



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: GH078601	Company Well Field County	WPX ENERGY WPX ENERGY RWF 42-4 RULISON GARFIELD	State CO
API No: 06046220880000	Location SHL: 415' FNL & 1674' FEL RML: 108-4 PAD BHL: 1164' FNL & 1293' FEL NABORS 674 SEC 4 TWP 7S RGE 94W		Other Services RPM
Permanent Datum Log Measured From Drill Measured From	OL KB KB	Elevation 26 ft Above P. D.	Elevations KB 6820 ft DF GL 5794 ft

Date	26/OCT/13	
Run	ONE	
Service Order	US624016	
Depth Driller	8020 ft	
Depth Logger	7987 ft	
Bottom Logged Interval	7977 ft	
Top Logged Interval	26 ft	
Time Started	9:30	
Time Finished	13:30	
Operator Rig Time	4 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	67 ft	
Logged Cement Top	NA	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	NA	
Nominal Logging Speed	65 fpm	
Maximum Recorded Temperature	228 degF	
Reference Log	NA	
Reference Log Date	NA	
Equipment No.	4271	GRAND JCT.
Recorded By	NEWELL	
Witnessed By	CHRIS	

- FOLD HERE

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

Borehole Record		
Bit Size	From	To
13.5 in	0 ft	1111 ft
8.75 in	1111 ft	8052 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in			0 ft	1111 ft
4.5 in	11.6 lbm/ft		0 ft	8052 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 2 feet.
Logged with zero PSI at wellhead.
BHT = 228 °F
SJ = 4490' - 4514'

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	CBL	1426XA	10218495	CENTRALIZED
1	1	GRICCL	1355XA	10580209	CENTRALIZED

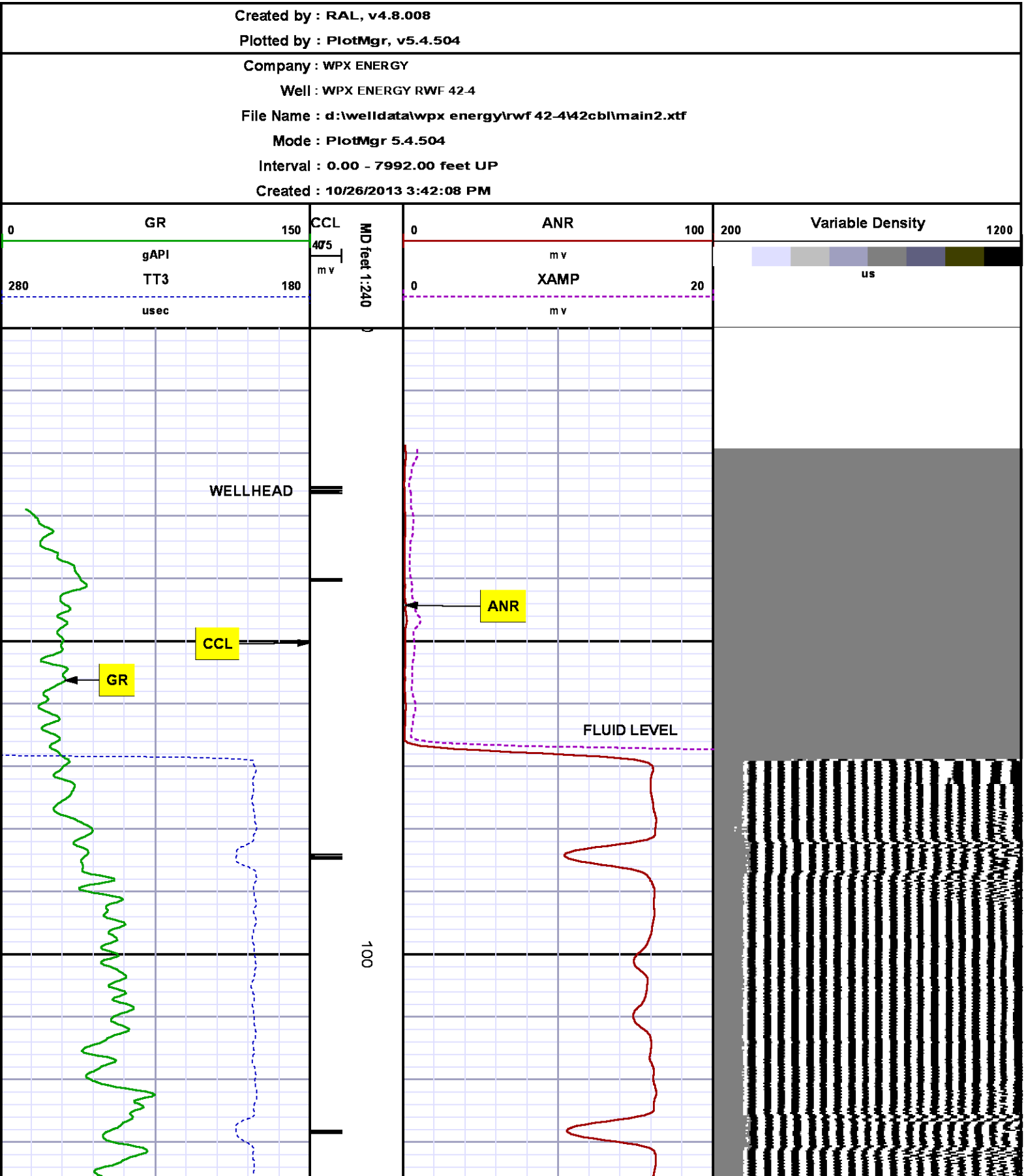
PRIMARY PRESENTATION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	29.656	7997.000
RAL	Amp Gate Start Near	200.391	usec	29.656	7997.000
RAL	Amp Gate Start Radial	200.391	usec	29.656	7997.000
RAL	Amp Gate Width Far	25.000	usec	29.656	7997.000
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RAL	FB Start Far	291.900	usec	29.656	7997.000
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RAL	FB Thresh Far	10.000	mv	29.656	7997.000
RAL	FB Thresh Near	4.000	mv	29.656	7997.000
RAL	FB Thresh Radial	4.000	mv	29.656	7997.000
RAL	Fluid Travel Time	200.000	usec/ft	29.656	7997.000

DEPTH OFFSETS
(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-11.000	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	CHV	FPR2
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TT4	TT5	TT6	TT7	TT8	TT9

			TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	-10.040	AFAR	SIG	TT5				
1355XA	-5.620	CCL						
1355XA	-1.500	GR						
1355XA	0.000	TEMP						



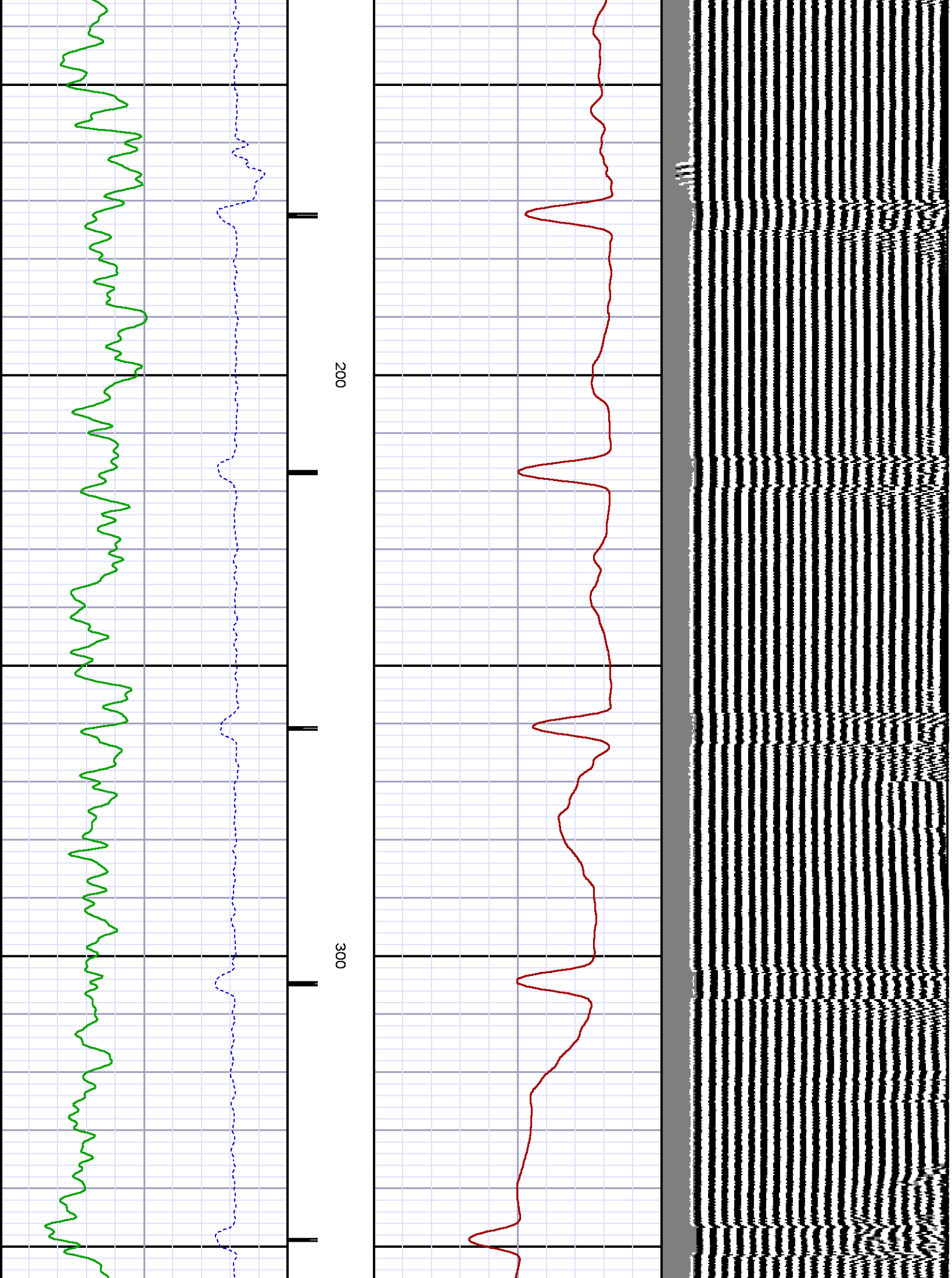
WELLHEAD

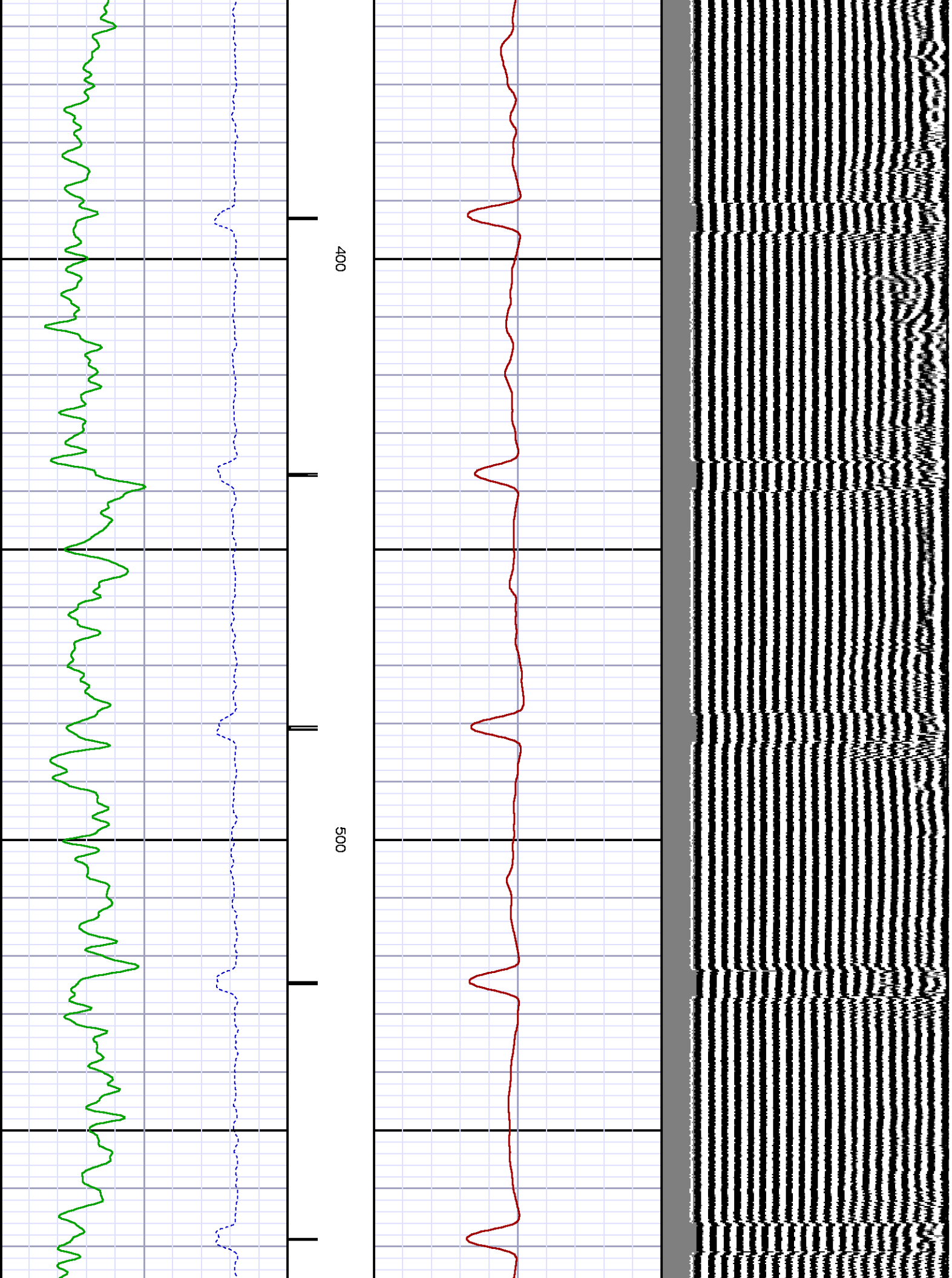
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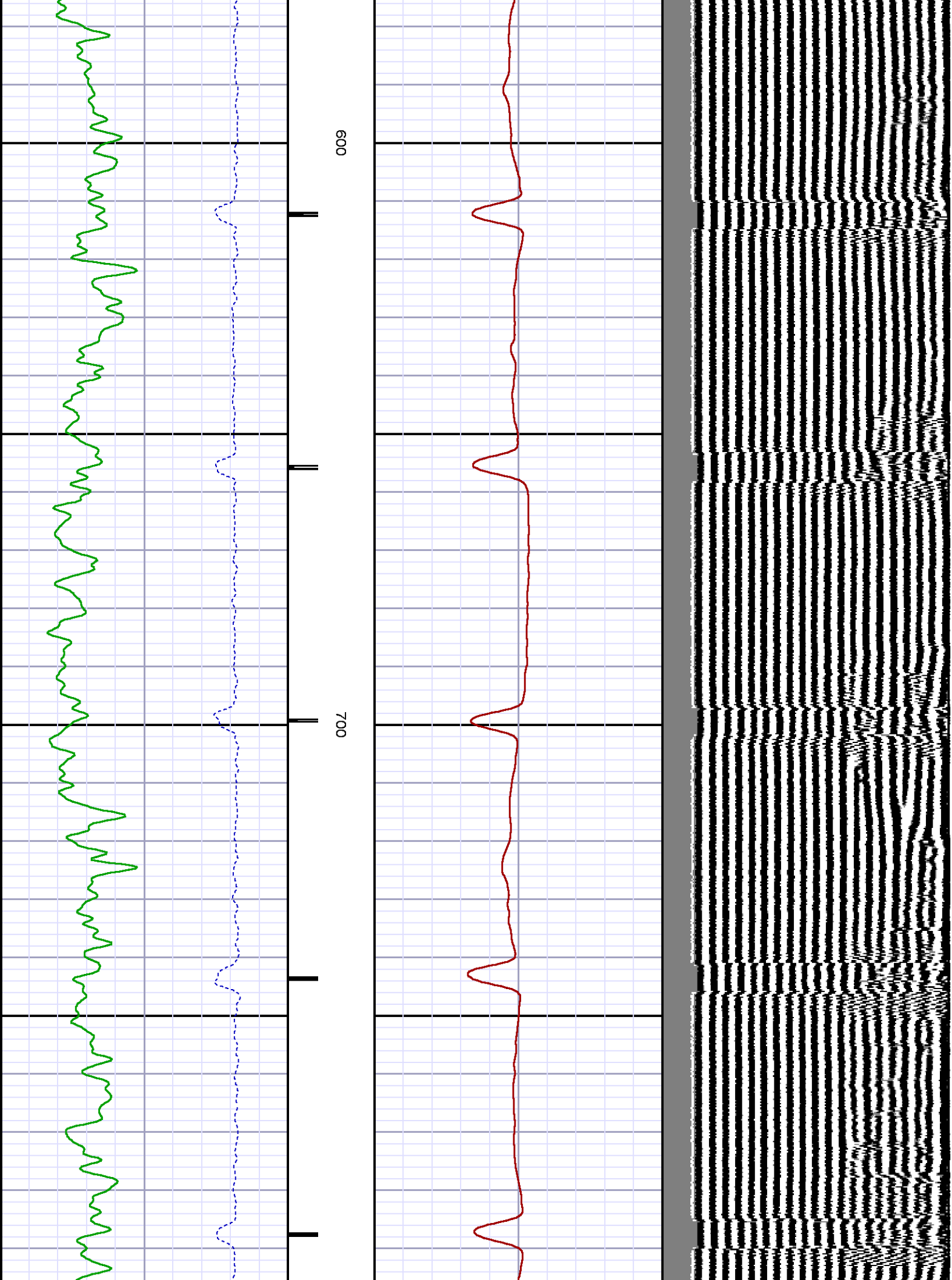
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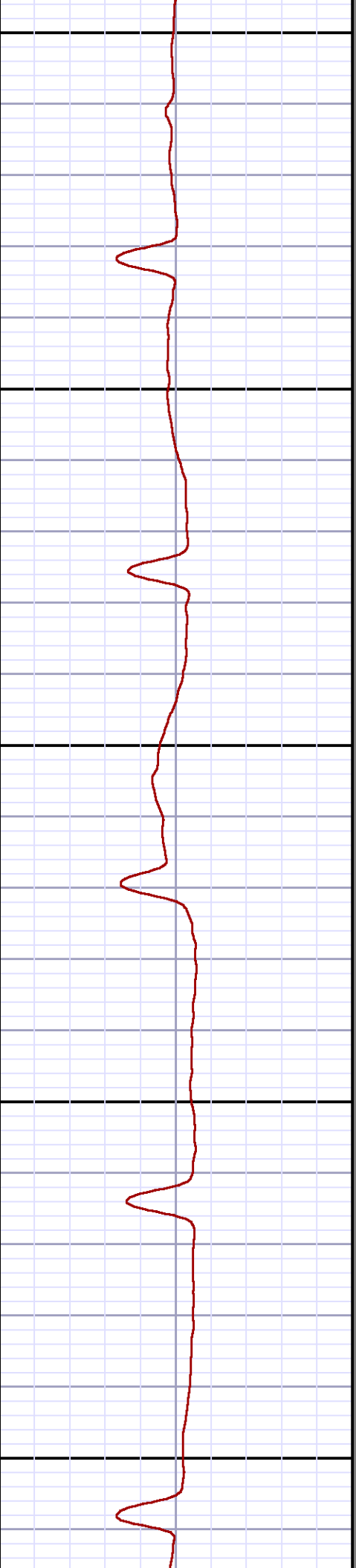
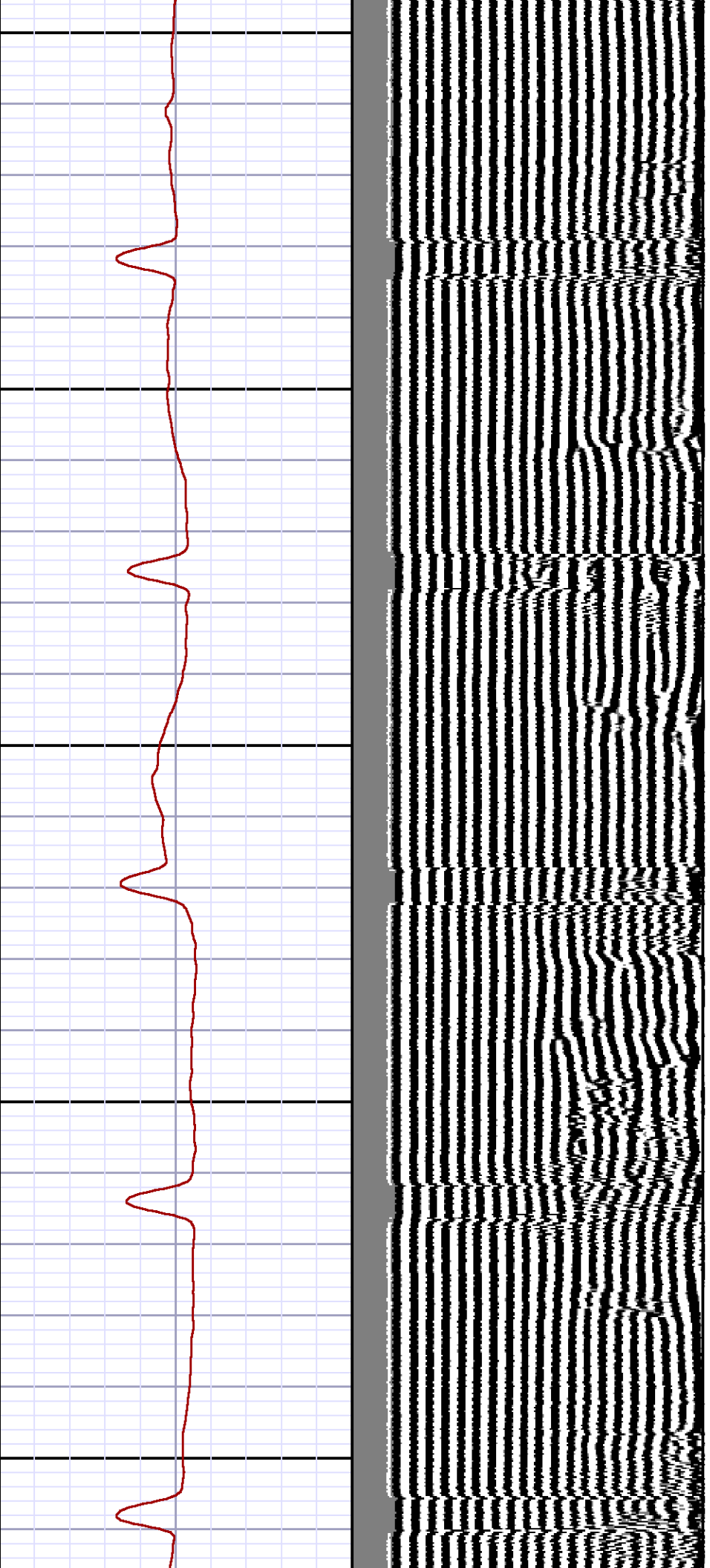
ANR

FLUID LEVEL





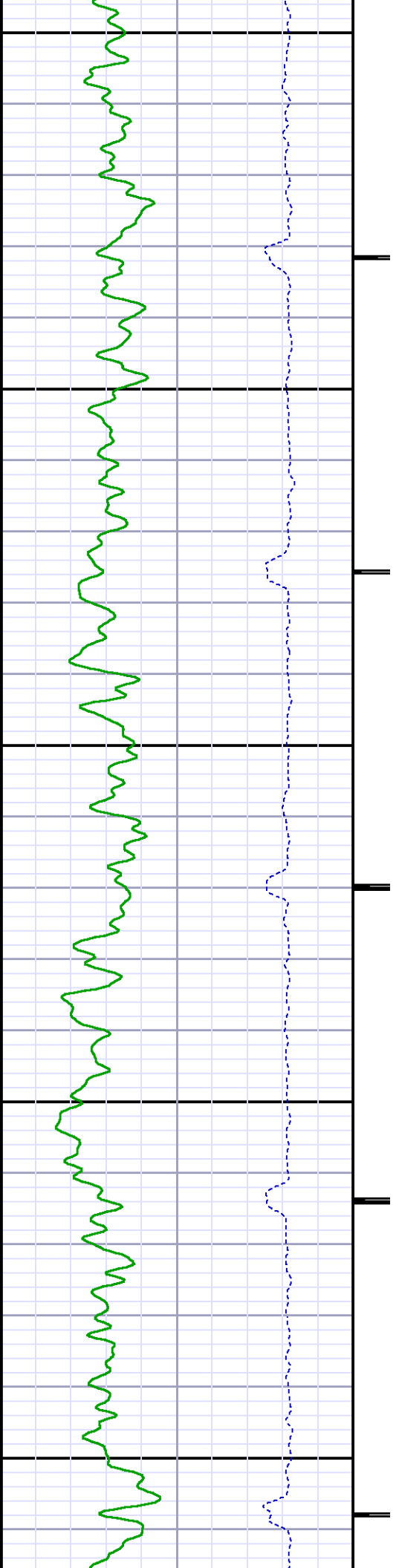


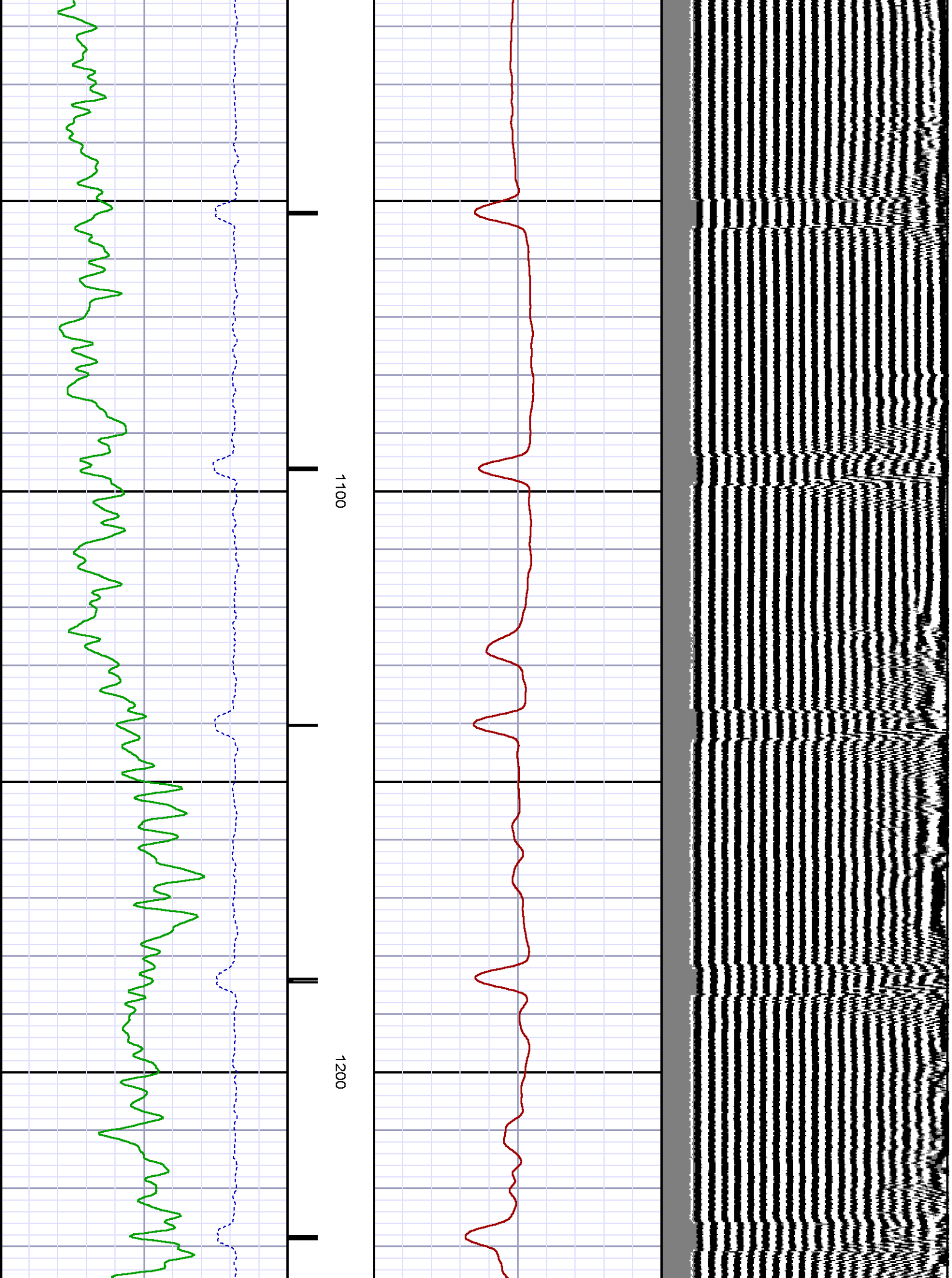


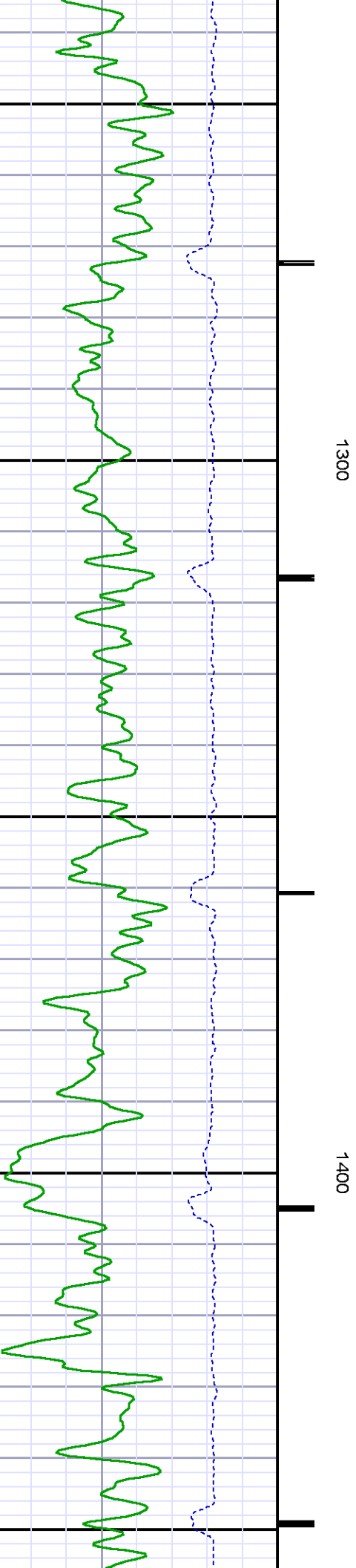
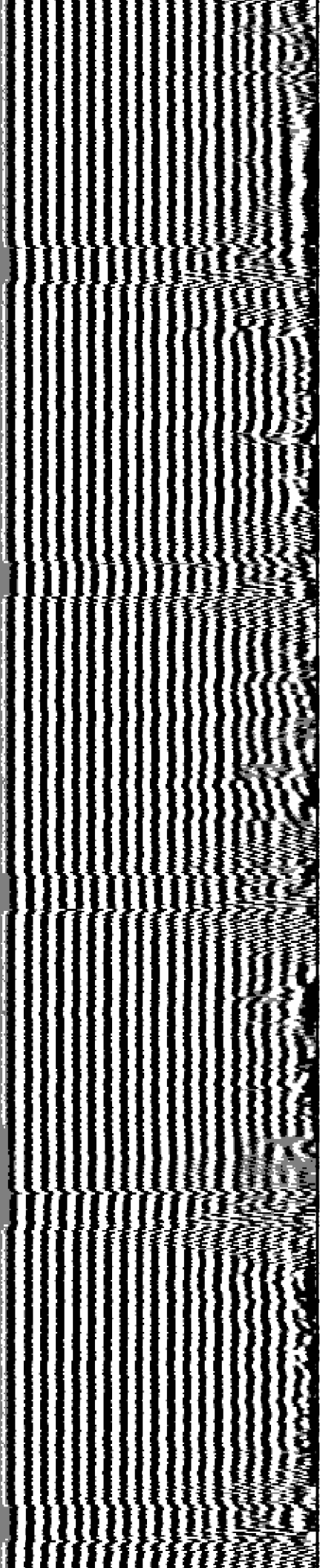
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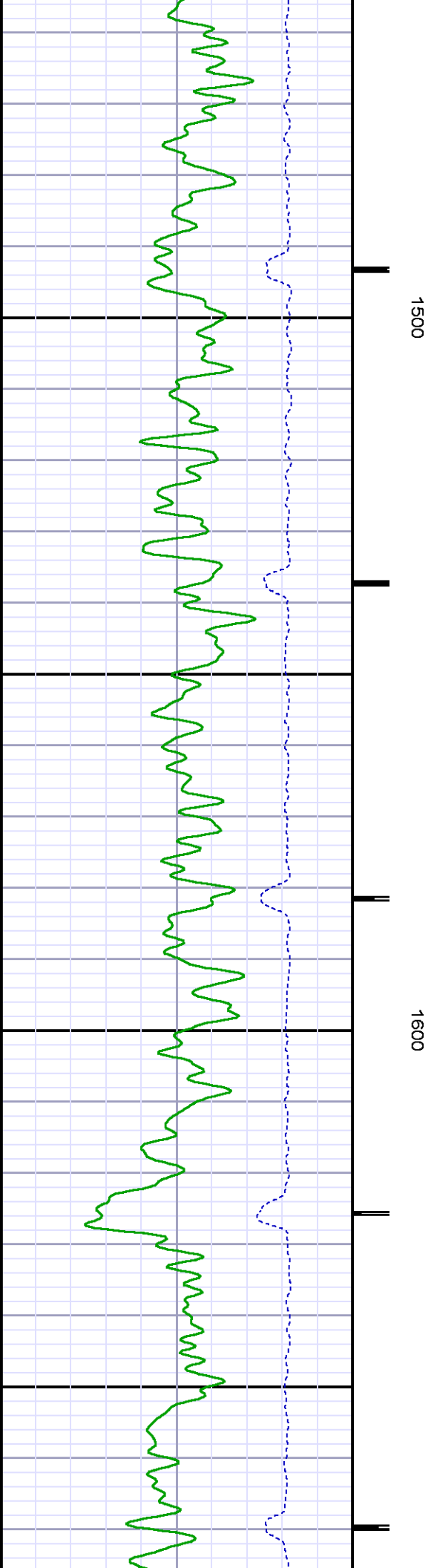
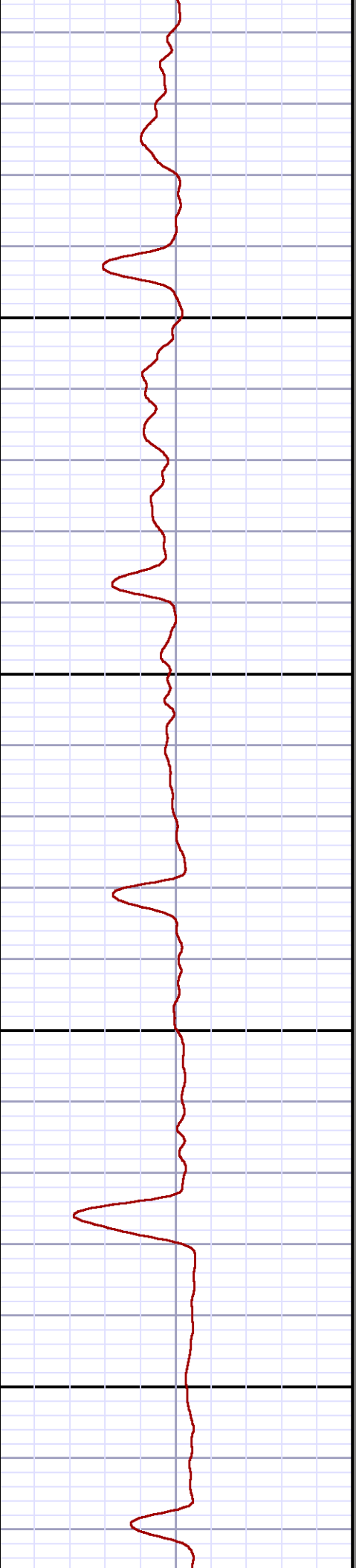
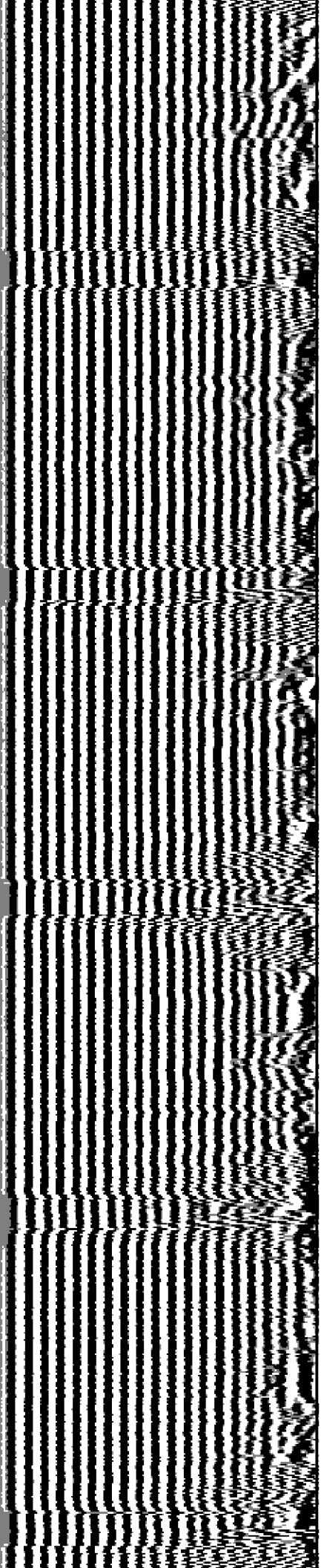
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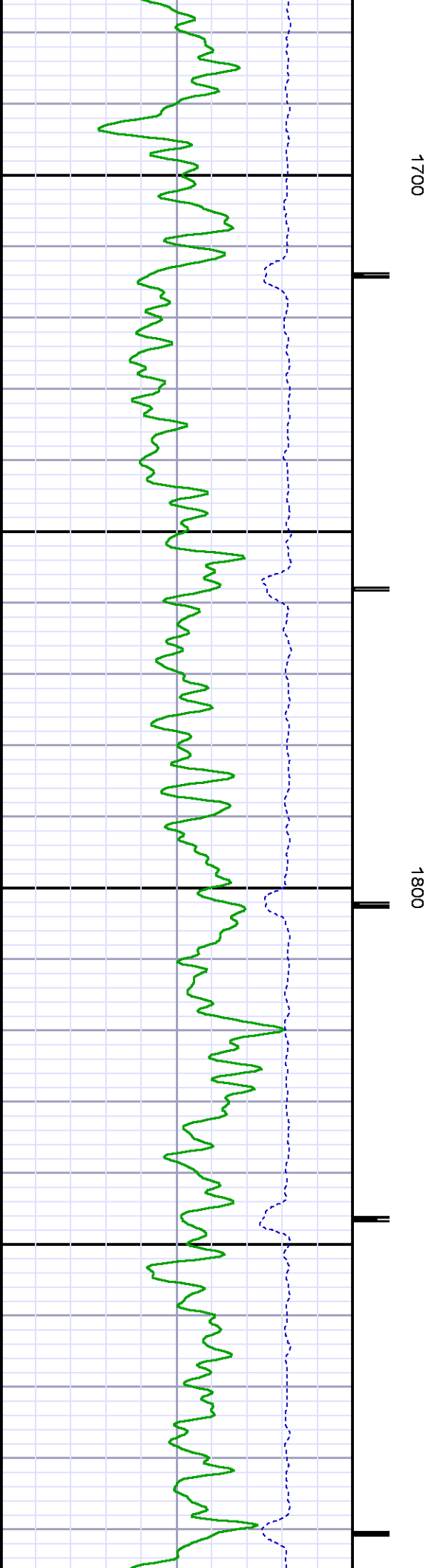
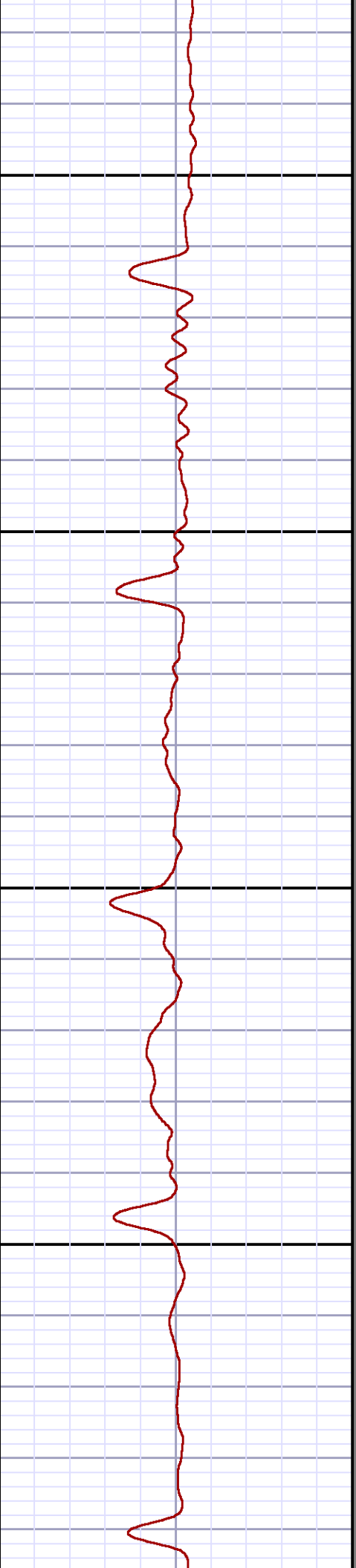
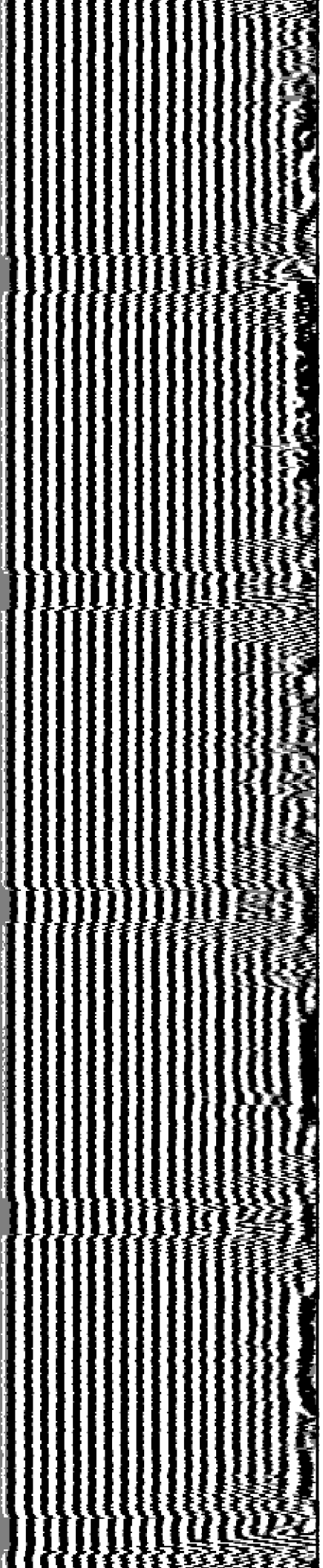
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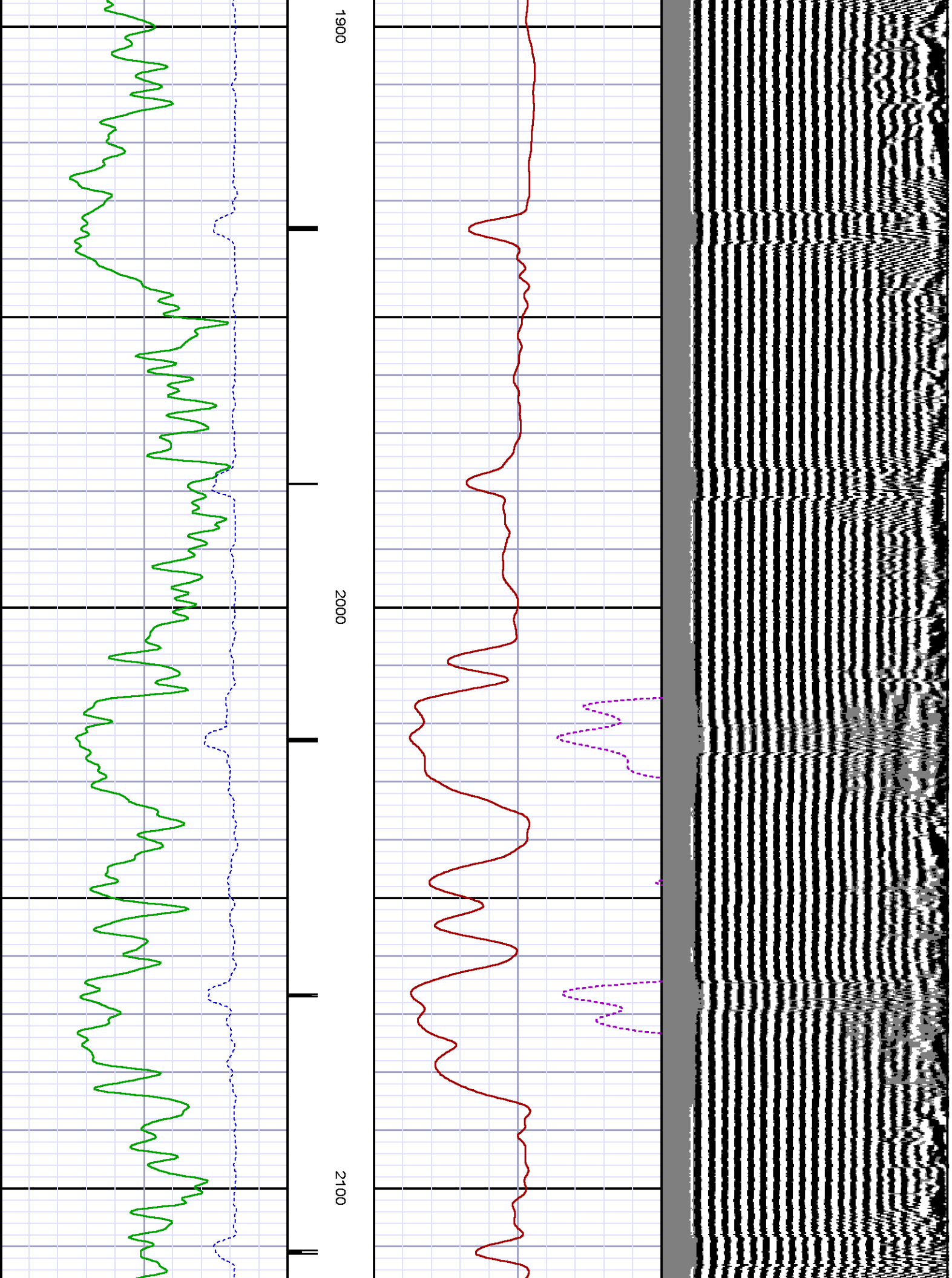


