



# RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: CH075120	Company Well Field County	WPX ENERGY STRAIT SG 532-22 GRAND VALLEY GARFIELD	State COLORADO
API No: 05045217590000	Location SHL: 1526' FNL & 289' FEL SEC:22 BHL: 2492' FNL & 1399' FEL SEC:22 CYCLONE 17 SEC 22 TWP 7S RGE 96W		Other Services RPM
Permanent Datum Log Measured From Drill Measured From	E.L. Elevation 5222 ft K.B. 22 ft Above P. D. KELLY BUSHING		Elevations KB 5244 ft DF GL 5222 ft

Date	24/JUL/15	
Run	ONE	
Service Order	B24A59	
Depth Driller	5766 ft	
Depth Logger	5748 ft	
Bottom Logged Interval	5738 ft	
Top Logged Interval	22 ft	
Time Started	10:00	
Time Finished	12:30	
Operator Rig Time	2.5 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	N/A	
Salinity	N/A	
Fluid Level	52 ft	
Logged Cement Top	N/A	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	N/A	
Nominal Logging Speed	45 fpm	
Maximum Recorded Temperature	186 degF	
Reference Log	N/A	
Reference Log Date	N/A	
Equipment No.	4271	GRAND JUNCTION
Recorded By	W. KINSEL	9721
Witnessed By	MR. AL DUNIHO	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	1170 ft
8.75 in	0 ft	5779 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in	N/A	N/A	0 ft	1101 ft
4.5 in	11.6 lbm/ft	1-80	0 ft	5768 ft

Remarks
ALL DATA IN THIS LOG WAS DEPTH SHIFTED TO MATCH THE TOP CCL MARK WITH KB LEVEL
AT THE CLIENT'S REQUEST. THE AMOUNT OF LINEAR SHIFT WAS 1 FOOT DOWN.
SHORT JOINT: 3495' - 3519'
BHT: 186 degF
LOG DONE WITH 0 PSI ON WELLHEAD

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1426XA	10124106	CENTRALIZED
1	1	GAMMA RAY/CCL	1355XA	10580209	CENTRALIZED

**MAIN LOG PRIMARY PRESENTATION**  
**0 PSI**

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	306.674	usec	30.968	5773.000
RAL	Amp Gate Start Near	199.015	usec	30.968	5773.000
RAL	Amp Gate Start Radial	199.015	usec	30.968	5773.000
RAL	Amp Gate Width Far	25.000	usec	30.968	5773.000
RAL	Amp Gate Width Near	25.000	usec	30.968	5773.000
RAL	Amp Gate Width Radial	25.000	usec	30.968	5773.000
RAL	casing od	4.500	inches	30.968	5773.000
RAL	casing wt	11.600	lbm/ft	30.968	5773.000
RAL	FB Start Far	291.900	usec	30.968	5773.000
RAL	FB Start Near	175.391	usec	30.968	5773.000
RAL	FB Start Radial	175.391	usec	30.968	5773.000
RAL	FB Thresh Far	10.000	mv	30.968	5773.000
RAL	FB Thresh Near	4.000	mv	30.968	5773.000
RAL	FB Thresh Radial	4.000	mv	30.968	5773.000
RAL	Fluid Travel Time	200.000	usec/ft	30.968	5773.000

## 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

1426XA -10.040  
1355XA -5.620  
1355XA -1.500  
1355XA 0.000

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

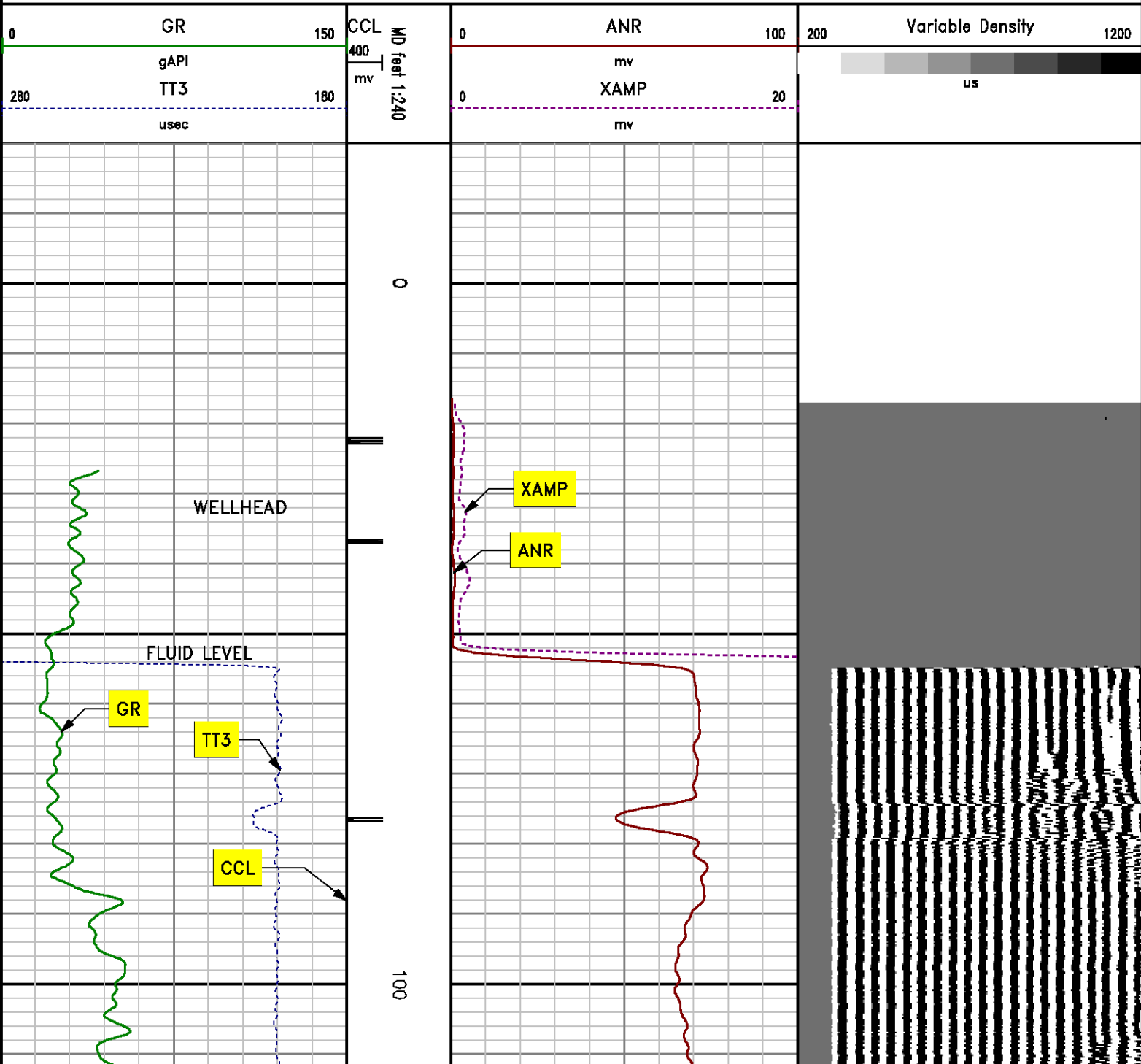
Well : STRAIT SG 532-22

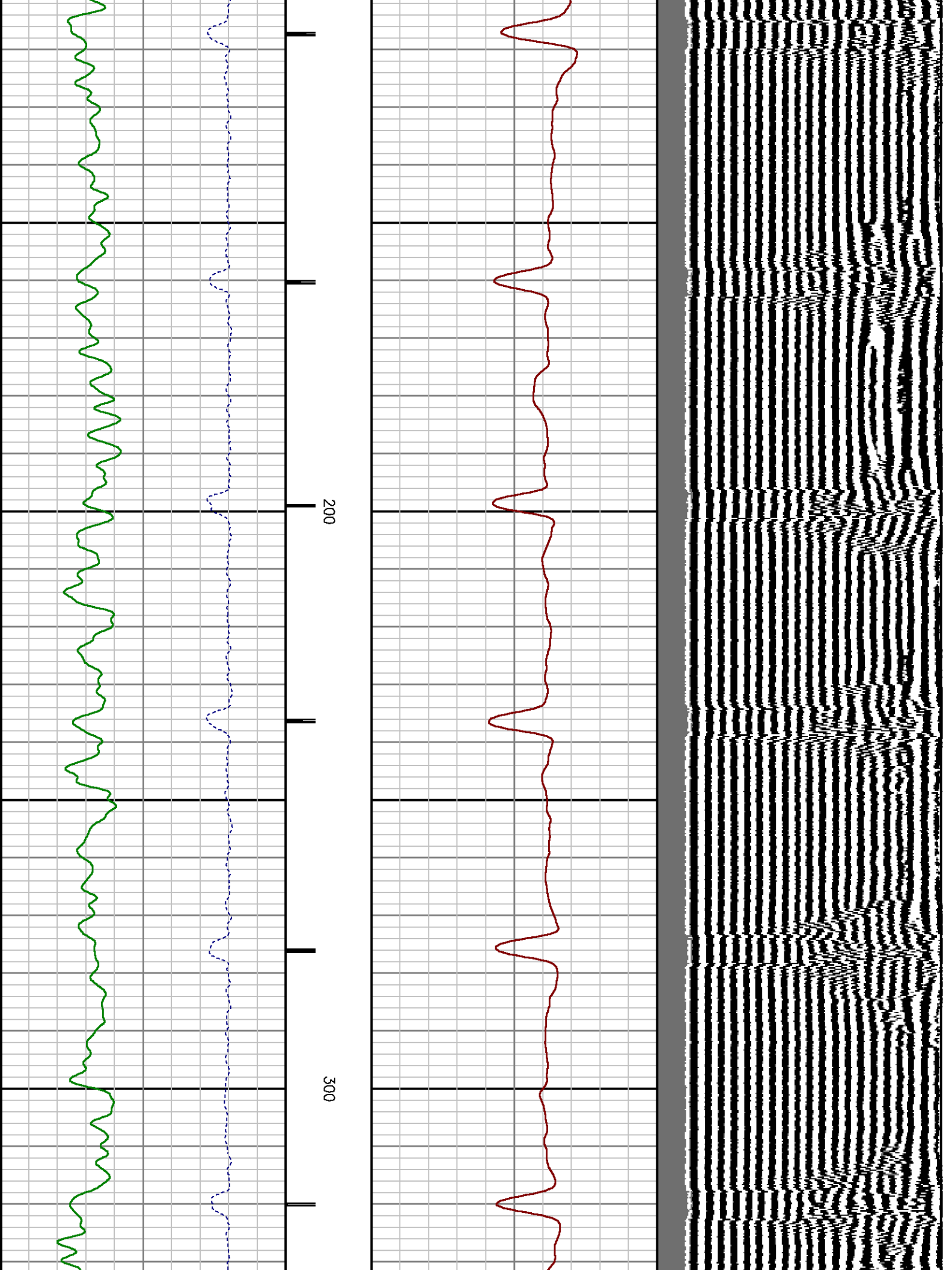
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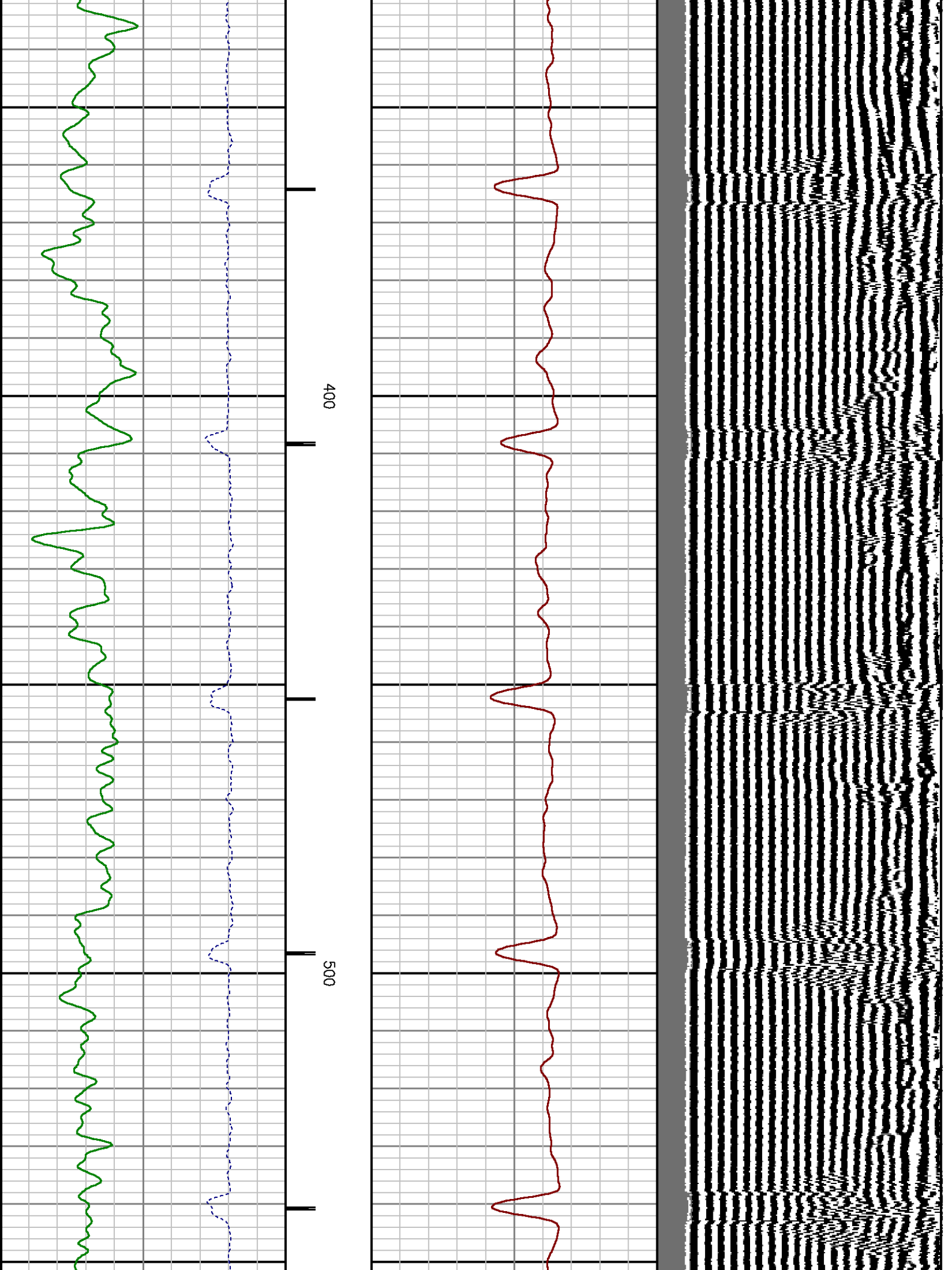
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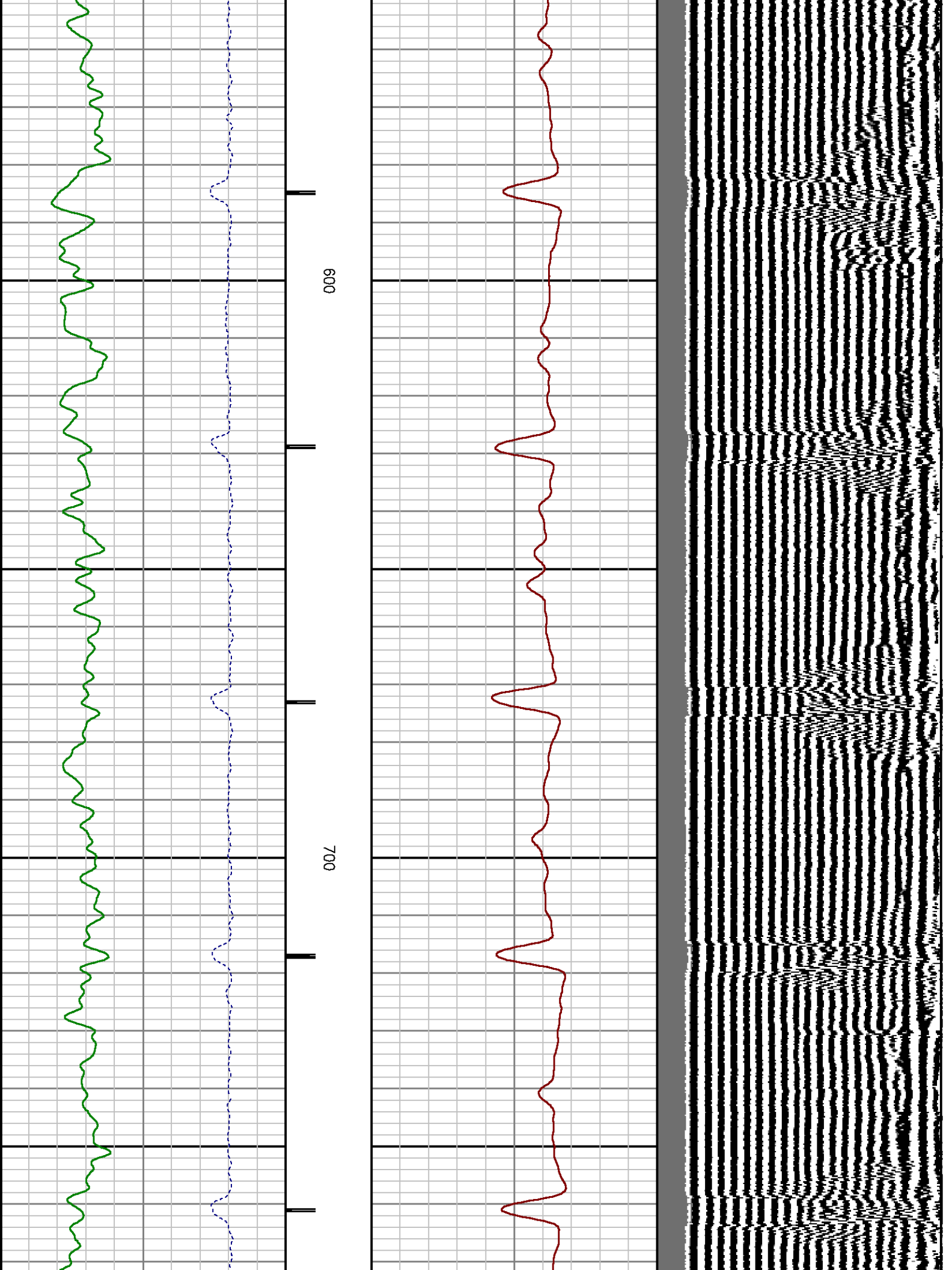
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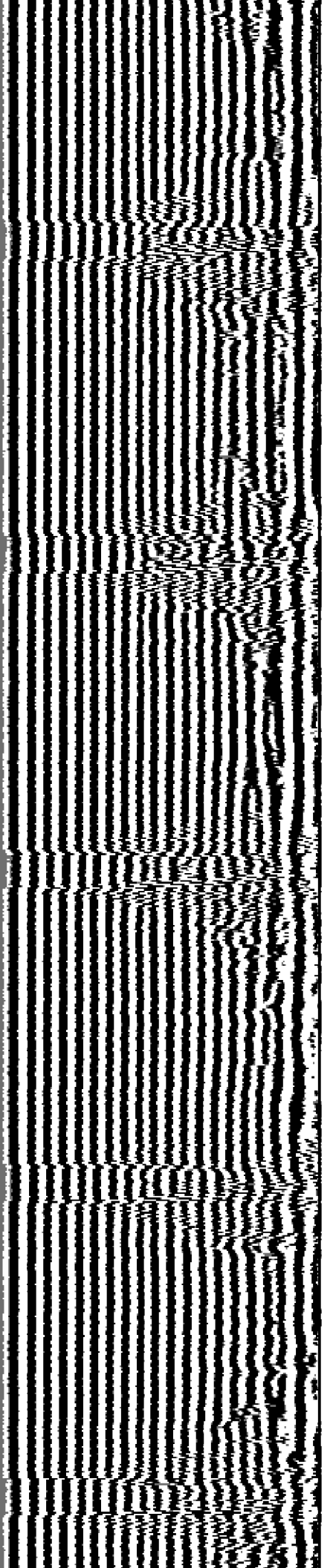
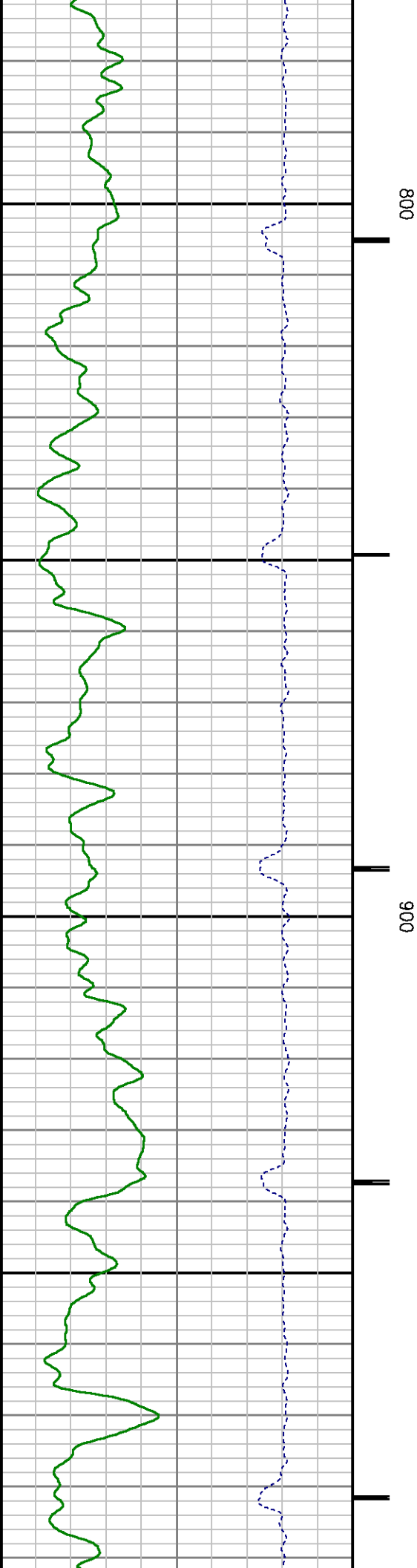
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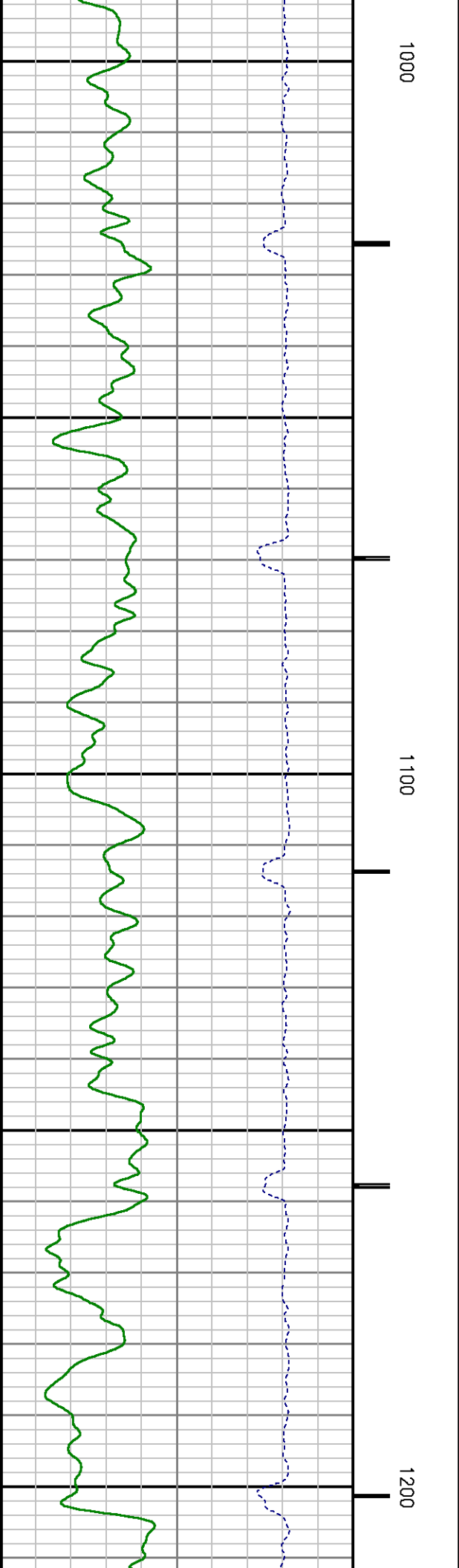
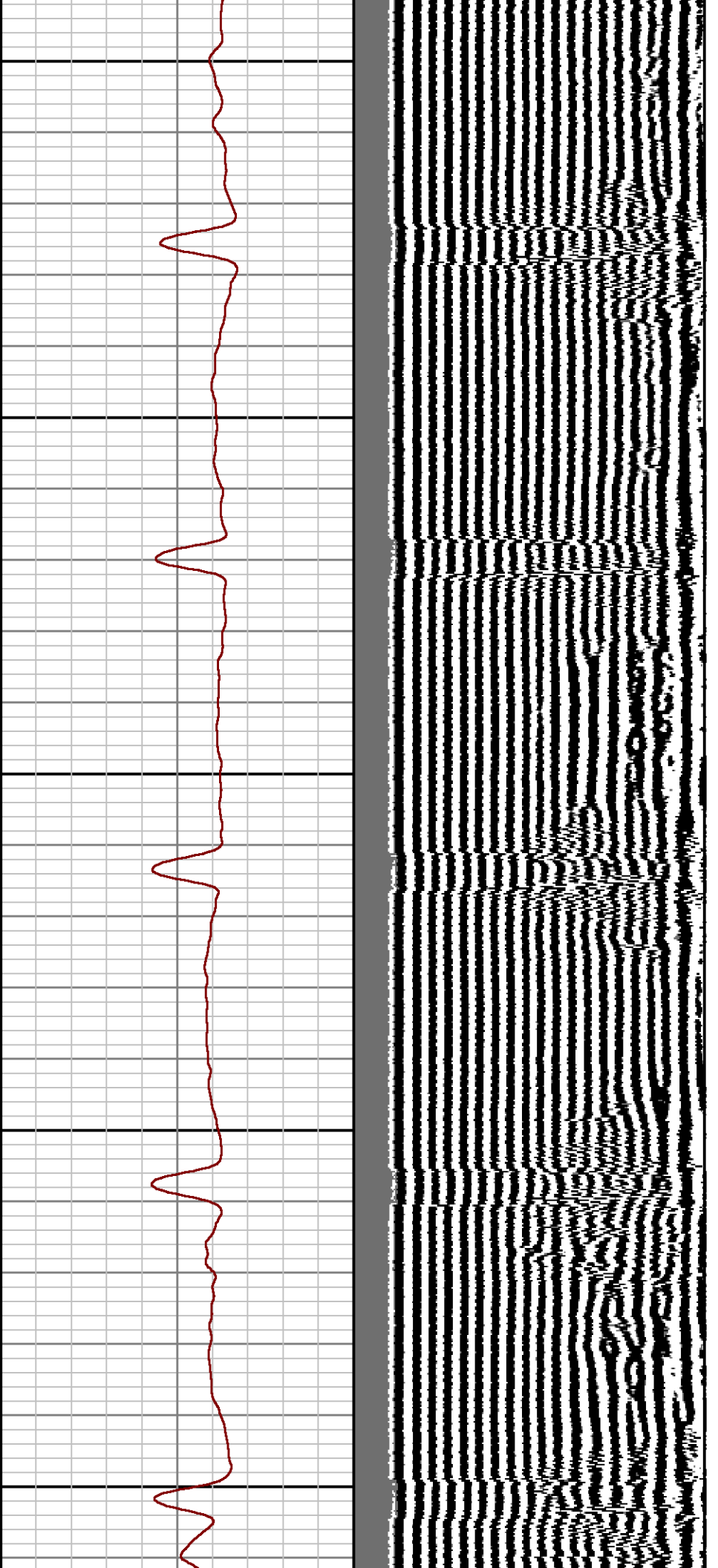




