



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: CH089582

Company Well Field County State COL ORADO

API No: 05045219930000

Location SHL: 1154' FSL & 1391' FEL
BHL: 1465' FSL & 1679' FEL (NWSE)

Other Services RPM

25 6S 94W

RWF 43-25 PAD

NABORS 677

Permanent Datum

Log Measured From

Drill Measured From

GL Elevation 6234 ft

KB 26 ft Above P. D.

KELLY BUSHING

Elevations

KB 6260 ft

DF

GL 6234 ft

Date 31/AUG/14

Run ONE

Service Order US089582J

Depth Driller 8771 ft

Depth Logger 8731 ft

Bottom Logged Interval 8721 ft

Top Logged Interval 26 ft

Time Started 0800

Time Finished 1200

Operator Rig Time 4 HRS

Type of Fluid in Hole WATER

Fluid Density NA

Salinity NA

Fluid Level 74 ft

Logged Cement Top NA

Wellhead Pressure 0 psi

Maximum Hole Deviation NA

Nominal Logging Speed 66 fpm

Maximum Recorded Temperature 244 degF

Reference Log Date NONE

Equipment No. 4271 Location GRAND UCTION

Recorded By FLOYD RENEAU

Witnessed By BOB CADY

- 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	26 ft	1102 ft
8.75 in	1102 ft	8771 ft

Casing Record

Size	Weight	Grade	From	To
9.625 in			26 ft	1102 ft
4.5 in	11.6 lbm/ft	1-80	26 ft	8771 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 feet.
Logged with zero PSI at wellhead.

BHT = 244°F

SJ = 5111'-5131'

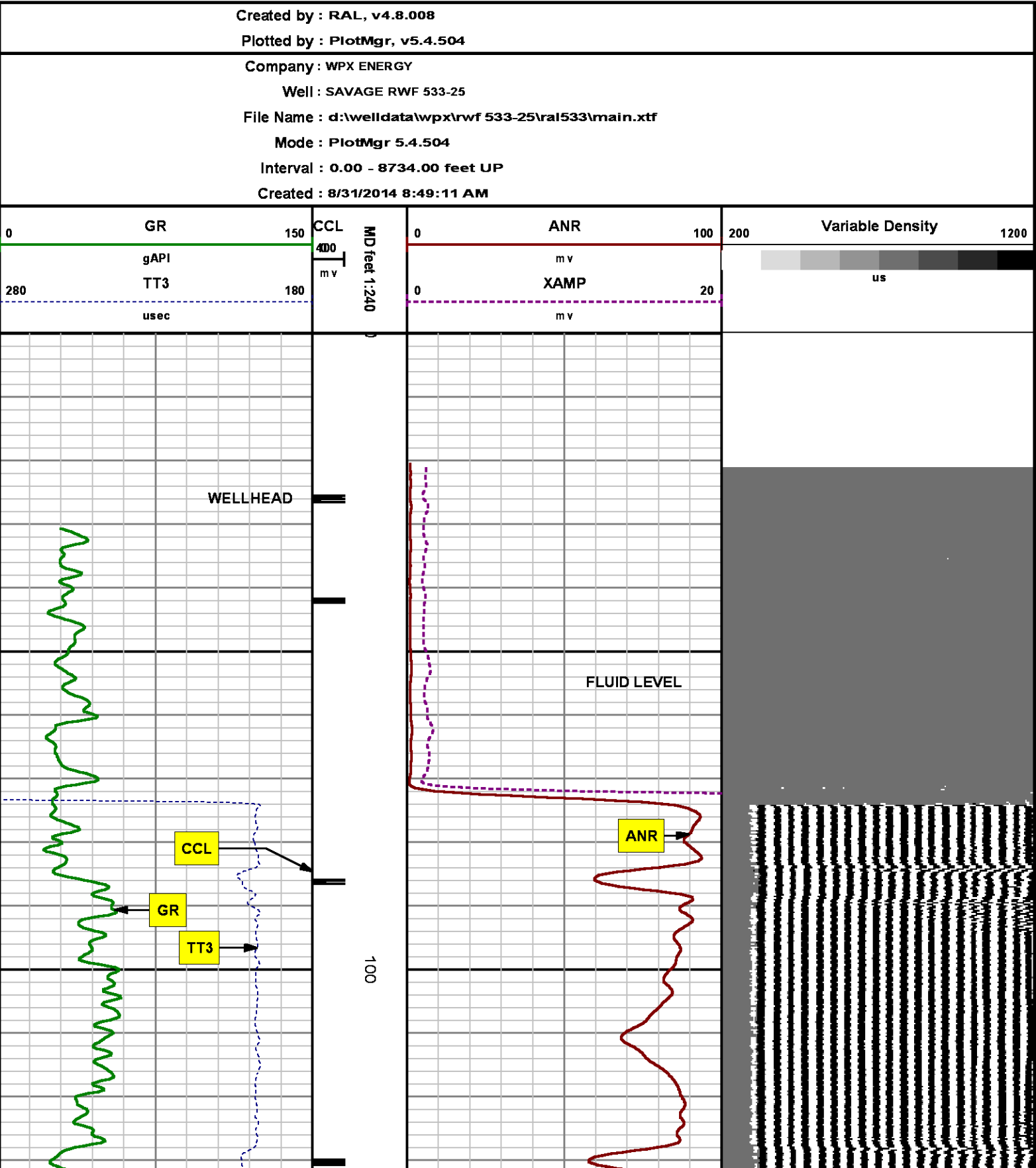
Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1426XA	10218496	CENT
1	1	GR/CCL	1355XA	11871510	CENT

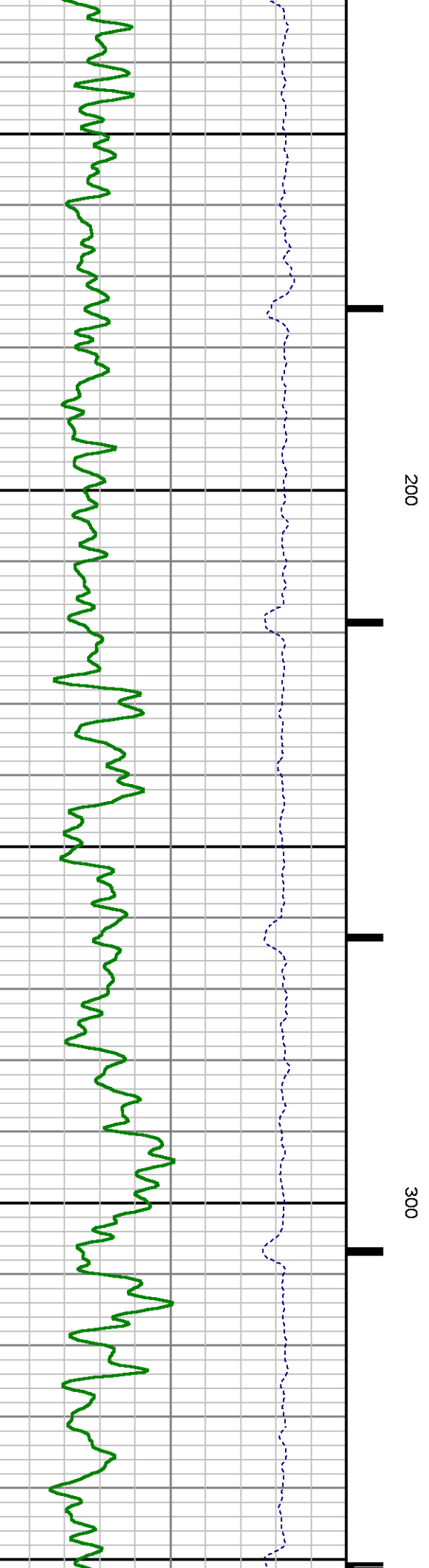
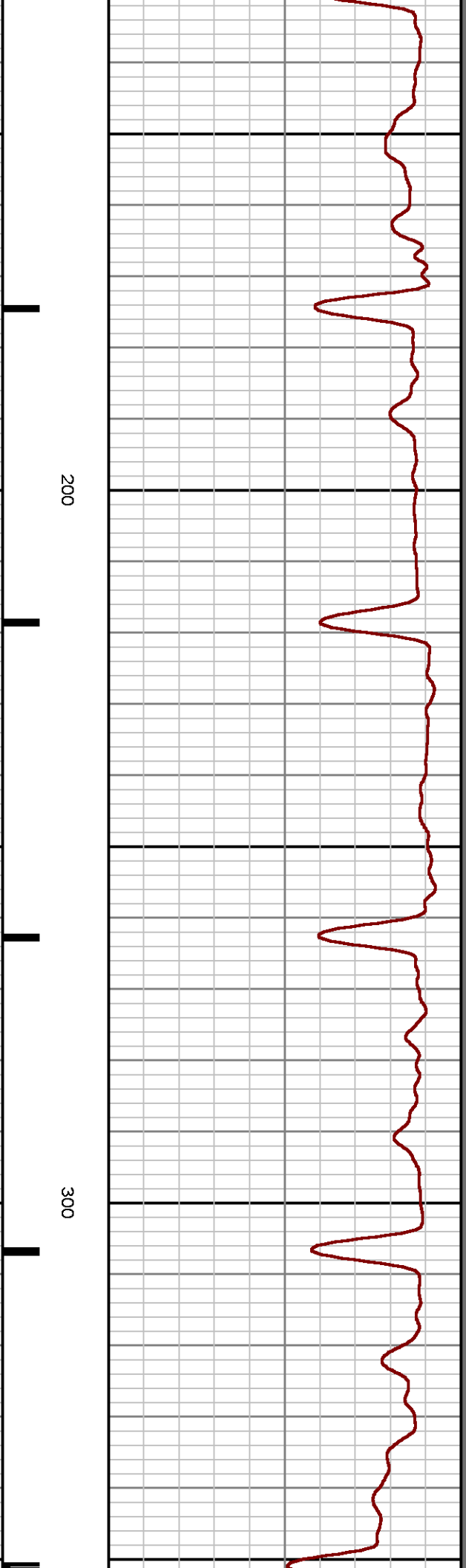
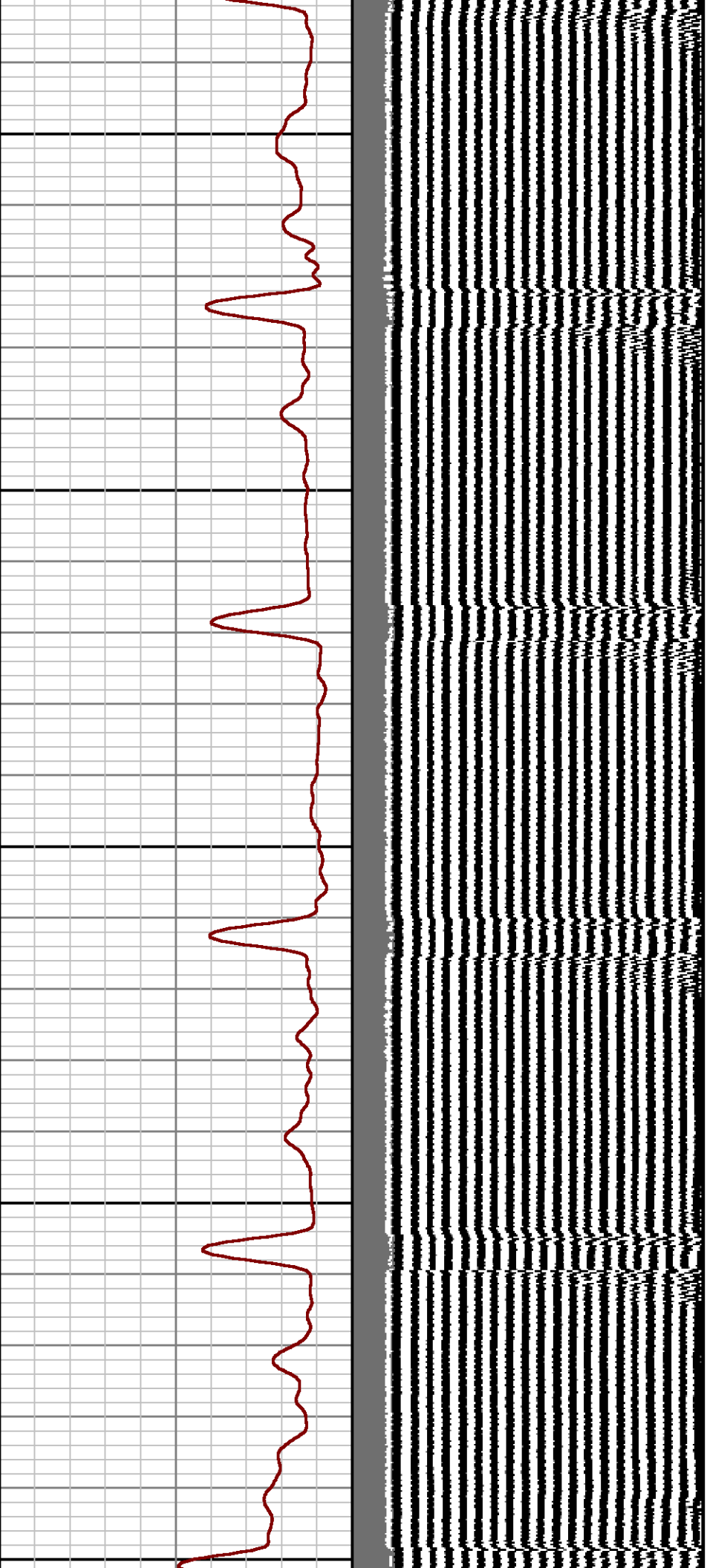
PRIMARY PRESENTATION
0 PSI

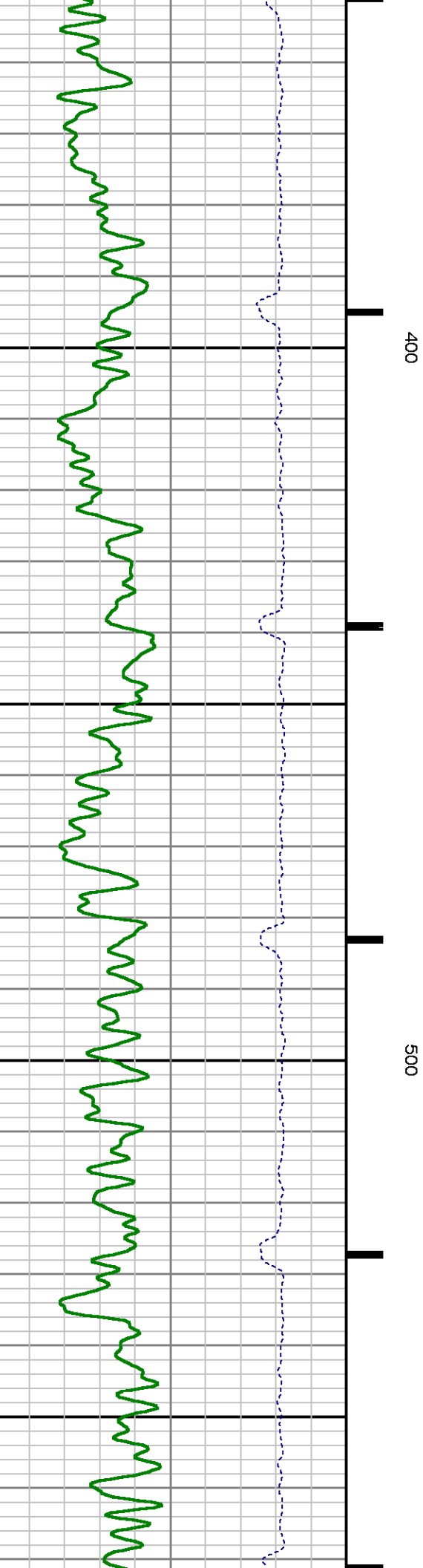
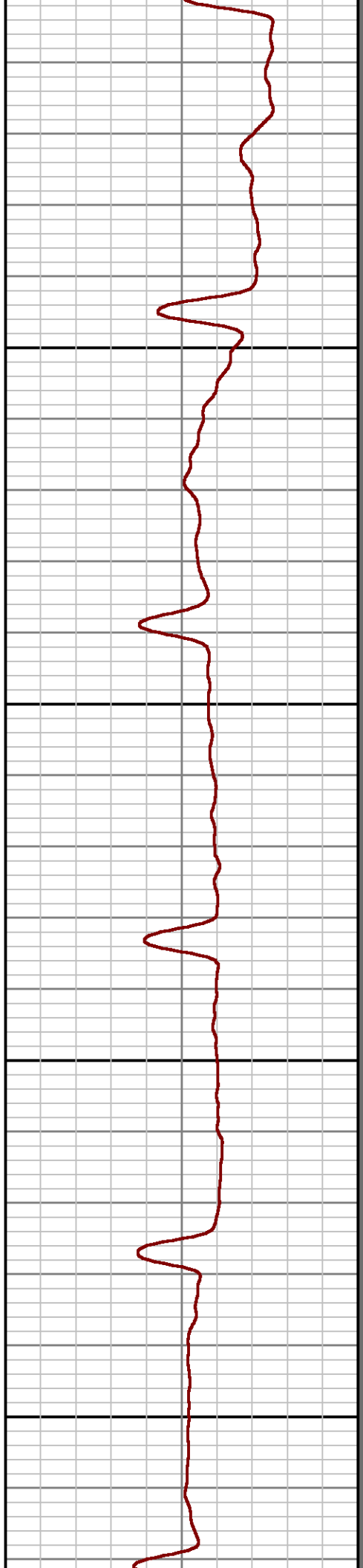
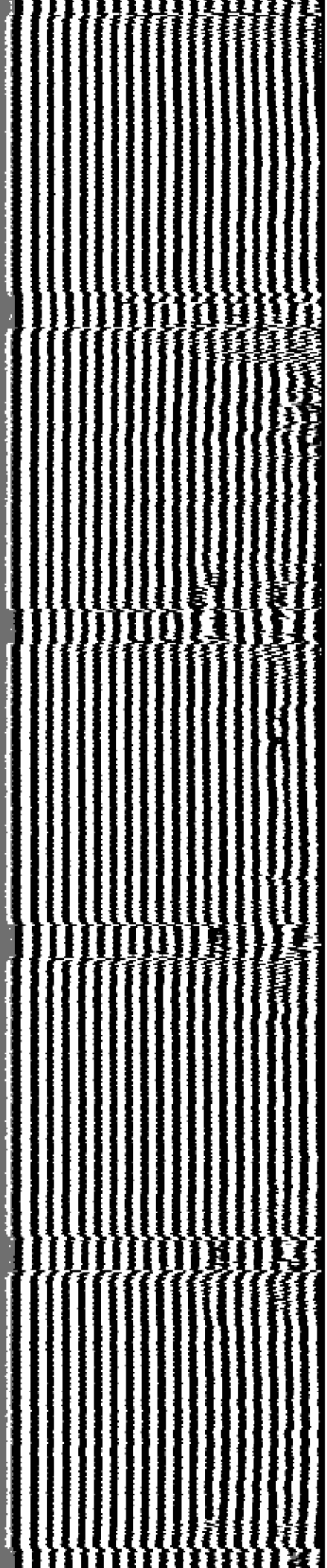
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	310.000	usec	30.843	8743.500
RAL	Amp Gate Start Near	195.000	usec	30.843	8743.500
RAL	Amp Gate Start Radial	195.000	usec	30.843	8743.500
RAL	Amp Gate Width Far	25.000	usec	30.843	8743.500
RAL	Amp Gate Width Near	25.000	usec	30.843	8743.500
RAL	Amp Gate Width Radial	25.000	usec	30.843	8743.500
RAL	casing od	4.500	inches	30.843	8743.500
RAL	casing wt	11.600	lbm/ft	30.843	8743.500
RAL	FB Start Far	291.900	usec	30.843	8743.500
RAL	FB Start Near	180.000	usec	30.843	8743.500
RAL	FB Start Radial	180.000	usec	30.843	8743.500
RAL	FB Thresh Far	10.000	mv	30.843	8743.500
RAL	FB Thresh Near	4.000	mv	30.843	8743.500
RAL	FB Thresh Radial	4.000	mv	30.843	8743.500
RAL	Fluid Travel Time	200.000	usec/ft	30.843	8743.124

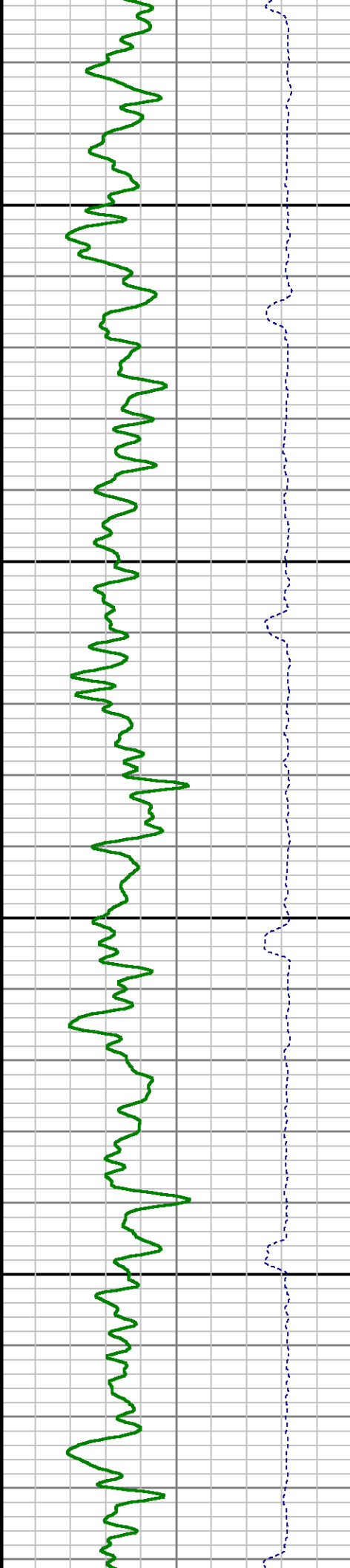
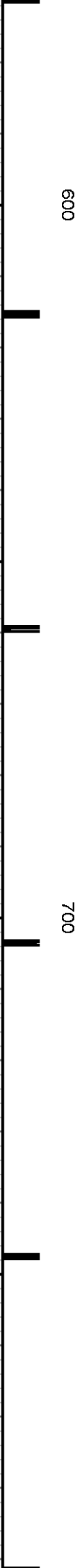
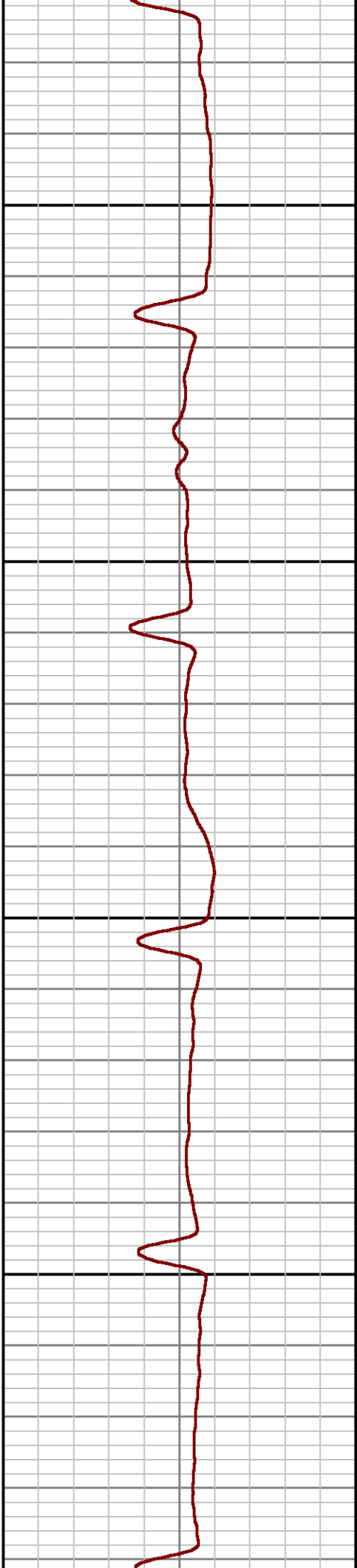
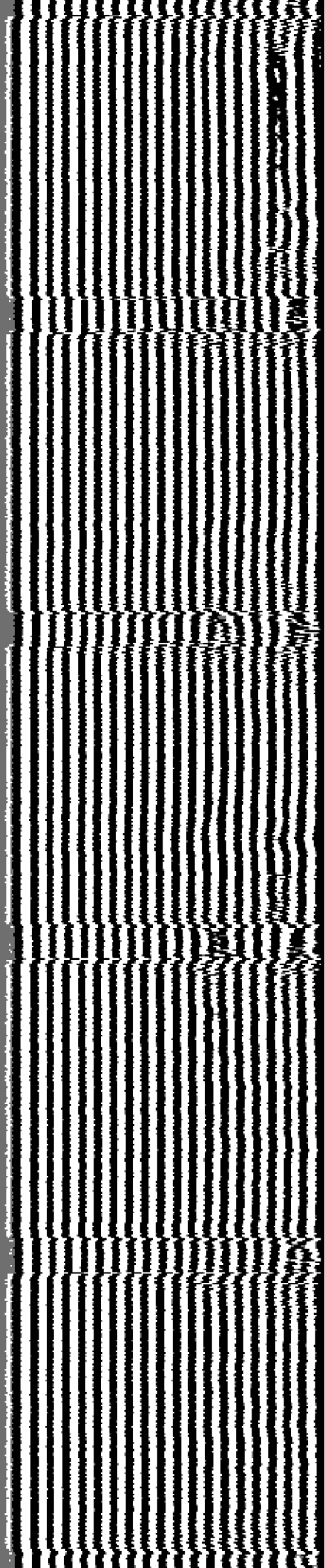
DEPTH OFFSETS							
(for Acquired Curves)							
SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-11.000	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	CHV	FPR2

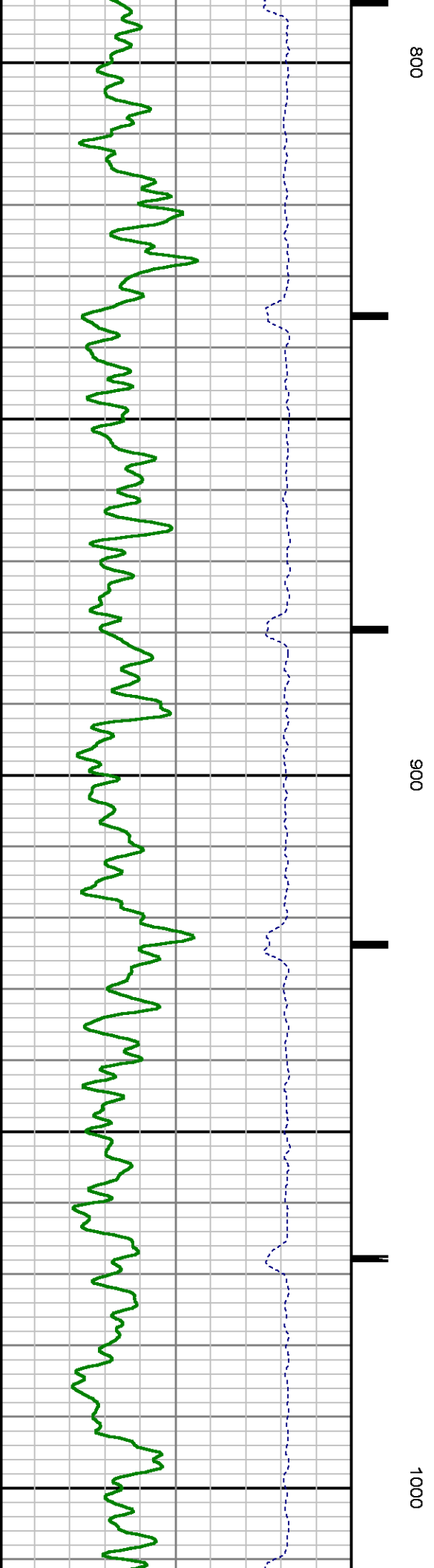
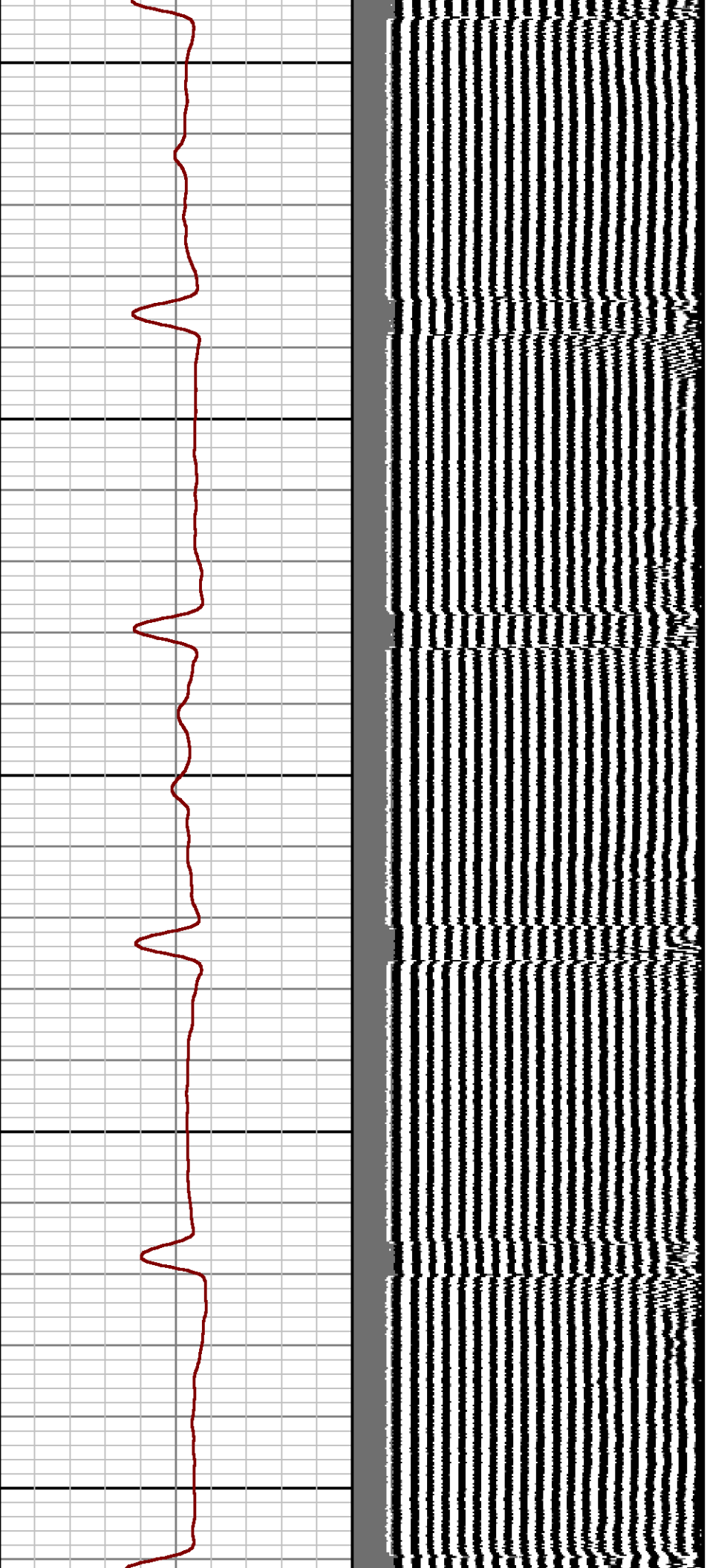
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	-10.040	AFAR	SIG	TT5			
1355XA	-5.620	CCL					
1355XA	-1.500	GR					
1355XA	0.000	TEMP					

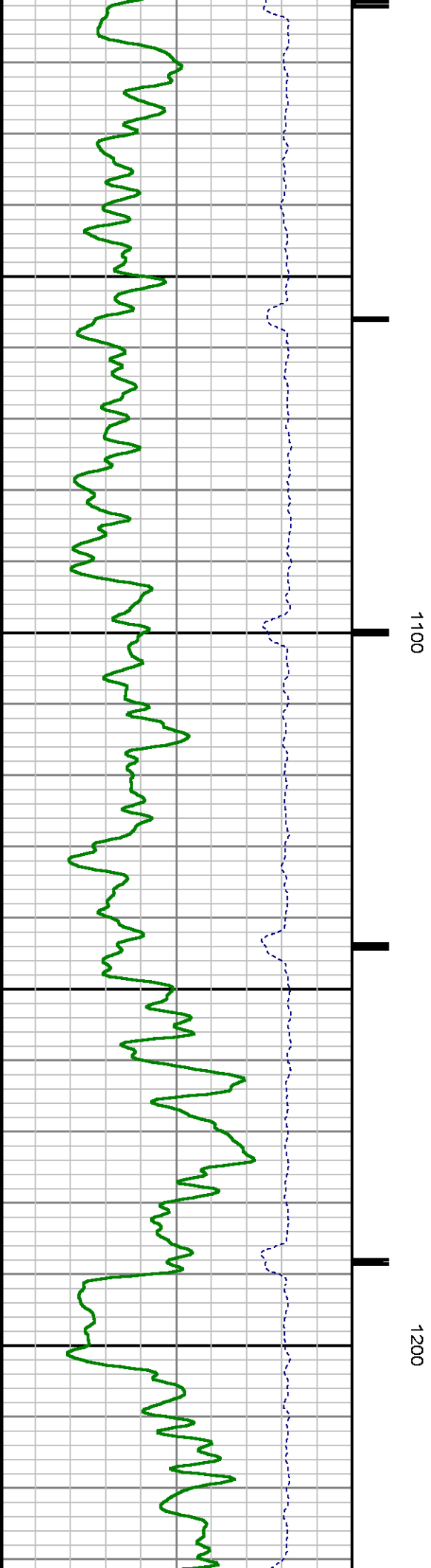
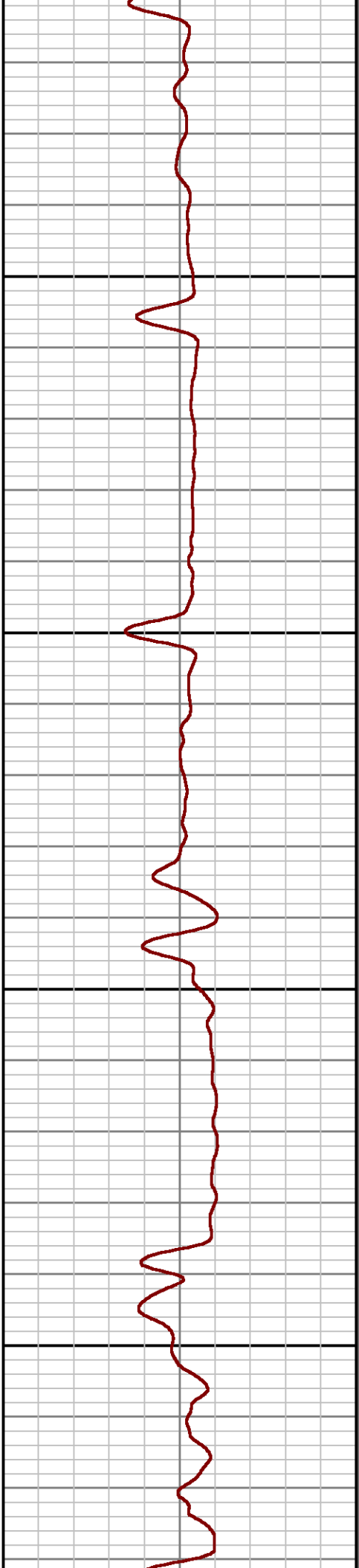
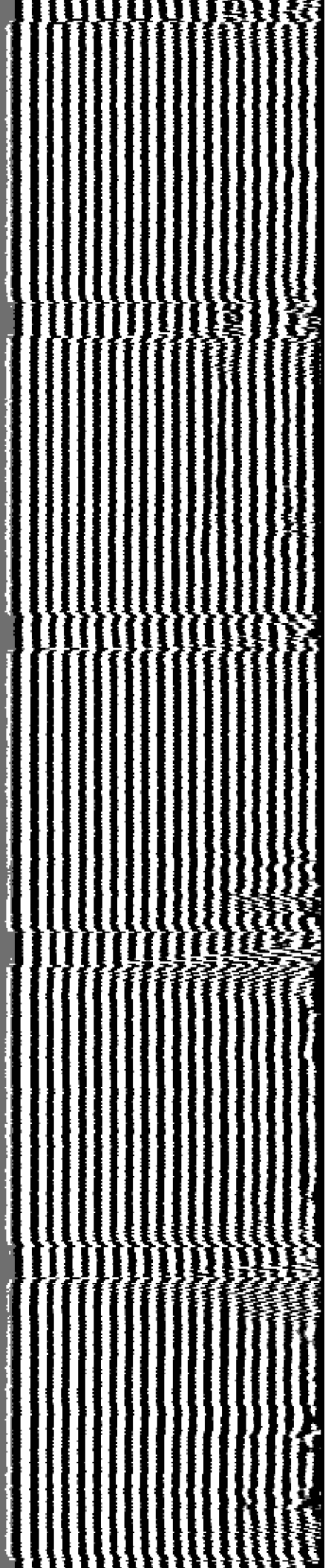


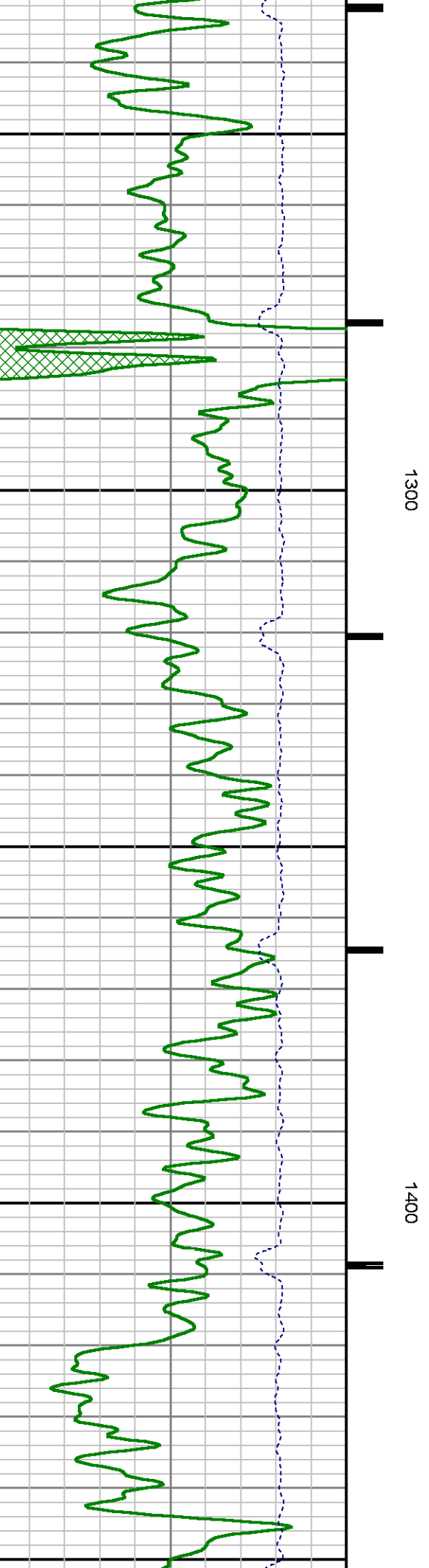
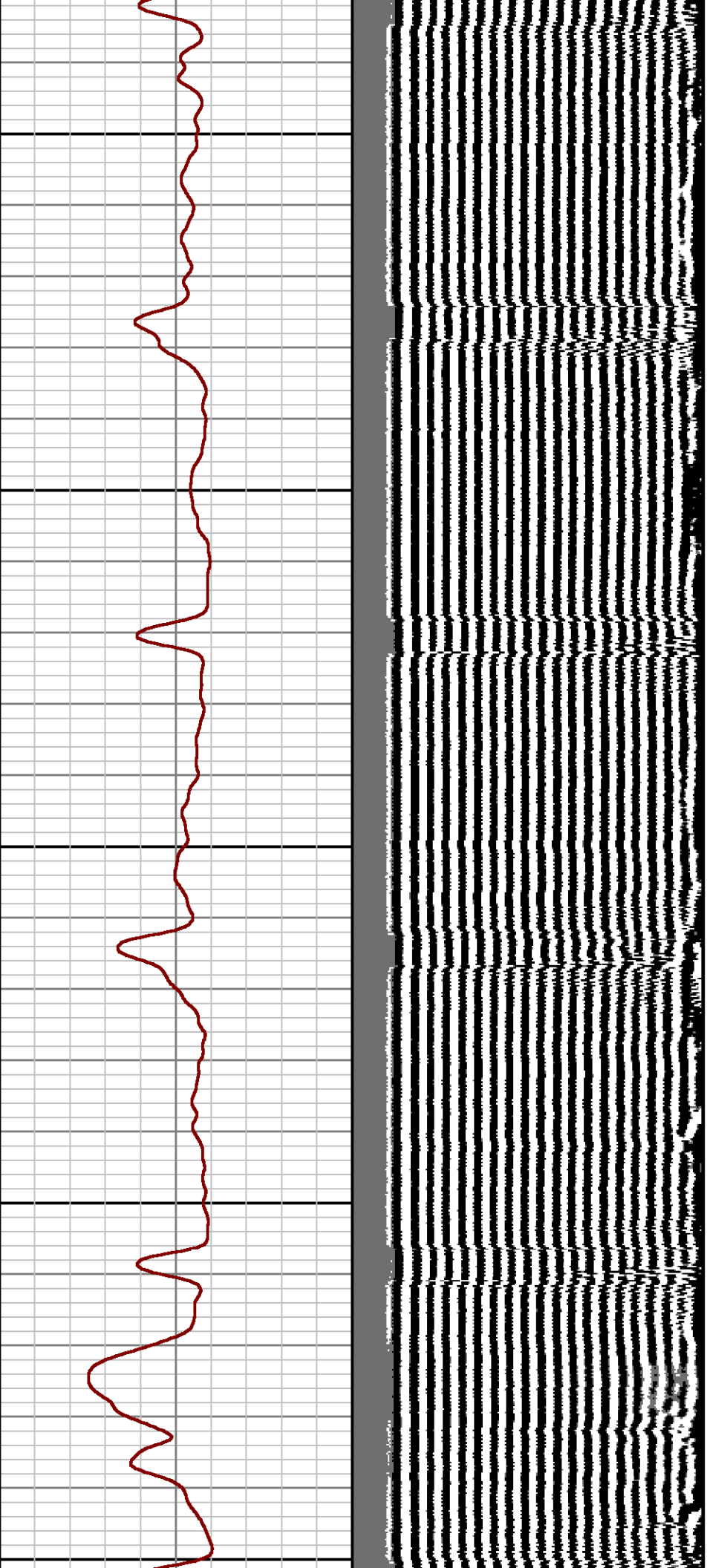


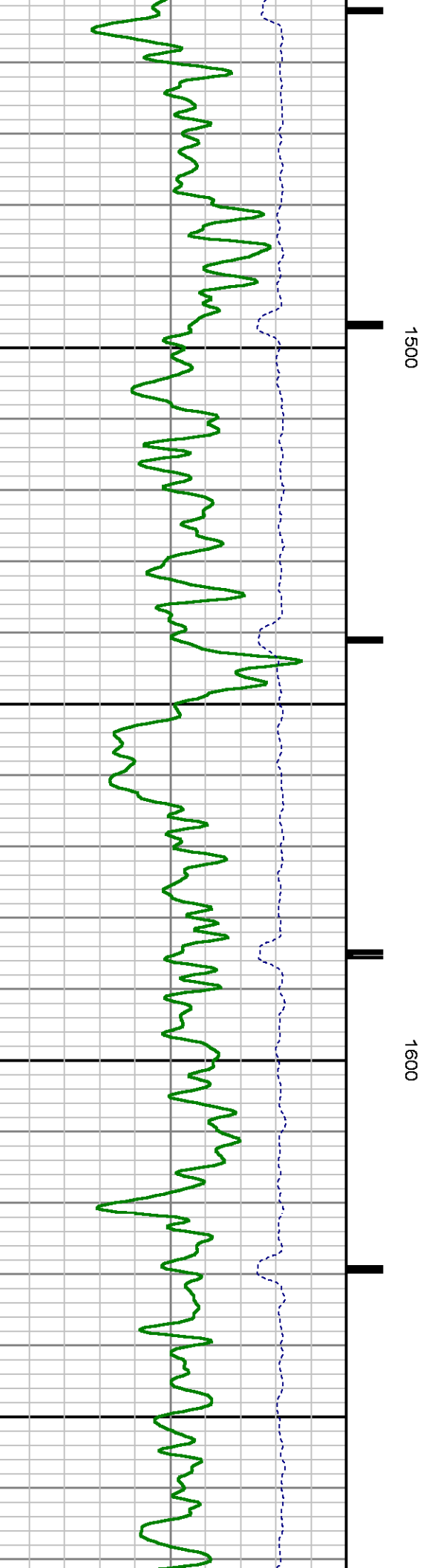
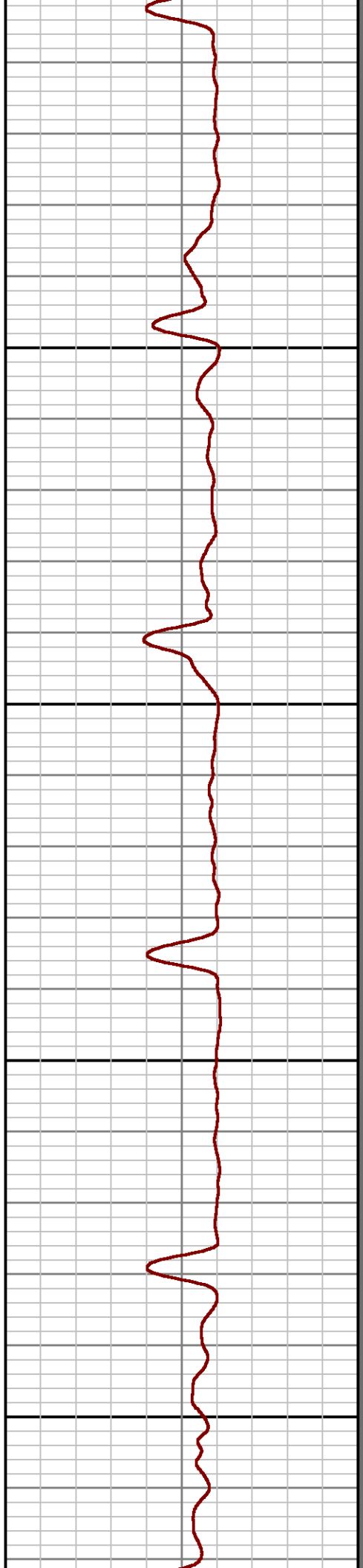
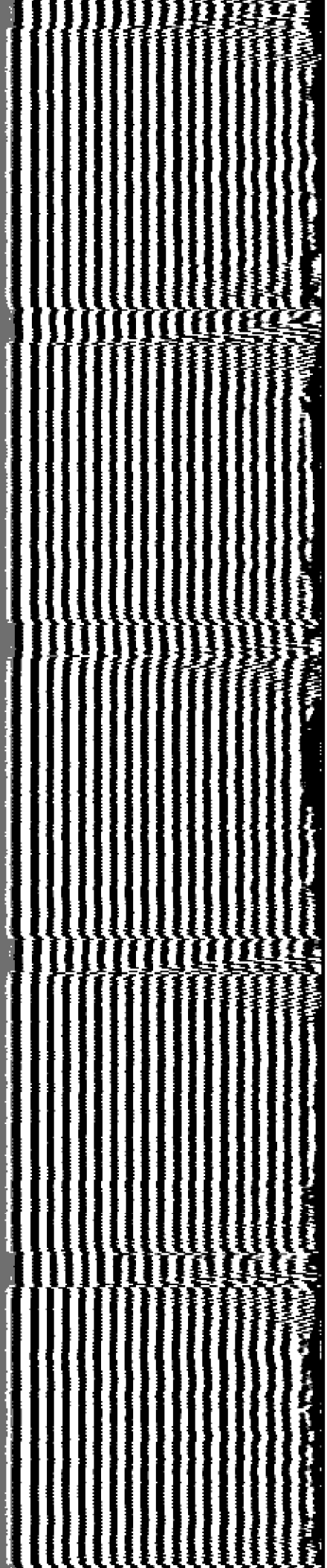


