



# RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: CH058603	Company Well Field County	WPX ENERGY FEDERAL KP 444-18 KOKOPELLI GARFIELD	State COLORADO
API No: 05045206340000			
Location 18-T6S-R31W KP 34-18 pod NABORS 574	SHL: 709' FSL 1942' FEL BHL: 518' FSL 847' FEL SEC 18 TWP 6S RGE 91W	Other Services RPM	
Permanent Datum Log Measured From Drill Measured From	G.L. K.B. KELLY BUSHING	Elevation 26 ft Above P. D.	Elevations KB 5944 ft DF NA GL 5918 ft

Date	30 JULY 2012	
Run	ONE	
Service Order	574700	
Depth Driller	7394 ft	
Depth Logger	7359 ft	
Bottom Logged Interval	7349 ft	
Top Logged Interval	0 ft	
Time Started	1200	
Time Finished	1500	
Operator Rig Time	3 HRS	
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	202 degF	
Reference Log	NA	
Reference Log Date	NA	
Equipment No.	4271	GRAND JUNCTION
Recorded By	JACOB STALEY	
Witnessed By	Jeff Brady	

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

Borehole Record		
Bit Size	From	To
13.5 In	0 ft	1080 ft
7.875 In	0 ft	7394 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 In	NA	NA	0 ft	1080 ft
4.5 In	NA	NA	0 ft	7394 ft

Remarks
ALL DATA WAS DEPTH SHIFTED TO PUT THE TOP CCL MARK ON DEPTH WITH GROUND LEVEL WITH A SHIFT OF +10 FT
LOGGED WITH 0 PSI AT WELLHEAD
BHT = 202 DEG F
SJ = 4100'-4120'

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1428XA	10124106	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	36.750	7378.000
RAL	Amp Gate Start Near	200.000	usec	36.750	7378.000
RAL	Amp Gate Start Radial	200.000	usec	36.750	7378.000
RAL	Amp Gate Width Far	25.000	usec	36.750	7378.000
RAL	Amp Gate Width Near	25.000	usec	36.750	7378.000
RAL	Amp Gate Width Radial	25.000	usec	36.750	7378.000
RAL	casing od	4.500	inches	36.750	7378.000
RAL	casing wt	11.600	lbm/ft	36.750	7378.000
RAL	FB Start Far	291.900	usec	36.750	7378.000
RAL	FB Start Near	175.391	usec	36.750	7378.000
RAL	FB Start Radial	175.391	usec	36.750	7378.000
RAL	FB Thresh Far	10.000	mv	36.750	7378.000
RAL	FB Thresh Near	4.000	mv	36.750	7378.000
RAL	FB Thresh Radial	4.000	mv	36.750	7378.000
RAL	Fluid Travel Time	200.000	usec/ft	36.750	7378.000

**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

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

FPR3	FPR5	TT3	TTR1	TTR2	TTR3
TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
AFAR	SIG	TT5			
CCL					
GR					
NEU					

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

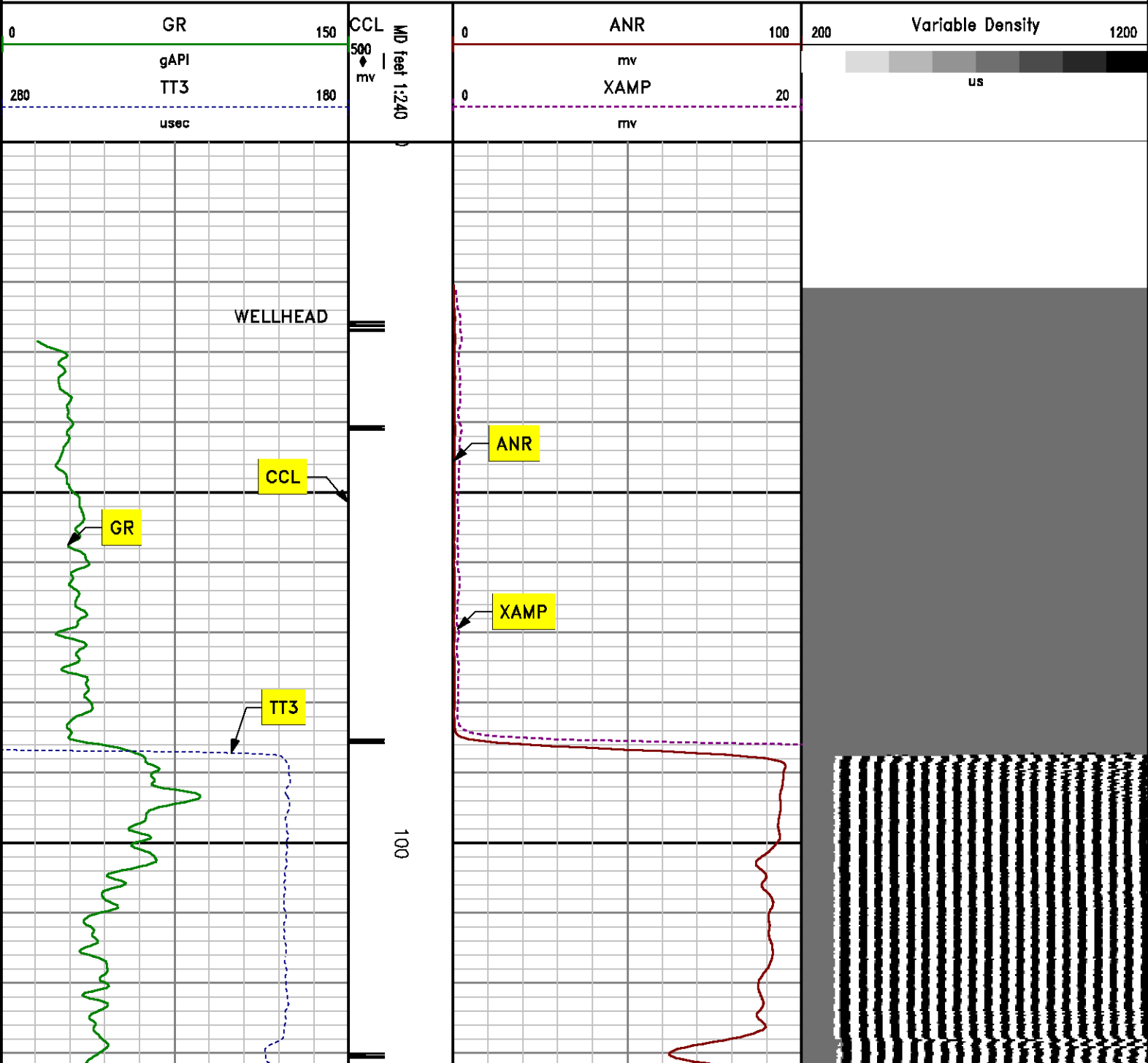
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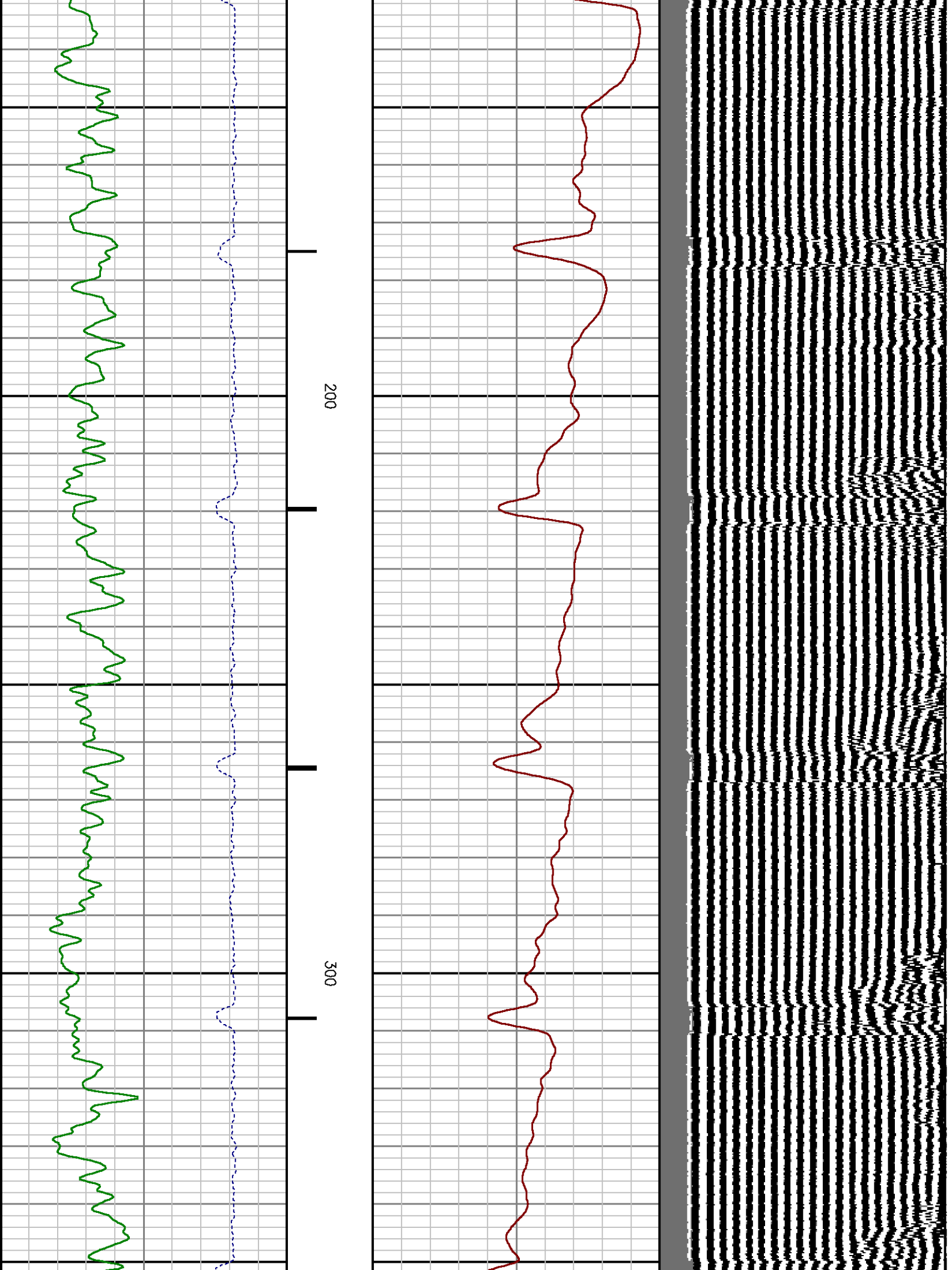
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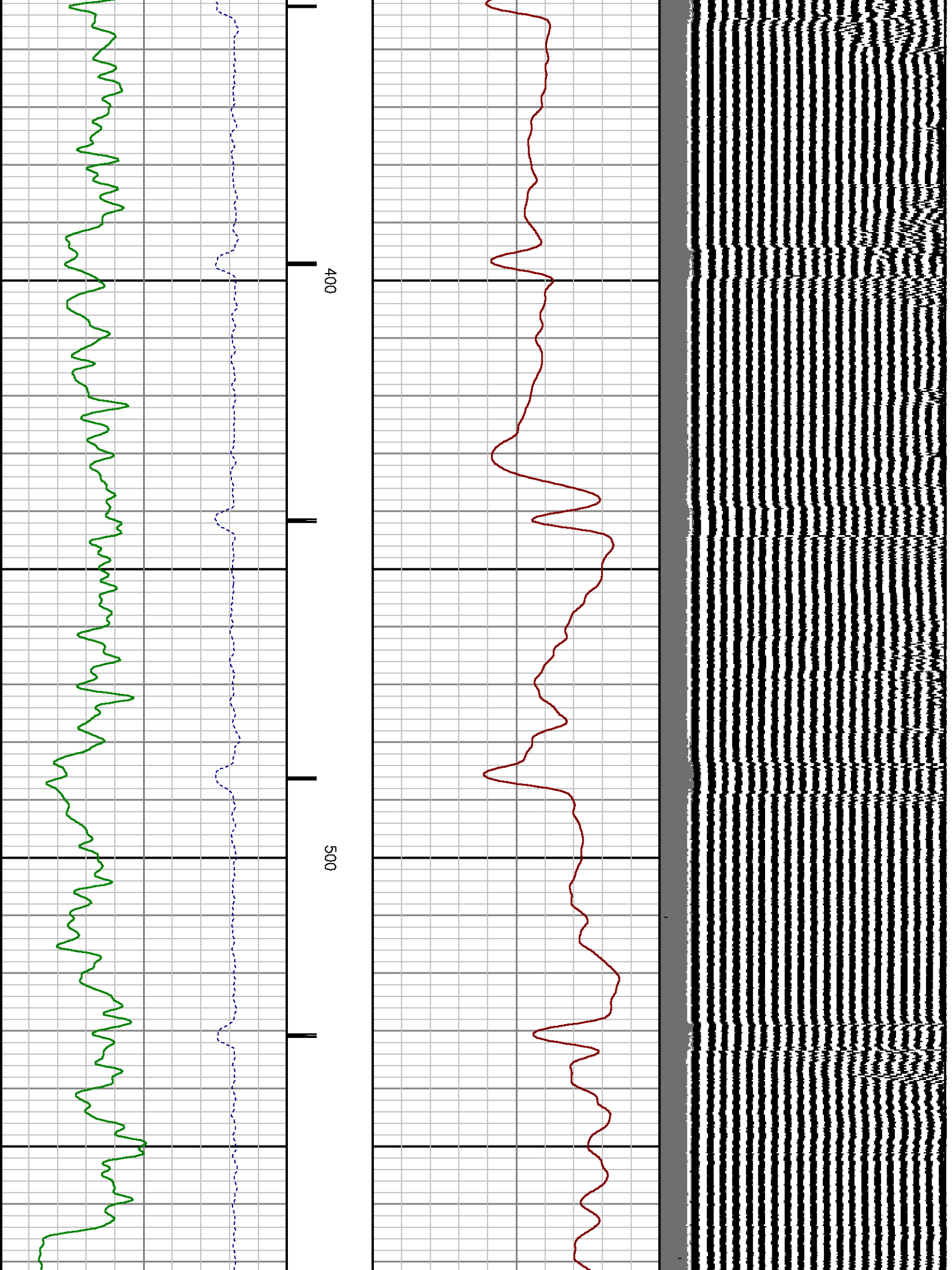
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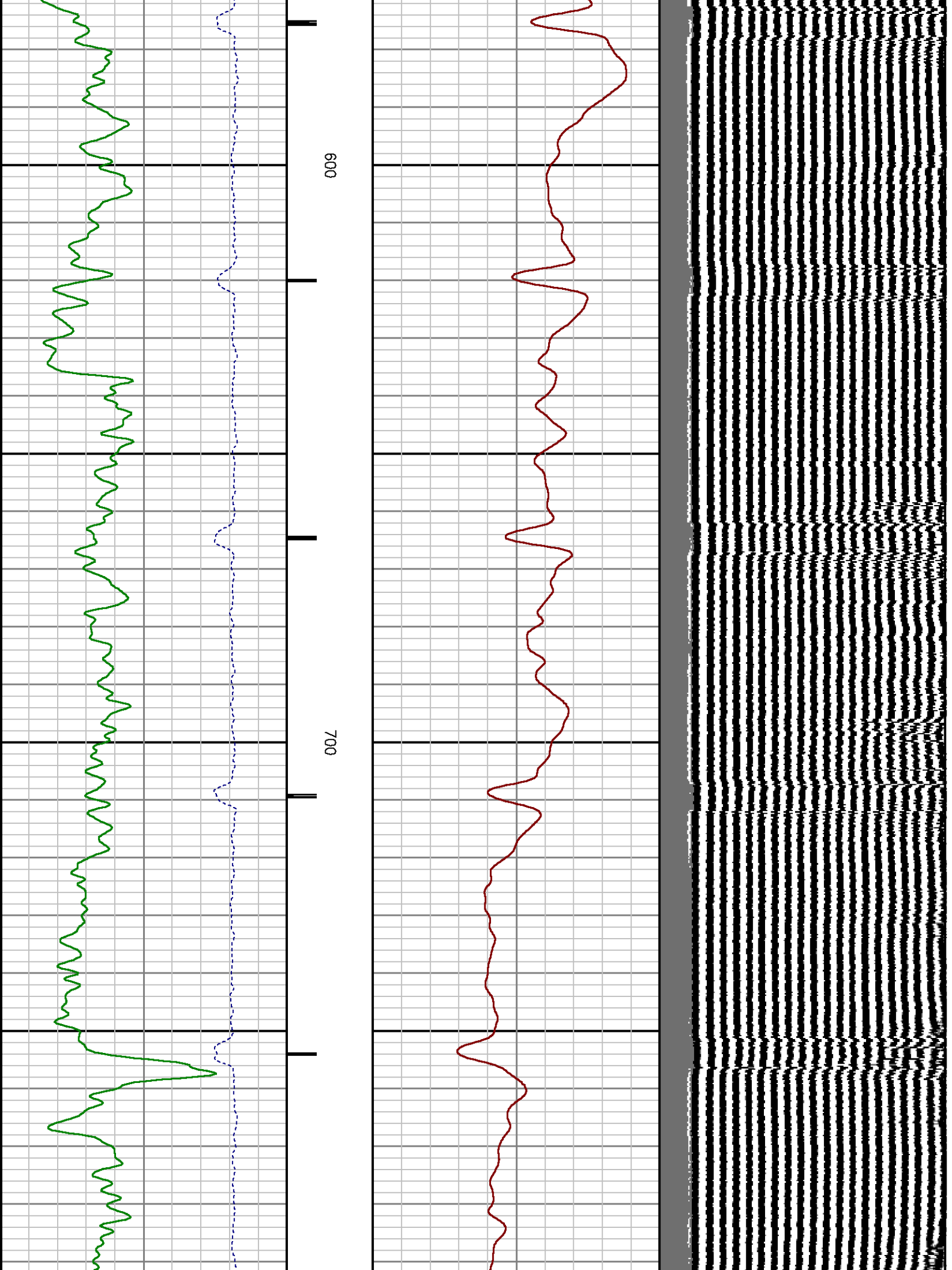
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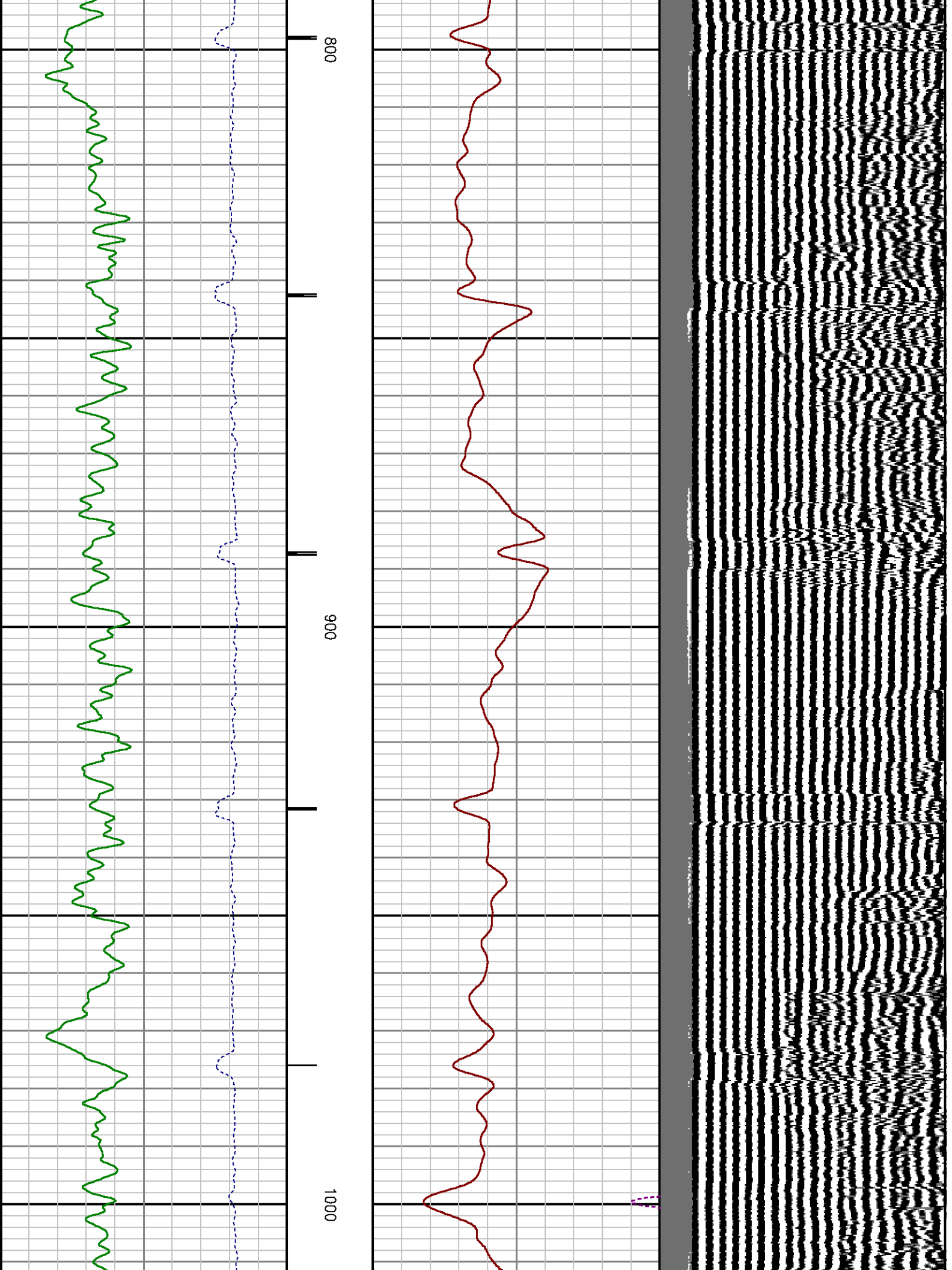
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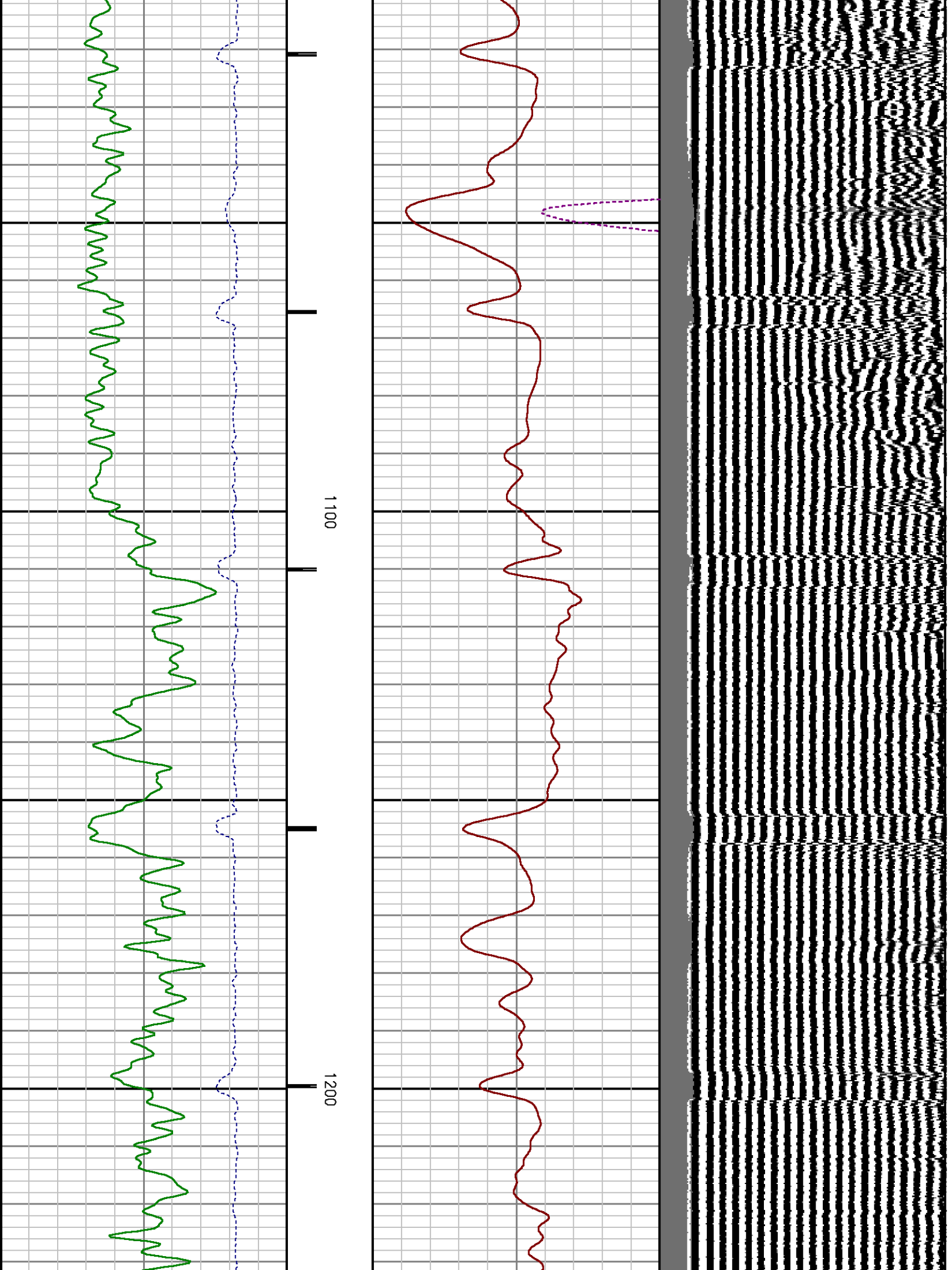




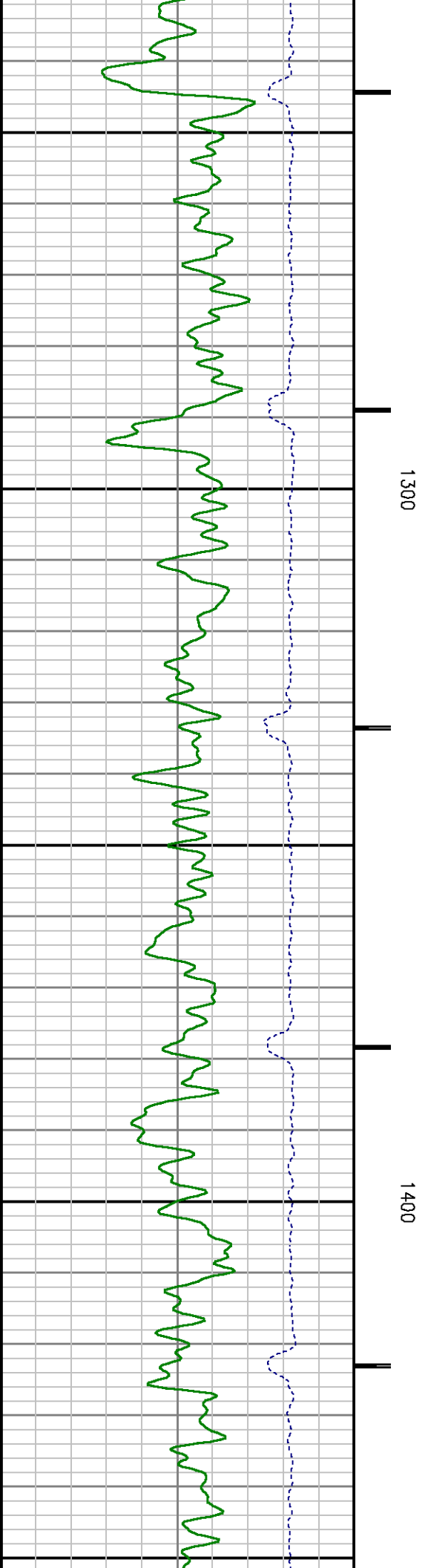
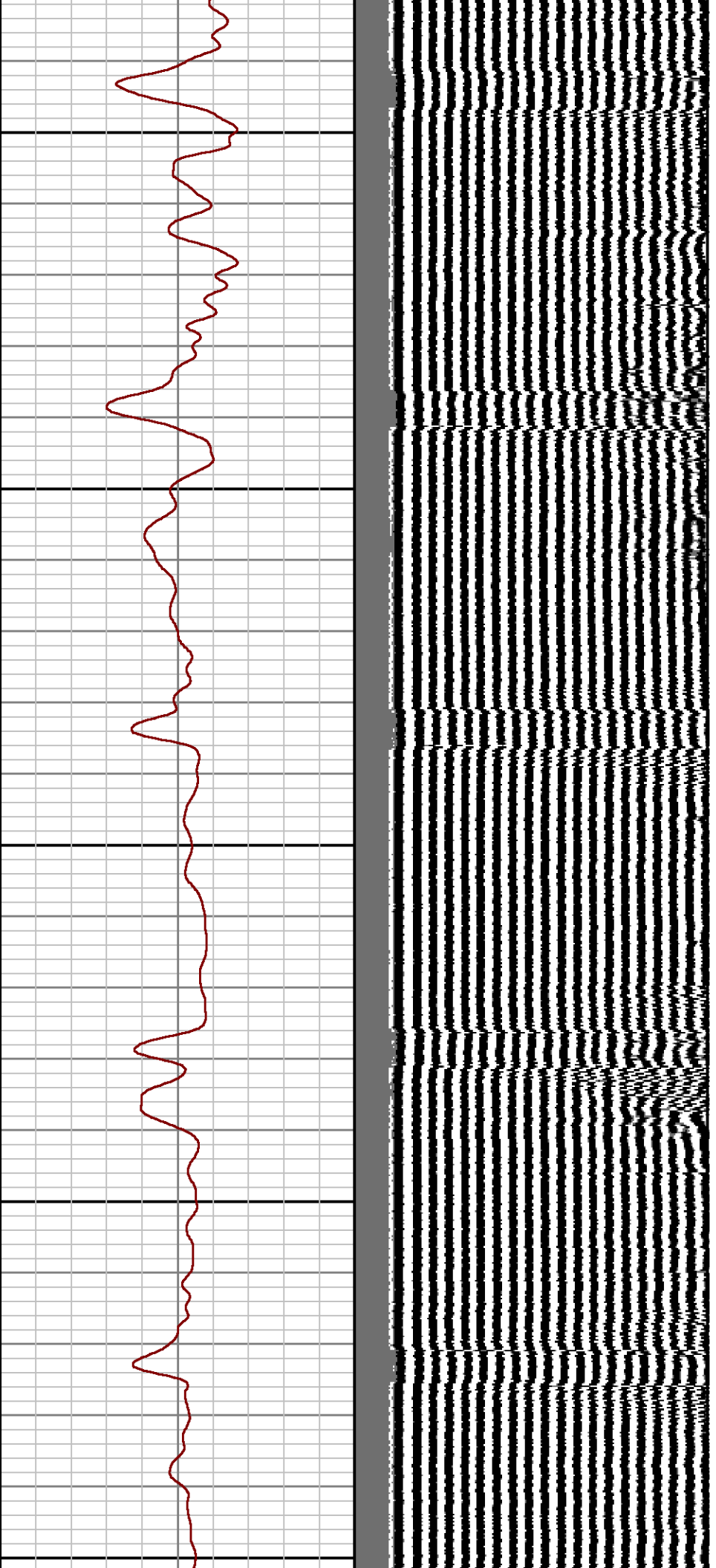


