



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: CH082312	Company Well	WPX ENERGY FEDERAL PA 542-21
API No: 05045220280000	Field County	PARACHUTE GARFIELD
	State CO	
21 GS 95W PA 22-21 PAD NABORS 573	Location SHL: 2810' FNL & 1456' FWL BHL: 2802' FNL & 258' FEL SEC 21 TWP 6S RGE 95W	Other Services RPM
Permanent Datum Log Measured From Drill Measured From	GL Elevation 6050 ft KB 26 ft Above P. D. KB	Elevations KB 6056 ft DF GL 6030 ft

Date	12/FEB/14	
Run	ONE	
Service Order	US625283	
Depth Driller	9737 ft	
Depth Logger	9716 ft	
Bottom Logged Interval	9706 ft	
Top Logged Interval	26 ft	
Time Started	8:00	
Time Finished	12:00	
Operator Rig Time	4 HOURS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	76 ft	
Logged Cement Top	NA	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	NA	
Nominal Logging Speed	65 fpm	
Maximum Recorded Temperature	246 degF	
Reference Log	NA	
Reference Log Date	NA	
Equipment No.	4271	GRAND JCT.
Recorded By	NEWELL	
Witnessed By	ORAN JACOBS	

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

Borehole Record		
Bit Size	From	To
13.5 In	0 ft	1101 ft
8.75 In	1101 ft	9751 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 In			0 ft	1101 ft
4.5 In	11.6 lbm/ft	1-80	0 ft	9751 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 12 feet.
Logged with zero PSI at wellhead.
THERE IS AN INVALID VDL SPIKE FROM 7405'- 7408'

BHT = 246 °F
SJ = 6084'-6108'

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	CBL	1426XA	10218496	CENTRALIZED
1	1	GR/CCL	2459XA	10124121	CENTRALIZED

PRIMARY PRESENTATION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	36.155	9718.000
RAL	Amp Gate Start Near	195.000	usec	36.155	9718.000
RAL	Amp Gate Start Radial	195.000	usec	36.155	9718.000
RAL	Amp Gate Width Far	25.000	usec	36.155	9718.000
RAL	Amp Gate Width Near	25.000	usec	36.155	9718.000
RAL	Amp Gate Width Radial	25.000	usec	36.155	9718.000
RAL	casing od	4.500	inches	36.155	9718.000
RAL	casing wt	11.600	lbm/ft	36.155	9718.000
RAL	FB Start Far	291.900	usec	36.155	9718.000
RAL	FB Start Near	175.391	usec	36.155	9718.000
RAL	FB Start Radial	175.391	usec	36.155	9718.000
RAL	FB Thresh Far	10.000	mv	36.155	9718.000
RAL	FB Thresh Near	4.000	mv	36.155	9718.000
RAL	FB Thresh Radial	4.000	mv	36.155	9718.000
RAL	Fluid Travel Time	200.000	usec/ft	36.155	9717.905

DEPTH OFFSETS
(for Acquired Curves)

SERIES DEPTH OFFSET ACQUIRED CURVES

SERIES

DEPTH OFFSET

ACQUIRED CURVES

1426XA

-16.750

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

-15.750

AFAR

SIG

TT5

2459XA

-11.340

CCL

2459XA

-9.490

GR

2459XA

-4.090

NEU

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

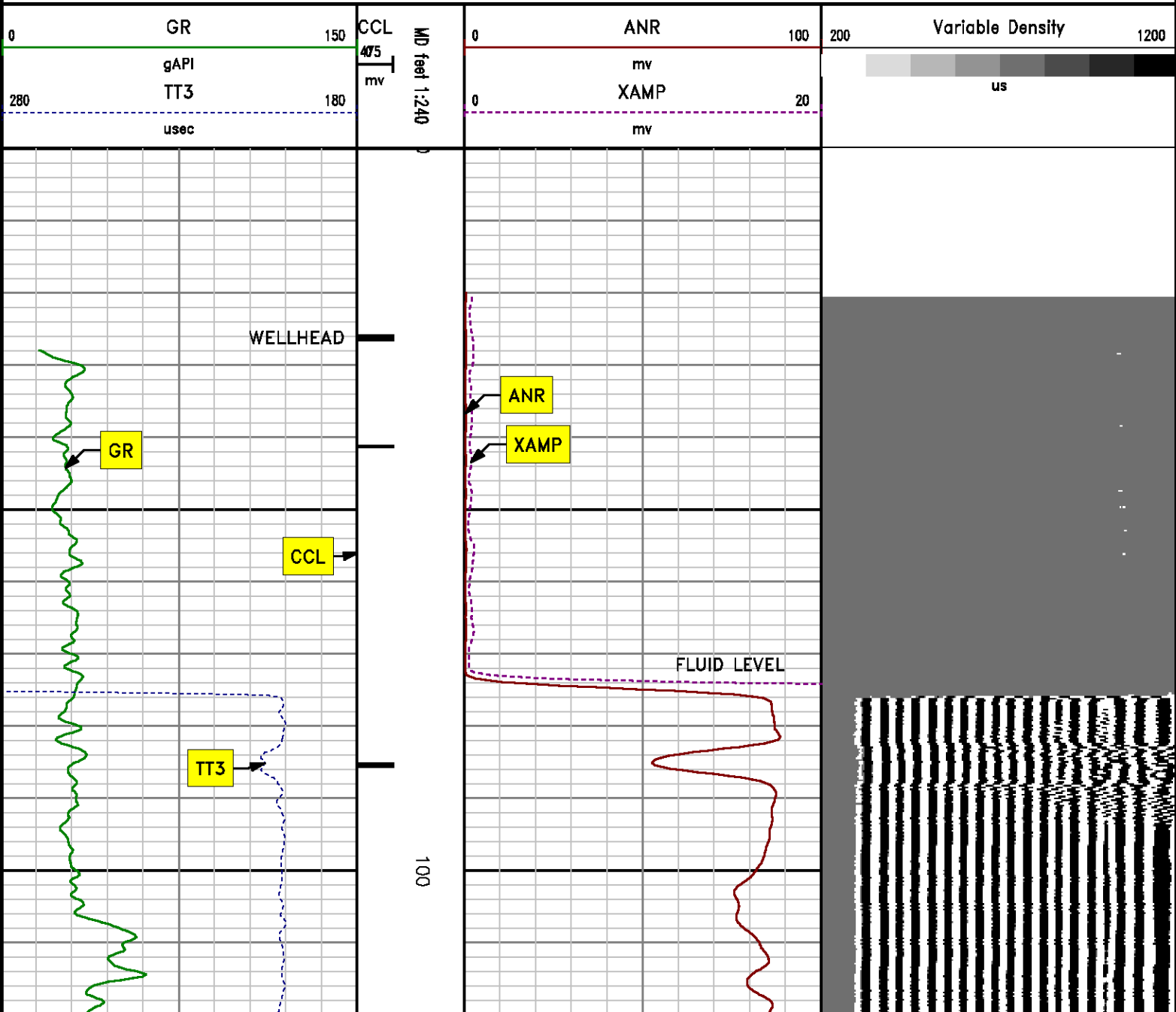
Well : FEDERAL PA 542-21

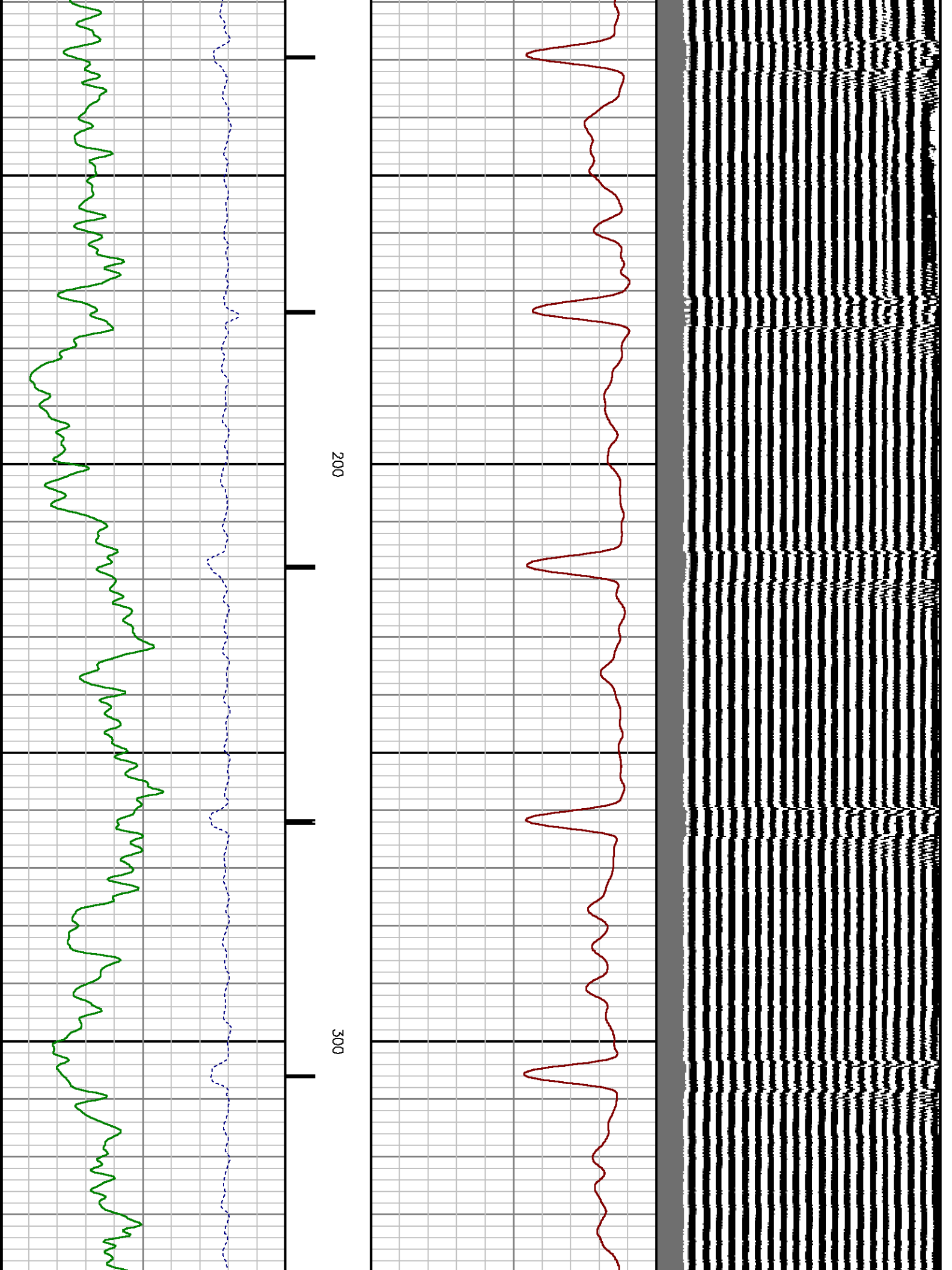
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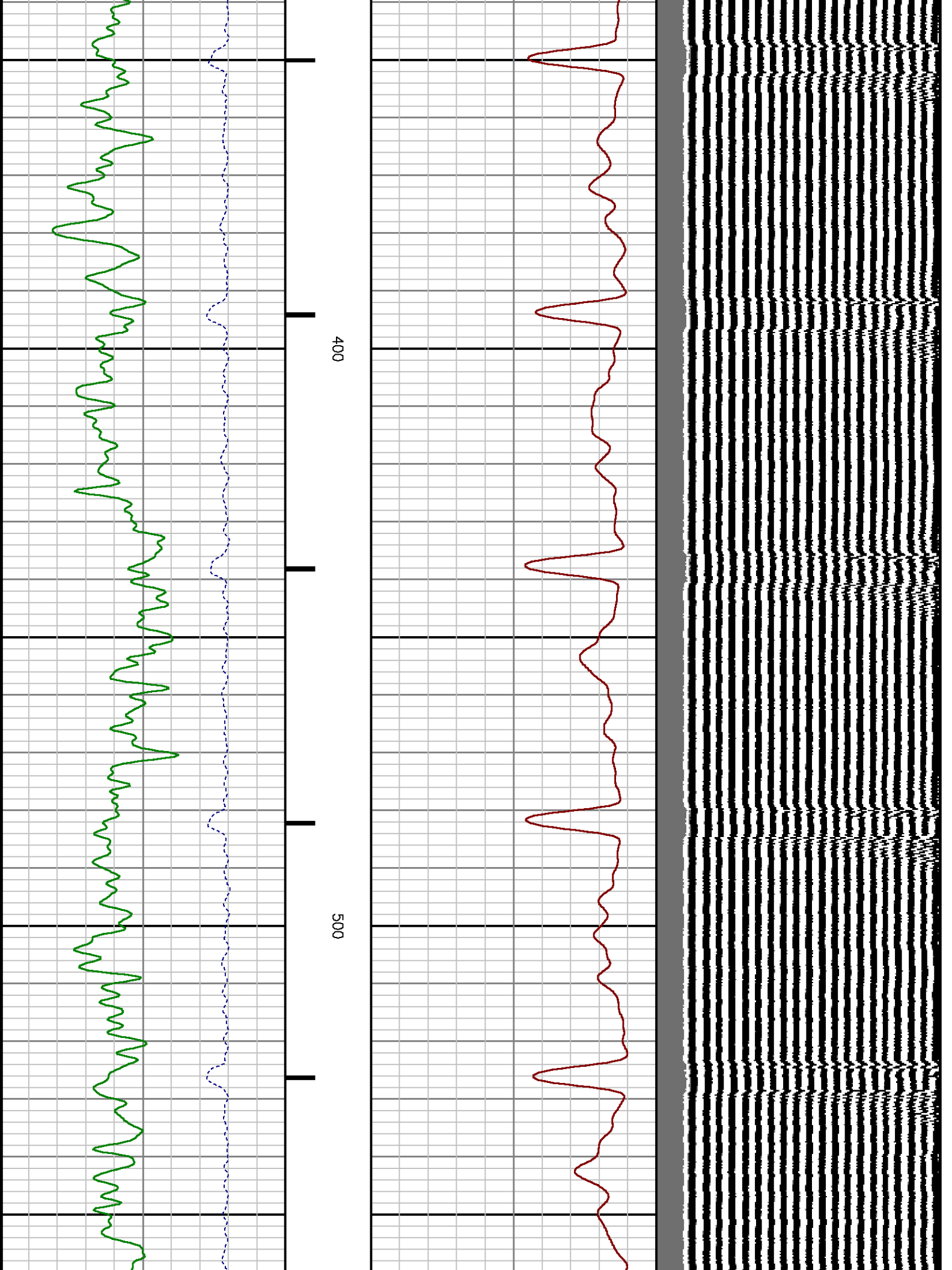
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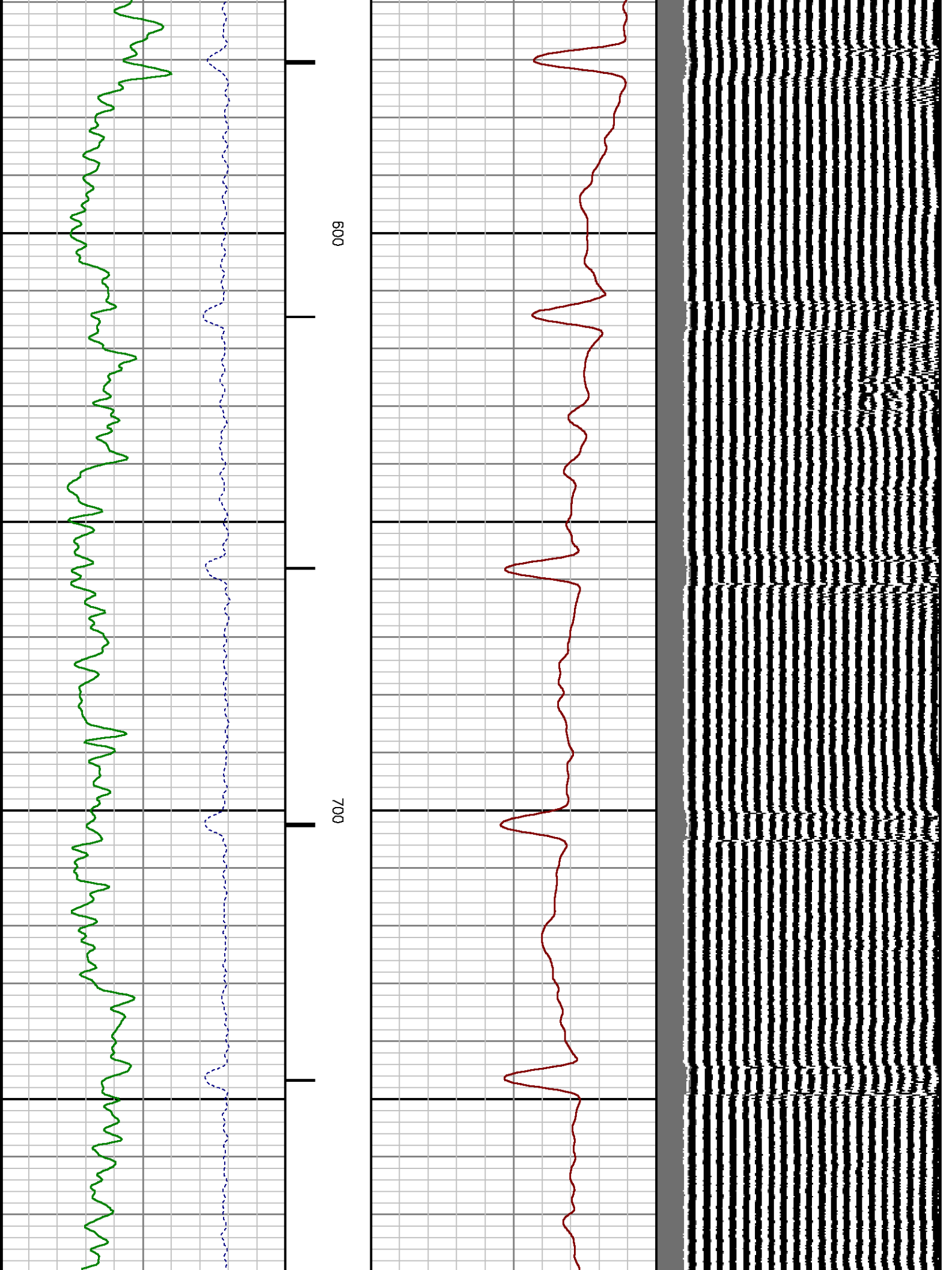
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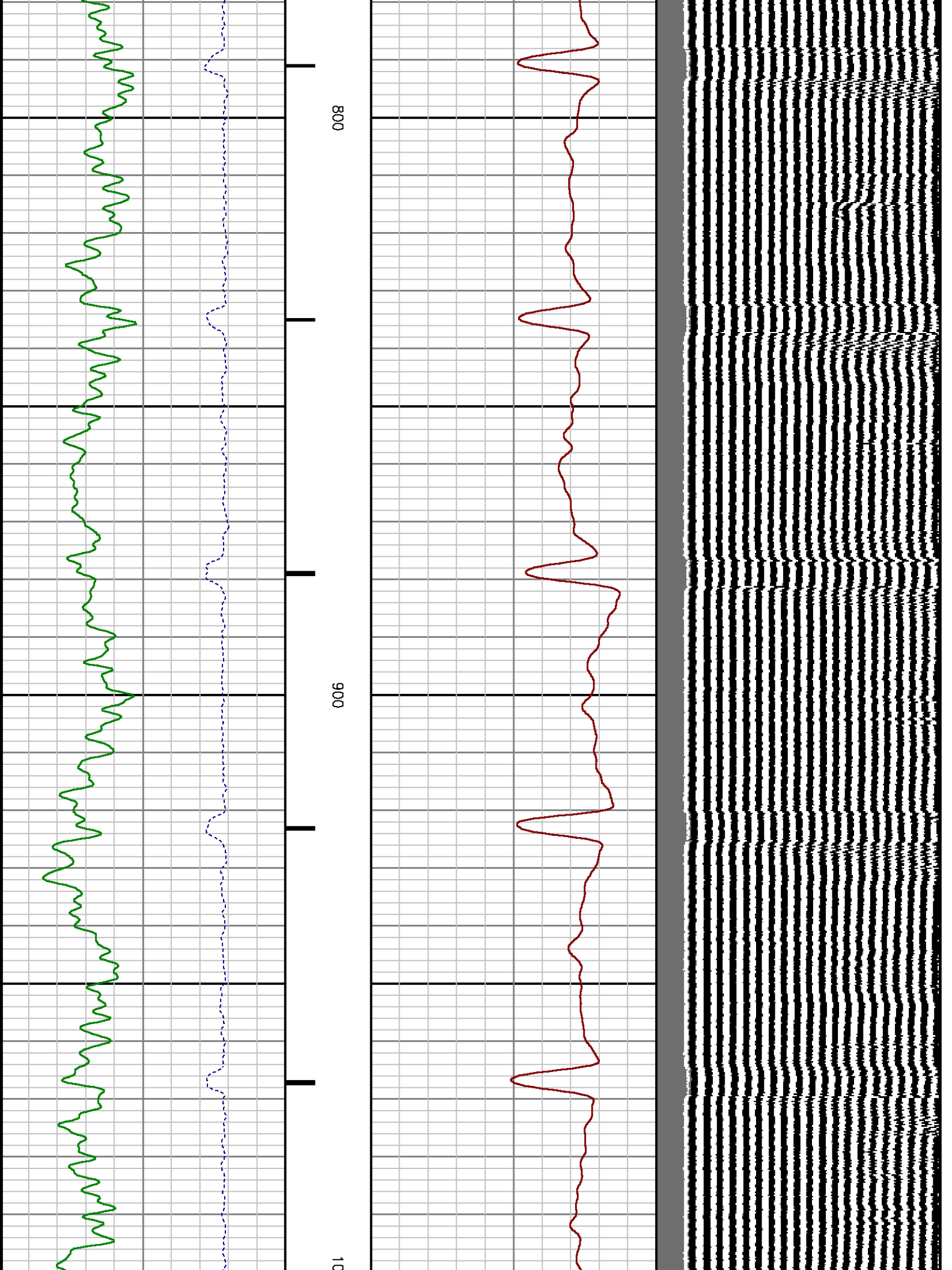
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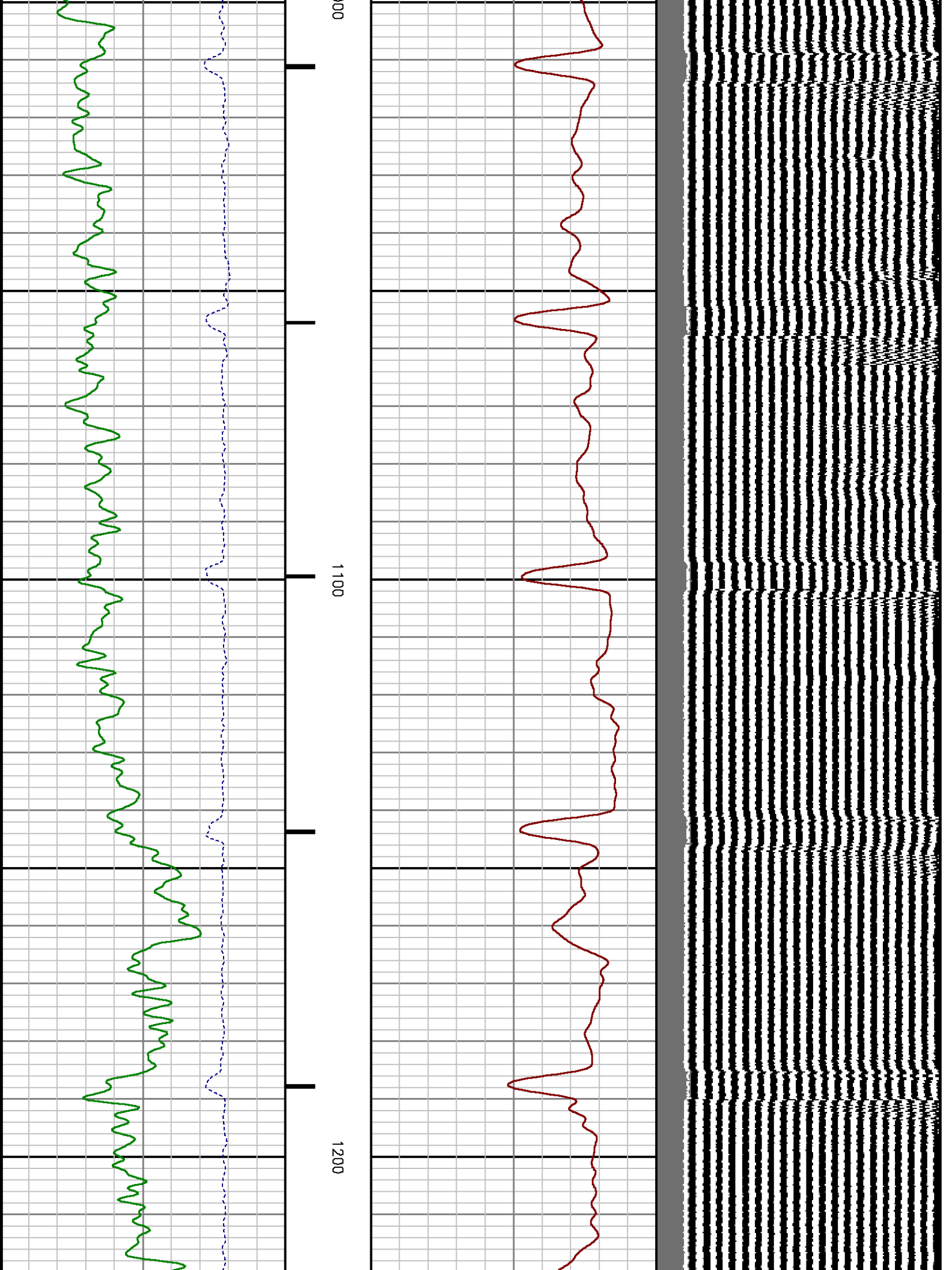