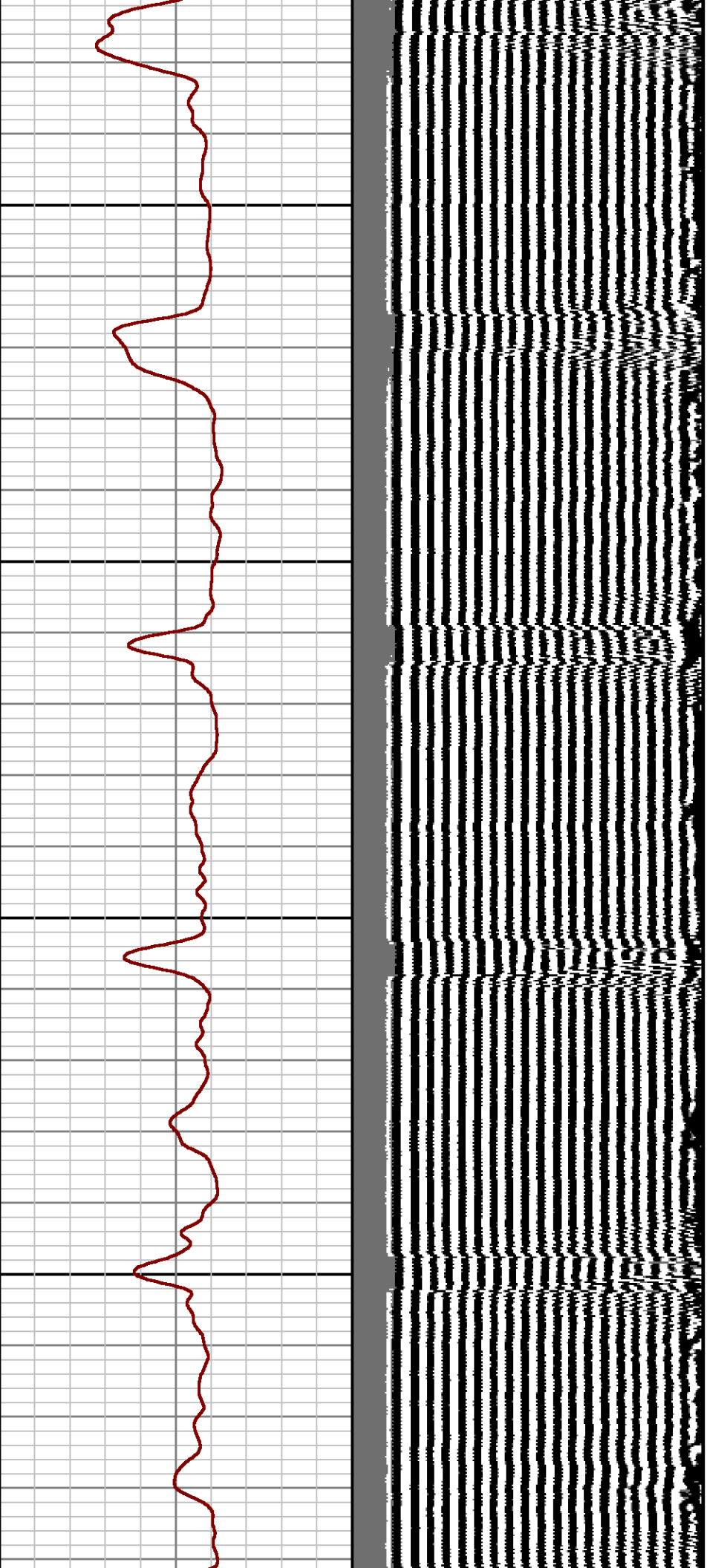






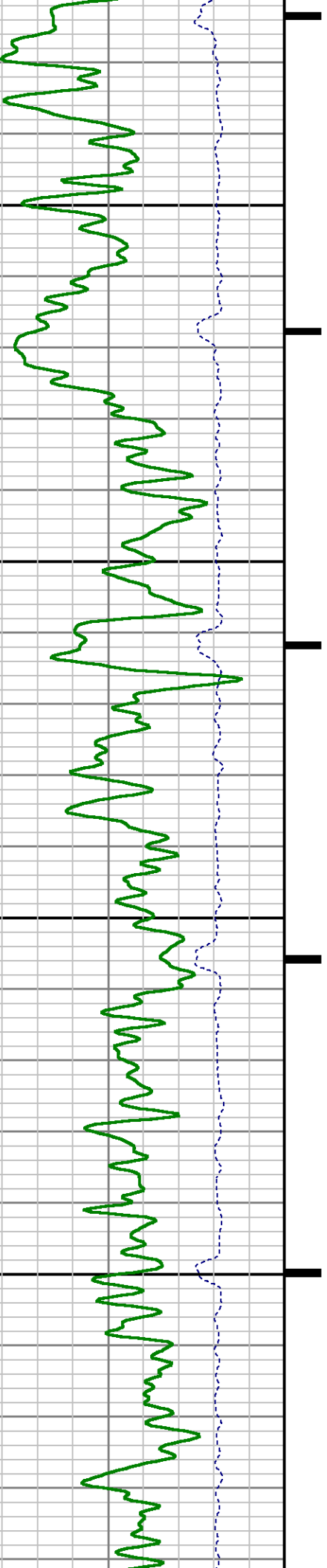


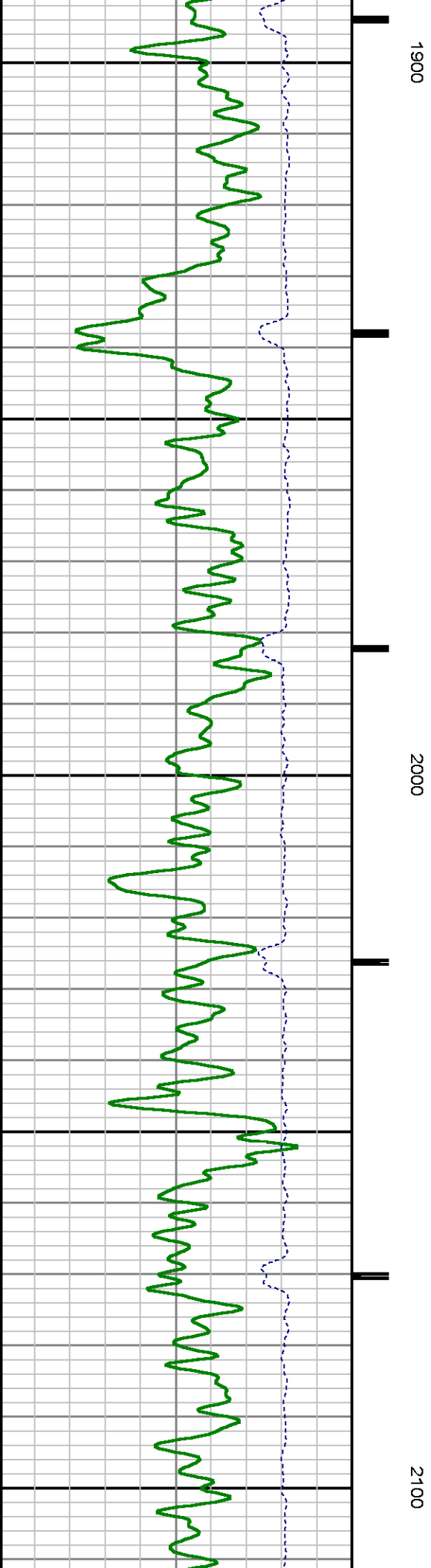
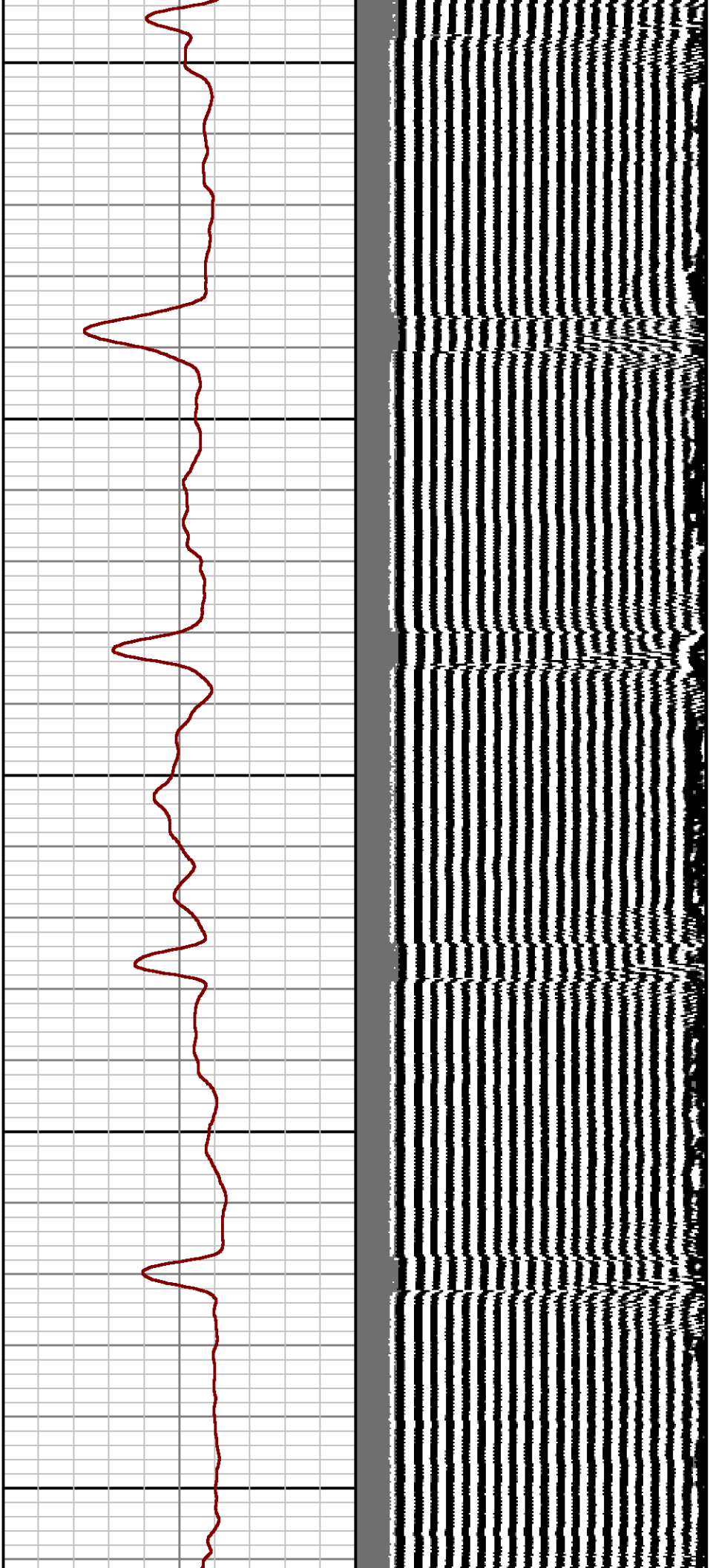


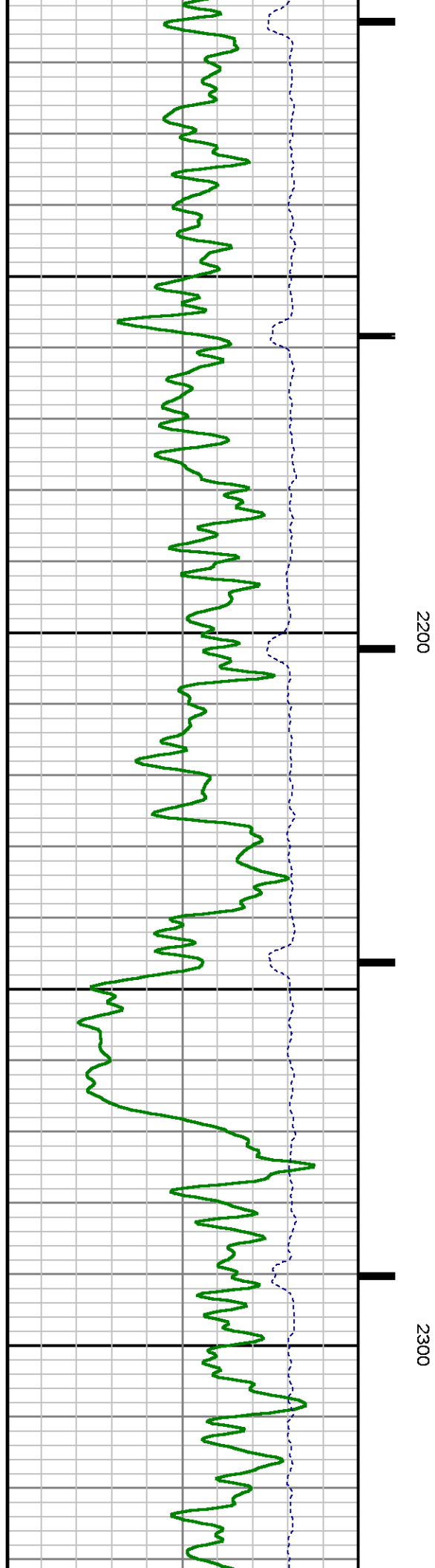
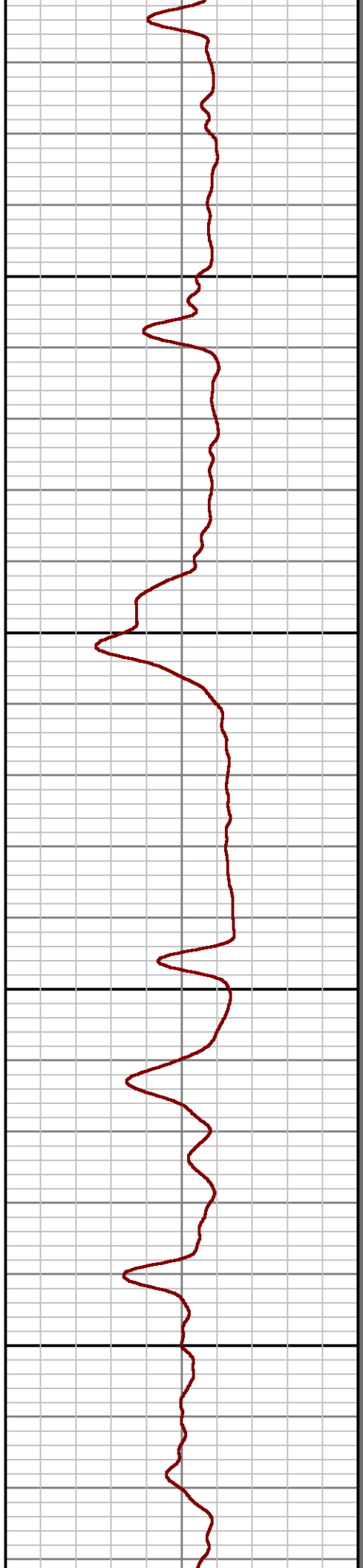
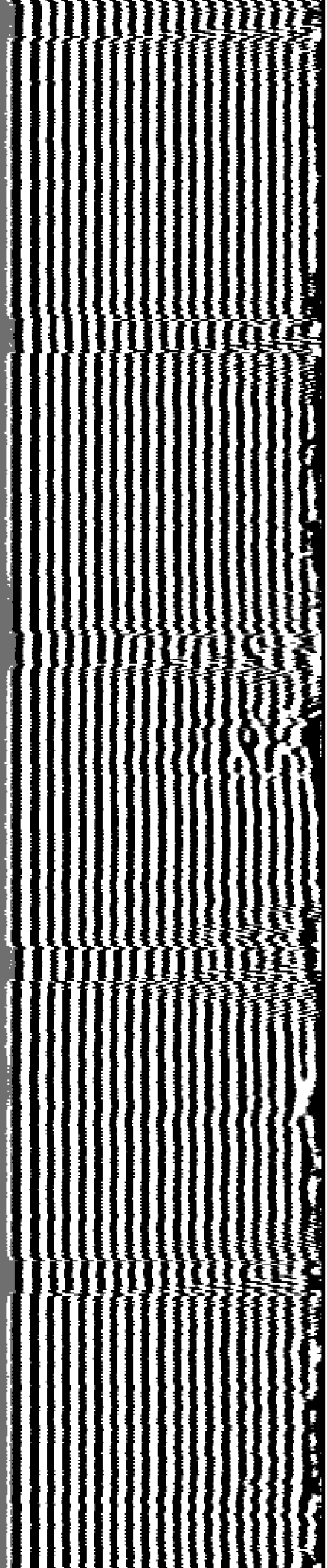


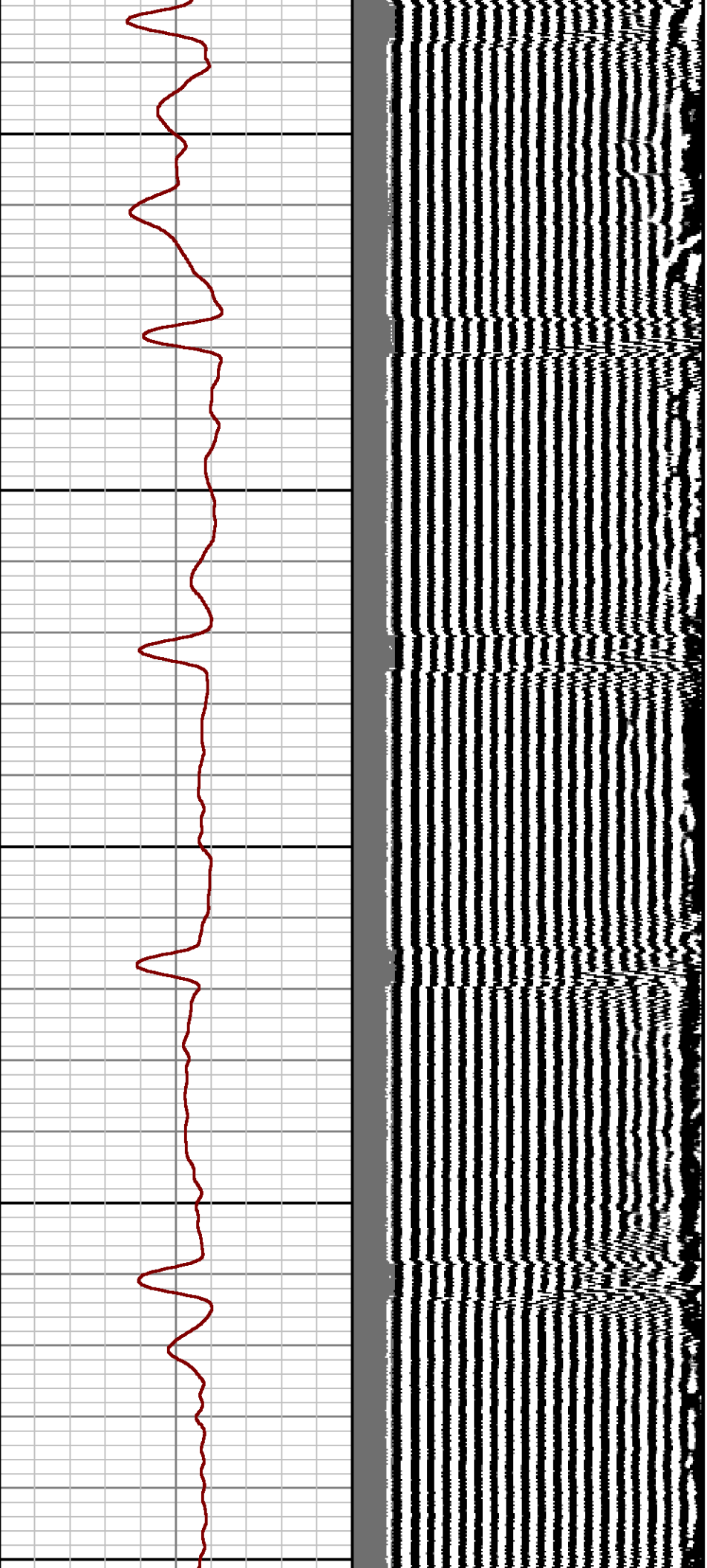
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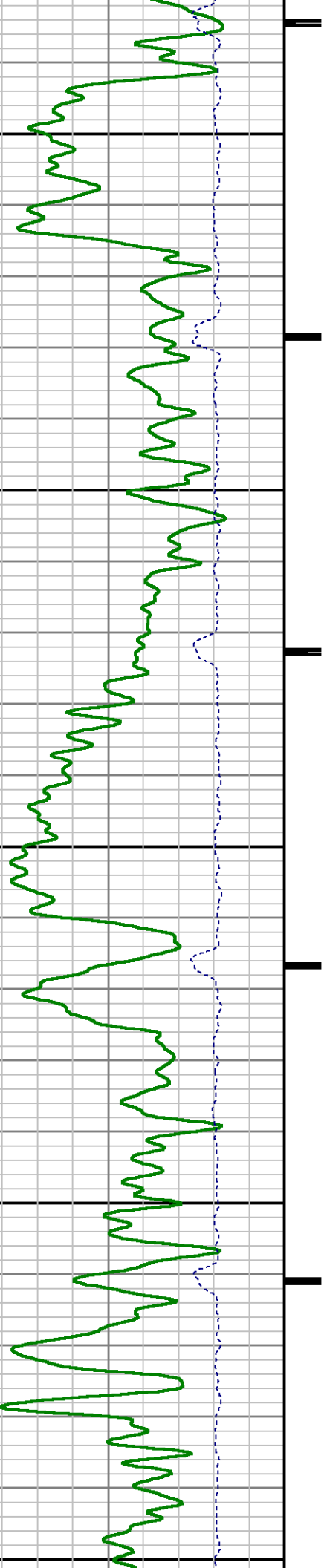


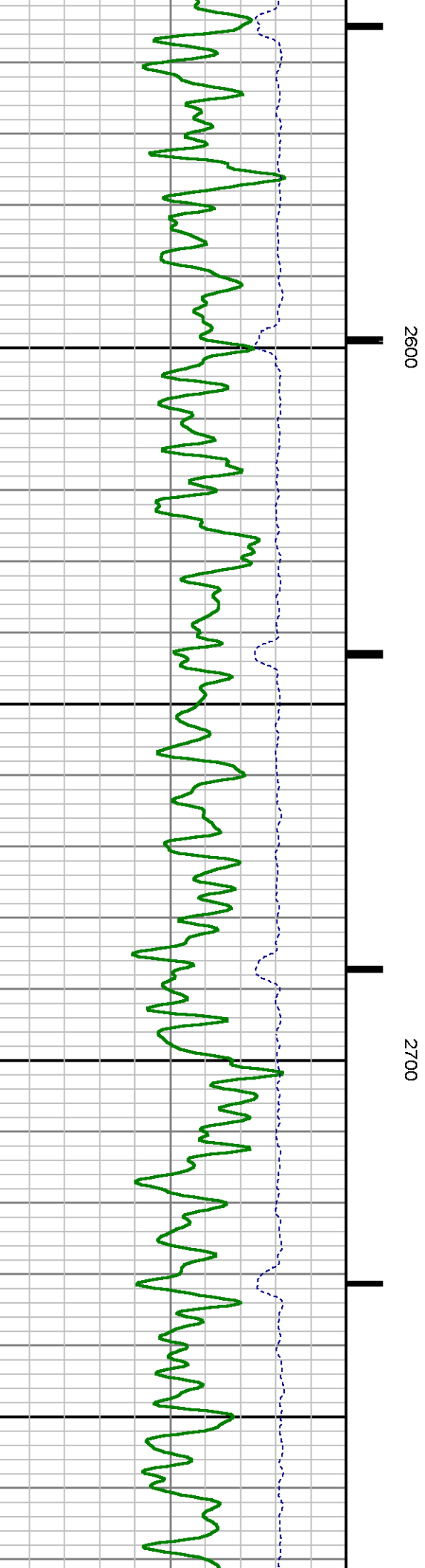
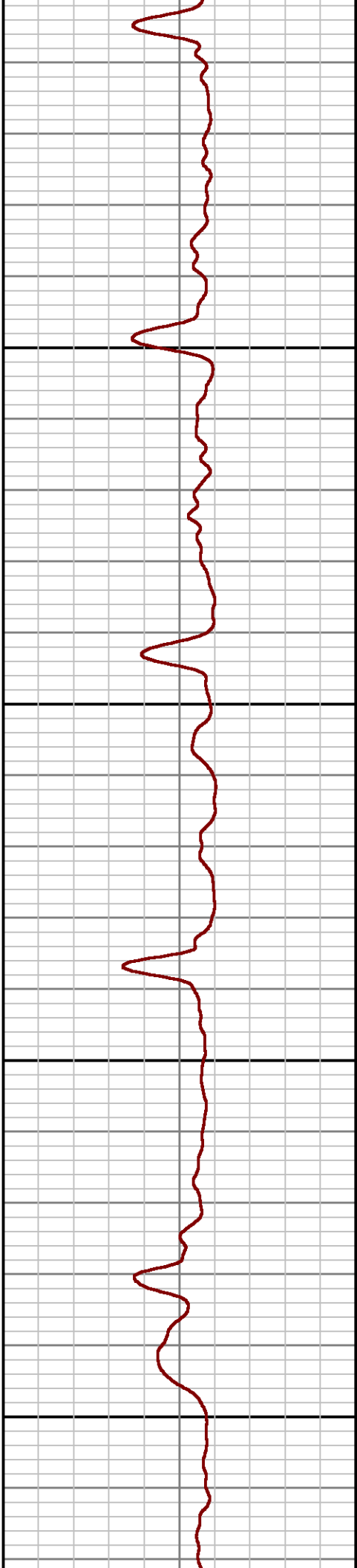
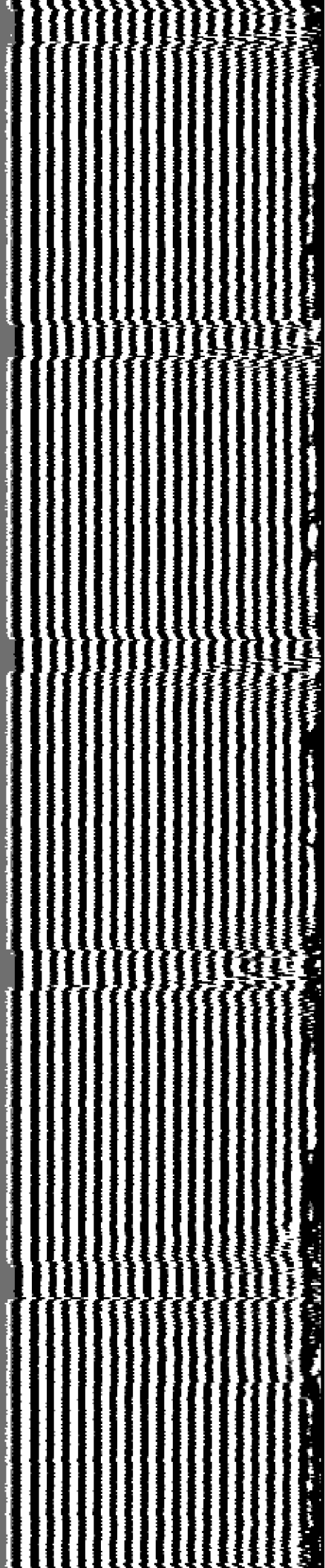


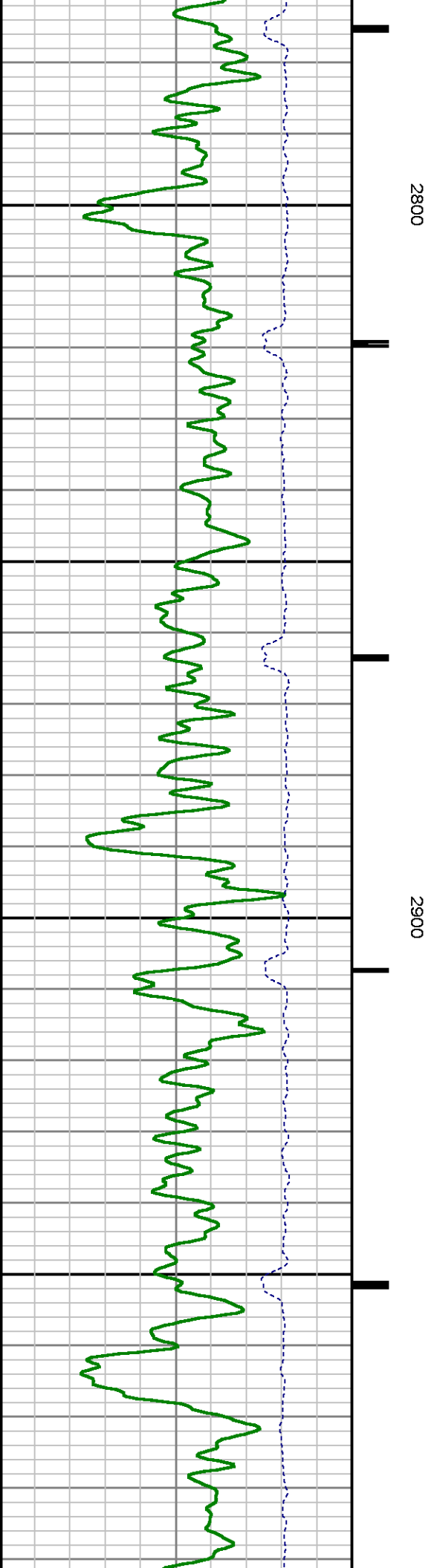
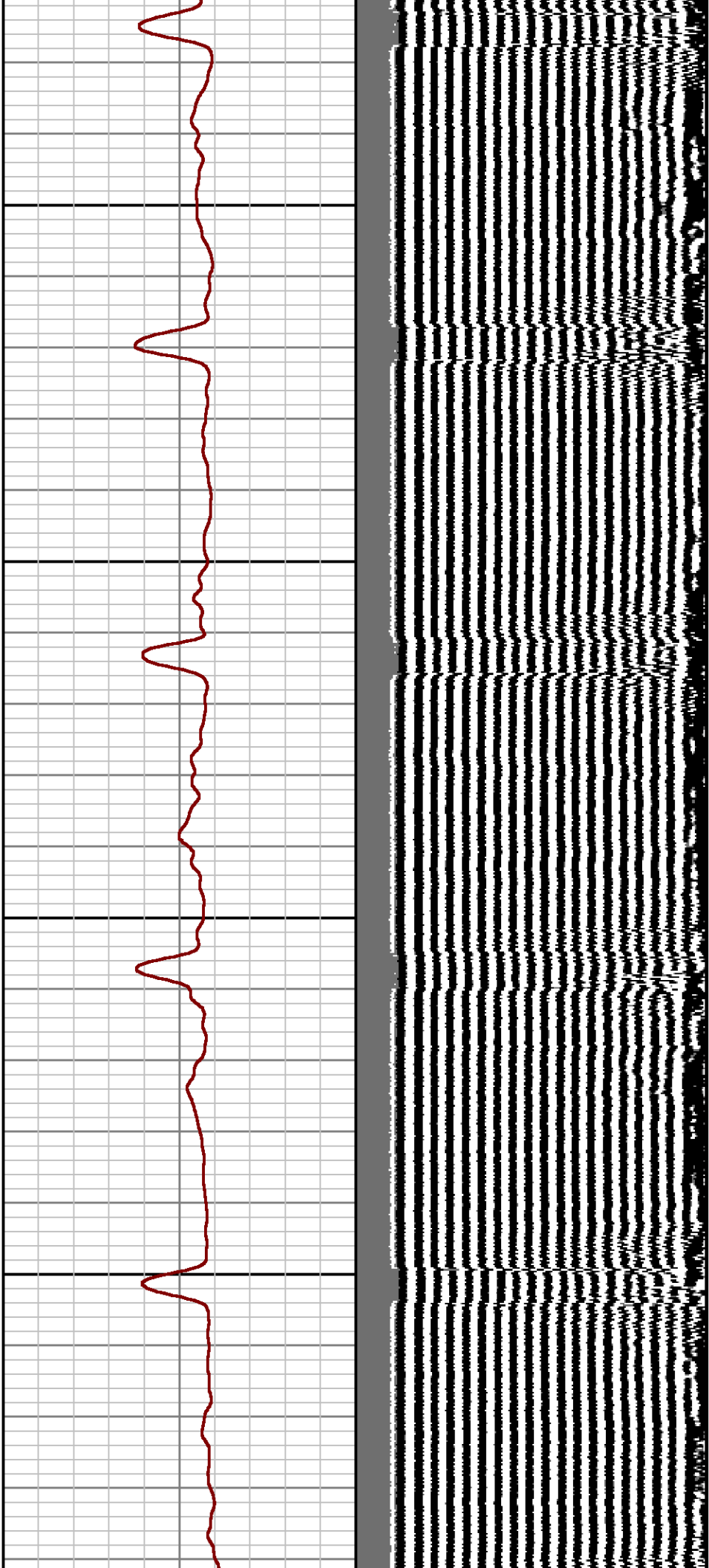


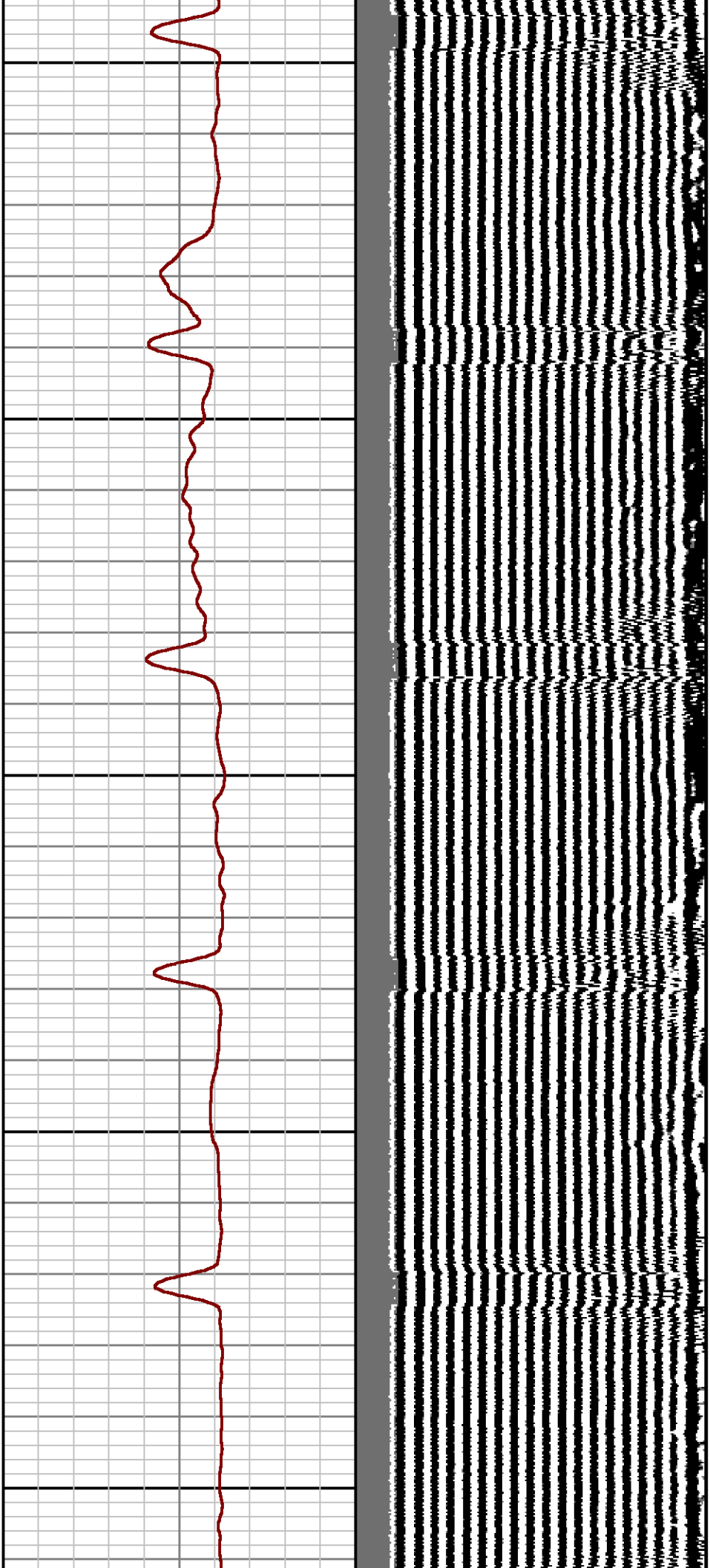
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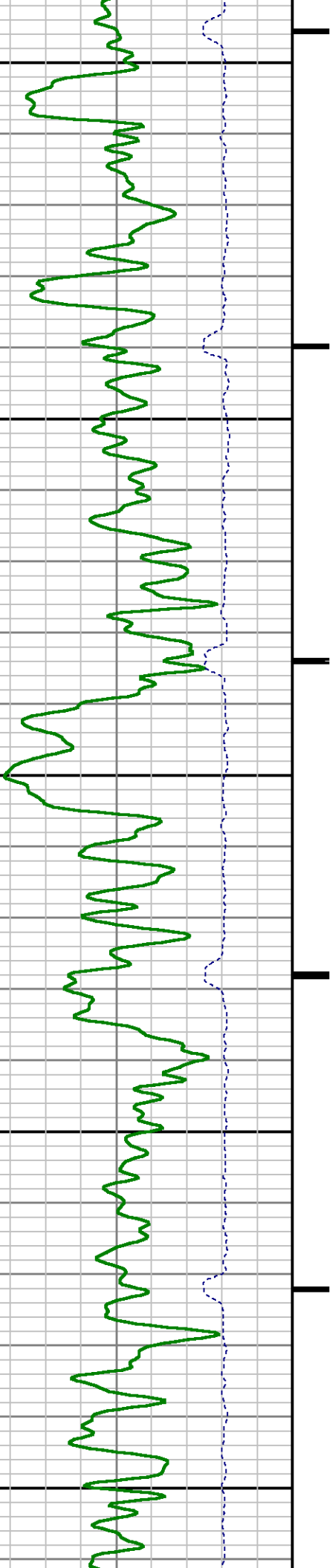


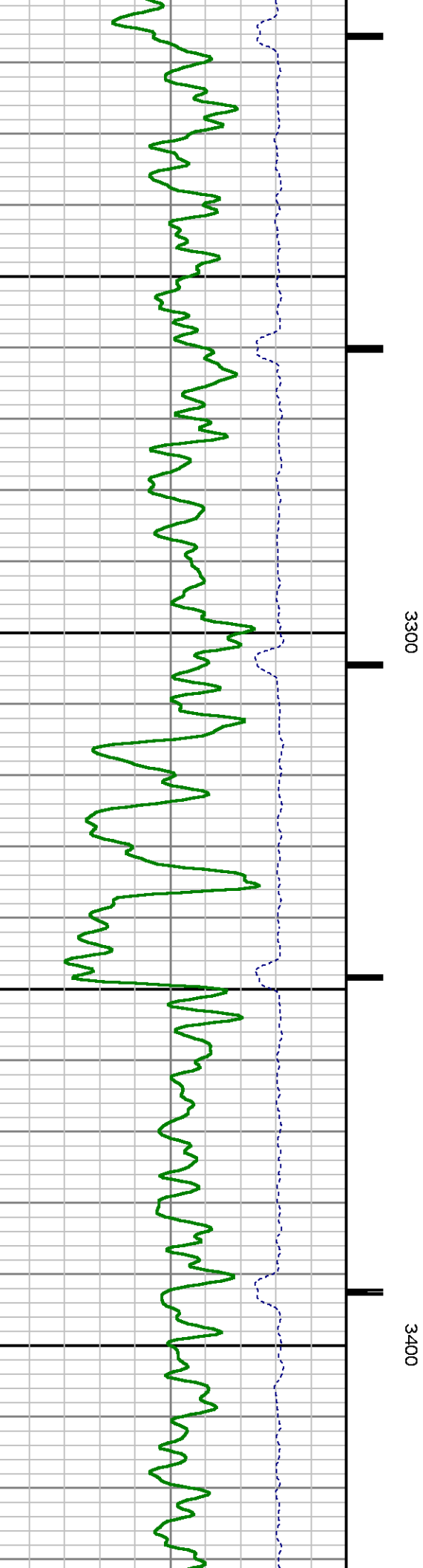
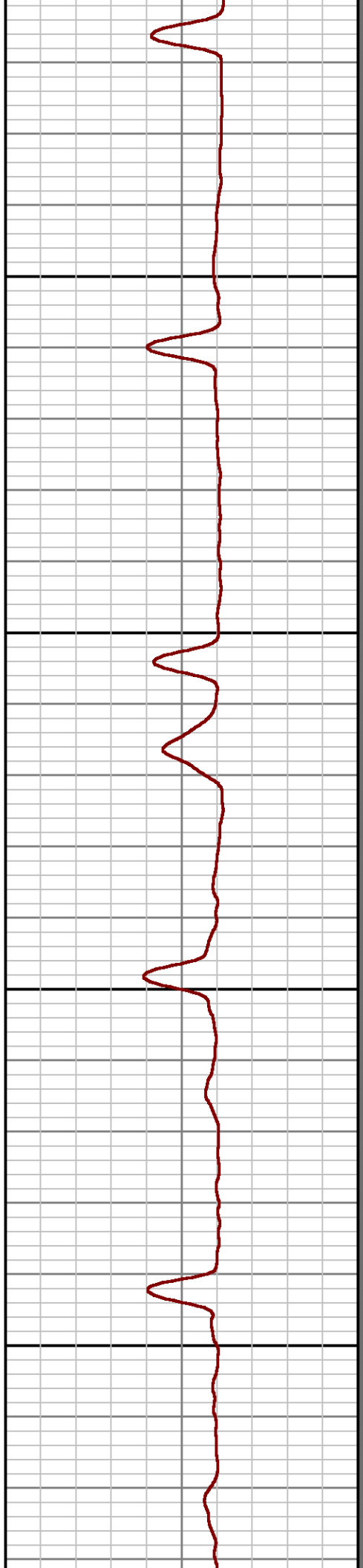
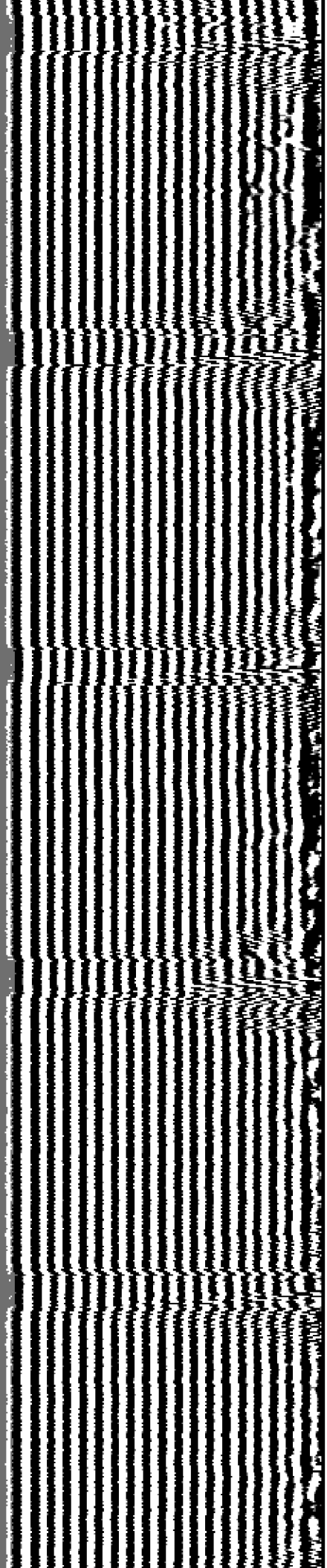