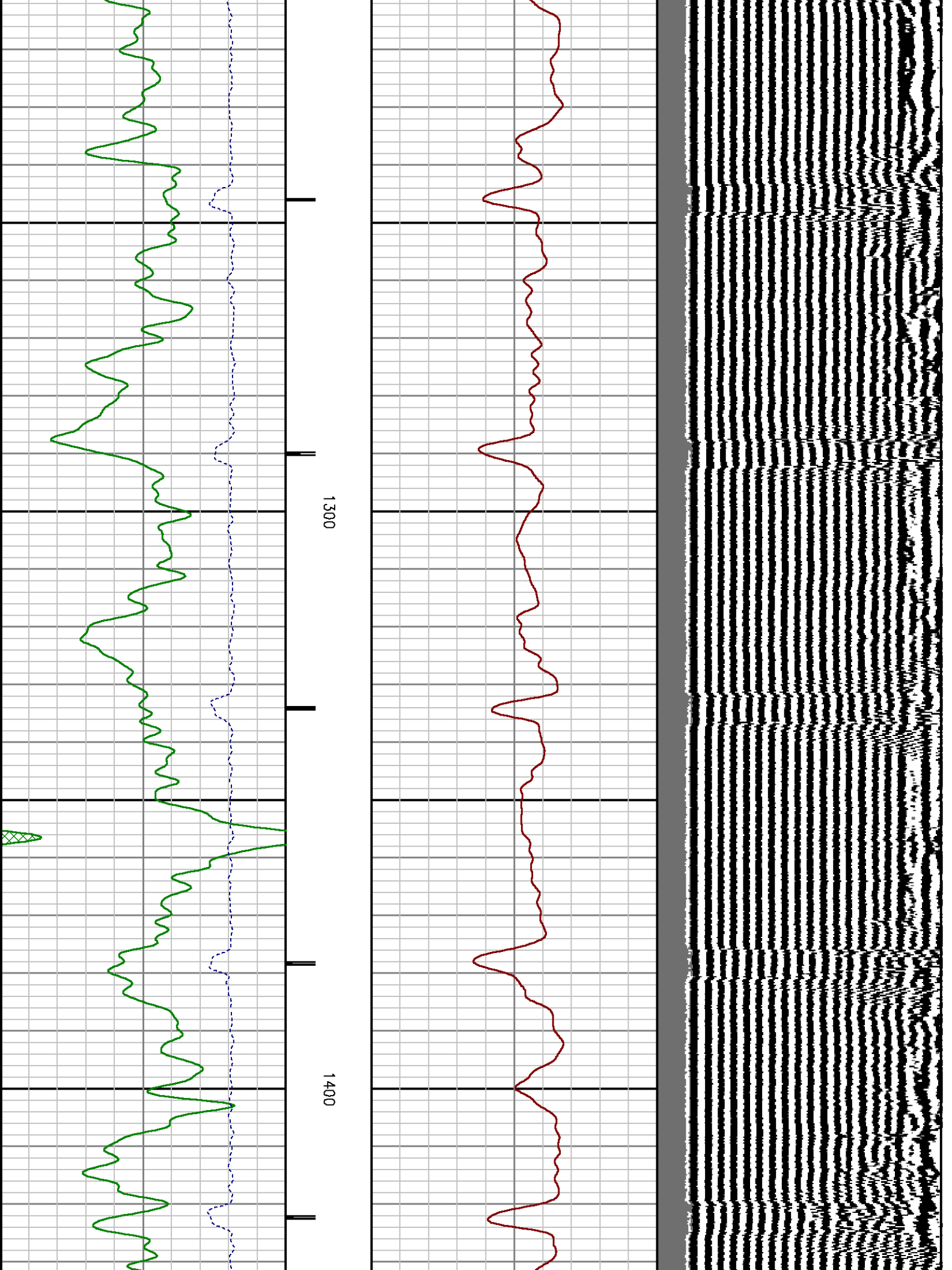


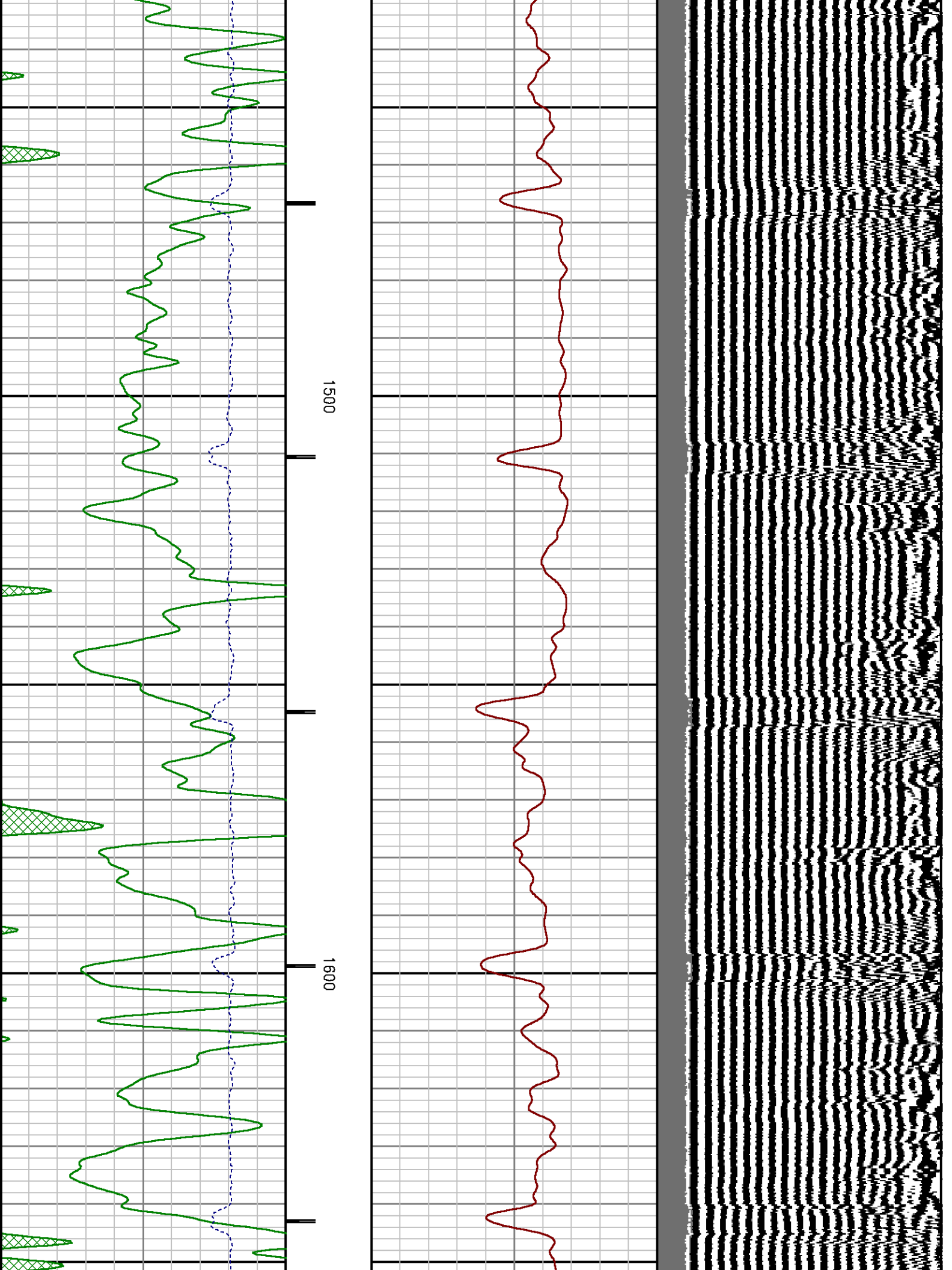


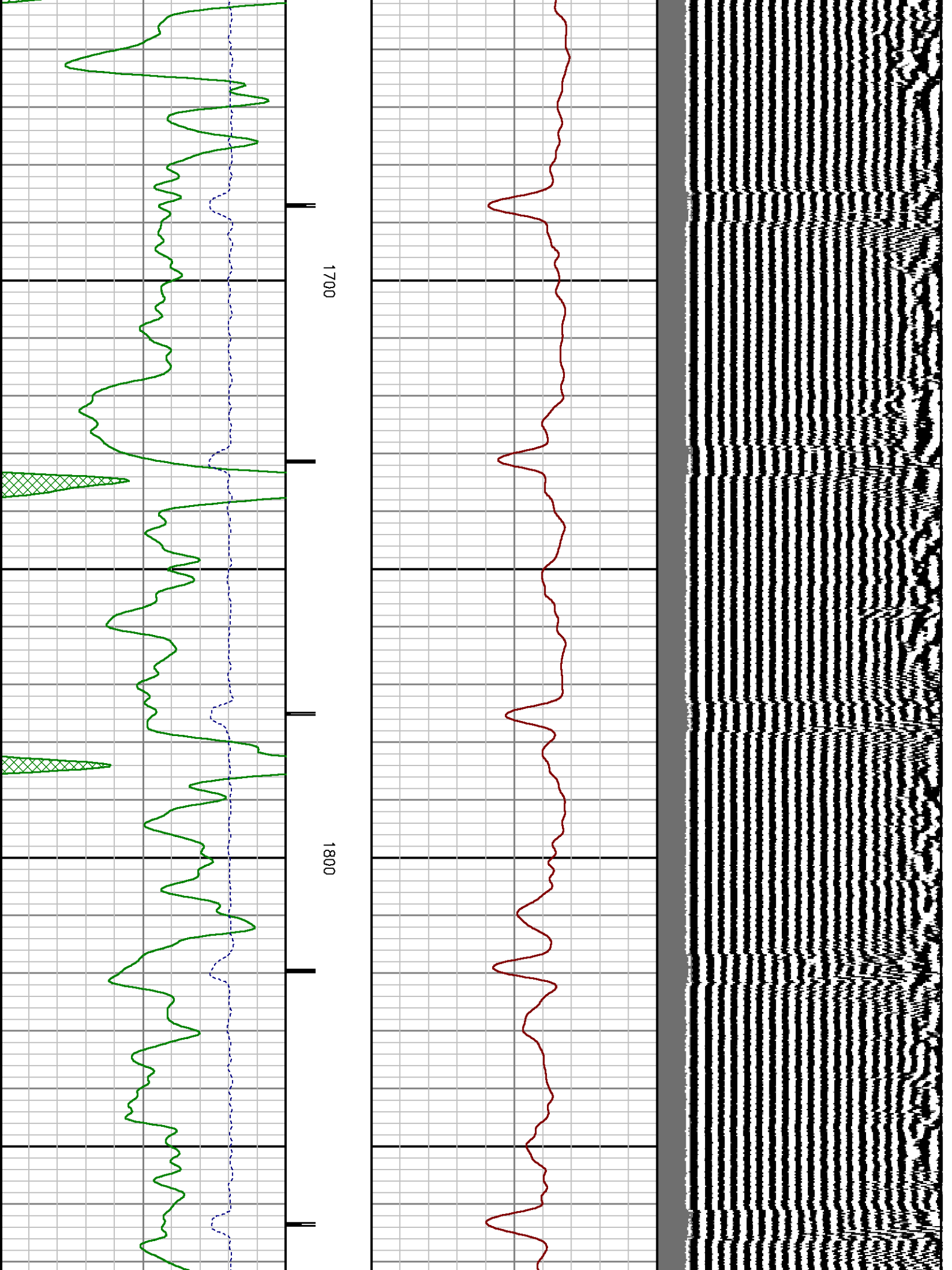


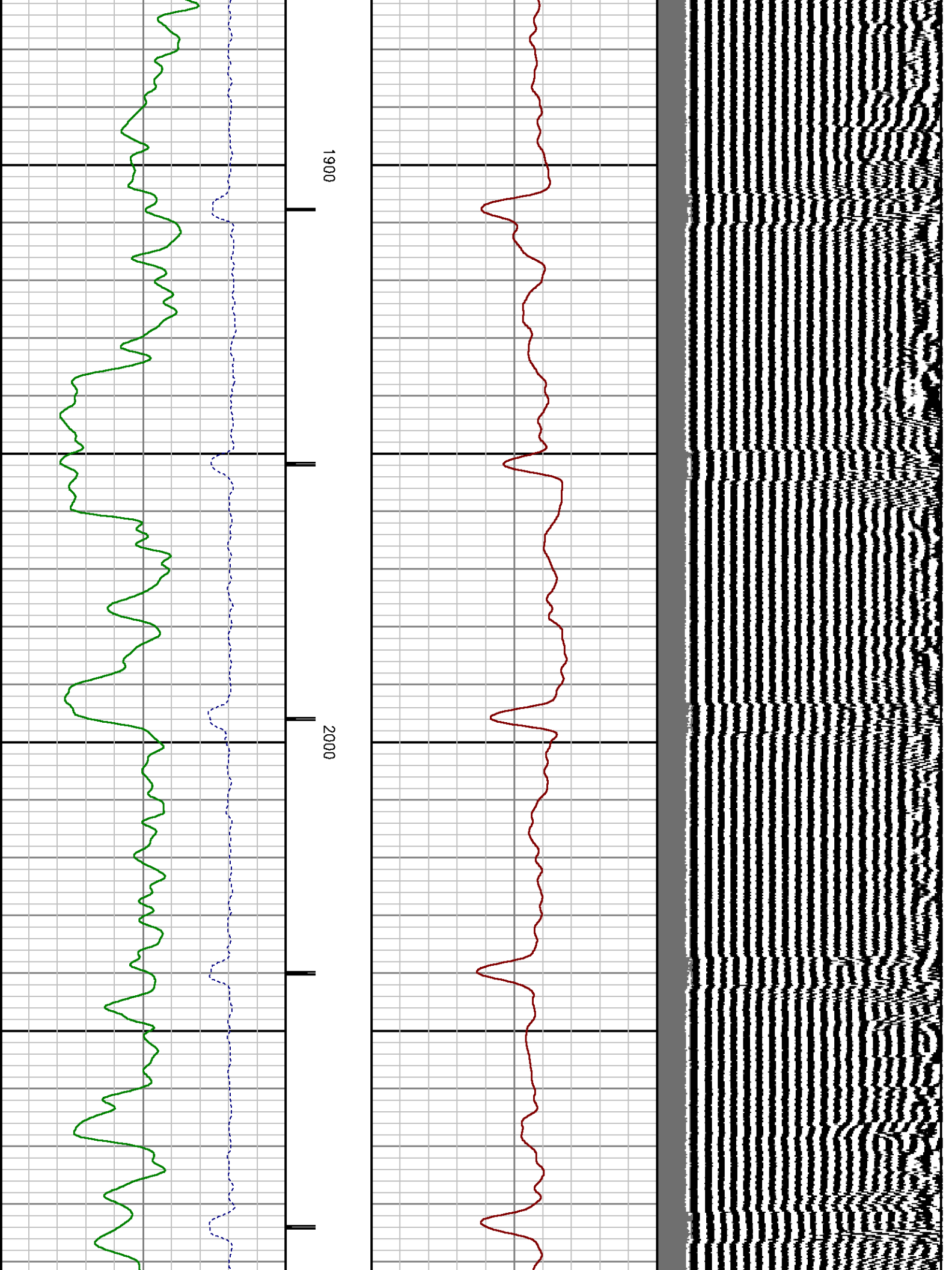


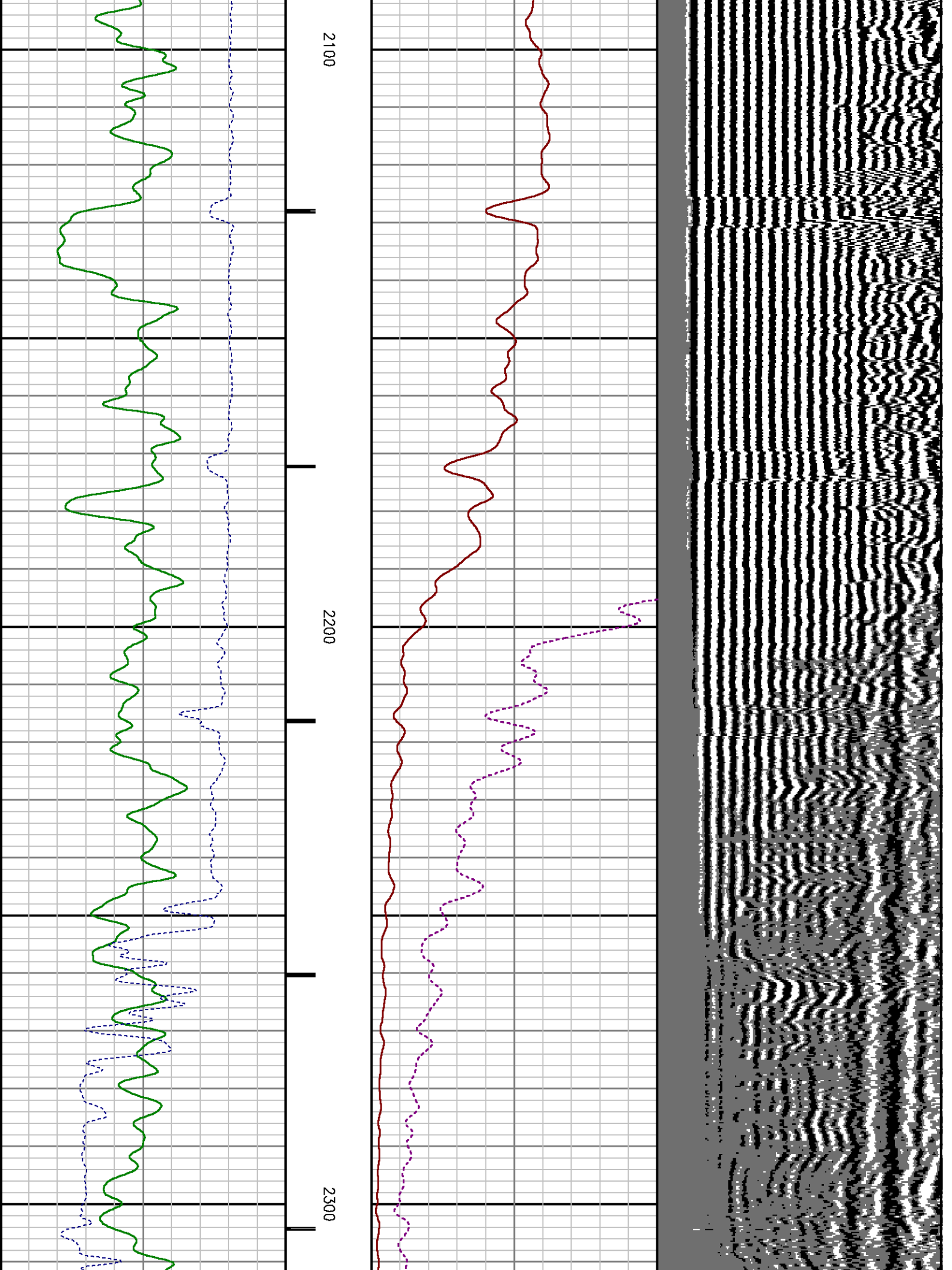


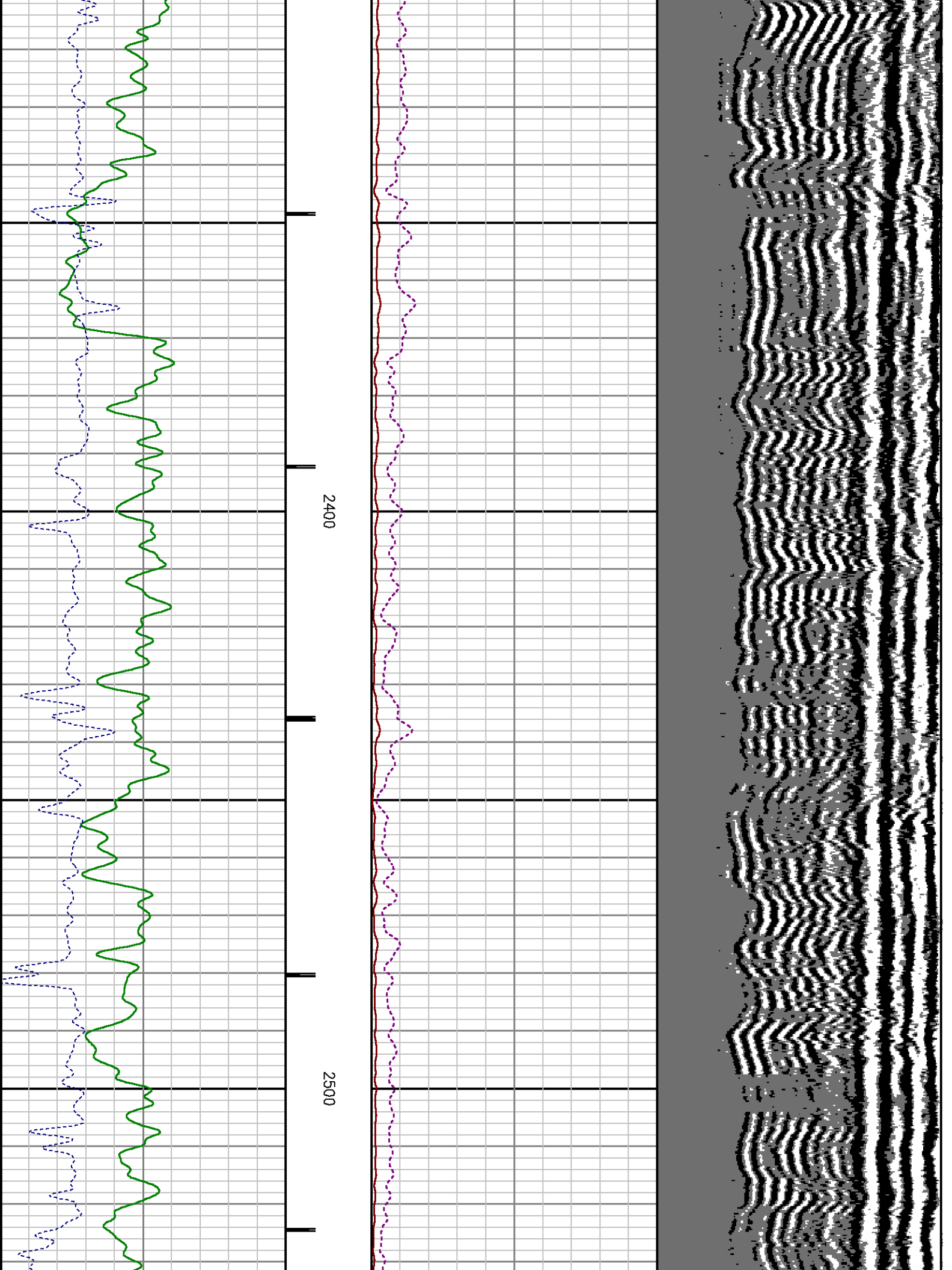




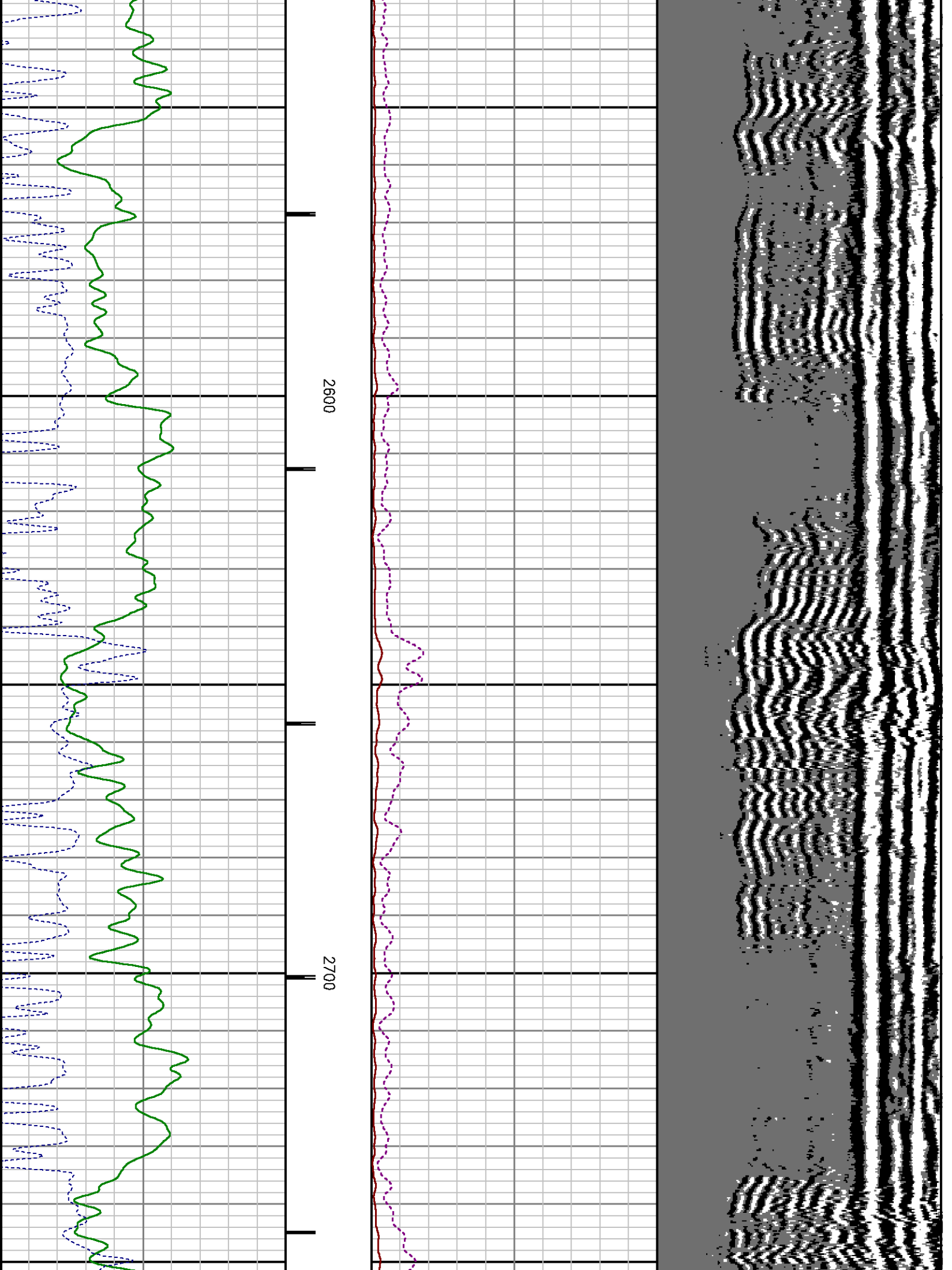


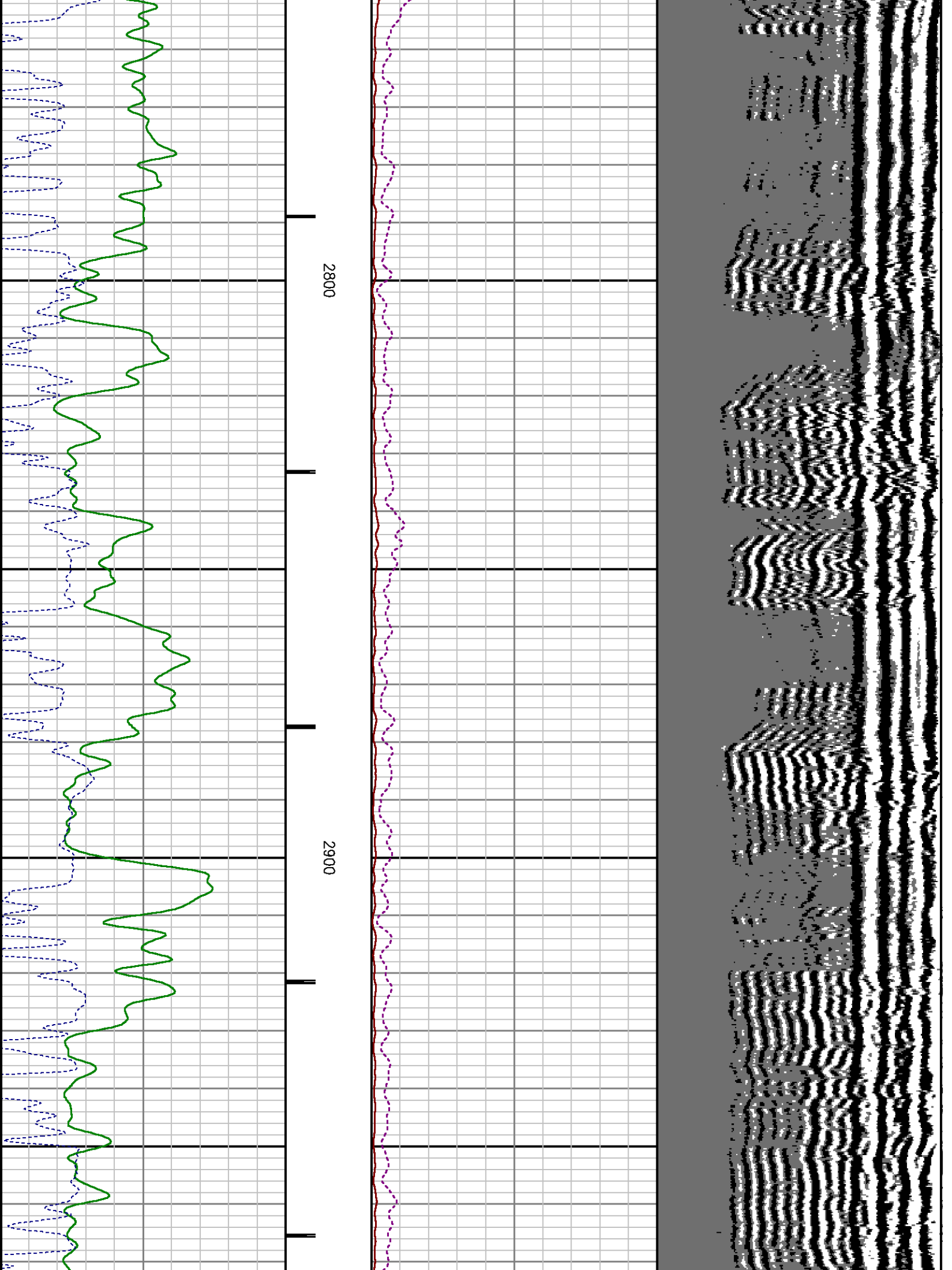




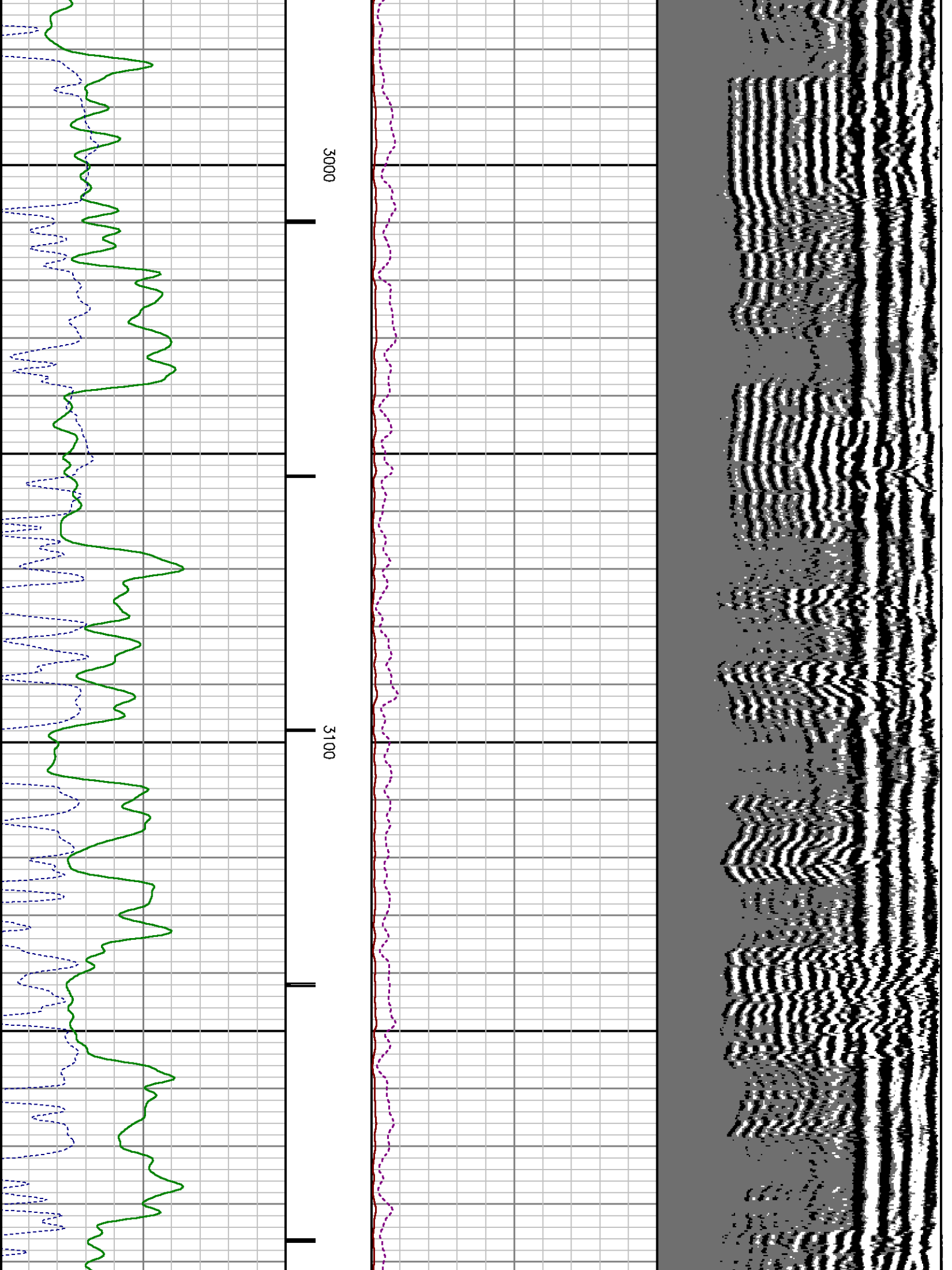