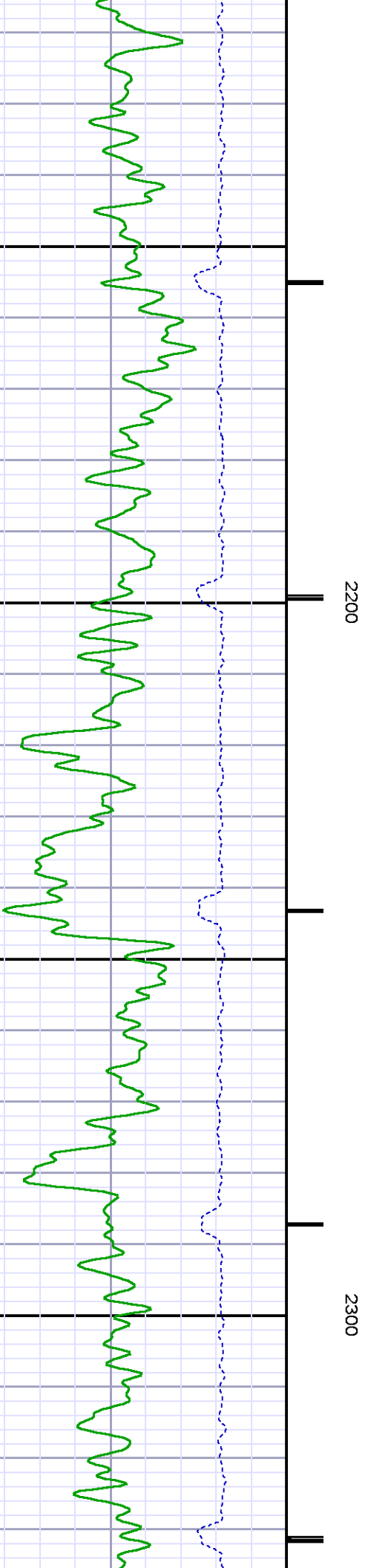
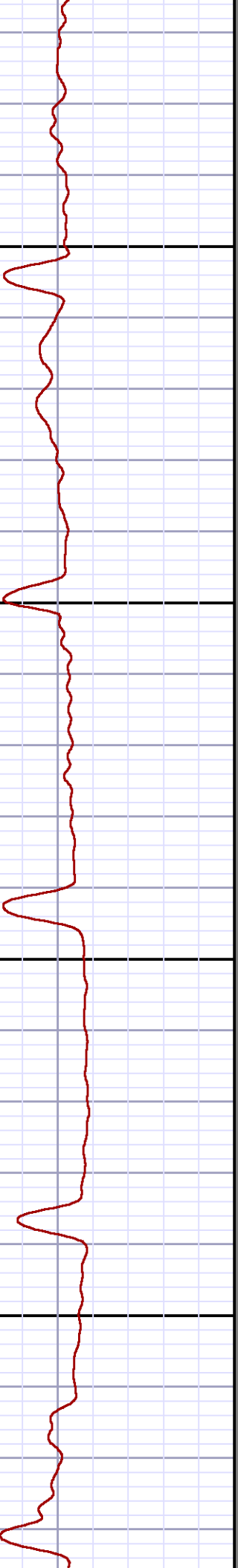
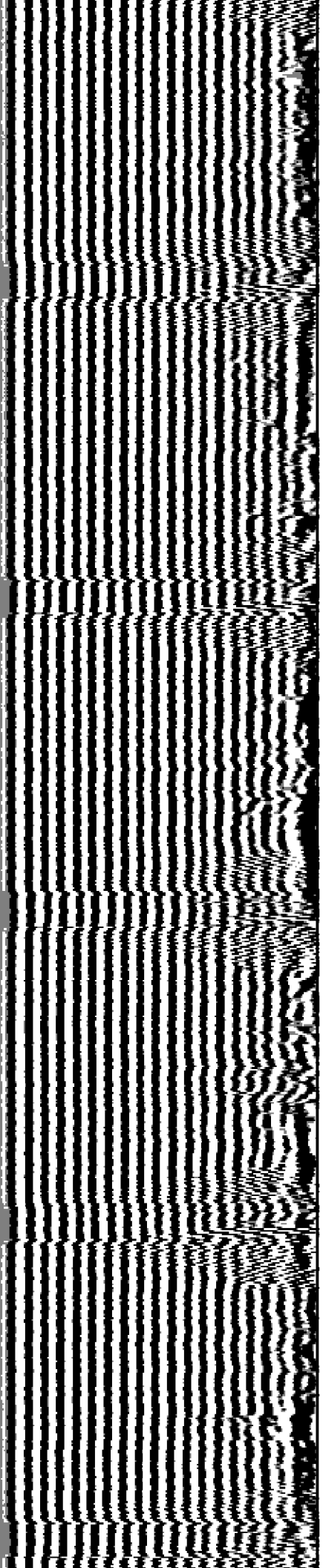


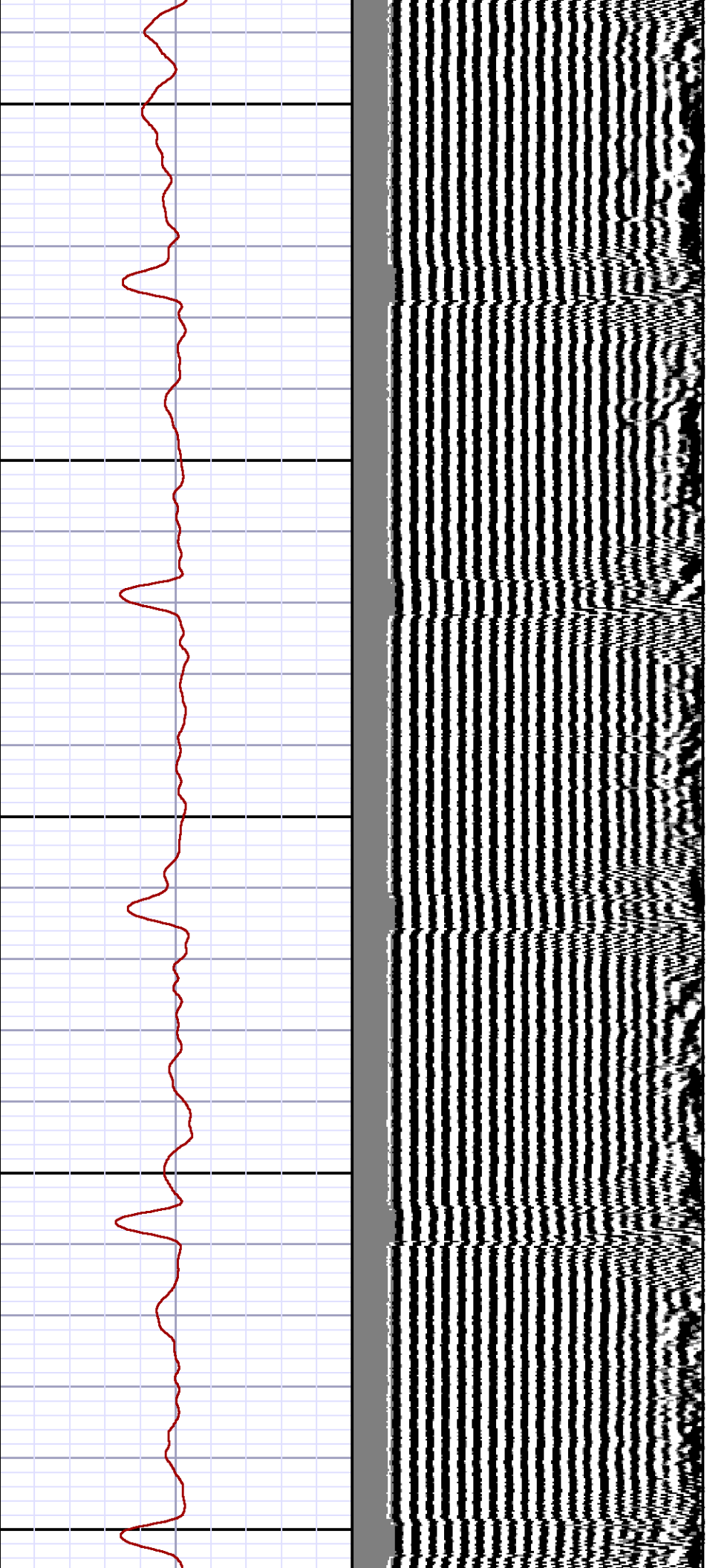






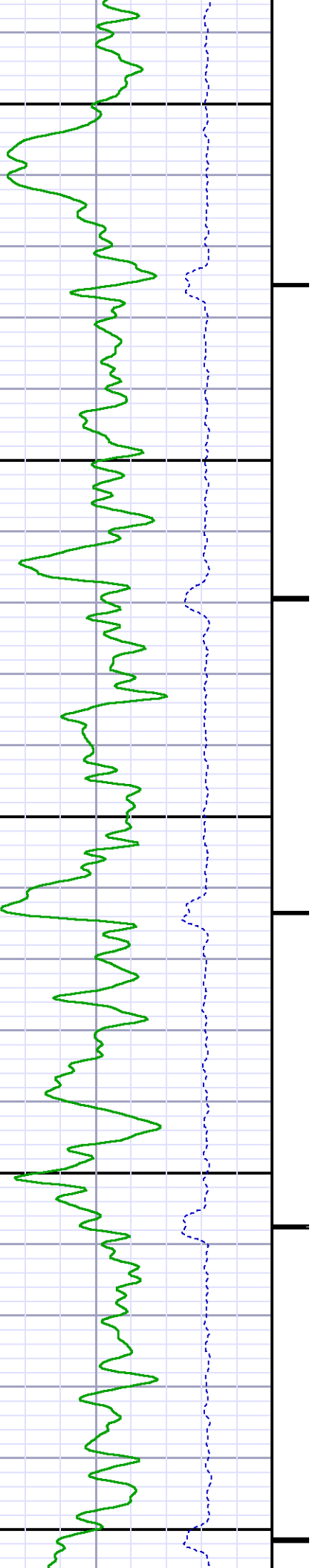


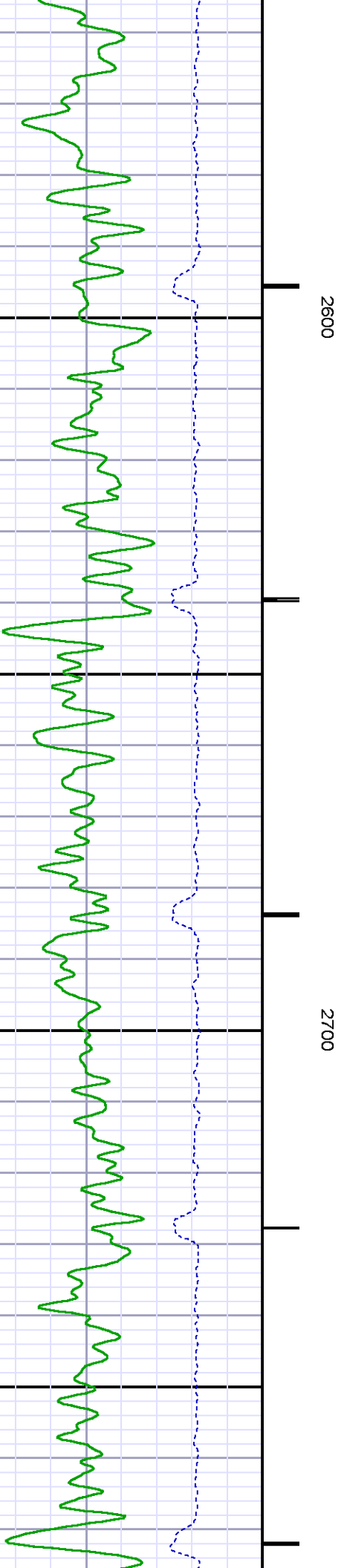
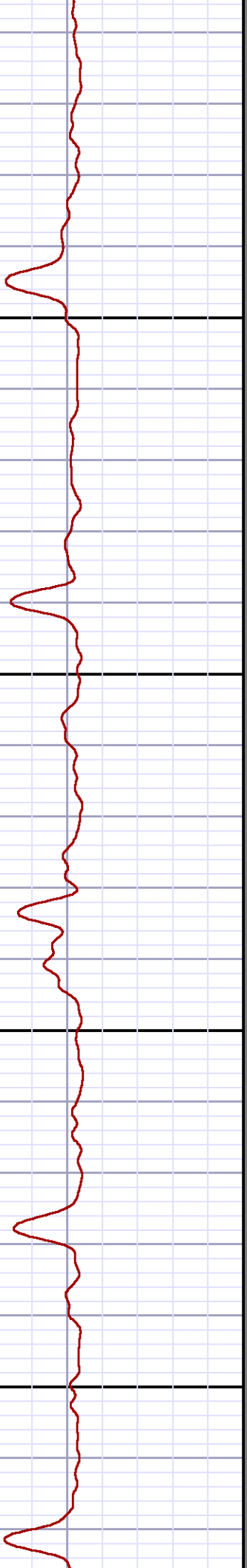
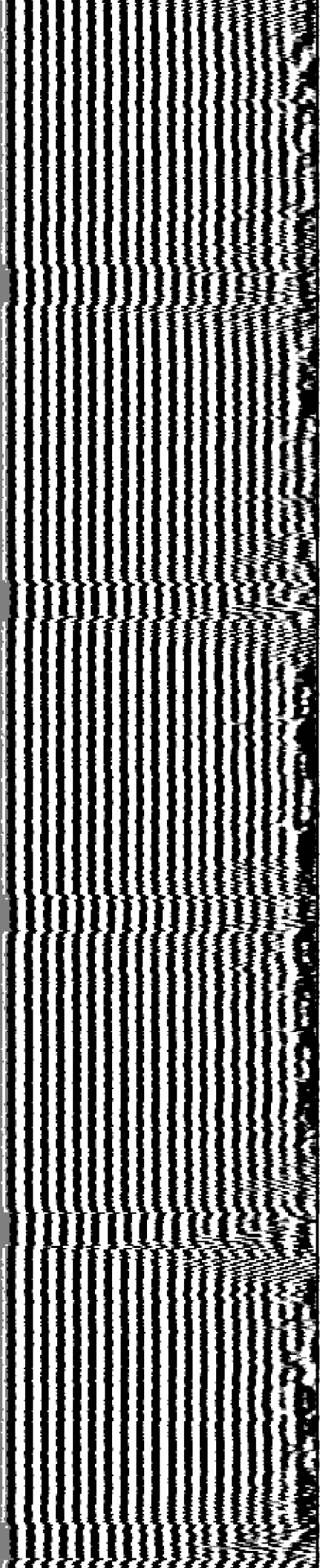


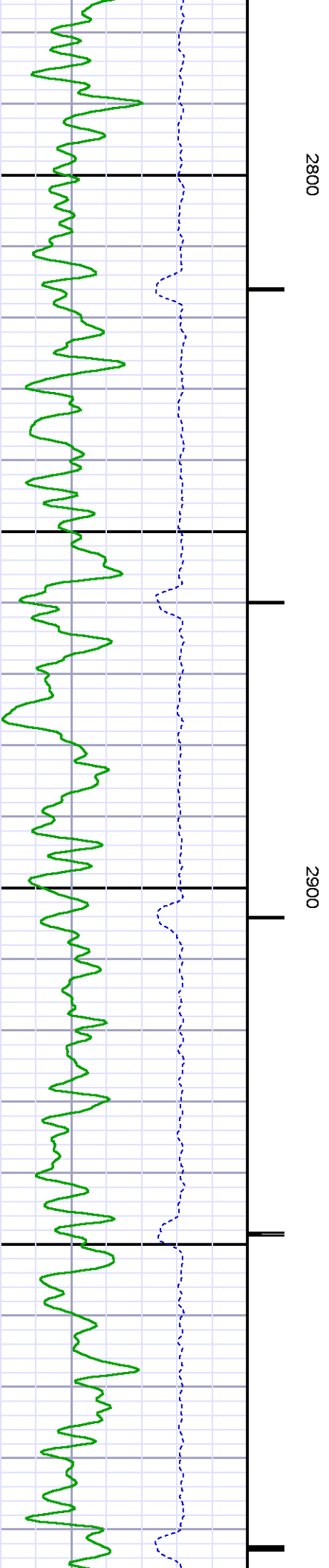
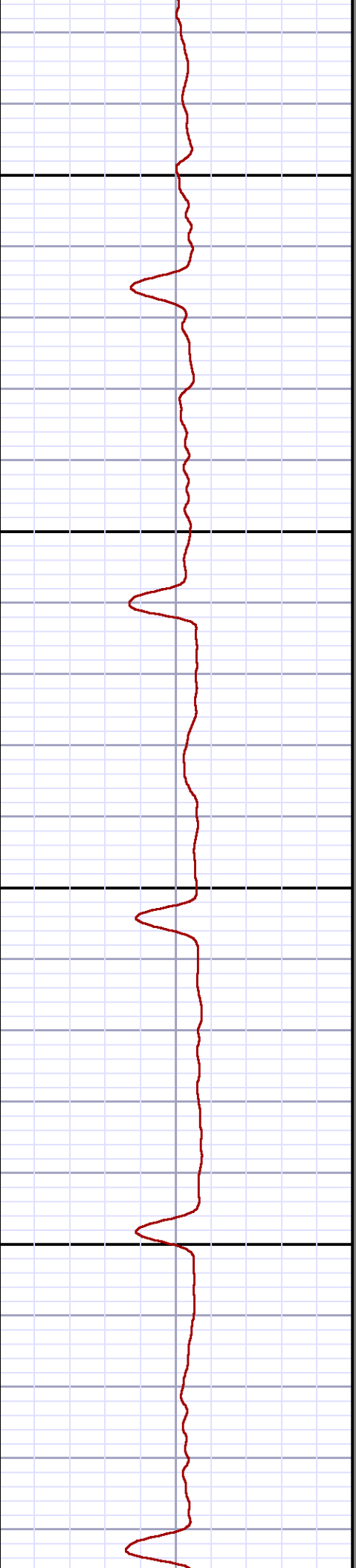
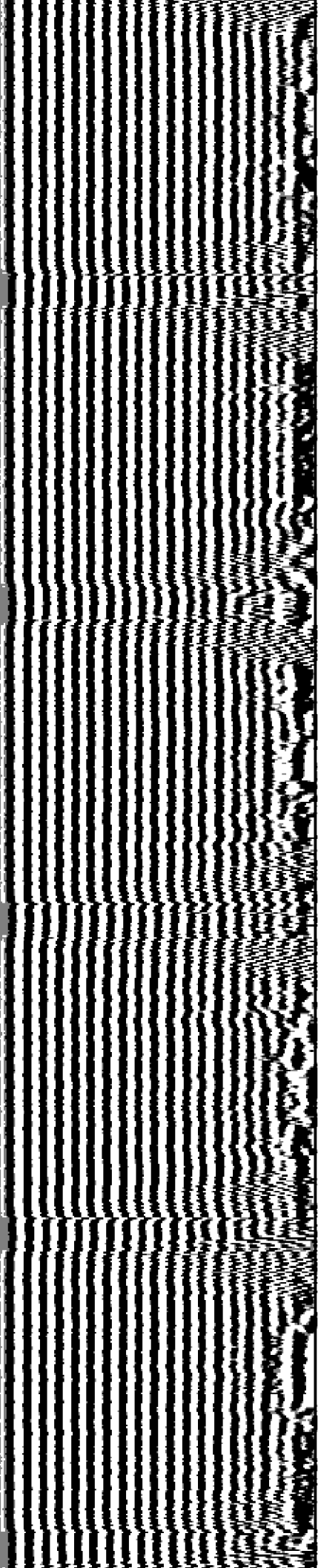


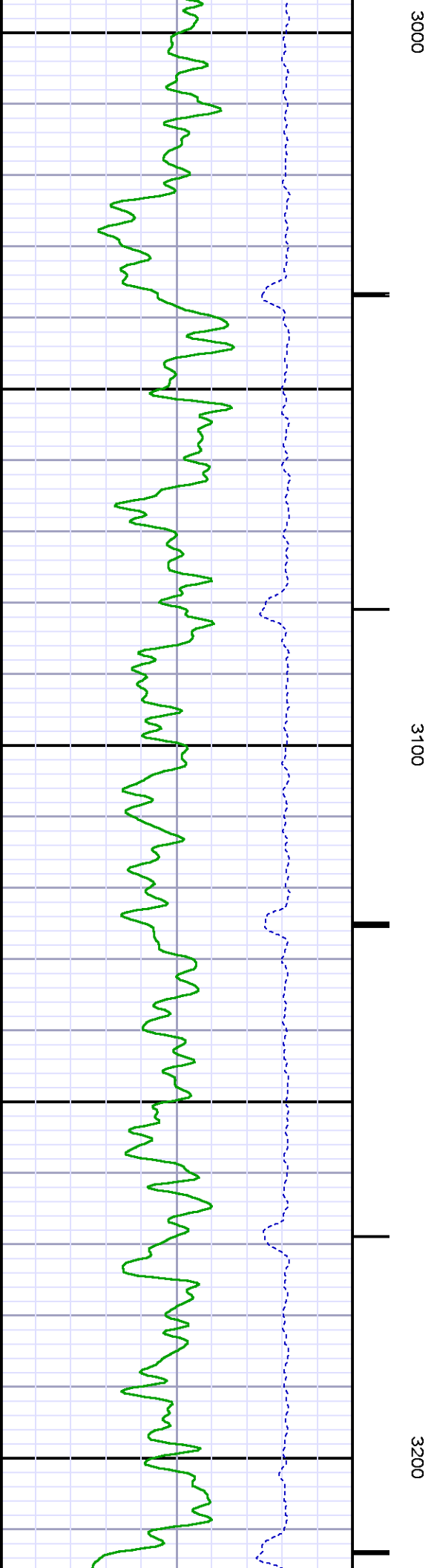
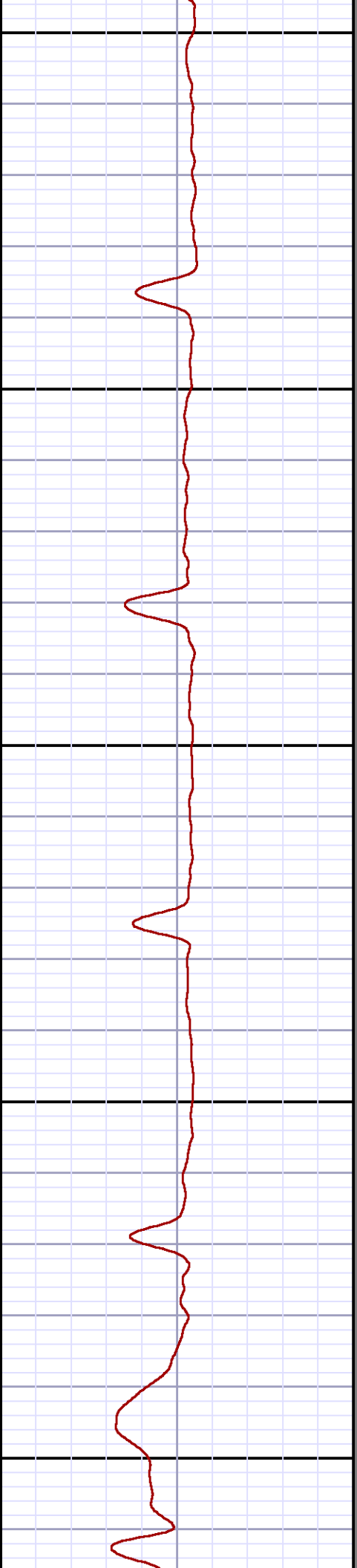
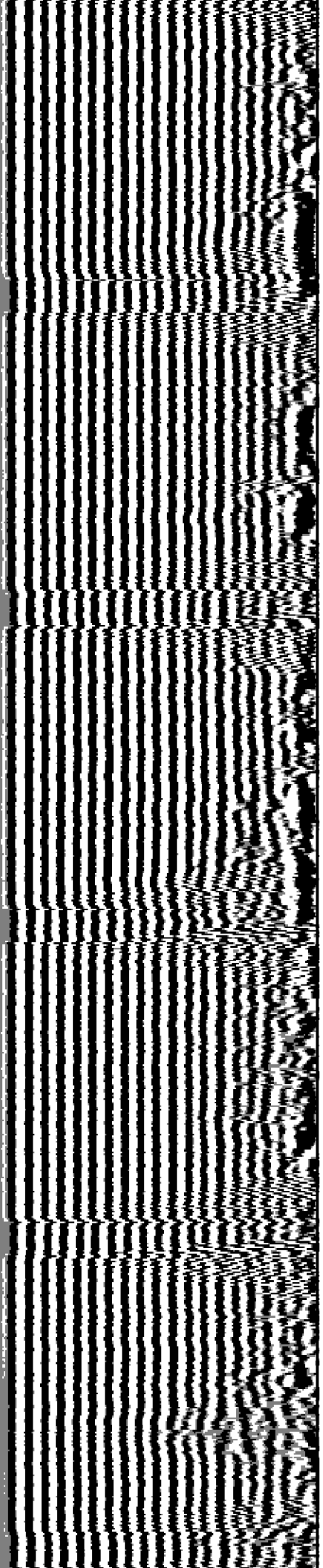
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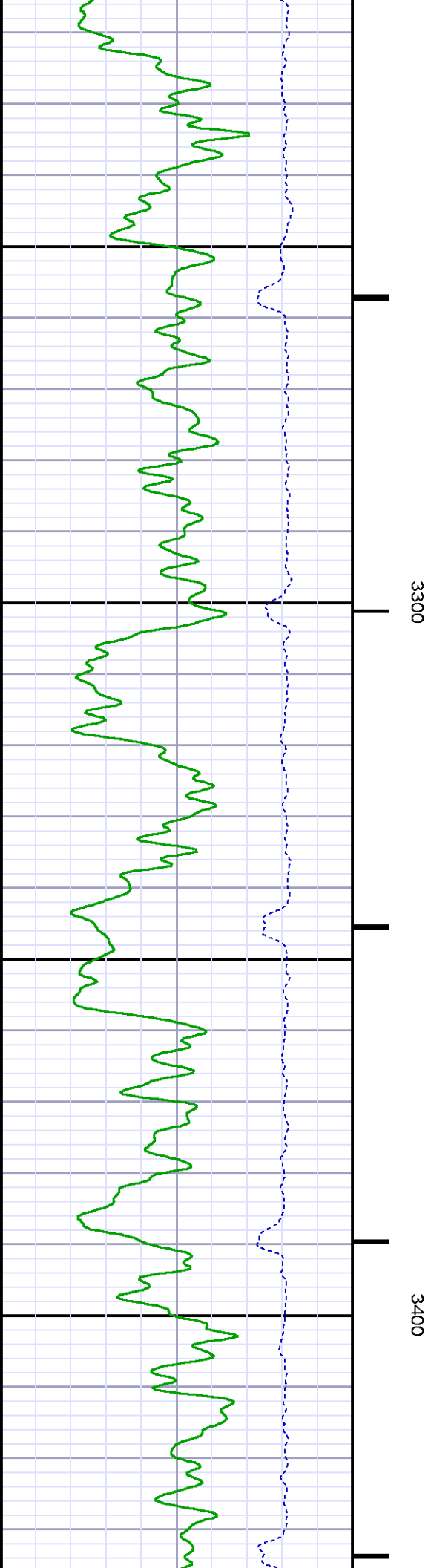
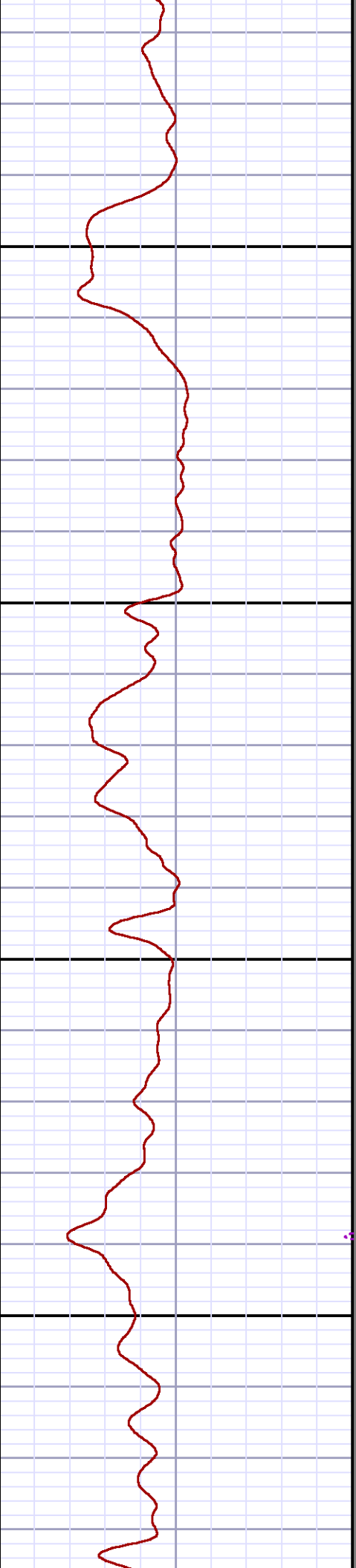
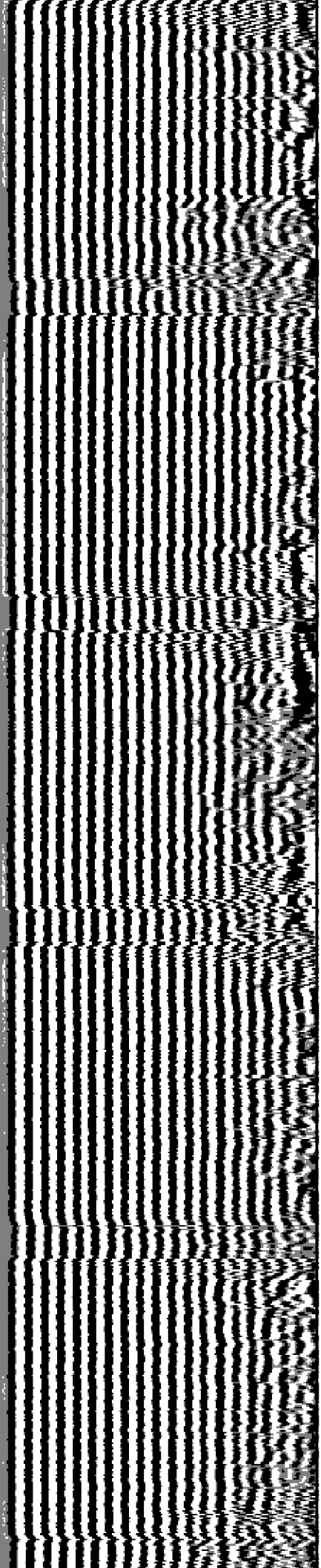
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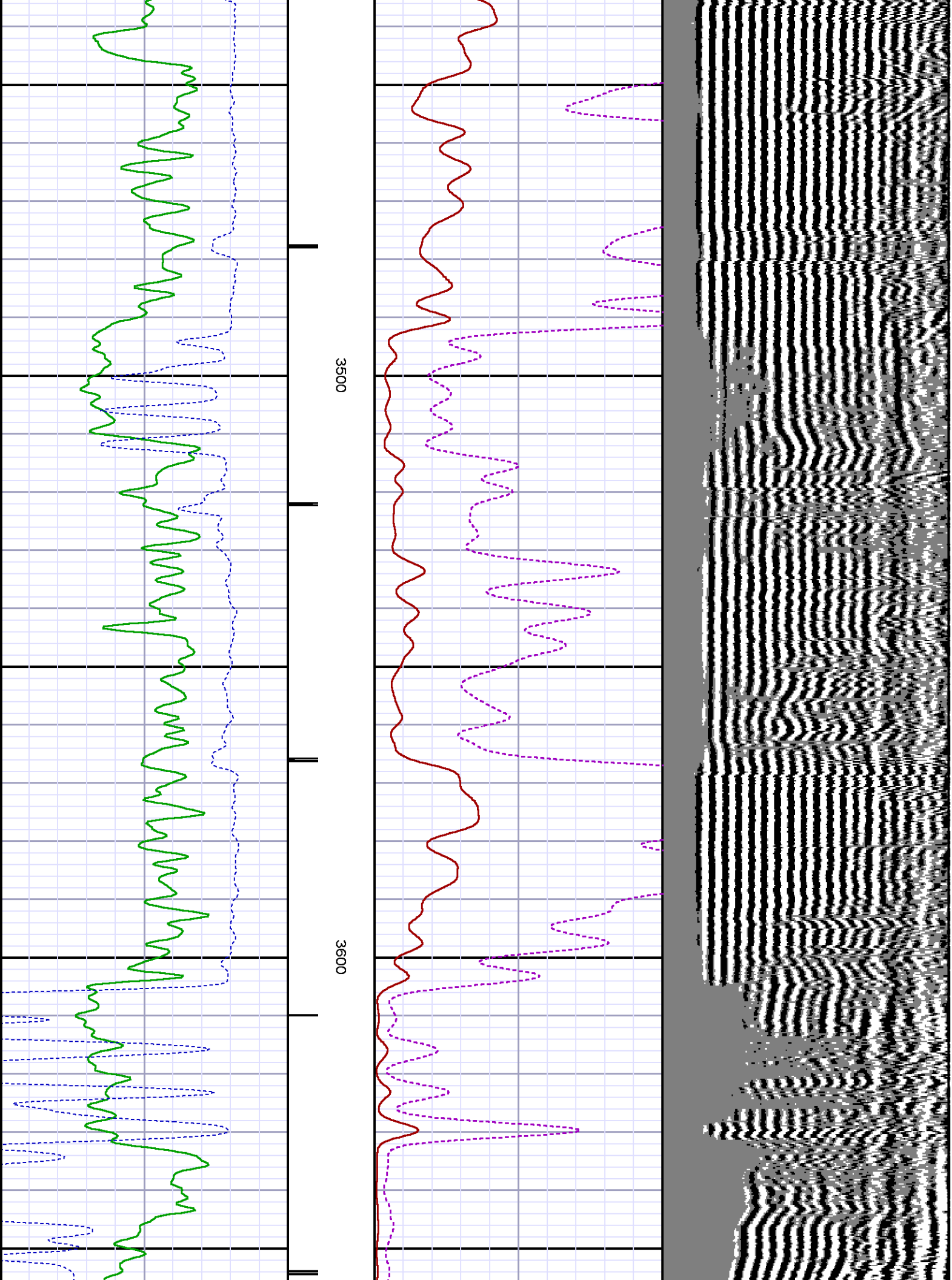


