



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No:	Company	WILLIAMS PRODUCTION COMPANY	
CH028021	Well	PA 442-12	
API No:	Field	PARACHUTE	
05045190220000	County	GARFIELD	State COLORADO
Location		Other Services	
12 7S 95W PA 41-12 PAD NABORS 574		RPM	
SHL: 421' FNL & 1930' FEL BHL: 2071' FNL & 335' FEL			
SEC 12 TWP 7S RGE 95W			
Permanent Datum	GL	Elevation	6289 ft
Log Measured From	KB	26 ft	Above P. D.
Drill Measured From	KELLY BUSHING		
		KB	6315 ft
		DF	6314 ft
		GL	6289 ft

Date	17 JAN 2011	
Run	ONE	
Service Order	534197	
Depth Driller	8662 ft	
Depth Logger	8549 ft	
Bottom Logged Interval	8545 ft	
Top Logged Interval	26 ft	
Time Started	09:00	
Time Finished	13:00	
Operator Rig Time	4 hrs	
Type of Fluid in Hole	WATER	
Fluid Density	N/A	
Salinity	N/A	
Fluid Level	FULL	
Logged Cement Top	N/A	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	N/A	
Nominal Logging Speed	45 fpm	
Maximum Recorded Temperature	228 degF	
Reference Log	NONE	
Reference Log Date	N/A	
Equipment No.	HL6670	G.J., COLORADO
Recorded By	J. OSTLER	
Witnessed By	MR. GARY SHINABAKER	

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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	SURFACE	1300 ft
7.875 In	SURFACE	8662 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 In			SURFACE	1300 ft
4.5 In	11.6 lbm/ft	P-110	SURFACE	8662 ft

Remarks
THIS IS THE FIRST LOG OF THE WELL
WELL WAS LOGGED WITH 0 PSI AT THE WELL HEAD
BHT = 228°F
SHORT JOINT AT 5136' TO 5158'

Equipment Data

Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1426XA	10154957	CENTRALIZED
1	1	GR/CCL/NEU	2459XA	10218504	CENTRALIZED

***MAIN SECTION
PRIMARY PRESENTATION
0 PSI***

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	312.910	usec	18.051	8584.000
RAL	Amp Gate Start Near	200.391	usec	18.051	8584.000
RAL	Amp Gate Start Radial	200.391	usec	18.051	8584.000
RAL	Amp Gate Width Far	25.000	usec	18.051	8584.000
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RAL	casing od	4.500	inches	18.051	8584.000
RAL	casing wt	11.600	lbm/ft	18.051	8584.000
RAL	FB Start Far	291.900	usec	18.051	8584.000
RAL	FB Start Near	175.391	usec	18.051	8584.000
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RAL	FB Thresh Near	4.000	mv	18.051	8584.000
RAL	FB Thresh Radial	4.000	mv	18.051	8584.000
RAL	Fluid Travel Time	200.000	usec/ft	18.051	8583.875

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 : WILLIAMS PRODUCTION COMPANY

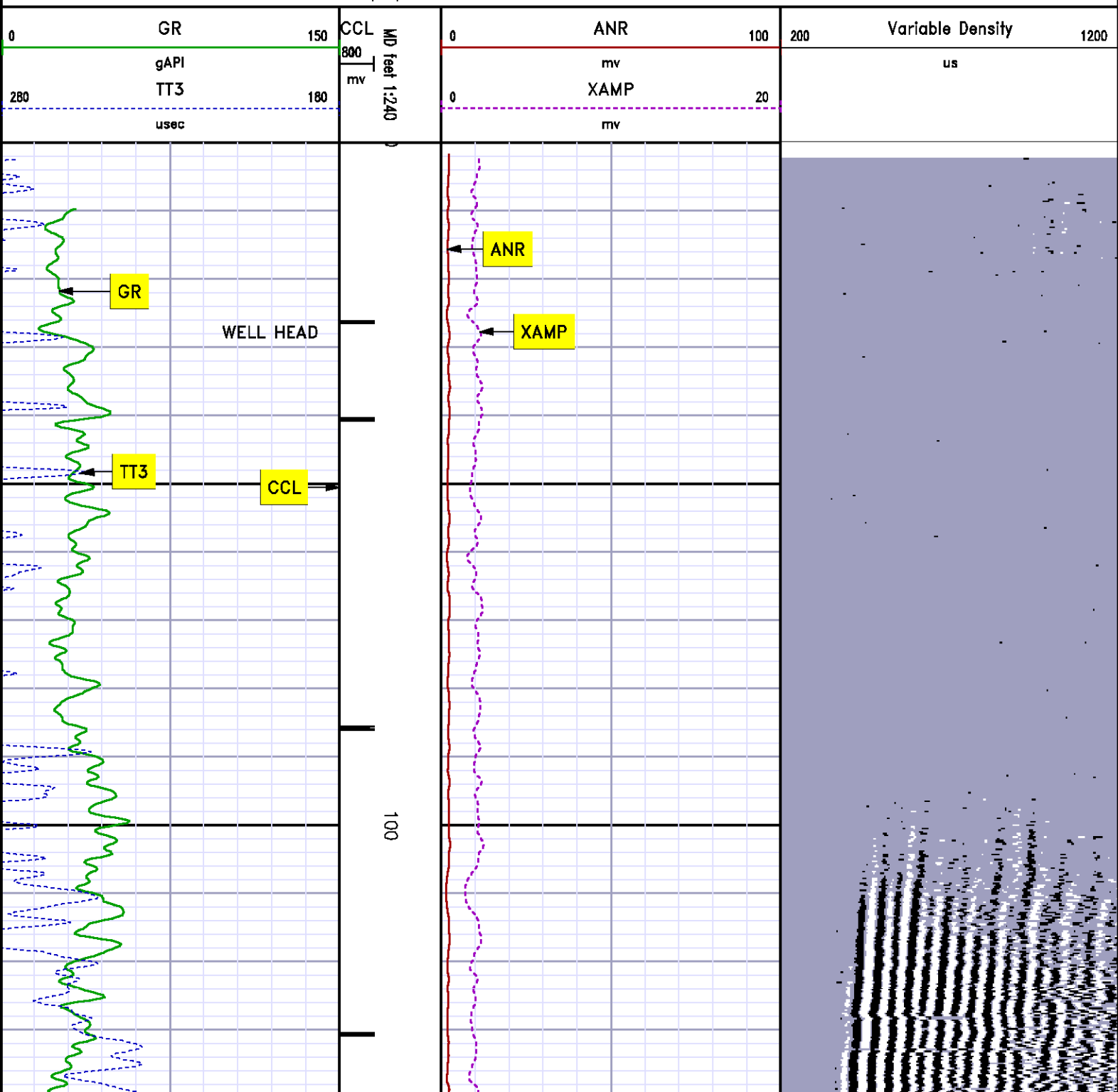
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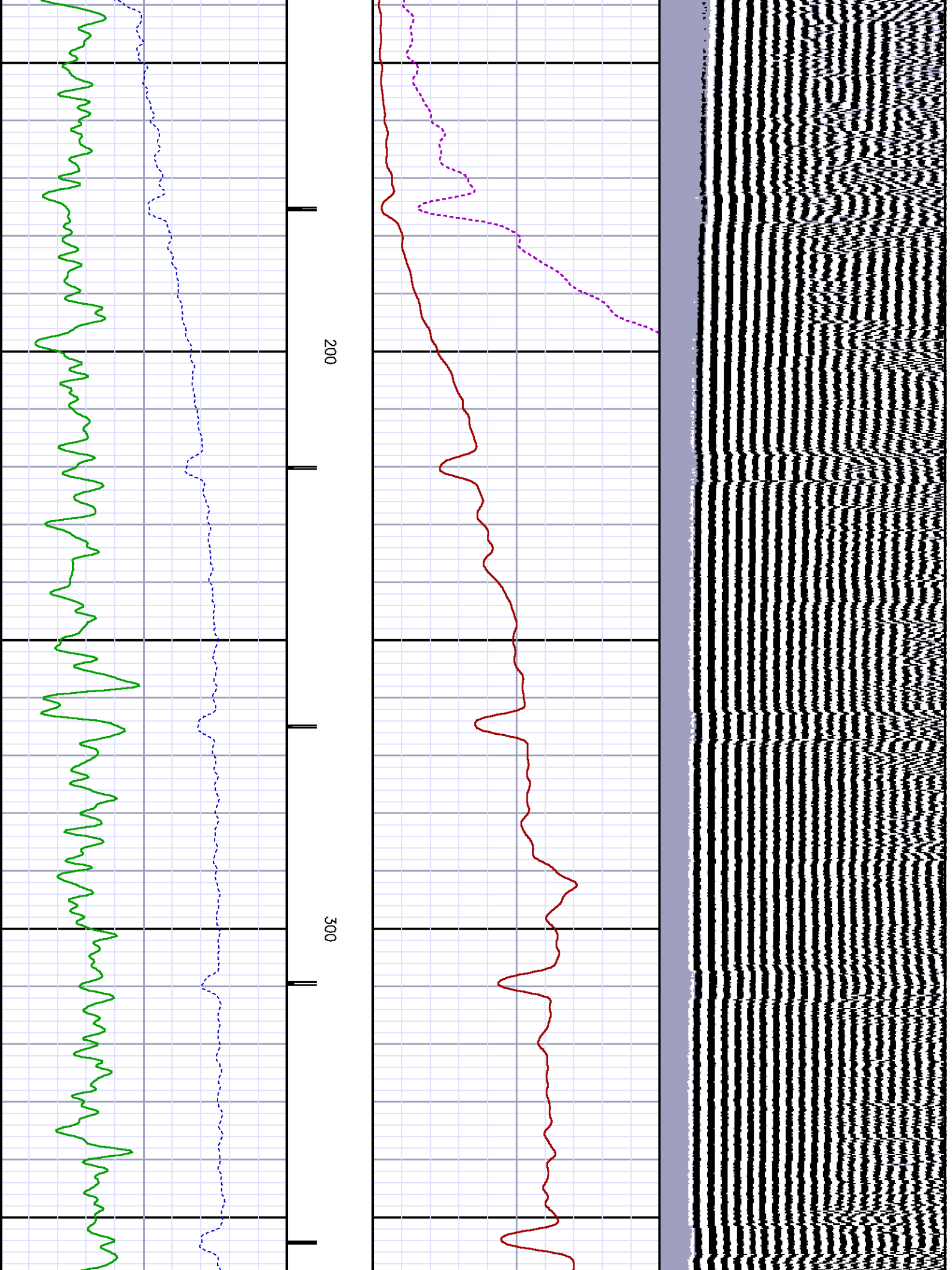
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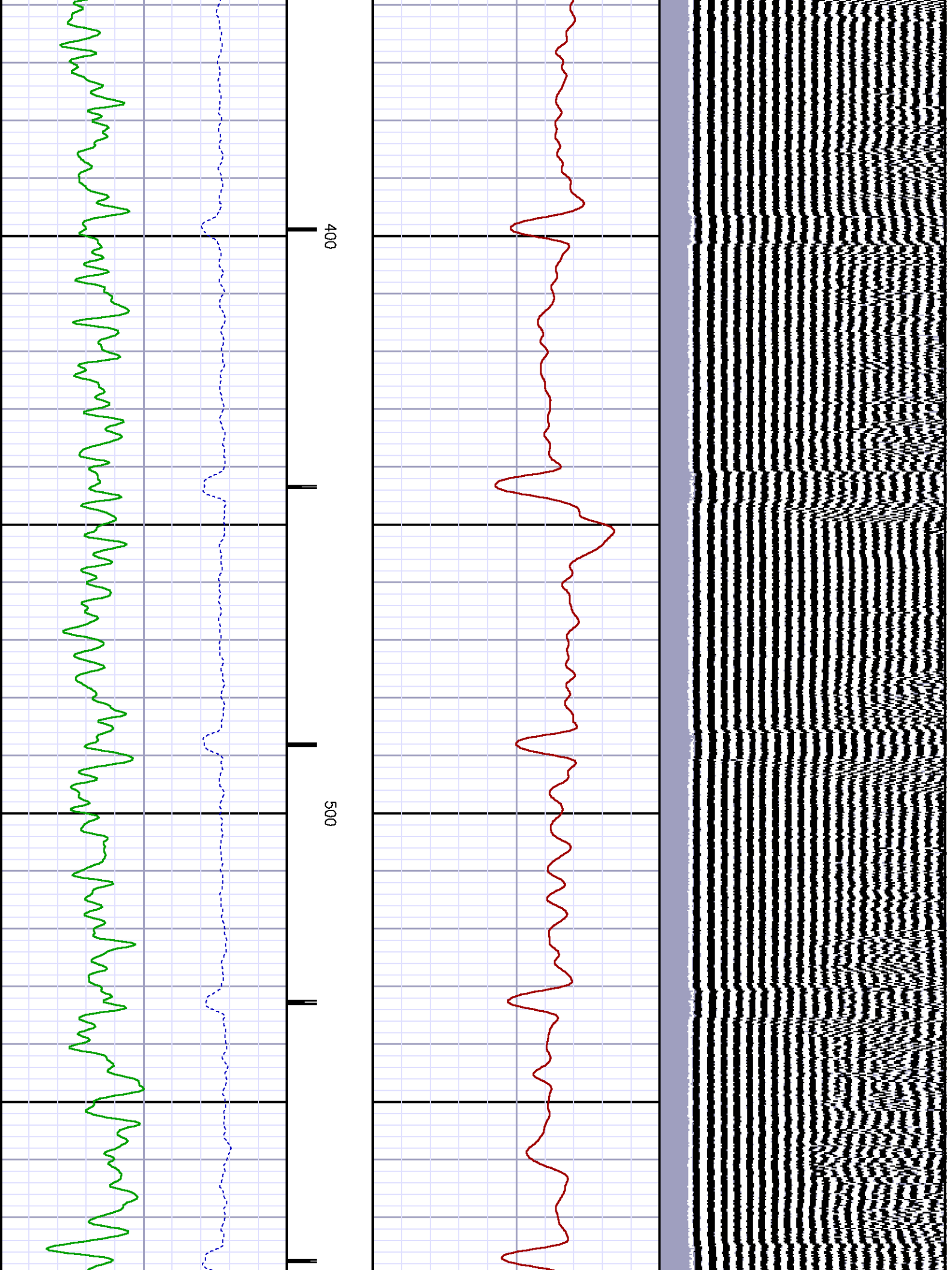
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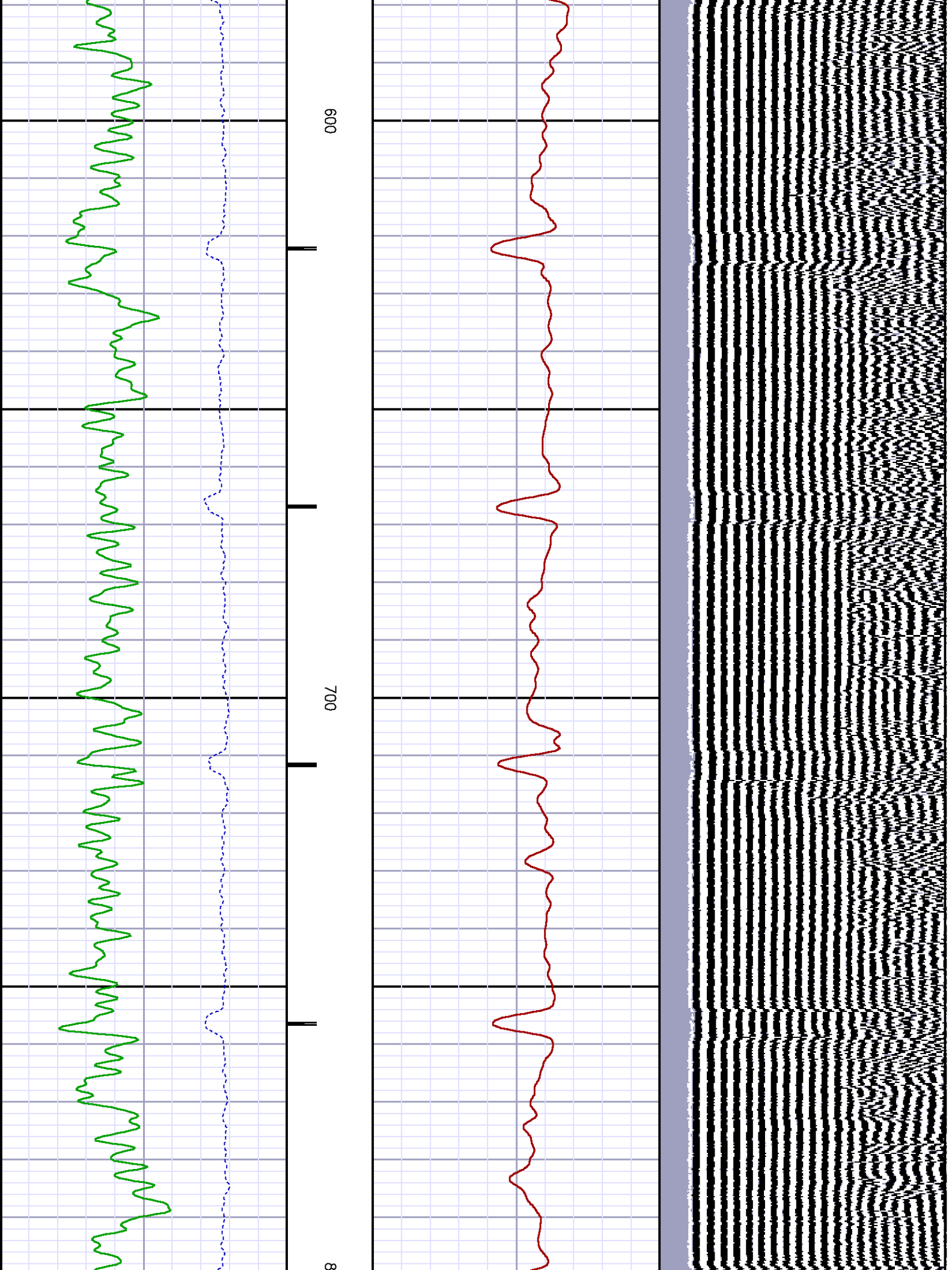
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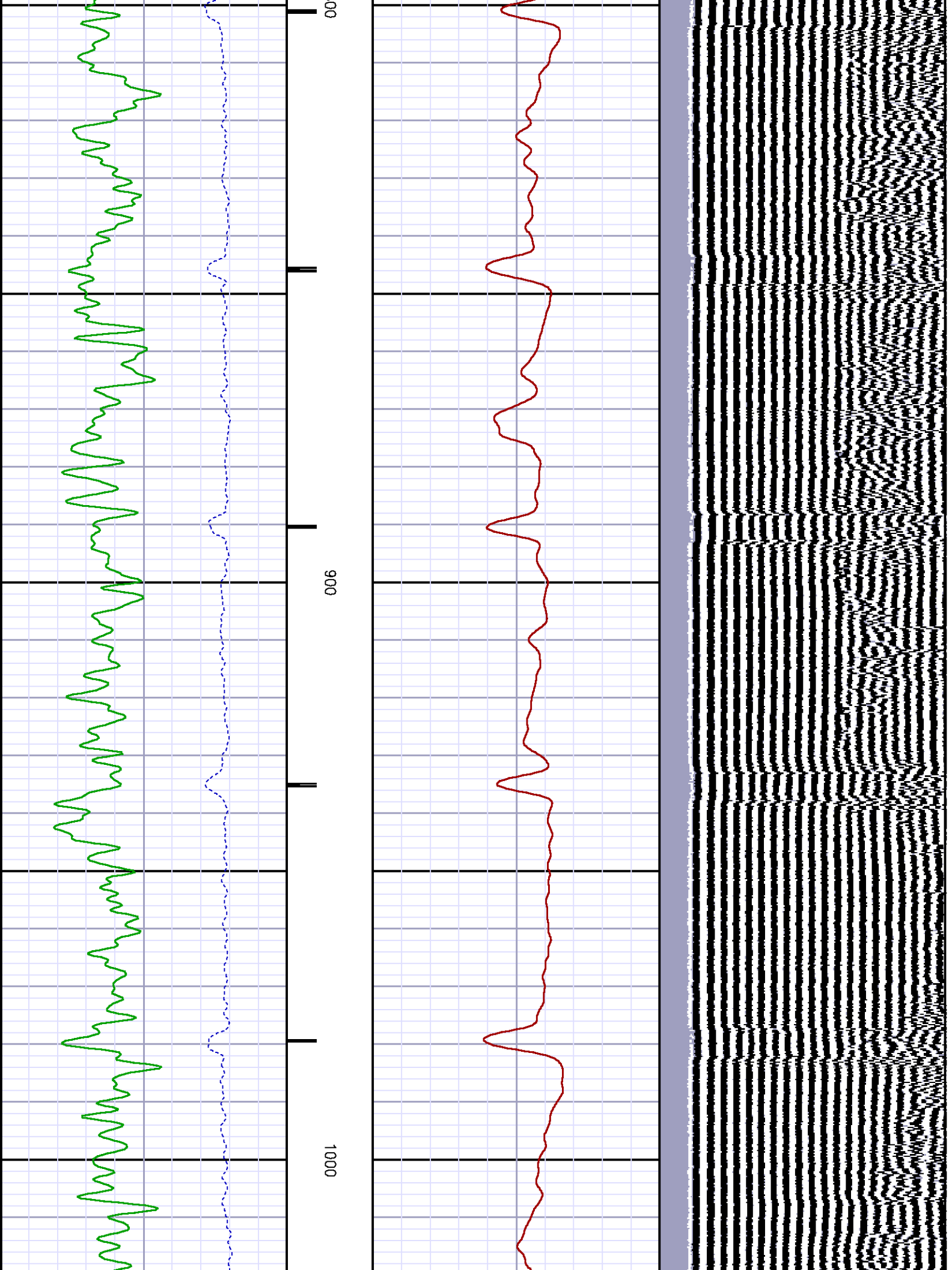
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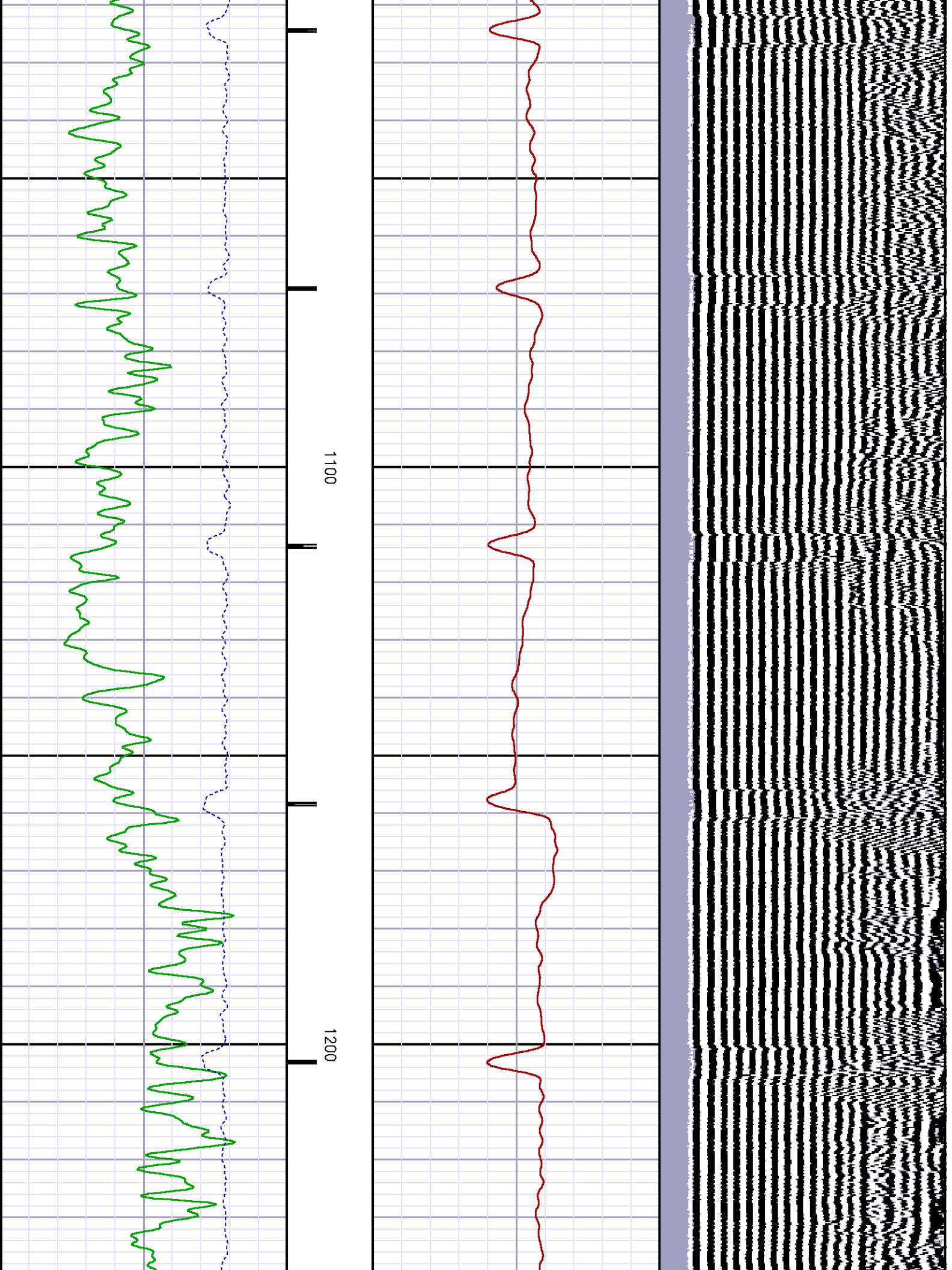


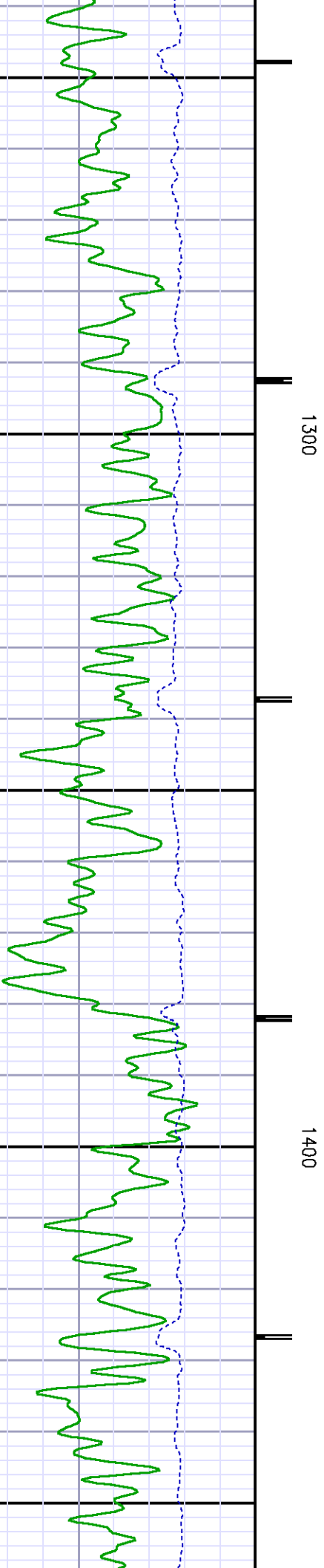
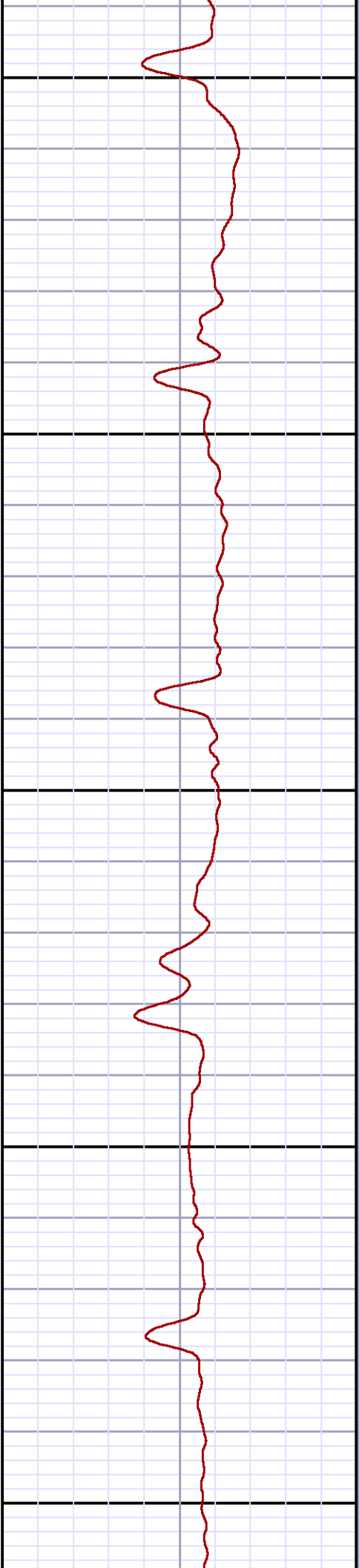
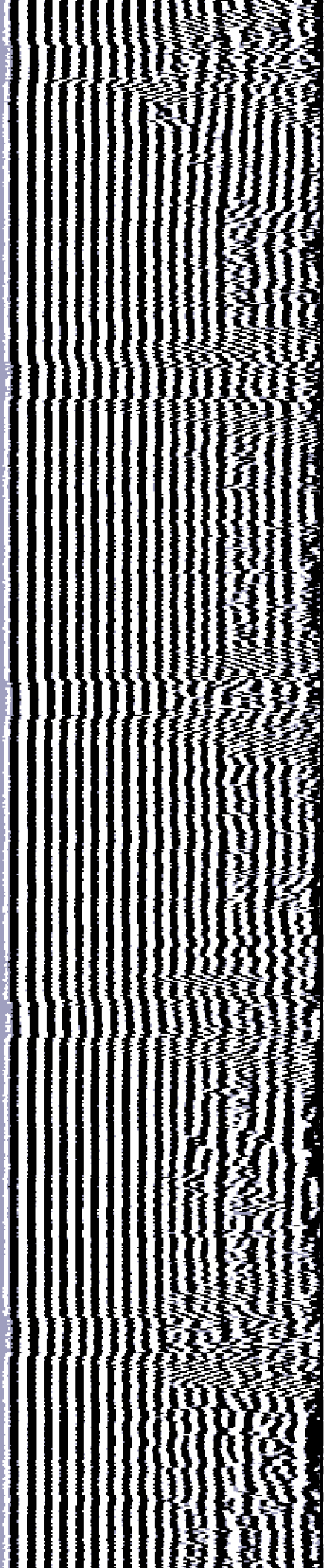