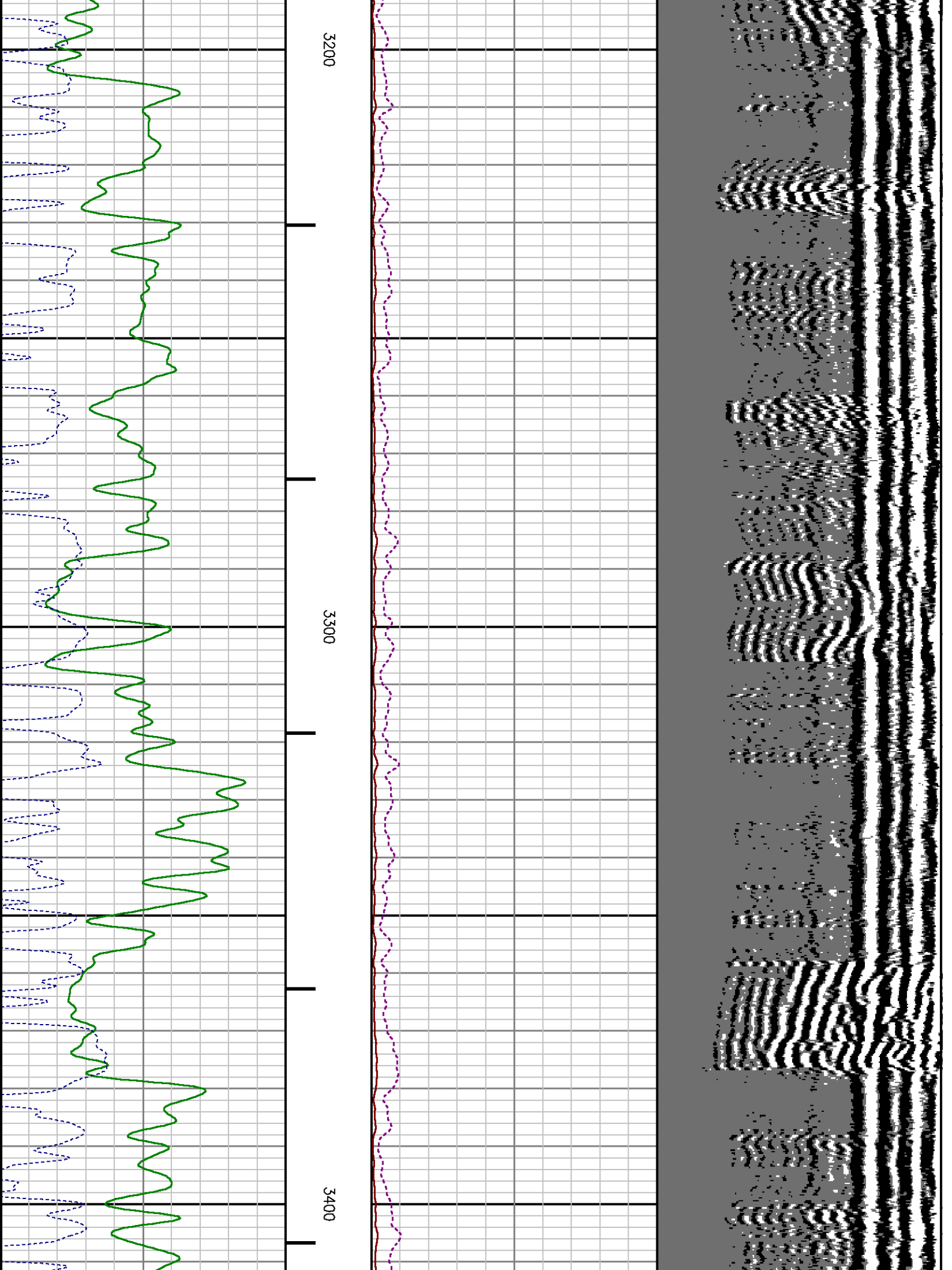


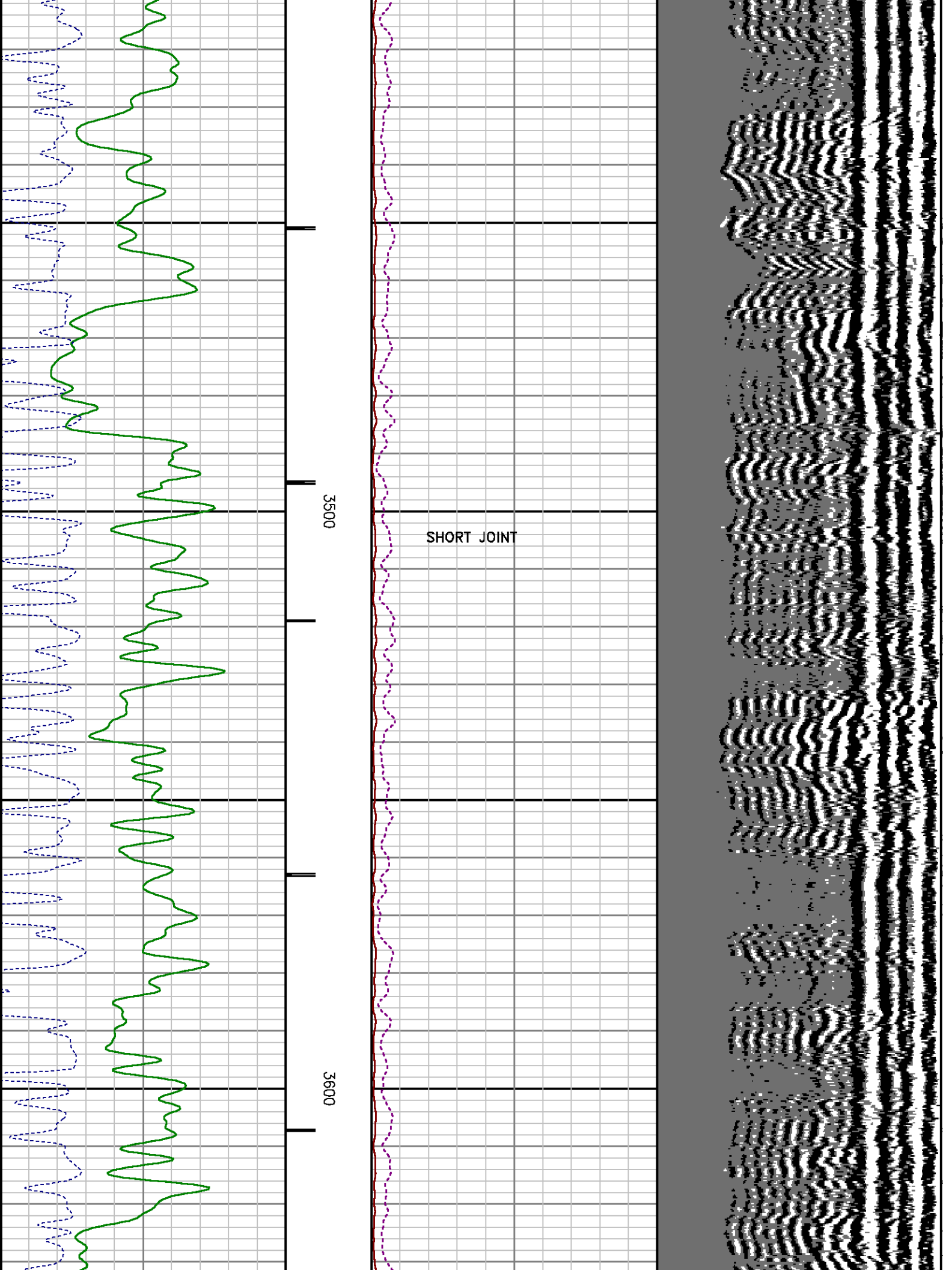


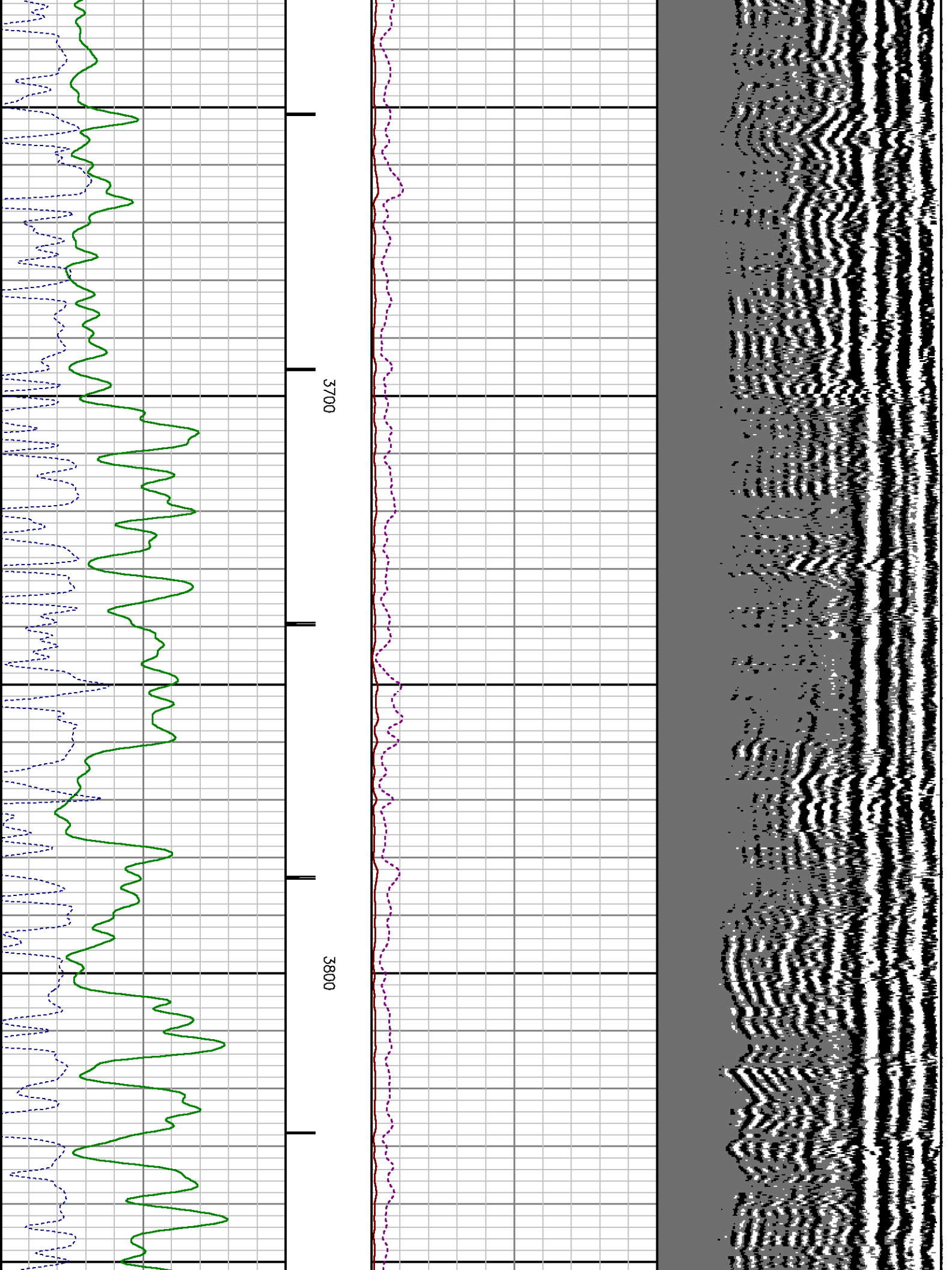


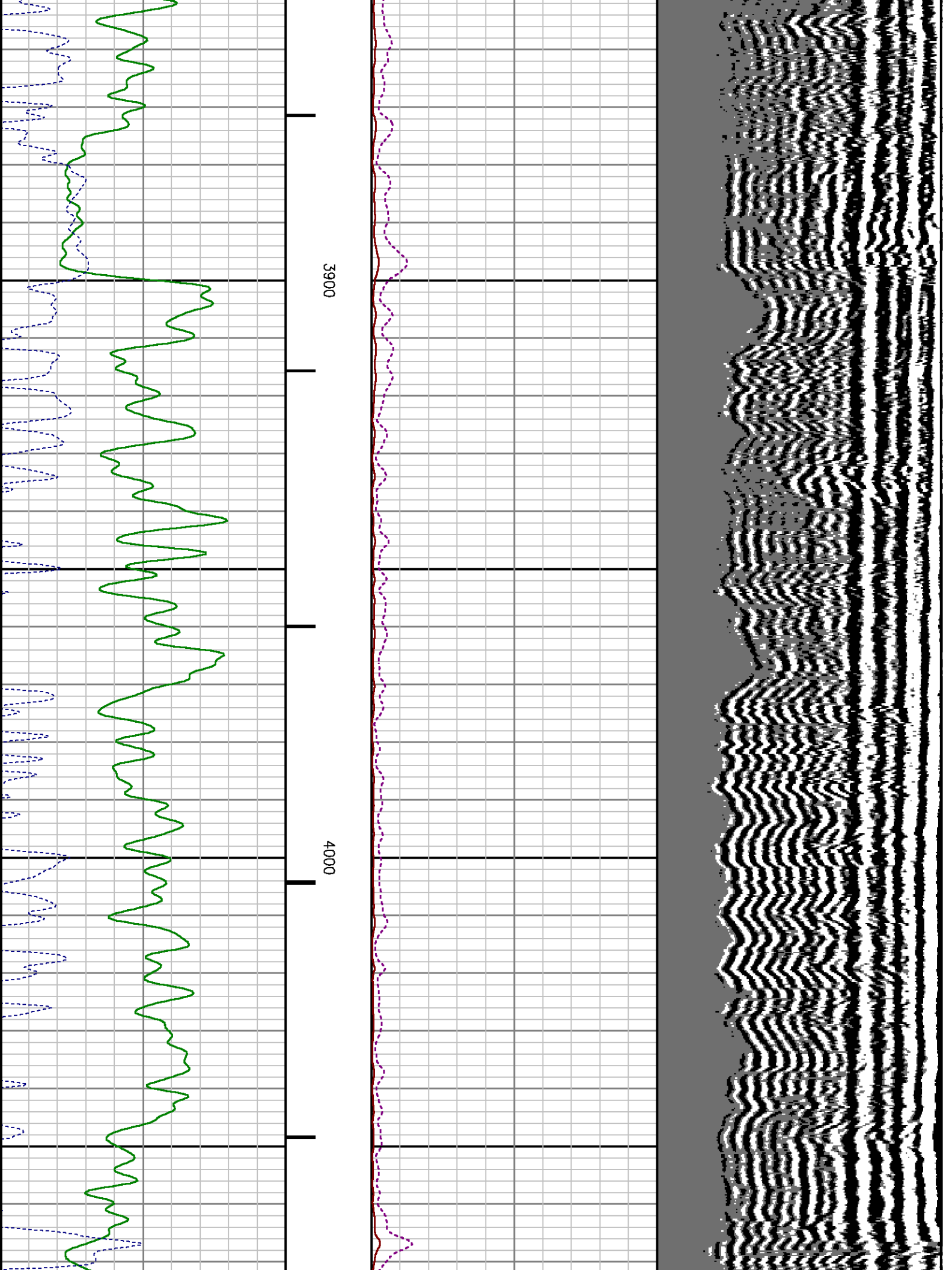


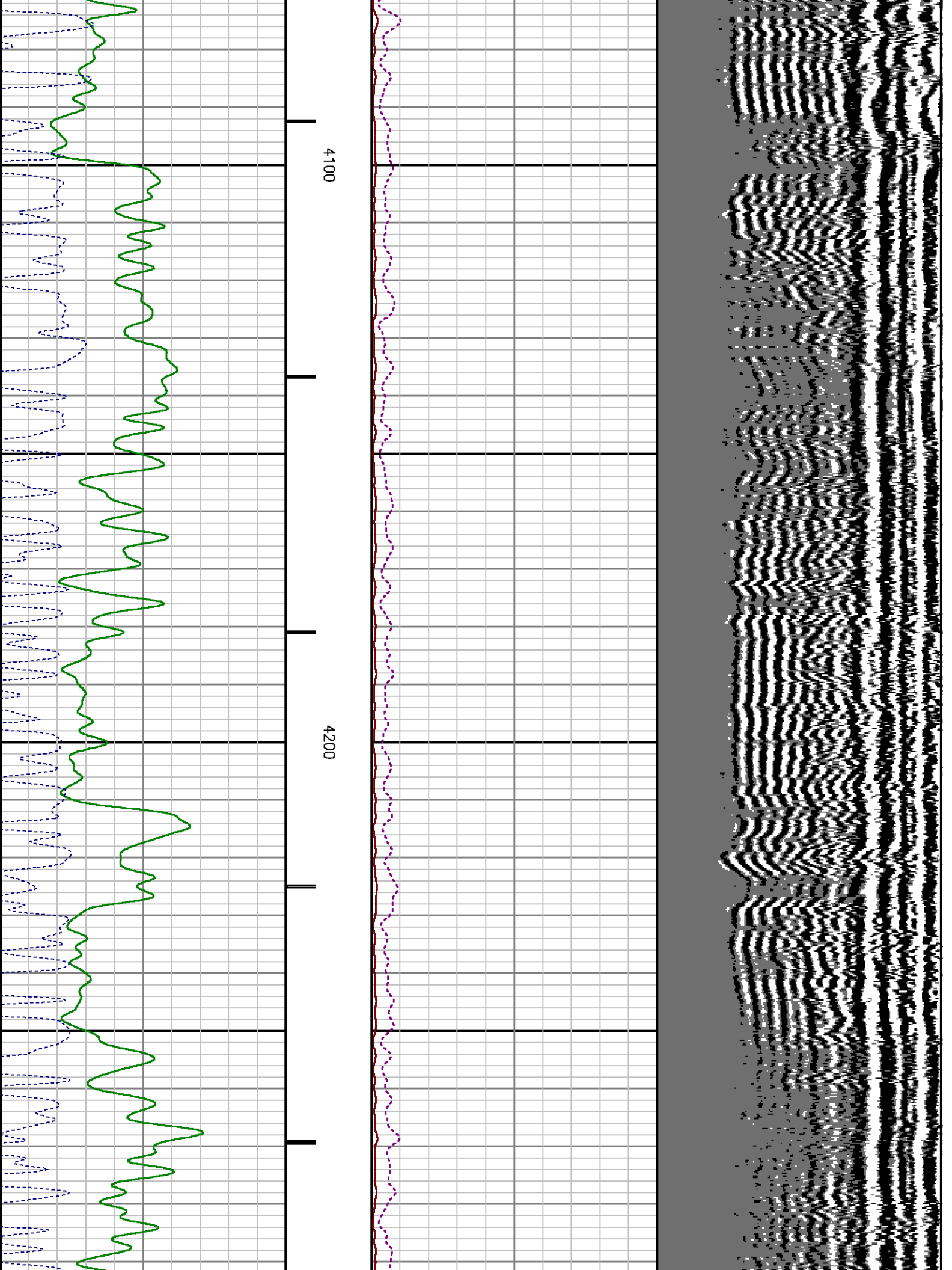




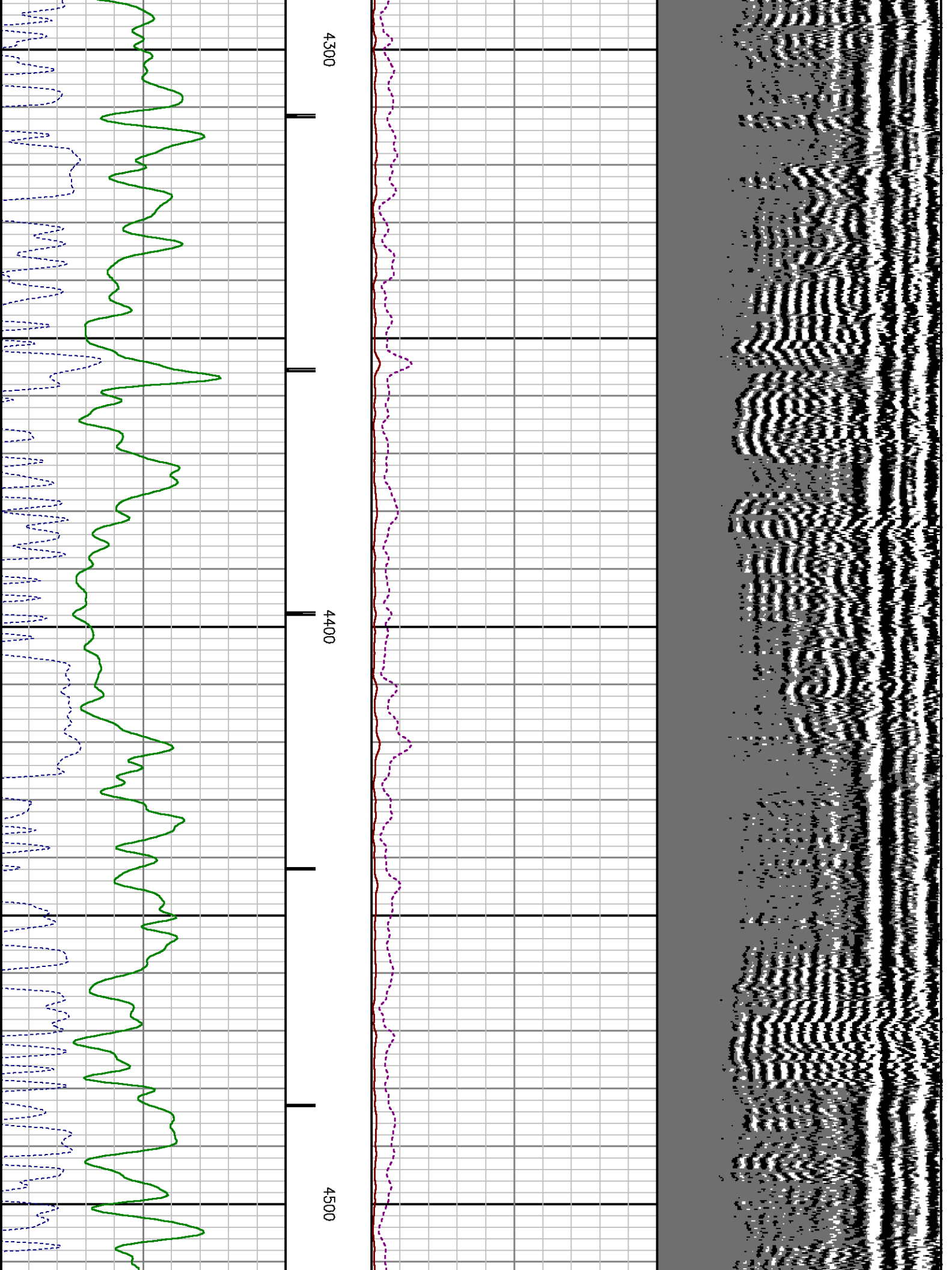


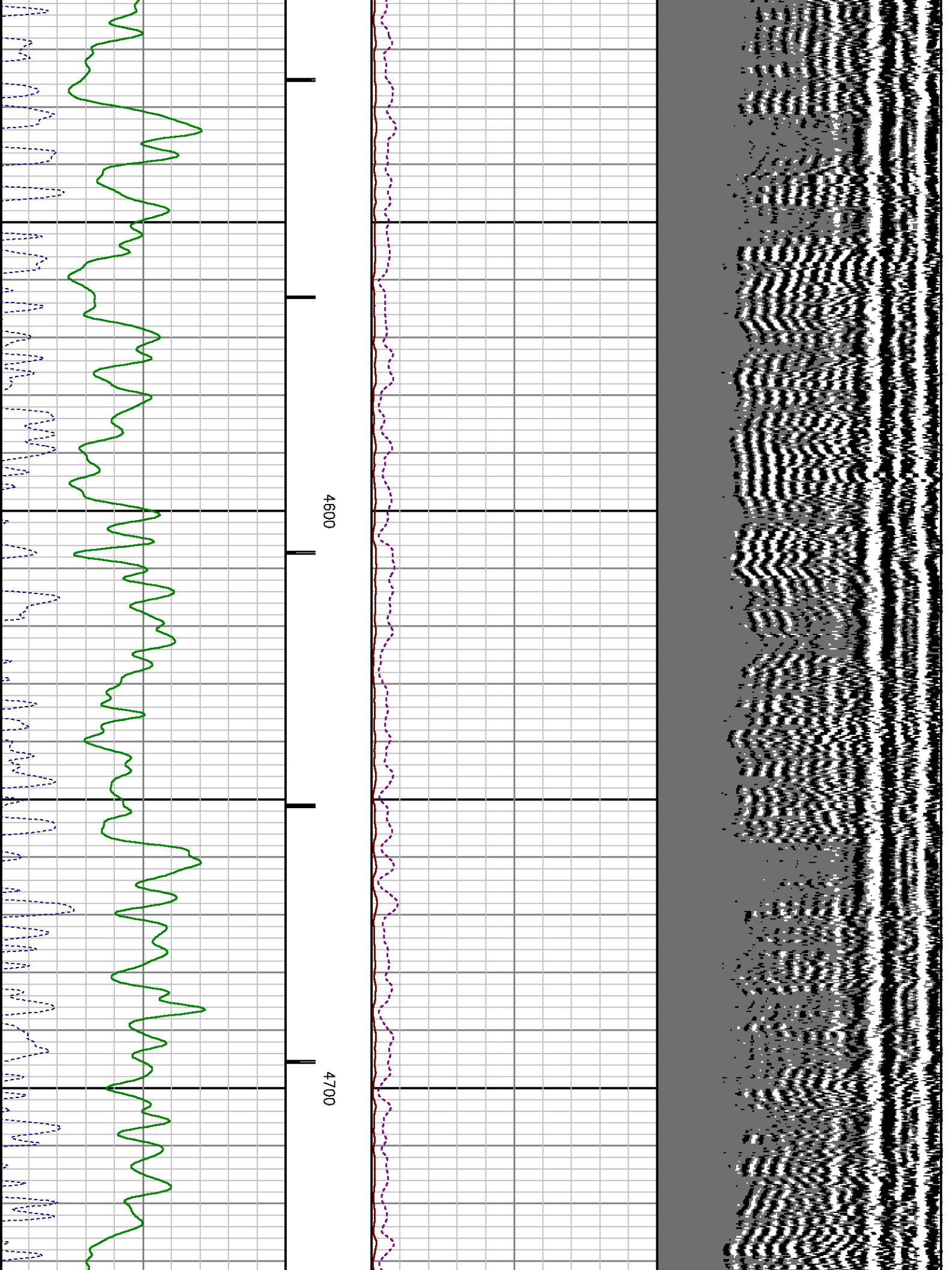




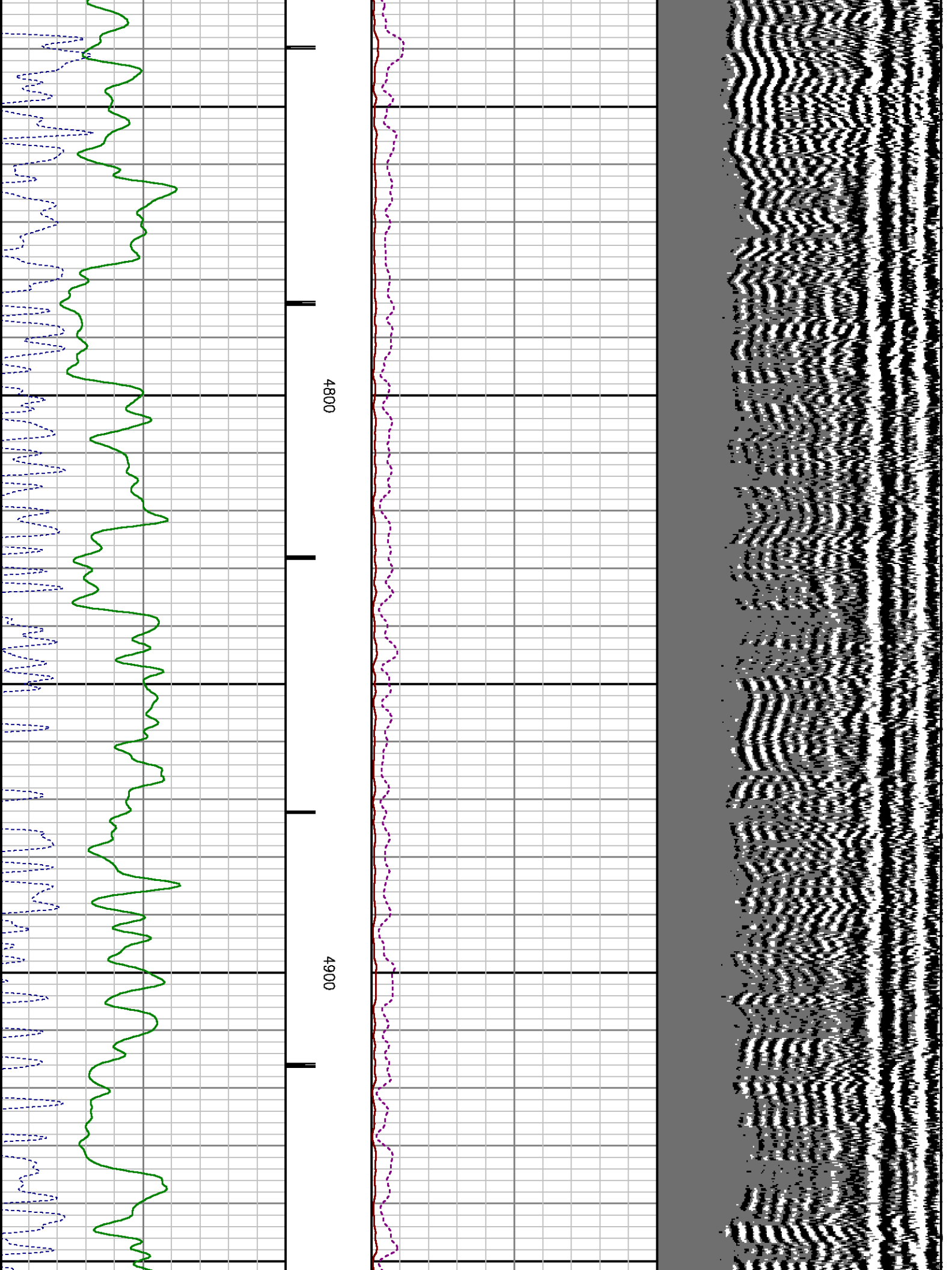


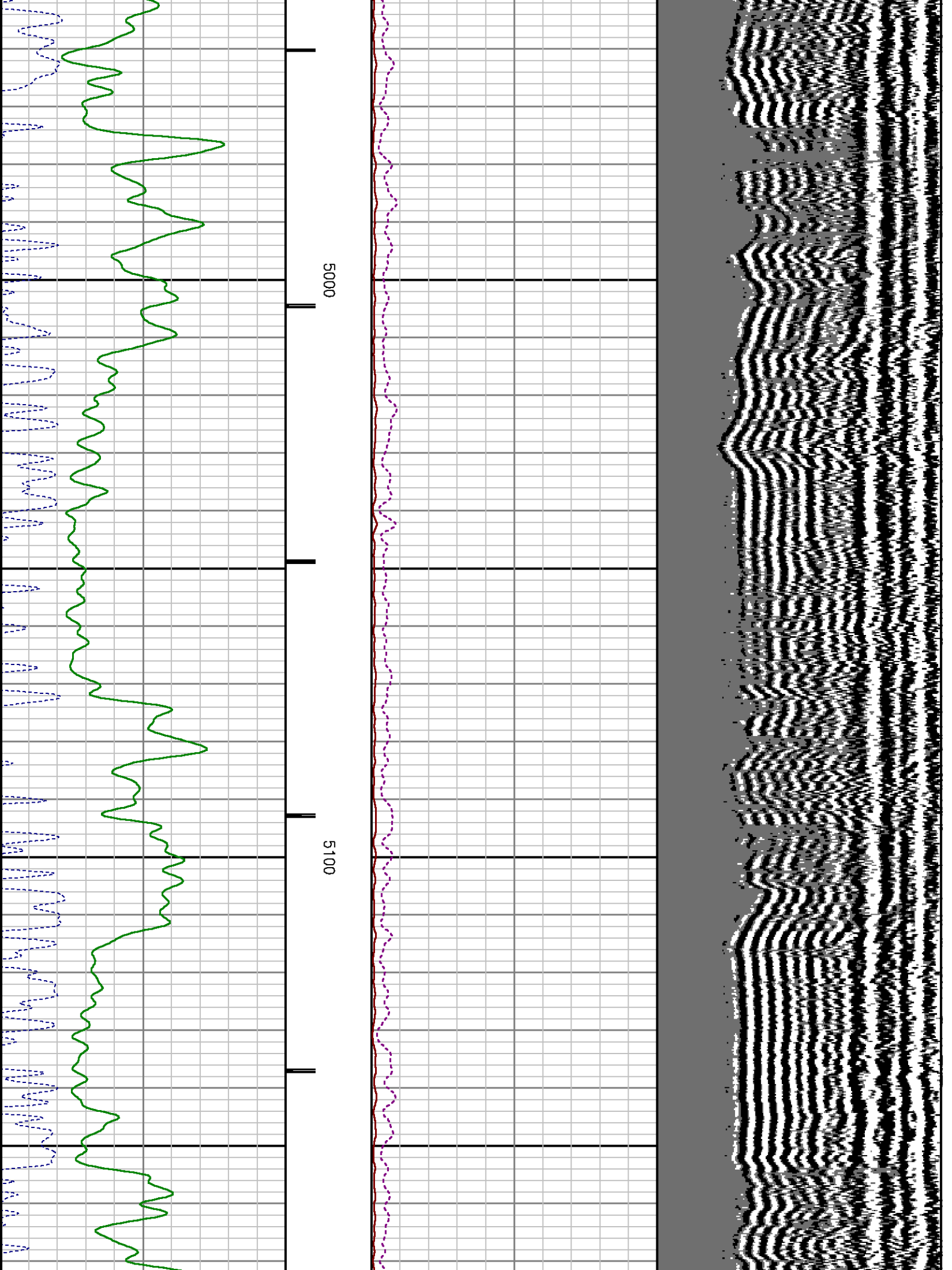


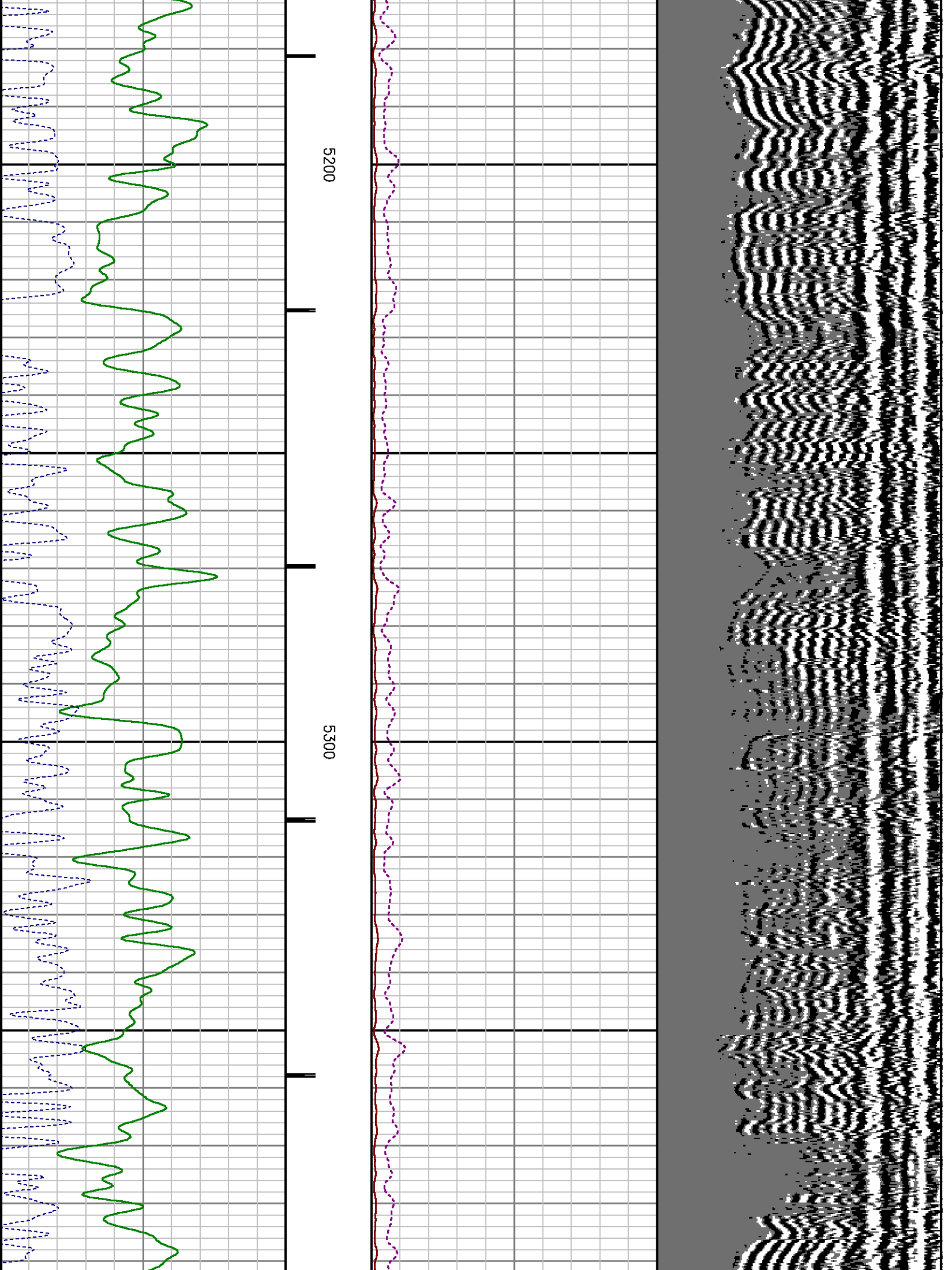