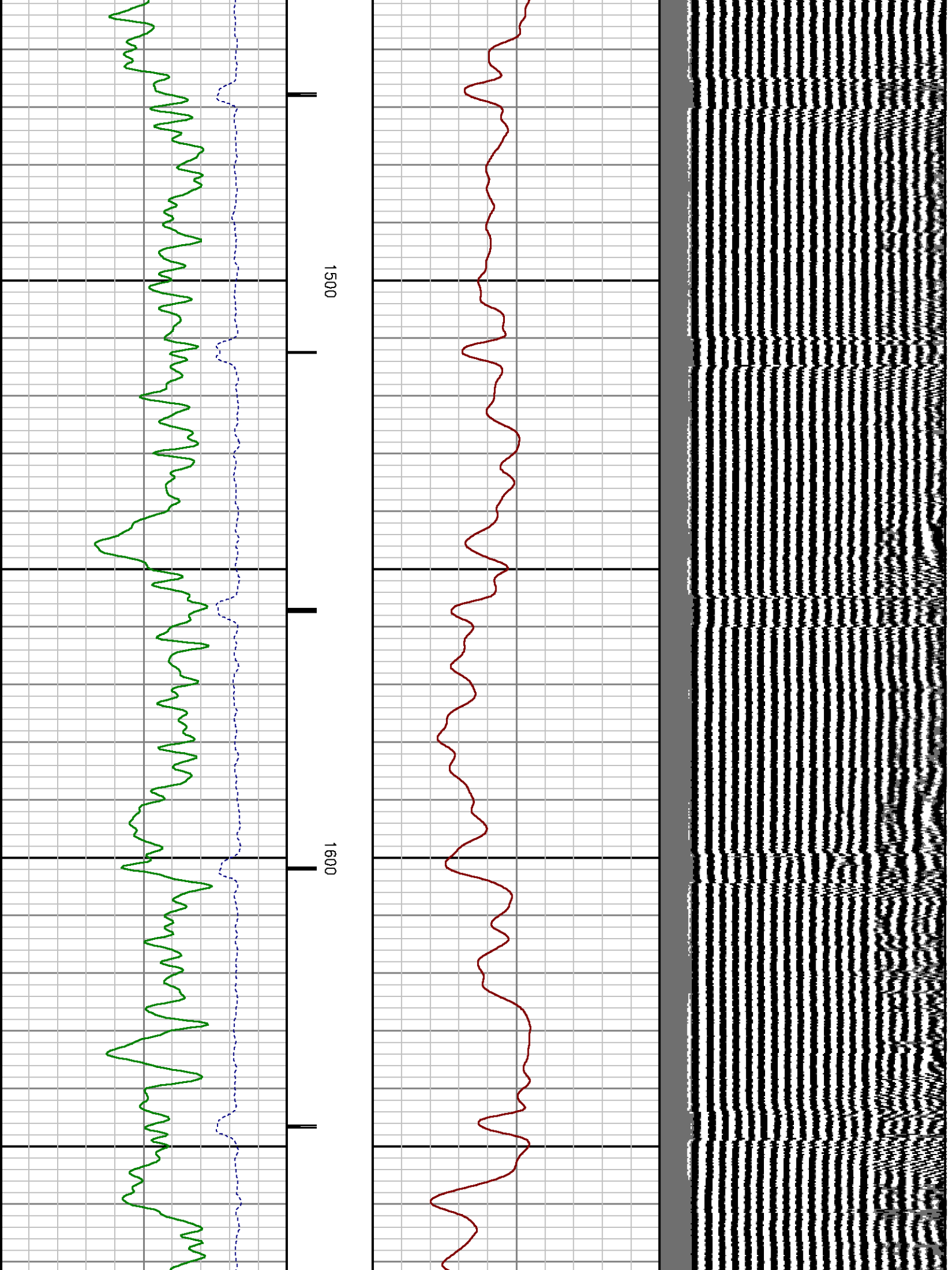


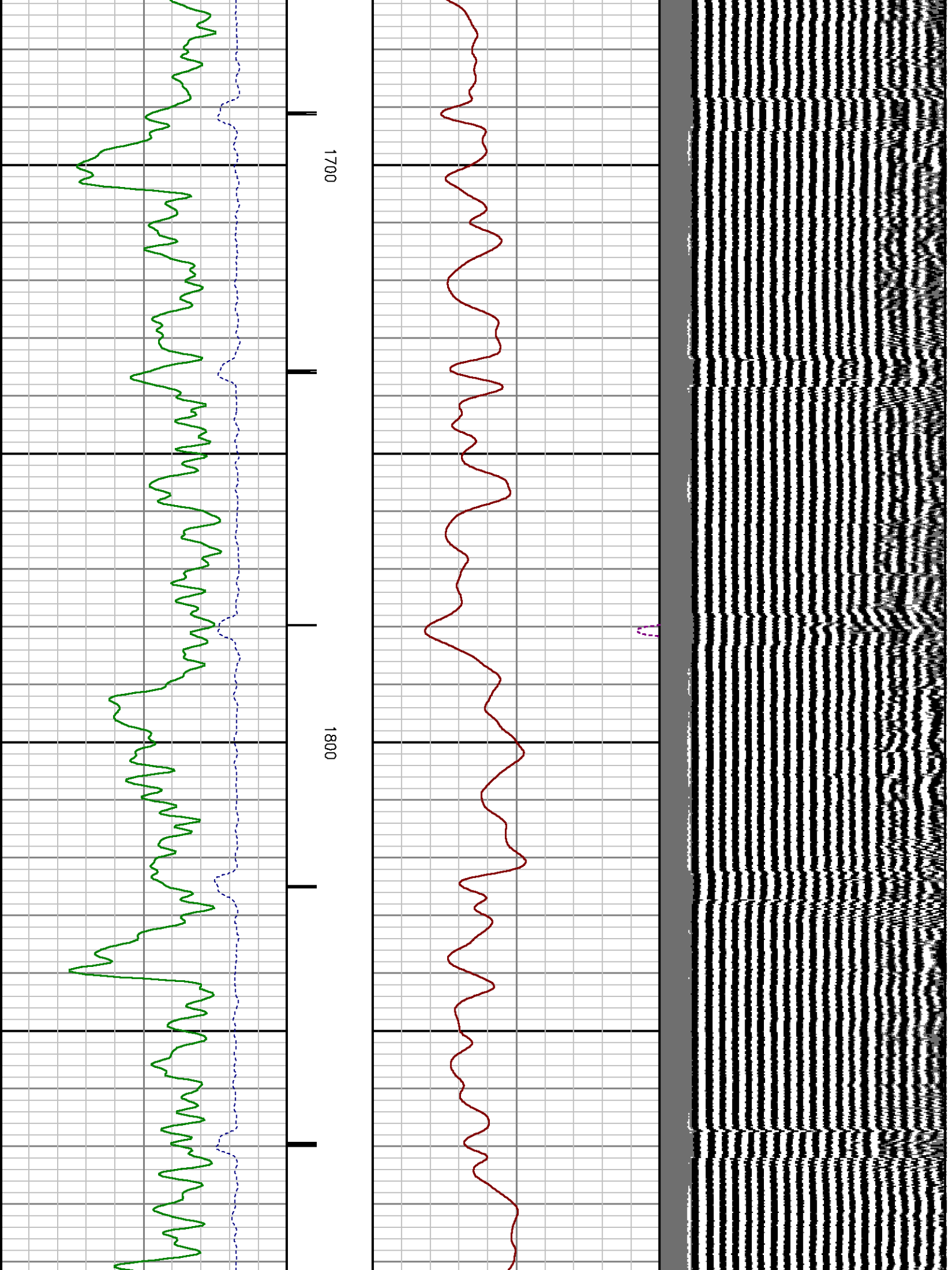


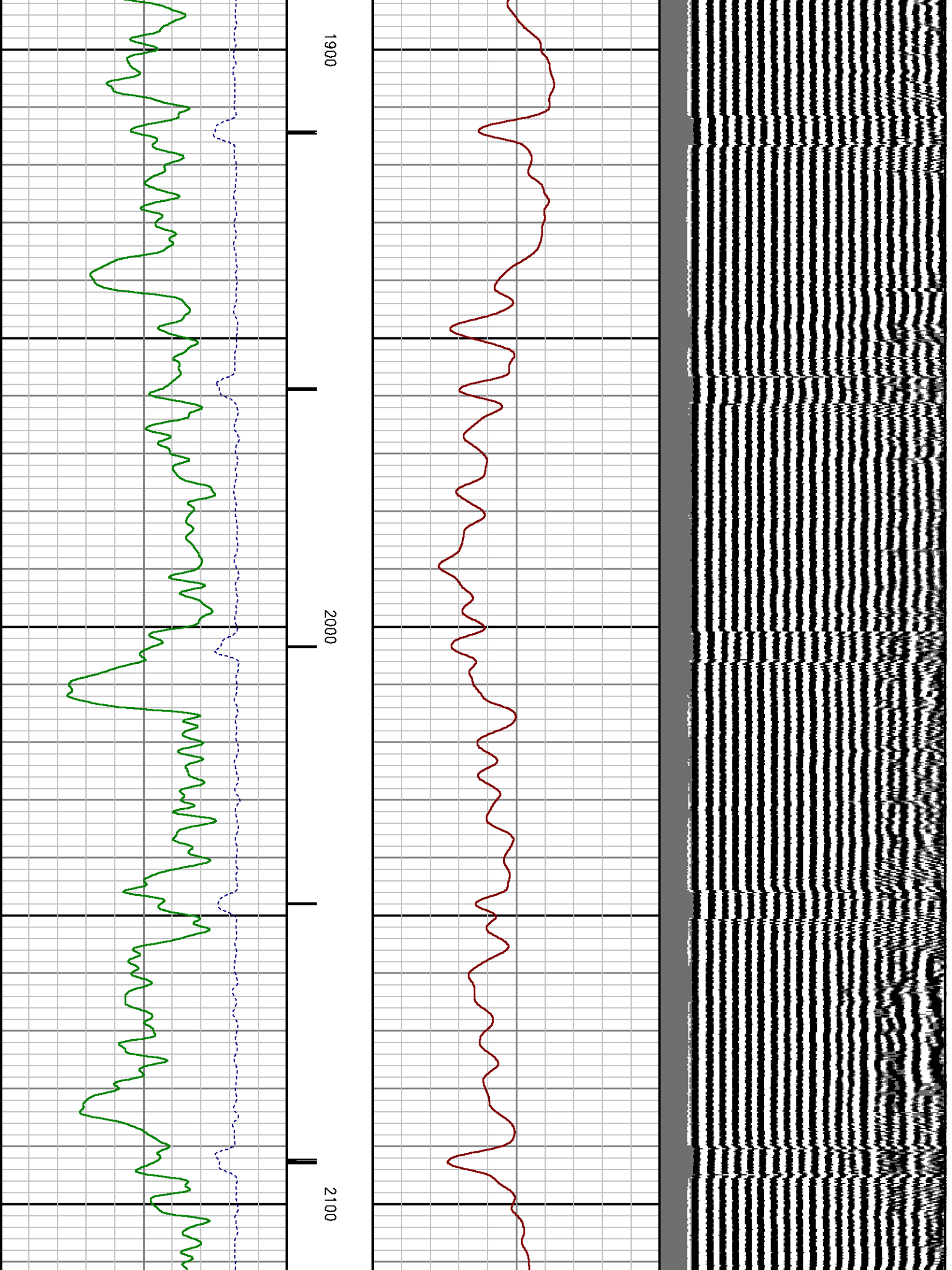


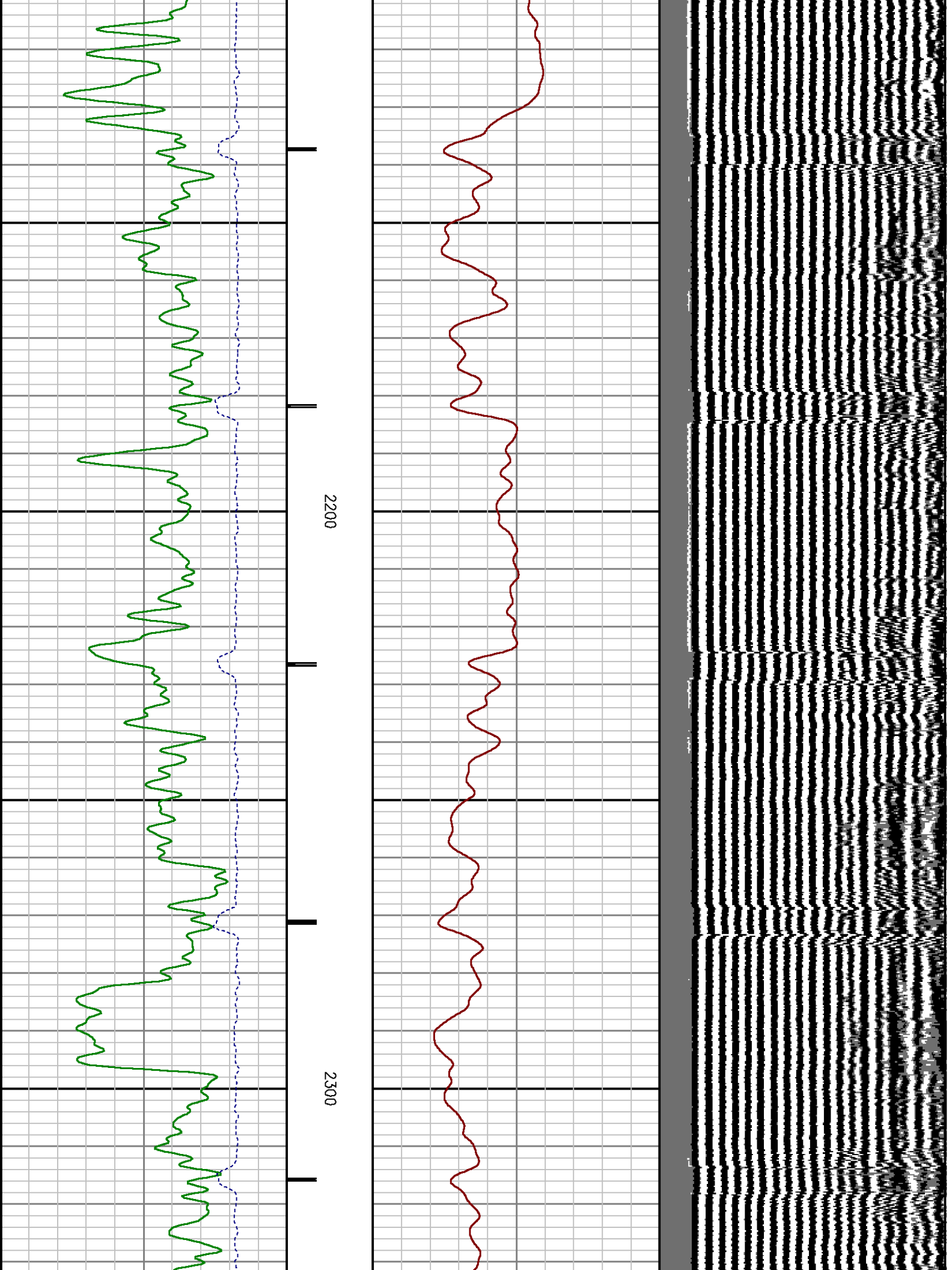


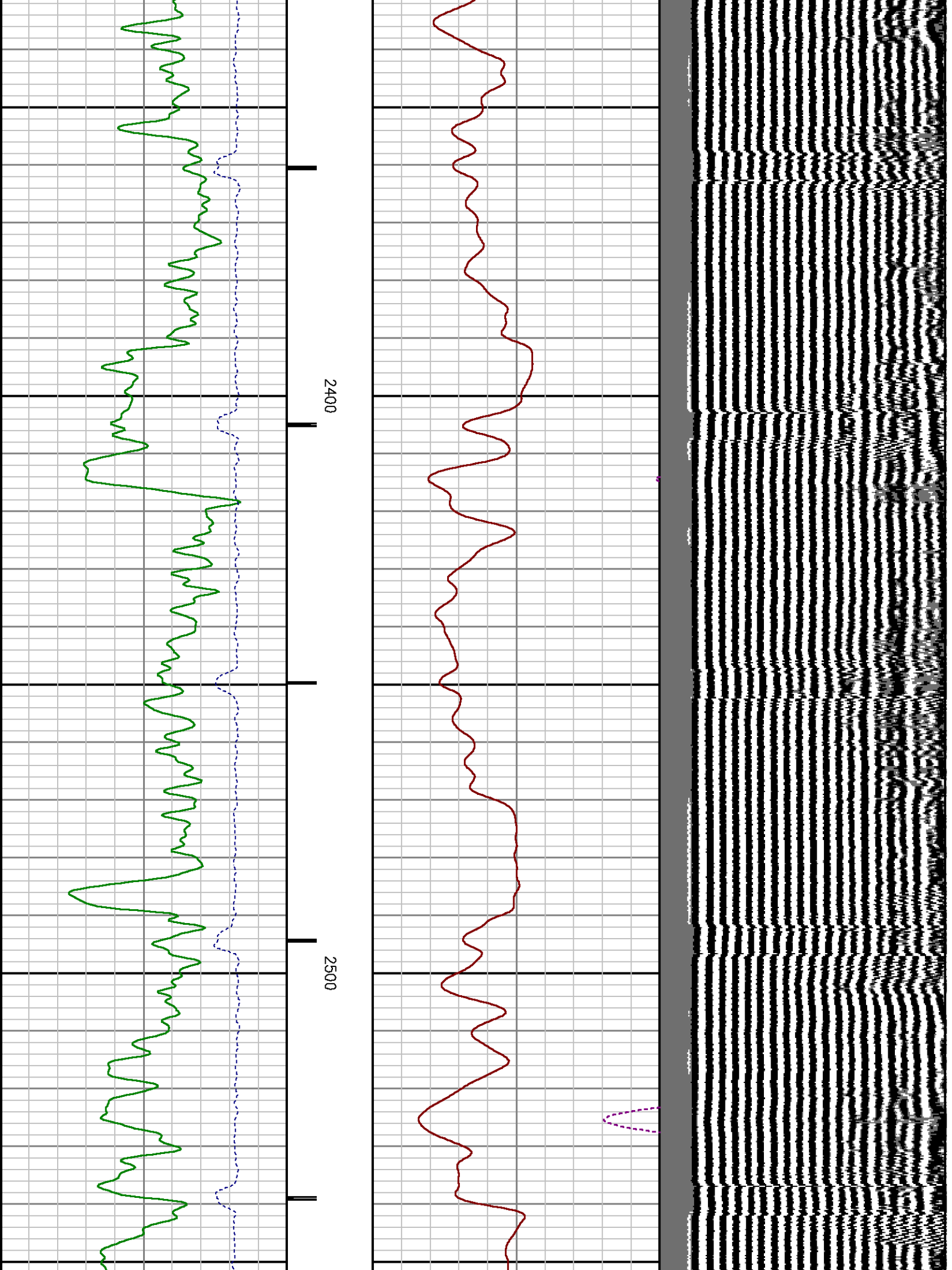




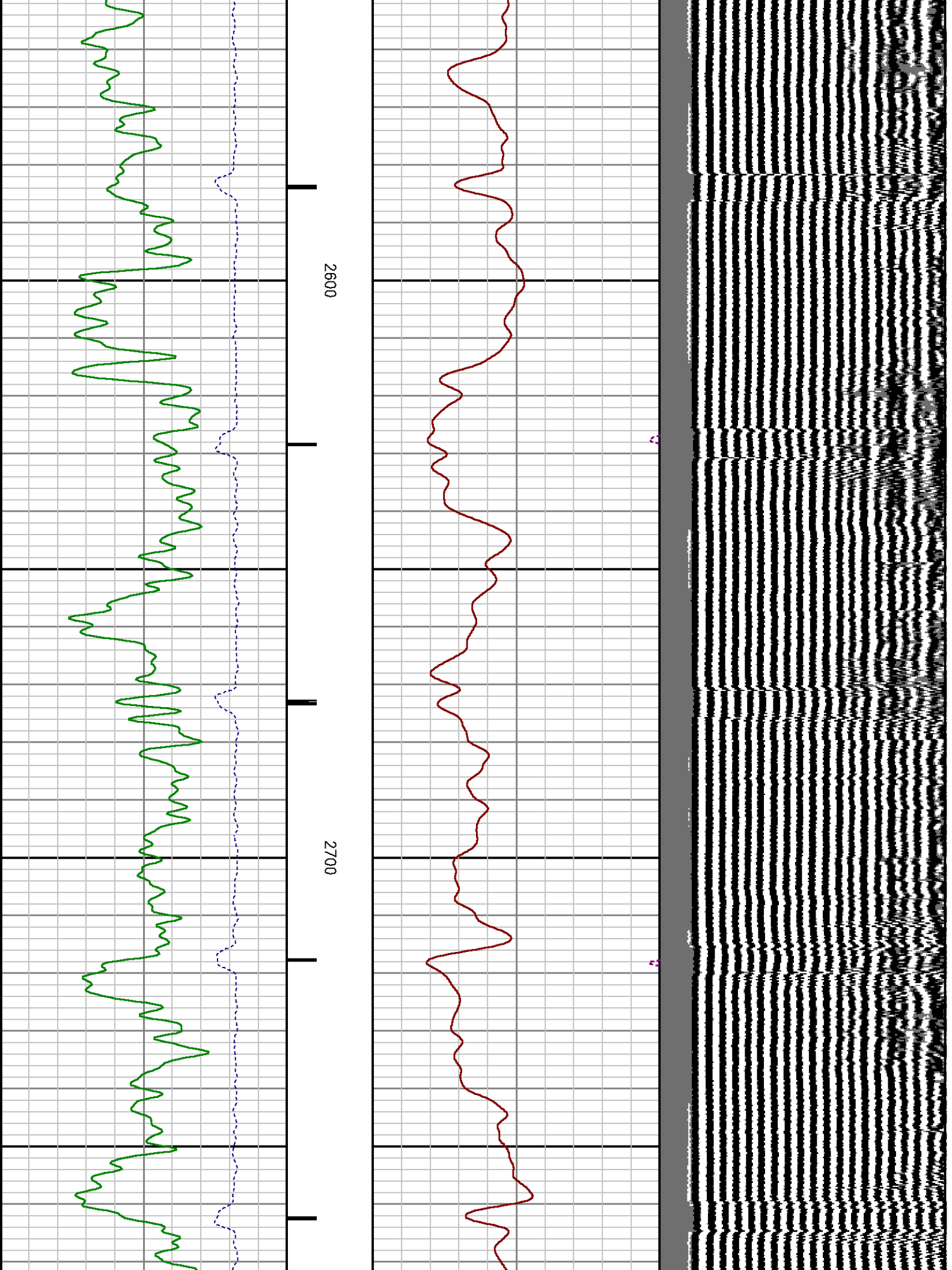


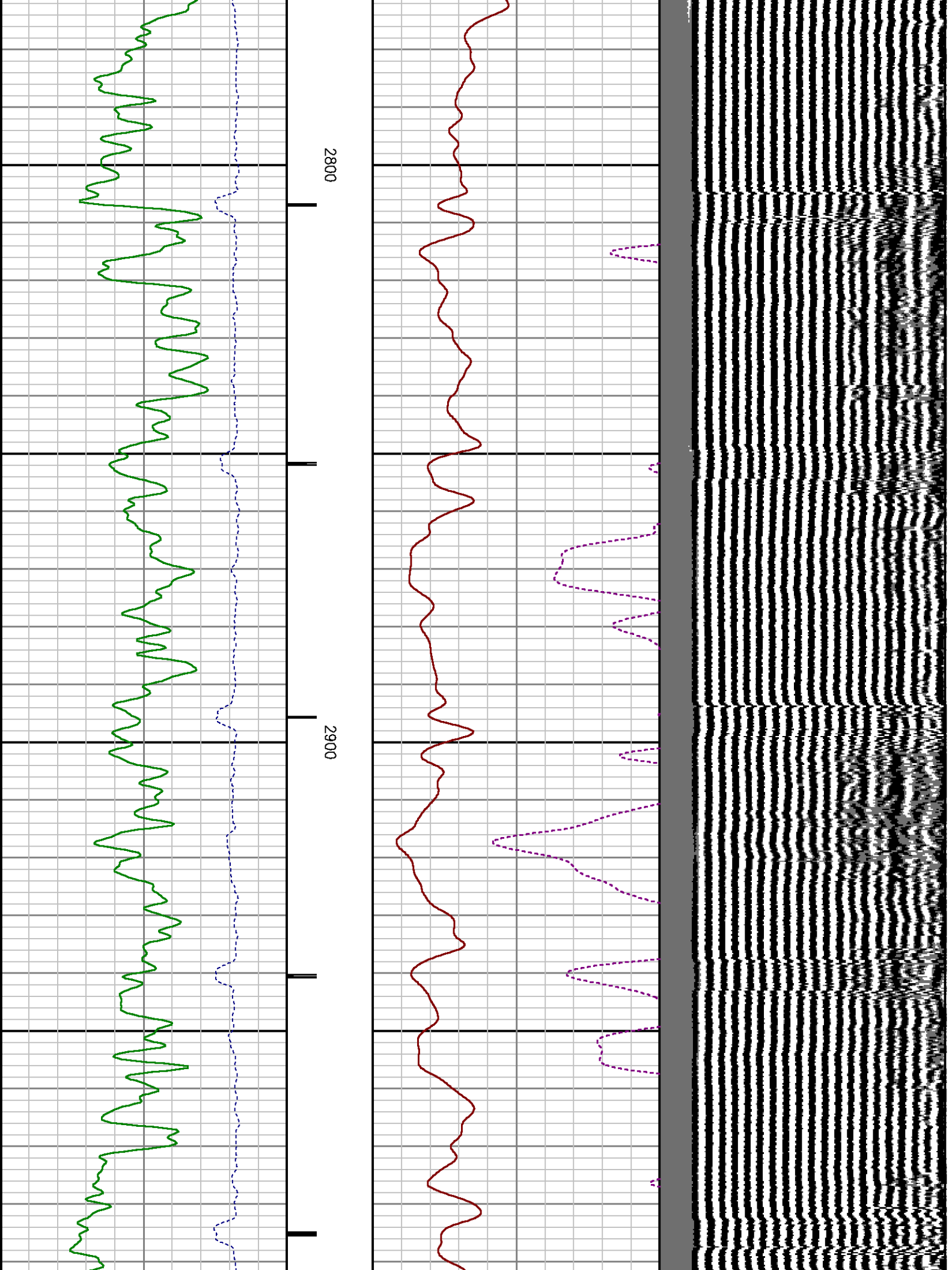




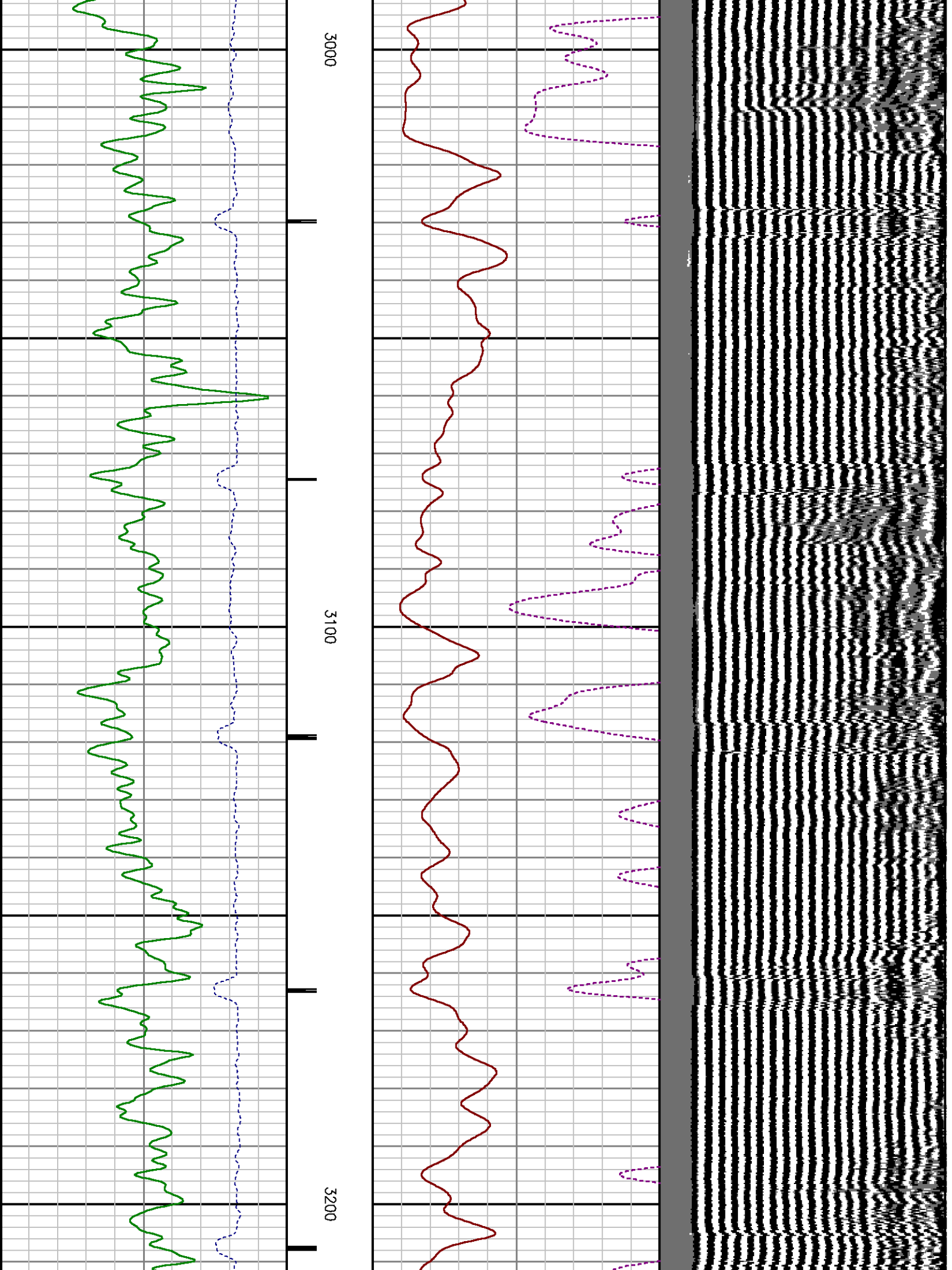


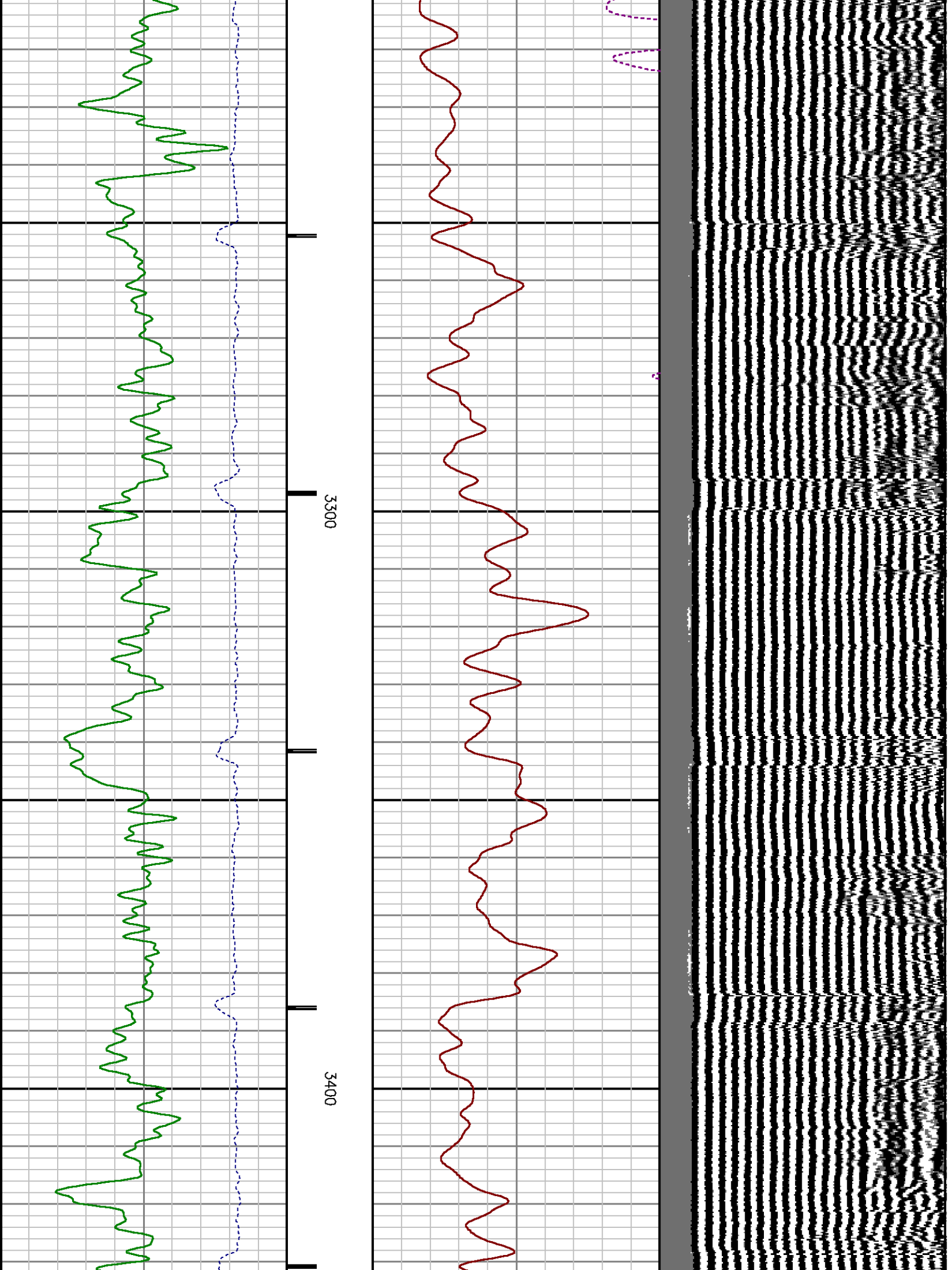