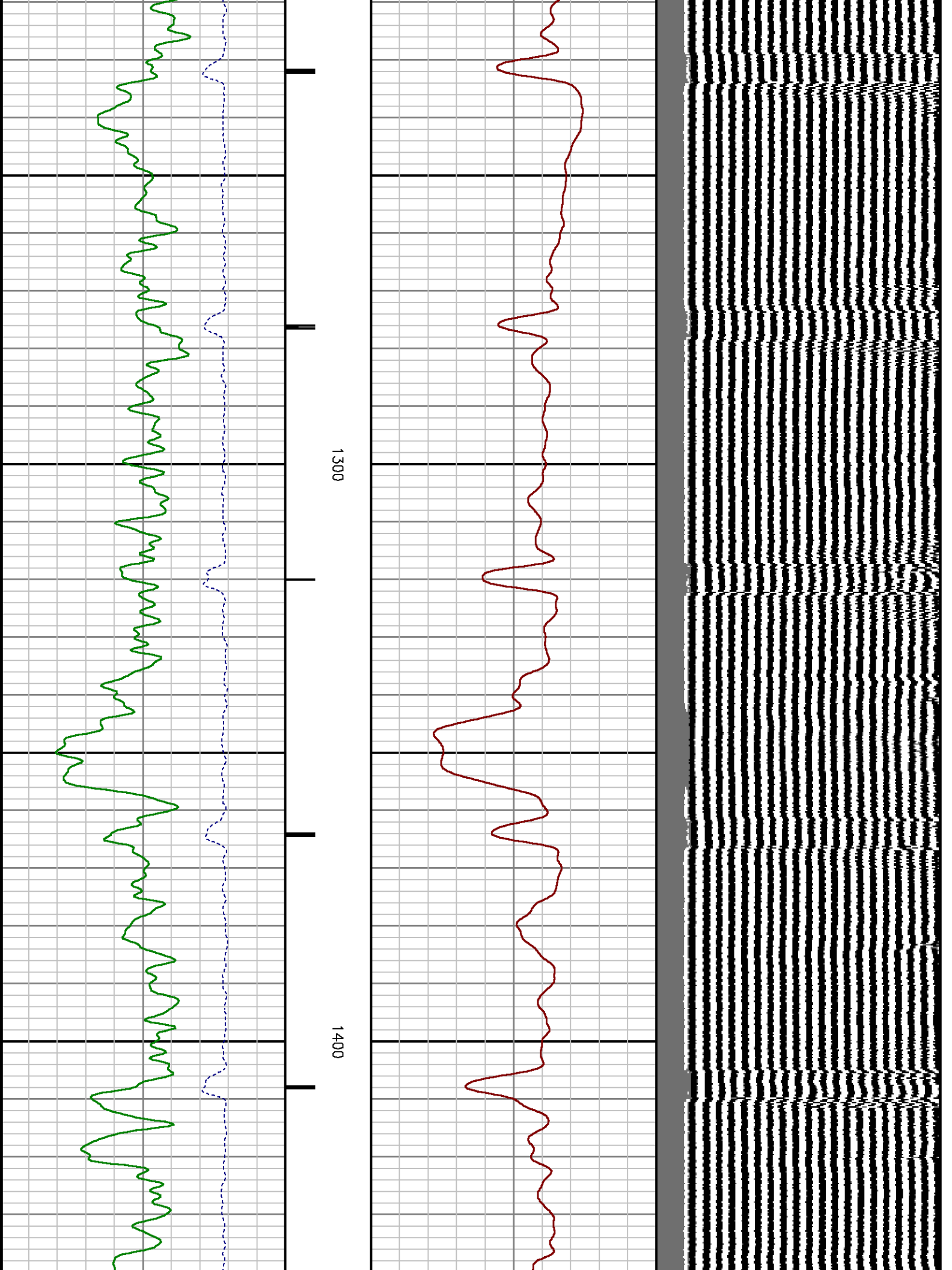


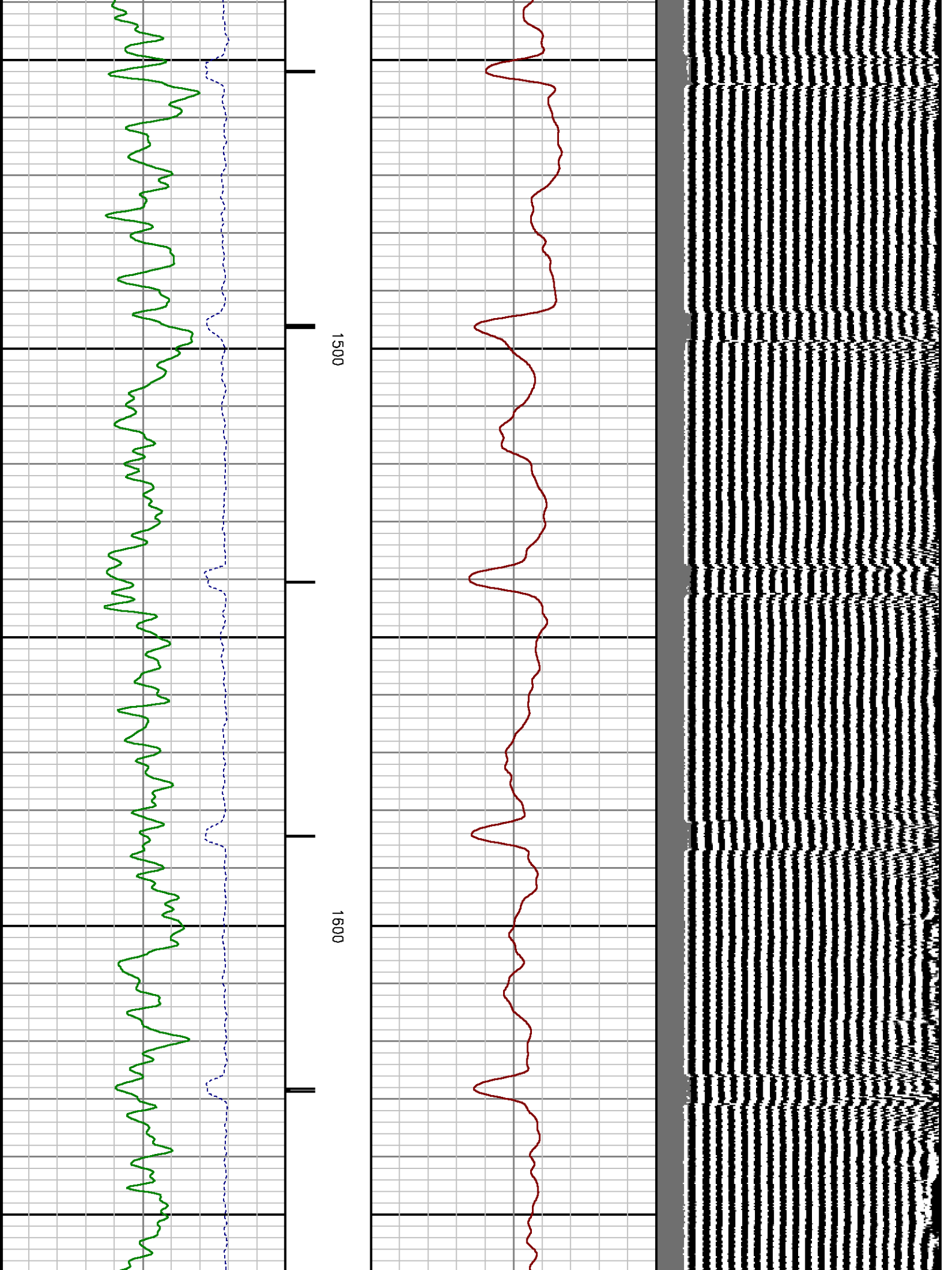


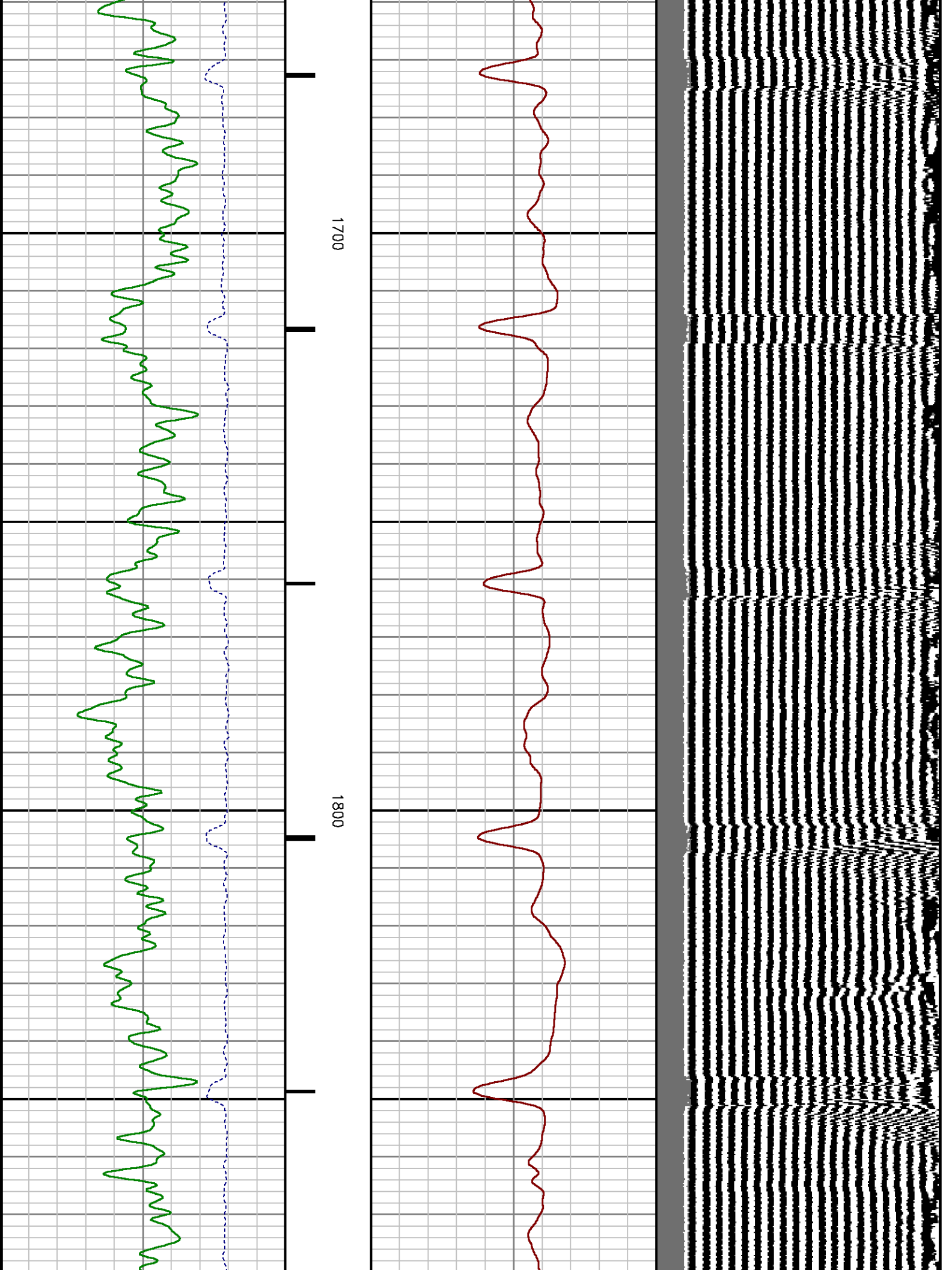


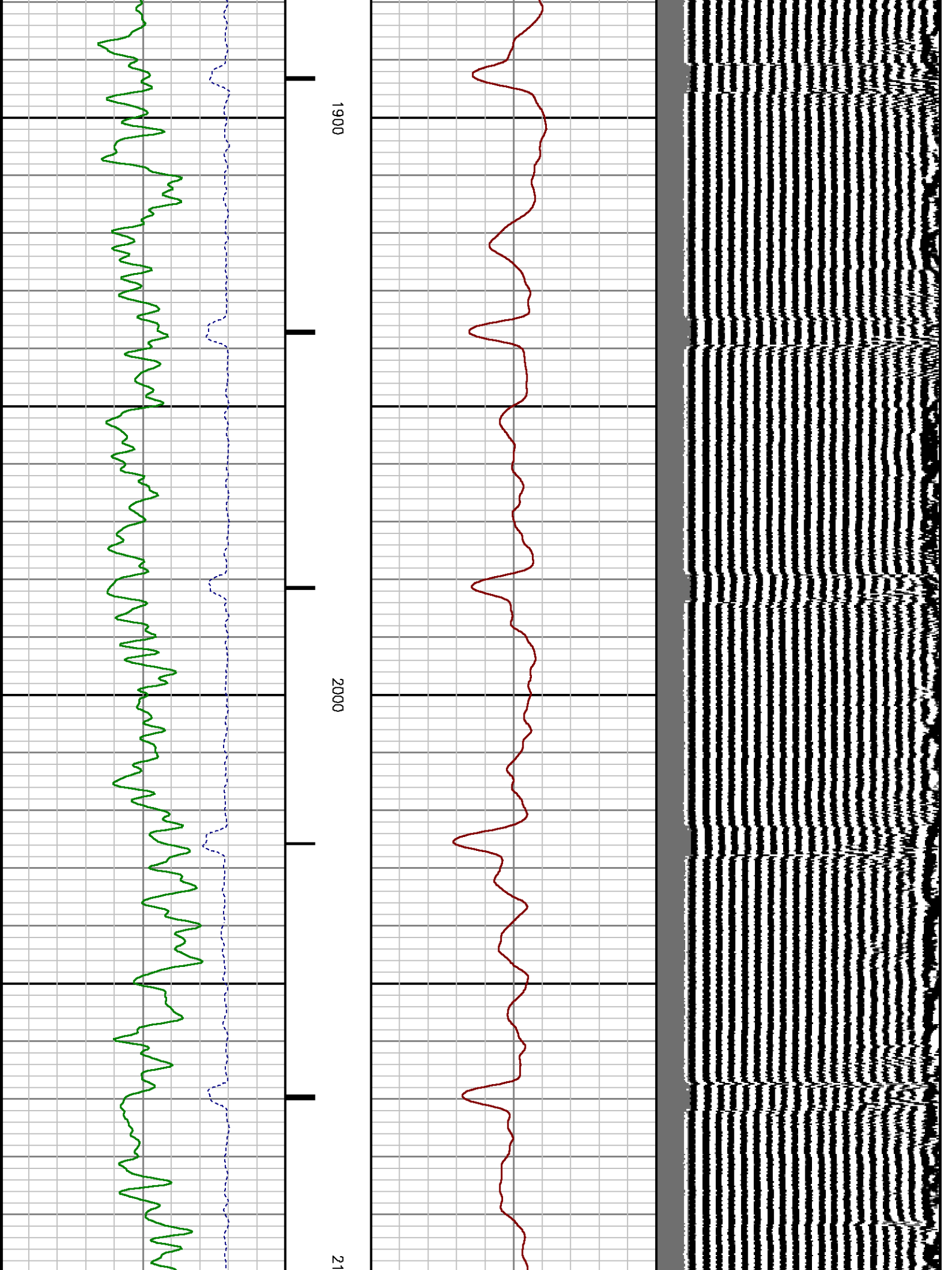


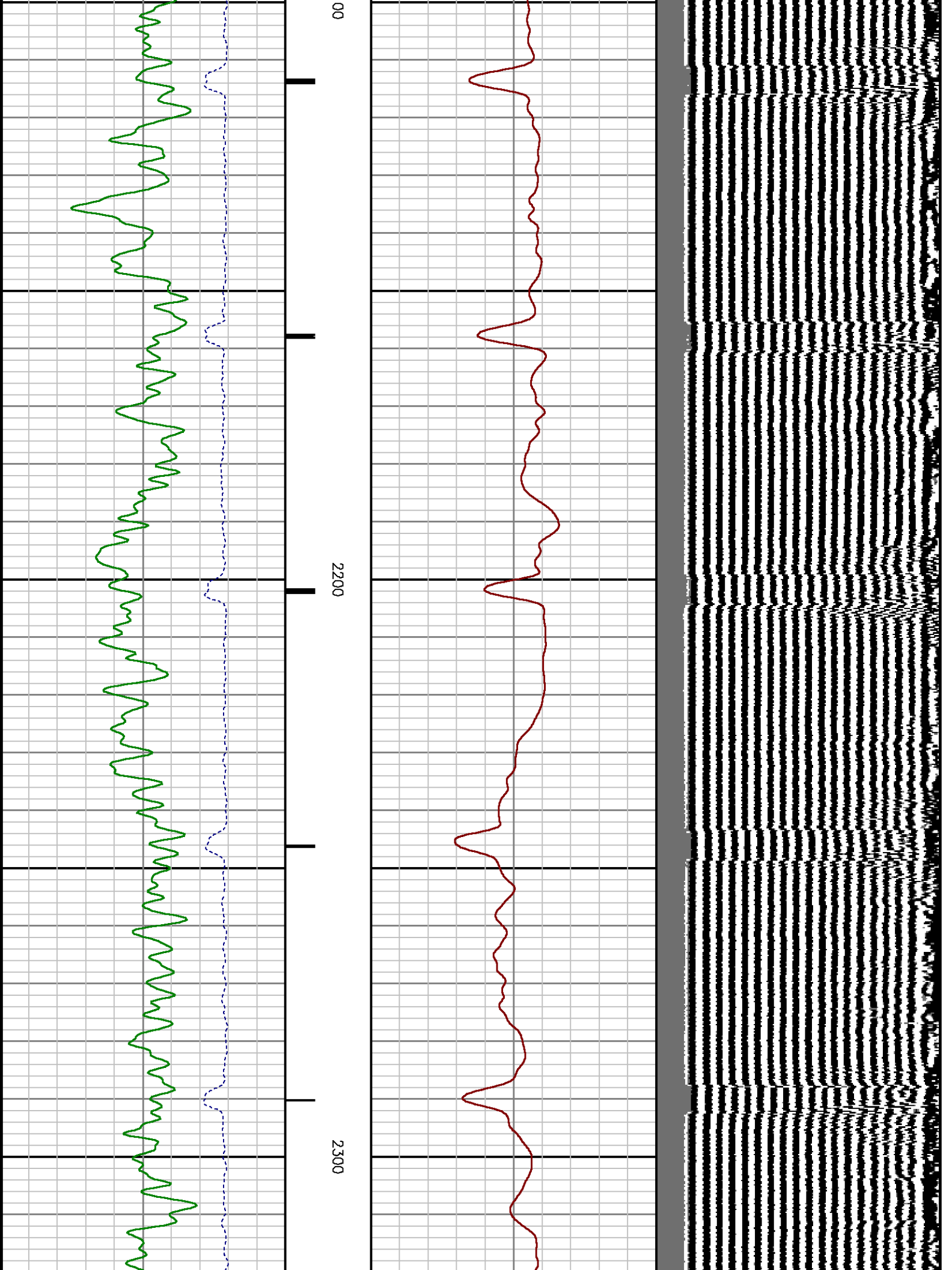


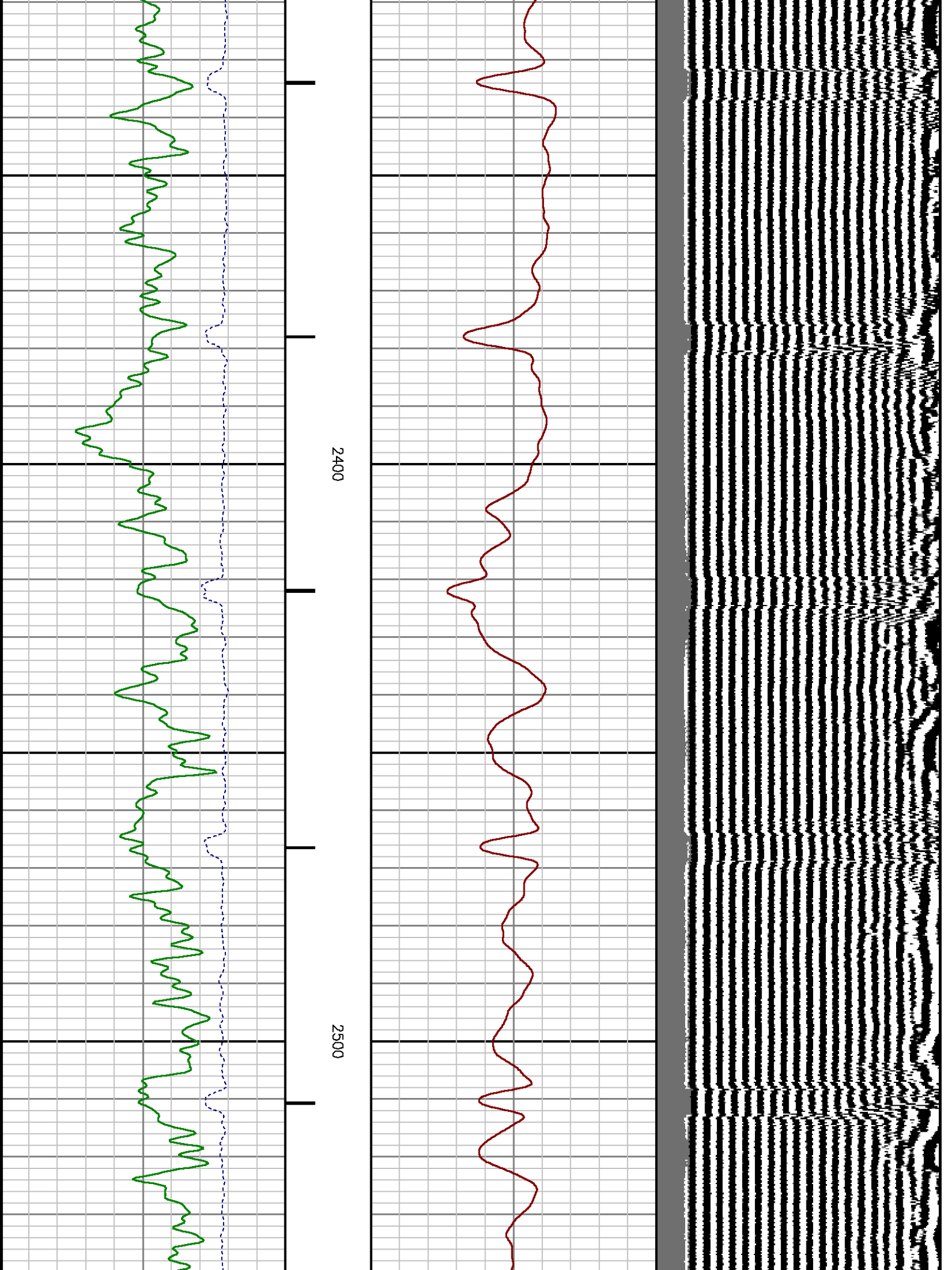


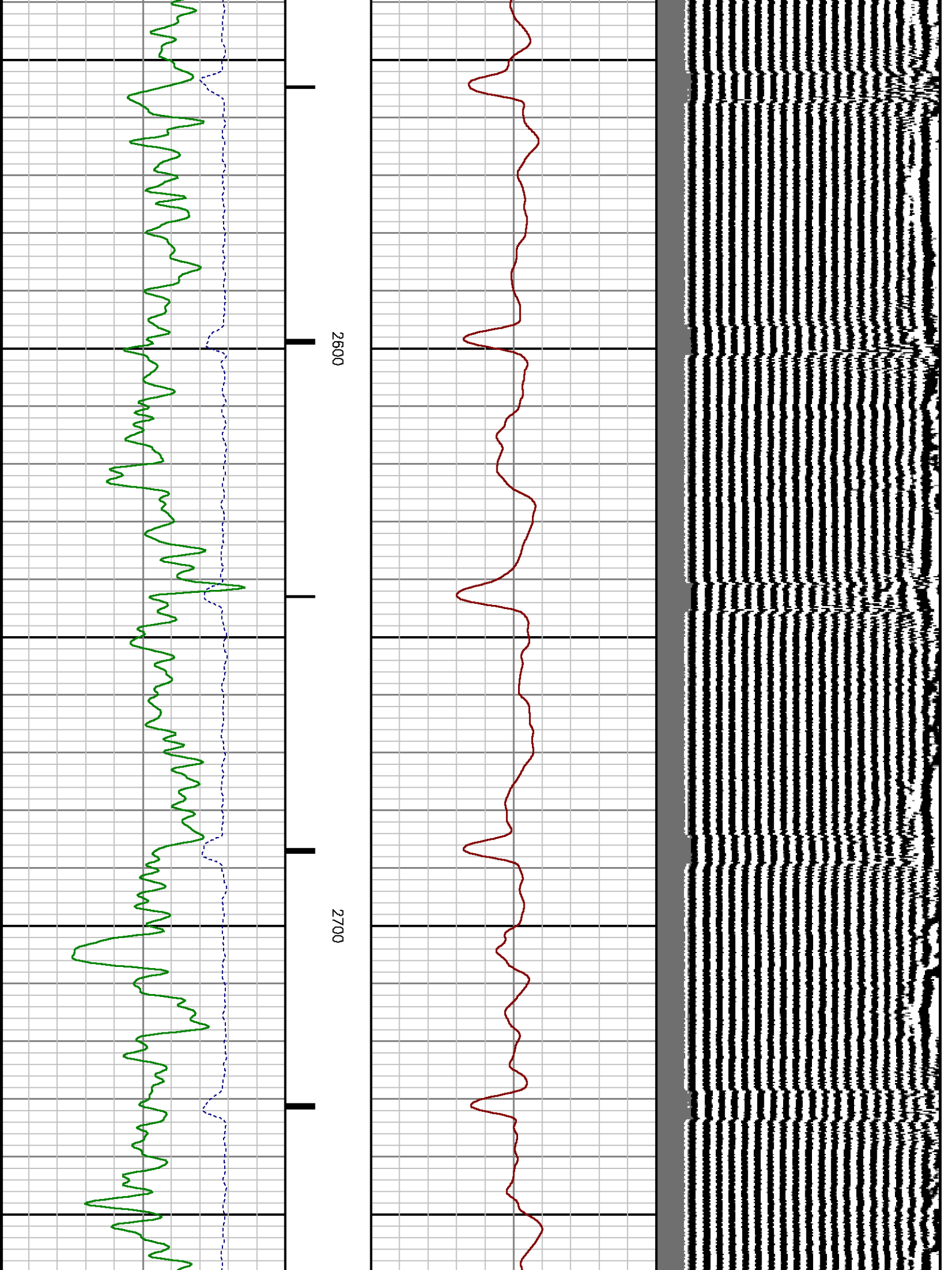


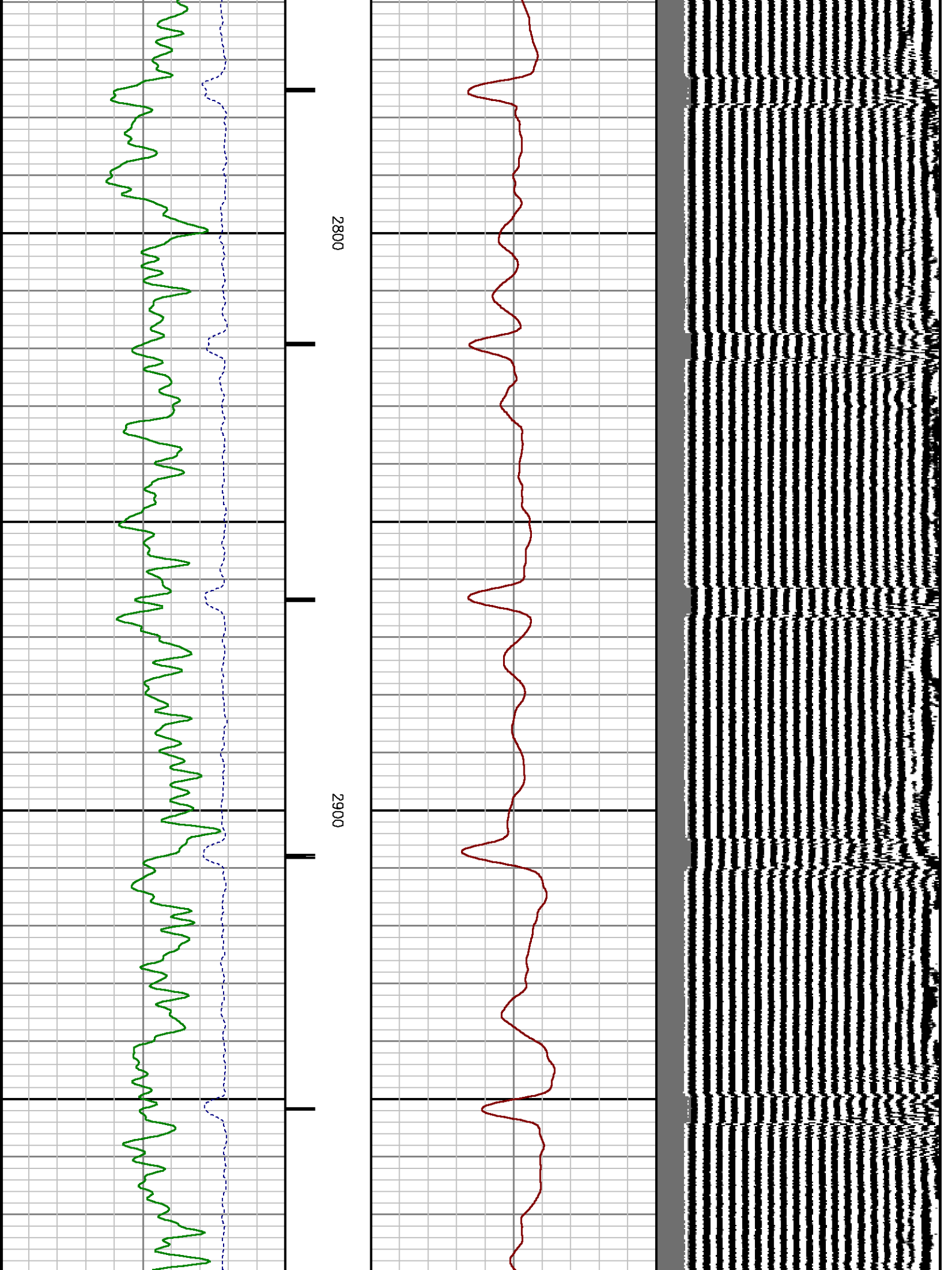


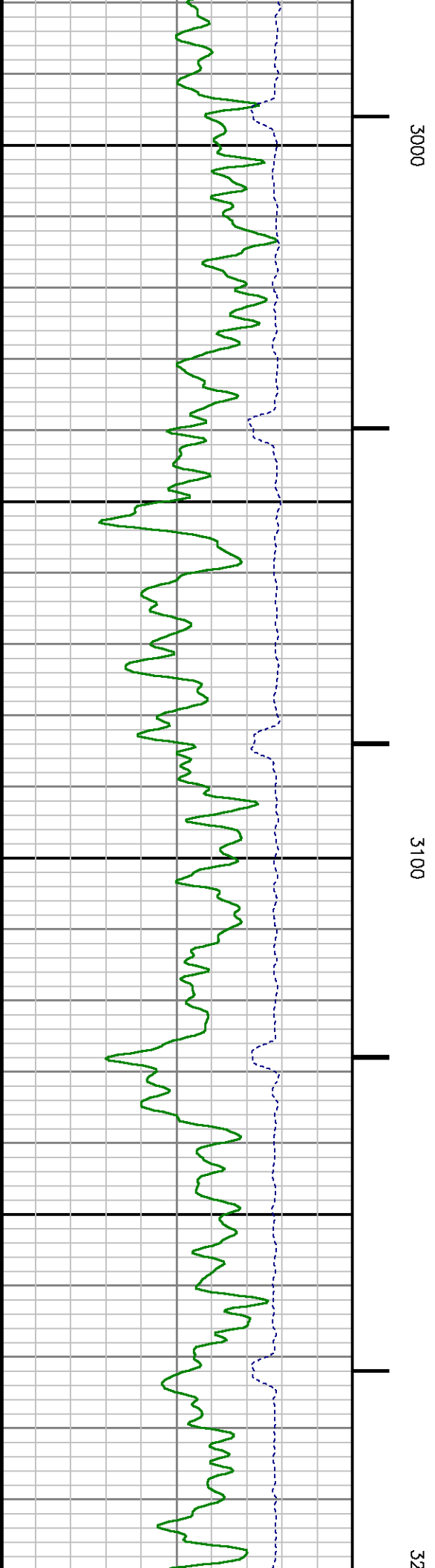
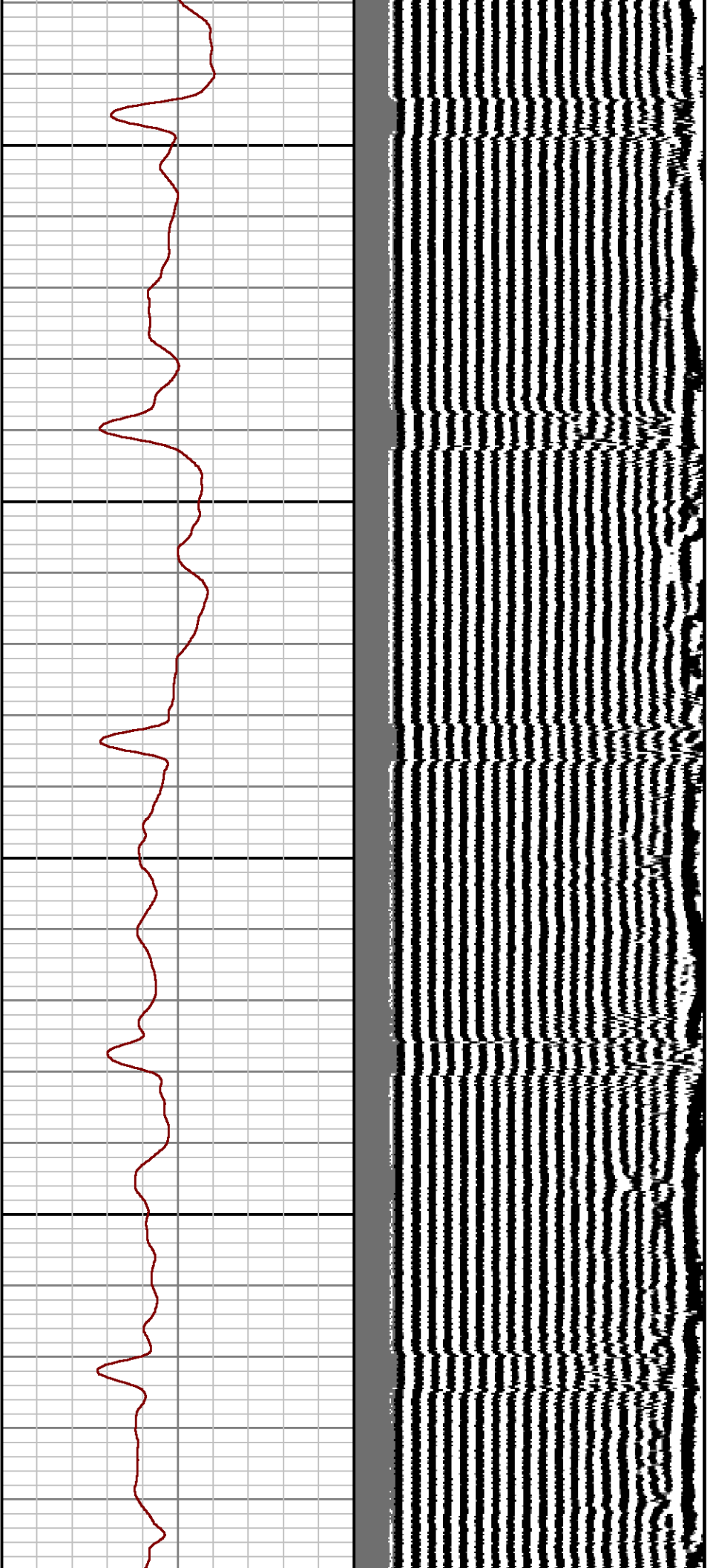


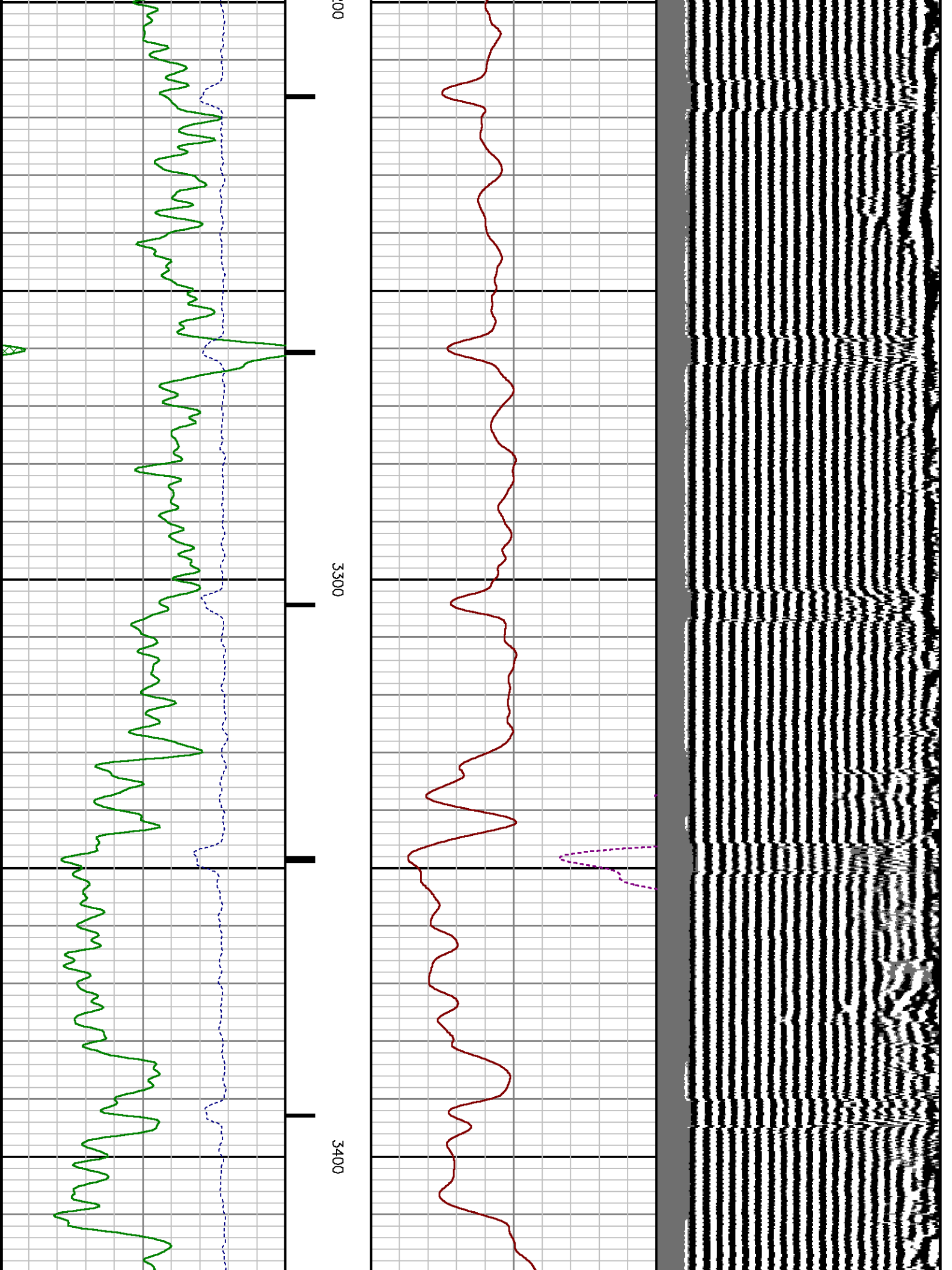


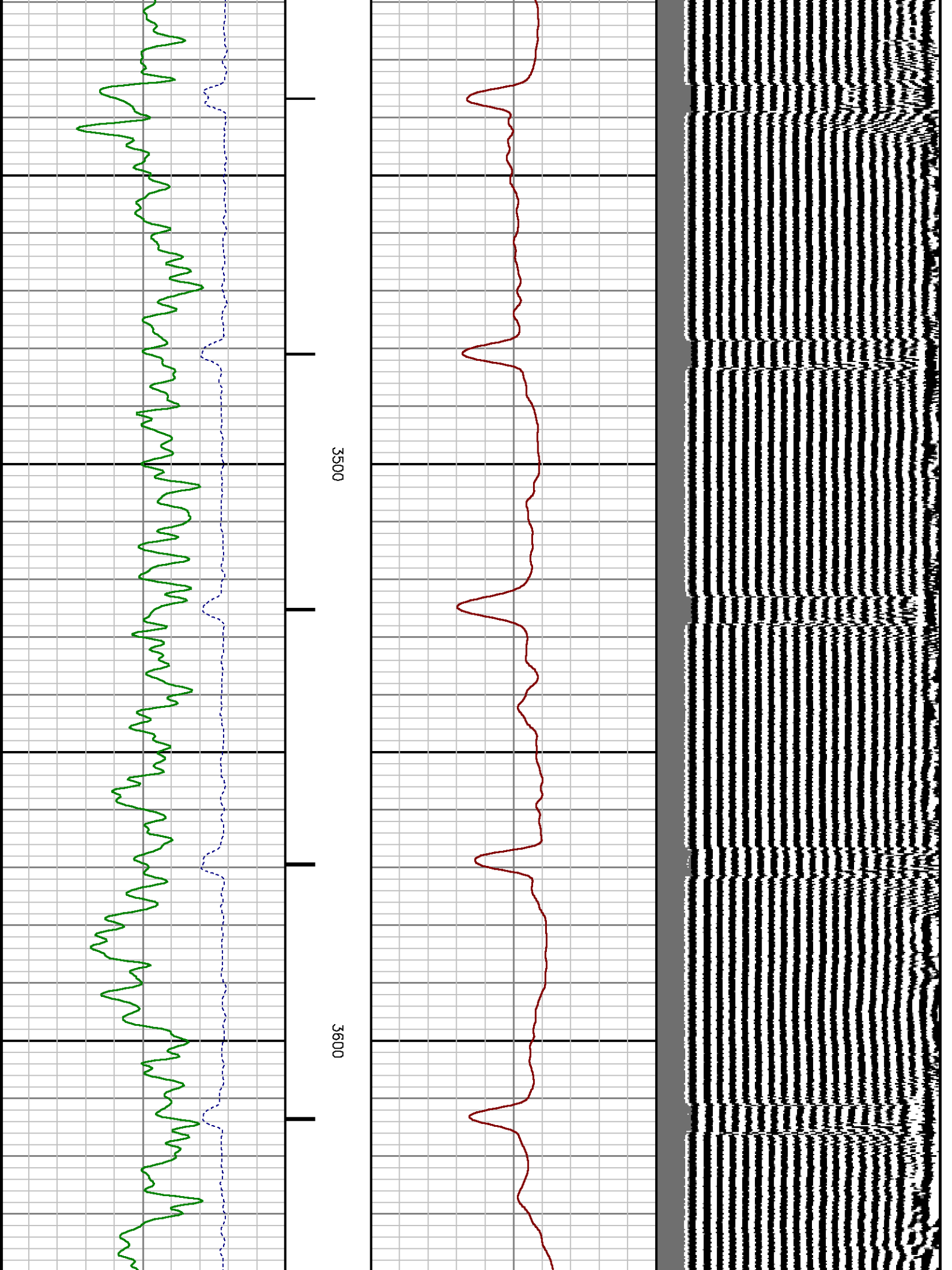


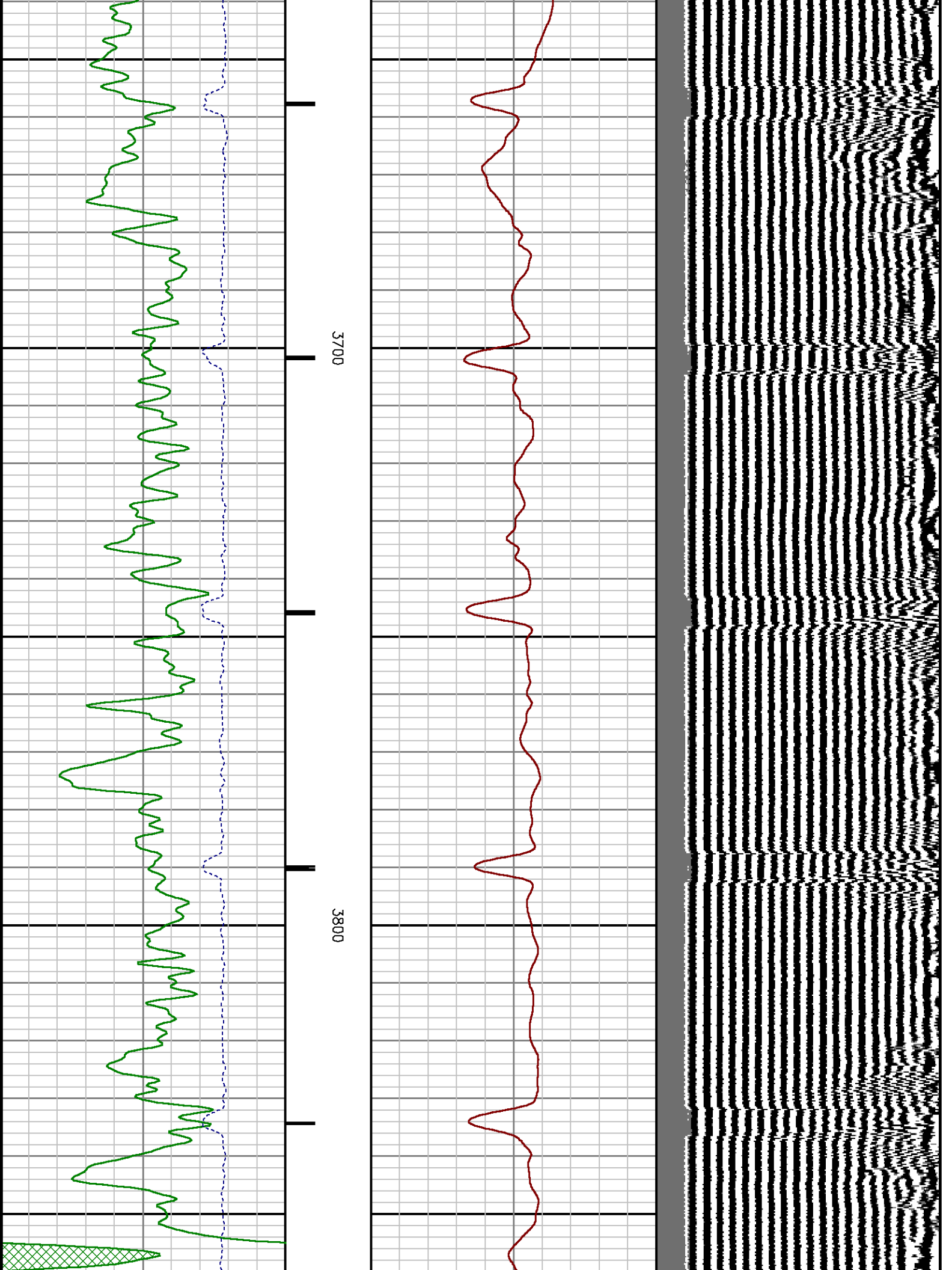


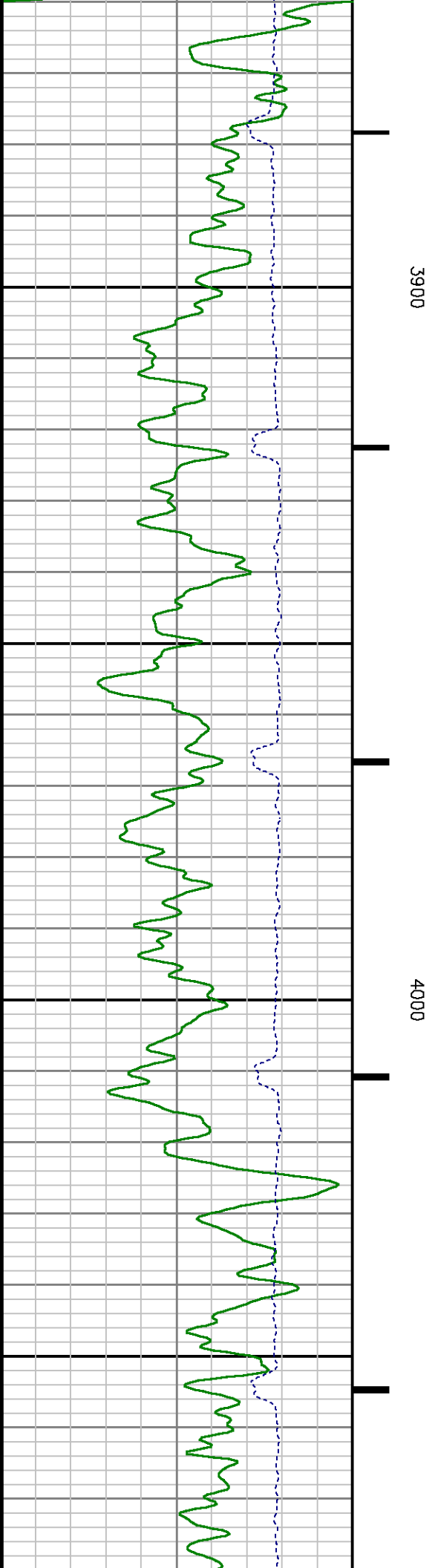
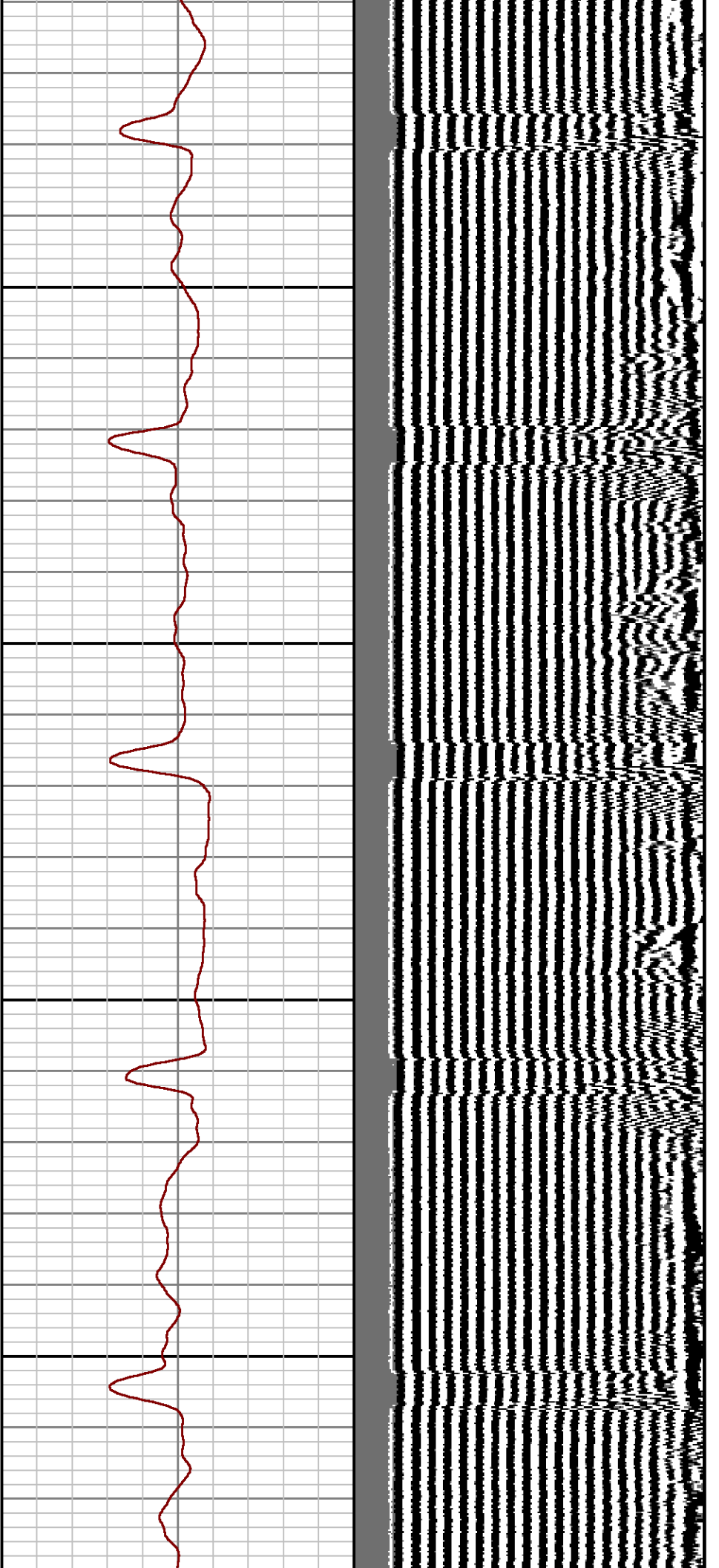


