



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: CH071683	Company Well Field County	WPX ENERGY HOEPPLI RWF 43-36 RULISON GARFIELD	State COLORADO
API No: 05045215540000	Location SHL: 2578' FNL, 2577' FEL (SWNE) BHL: 1990' FSL, 735' FEL (NESE)		
36 SS 94W RWF 33-36 EAST PAD NABORS 576	SEC 36 TWP 6S RGE 94W	Other Services RPM	
Permanent Datum Log Measured From Drill Measured From	GL Elevation 6528 ft KB 6554 ft DF GL 6528 ft	Above P. D.	

Date	06/MAY/13	
Run	ONE	
Service Order	575121	
Depth Driller	9207 ft	
Depth Logger	9153 ft	
Bottom Logged Interval	9143 ft	
Top Logged Interval	26 ft	
Time Started	1100	
Time Finished	1430	
Operator Rig Time	3.5 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	233 degF	
Reference Log	NONE	
Reference Log Date	NA	
Equipment No.	4271	GRAND JCT
Recorded By	FLOYD RENEAU	
Witnessed By	BOB CADY	

- 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.

Casing Record				
Size	Weight	Grade	From	To
9.625 in	32 lbm/ft		0 ft	1133 ft
4.5 in	11.6 lbm/ft	I-80	0 ft	9207 ft

Borehole Record		
Bit Size	From	To
13.5 in	0 ft	1133 ft
8.75 in	1133 ft	9207 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 5.5 feet.
Logged with zero PSI at wellhead.
BHT = 234°F
SJ = 5832'-5853'

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1426XA	10404539	CENT
1	1	GR/CCL	1355XA	10580209	CENT

PRIMARY PRESENTATION

0 PSI

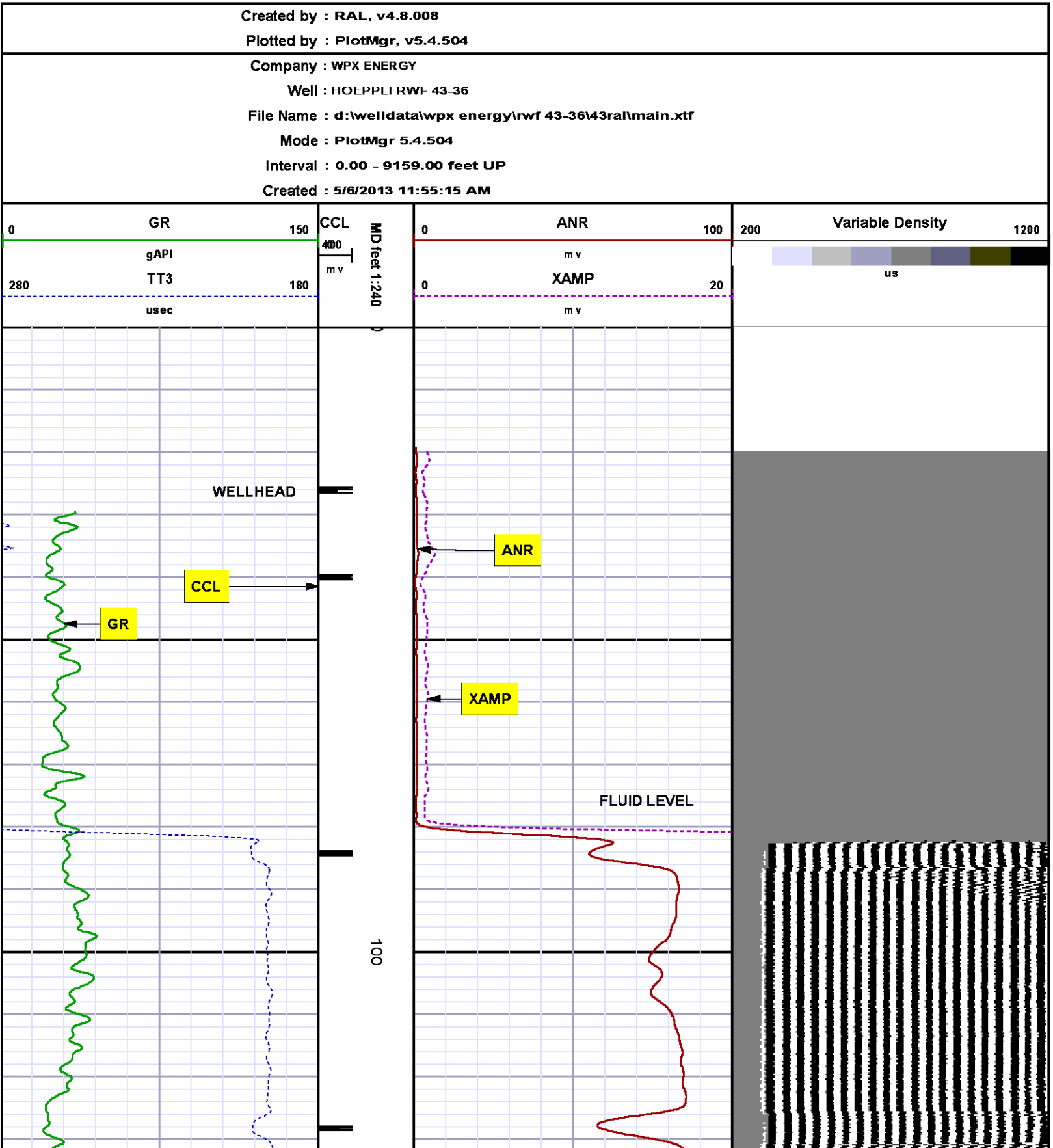
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	310.000	usec	29.718	9173.500
RAL	Amp Gate Start Near	195.000	usec	29.718	9173.500
RAL	Amp Gate Start Radial	195.000	usec	29.718	9173.500
RAL	Amp Gate Width Far	25.000	usec	29.718	9173.500
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RAL	Amp Gate Width Radial	25.000	usec	29.718	9173.500
RAL	casing od	4.500	inches	29.718	9173.500
RAL	casing wt	11.600	lbm/ft	29.718	9173.500
RAL	FB Start Far	291.900	usec	29.718	9173.500
RAL	FB Start Near	180.000	usec	29.718	9173.500
RAL	FB Start Radial	180.000	usec	29.718	9173.500
RAL	FB Thresh Far	10.000	mv	29.718	9173.500
RAL	FB Thresh Near	4.000	mv	29.718	9173.500
RAL	FB Thresh Radial	4.000	mv	29.718	9173.500
RAL	Fluid Travel Time	200.000	usec/ft	29.718	9173.093

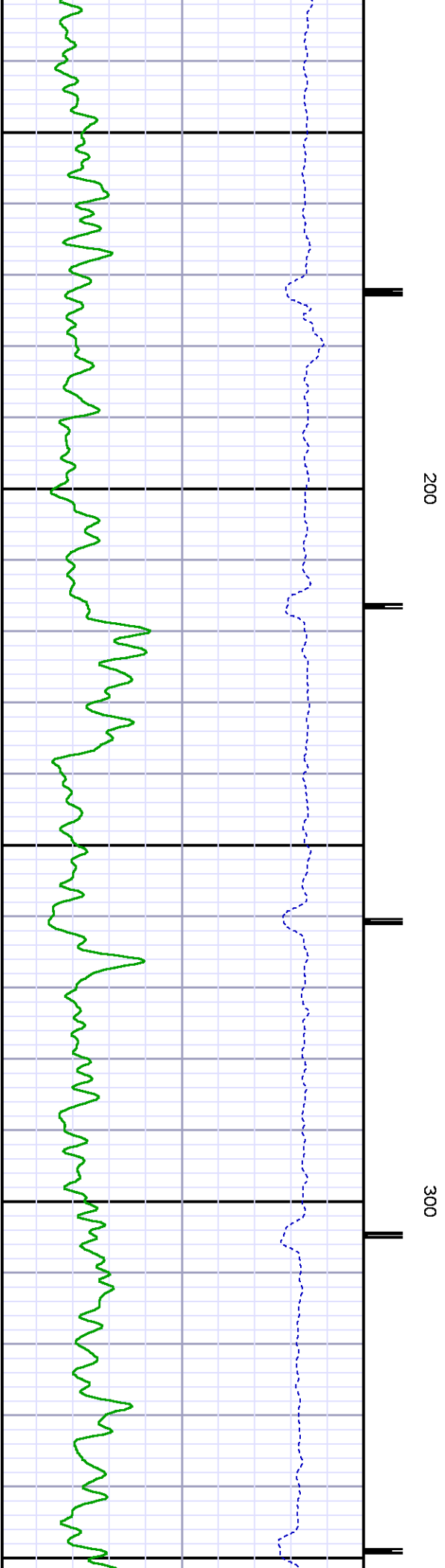
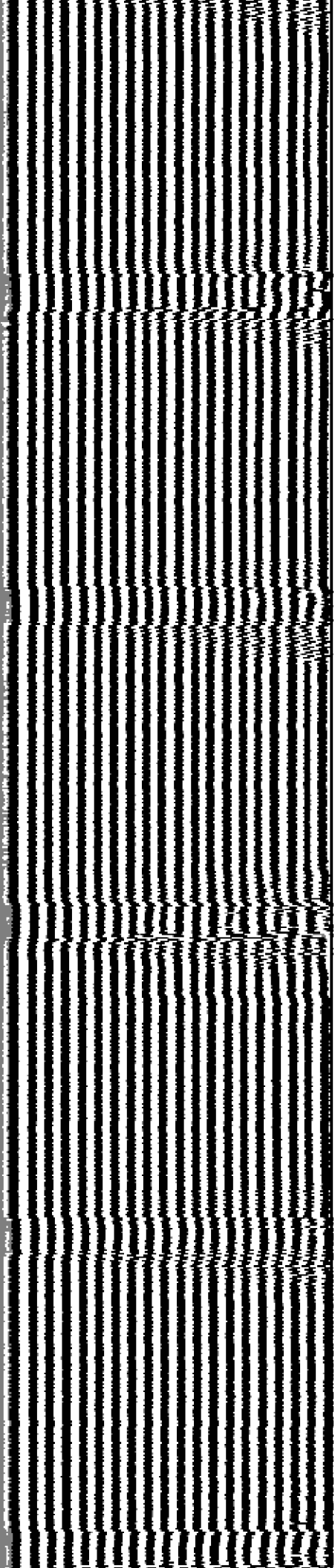
DEPTH OFFSETS

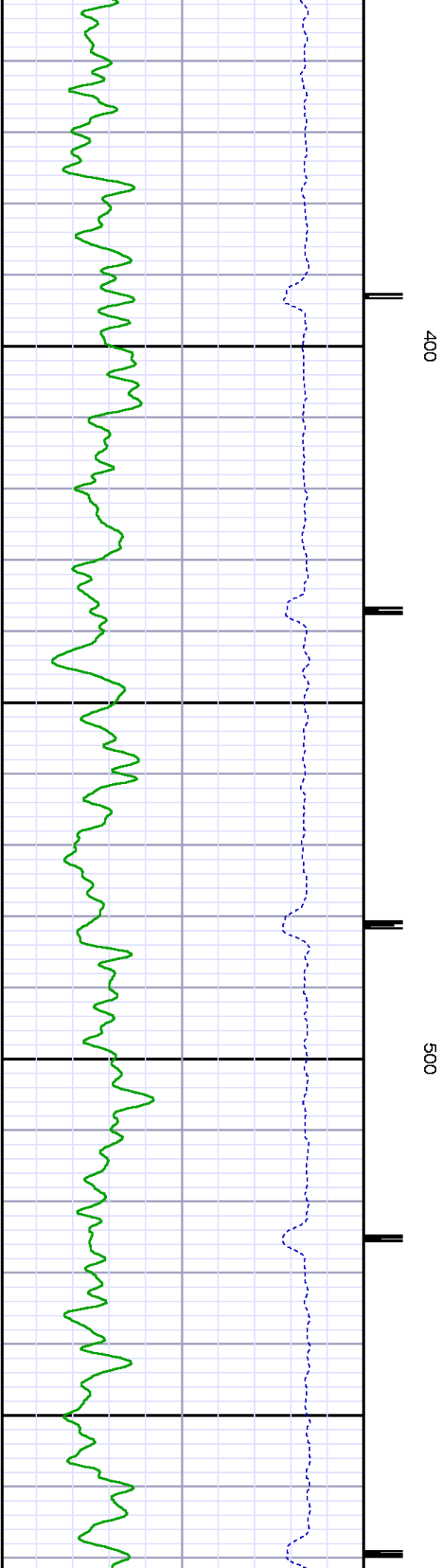
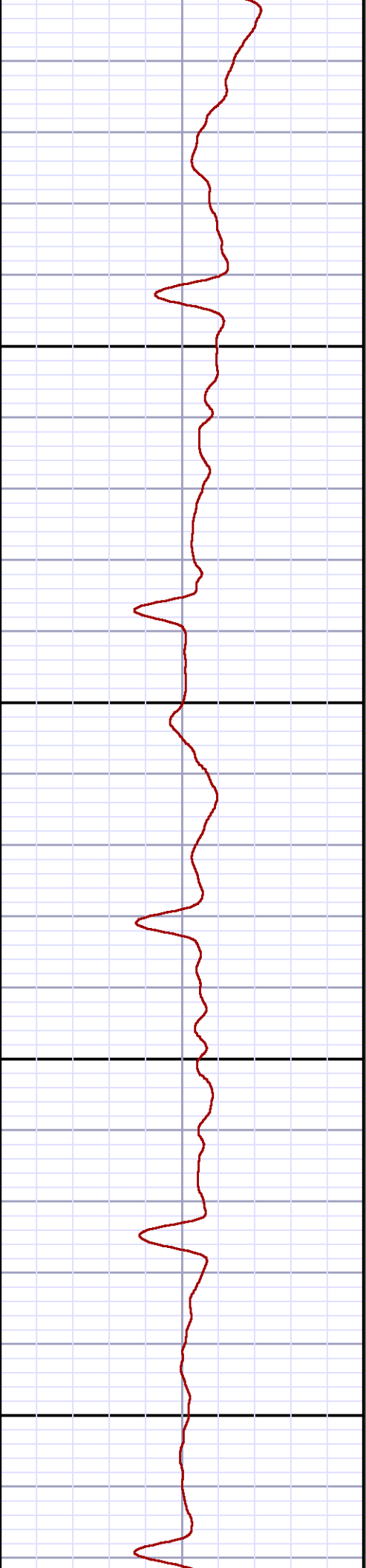
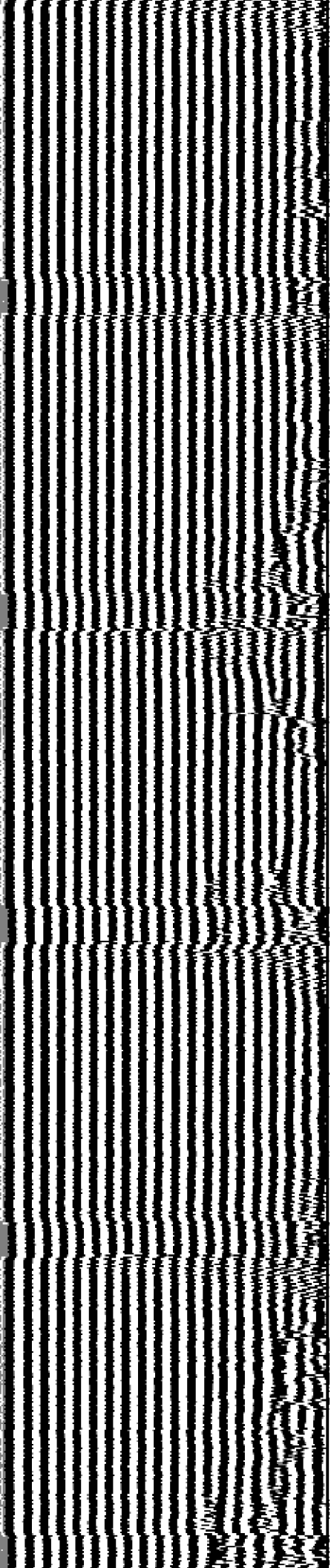
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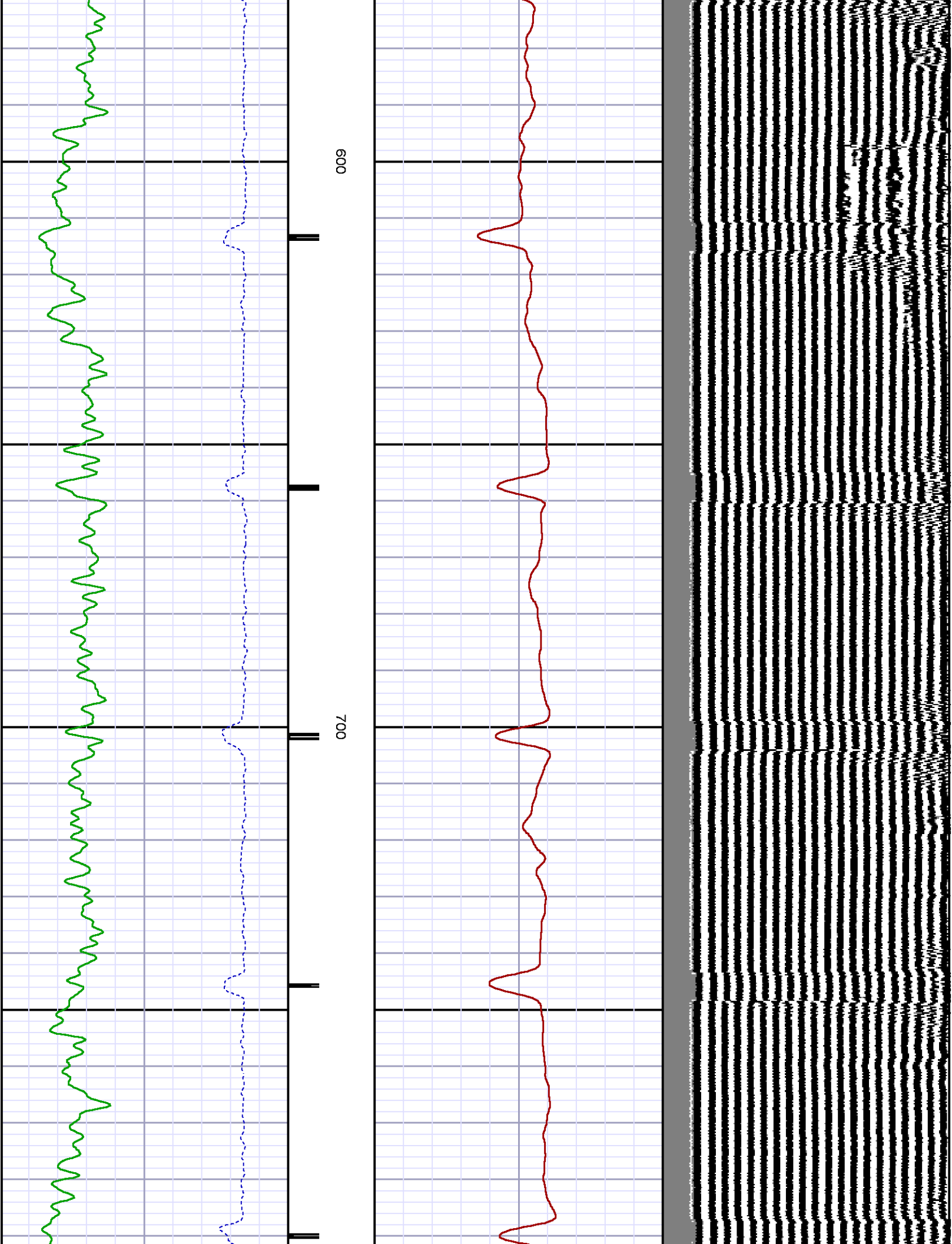
SERIES	DEPTH OFFSET	ACQUIRED CURVES					
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		AR5	AR6	AR7	AR8	CHV	FPR2