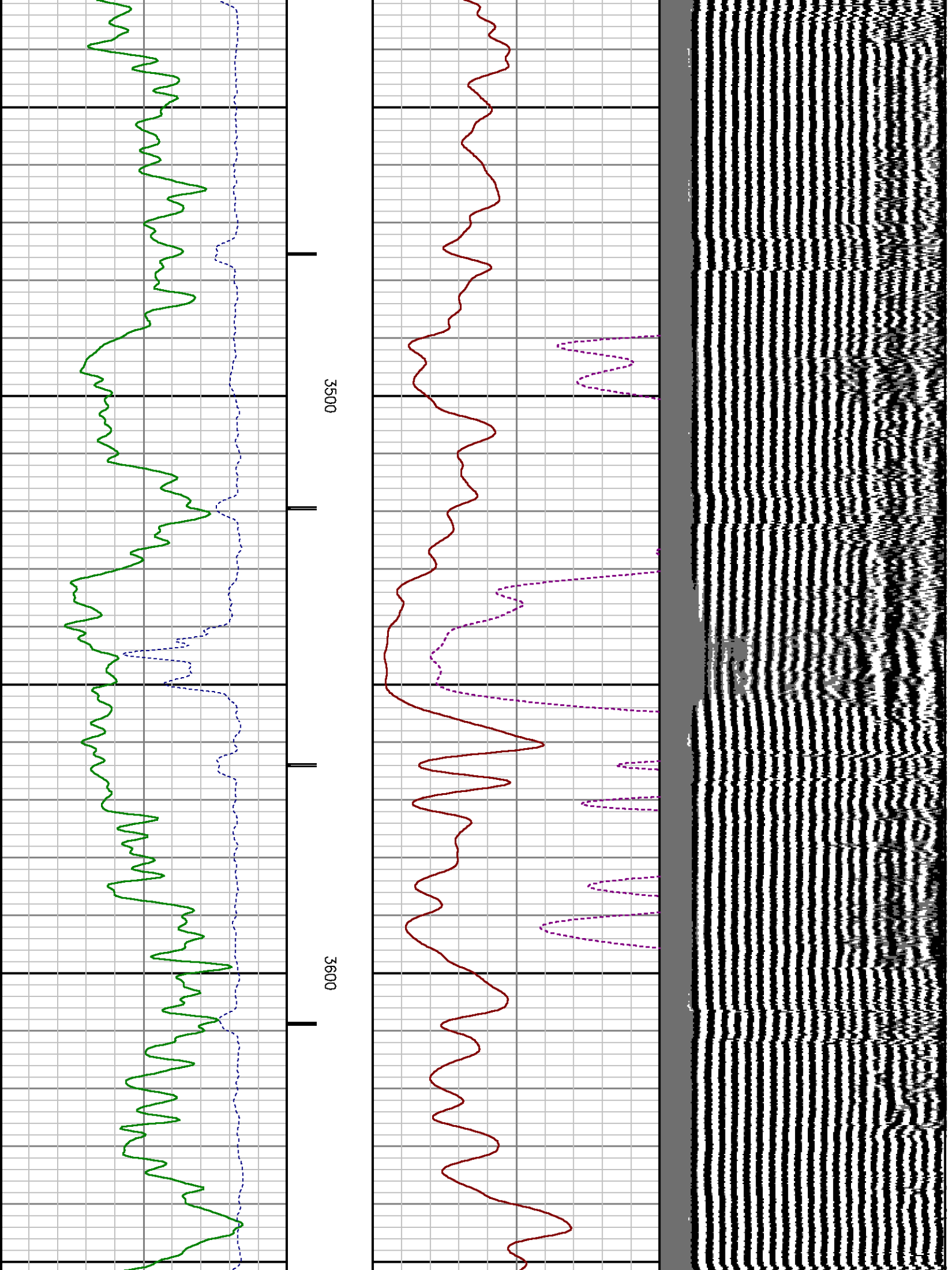


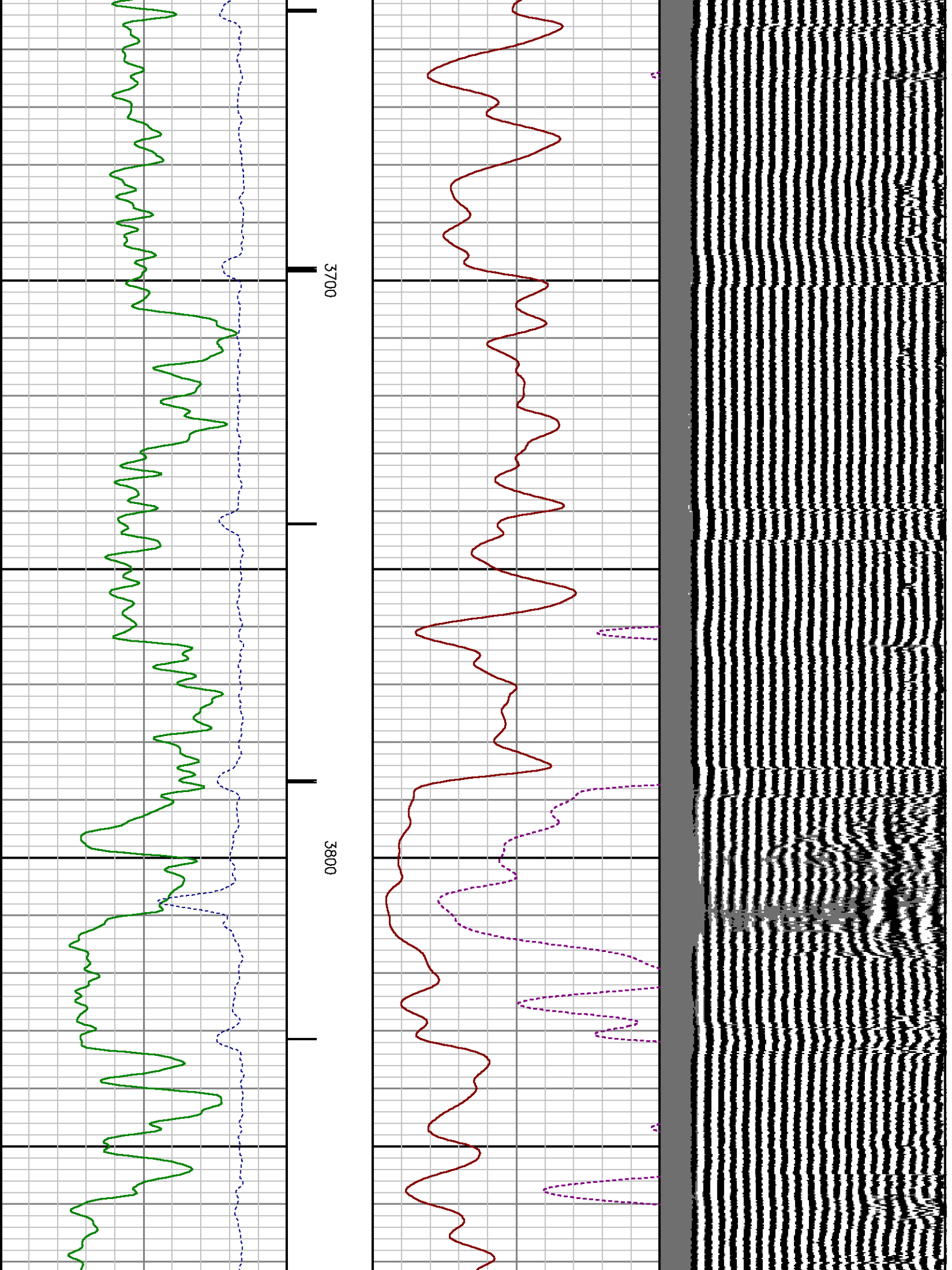


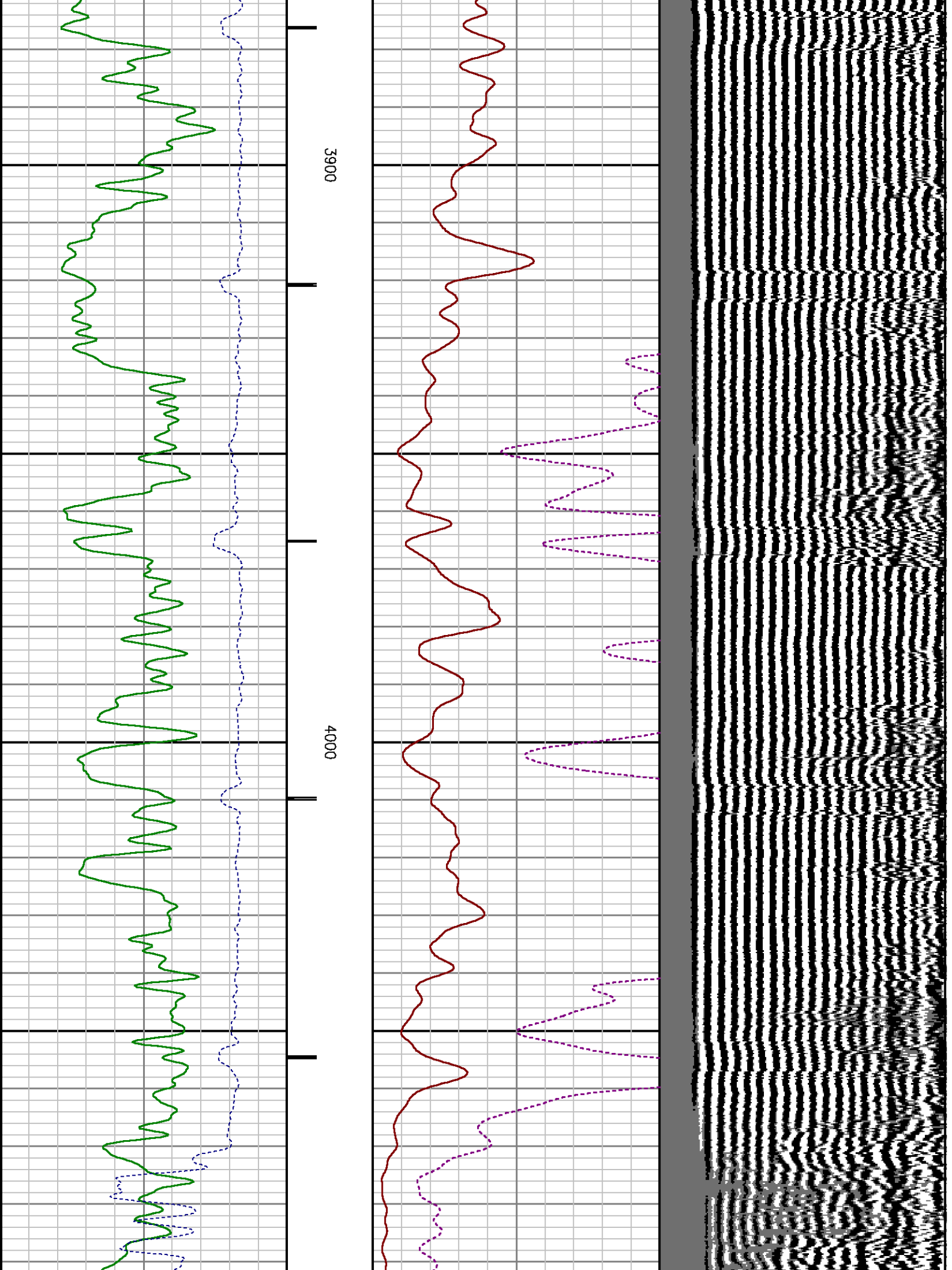




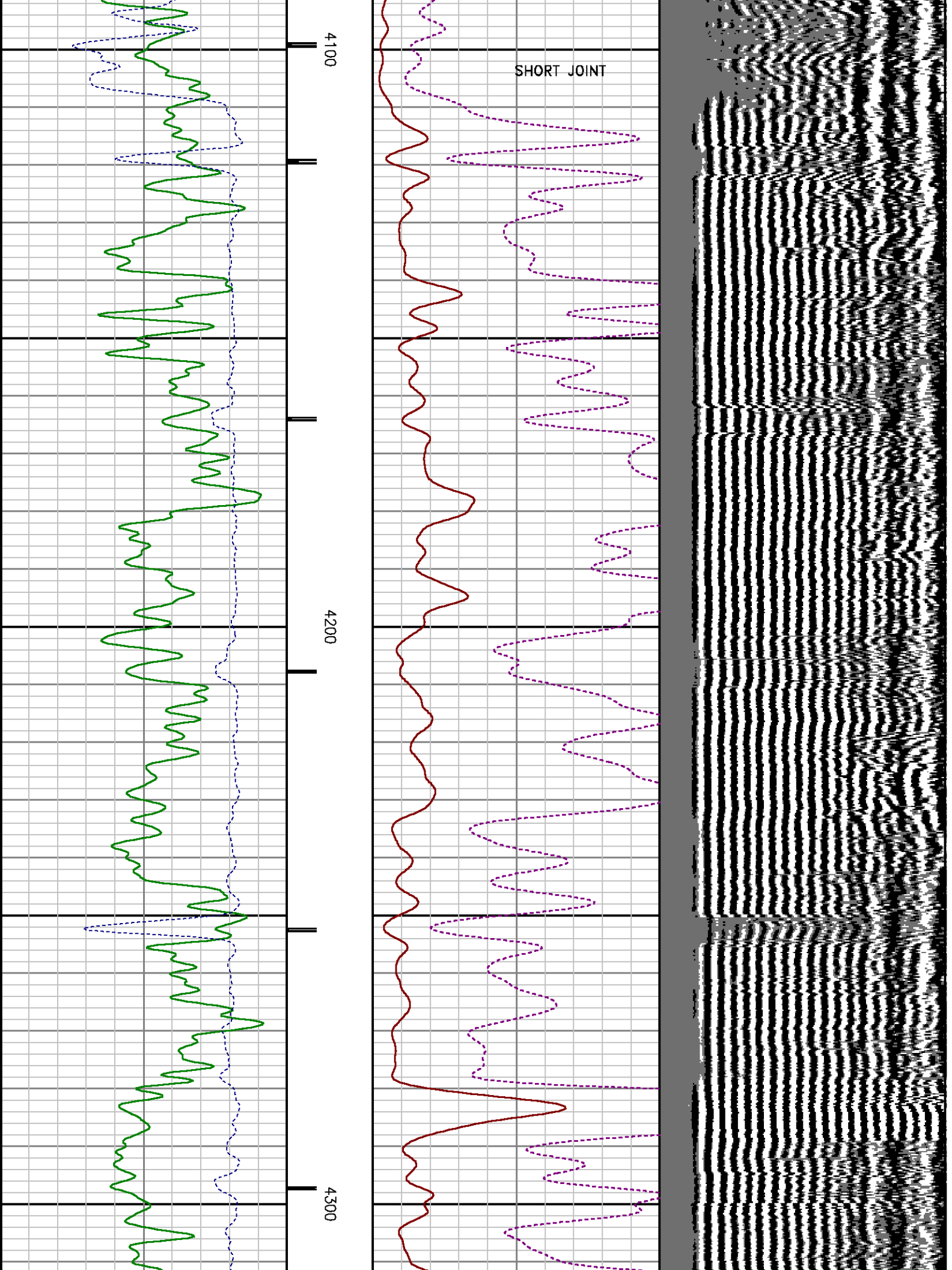


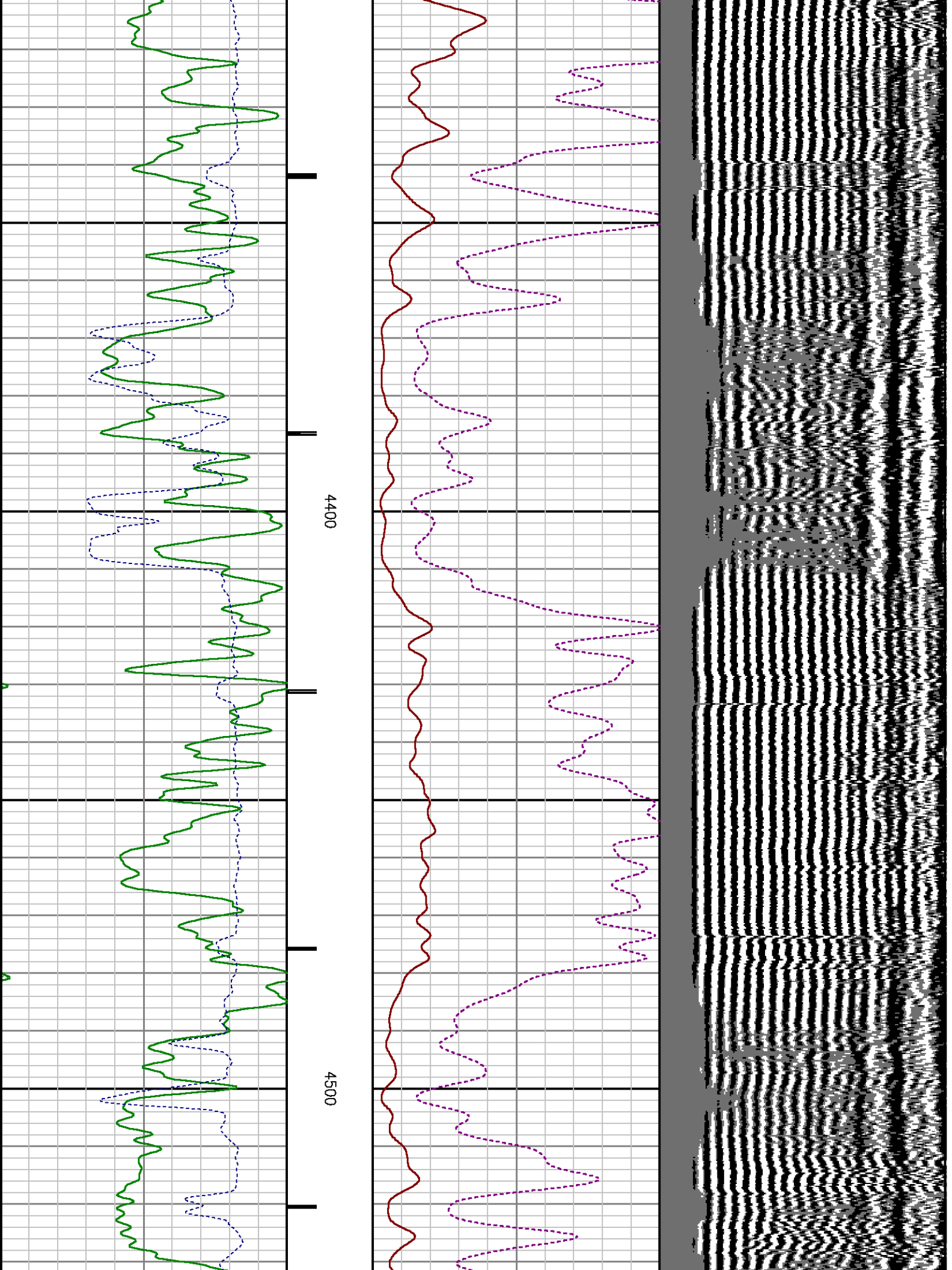


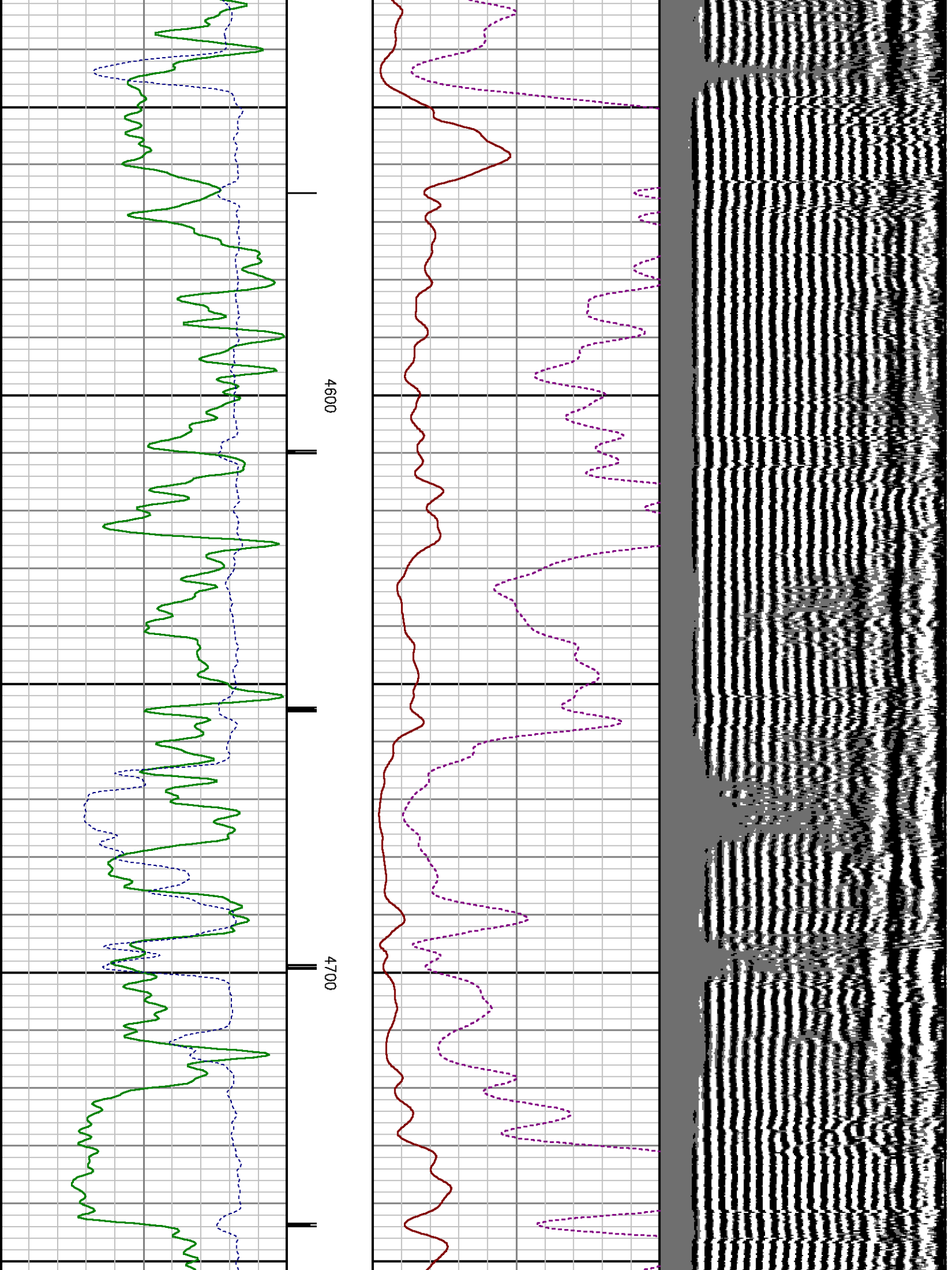




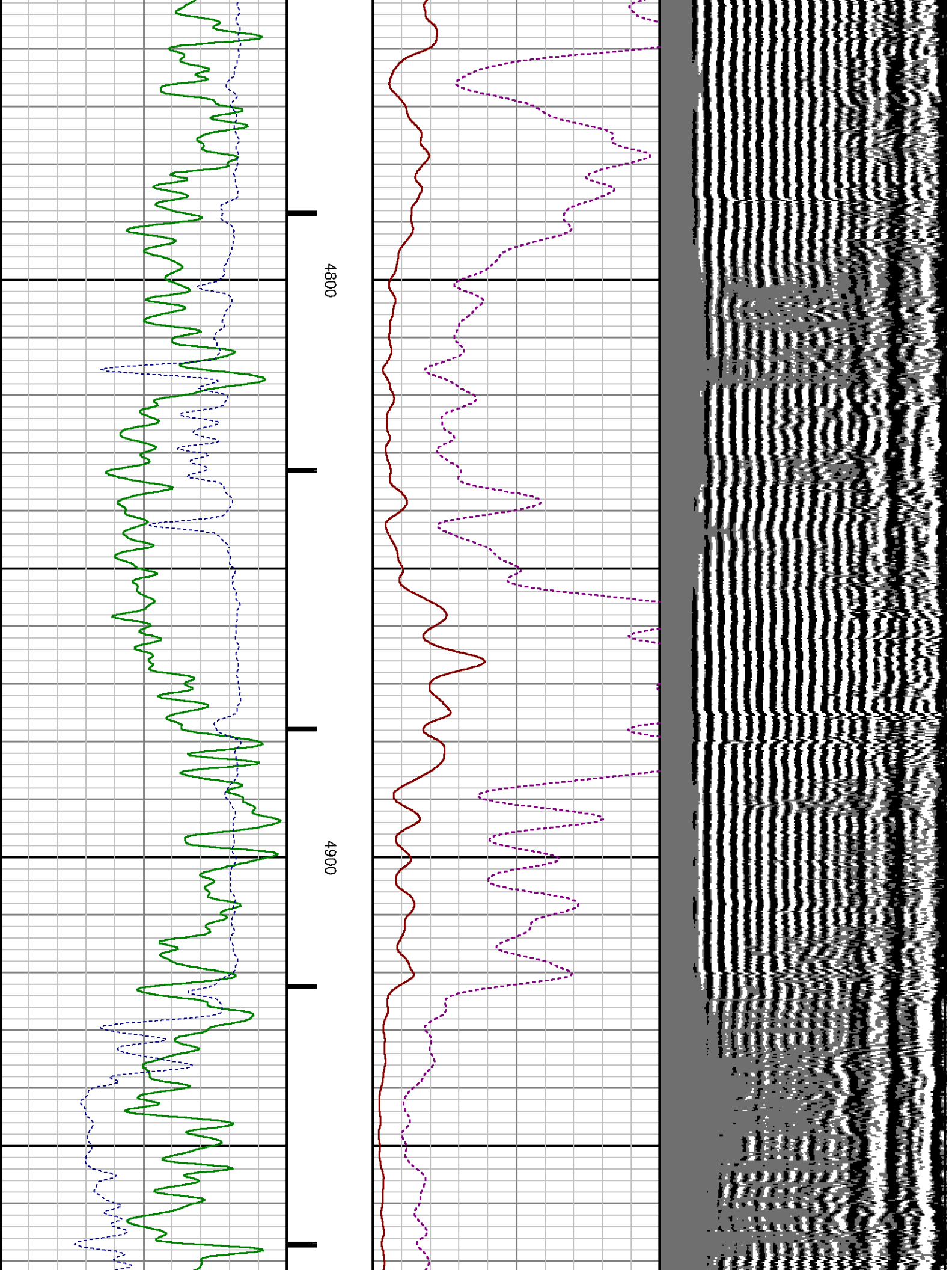


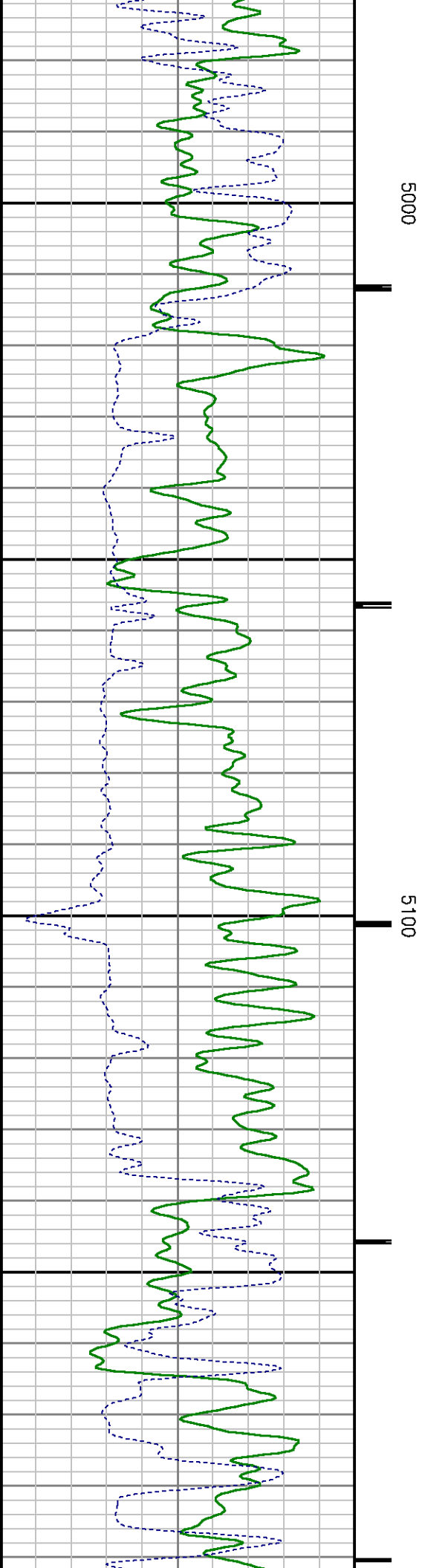
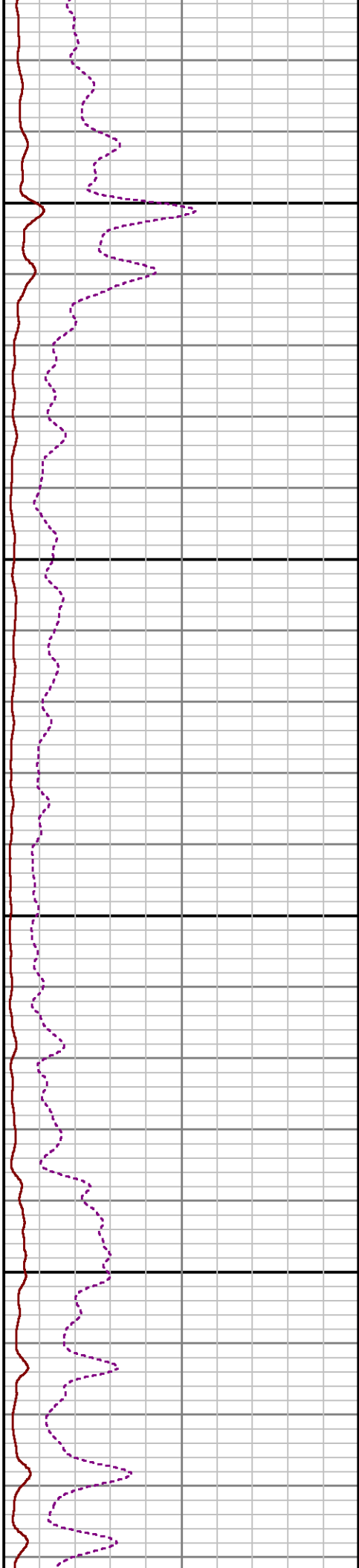
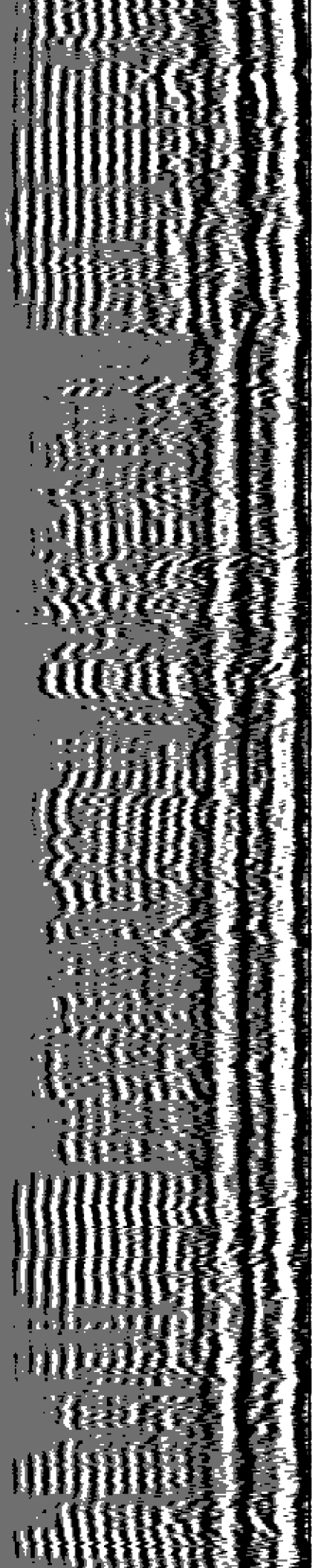