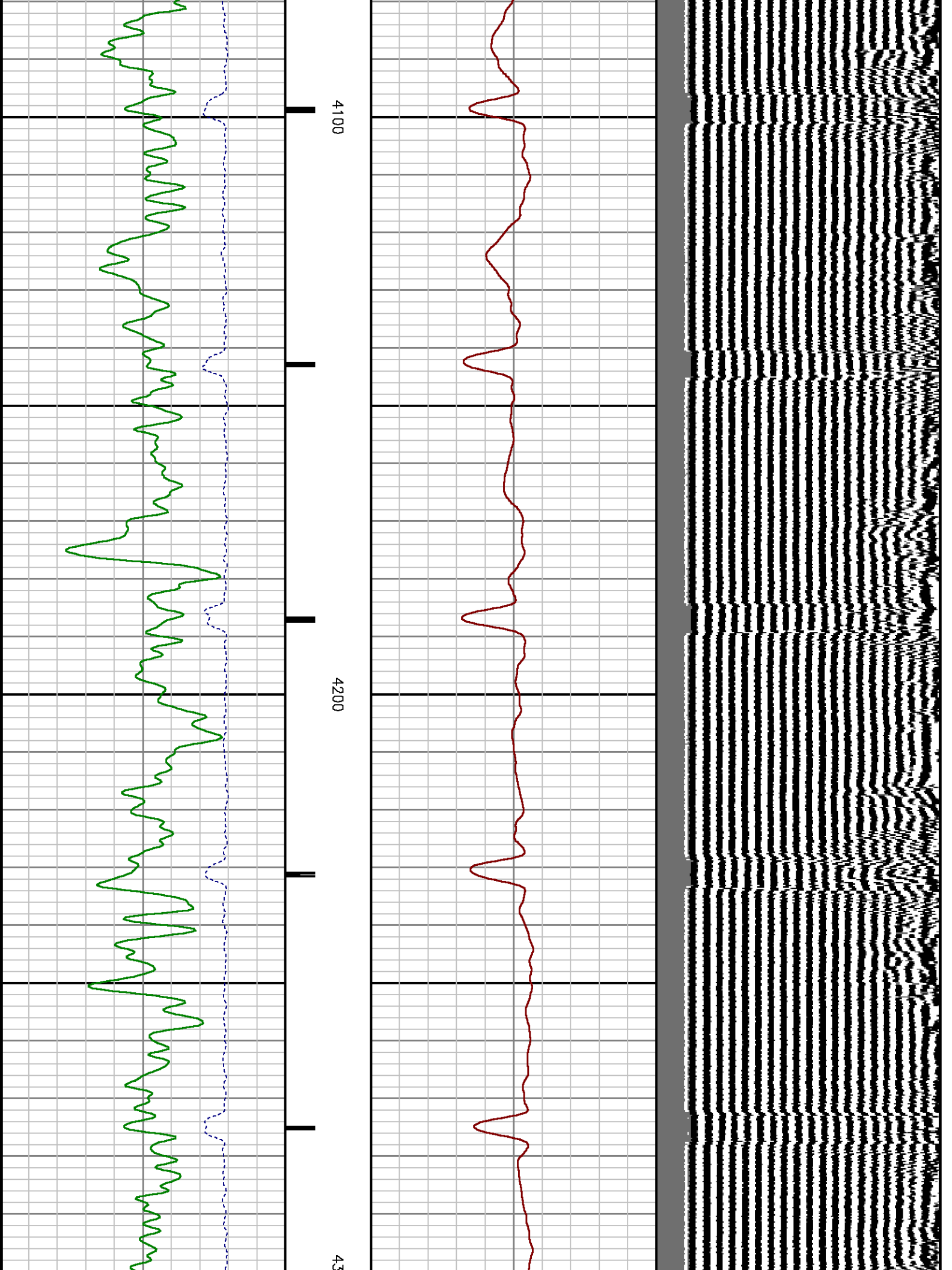


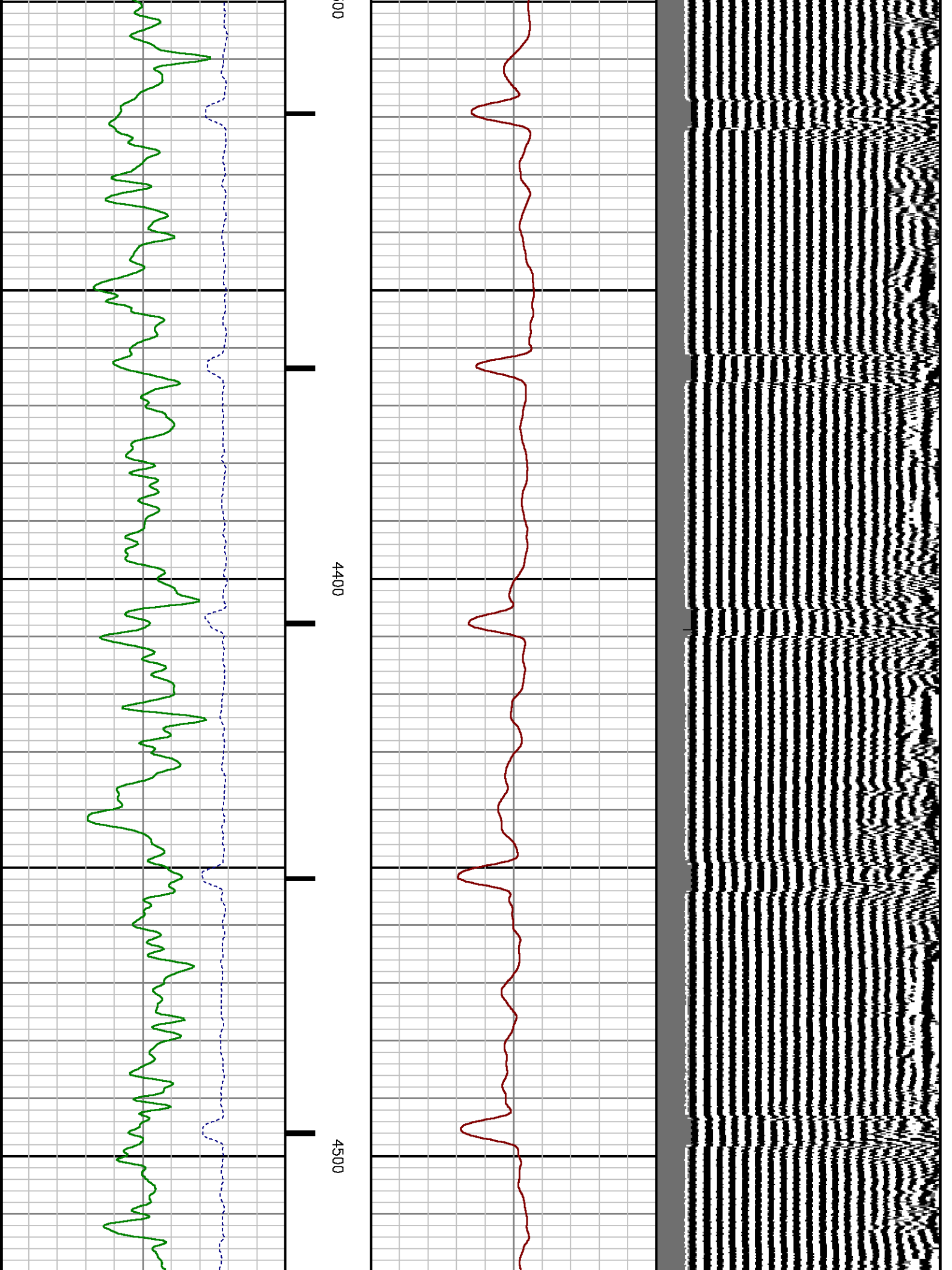


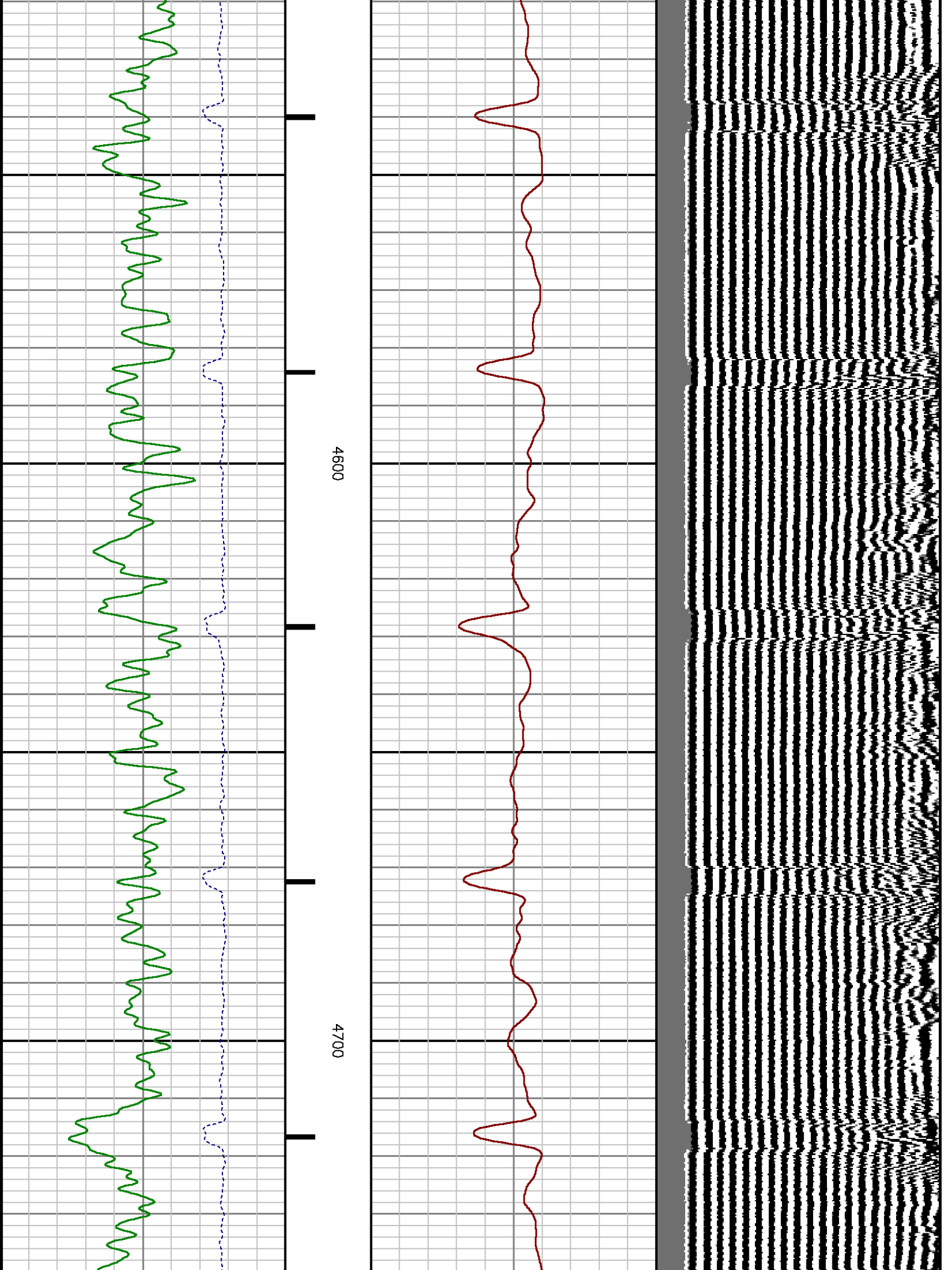


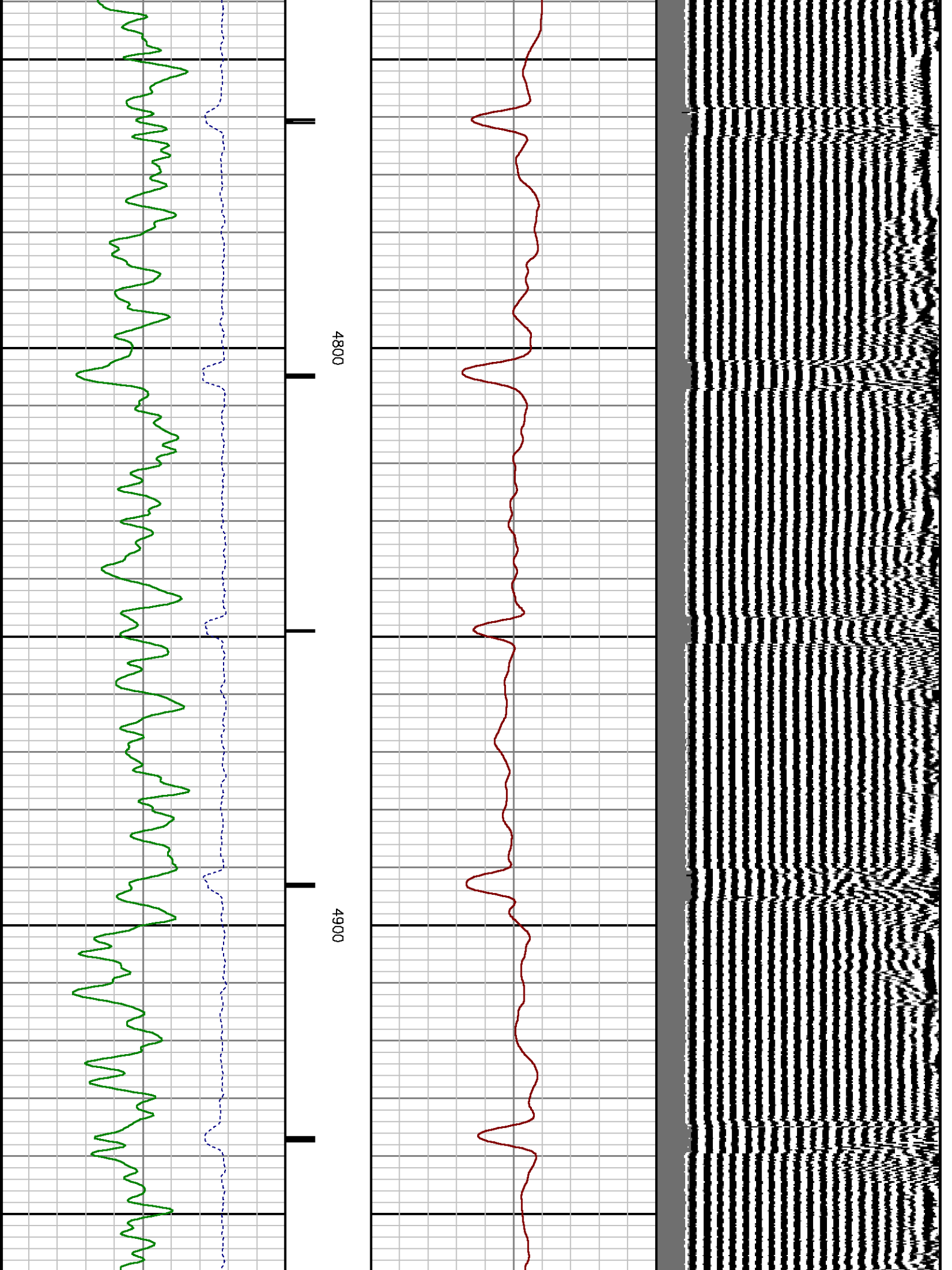


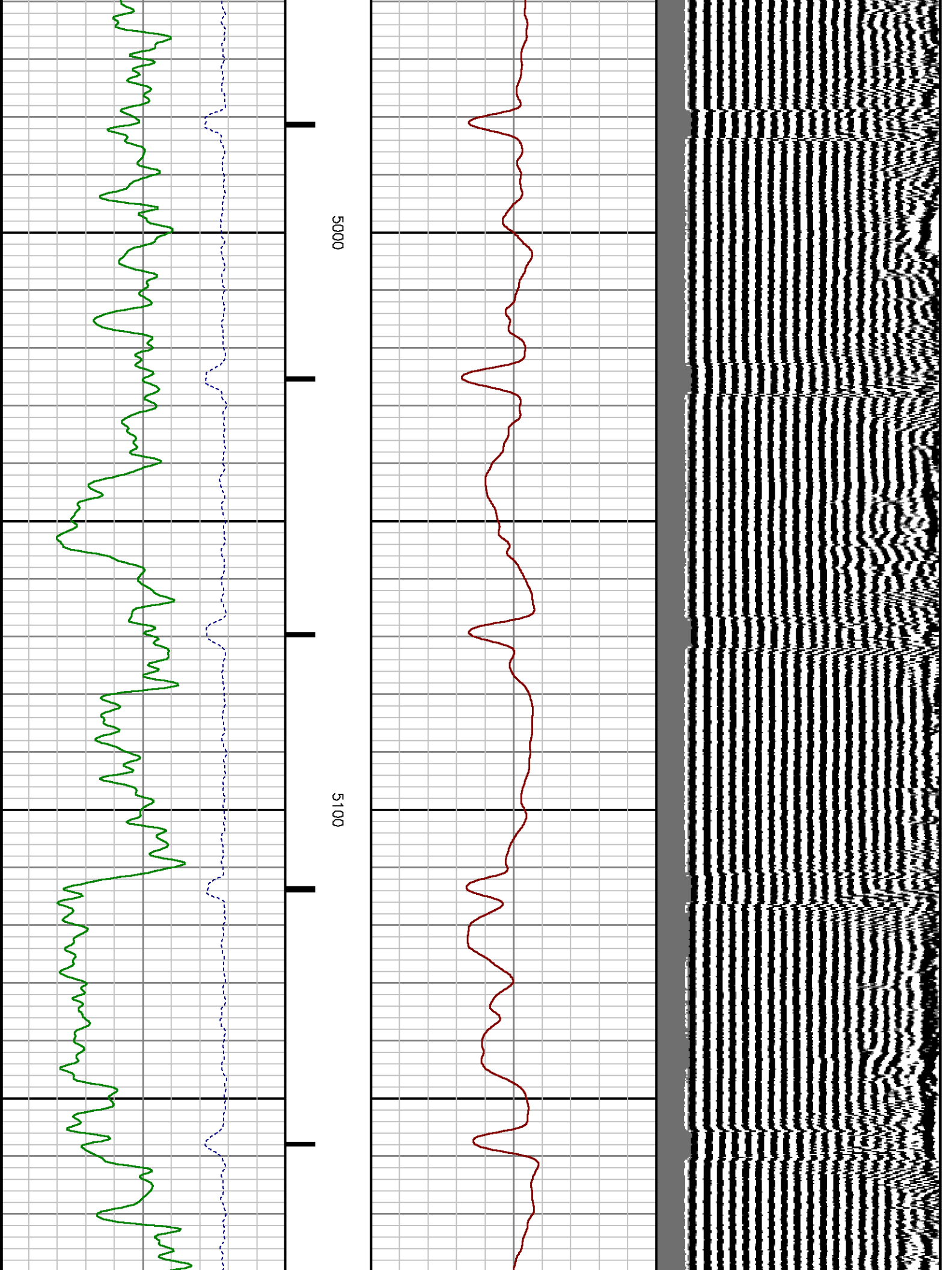


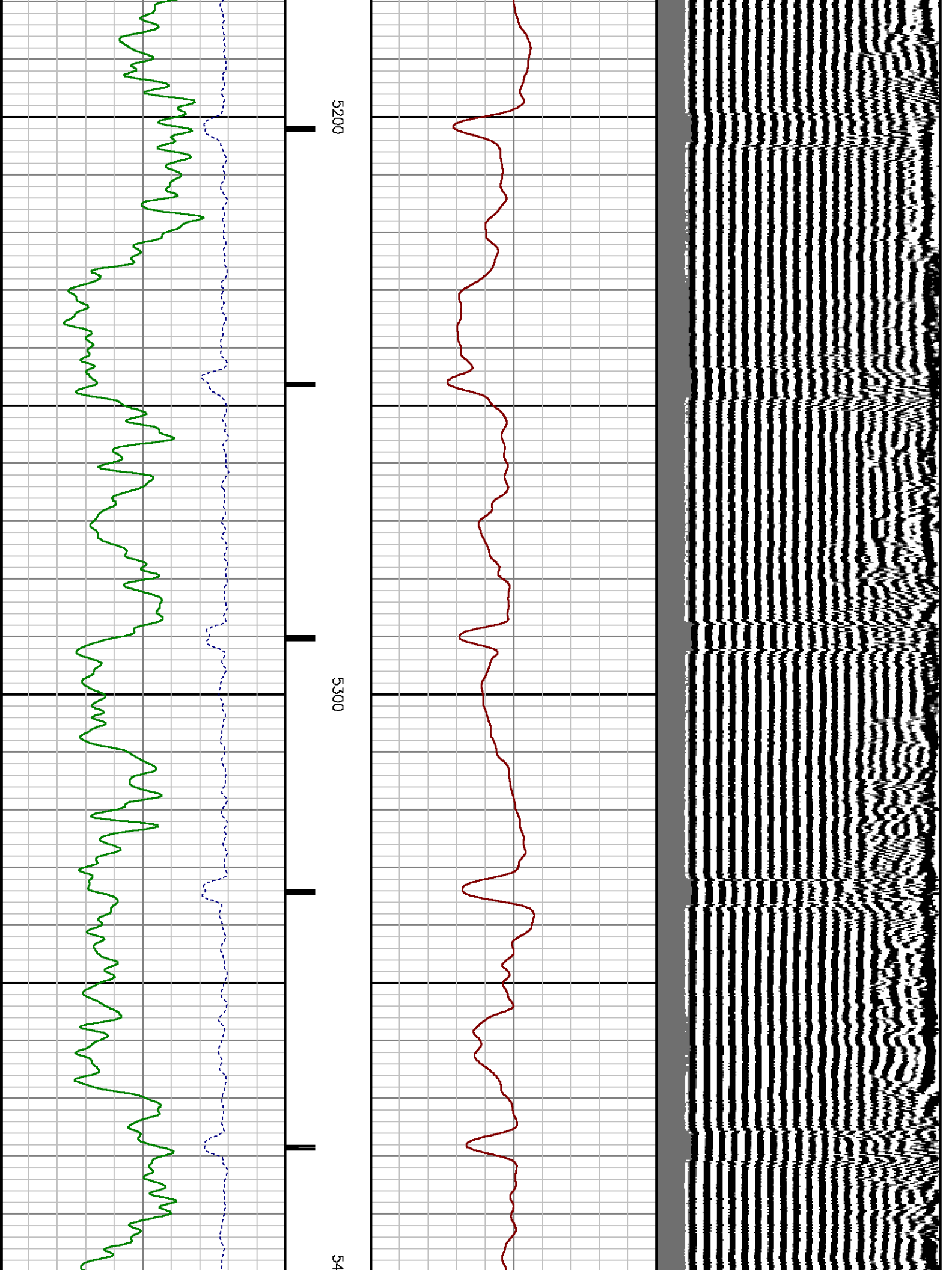


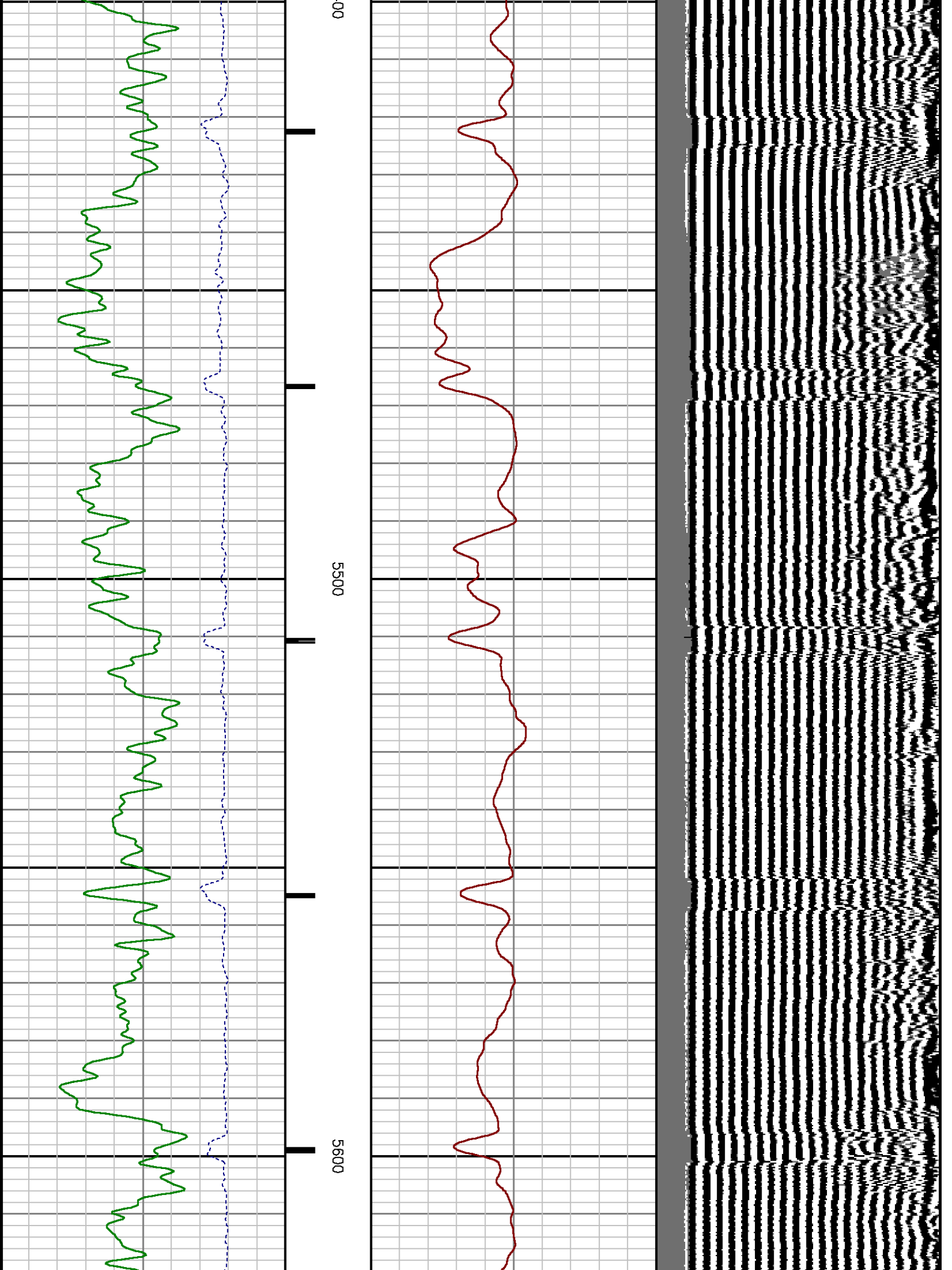


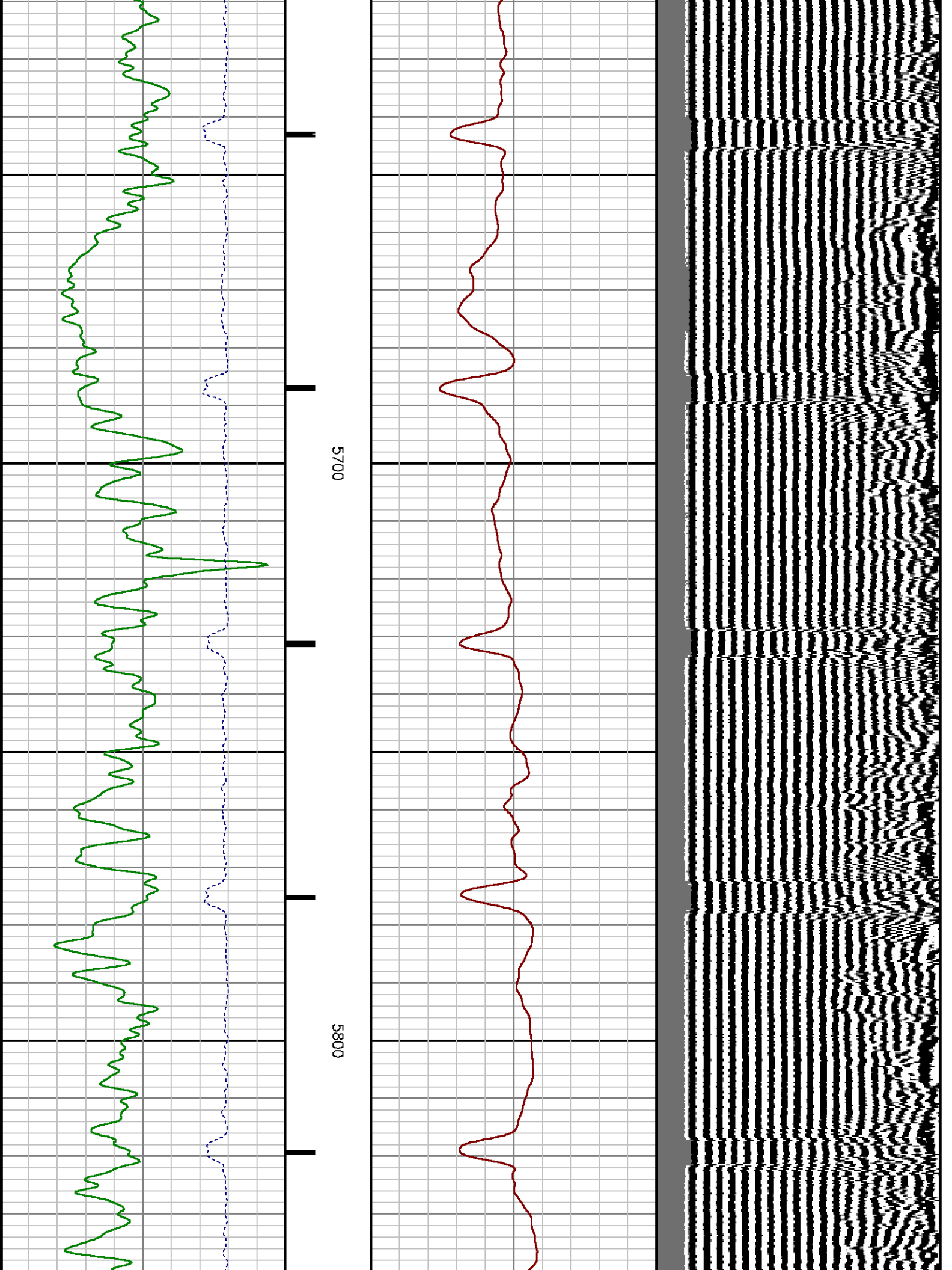


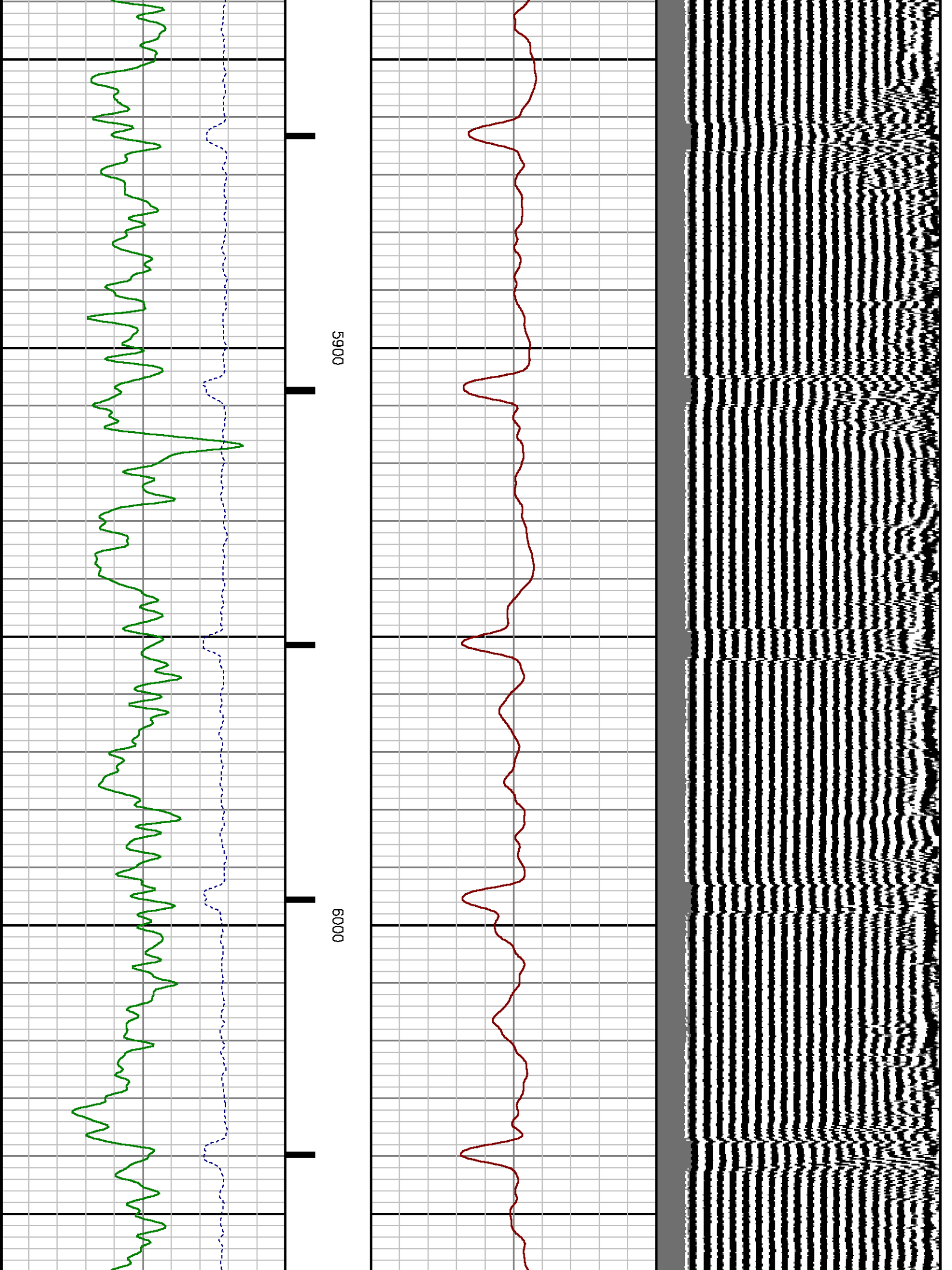


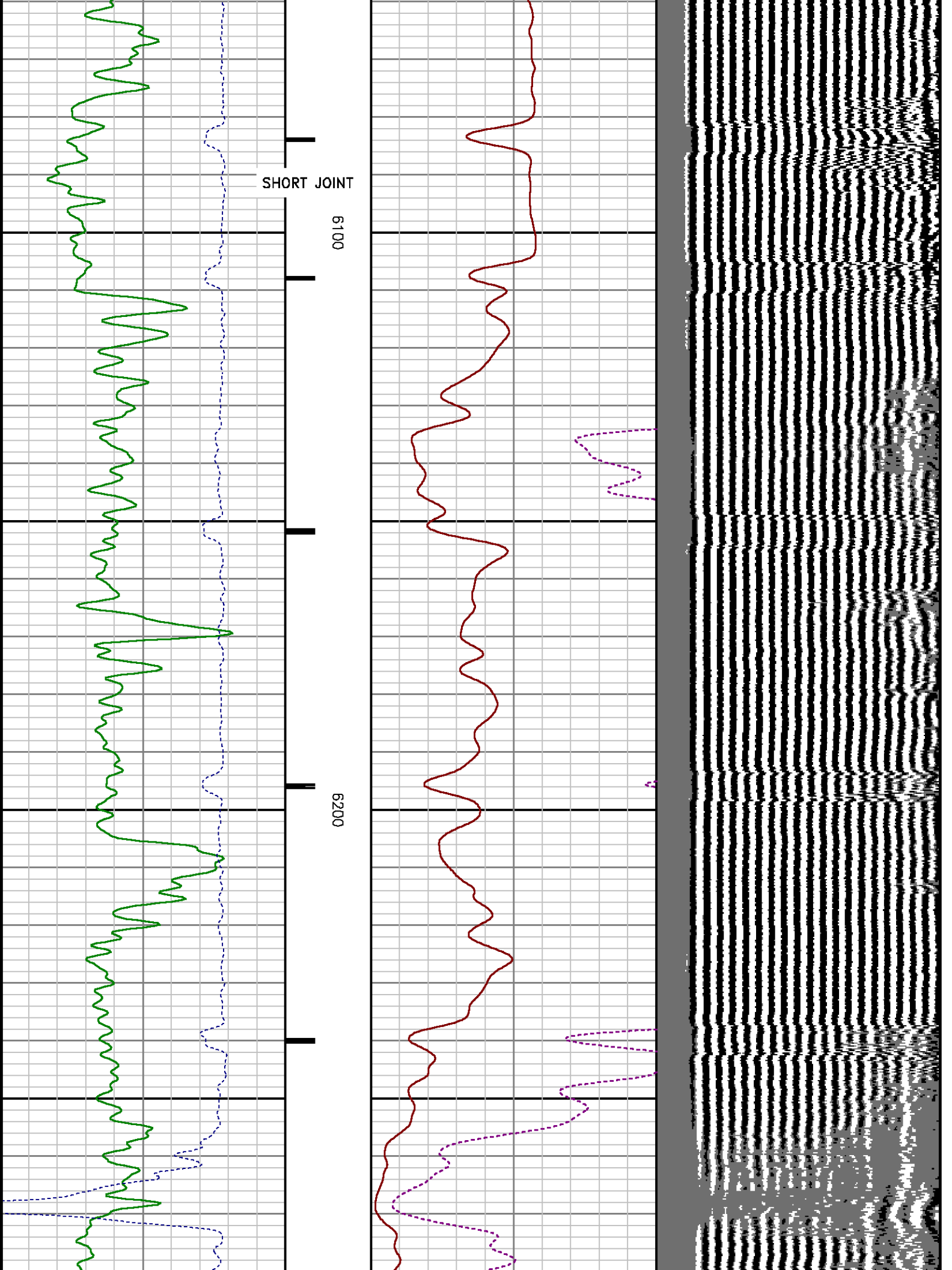


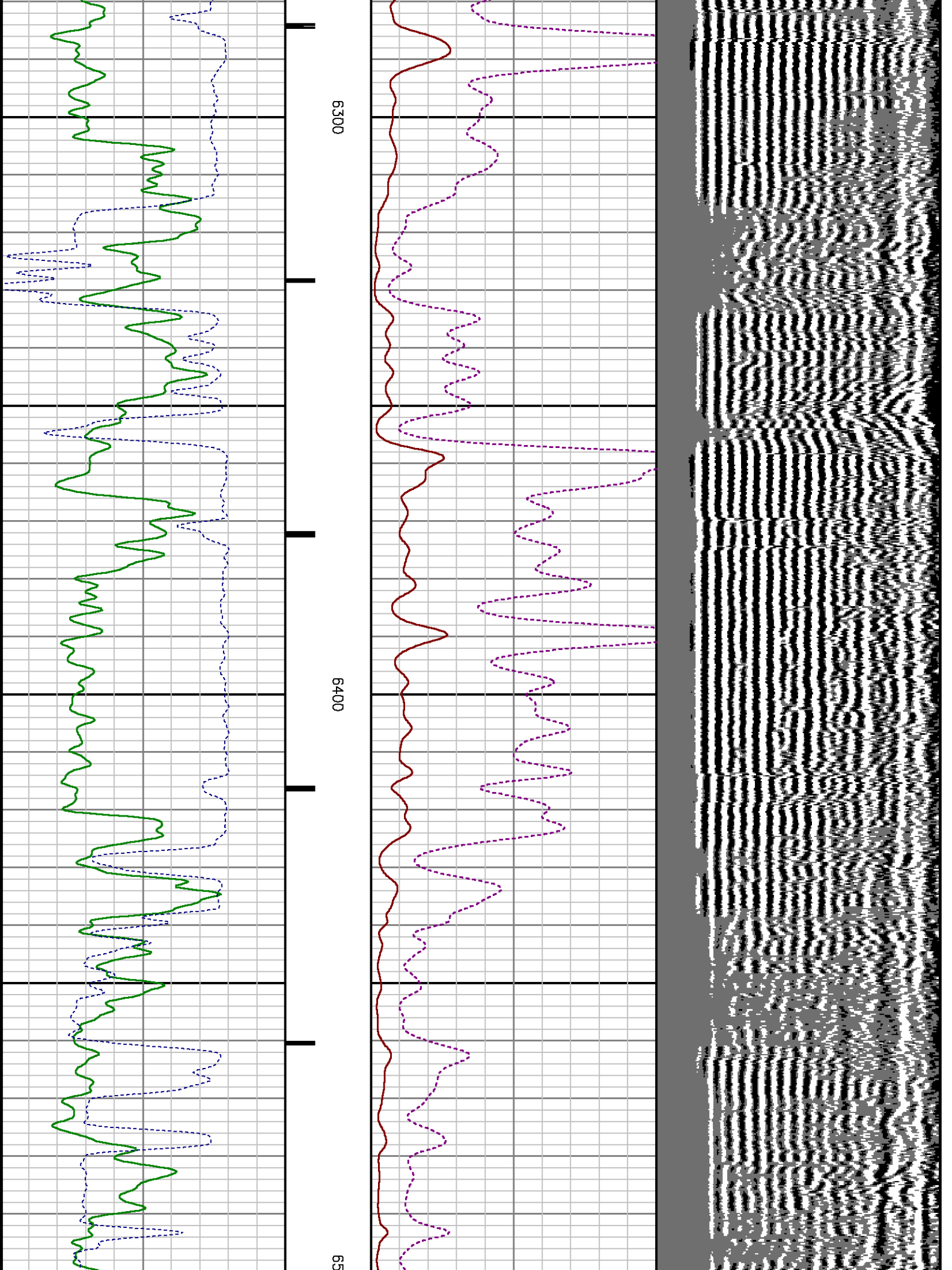


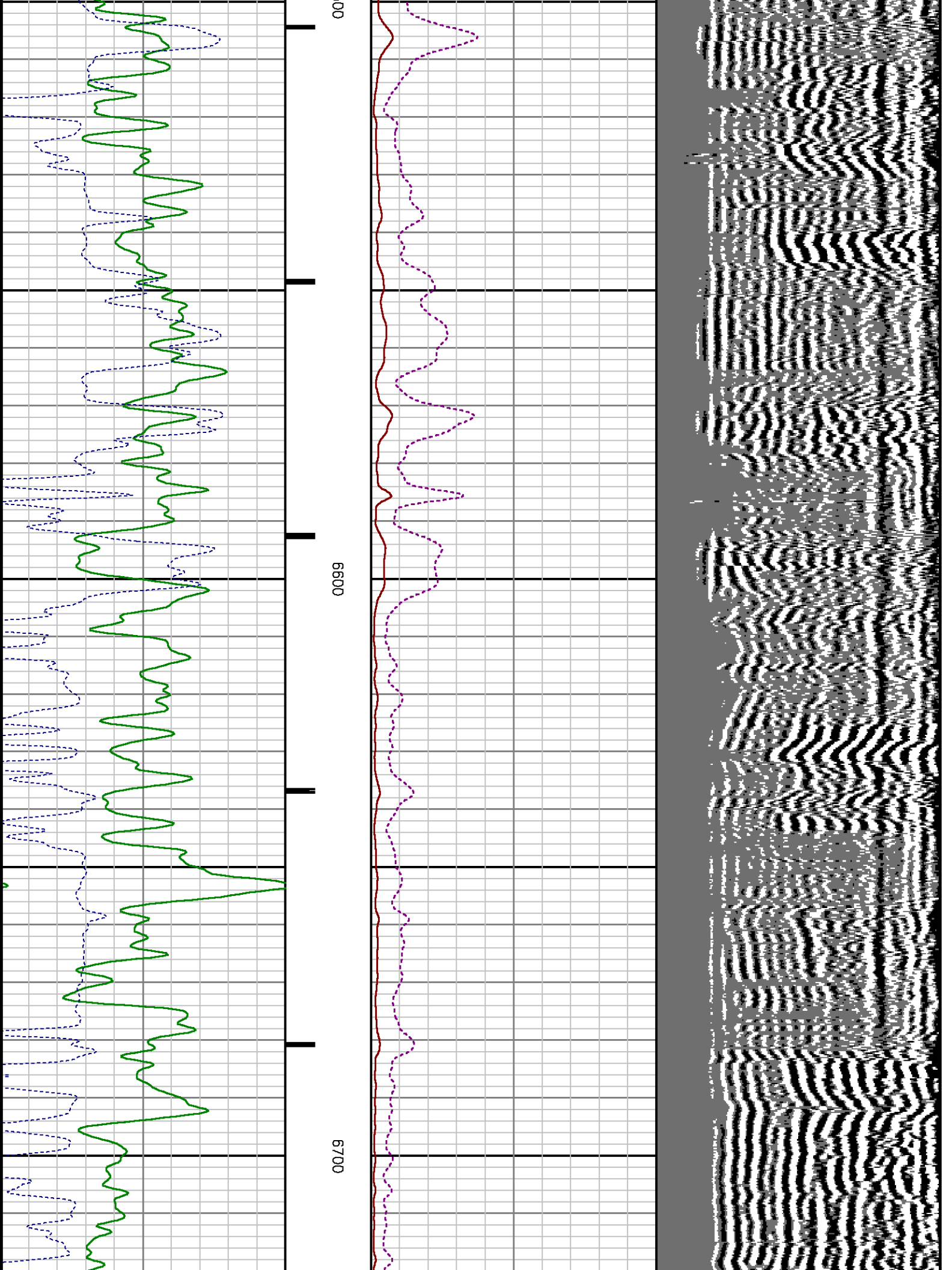


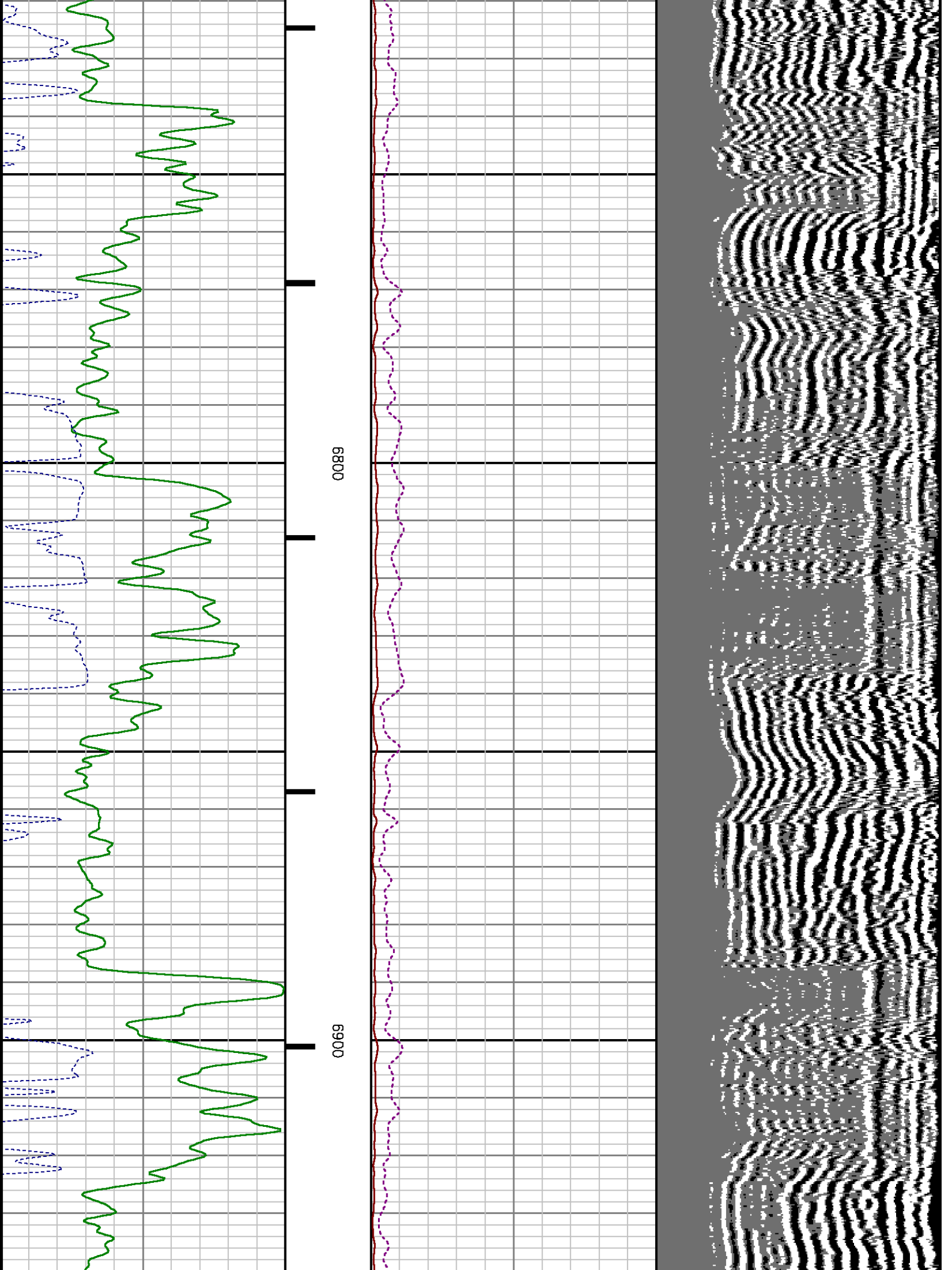


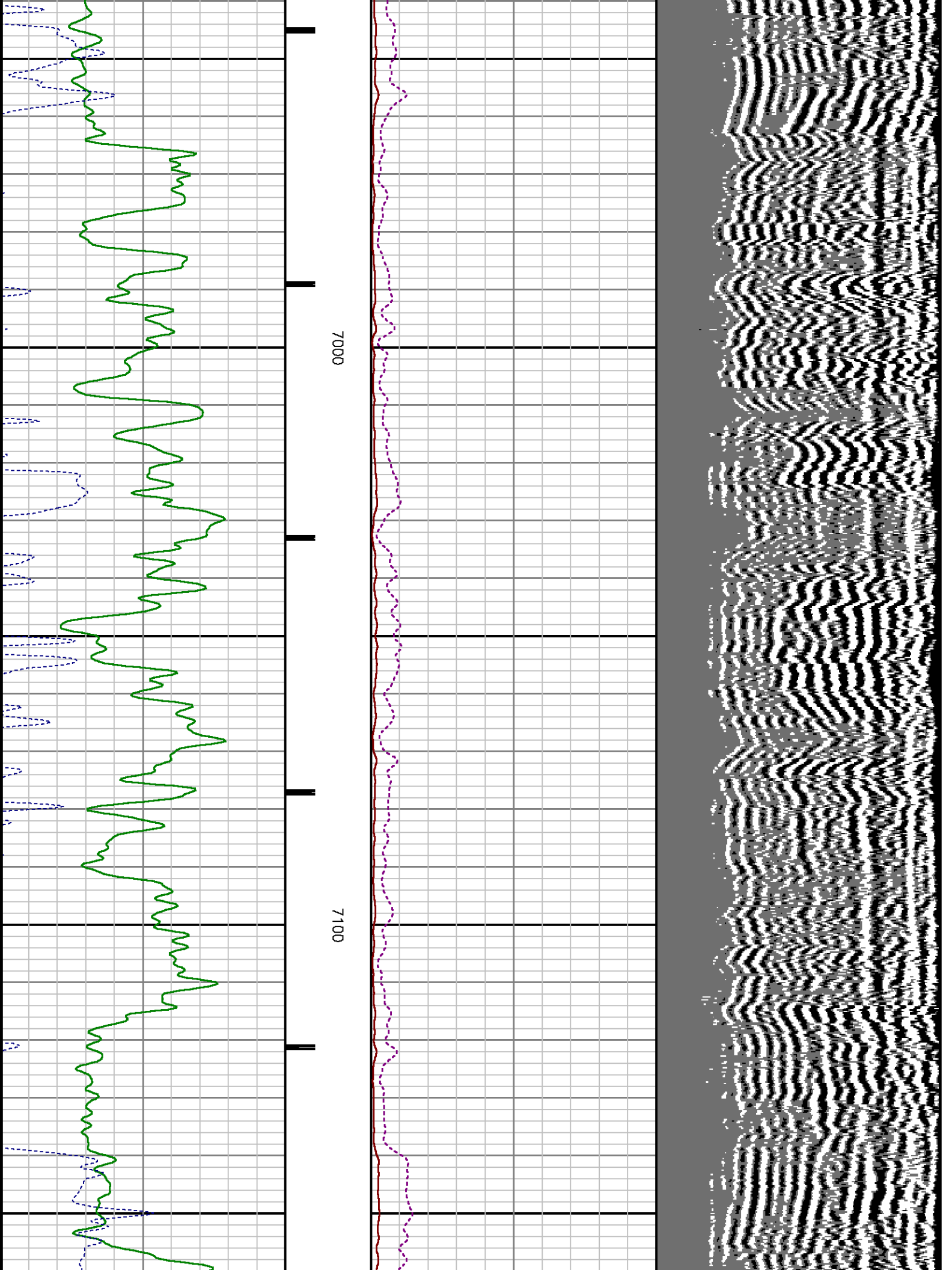


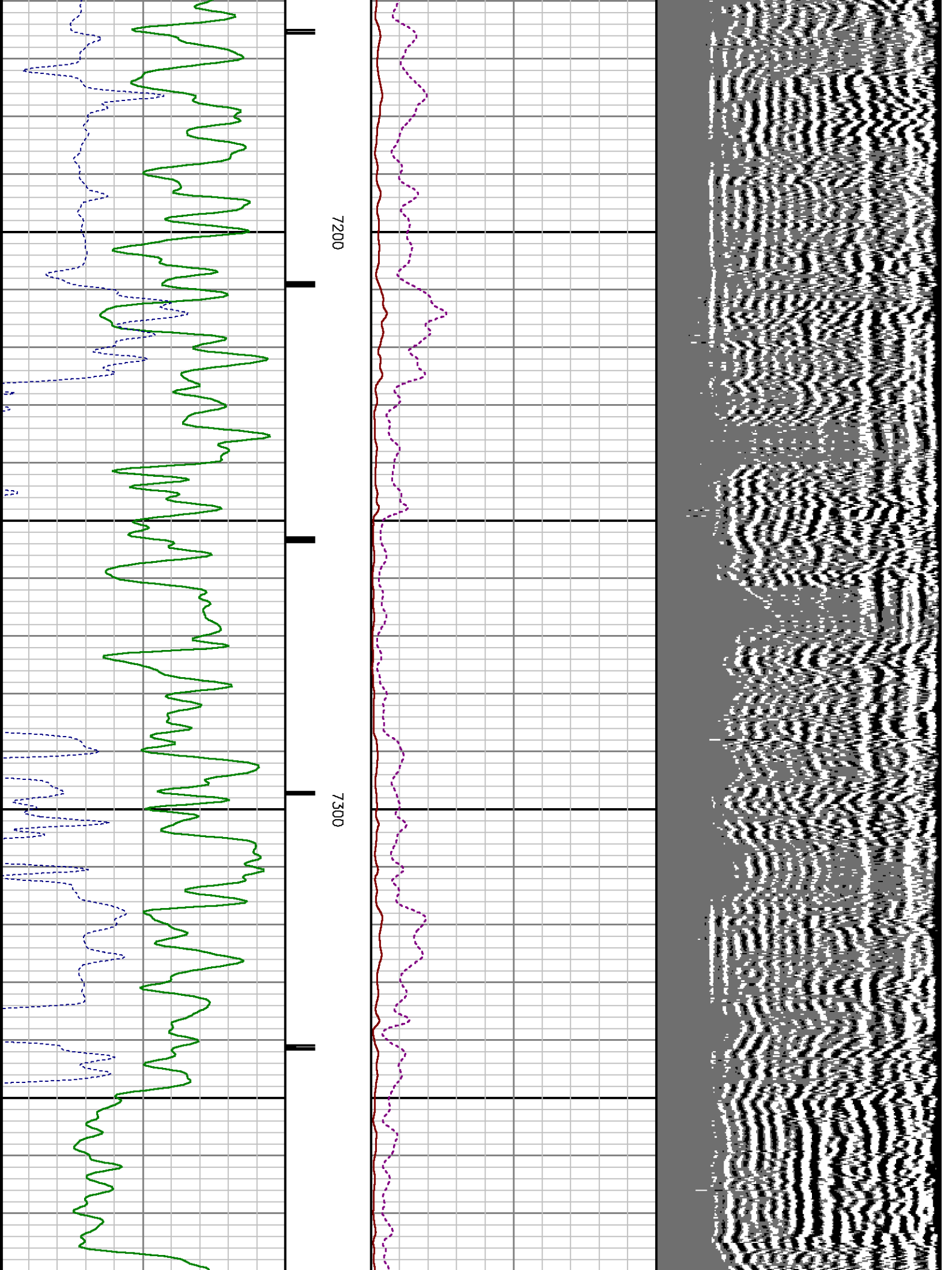


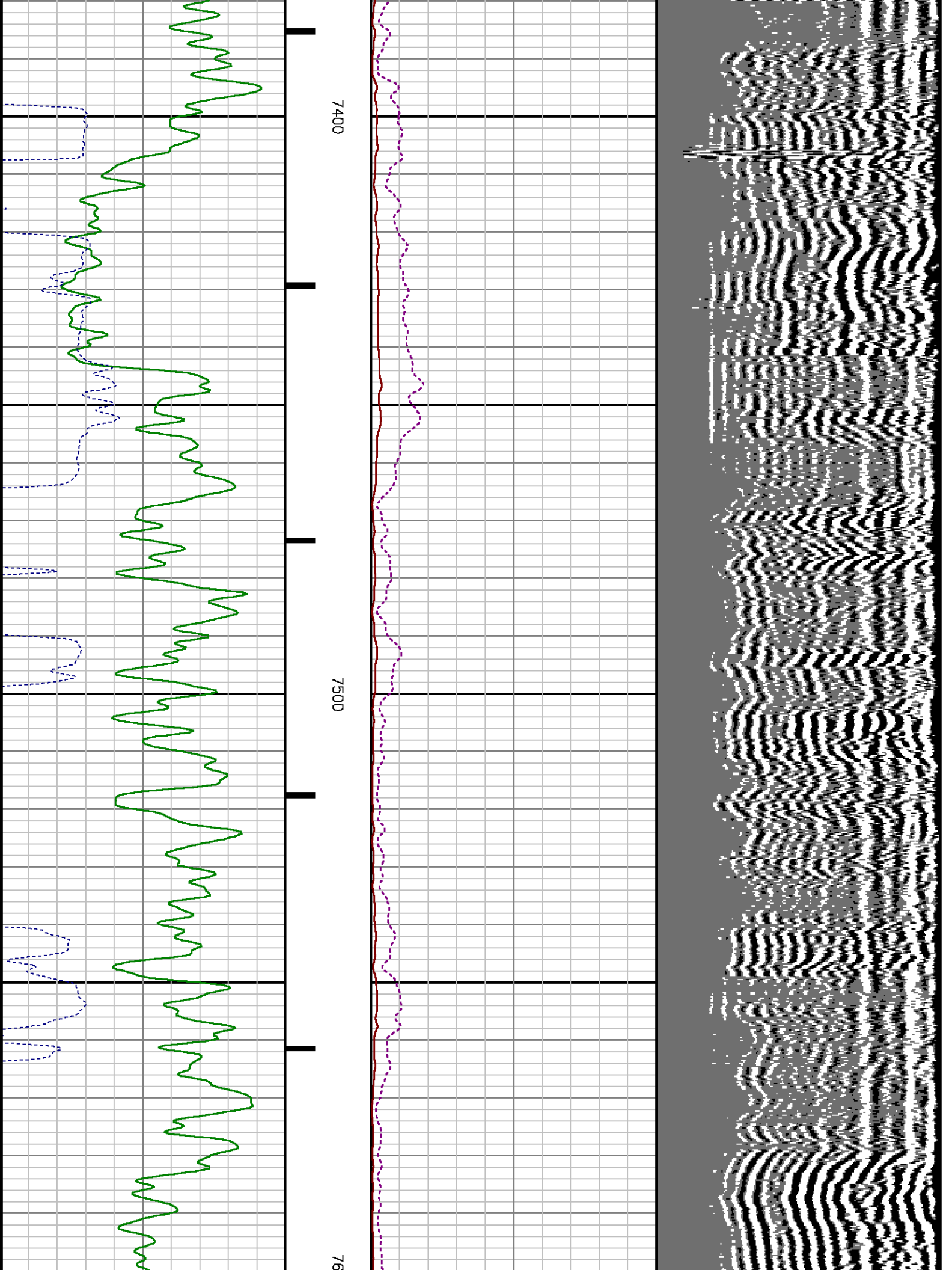


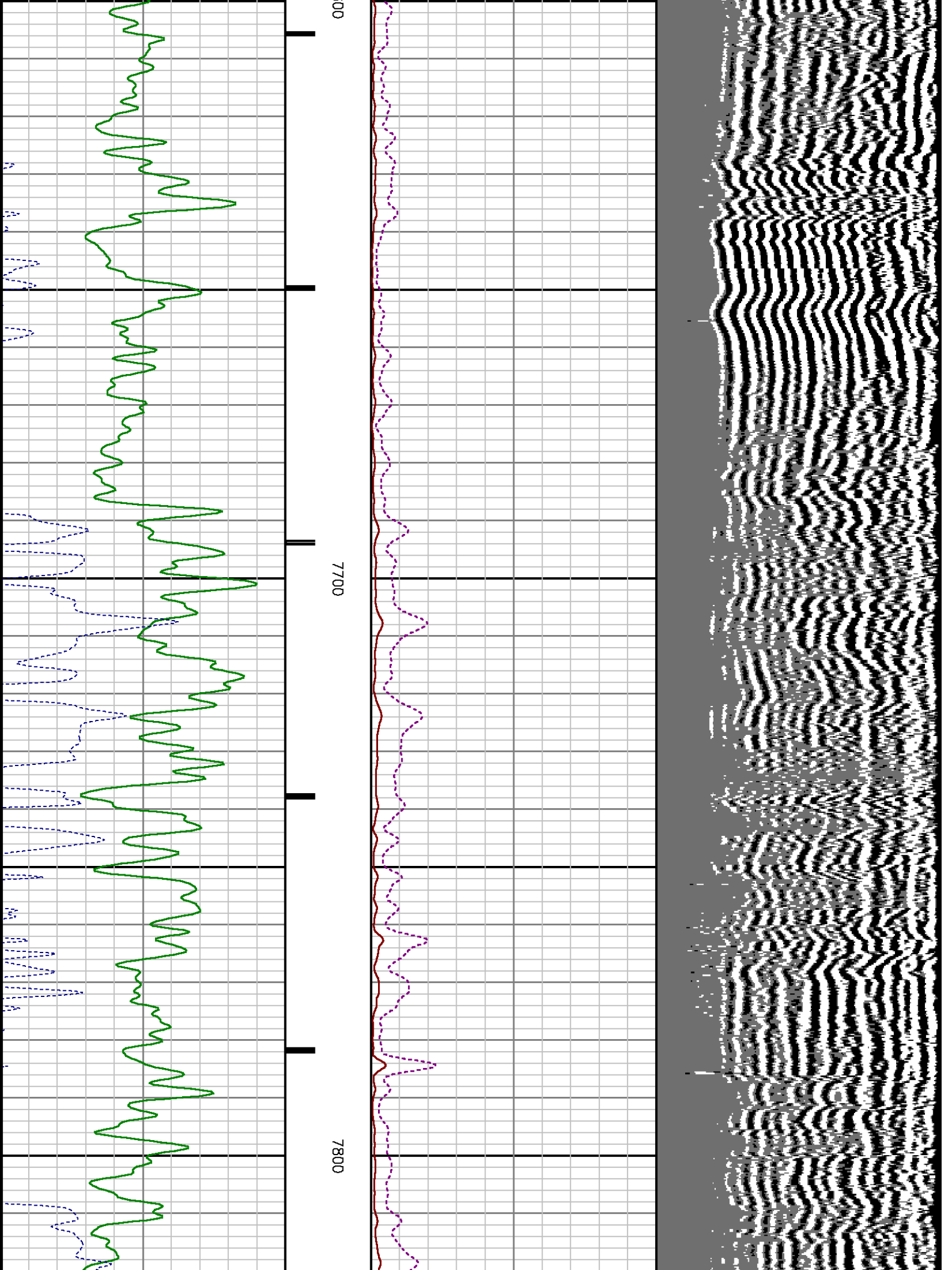


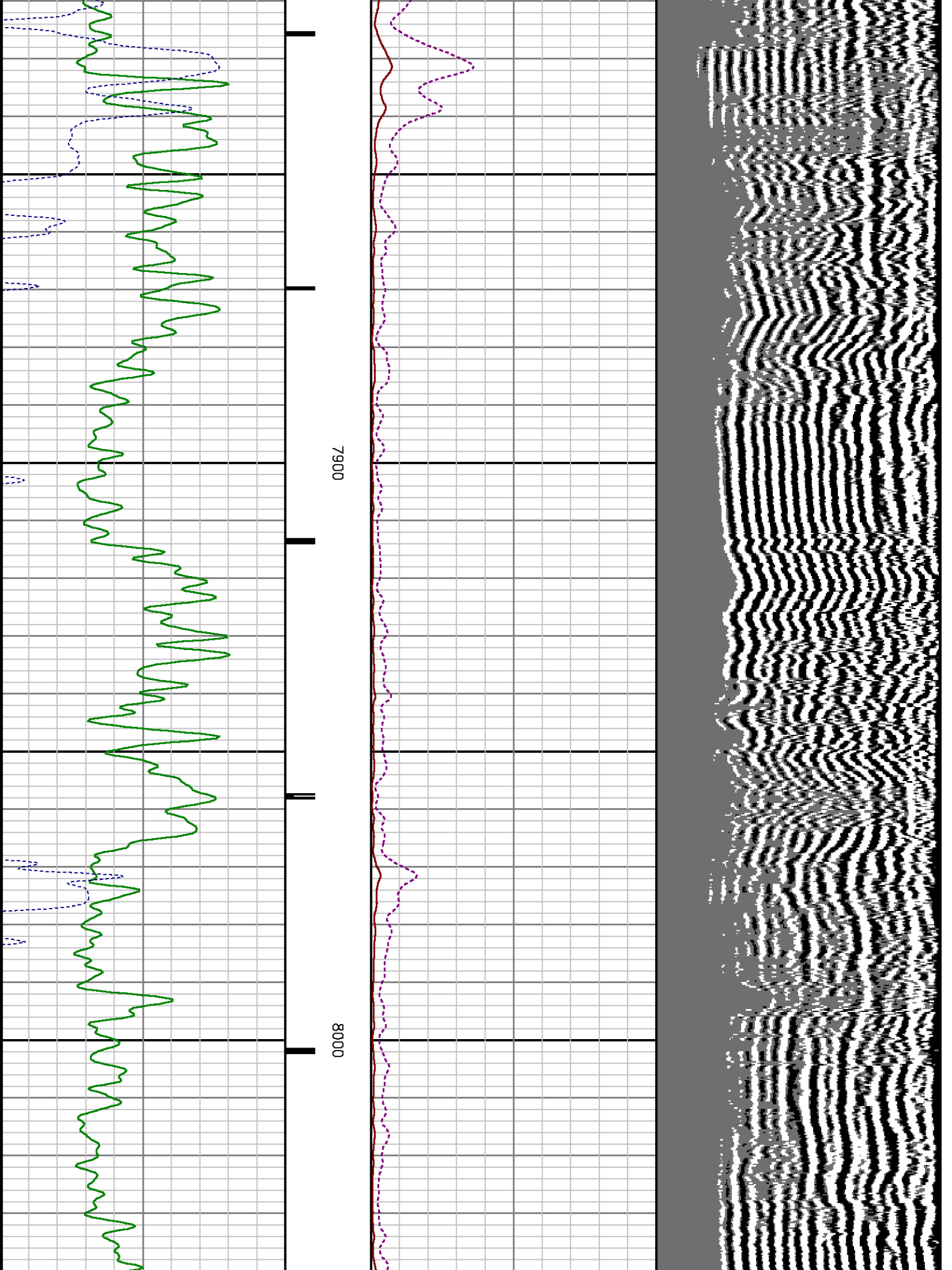


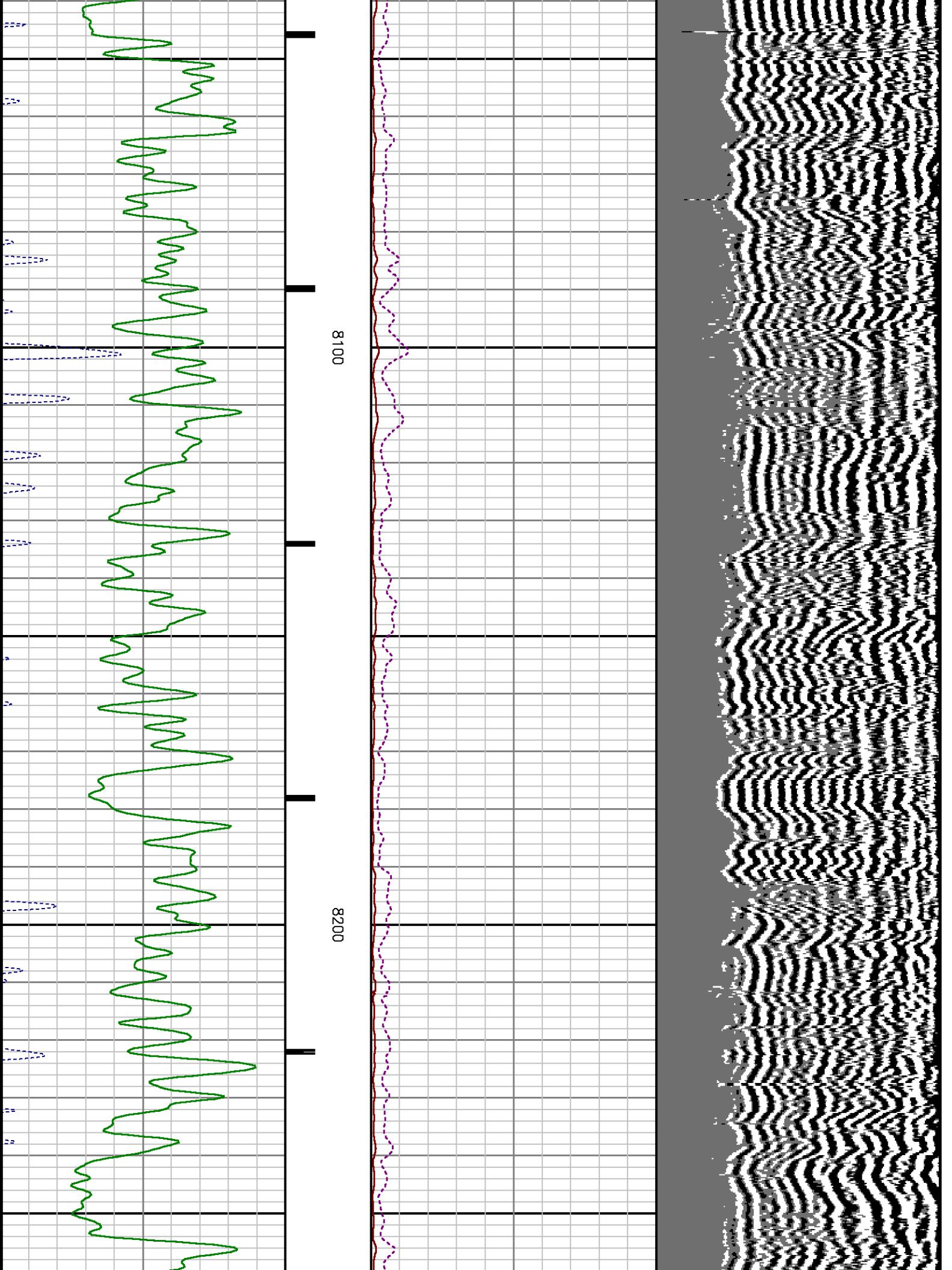


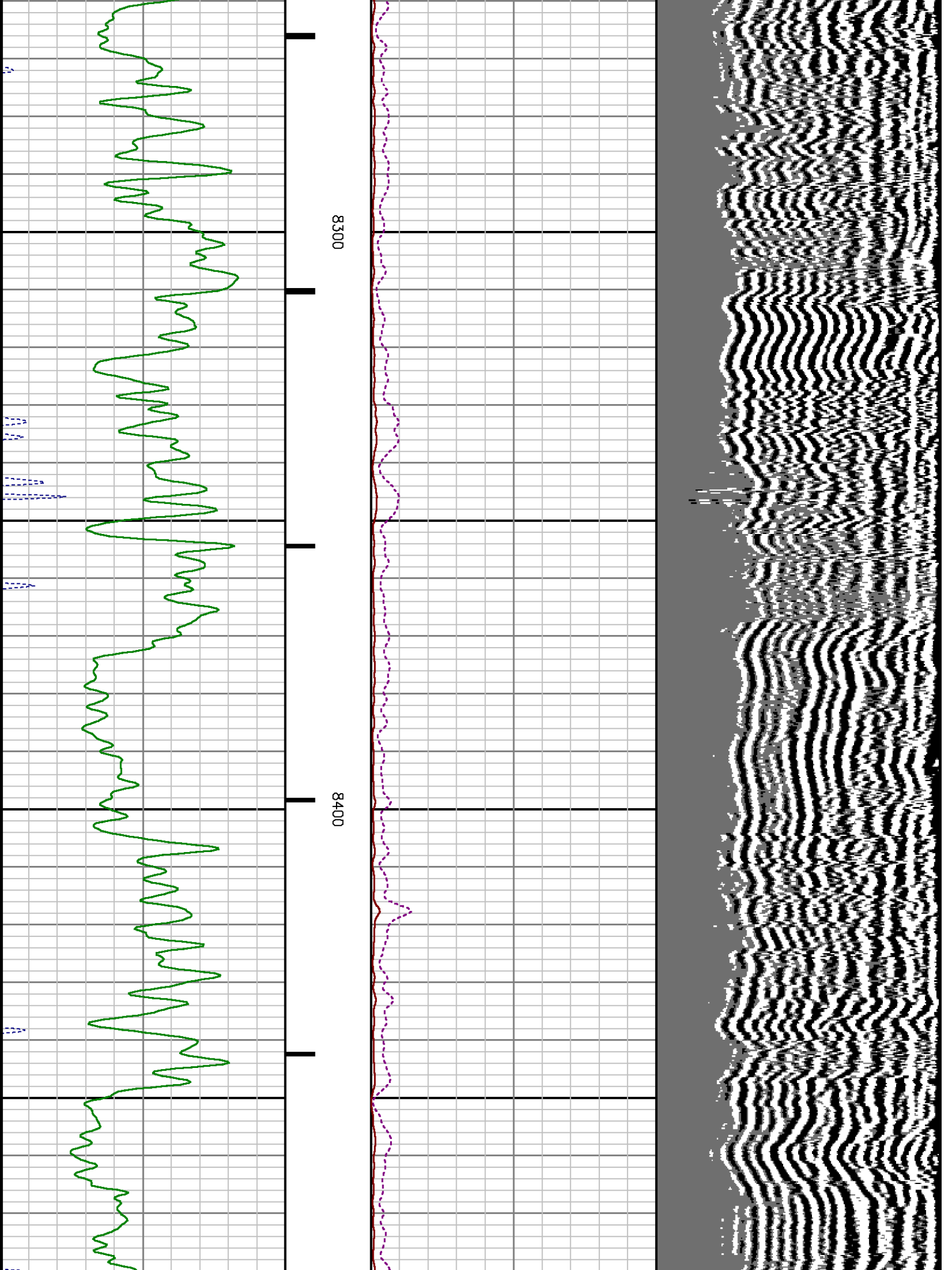


