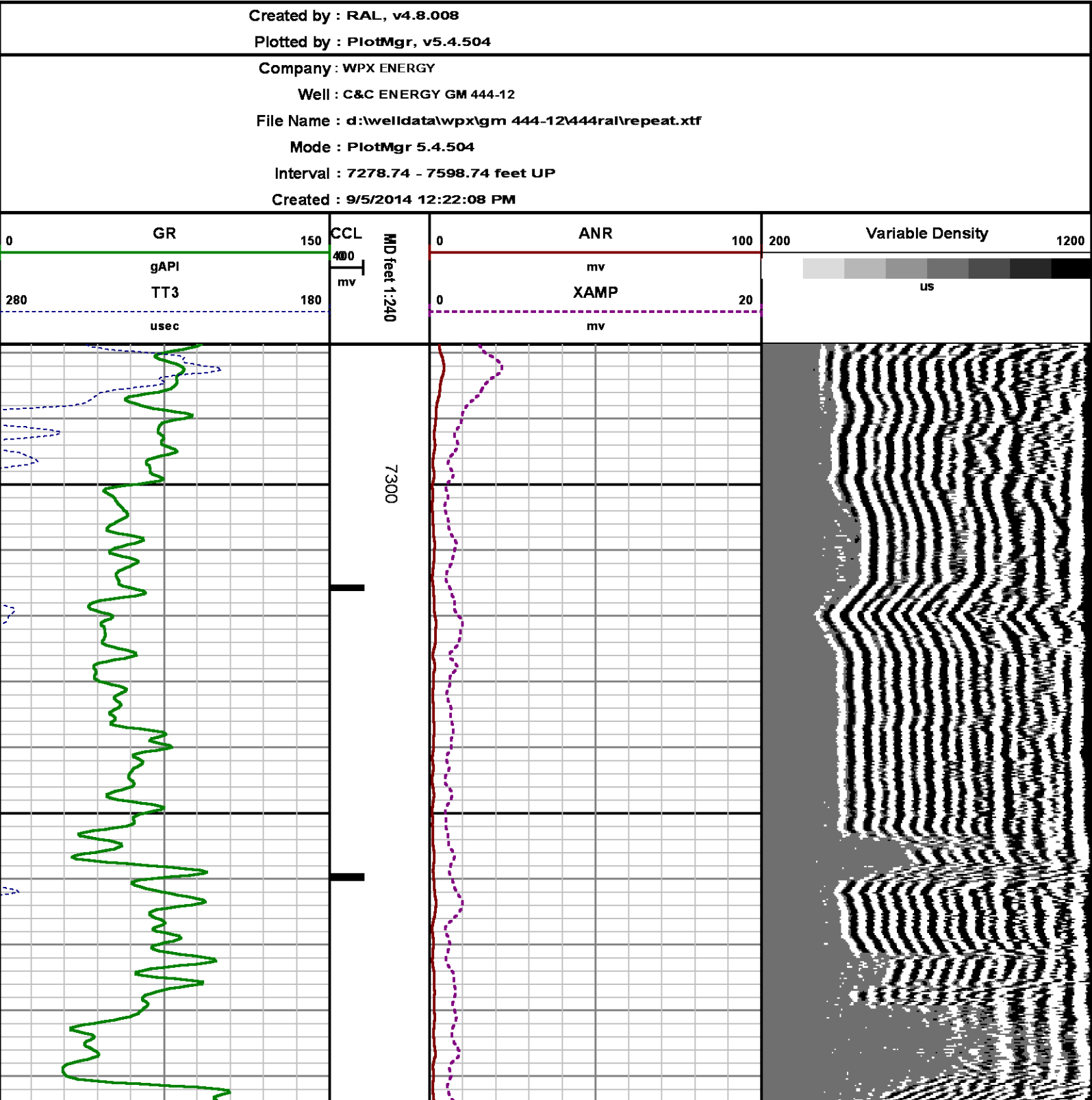


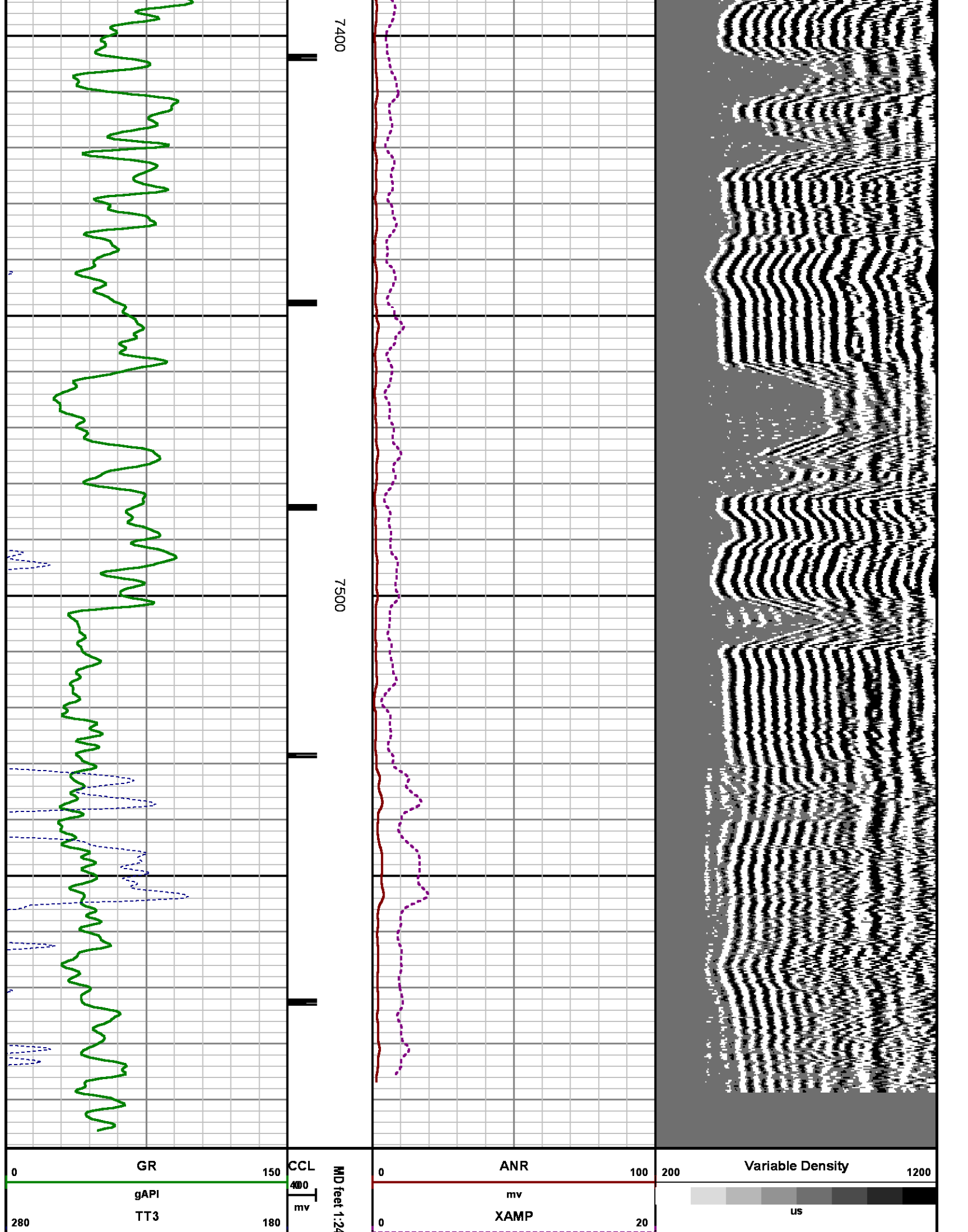
REPEAT SECTION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	310.000	u sec	7278.490	7598.740
RAL	Amp Gate Start Near	195.000	u sec	7278.490	7598.740
RAL	Amp Gate Start Radial	195.000	u sec	7278.490	7598.740
RAL	Amp Gate Width Far	25.000	u sec	7278.490	7598.740
RAL	Amp Gate Width Near	25.000	u sec	7278.490	7598.740
RAL	Amp Gate Width Radial	25.000	u sec	7278.490	7598.740
RAL	casing od	4.500	inches	7278.490	7598.740
RAL	casing wt	11.600	lbm/ft	7278.490	7598.740
RAL	FB Start Far	291.900	u sec	7278.490	7598.740
RAL	FB Start Near	180.000	u sec	7278.490	7598.740
RAL	FB Start Radial	180.000	u sec	7278.490	7598.740
RAL	FB Thresh Far	10.000	mv	7278.490	7598.740
RAL	FB Thresh Near	4.000	mv	7278.490	7598.740
RAL	FB Thresh Radial	4.000	mv	7278.490	7598.740
RAL	Fluid Travel Time	200.000	u sec/ft	7278.490	7598.584

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							





u sec

5

mv

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 [u sec]	-55.00	Tank OD in	5.50	Tank Wt lbm/ft	15.50	Tank ID in	4.95	
