



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: WPX ENERGY

CH08B401 C&C ENERGY GM 323-13

API No: GRAND VALLEY

0504522570000 County GARFIELD State COLORADO

Location

13 75 96W SHL: 282' FSL & 987' FWL (SEC 12)

GM 24-12 PAD BHT: 1877' FNL & 642' FWL (SWNW SEC 13)

H&P 318 SEC 13 TWP 7S RGE 96W

Other Services

RPM

Permanent Datum GL Elevation 5141 ft

Log Measured From KB 24 ft Above P. D.

Drill Measured From KELLY BUSHING KB 5165 ft DF GL 5141 ft

Date	20/JUL/14	
Run	ONE	
Service Order	US08B401J	
Depth Driller	6569 ft	
Depth Logger	6521 ft	
Bottom Logged Interval	6511 ft	
Top Logged Interval	24 ft	
Time Started	1515	
Time Finished	1745	
Operator Rig Time	2.5 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	61 ft	
Logged Cement Top	NA	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	NA	
Nominal Logging Speed	65 fpm	
Maximum Recorded Temperature	205 degF	
Reference Log	NONE	
Reference Log Date	NA	
Equipment No.	4271	GRAND JCT
Recorded By	FLYOD 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	1350 ft
8.75 in	1350 ft	6569 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in			24 ft	1350 ft
4.5 in	11.6 lbm/ft	I-80	24 ft	6569 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 6.5 feet.
Logged with zero PSI at wellhead.
BHT = 205°F
SJ = 2926'-2949'

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1426XA	10124106	CENT
1	1	GR/CCL	2459XA	10124121	CENT

PRIMARY PRESENTATION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	29.187	6522.500
RAL	Amp Gate Start Near	195.000	usec	29.187	6522.500
RAL	Amp Gate Start Radial	195.000	usec	29.187	6522.500
RAL	Amp Gate Width Far	25.000	usec	29.187	6522.500
RAL	Amp Gate Width Near	25.000	usec	29.187	6522.500
RAL	Amp Gate Width Radial	25.000	usec	29.187	6522.500
RAL	casing od	4.500	inches	29.187	6522.500
RAL	casing wt	11.600	lbm/ft	29.187	6522.500
RAL	FB Start Far	291.900	usec	29.187	6522.500
RAL	FB Start Near	180.000	usec	29.187	6522.500
RAL	FB Start Radial	180.000	usec	29.187	6522.500
RAL	FB Thresh Far	10.000	mv	29.187	6522.500
RAL	FB Thresh Near	4.000	mv	29.187	6522.500
RAL	FB Thresh Radial	4.000	mv	29.187	6522.500
RAL	Fluid Travel Time	200.000	usec/ft	29.187	6522.375

DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-12.360	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	CHV	FPR2
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3

1426XA -11.360
2459XA -7.250
2459XA -5.390
2459XA 0.000

TTR4 TTR5 TTR6 TTR7 TTR8 XAMP
AFAR SIG TT5
CCL
GR
NEU

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

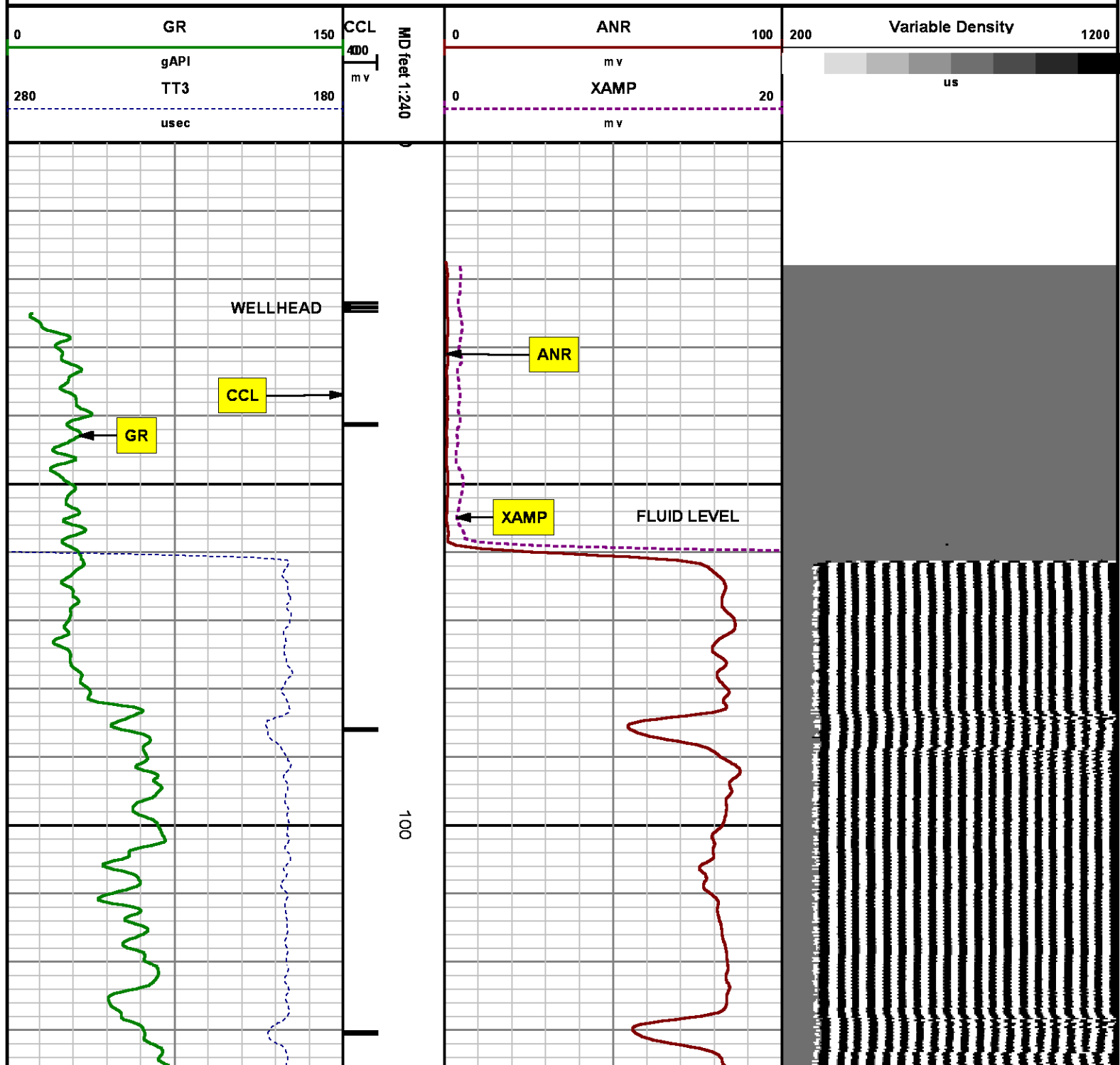
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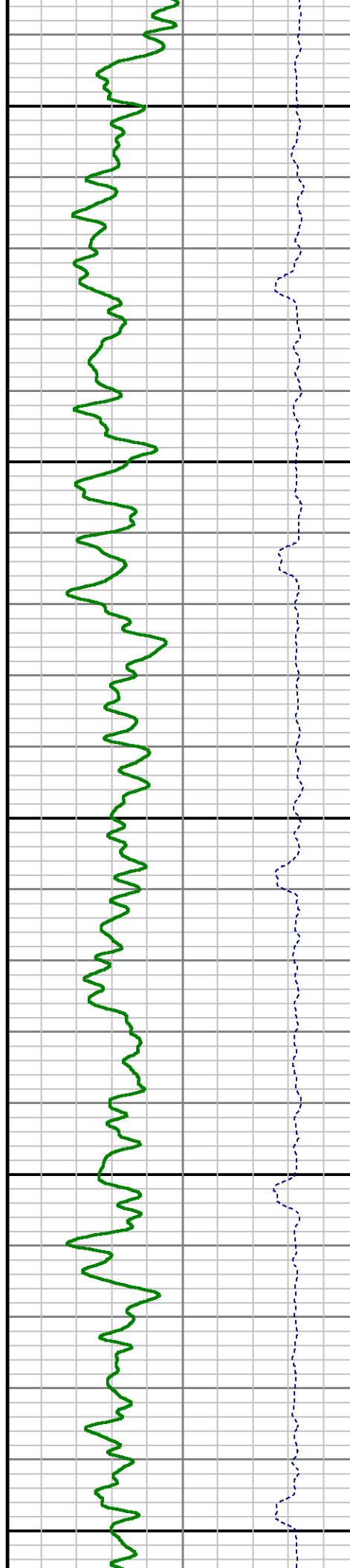
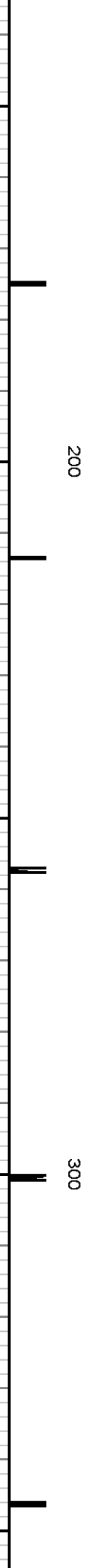
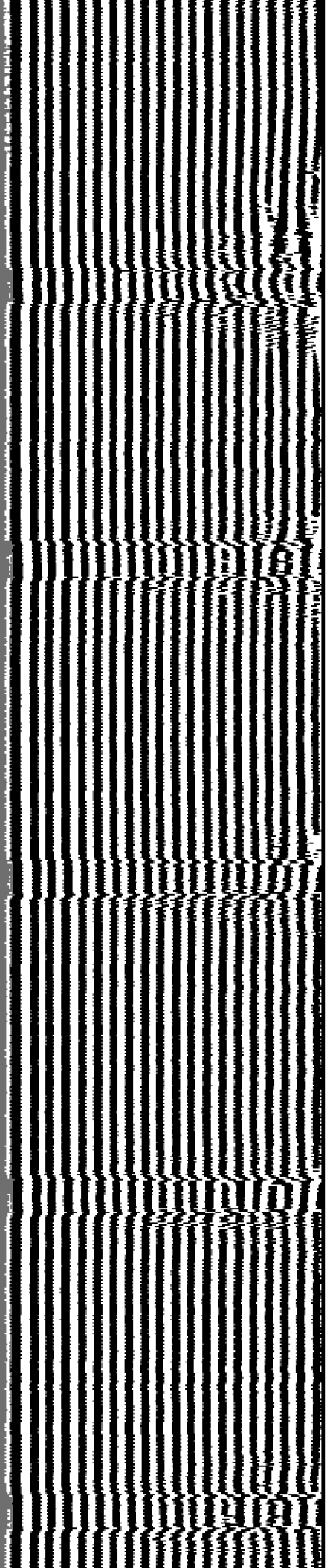
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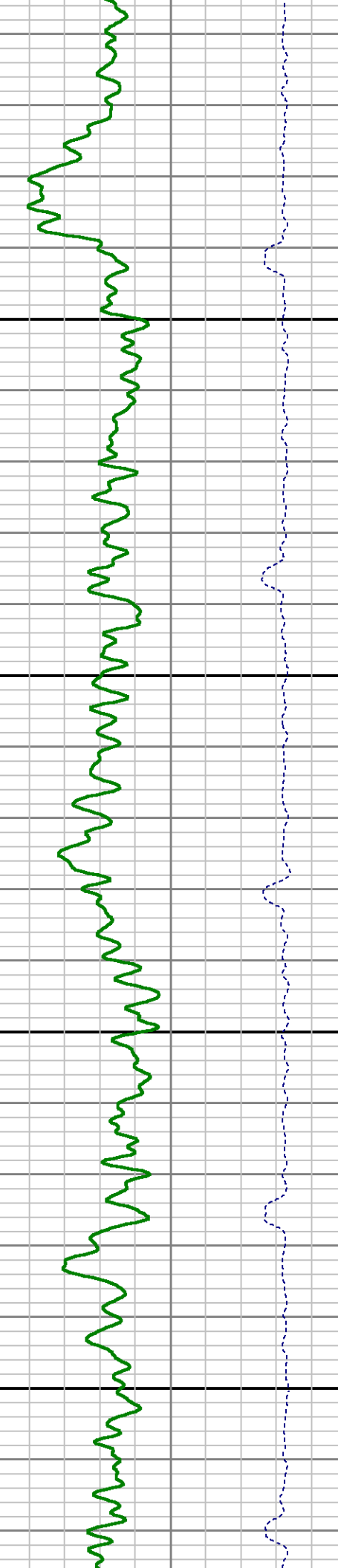
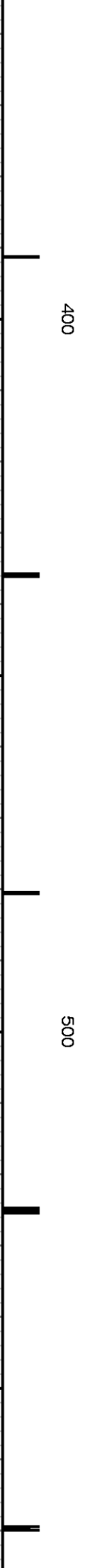
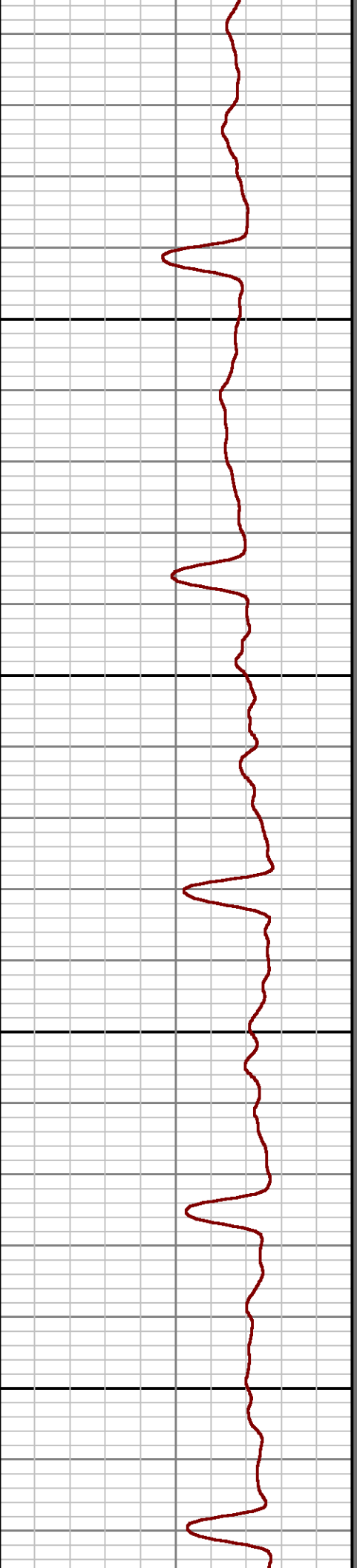
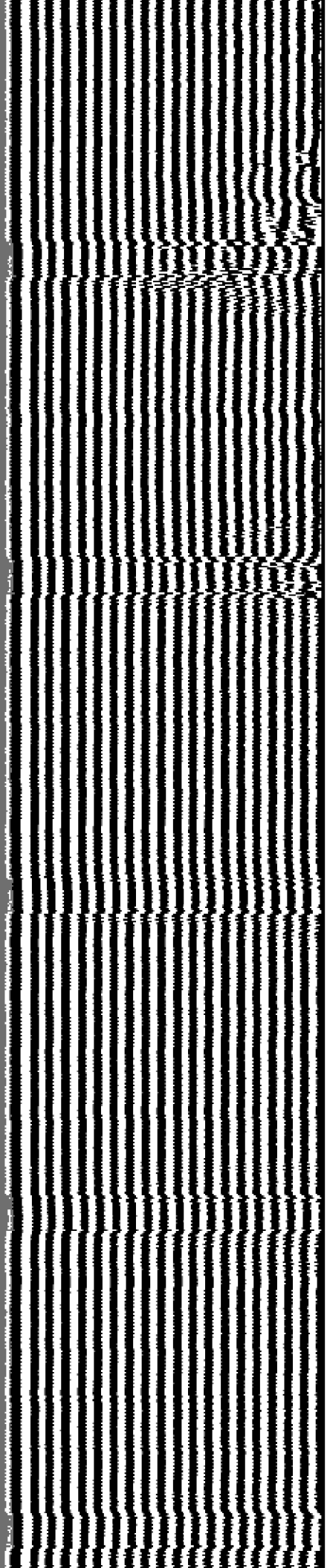
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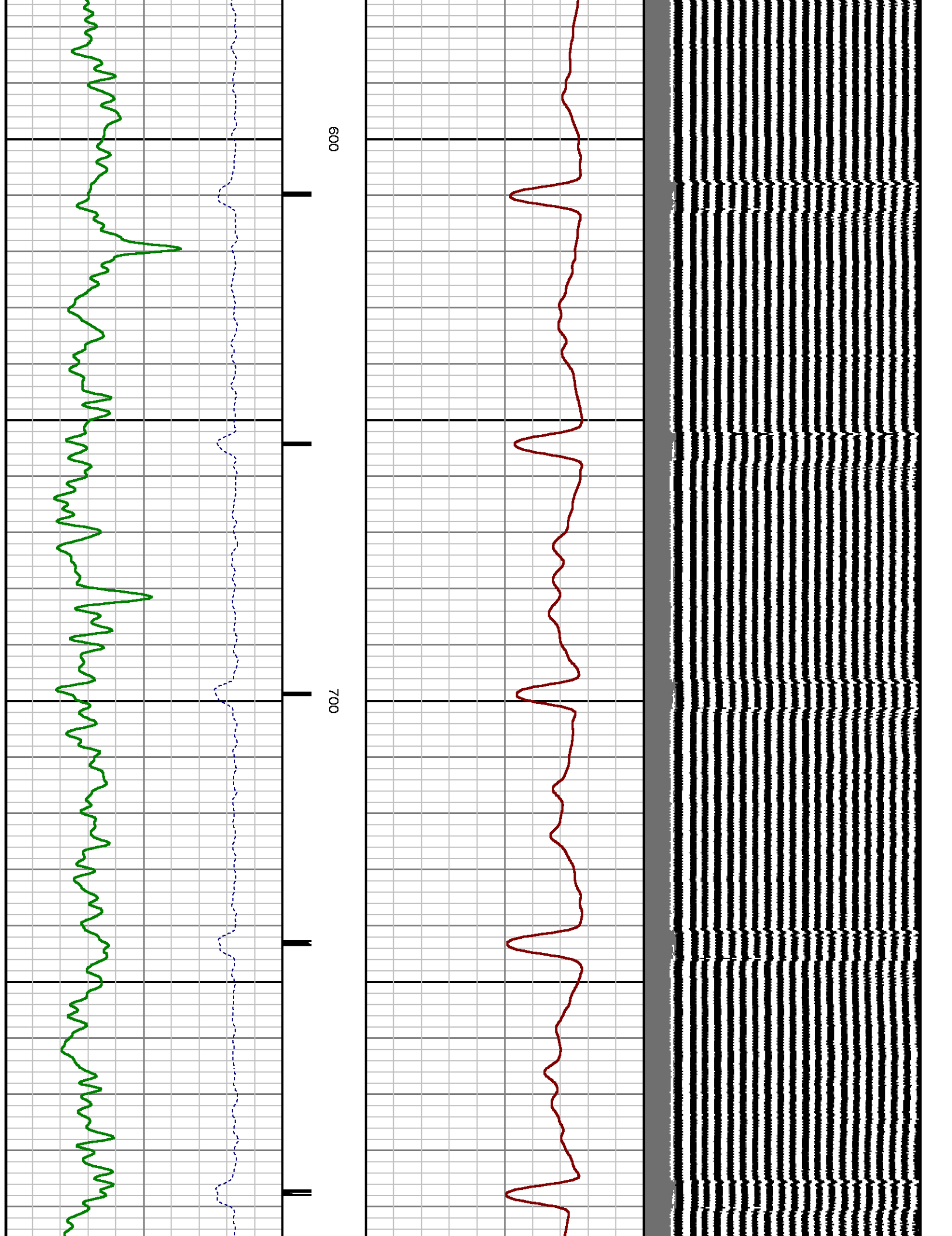
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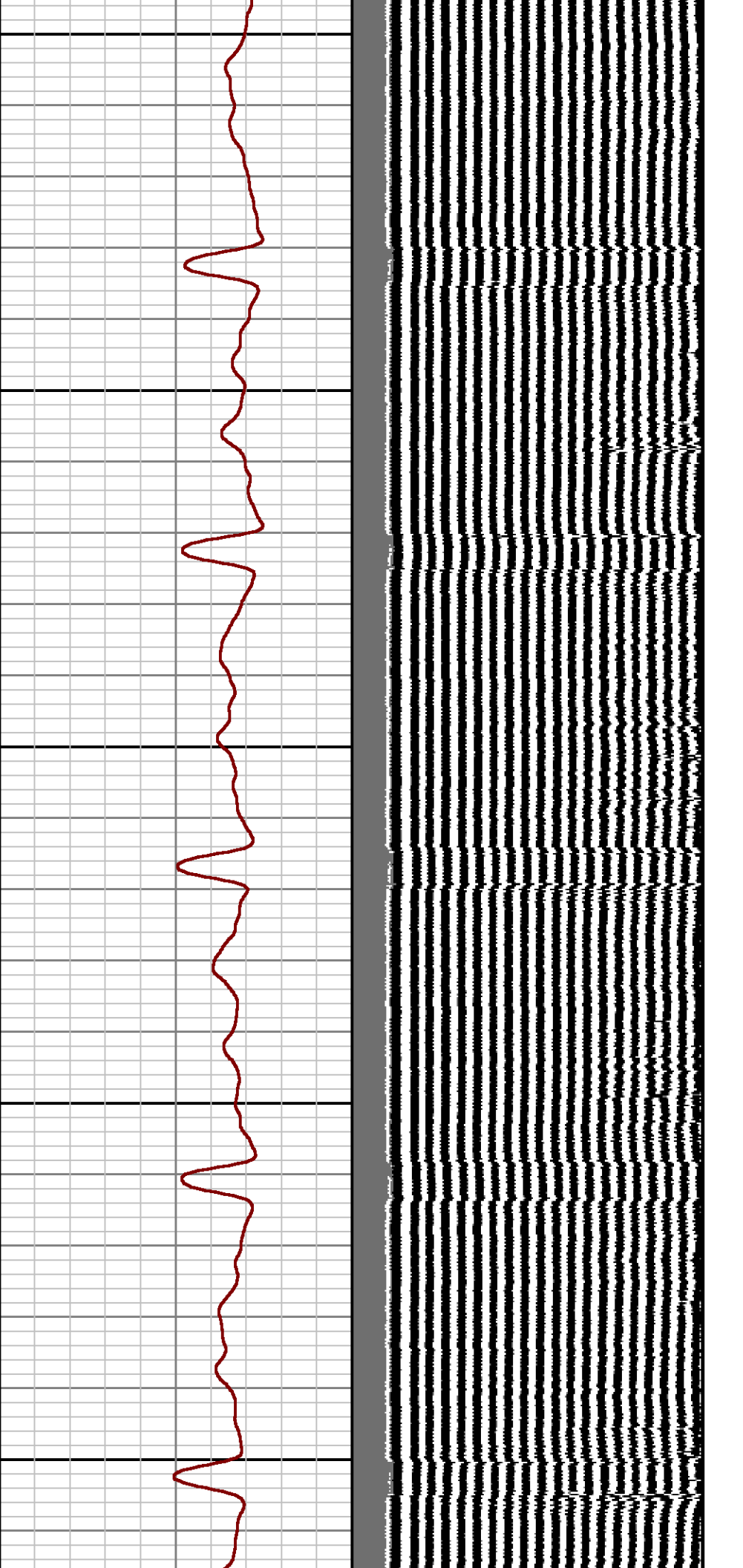
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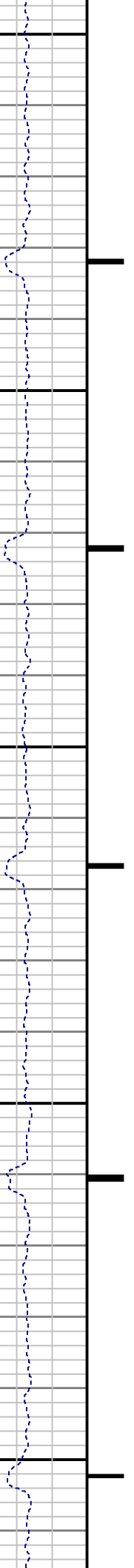


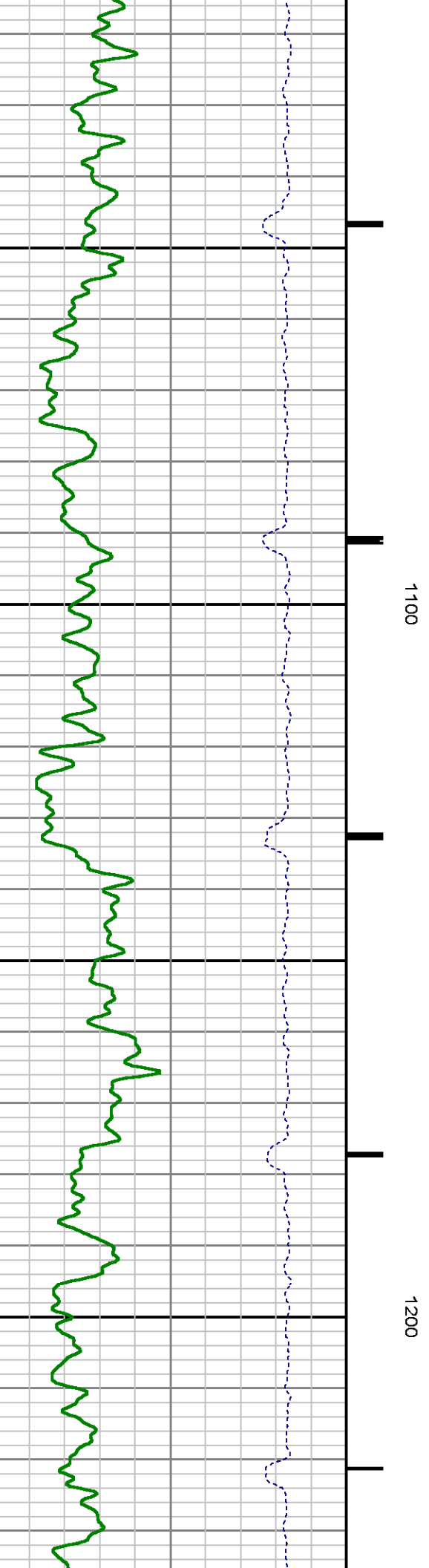
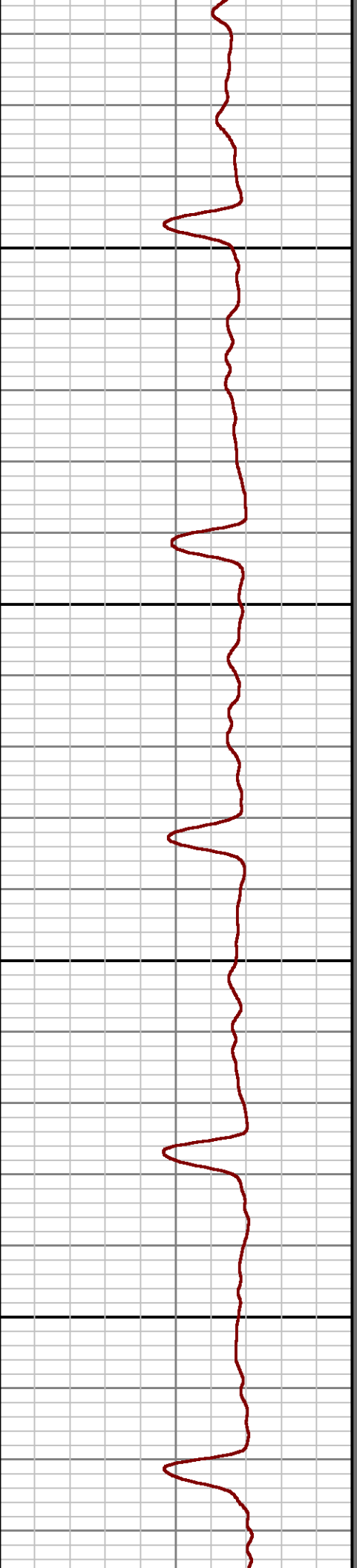
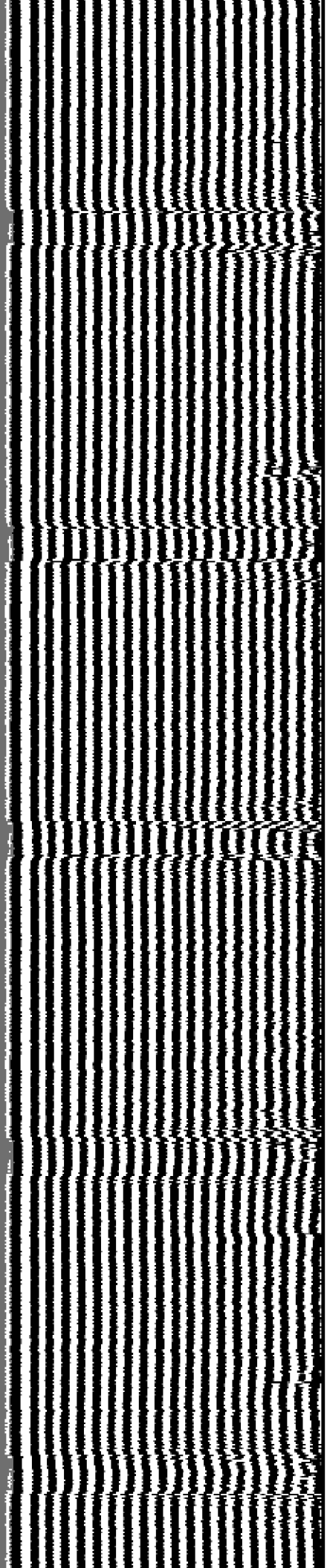


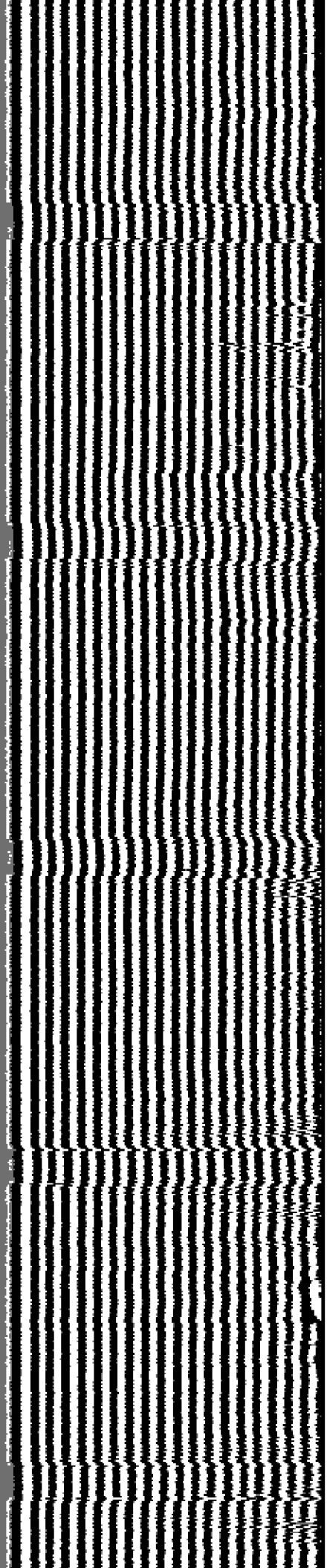
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900

1000

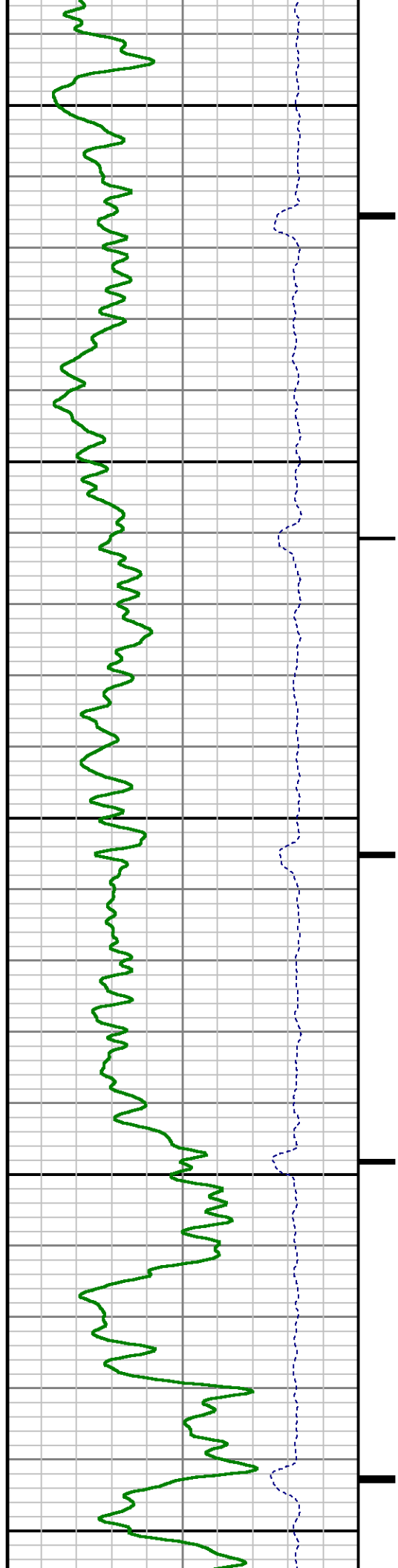


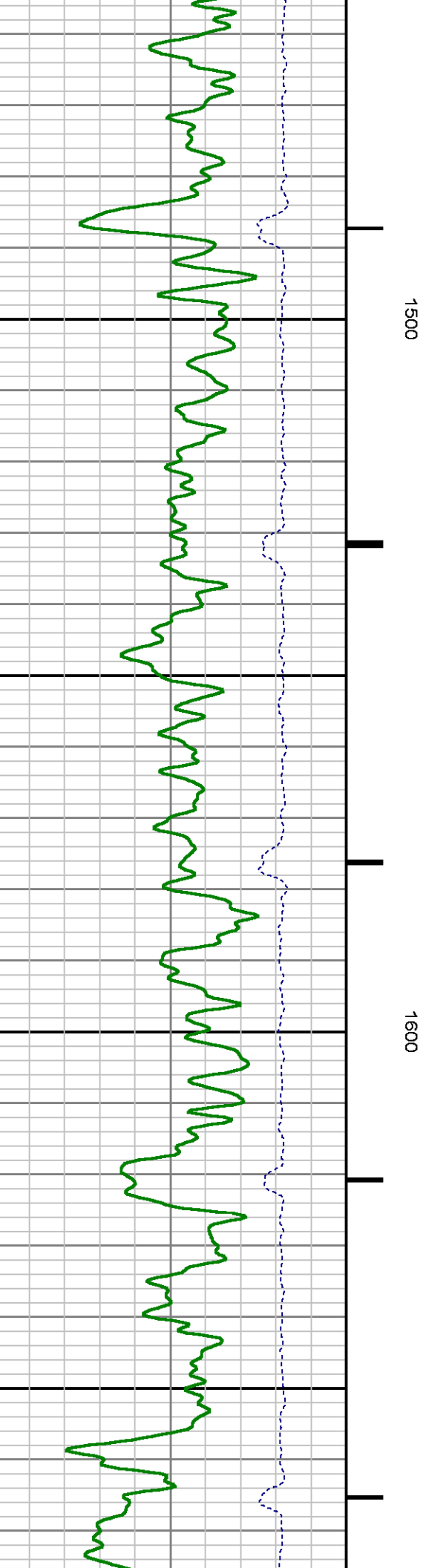
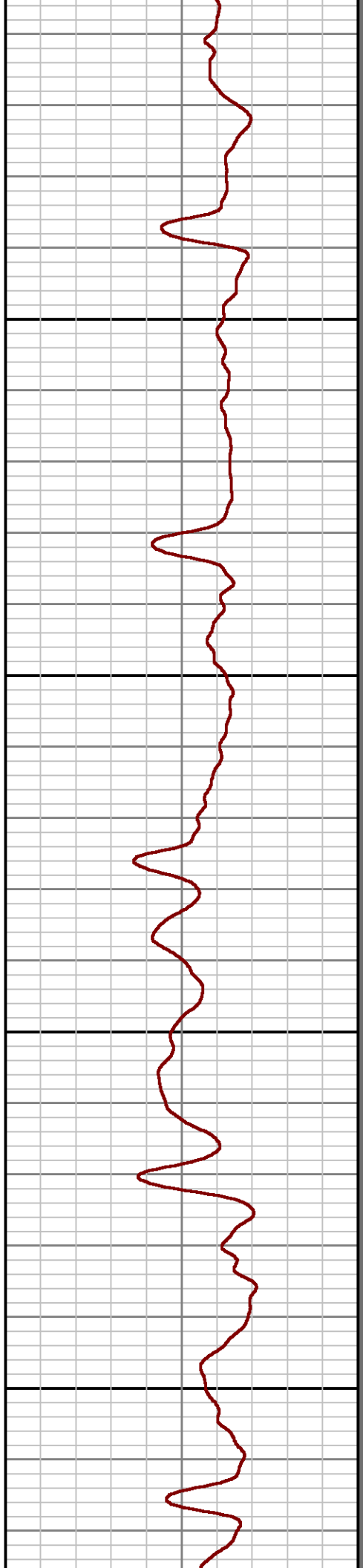
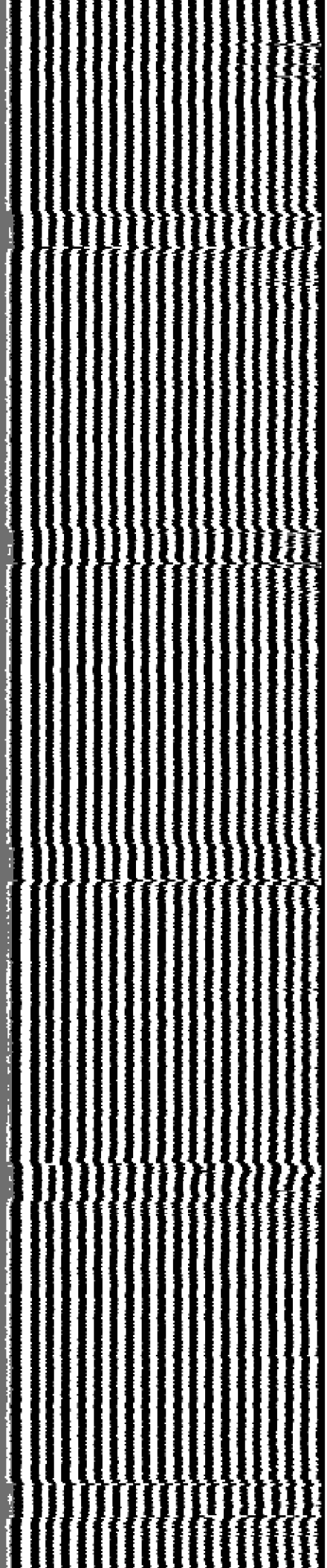


