



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: CH060997	Company Well Field County	WPX ENERGY FEDERAL RGU 24-25-198 SULPHUR CREEK RIO BLANCO	State COLORADO
API No: 05103118760000			
25 1S 98W RGU 24-25-198 PAD CYCLONE 29 BS SLOT	Location SHL: 342' FSL, 1418' FWL (SESW) BHL: 1235' FSL, 1908' FWL (SESW) SEC 25 TWP 15 RGE 98W	Other Services RPM KB 6705 ft DF GL 6684 ft	
Permanent Datum Log Measured From Drill Measured From	GL Elevation 6684 ft KB 21 ft Above P. D. KELLY BUSHING		

Date	14/SEP/12	
Run	ONE	
Service Order	575197	
Depth Driller	12711 ft	
Depth Logger	12620 ft	
Bottom Logged Interval	12610 ft	
Top Logged Interval	21 ft	
Time Started	1100	
Time Finished	1600	
Operator Rig Time	SHRS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	FULL	
Logged Cement Top	NA	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	NA	
Nominal Logging Speed	45 fpm	
Maximum Recorded Temperature	278 degF	
Reference Log	NONE	
Reference Log Date	NA	
Equipment No.	4271	GRAND JCT
Recorded By	FLOYD RENEAU	
Witnessed By	WAYNE MARCOTTE	

- 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
30 In	0 ft	80 ft
13.5 In	0 ft	3932 ft
7.825 In	0 ft	12711 ft

Casing Record				
Size	Weight	Grade	From	To
18 In			0 ft	80 ft
9.825 In			0 ft	3932 ft
4.5 In		P-110	0 ft	12711 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 14 feet.
Logged with zero PSI at wellhead.
BHT = 278°F

Equipment Data

Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1426XA	10417452	CENT
1	1	GR/CCL	2459XA	10404544	CENT

PRIMARY PRESENTATION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	31.475	12645.000
RAL	Amp Gate Start Near	195.000	usec	31.475	12645.000
RAL	Amp Gate Start Radial	195.000	usec	31.475	12645.000
RAL	Amp Gate Width Far	25.000	usec	31.475	12645.000
RAL	Amp Gate Width Near	25.000	usec	31.475	12645.000
RAL	Amp Gate Width Radial	25.000	usec	31.475	12645.000
RAL	casing od	4.500	inches	31.475	12645.000
RAL	casing wt	11.600	lbm/ft	31.475	12645.000
RAL	FB Start Far	291.900	usec	31.475	12645.000
RAL	FB Start Near	180.000	usec	31.475	12645.000
RAL	FB Start Radial	180.000	usec	31.475	12645.000
RAL	FB Thresh Far	10.000	mv	31.475	12645.000
RAL	FB Thresh Near	4.000	mv	31.475	12645.000
RAL	FB Thresh Radial	4.000	mv	31.475	12645.000
RAL	Fluid Travel Time	200.000	usec/ft	31.475	12644.443

DEPTH OFFSETS
(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-16.750	ACAL	ANR	AR1	AR2	AR3	AR4

1426XA -15.750
2459XA -11.340
2459XA -9.490
2459XA -4.090

AR5	AR6	AR7	AR8	CHV	FPR2
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

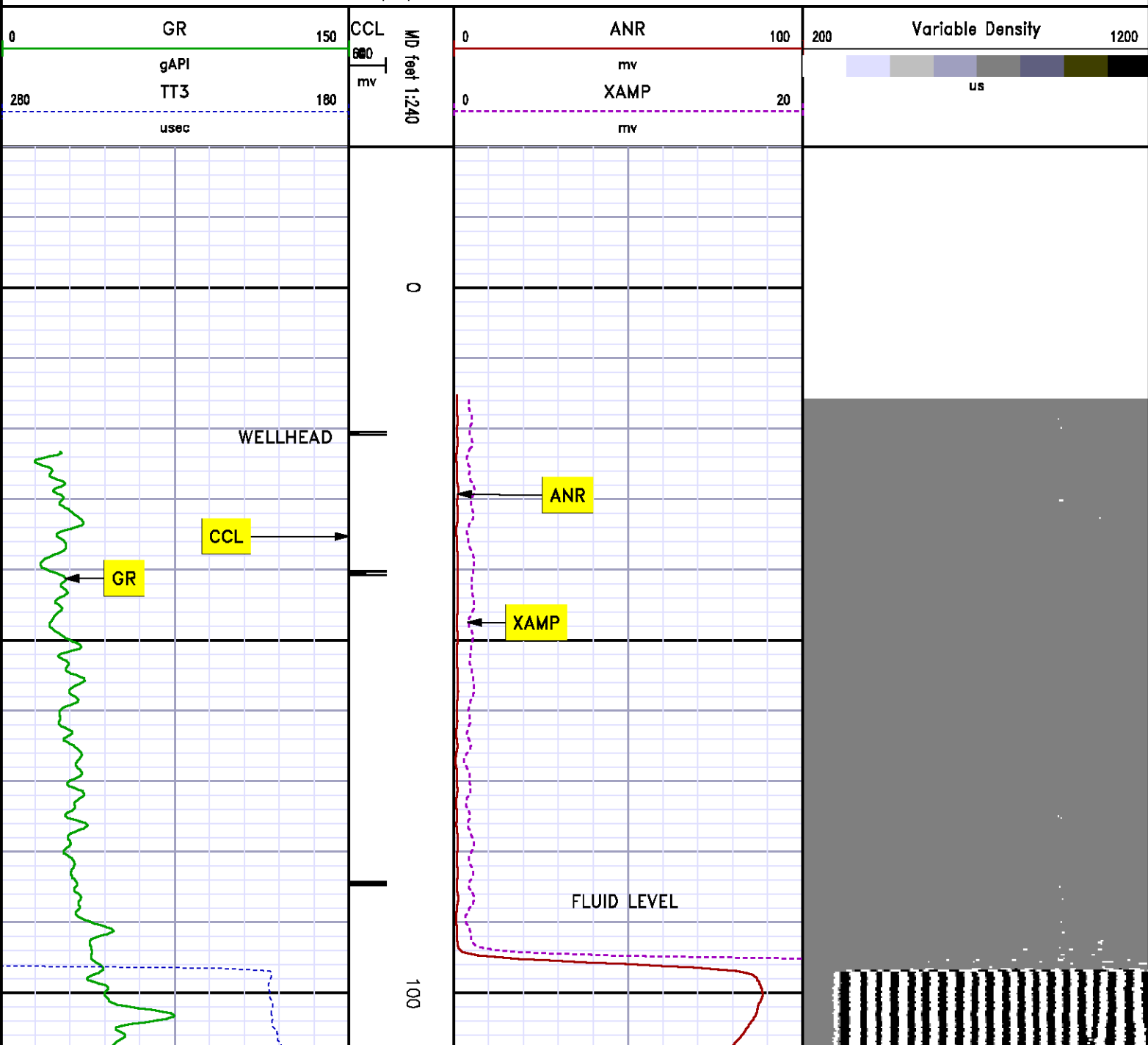
Well : FEDERAL RGU 24-25-198

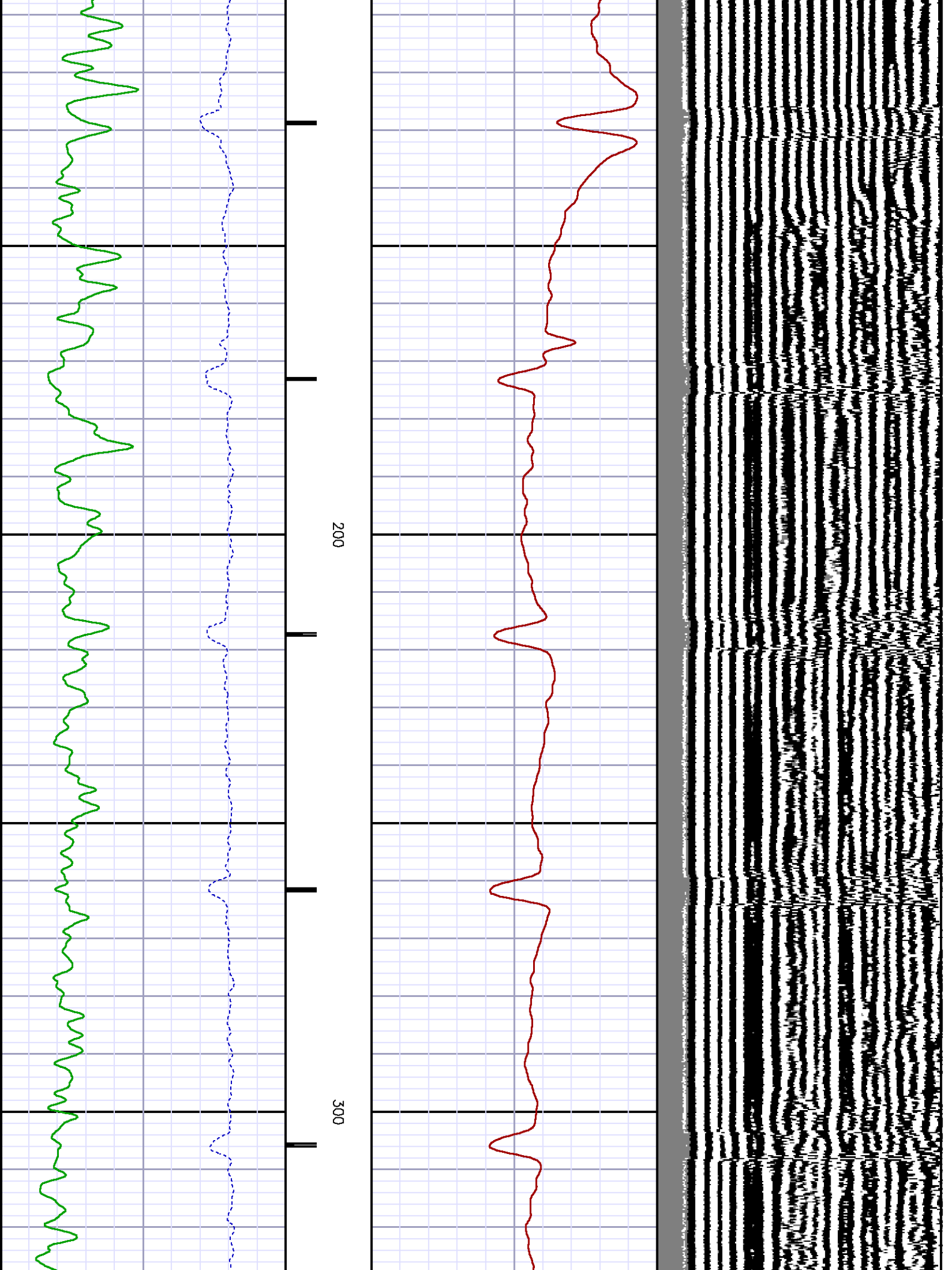
File Name : d:\welldata\wpx energy\rgu 24-25-198\ral24\main.xtf

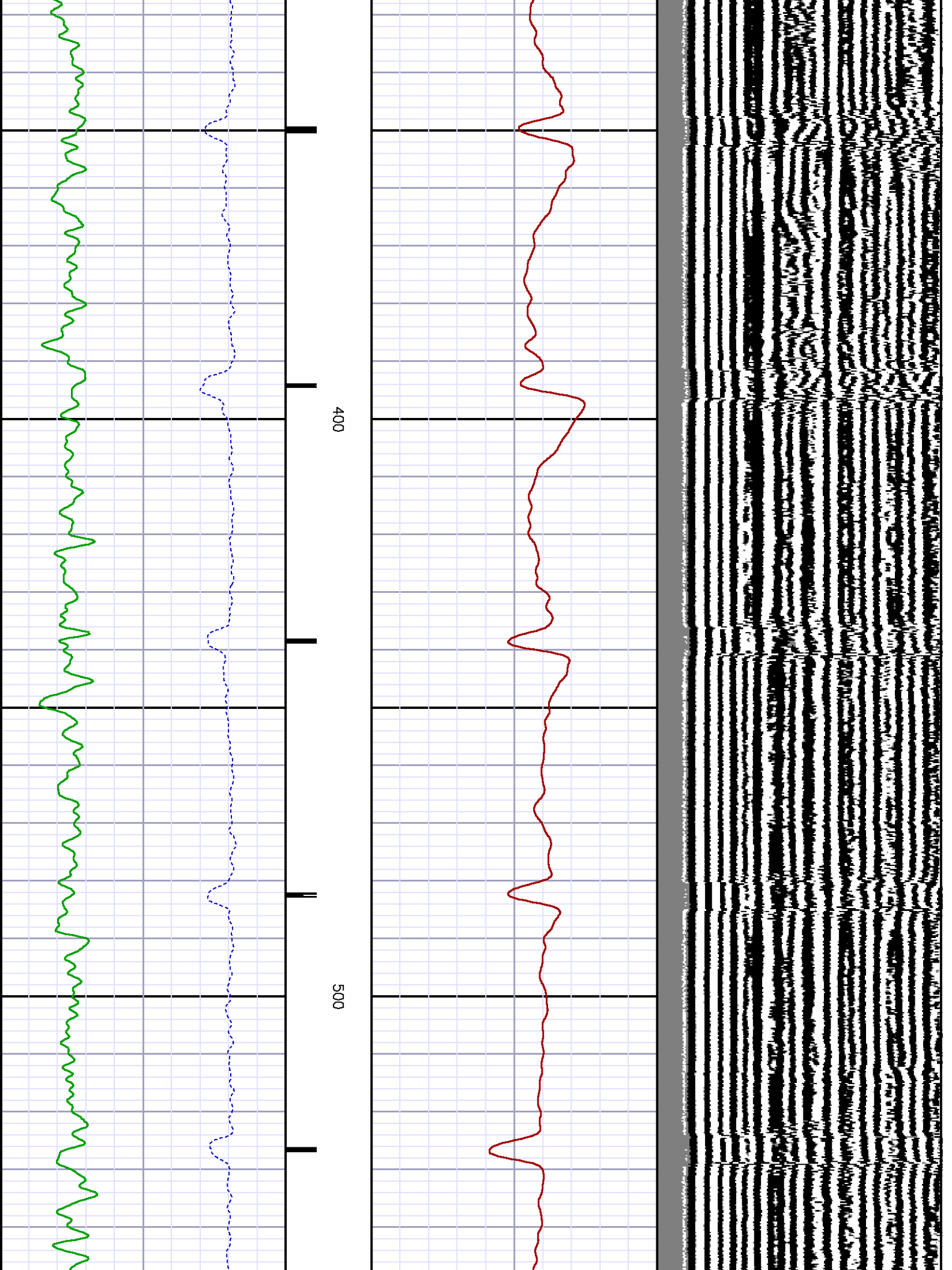
Mode : PlotMgr 5.4.504

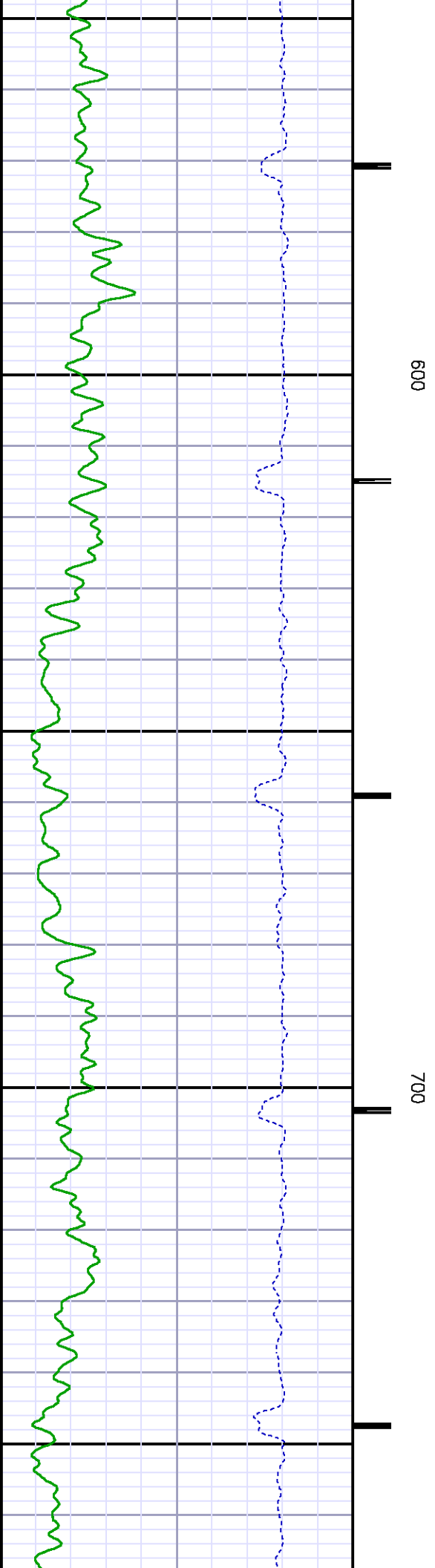
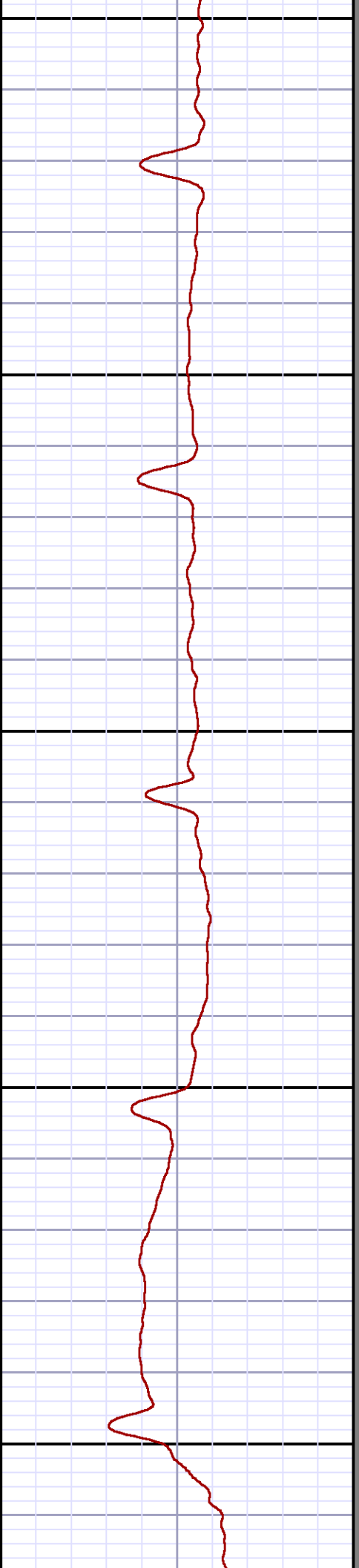
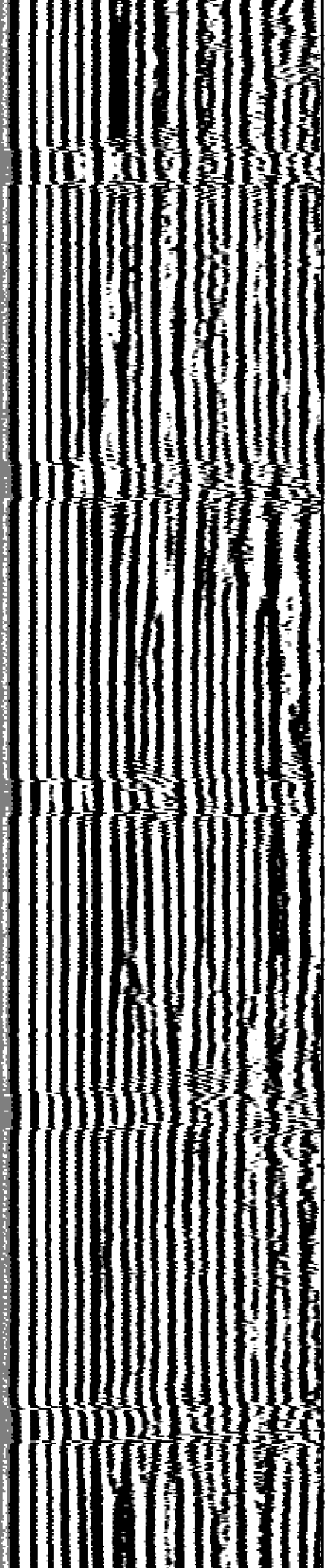
Interval : -20.00 - 12626.00 feet UP

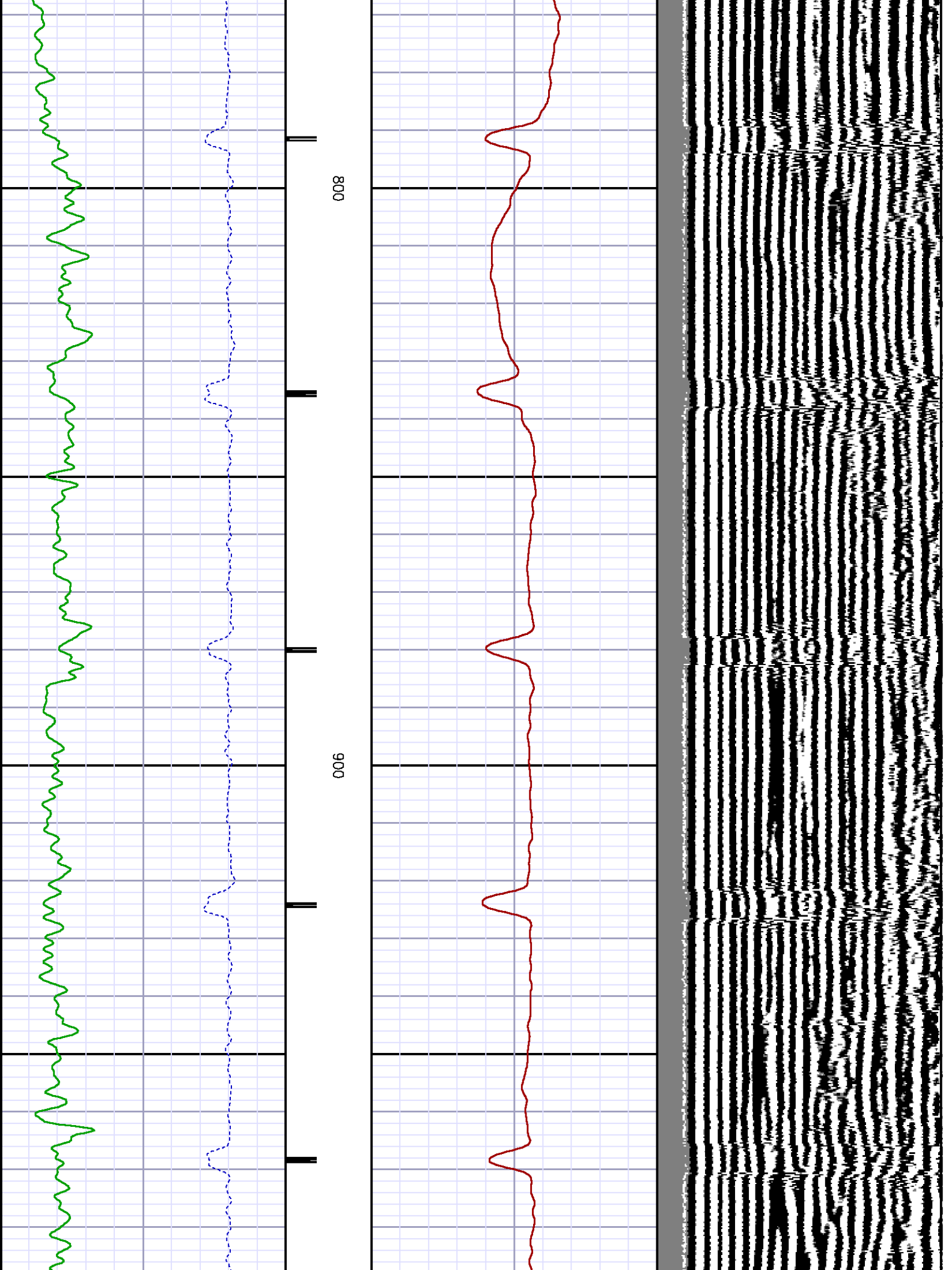
Created : 9/13/2012 12:25:19 PM

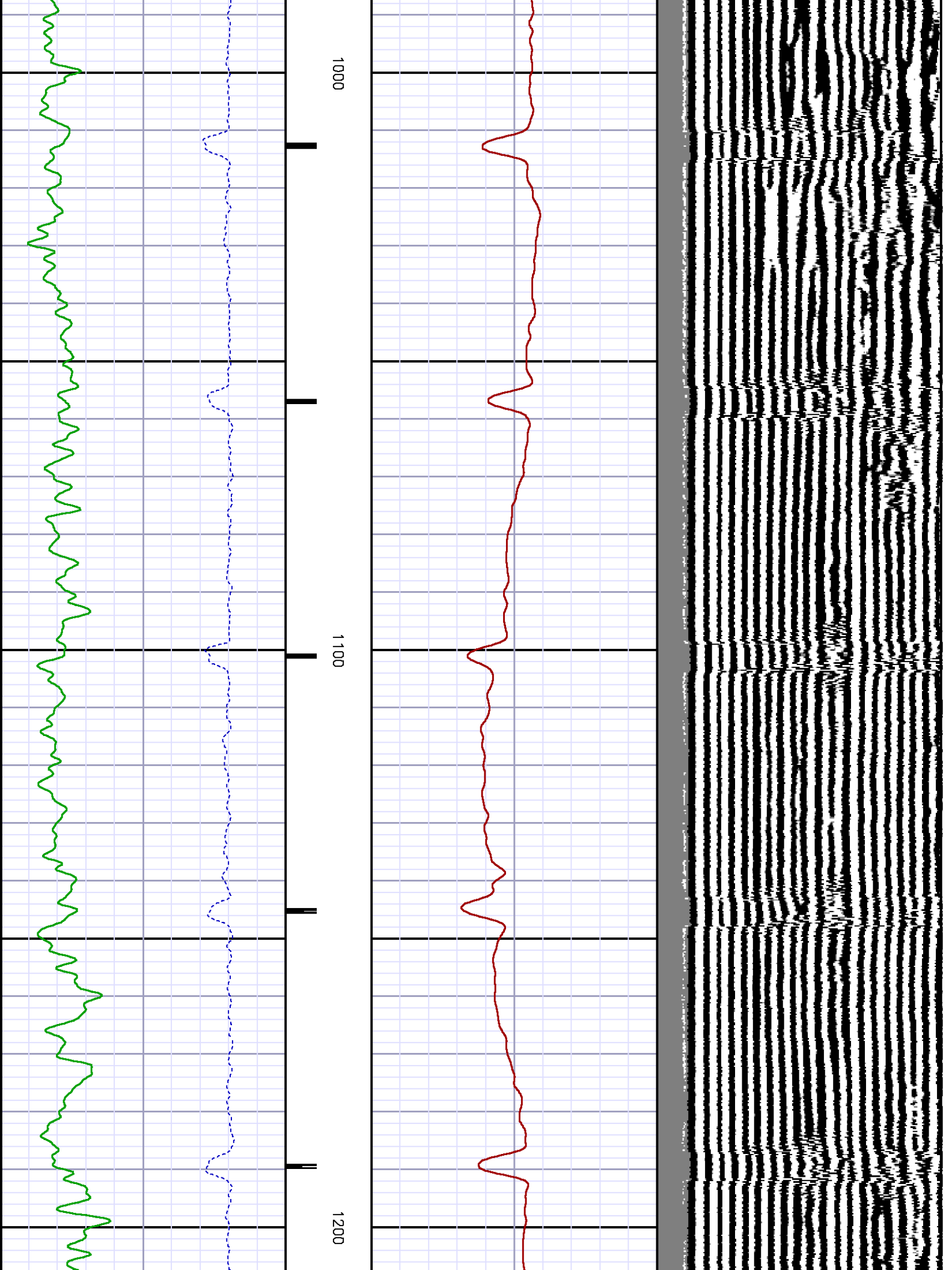


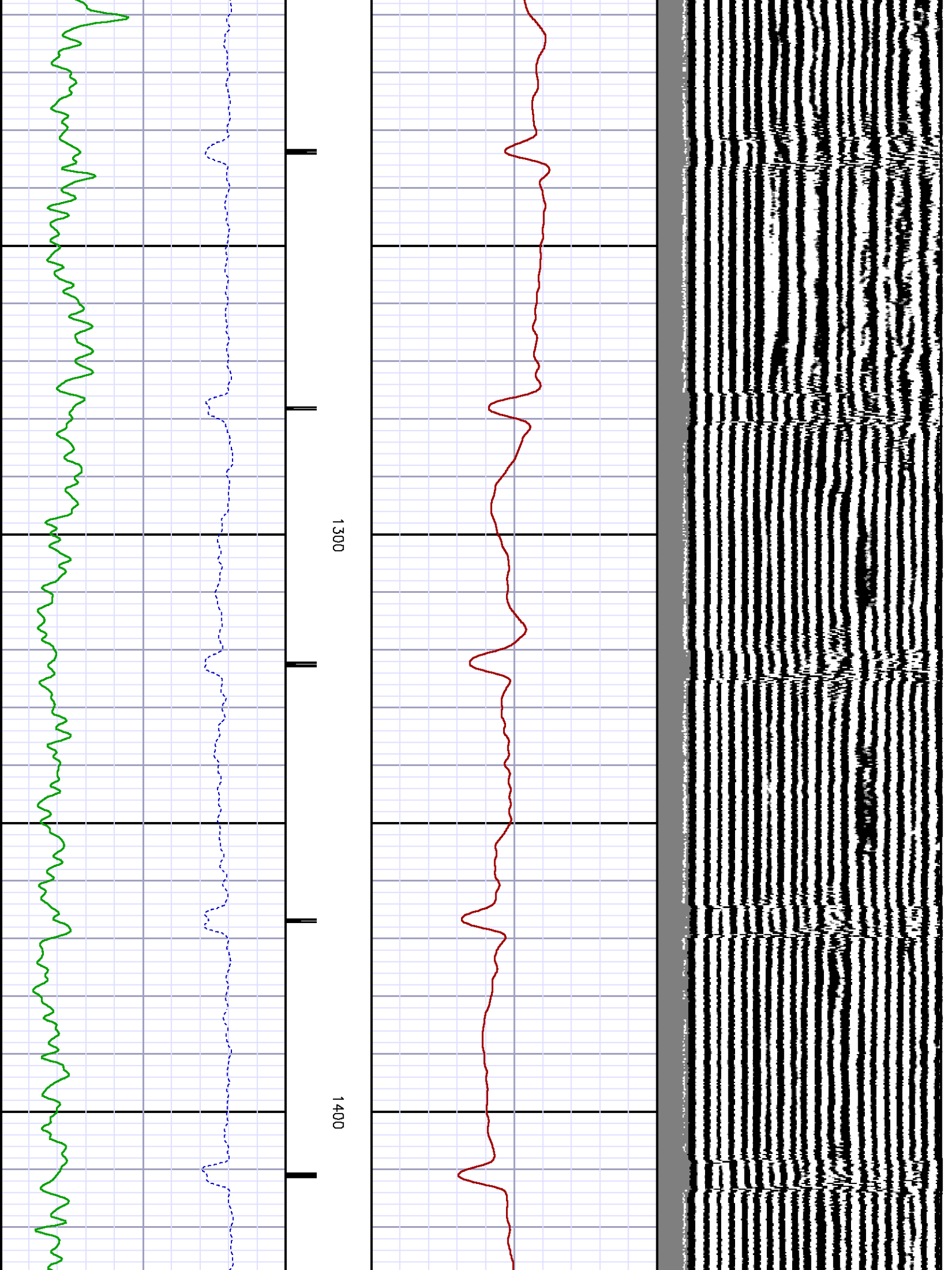


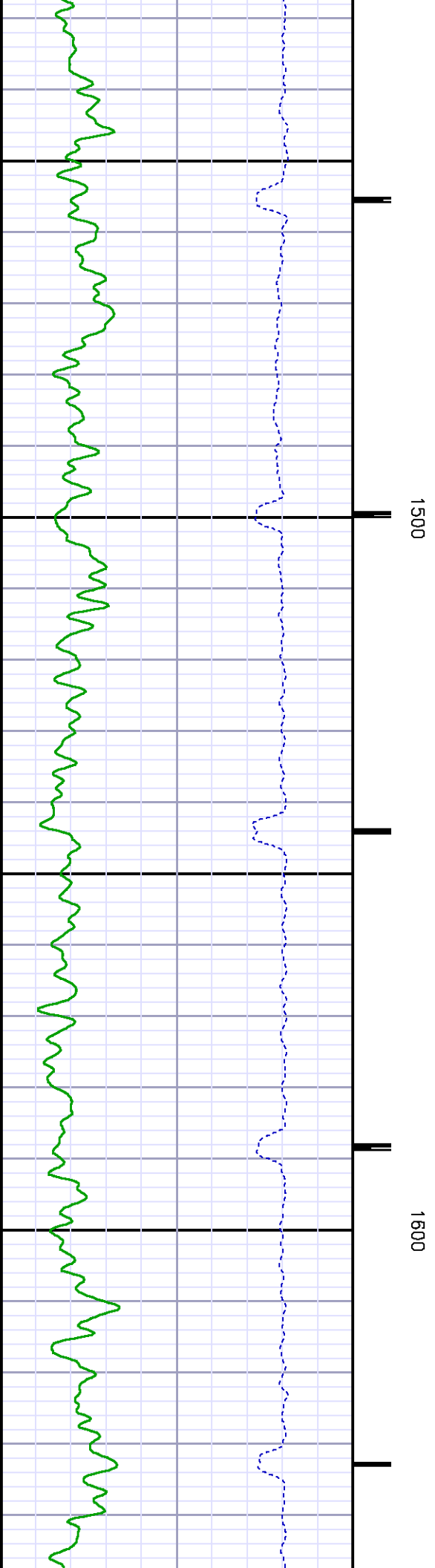
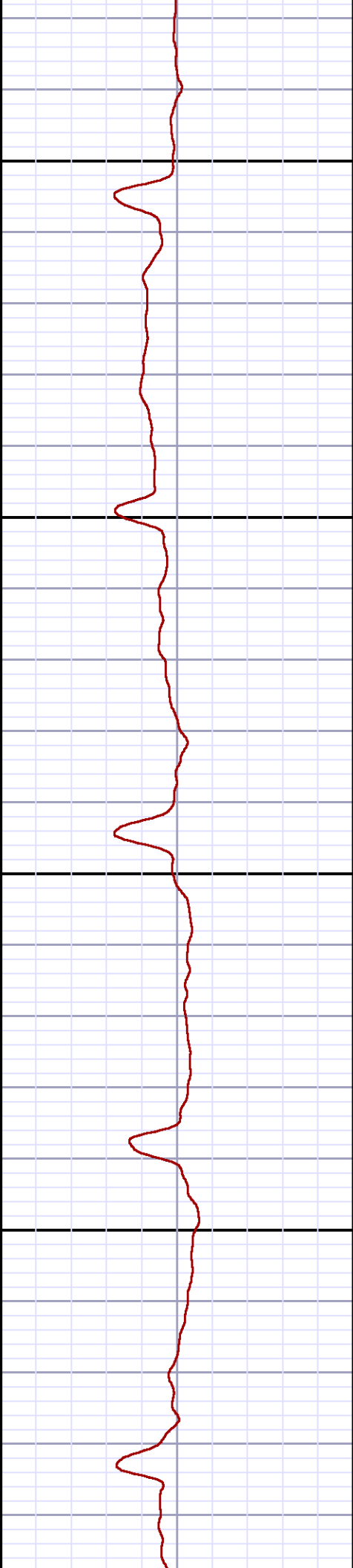
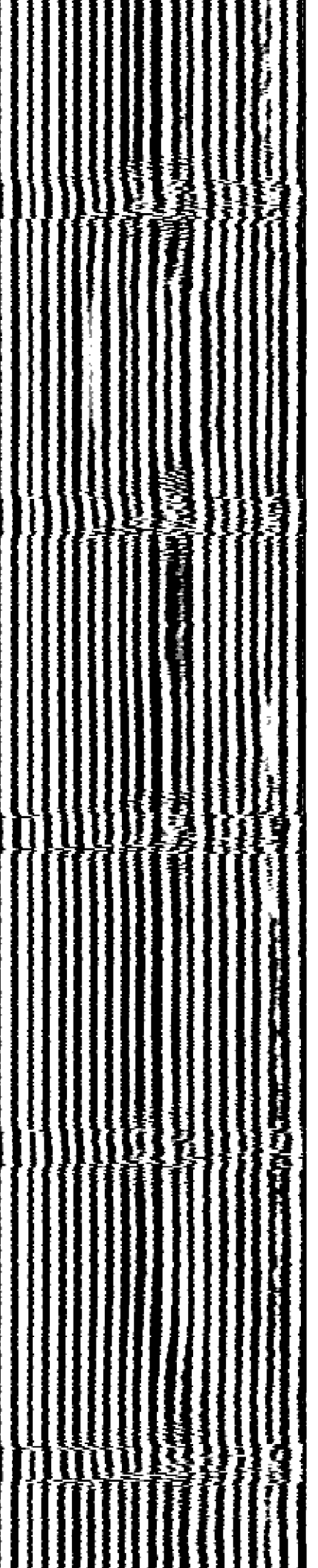


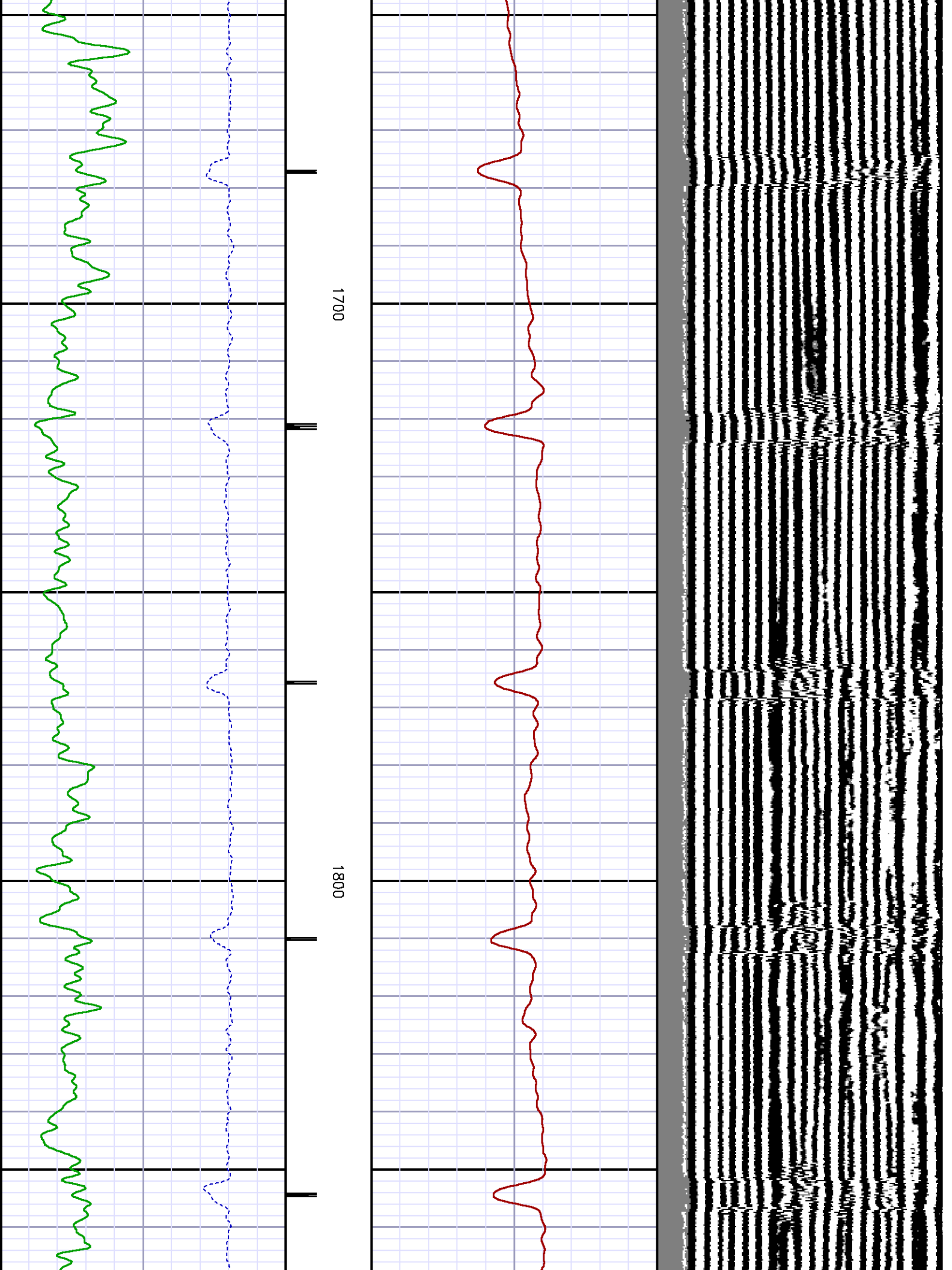


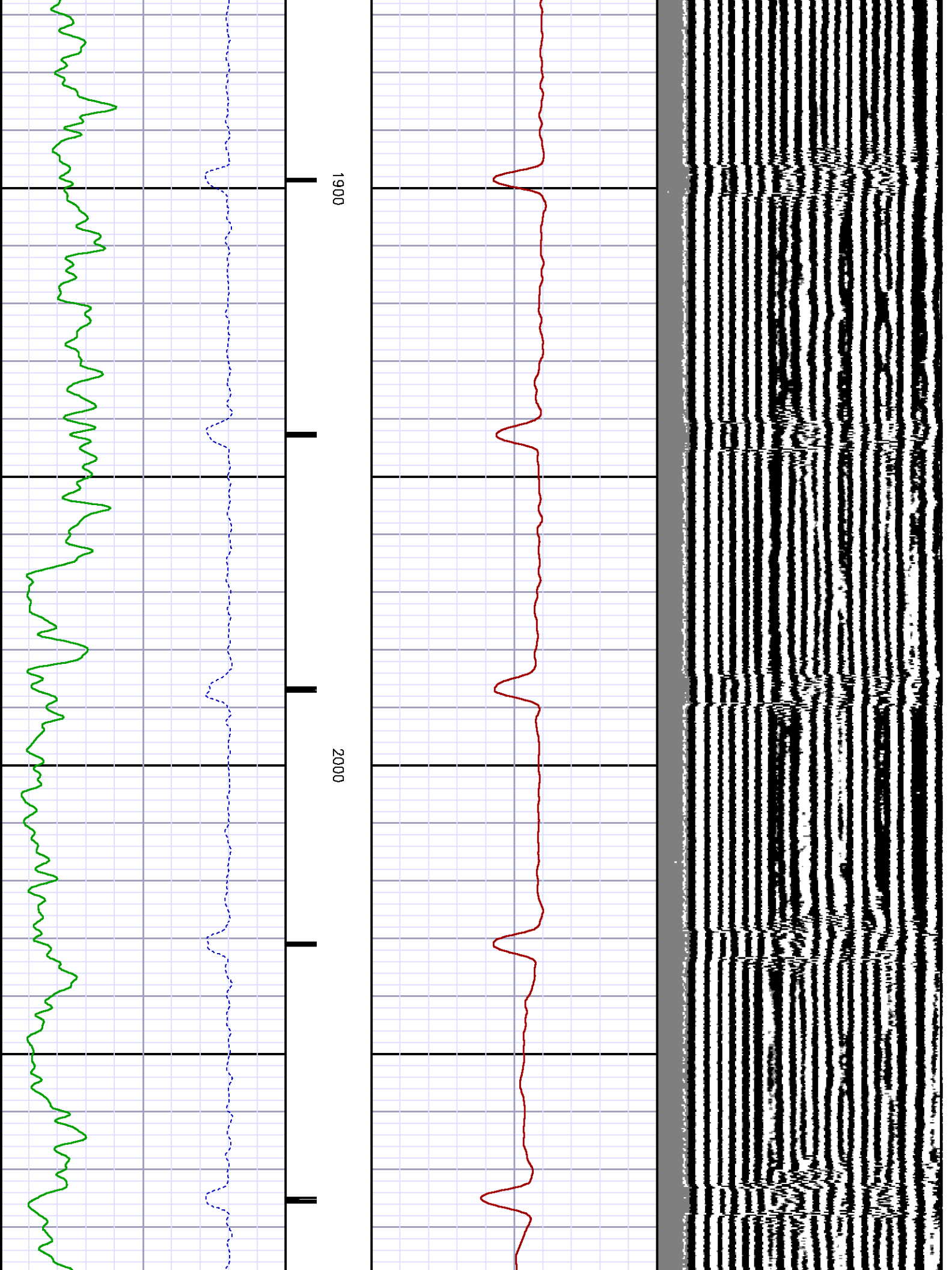


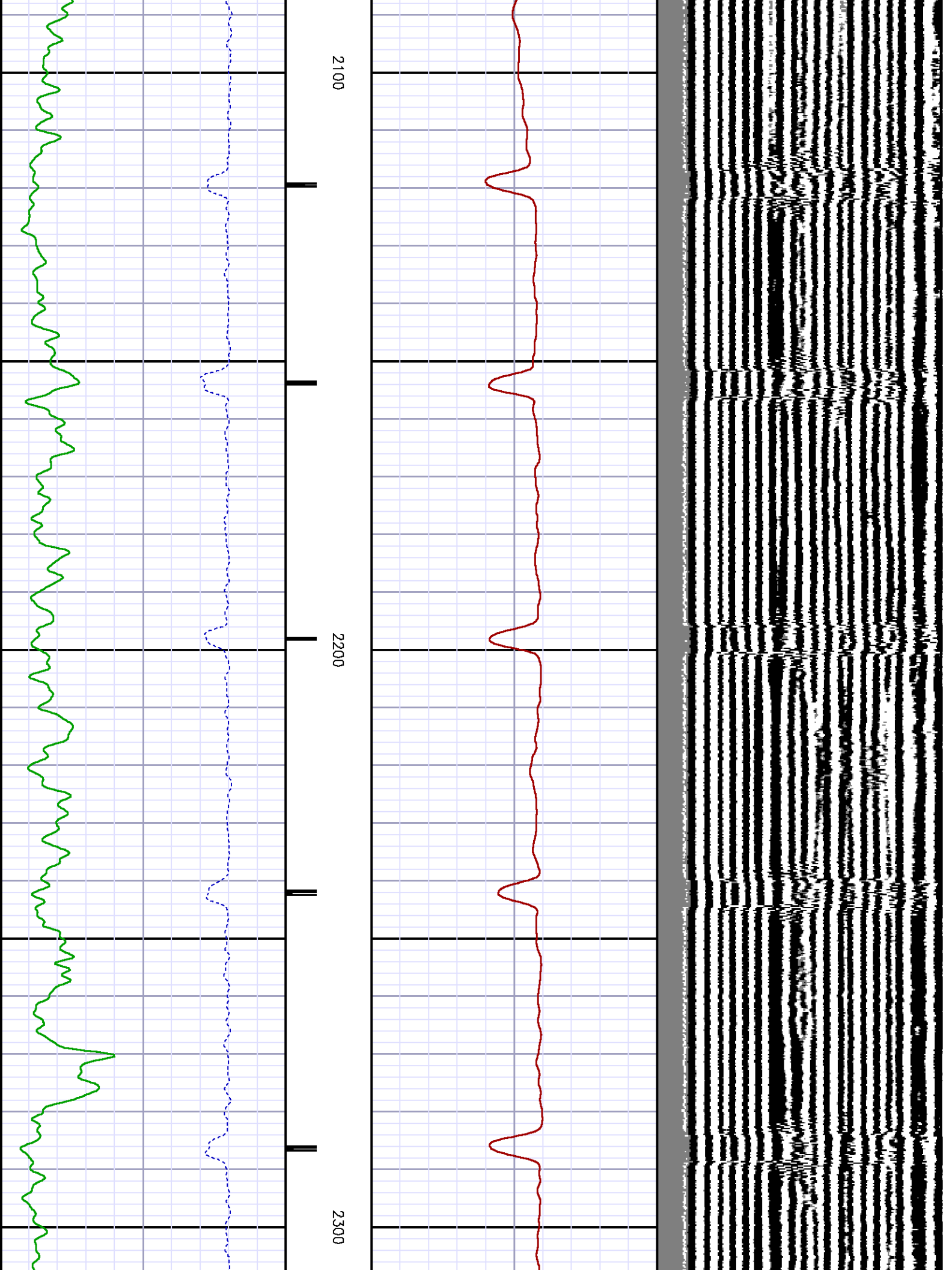


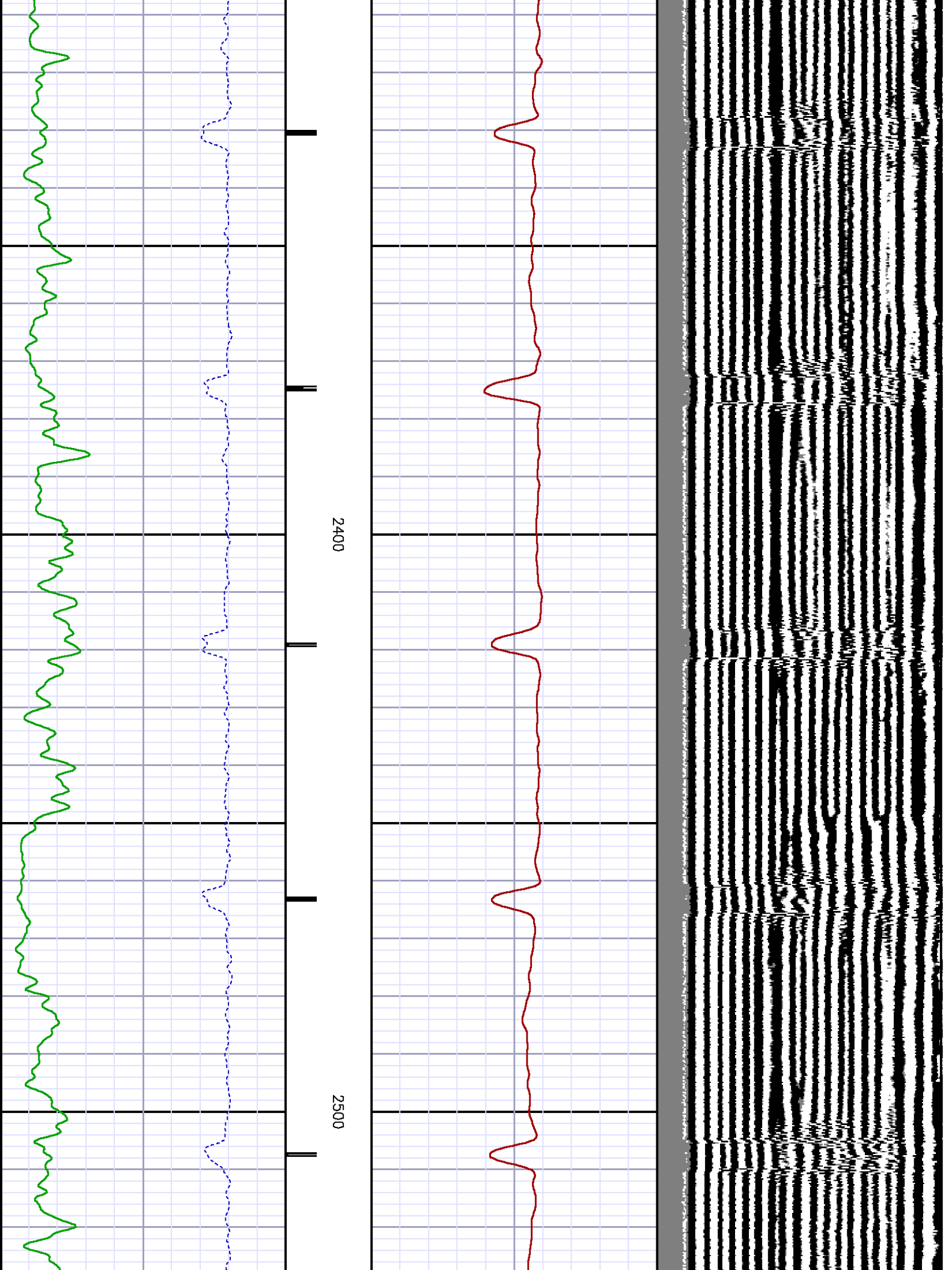


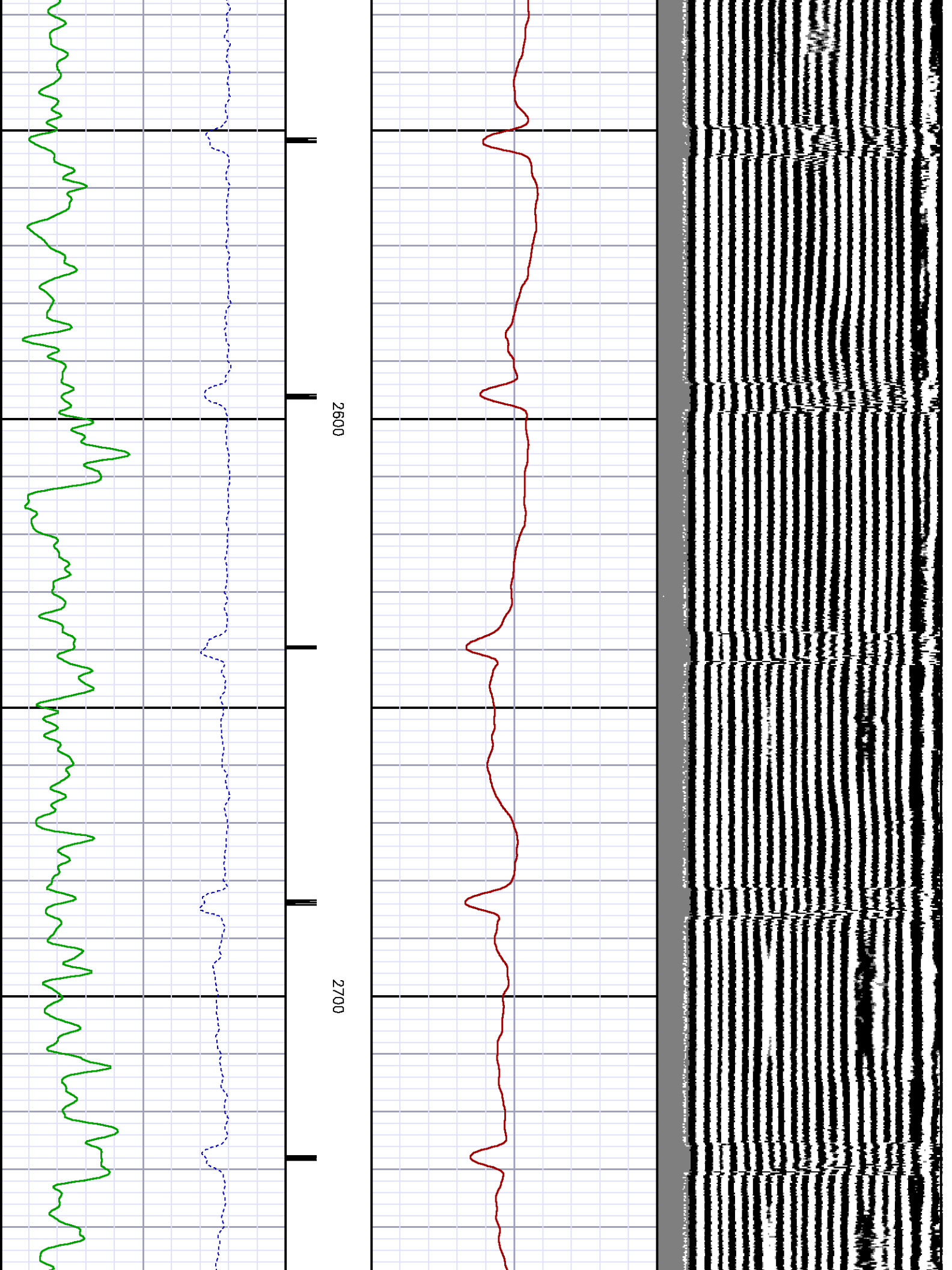


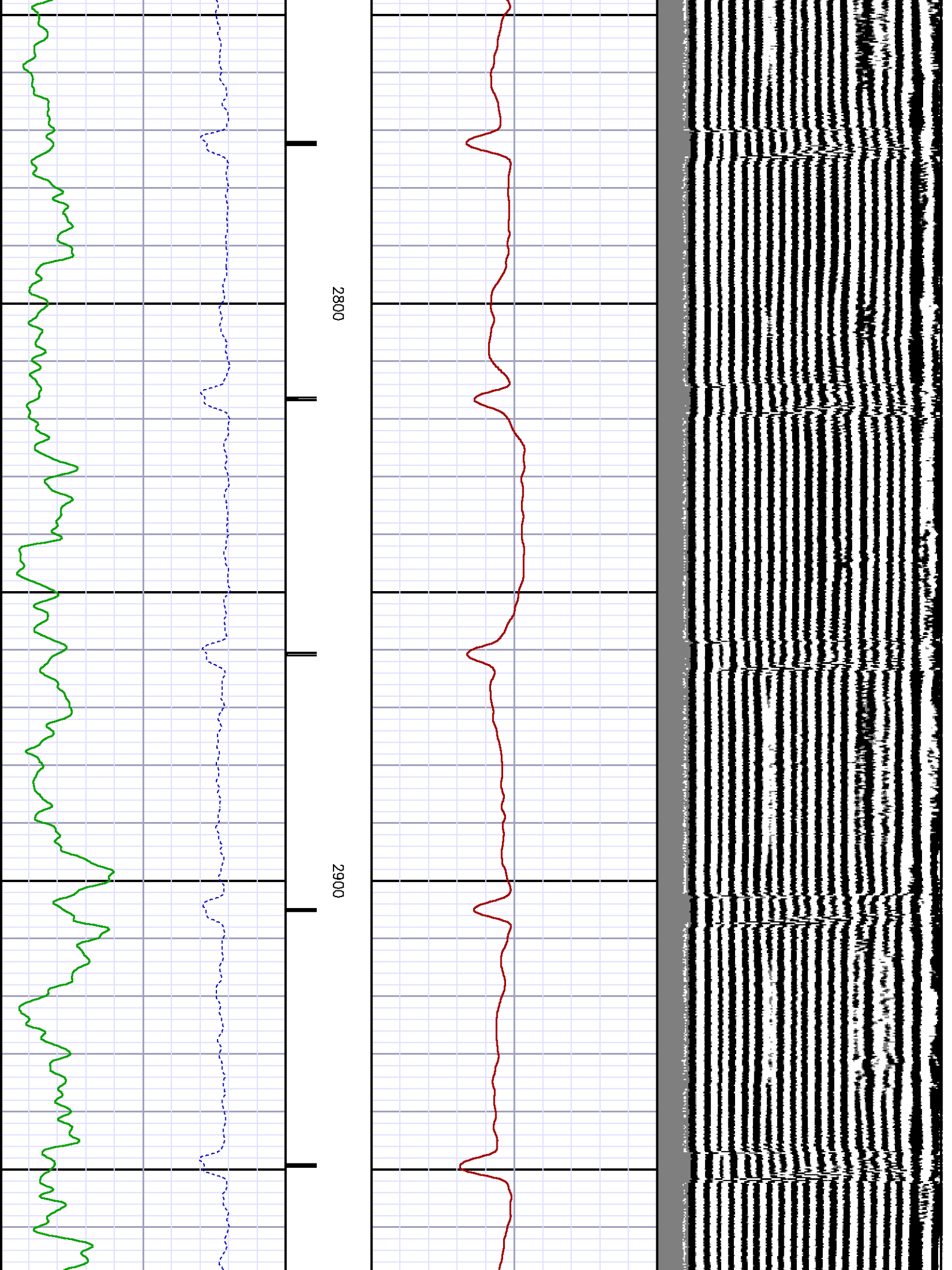


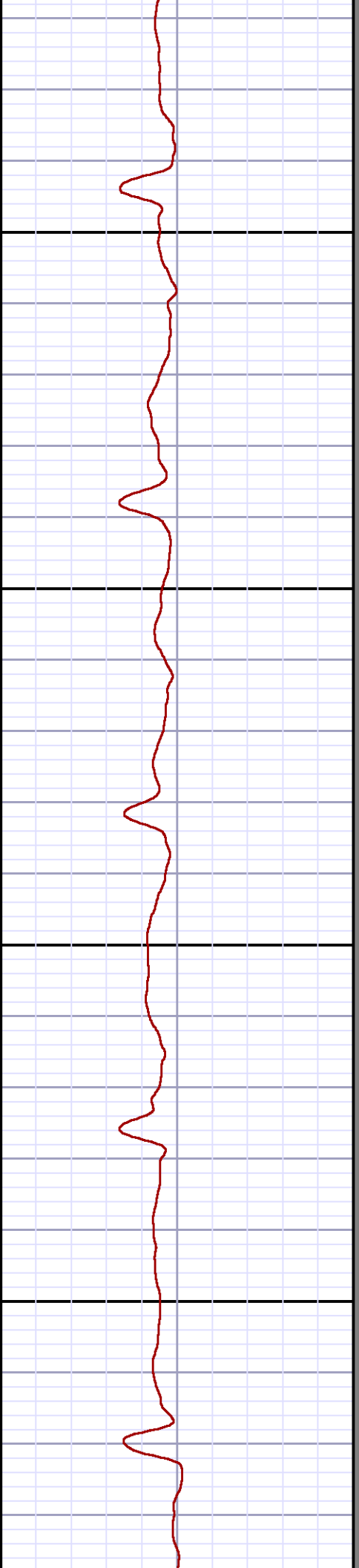
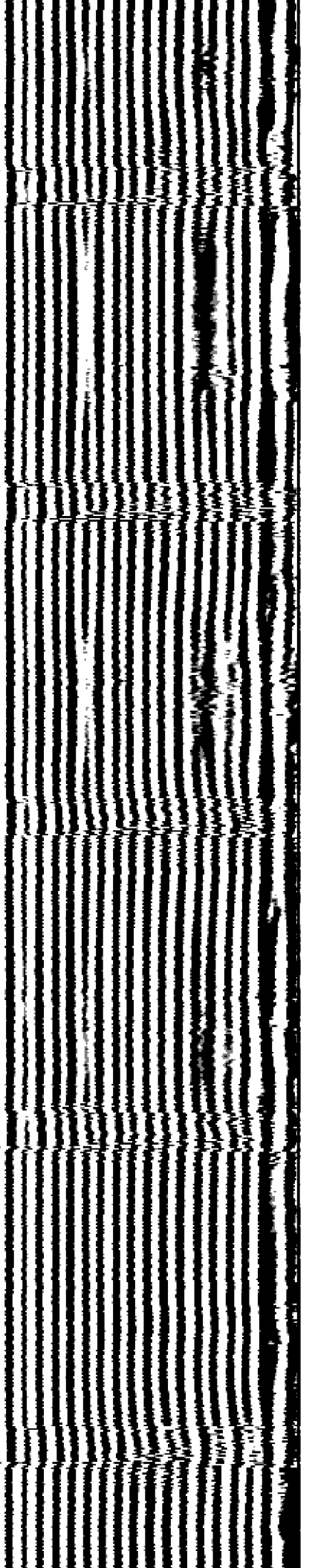






