



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: **WPX ENERGY**

CH091000 **CHEVRON GM 411-21**

API No: **GRAND VALLEY**

0504523580000 **GARFIELD** State **CO**

Location

SHL: 2027' FNL & 702' FEL (20 6S 96W)

BHL: 1033' FNL & 996' FWL (21 6S 96W)

21 6S 96W SEC 21 TWP 6S RGE 96W

GM 442-20 PAD

CYCLONE 17

Other Services

RPM

Permanent Datum **GL** Elevation **5575 ft**

Log Measured From **KB** **21 ft** **Above P. D.**

Drill Measured From **KB**

Elevations

KB 5596 ft

DF

GL 5575 ft

Date	09/OCT/14
Run	ONE
Service Order	US091000
Depth Driller	7324 ft
Depth Logger	7275 ft
Bottom Logged Interval	7265 ft
Top Logged Interval	21 ft
Time Started	21:00
Time Finished	24:00
Operator Rig Time	3 HOURS
Type of Fluid in Hole	WATER
Fluid Density	NA
Salinity	NA
Fluid Level	62 ft
Logged Cement Top	NA
Wellhead Pressure	0 psi
Maximum Hole Deviation	NA
Nominal Logging Speed	65 fpm
Maximum Recorded Temperature	242 degF
Reference Log	NA
Reference Log Date	NA
Equipment No.	4271
Recorded By	NEWELL
Witnessed By	COLE APPIEGATE
Location	GRAND JUNCTION

- 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	0 ft	1100 ft
8.75 in	1100 ft	7360 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in			0 ft	1100 ft
4.5 in	11.6 lbm/ft	I-80	0 ft	7360 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 clients request.

The amount of linear shift is 1 foot.

Logged with zero PSI at wellhead.

BHT = 242 °F

Equipment Data

Run	Trip	Tool	Series Number	Serial Number	Position
1	1	CBL	1426XA	10124106	CENTRALIZED
1	1	GR/CCL	2459XA	10218503	CENTRALIZED

PRIMARY PRESENTATION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	24.981	7279.500
RAL	Amp Gate Start Near	195.000	usec	24.981	7279.500
RAL	Amp Gate Start Radial	195.000	usec	24.981	7279.500
RAL	Amp Gate Width Far	25.000	usec	24.981	7279.500
RAL	Amp Gate Width Near	25.000	usec	24.981	7279.500
RAL	Amp Gate Width Radial	25.000	usec	24.981	7279.500
RAL	casing od	4.500	inches	24.981	7279.500
RAL	casing wt	11.600	lbm/ft	24.981	7279.500
RAL	FB Start Far	291.900	usec	24.981	7279.500
RAL	FB Start Near	175.391	usec	24.981	7279.500
RAL	FB Start Radial	175.391	usec	24.981	7279.500
RAL	FB Thresh Far	10.000	mv	24.981	7279.500
RAL	FB Thresh Near	4.000	mv	24.981	7279.500
RAL	FB Thresh Radial	4.000	mv	24.981	7279.500
RAL	Fluid Travel Time	200.000	usec/ft	24.981	7280.250

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

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

FPR3 FPR5 TT3 TTR1 TTR2 TTR3
 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

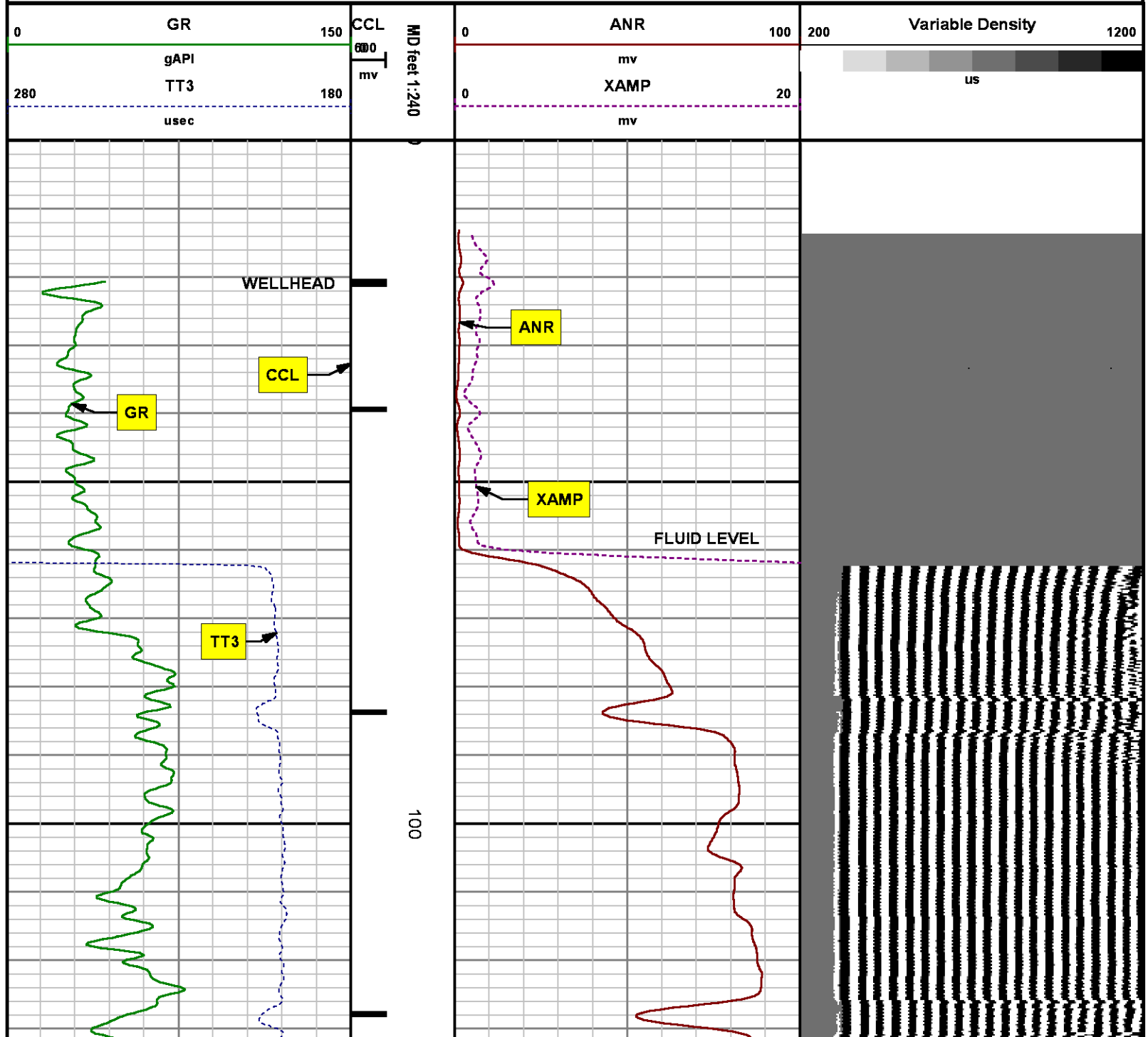
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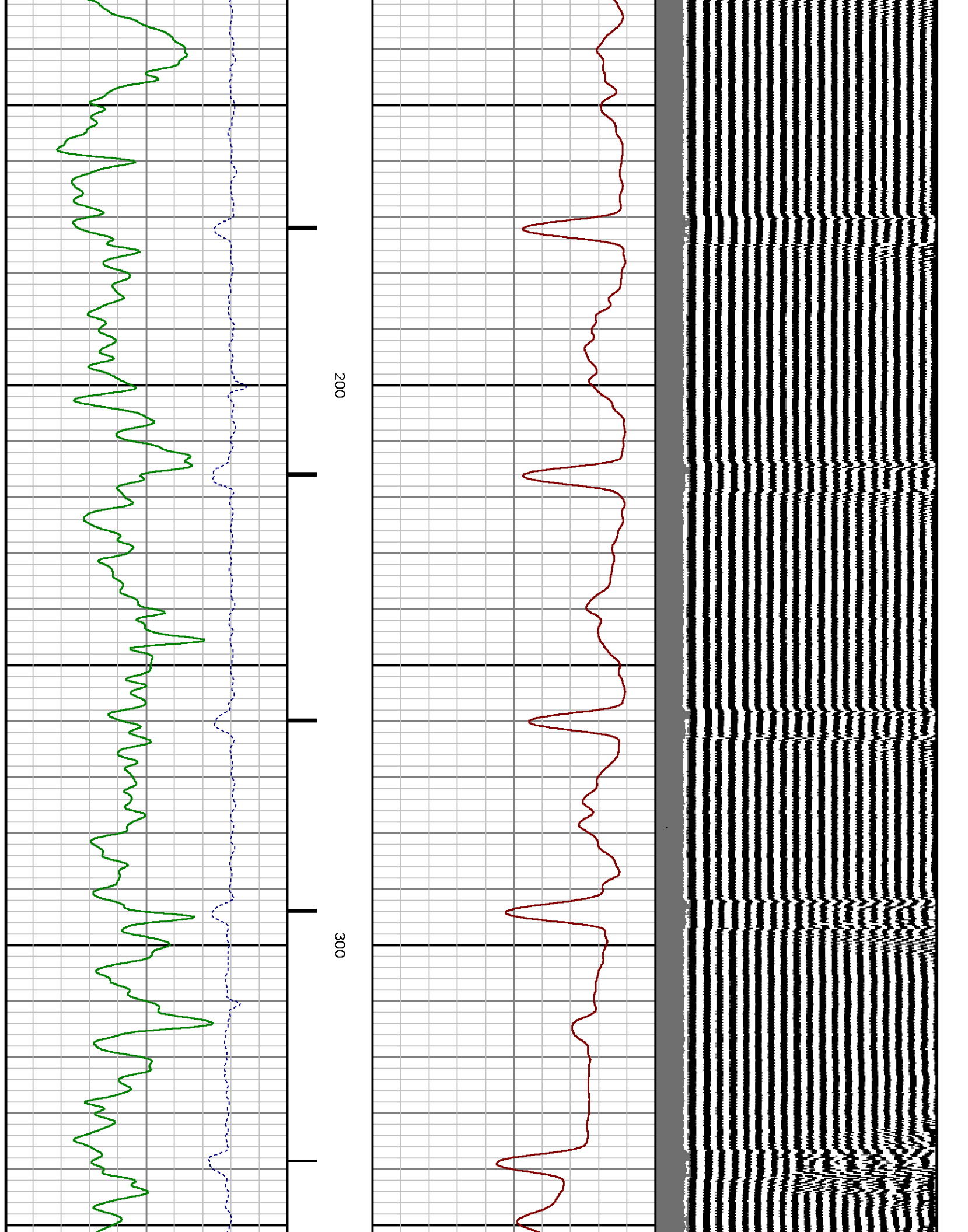
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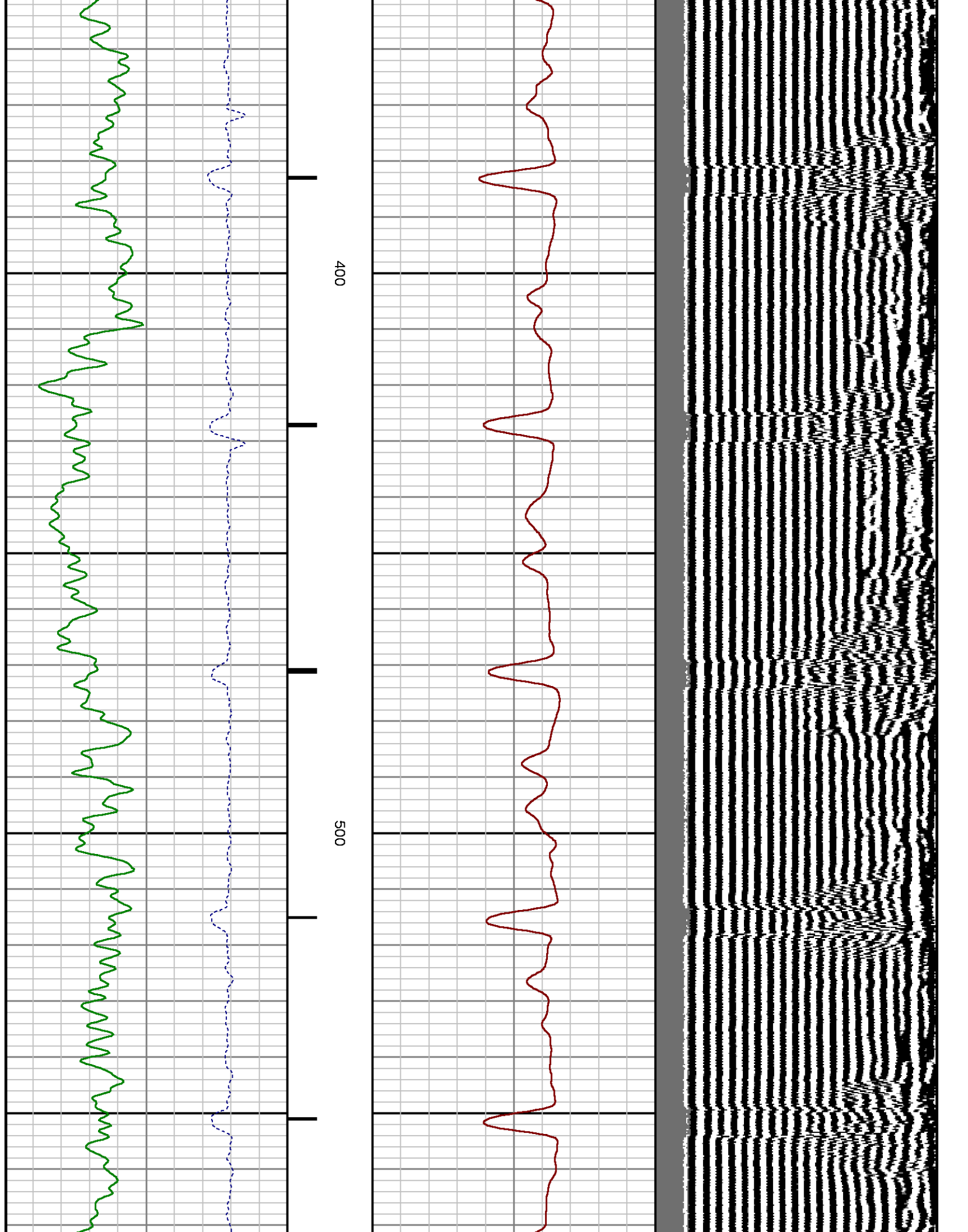
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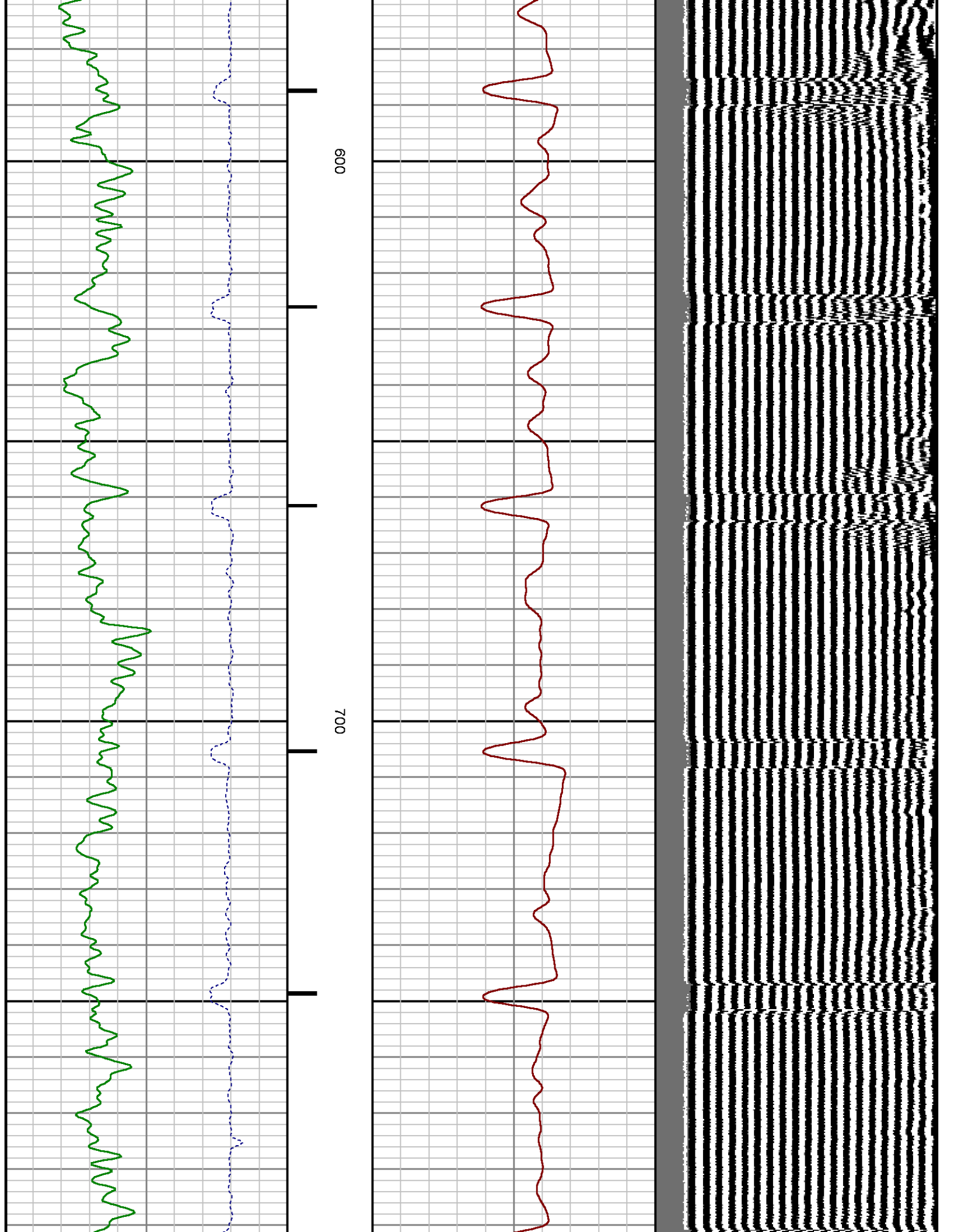
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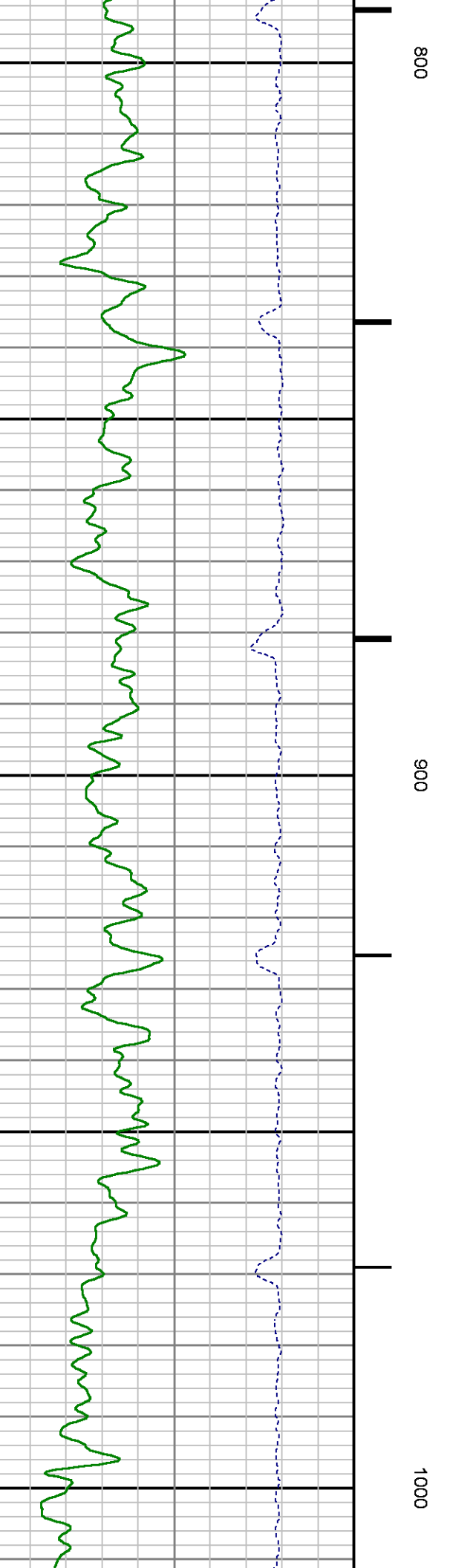
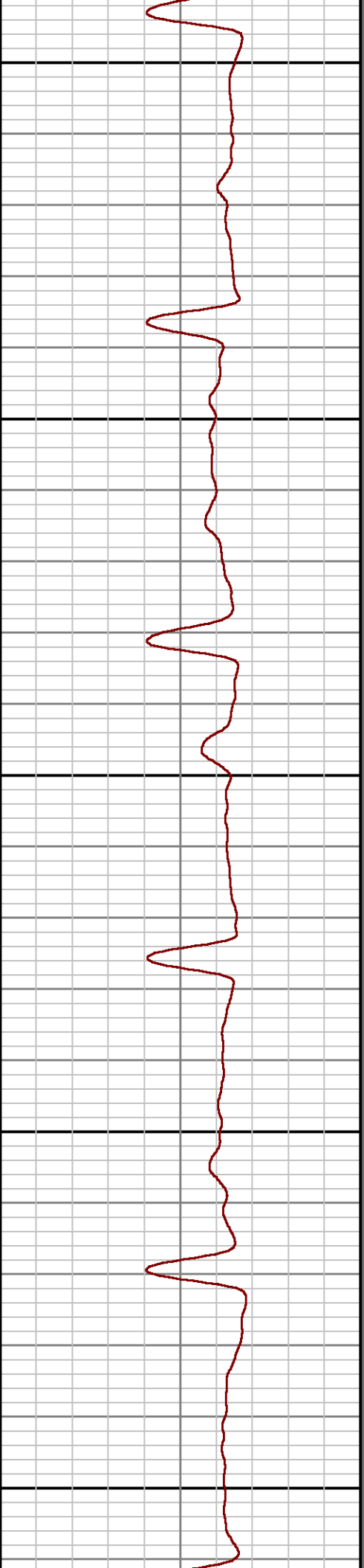
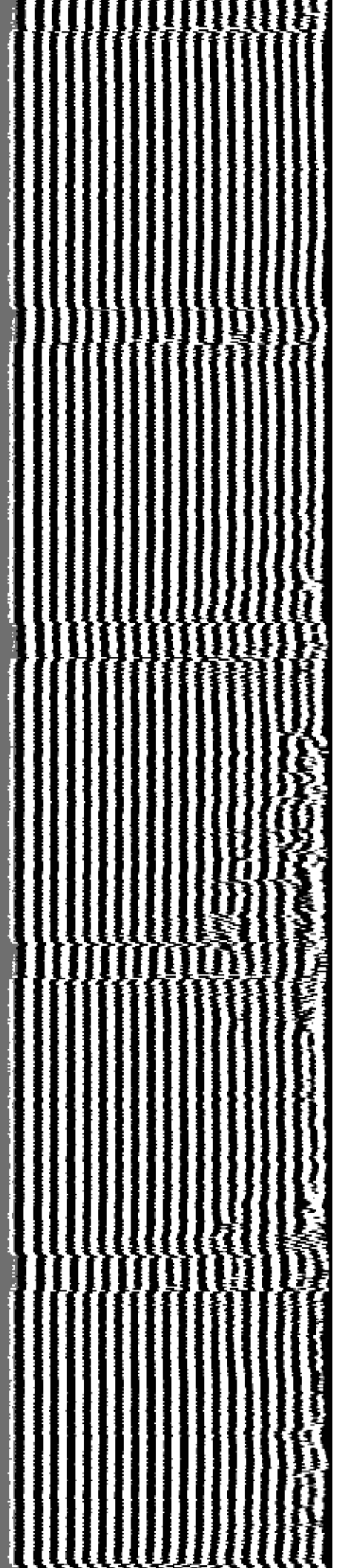
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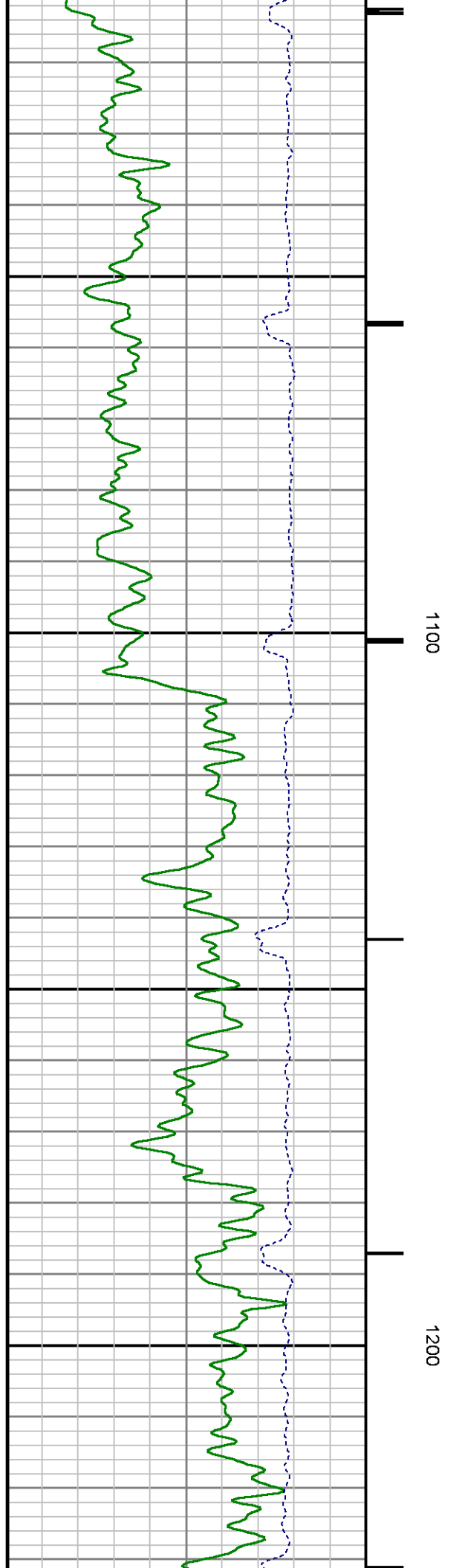
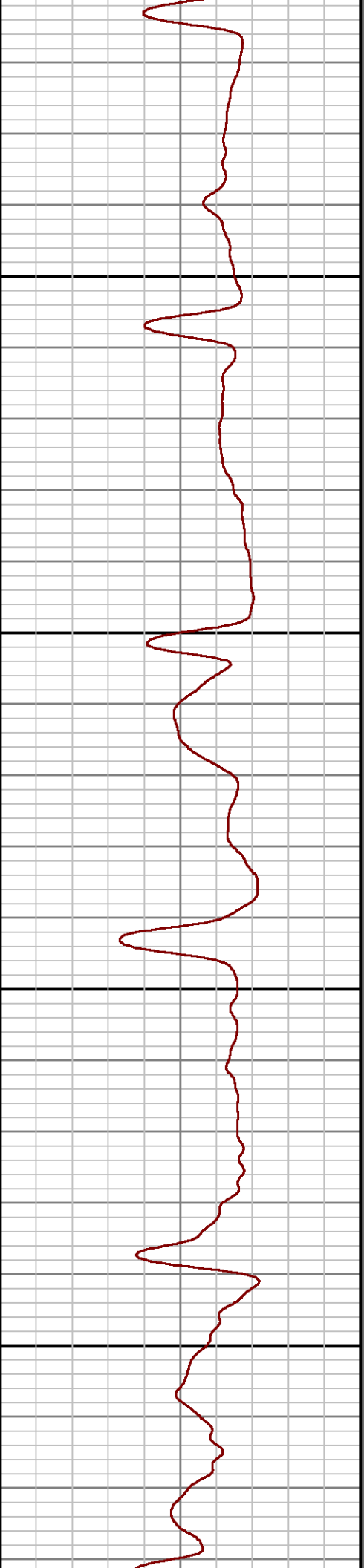
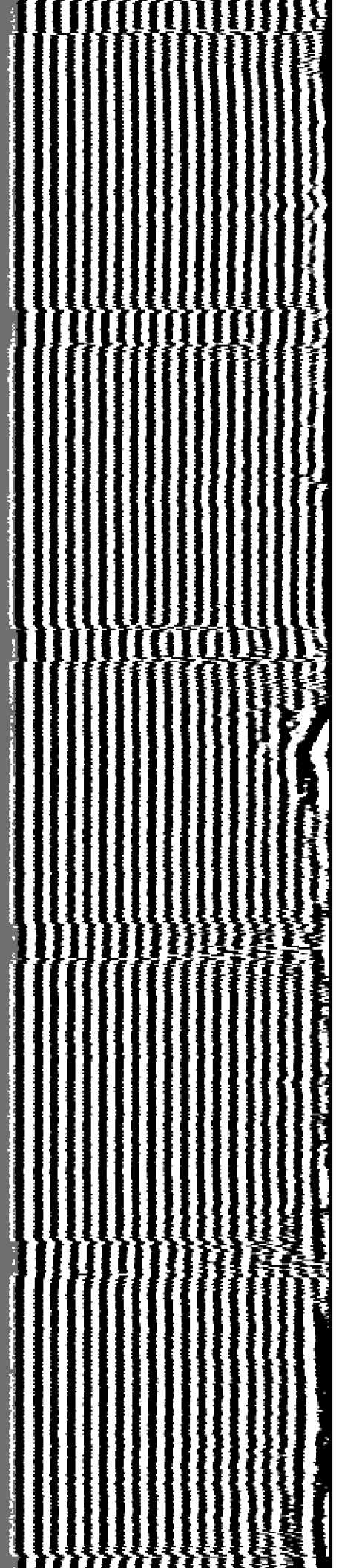