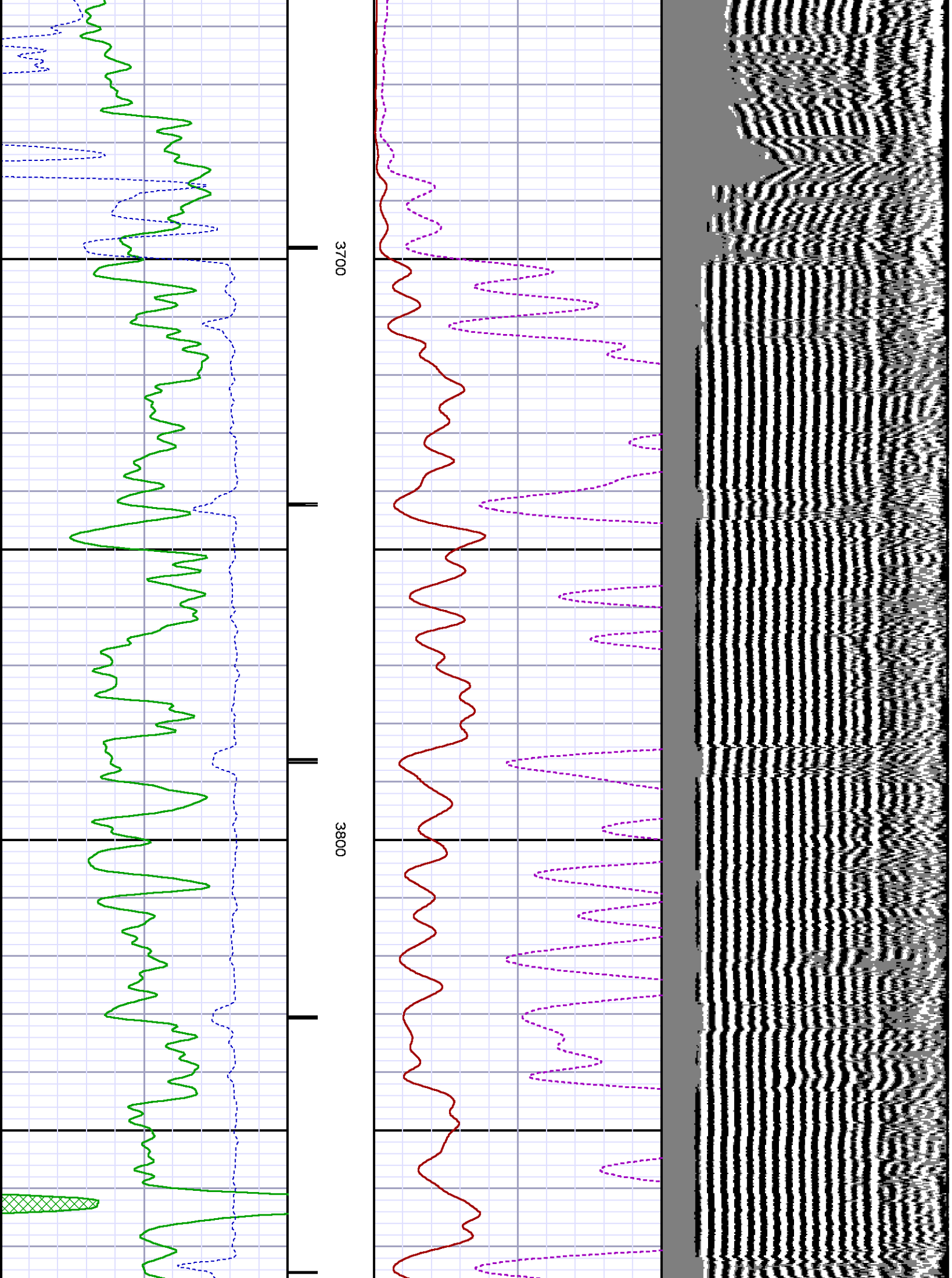


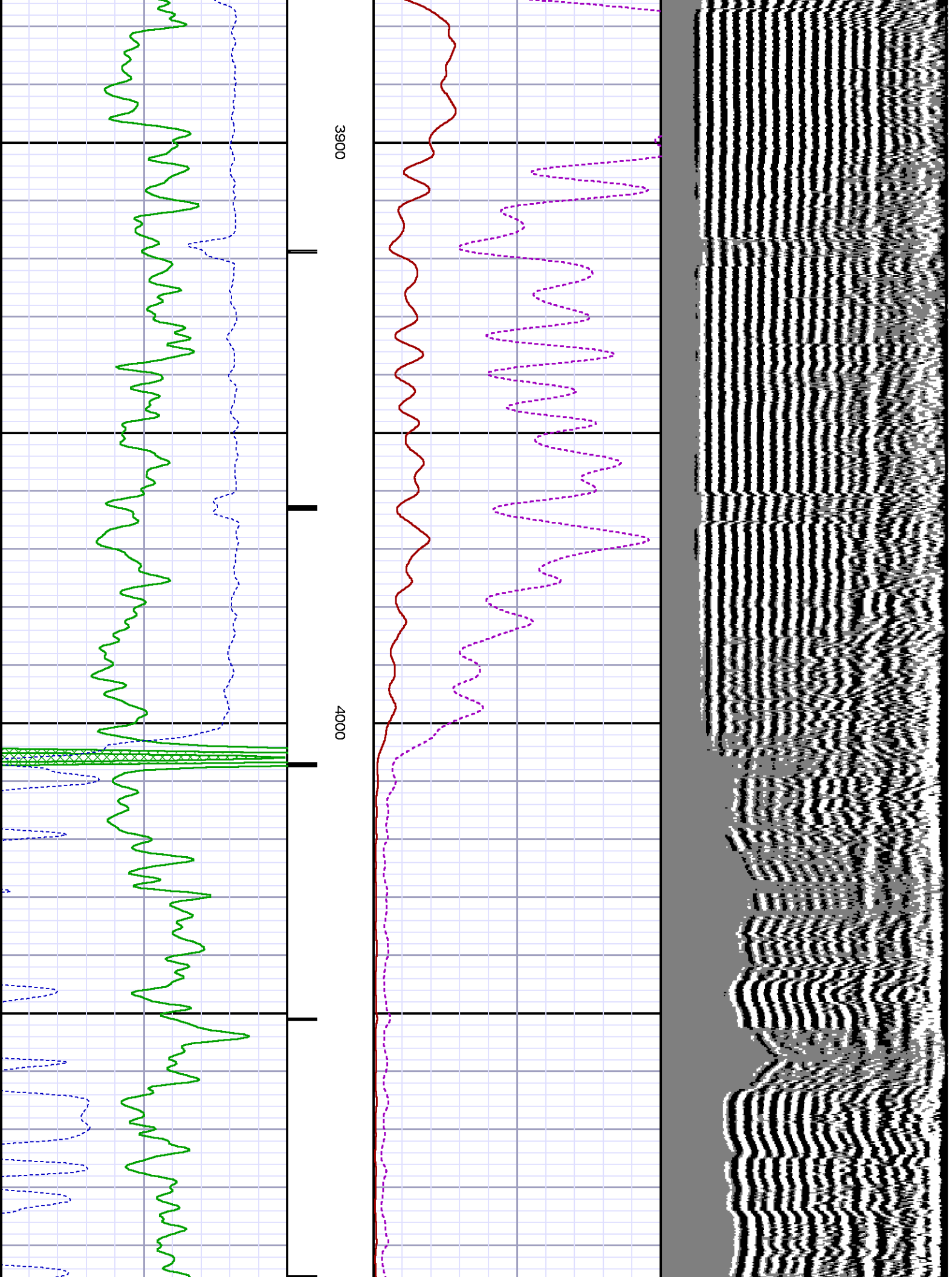


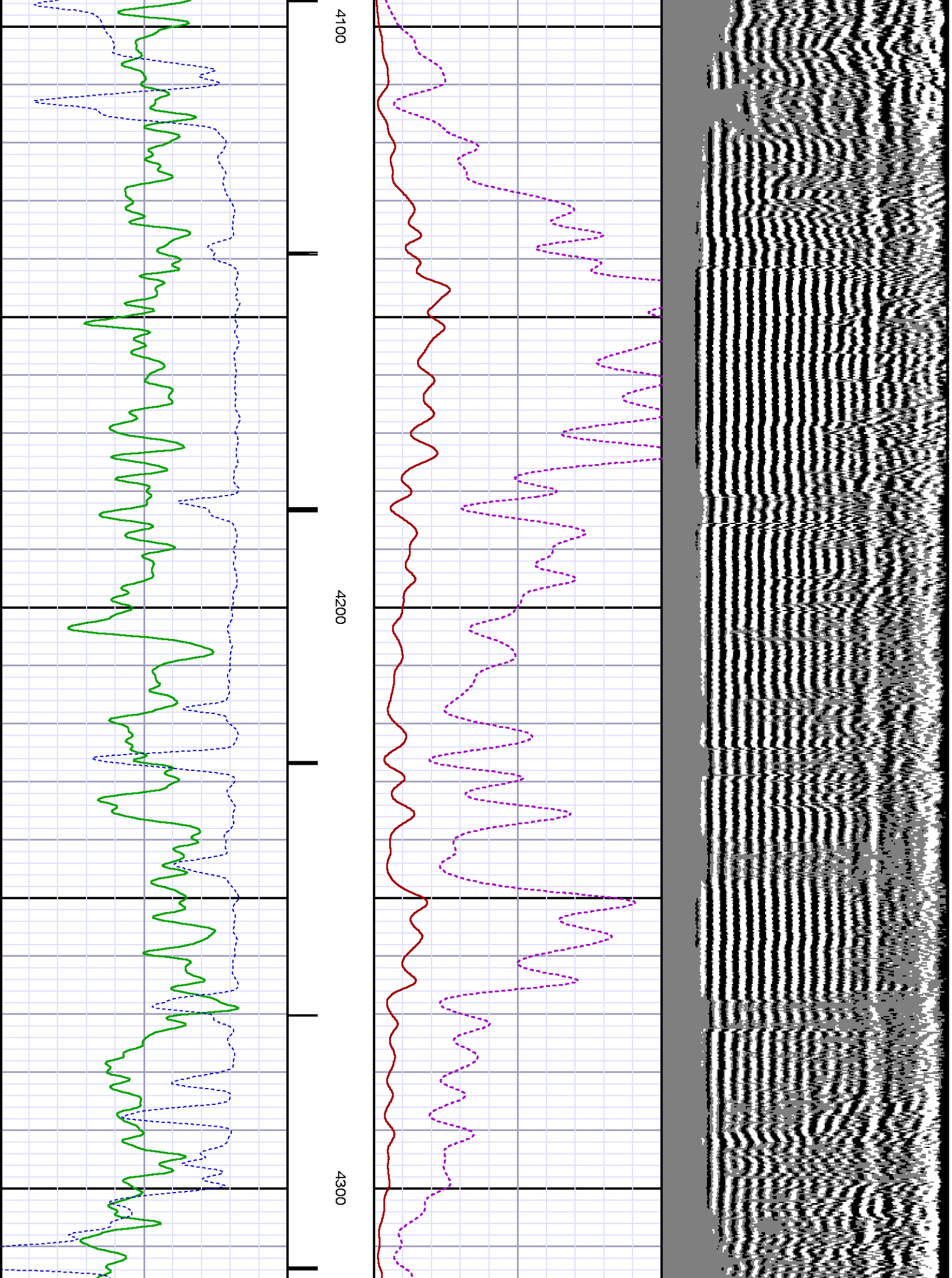


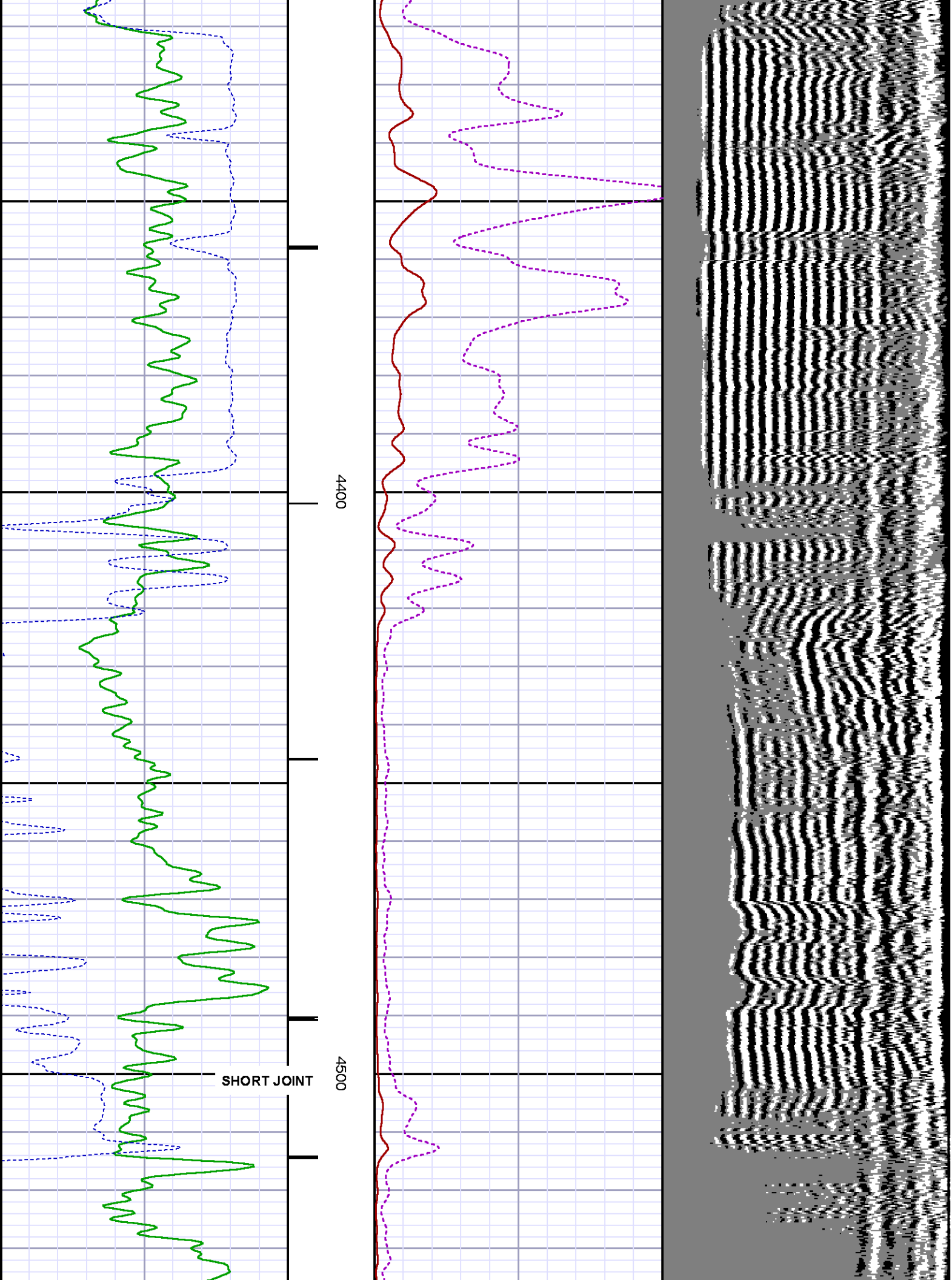


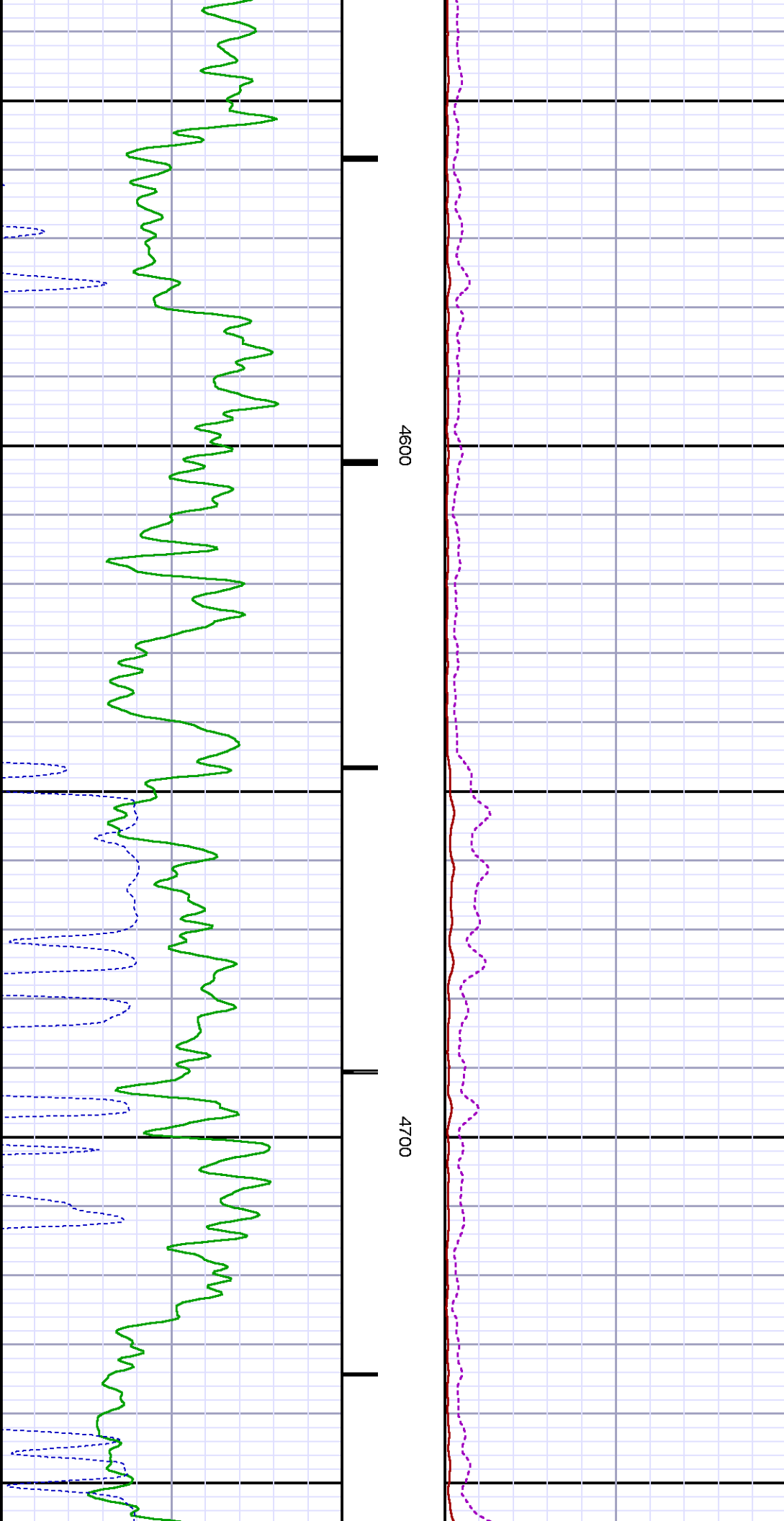
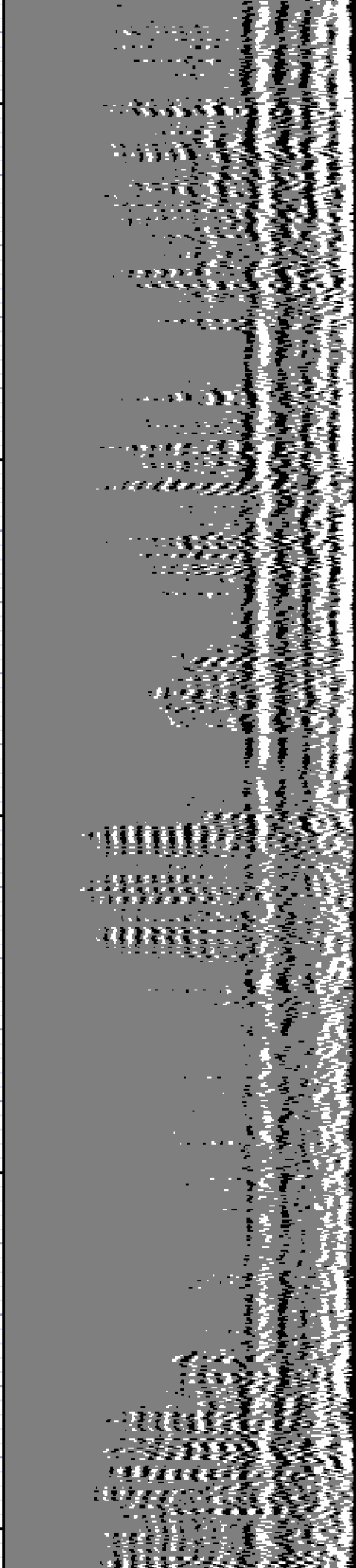


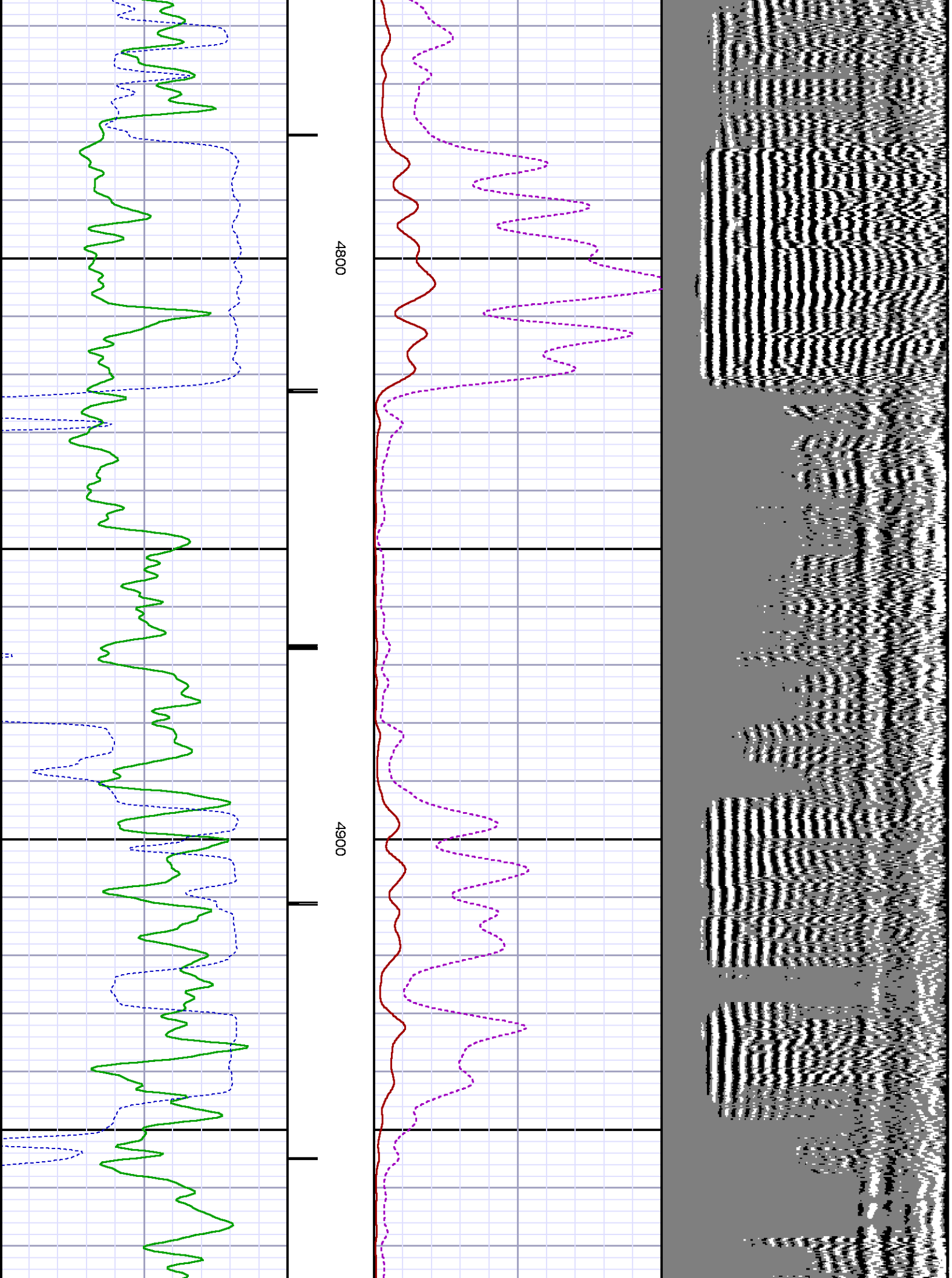


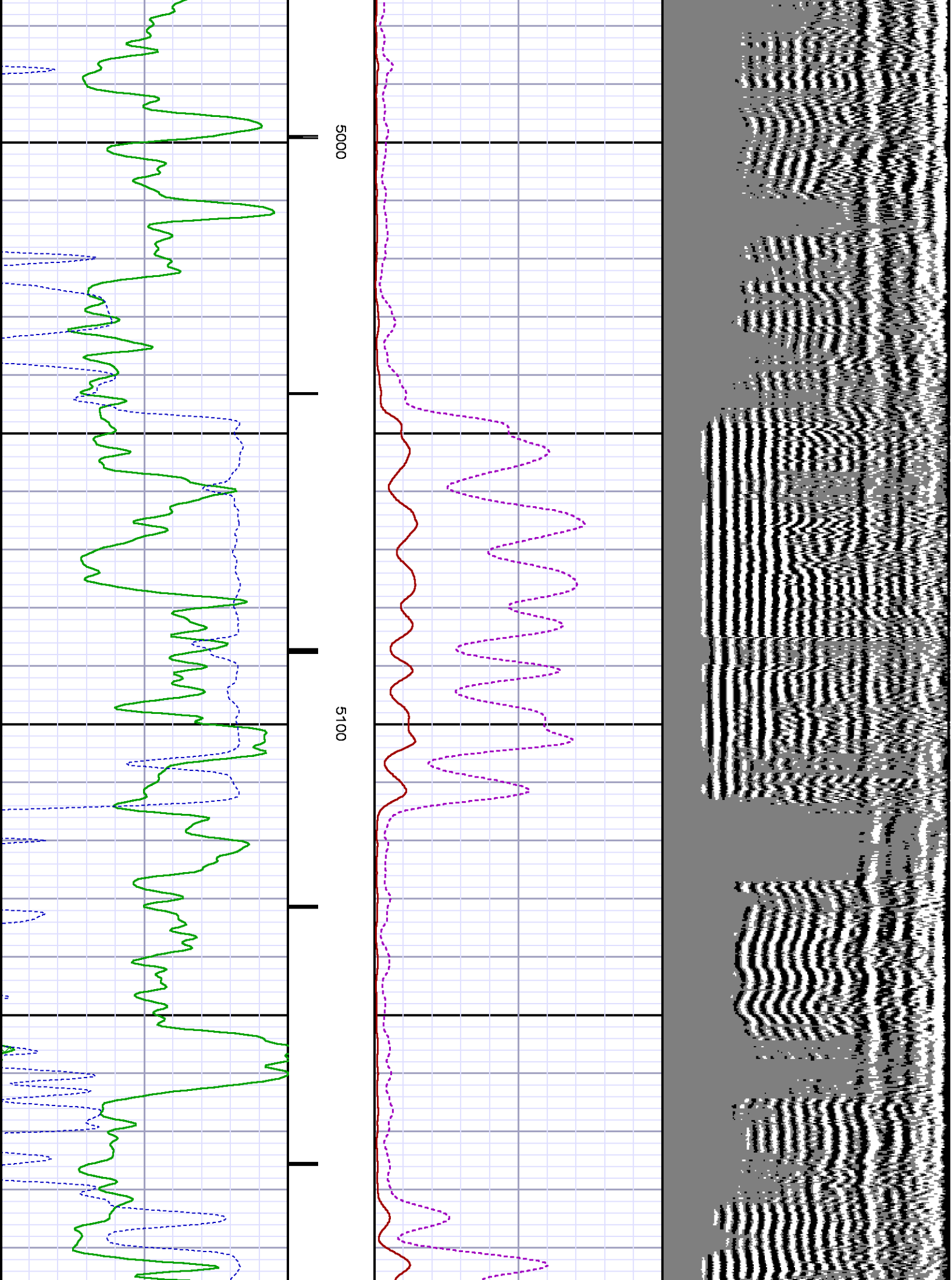


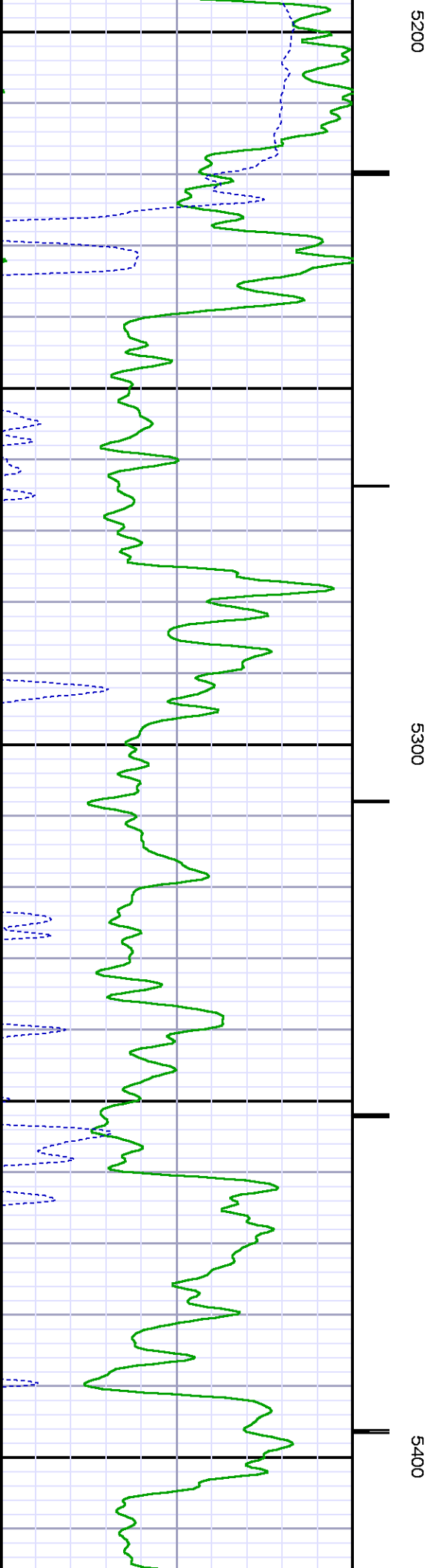
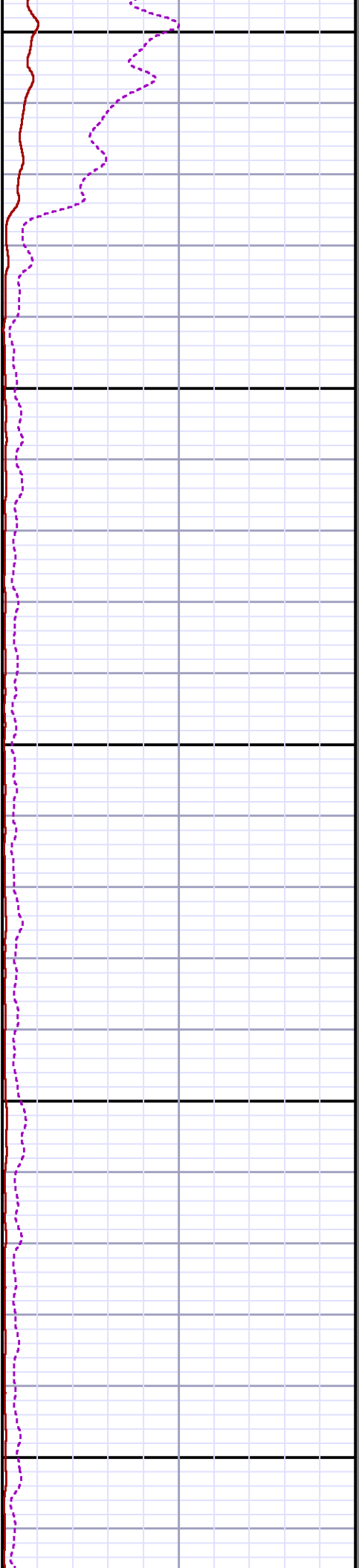
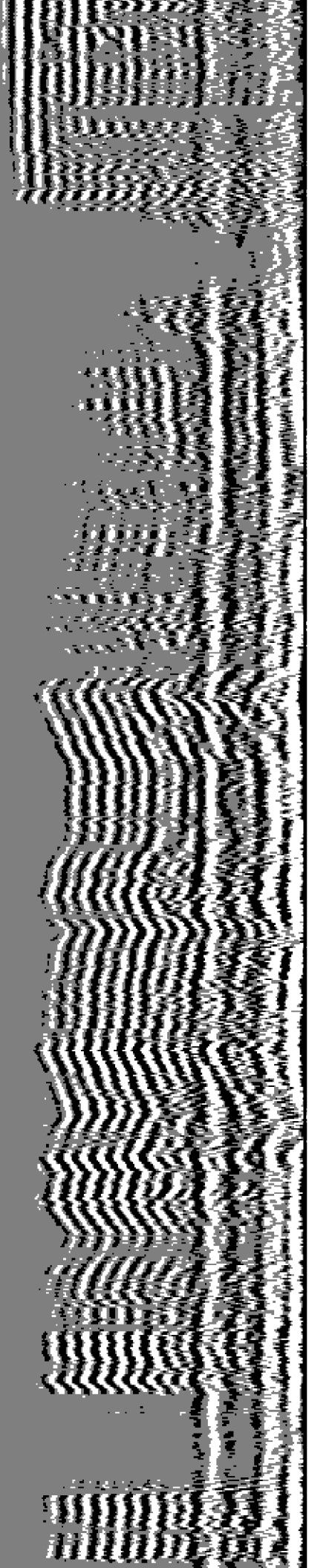