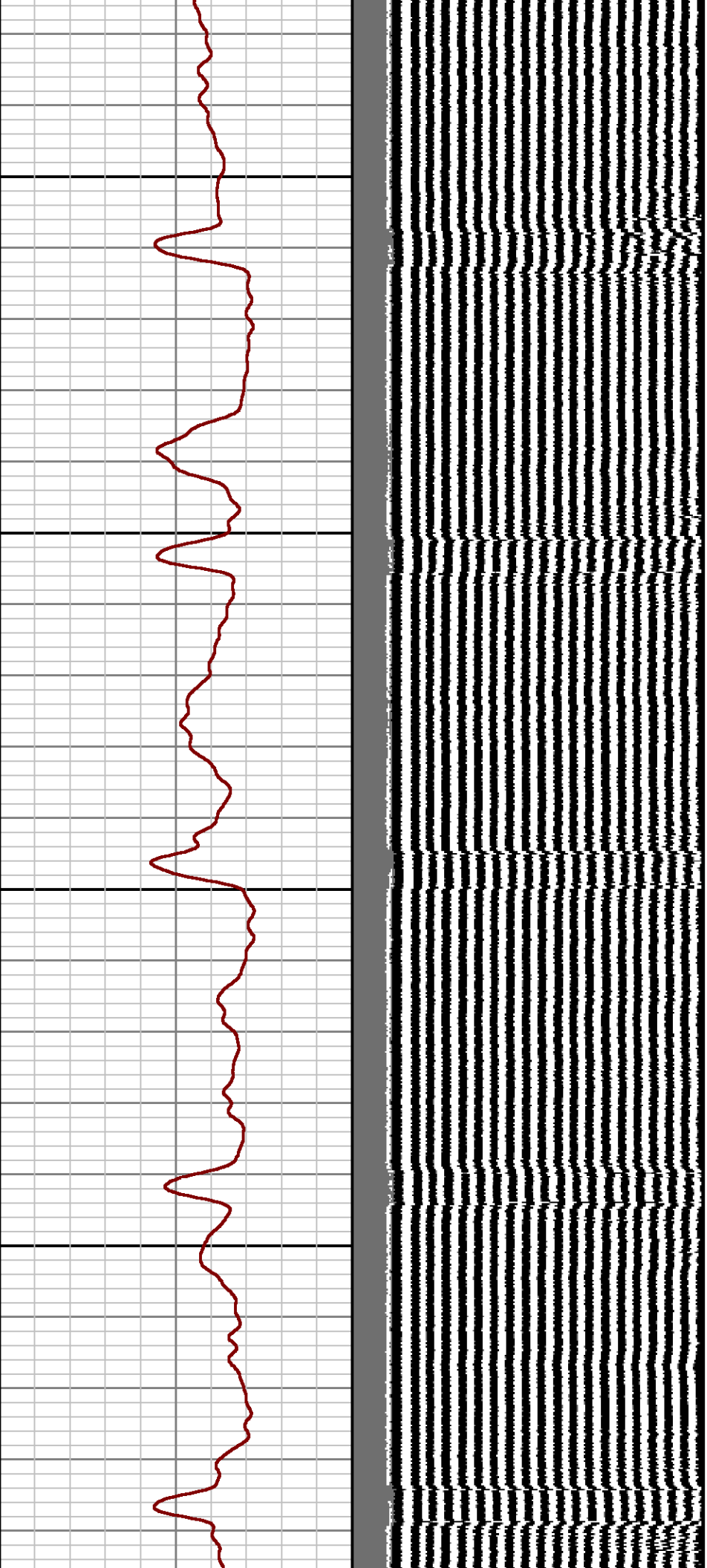


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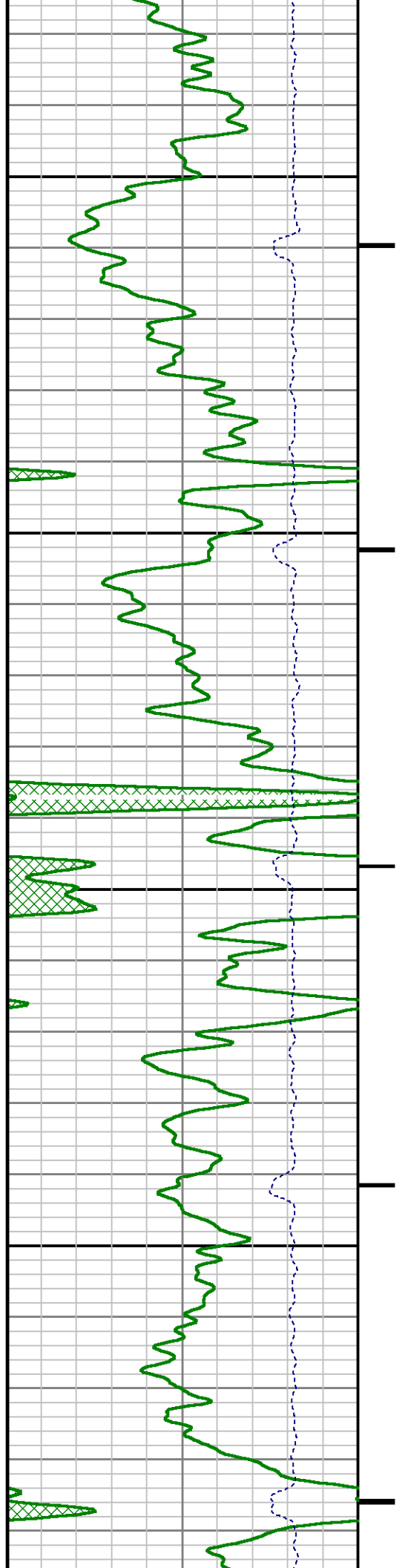


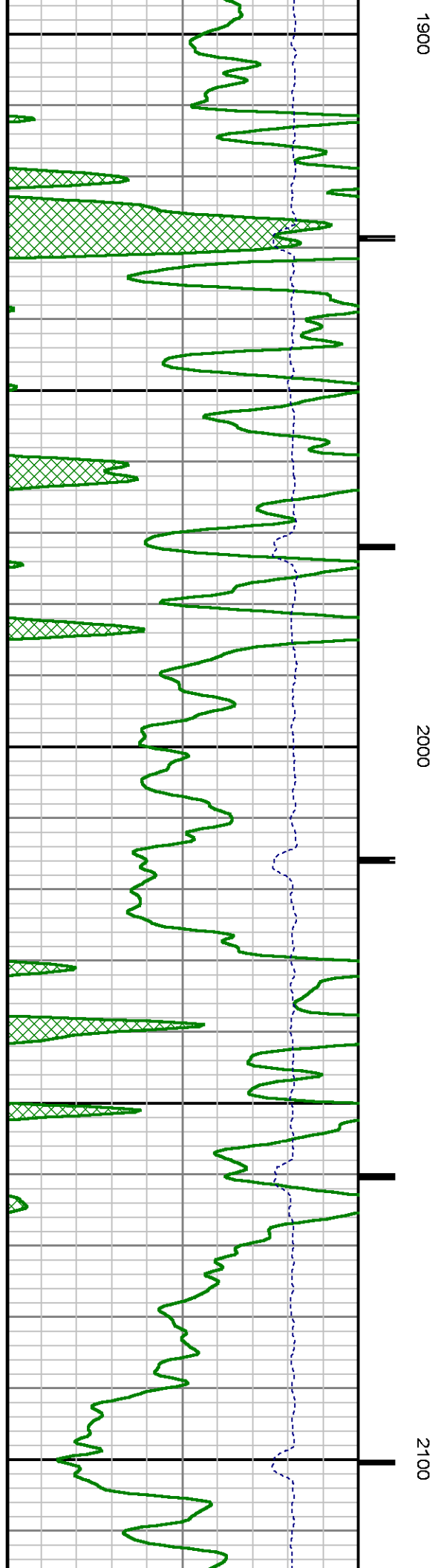
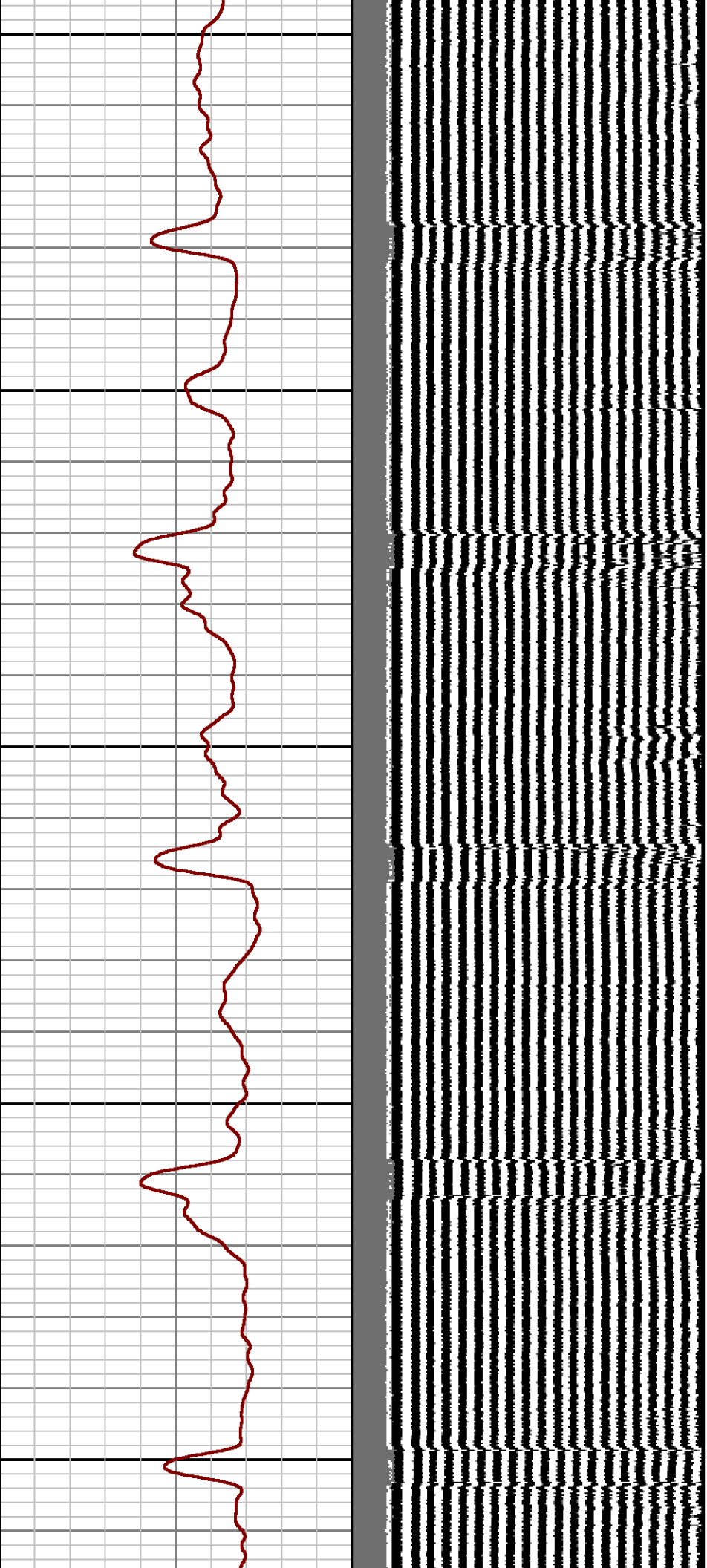


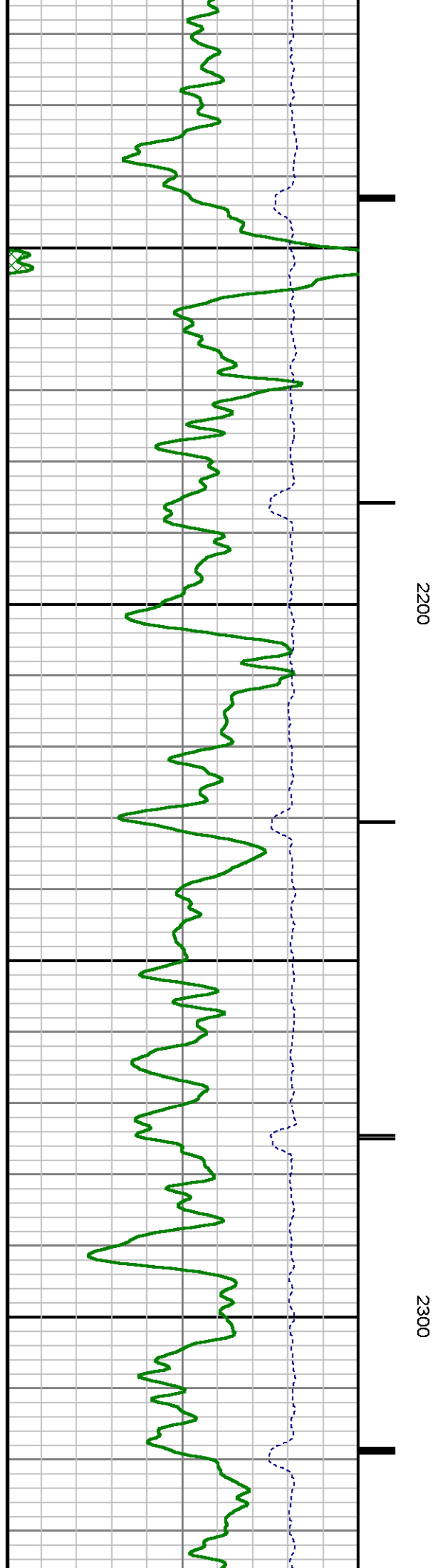
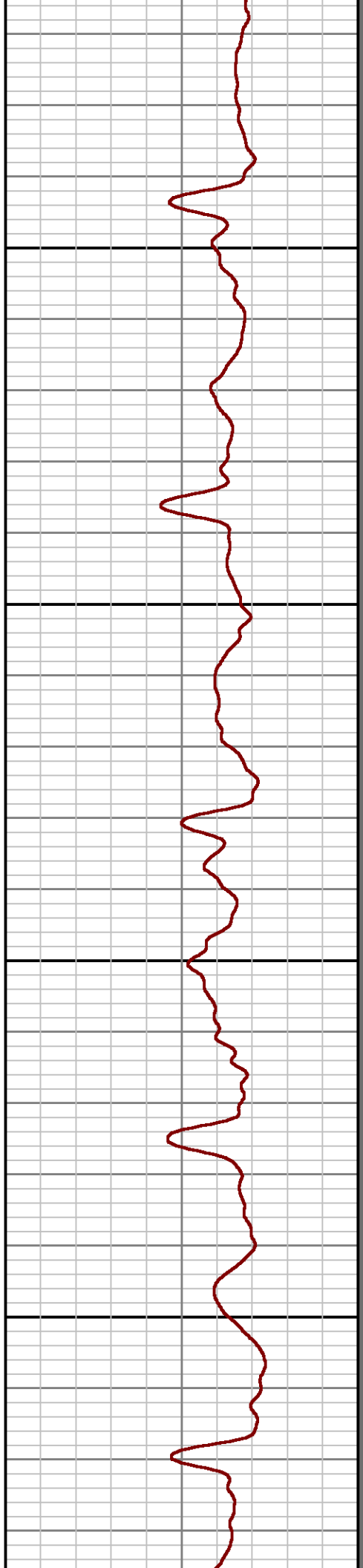
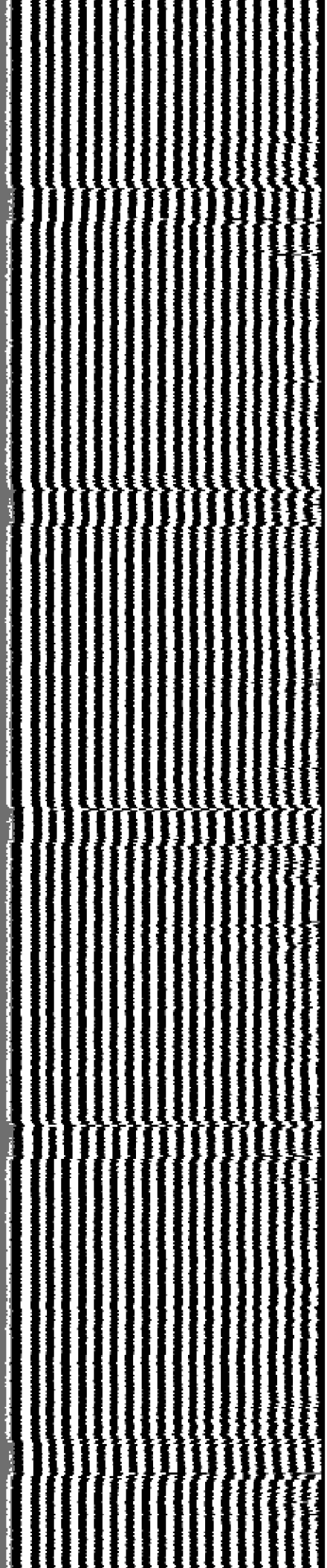


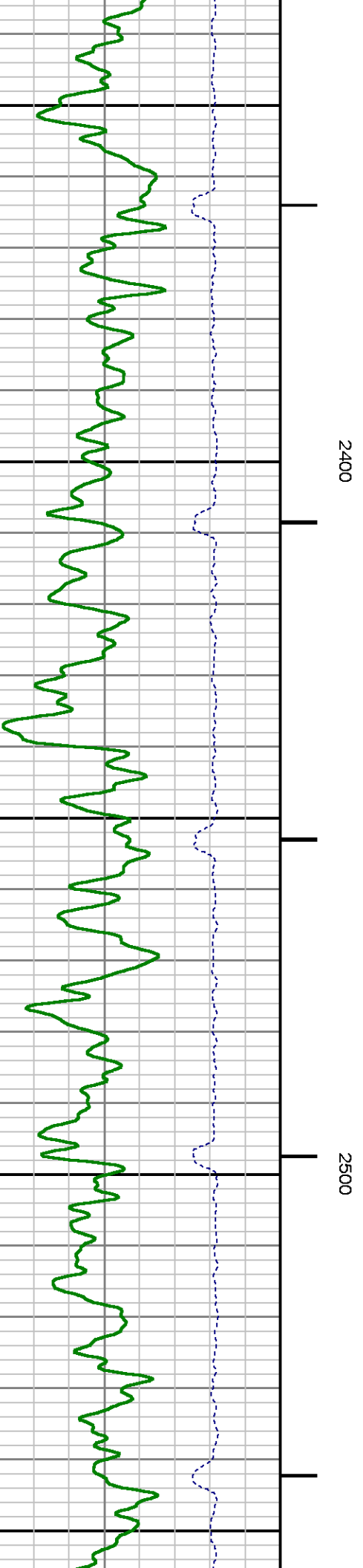
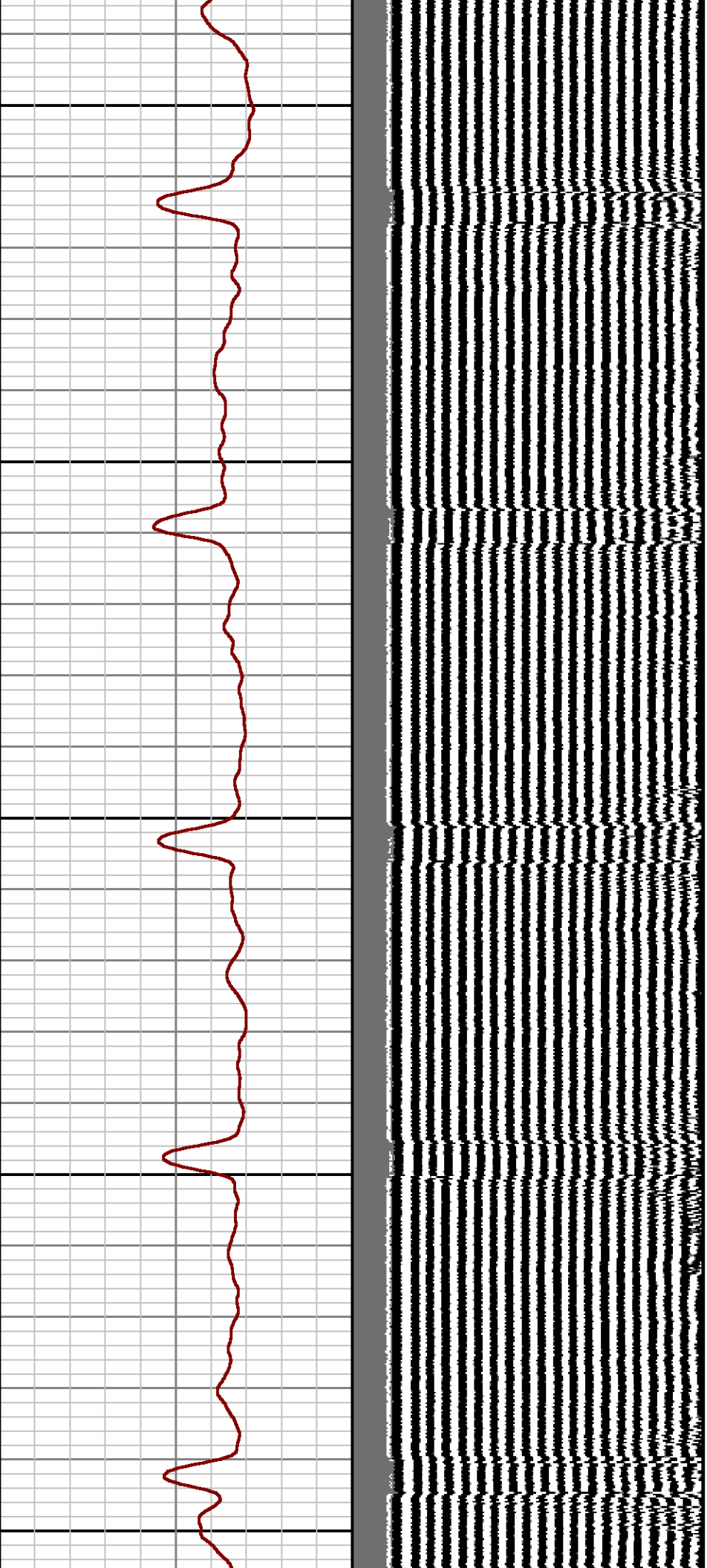
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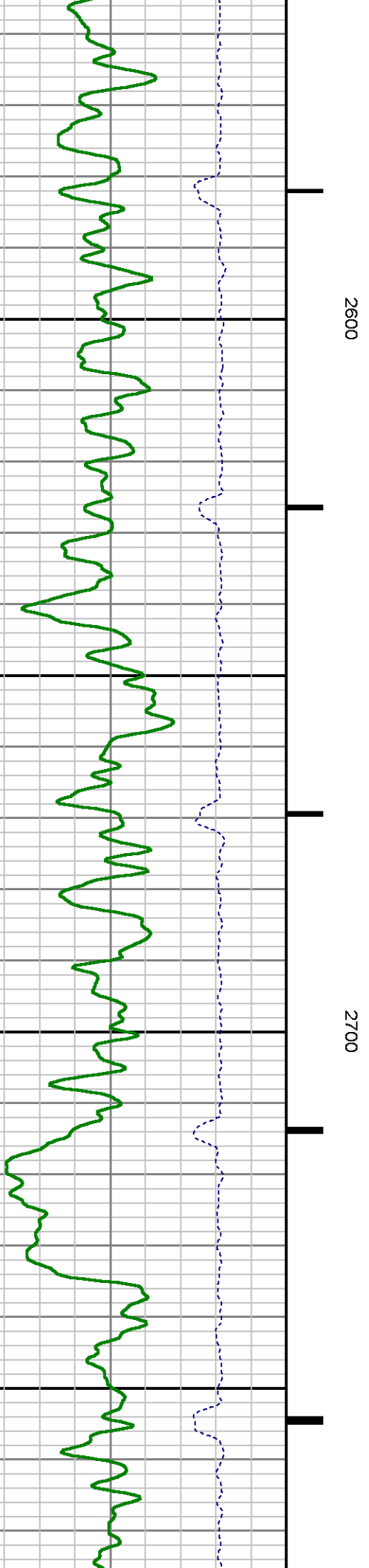
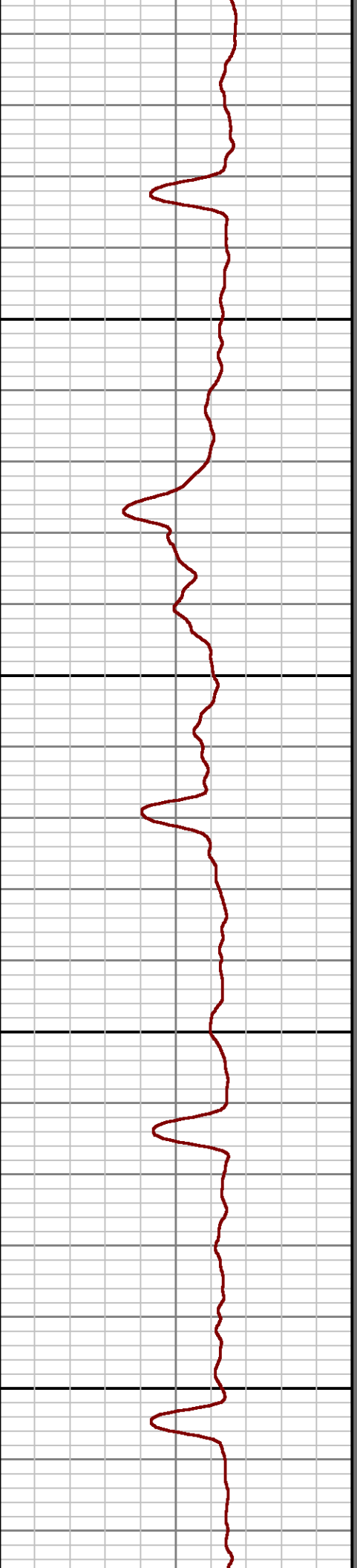
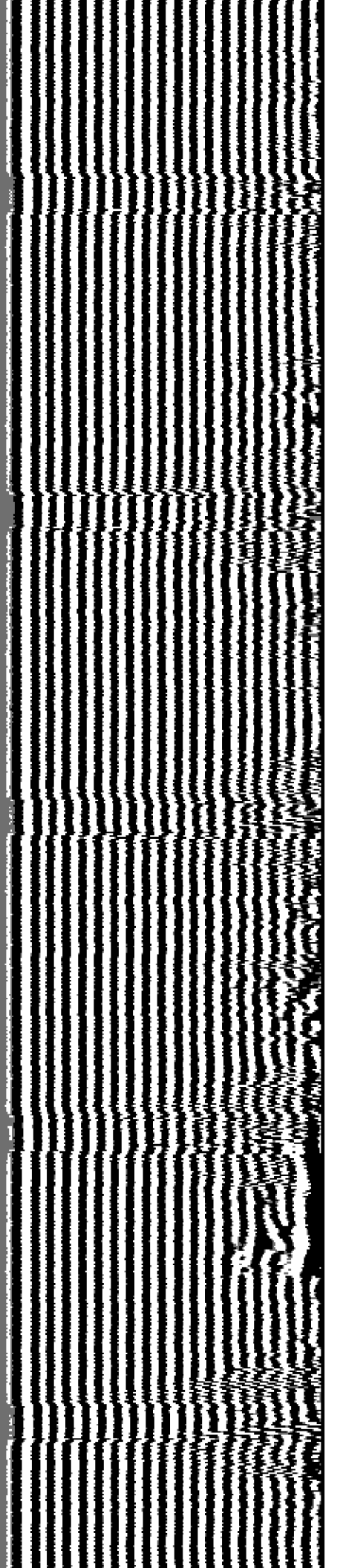
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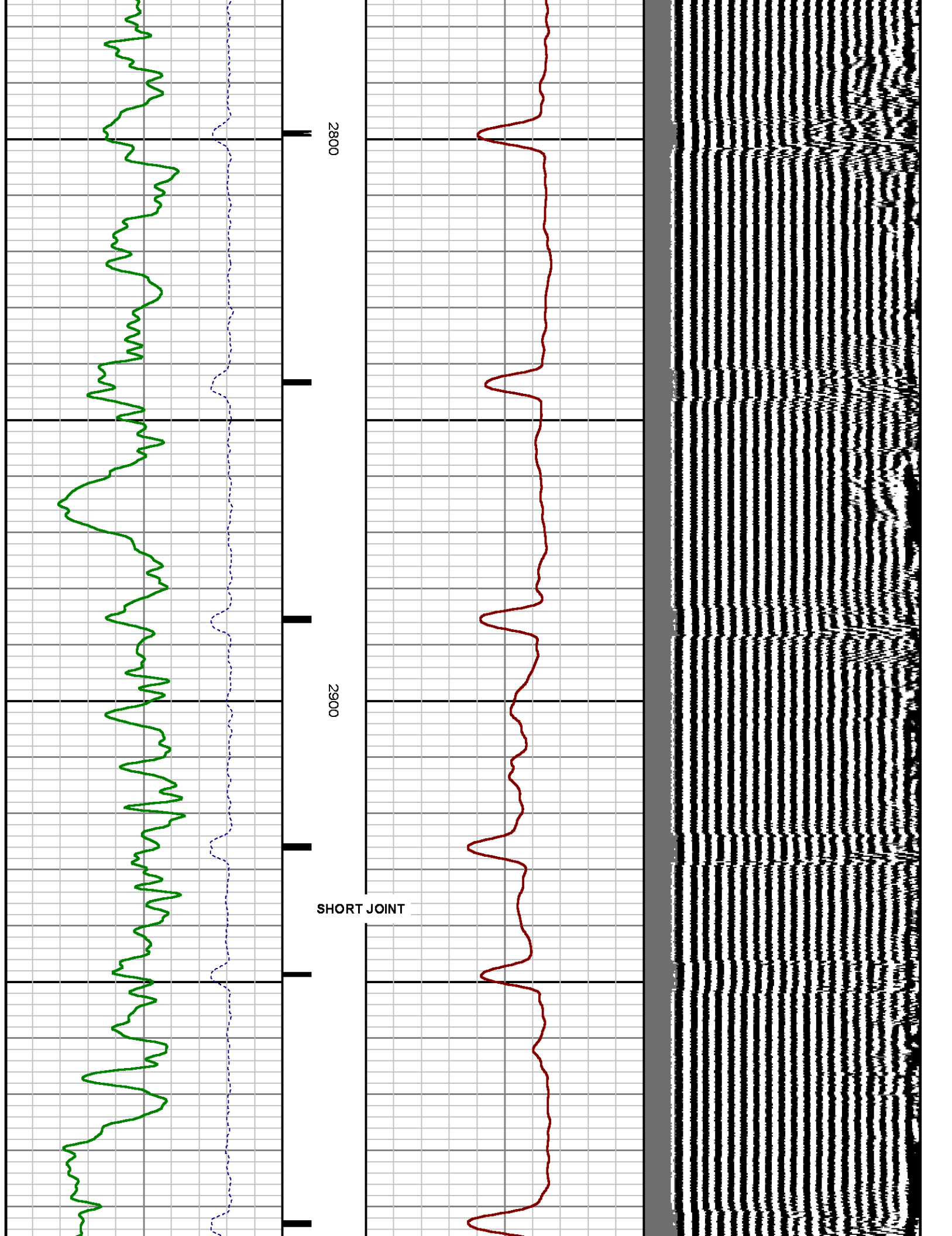