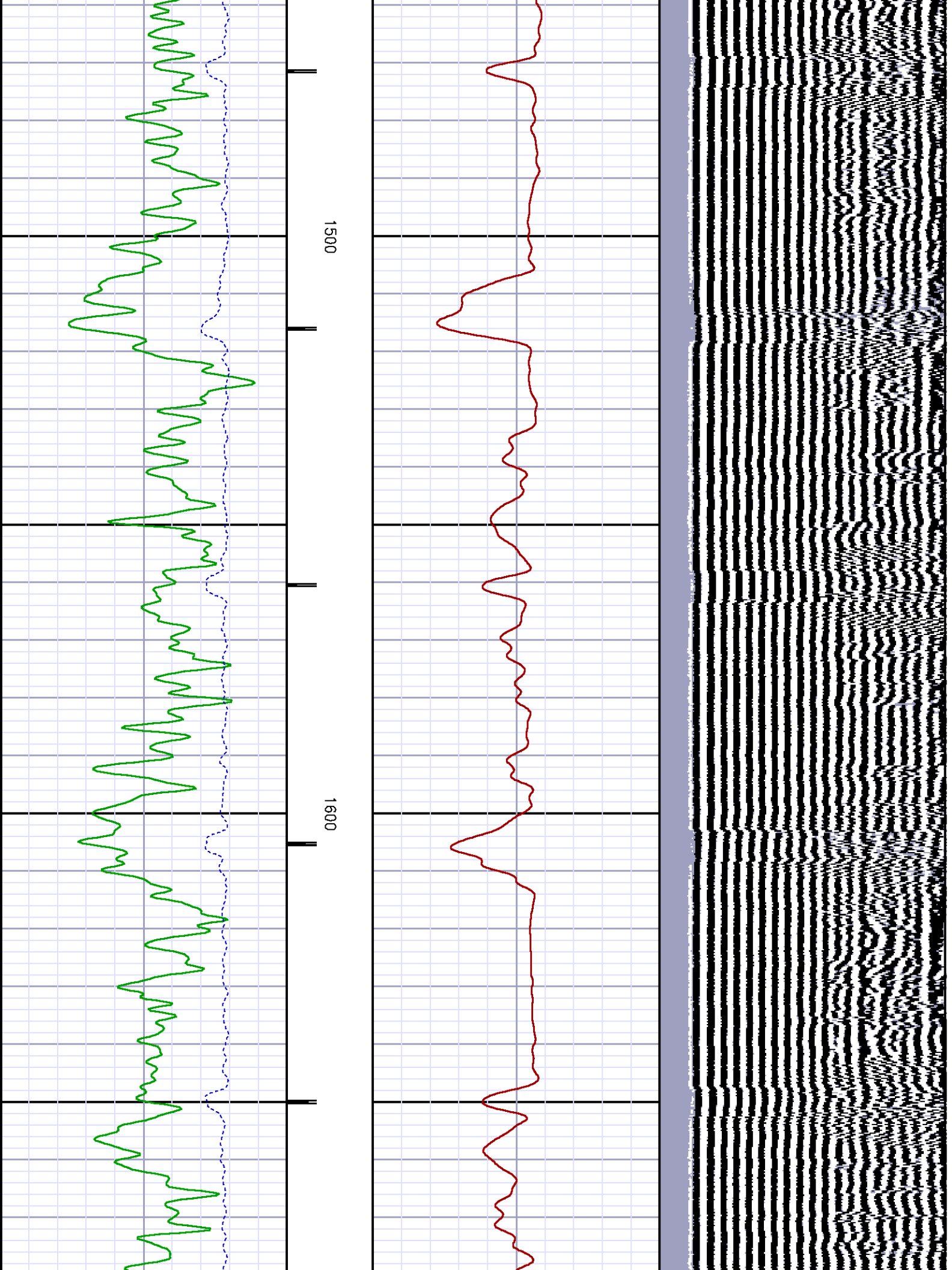


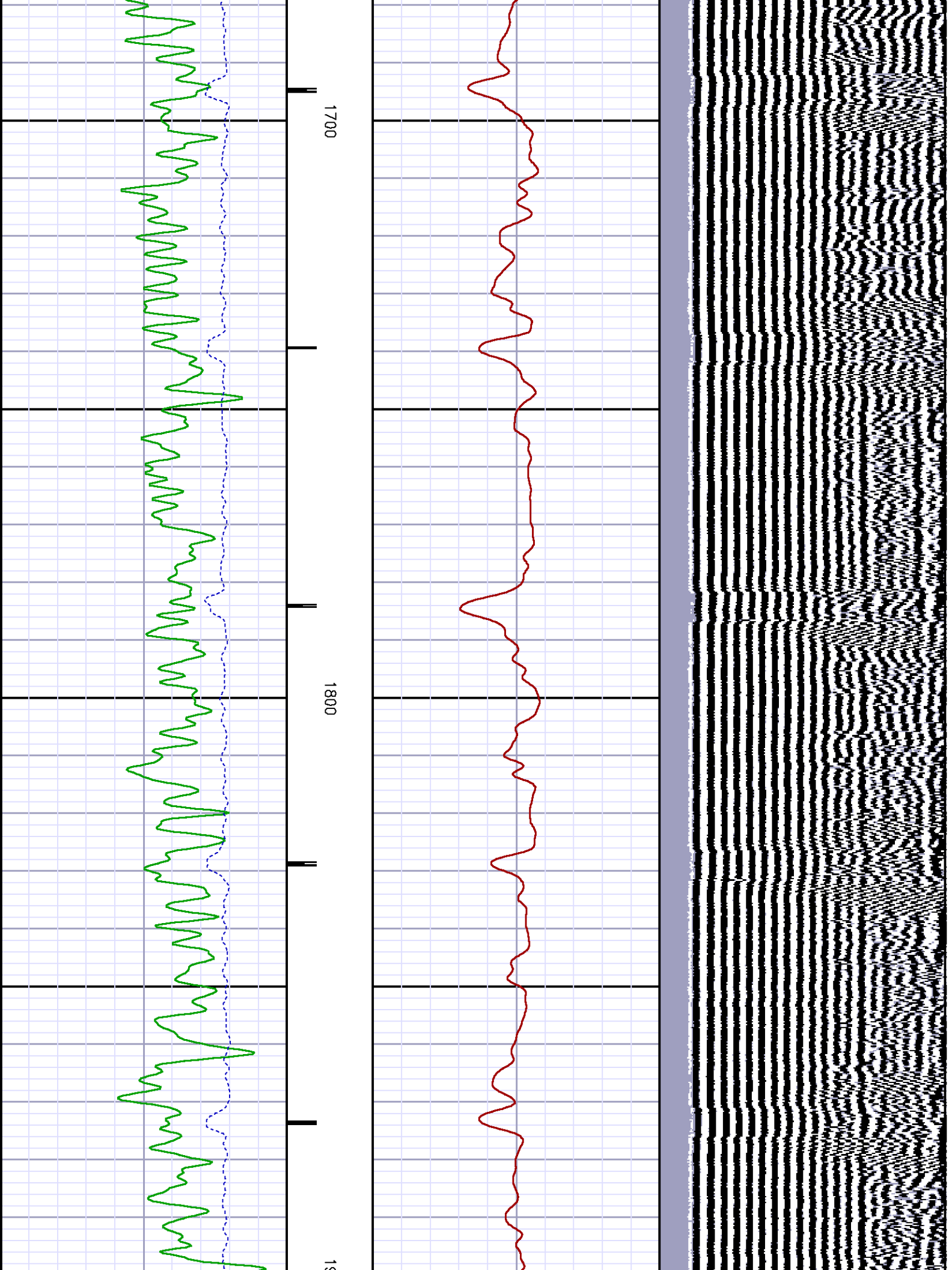


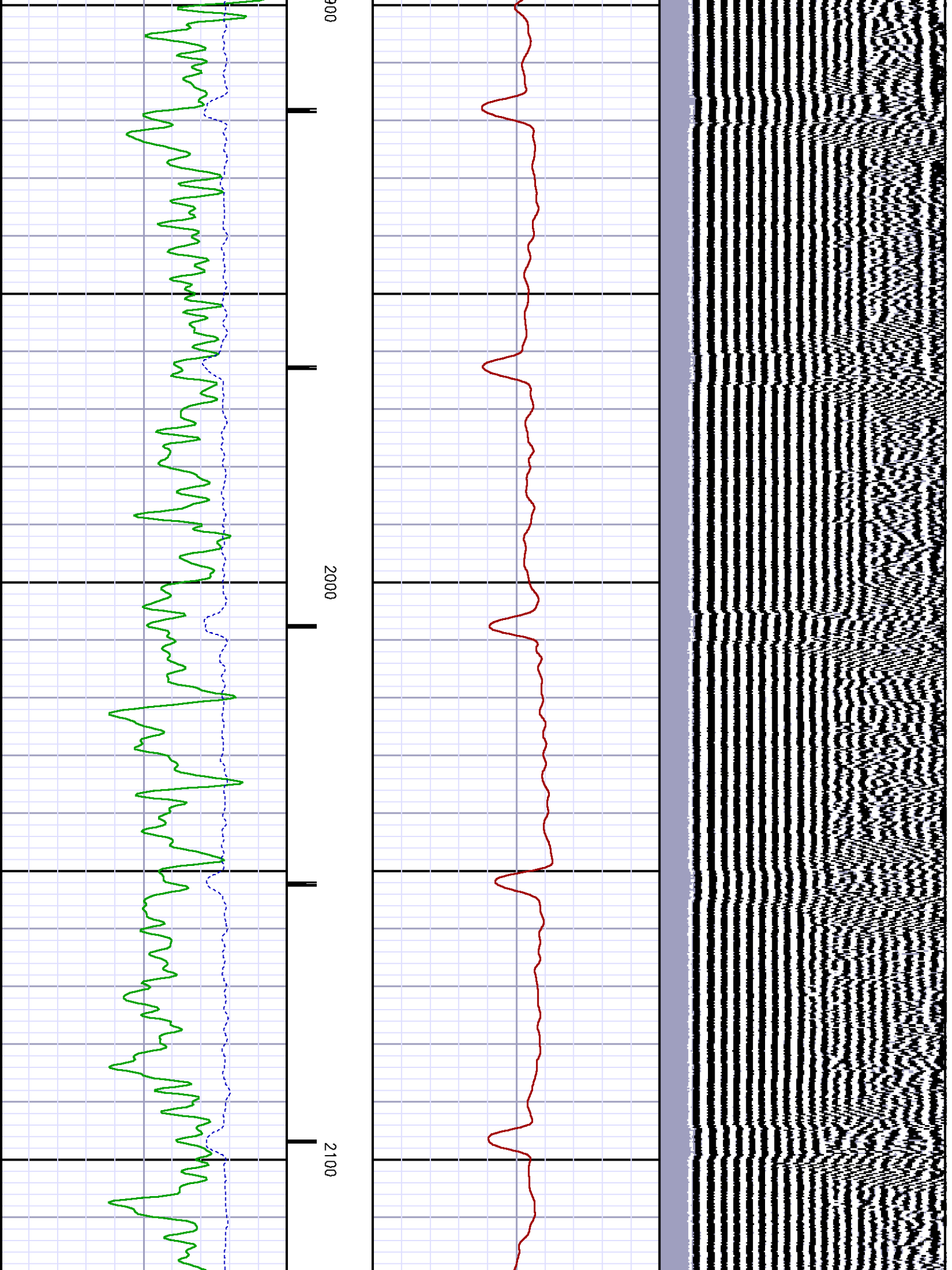


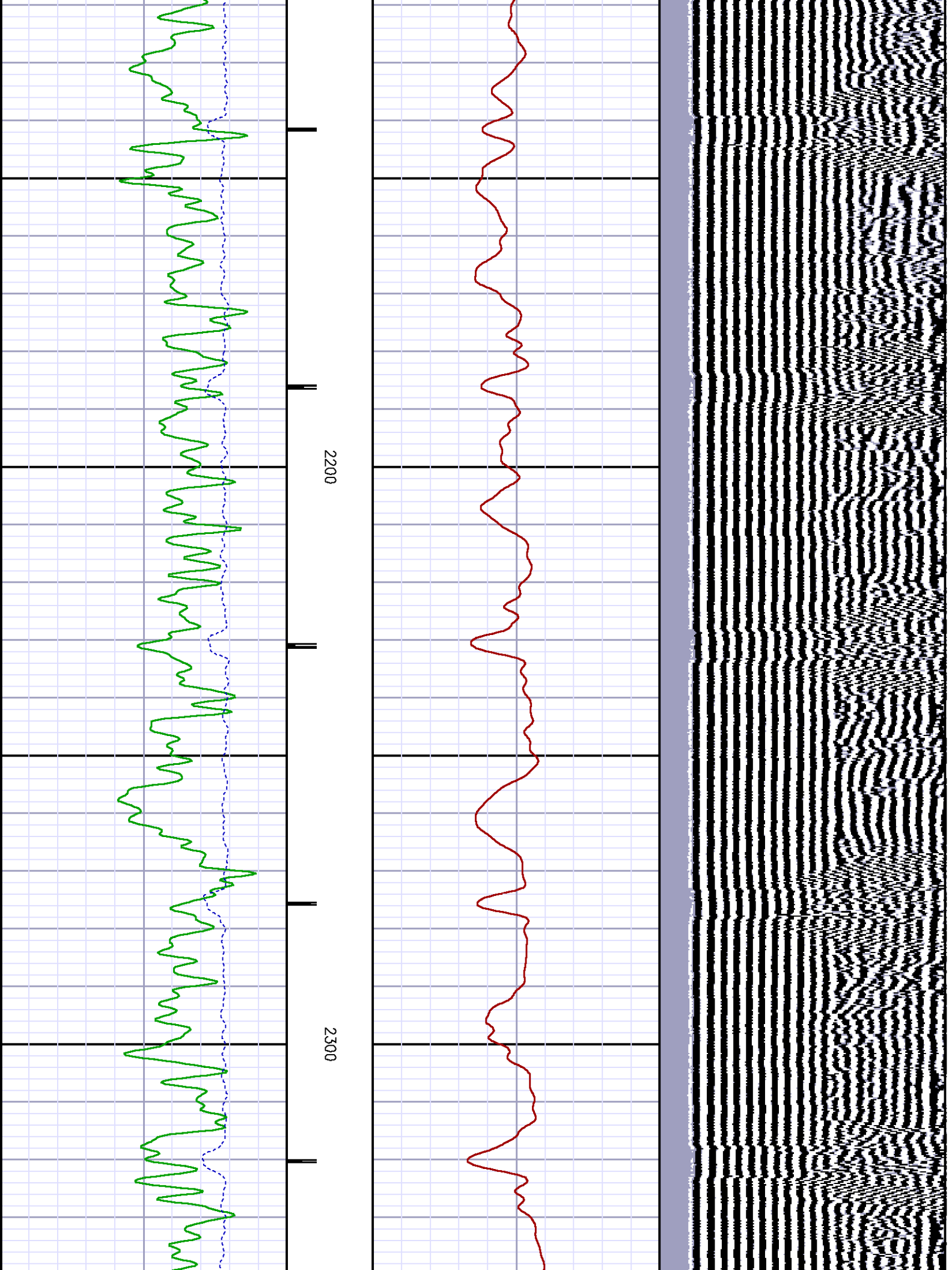


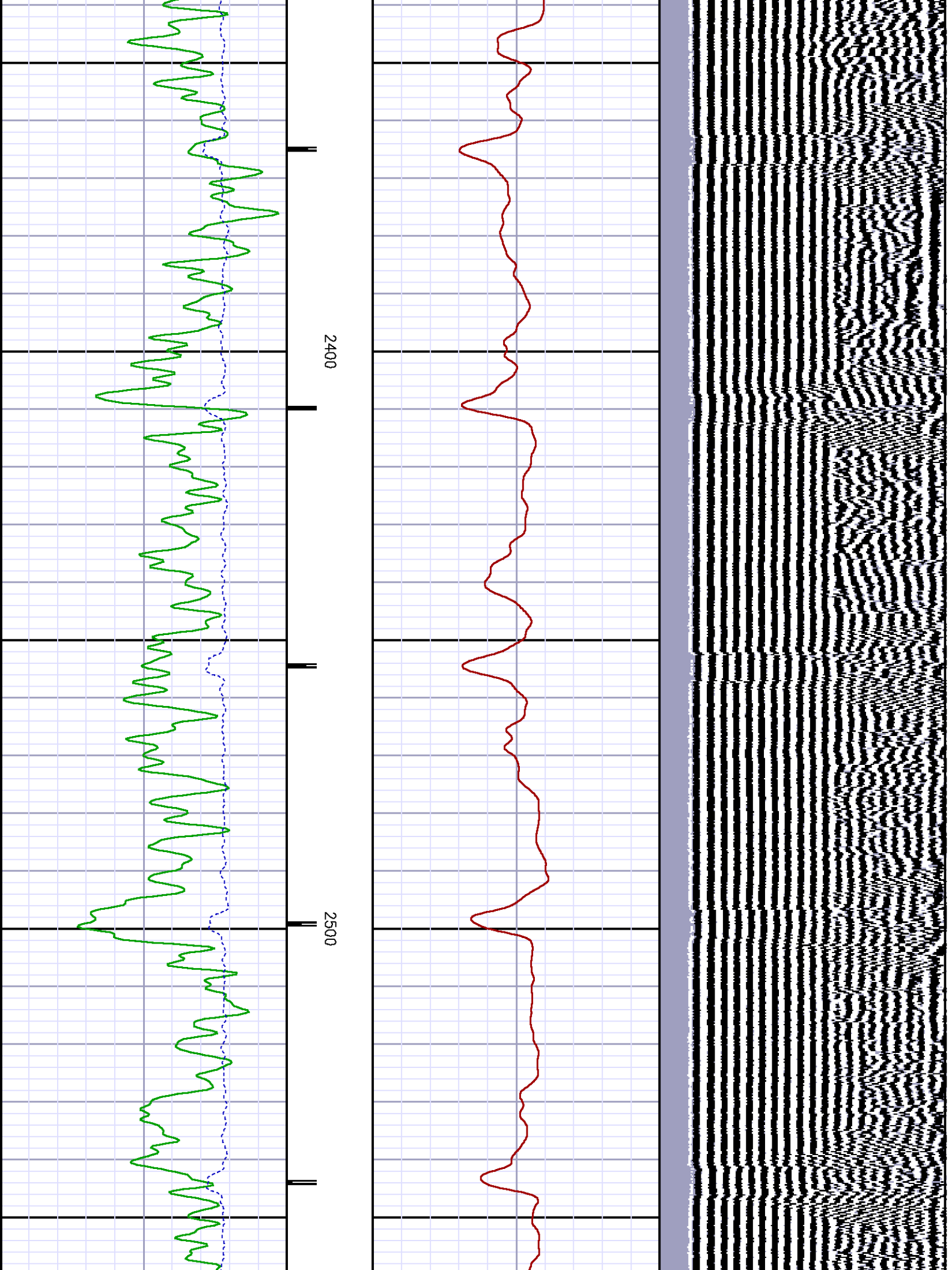


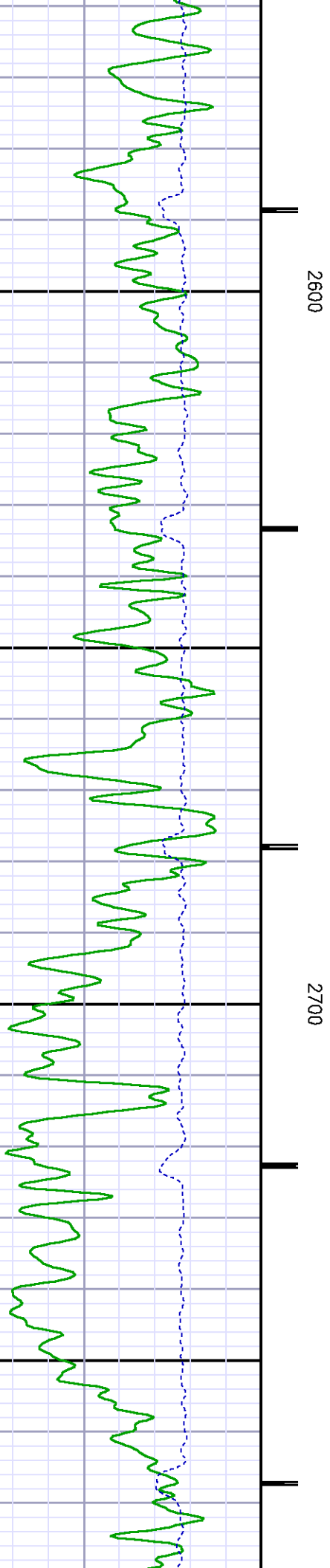
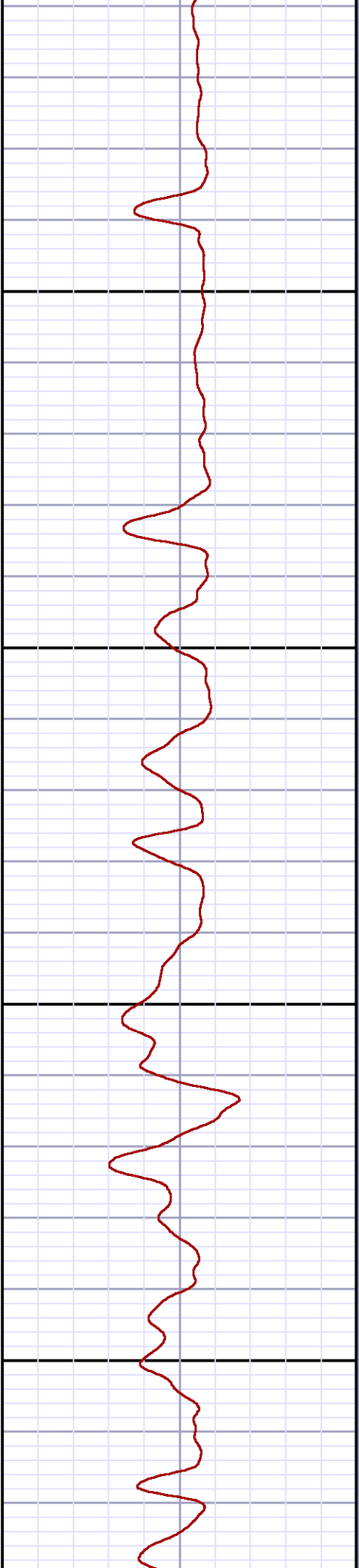
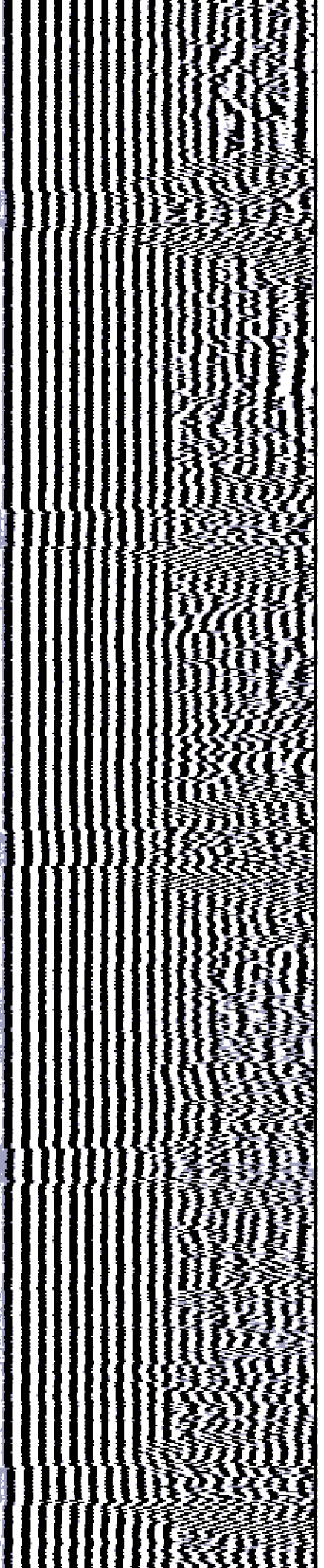