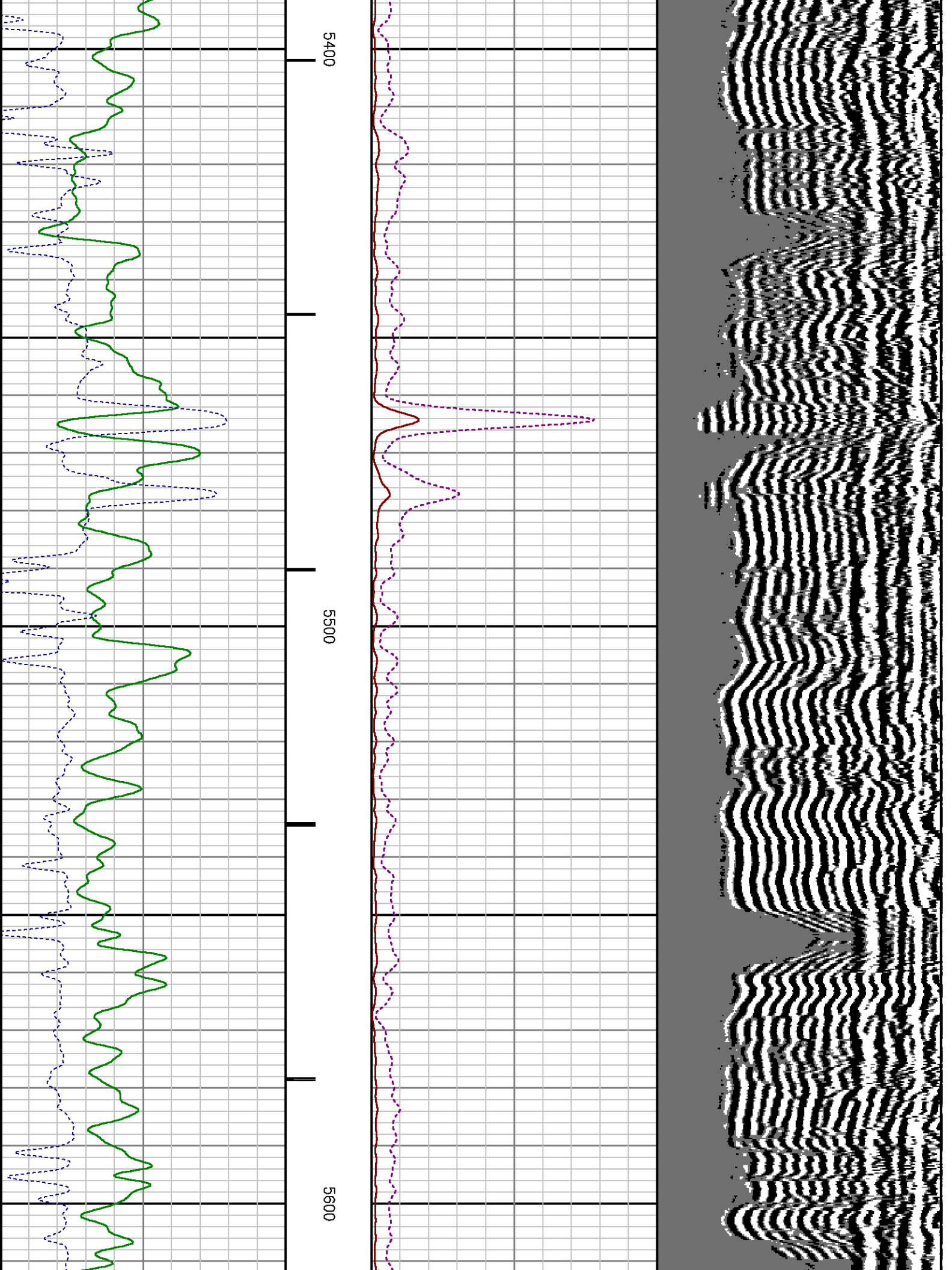


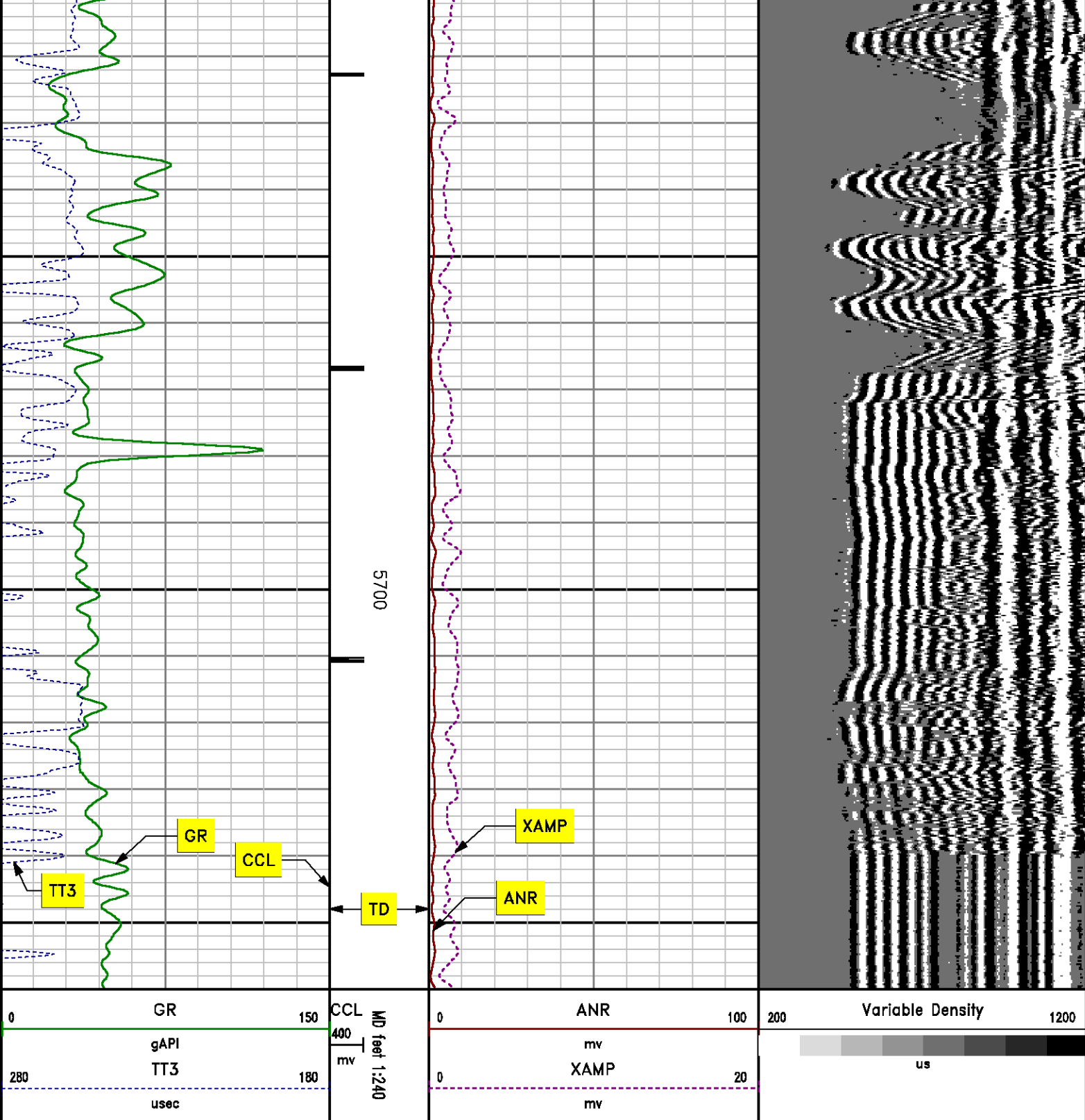












**MAIN LOG SECONDARY PRESENTATION**  
**0 PSI**

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	306.674	usec	30.968	5773.000
RAL	Amp Gate Start Near	199.015	usec	30.968	5773.000
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RAL	Fluid Travel Time	200.000	usec/ft	30.968	5773.000