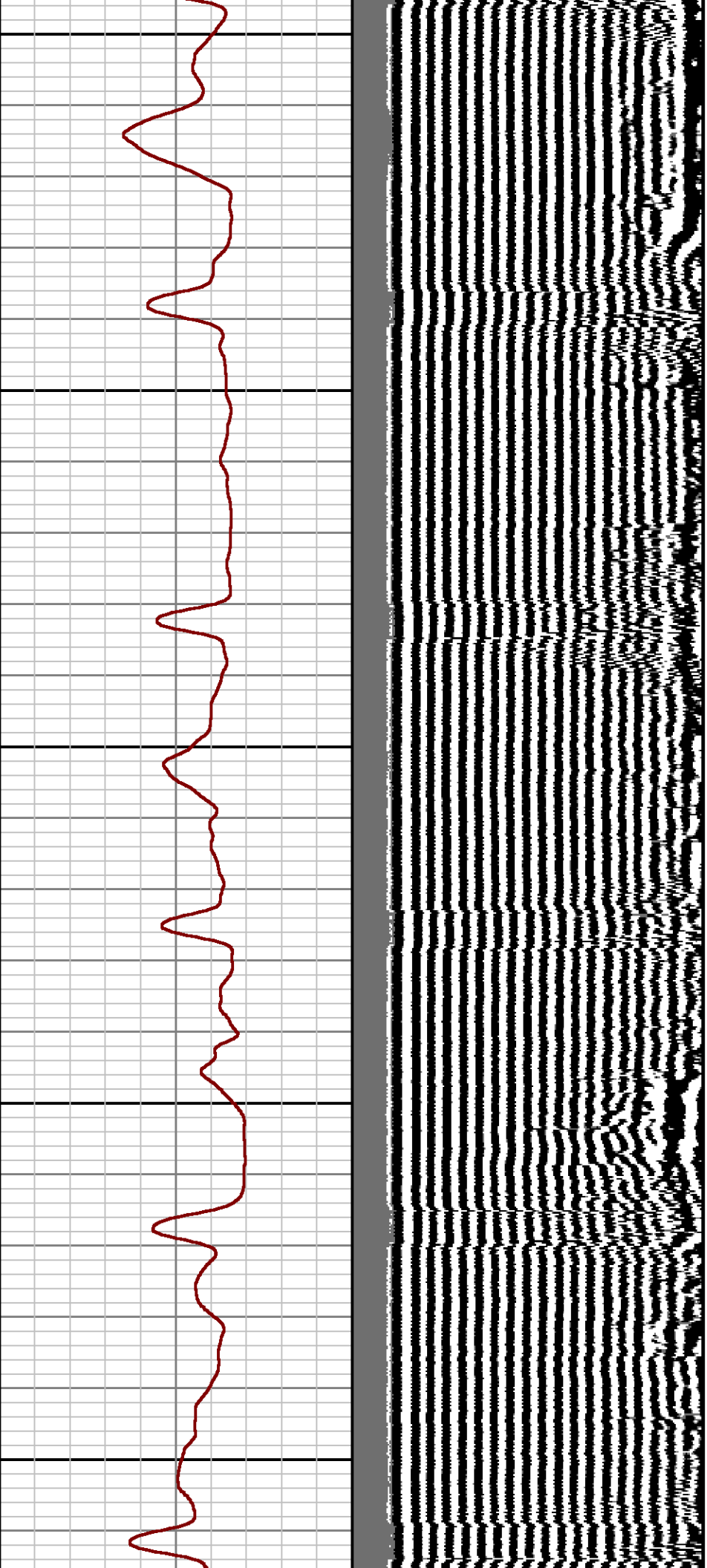








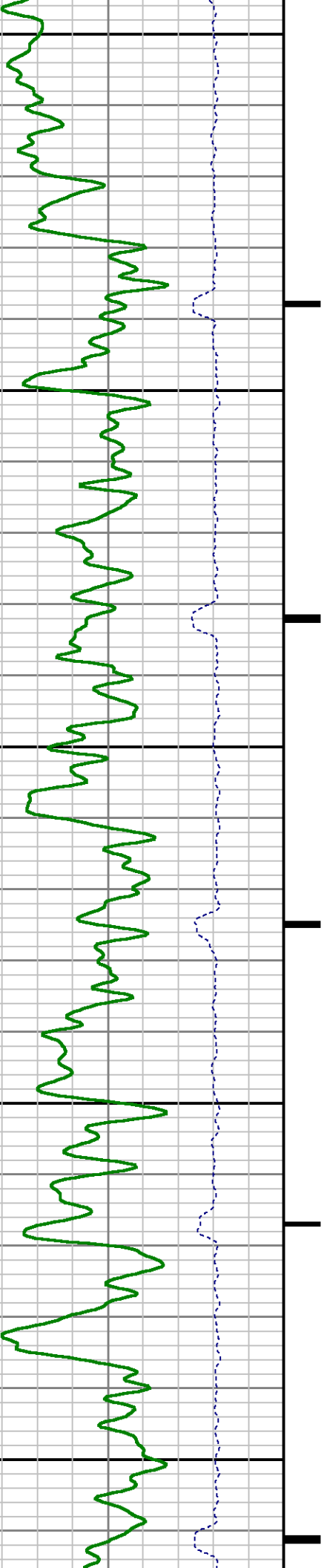


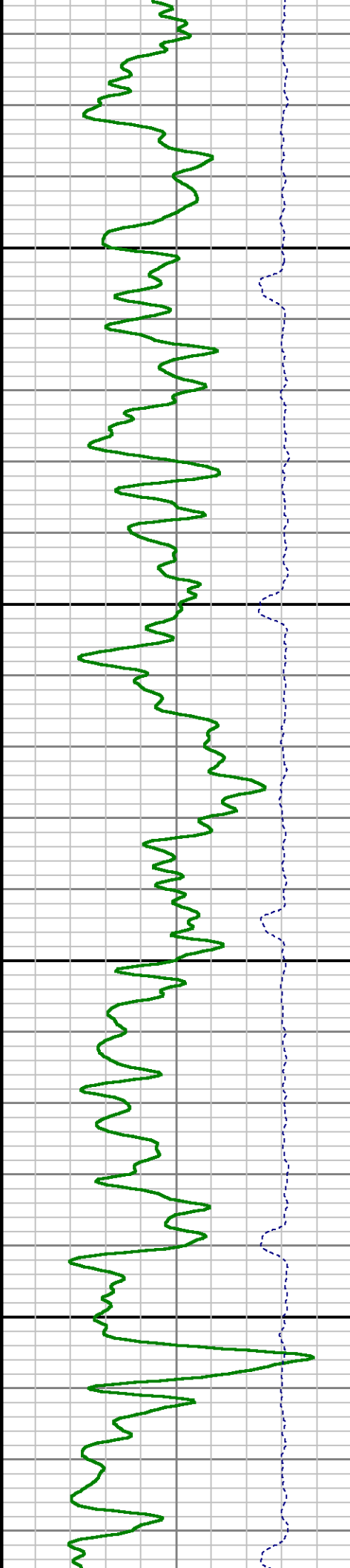
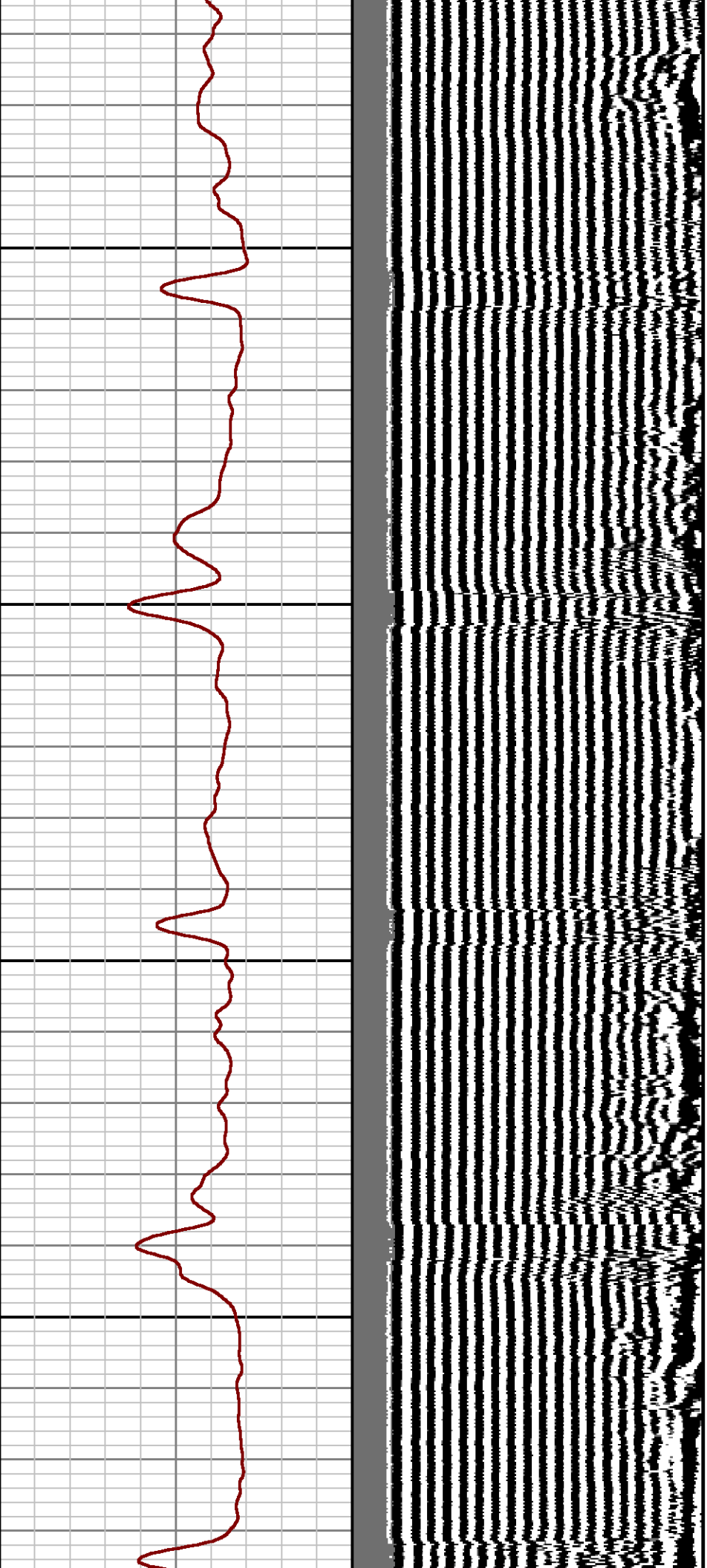


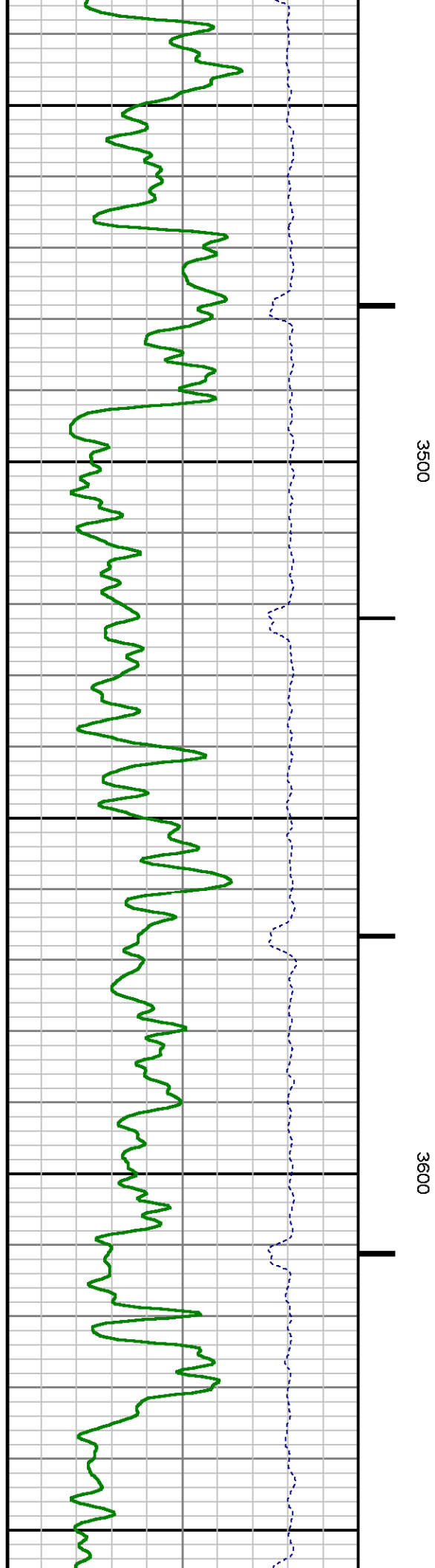
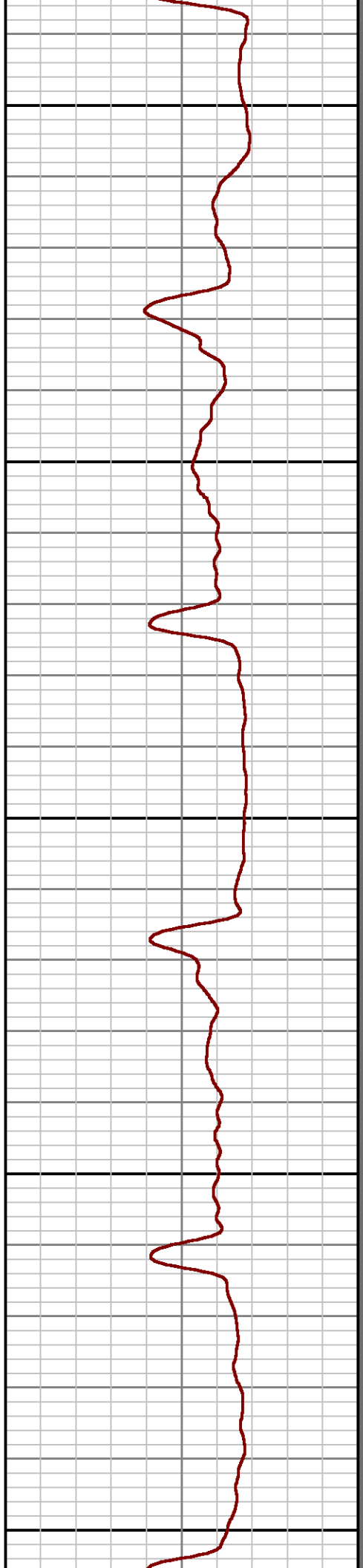
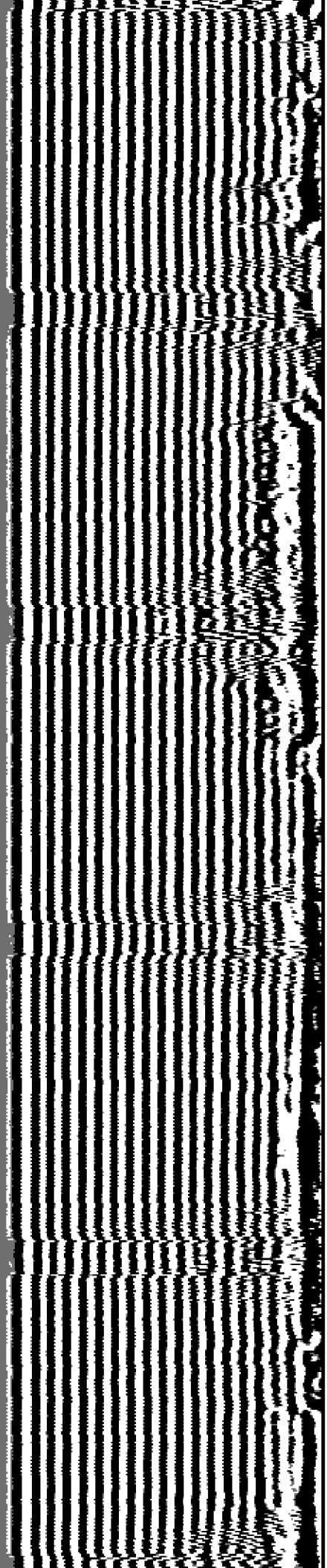
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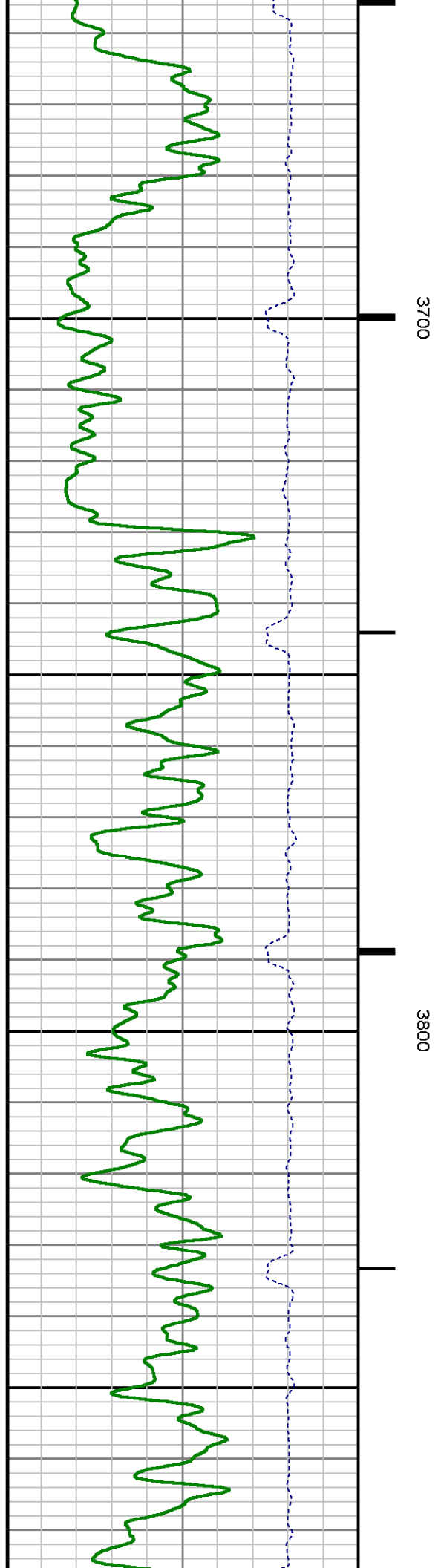
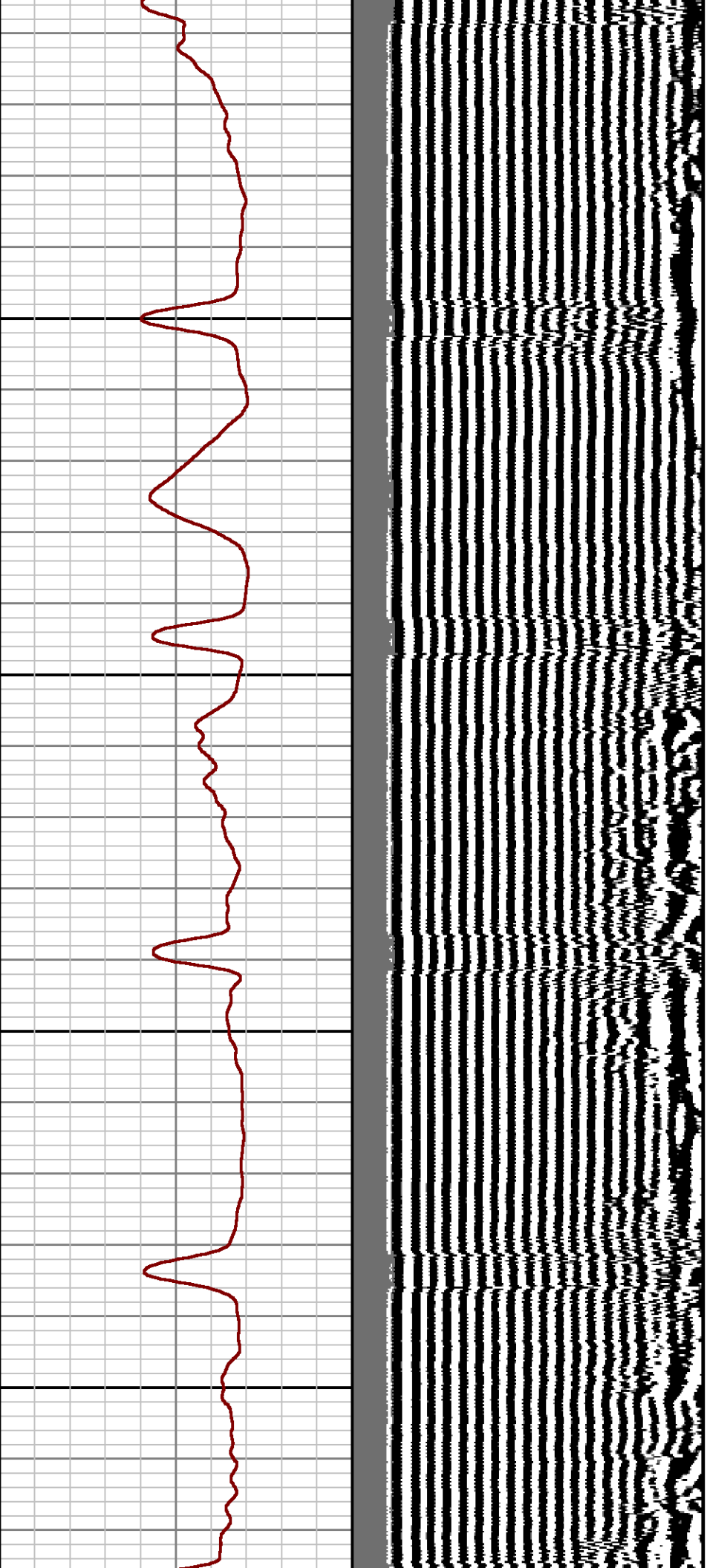
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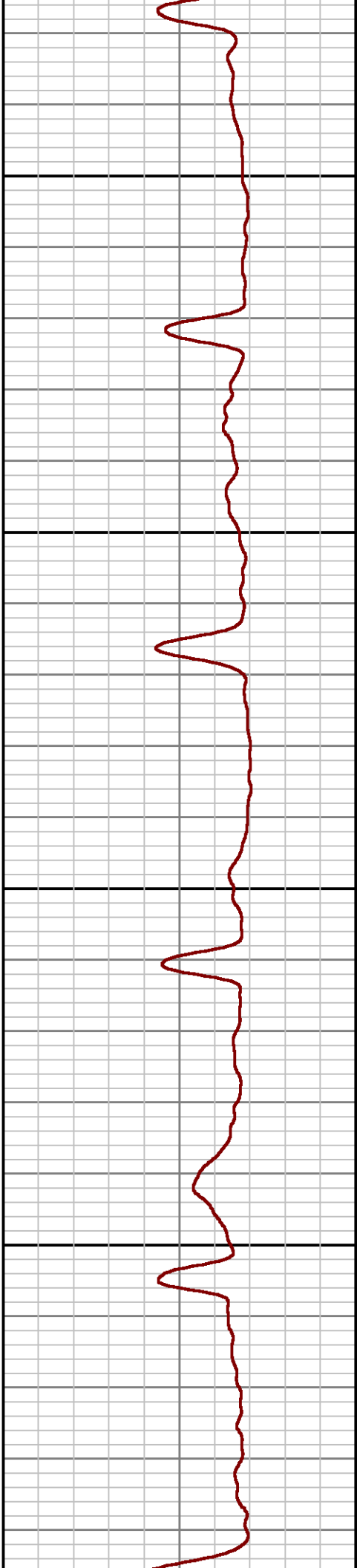
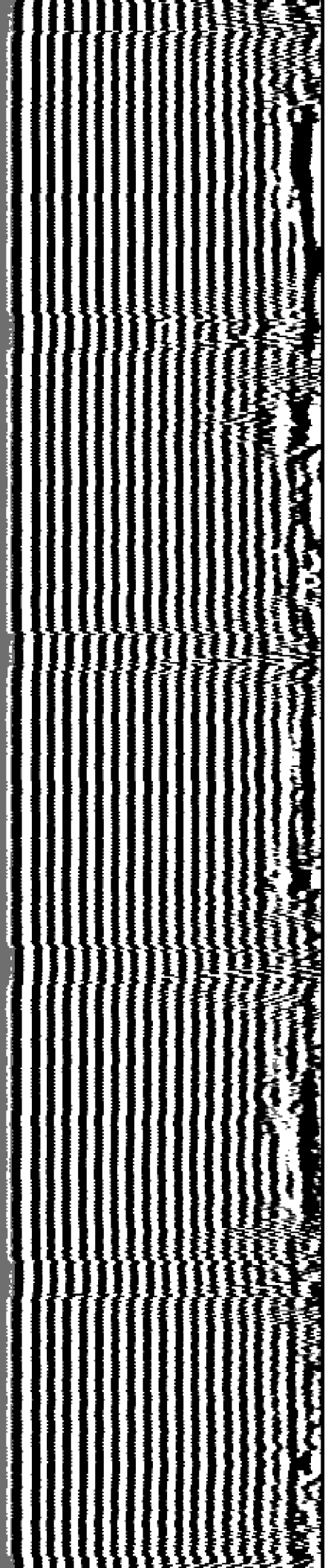
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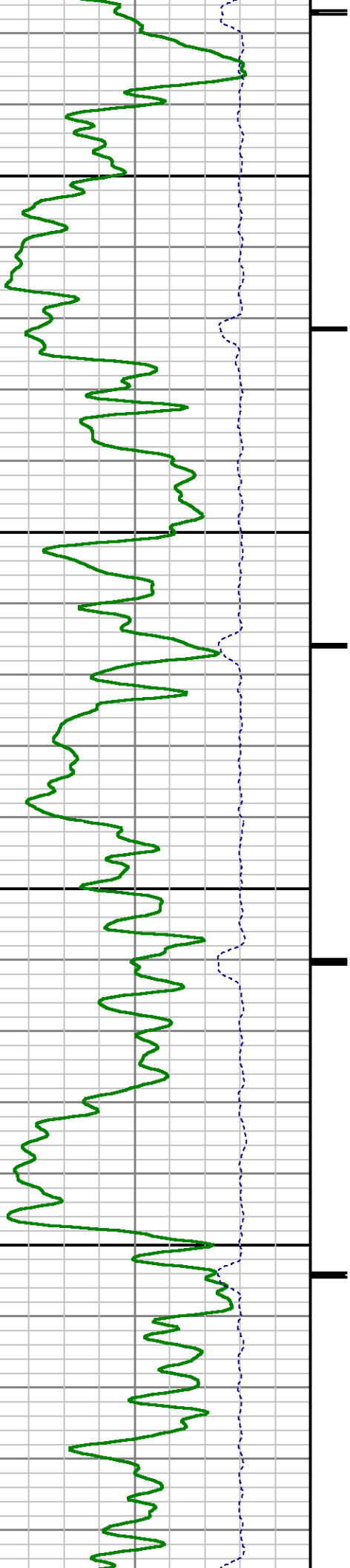


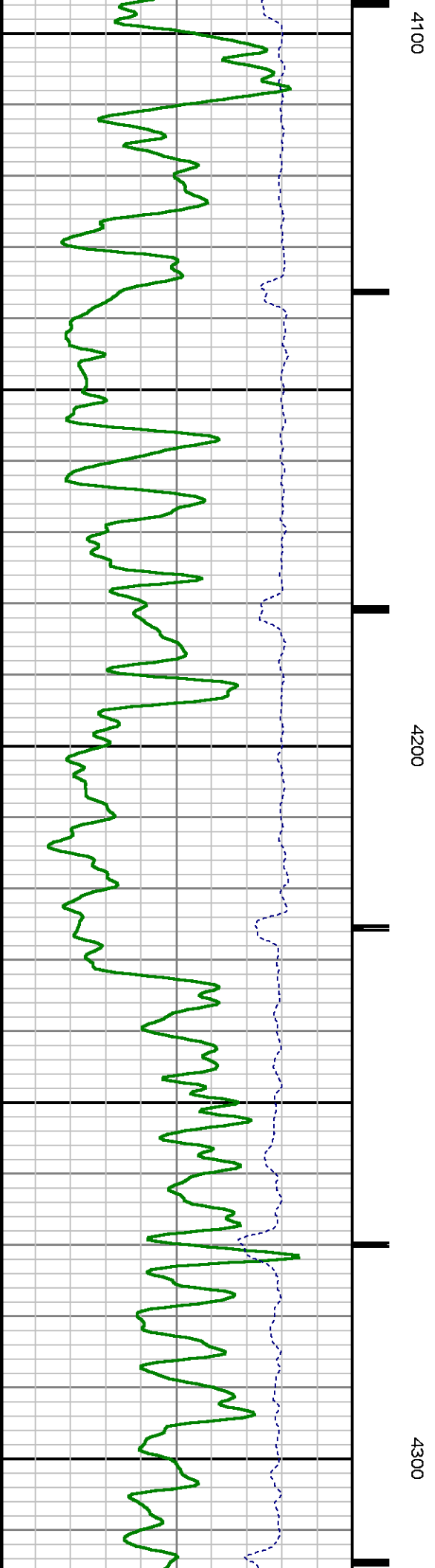
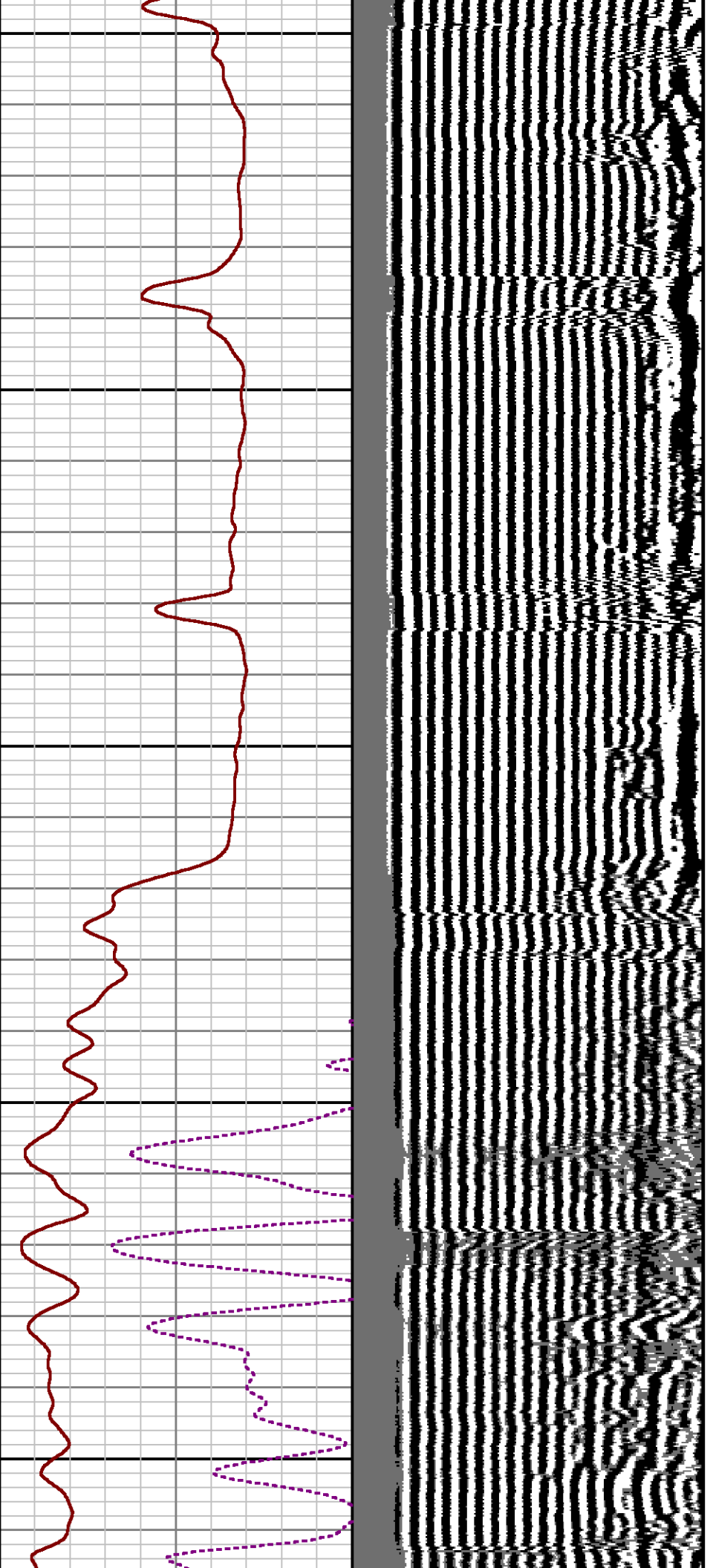


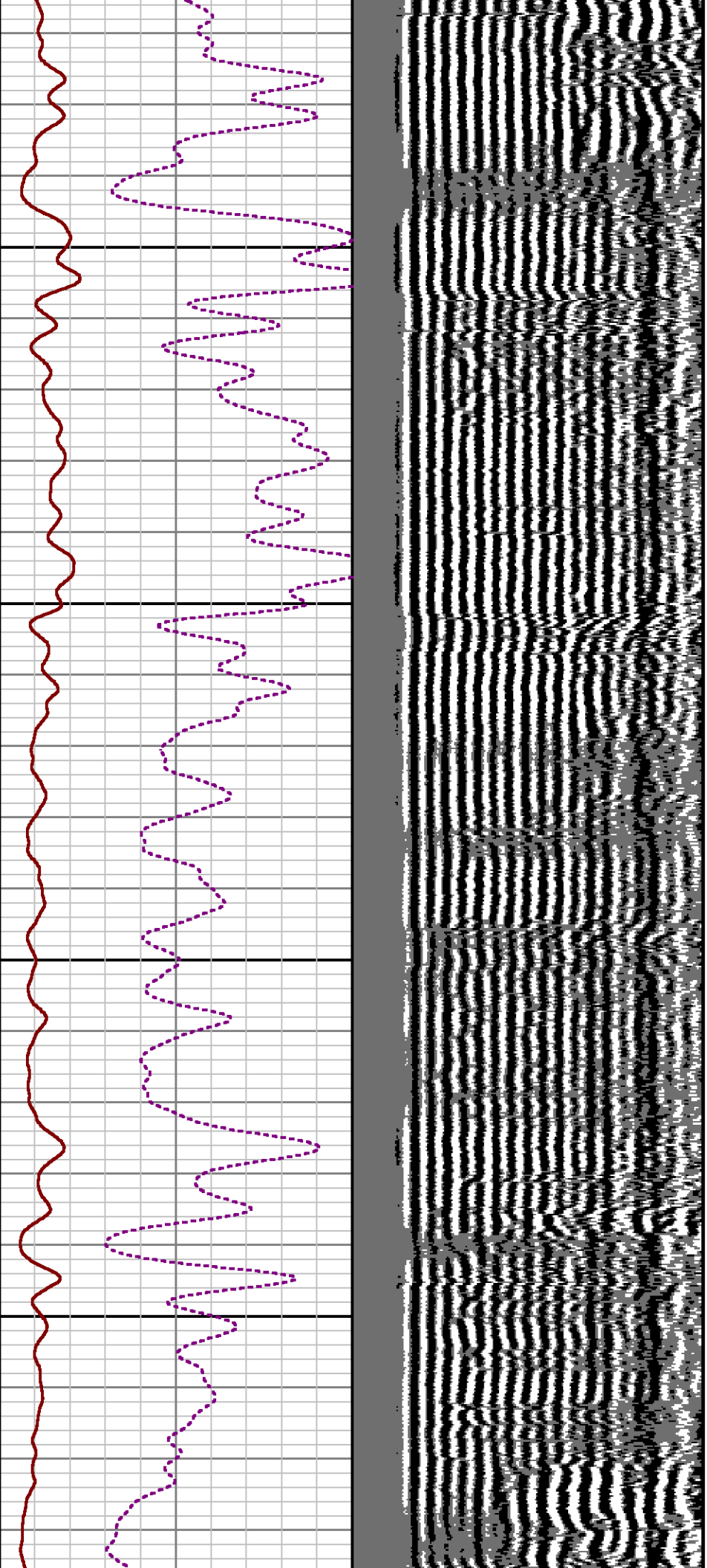


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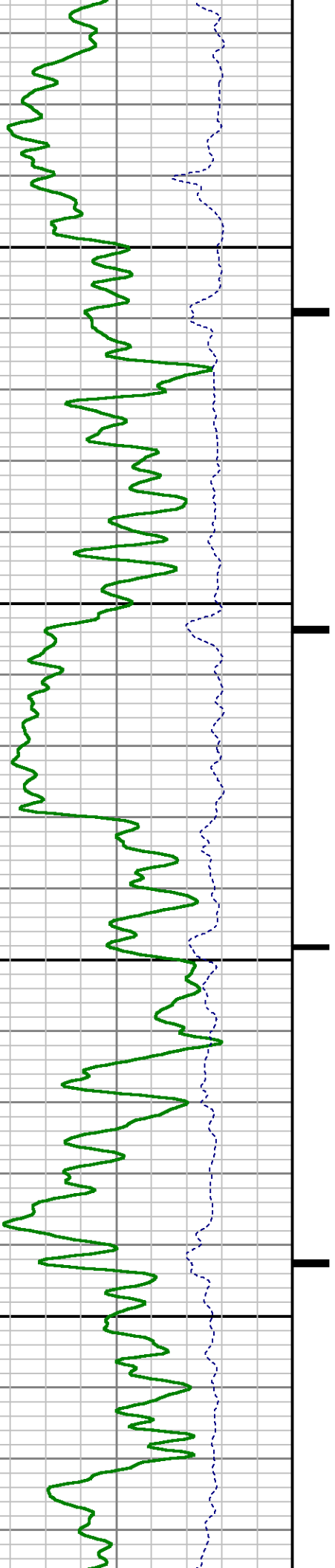