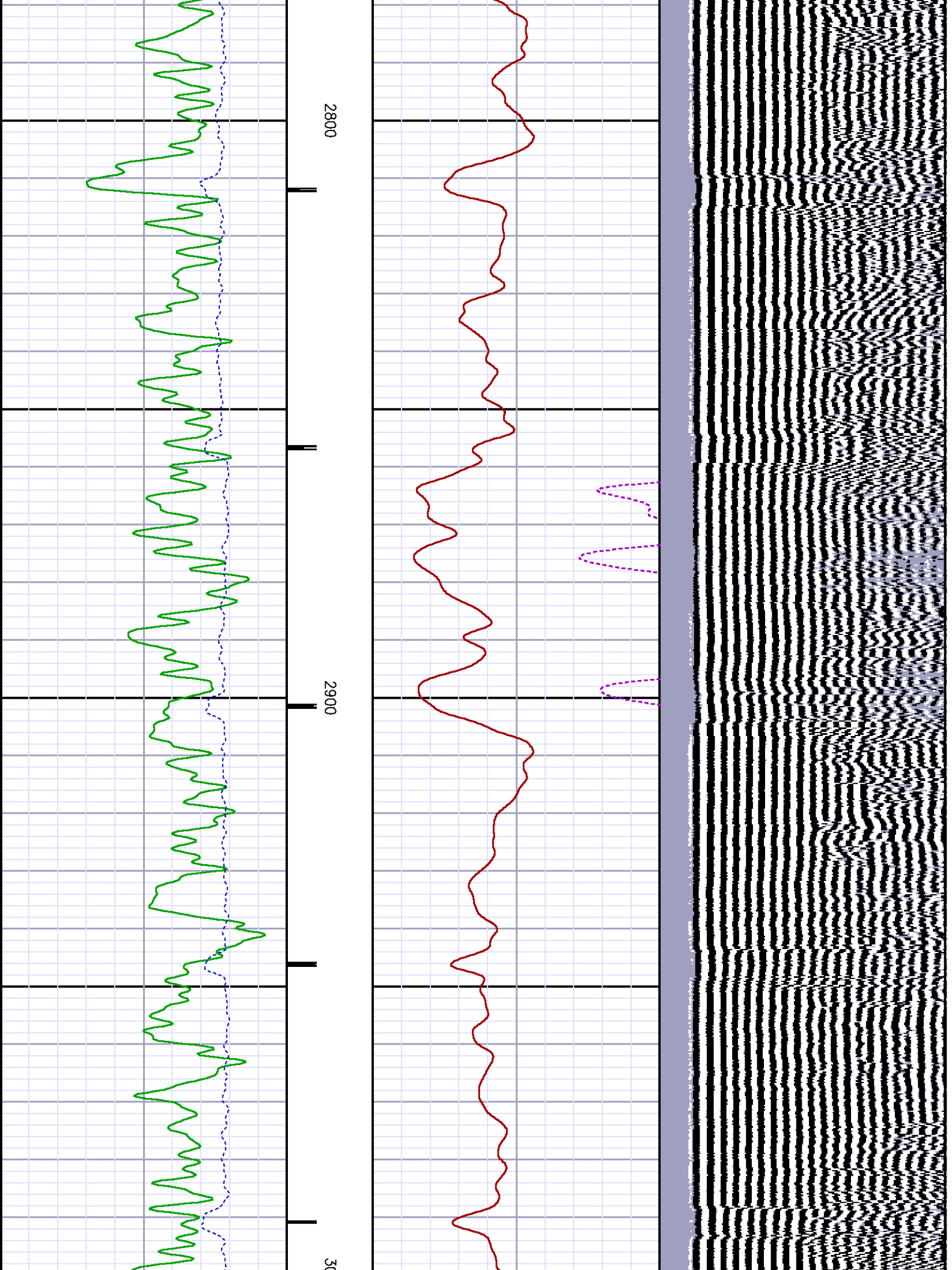


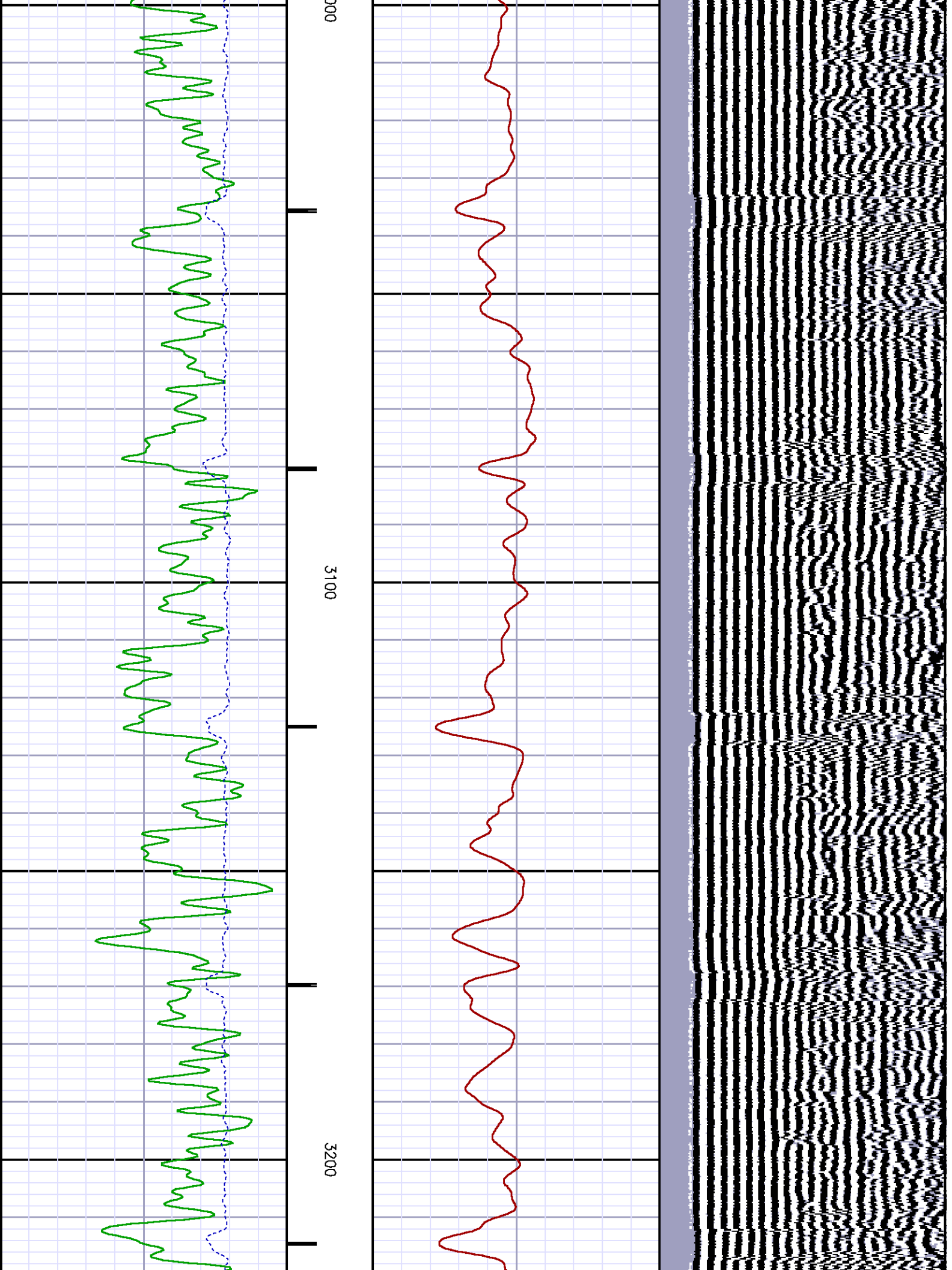


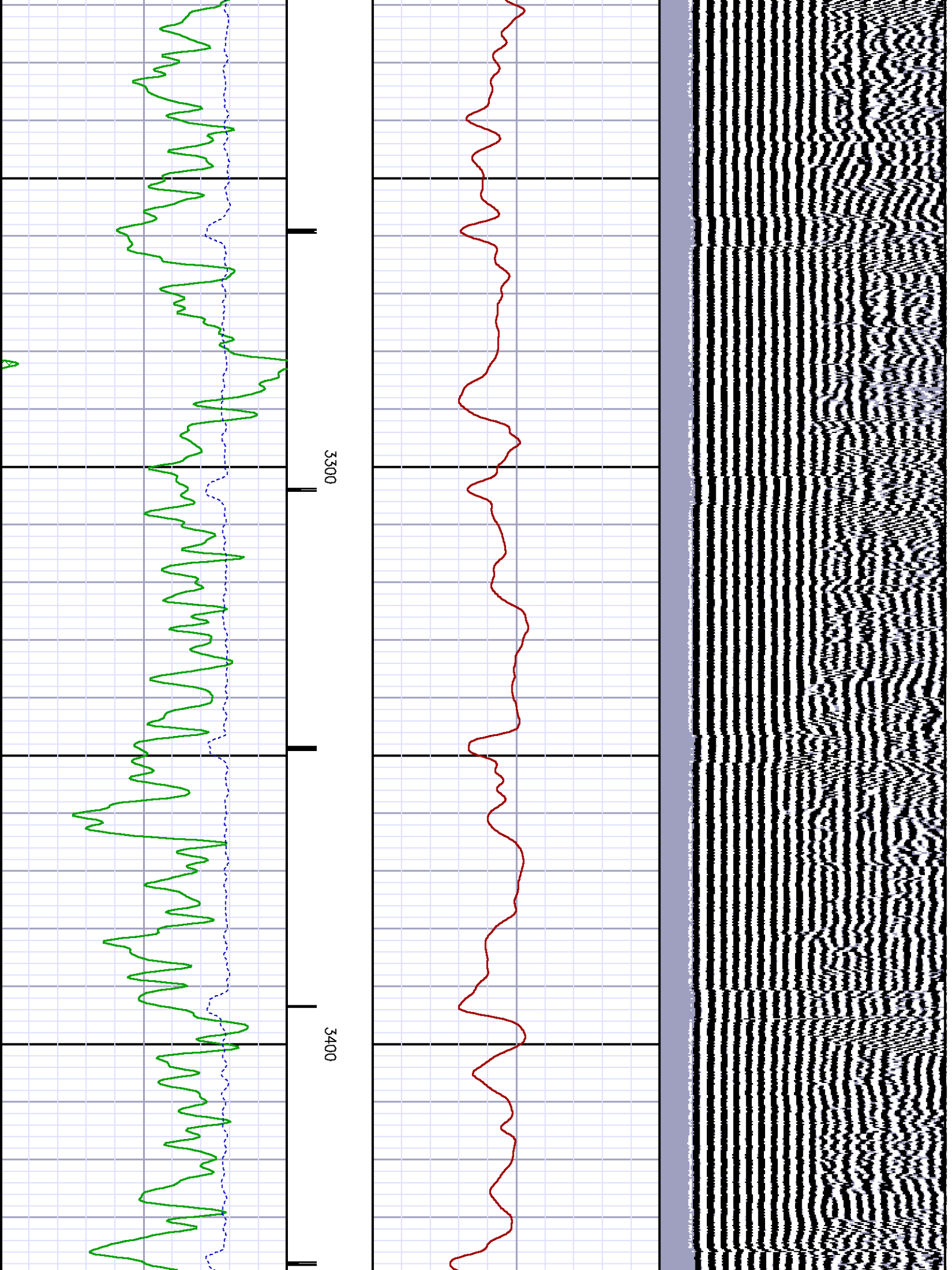


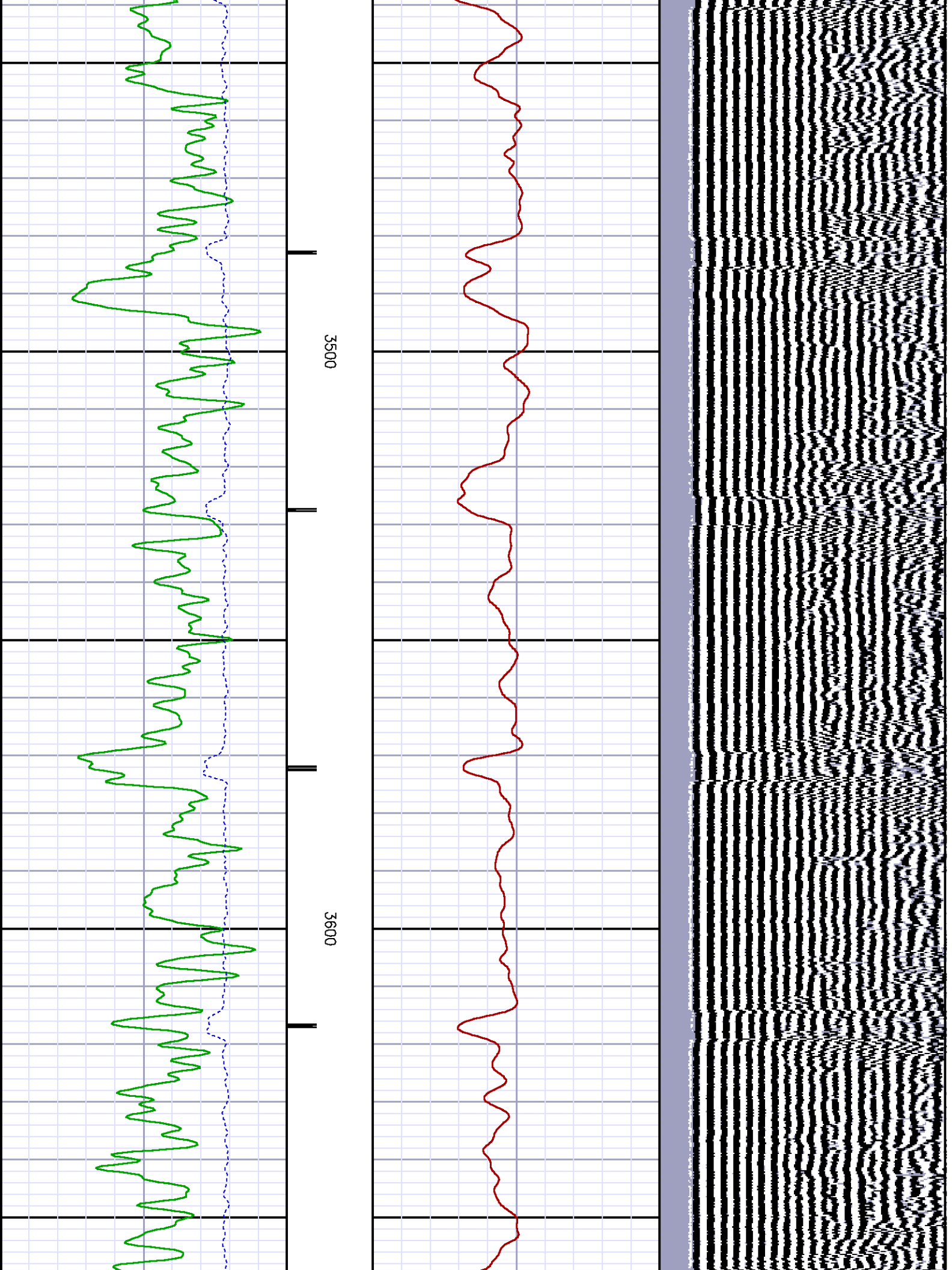


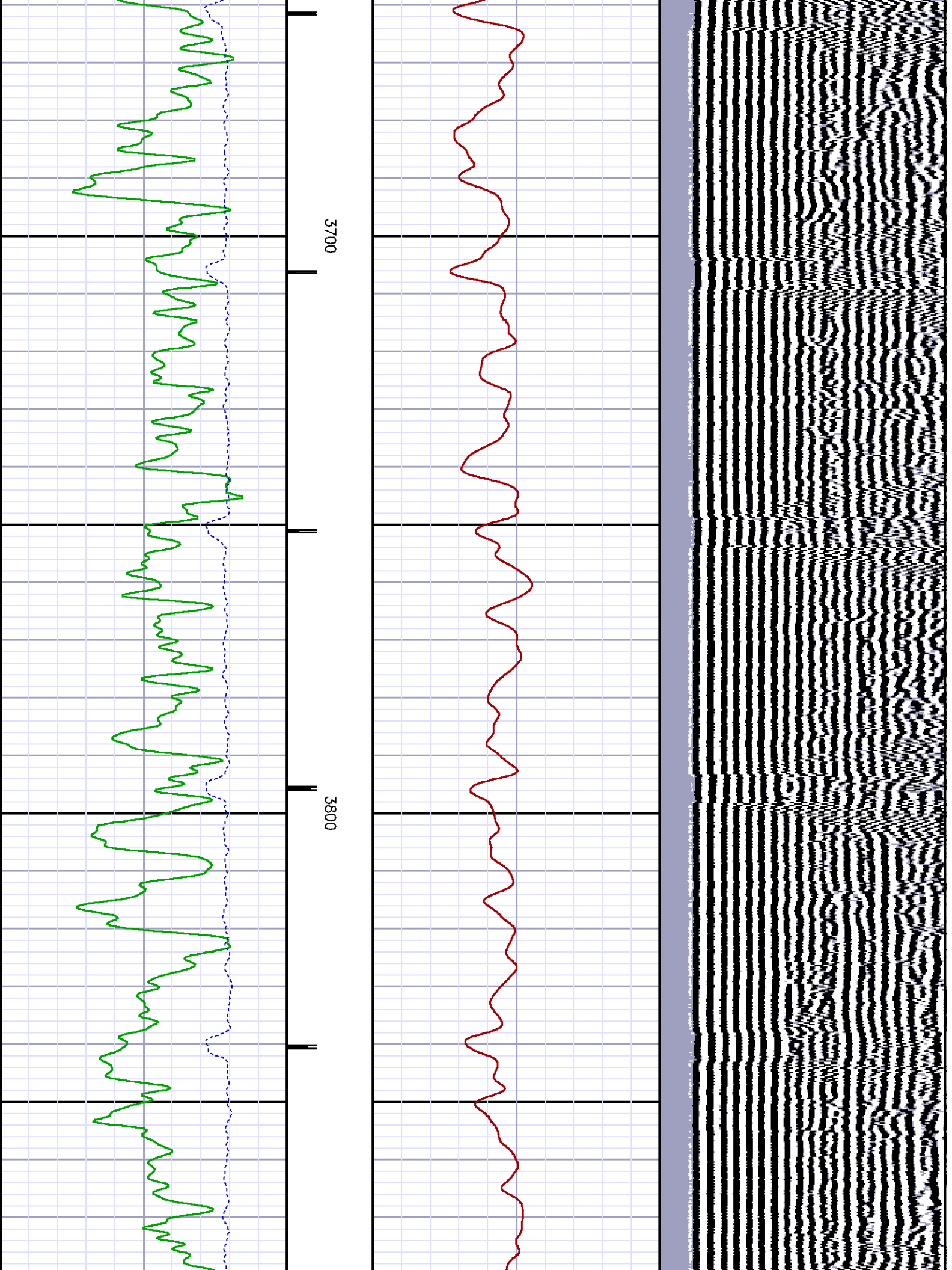


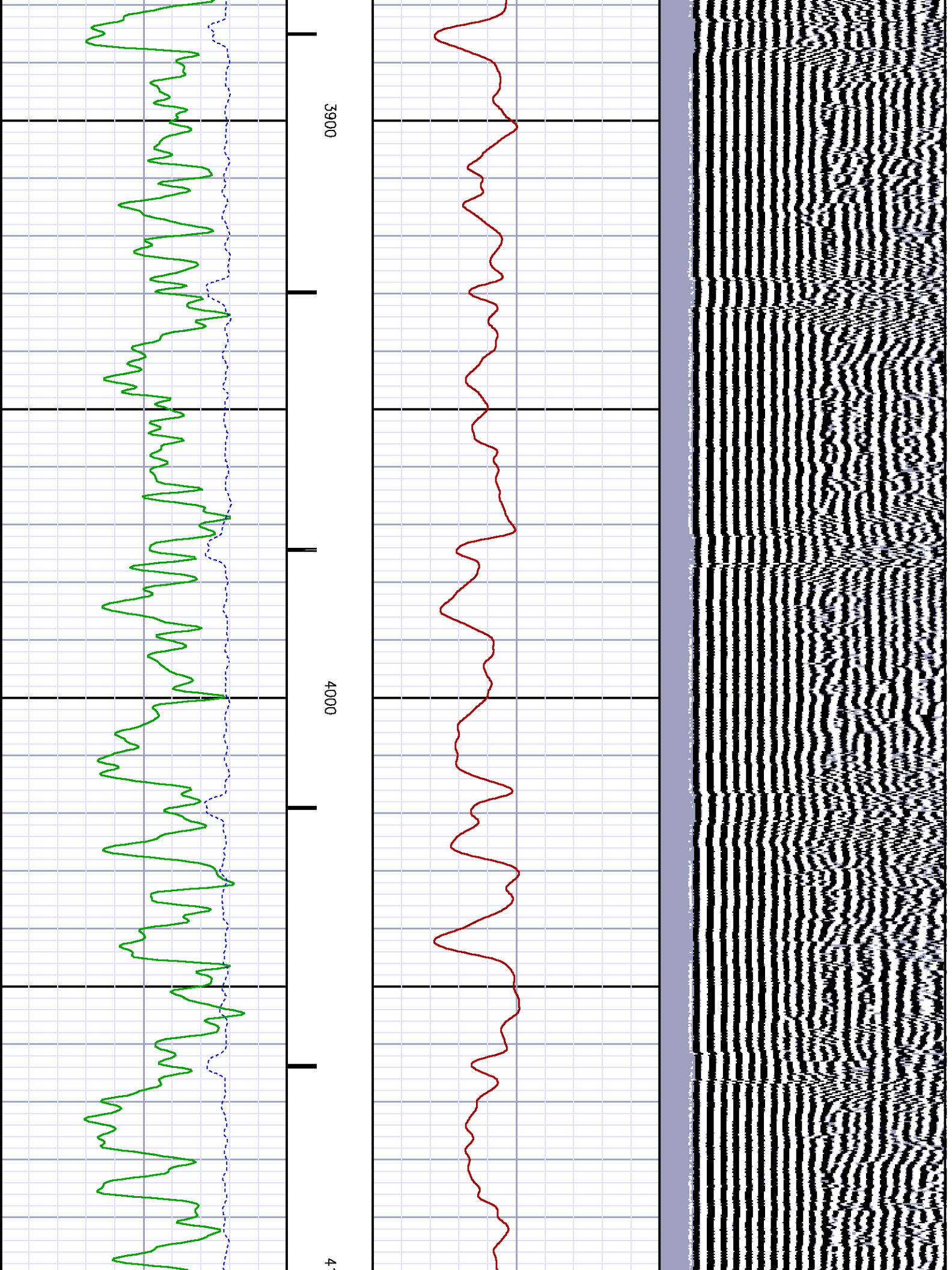


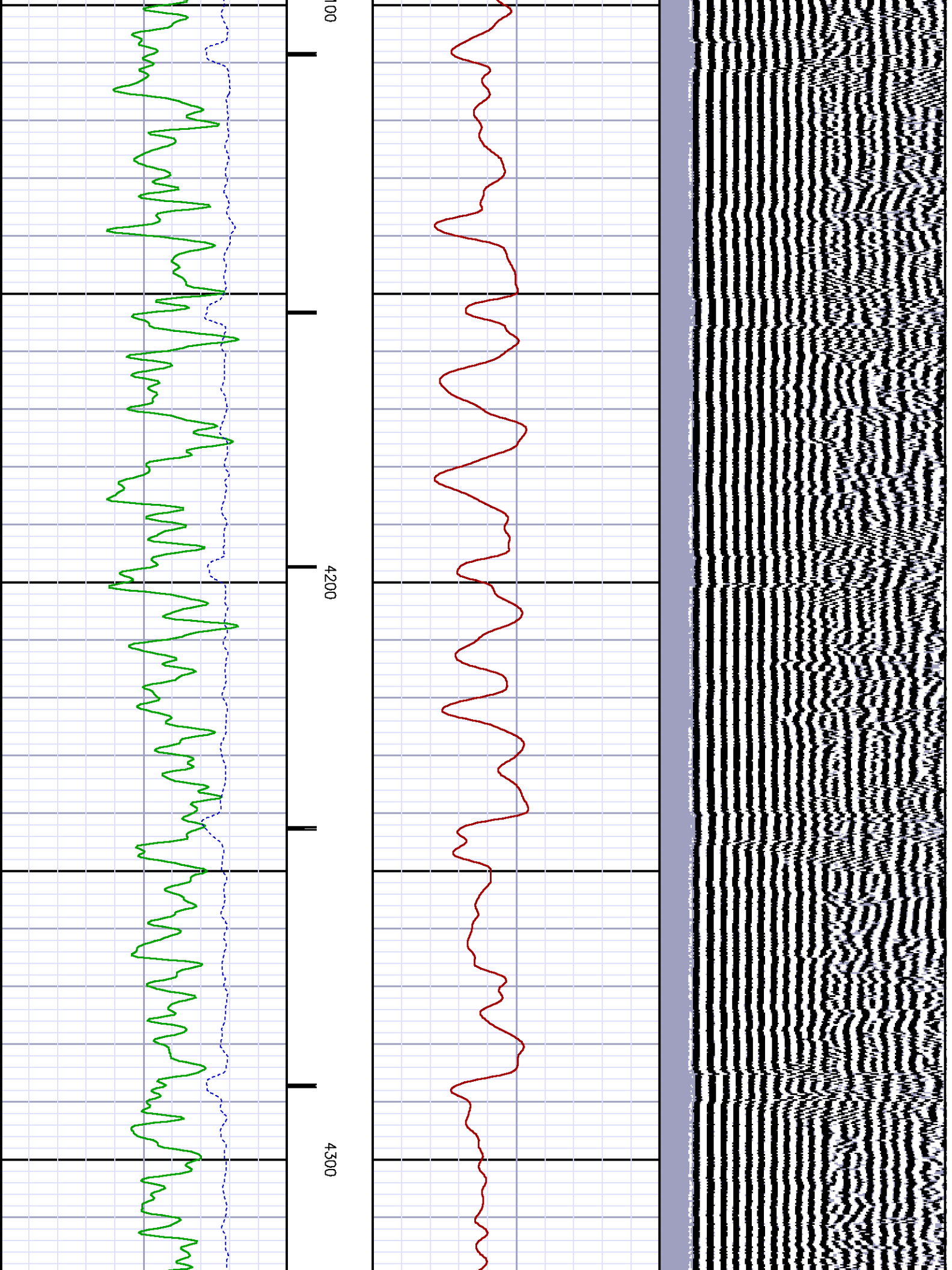


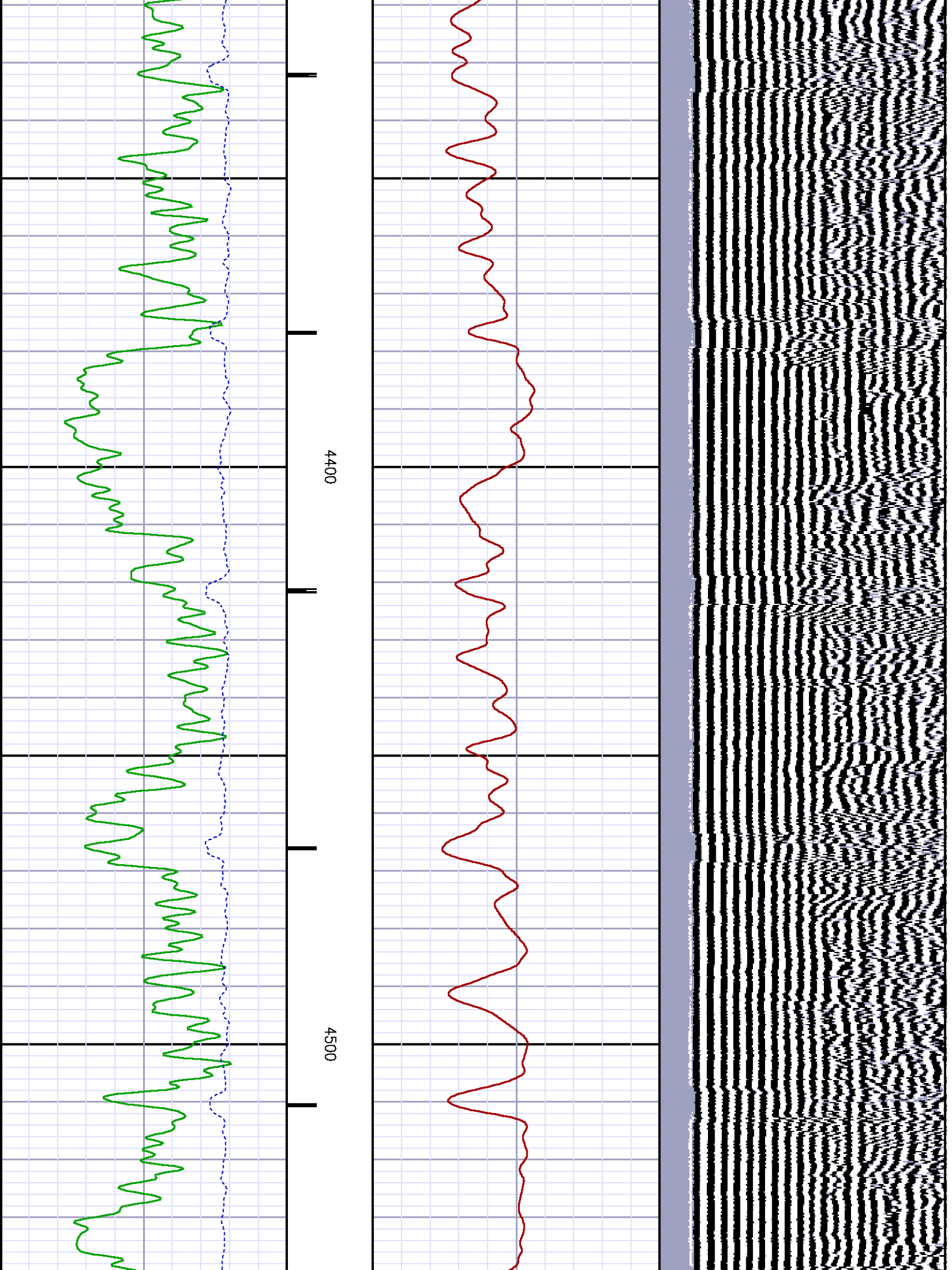


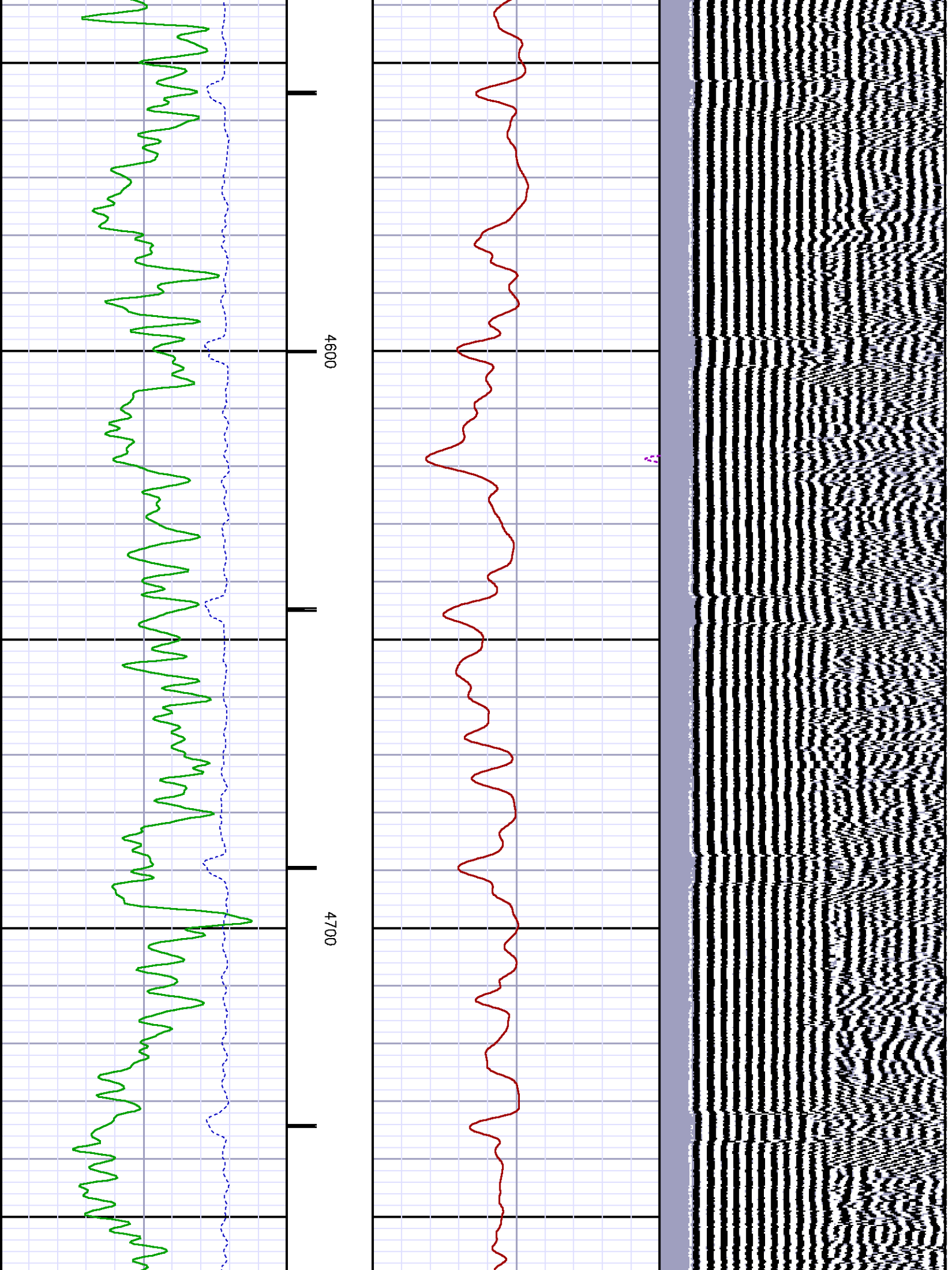


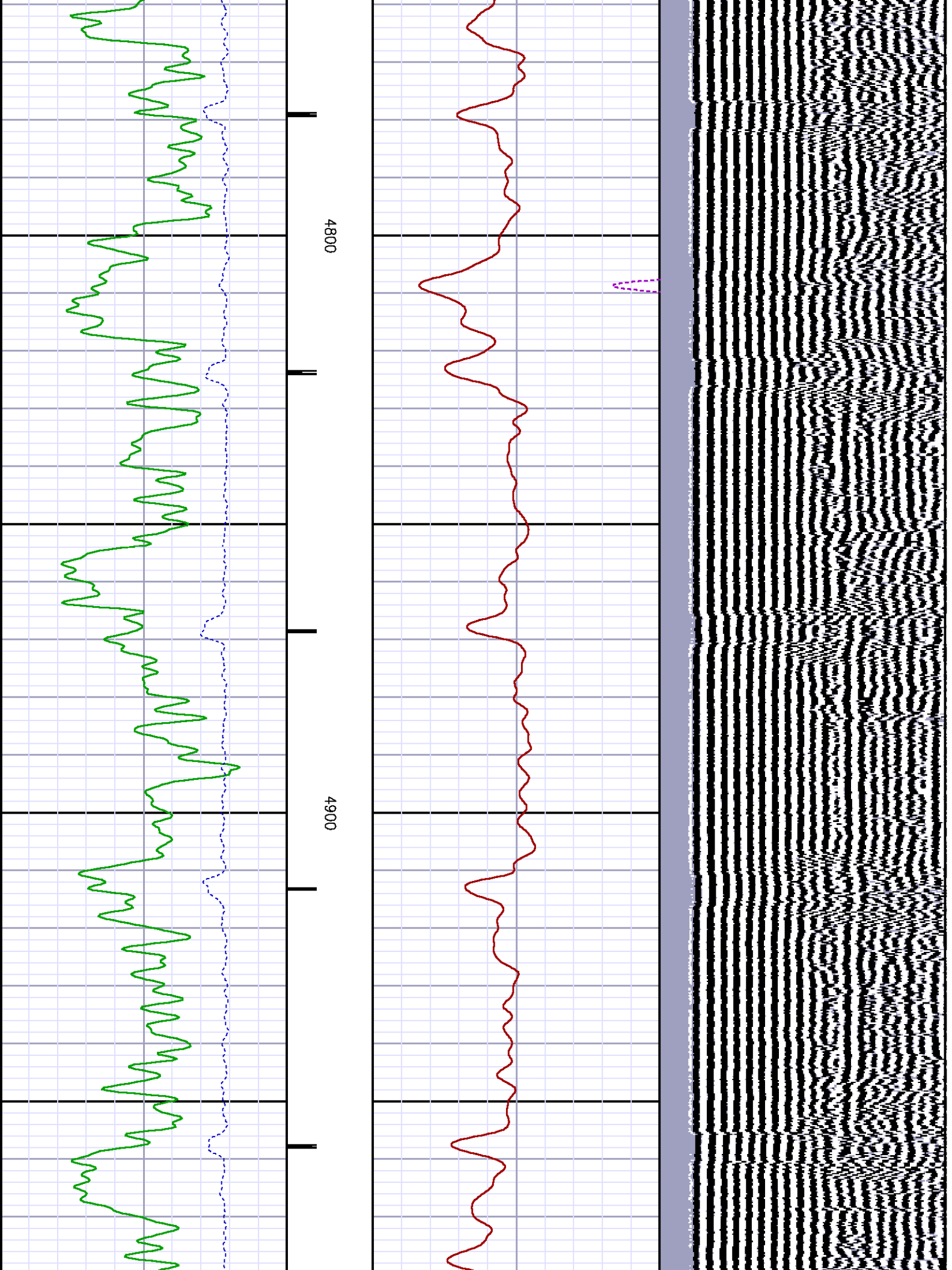


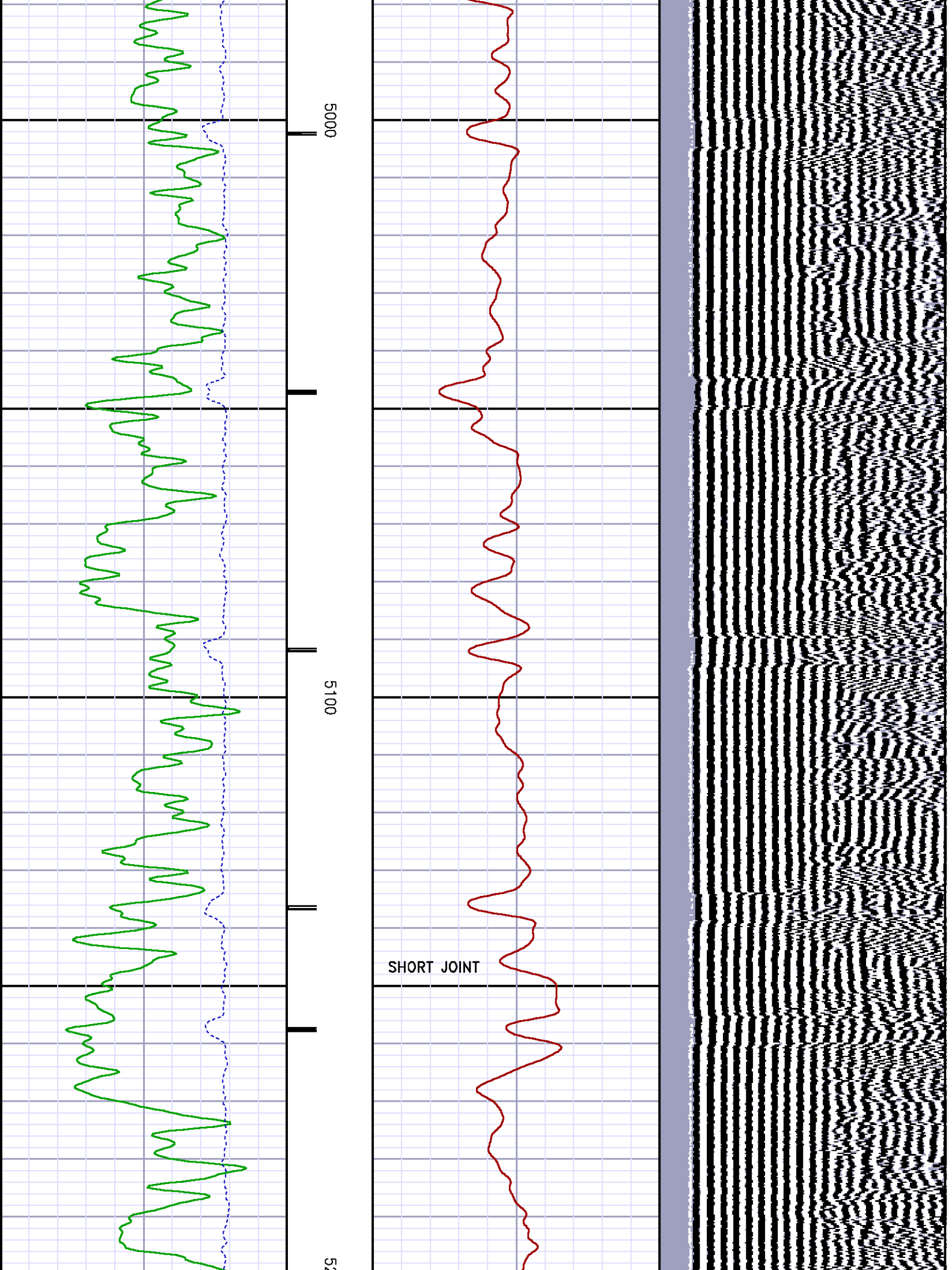


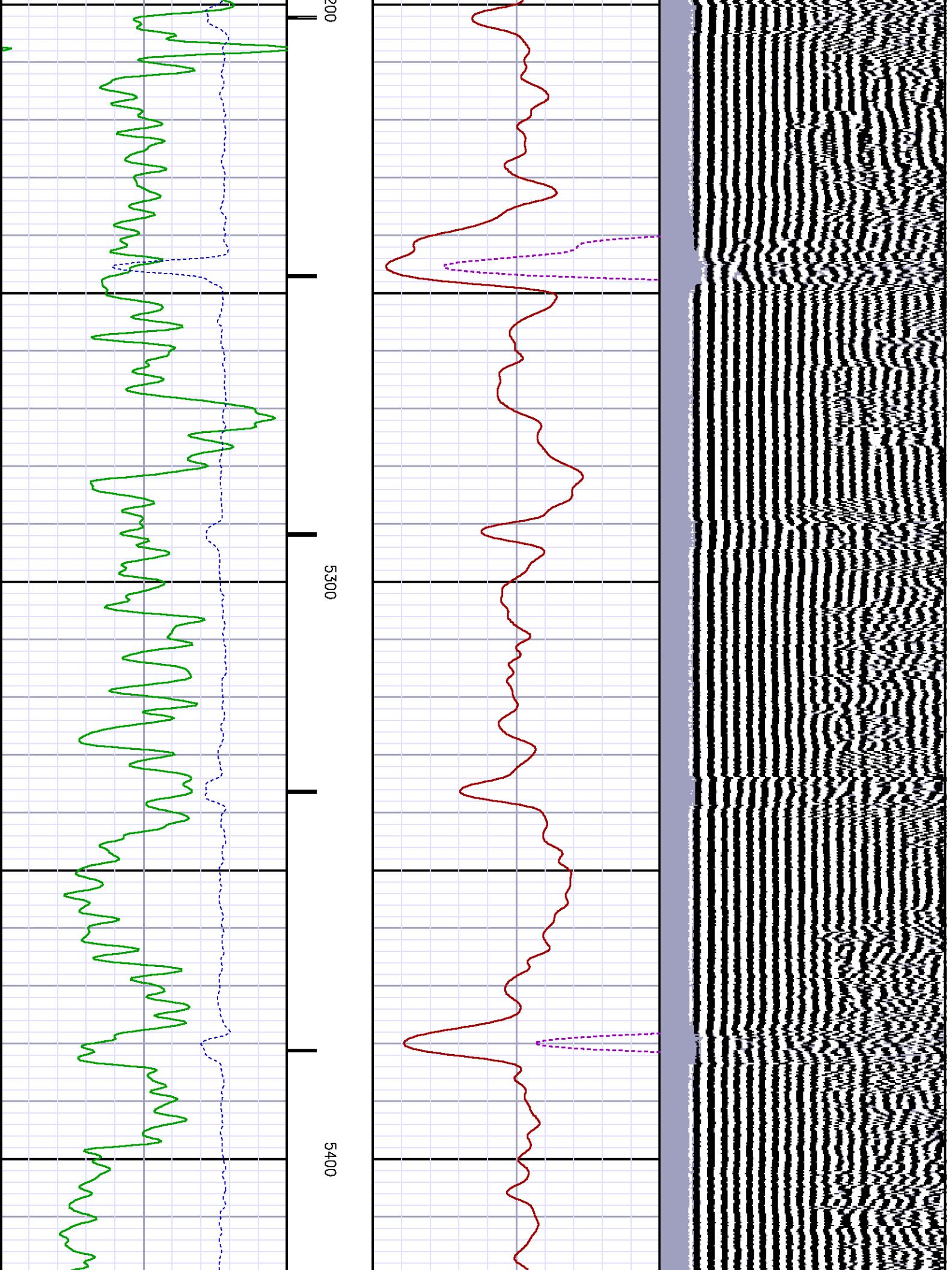


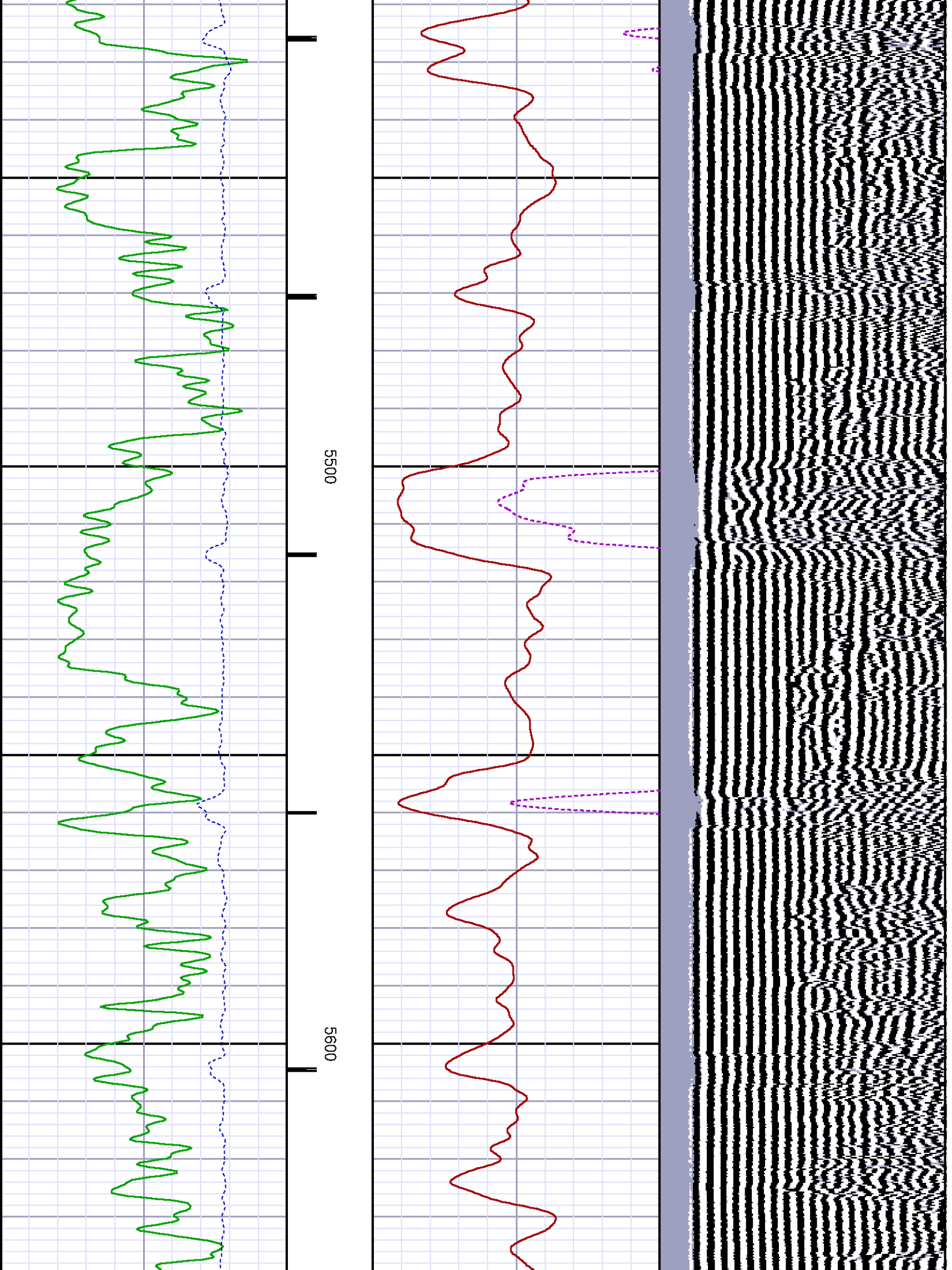


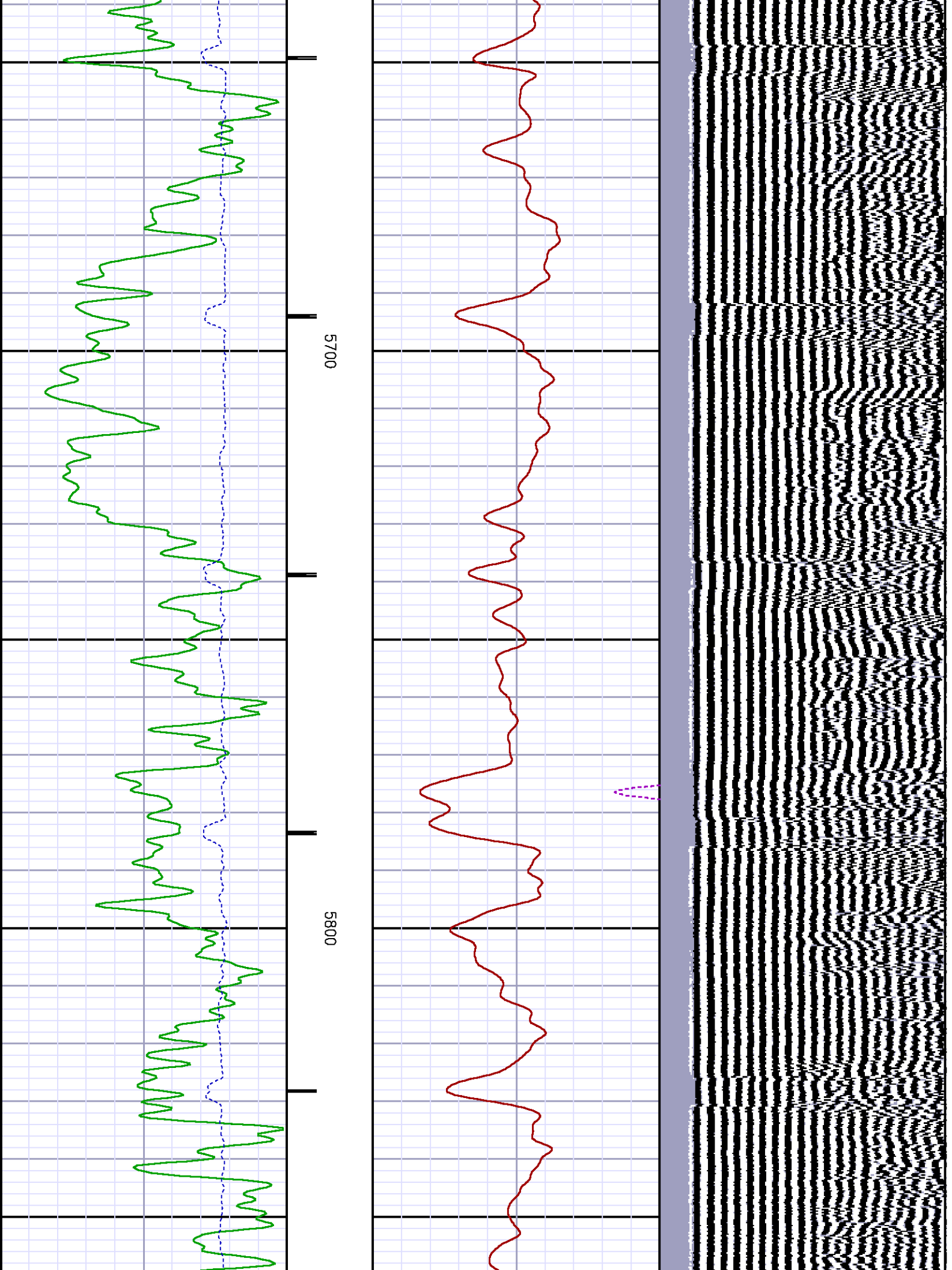


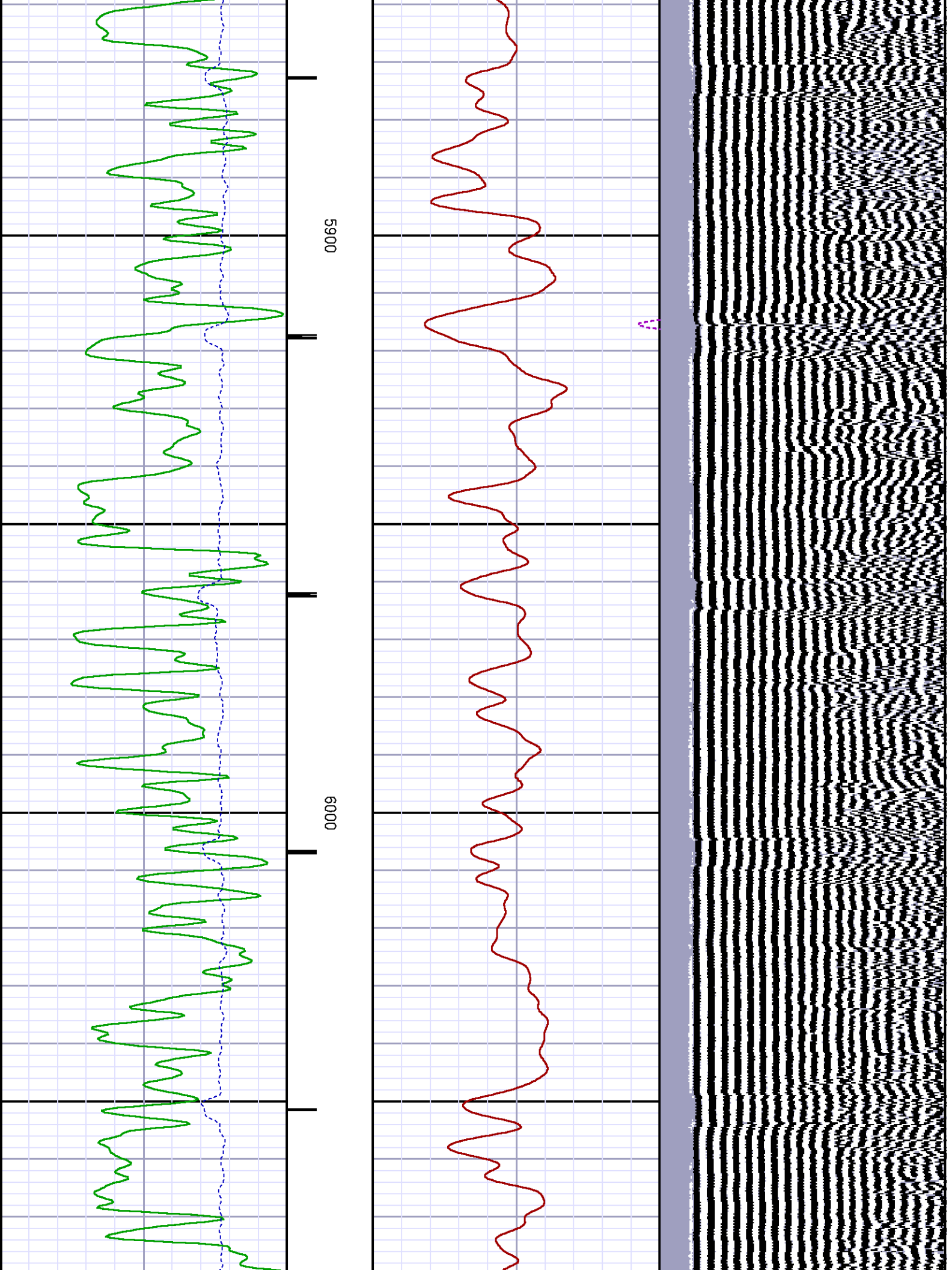


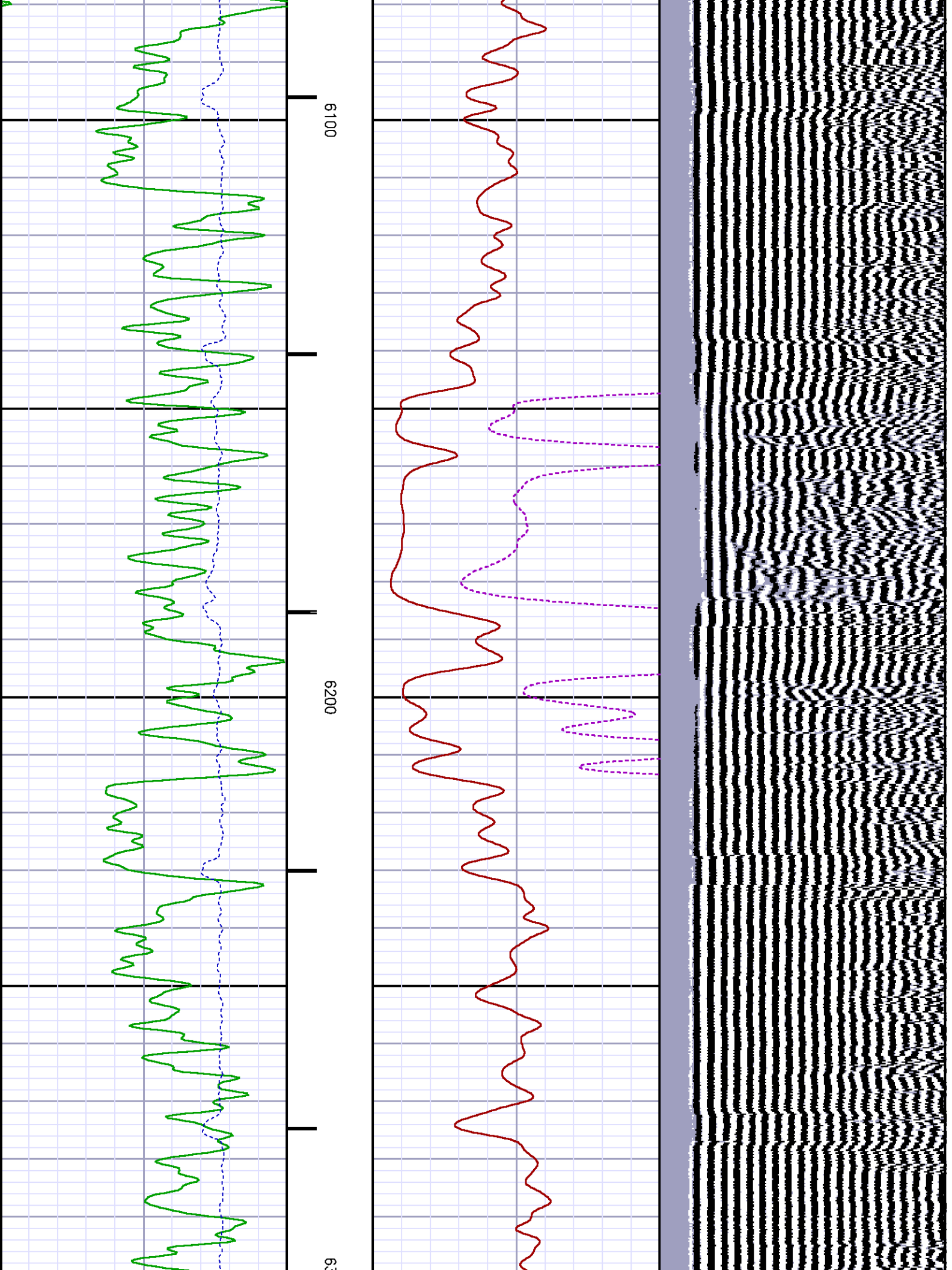


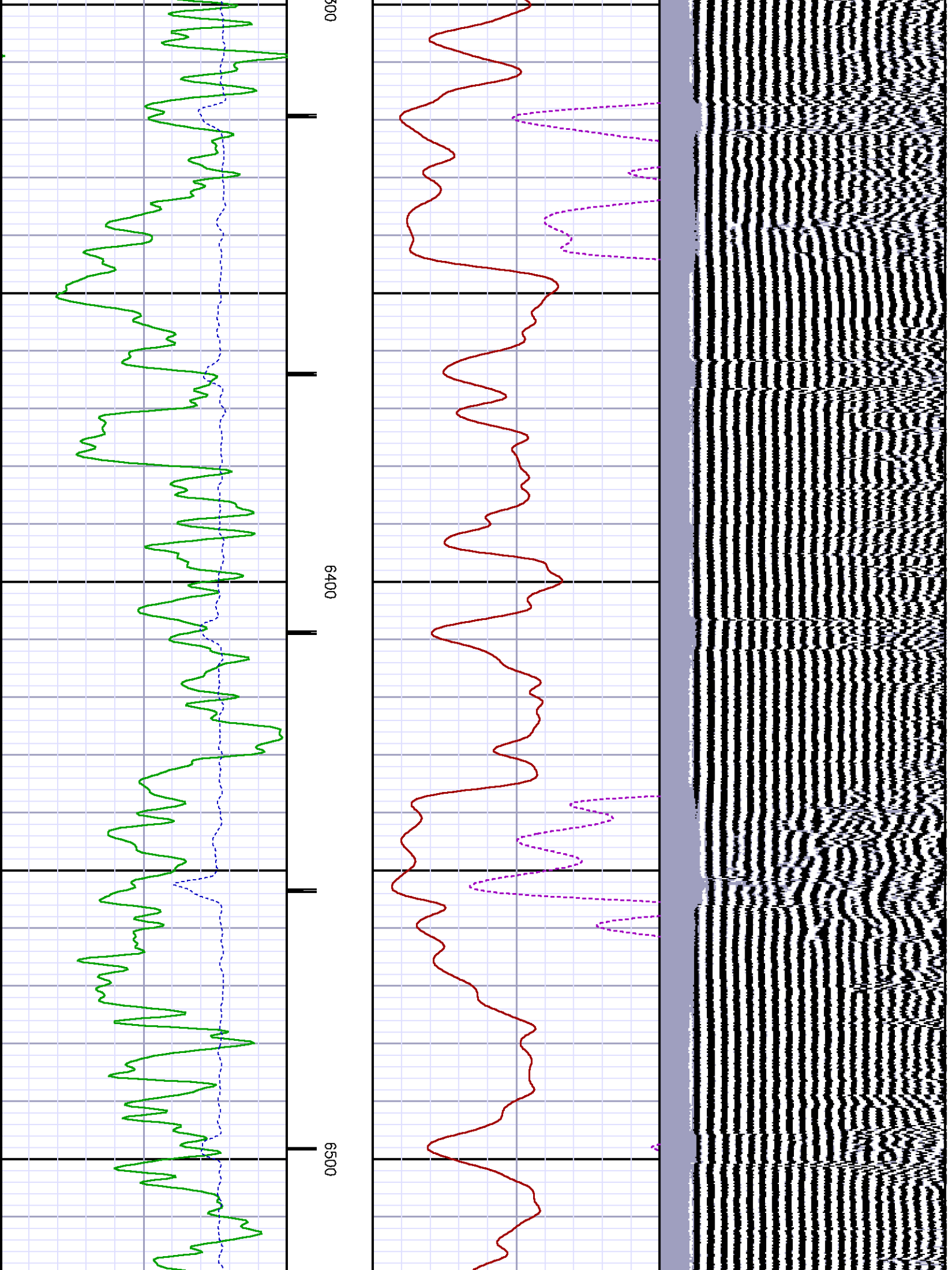


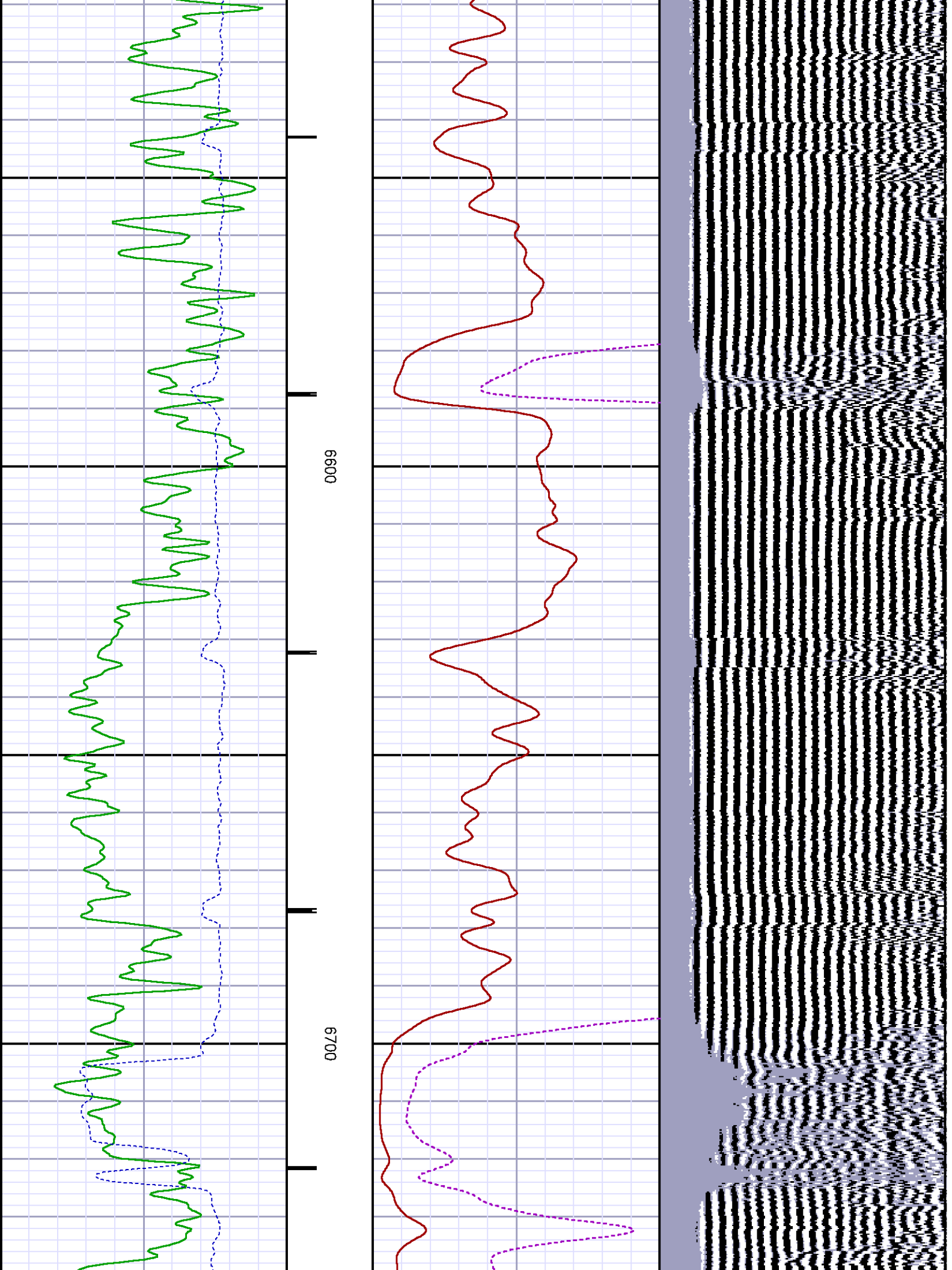


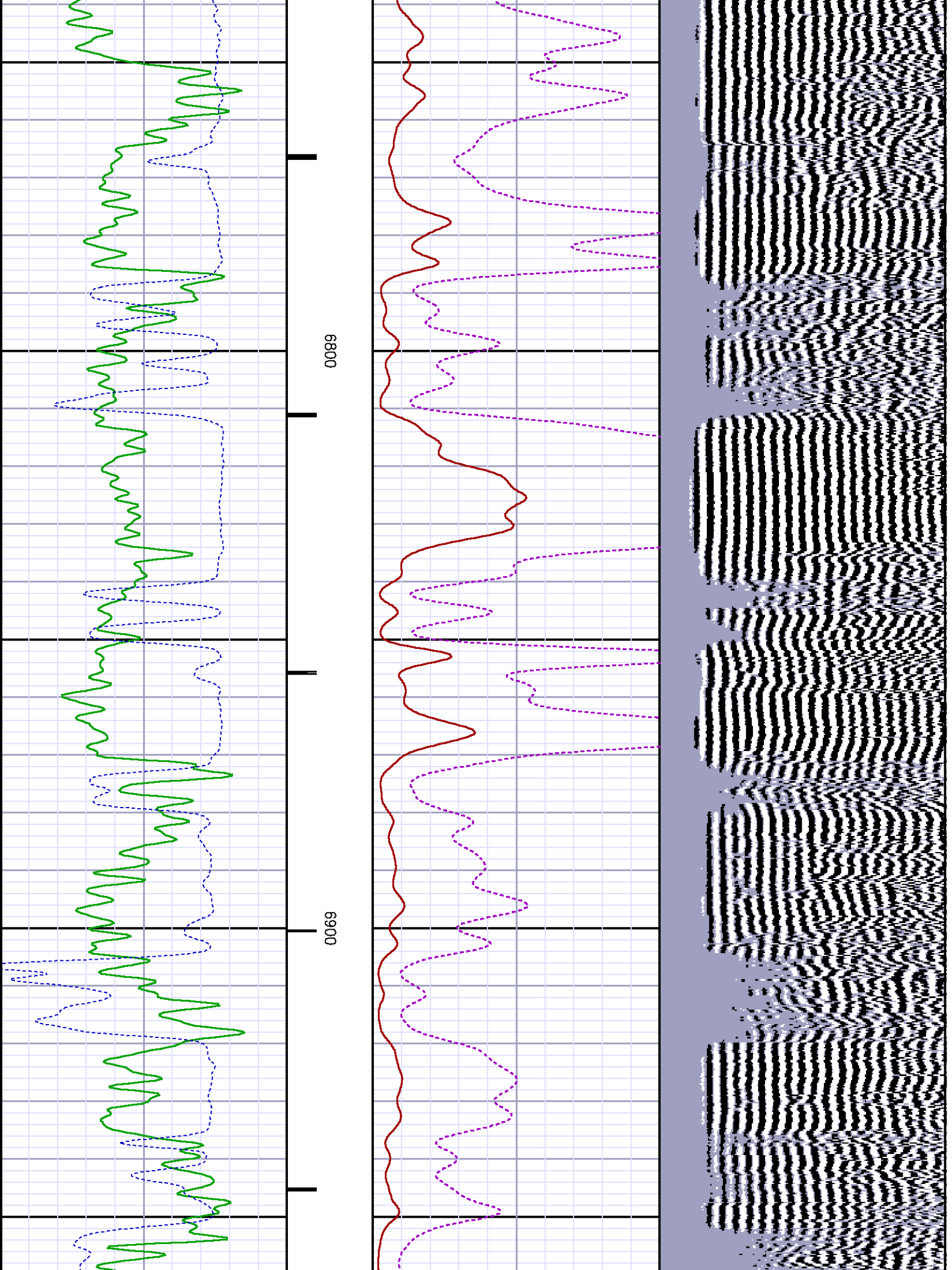


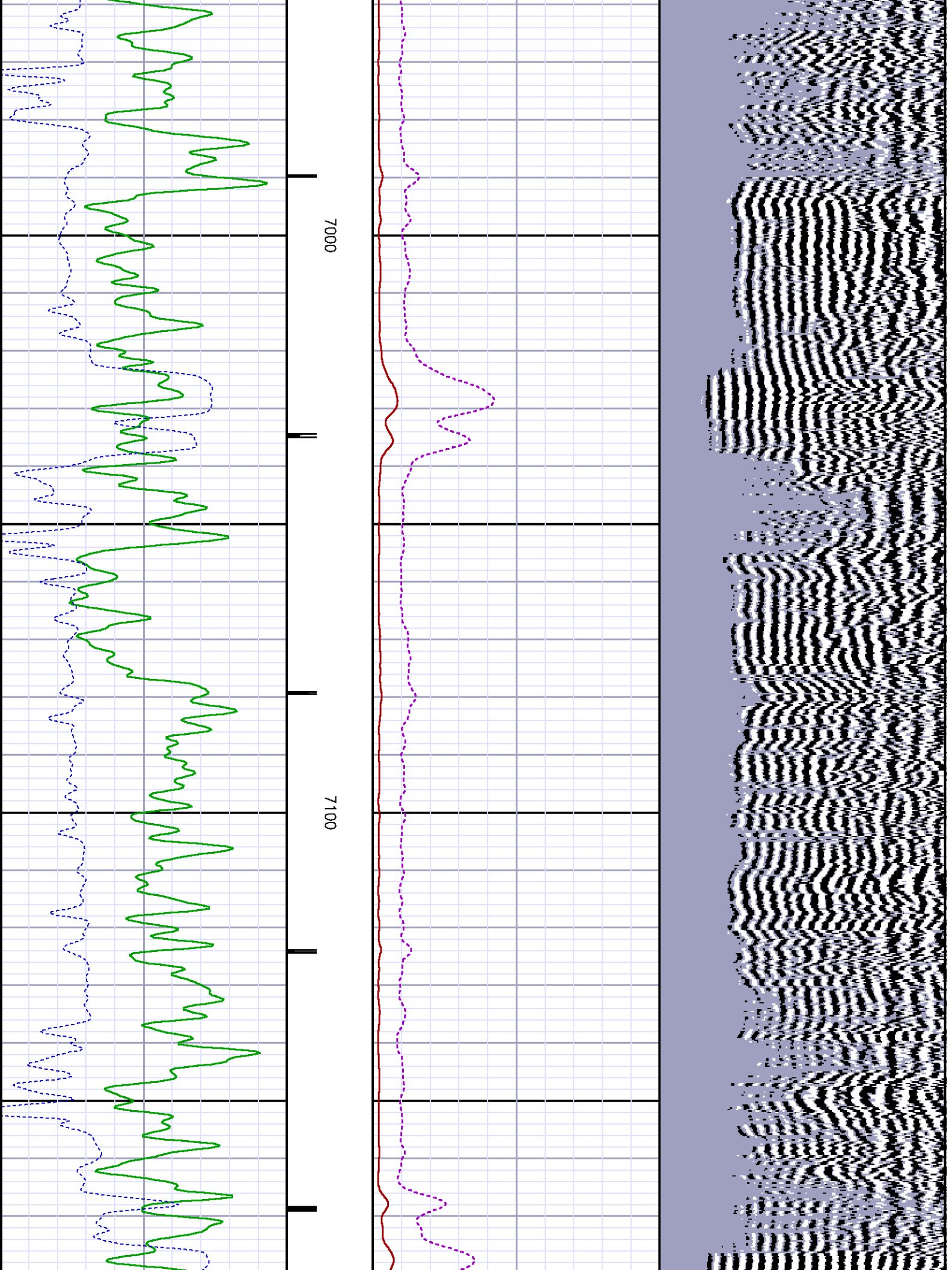


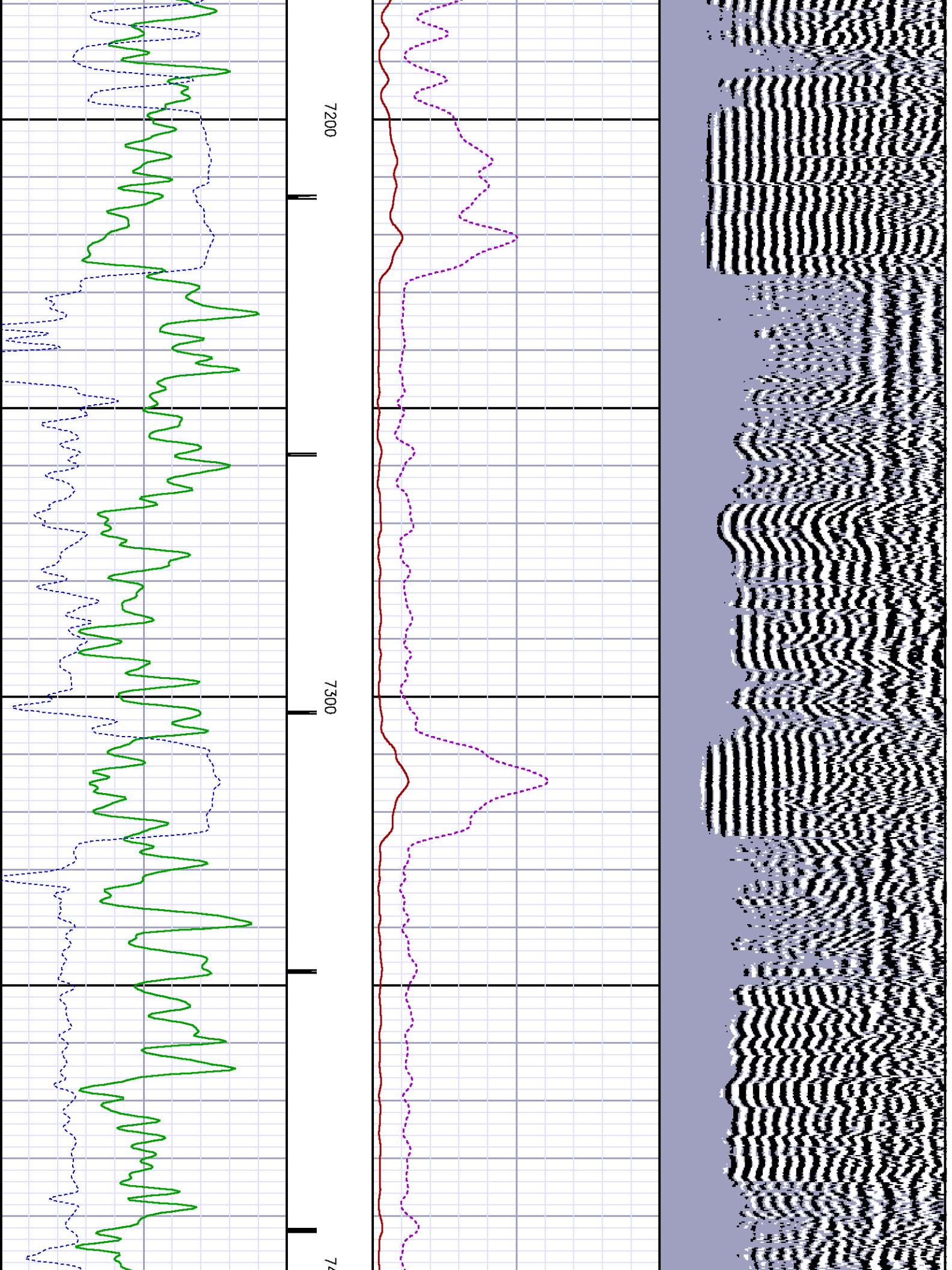


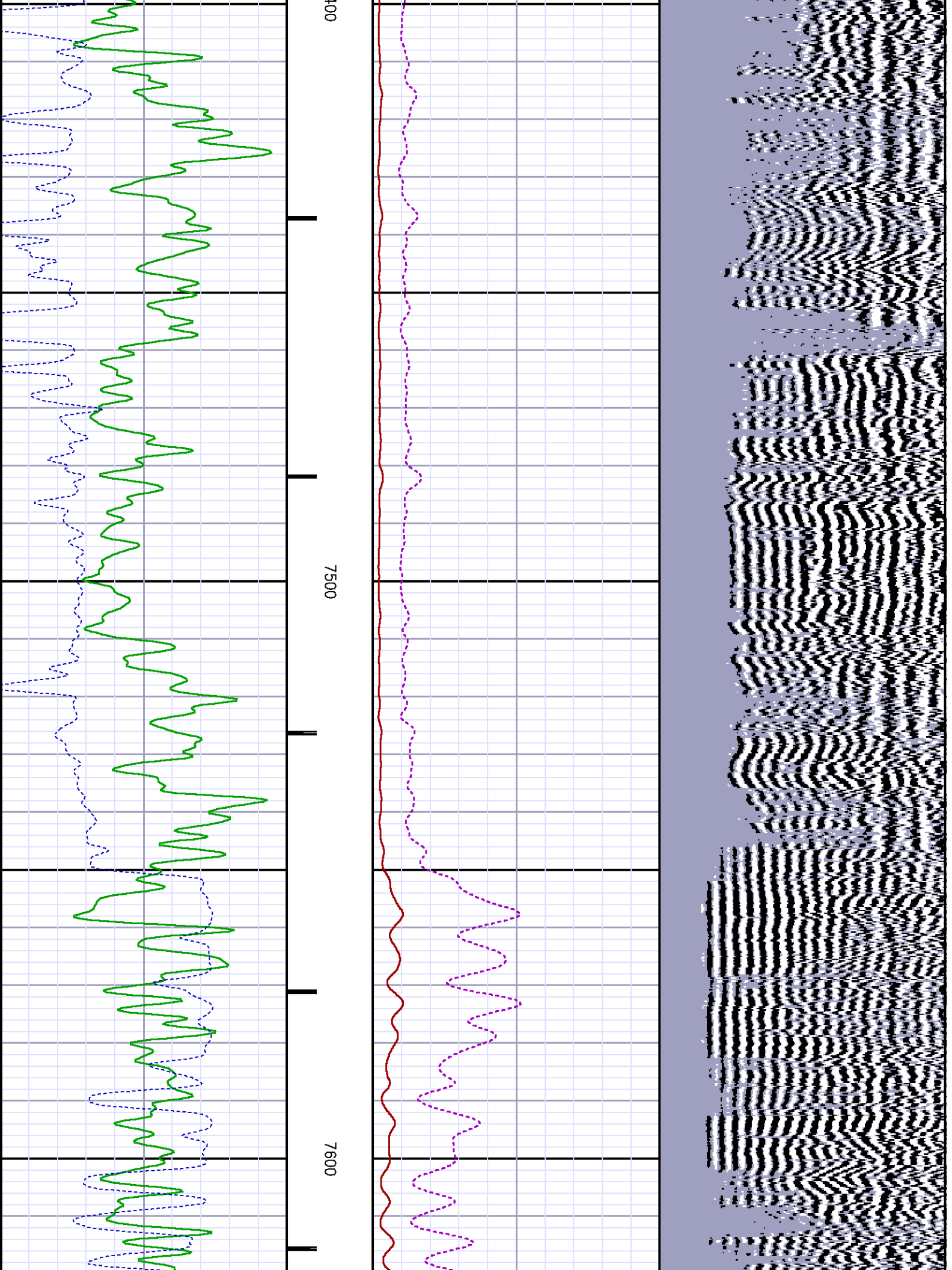