## 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

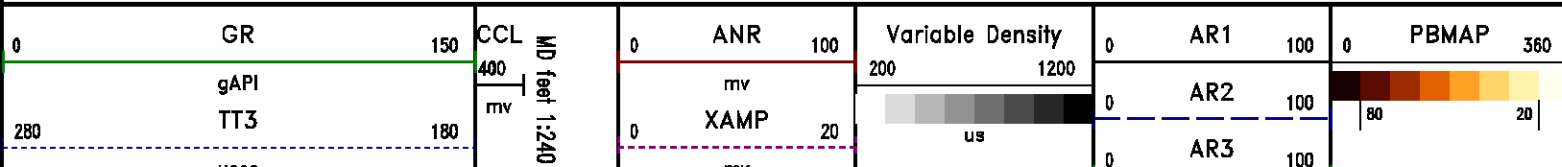
Well : STRAIT SG 532-22

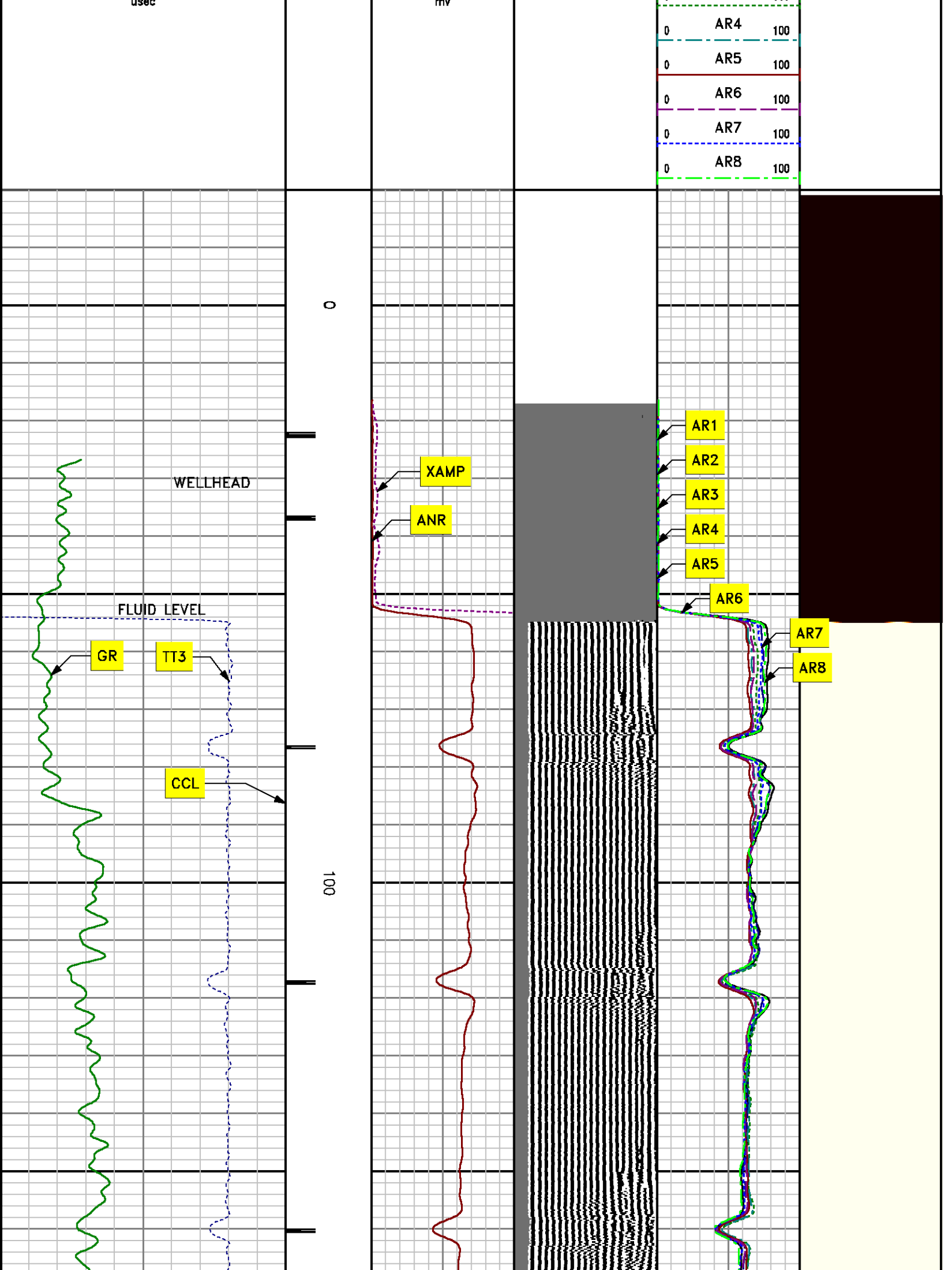
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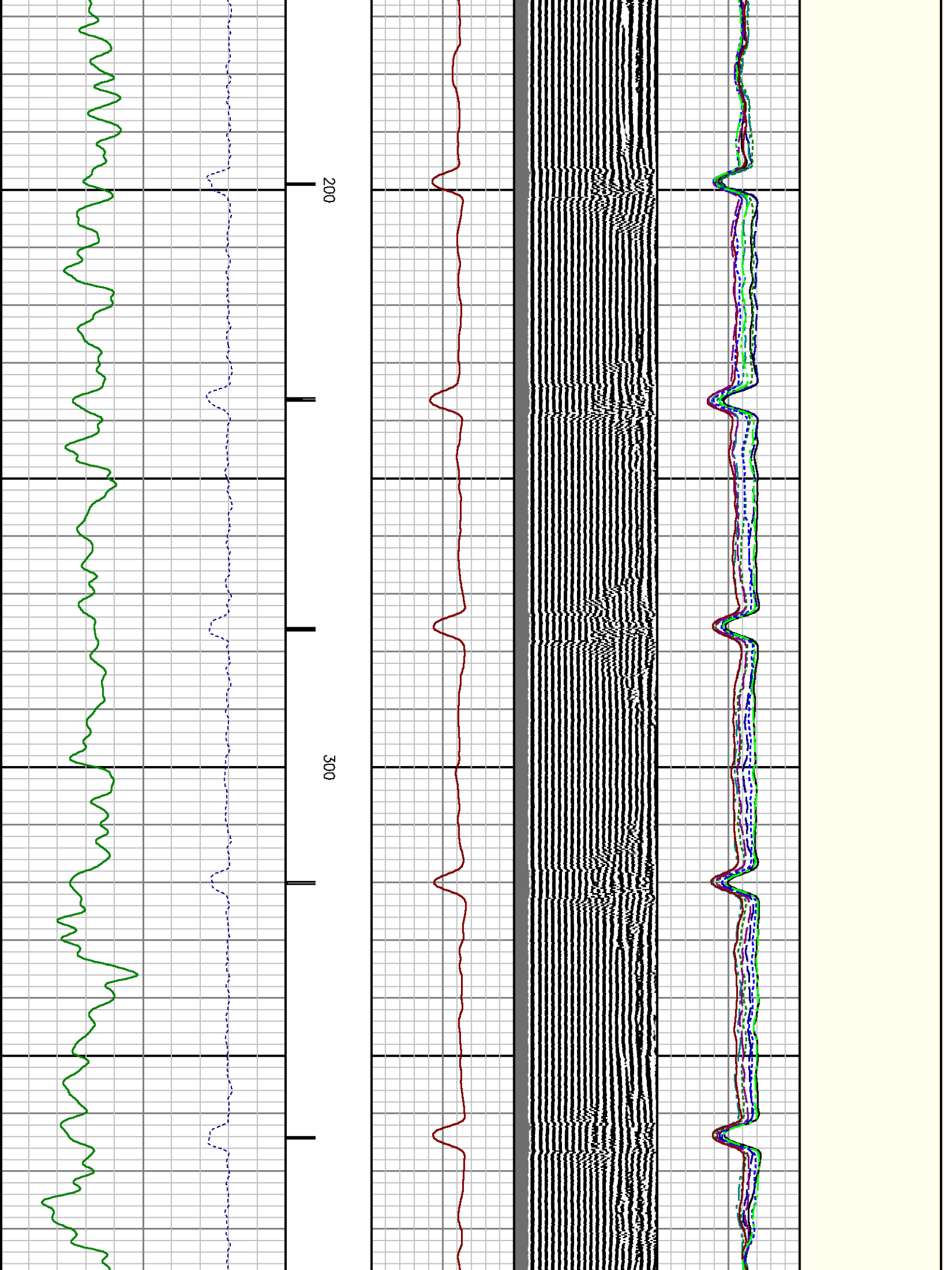
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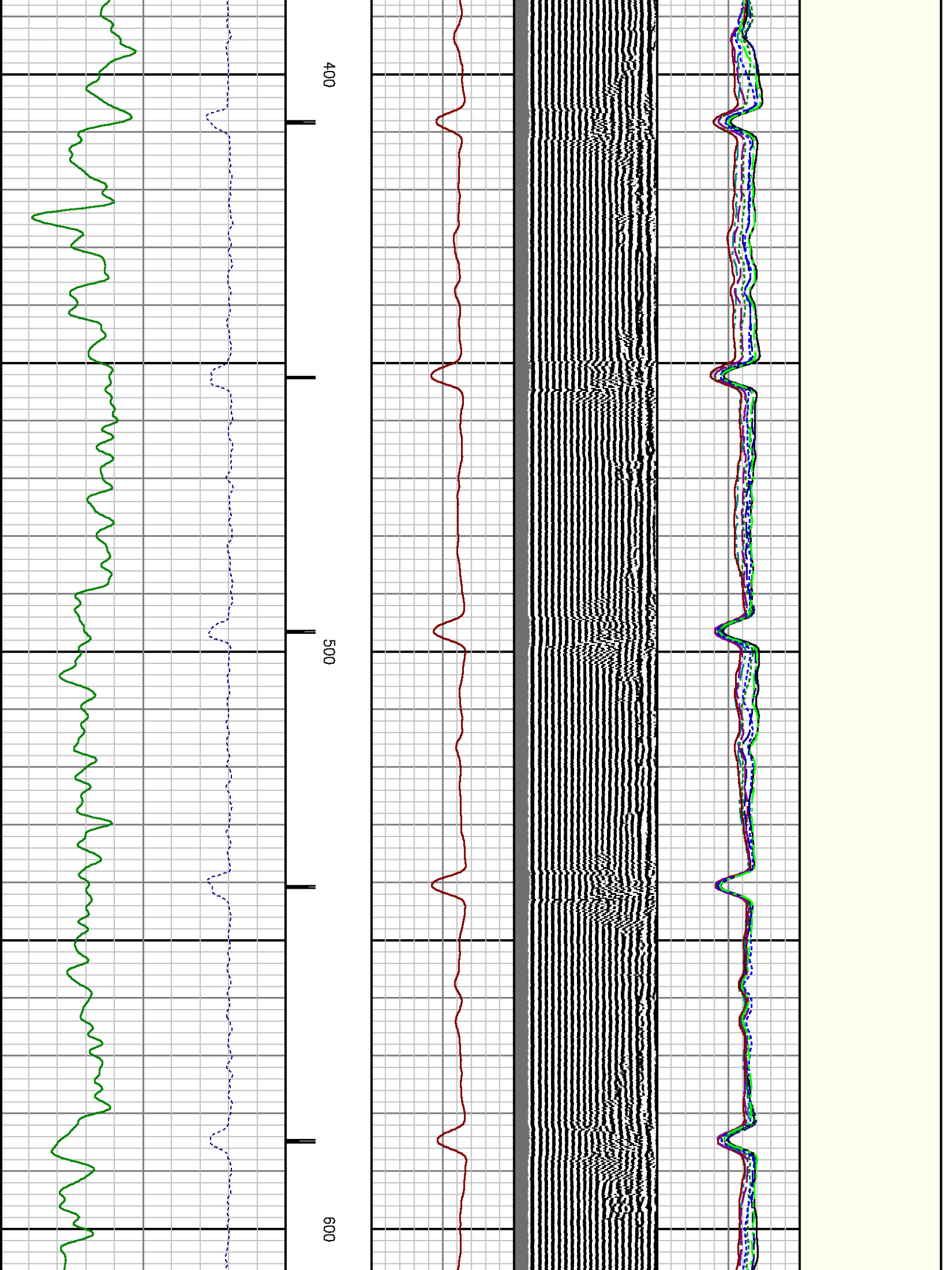


