



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: **WPX ENERGY**
GHO73688 **Well YOUBERG RWF 344-23**
API No: **Field RULISON**
0504518250000 **County GARFIELD State COLORADO**

Location
23 6S 94W **SHL: 1359' FSL, 2259' FEL**
RWF 33-23 PAD **BHL: 524' FSL, 463' FEL (SWSE)**
NABORS 877 **SEC 23 TWP 6S RGE 94W**

Permanent Datum **OL Elevation 5501.5 ft**
Log Measured From **KB 26 ft Above P. D.**
Drill Measured From **KELLY BUSHING**

Other Services
RPM

Elevations
KB 5527.5 ft
DF
GL 5501.5 ft

Date	15/JUN/13
Run	ONE
Service Order	624427
Depth Driller	8480 ft
Depth Logger	8450 ft
Bottom Logged Interval	8440 ft
Top Logged Interval	26 ft
Time Started	1215
Time Finished	1500
Operator Rig Time	2.75 HRS
Type of Fluid in Hole	WATER
Fluid Density	NA
Salinity	NA
Fluid Level	82 ft
Logged Cement Top	NA
Wellhead Pressure	0 psi
Maximum Hole Deviation	NA
Nominal Logging Speed	45 fpm
Maximum Recorded Temperature	235 degF
Reference Log	NONE
Reference Log Date	NA
Equipment No.	4271
Location	FLOYD RENEAU GRAND JCT
Recorded By	JEFF DUGY
Witnessed By	

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	2023 ft
8.75 in	2023 ft	8480 ft

Casing Record

Size	Weight	Grade	From	To
9.625 in	32 lbm/ft		0 ft	2023 ft
4.5 in	11.6 lbm/ft	I-80	0 ft	8480 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 3 feet.
Logged with zero PSI at wellhead.

BHT = 235°

SJ = 4867'-4891'

- FOLD HERE

Equipment Data

Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1426XA	10124106	CENT
1	1	GRICCL	1355XA	10580209	CENT

PRIMARY PRESENTATION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	30.438	8470.000
RAL	Amp Gate Start Near	195.000	usec	30.438	8470.000
RAL	Amp Gate Start Radial	195.000	usec	30.438	8470.000
RAL	Amp Gate Width Far	25.000	usec	30.438	8470.000
RAL	Amp Gate Width Near	25.000	usec	30.438	8470.000
RAL	Amp Gate Width Radial	25.000	usec	30.438	8470.000
RAL	casing od	4.500	inches	30.438	8470.000
RAL	casing wt	11.600	lbm/ft	30.438	8470.000
RAL	FB Start Far	291.900	usec	30.438	8470.000
RAL	FB Start Near	180.000	usec	30.438	8470.000
RAL	FB Start Radial	180.000	usec	30.438	8470.000
RAL	FB Thresh Far	10.000	mv	30.438	8470.000
RAL	FB Thresh Near	4.000	mv	30.438	8470.000
RAL	FB Thresh Radial	4.000	mv	30.438	8470.000
RAL	Fluid Travel Time	200.000	usec/ft	30.438	8469.781

DEPTH OFFSETS
(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-11.000	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	CHV	FPR2

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

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

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

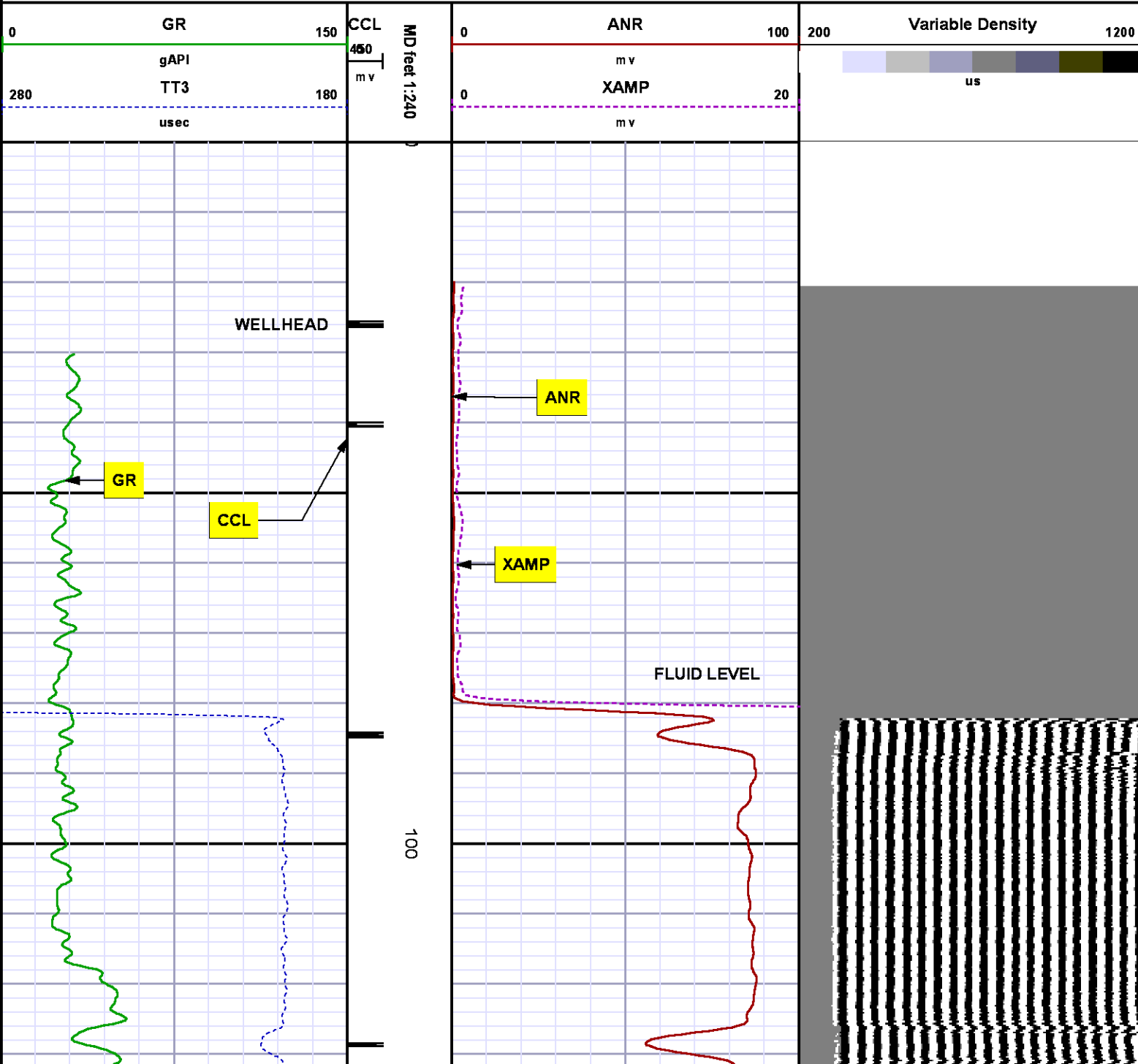
Well : YOUBERG RWF 344-23

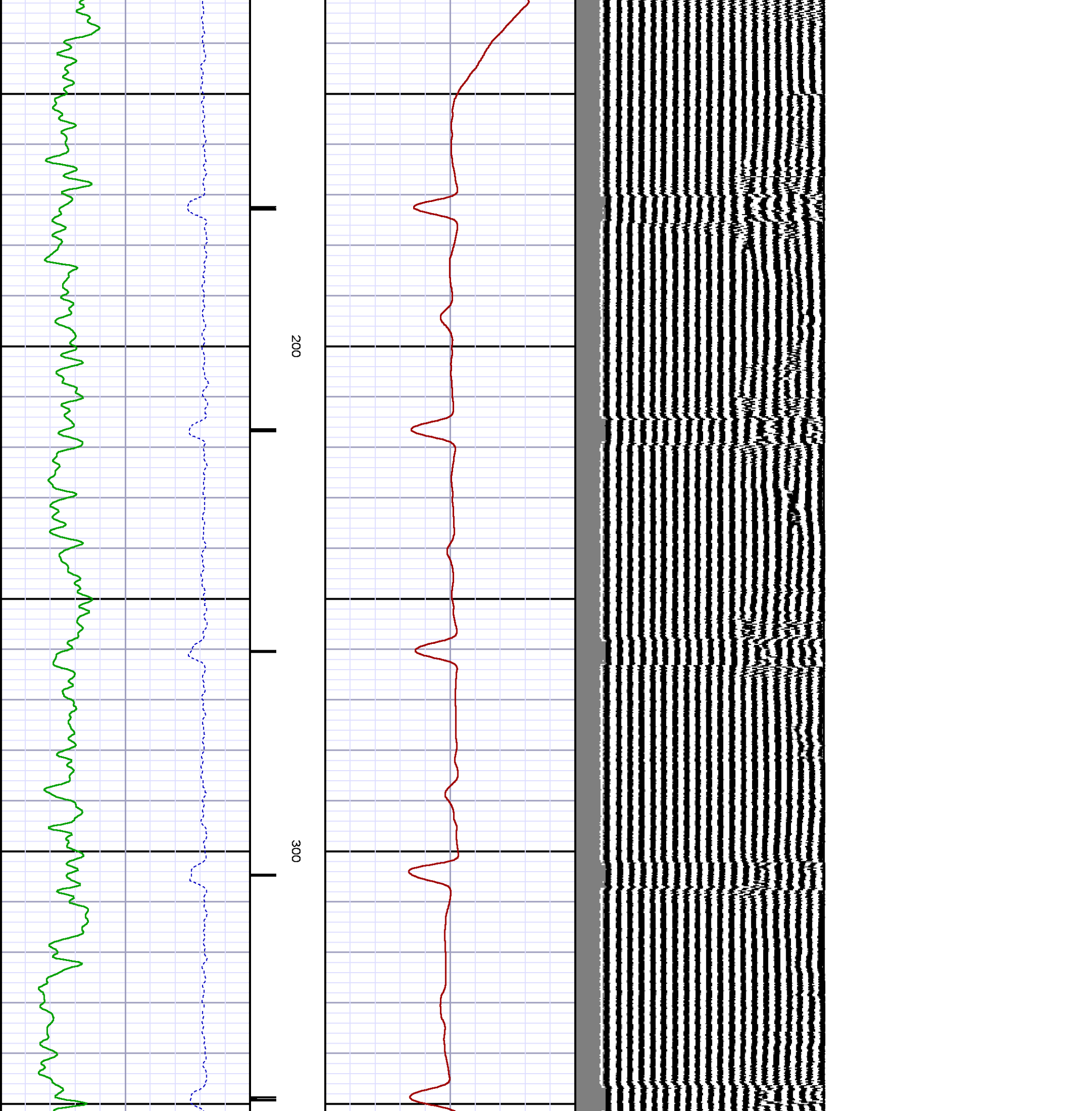
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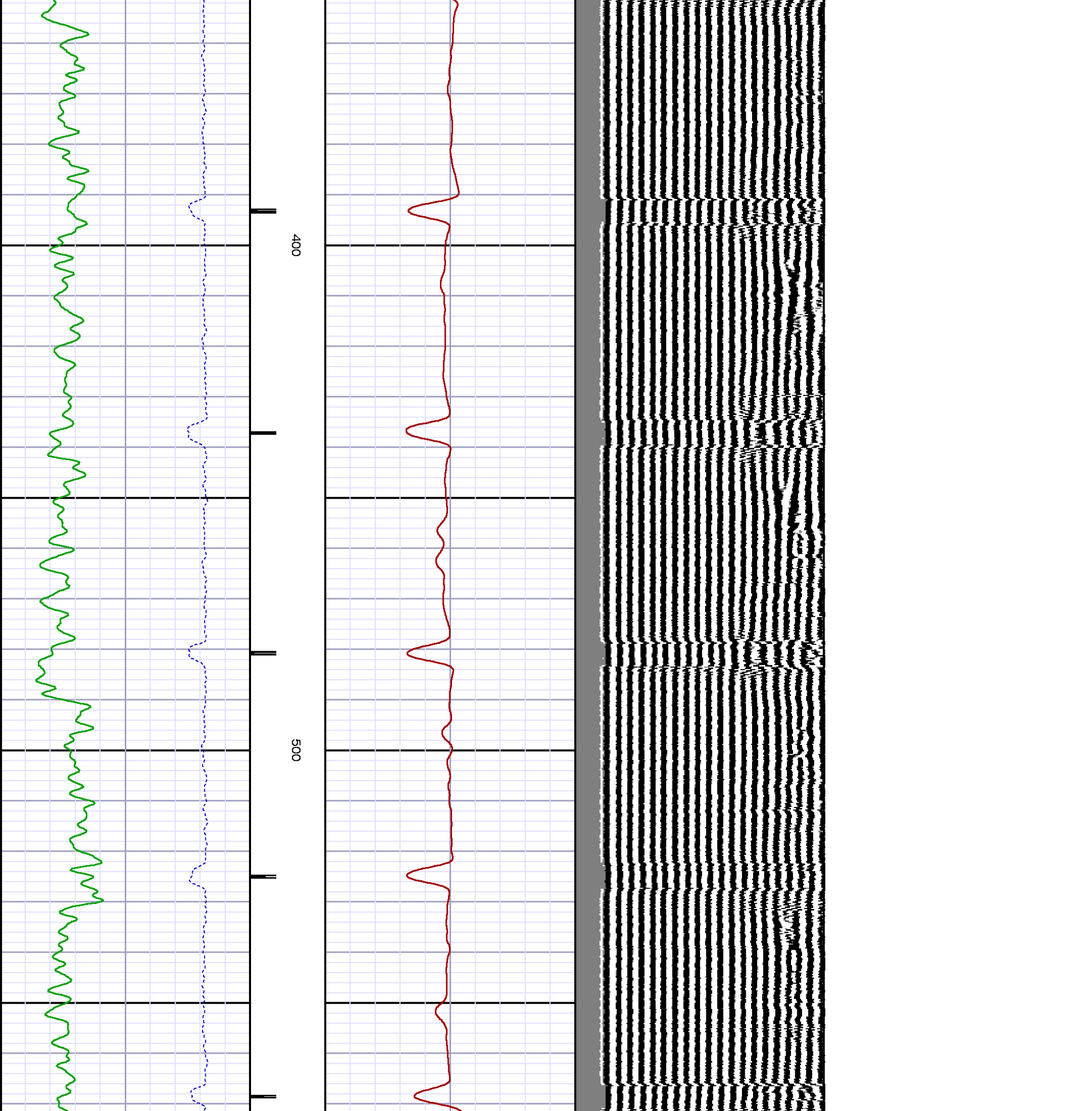
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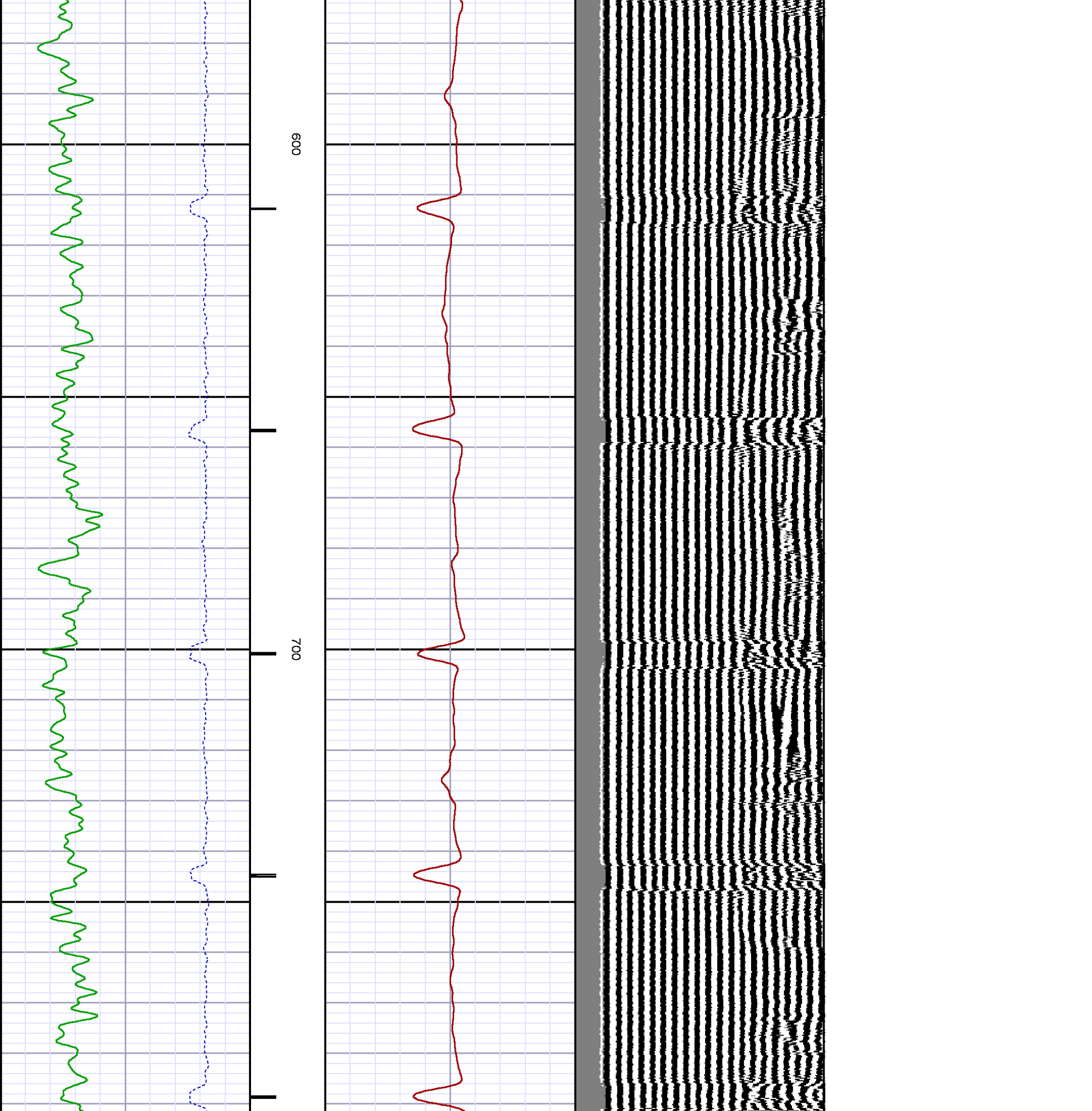
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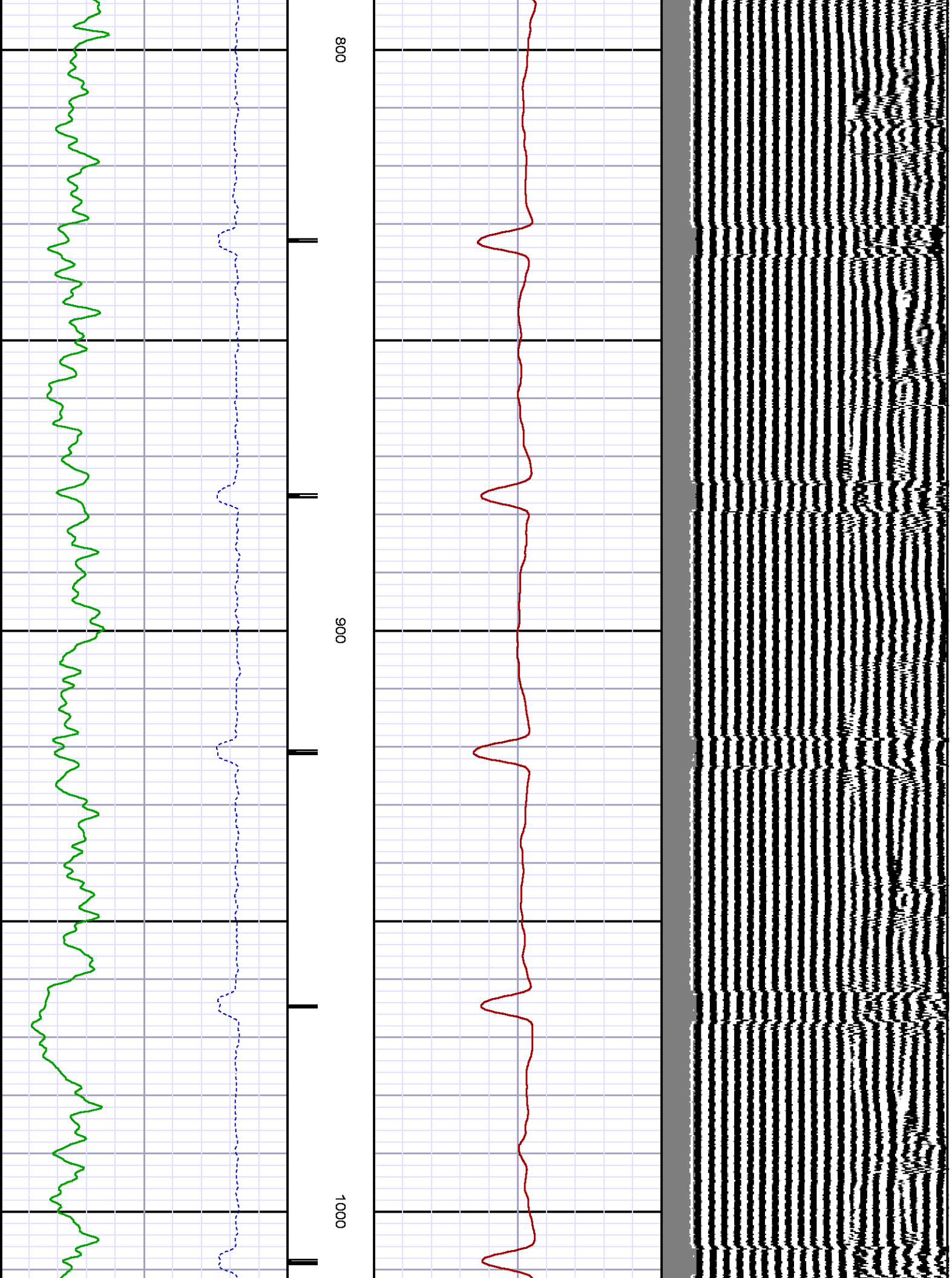
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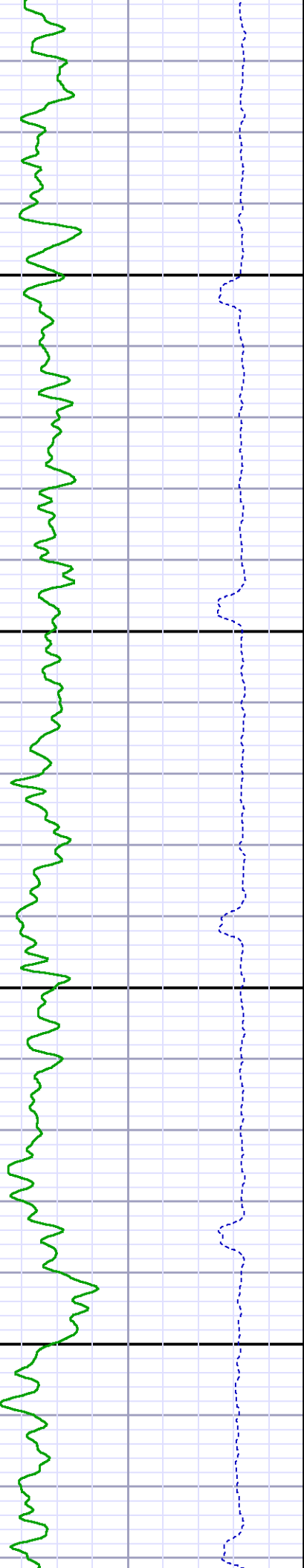
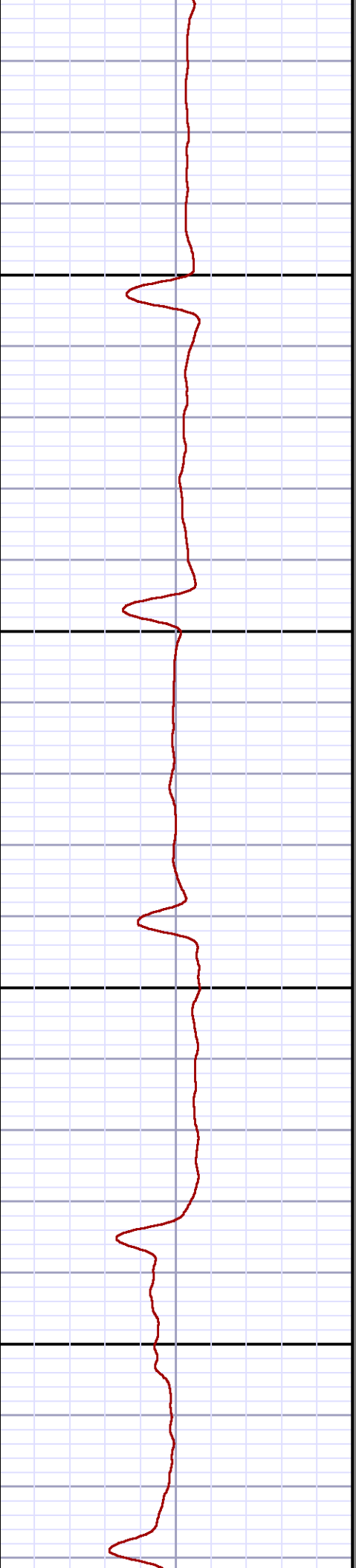
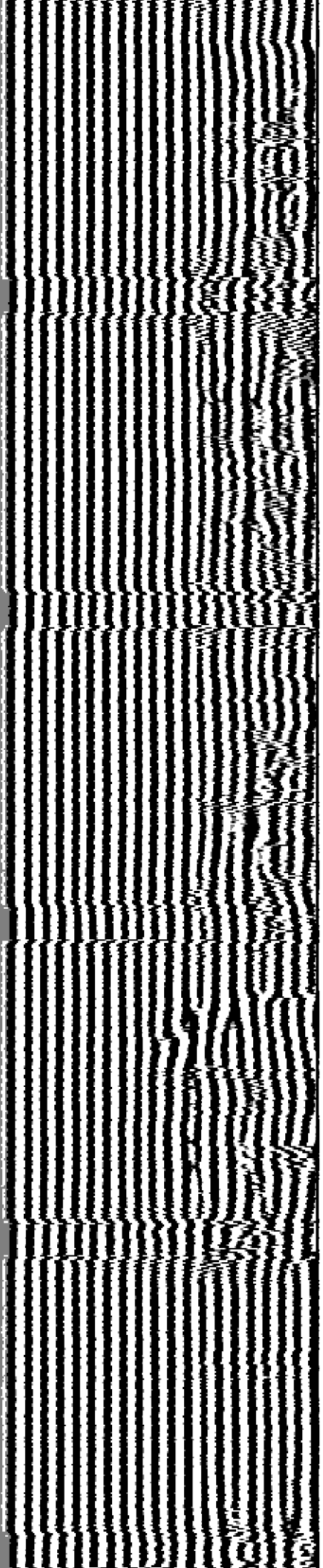


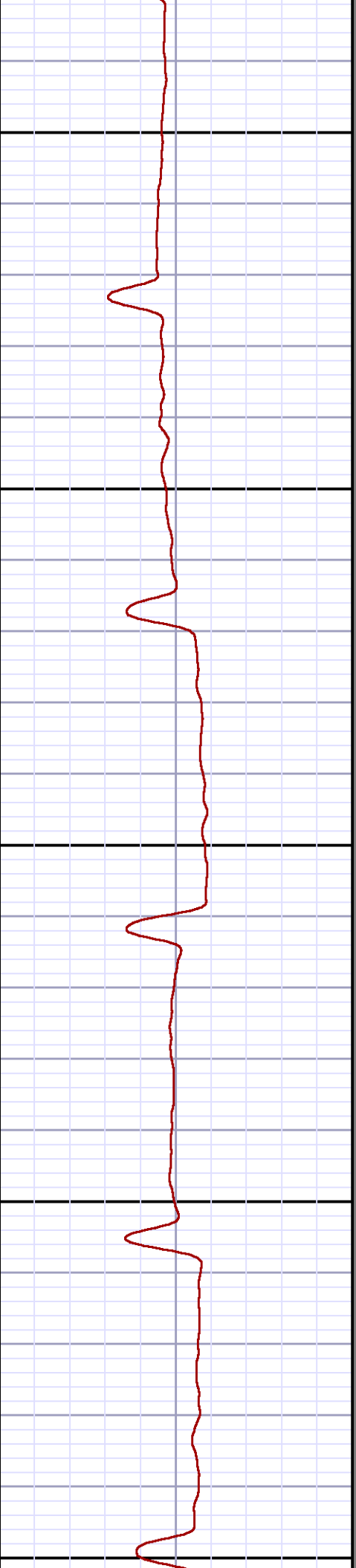
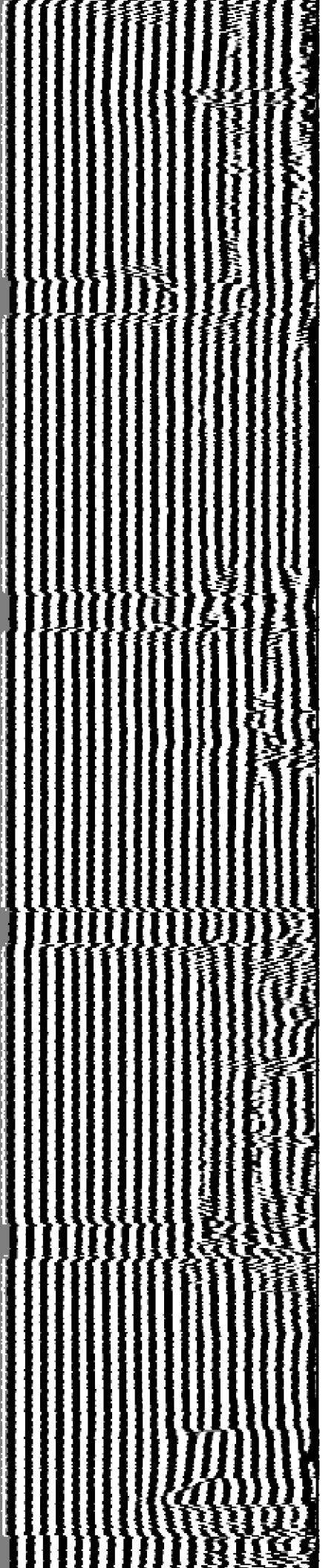






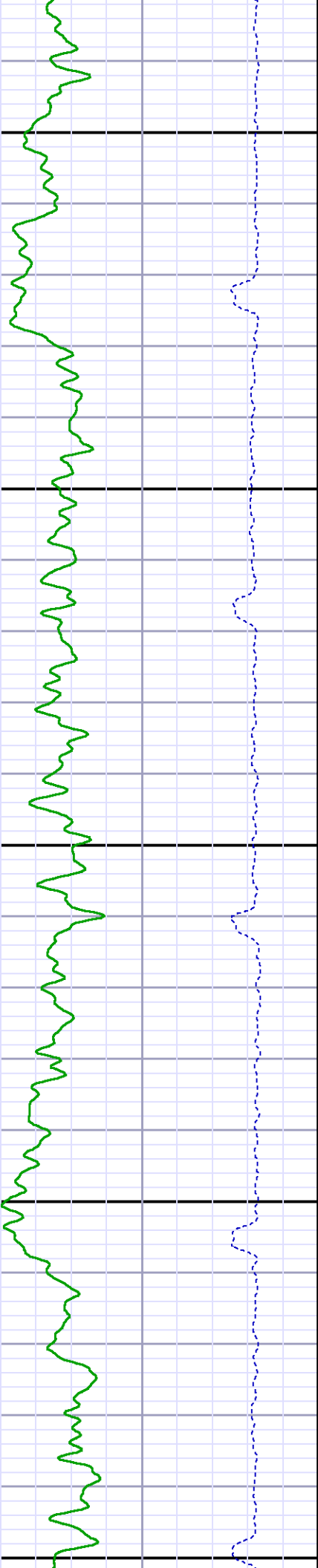


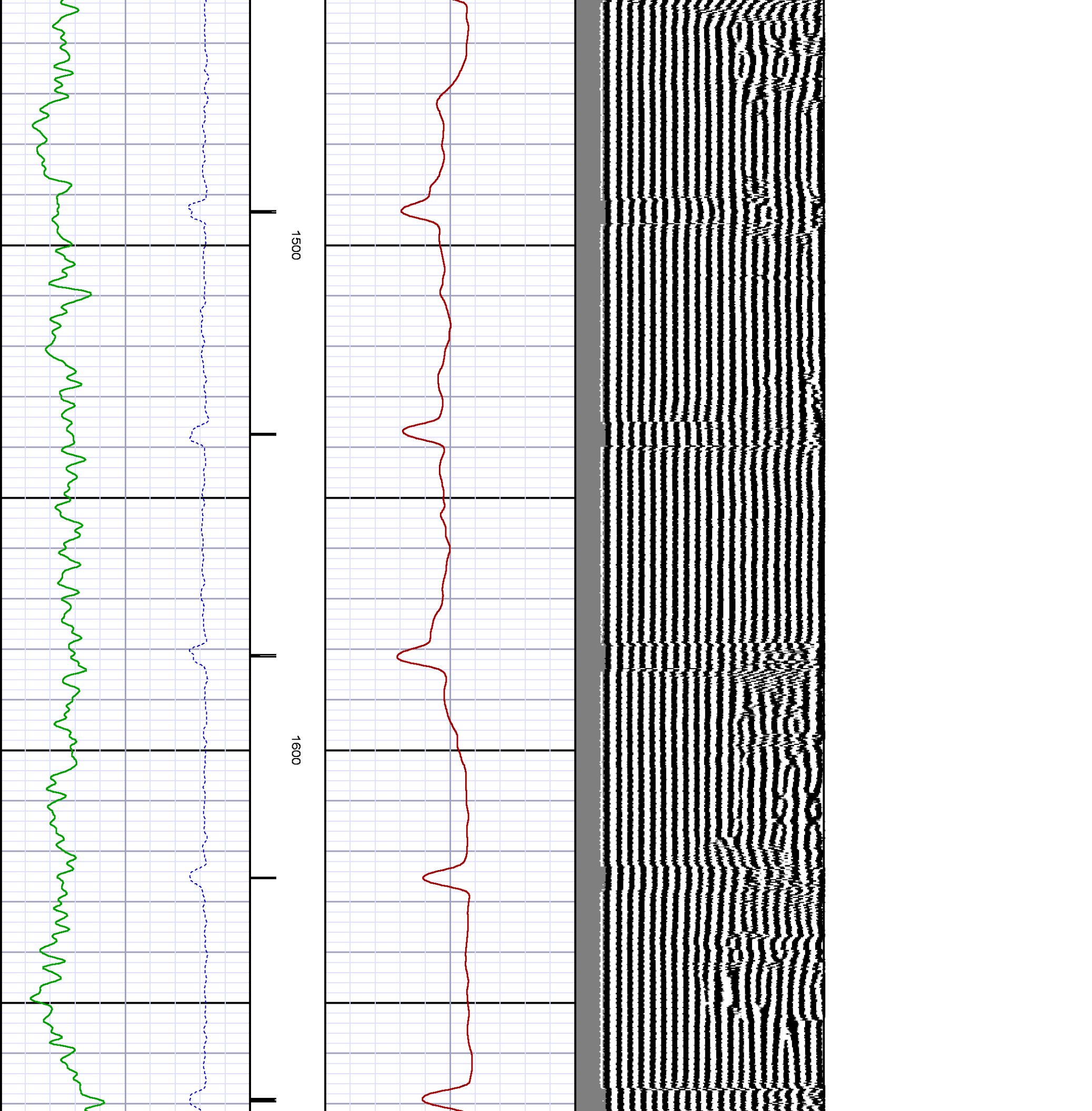


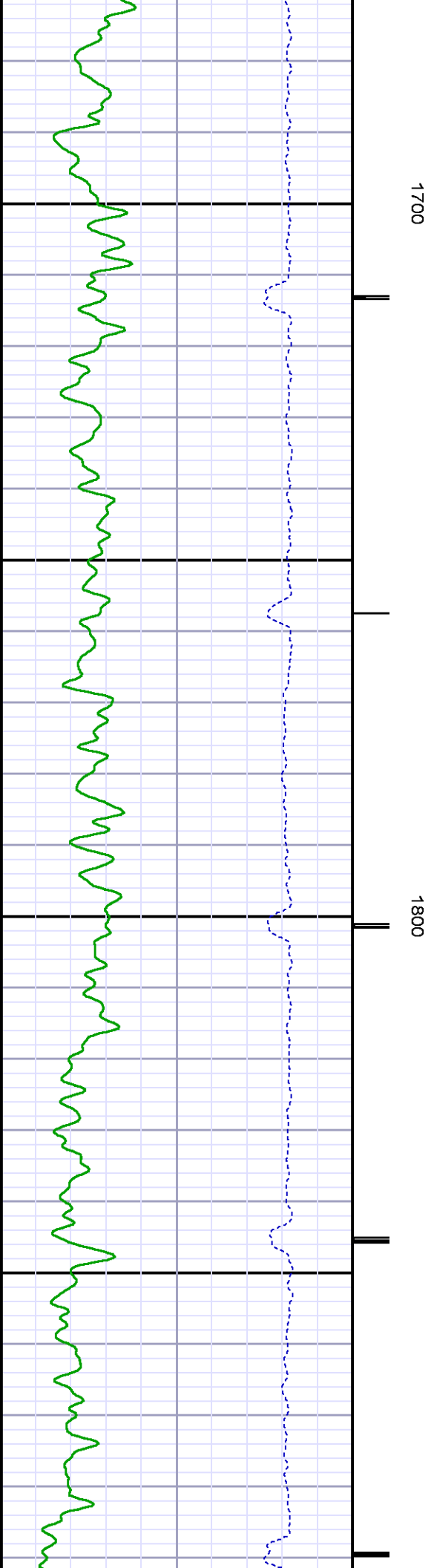
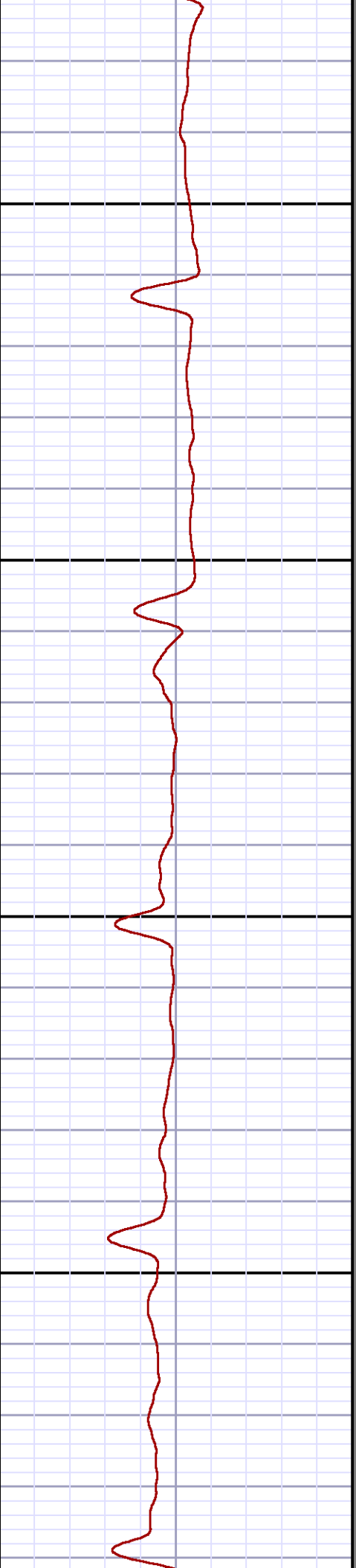
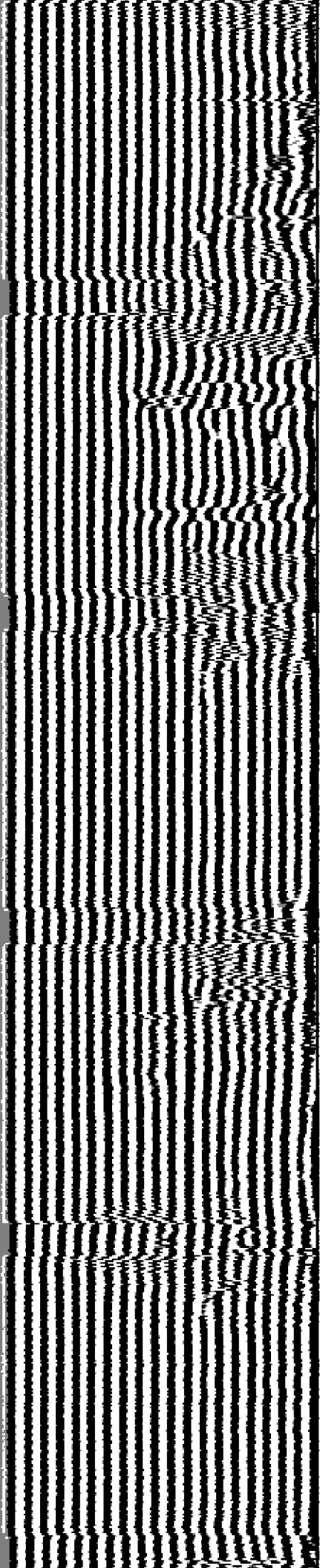