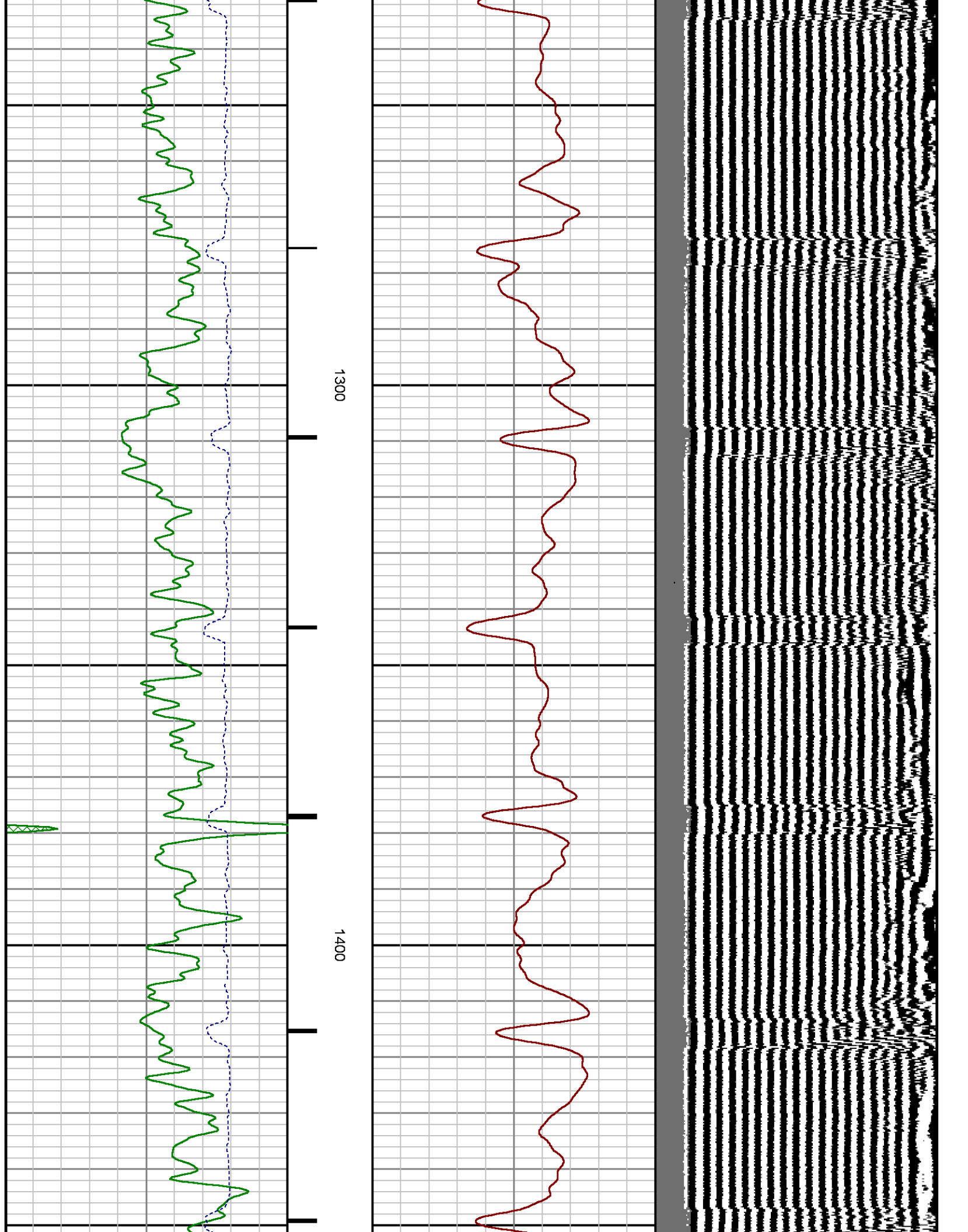


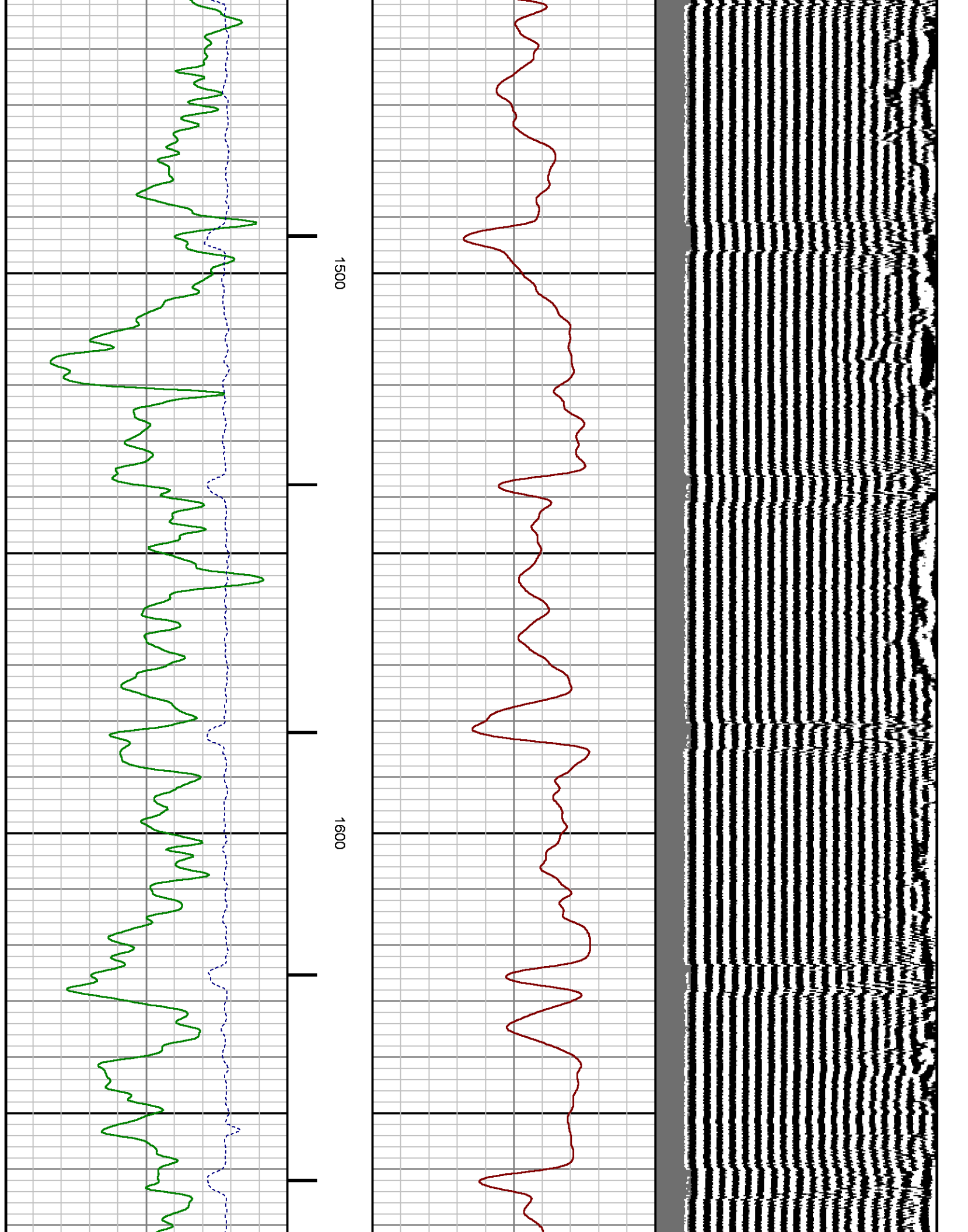


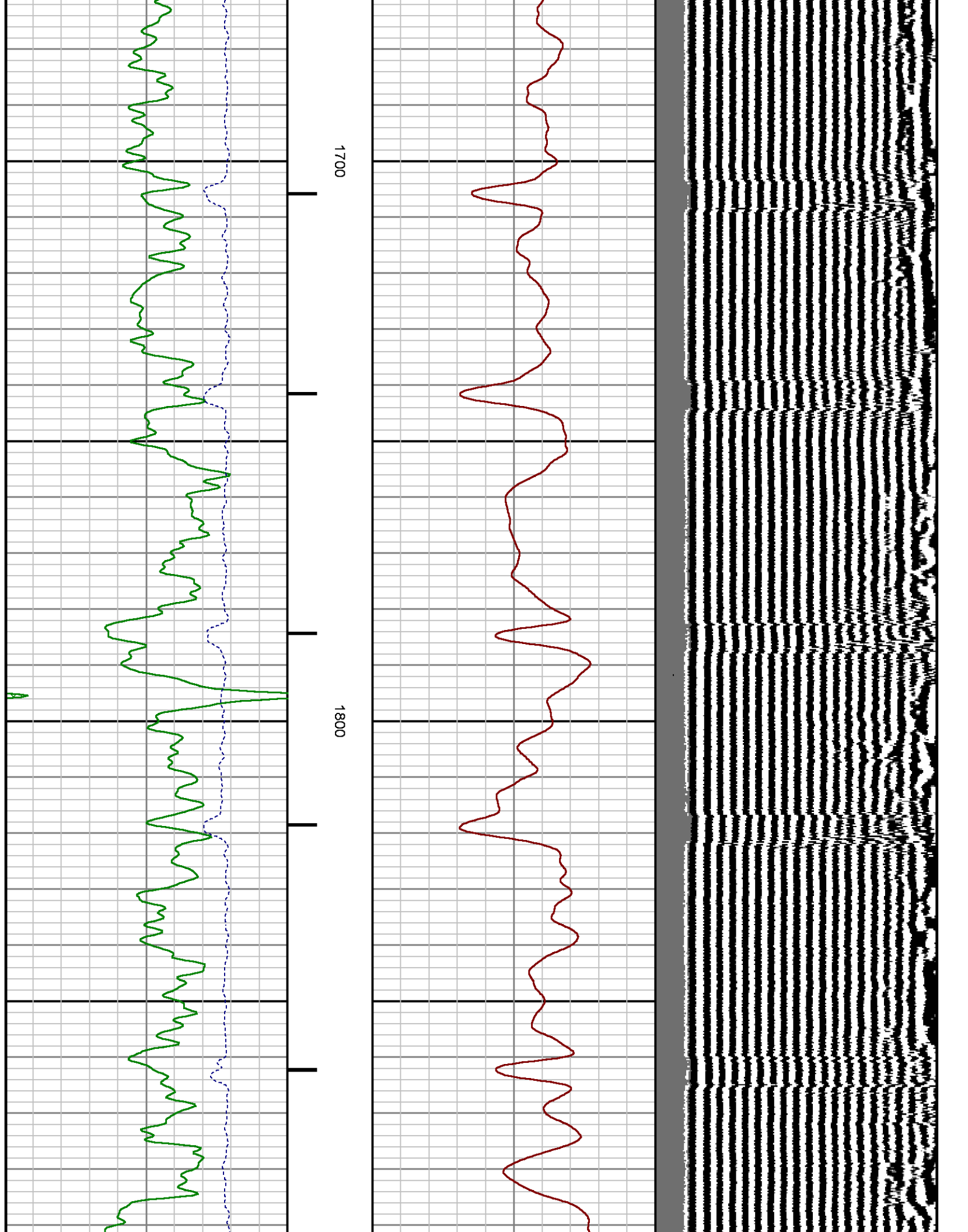


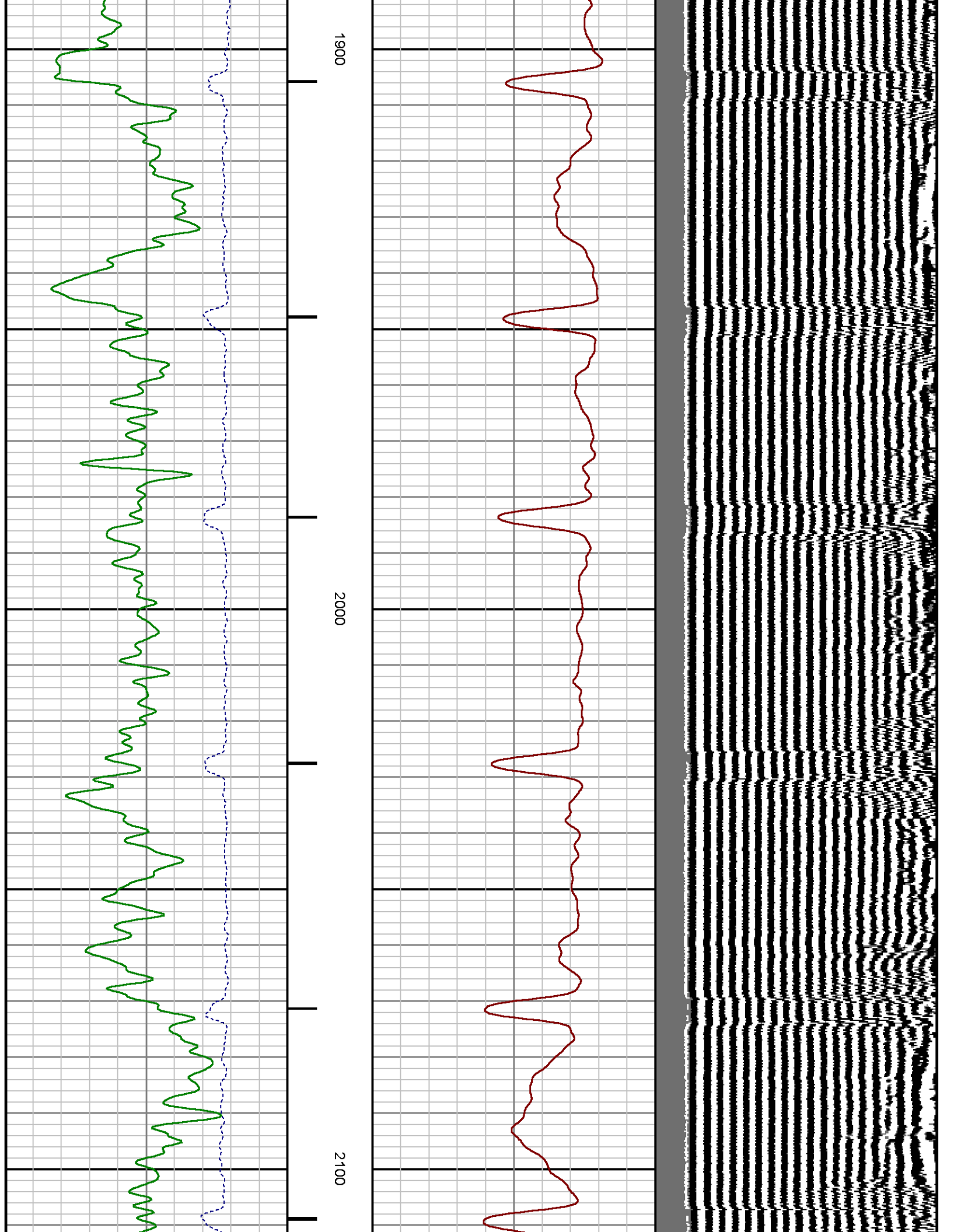


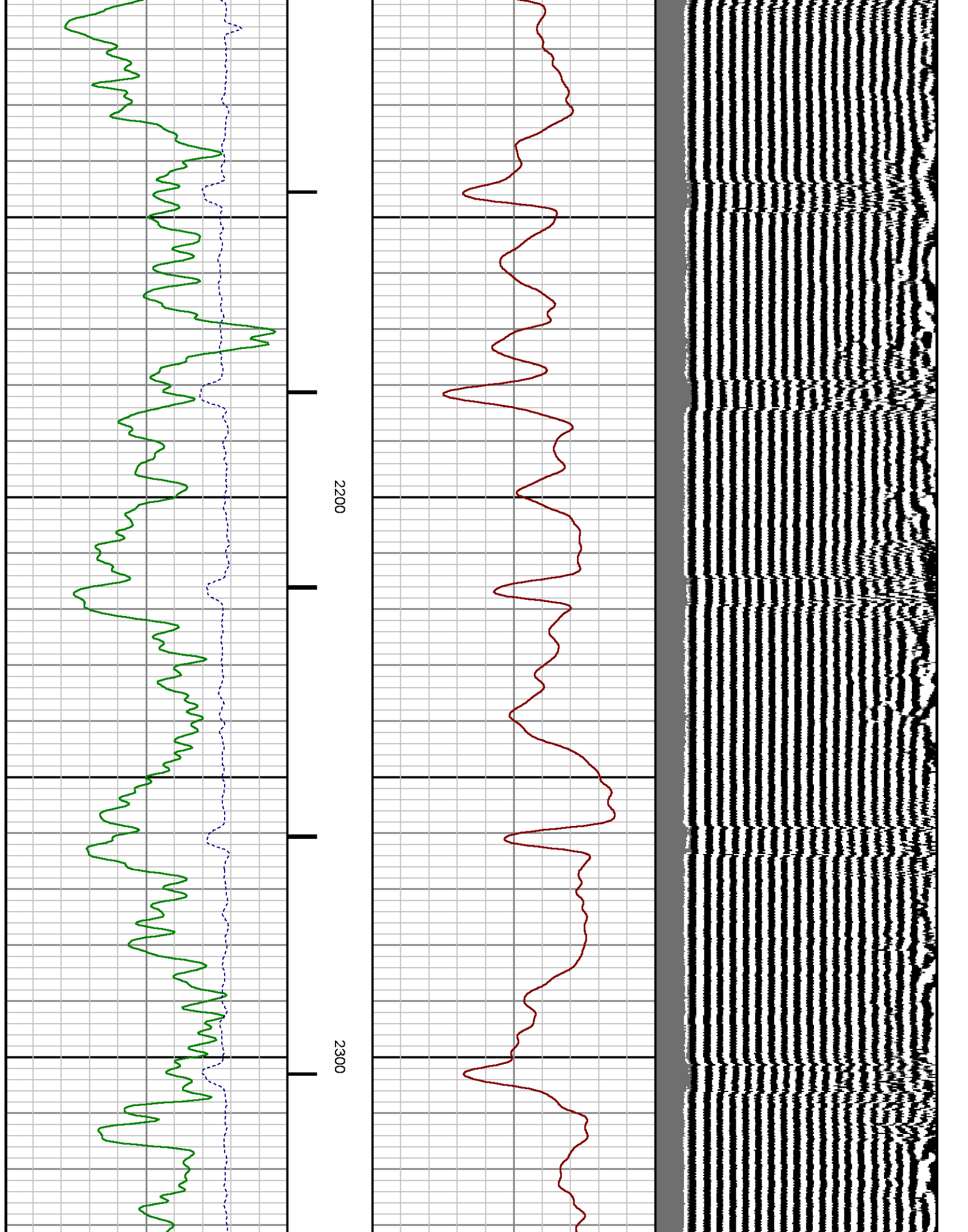


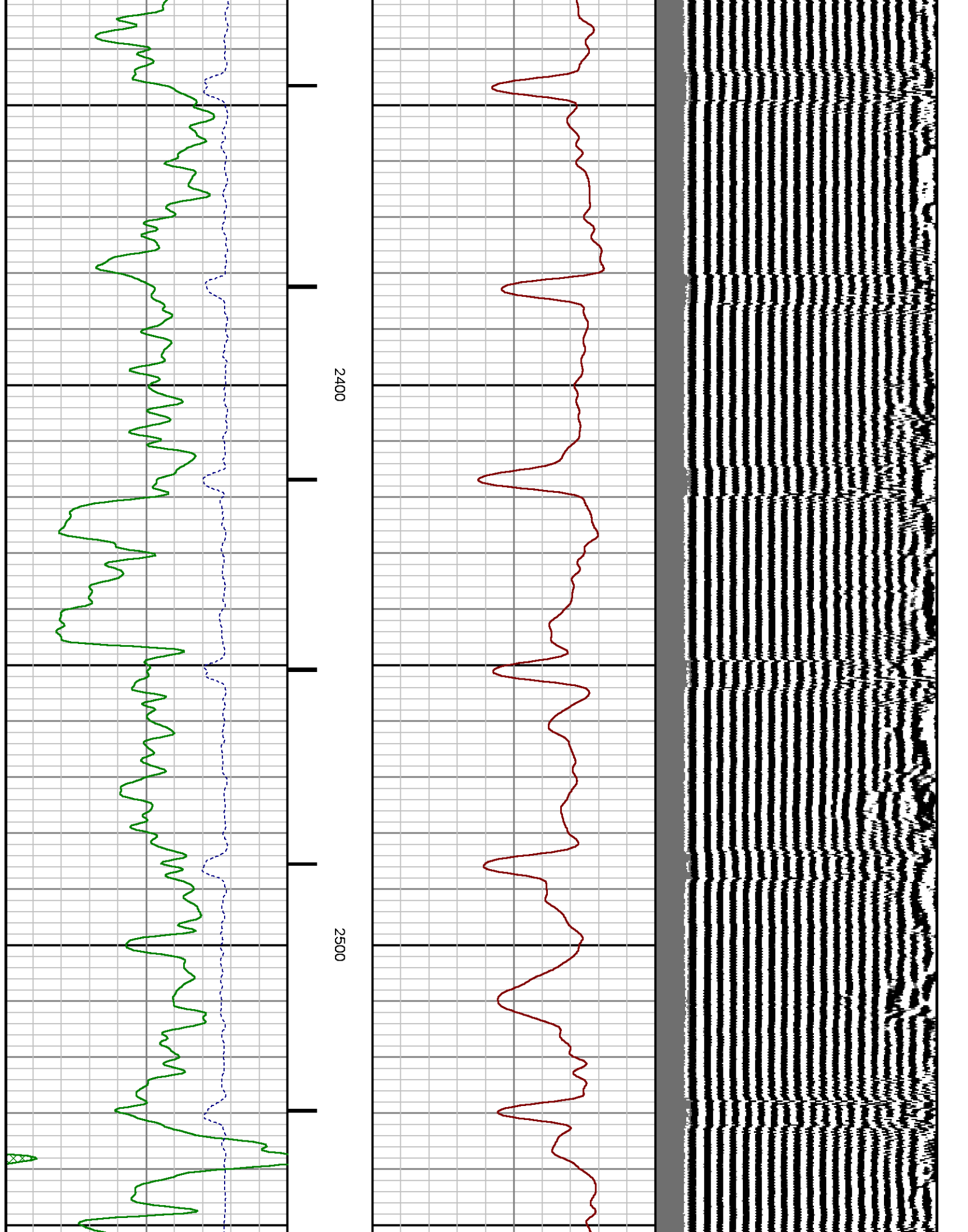


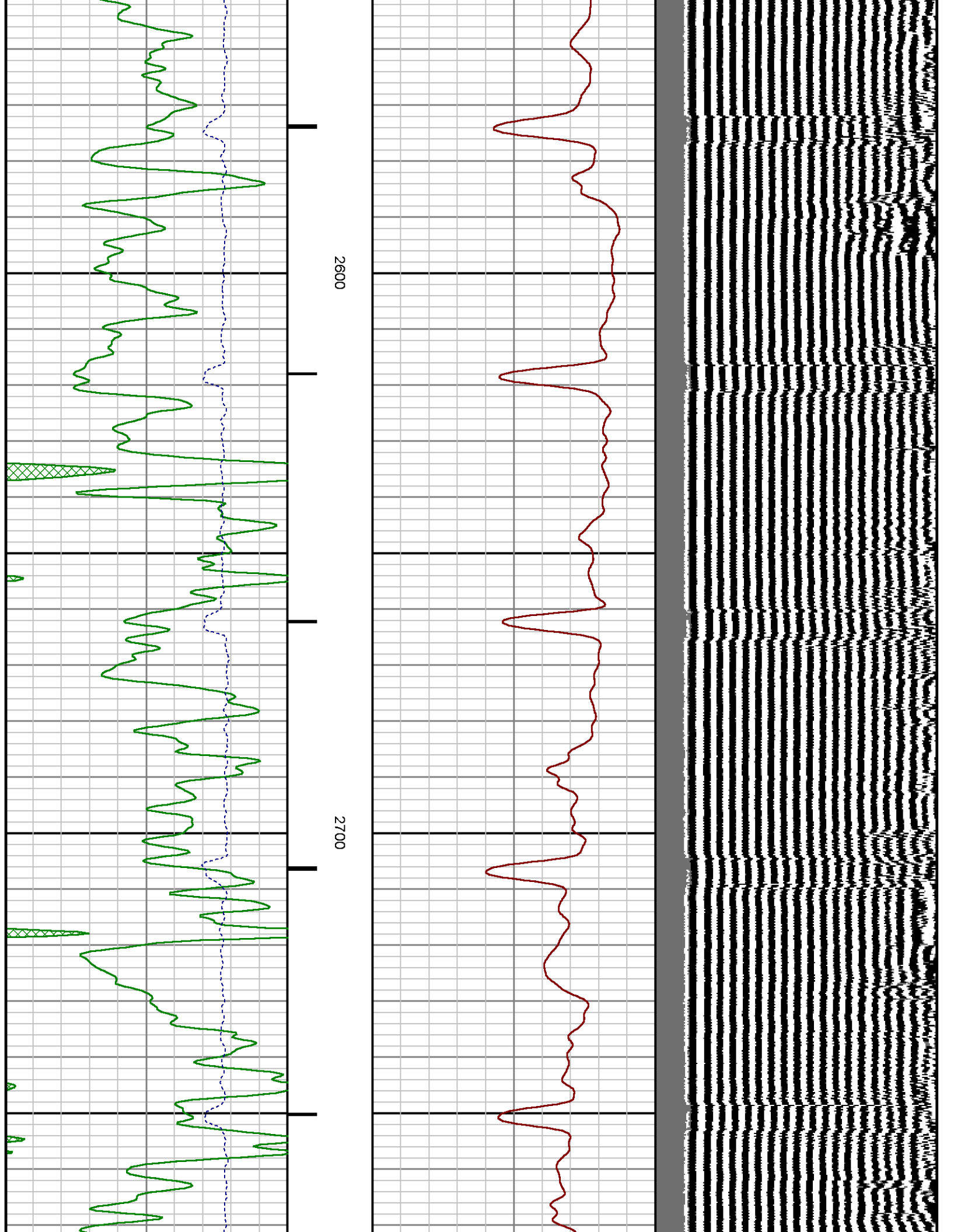


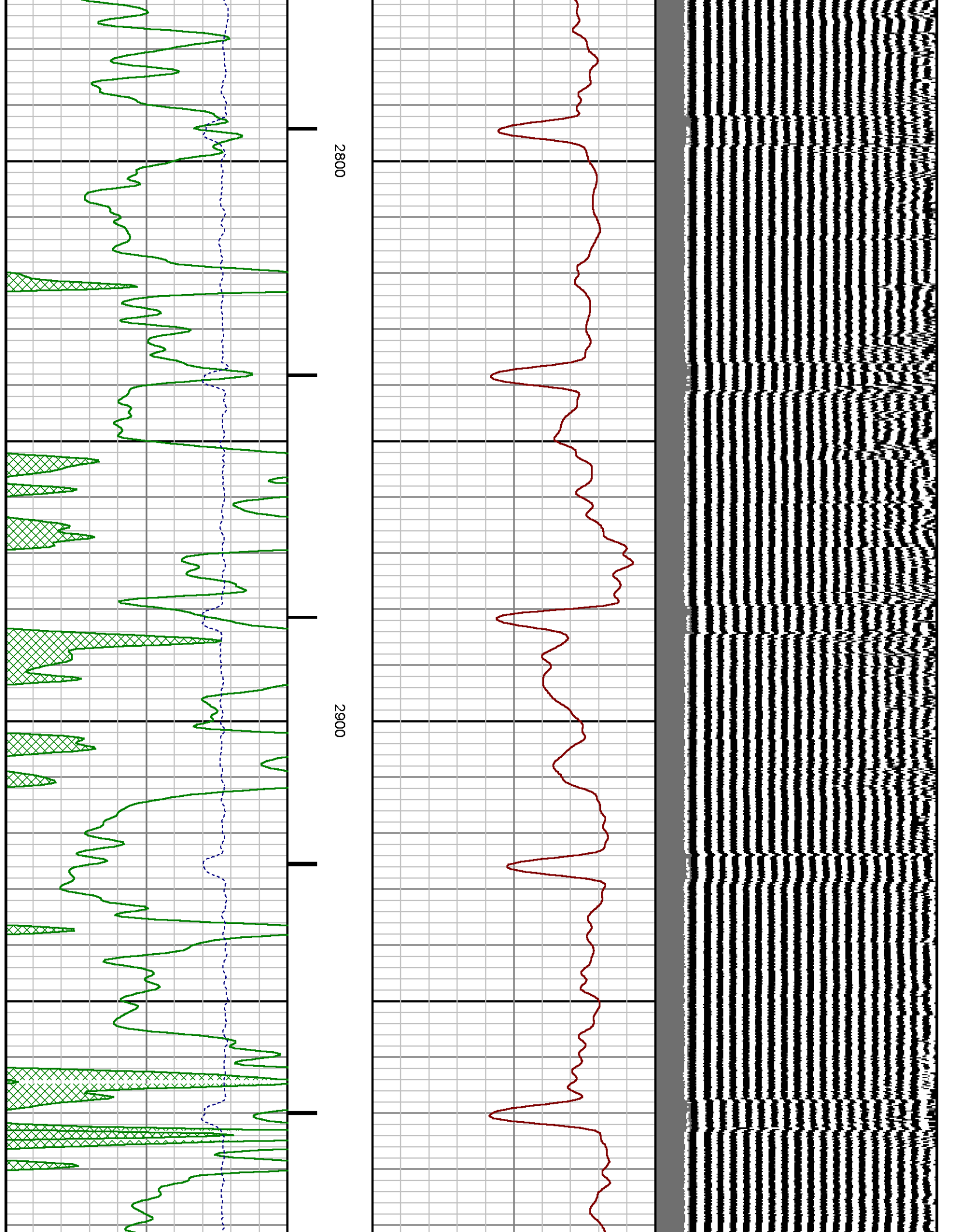


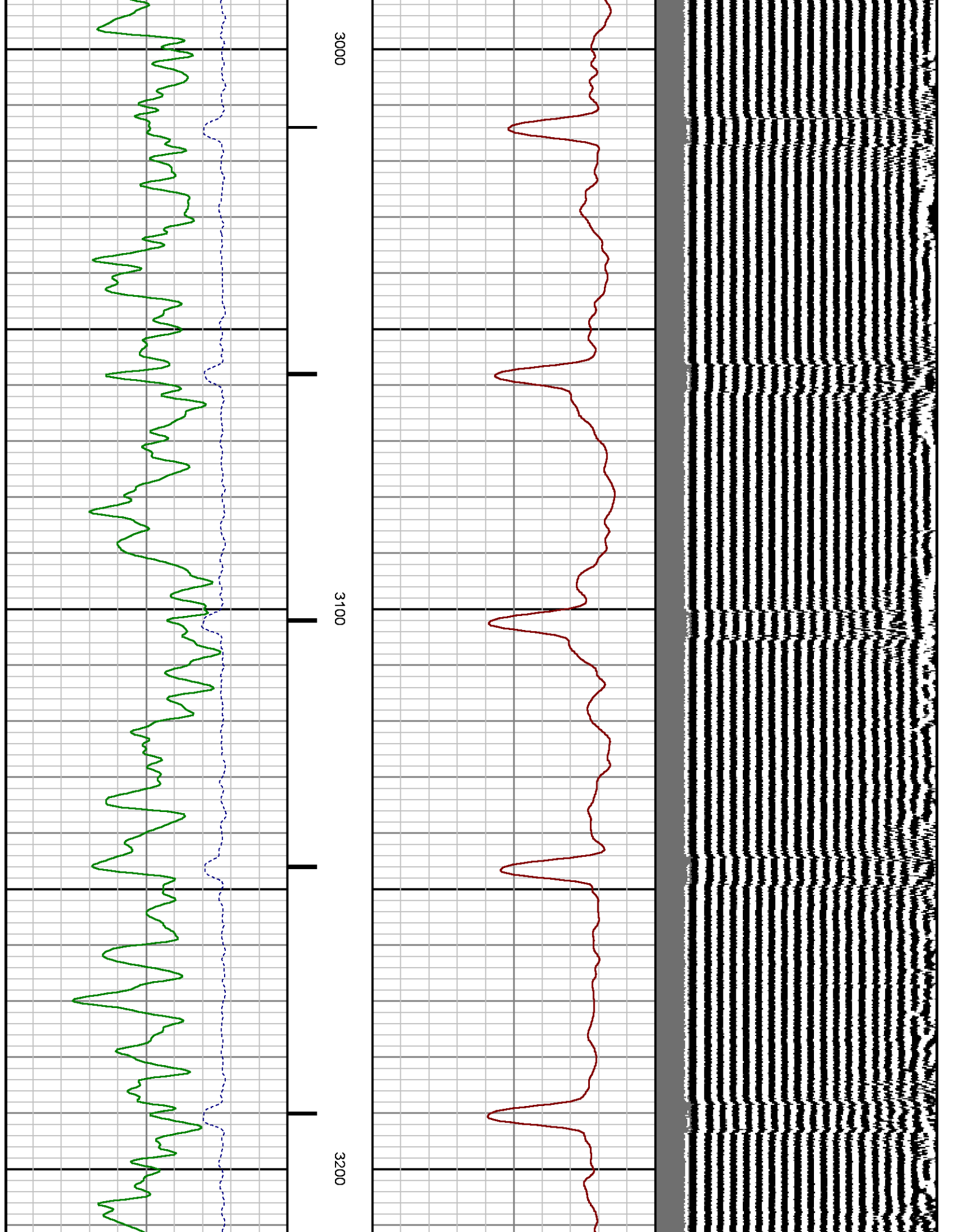


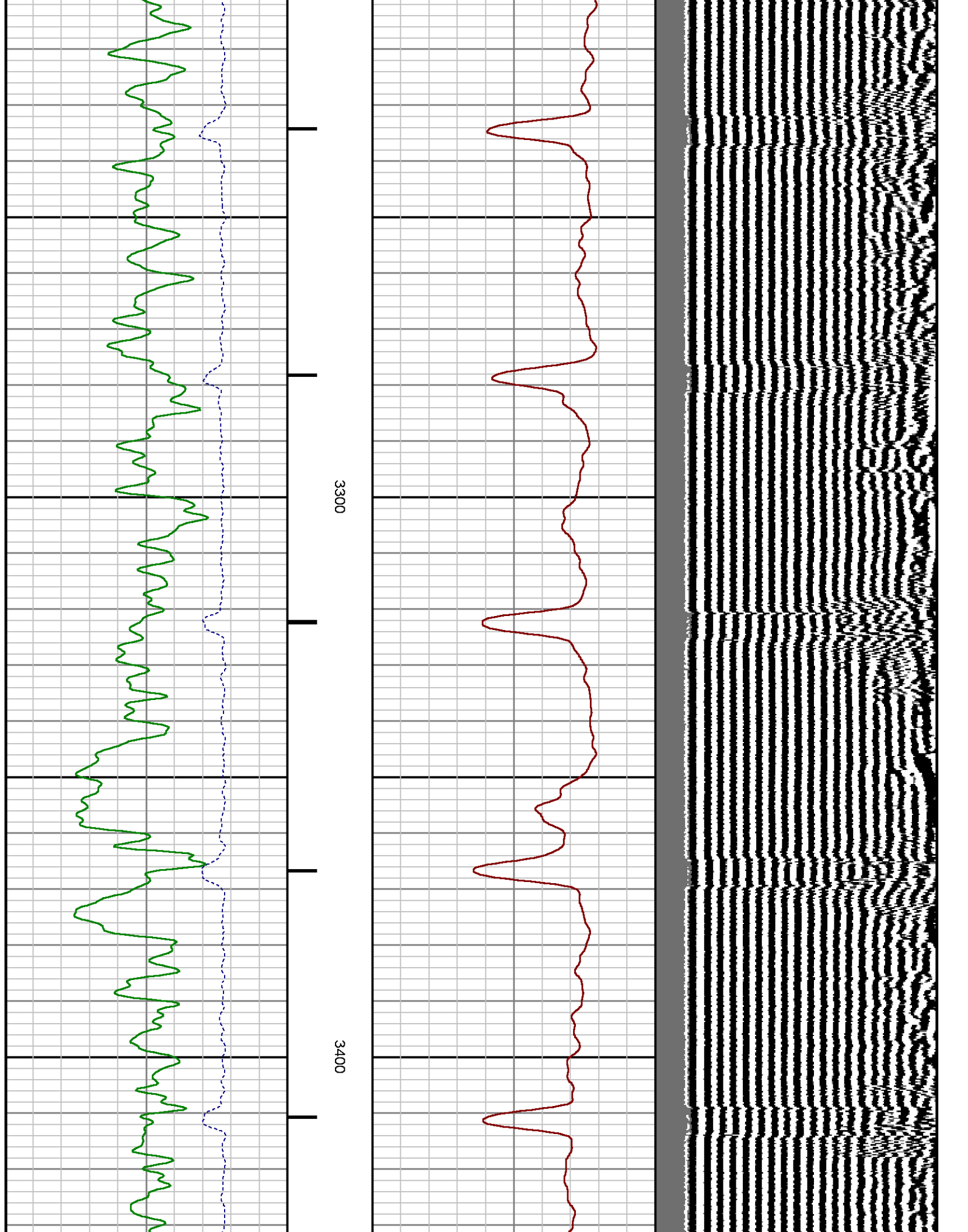


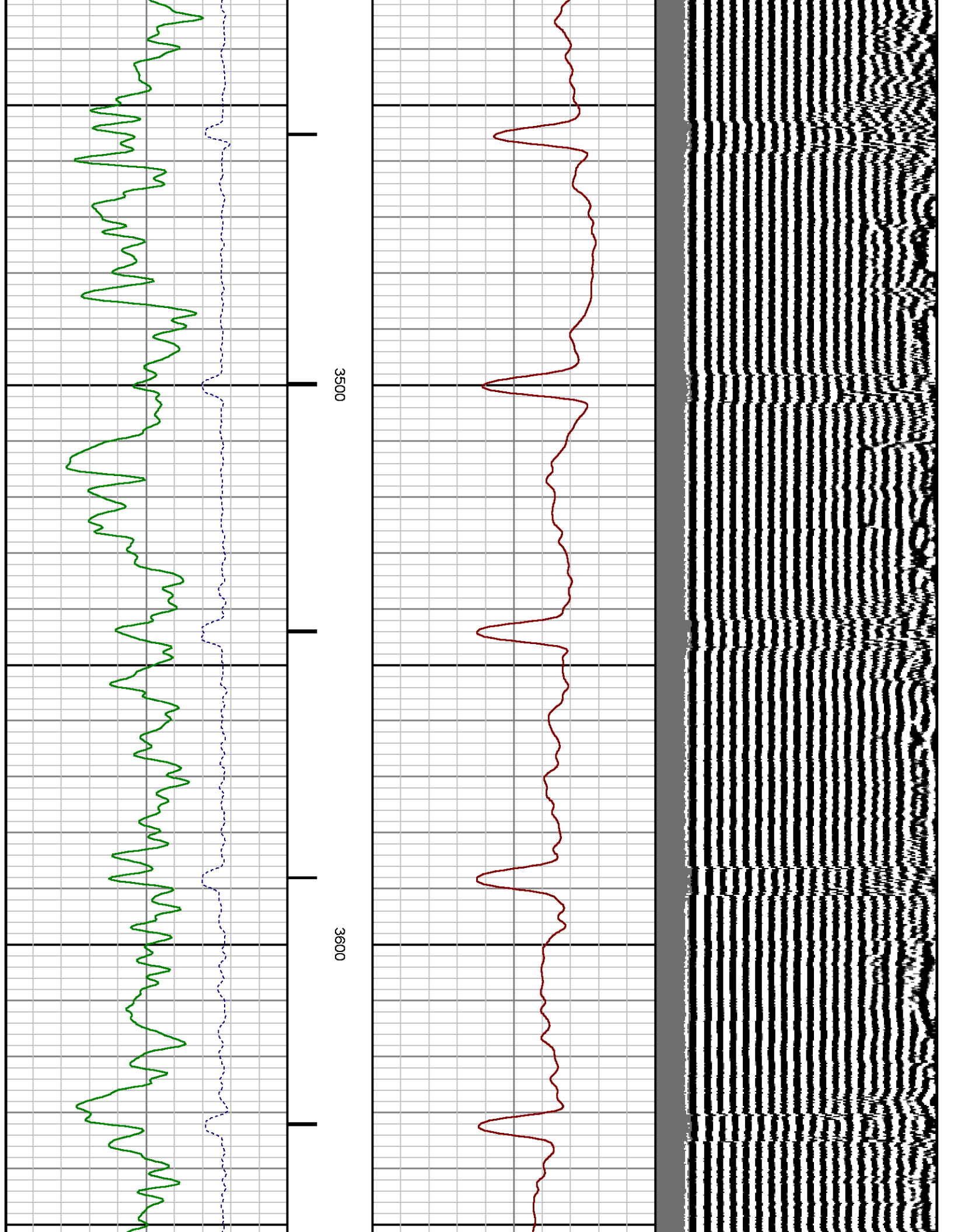


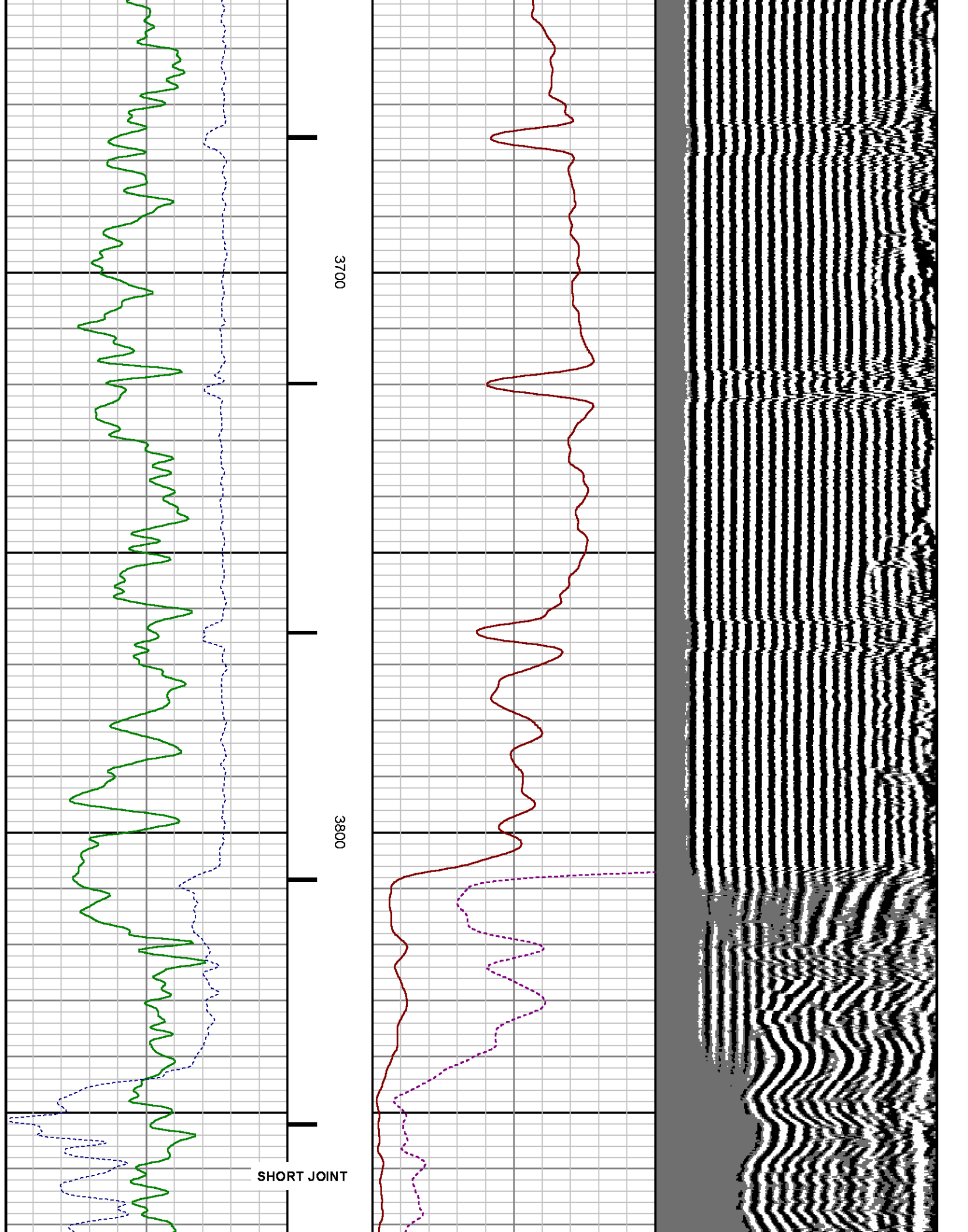


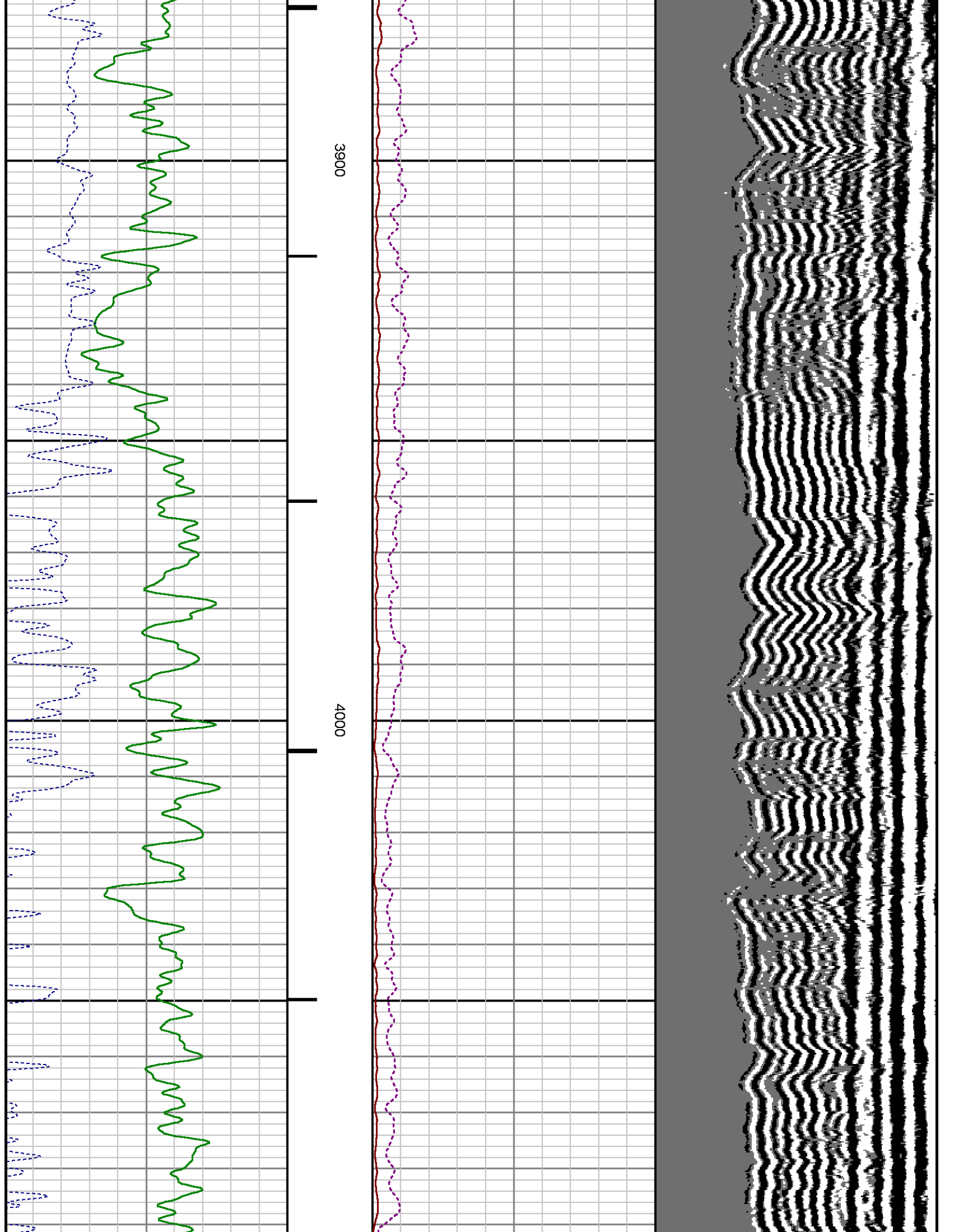


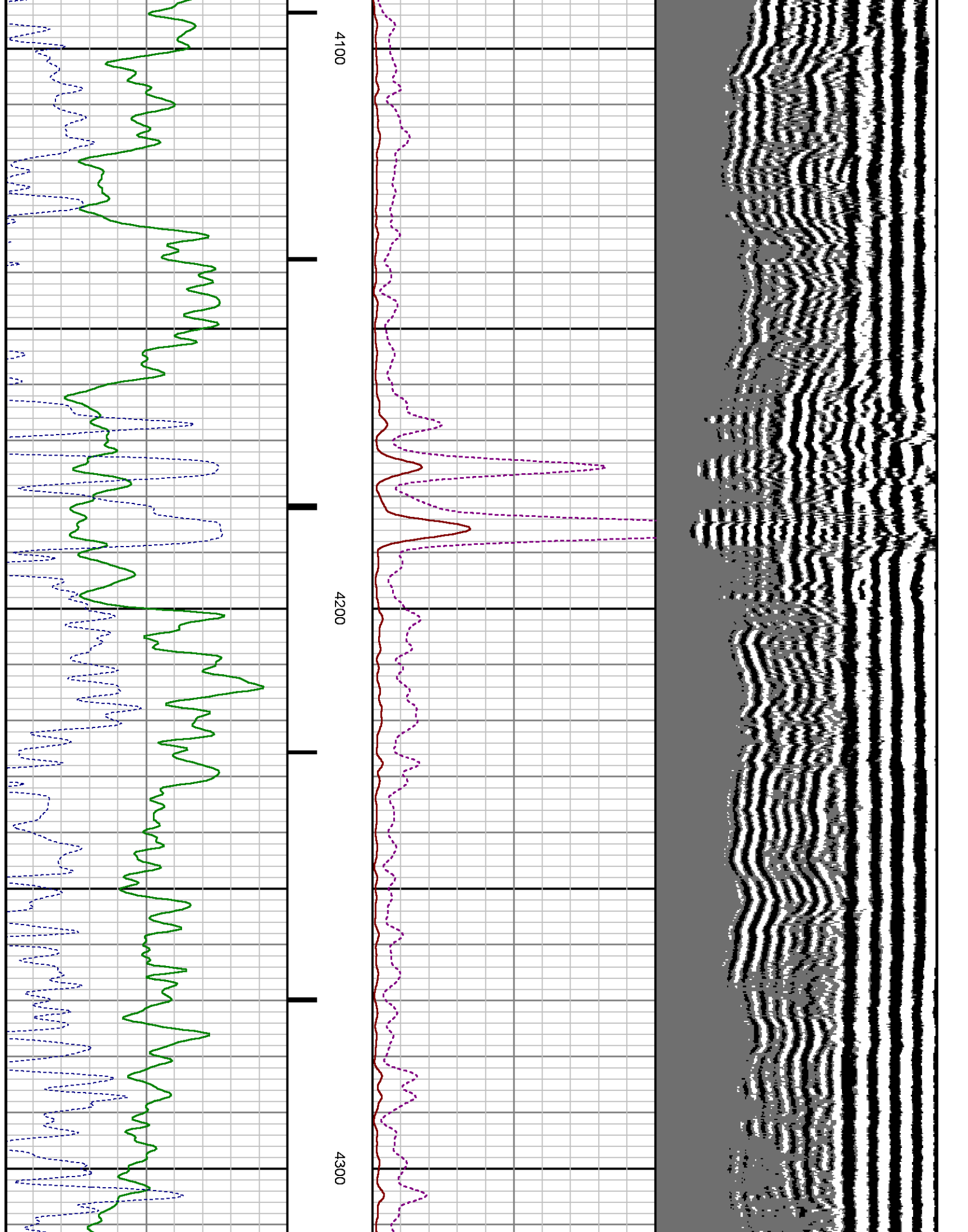


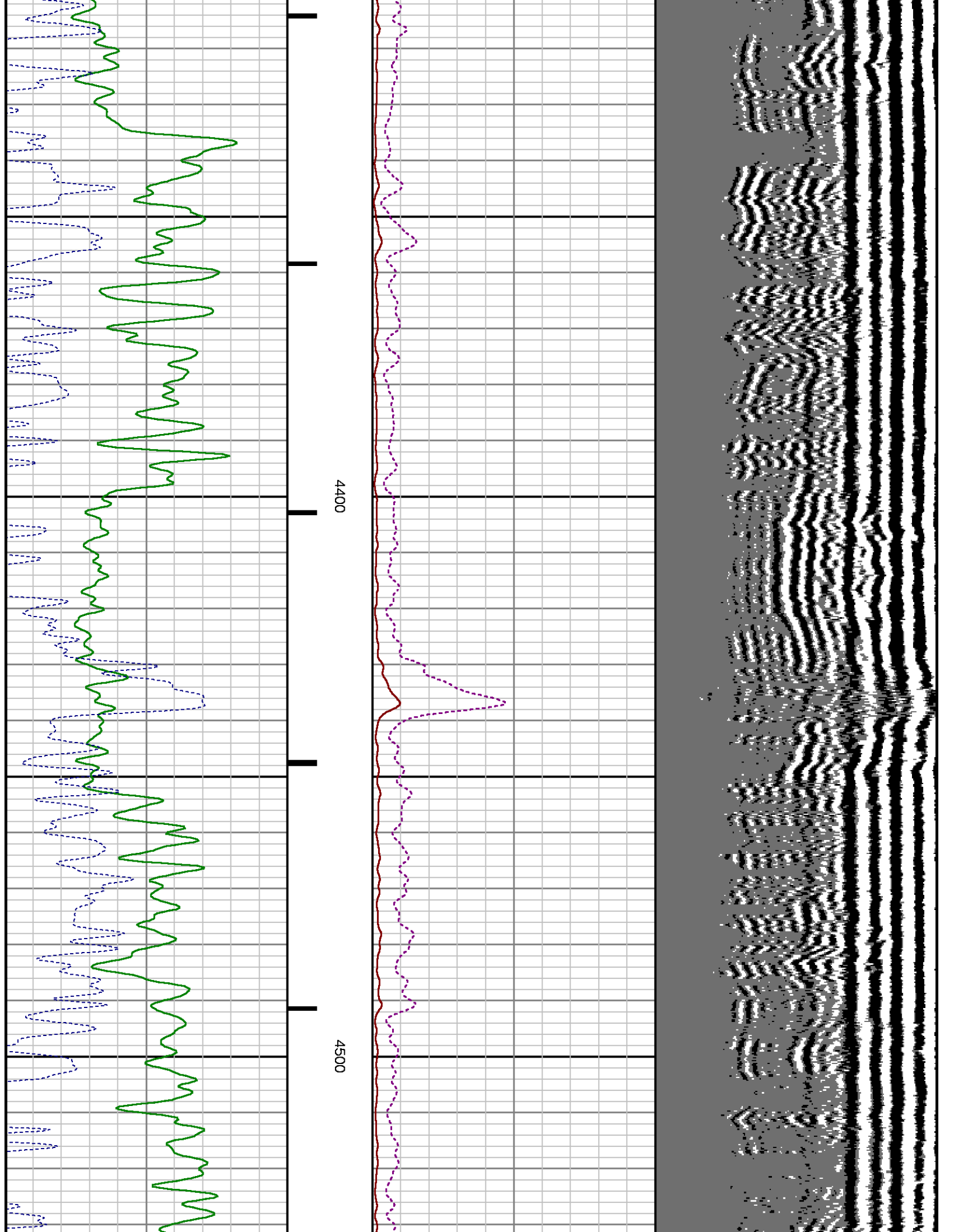


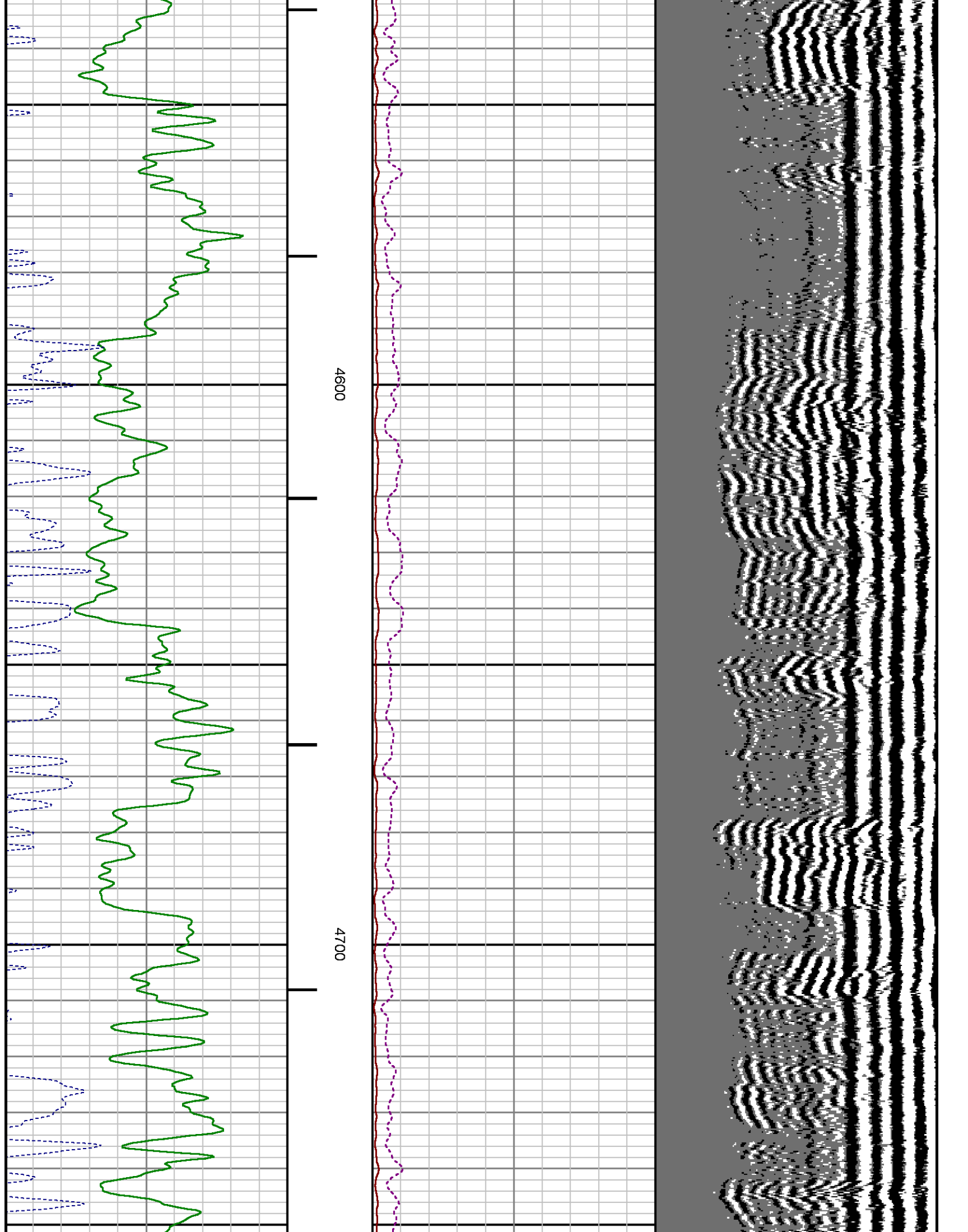


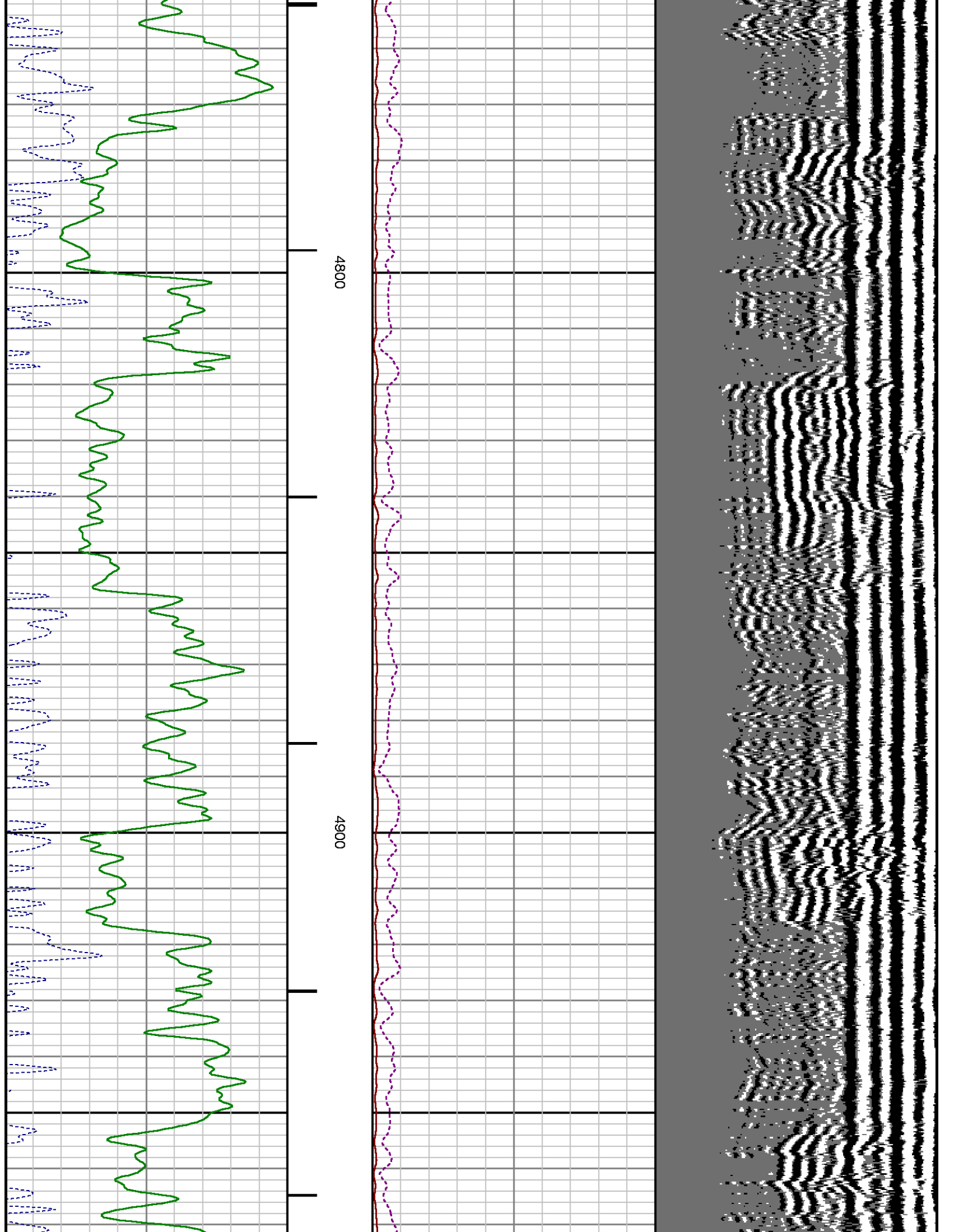