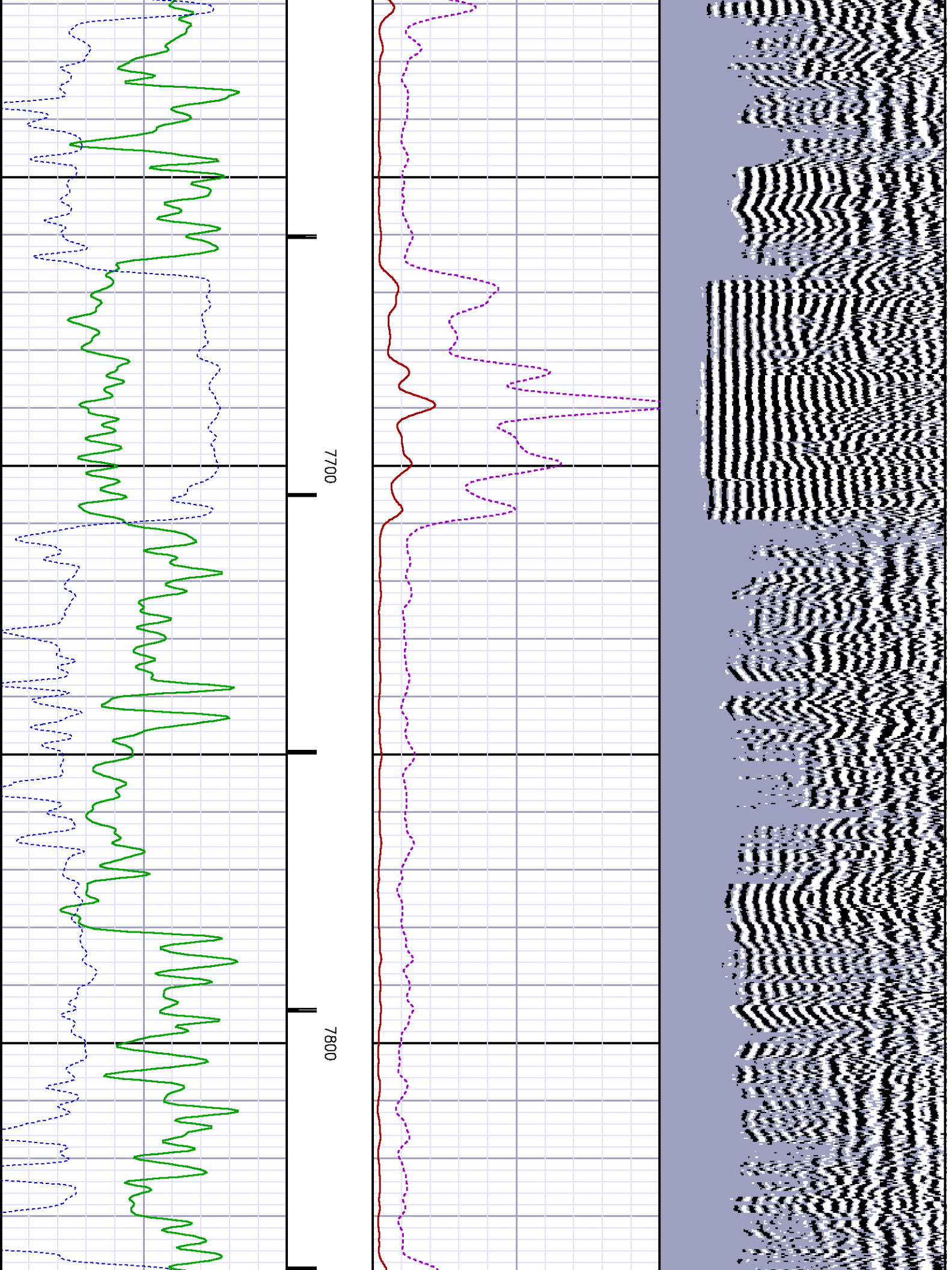


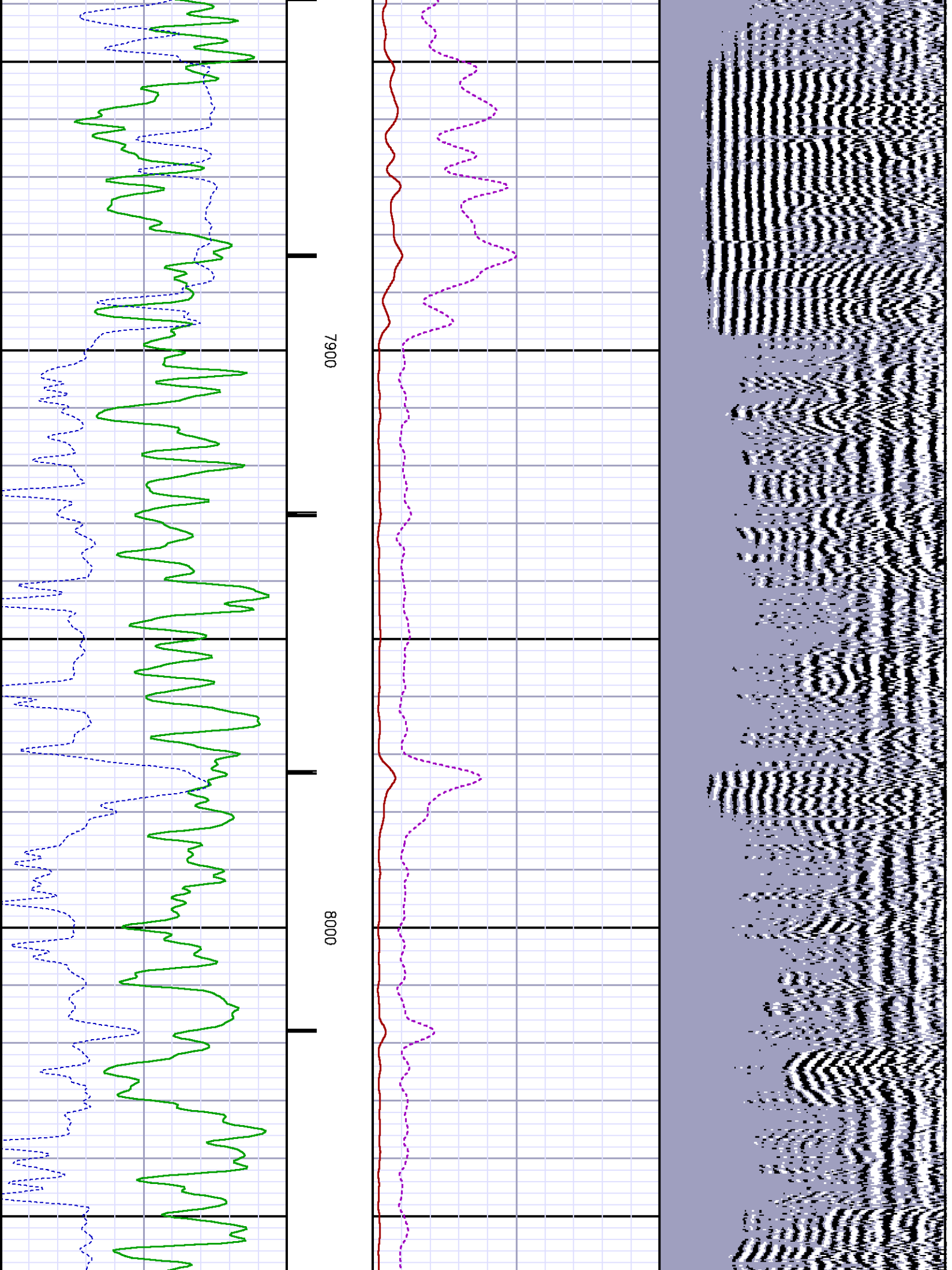


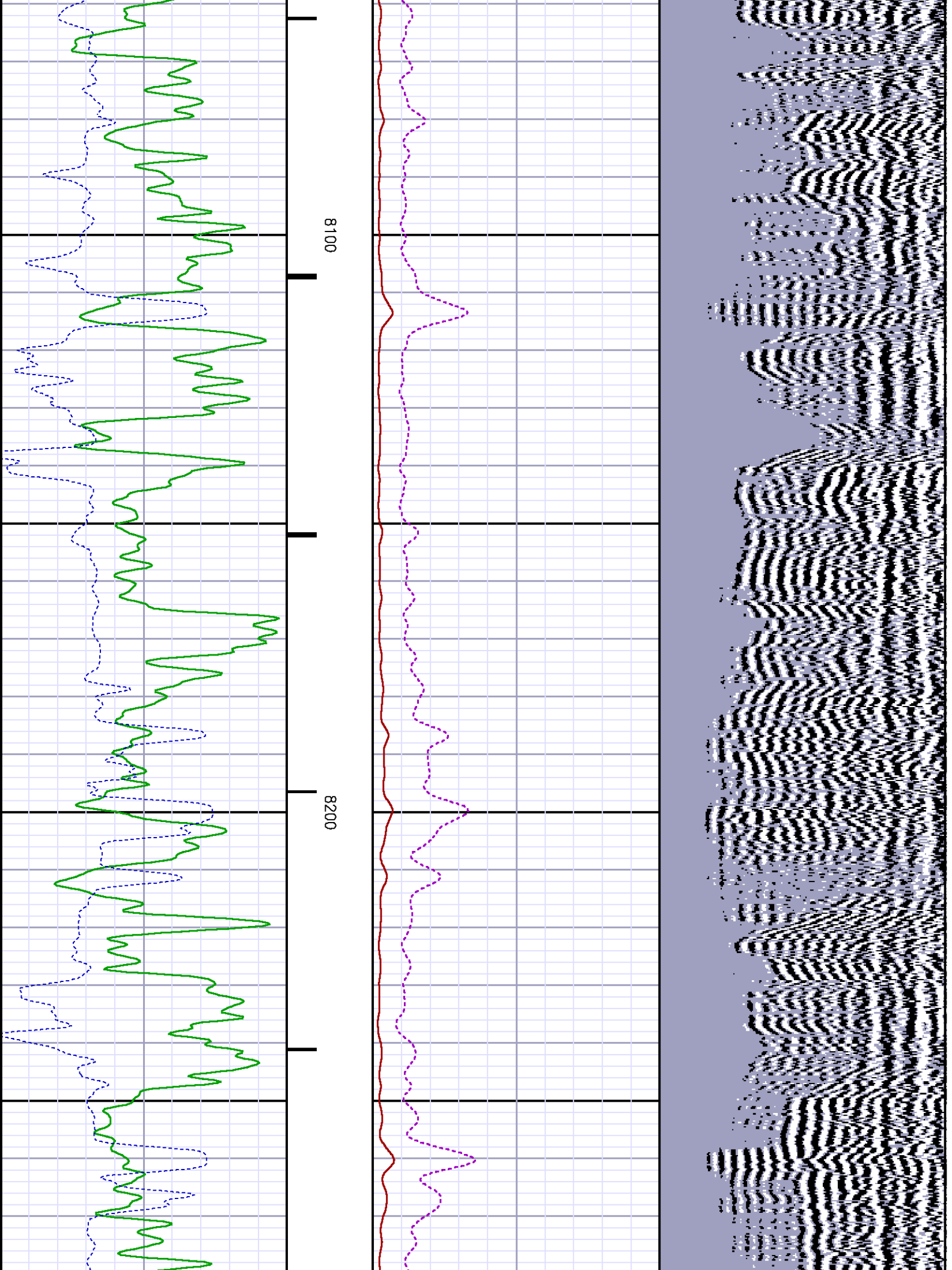


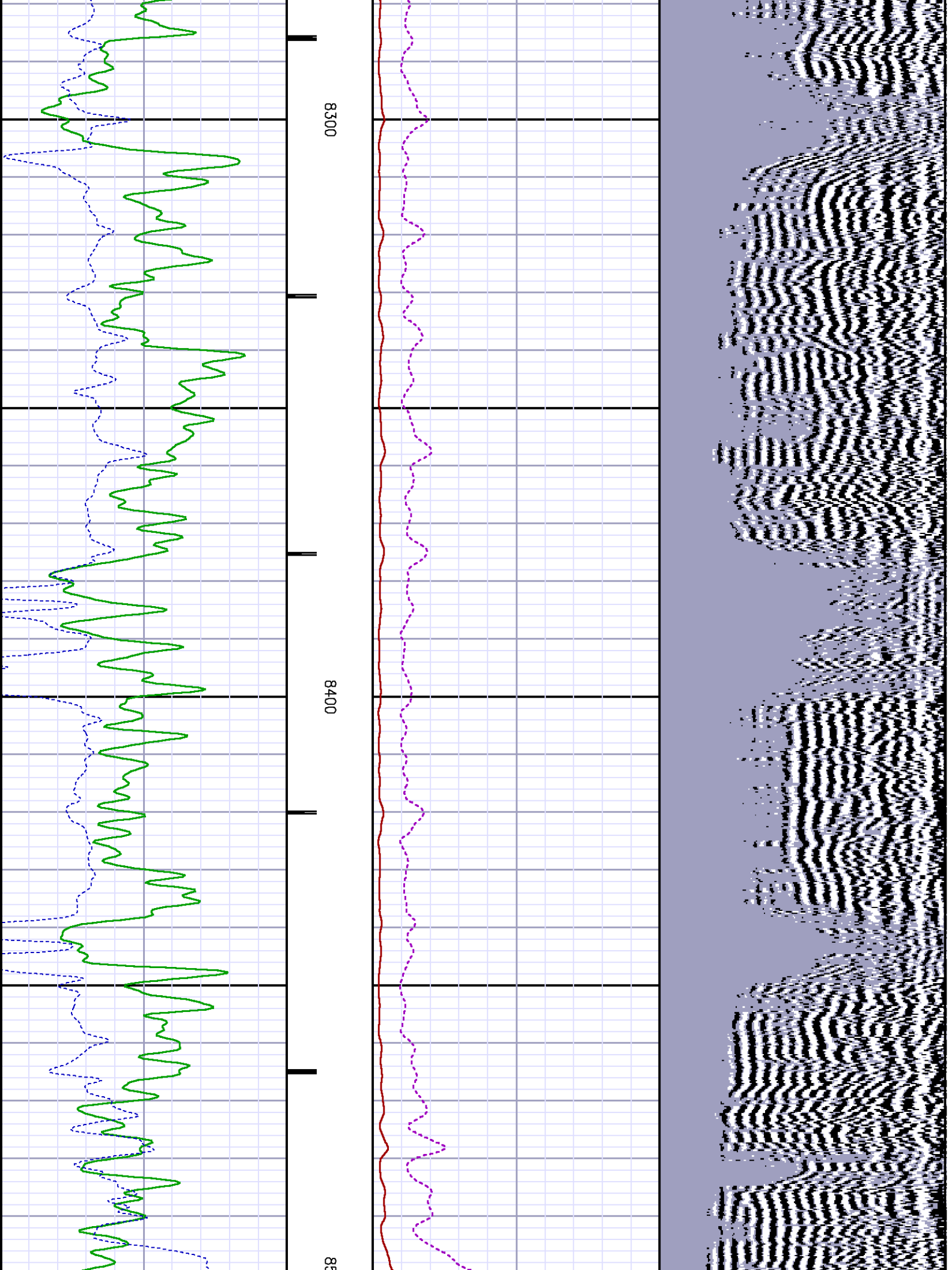


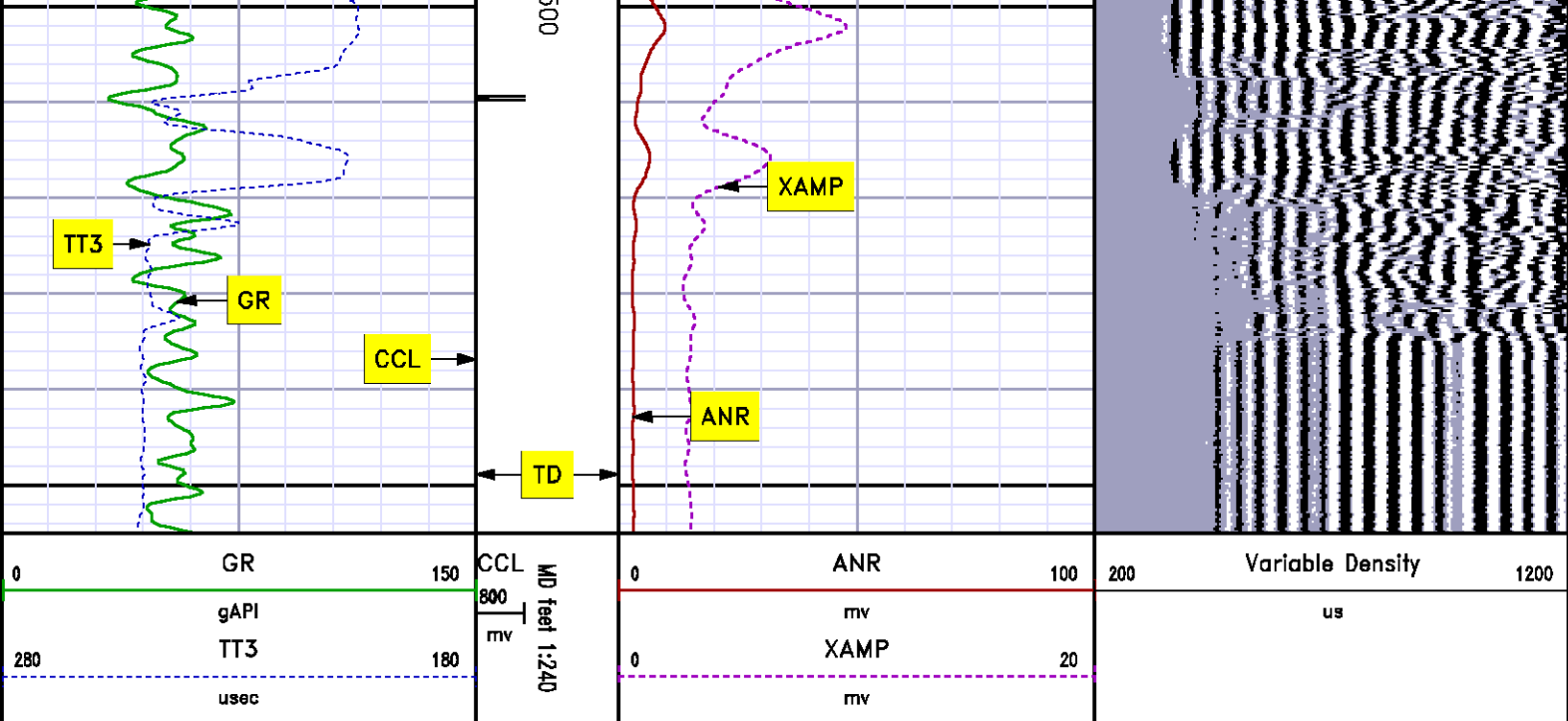












MAIN SECTION **SECONDARY PRESENTATION** **0 PSI**

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	312.910	usec	18.051	8584.000
RAL	Amp Gate Start Near	200.391	usec	18.051	8584.000
RAL	Amp Gate Start Radial	200.391	usec	18.051	8584.000
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DEPTH OFFSETS

(for Acquired Curves)

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		AR5	AR6	AR7	AR8	CHV	FPR2		
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3		
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1426XA	-15.750	AFAR	SIG	TT5					
2459XA	-11.340	CCL							
2459XA	-9.490	GR							
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Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WILLIAMS PRODUCTION COMPANY