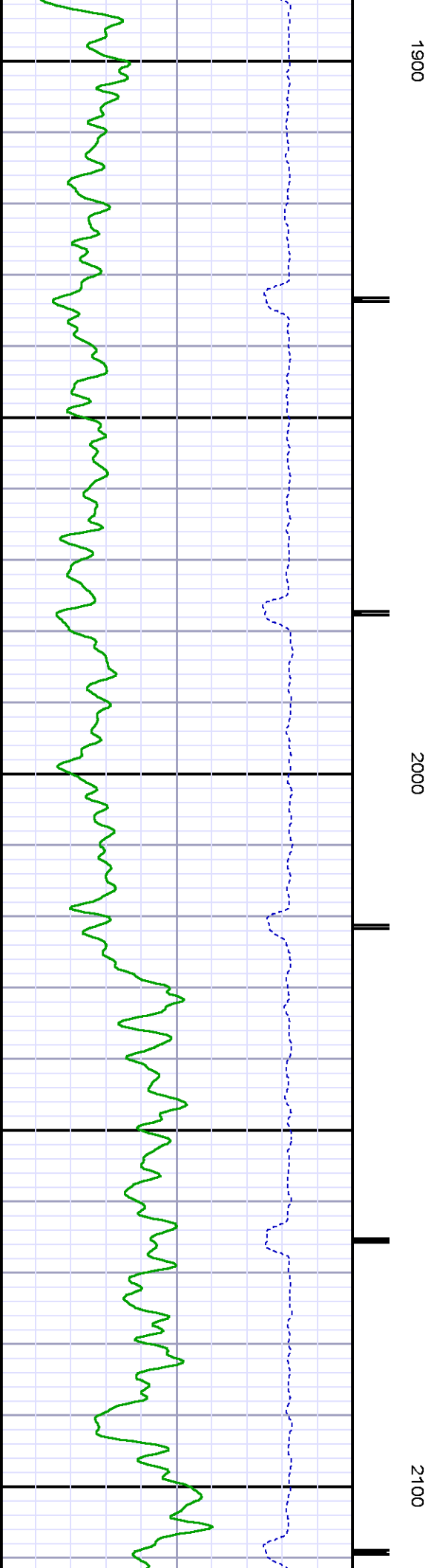
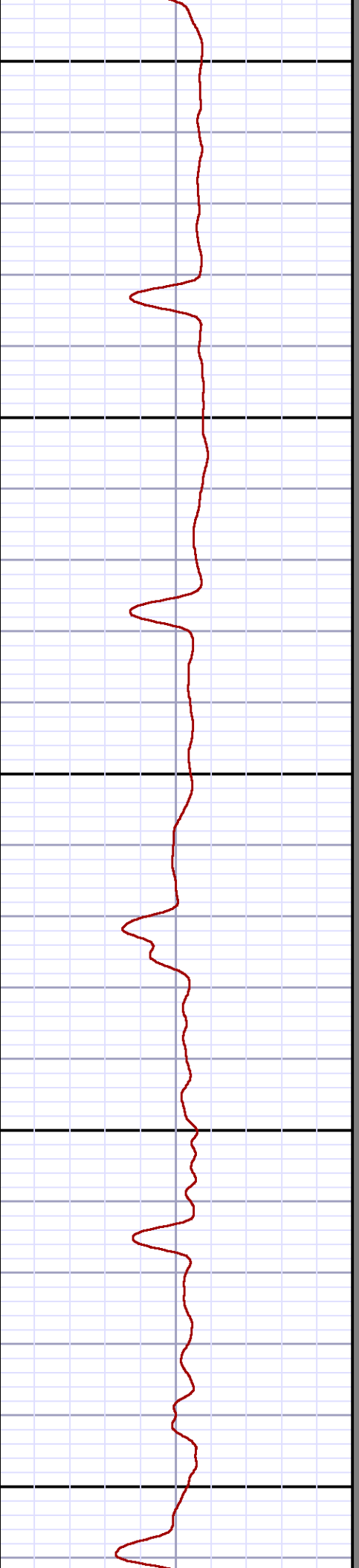
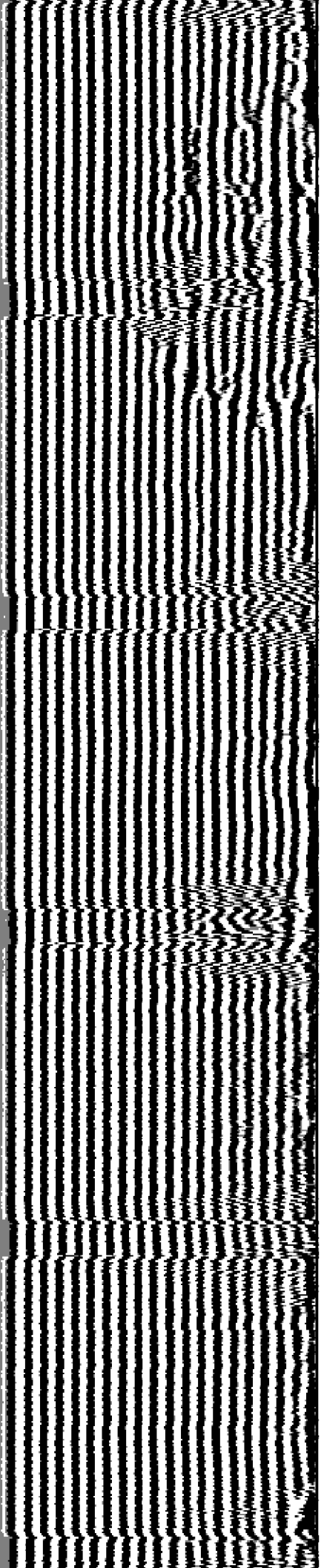
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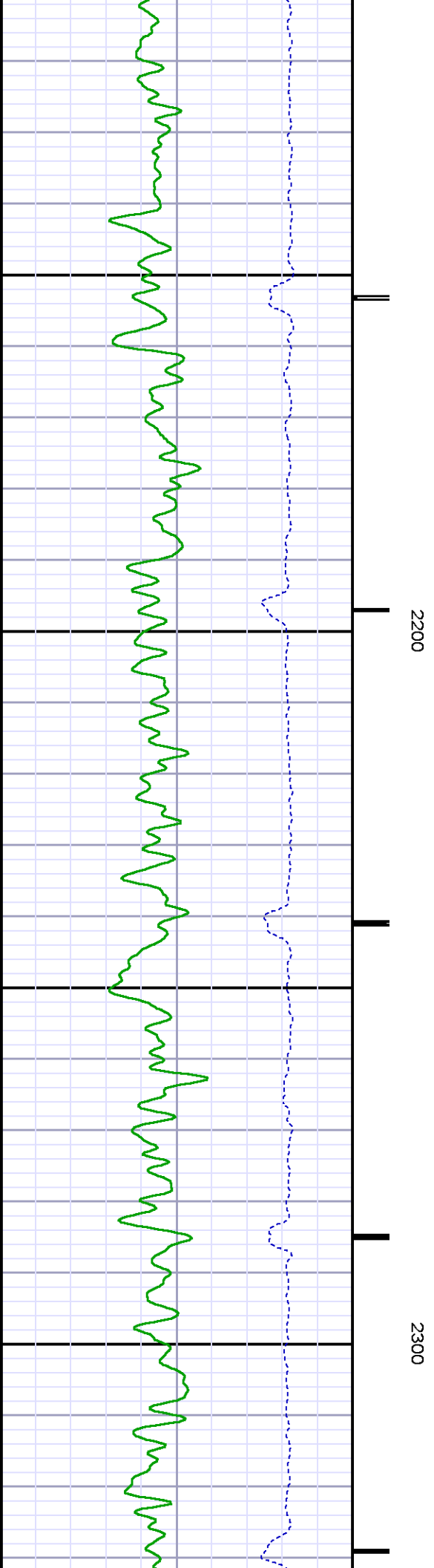
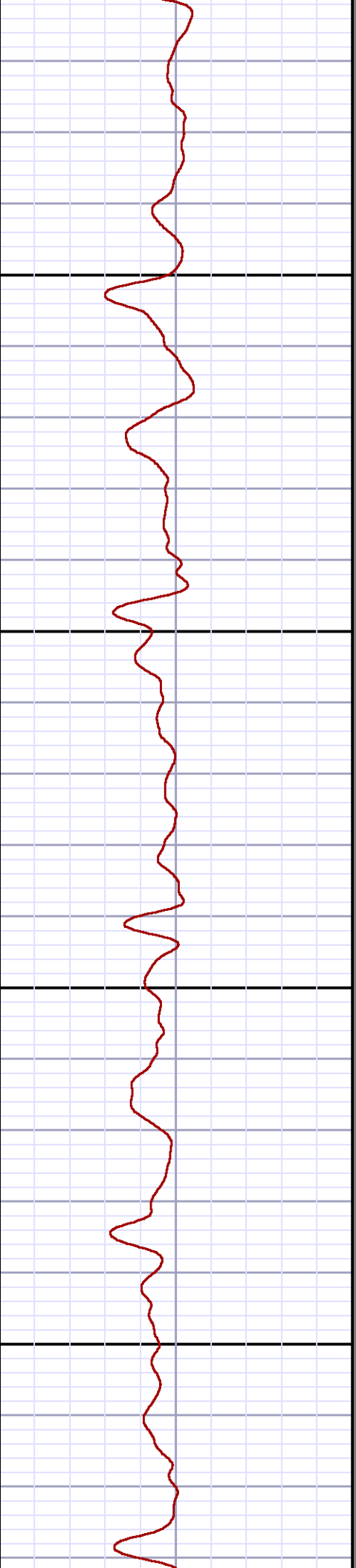
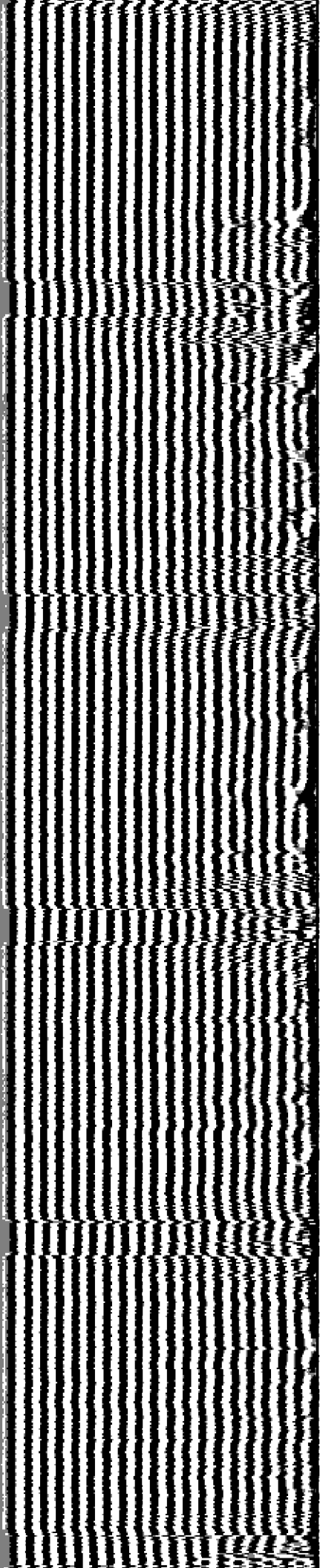
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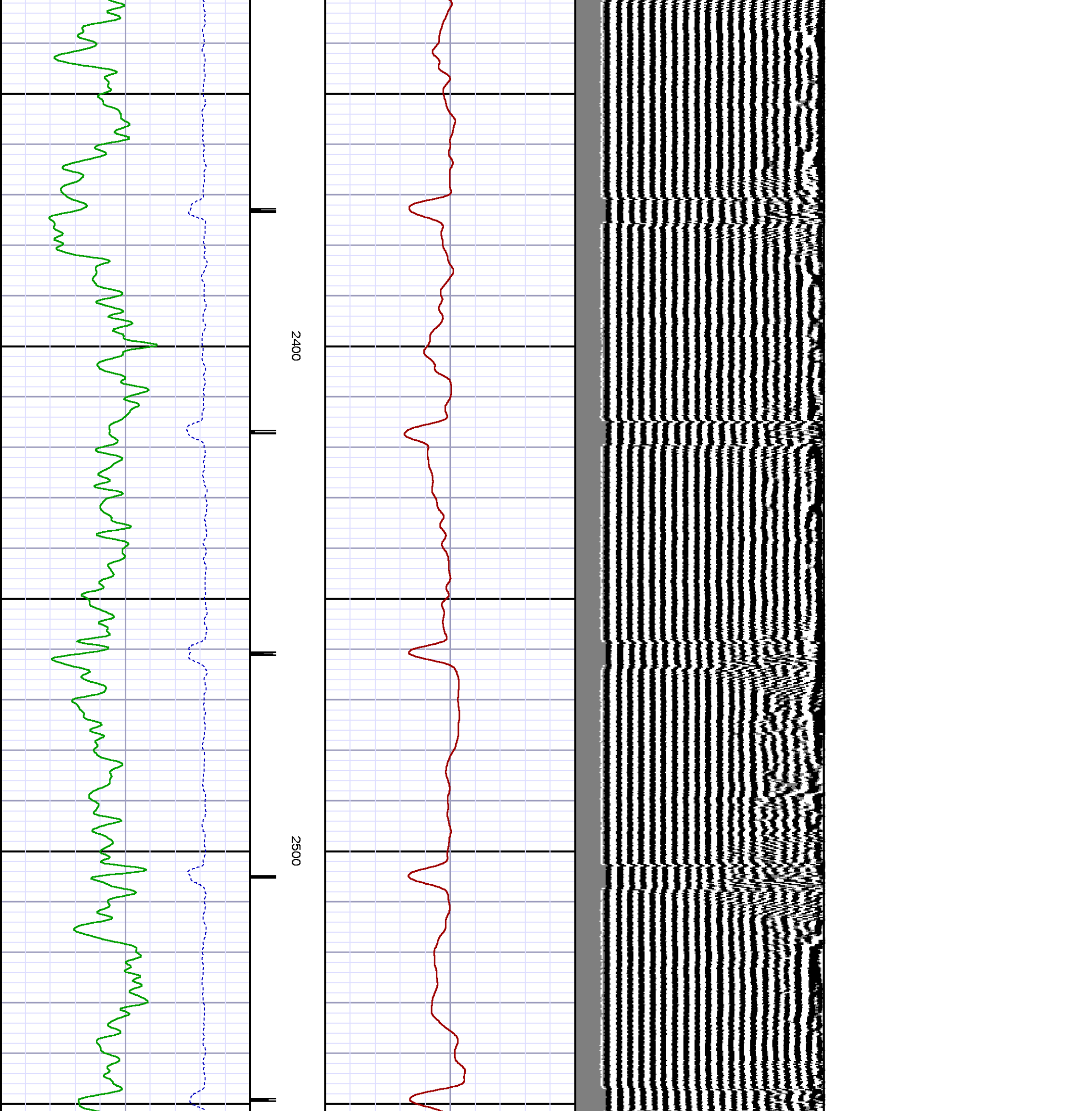


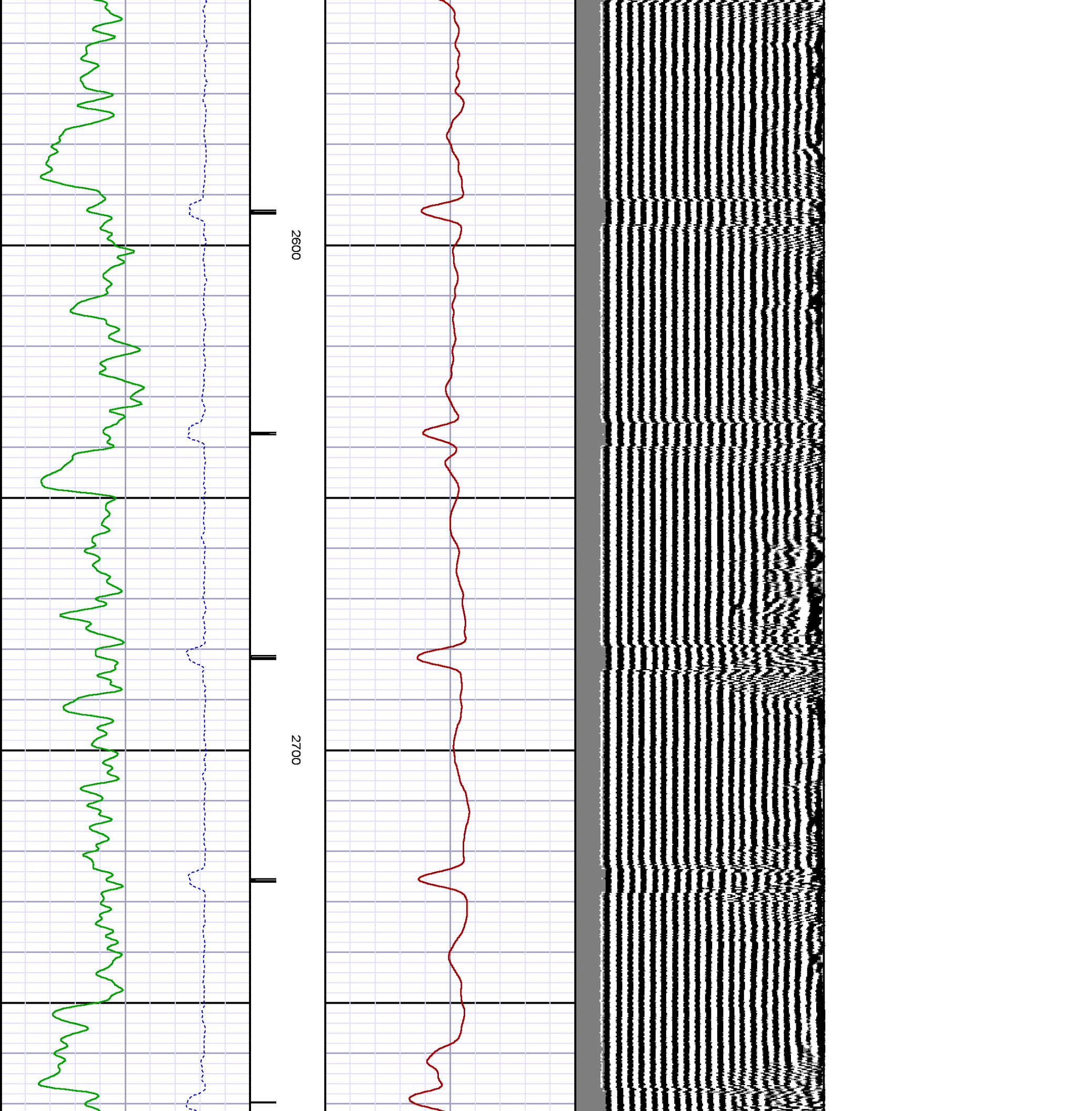


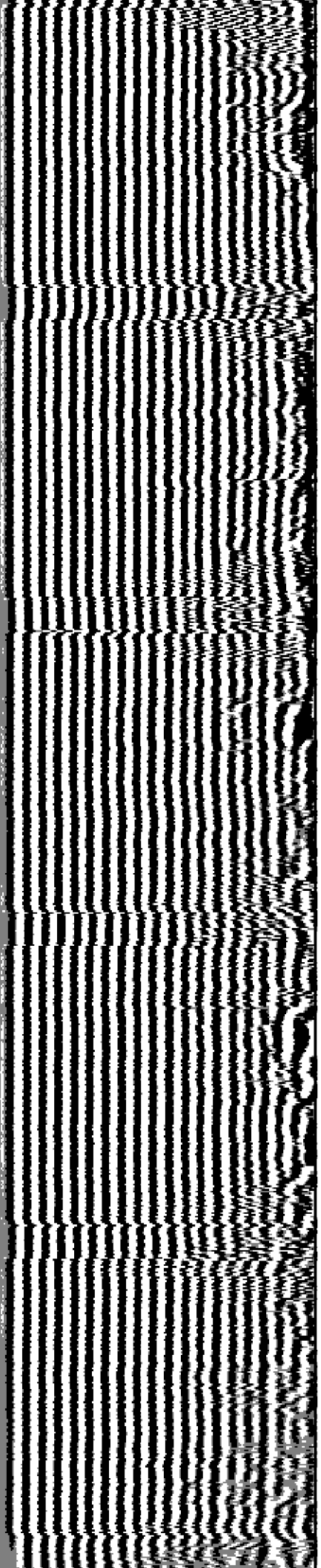






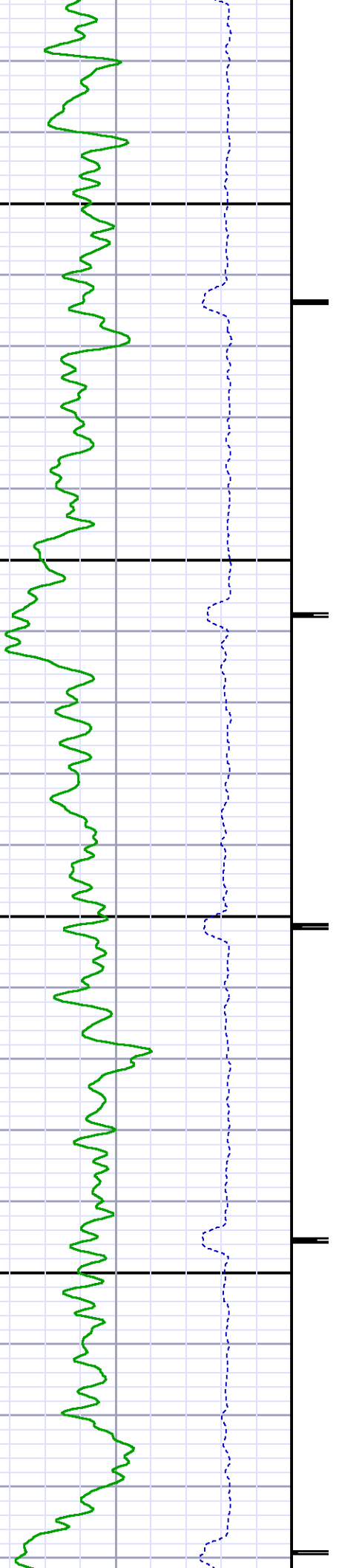


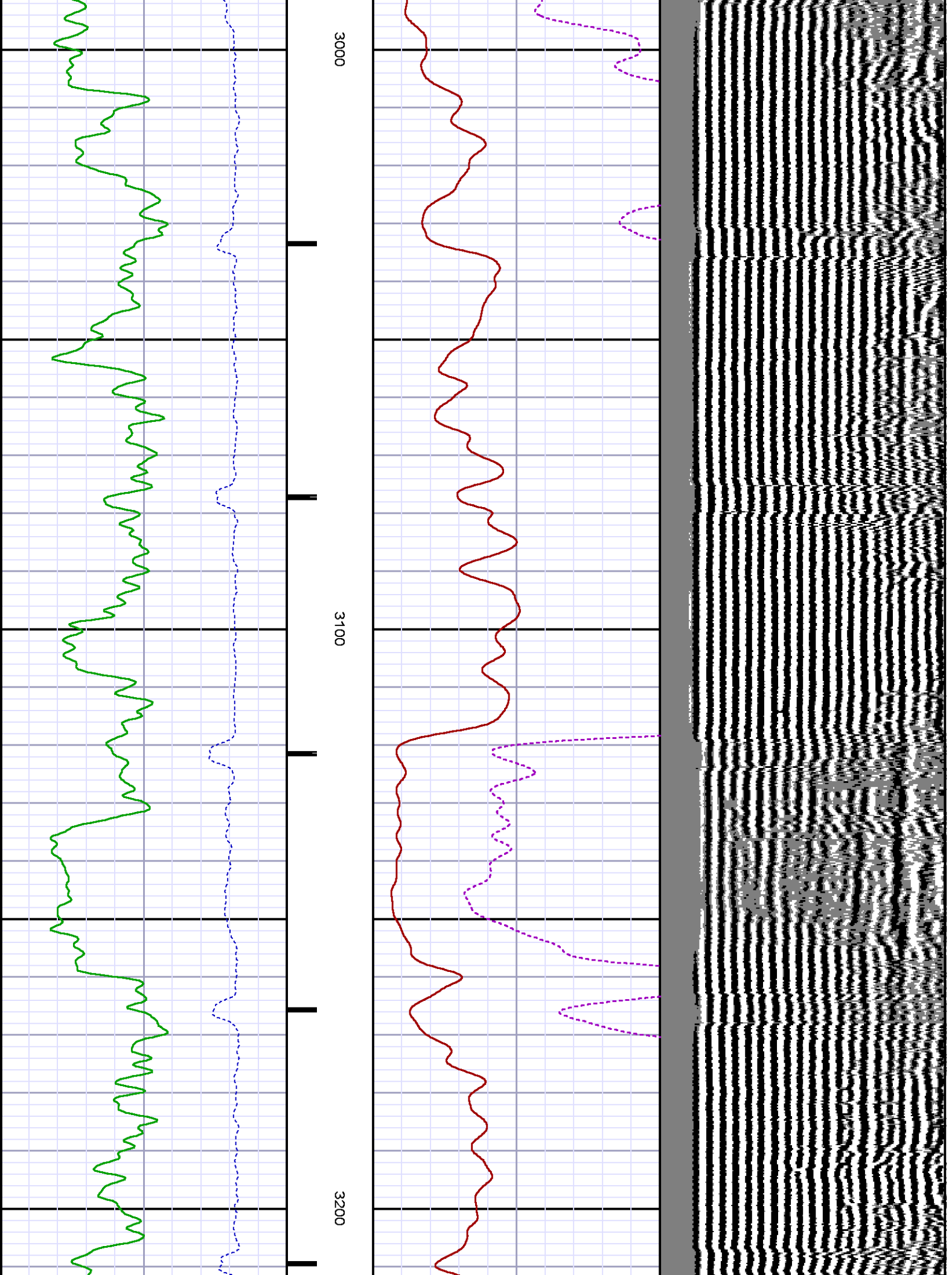


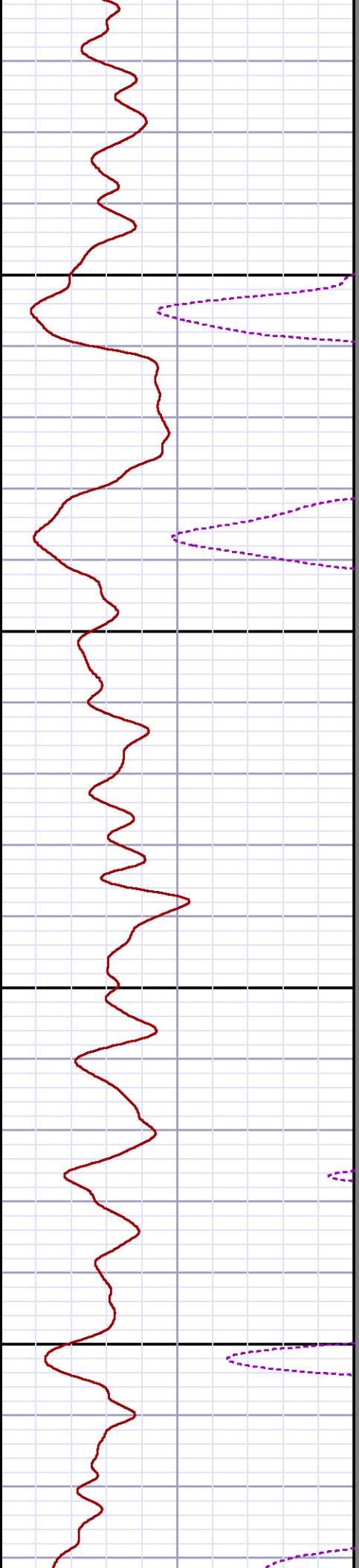
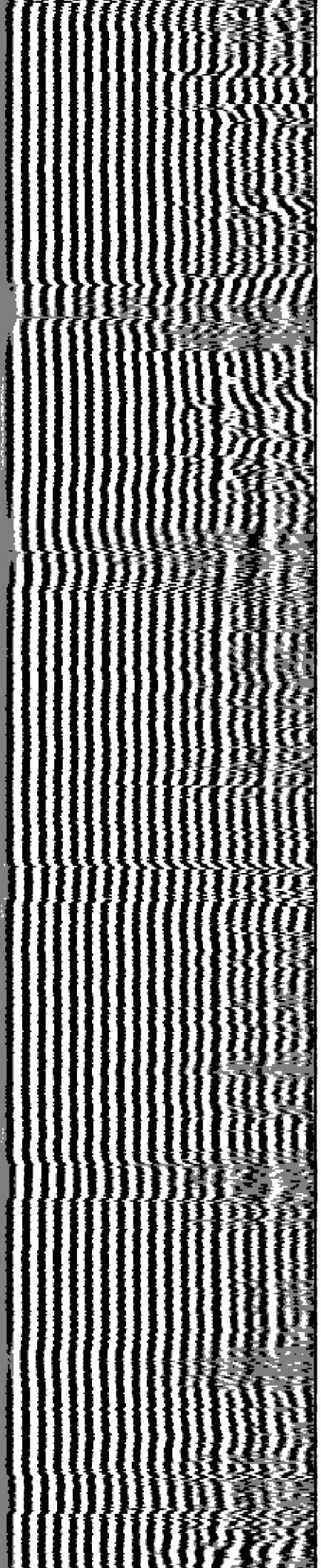


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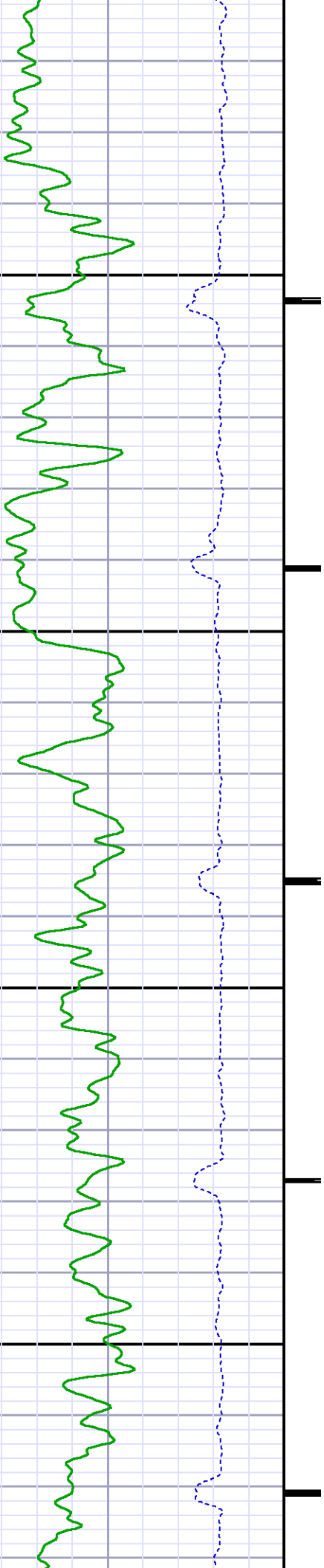