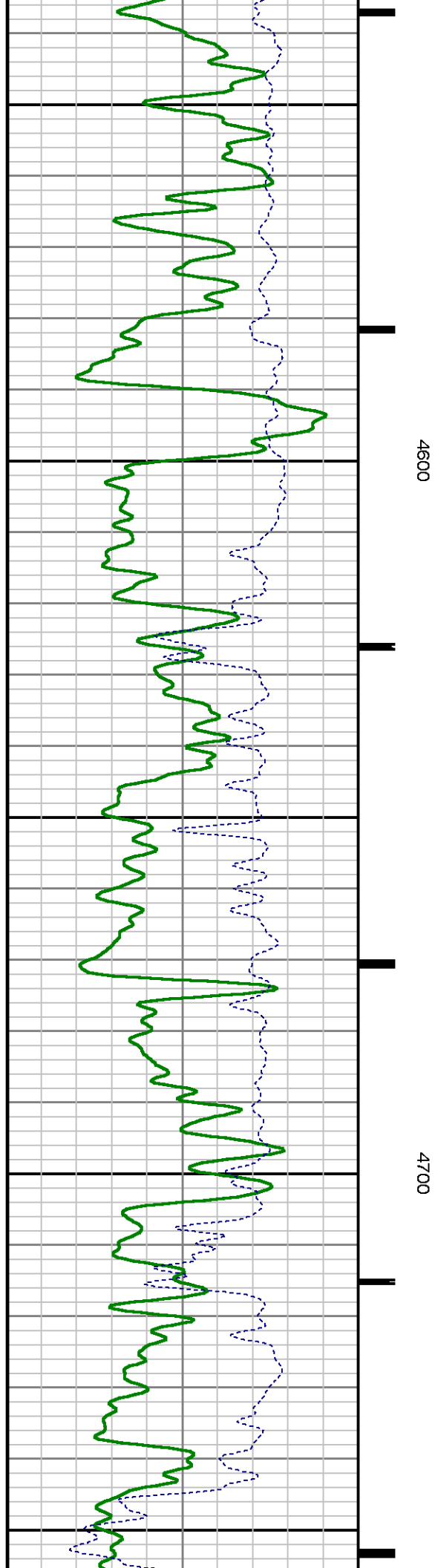
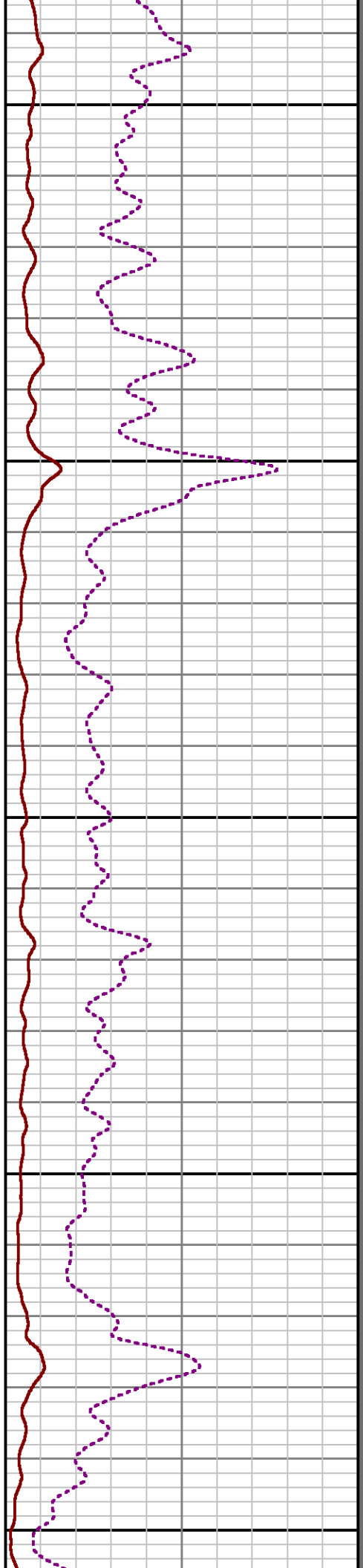
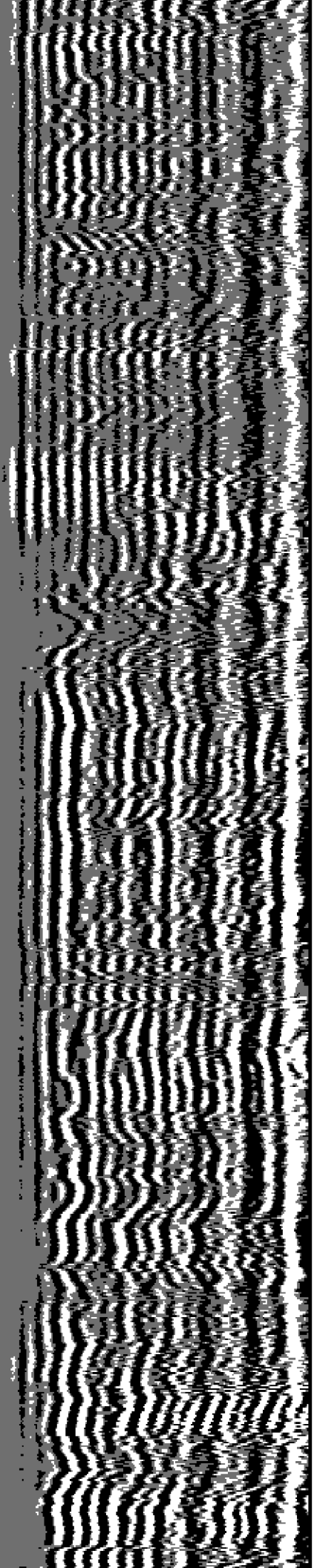


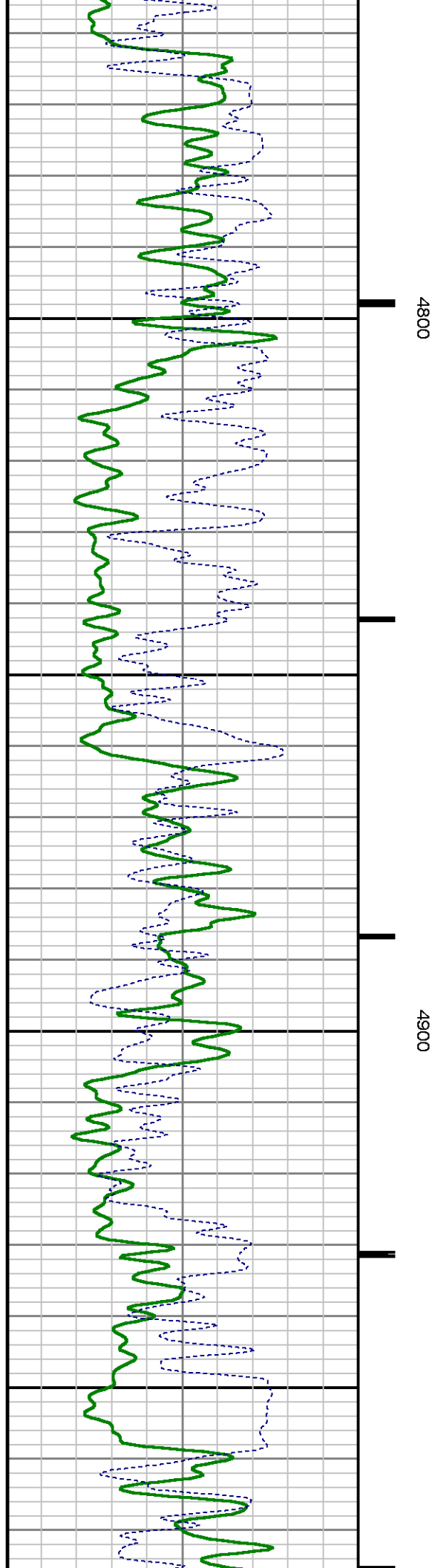
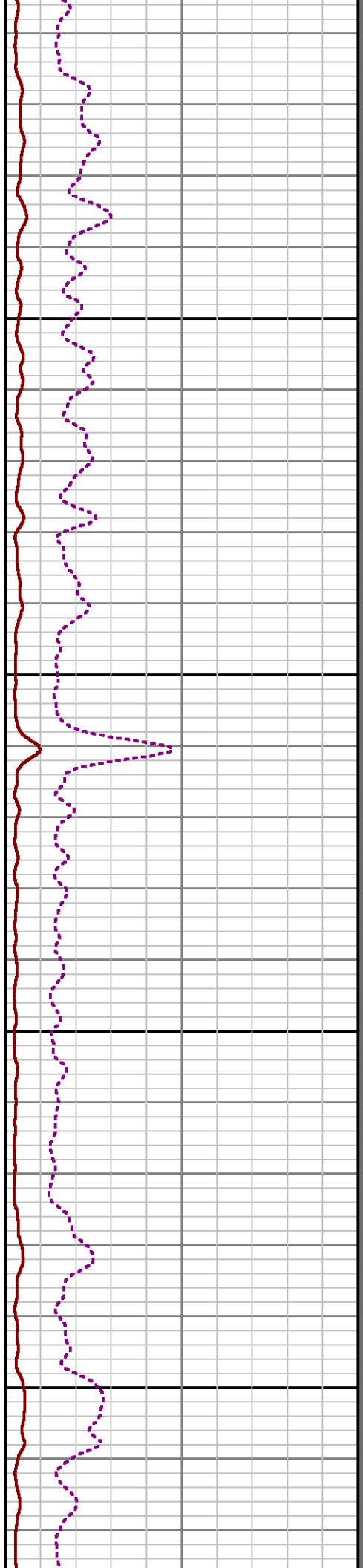
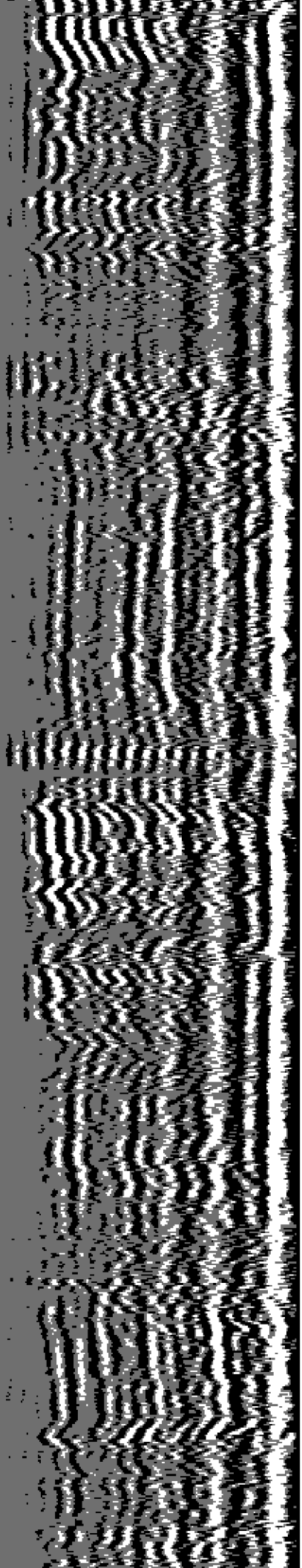


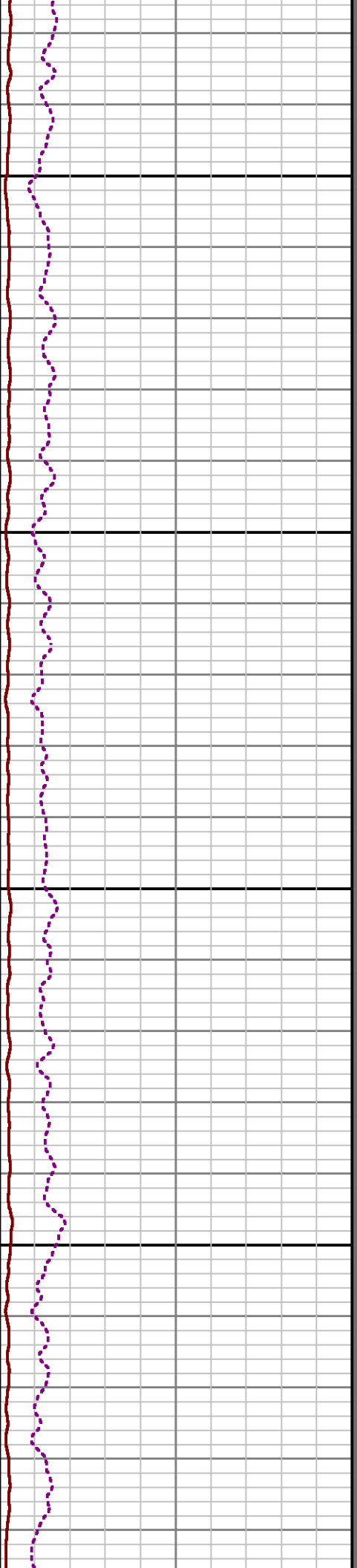
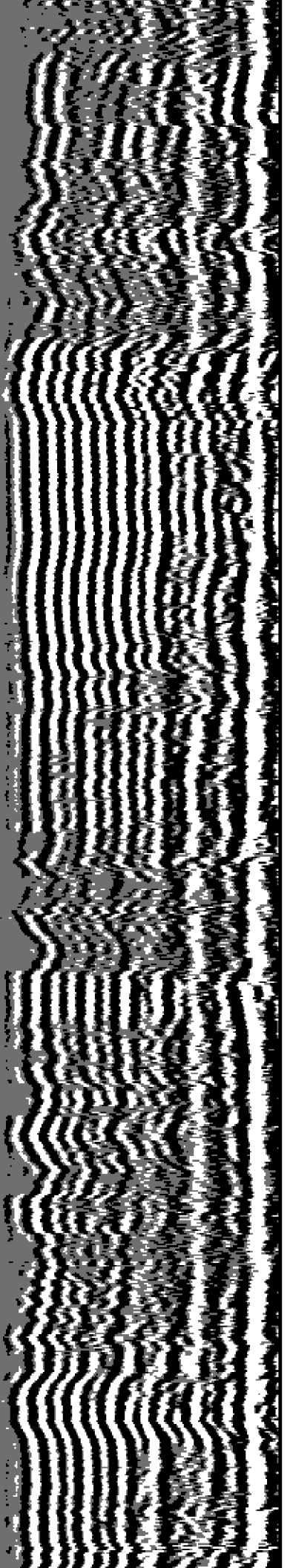
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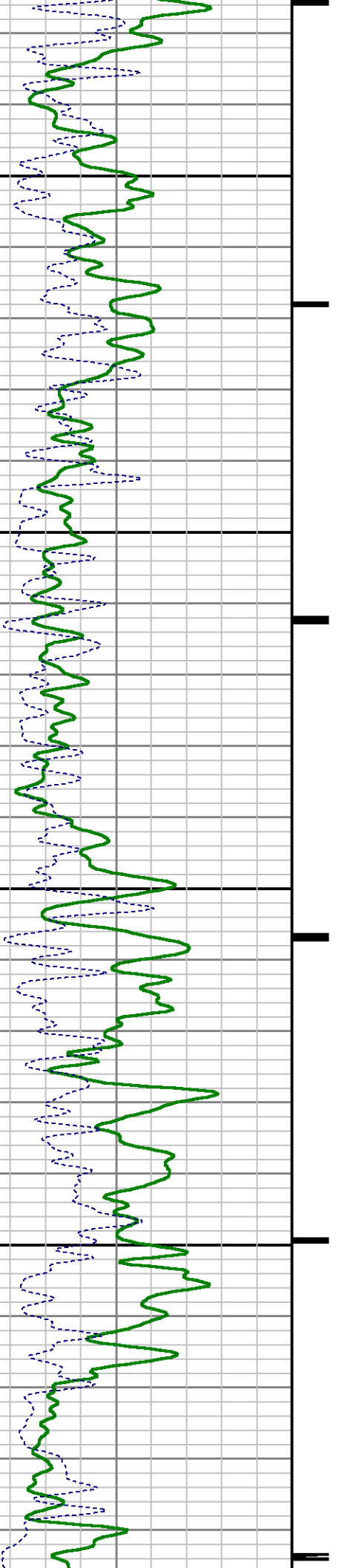


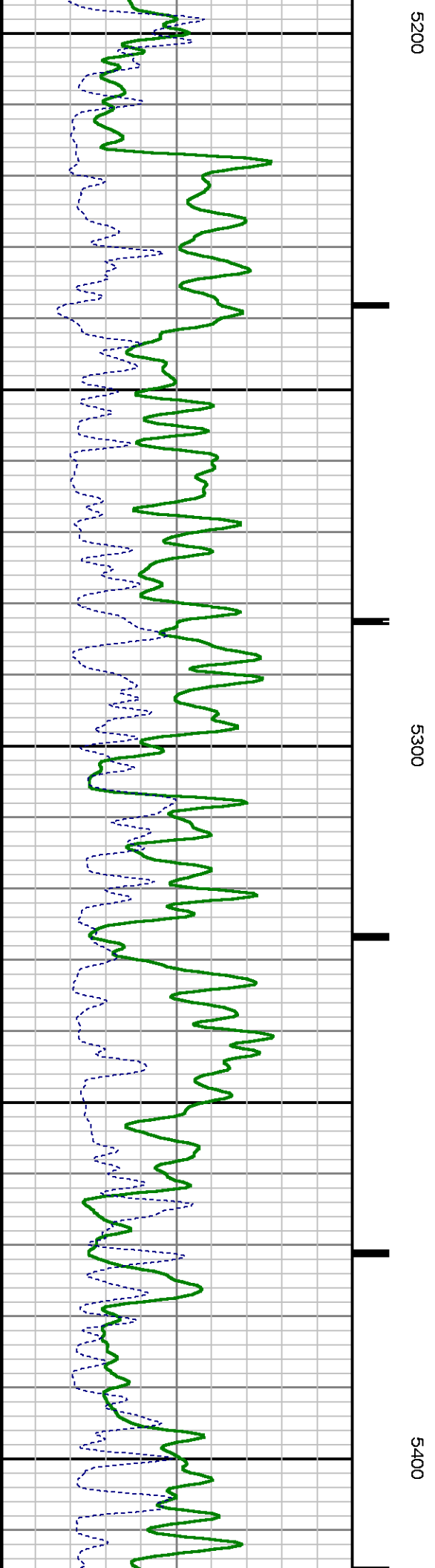
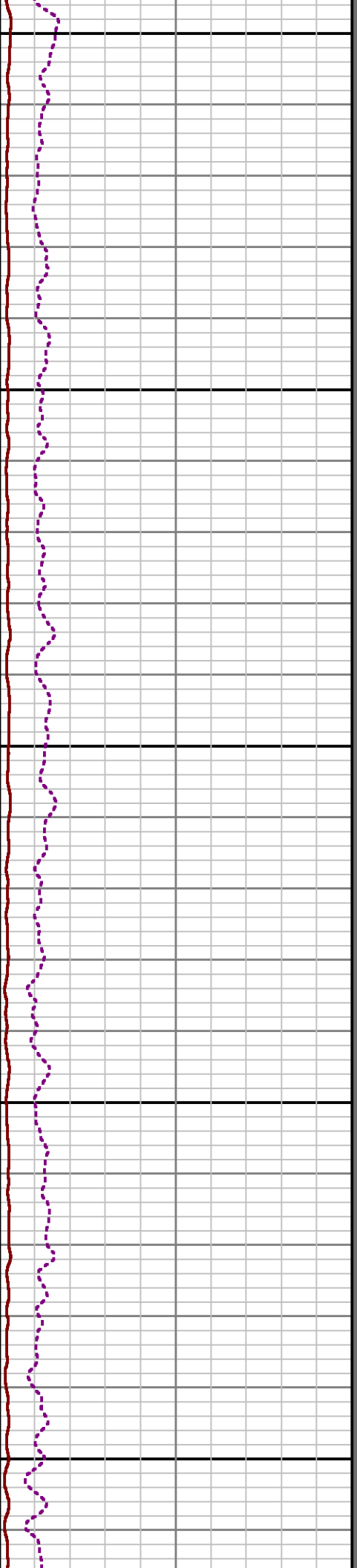
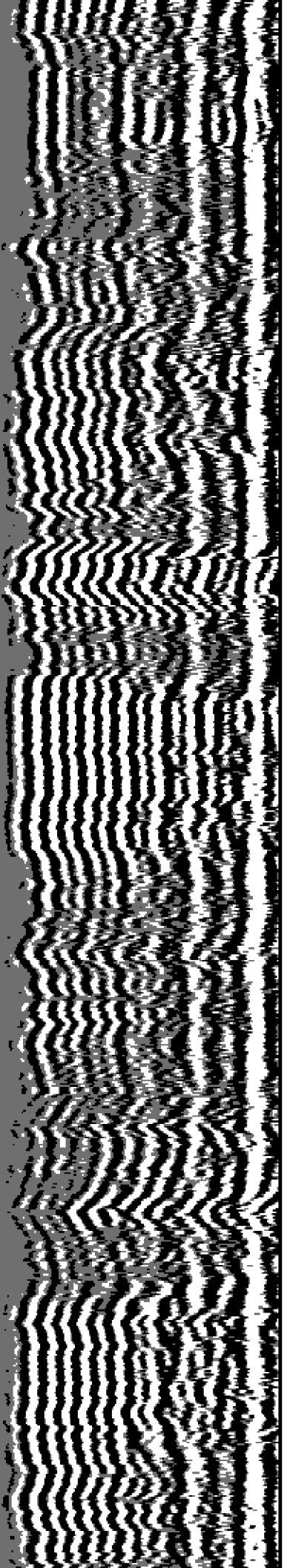


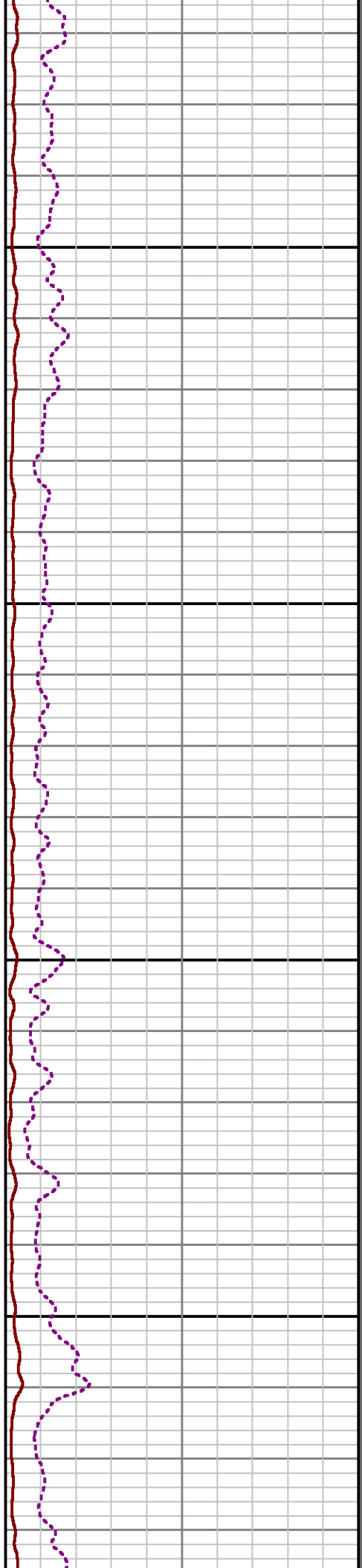
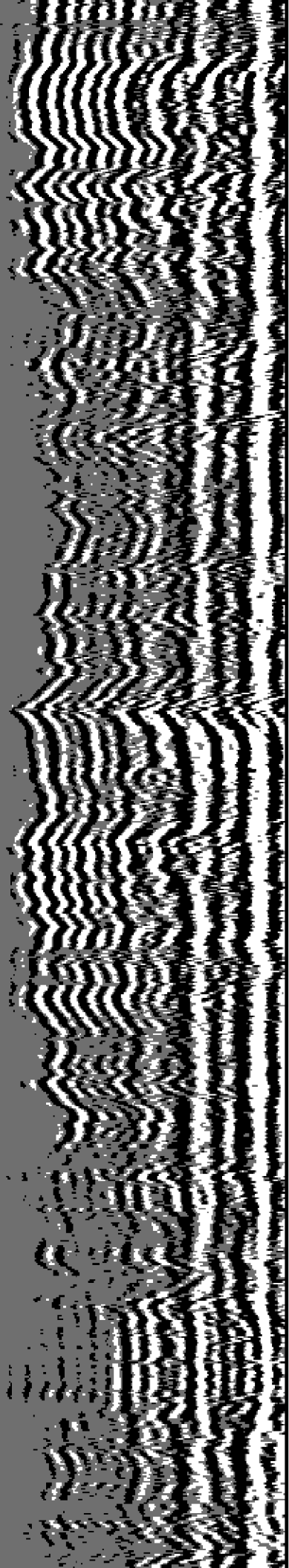


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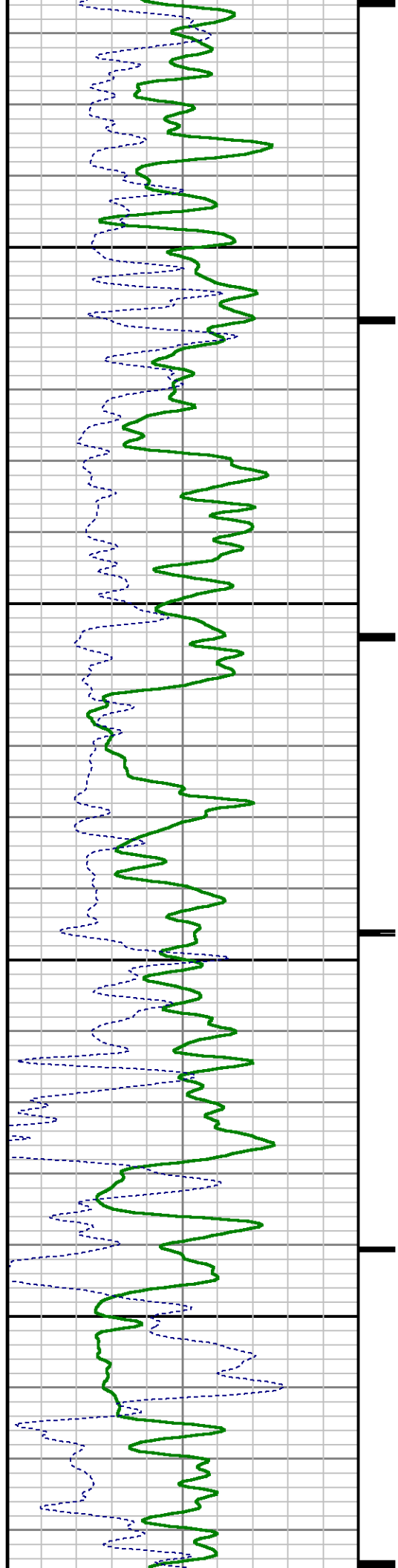


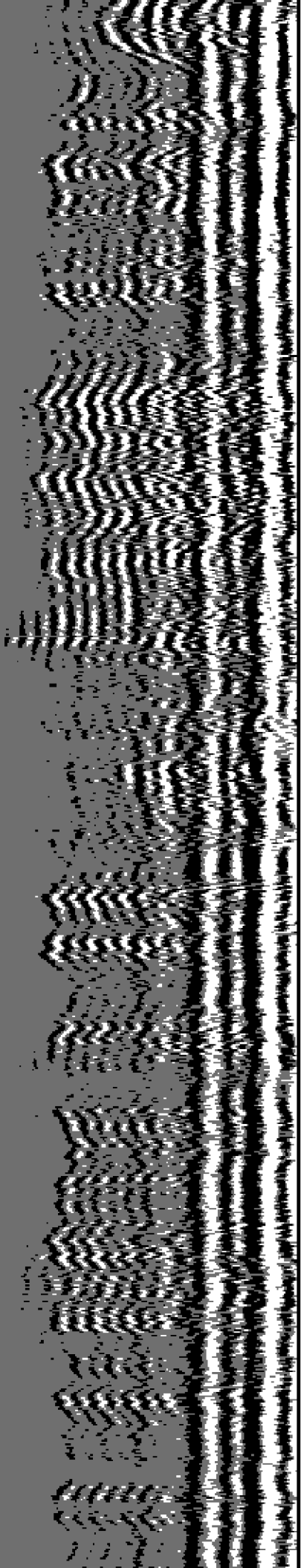




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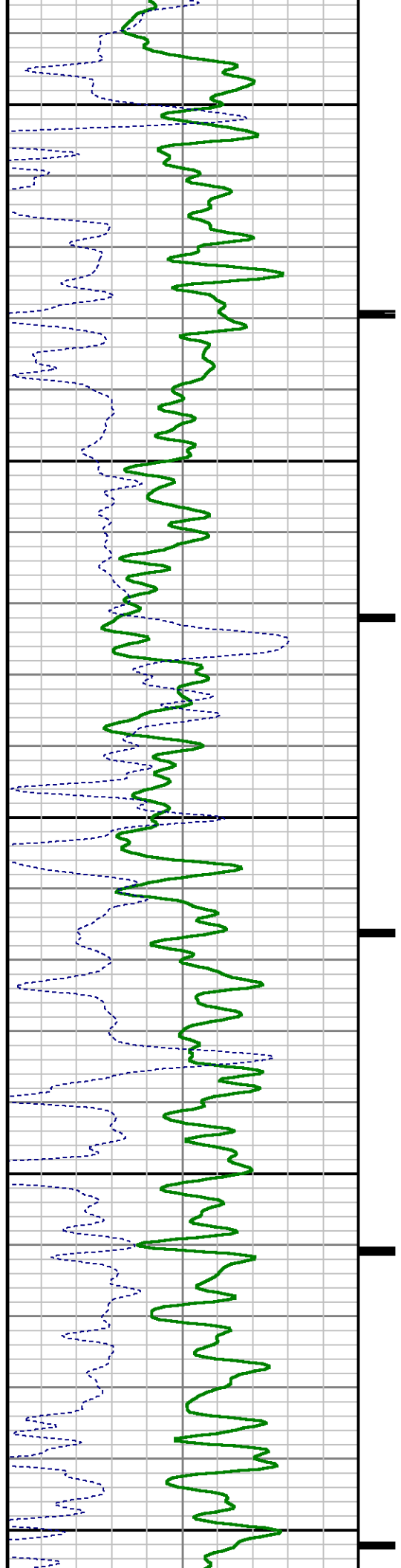
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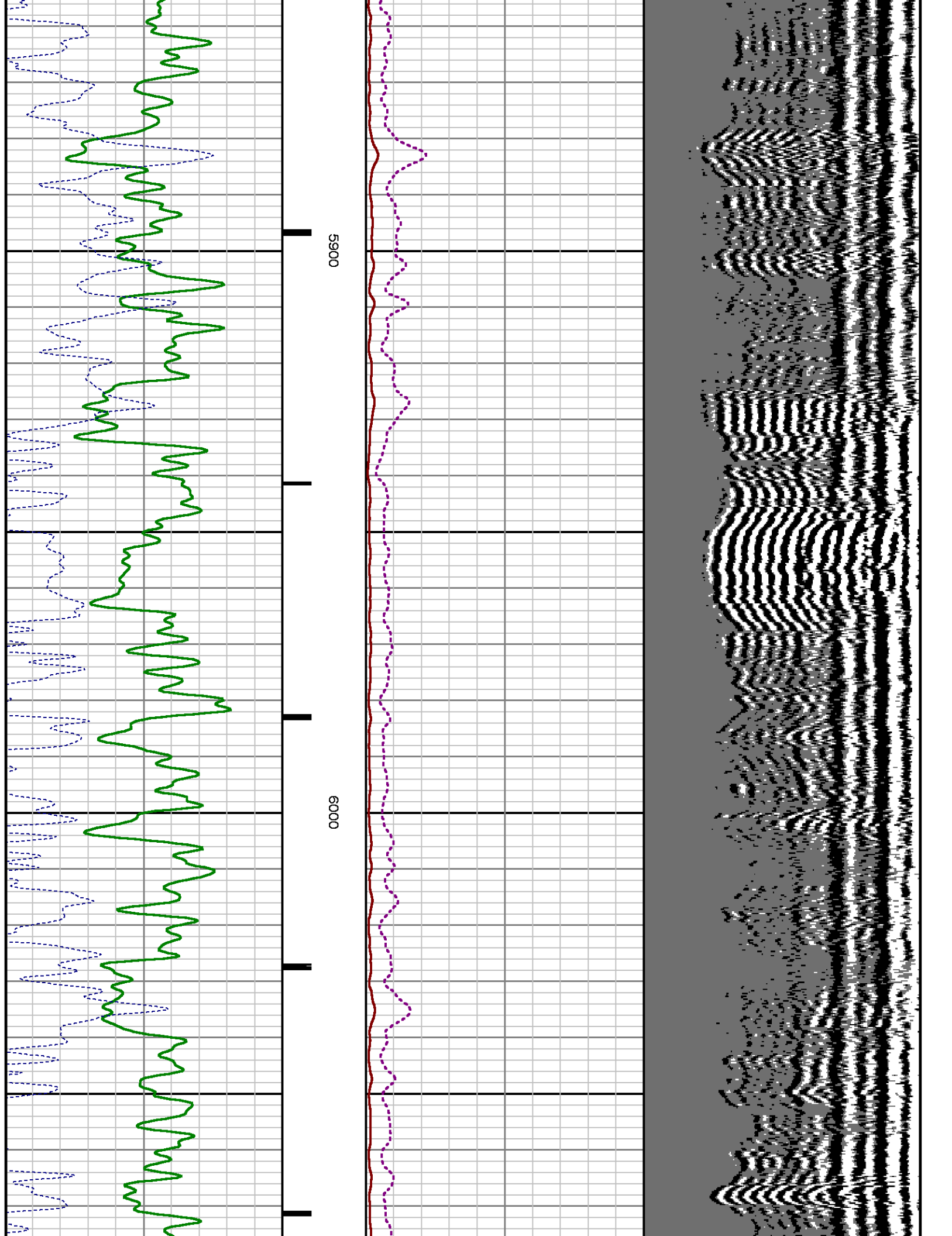