RECEIVER	Travel Time [u sec]	Amp. Gate Start [u sec]	Amp. Gate Width [u sec]	Zero Gate Start [u sec]	Zero Gate Width [u sec]	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 [u sec]	-55.00	Casing OD in	4.50	Casing Wt lbm/ft	11.60	Casing ID in	4.00	
RECEIVER	Zero Gate Start [u sec]	Zero Gate Width [u sec]	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	Calibrator On	Multiplicative	Background	Calibrator On	Differential	
	[cps]	[cps]		[api]	[api]	[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	Calibrator On	Multiplicative	Background	Calibrator On	Differential	
	[cps]	[cps]		[api]	[api]	[api]	
S2K WA612	85.91	455.51	0.483	41.52	220.17	178.64	

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

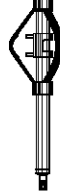


	18.89'
XMIT	12.71'

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



NEAR RCVR 9.63'
FAR RCVR 7.71'
CCL 5.79'
GR 1.67'
TEMP 0.17'
0.00'

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



Baker Atlas

CASE

Company

WPX ENERGY

Well

C&C ENERGY GM 444-12

Field

GRAND VALLEY

County

GARFIELD

State

COLORADO

Location

SHL: 255' FSL & 1057' FWL

BHT: 520' FSL & 867' FEL (SESE)

Elevations

KB 5165 ft

DF

GL 5141 ft

File No:

CH089911

API No:

05045224280000

12 7S 96W

GM 24-12 PAD

H&P 318

SEC 12 TWP 7S RGE 96W