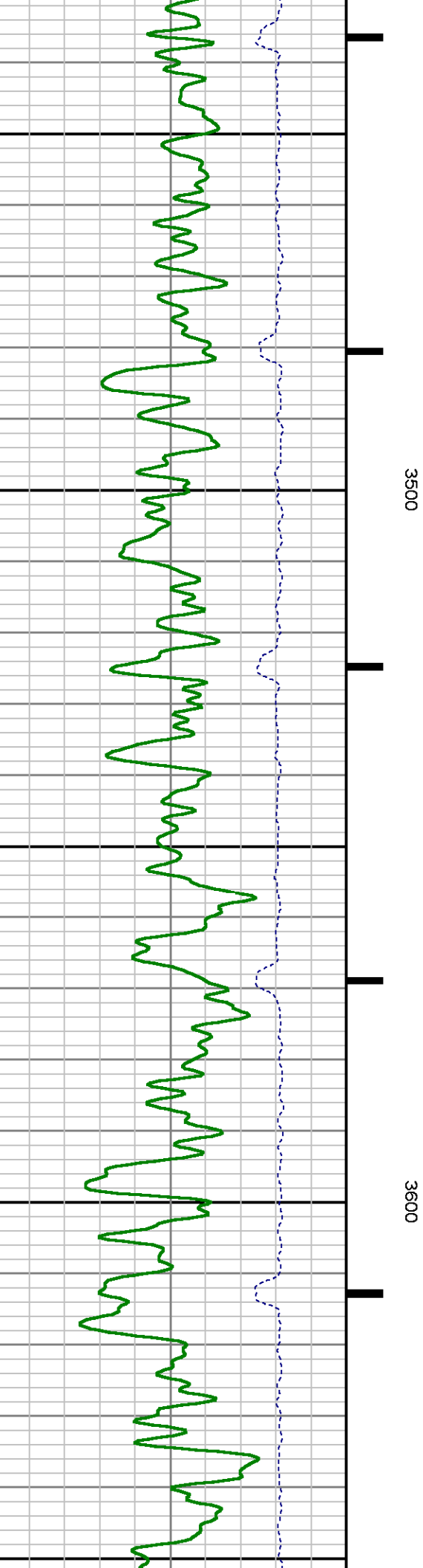
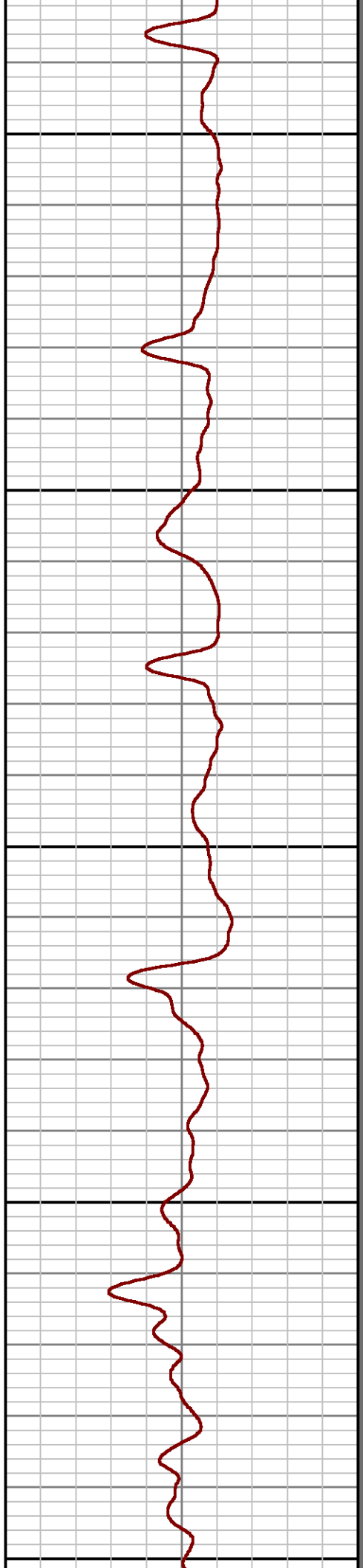
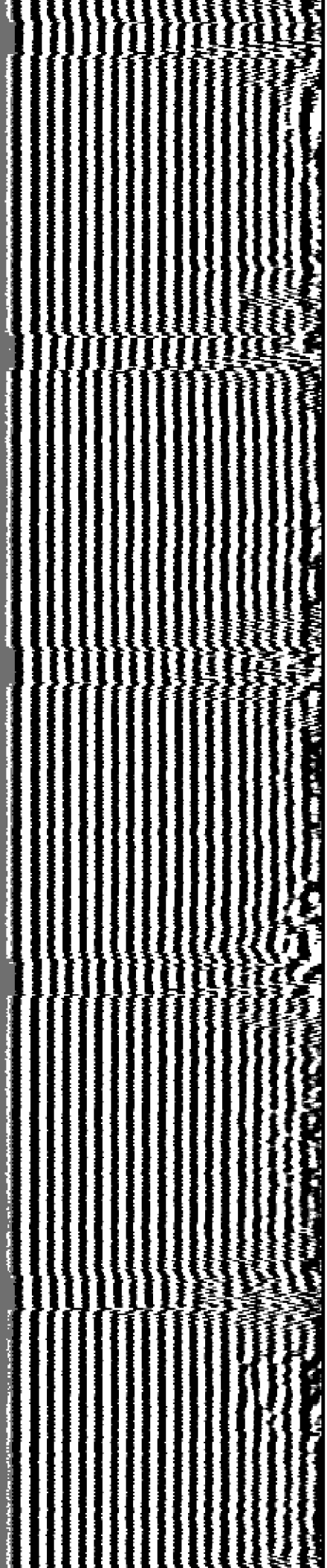
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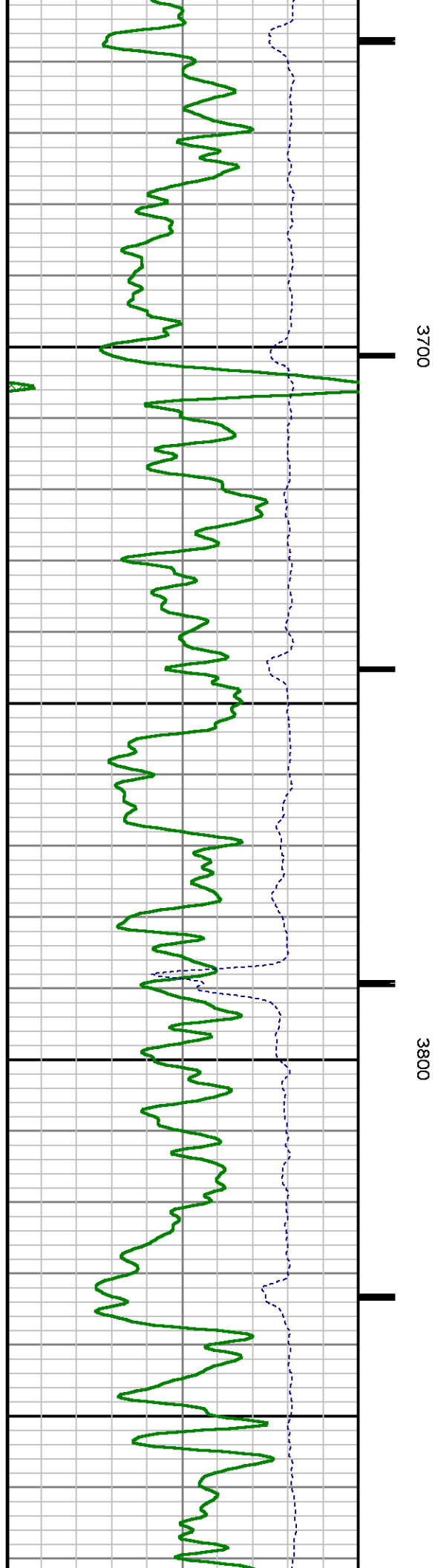
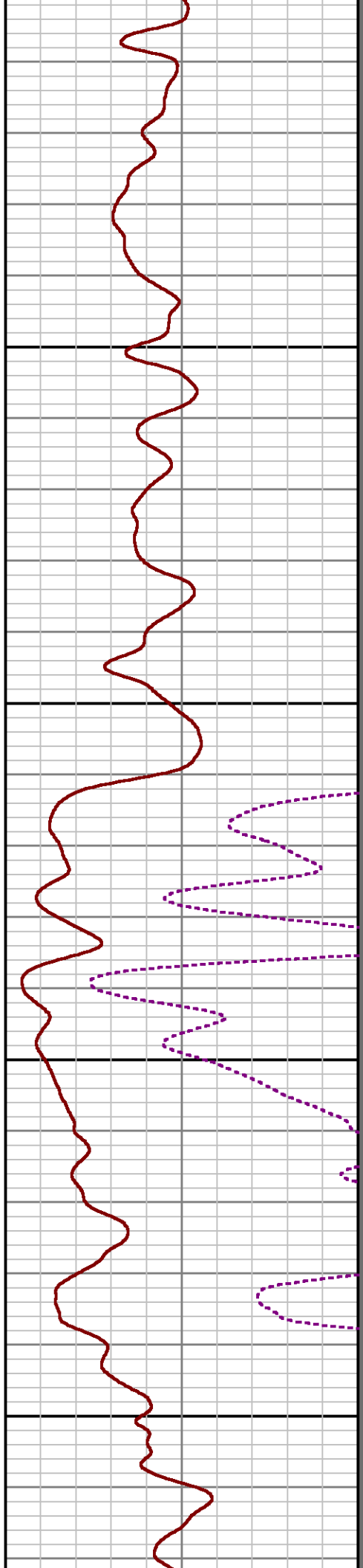
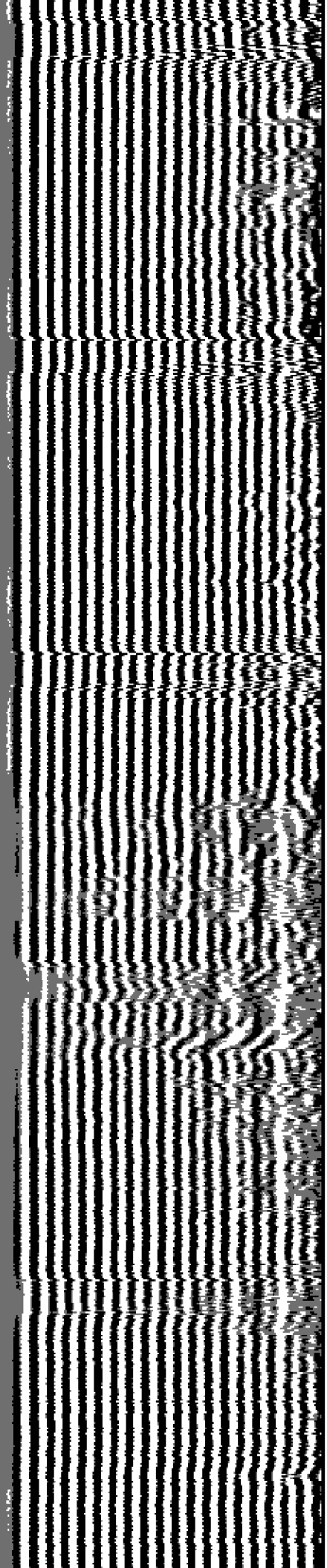
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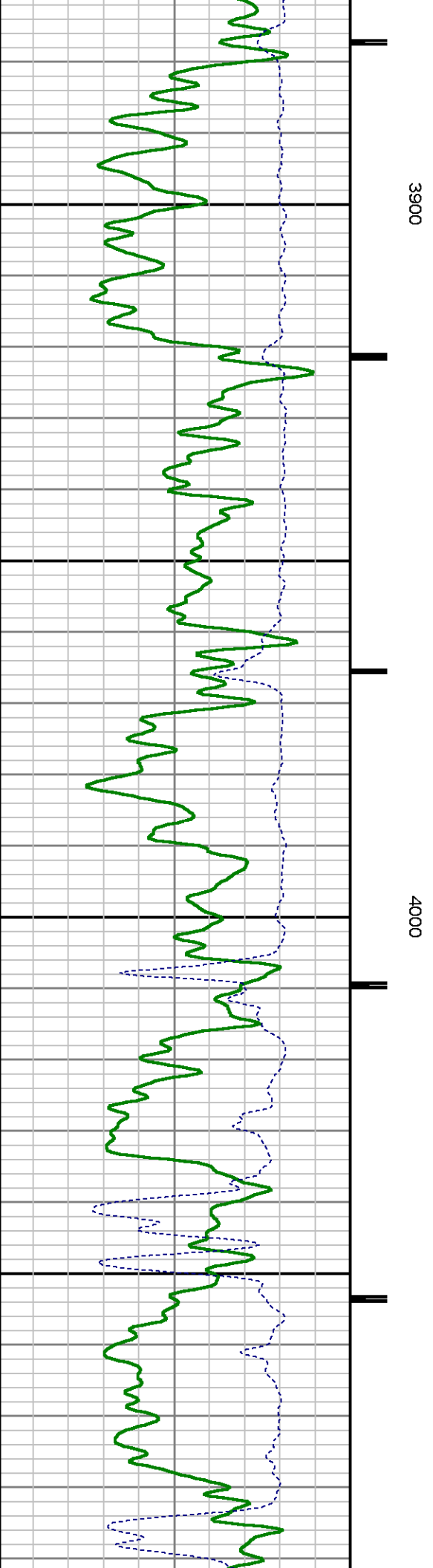
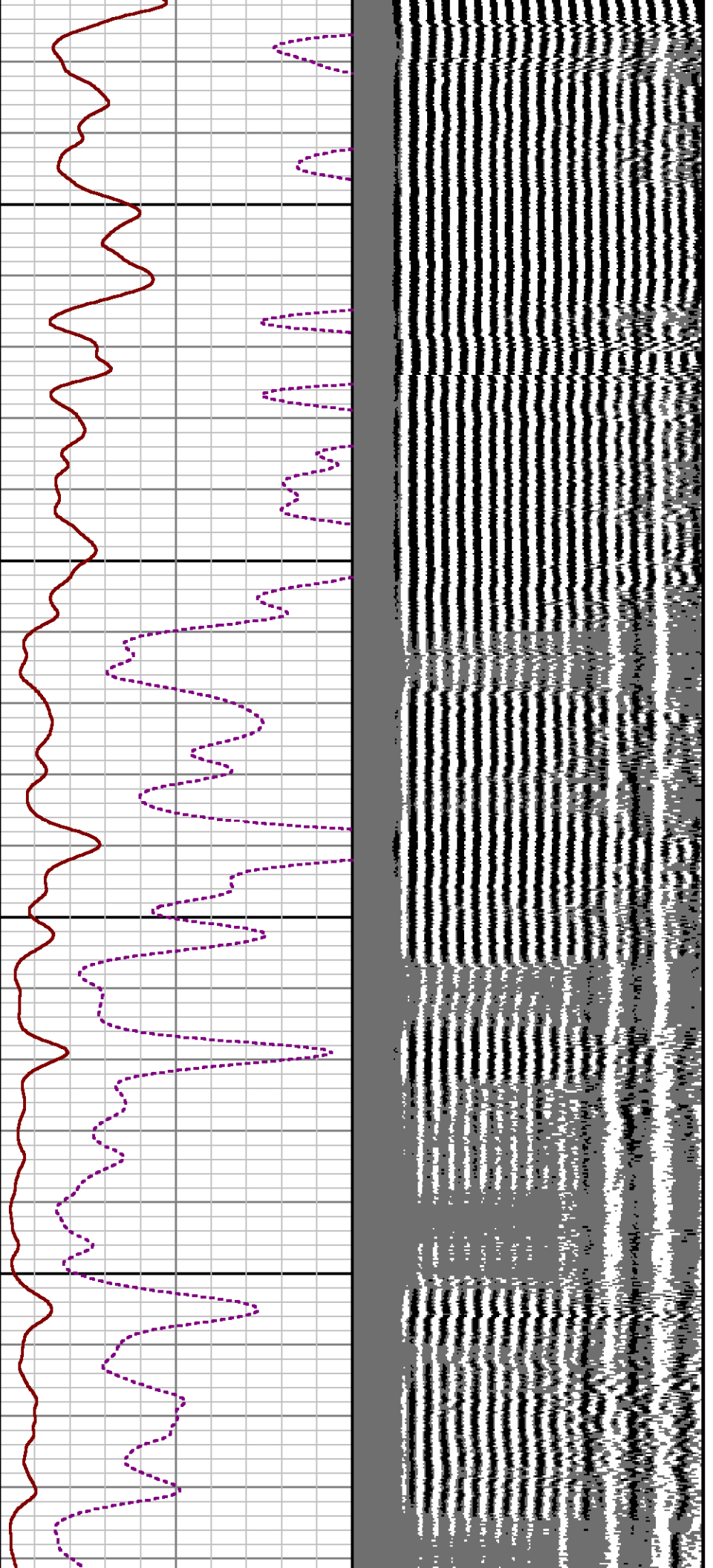
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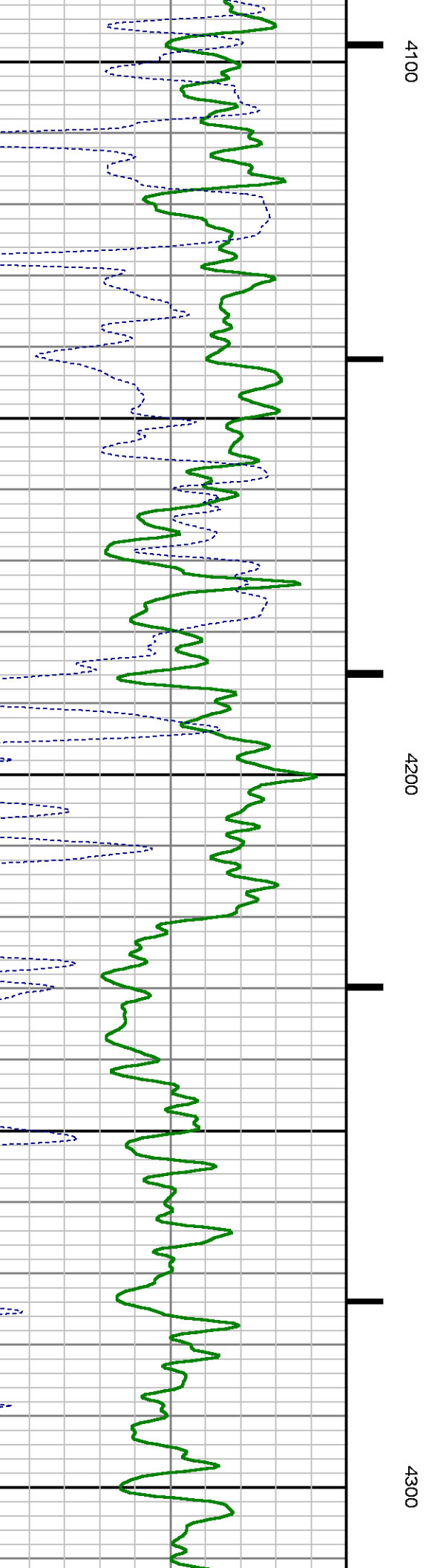
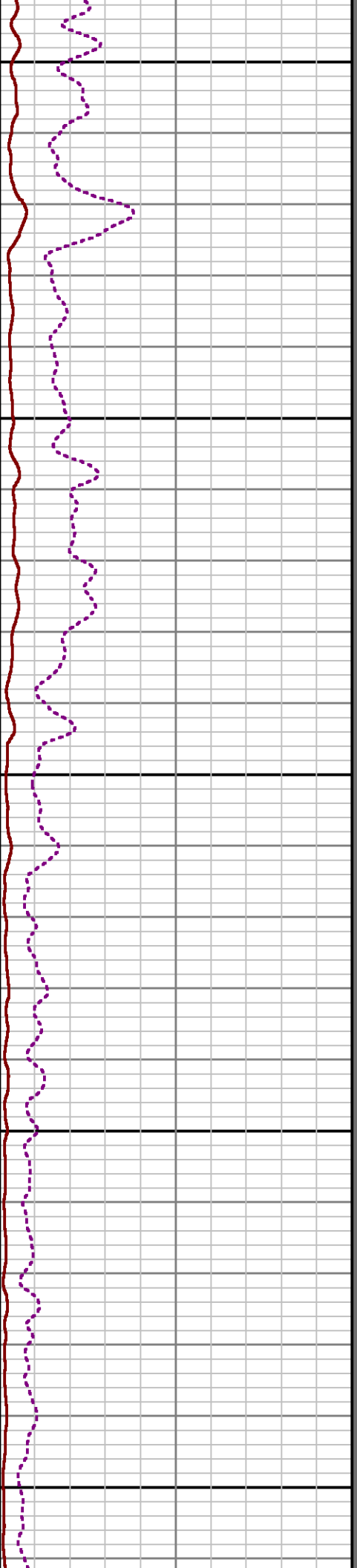
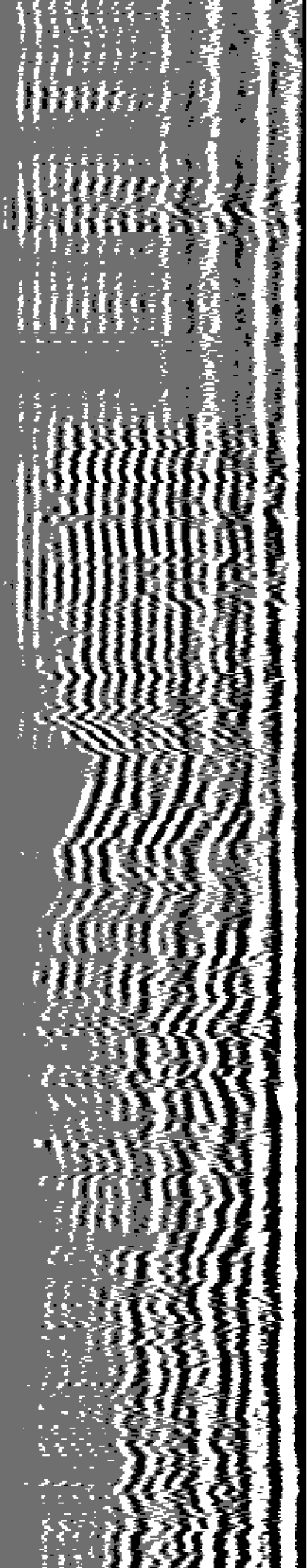


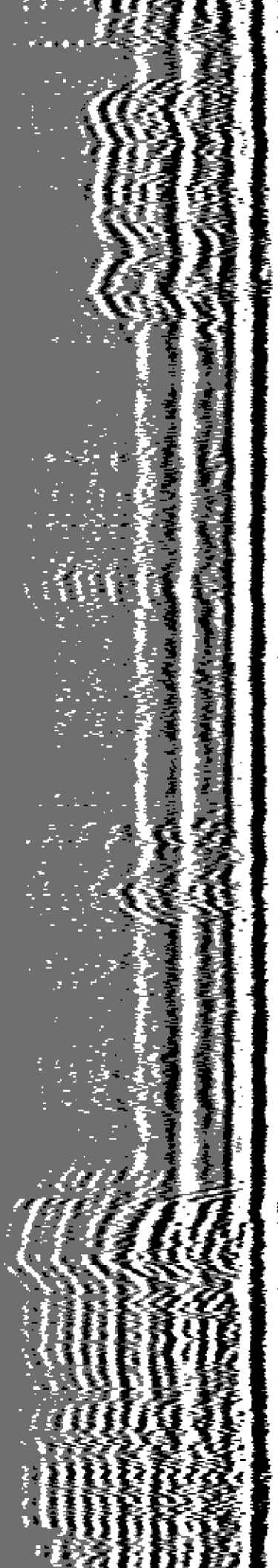






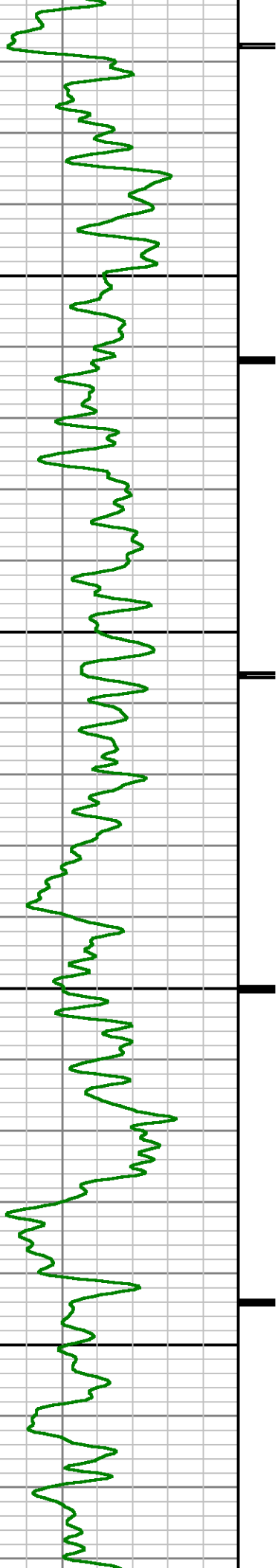


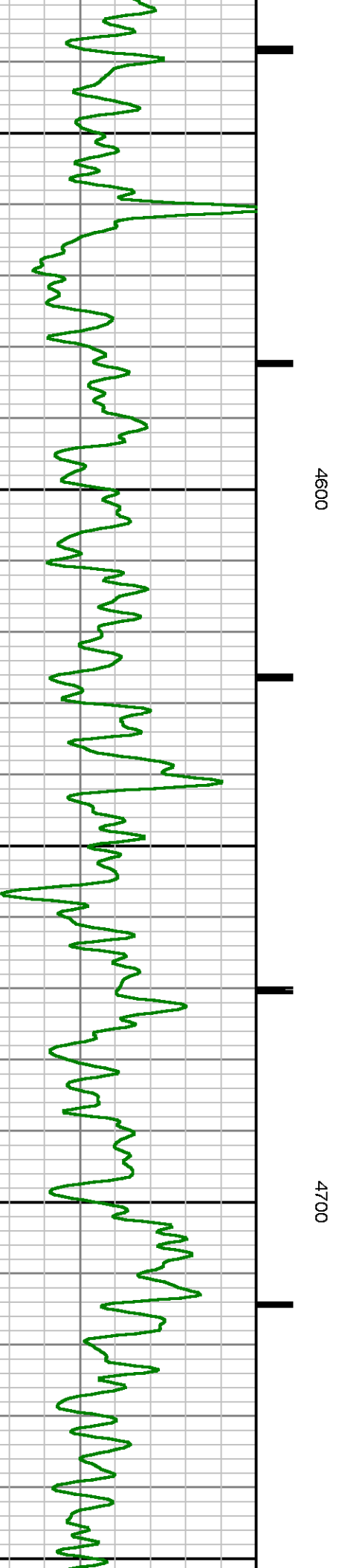
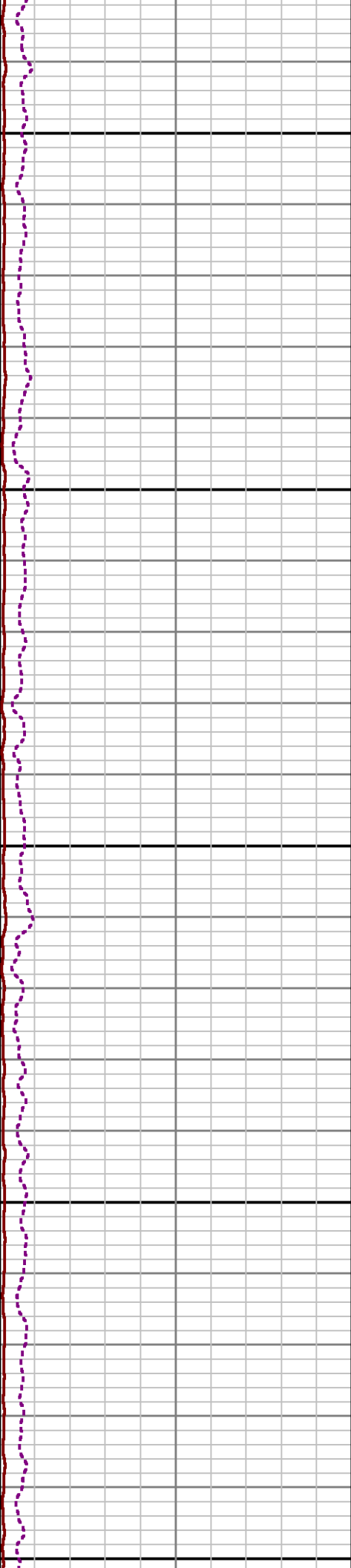
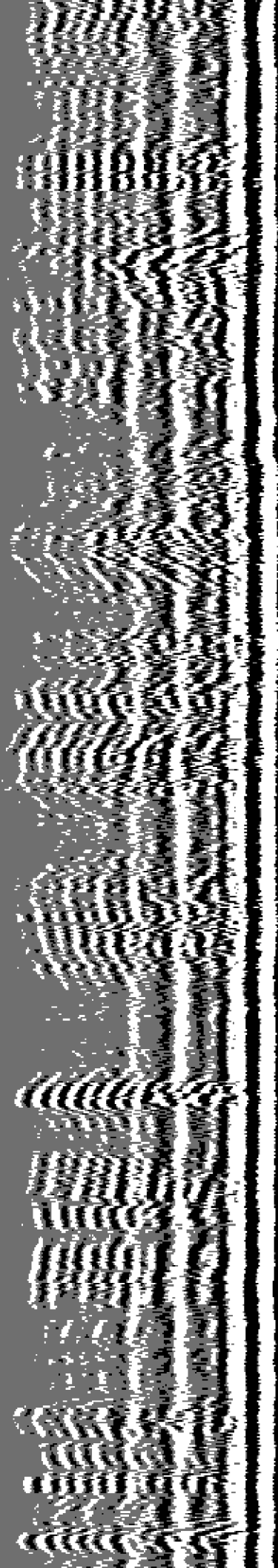


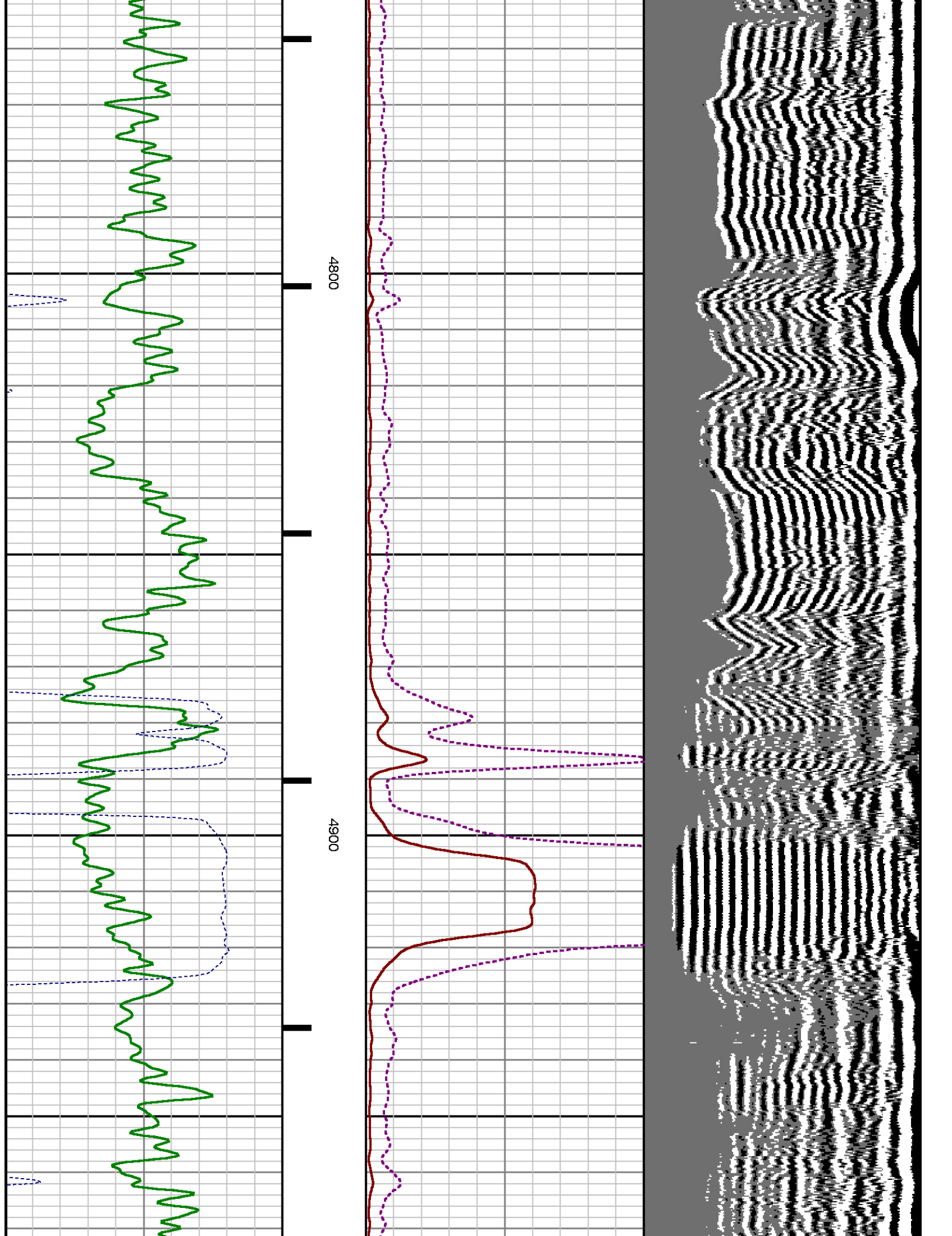


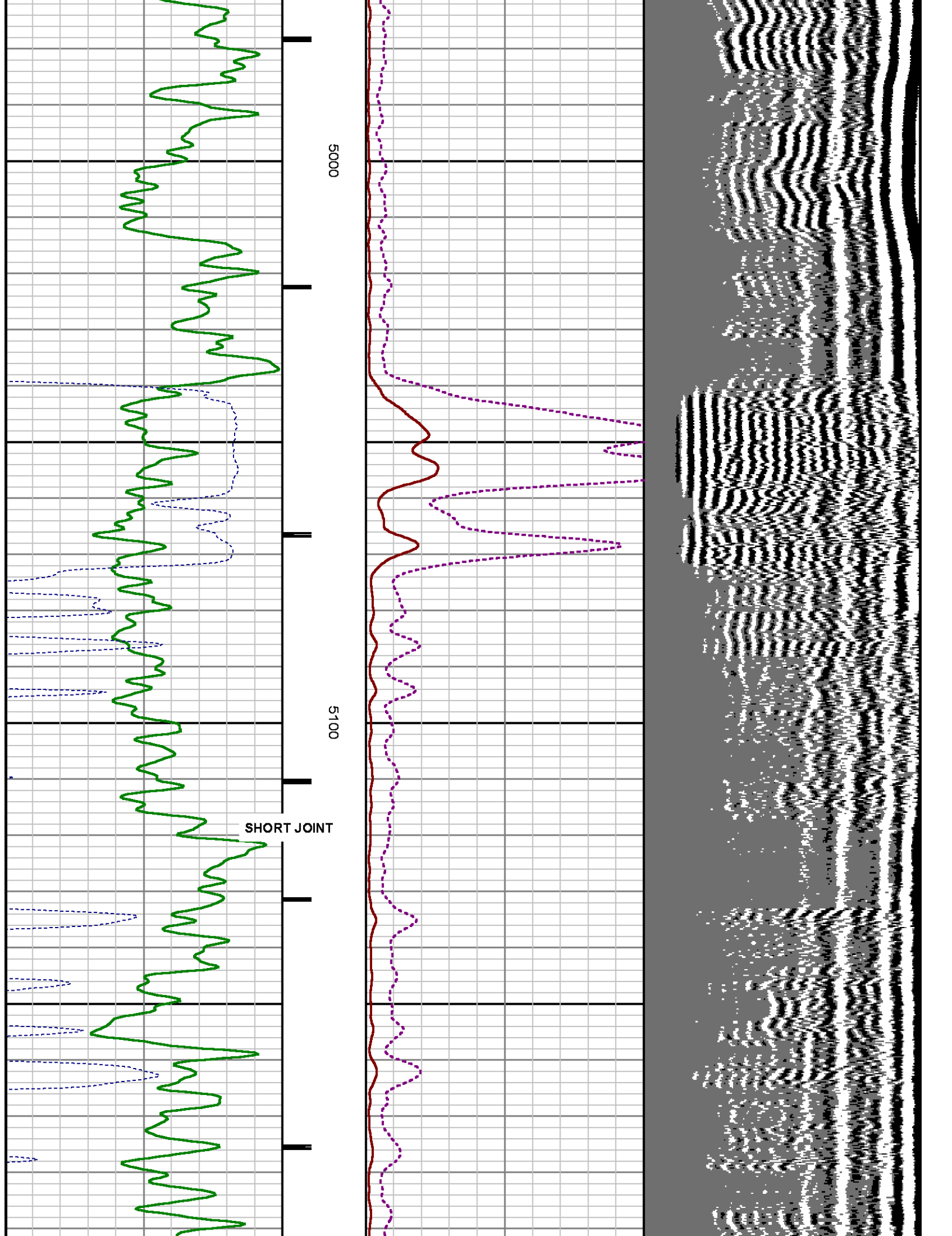
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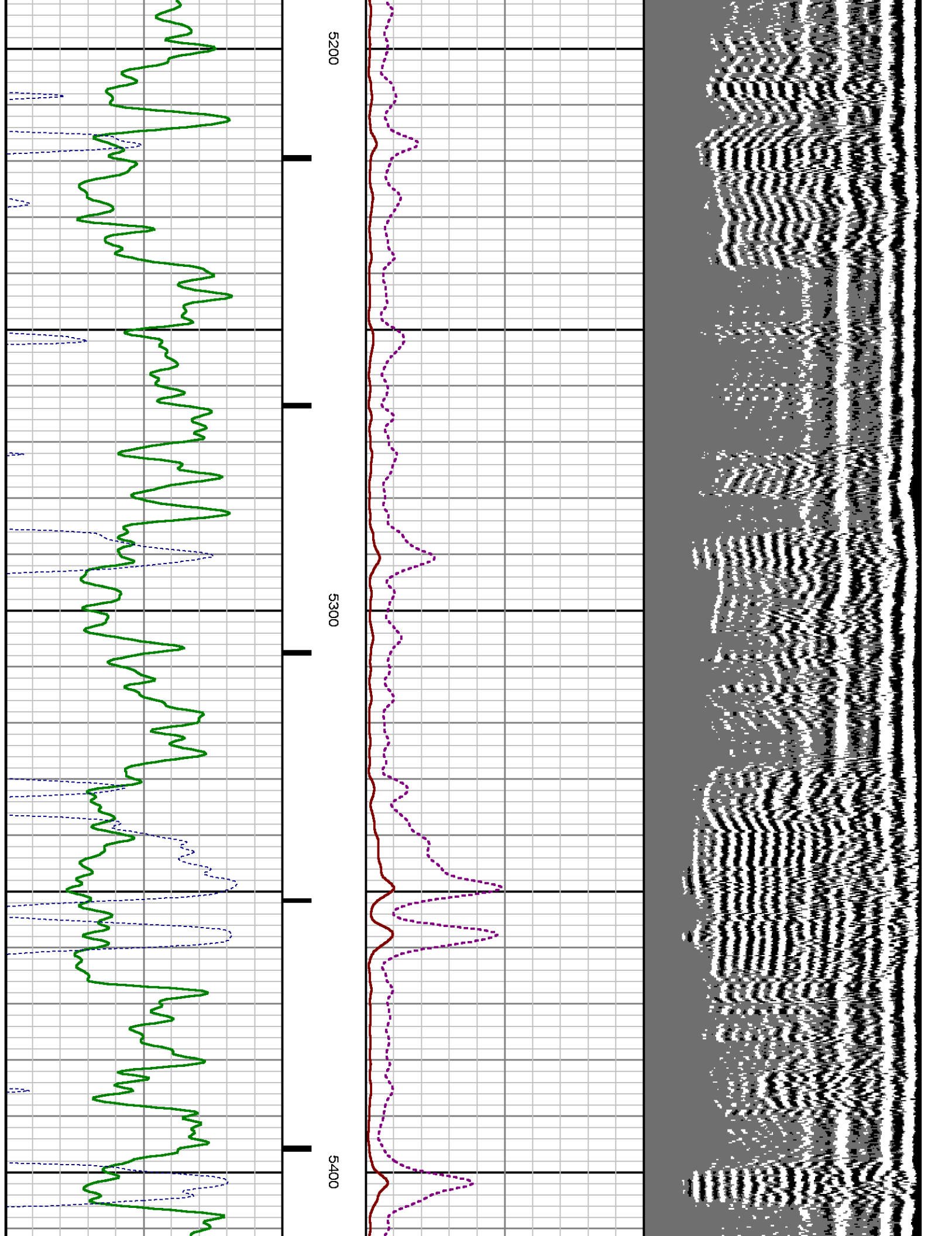
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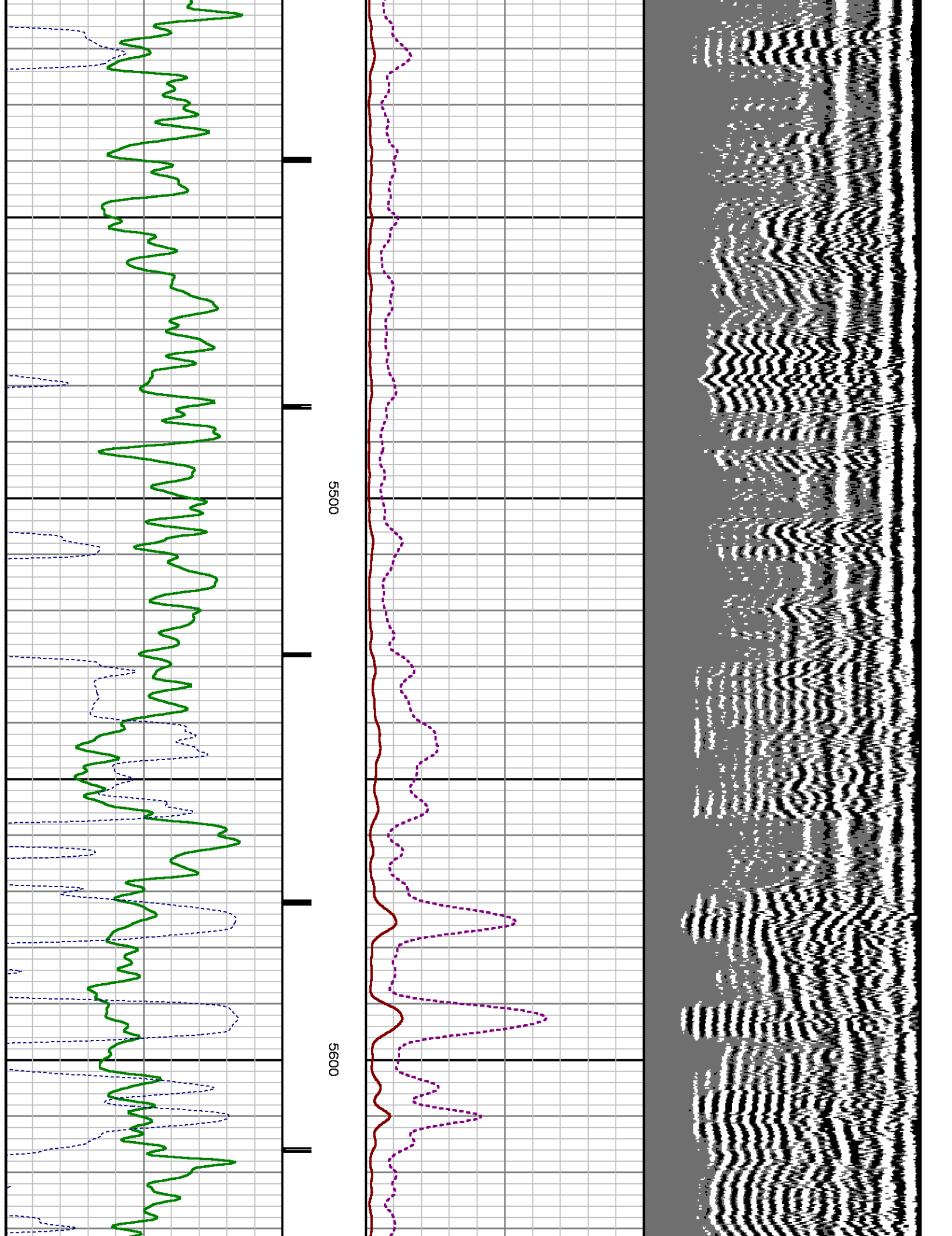


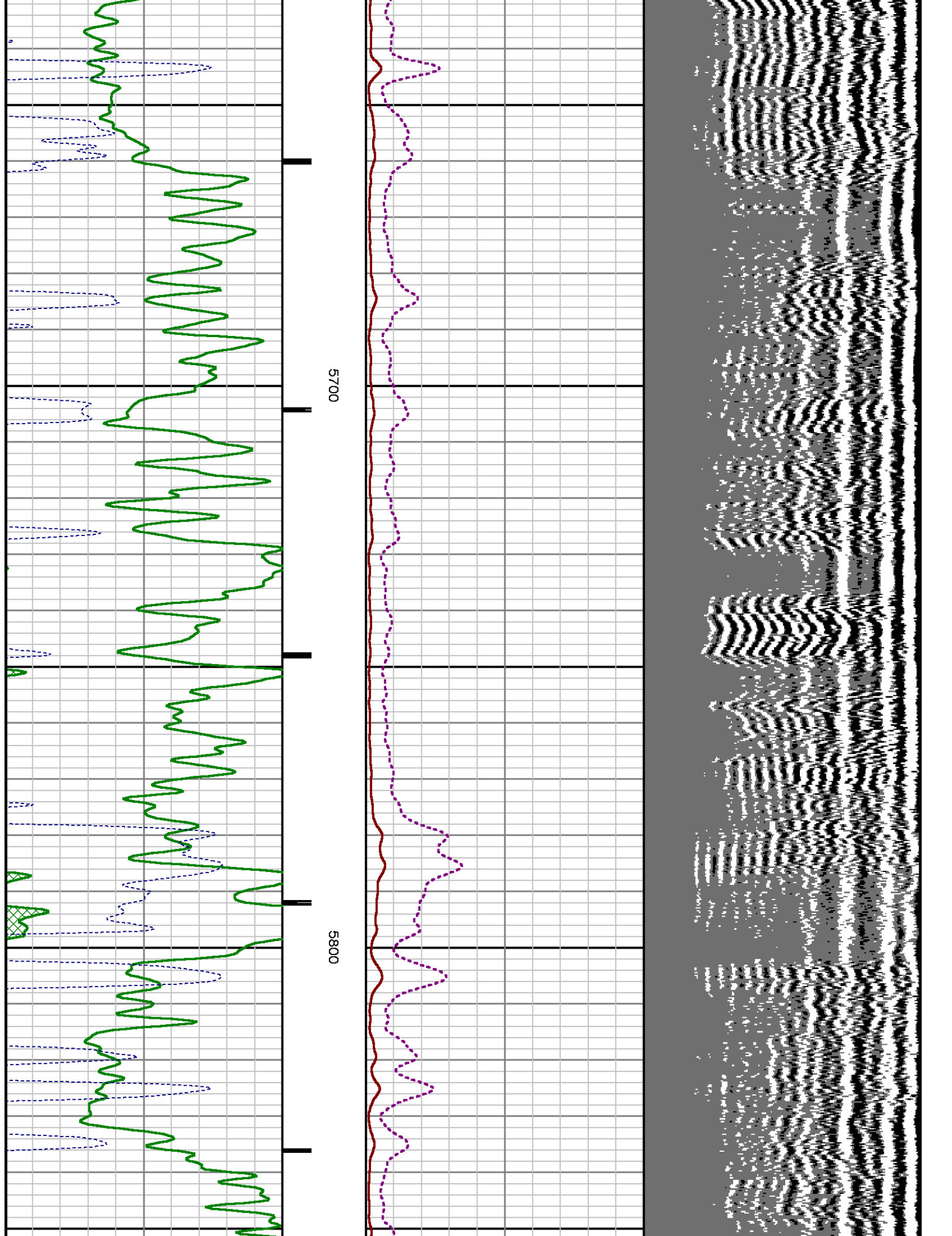


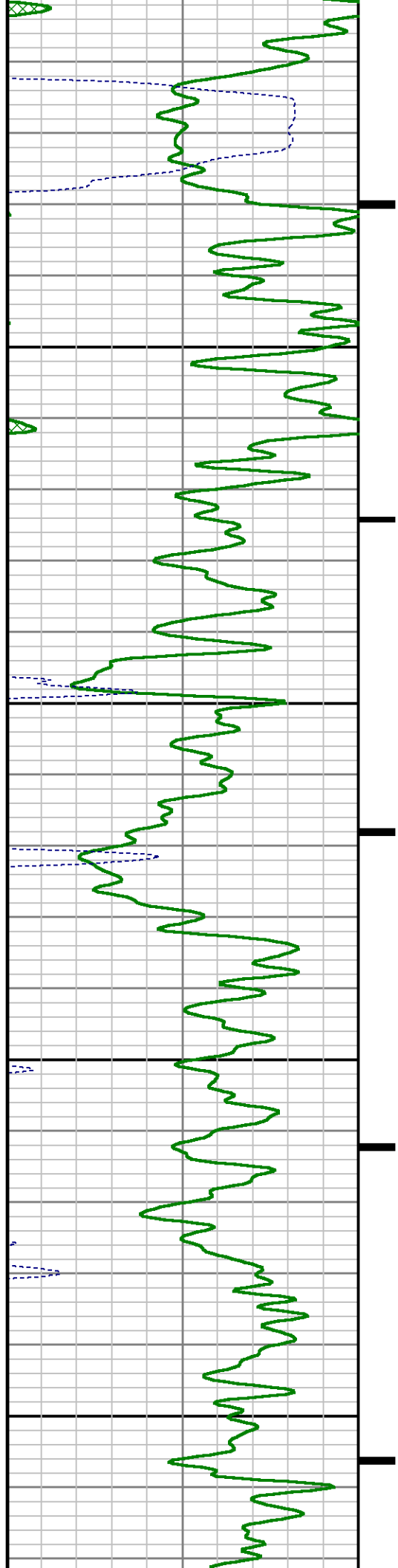
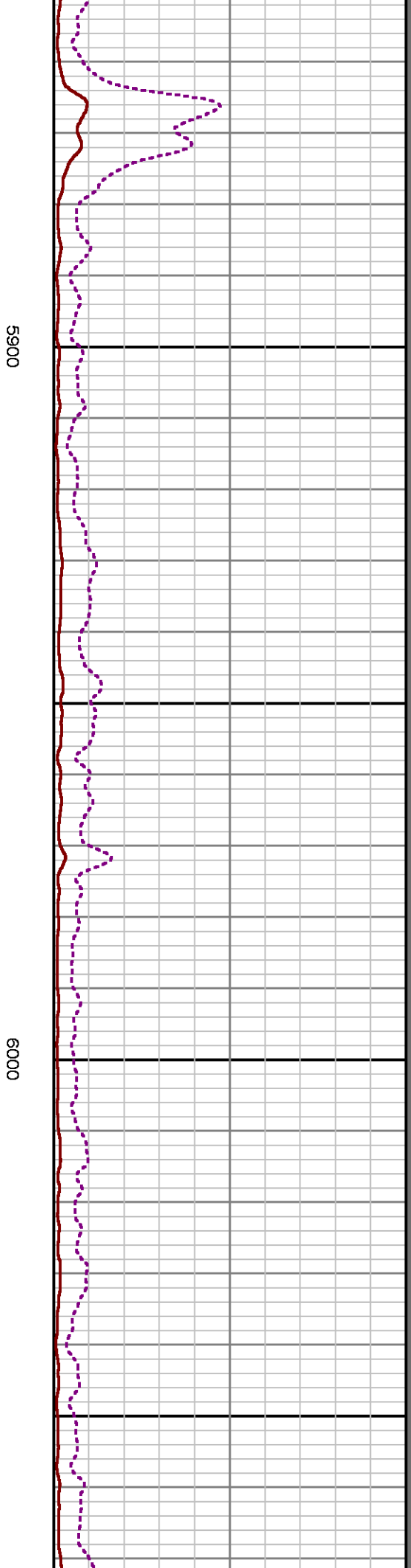
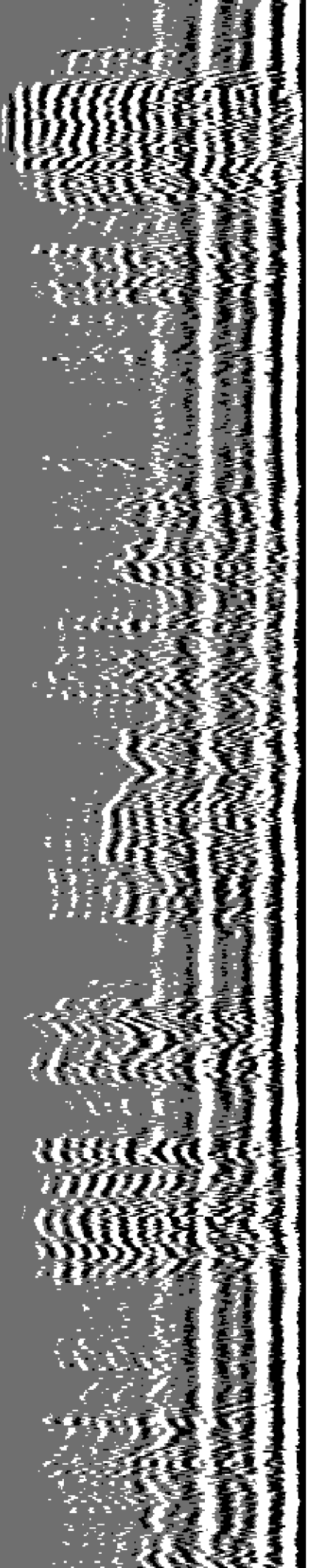


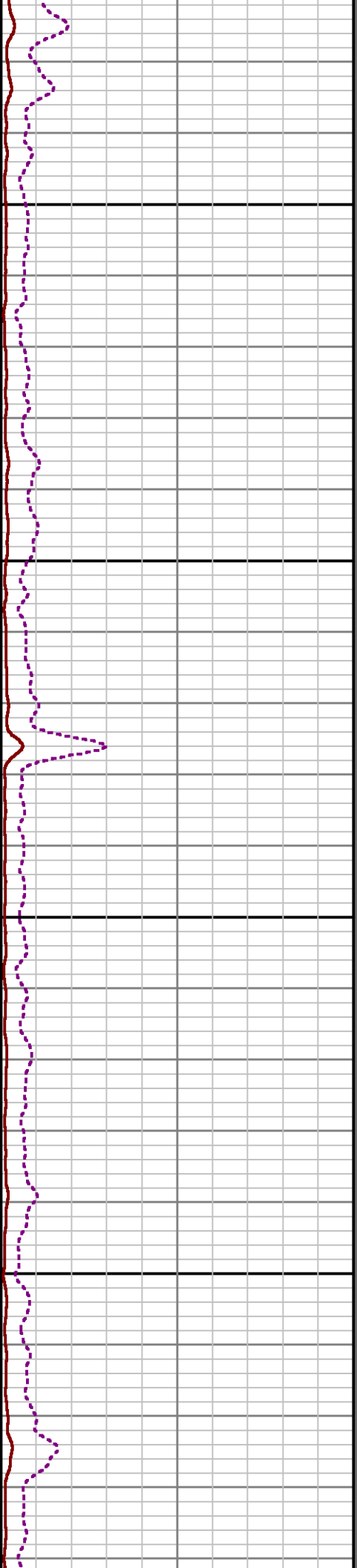
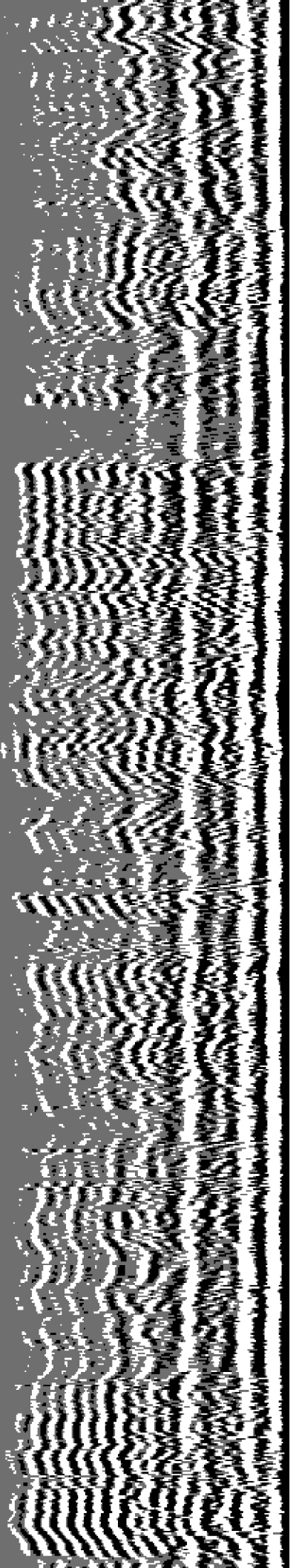