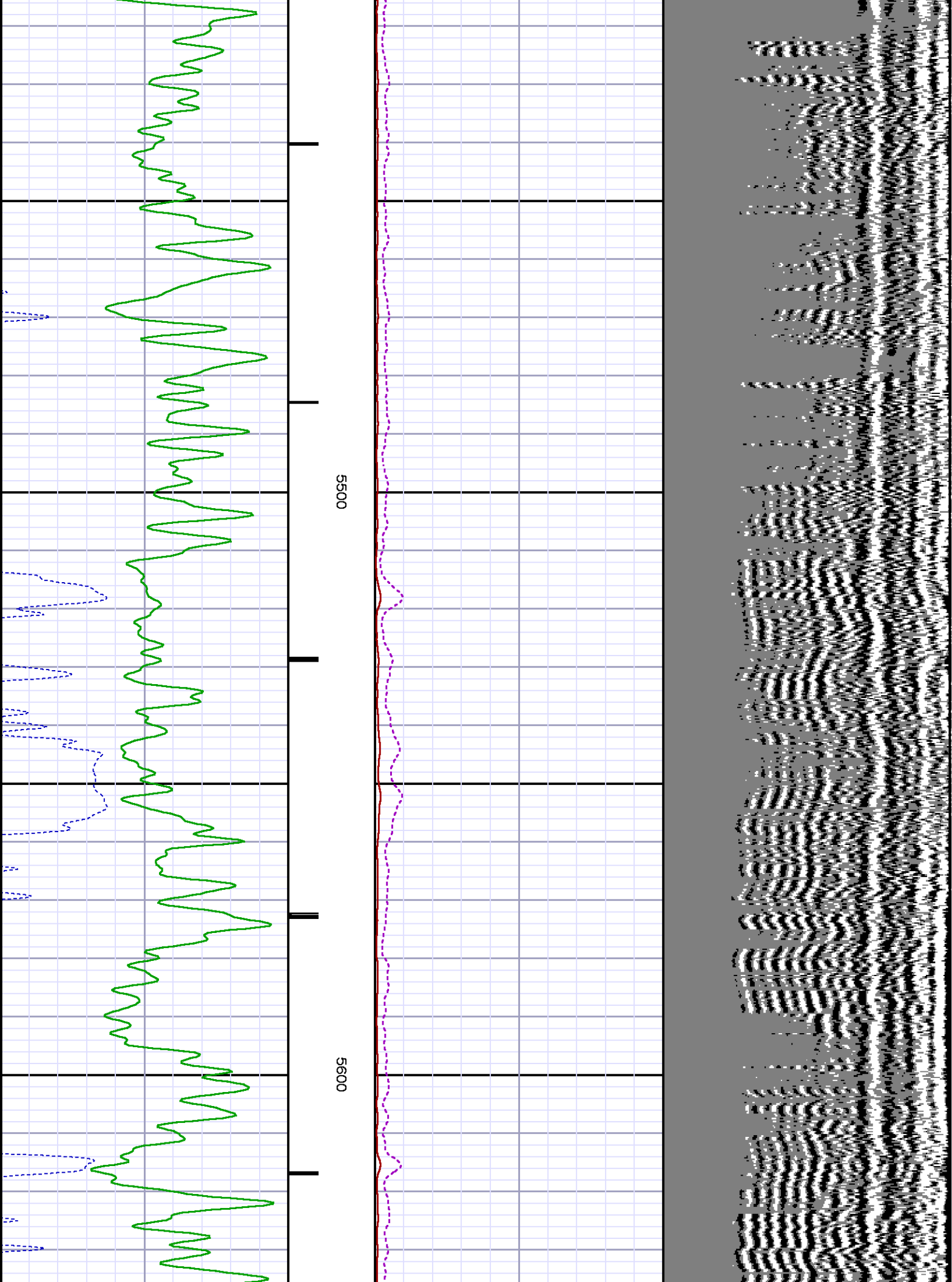


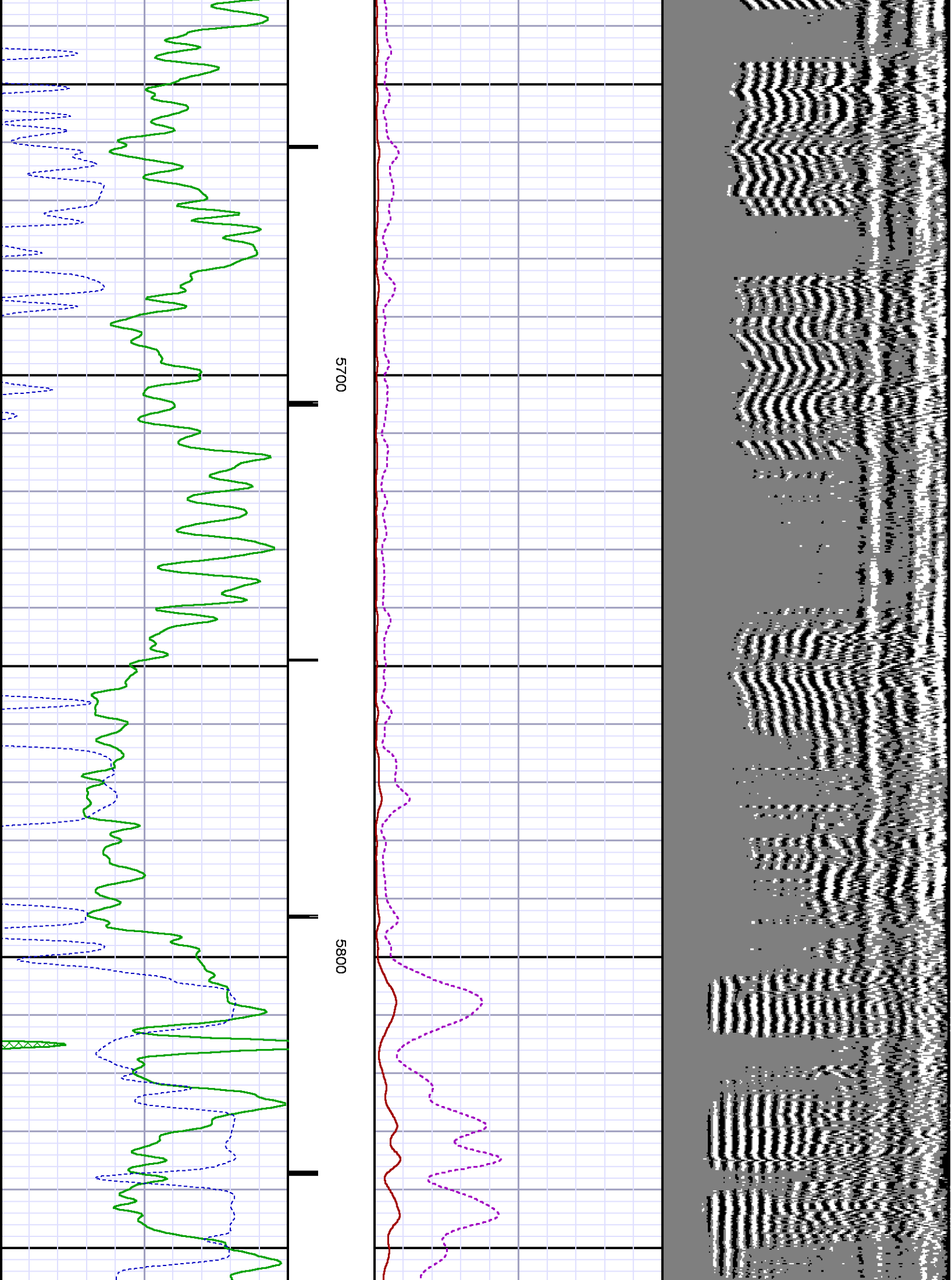


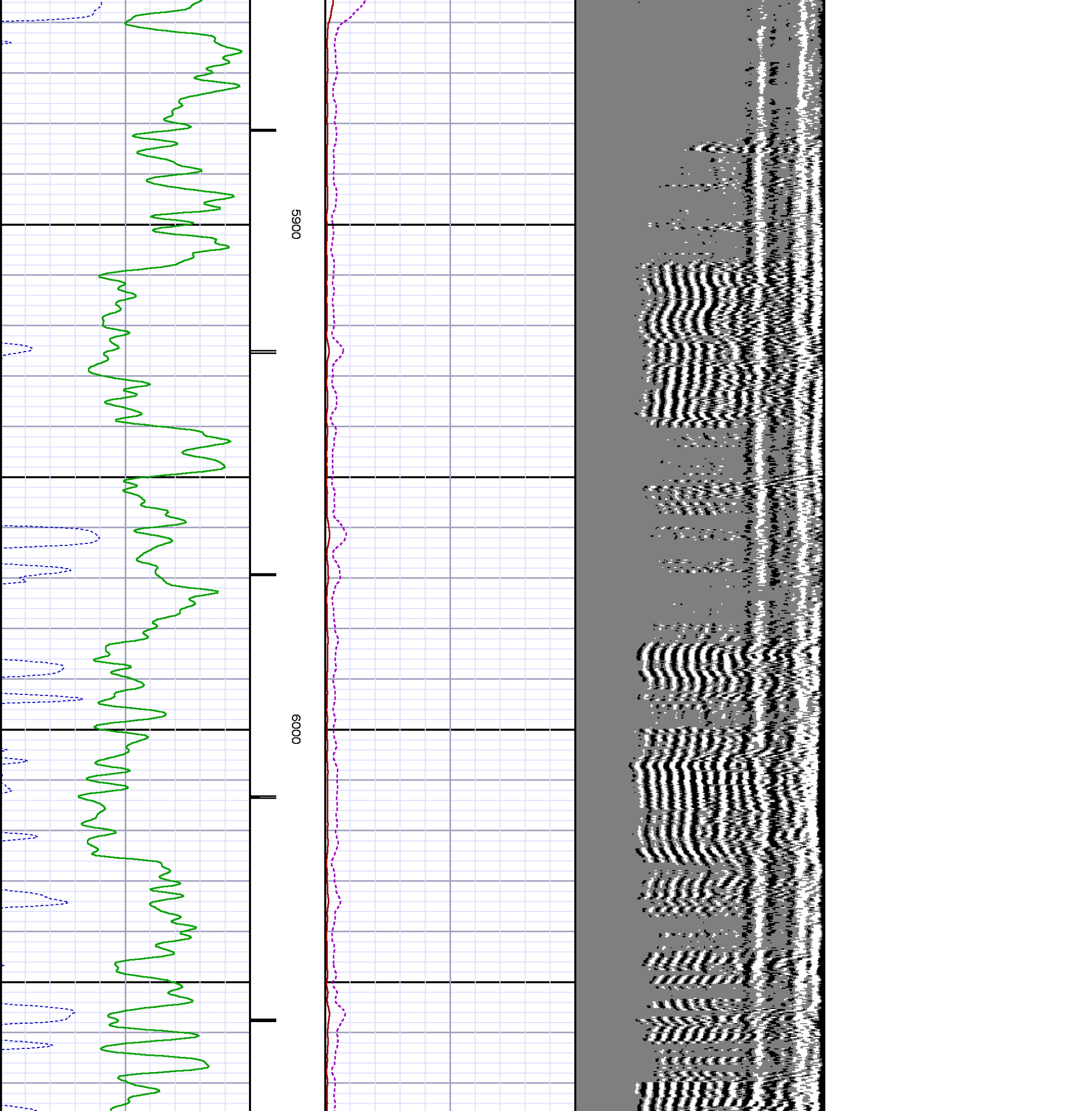


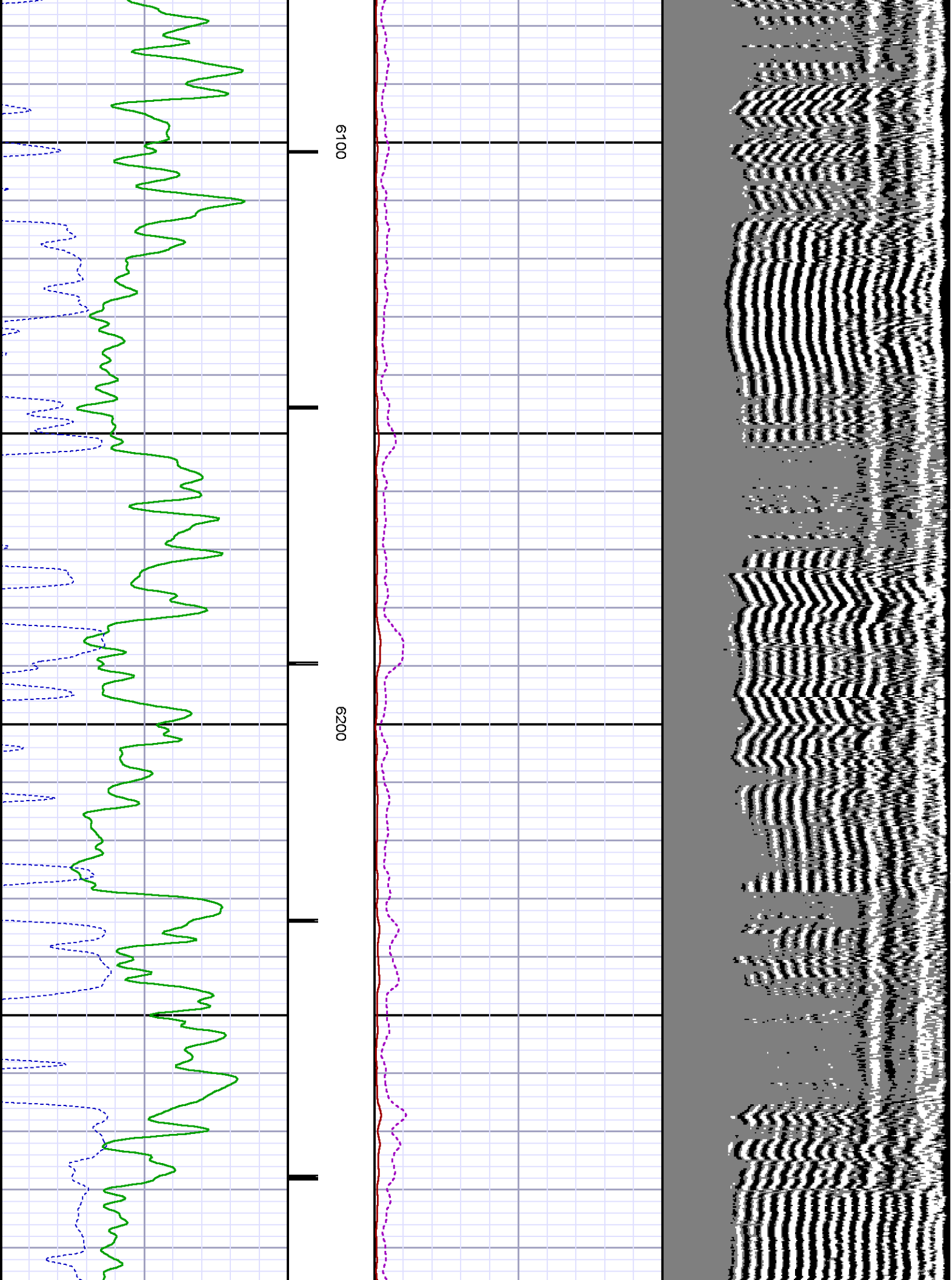


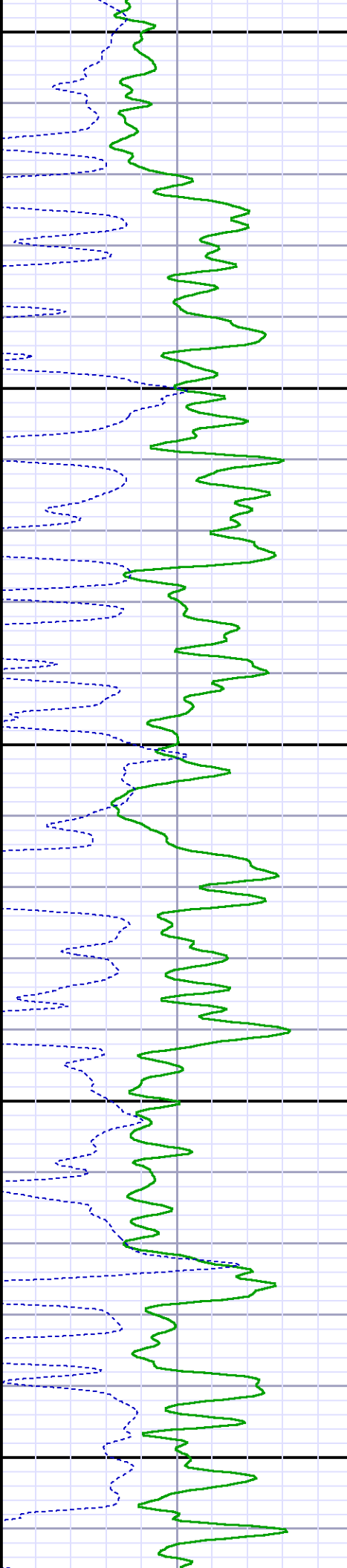
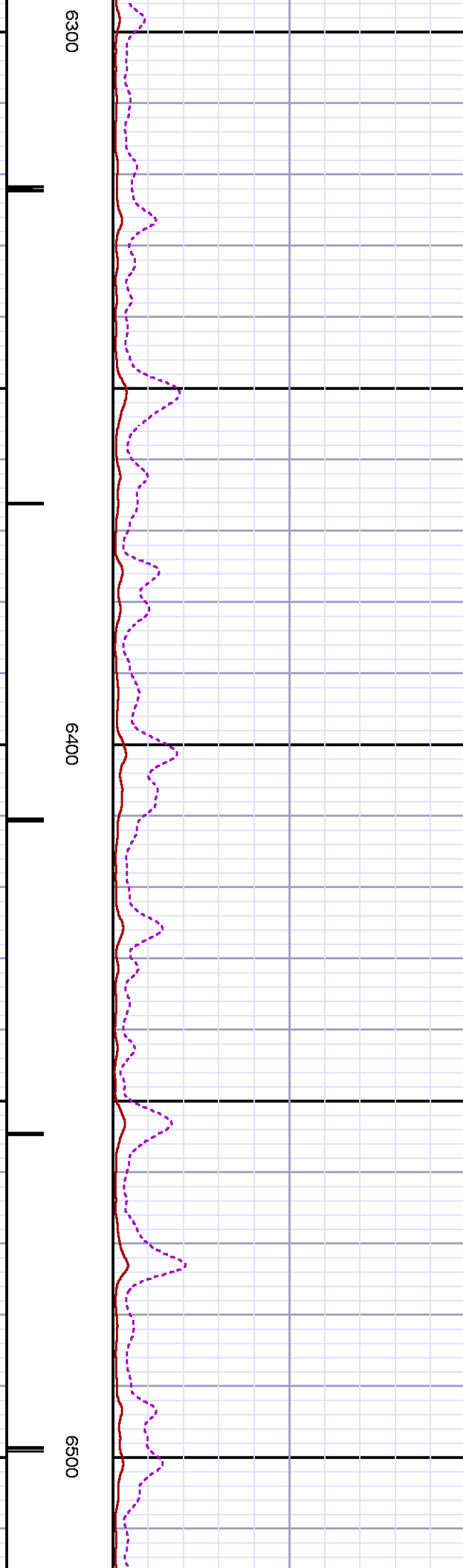
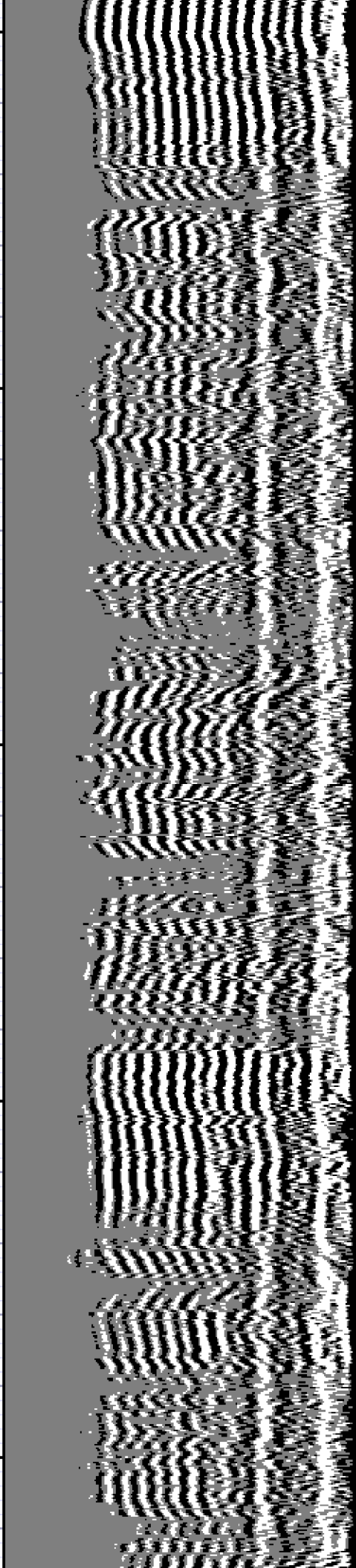


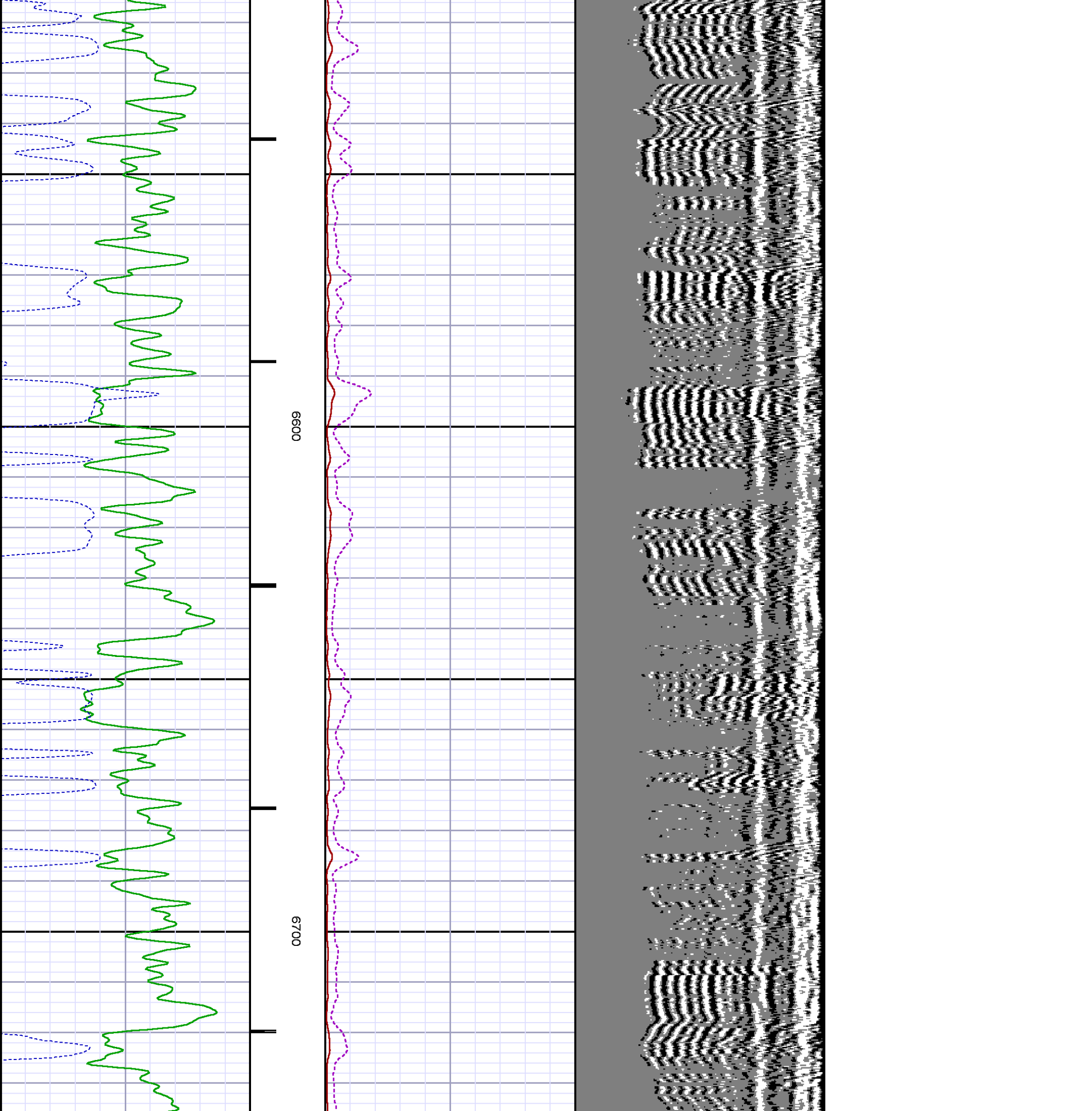


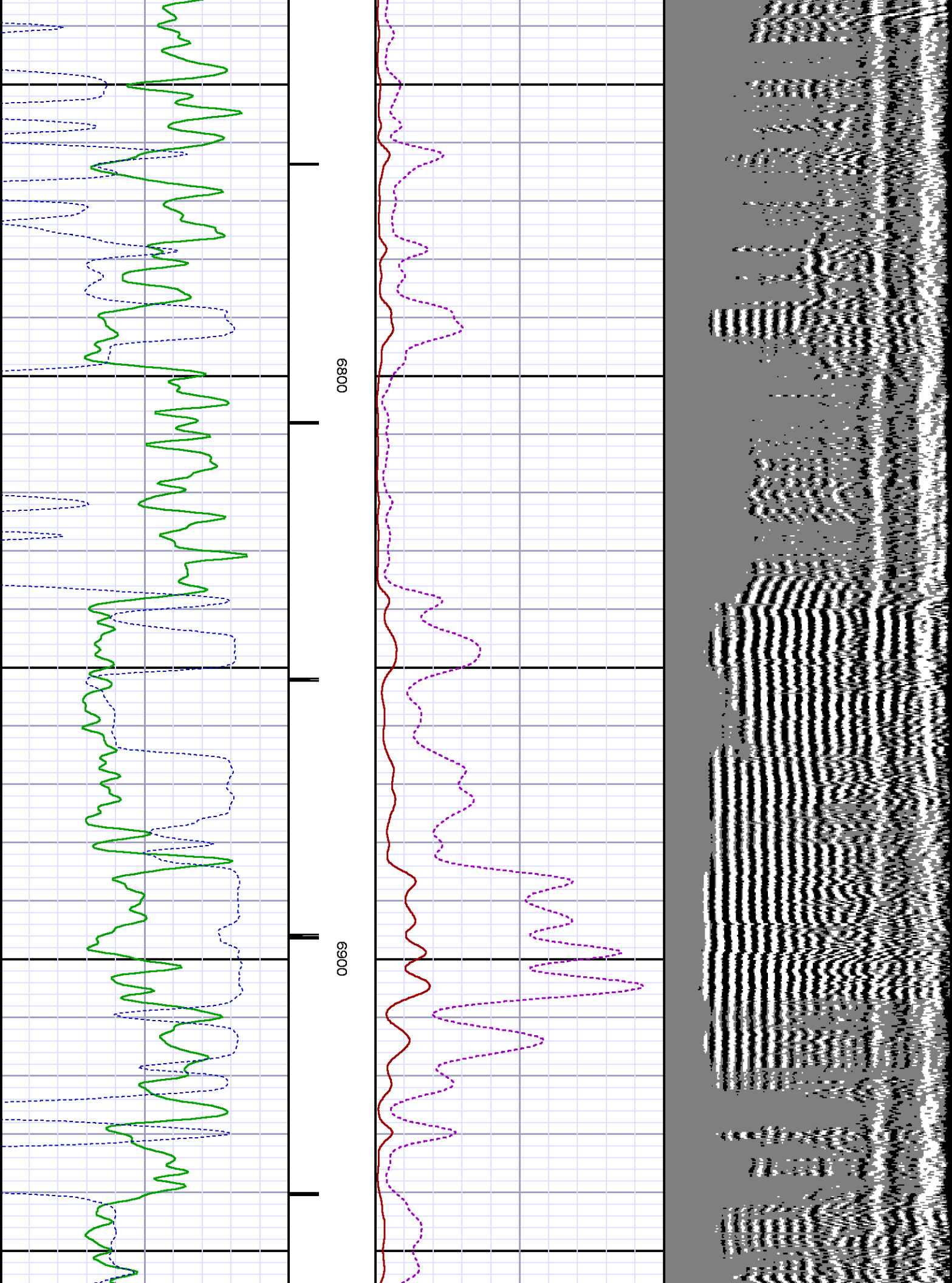


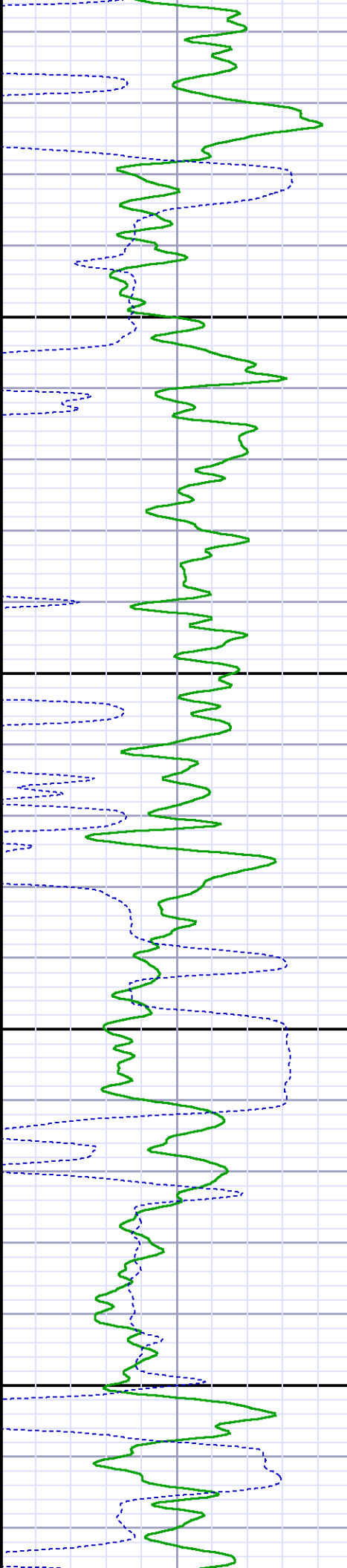
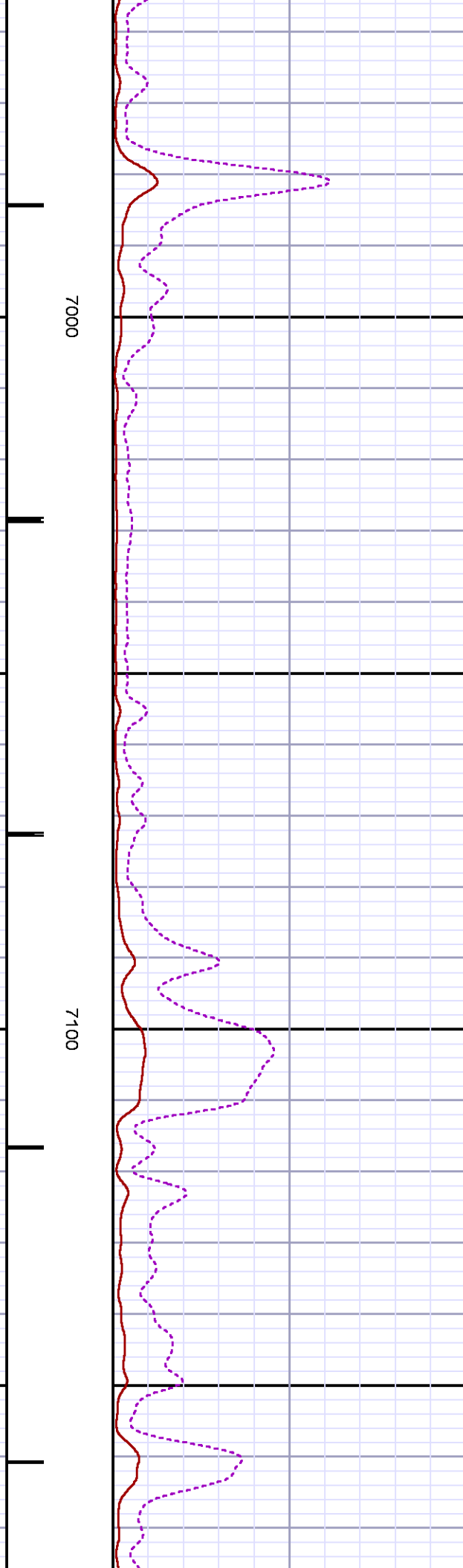
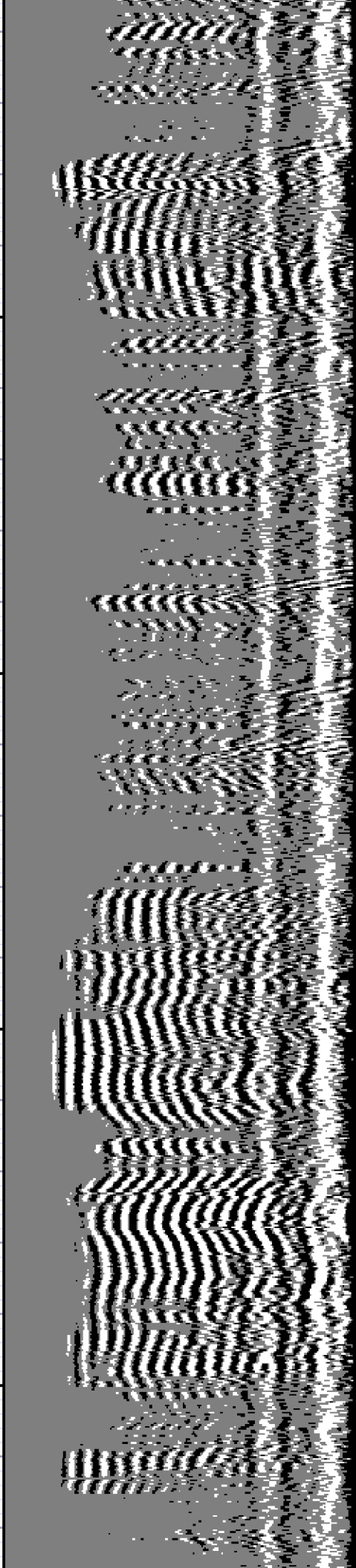


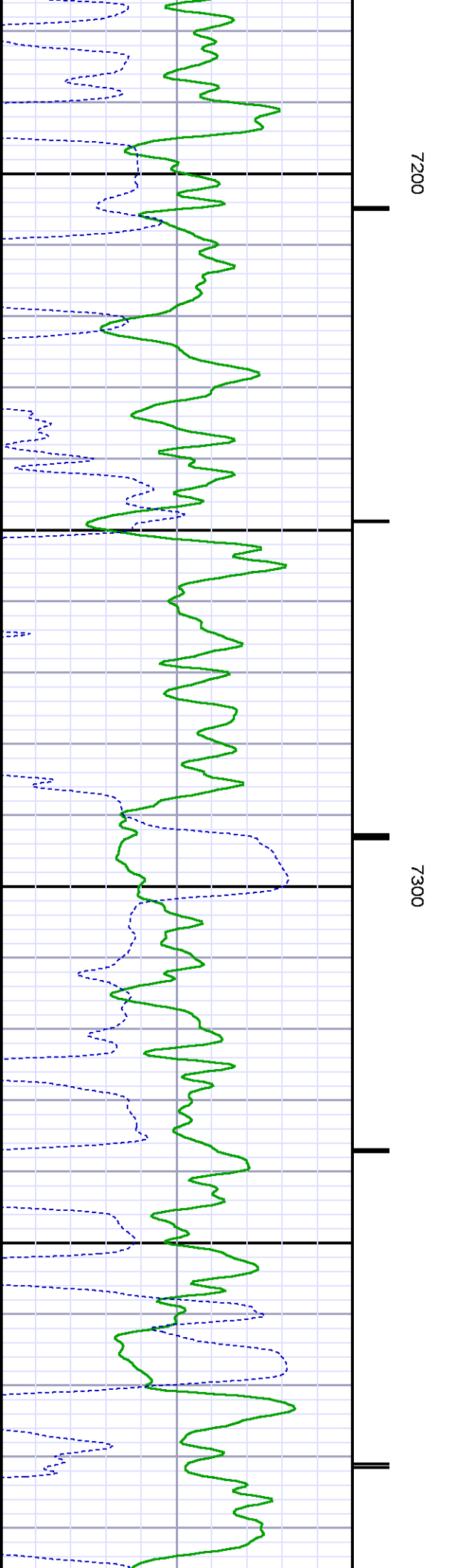
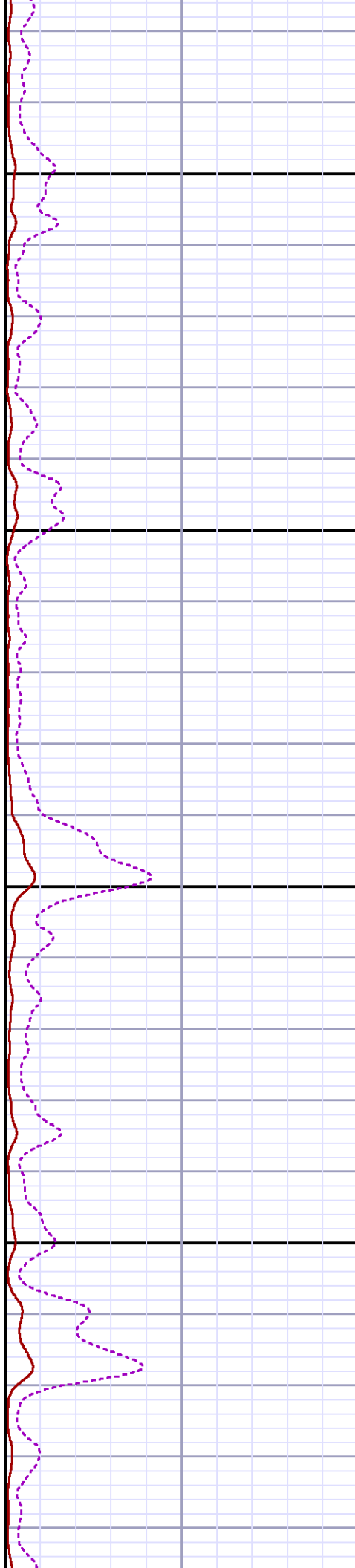
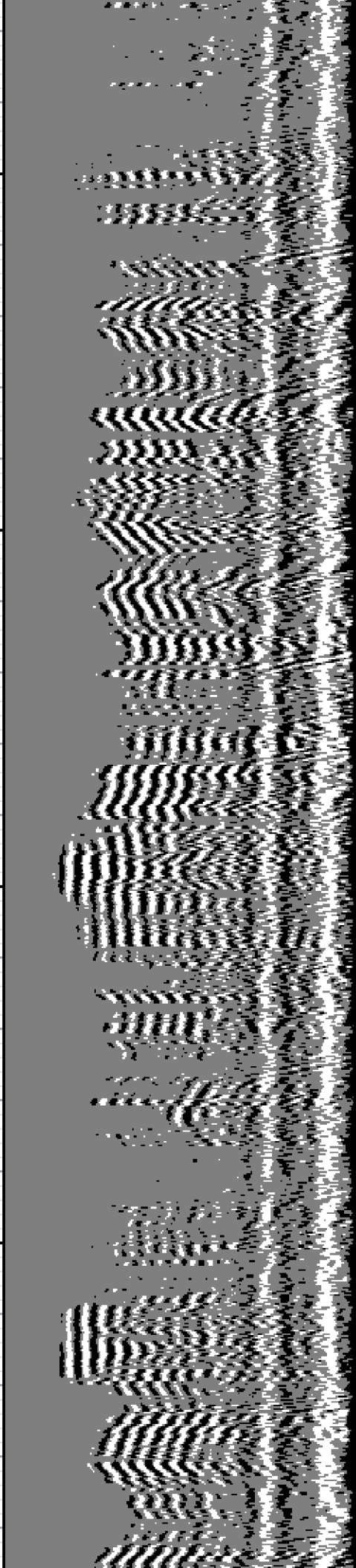


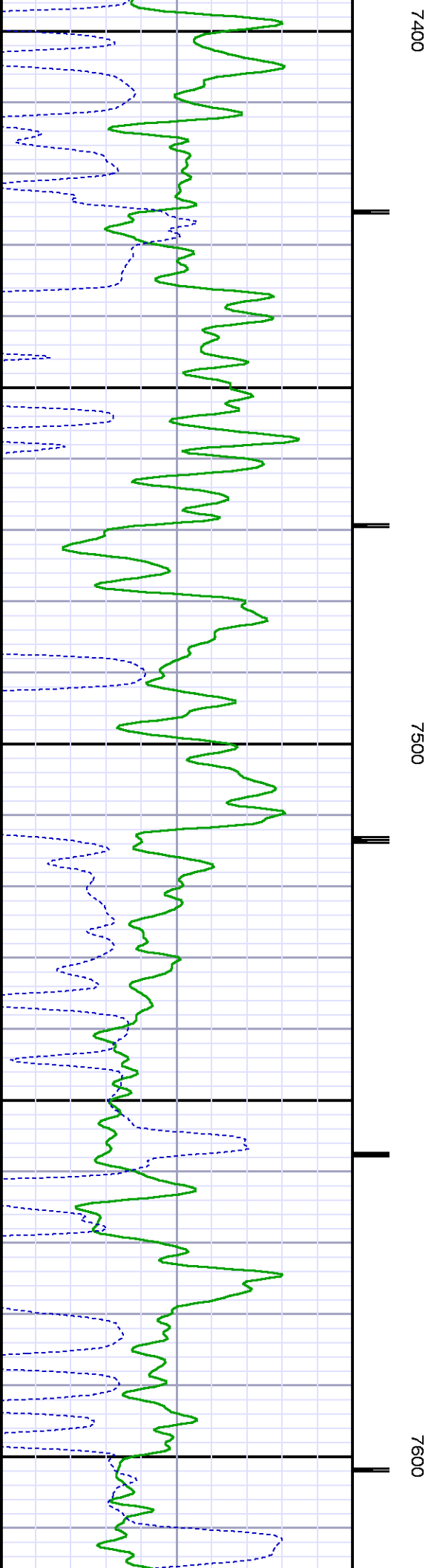
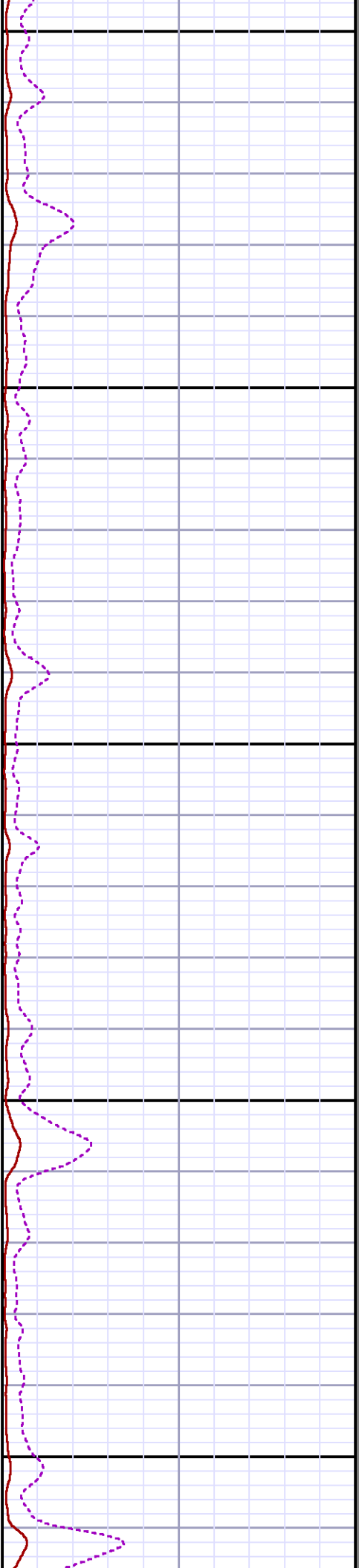
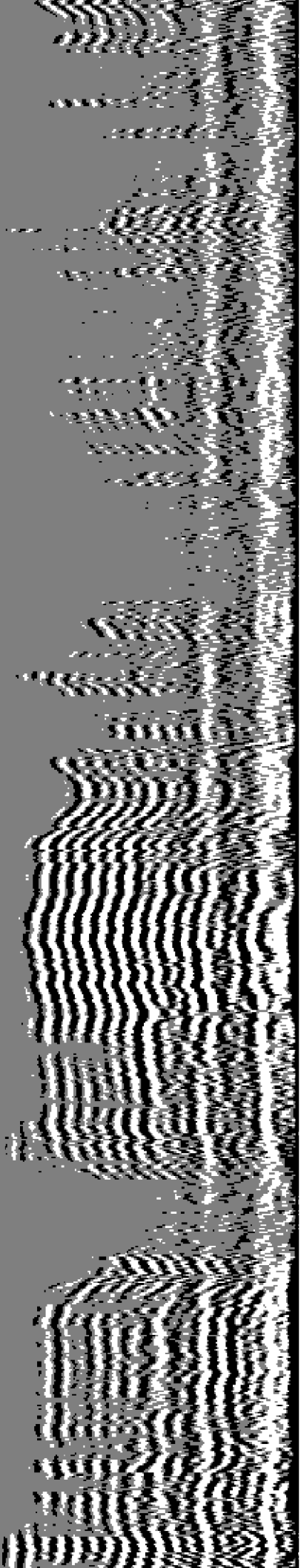