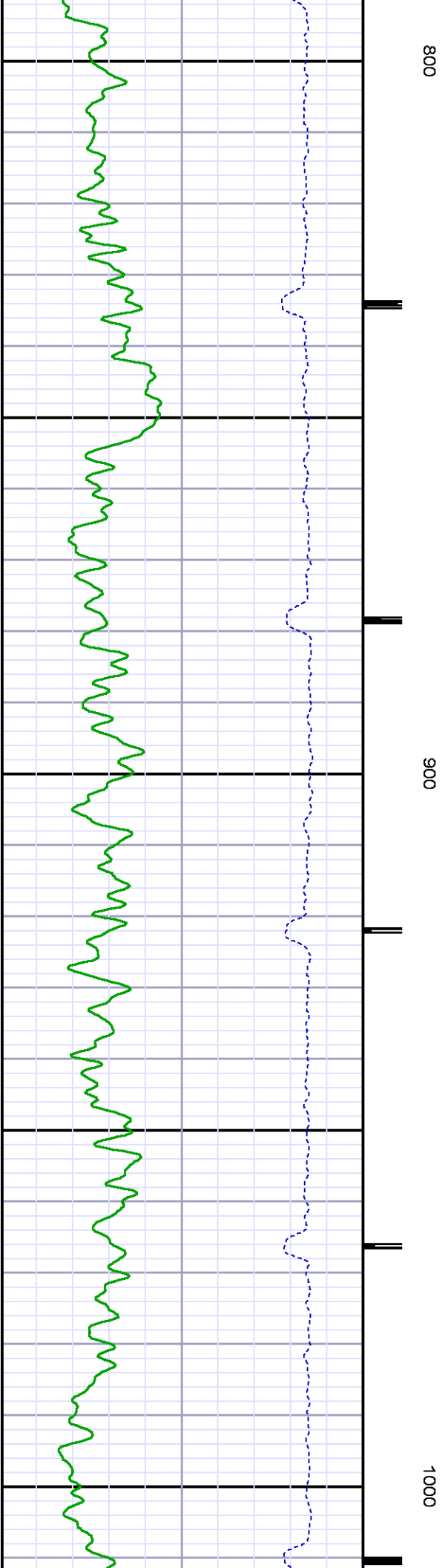
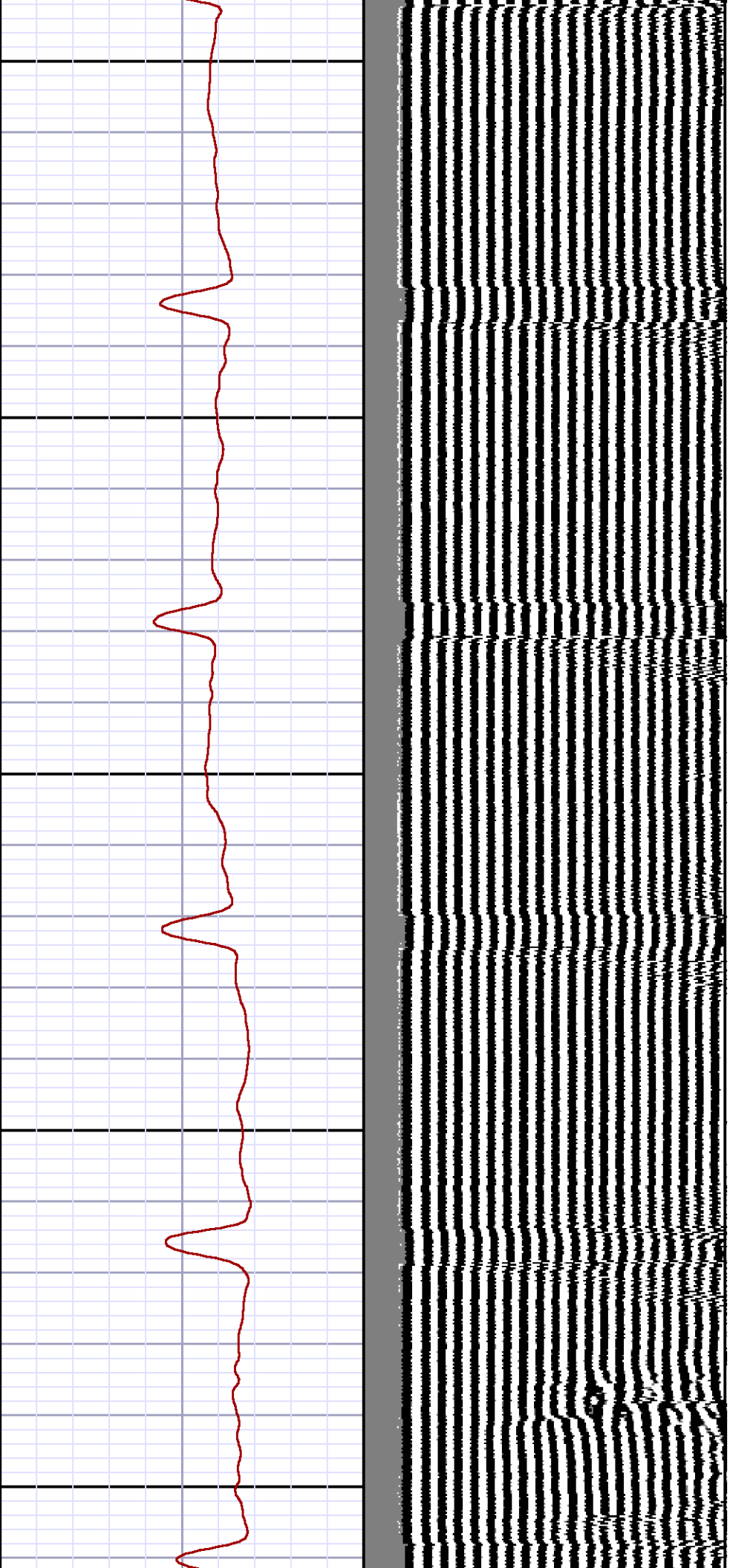
			FPR3	FPR5	TT3	TTR1	TTR2	TTR3
			TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	-10.040		AFAR	SIG	TT5			
1355XA	-5.620		CCL					
1355XA	-1.500		GR					
1355XA	0.000		TEMP					