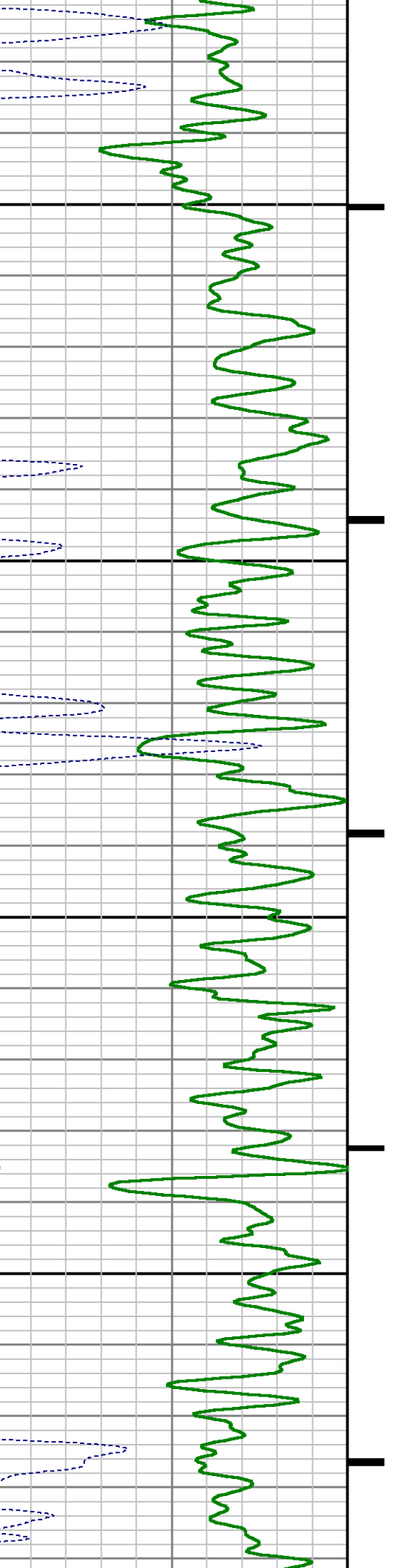


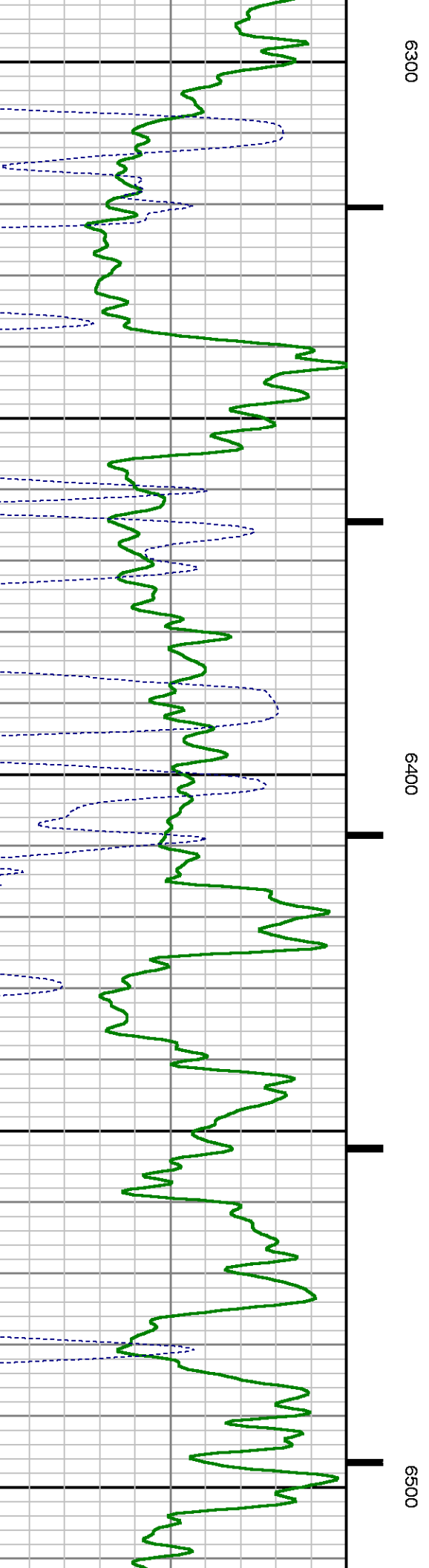
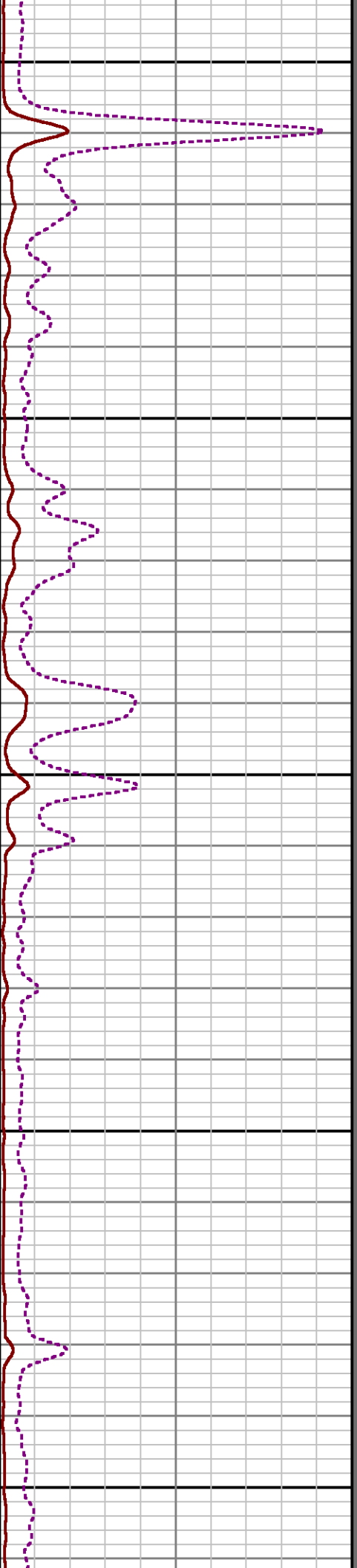
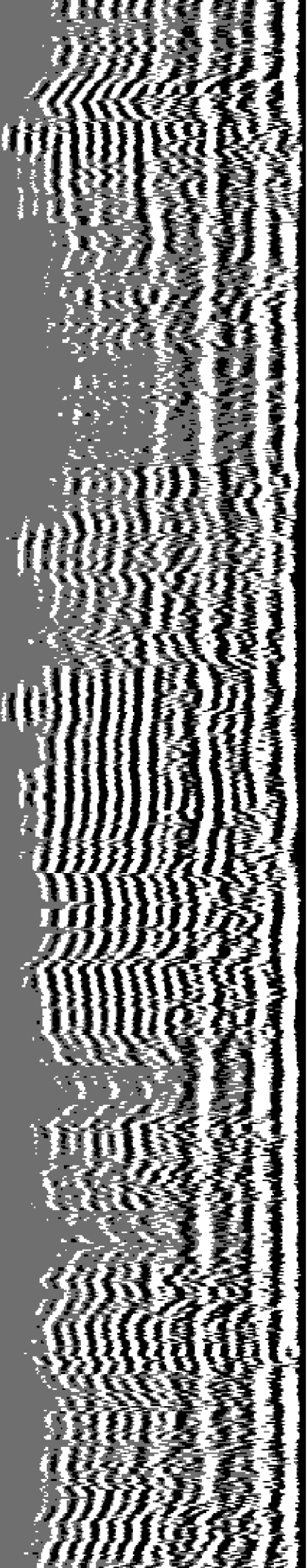


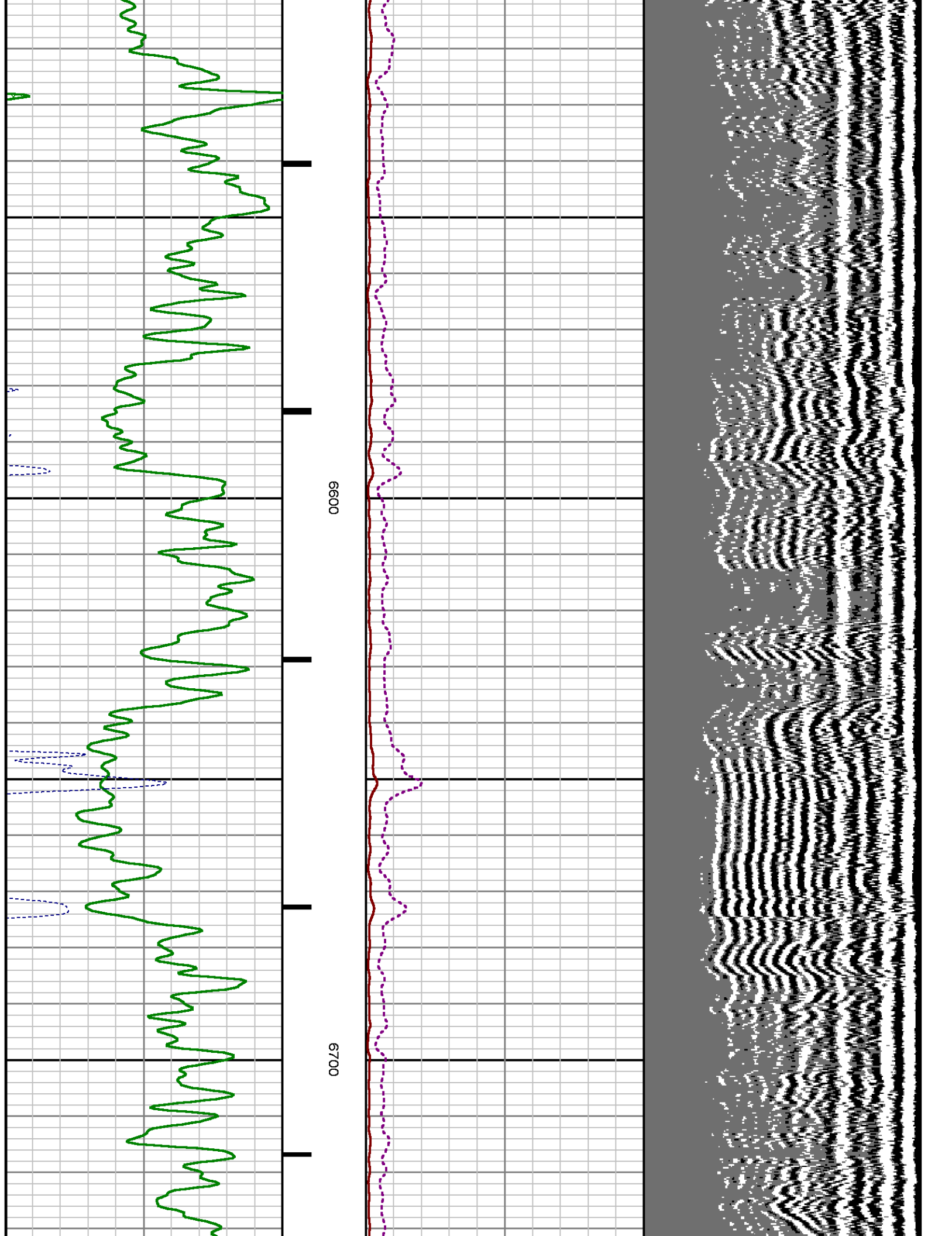


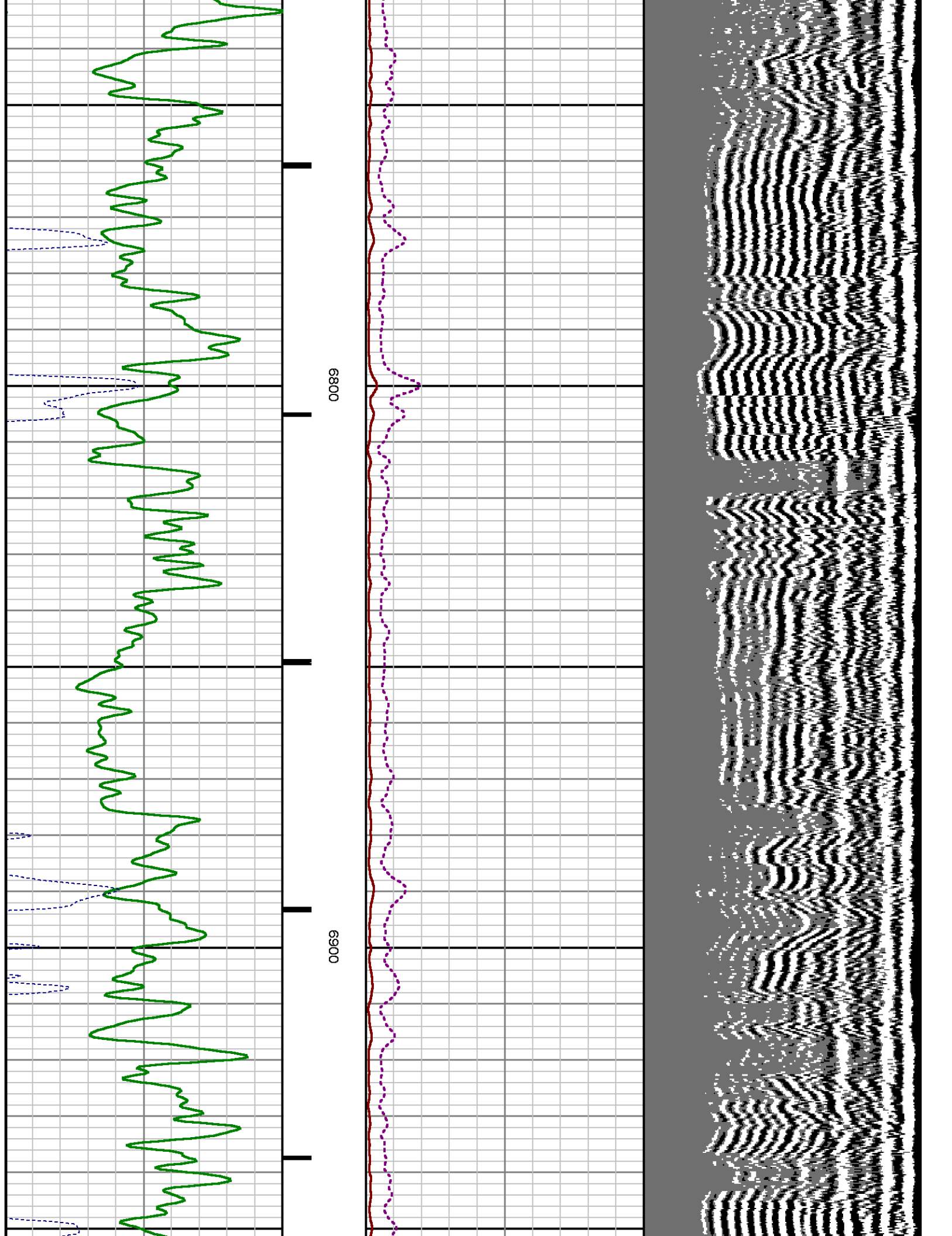
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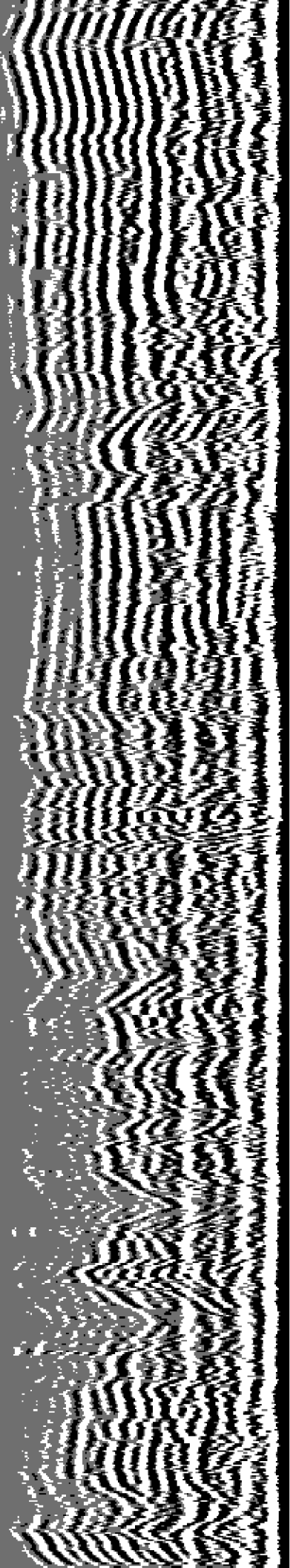
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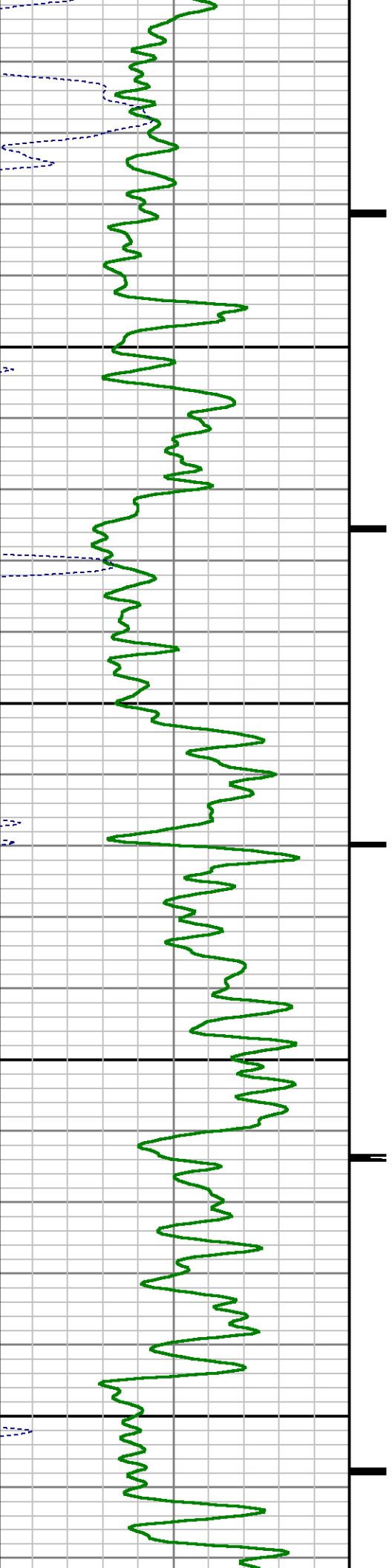


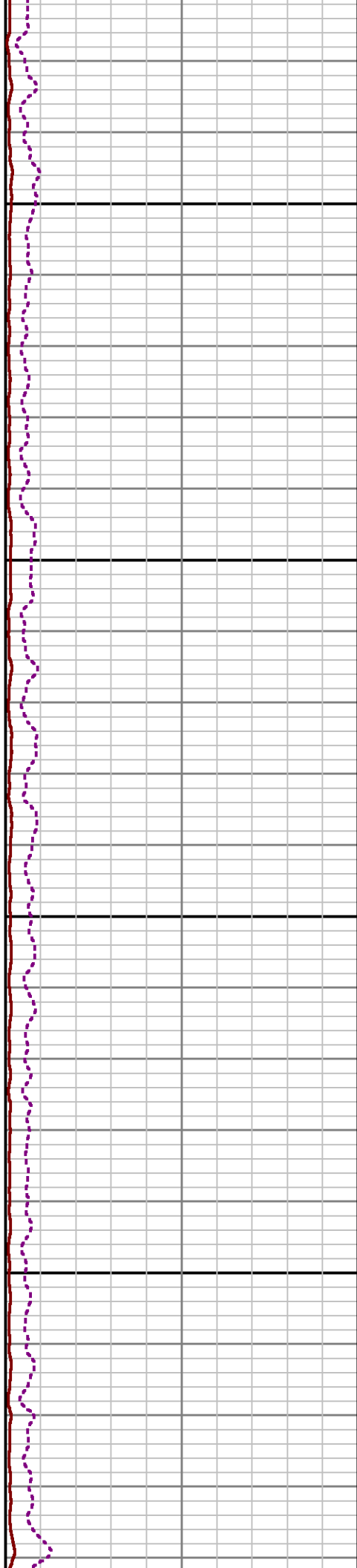
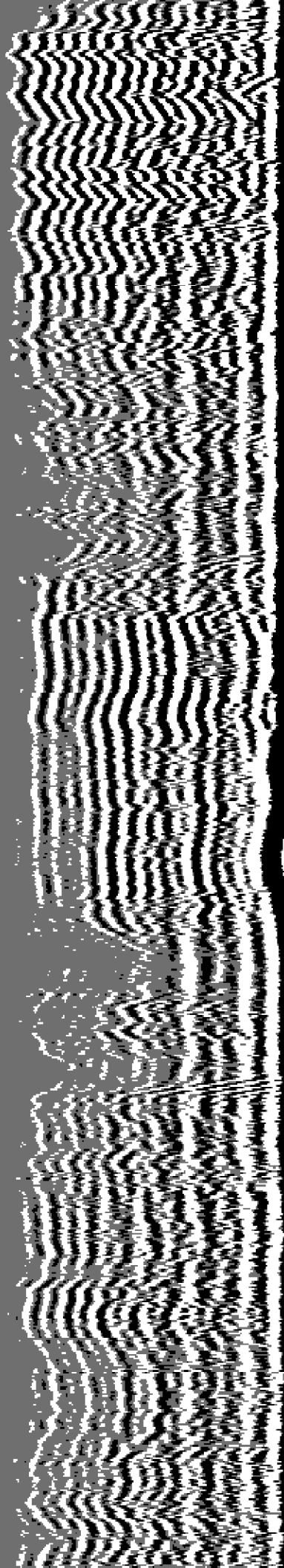




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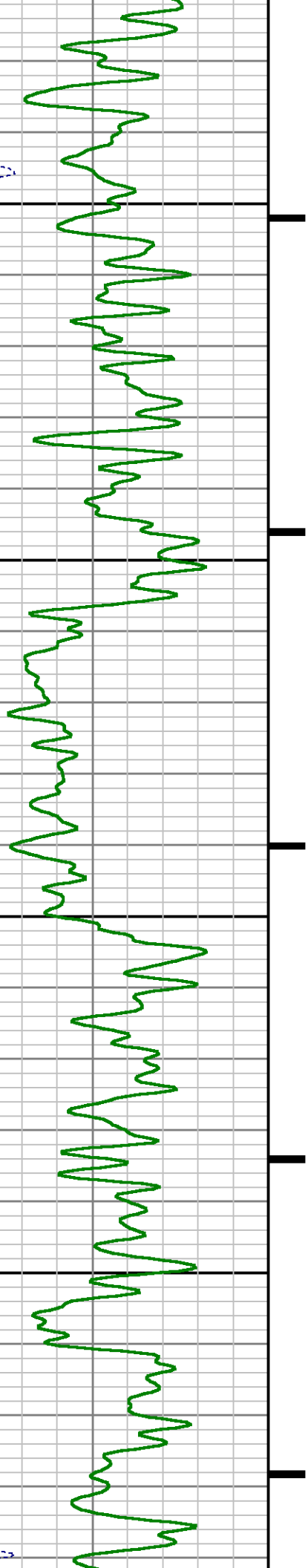
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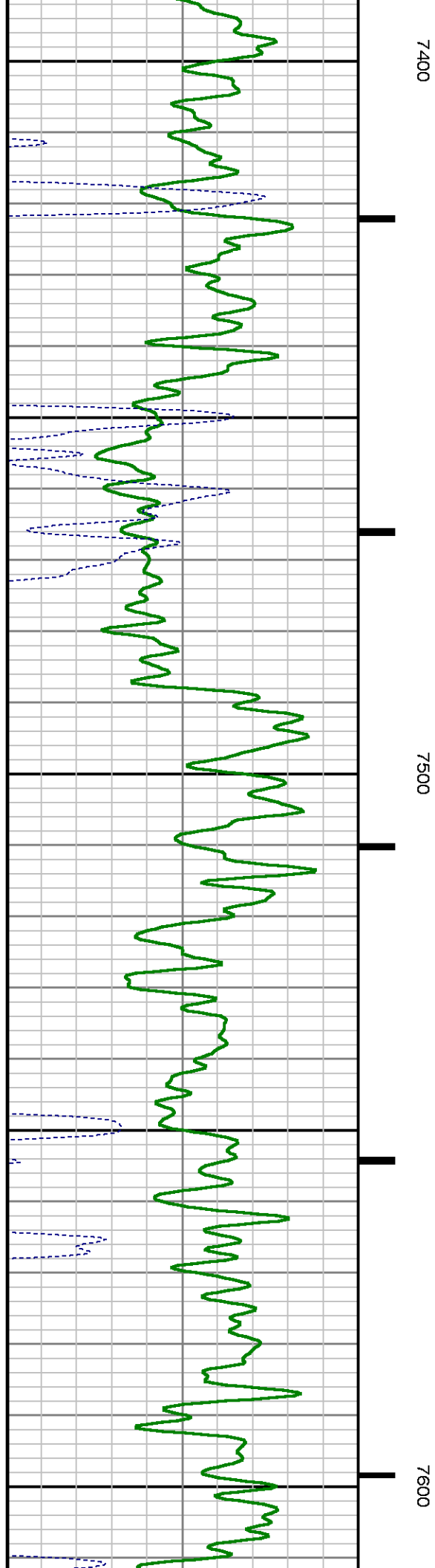
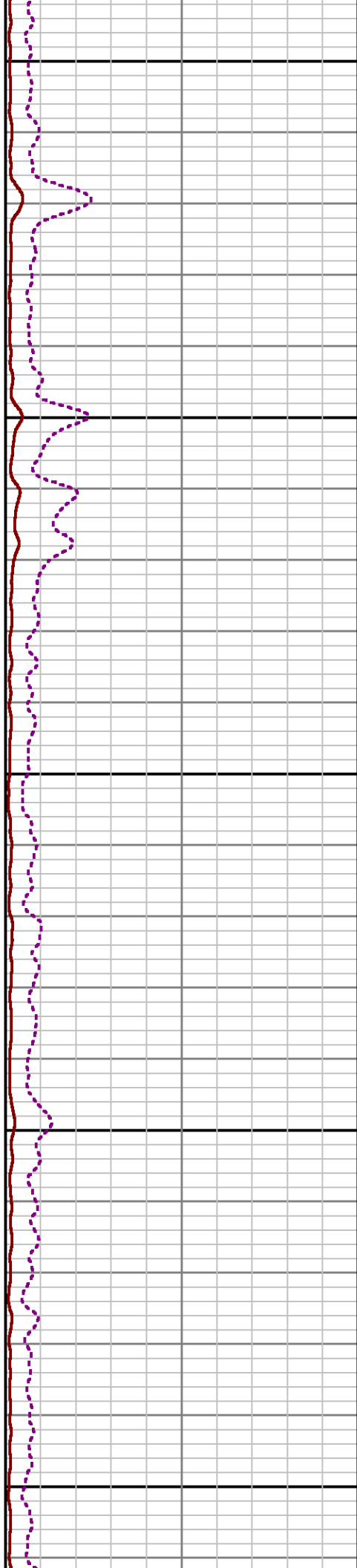
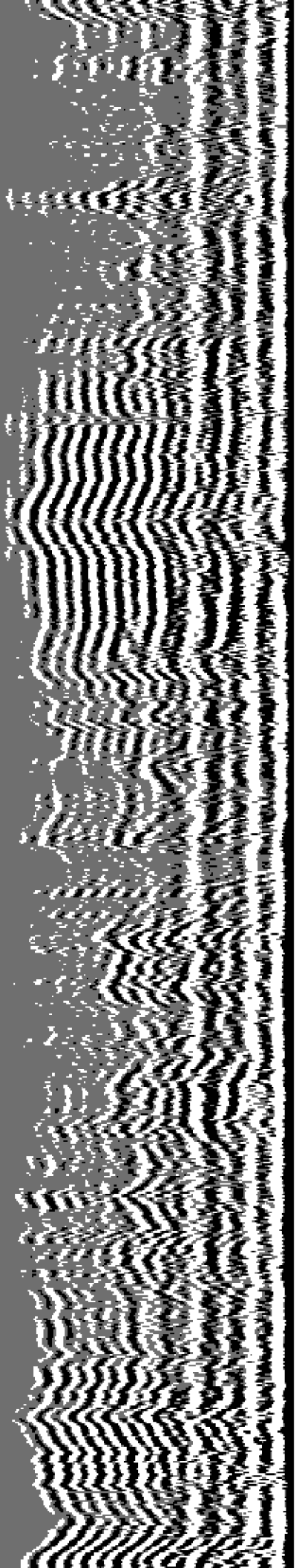


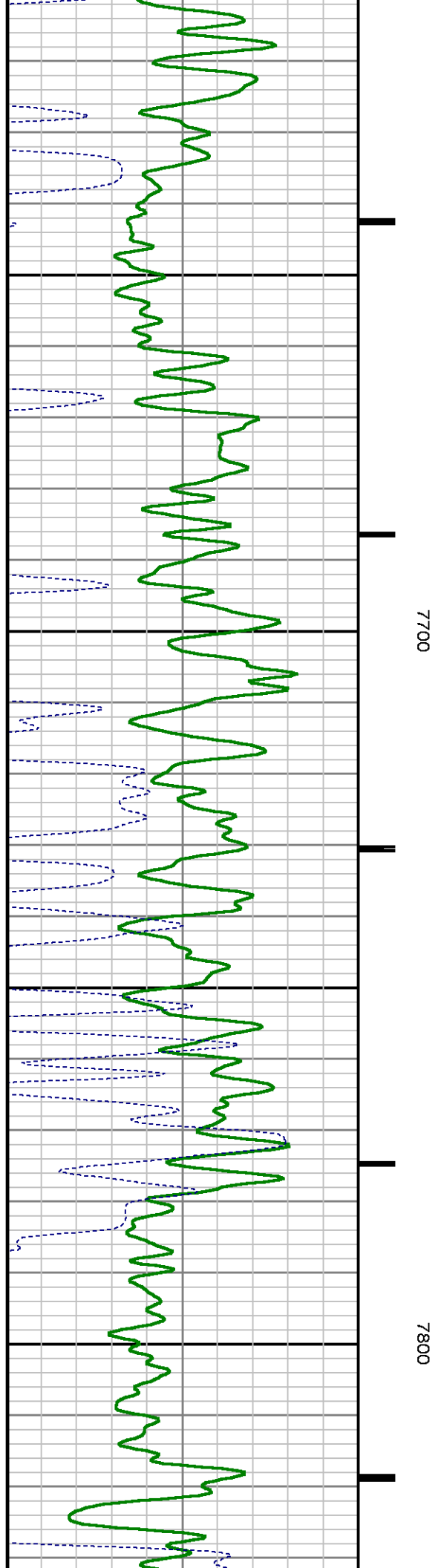
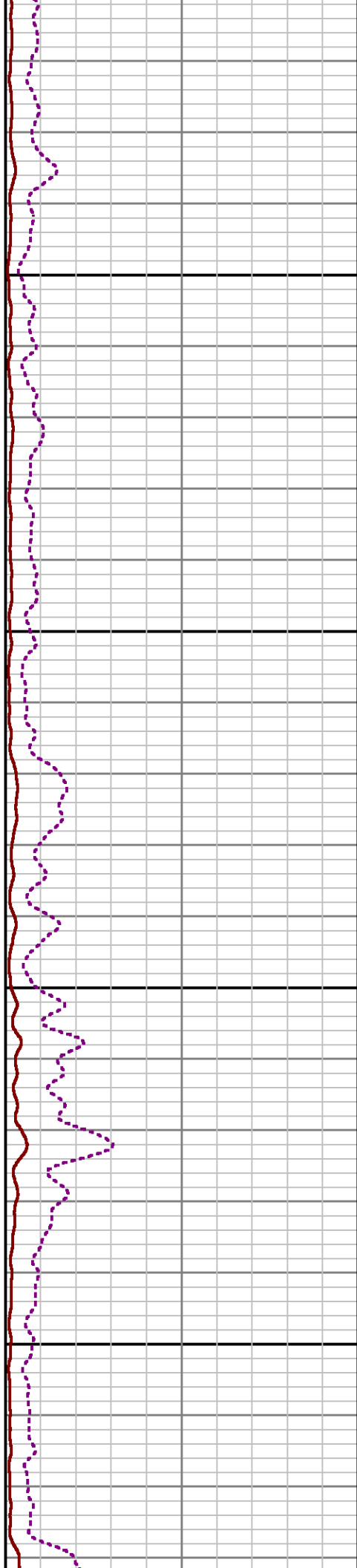
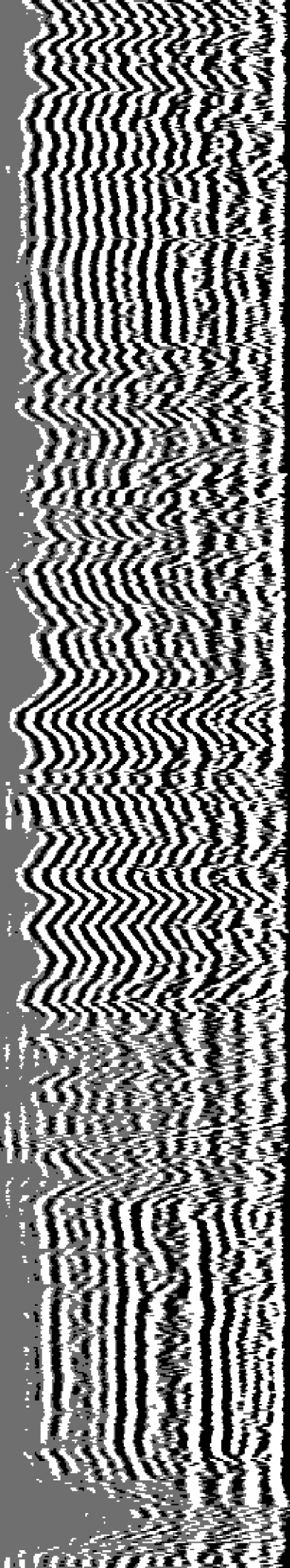


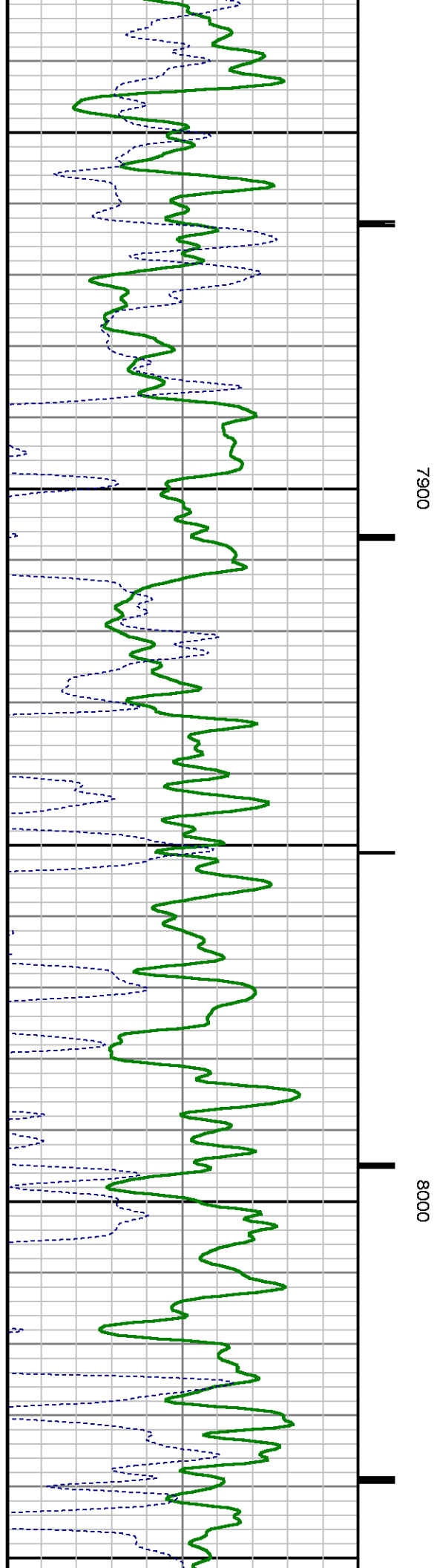
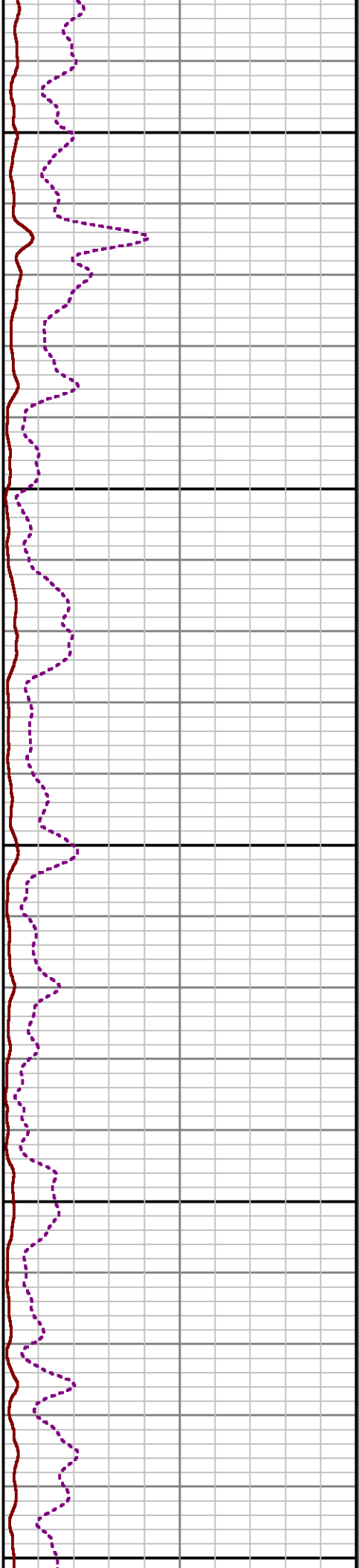
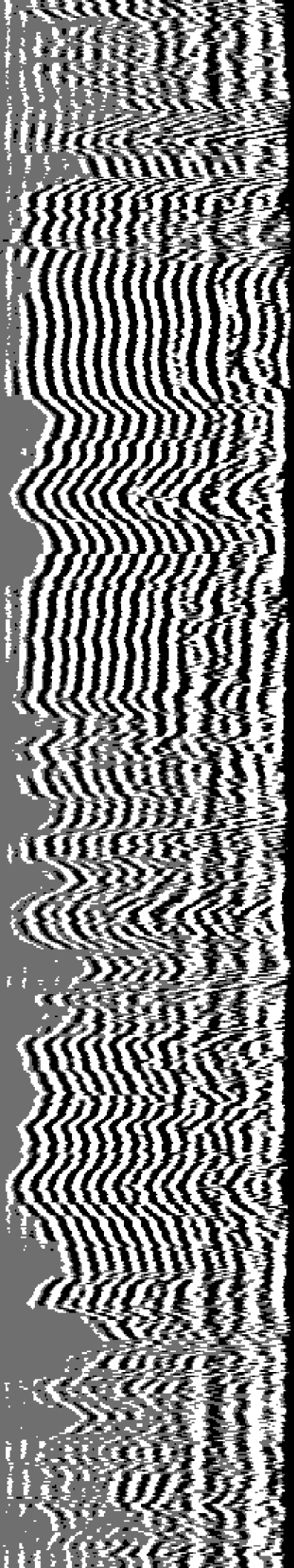
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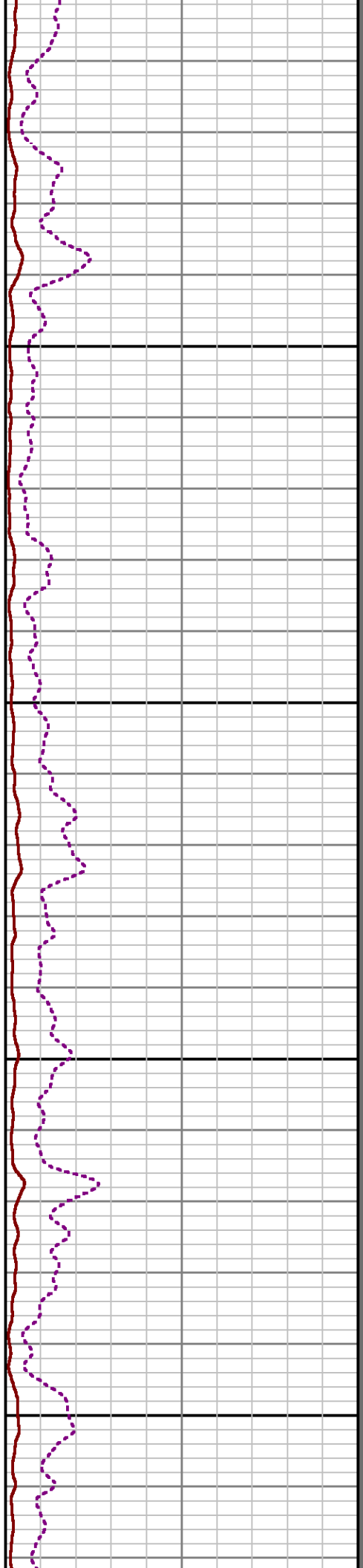
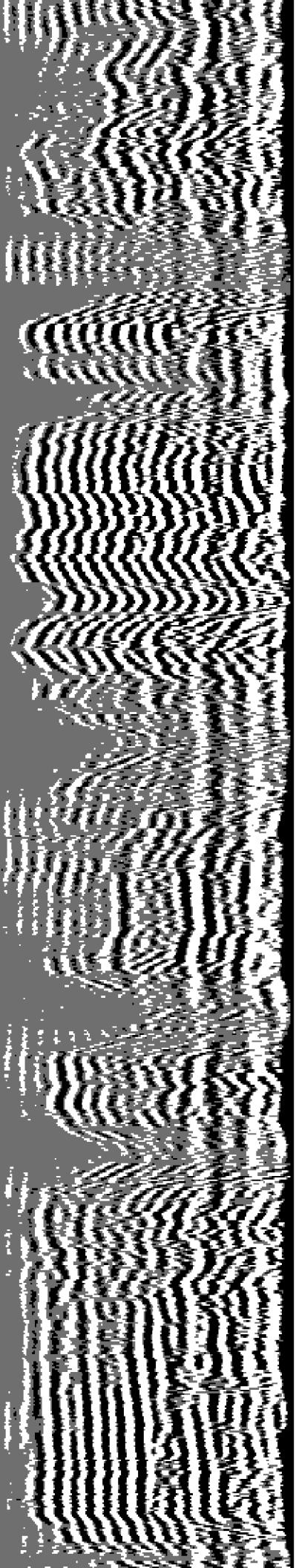
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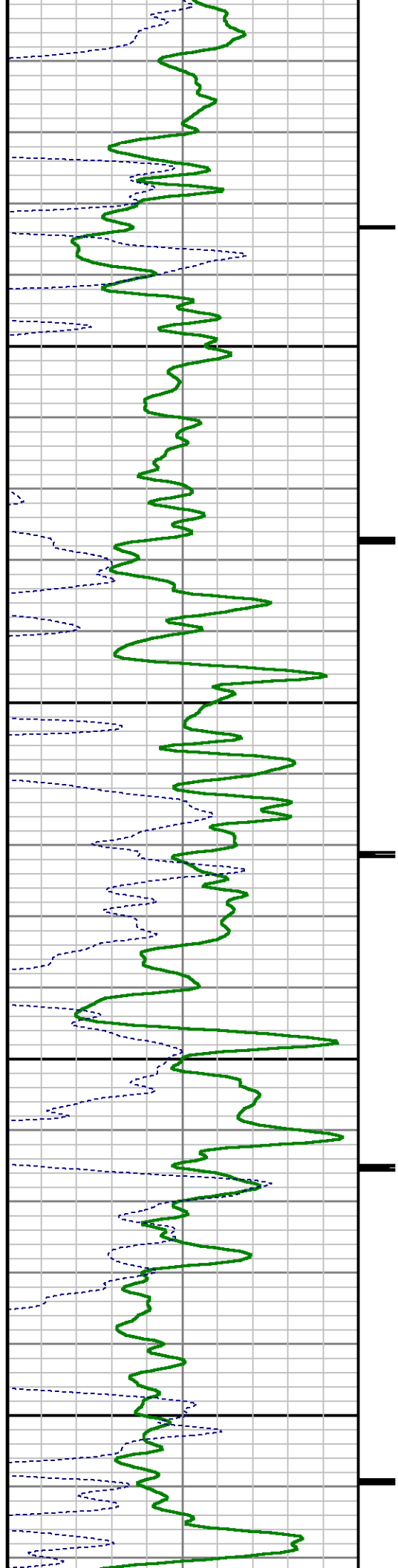


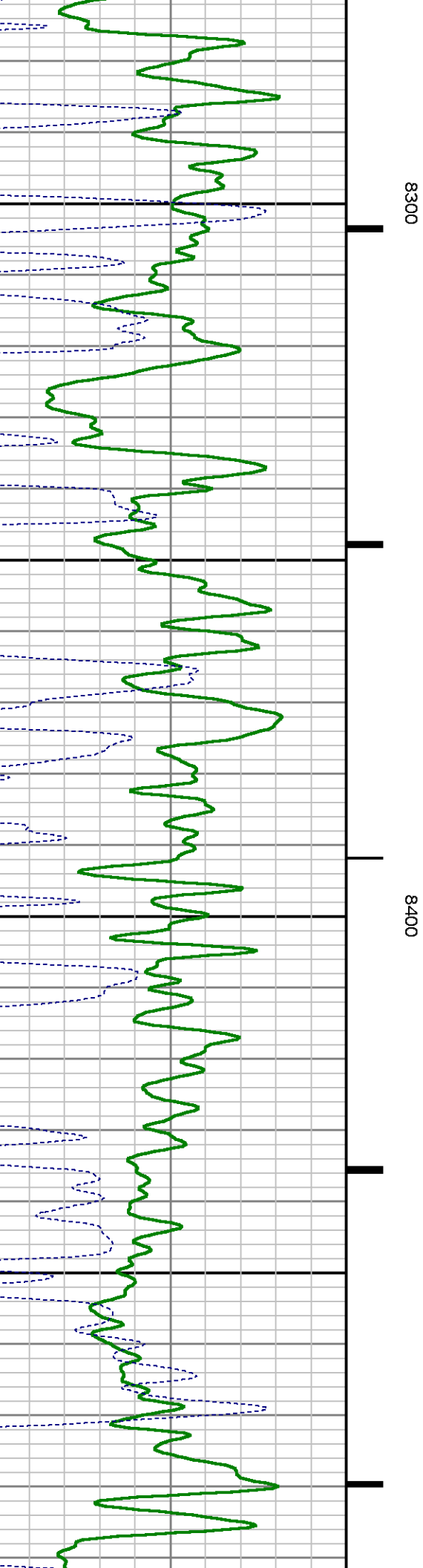
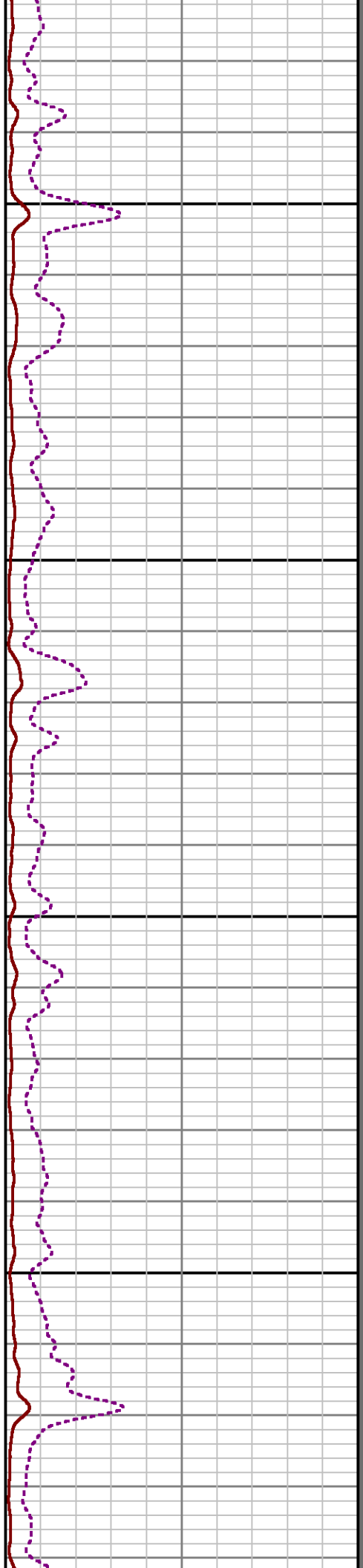
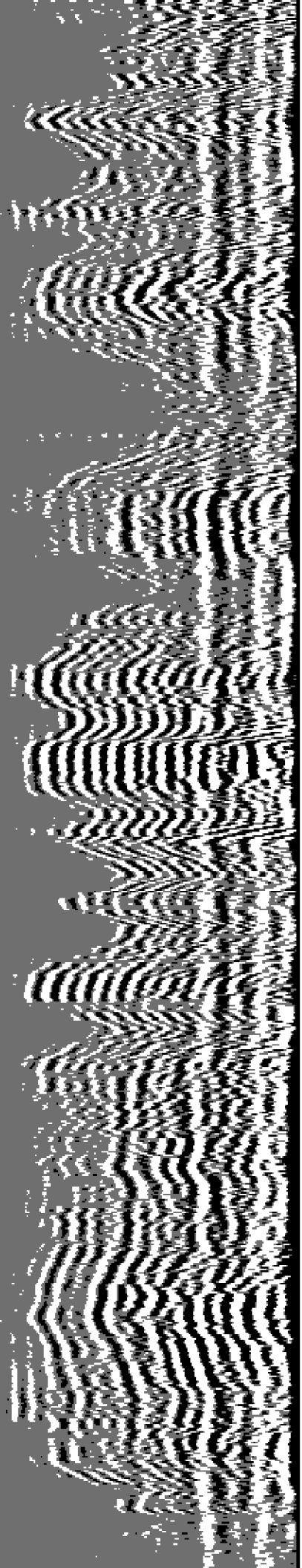