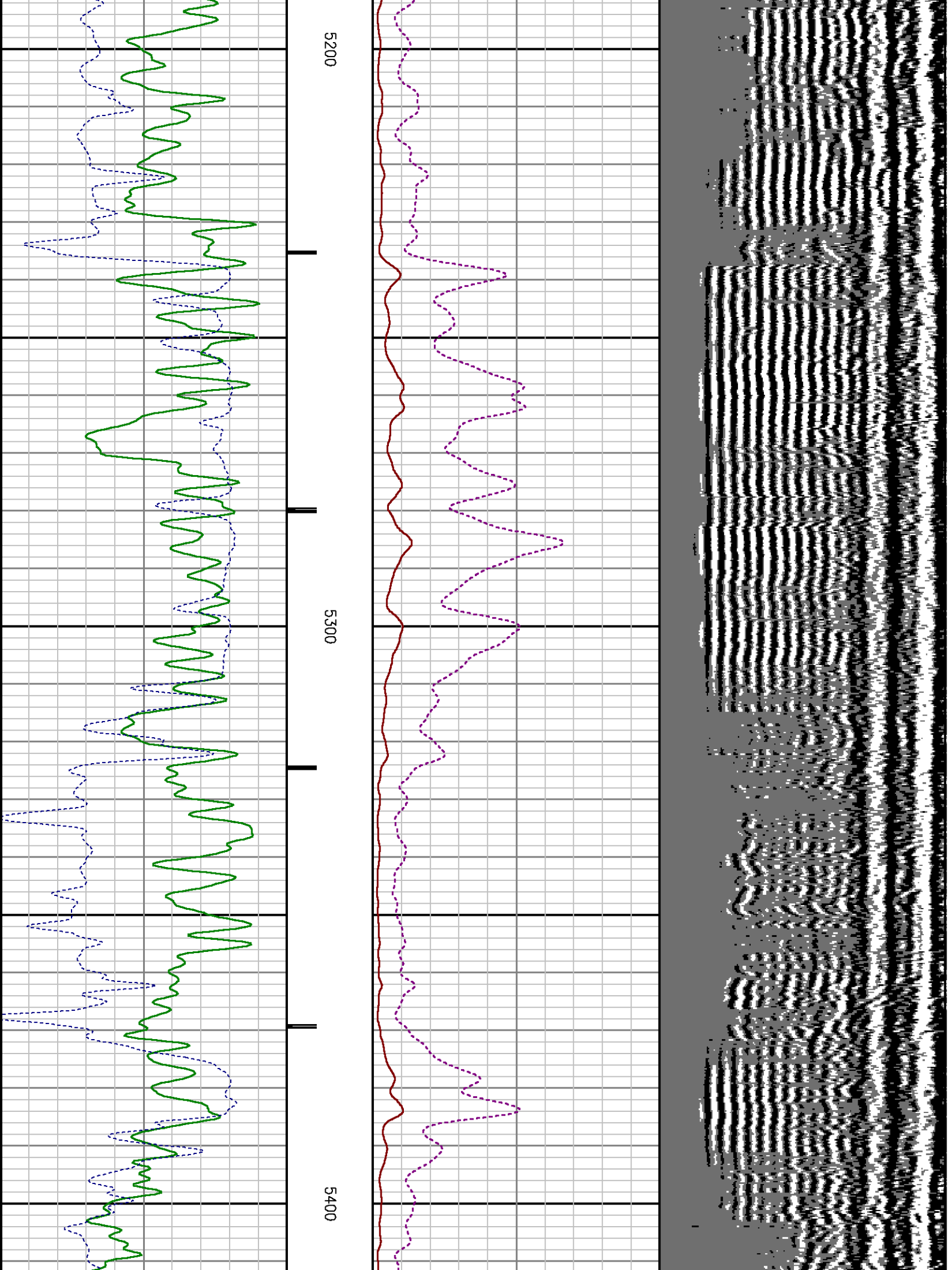


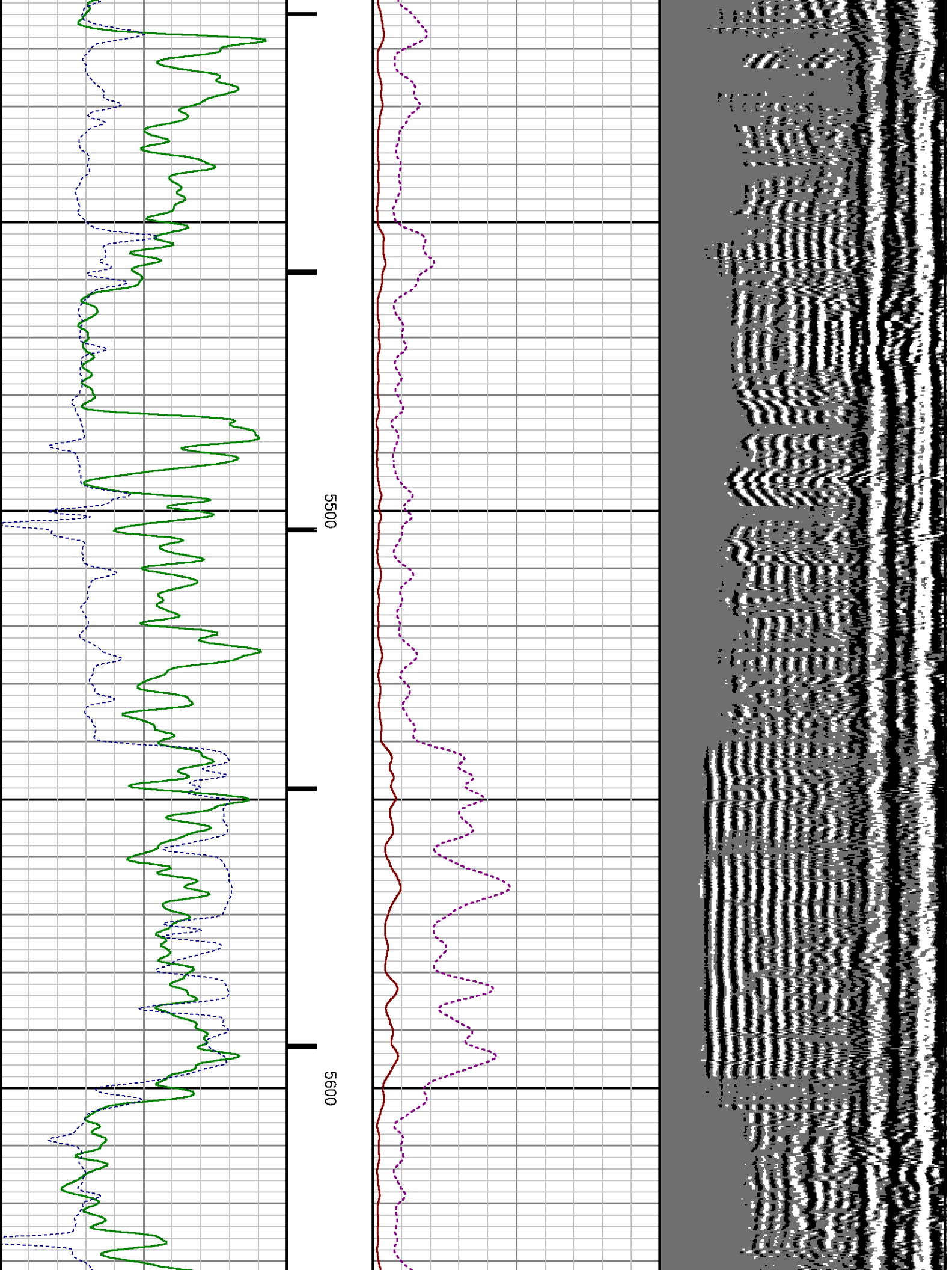


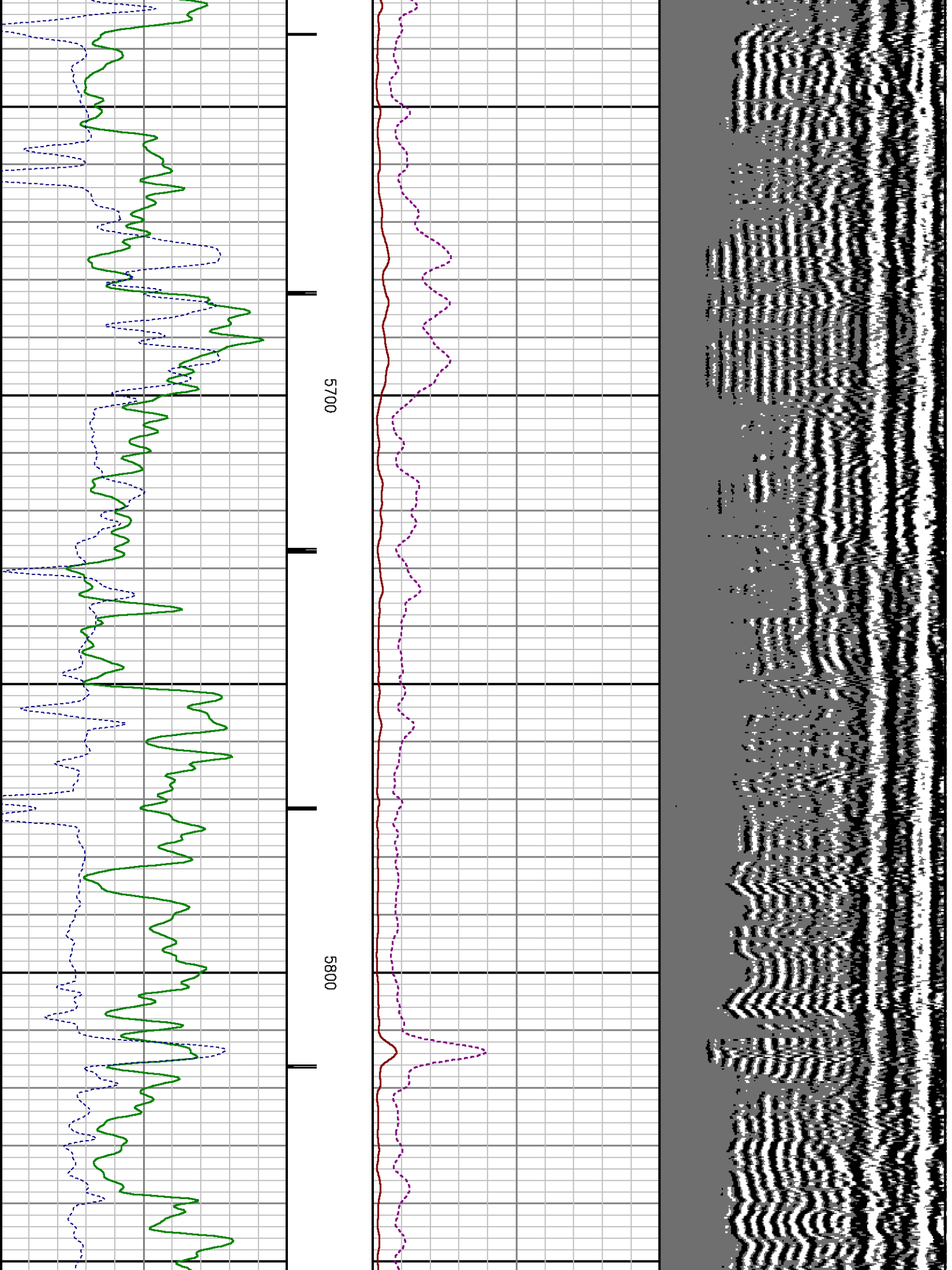




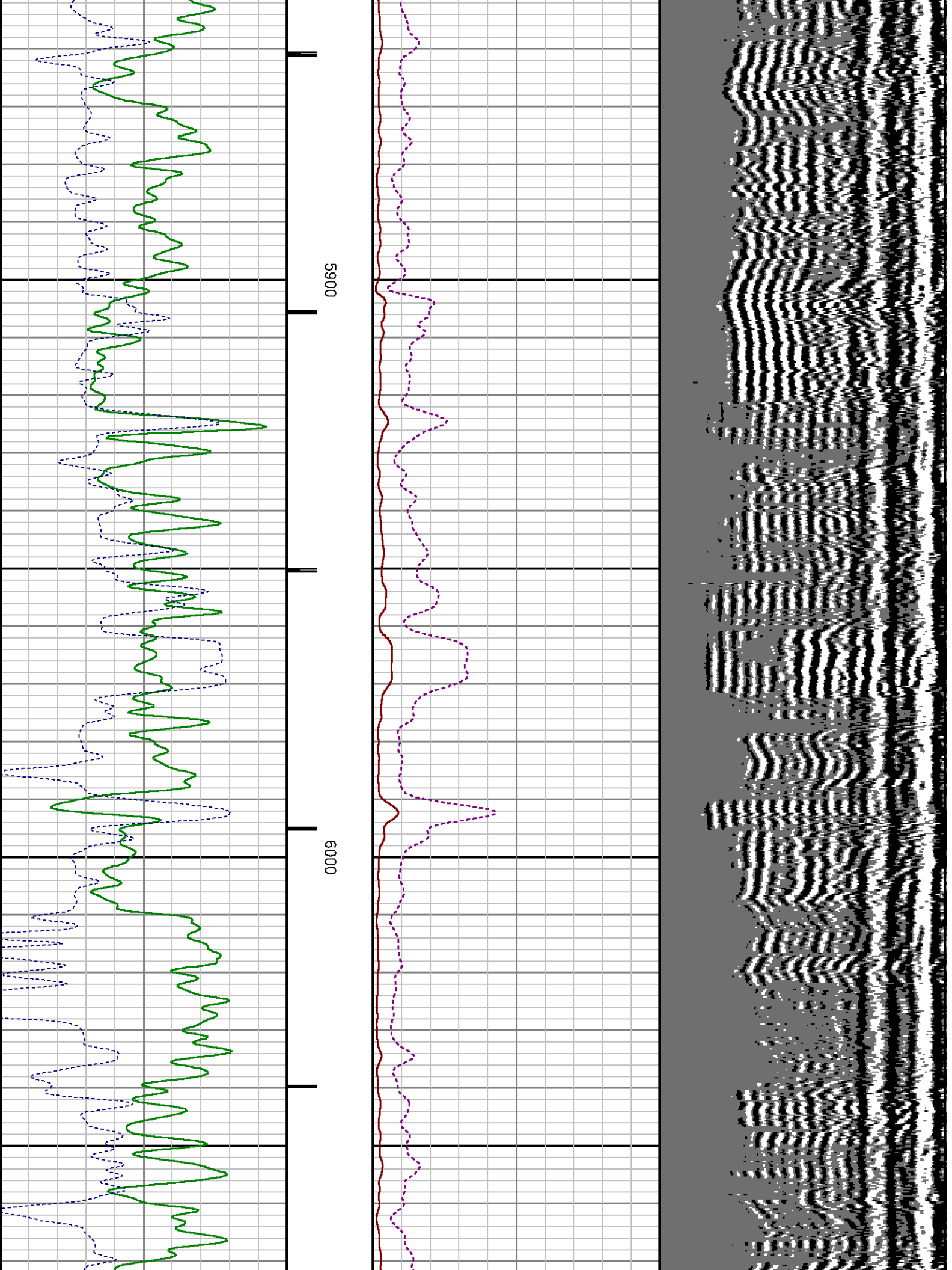


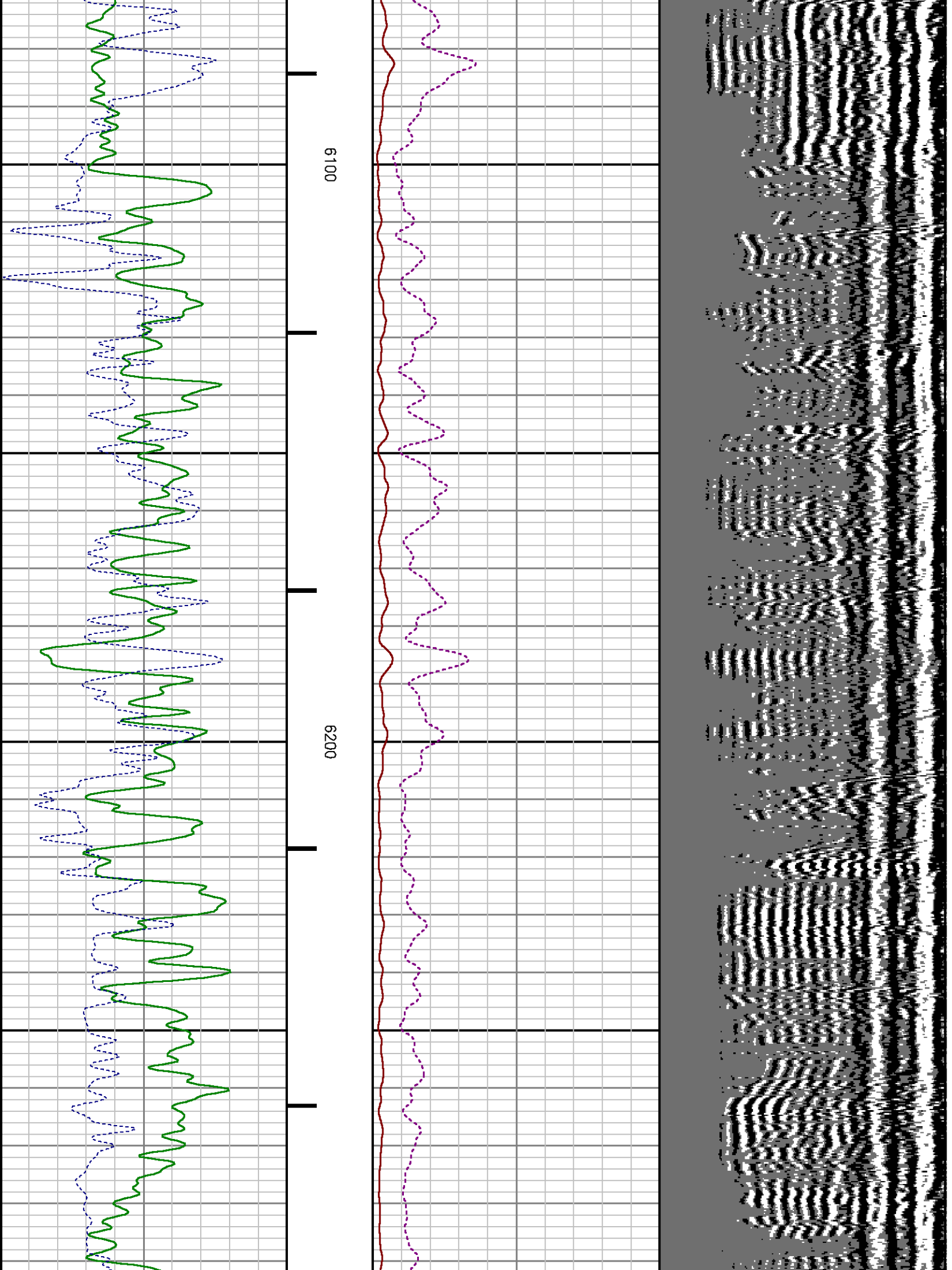


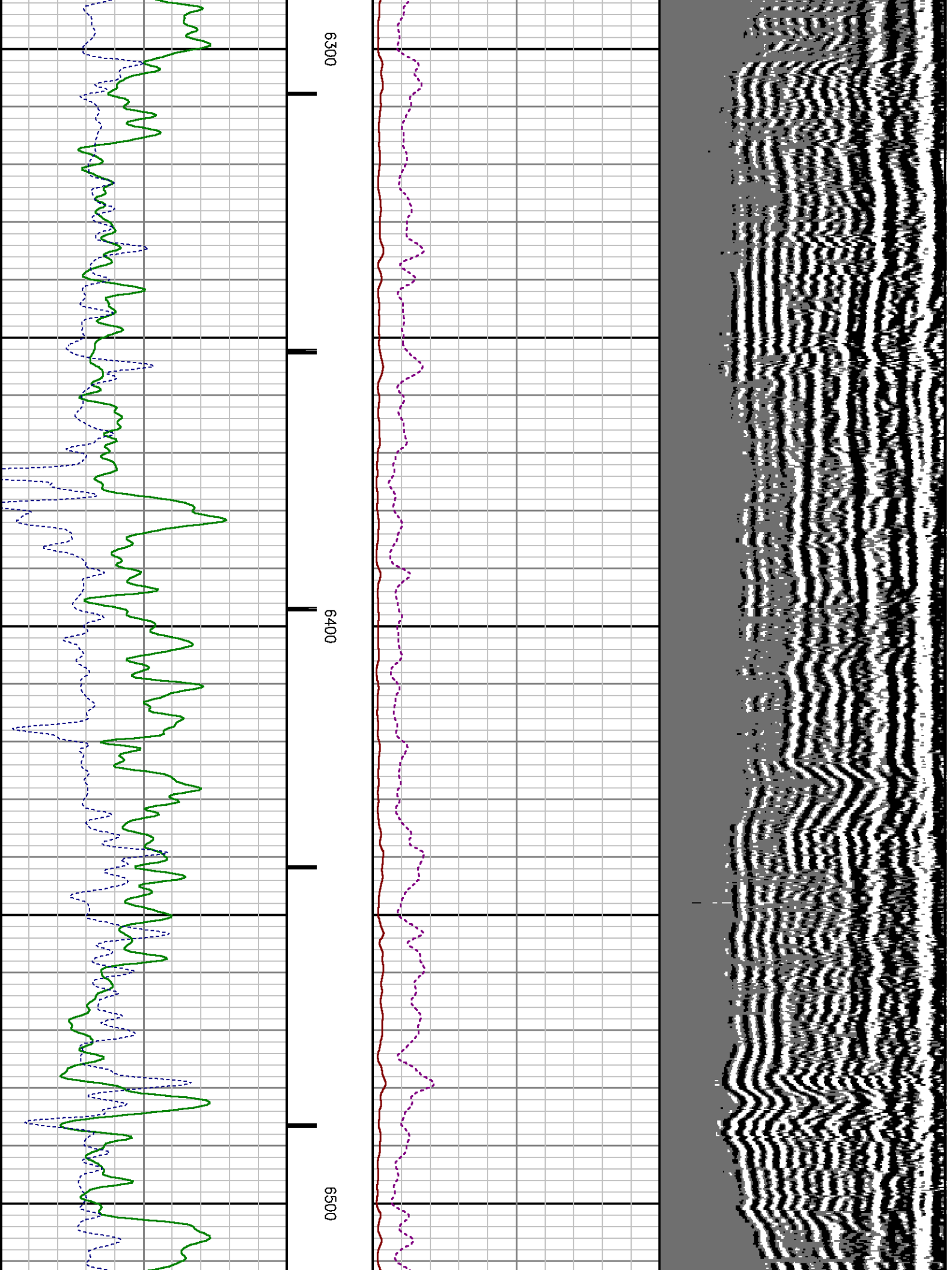




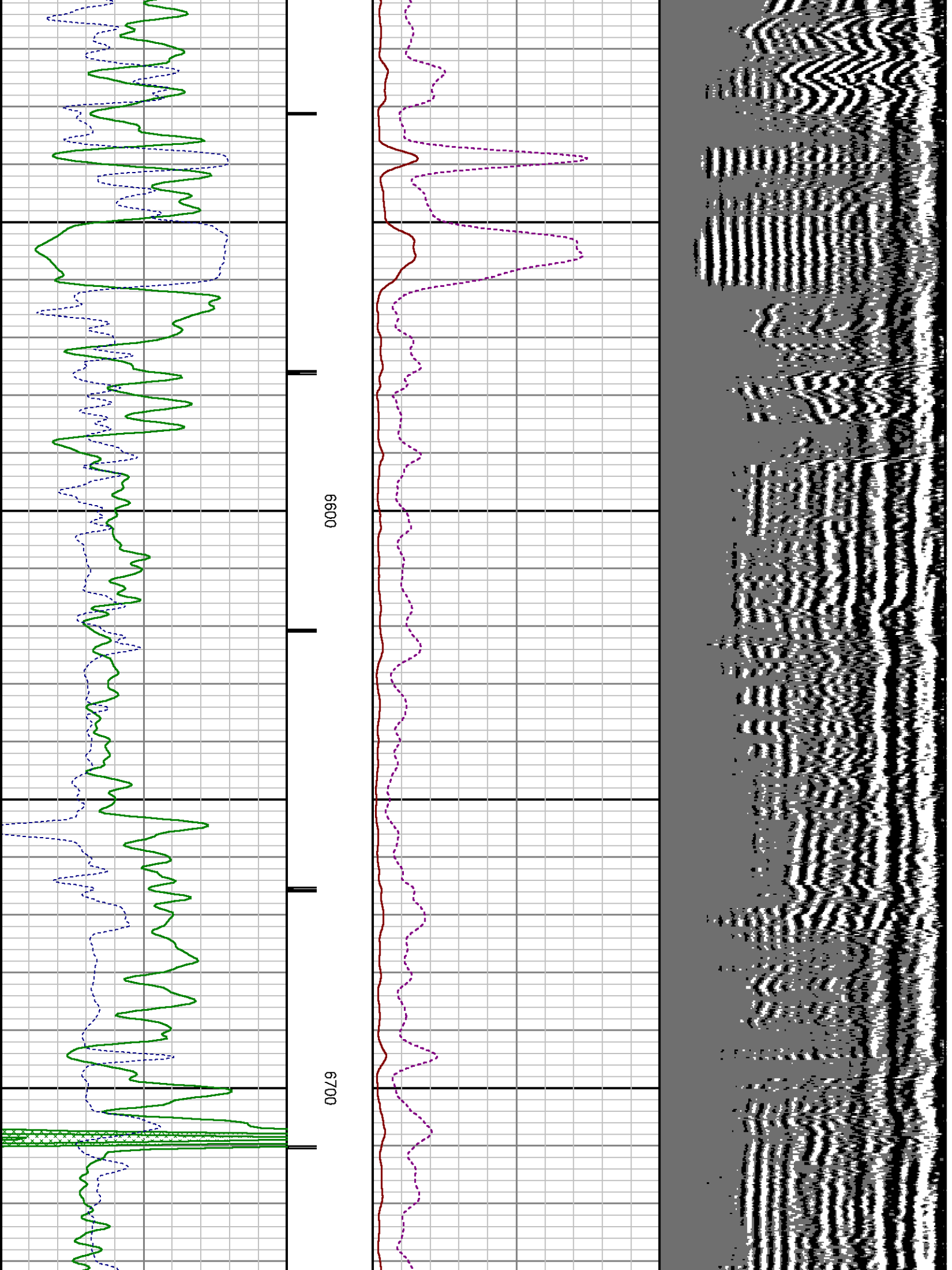


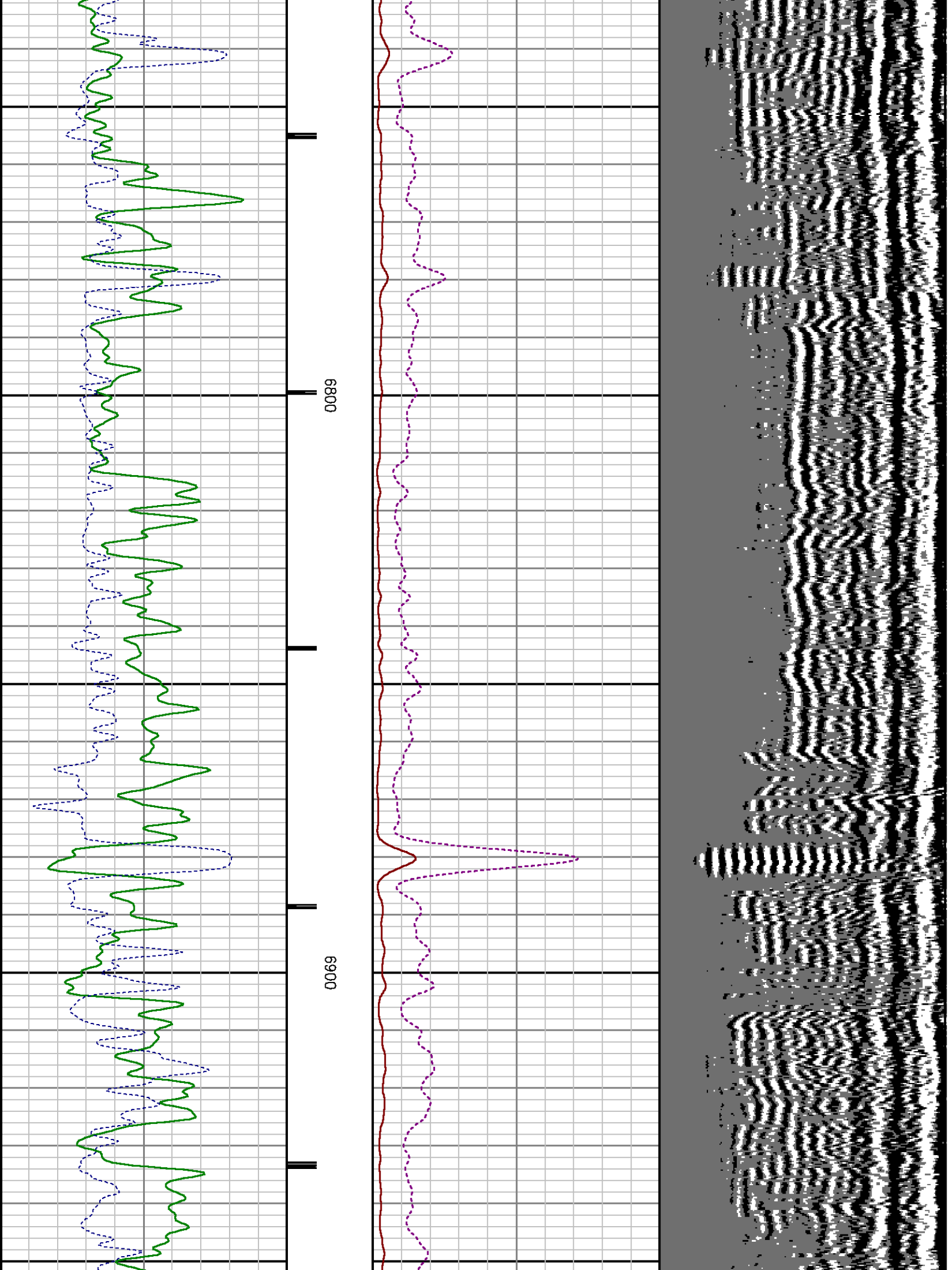


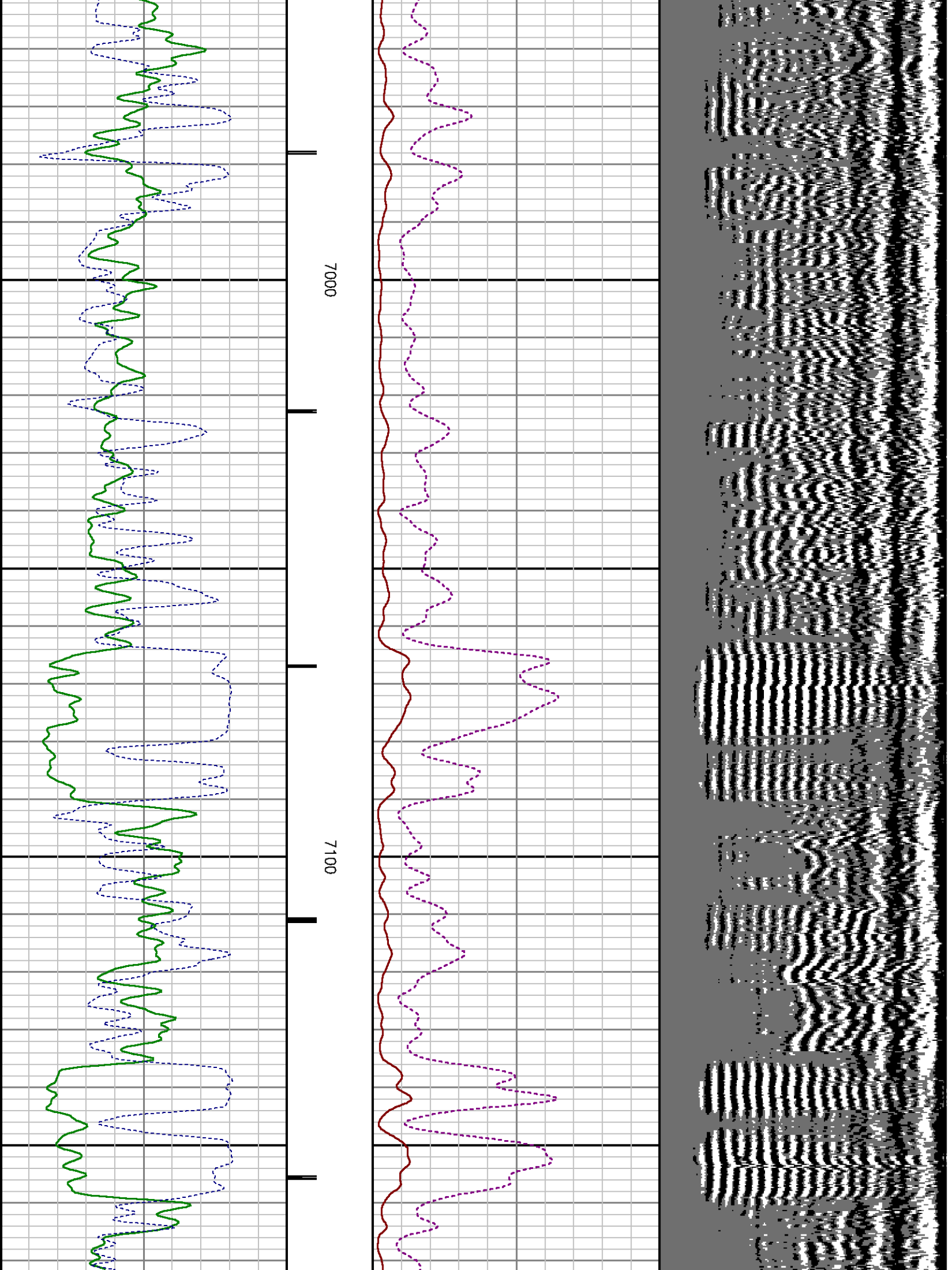


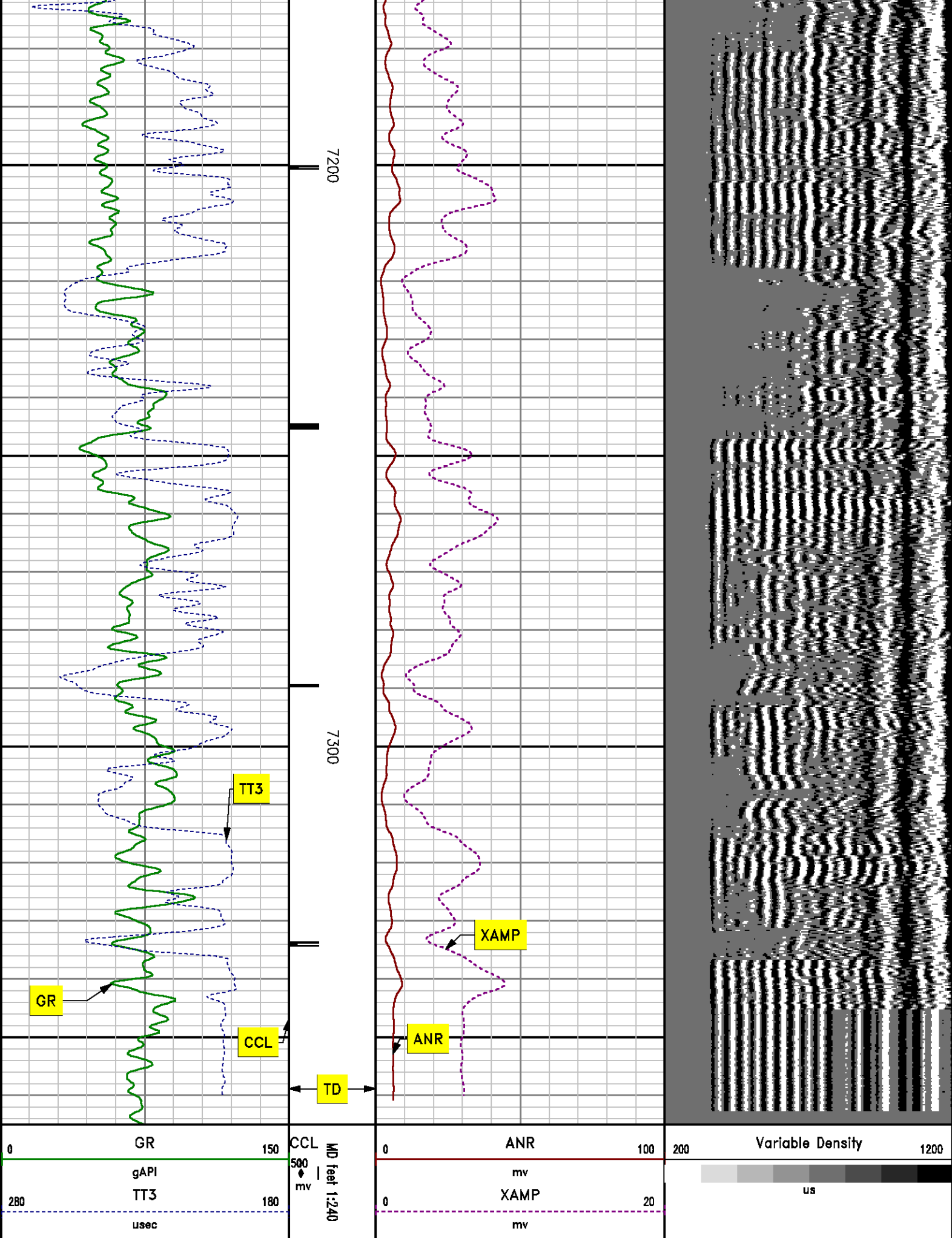












# ***SECONDARY PRESENTATION***

## ***0 PSI***

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	36.750	7378.000
RAL	Amp Gate Start Near	200.000	usec	36.750	7378.000
RAL	Amp Gate Start Radial	200.000	usec	36.750	7378.000
RAL	Amp Gate Width Far	25.000	usec	36.750	7378.000
RAL	Amp Gate Width Near	25.000	usec	36.750	7378.000
RAL	Amp Gate Width Radial	25.000	usec	36.750	7378.000
RAL	casing od	4.500	inches	36.750	7378.000
RAL	casing wt	11.600	lbm/ft	36.750	7378.000
RAL	FB Start Far	291.900	usec	36.750	7378.000
RAL	FB Start Near	175.391	usec	36.750	7378.000
RAL	FB Start Radial	175.391	usec	36.750	7378.000
RAL	FB Thresh Far	10.000	mv	36.750	7378.000
RAL	FB Thresh Near	4.000	mv	36.750	7378.000
RAL	FB Thresh Radial	4.000	mv	36.750	7378.000
RAL	Fluid Travel Time	200.000	usec/ft	36.750	7378.000