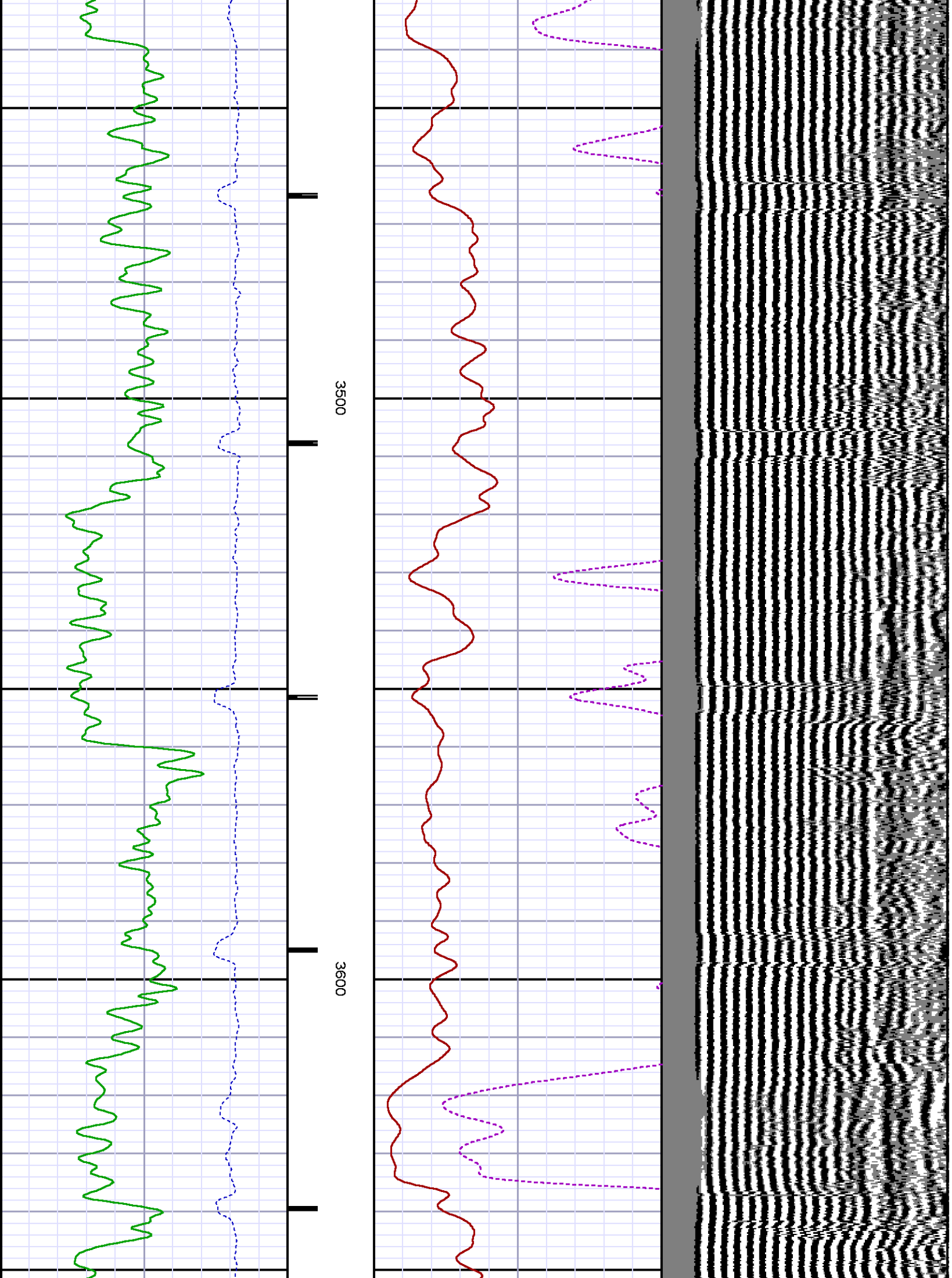


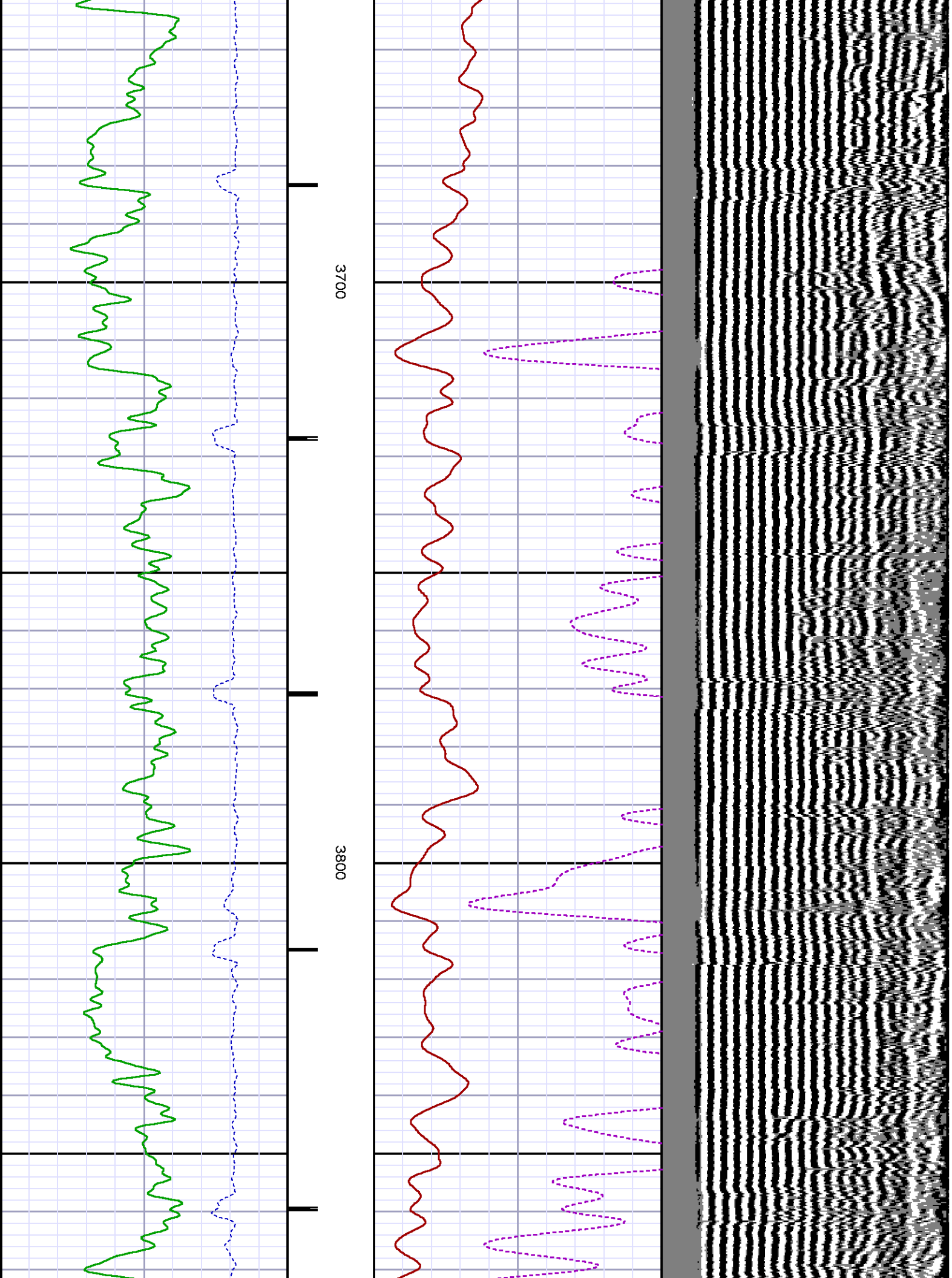


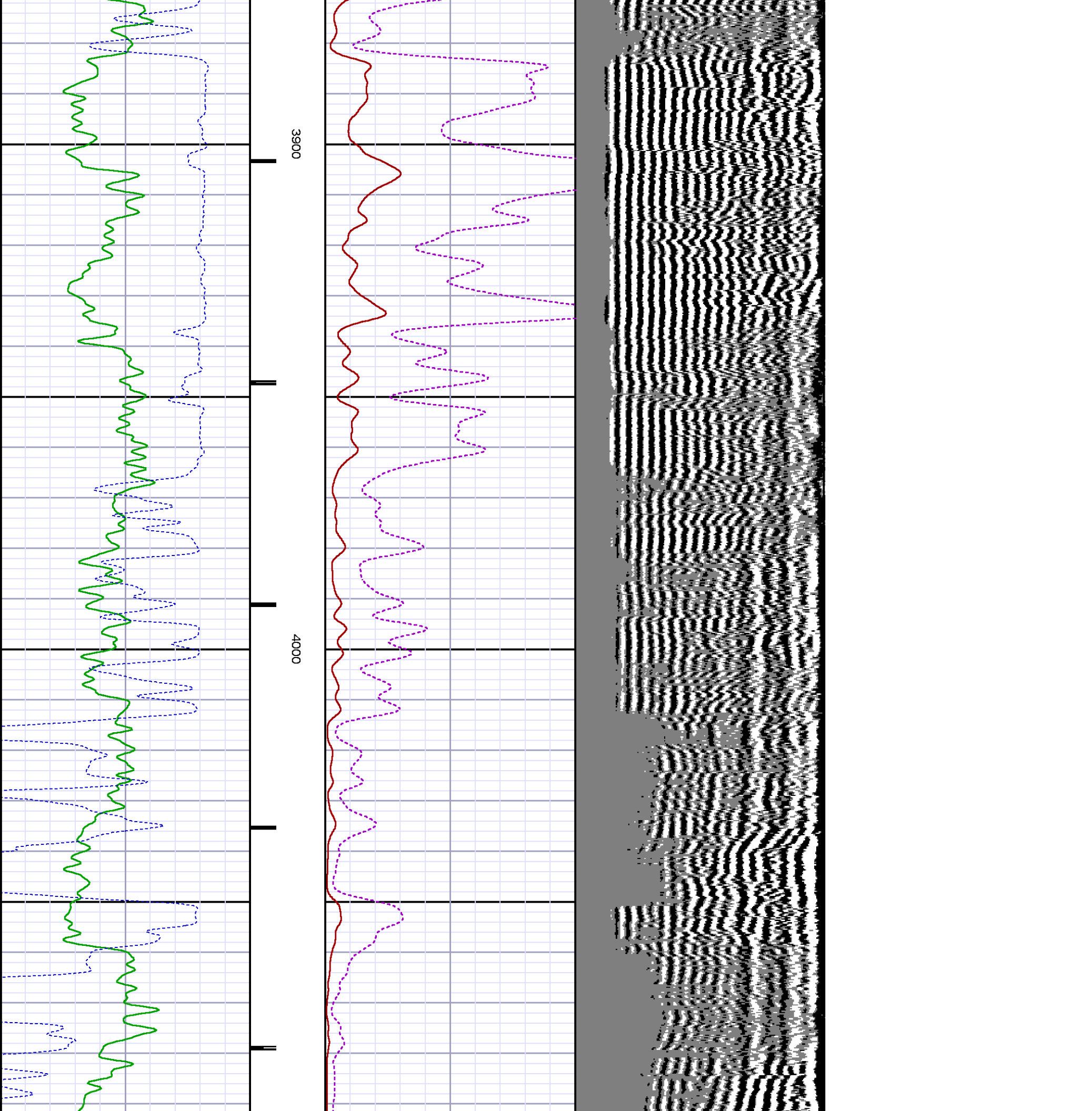
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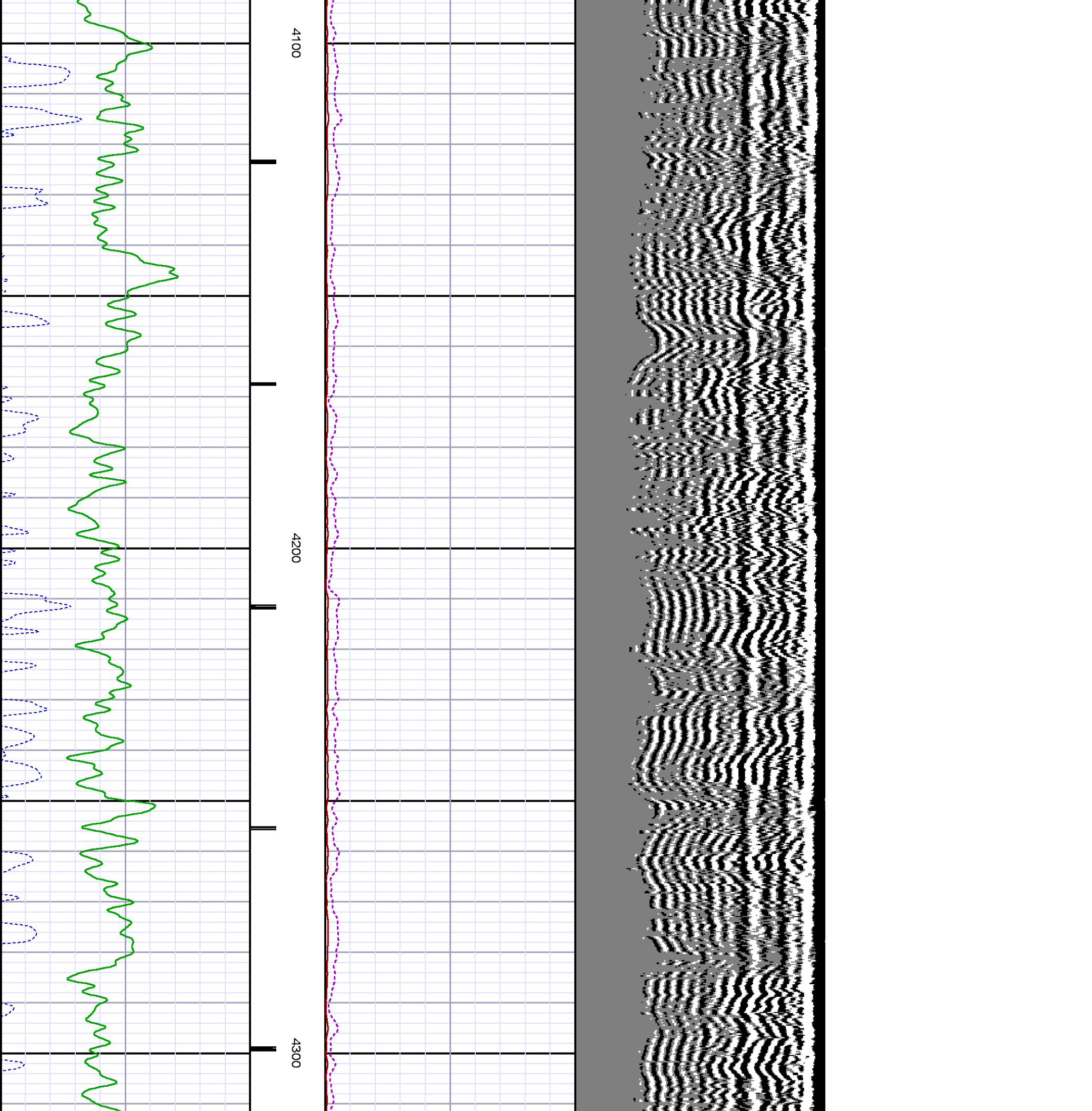
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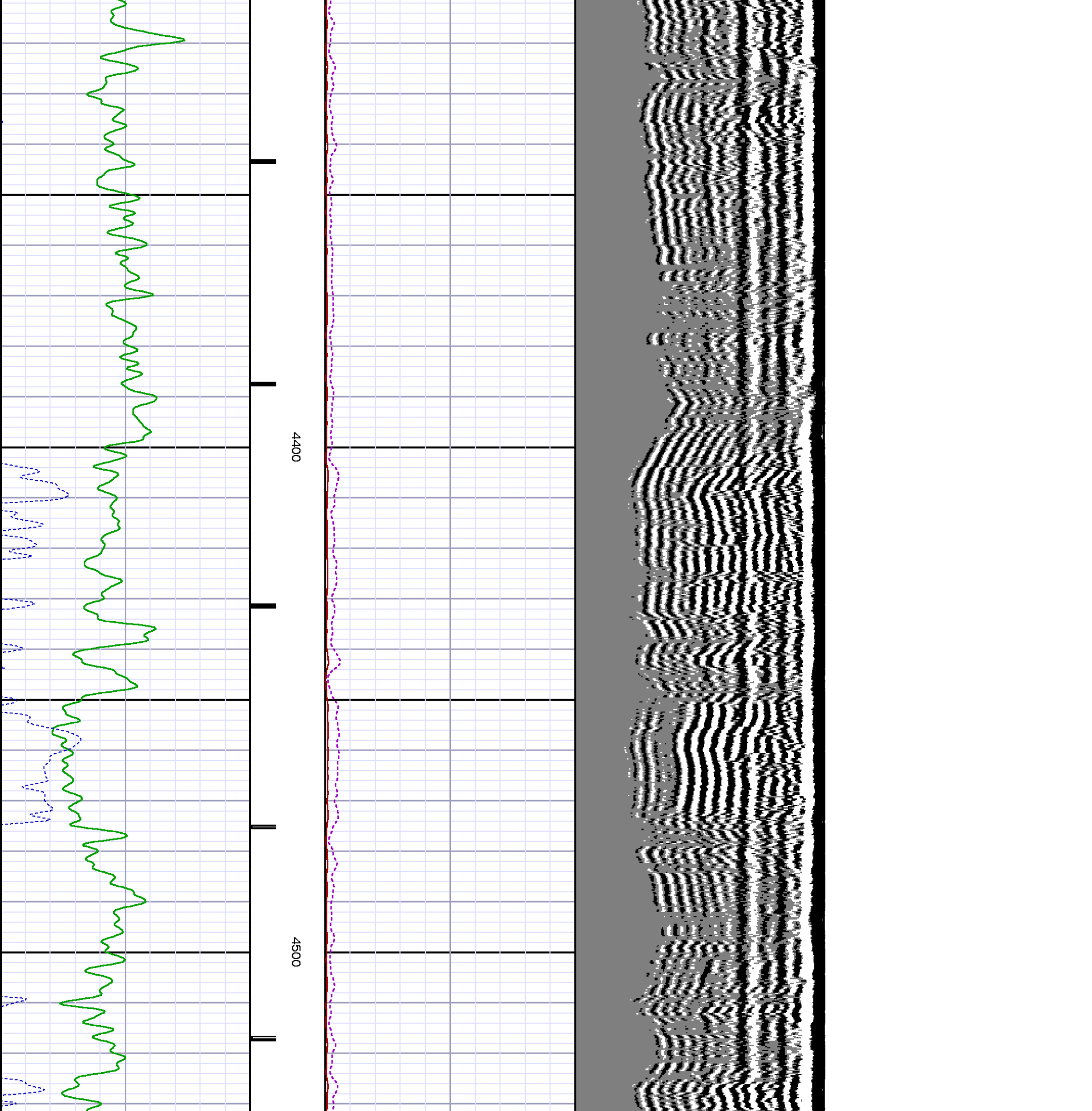


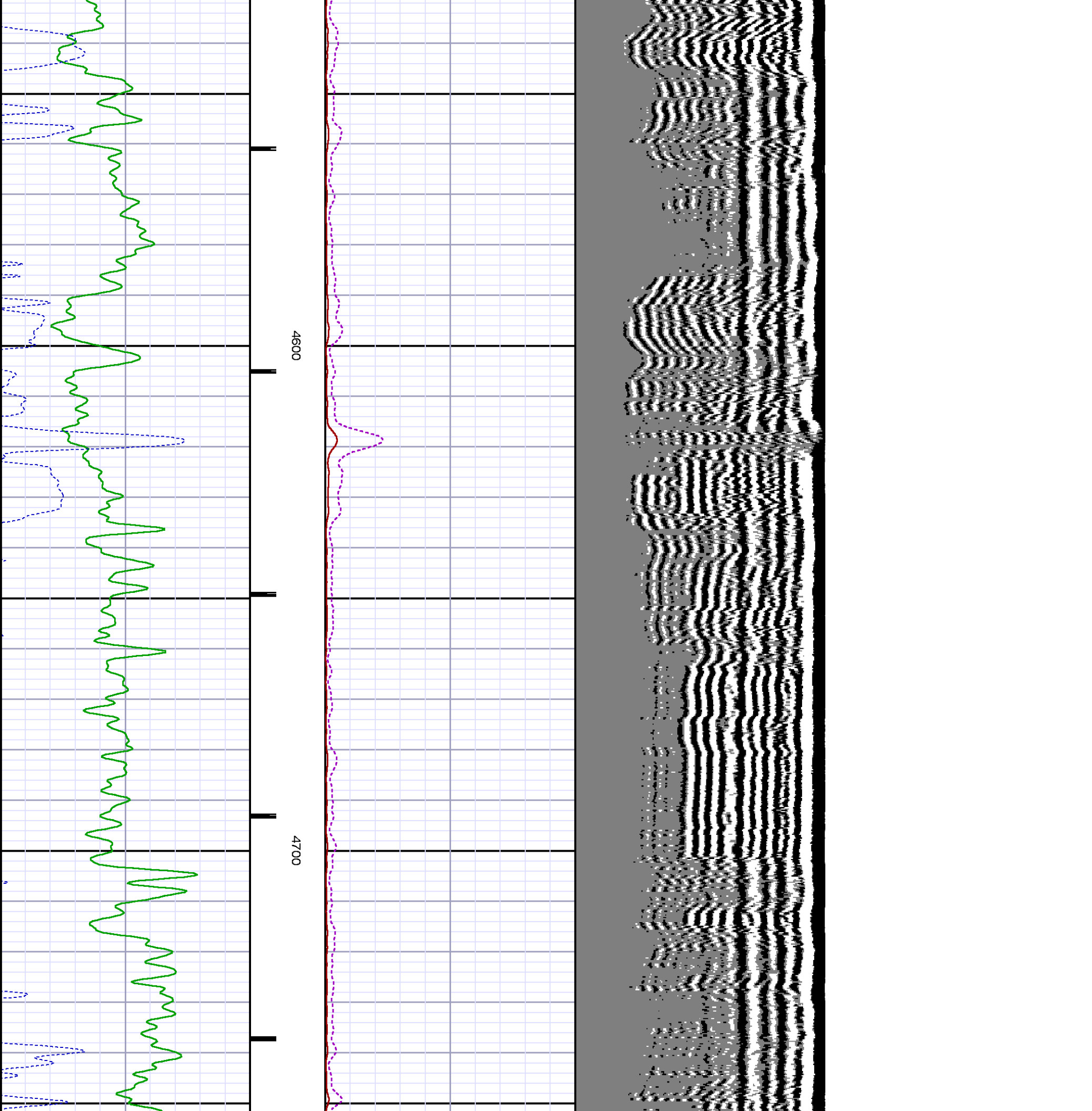


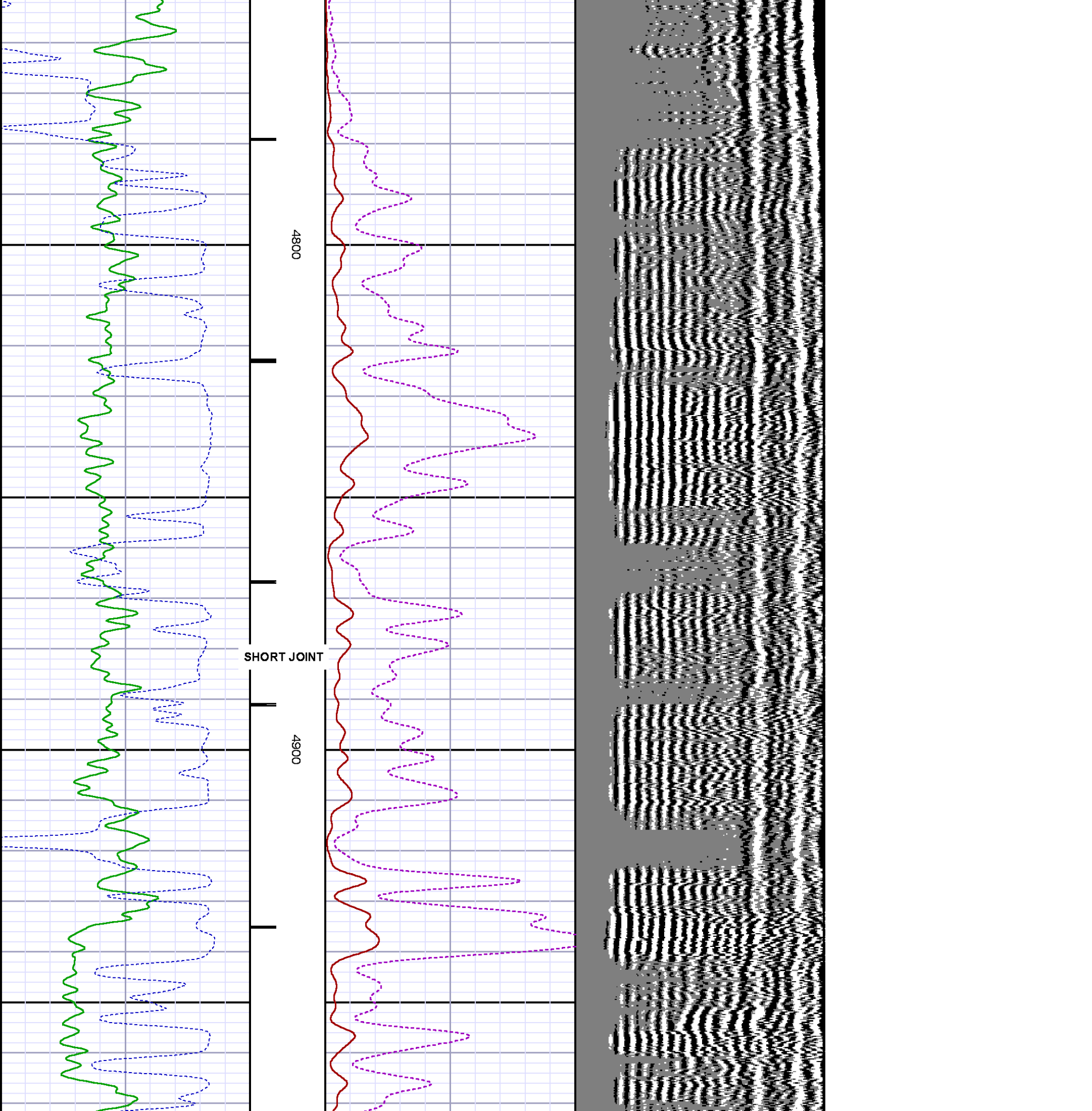


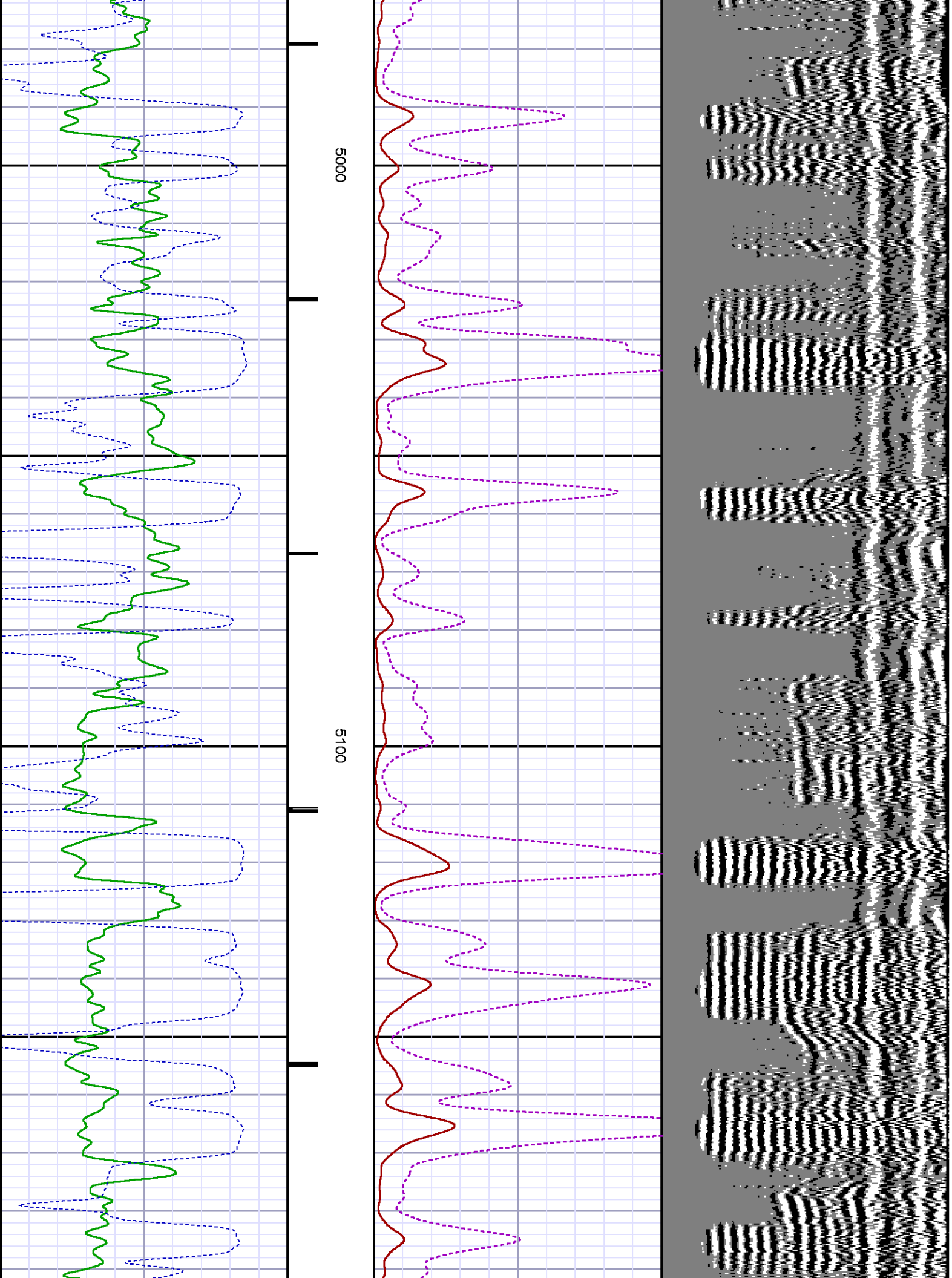


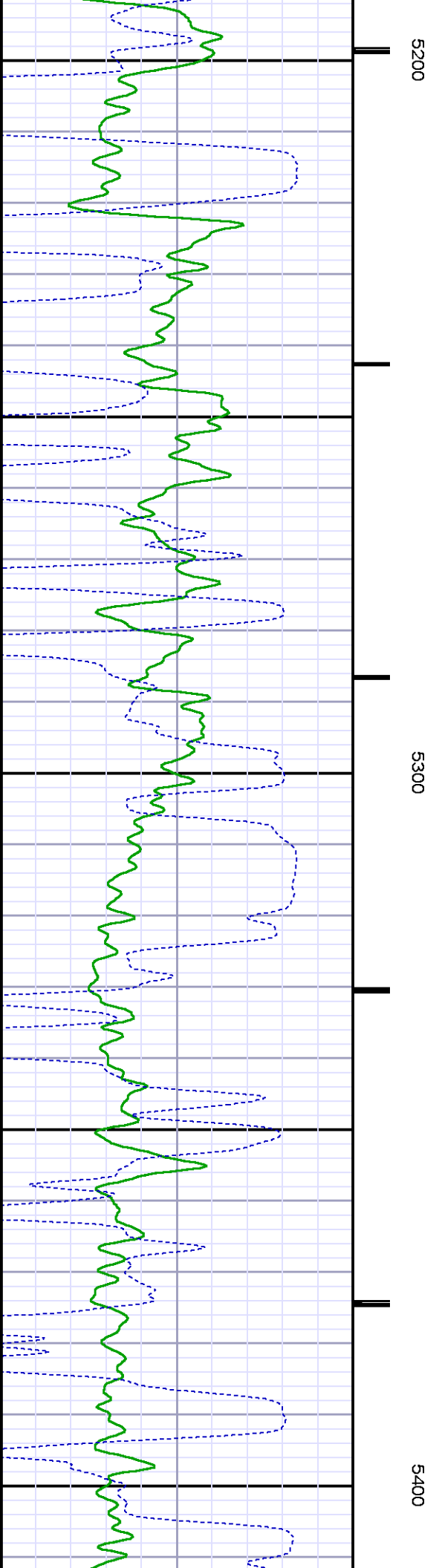
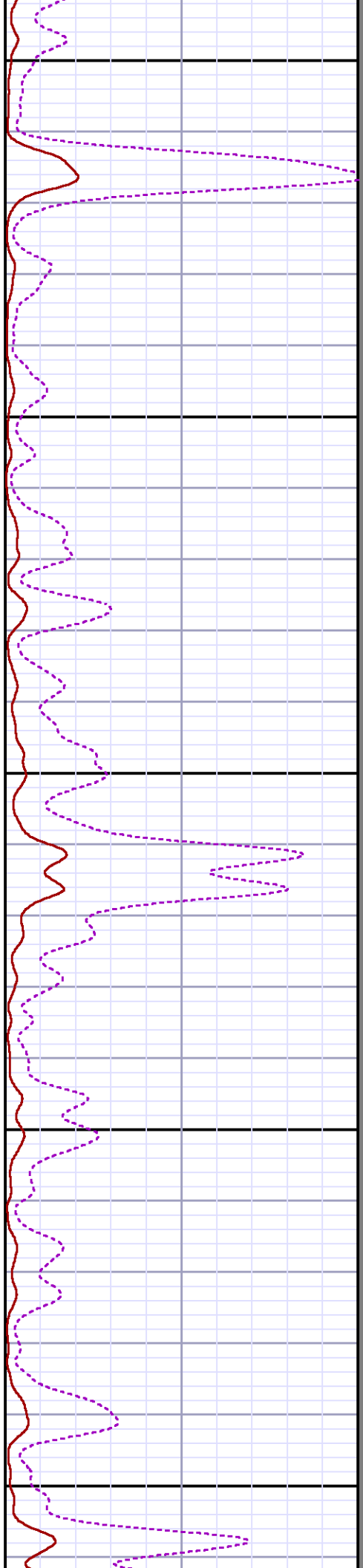
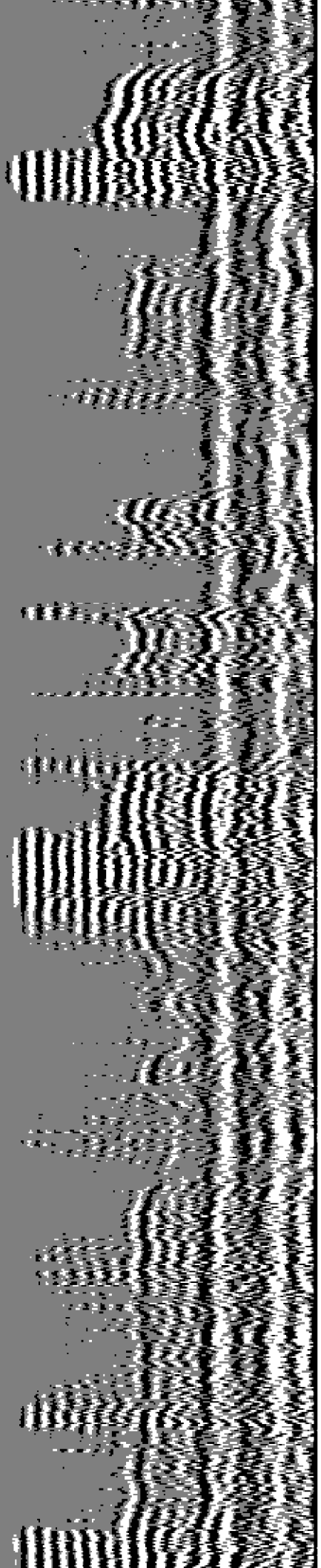


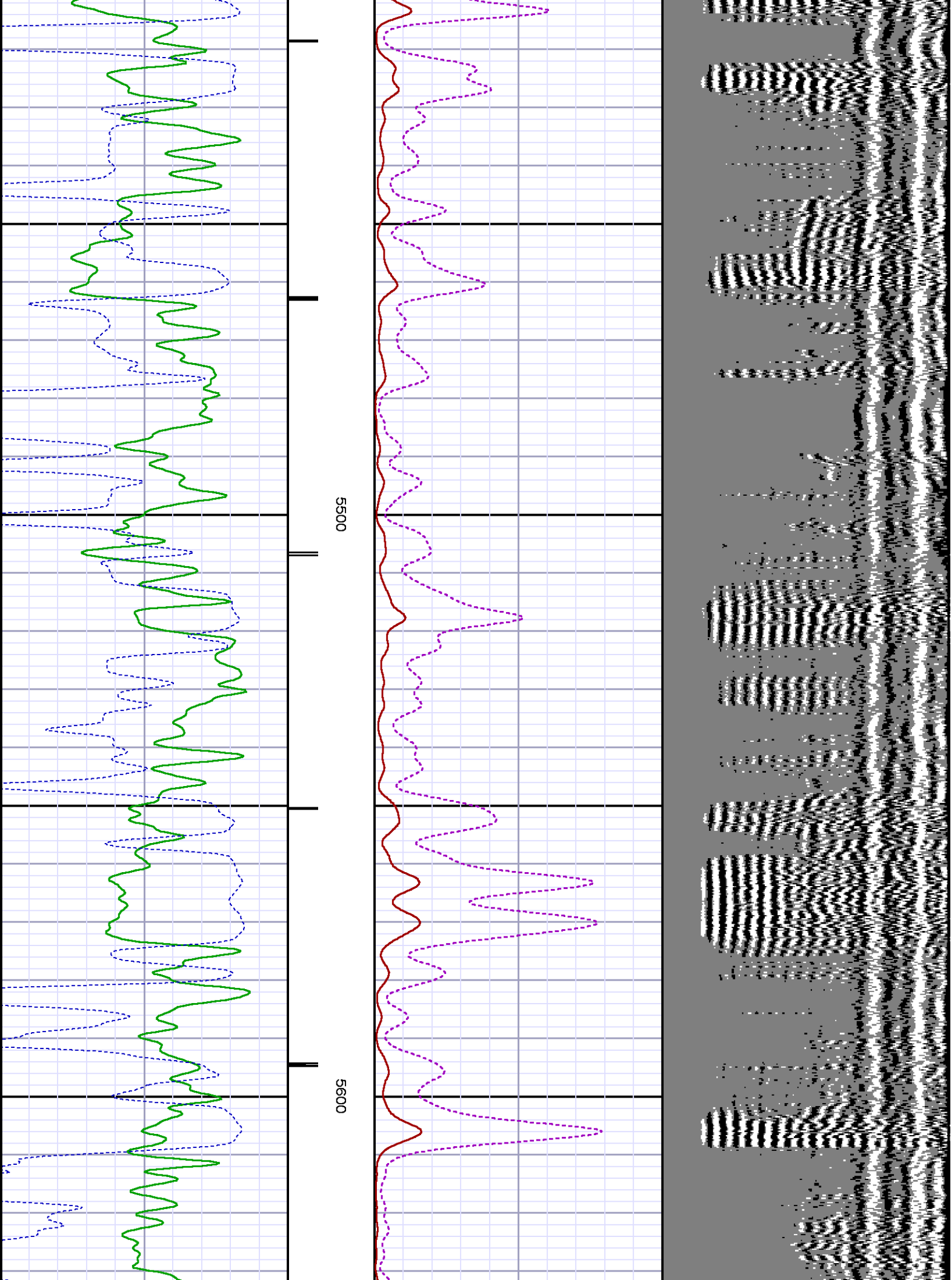


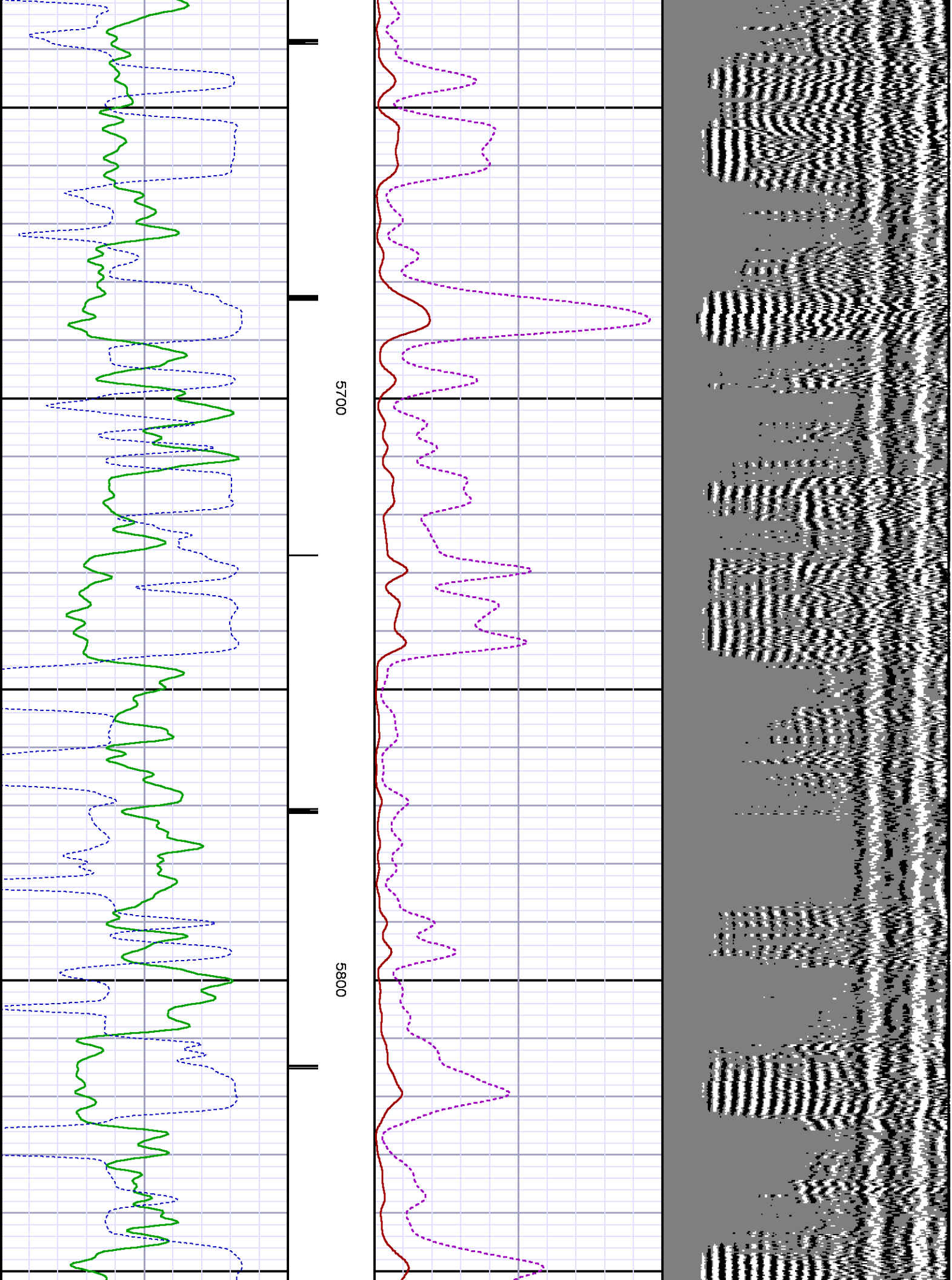


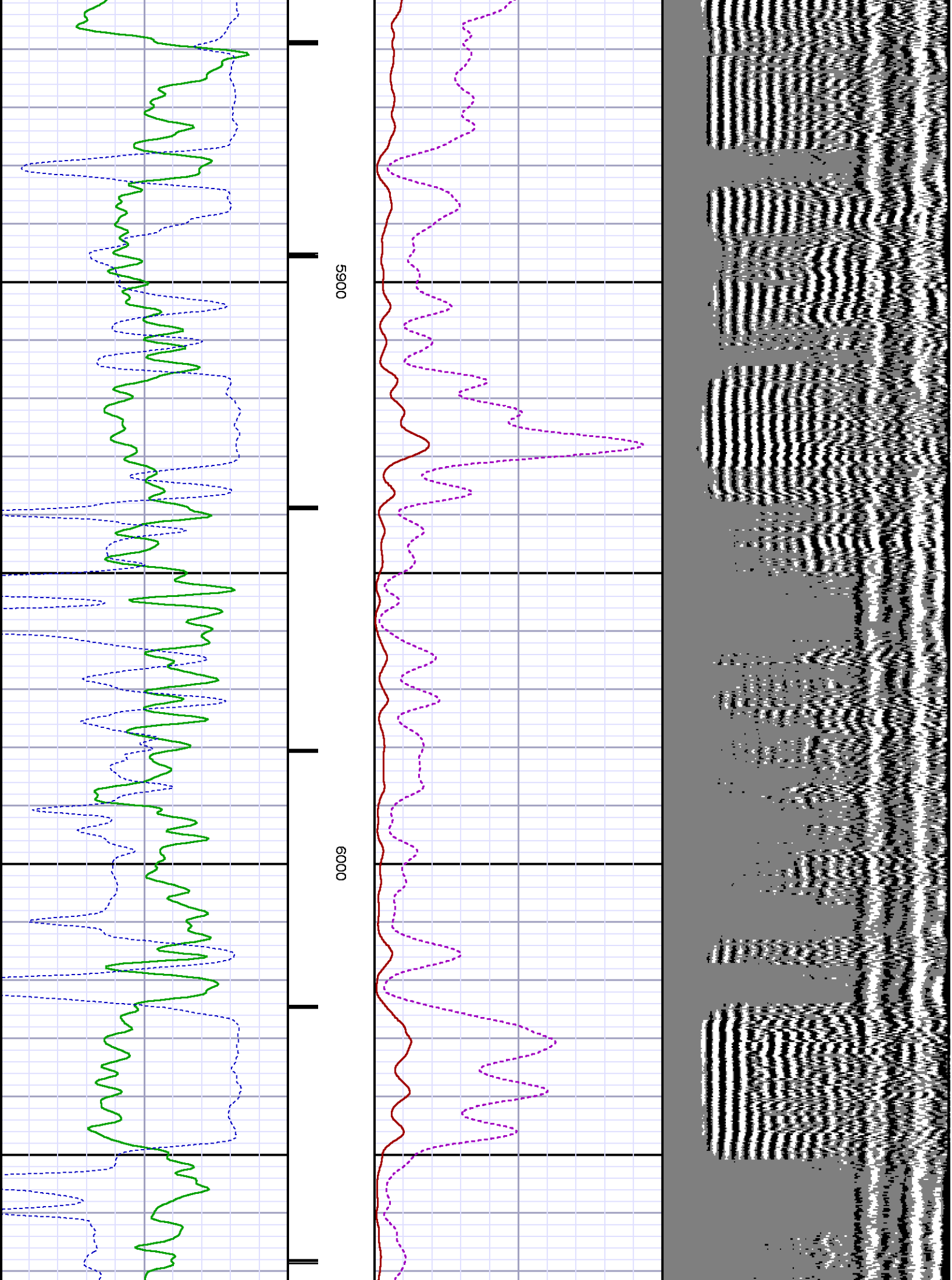


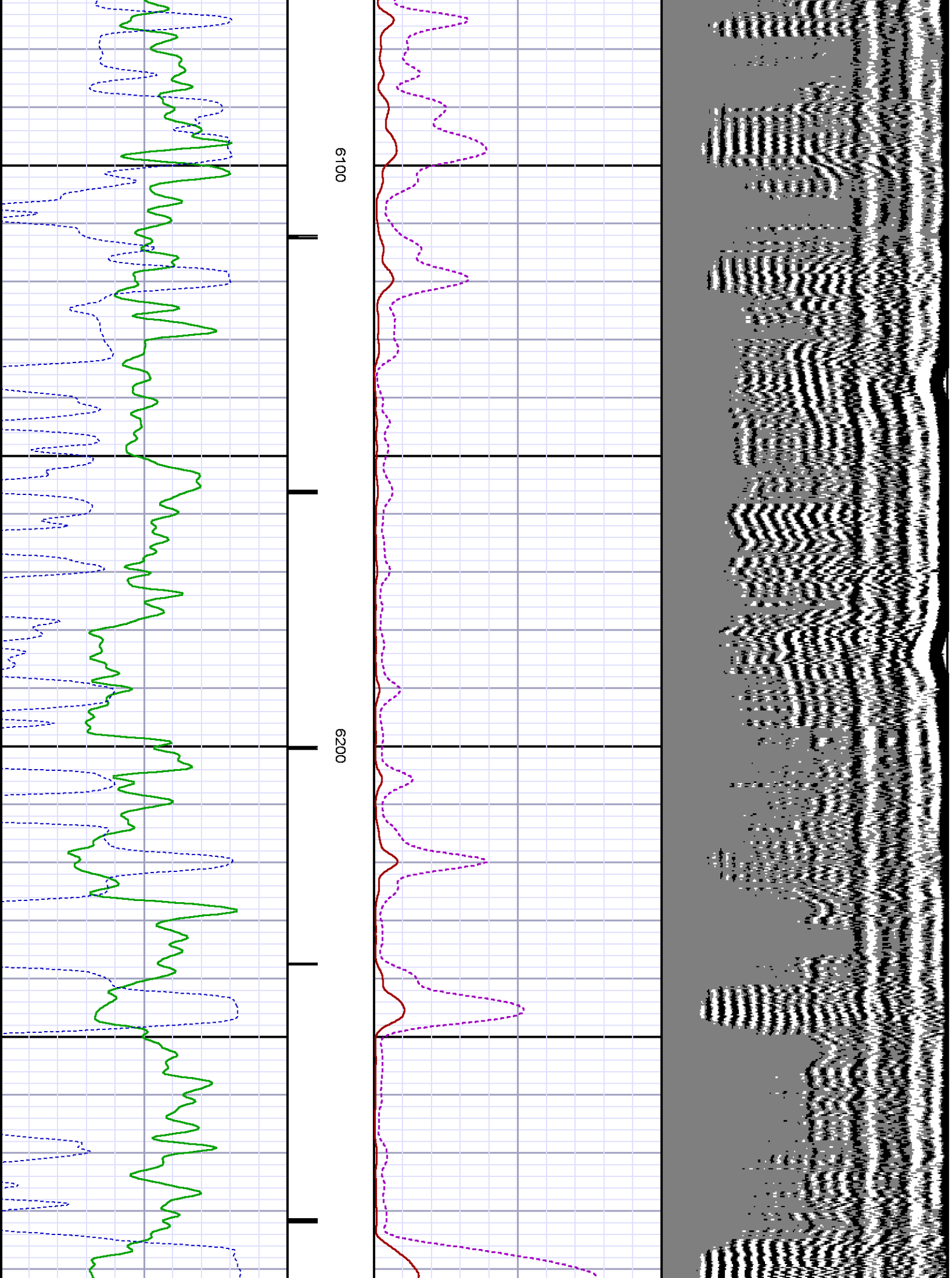


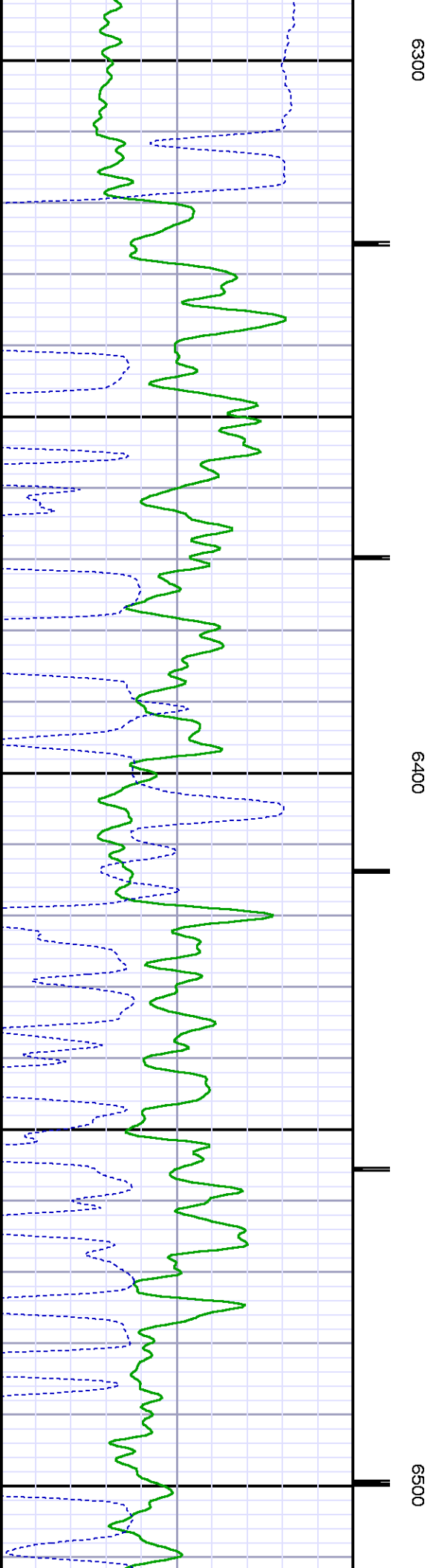
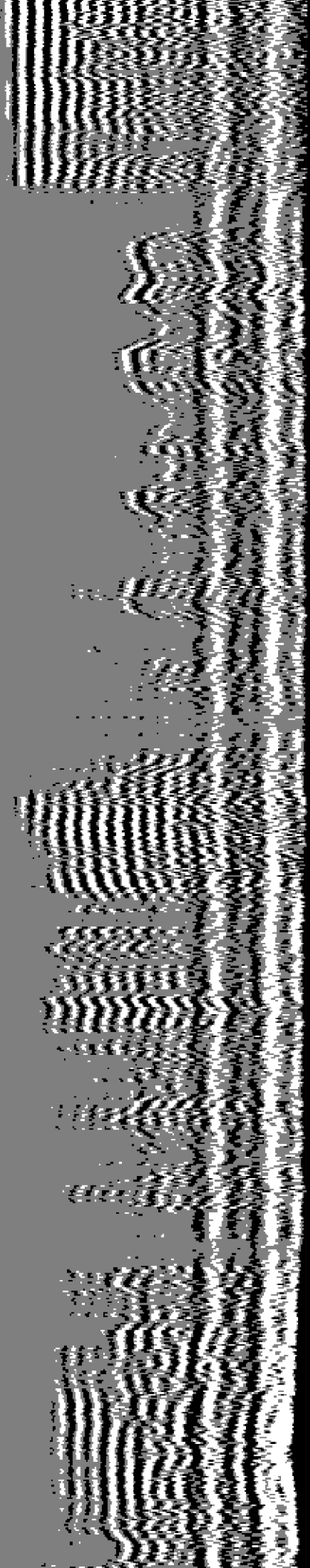