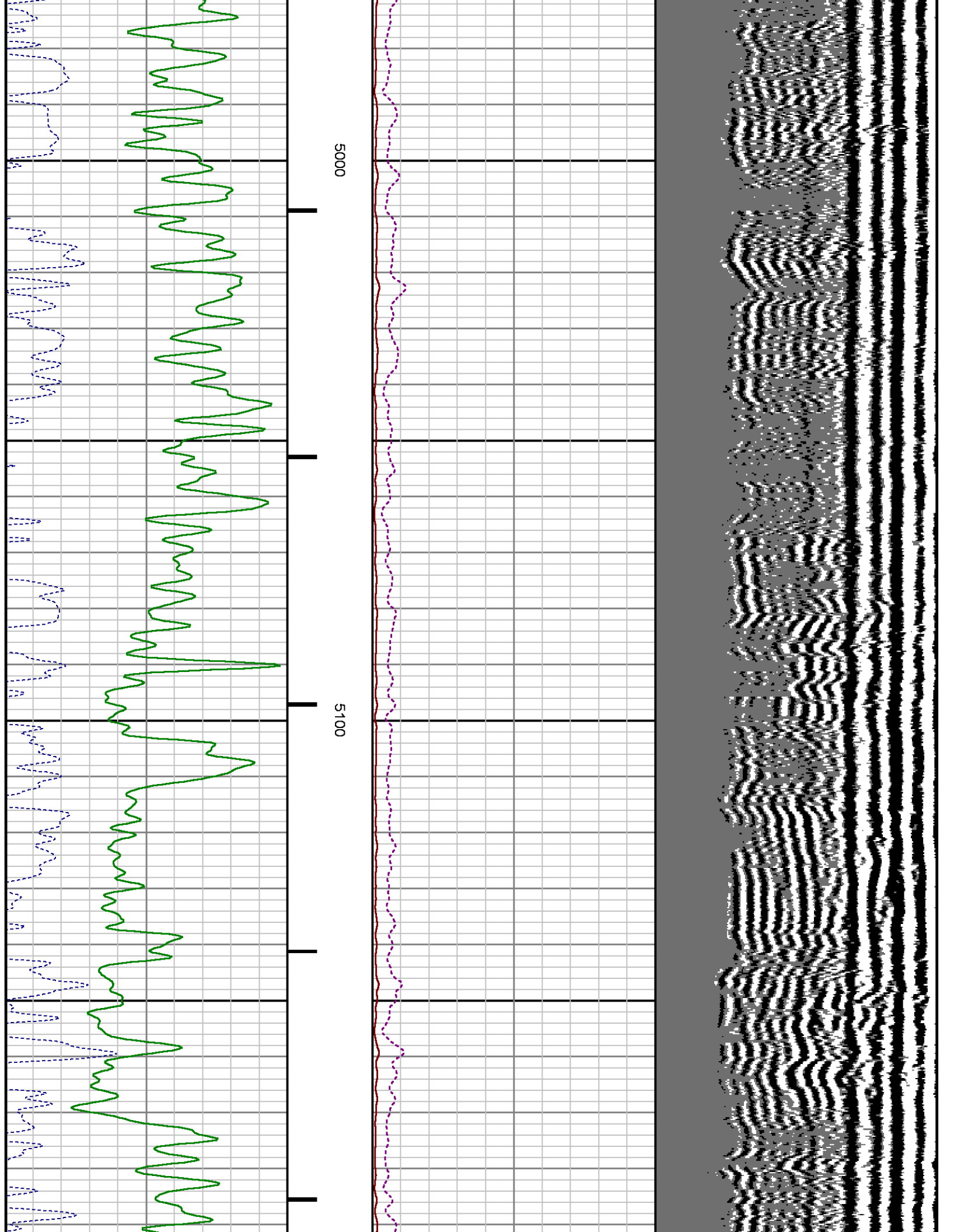


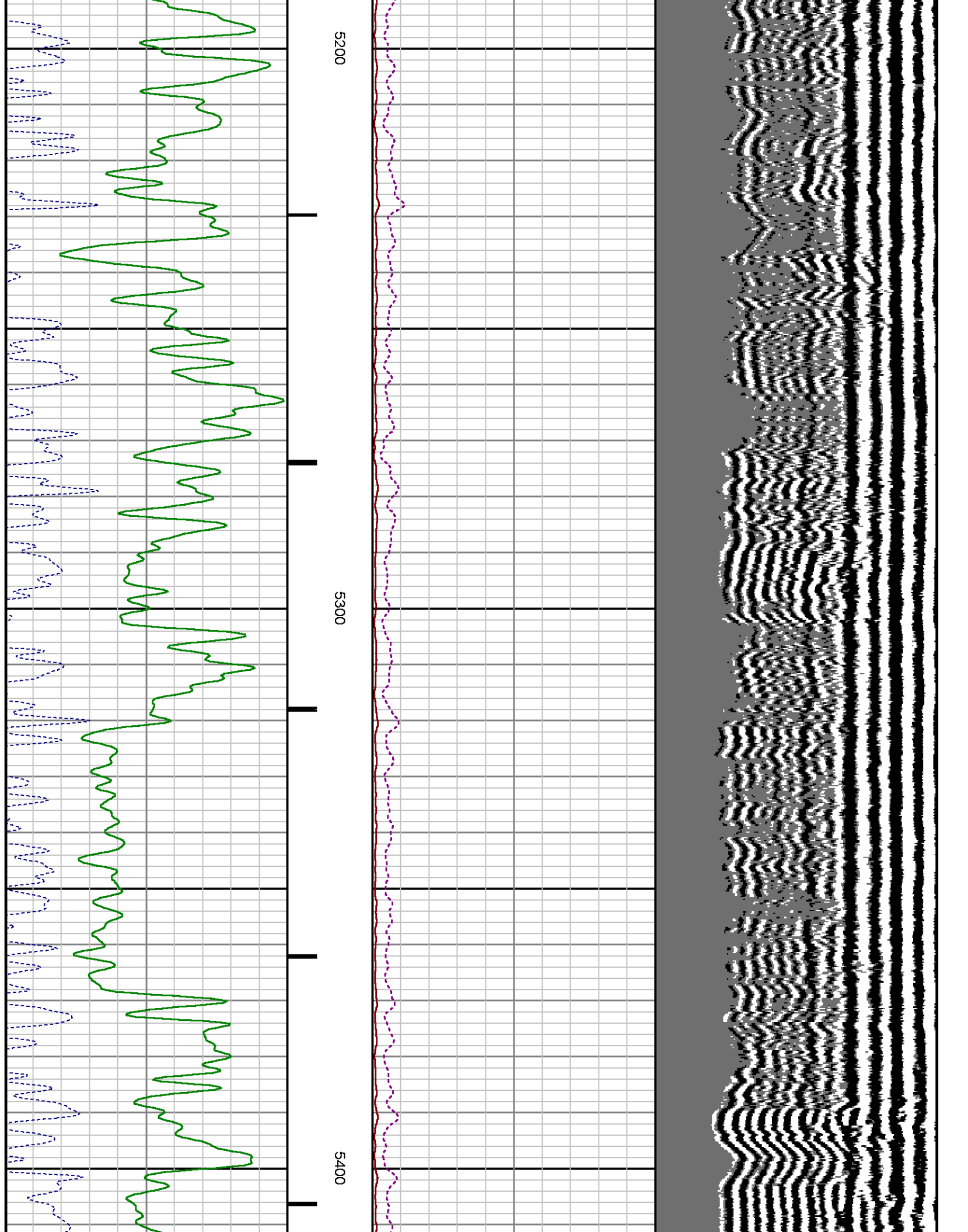


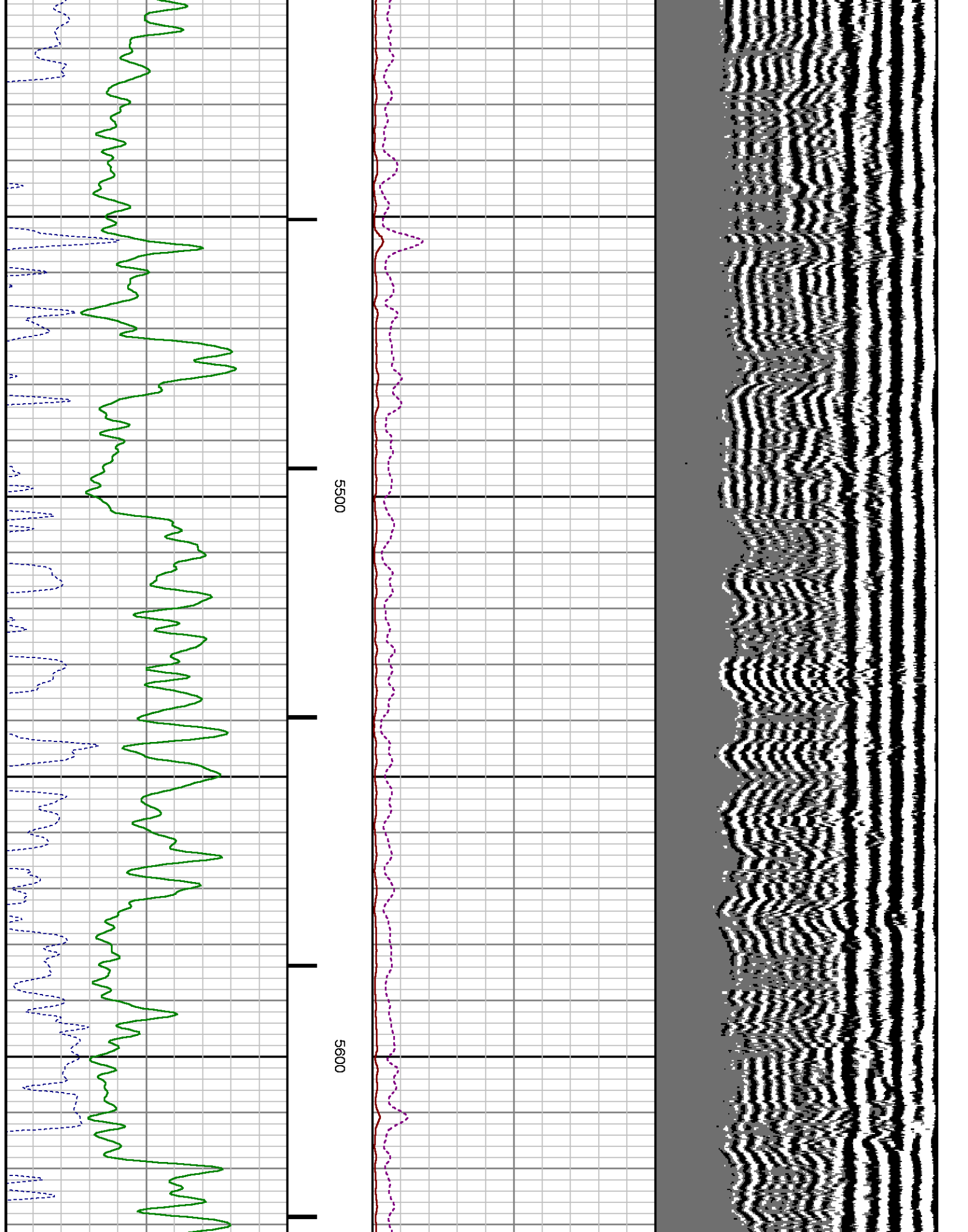


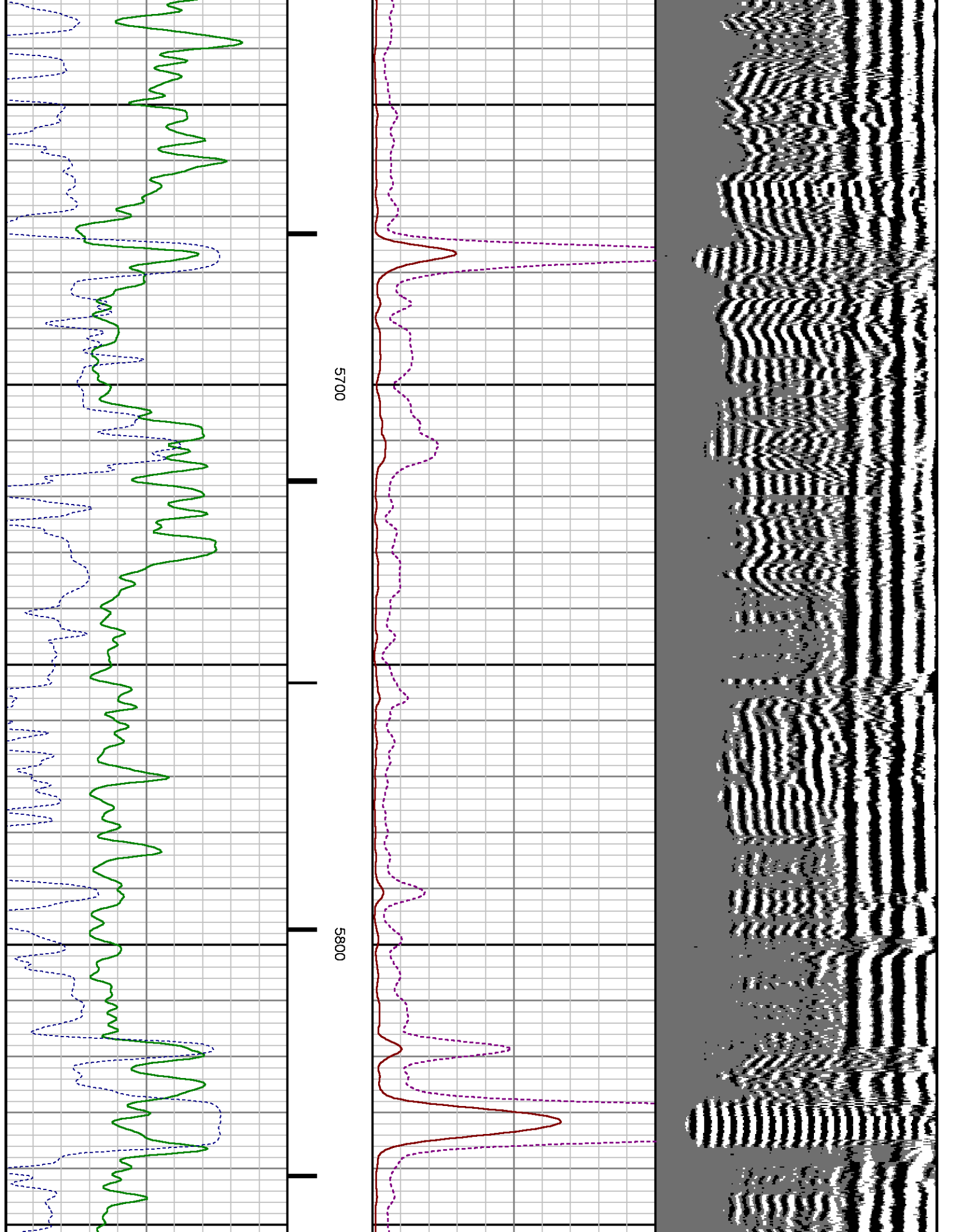


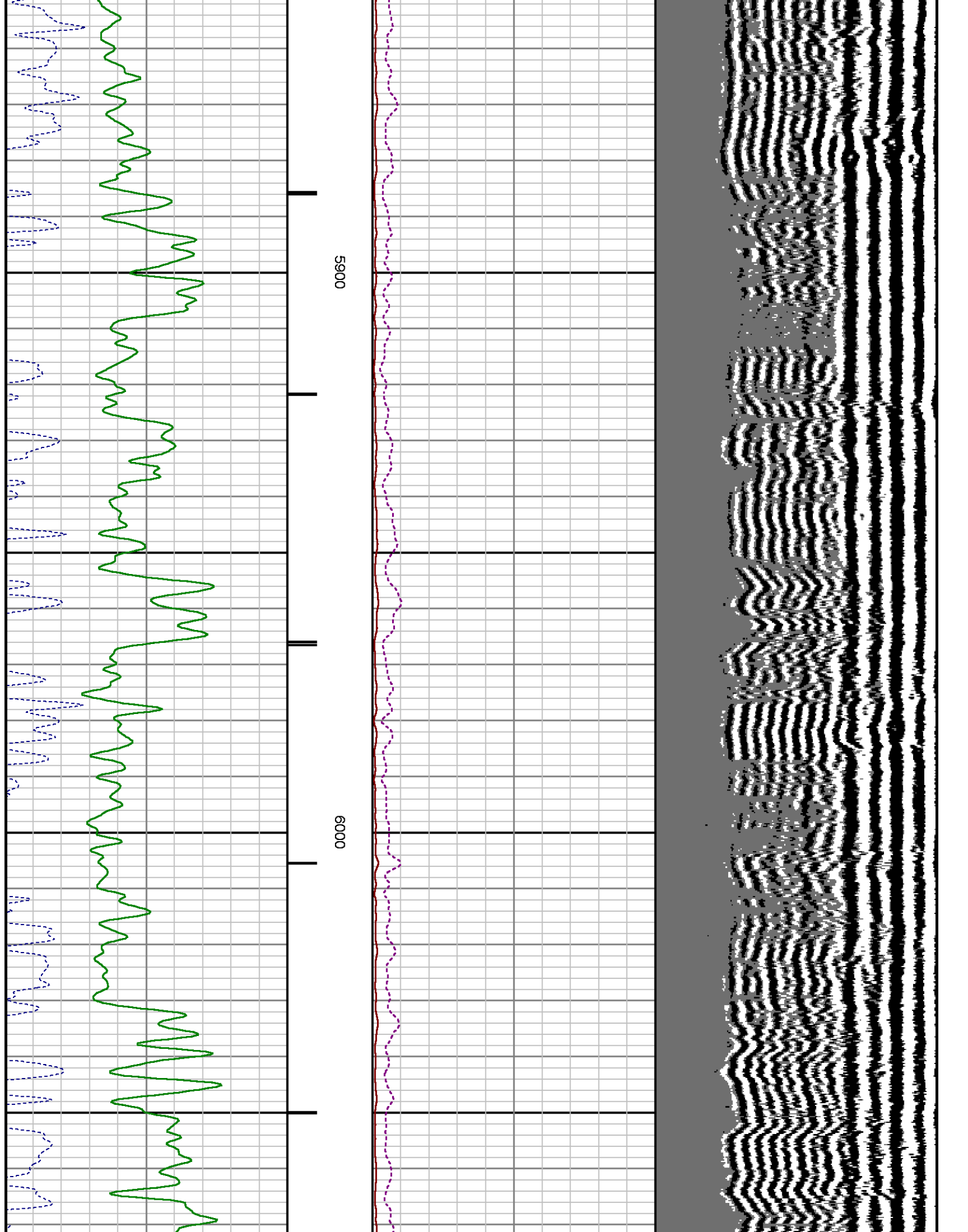


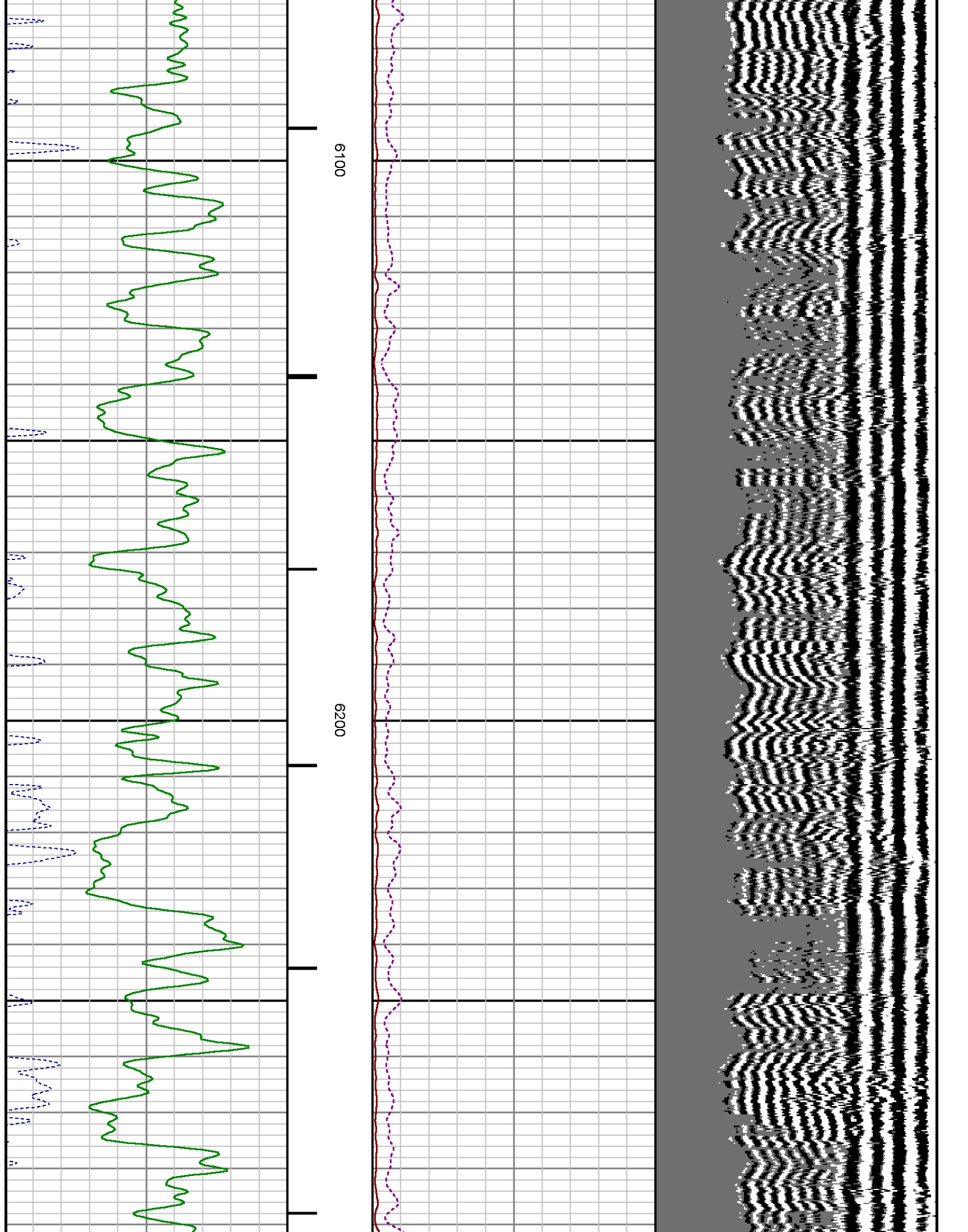


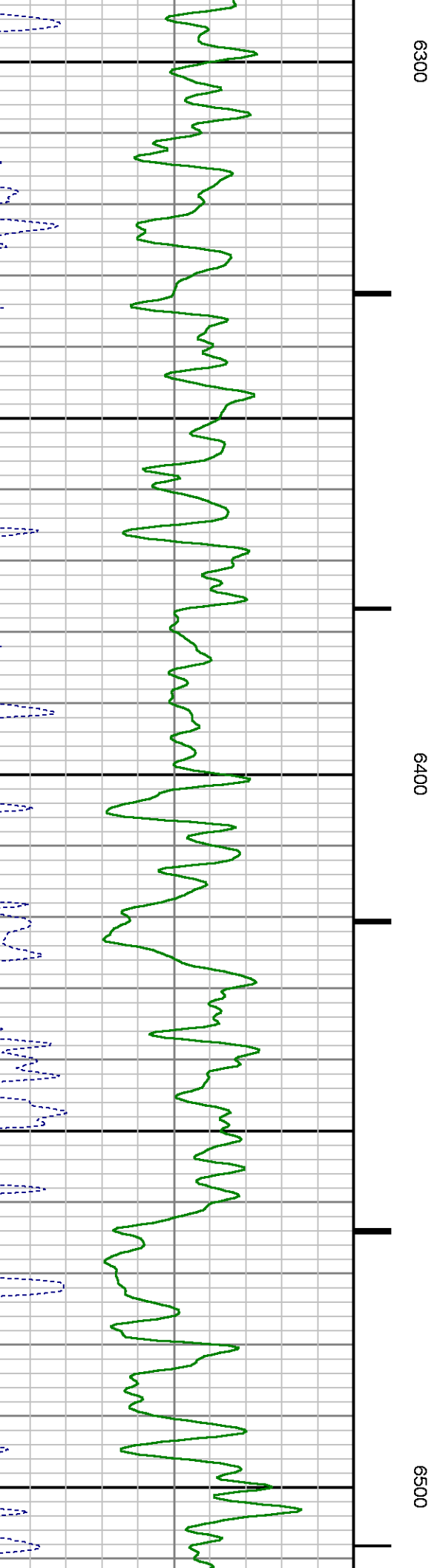
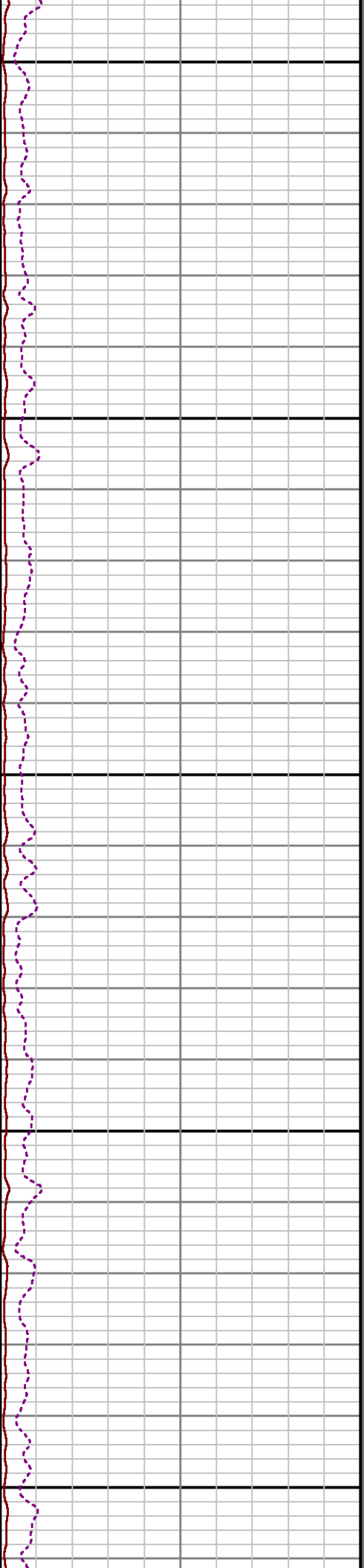
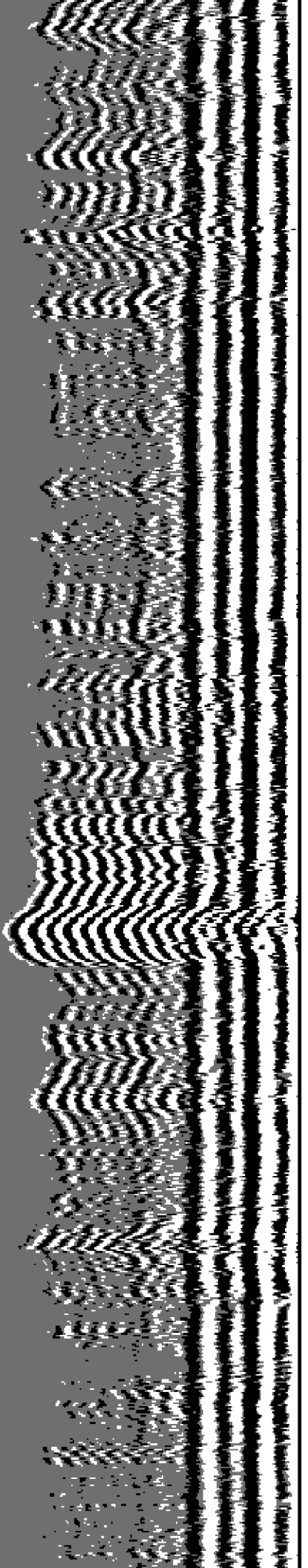


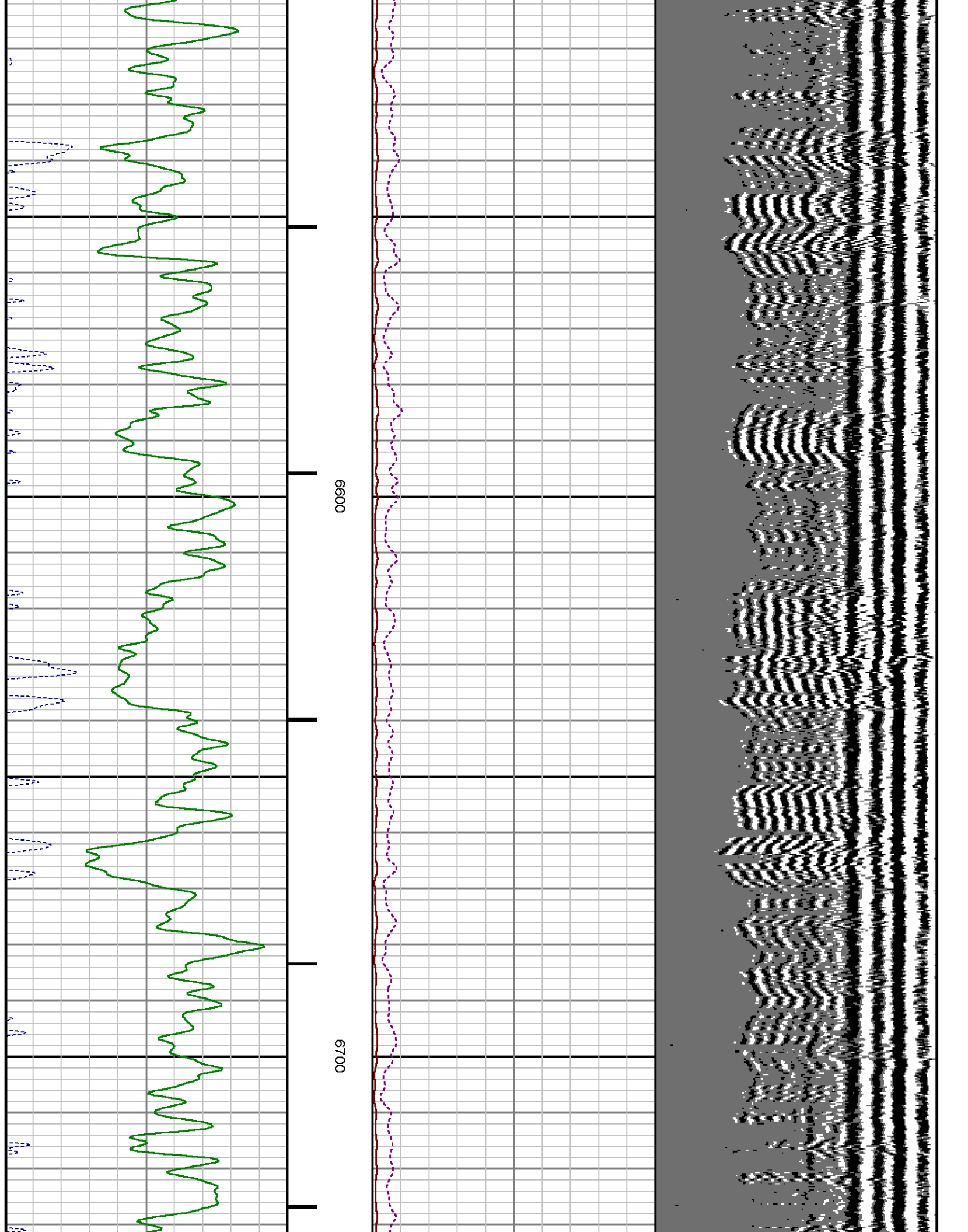


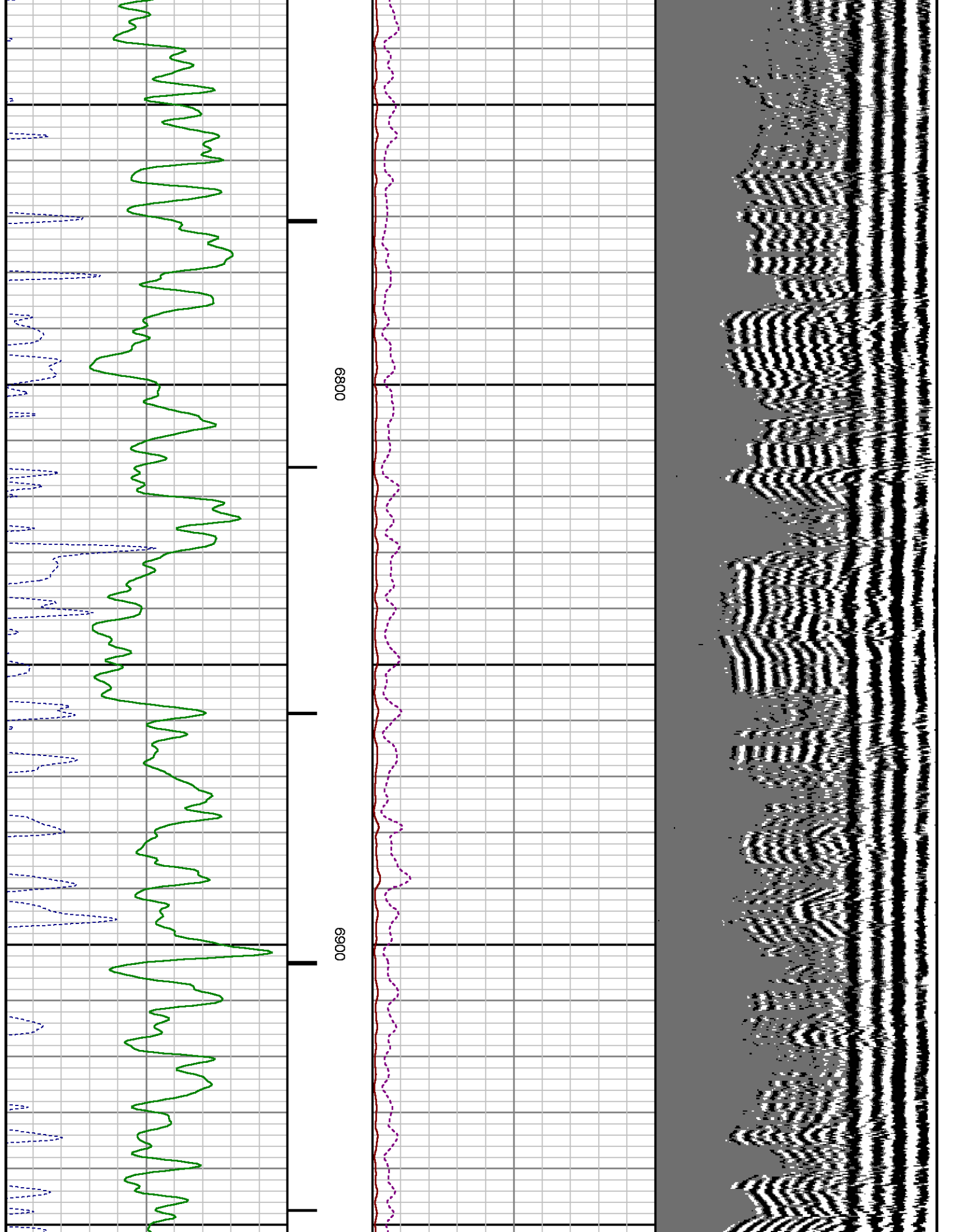


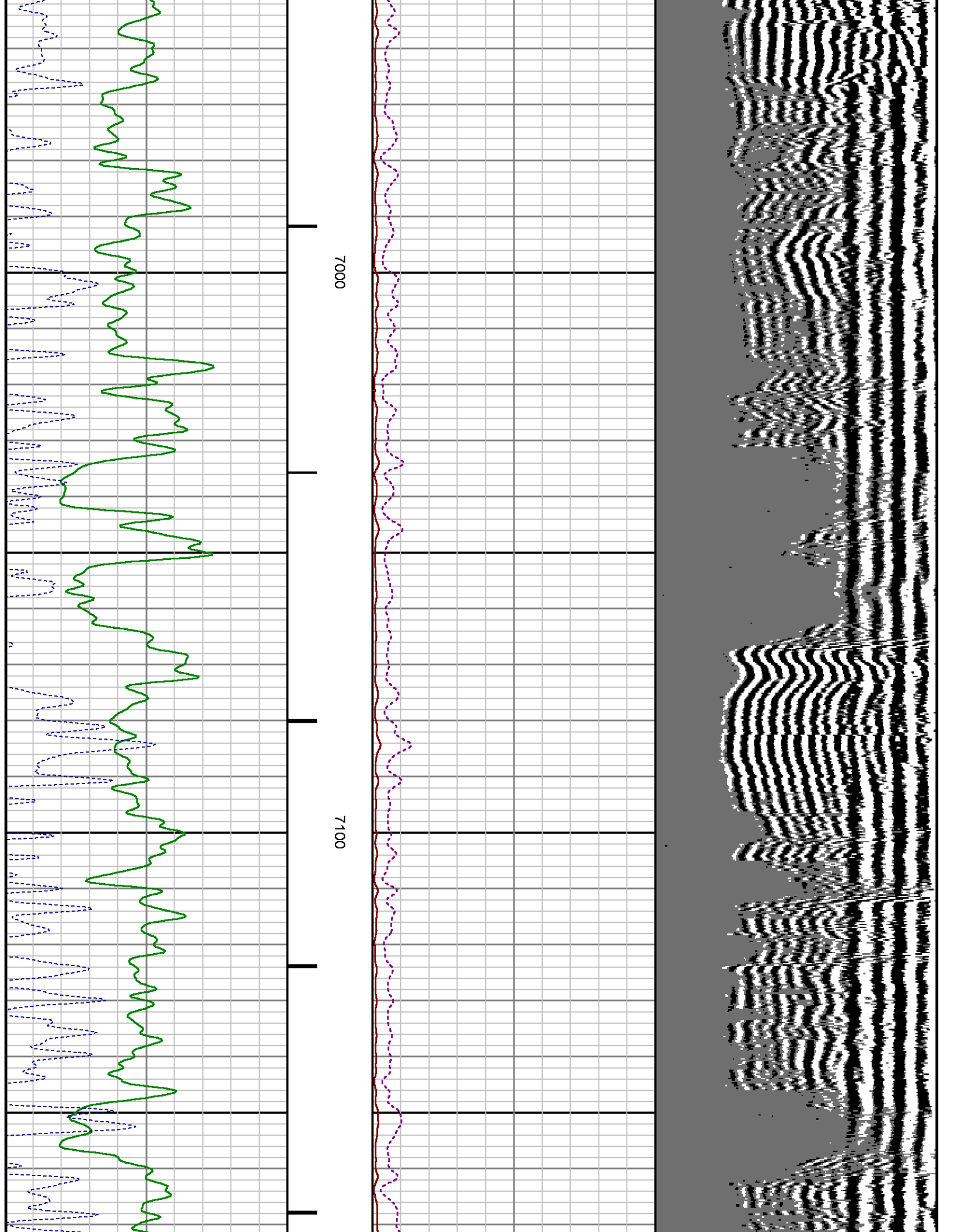


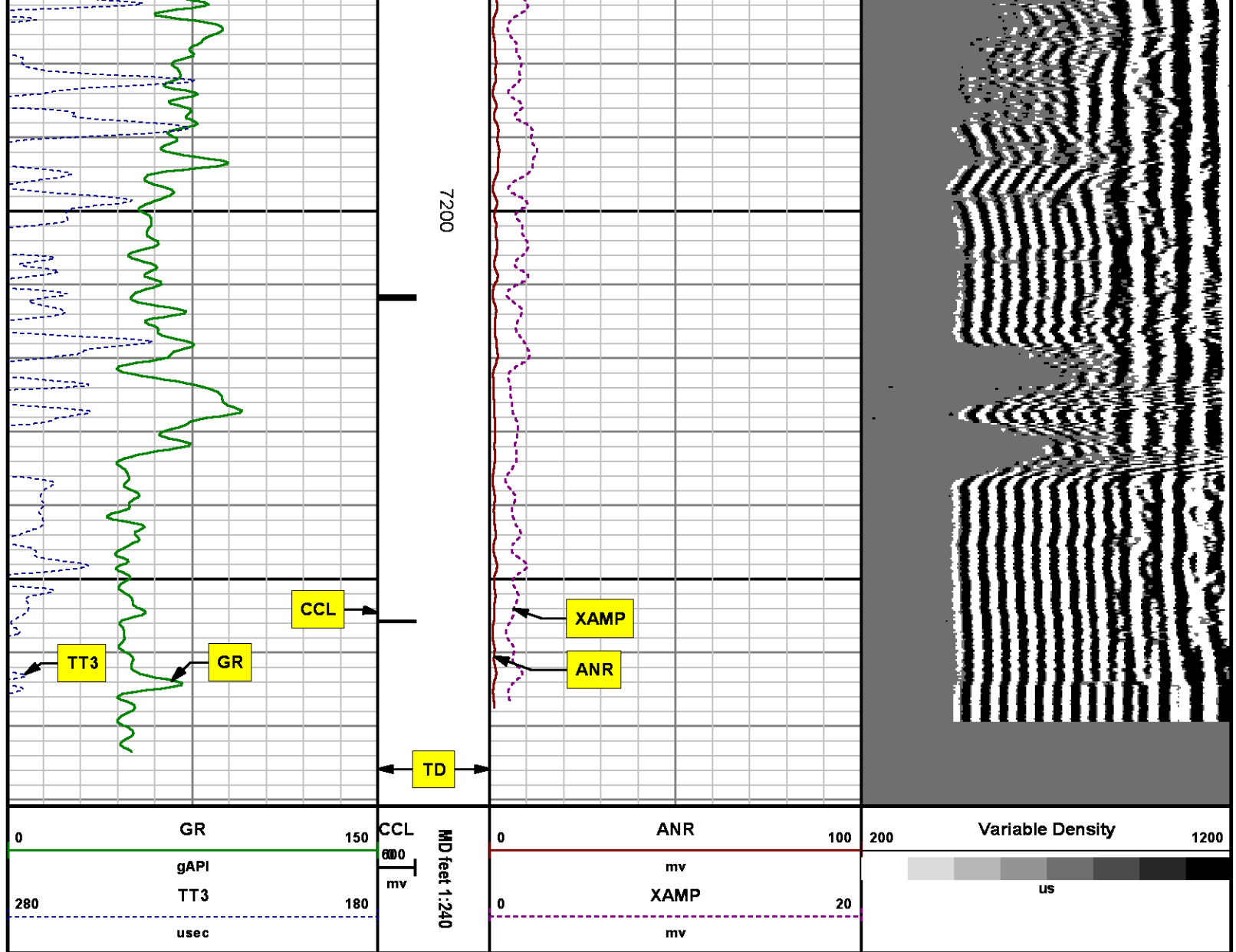












SECONDARY PRESENTATION O PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	24.981	7279.500
RAL	Amp Gate Start Near	195.000	usec	24.981	7279.500
RAL	Amp Gate Start Radial	195.000	usec	24.981	7279.500
RAL	Amp Gate Width Far	25.000	usec	24.981	7279.500

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RAL	Amp Gate Width Near	25.000	usec	24.981	7279.500
RAL	Amp Gate Width Radial	25.000	usec	24.981	7279.500
RAL	casing od	4.500	inches	24.981	7279.500
RAL	casing wt	11.600	lbm/ft	24.981	7279.500
RAL	FB Start Far	291.900	usec	24.981	7279.500
RAL	FB Start Near	175.391	usec	24.981	7279.500
RAL	FB Start Radial	175.391	usec	24.981	7279.500
RAL	FB Thresh Far	10.000	mv	24.981	7279.500
RAL	FB Thresh Near	4.000	mv	24.981	7279.500
RAL	FB Thresh Radial	4.000	mv	24.981	7279.500
RAL	Fluid Travel Time	200.000	usec/ft	24.981	7280.250