### **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					

Company : WPX ENERGY

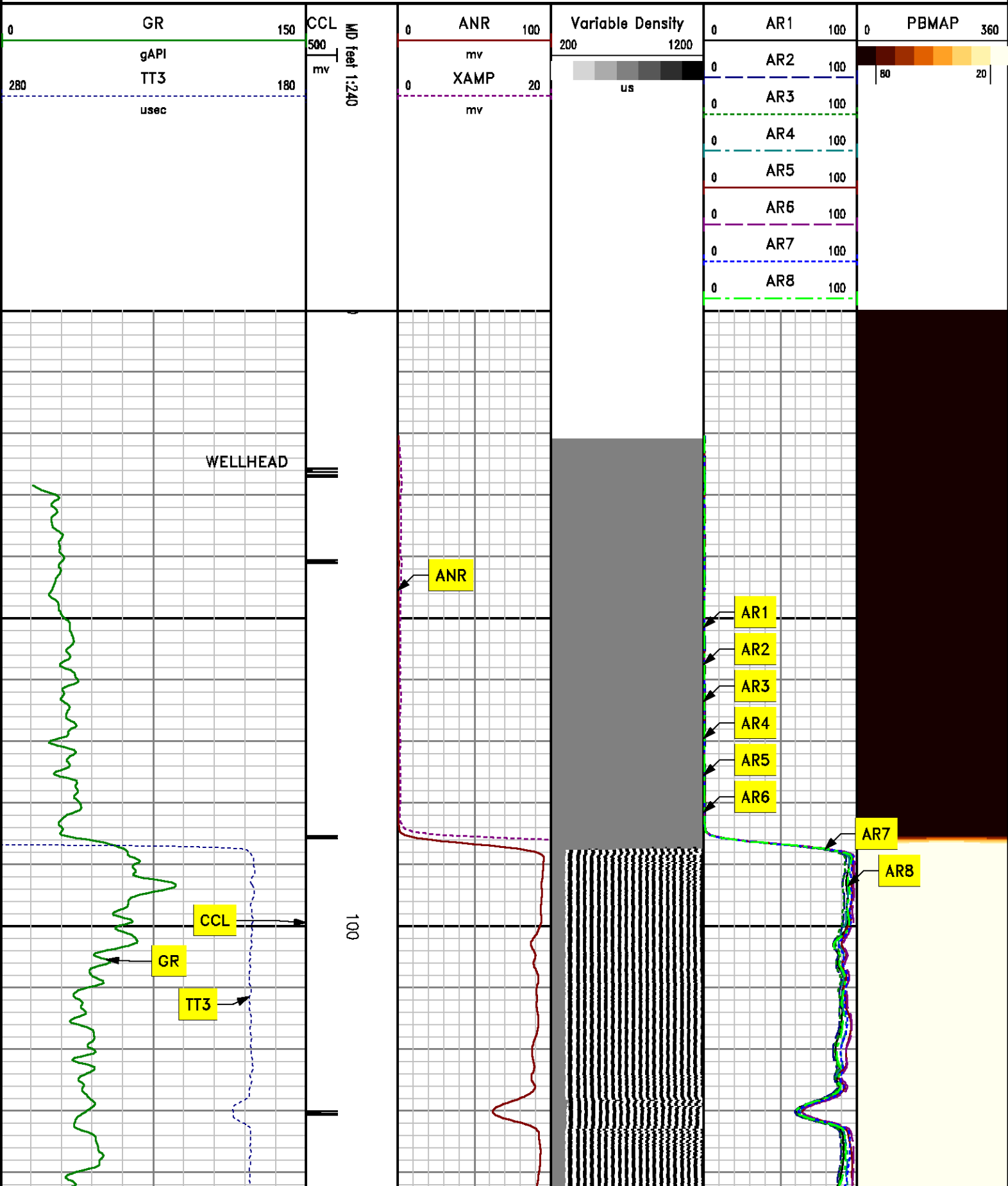
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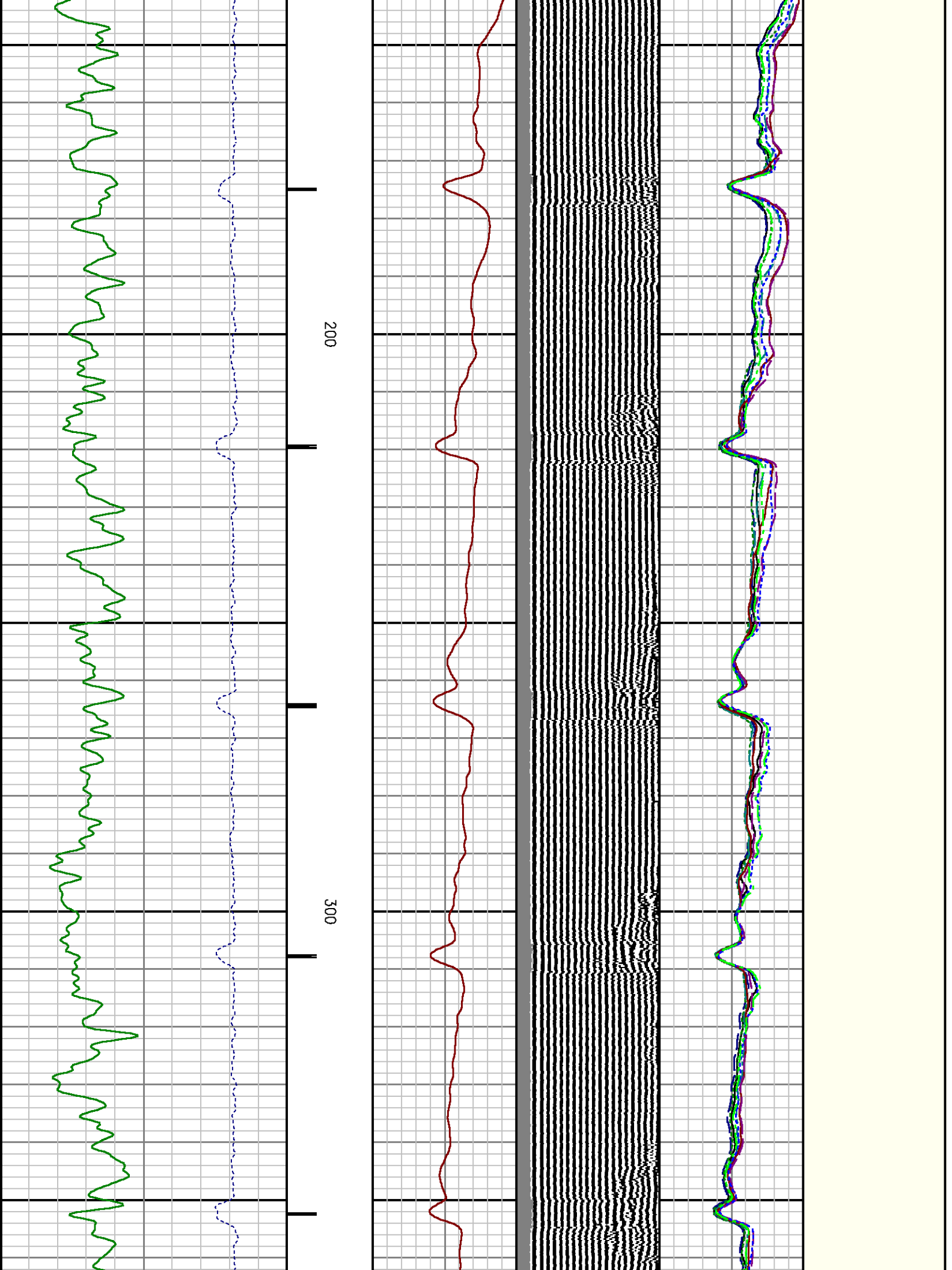
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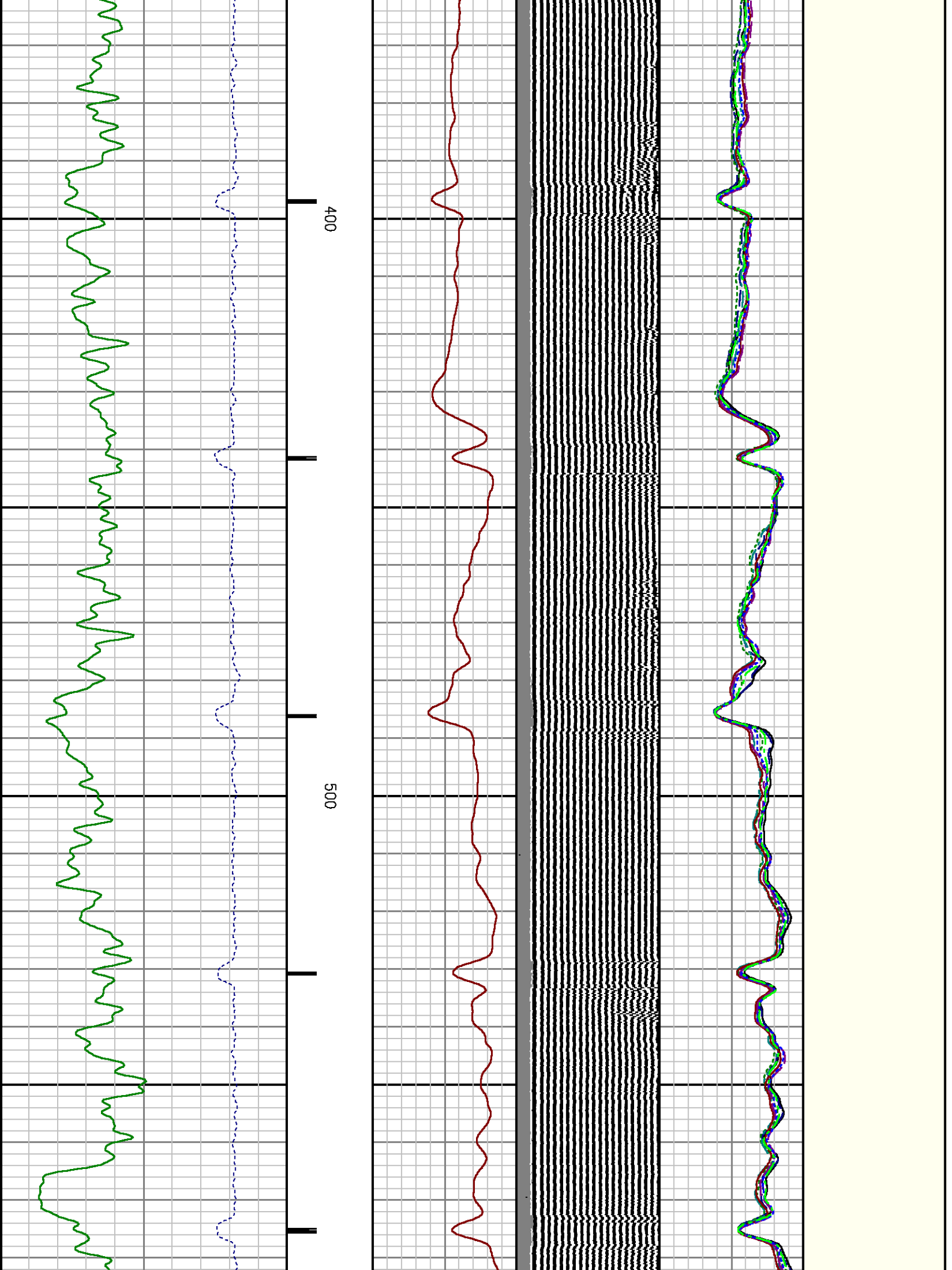
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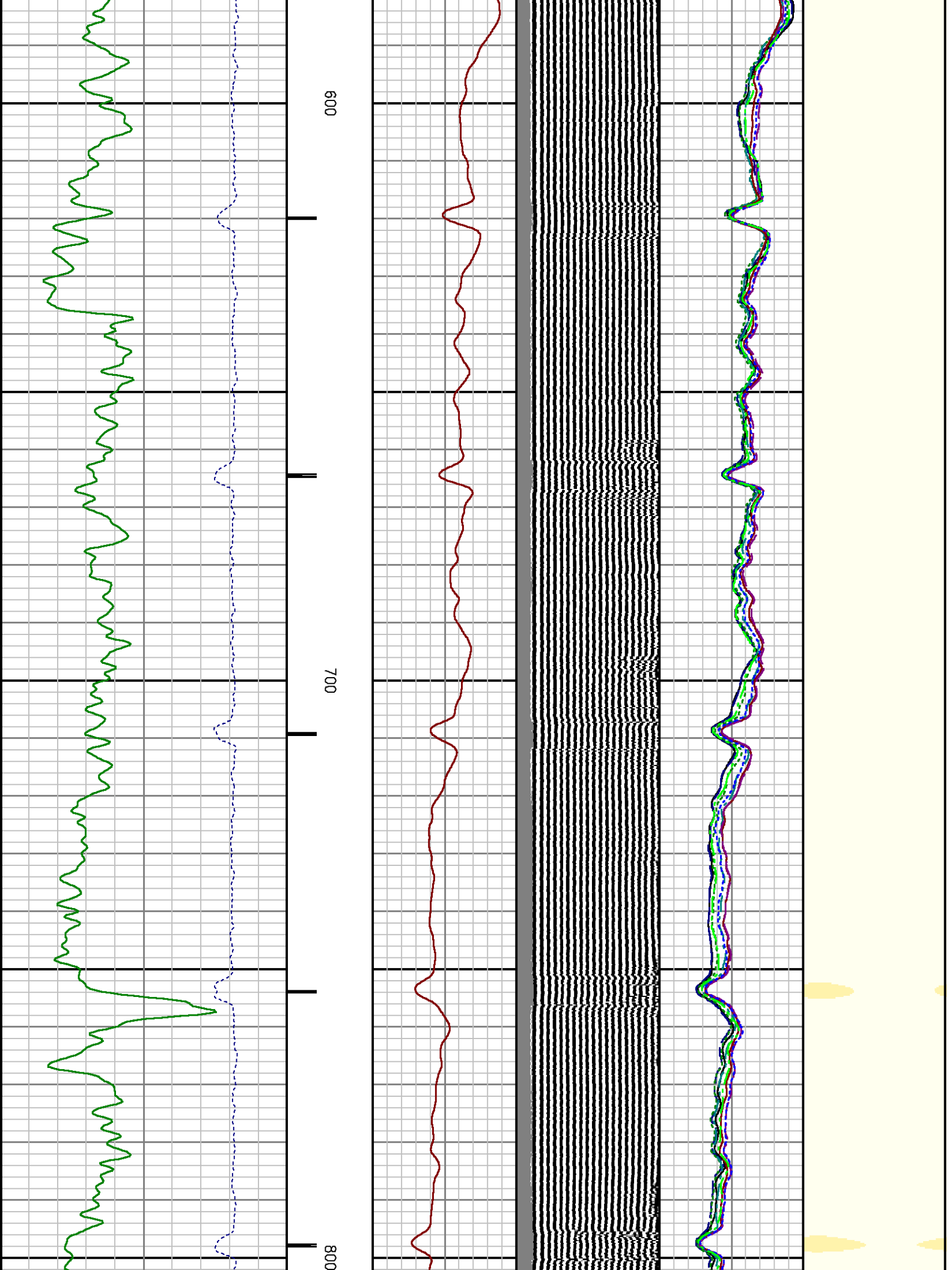


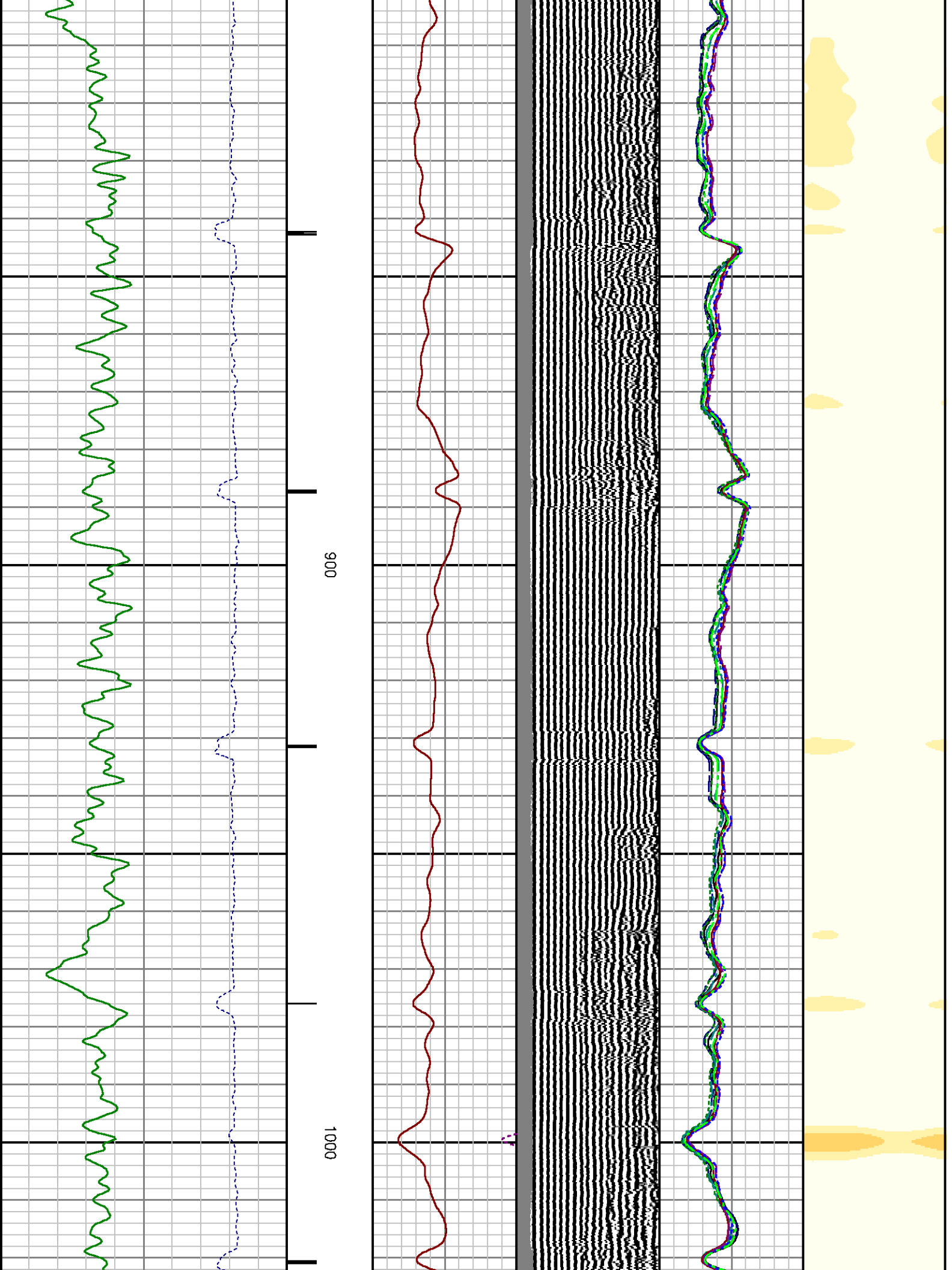


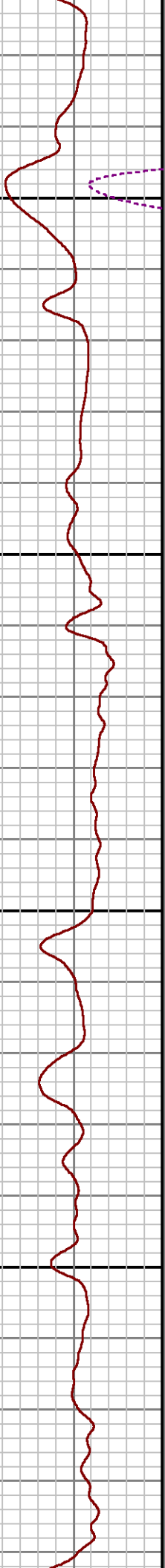
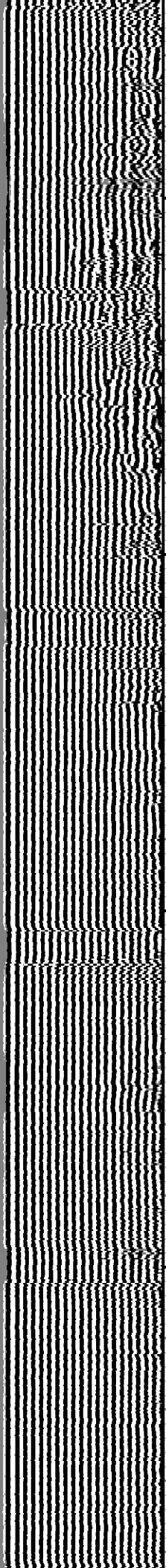
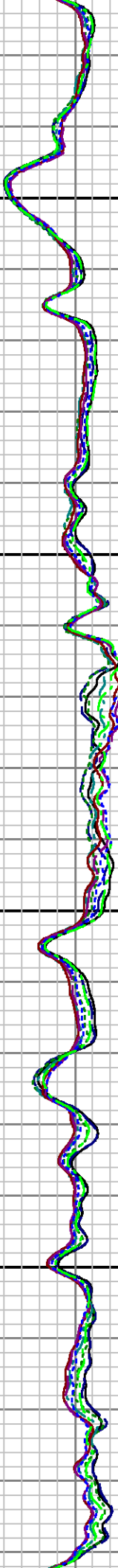






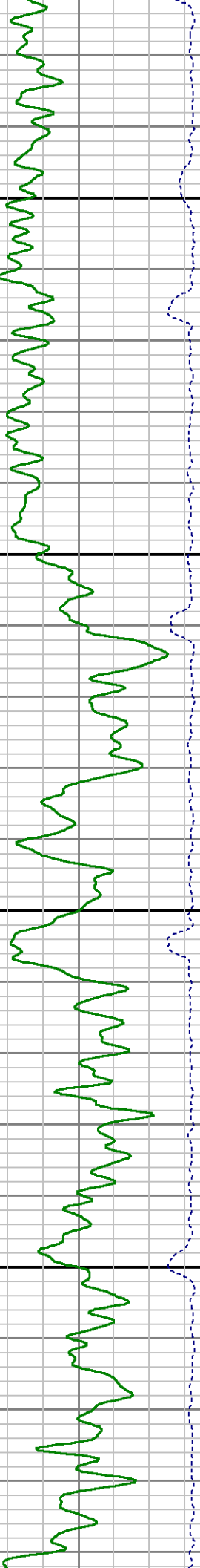


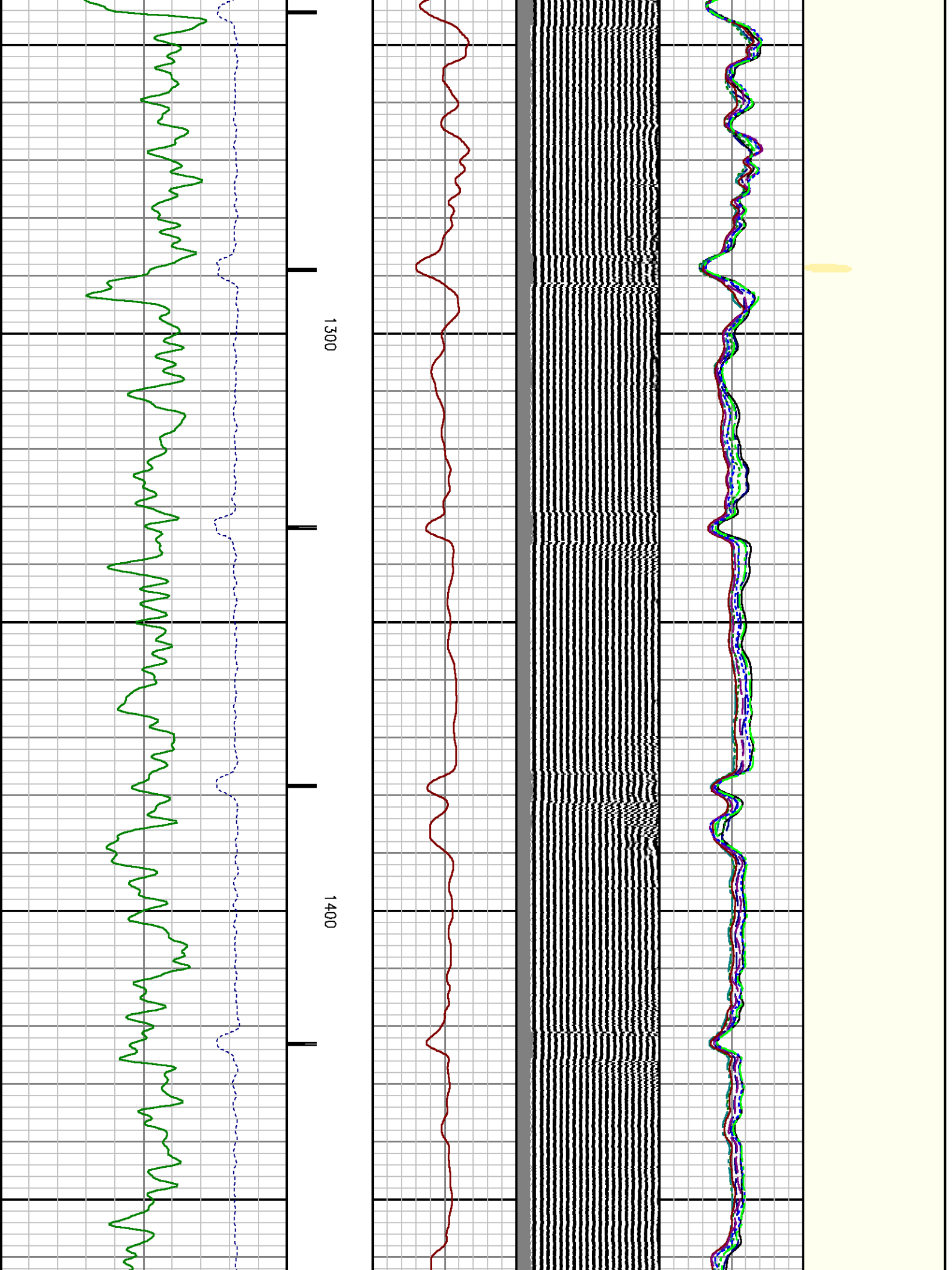


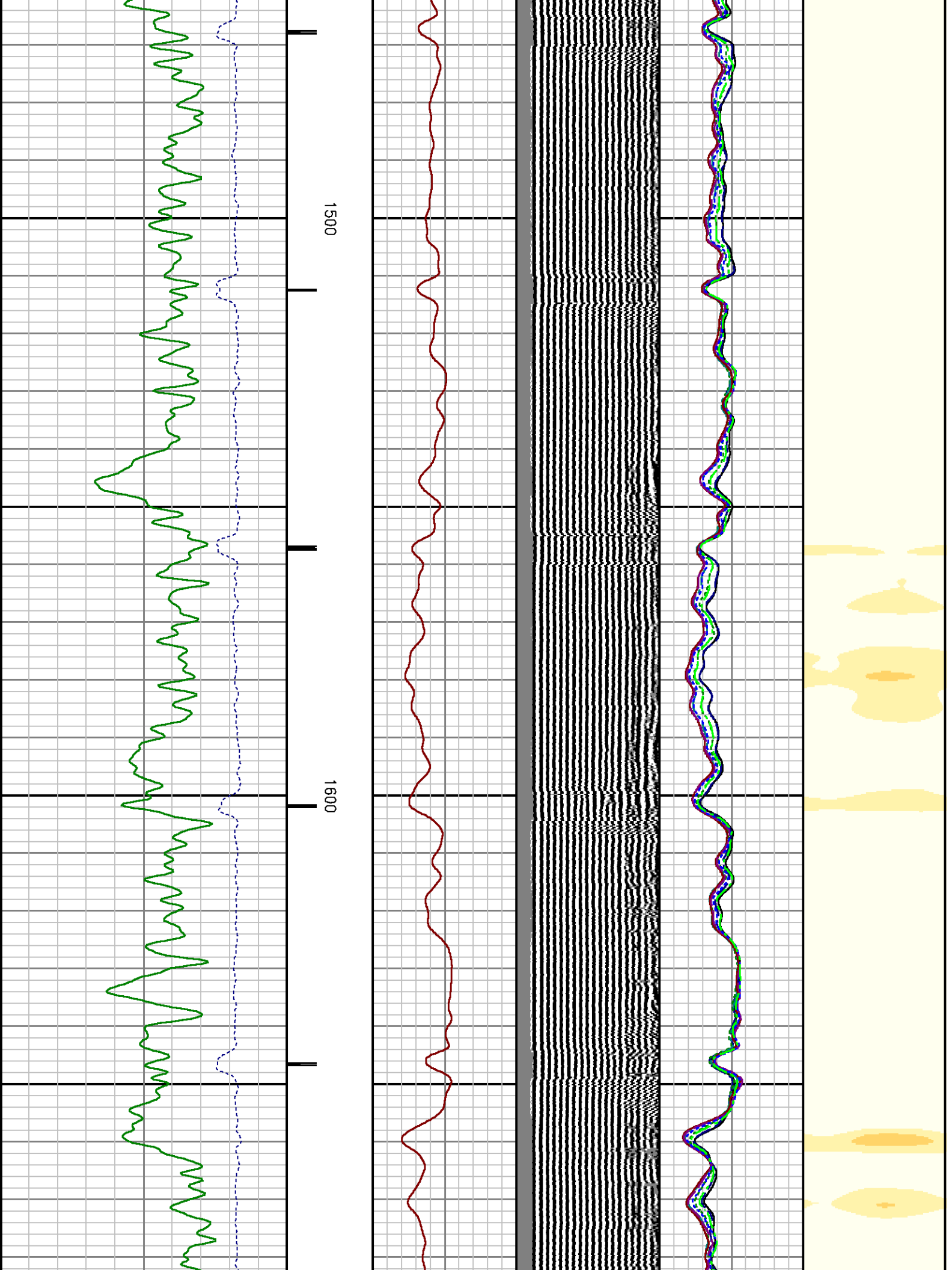


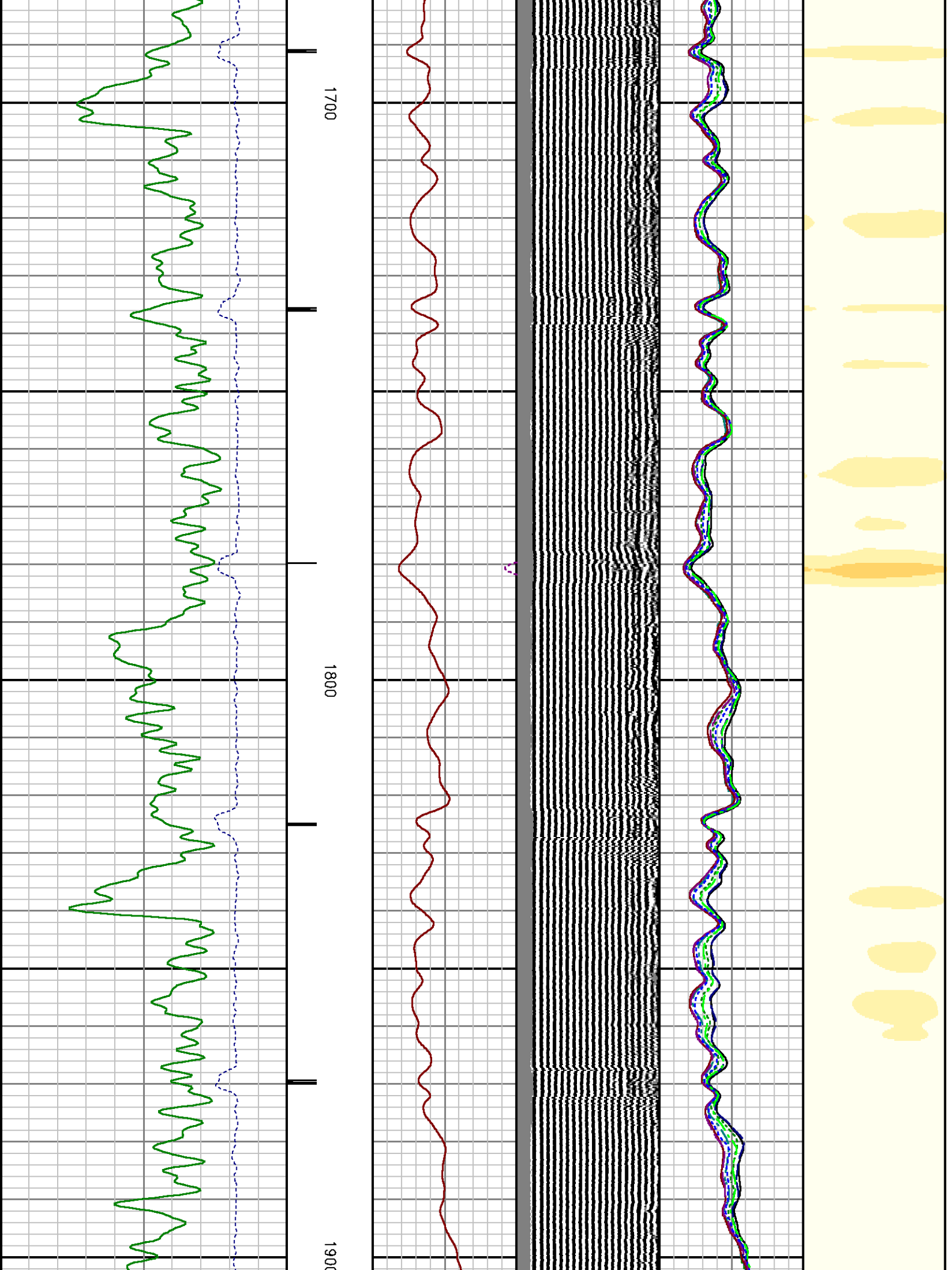
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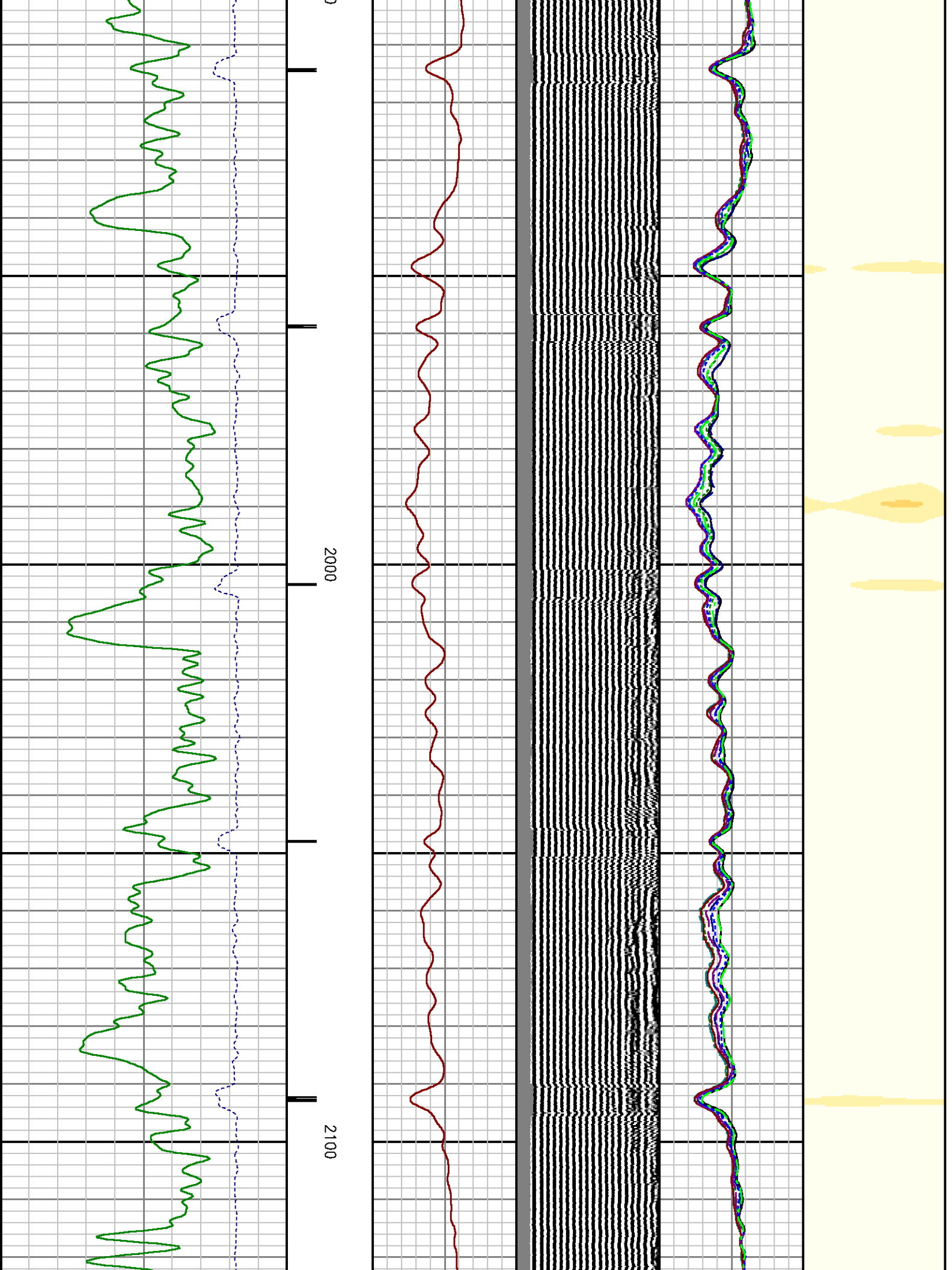