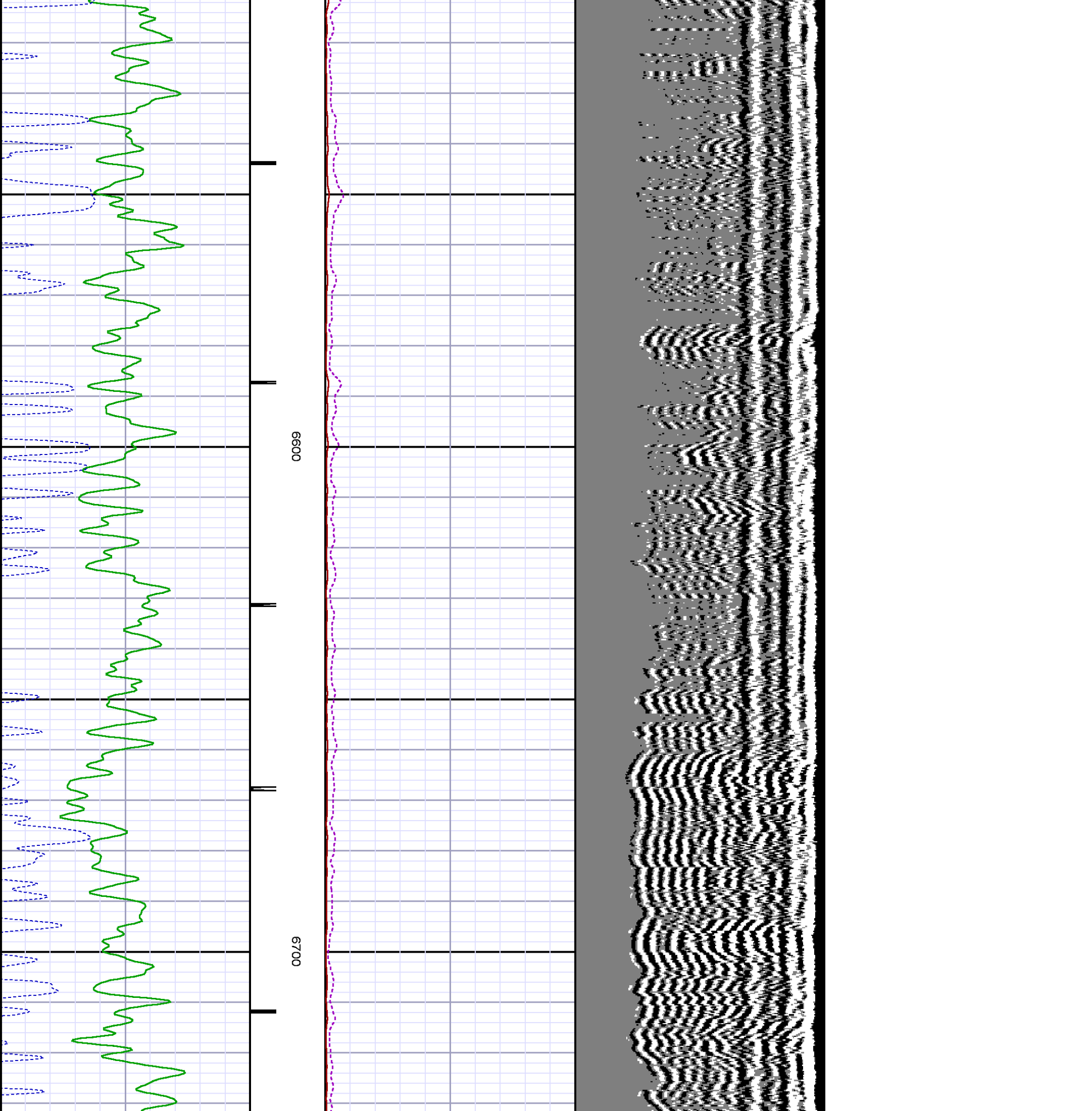


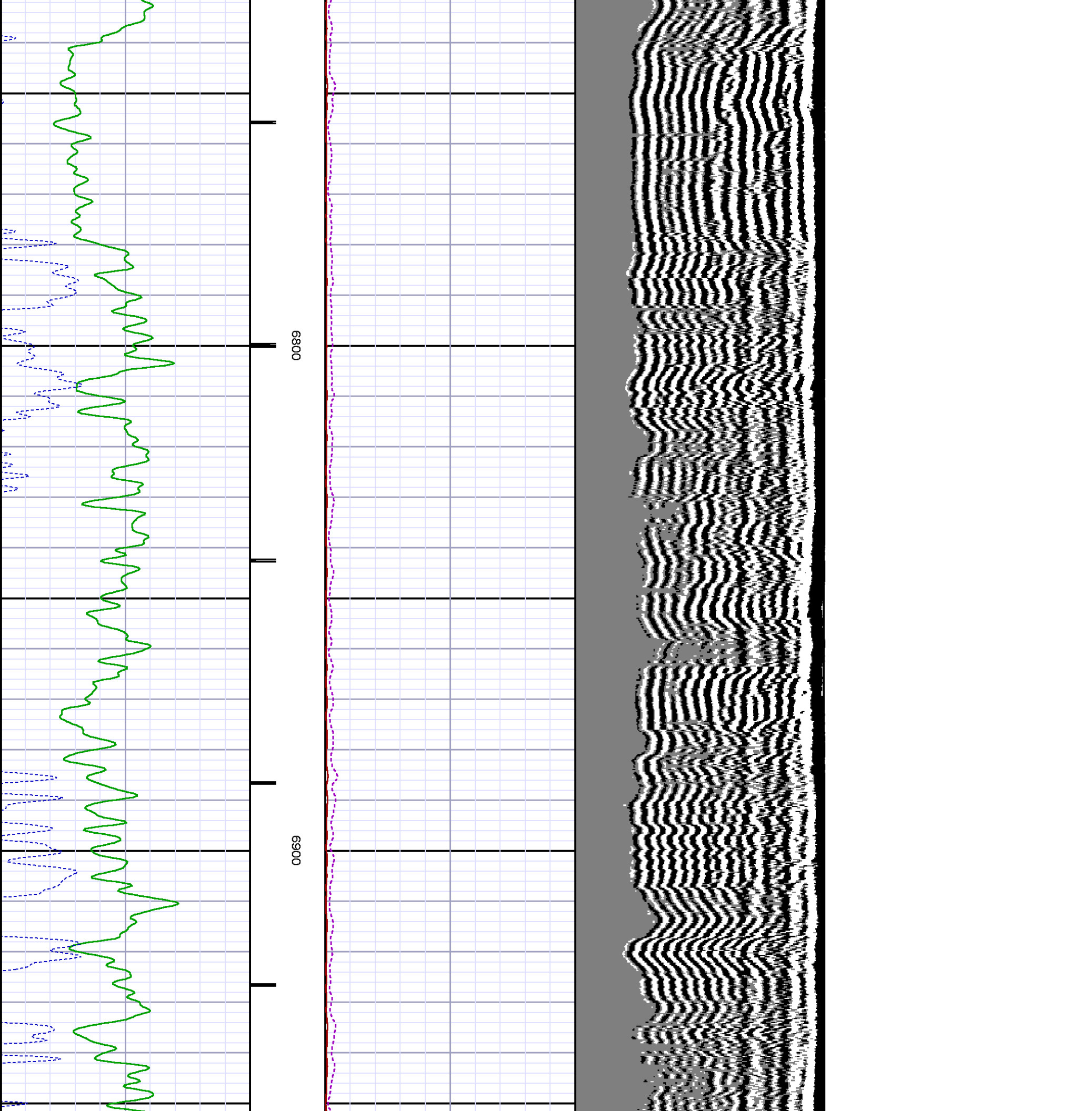


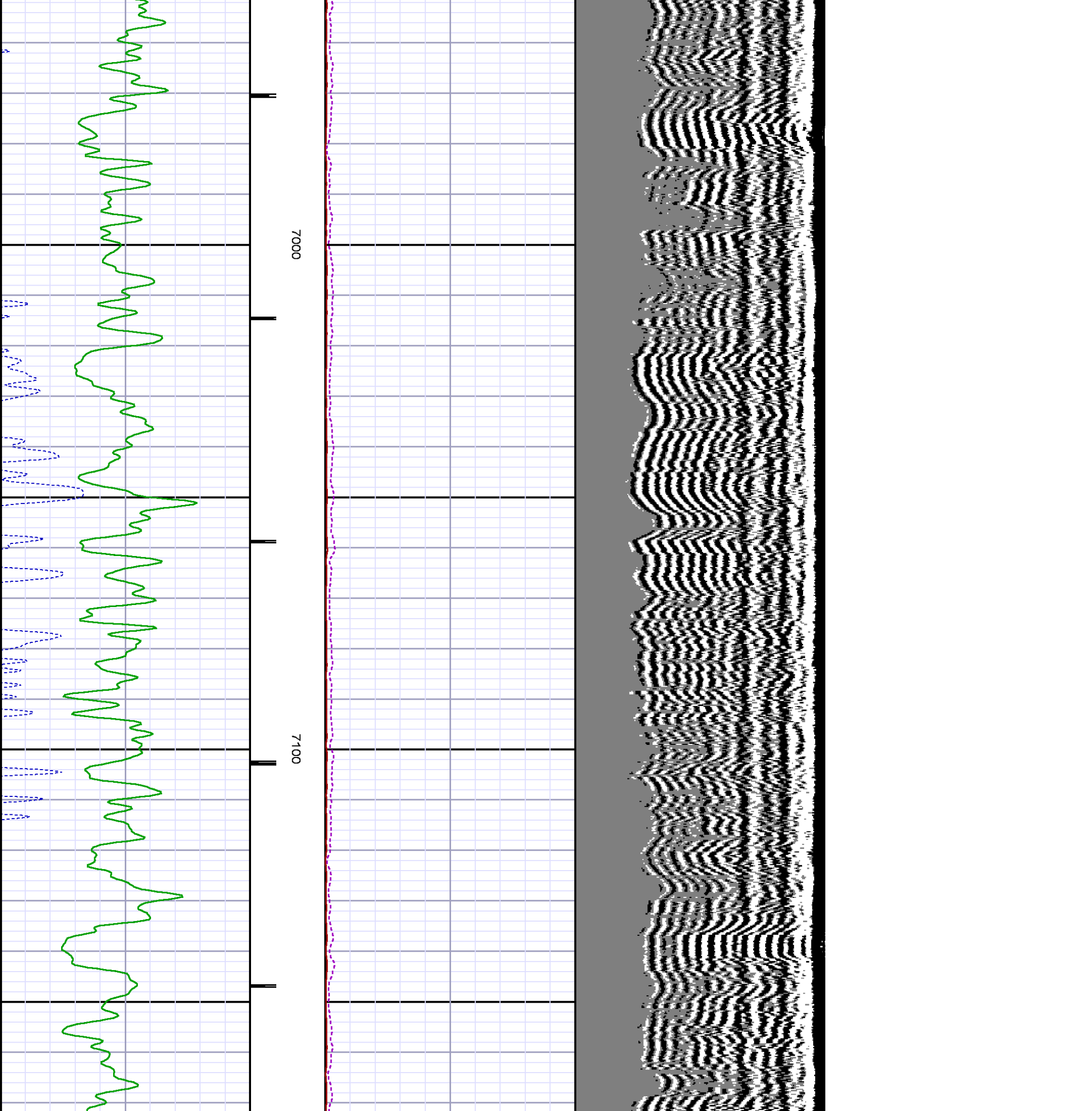


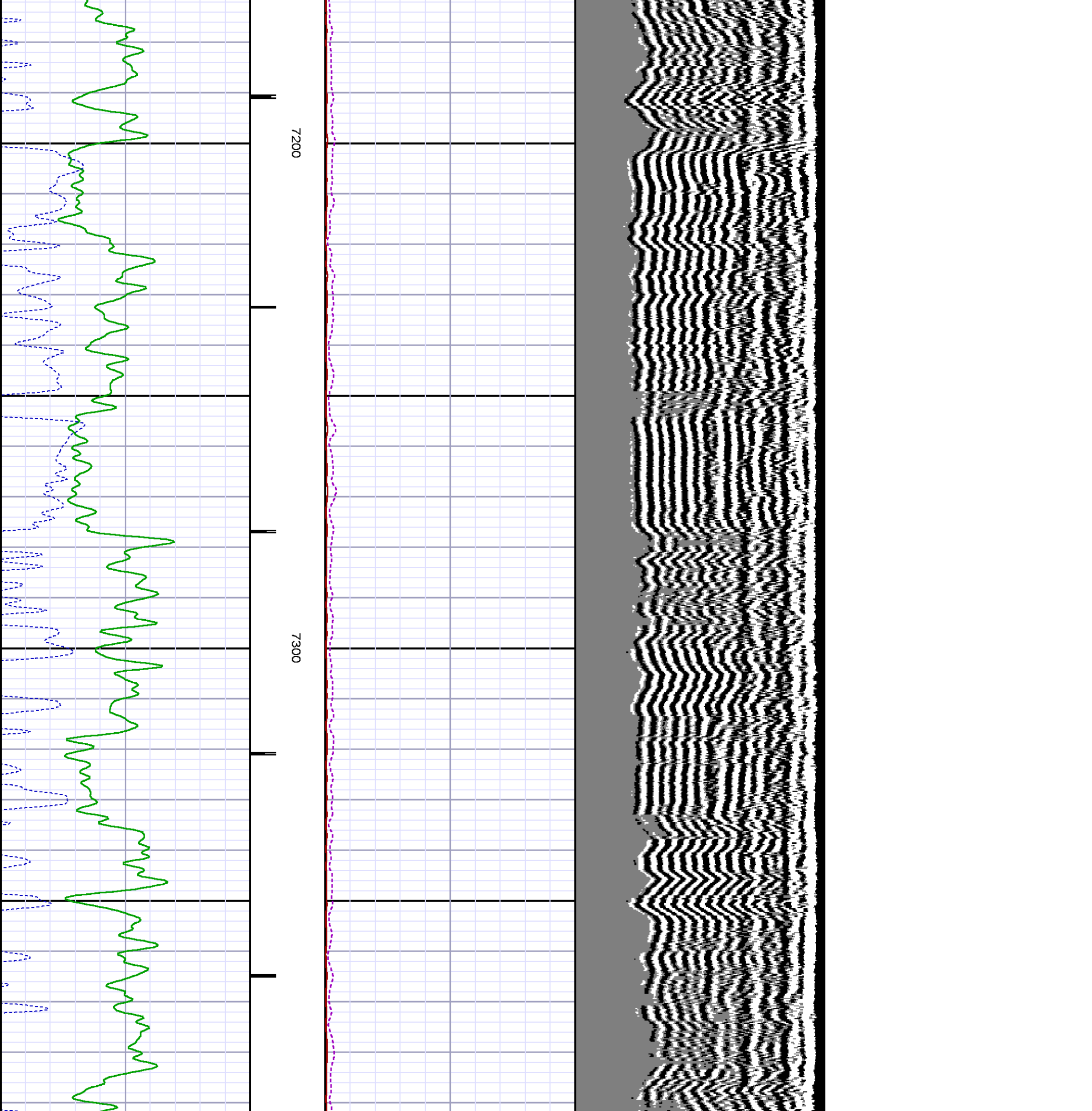


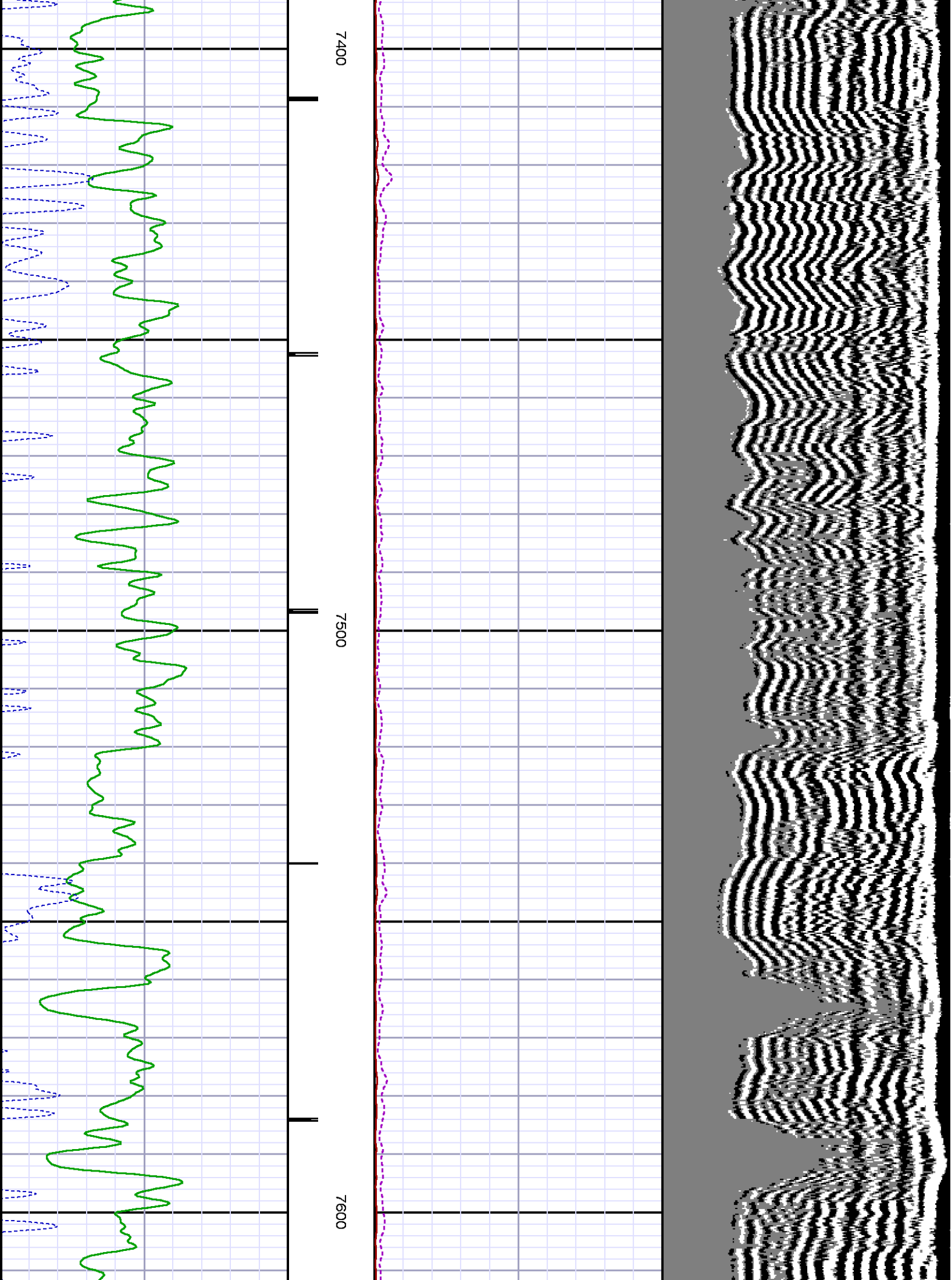


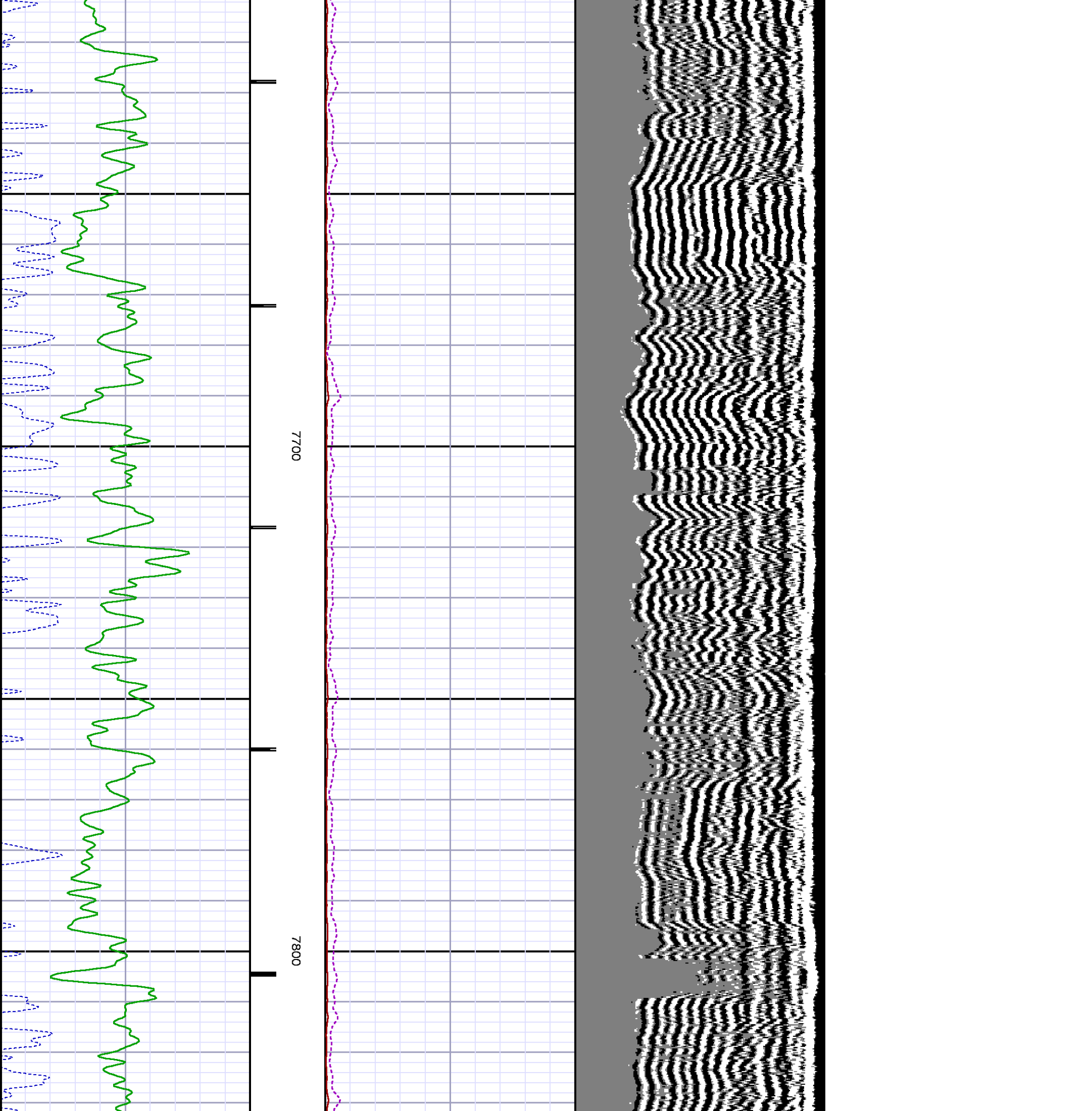


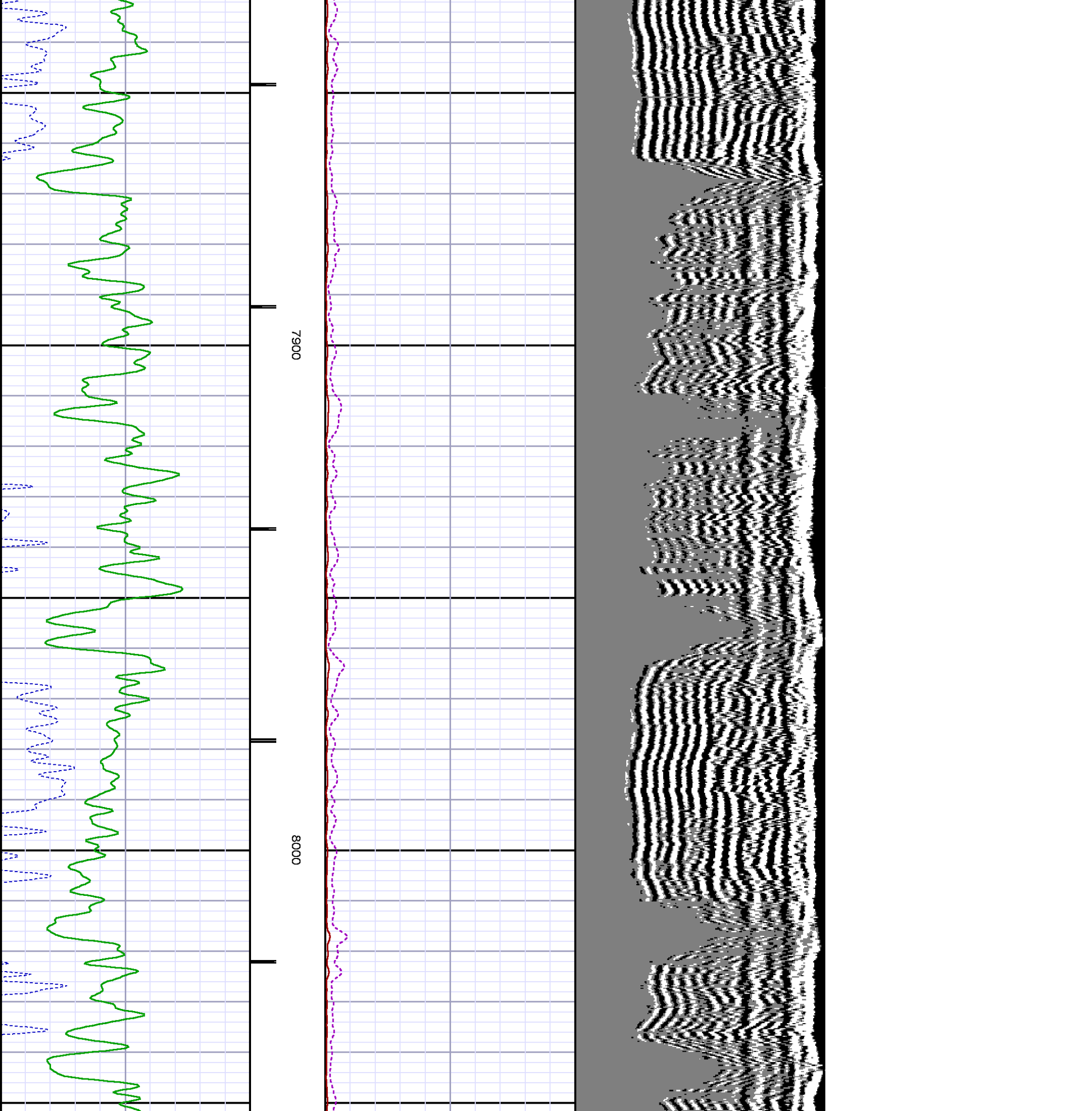


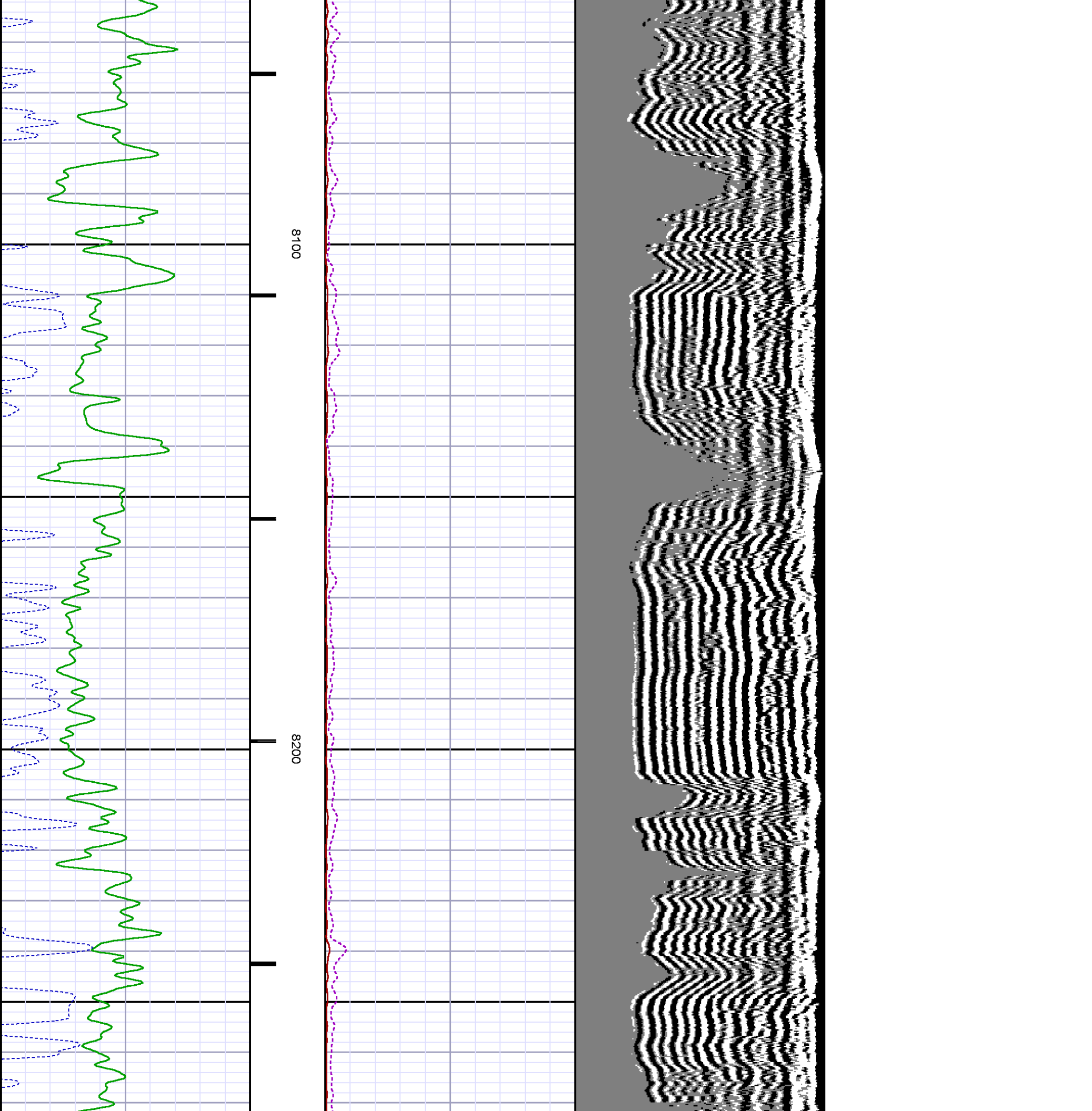


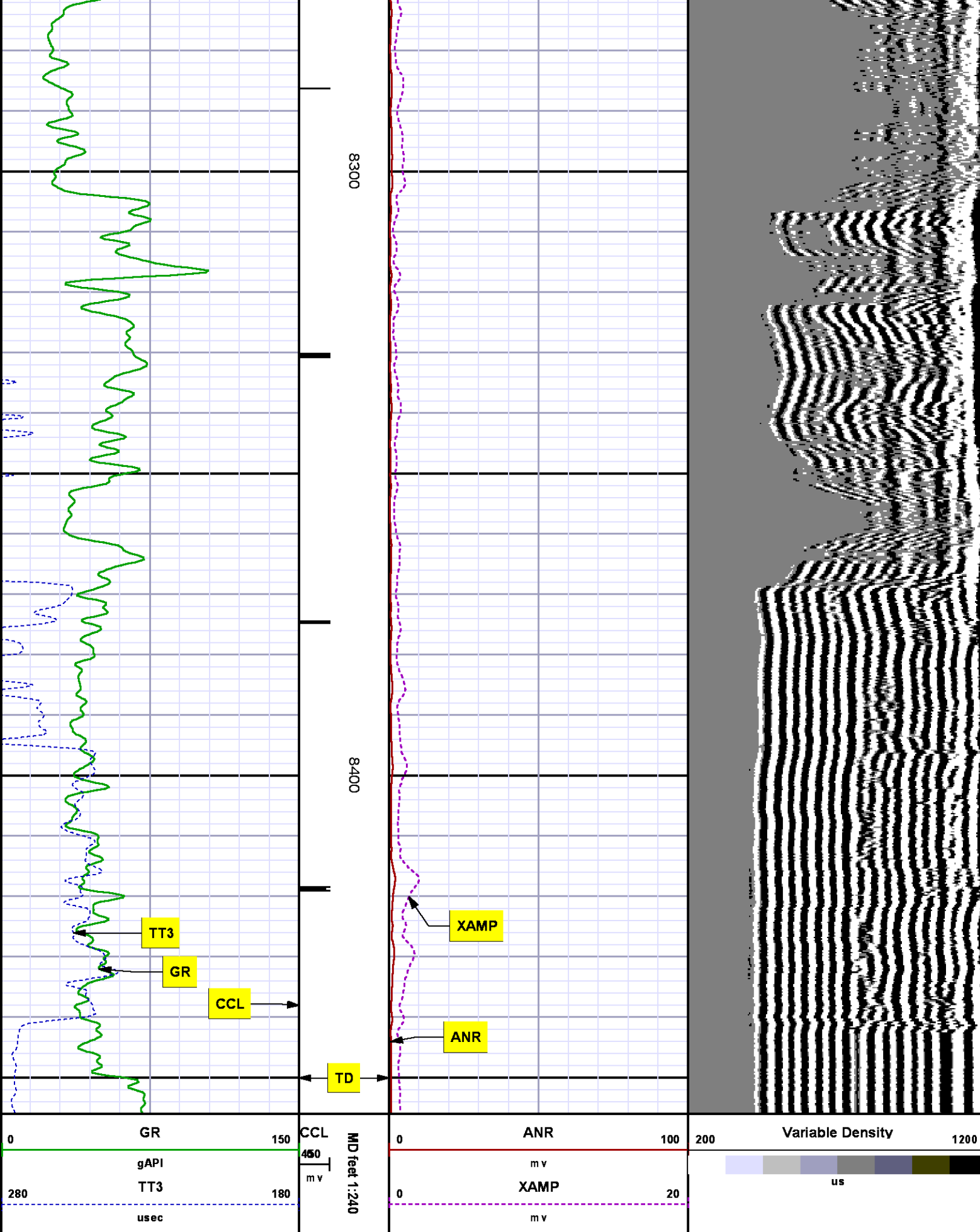












SECONDARY PRESENTATION

O PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	30.438	8470.000
RAL	Amp Gate Start Near	195.000	usec	30.438	8470.000
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RAL	FB Thresh Far	10.000	mv	30.438	8470.000
RAL	FB Thresh Near	4.000	mv	30.438	8470.000
RAL	FB Thresh Radial	4.000	mv	30.438	8470.000
RAL	Fluid Travel Time	200.000	usec/ft	30.438	8469.781