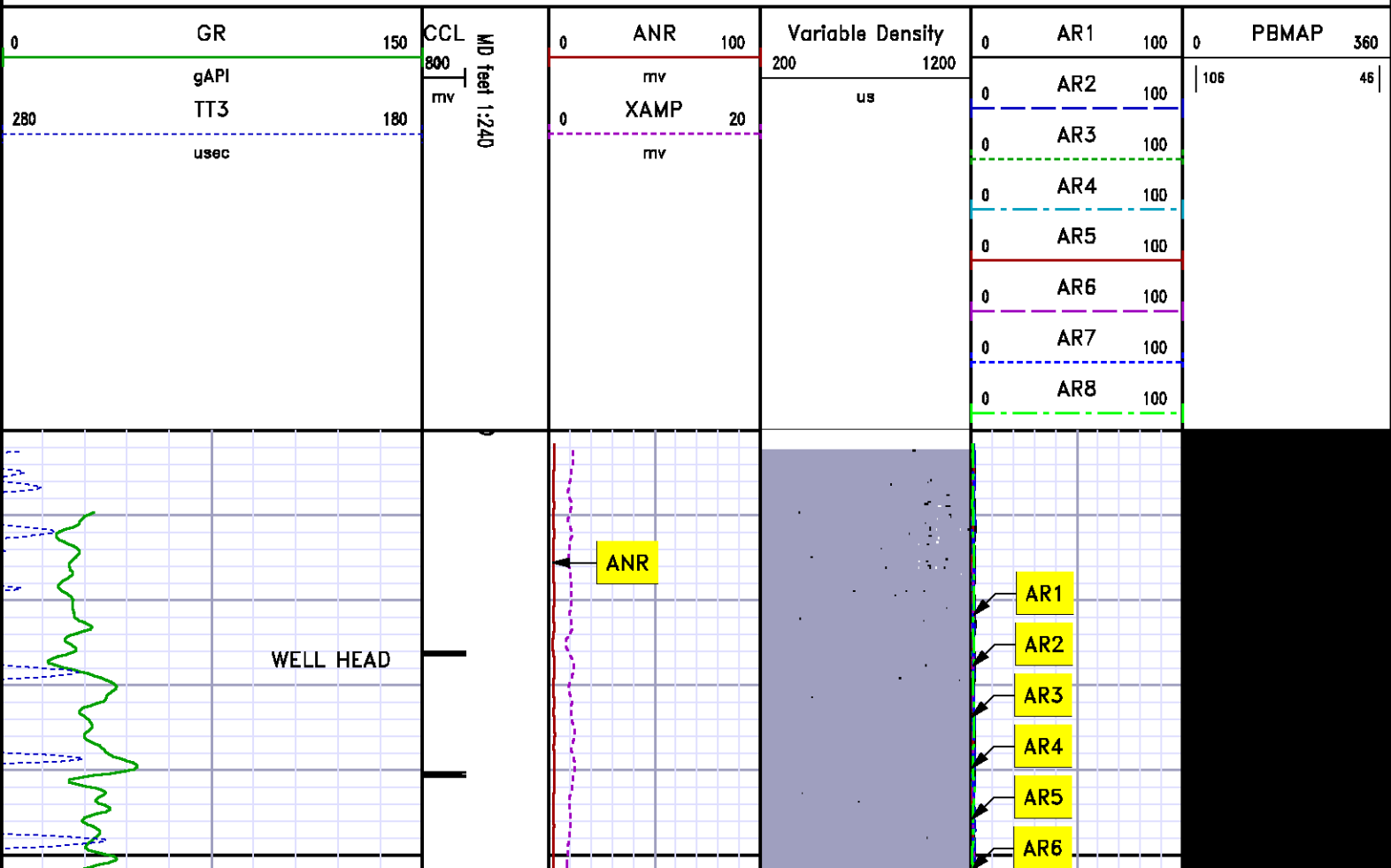
Well : PA 442-12

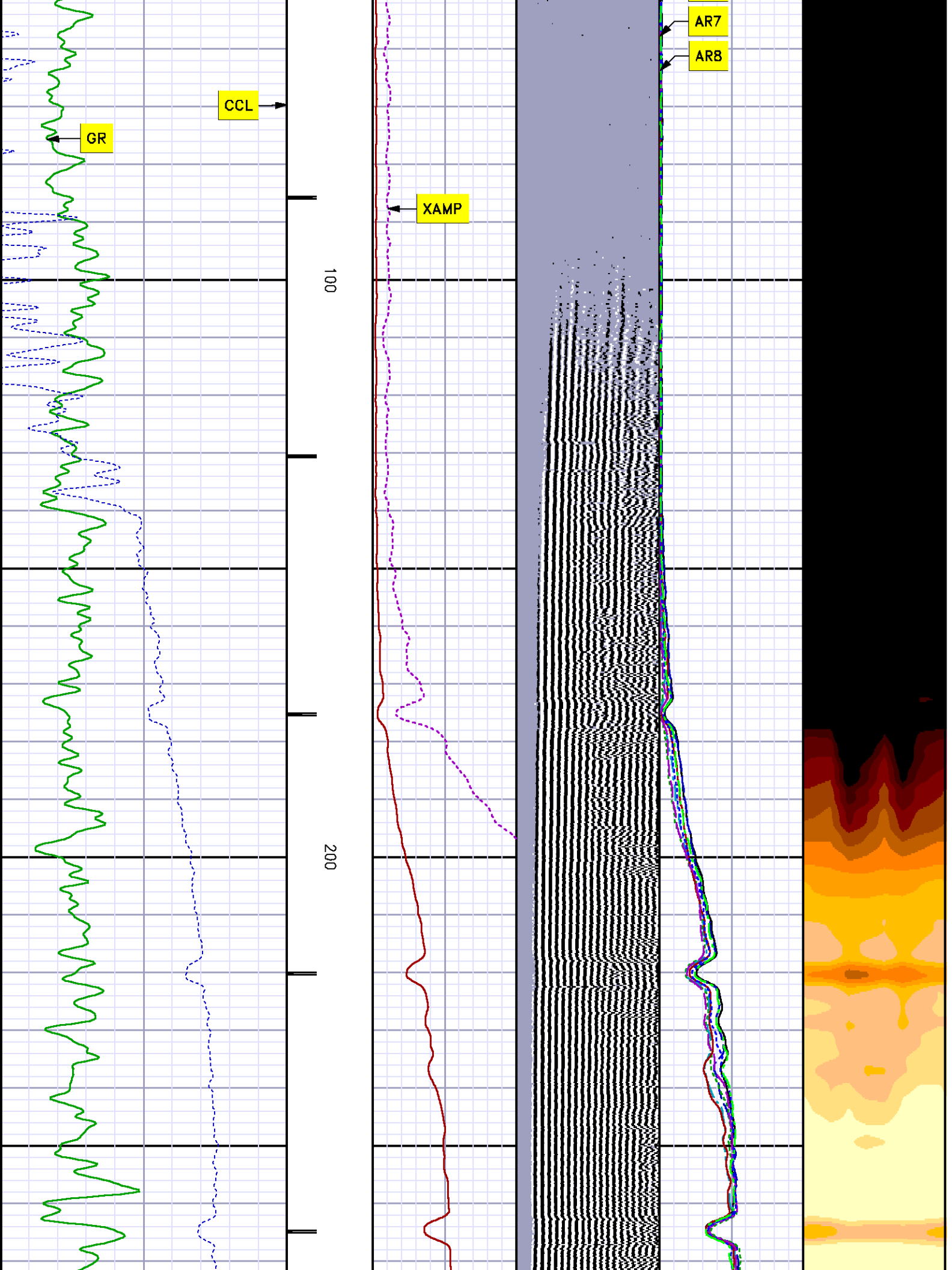
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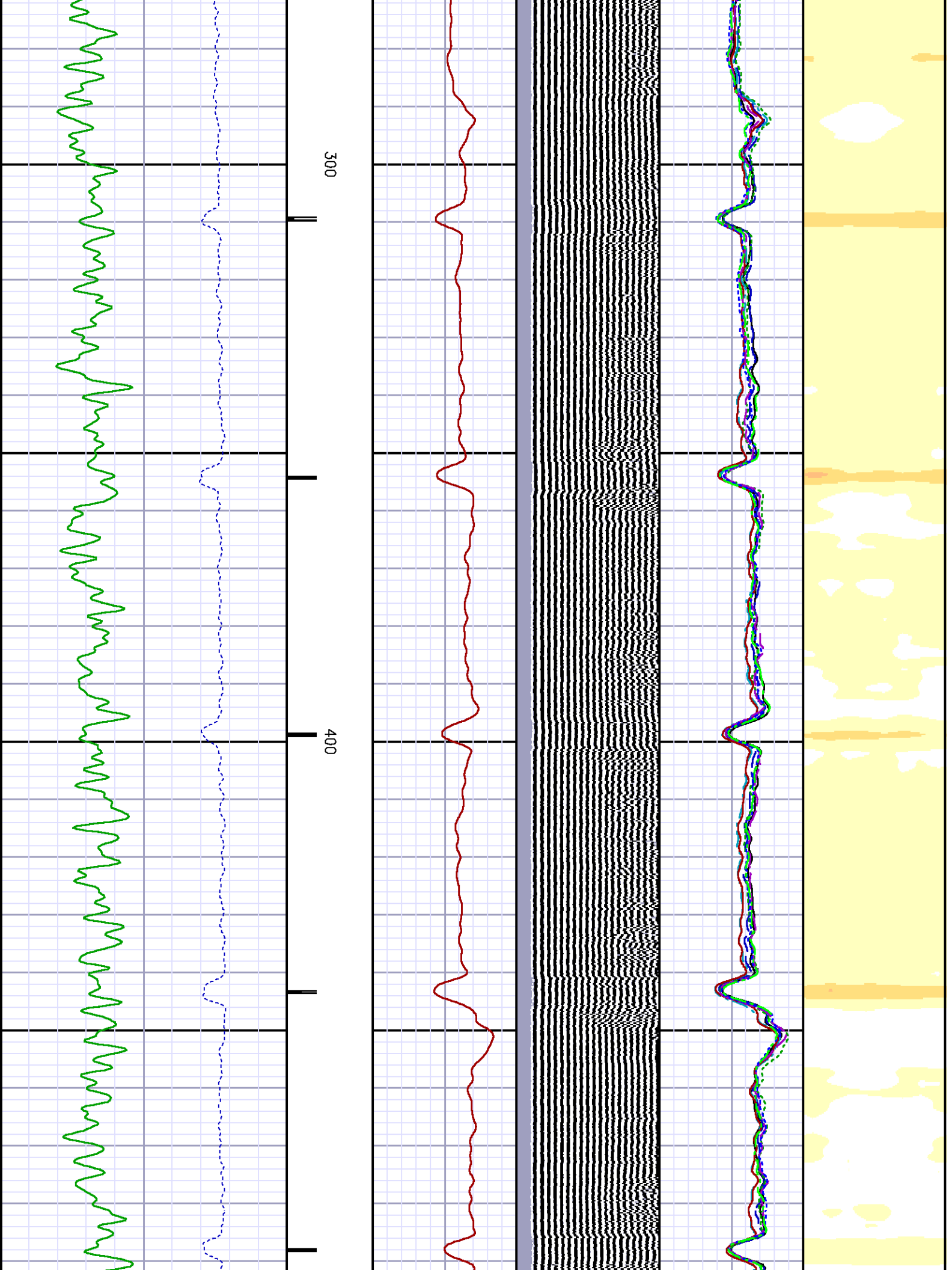
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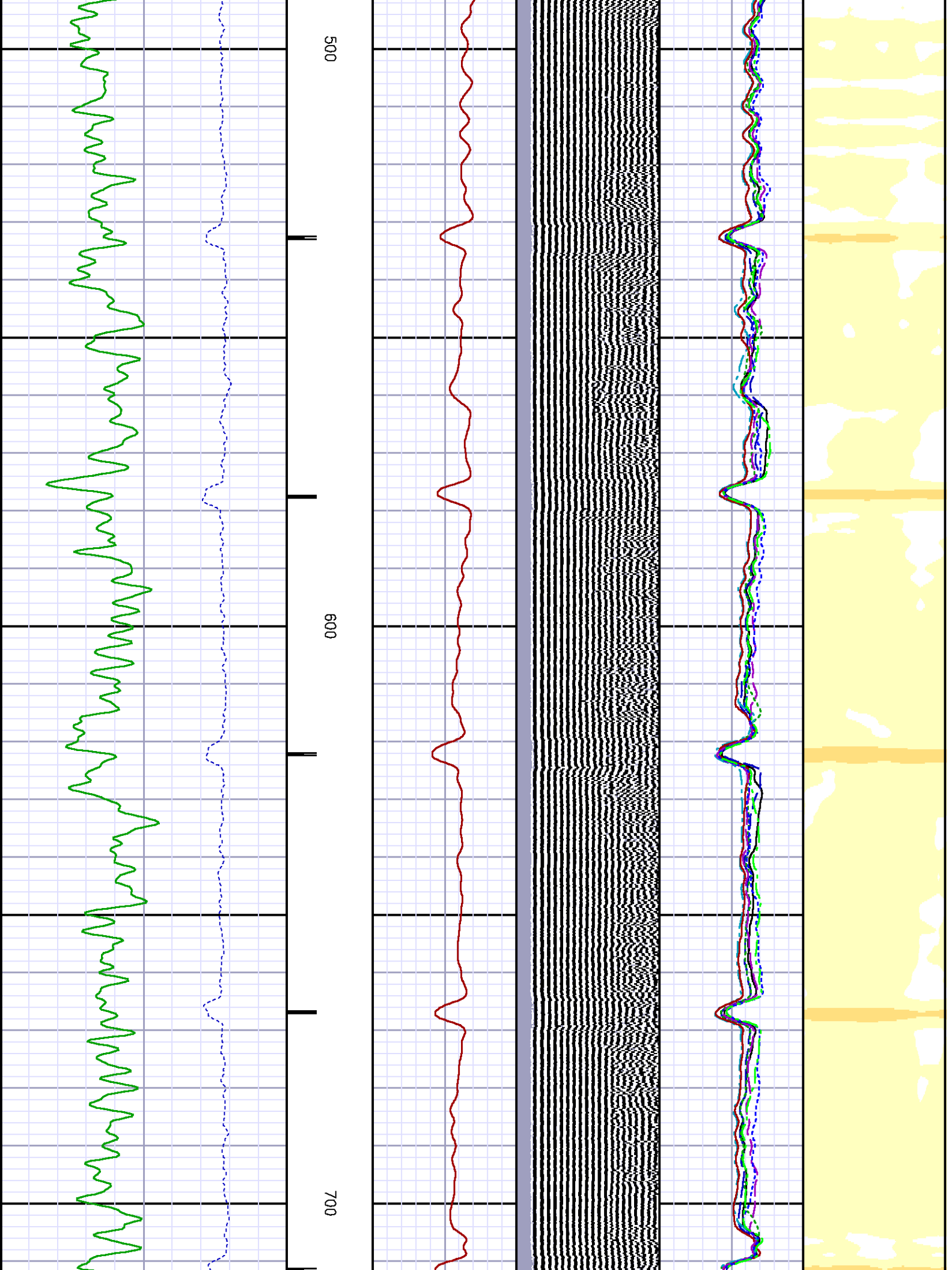
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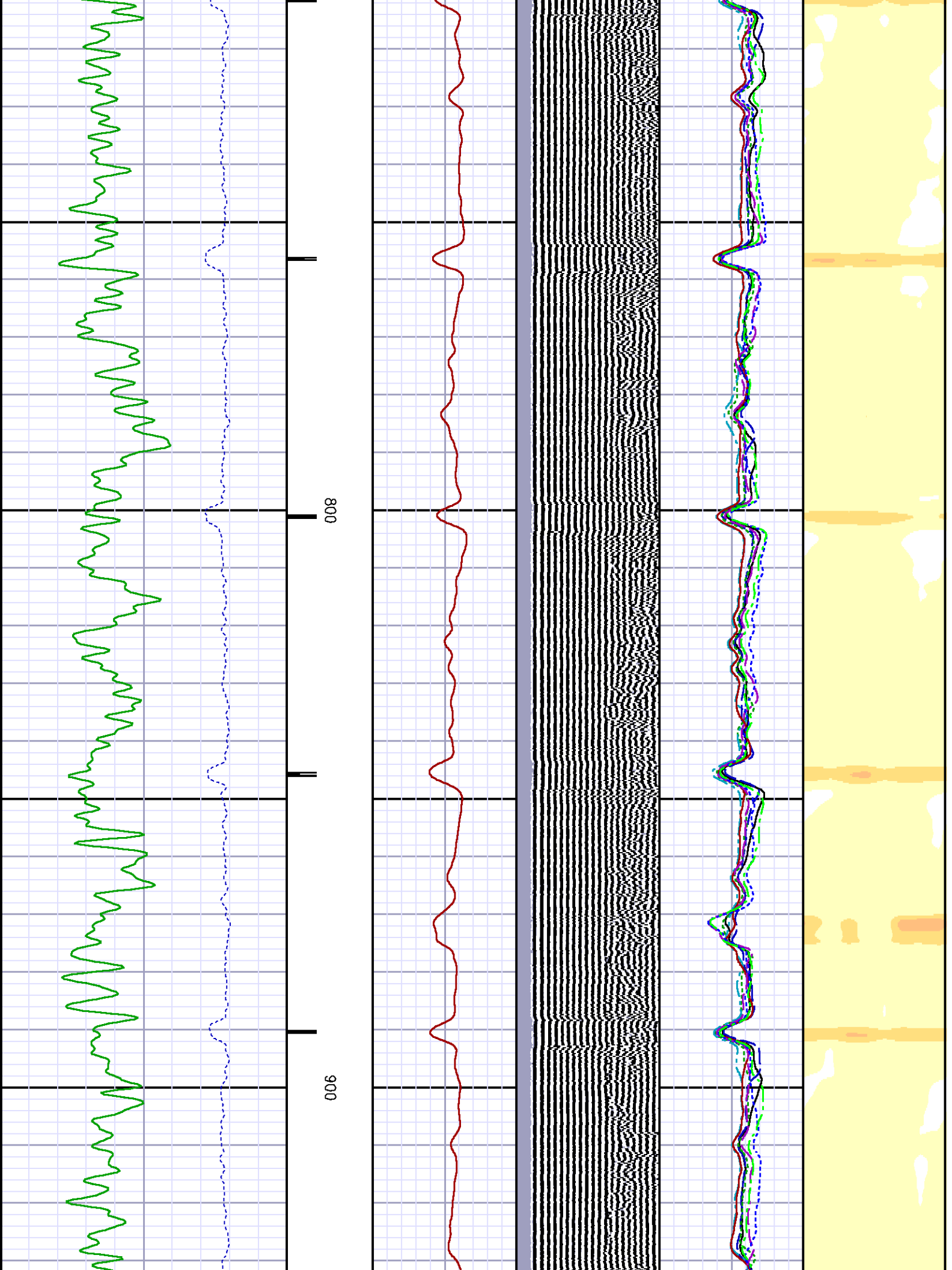
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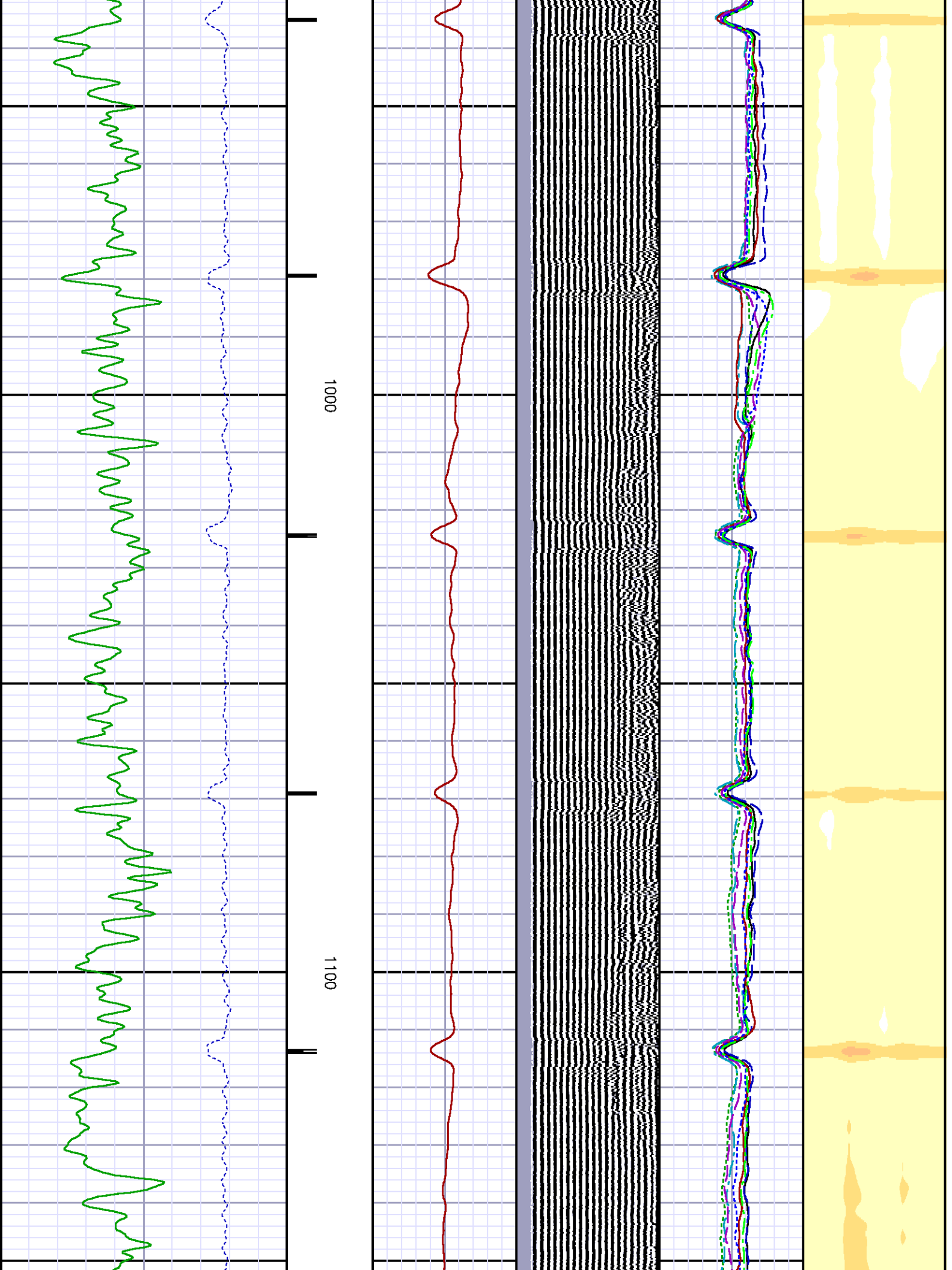