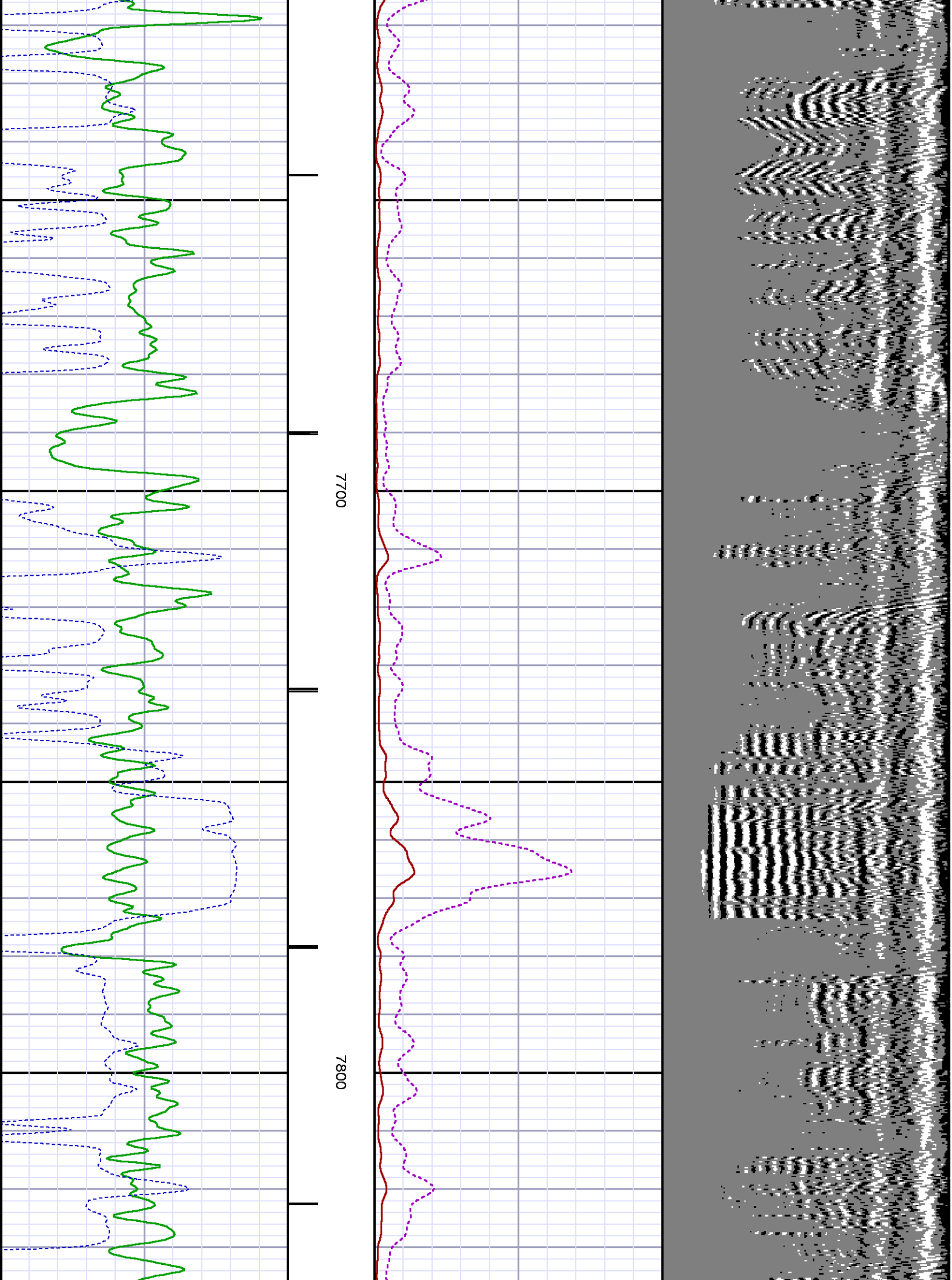












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DEPTH OFFSETS
(for Acquired Curves)

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

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

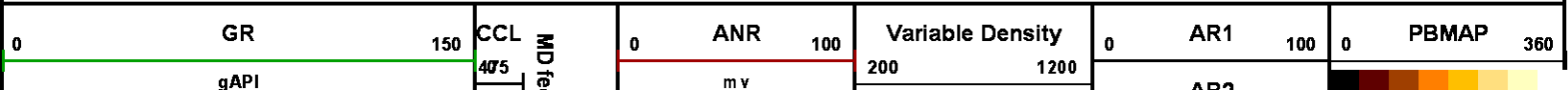
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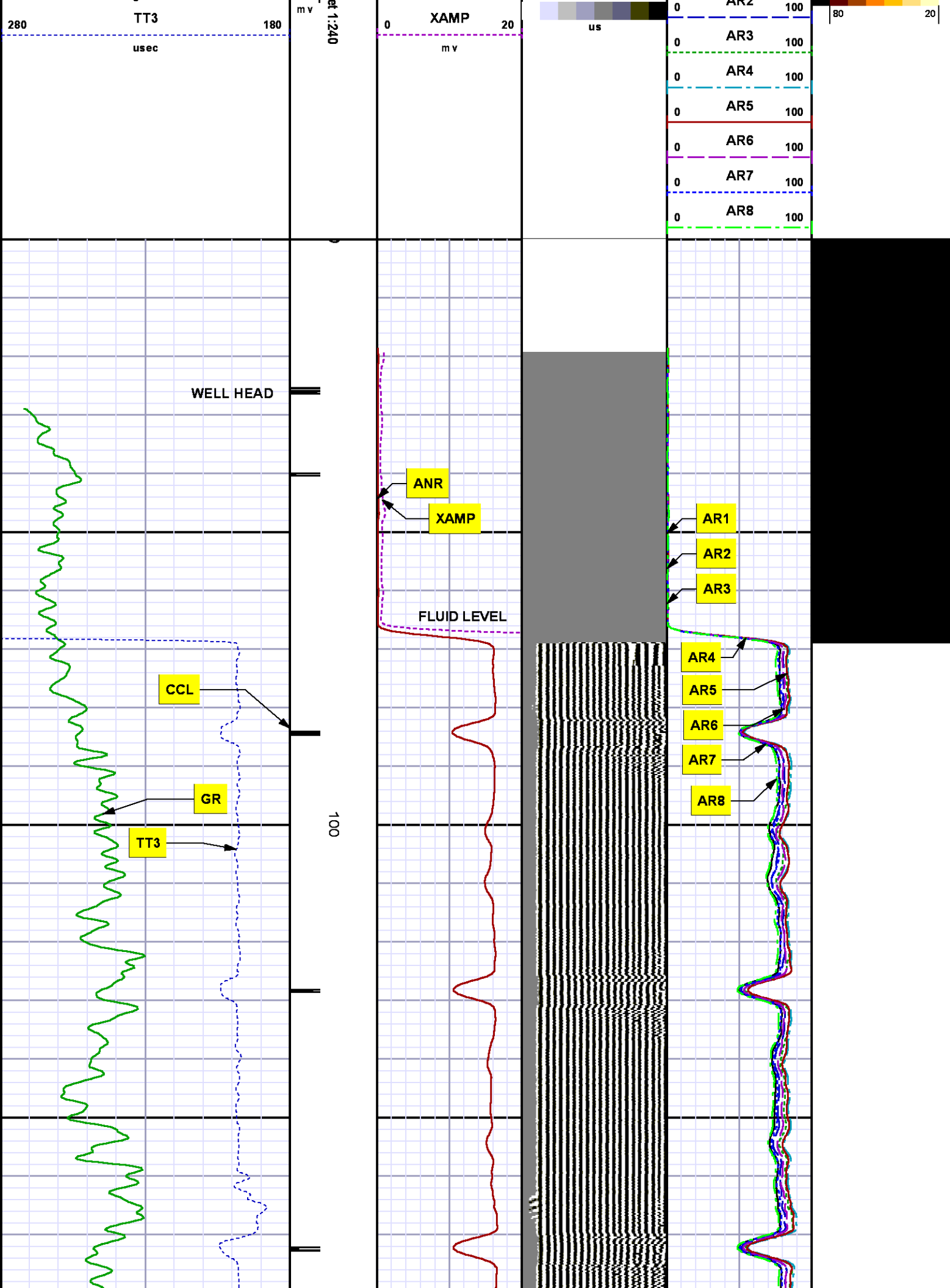
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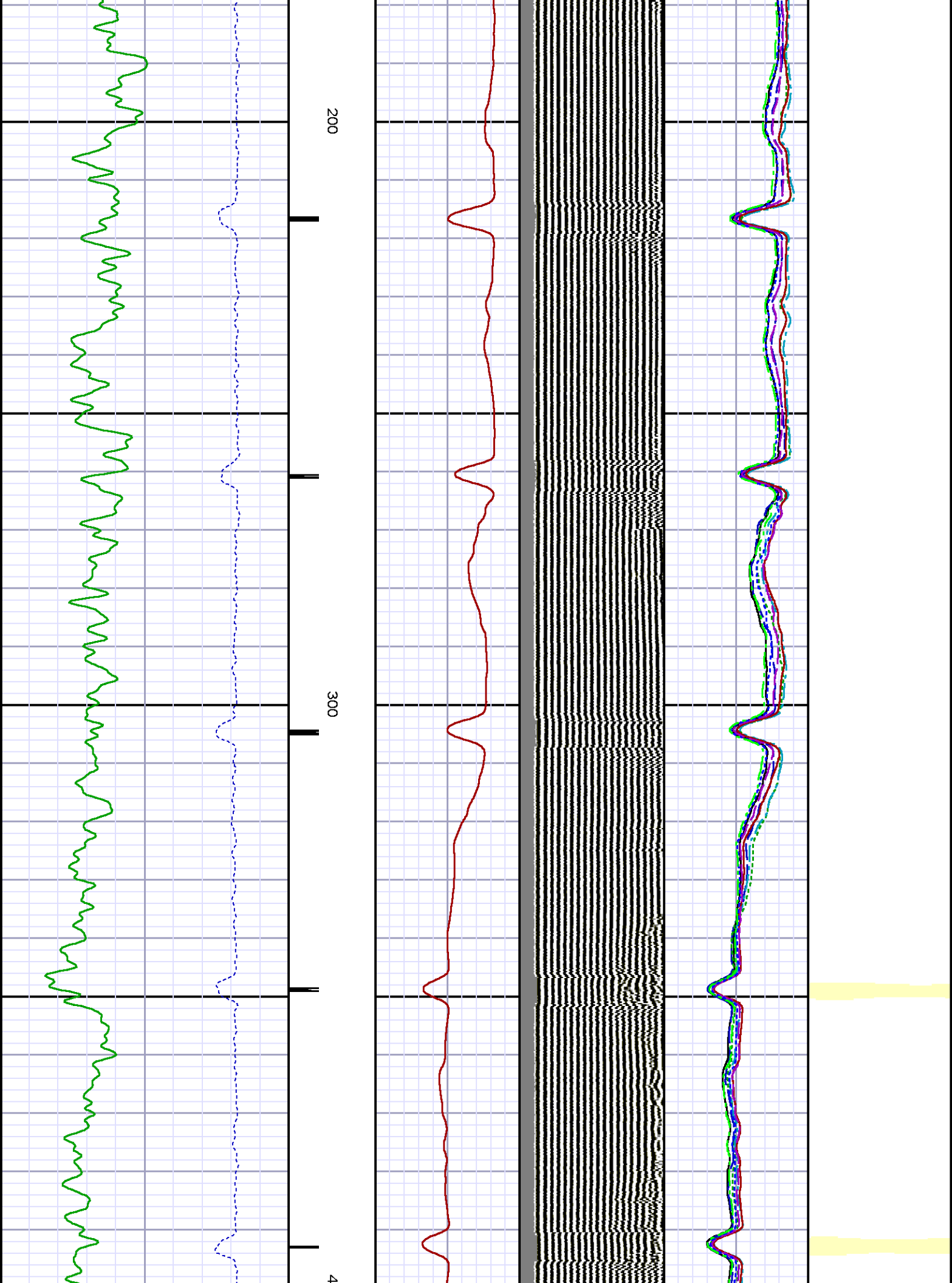
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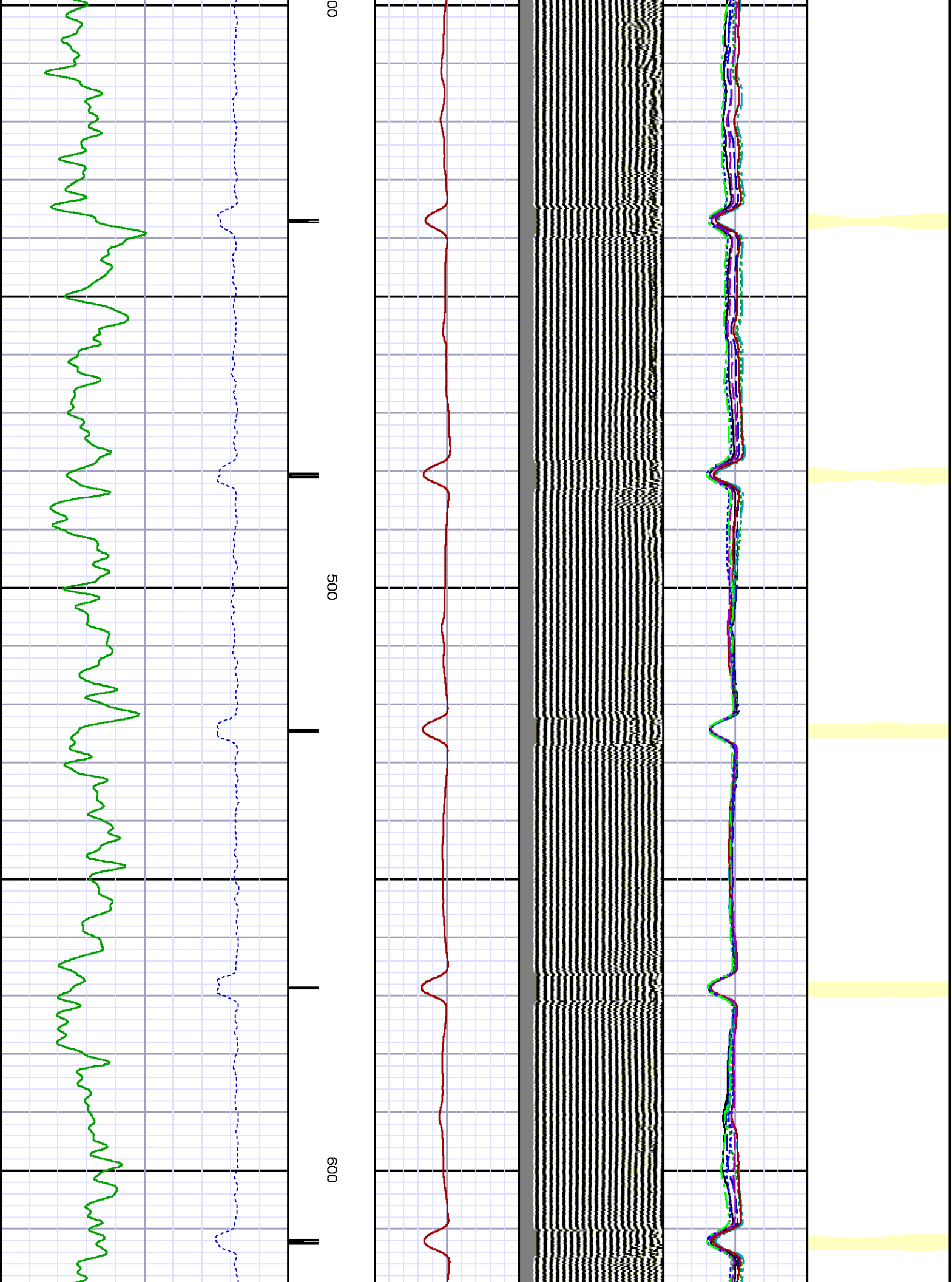
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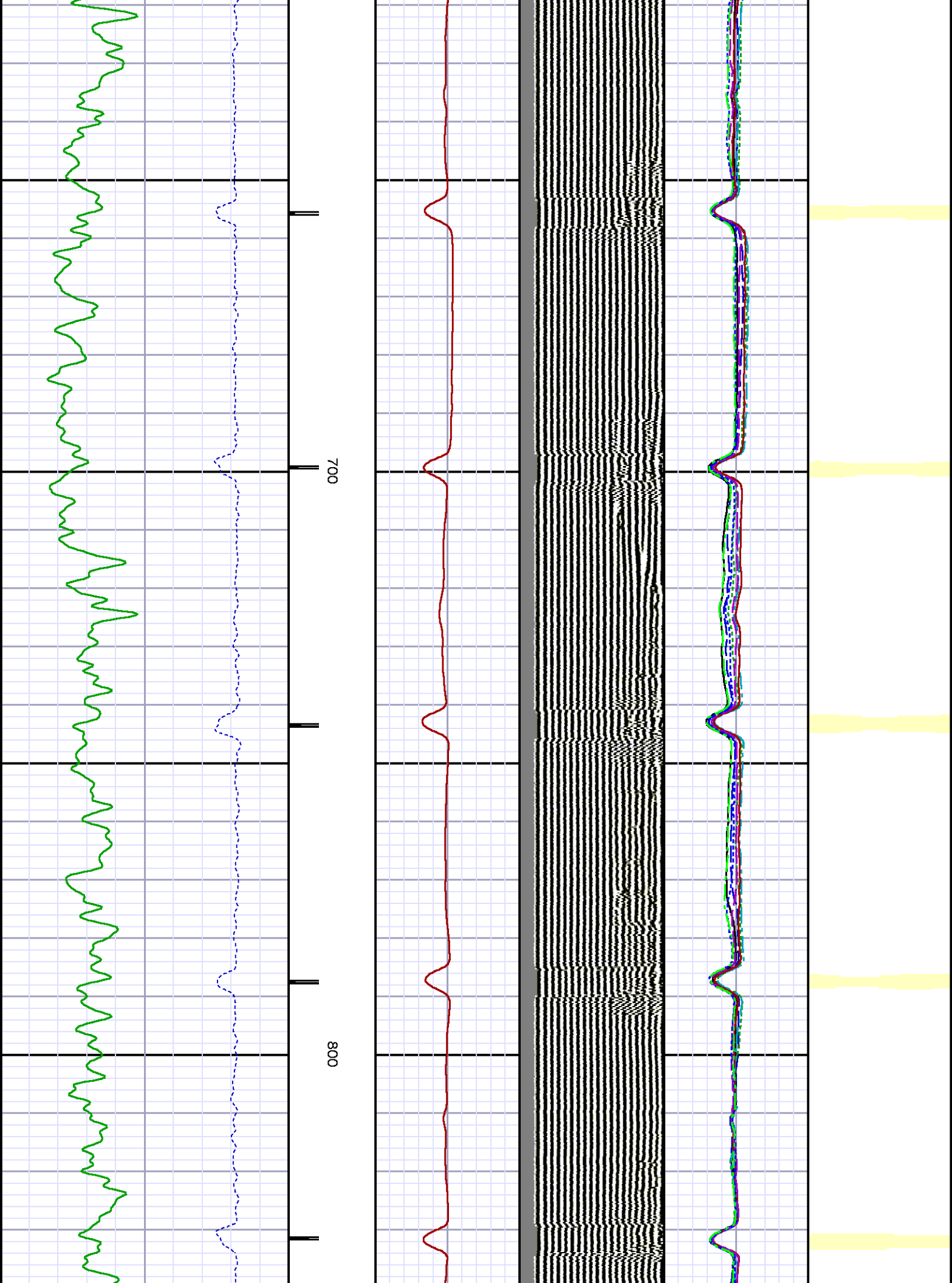
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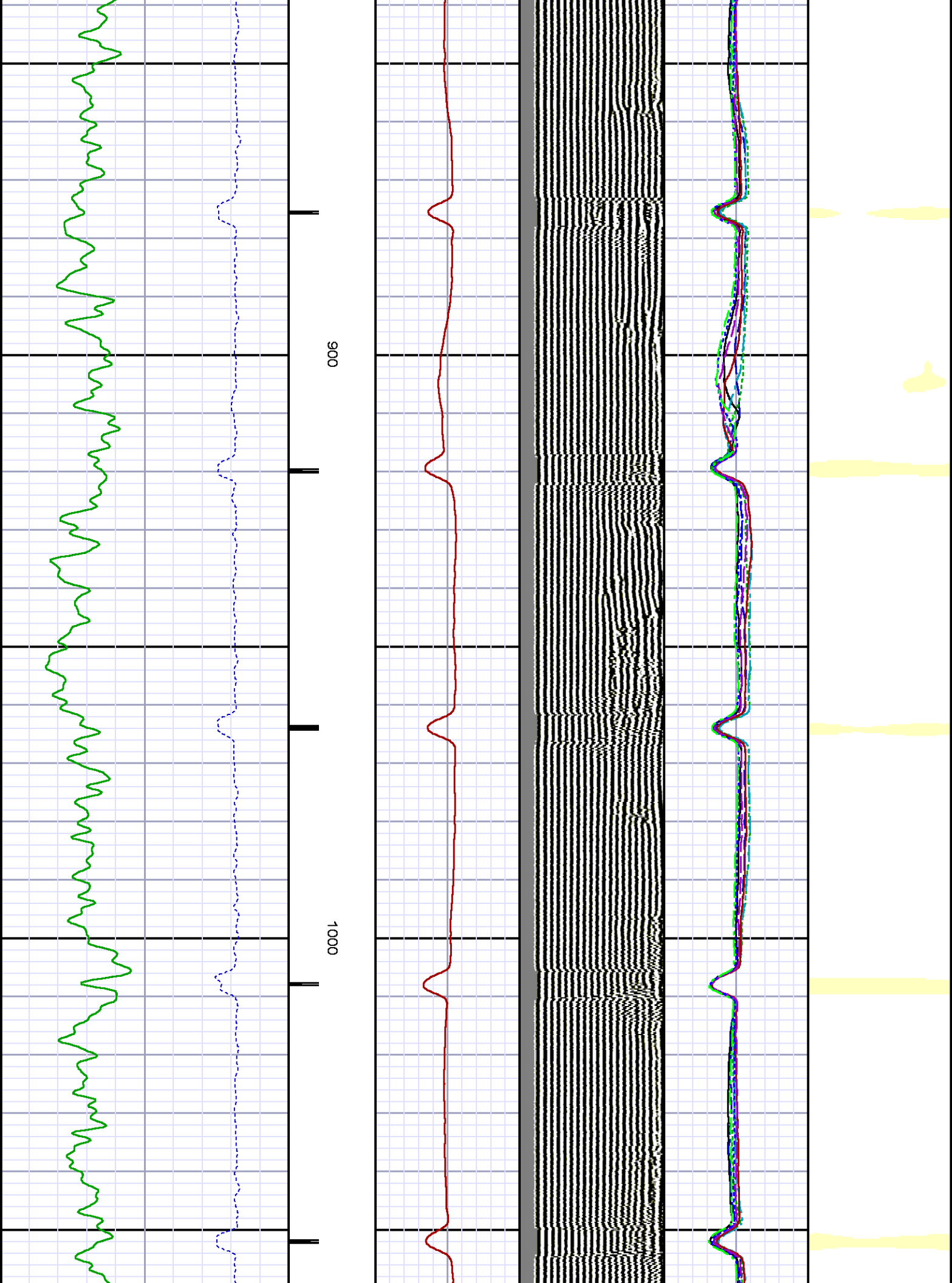