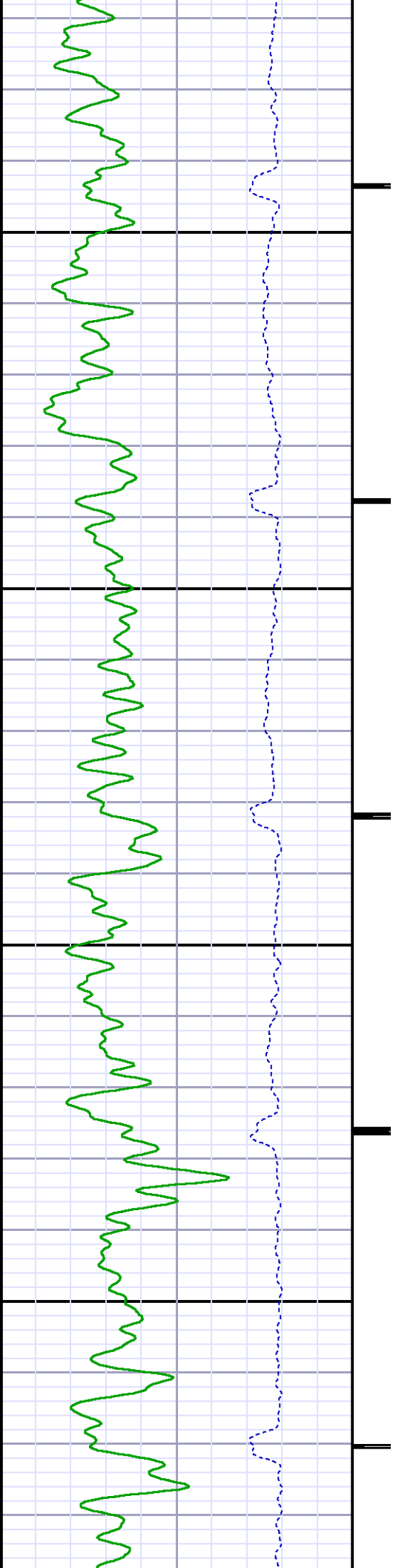


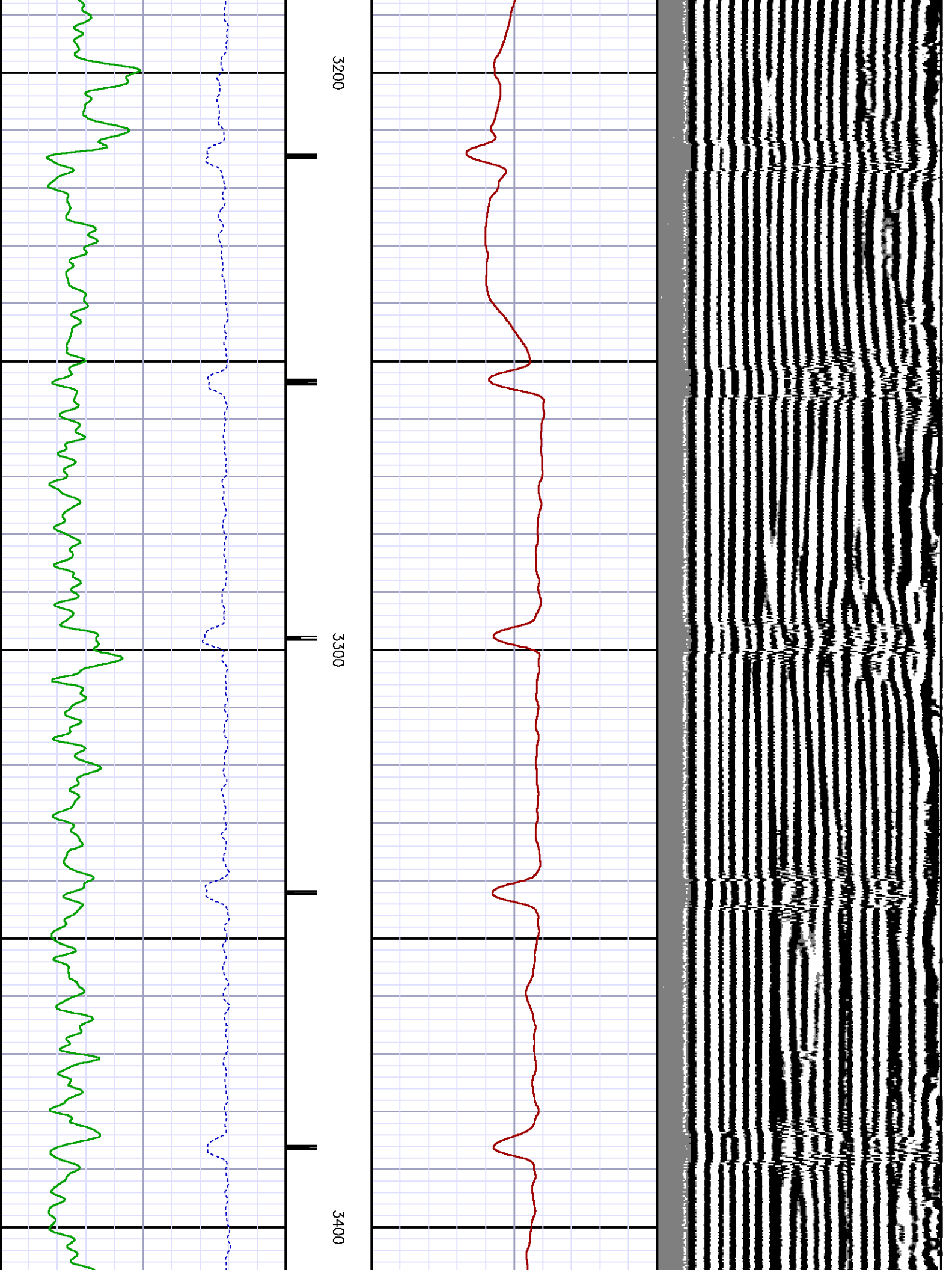


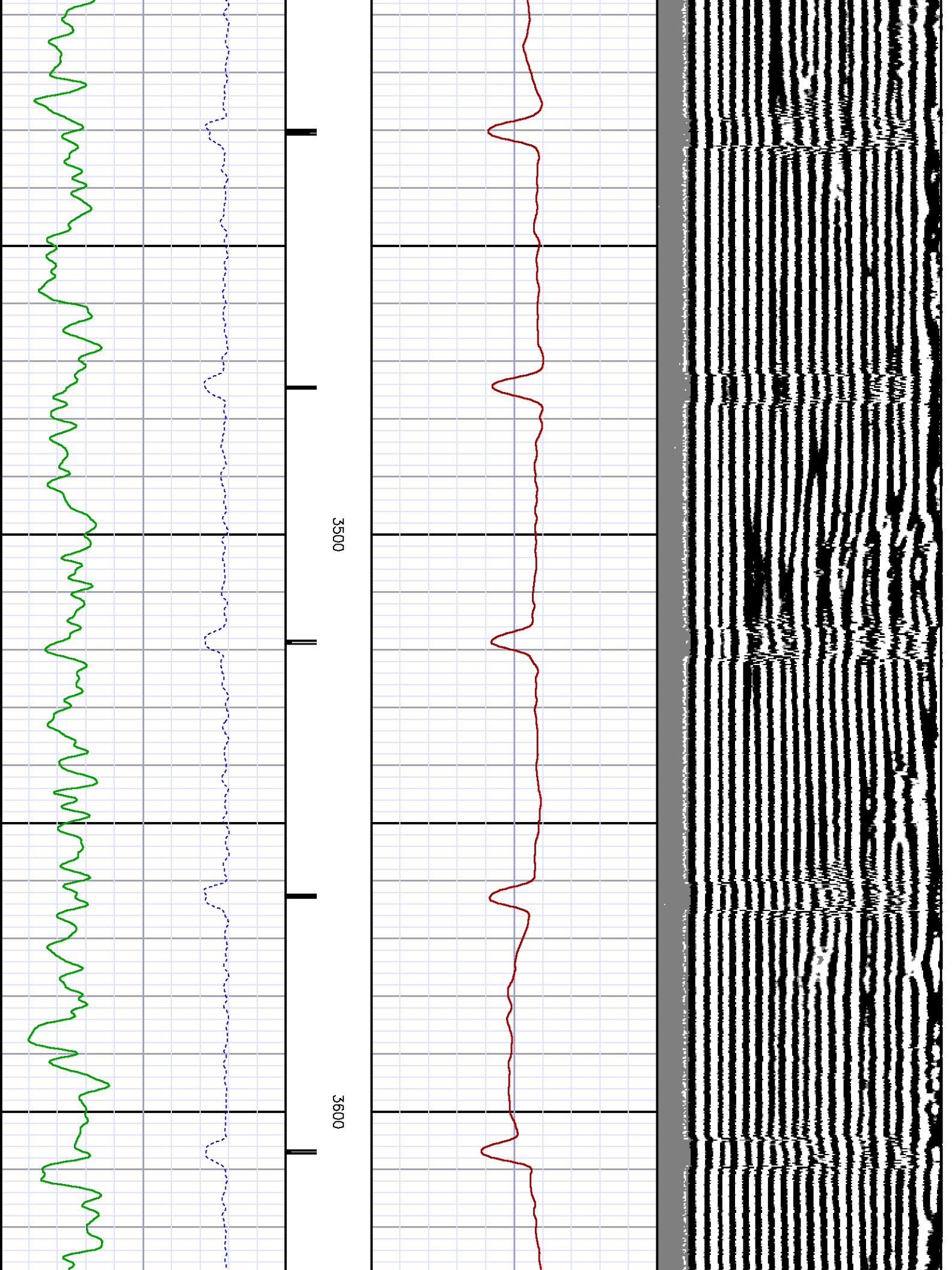


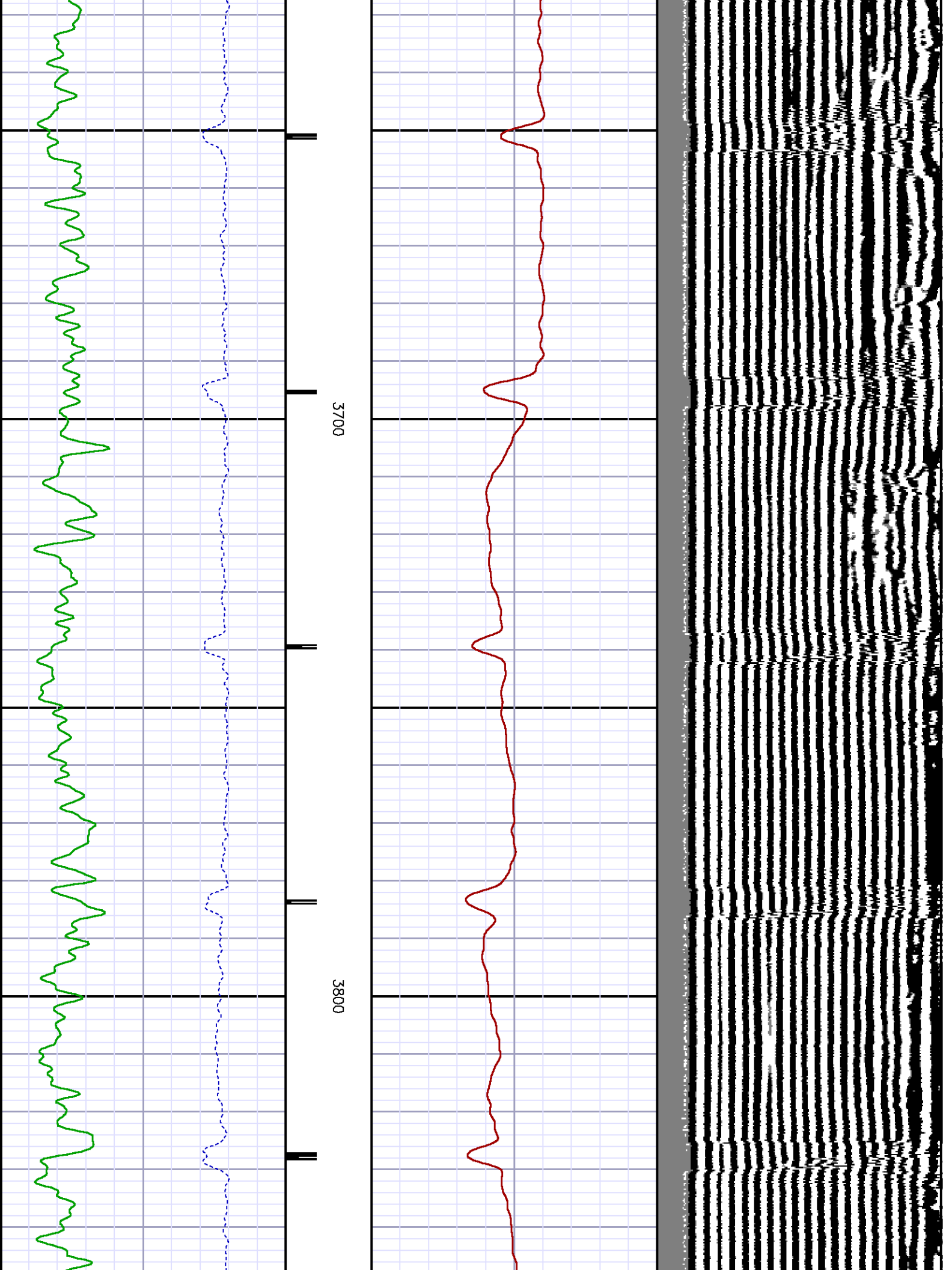
3000

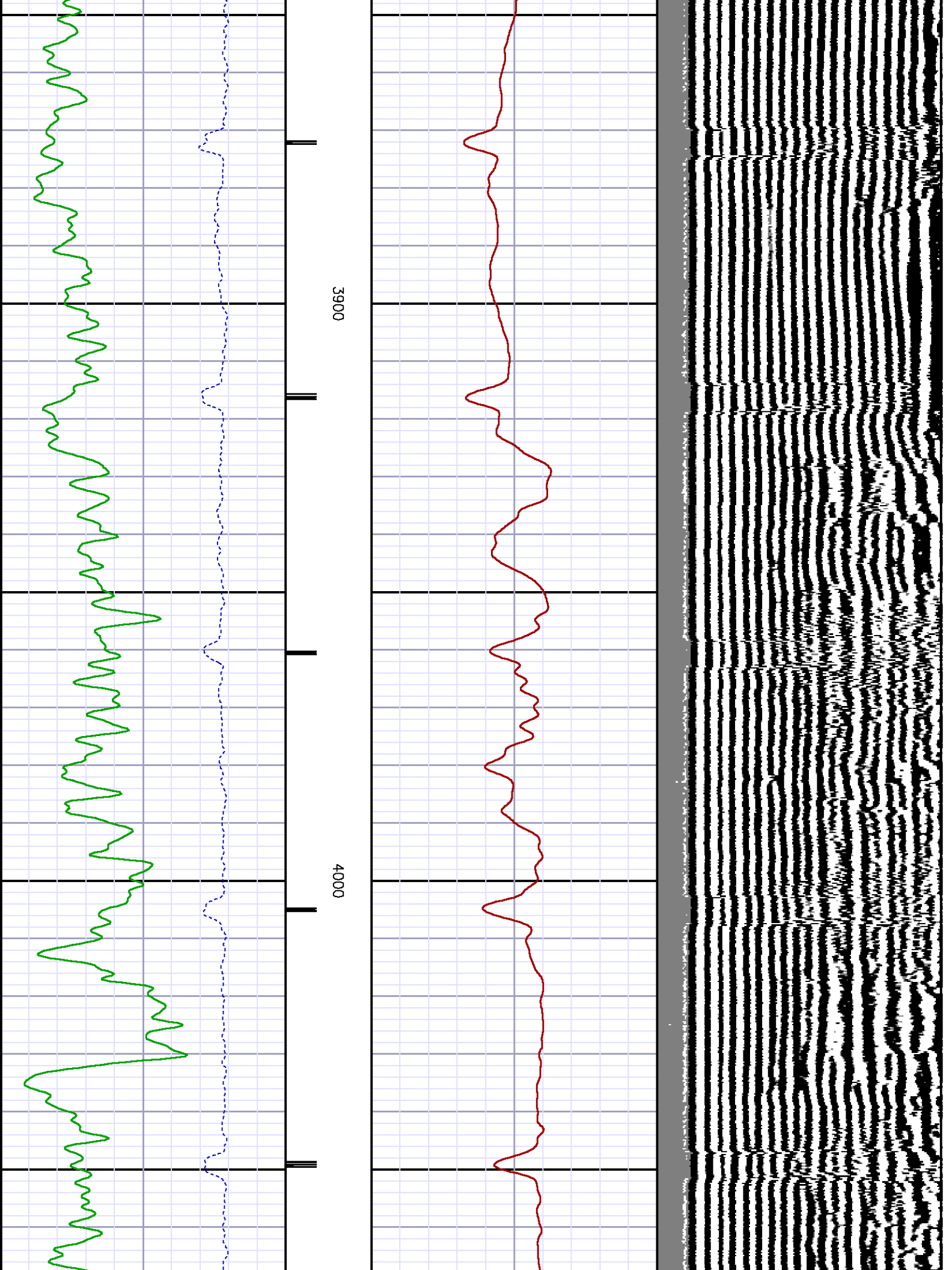
3100

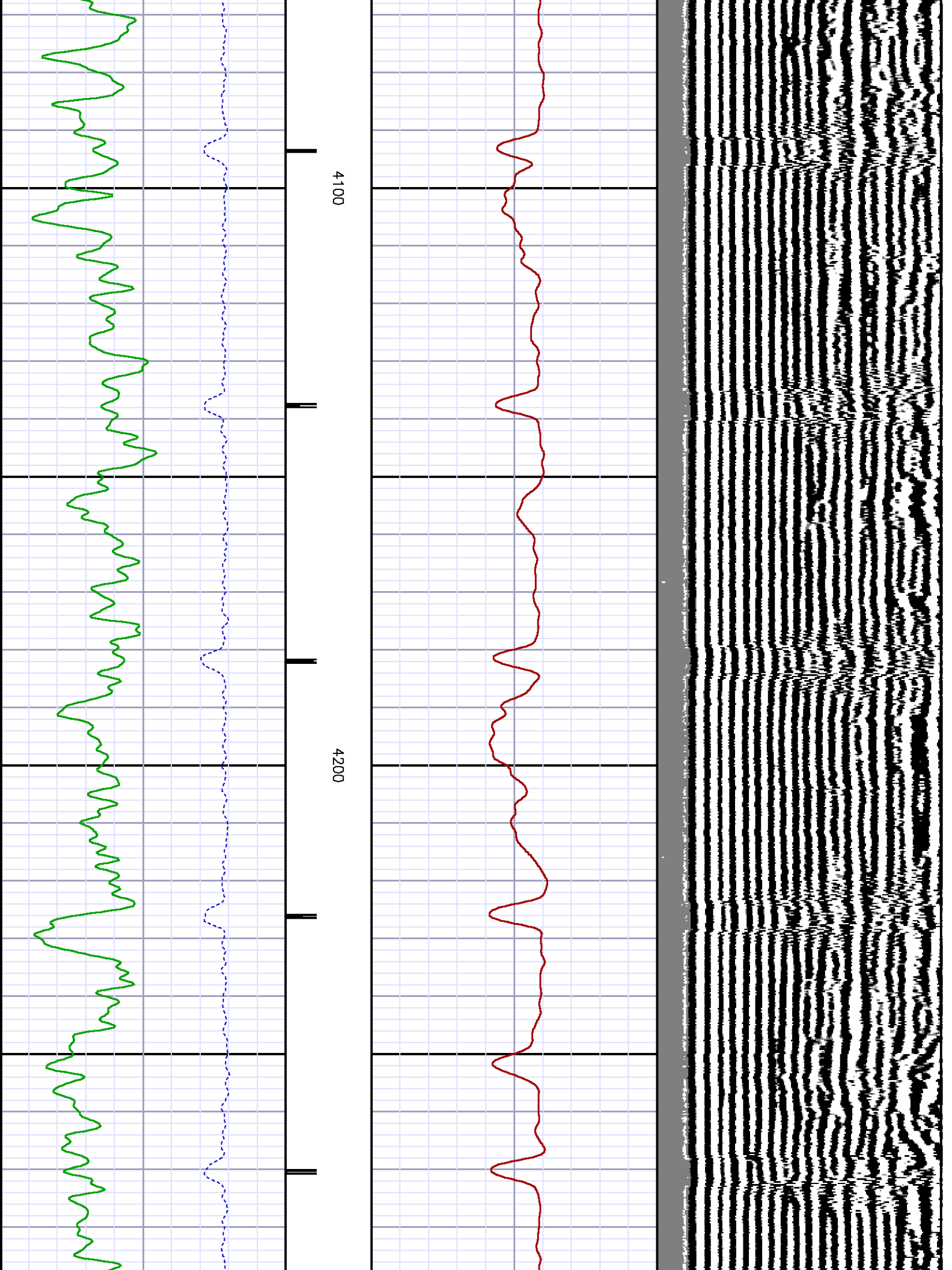


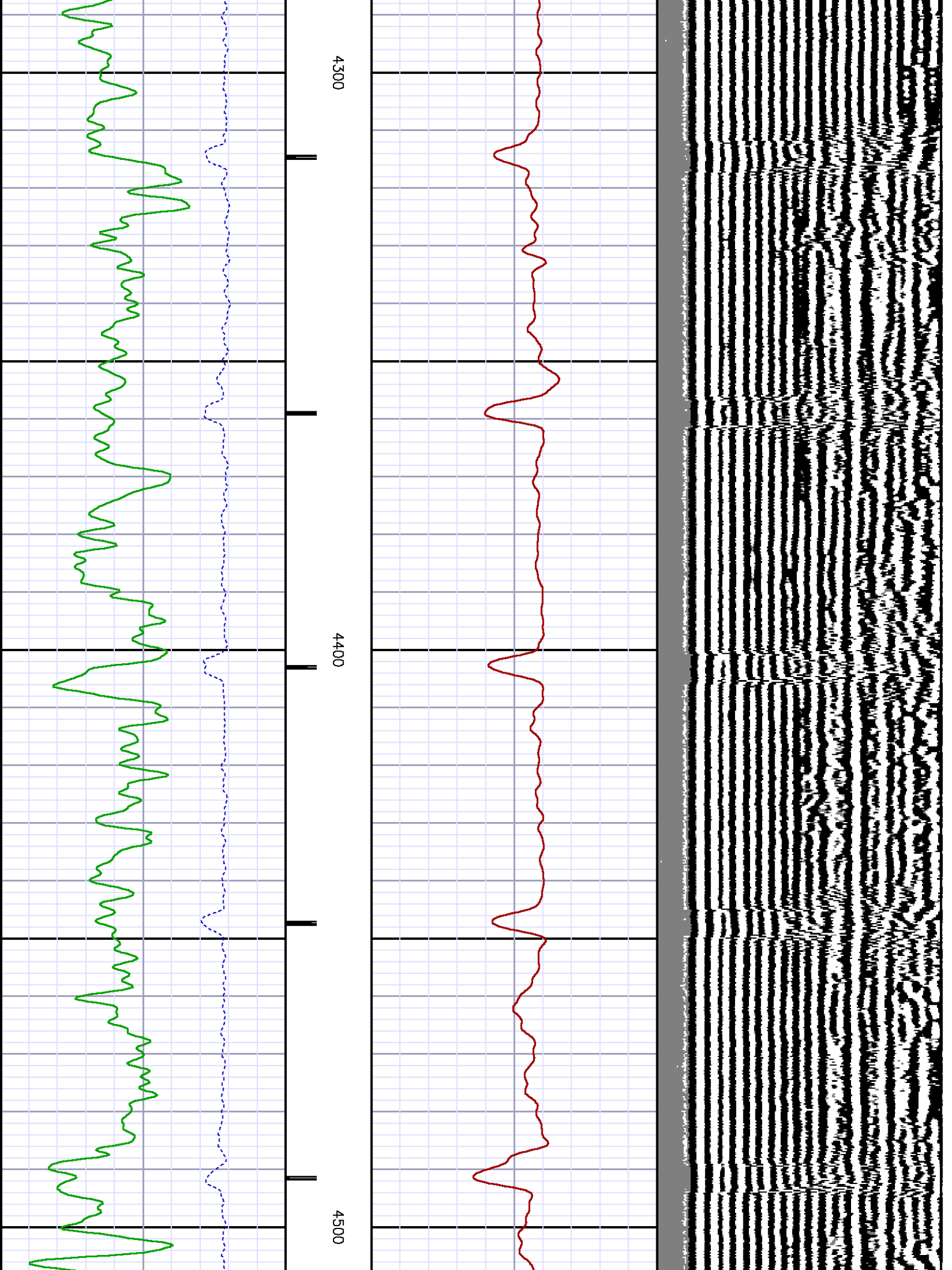


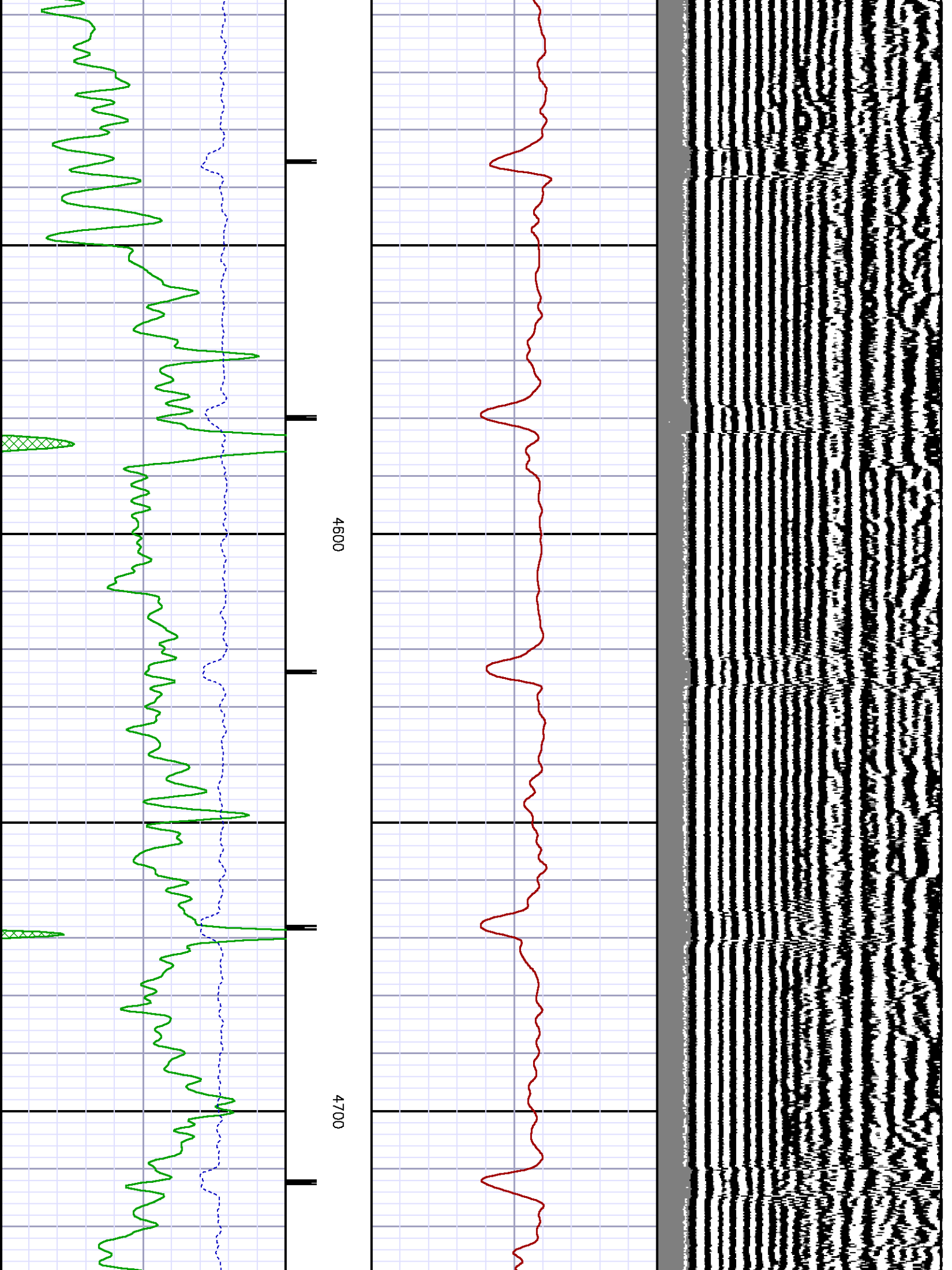


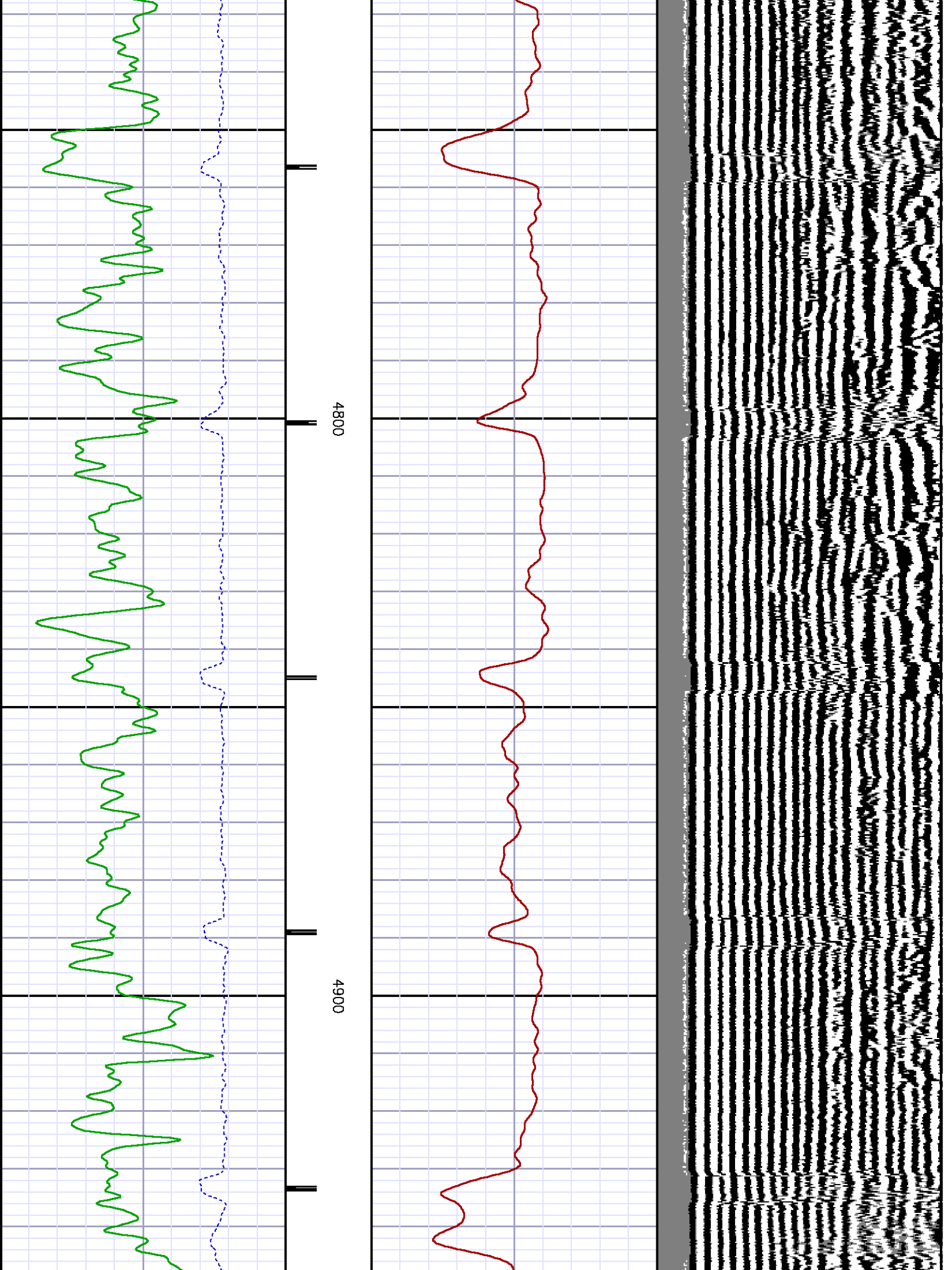


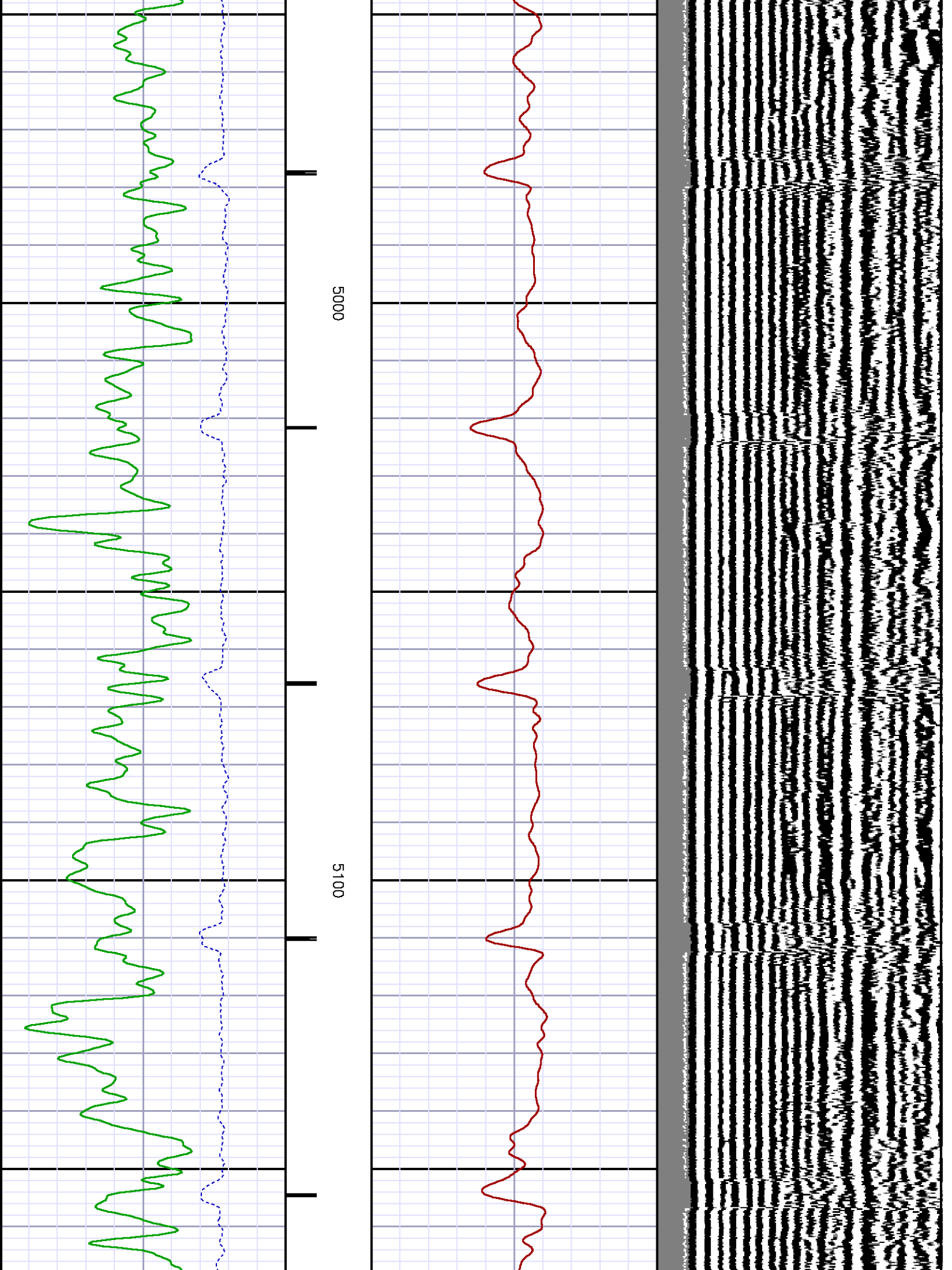


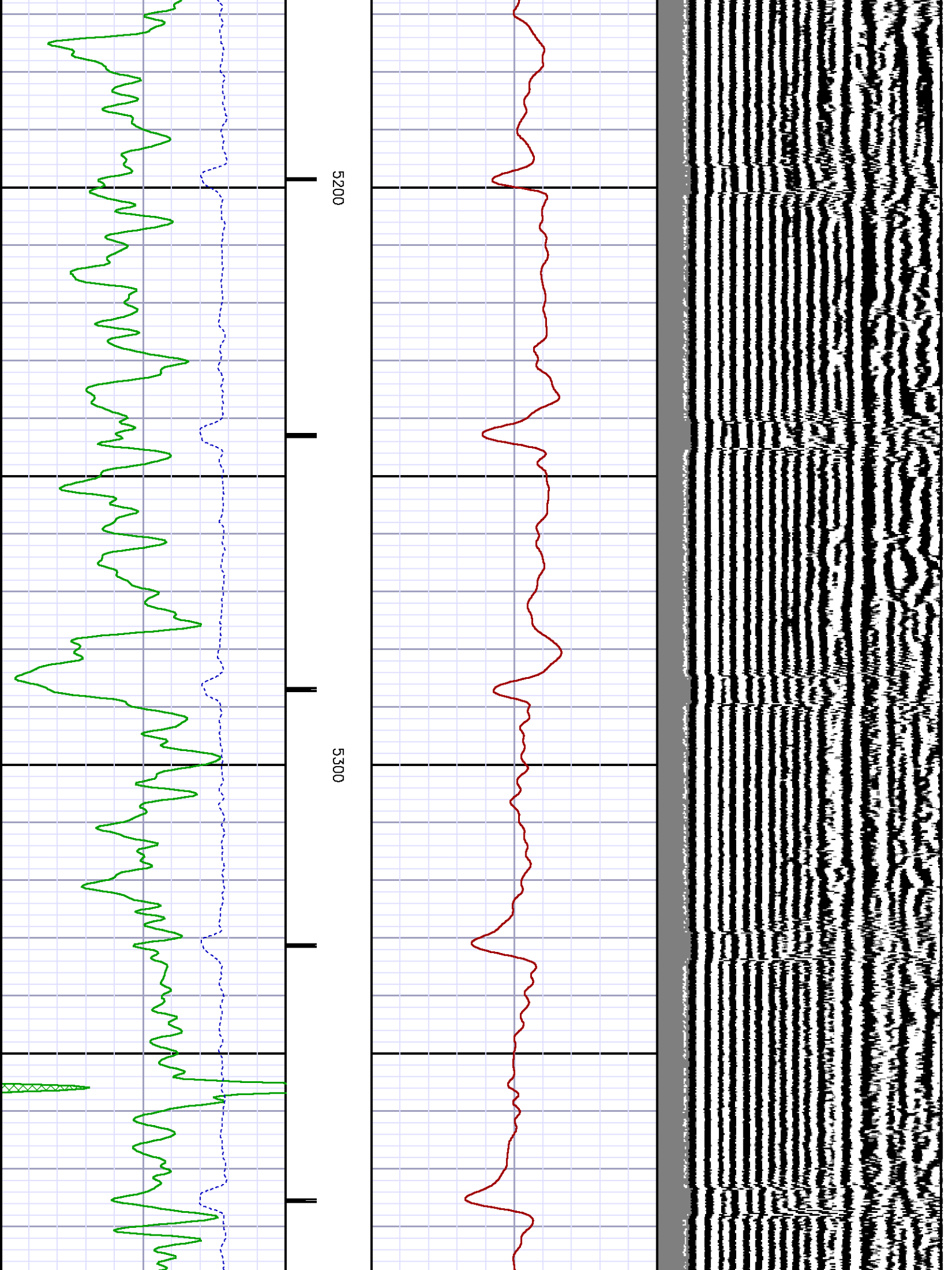


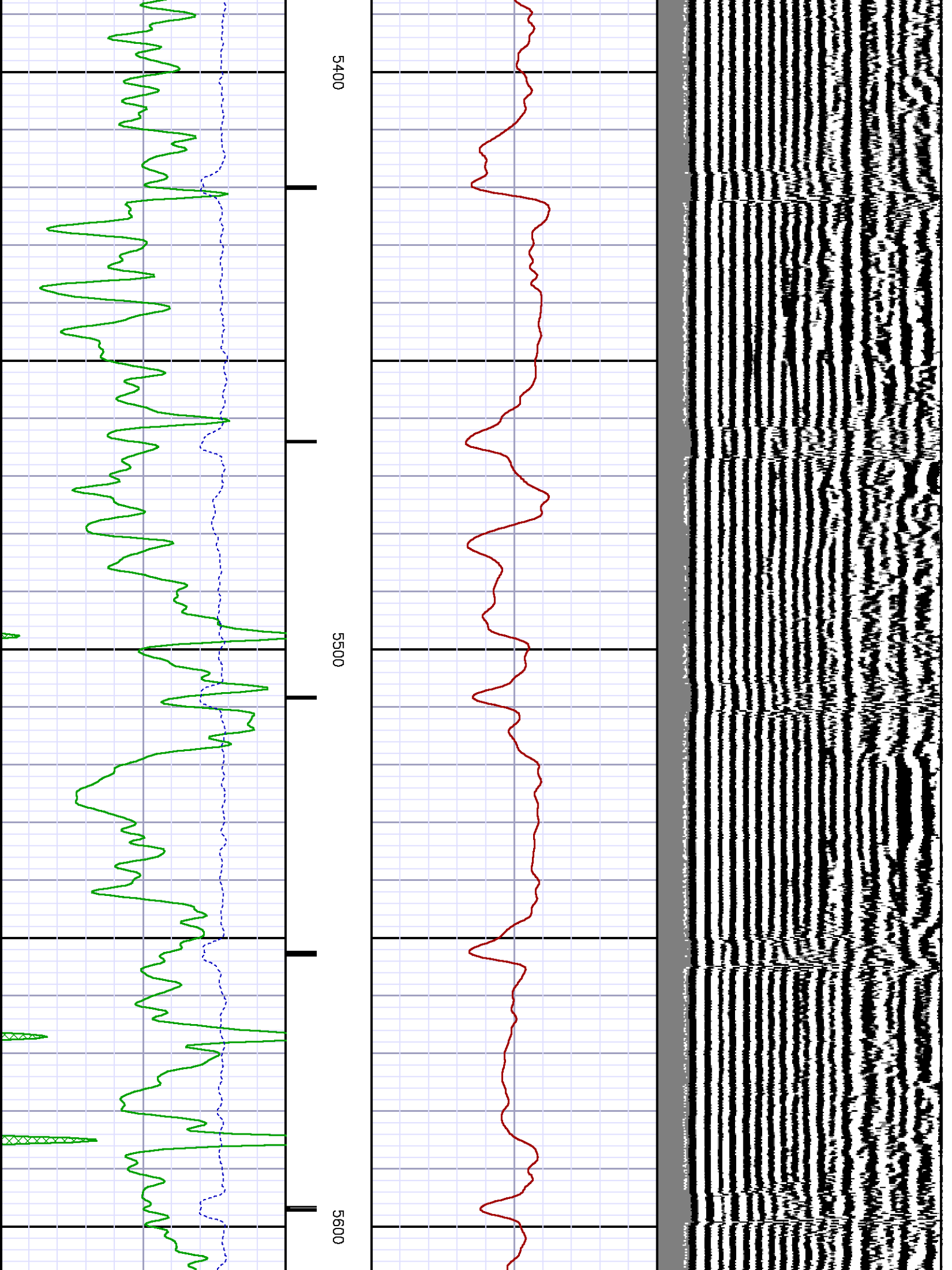


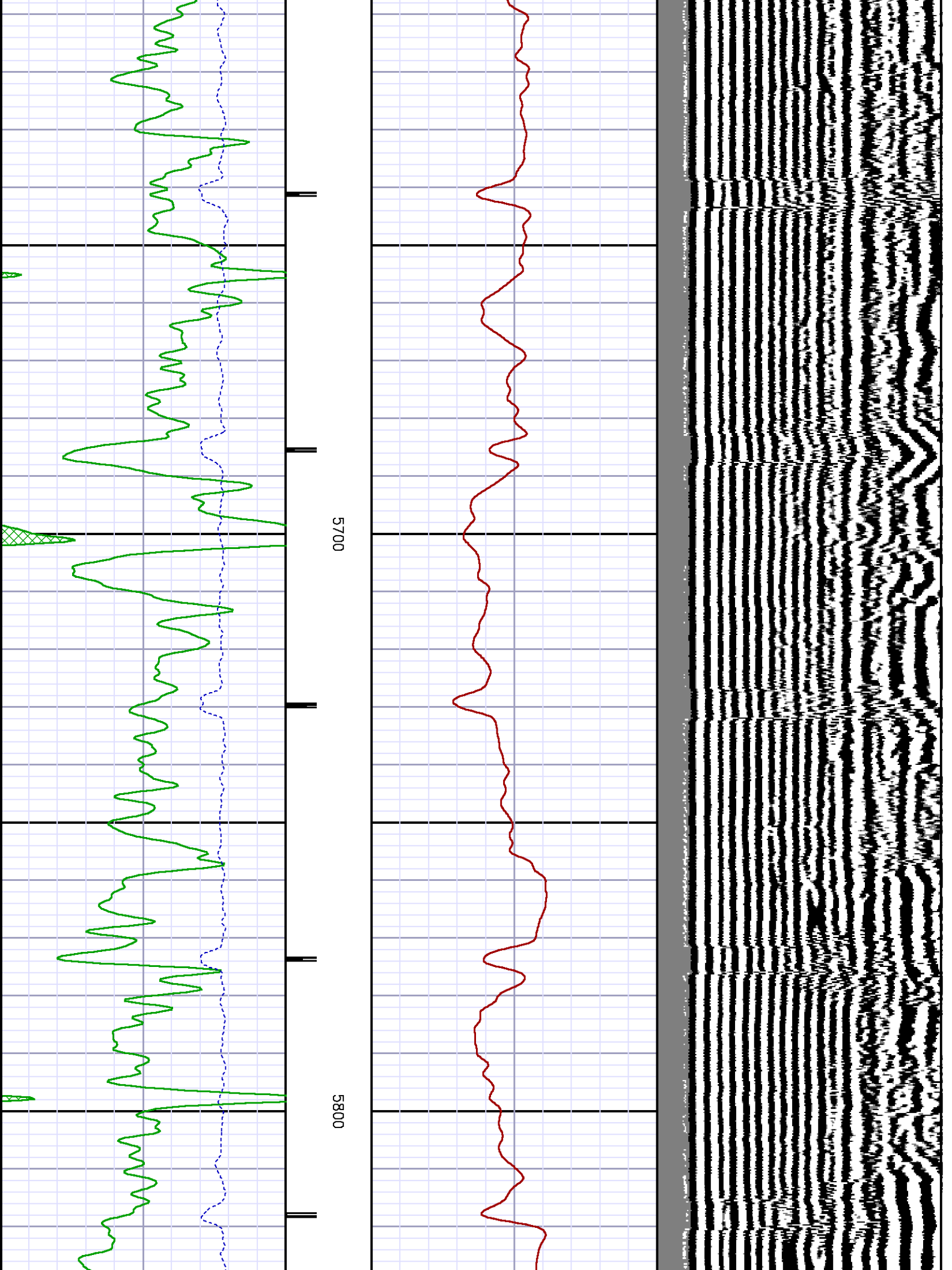


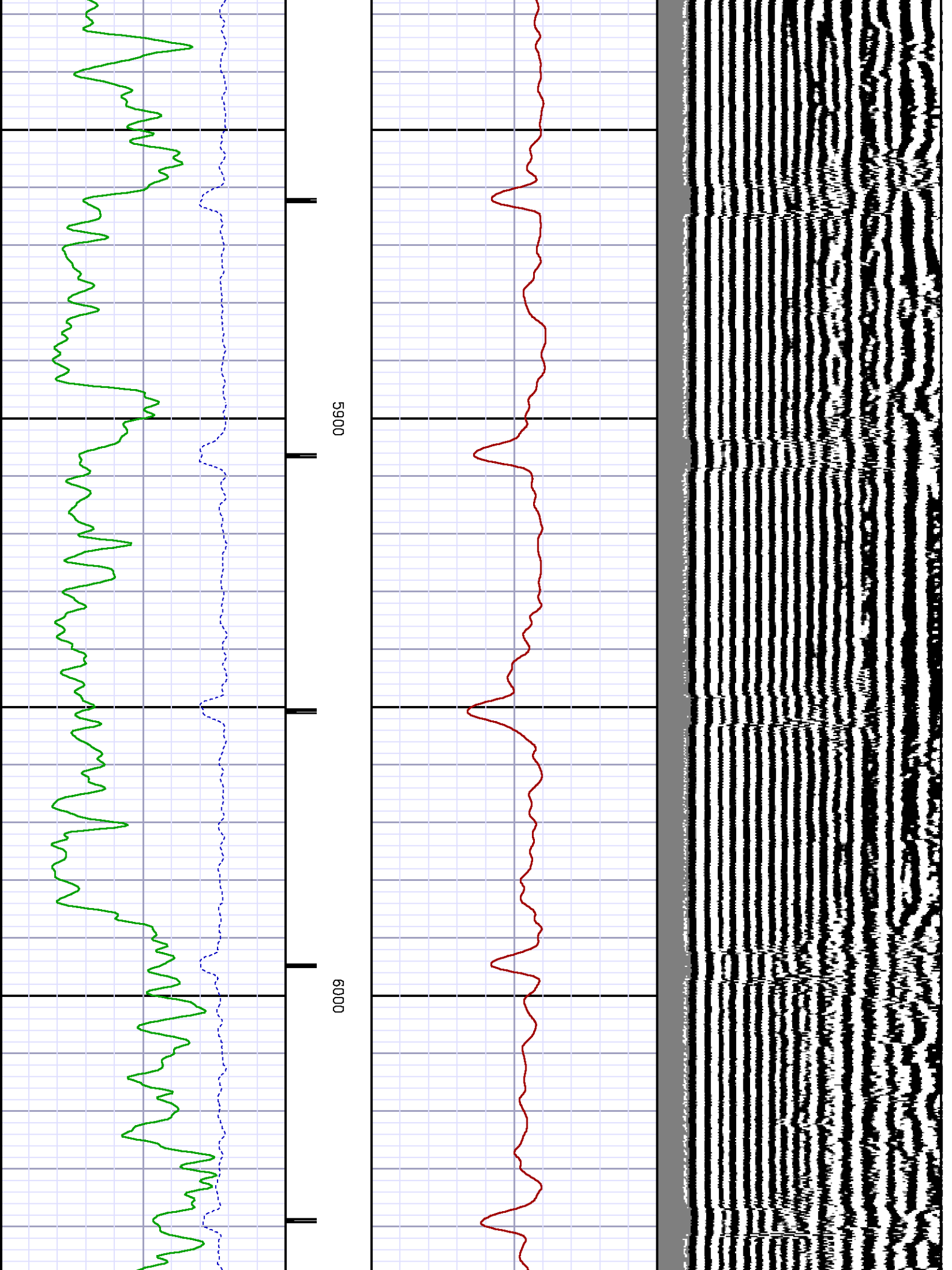


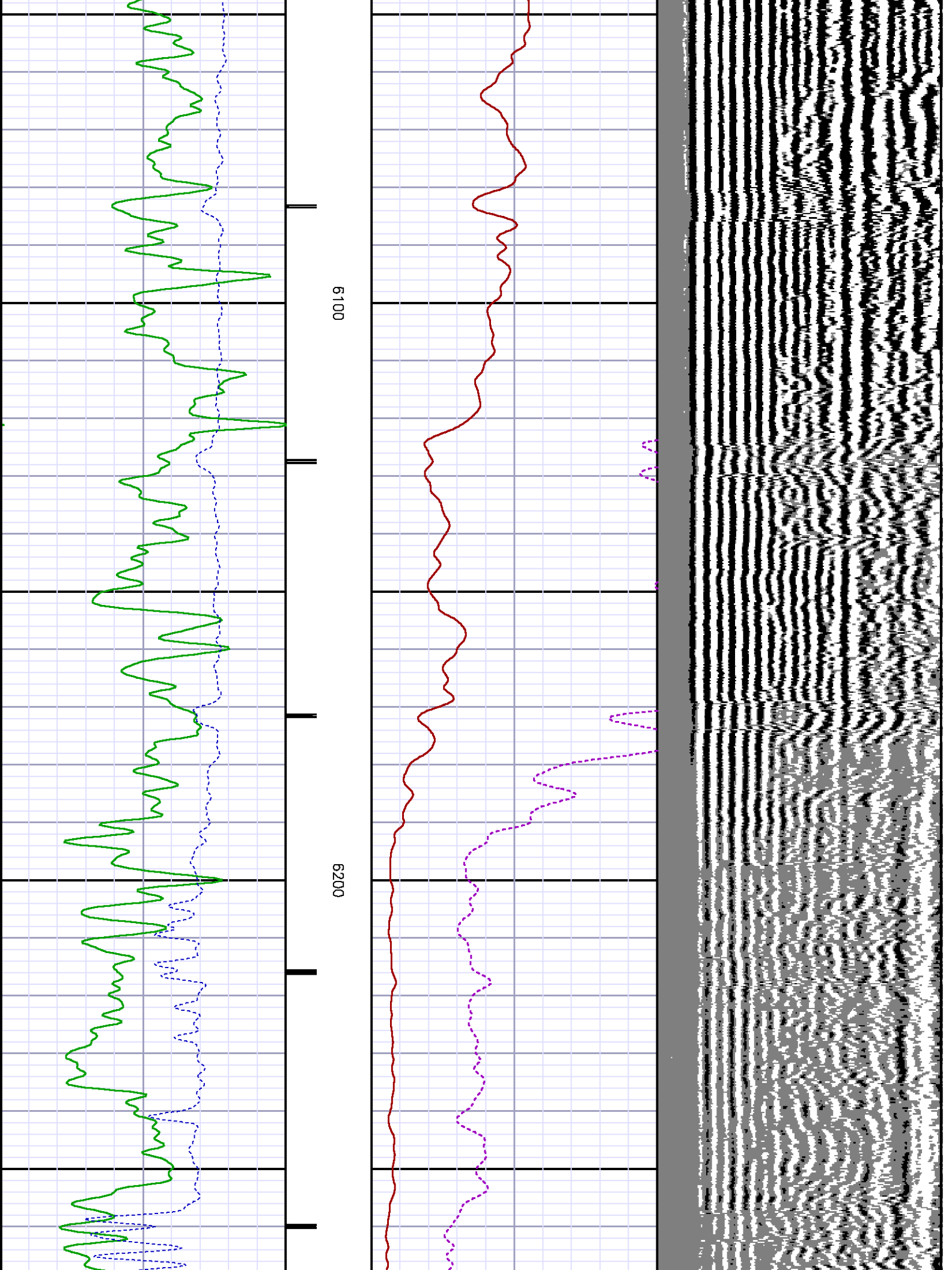


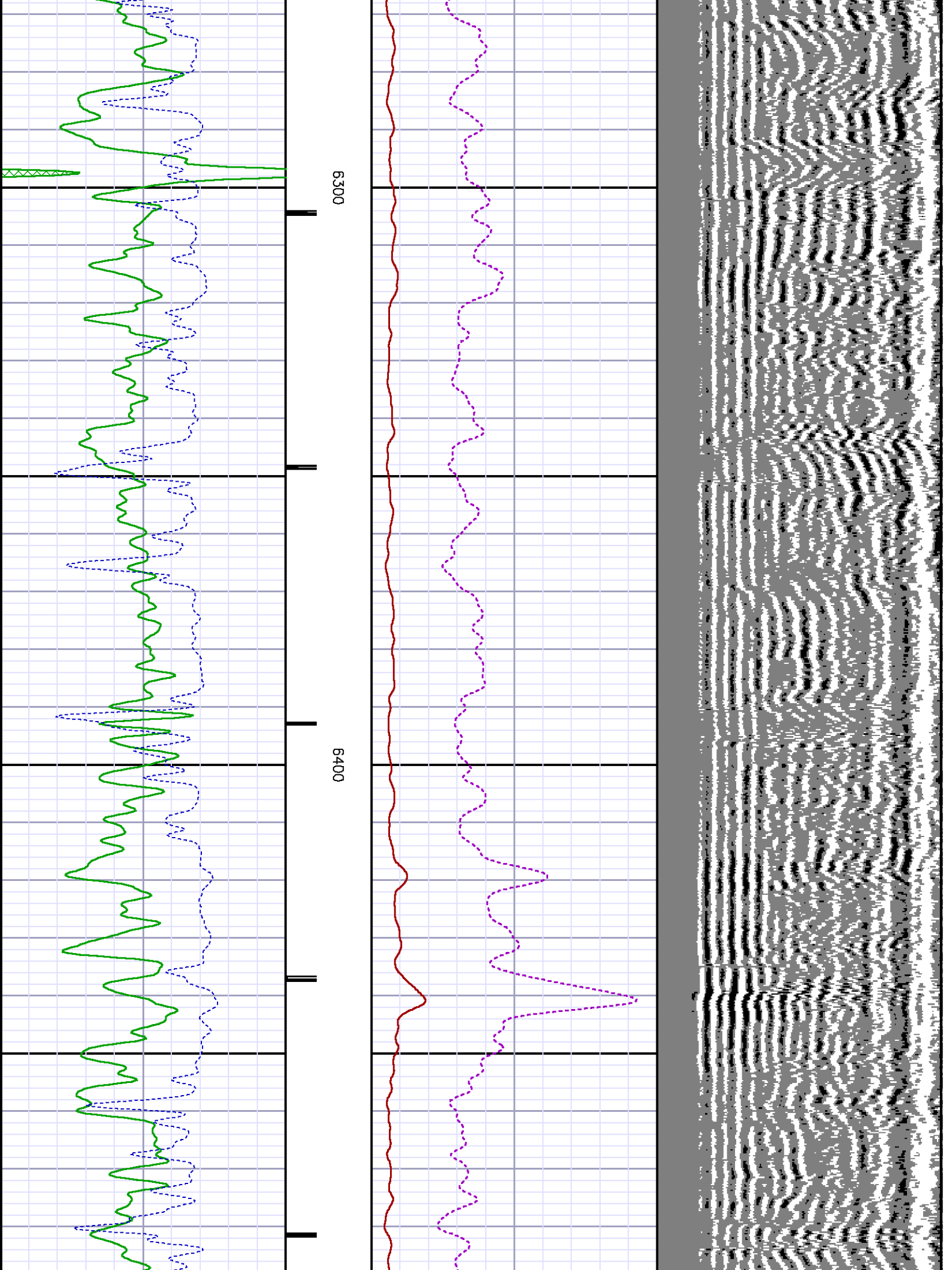


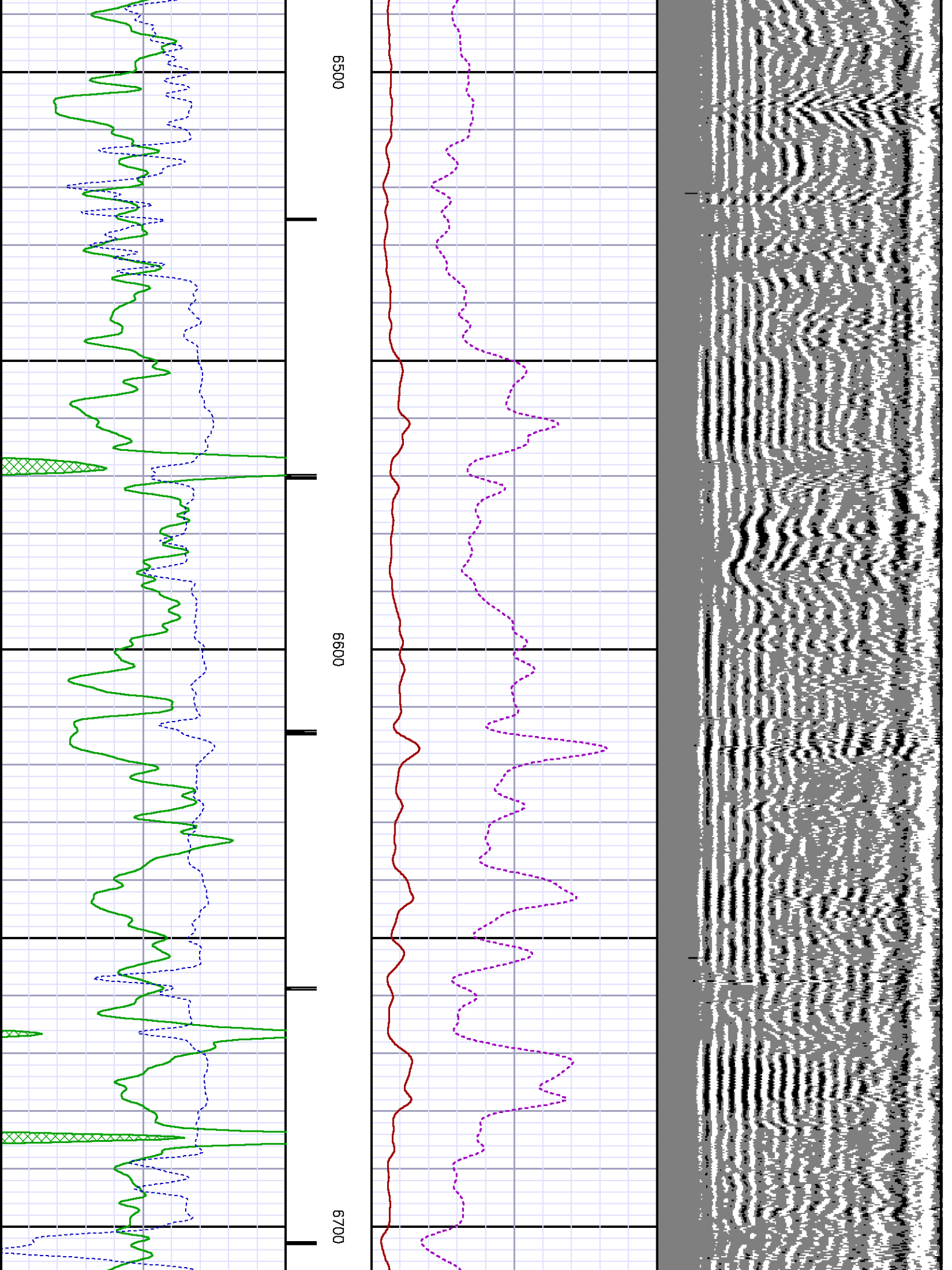


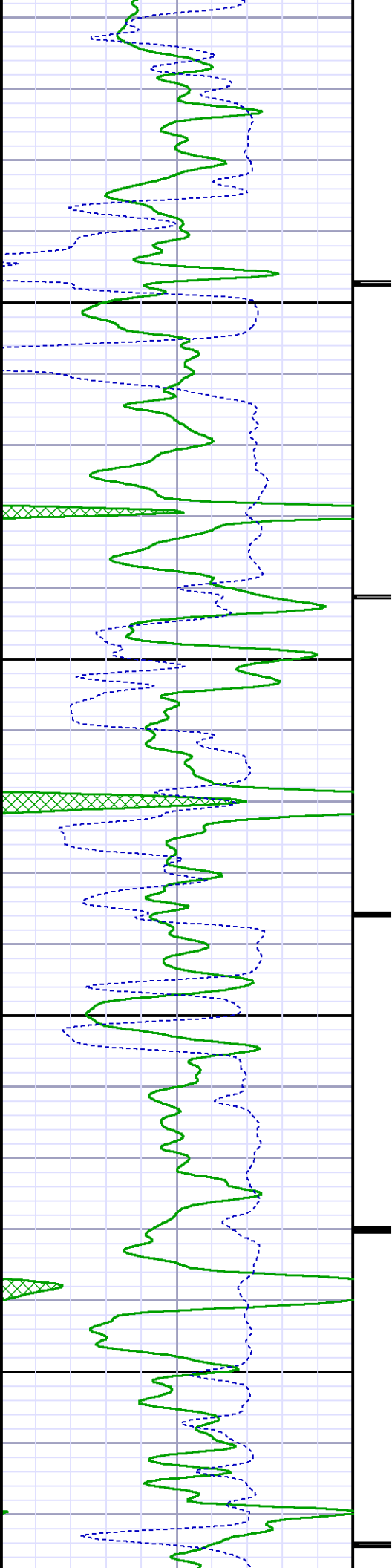






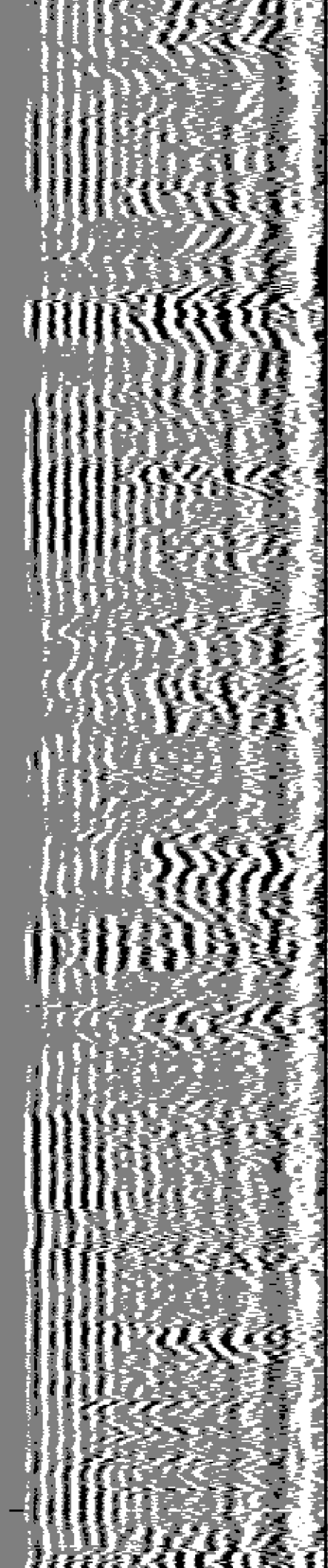
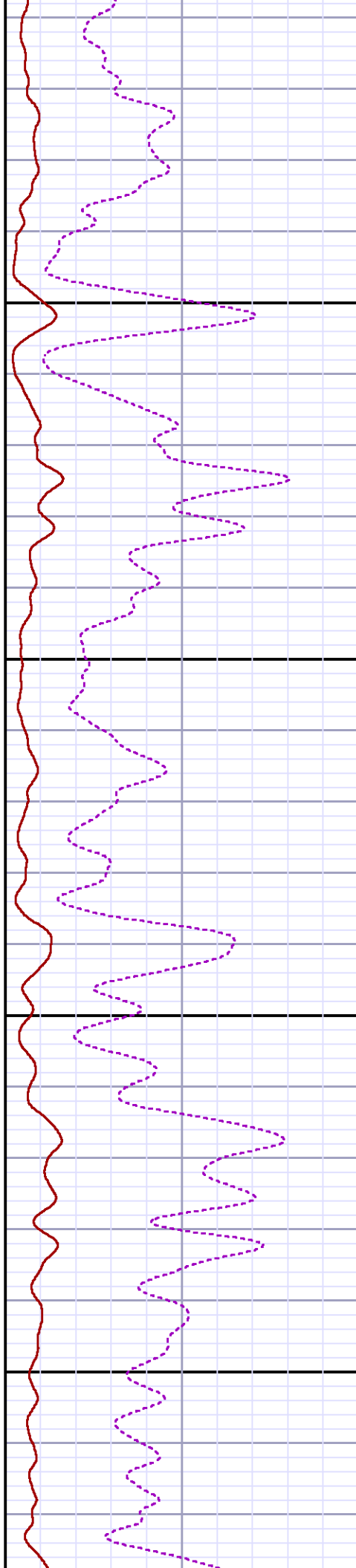