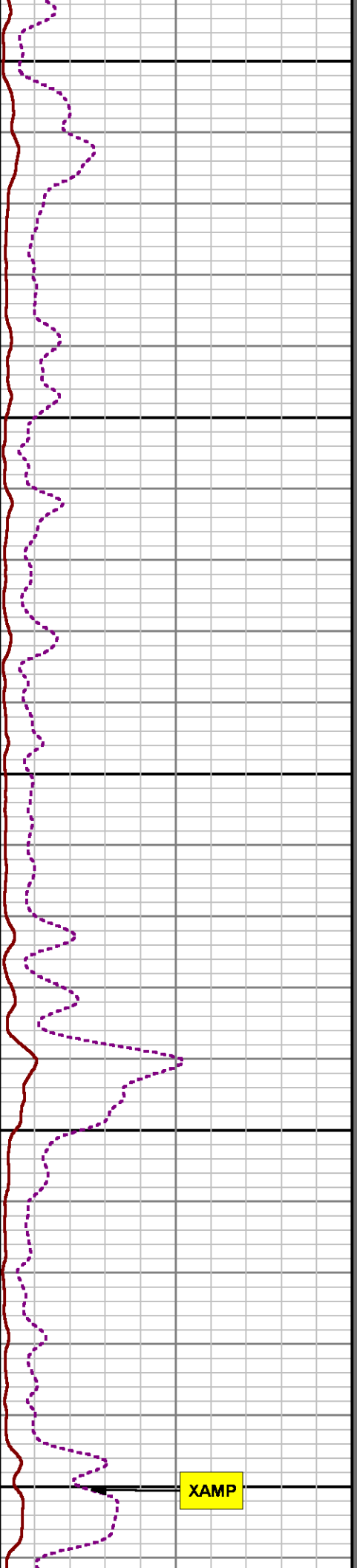
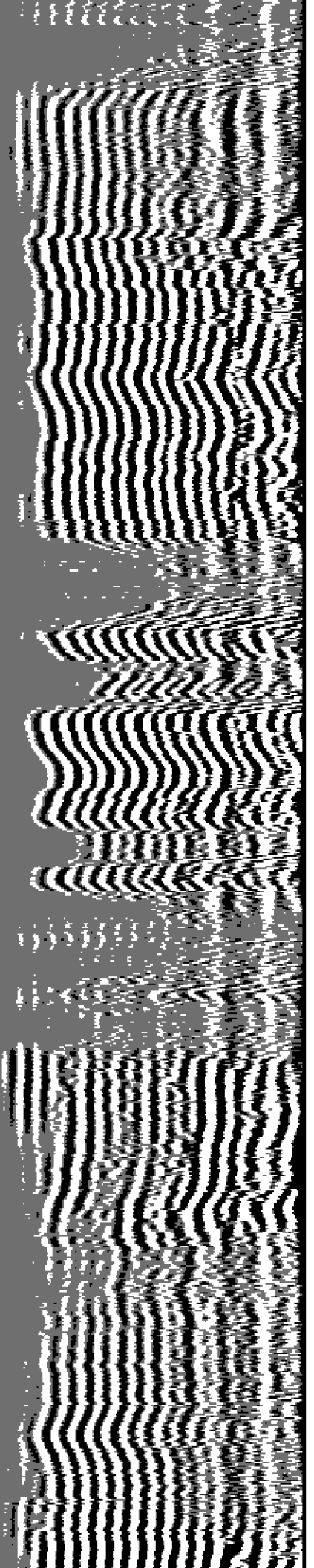


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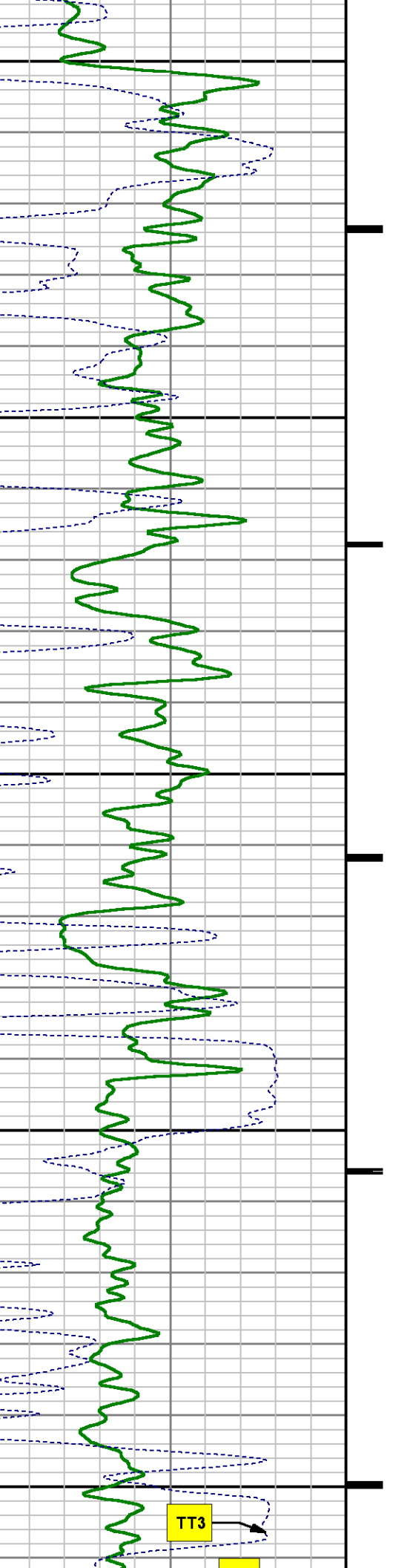
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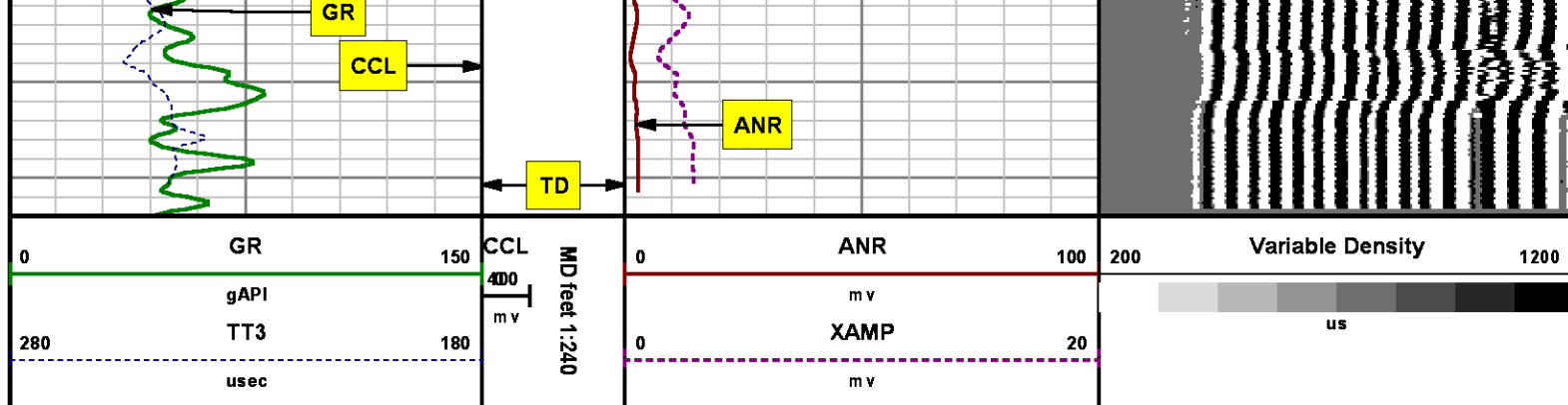
8600

8700

XAMP

TT3





SECONDARY PRESENTATION

0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	310.000	usec	30.843	8743.500
RAL	Amp Gate Start Near	195.000	usec	30.843	8743.500
RAL	Amp Gate Start Radial	195.000	usec	30.843	8743.500
RAL	Amp Gate Width Far	25.000	usec	30.843	8743.500
RAL	Amp Gate Width Near	25.000	usec	30.843	8743.500
RAL	Amp Gate Width Radial	25.000	usec	30.843	8743.500
RAL	casing od	4.500	inches	30.843	8743.500
RAL	casing wt	11.600	lbm/ft	30.843	8743.500
RAL	FB Start Far	291.900	usec	30.843	8743.500
RAL	FB Start Near	180.000	usec	30.843	8743.500
RAL	FB Start Radial	180.000	usec	30.843	8743.500
RAL	FB Thresh Far	10.000	mv	30.843	8743.500
RAL	FB Thresh Near	4.000	mv	30.843	8743.500
RAL	FB Thresh Radial	4.000	mv	30.843	8743.500
RAL	Fluid Travel Time	200.000	usec/ft	30.843	8743.124

DEPTH OFFSETS

(for Acquired Curves)

SERIES

DEPTH OFFSET

ACQUIRED CURVES

1426XA -11.000
 1355XA -5.620
 1355XA -1.500
 1355XA 0.000

ACAL ANR AR1 AR2 AR3 AR4
 AR5 AR6 AR7 AR8 CHV FPR2
 FPR3 FPR5 TT3 TTR1 TTR2 TTR3
 TTR4 TTR5 TTR6 TTR7 TTR8 XAMP
 AFAR SIG TT5
 CCL
 GR
 TEMP

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

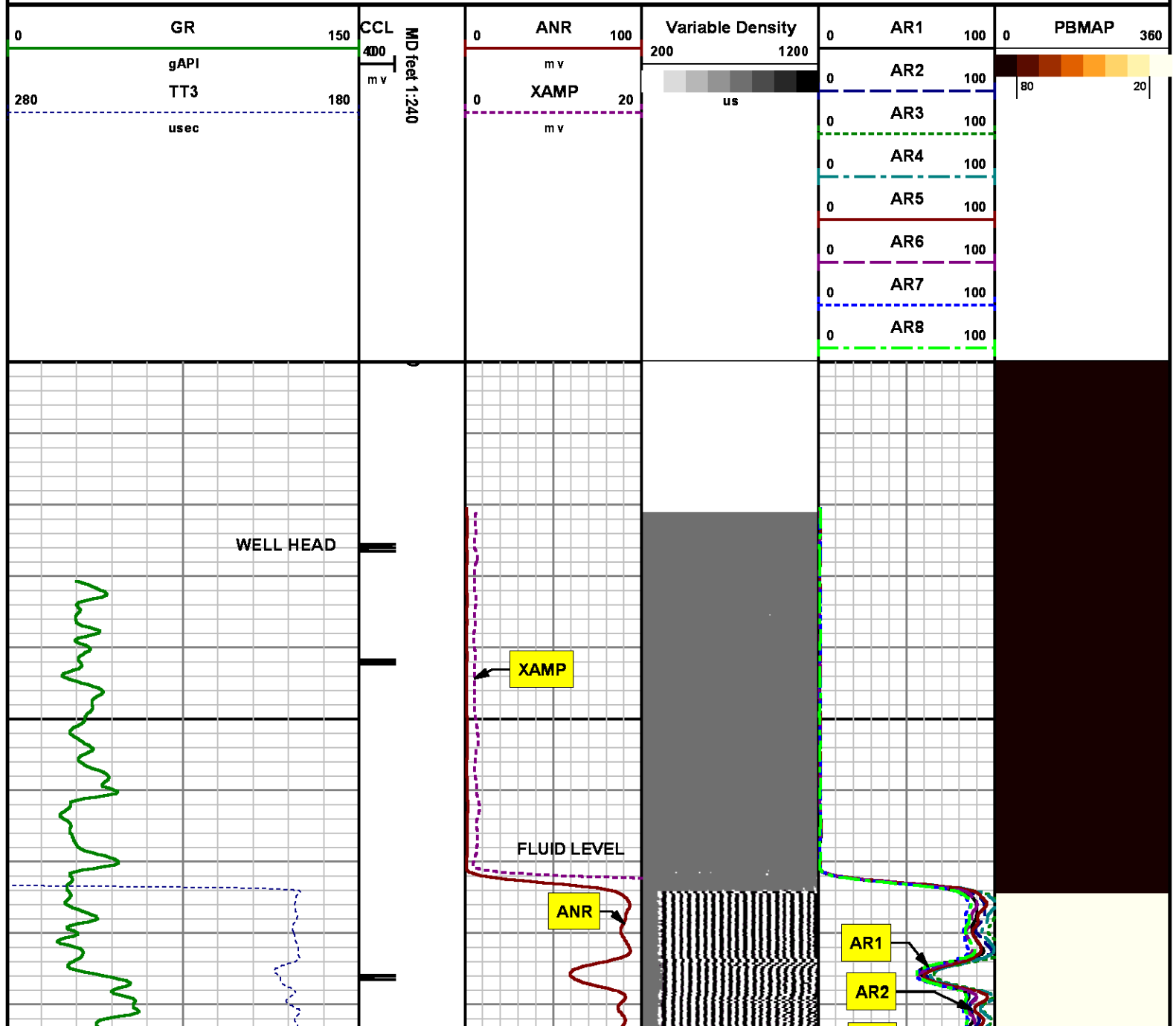
Well : SAVAGE RWF 533-25

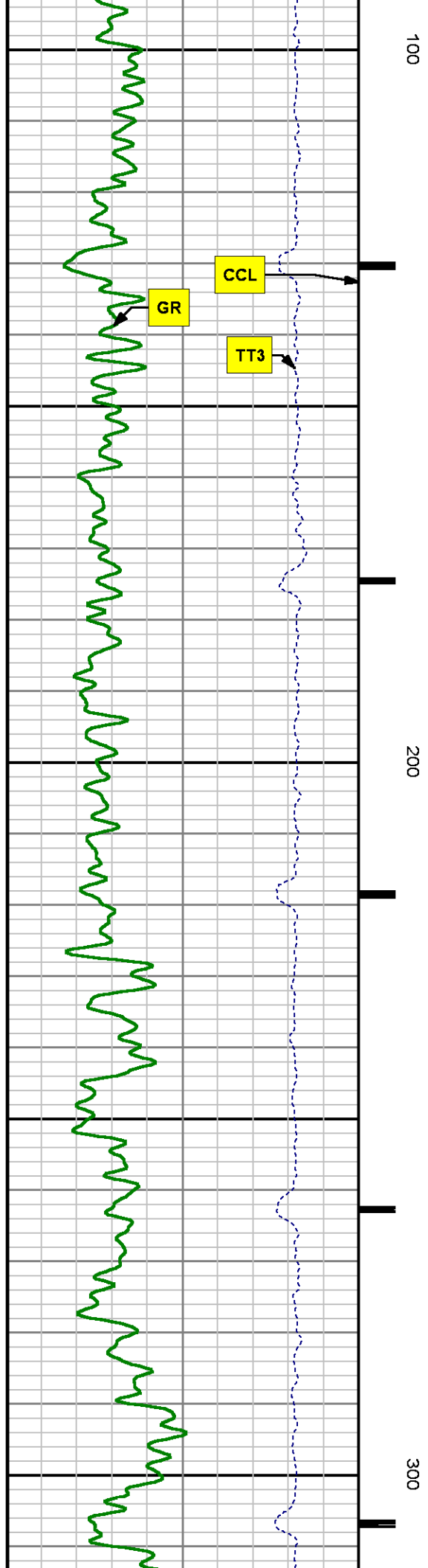
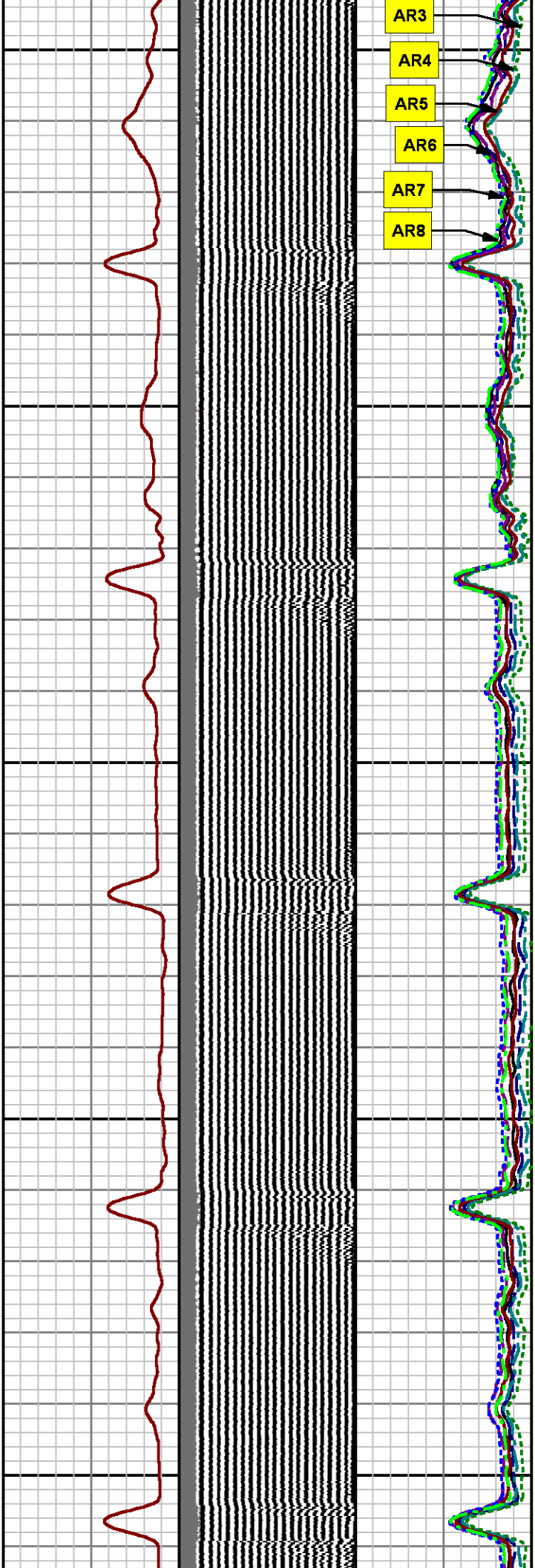
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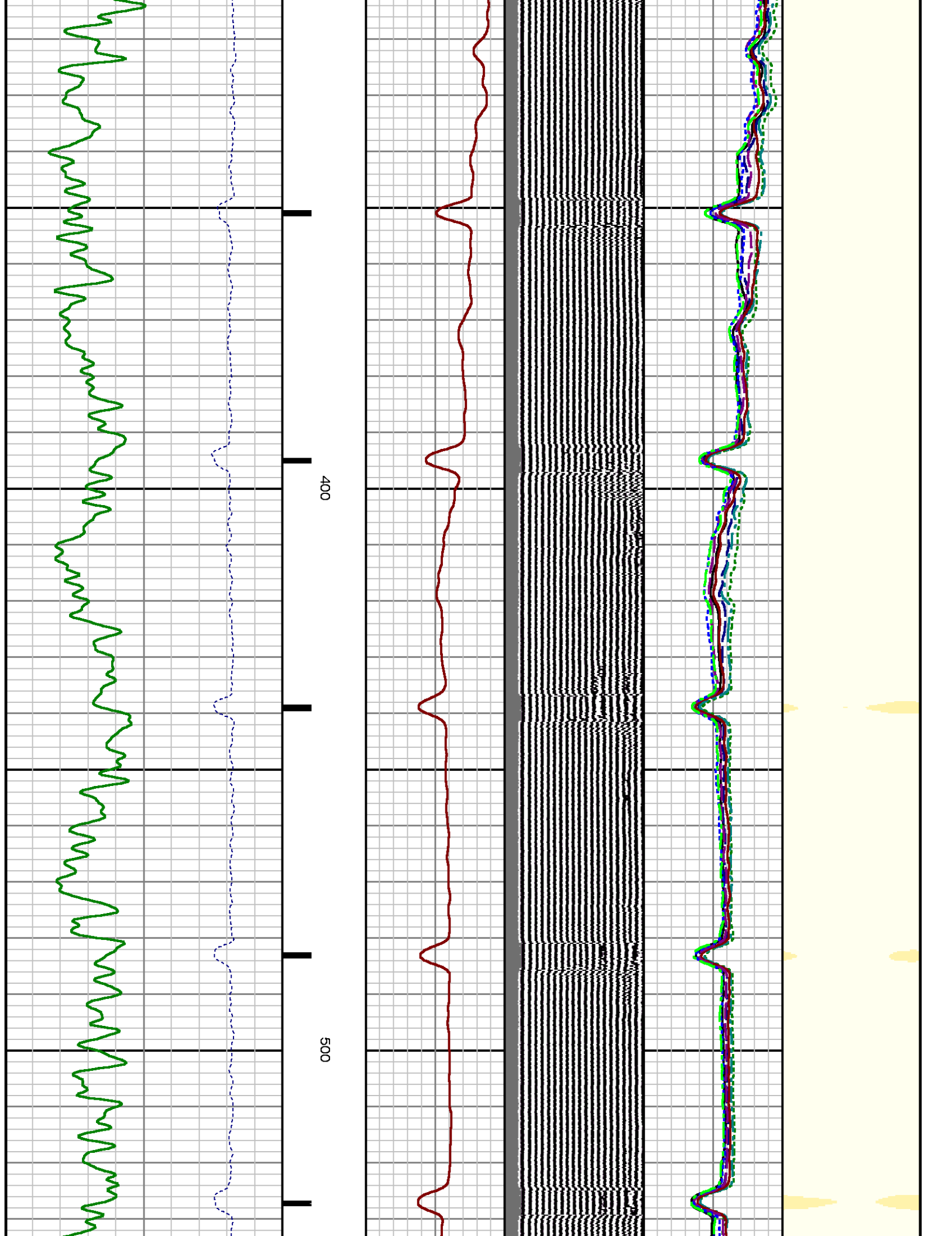
Mode : PlotMgr 5.4.504

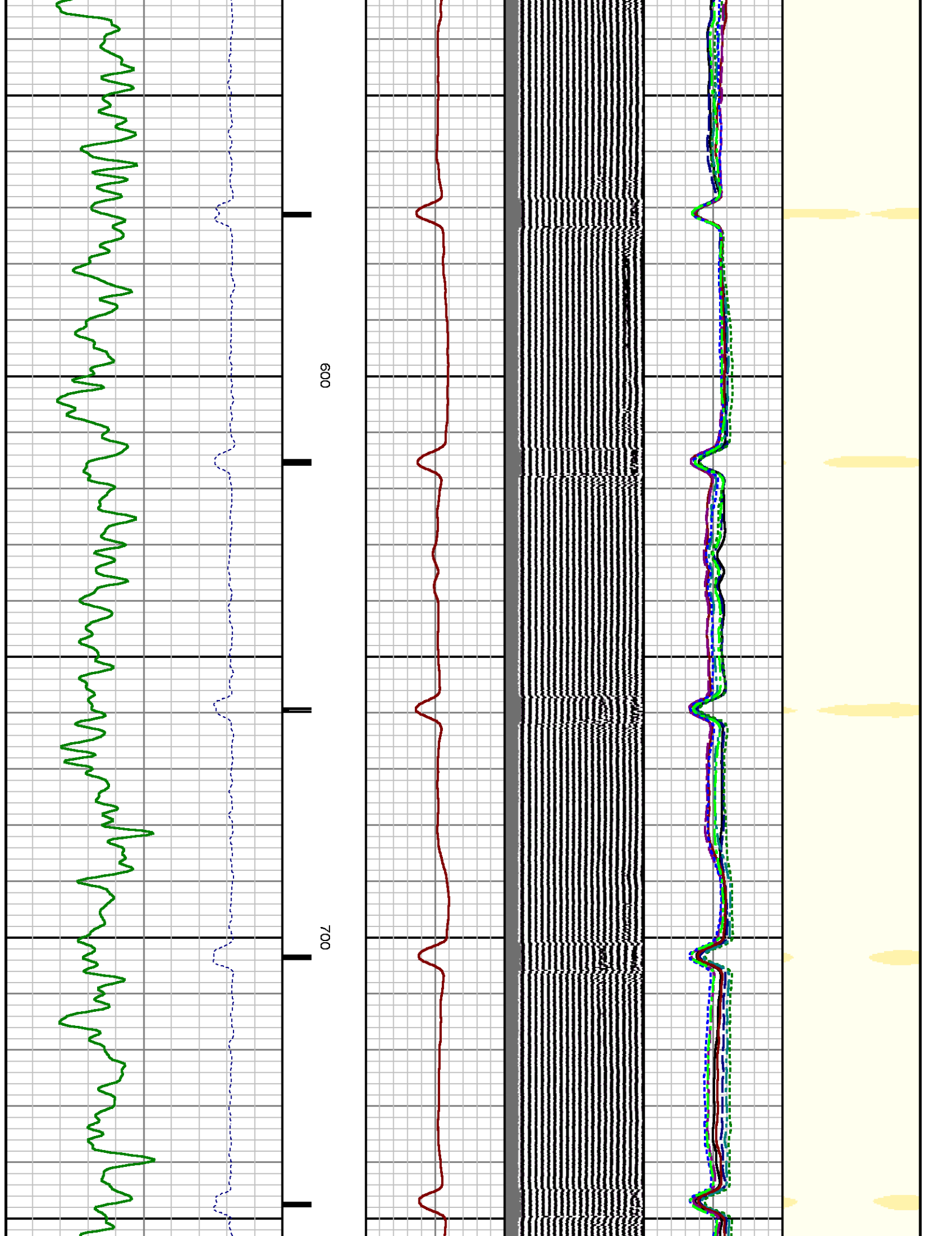
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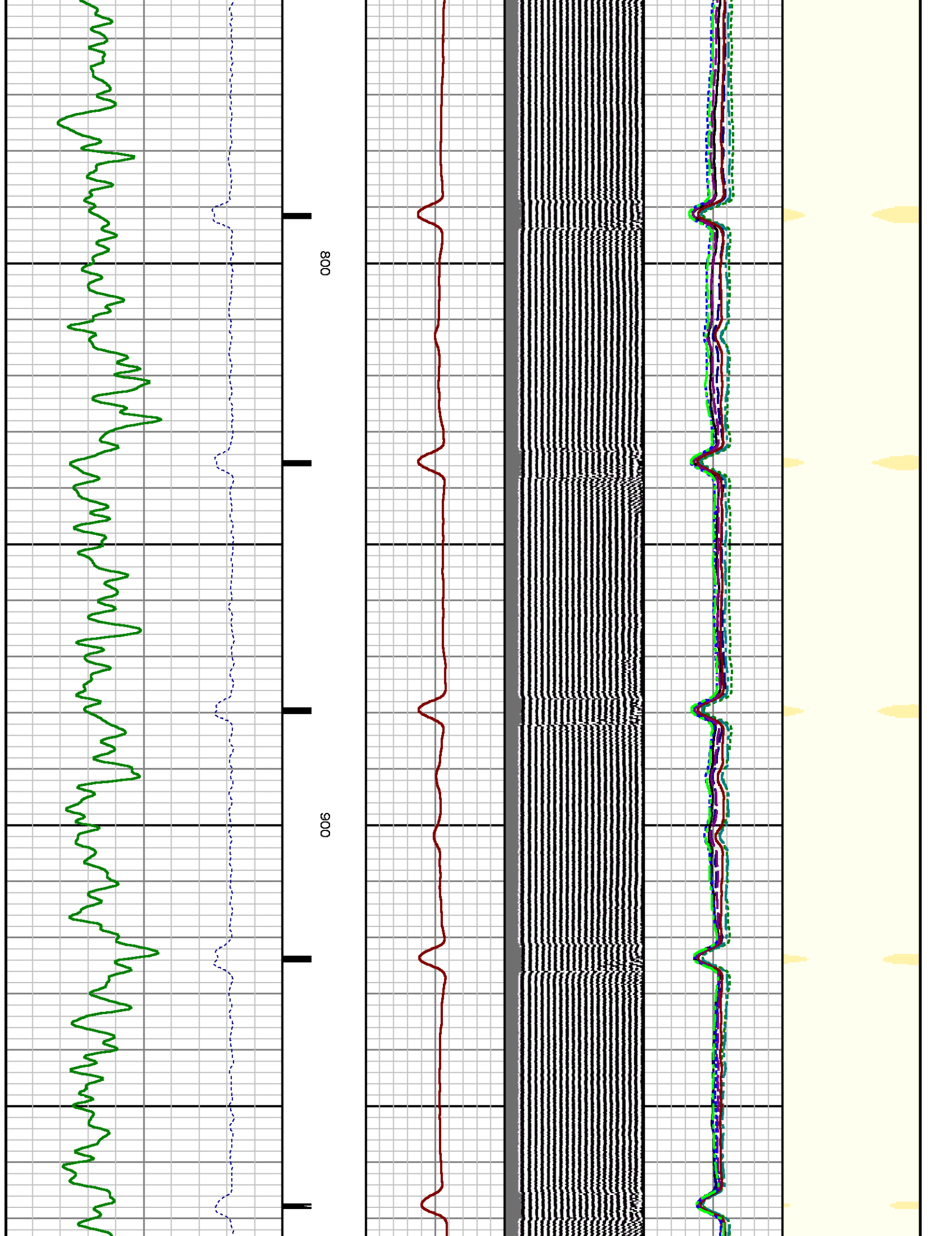
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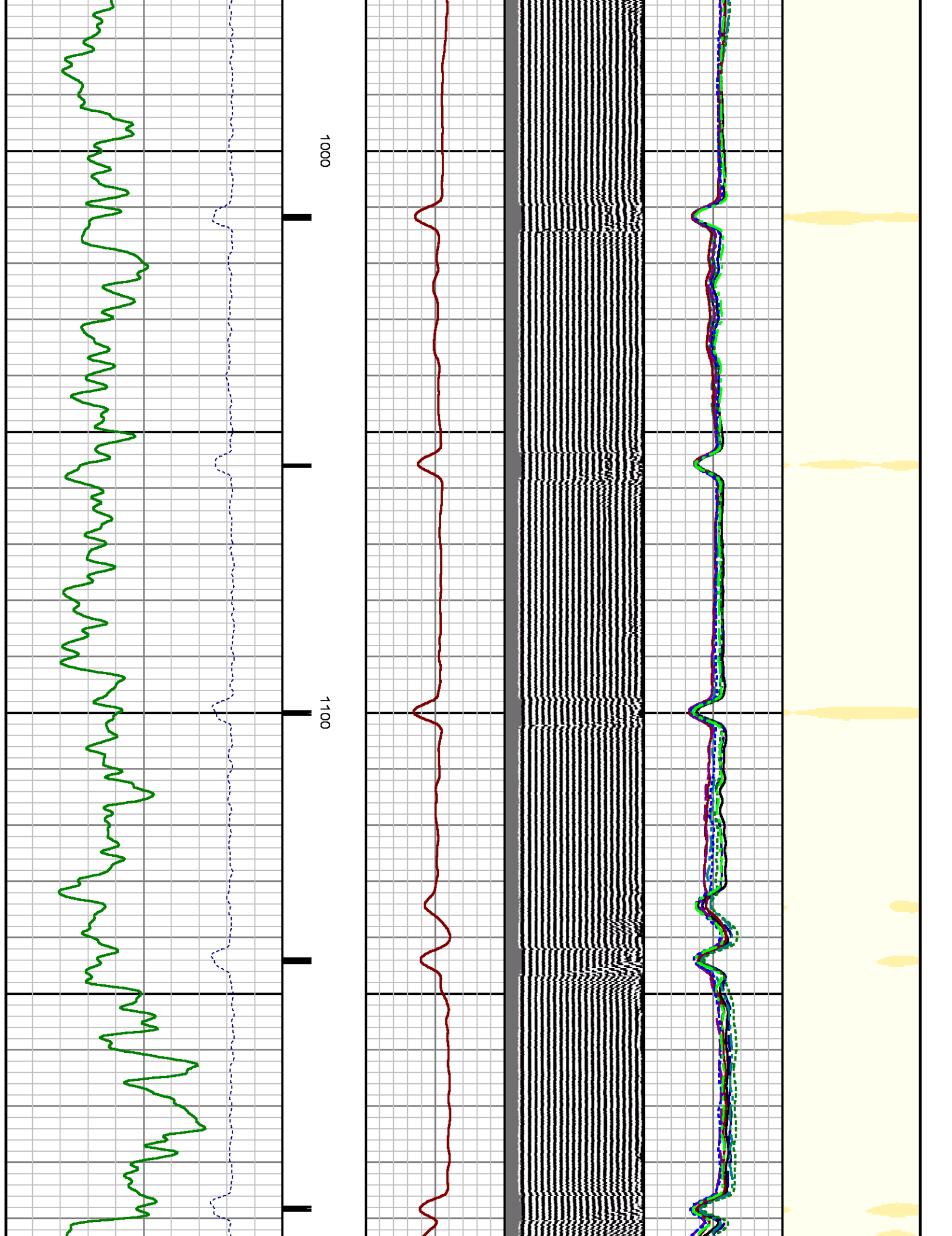


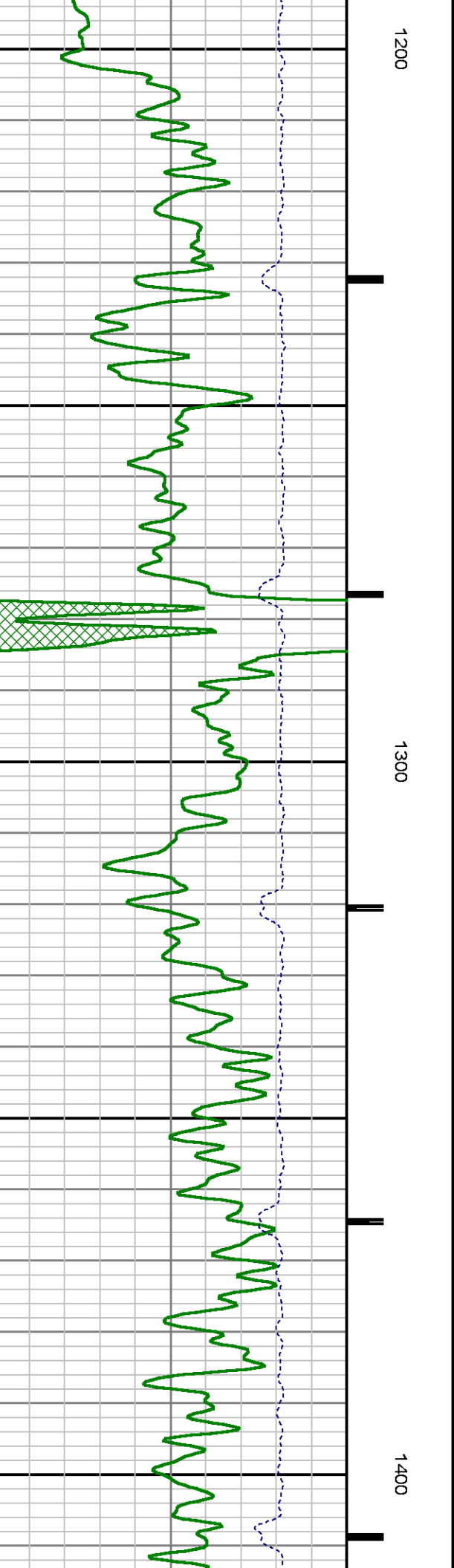
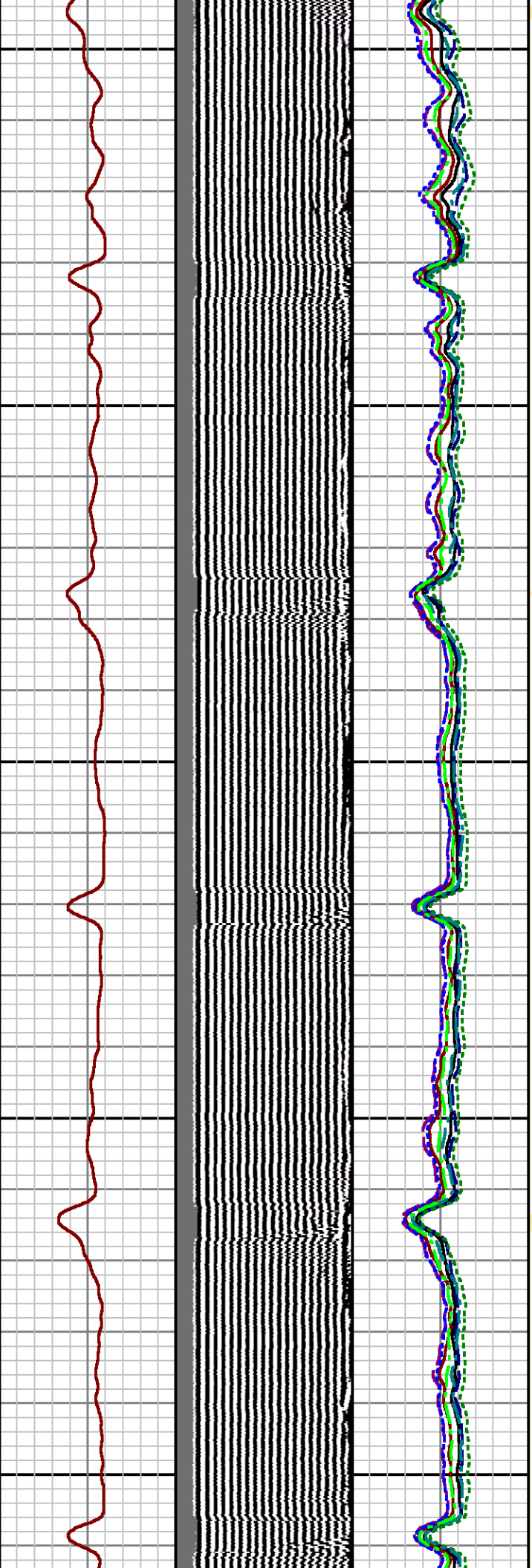


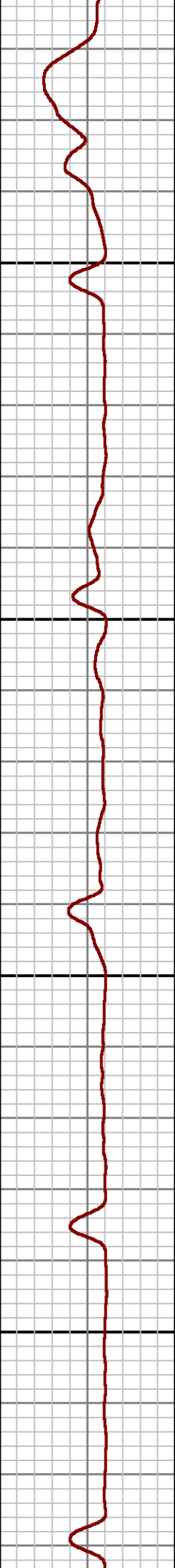
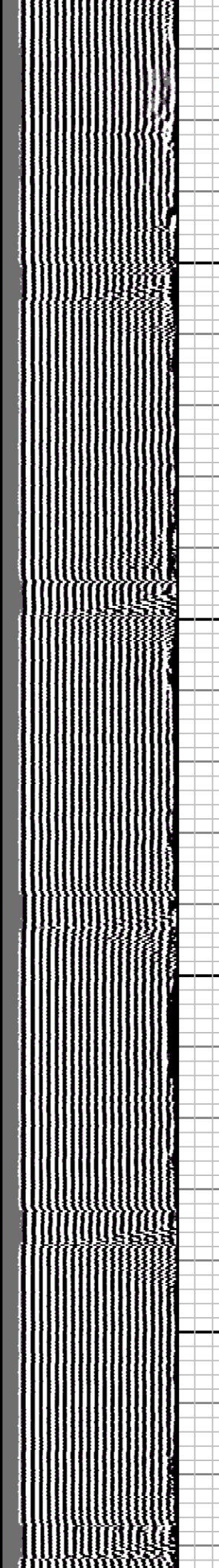
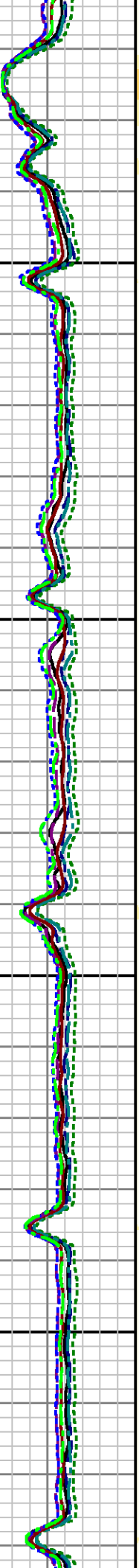






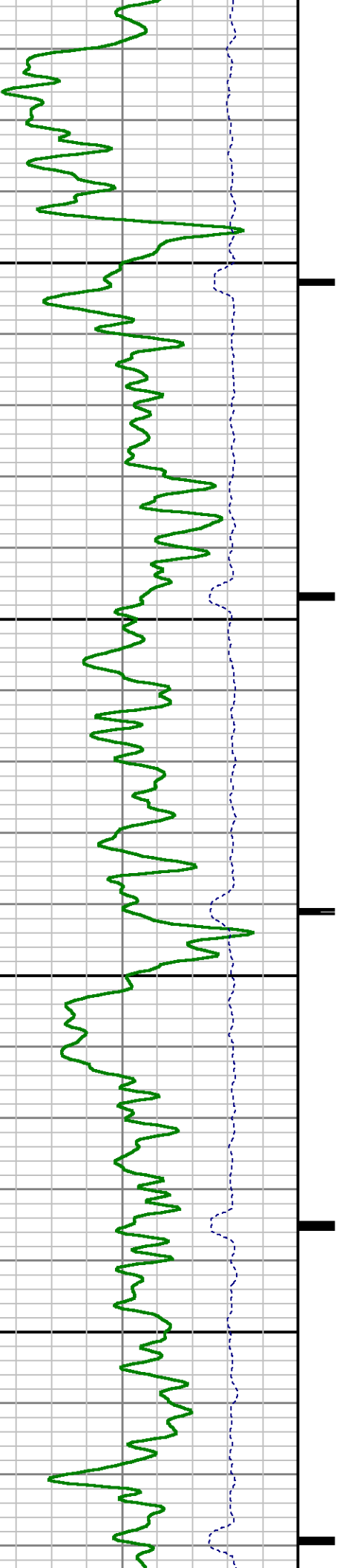


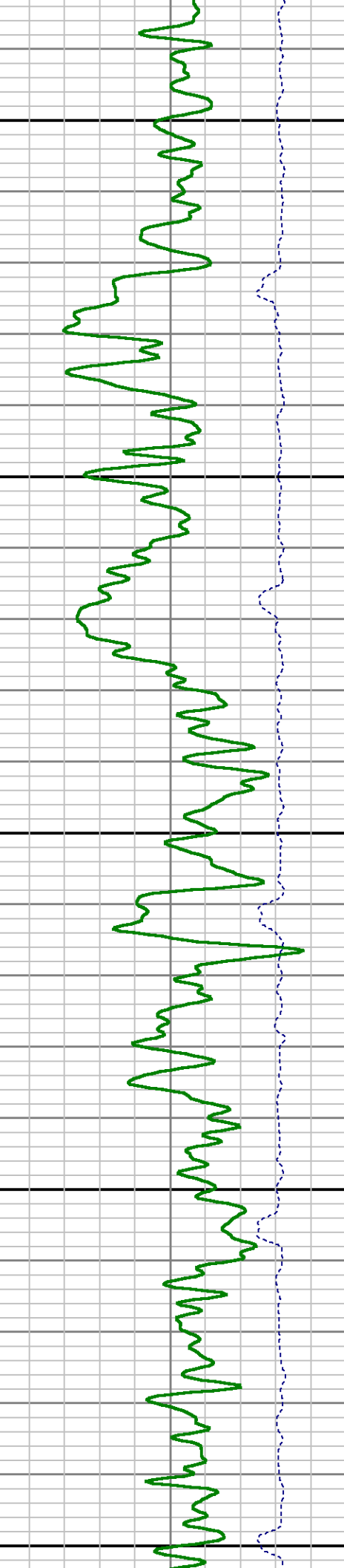
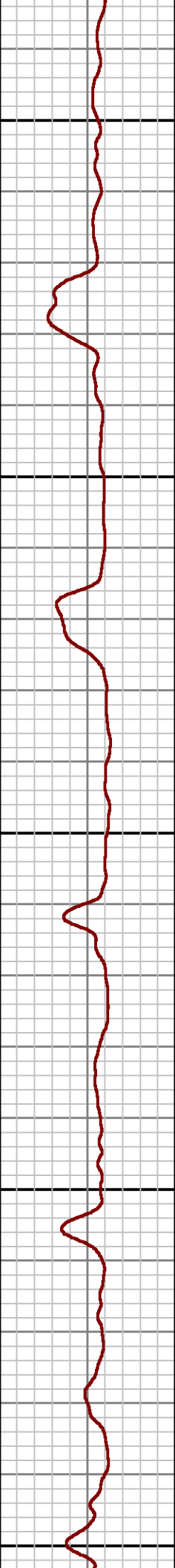
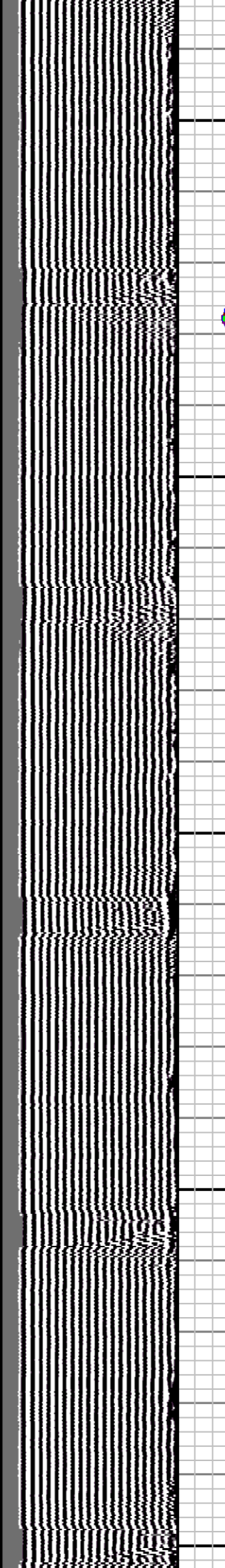
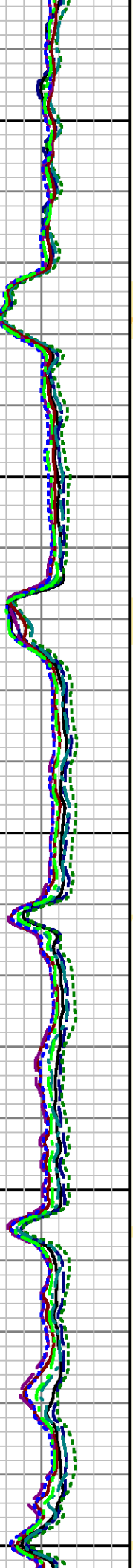
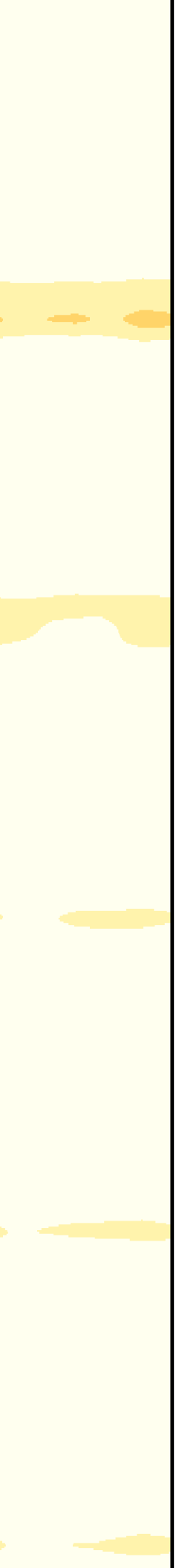


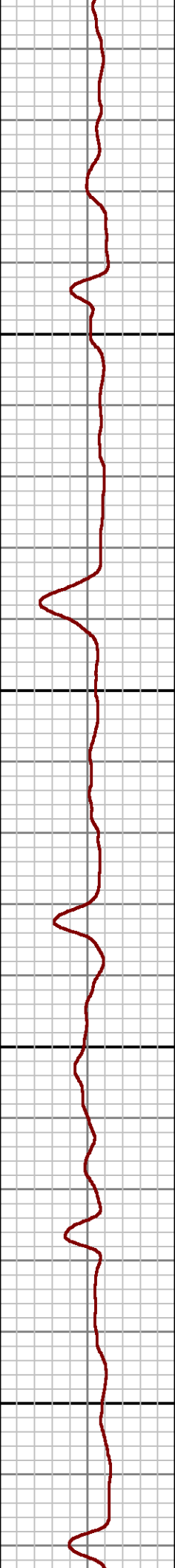
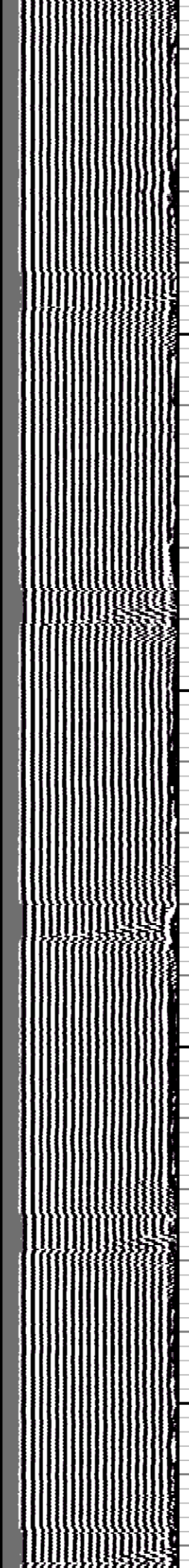
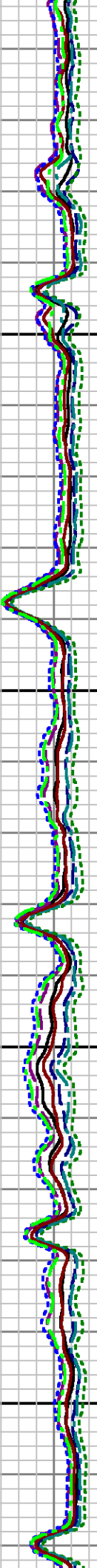
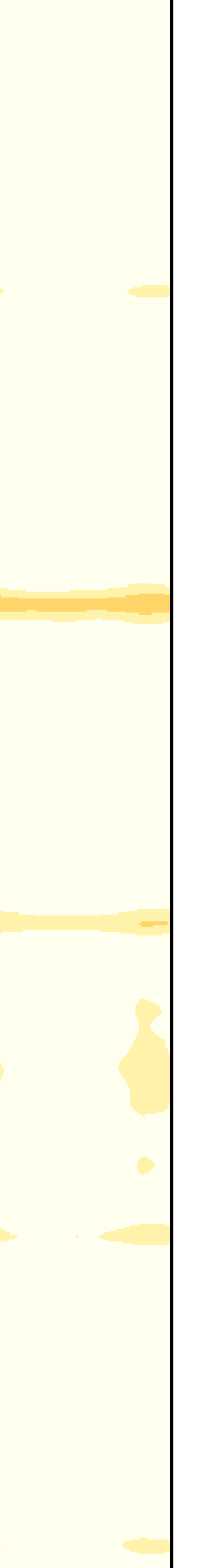