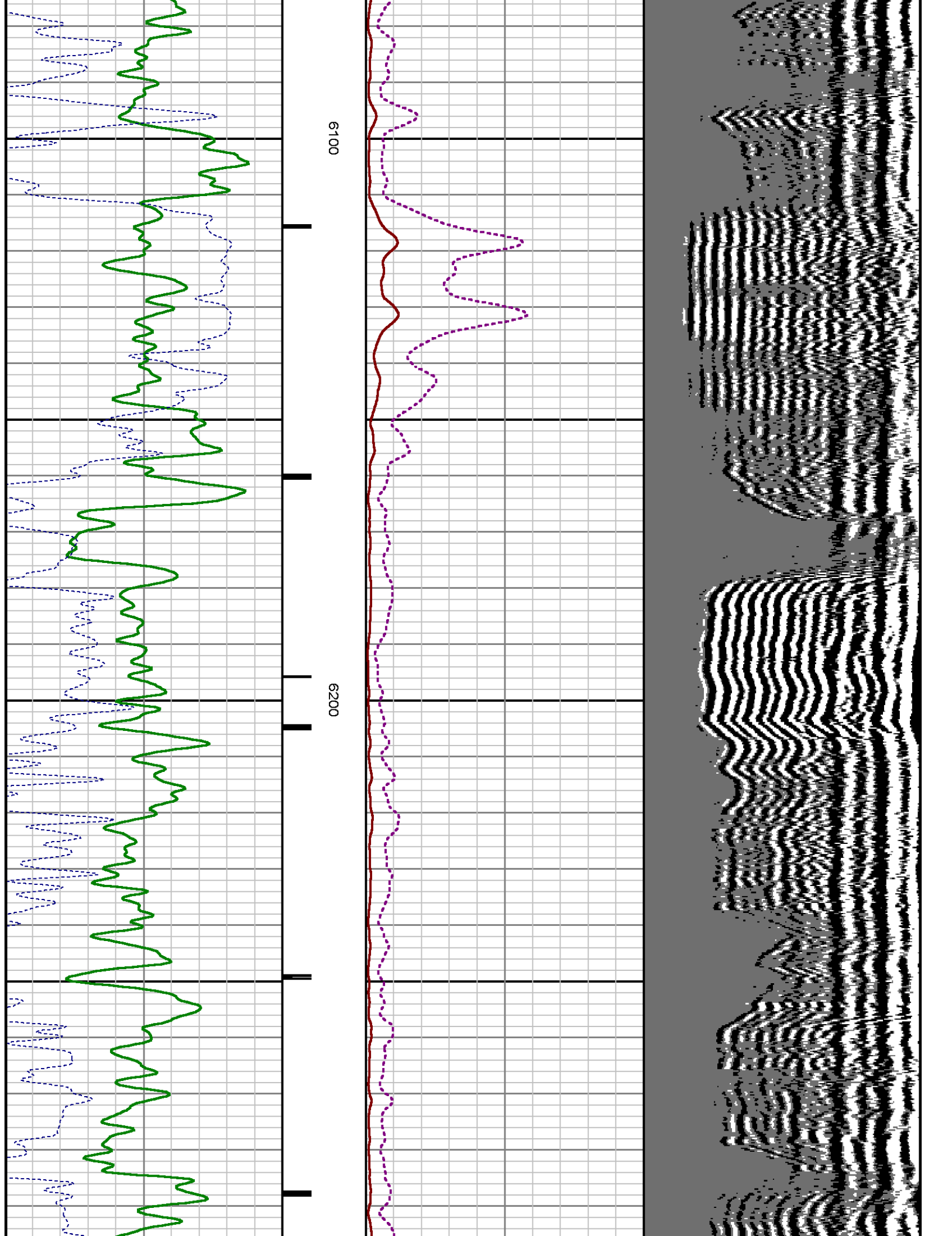


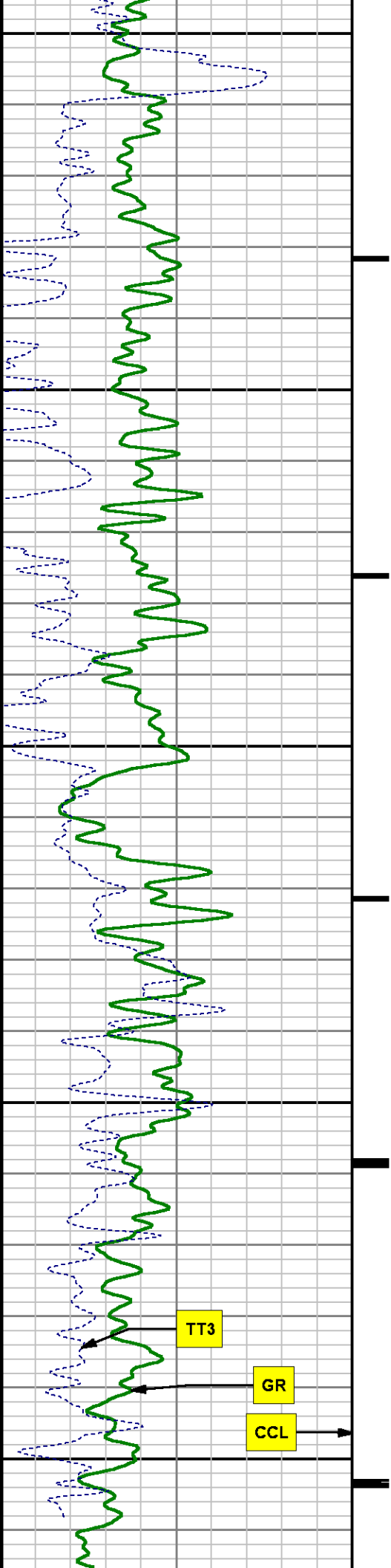
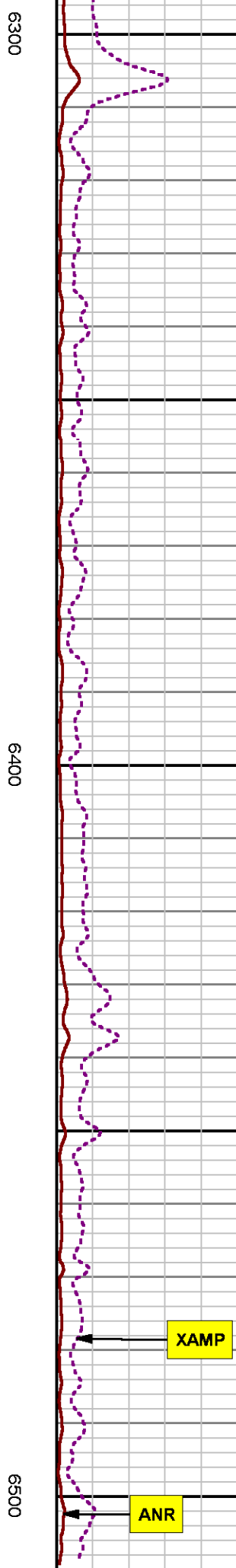
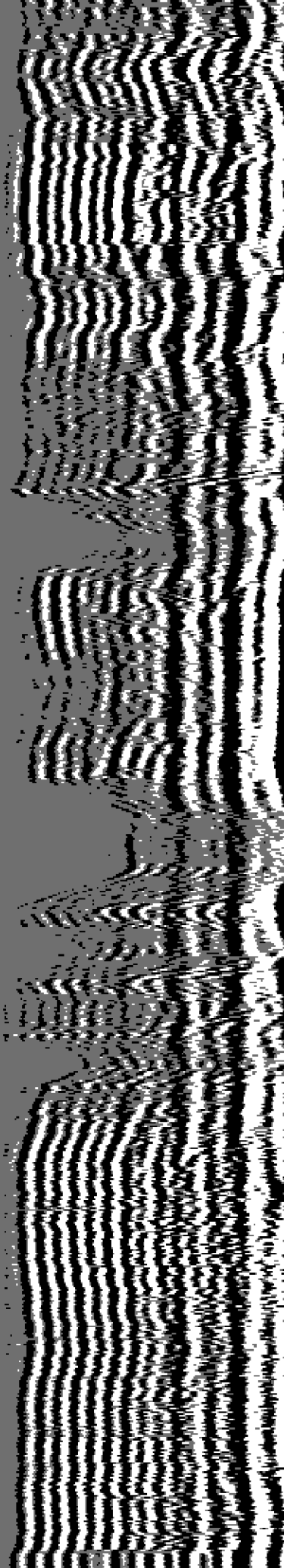
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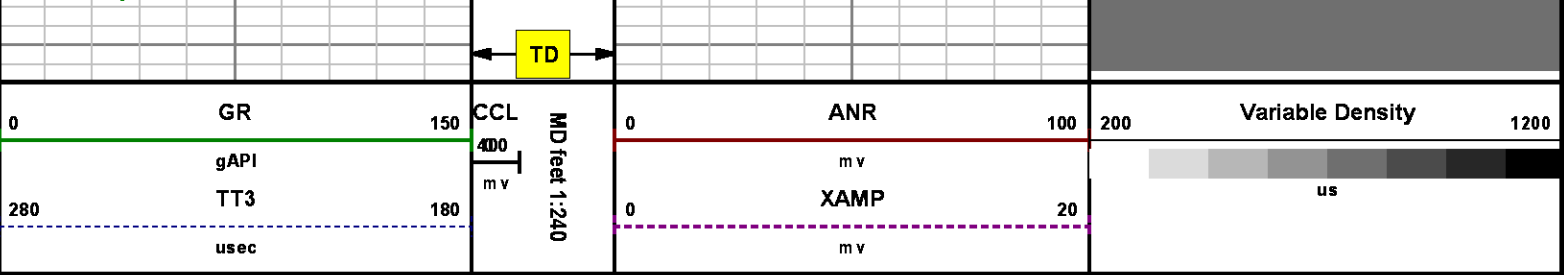
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SECONDARY PRESENTATION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	u sec	29.187	6522.500
RAL	Amp Gate Start Near	195.000	u sec	29.187	6522.500
RAL	Amp Gate Start Radial	195.000	u sec	29.187	6522.500
RAL	Amp Gate Width Far	25.000	u sec	29.187	6522.500
RAL	Amp Gate Width Near	25.000	u sec	29.187	6522.500
RAL	Amp Gate Width Radial	25.000	u sec	29.187	6522.500
RAL	casing od	4.500	inches	29.187	6522.500
RAL	casing wt	11.600	lbm/ft	29.187	6522.500
RAL	FB Start Far	291.900	u sec	29.187	6522.500
RAL	FB Start Near	180.000	u sec	29.187	6522.500
RAL	FB Start Radial	180.000	u sec	29.187	6522.500
RAL	FB Thresh Far	10.000	mv	29.187	6522.500
RAL	FB Thresh Near	4.000	mv	29.187	6522.500
RAL	FB Thresh Radial	4.000	mv	29.187	6522.500
RAL	Fluid Travel Time	200.000	u sec/ft	29.187	6522.375

DEPTH OFFSETS
(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-12.360	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	-11.360	AFAR	SIG	TT5
2459XA	-7.250	CCL		
2459XA	-5.390	GR		
2459XA	0.000	NEU		

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

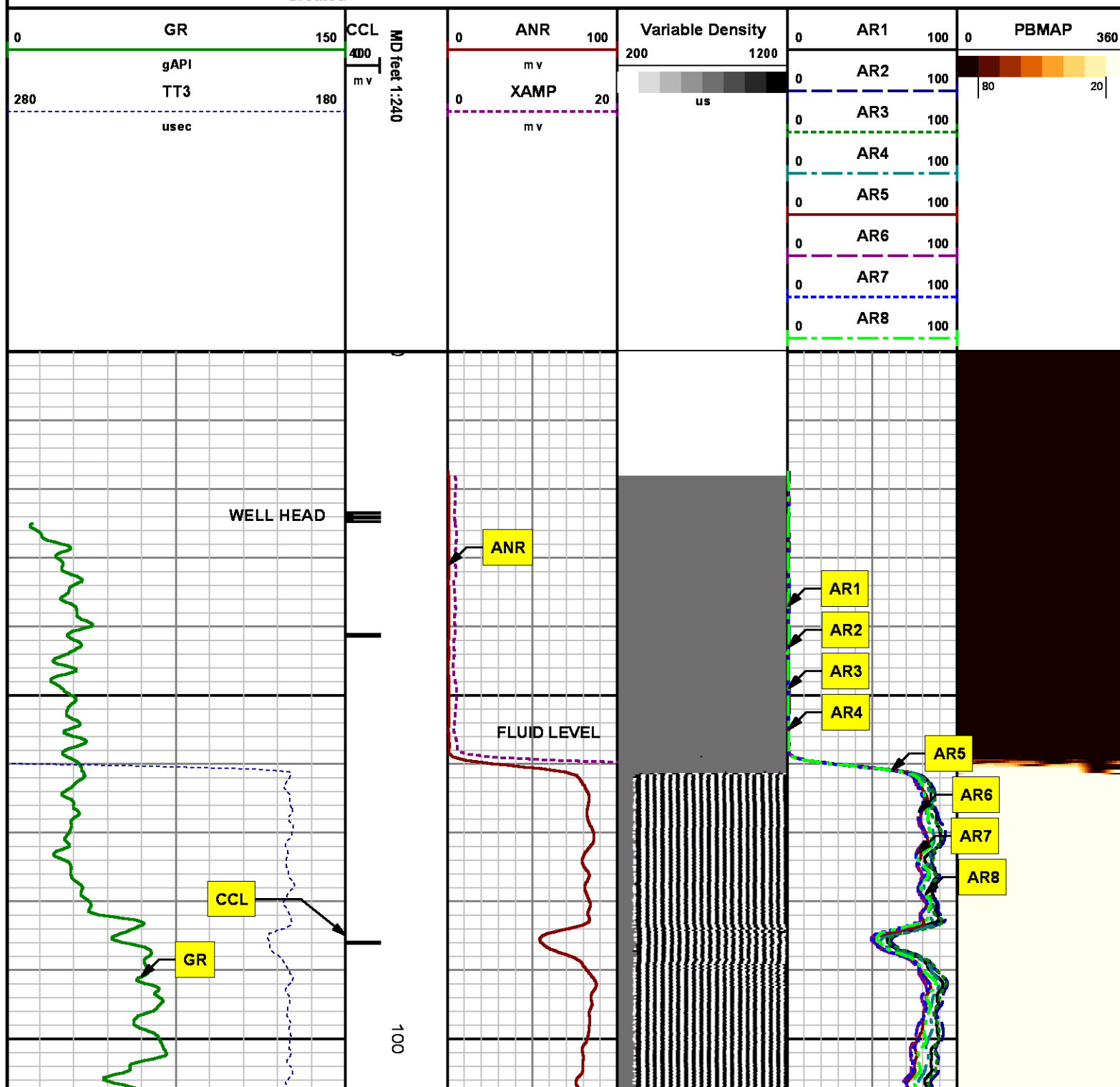
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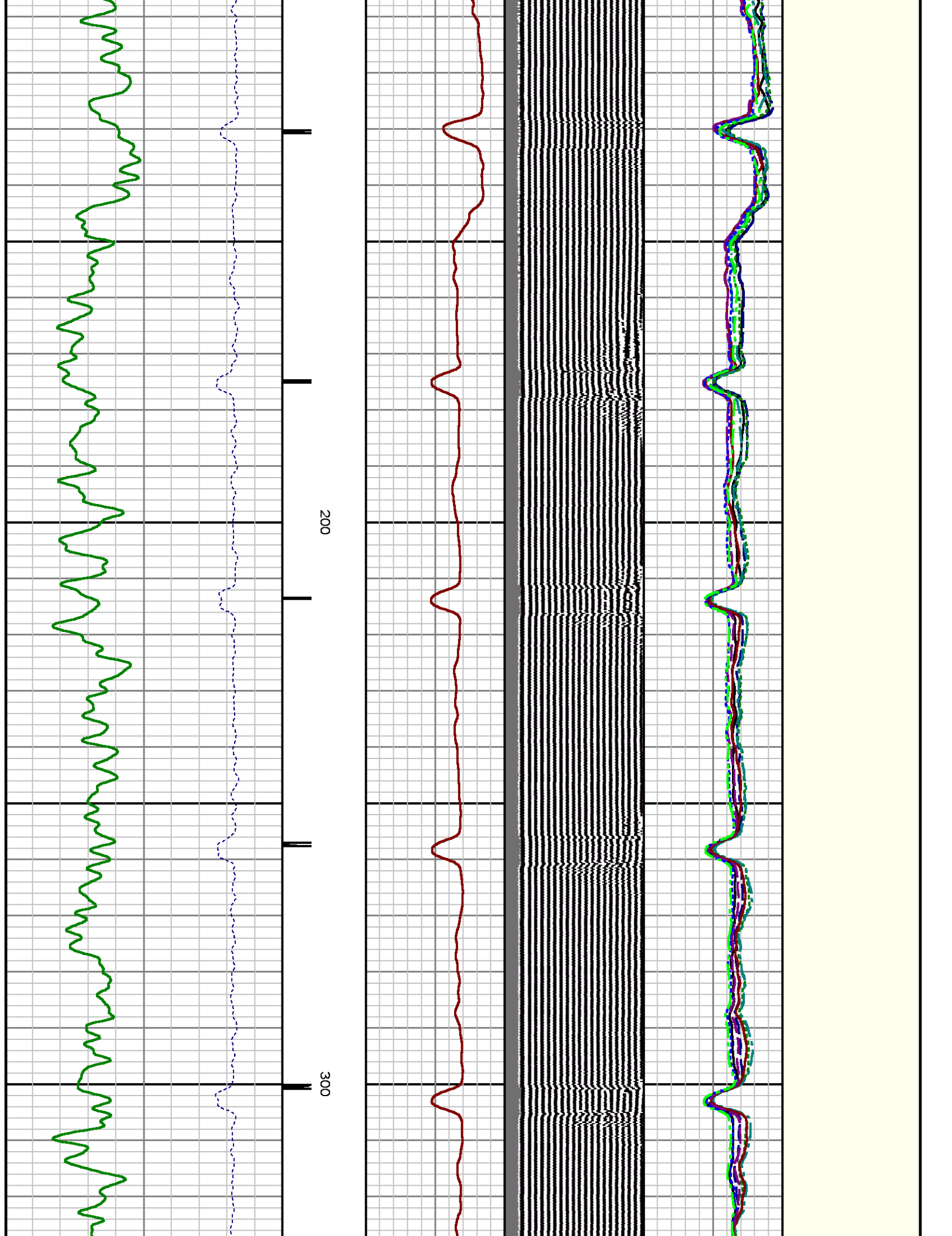
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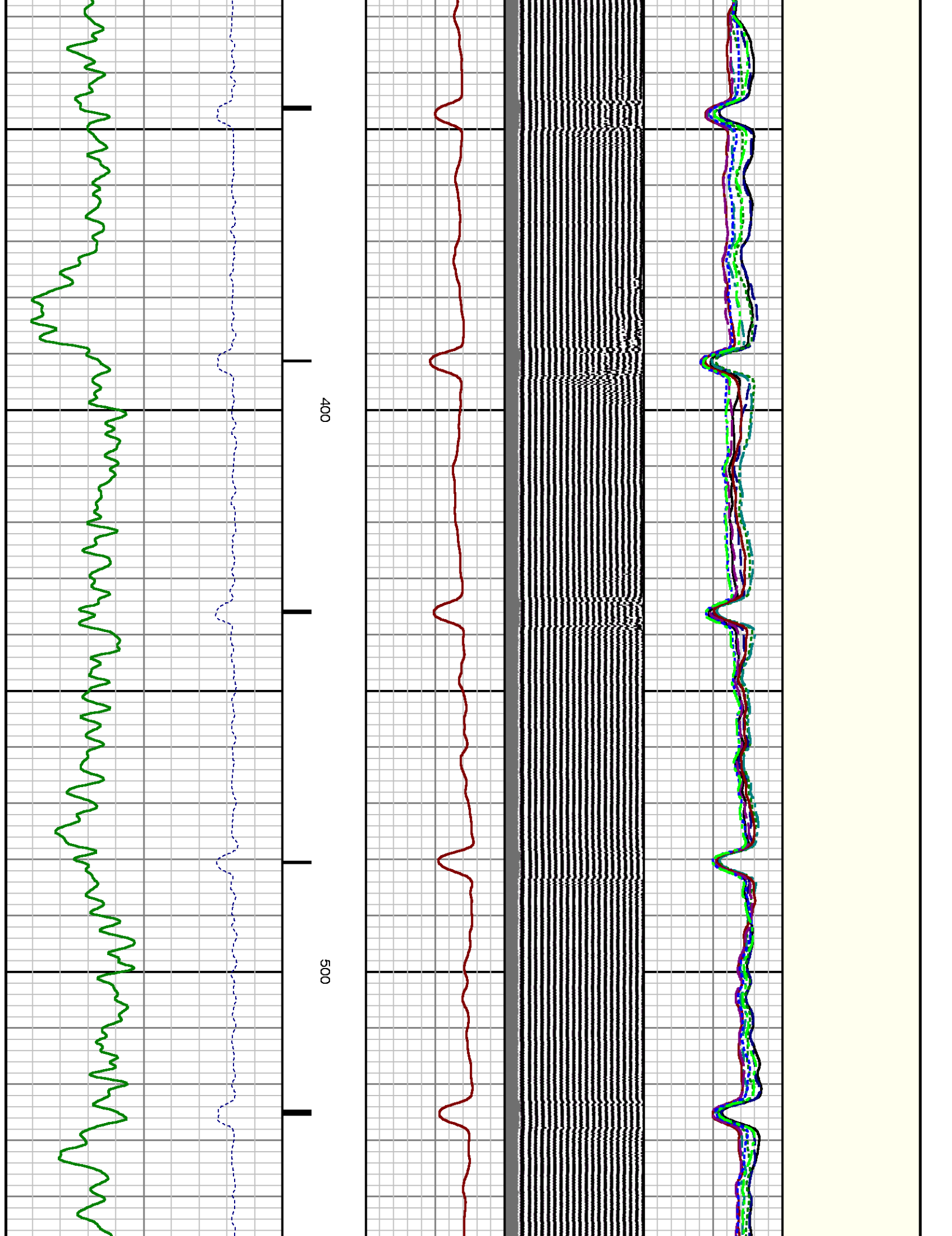
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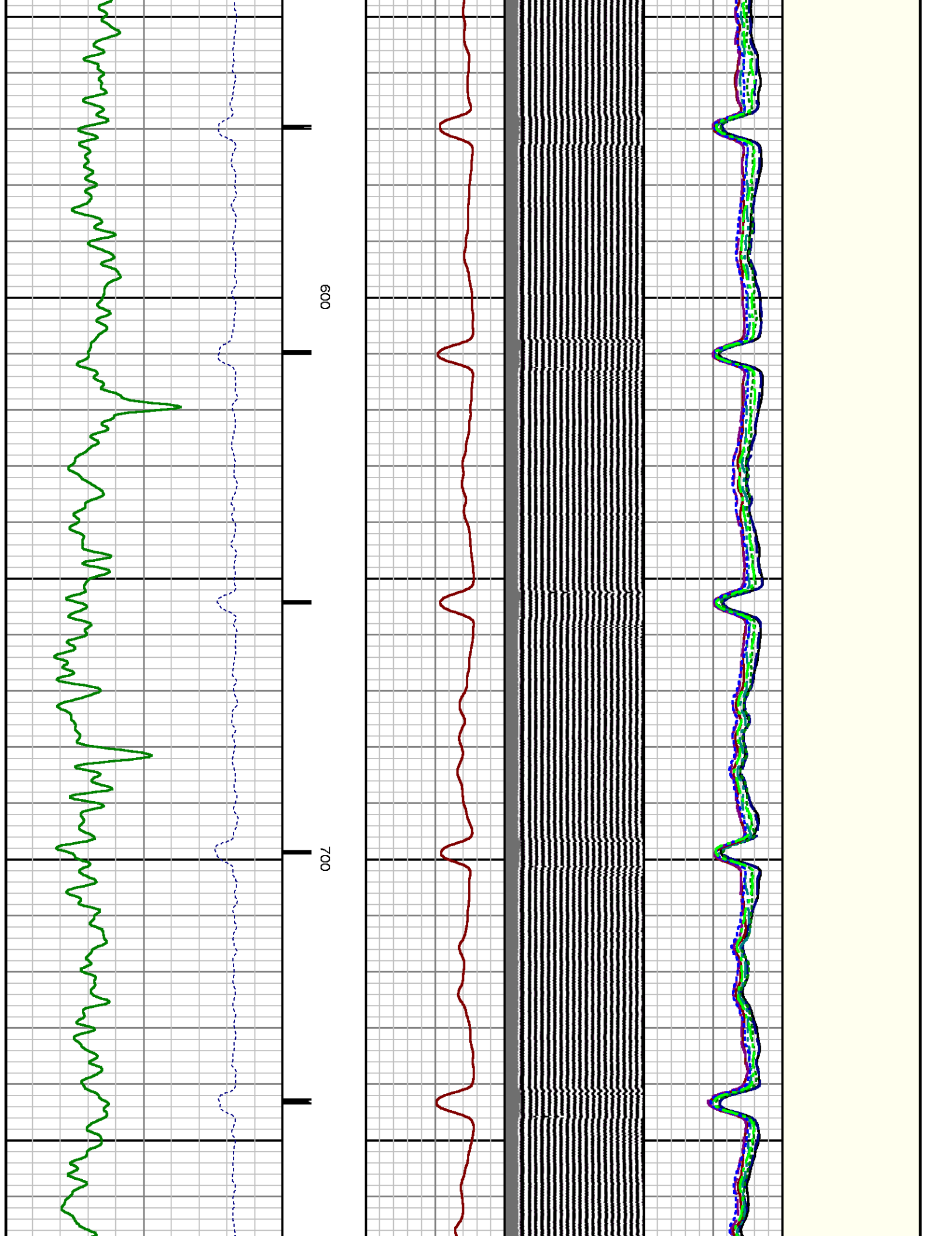
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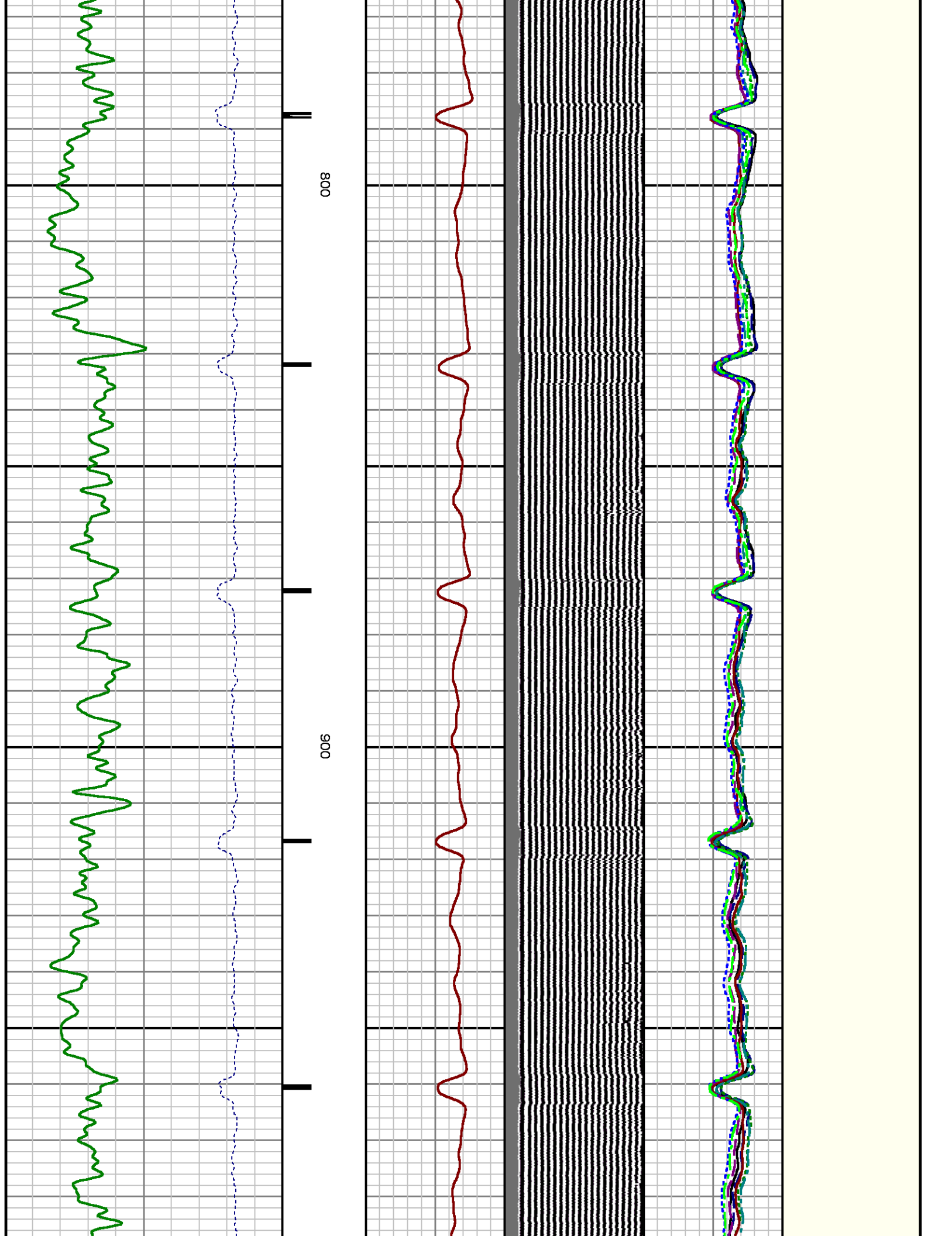
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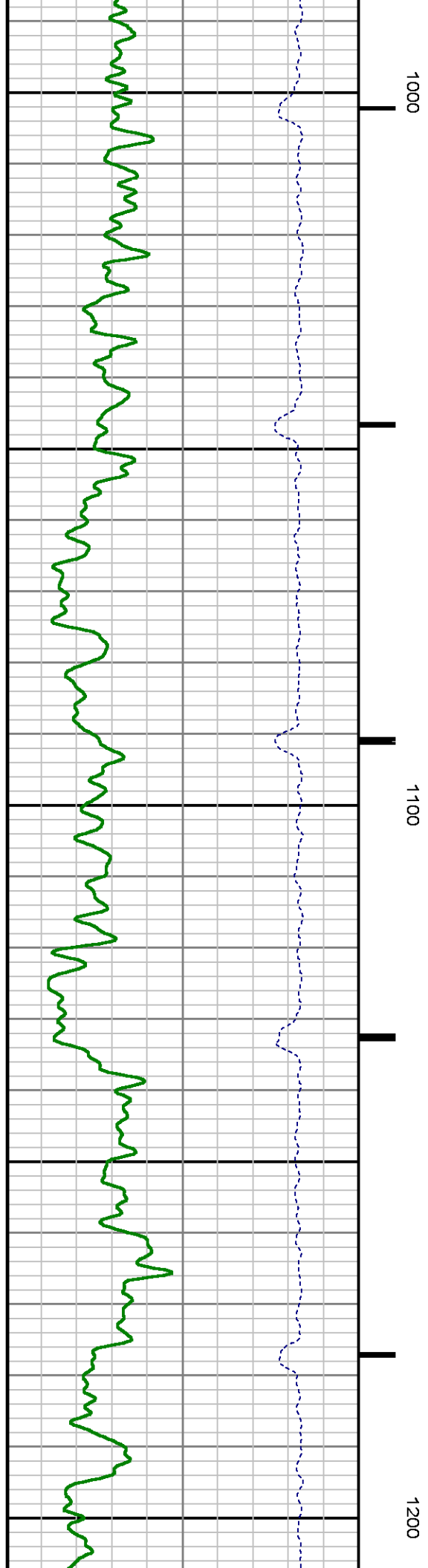
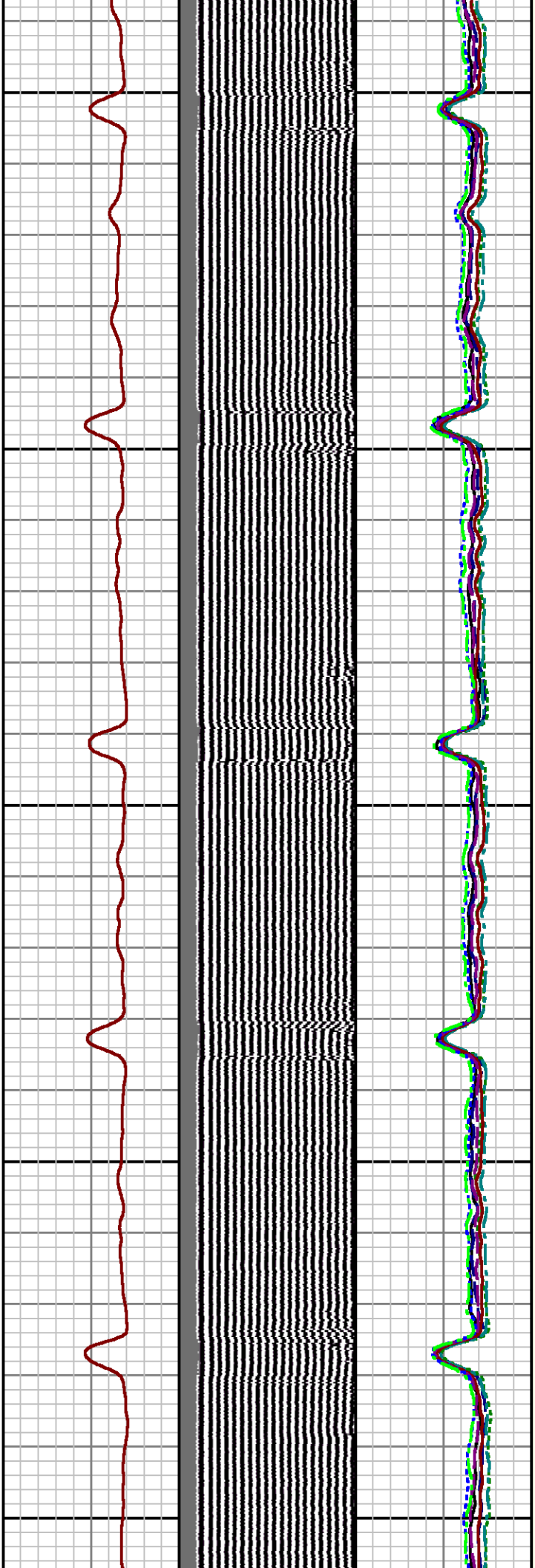


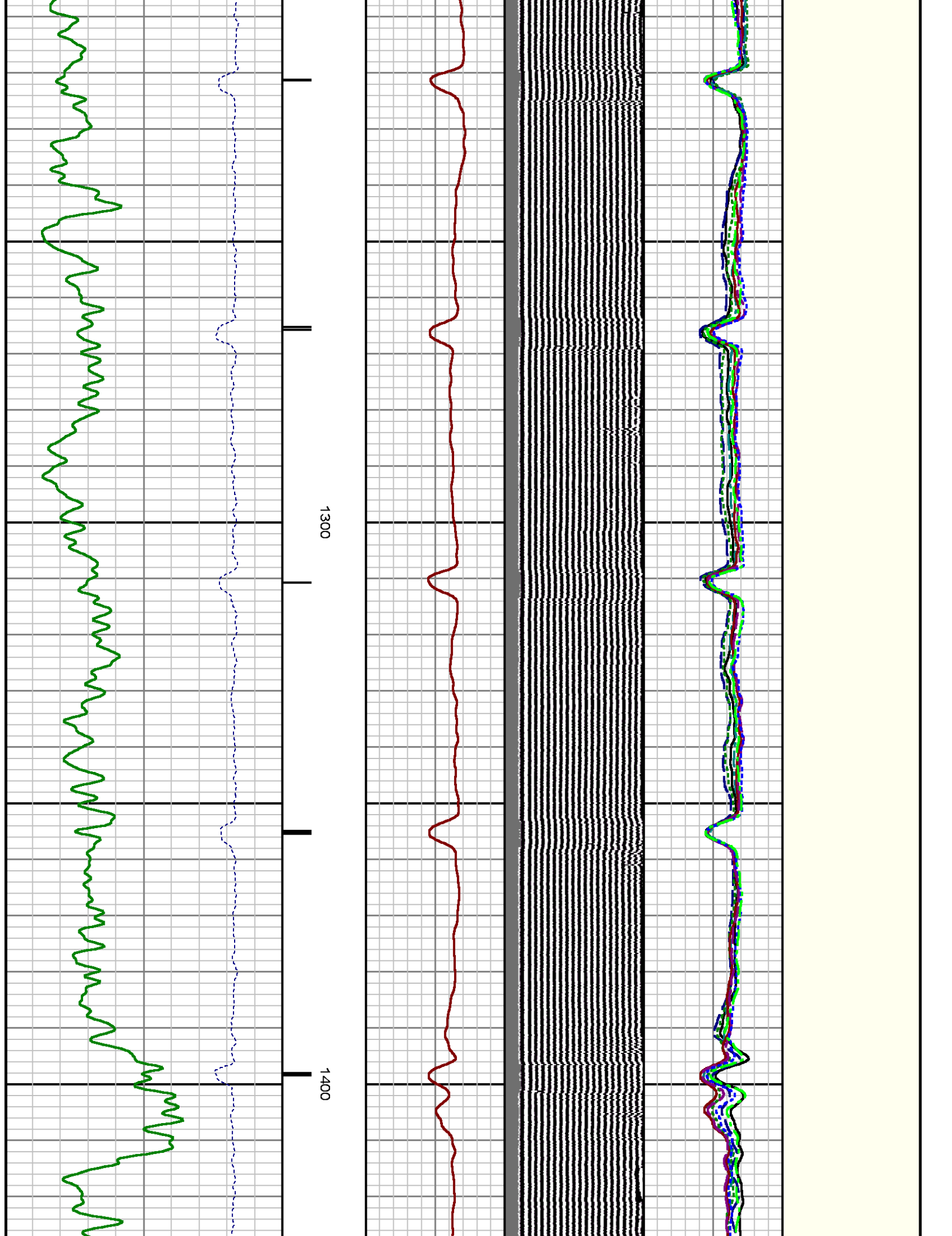


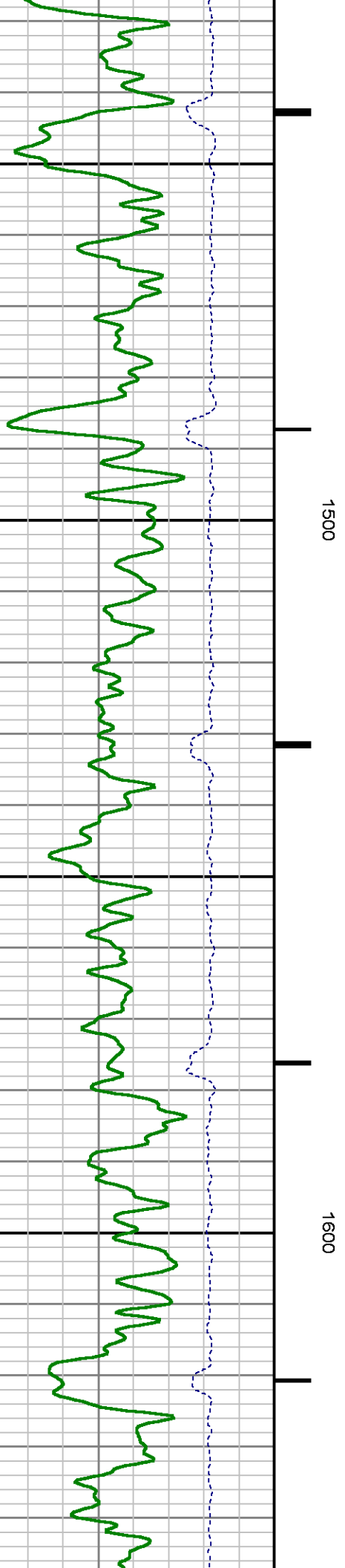
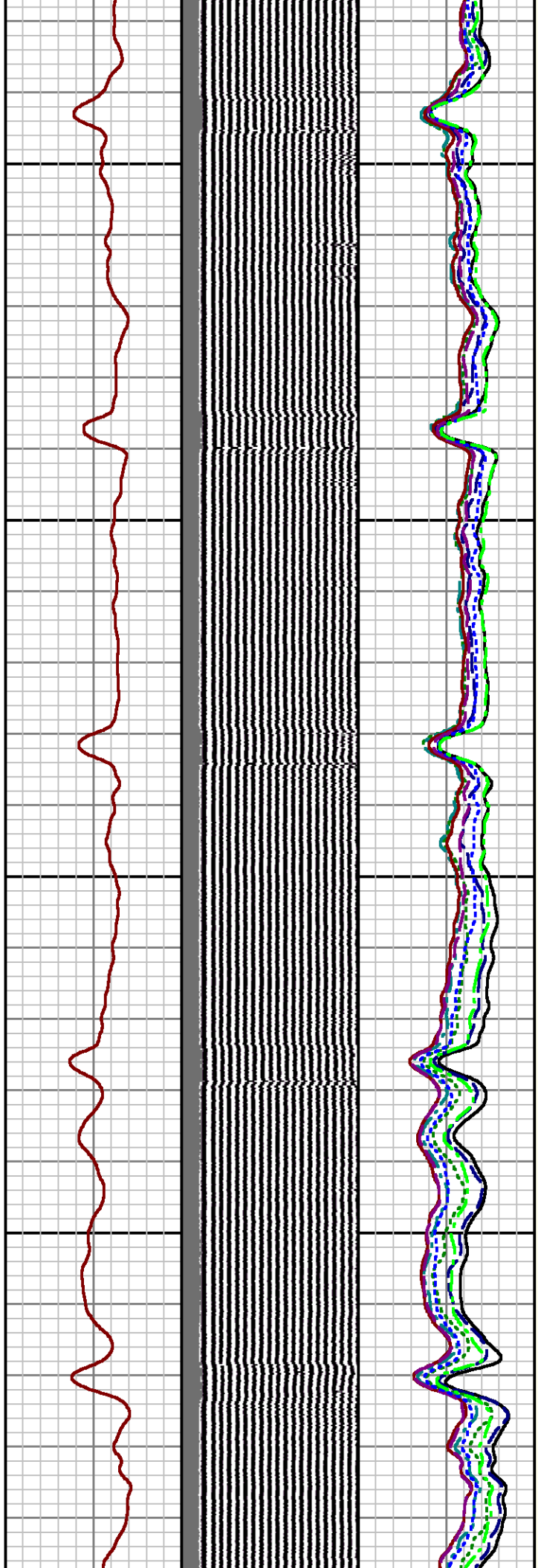