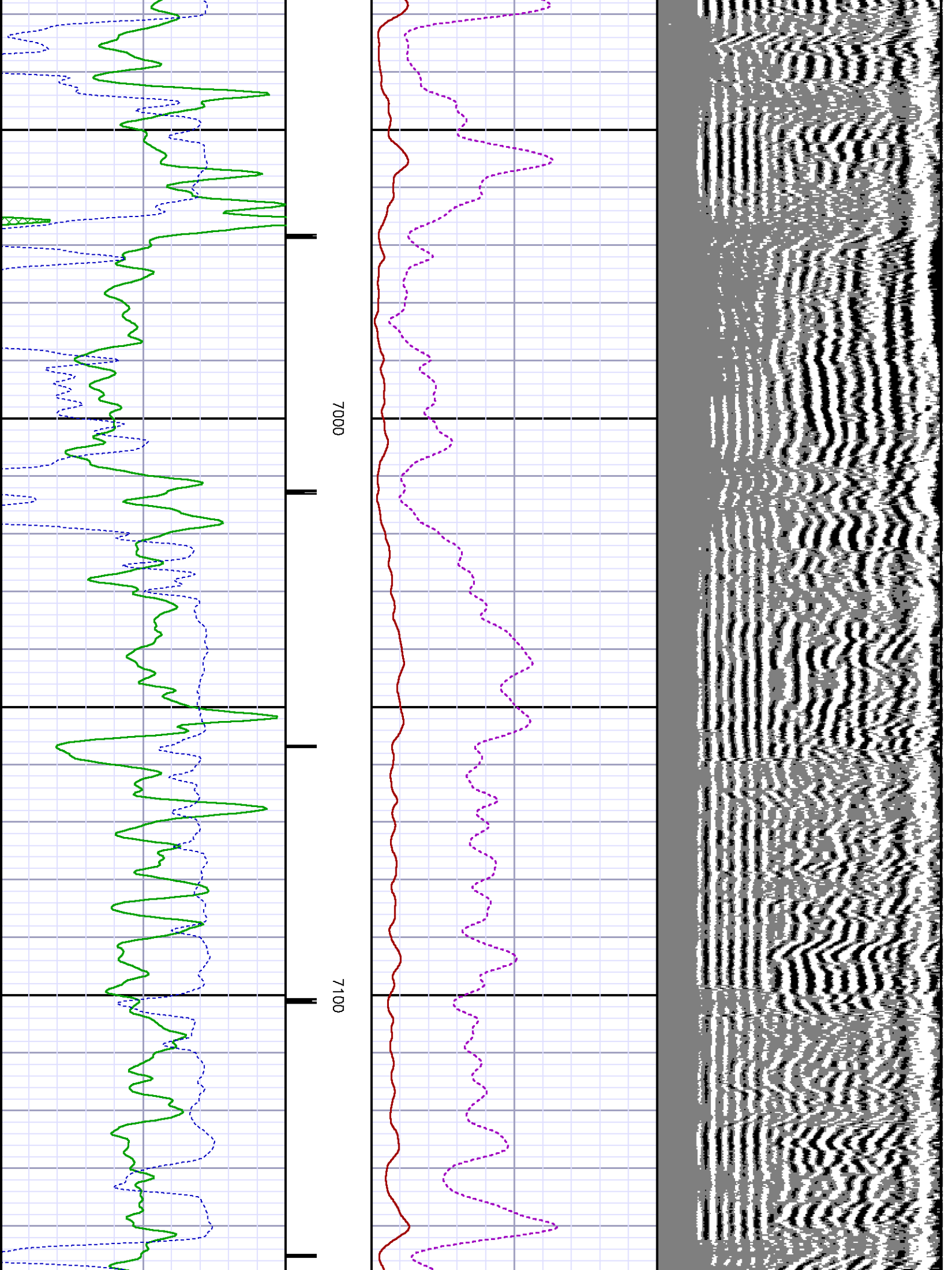


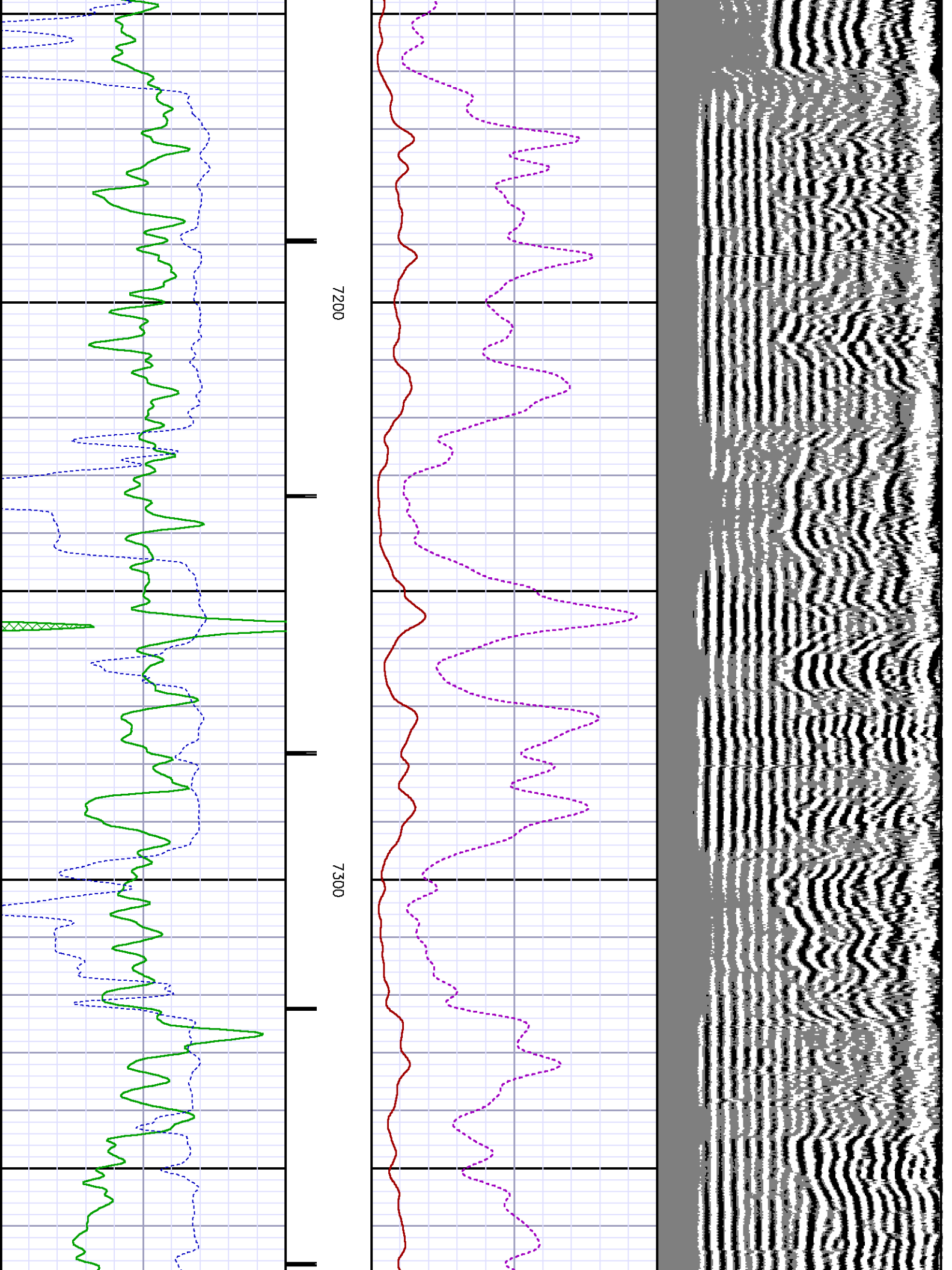


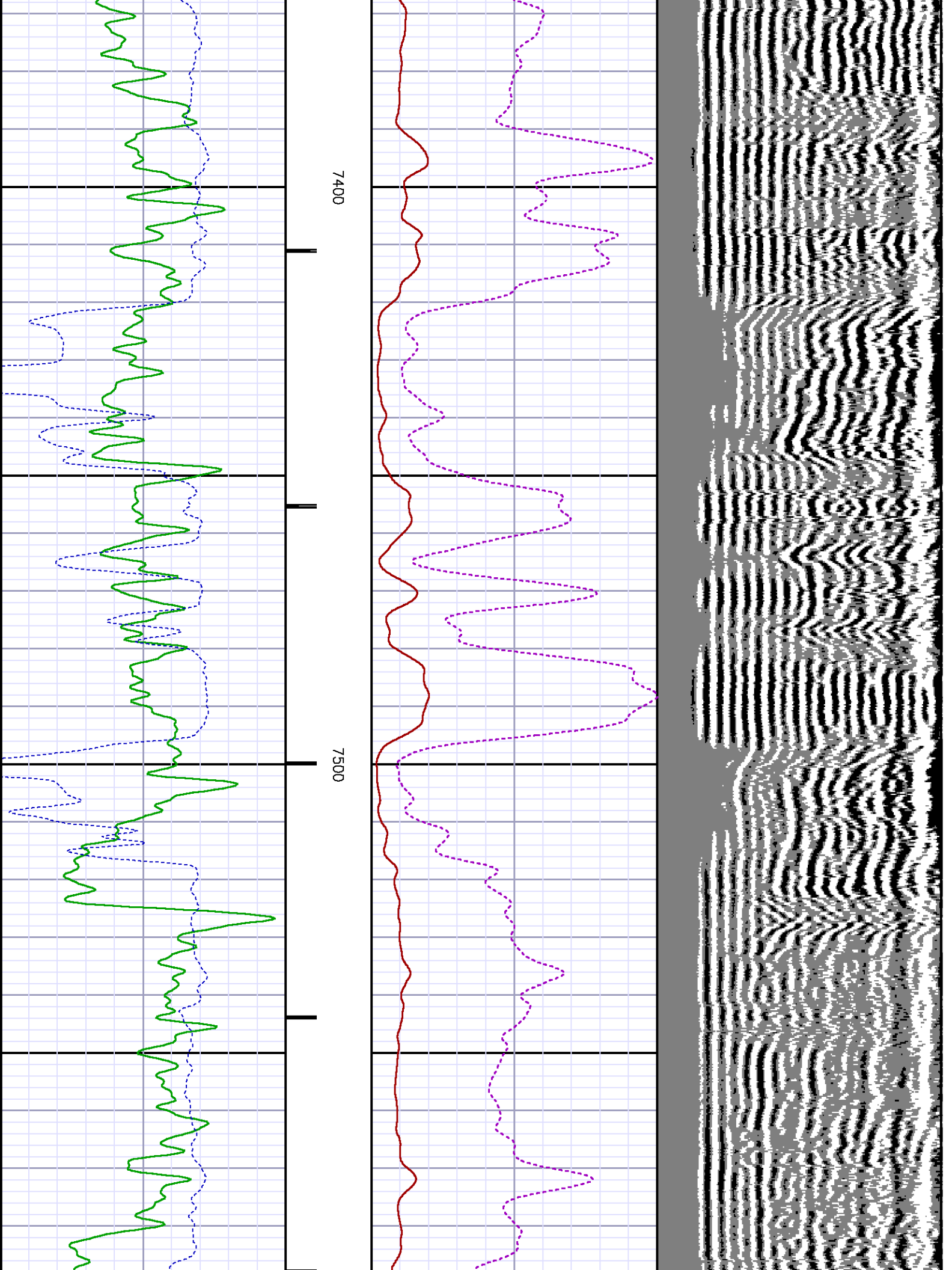
6800

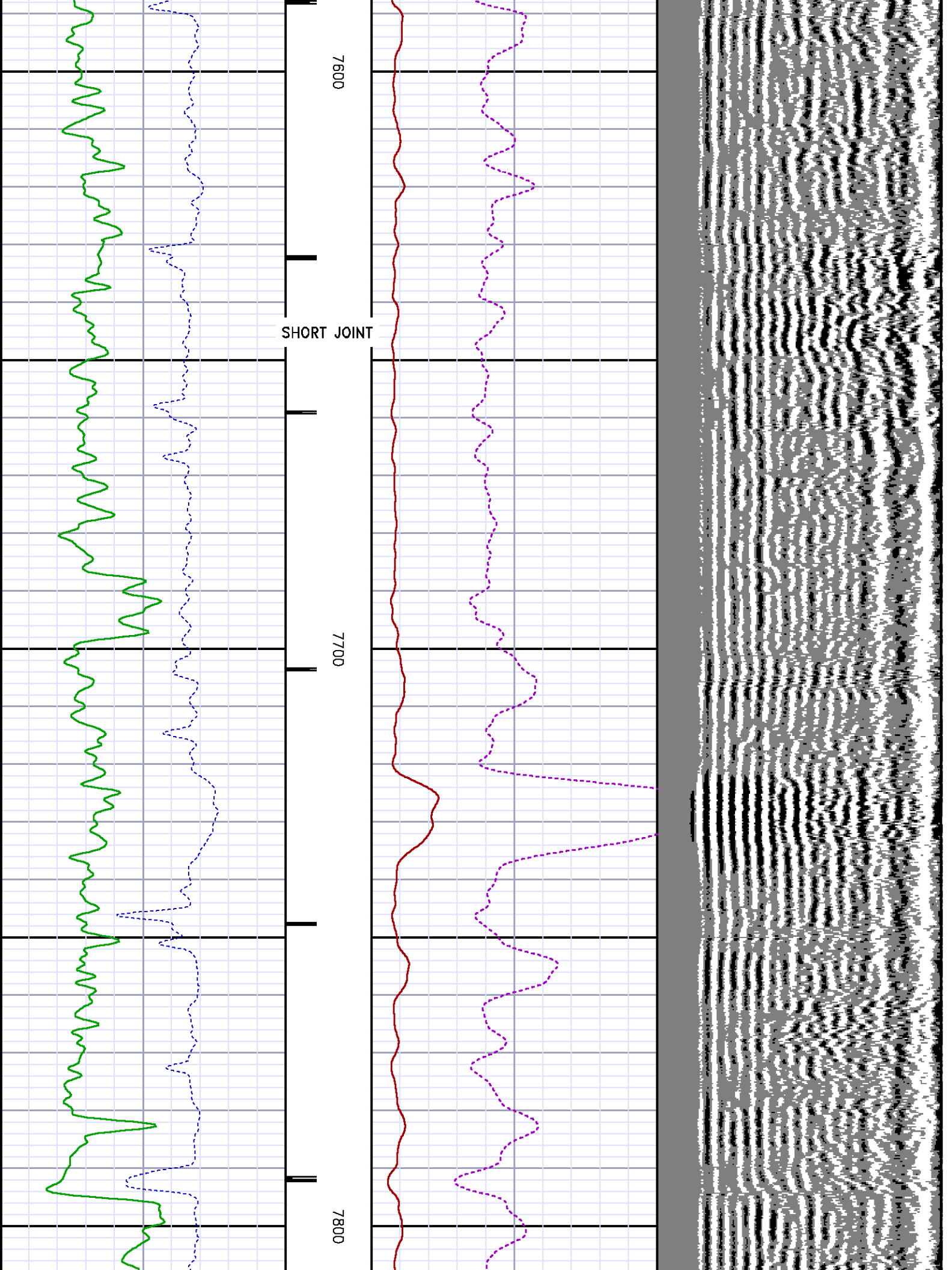
6900

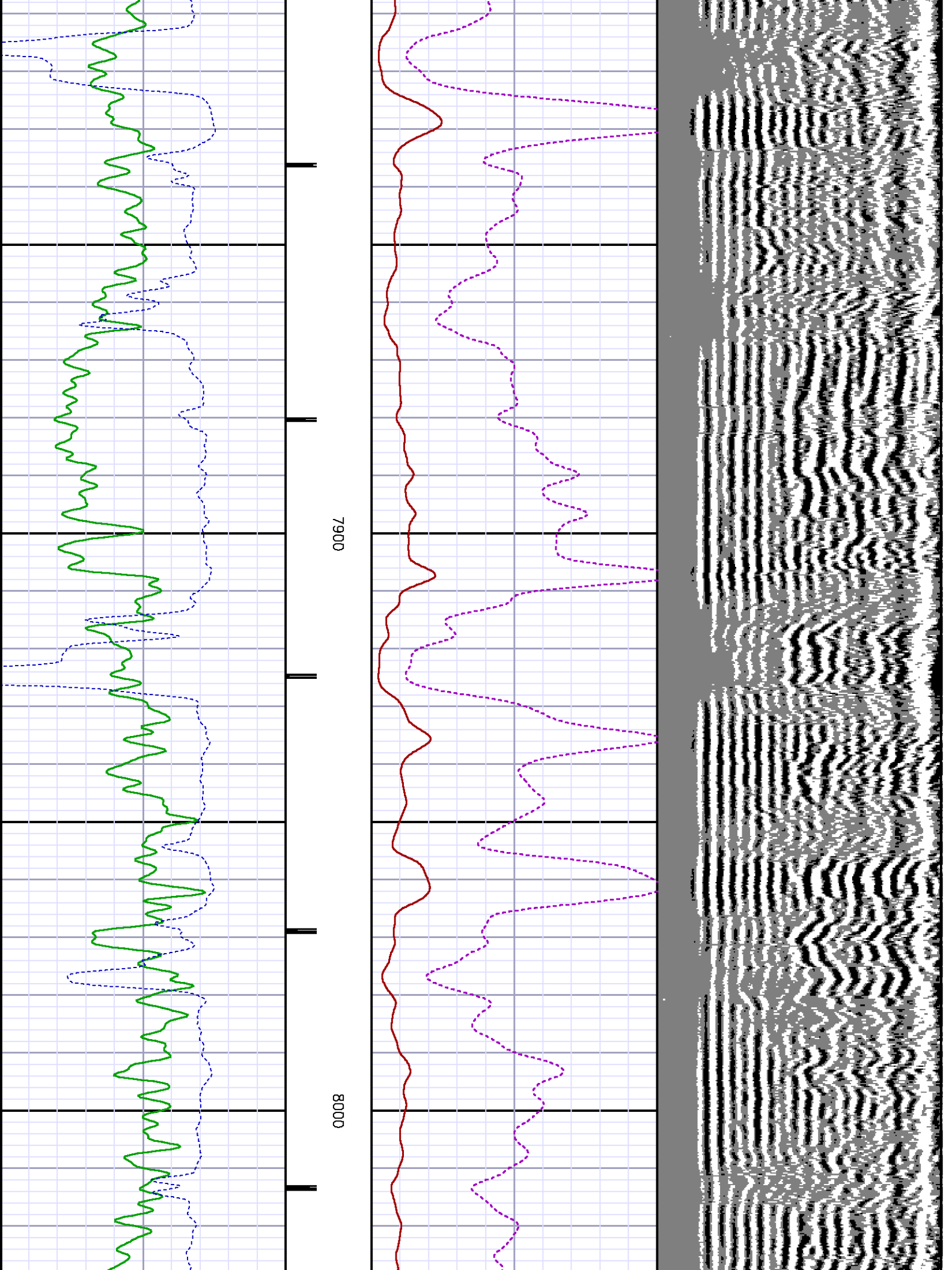


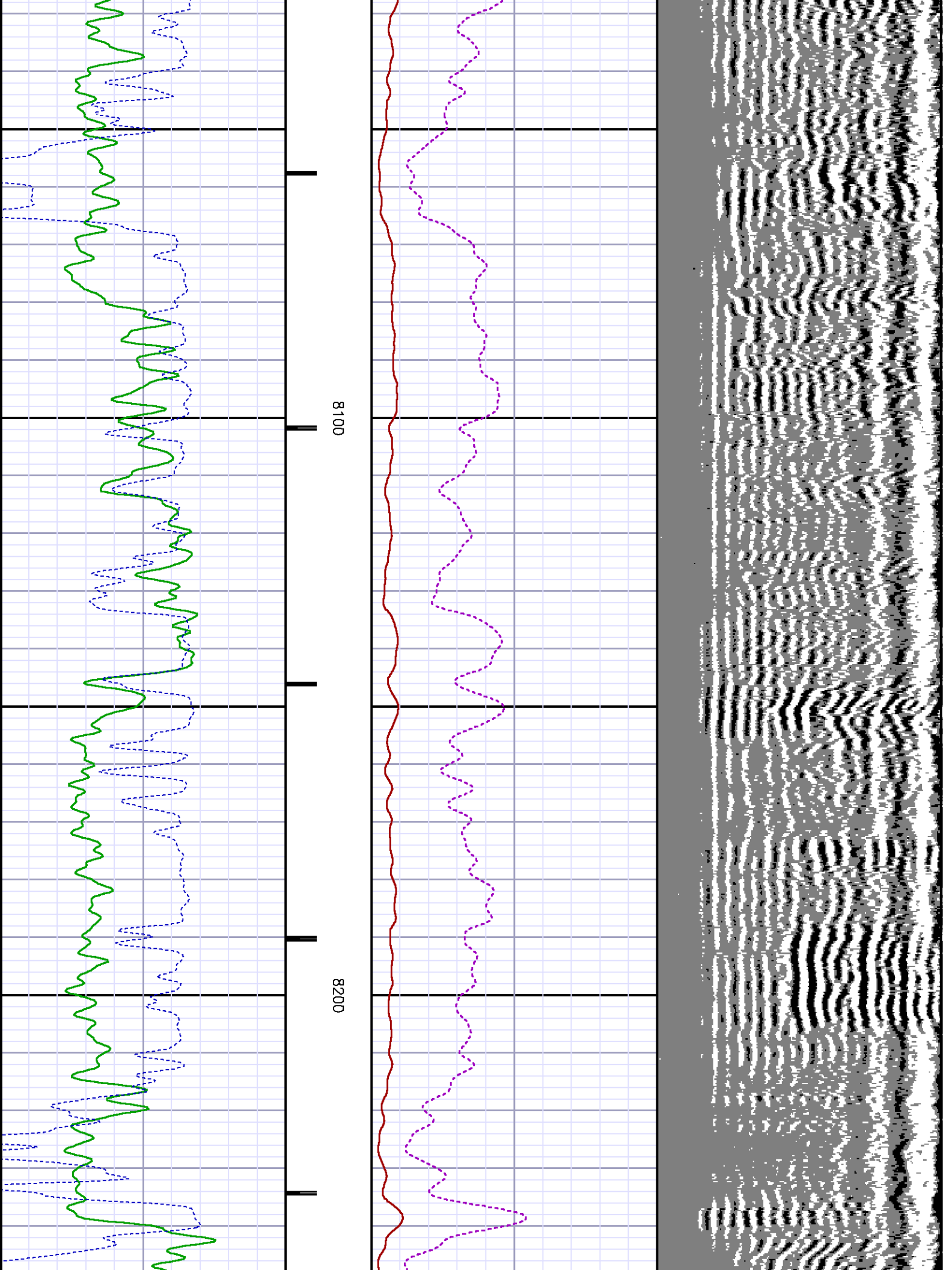


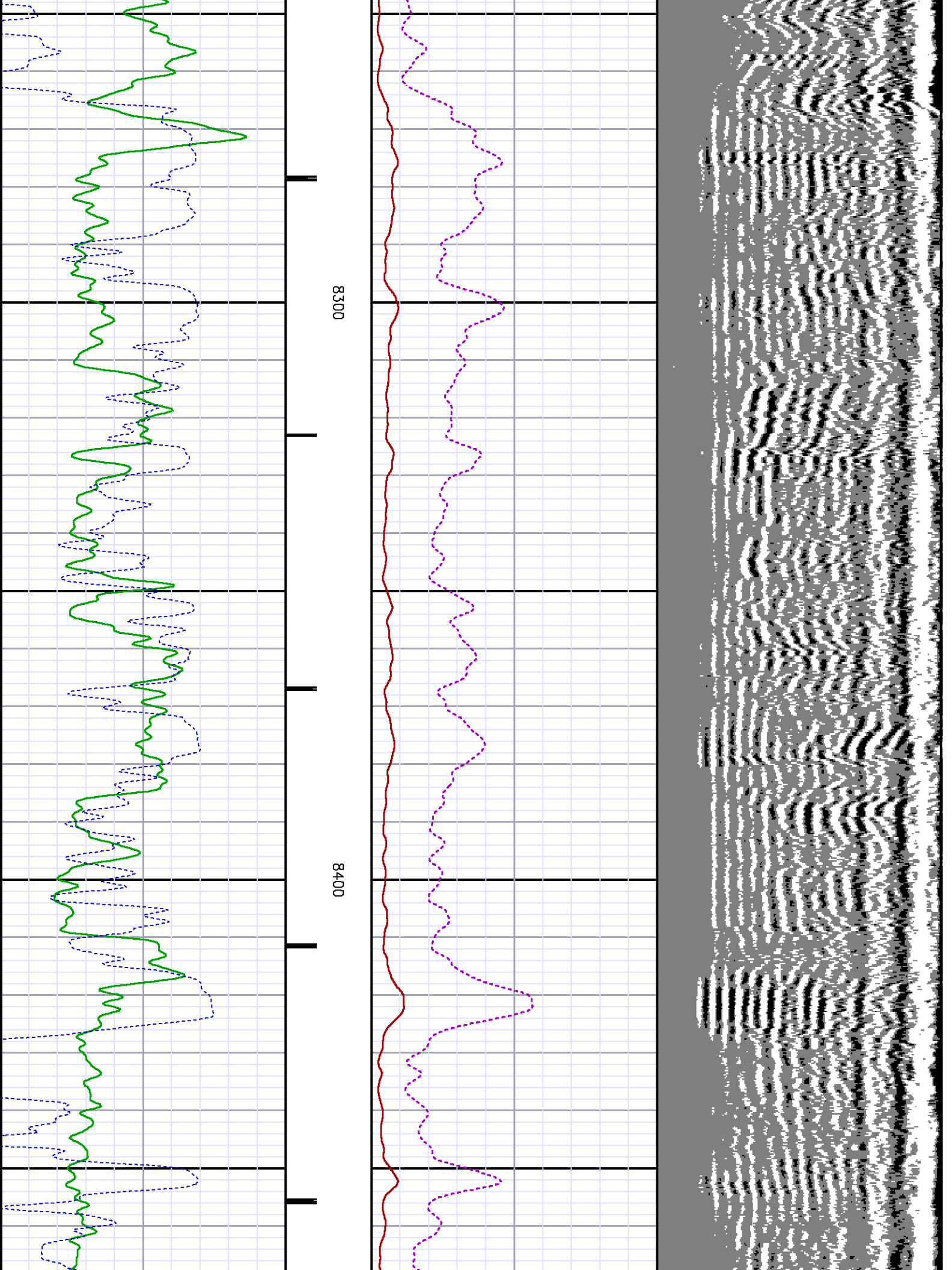


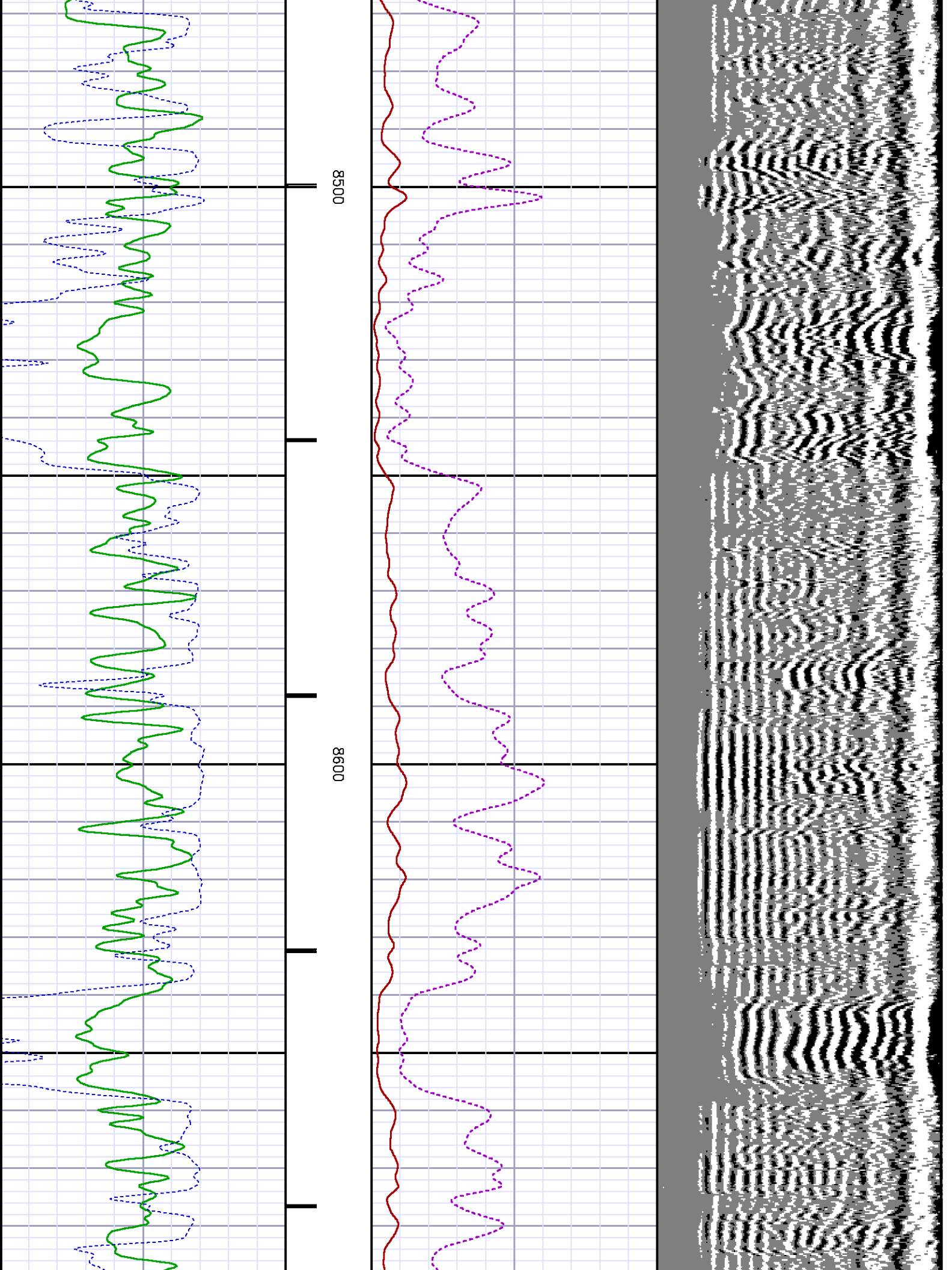


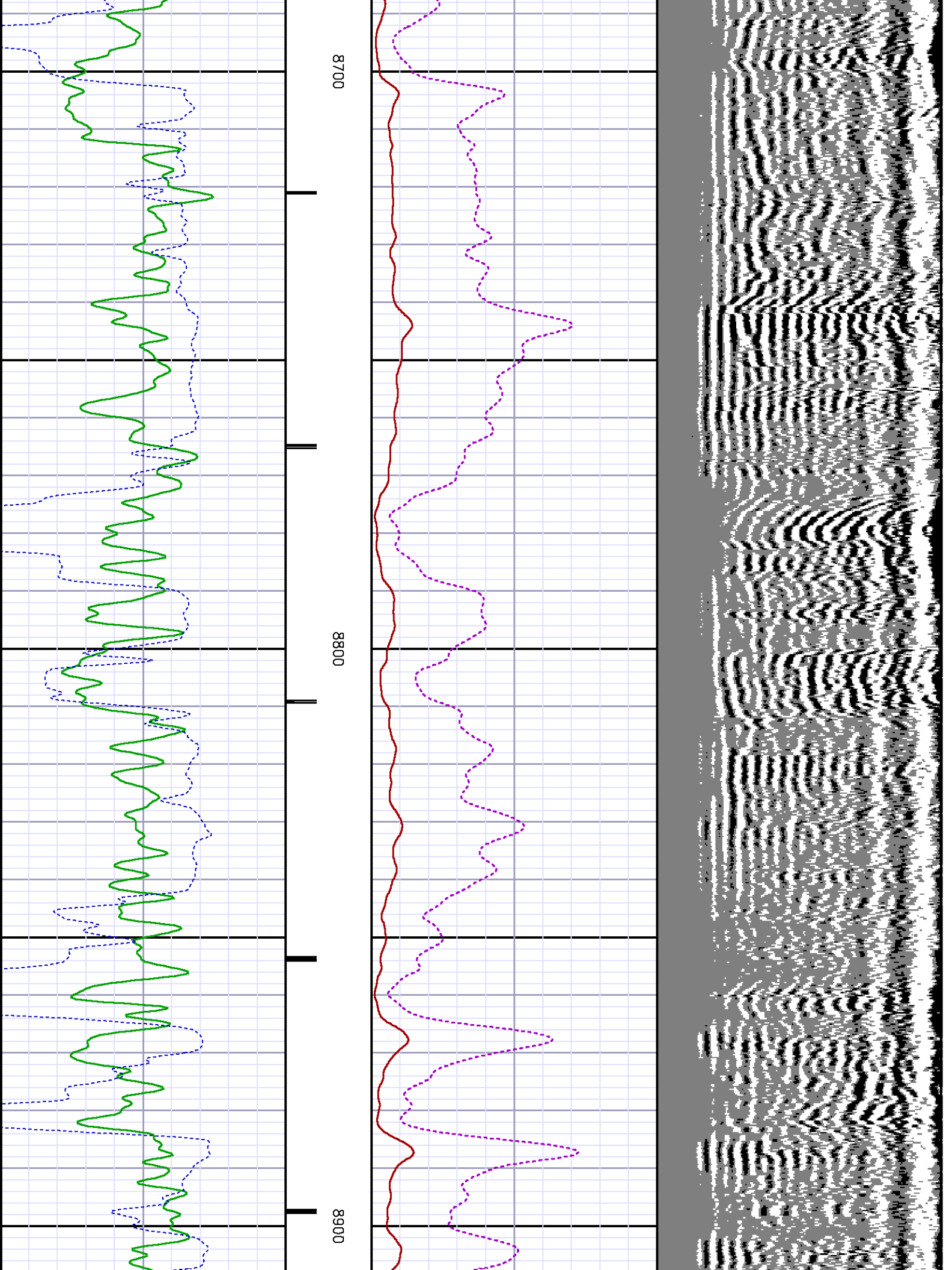


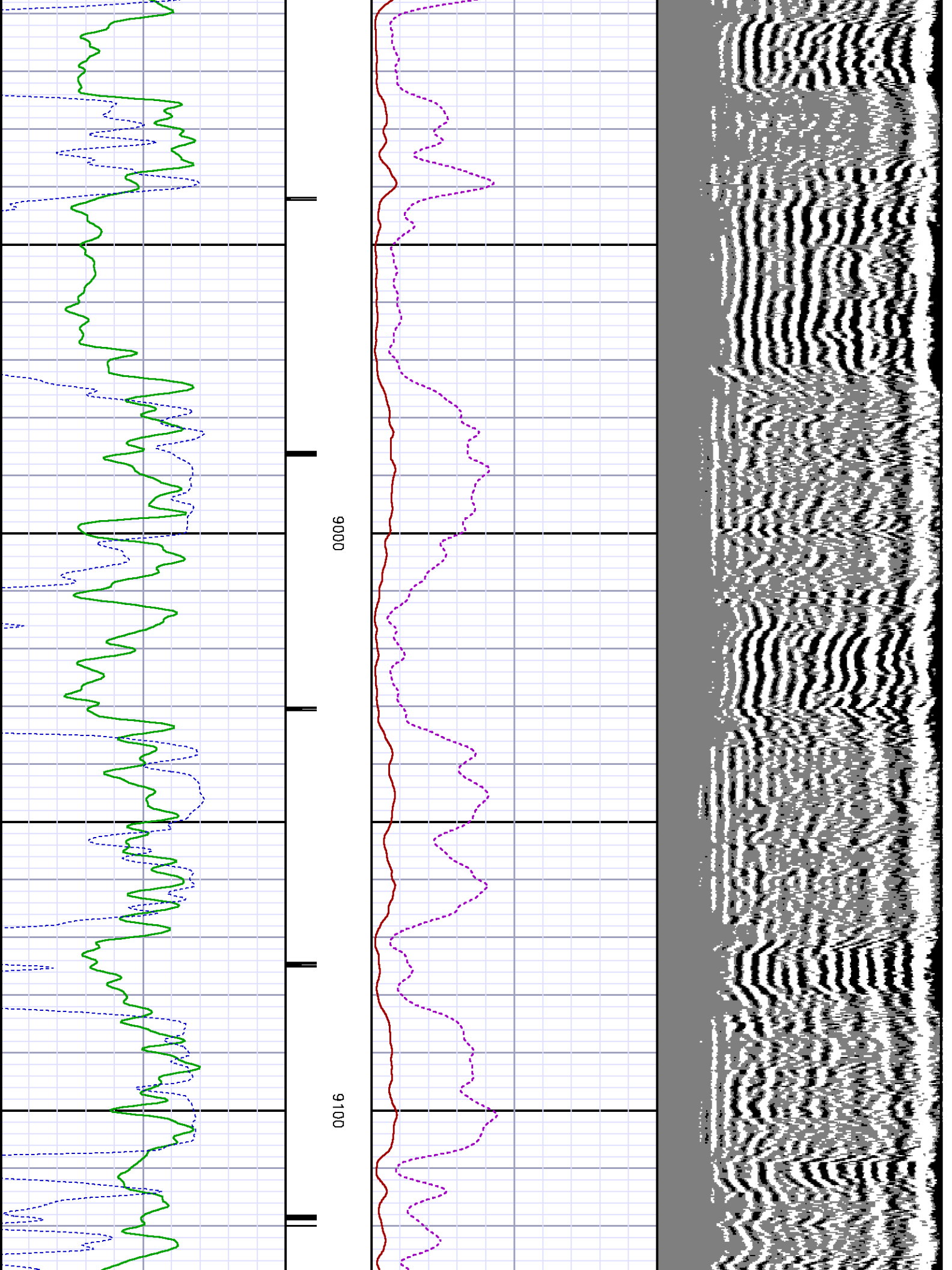


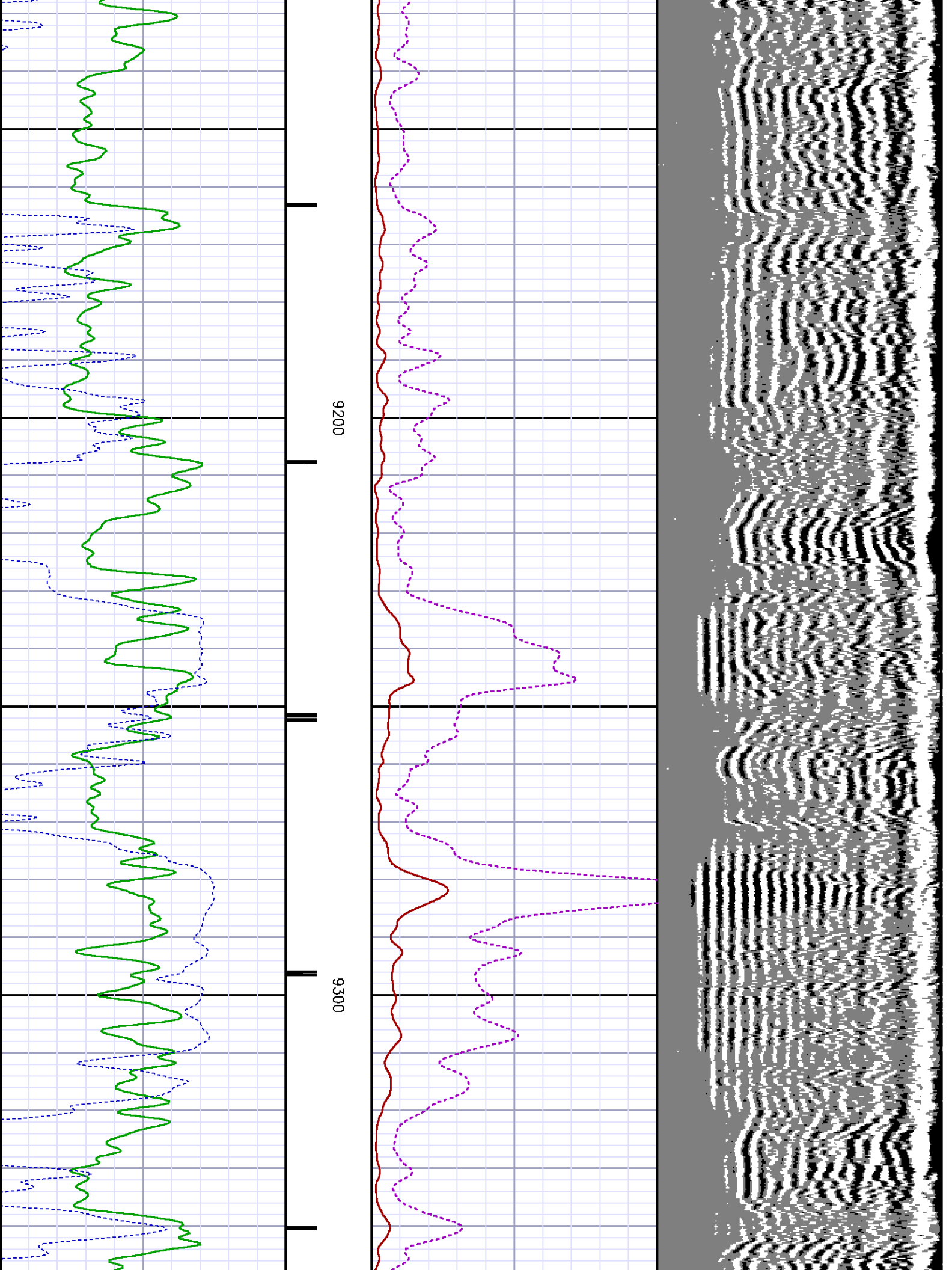


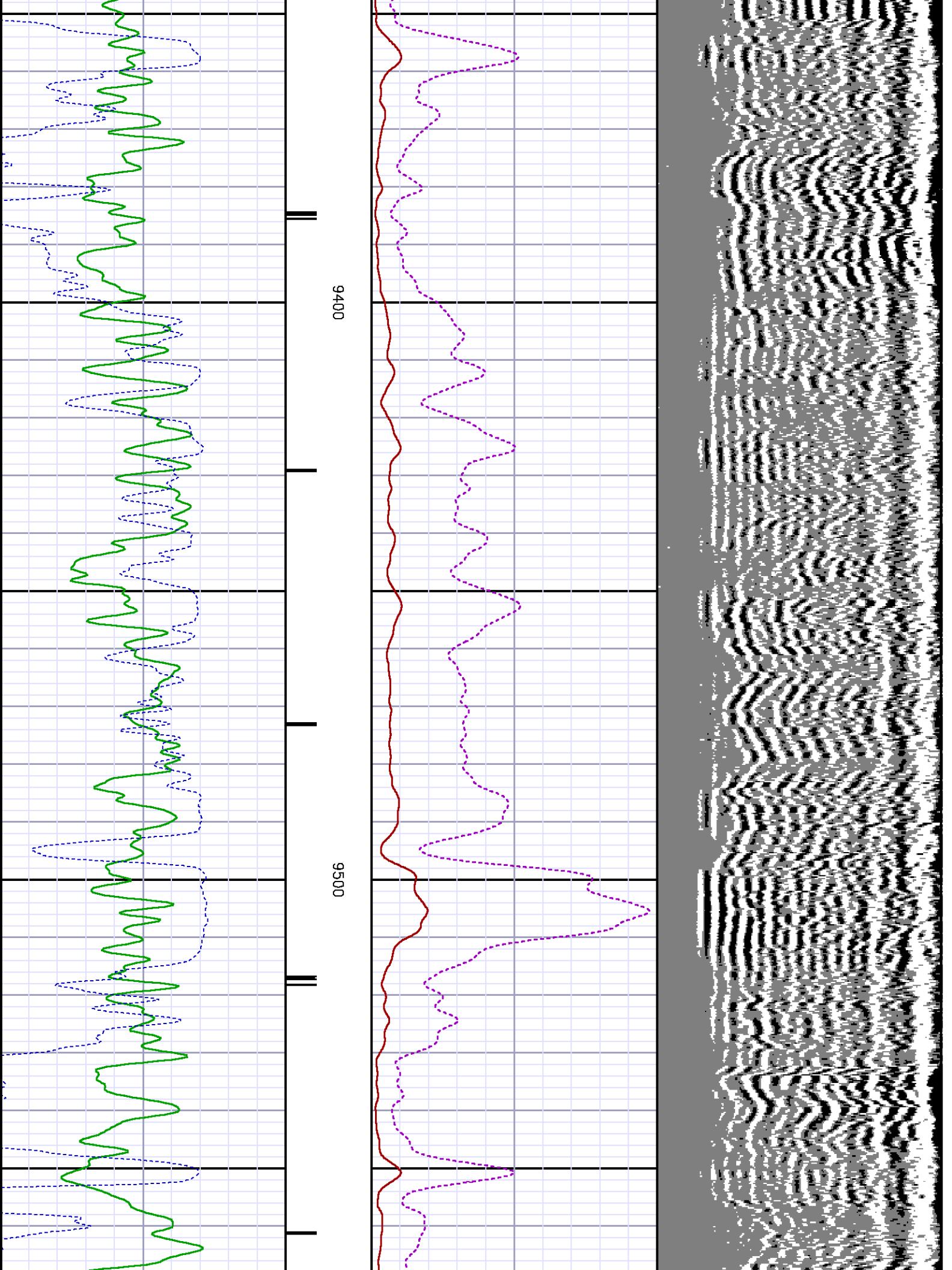


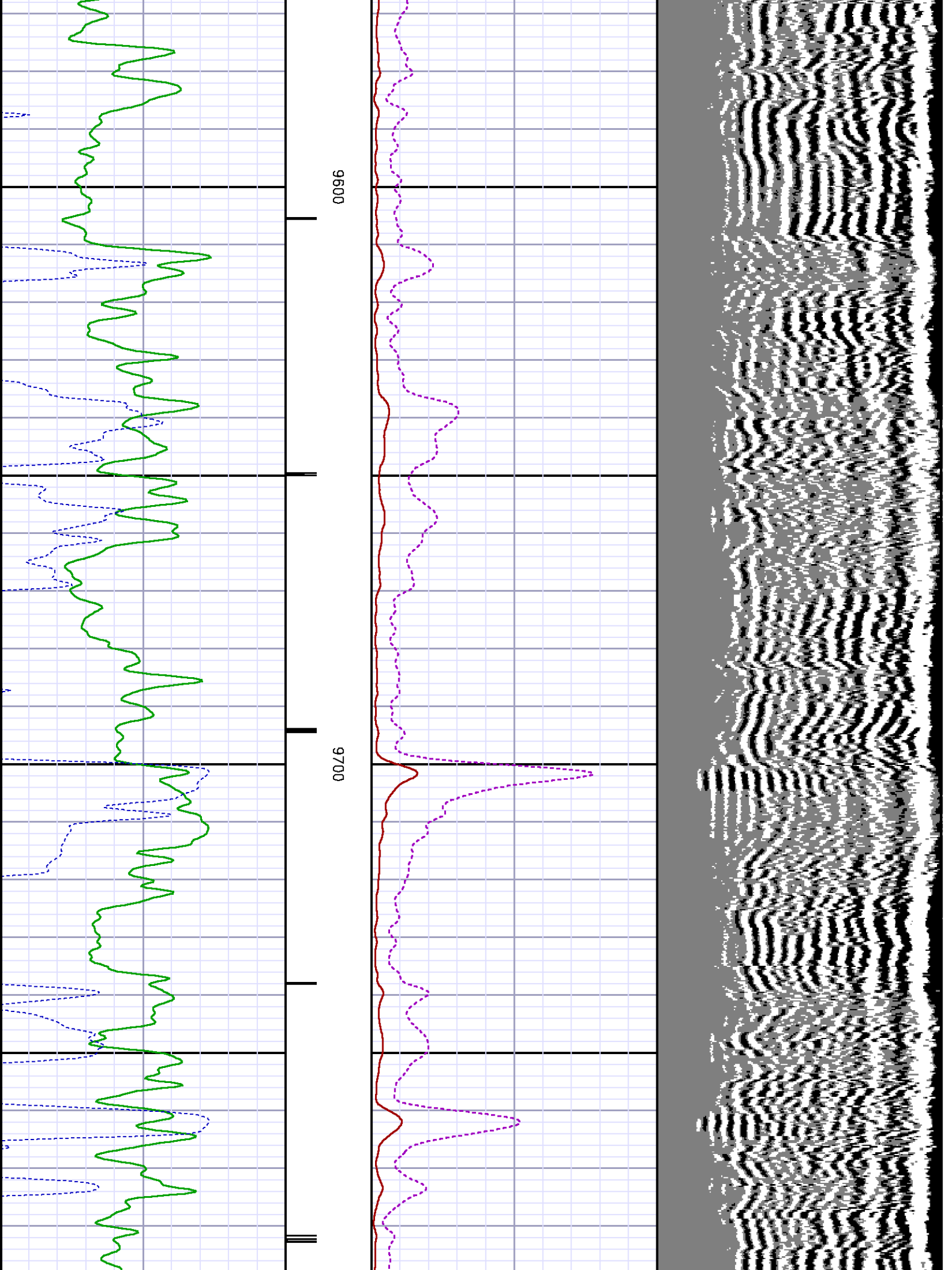


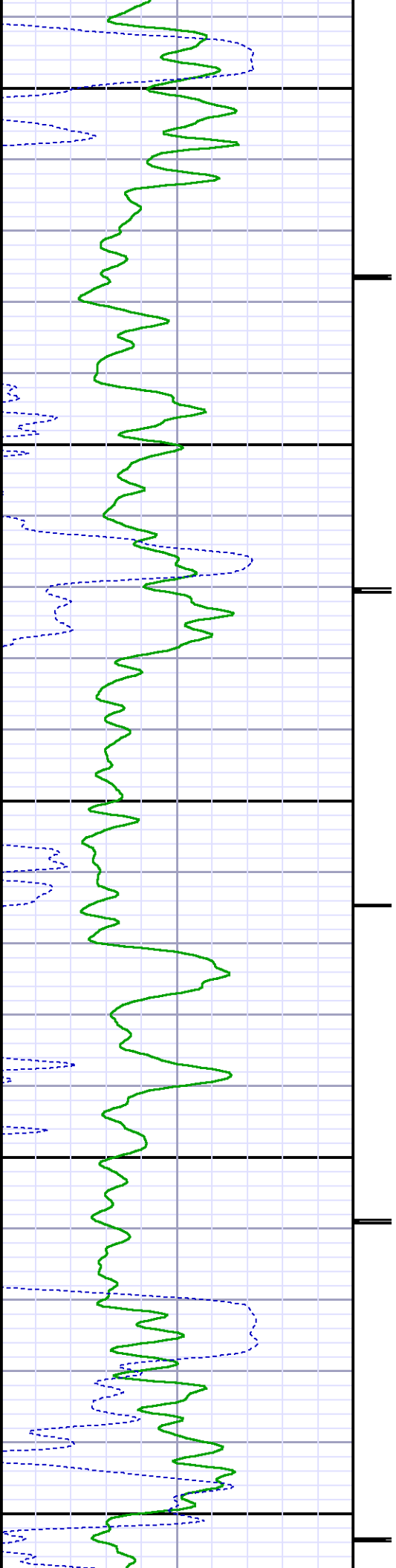
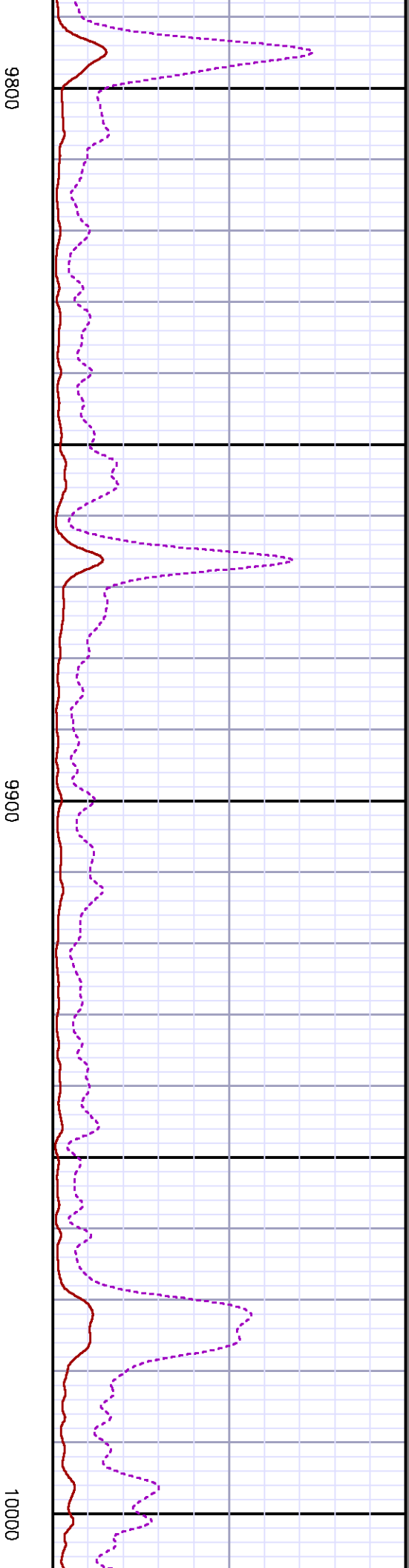
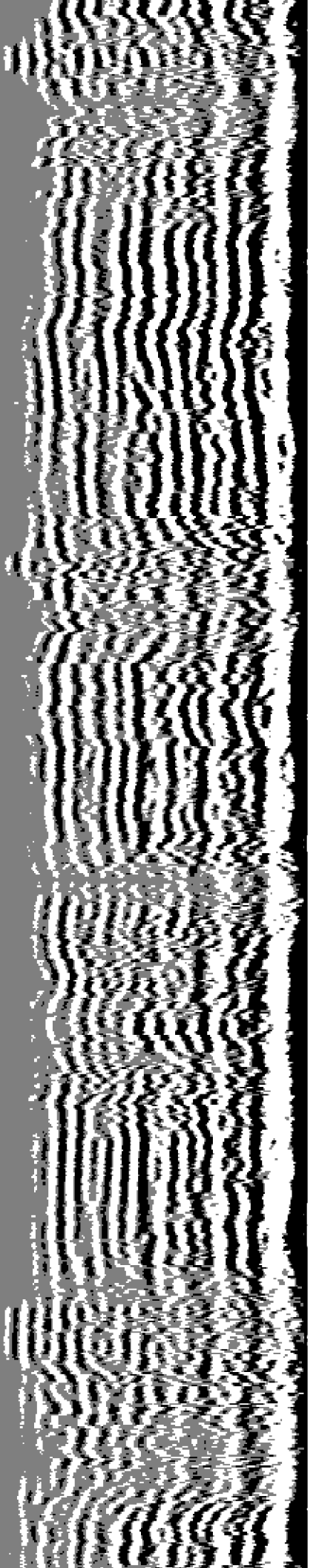


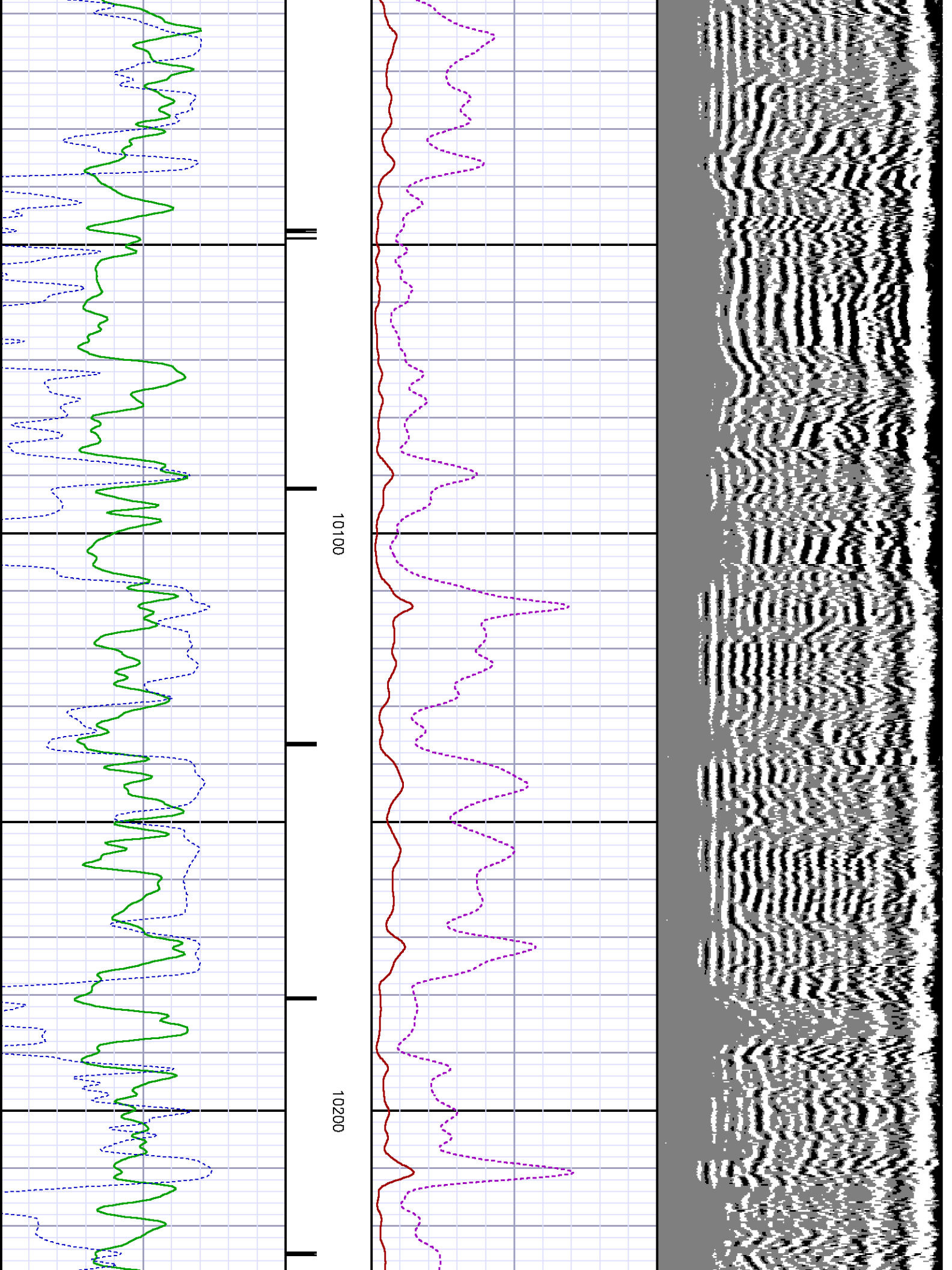


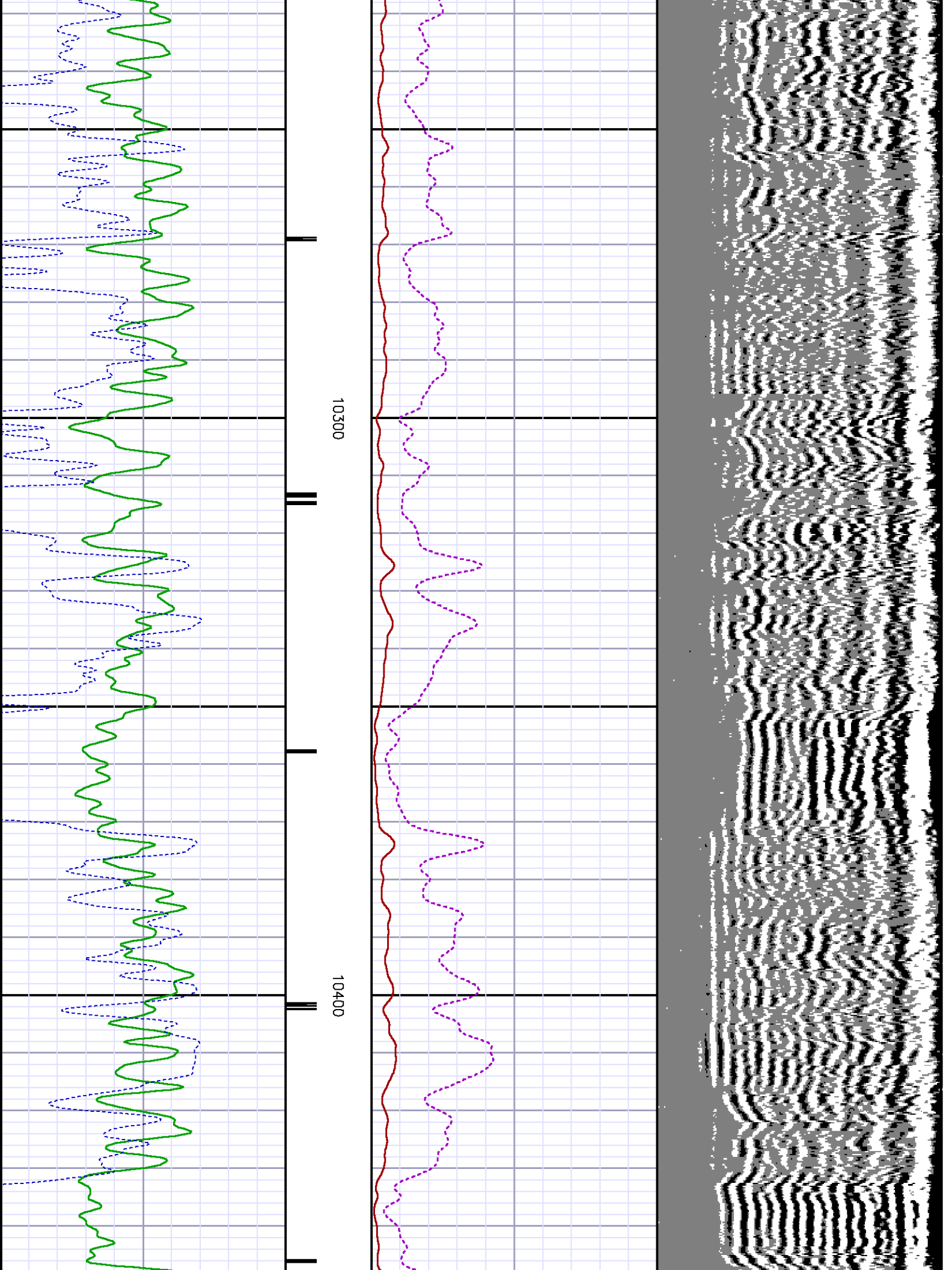


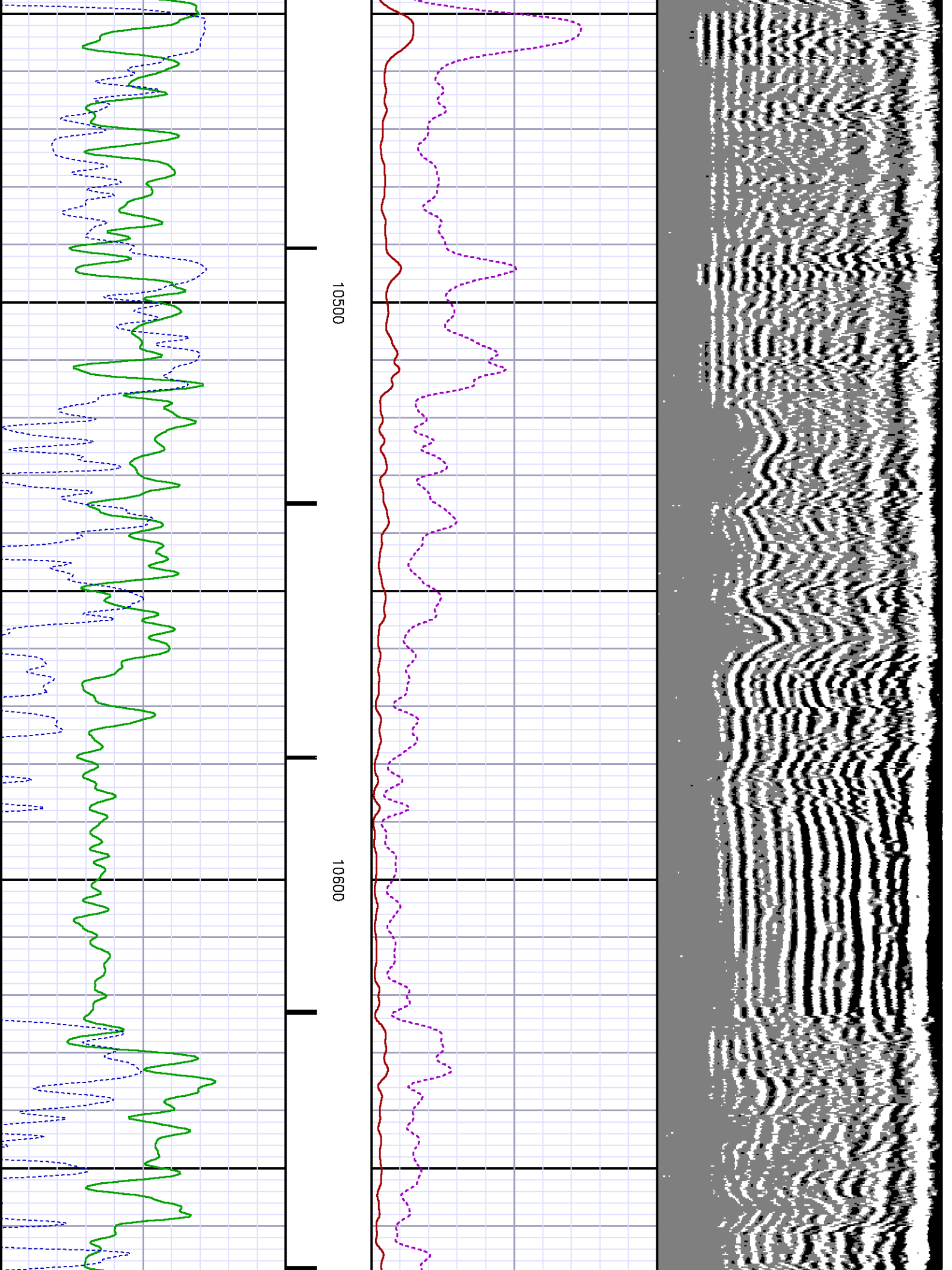


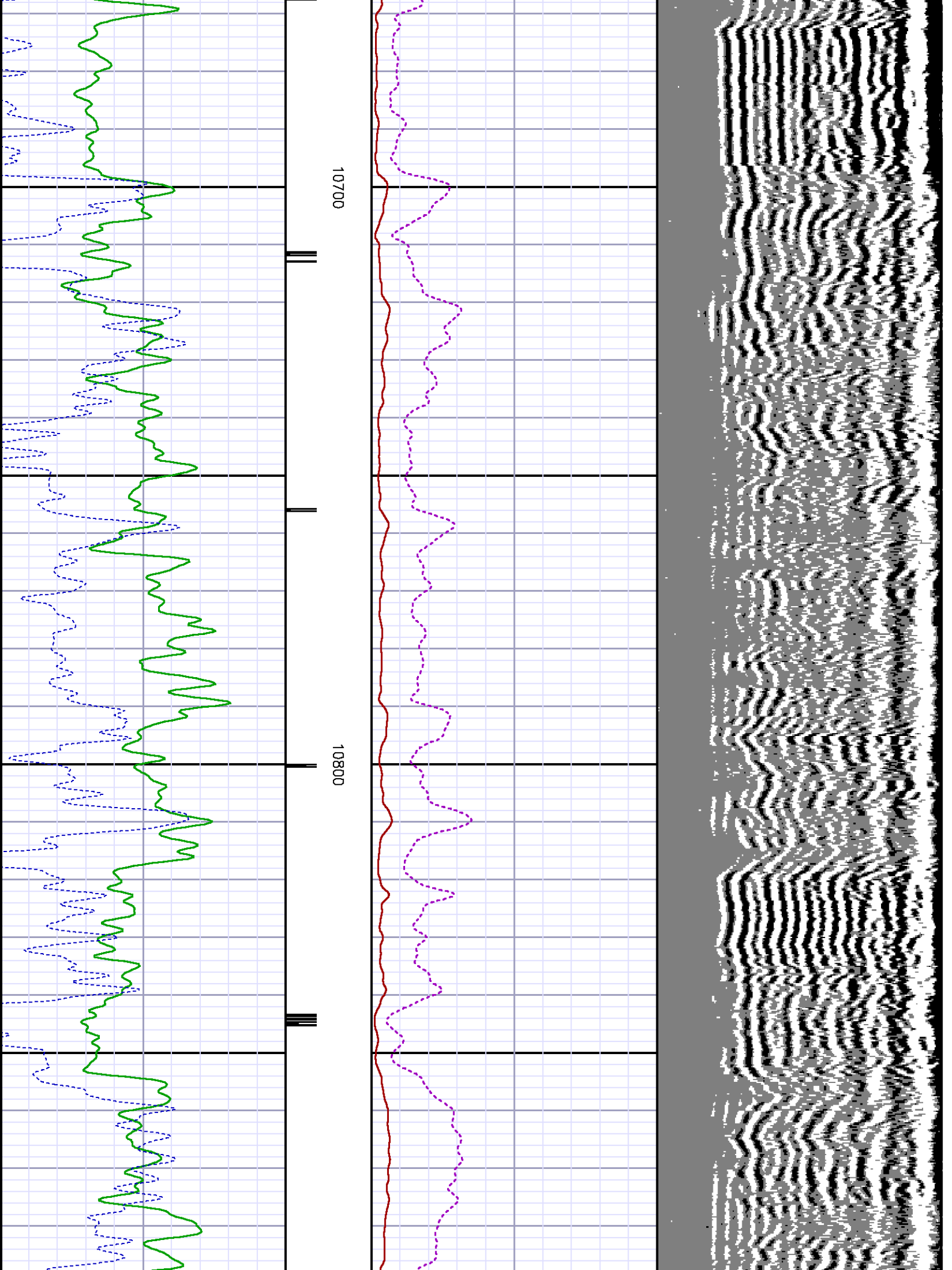


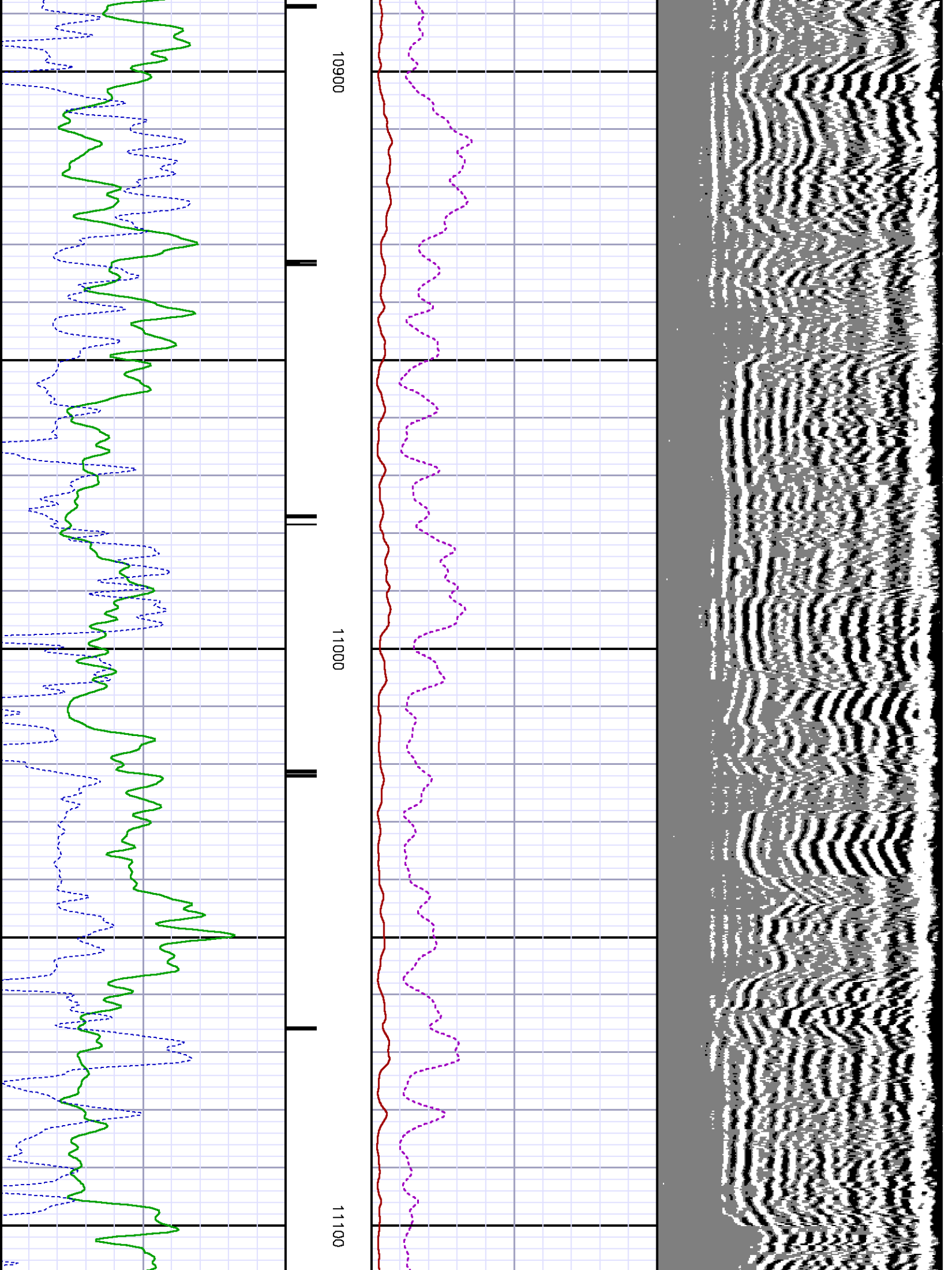


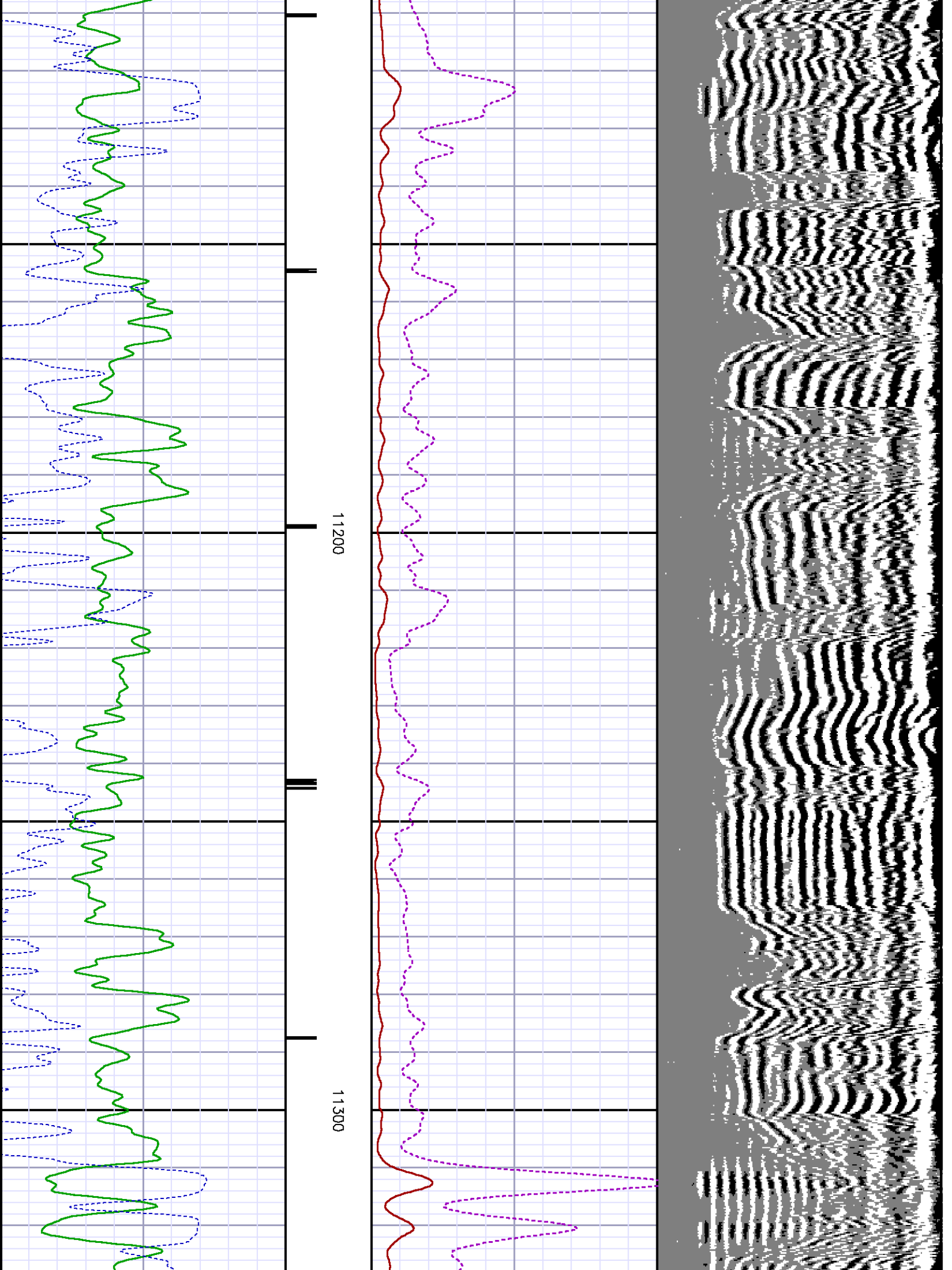


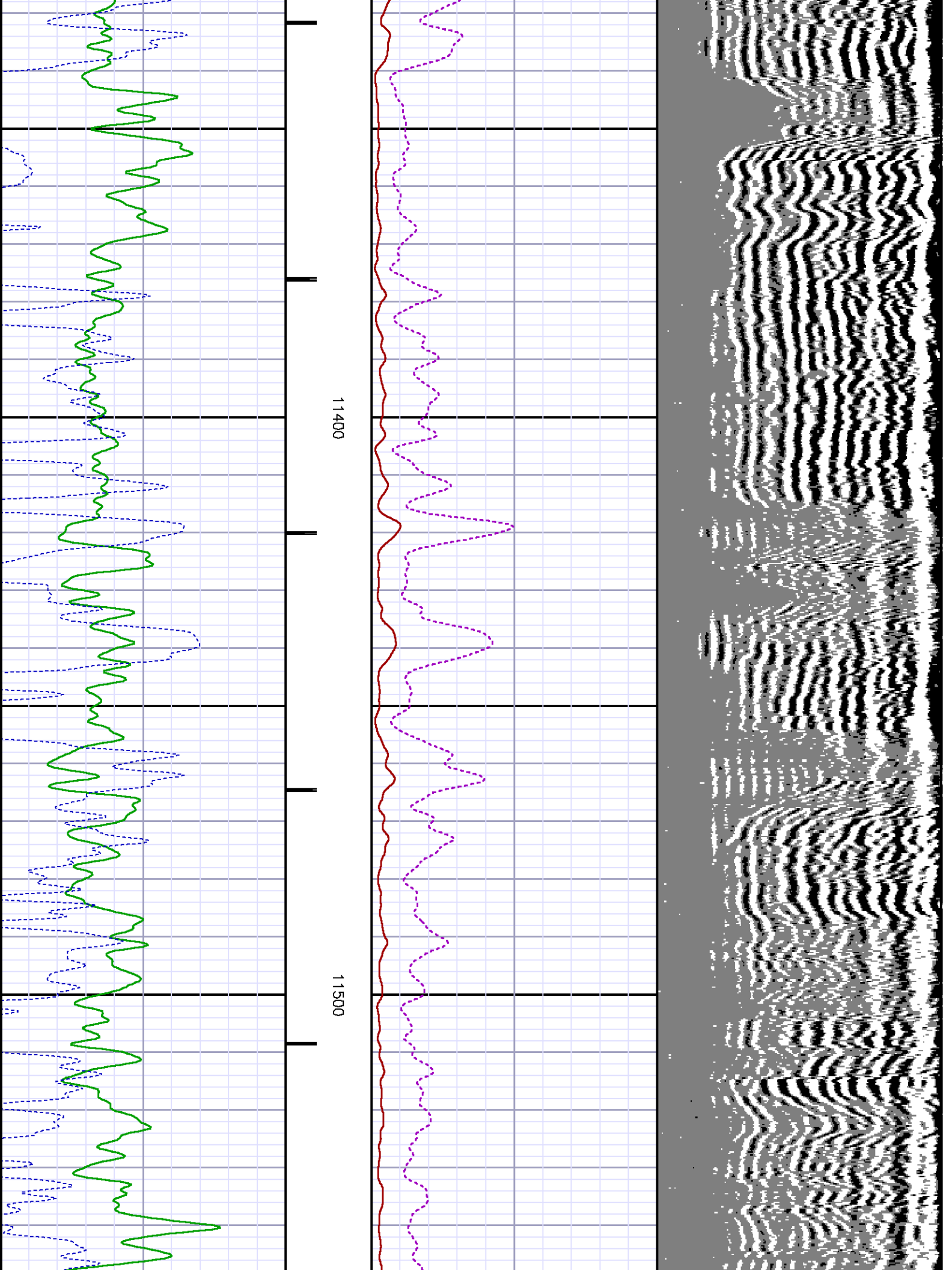


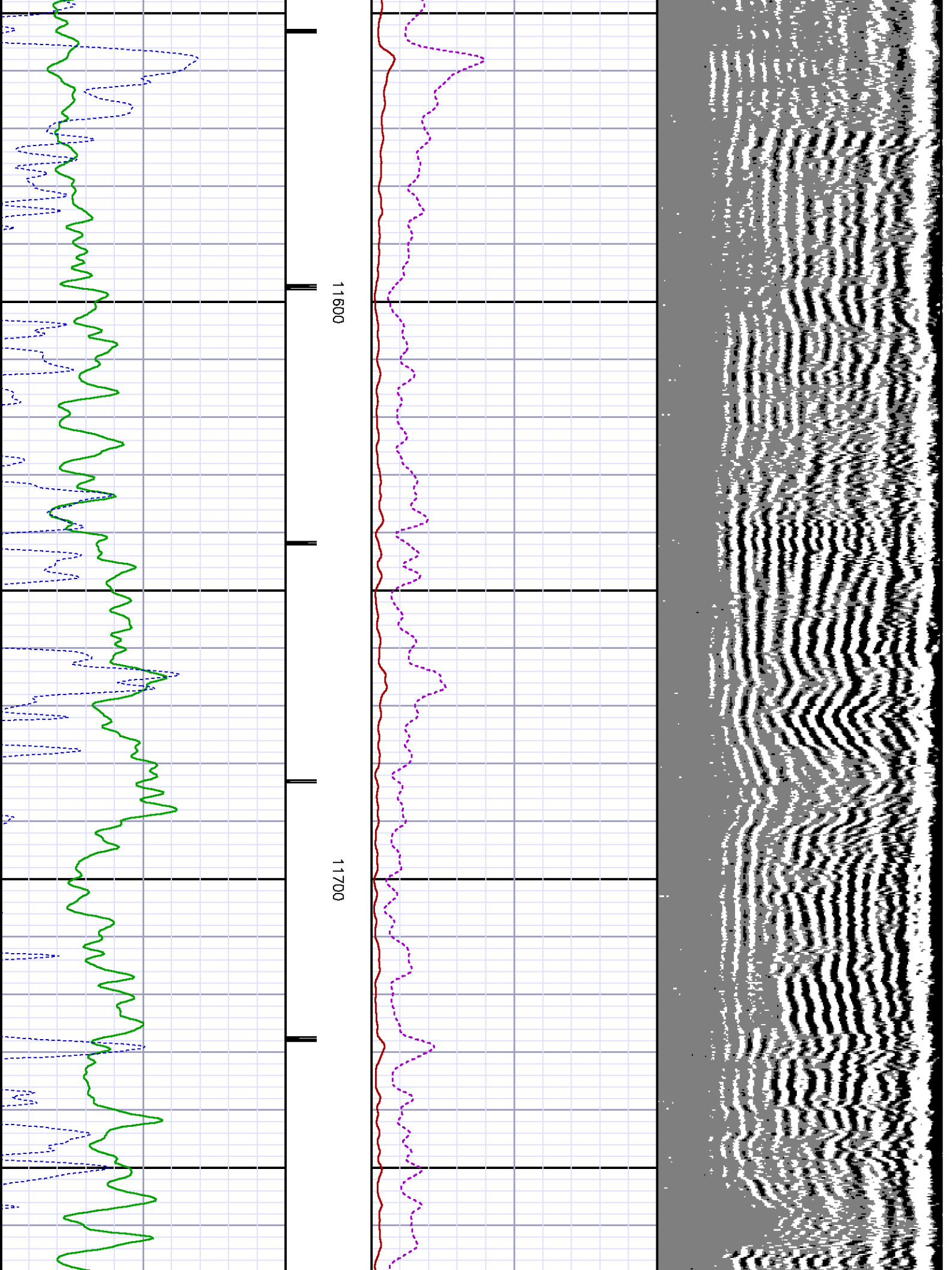


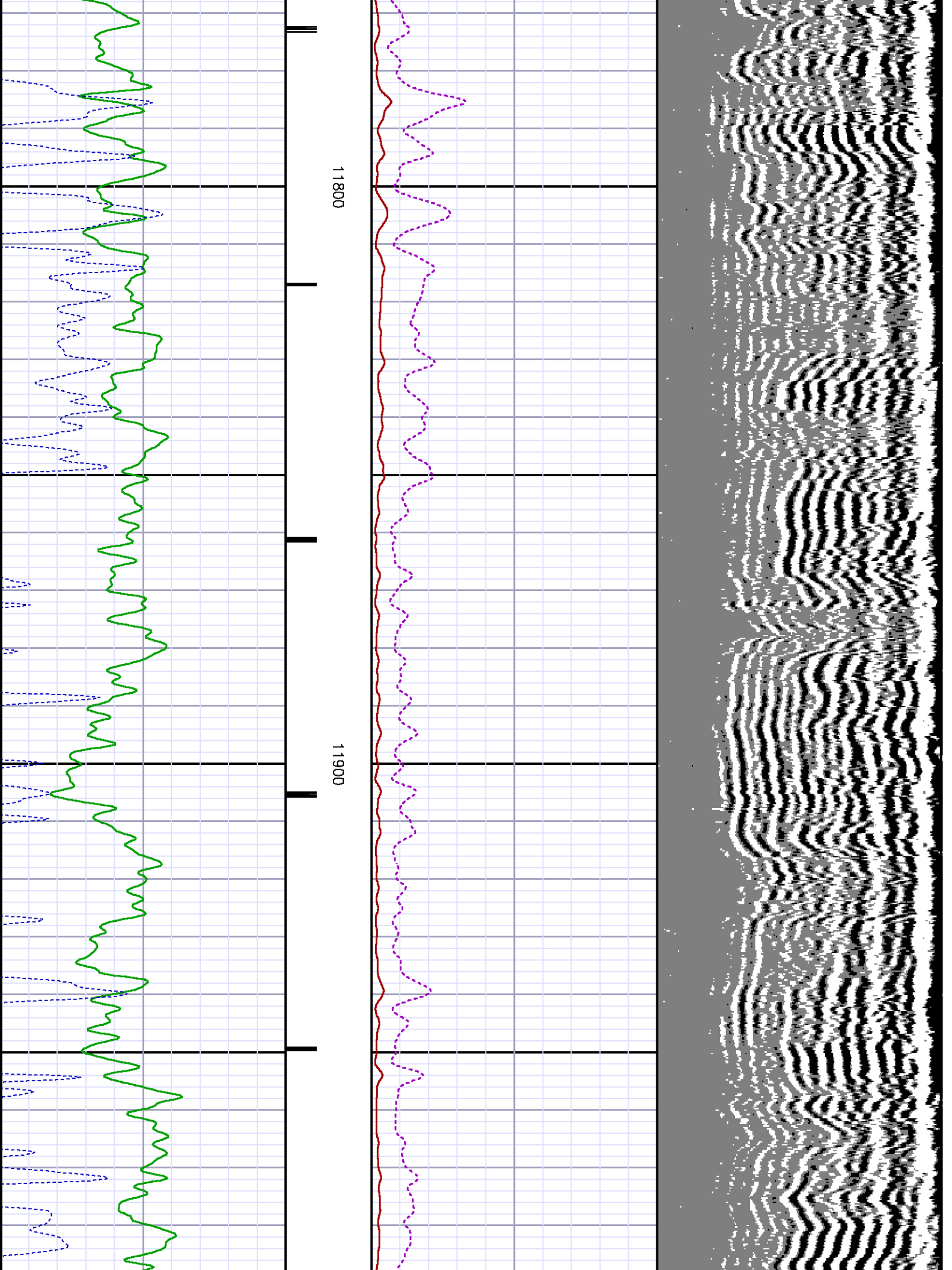


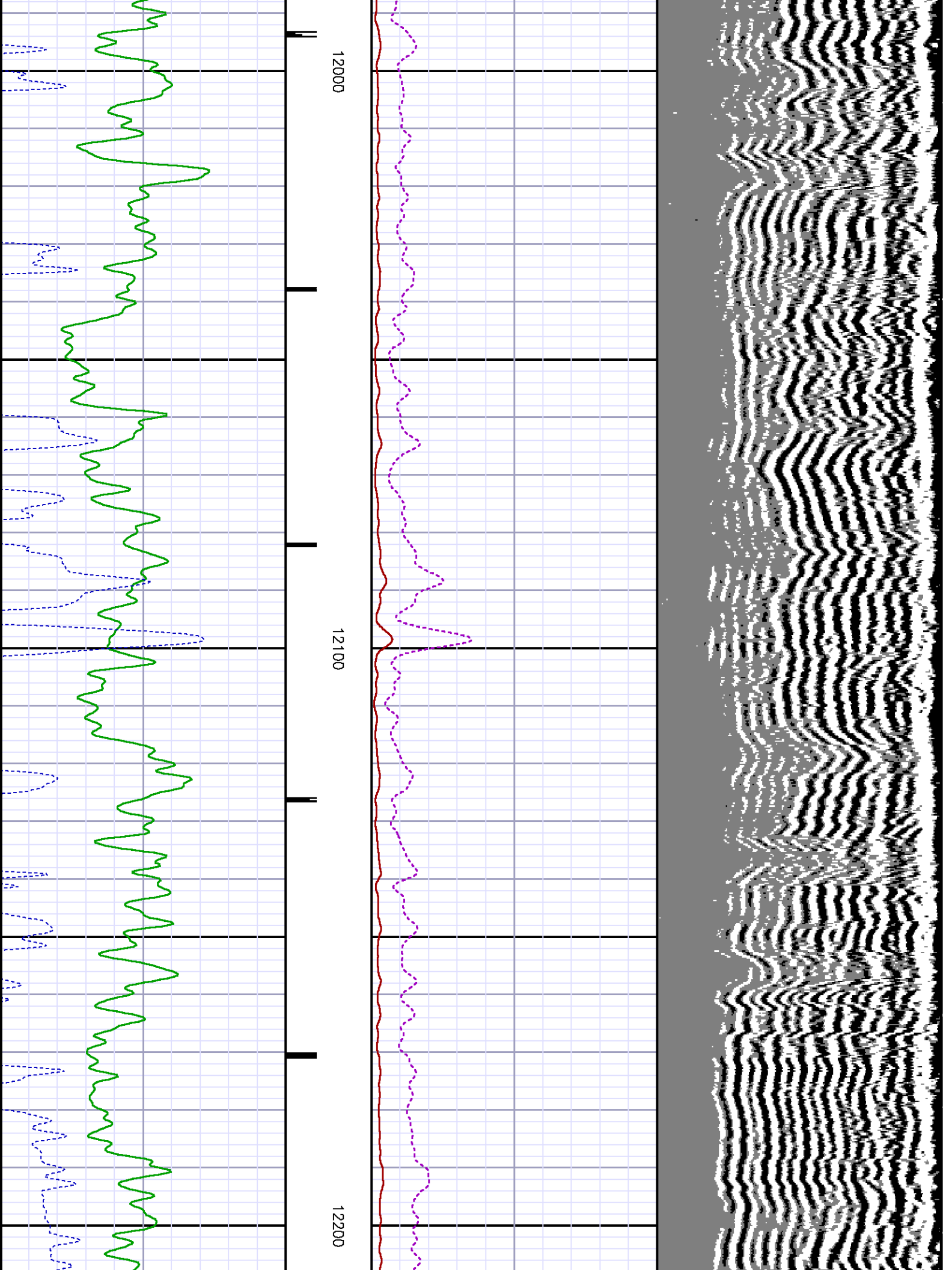


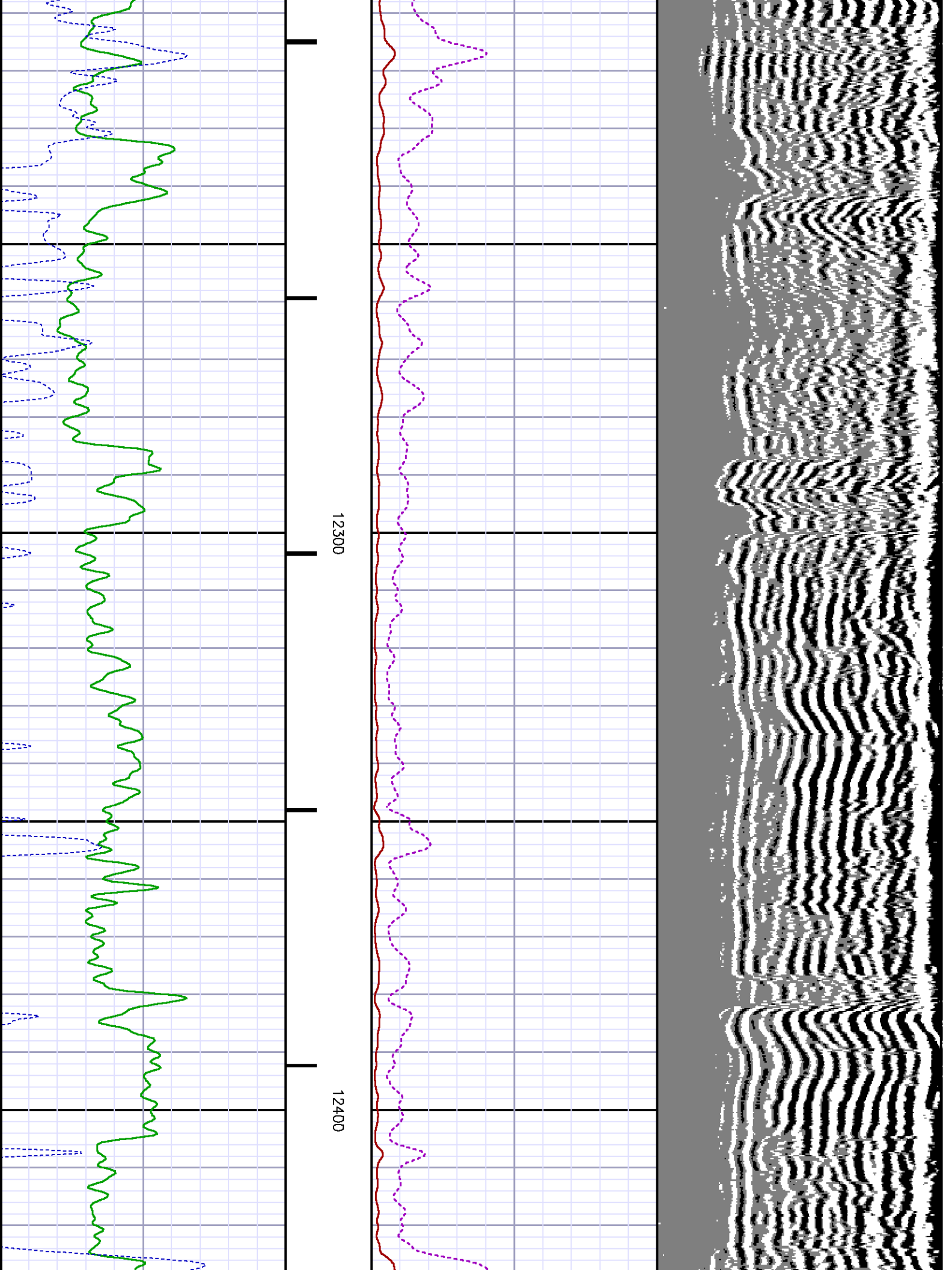


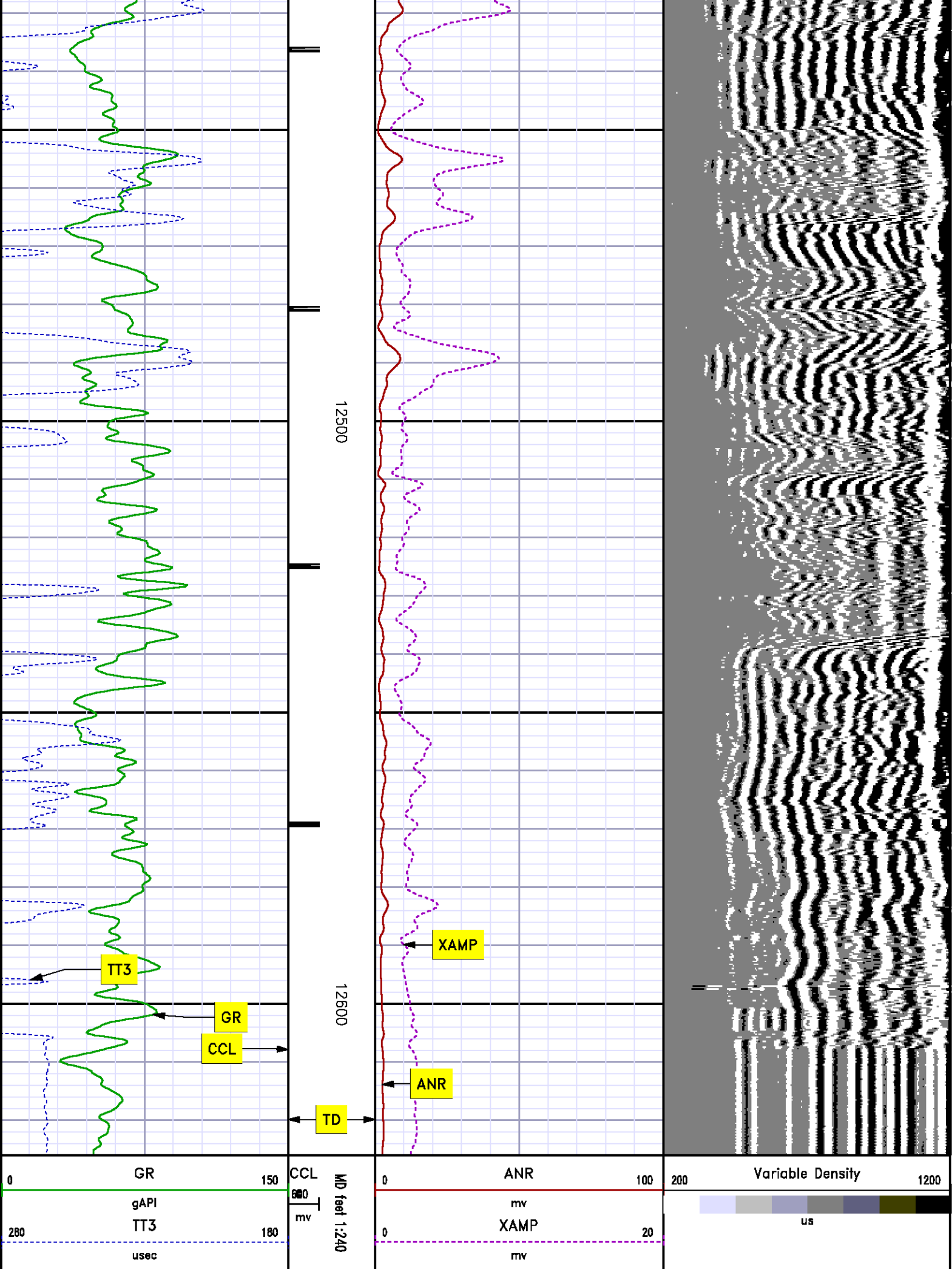












SECONDARY PRESENTATION

0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	31.475	12645.000
RAL	Amp Gate Start Near	195.000	usec	31.475	12645.000
RAL	Amp Gate Start Radial	195.000	usec	31.475	12645.000
RAL	Amp Gate Width Far	25.000	usec	31.475	12645.000
RAL	Amp Gate Width Near	25.000	usec	31.475	12645.000
RAL	Amp Gate Width Radial	25.000	usec	31.475	12645.000
RAL	casing od	4.500	inches	31.475	12645.000
RAL	casing wt	11.600	lbm/ft	31.475	12645.000
RAL	FB Start Far	291.900	usec	31.475	12645.000
RAL	FB Start Near	180.000	usec	31.475	12645.000
RAL	FB Start Radial	180.000	usec	31.475	12645.000
RAL	FB Thresh Far	10.000	mv	31.475	12645.000
RAL	FB Thresh Near	4.000	mv	31.475	12645.000
RAL	FB Thresh Radial	4.000	mv	31.475	12645.000
RAL	Fluid Travel Time	200.000	usec/ft	31.475	12644.443