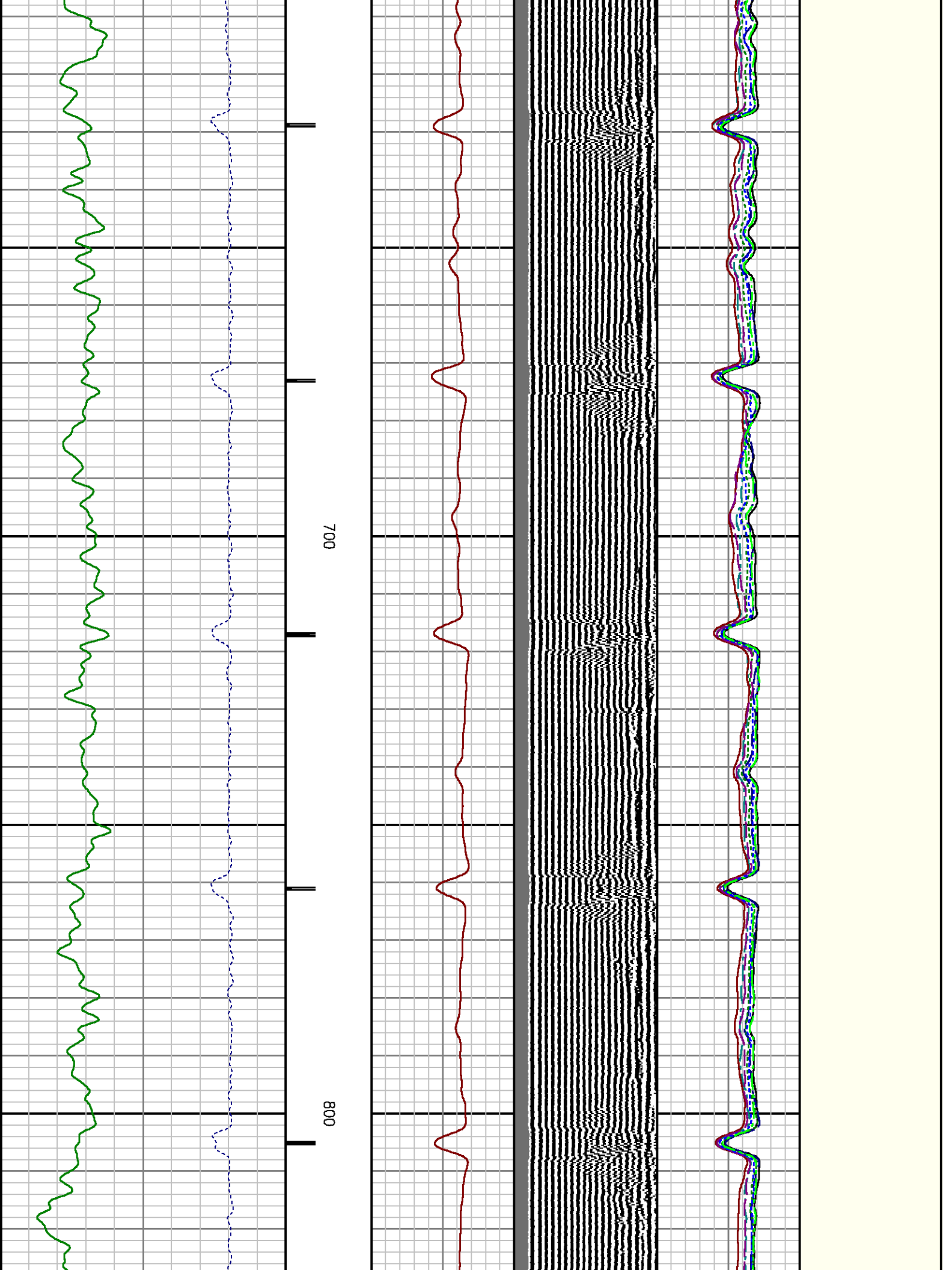


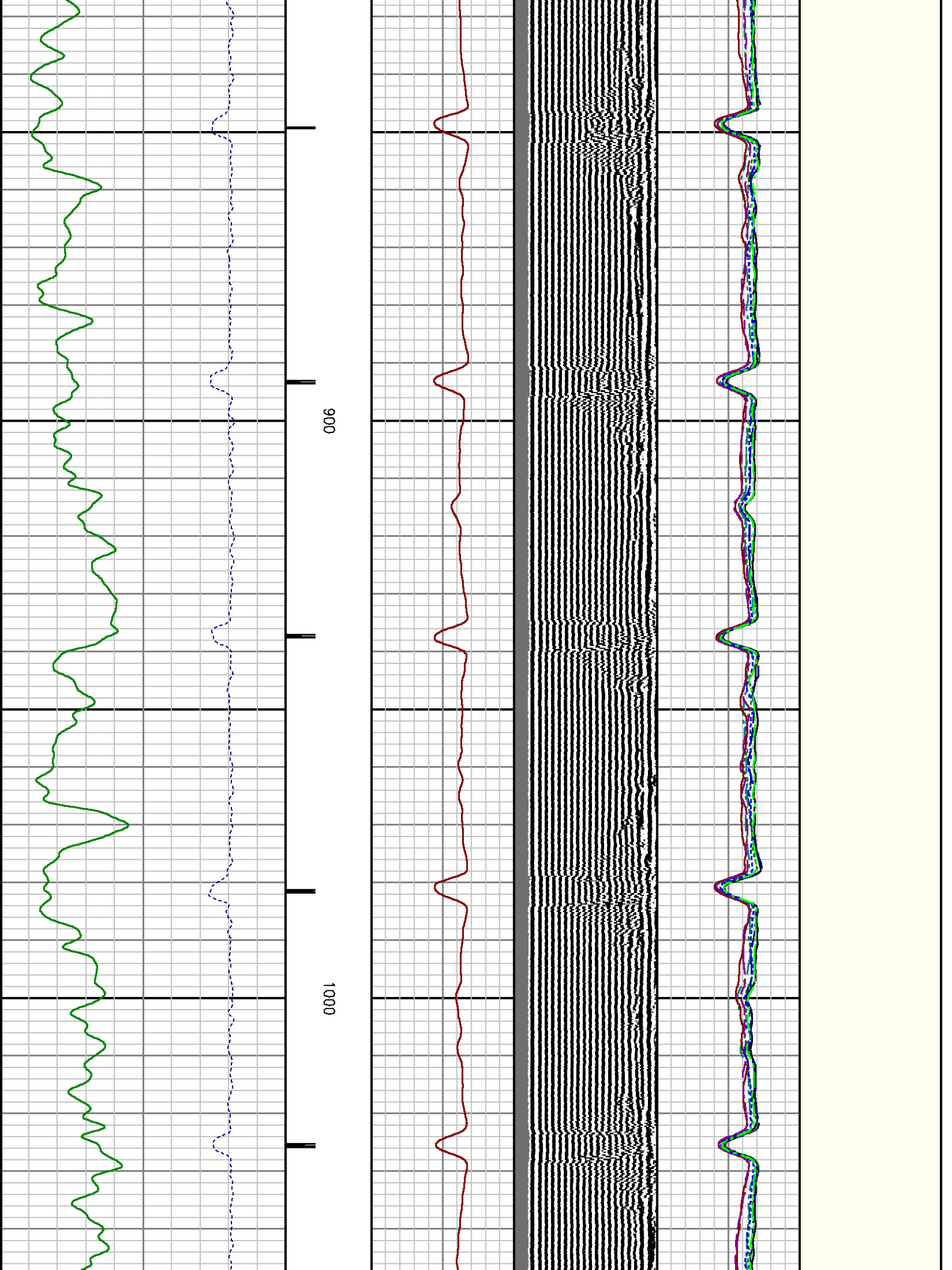


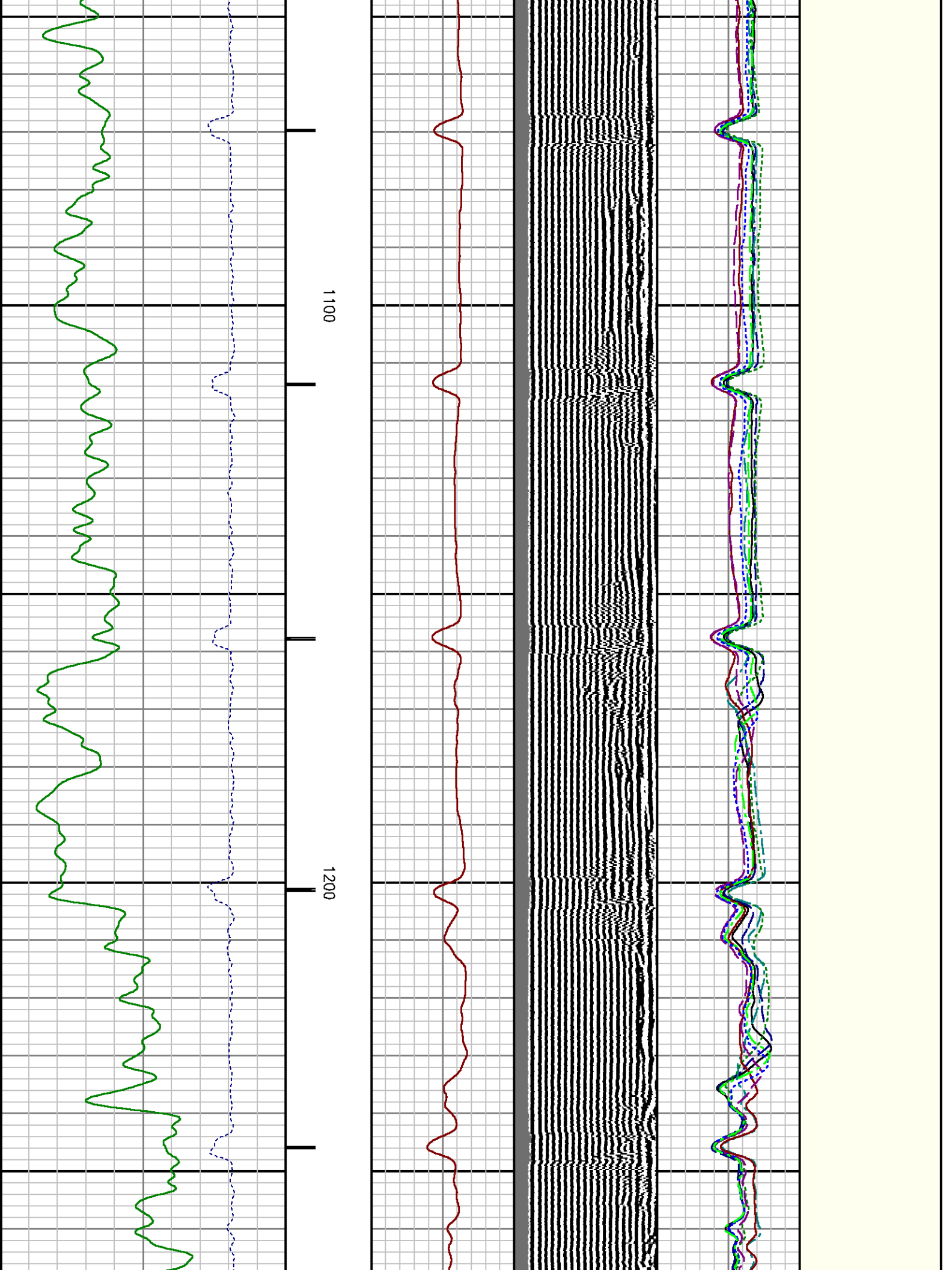


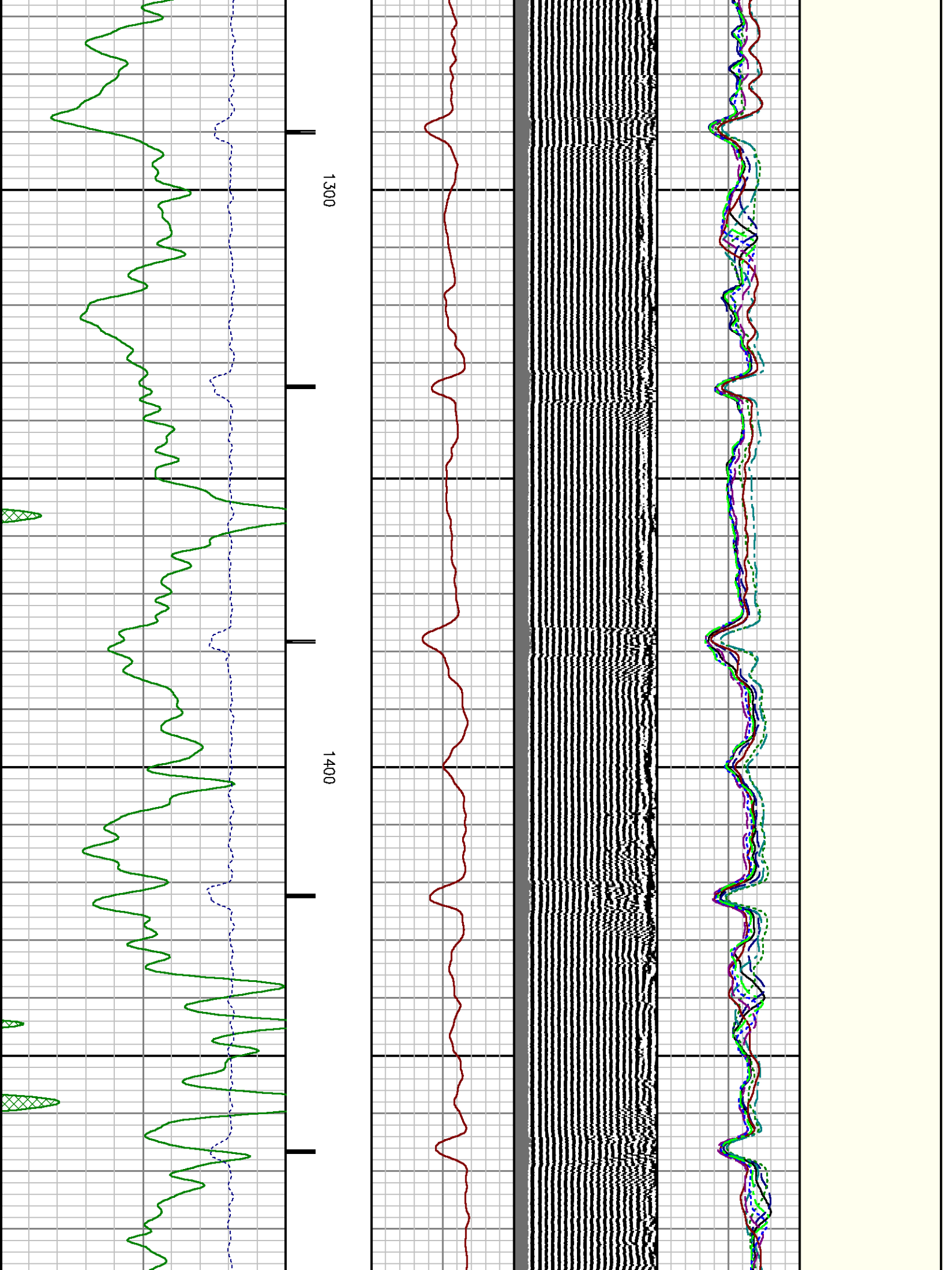


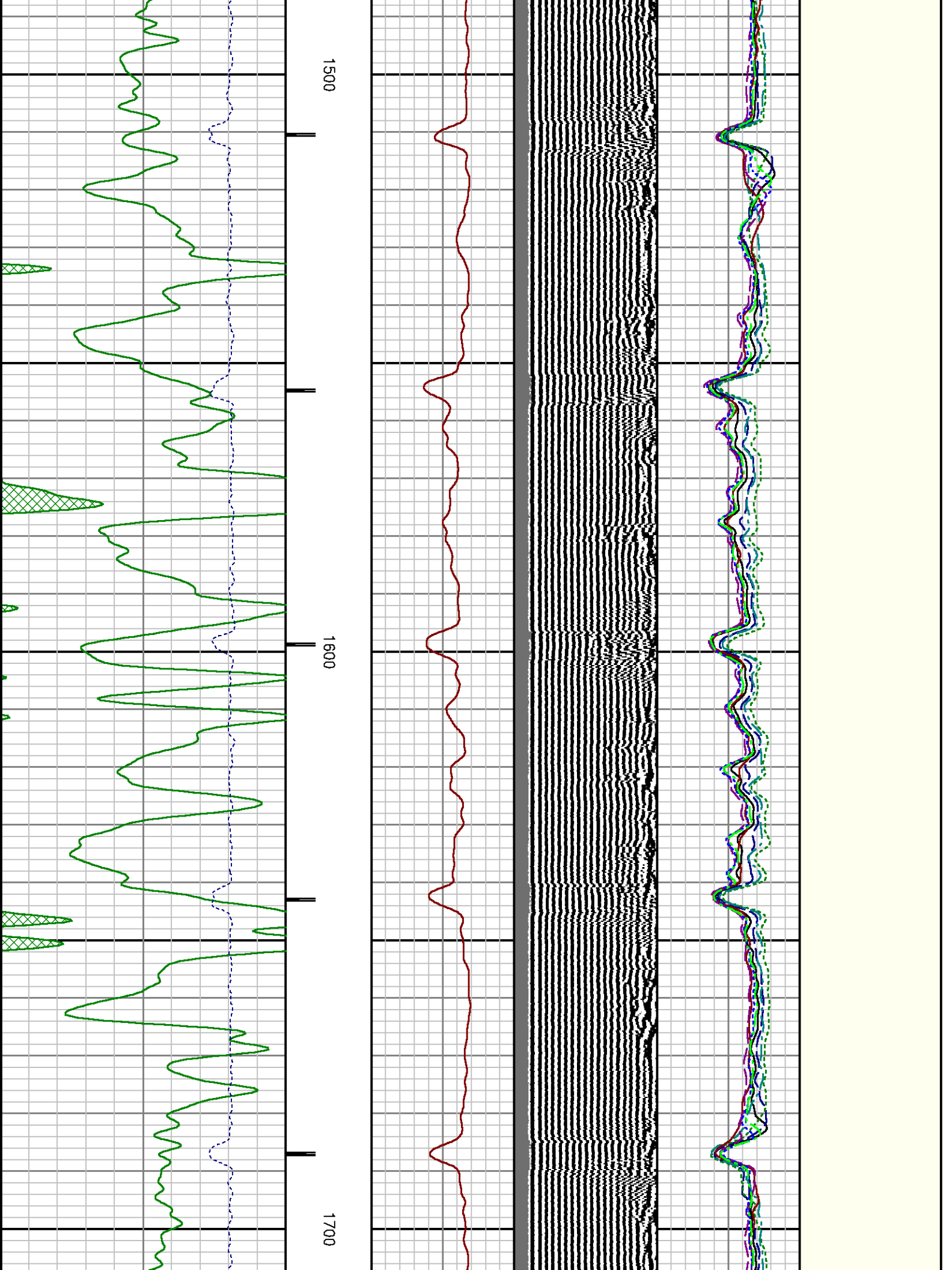




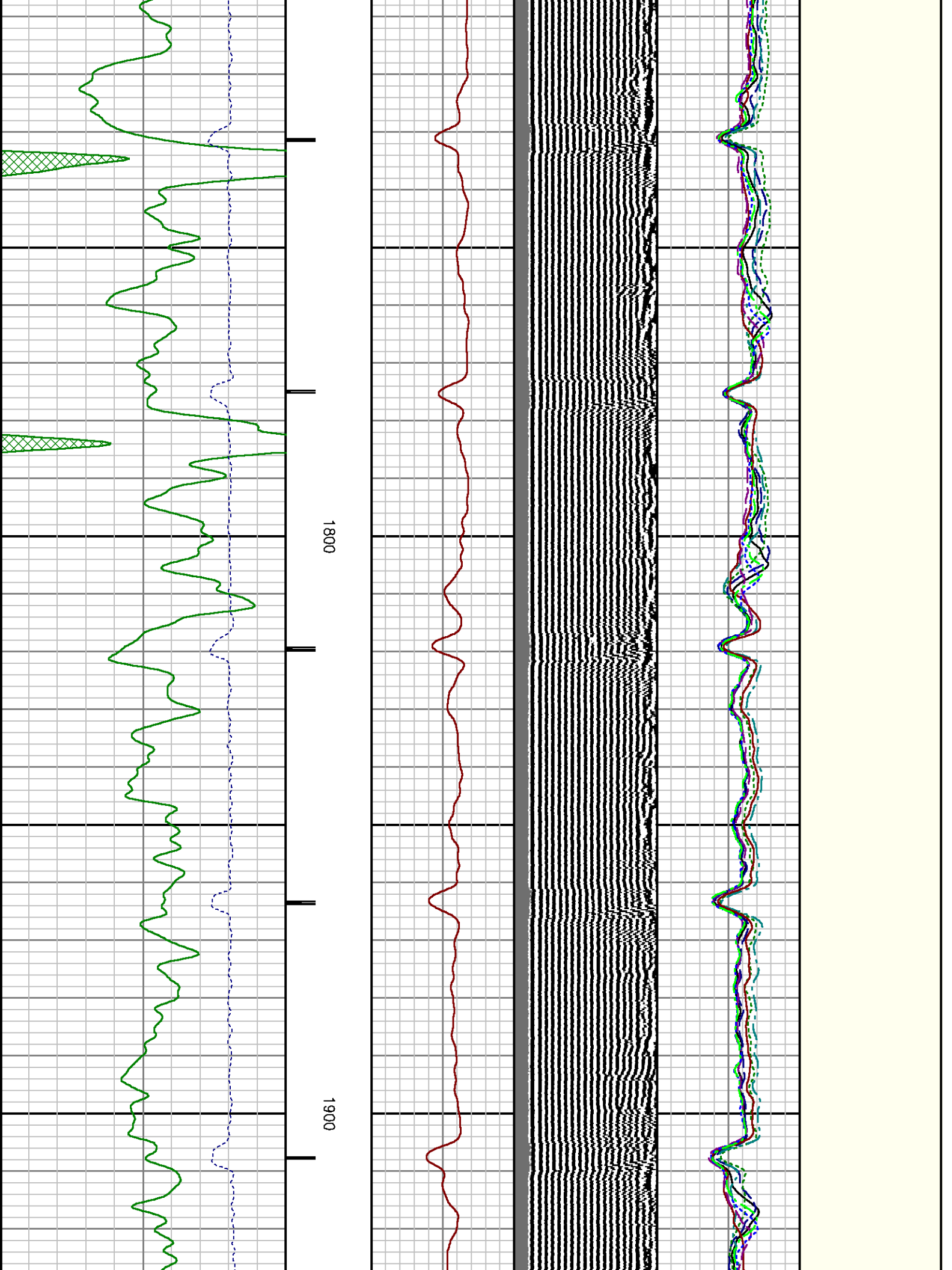


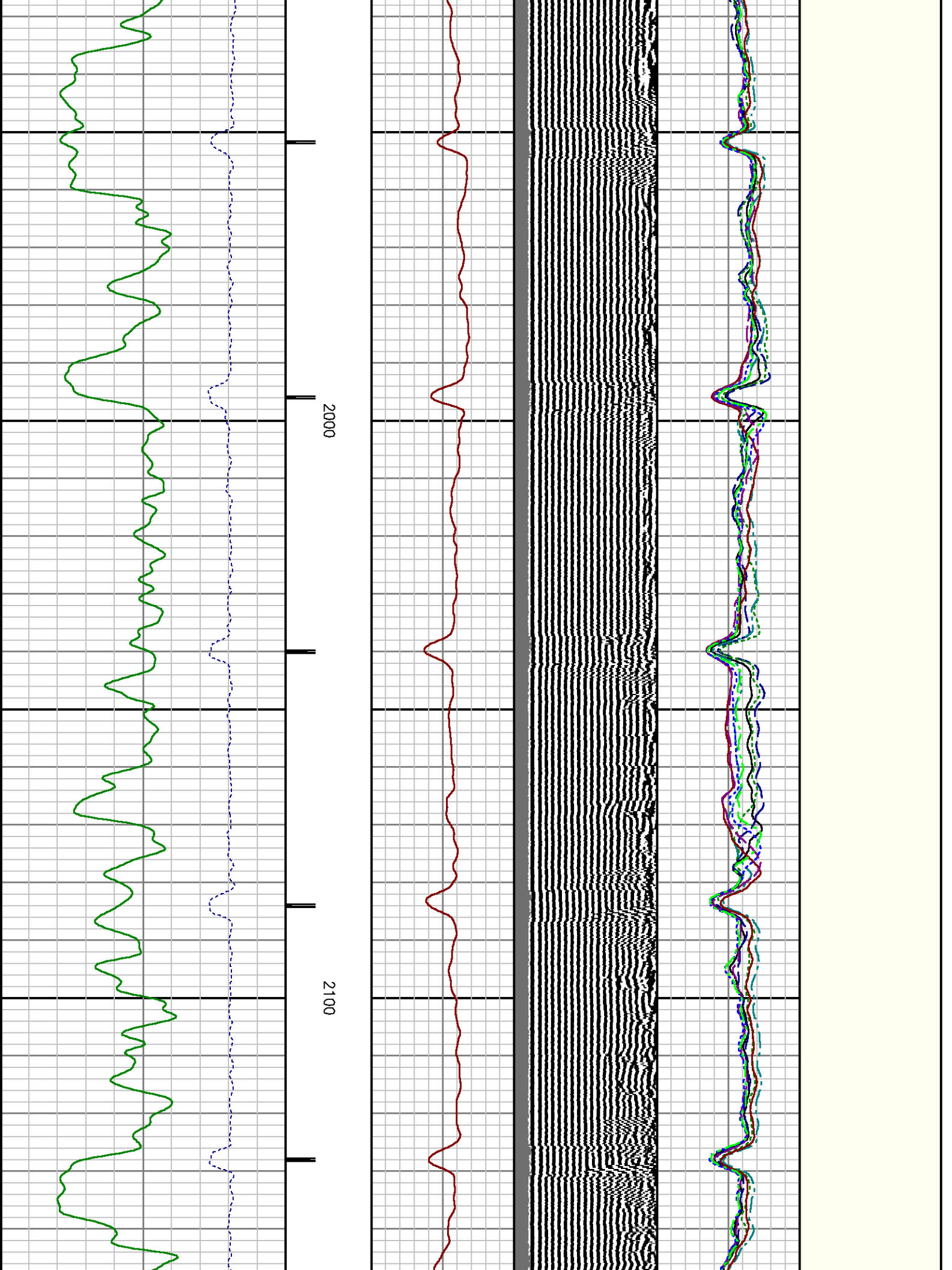




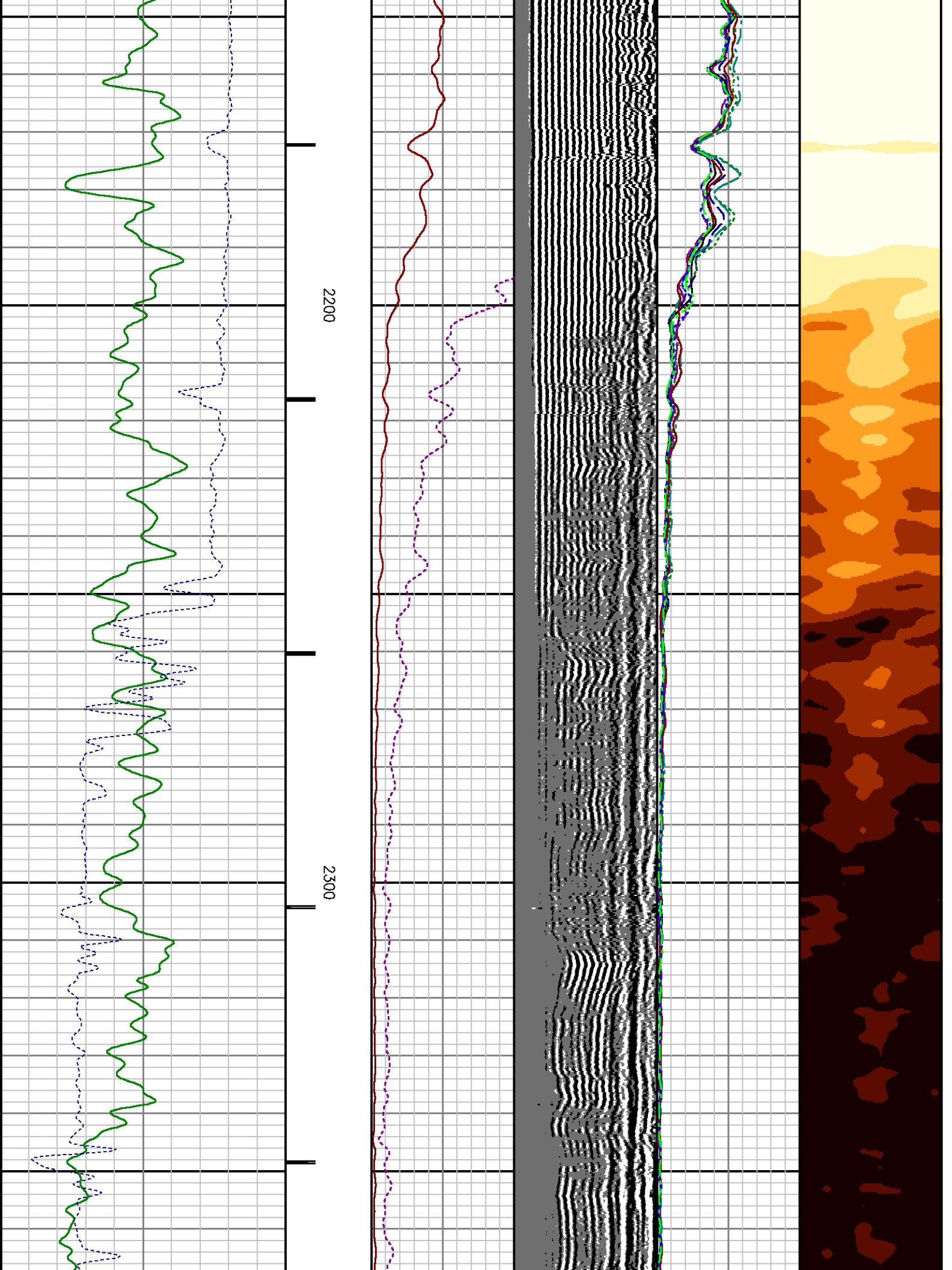


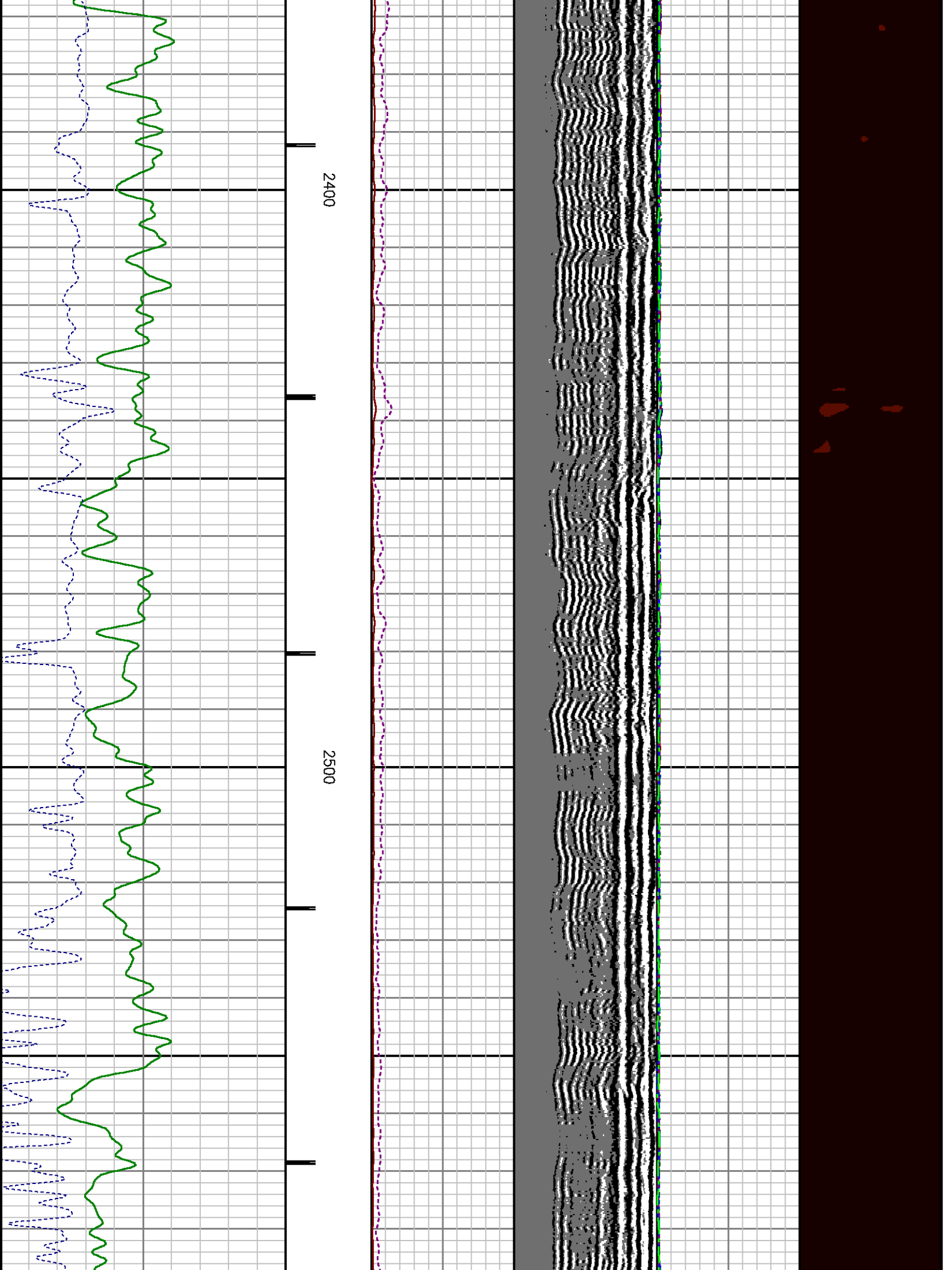


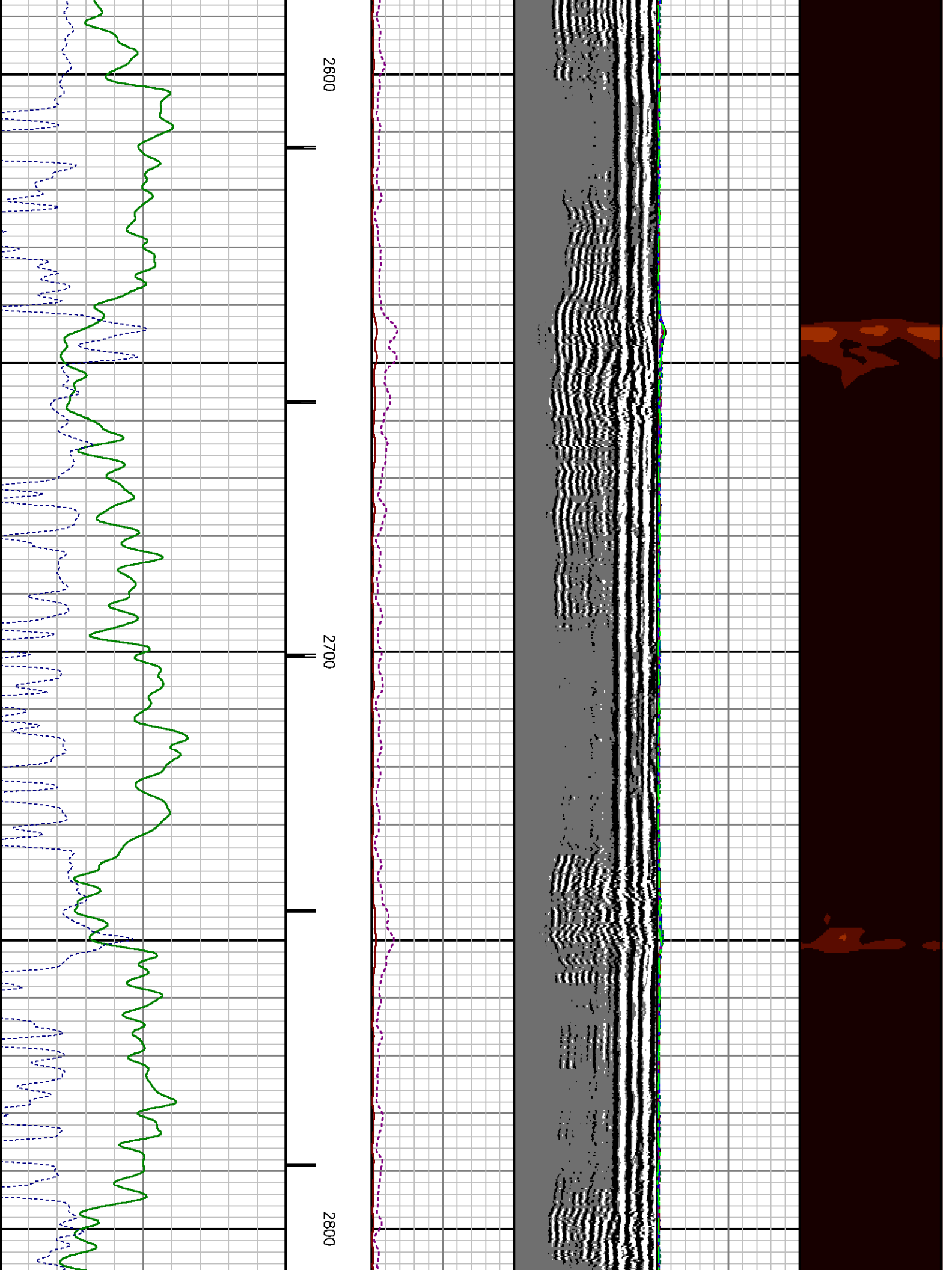


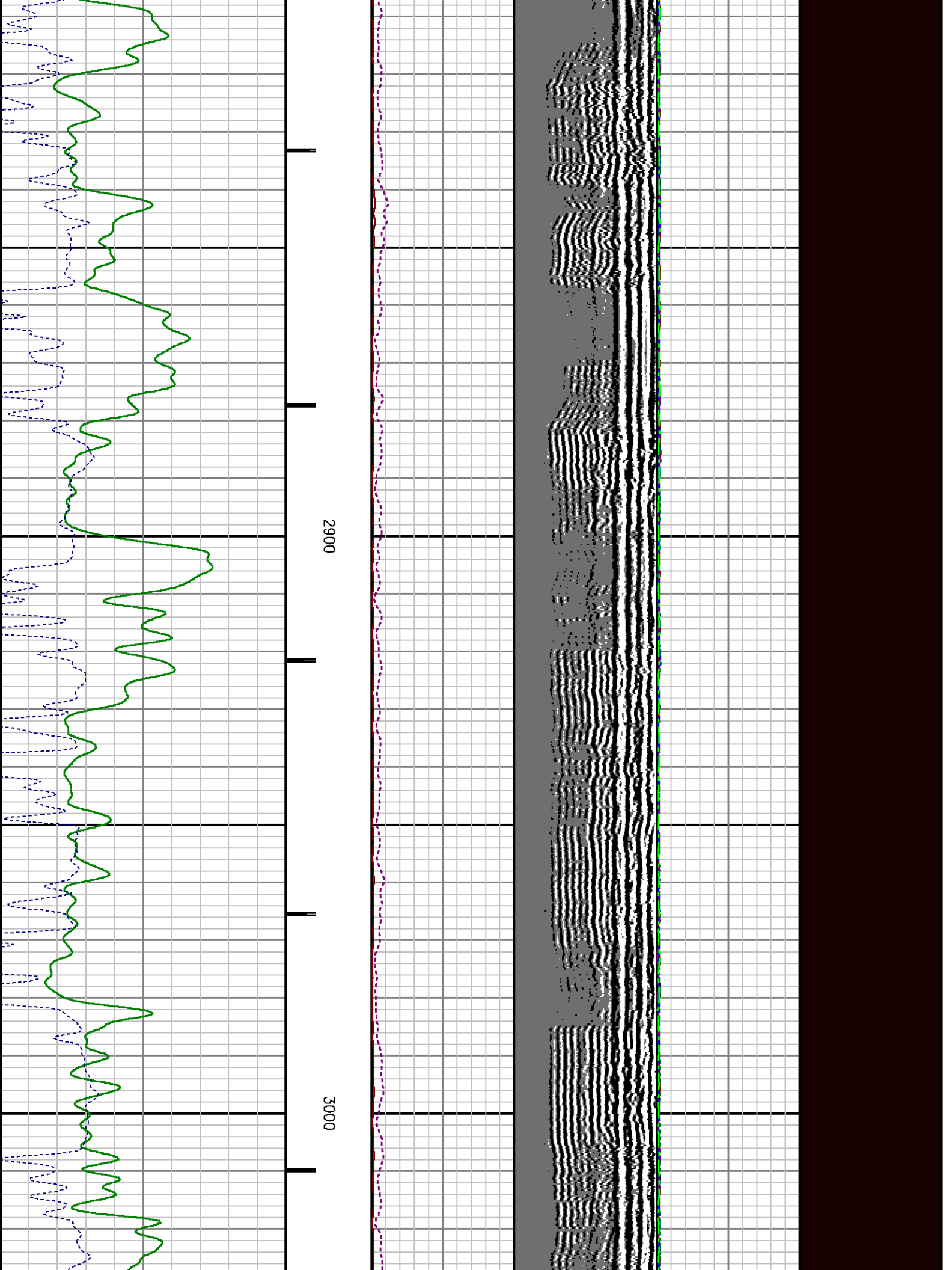


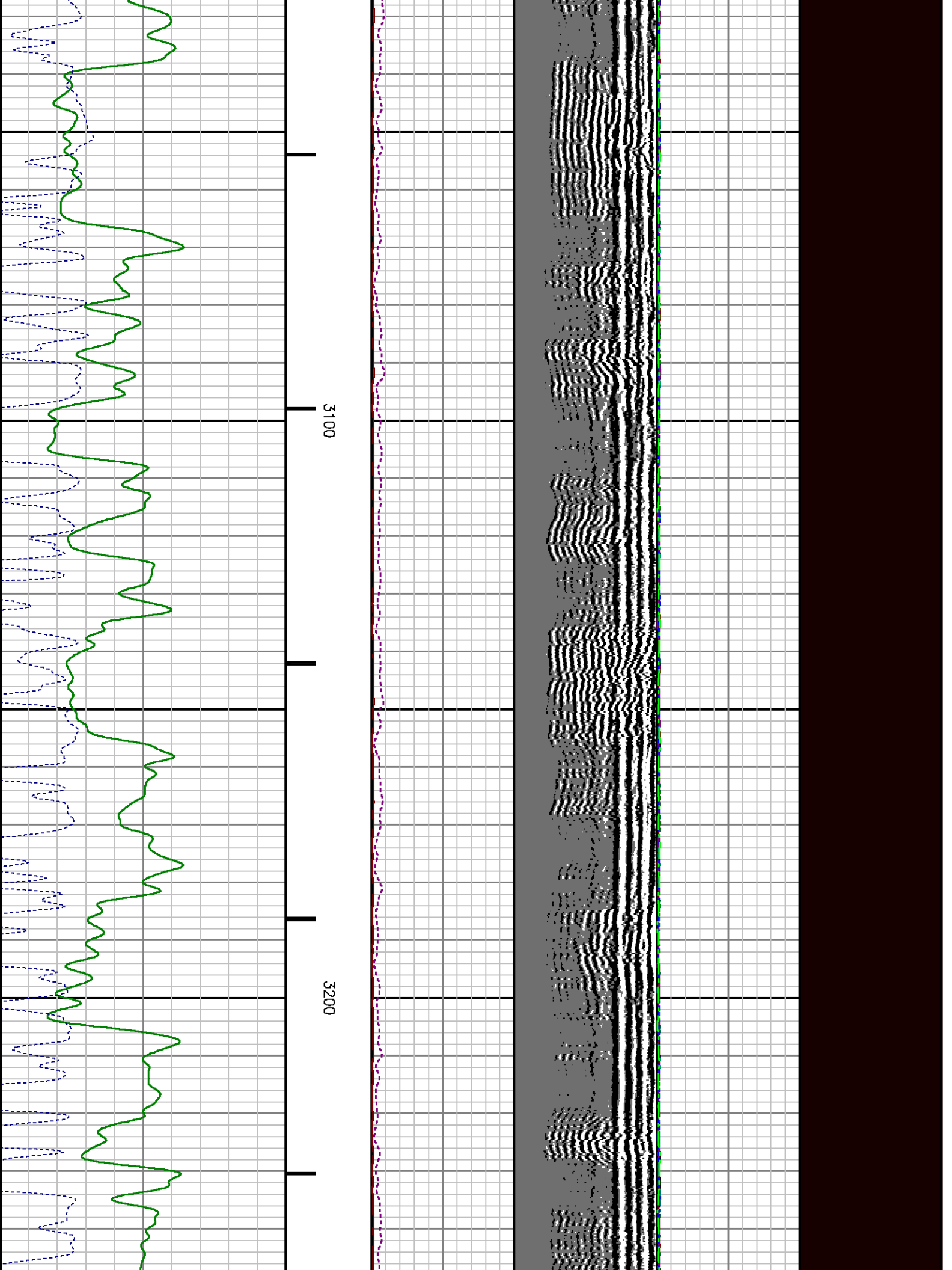


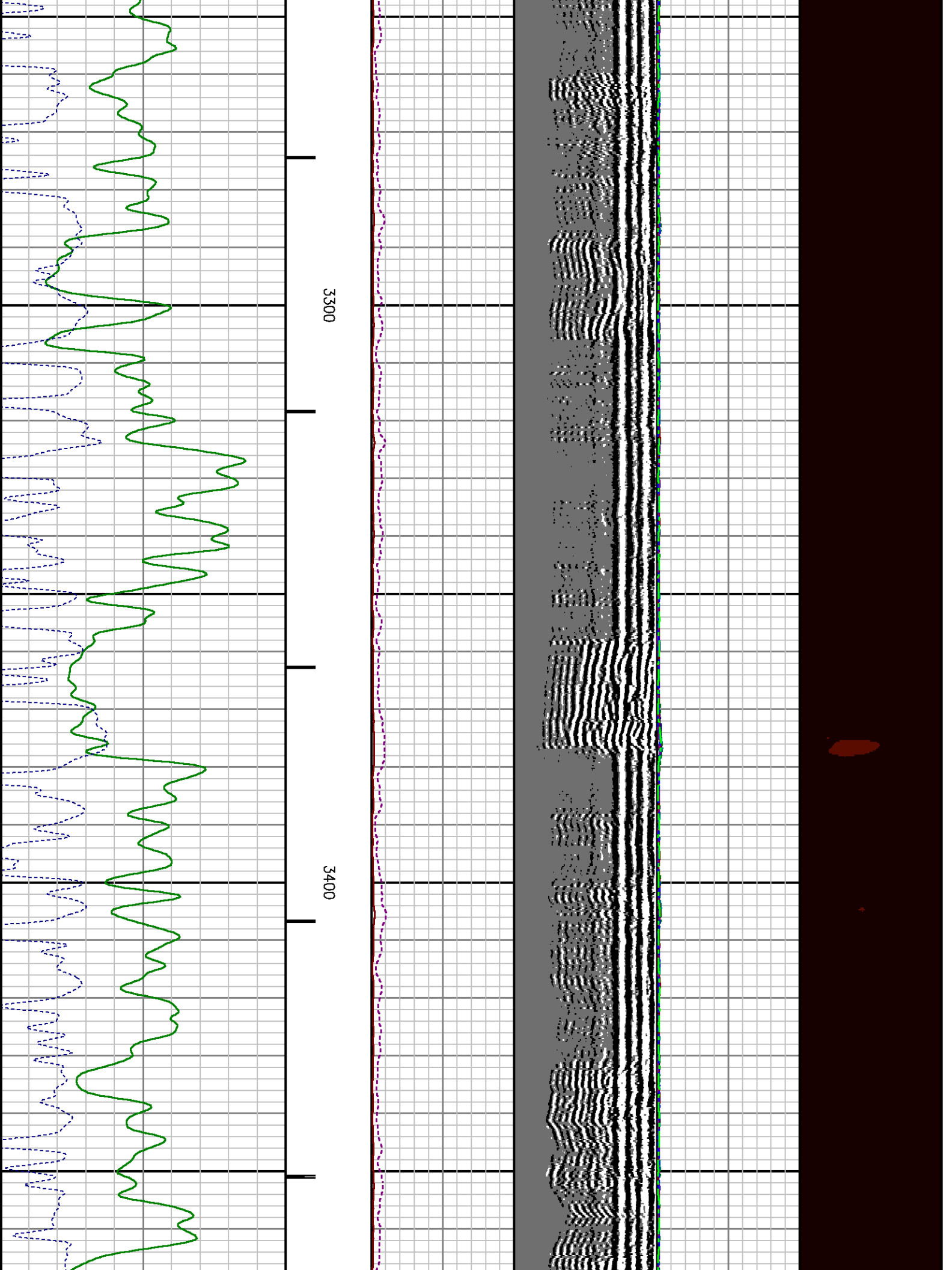




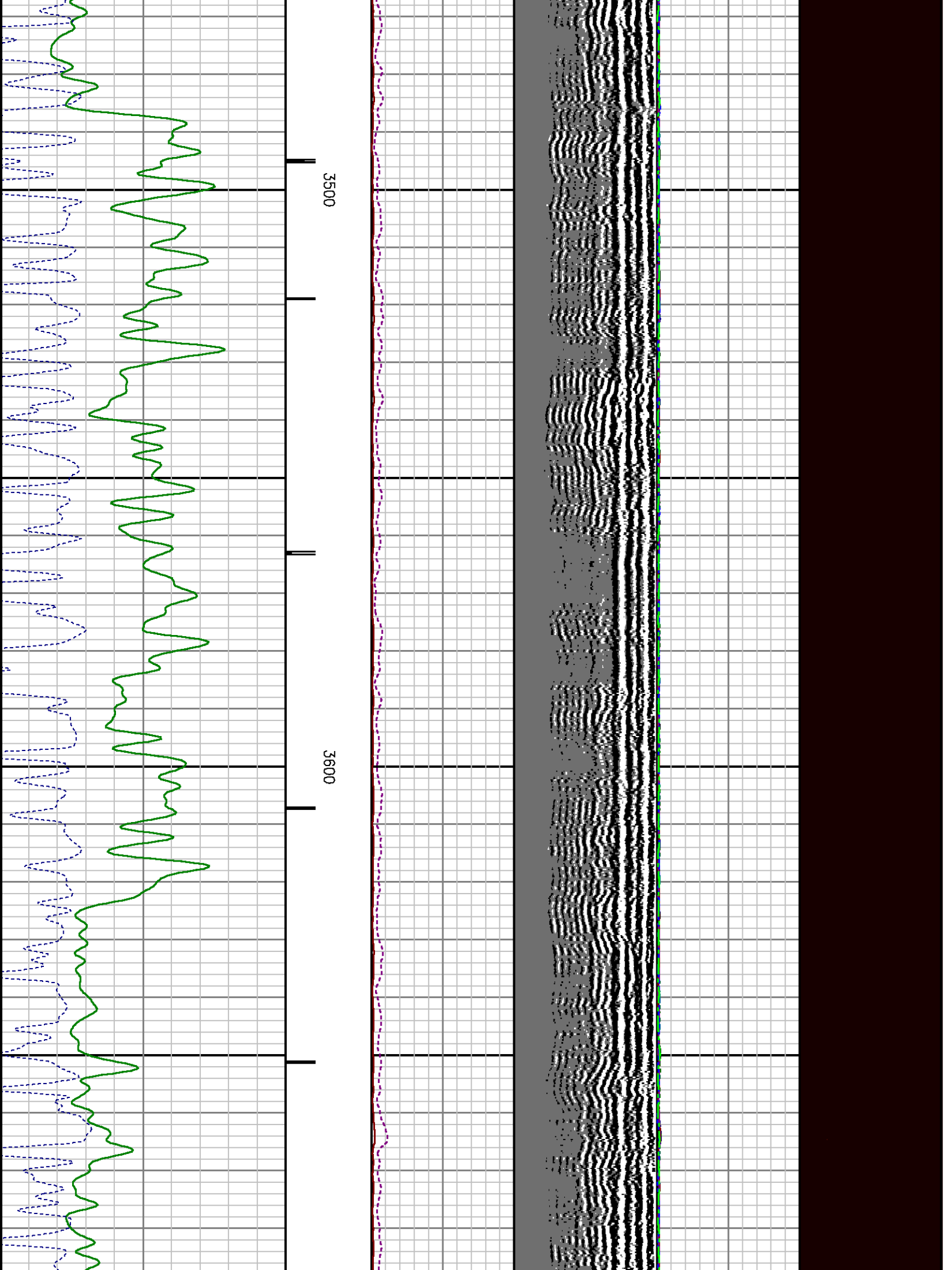


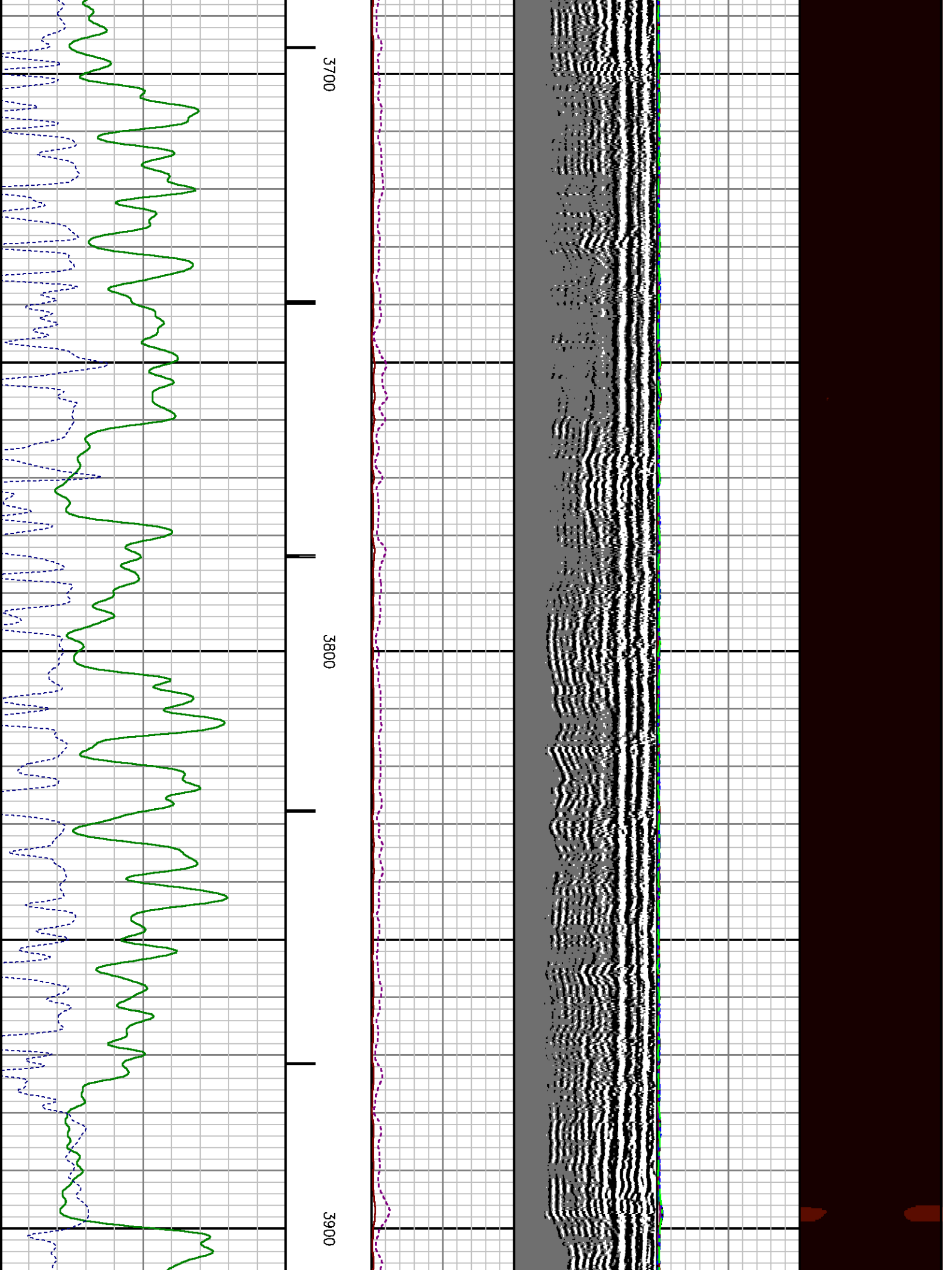


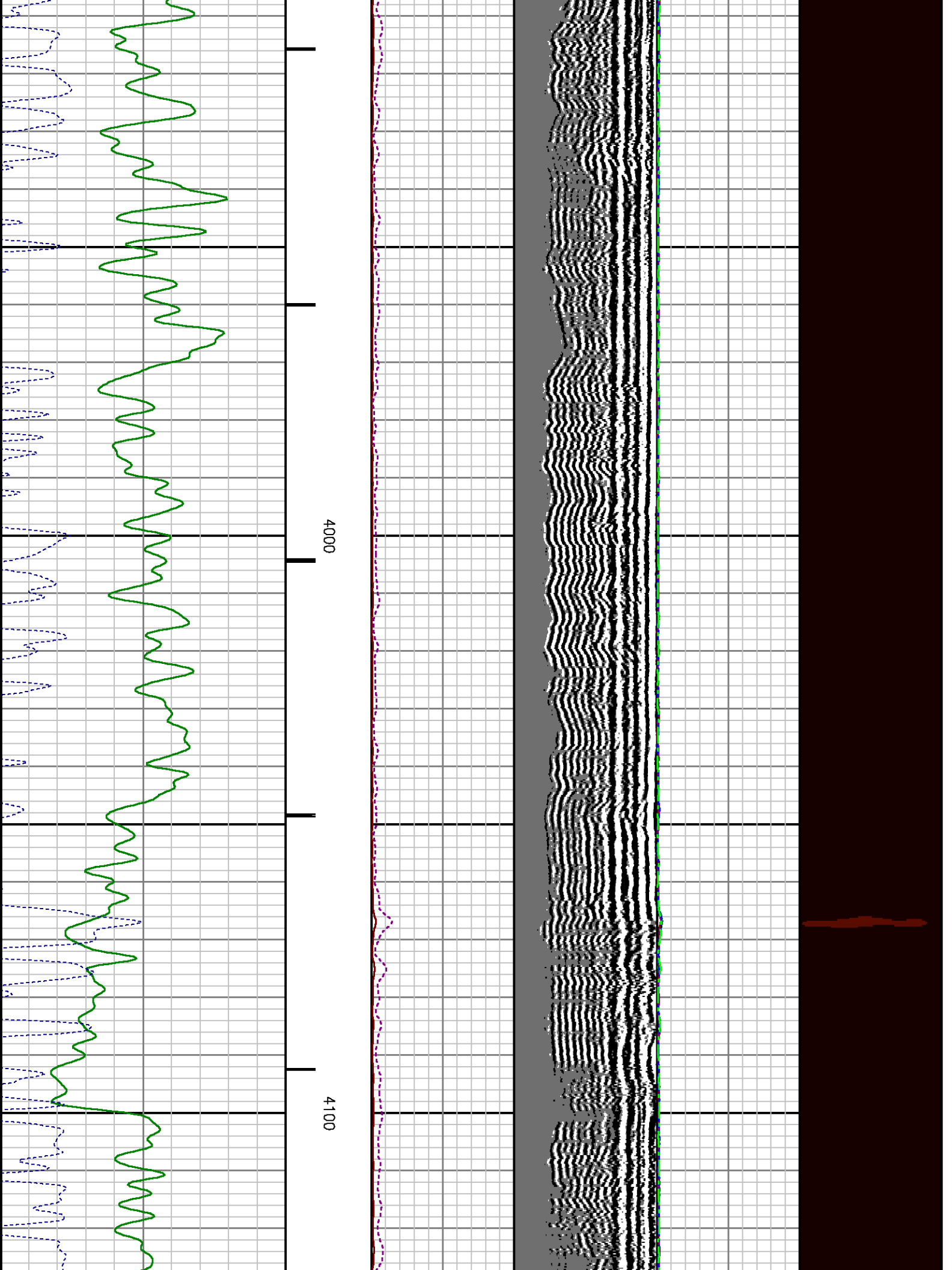


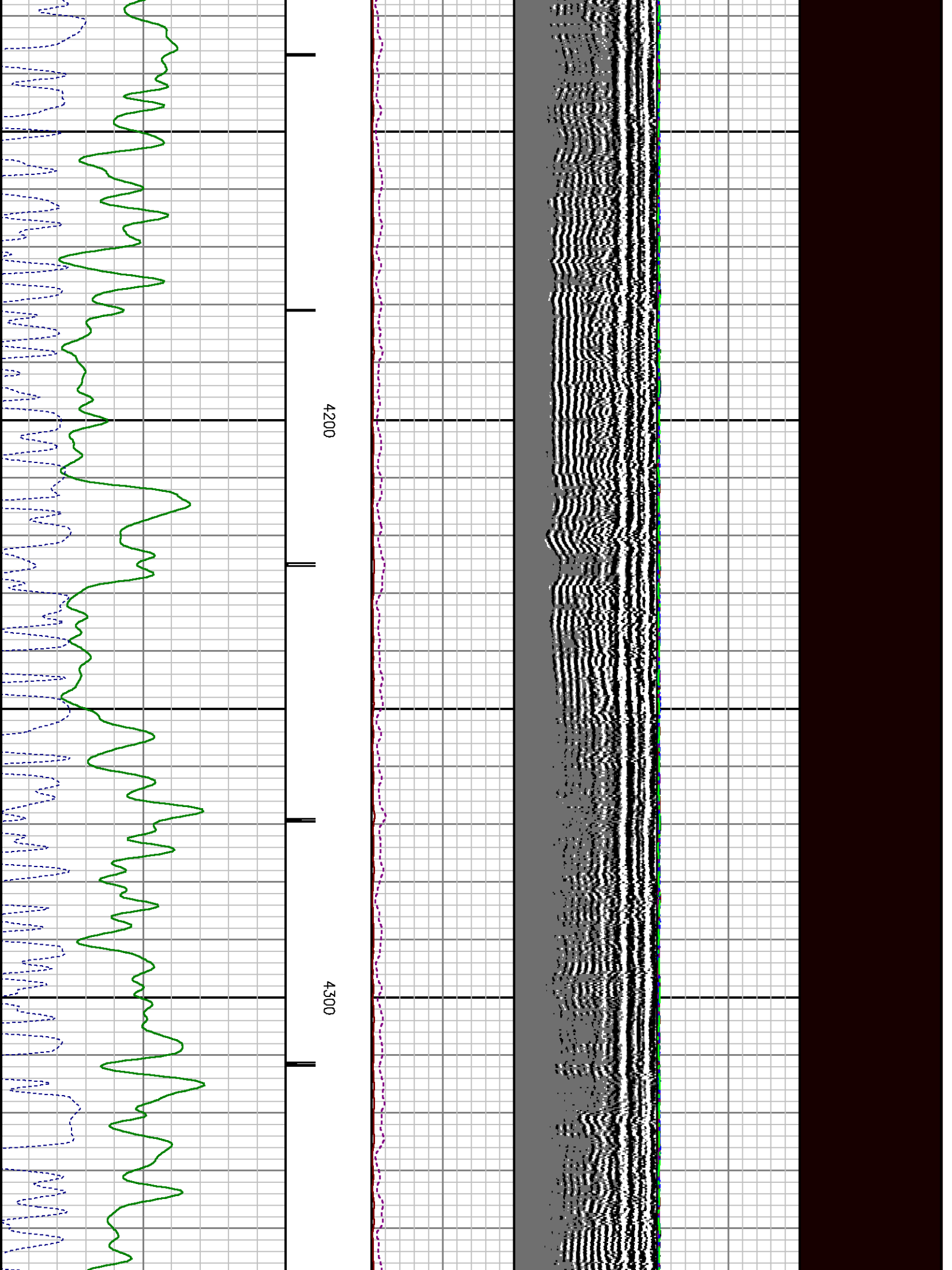


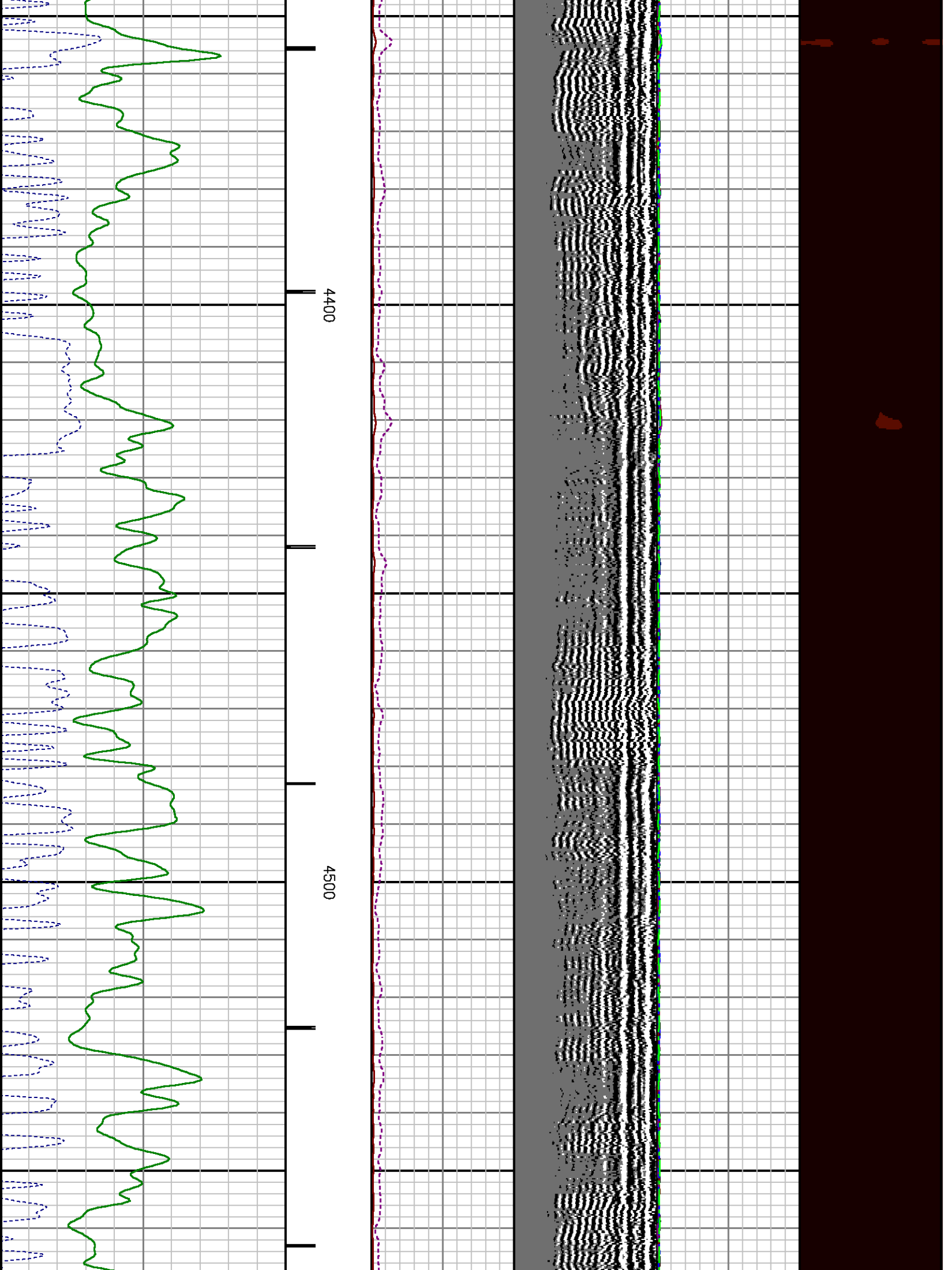


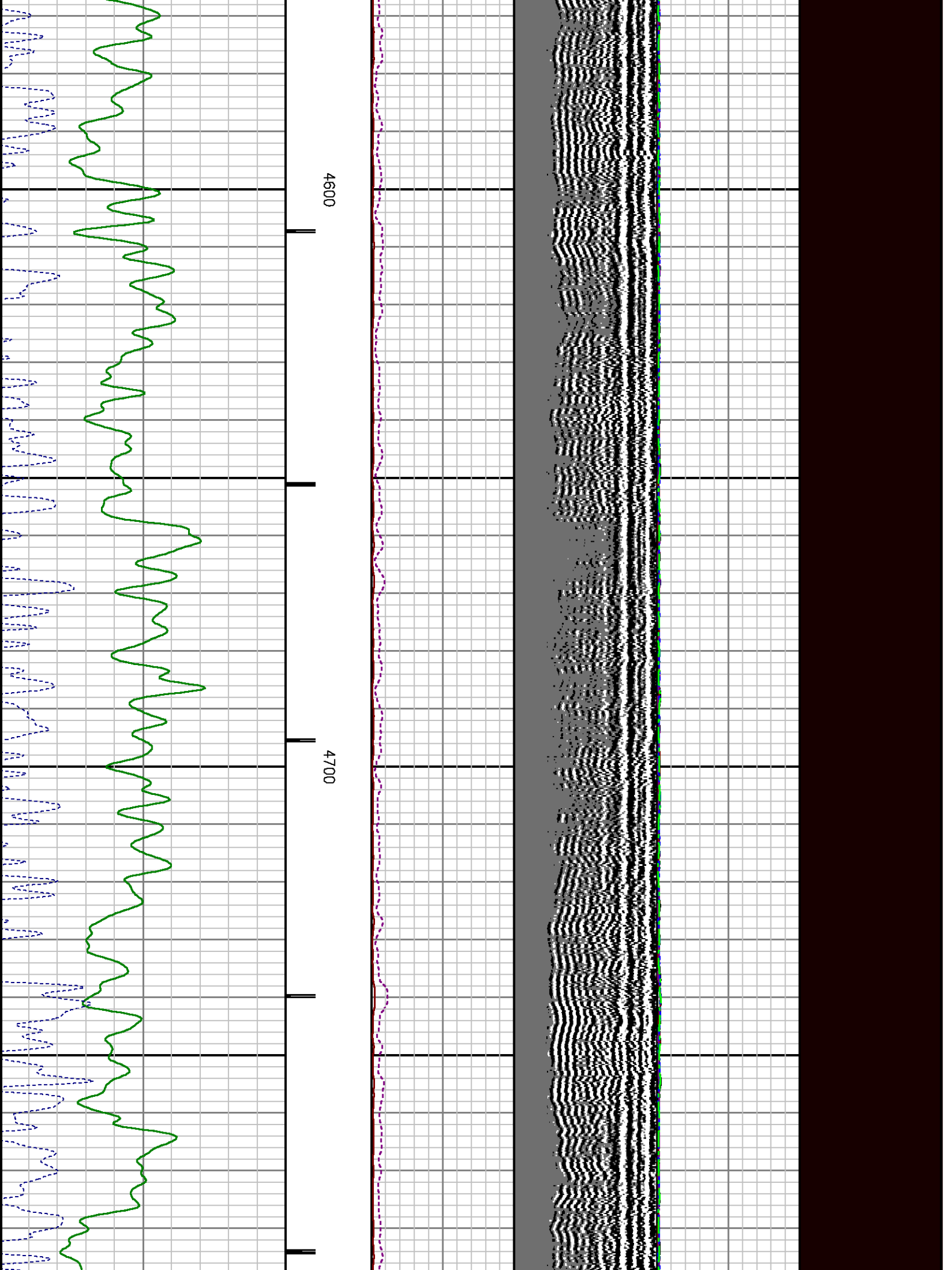




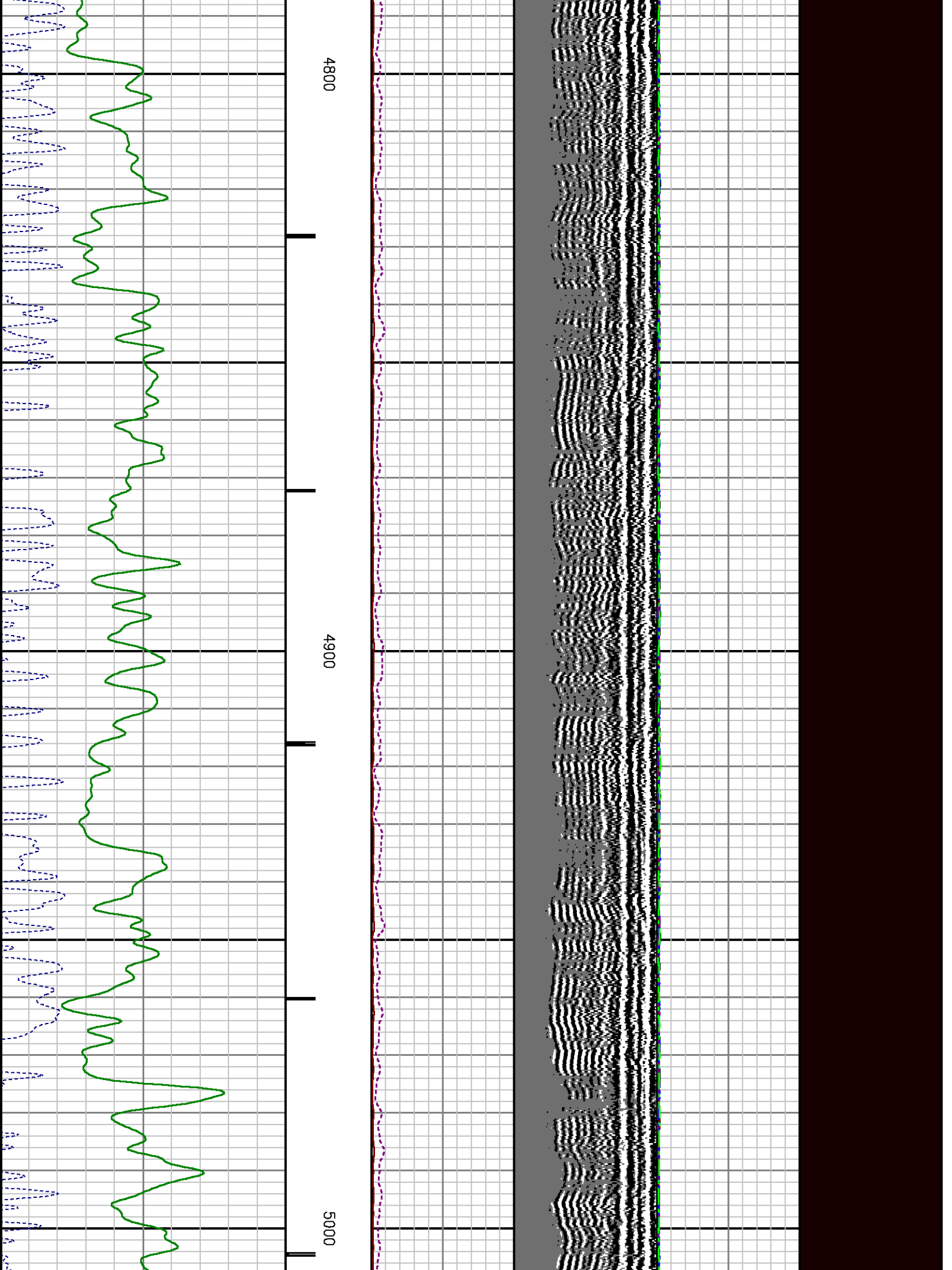


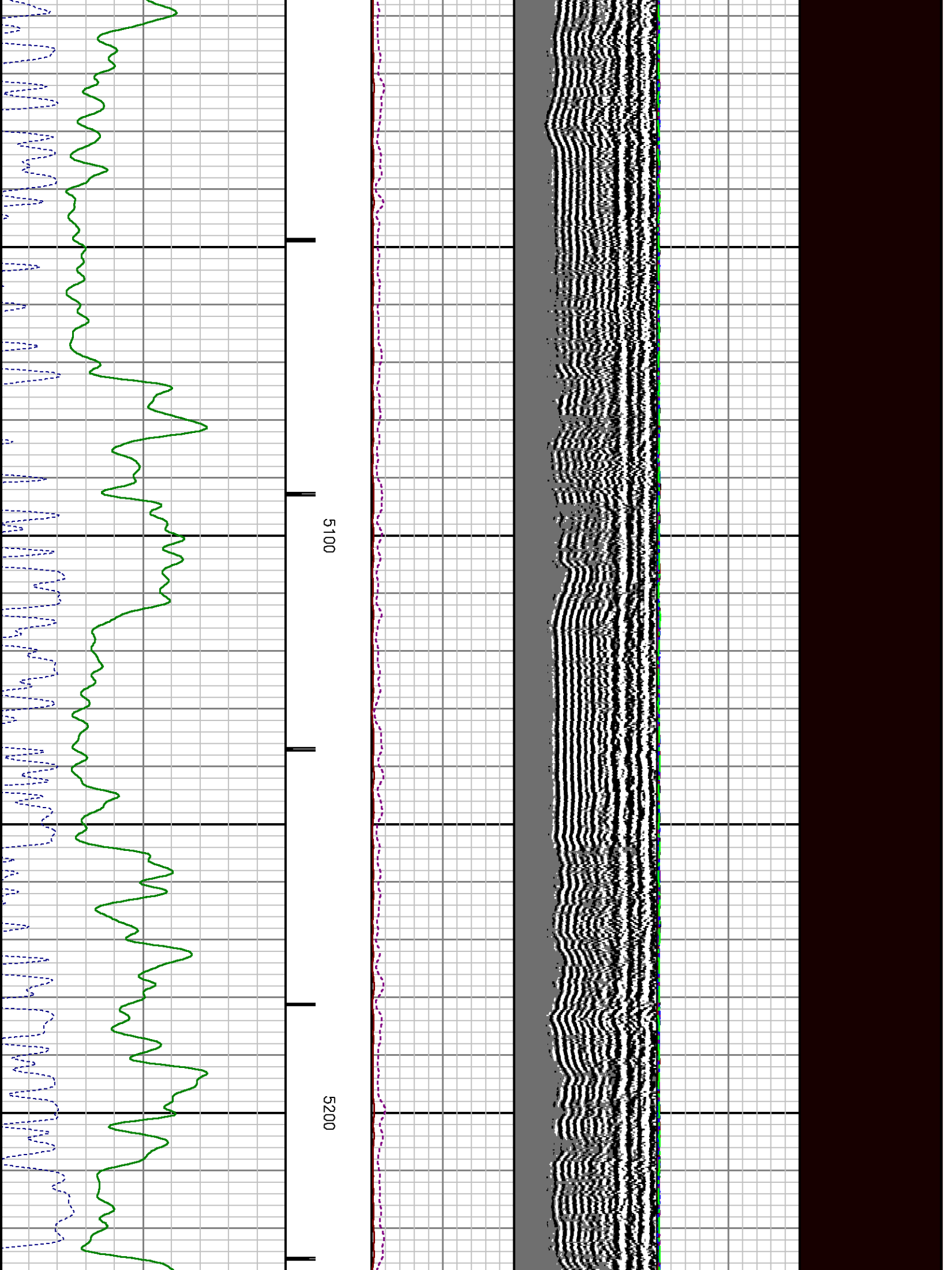


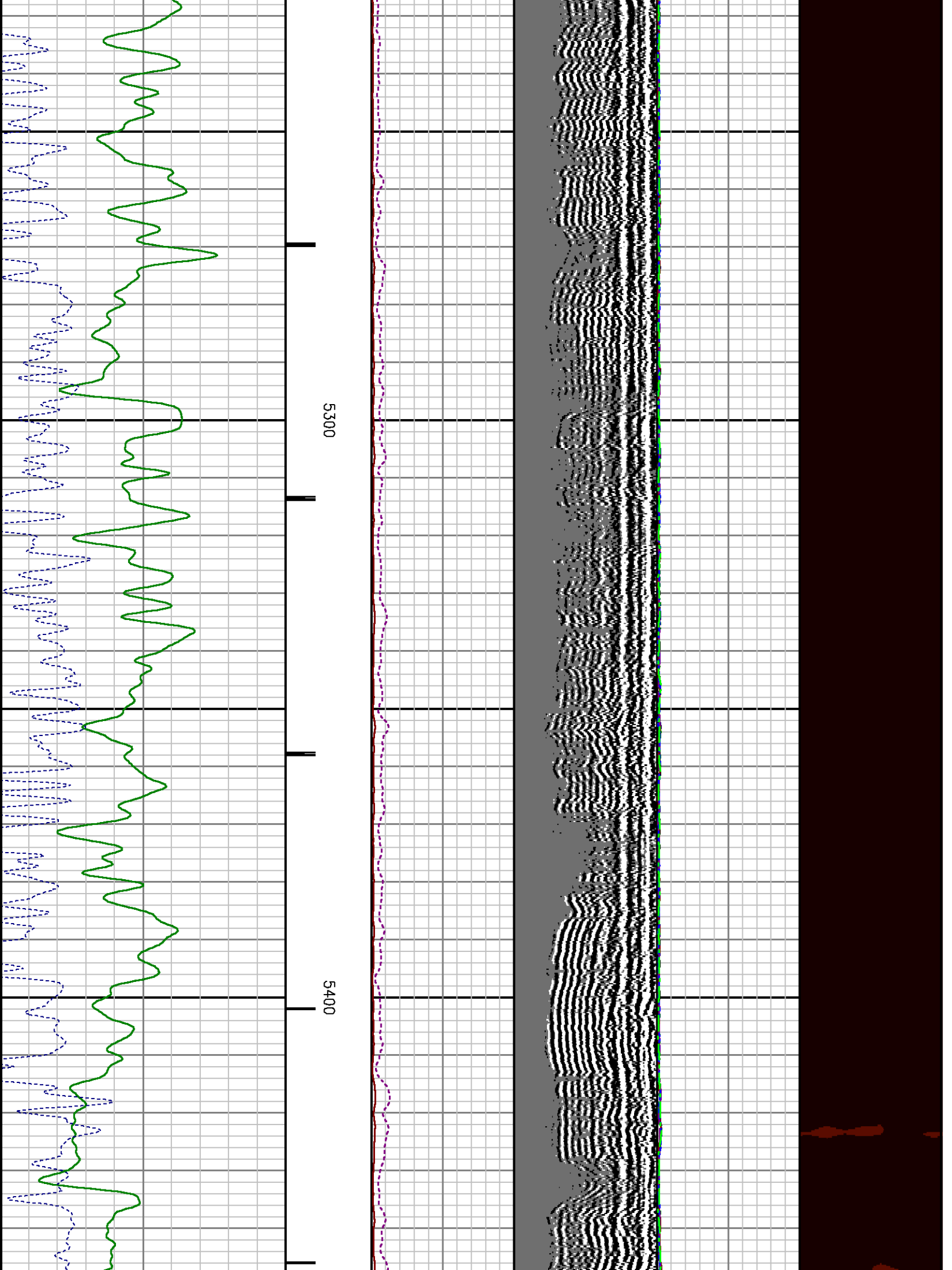


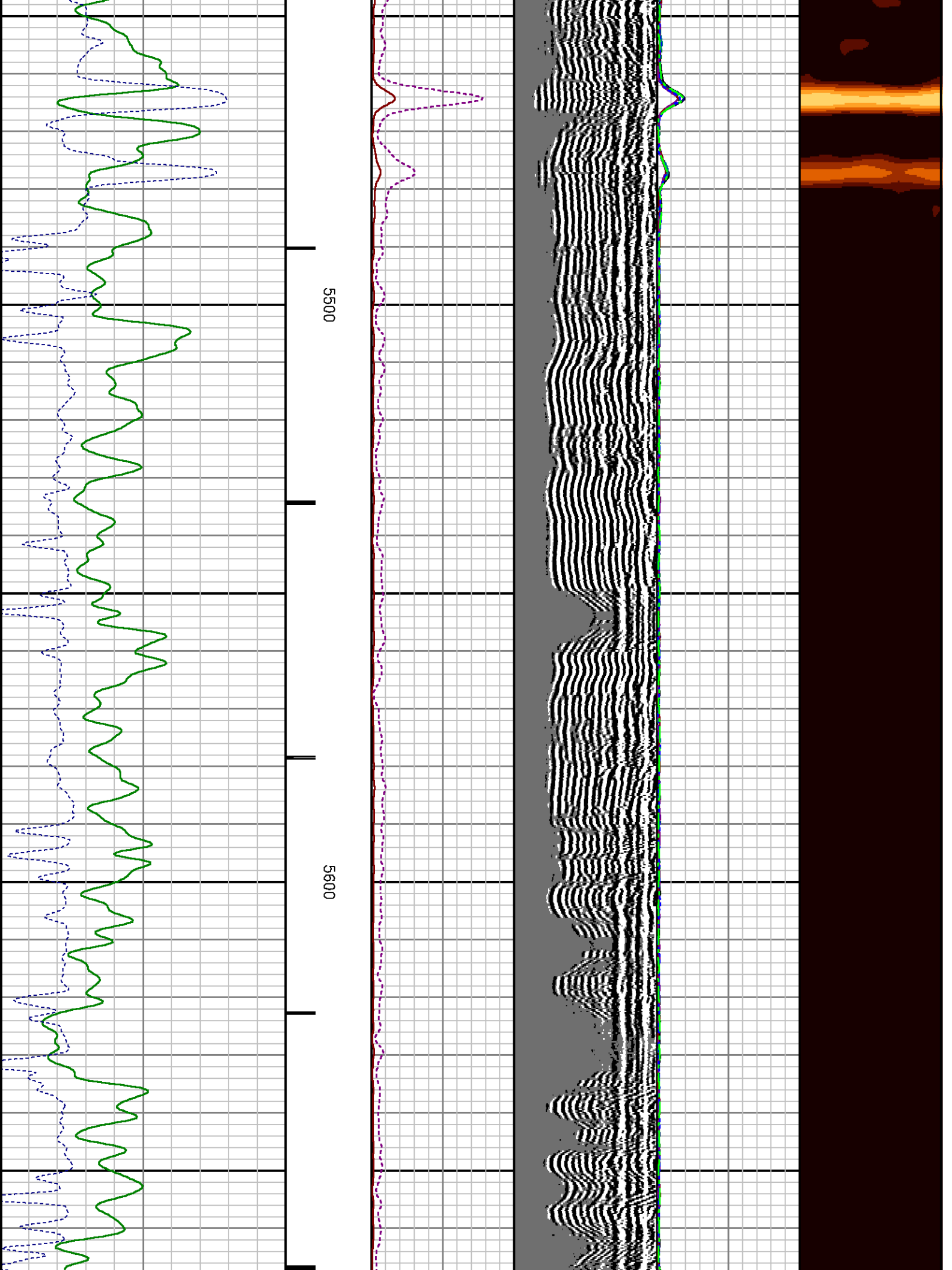


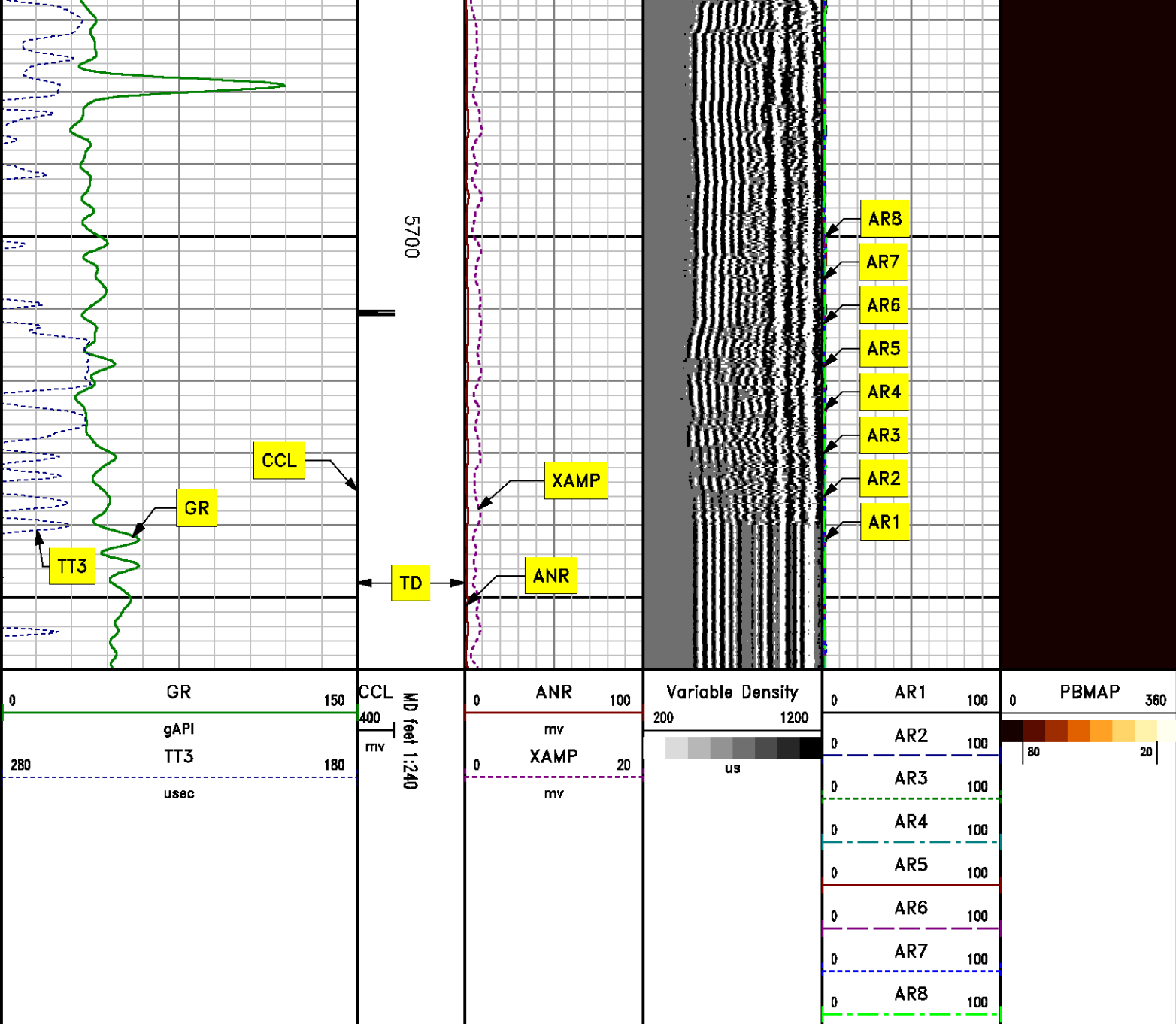












*REPEAT PASS*  
*0 PSI*

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
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RAL	Amp Gate Start Far	306.674	usec	5449.750	5772.000
RAL	Amp Gate Start Near	199.015	usec	5449.750	5772.000
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RAL	Amp Gate Width Far	25.000	usec	5449.750	5772.000
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RAL	casing od	4.500	inches	5449.750	5772.000
RAL	casing wt	11.600	lbm/ft	5449.750	5772.000
RAL	FB Start Far	291.900	usec	5449.750	5772.000
RAL	FB Start Near	175.391	usec	5449.750	5772.000