DEPTH OFFSETS

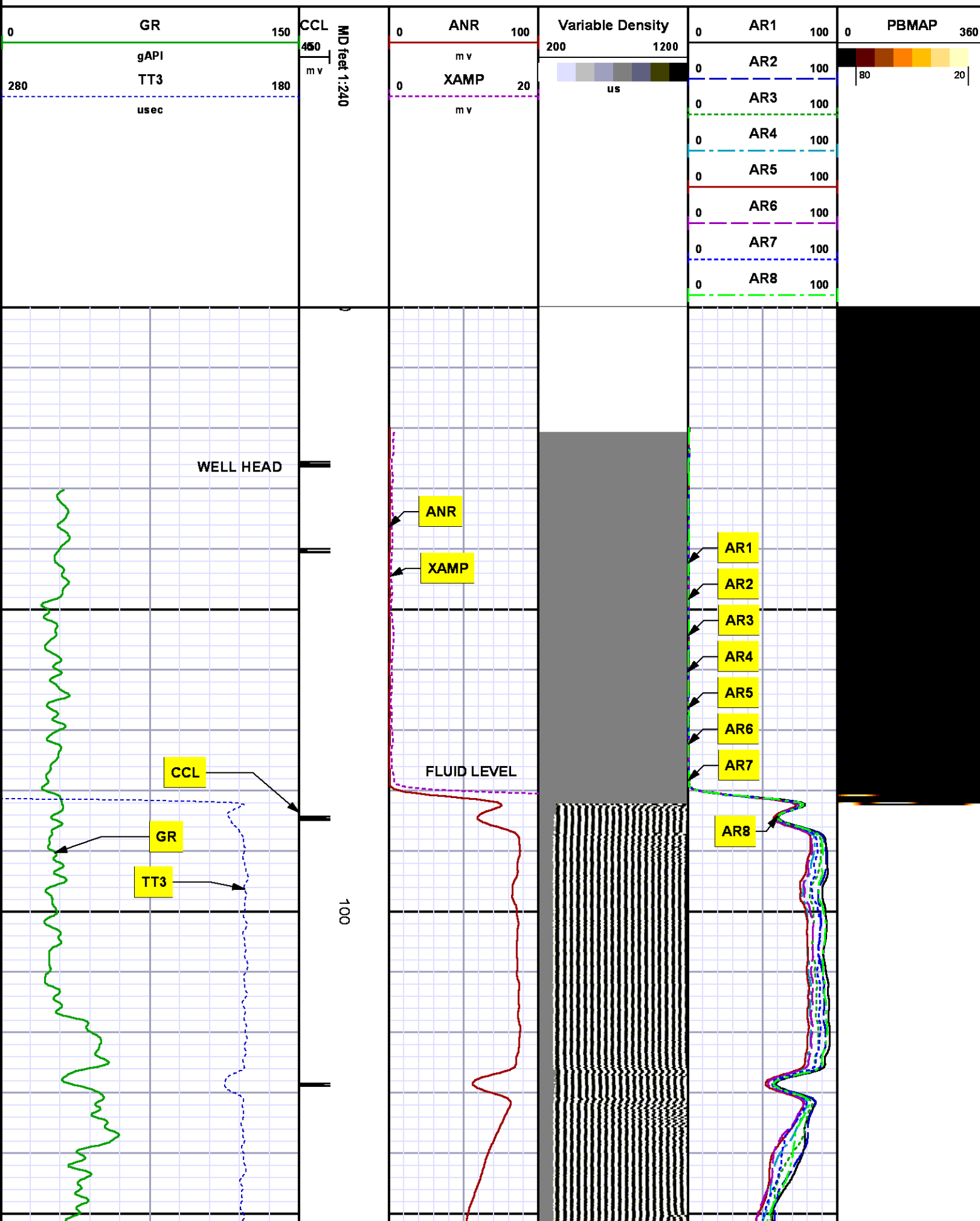
(for Acquired Curves)

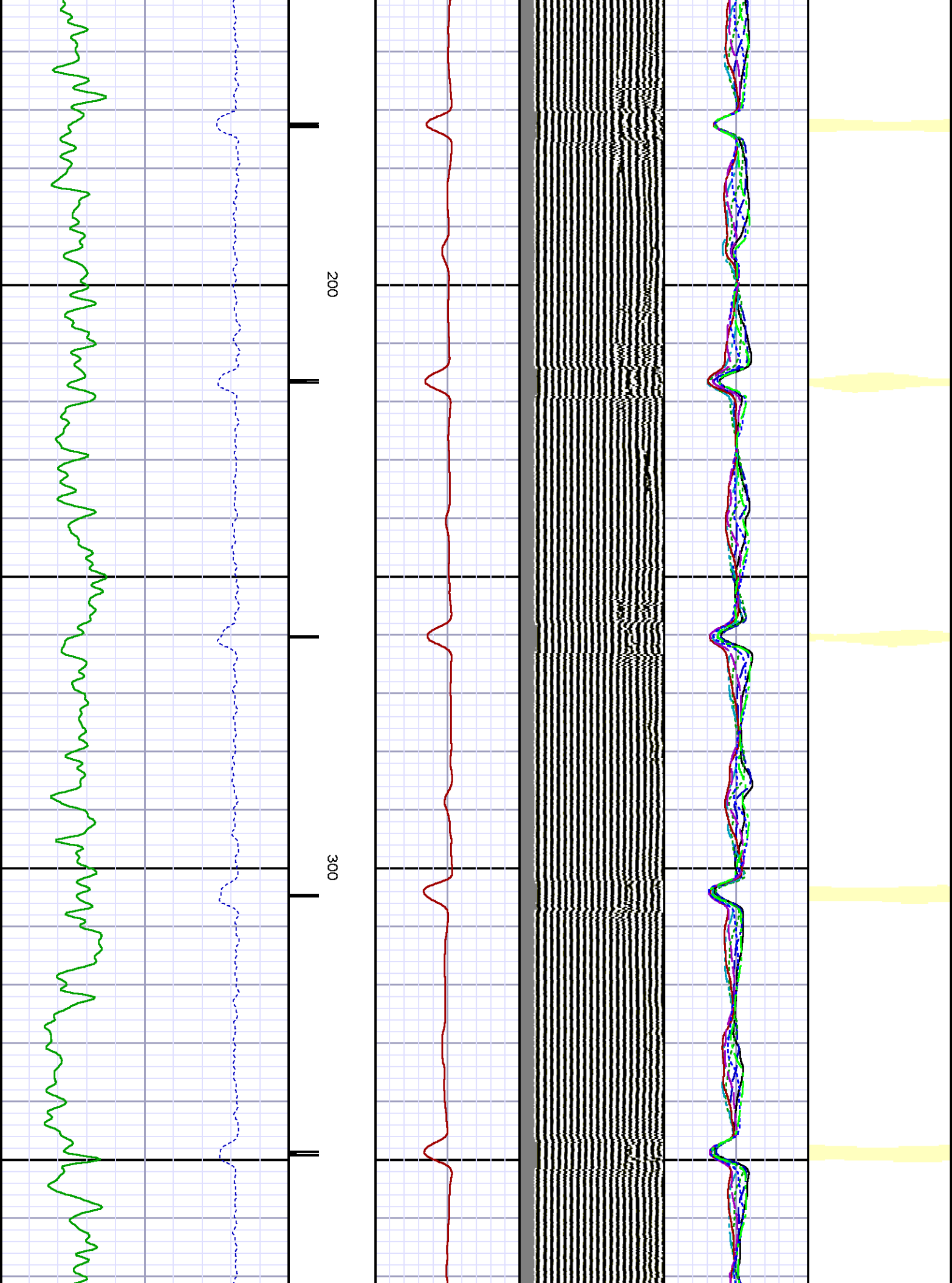
SERIES	DEPTH OFFSET	ACQUIRED CURVES
1426XA	-11.000	ACAL ANR AR1 AR2 AR3 AR4 AR5 AR6 AR7 AR8 CHV FPR2 FPR3 FPR5 TT3 TTR1 TTR2 TTR3 TTR4 TTR5 TTR6 TTR7 TTR8 XAMP
1426XA	-10.040	AFAR SIG TT5
1355XA	-5.620	CCL
1355XA	-1.500	GR
1355XA	0.000	TEMP

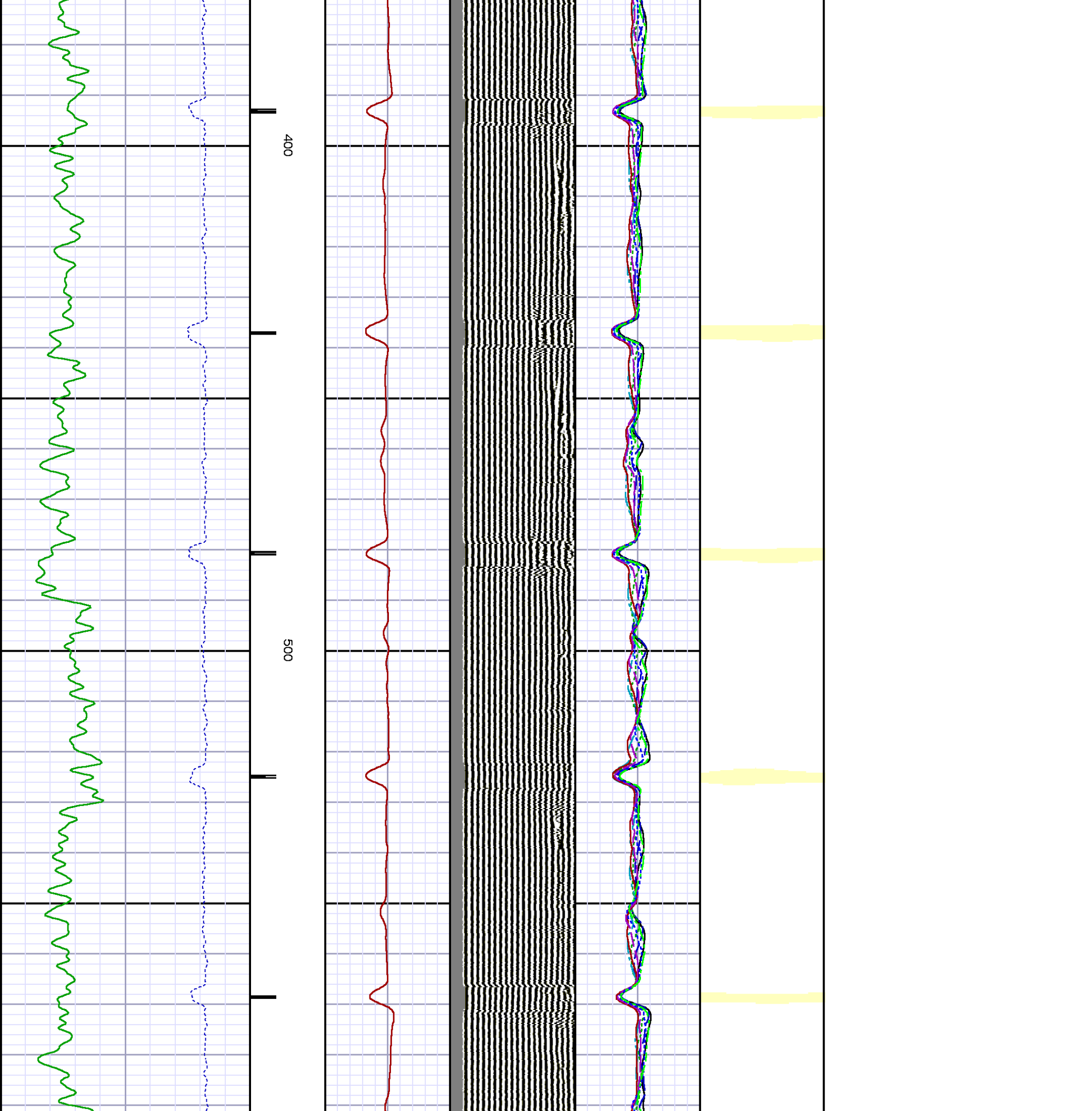
Created by : RAL, v4.8.008

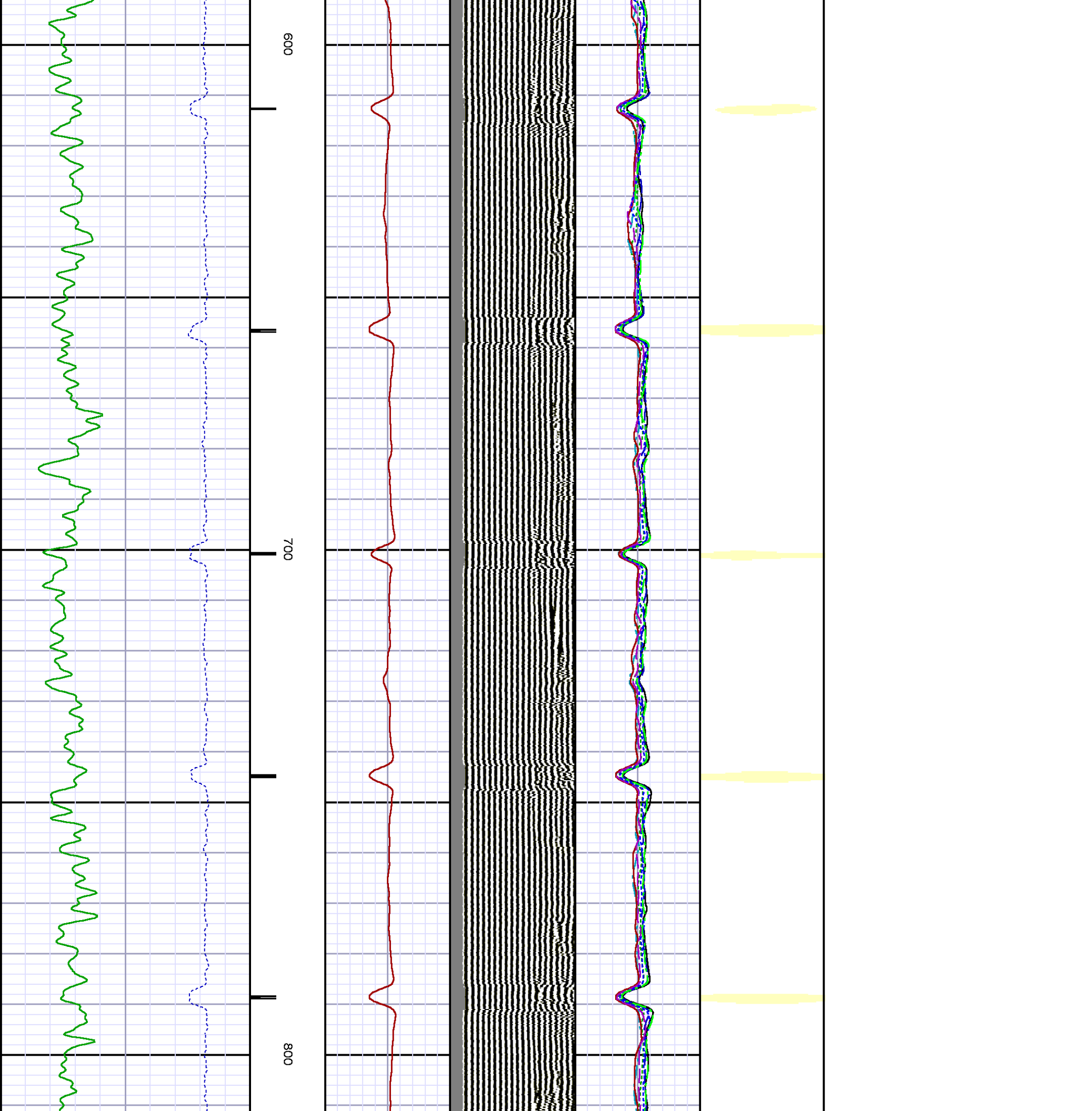
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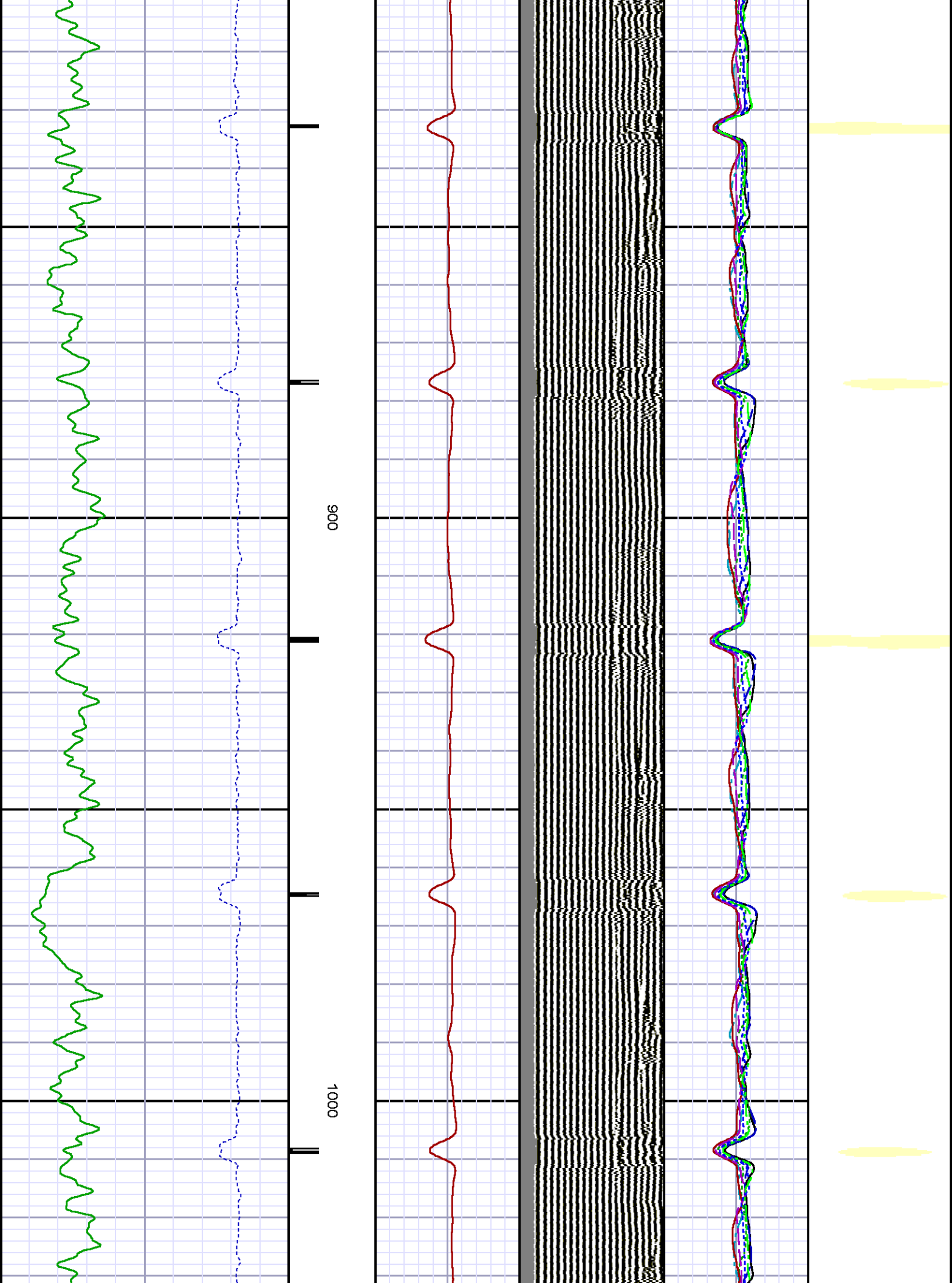
Company : WPX ENERGY