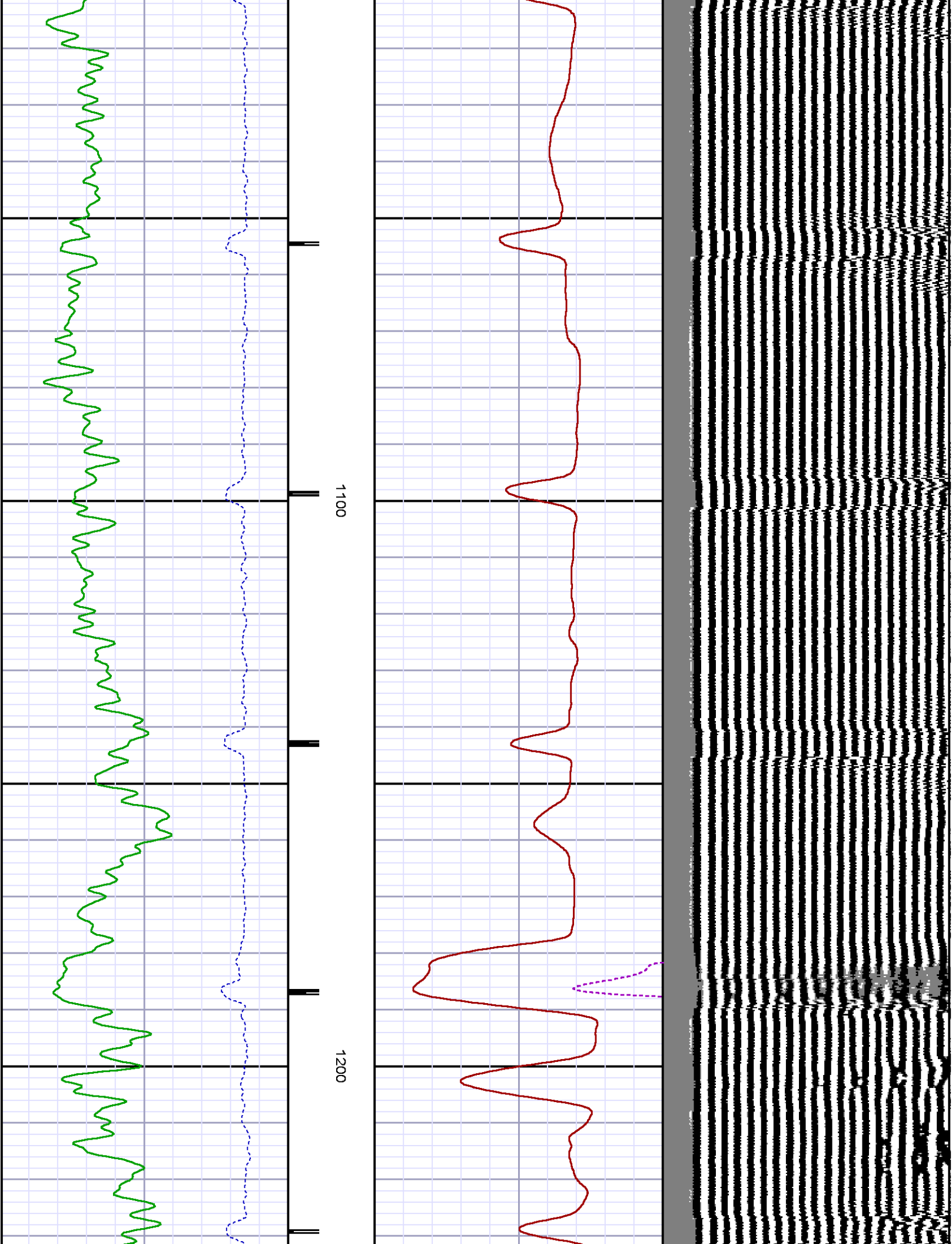


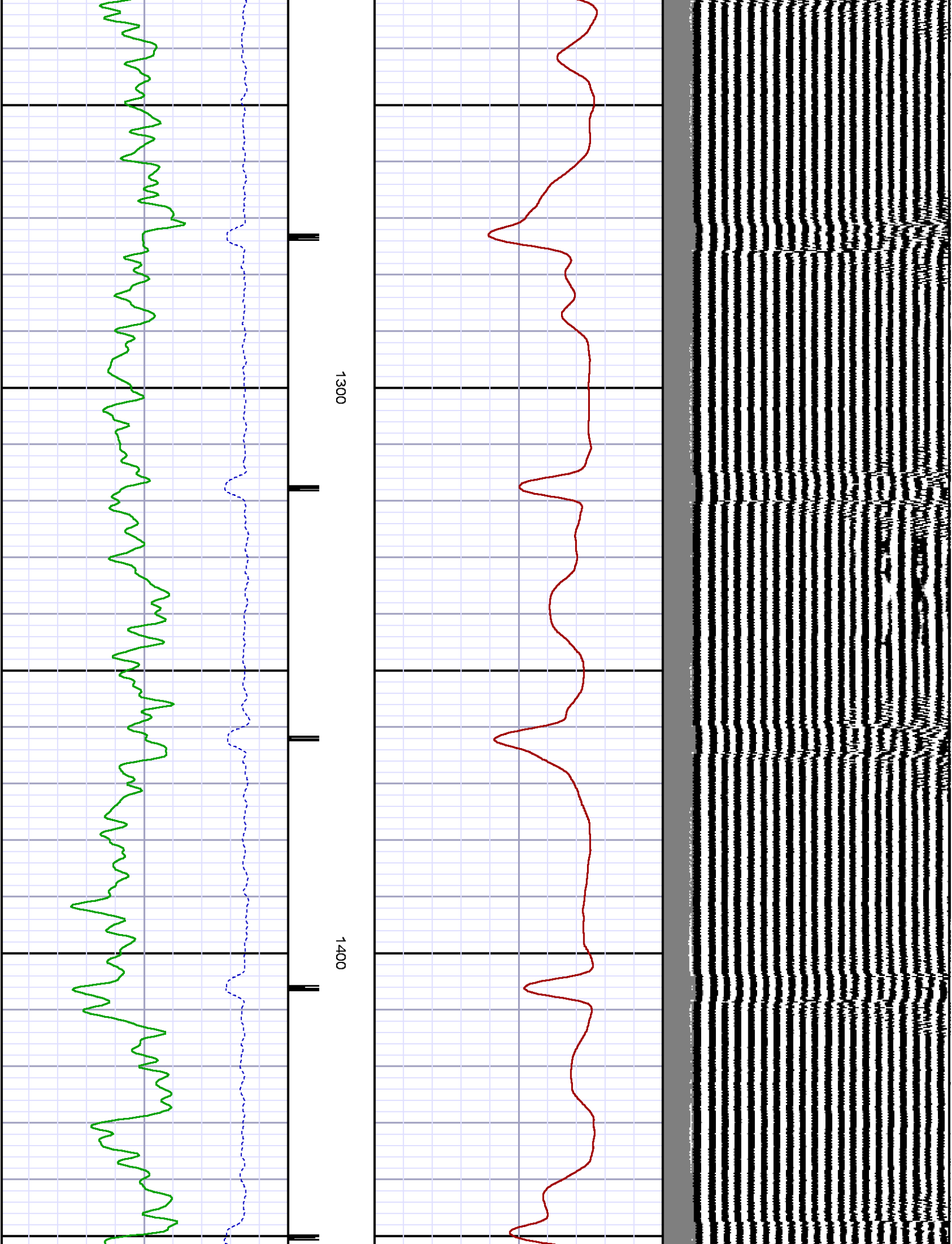


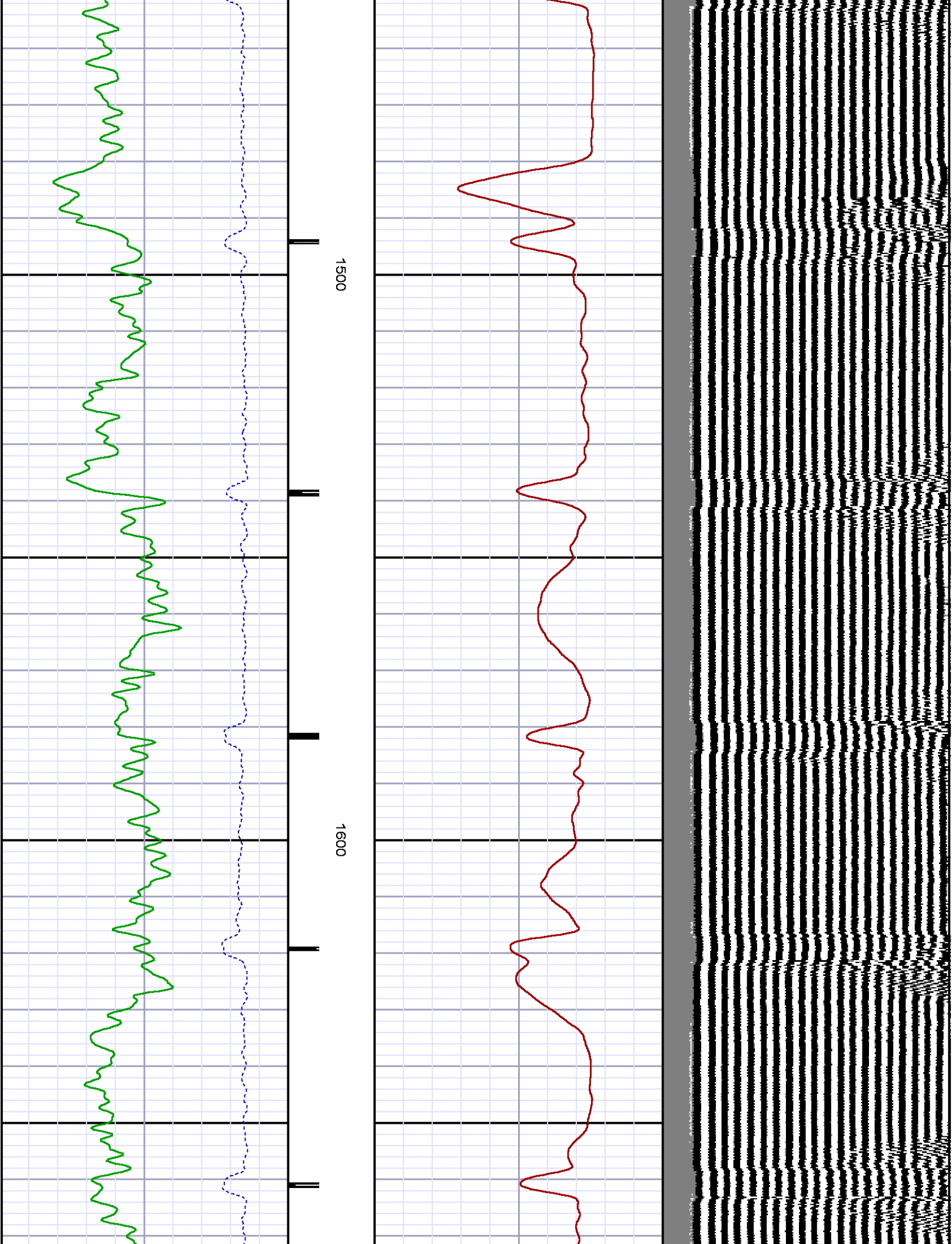


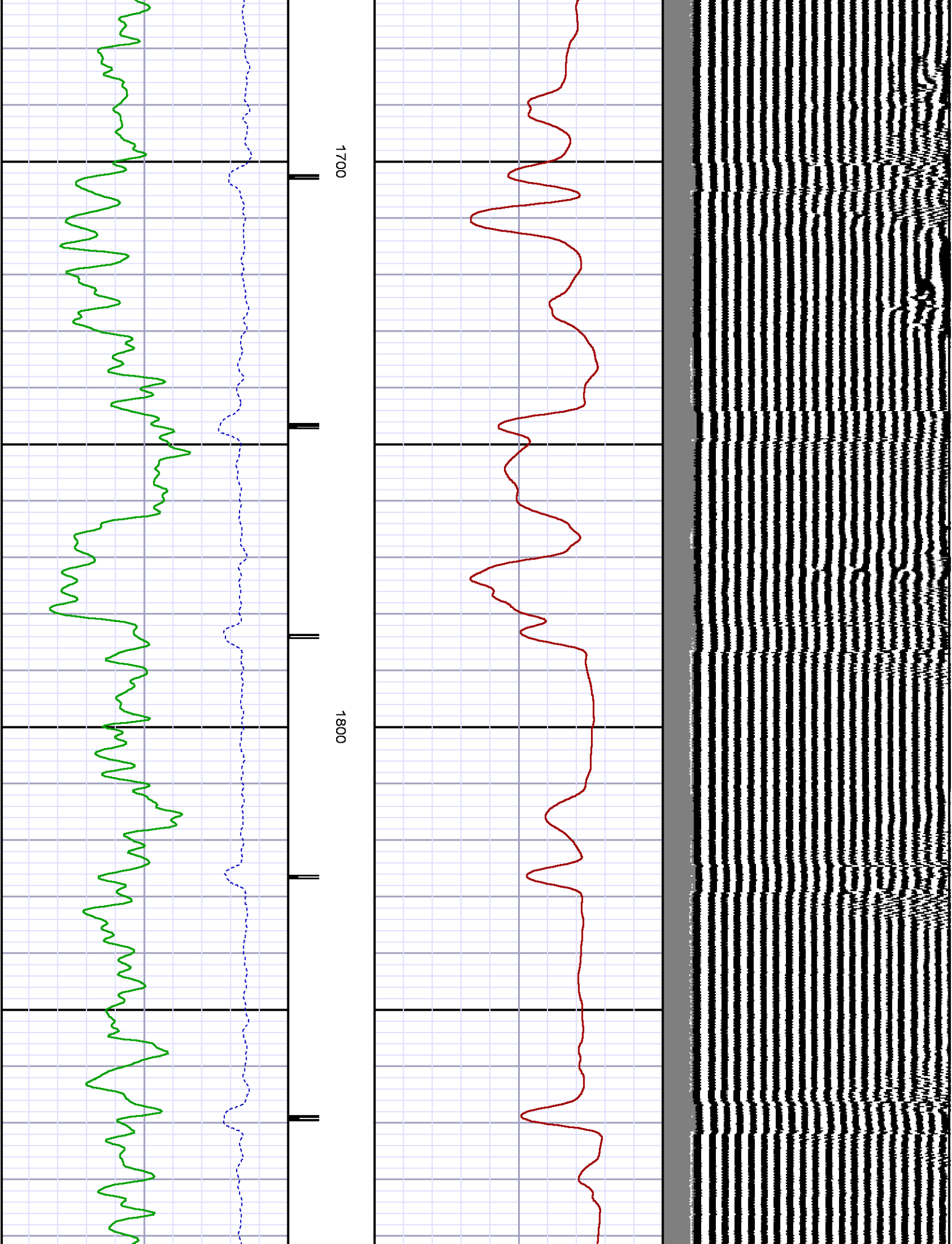


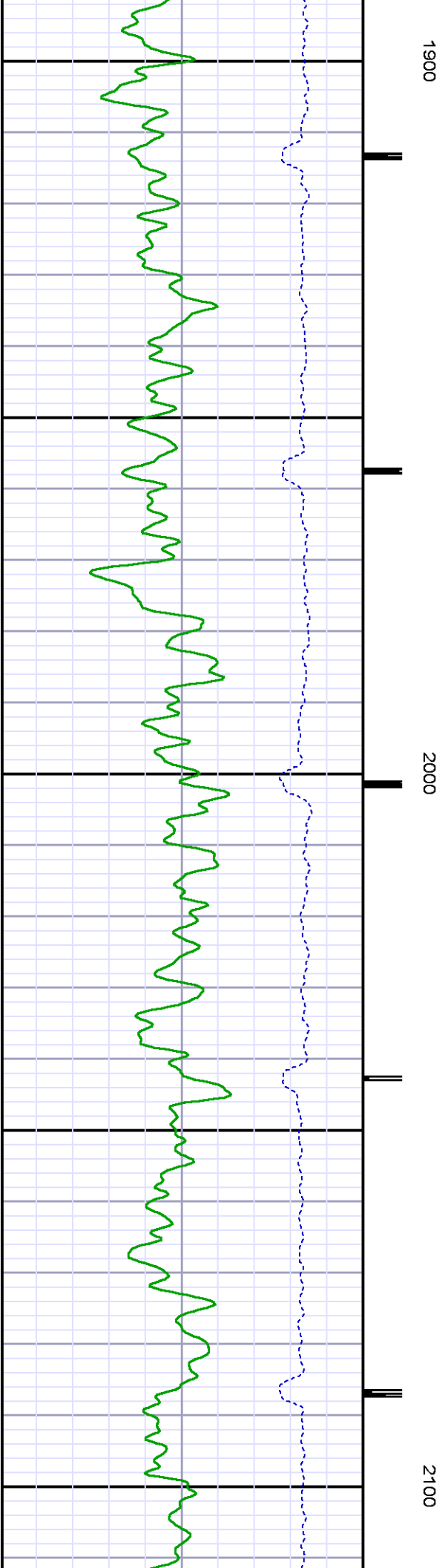
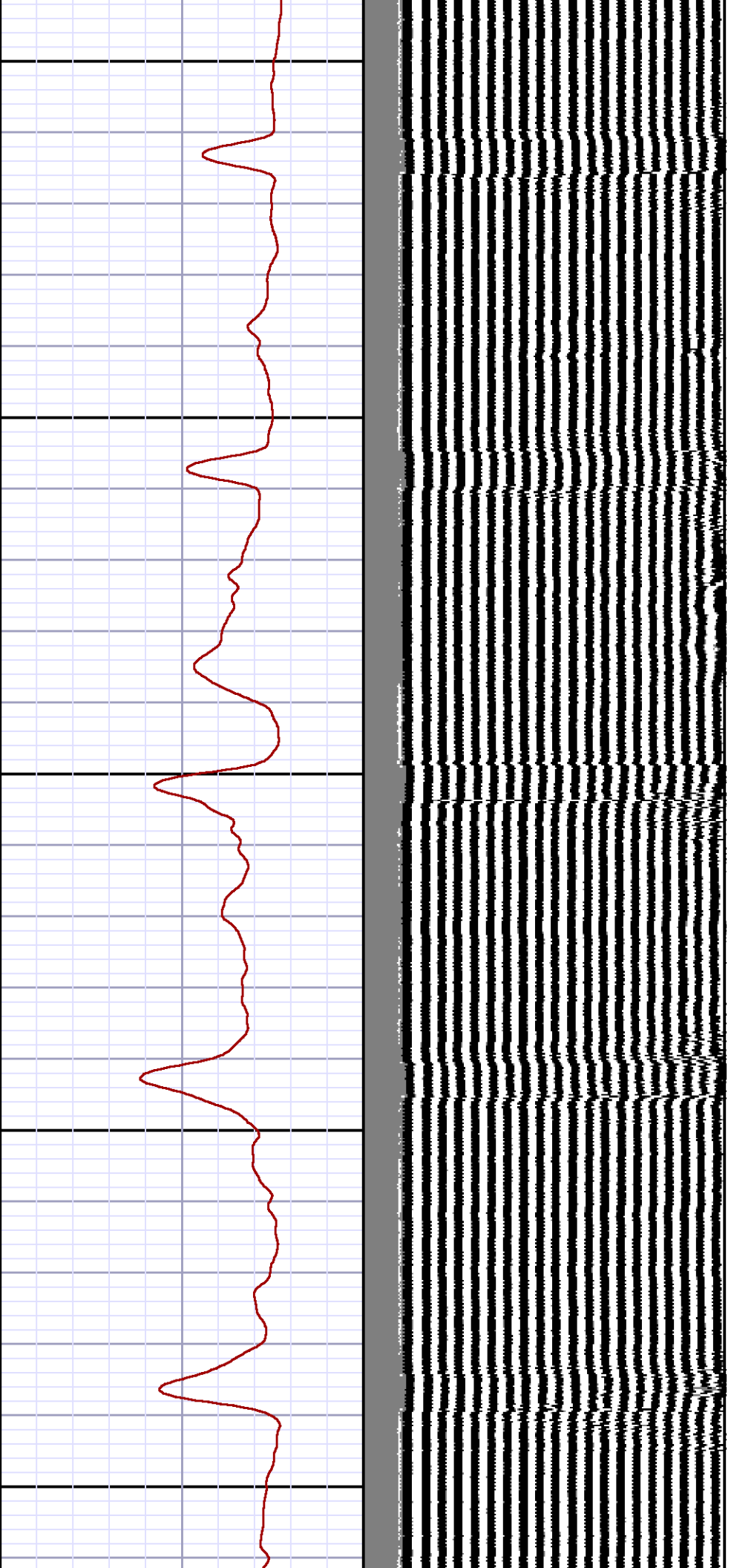