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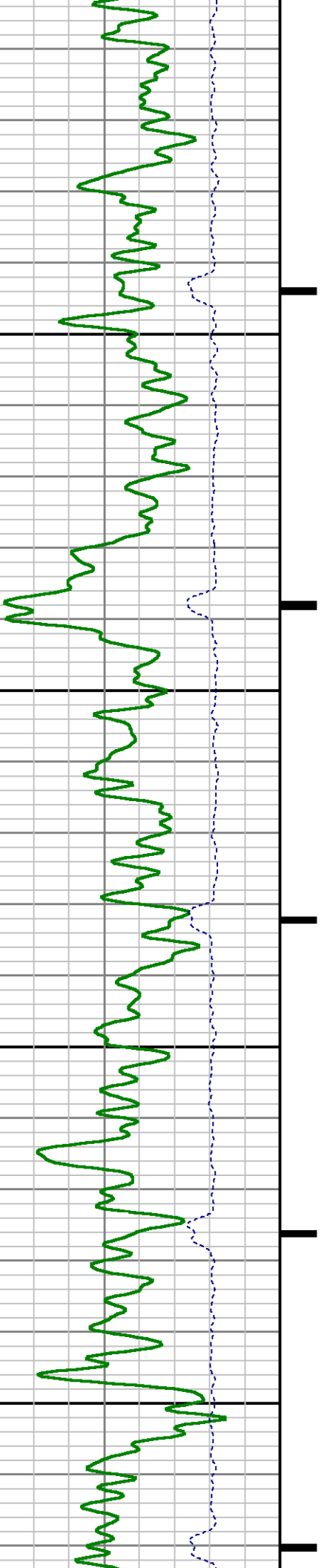


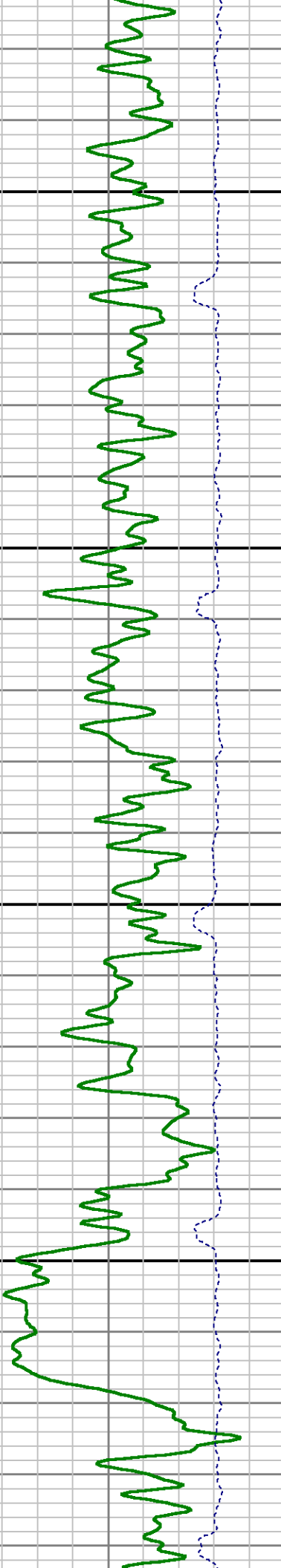
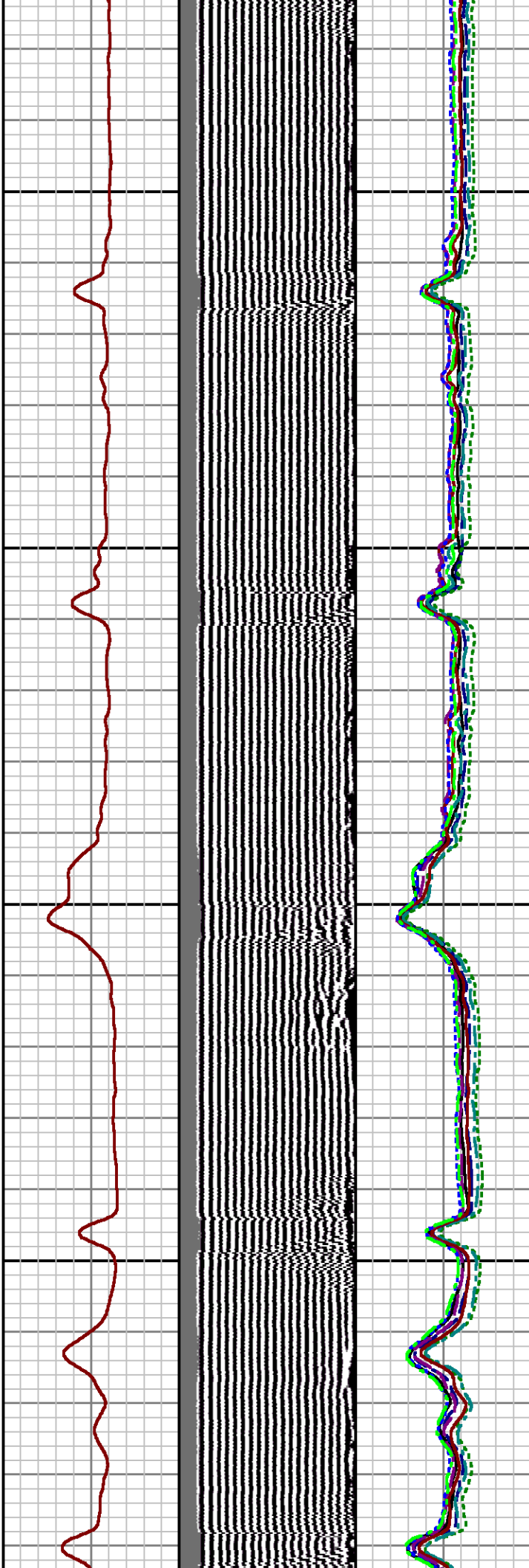
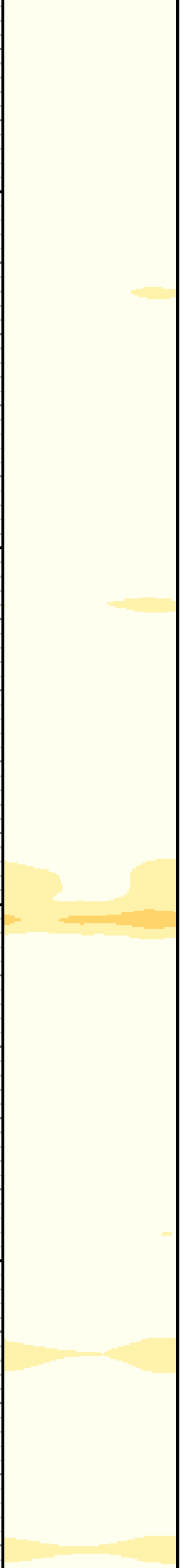


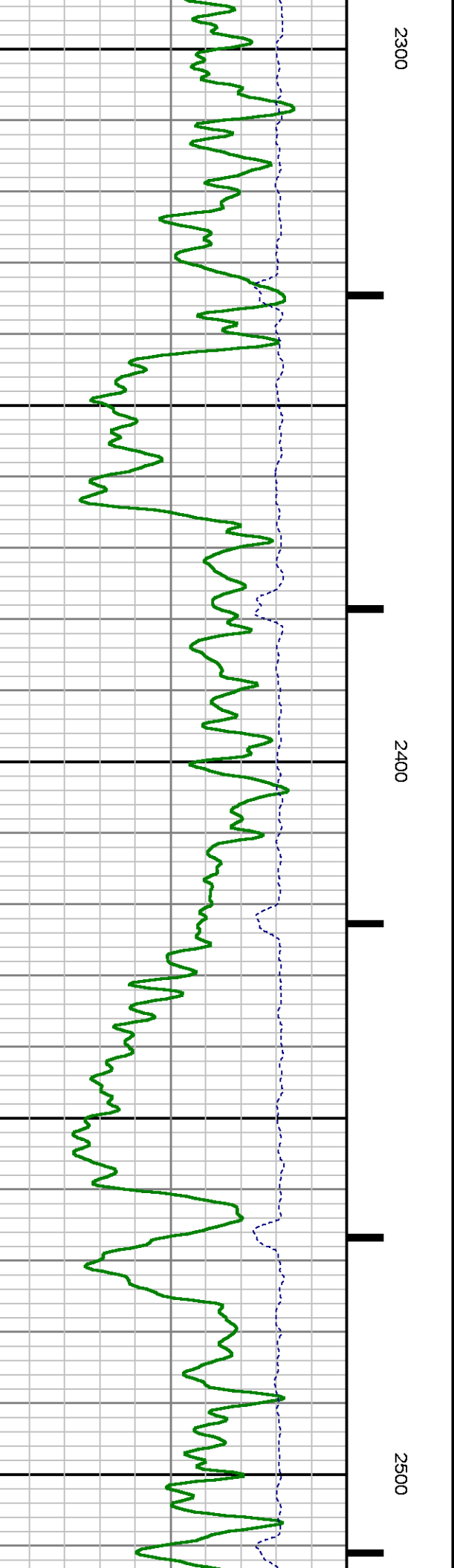
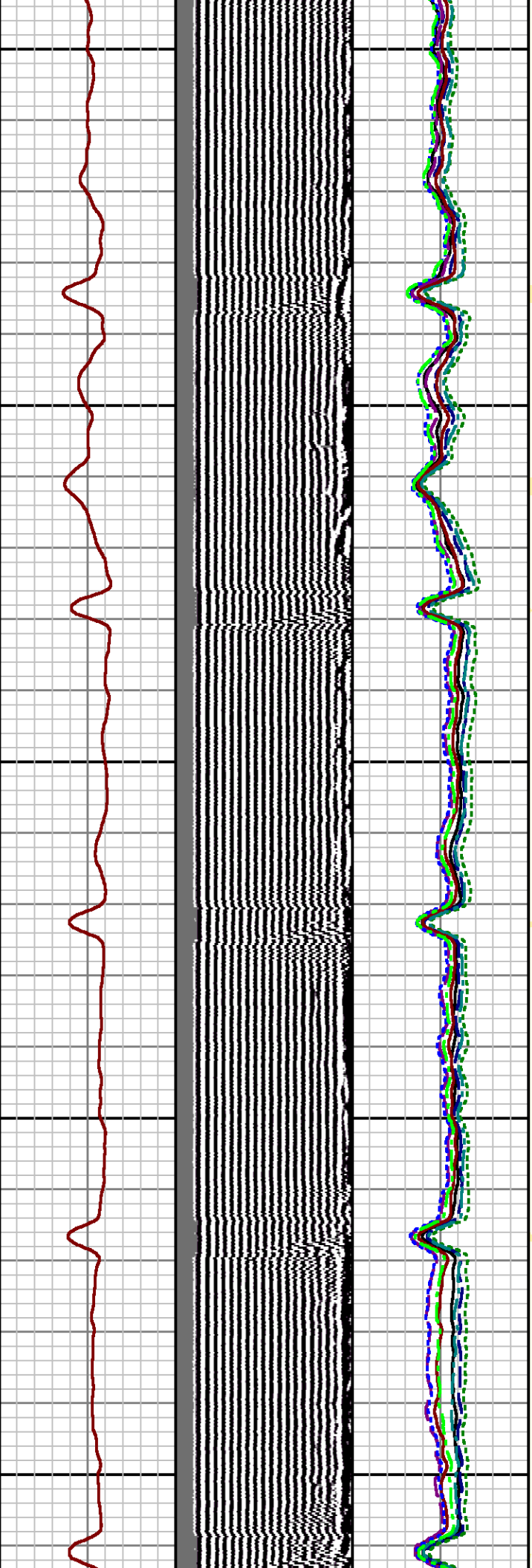
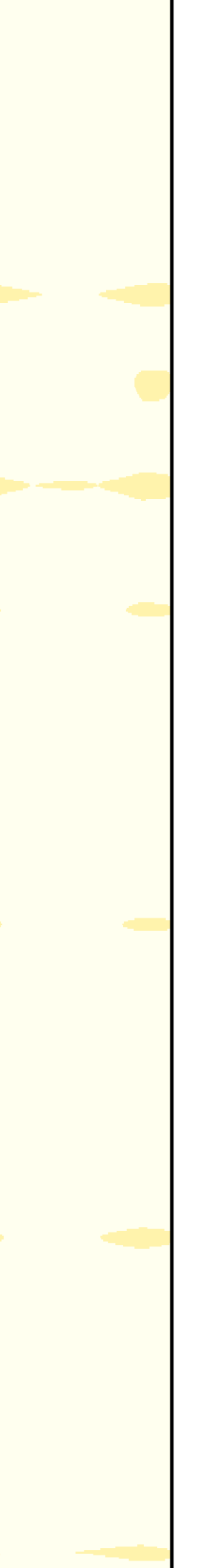


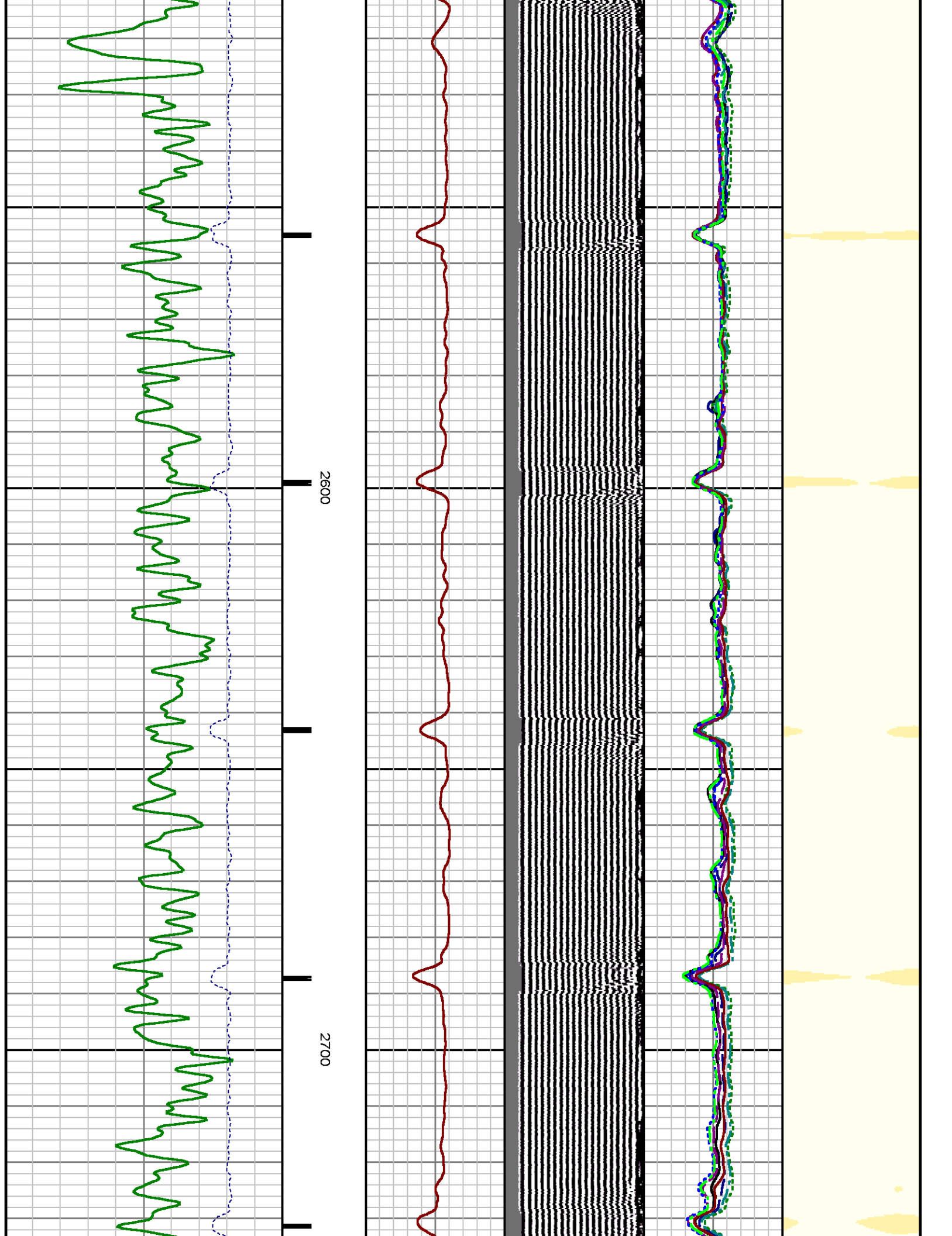
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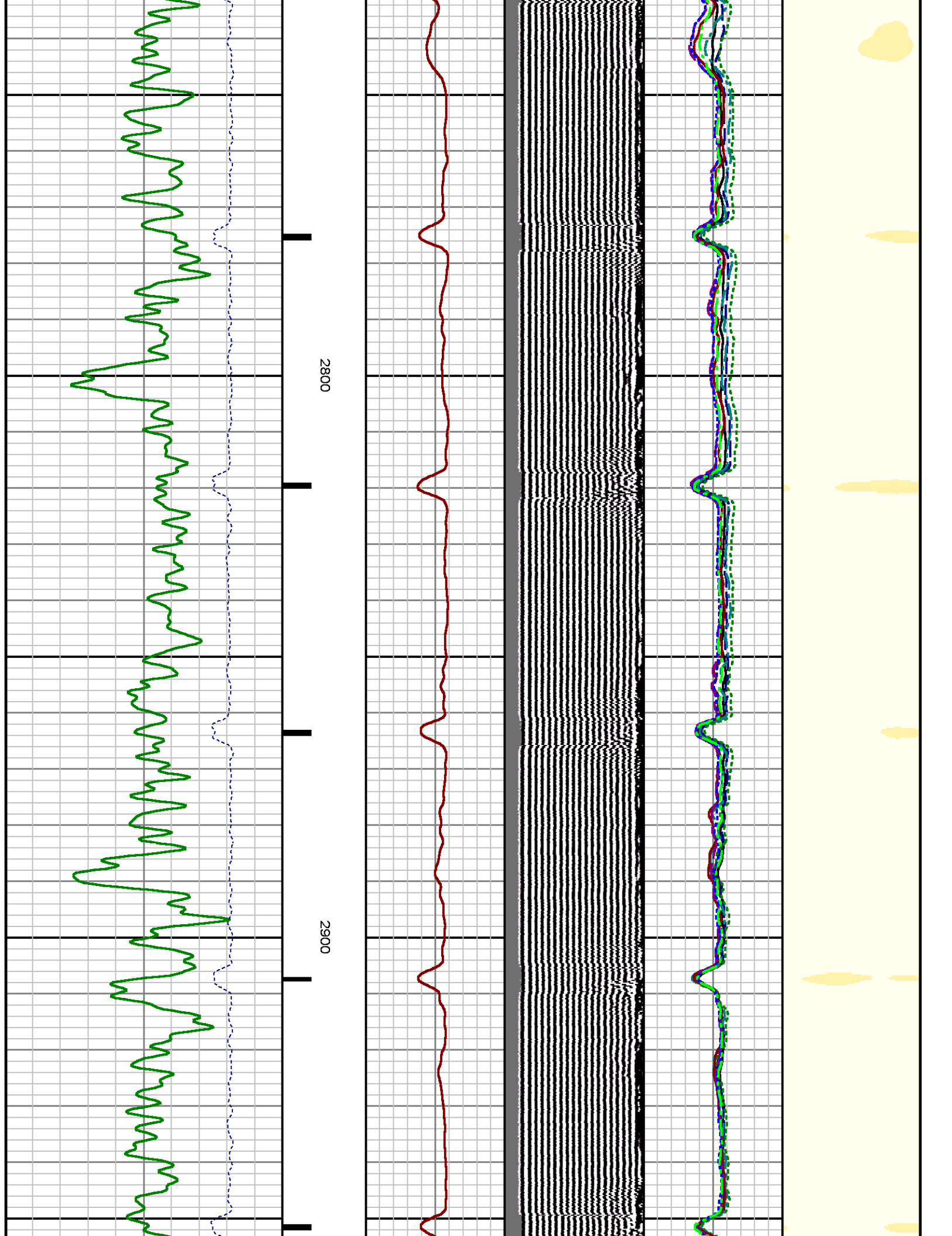
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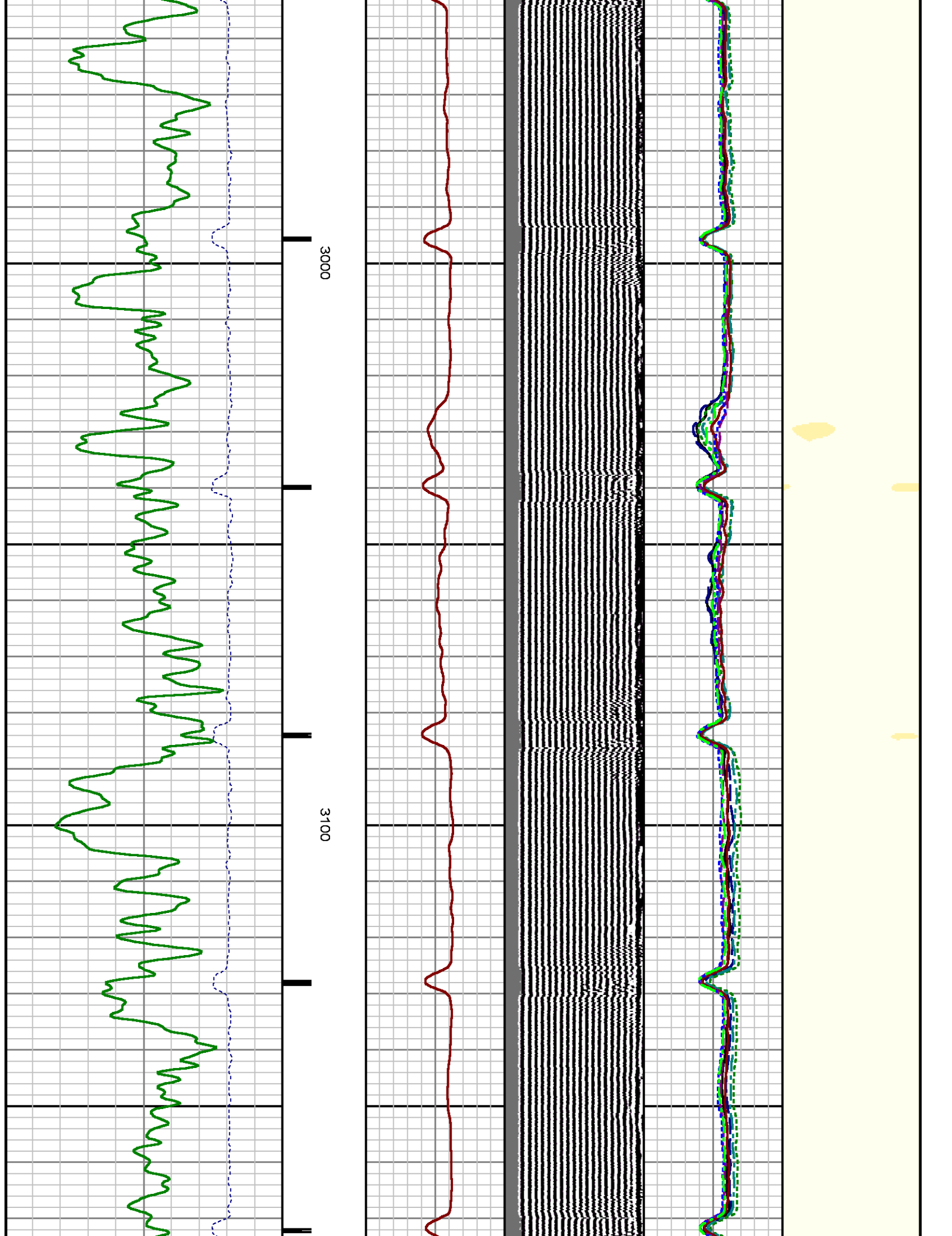


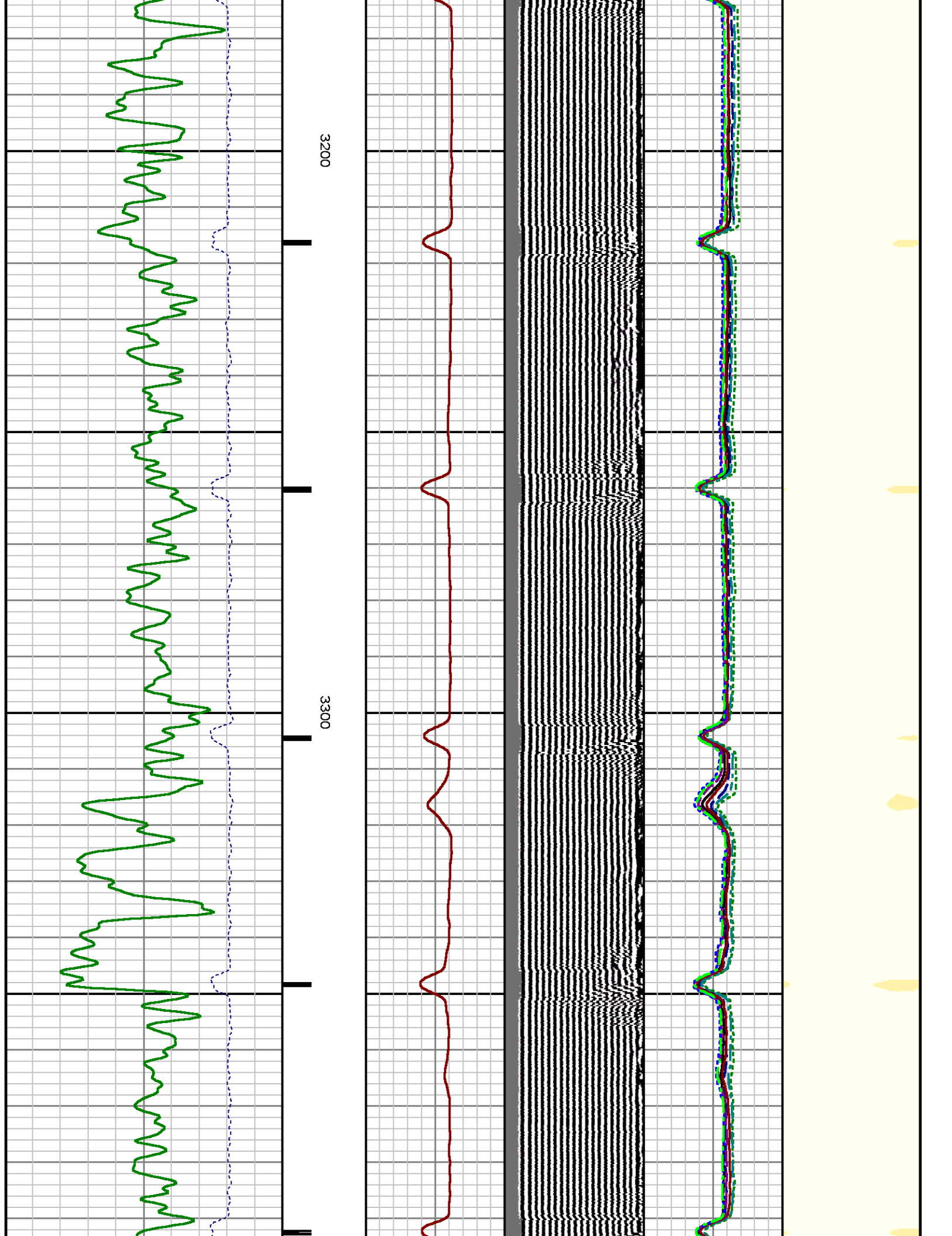


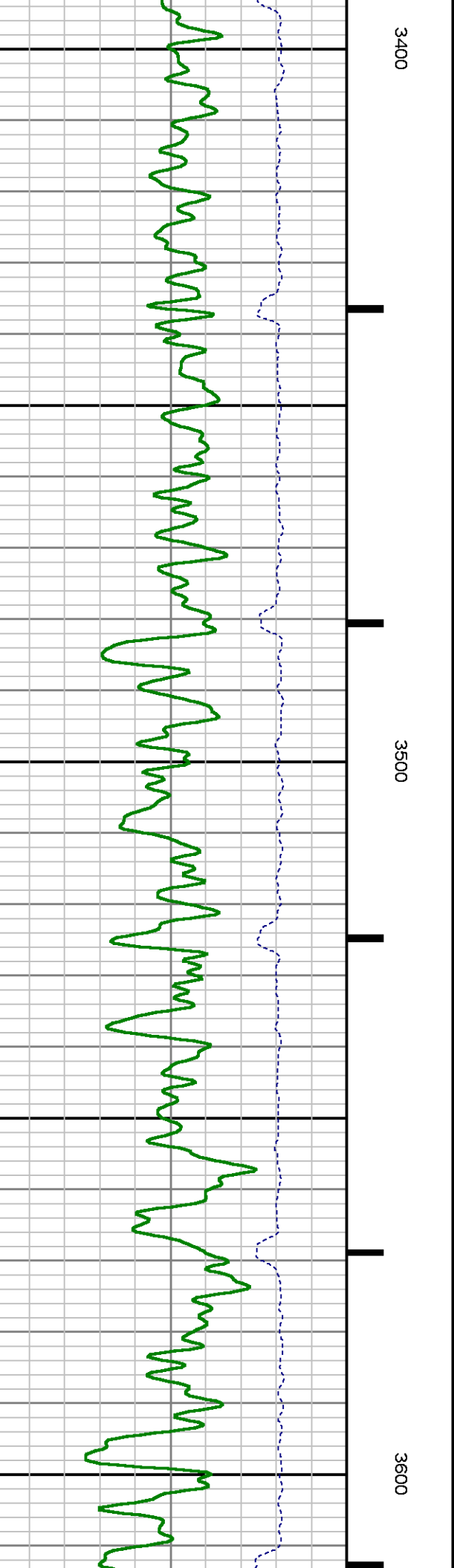
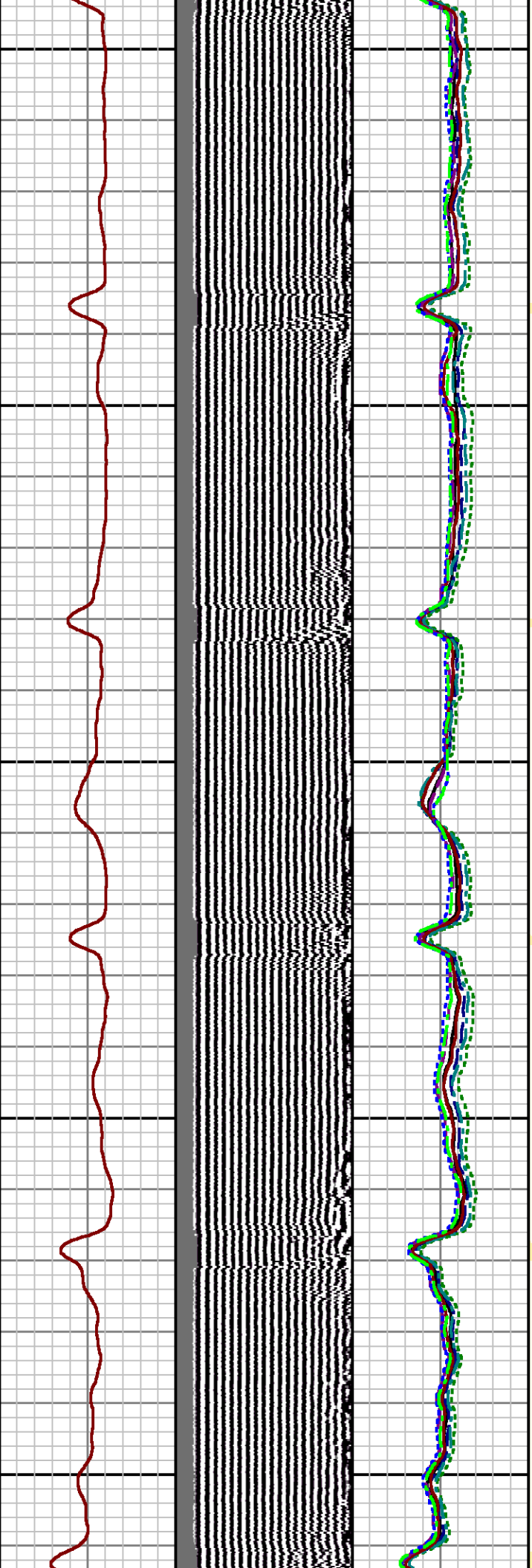
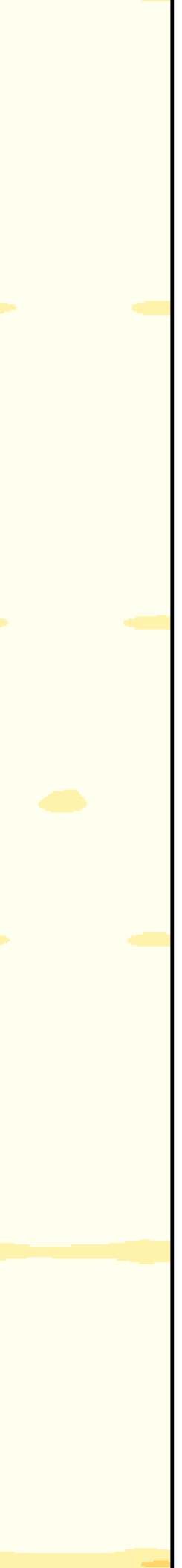


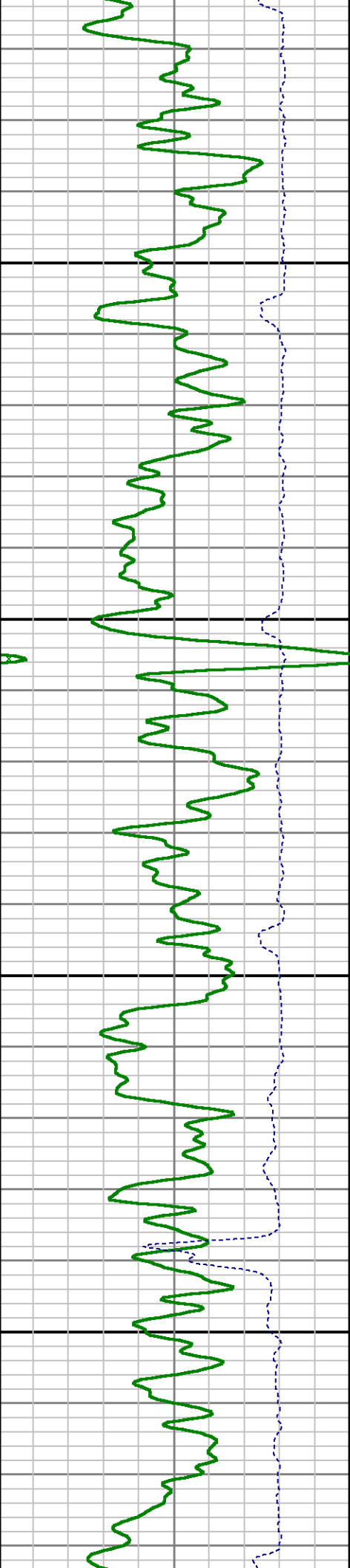
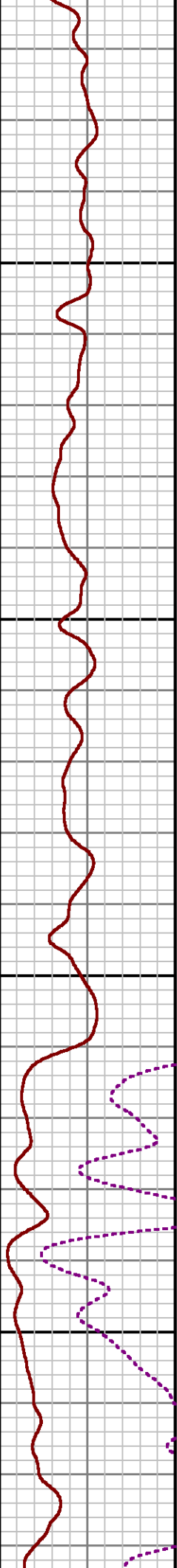
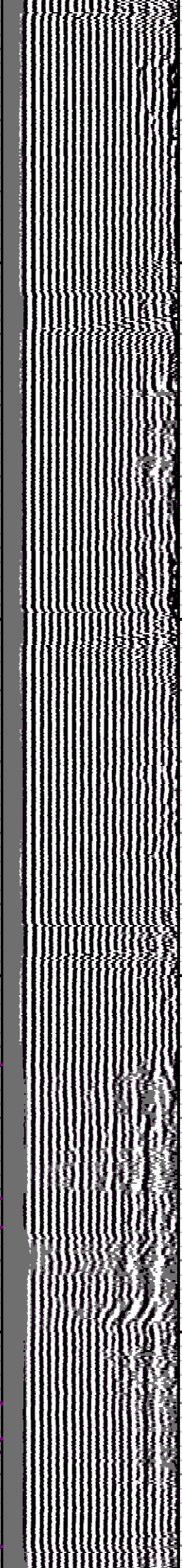
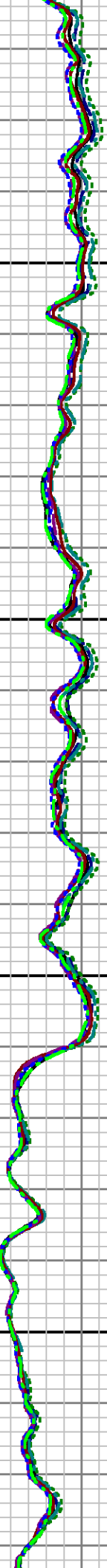
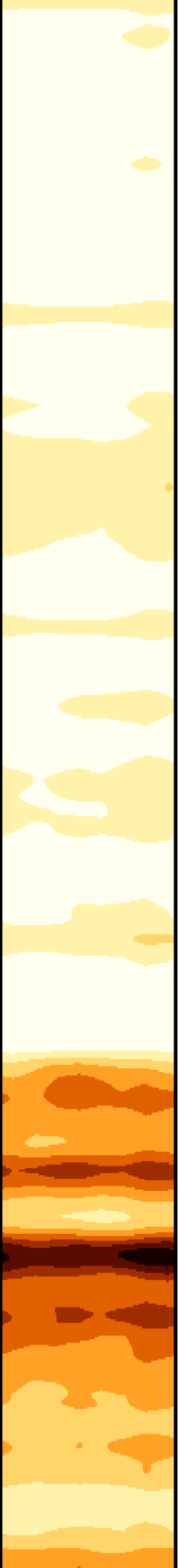


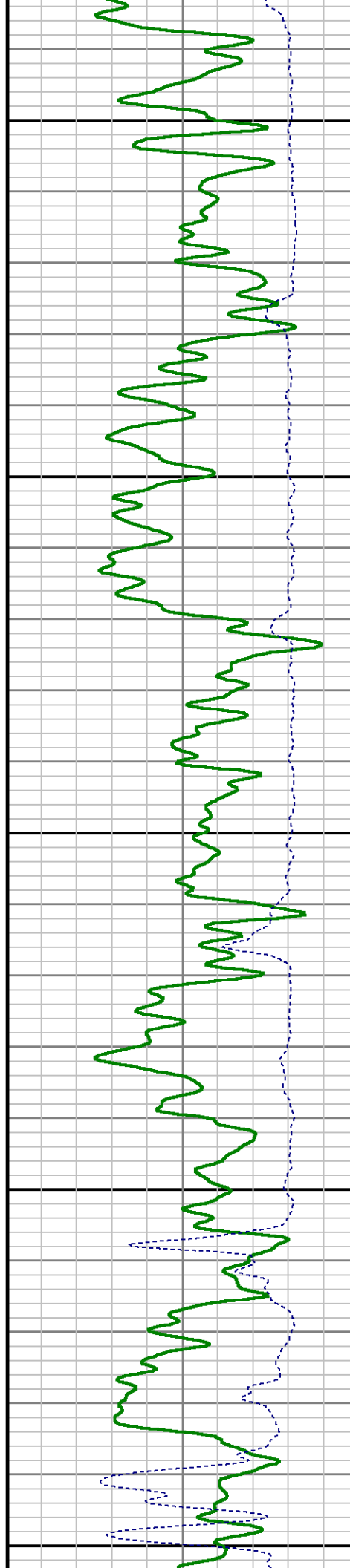
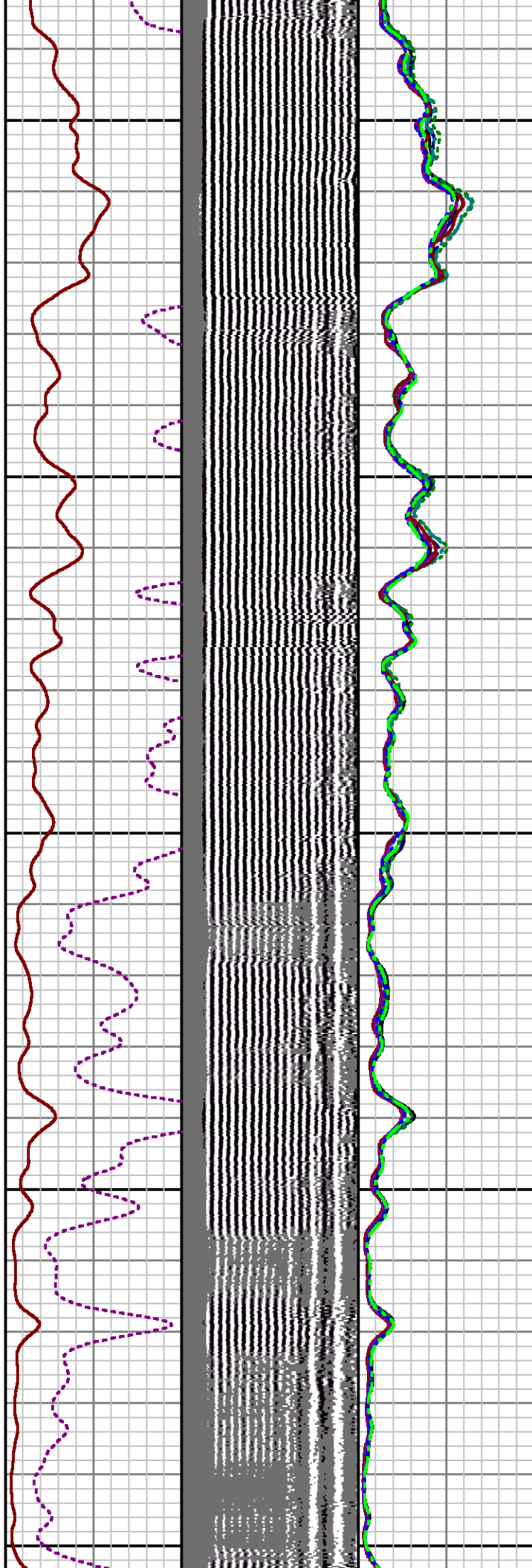
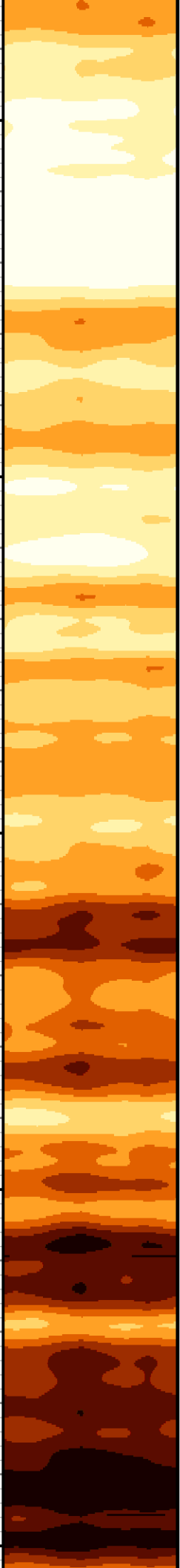


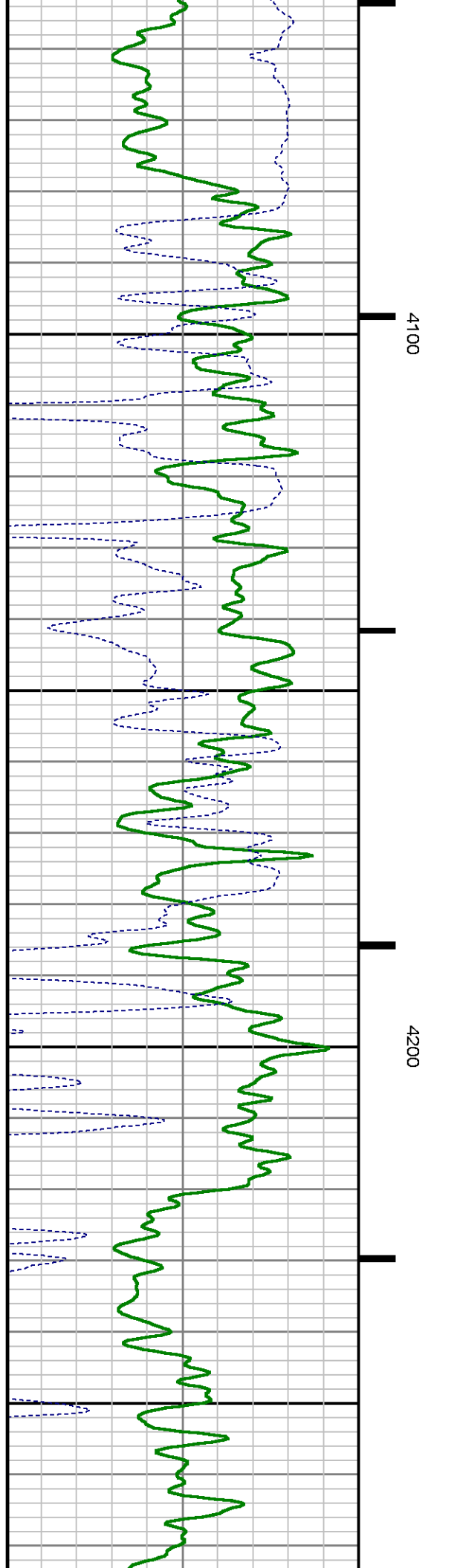
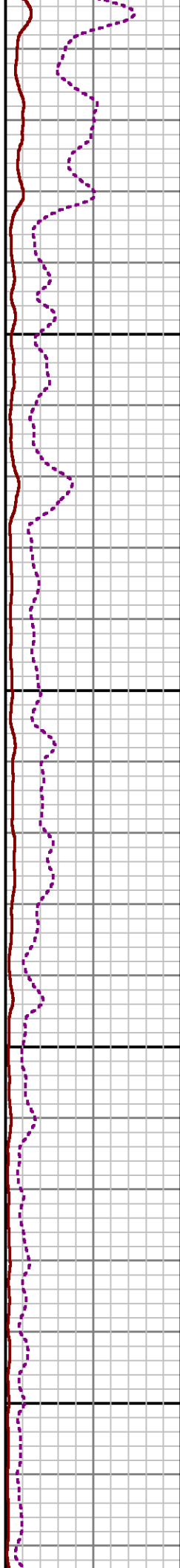
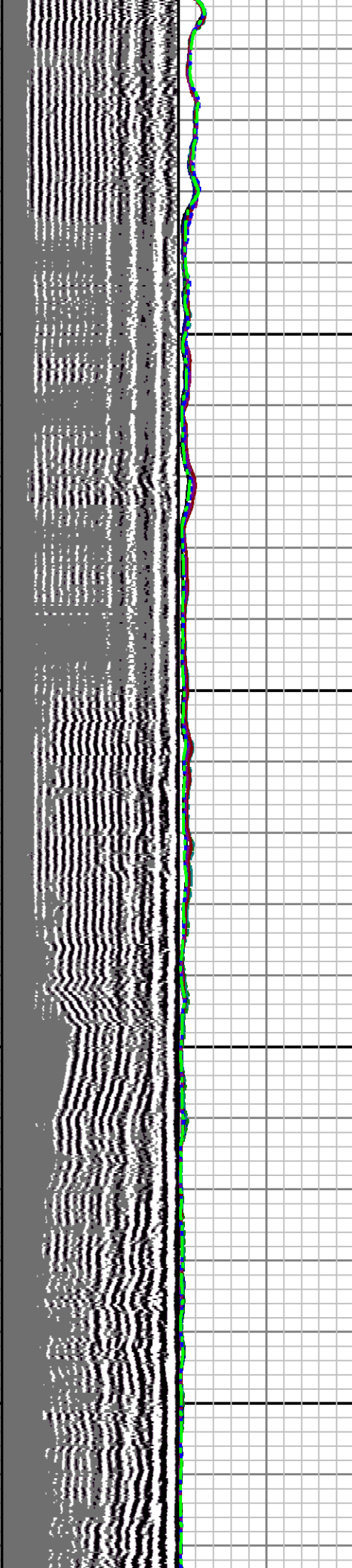