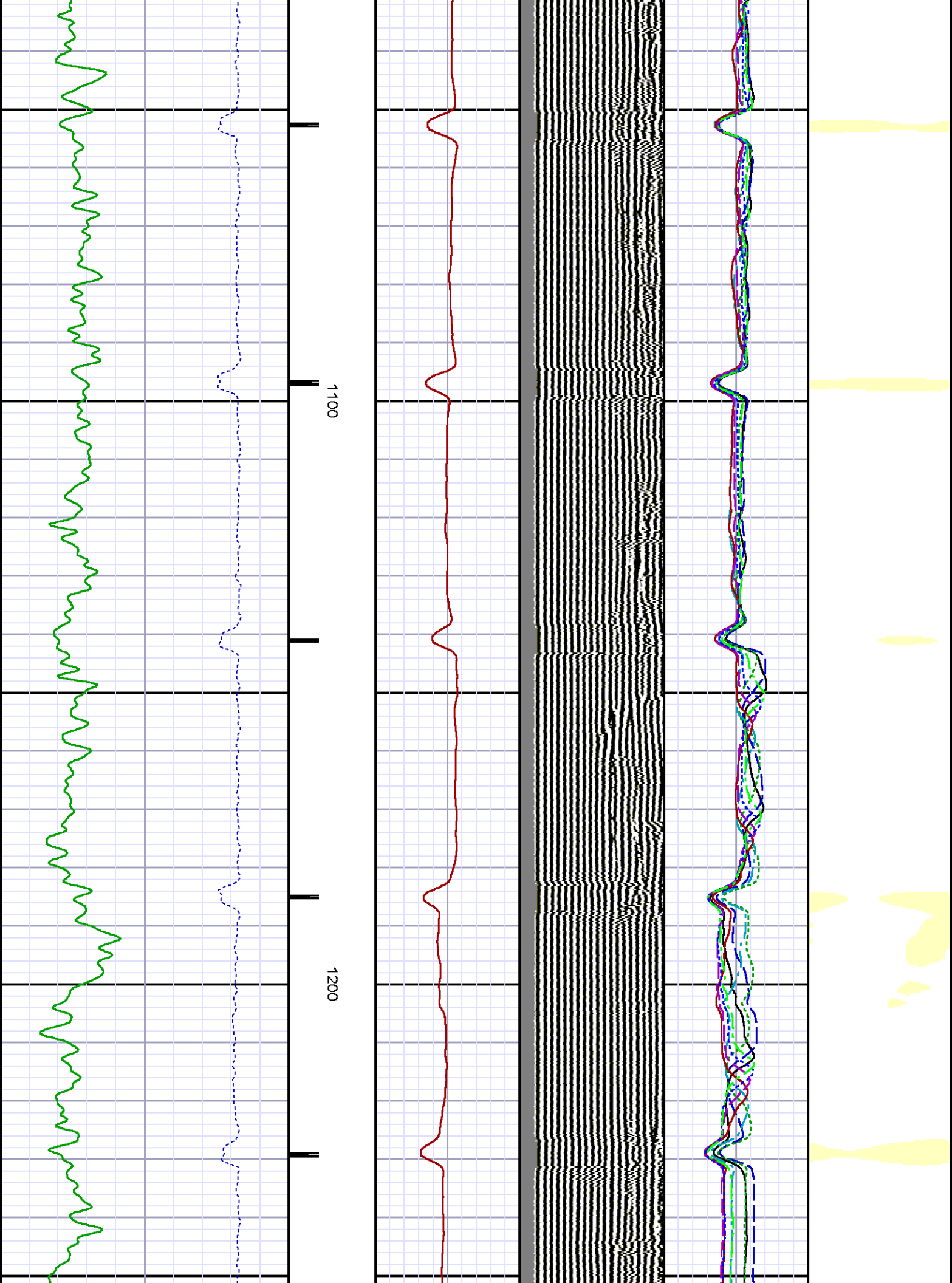


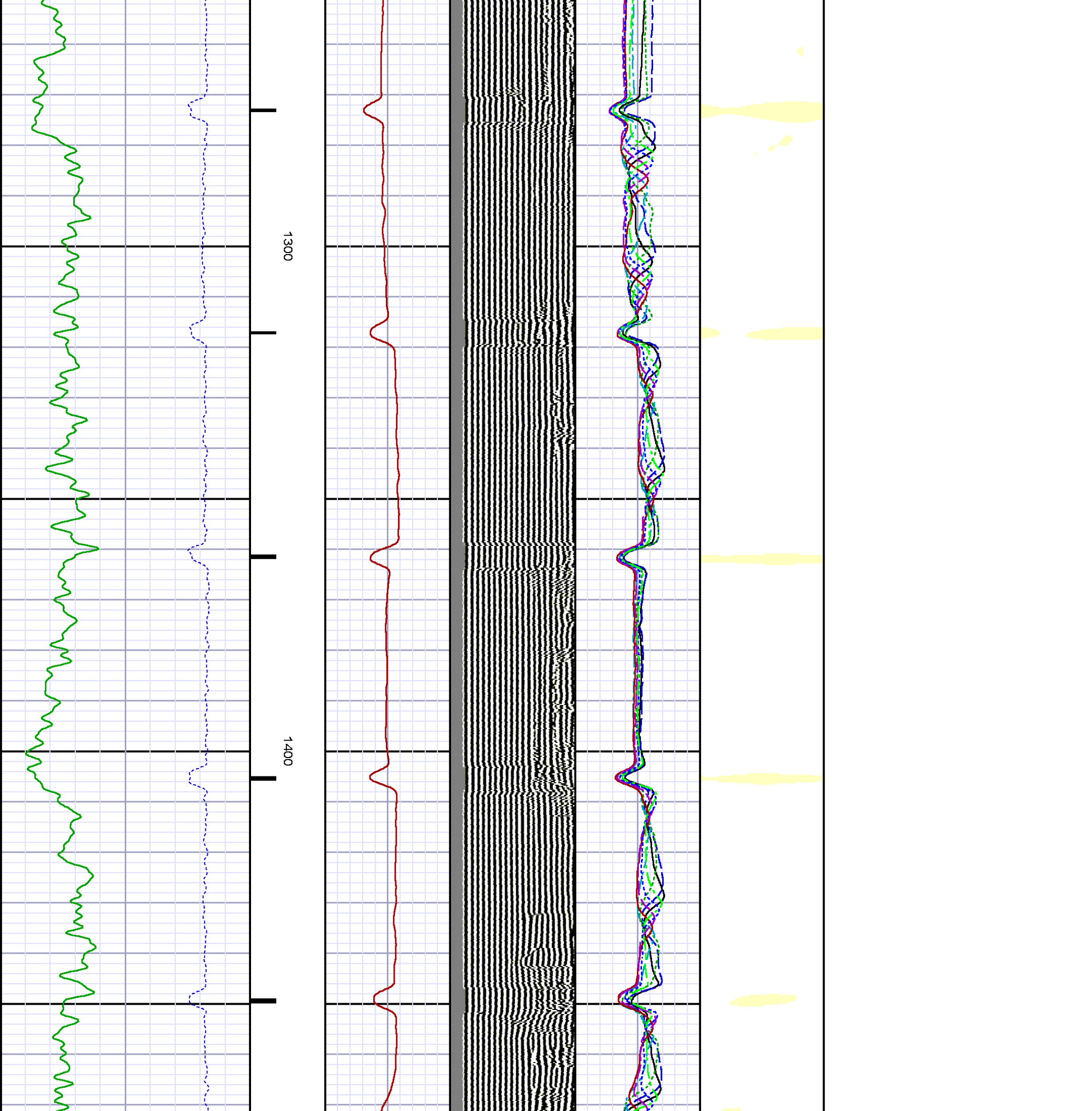


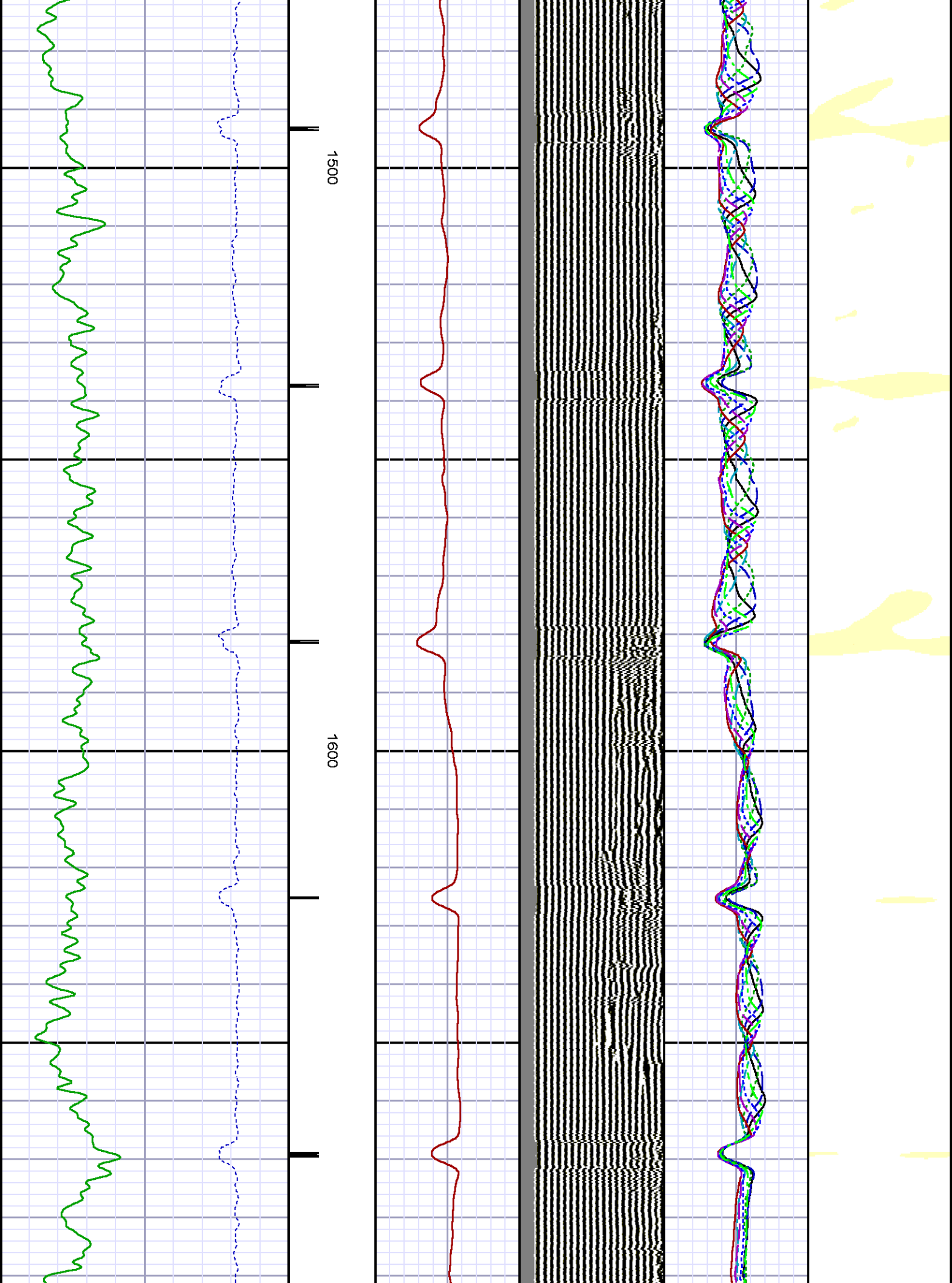


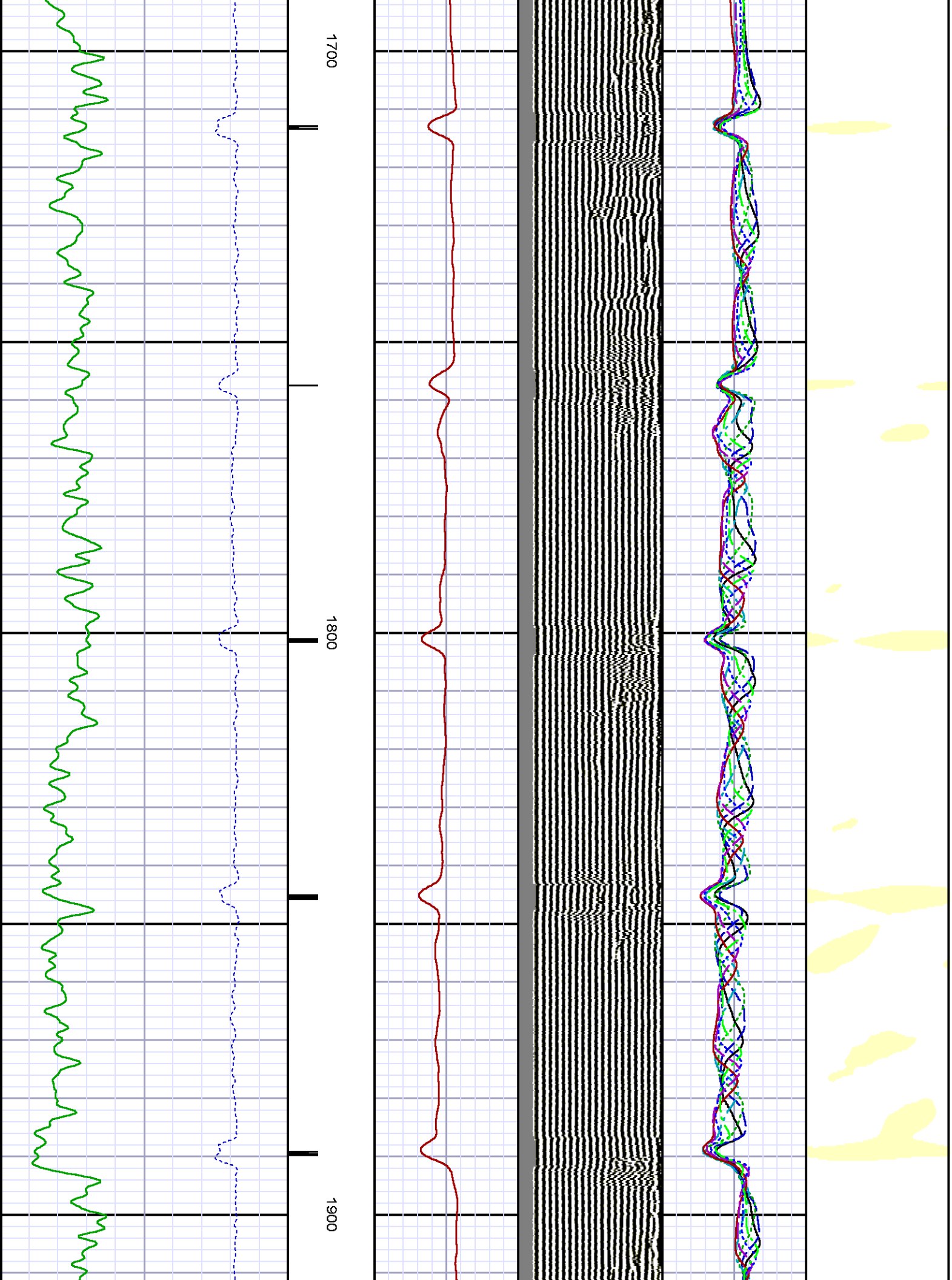


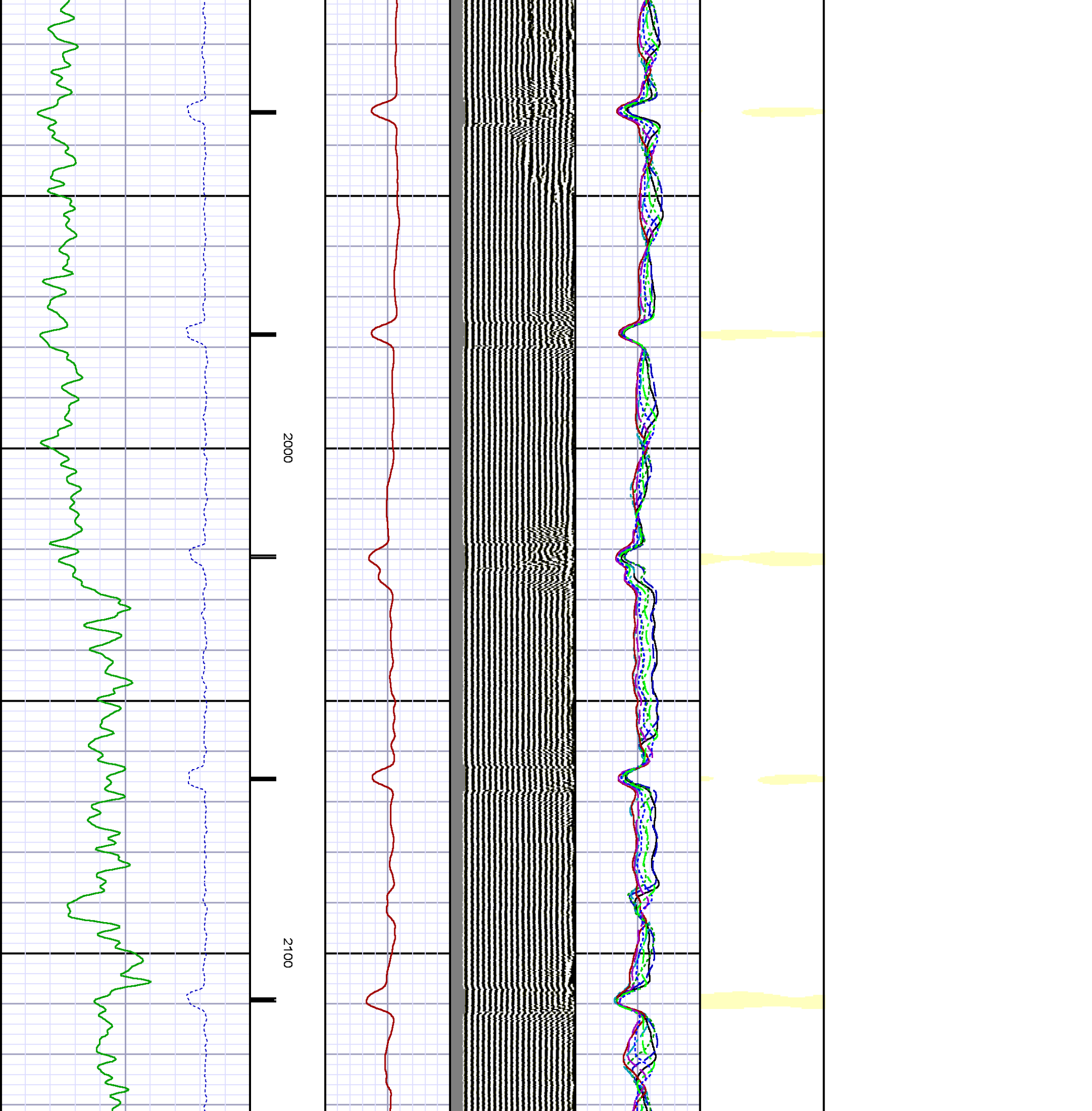


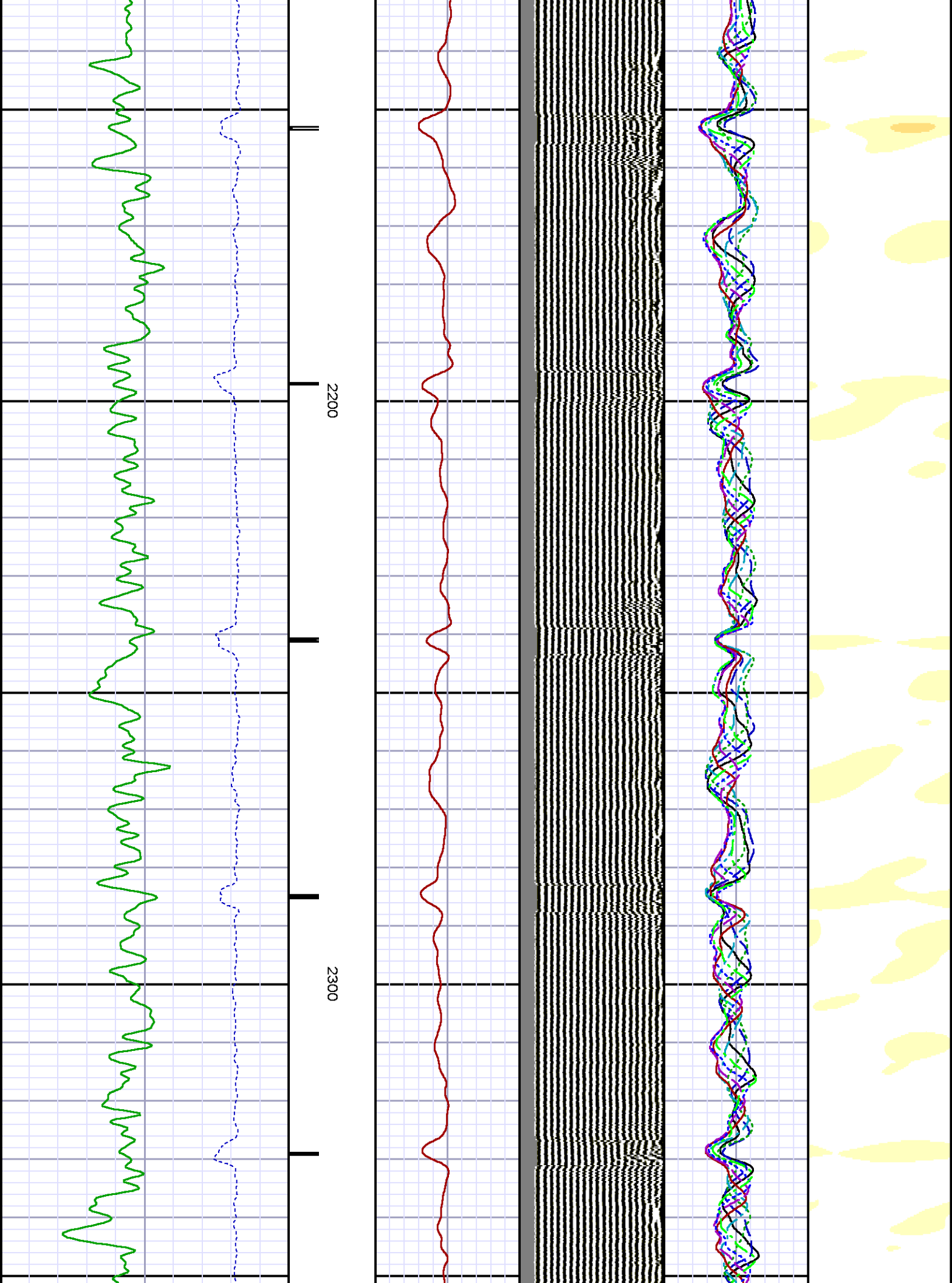


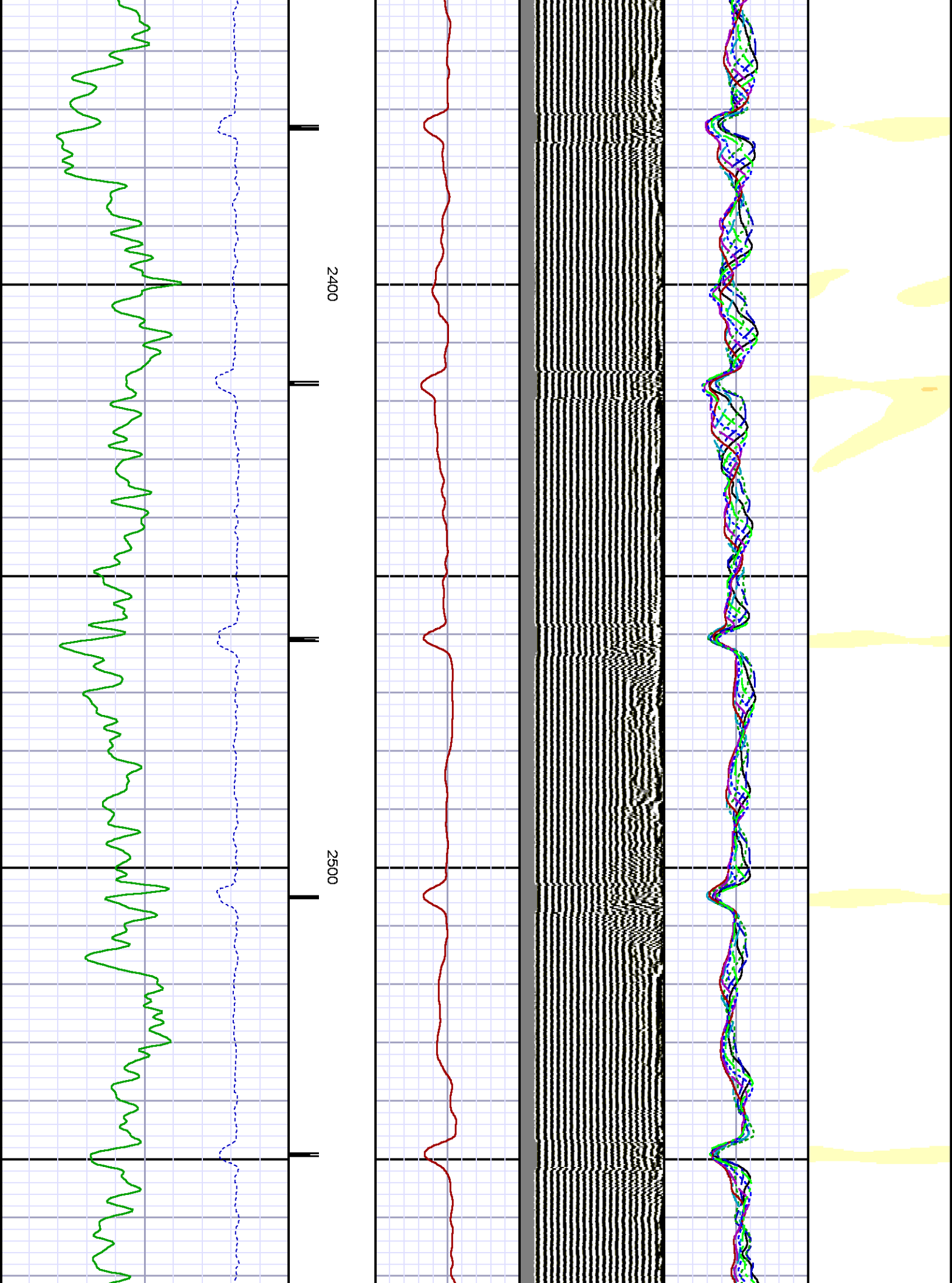


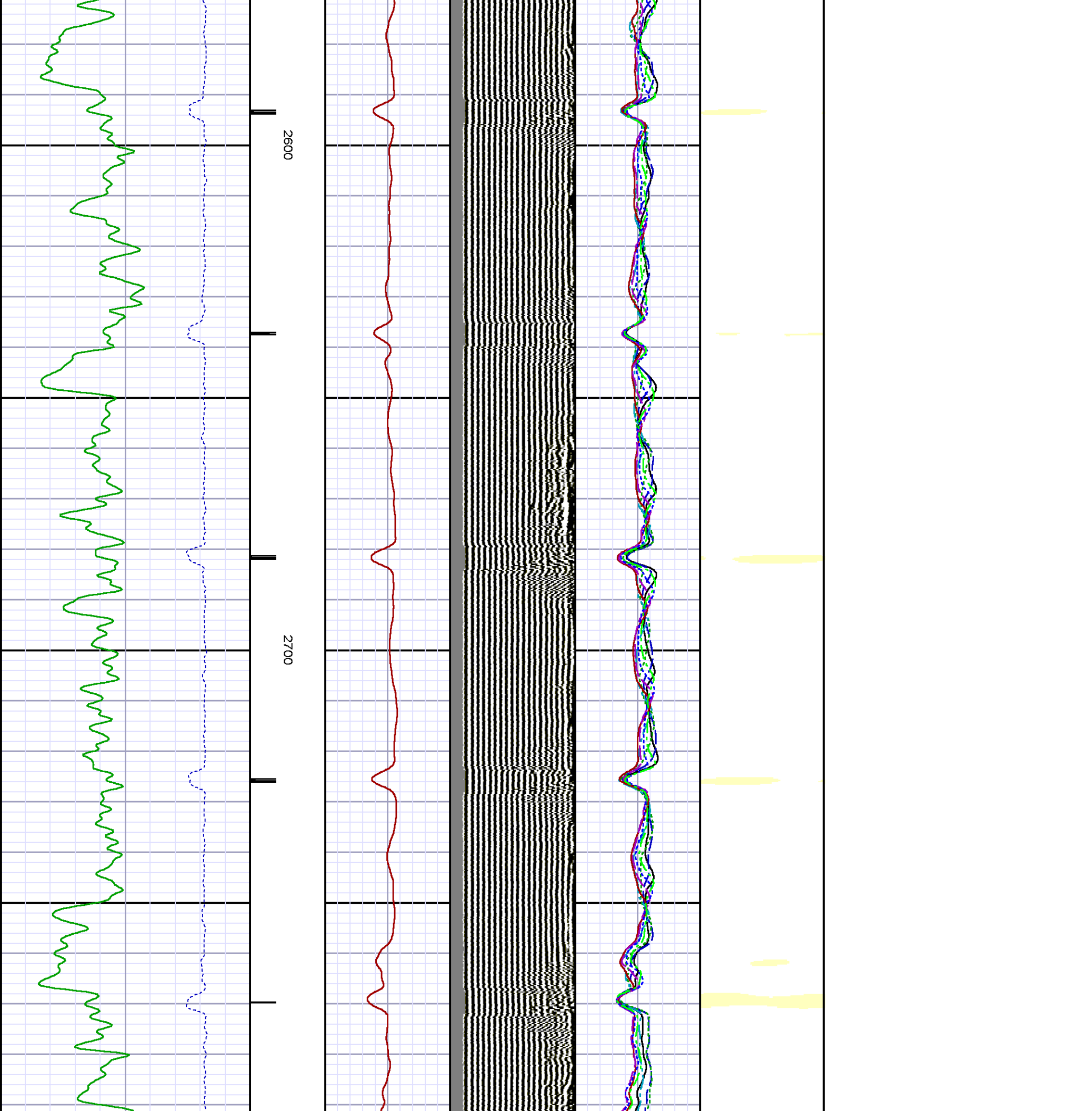


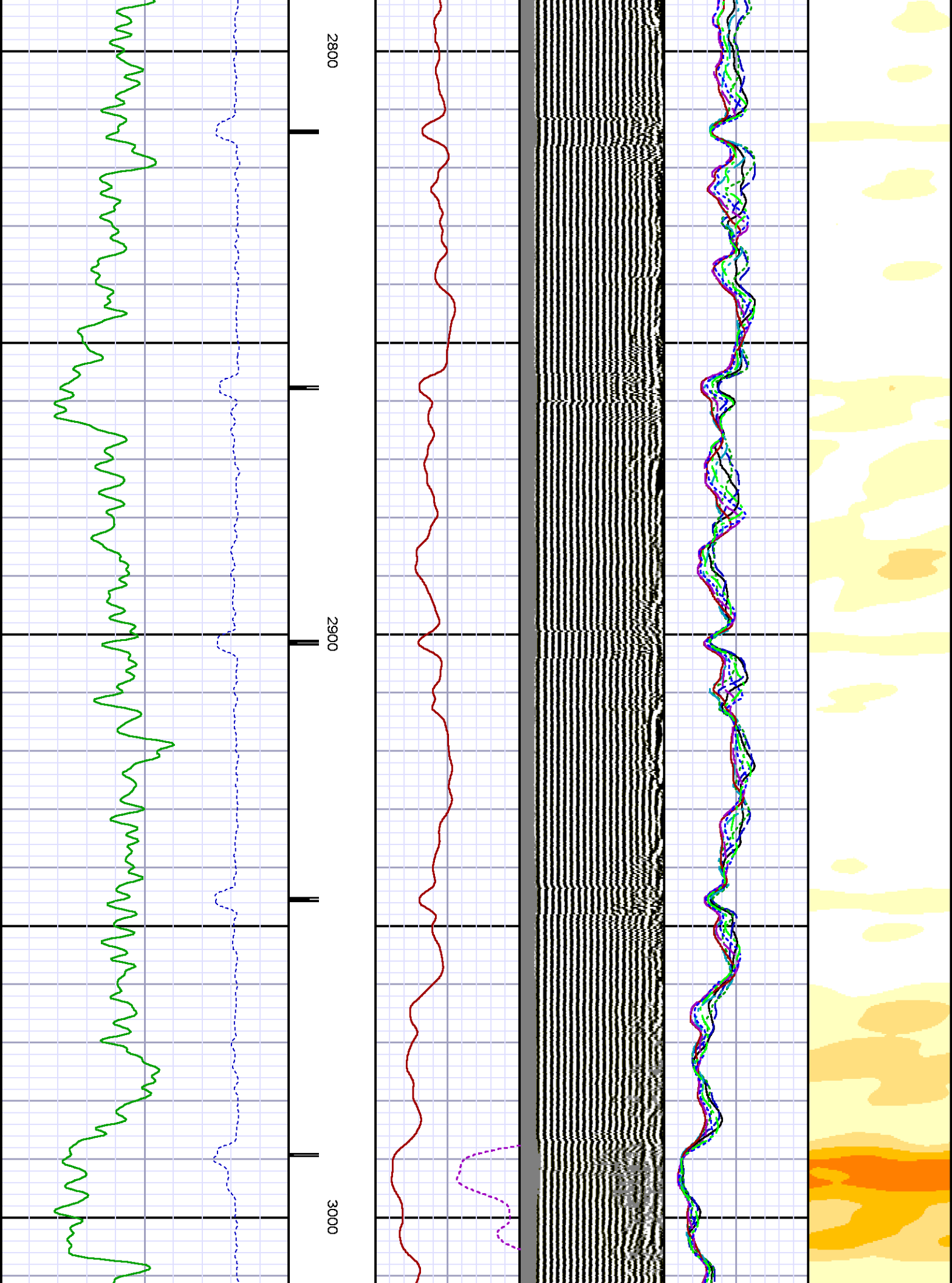


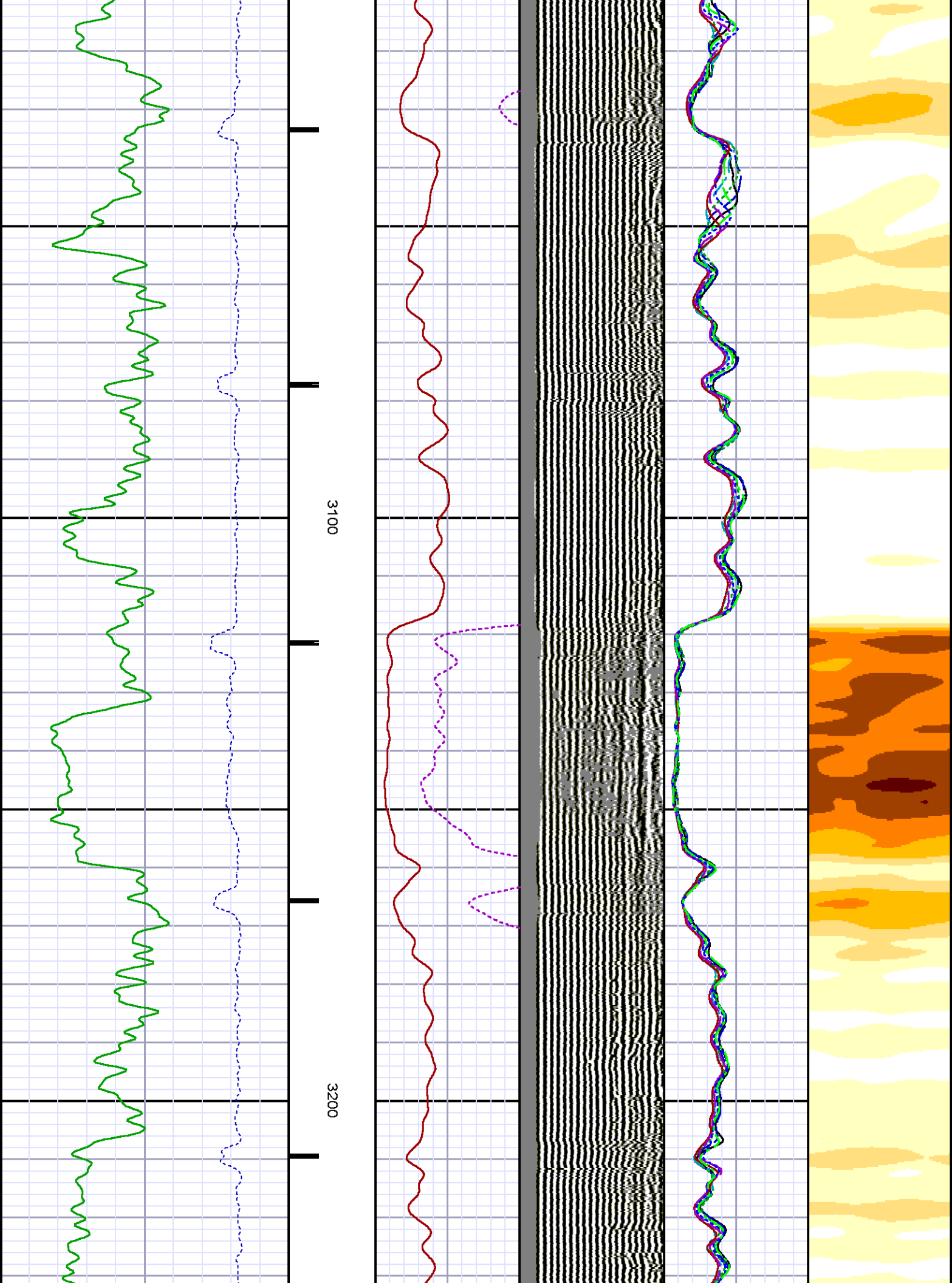


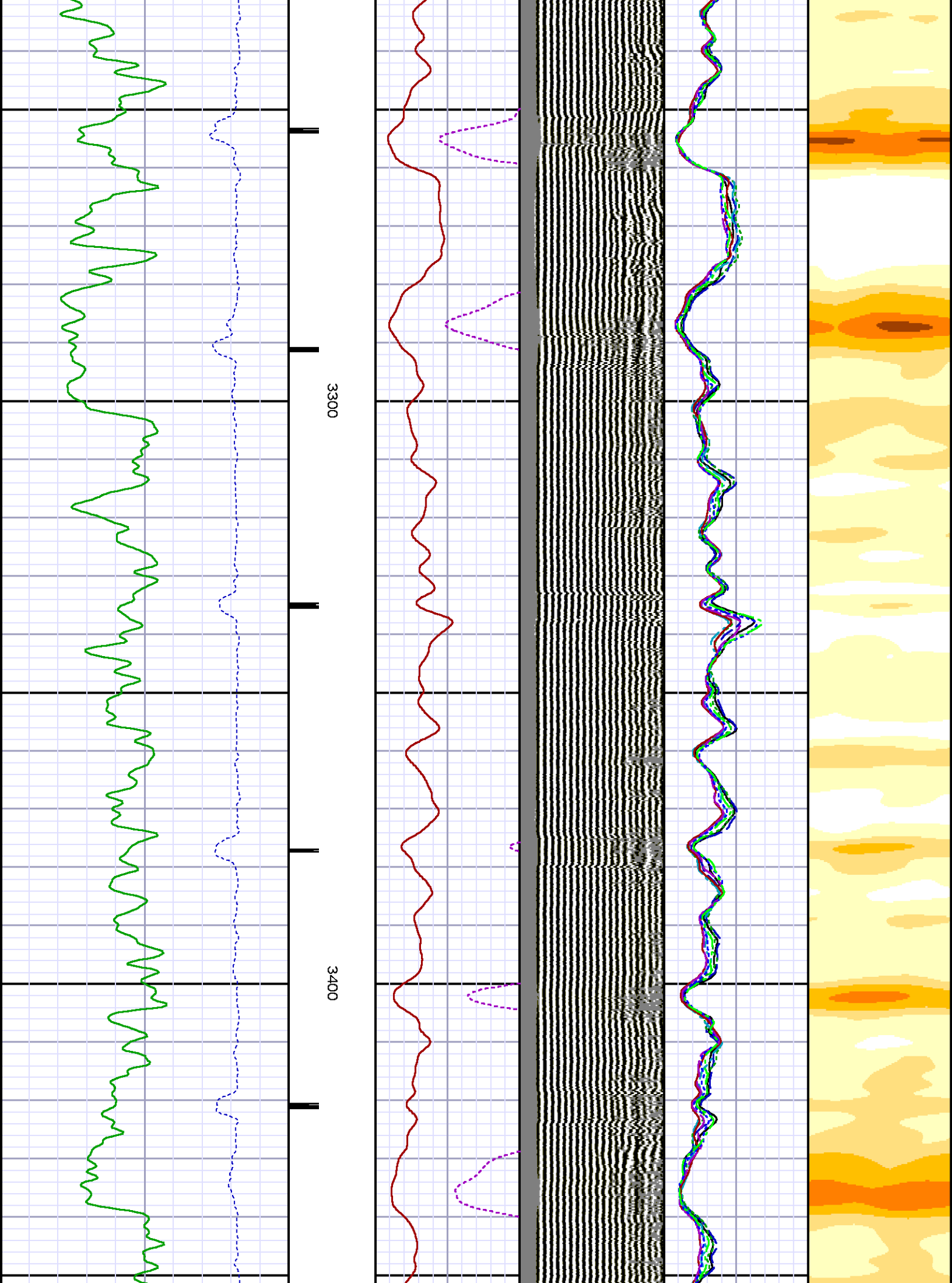


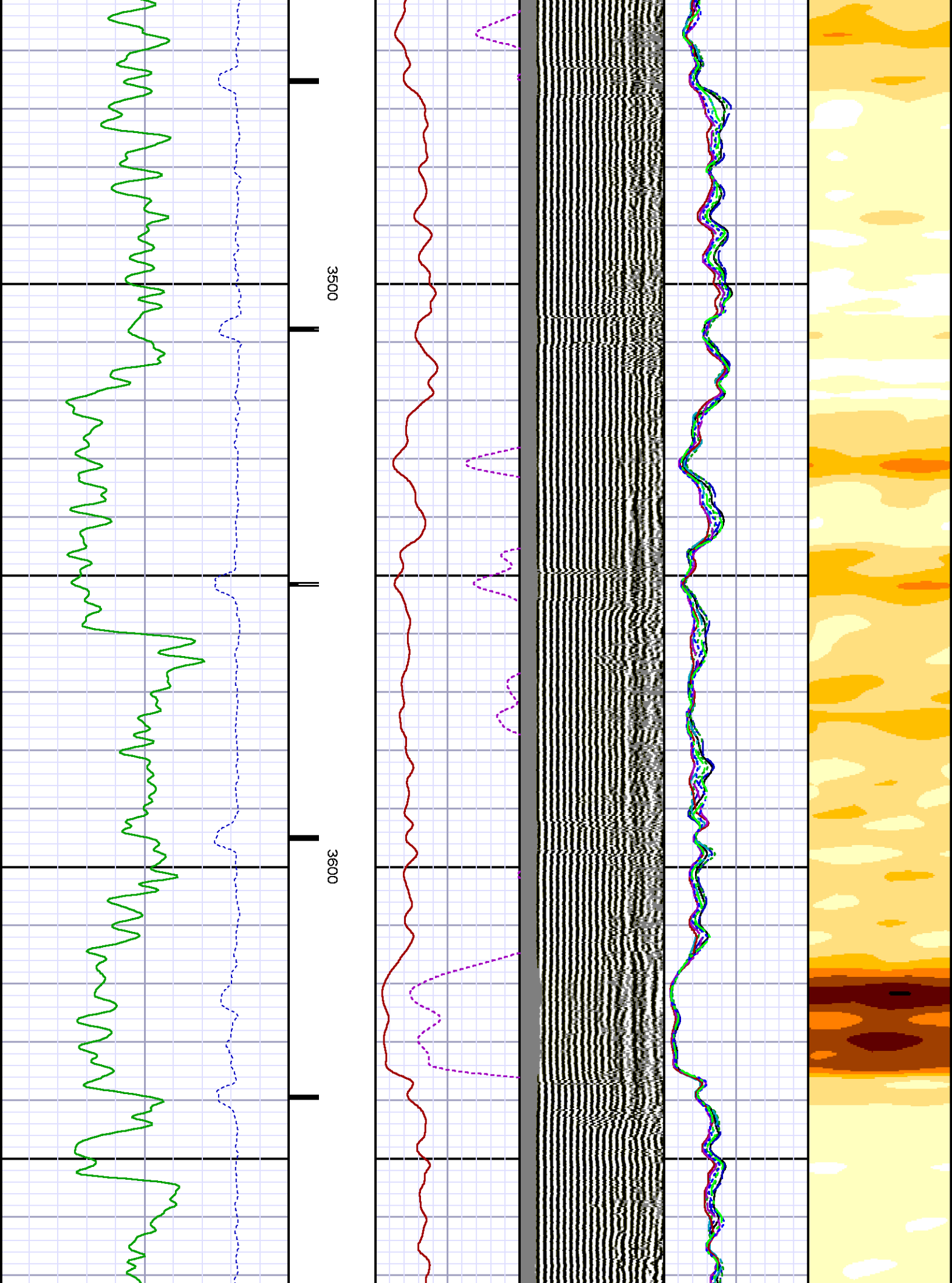


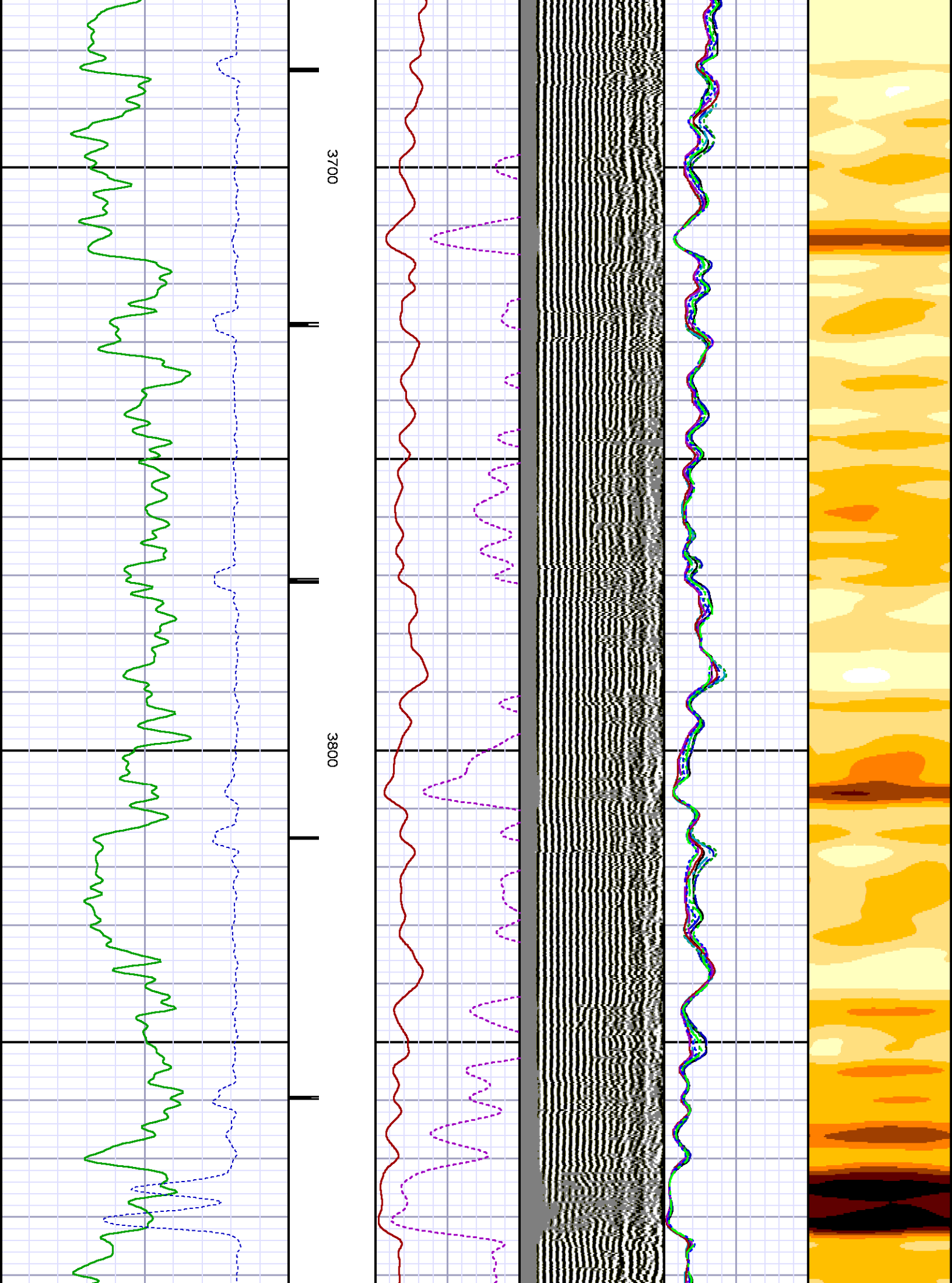


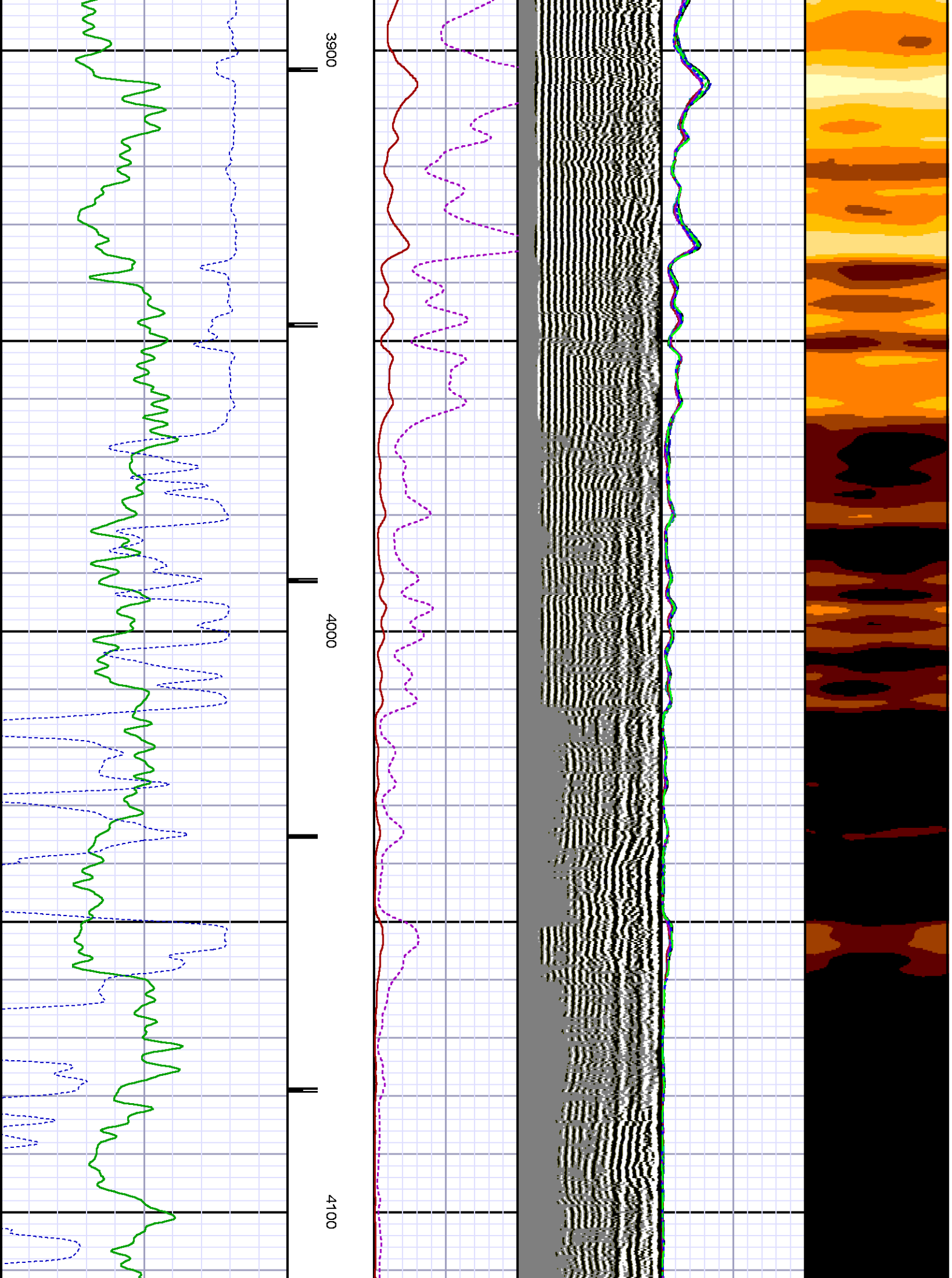


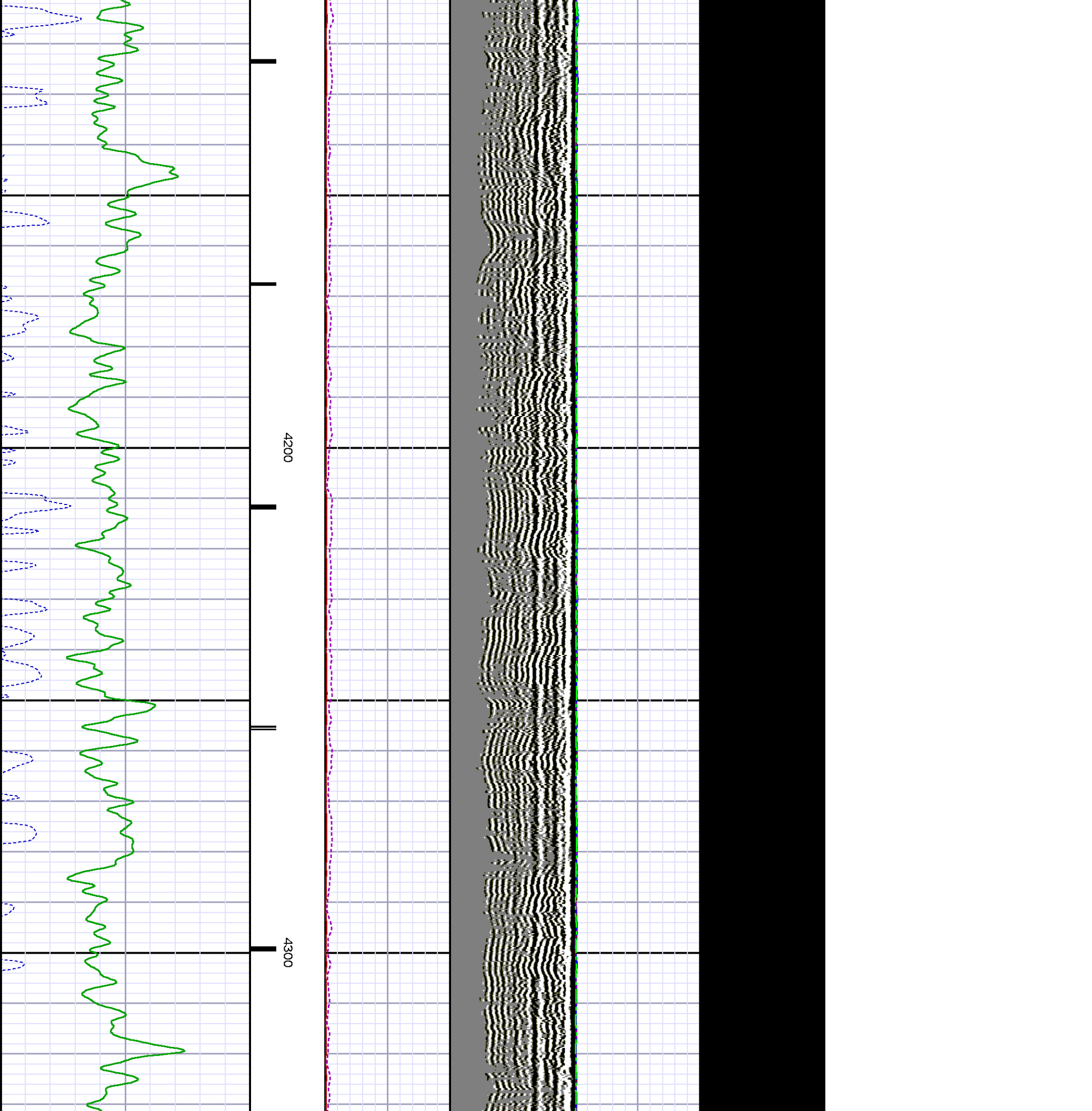


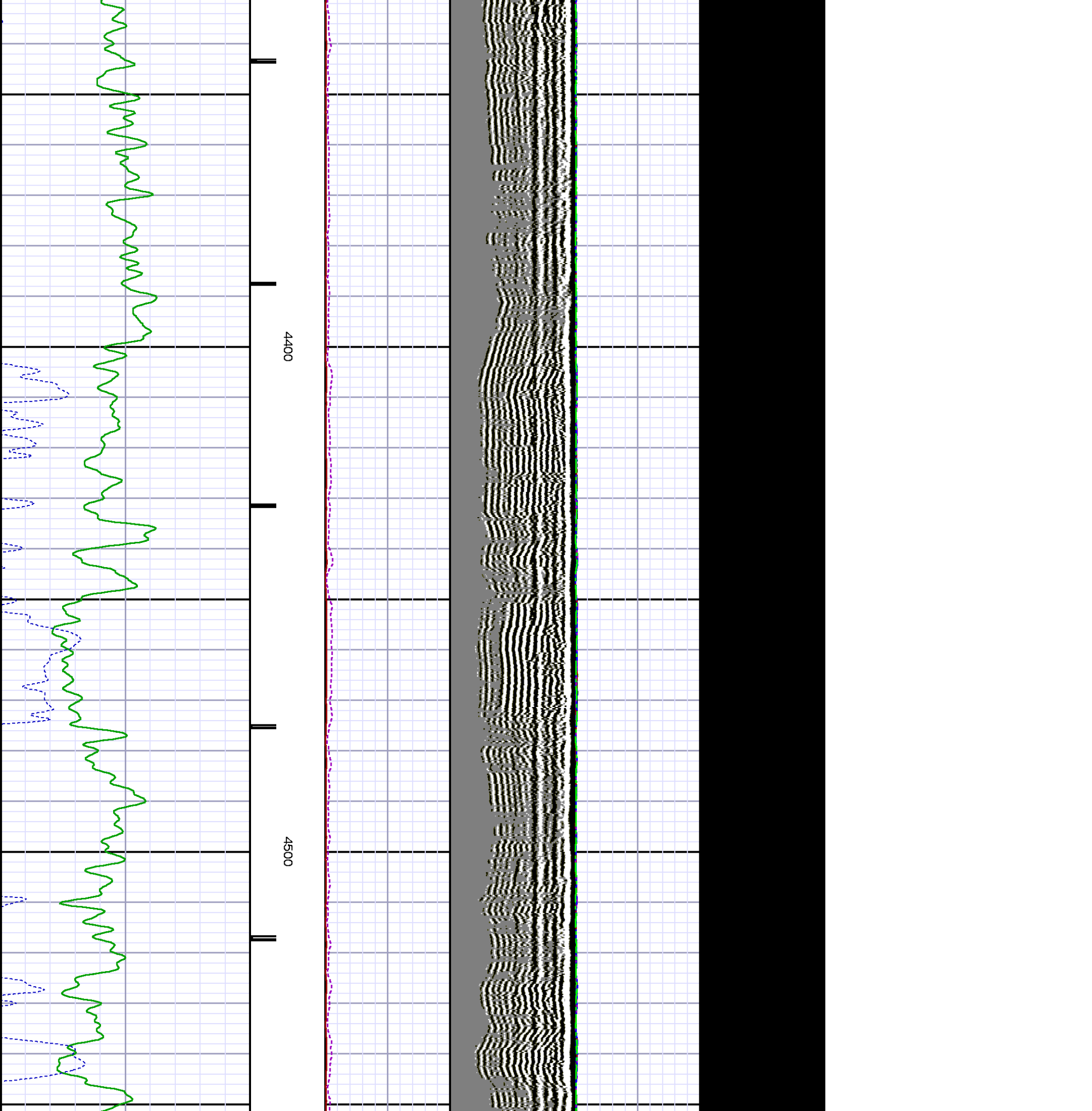


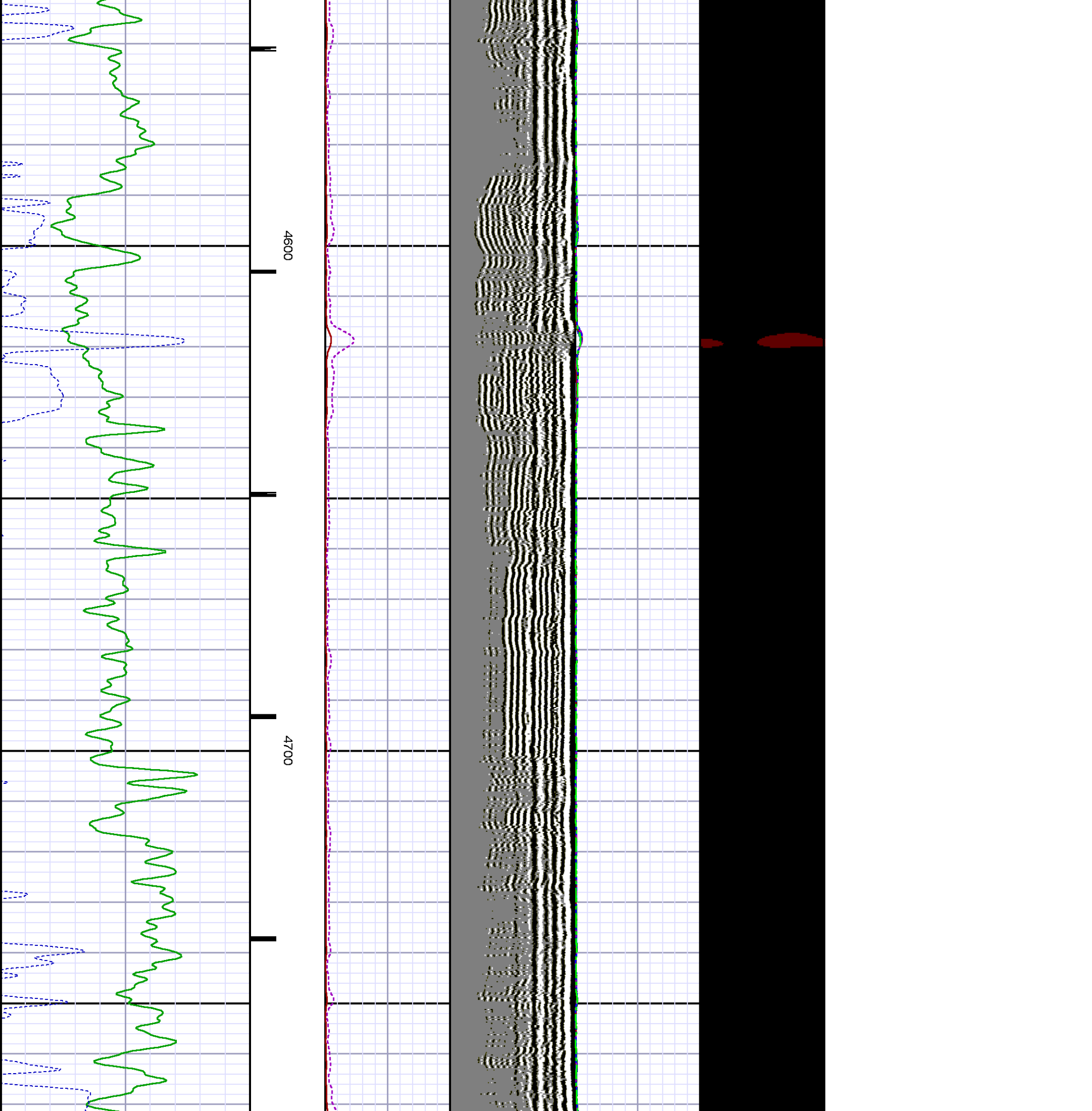


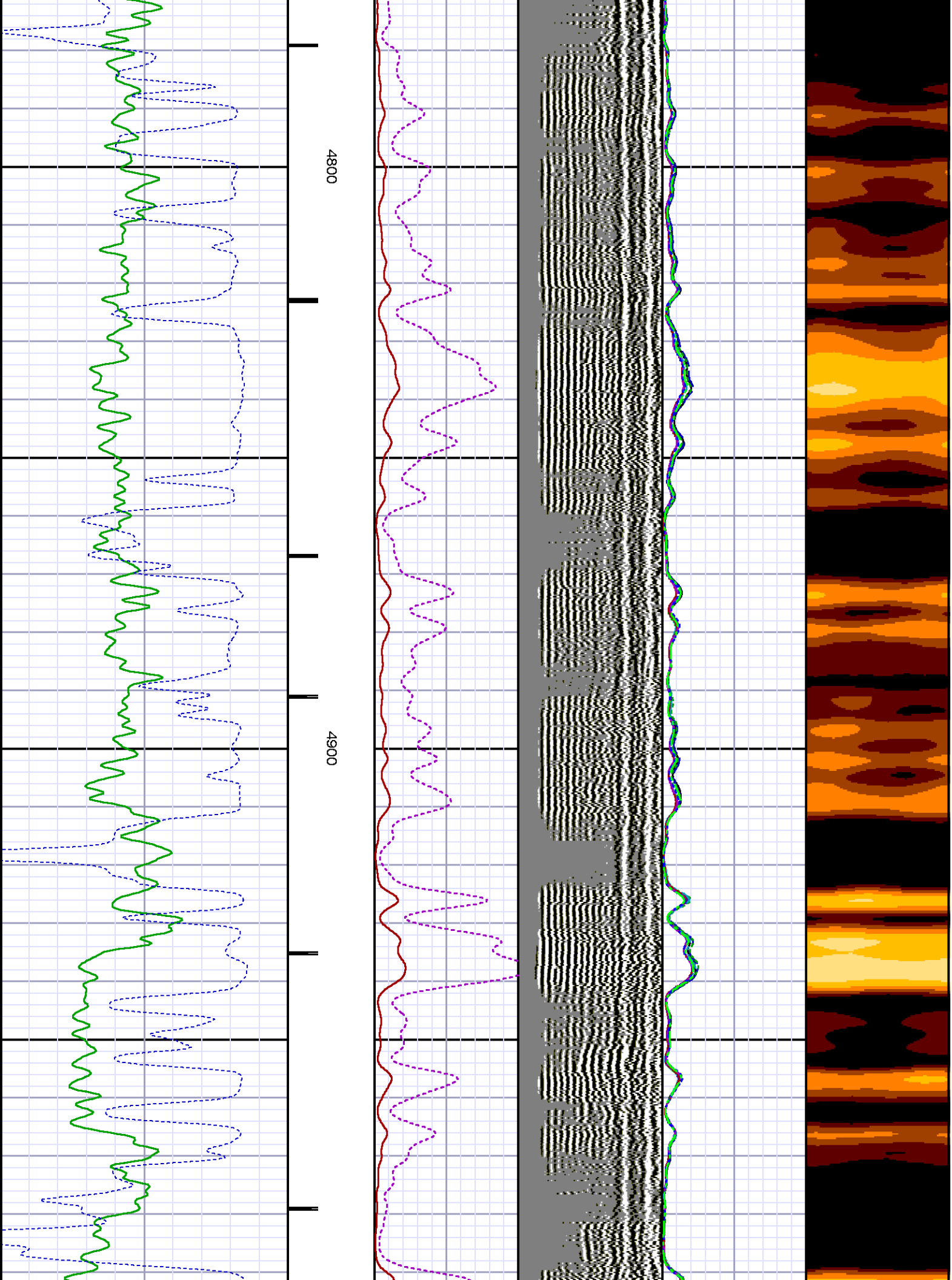


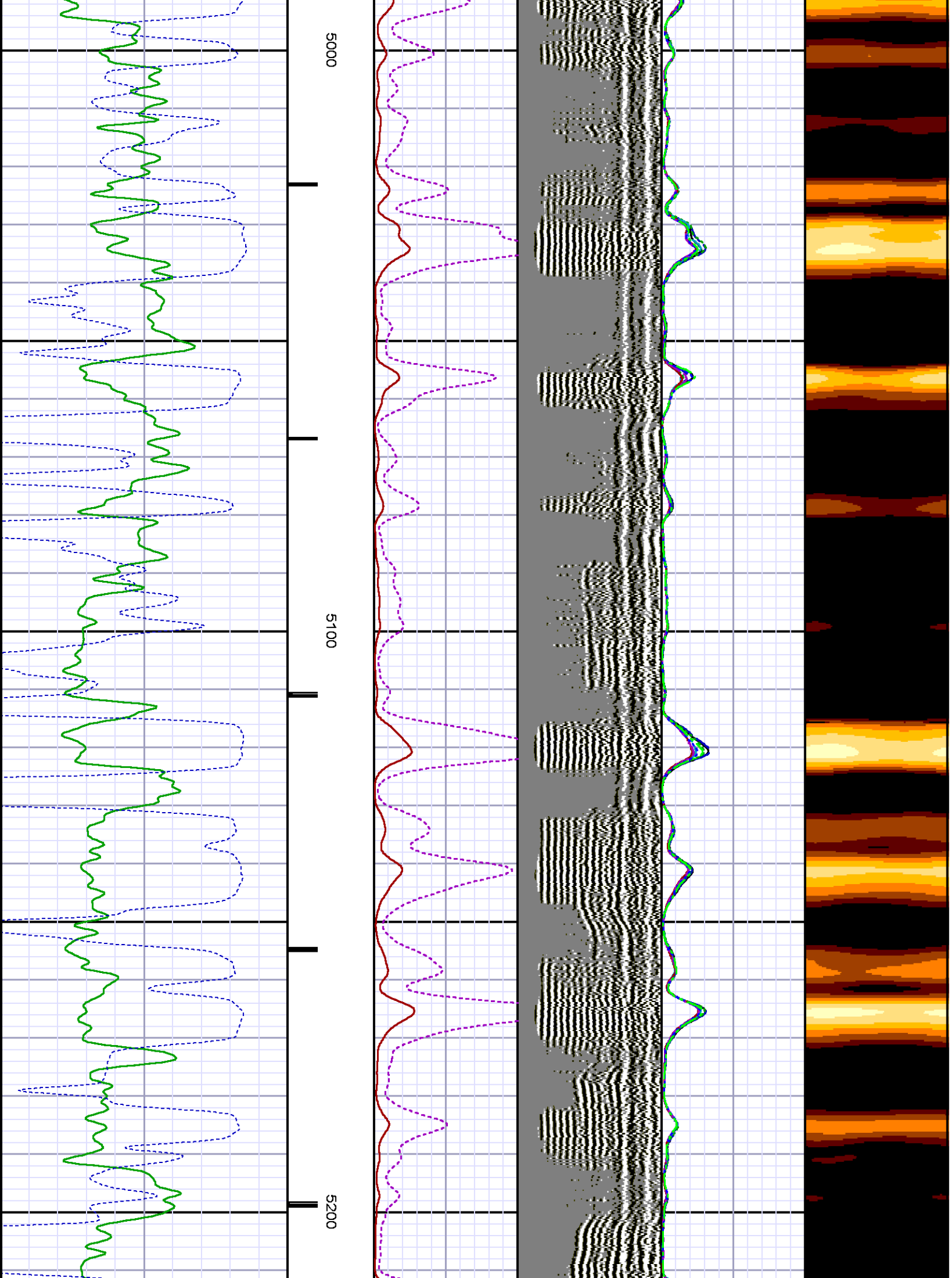


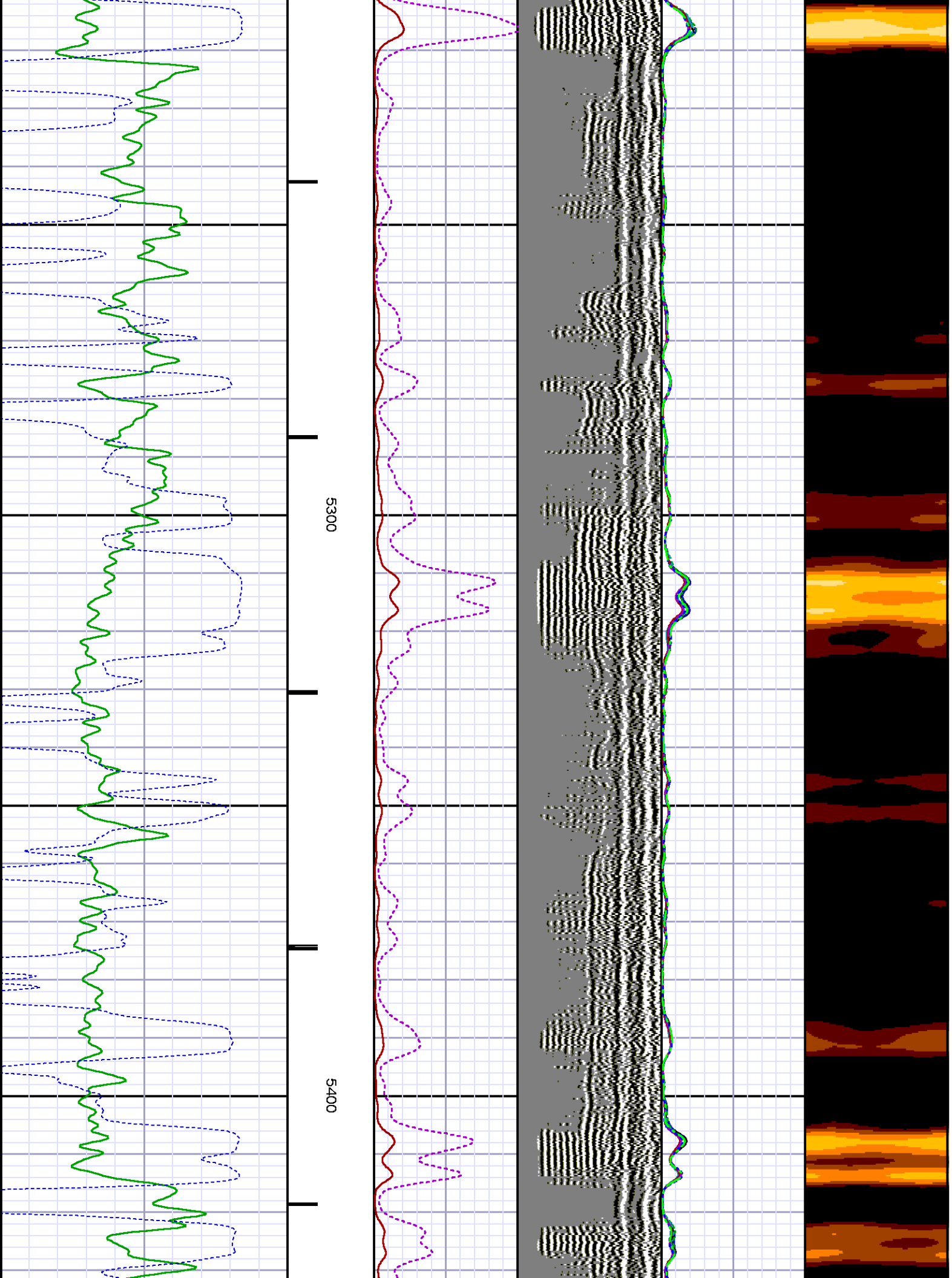


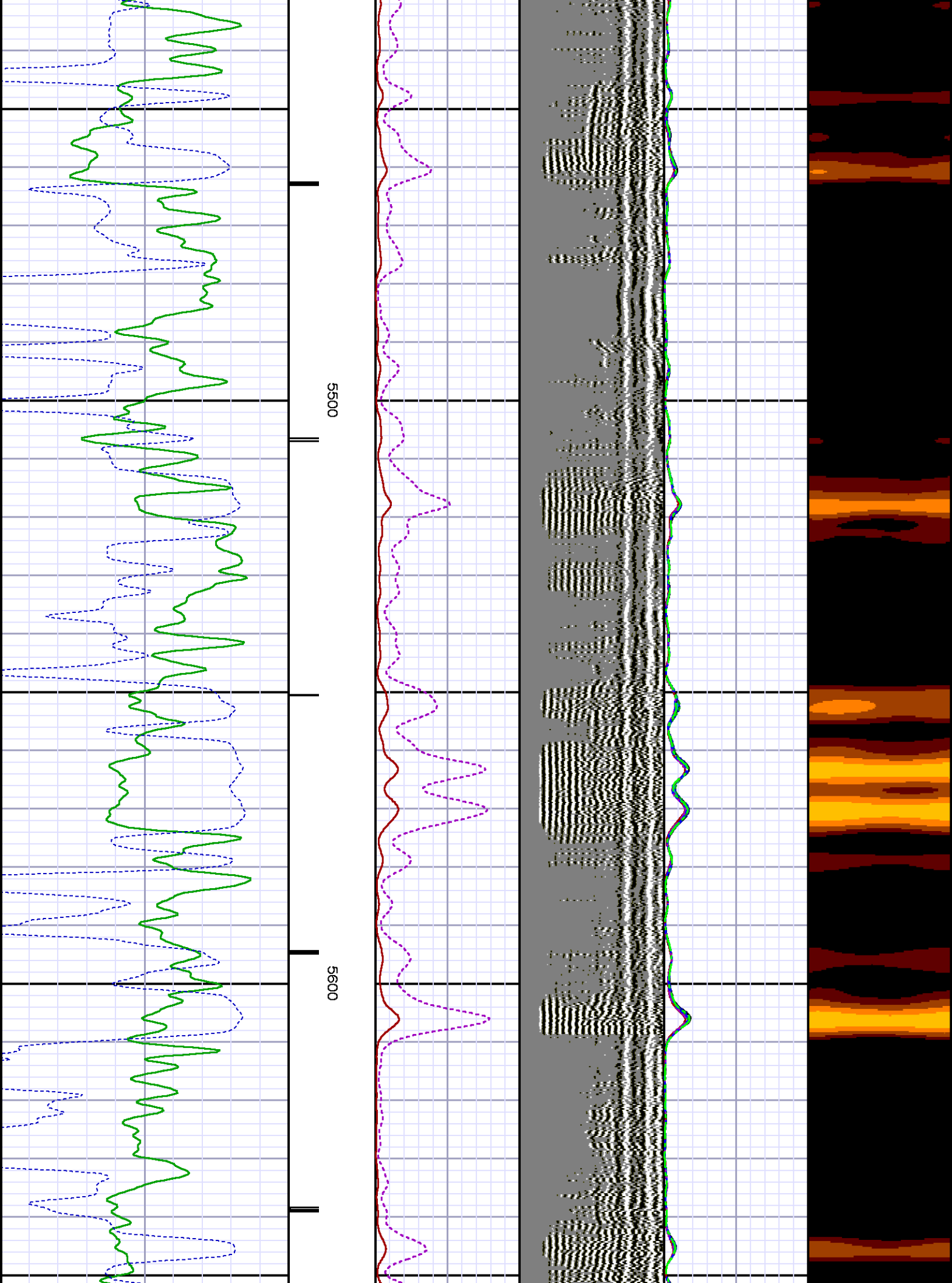


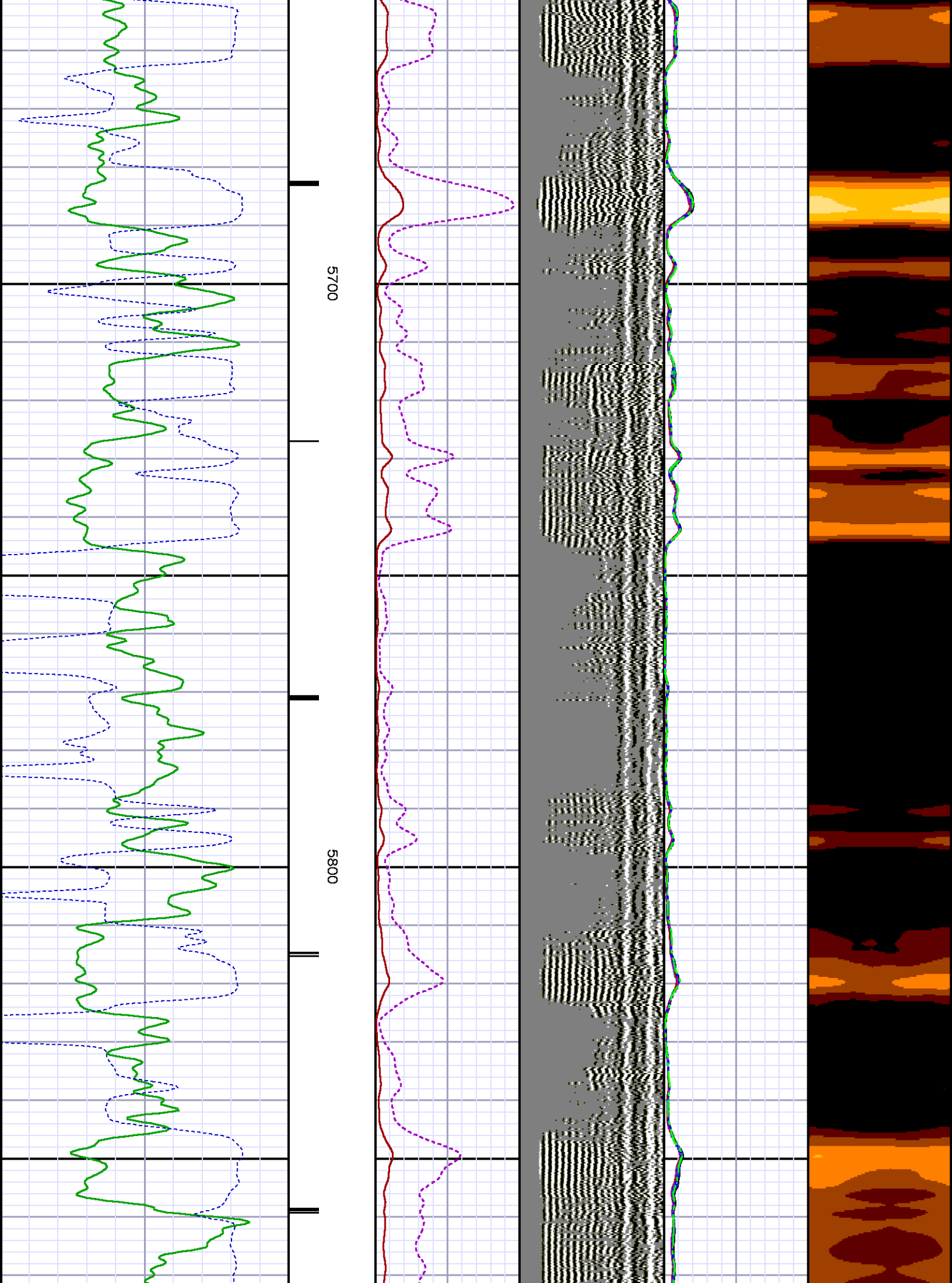


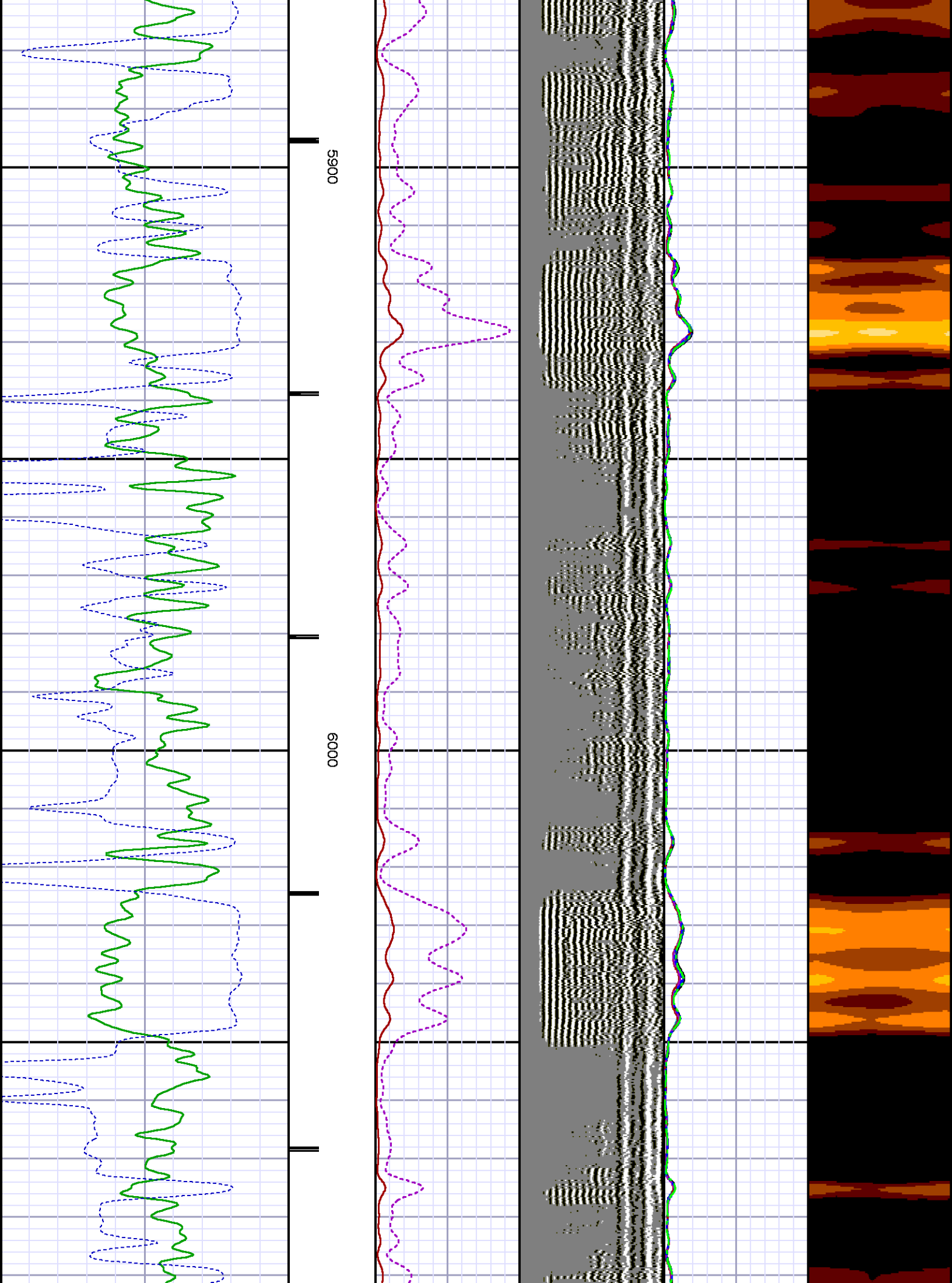


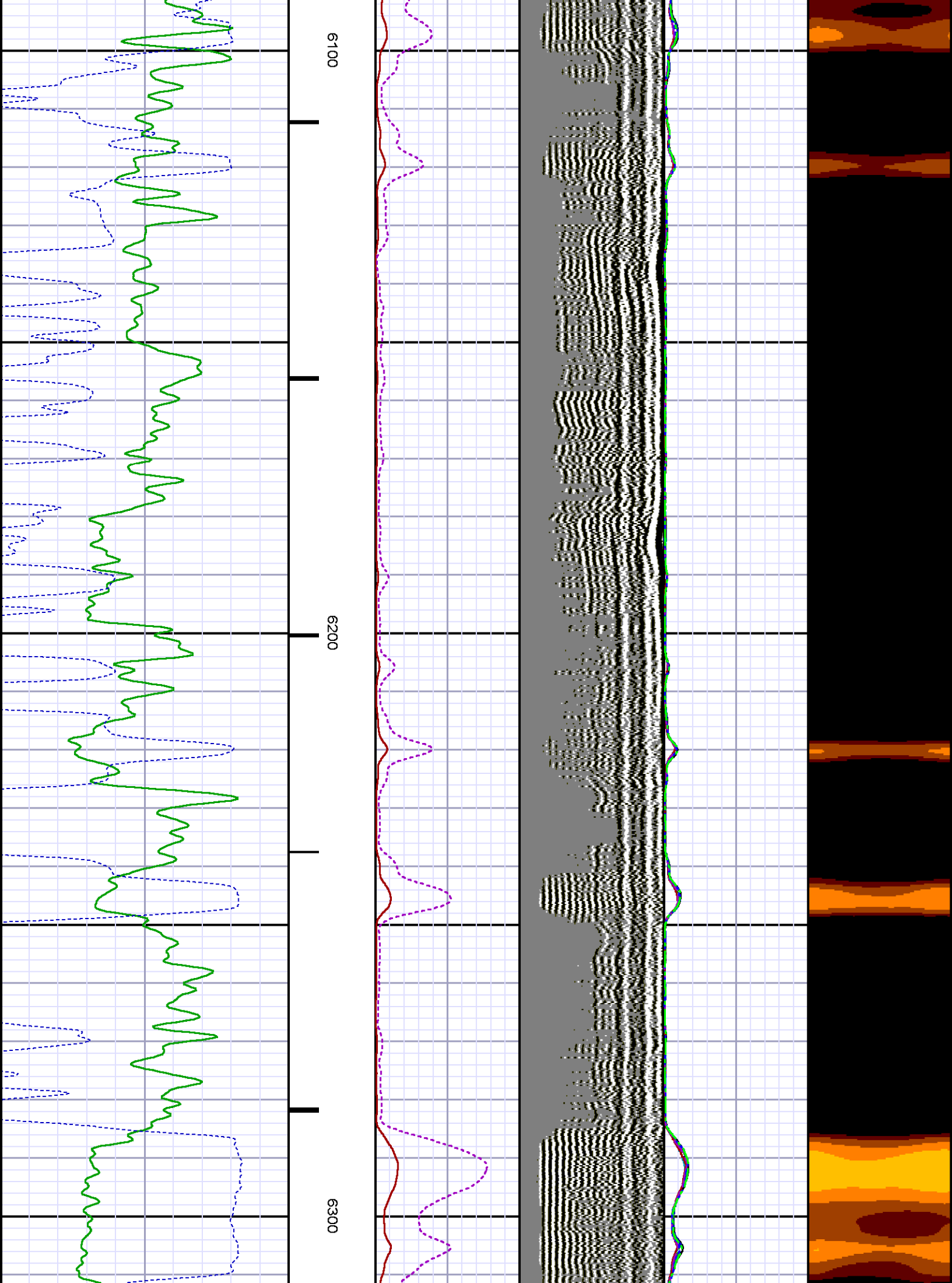


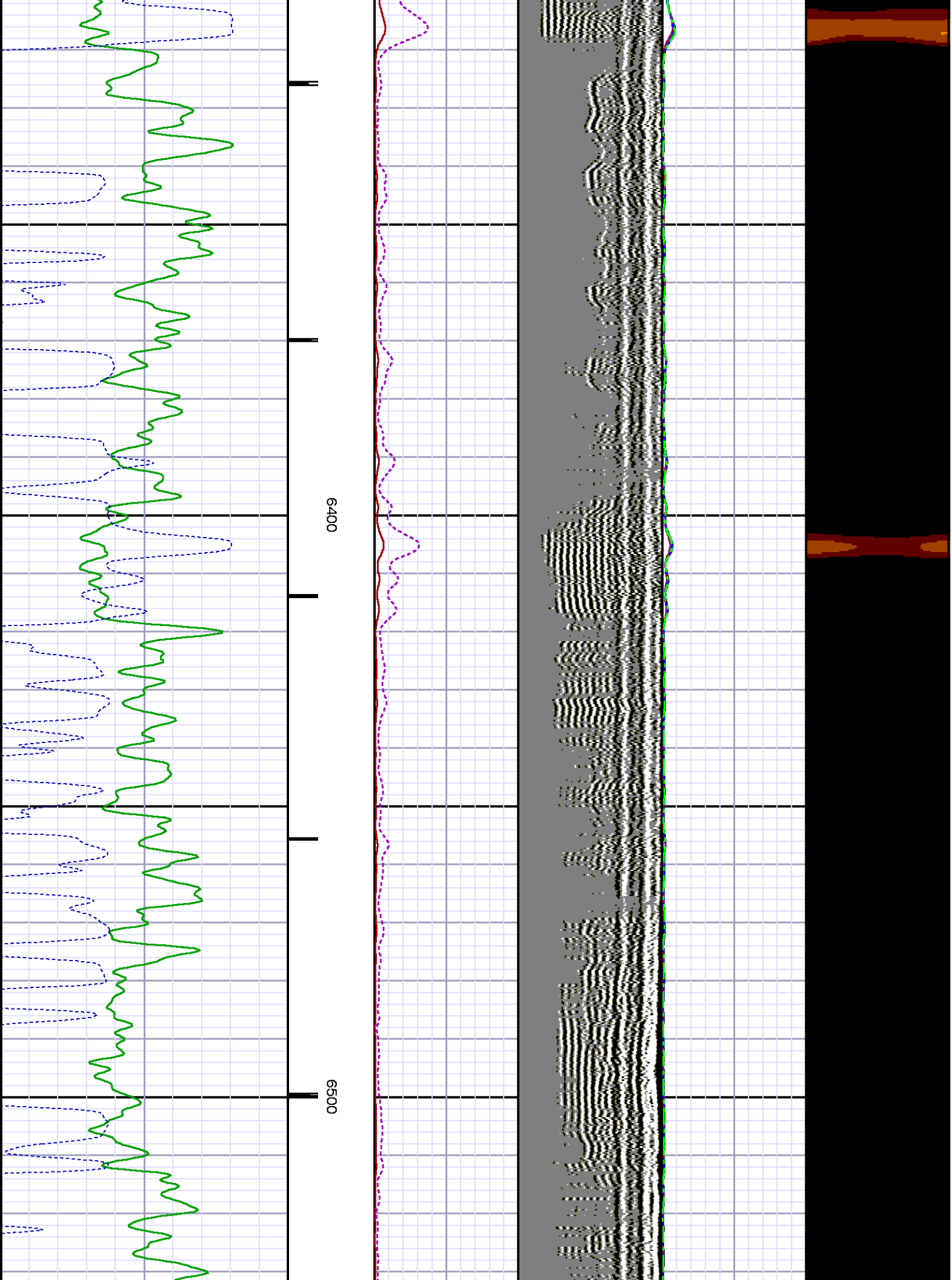


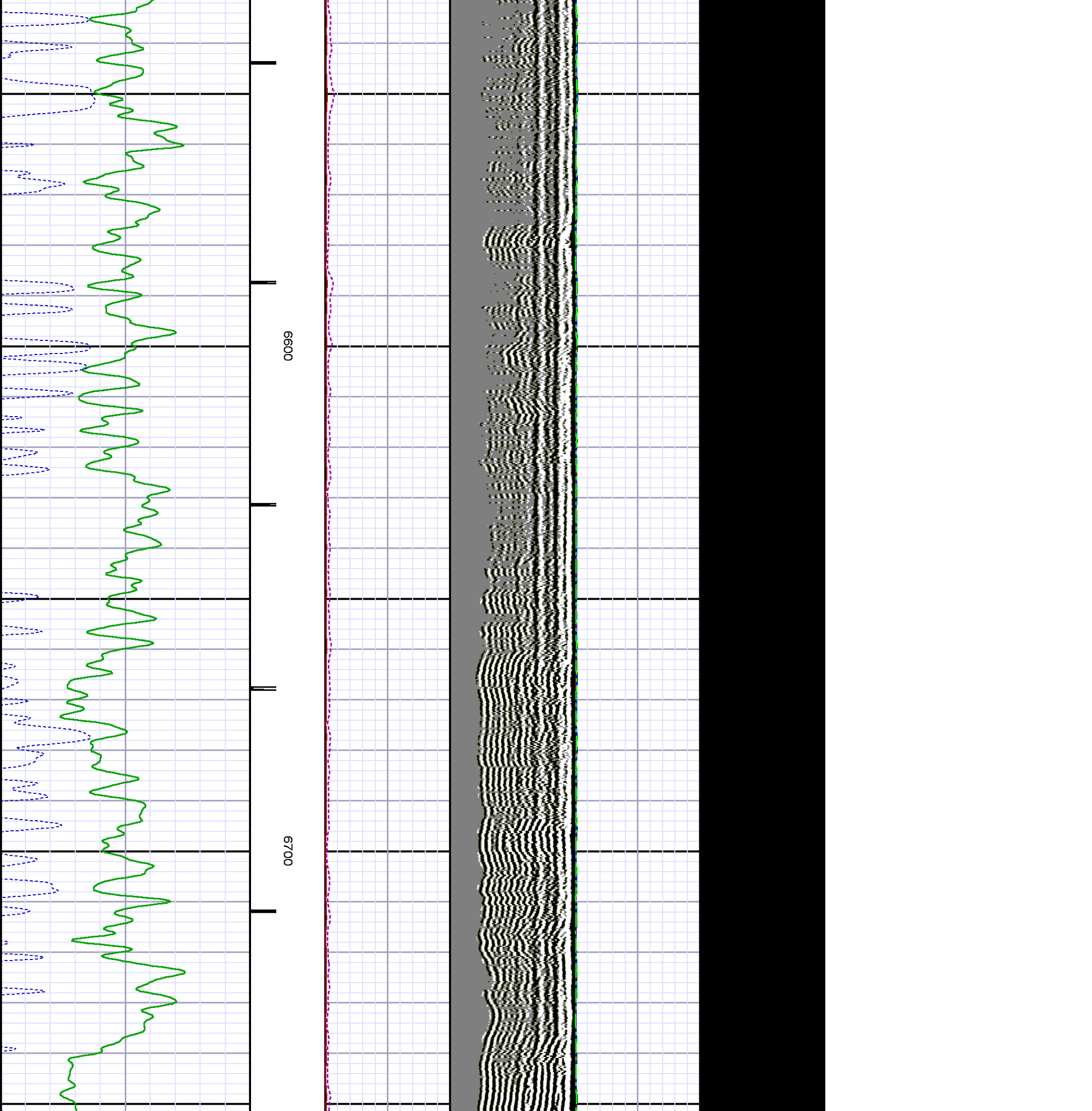


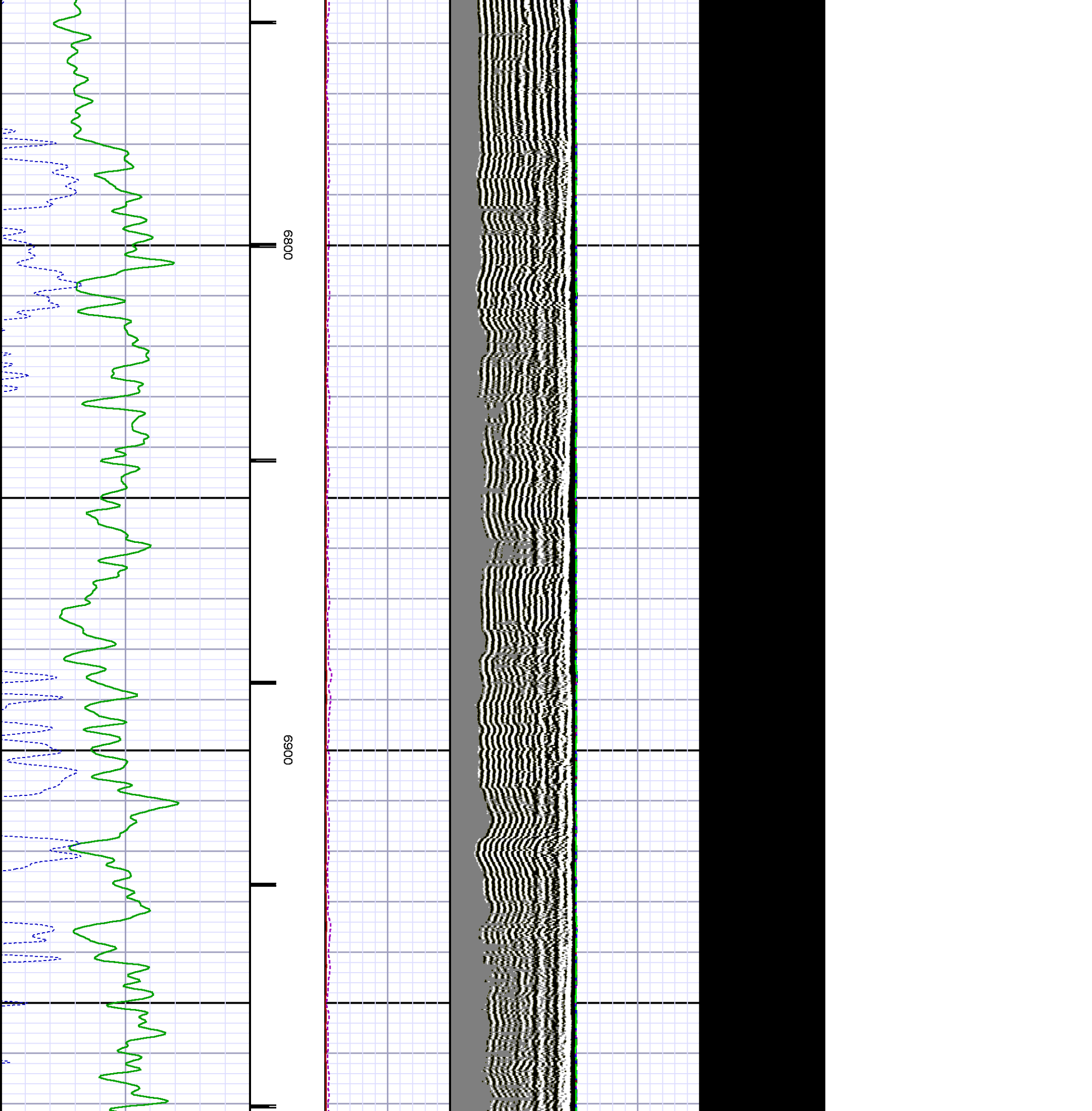


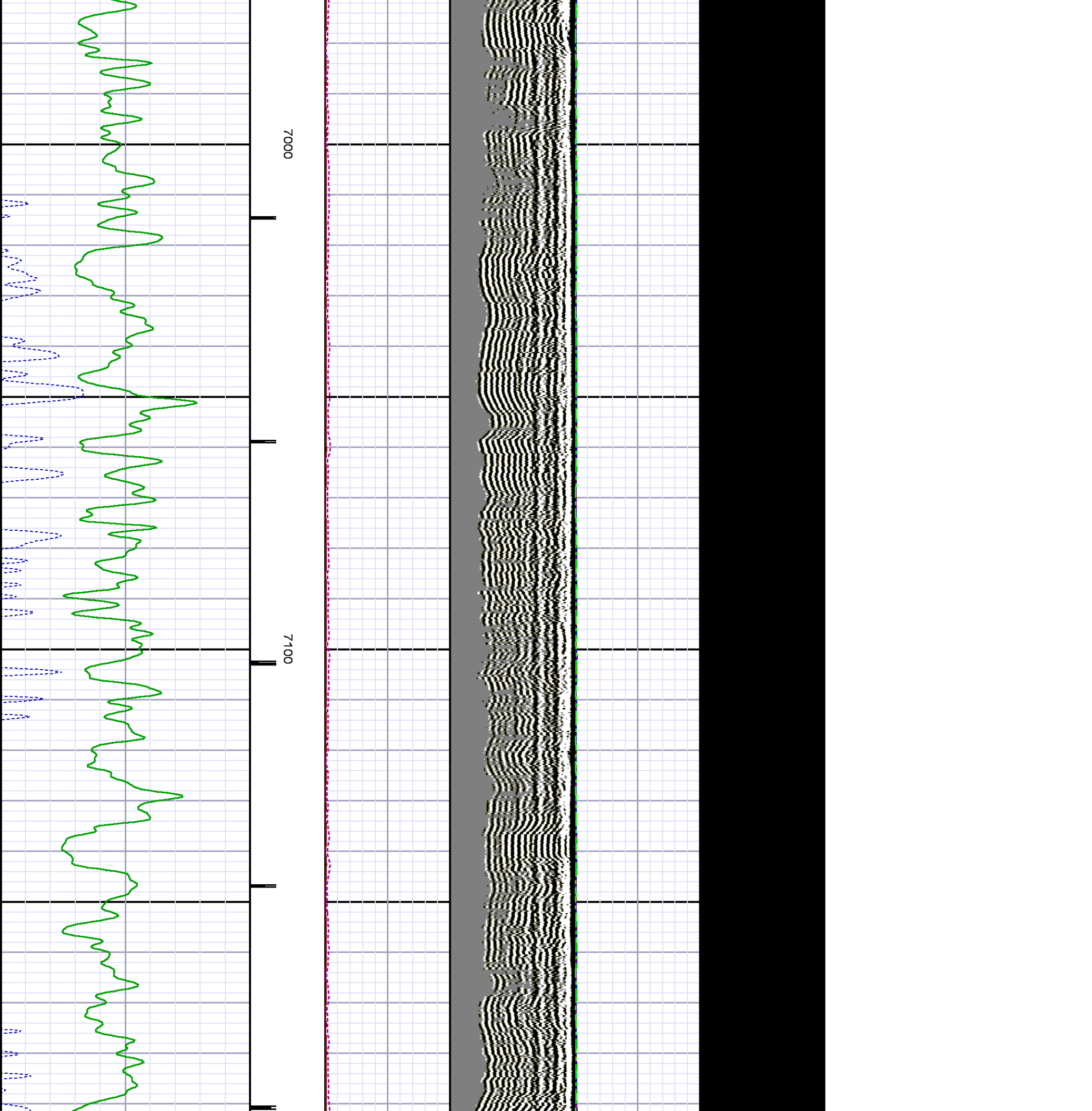


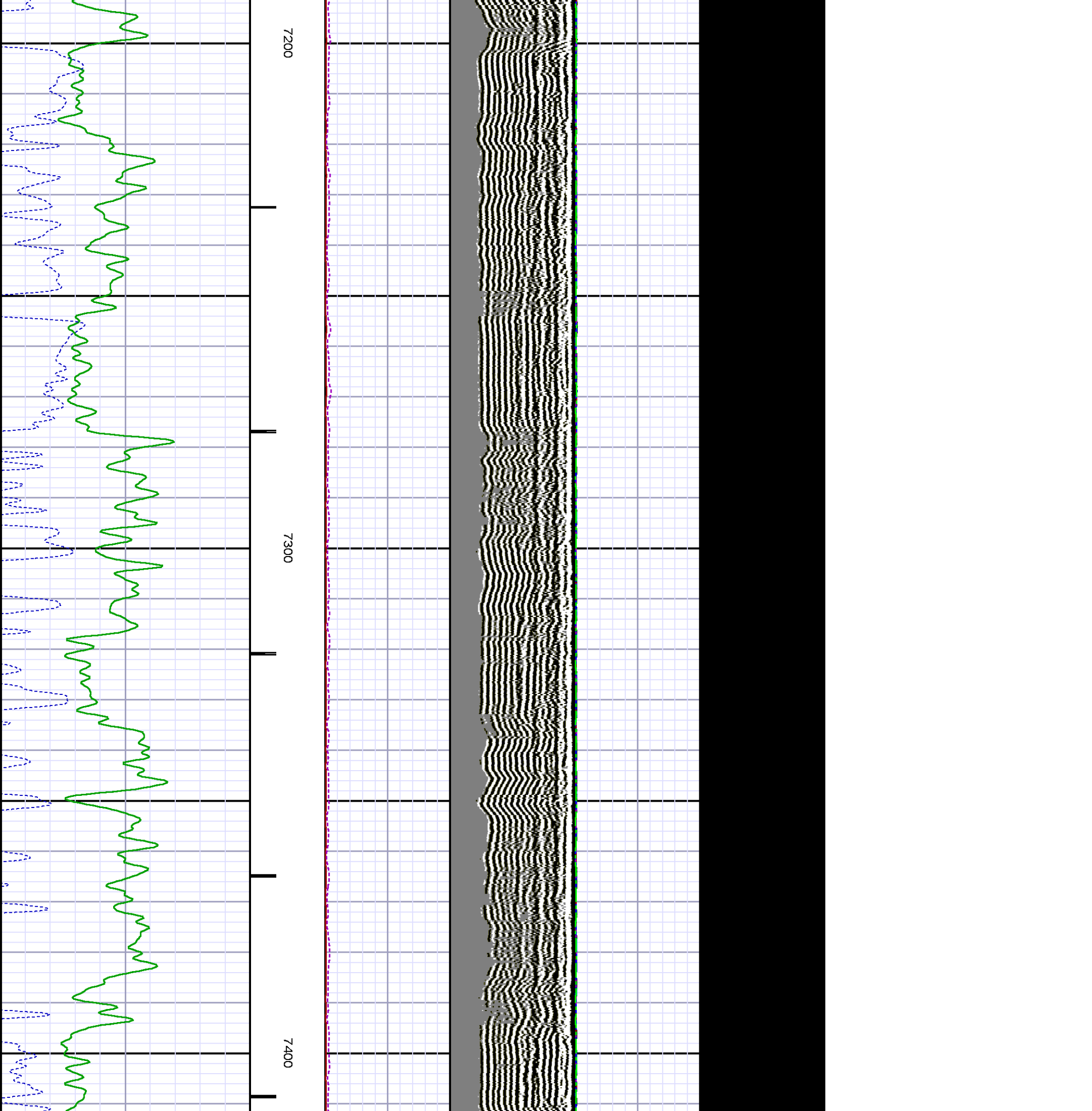


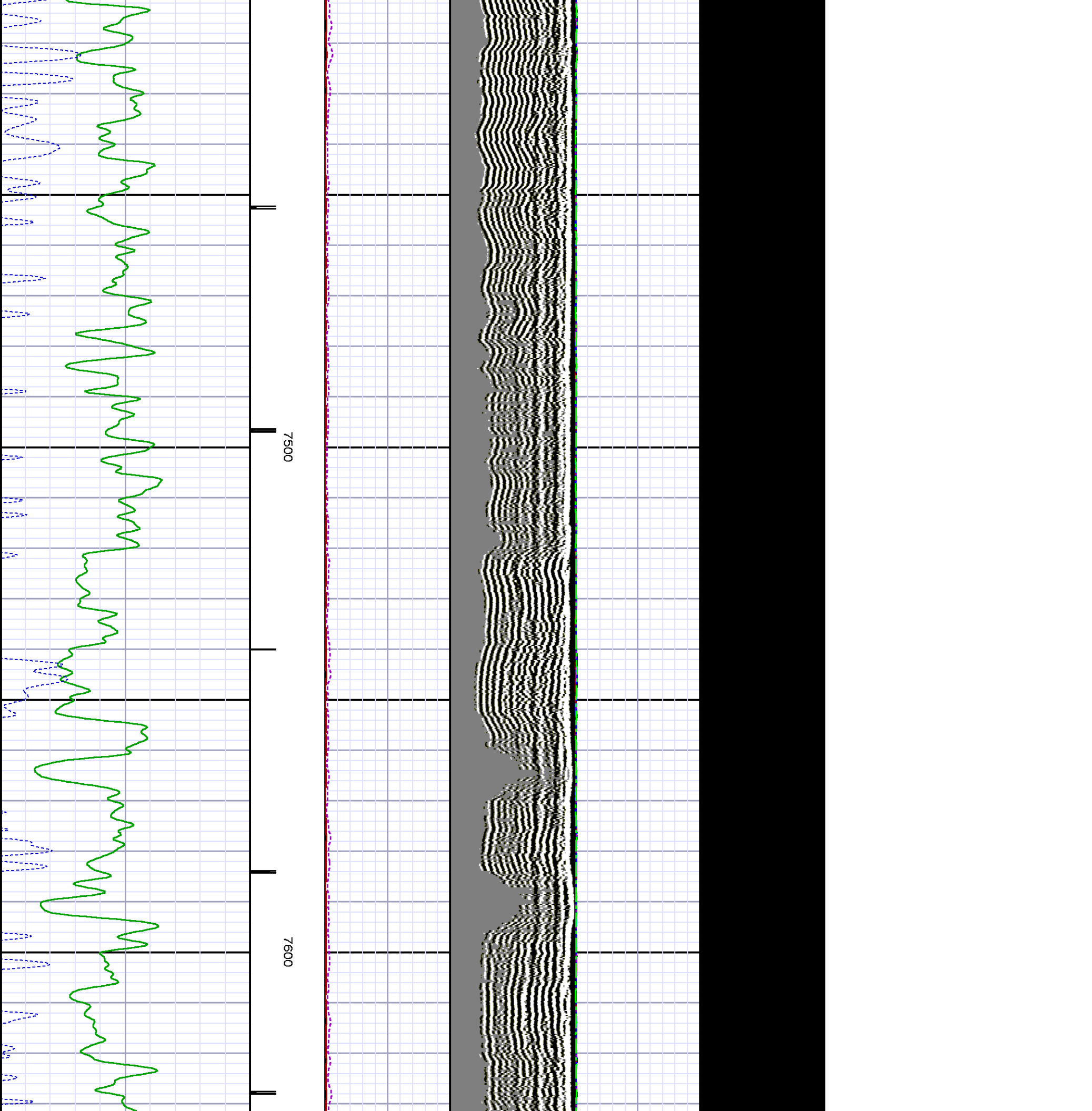


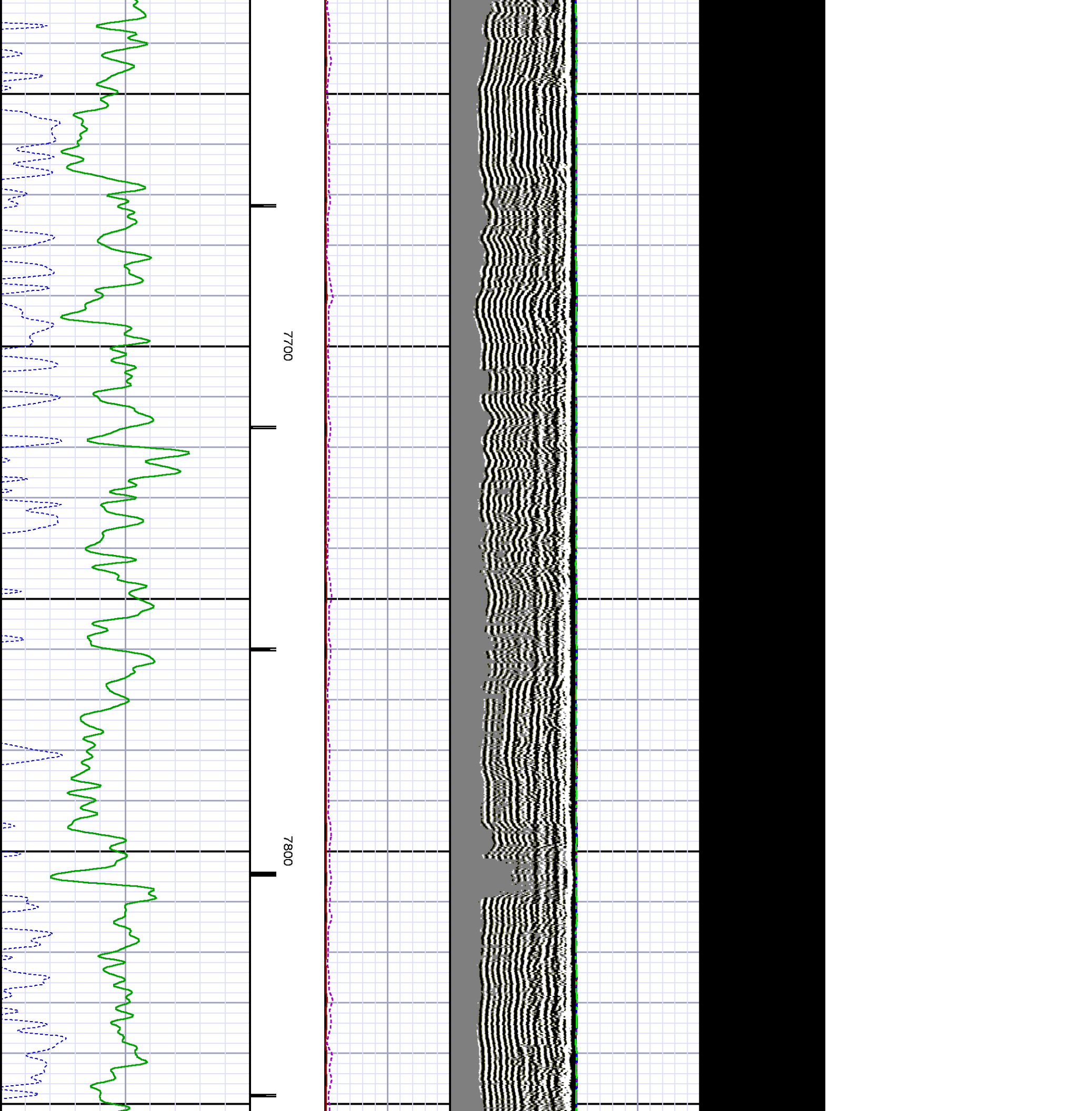


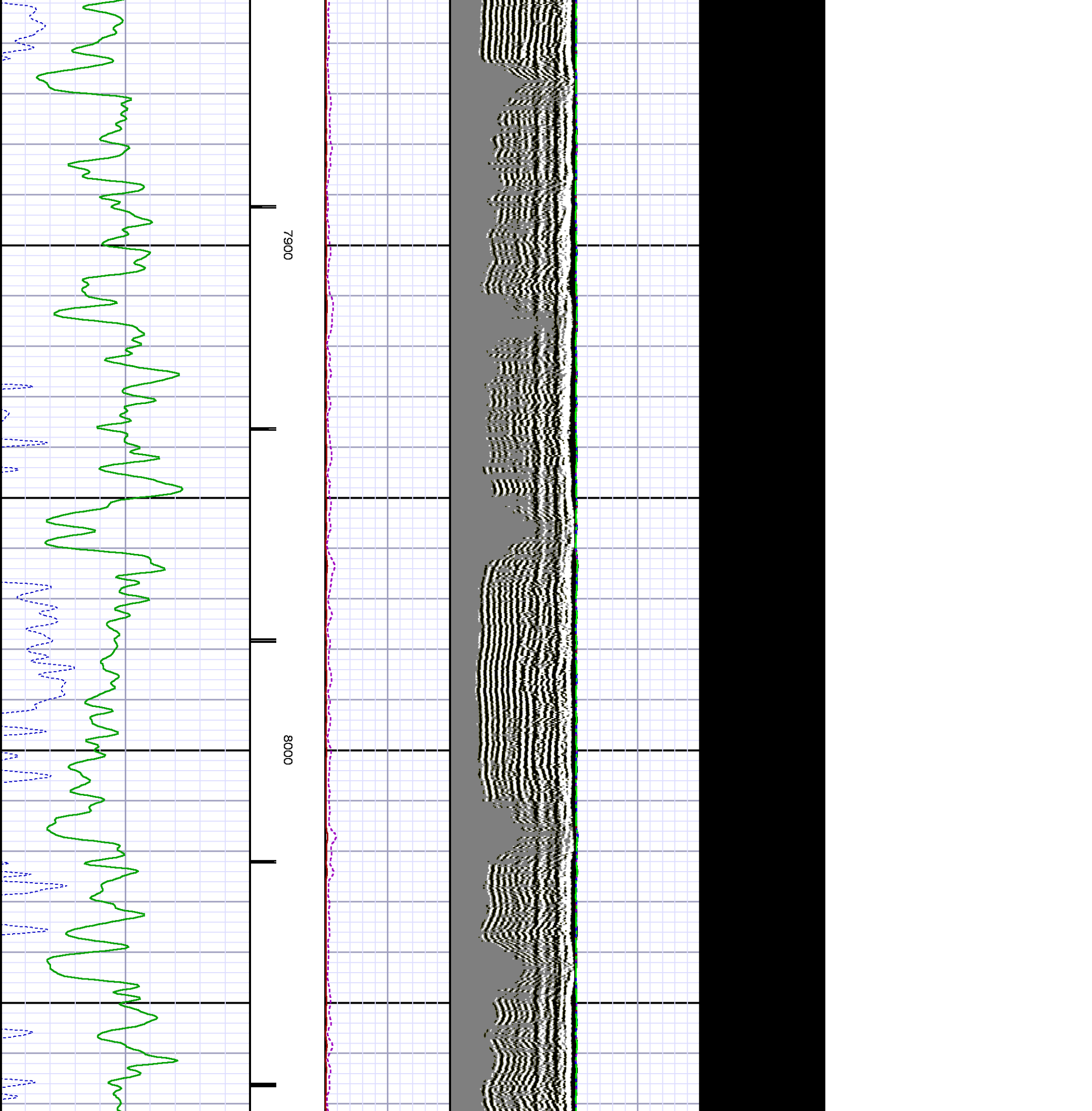


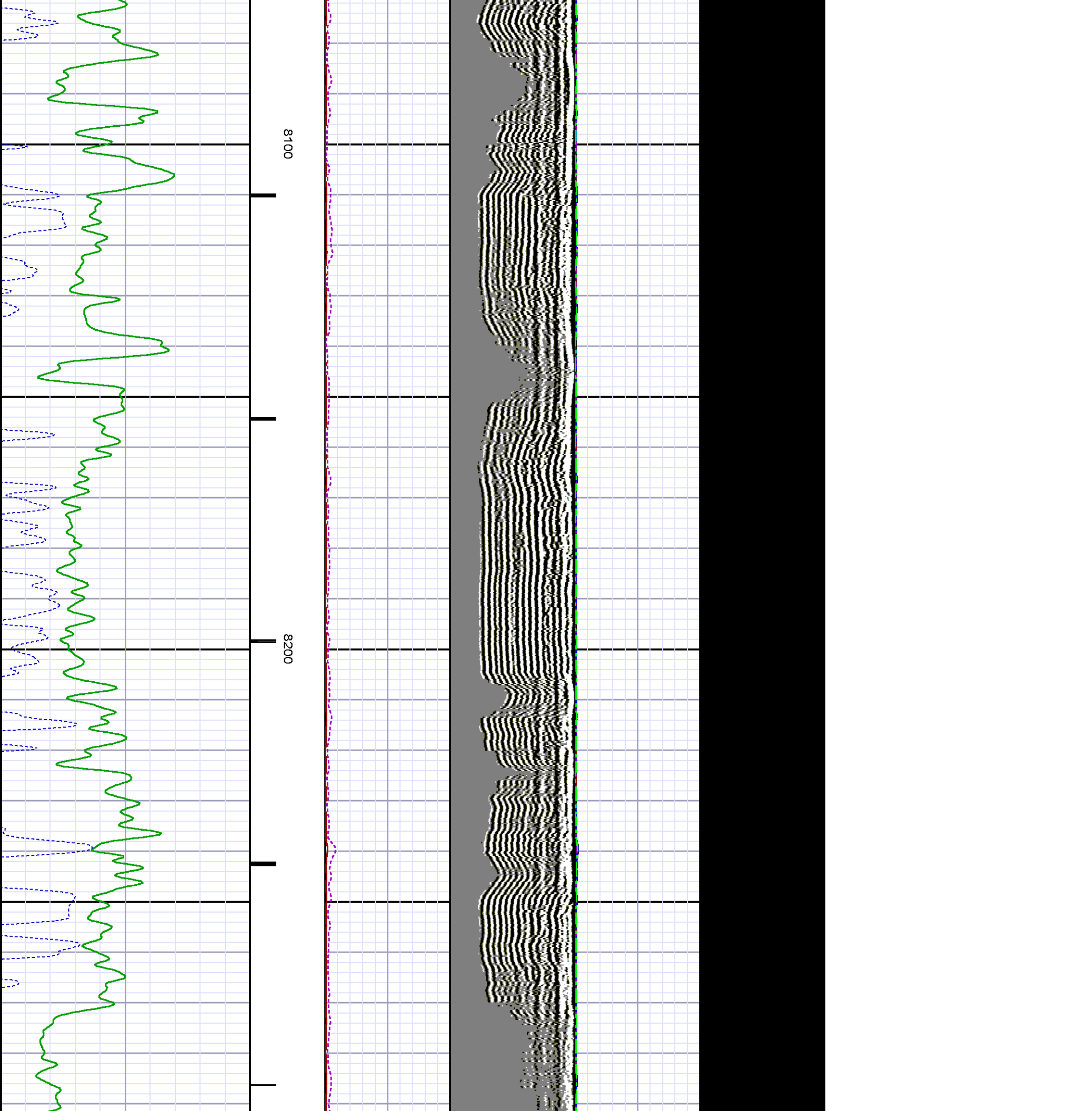


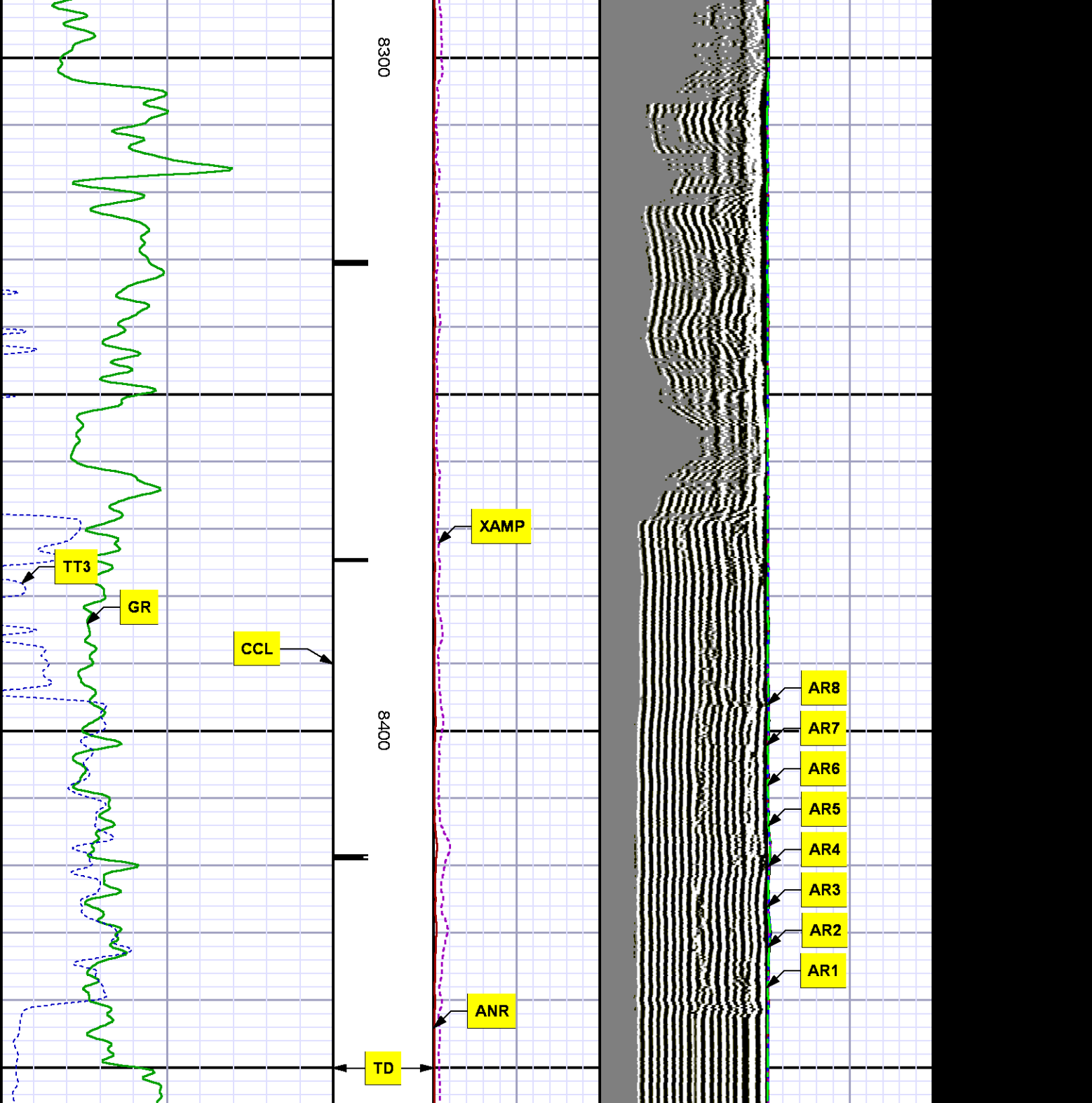












0	GR	150	CCL	450	0	ANR	100	Variable Density	0	AR1	100	0	PBMAP	360
	gAPI		MID feet 1:240	m v		m v		200		AR2	100		80	20
280	TT3	180			0	XAMP	20	us		AR3	100			
	usec									AR4	100			
										AR5	100			
										AR6	100			
										AR7	100			
										AR8	100			

REPEAT SECTION

0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	8145.830	8473.080
RAL	Amp Gate Start Near	195.000	usec	8145.830	8473.080
RAL	Amp Gate Start Radial	195.000	usec	8145.830	8473.080
RAL	Amp Gate Width Far	25.000	usec	8145.830	8473.080