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

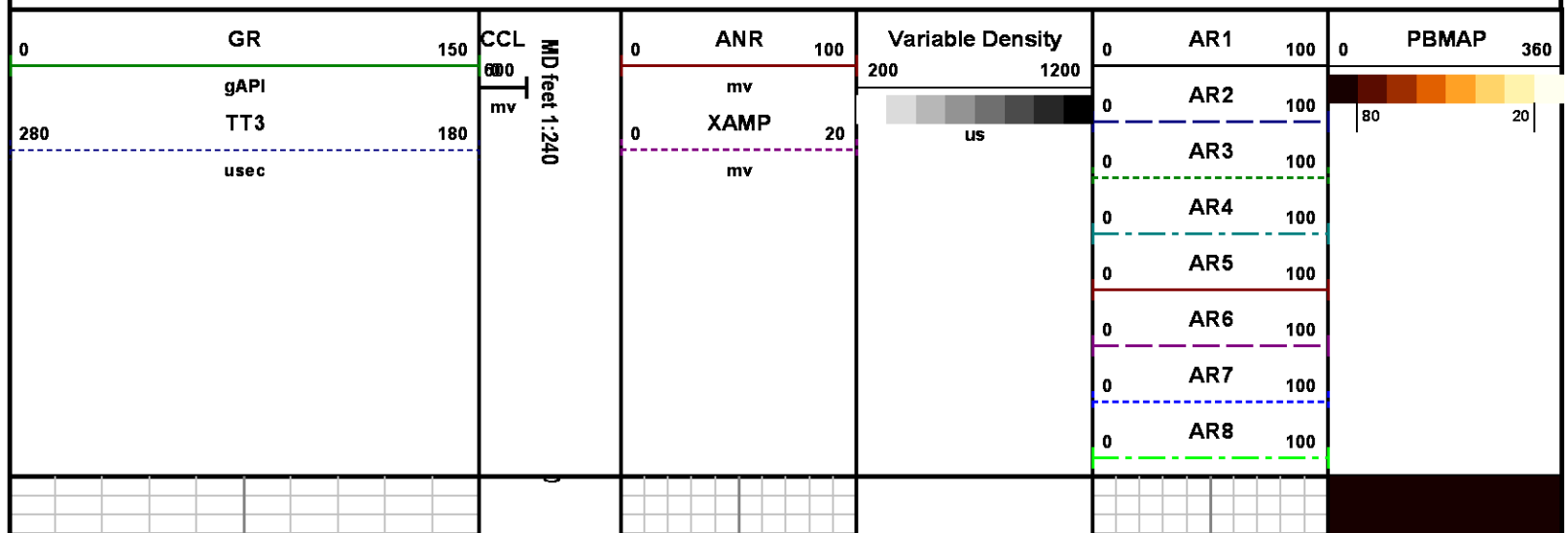
Well : CHEVRON GM 411-21

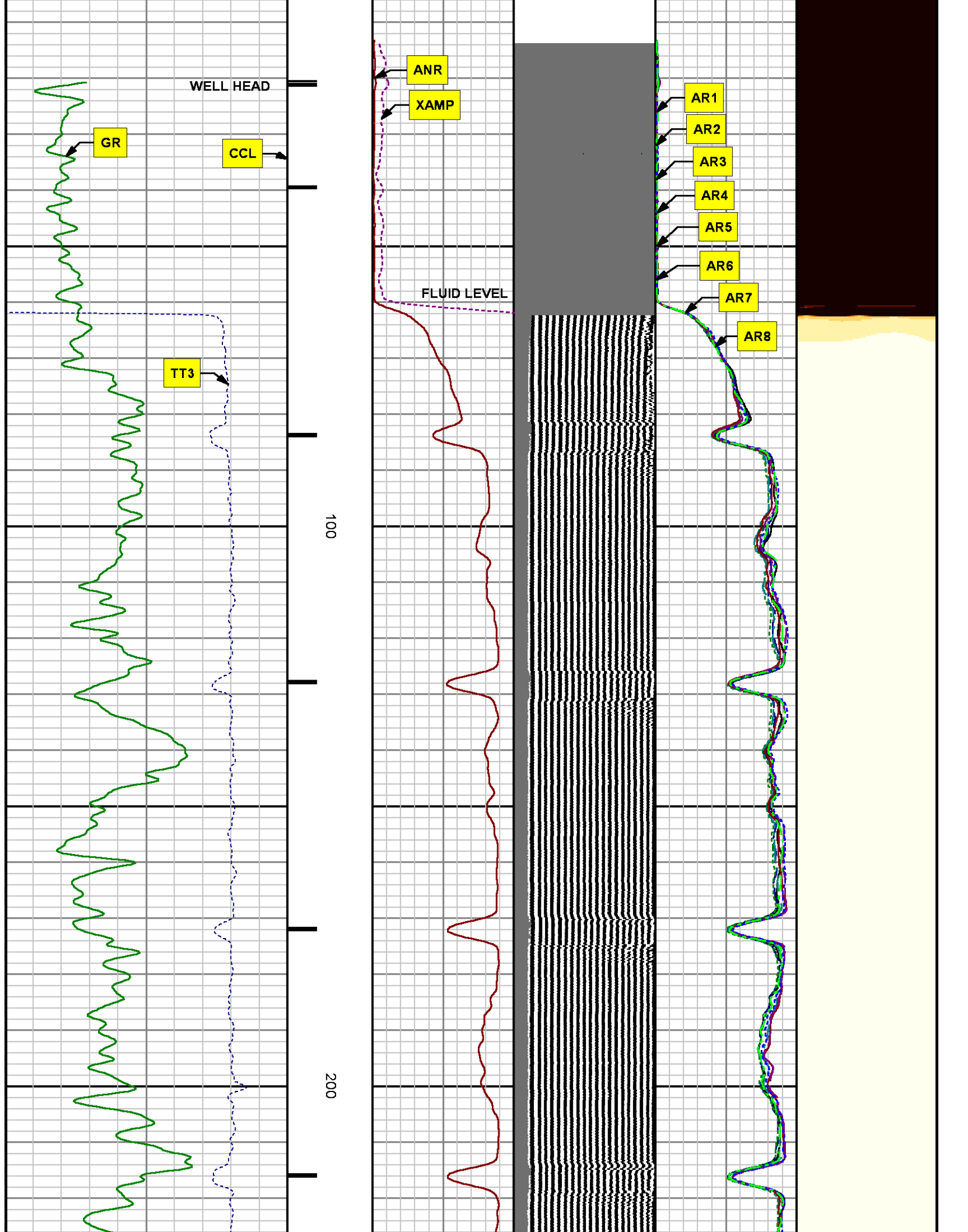
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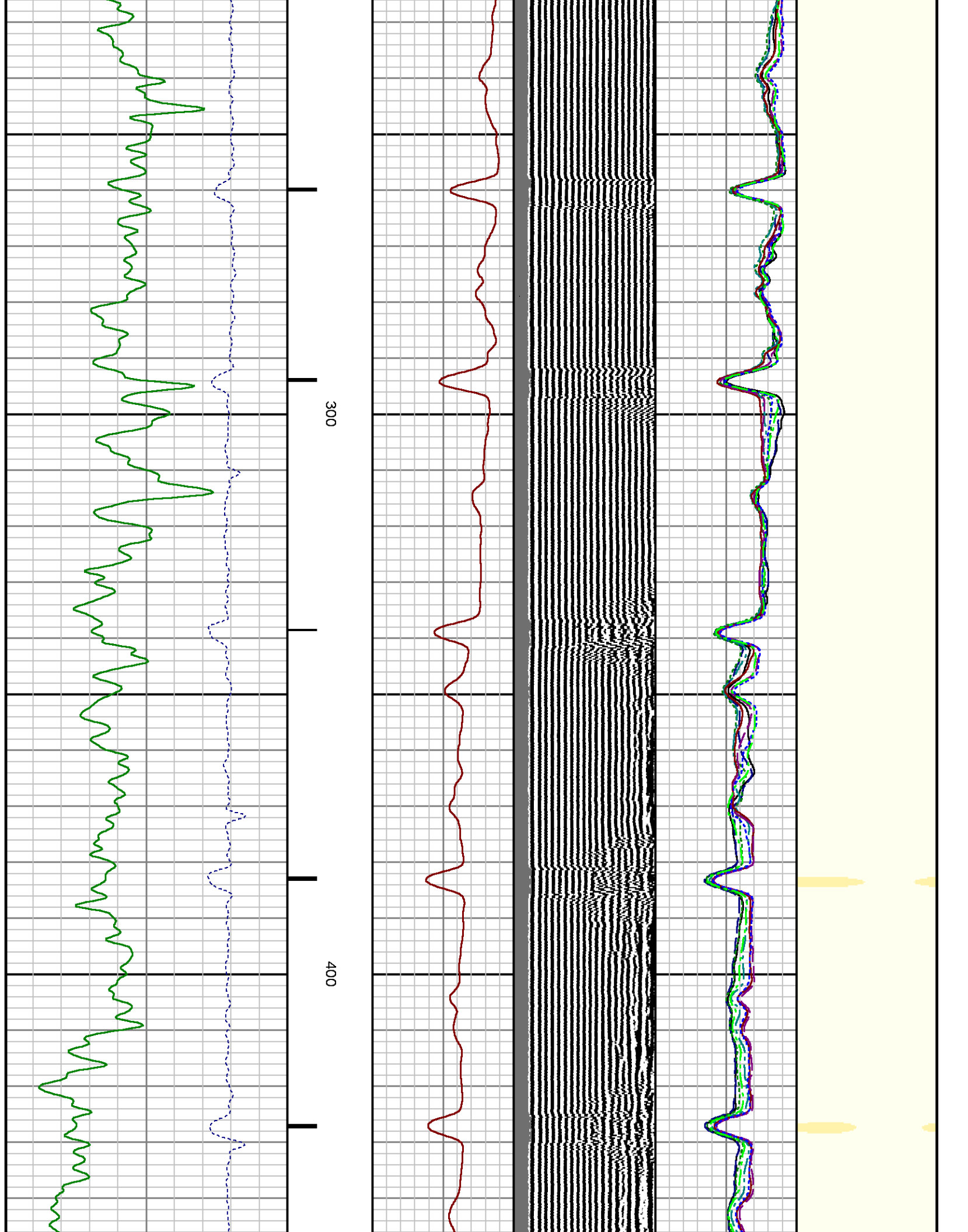
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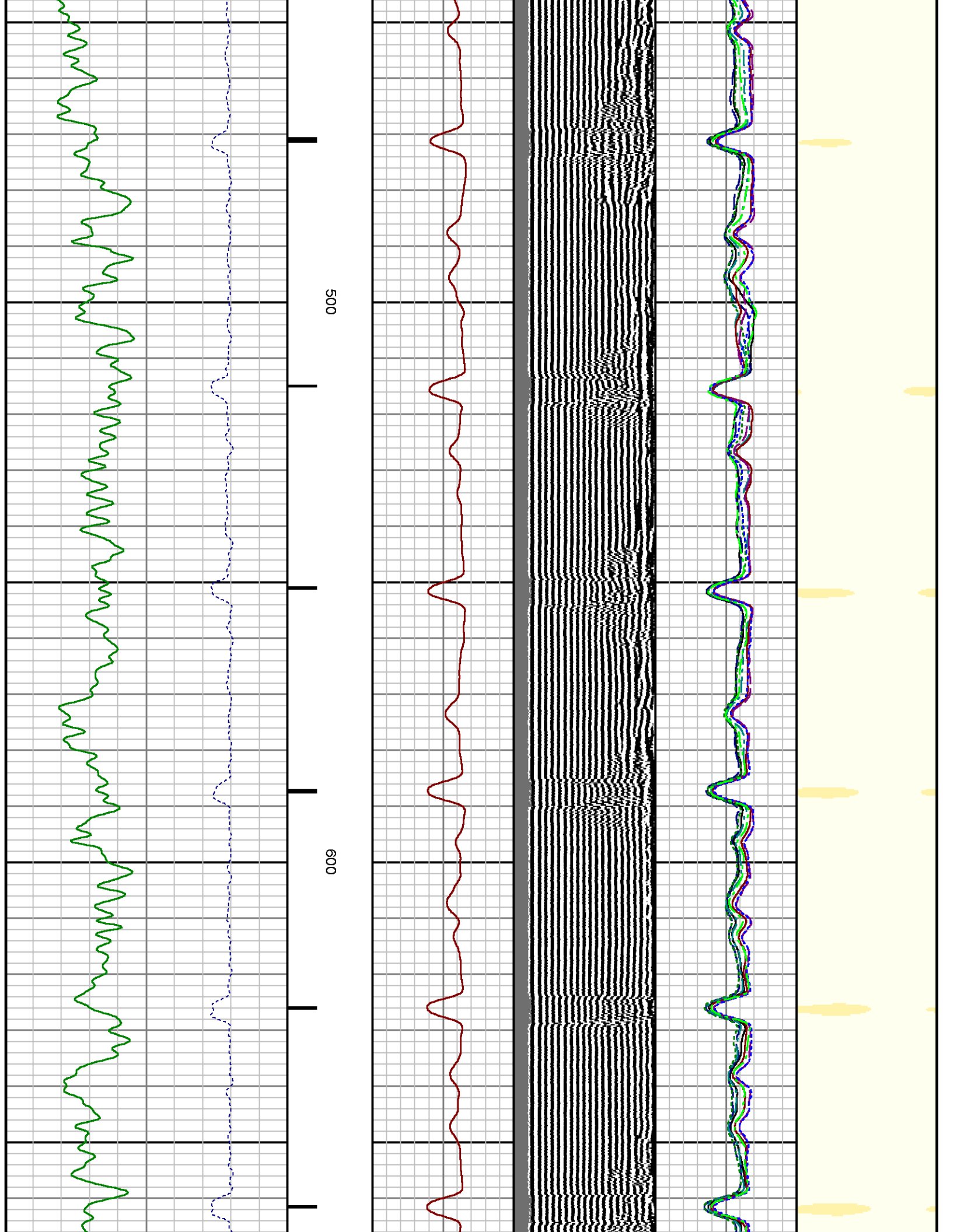
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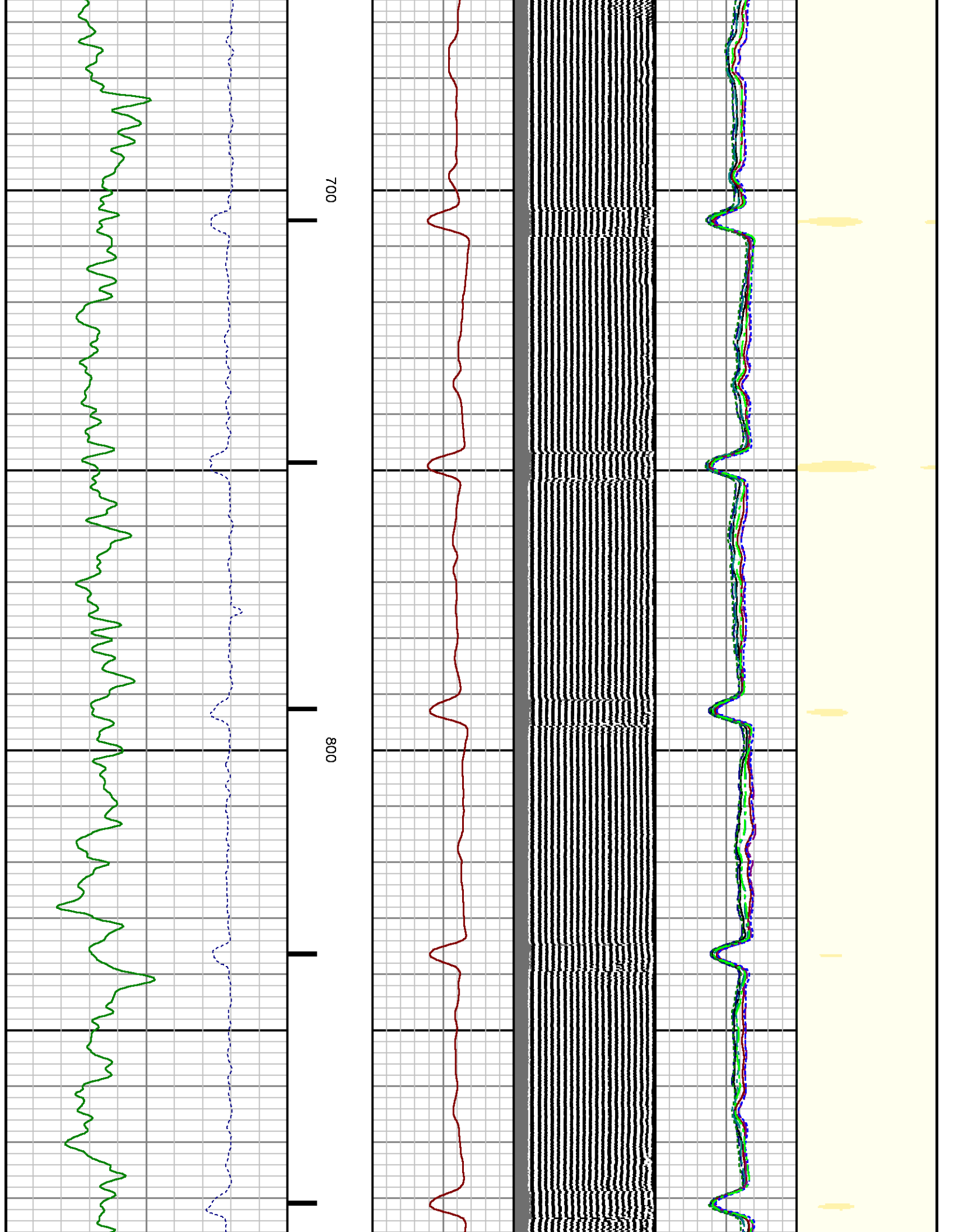
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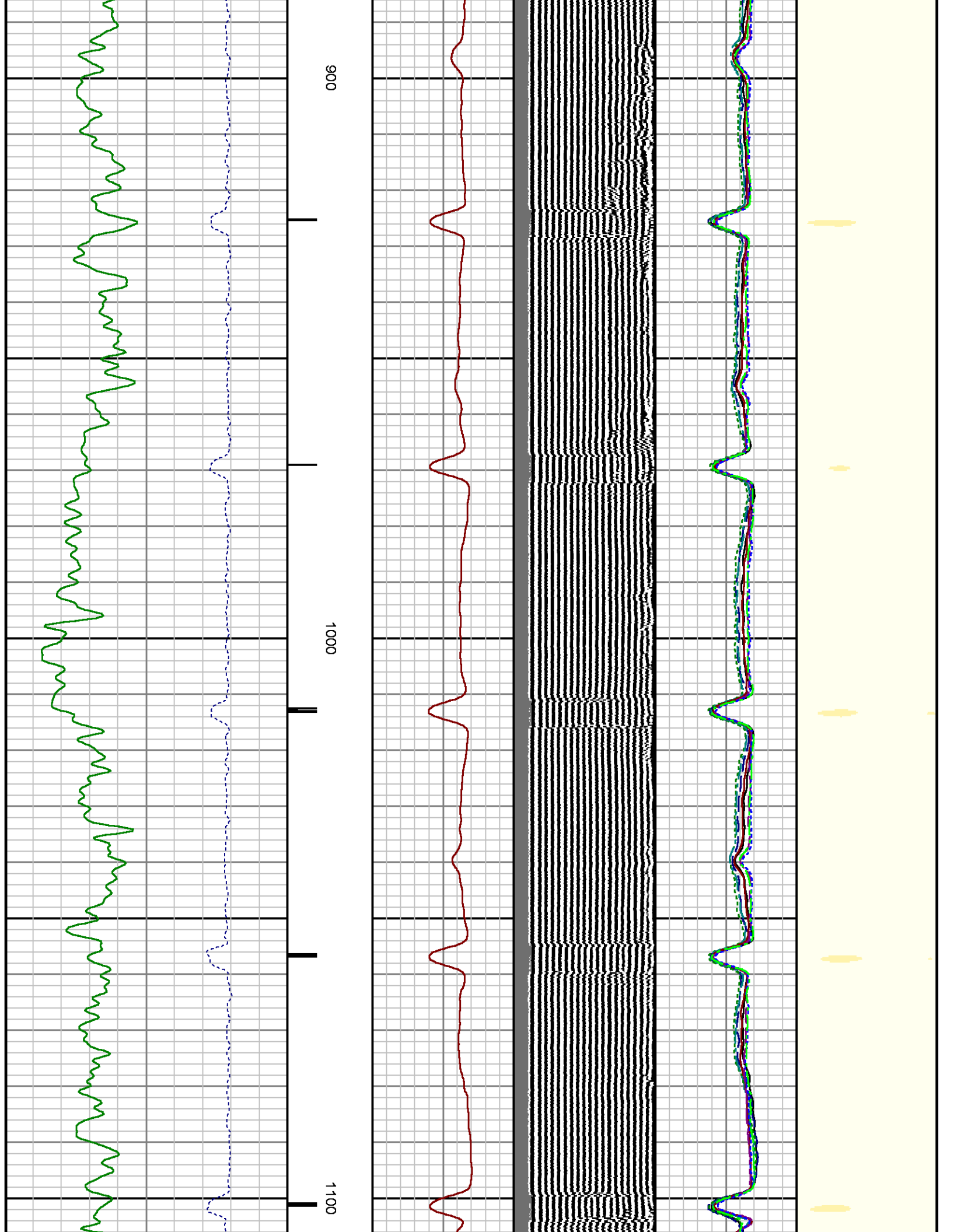