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

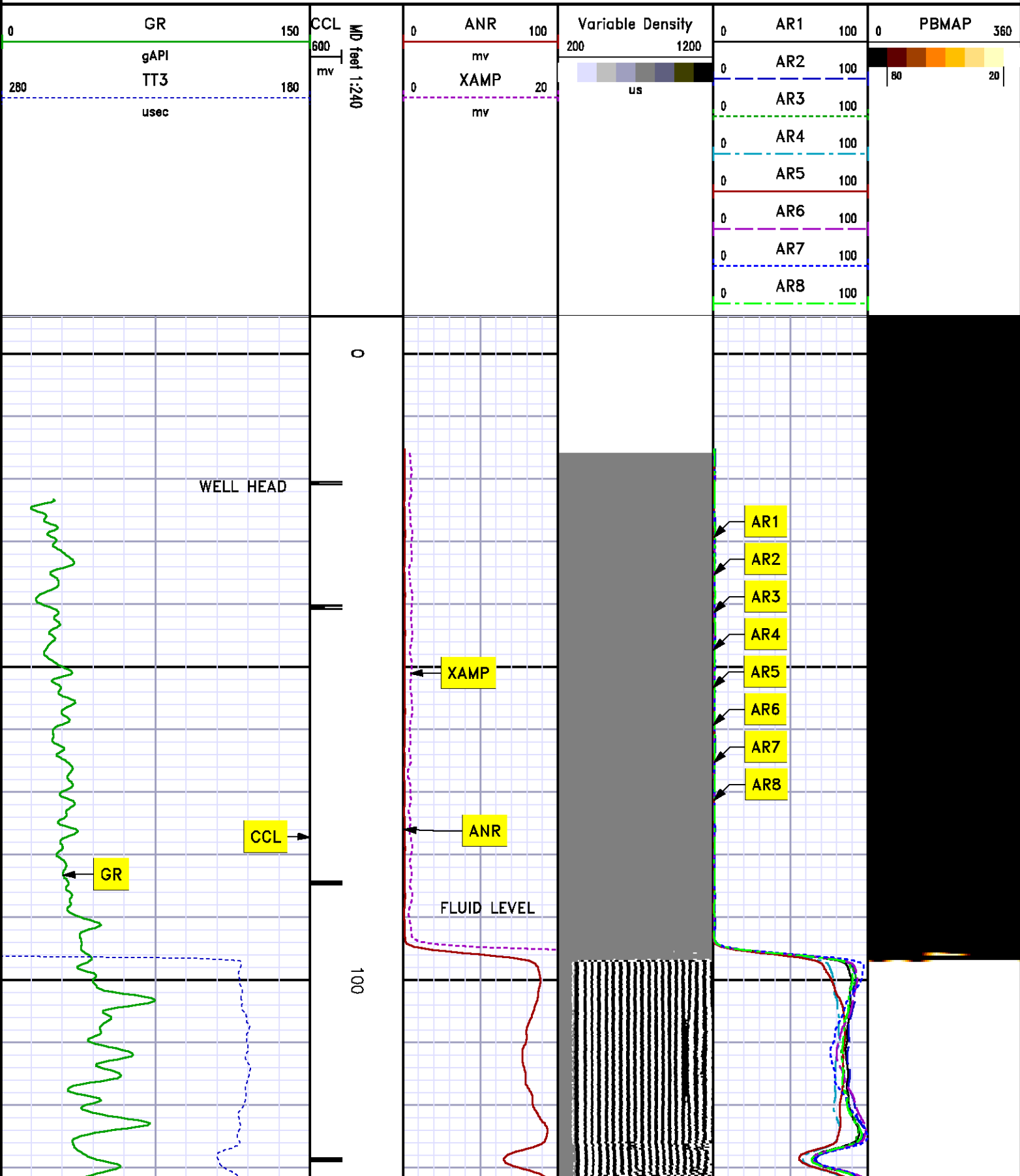
Well : FEDERAL RGU 24-25-198

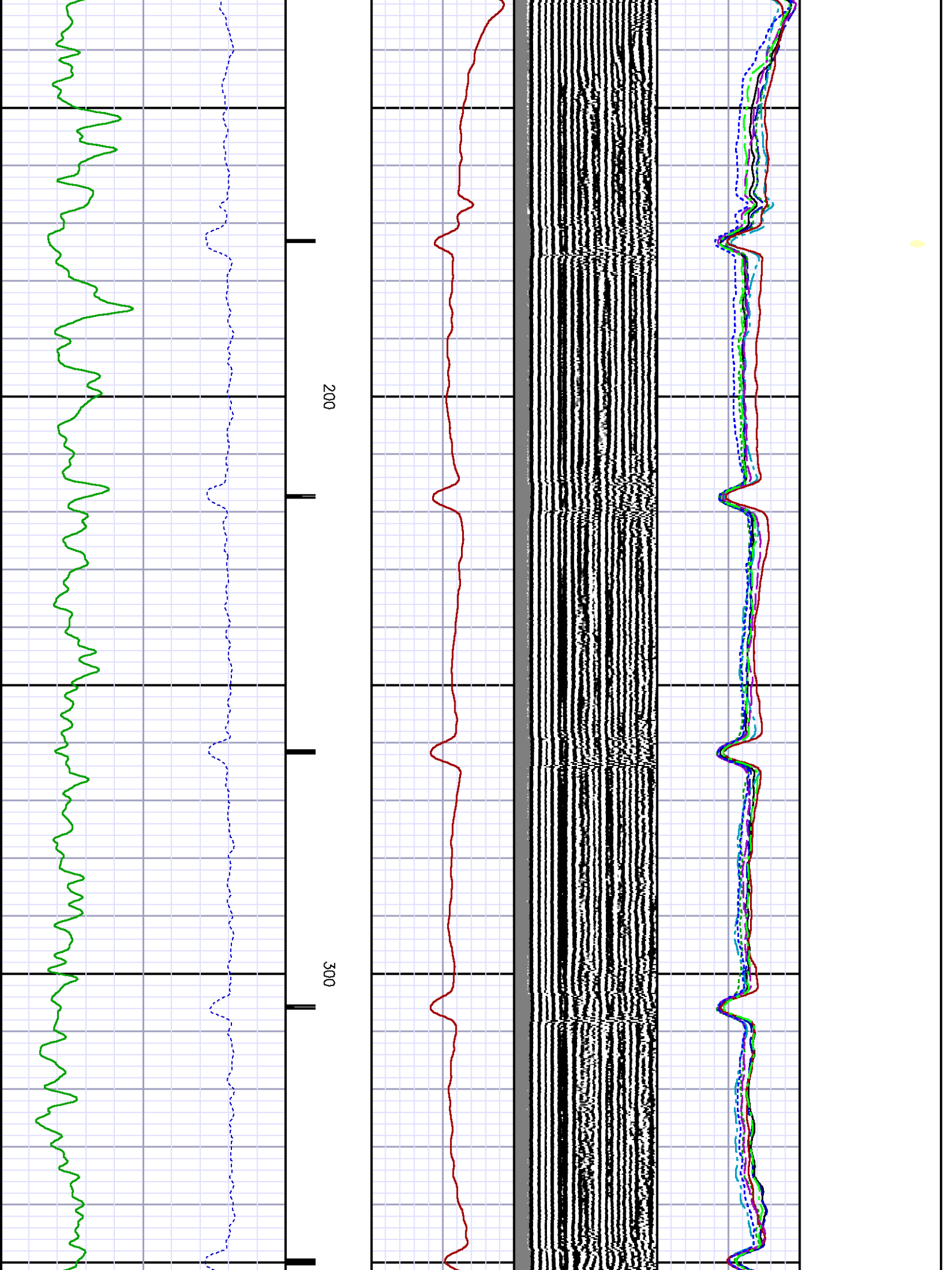
File Name : d:\welldata\wpx energy\rgu 24-25-198\ral24\main.xtf