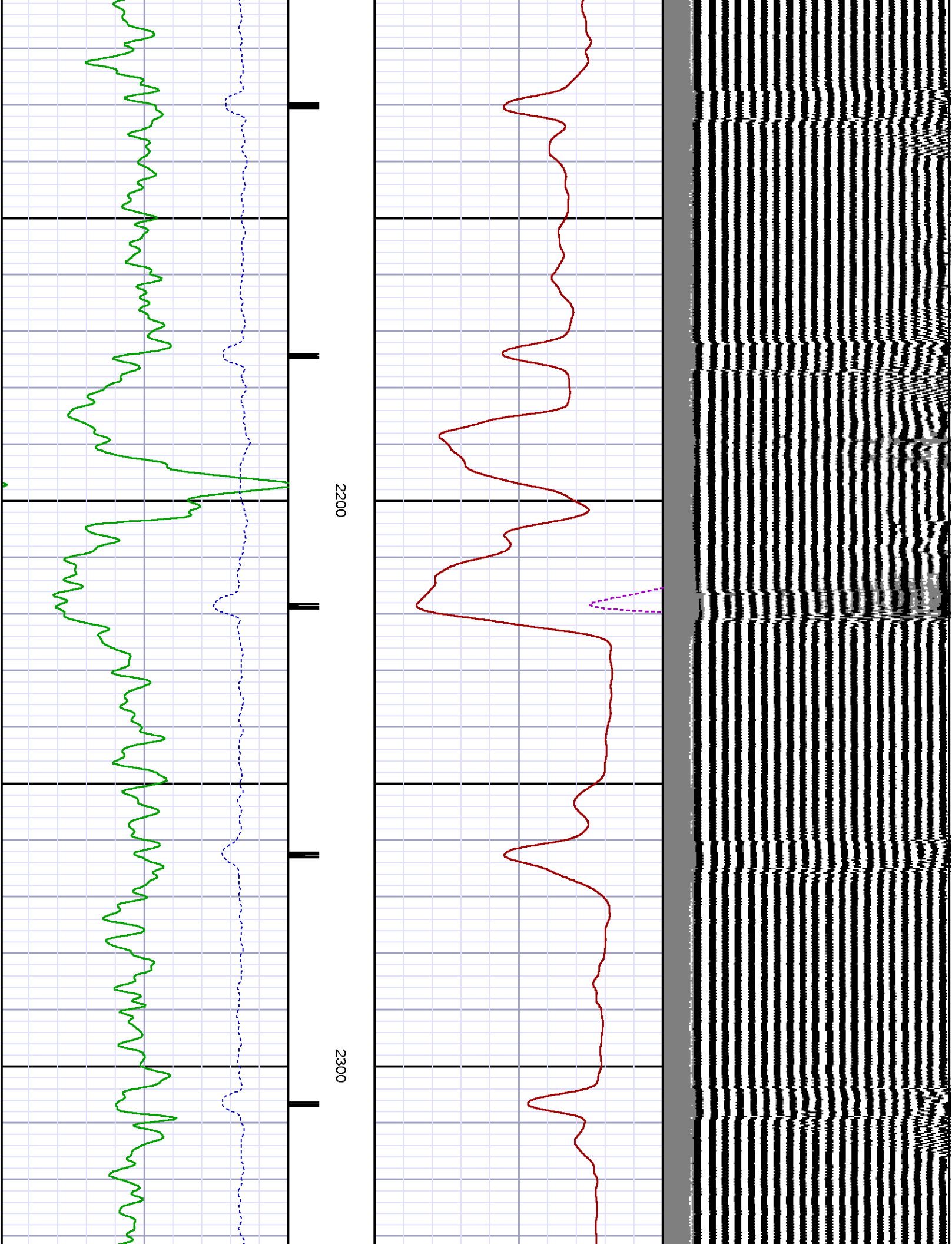


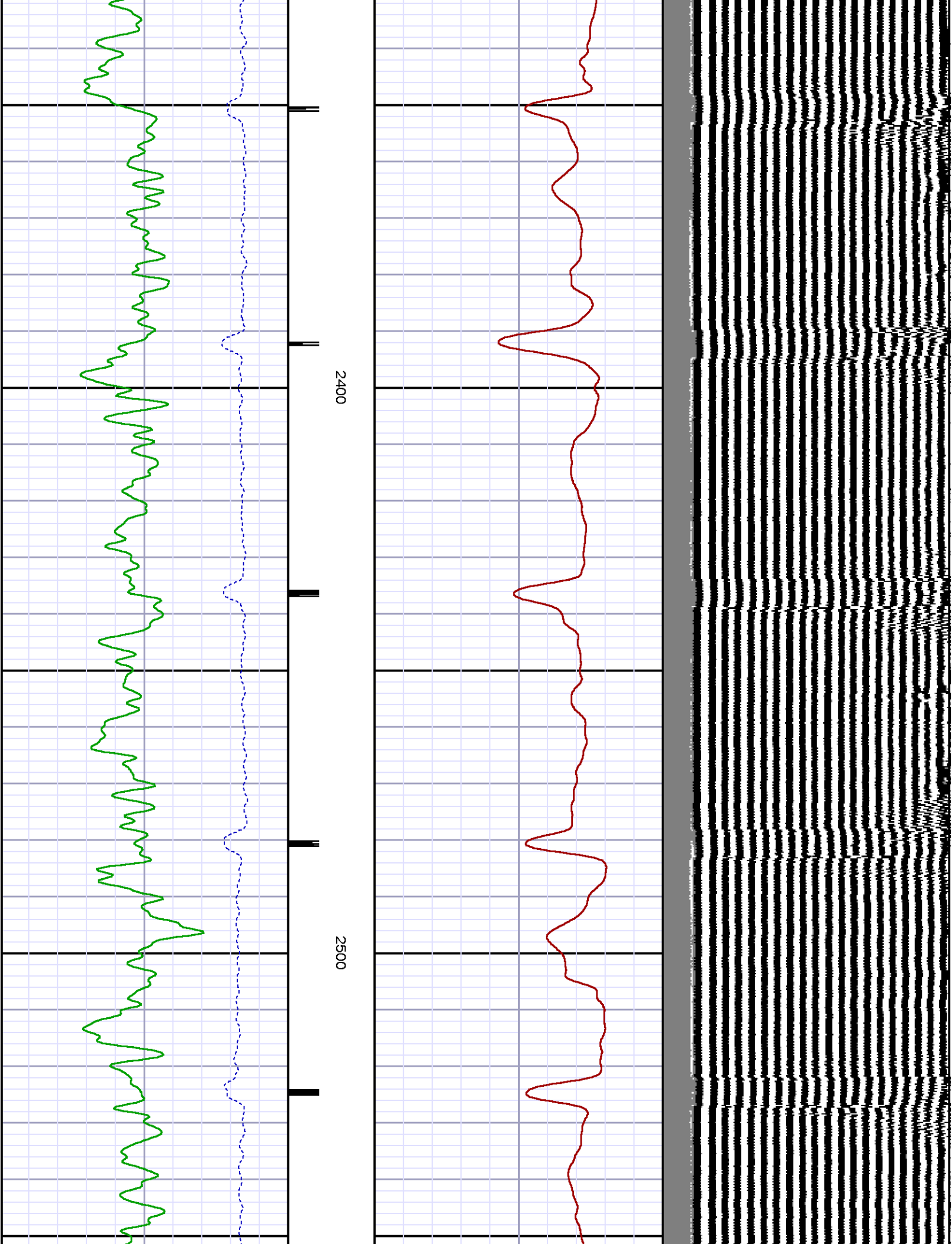


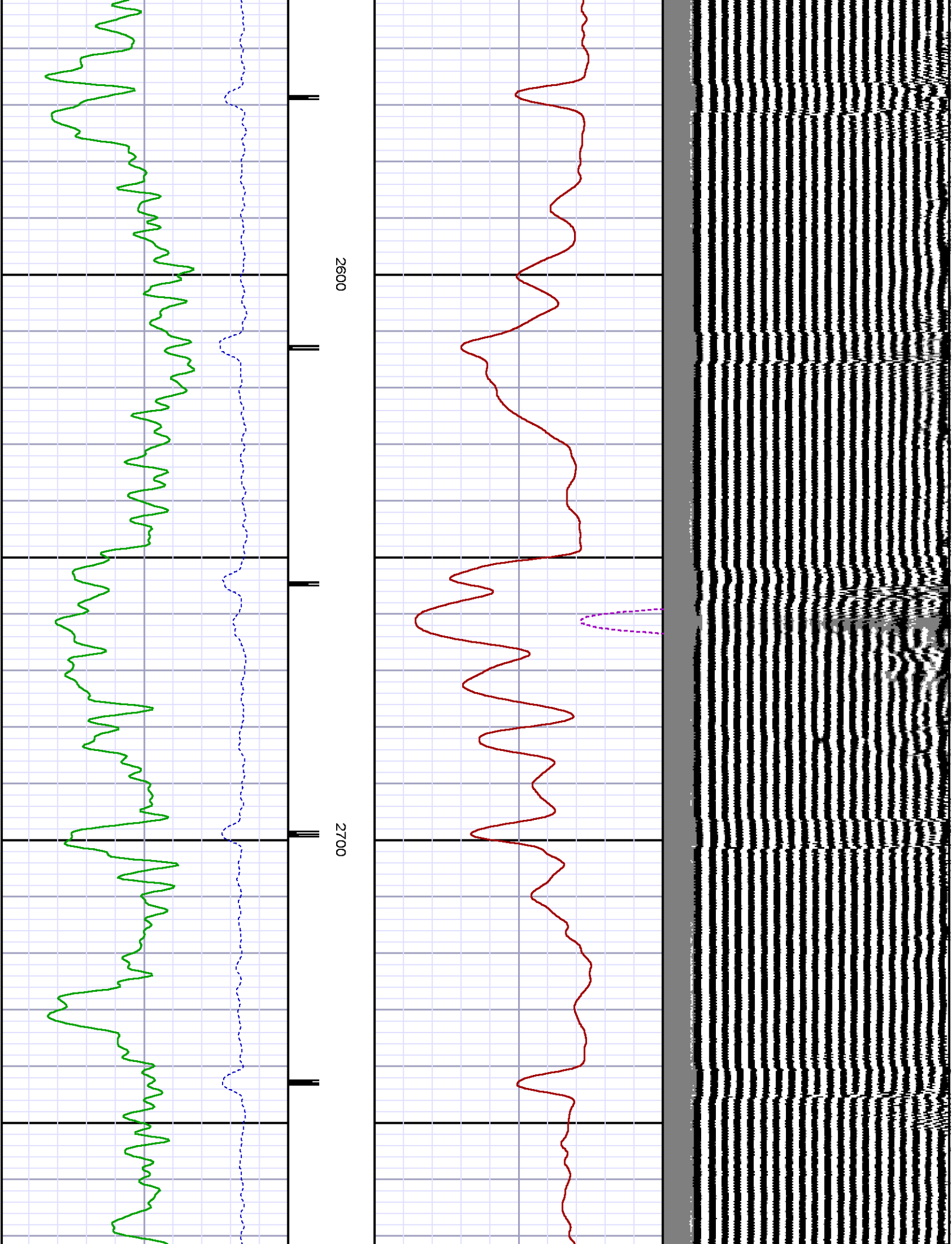


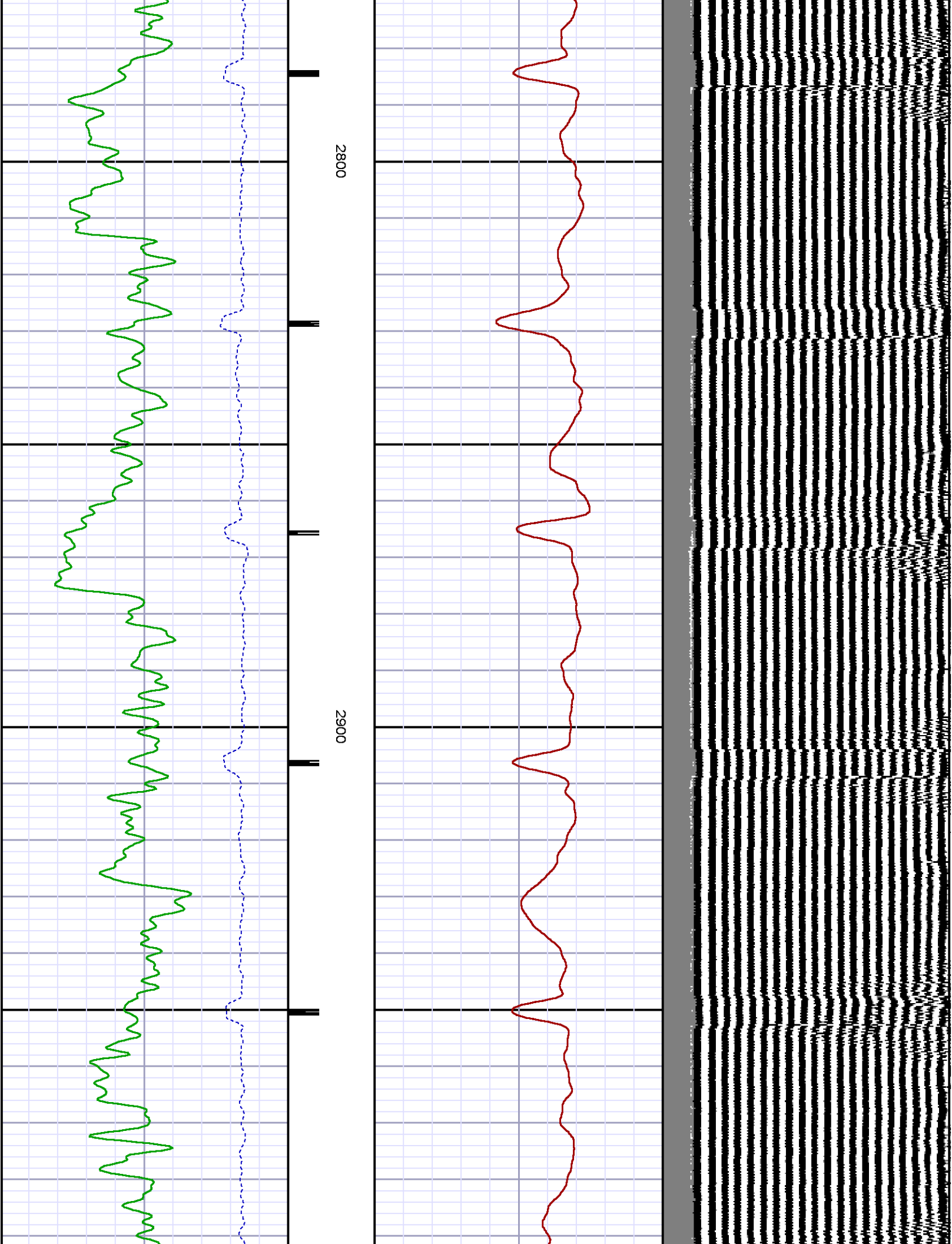


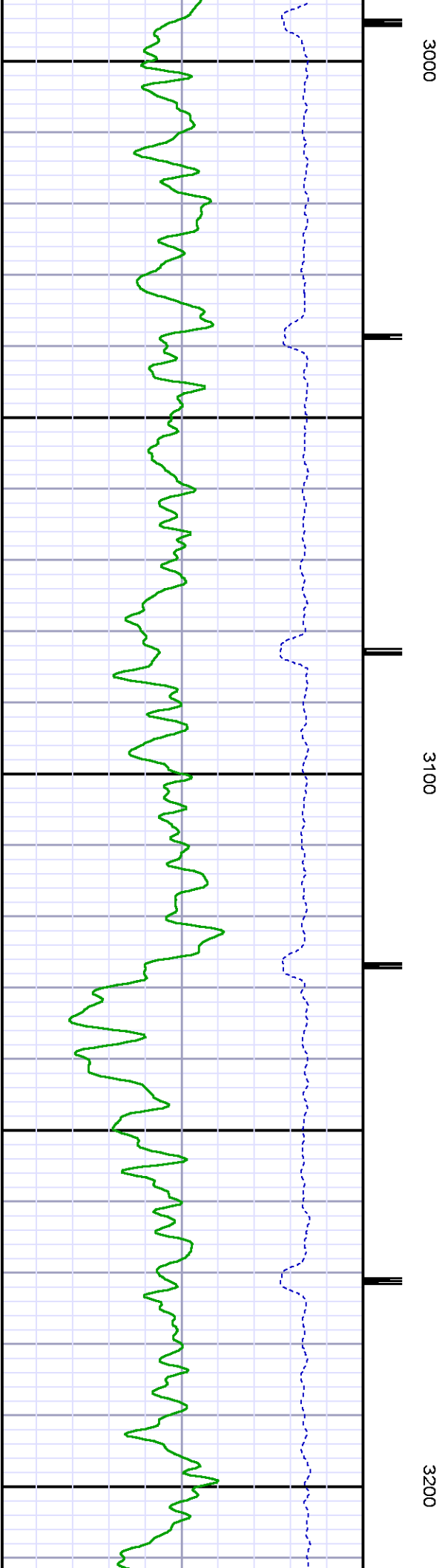