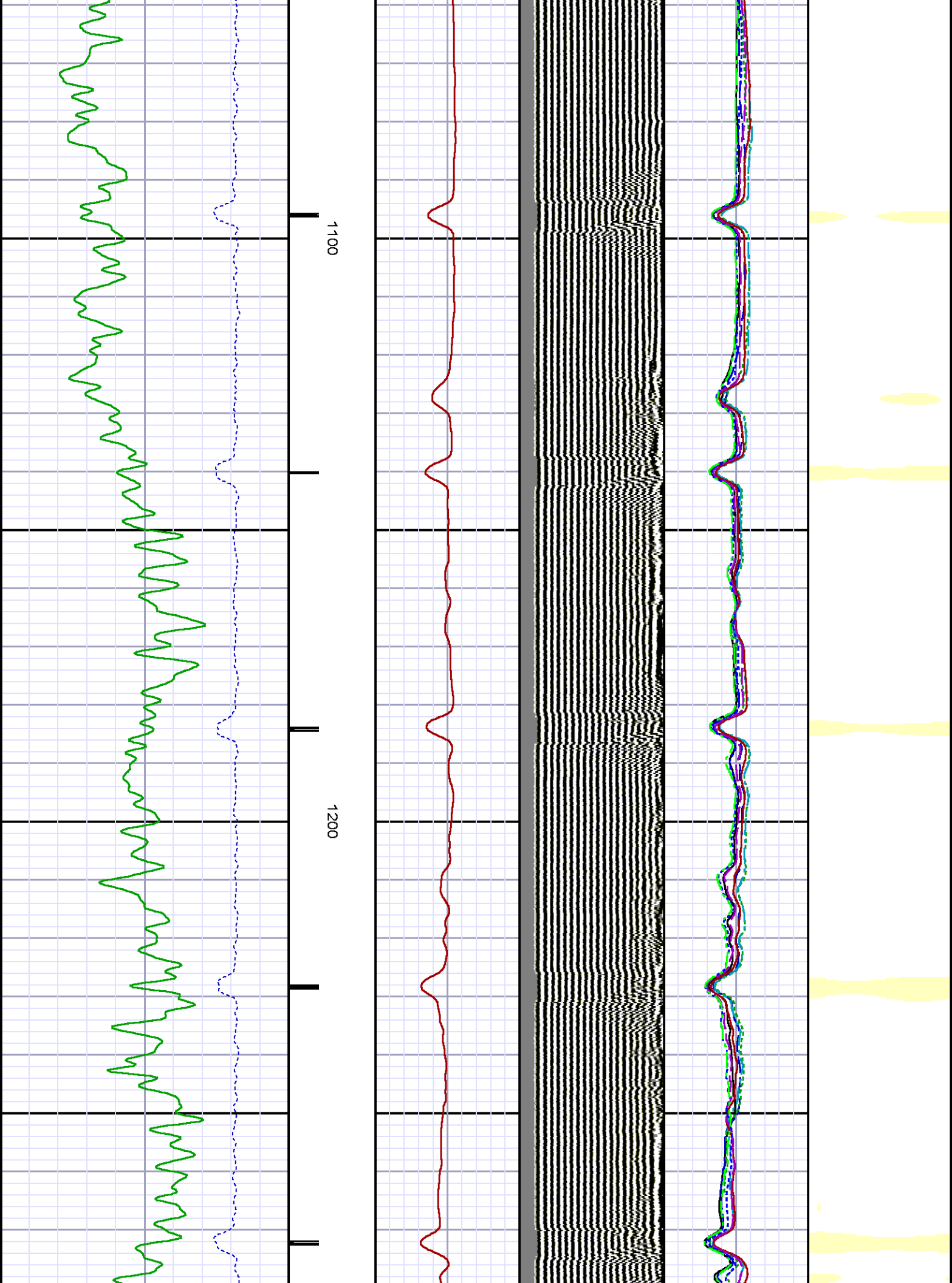


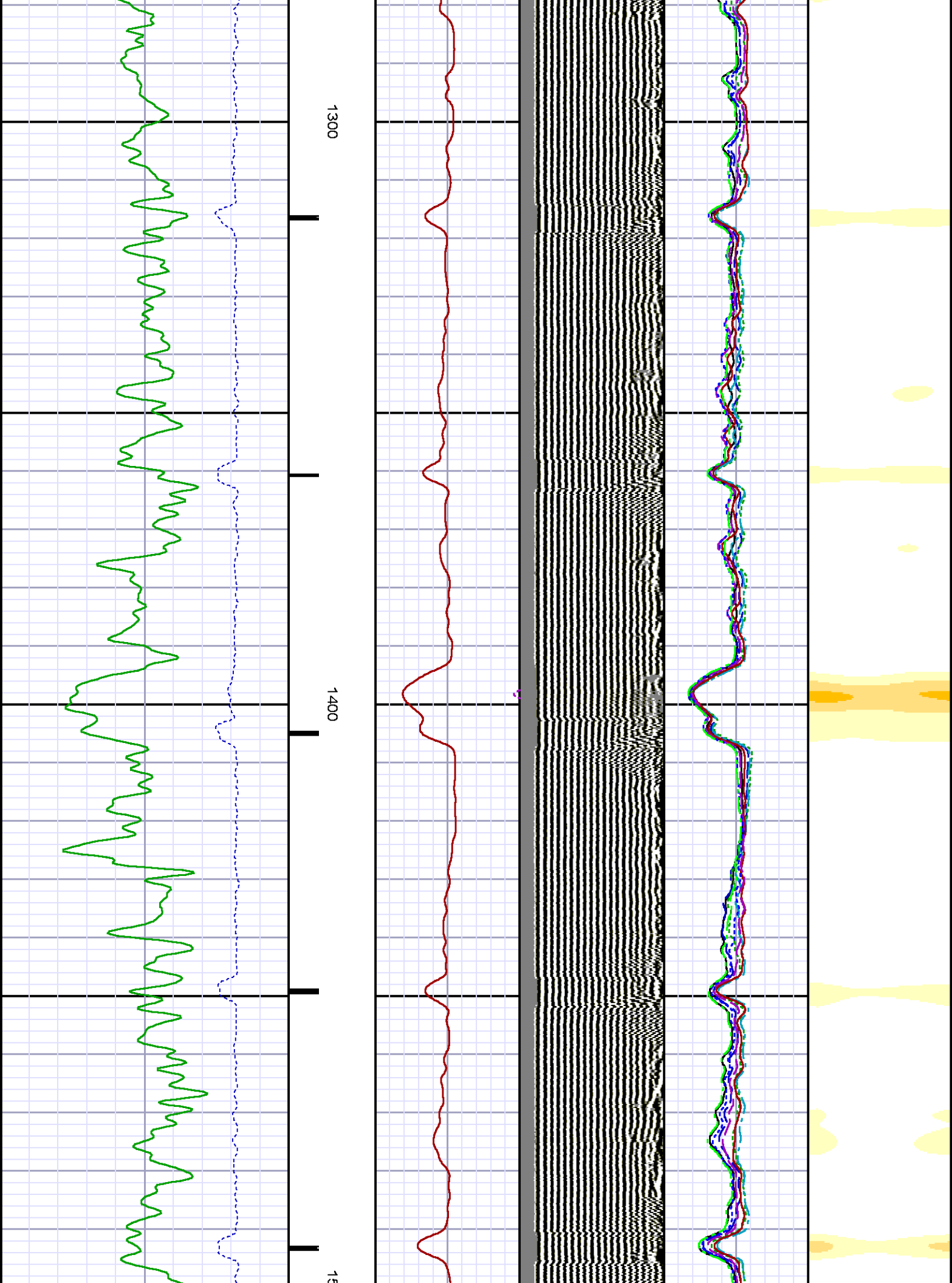


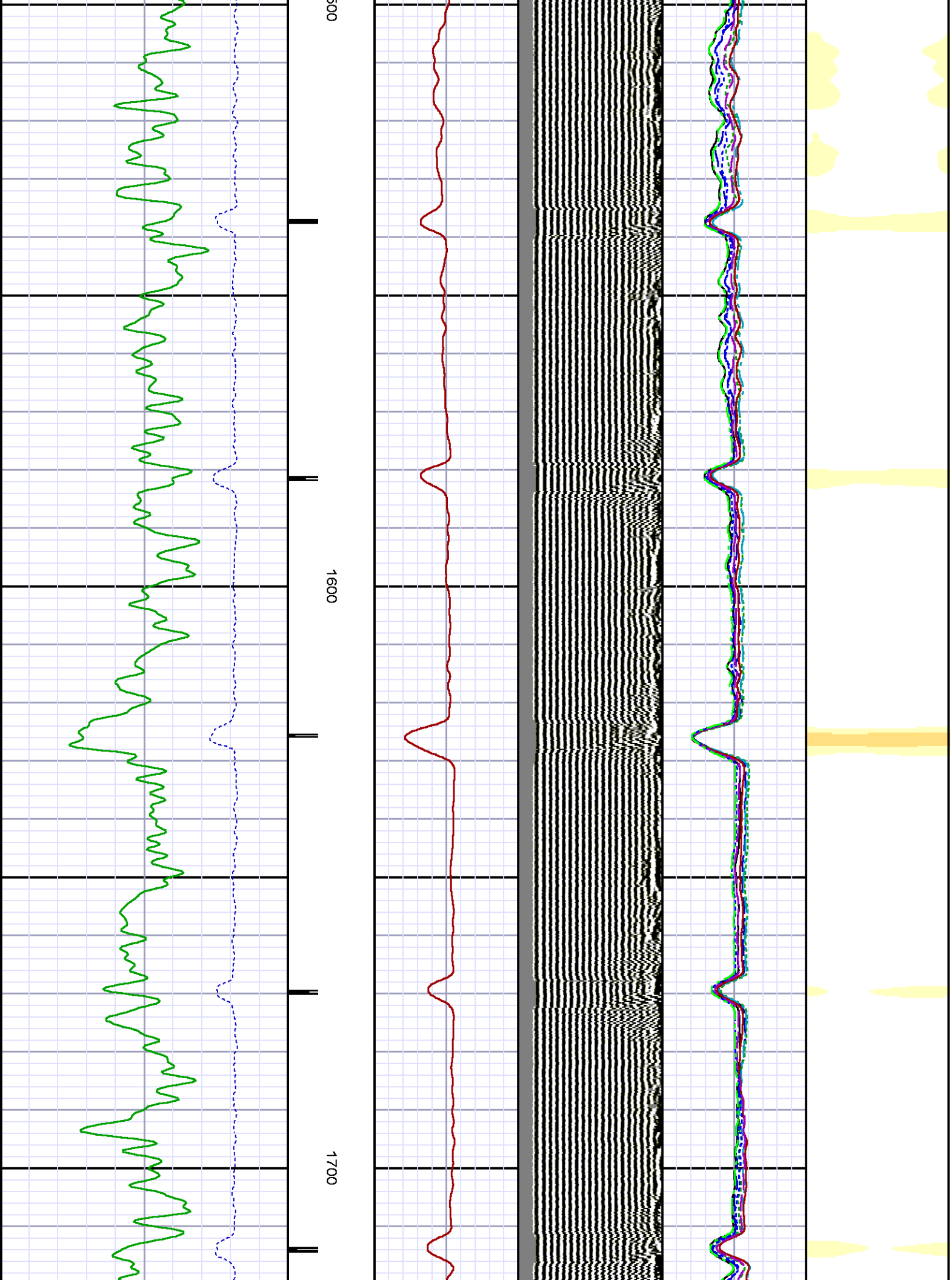


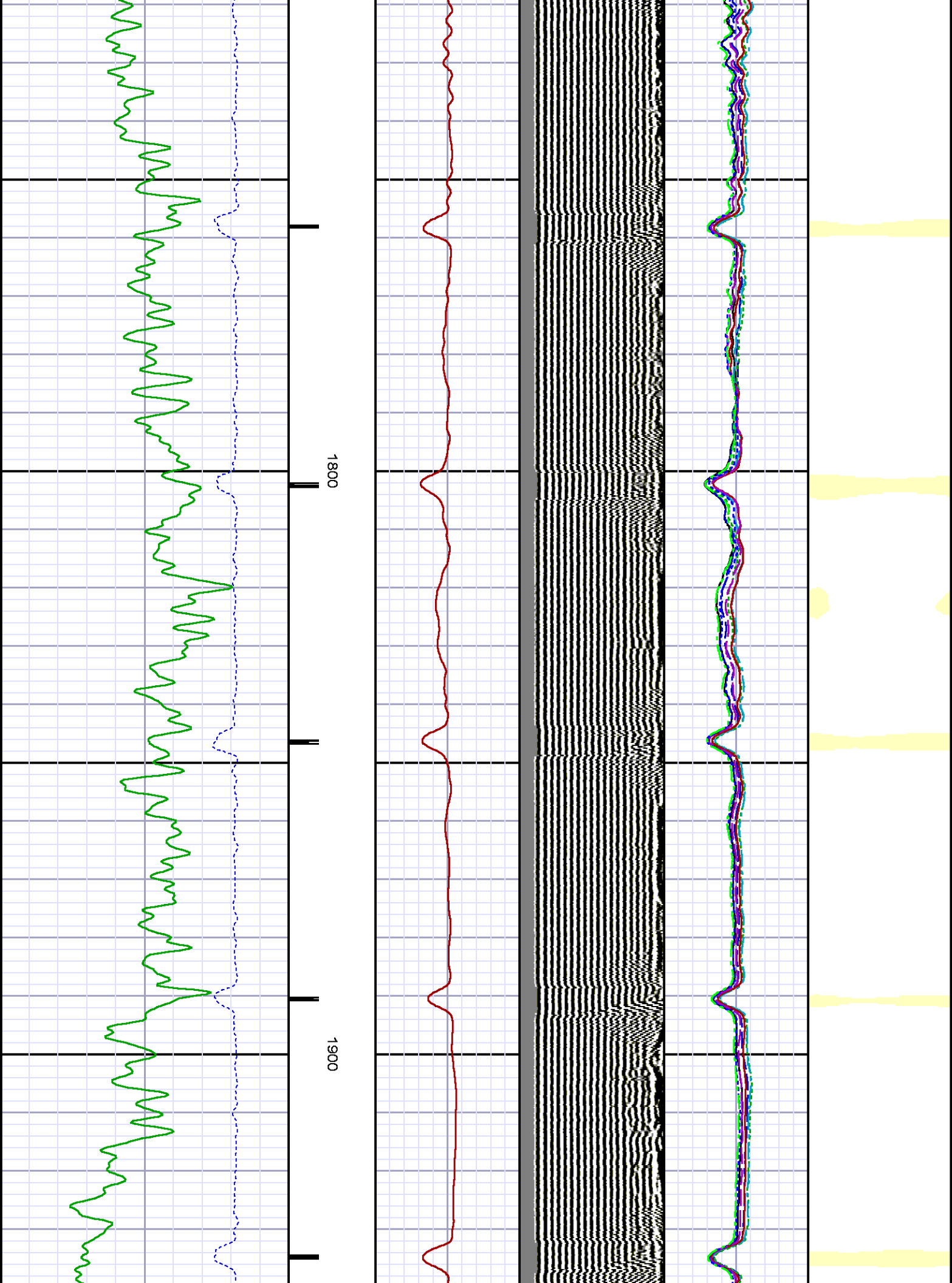


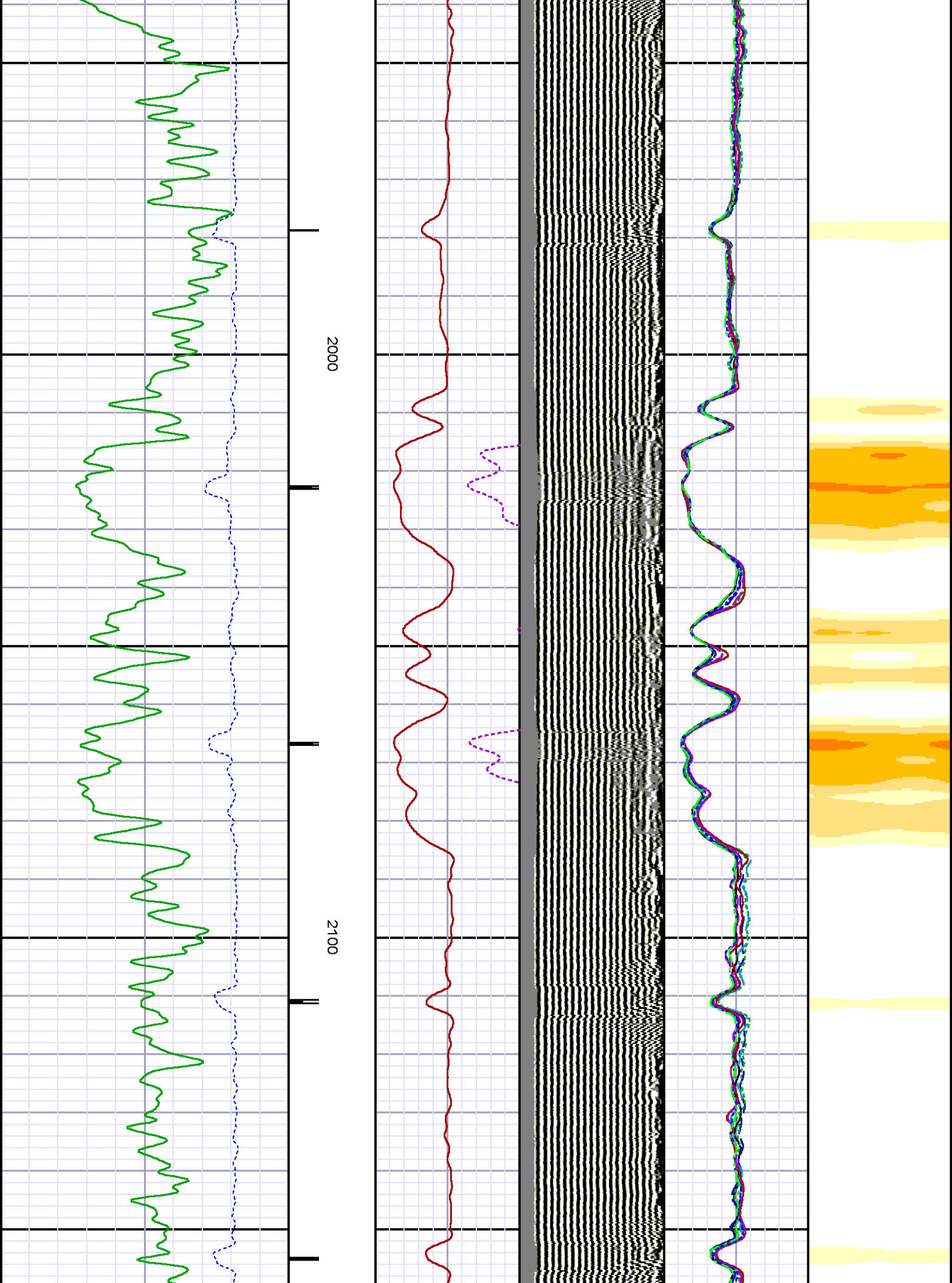


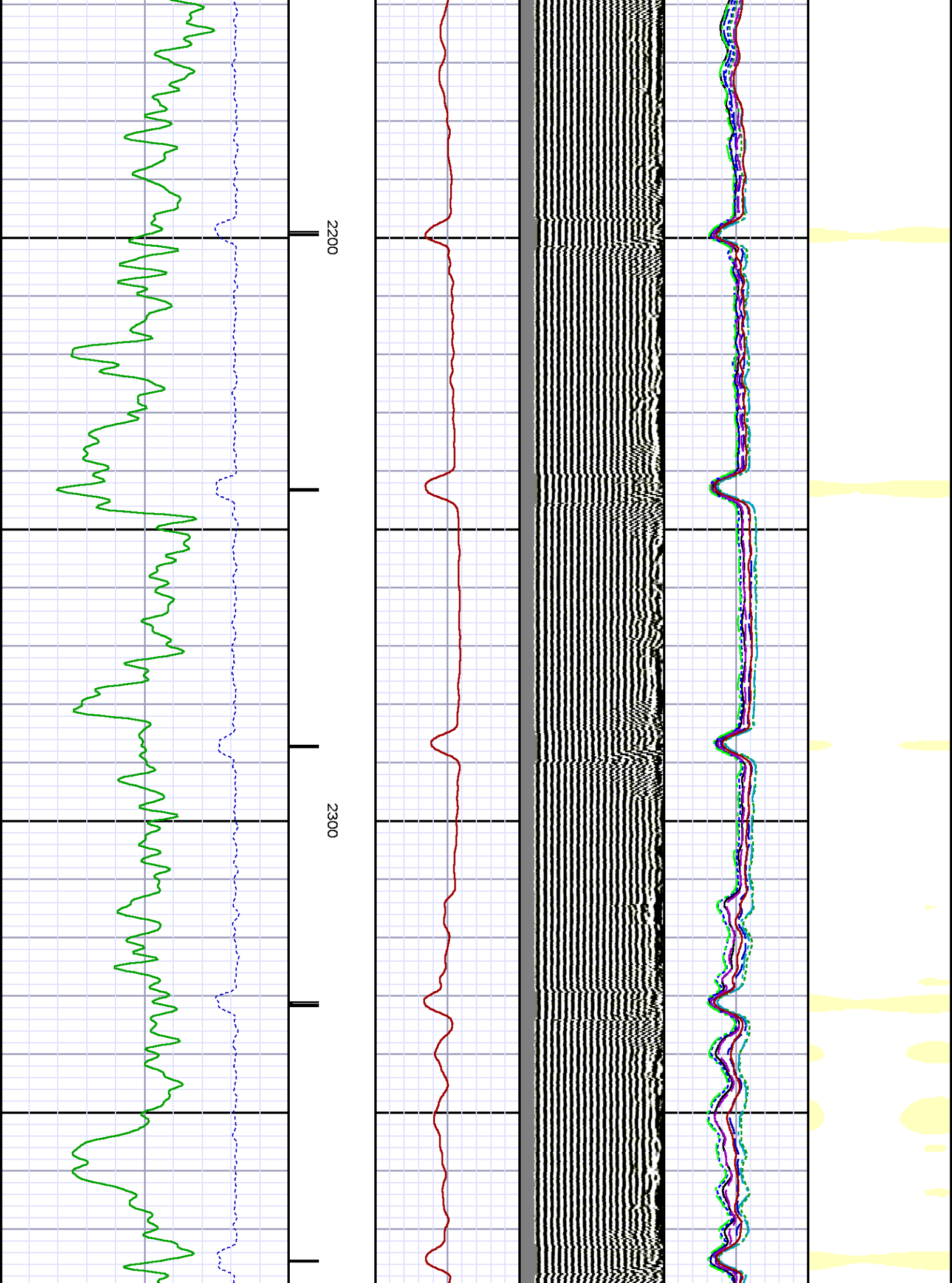


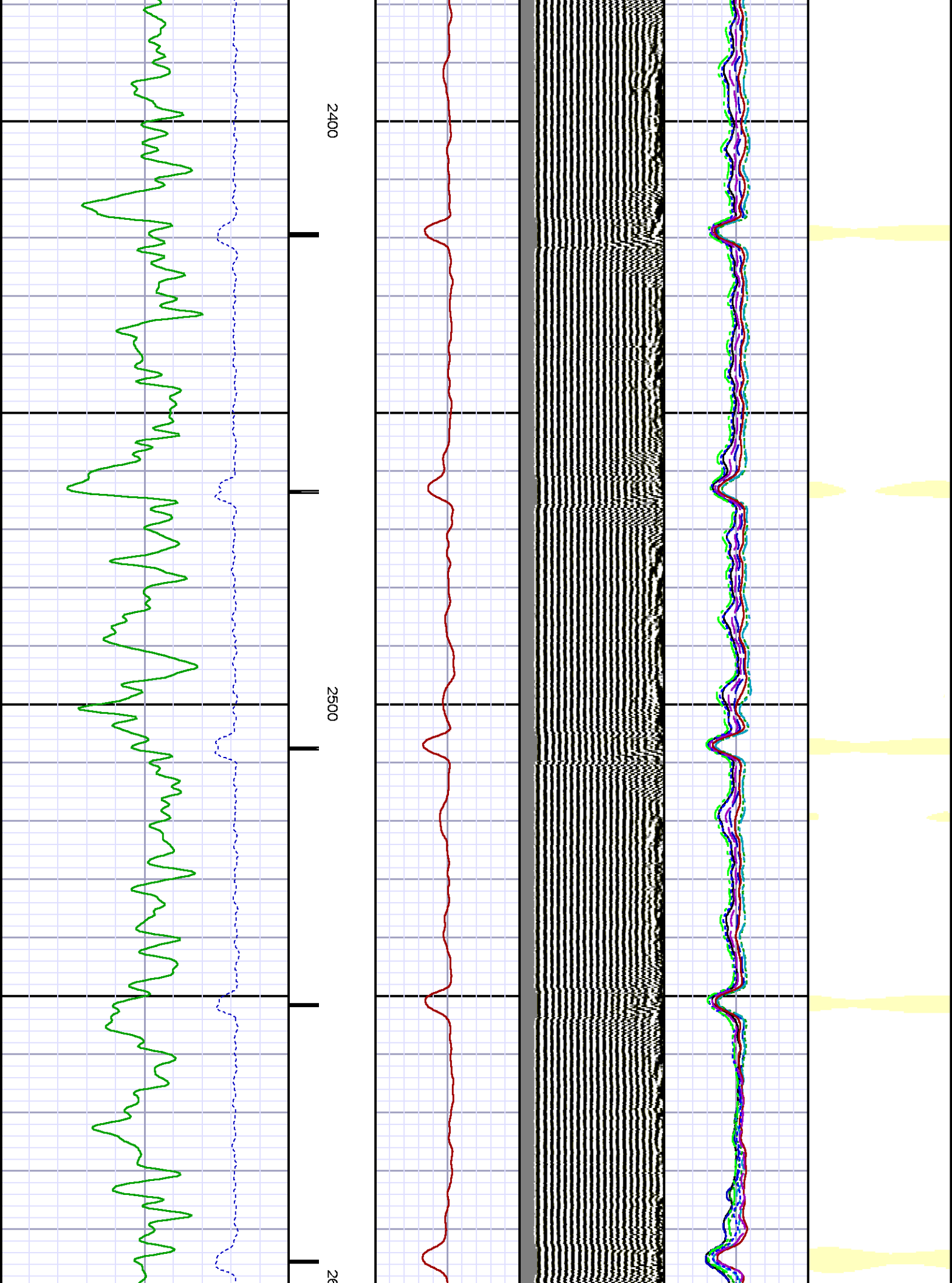


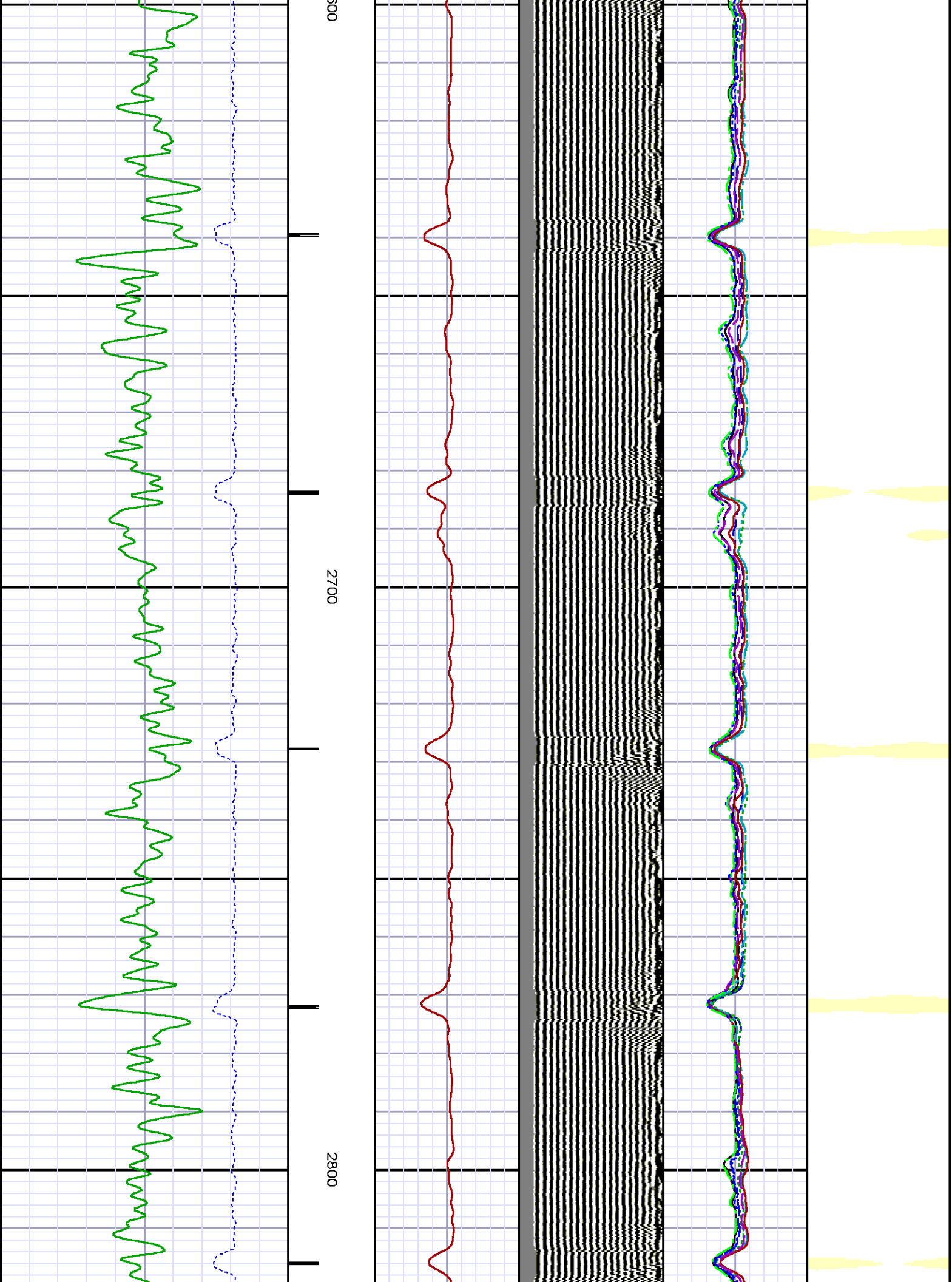


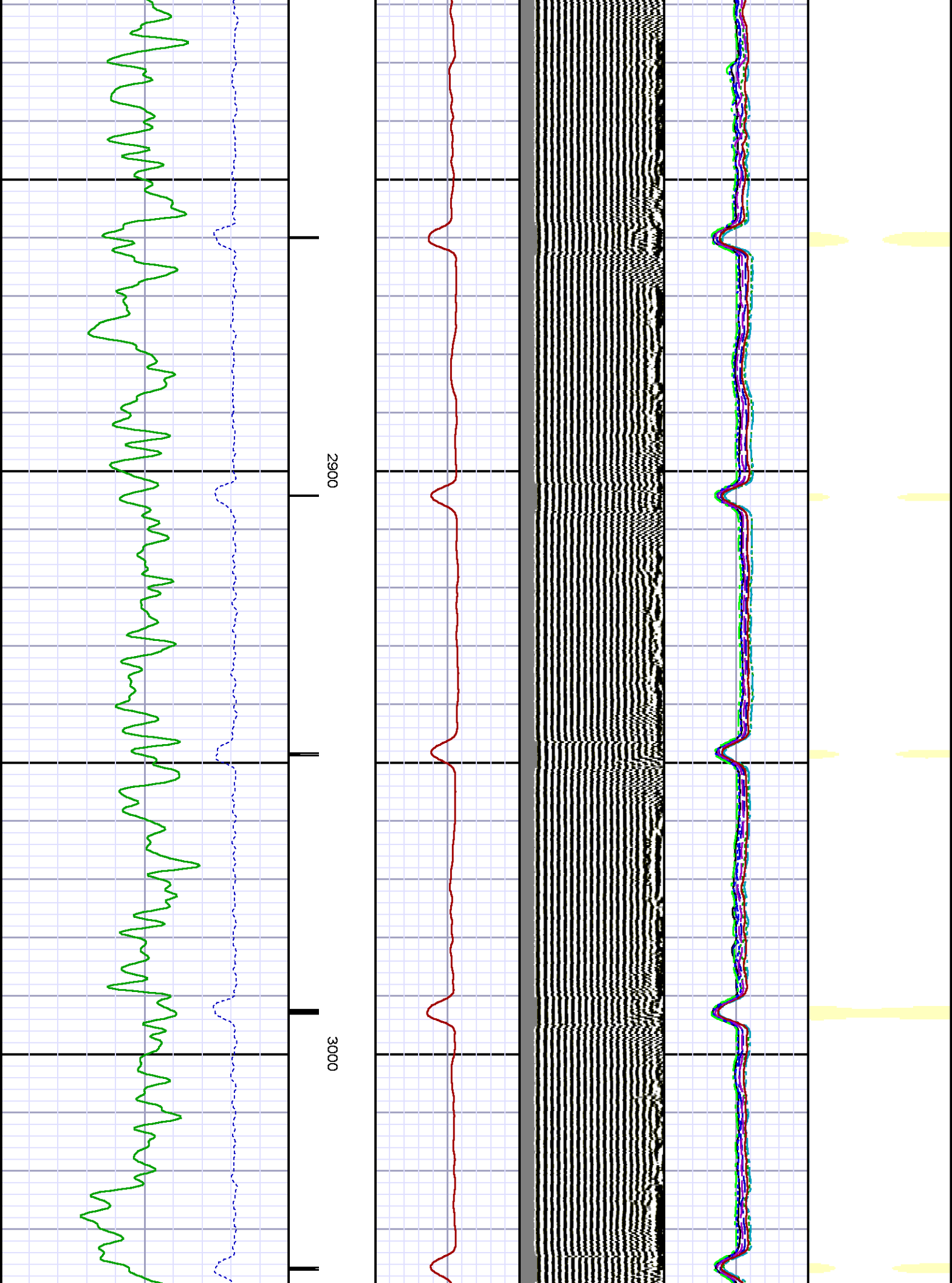


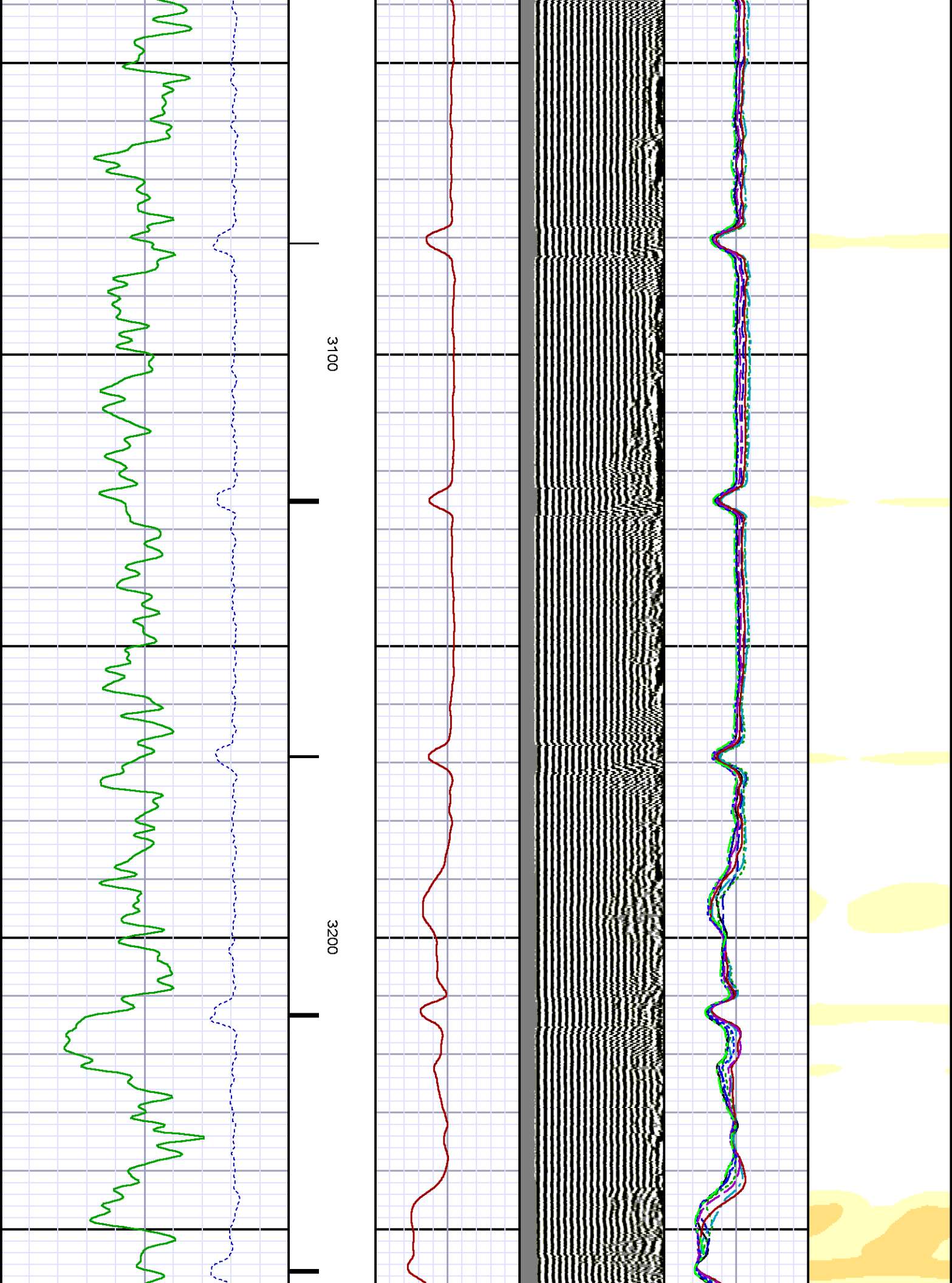


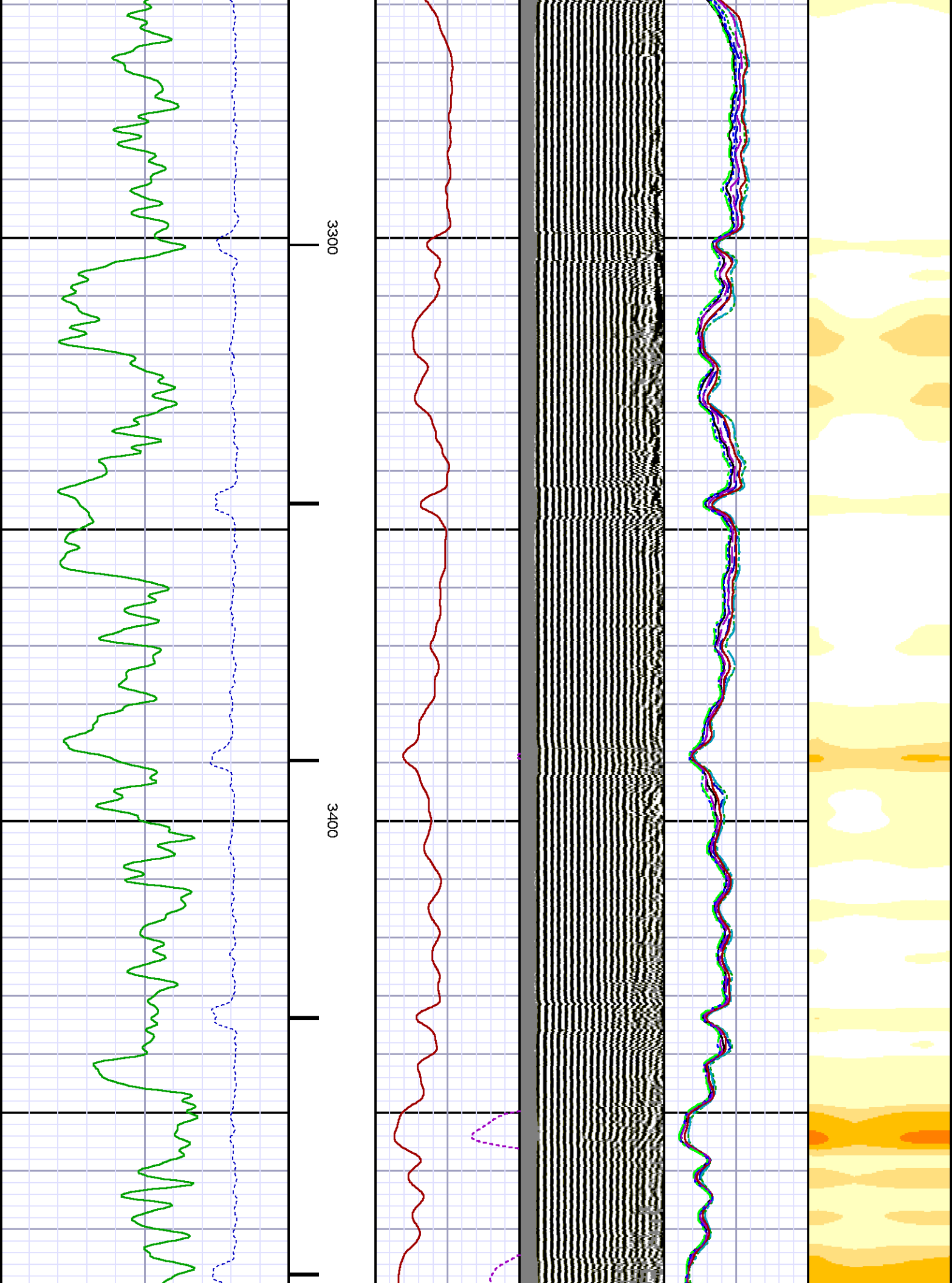


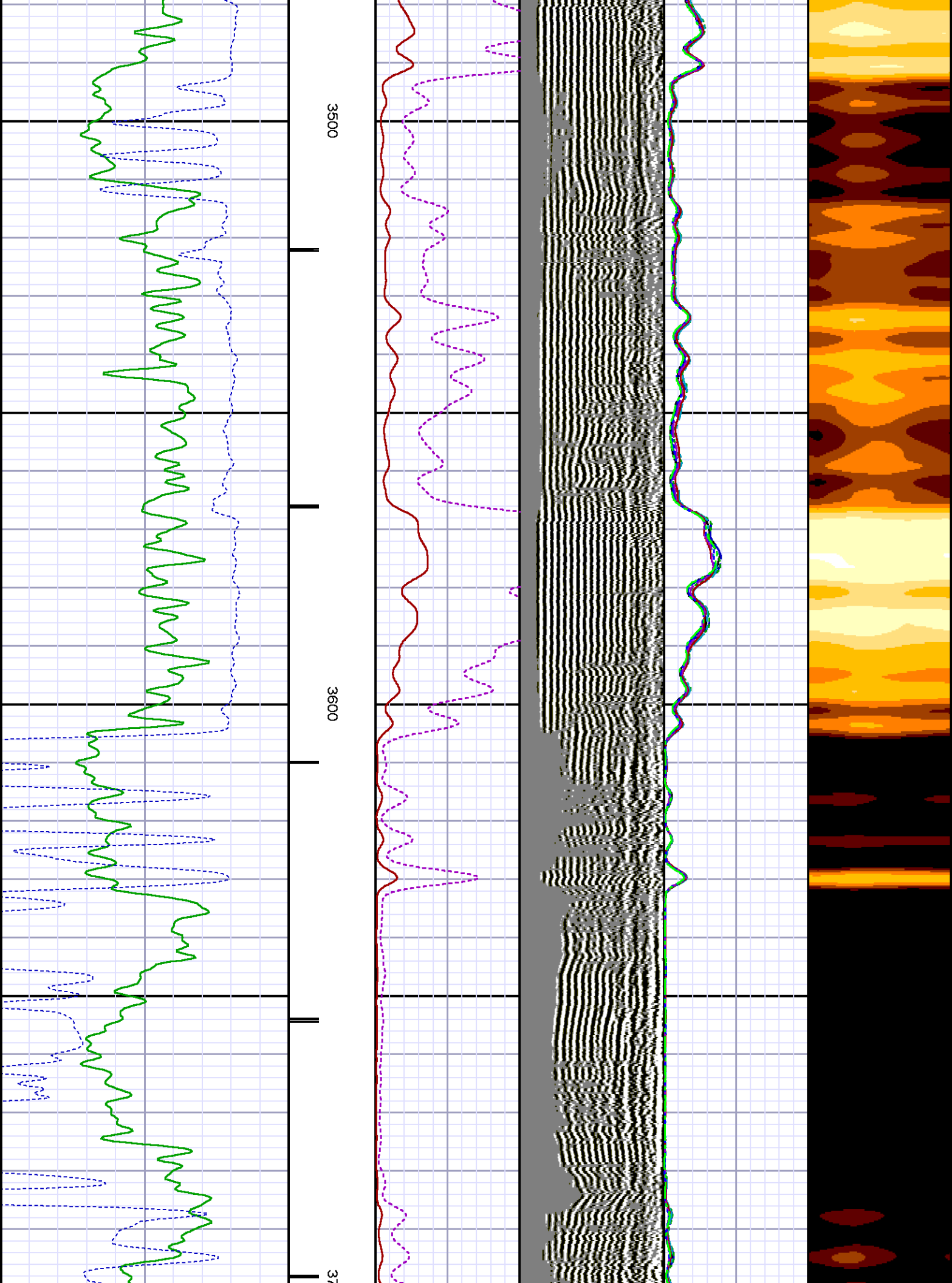


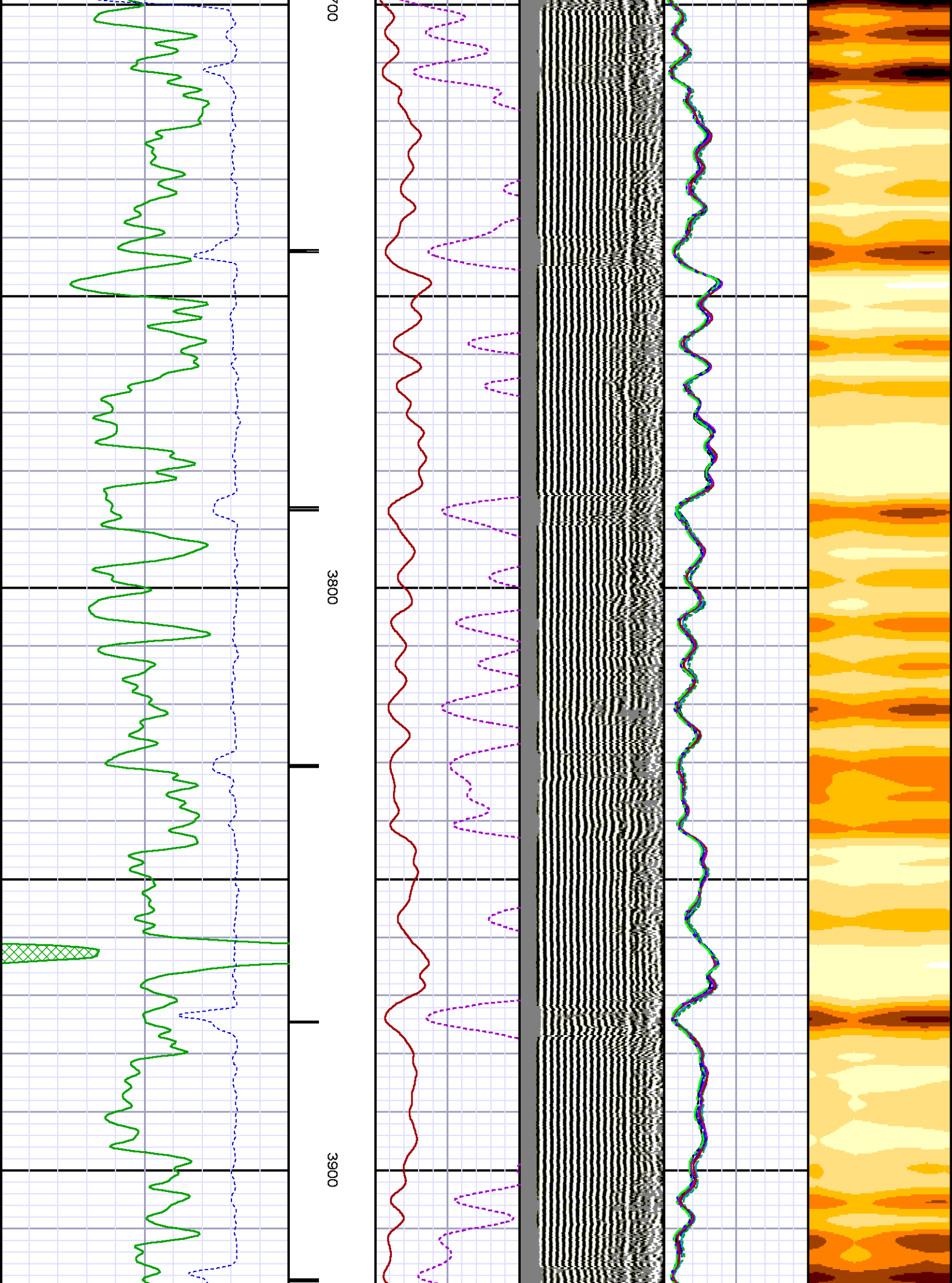


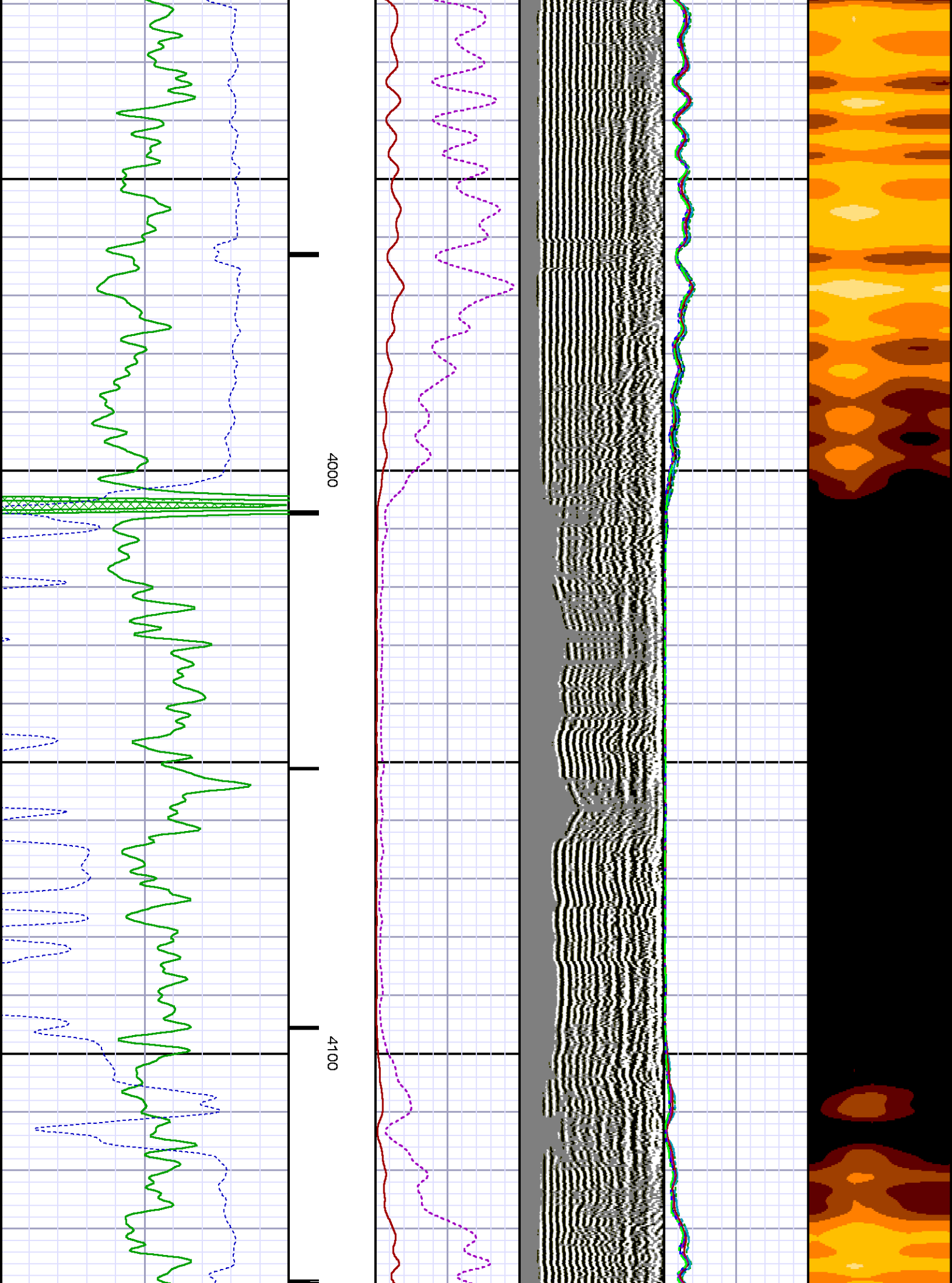


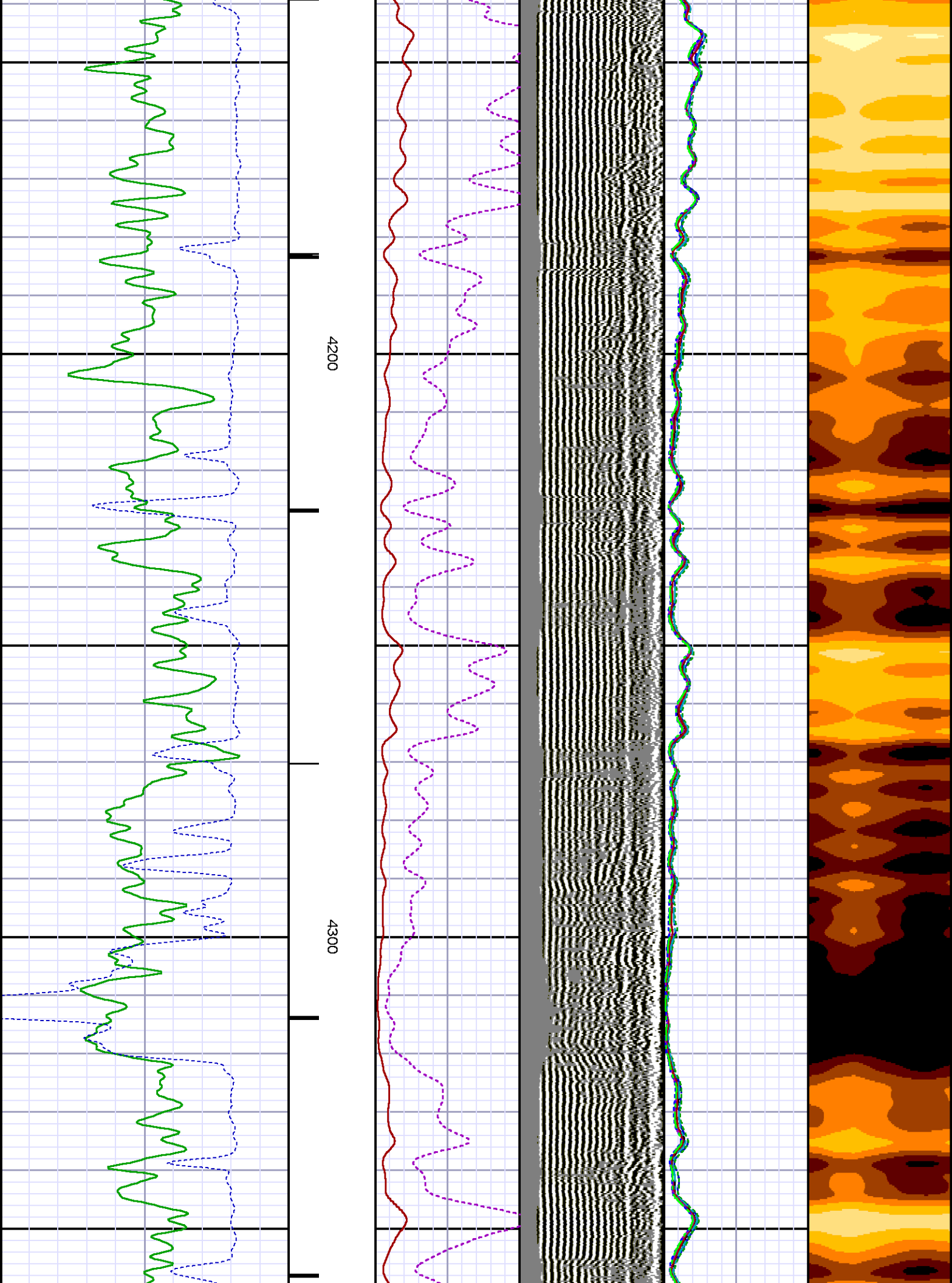


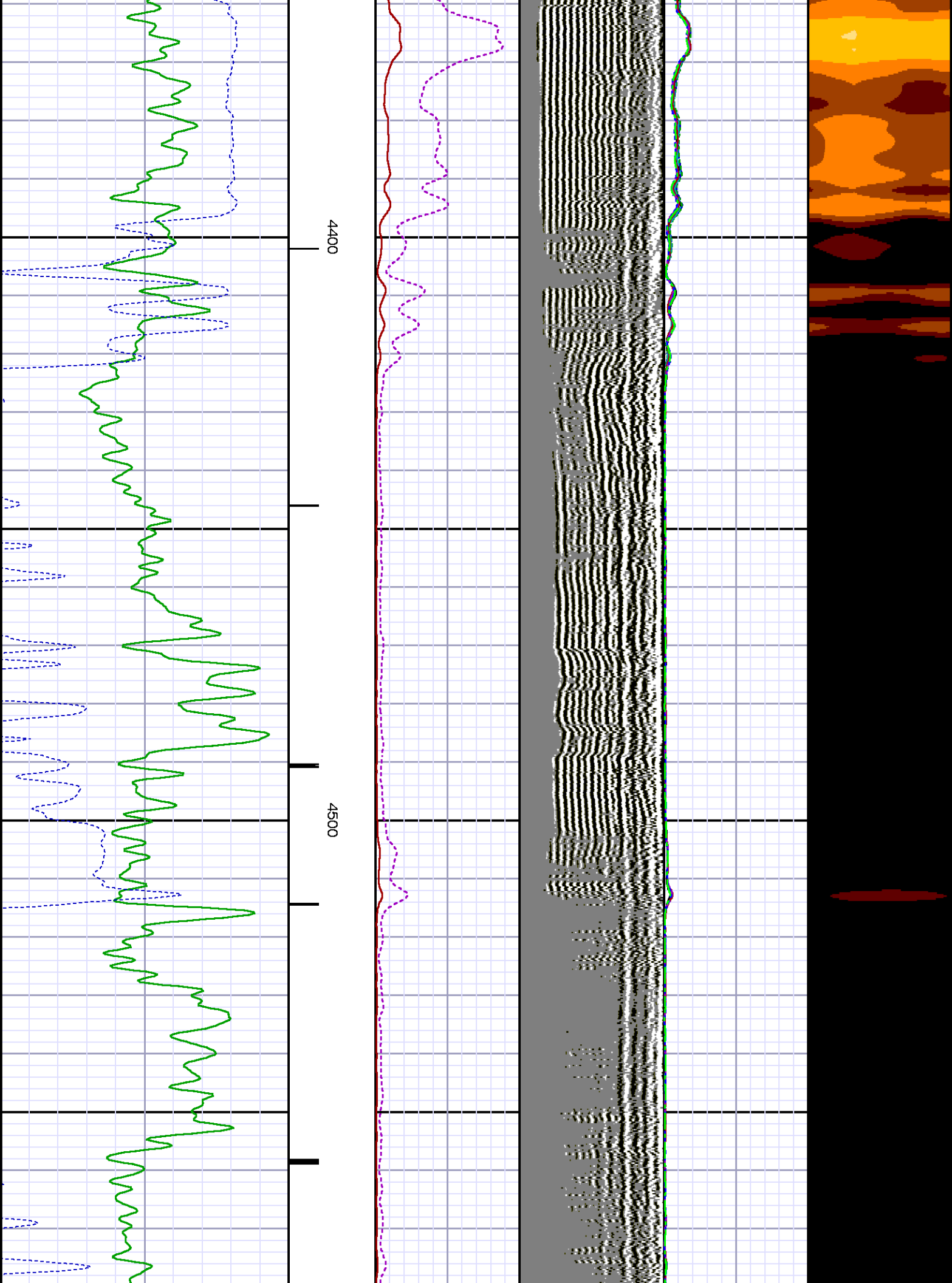


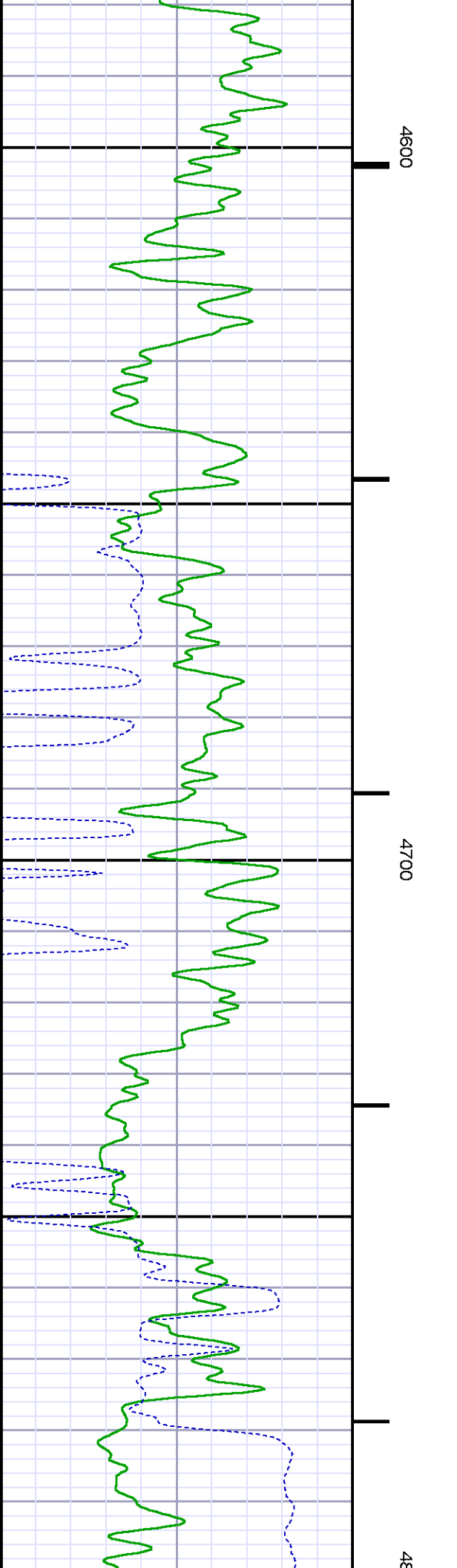
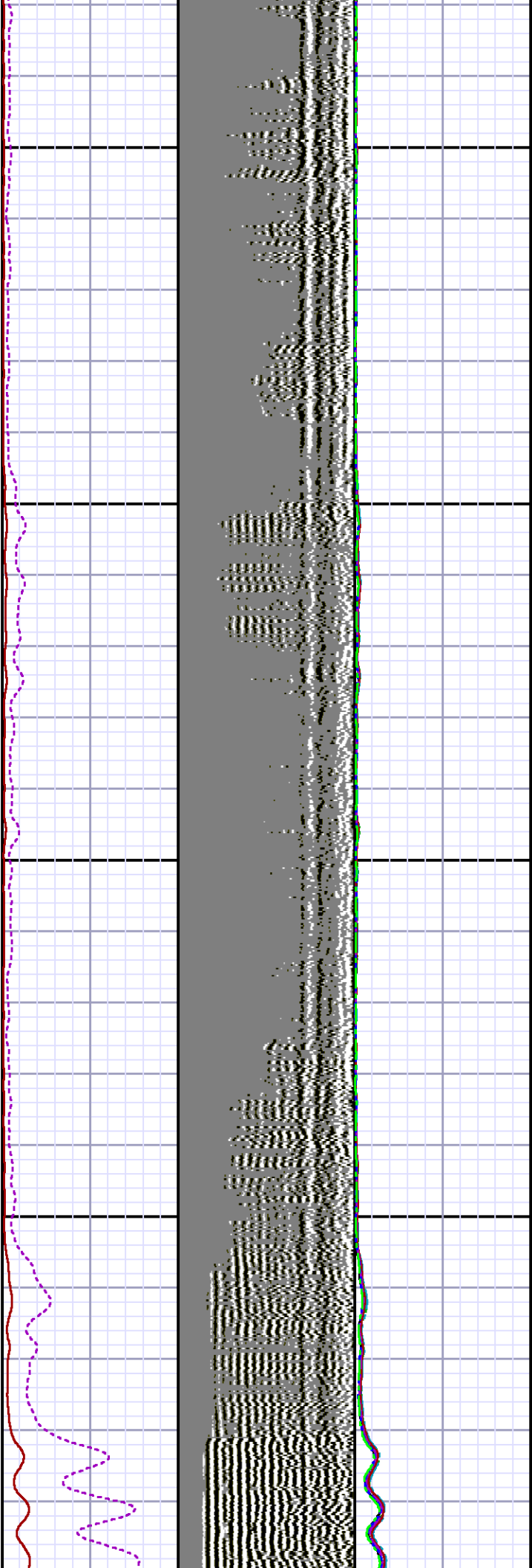
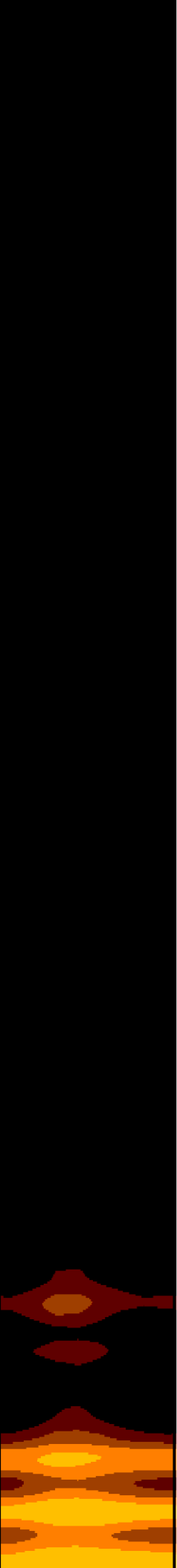