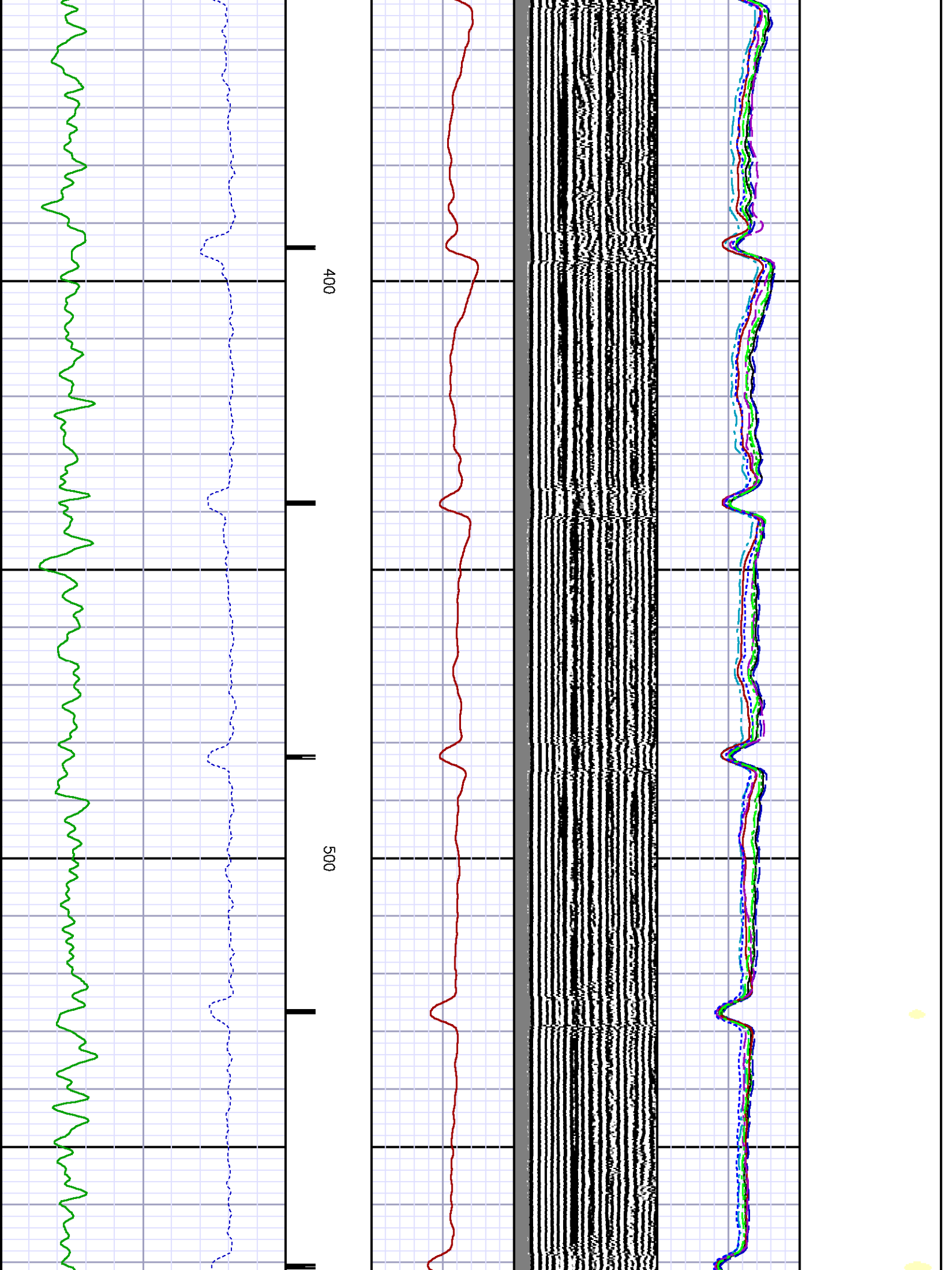
Mode : PlotMgr 5.4.504

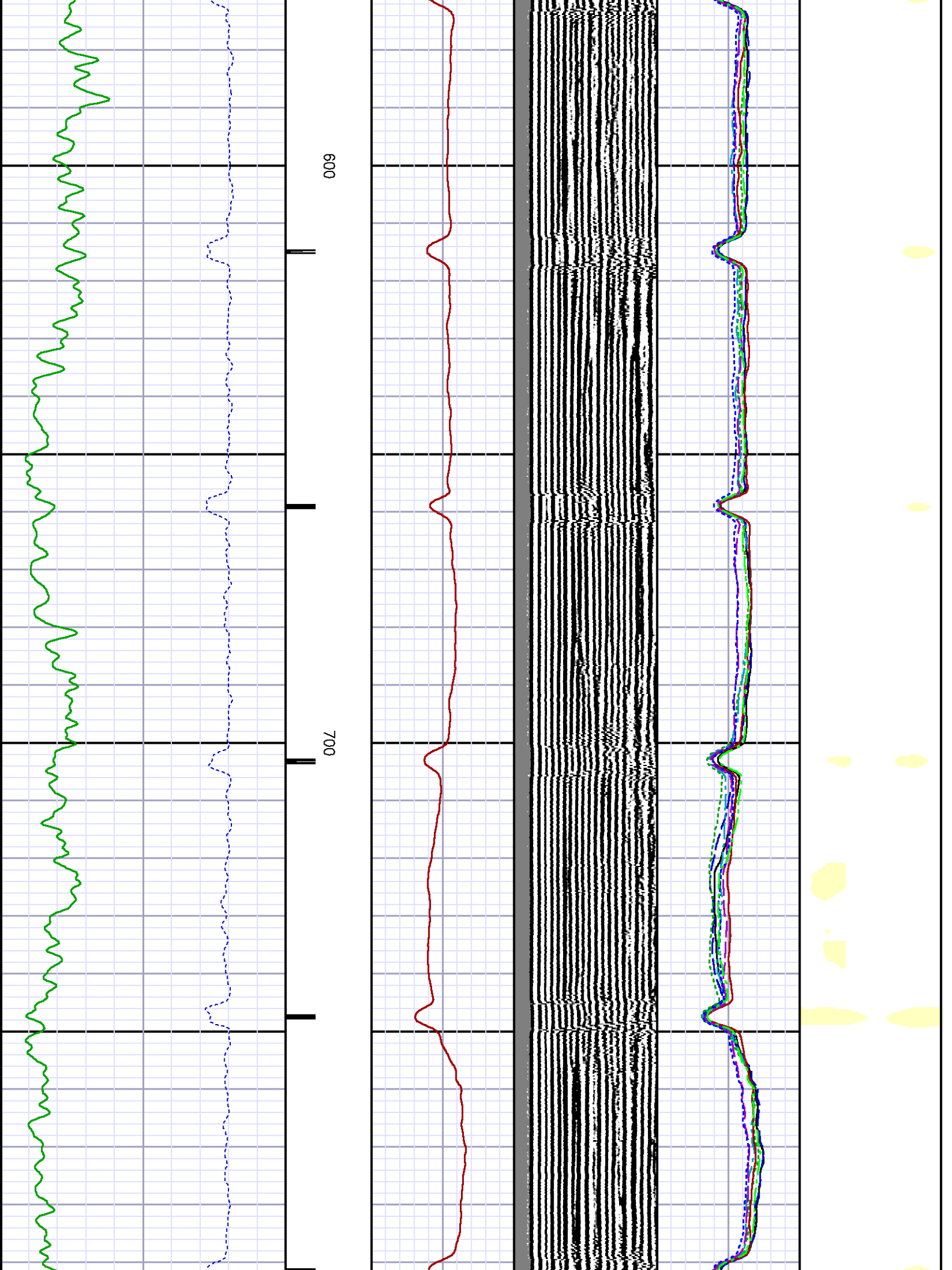
Interval : -6.00 - 12626.00 feet UP

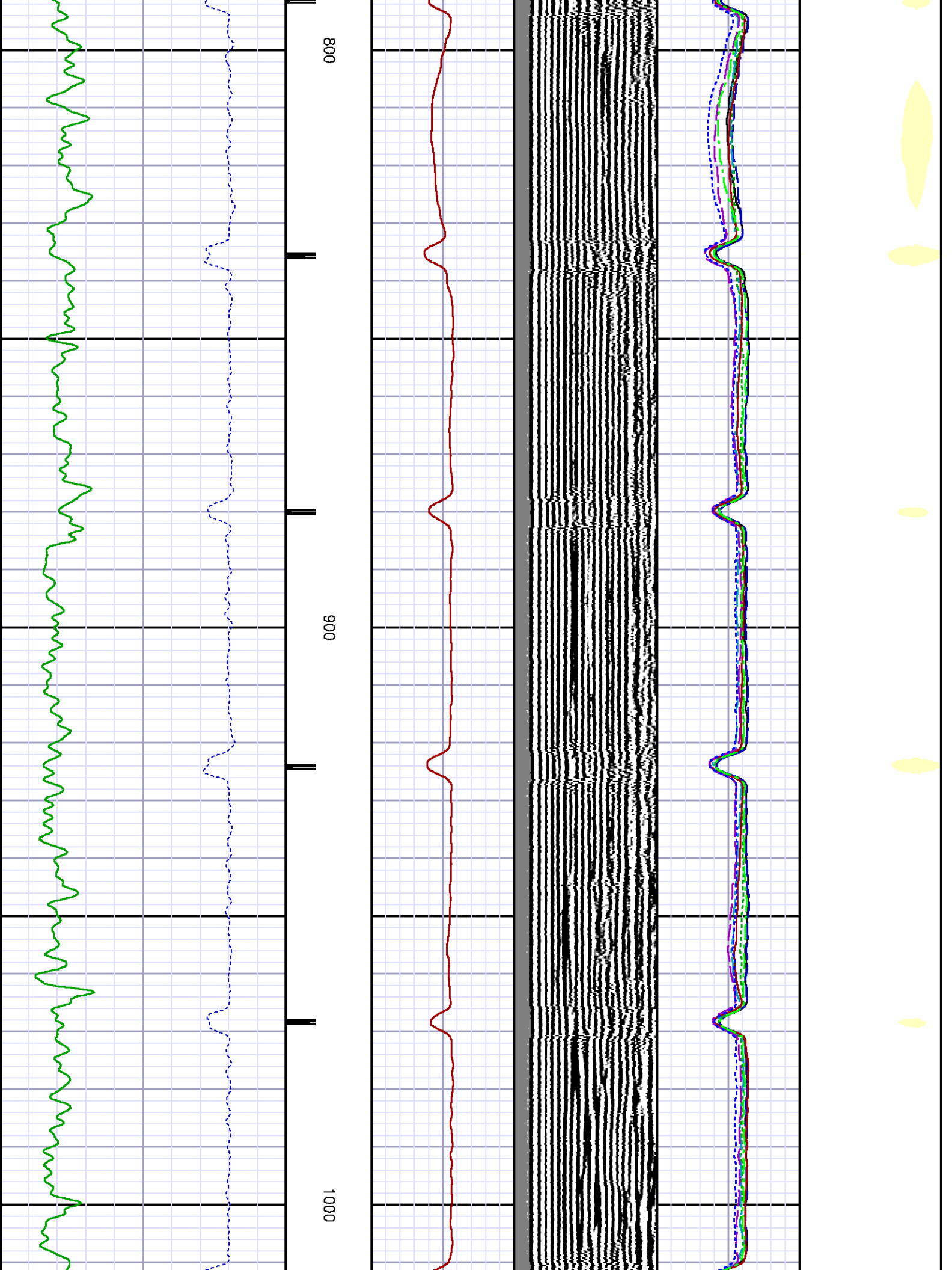
Created : 9/13/2012 12:25:19 PM

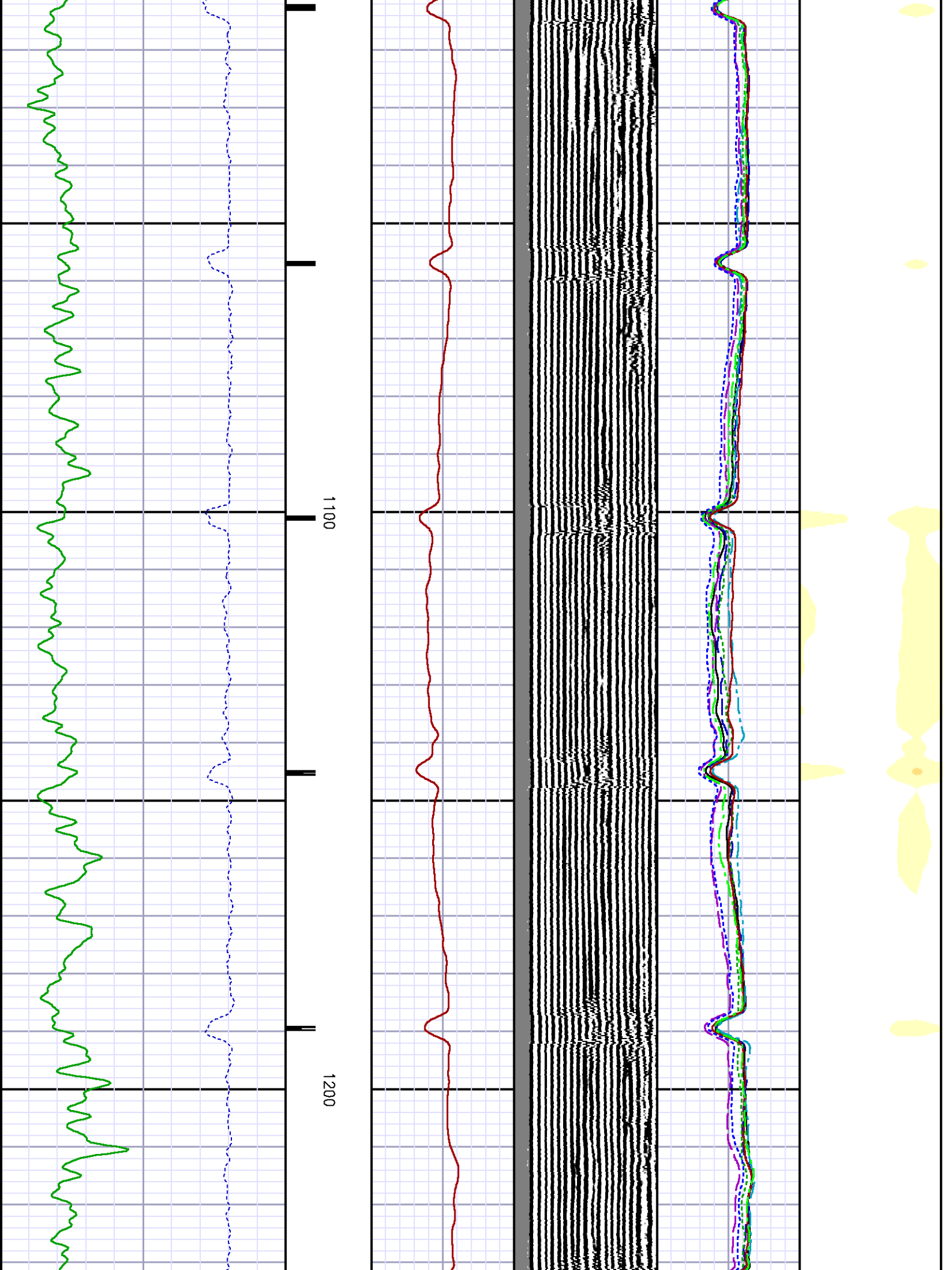


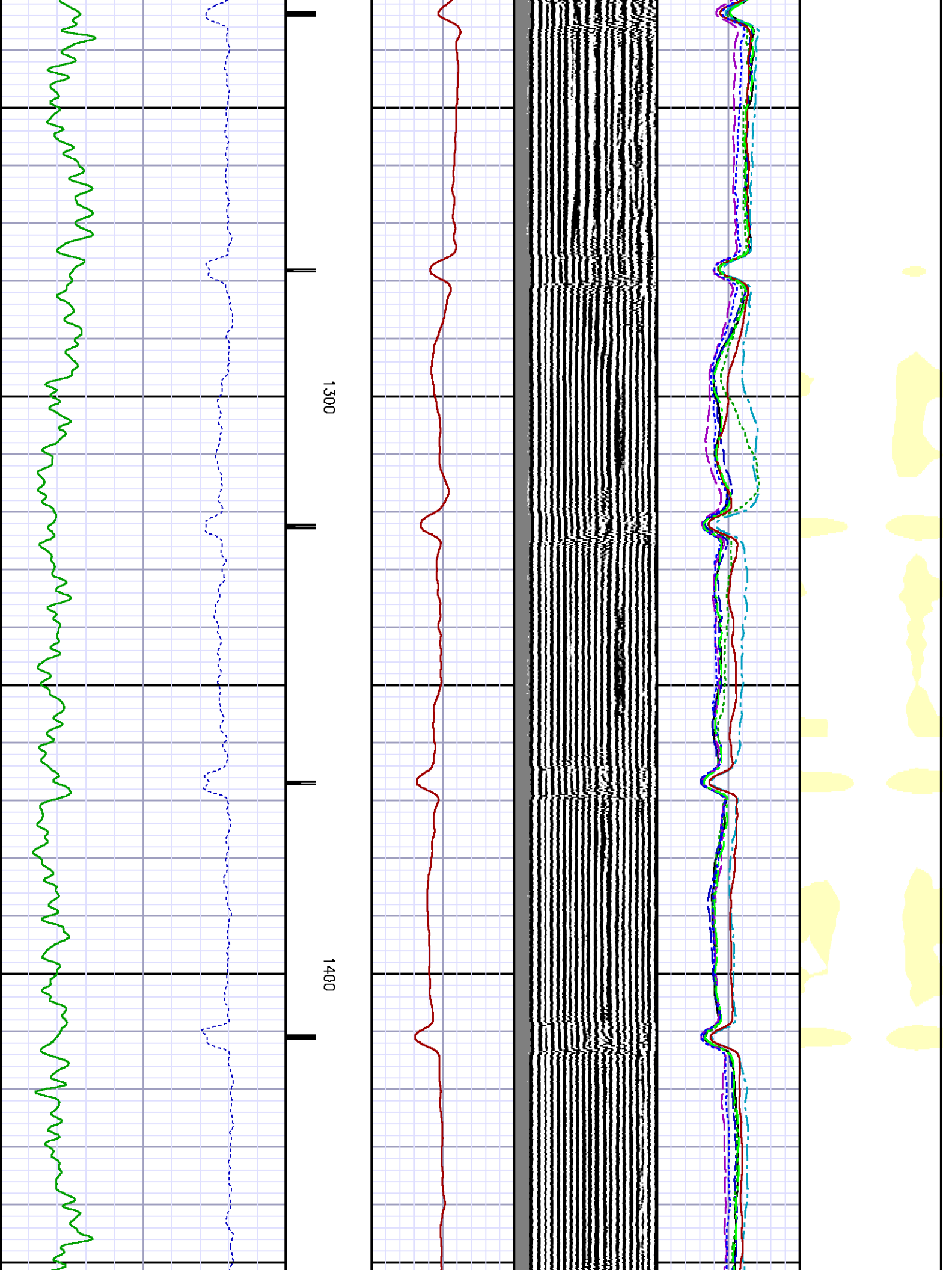


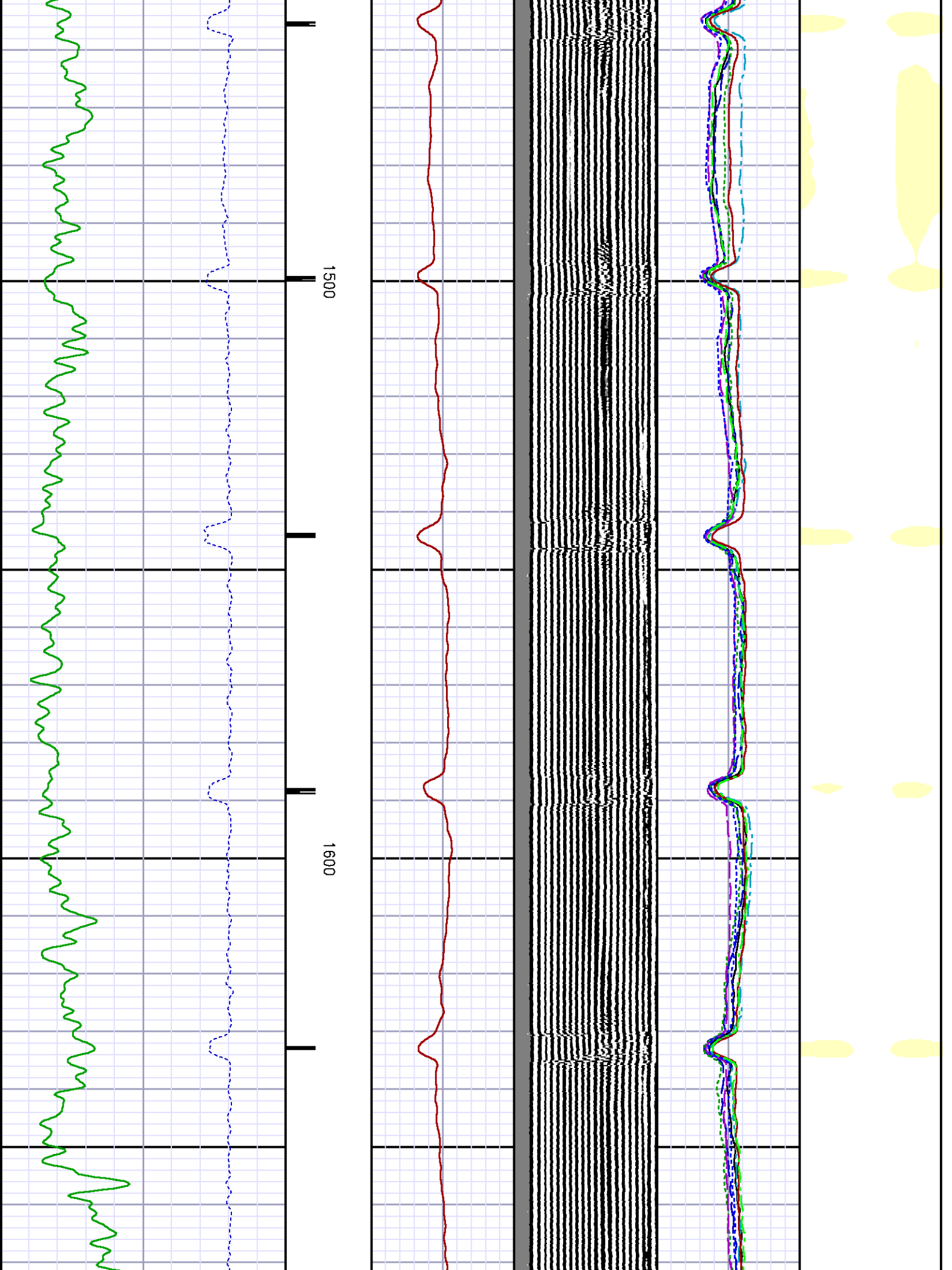


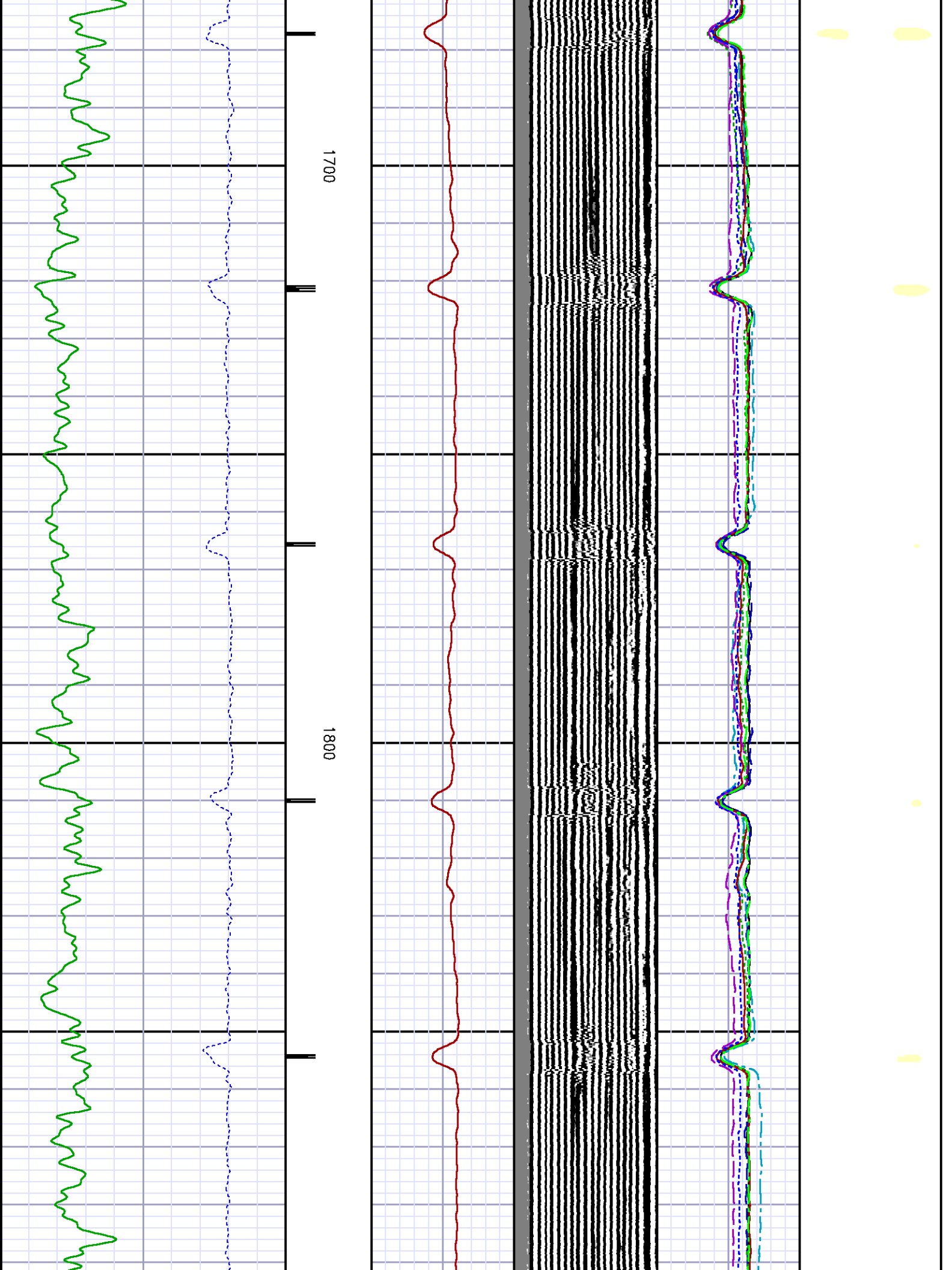


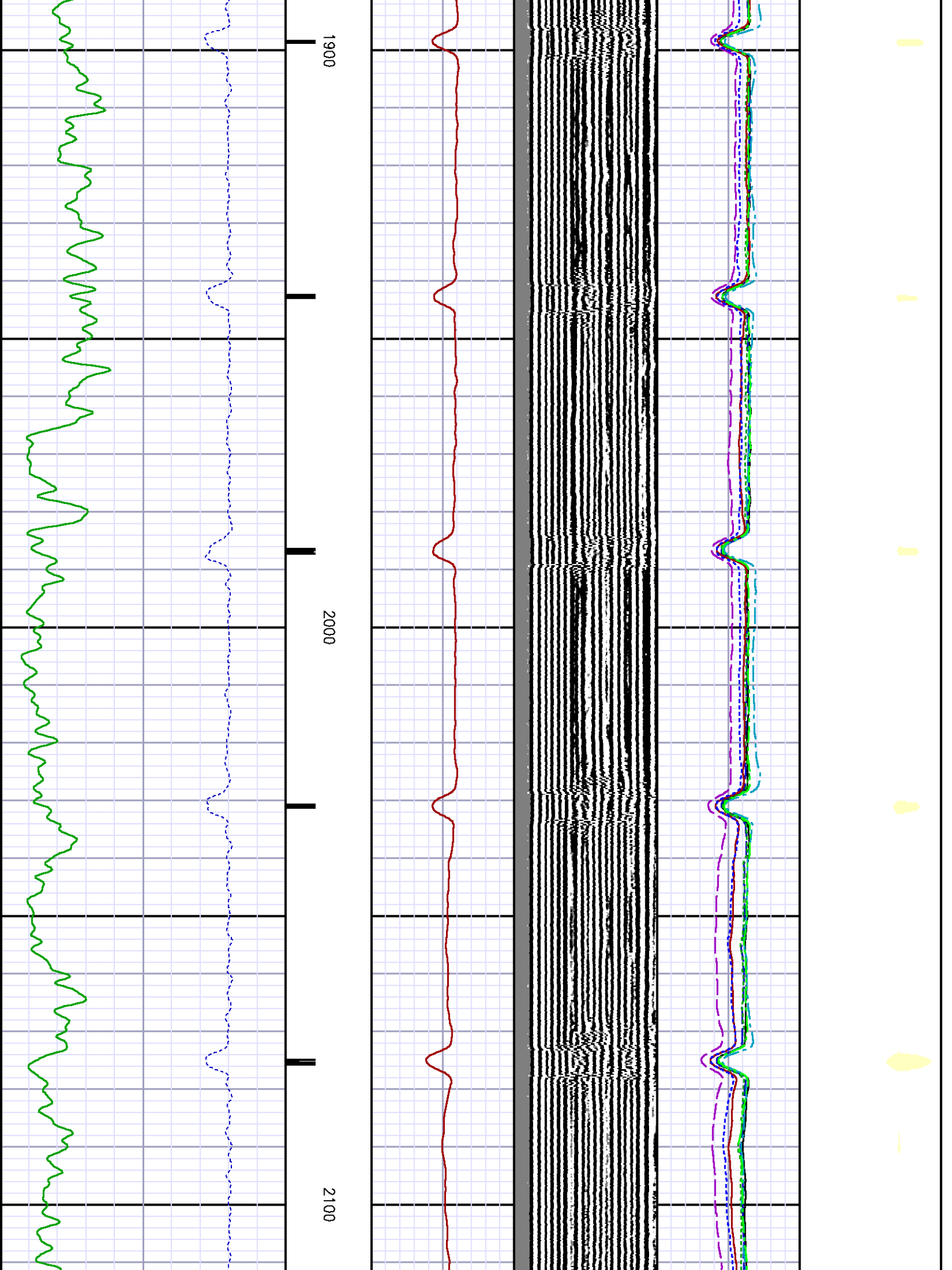


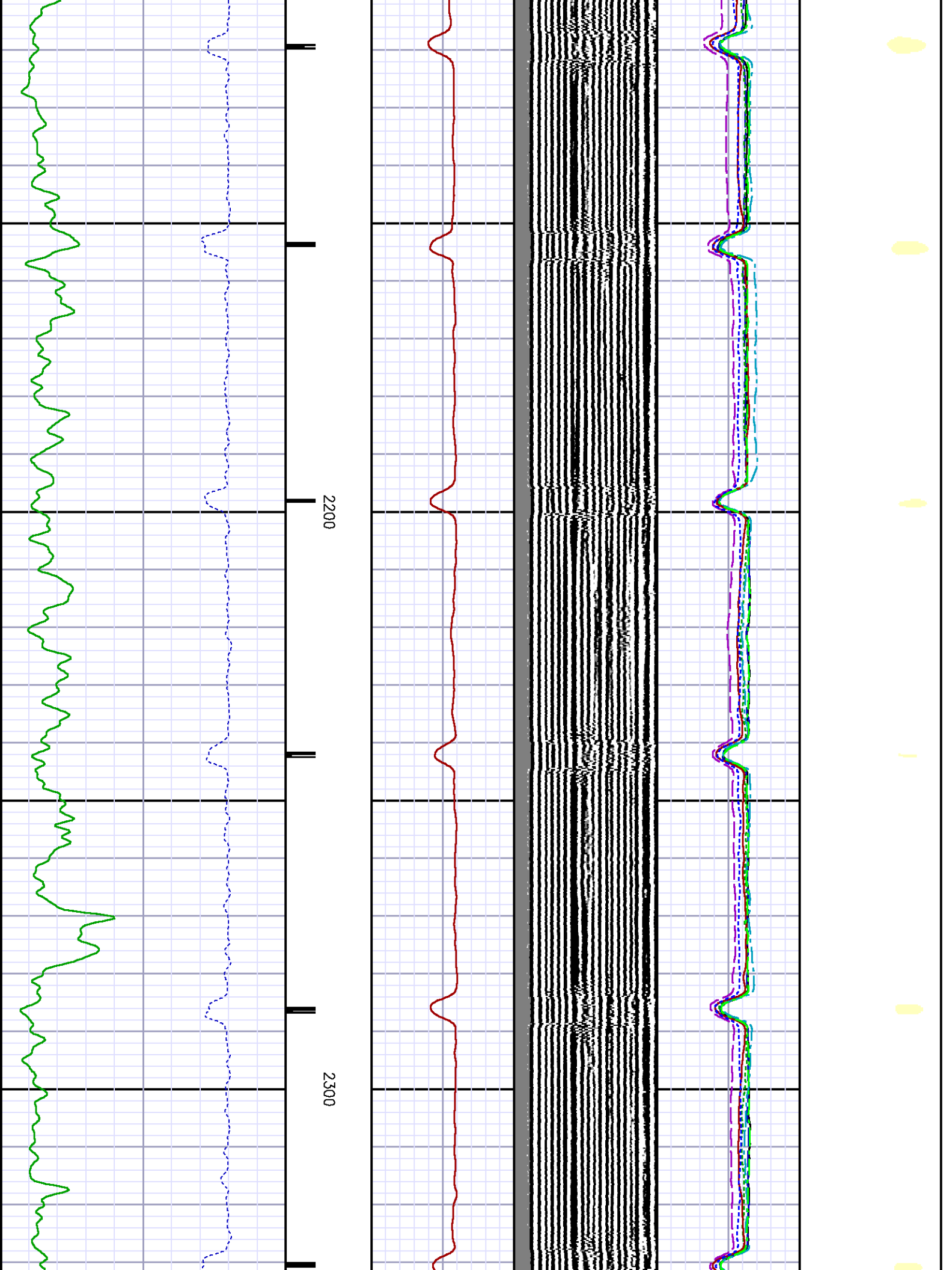


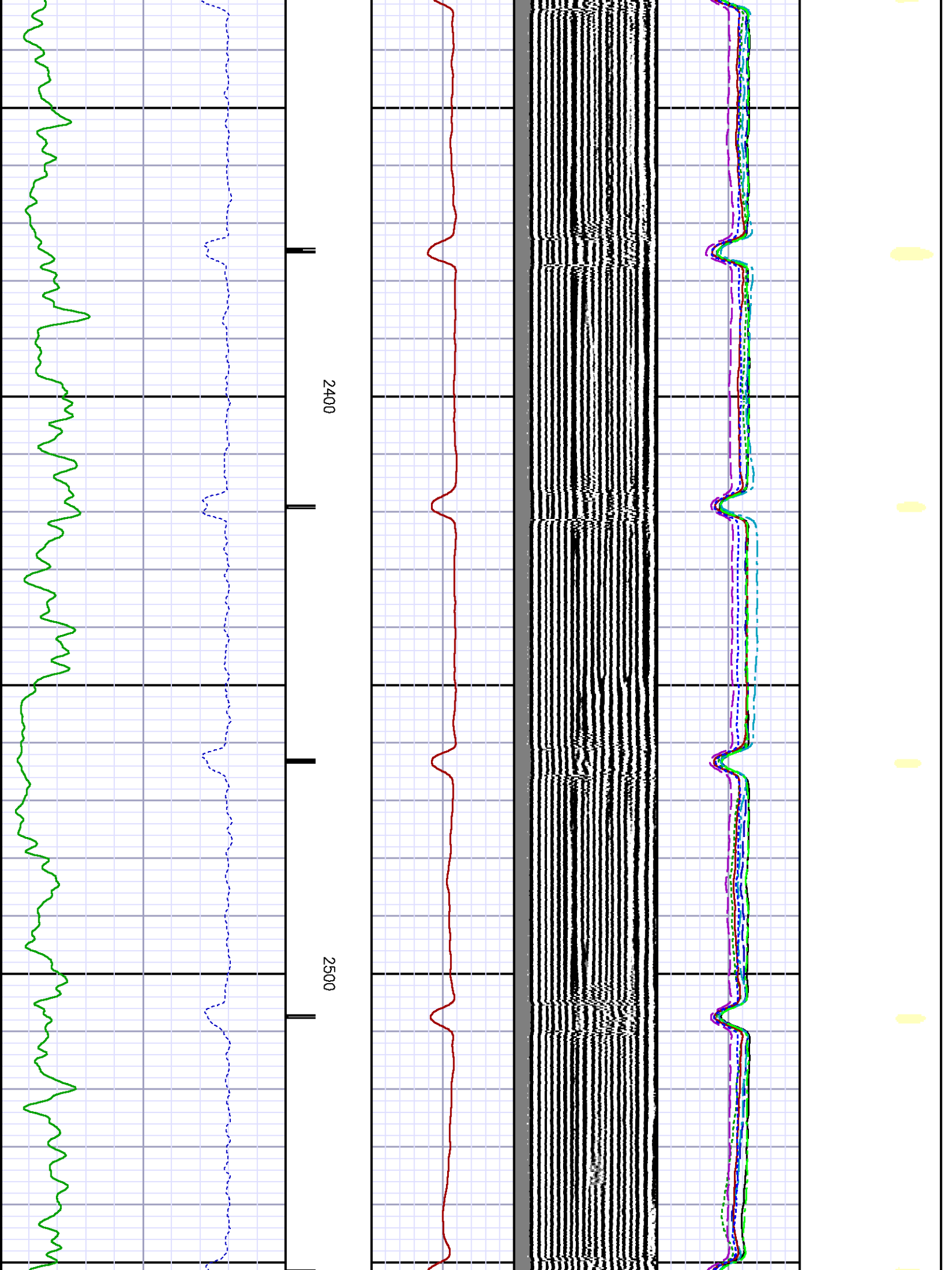


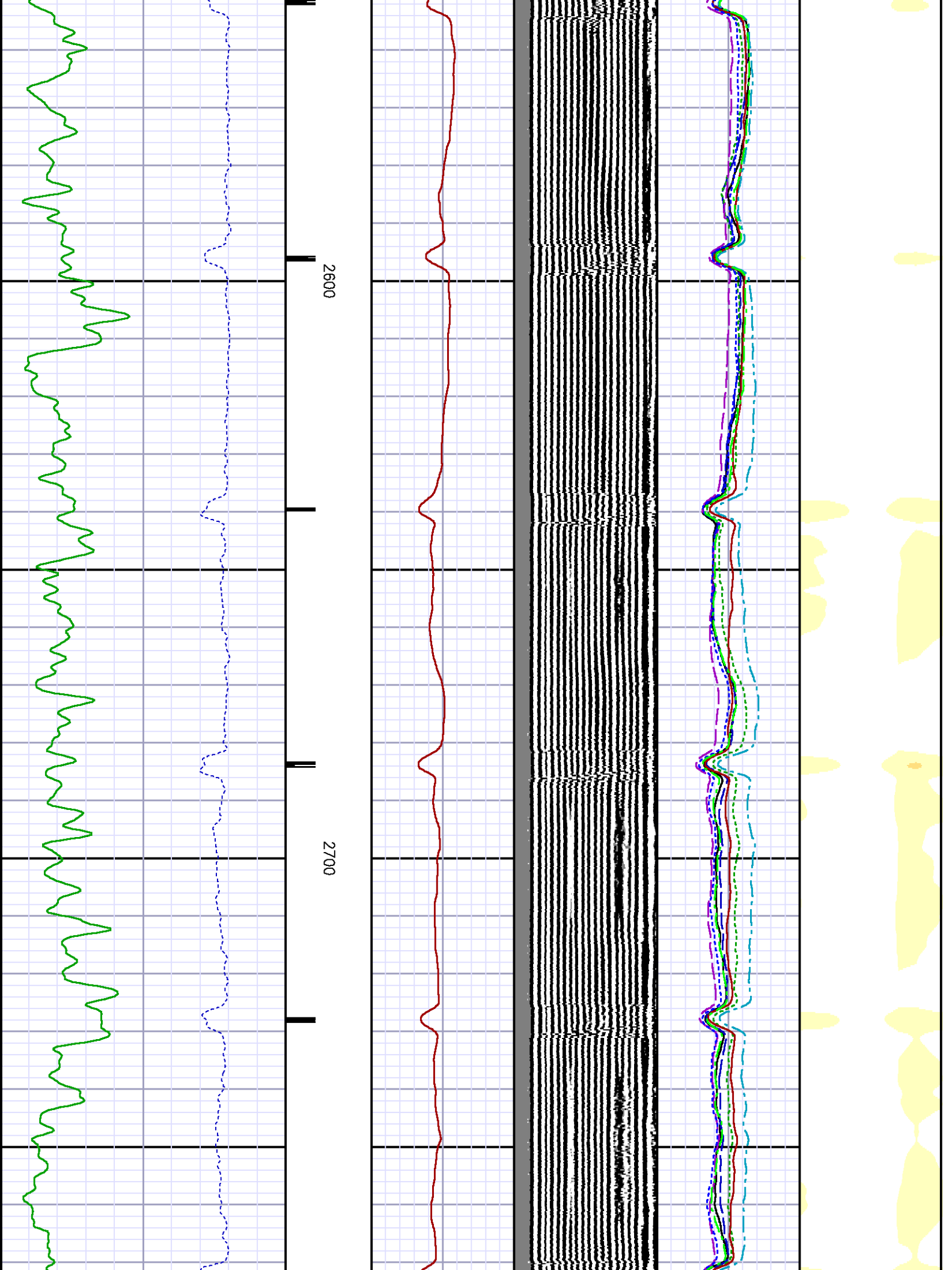


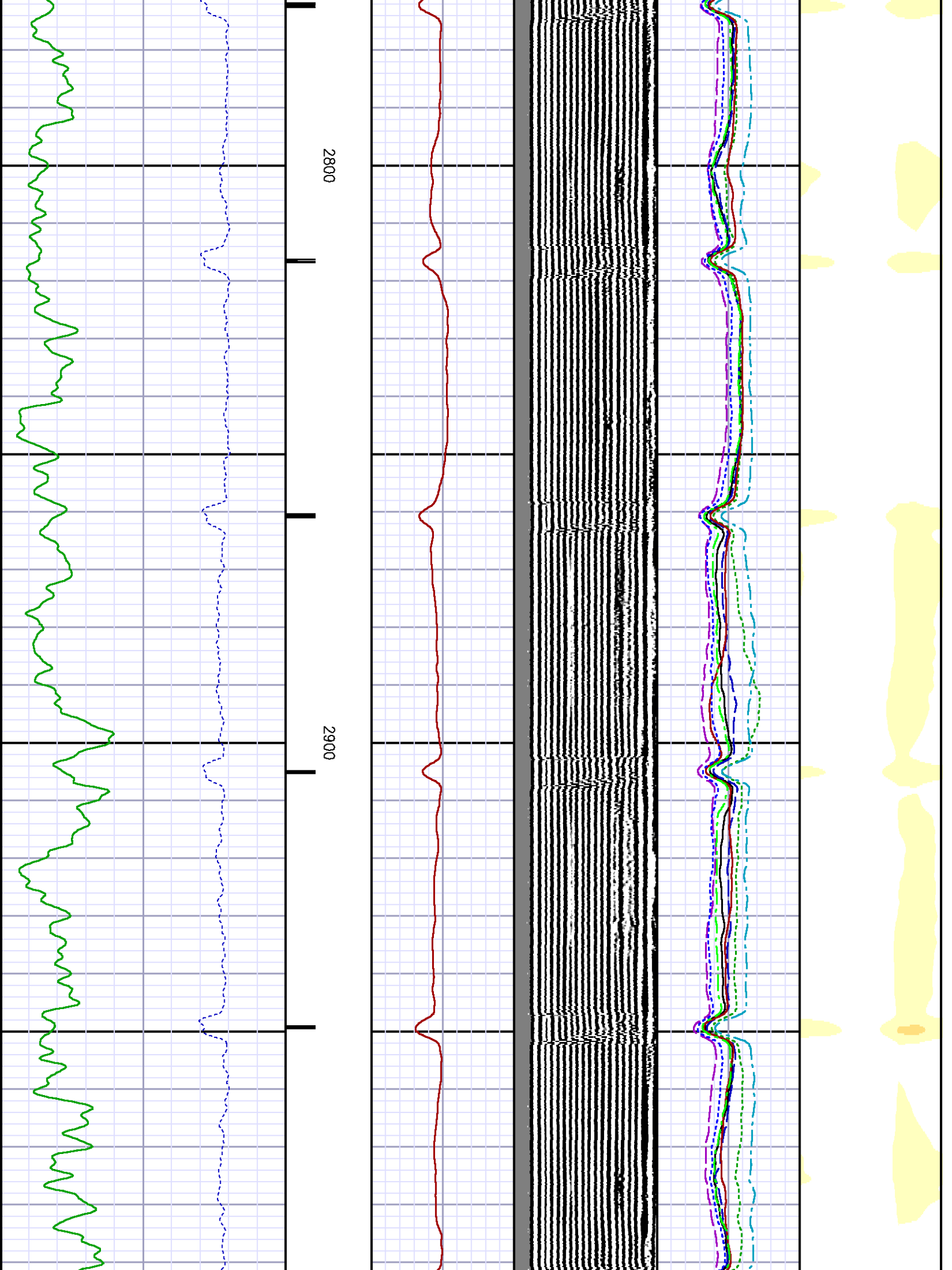


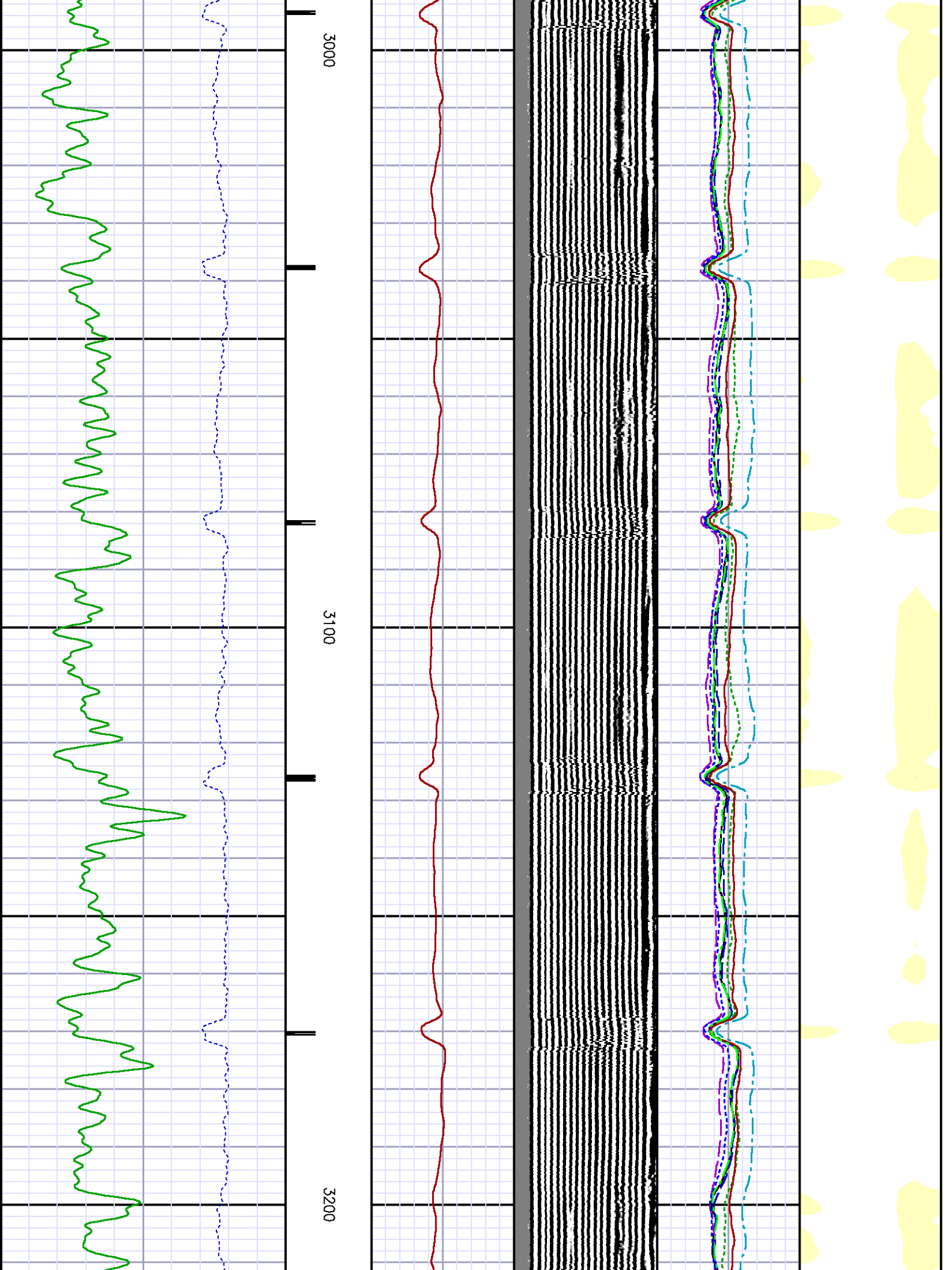


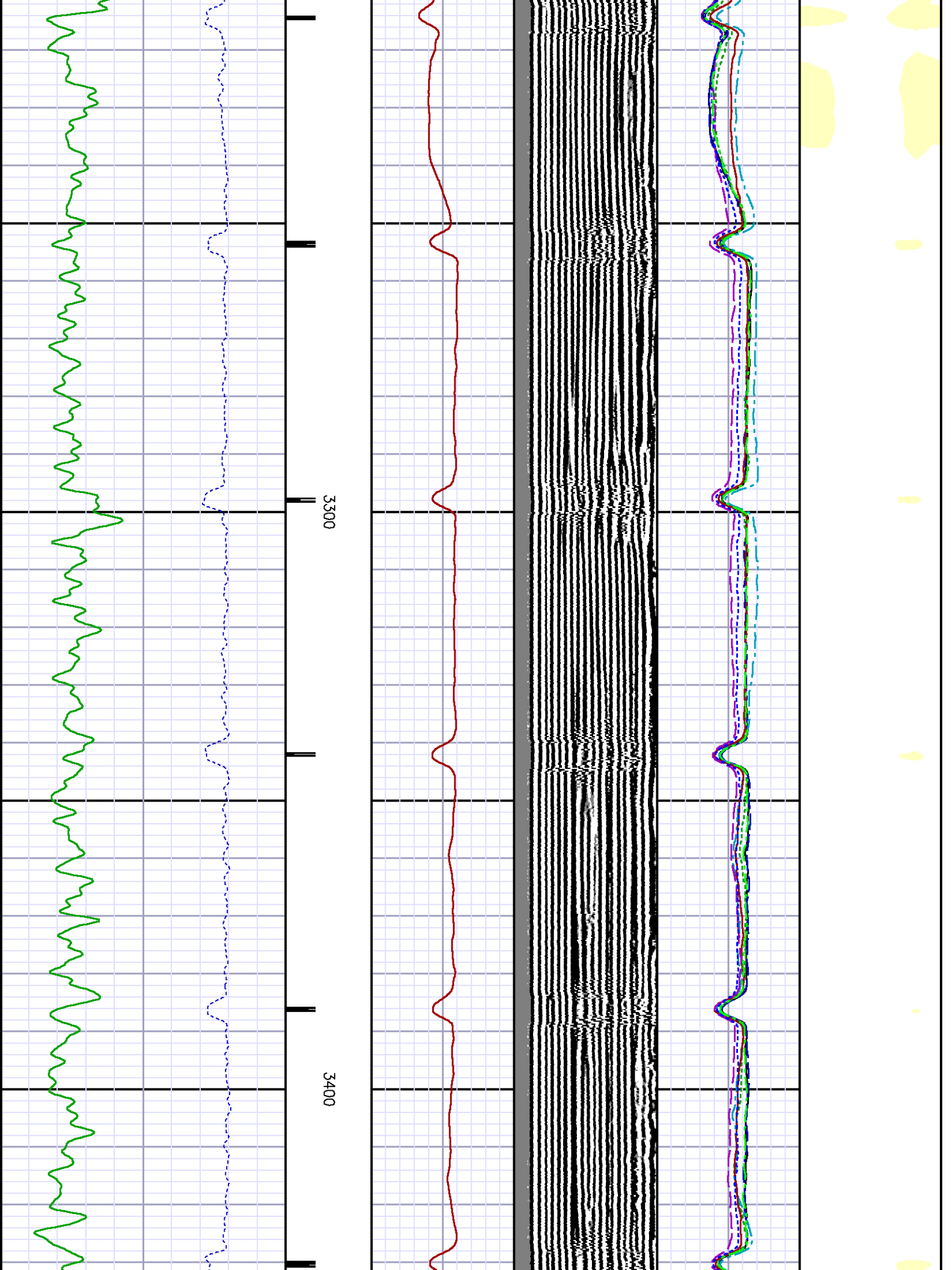


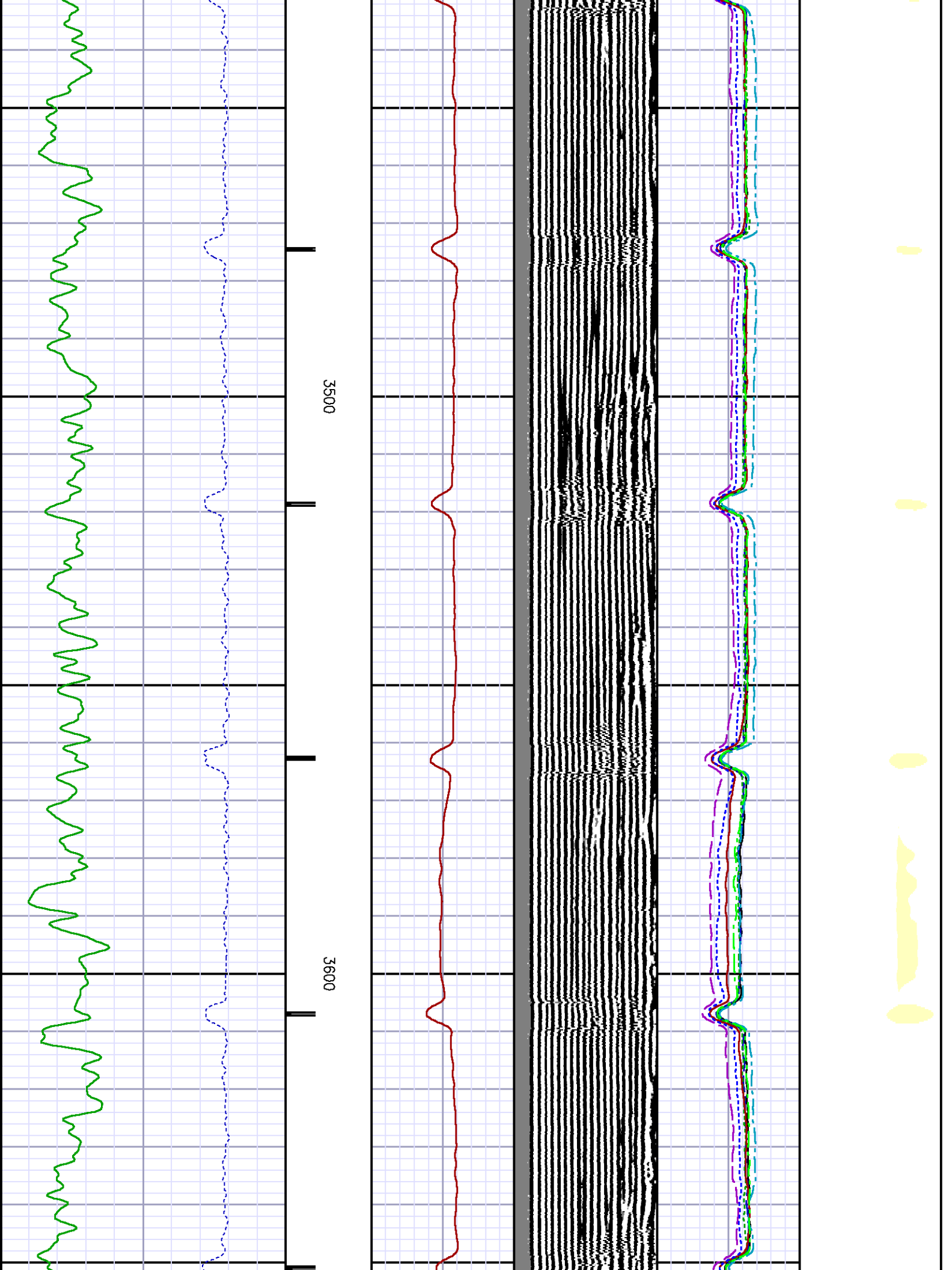


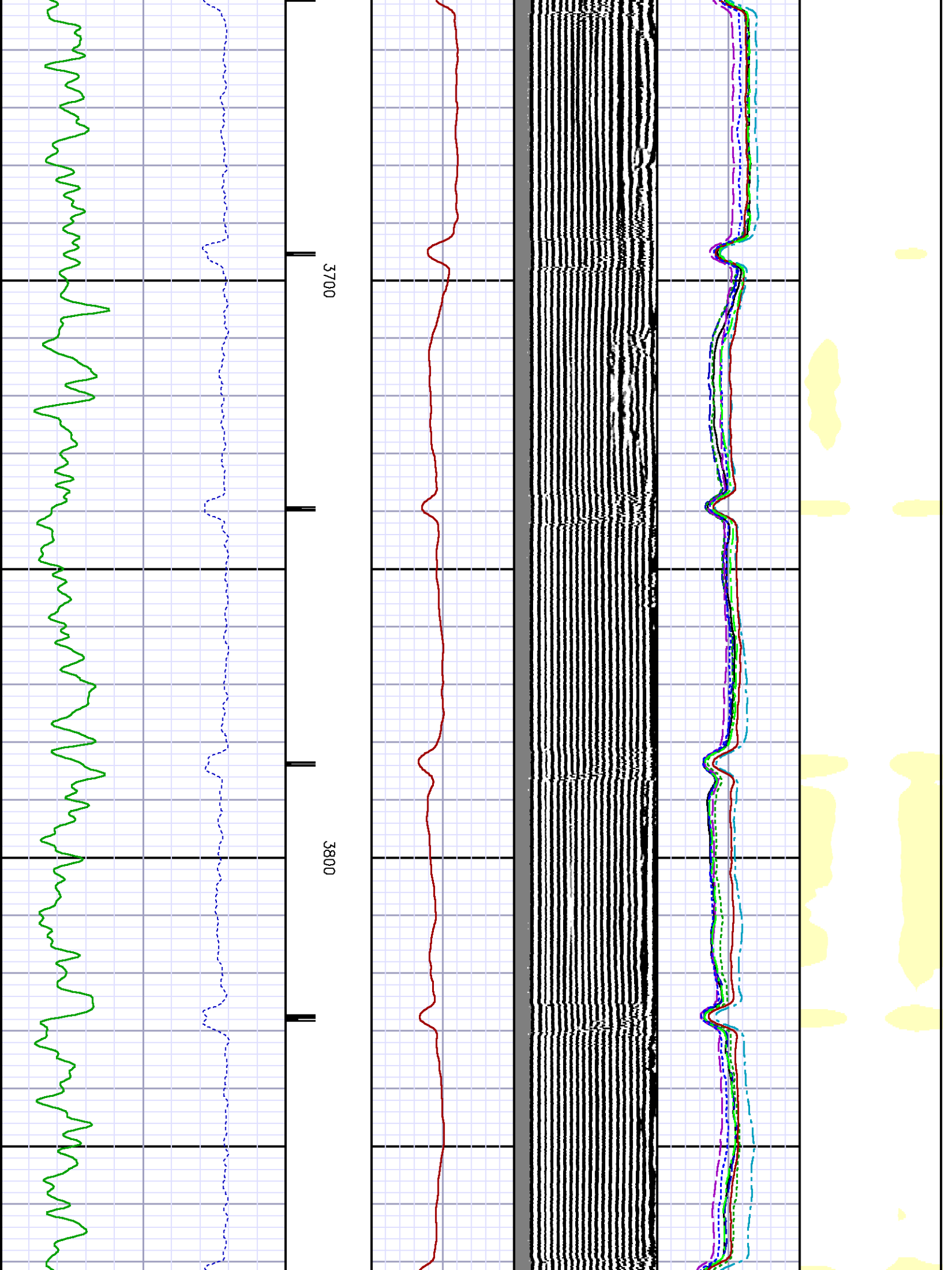


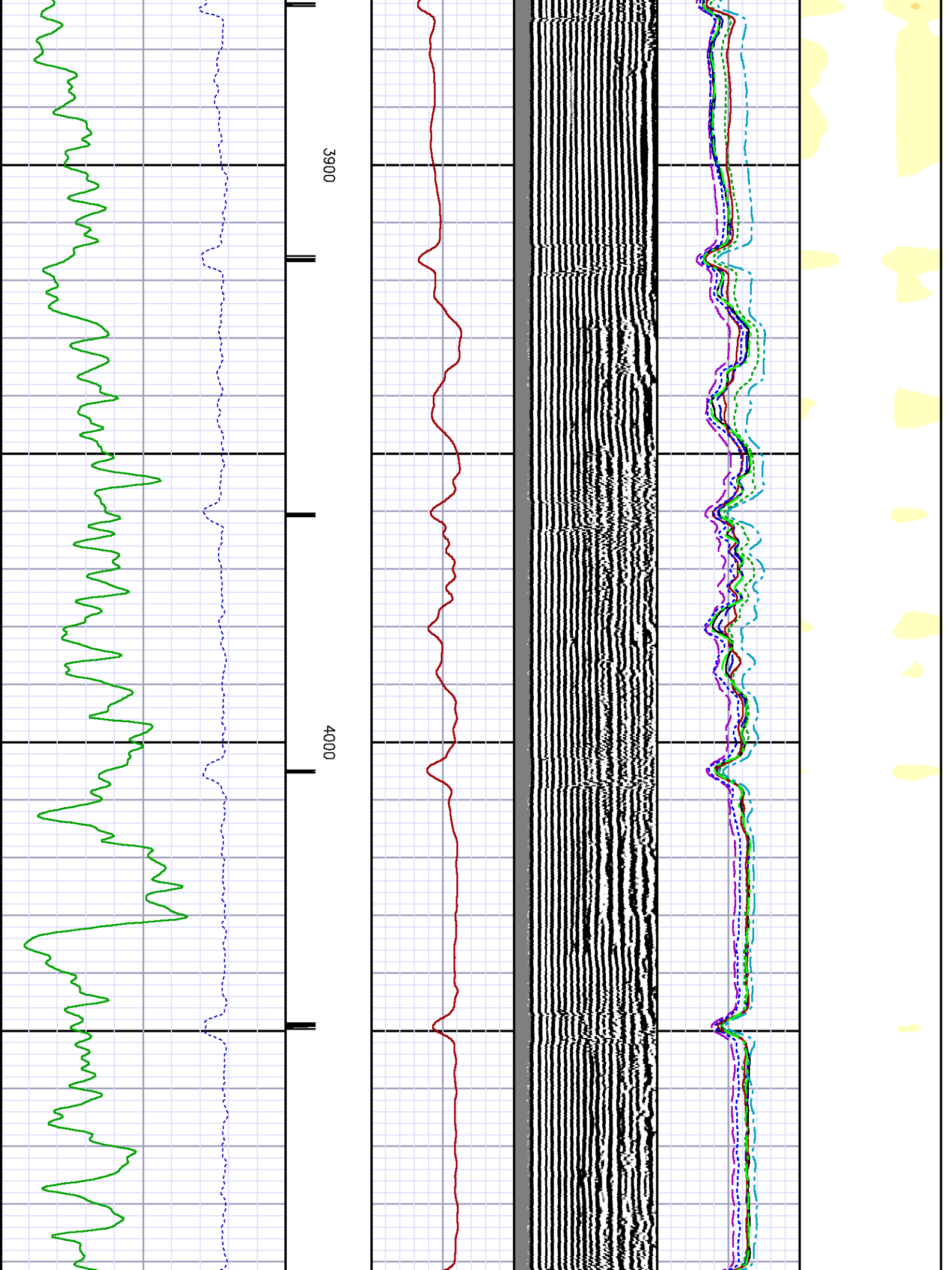


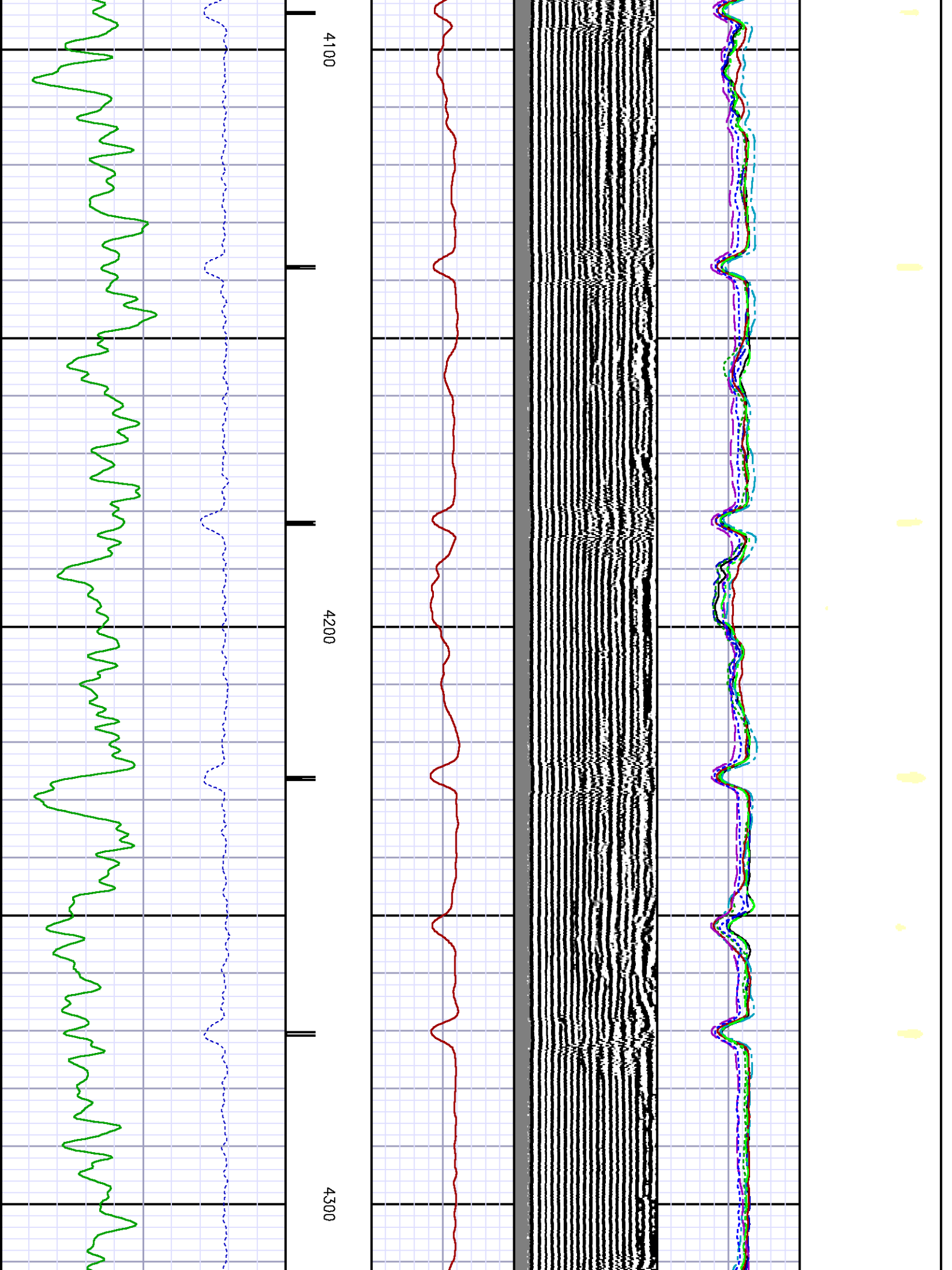


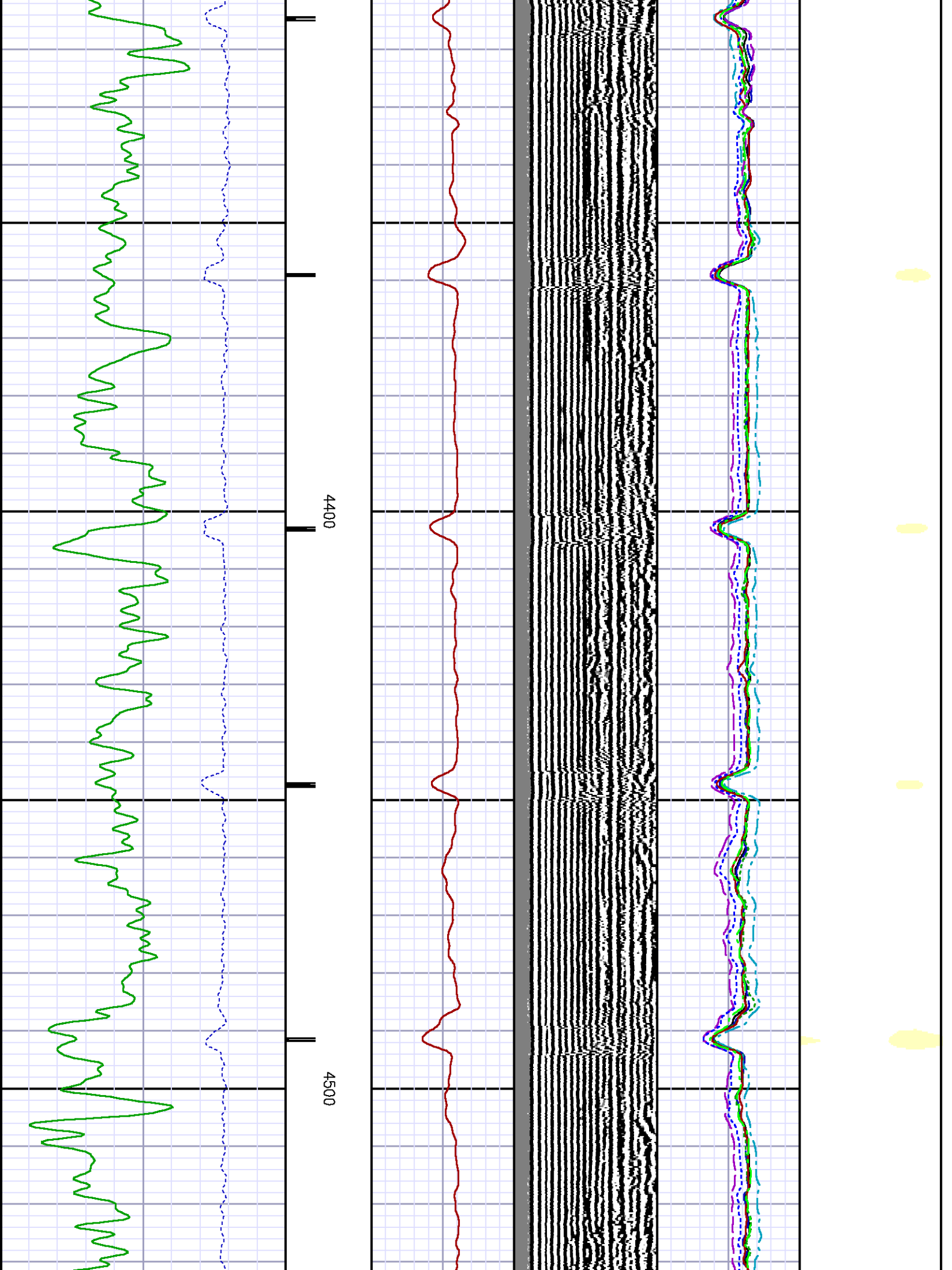


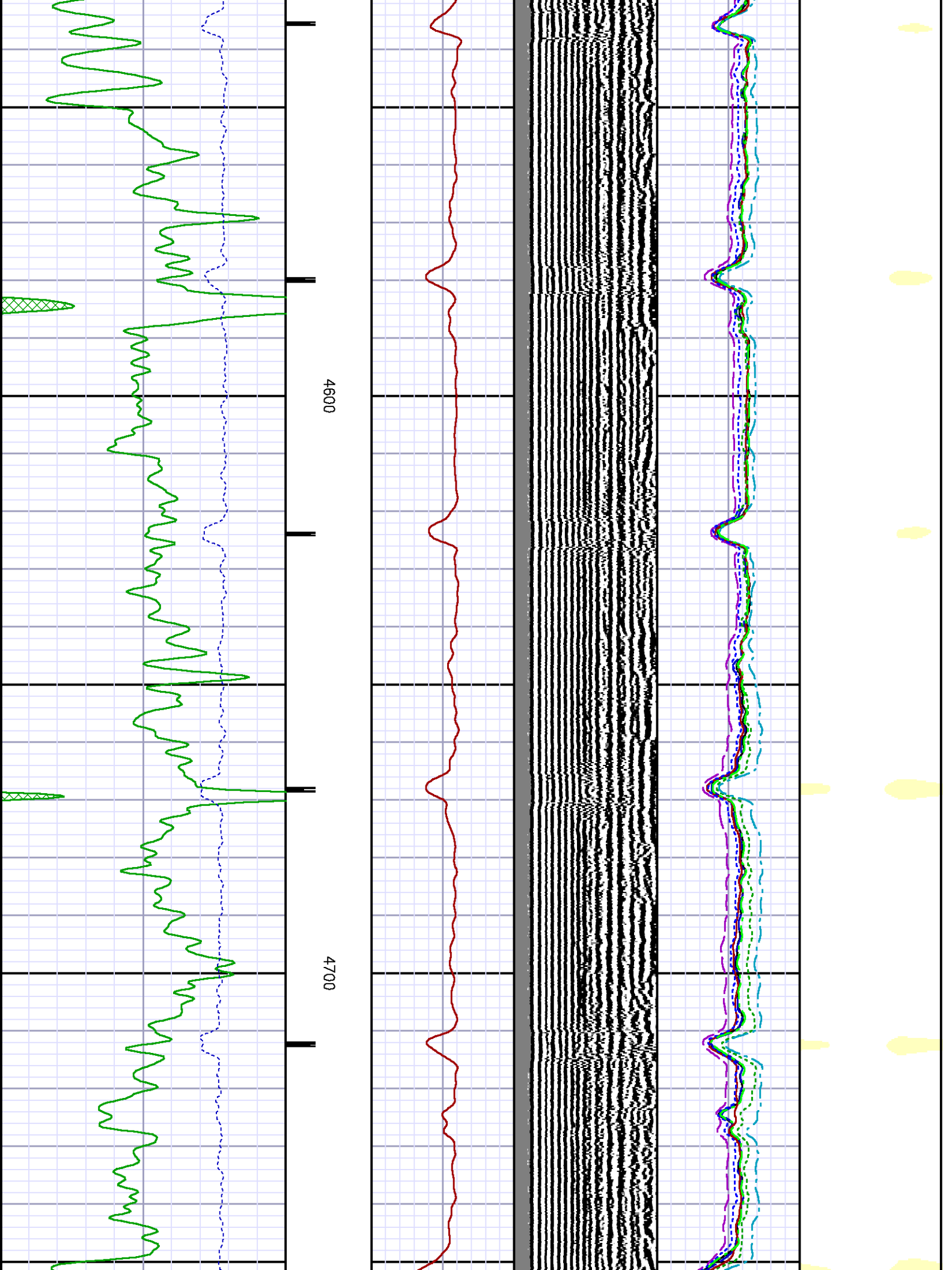


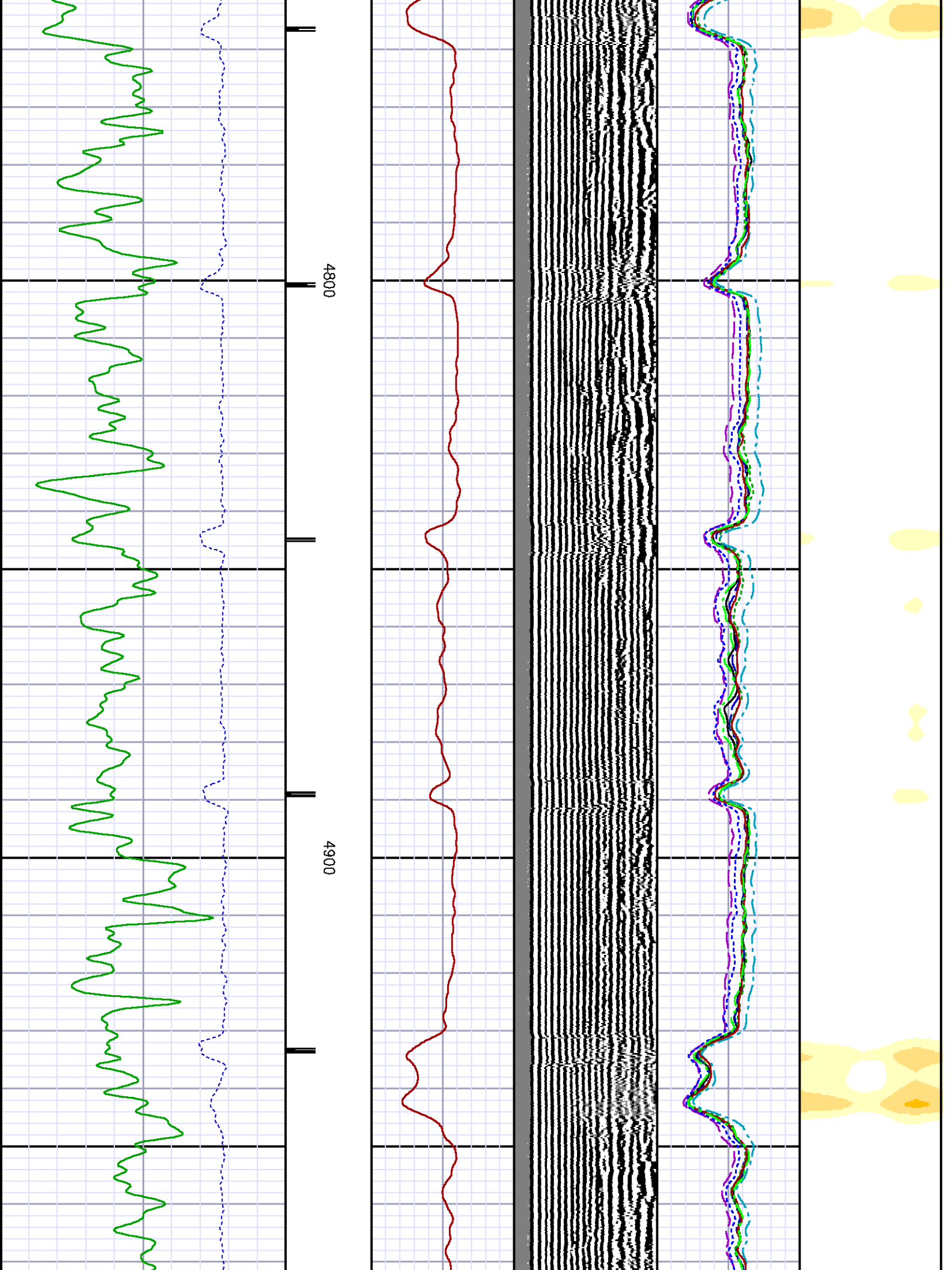


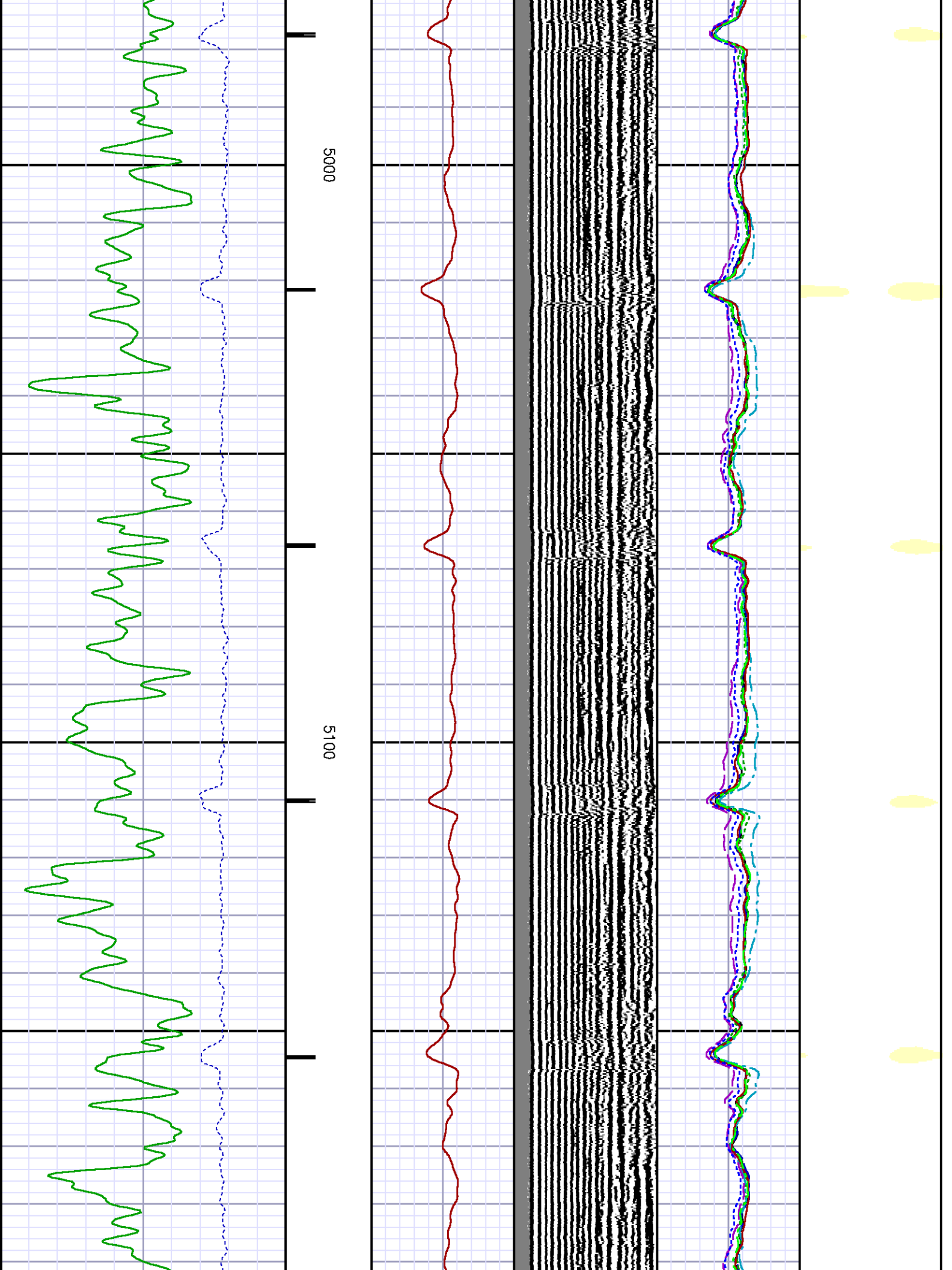


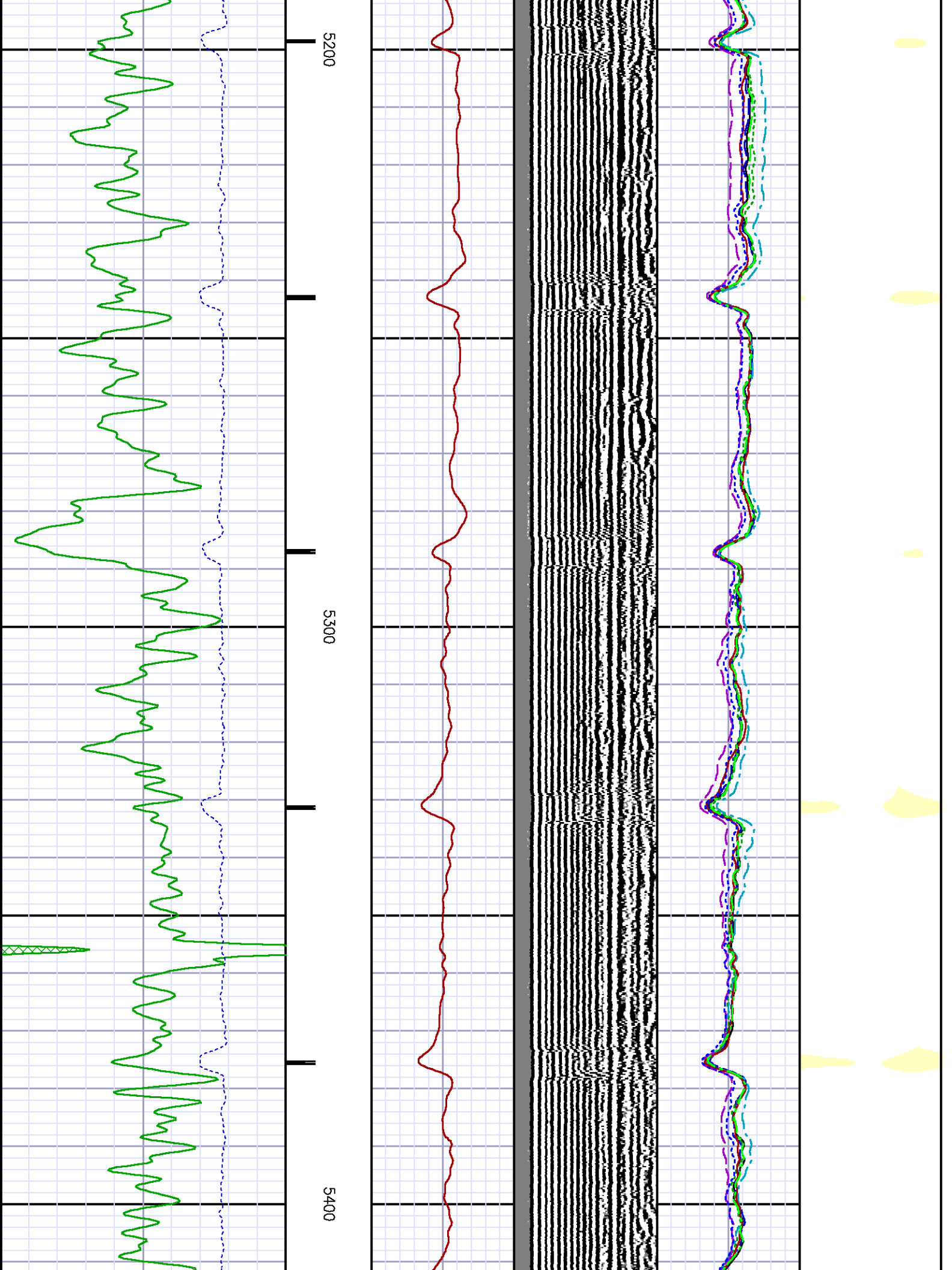


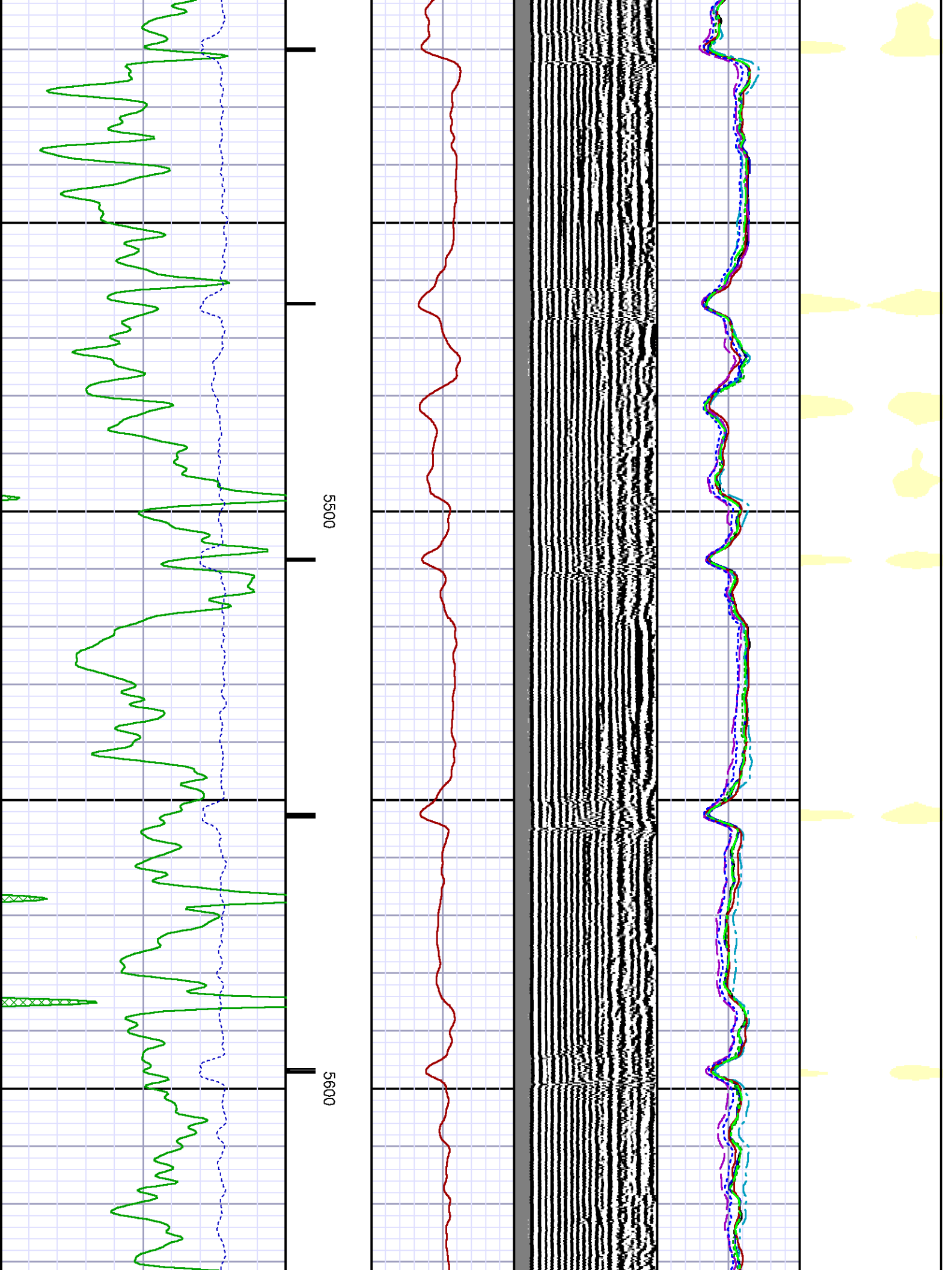


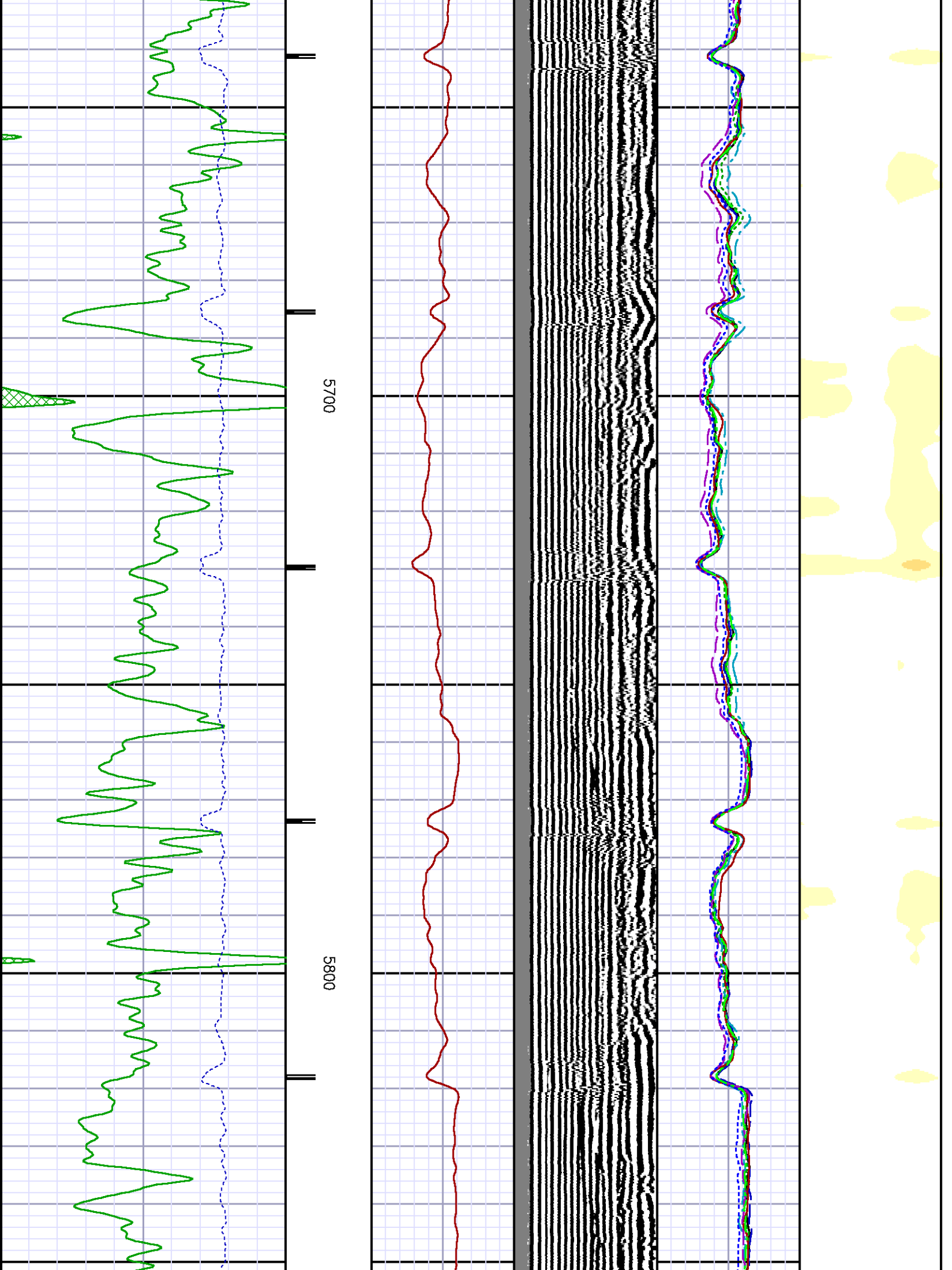


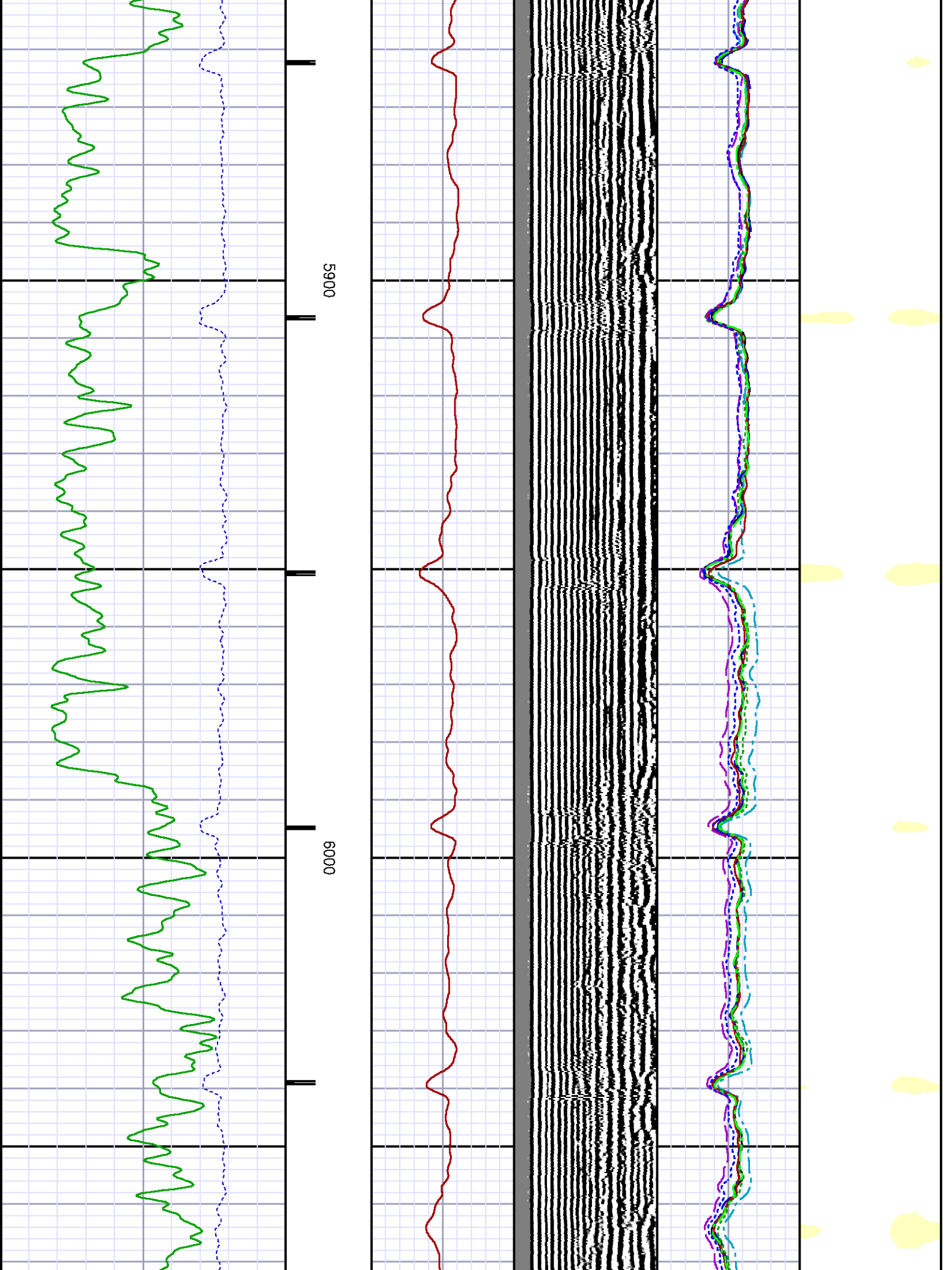


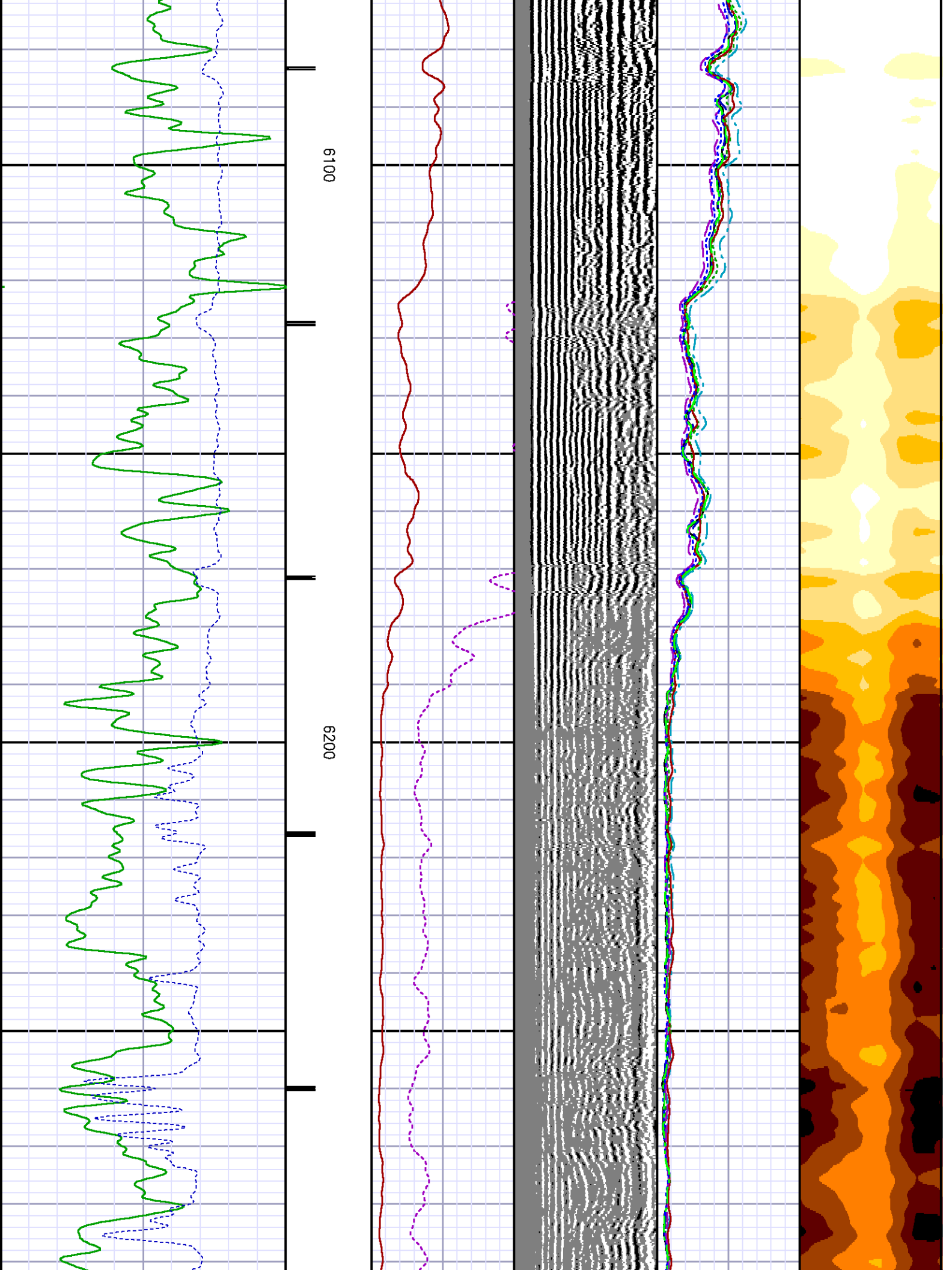


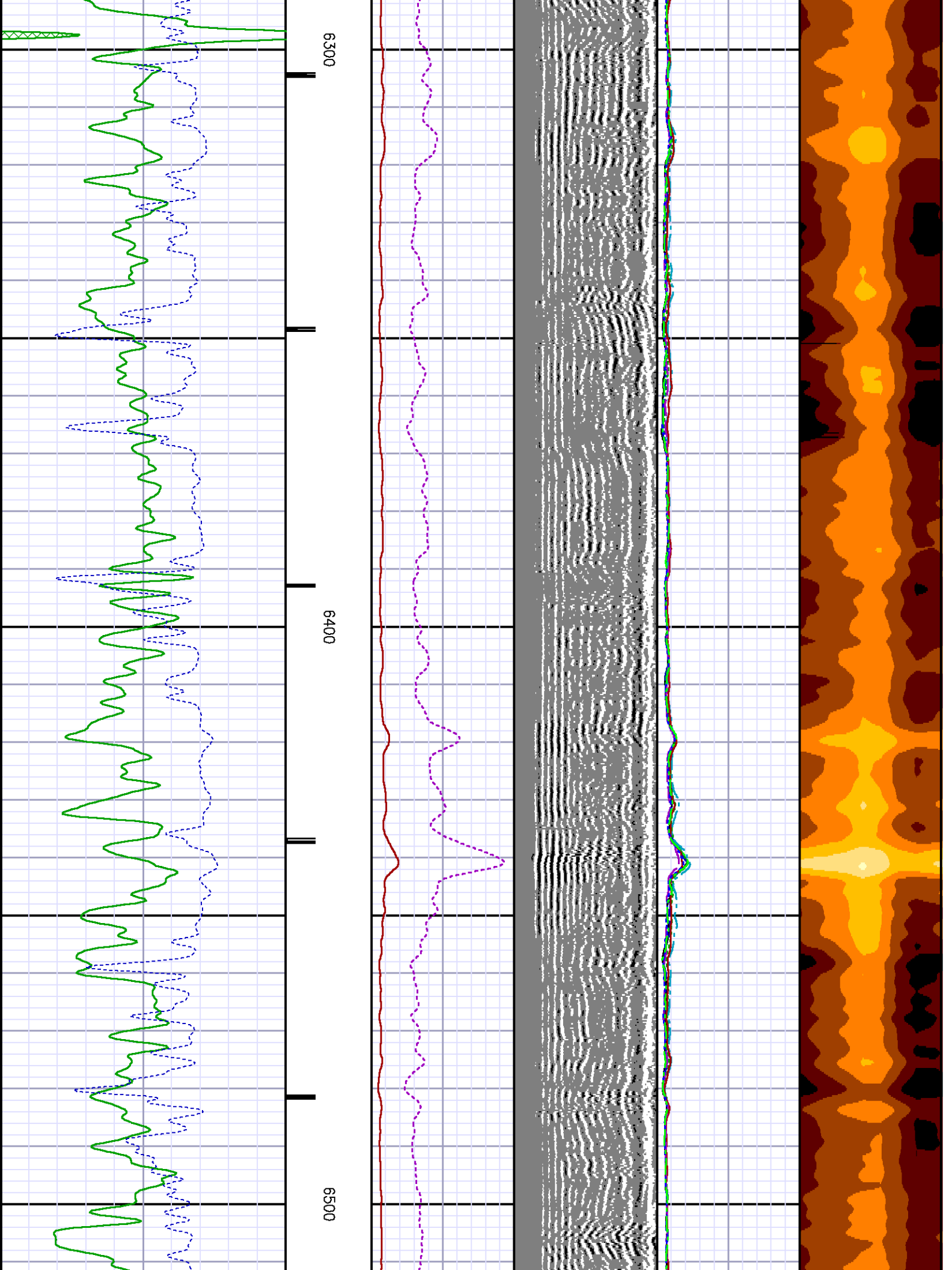


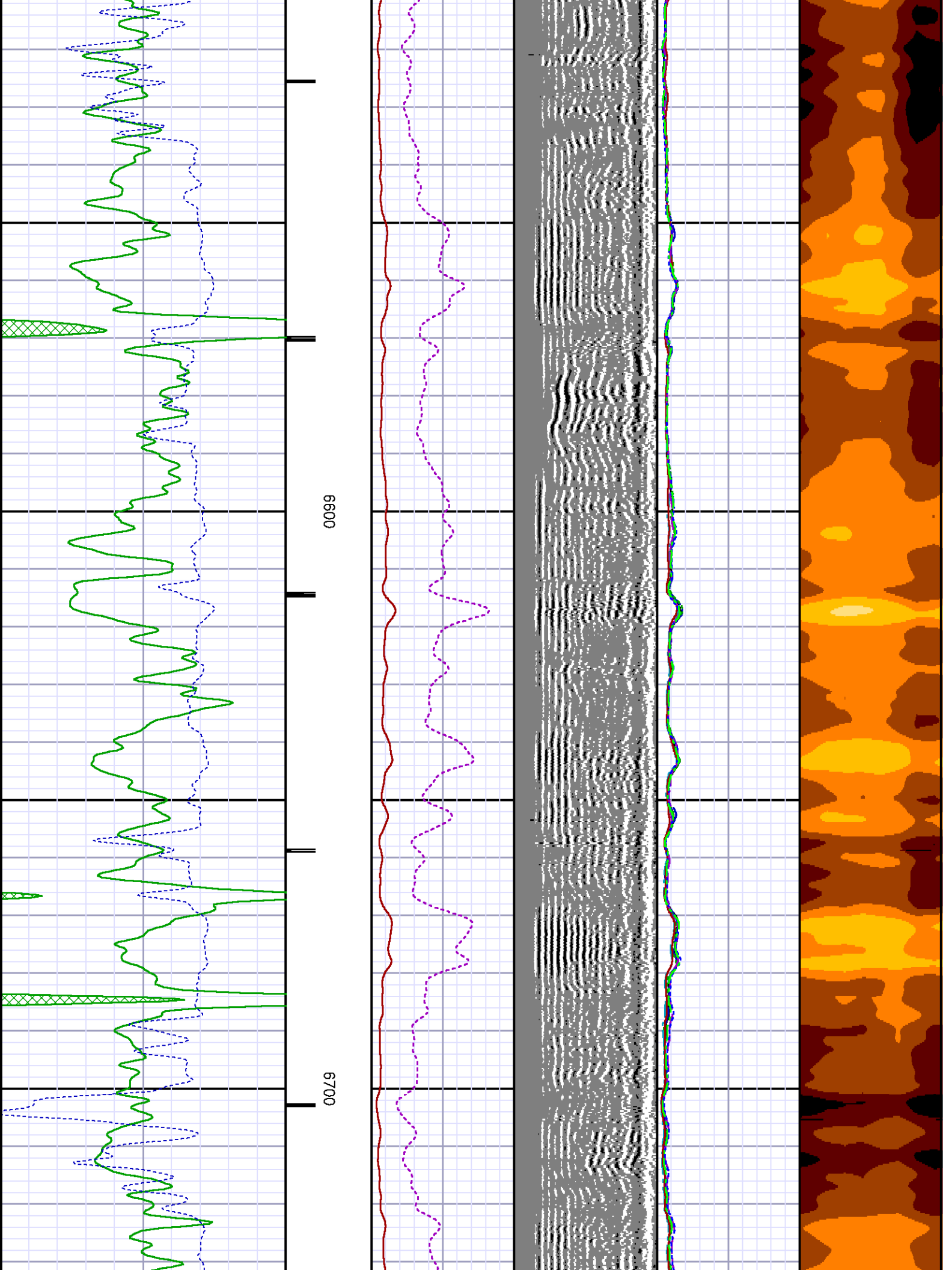


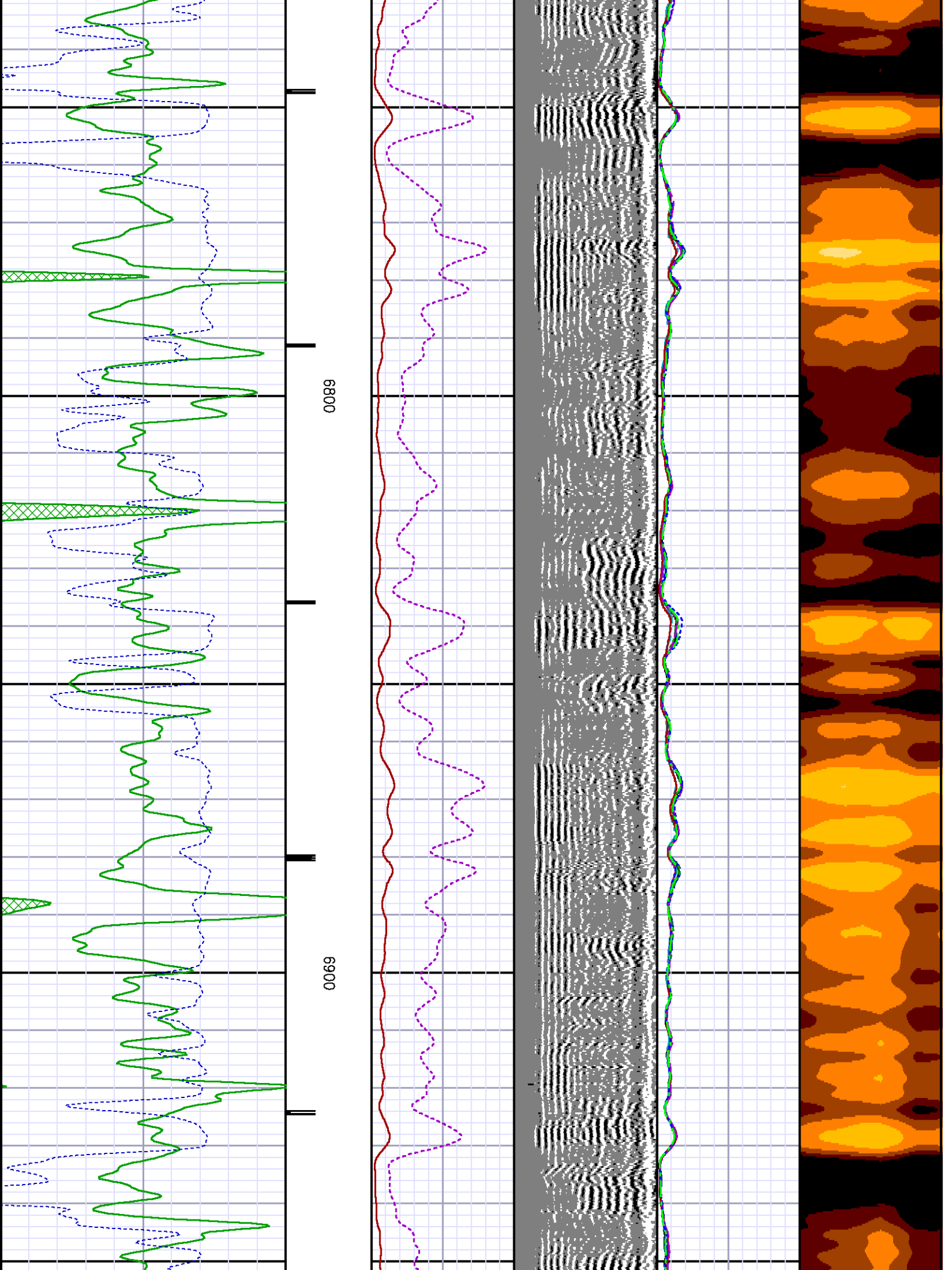


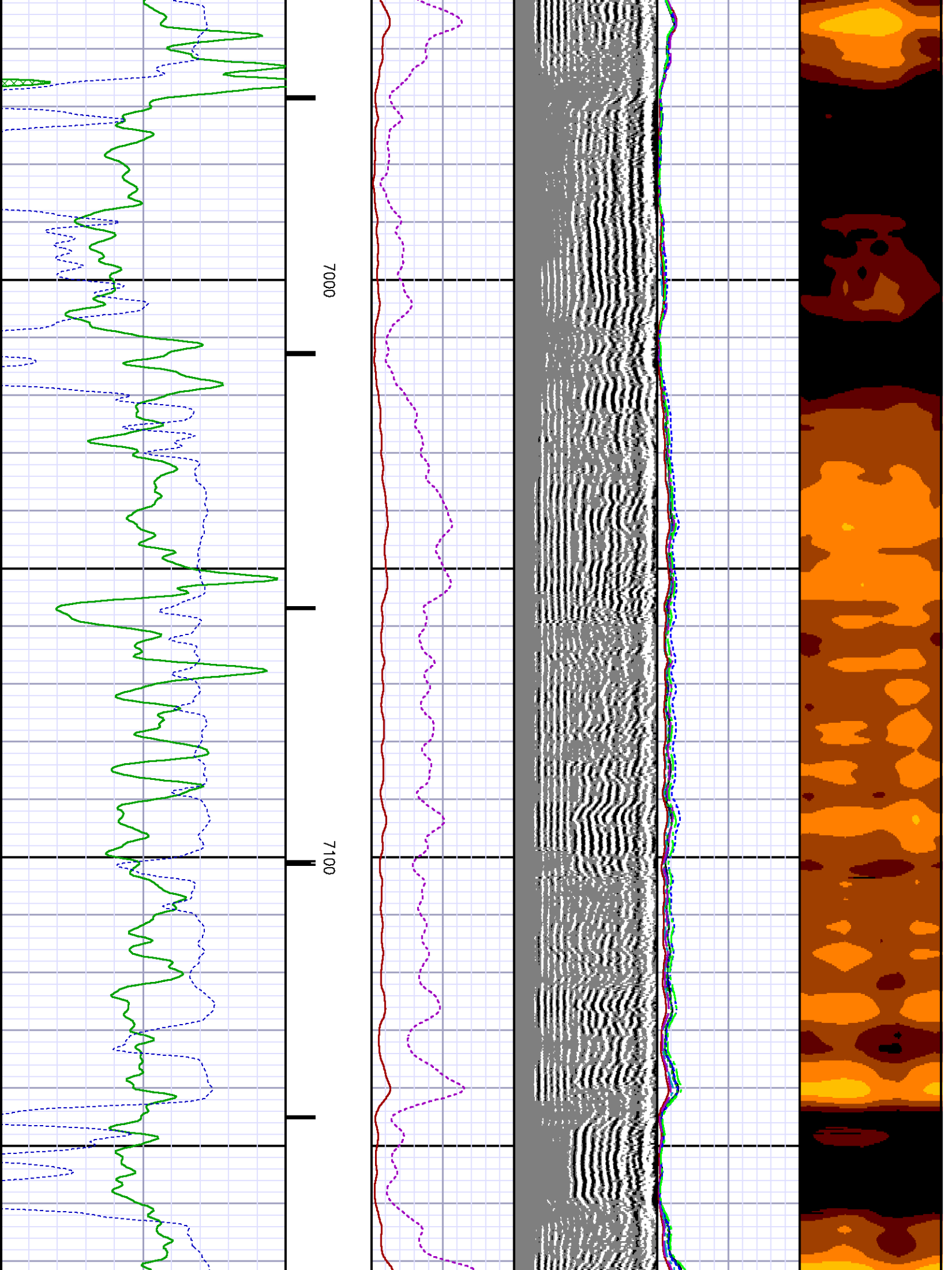


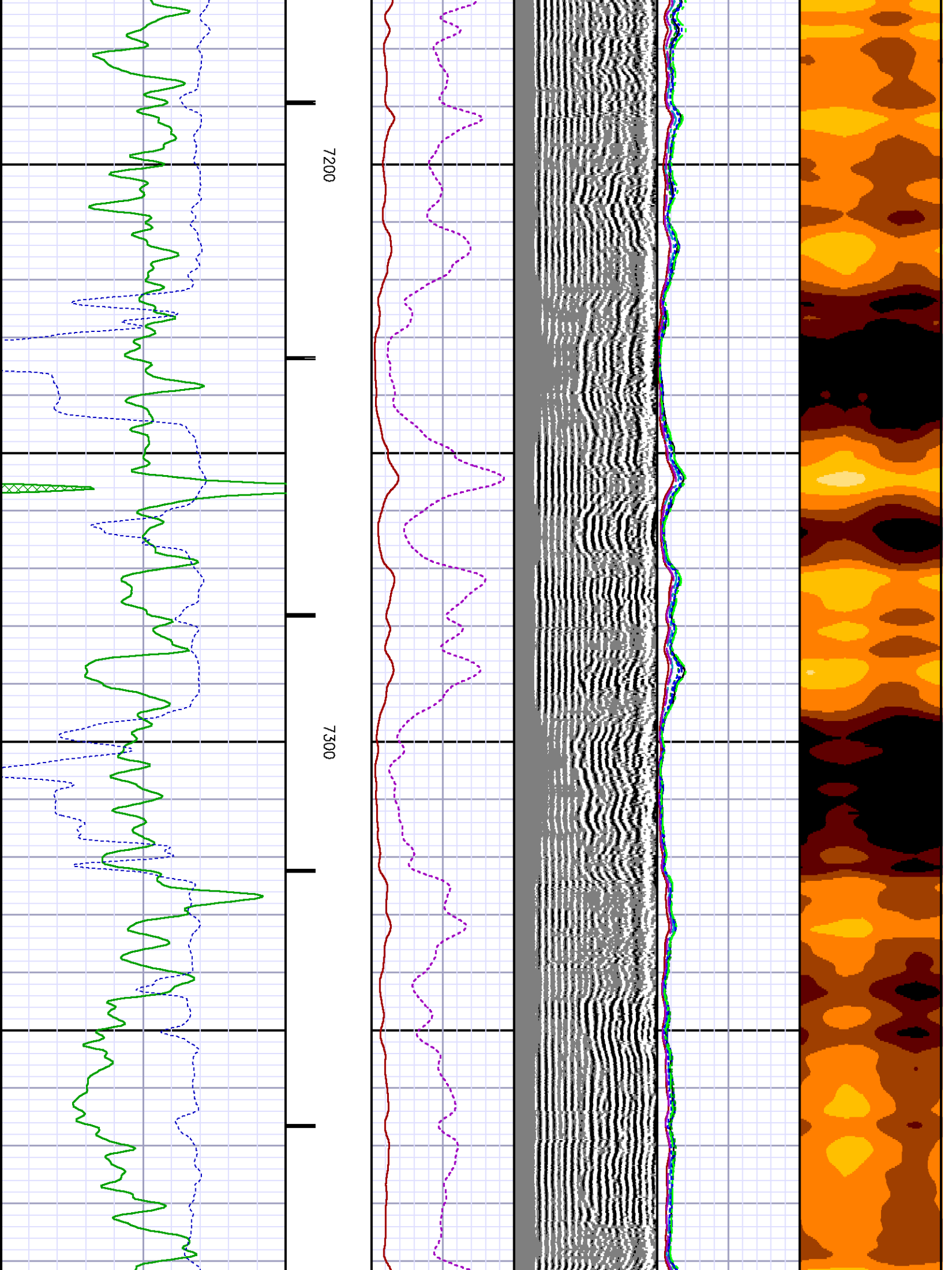


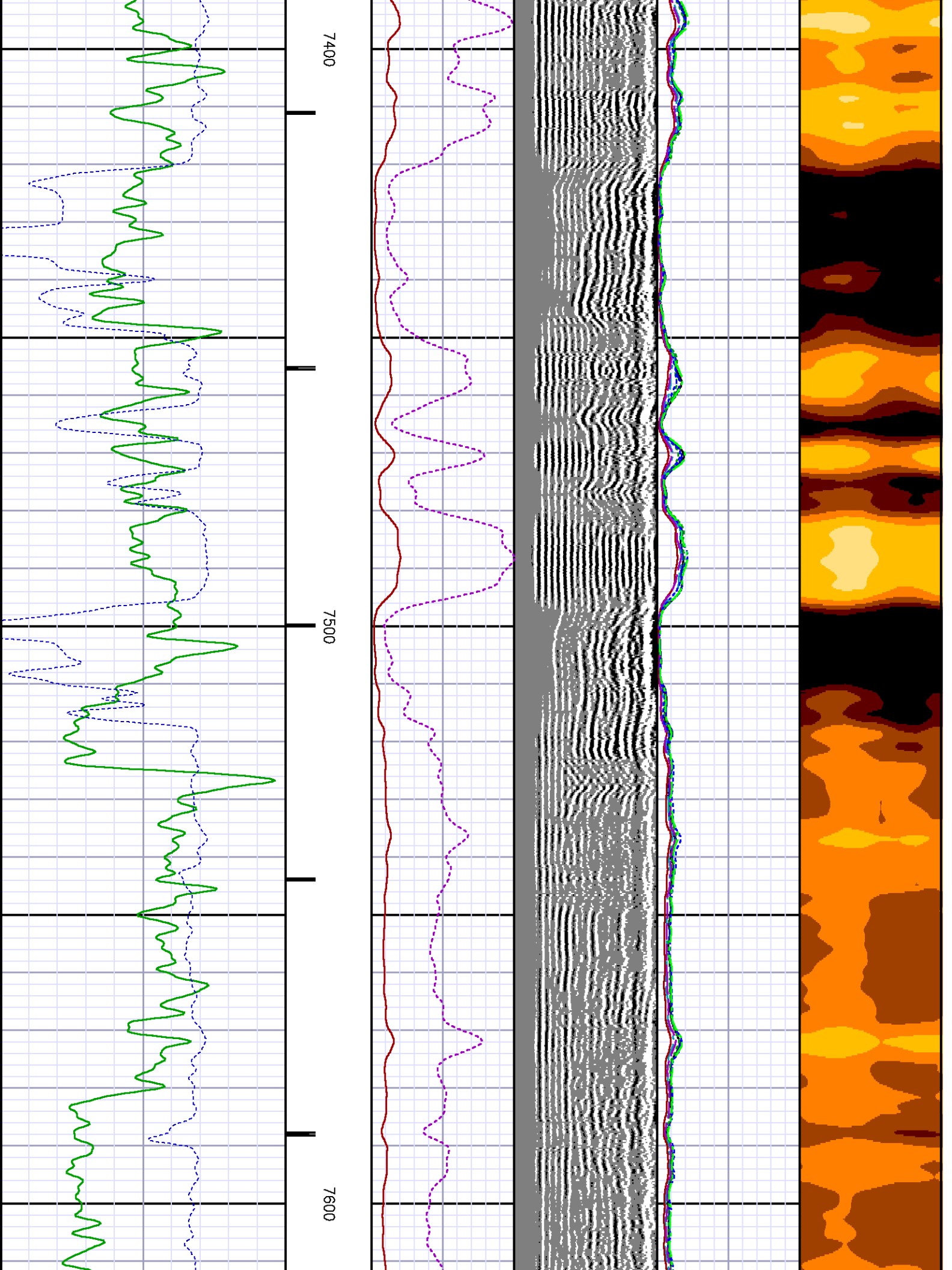


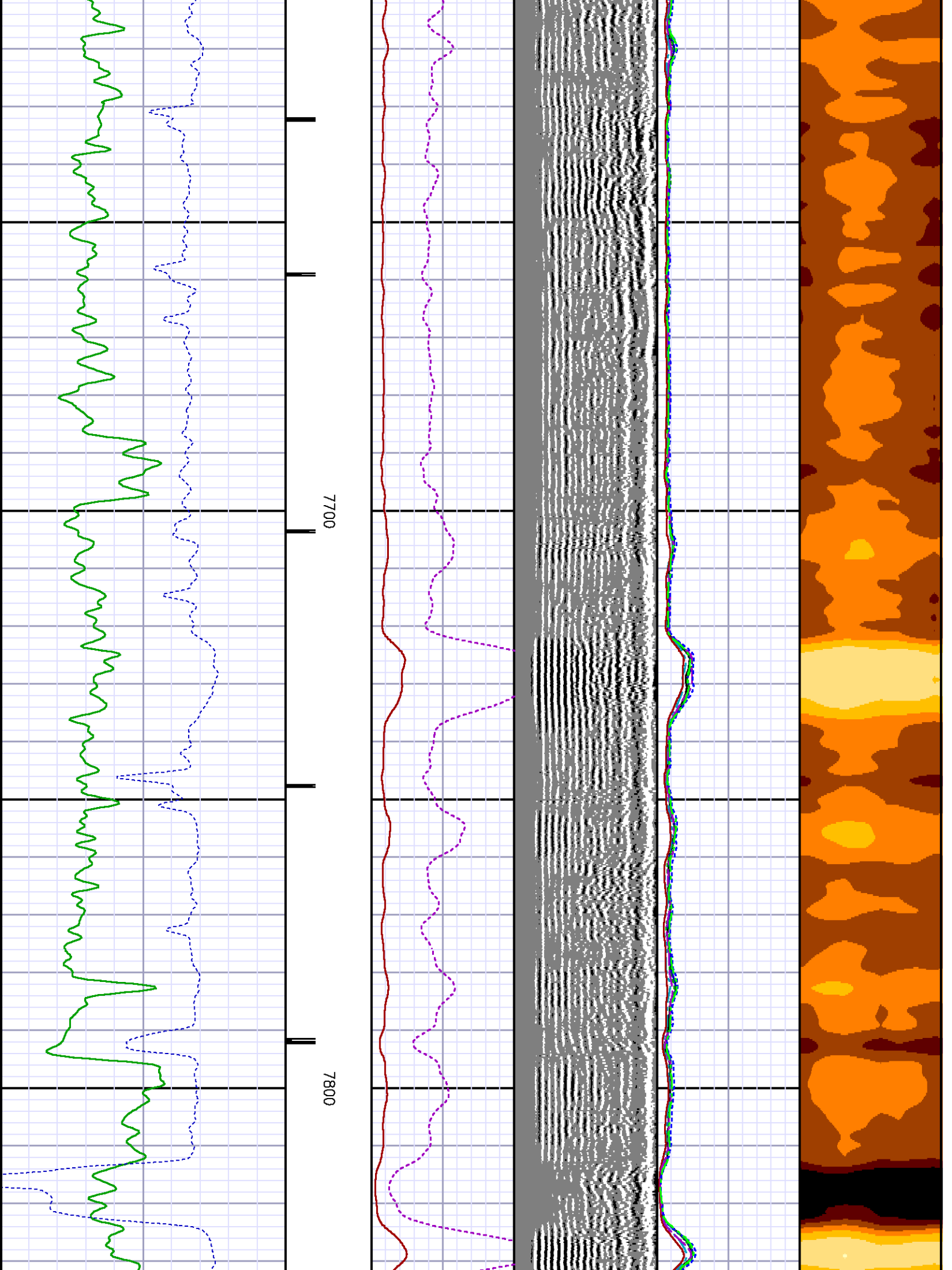


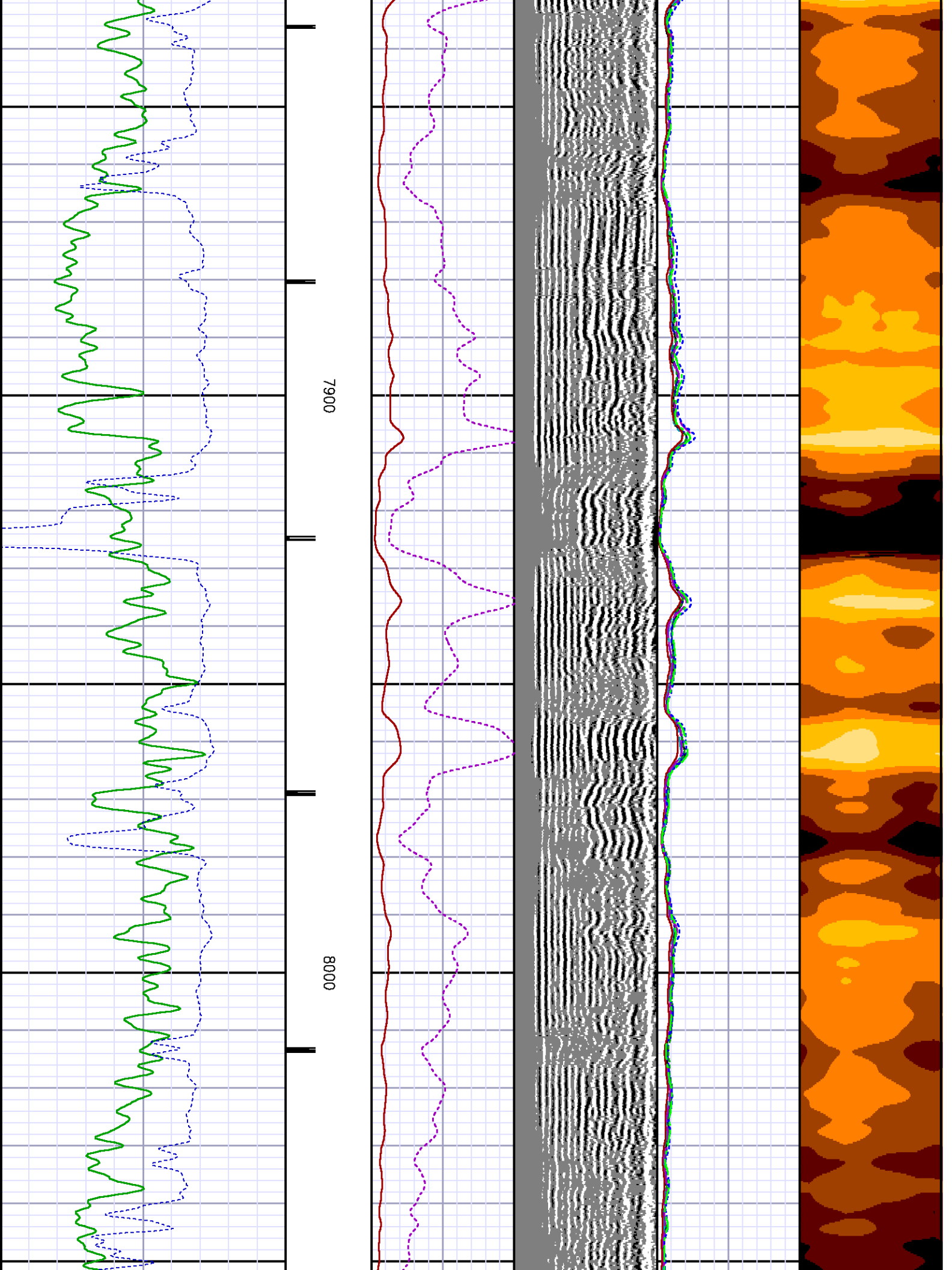


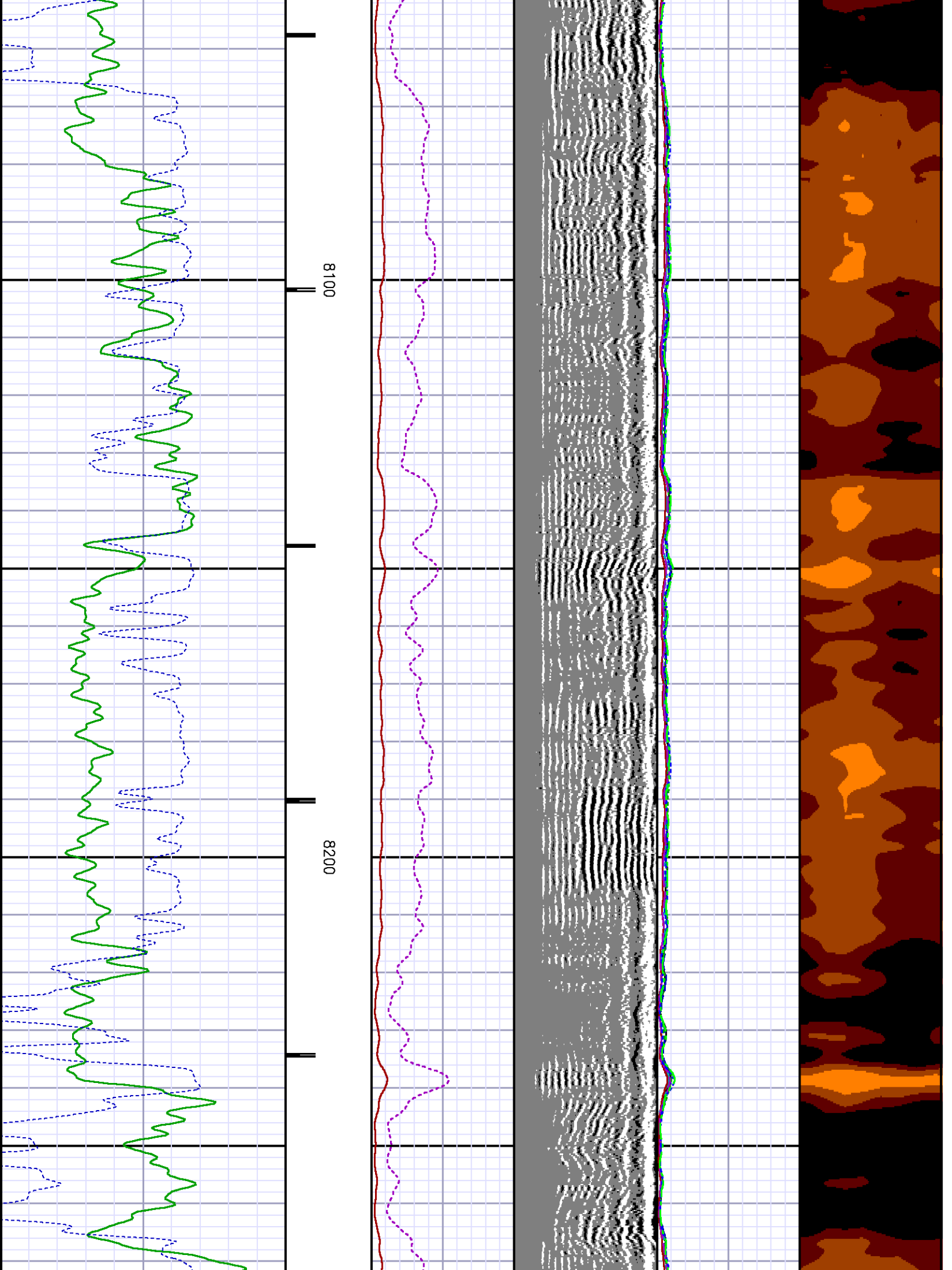


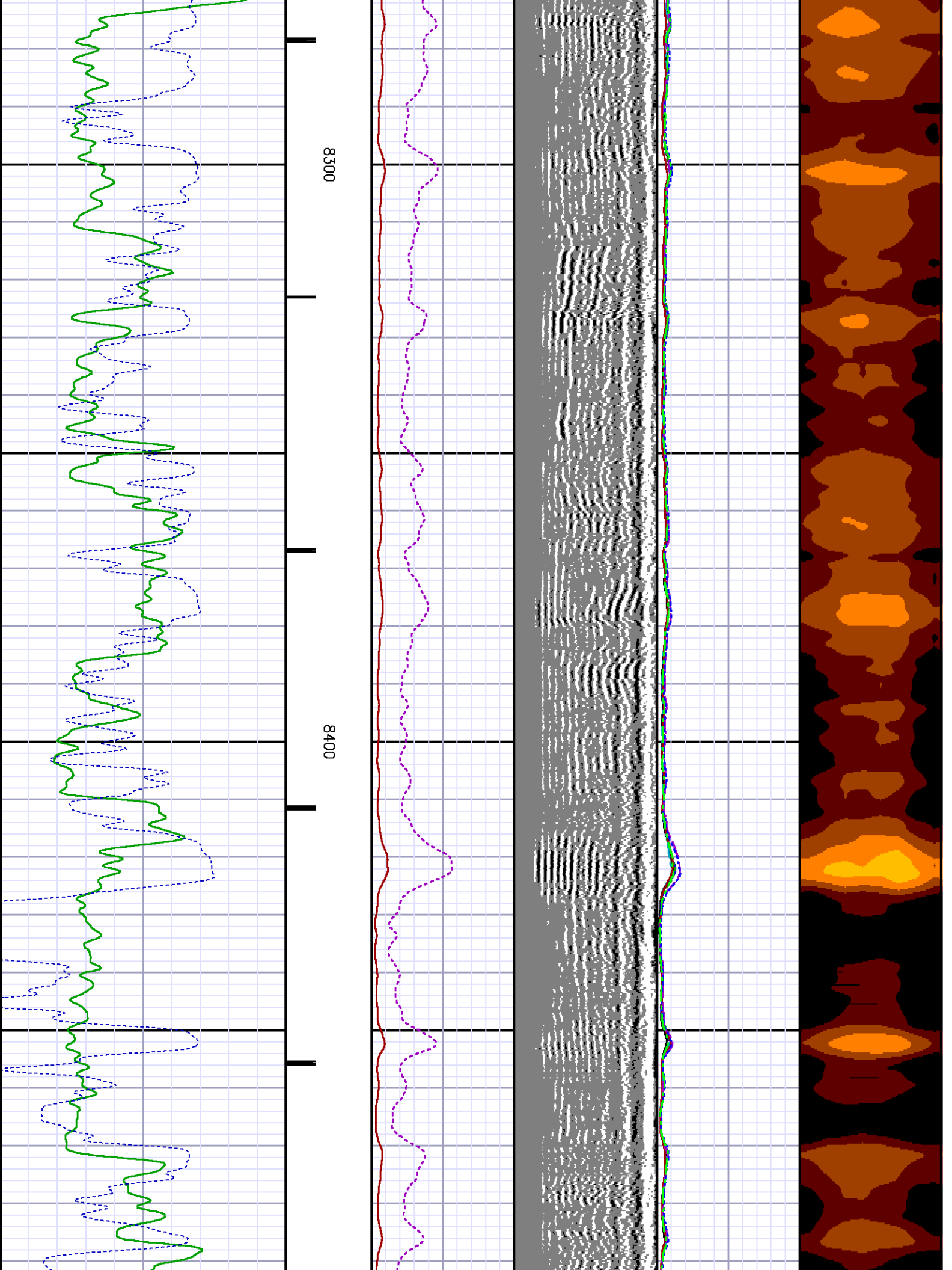