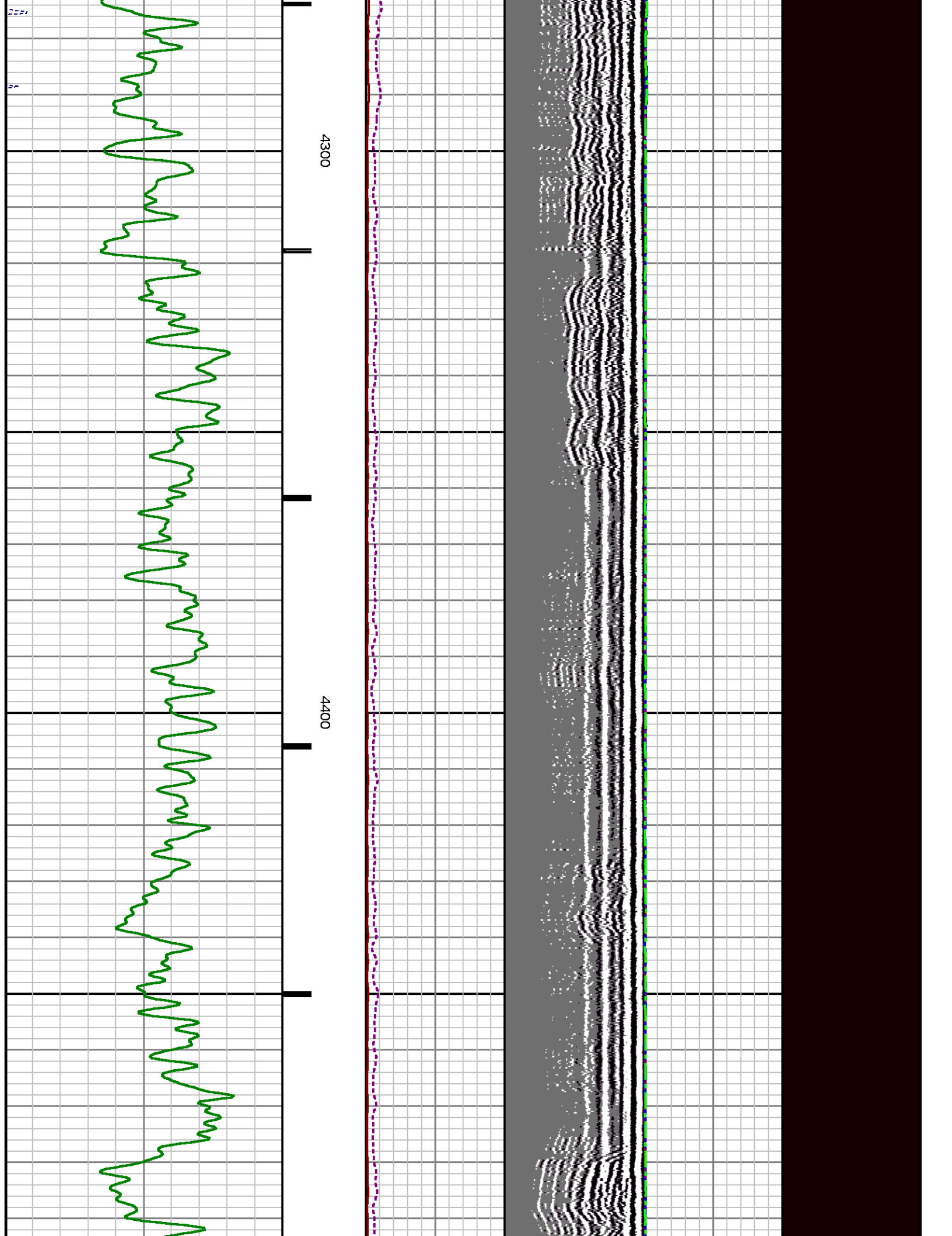


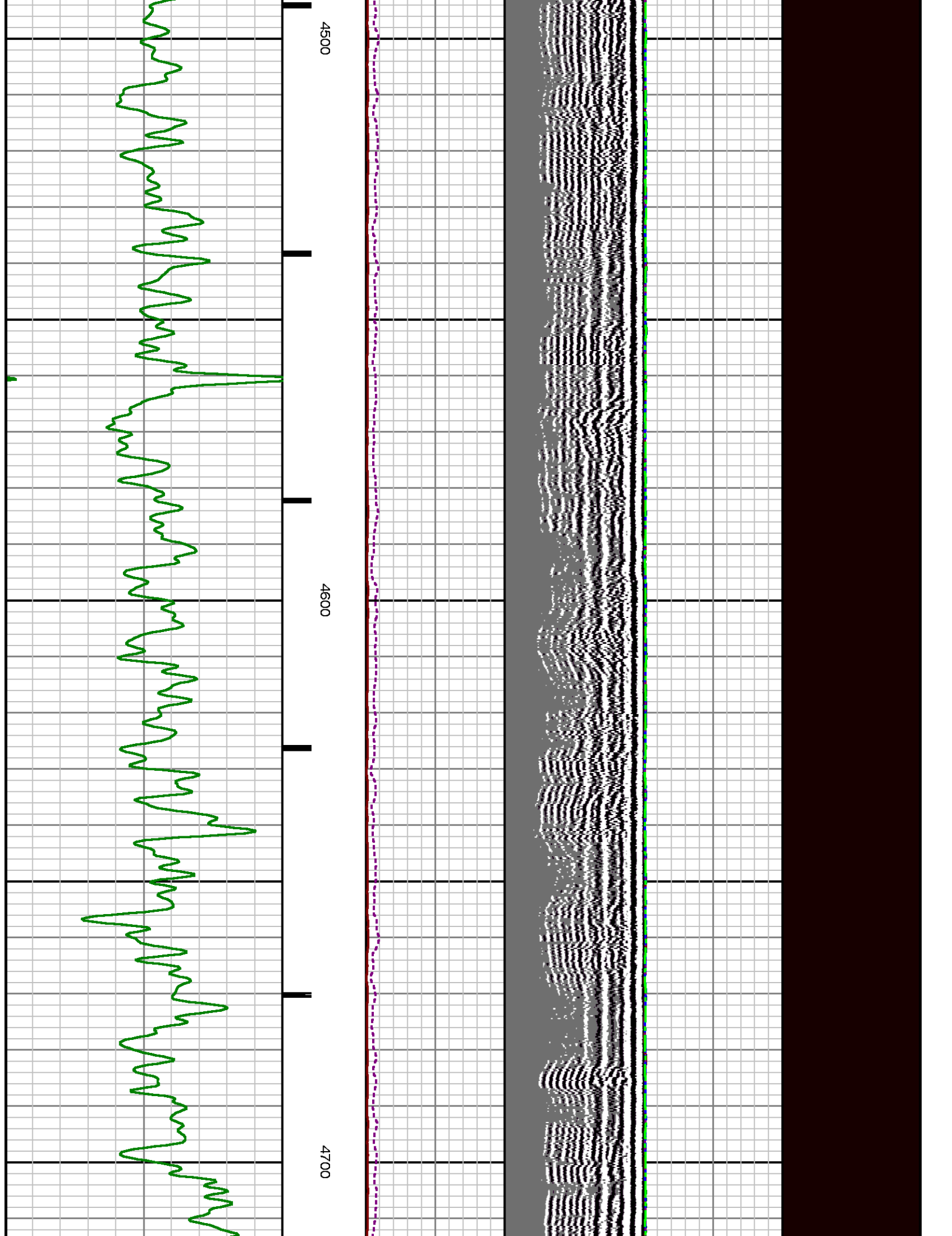


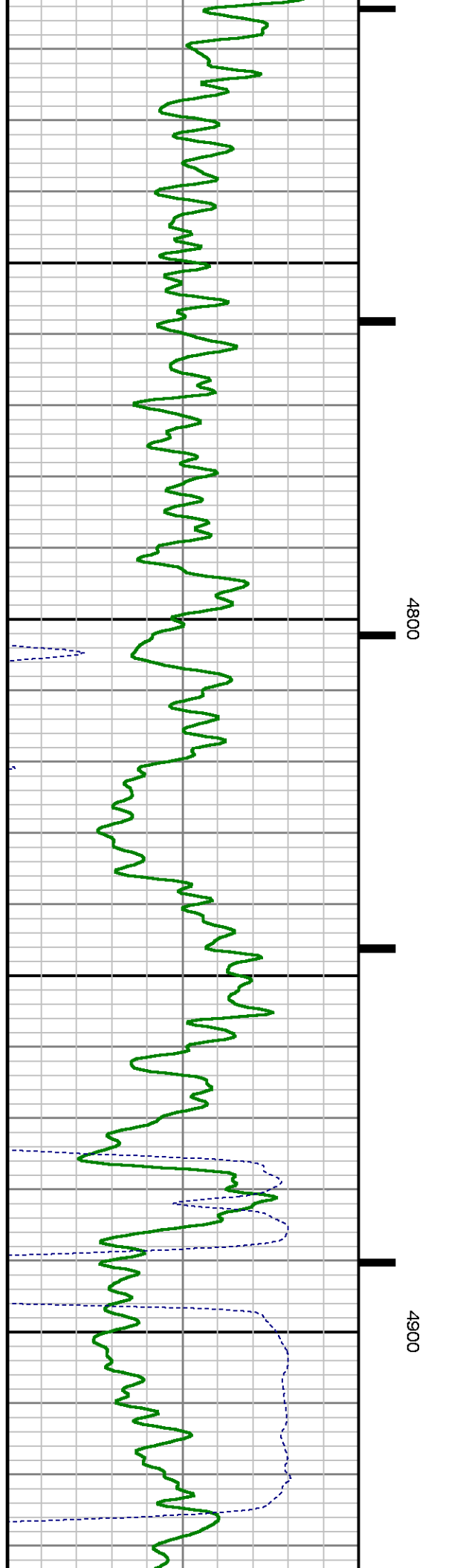
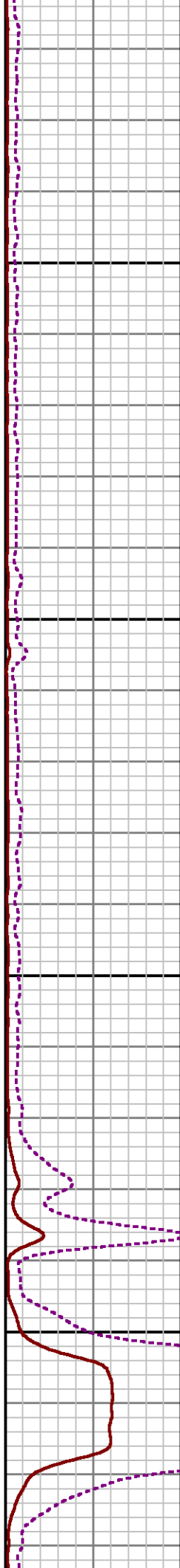
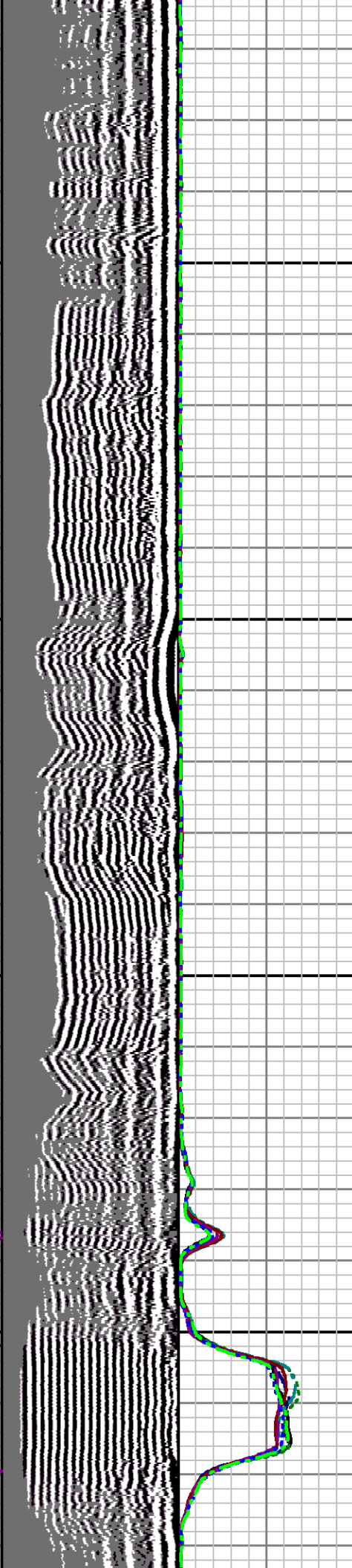


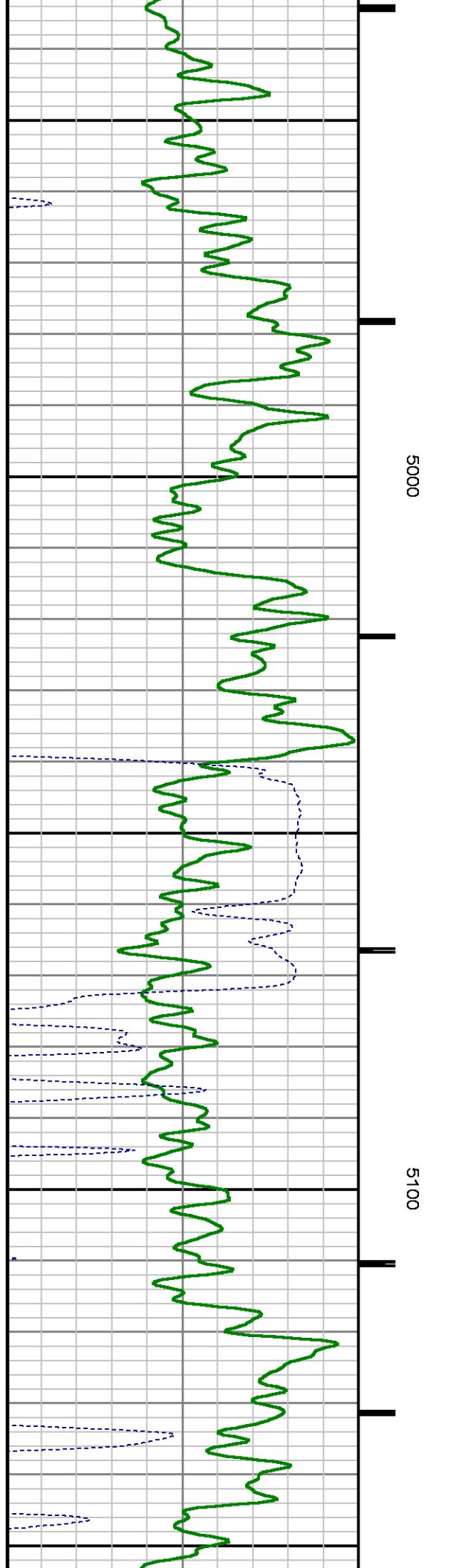
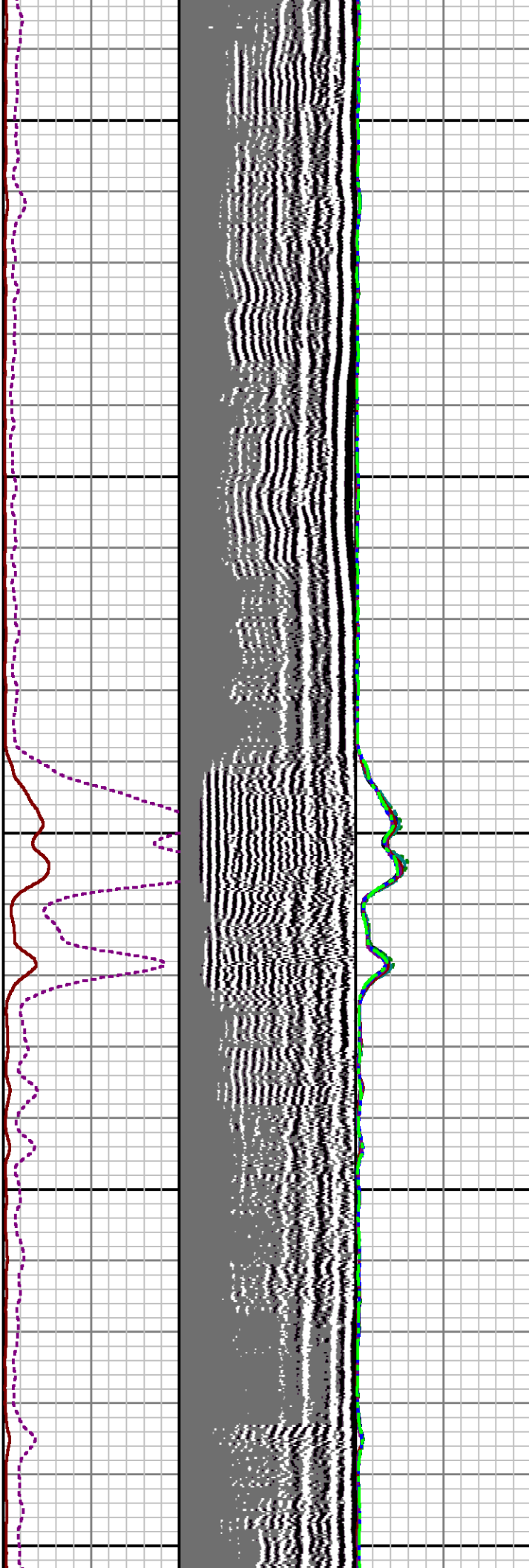


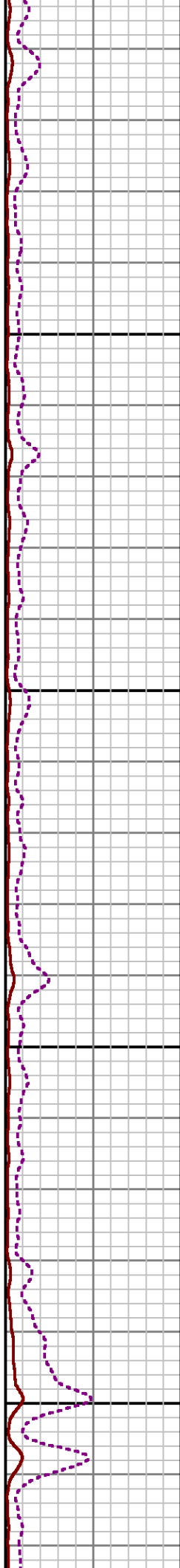
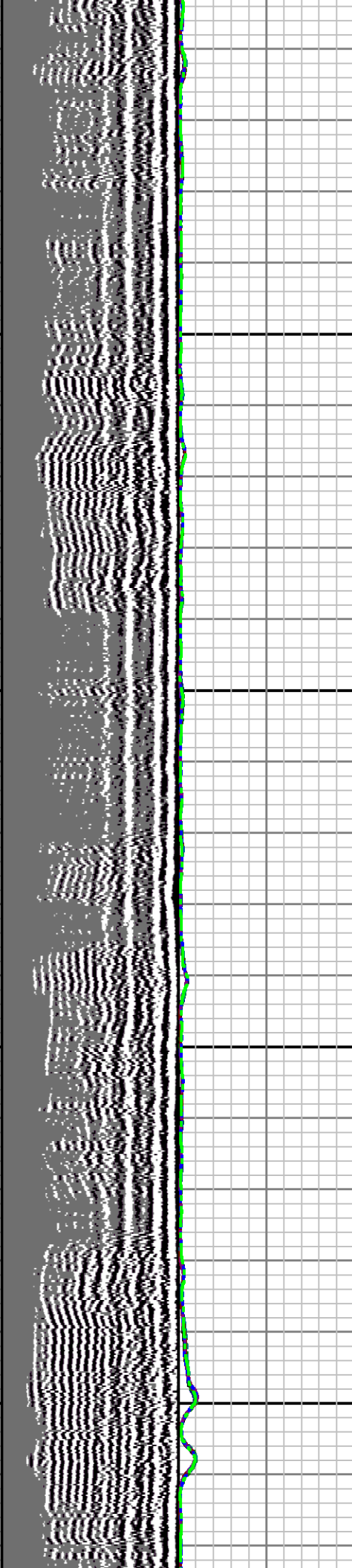






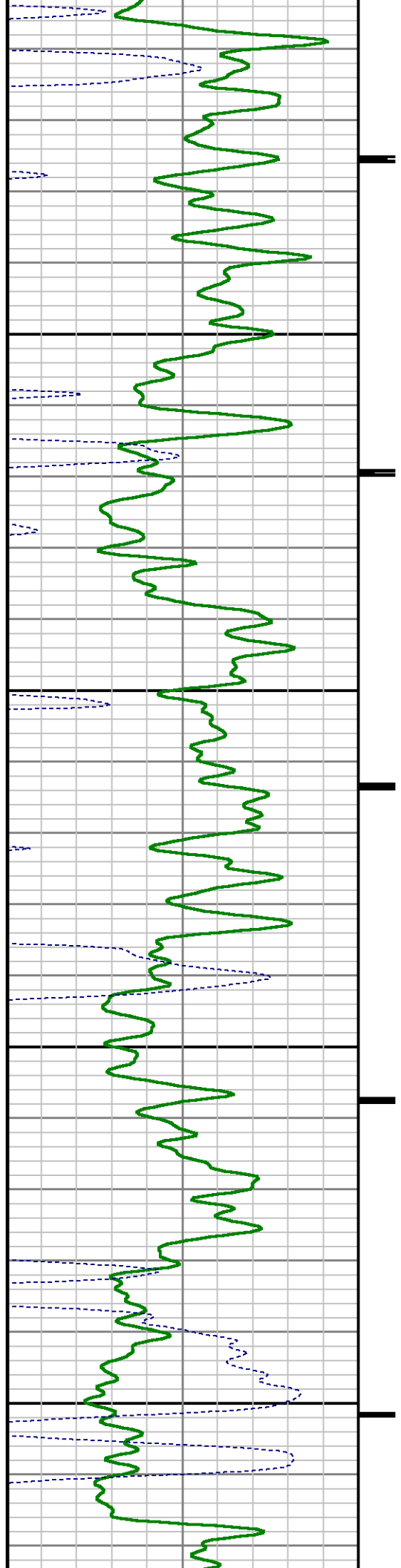


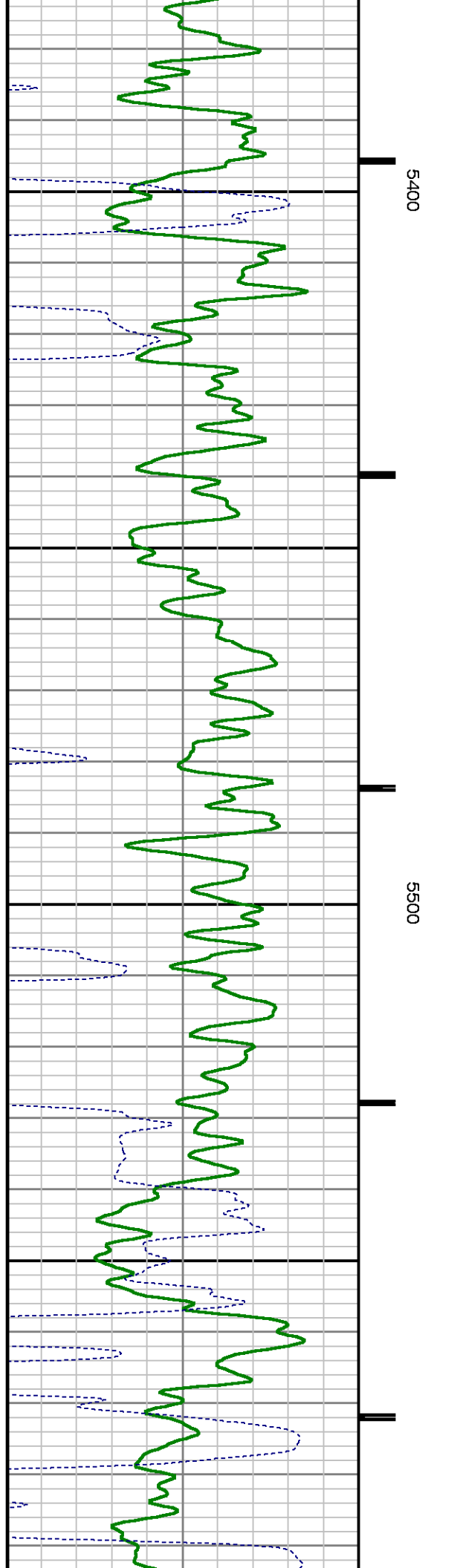
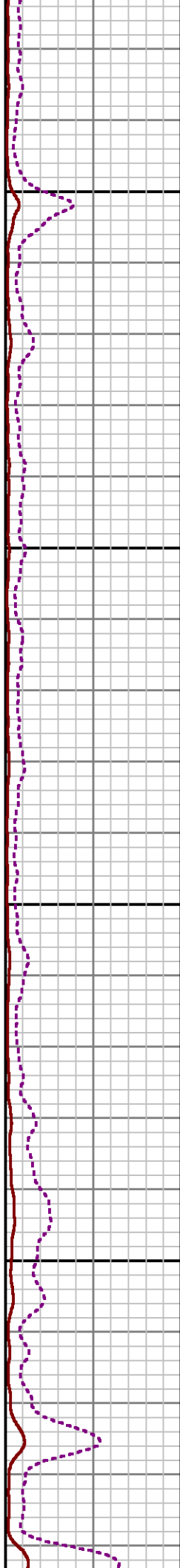
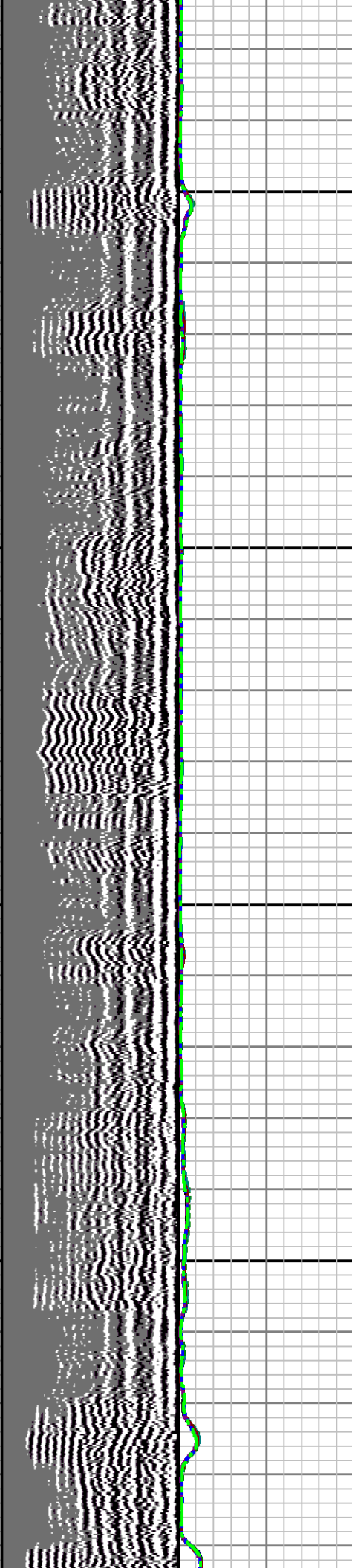


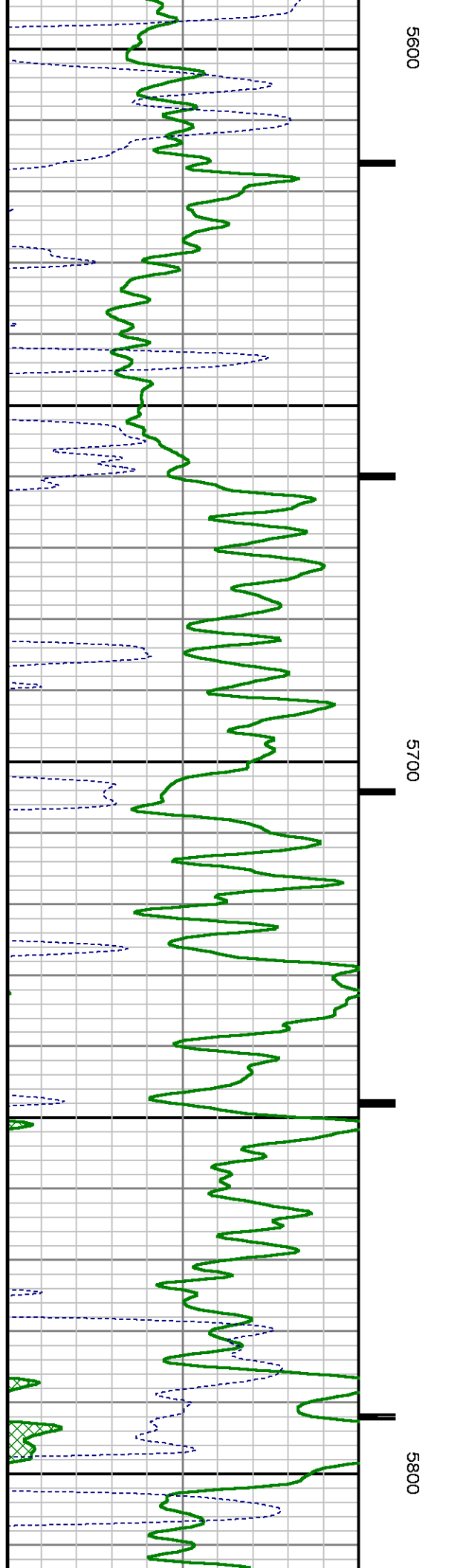
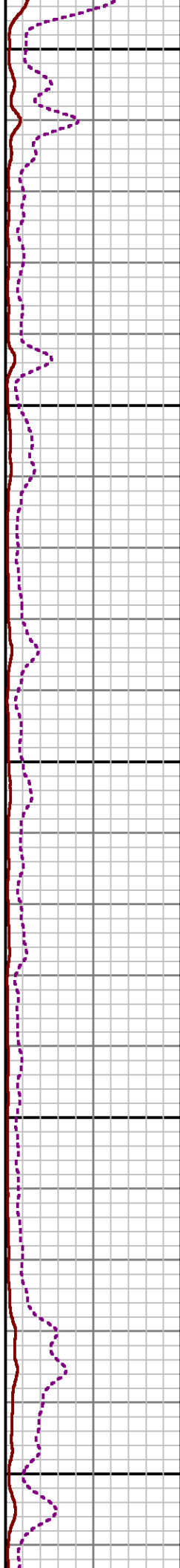
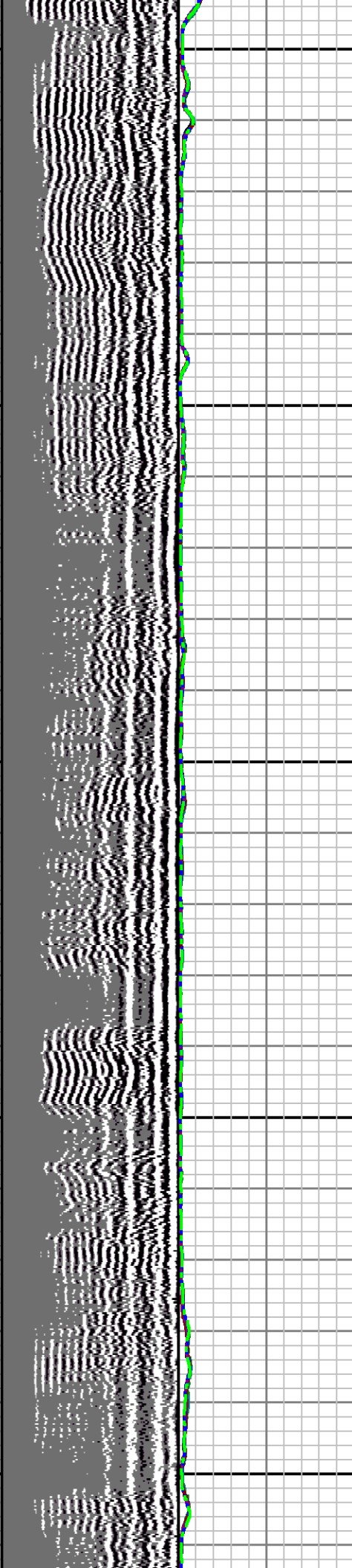
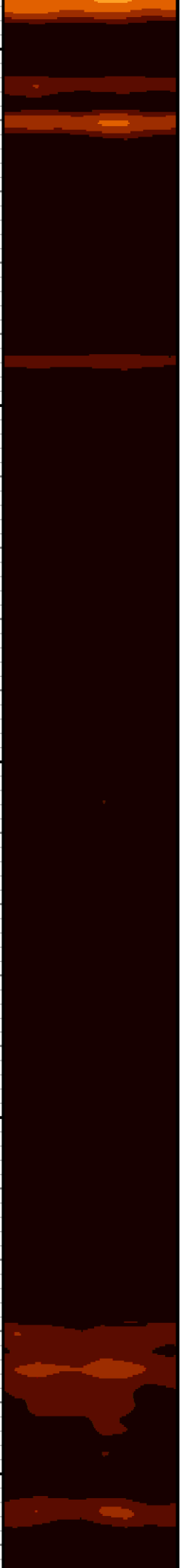


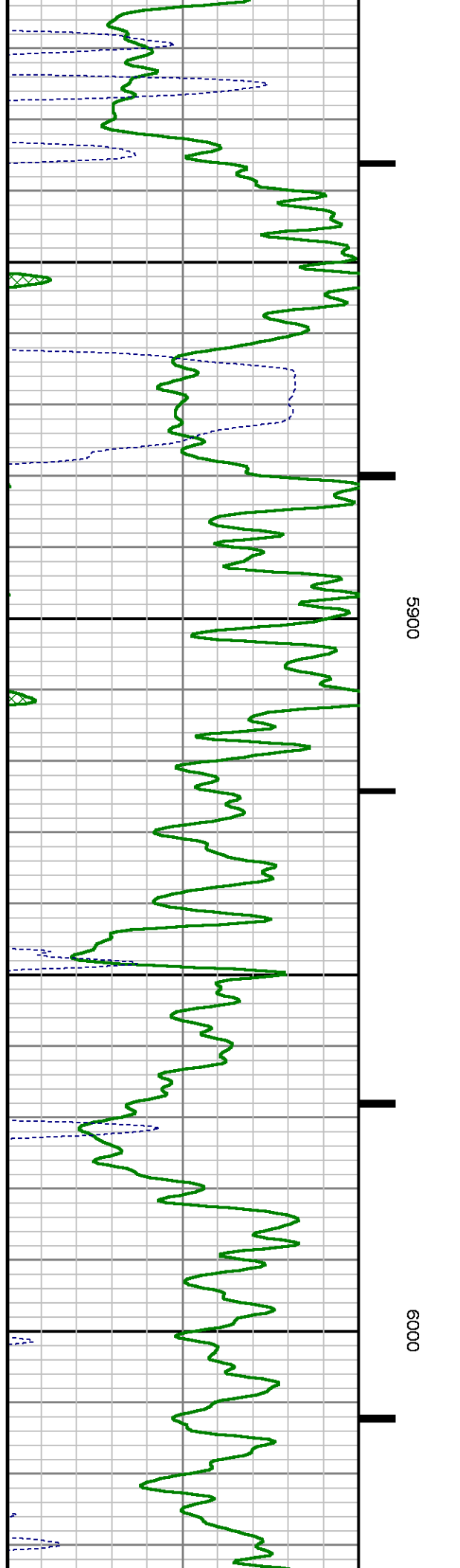
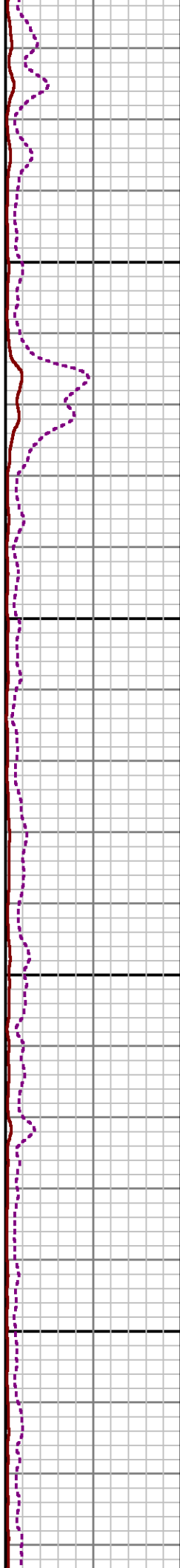
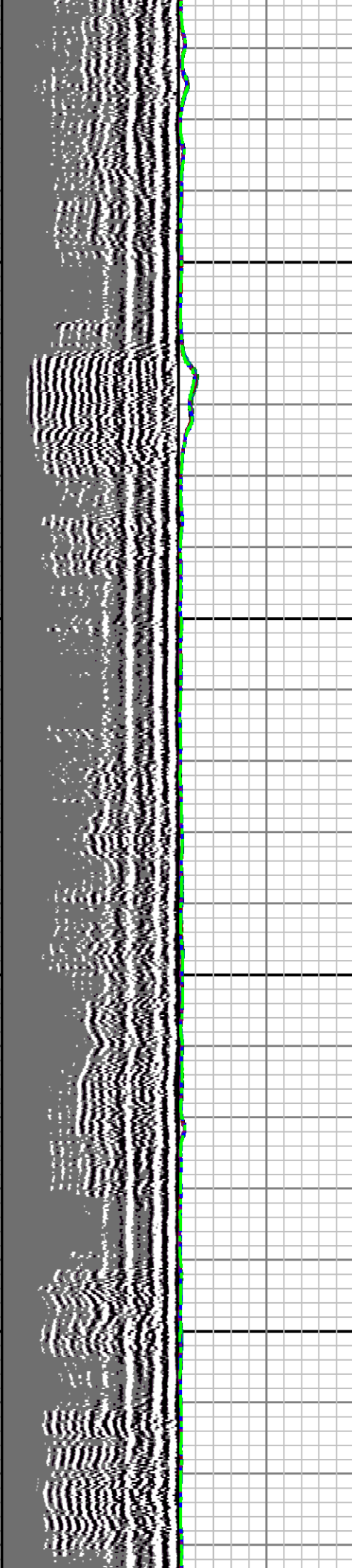
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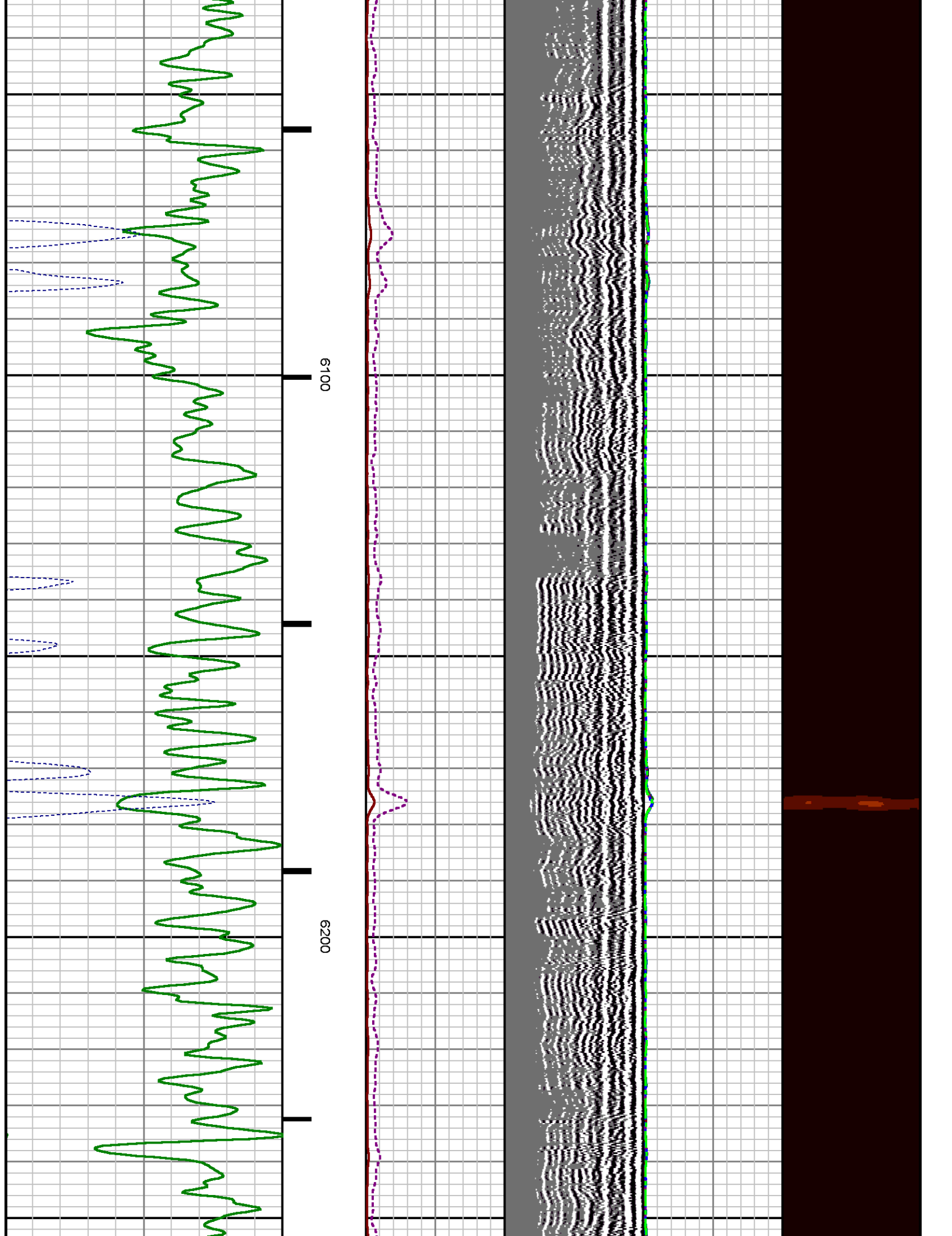
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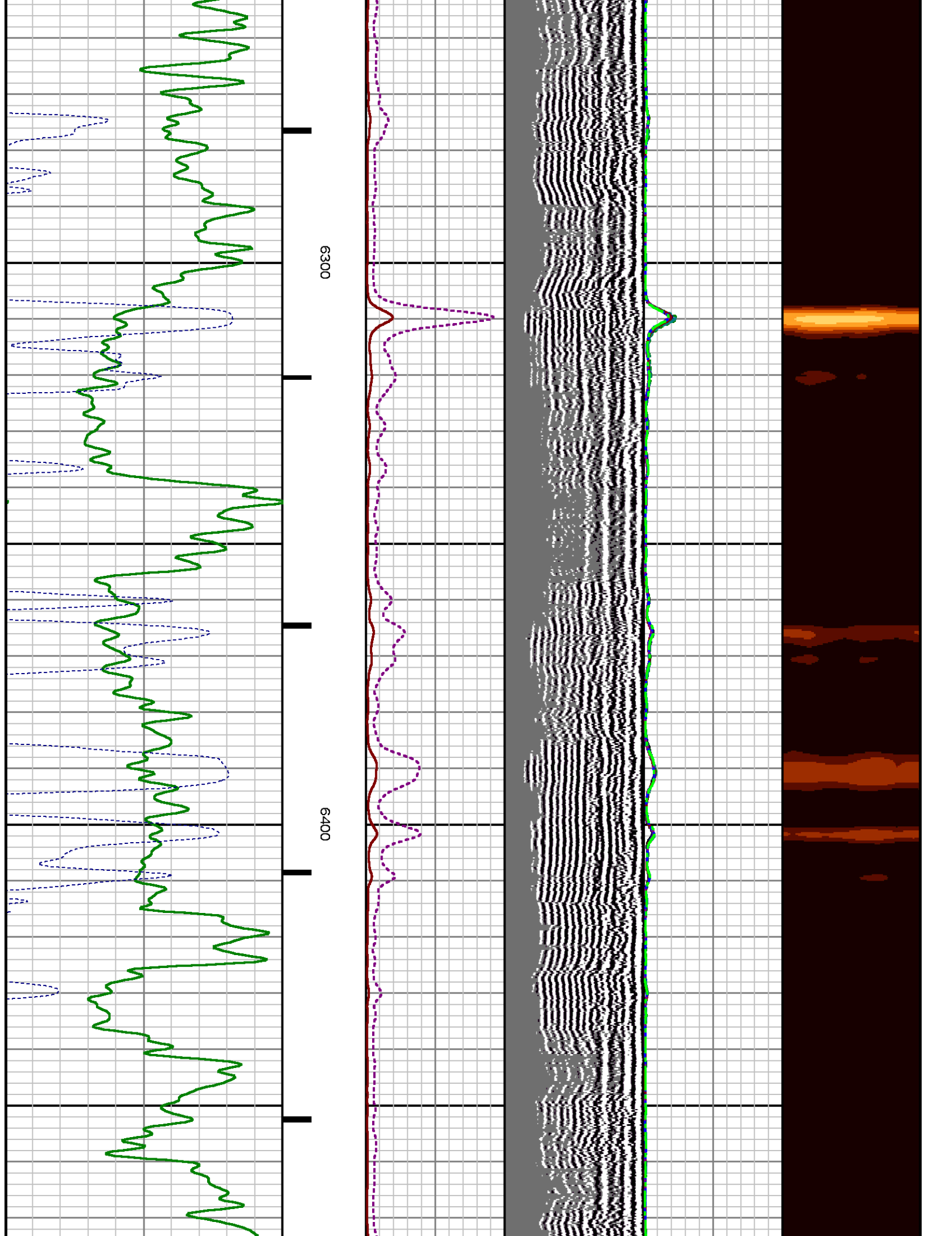