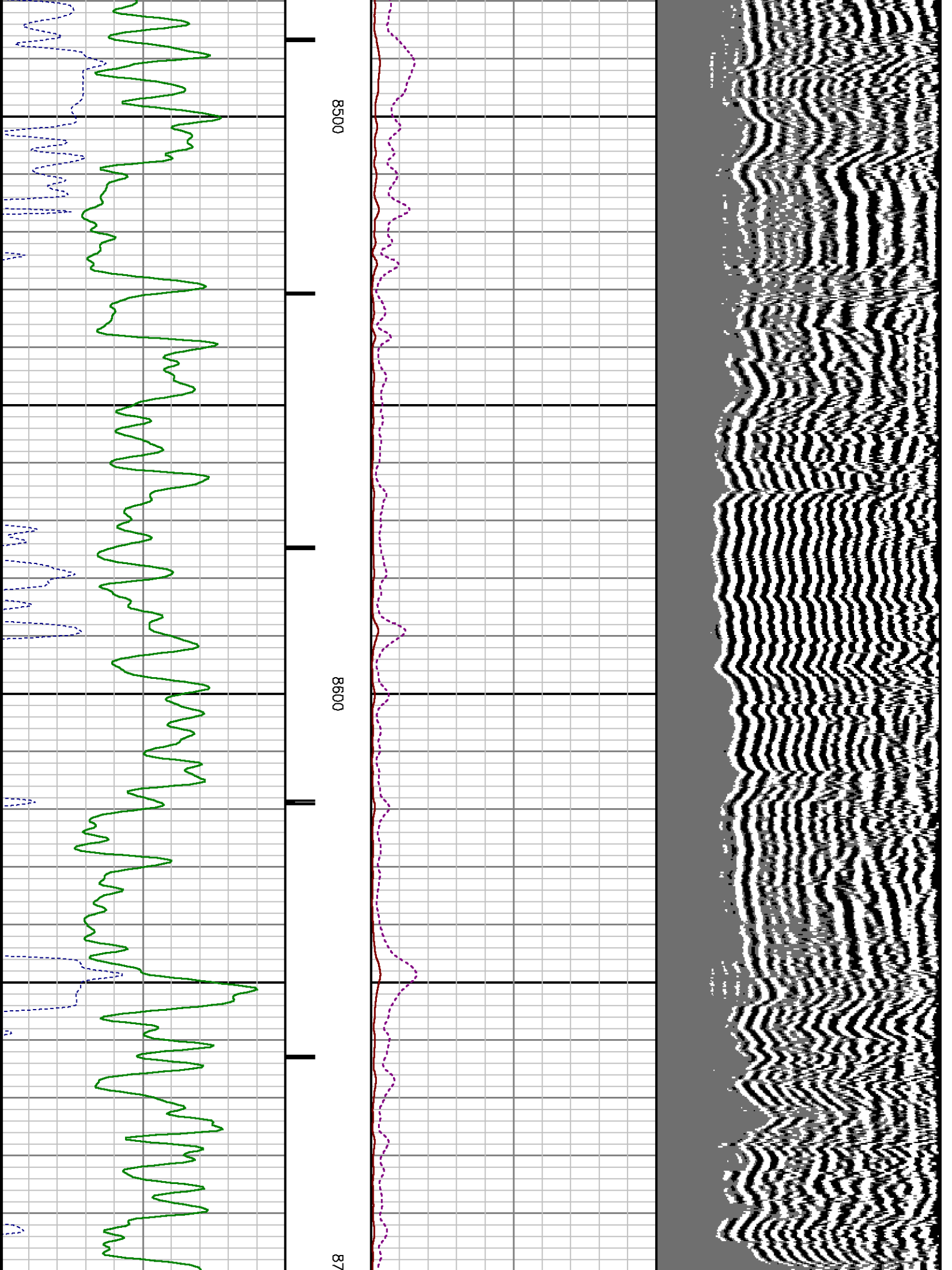


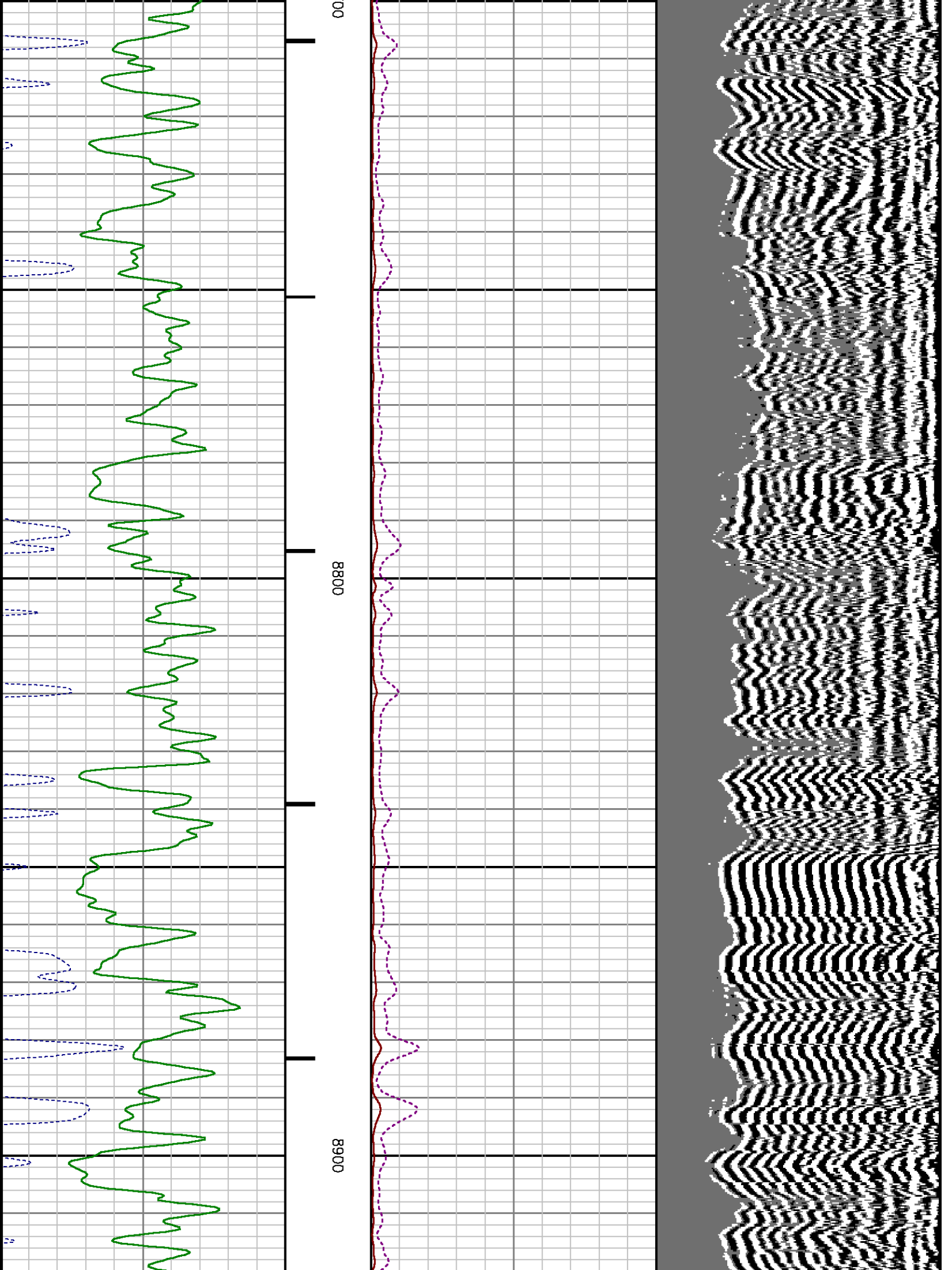


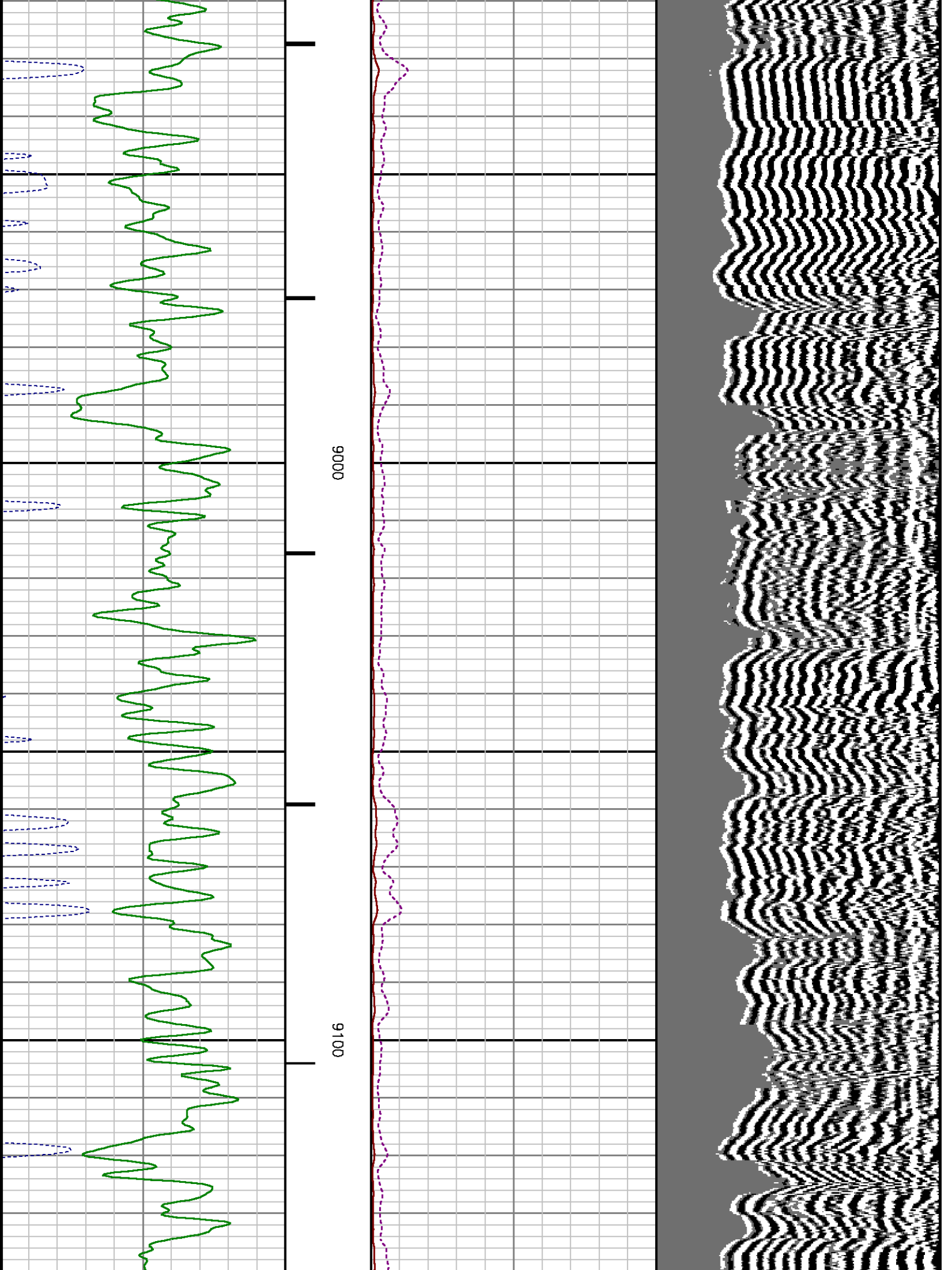


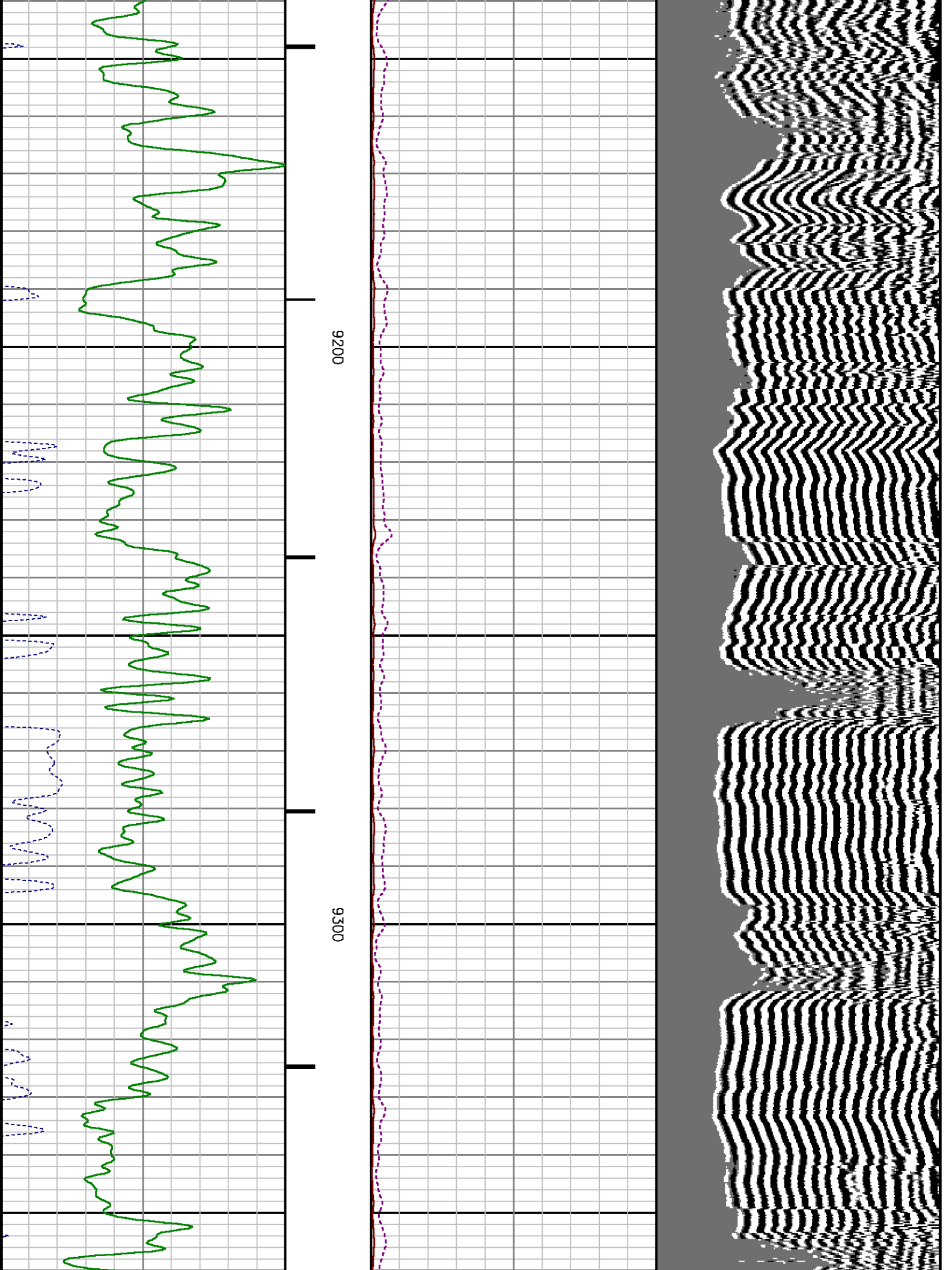


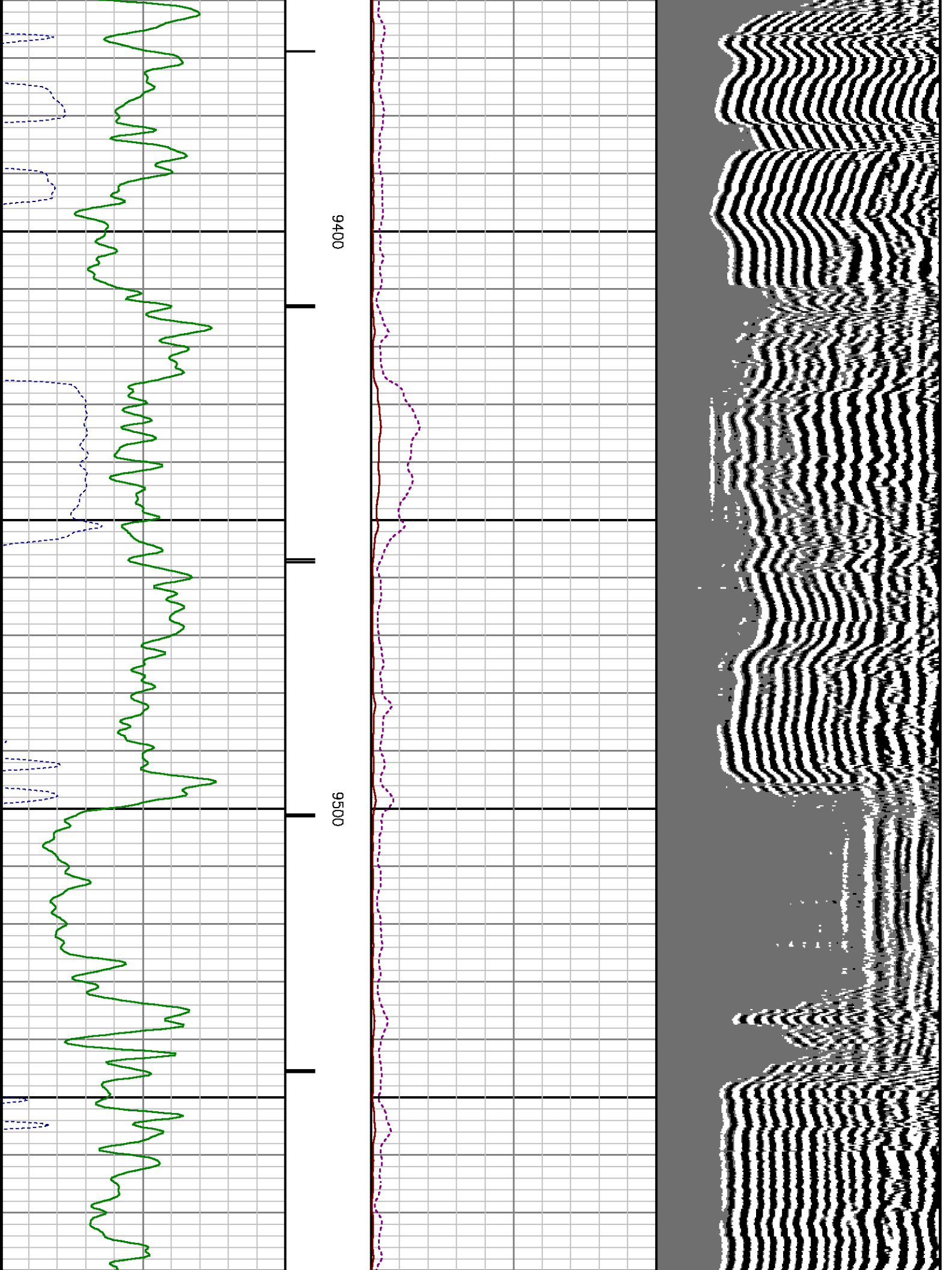


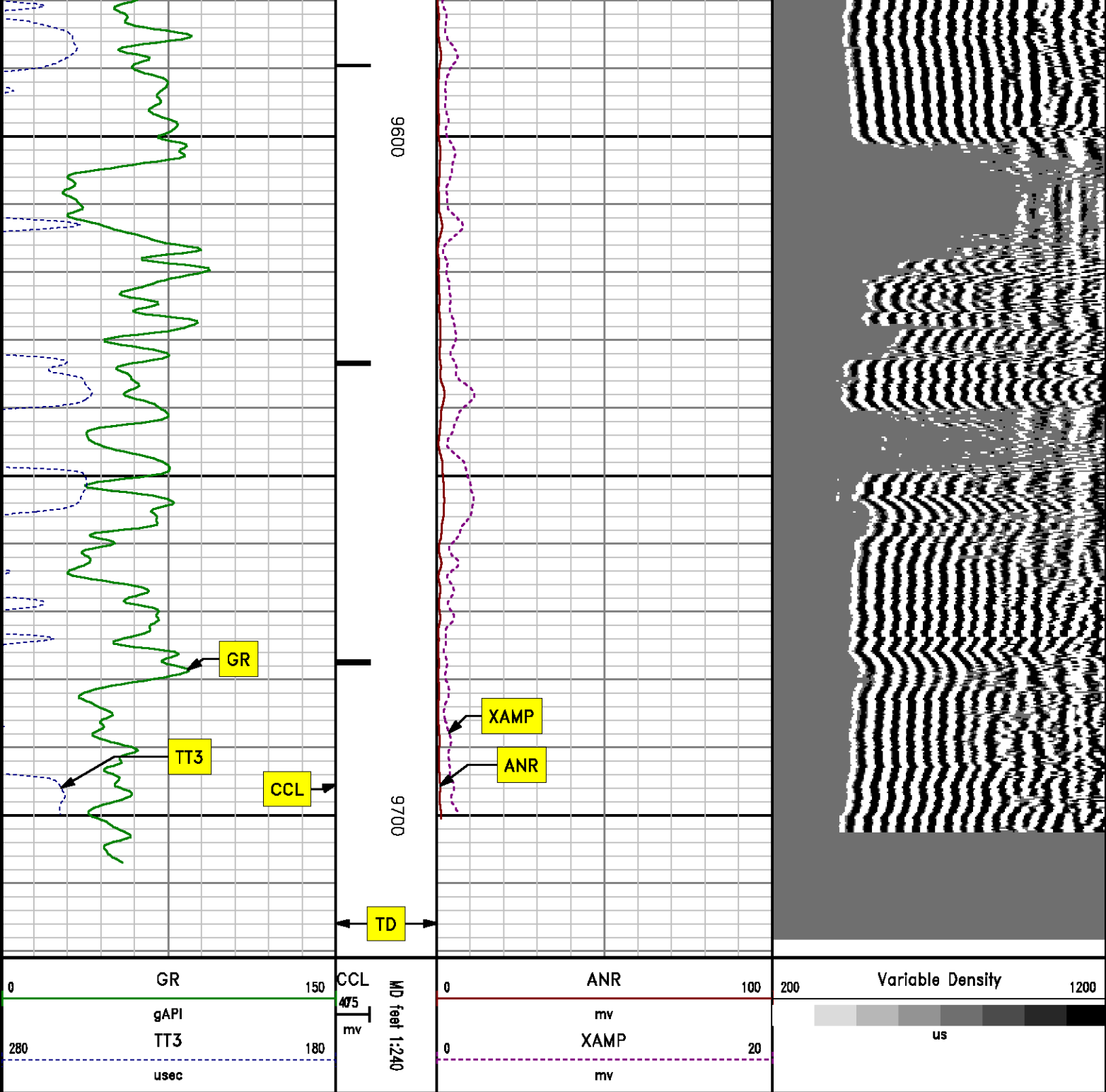












SECONDARY PRESENTATION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	36.155	9718.000
RAL	Amp Gate Start Near	195.000	usec	36.155	9718.000
RAL	Amp Gate Start Radial	195.000	usec	36.155	9718.000
RAL	Amp Gate Width Far	25.000	usec	36.155	9718.000
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RAL	FB Thresh Radial	4.000	mv	36.155	9718.000
RAL	Fluid Travel Time	200.000	usec/ft	36.155	9717.905

DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-16.750	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	-15.750	AFAR	SIG	TT5			
2459XA	-11.340	CCL					
2459XA	-9.490	GR					
2459XA	-4.090	NEU					