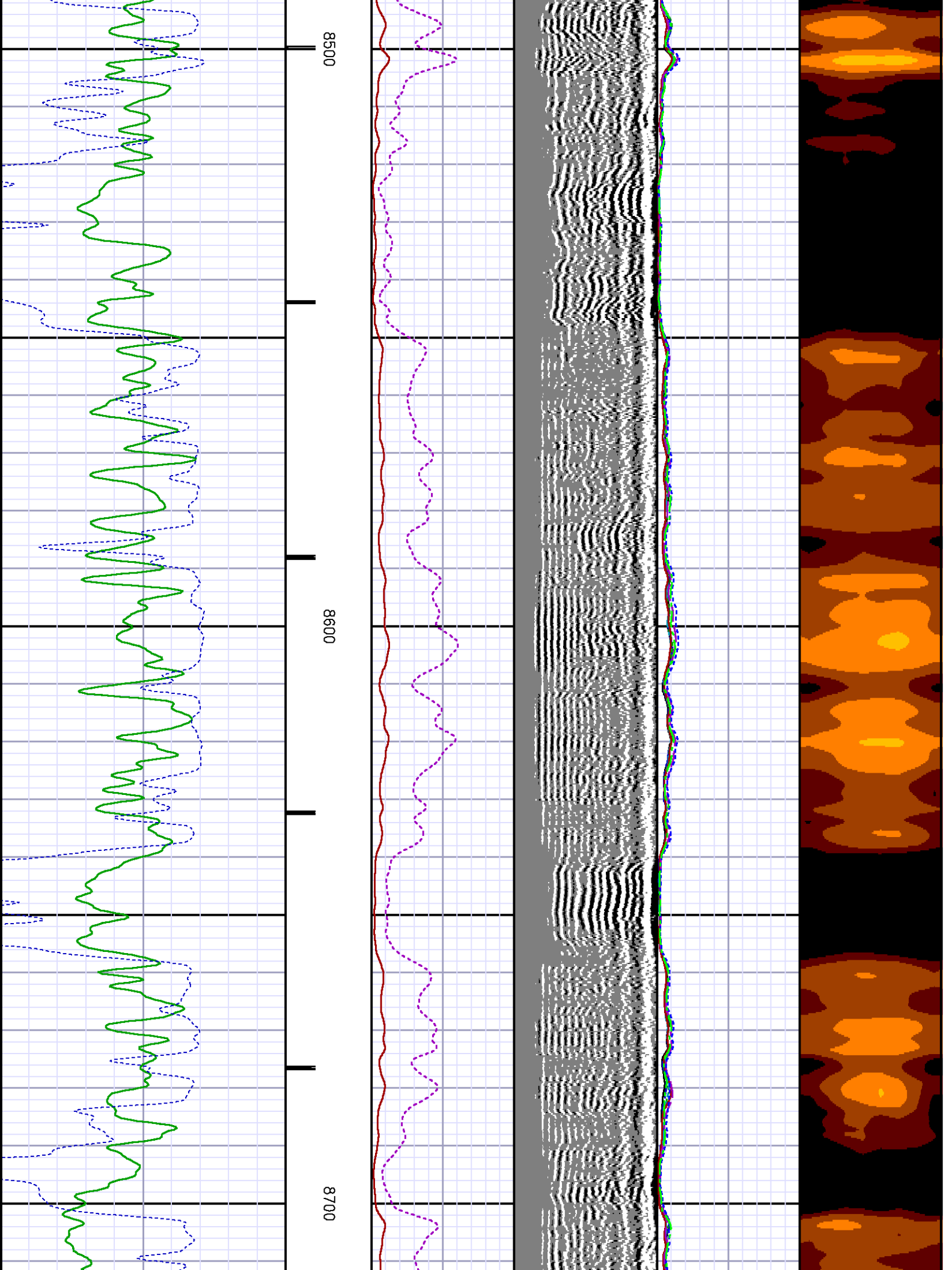


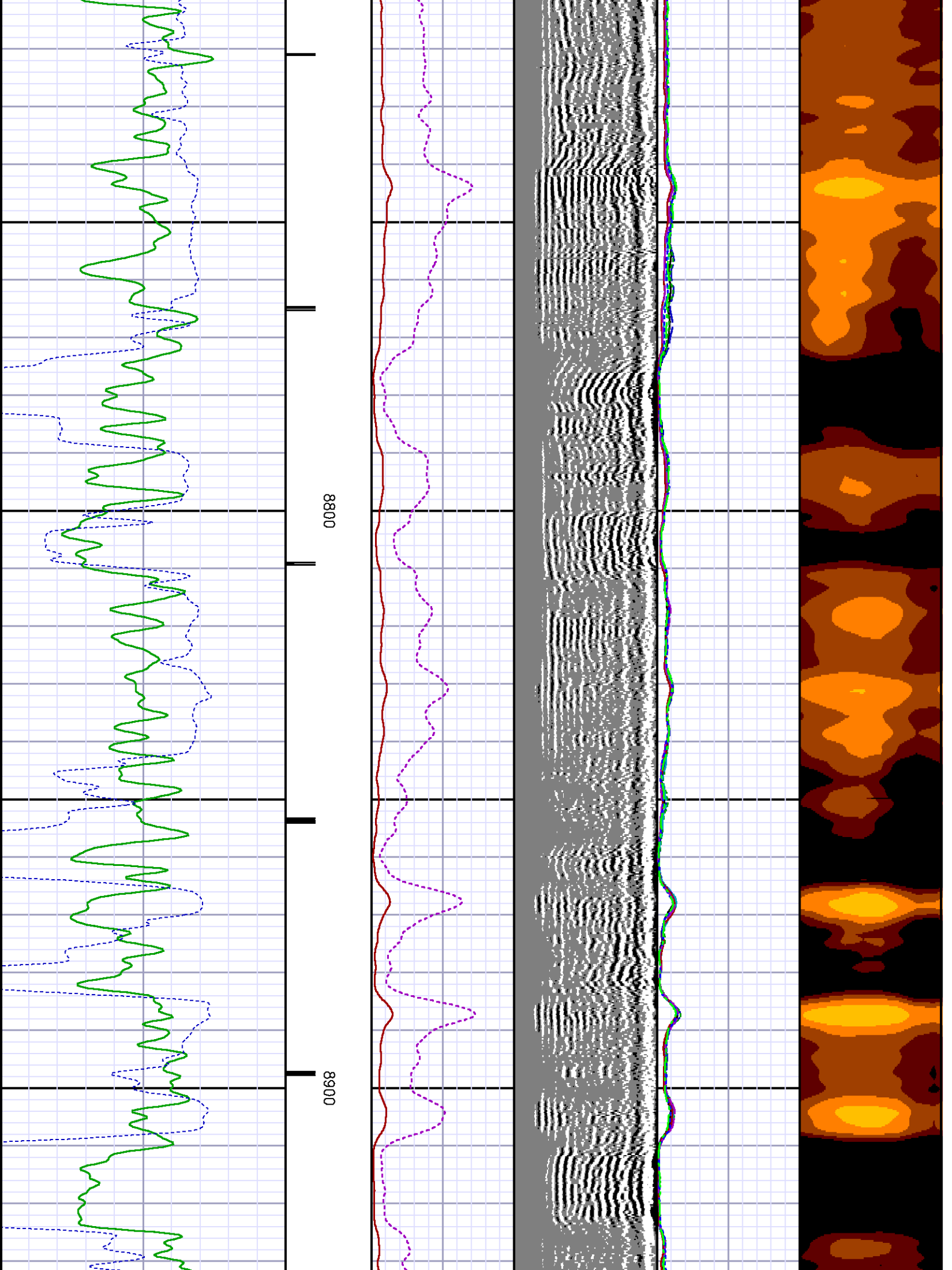


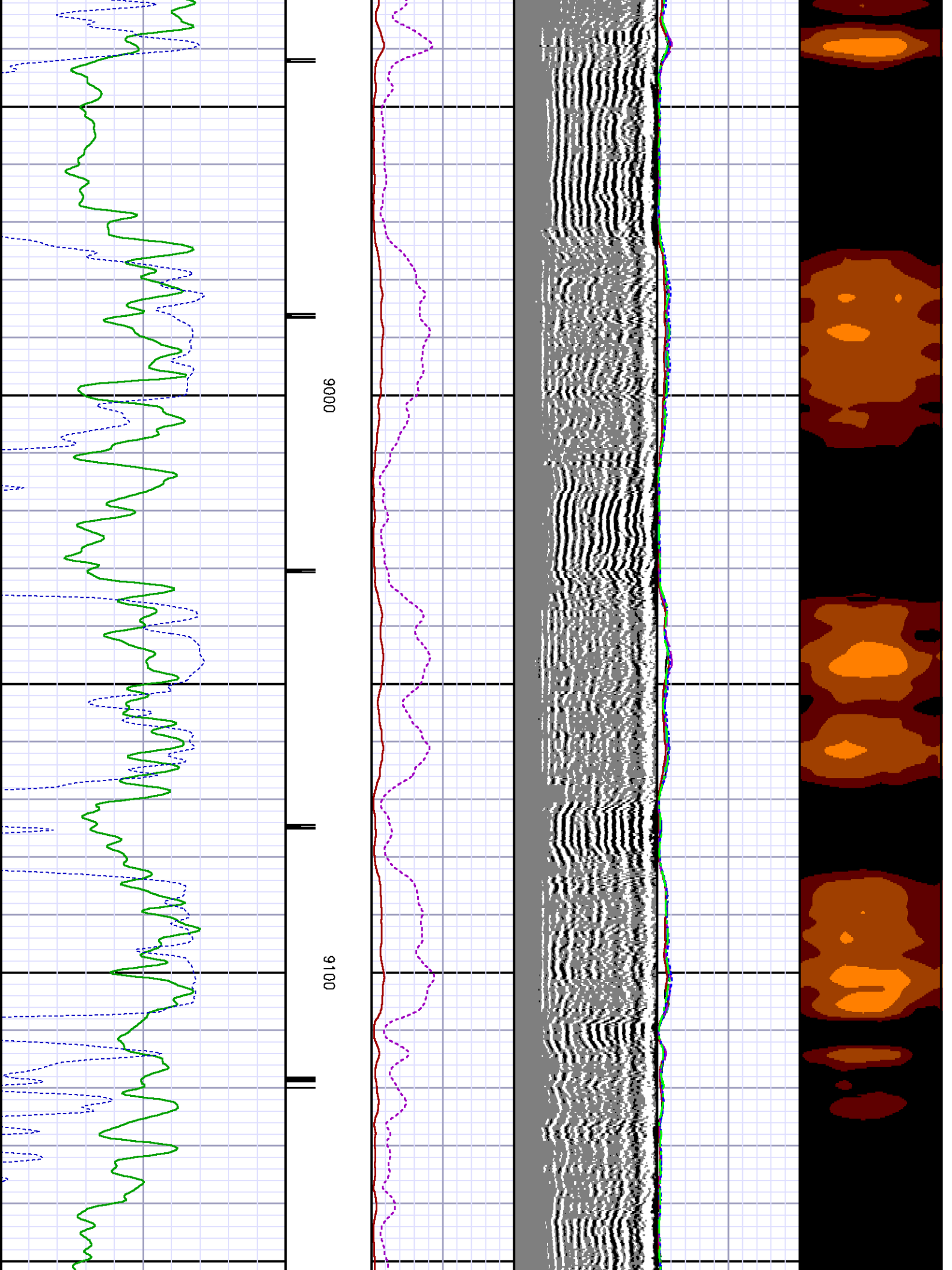


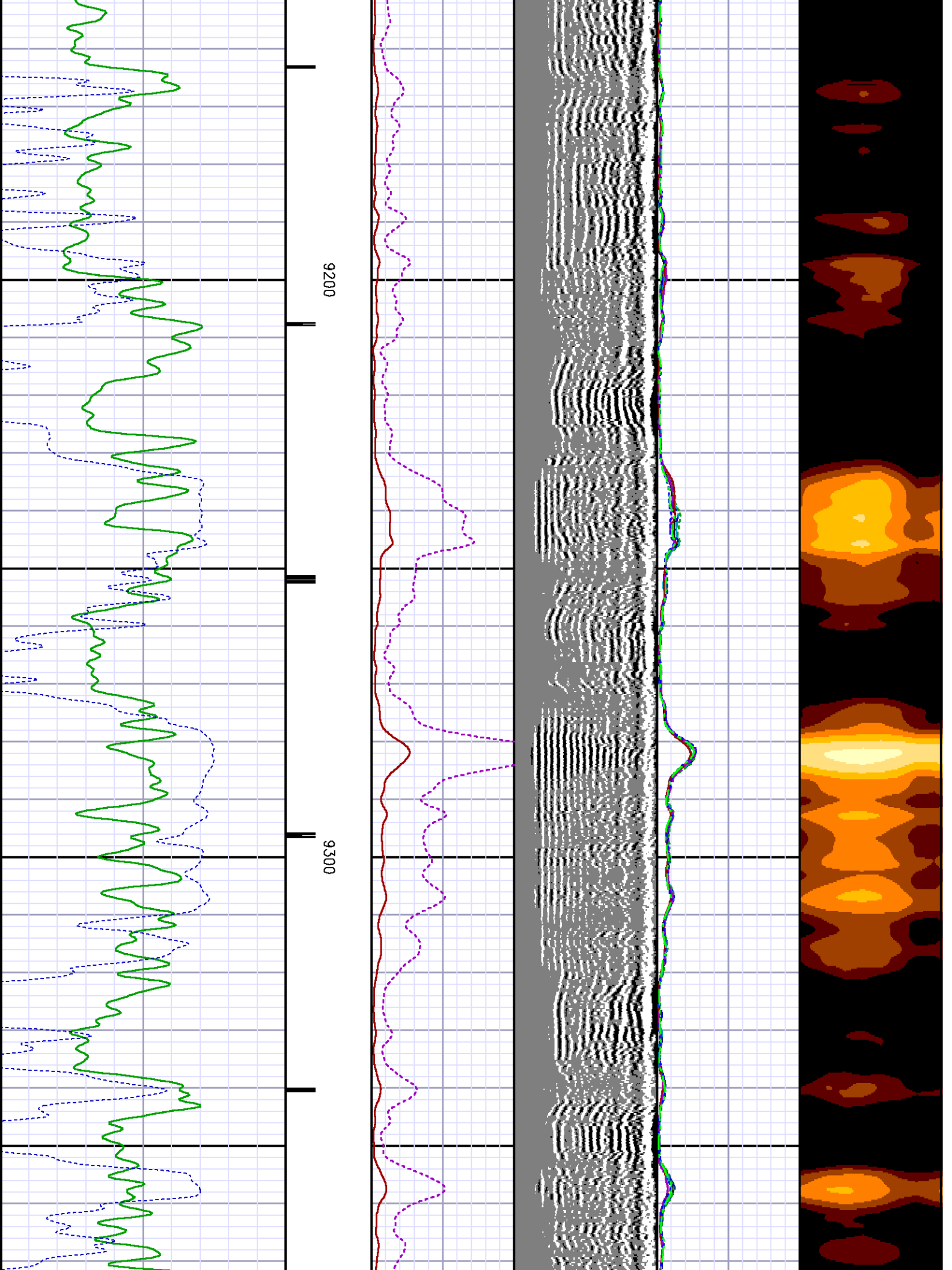


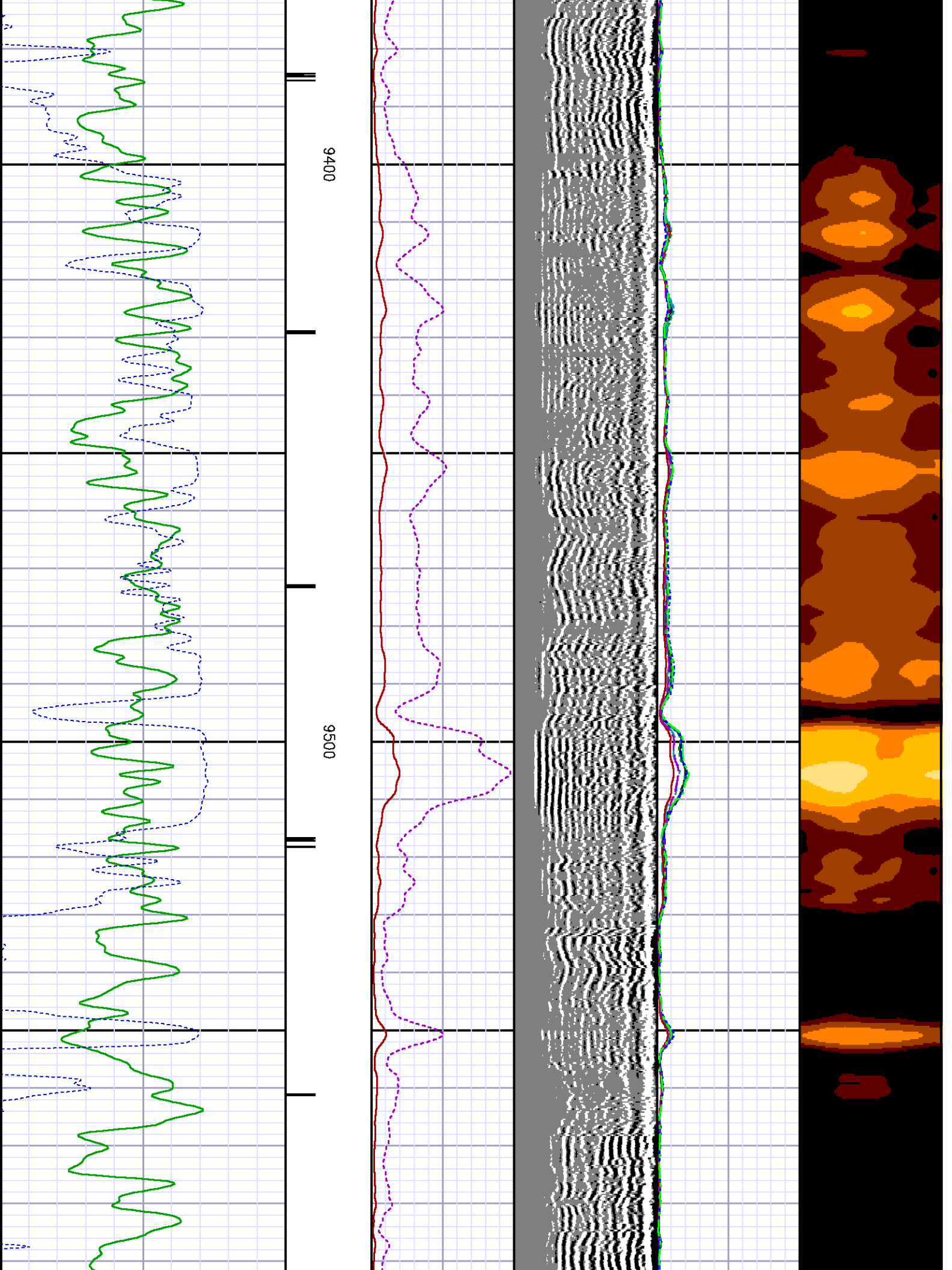


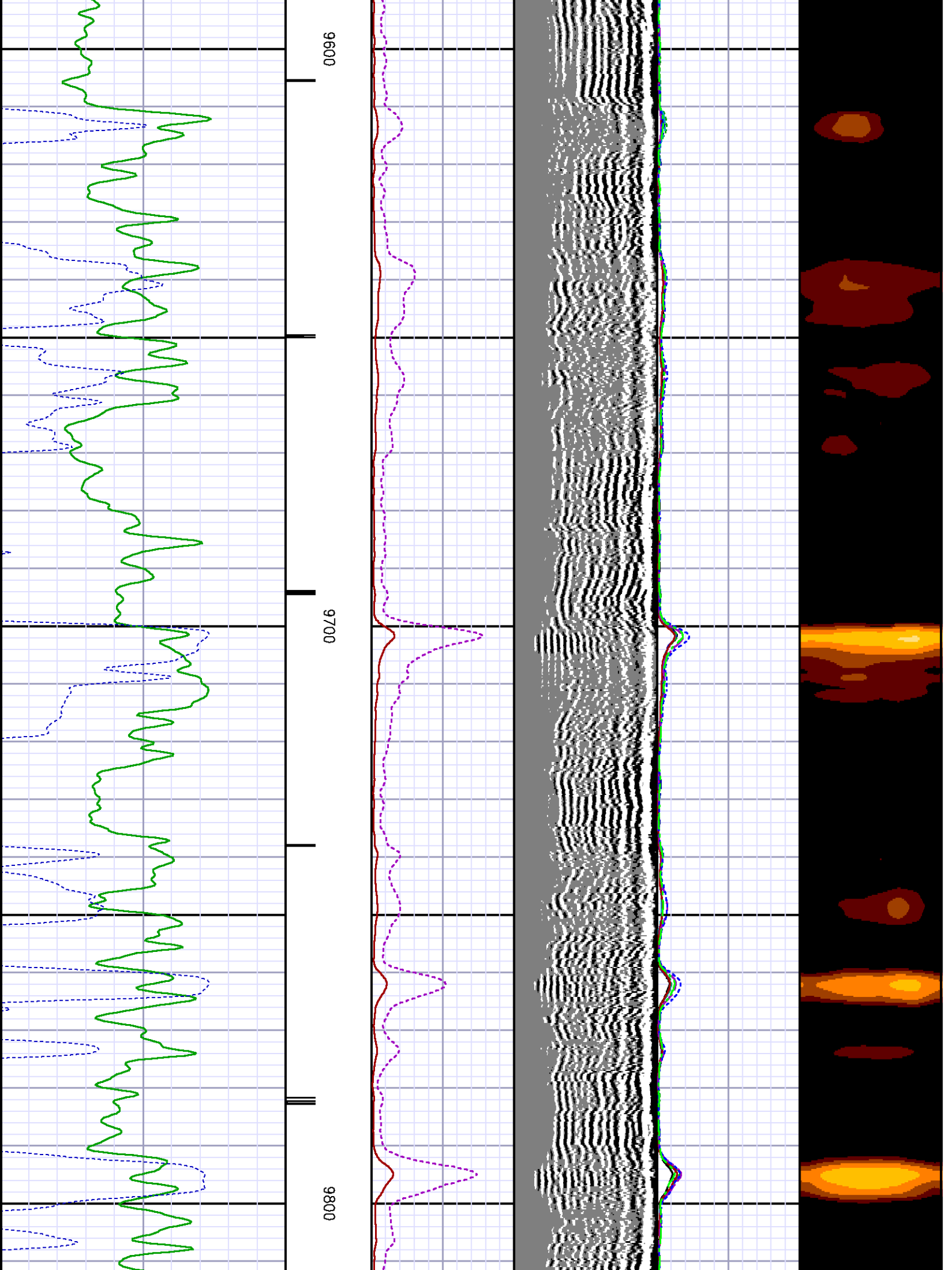


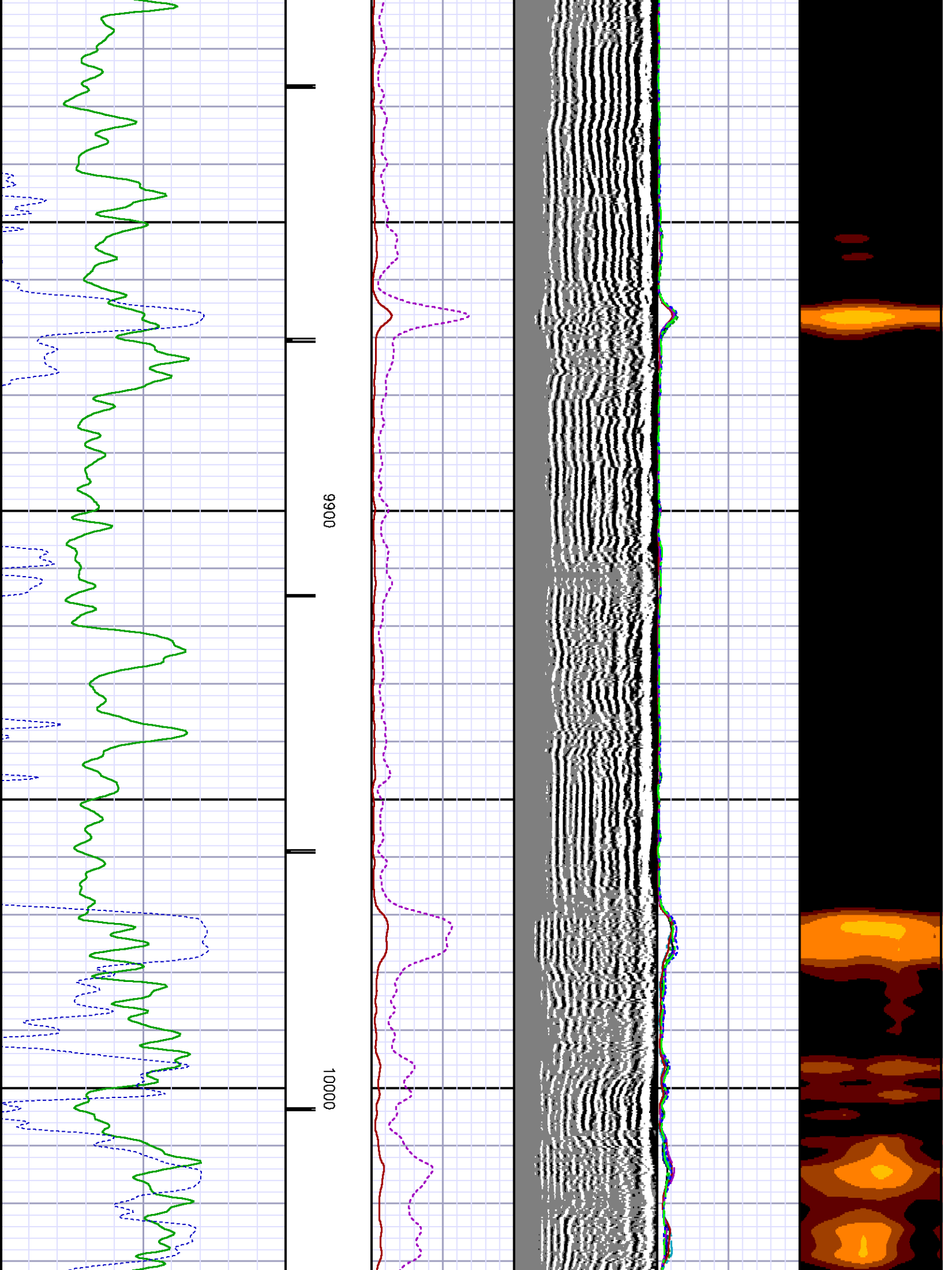


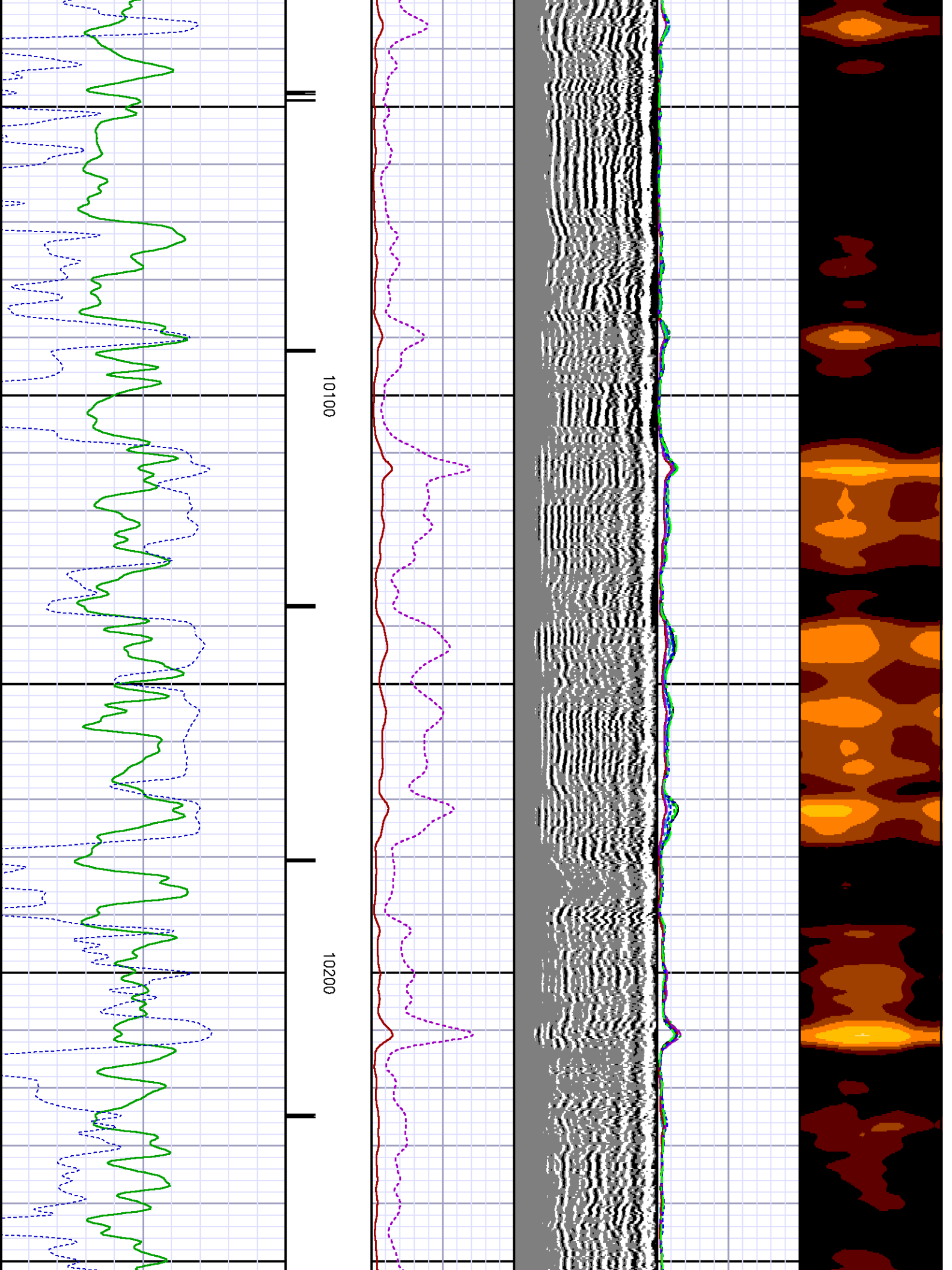


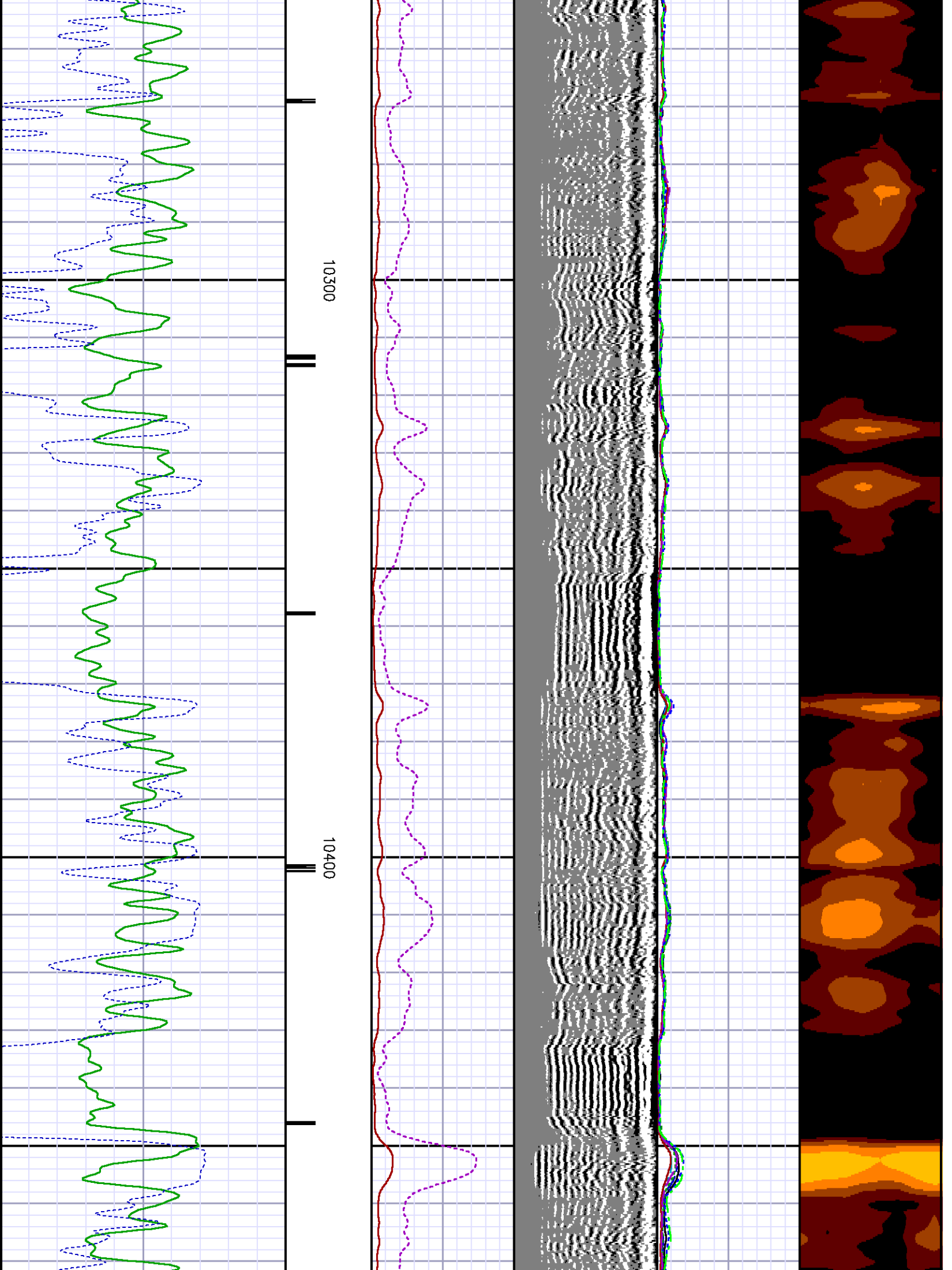


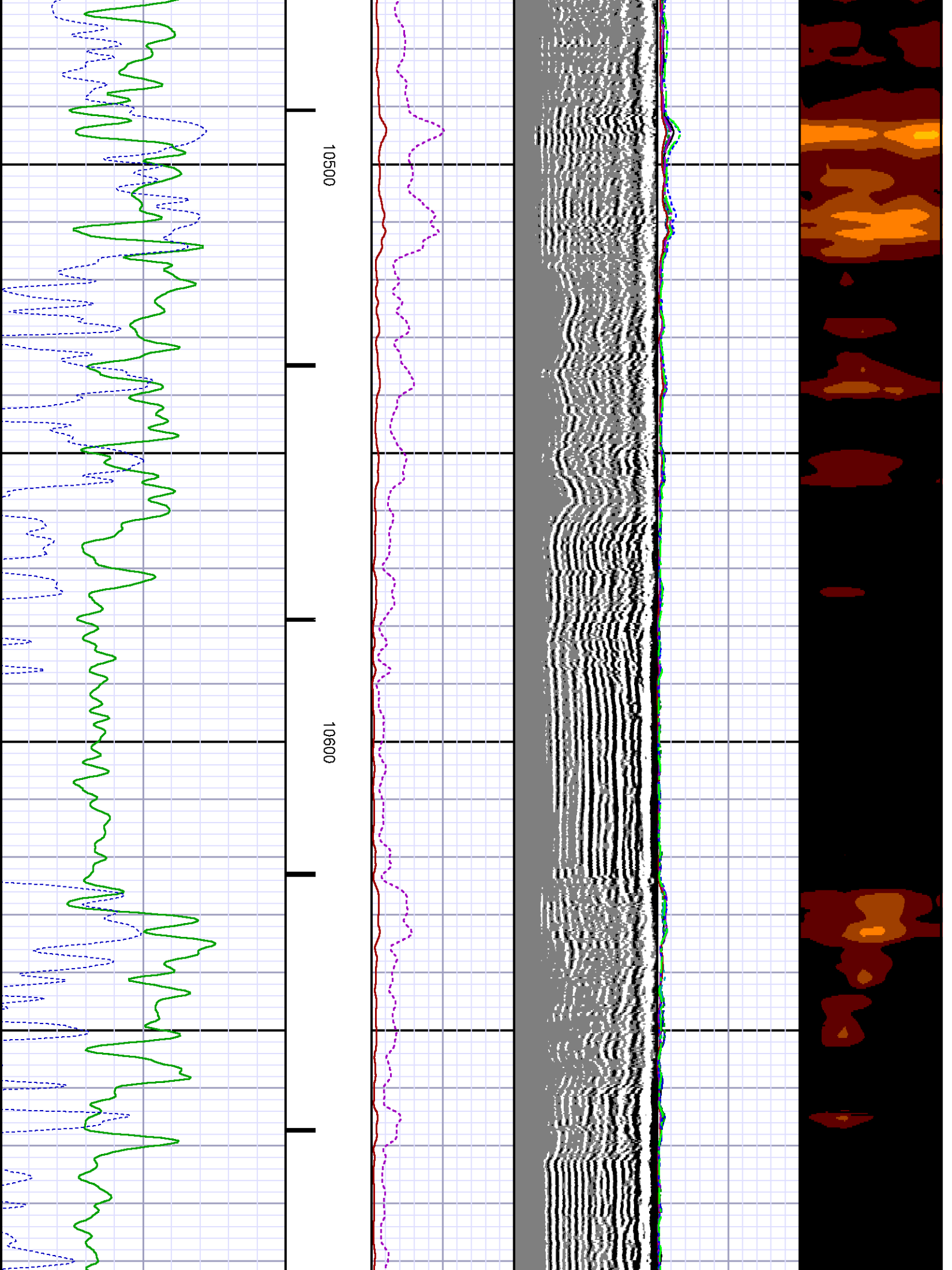


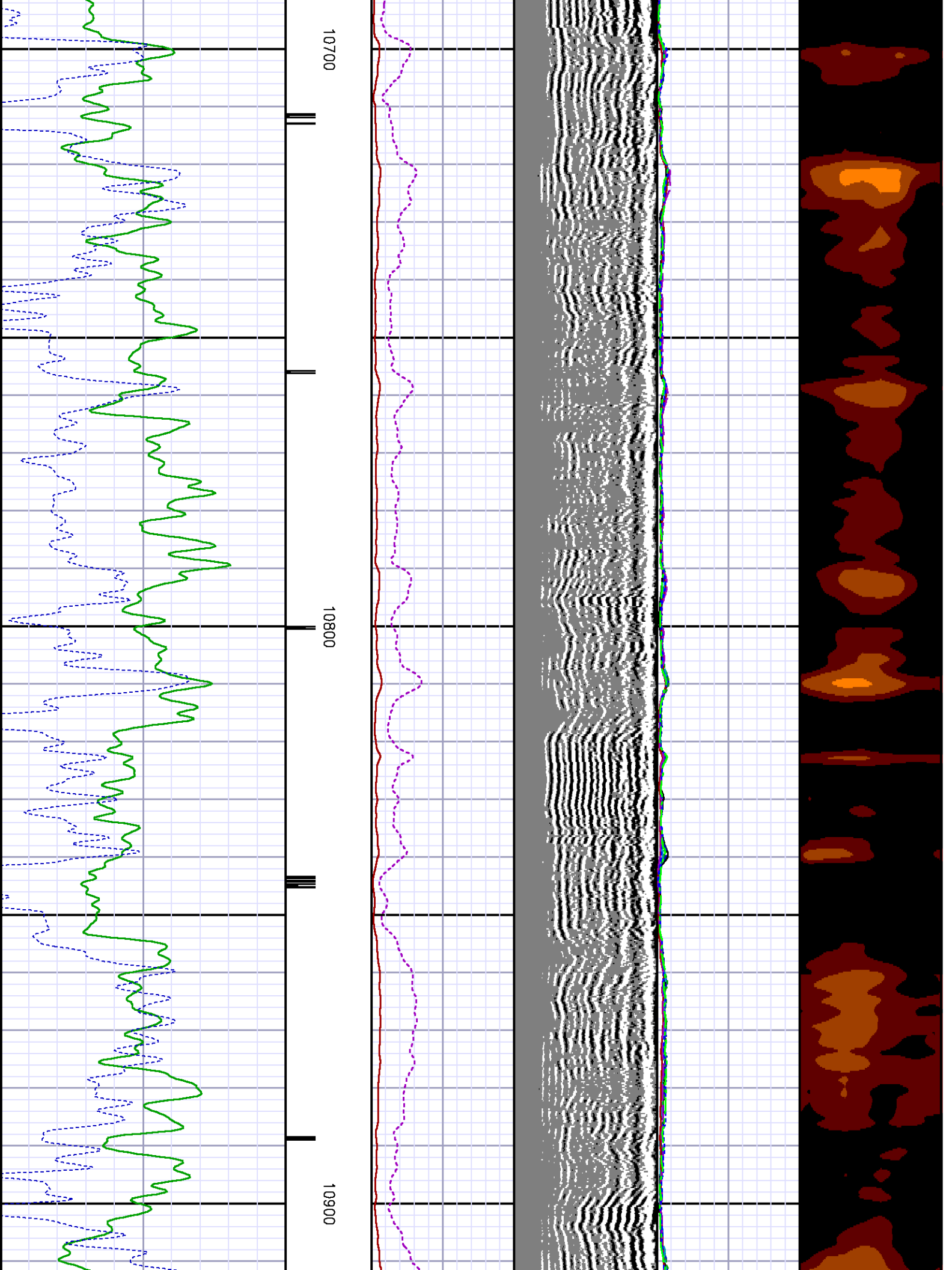


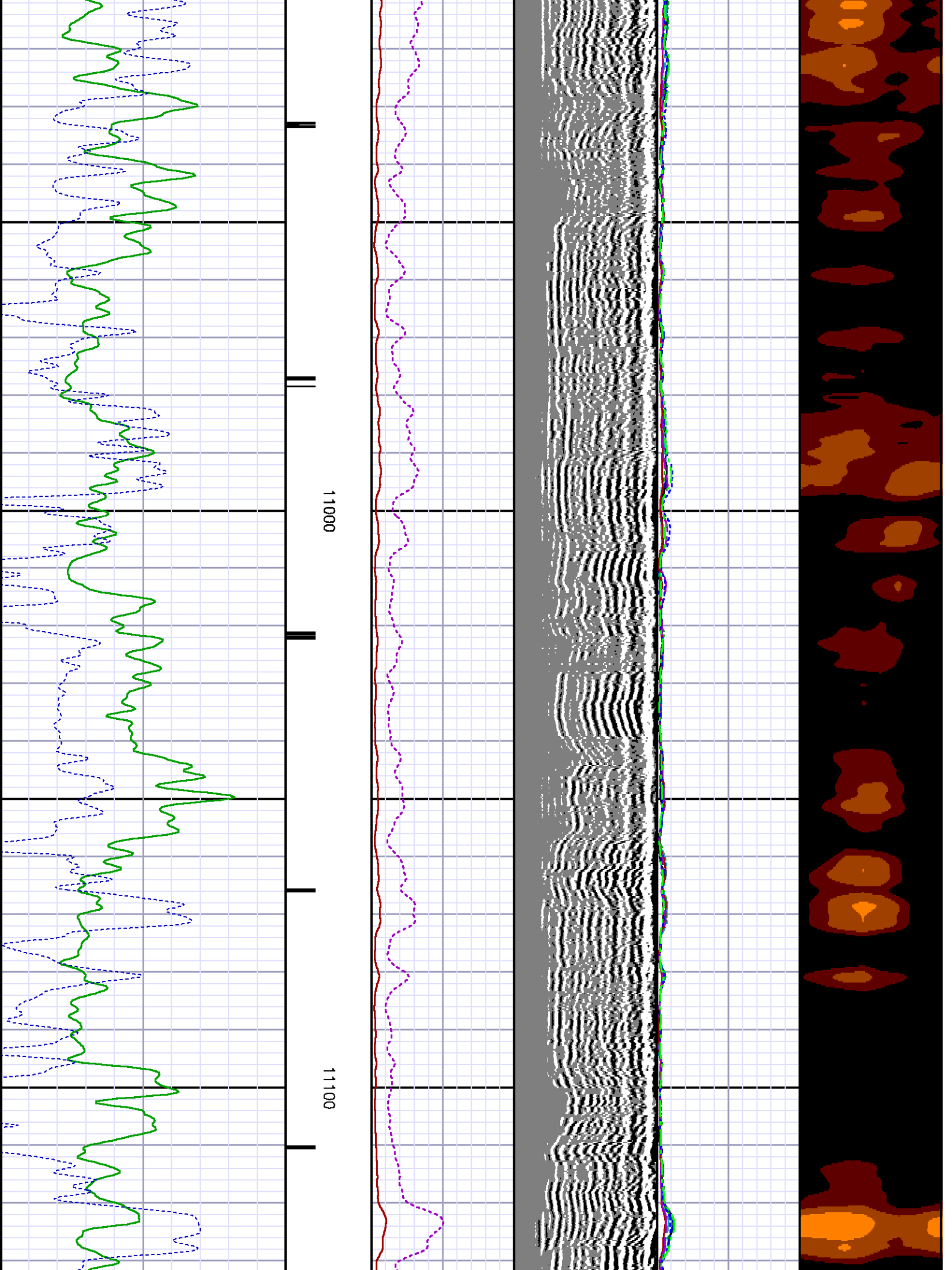


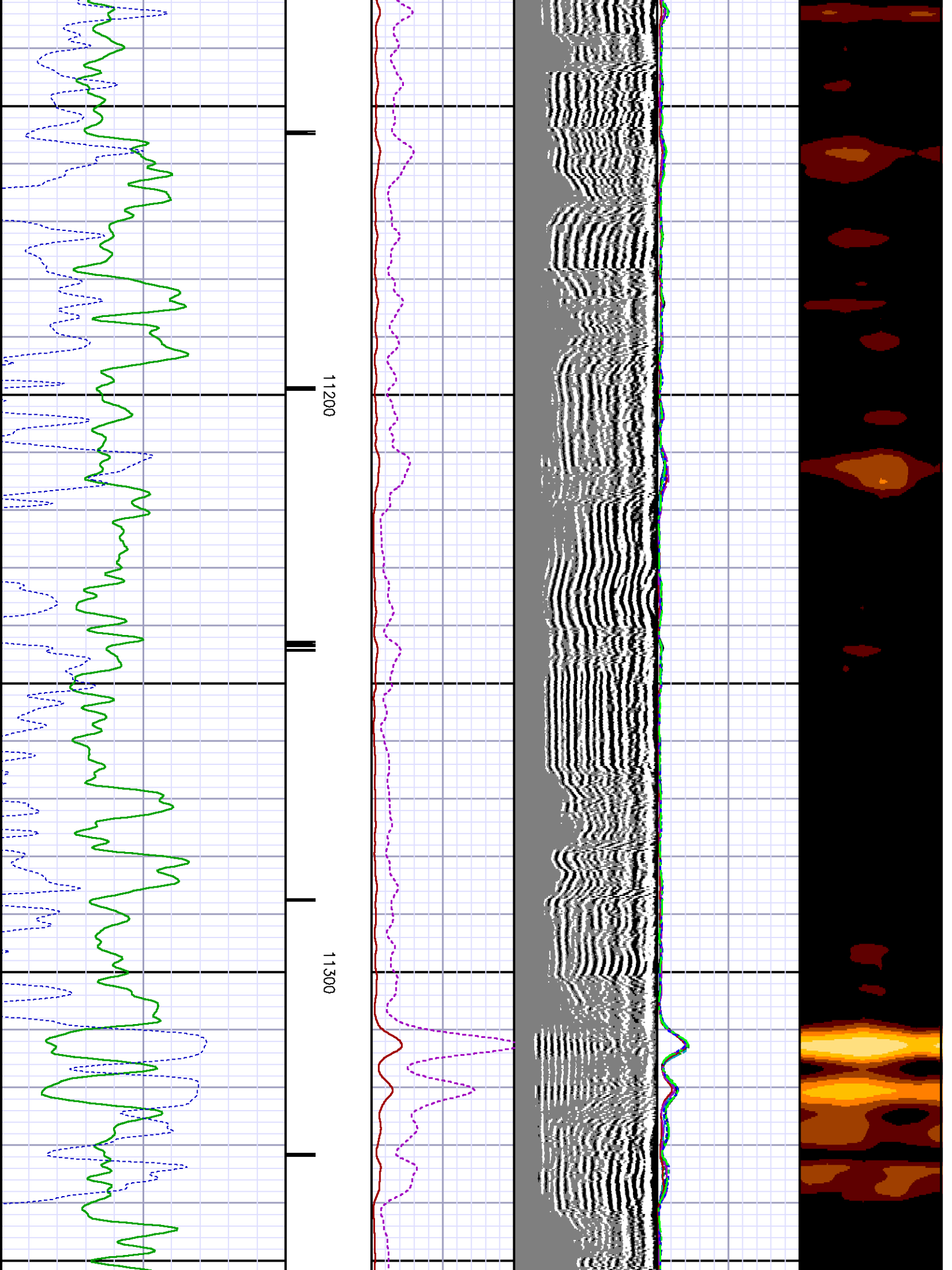


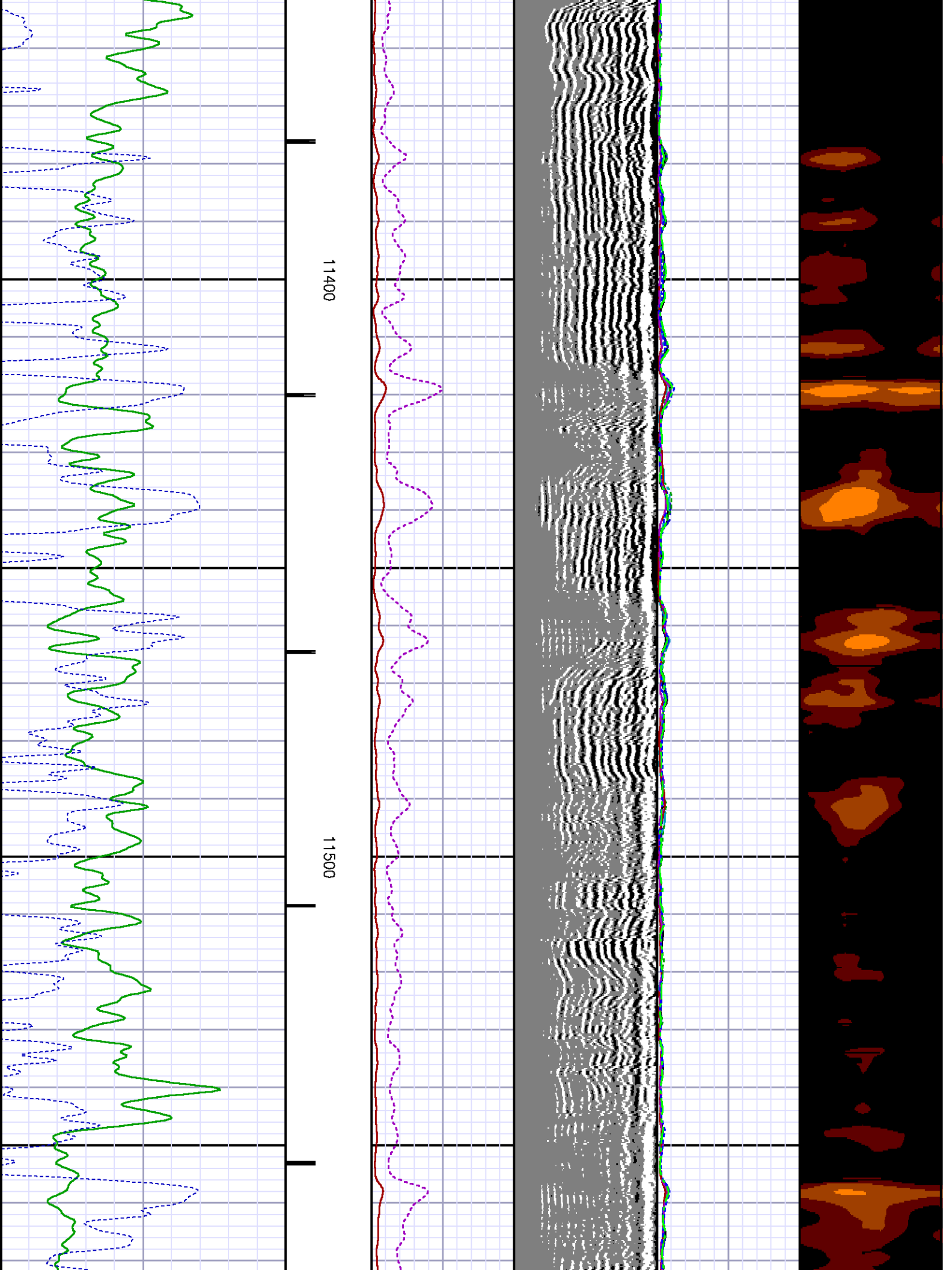


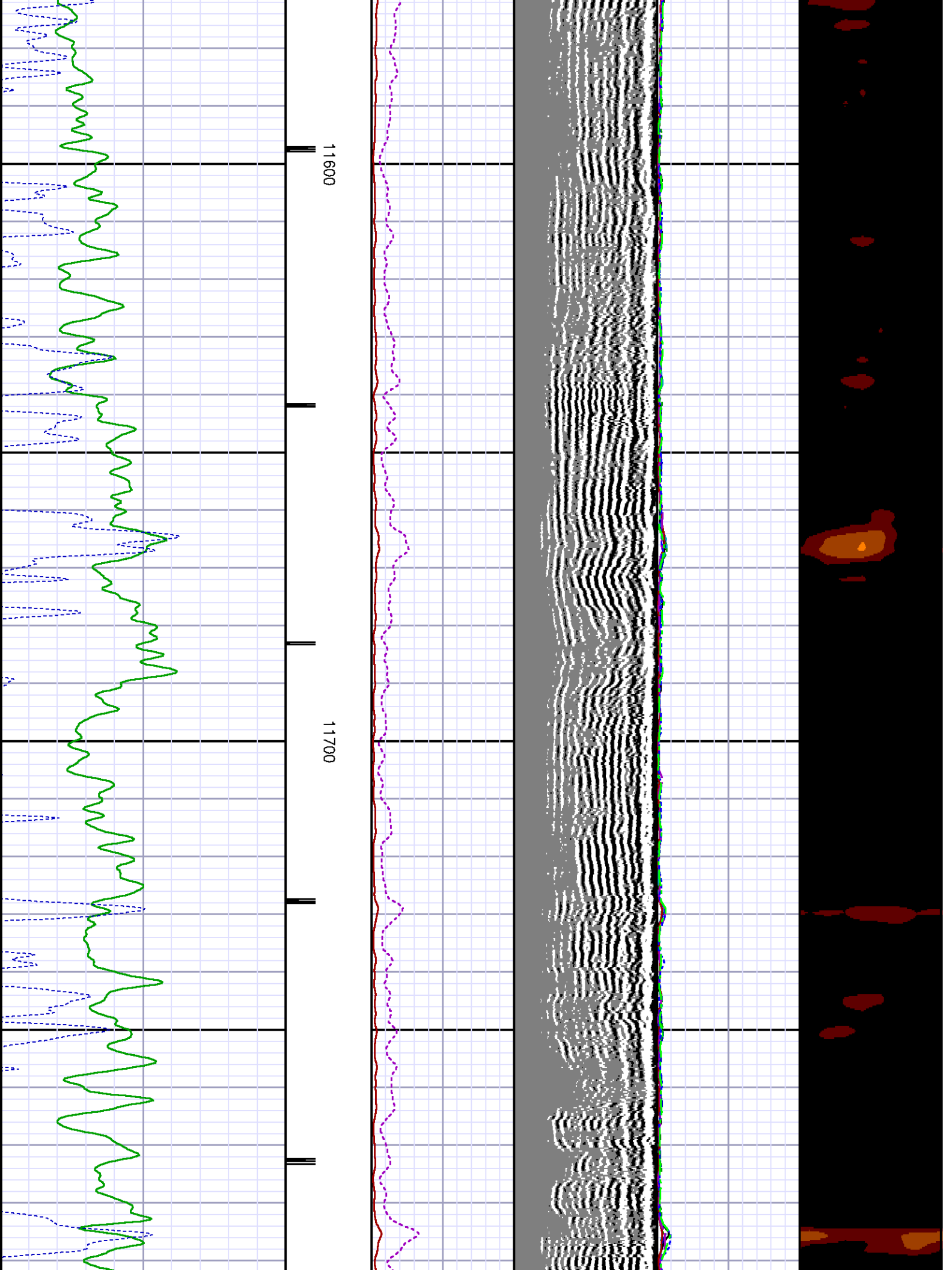


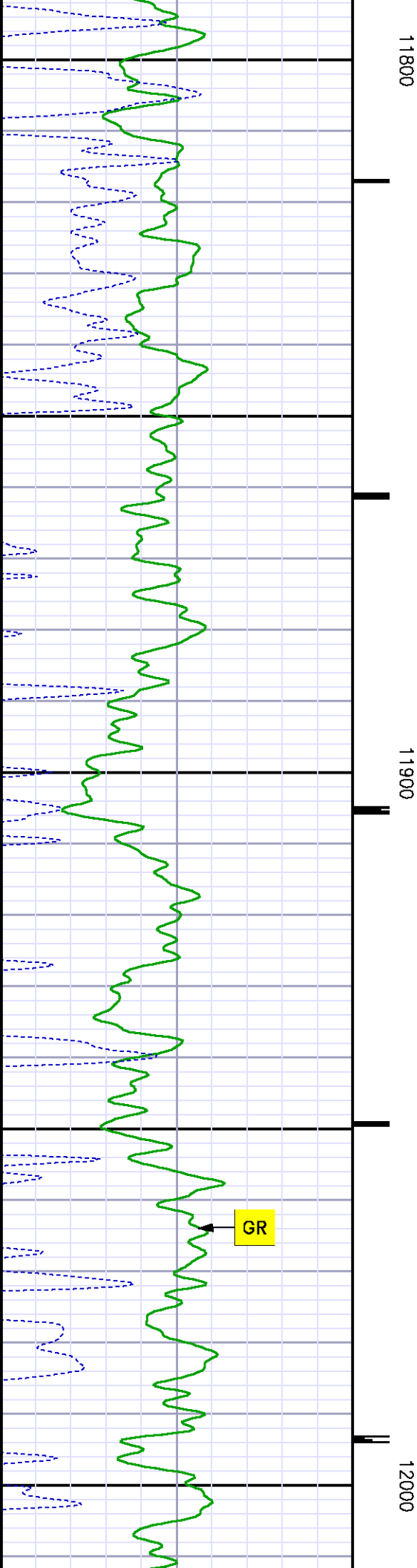
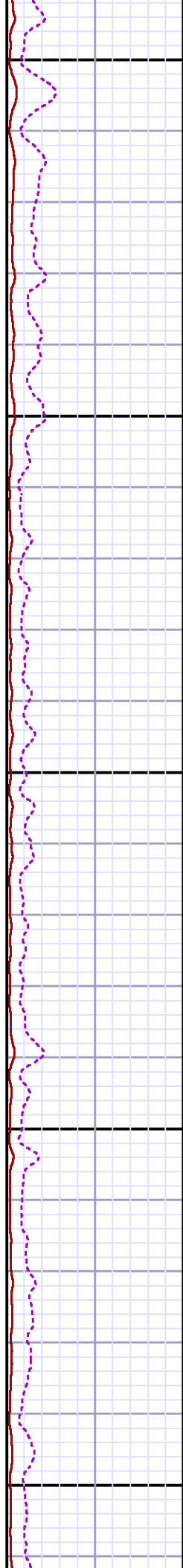
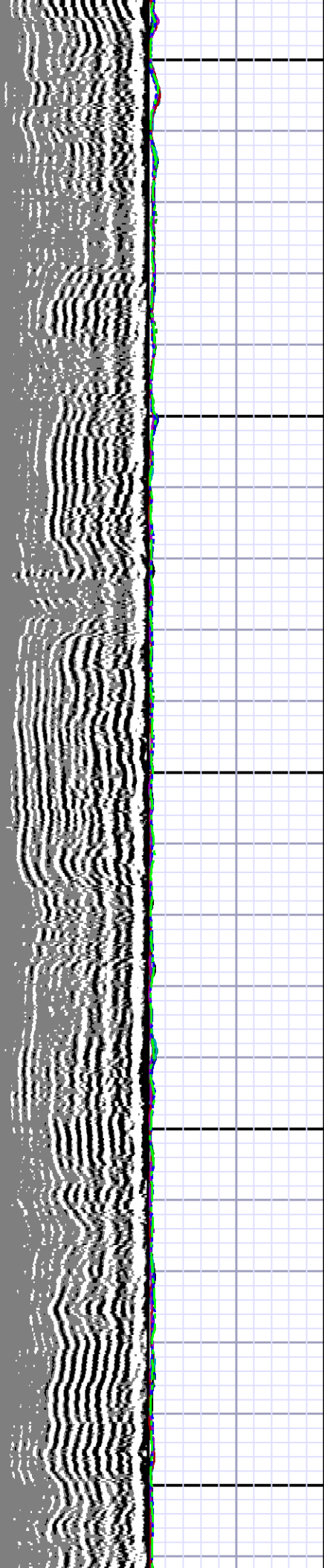
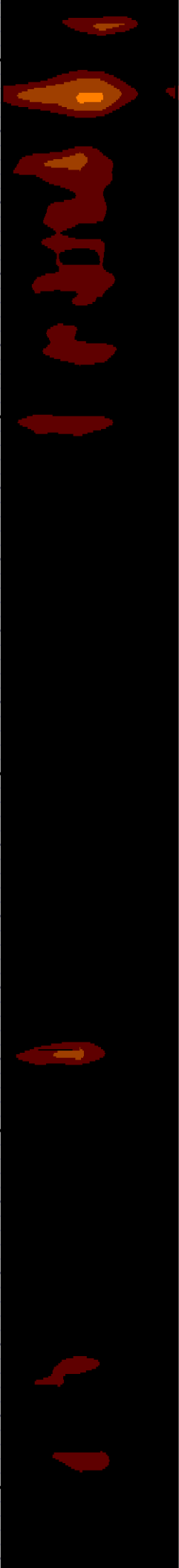


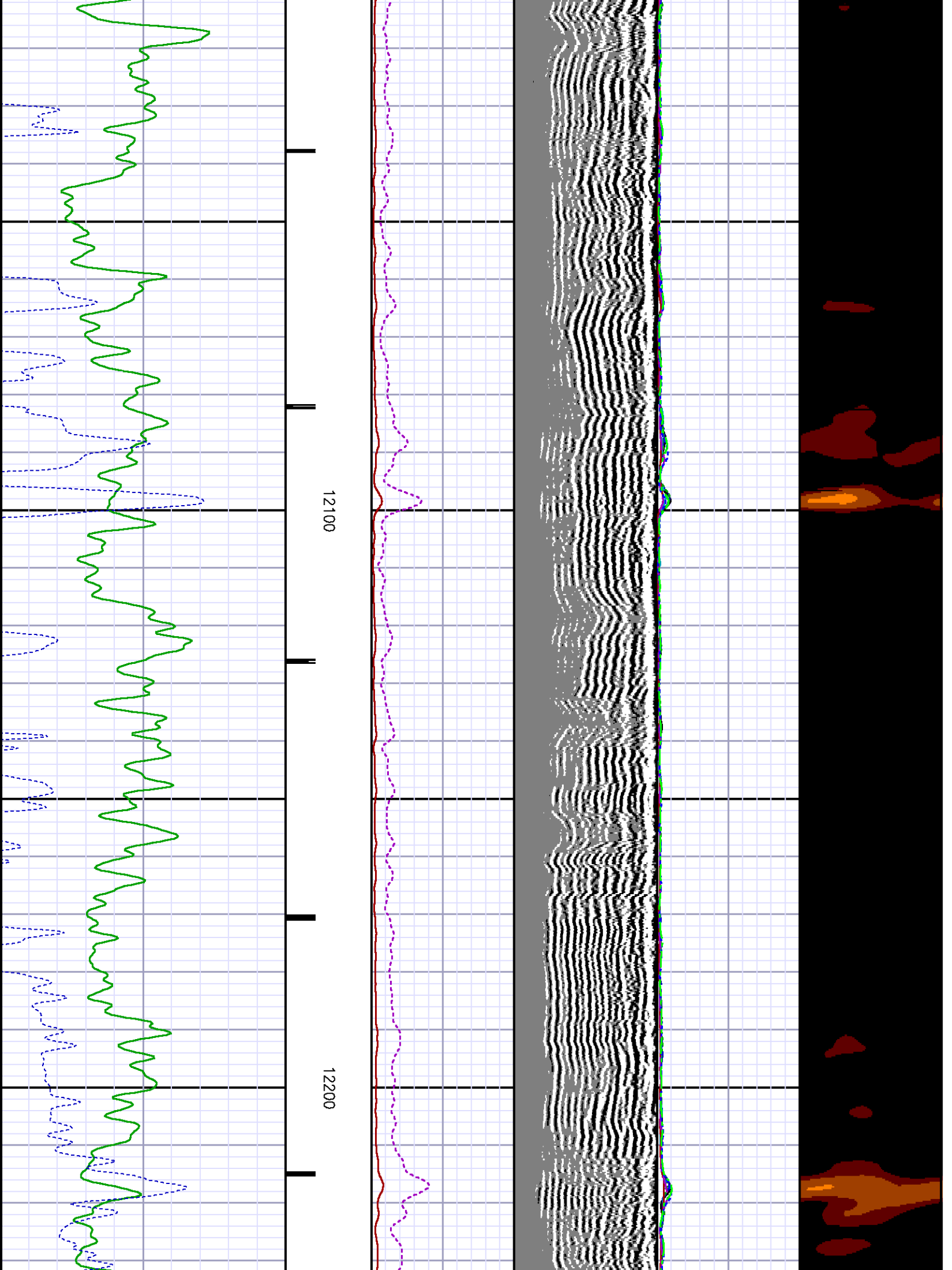


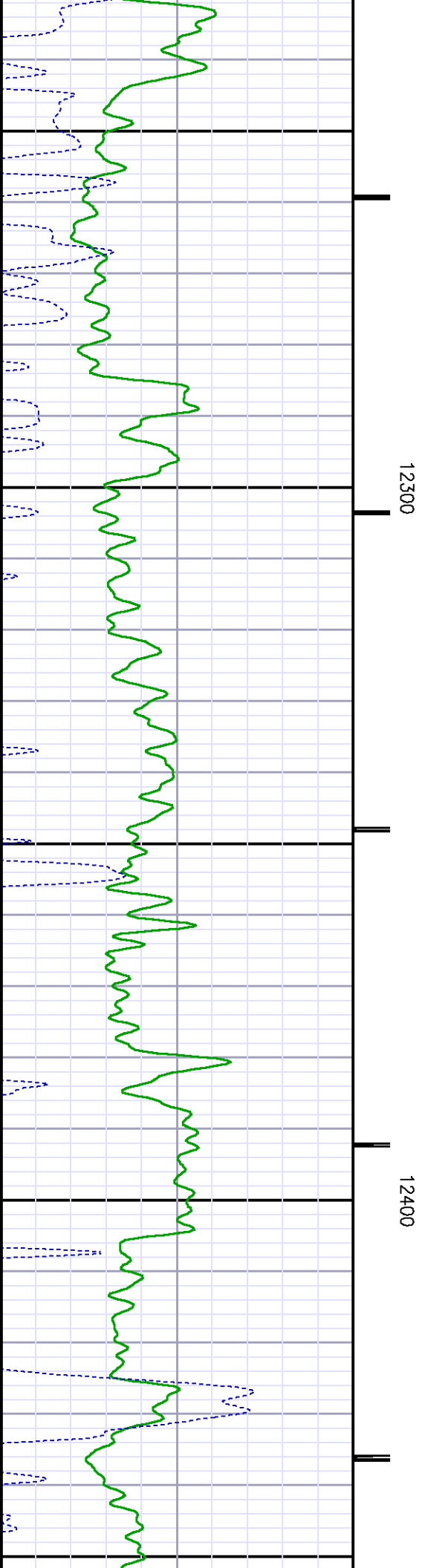
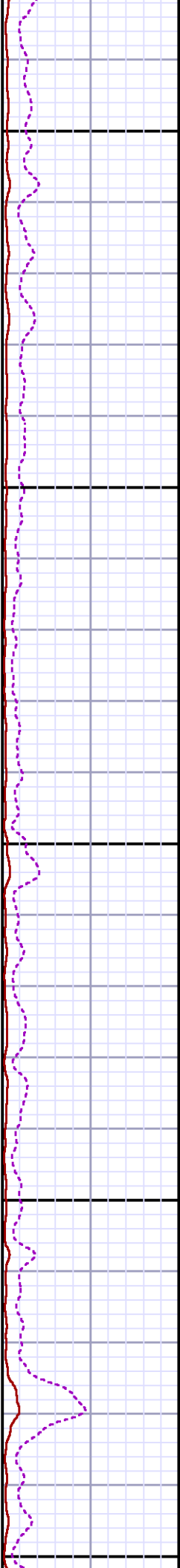
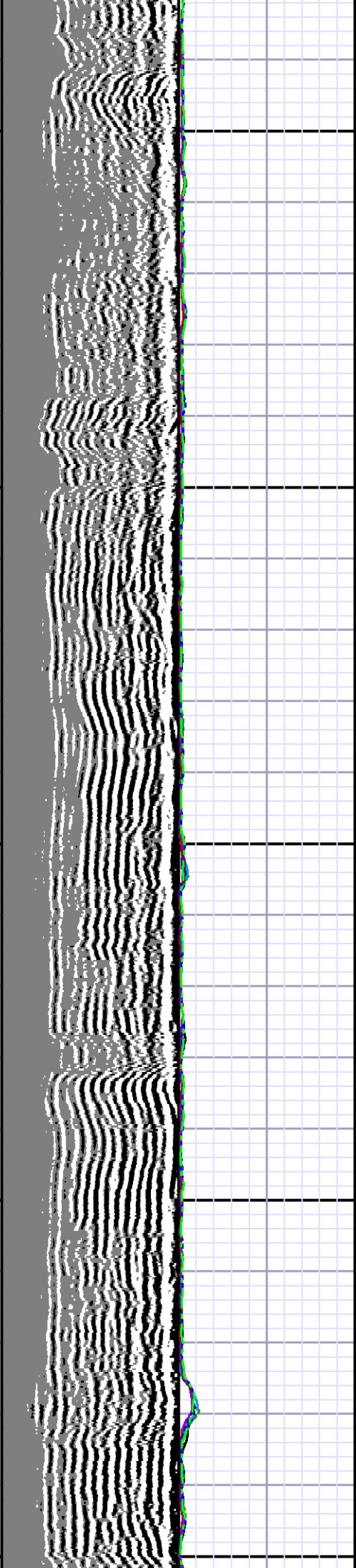


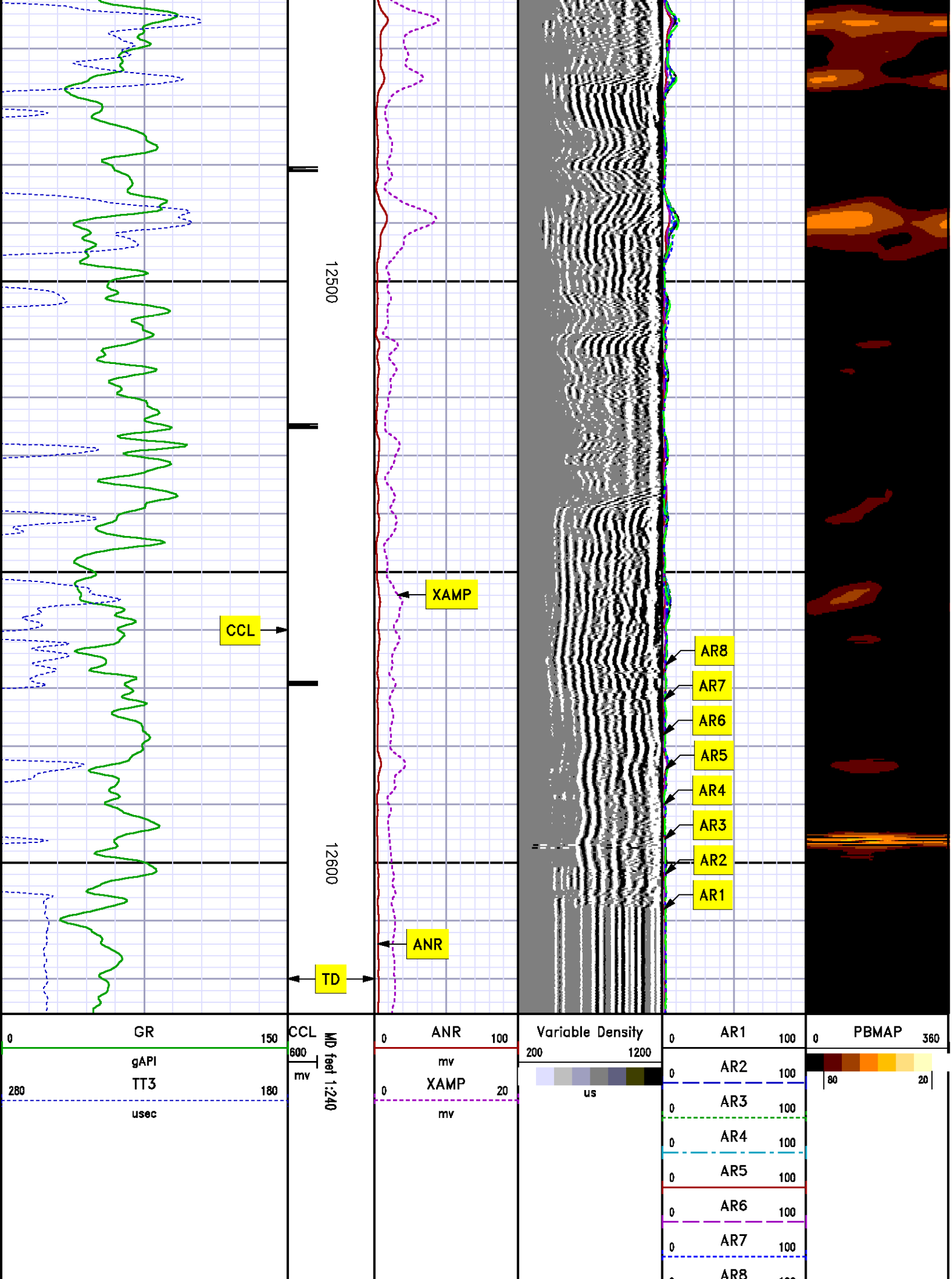












REPEAT SECTION

0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	12353.040	12644.290
RAL	Amp Gate Start Near	195.000	usec	12353.040	12644.290
RAL	Amp Gate Start Radial	195.000	usec	12353.040	12644.290
RAL	Amp Gate Width Far	25.000	usec	12353.040	12644.290
RAL	Amp Gate Width Near	25.000	usec	12353.040	12644.290
RAL	Amp Gate Width Radial	25.000	usec	12353.040	12644.290
RAL	casing od	4.500	inches	12353.040	12644.290
RAL	casing wt	11.600	lbm/ft	12353.040	12644.290
RAL	FB Start Far	291.900	usec	12353.040	12644.290
RAL	FB Start Near	180.000	usec	12353.040	12644.290
RAL	FB Start Radial	180.000	usec	12353.040	12644.290
RAL	FB Thresh Far	10.000	mv	12353.040	12644.290