RAL	FB Start Radial	175.391	usec	5449.750	5772.000
RAL	FB Thresh Far	10.000	mv	5449.750	5772.000
RAL	FB Thresh Near	4.000	mv	5449.750	5772.000
RAL	FB Thresh Radial	4.000	mv	5449.750	5772.000
RAL	Fluid Travel Time	200.000	usec/ft	5449.750	5772.000

## DEPTH OFFSETS

(for Acquired Curves)

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

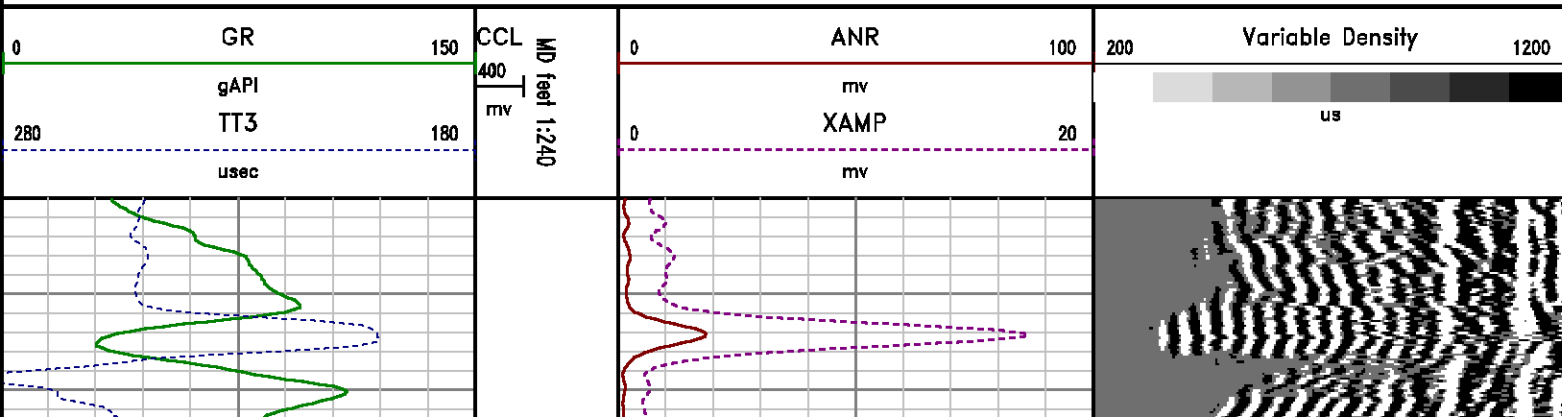
Well : STRAIT SG 532-22

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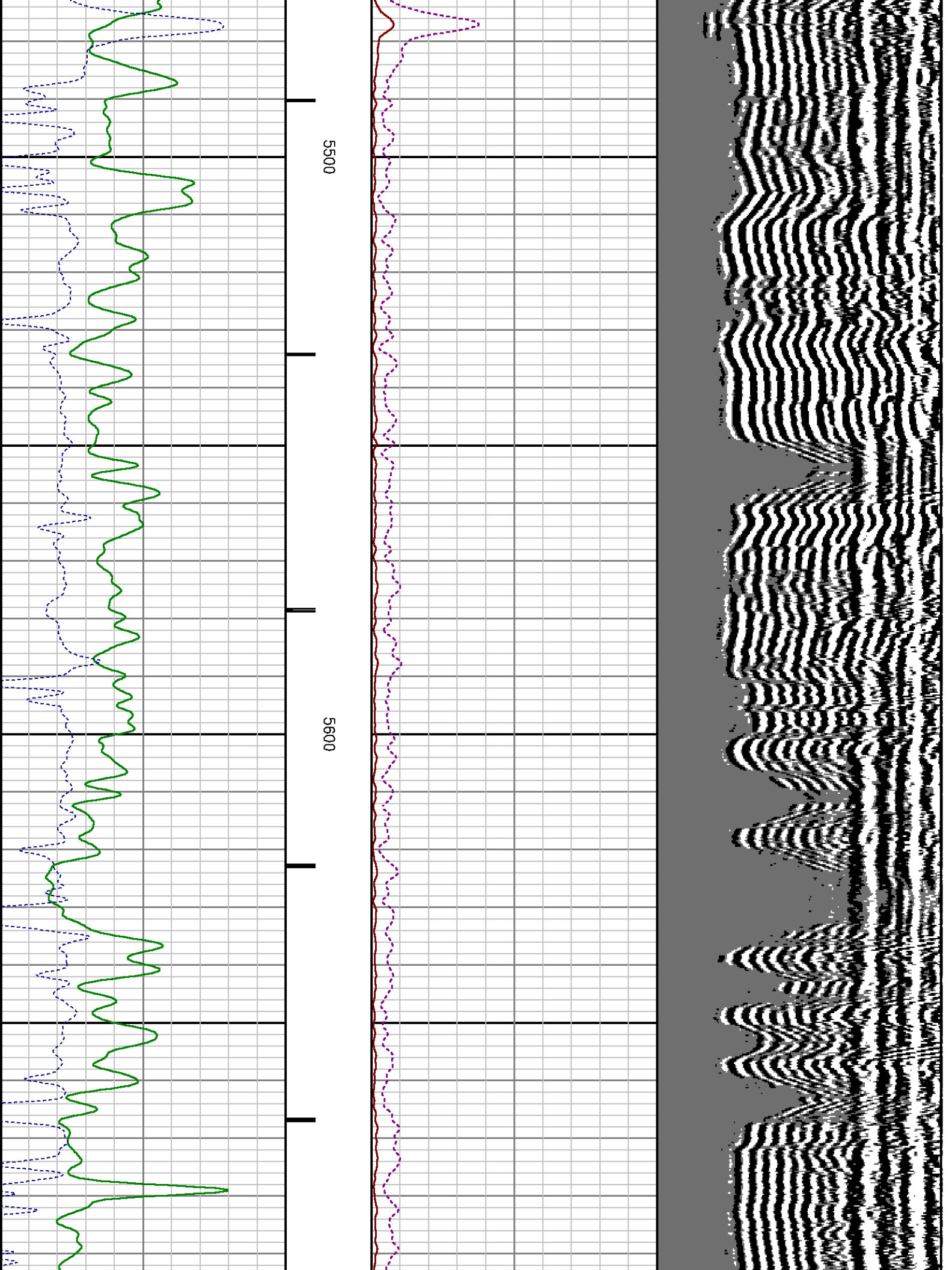
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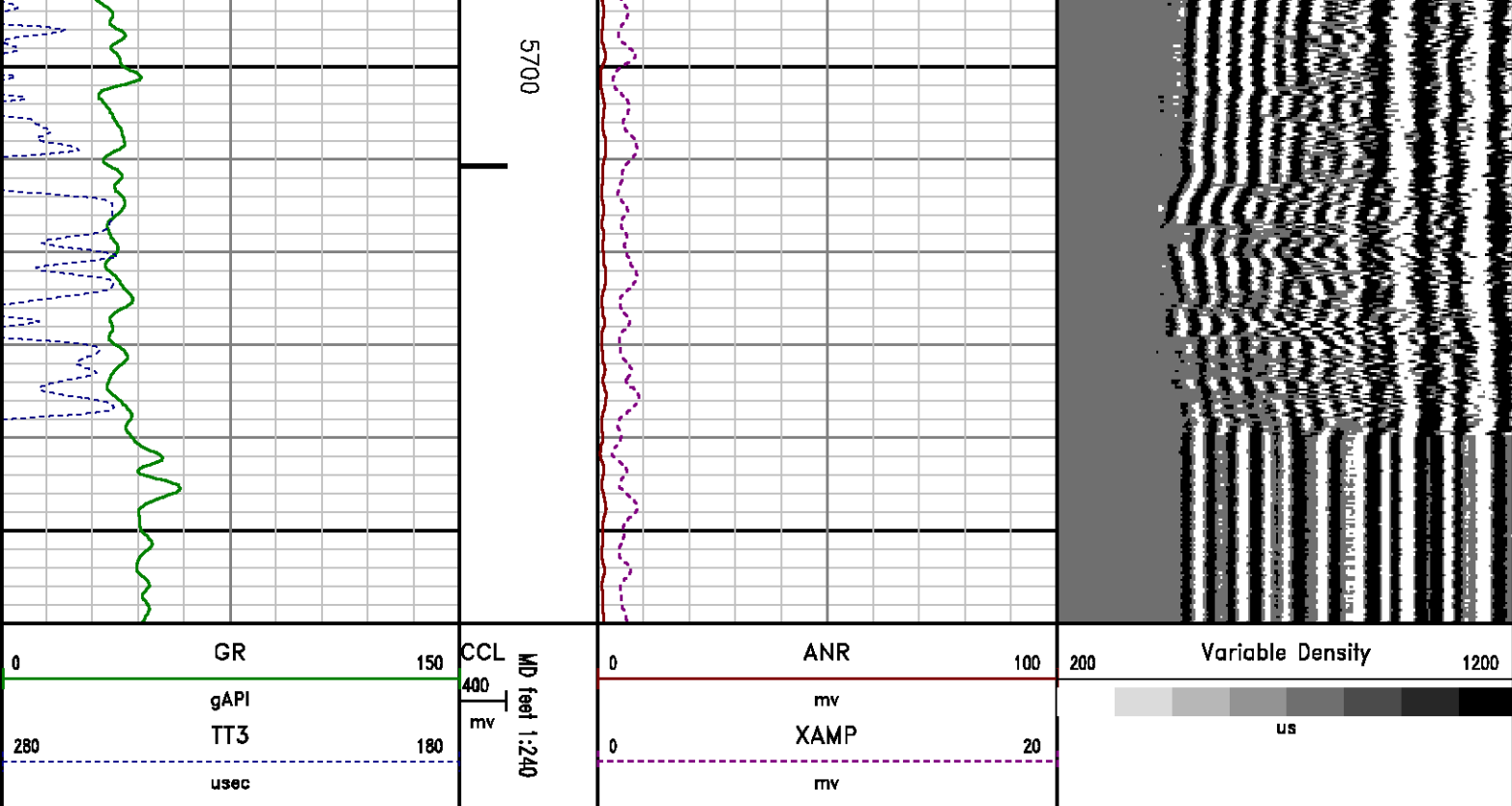
Interval : 5450.00 - 5760.00 feet UP

Created : 7/24/2013 10:45:48 AM









## CALIBRATION SUMMARY

*RALSHP*

Shop Calibrations: C:\case\calver\RALSHP\106JUL24 shp.cal

### SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Wed Jul 24 08:21:01 2013 TOOL SERIES: 1426XA ASSET: 106 SEQ: JUL24

Tool Delay [usec] -58.00 Tank OD 5.50 Tank Wt 15.50 Tank ID 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	-0.313	100.00	0.19
3 Ft. Receiver	218	216	30	166	25	-0.293	100.00	0.19
5 Ft. Receiver	326	322	30	263	25	0.484	150.00	0.20
Radial #1	218	216	30	166	25	-0.585	100.00	0.19
Radial #2	218	216	30	166	25	-0.082	100.00	0.19
Radial #3	218	216	30	166	25	-0.391	100.00	0.19
Radial #4	218	216	30	166	25	0.169	100.00	0.19
Radial #5	218	216	30	166	25	-0.664	100.00	0.19
Radial #6	218	216	30	166	25	-0.448	100.00	0.19
Radial #7	218	216	30	166	25	-0.177	100.00	0.19

Radial #7	218	216	30	166	25	0.177	100.00	0.19
Radial #8	218	216	30	166	25	-0.722	100.00	0.18

## RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\106JUL24 fld.cal

### WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Wed Jul 24 08:22:43 2013 TOOL SERIES: 1426XA ASSET: 106 SEQ: JUL24

Tool Delay [usec] -58.00 Casing OD 4.50 Casing Wt 11.60 Casing ID 4.00  
in 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	166	25	-0.094	0.000	1.00	100.000
3 Ft. Receiver	200	30	-1.151			
5 Ft. Receiver	317	30	-1.749			
Radial #1	200	30	-2.244			
Radial #2	200	30	-1.677			
Radial #3	200	30	-1.380			
Radial #4	200	30	-1.655			
Radial #5	200	30	-1.457			
Radial #6	200	30	-1.524			
Radial #7	200	30	-1.100			
Radial #8	200	30	-1.451			

## GAMMA RAY

Calibration File: C:\case\calver\GR\209J7.cal

### CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Jun 27 10:51:00 2013 TOOL SERIES: 2459XA ASSET: 209 SEQ: J7

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	132.31	583.42	0.410	54.26	239.26	185.00

Verification File: C:\case\calver\GR\209J7.VP

### PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Thu Jun 27 10:52:46 2013 TOOL SERIES: 2459XA ASSET: 209 SEQ: J7

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	140.71	580.31	0.410	57.71	237.98	180.28

# TOOL DIAGRAM

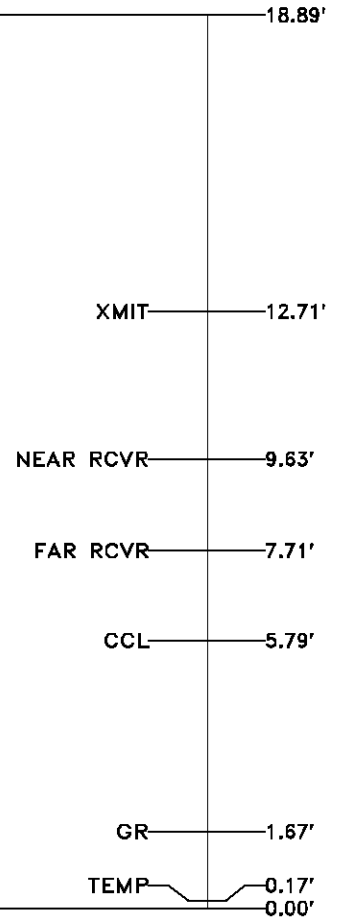
## OTA SHORT CABLE HEAD

## 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



Company

WPX ENERGY

Well

STRAIT SG 532-22

Field

GRAND VALLEY

County

GARFIELD

State

COLORADO

Location

SHL: 1526' FNL & 289' FEL SEC:22

BHL: 2492' FNL & 1399' FEL SEC:22

SEC 22

TWP 75

RGE 96W

Elevations

KB 5244 ft

DF

GL 5222 ft

File No:

CH075120

API No:

05045217560000

22 7S 96W

SG 42-22

CYCLONE 17