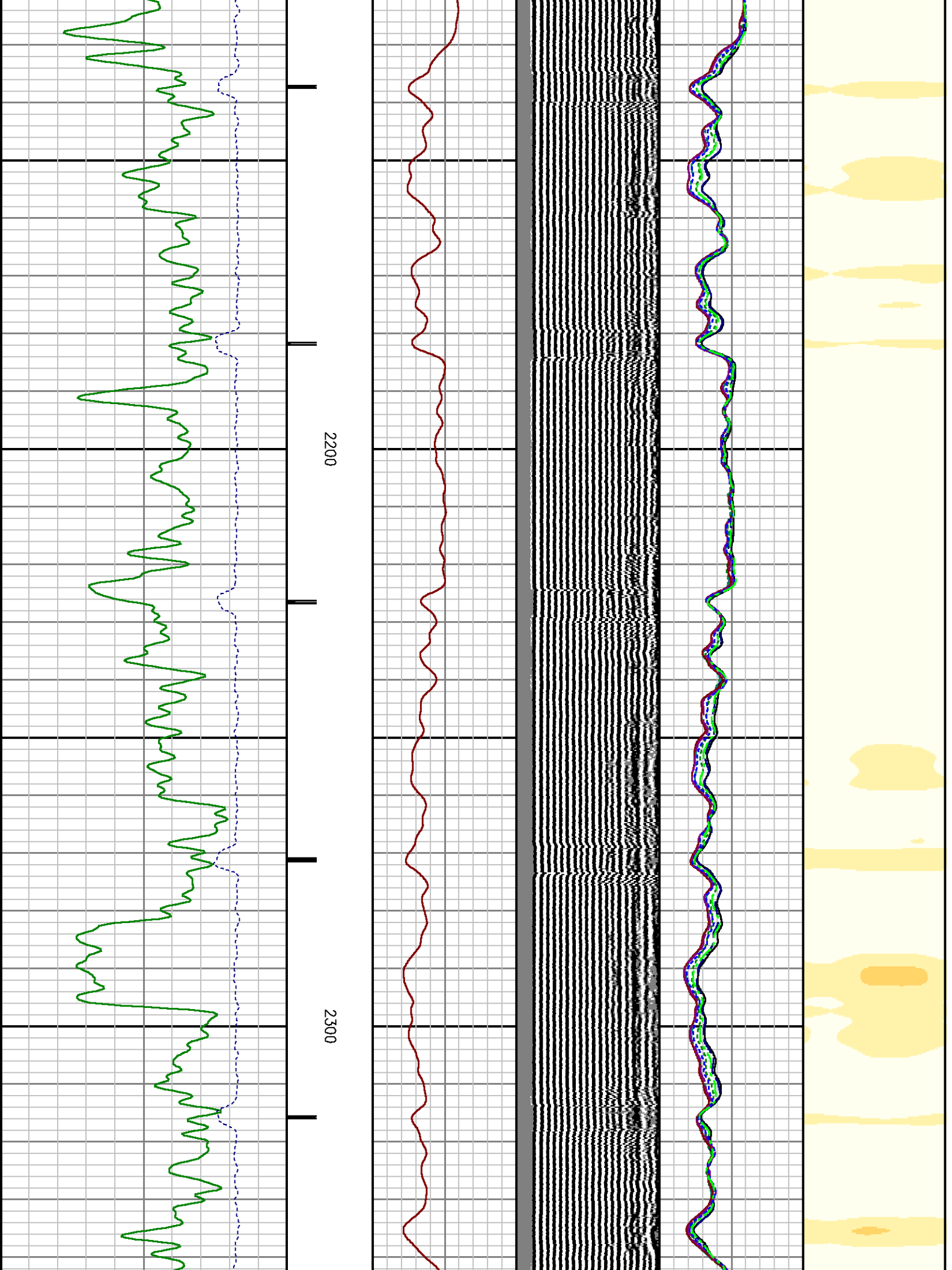


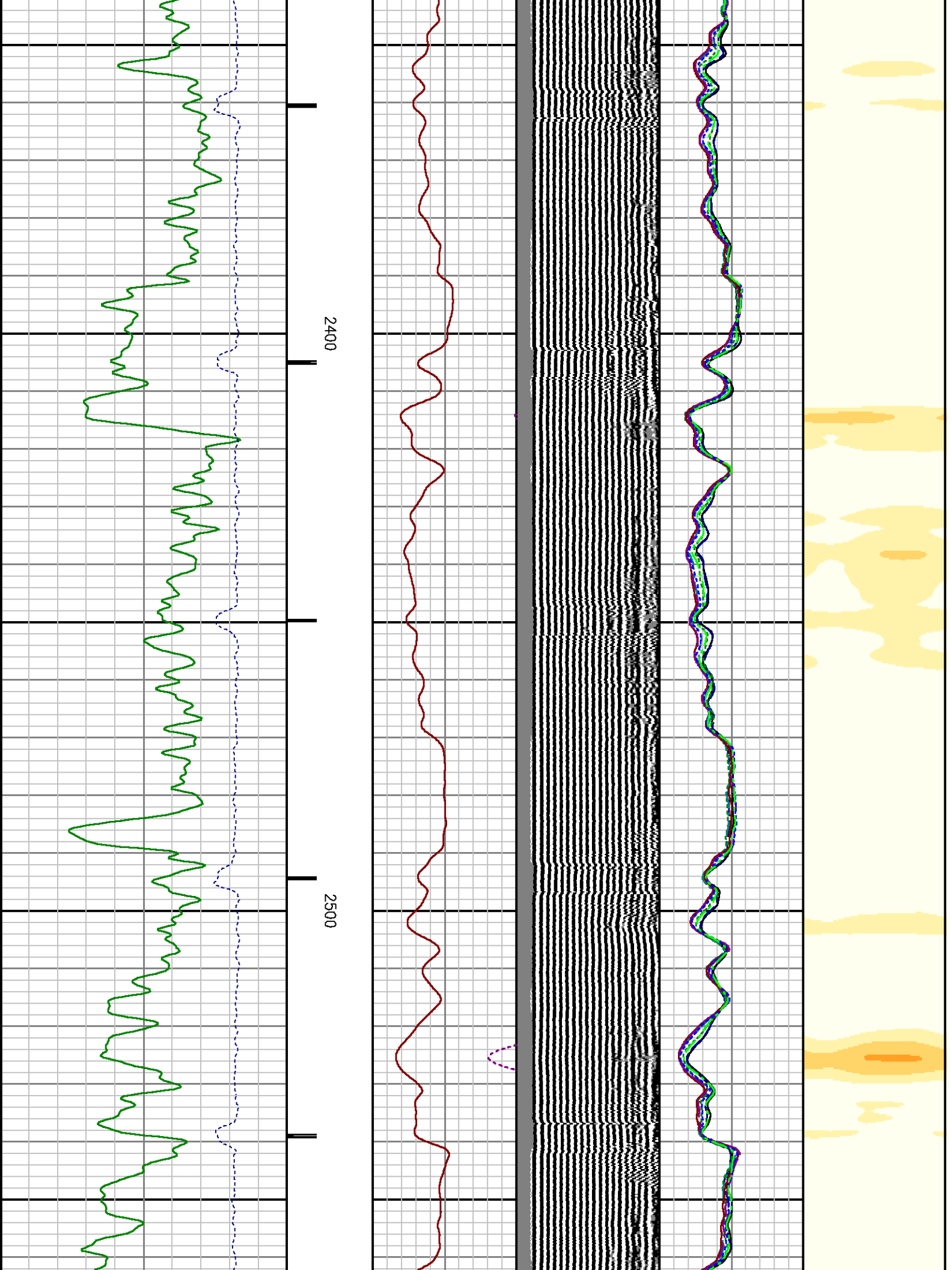


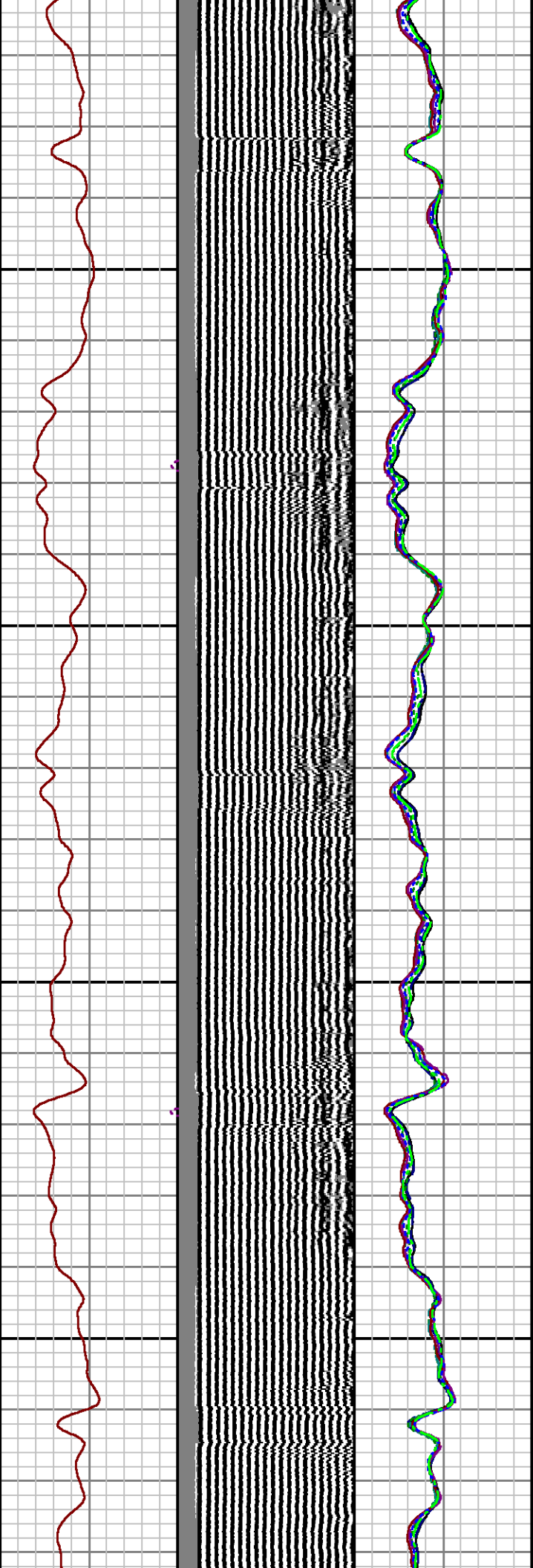
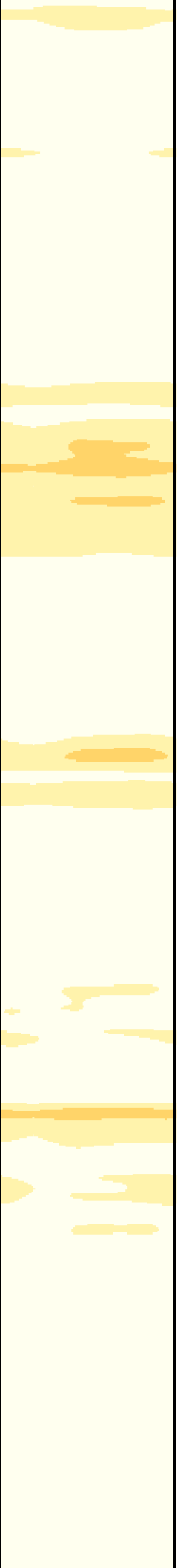






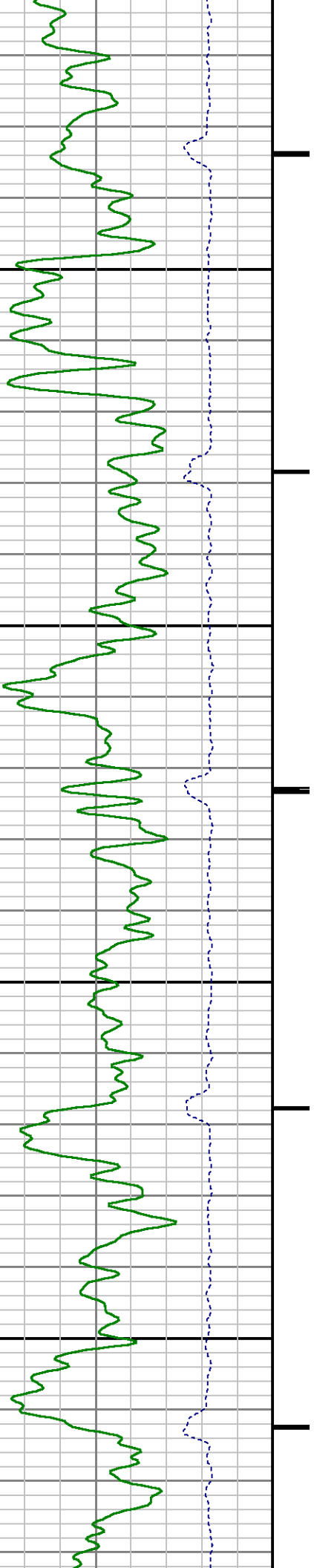


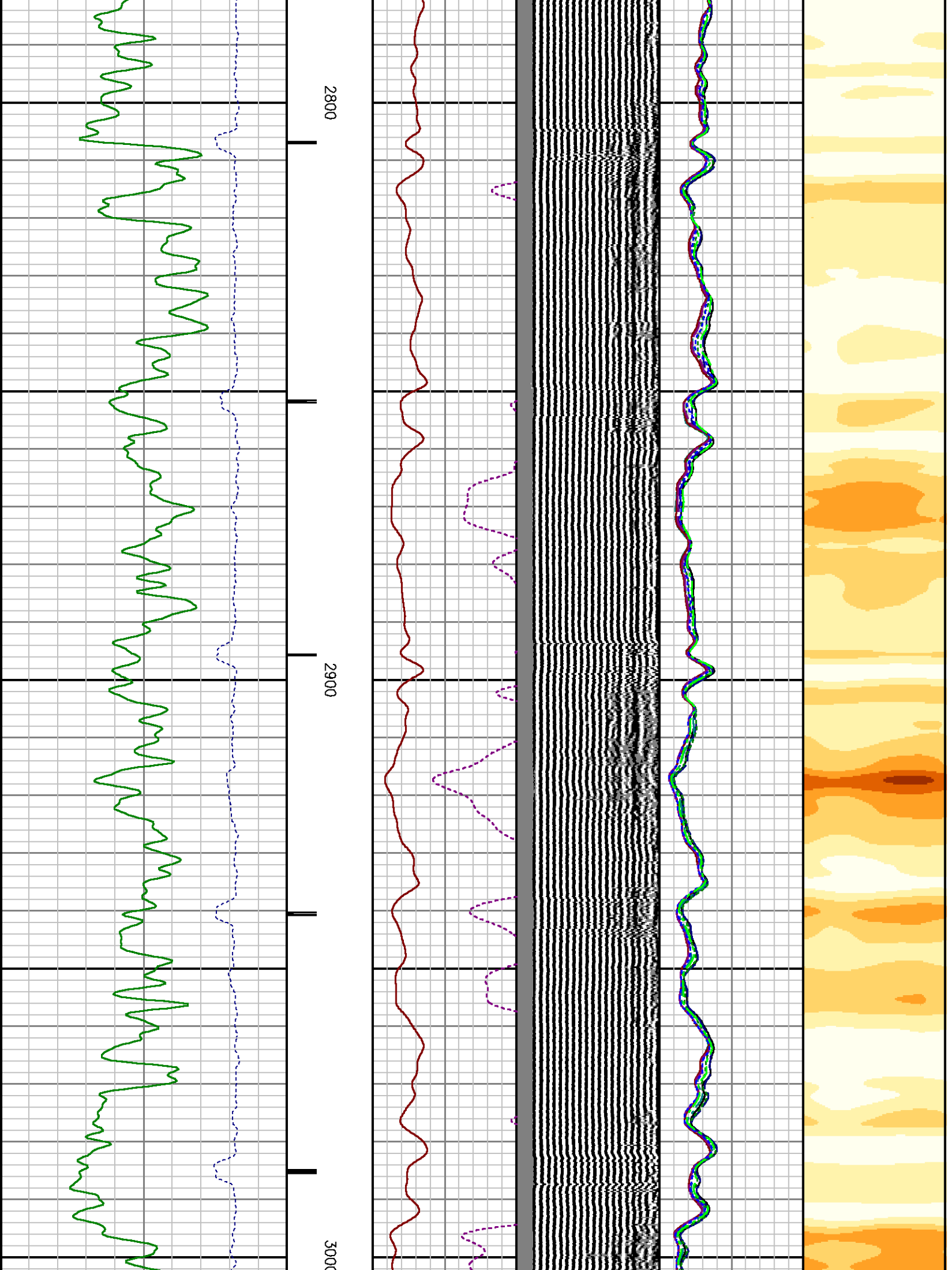


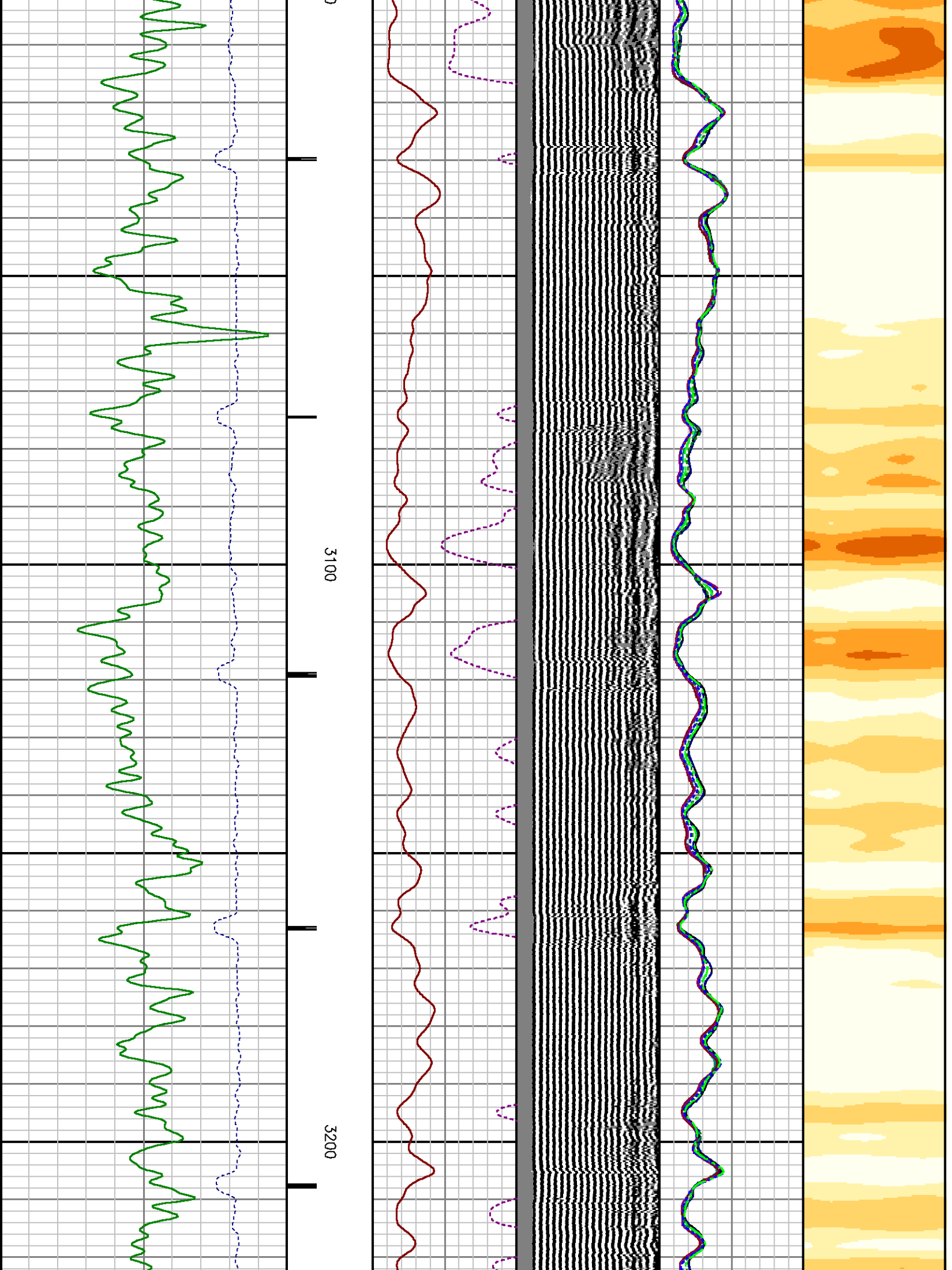


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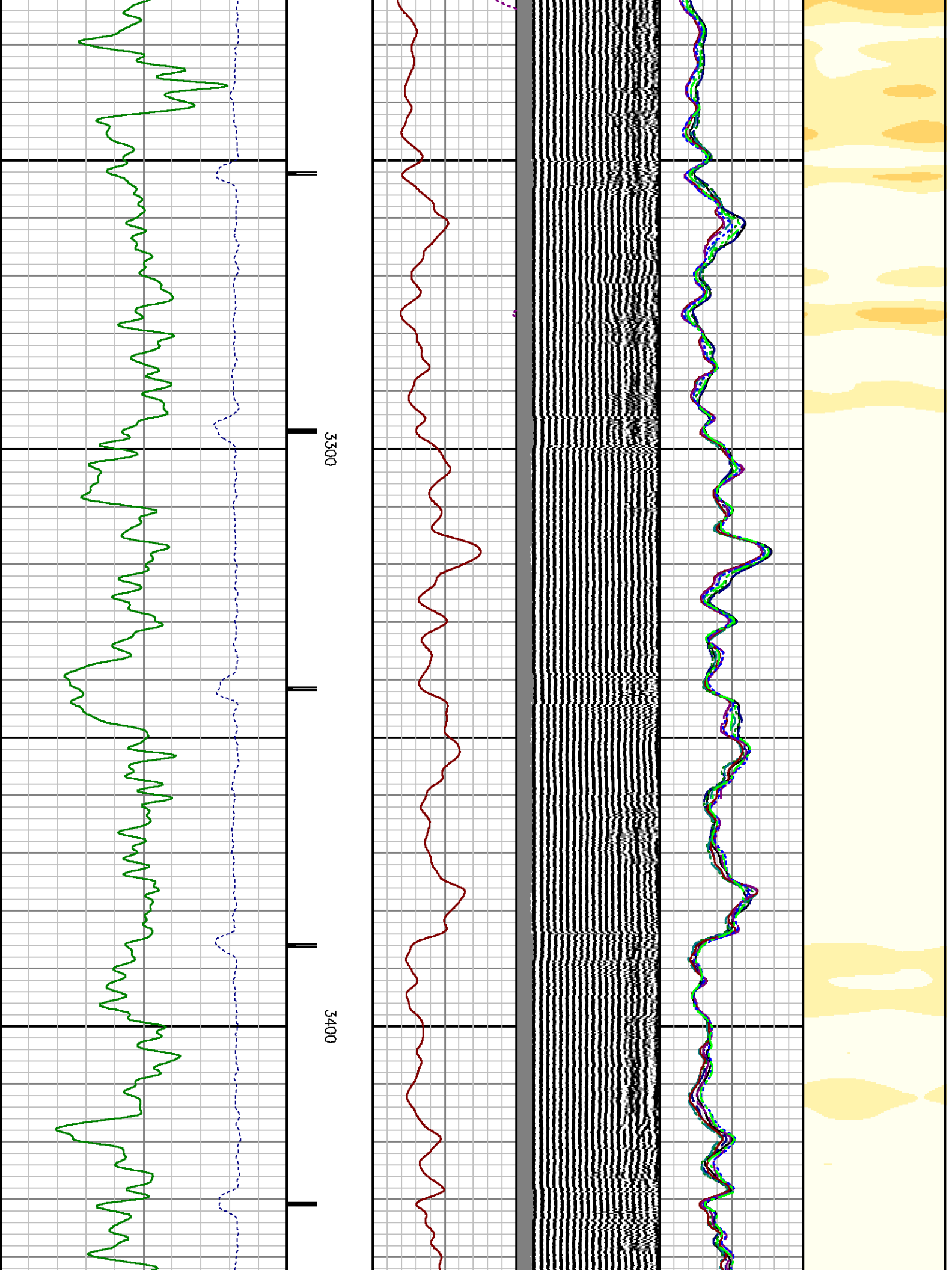
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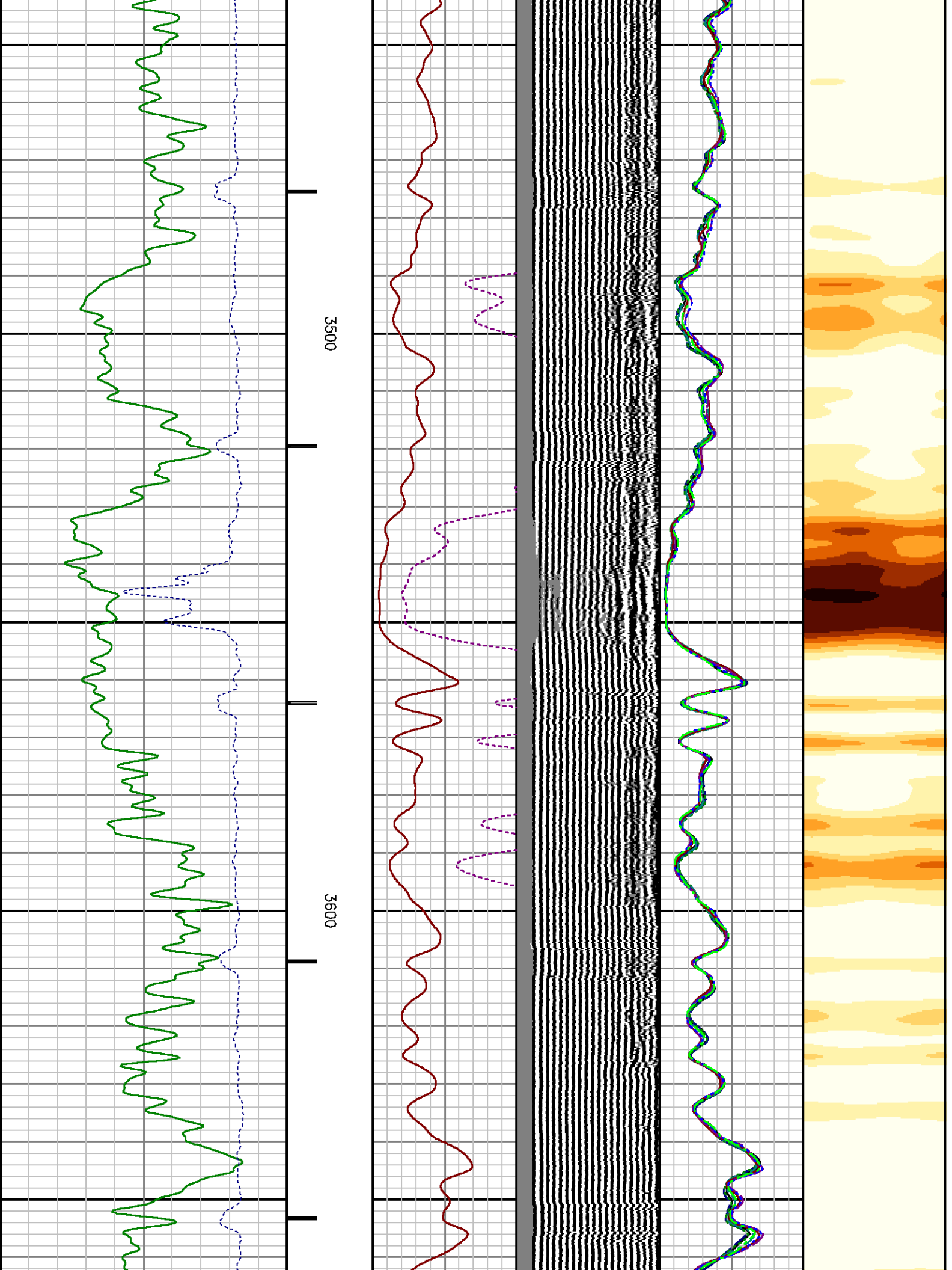


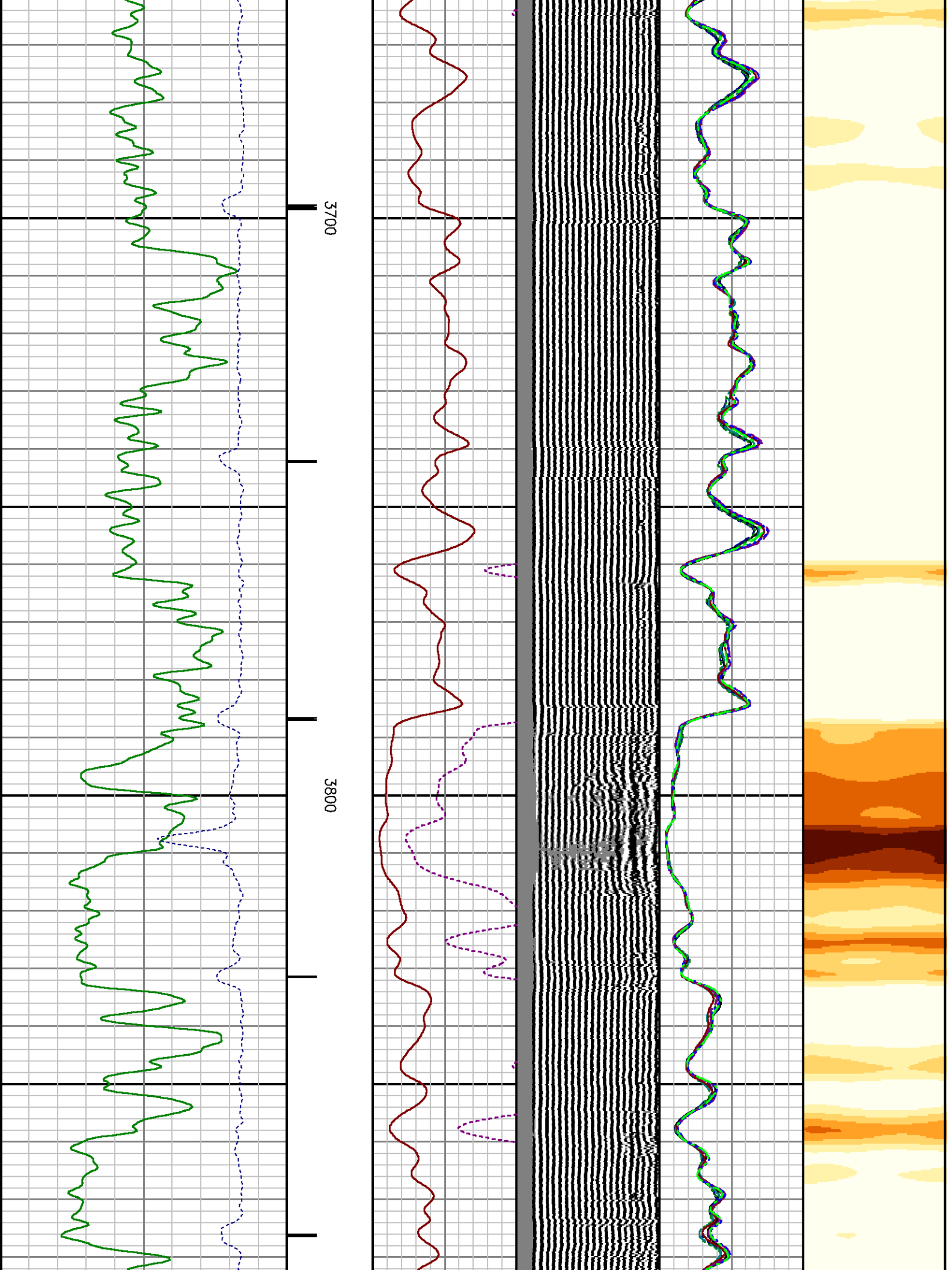


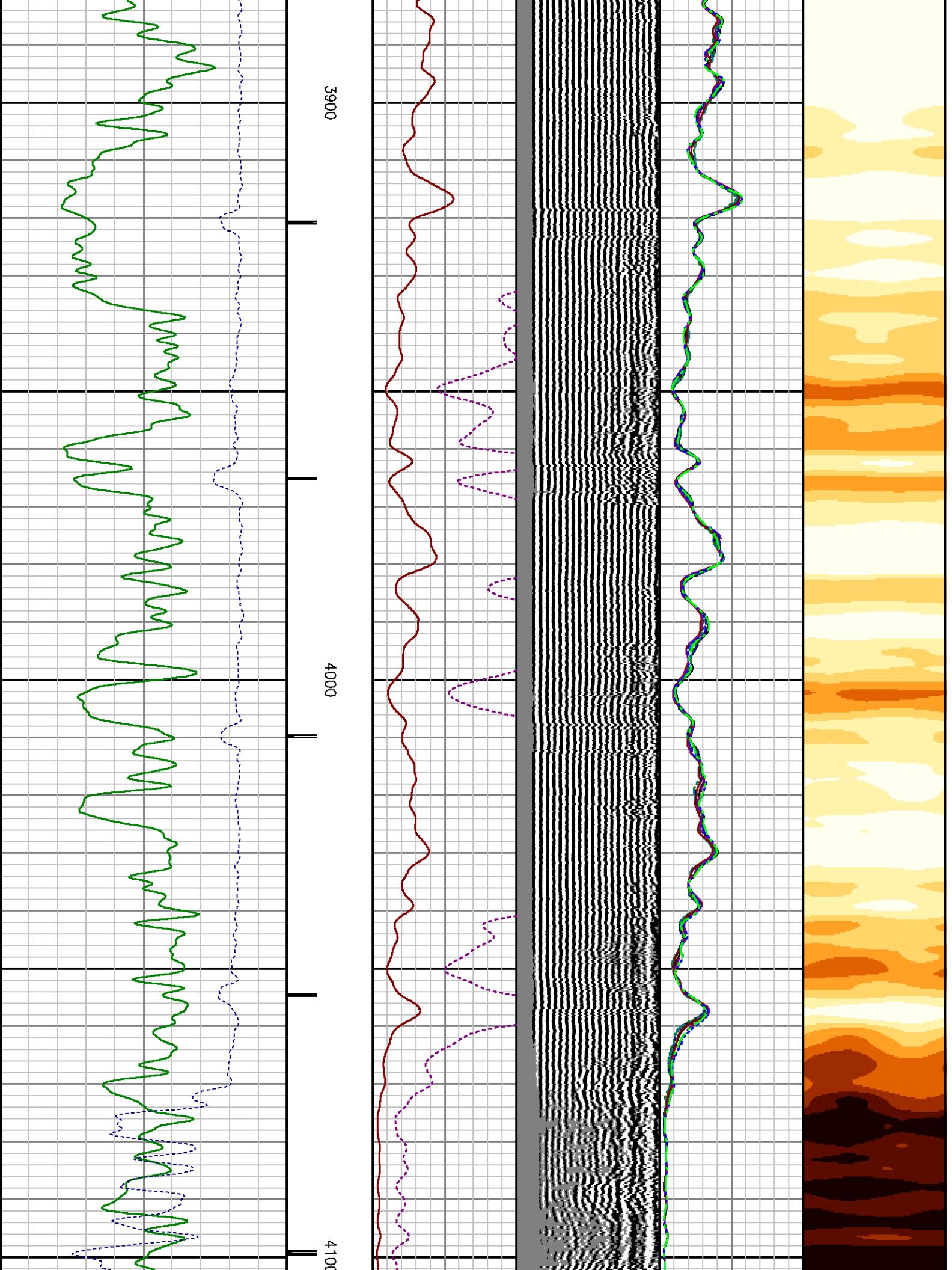


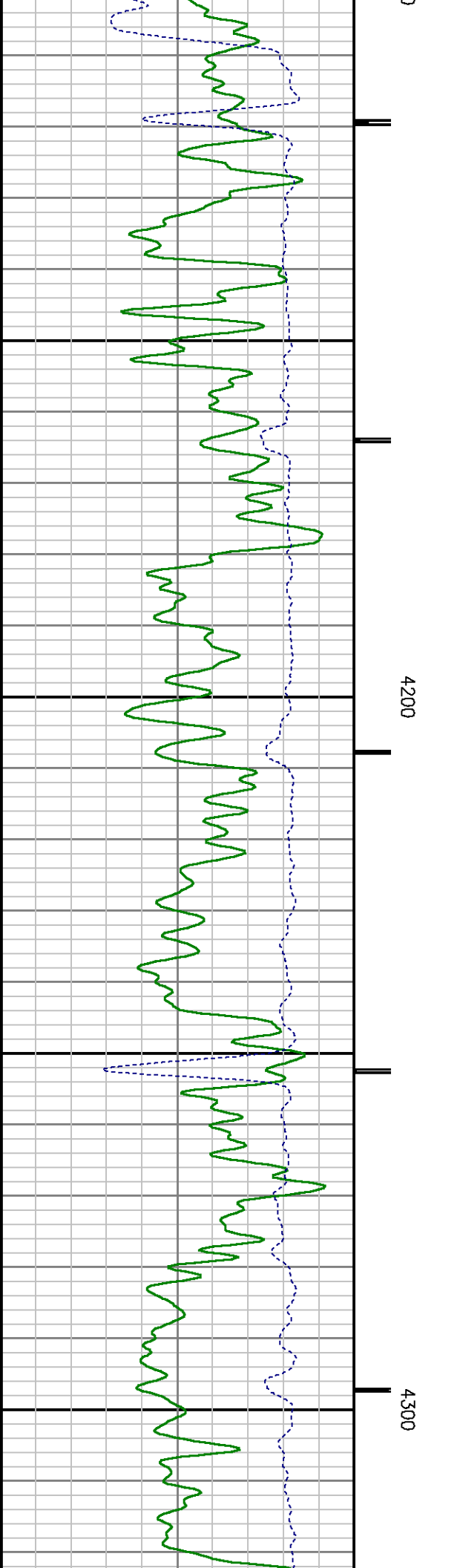
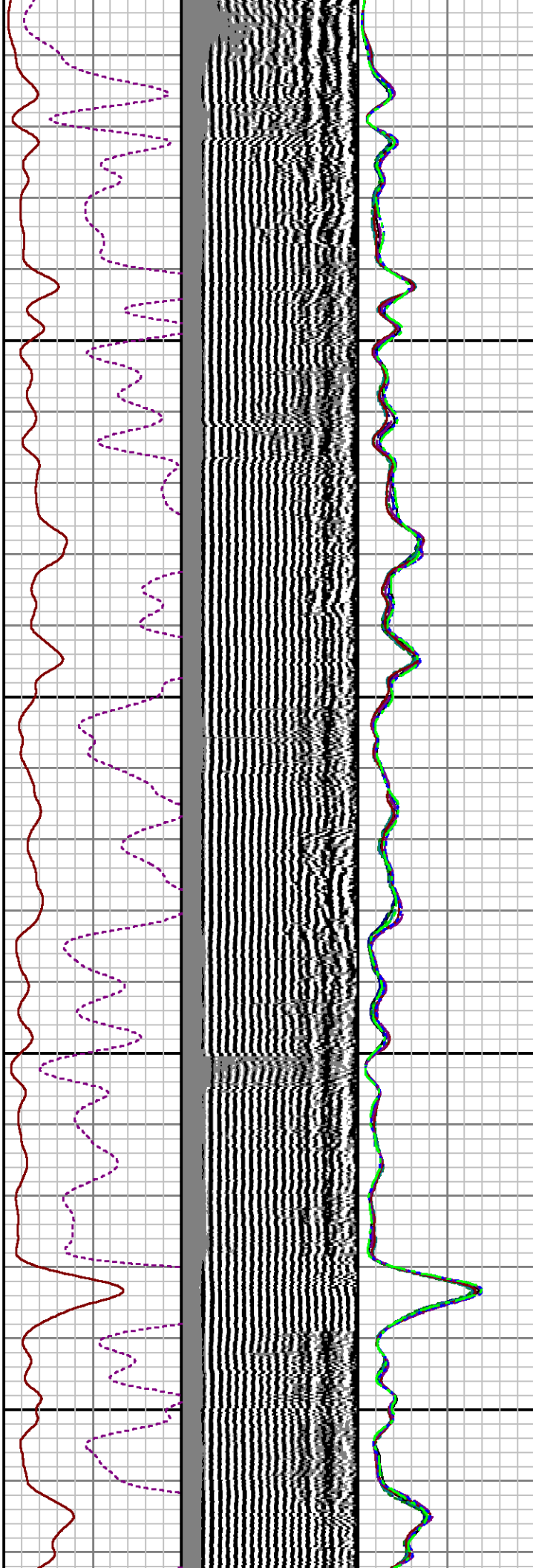
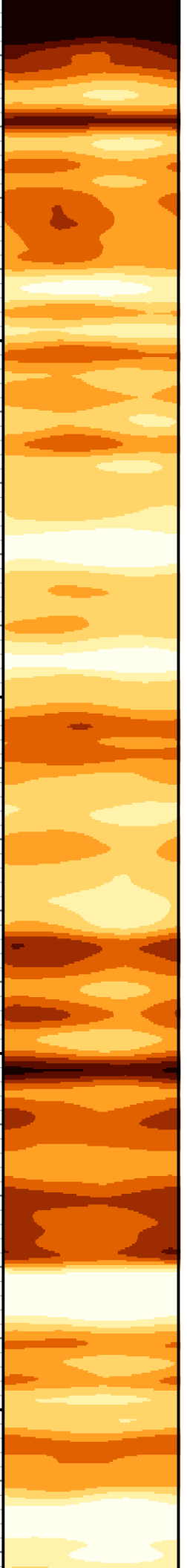