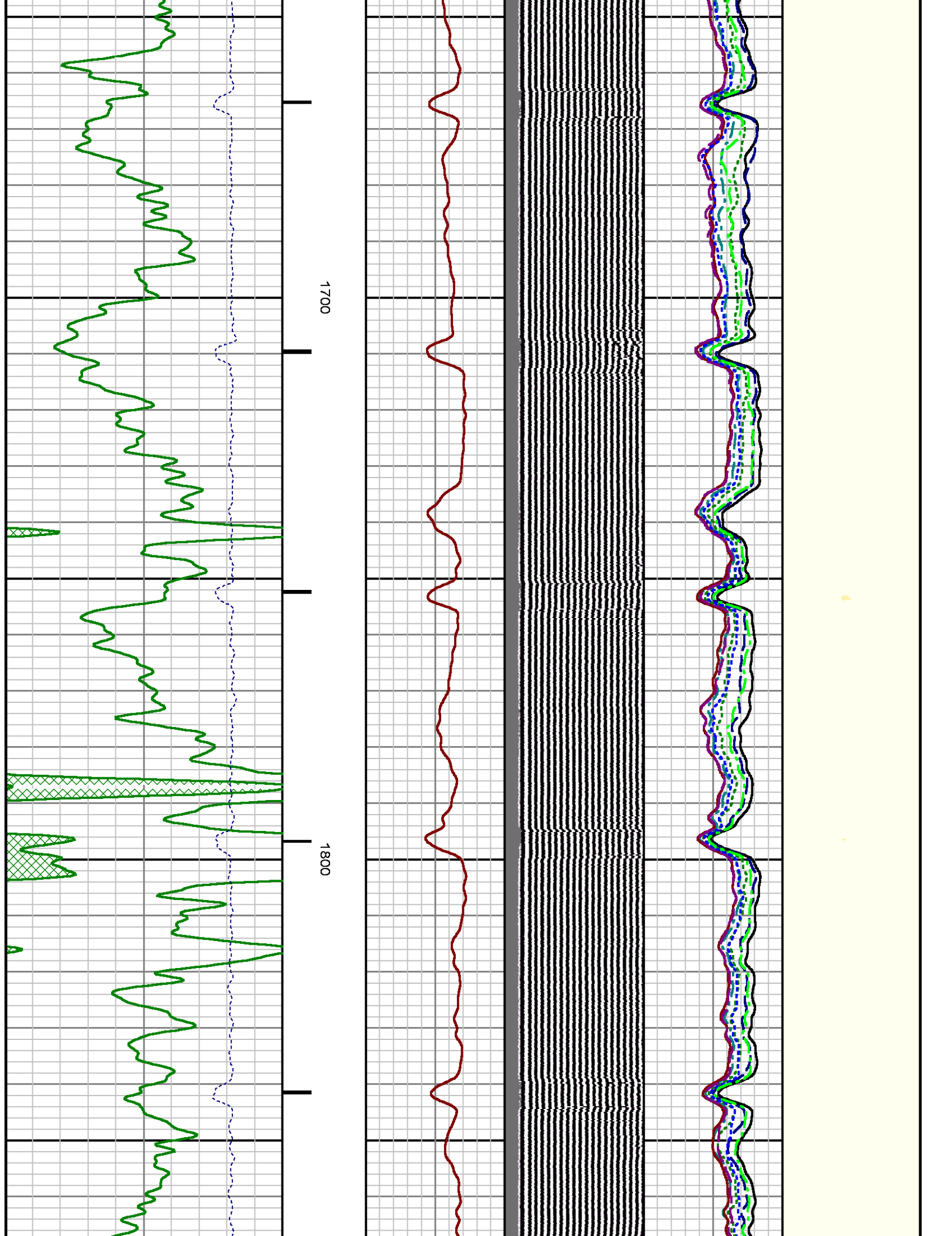


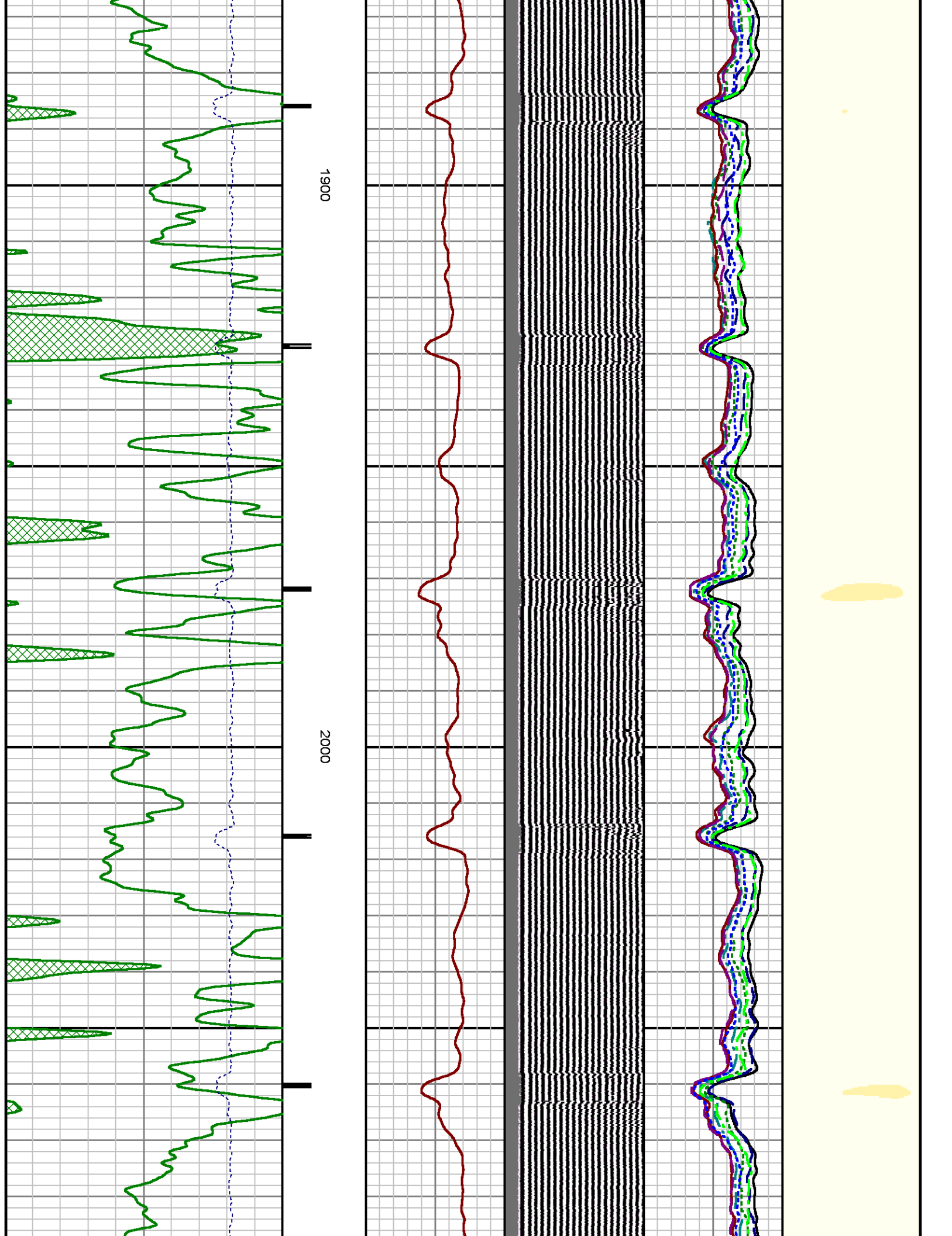


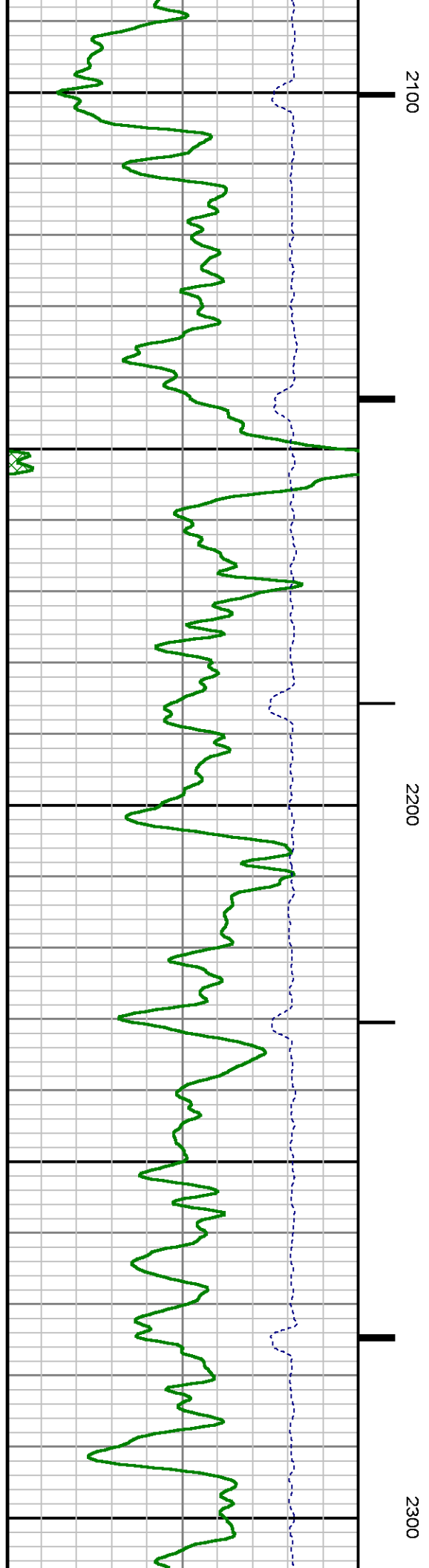
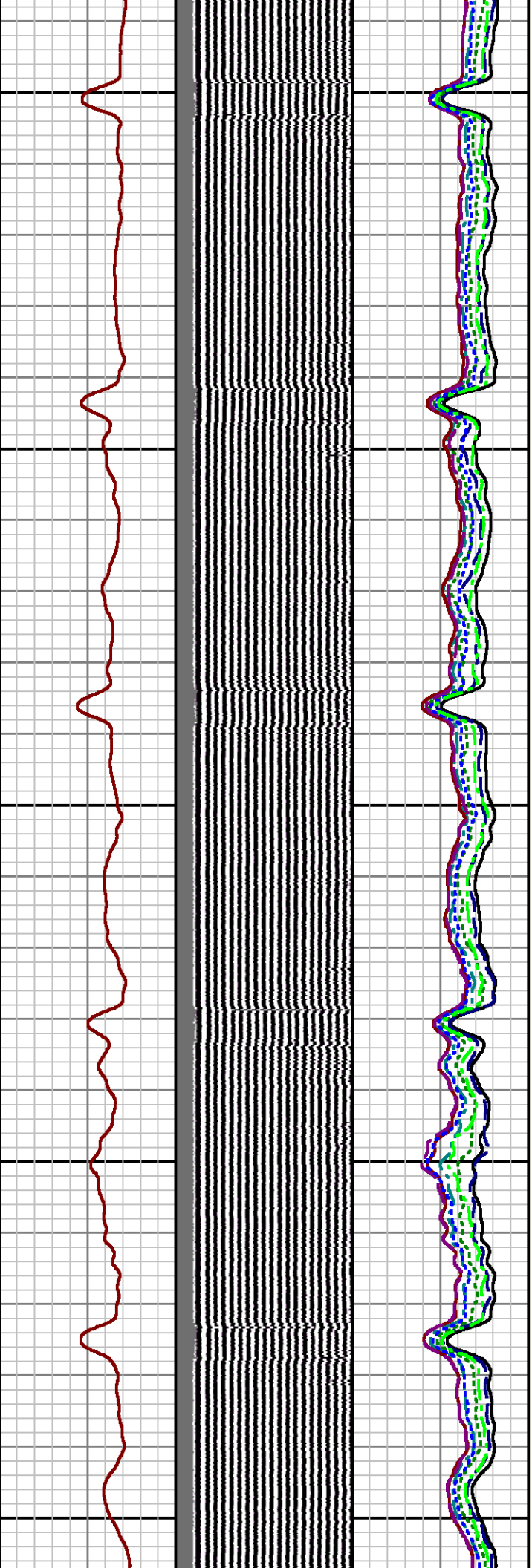


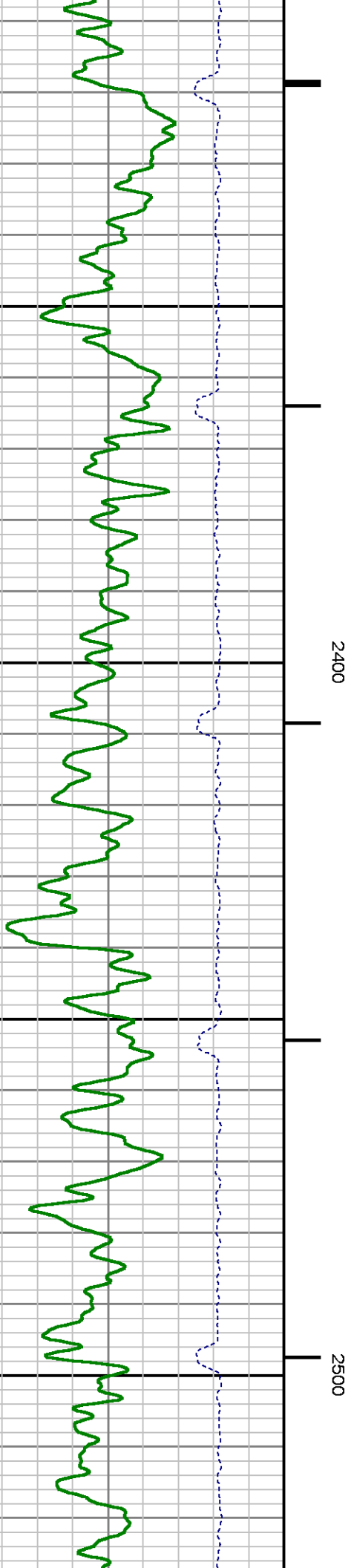
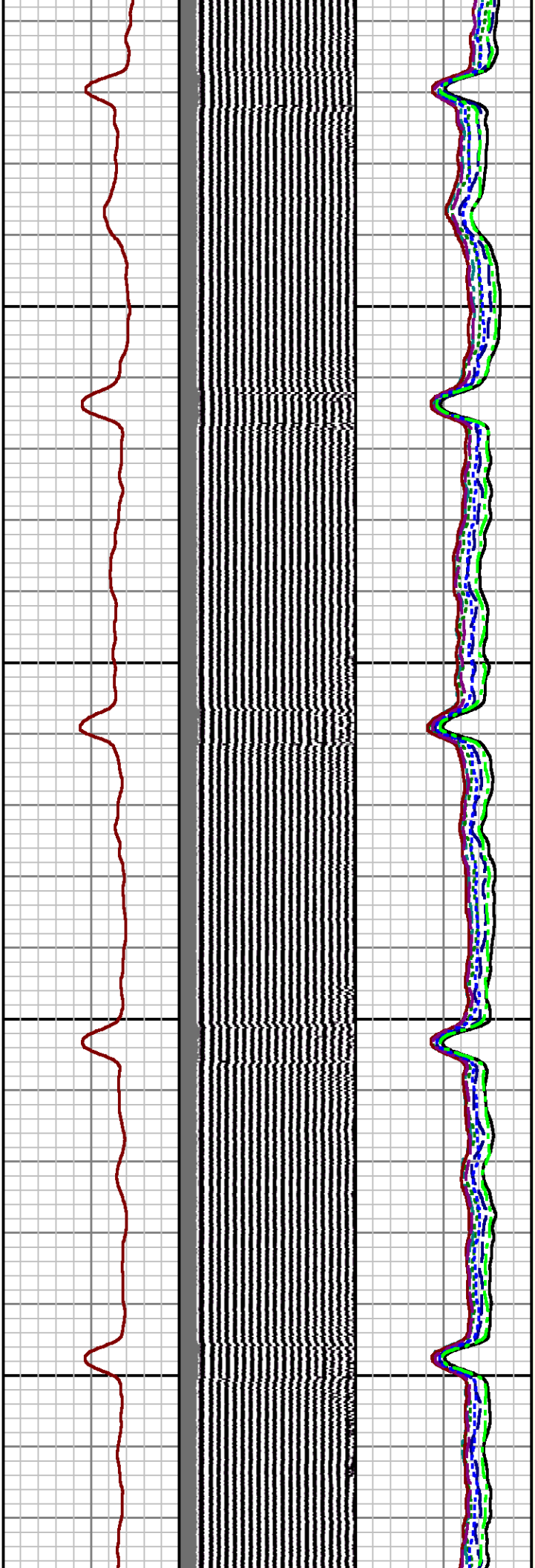