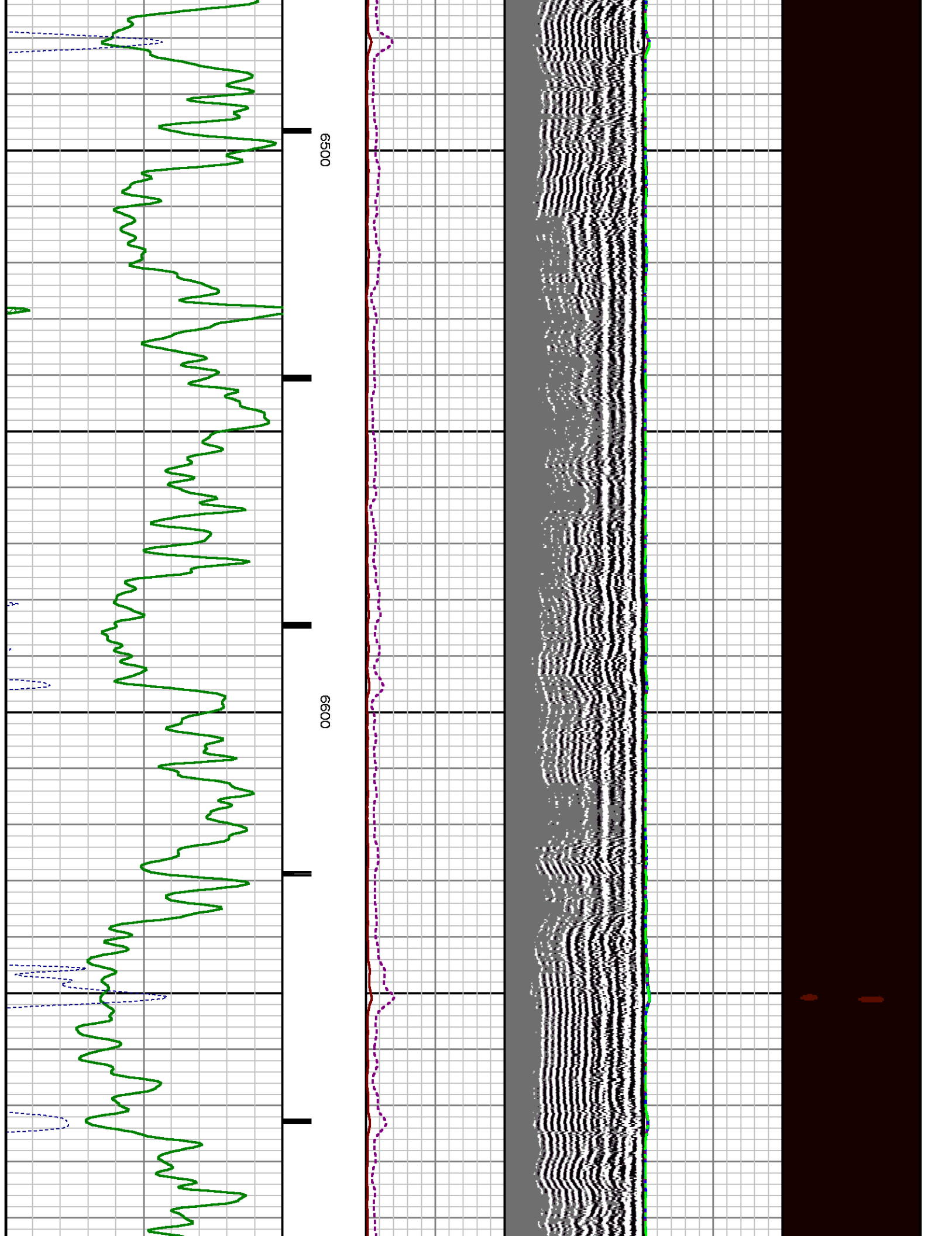


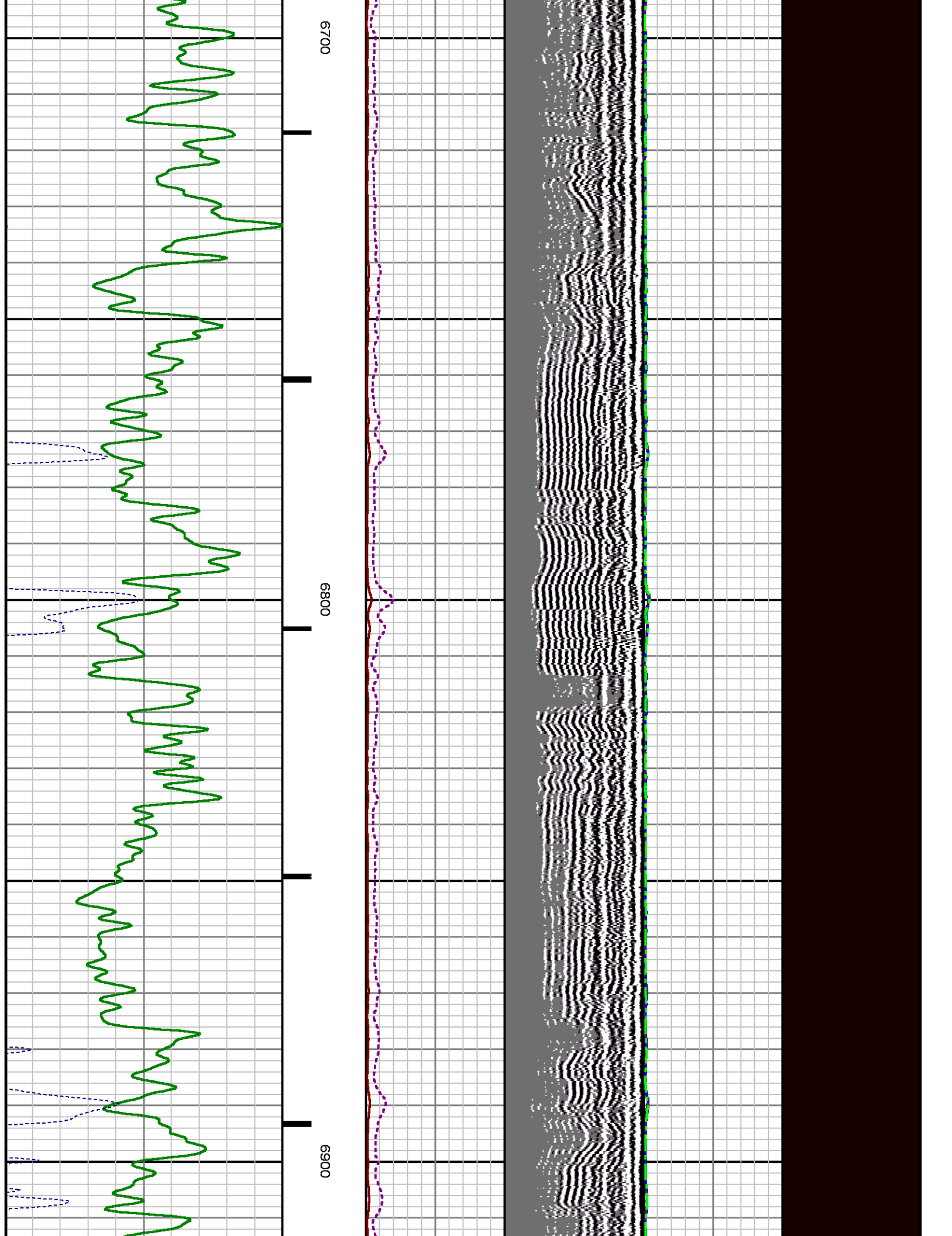


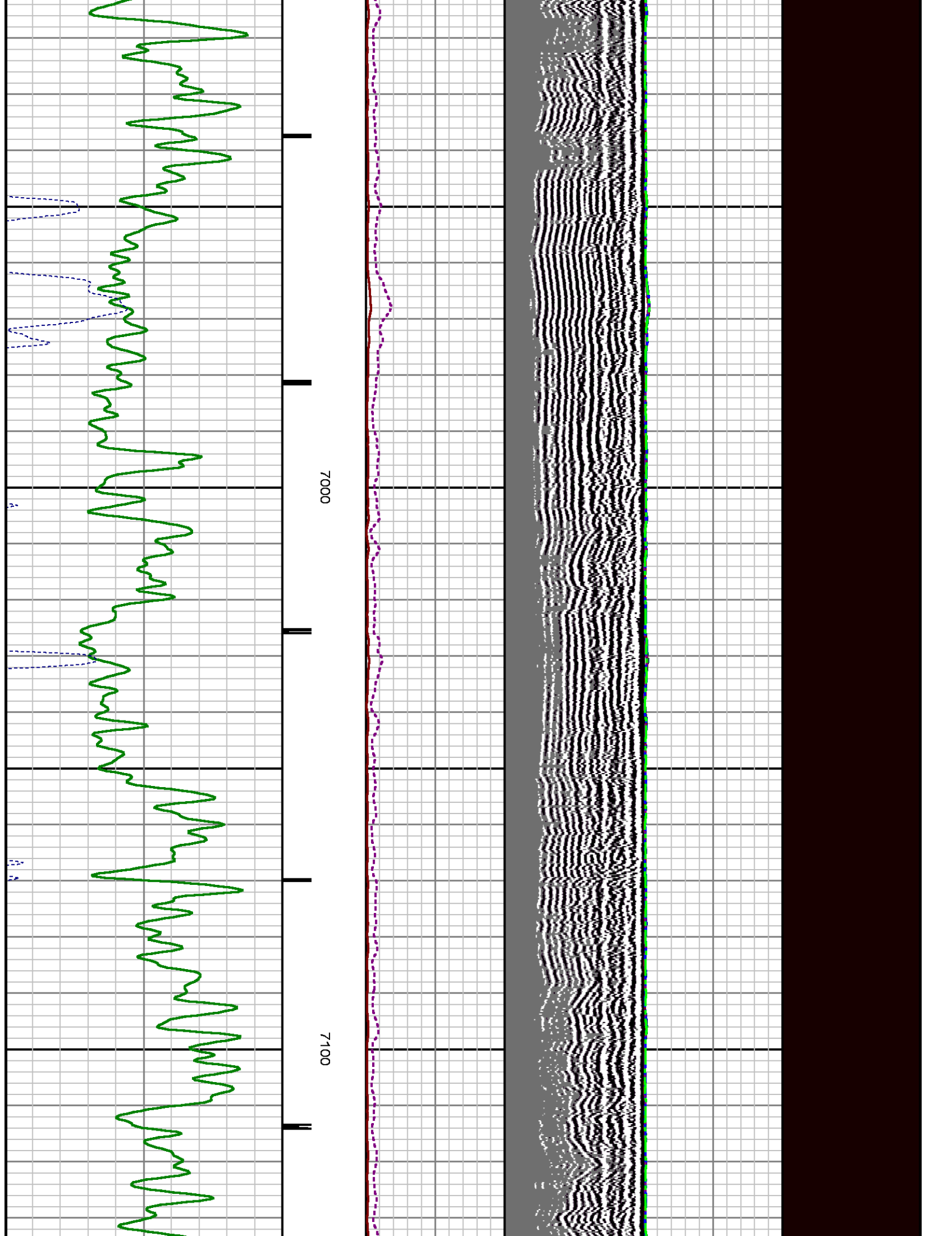


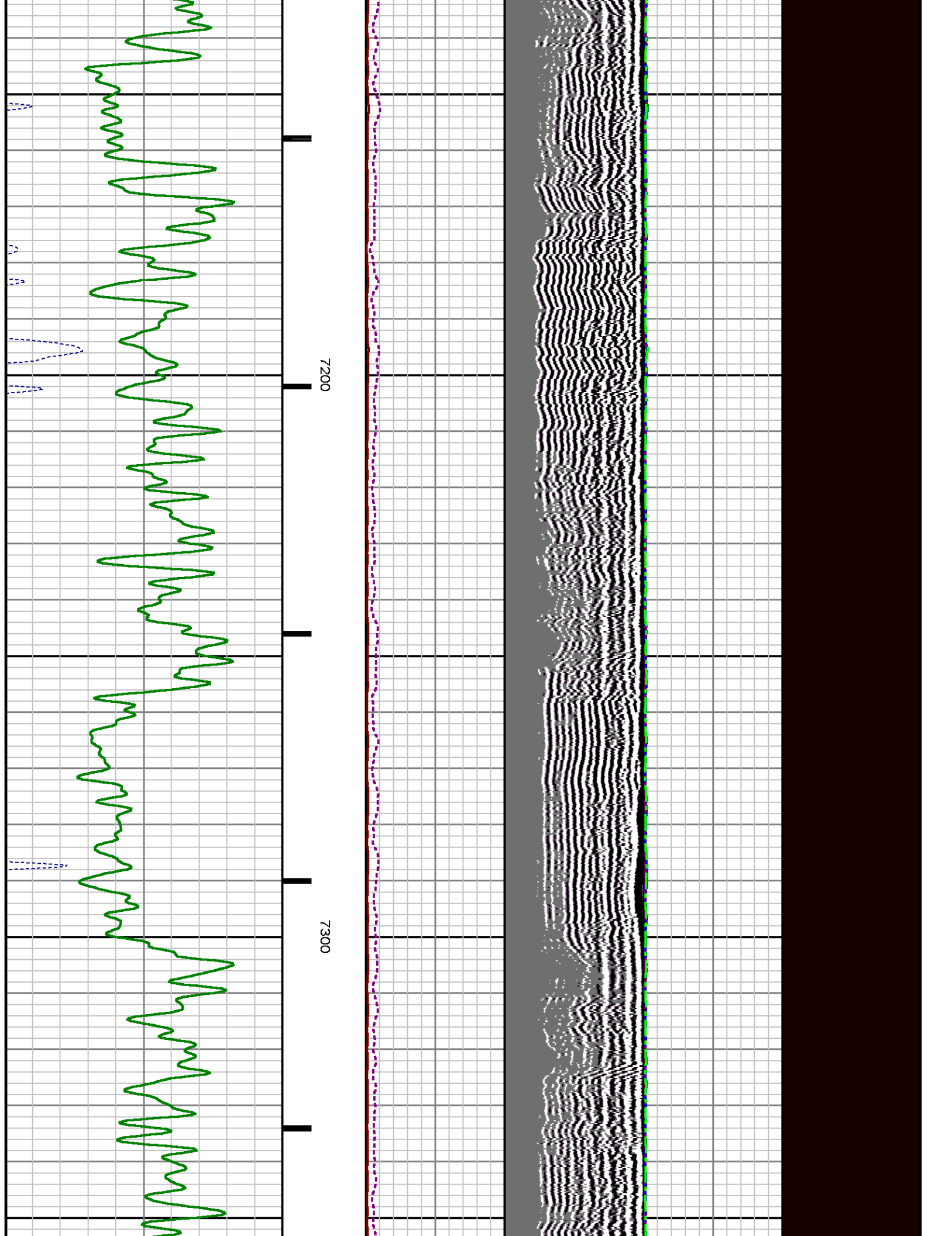


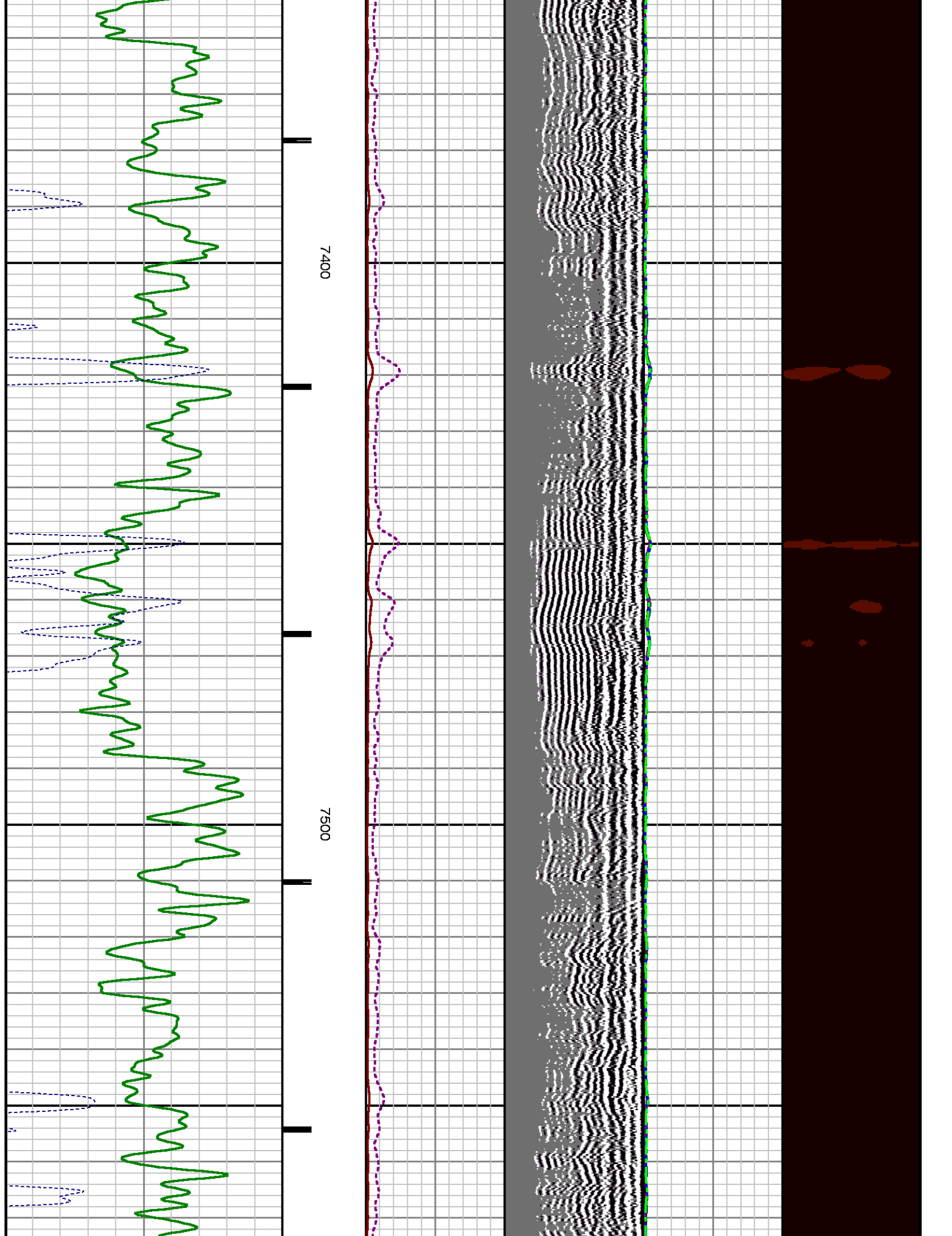


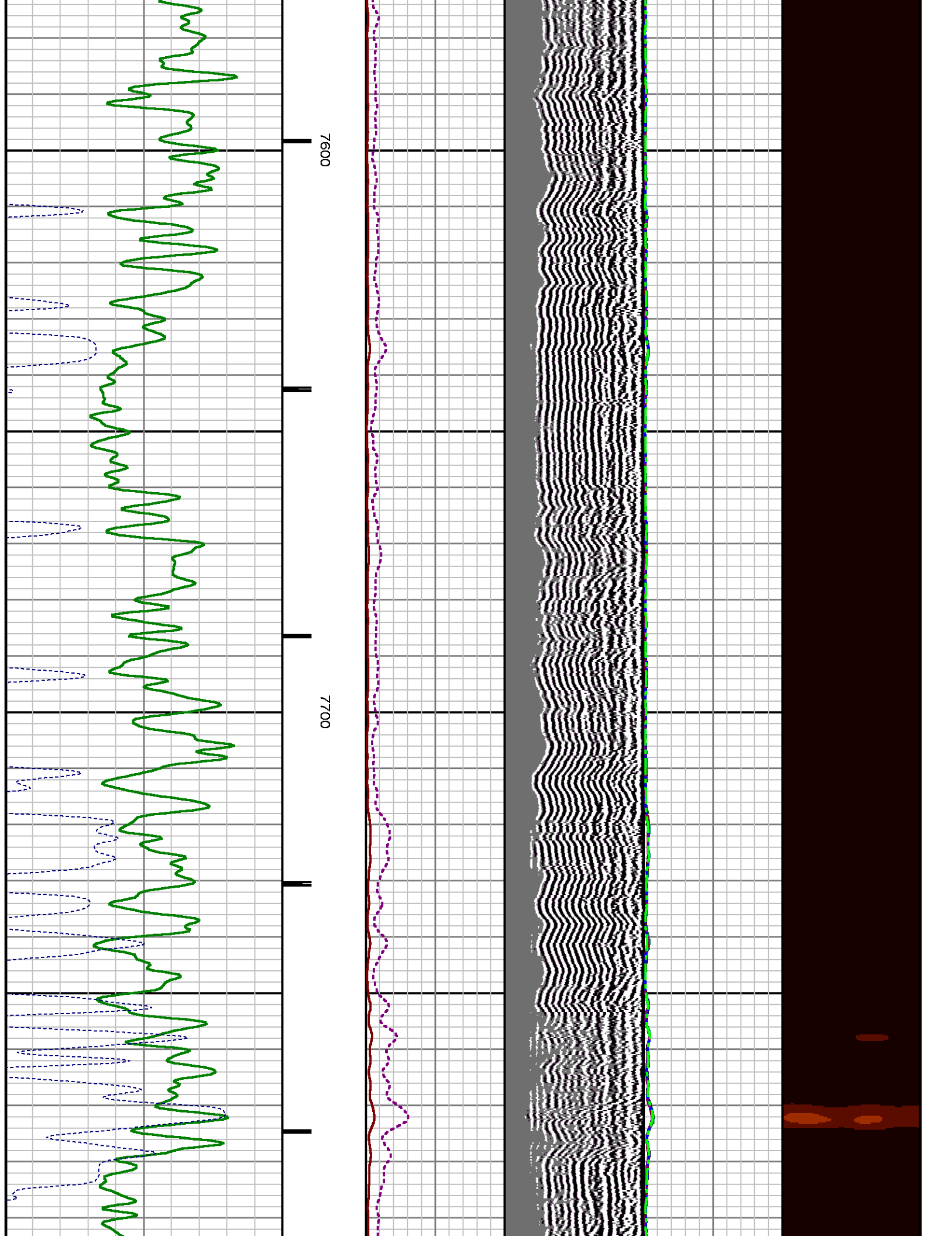


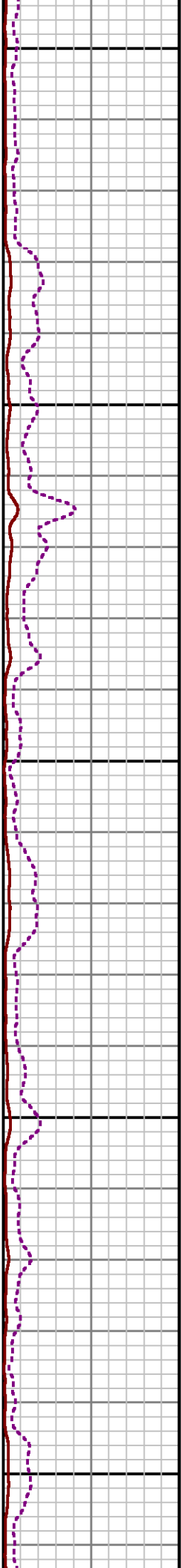
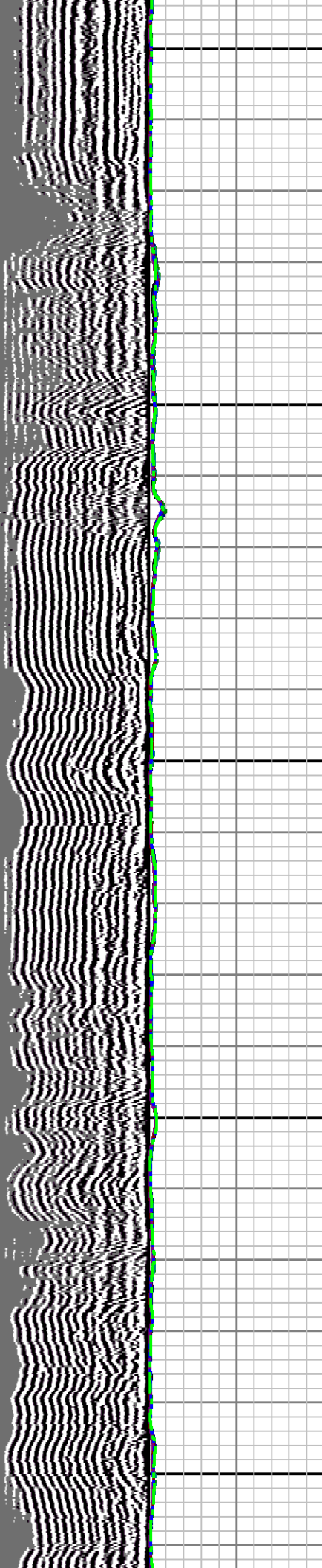
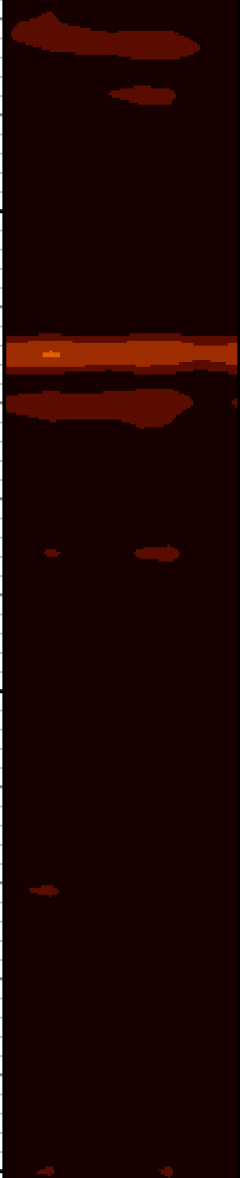








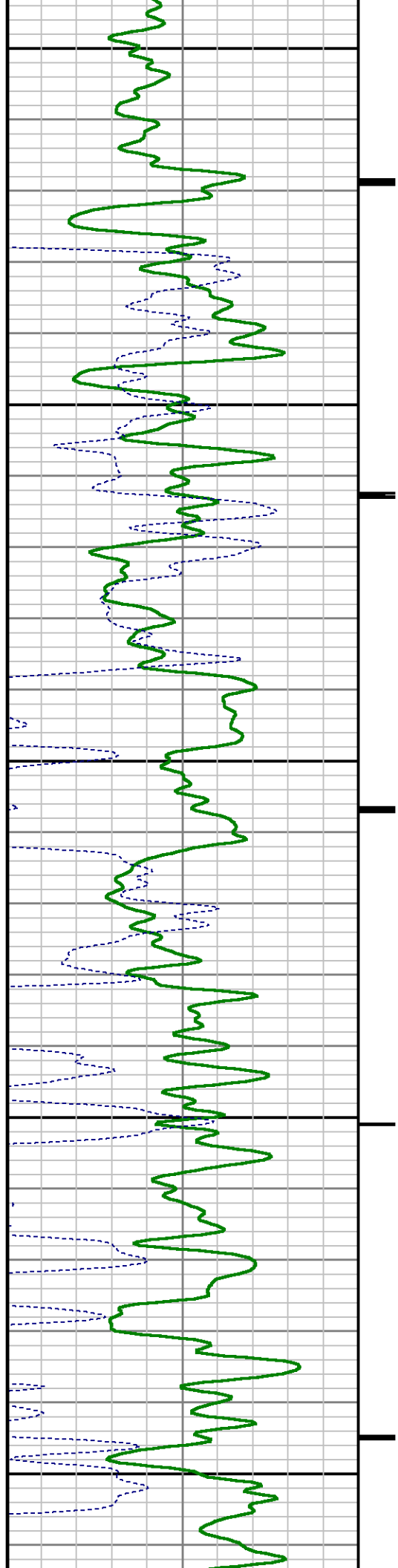


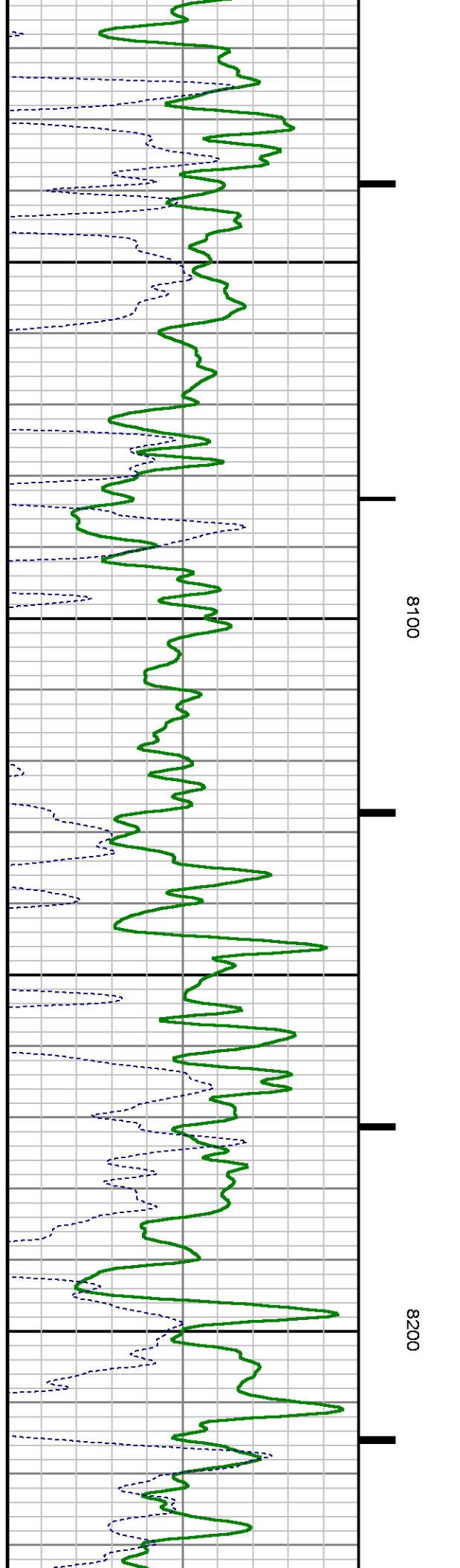
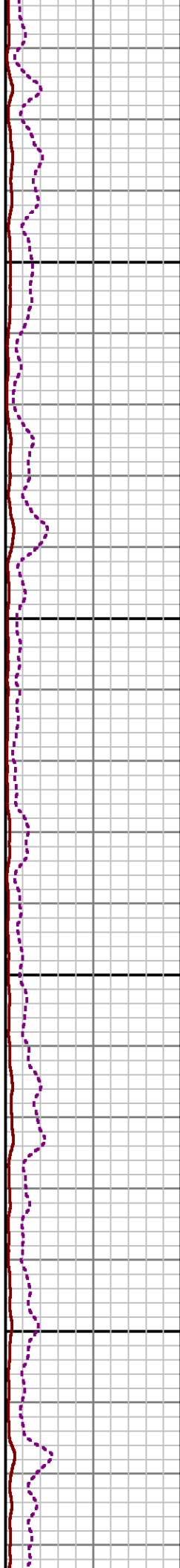
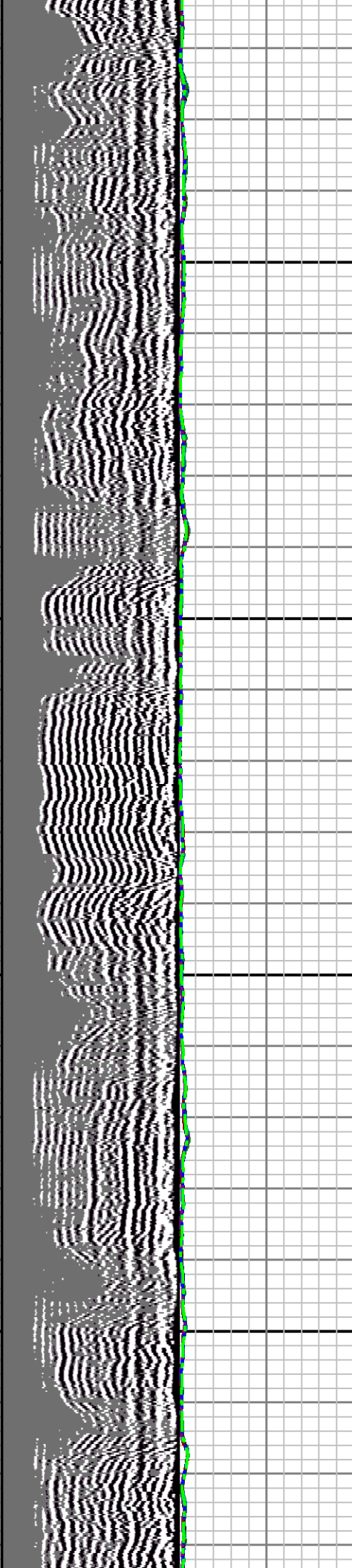


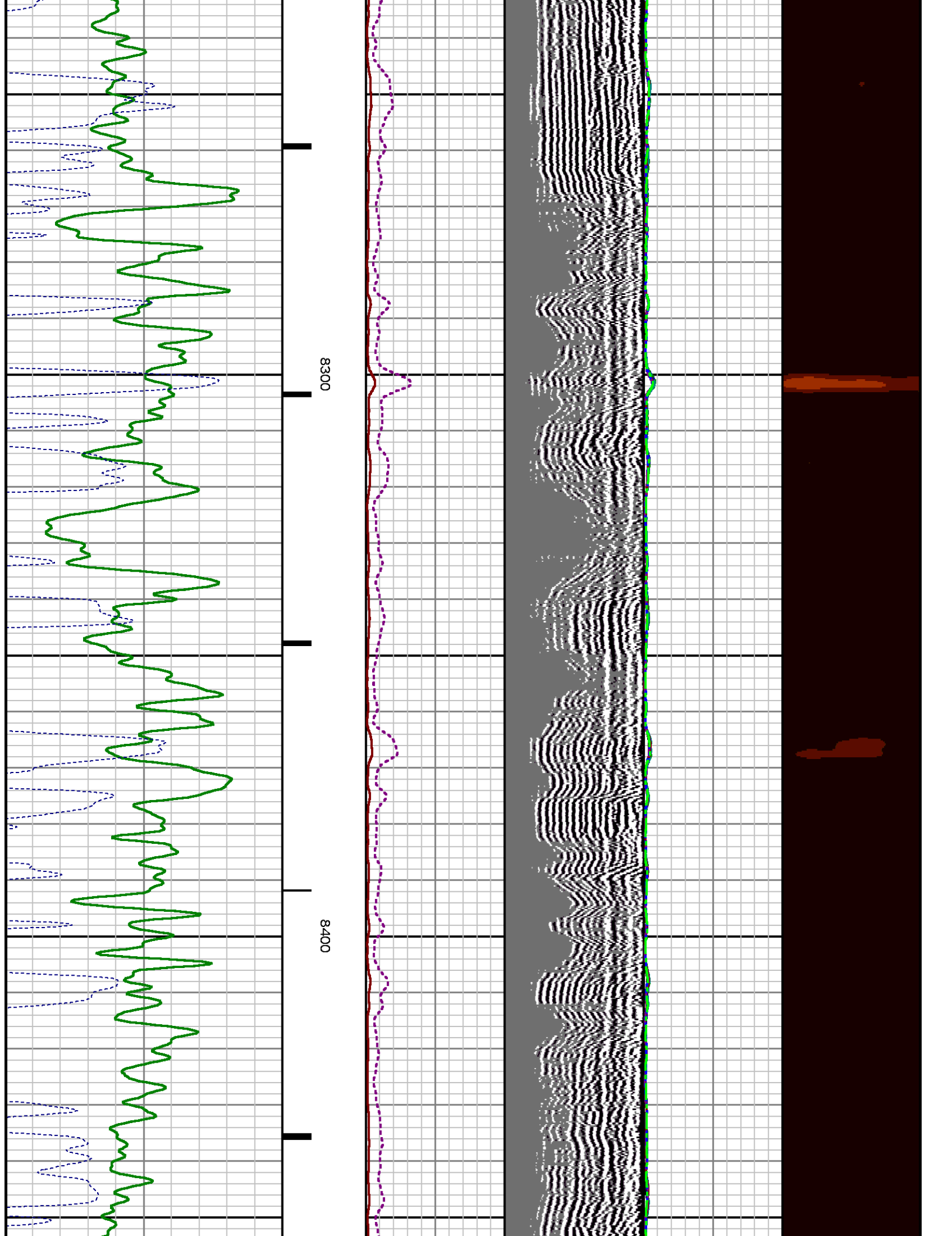
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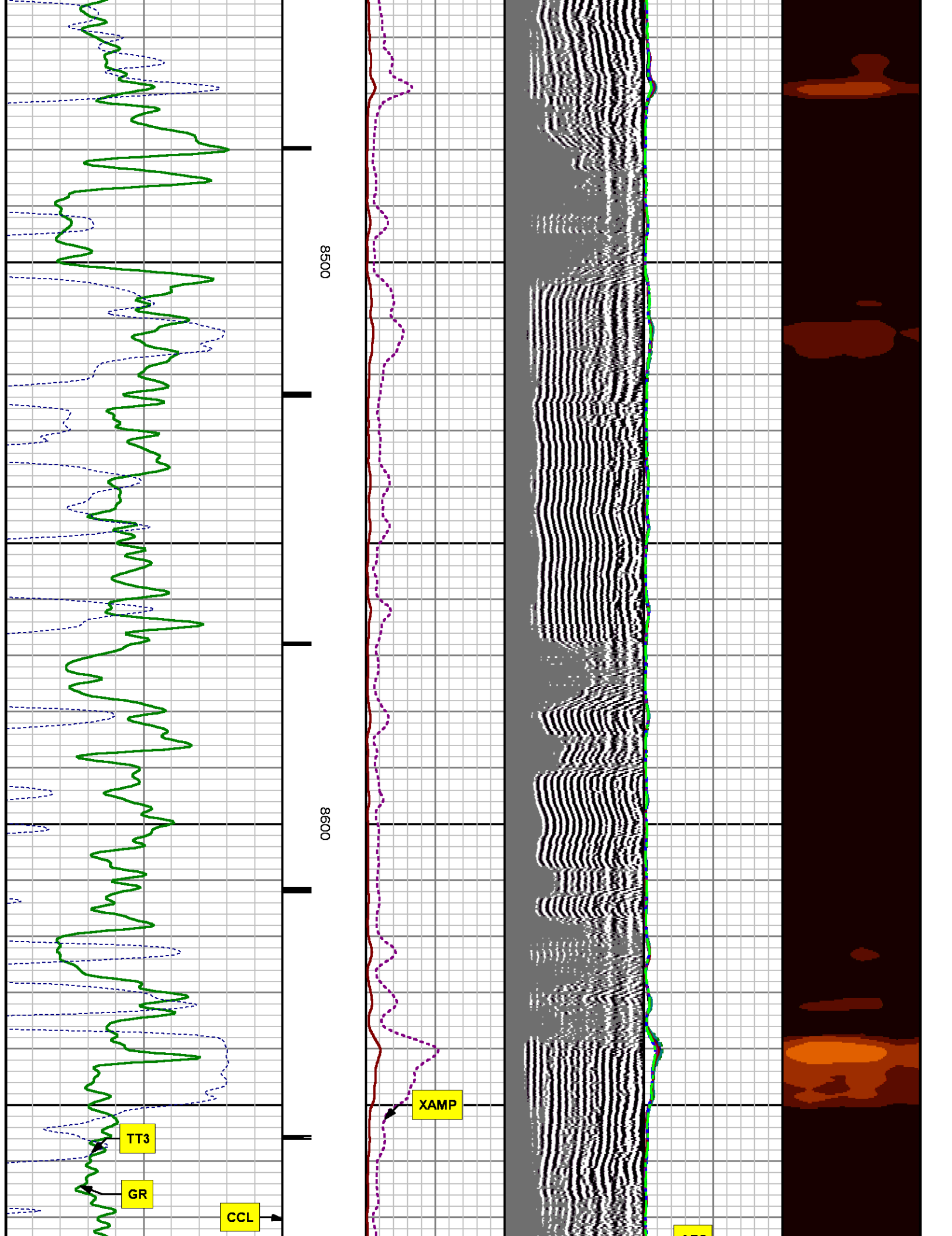
7900

8000









RAL	FB Start Far	291.900	usec	8410.837	8734.900
RAL	FB Start Near	180.000	usec	8410.837	8734.900
RAL	FB Start Radial	180.000	usec	8410.837	8734.900
RAL	FB Thresh Far	10.000	mv	8410.837	8734.900
RAL	FB Thresh Near	4.000	mv	8410.837	8734.900
RAL	FB Thresh Radial	4.000	mv	8410.837	8734.900
RAL	Fluid Travel Time	200.000	usec/ft	8410.837	8734.806

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

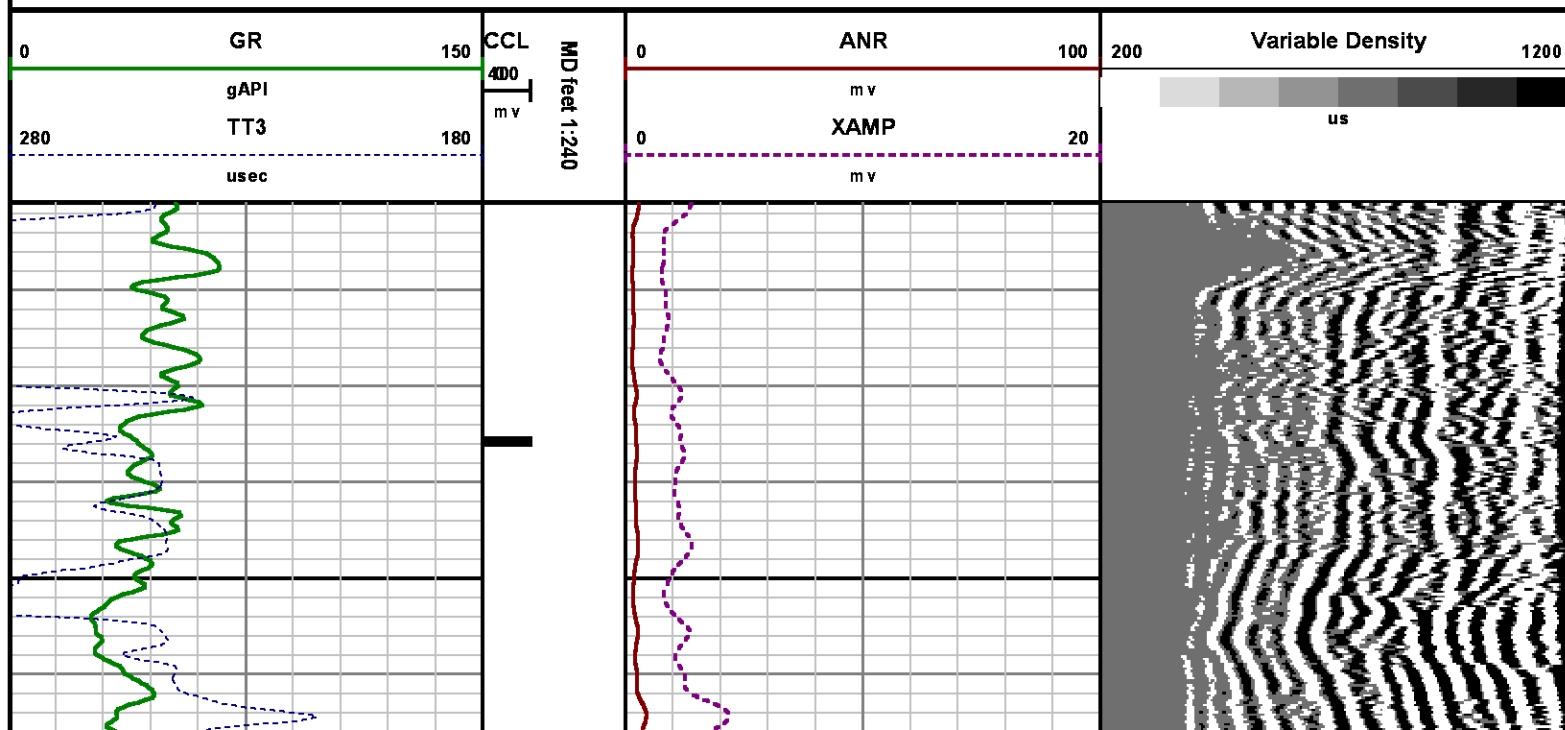
Well : SAVAGE RWF 533-25

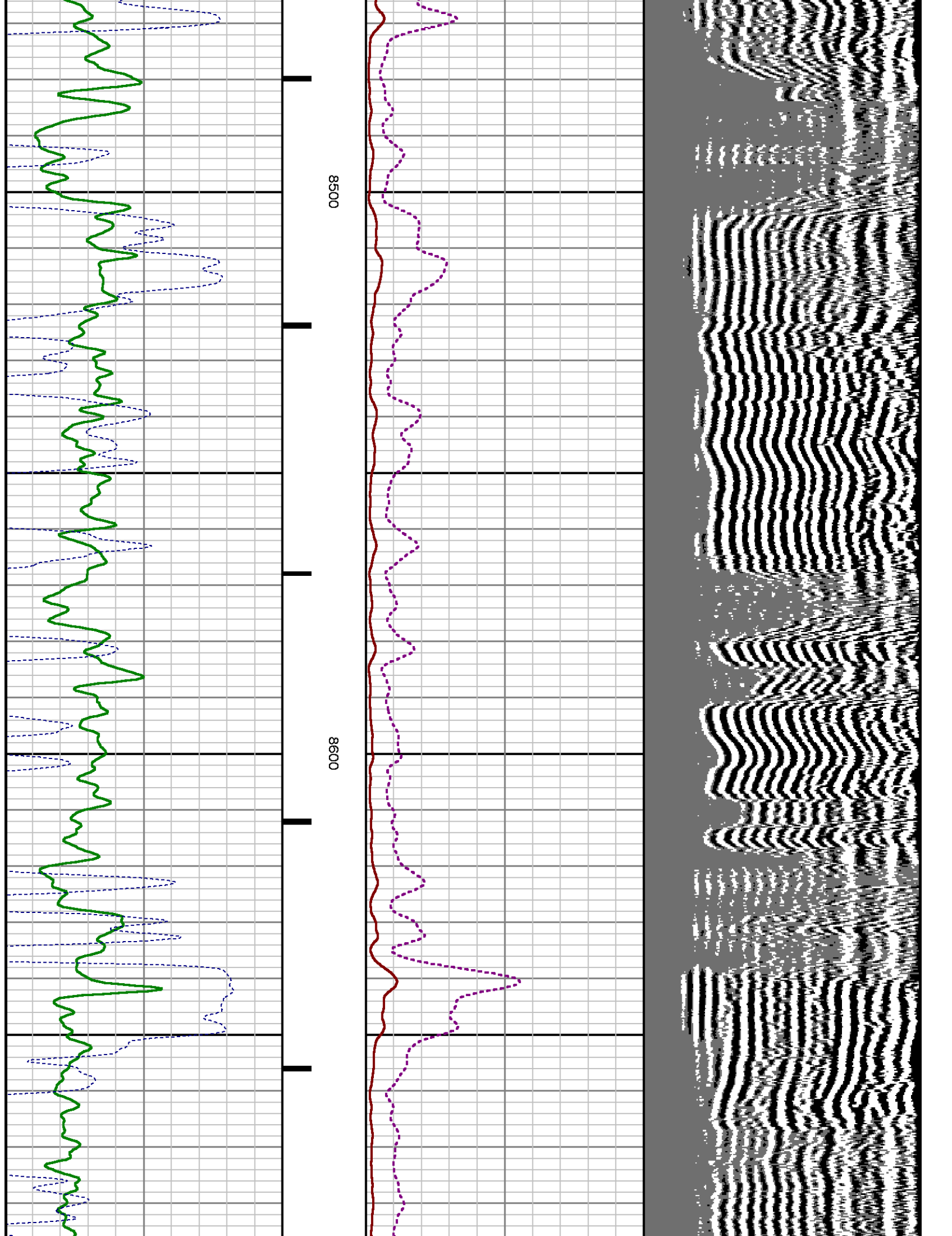
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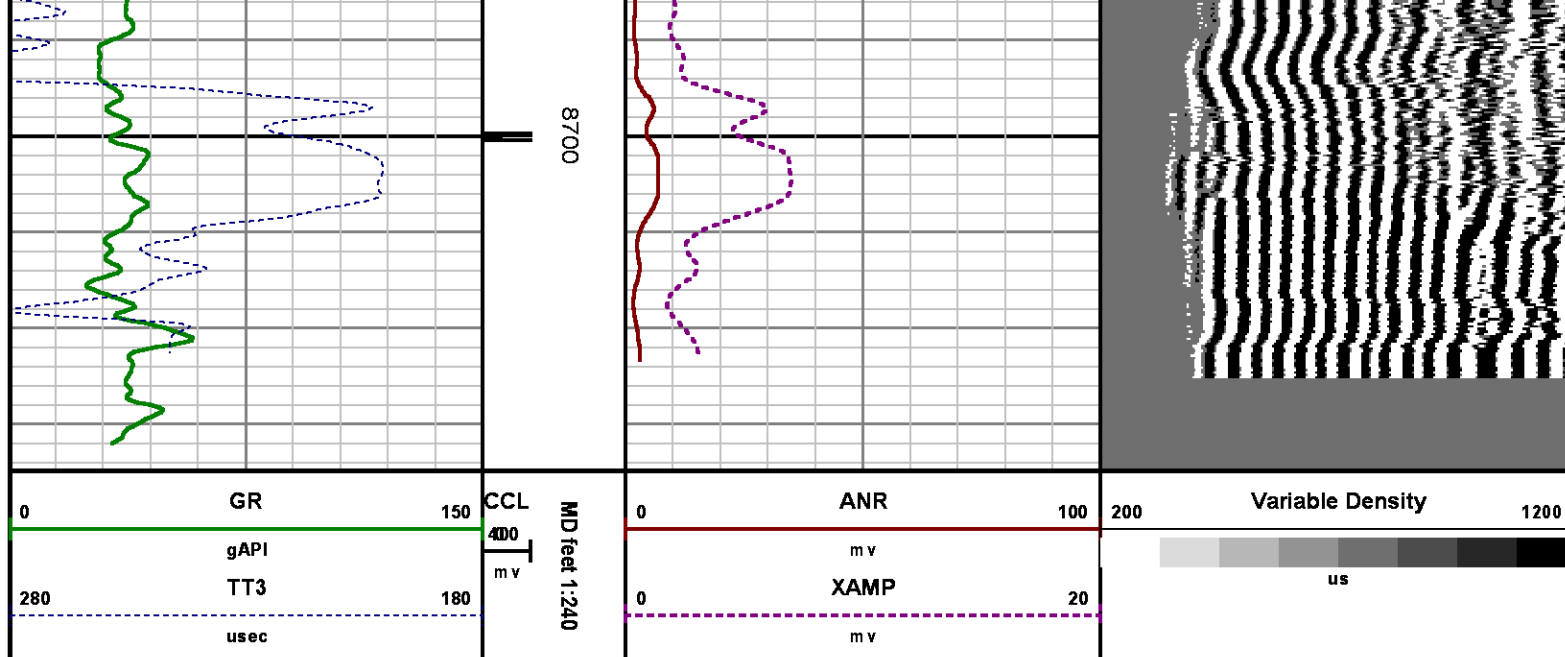
Mode : PlotMgr 5.4.504

Interval : 8410.90 - 8734.90 feet UP

Created : 8/31/2014 8:41:24 AM







CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP\496AU29_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Fri Aug 29 13:06:57 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: AU29

Tool Delay [usec] -53.00 Tank OD in 5.50 Tank Wt lbm/ft 15.50 Tank ID in 4.95

RECEIVER	Travel Time [usec]	Amp. Gate Start [usec]	Amp. Gate Width [usec]	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Amp Ref. [mV]	Shop Factor
CAL Pulse	218	216	30	166	25	-0.157	100.00	0.31
3 Ft. Receiver	217	216	30	166	25	2.432	100.00	0.30
5 Ft. Receiver	326	325	30	244	25	0.126	150.00	0.34
Radial #1	217	216	30	166	25	1.708	100.00	0.31
Radial #2	216	216	30	166	25	1.524	100.00	0.30
Radial #3	216	216	30	166	25	2.506	100.00	0.30
Radial #4	216	216	30	166	25	2.286	100.00	0.30
Radial #5	216	216	30	166	25	2.035	100.00	0.30
Radial #6	217	216	30	166	25	2.053	100.00	0.31
Radial #7	217	216	30	166	25	1.714	100.00	0.31
Radial #8	219	216	30	166	25	2.058	100.00	0.31

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\496AU29 fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Fri Aug 29 13:08:50 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: AU29

Tool Delay [usec] -53.00 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	0.047	0.000	1.00	100.000
3 Ft. Receiver	195	25	2.335			
5 Ft. Receiver	305	25	3.409			
Radial #1	195	25	1.727			
Radial #2	195	25	1.700			
Radial #3	195	25	2.083			
Radial #4	195	25	2.143			
Radial #5	195	25	2.273			
Radial #6	195	25	2.310			
Radial #7	195	25	1.810			
Radial #8	195	25	1.744			

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

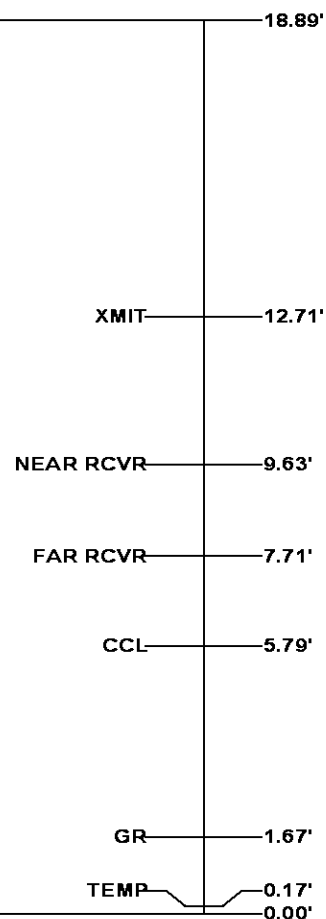
OTA SHORT CABLE HEAD

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

SAVAGE RWF 533-25

Field

RULISON

County

GARFIELD

State

COLORADO

Location

SHL: 1154' FSL & 1391' FEL

BHL: 1455' FSL & 1679' FEL (NWSE)

SEC 25

TWP 6S

RGE 94S

Elevations

KB 6260 ft

DF

GL 6234 ft

File No:

CH089582

API No:

05045219930000

25 6S 94W

RWF 43-25 PAD

NABORS 577