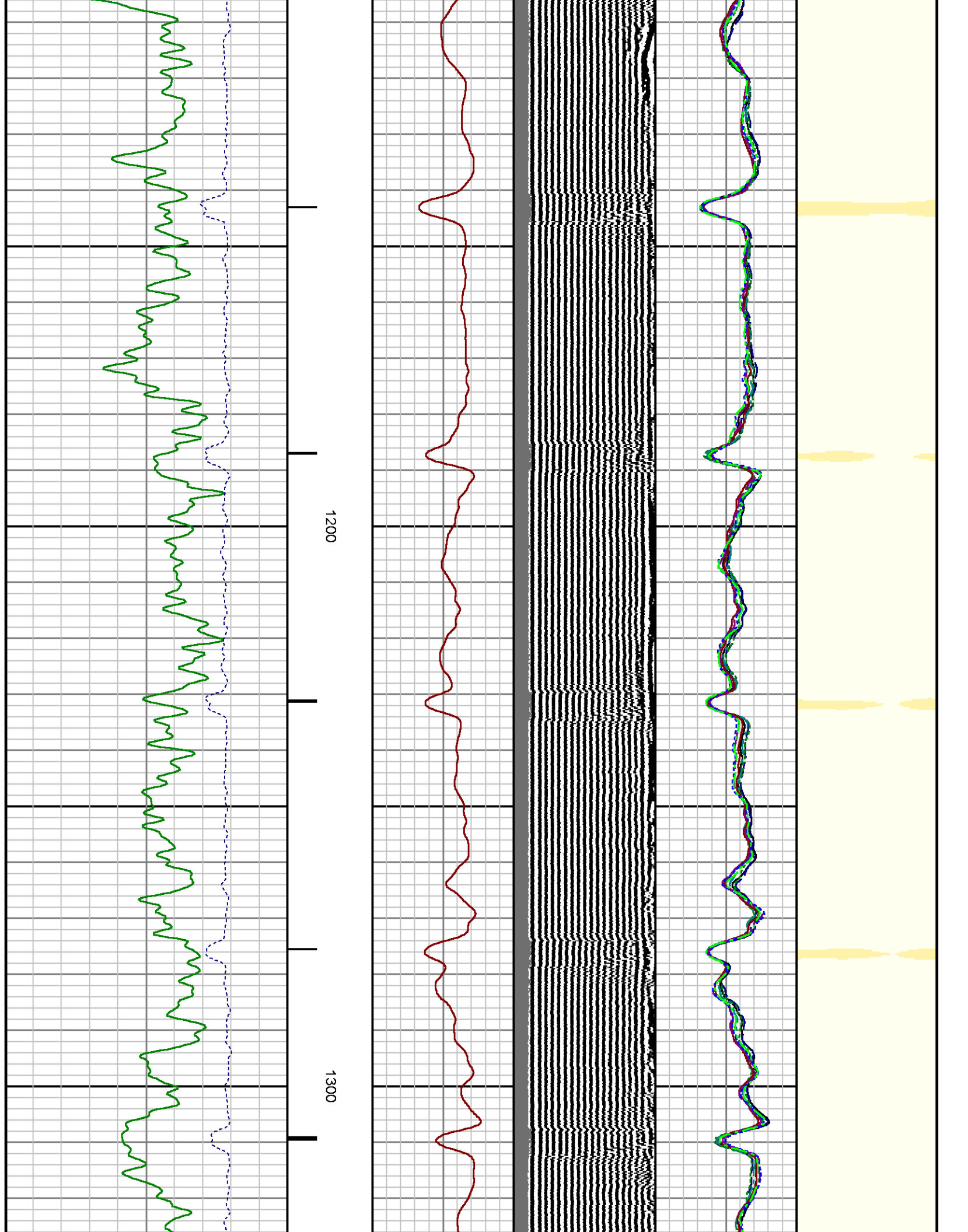


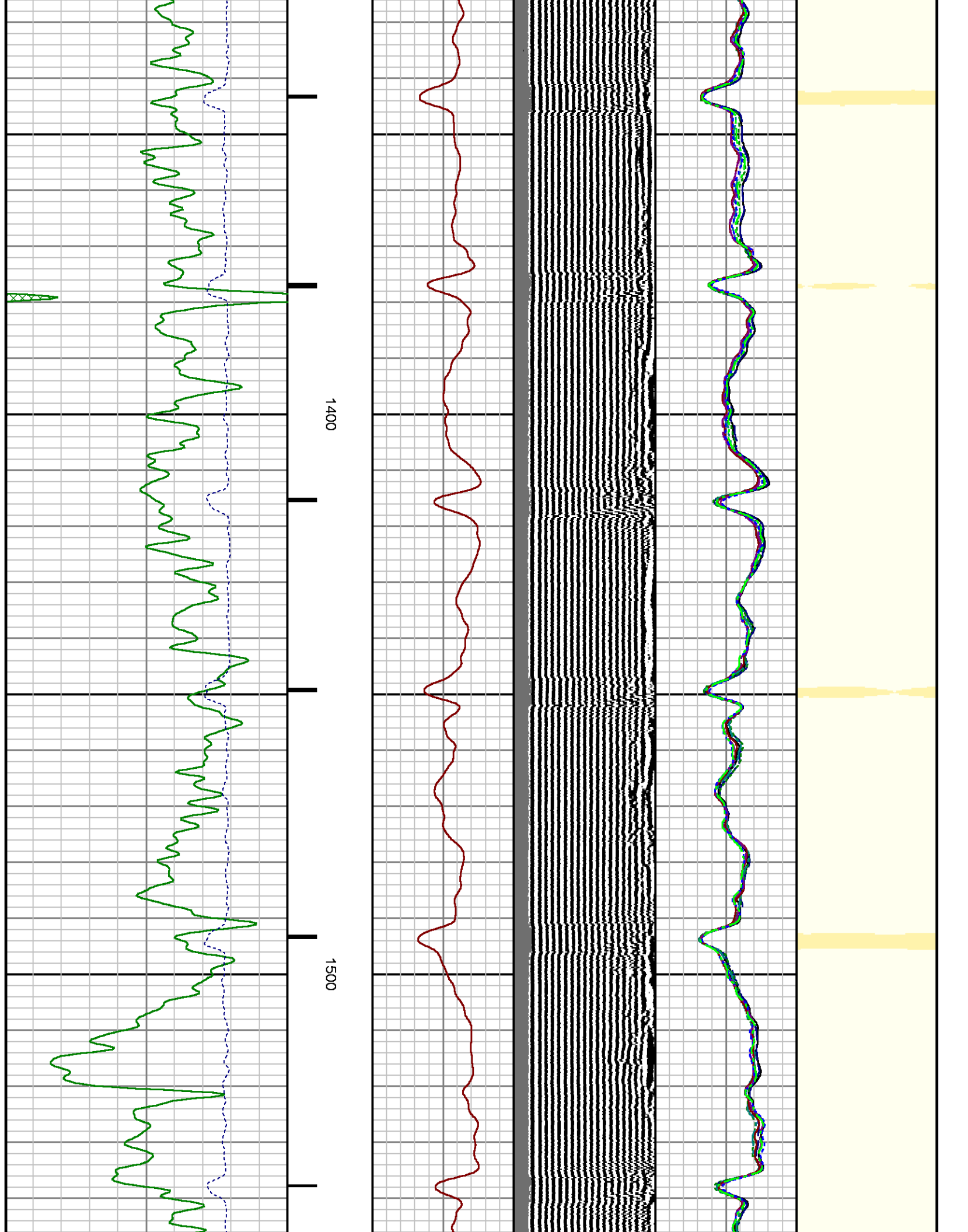


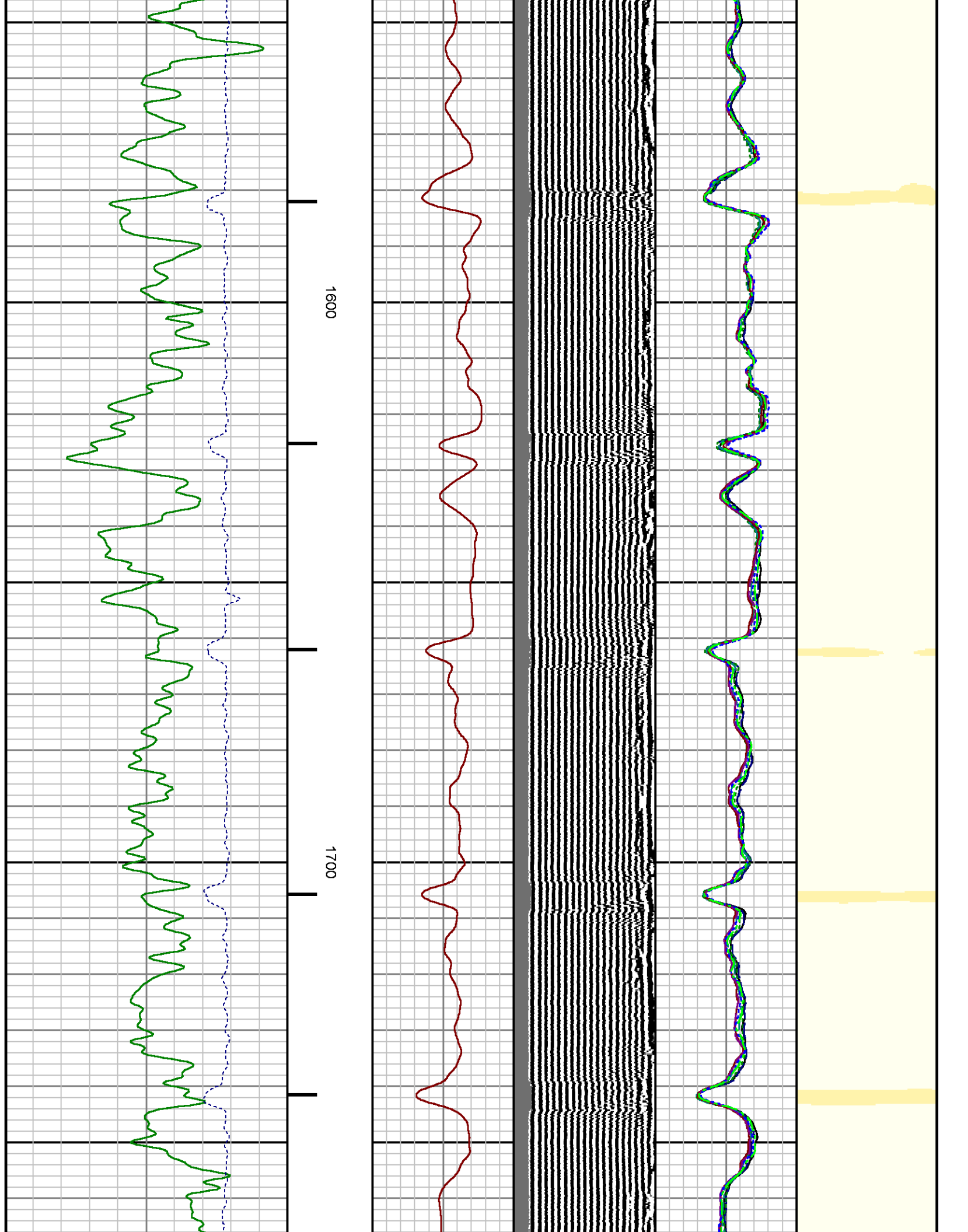


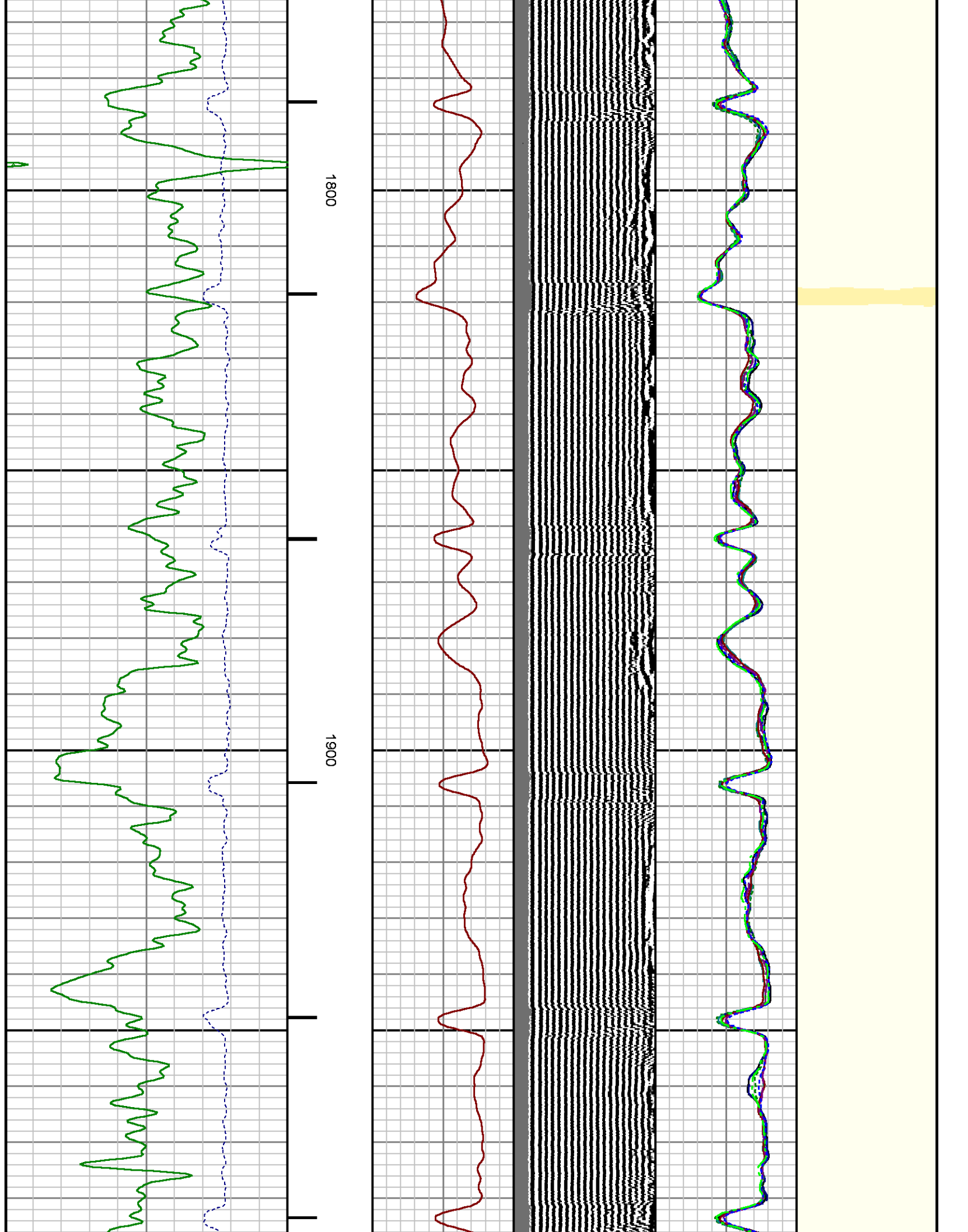


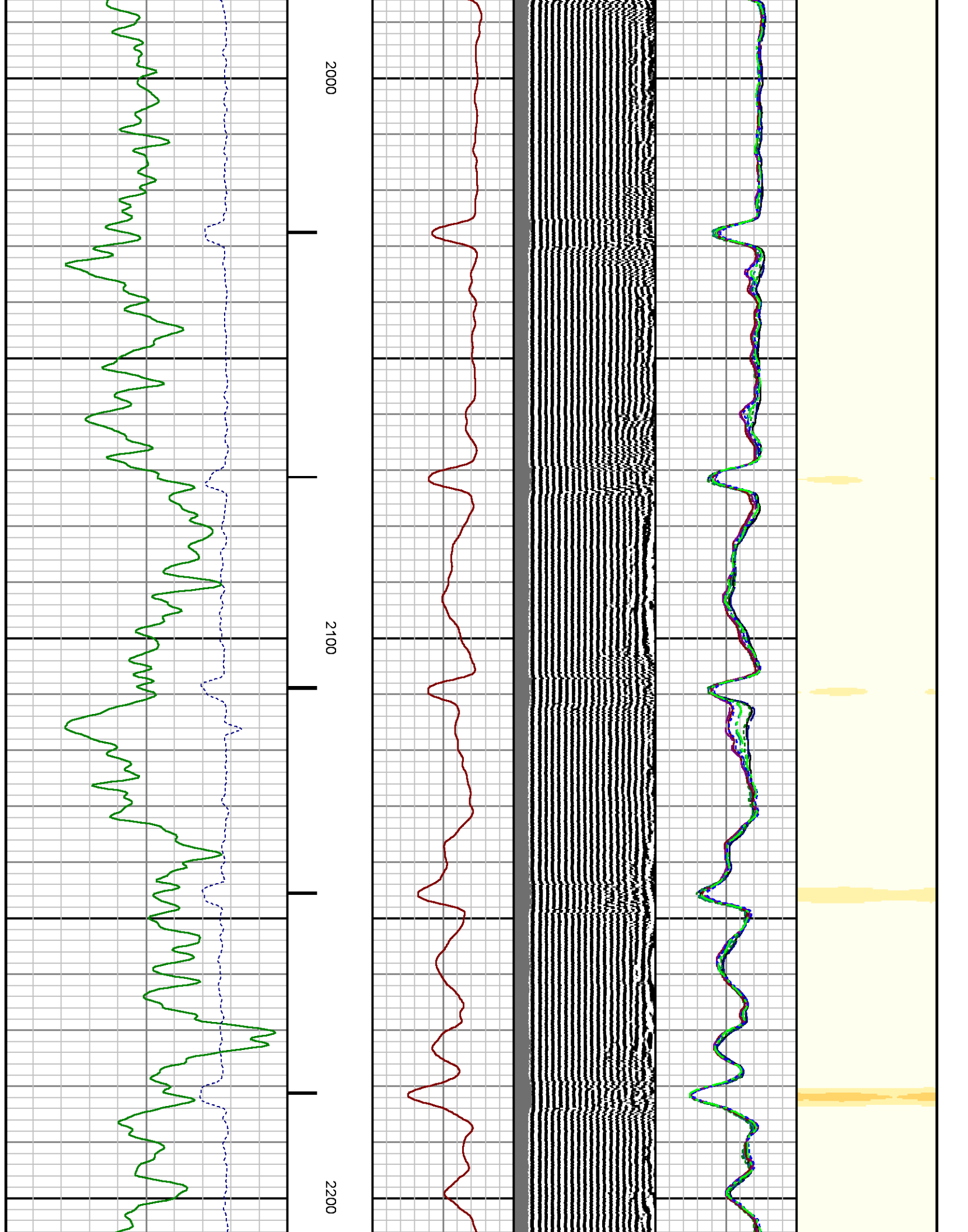


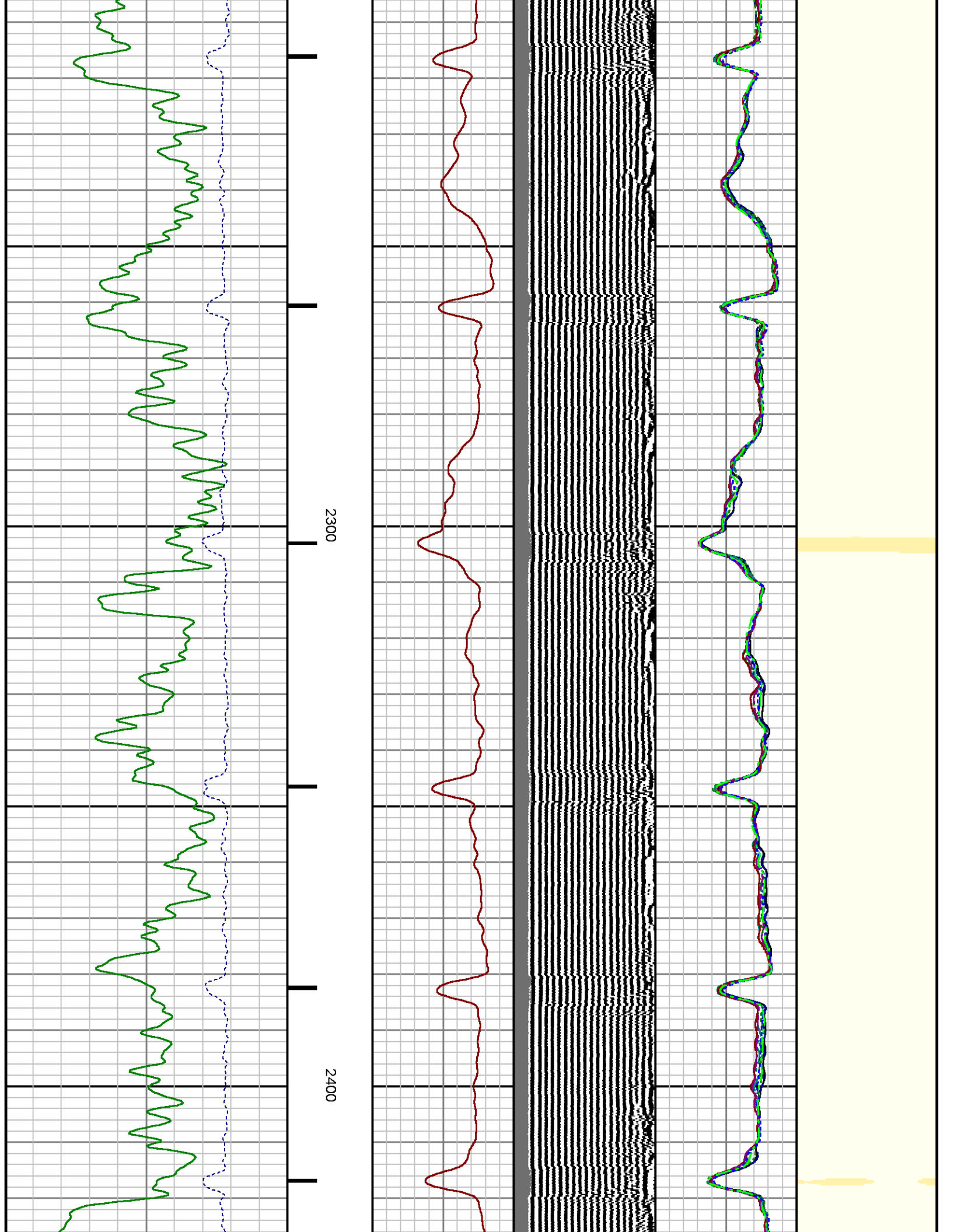


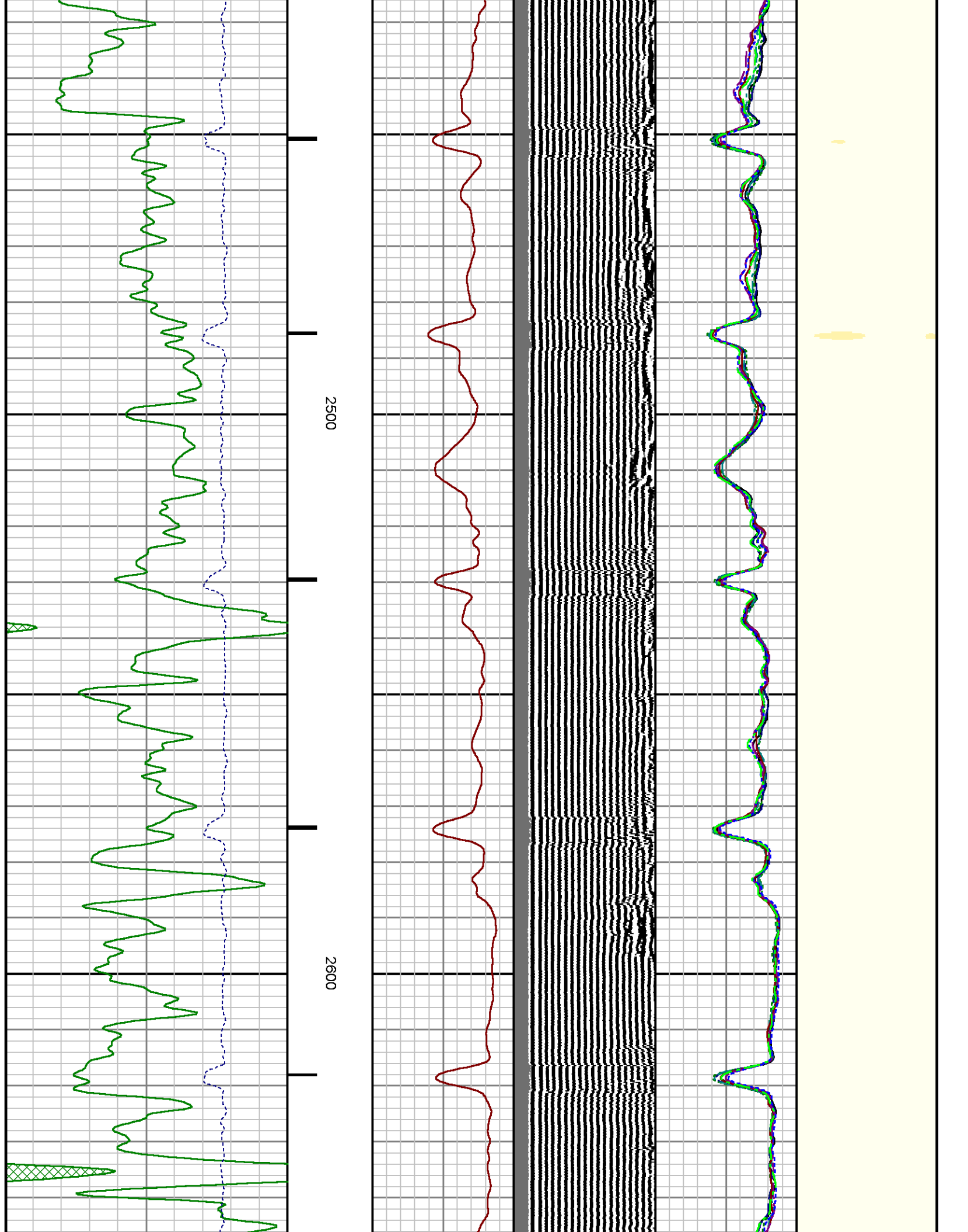


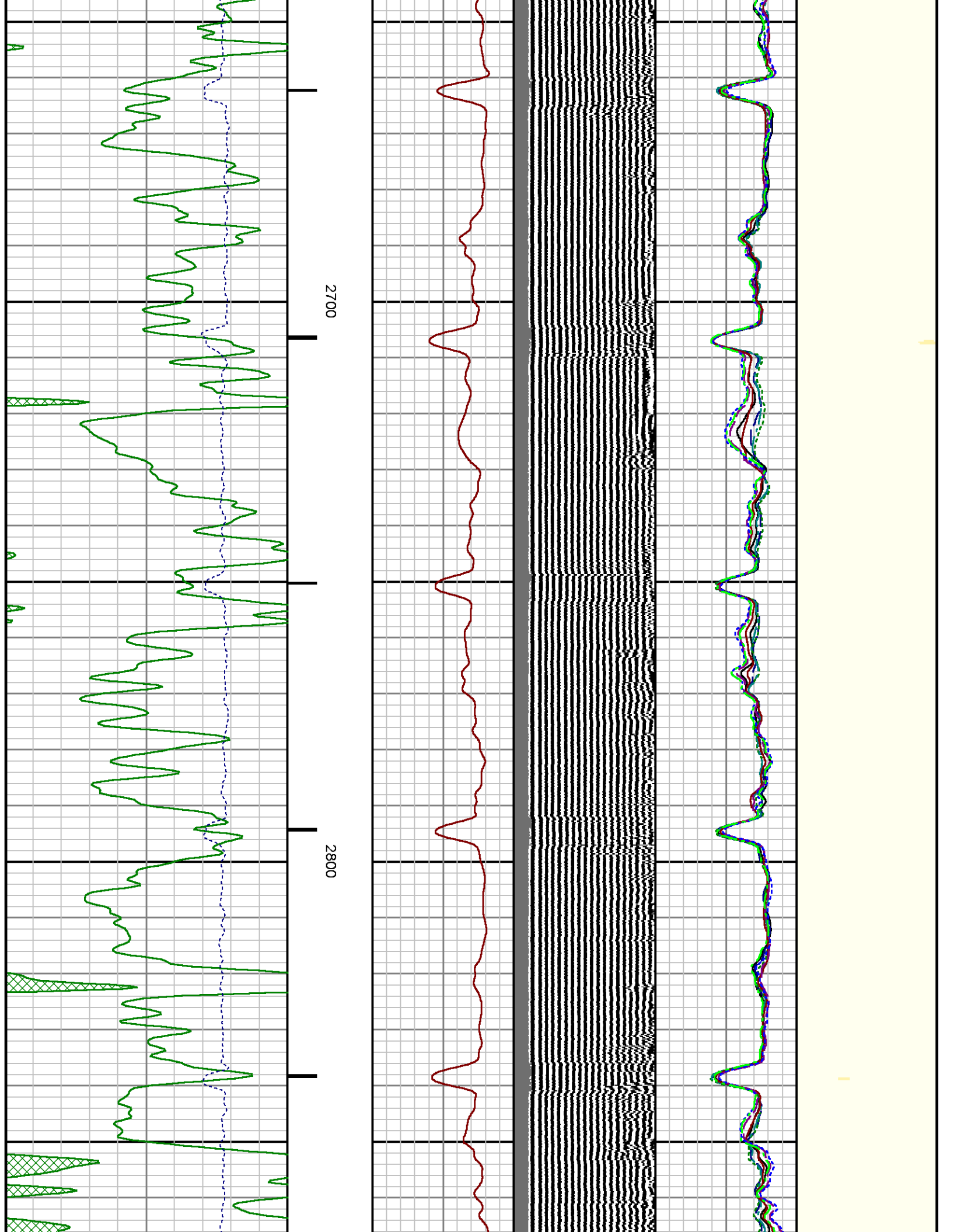


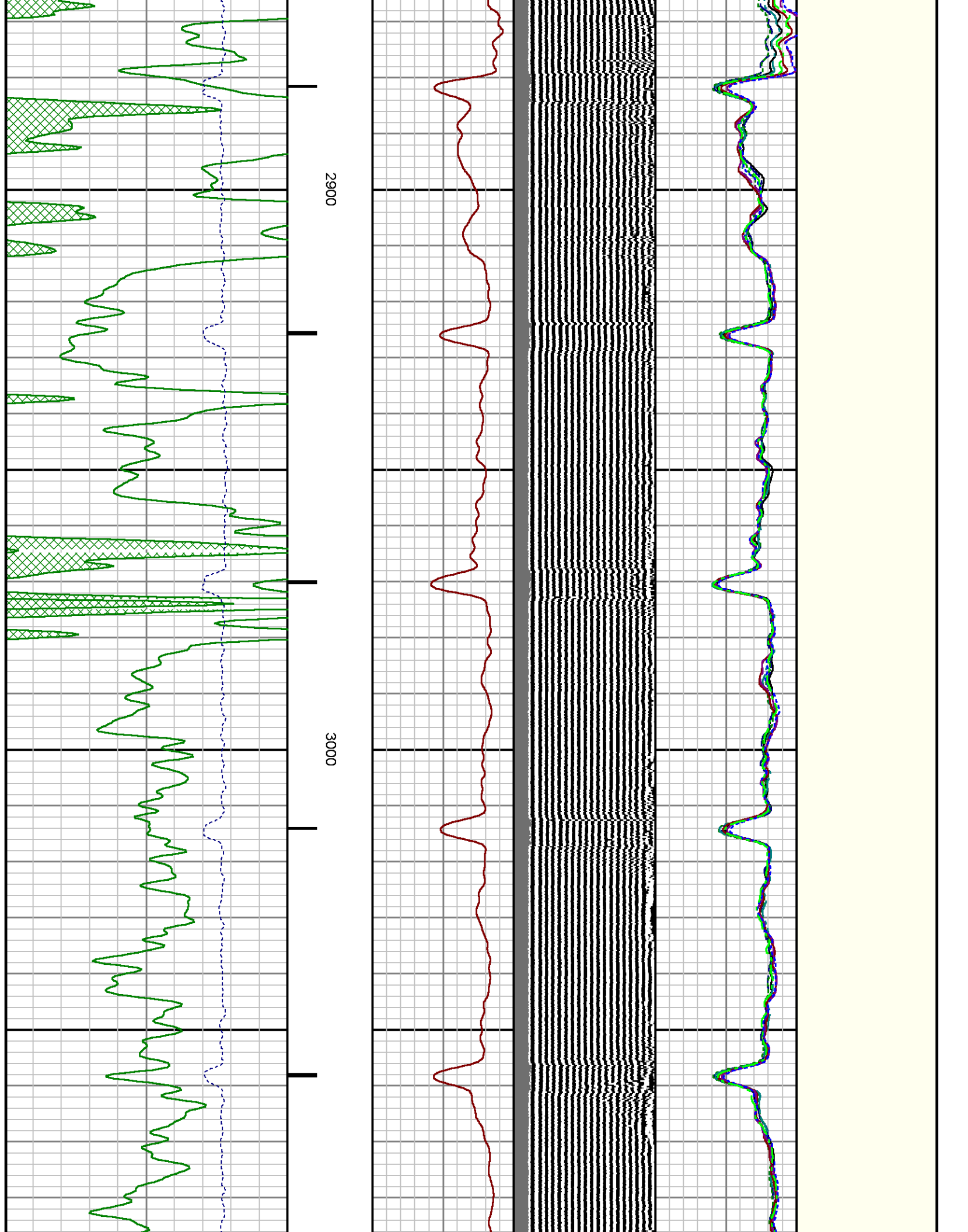


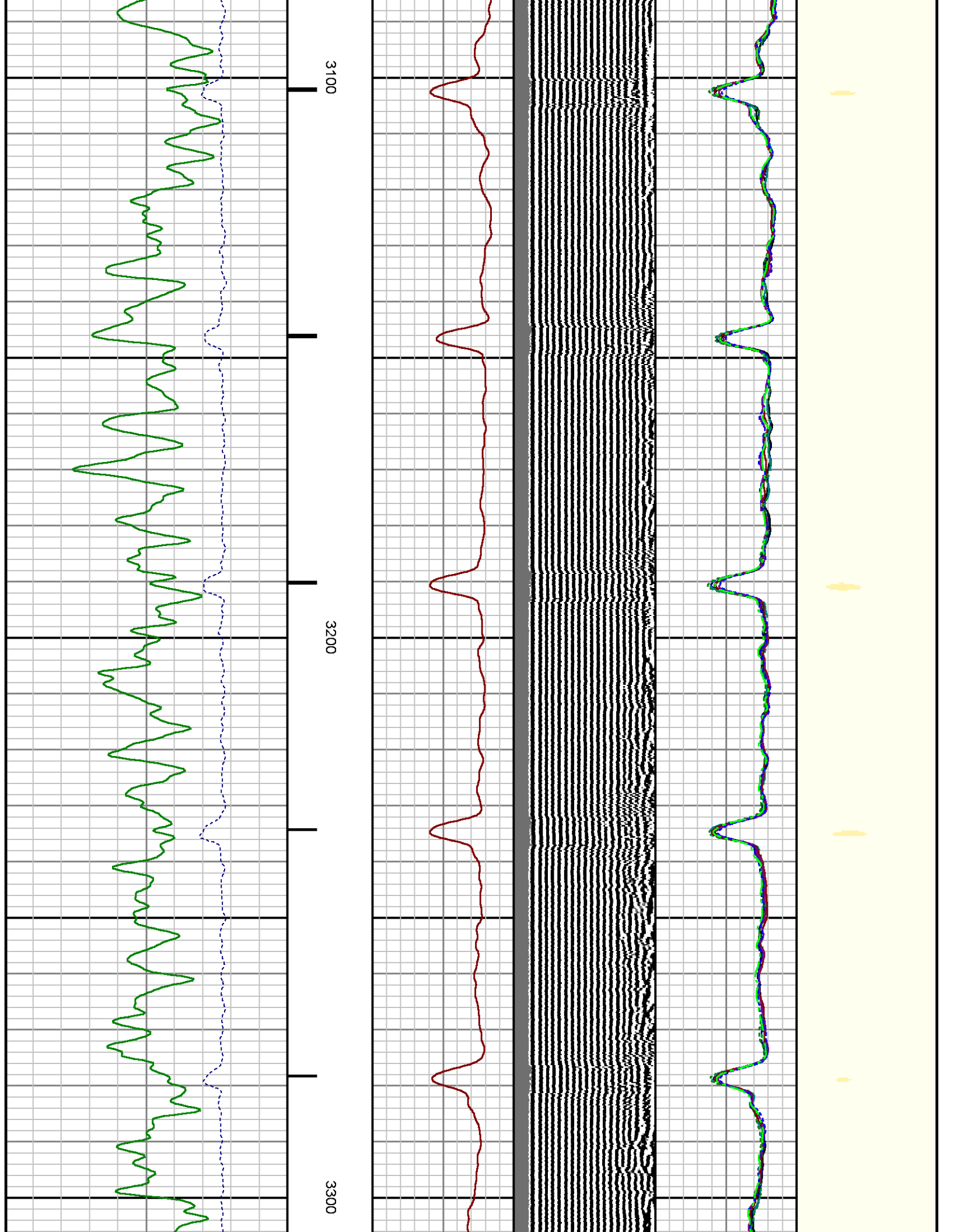


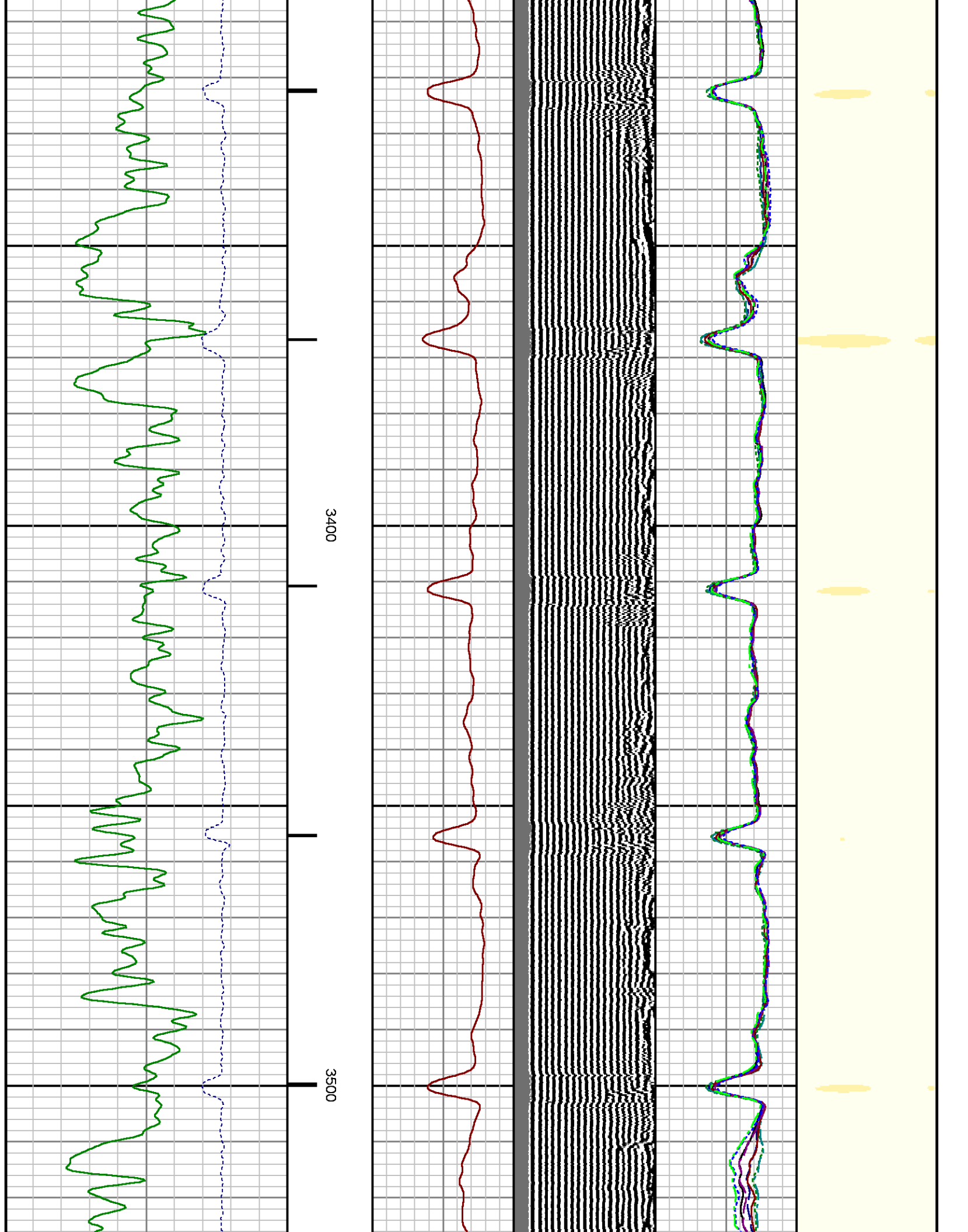


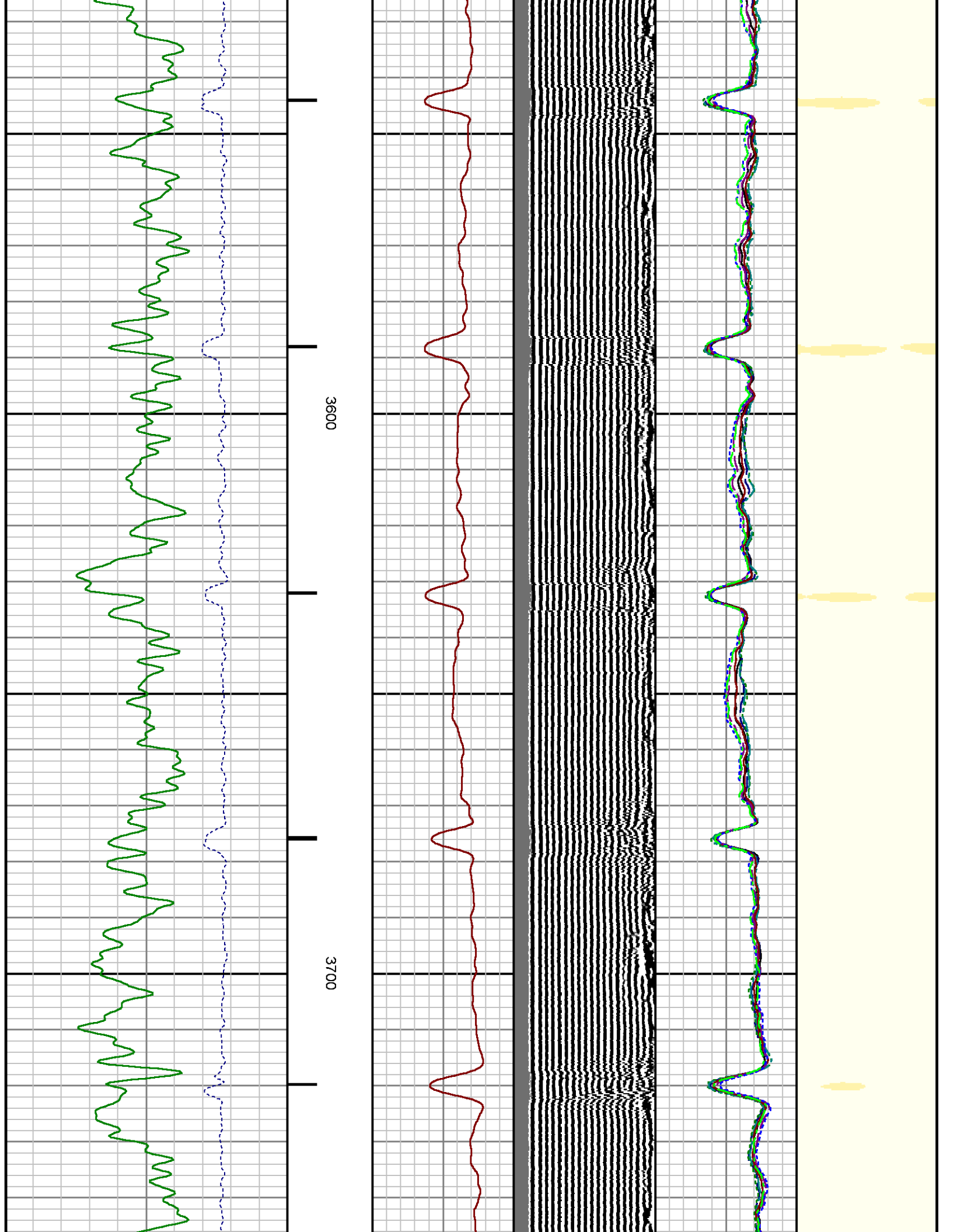


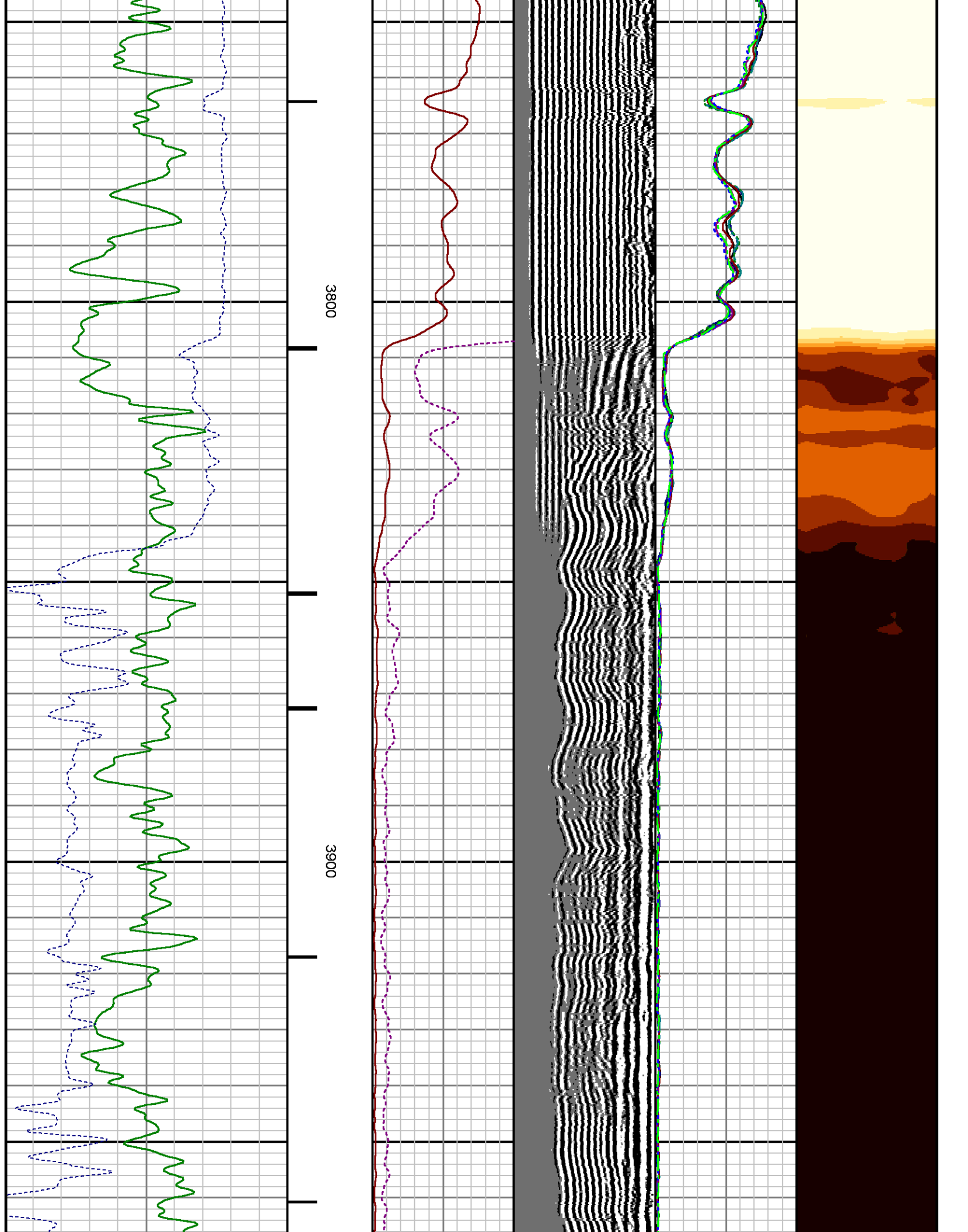


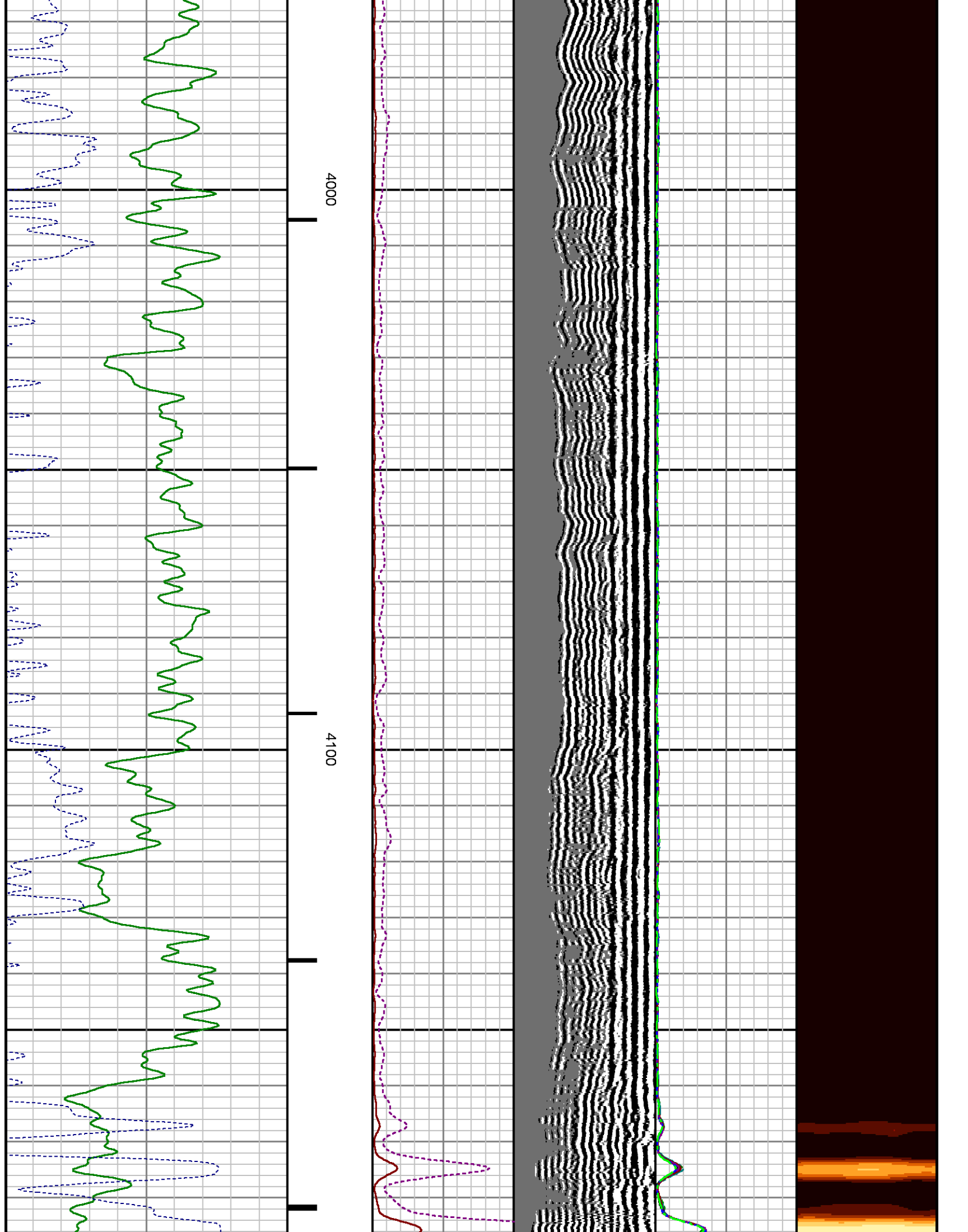


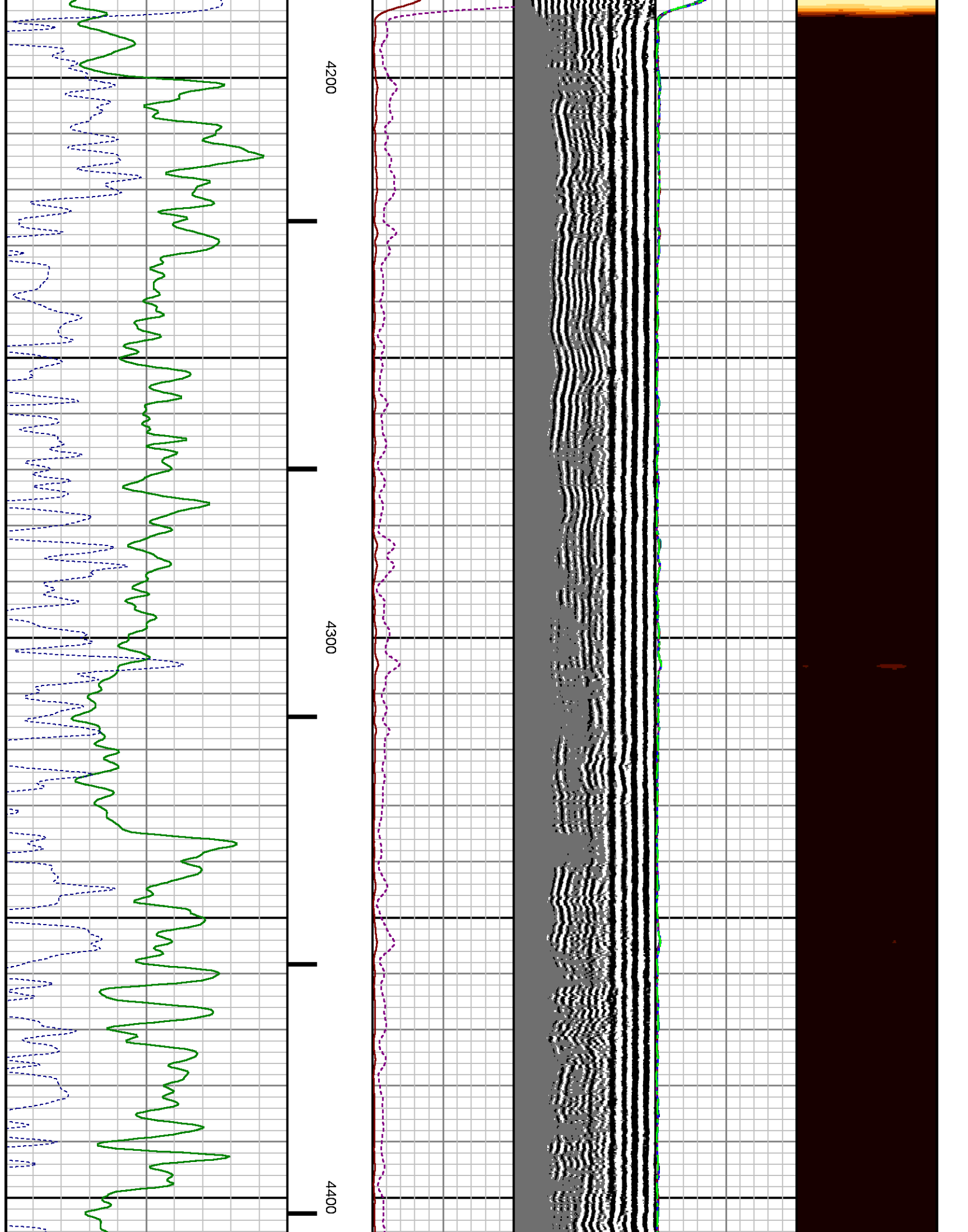


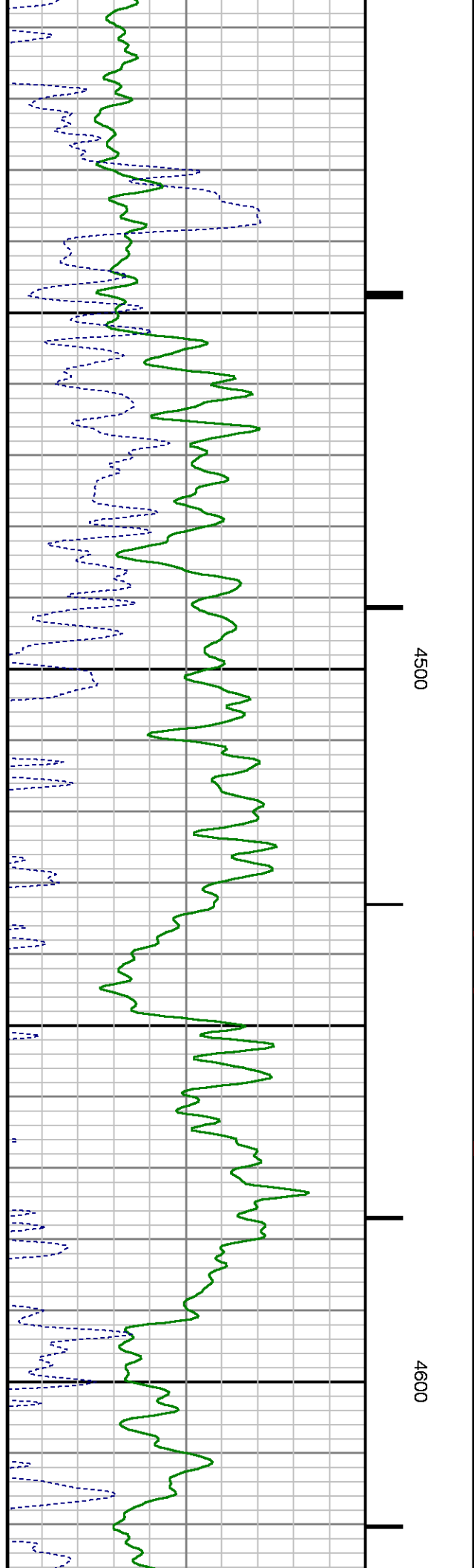
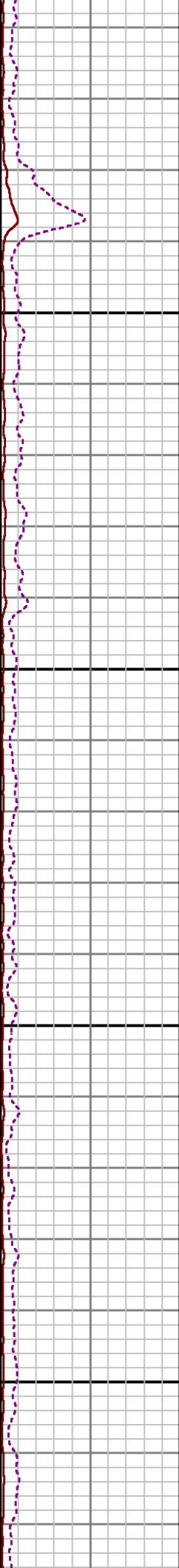
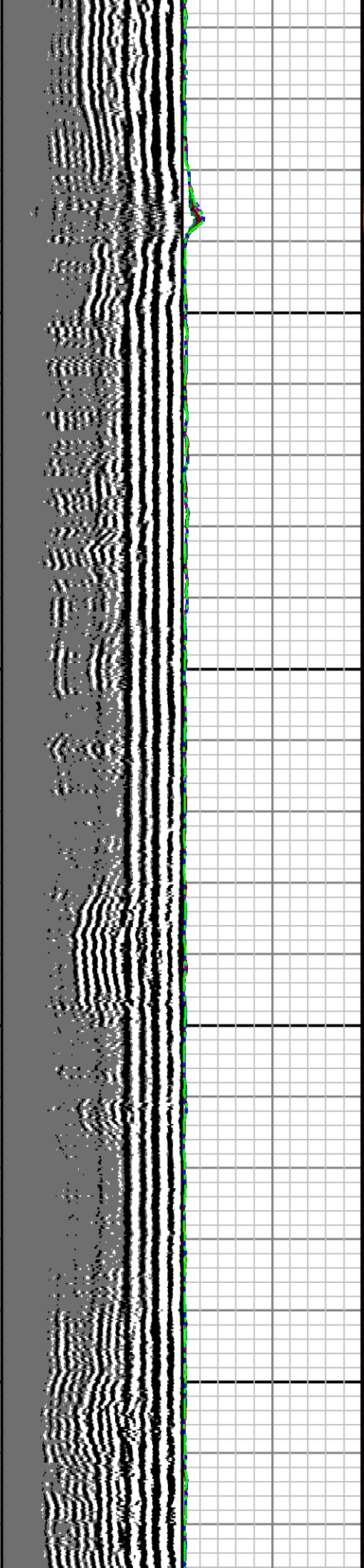