RAL	Amp Gate Width Near	25.000	usec	8145.830	8473.080
RAL	Amp Gate Width Radial	25.000	usec	8145.830	8473.080
RAL	casing od	4.500	inches	8145.830	8473.080
RAL	casing wt	11.600	lbm/ft	8145.830	8473.080
RAL	FB Start Far	291.900	usec	8145.830	8473.080
RAL	FB Start Near	180.000	usec	8145.830	8473.080
RAL	FB Start Radial	180.000	usec	8145.830	8473.080
RAL	FB Thresh Far	10.000	mv	8145.830	8473.080
RAL	FB Thresh Near	4.000	mv	8145.830	8473.080
RAL	FB Thresh Radial	4.000	mv	8145.830	8473.080
RAL	Fluid Travel Time	200.000	usec/ft	8145.830	8472.705

DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES
1426XA	-11.000	ACAL ANR AR1 AR2 AR3 AR4 AR5 AR6 AR7 AR8 CHV FPR2 FPR3 FPR5 TT3 TTR1 TTR2 TTR3 TTR4 TTR5 TTR6 TTR7 TTR8 XAMP
1426XA	-10.040	AFAR SIG TT5
1355XA	-5.620	CCL
1355XA	-1.500	GR
1355XA	0.000	TEMP

Company : WPX ENERGY

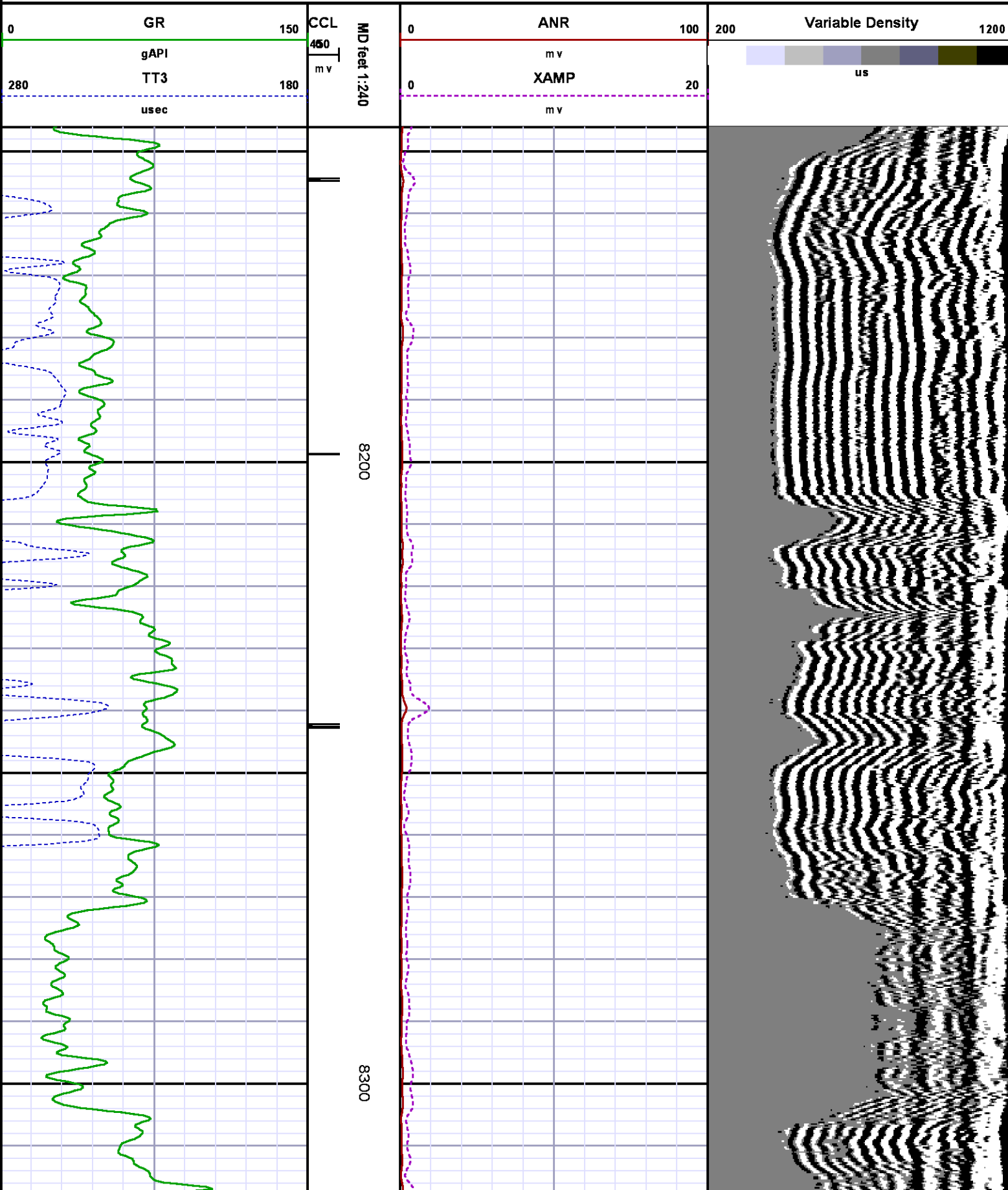
Well : YOUBERG RWF 344-23

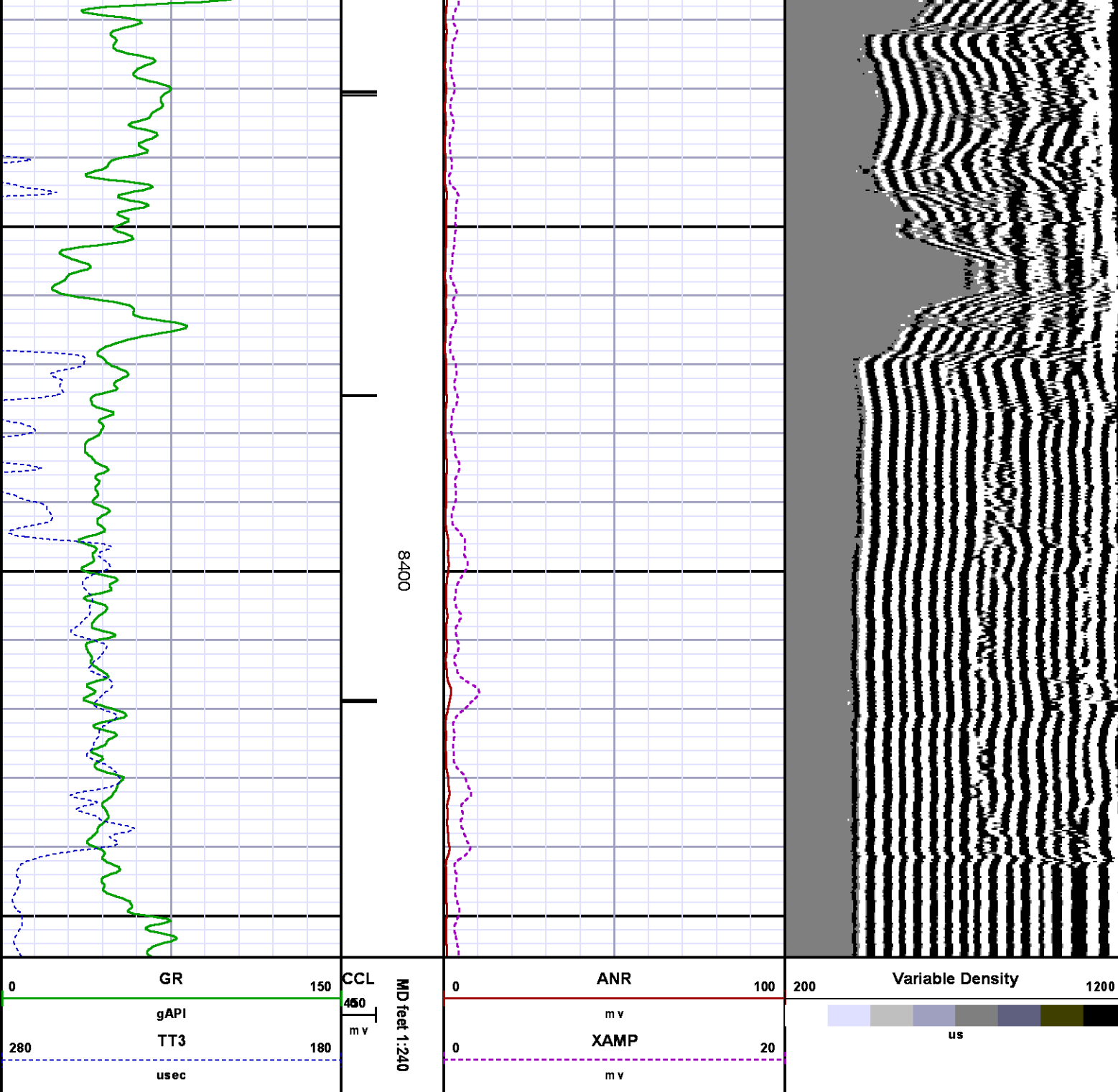
File Name : d:\well\data\wpx energy\rwf 344-23\344ra\repeat.xtf

Mode : PlotMgr 5.4.504

Interval : 8146.08 - 8456.00 feet UP

Created : 6/15/2013 12:47:09 PM





CALIBRATION SUMMARY

RALSHP

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sat Jun 15 09:18:06 2013 TOOL SERIES: 1426XA ASSET: 106 SEQ: J15

Tool Delay [usec]	-61.00	Tank OD in	5.50	Tank Wt lbm/ft	15.50	Tank ID in	4.95
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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	-0.180	100.00	0.12
3 Ft. Receiver	218	216	30	158	25	-0.235	100.00	0.12
5 Ft. Receiver	326	325	30	236	25	0.107	150.00	0.13
Radial #1	215	216	30	141	25	0.547	100.00	0.12
Radial #2	216	216	30	141	25	0.300	100.00	0.12
Radial #3	218	216	30	141	25	-0.112	100.00	0.12
Radial #4	218	216	30	141	25	-0.185	100.00	0.12
Radial #5	218	216	30	141	25	0.035	100.00	0.12
Radial #6	217	216	30	141	25	-0.107	100.00	0.12
Radial #7	215	216	30	141	25	-0.027	100.00	0.12
Radial #8	217	216	30	141	25	-0.319	100.00	0.12