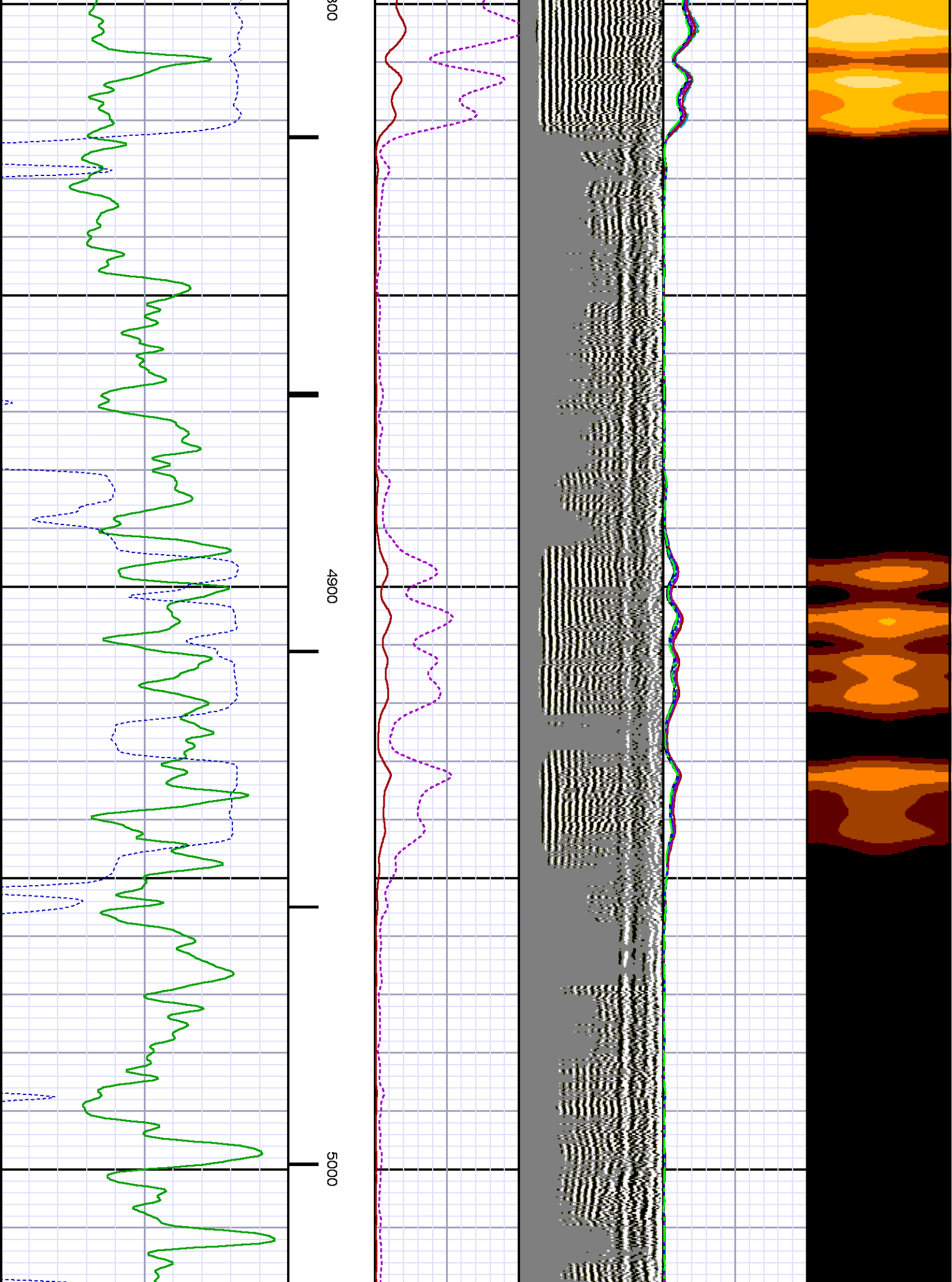


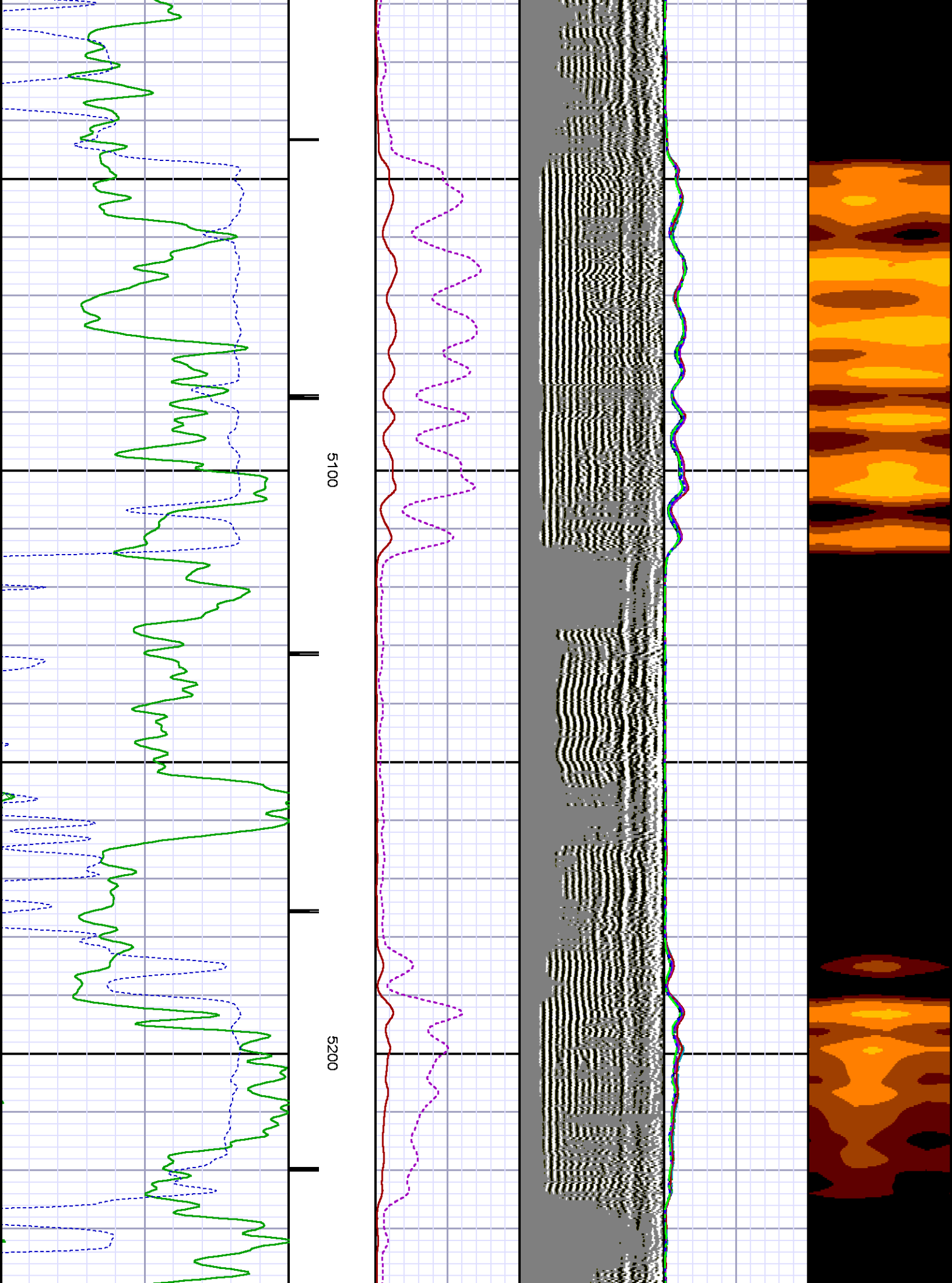


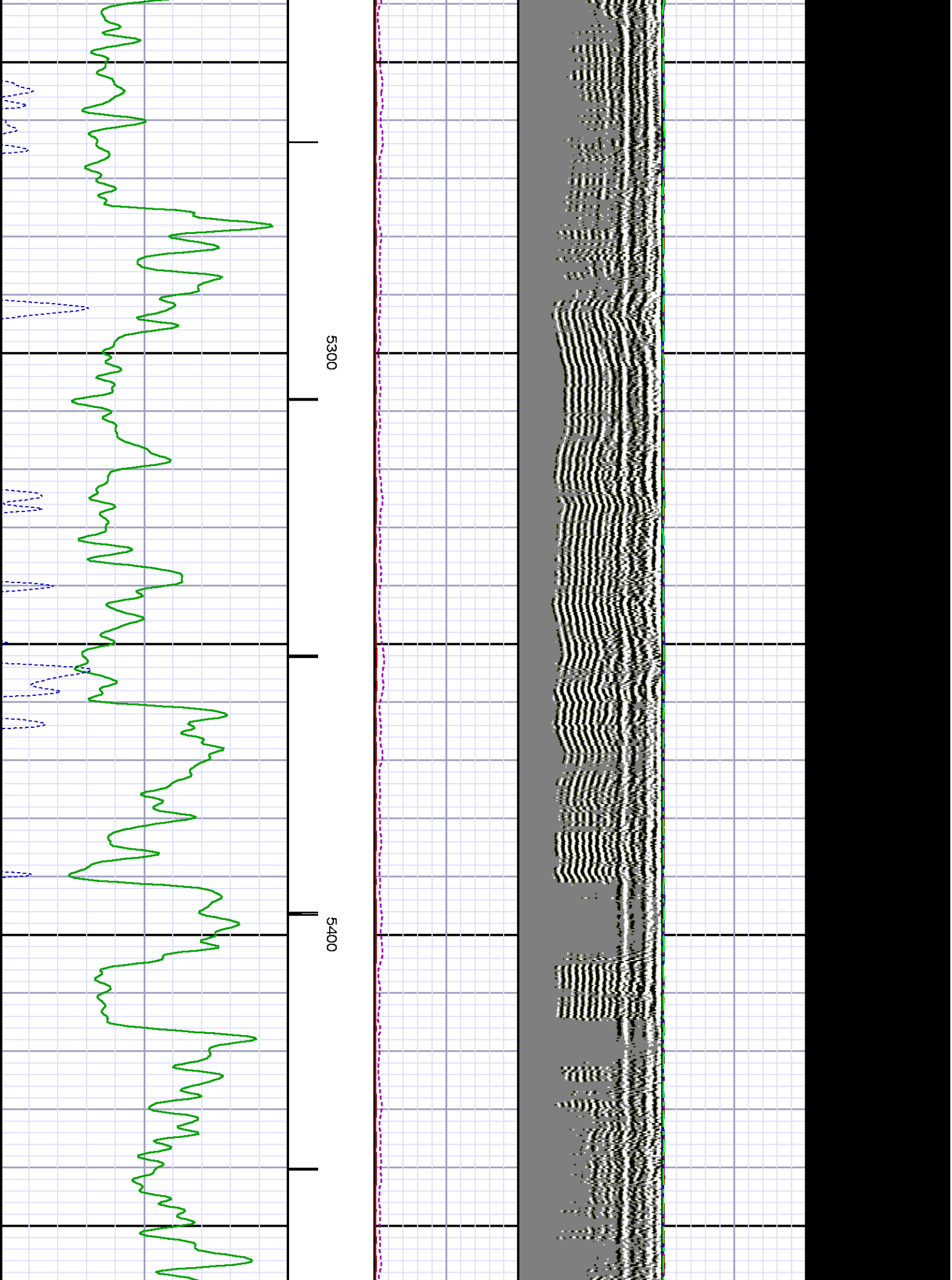


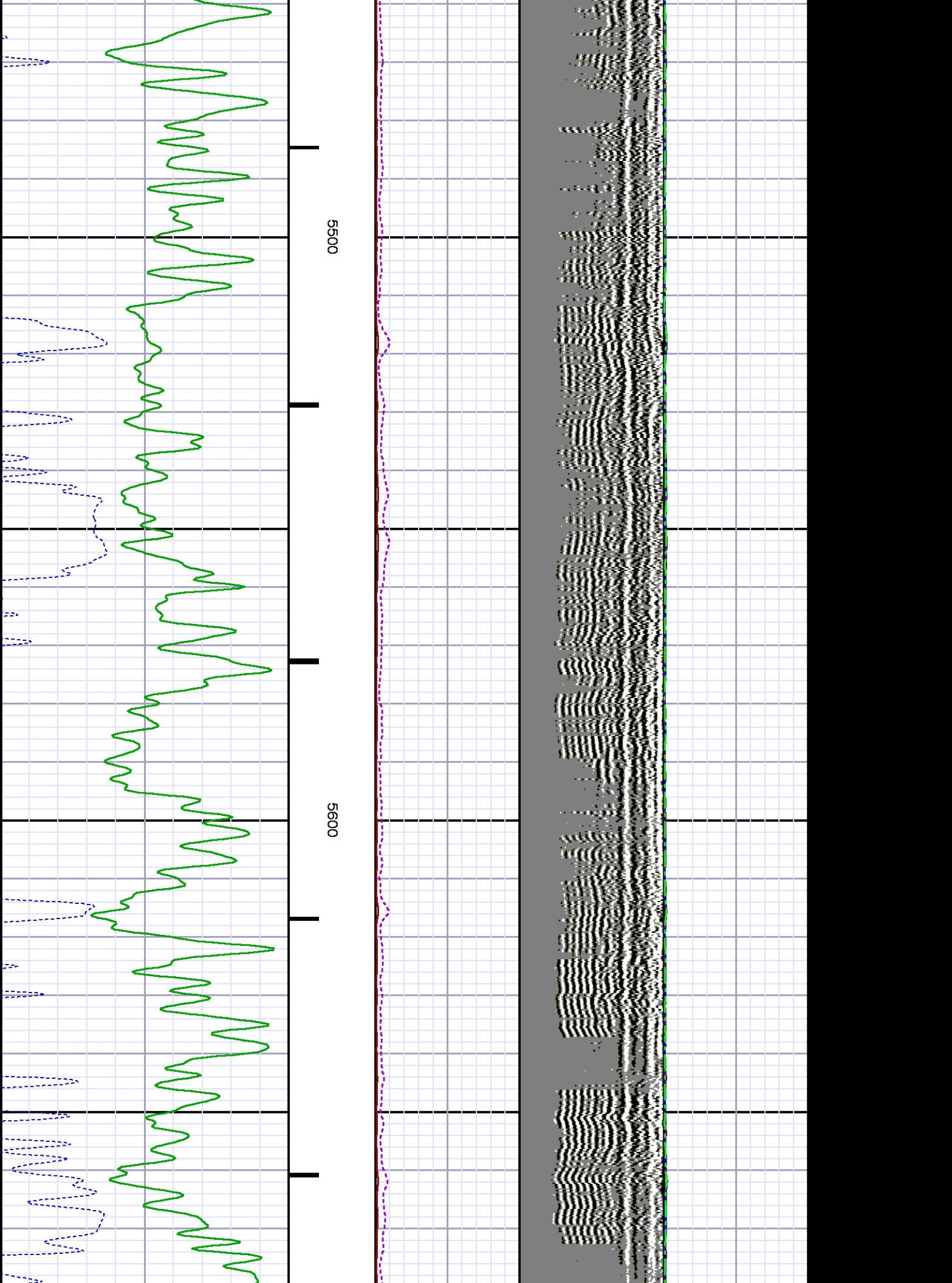


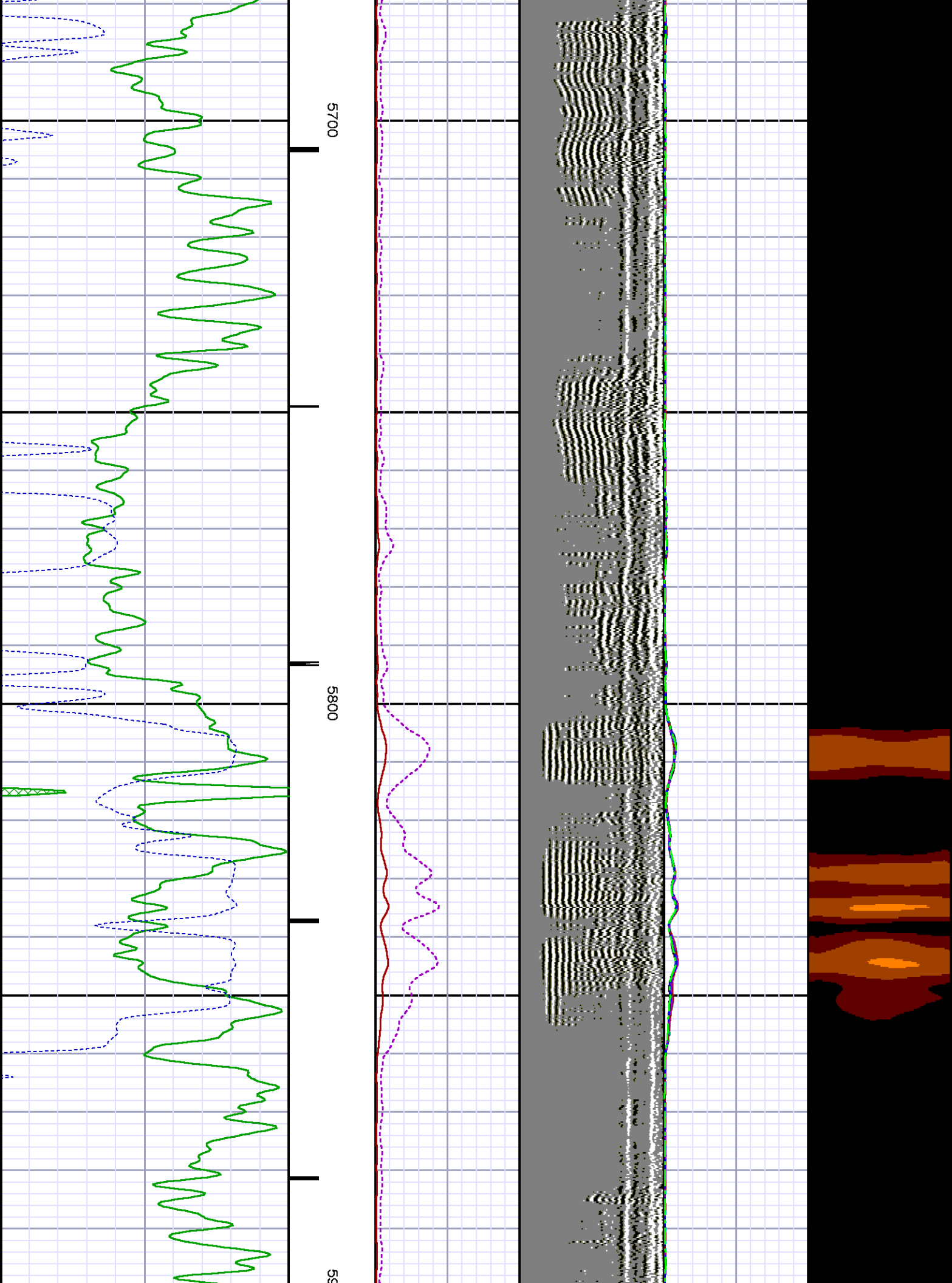


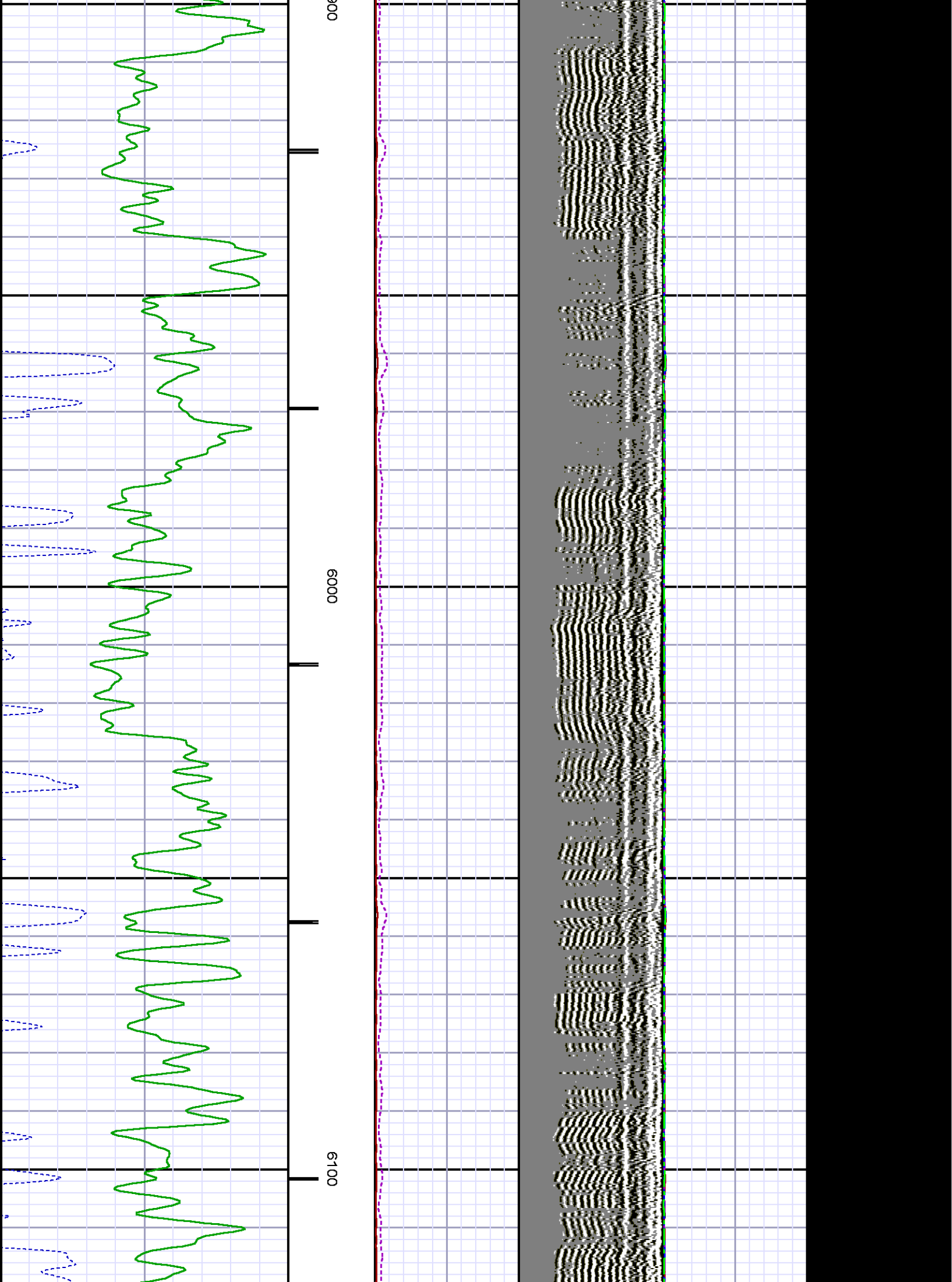


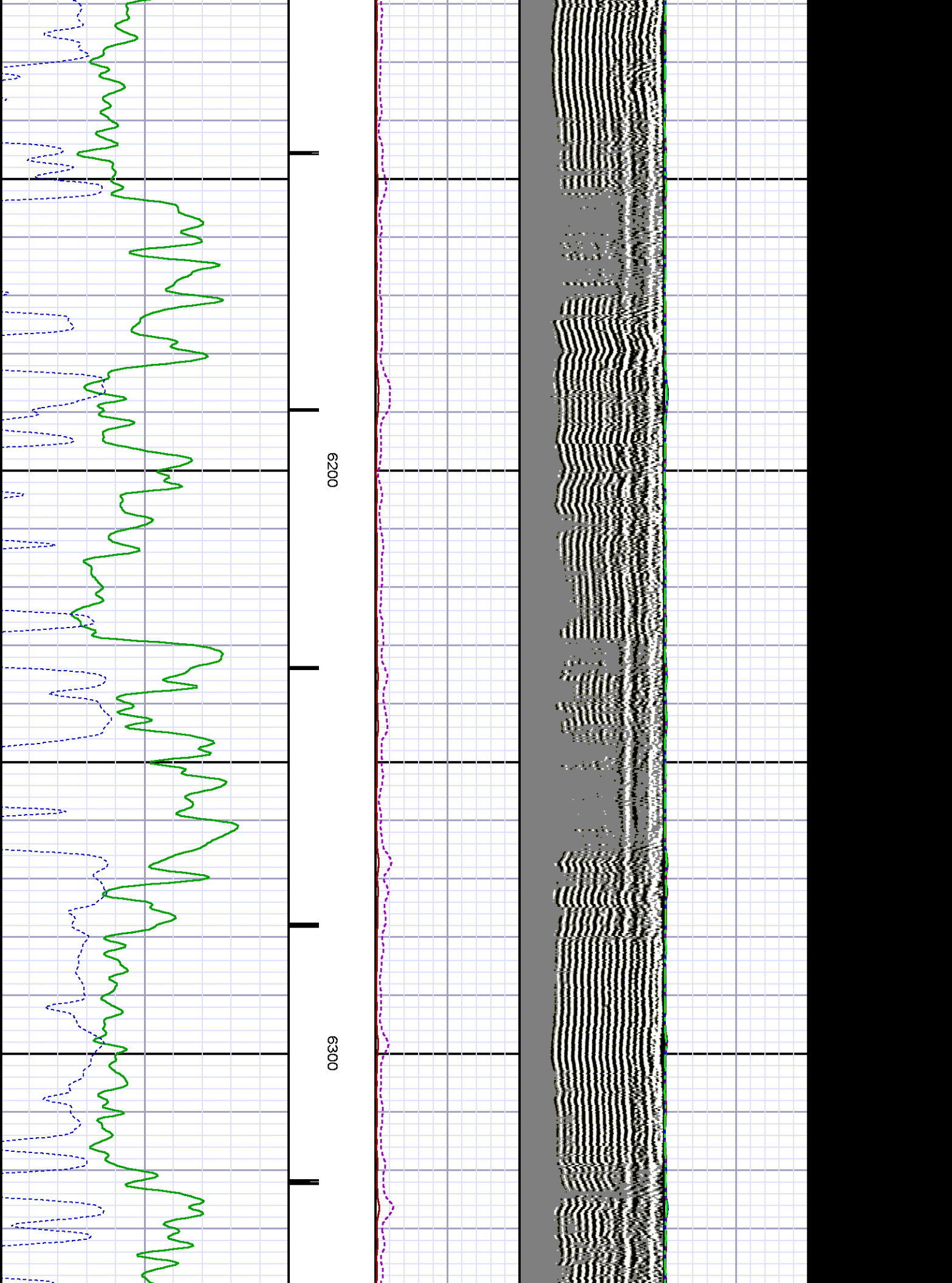


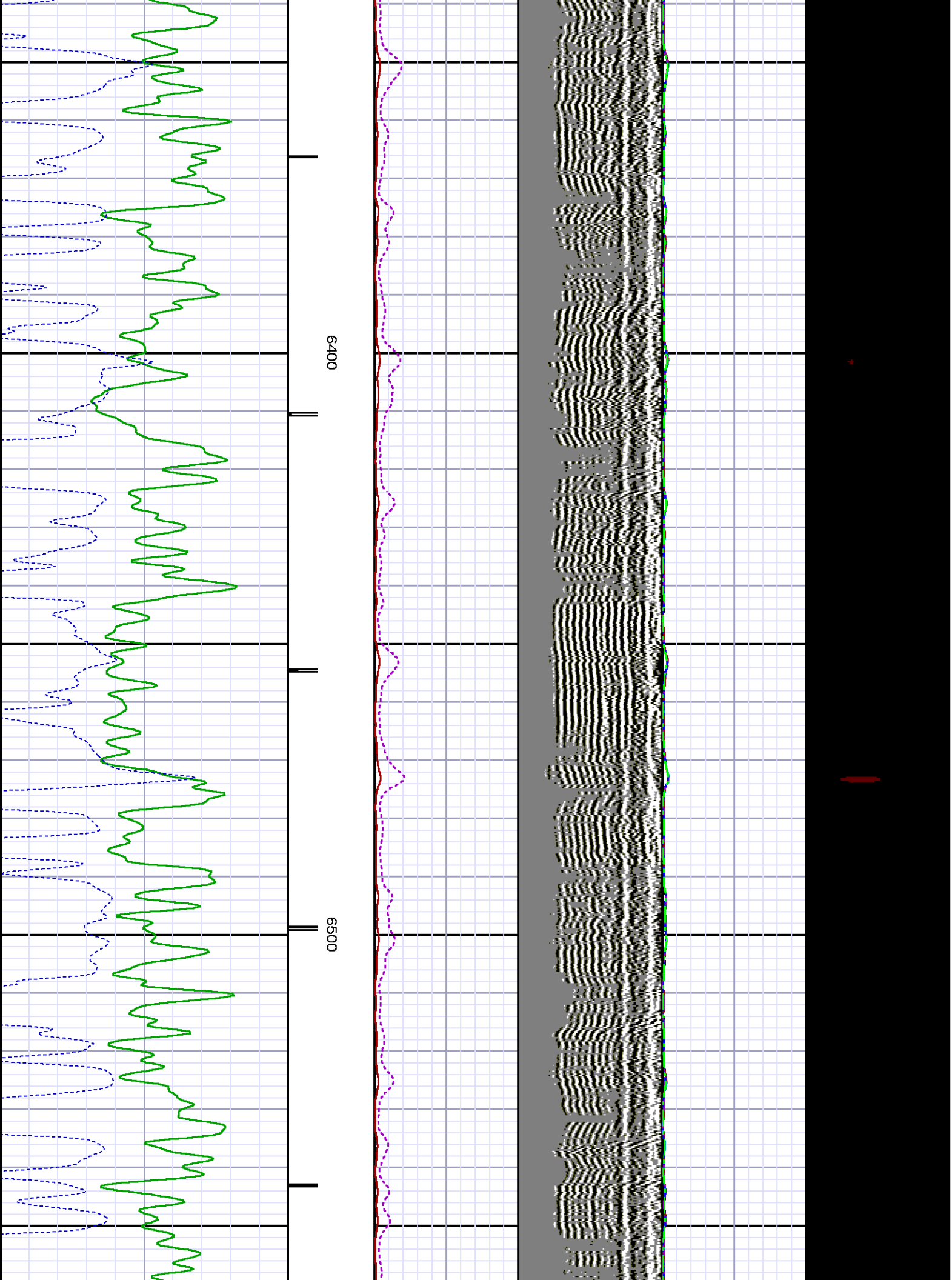


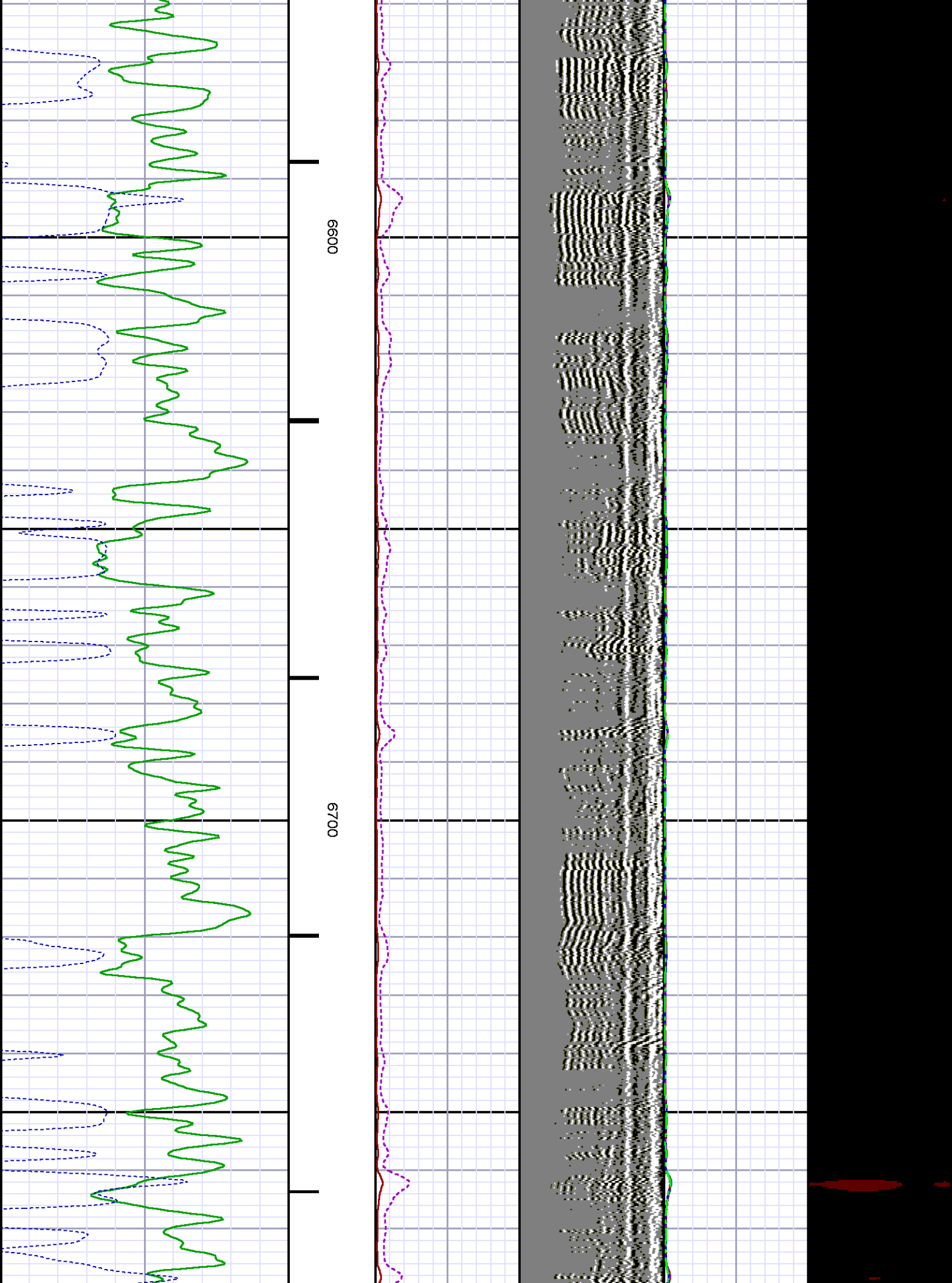


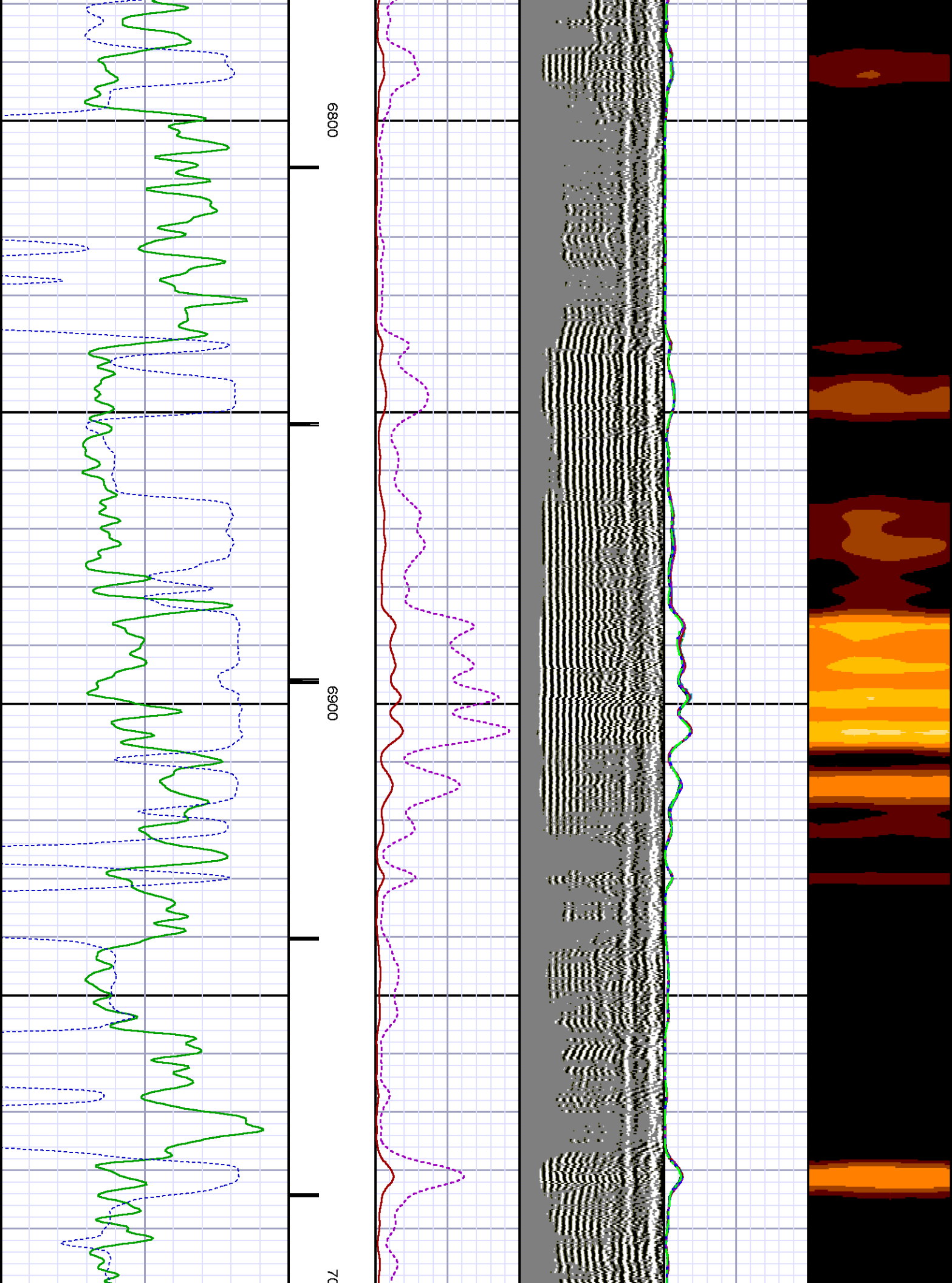


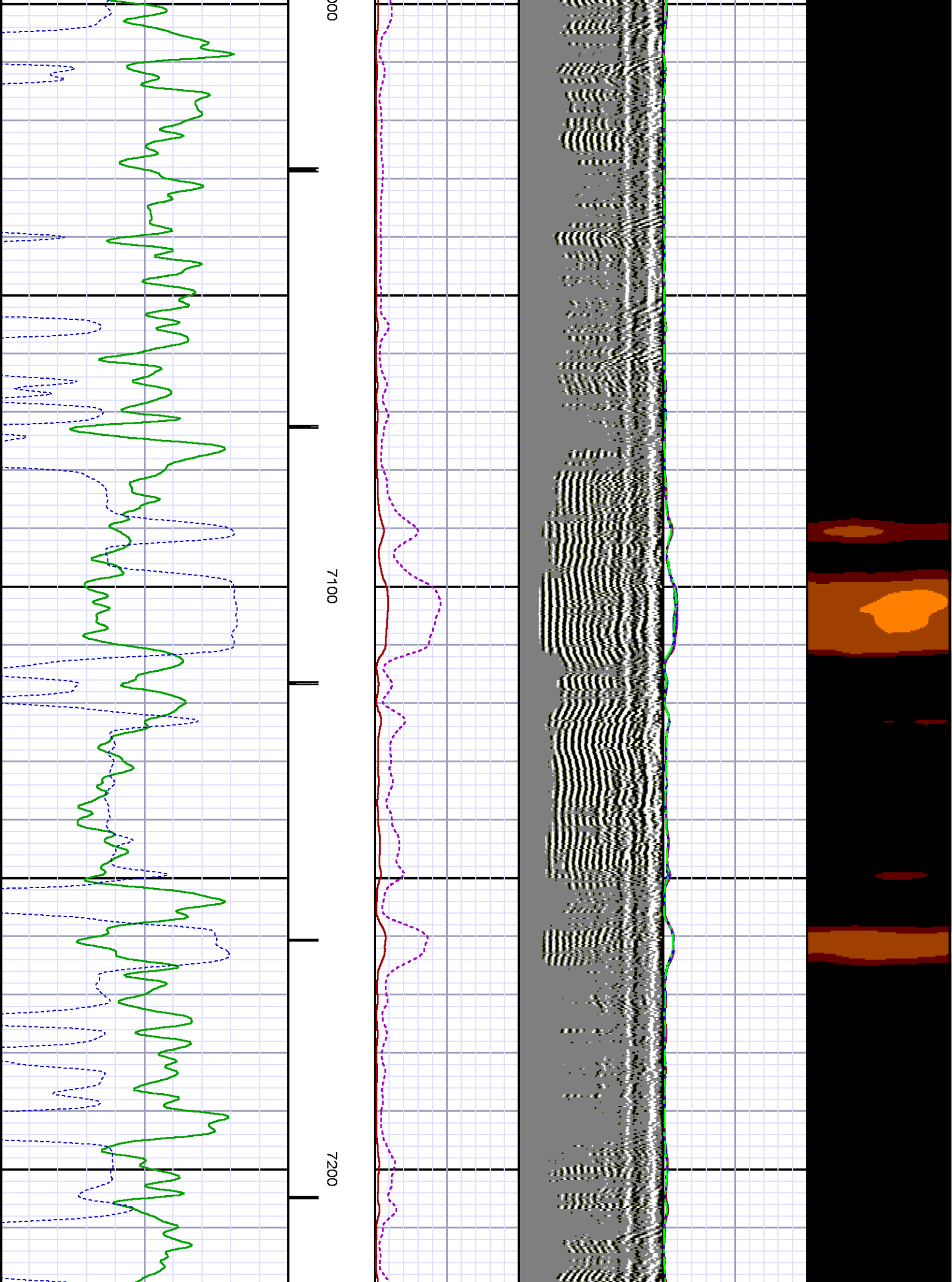


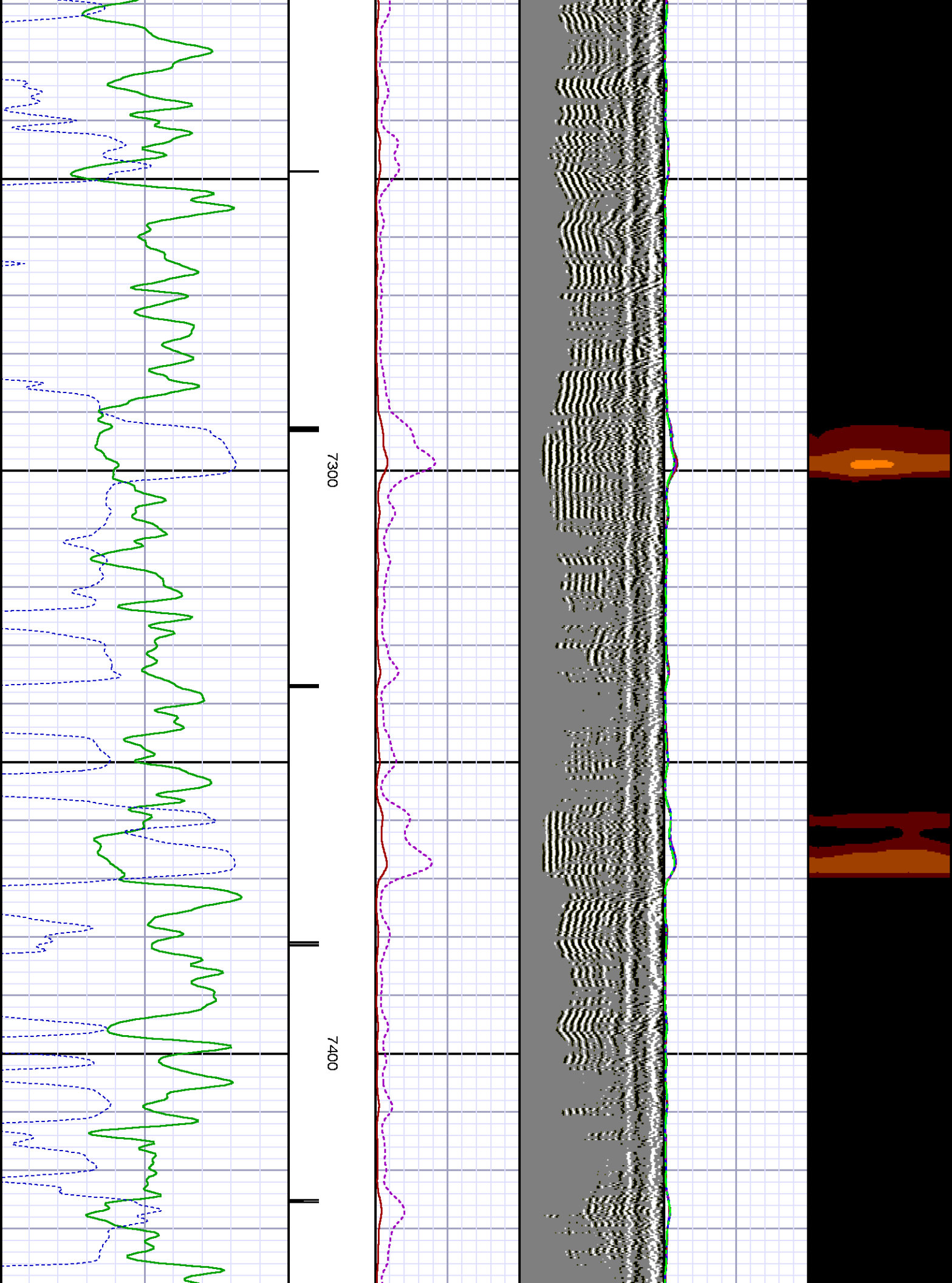


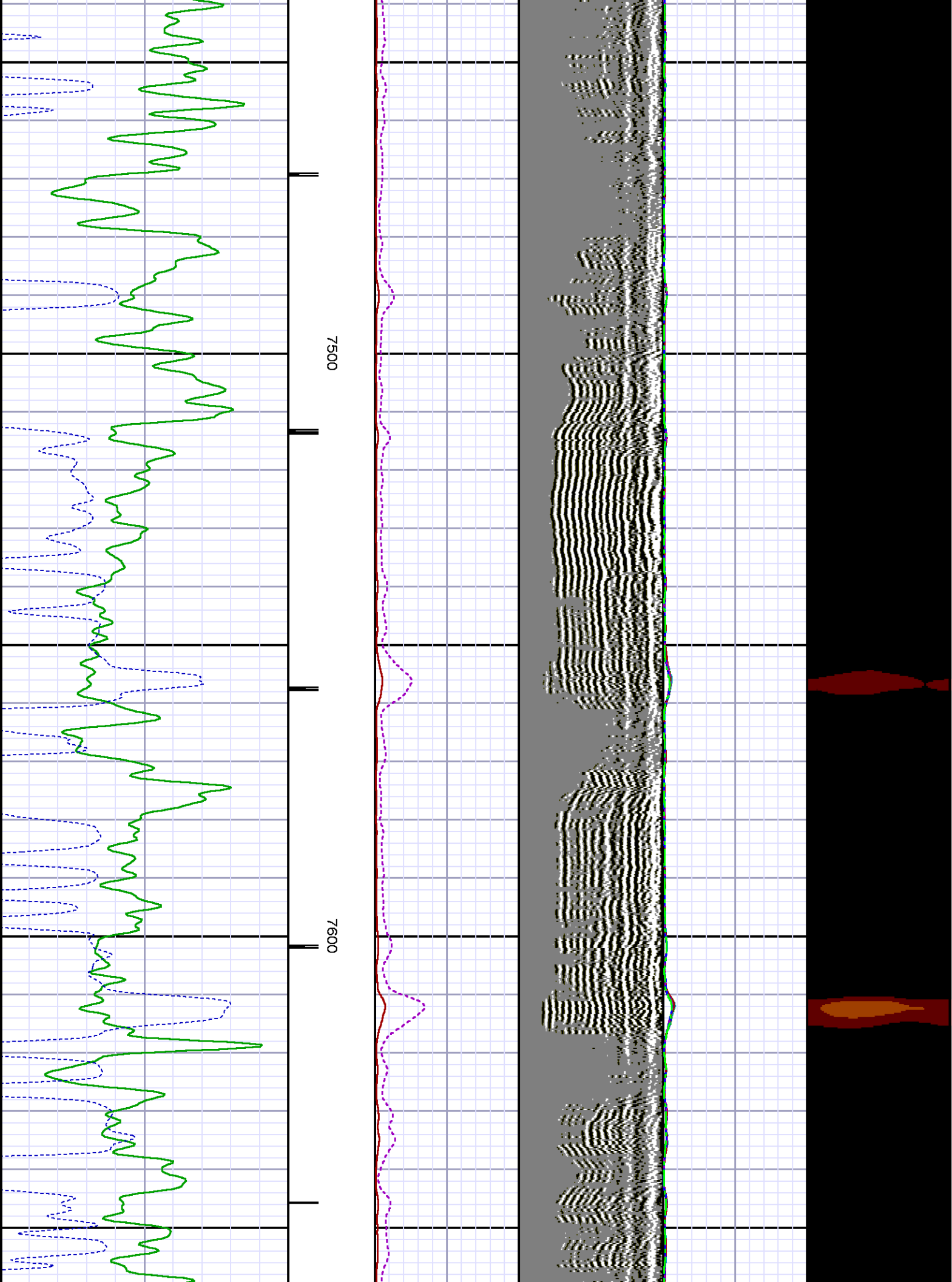


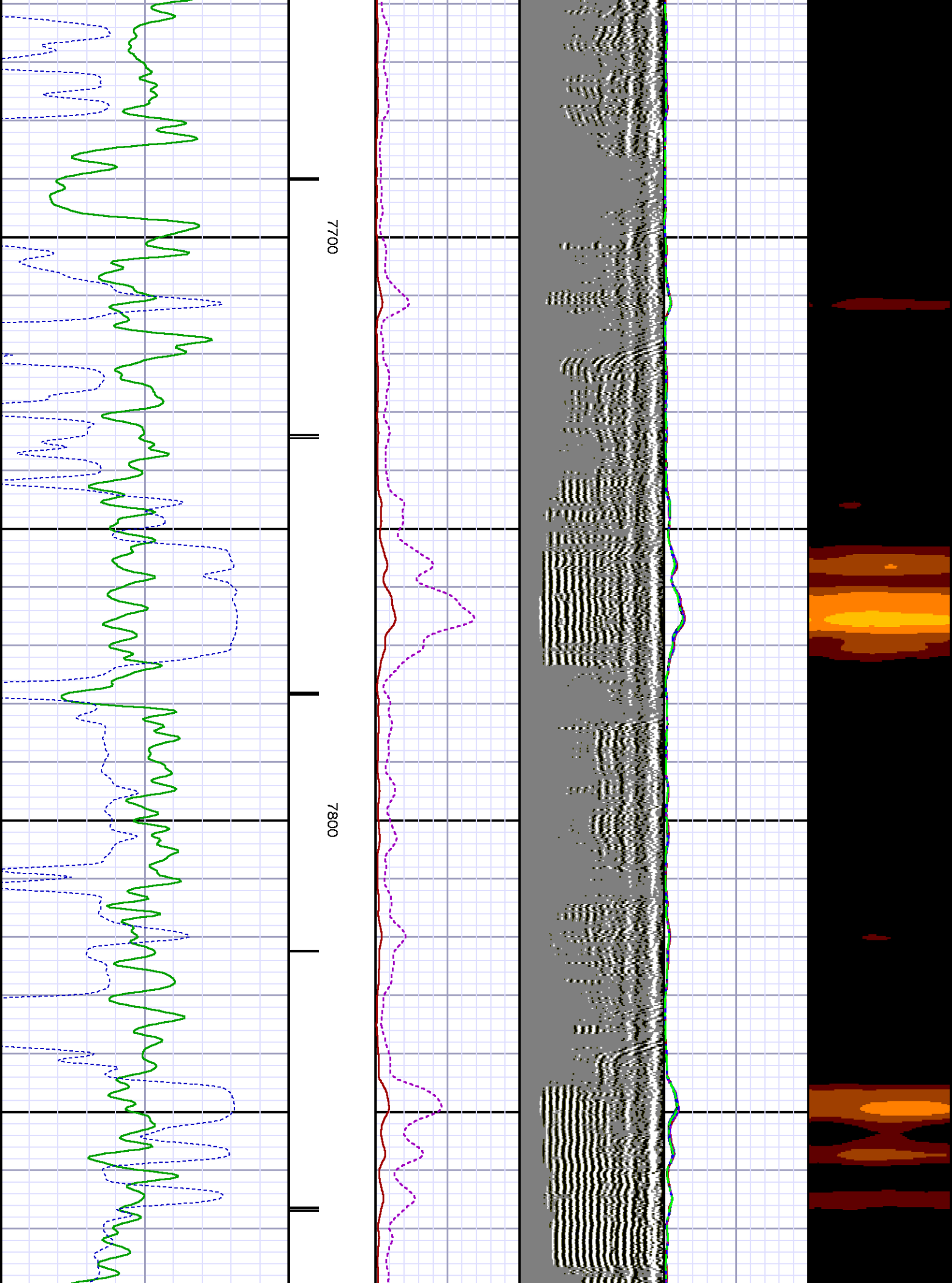


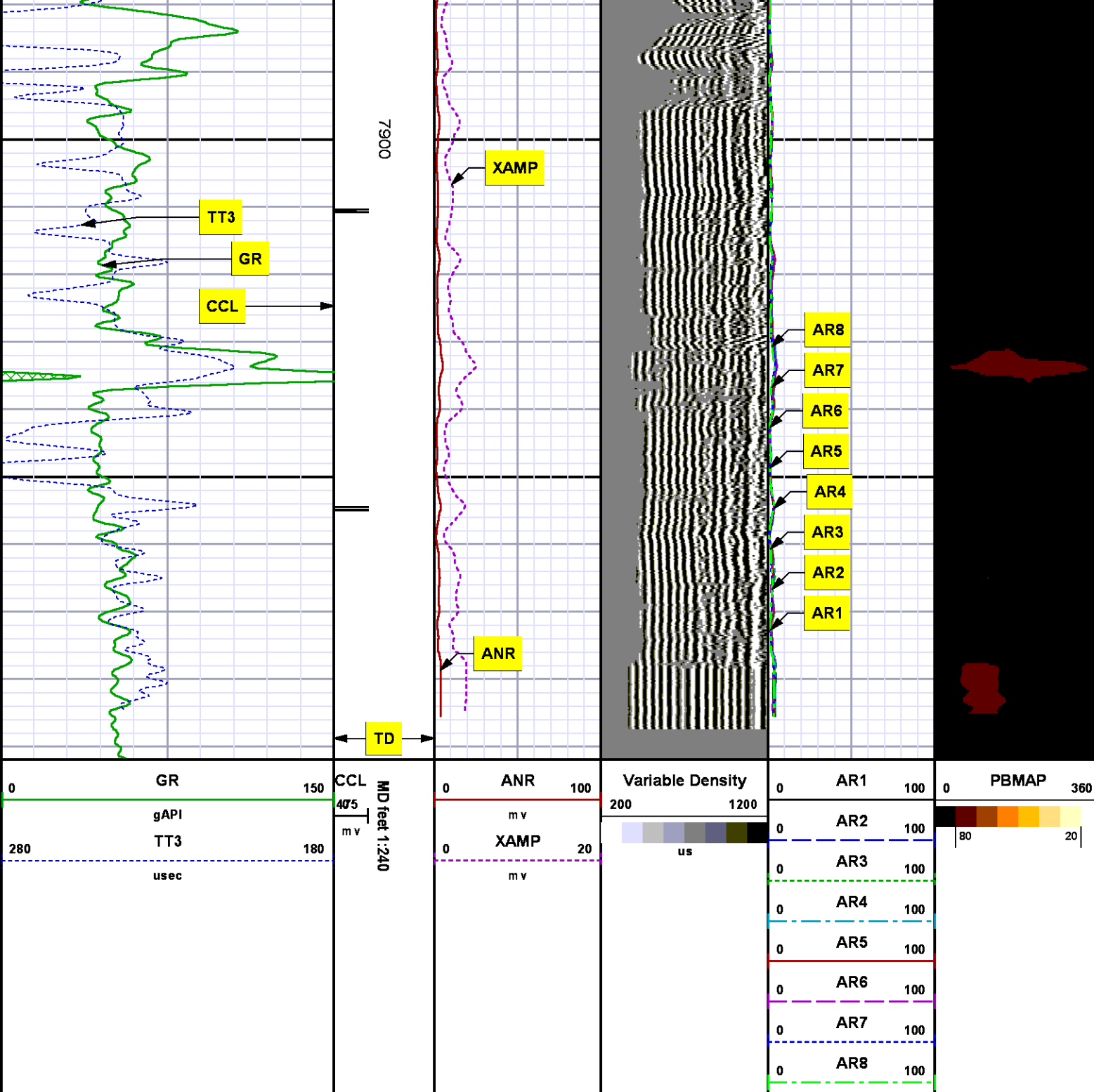












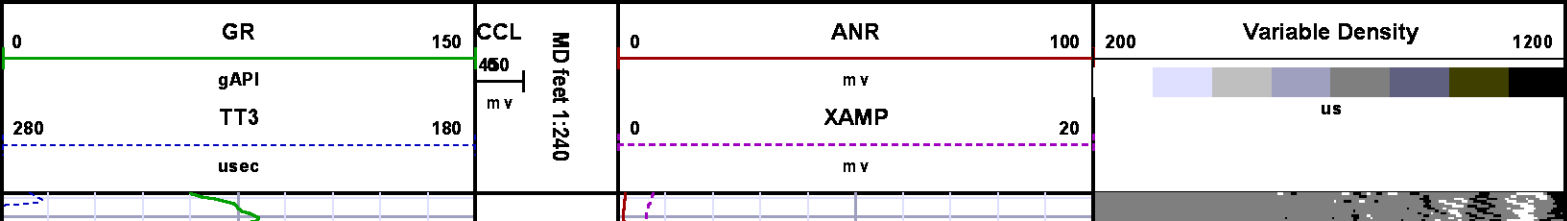
REPEAT SECTION
0 PSI

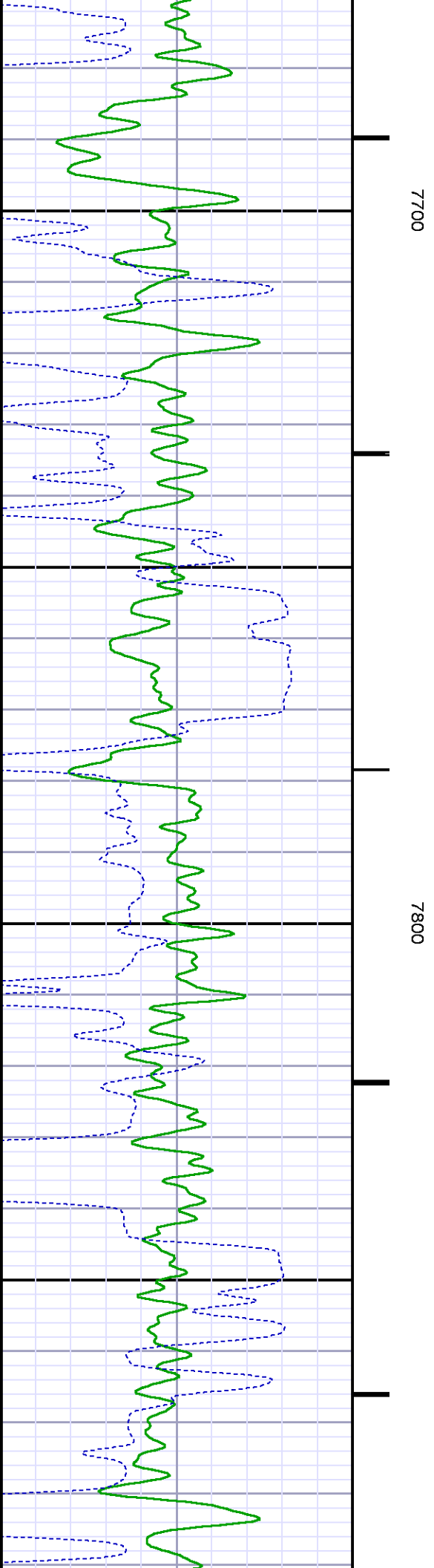
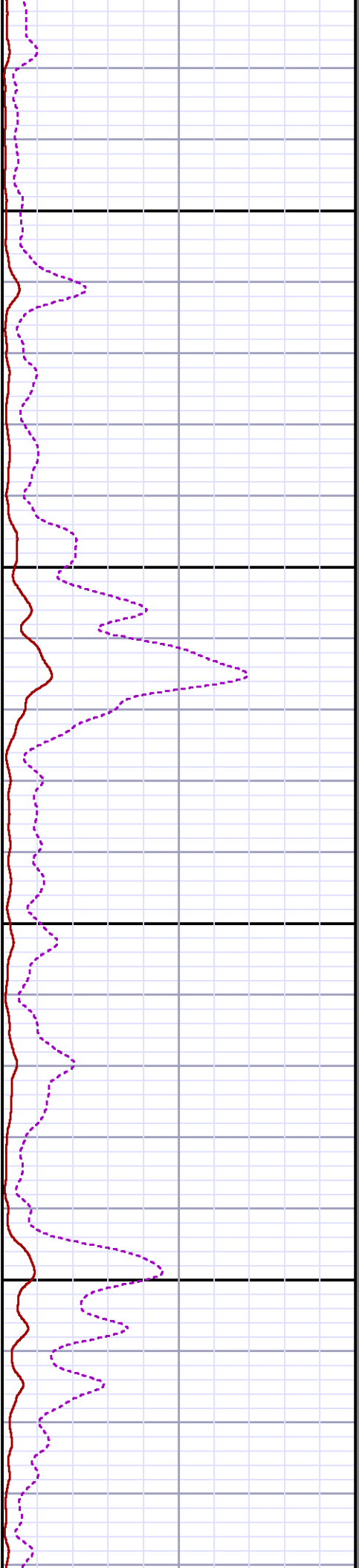
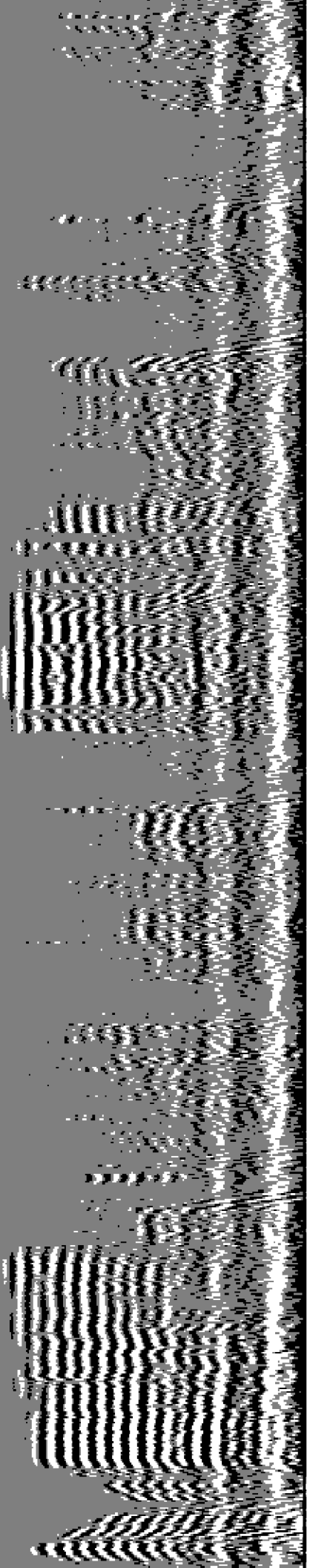
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	7667.770	8002.770
RAL	Amp Gate Start Near	200.391	usec	7667.770	8002.770
RAL	Amp Gate Start Radial	200.391	usec	7667.770	8002.770
RAL	Amp Gate Width Far	25.000	usec	7667.770	8002.770
RAL	Amp Gate Width Near	24.999	usec	7667.770	8002.770
RAL	Amp Gate Width Radial	24.999	usec	7667.770	8002.770
RAL	casing od	4.500	inches	7667.770	8002.770
RAL	casing wt	11.600	lbm/ft	7667.770	8002.770
RAL	FB Start Far	291.900	usec	7667.770	8002.770
RAL	FB Start Near	175.391	usec	7667.770	8002.770
RAL	FB Start Radial	175.391	usec	7667.770	8002.770
RAL	FB Thresh Far	10.000	mv	7667.770	8002.770
RAL	FB Thresh Near	4.000	mv	7667.770	8002.770
RAL	FB Thresh Radial	4.000	mv	7667.770	8002.770
RAL	Fluid Travel Time	200.000	usec/ft	7667.770	8002.770

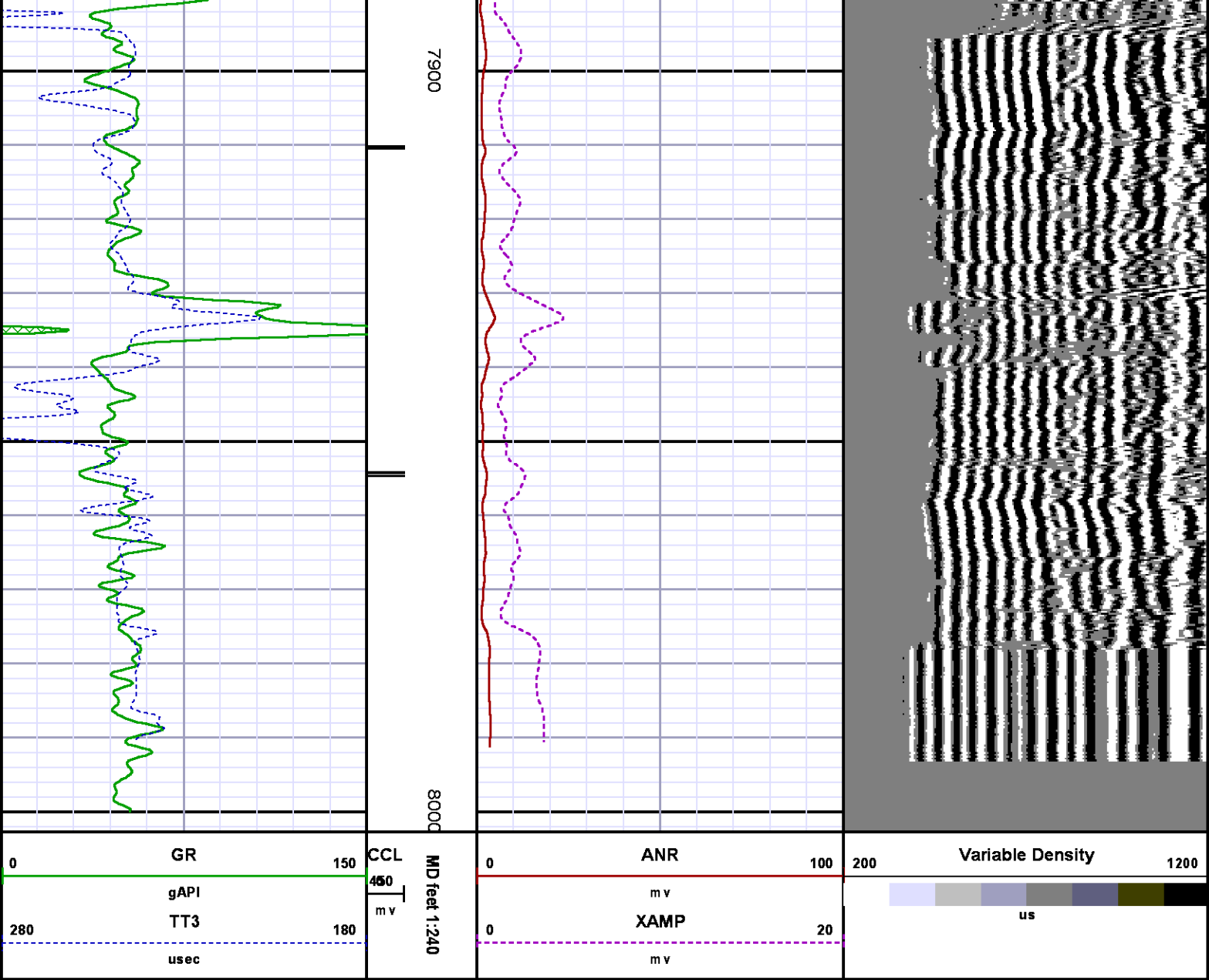
DEPTH OFFSETS
(for Acquired Curves)

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

Created by : RAL, v4.8.008
Plotted by : PlotMgr, v5.4.504
Company : WPX ENERGY
Well : WPX ENERGY RWF 42-4
File Name : d:\welldata\wpx energy\rwf 42-4\42cbl\repeat2.xtf
Mode : PlotMgr 5.4.504
Interval : 7667.52 - 8002.77 feet UP
Created : 10/26/2013 3:32:03 PM







CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP\495FR_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sat Oct 26 12:32:52 2013 TOOL SERIES: 1426XA ASSET: 495 SEQ: FR

Tool Delay [usec]	-56.00	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	218	216	30	166	25	-0.389	100.00	0.14
3 Ft. Receiver	216	216	30	166	19	-2.298	100.00	0.14
5 Ft. Receiver	327	325	30	270	10	-1.800	150.00	0.15