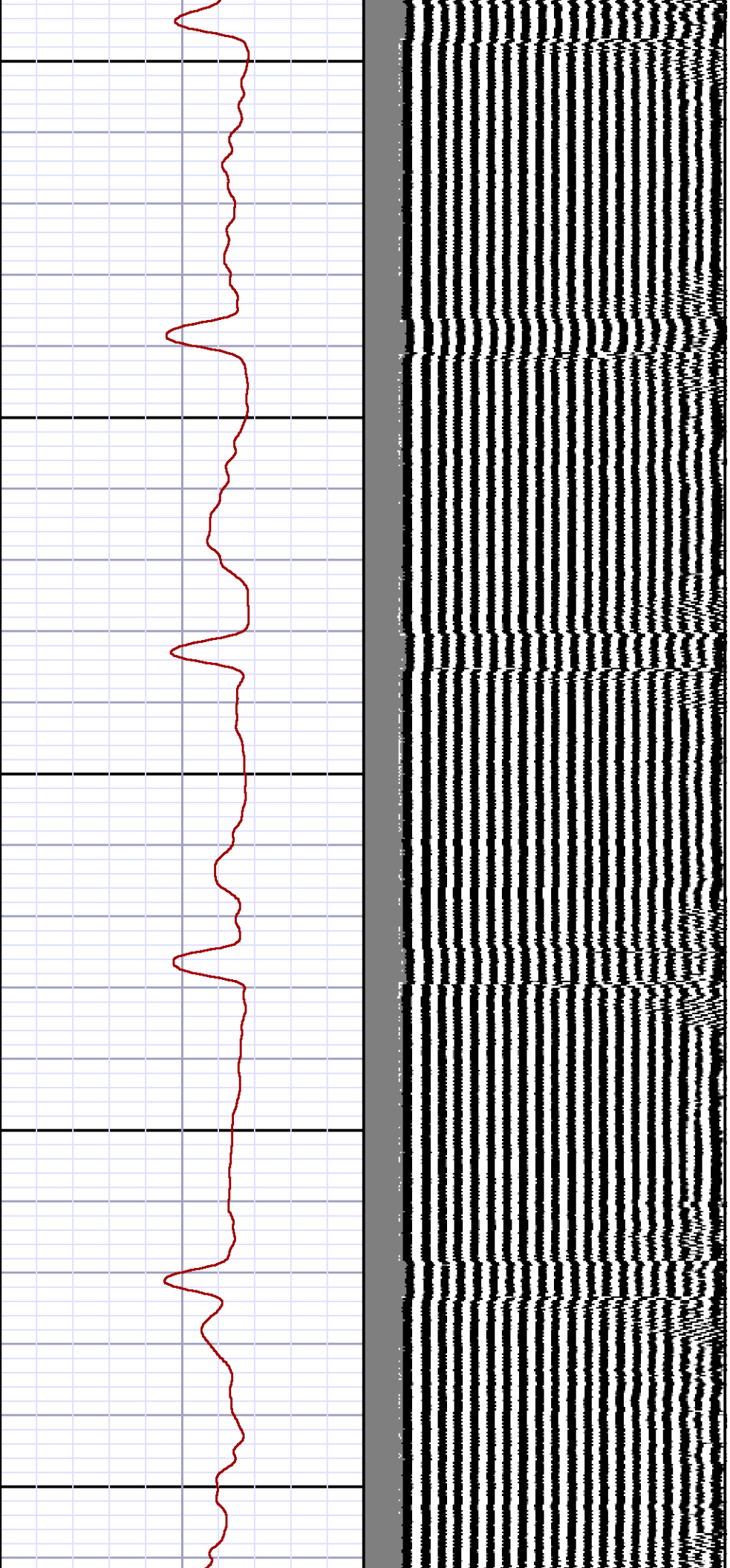


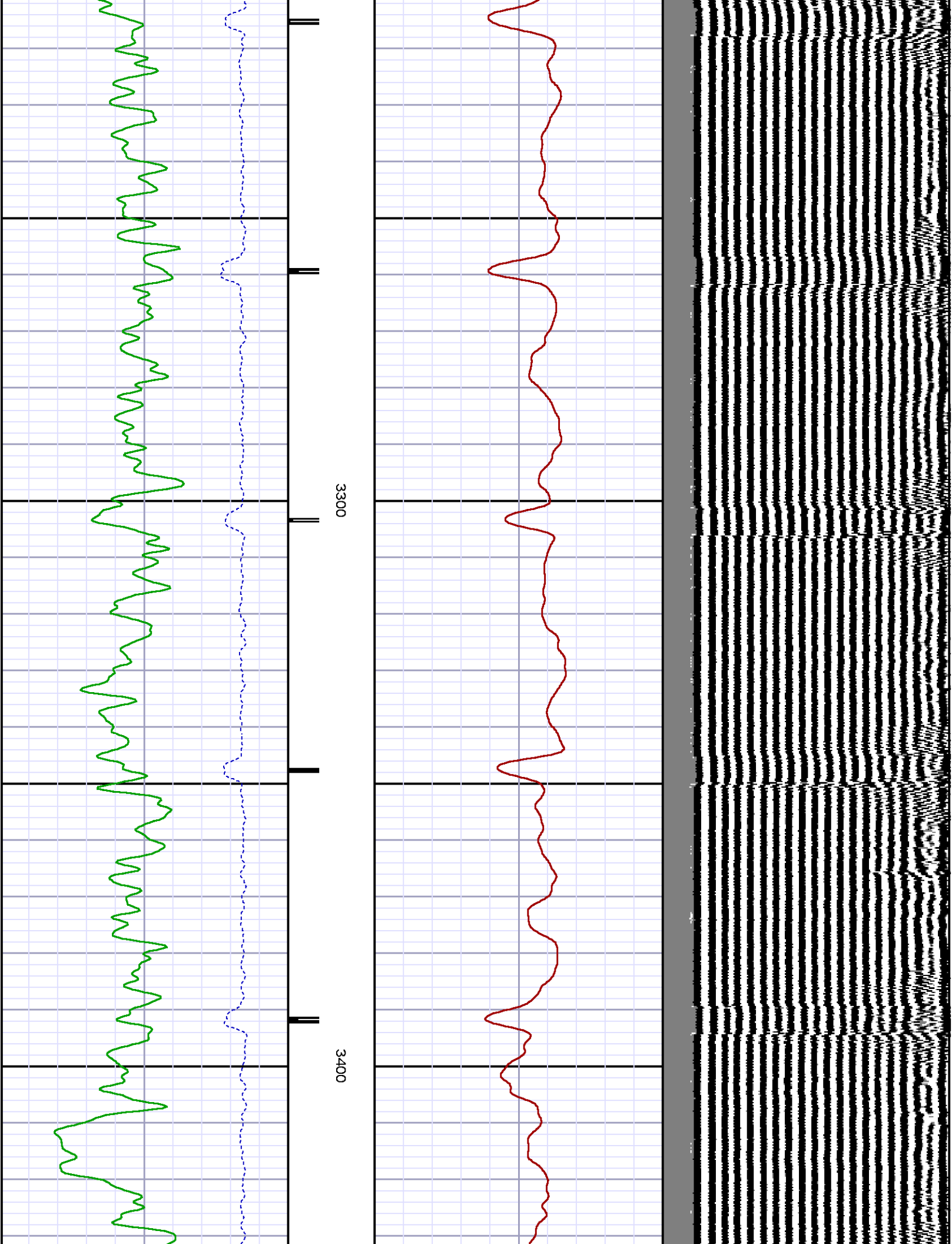


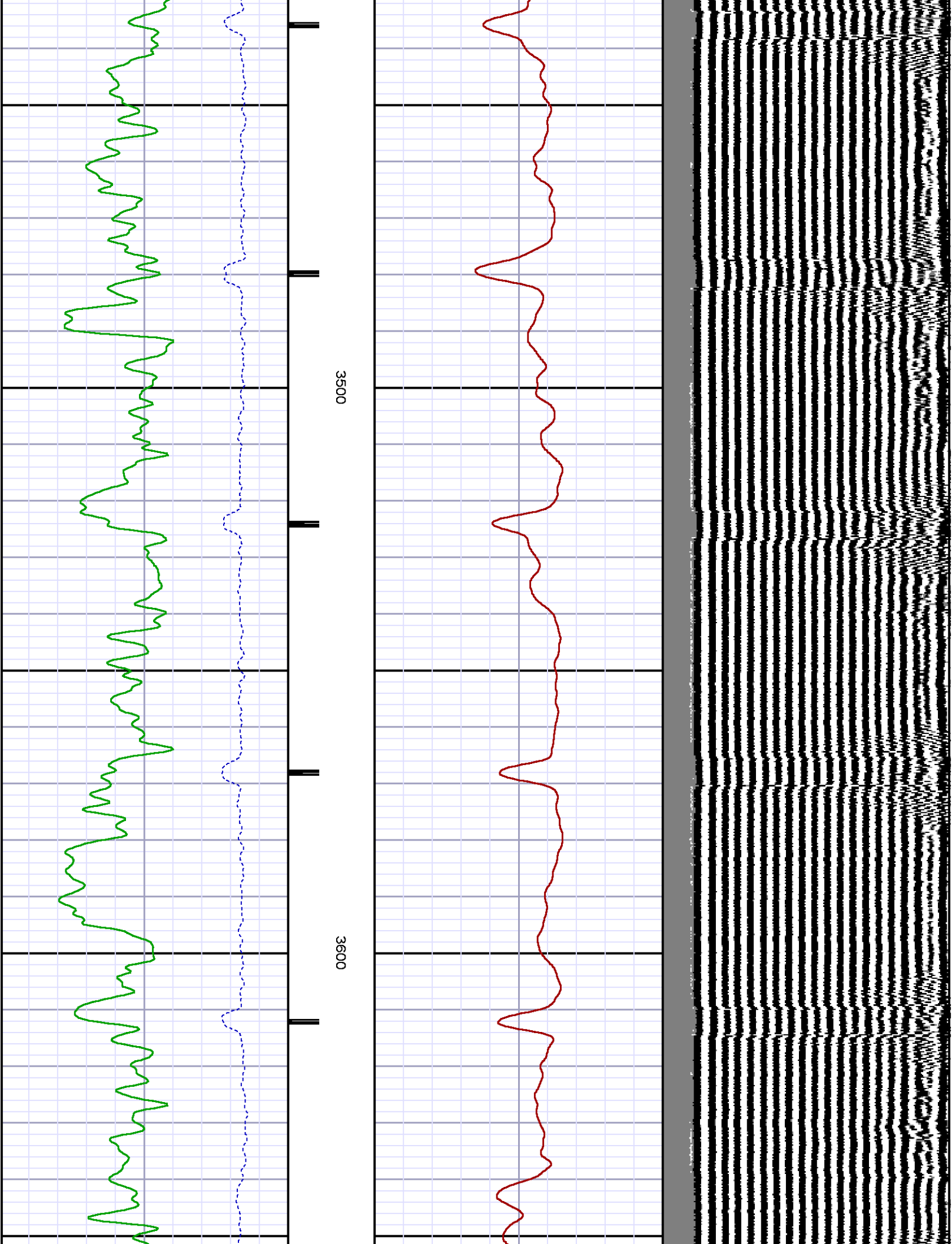


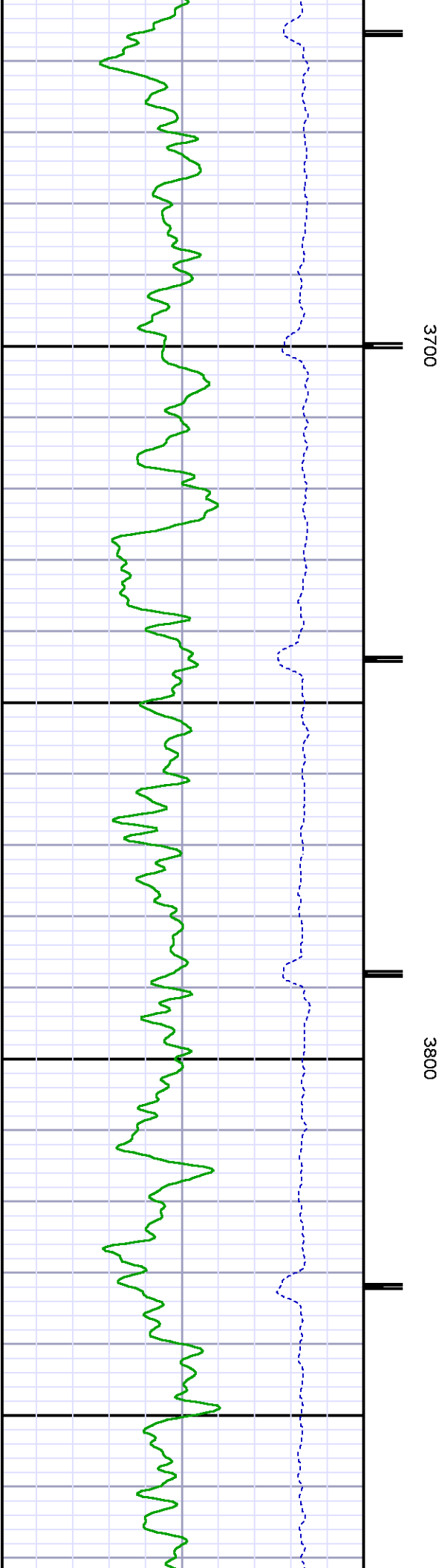
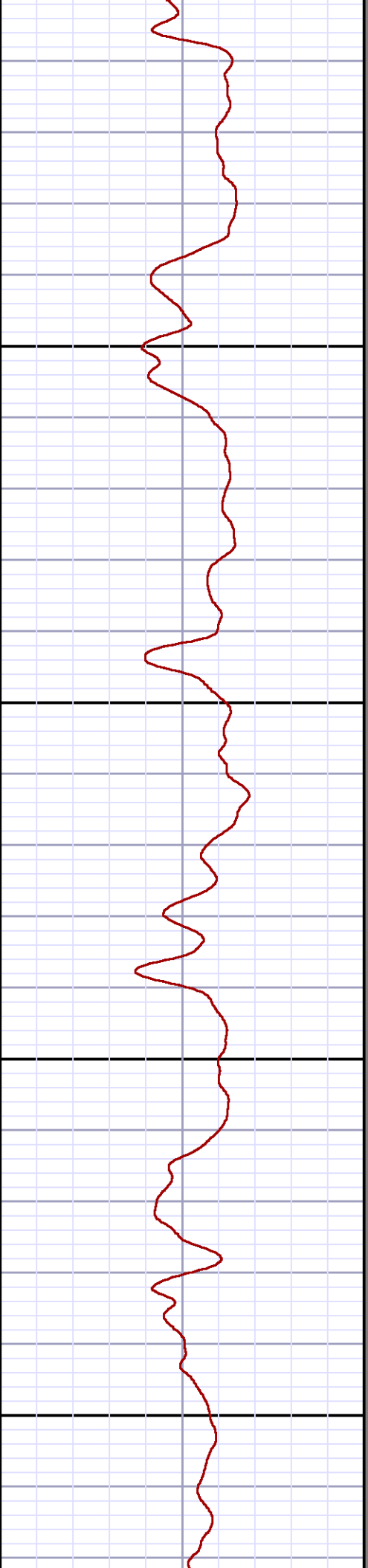
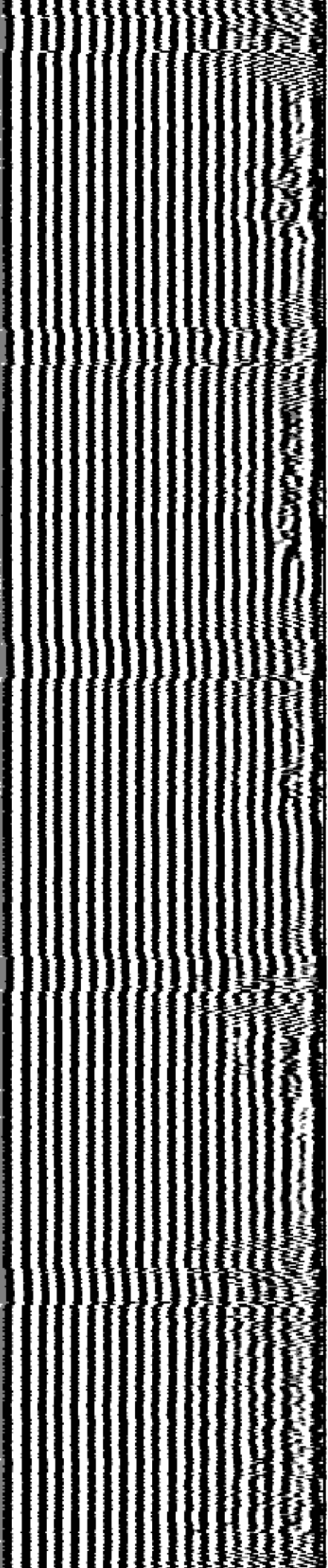