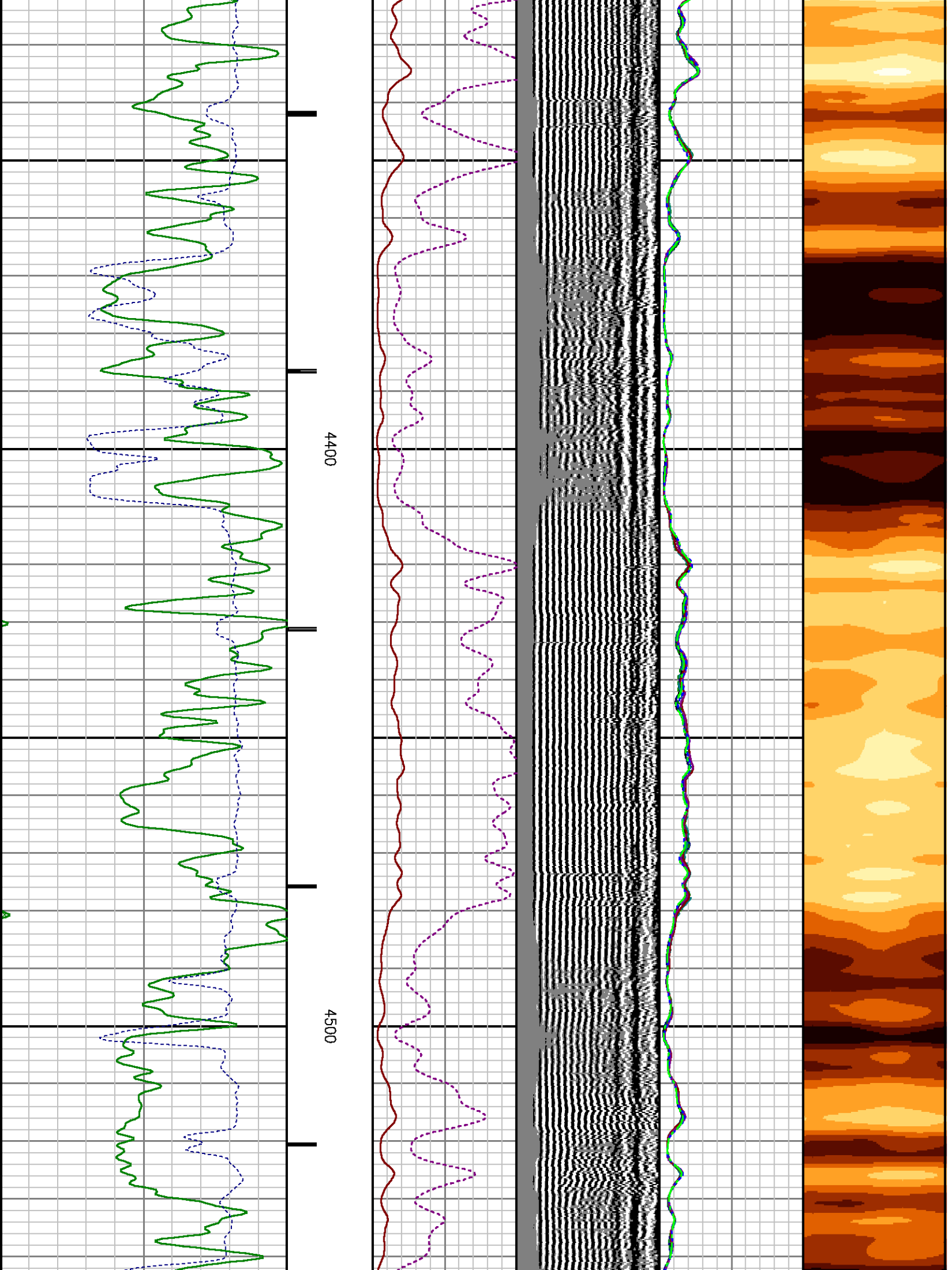




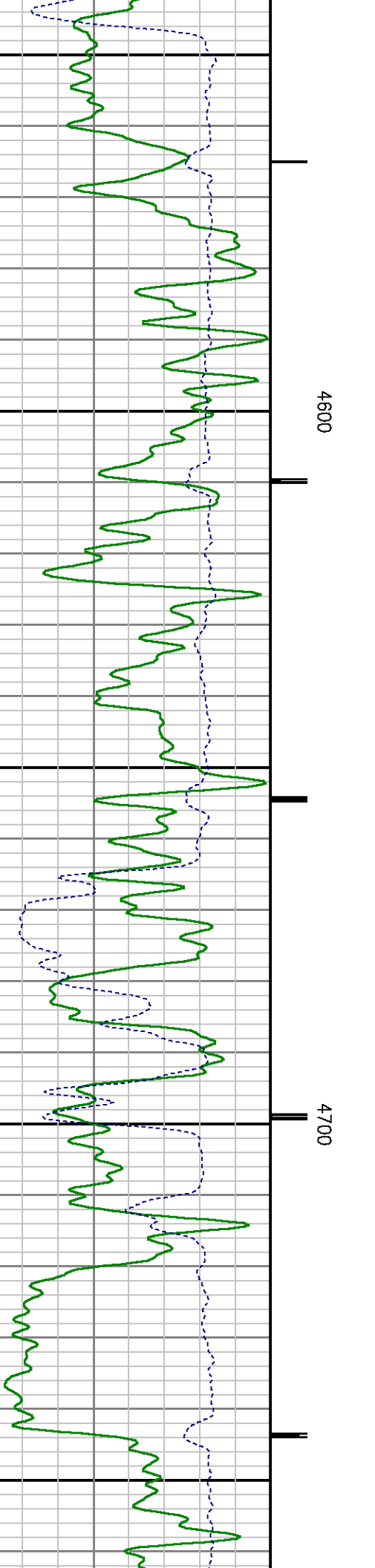
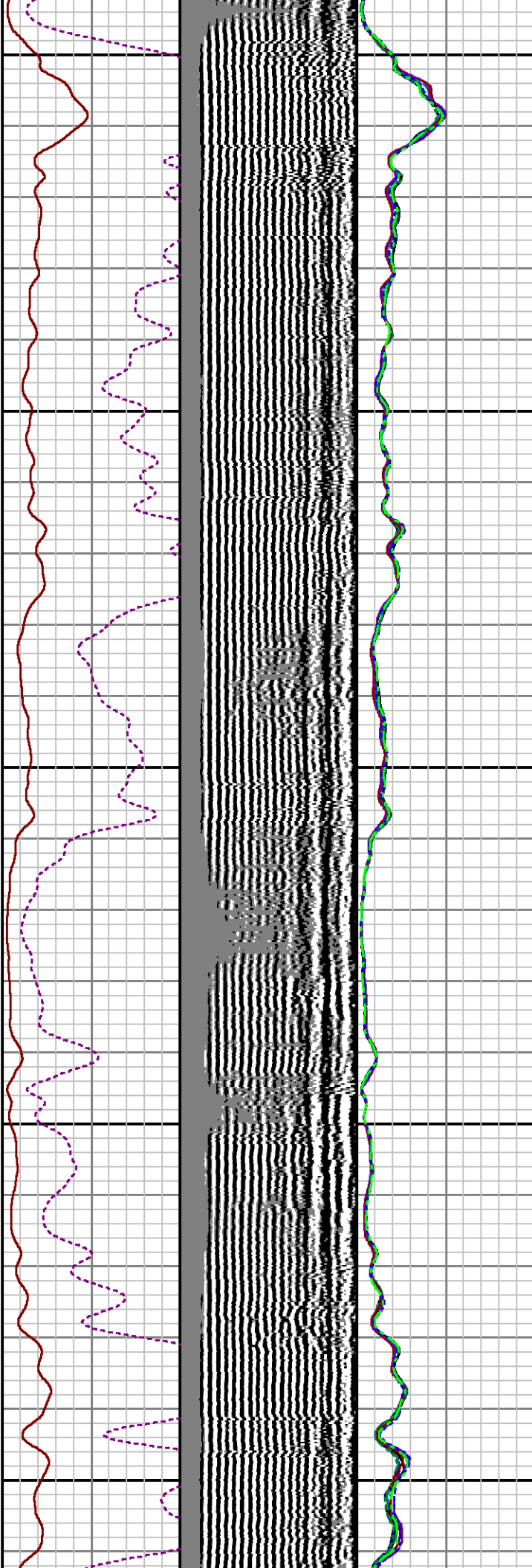


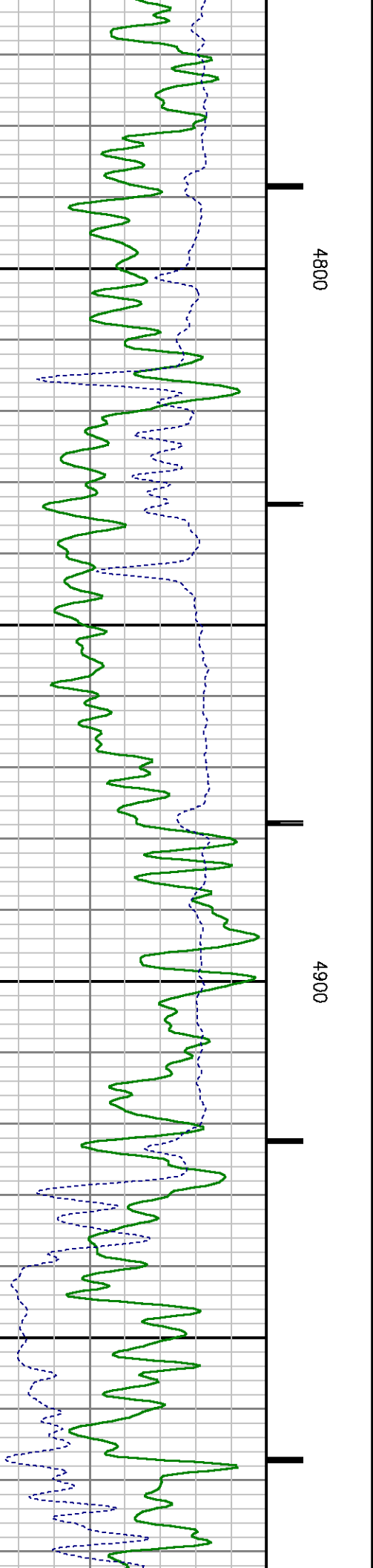
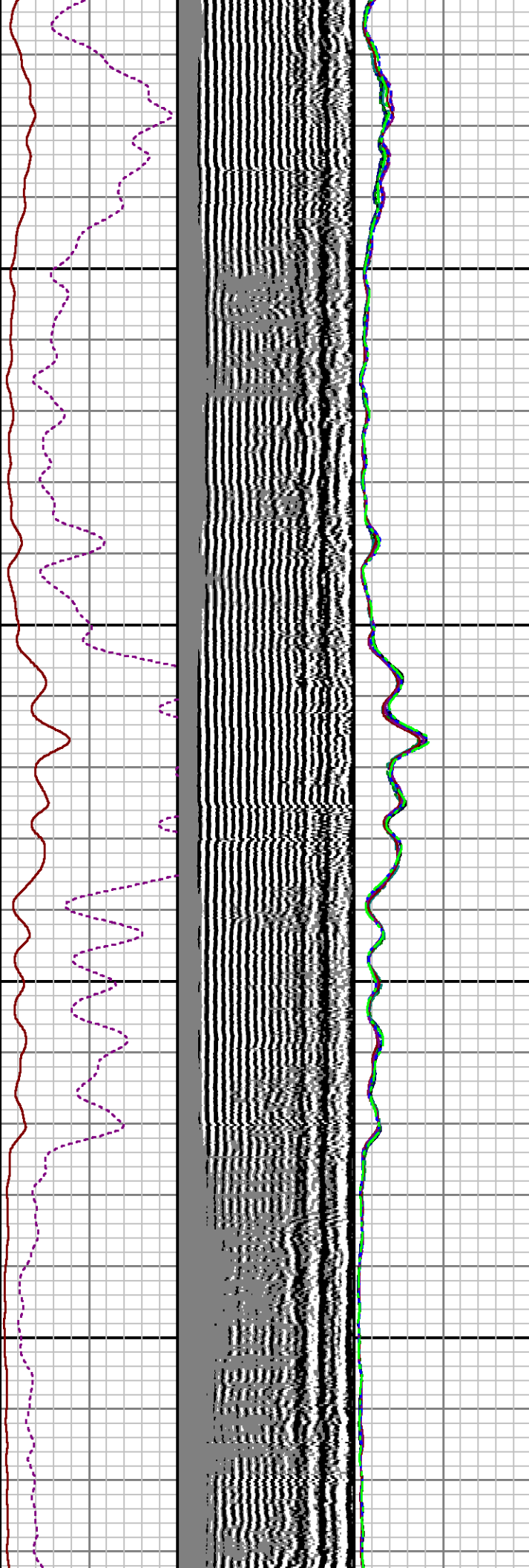