Radial #1	218	216	30	166	25	1.089	100.00	0.14
Radial #2	217	216	30	166	25	1.421	100.00	0.14
Radial #3	216	216	30	166	25	-0.253	100.00	0.14
Radial #4	215	216	30	166	25	-0.613	100.00	0.14
Radial #5	215	216	30	166	25	-1.404	100.00	0.14
Radial #6	215	216	30	166	25	-2.353	100.00	0.14
Radial #7	216	216	30	166	25	-0.944	100.00	0.14
Radial #8	218	216	30	166	25	-1.044	100.00	0.14

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD495FR_fid.cal

WELLSITE CALIBRATION SUMMARY							
DATE/TIME PERFORMED:		Sat Oct 26 12:36:00 2013		TOOL SERIES:		1426XA ASSET: 495 SEQ: FR	
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	-0.063	0.000	1.00	100.000	
3 Ft. Receiver	200	25	-0.326				
5 Ft. Receiver	305	25	-0.408				
Radial #1	200	25	-0.318				
Radial #2	200	25	-0.193				
Radial #3	200	25	-0.260				
Radial #4	200	25	-0.393				
Radial #5	200	25	-0.363				
Radial #6	200	25	-0.317				
Radial #7	200	25	-0.247				
Radial #8	200	25	-0.180				

GAMMA RAY

Calibration File: C:\case\calver\GRI209TN.cal

CALIBRATION SUMMARY						
DATE/TIME PERFORMED:		Sat Oct 26 12:46:37 2013		TOOL SERIES:		1355XA ASSET: 209 SEQ: TN
Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]

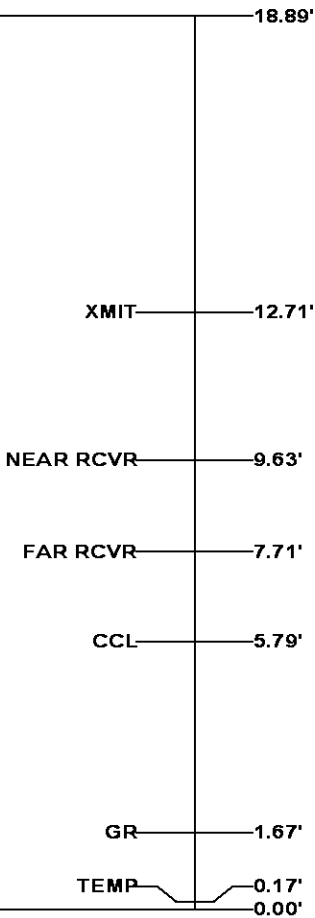
S2K	WA-612	128.18	490.09	0.511	65.52	250.52	185.00
Verification File: C:\case\calver\GR\209TN.VP							
PRIMARY LOG VERIFICATION							
DATE/TIME PERFORMED:		Sat Oct 26 12:47:47 2013		TOOL SERIES:	1355XA	ASSET:	209 SEQ: TN
Calibrator #	Background	Calibrator On	Multiplicative	Background	Calibrator On	Differential	
	[cps]	[cps]		[api]	[api]	[api]	
S2K WA-612	132.73	483.86	0.511	67.85	247.34	179.49	

TOOL DIAGRAM

OTA SHORT CABLE HEAD

PROBE 2 3/4 DUAL RECEIVER RADII	
Series	1426XA
Mnemonic	PROB
Diameter	2.75"
Length	11.17'
Measure Point	0.75' FAR RCVR
Measure Point	2.67' NEAR RCVR
Measure Point	5.75' XMIT
Temp Rating	350.00 °F
Press Rating	18000.00 PSI

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



Total Length: 18.89'
Total Weight: Not Available
Max Diameter: 0' 2.75"



Company

WPX ENERGY

File No:

<div>BAKER HUGHES</div> <div>Baker Atlas</div> <div>CASE</div>	Well	WPX ENERGY RWF 42-4			CH078601	
	Field	RULISON			API No:	
	County	GARFIELD	State	CO	05045220880000	
	Location			Elevations		
	SHL: 415' FNL & 1674' FEL			KB	5820 ft	
	BHL: 1154' FNL & 1293' FEL			DF		
				GL	5794 ft	
	SEC	4	TWP	7S	RGE	94W
				4 7S 94W		
				RMV 108-4 PAD		
				NABORS 574		