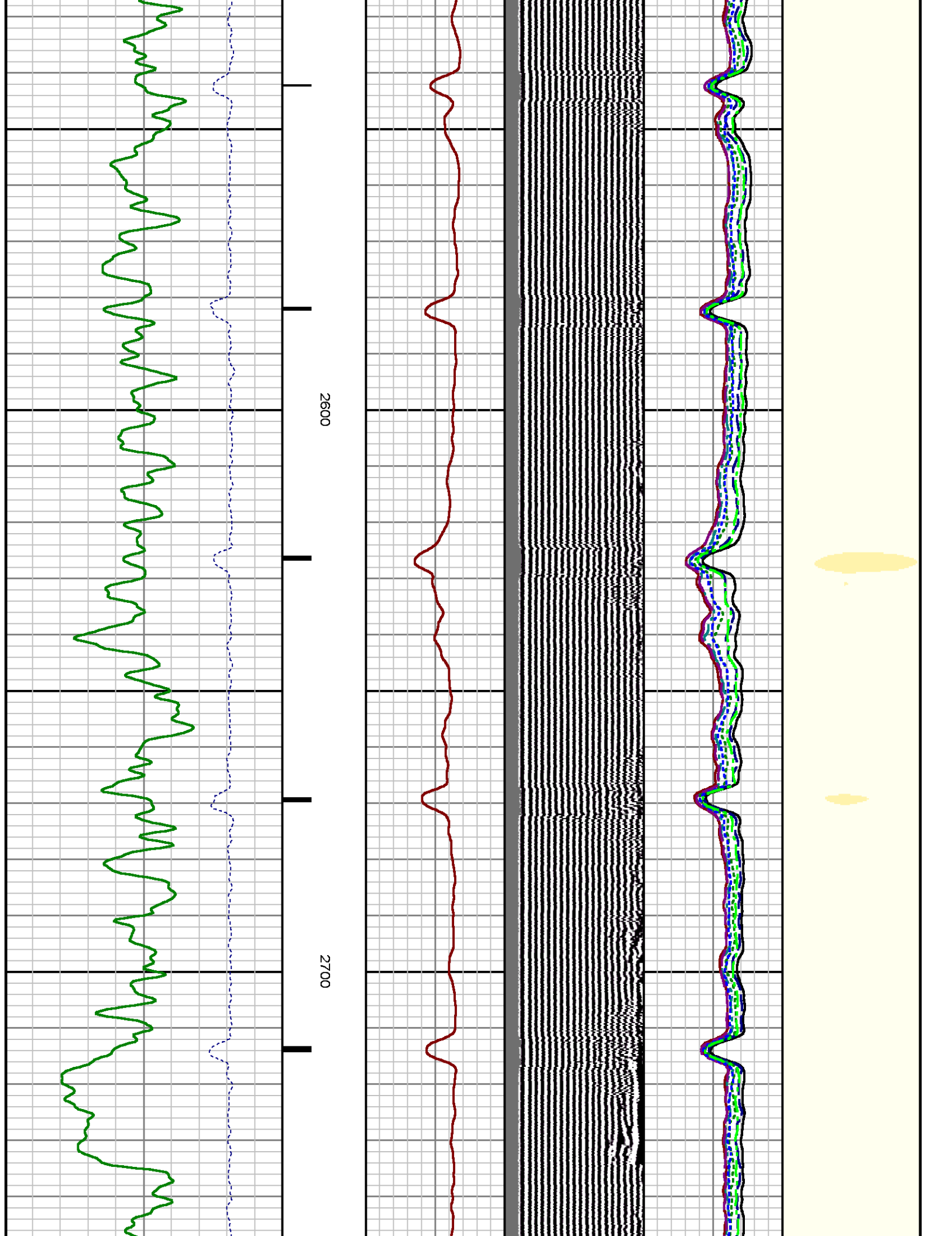


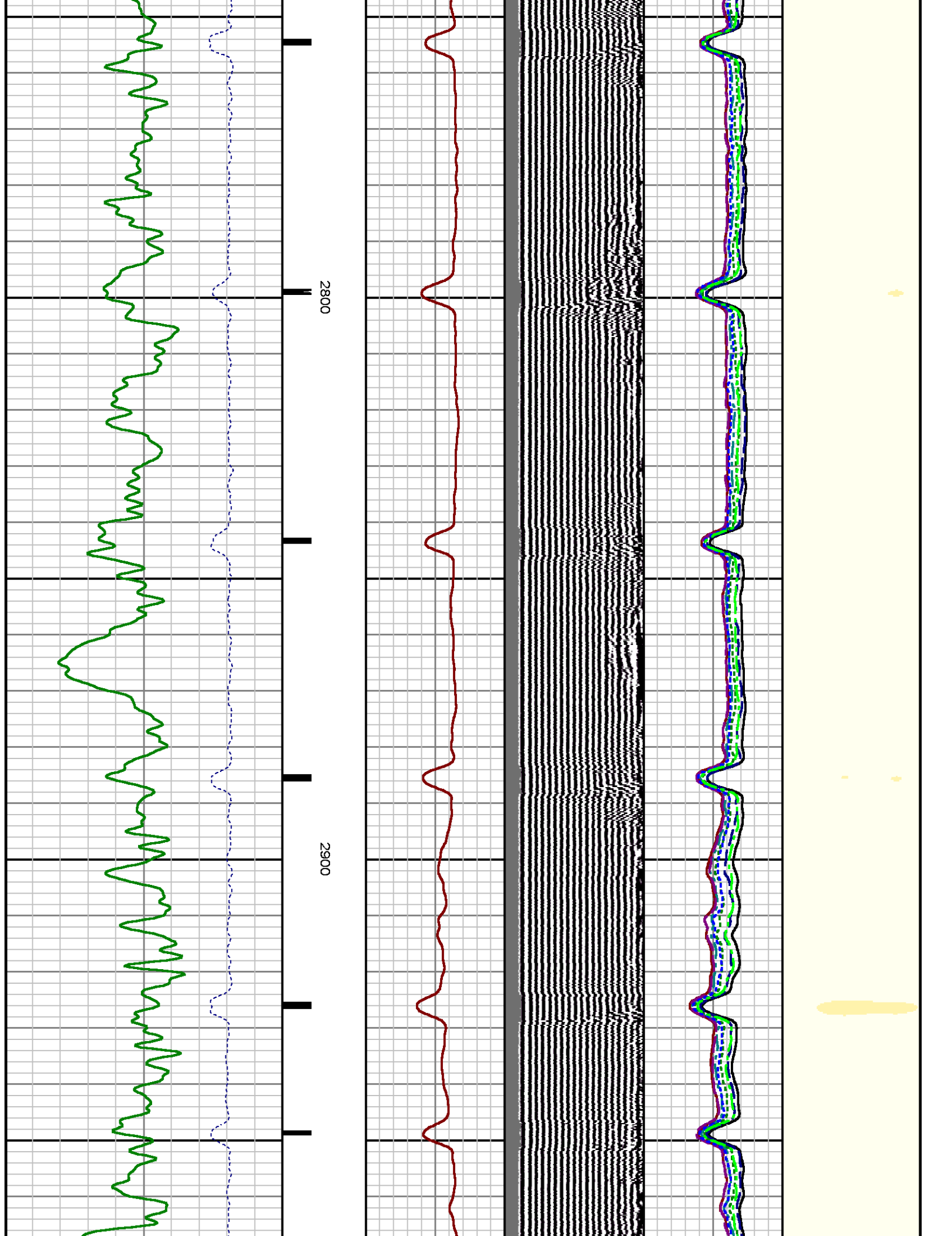


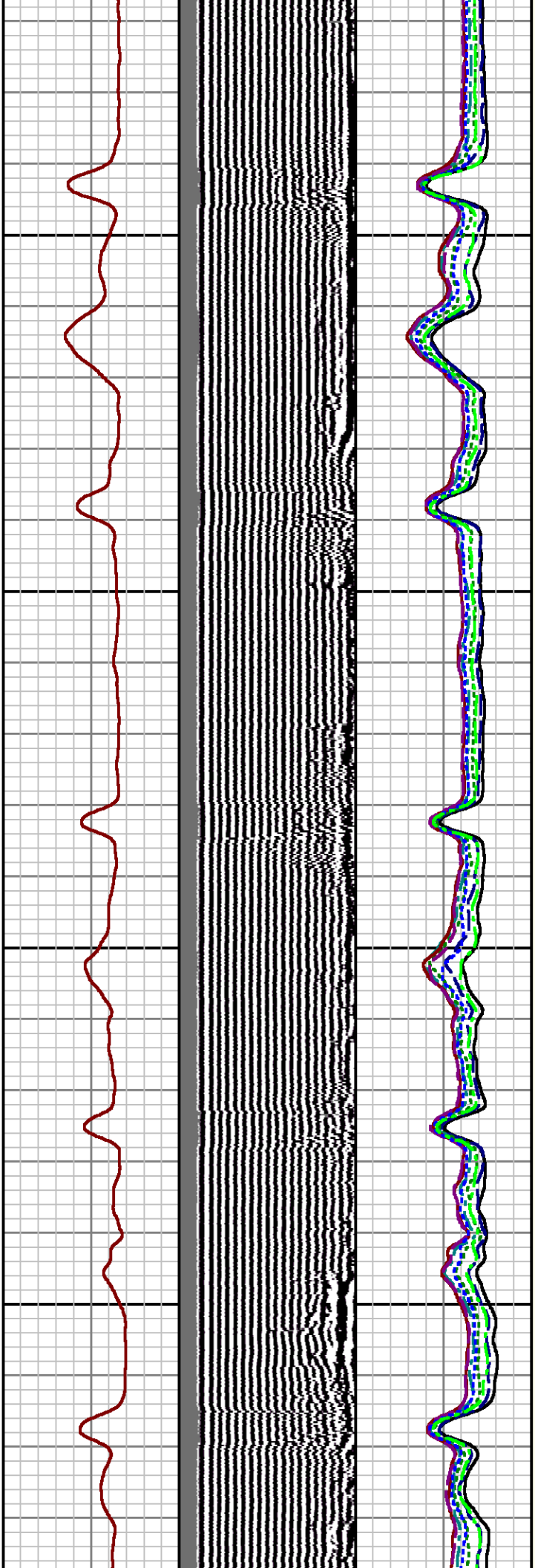






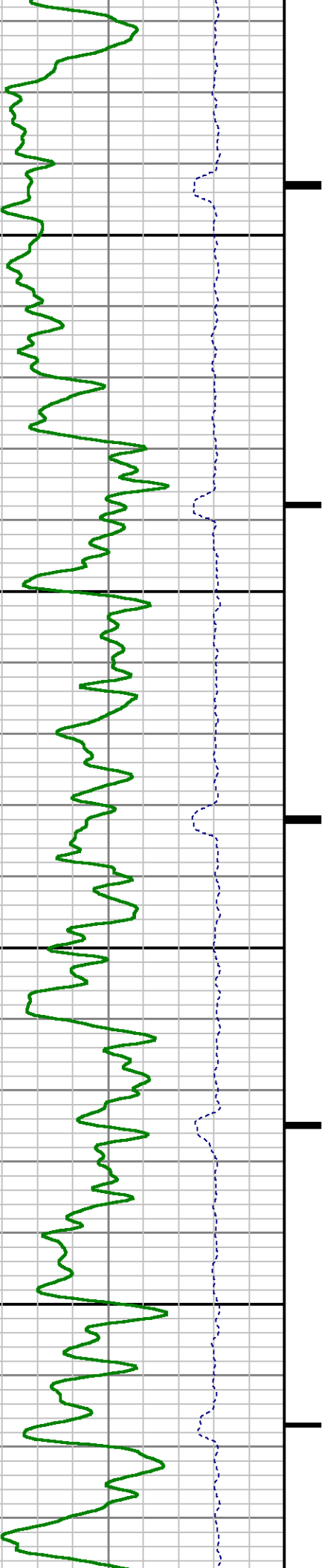


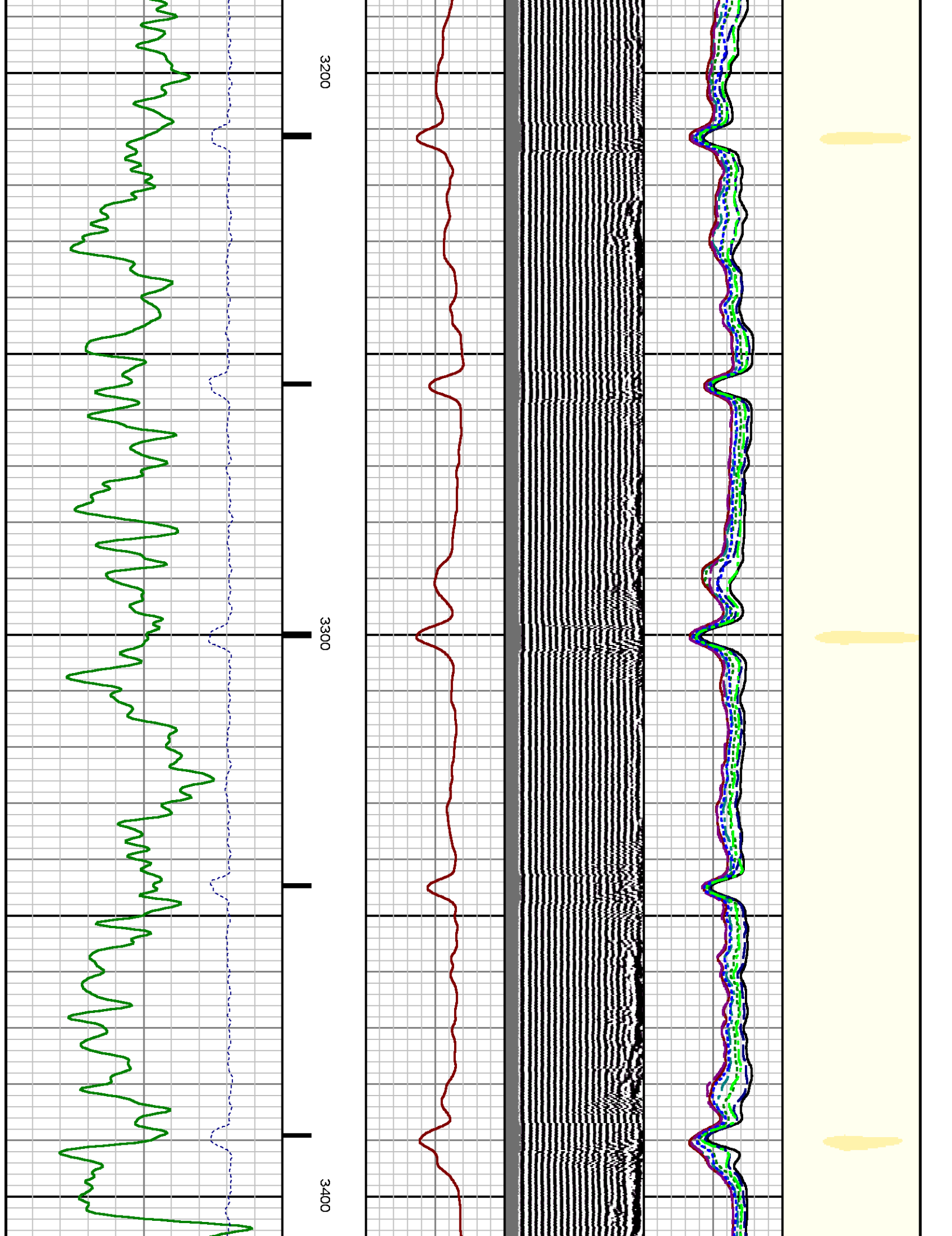


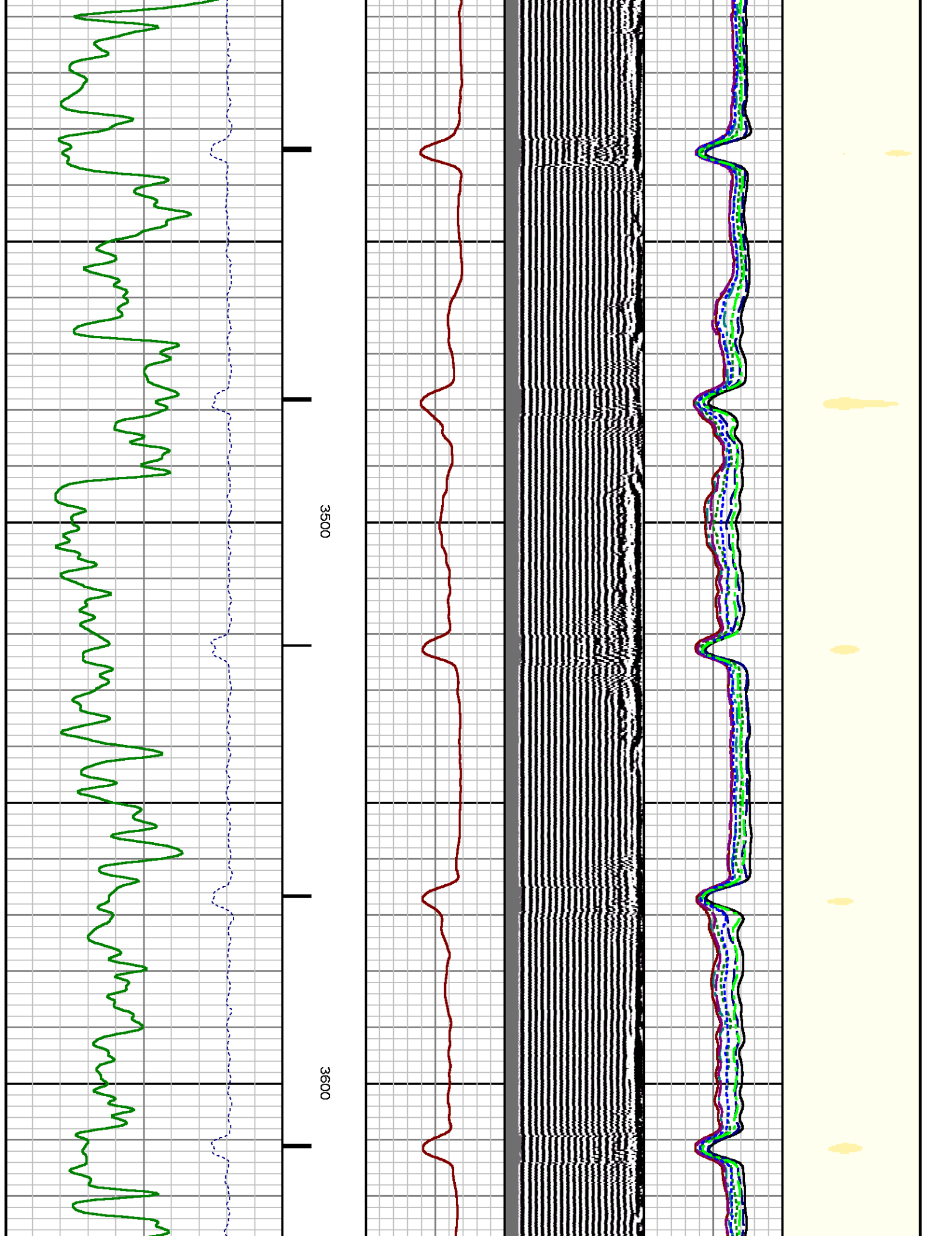


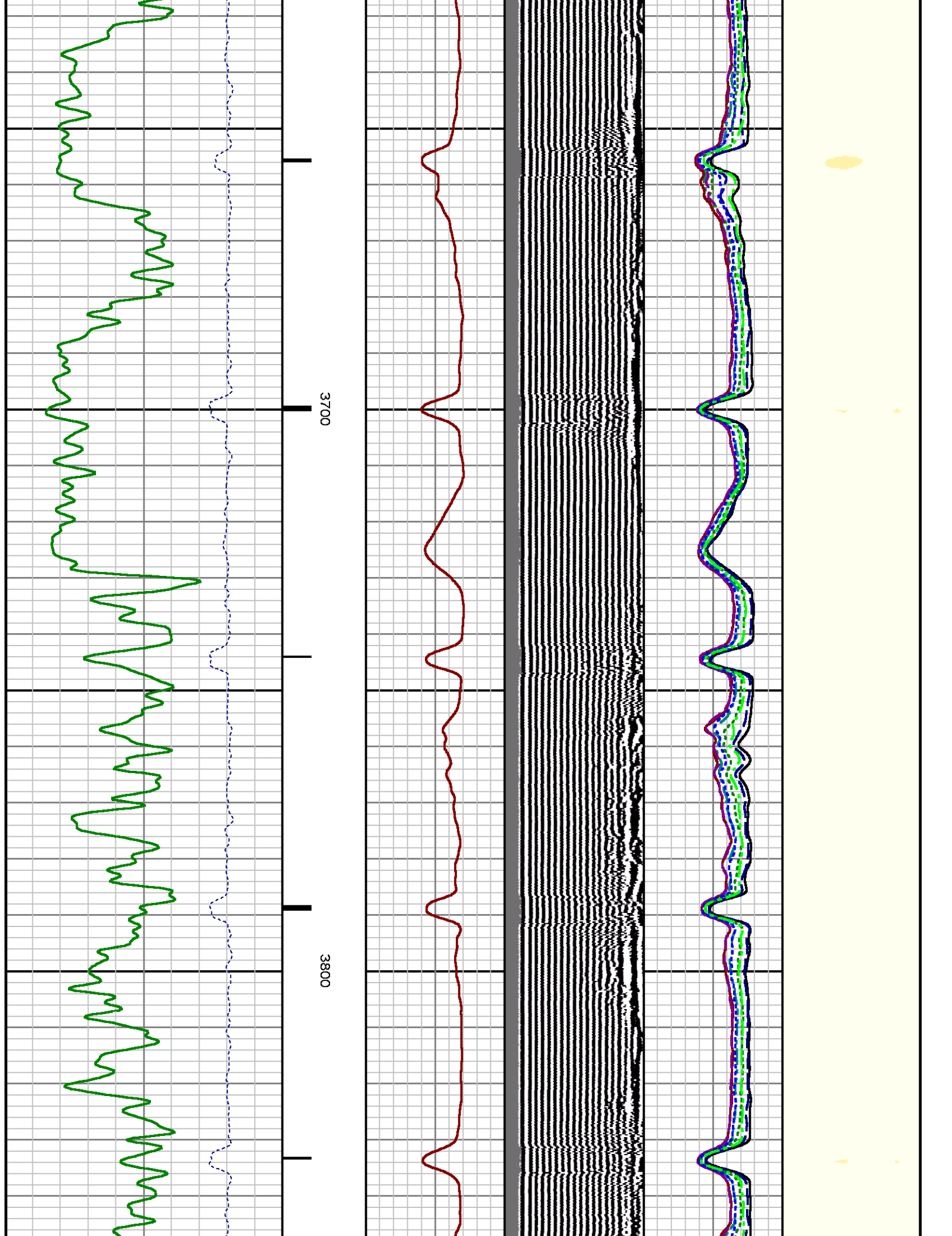
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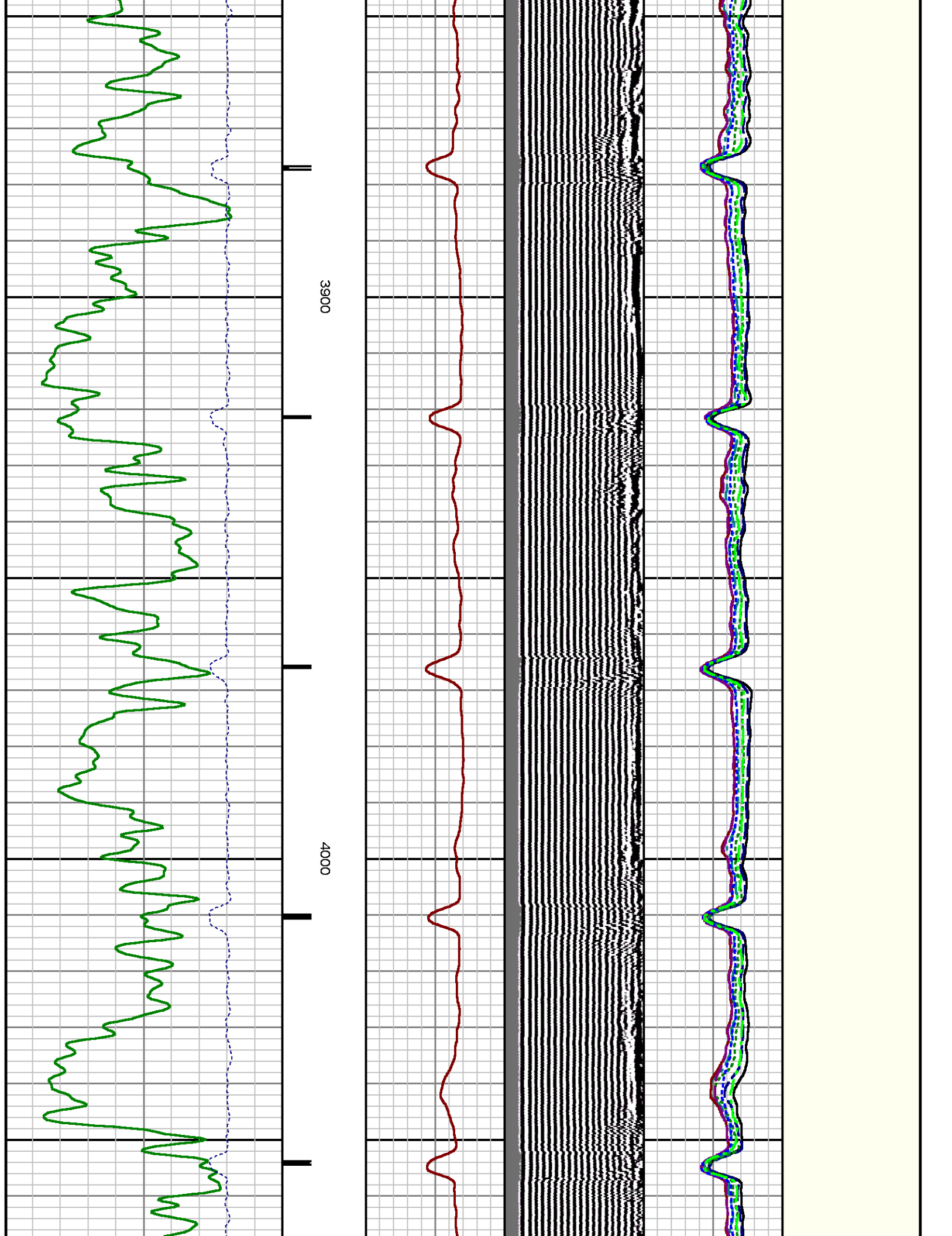
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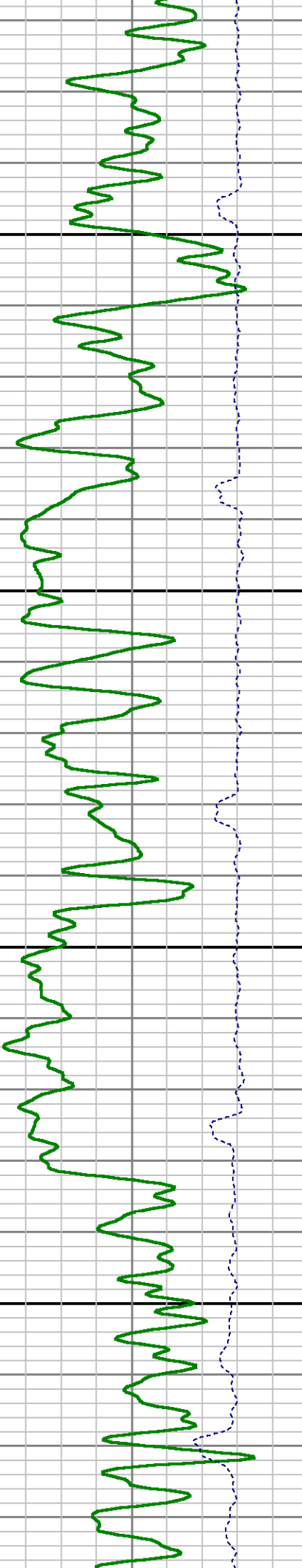
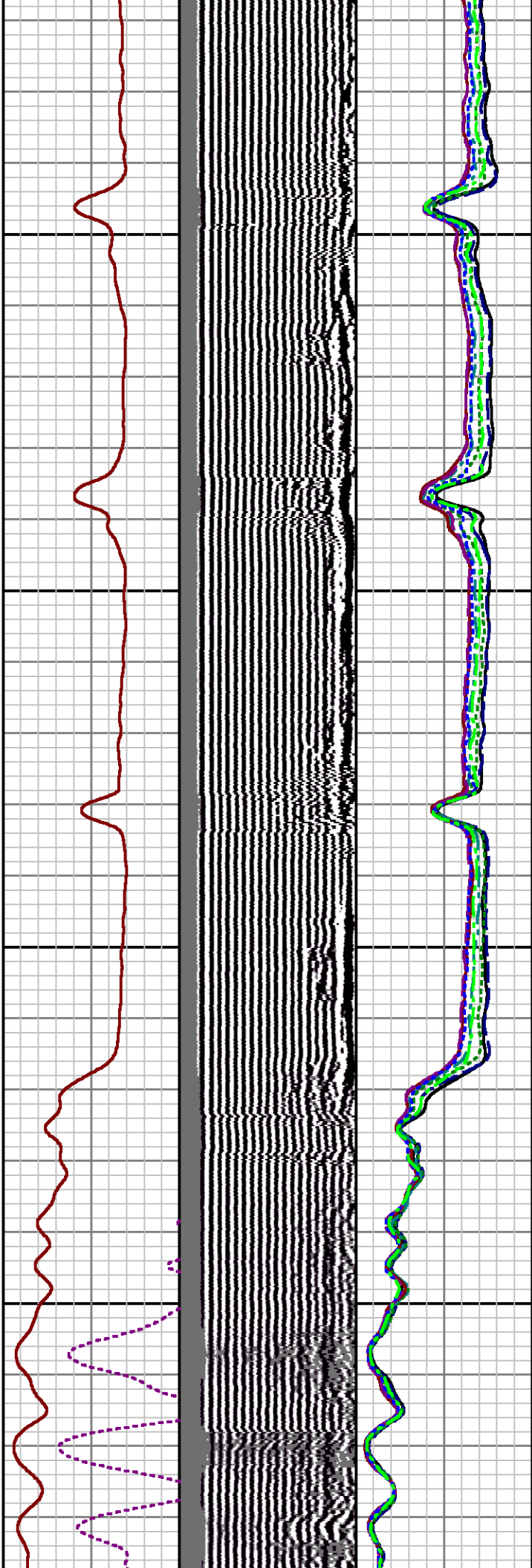
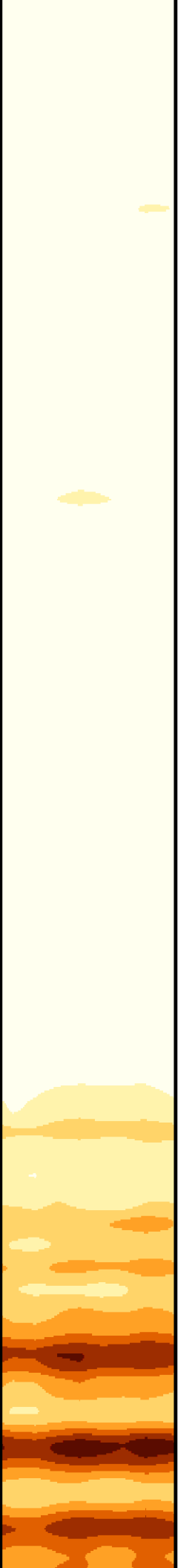


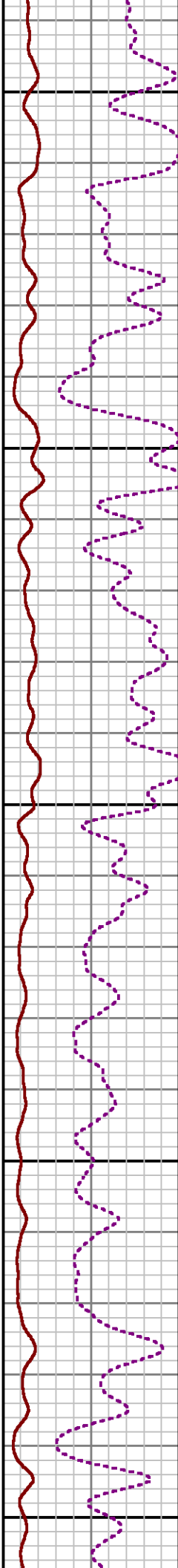
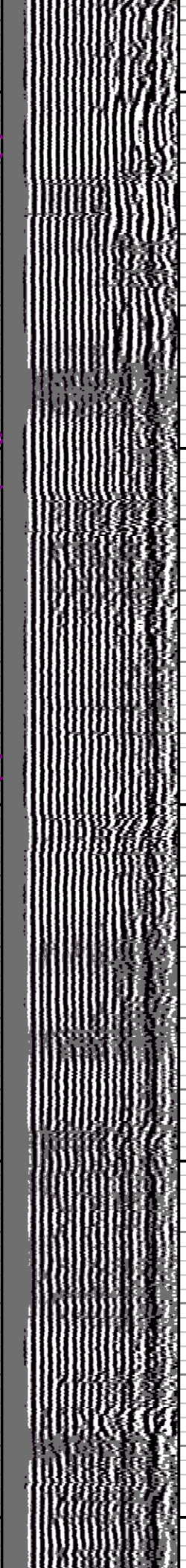
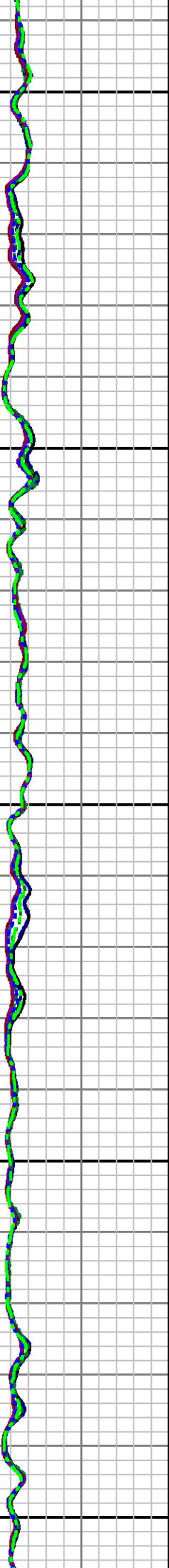
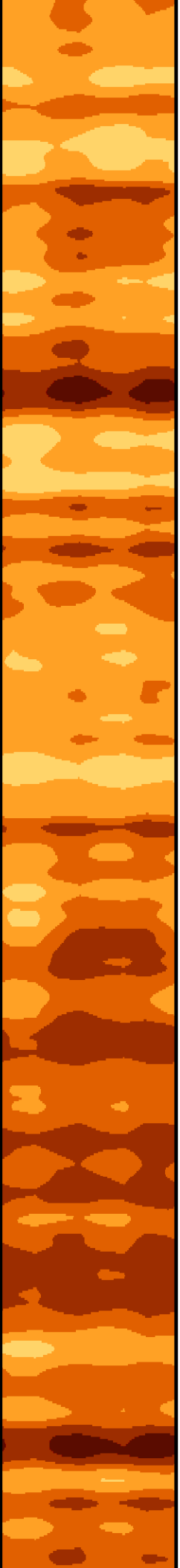








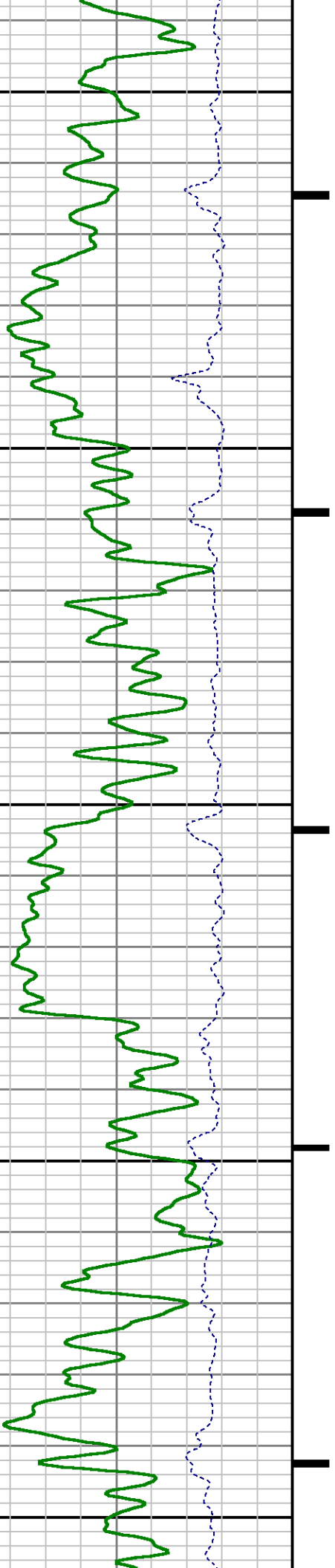


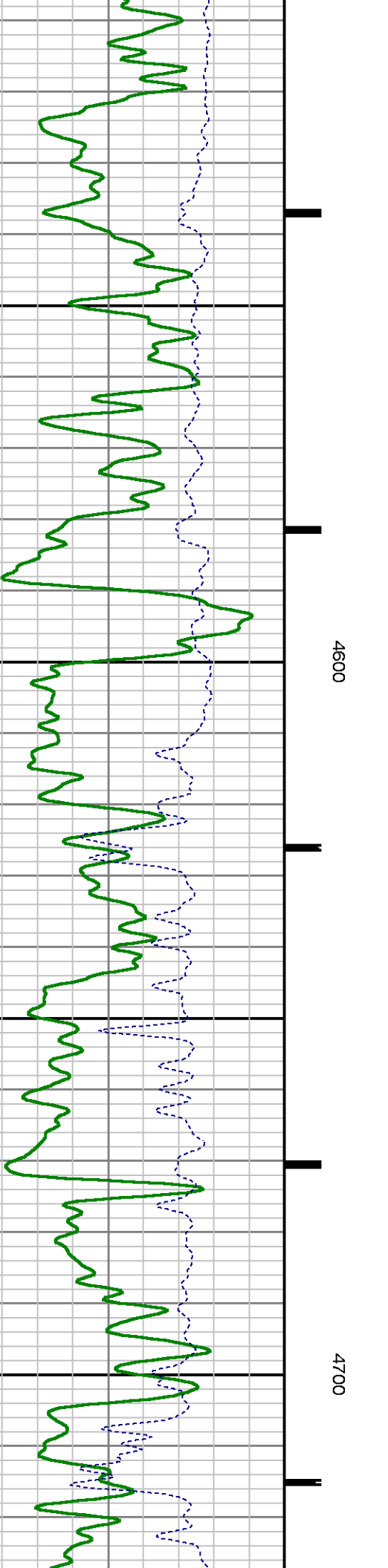
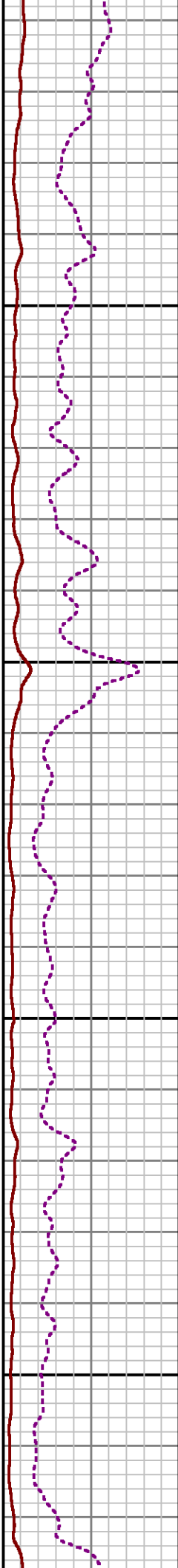
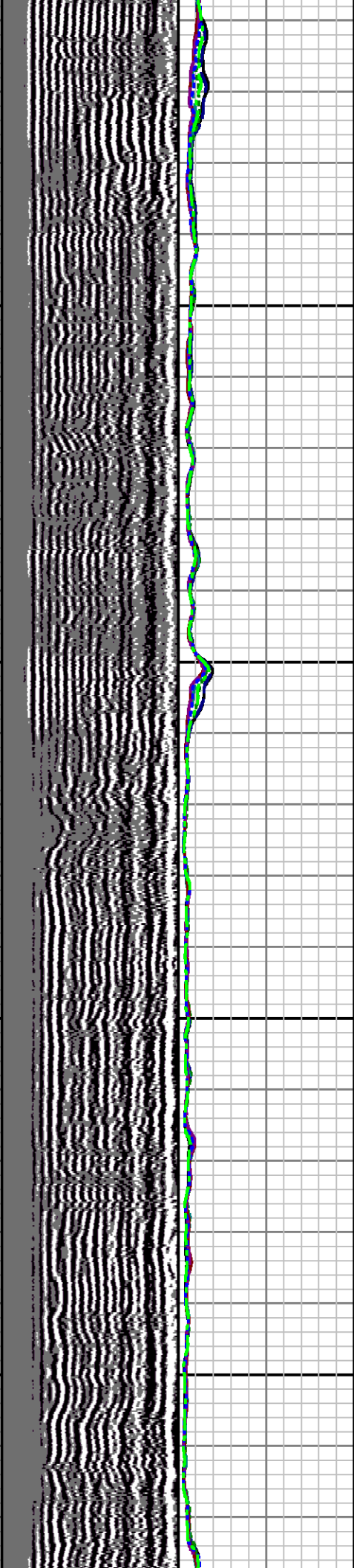


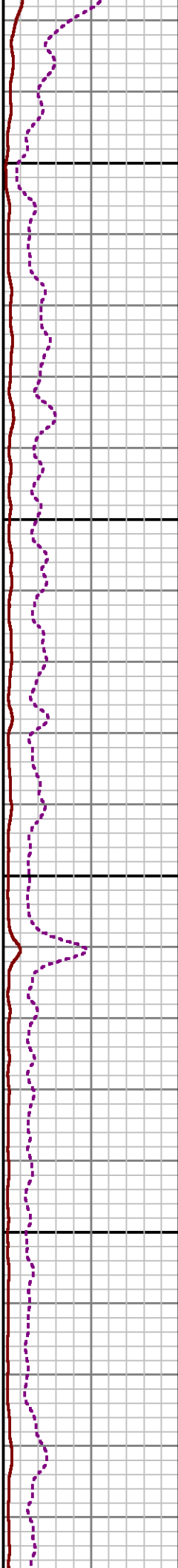
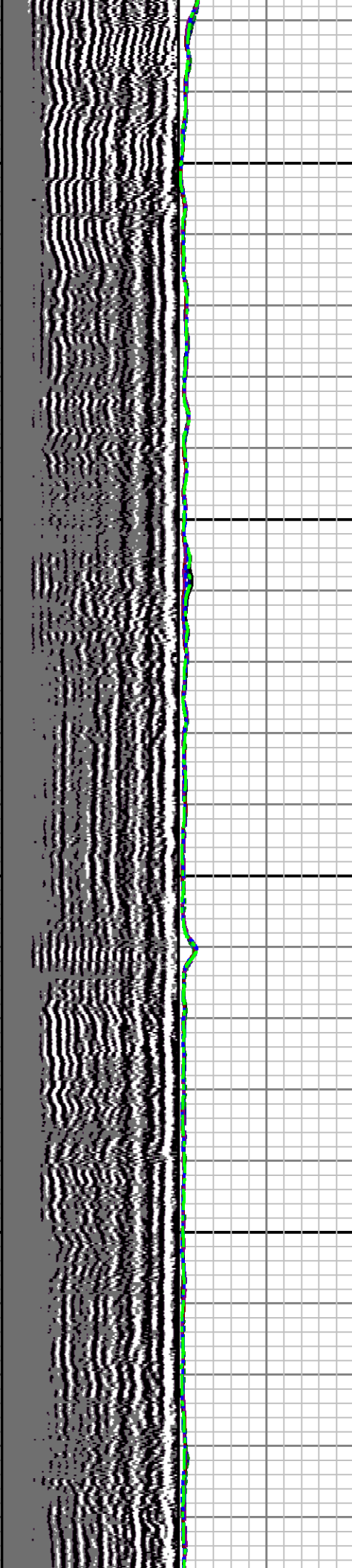
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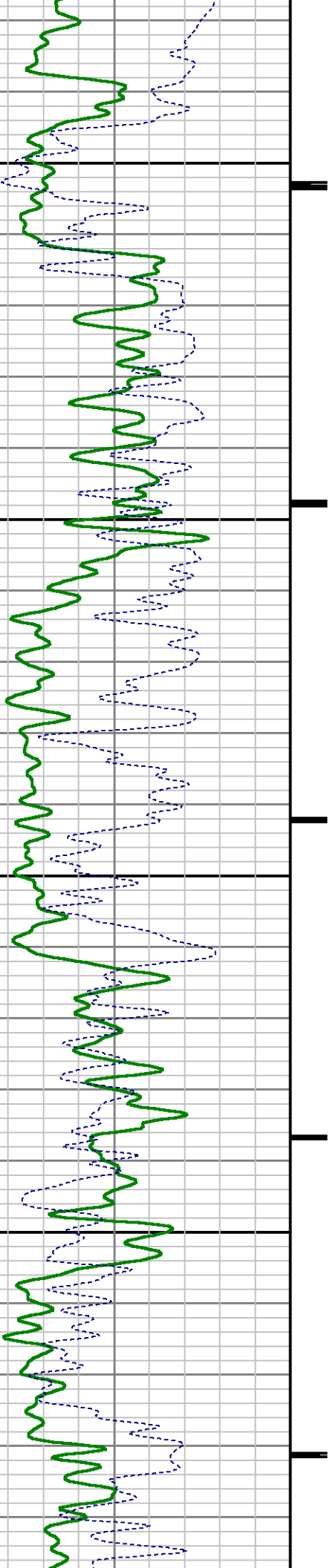


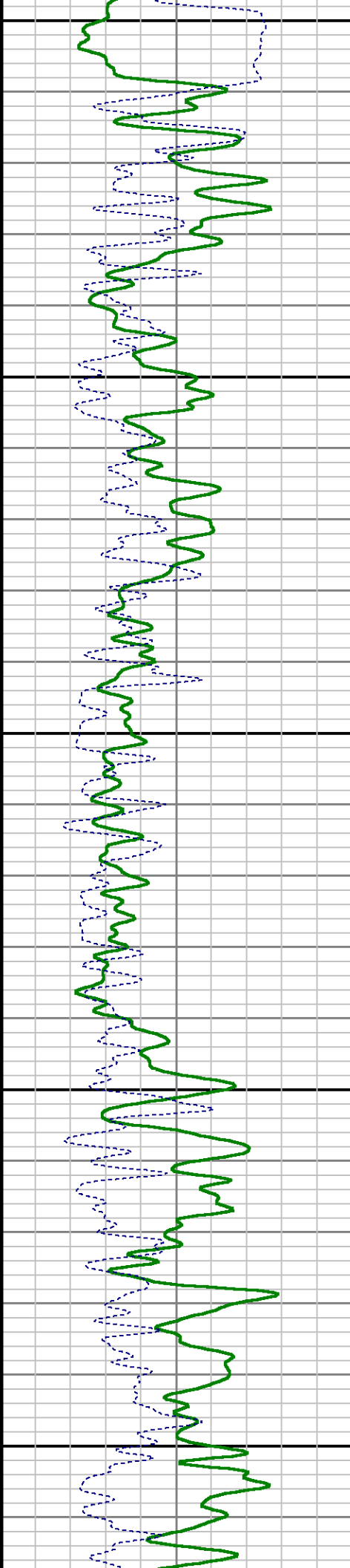
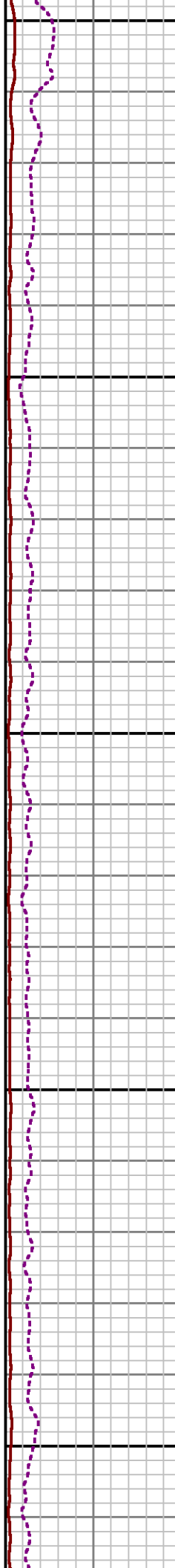
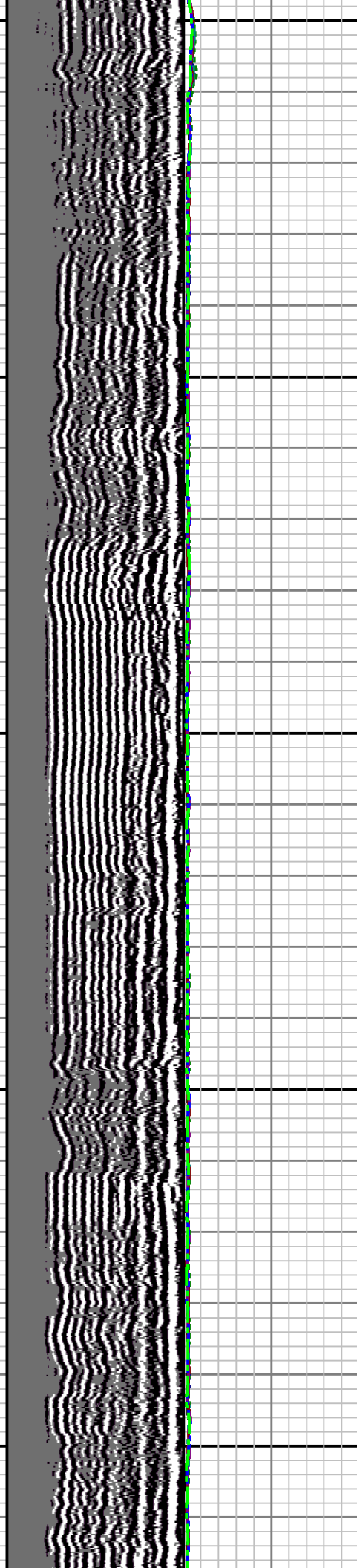