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

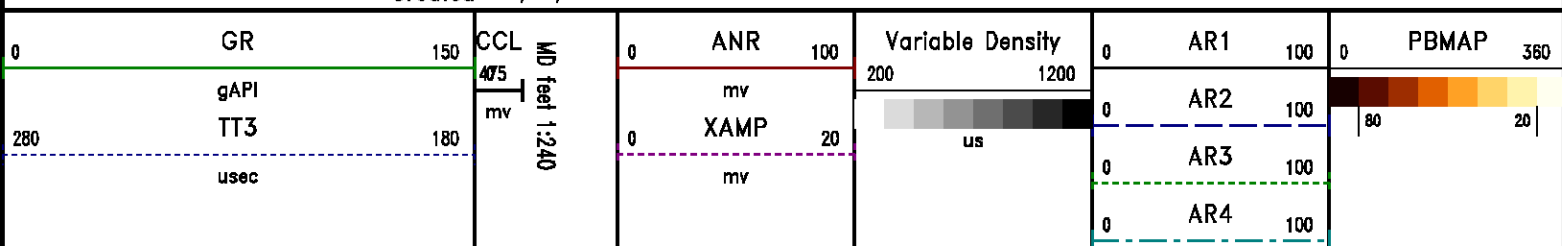
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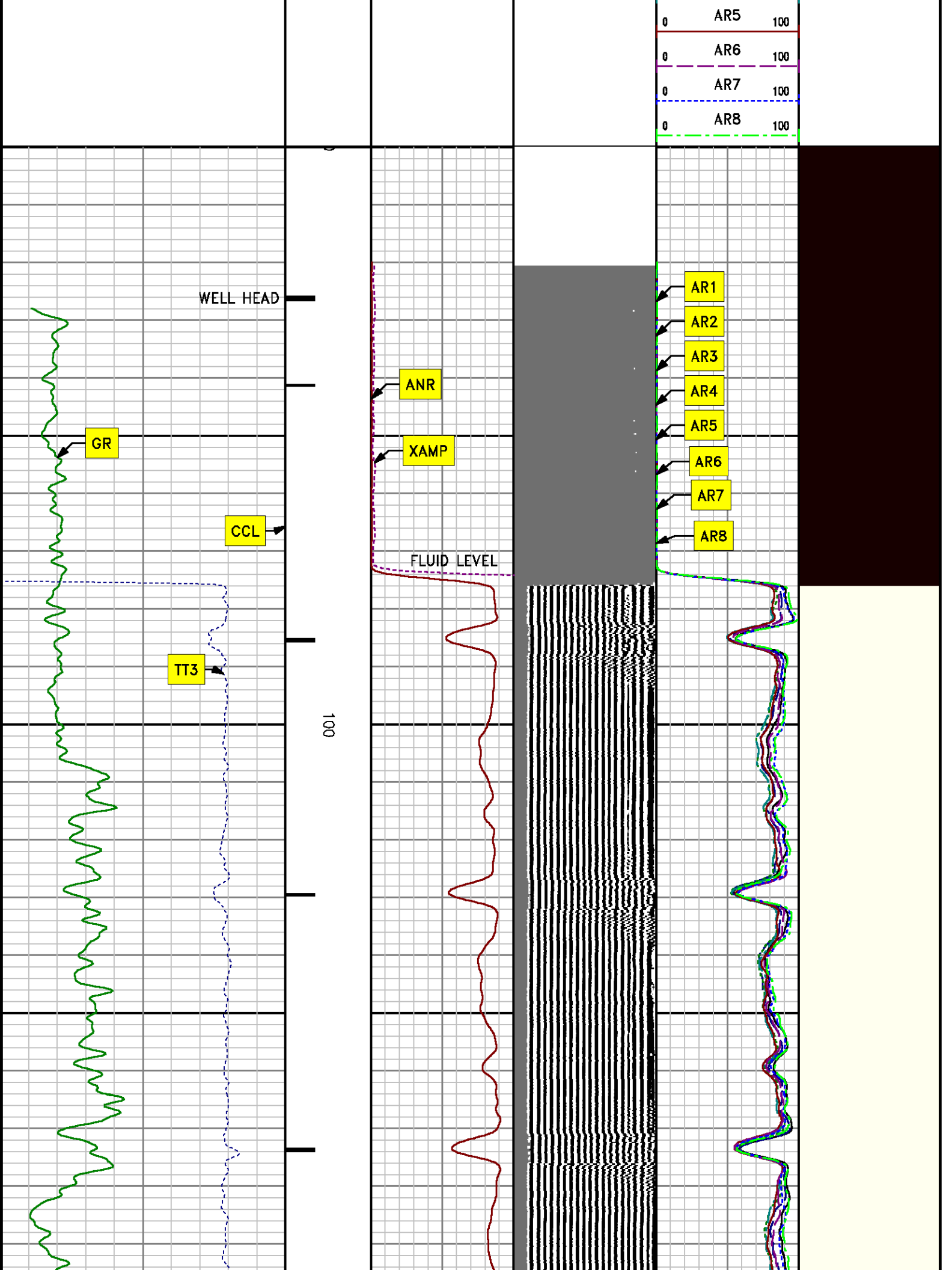
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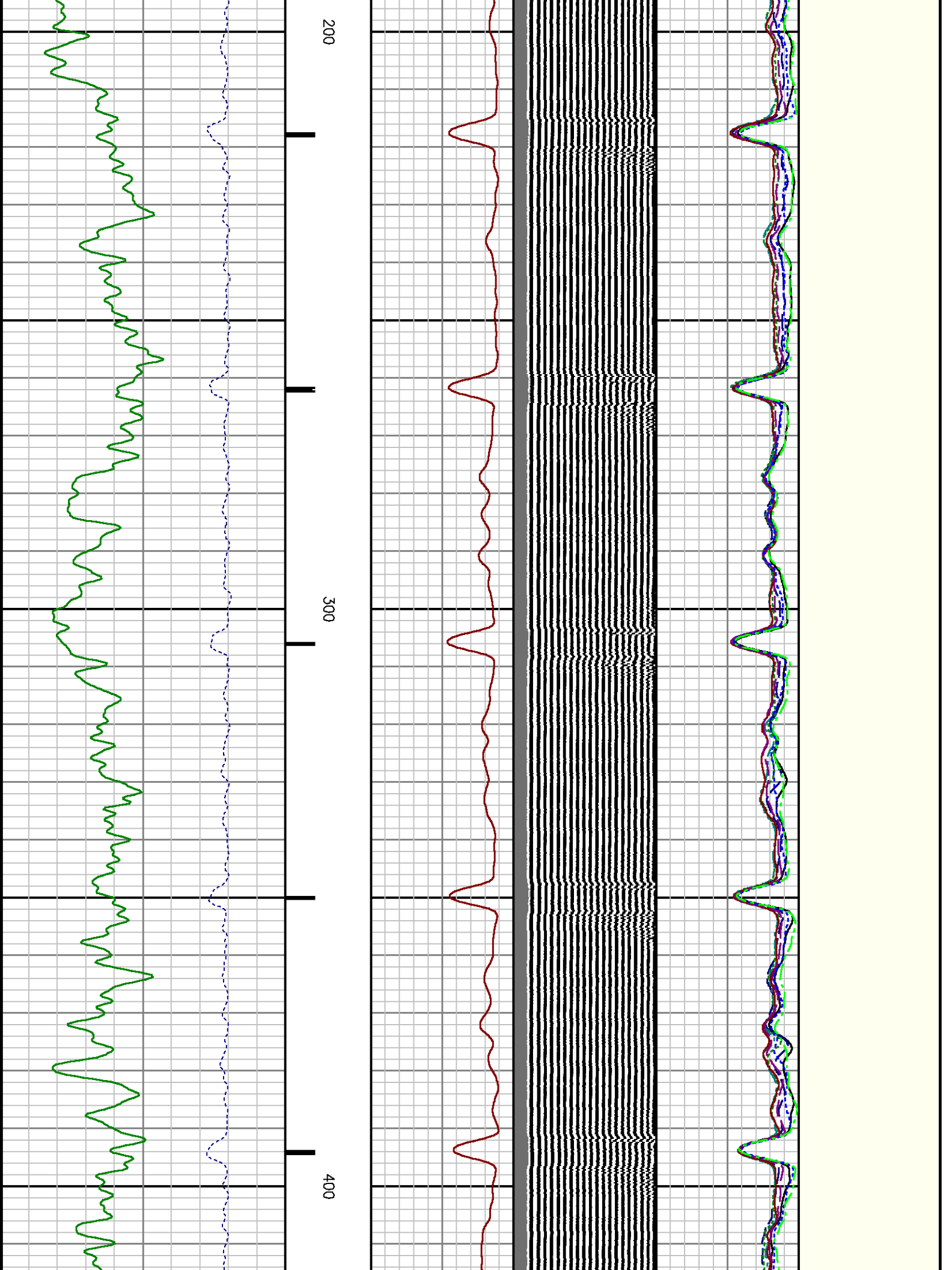
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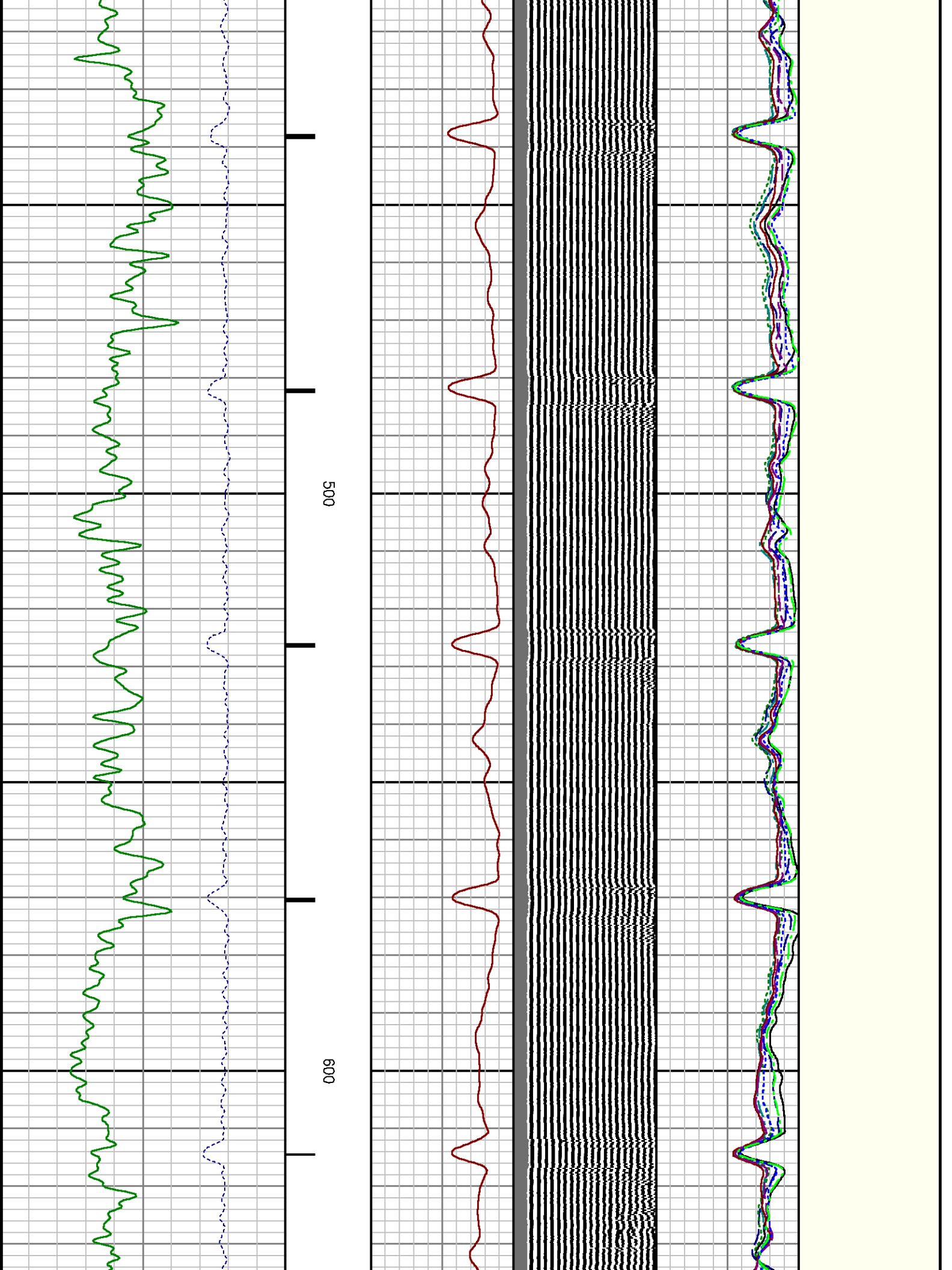
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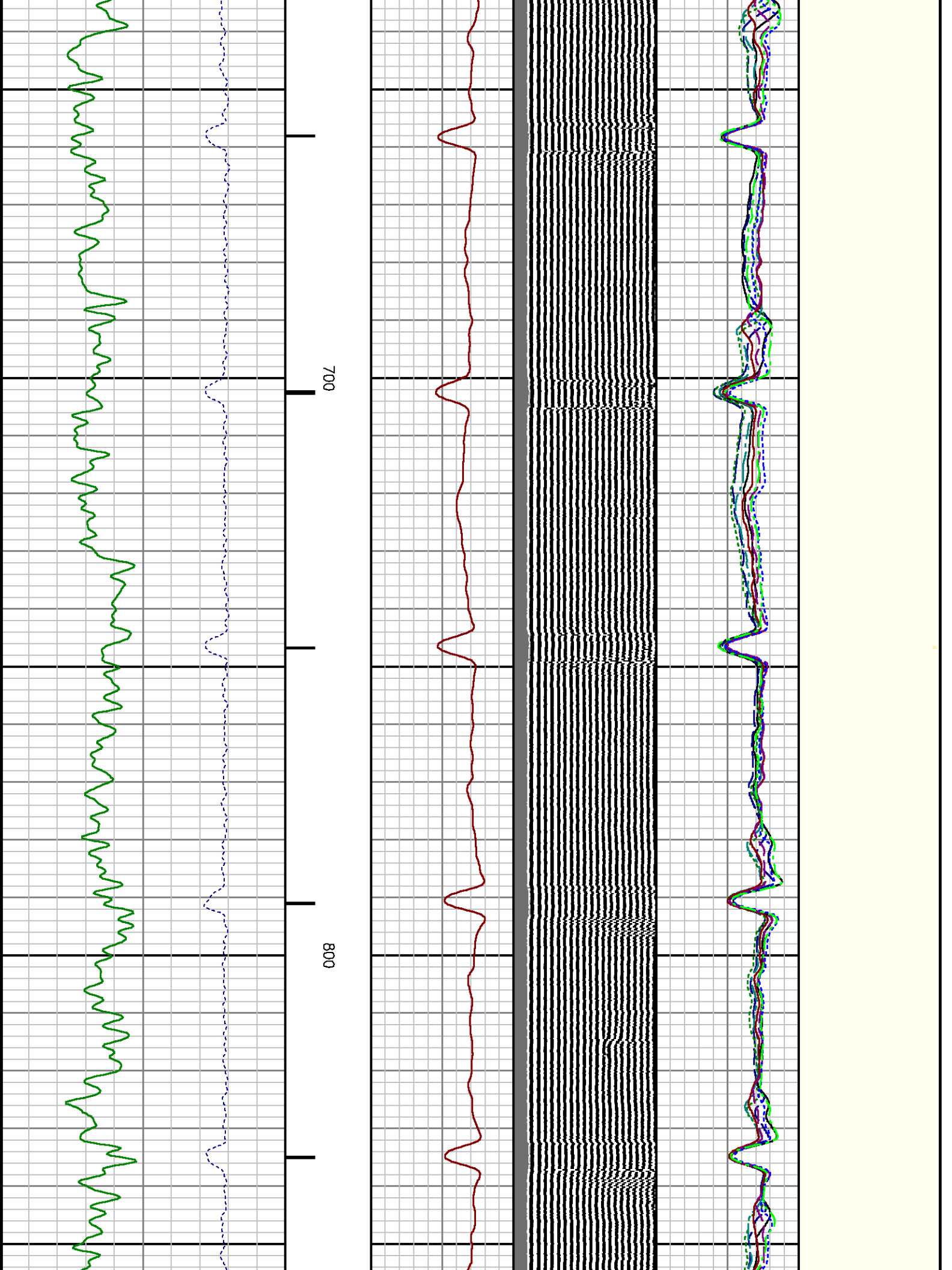


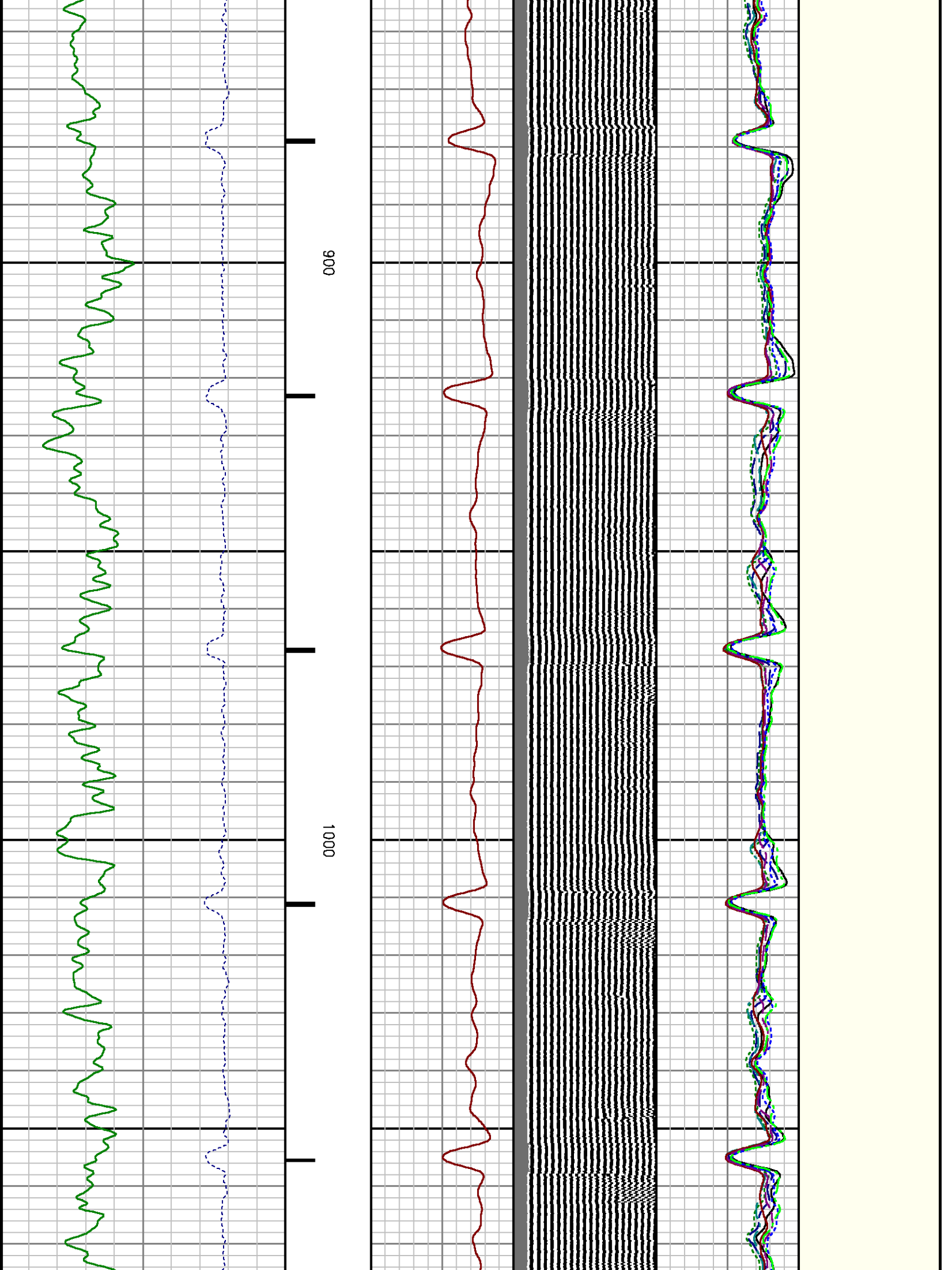


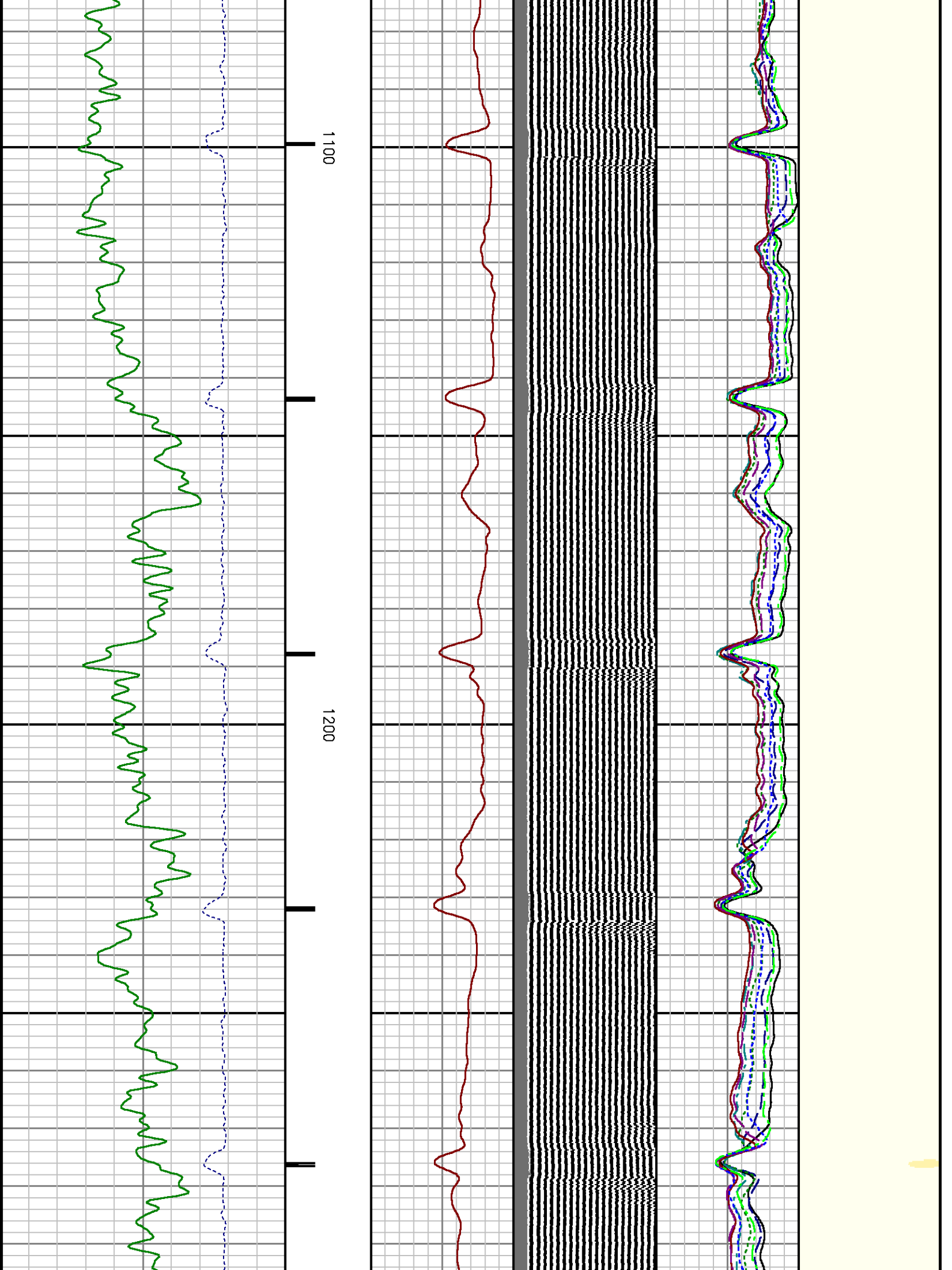
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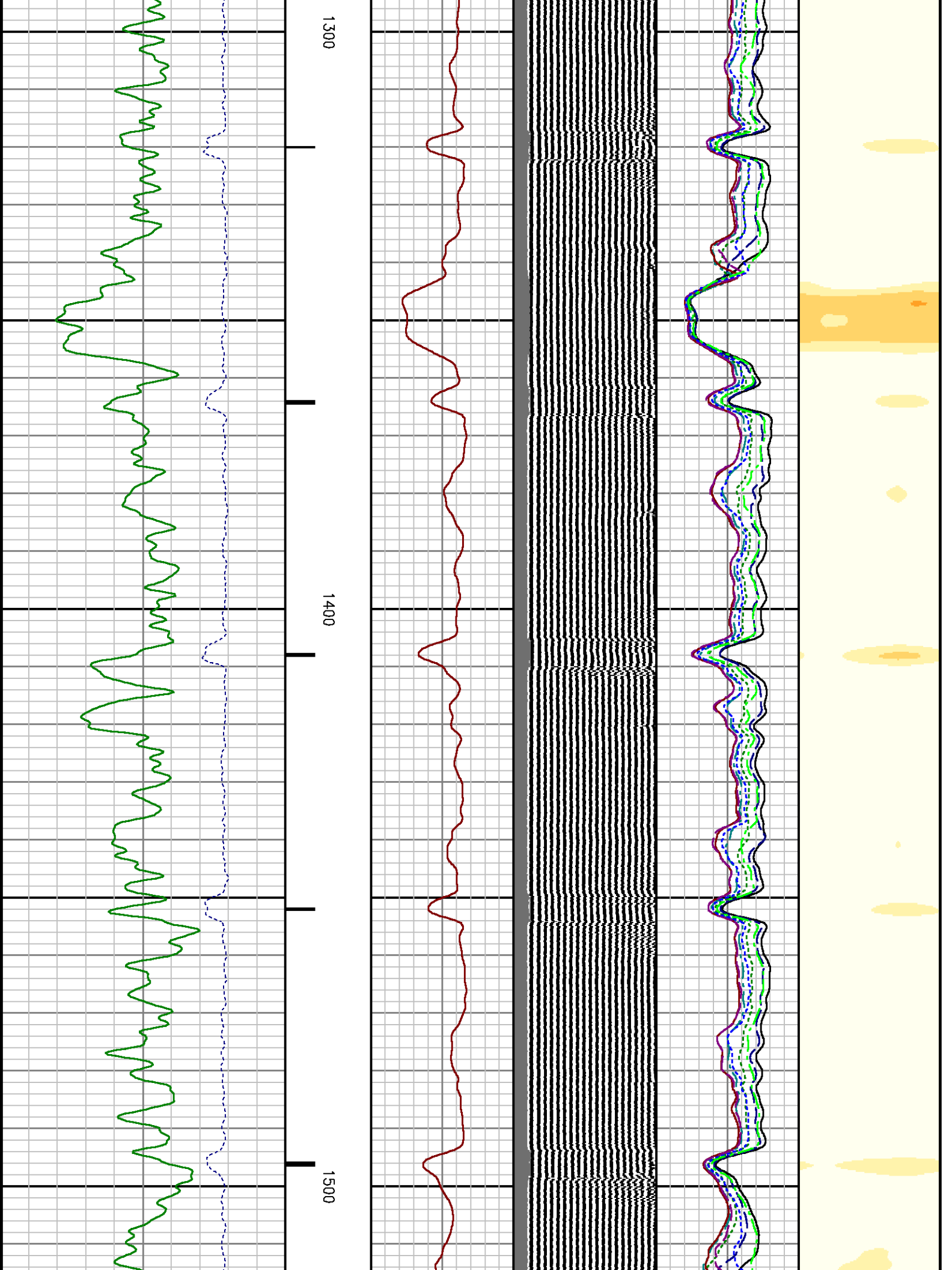