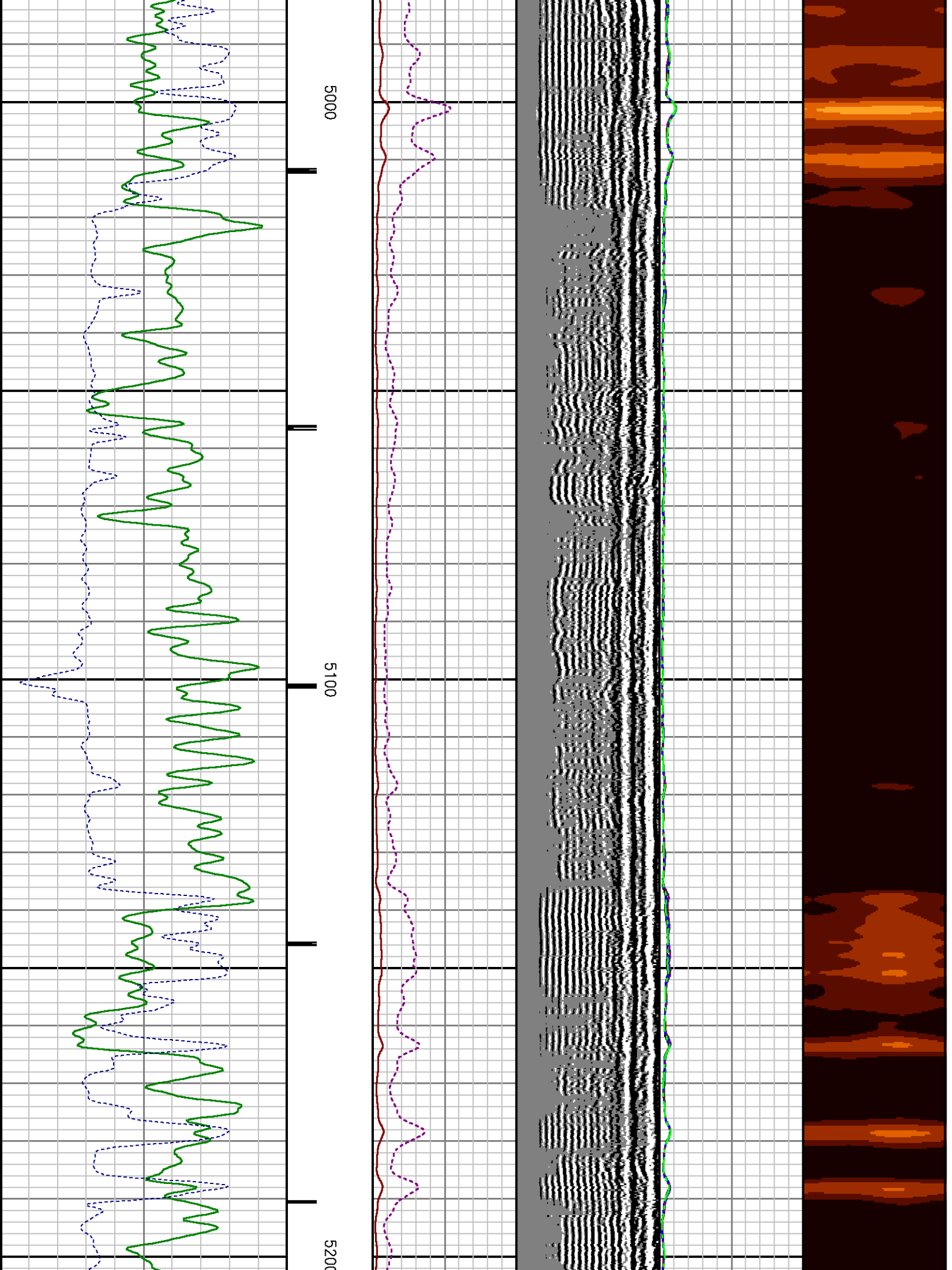


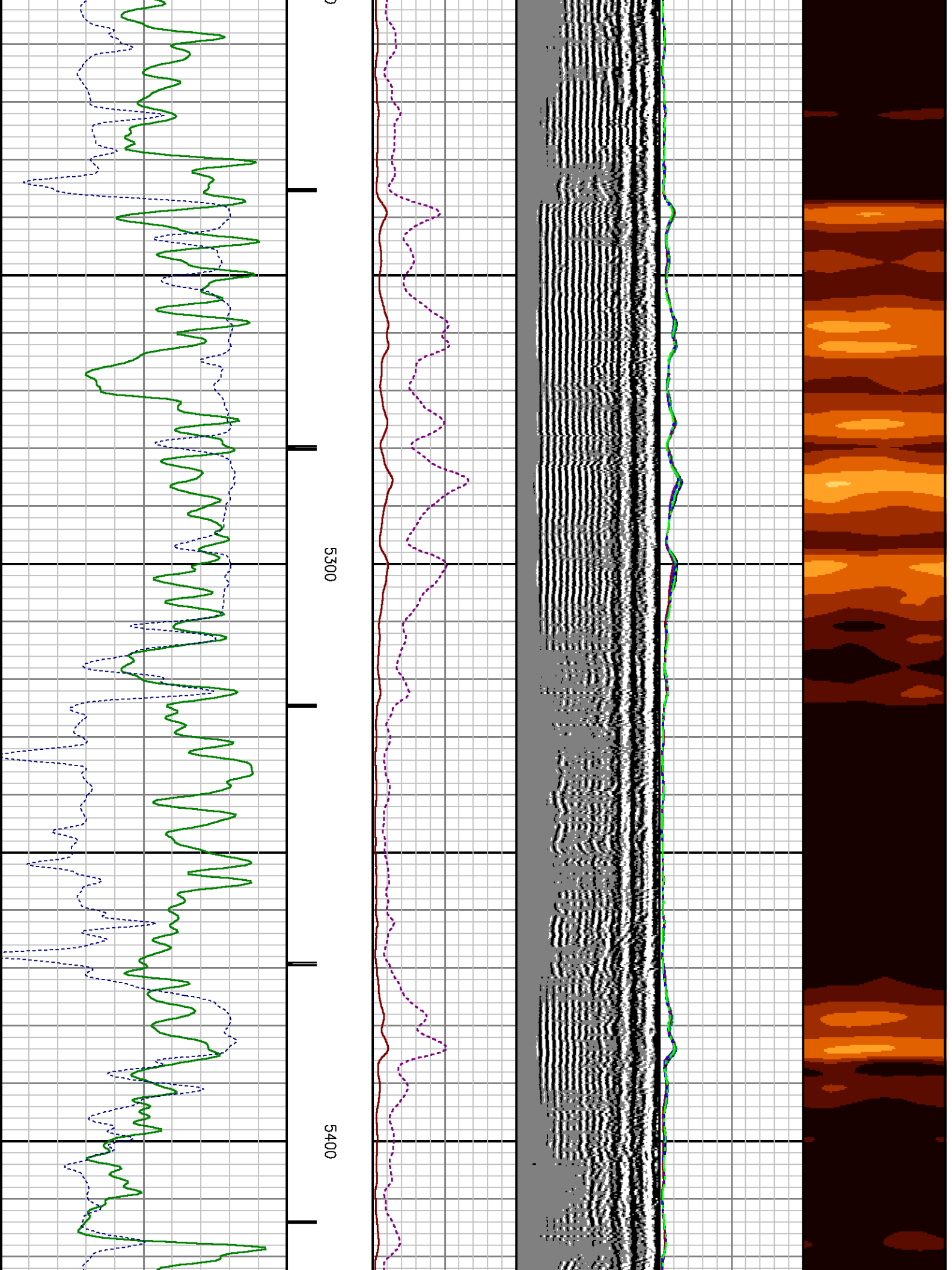


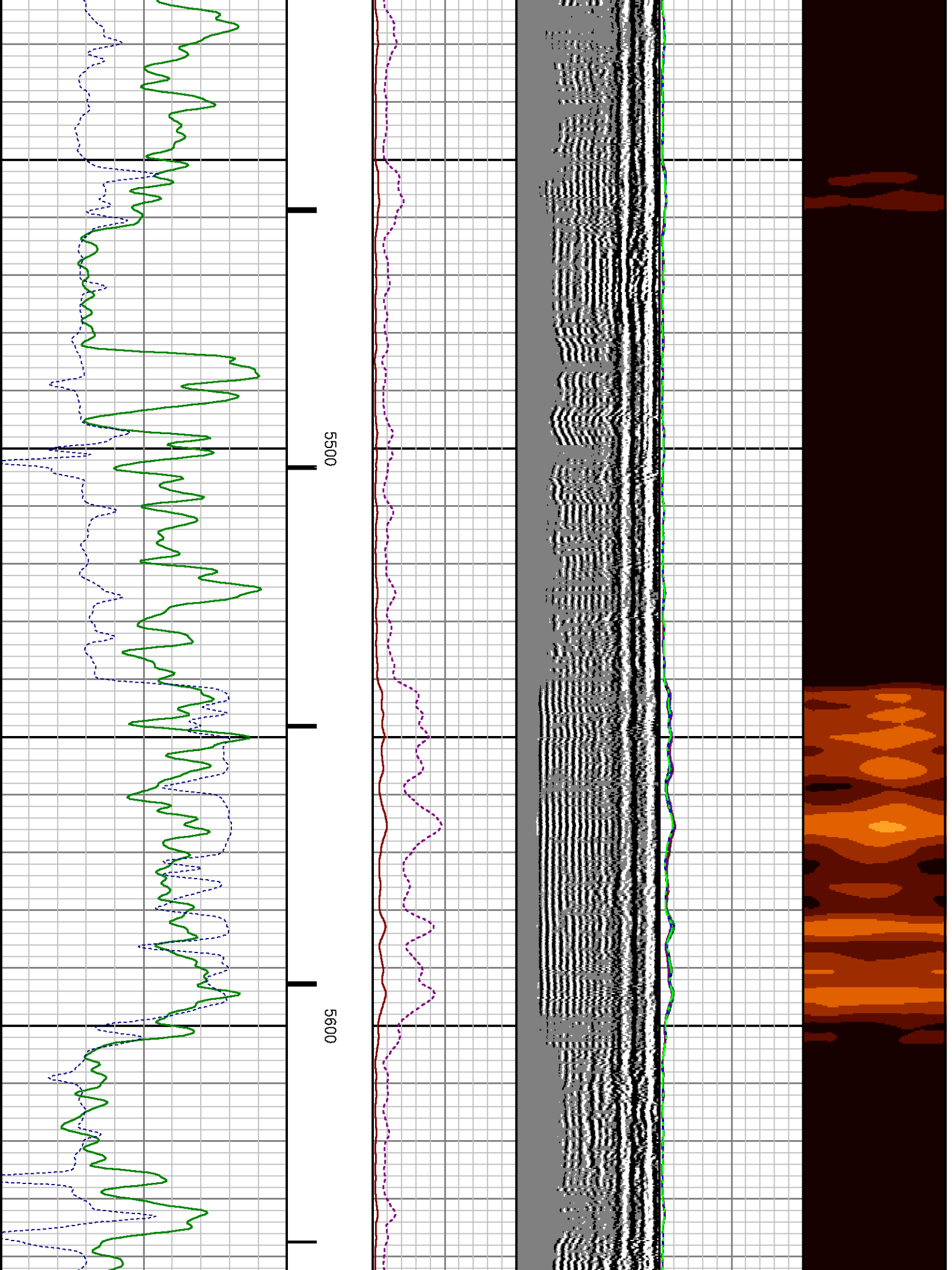


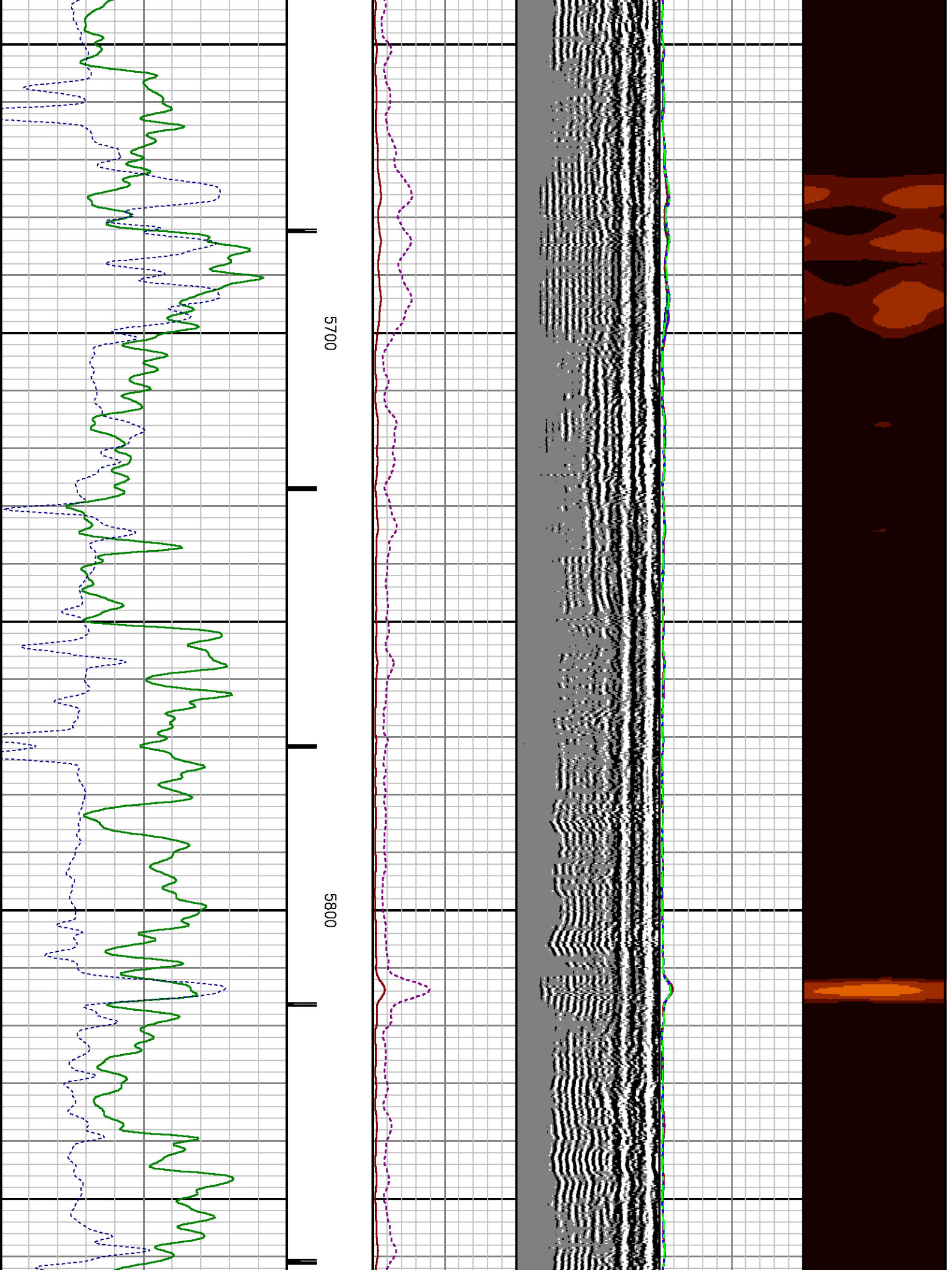
4800

4900

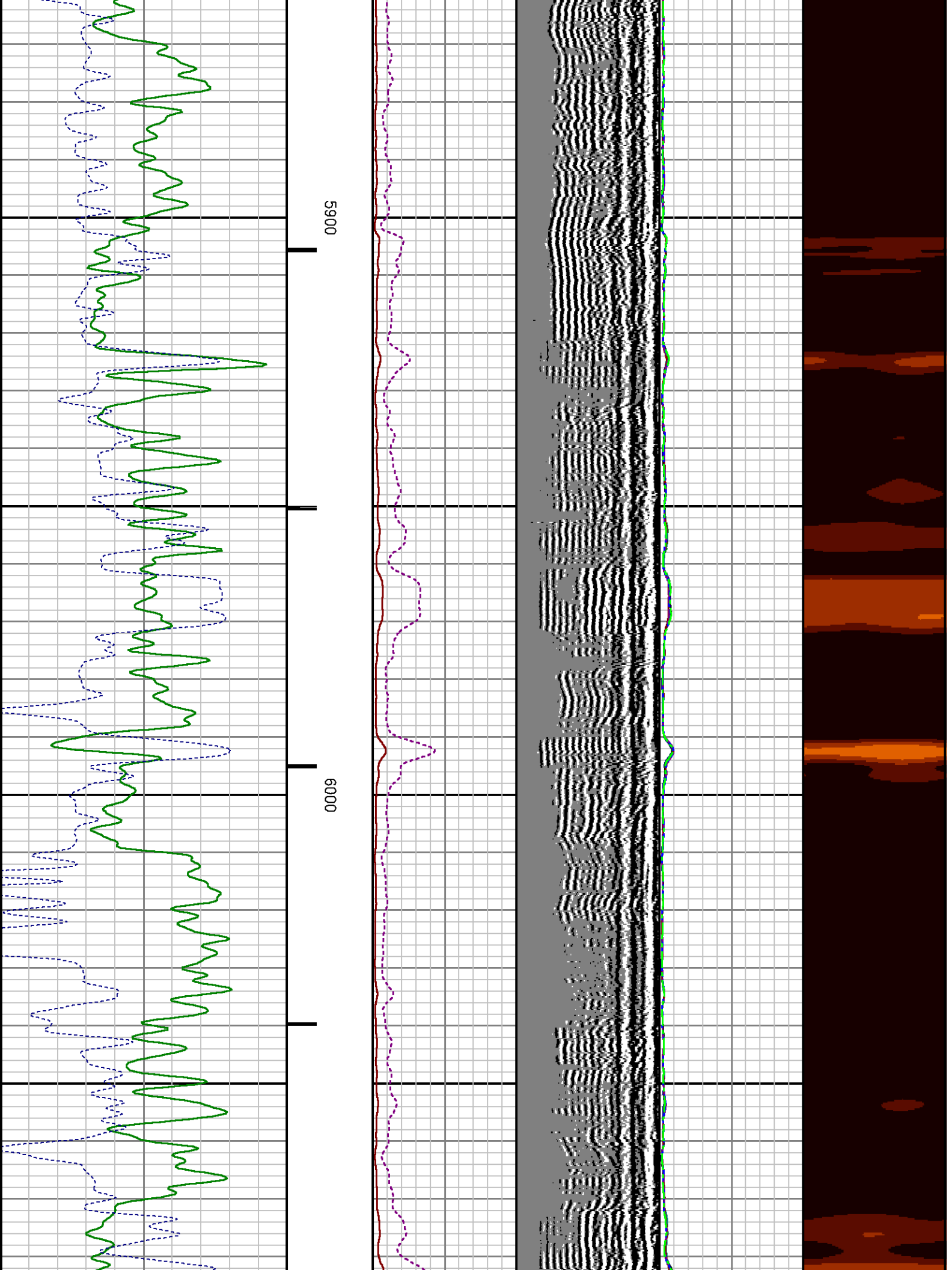


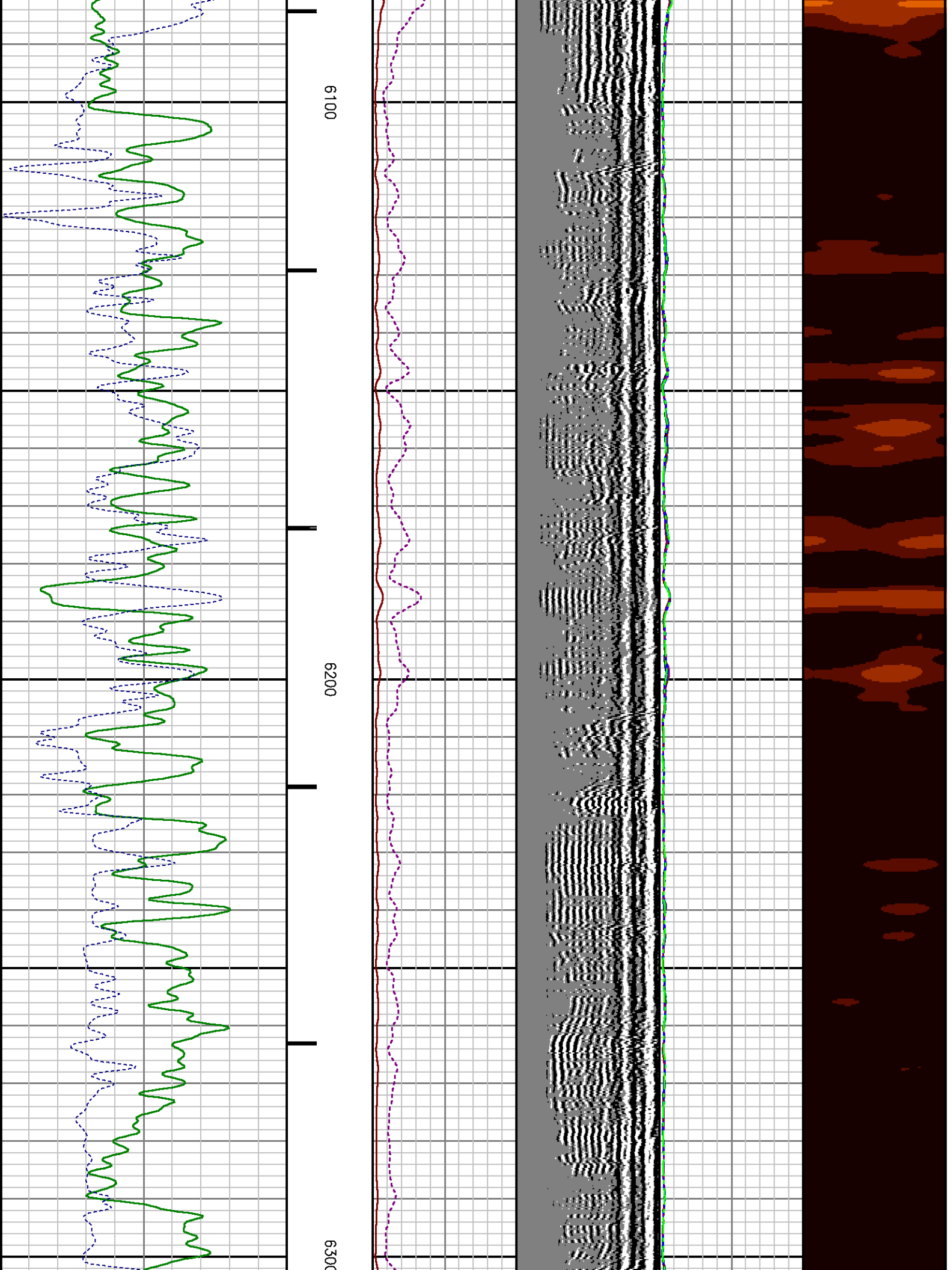


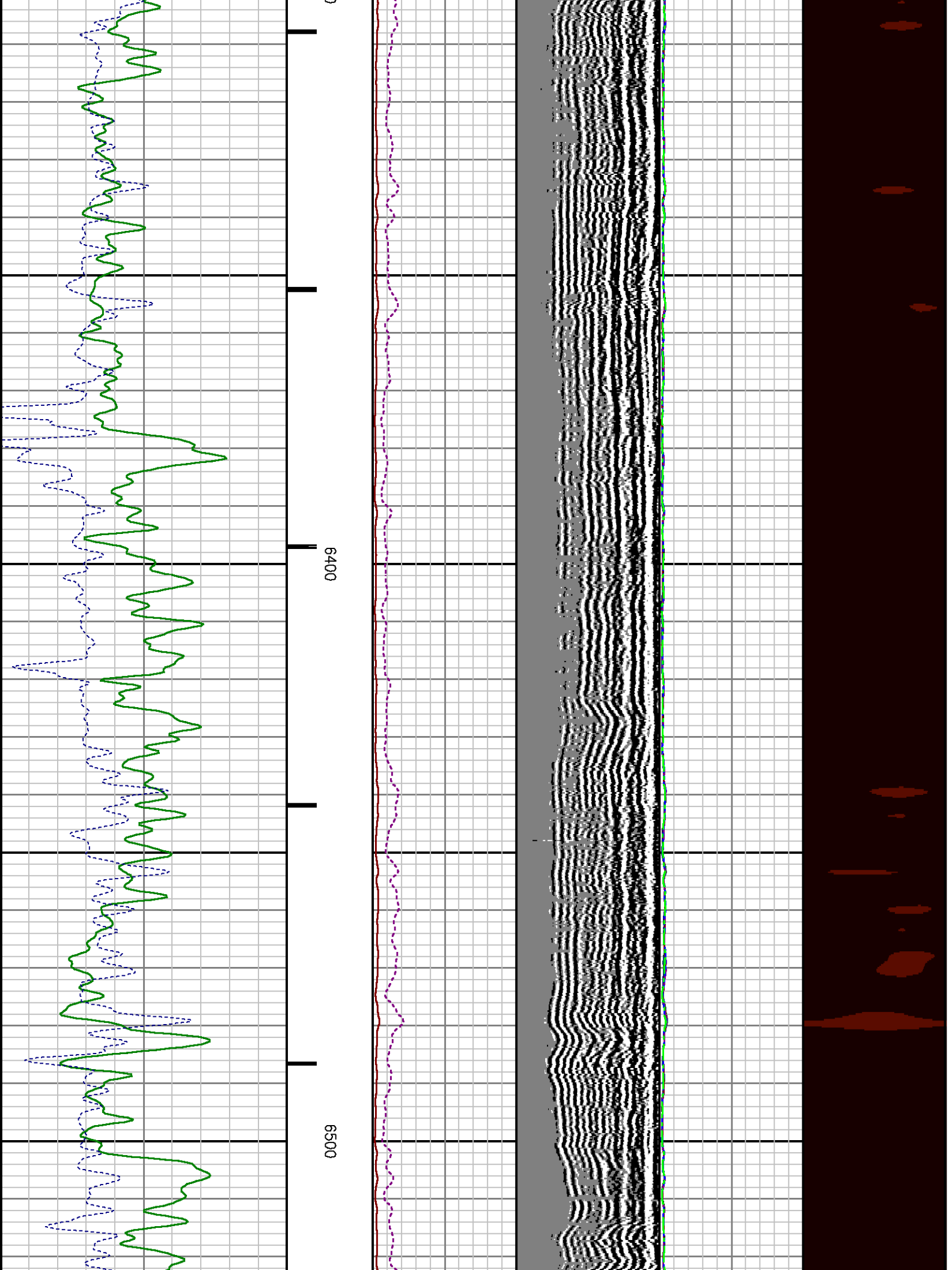


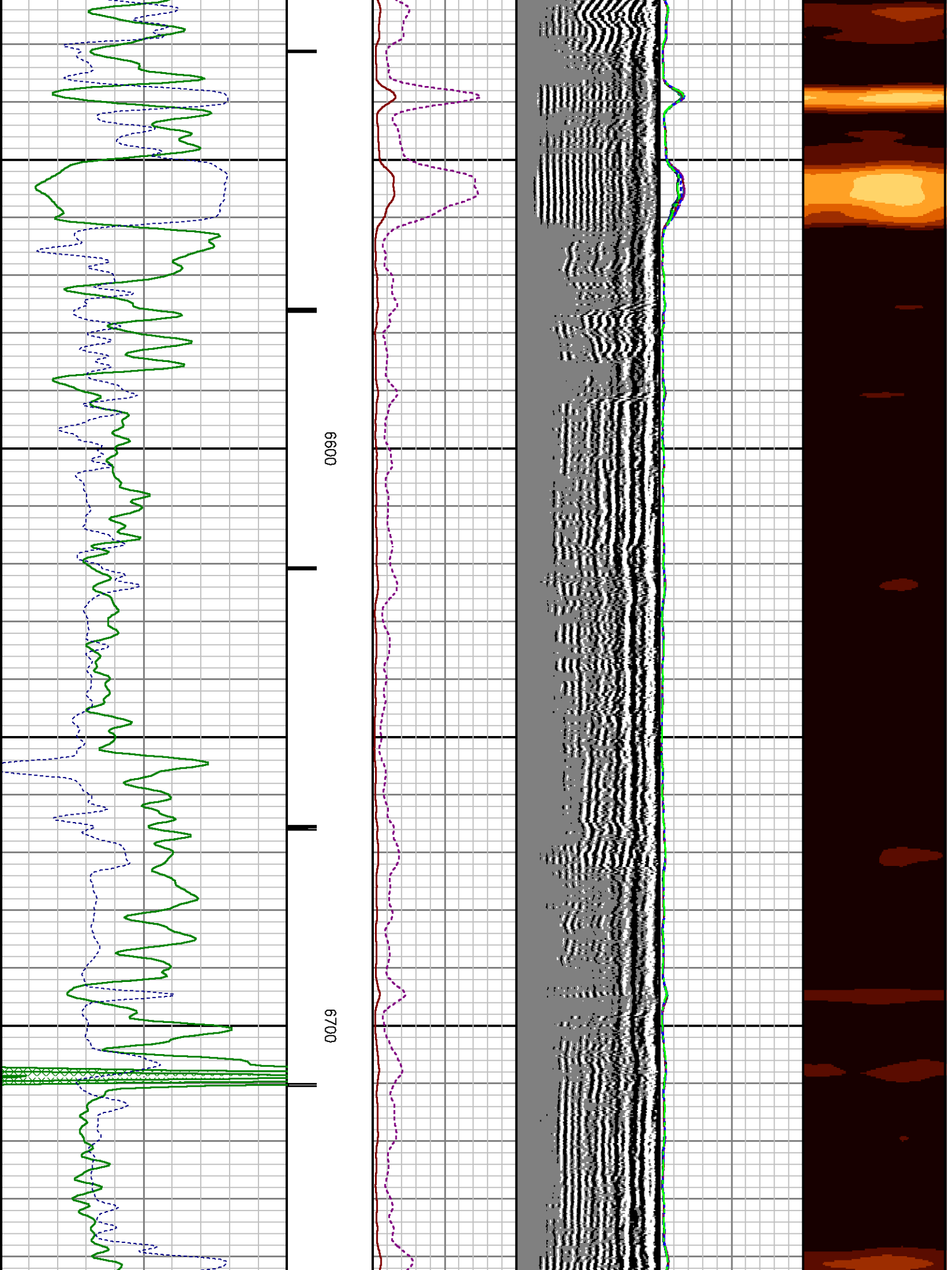


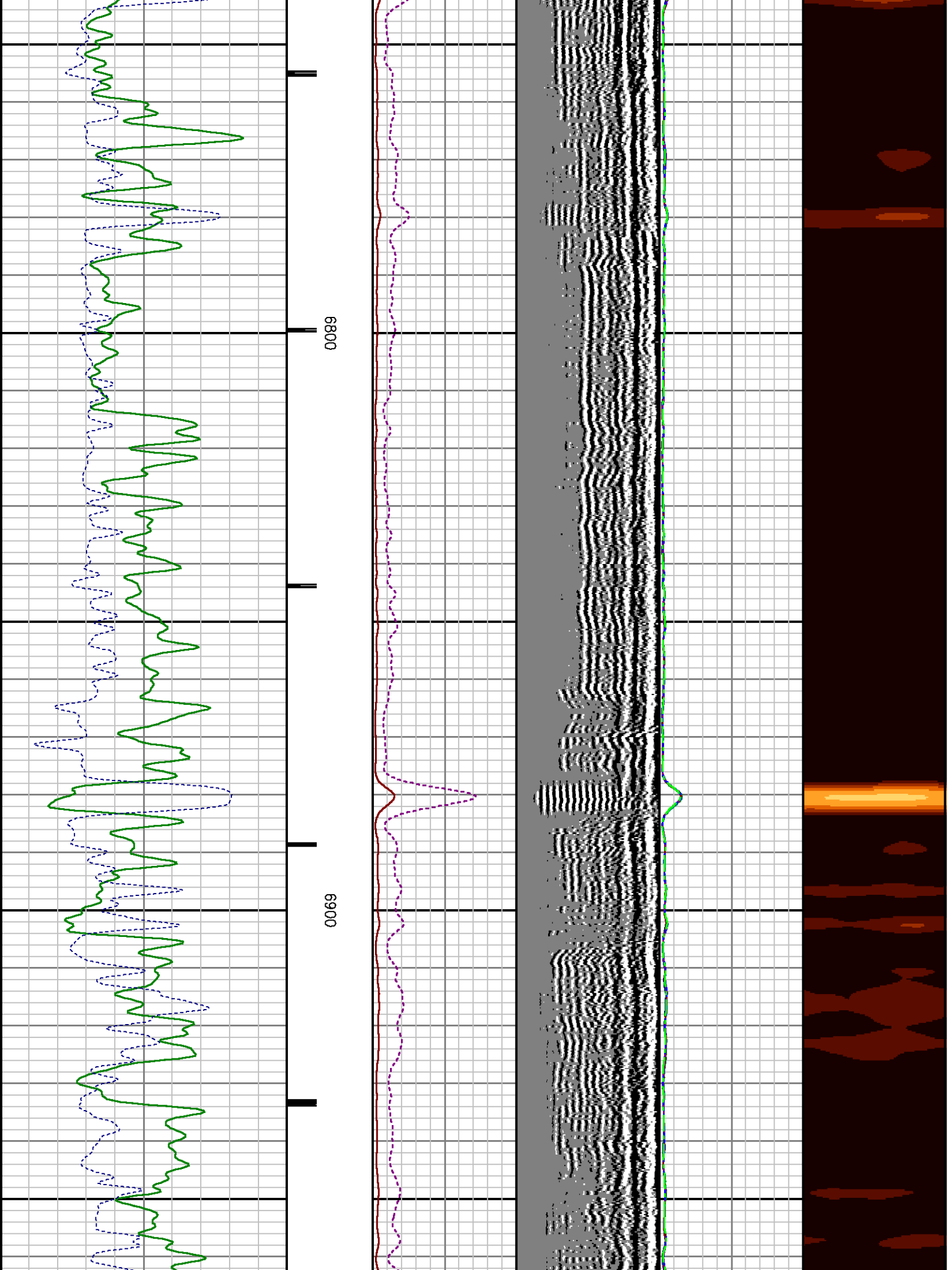


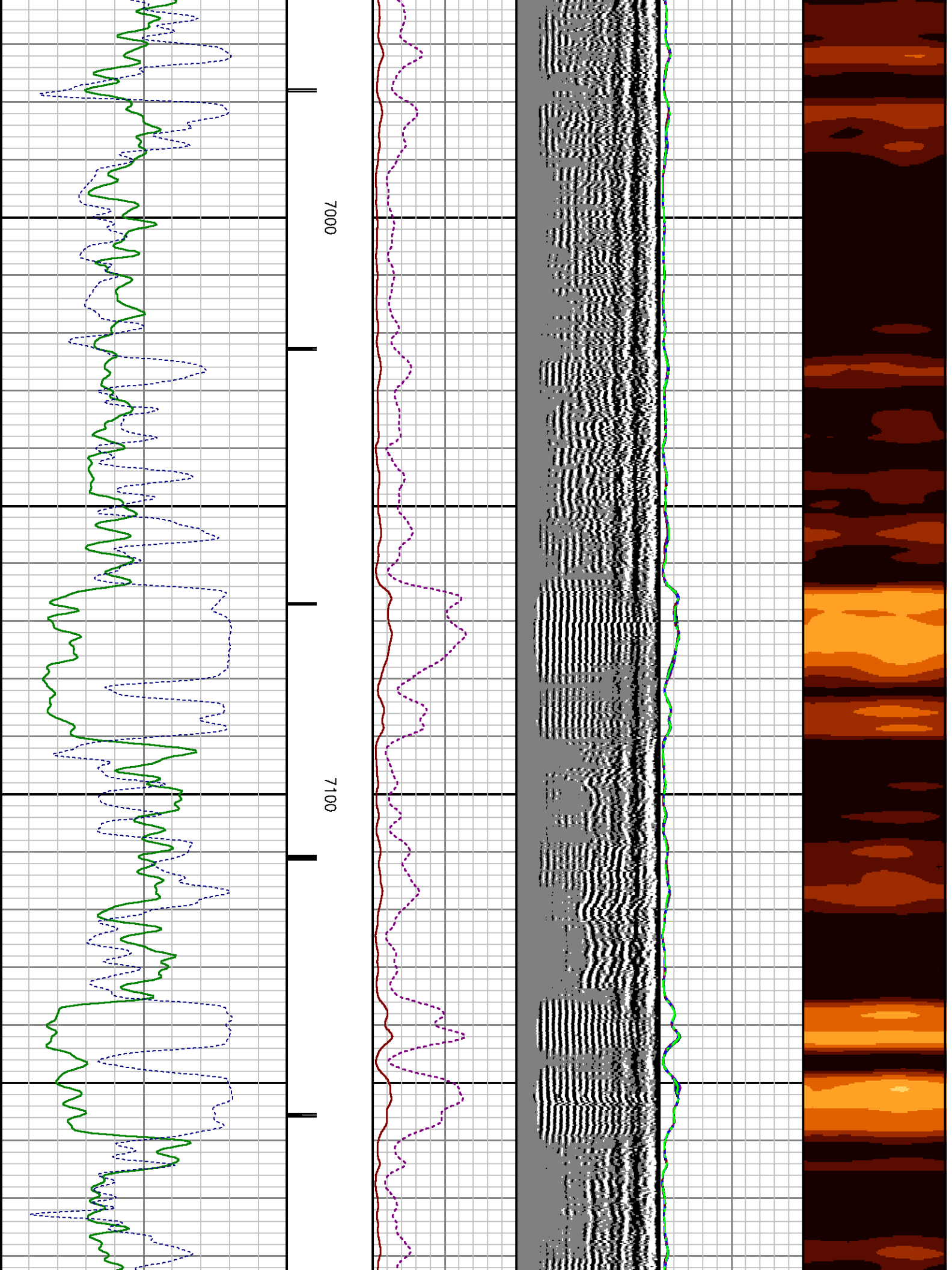




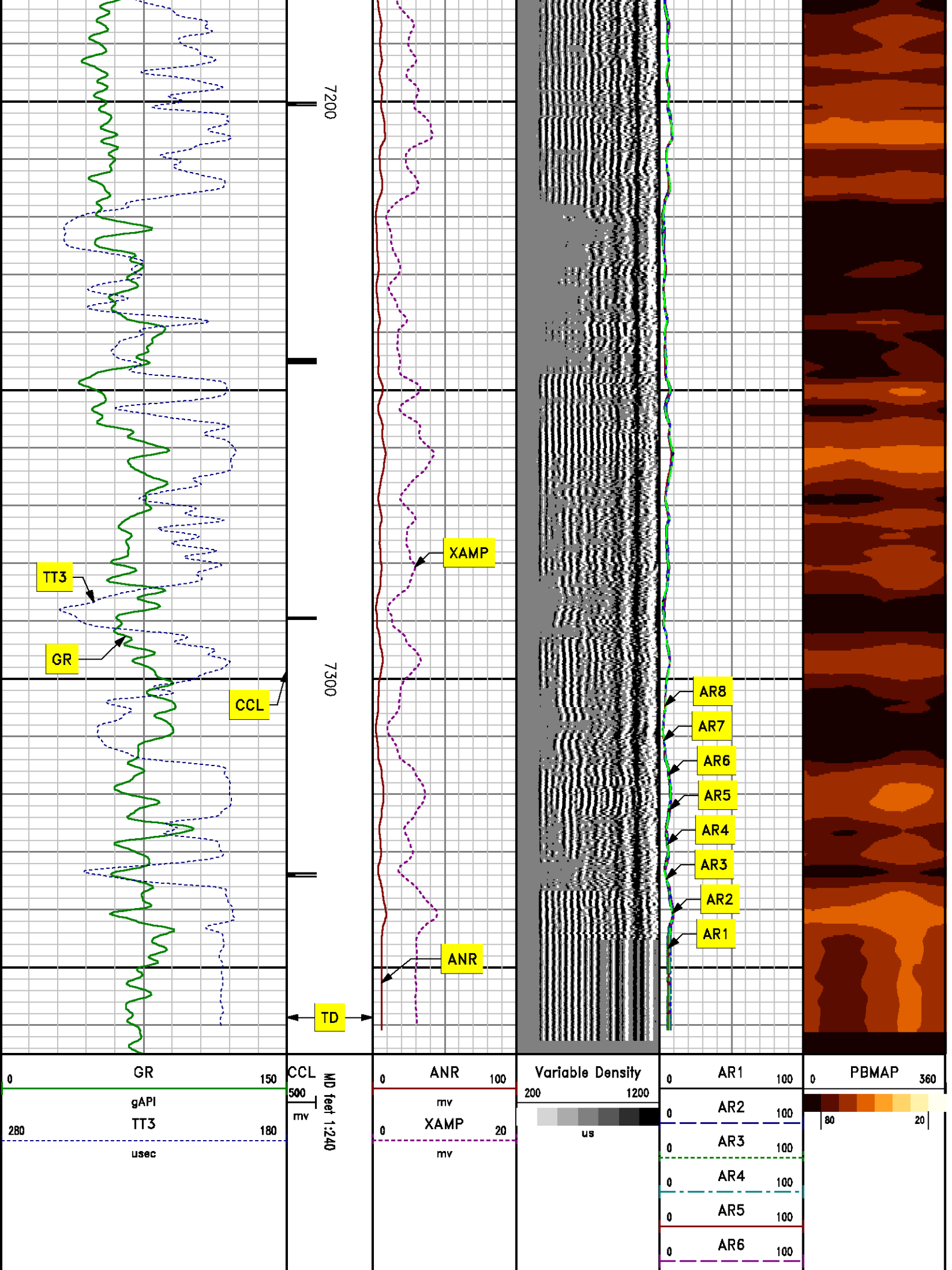












				0	AR7	100
				0	AR8	100

# ***REPEAT SECTION*** ***0 PSI***

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	7075.180	7375.430
RAL	Amp Gate Start Near	200.000	usec	7075.180	7375.430
RAL	Amp Gate Start Radial	200.000	usec	7075.180	7375.430
RAL	Amp Gate Width Far	25.000	usec	7075.180	7375.430
RAL	Amp Gate Width Near	25.000	usec	7075.180	7375.430
RAL	Amp Gate Width Radial	25.000	usec	7075.180	7375.430
RAL	casing od	4.500	inches	7075.180	7375.430
RAL	casing wt	11.600	lbm/ft	7075.180	7375.430
RAL	FB Start Far	291.900	usec	7075.180	7375.430
RAL	FB Start Near	175.391	usec	7075.180	7375.430
RAL	FB Start Radial	175.391	usec	7075.180	7375.430
RAL	FB Thresh Far	10.000	mv	7075.180	7375.430
RAL	FB Thresh Near	4.000	mv	7075.180	7375.430
RAL	FB Thresh Radial	4.000	mv	7075.180	7375.430
RAL	Fluid Travel Time	200.000	usec/ft	7075.180	7375.367

## **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

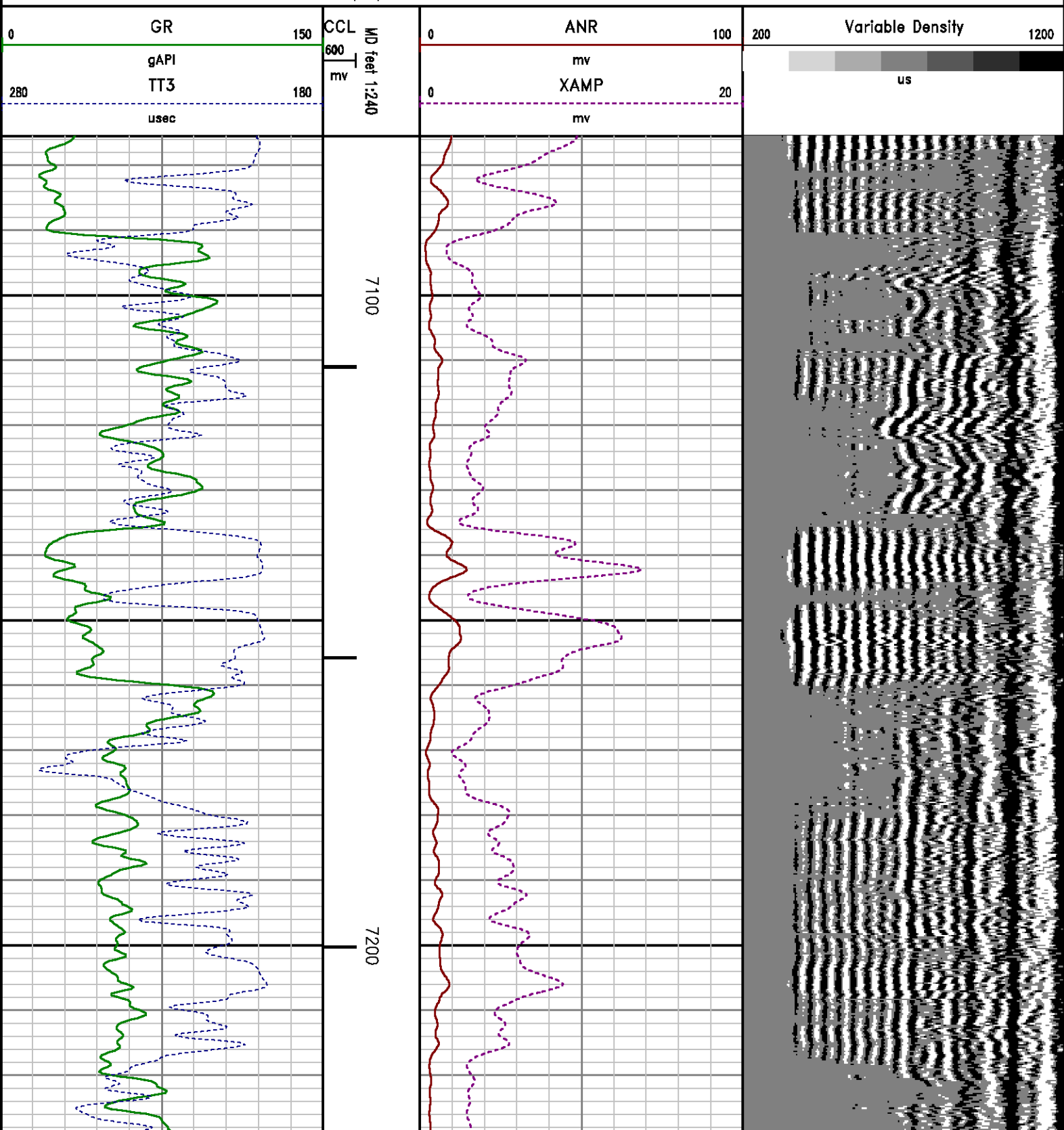
Well : FEDERAL KP 444-18

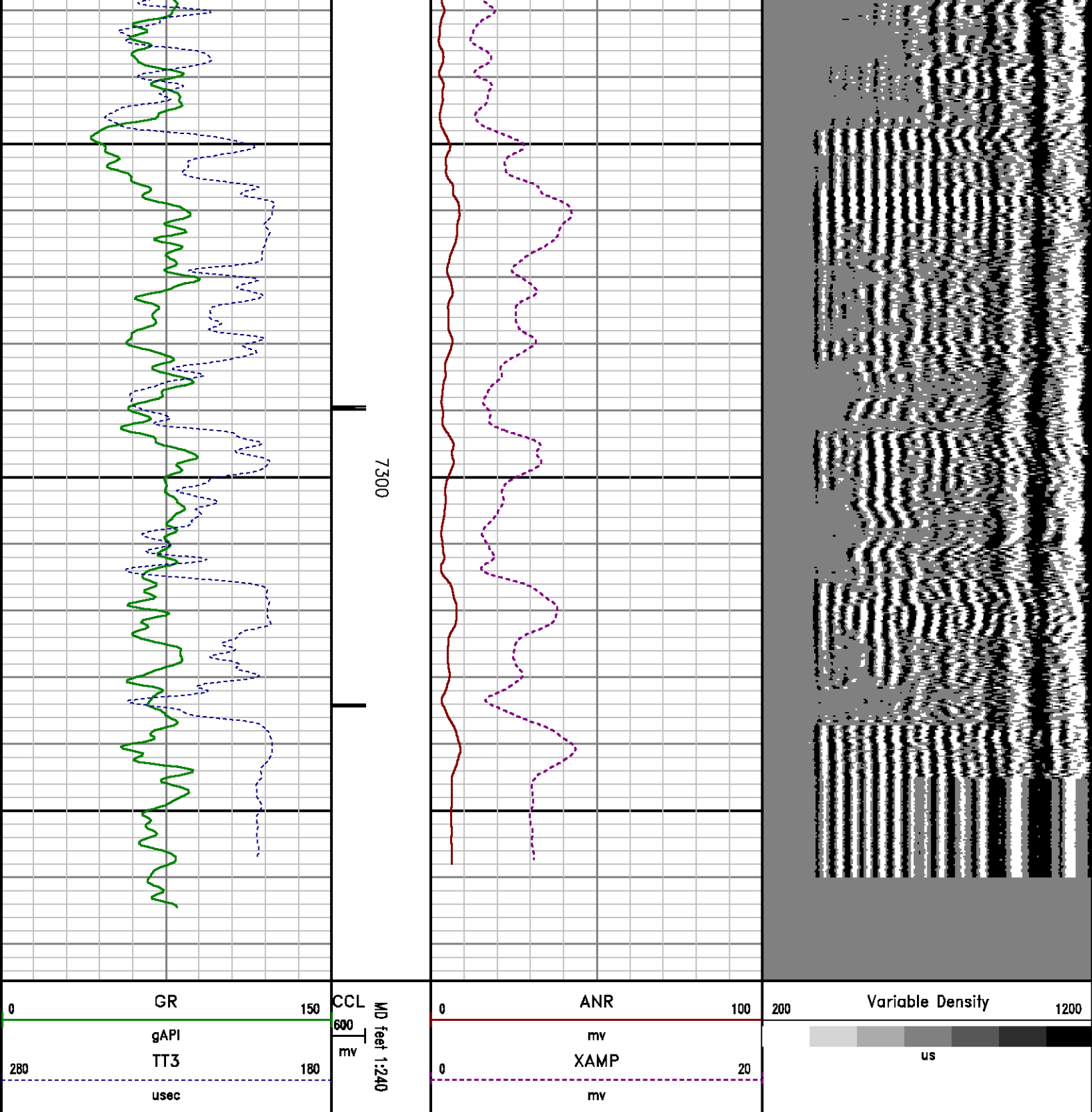
File Name : d:\welldata\wpx energy\federal kp 444-18\cb1444\repeat.xtf

Mode : PlotMgr 5.4.504

Interval : 7075.43 - 7375.43 feet UP

Created : 7/30/2012 12:57:41 PM





## CALIBRATION SUMMARY

*RALSHP*

## SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Mon Jul 30 12:22:56 2012 TOOL SERIES: 1426XA ASSET: 106 SEQ: JJ

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	218	216	30	166	25	-2.096	100.00	0.08
3 Ft. Receiver	218	216	30	135	25	2.797	100.00	0.08
5 Ft. Receiver	326	325	30	243	25	7.706	150.00	0.08
Radial #1	217	216	30	147	25	-4.869	100.00	0.08
Radial #2	218	216	30	147	25	3.044	100.00	0.08
Radial #3	218	216	30	147	25	3.071	100.00	0.08
Radial #4	218	216	30	147	25	3.288	100.00	0.08
Radial #5	218	216	30	147	25	3.063	100.00	0.08
Radial #6	216	216	30	147	25	2.279	100.00	0.08
Radial #7	214	216	30	147	25	3.103	100.00	0.08
Radial #8	218	216	30	147	25	3.258	100.00	0.08

**RALFLD**

## WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Mon Jul 30 12:23:57 2012 TOOL SERIES: 1426XA ASSET: 106 SEQ: JJ

Tool Delay [usec] -56.00 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	166	25	-0.119	0.000	1.00	100.000
3 Ft. Receiver	200	30	-0.739			
5 Ft. Receiver	317	30	-2.387			
Radial #1	200	30	-2.149			
Radial #2	200	30	-1.137			
Radial #3	200	30	-0.917			
Radial #4	200	30	-1.095			
Radial #5	200	30	-0.871			
Radial #6	200	30	-0.817			
Radial #7	200	30	-0.559			
Radial #8	200	30	-0.713			

**GAMMA RAY**

Calibration File: C:\case\calver\GR\544J7.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Tue Jul 17 09:43:56 2012 TOOL SERIES: 2459XA ASSET: 544 SEQ: J7

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
SHOP JIG	79.29	341.56	0.705	55.93	240.93	185.00

Verification File: C:\case\calver\GR\544J7.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Tue Jul 17 09:46:29 2012 TOOL SERIES: 2459XA ASSET: 544 SEQ: J7

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
SHOP JIG	80.09	347.96	0.705	56.49	245.44	188.95

## TOOL DIAGRAM

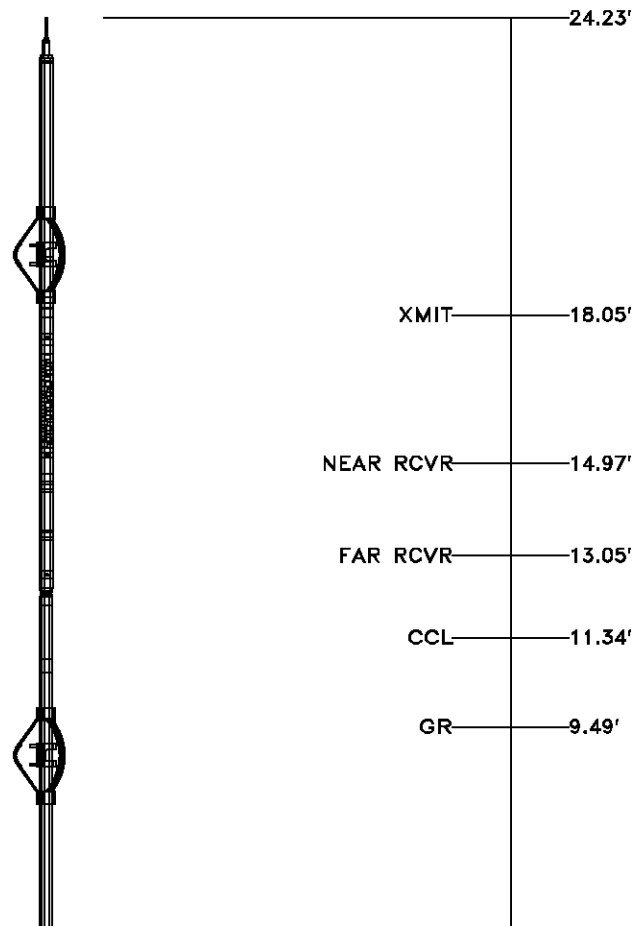
### OTA SHORT CABLE HEAD

### PROBE 2 3/4 DUAL RECEIVER RADII

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

### Probe GR/CCL/NEU

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





NEU 4.09'

0.00'

# 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  
Well  
Field  
County

WPX ENERGY  
FEDERAL KP 444-18  
KOKOPELLI  
GARFIELD State COLORADO

File No:  
CH058603  
API No:  
05045206340000

## Location

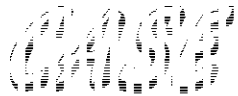
SHL: 709' FSL 1942' FEL  
BHL: 518' FSL 647' FEL

## Elevations

KB 5944 ft  
DF NA  
GL 5918 ft

18-T6S-R91W  
KP 34-18 pad  
NABORS 574

SEC 18 TWP 6S RGE 91W



Baker Atlas