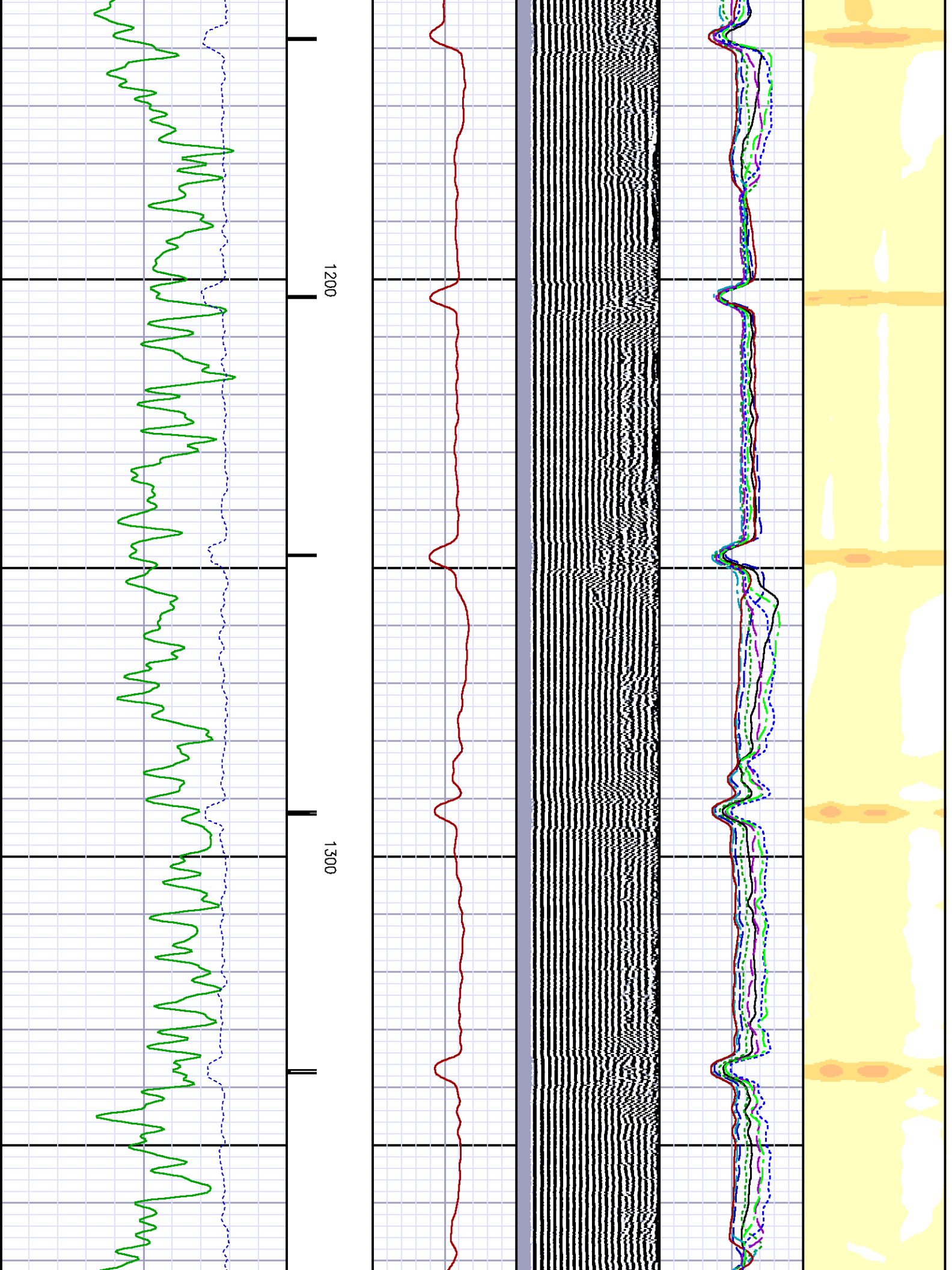


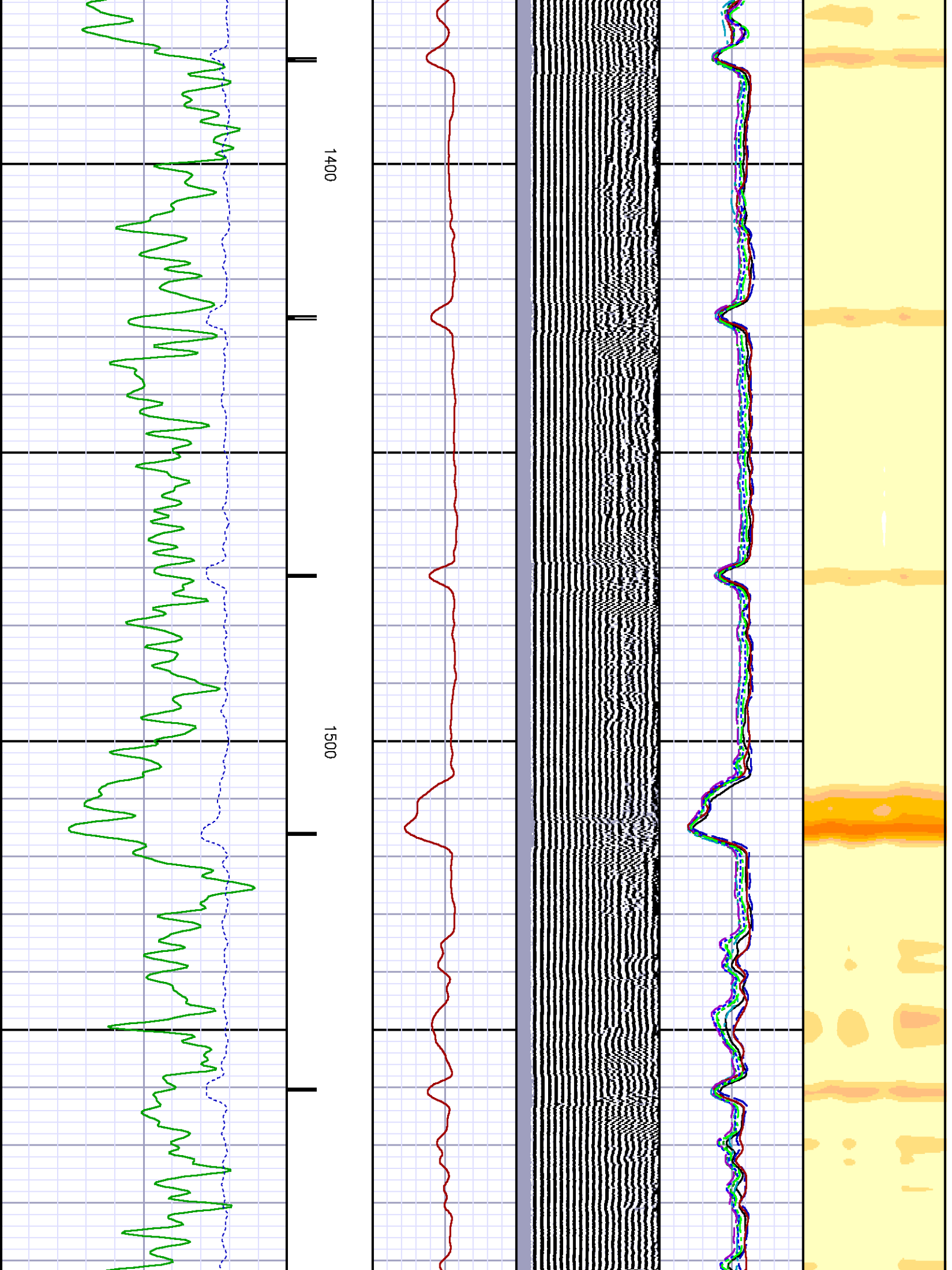


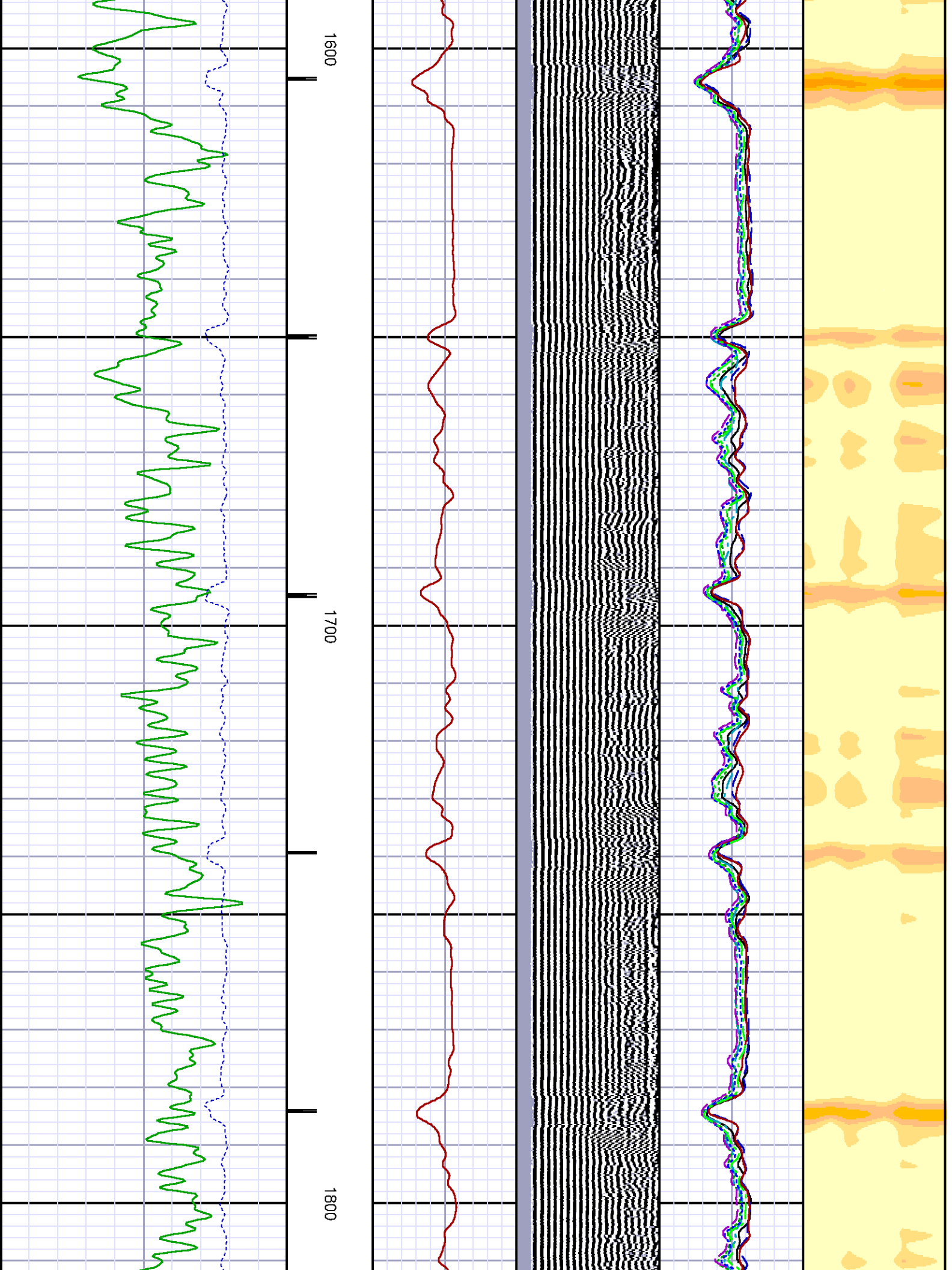


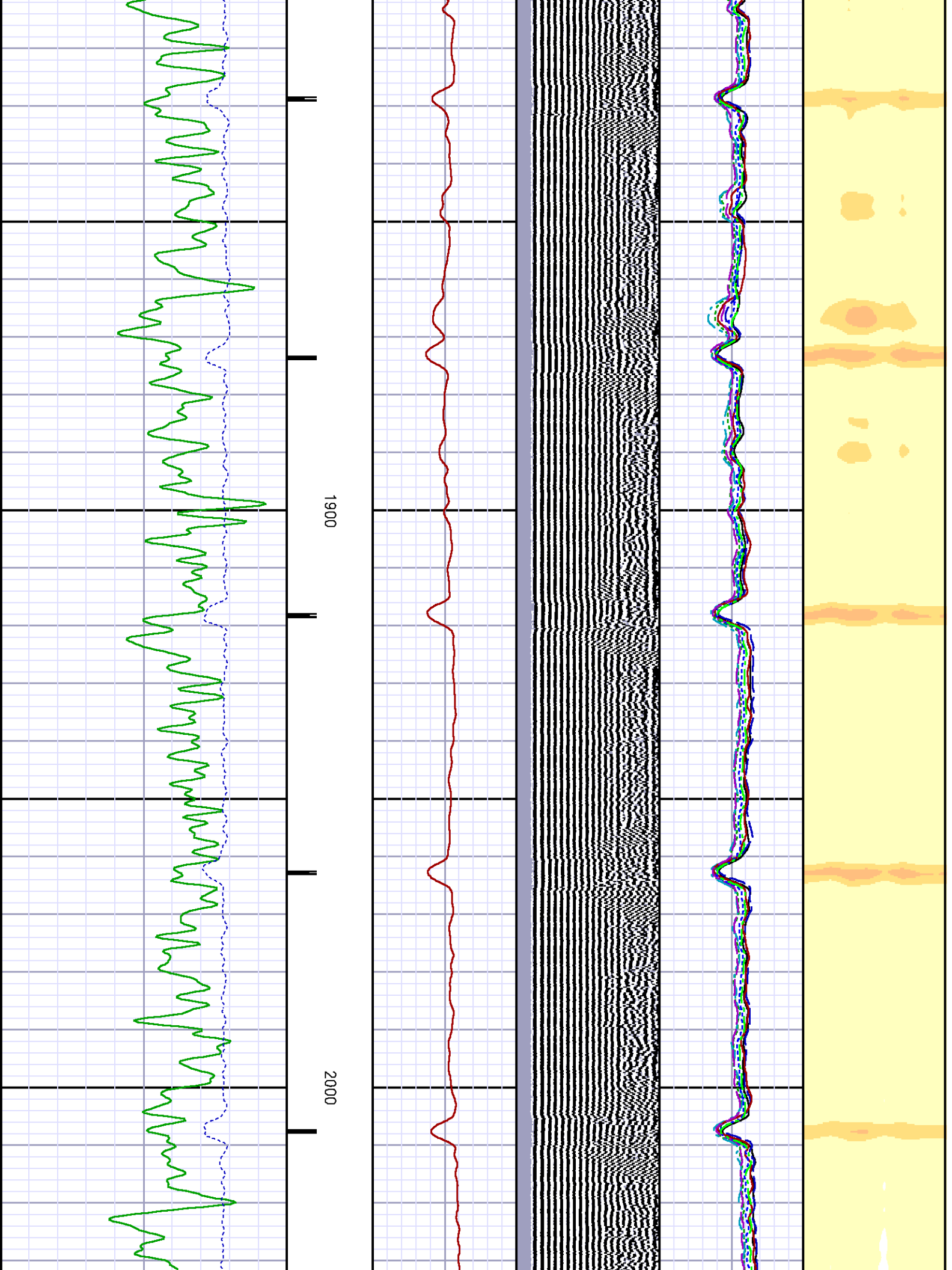


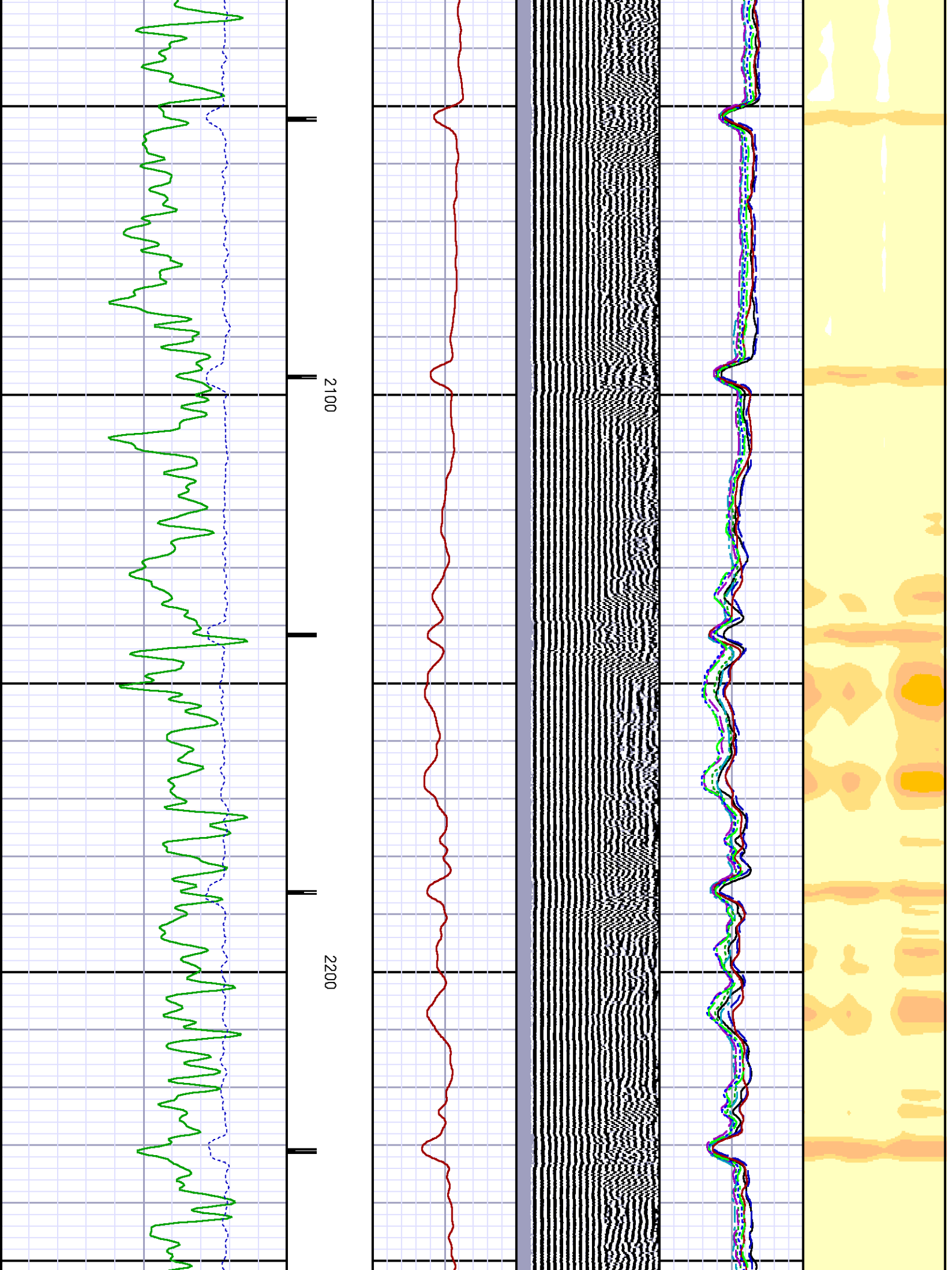


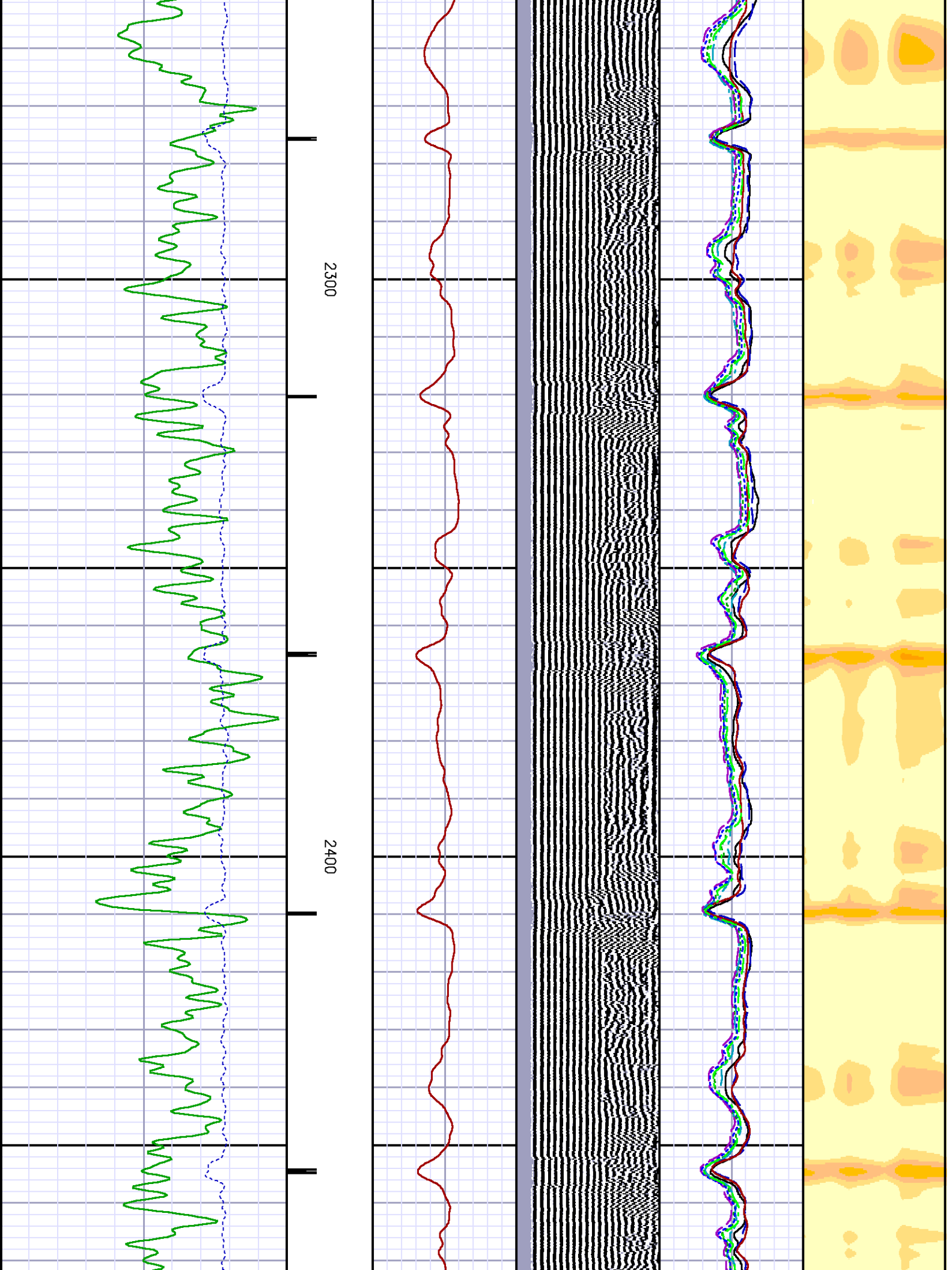


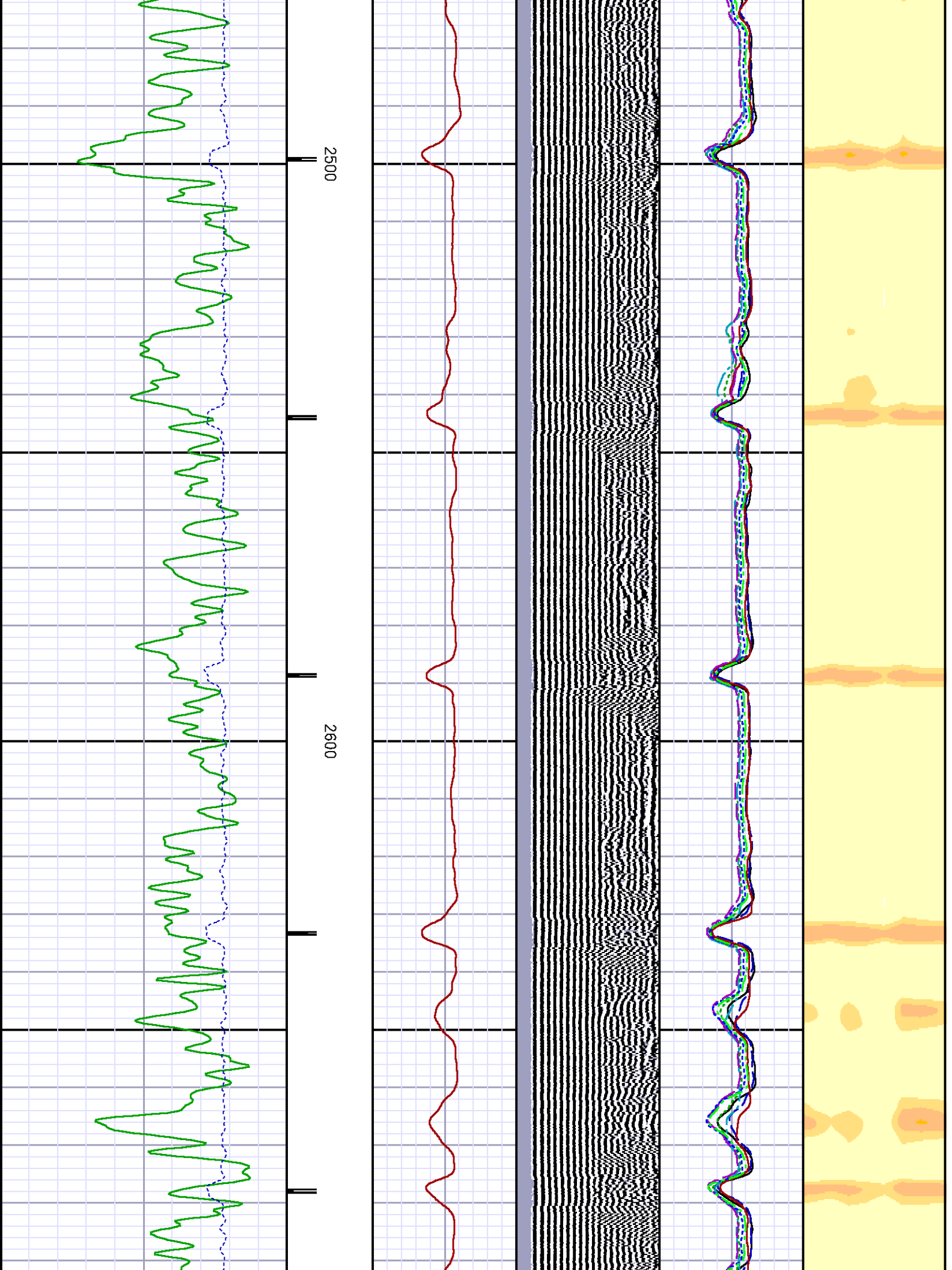


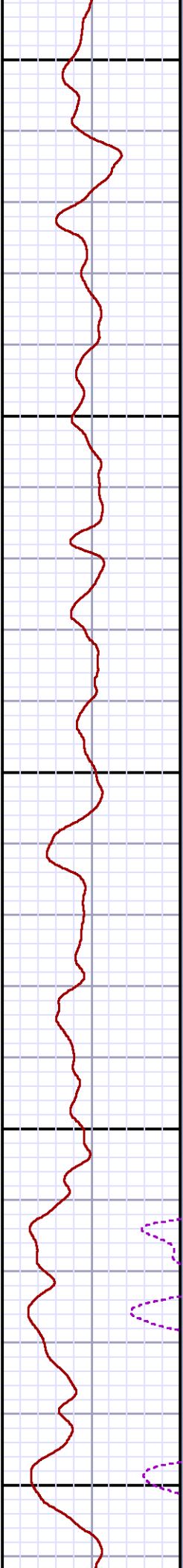
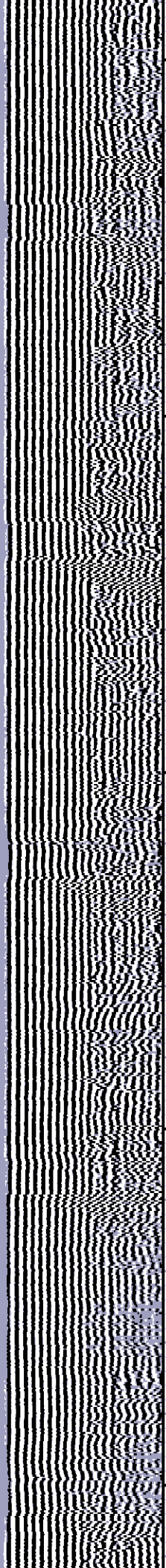
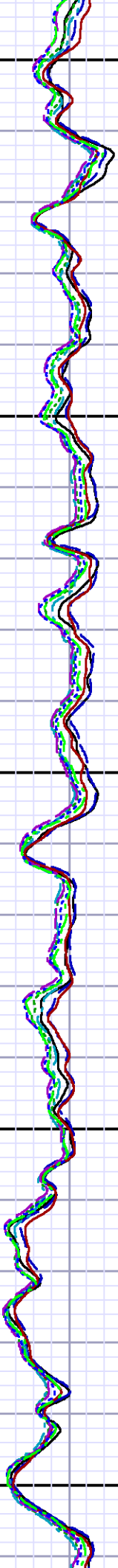
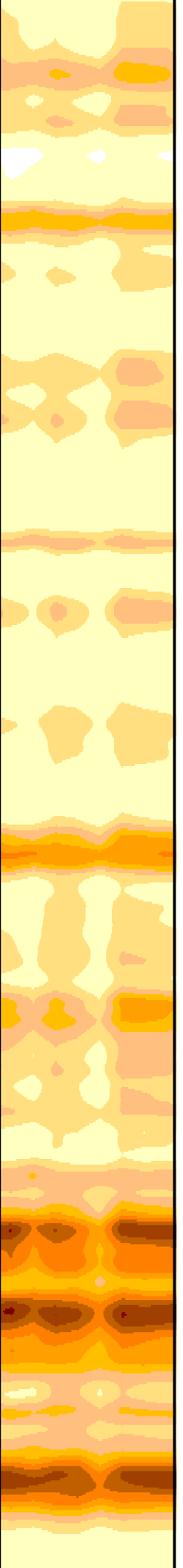








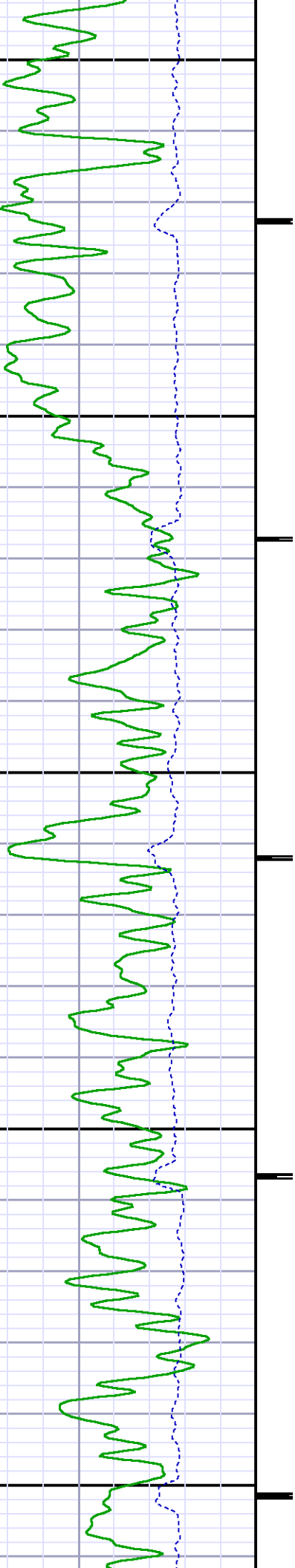


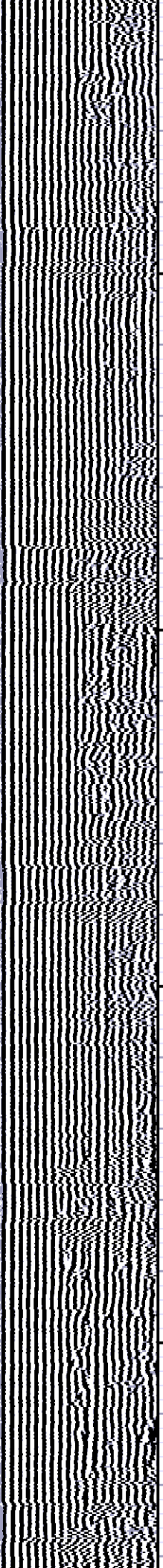
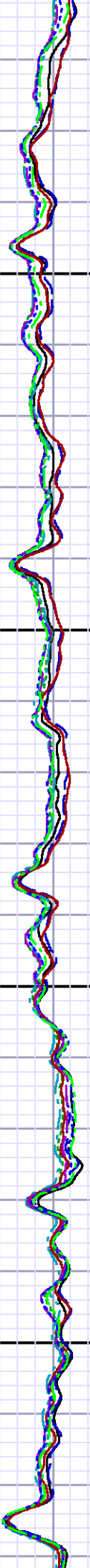
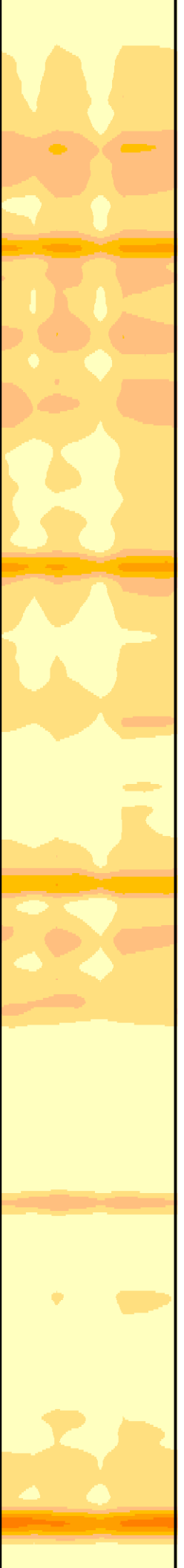


2700

2800

2900

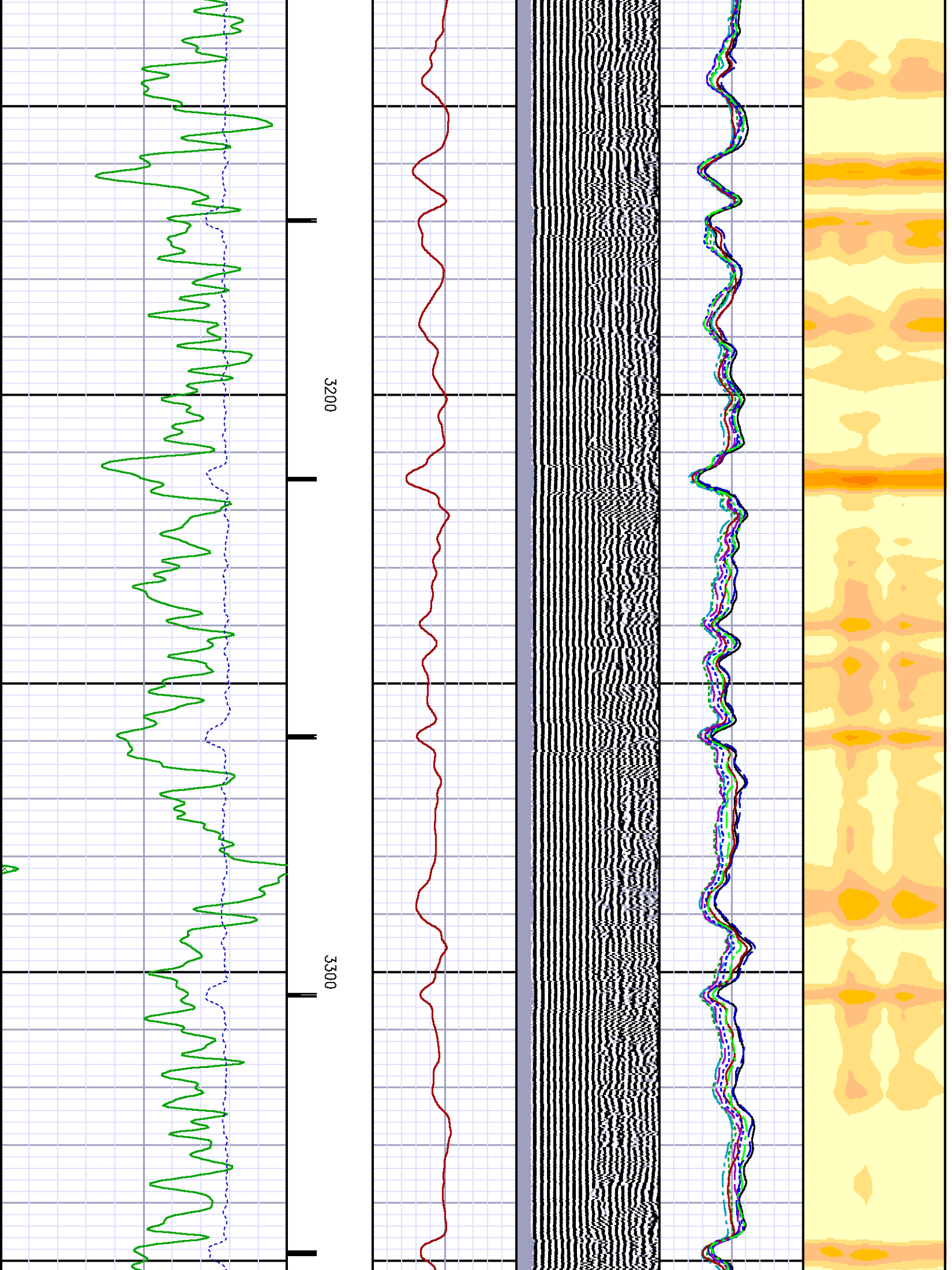


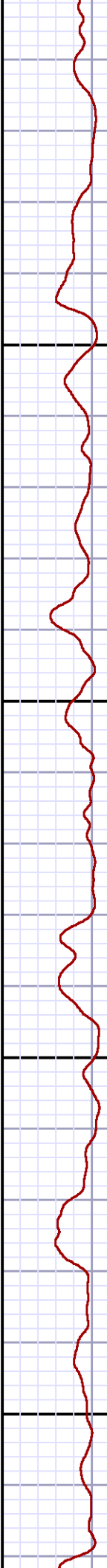
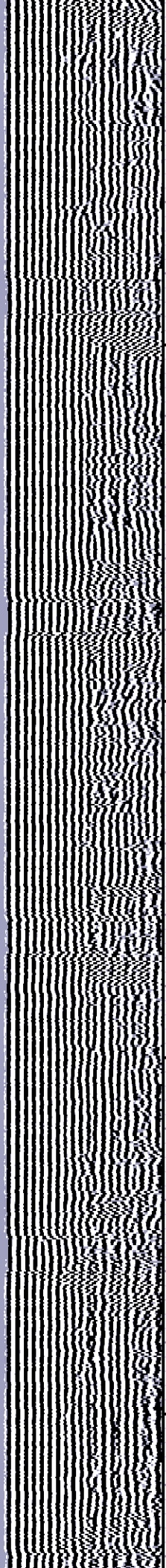
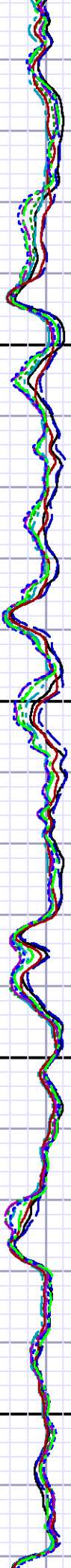
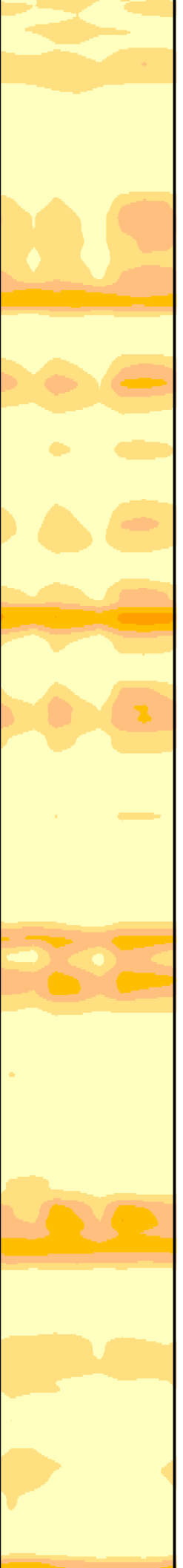


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3100

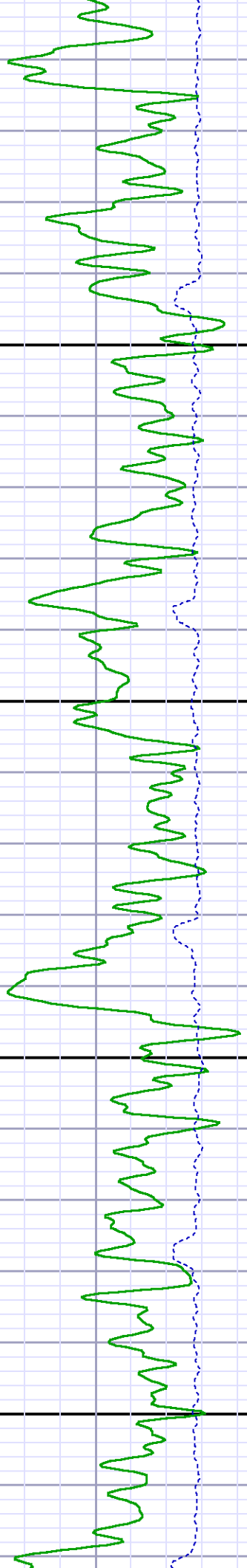


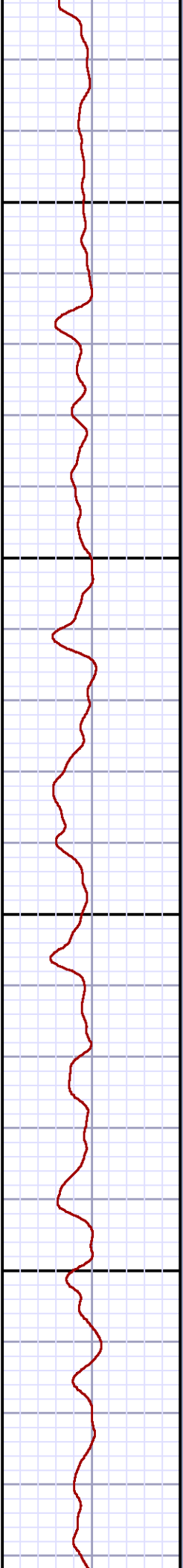
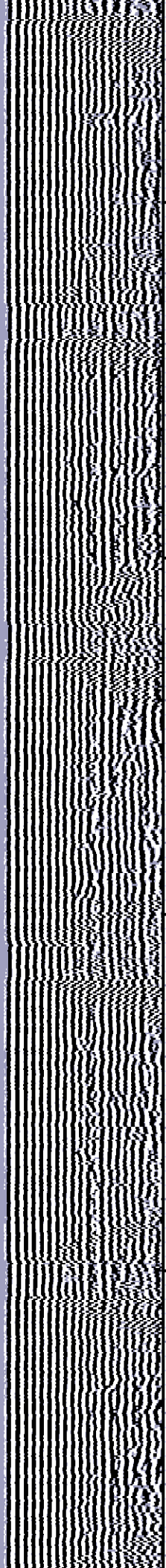
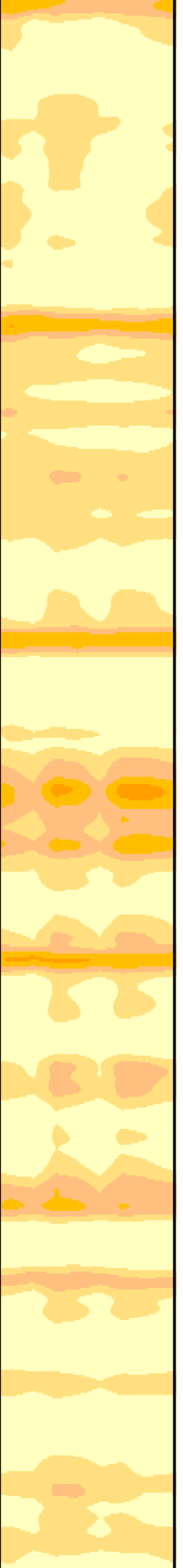




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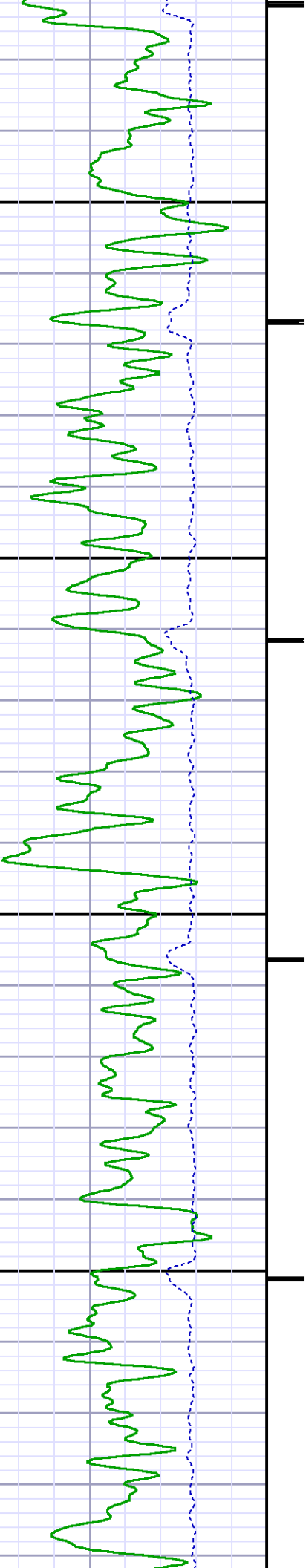
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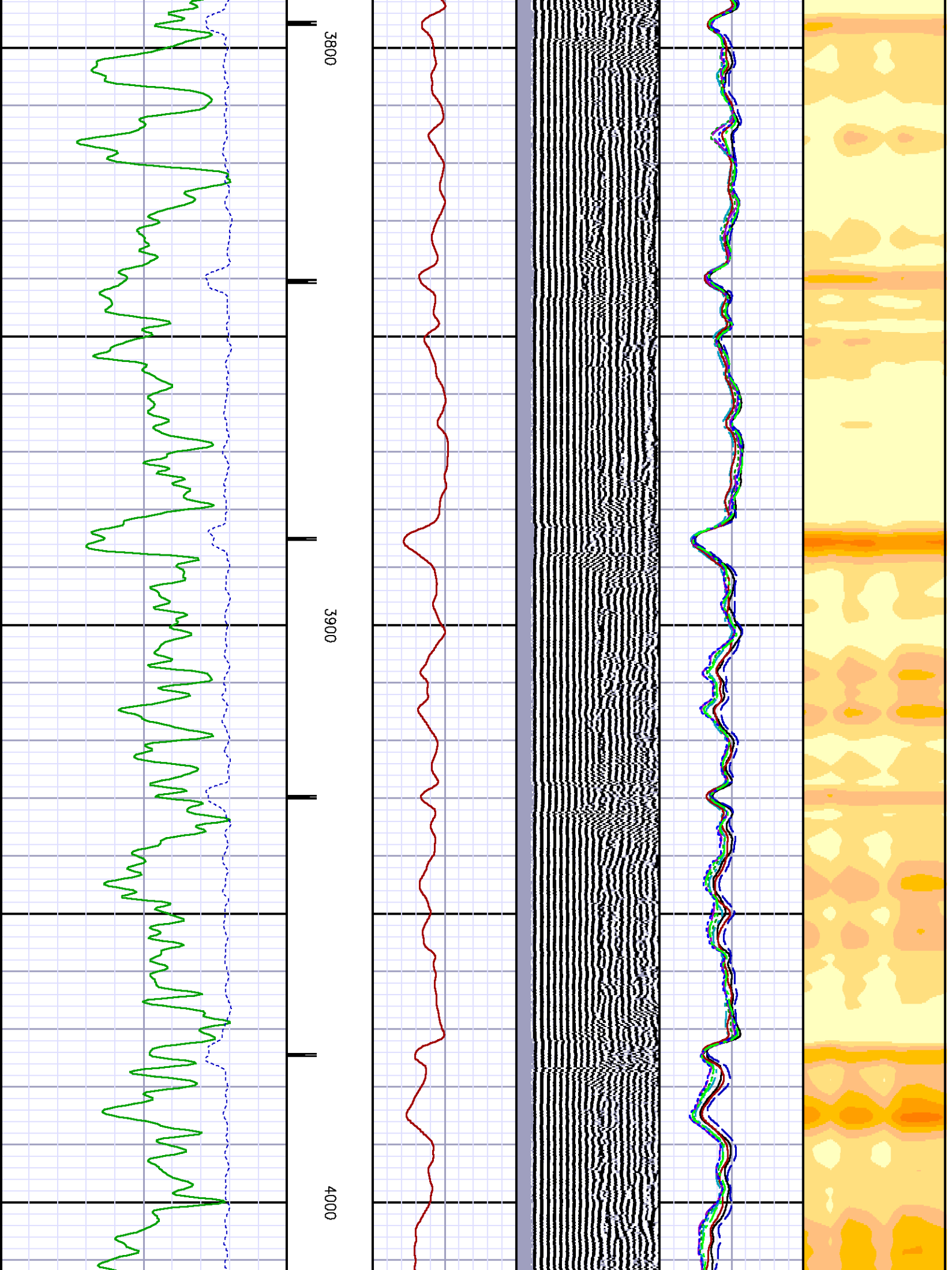


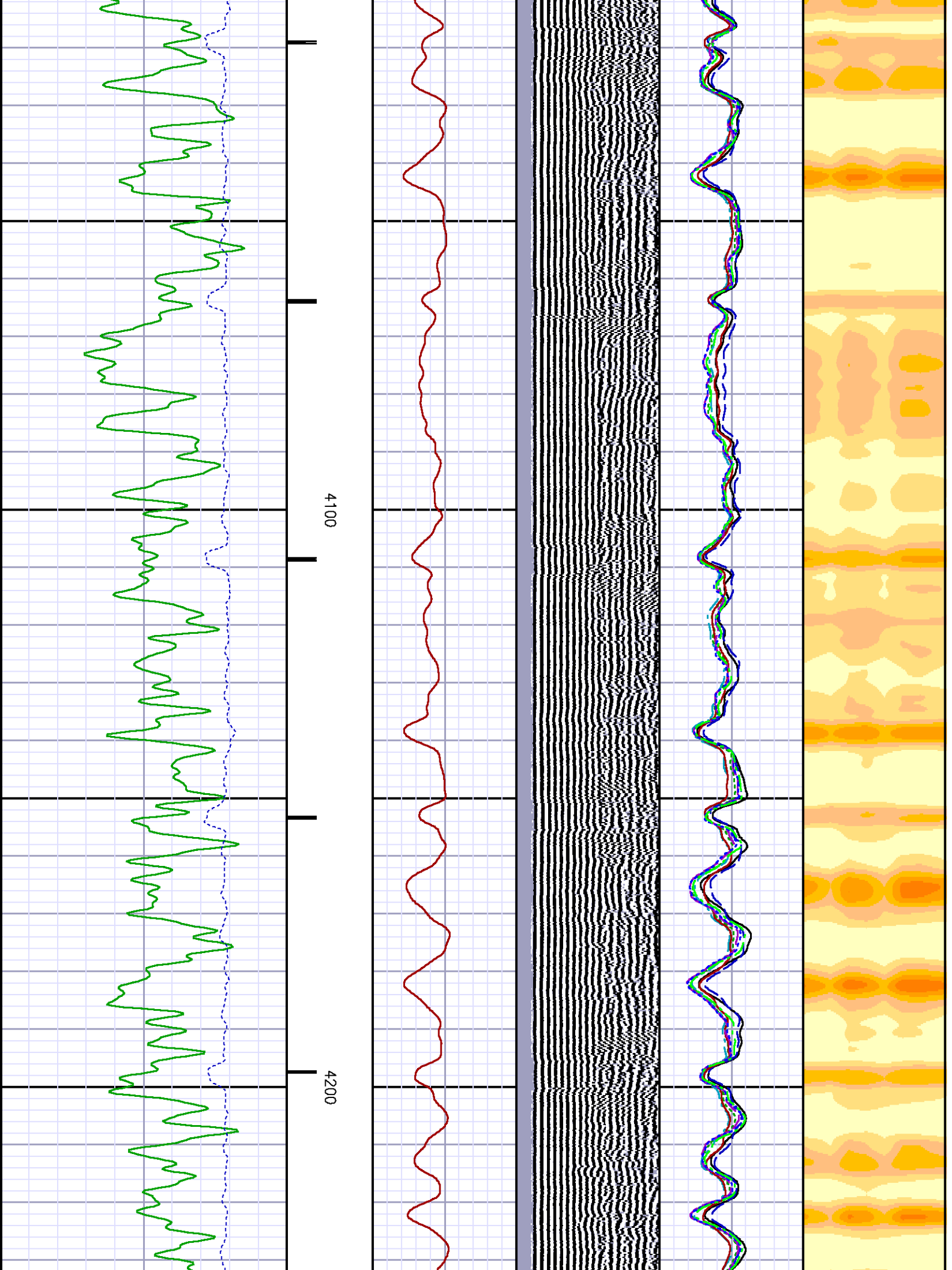


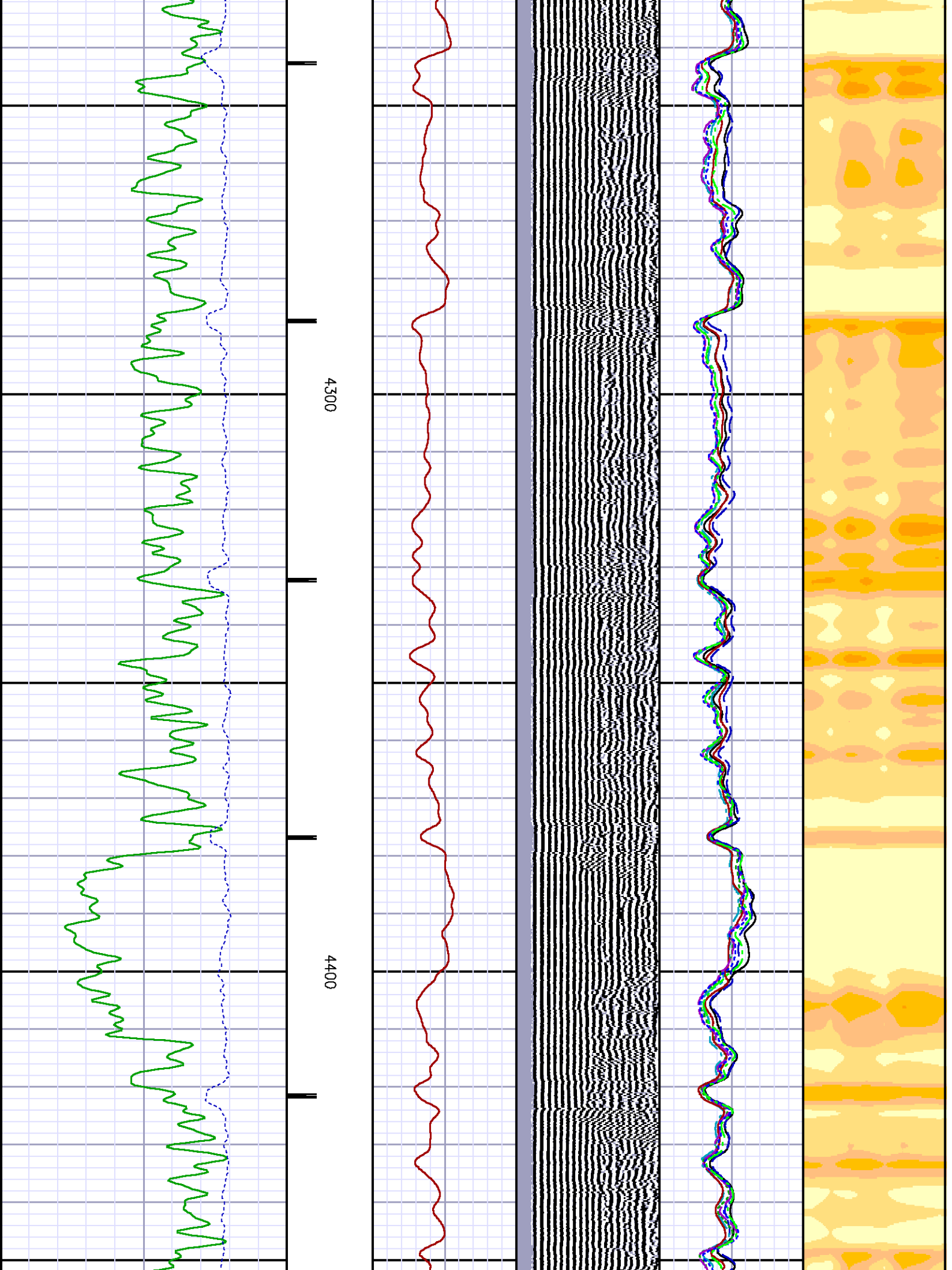
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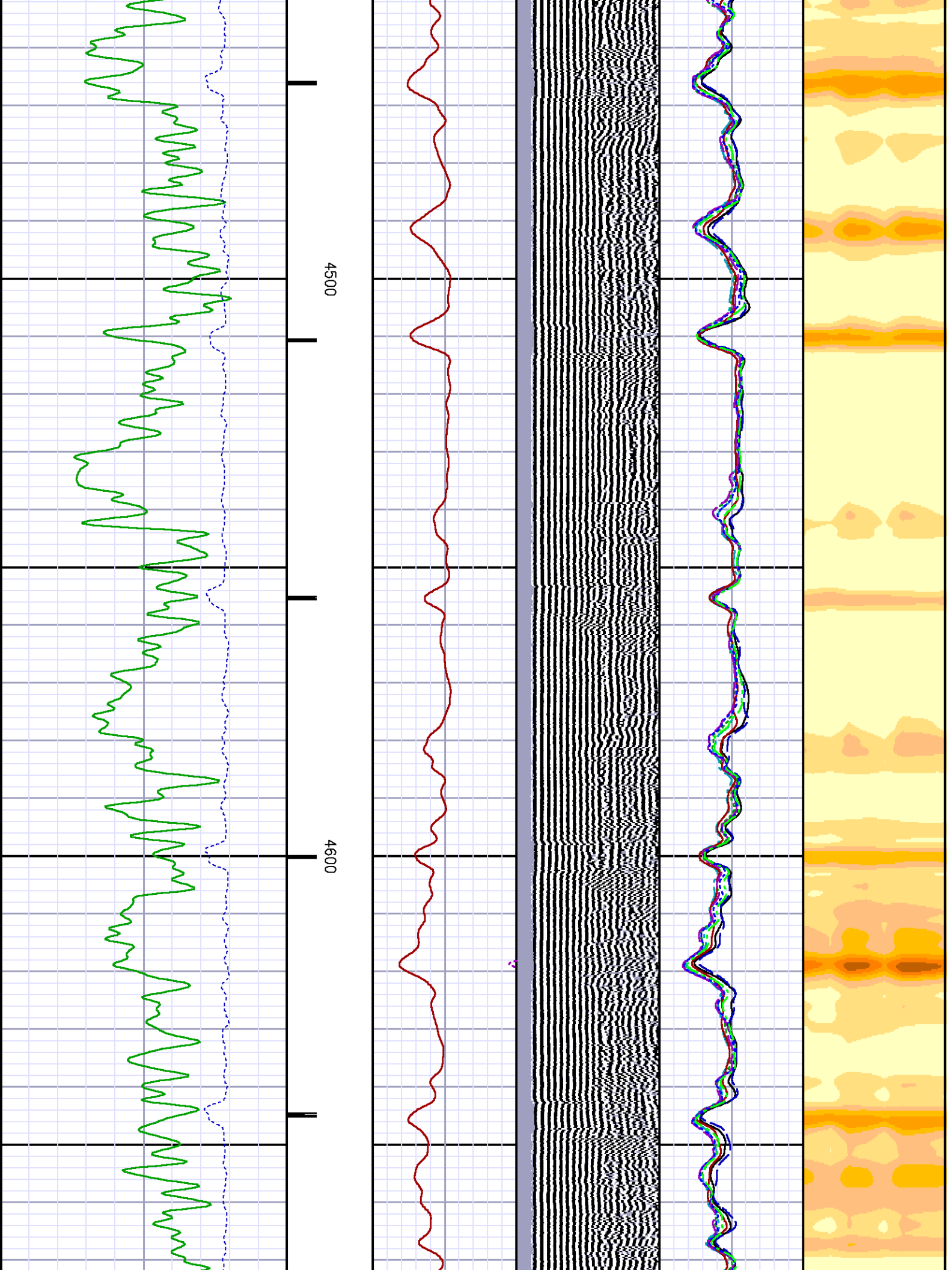
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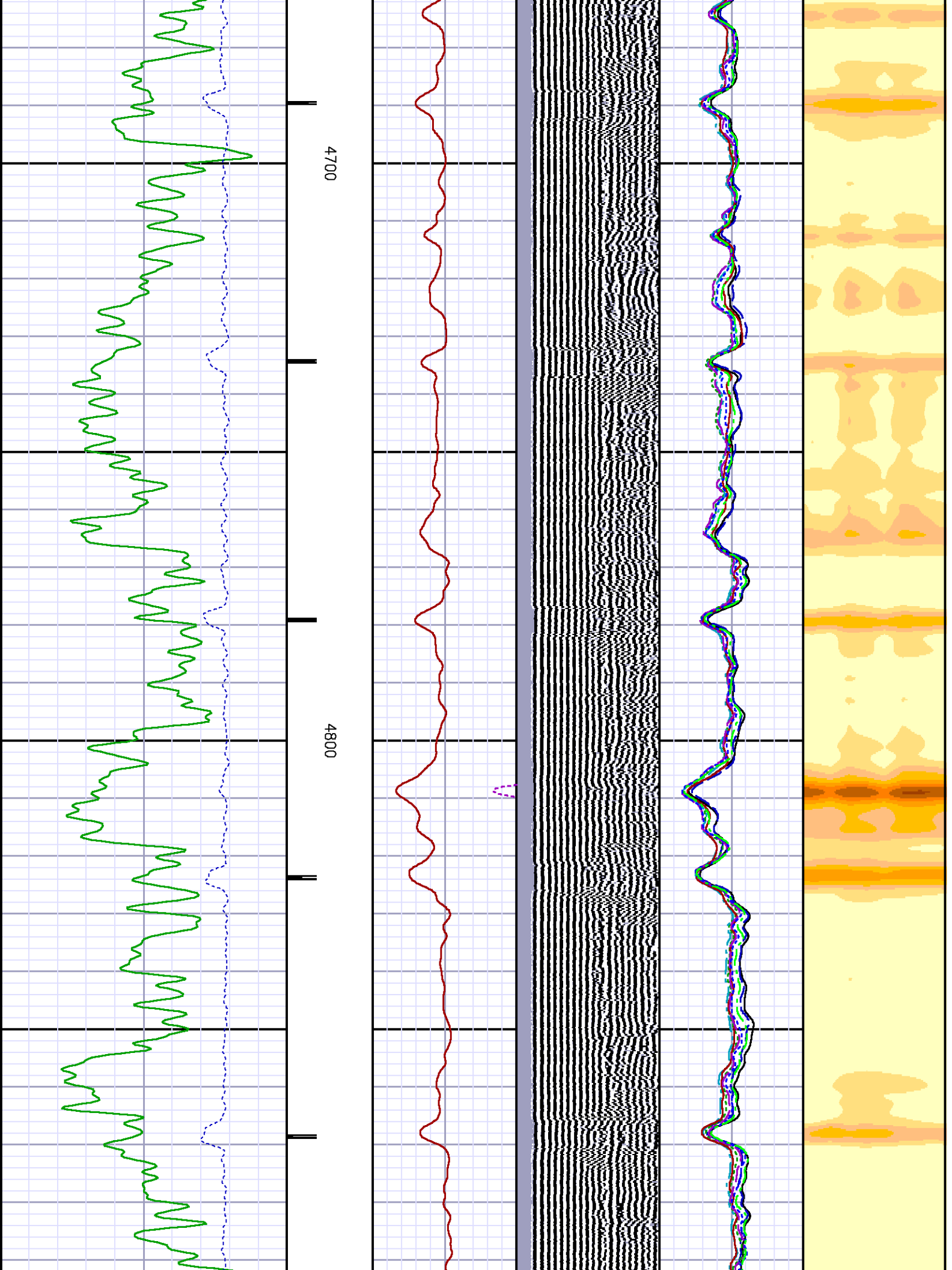