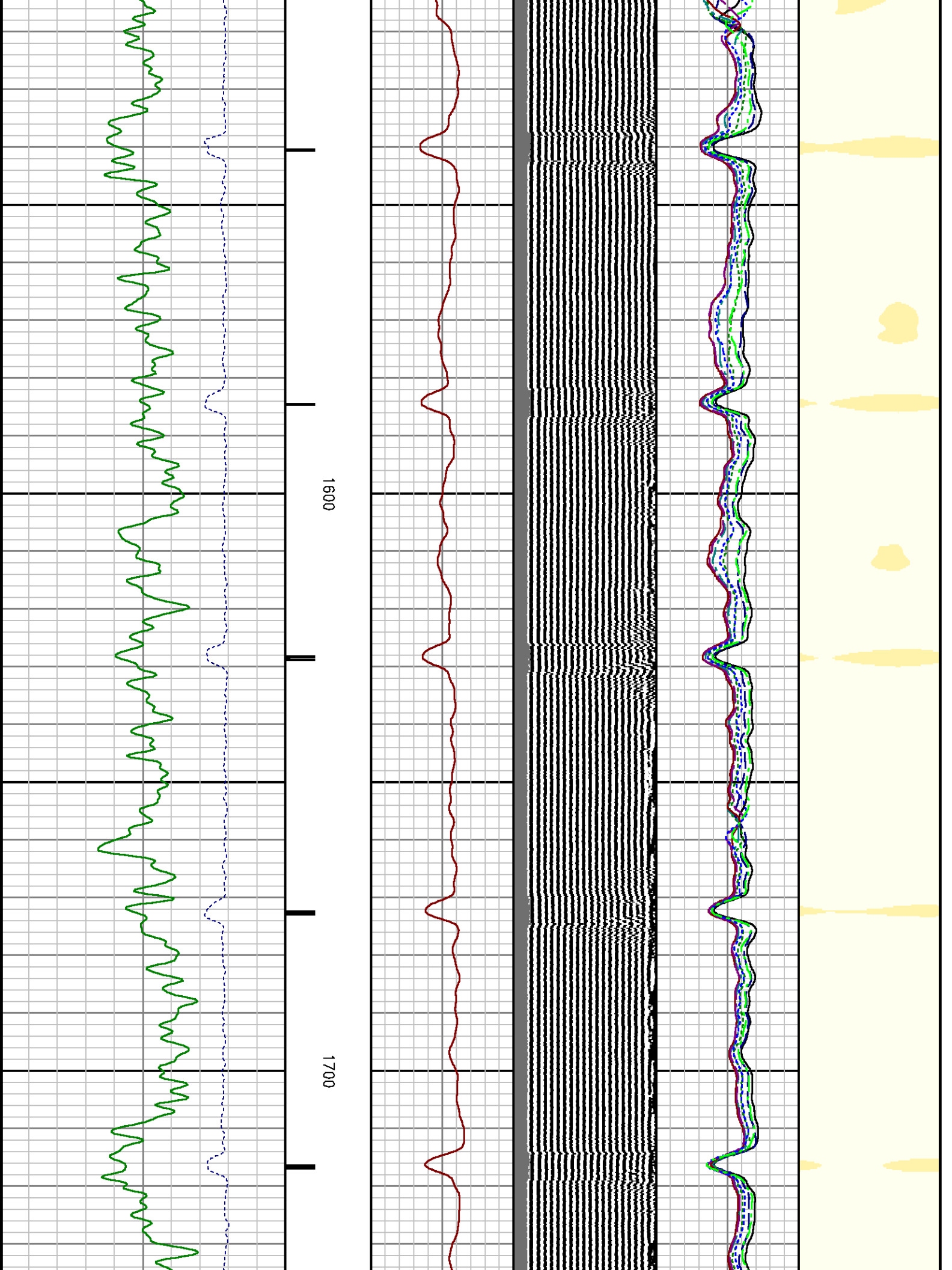


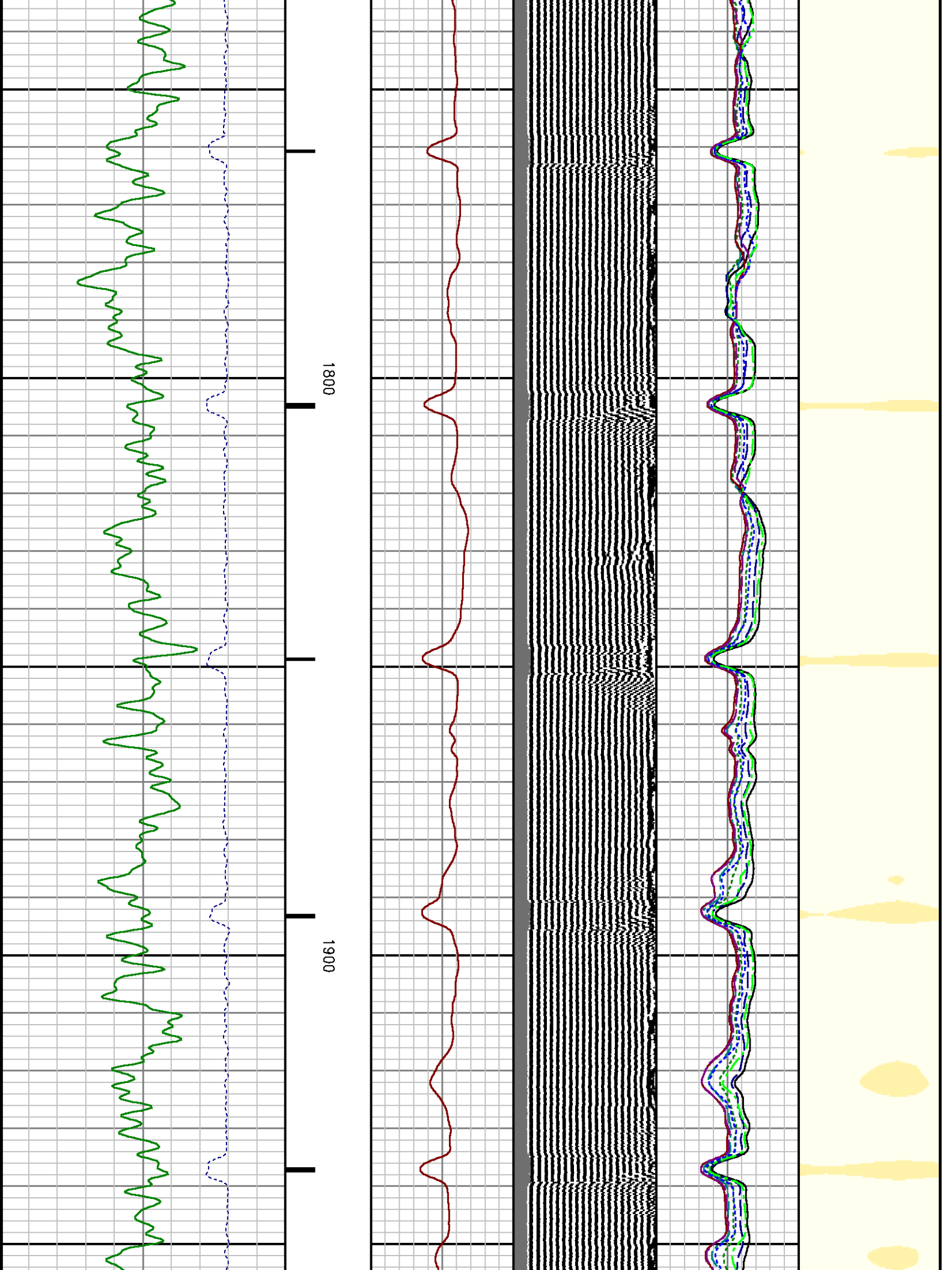


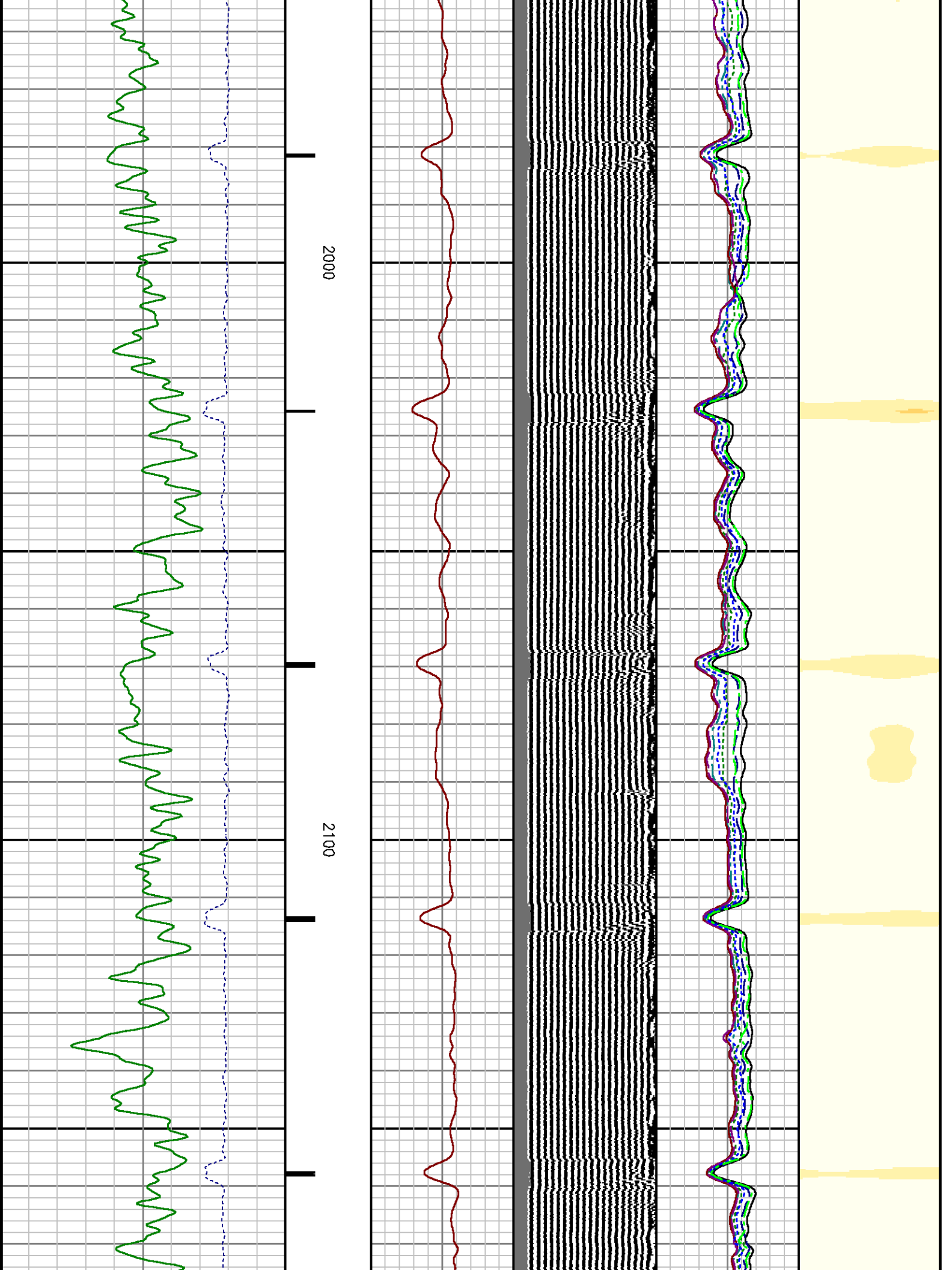


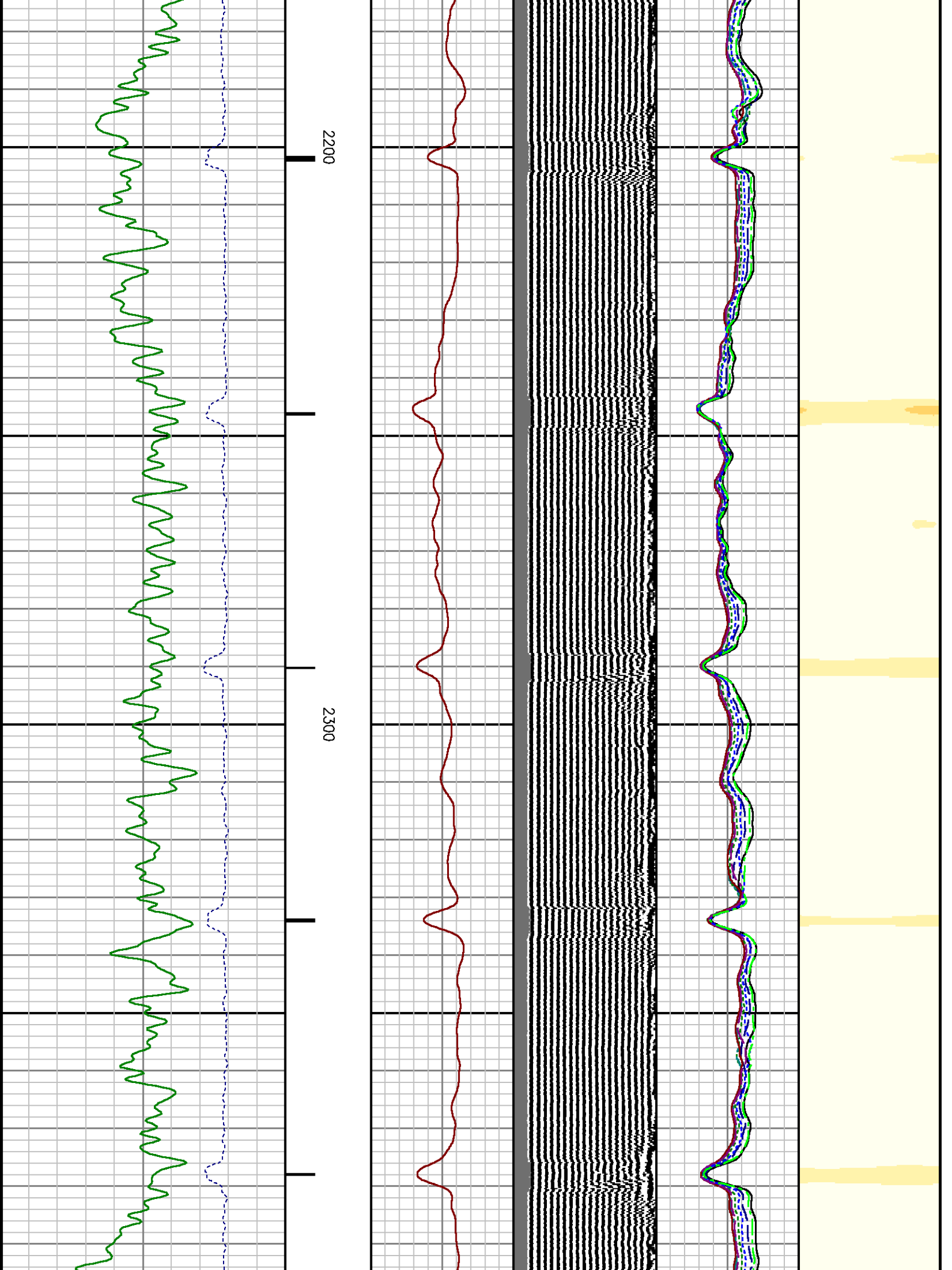


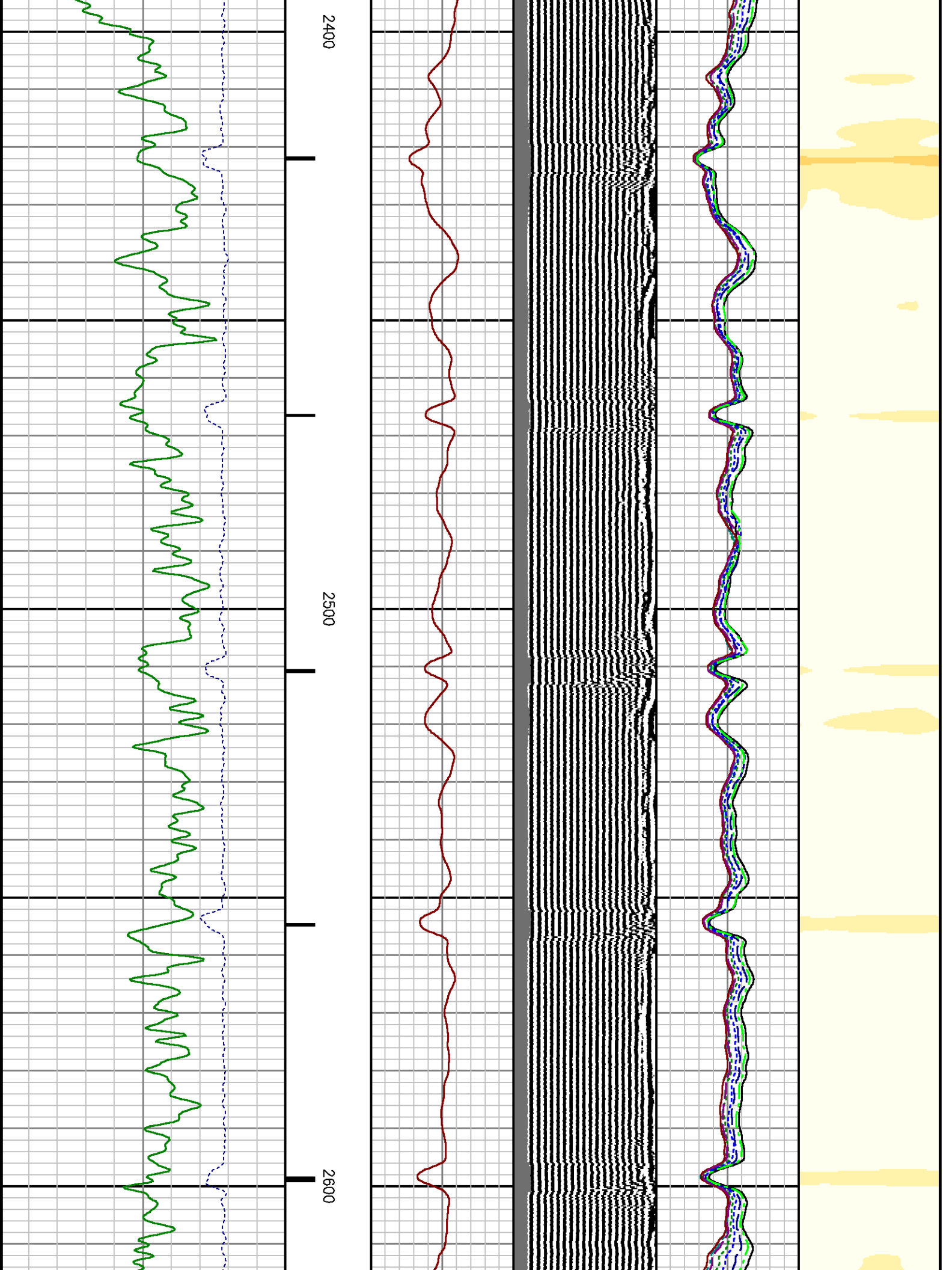


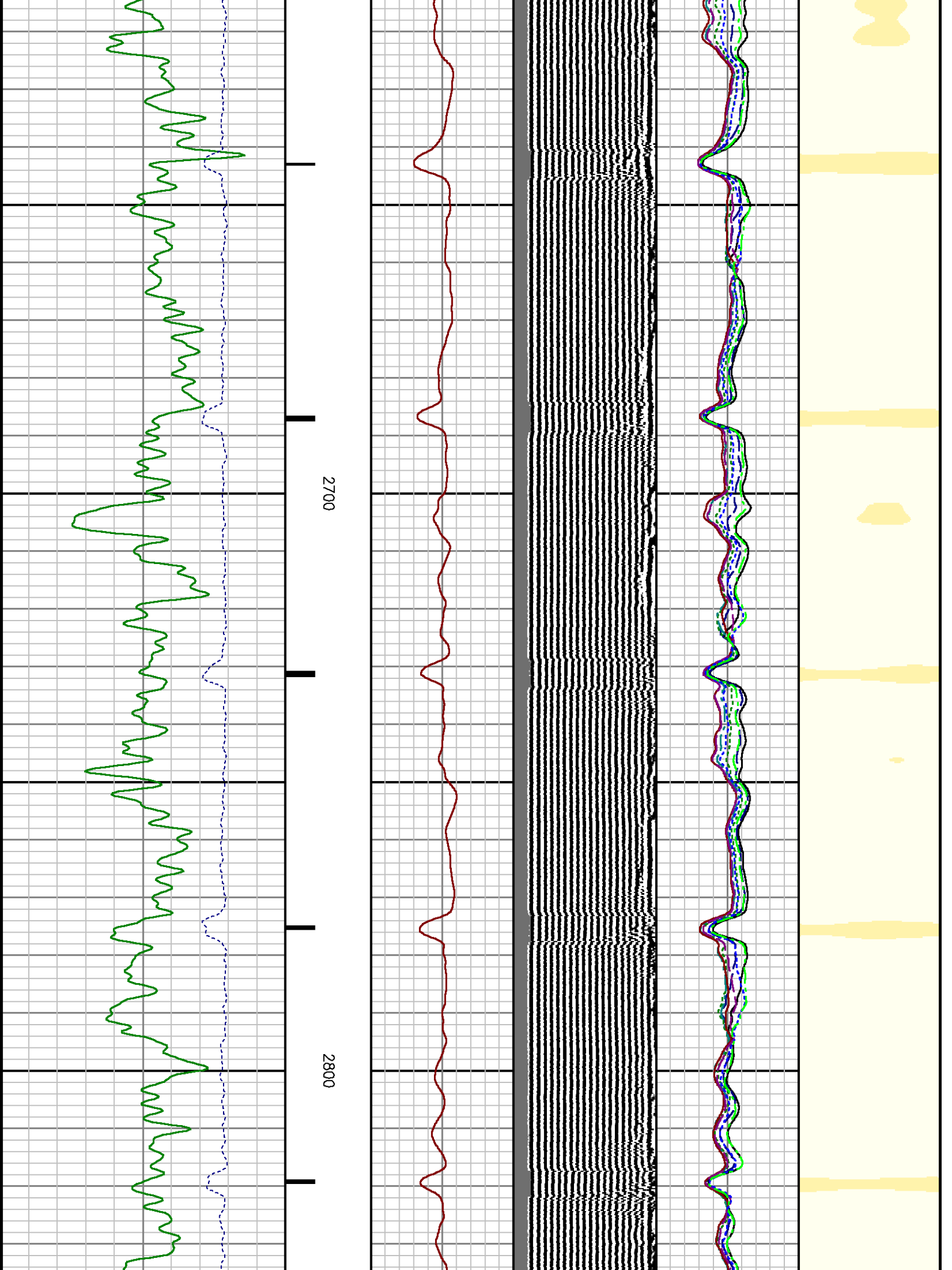


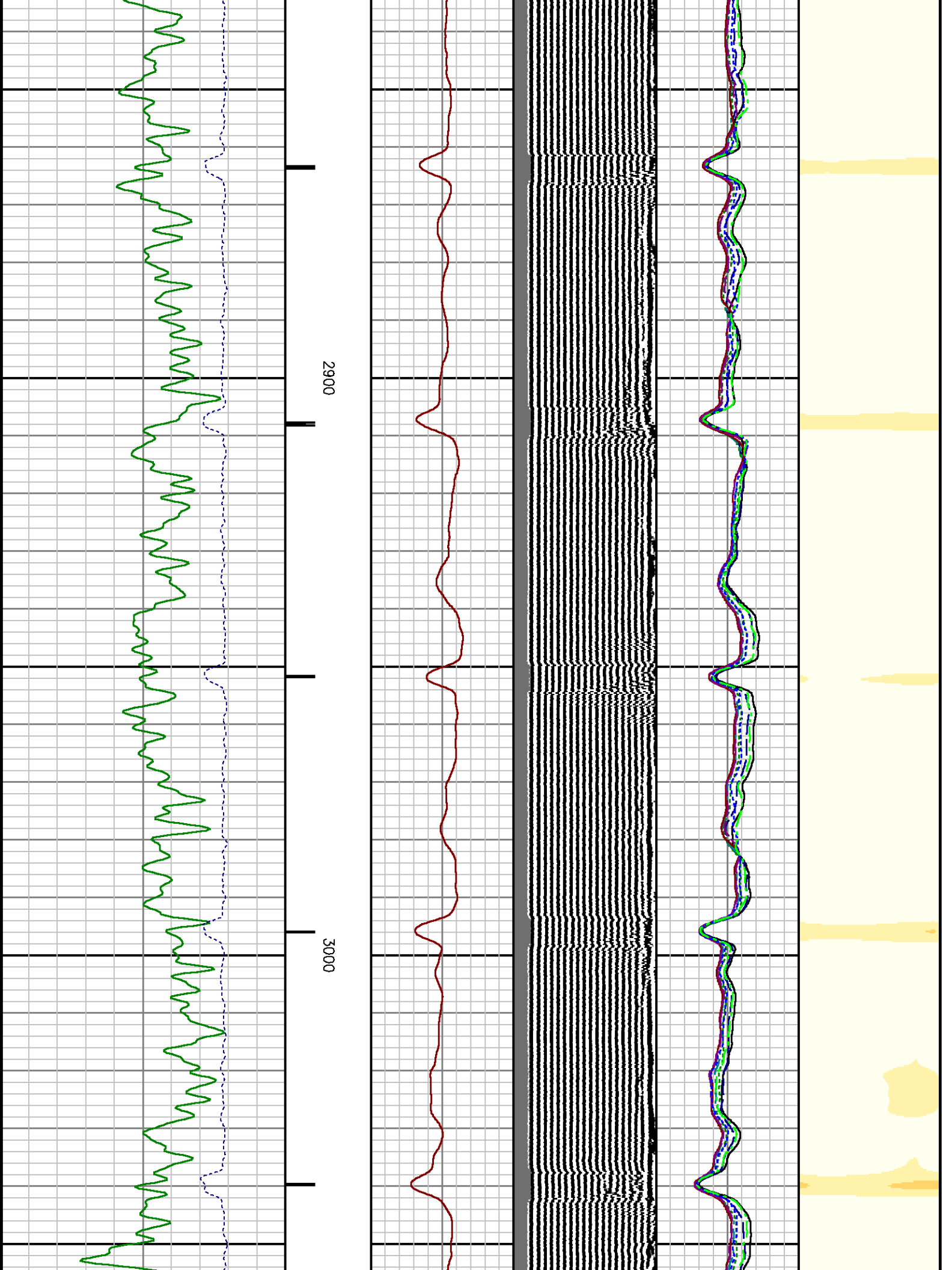


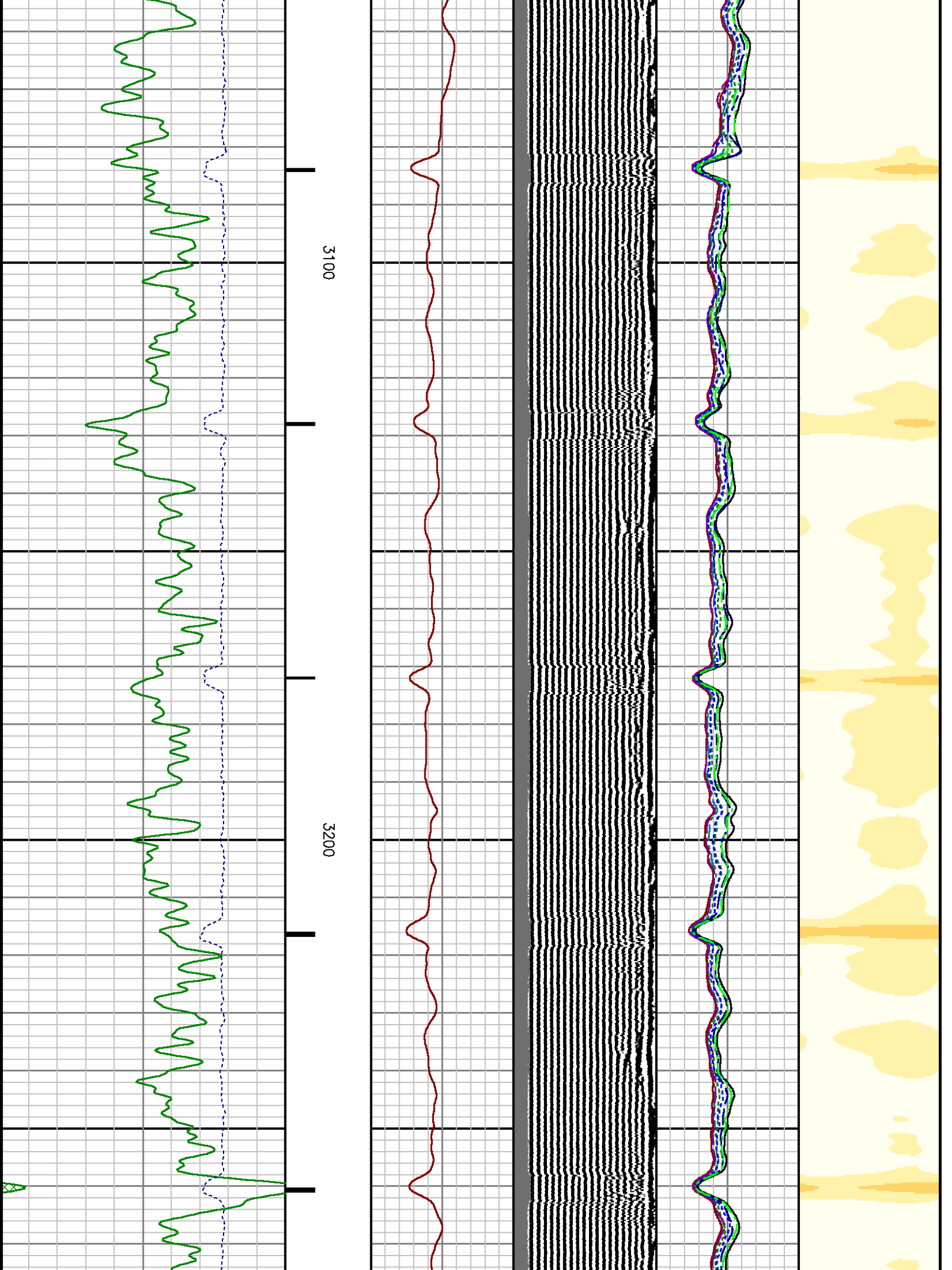


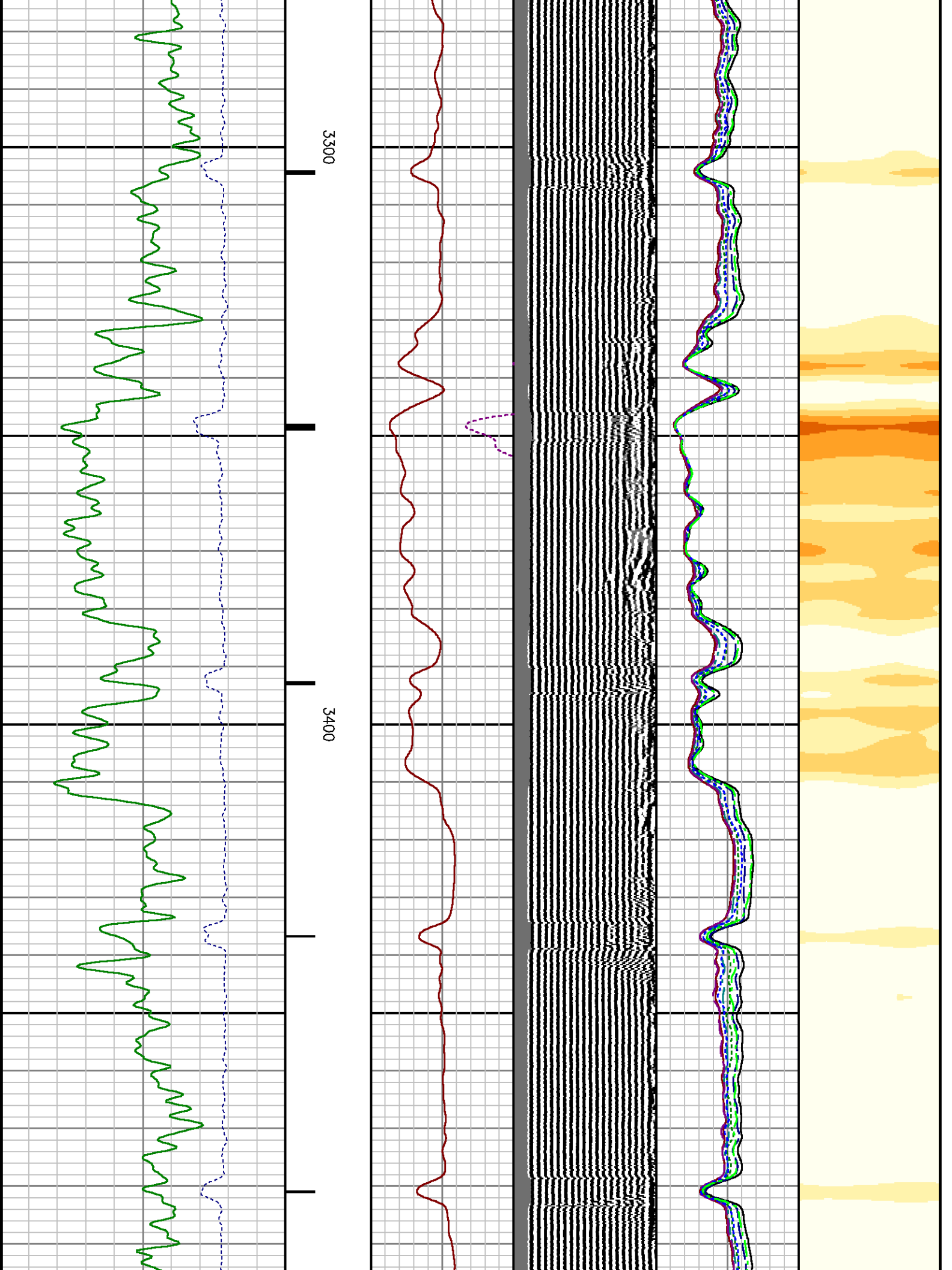


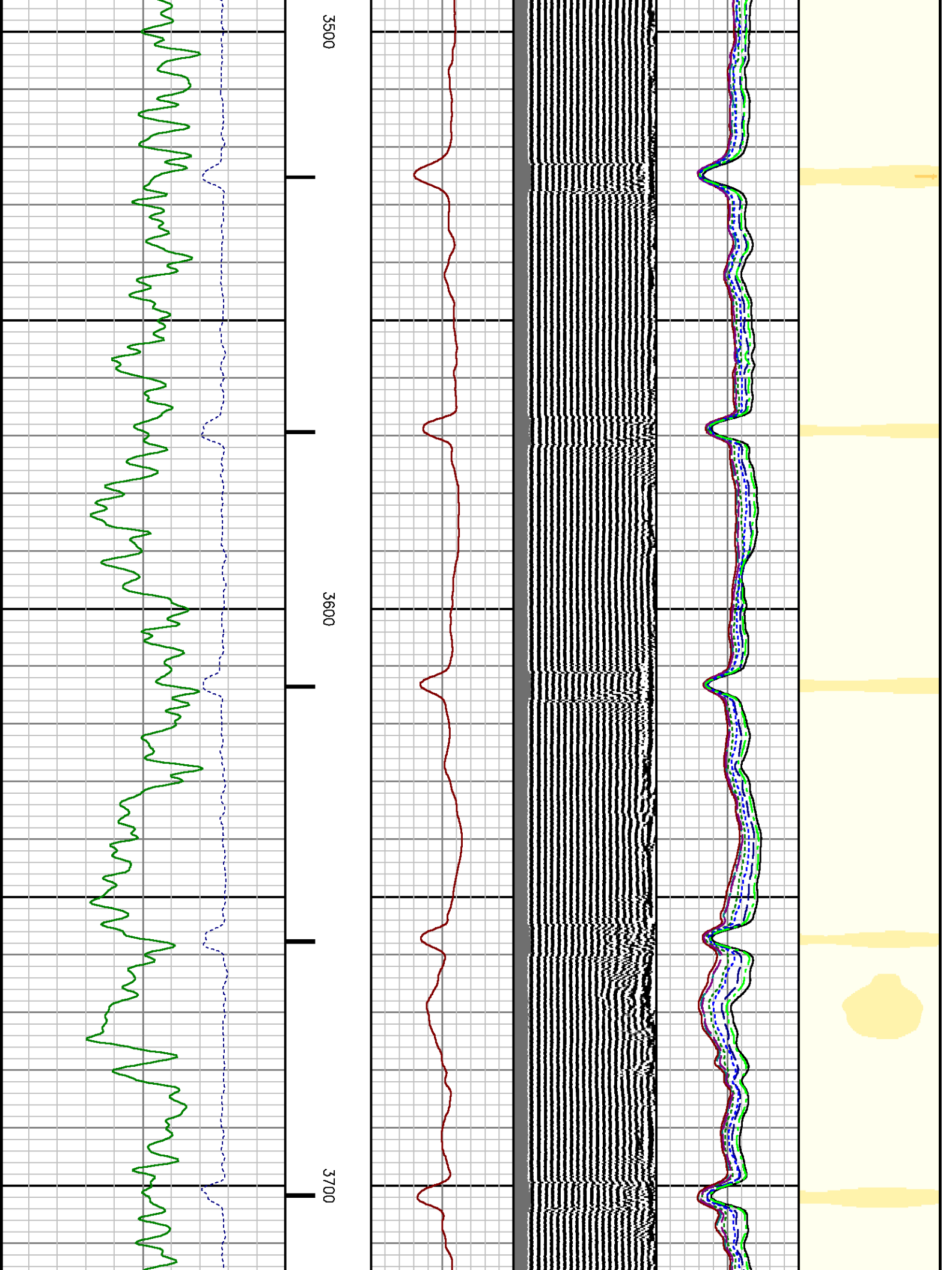


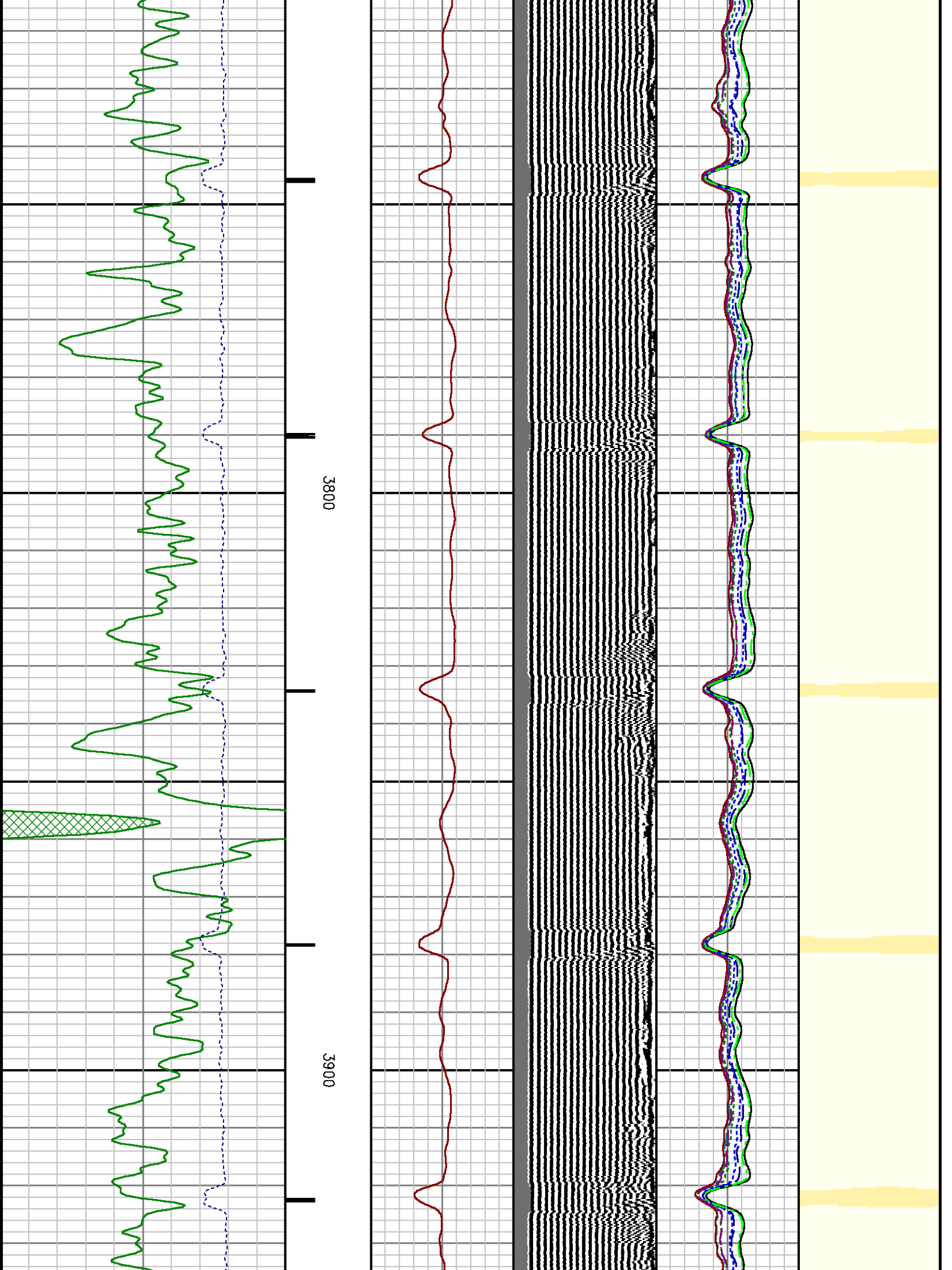


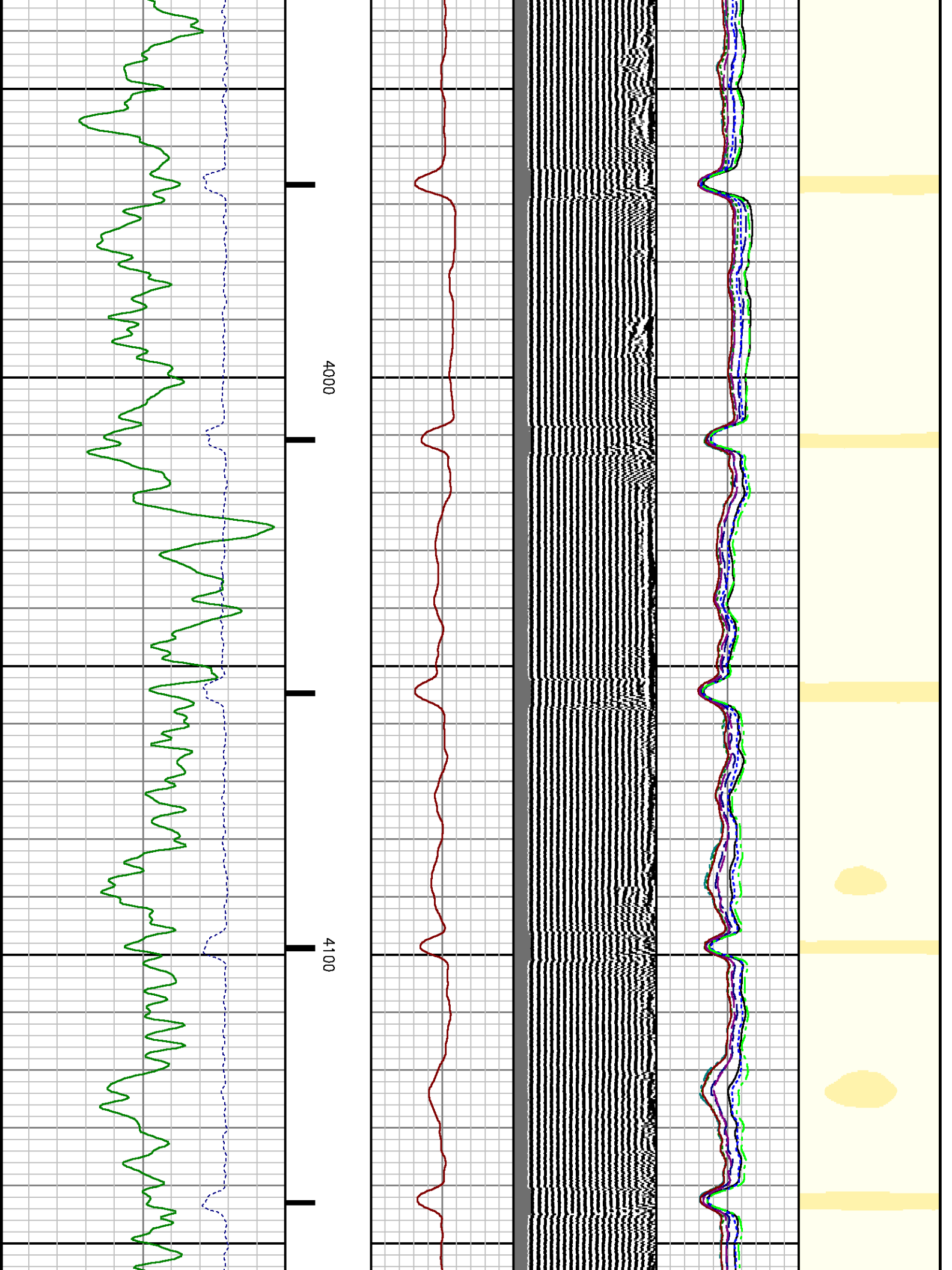


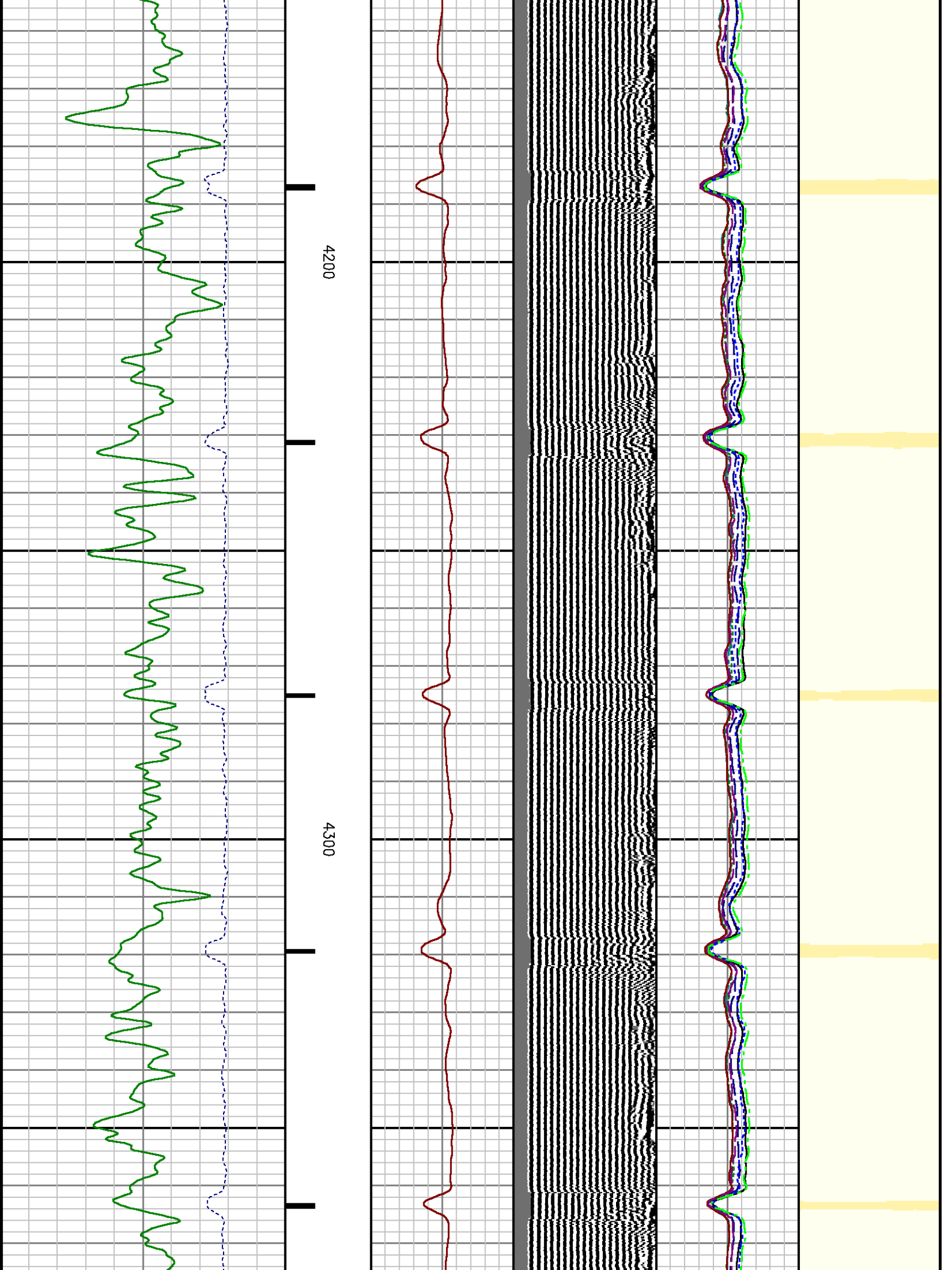


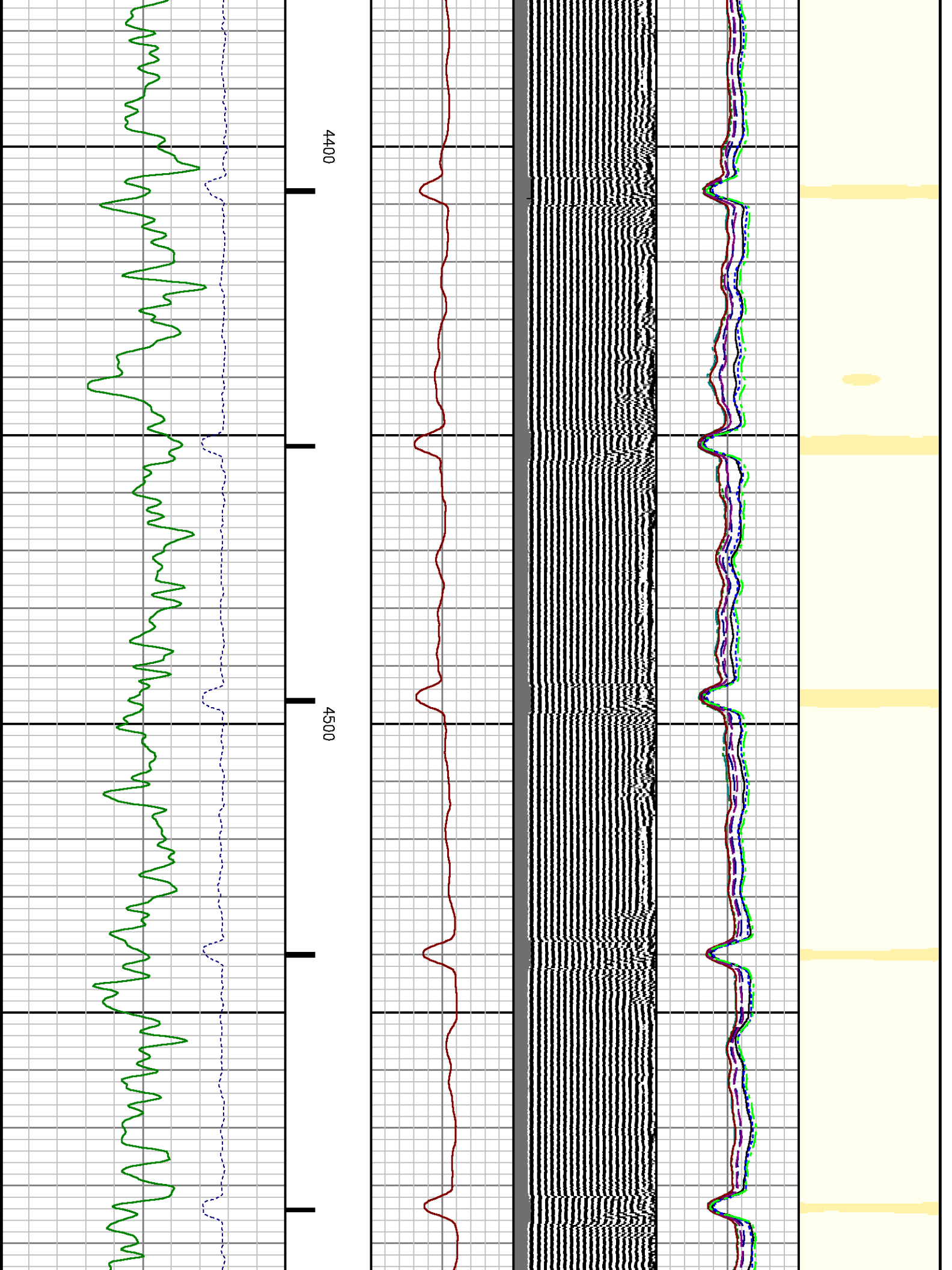


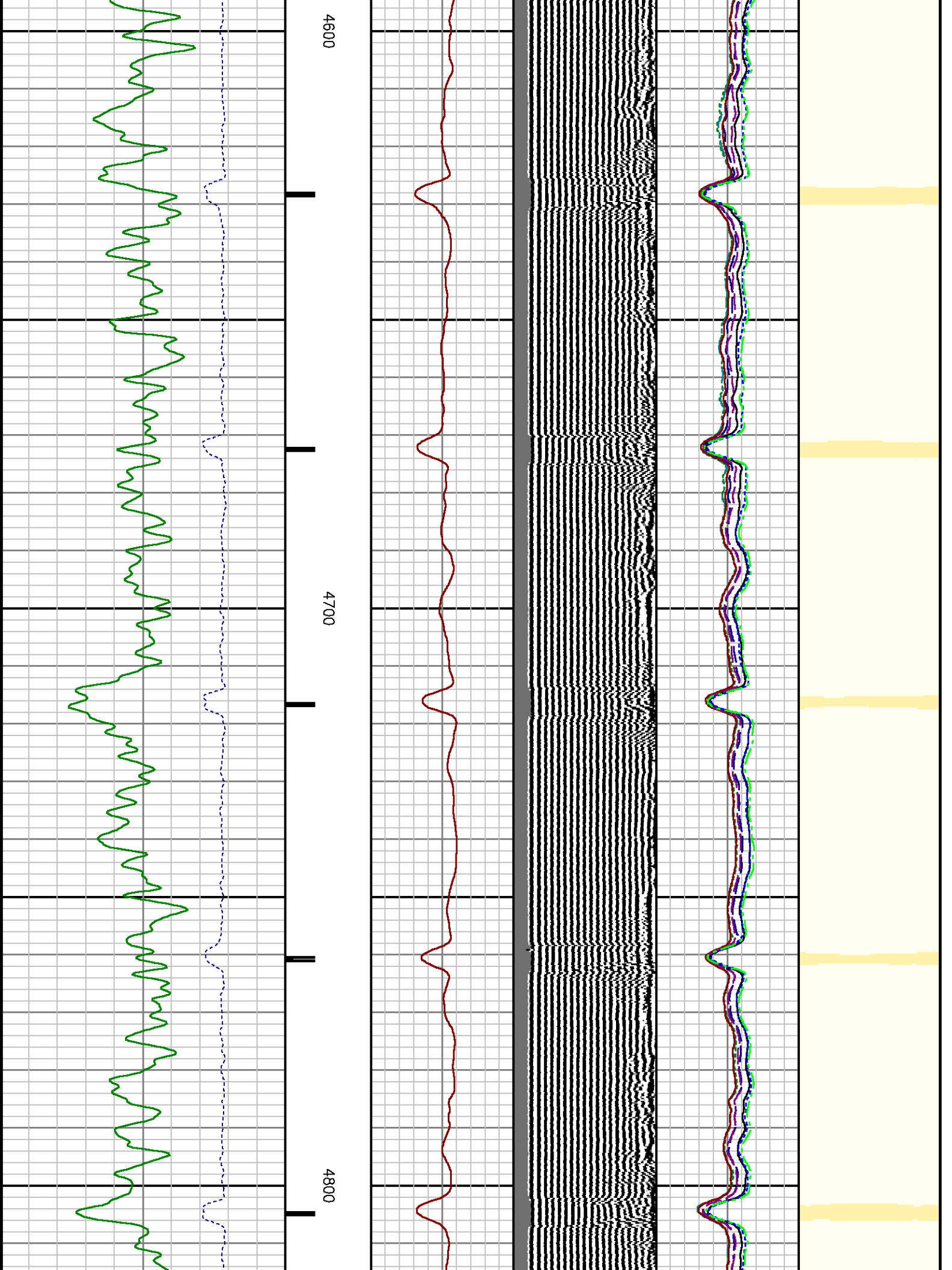


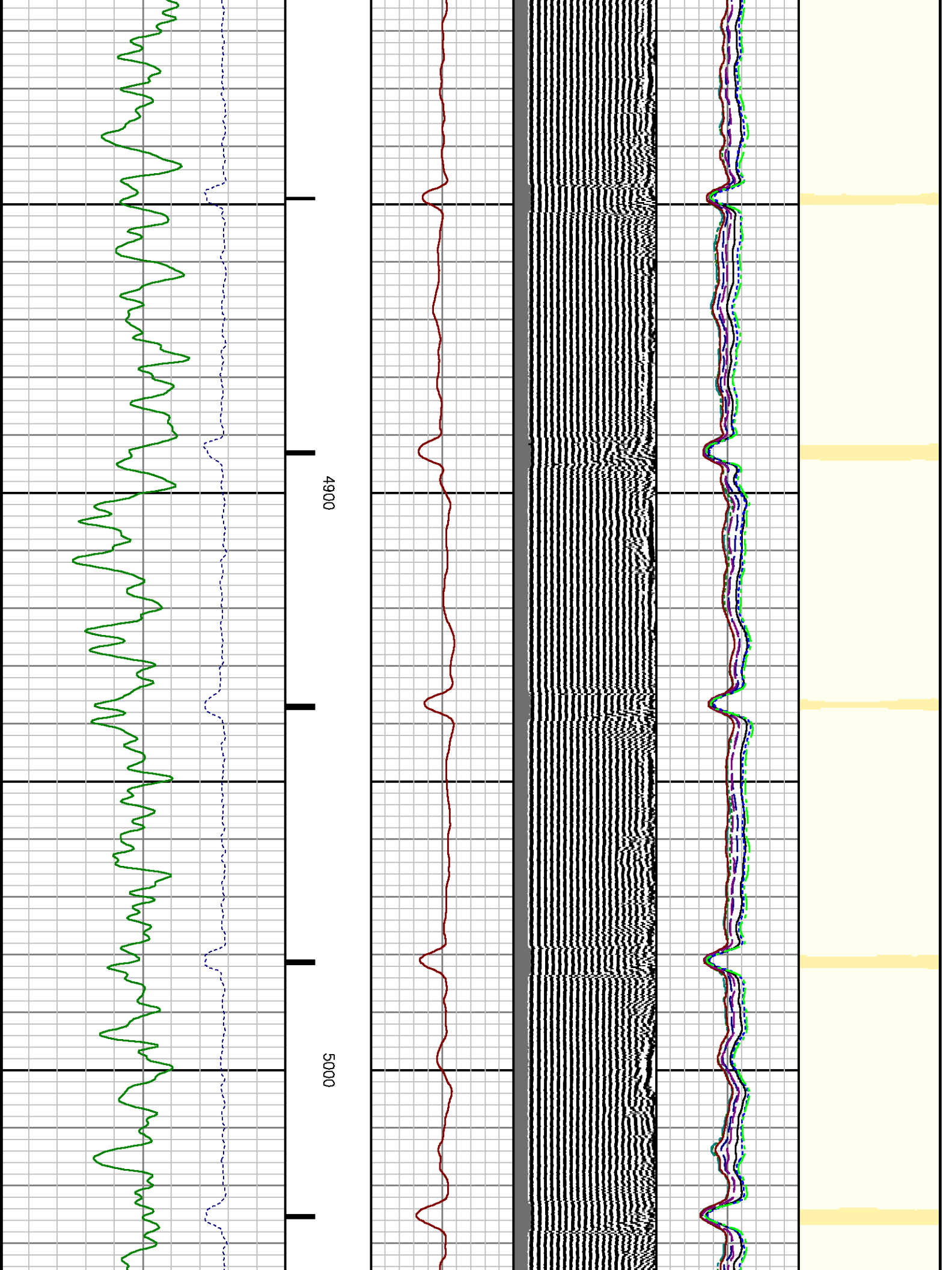


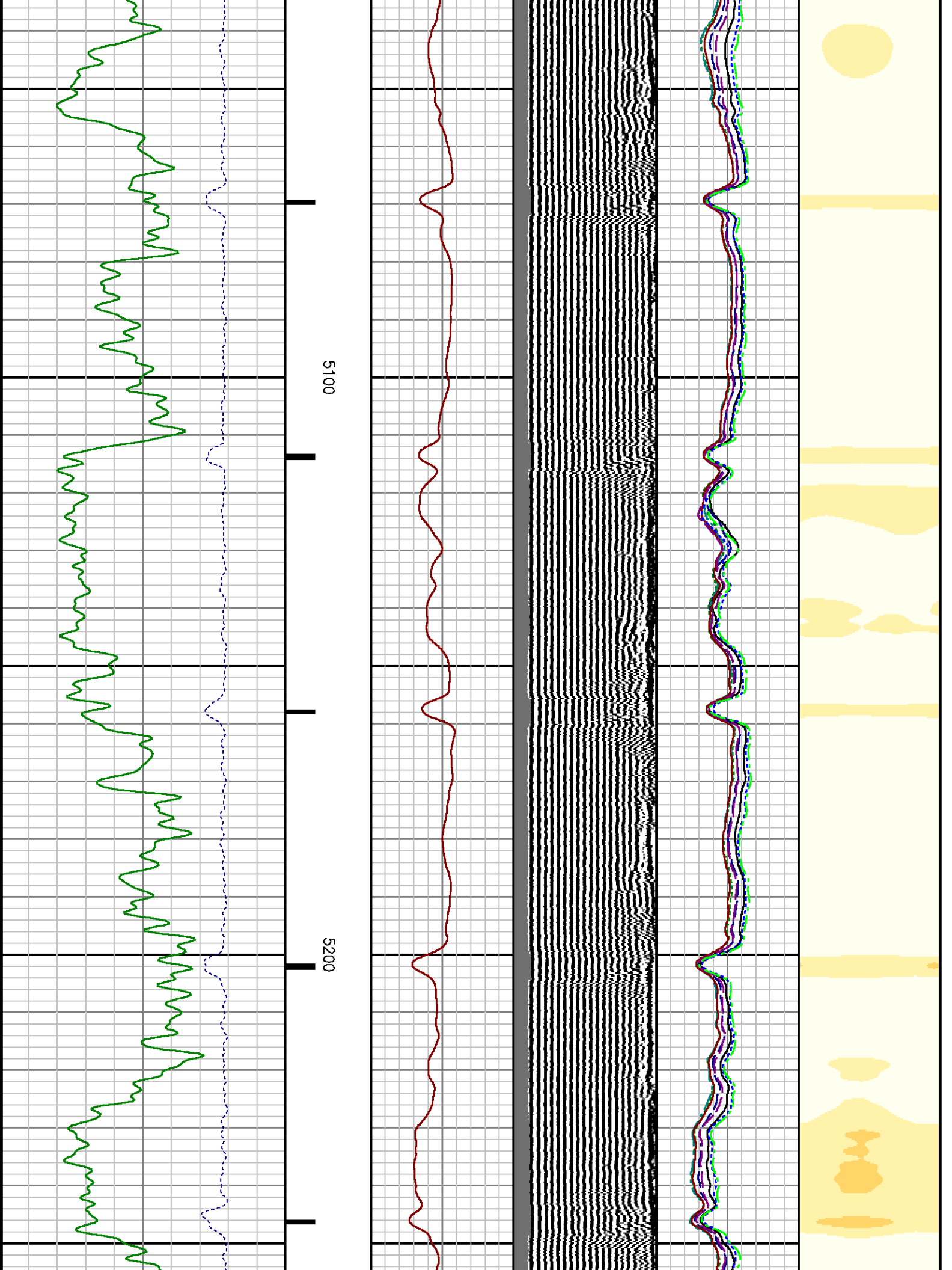


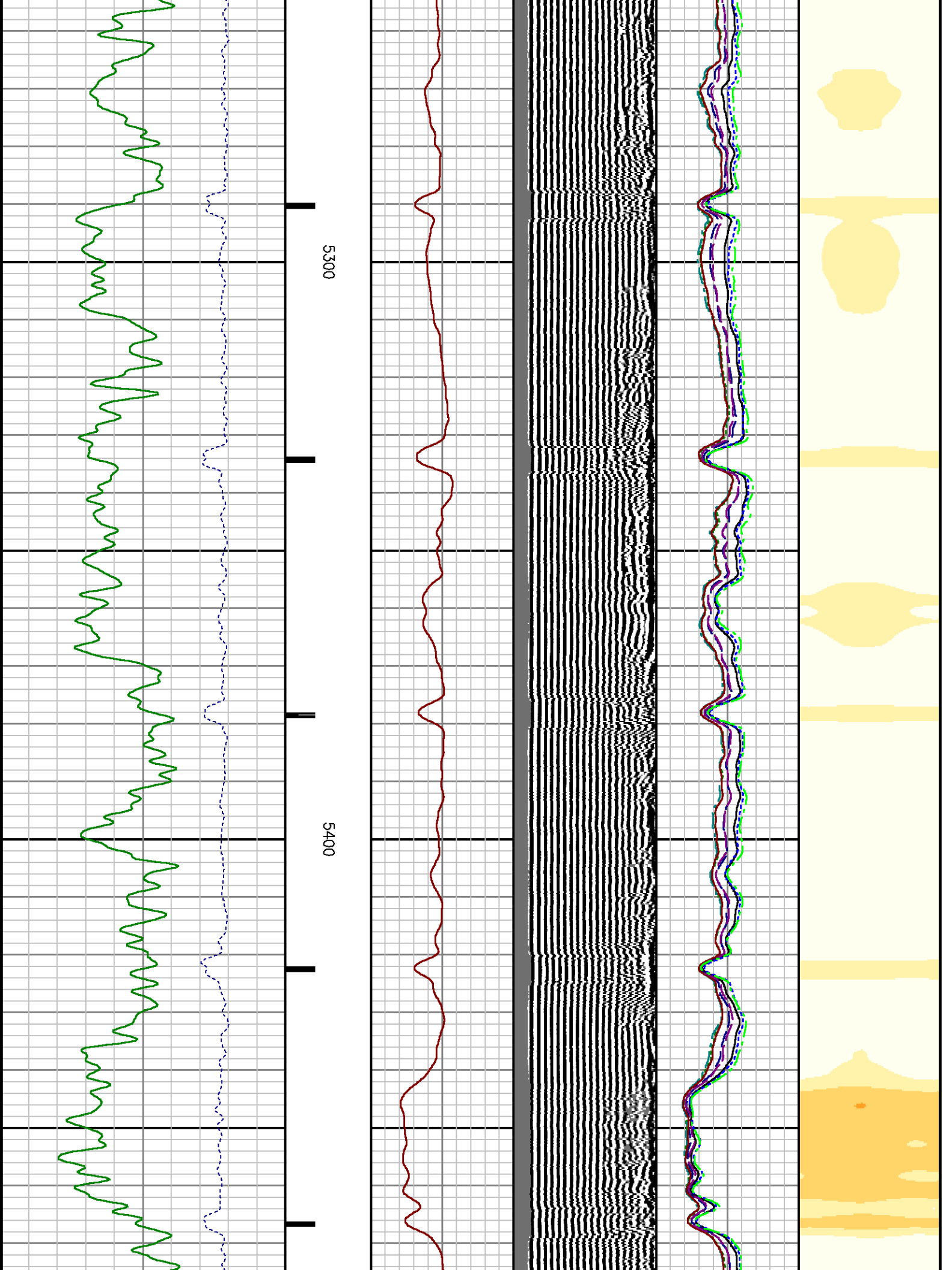


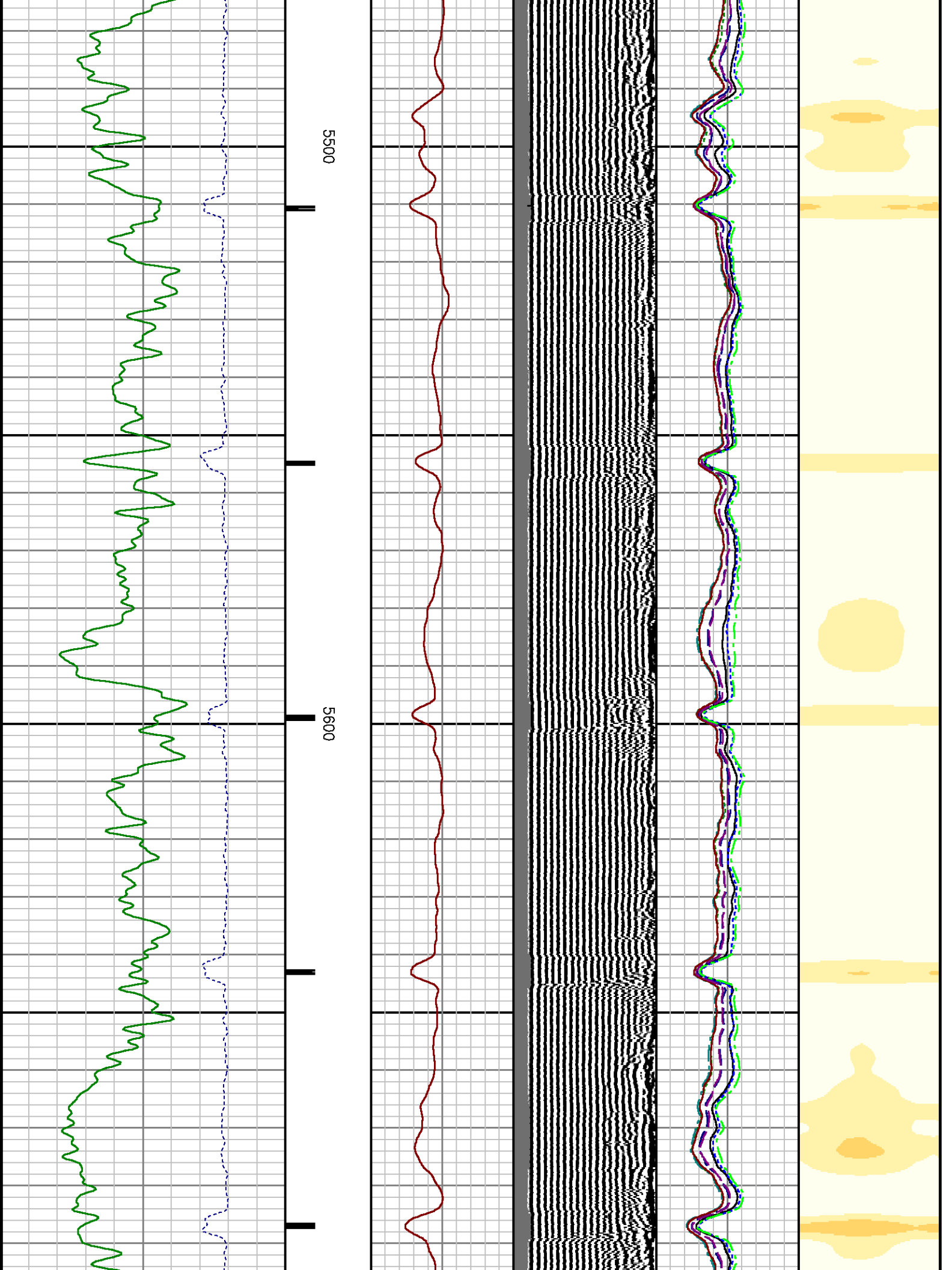


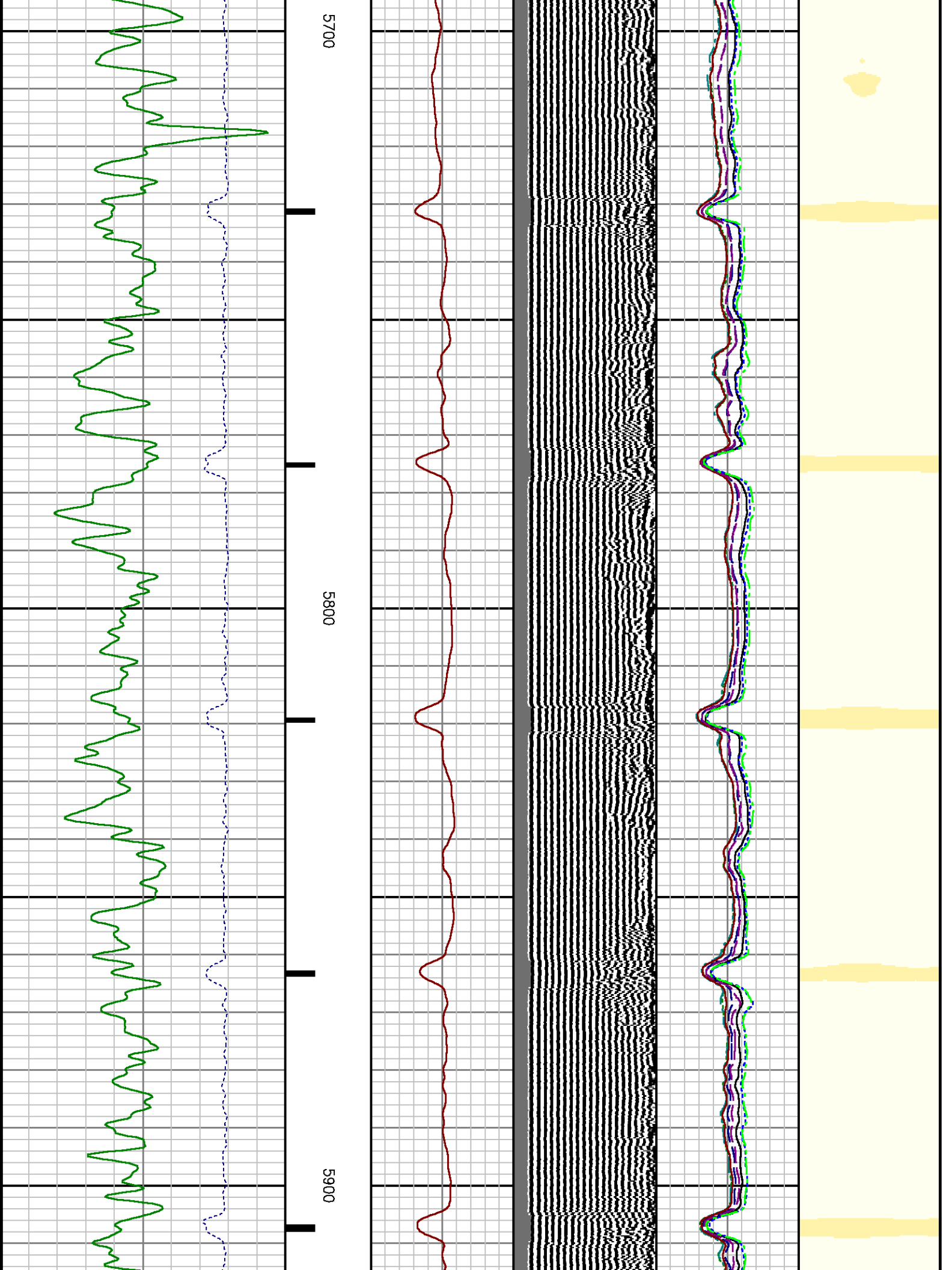


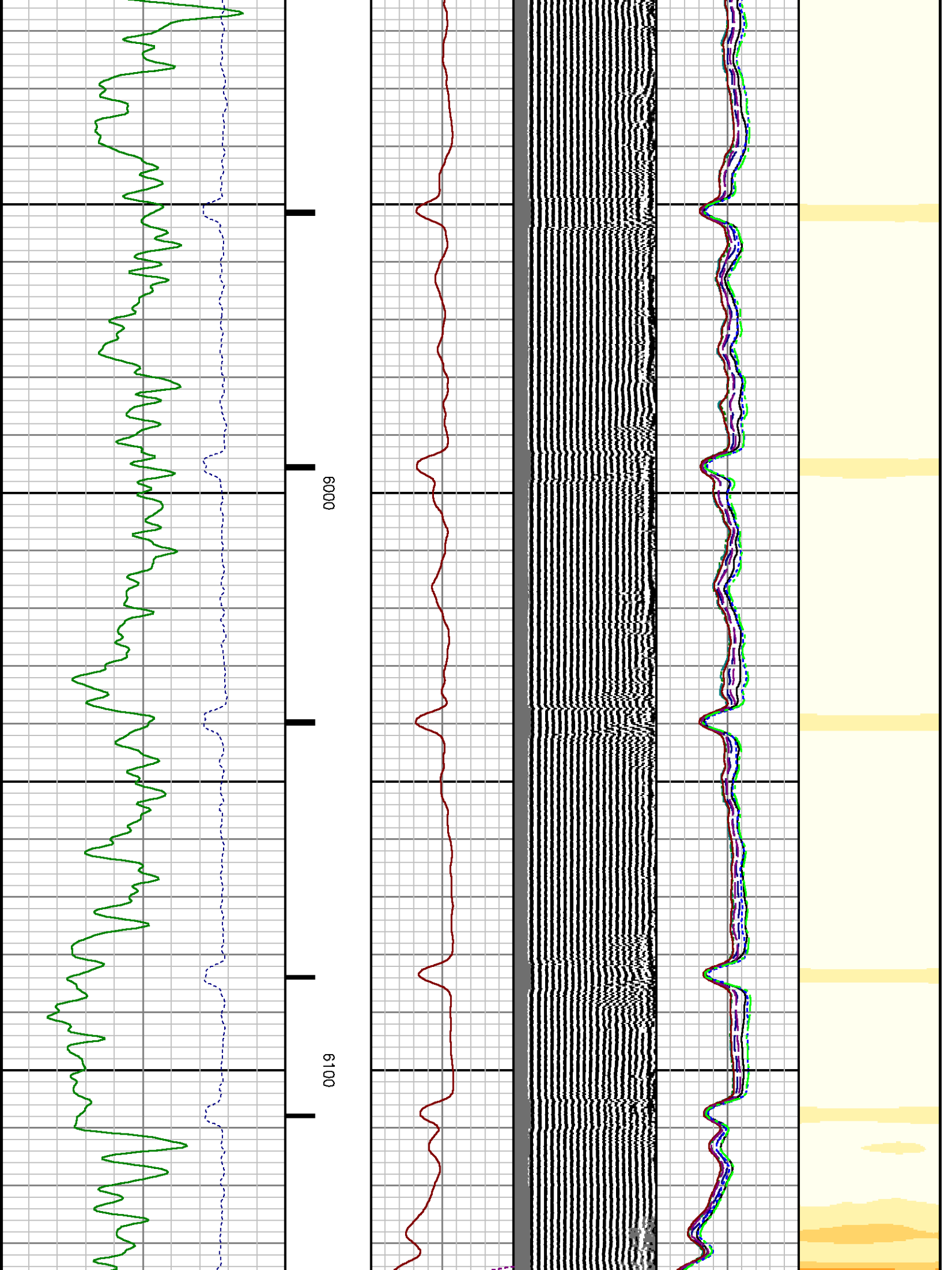


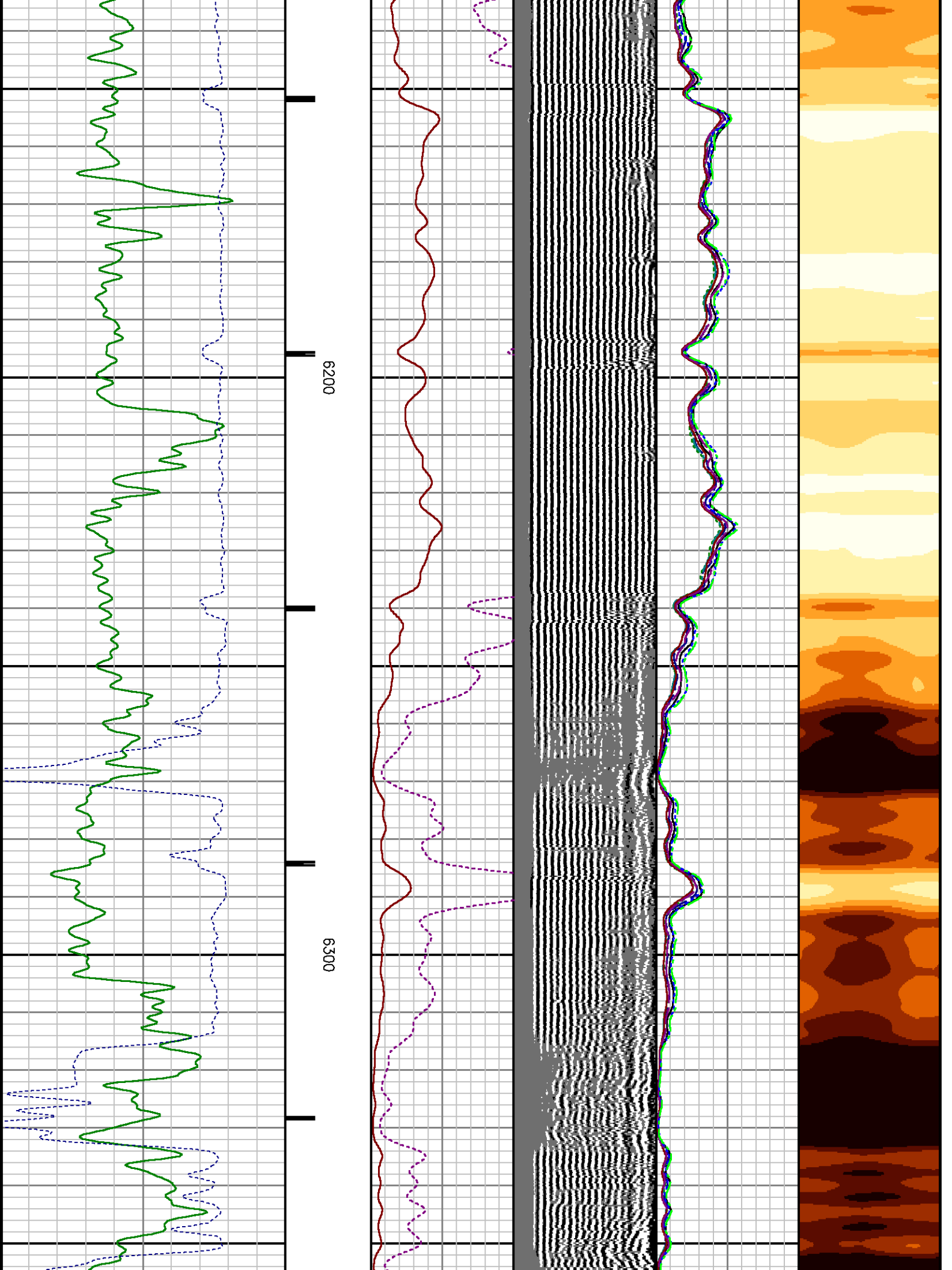


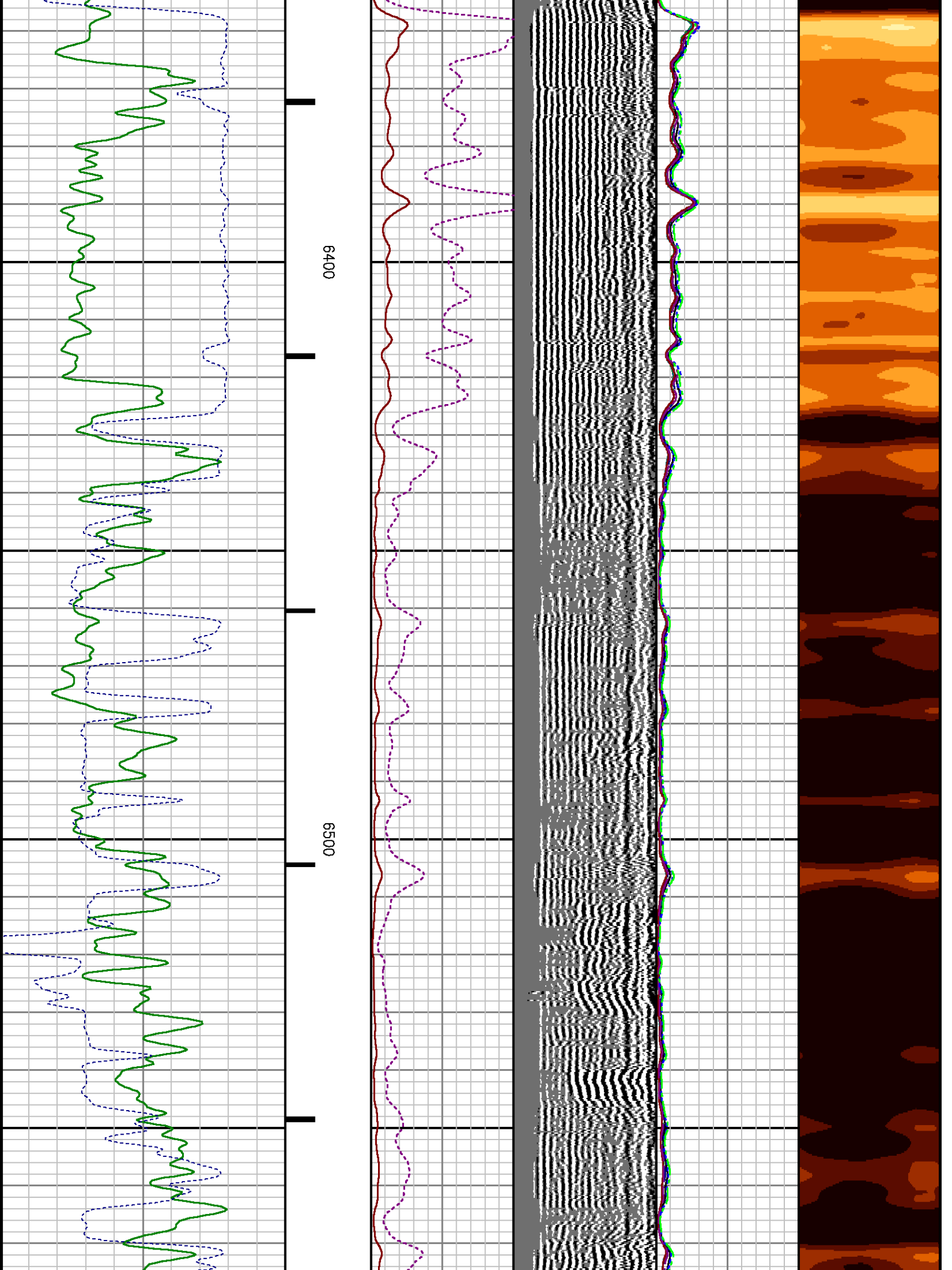


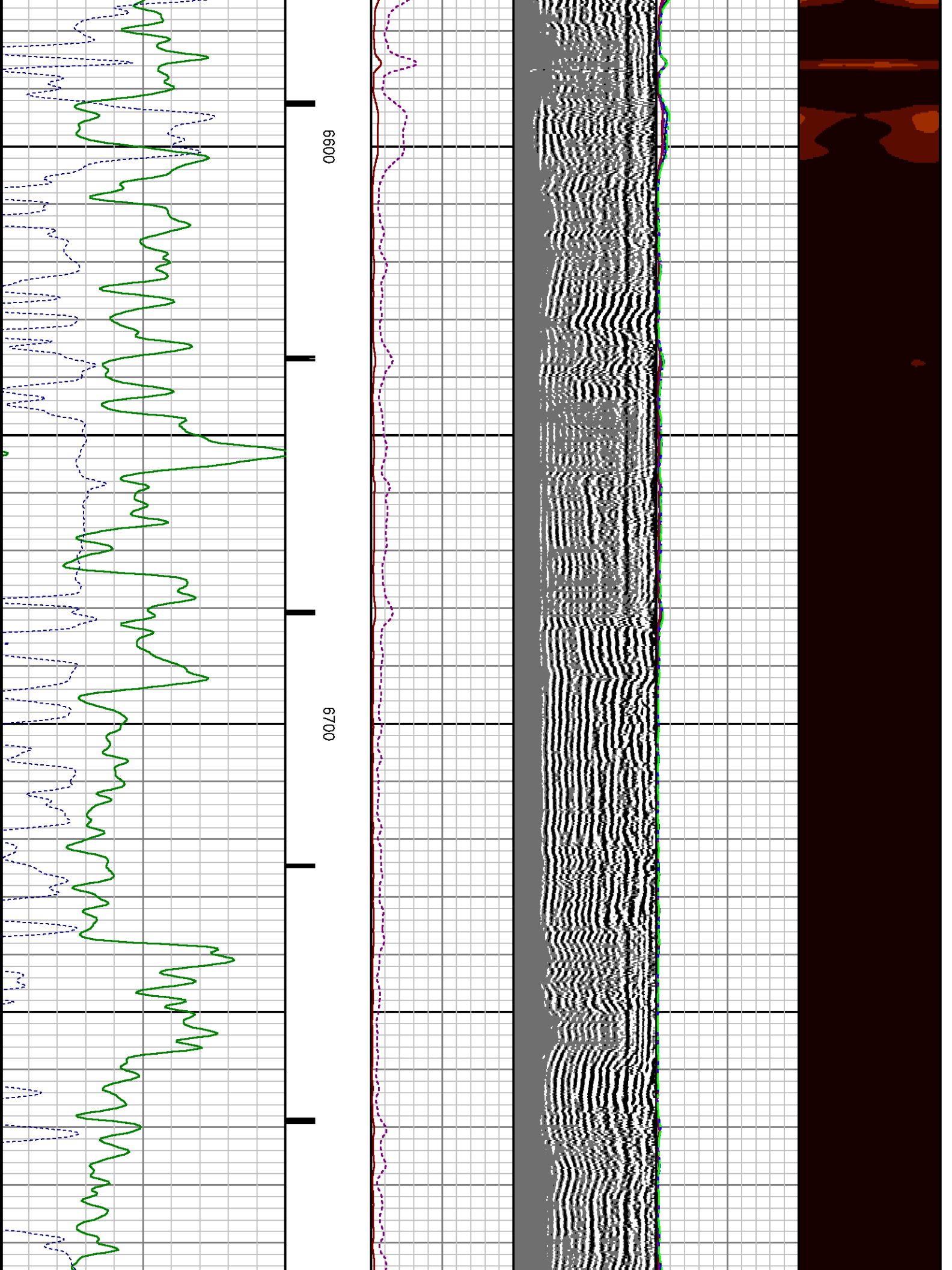


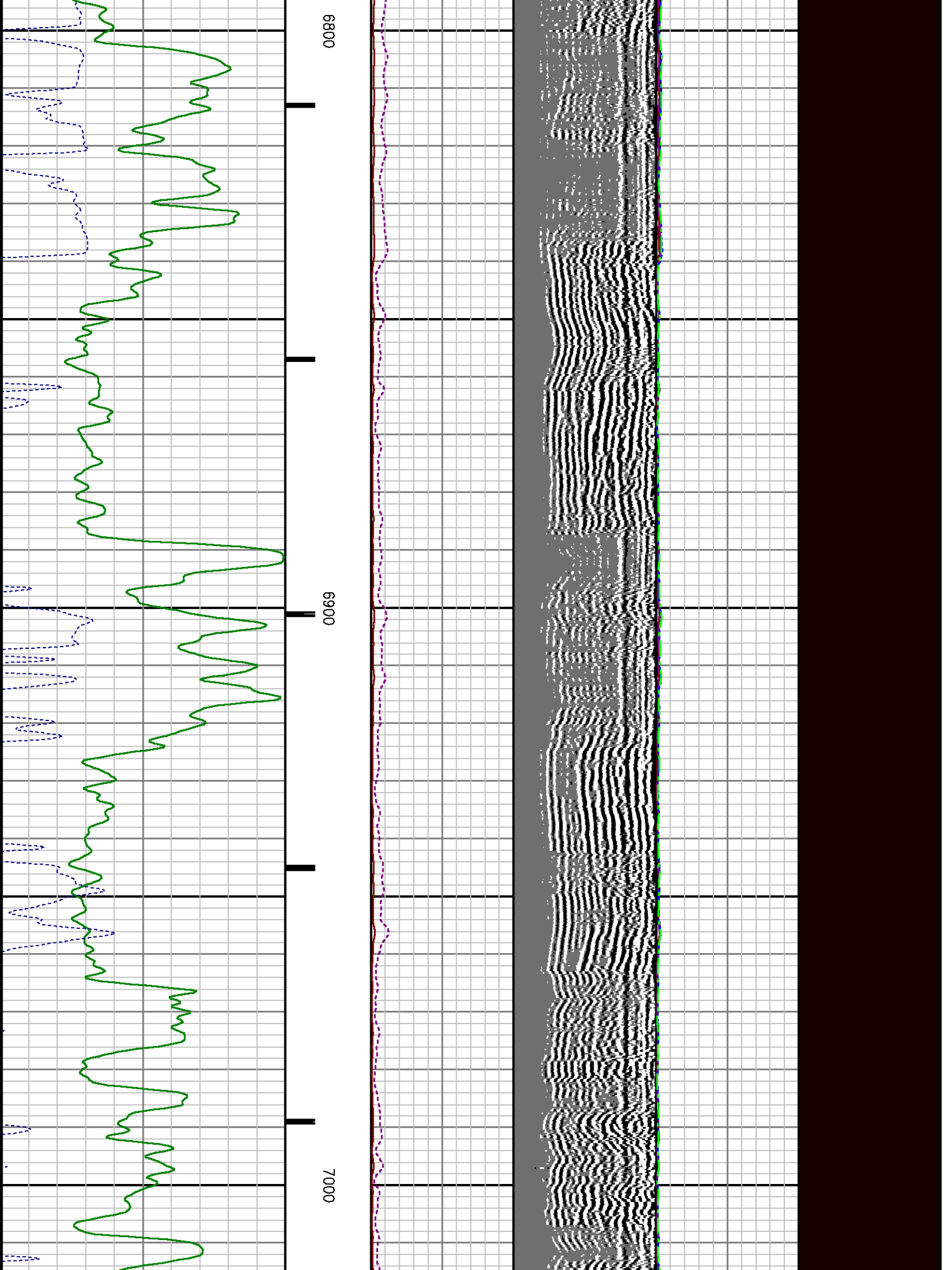


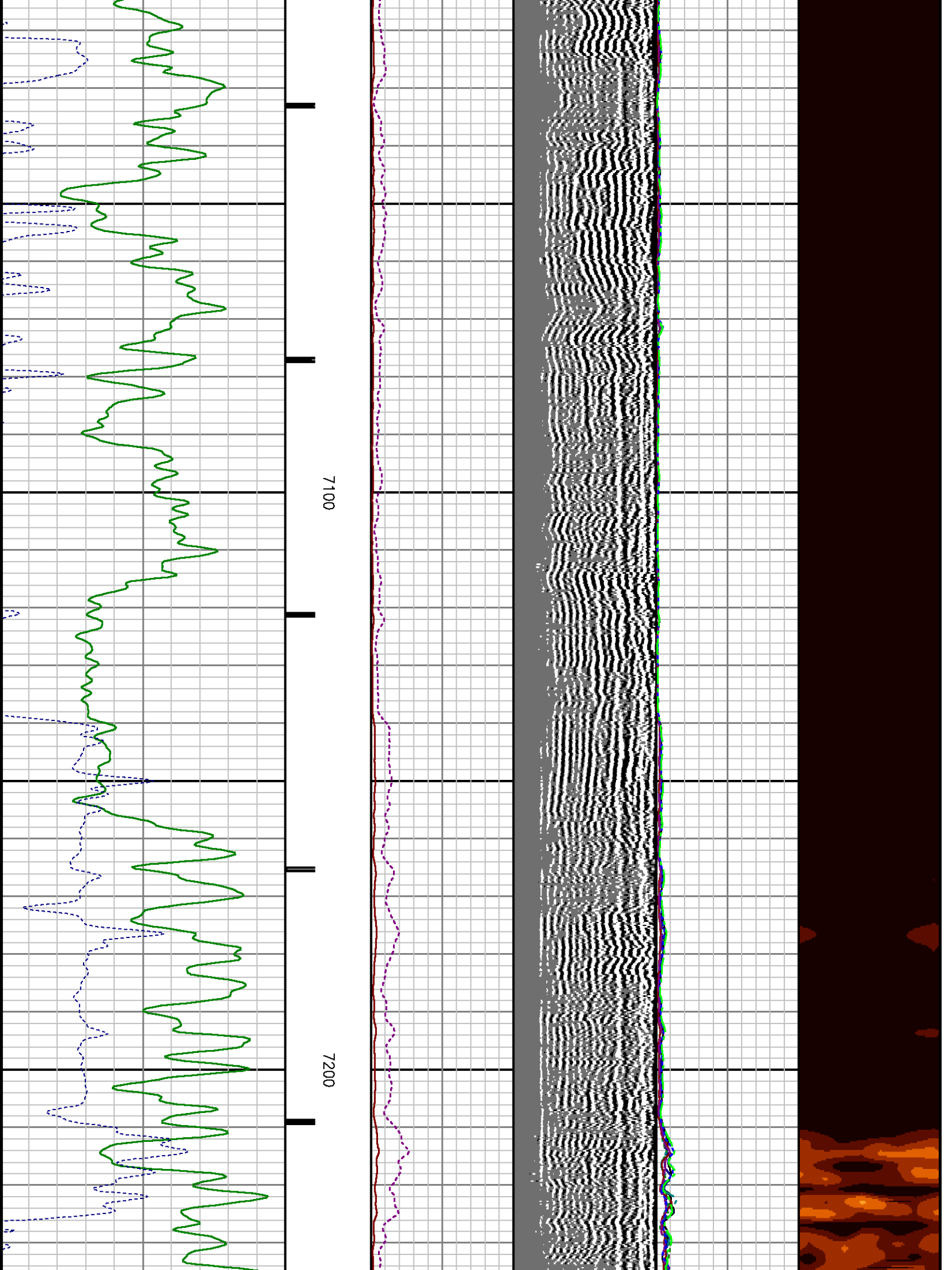


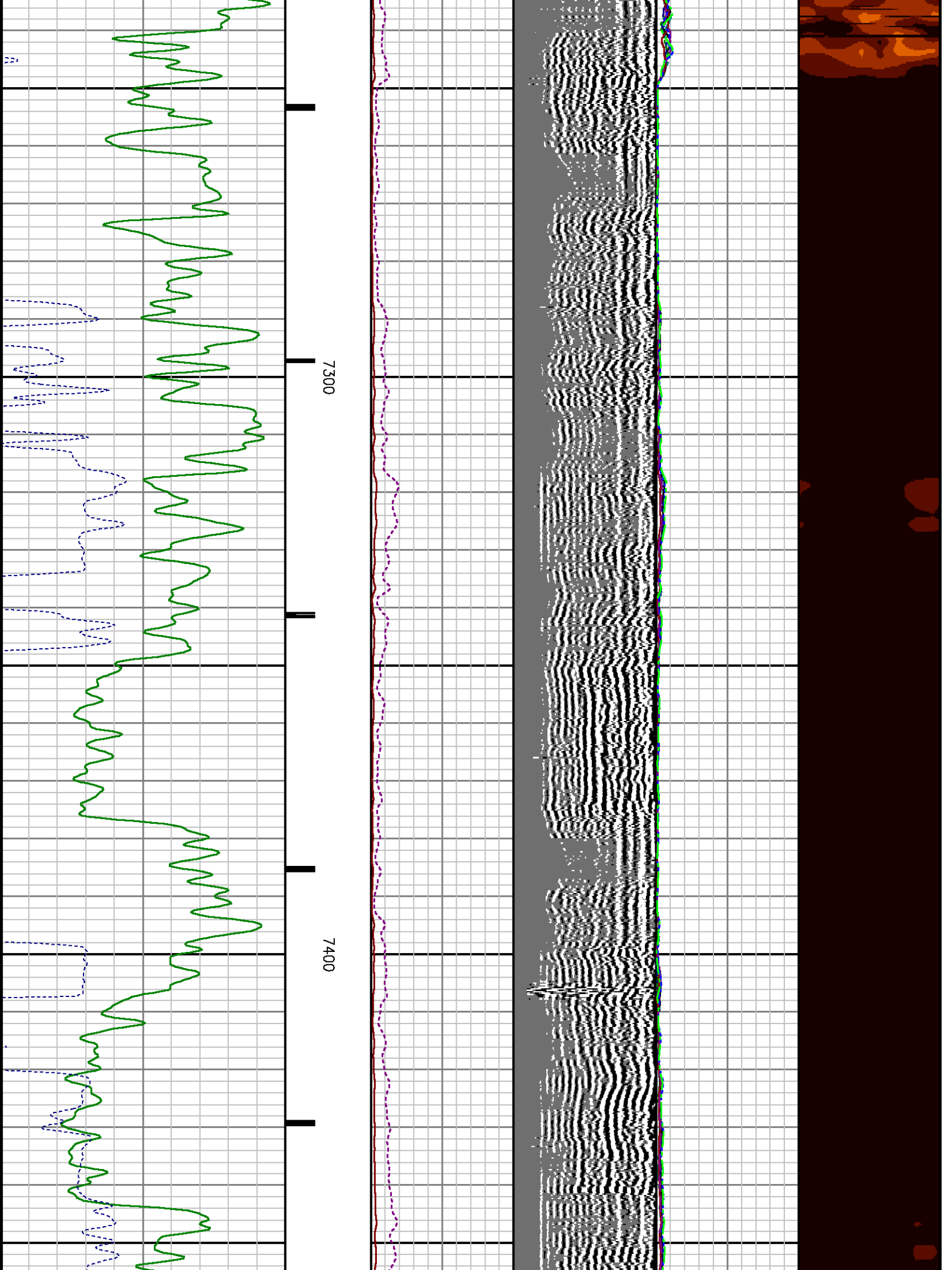


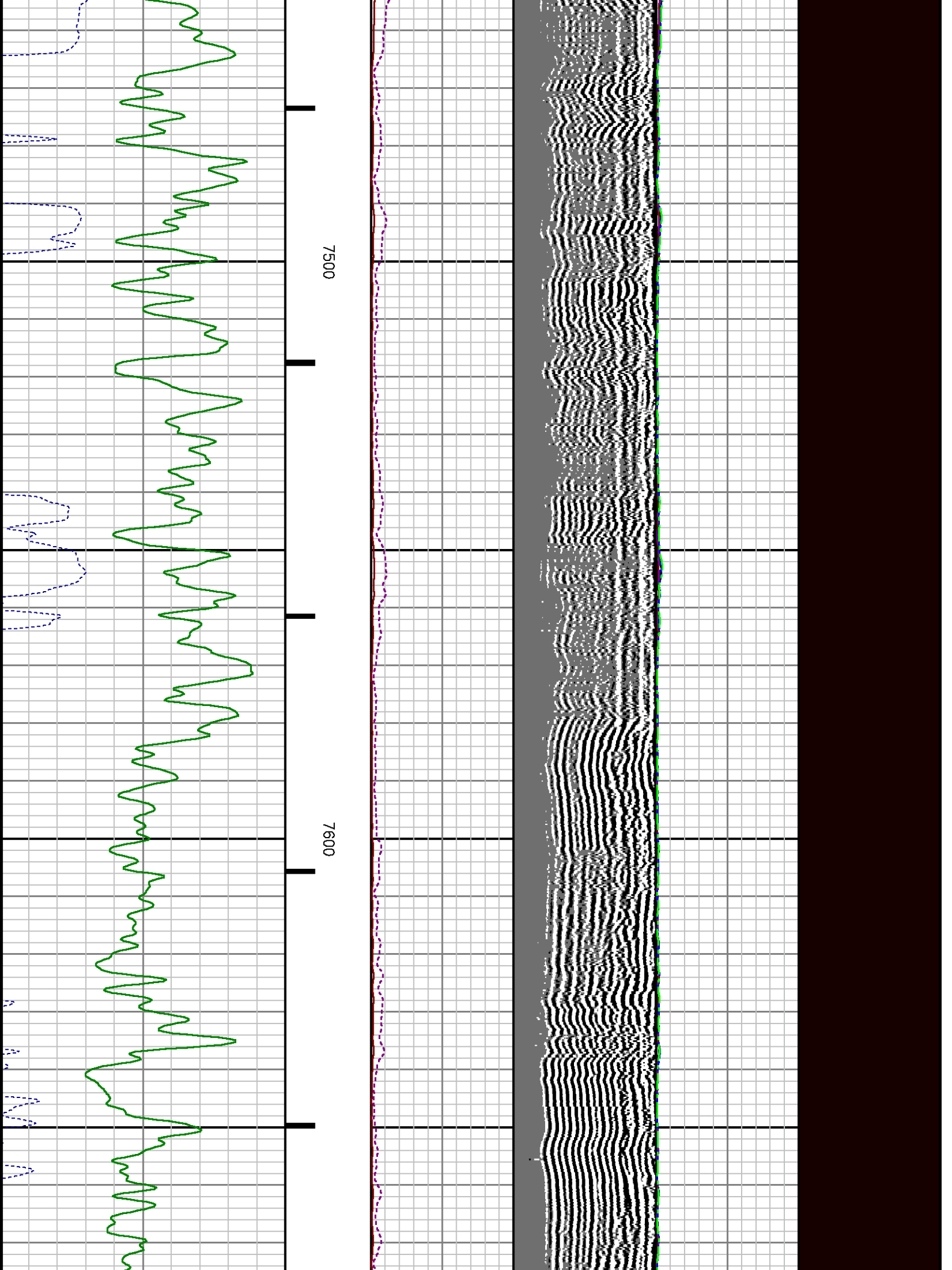


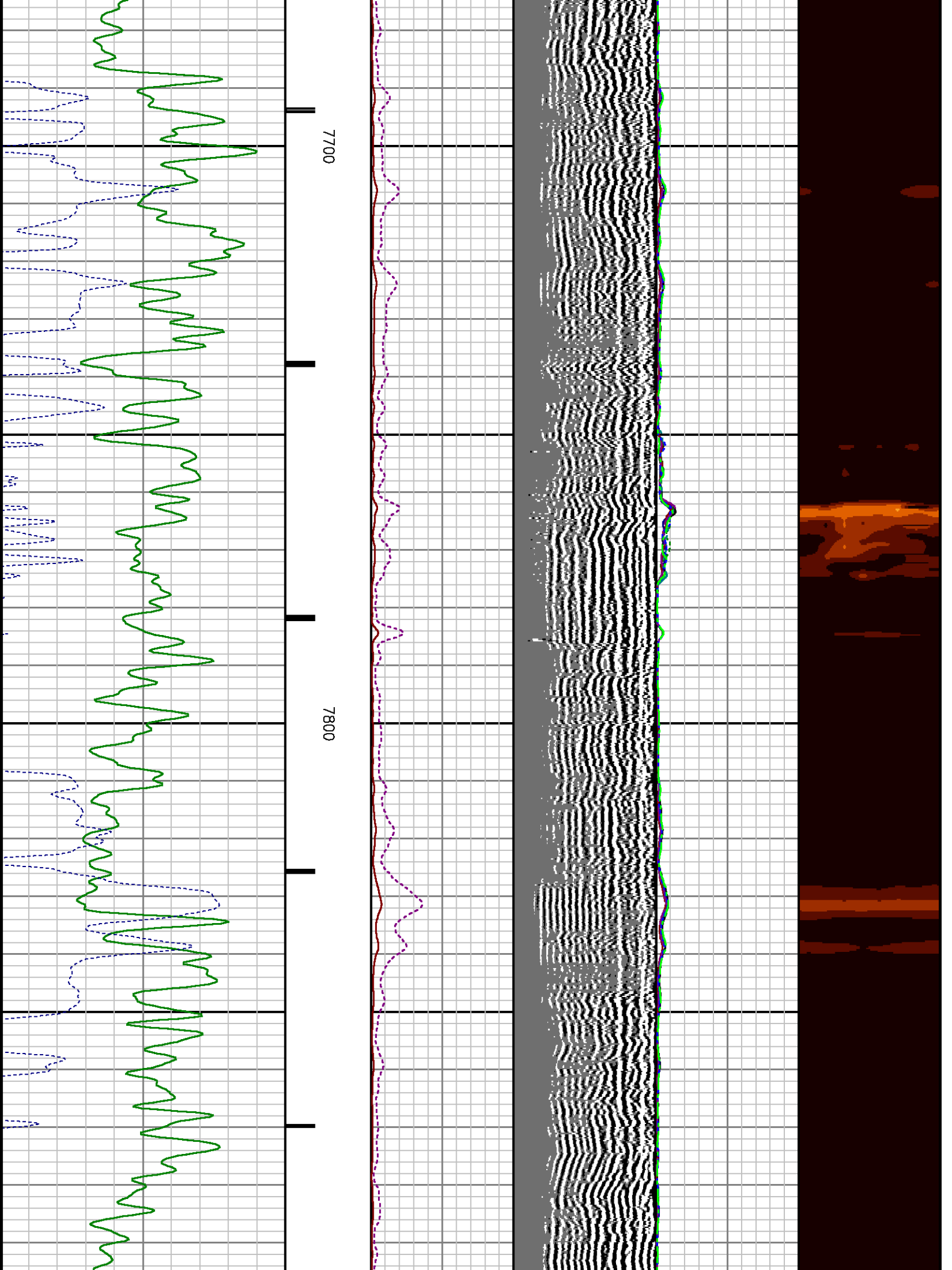


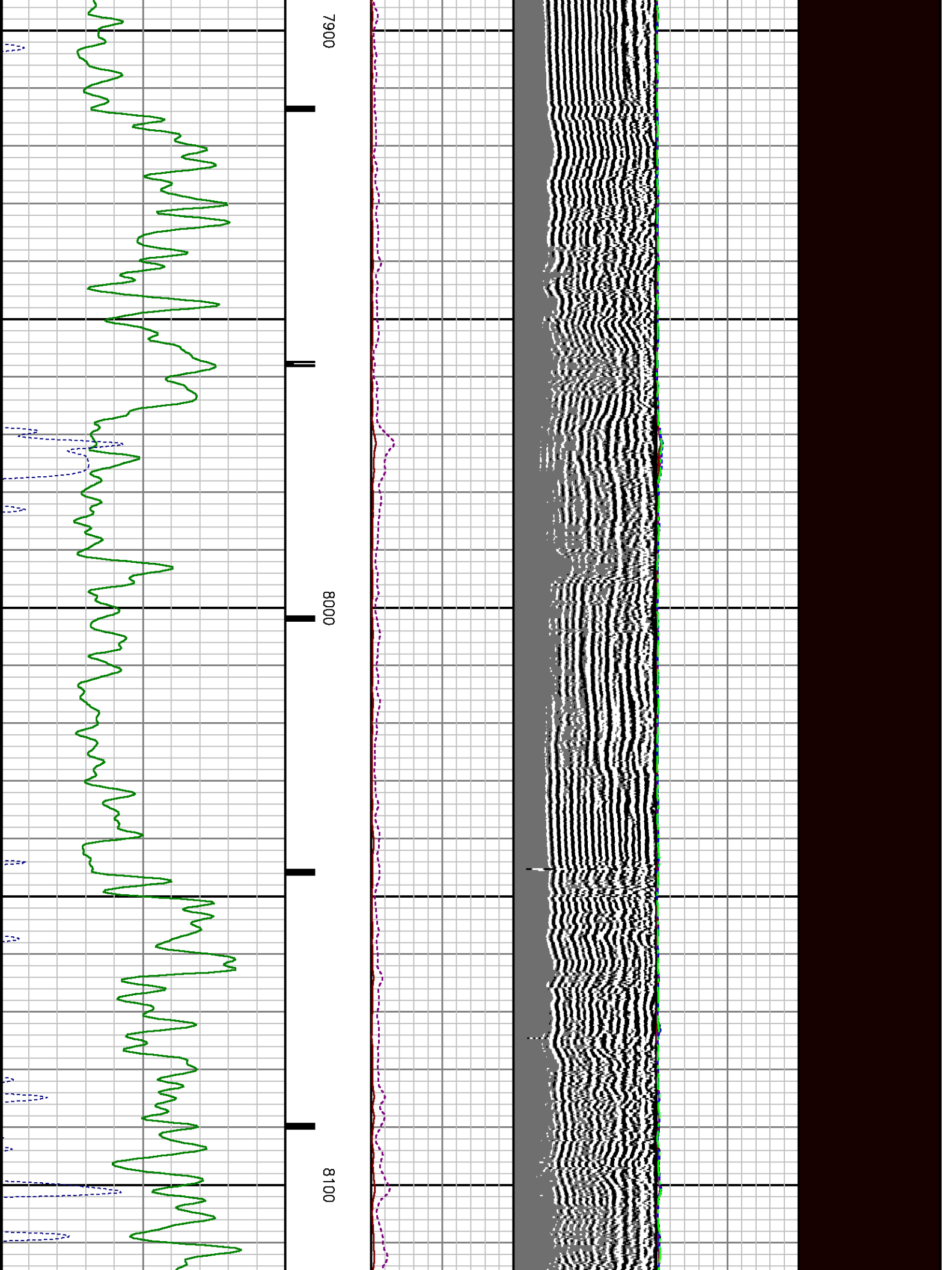


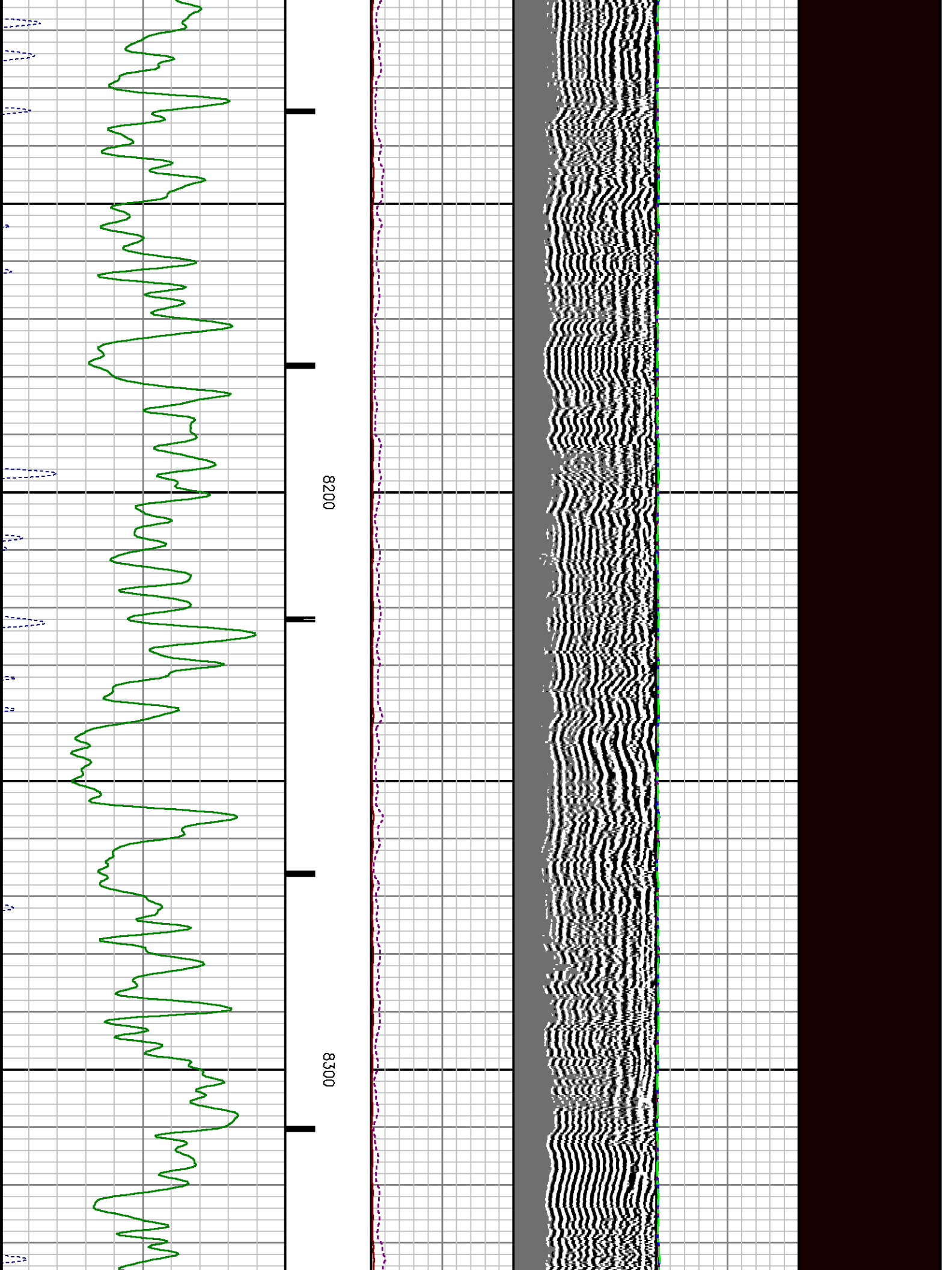


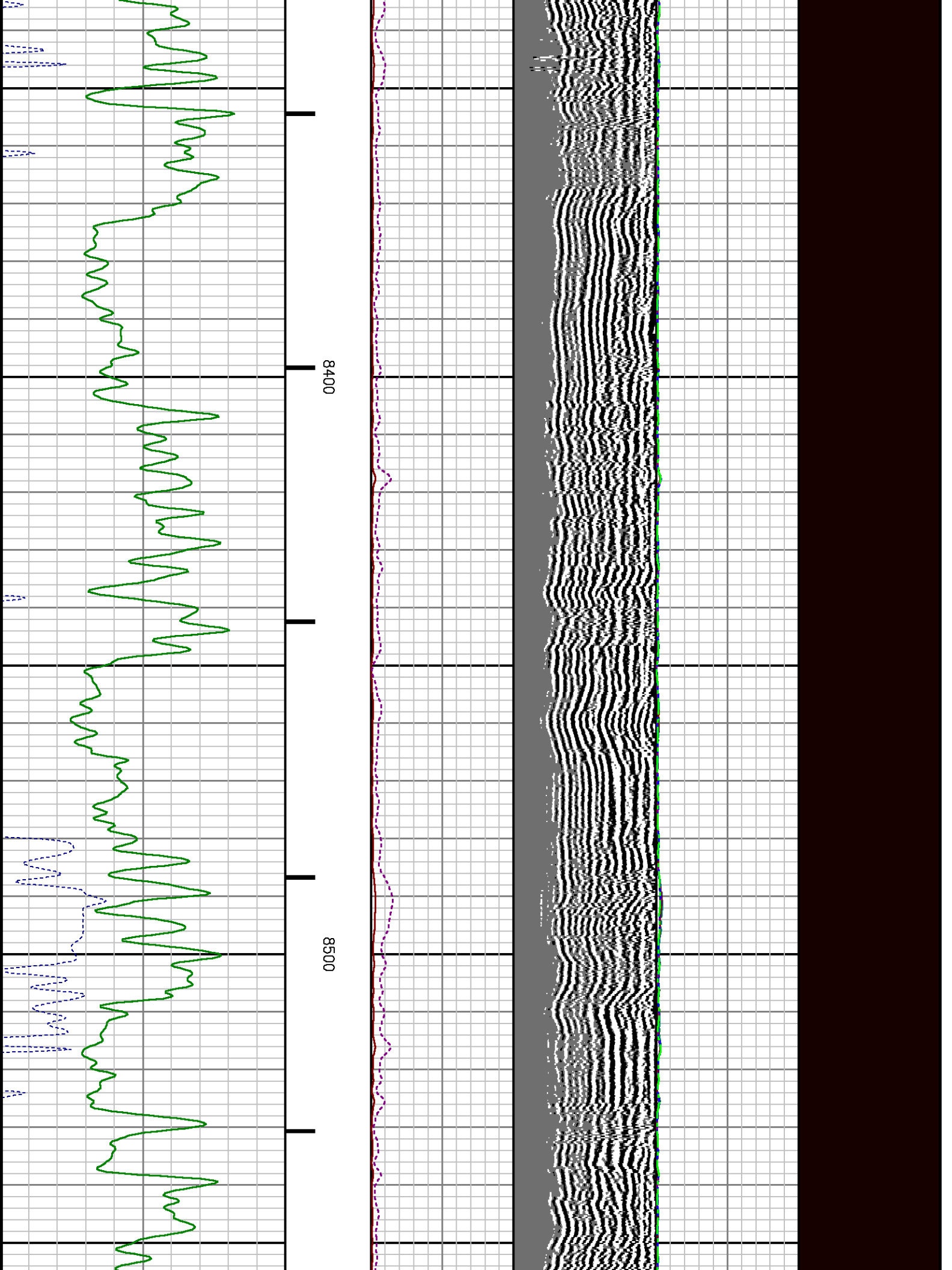


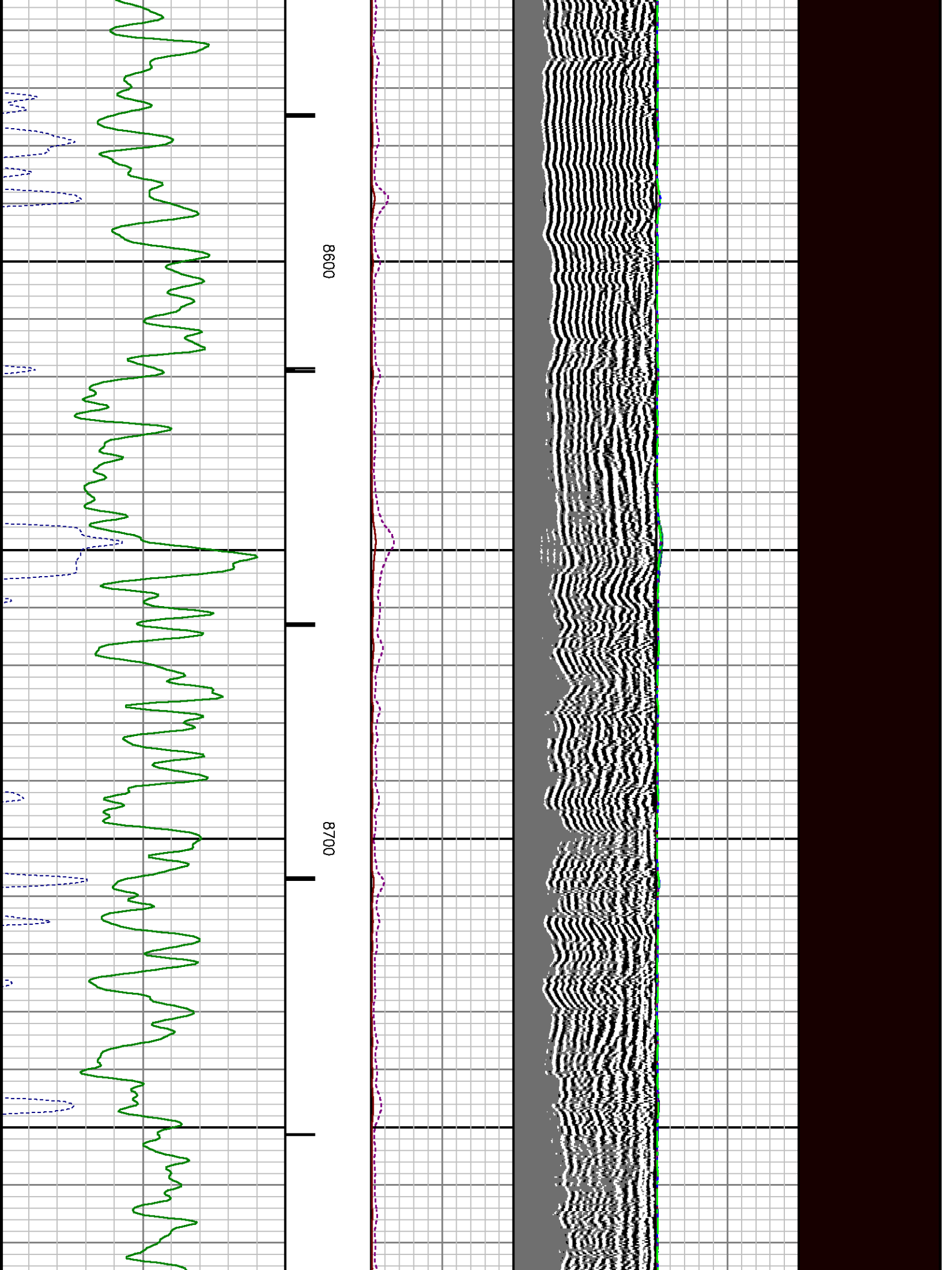


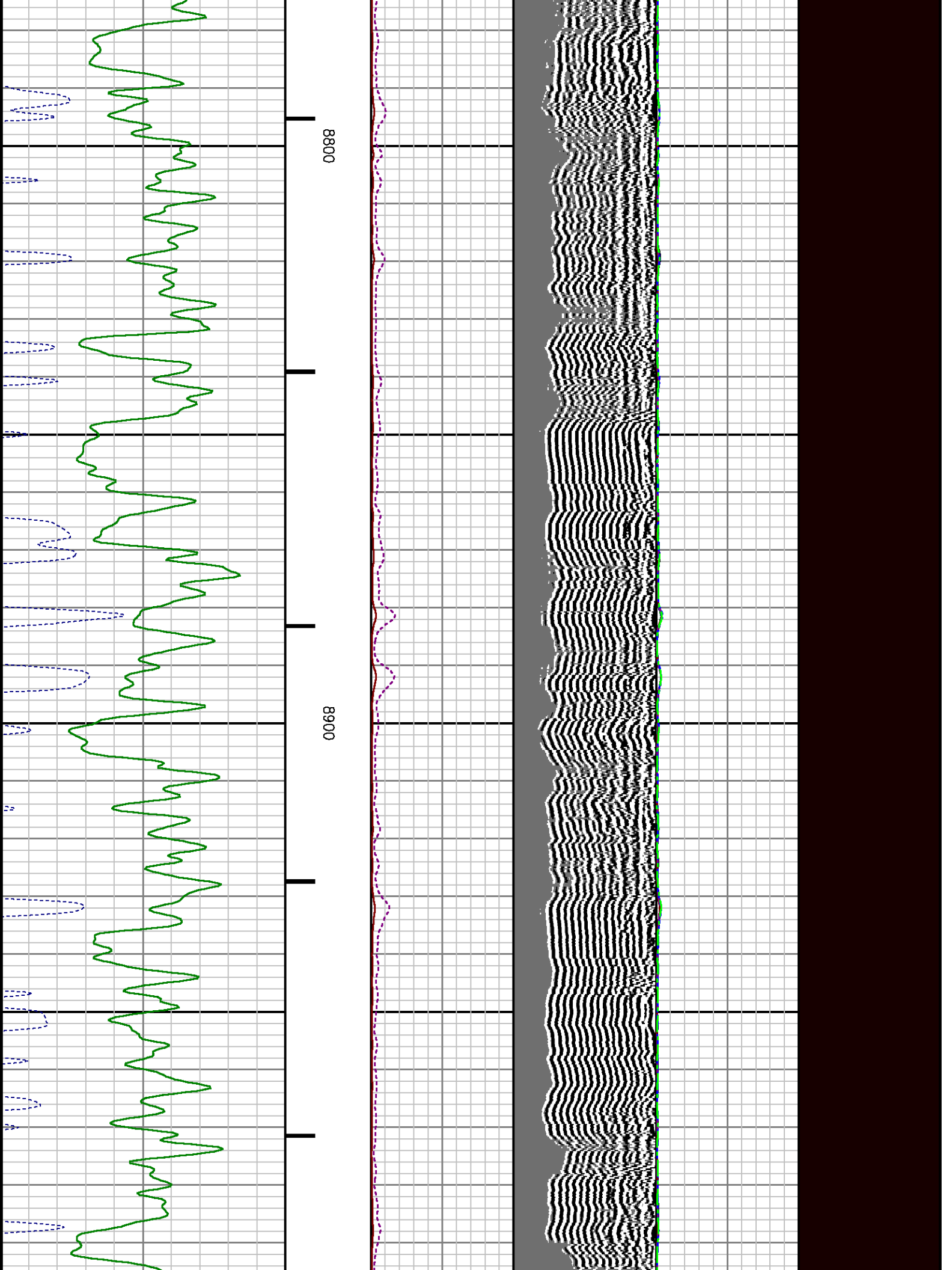


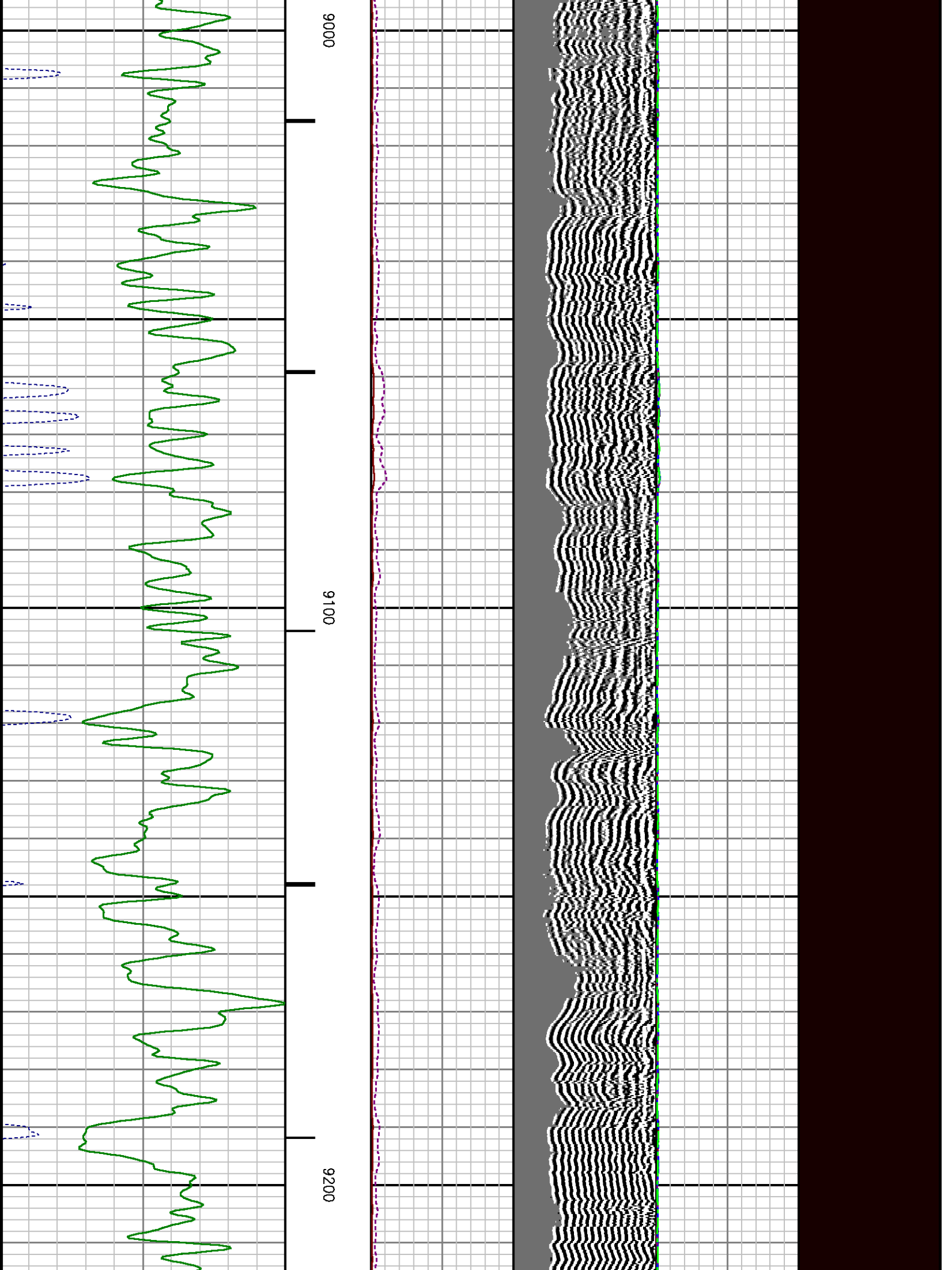


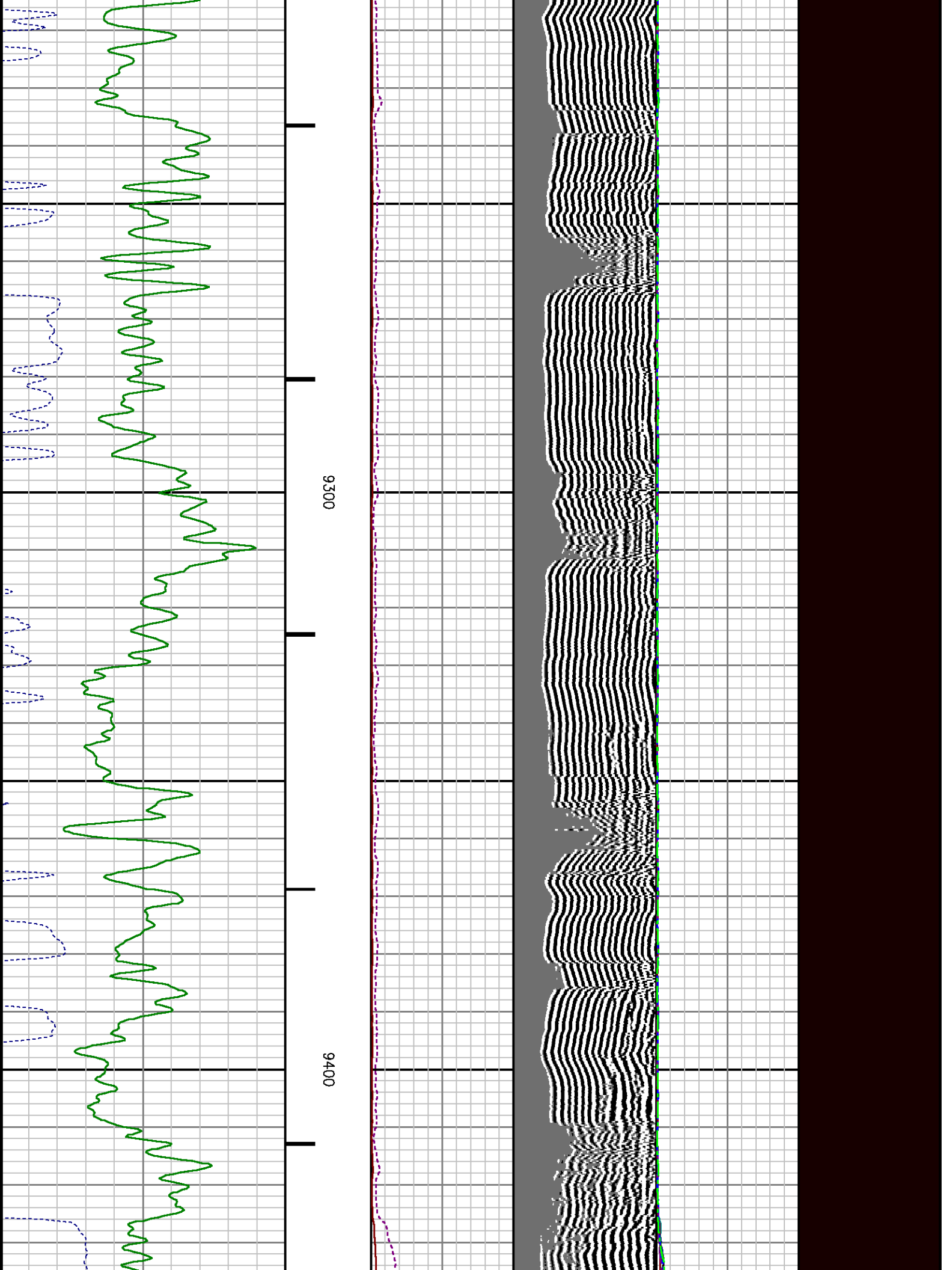


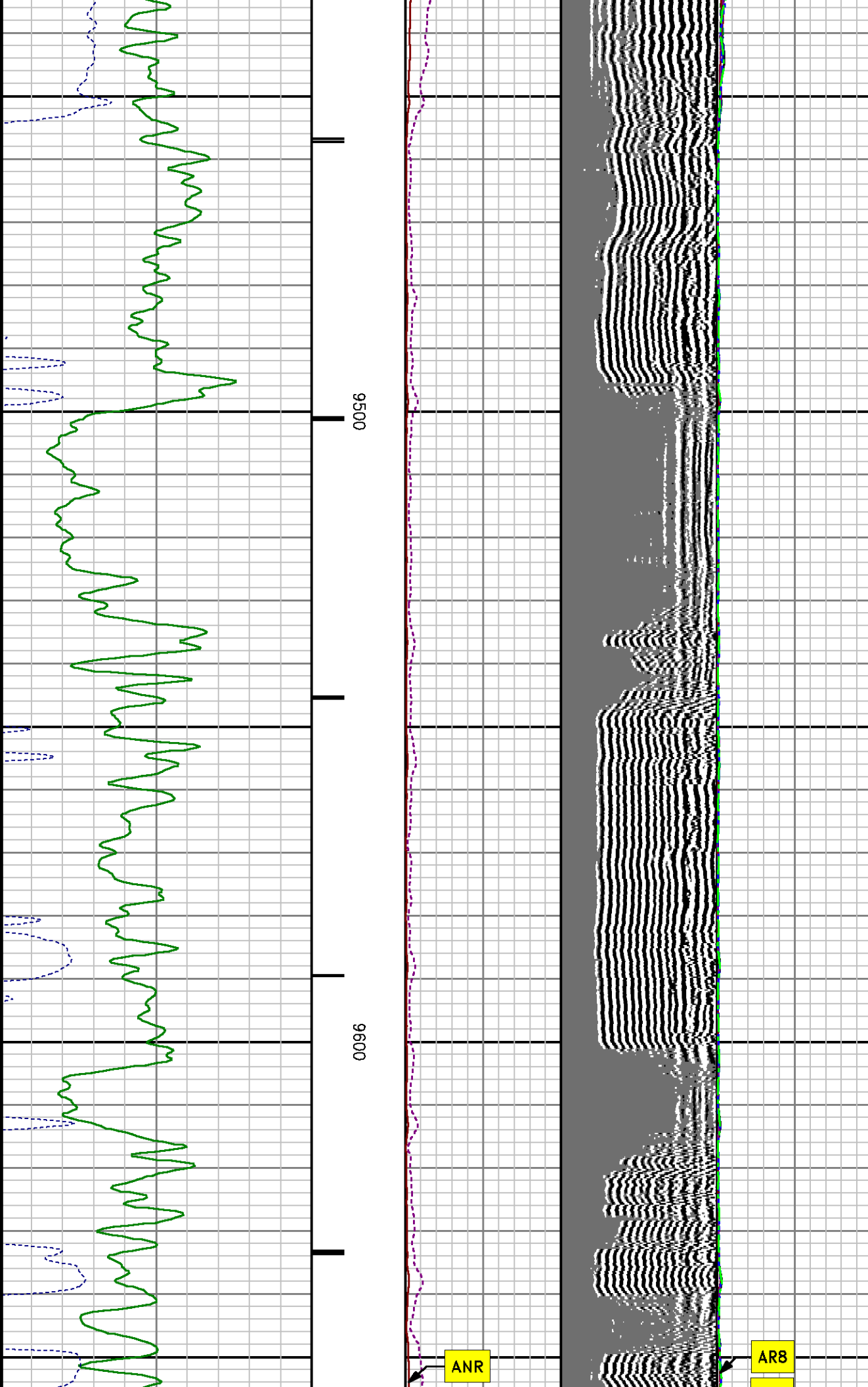


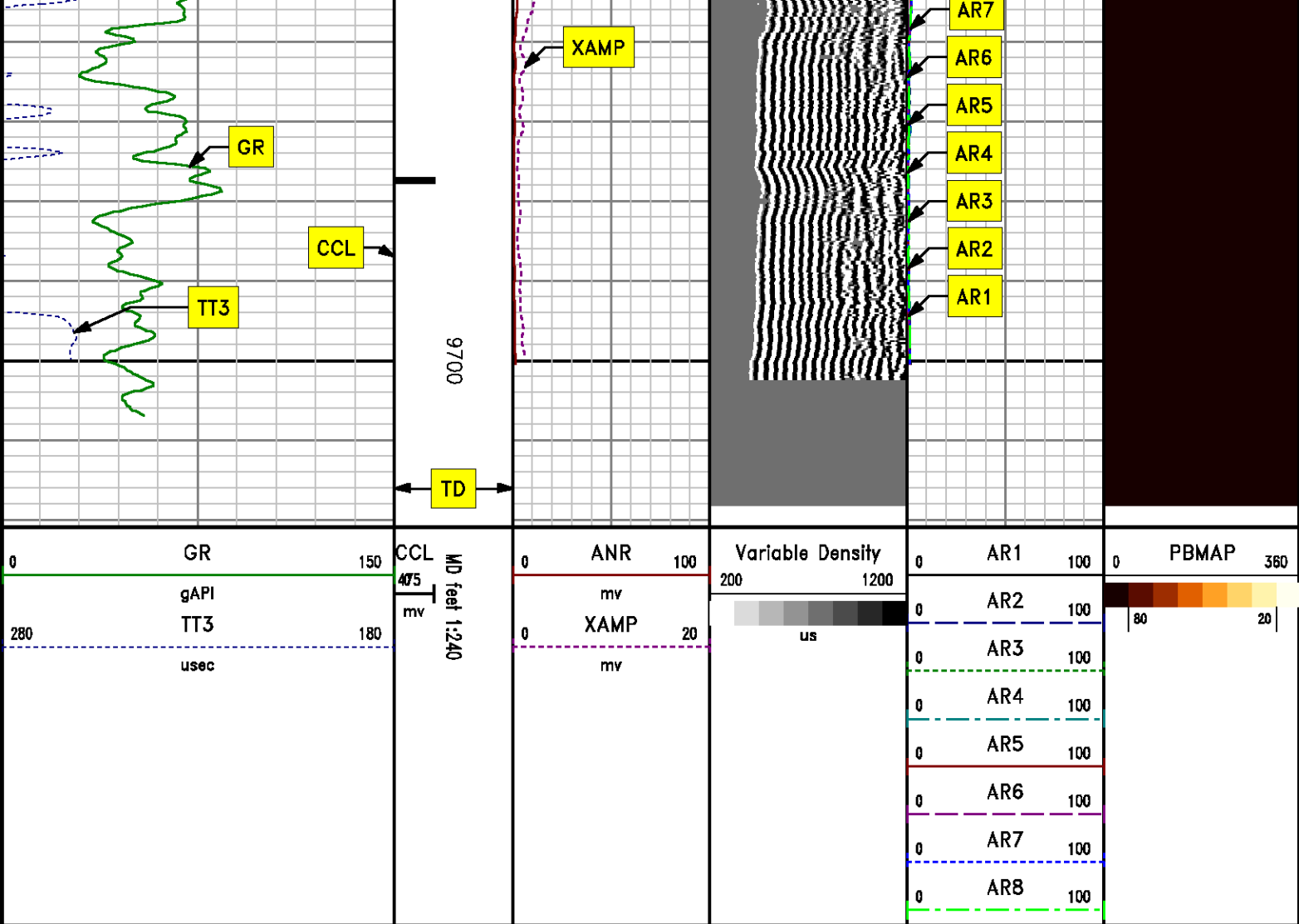












REPEAT SECTION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	9396.255	9721.350
RAL	Amp Gate Start Near	195.000	usec	9396.255	9721.350
RAL	Amp Gate Start Radial	195.000	usec	9396.255	9721.350
RAL	Amp Gate Width Far	25.000	usec	9396.255	9721.350
RAL	Amp Gate Width Near	25.000	usec	9396.255	9721.350
RAL	Amp Gate Width Radial	25.000	usec	9396.255	9721.350
RAL	casing od	4.500	inches	9396.255	9721.350