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\106J15_fid.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sat Jun 15 09:20:30 2013 TOOL SERIES: 1426XA ASSET: 106 SEQ: J15

Tool Delay [usec]	-61.00	Casing OD in	4.50	Casing Wt lbm/ft	11.60	Casing ID in	4.00
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RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	166	25	0.007	0.000	0.98	100.000
3 Ft. Receiver	195	25	-0.831			
5 Ft. Receiver	305	25	-0.842			
Radial #1	195	25	-1.532			
Radial #2	195	25	-1.279			
Radial #3	195	25	-1.074			
Radial #4	195	25	-1.059			
Radial #5	195	25	-0.928			
Radial #6	195	25	-0.952			
Radial #7	195	25	-0.645			
Radial #8	195	25	-0.797			

GAMMA RAY

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Mon Jun 03 09:09:02 2013 TOOL SERIES: 1355XA ASSET: 209 SEQ: J1

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	149.24	605.69	0.405	60.49	245.49	185.00

Verification File: C:\case\calver\GR\209J1.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Mon Jun 03 09:10:36 2013 TOOL SERIES: 1355XA ASSET: 209 SEQ: J1

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	150.93	617.24	0.405	61.17	250.17	189.00

TOOL DIAGRAM

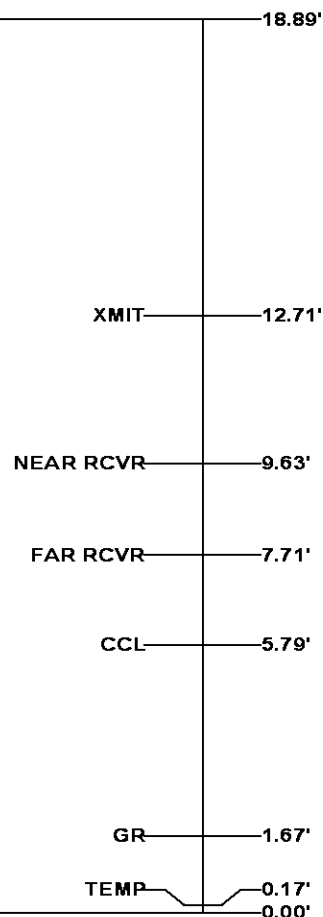
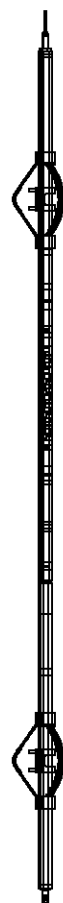
OTA SHORT CABLE HEAD

PROBE 2 3/4 DUAL RECEIVER RADII

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

RAL GR/TEMP/CCL/CHV DETECTOR

Series 1355XA
 Mnemonic RAL
 Diameter 2.75"
 Weight 85.00 lb
 Length 6.96'
 Measure Point 0.17' TEMP
 Measure Point 1.67' GR
 Measure Point 5.79' CCL
 Temp Rating 400.00 °F
 Press Rating 20000.00 PSI



Total Length: 18.89'
 Total Weight: Not Available
 Max Diameter: 2.75"



Baker Atlas



Company	WPX ENERGY		File No:
Well	YOUBERG RWF 344-23		CH073688
Field	RULISON		API No:
County	GARFIELD	State	COLORADO
Location	SHL: 1359' FSL, 2259' FEL BHL: 524' FSL, 463' FEL (SWSE)		Elevations KB 5527.5 ft DF GL 5501.5 ft
SEC	23	TWP	6S
		RGE	94W
			23 6S 94W RWF 33-23 PAD NABORS 577