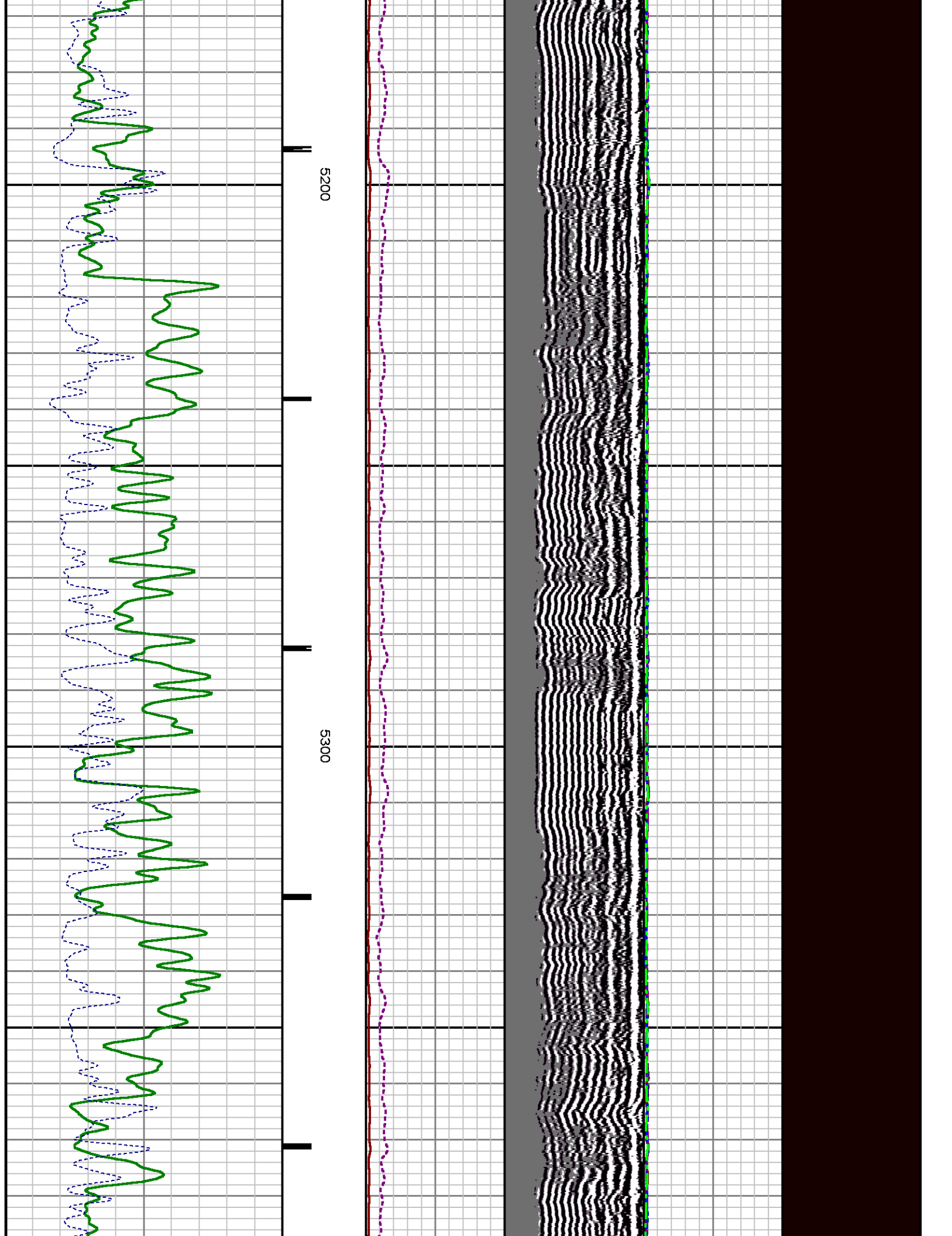


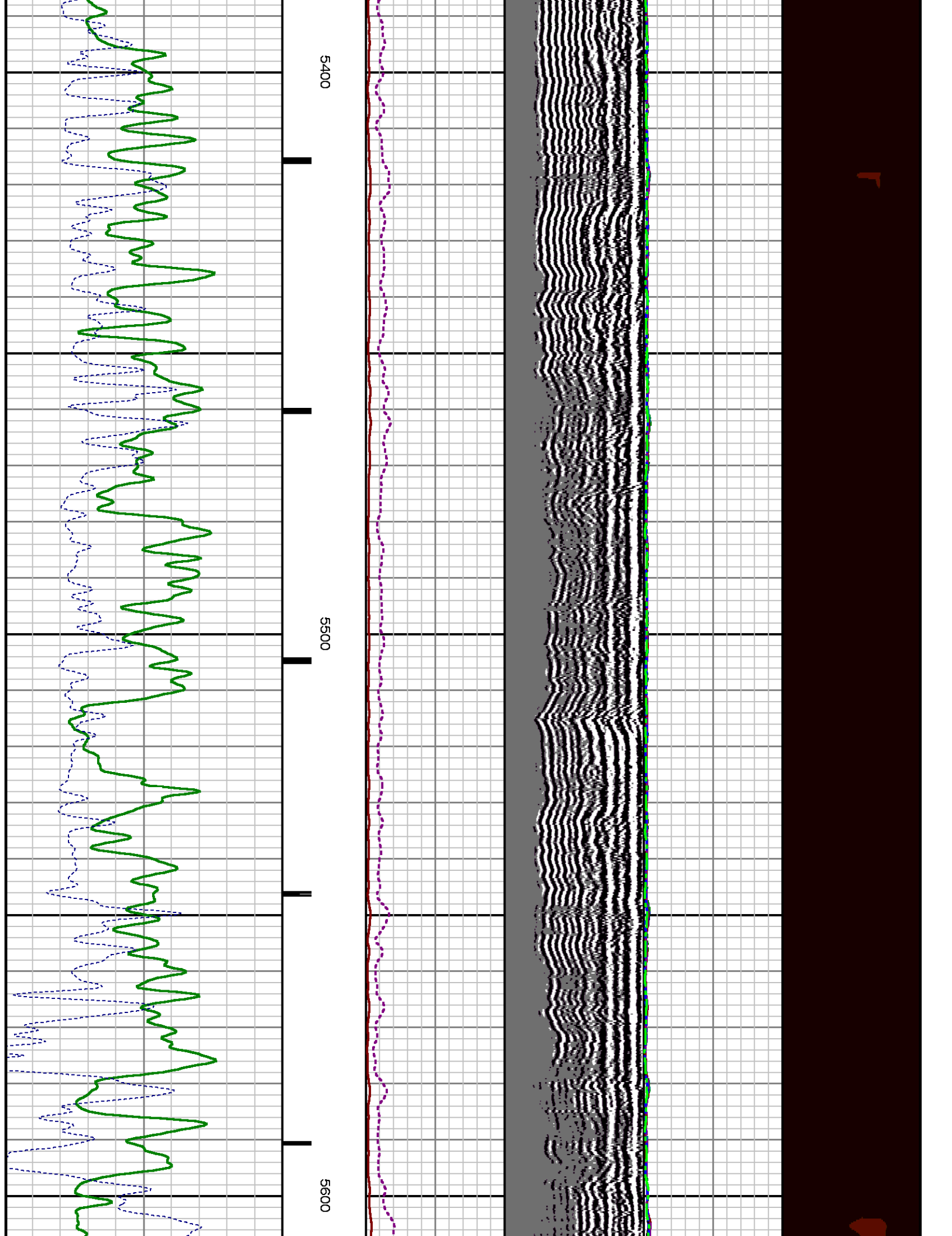
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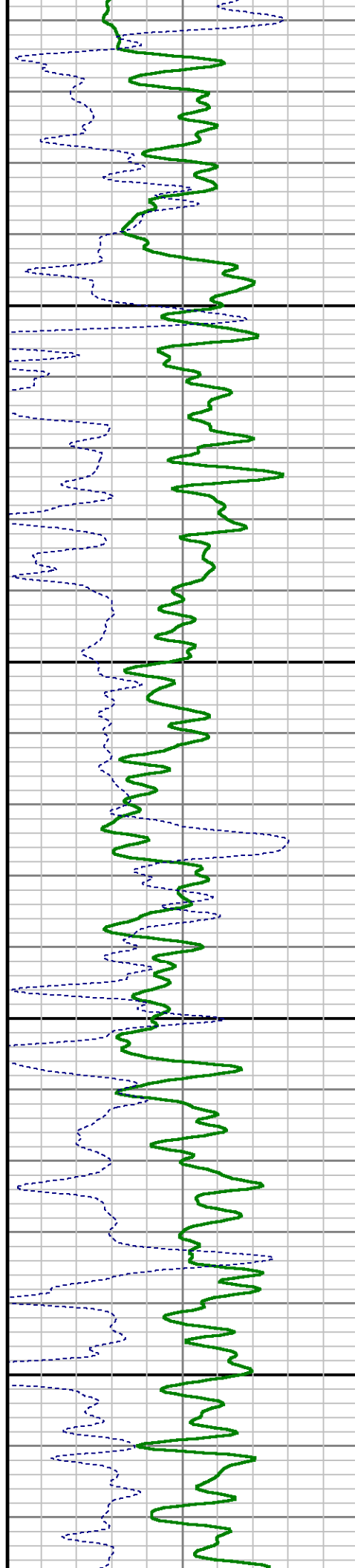
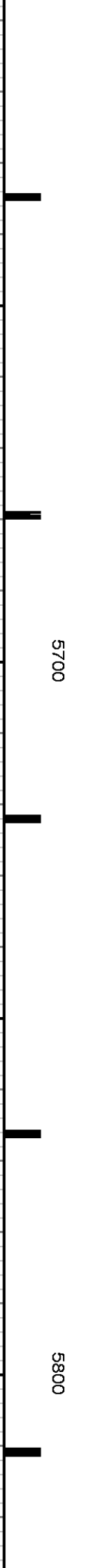
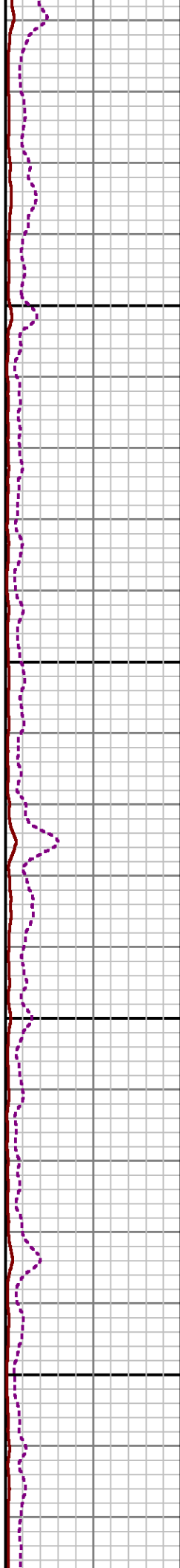
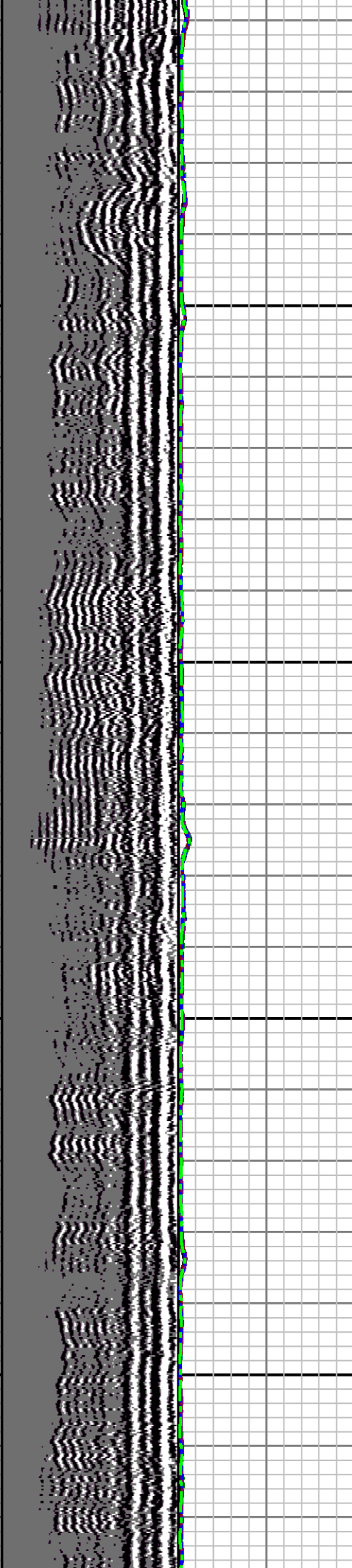
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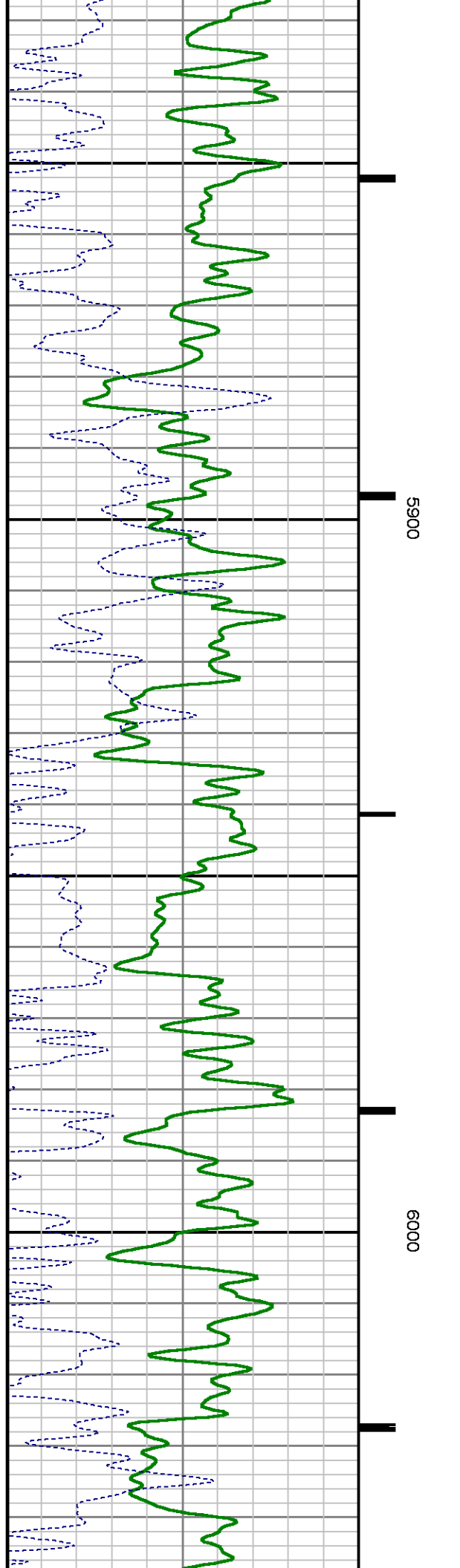
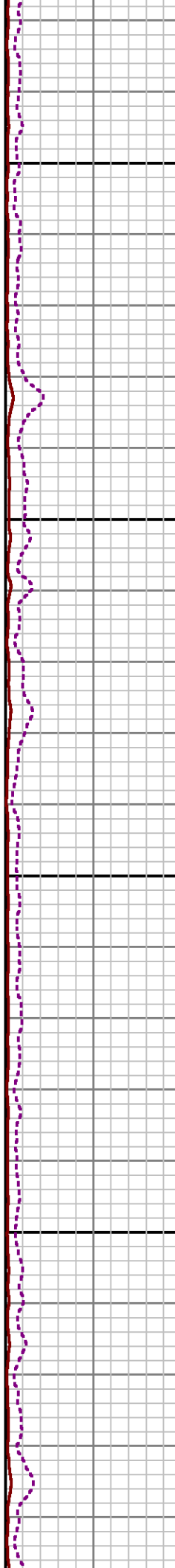
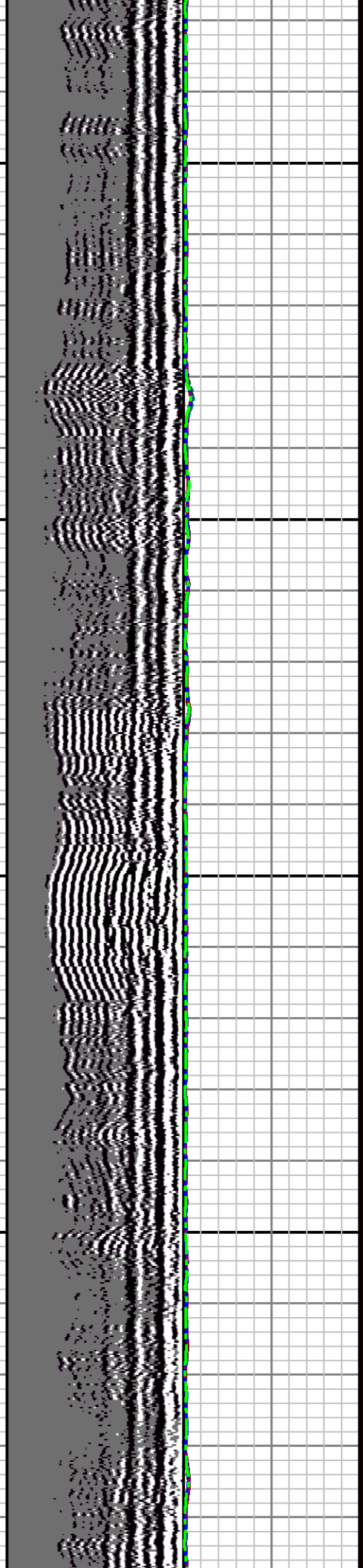


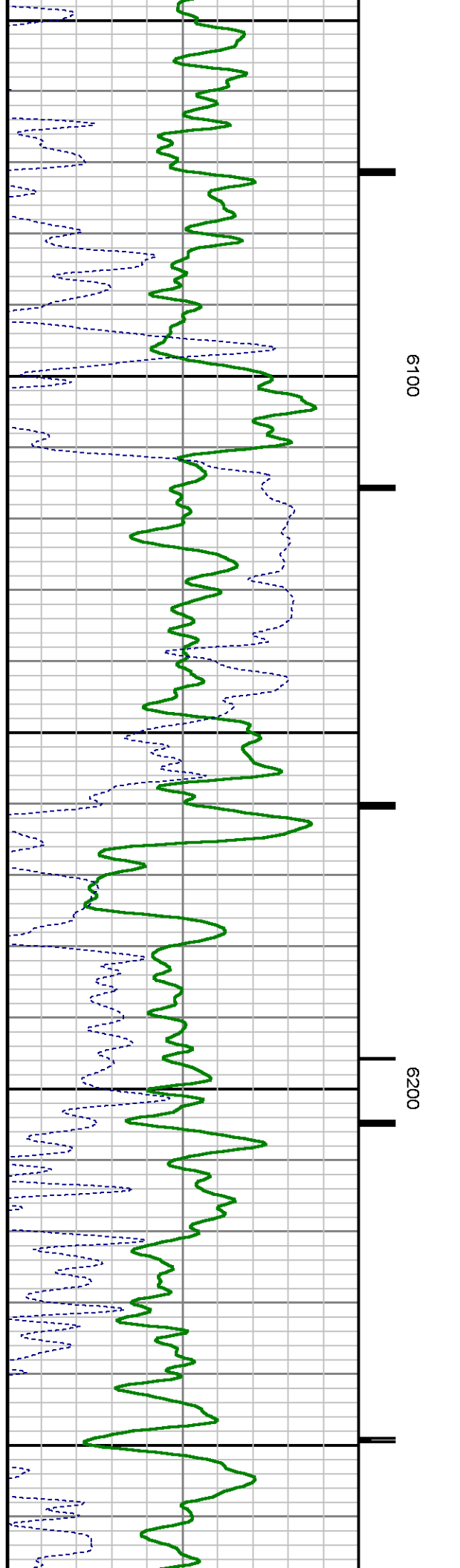
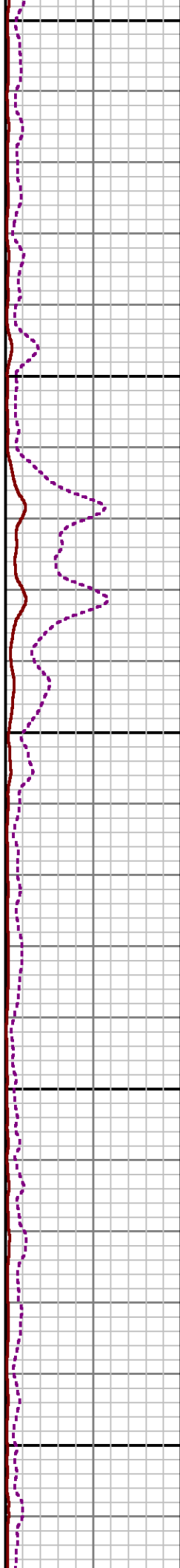
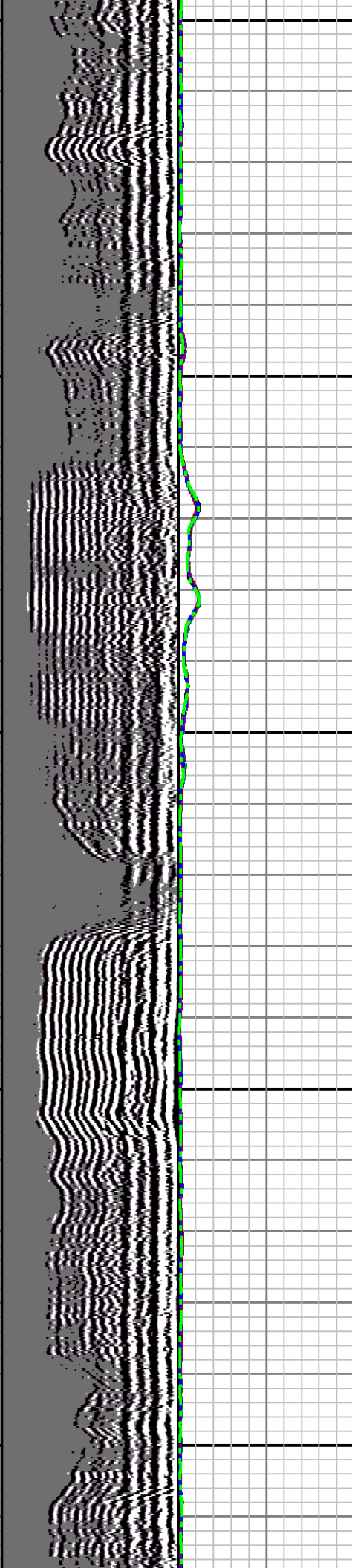


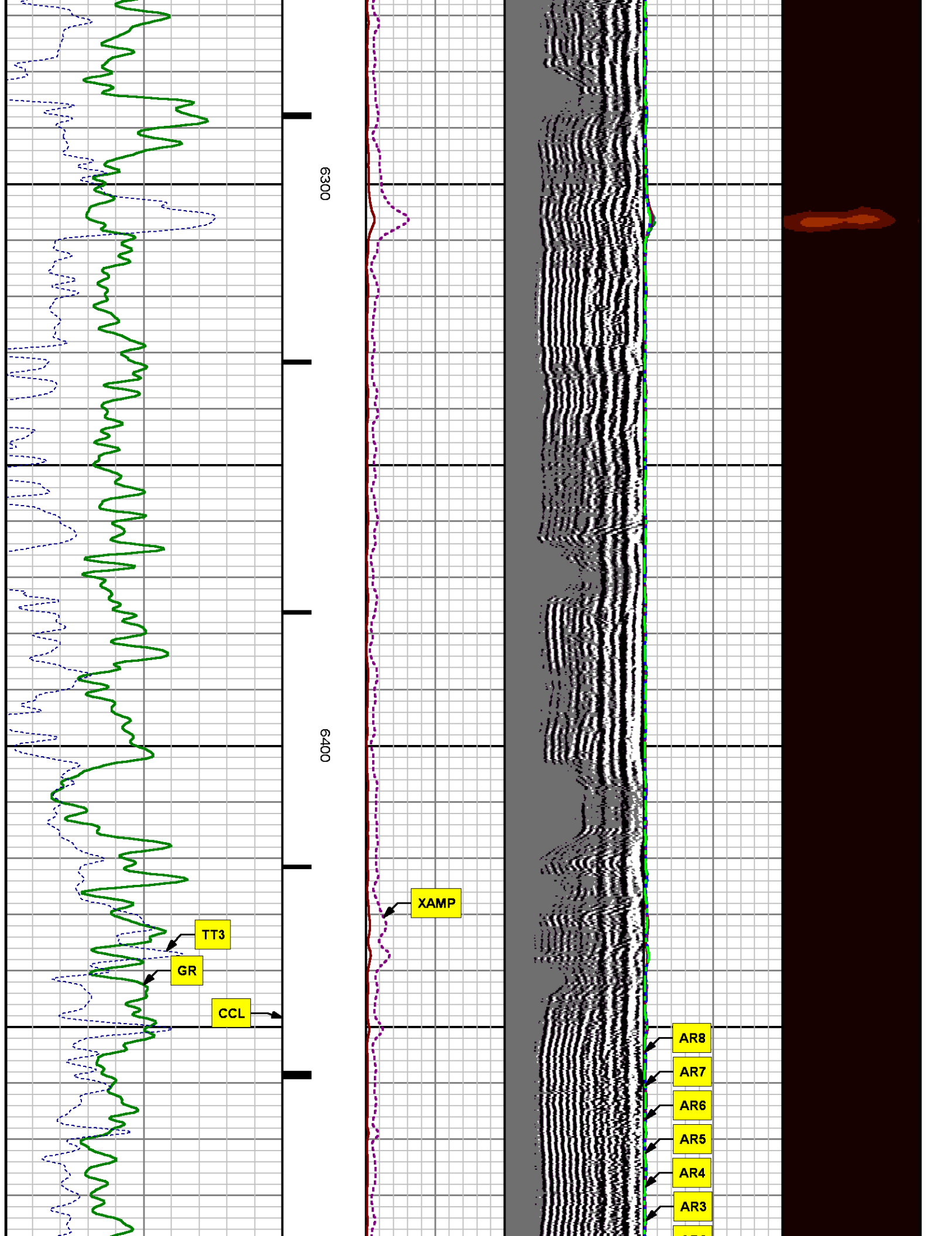


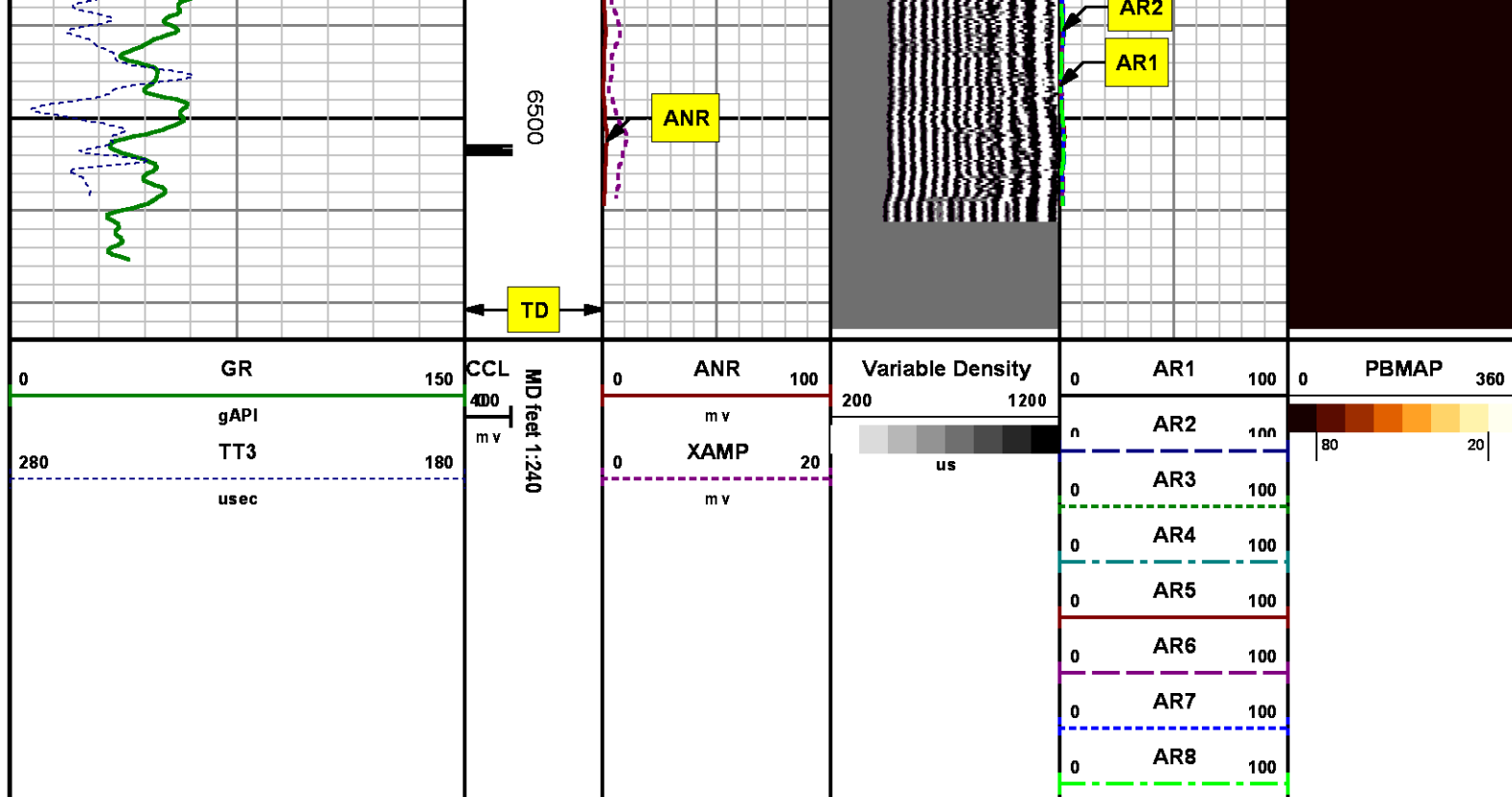


1









*REPEAT SECTION
0 PSI*

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	6206.617	6522.680
RAL	Amp Gate Start Near	195.000	usec	6206.617	6522.680
RAL	Amp Gate Start Radial	195.000	usec	6206.617	6522.680
RAL	Amp Gate Width Far	25.000	usec	6206.617	6522.680
RAL	Amp Gate Width Near	25.000	usec	6206.617	6522.680
RAL	Amp Gate Width Radial	25.000	usec	6206.617	6522.680
RAL	casing od	4.500	inches	6206.617	6522.680
RAL	casing wt	11.600	lbm/ft	6206.617	6522.680
RAL	FB Start Far	291.900	usec	6206.617	6522.680
RAL	FB Start Near	180.000	usec	6206.617	6522.680
RAL	FB Start Radial	180.000	usec	6206.617	6522.680
RAL	FB Thresh Far	10.000	mv	6206.617	6522.680
RAL	FB Thresh Near	4.000	mv	6206.617	6522.680
RAL	FB Thresh Radial	4.000	mv	6206.617	6522.680

DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-12.360	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	-11.360	AFAR	SIG	TT5			
2459XA	-7.250	CCL					
2459XA	-5.390	GR					
2459XA	0.000	NEU					

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

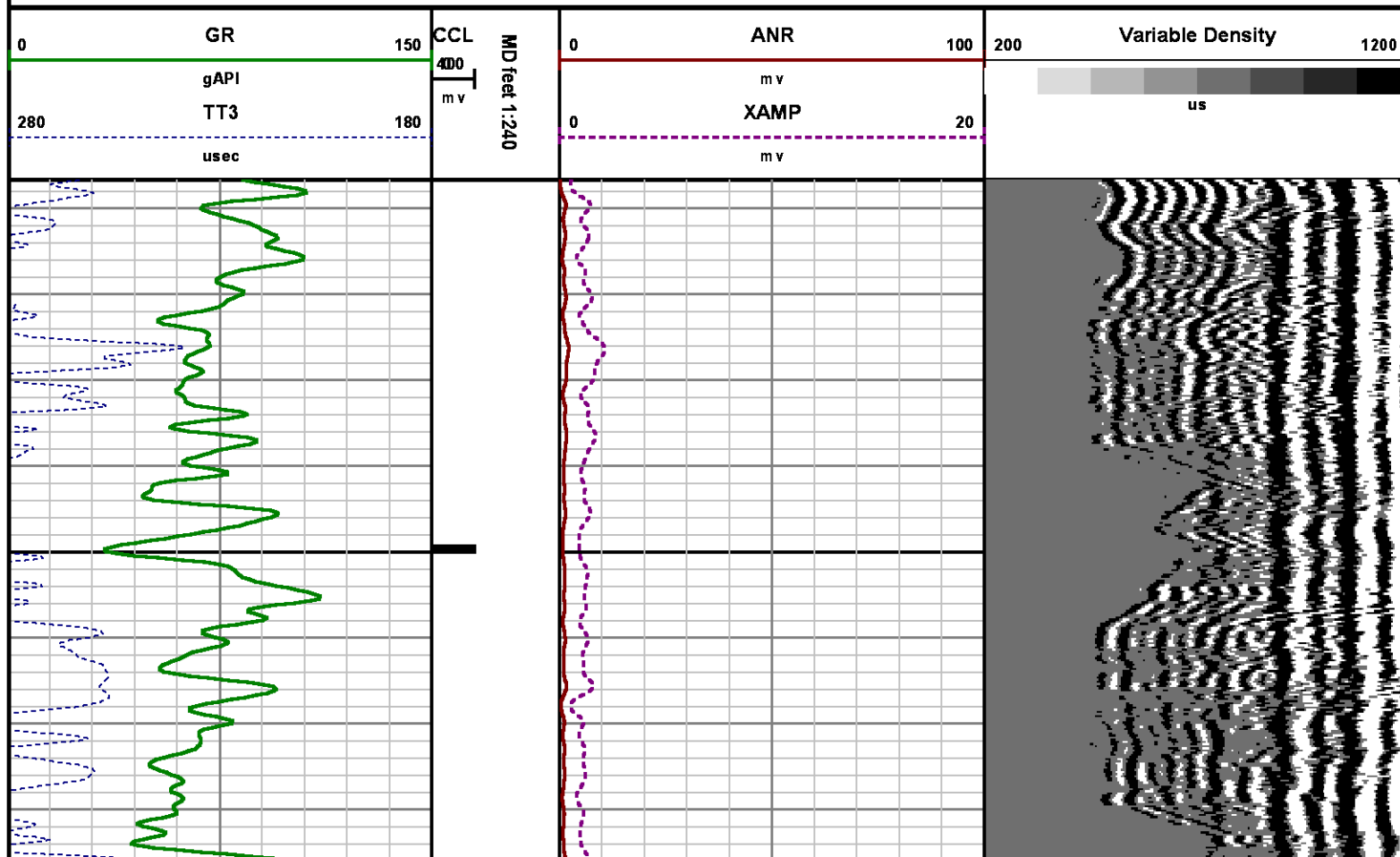
Well : C&C ENERGY GM 323-13

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Mode : PlotMgr 5.4.504

Interval : 6206.68 - 6522.68 feet UP

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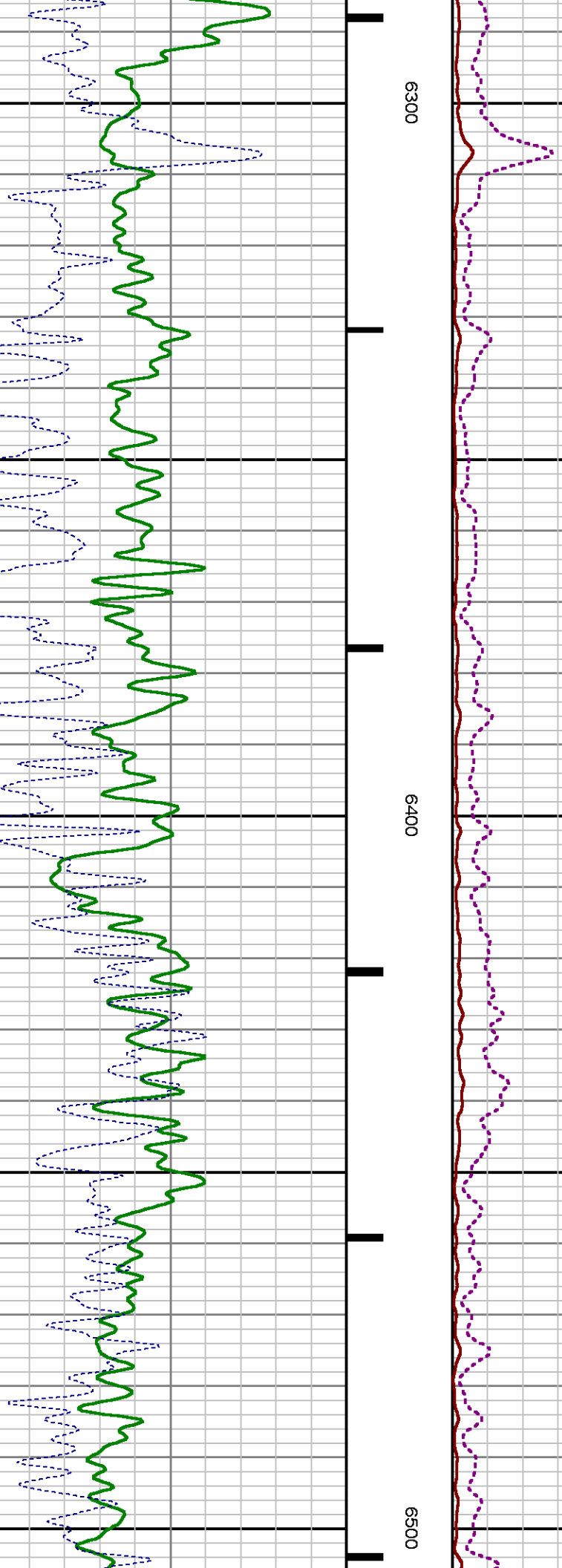


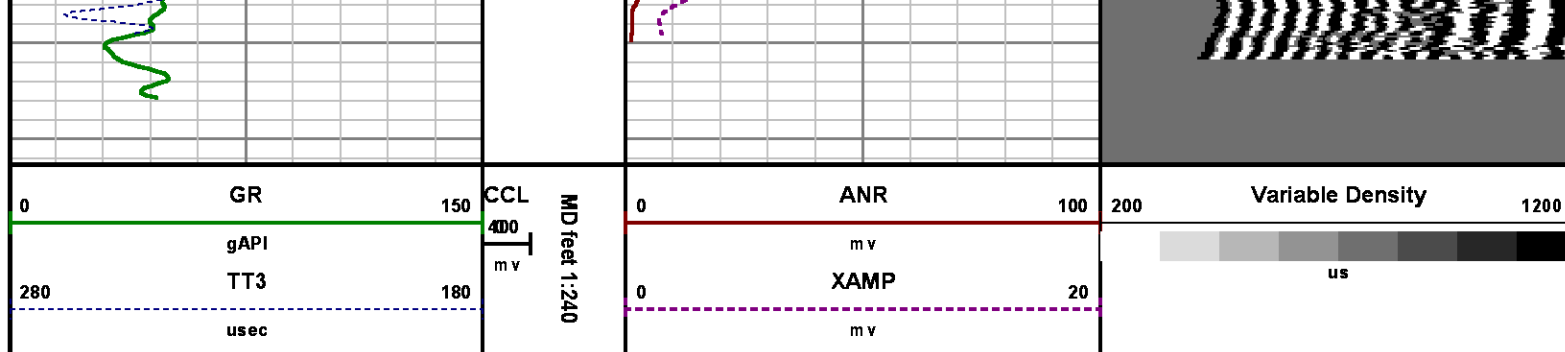


6300

6400

6500





CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP\106JY20_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sun Jul 20 13:08:31 2014 TOOL SERIES: 1426XA ASSET: 106 SEQ: JY20

Tool Delay [usec] -51.00 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	219	216	30	166	25	-0.186	100.00	0.36
3 Ft. Receiver	218	216	30	166	25	-0.187	100.00	0.36
5 Ft. Receiver	326	325	30	220	25	0.672	150.00	0.38
Radial #1	217	216	30	166	25	-0.766	100.00	0.35
Radial #2	216	216	30	166	25	-0.231	100.00	0.35
Radial #3	216	216	30	166	25	-0.712	100.00	0.35
Radial #4	217	216	30	166	25	-0.439	100.00	0.36
Radial #5	217	216	30	166	25	-0.496	100.00	0.36
Radial #6	218	216	30	166	25	-0.209	100.00	0.36
Radial #7	218	216	30	166	25	-0.585	100.00	0.36
Radial #8	219	216	30	166	25	-0.232	100.00	0.36

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\106JY20 fld.cal

WELLSITE CALIBRATION SUMMARY

Tool Delay [usec]	-51.00	Casing OD in	4.50	Casing Wt lbm/ft	11.60	Casing ID in	4.00
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RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	166	25	-0.209	0.000	0.99	100.000
3 Ft. Receiver	195	25	-2.824			
5 Ft. Receiver	305	25	-3.963			
Radial #1	195	25	-3.823			
Radial #2	195	25	-3.745			
Radial #3	195	25	-3.428			
Radial #4	195	25	-3.564			
Radial #5	195	25	-3.192			
Radial #6	195	25	-3.354			
Radial #7	195	25	-2.256			
Radial #8	195	25	-2.650			

GAMMA RAY

Calibration File: C:\case\calver\GR\121J2.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Tue Jan 21 14:45:39 2014 TOOL SERIES: 2459XA ASSET: 121 SEQ: J2

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
SK2 WA612	71.78	314.67	0.762	54.67	239.67	185.00

Verification File: C:\case\calver\GR\121J2.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Tue Jan 21 14:46:51 2014 TOOL SERIES: 2459XA ASSET: 121 SEQ: J2

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
SK2 WA612	74.22	316.93	0.762	56.53	241.40	184.86

TOOL DIAGRAM

PROBE 2 3/4 DUAL RECEIVER RADII

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

Probe GR/CCL/NEU

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

XMIT	15.62'
NEAR RCVR	12.54'
FAR RCVR	10.62'
CCL	8.92'
GR	7.06'
NEU	1.67'
	0.00'

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

**Baker Atlas****CASE**

Company	WPX ENERGY		
Well	C&C ENERGY GM 323-13		
Field	GRAND VALLEY		
County	GARFIELD	State	COLORADO

File No:

CH088401

API No:

05045222570000

Location

SHL: 282' FSL & 987' FWL (SEC 12)
BHT: 1877' FNL & 642' FWL (SWNW SEC 13)

SEC	13	TWP	7S	RGE	96W
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Elevations

KB	5165 ft
DF	
GL	5141 ft

13 7S 96W
GM 24-12 PAD
H&P 318