RAL	casing wt	11.600	lbm/ft	9396.255	9721.350
RAL	FB Start Far	291.900	usec	9396.255	9721.350
RAL	FB Start Near	175.391	usec	9396.255	9721.350
RAL	FB Start Radial	175.391	usec	9396.255	9721.350
RAL	FB Thresh Far	10.000	mv	9396.255	9721.350
RAL	FB Thresh Near	4.000	mv	9396.255	9721.350
RAL	FB Thresh Radial	4.000	mv	9396.255	9721.350
RAL	Fluid Travel Time	200.000	usec/ft	9396.255	9721.286

DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES							
1426XA	-16.750	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	-15.750	AFAR	SIG	TT5					
2459XA	-11.340	CCL							
2459XA	-9.490	GR							
2459XA	-4.090	NEU							

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

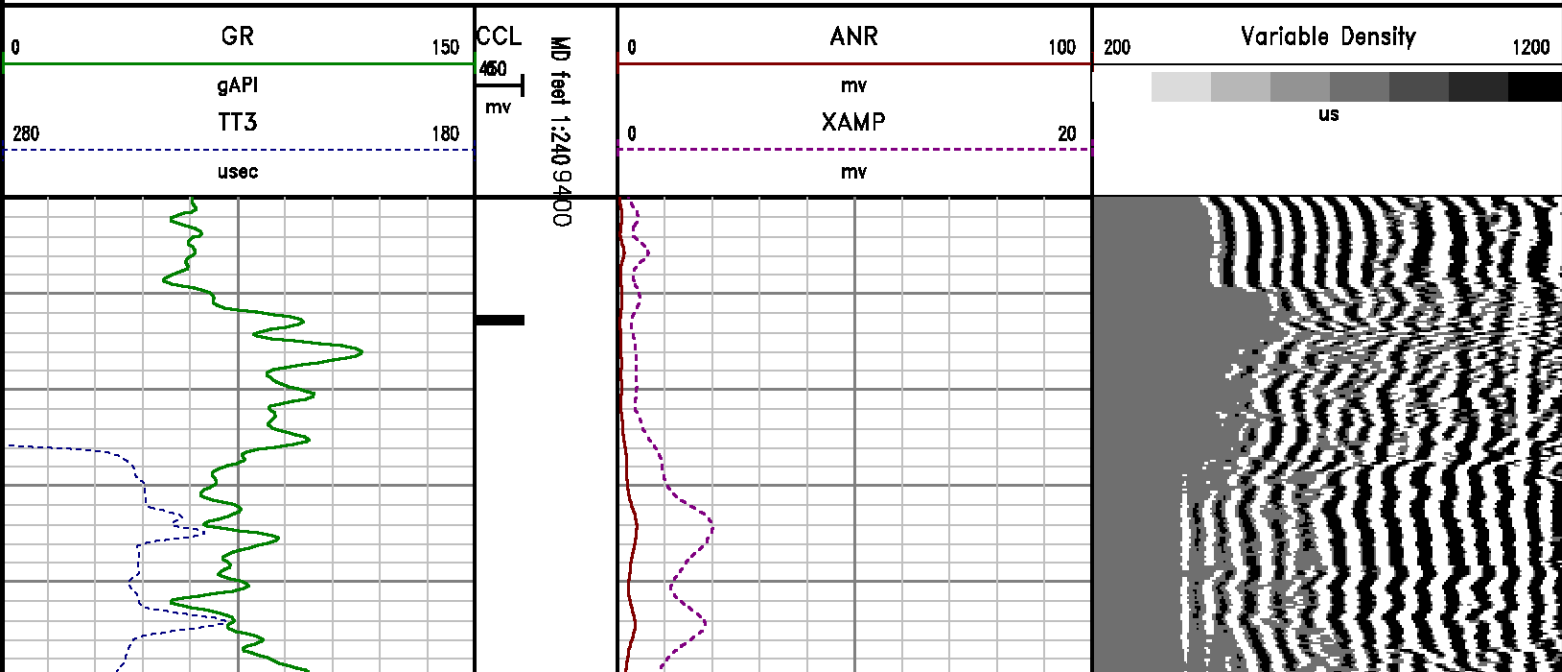
Well : FEDERAL PA 542-21

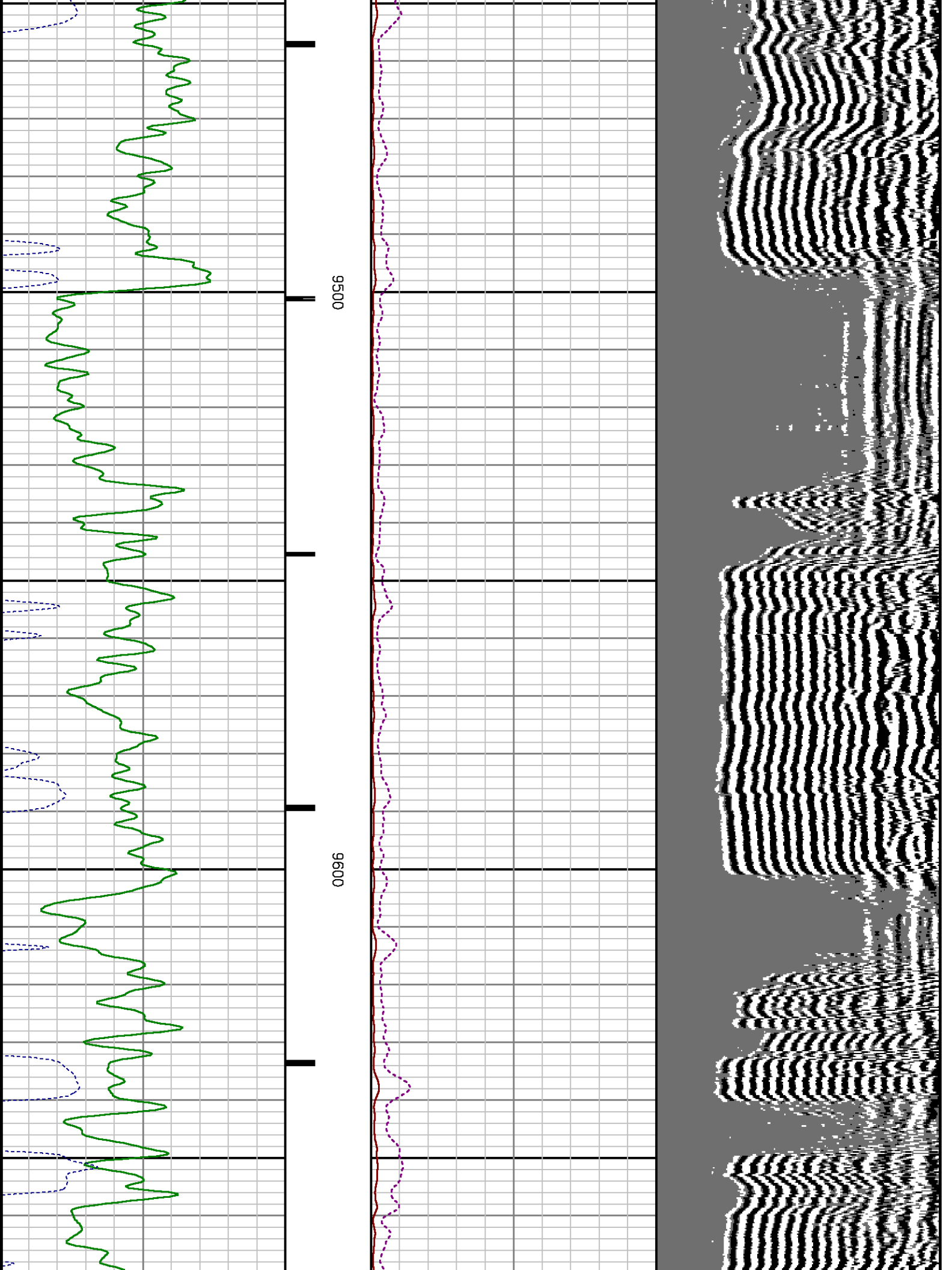
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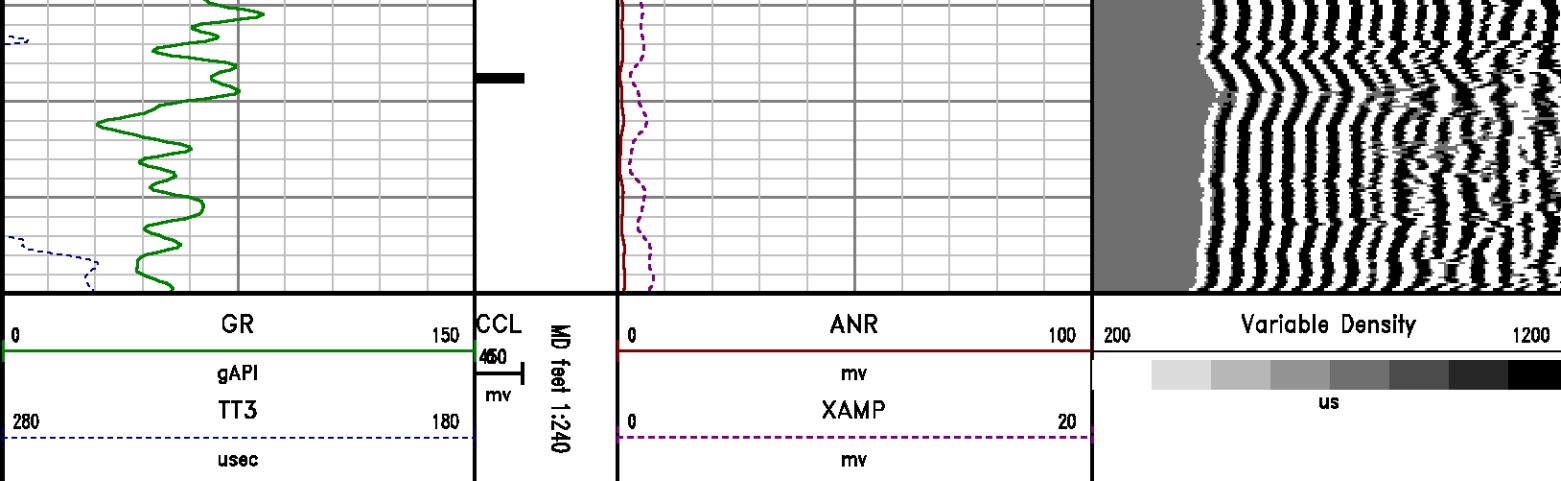
Mode : PlotMgr 5.4.504

Interval : 9400.00 - 9700.00 feet UP

Created : 2/12/2014 9:10:24 AM







CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP\496F11.shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Tue Feb 11 13:30:26 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: F11

Tool Delay [usec] -54.00 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	0.017	100.00	0.16
3 Ft. Receiver	218	216	30	149	25	-0.233	100.00	0.16
5 Ft. Receiver	327	325	30	237	25	0.260	150.00	0.18
Radial #1	218	216	30	150	25	-0.144	100.00	0.16
Radial #2	218	216	30	150	25	-0.418	100.00	0.16
Radial #3	218	216	30	150	25	-0.477	100.00	0.16
Radial #4	218	216	30	150	25	-0.269	100.00	0.16
Radial #5	218	216	30	150	25	-0.203	100.00	0.16
Radial #6	218	216	30	150	25	-0.120	100.00	0.16
Radial #7	216	216	30	150	25	-0.180	100.00	0.16
Radial #8	218	216	30	150	25	-0.205	100.00	0.16

RALFLD

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Tue Feb 11 13:35:03 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: F11

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

RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.010"/>	<input type="text" value="0.000"/>	<input type="text" value="1.00"/>	<input type="text" value="100.000"/>