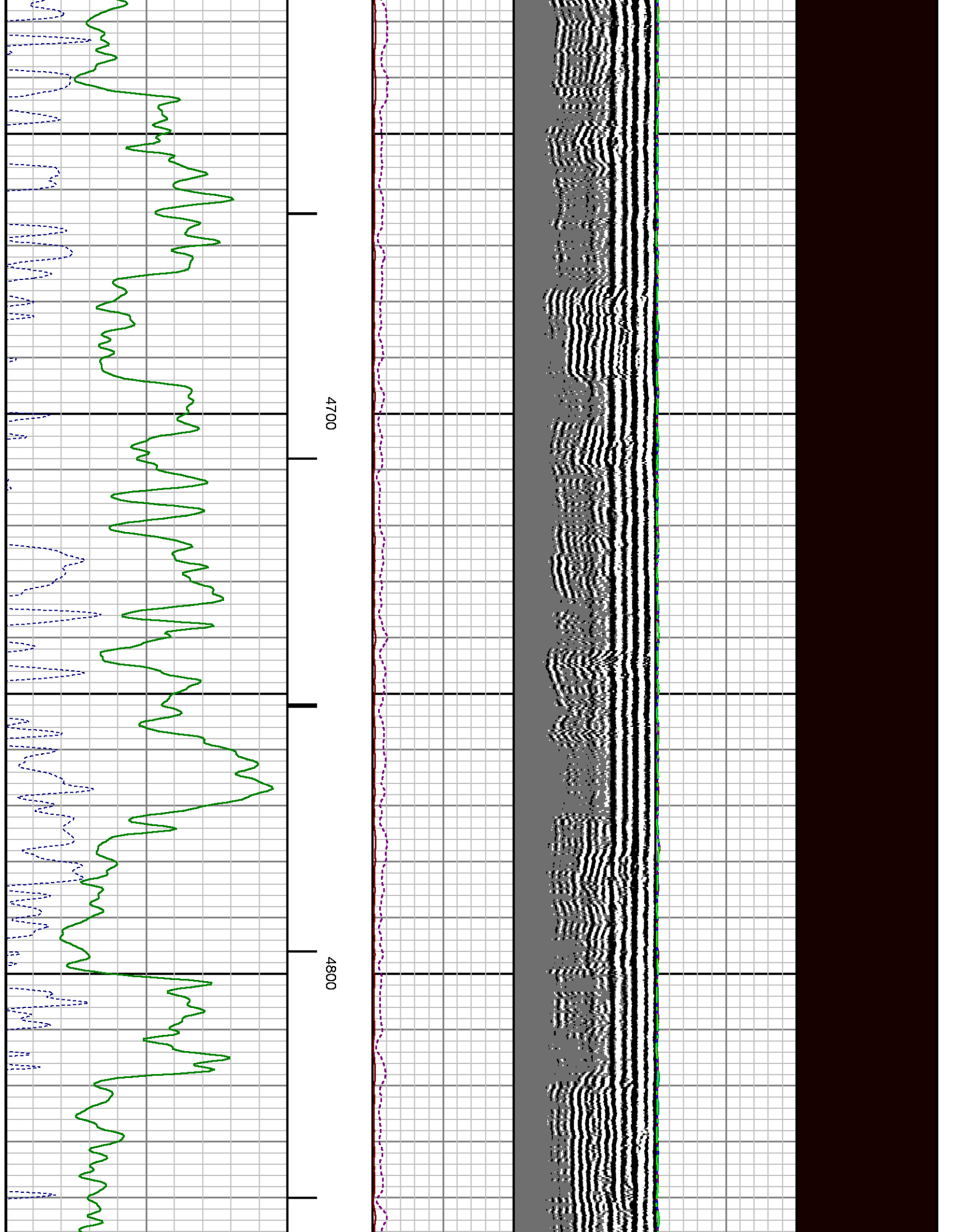


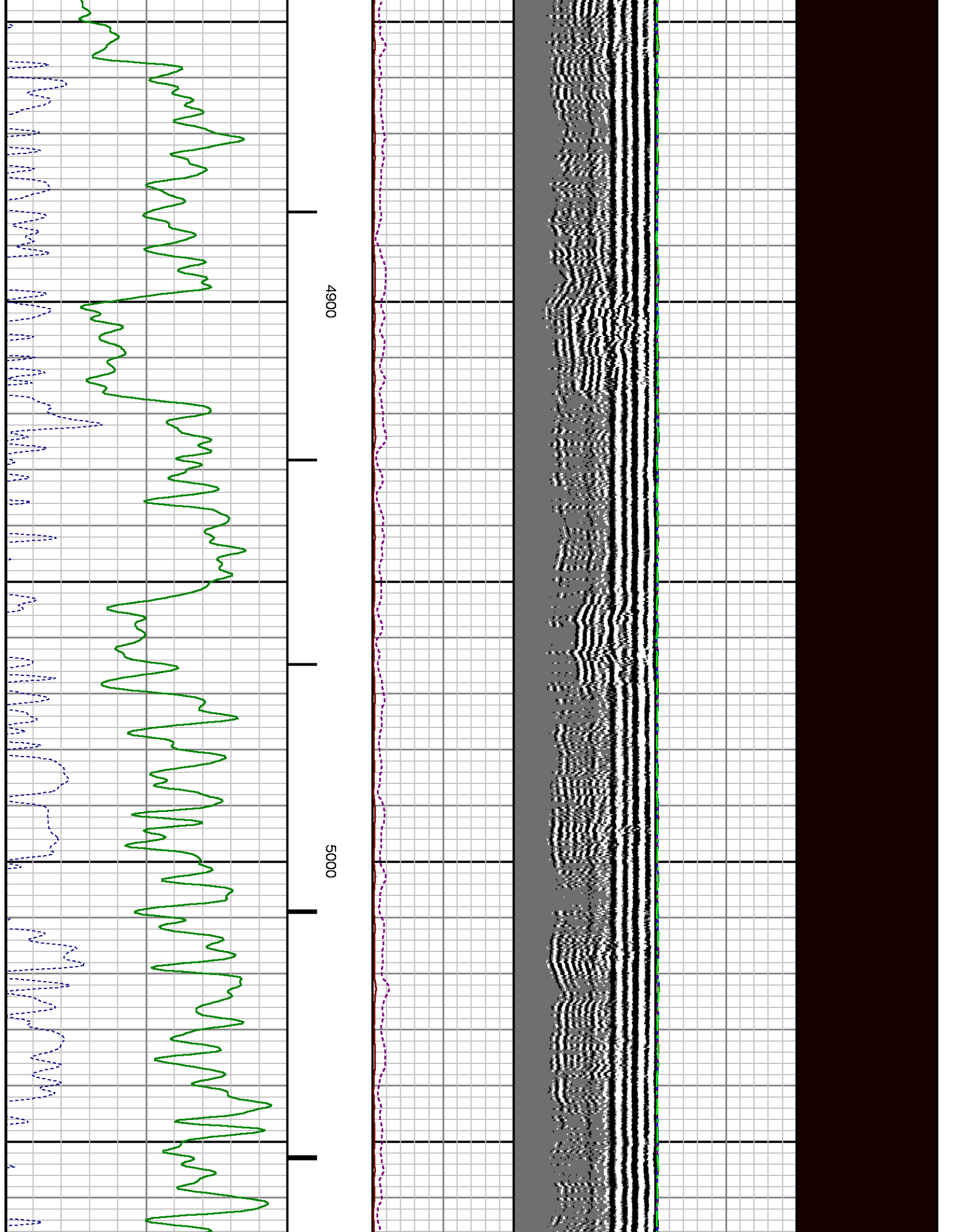


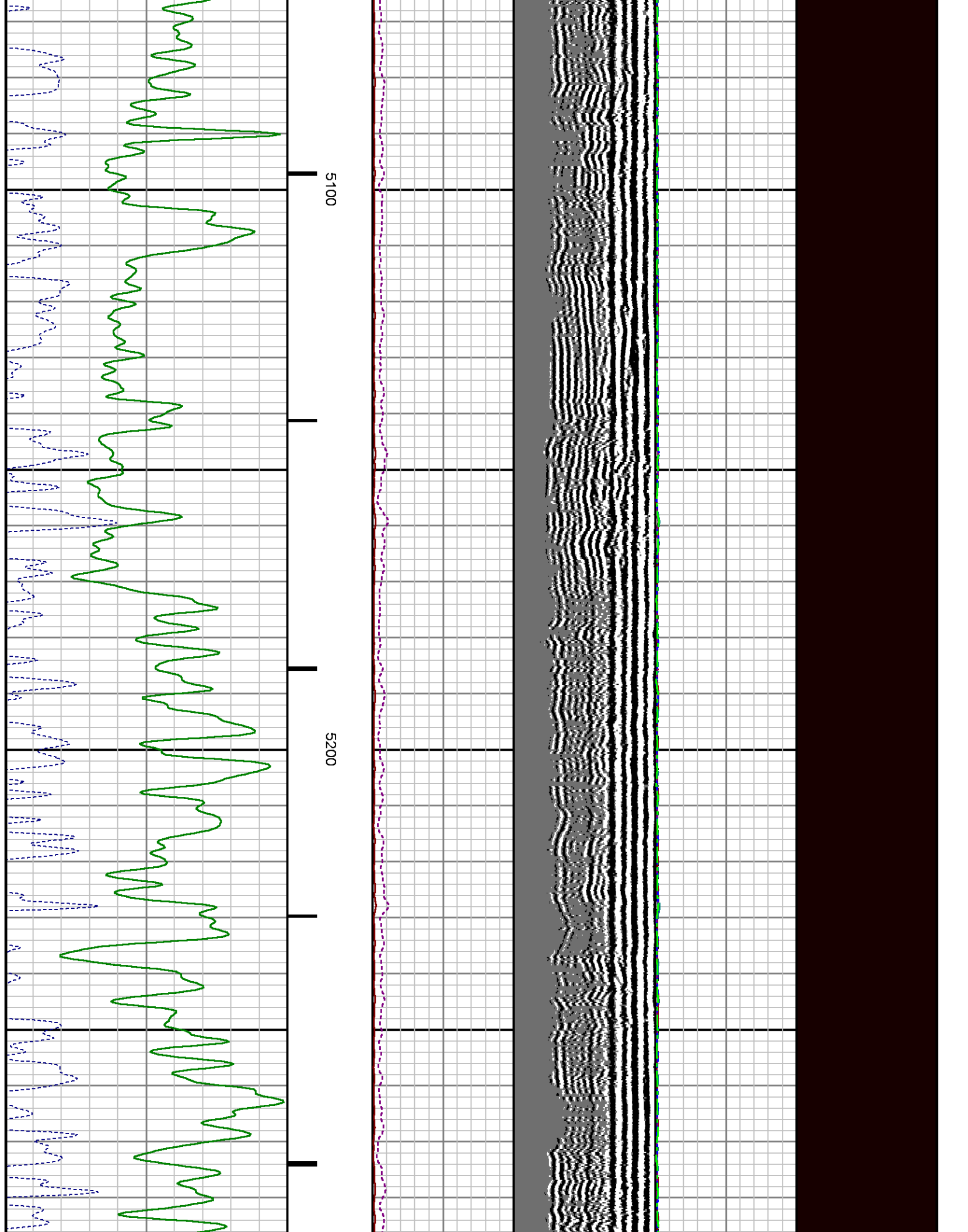


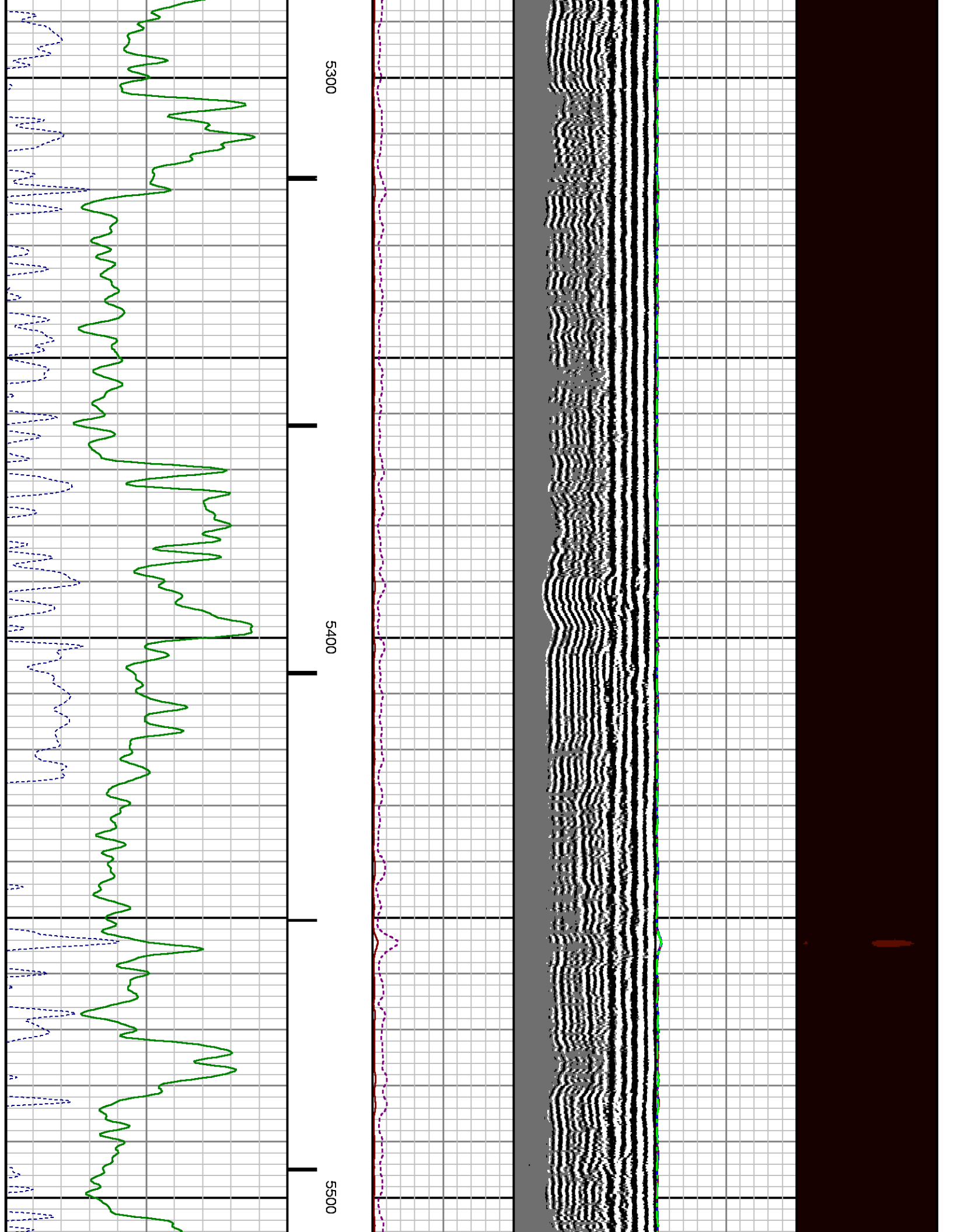


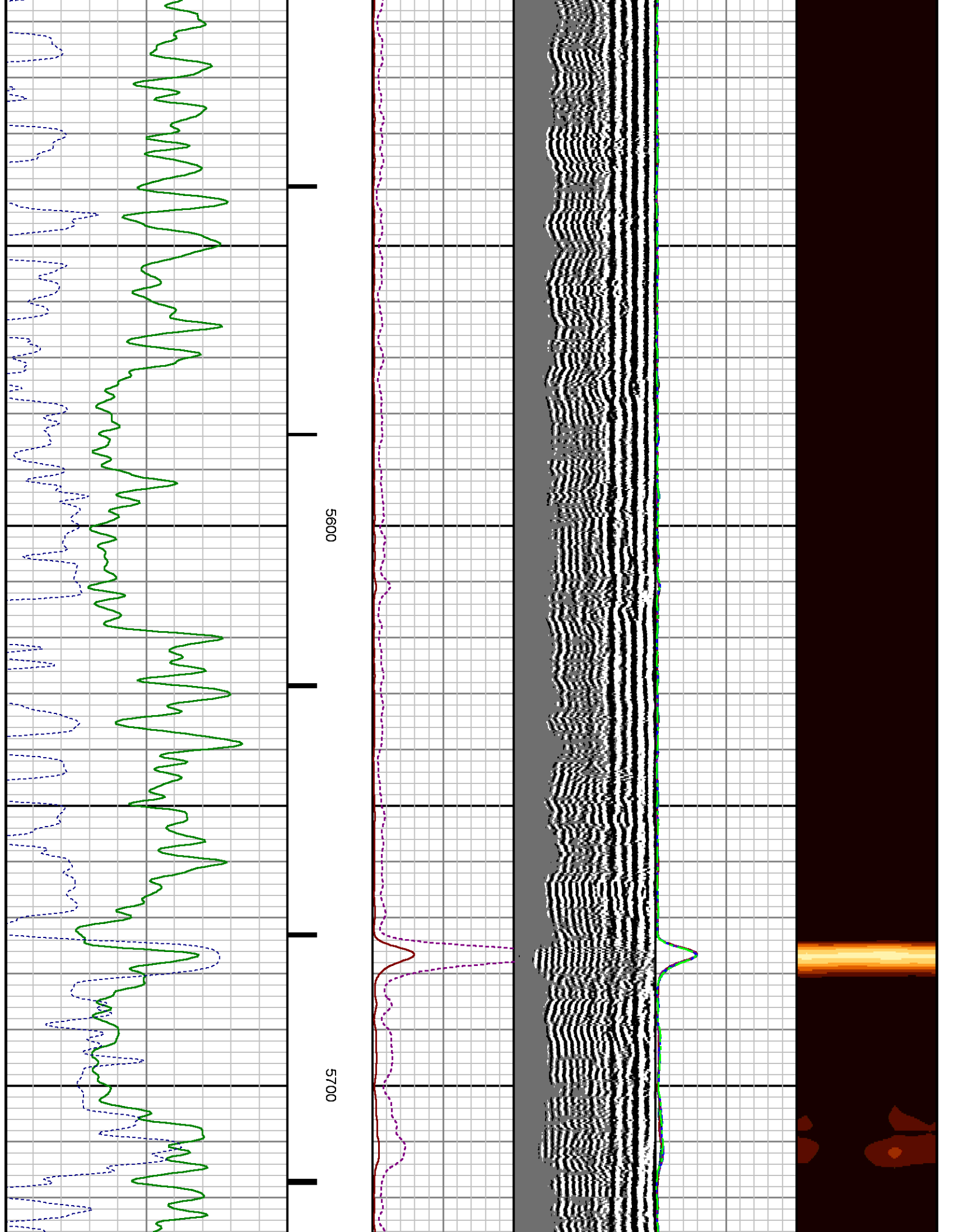


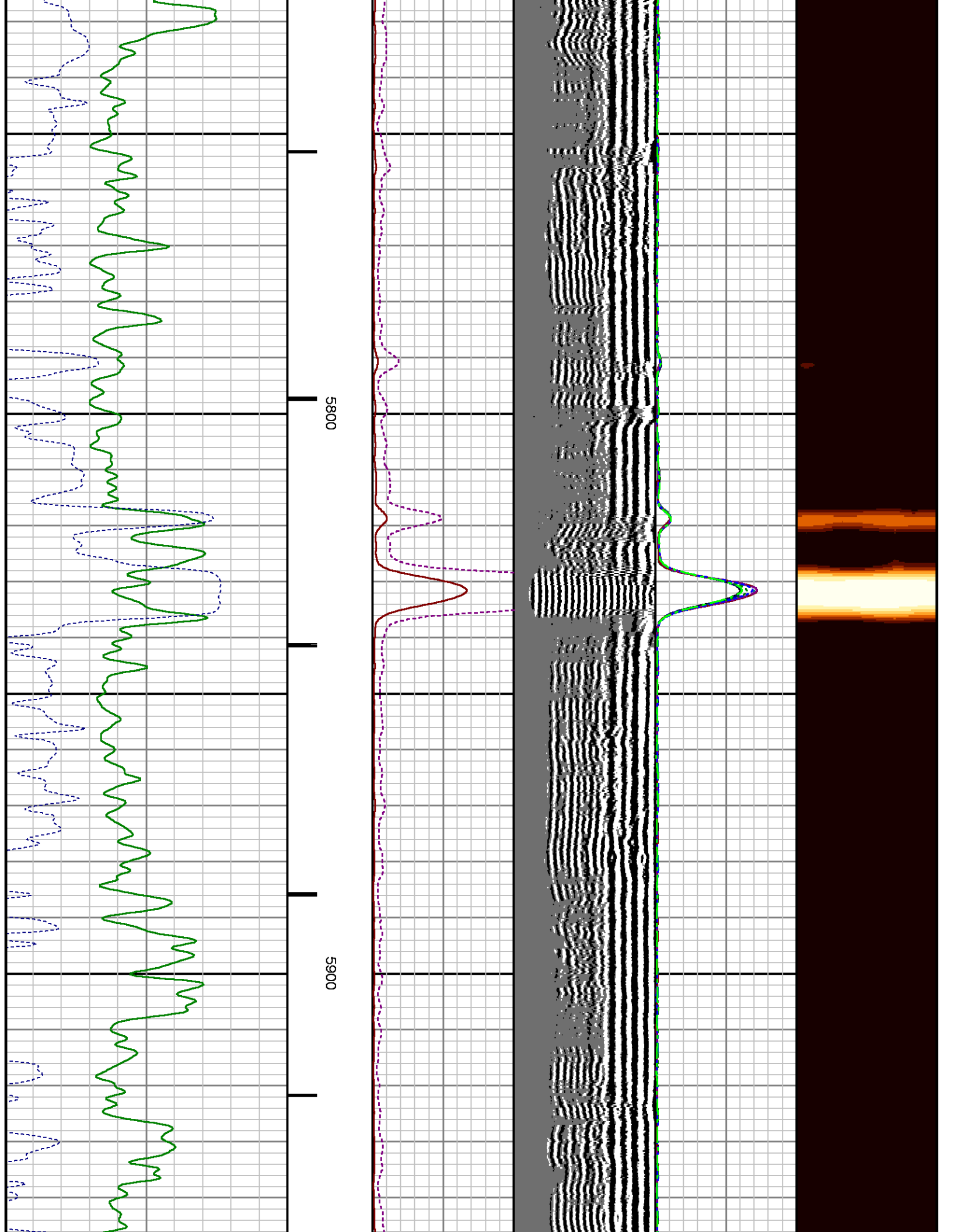


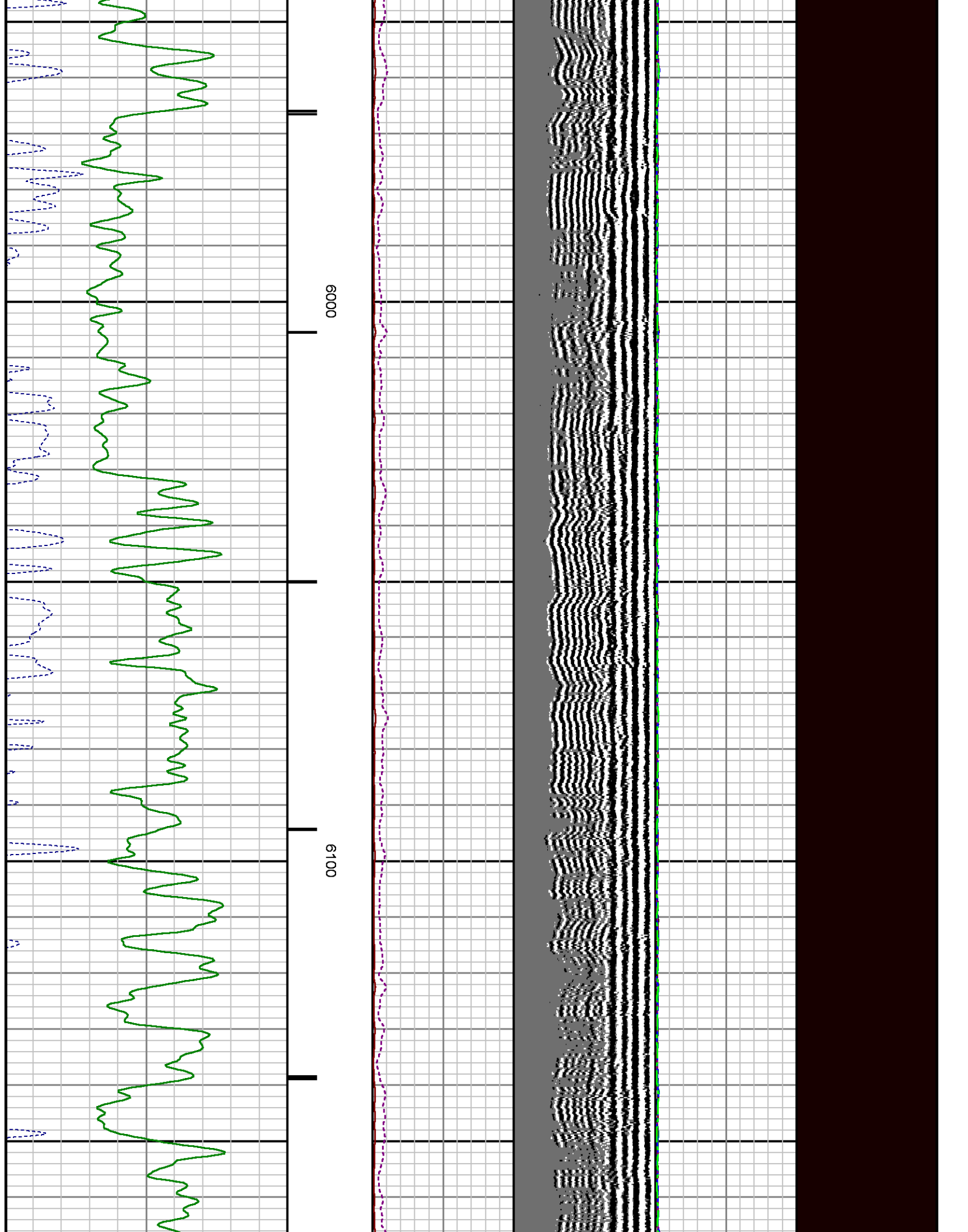


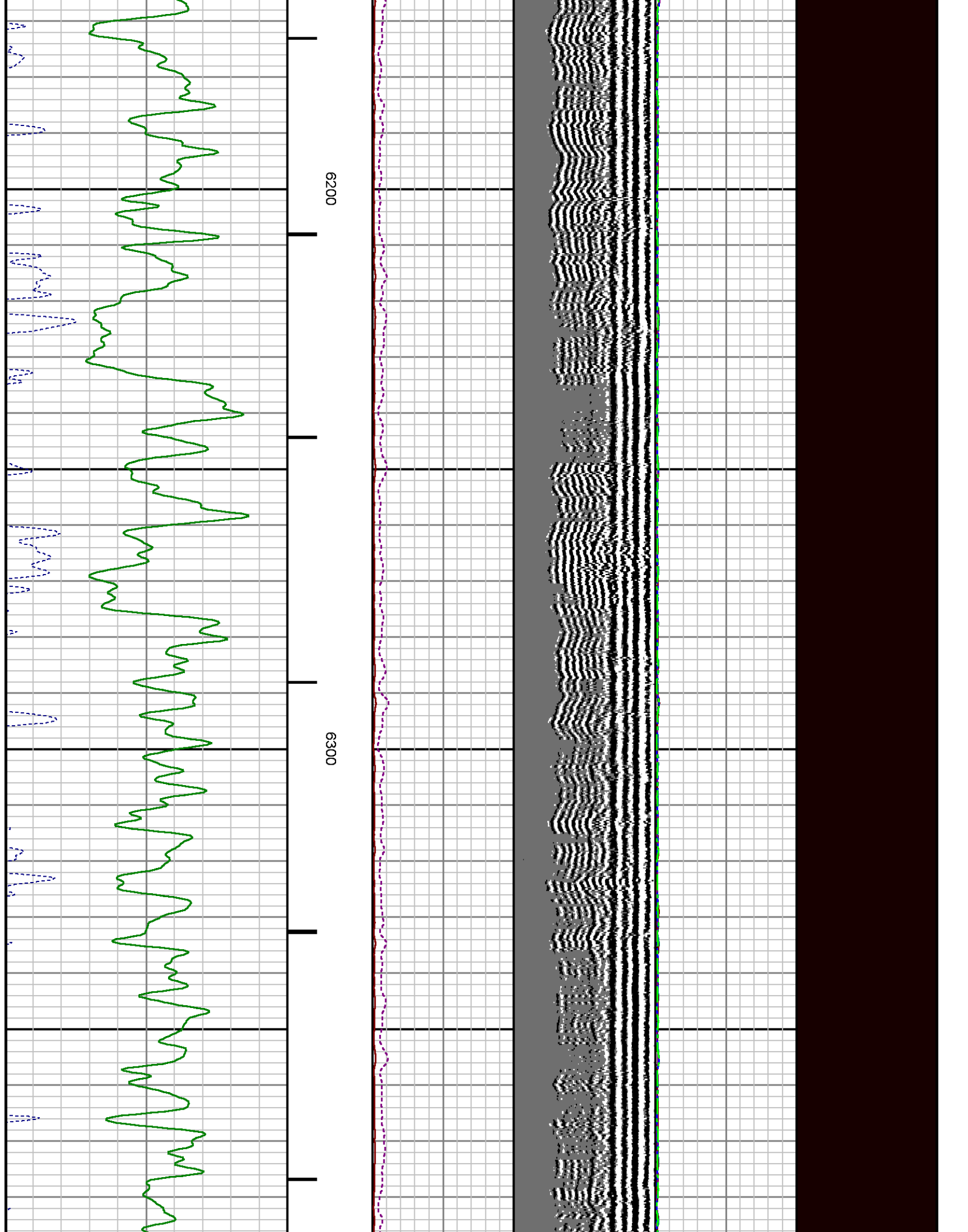


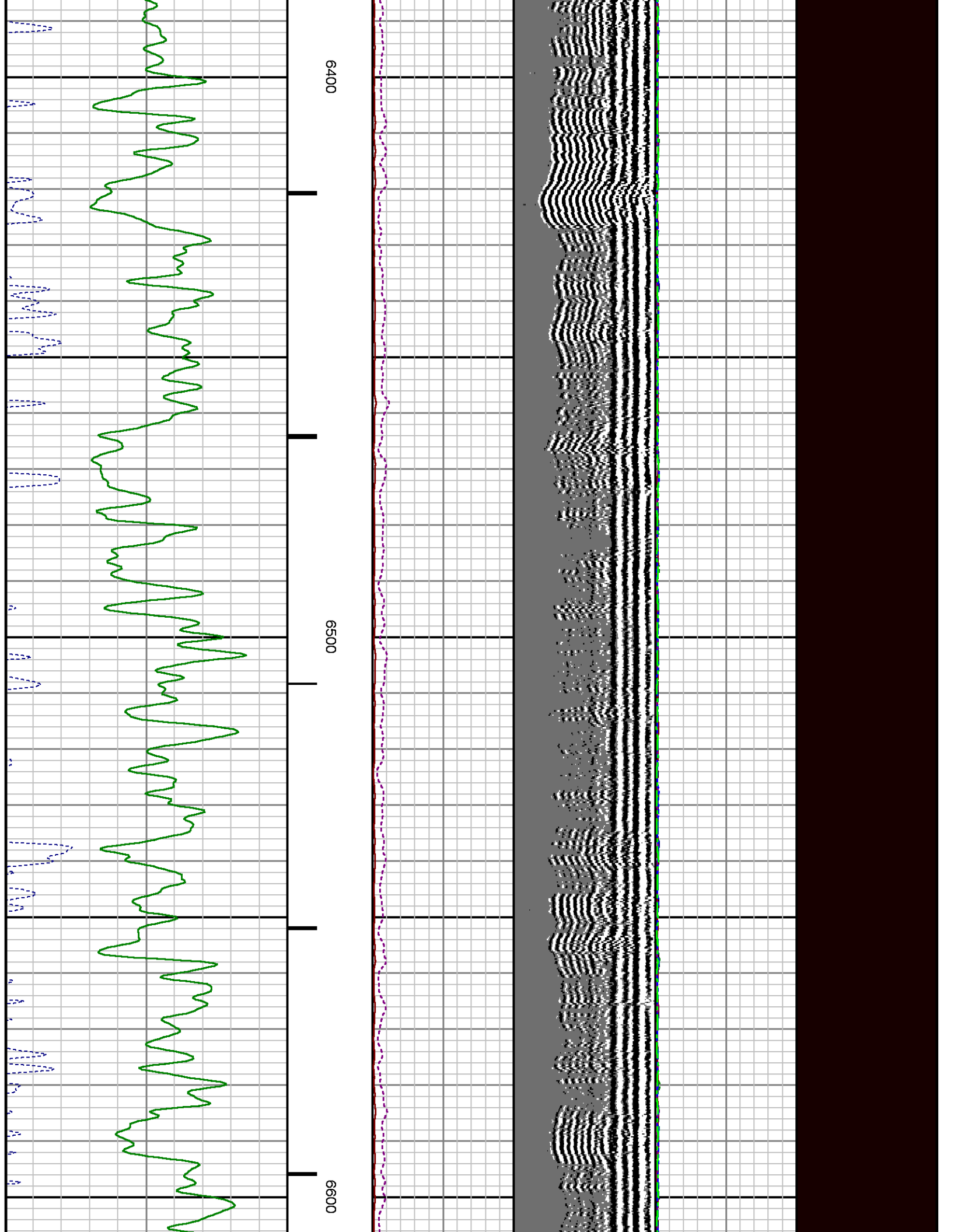


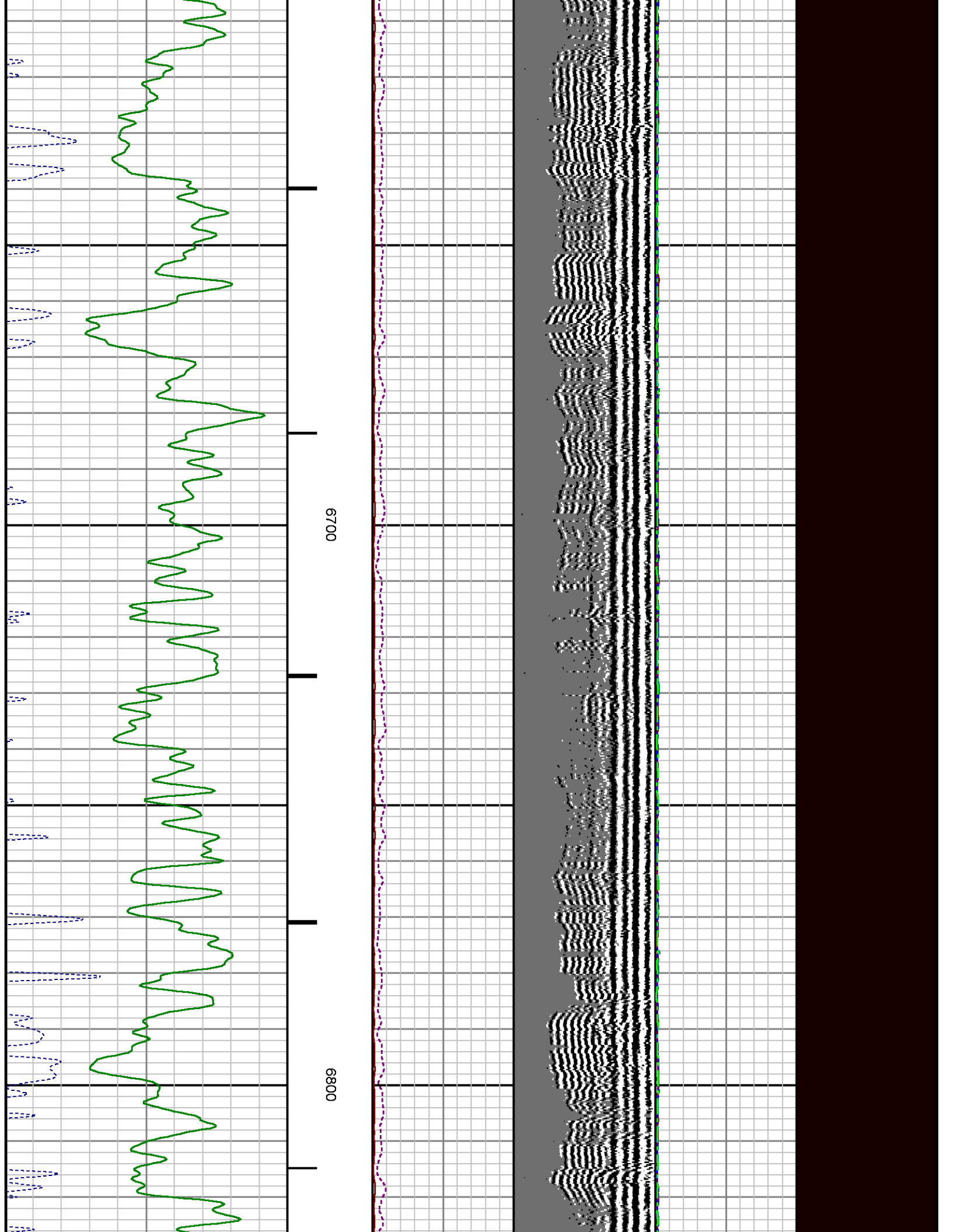


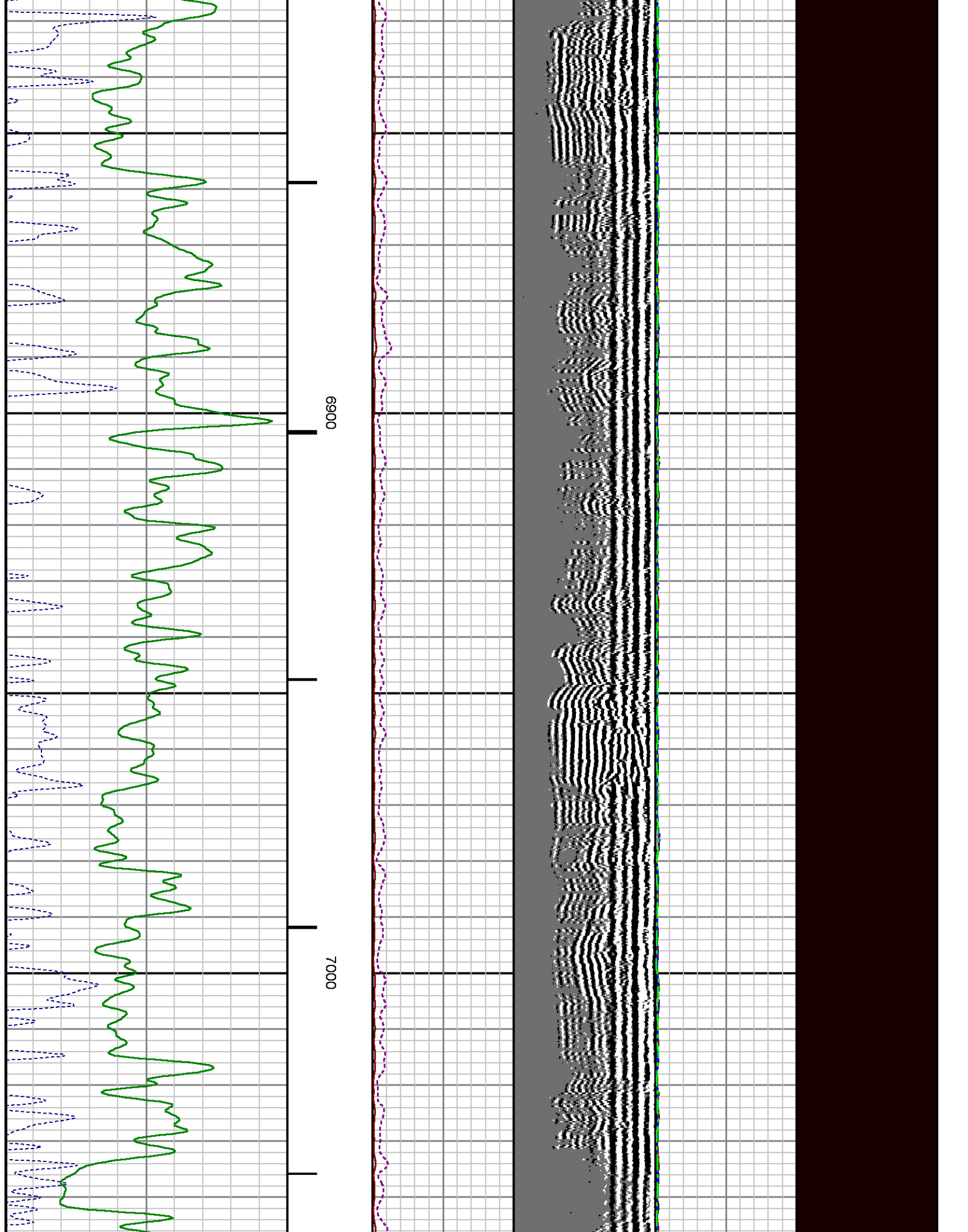


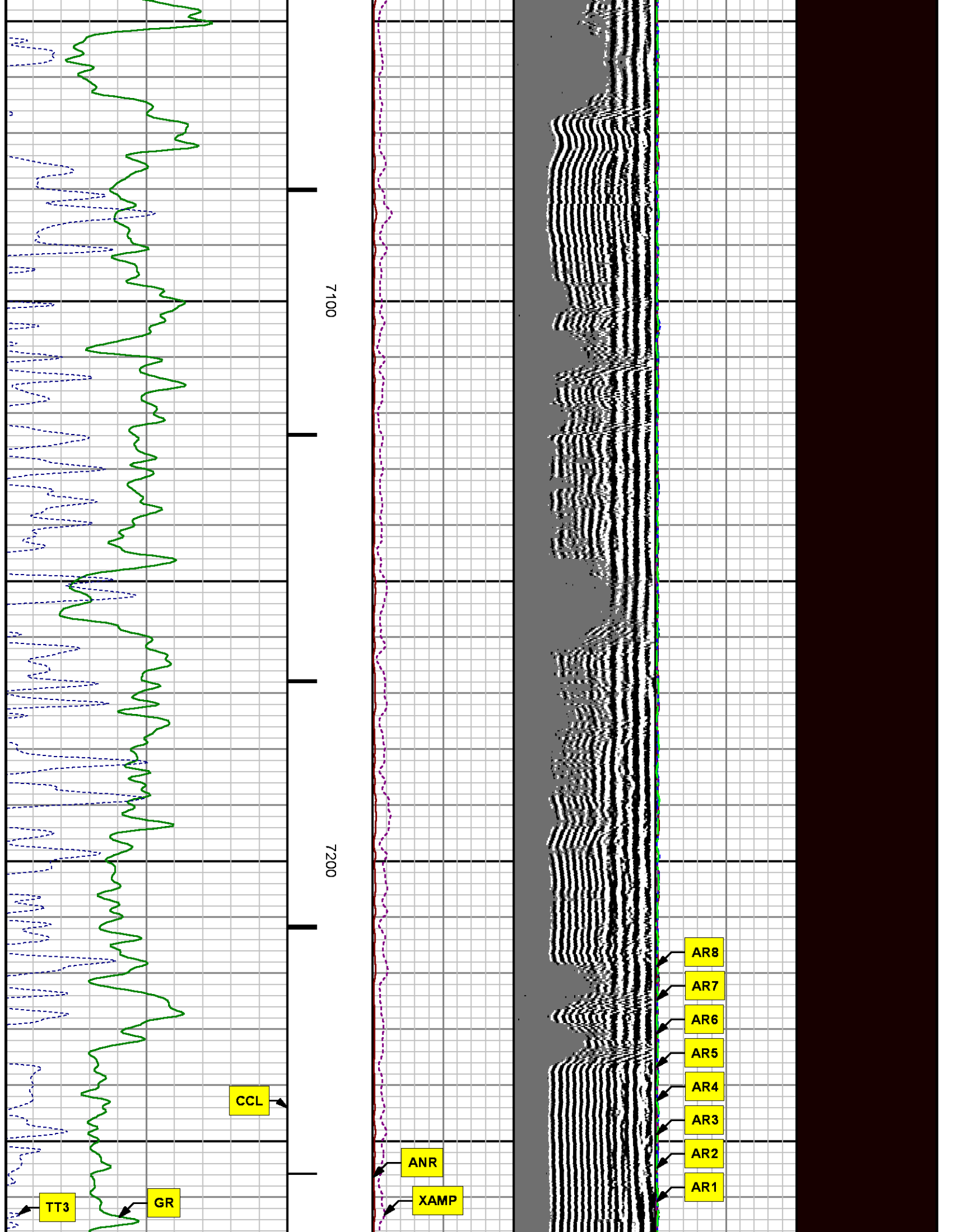












7100

7200

TT3

GR

CCL

ANR

XAMP

AR8

AR7

AR6

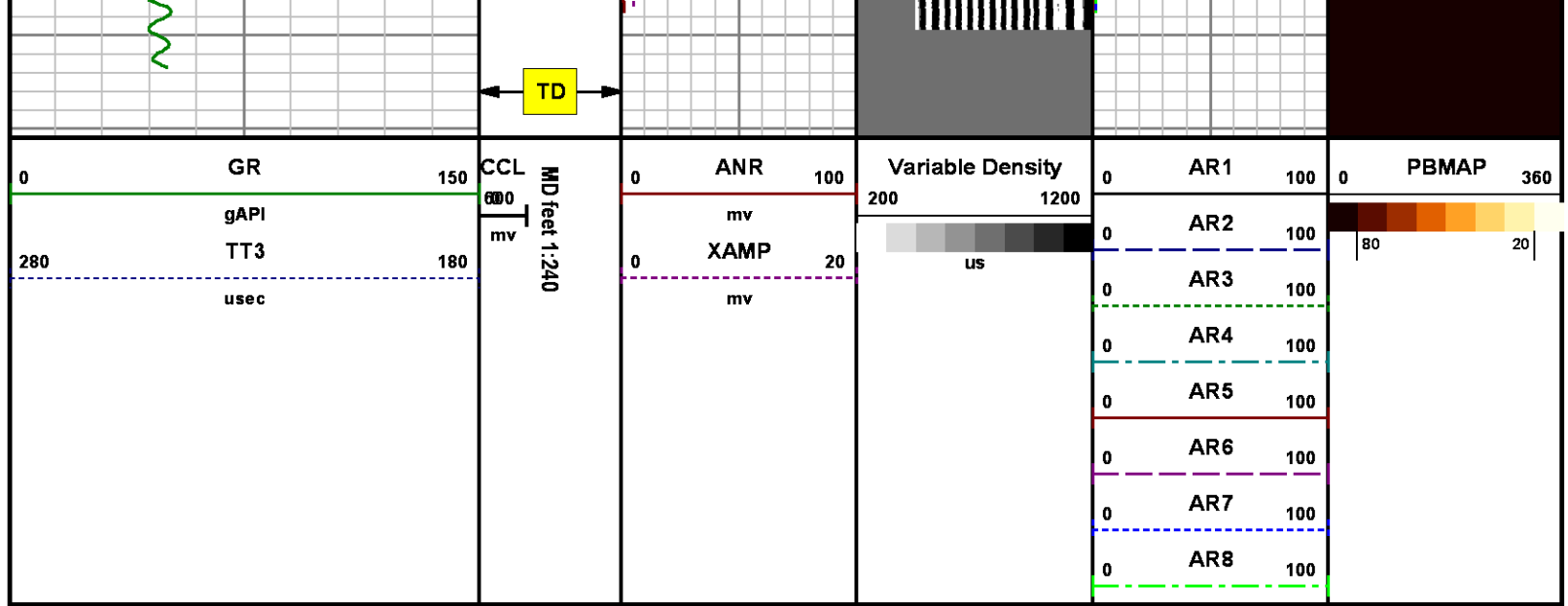
AR5

AR4

AR3

AR2

AR1



**REPEAT SECTION
0 PSI**

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	6950.520	7276.520
RAL	Amp Gate Start Near	195.000	usec	6950.520	7276.520
RAL	Amp Gate Start Radial	195.000	usec	6950.520	7276.520
RAL	Amp Gate Width Far	25.000	usec	6950.520	7276.520
RAL	Amp Gate Width Near	25.000	usec	6950.520	7276.520
RAL	Amp Gate Width Radial	25.000	usec	6950.520	7276.520
RAL	casing od	4.500	inches	6950.520	7276.520
RAL	casing wt	11.600	lbm/ft	6950.520	7276.520
RAL	FB Start Far	291.900	usec	6950.520	7276.520
RAL	FB Start Near	175.391	usec	6950.520	7276.520
RAL	FB Start Radial	175.391	usec	6950.520	7276.520
RAL	FB Thresh Far	10.000	mv	6950.520	7276.520
RAL	FB Thresh Near	4.000	mv	6950.520	7276.520
RAL	FB Thresh Radial	4.000	mv	6950.520	7276.520
RAL	Fluid Travel Time	200.000	usec/ft	6950.520	7277.251

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

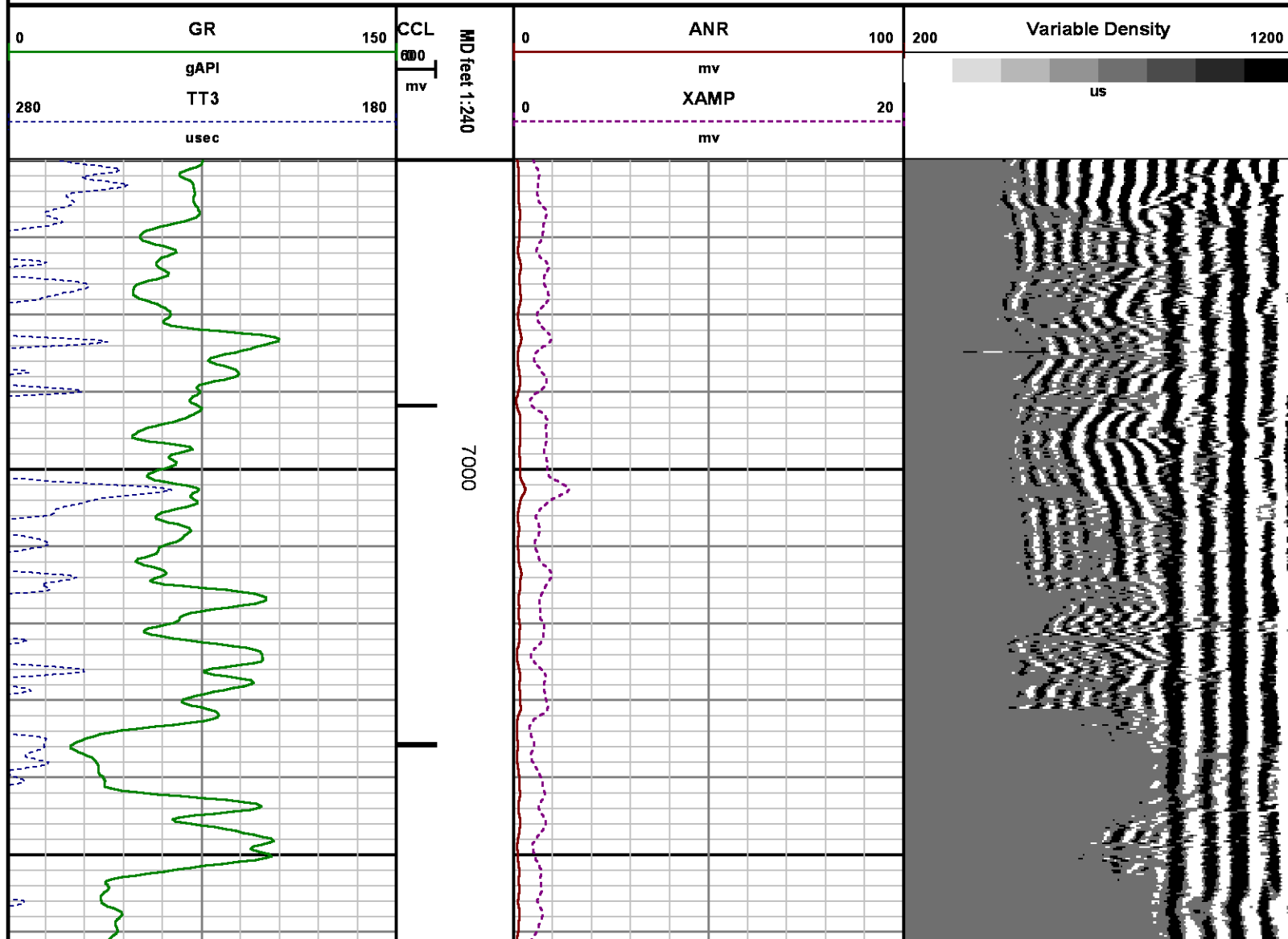
Well : CHEVRON GM 411-21

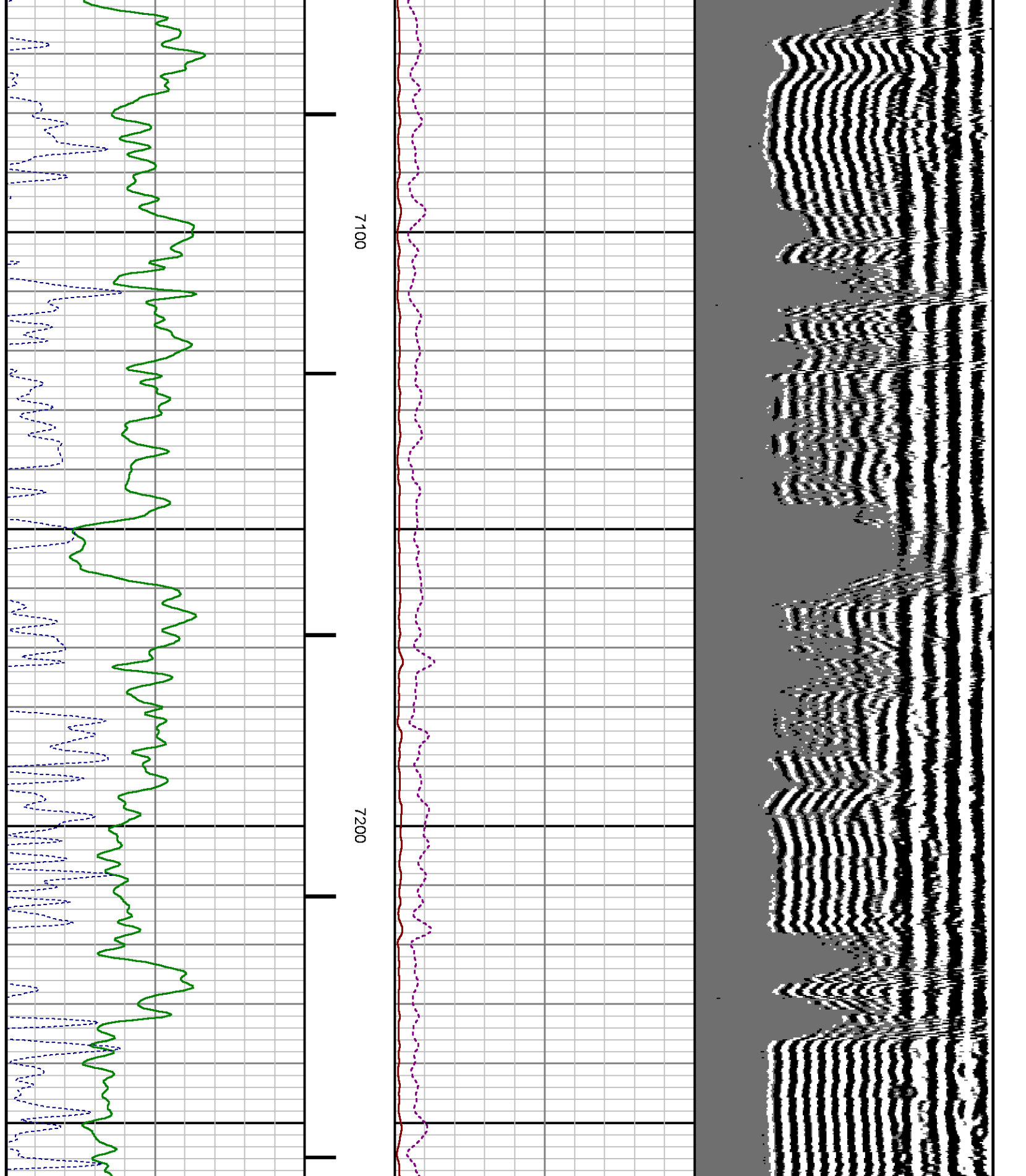
File Name : d:\welldata\wpx\gm 411-21\411cbl\repeat.xtf

Mode : PlotMgr 5.4.504

Interval : 6960.00 - 7260.00 feet UP

Created : 10/10/2014 1:15:09 AM





7100

7200

MD feet 1:240

0	GR	150
280	gAPI	180
	TT3	180
	usec	

CCL
600
mv

0	ANR	100
	mv	
0	XAMP	20
	mv	

200	Variable Density	1200
	us	

CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP\10609_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Oct 09 21:42:22 2014 TOOL SERIES: 1426XA ASSET: 106 SEQ: 09

Tool Delay [usec] Tank OD in Tank Wt lbm/ft Tank ID in

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	217	216	30	166	25	-0.399	100.00	0.54
3 Ft. Receiver	218	216	30	166	16	-0.528	100.00	0.54