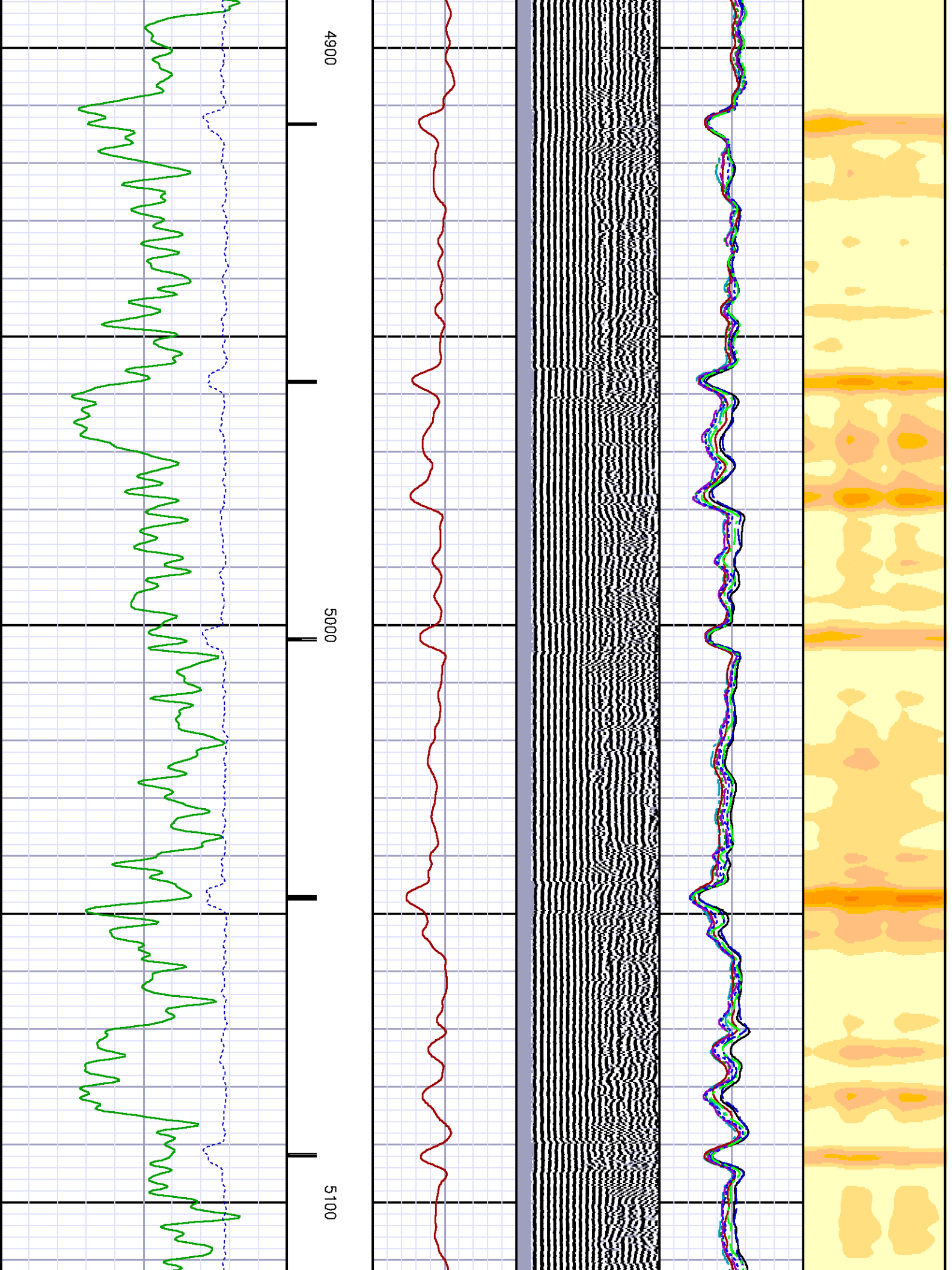


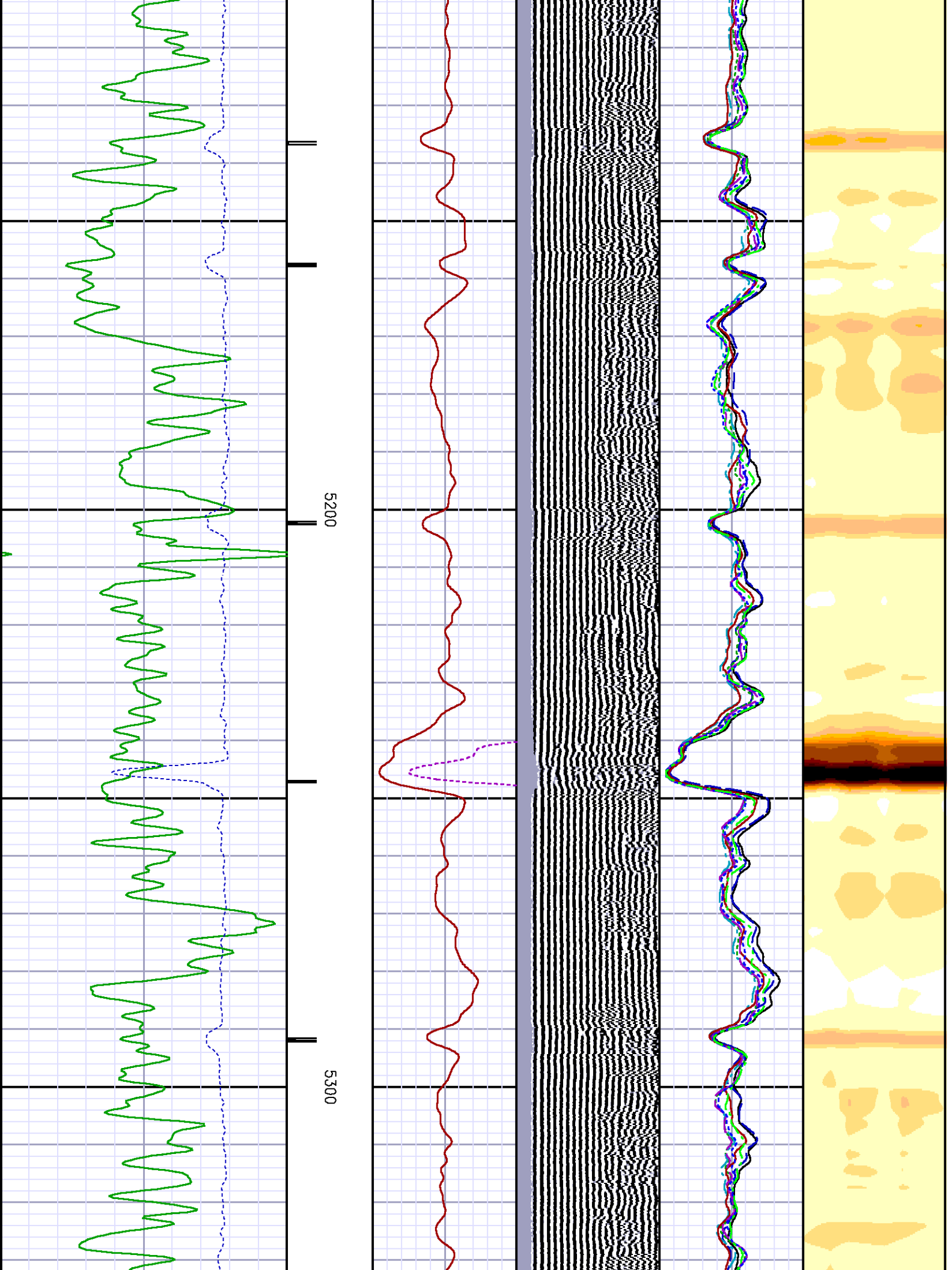


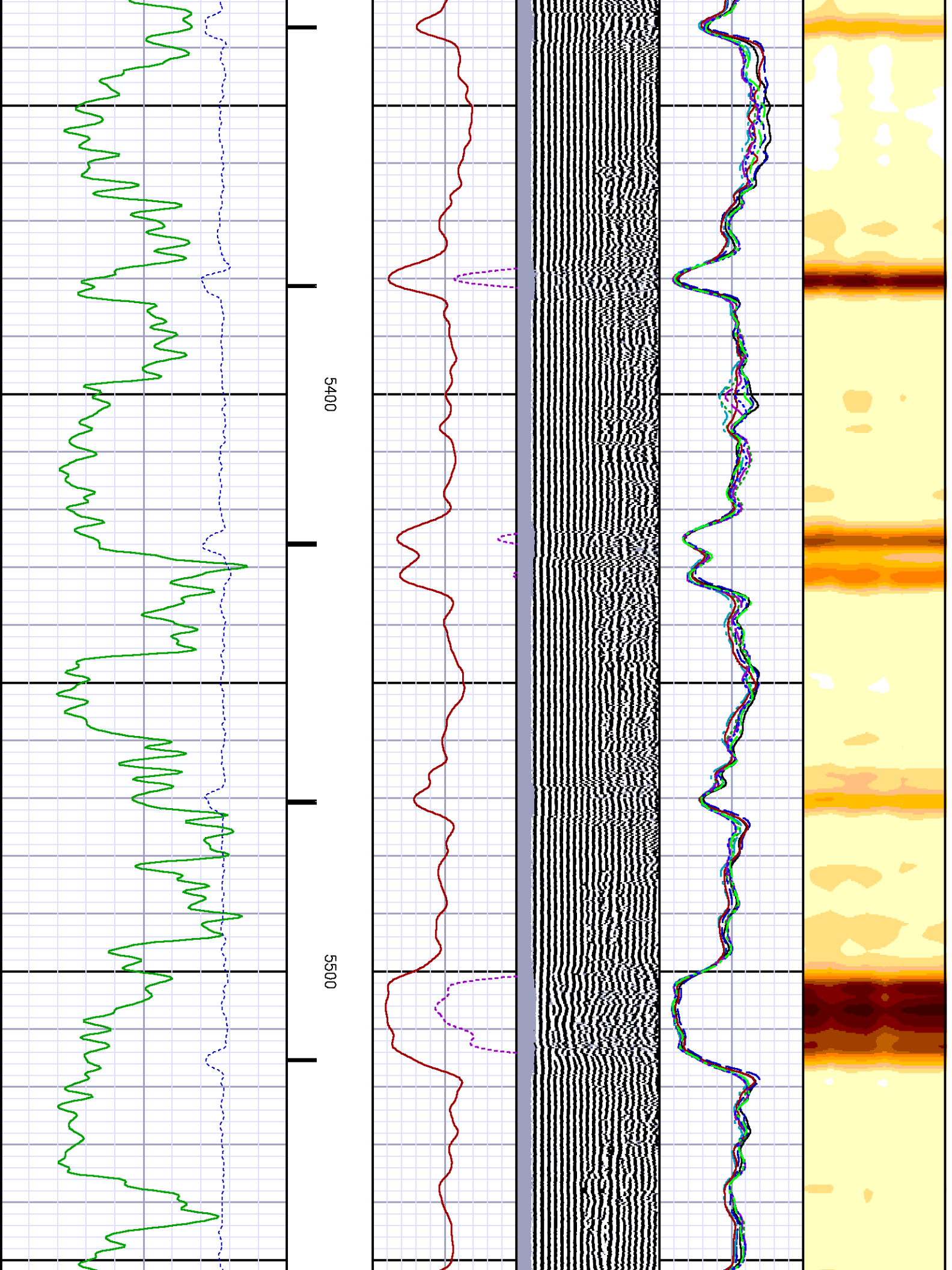


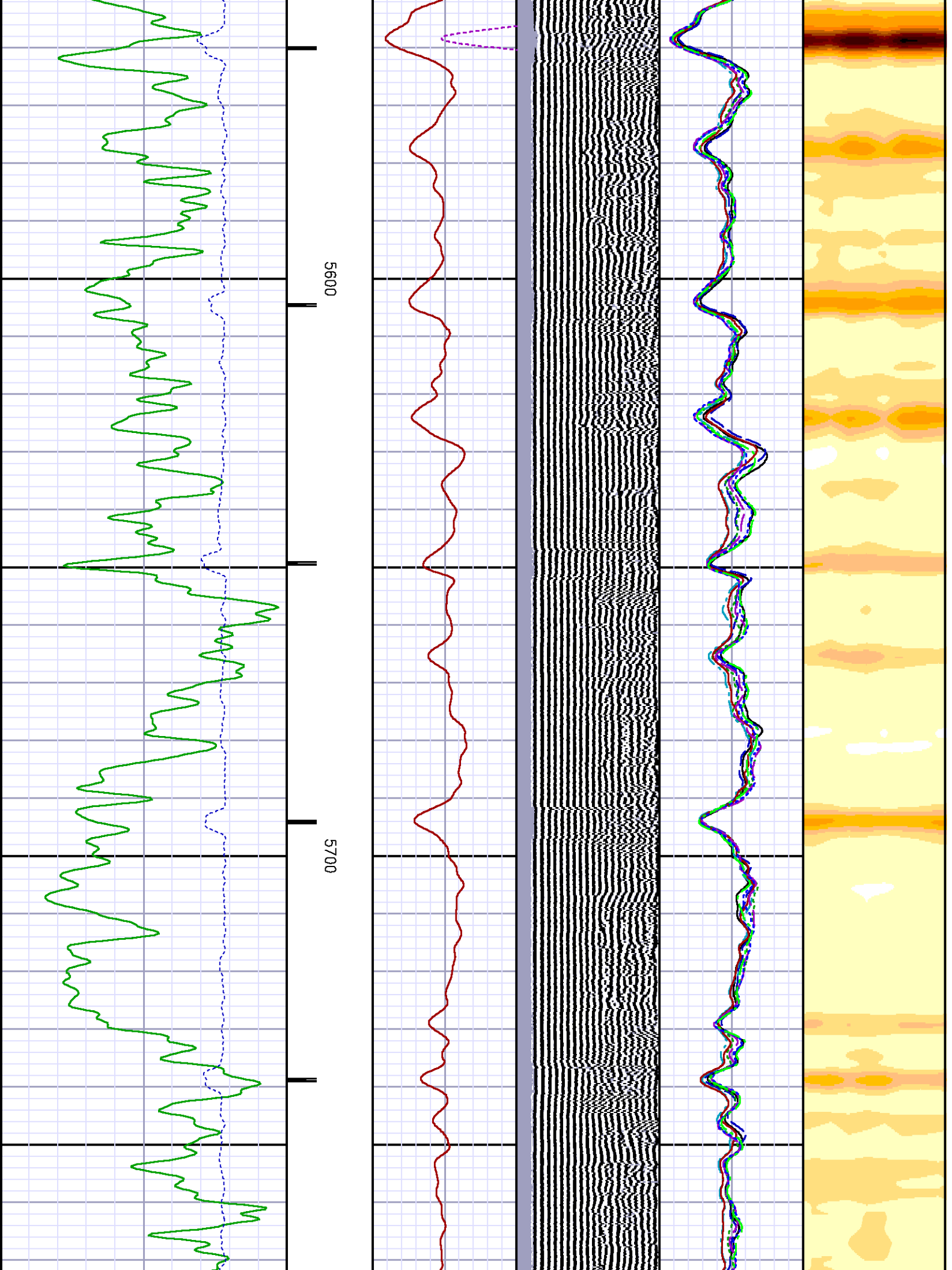


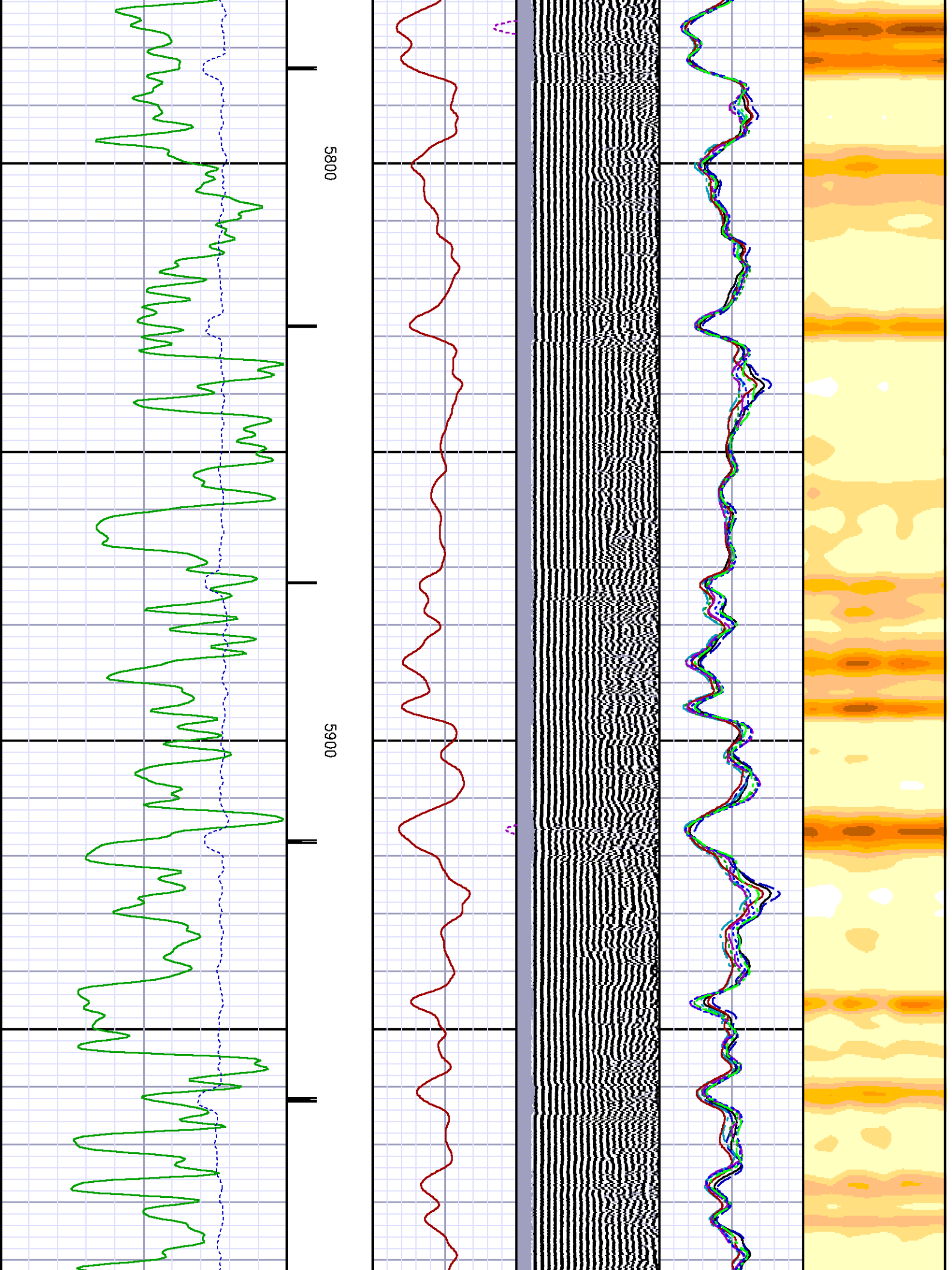


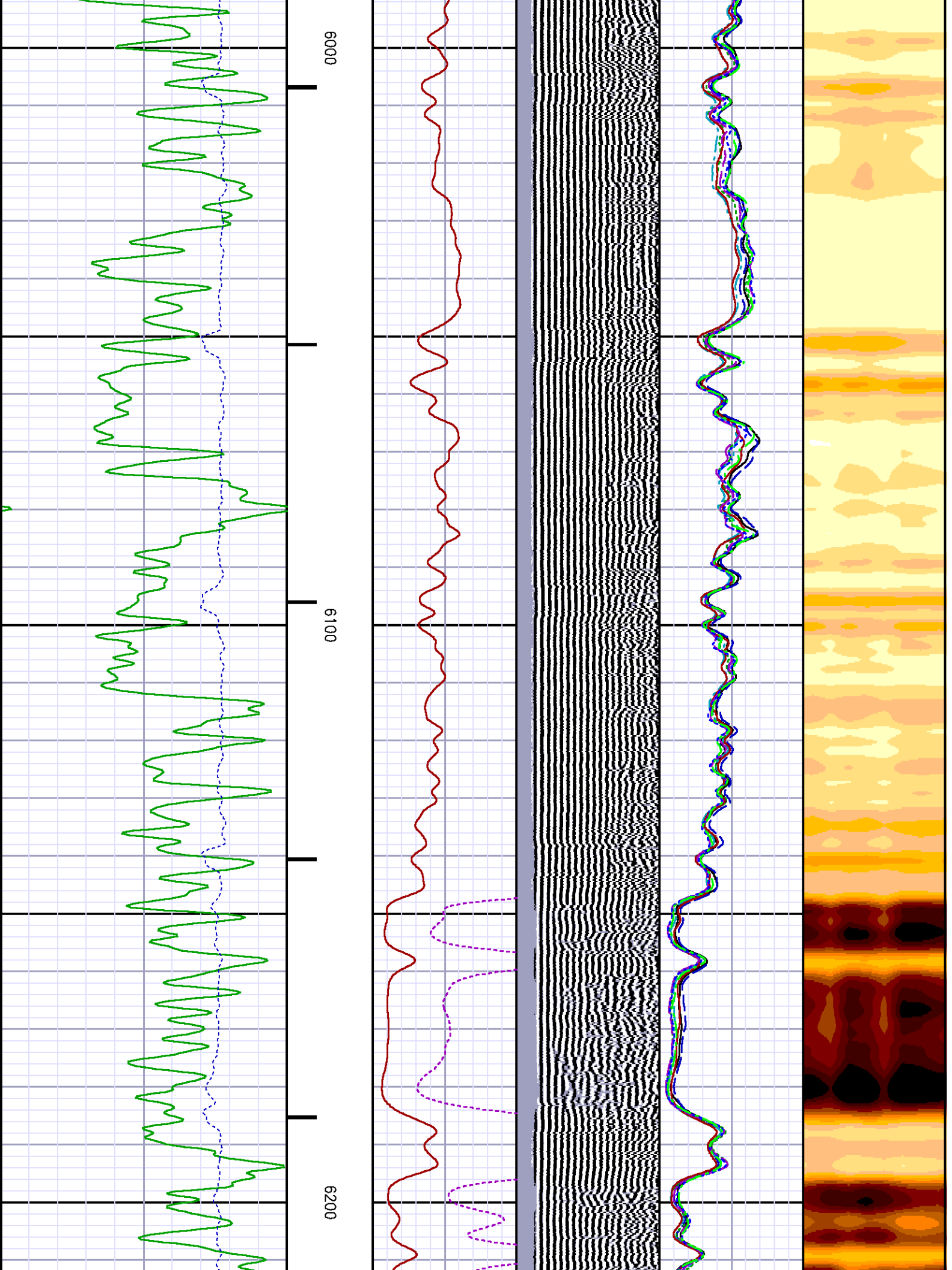


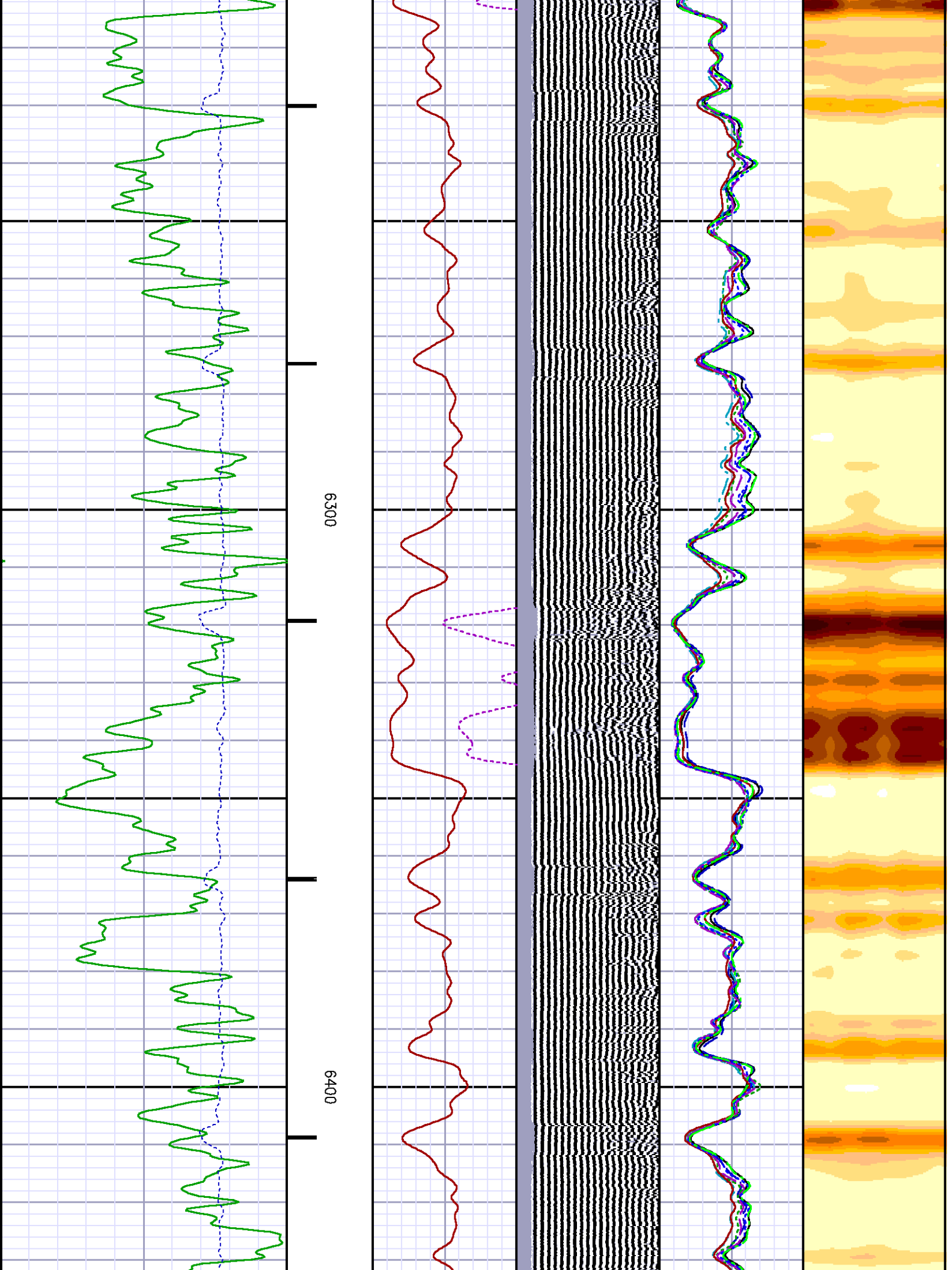


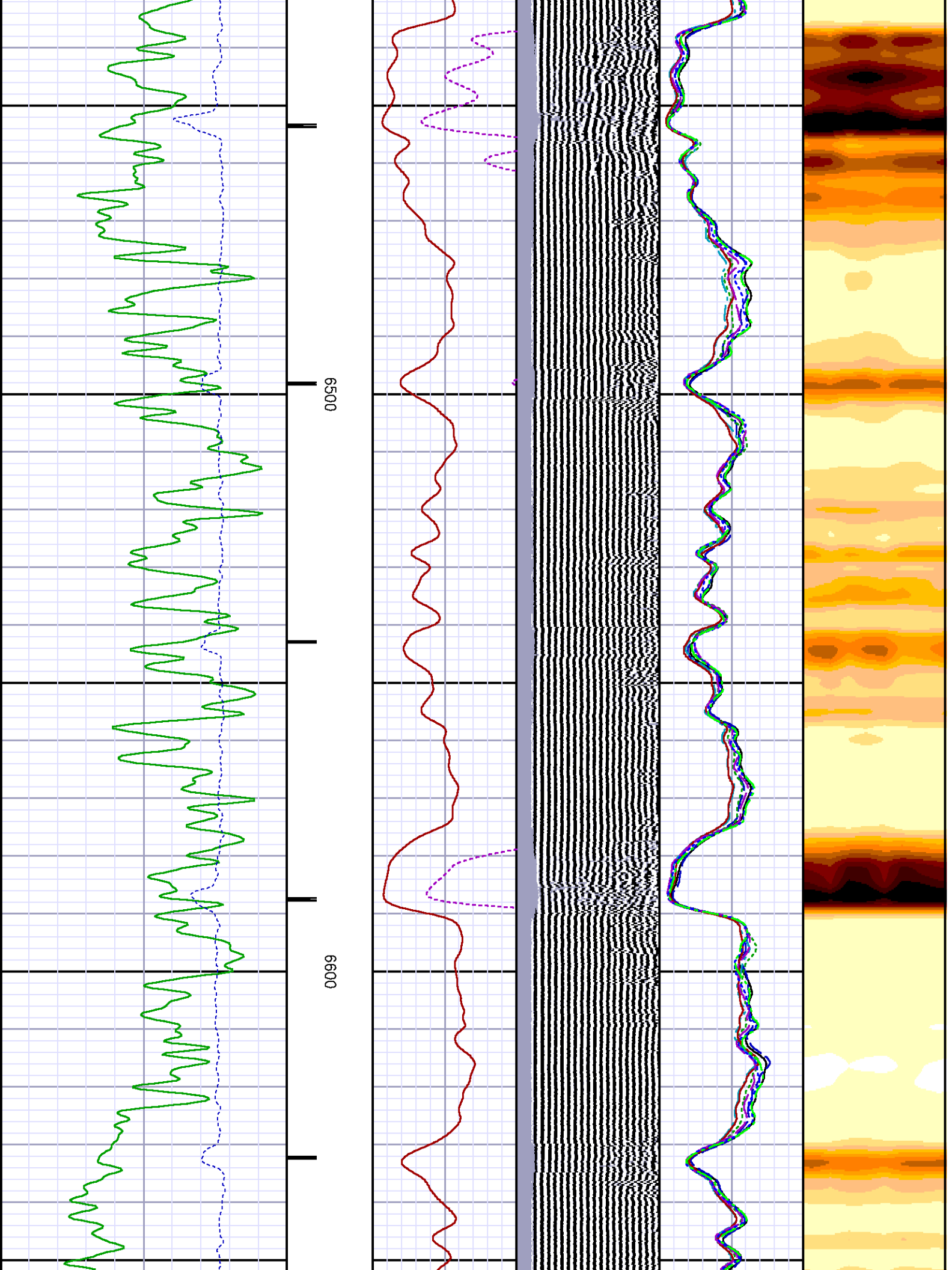


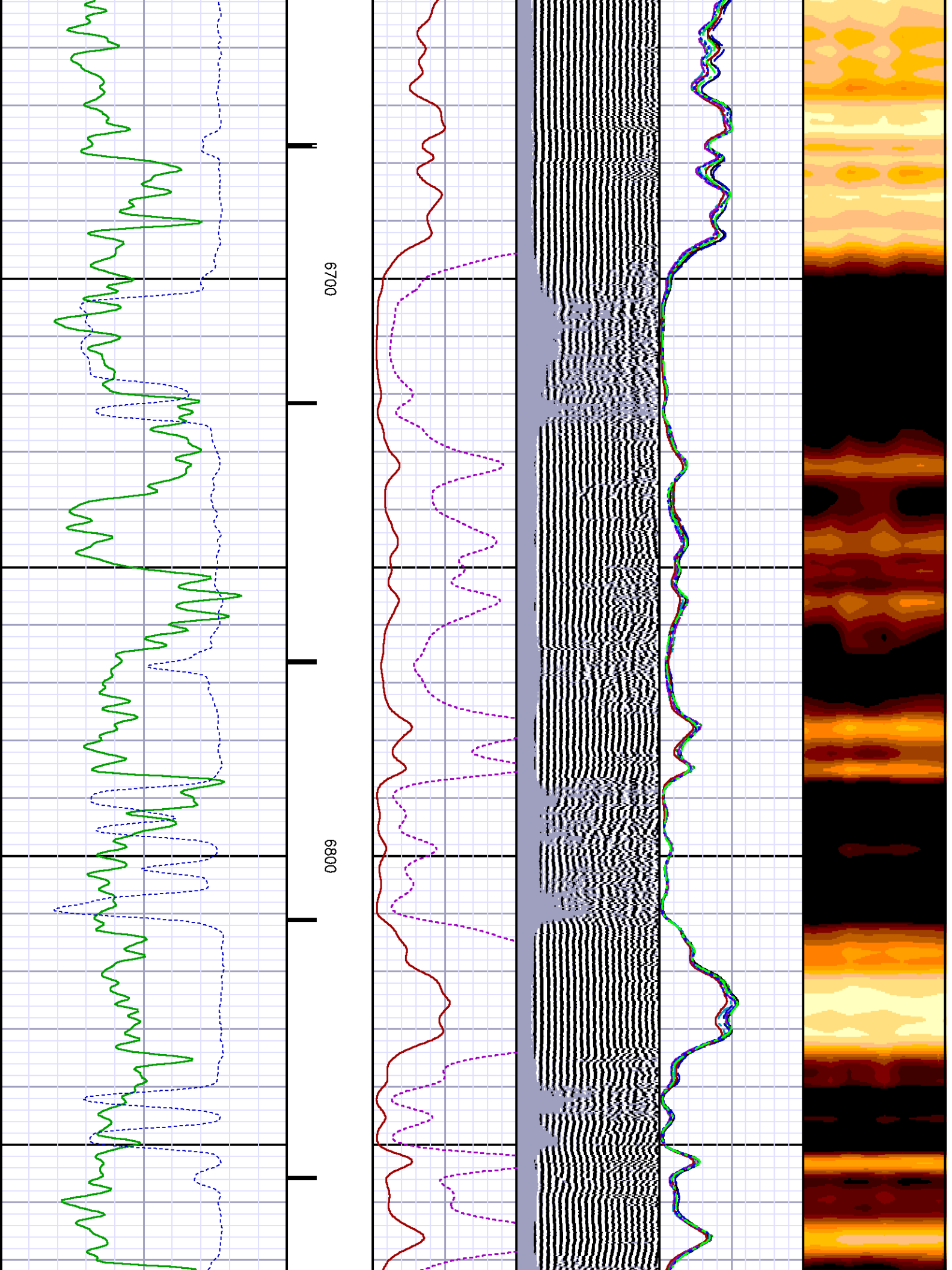


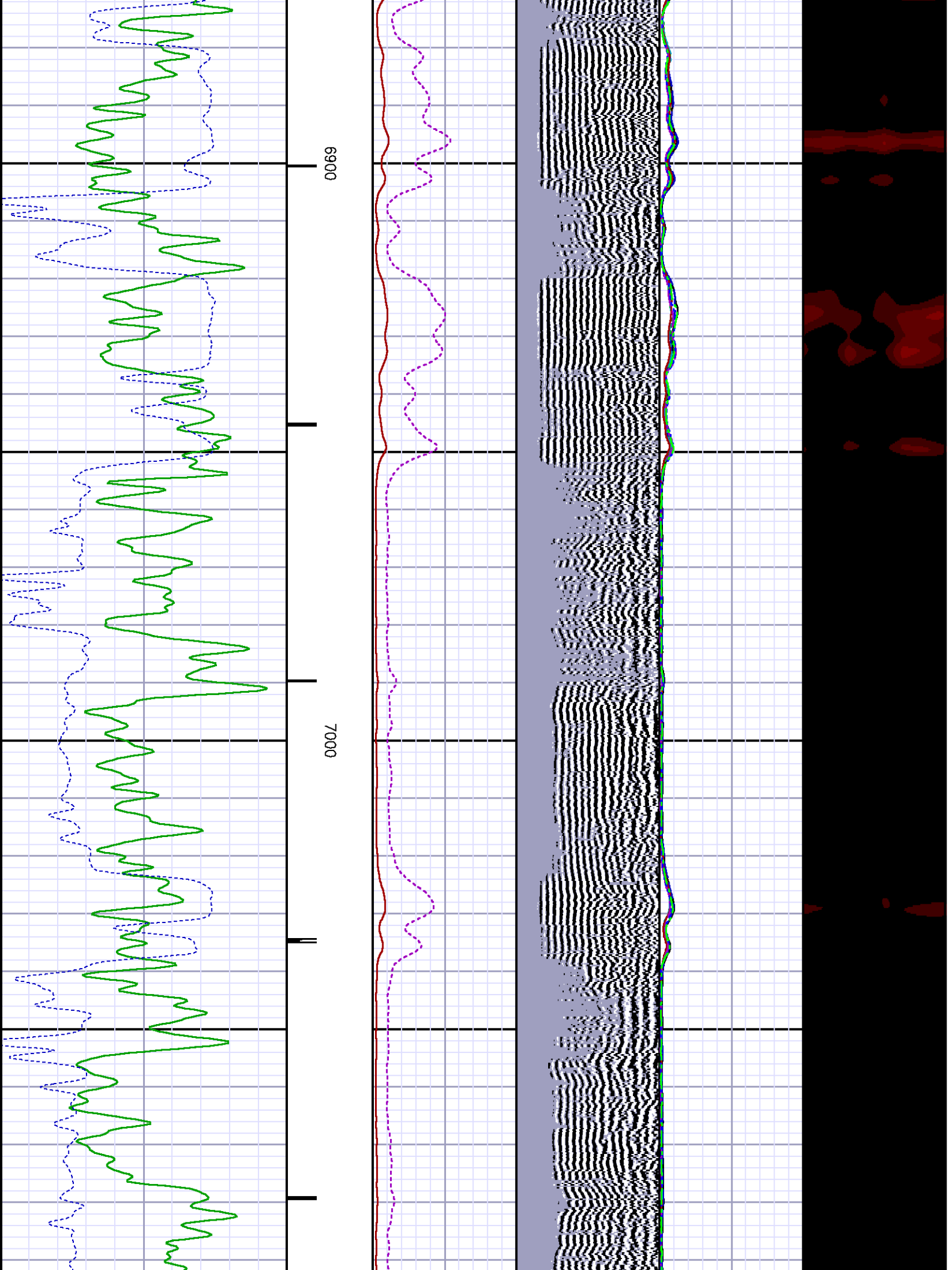


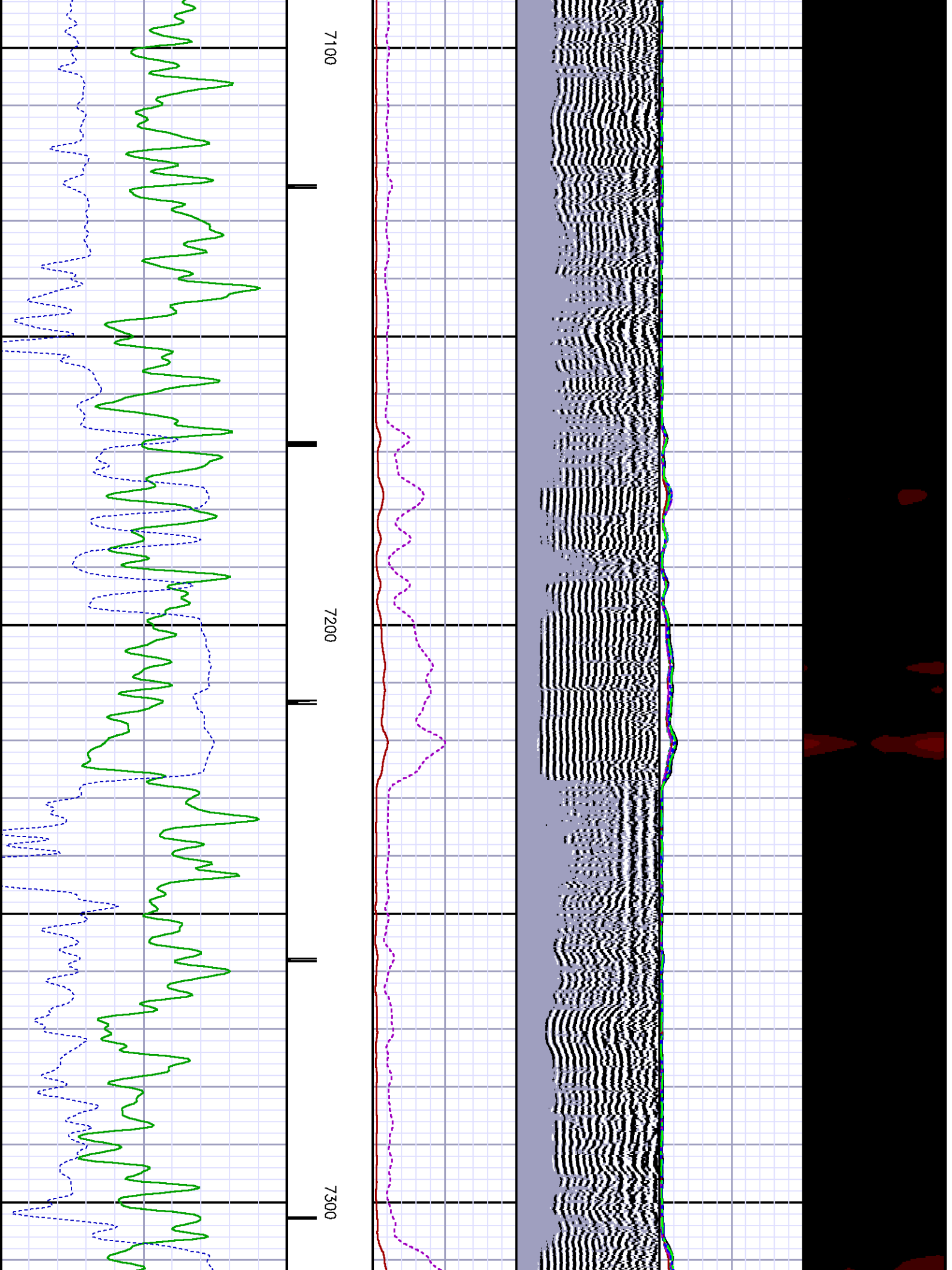


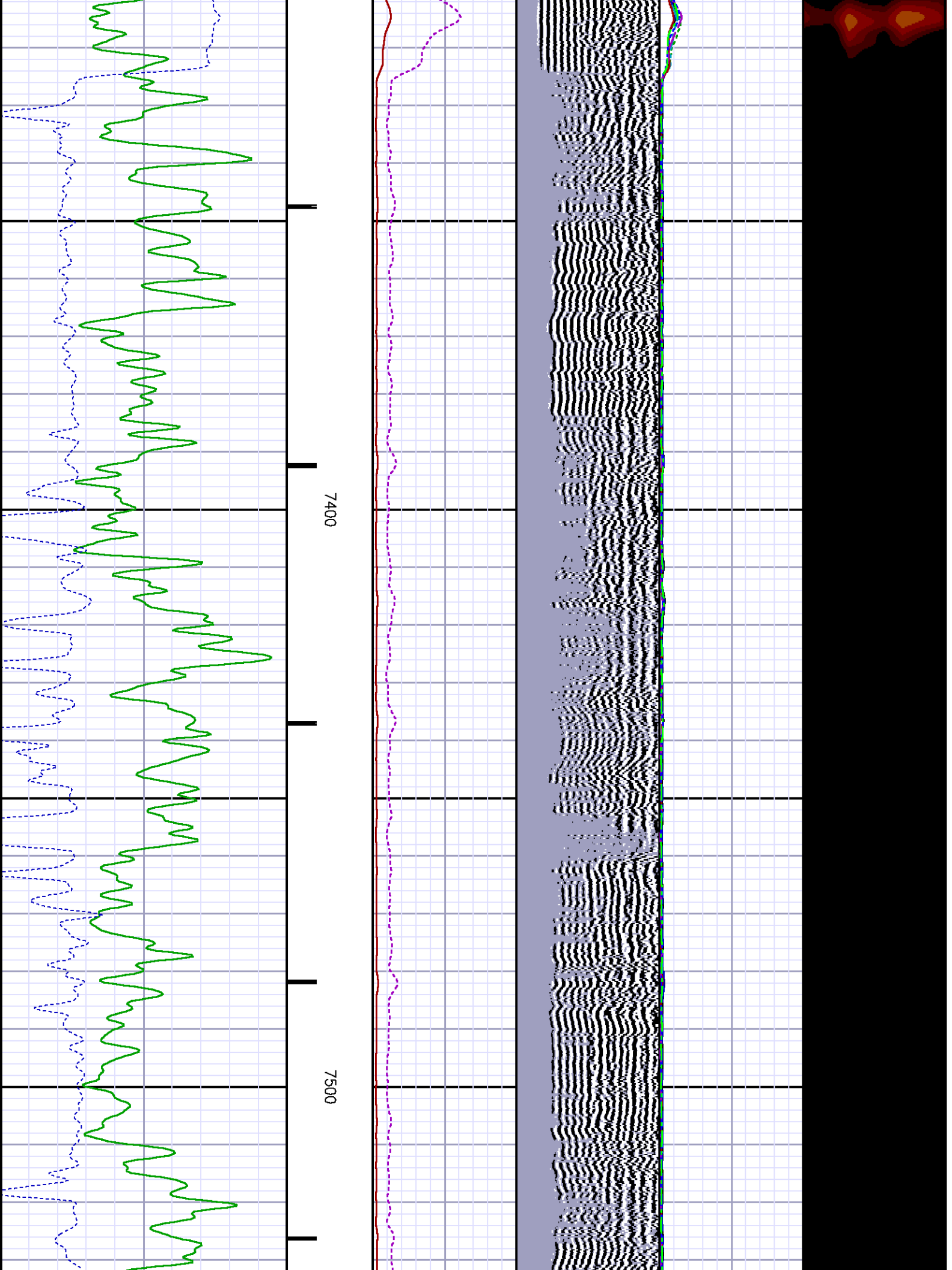


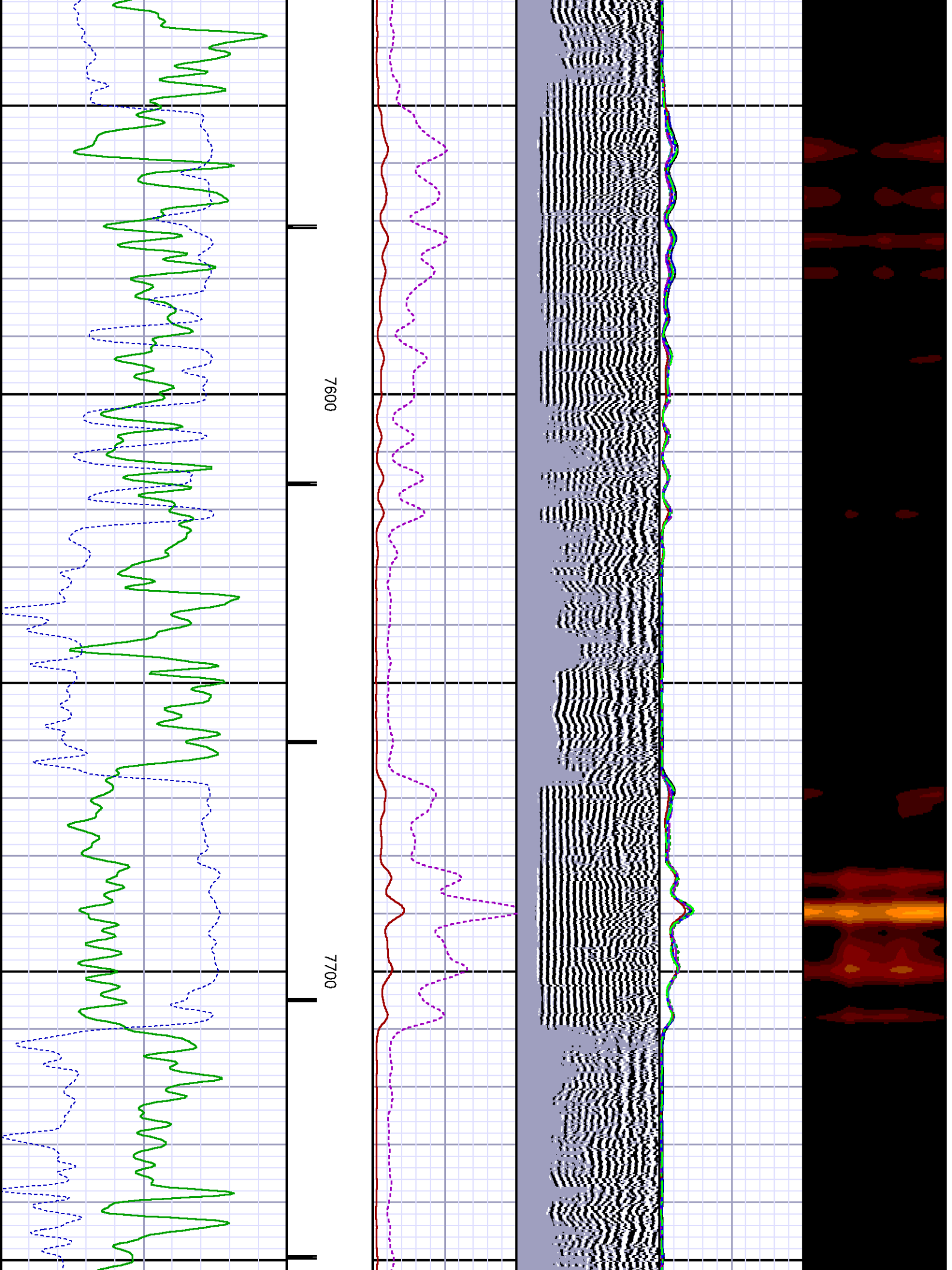


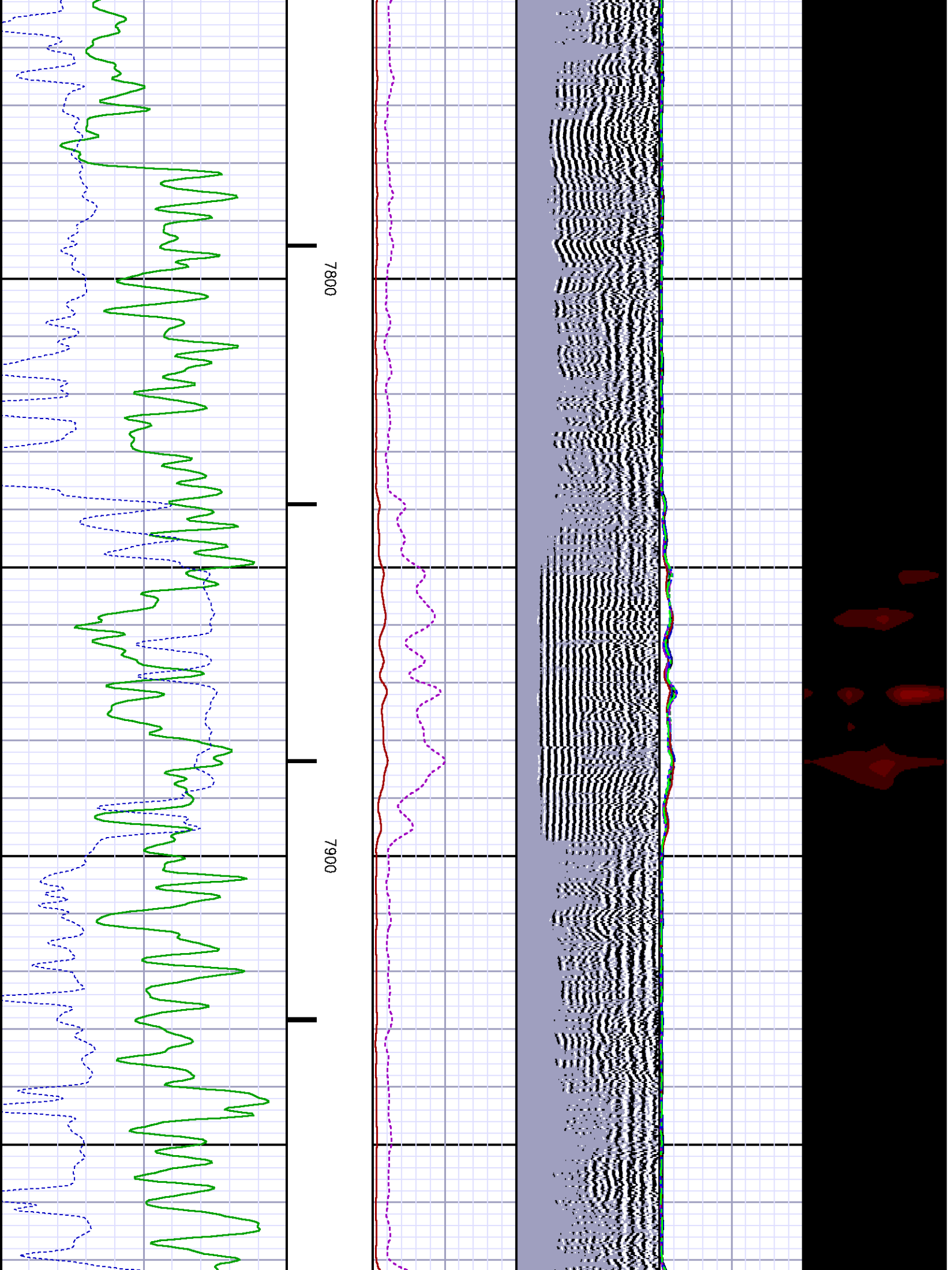


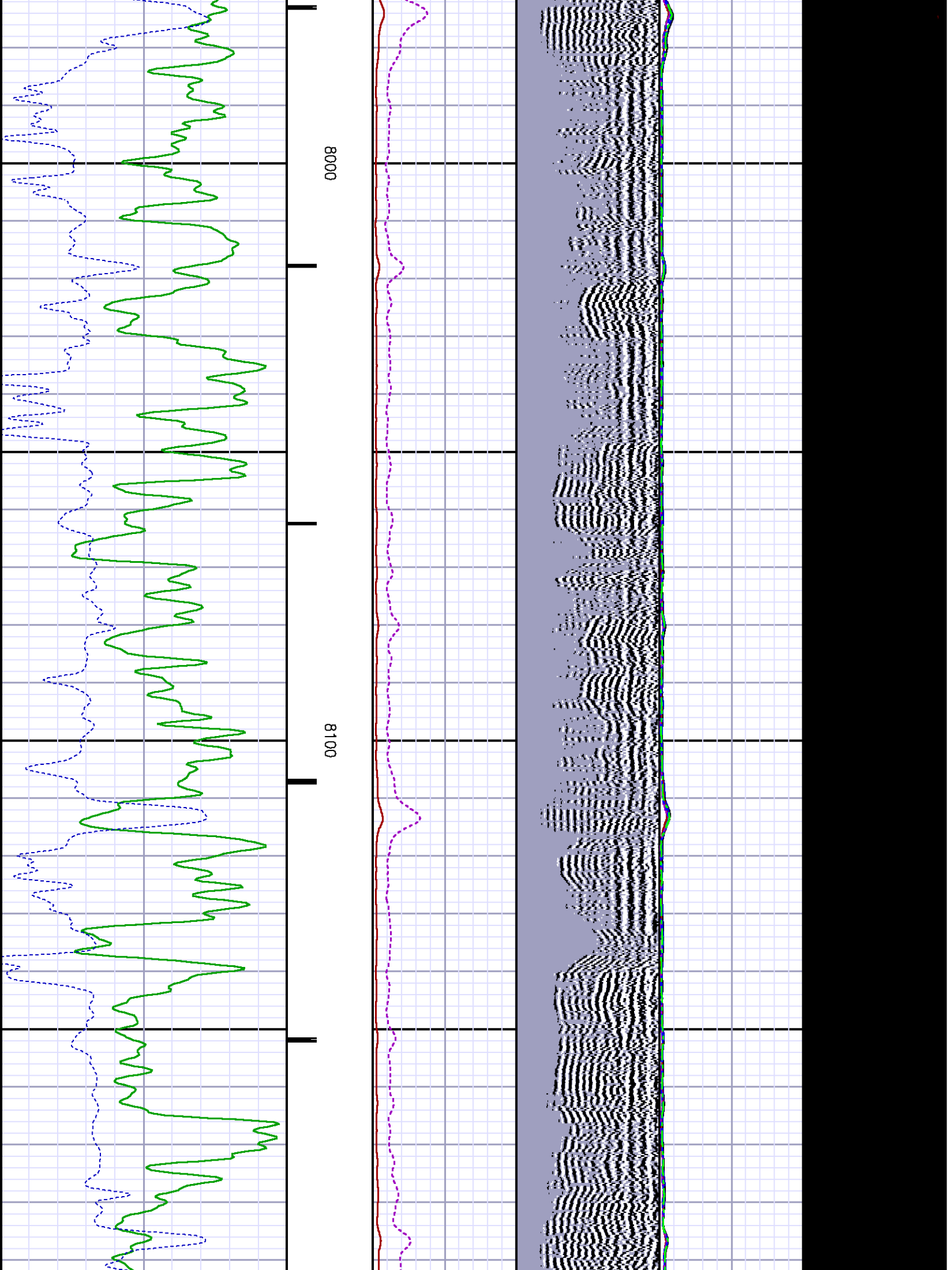


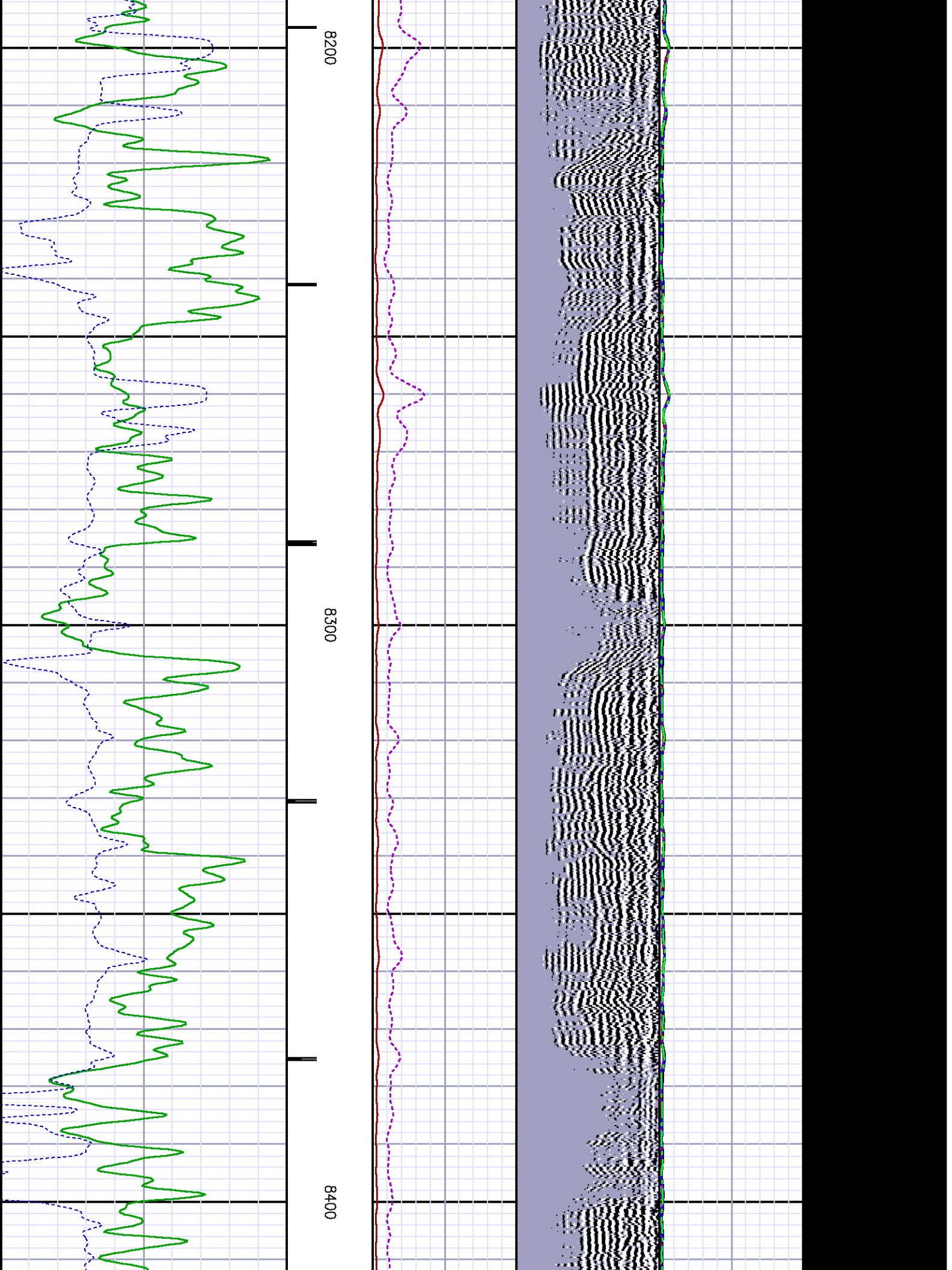


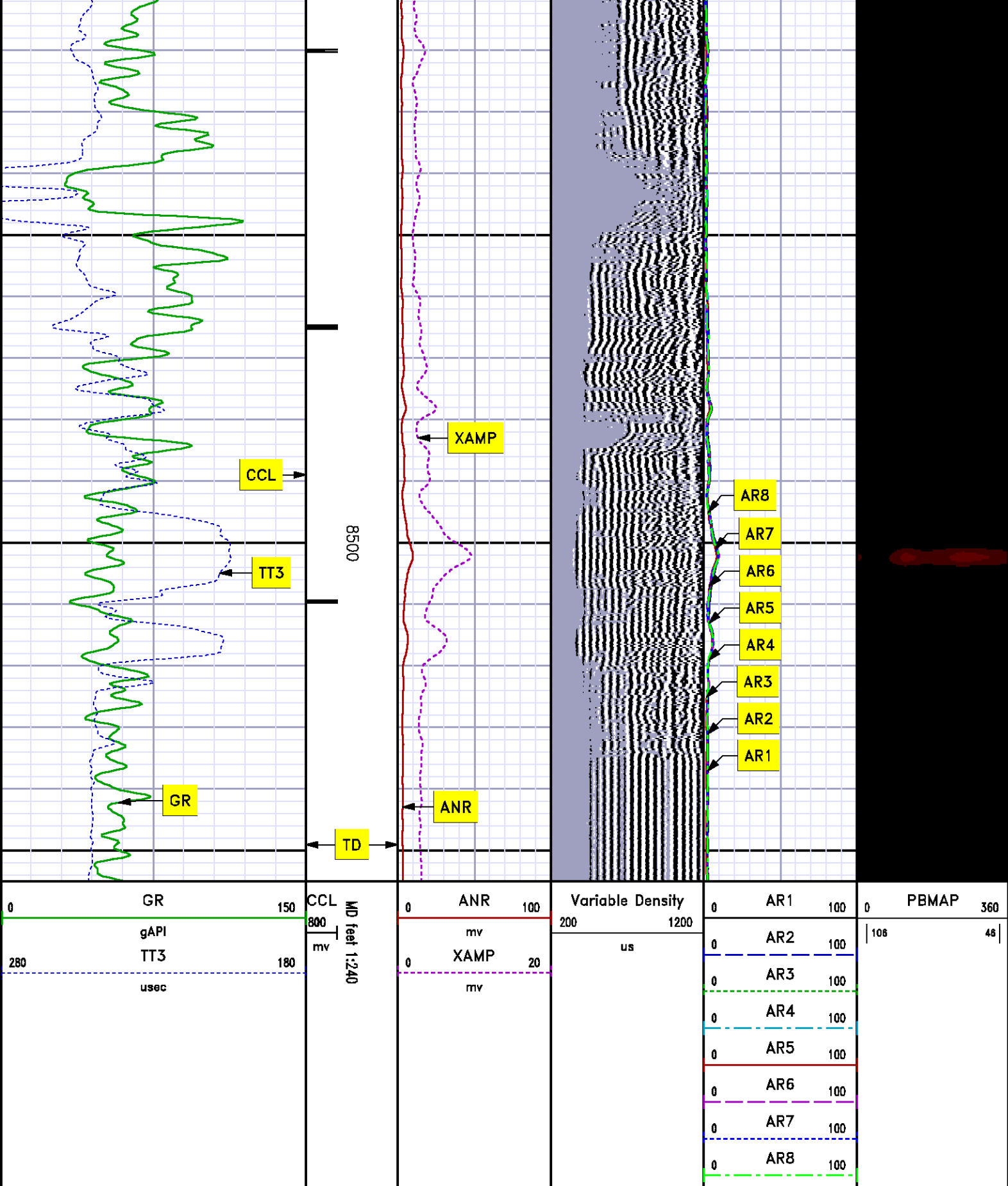












REPEAT SECTION

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	312.910	usec	8149.750	8587.000
RAL	Amp Gate Start Near	200.391	usec	8149.750	8587.000
RAL	Amp Gate Start Radial	200.391	usec	8149.750	8587.000
RAL	Amp Gate Width Far	25.000	usec	8149.750	8587.000
RAL	Amp Gate Width Near	25.000	usec	8149.750	8587.000
RAL	Amp Gate Width Radial	25.000	usec	8149.750	8587.000
RAL	casing od	4.500	inches	8149.750	8587.000
RAL	casing wt	11.600	lbm/ft	8149.750	8587.000
RAL	FB Start Far	291.900	usec	8149.750	8587.000
RAL	FB Start Near	175.391	usec	8149.750	8587.000
RAL	FB Start Radial	175.391	usec	8149.750	8587.000
RAL	FB Thresh Far	10.000	mv	8149.750	8587.000
RAL	FB Thresh Near	4.000	mv	8149.750	8587.000
RAL	FB Thresh Radial	4.000	mv	8149.750	8587.000
RAL	Fluid Travel Time	200.000	usec/ft	8149.750	8586.969

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 : WILLIAMS PRODUCTION COMPANY

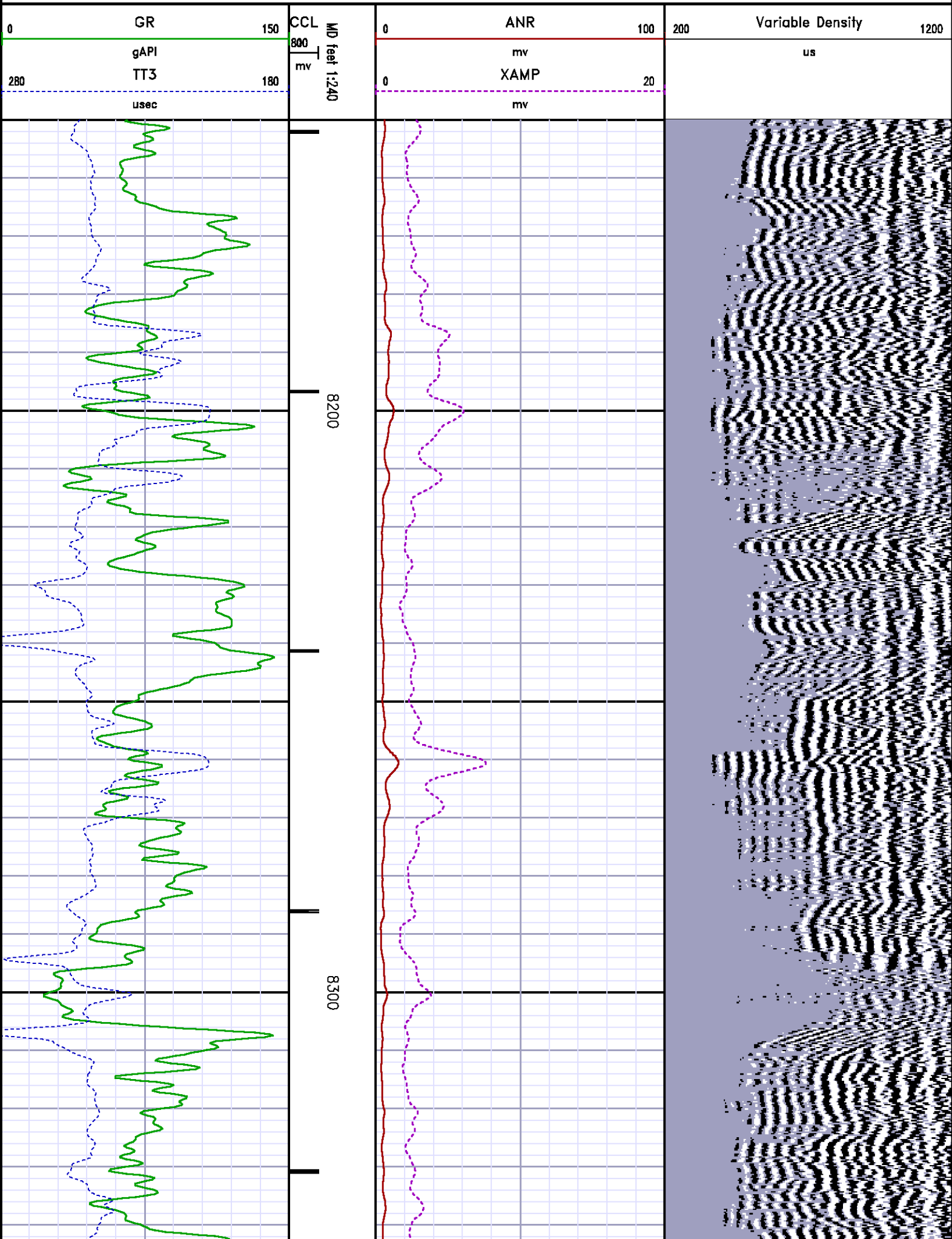
Well : PA 442-12

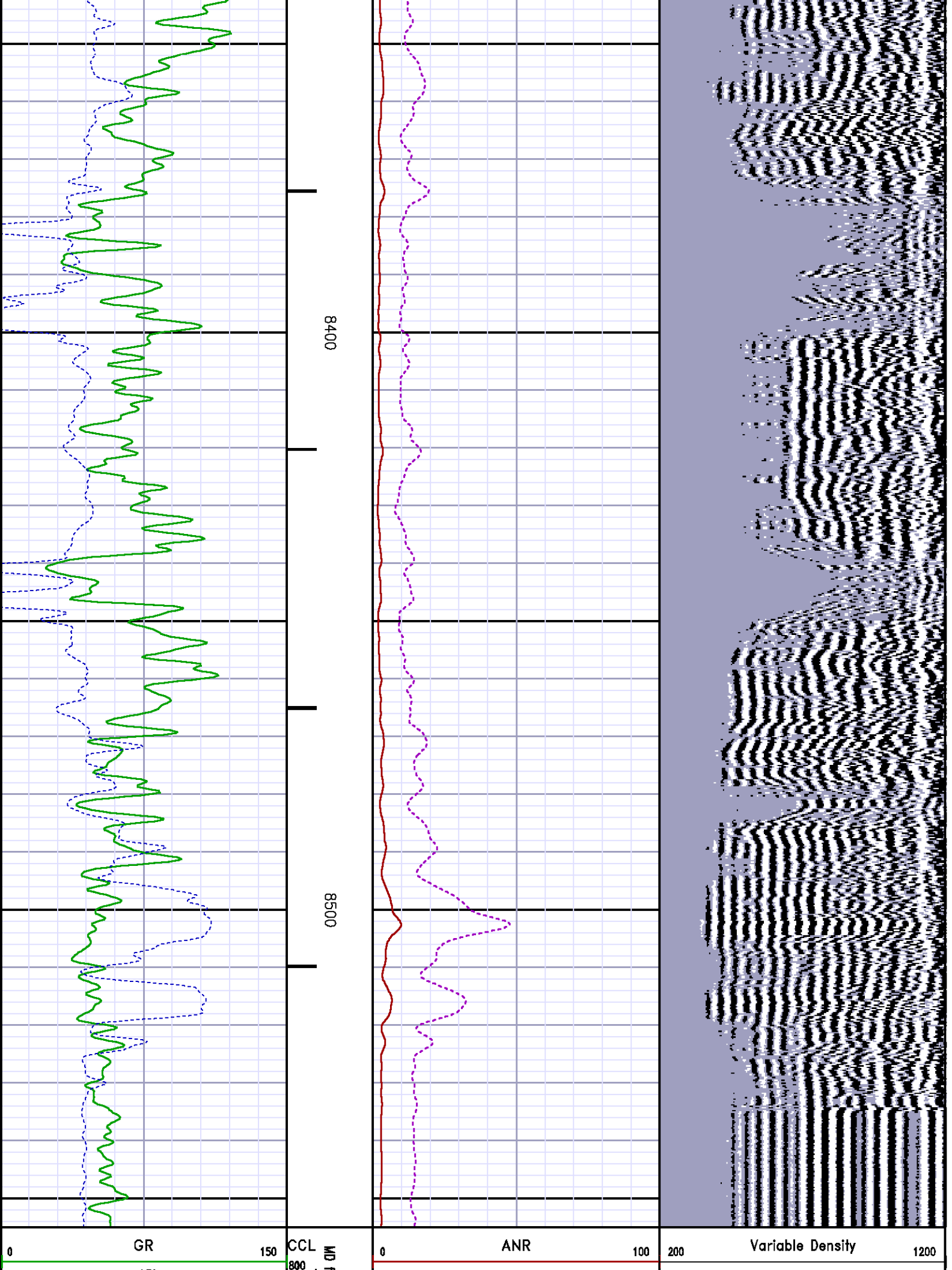
File Name : d:\welldata\rad442\repeat.xtf

Mode : PlotMgr 5.4.504

Interval : 8150.00 - 8555.00 feet UP

Created : 1/17/2011 11:36:41 AM





gAPI	TT3	180	mv	0	XAMP	20	mv	us
280								
	usec							

CALIBRATION SUMMARY

GAMMA RAY

Calibration File: C:\case\calver\GR\504D1.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sat Dec 04 13:55:36 2010 TOOL SERIES: 2459XA ASSET: 504 SEQ: D1

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K 612	35.11	145.96	1.669	58.60	243.60	185.00