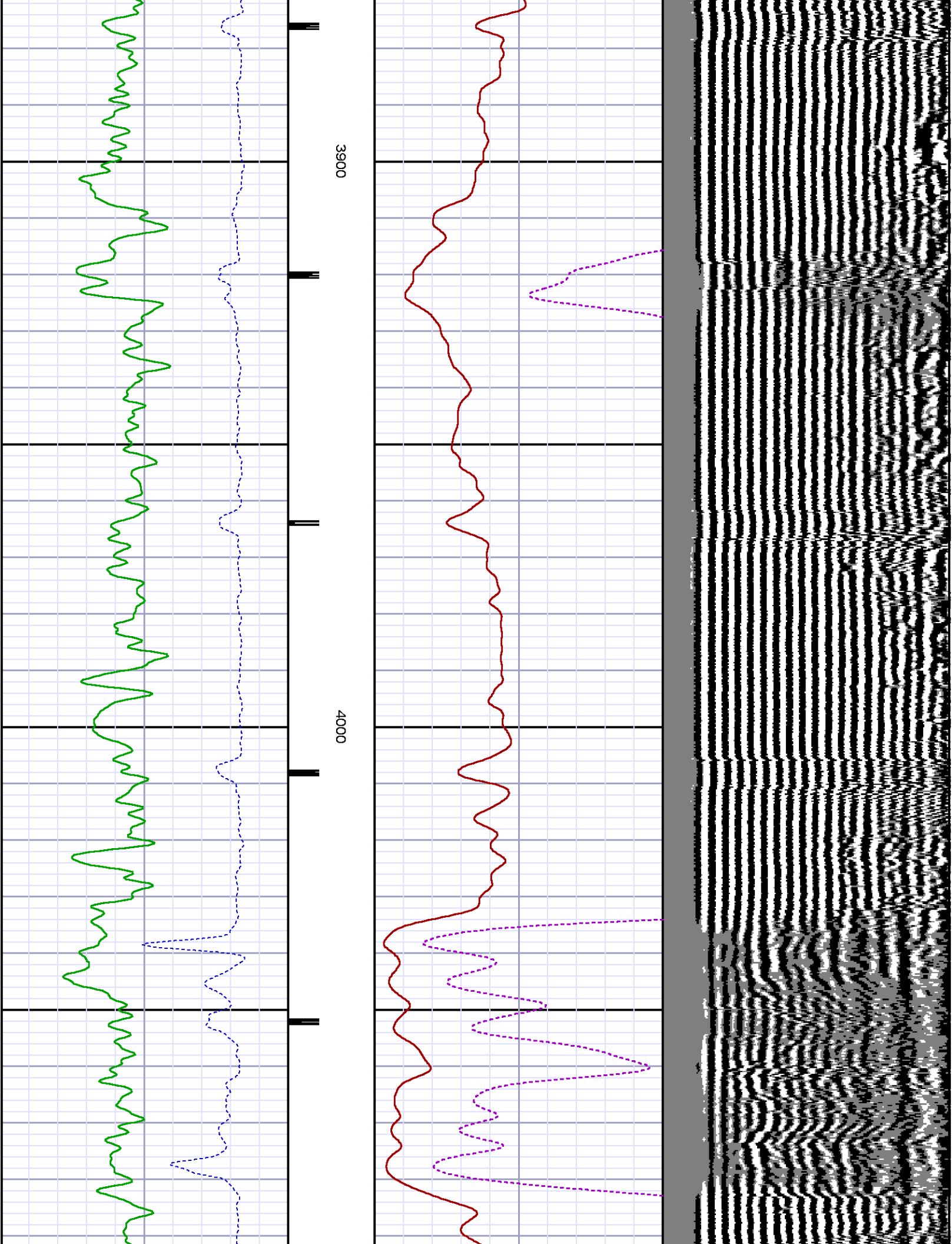


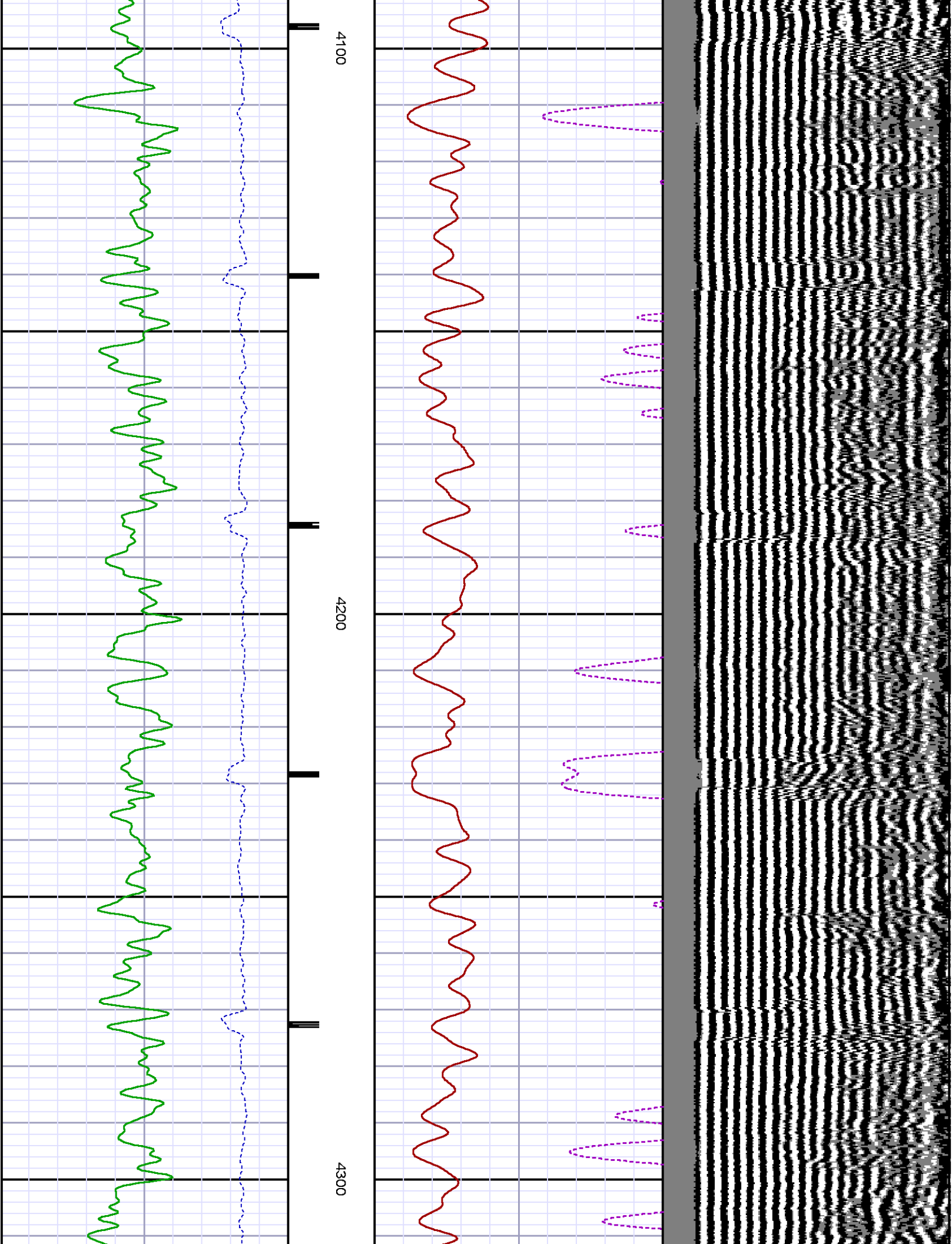


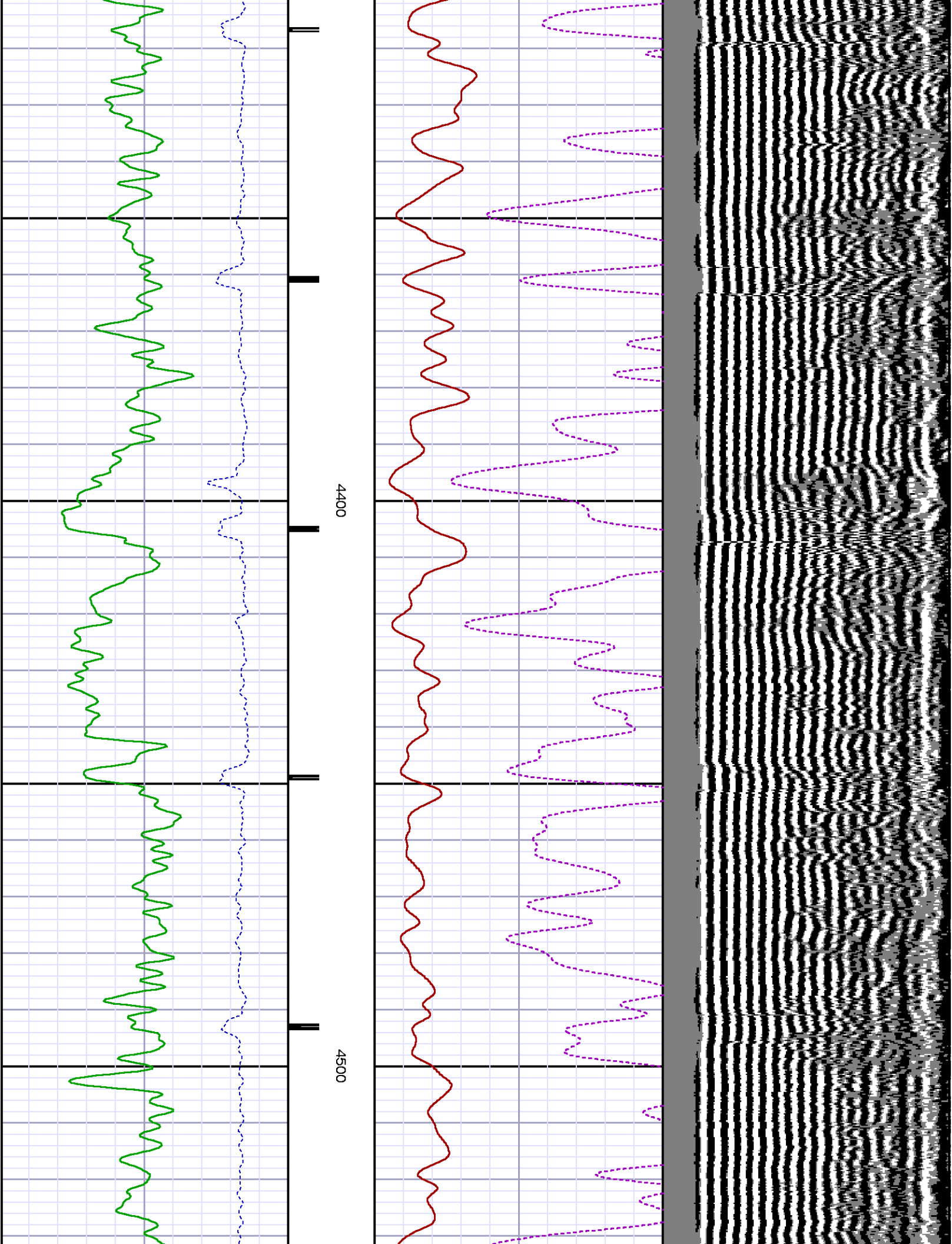


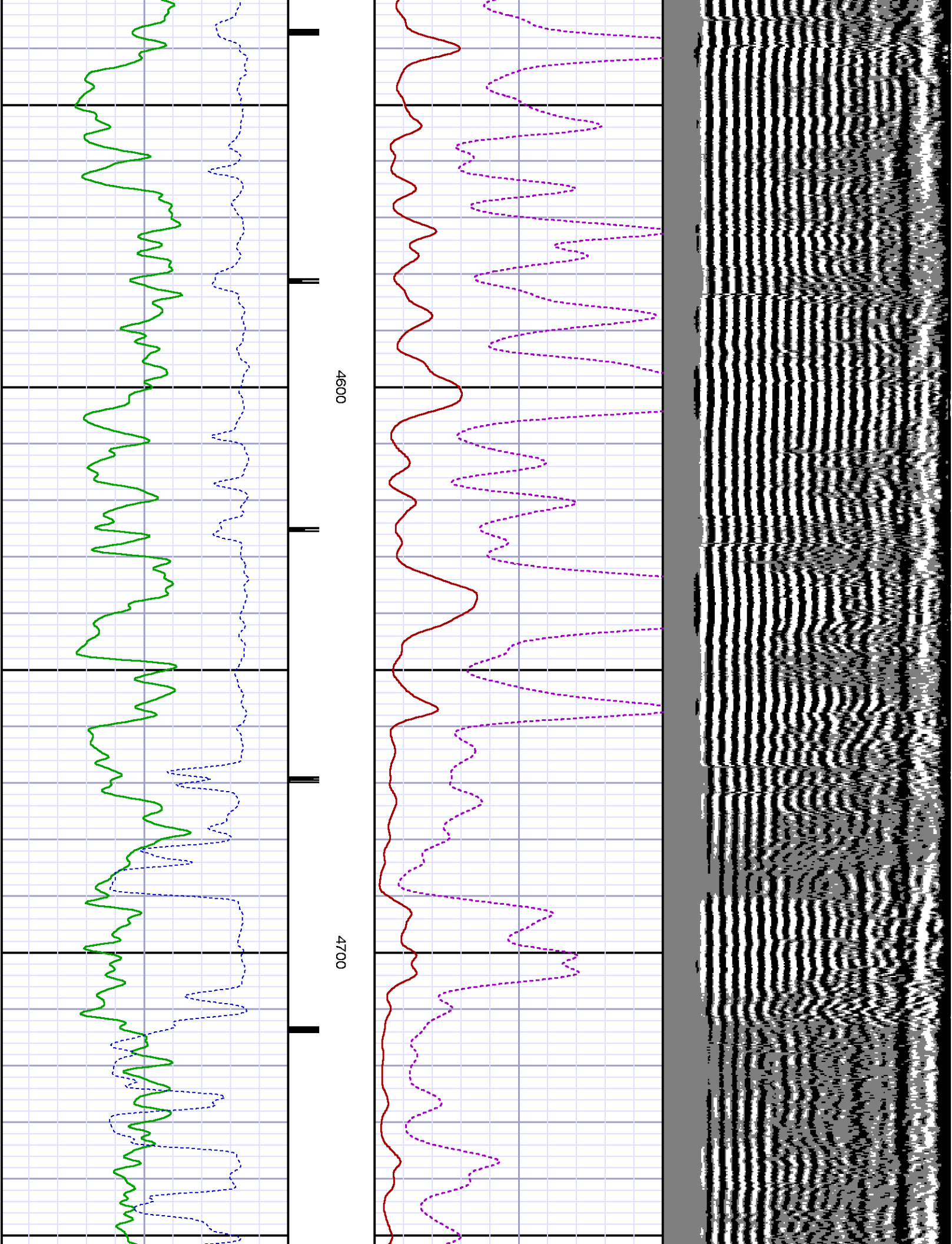