3 Ft. Receiver	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="1.905"/>			
5 Ft. Receiver	<input type="text" value="305"/>	<input type="text" value="25"/>	<input type="text" value="2.558"/>			
Radial #1	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="1.327"/>			
Radial #2	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="1.354"/>			
Radial #3	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="1.478"/>			
Radial #4	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="1.517"/>			
Radial #5	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="1.726"/>			
Radial #6	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="1.847"/>			
Radial #7	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="1.511"/>			
Radial #8	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="1.501"/>			

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	<input type="text" value="71.78"/>	<input type="text" value="314.67"/>	<input type="text" value="0.762"/>	<input type="text" value="54.67"/>	<input type="text" value="239.67"/>	<input type="text" value="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	<input type="text" value="74.22"/>	<input type="text" value="316.93"/>	<input type="text" value="0.762"/>	<input type="text" value="56.53"/>	<input type="text" value="241.40"/>	<input type="text" value="184.86"/>

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

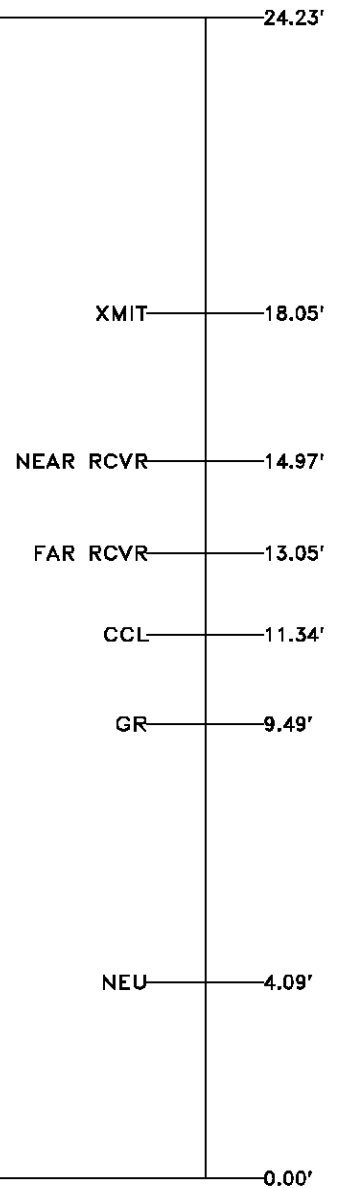
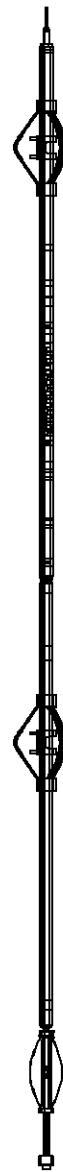
Probe GR/CCL/NEU

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

CENTRALIZER

Series RALCENT
 Mnemonic CENT
 Diameter 3.12"
 Weight 20.00 lb

Total Length: 24.23'
 Total Weight: Not Available
 Max Diameter: 0' 3.12"



Company

WPX ENERGY

Well

FEDERAL PA 542-21

Field

PARACHUTE

County

GARFIELD

State

CO

Location

SHL: 2610' FNL & 1456' FWL

BHL: 2602' FNL & 258' FEL

Elevations

KB 6056 ft

DF

GL 6030 ft

File No:

CH082312

API No:

05045220280000

21 6S 95W

PA 22-21 PAD

NABORS 573

SEC

21

TWP

6S

RGE

95W

CASE

Baker Atlas