5 Ft. Receiver	326	325	30	255	25	0.489	150.00	0.59
Radial #1	218	216	30	166	12	0.327	100.00	0.54
Radial #2	218	216	30	166	12	0.267	100.00	0.55
Radial #3	218	216	30	166	12	-0.204	100.00	0.54
Radial #4	218	216	30	166	12	0.160	100.00	0.55
Radial #5	217	216	30	166	12	-0.392	100.00	0.54
Radial #6	216	216	30	166	12	0.488	100.00	0.54
Radial #7	216	216	30	166	12	-0.006	100.00	0.53
Radial #8	217	216	30	166	12	-0.360	100.00	0.53

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\1069_fid.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Fri Oct 10 00:17:06 2014 TOOL SERIES: 1426XA ASSET: 106 SEQ: 9

Tool Delay [usec] Casing OD in Casing Wt lbm/ft Casing ID in

RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	166	25	-0.077	0.000	0.67	100.000
3 Ft. Receiver	200	30	-1.656			
5 Ft. Receiver	317	30	-1.001			
Radial #1	200	30	-3.275			

Radial #2	200	30	-2.370
Radial #3	200	30	-1.875
Radial #4	200	30	-2.330
Radial #5	200	30	-1.892
Radial #6	200	30	-1.715
Radial #7	200	30	-1.428
Radial #8	200	30	-1.815

GAMMA RAY

Calibration File: C:\case\calver\GR\503O8.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Wed Oct 08 09:03:02 2014		TOOL SERIES: 2459XA		ASSET: 503		SEQ: 08	
Calibrator #	Background	Calibrator On	Multiplicative	Background	Calibrator On	Differential	
	[cps]	[cps]		[api]	[api]	[api]	
S2K WA612	110.22	393.29	0.654	72.04	257.04	185.00	

Verification File: C:\case\calver\GR\503O8.VP

PRIMARY LOG VERIFICATION

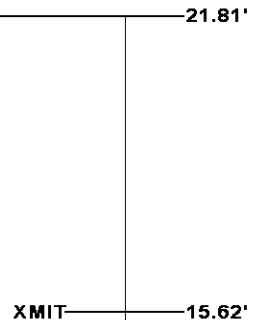
DATE/TIME PERFORMED: Wed Oct 08 09:04:12 2014		TOOL SERIES: 2459XA		ASSET: 503		SEQ: 08	
Calibrator #	Background	Calibrator On	Multiplicative	Background	Calibrator On	Differential	
	[cps]	[cps]		[api]	[api]	[api]	
S2K WA612	101.07	384.62	0.654	66.05	251.37	185.32	

TOOL DIAGRAM

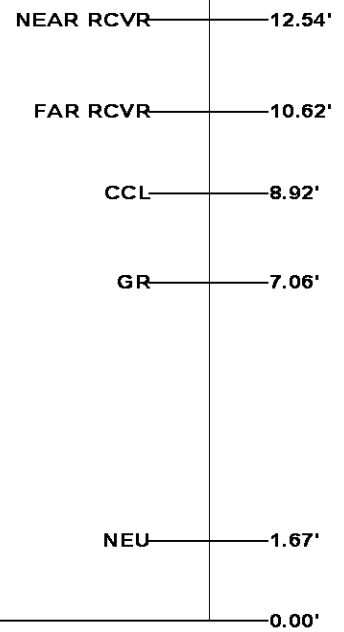
OTA SHORT CABLE HEAD

PROBE 2 3/4 DUAL RECEIVER RADII



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



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



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

 Baker Atlas 	Company WPX ENERGY Well CHEVRON GM 411-21 Field GRAND VALLEY County GARFIELD State CO	File No: CH091000 API No: 05045223580000
	Location SHL: 2027' FNL & 702' FEL (20 6S 96W) BHL: 1033' FNL & 996' FWL (21 6S 96W) SEC 21 TWP 6S RGE 96W	Elevations KB 5596 ft DF GL 5575 ft