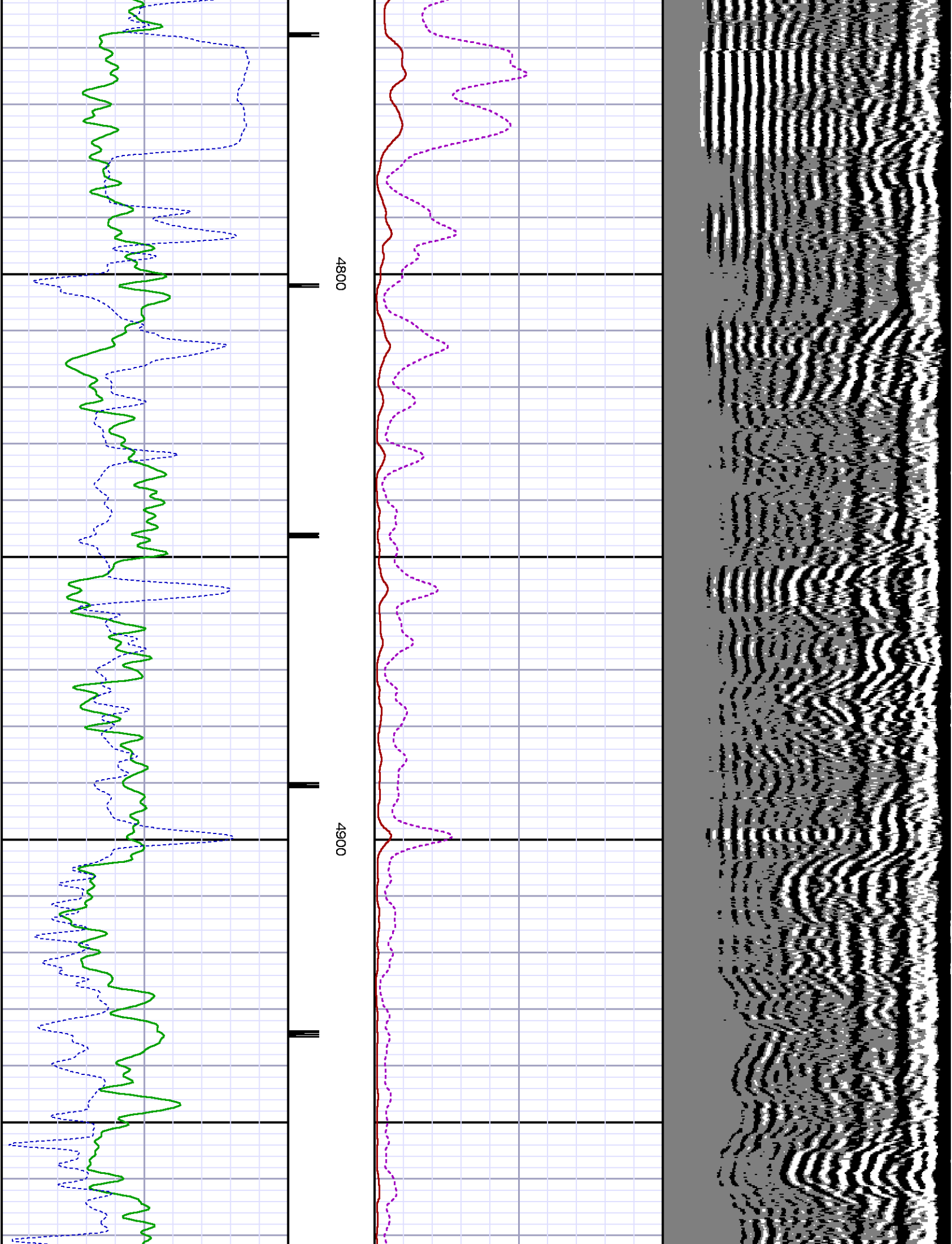


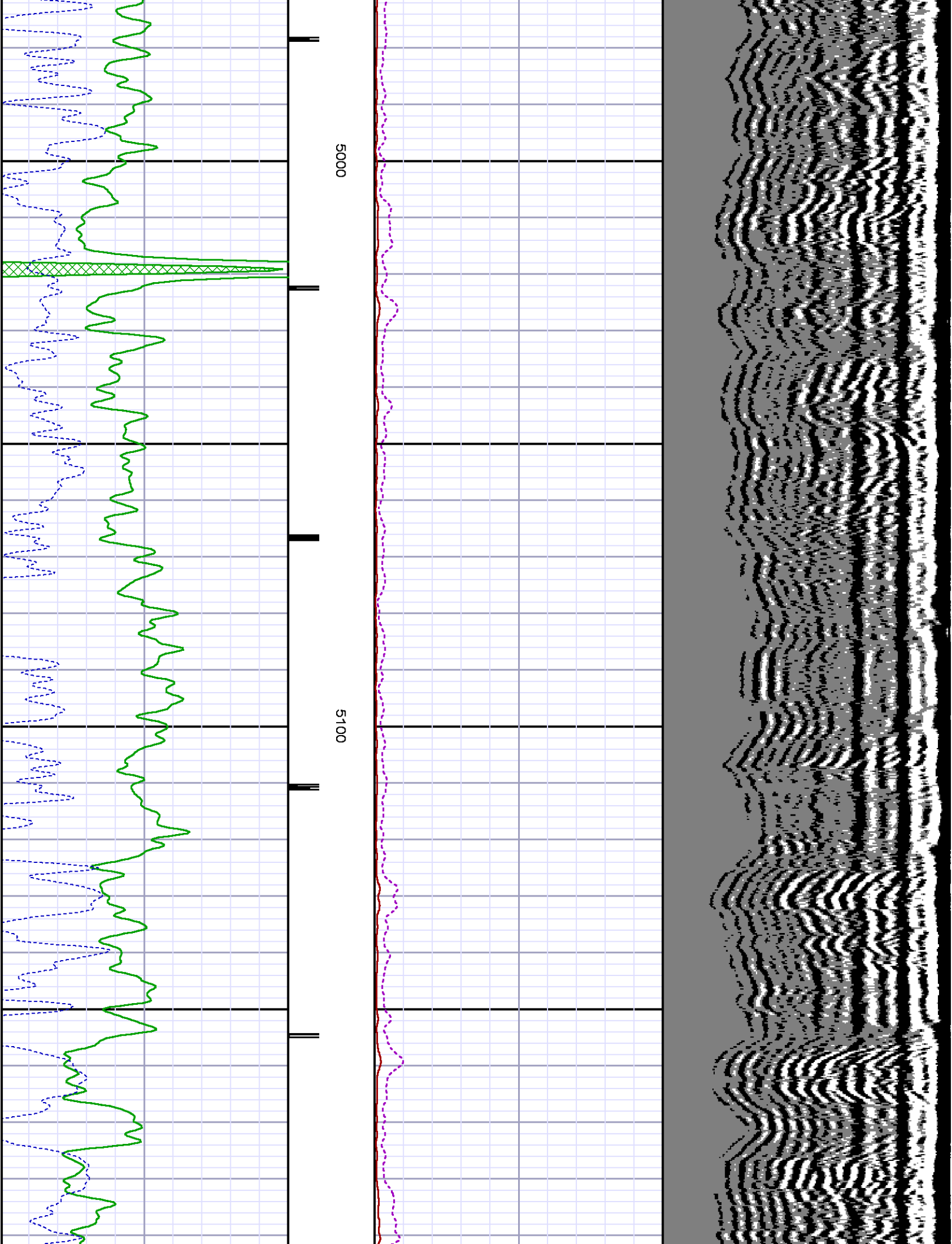


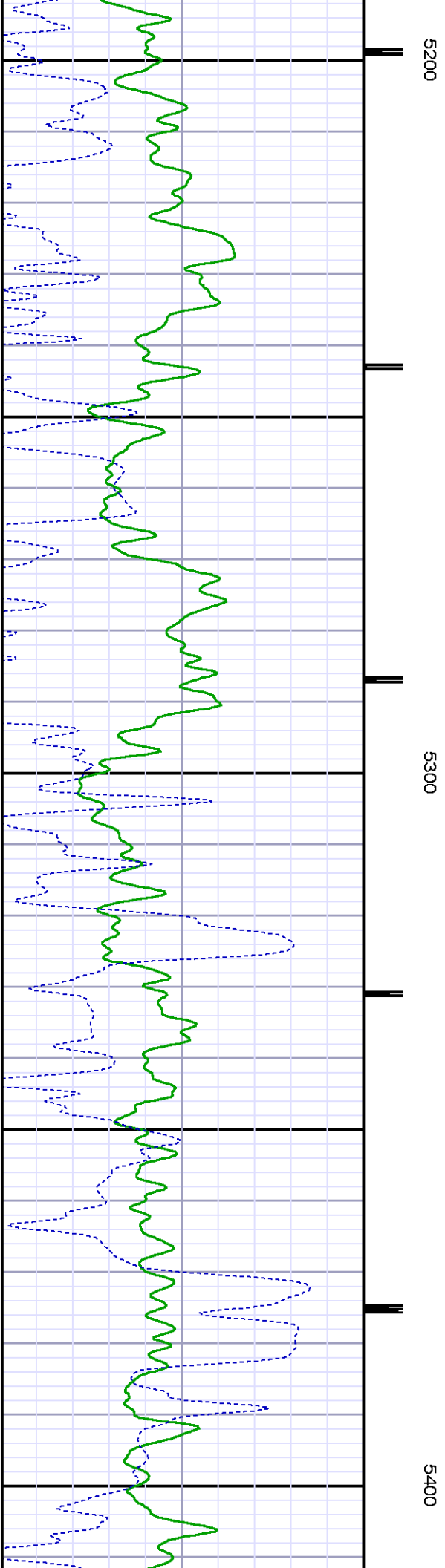
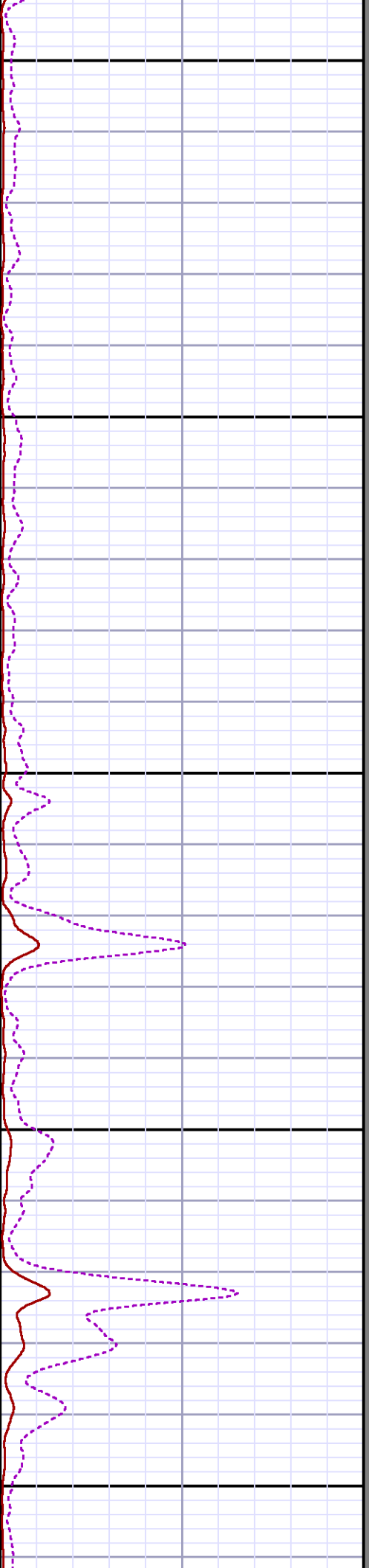
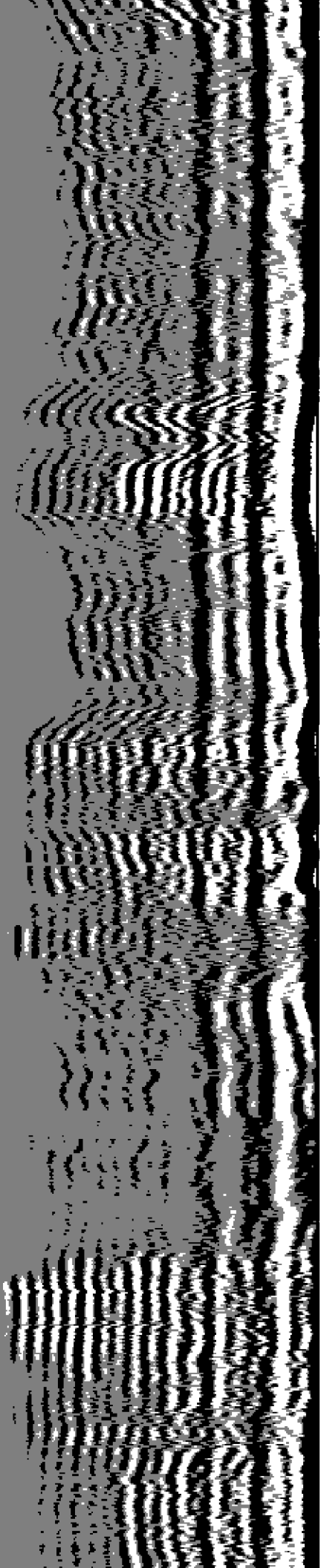