RAL	FB Thresh Near	4.000	mv	12353.040	12644.290
RAL	FB Thresh Radial	4.000	mv	12353.040	12644.290
RAL	Fluid Travel Time	200.000	usec/ft	12353.040	12643.921

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

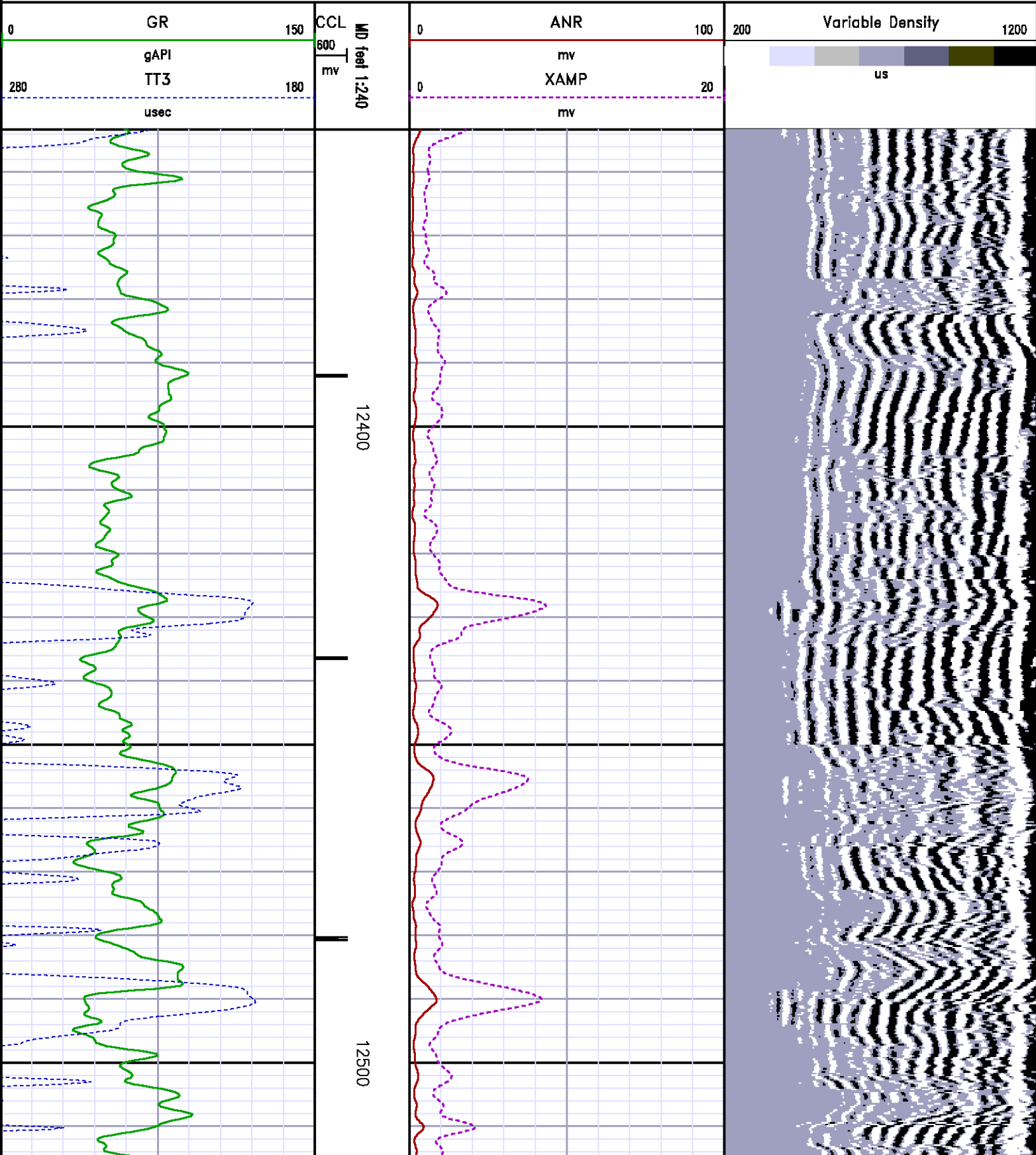
Well : FEDERAL RGU 24-25-198

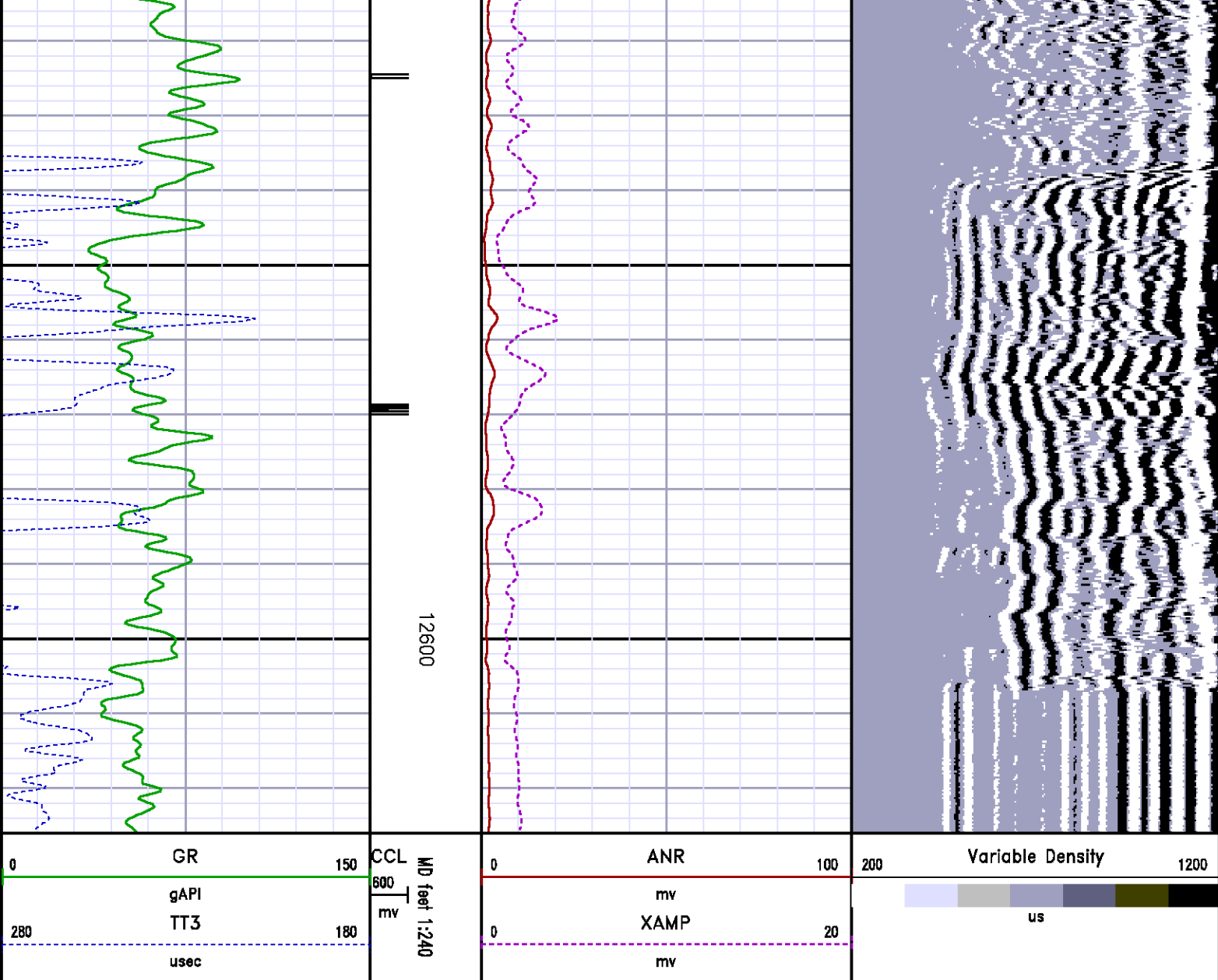
File Name : d:\welldata\wpx energy\rgu 24-25-198\ral24\repeat.xtf

Mode : PlotMgr 5.4.504

Interval : 12353.29 - 12626.00 feet UP

Created : 9/13/2012 12:18:20 PM





CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP\452S13_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Sep 13 11:28:35 2012 TOOL SERIES: 1426XA ASSET: 452 SEQ: S13

Tool Delay [usec] -56.00 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	217	216	30	166	25	0.215	100.00	0.29
3 Ft. Receiver	216	216	30	155	25	0.233	100.00	0.28
5 Ft. Receiver	325	325	30	257	25	0.276	150.00	0.31
Radial #1	217	216	30	158	25	-0.042	100.00	0.29
Radial #2	217	216	30	158	25	0.295	100.00	0.29
Radial #3	215	216	30	158	25	0.637	100.00	0.29
Radial #4	215	216	30	158	25	0.752	100.00	0.28
Radial #5	215	216	30	158	25	0.782	100.00	0.28
Radial #6	215	216	30	158	25	0.733	100.00	0.28
Radial #7	215	216	30	158	25	0.678	100.00	0.28
Radial #8	217	216	30	158	25	0.220	100.00	0.29

RALFLD

WellSite Calibration: C:\case\calver\RALFLD\452S13 fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Sep 13 11:31:34 2012 TOOL SERIES: 1426XA ASSET: 452 SEQ: S13

Tool Delay [usec] -56.00 Casing OD 4.50 Casing Wt 11.60 Casing ID 4.00

RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	166	25	0.112	0.000	1.00	100.000
3 Ft. Receiver	195	25	1.671			
5 Ft. Receiver	305	25	4.219			
Radial #1	195	25	1.758			
Radial #2	195	25	1.705			