Verification File: C:\case\calver\GR\504D1.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Sat Dec 04 13:57:10 2010 TOOL SERIES: 2459XA ASSET: 504 SEQ: D1

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K 612	33.42	146.18	1.669	55.78	243.97	188.19

RALSHP

Shop Calibration: C:\case\calver\RALSHP\957JA_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sun Jan 16 12:28:08 2011 TOOL SERIES: 1426XA ASSET: 957 SEQ: JA

Tool Delay [usec]	-54.00	Tank OD in	5.50	Tank Wt lbm/ft	15.50	Tank ID in	4.95
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	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
RECEIVER								
CAL Pulse	223	216	30	101	92	-0.057	100.00	0.50
3 Ft. Receiver	223	216	30	108	83	0.039	100.00	0.49
5 Ft. Receiver	331	332	30	204	86	0.027	150.00	0.53
Radial #1	223	216	30	76	111	-0.039	100.00	0.49
Radial #2	224	216	30	76	111	-0.039	100.00	0.50
Radial #3	223	216	30	76	111	-0.017	100.00	0.51

Radial #4	224	216	30	76	111	-0.067	100.00	0.50
Radial #5	224	216	30	76	111	-0.062	100.00	0.49
Radial #6	221	216	30	76	111	-0.078	100.00	0.49
Radial #7	220	216	30	76	111	-0.129	100.00	0.48
Radial #8	222	216	30	76	111	-0.106	100.00	0.49

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\957JA fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sun Jan 16 15:34:44 2011 TOOL SERIES: 1426XA ASSET: 957 SEQ: JA

Tool Delay [usec] -54.00 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	101	92	-0.036	0.000	0.98	100.000
3 Ft. Receiver	200	25	-2.493			
5 Ft. Receiver	317	25	-0.539			
Radial #1	200	25	-1.751			
Radial #2	200	25	-1.790			
Radial #3	200	25	-0.377			
Radial #4	200	25	-0.690			
Radial #5	200	25	-0.447			
Radial #6	200	25	-0.251			
Radial #7	200	25	-0.540			
Radial #8	200	25	-0.457			

TOOL DIAGRAM

OTA SHORT CABLE HEAD

24.23'

PROBE 2 3/4 DUAL RECEIVER RADII

Series 1426XA
Mnemonic PROB
Diameter 2.75"
Length 41.43"



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

XMIT 18.05'
 NEAR RCVR 14.97'
 FAR RCVR 13.05'
 CCL 11.34'
 GR 9.49'
 NEU 4.09'
 0.00'

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 WILLIAMS PRODUCTION COMPANY
 Well PA 442-12
 Field PARACHUTE
 County GARFIELD State COLORADO

File No: CH028021
 API No: 05045190220000

Location

SHL: 421' FNL & 1930' FEL
 BHL: 2071' FNL & 335' FEL

Elevations

KB 6315 ft
 DF 6314 ft
 GL 6289 ft

12 7S 95W
 PA 41-12 PAD
 NABORS 574

SEC 12 TWP 7S RGE 95W

CASE