Radial #3	195	25	1.956			
Radial #4	195	25	1.661			
Radial #5	195	25	1.508			
Radial #6	195	25	1.602			
Radial #7	195	25	1.627			
Radial #8	195	25	1.425			

GAMMA RAY

Calibration File: C:\case\calver\GR\544S6.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Sep 06 14:46:05 2012 TOOL SERIES: 2459XA ASSET: 544 SEQ: S6

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K W612	31.20	310.24	0.663	20.68	205.68	185.00

Verification File: C:\case\calver\GR\544S6.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED:		Thu Sep 06 14:47:35 2012		TOOL SERIES:	2459XA	ASSET:	544	SEQ:	S6
Calibrator #	Background	Calibrator On		Multiplicative	Background	Calibrator On	Differential		
	[cps]	[cps]			[api]	[api]	[api]		
S2K W612	30.09	314.67		0.663	19.95	208.62	188.67		

TOOL DIAGRAM

OTA SHORT CABLE HEAD

CENTRALIZER

Series	RALCENT
Mnemonic	CENT
Diameter	3.12"
Weight	20.00 lb

PROBE 2 3/4 DUAL RECEIVER RADII

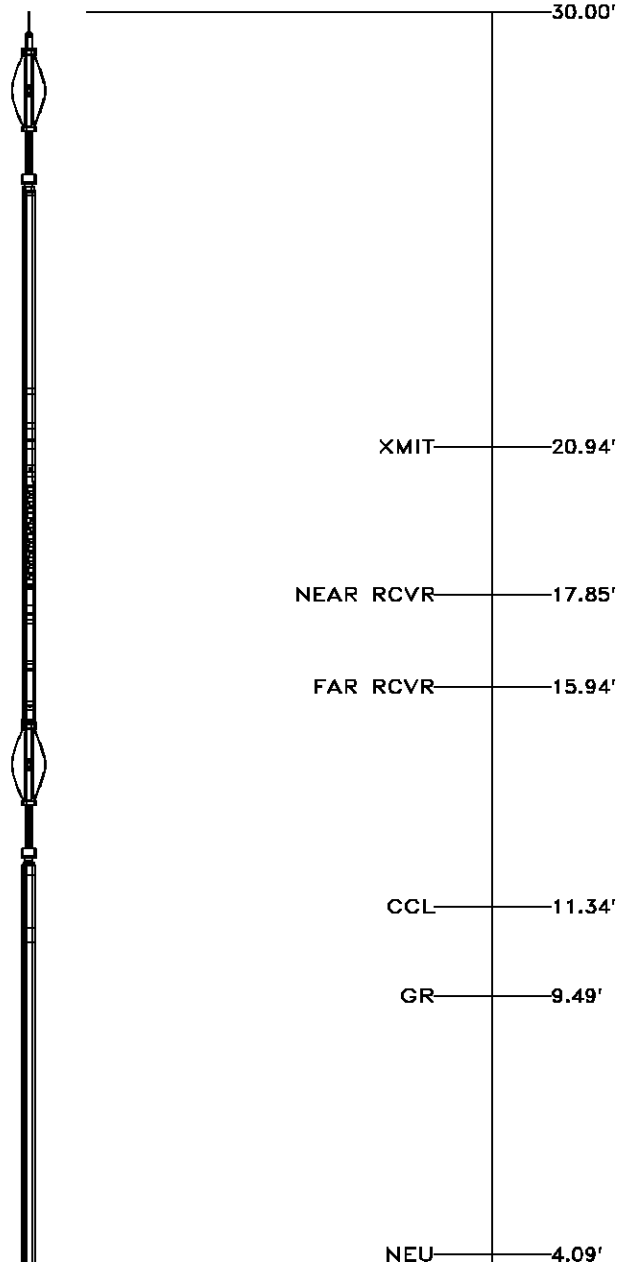
Series	1426XA
Mnemonic	PROB
Diameter	2.75"
Length	11.17'
Measure Point	0.75' FAR RCVR
Measure Point	2.67' NEAR RCVR
Measure Point	5.75' XMIT
Temp Rating	350.00 °F
Press Rating	18000.00 PSI

CENTRALIZER

Series	RALCENT
Mnemonic	CENT
Diameter	3.12"
Weight	20.00 lb

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



0.00'

Total Length: 30.00'
Total Weight: Not Available
Max Diameter: 0' 3.12"

 Baker Atlas 	Company WPX ENERGY Well FEDERAL RGU 24-25-198 Field SULPHUR CREEK County RIO BLANCO State COLORADO	File No: CH080997 API No: 05103118760000
	Location SHL: 342' FSL, 1418' FWL (SESW) BHL: 1235' FSL, 1908' FWL (SESW) SEC 25 TWP 1S RGE 98W	Elevations KB 6705 ft DF GL 6684 ft 25 1S 98W RGU 24-25-198 PAD CYCLONE 29 B5 SLOT