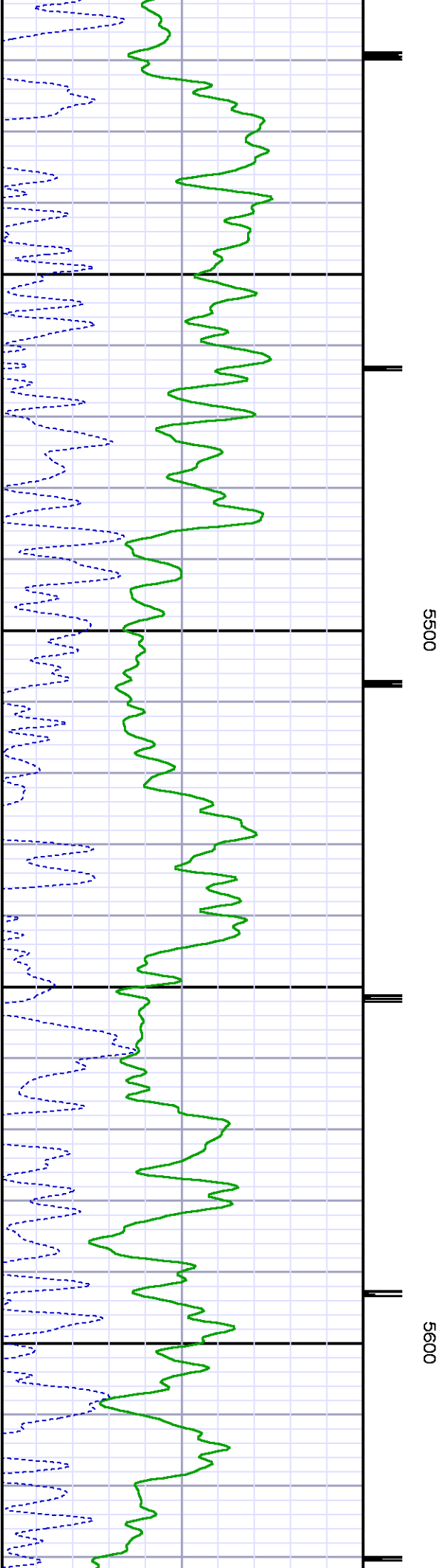
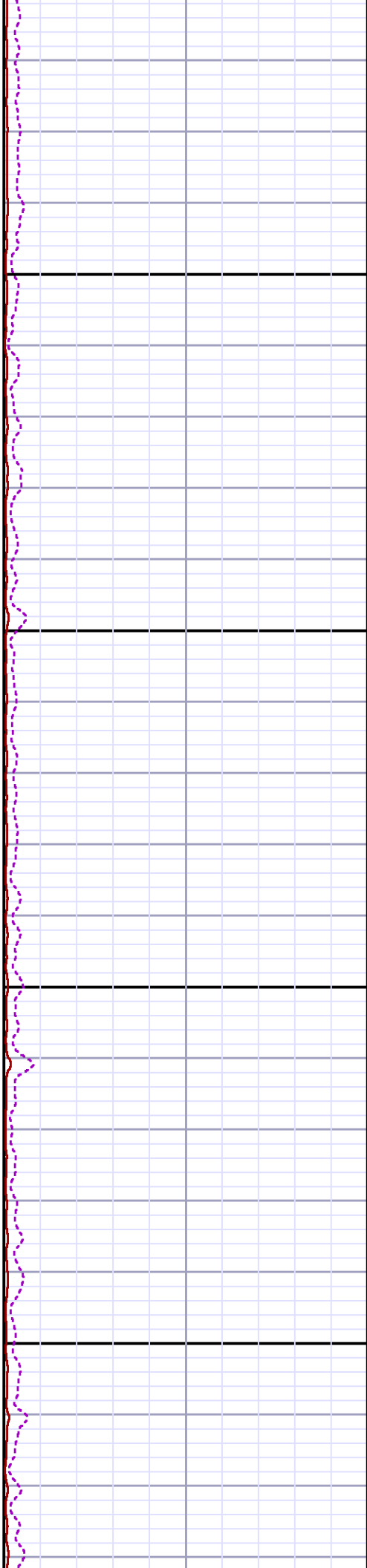
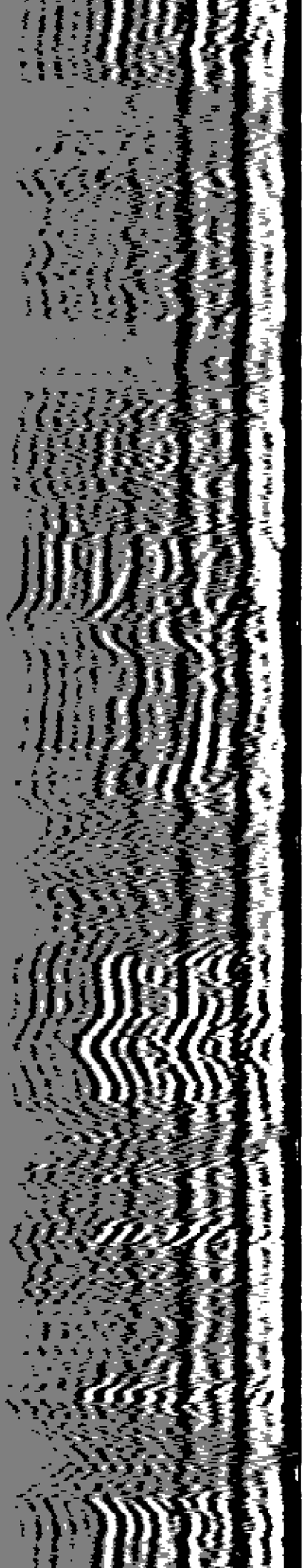


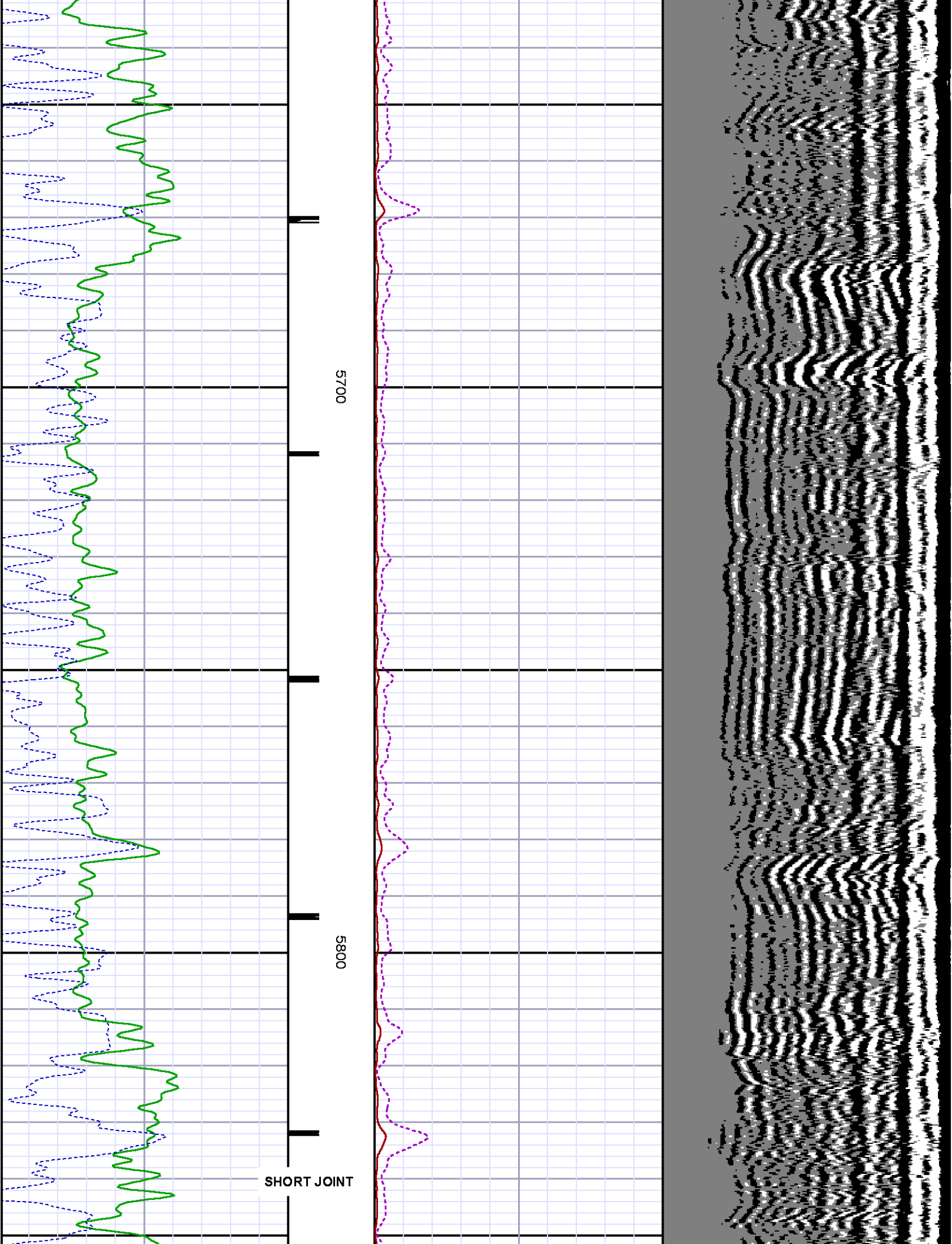


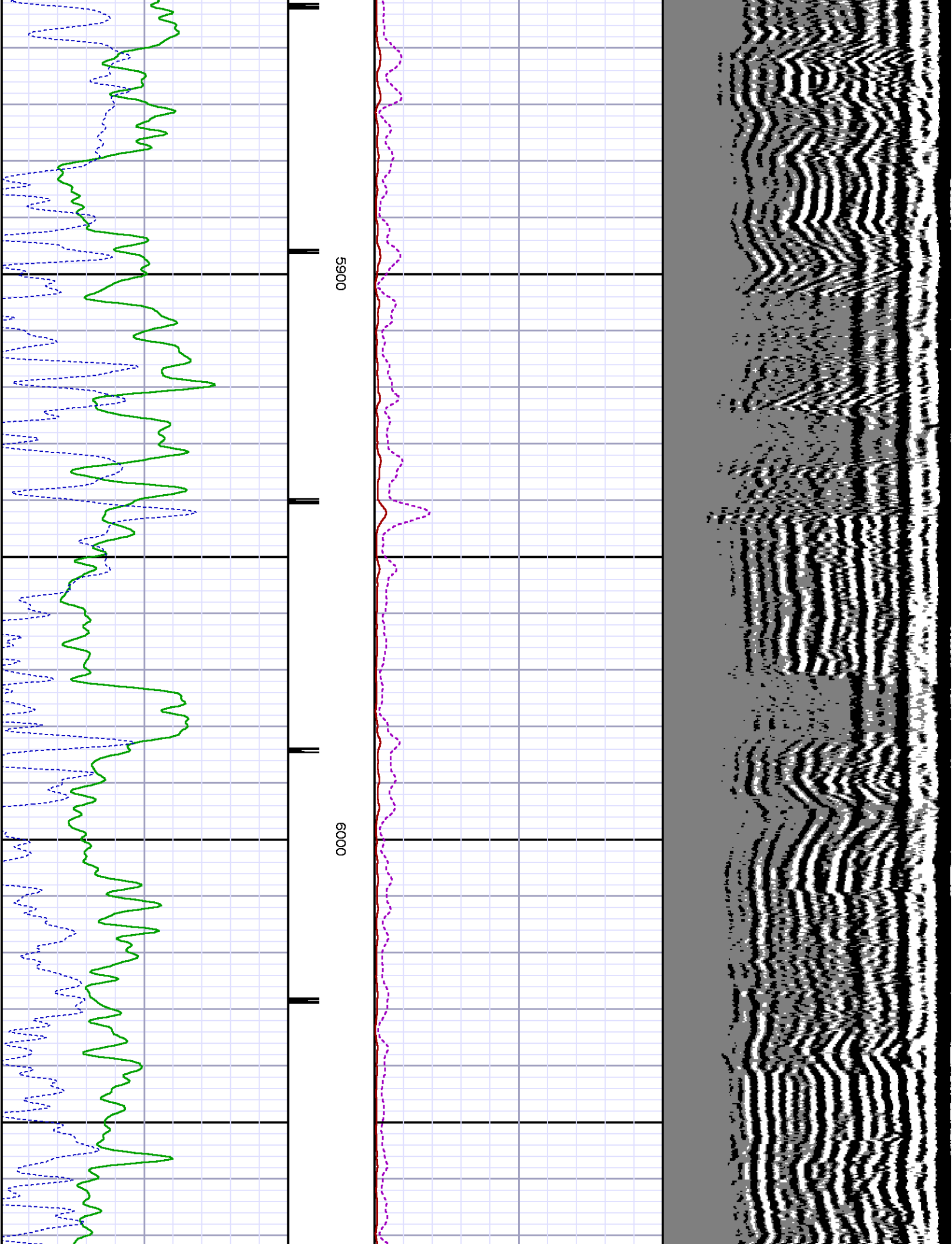


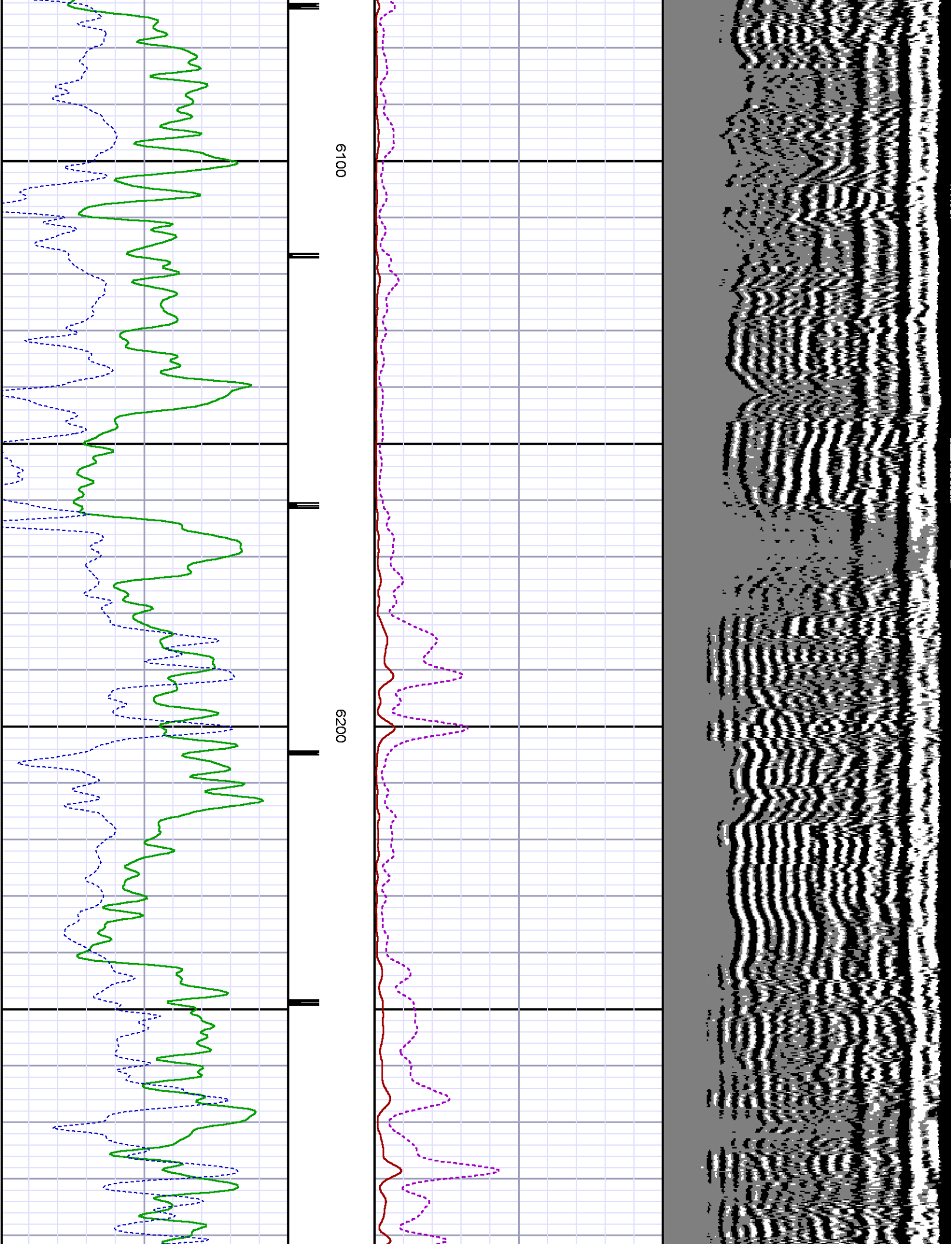


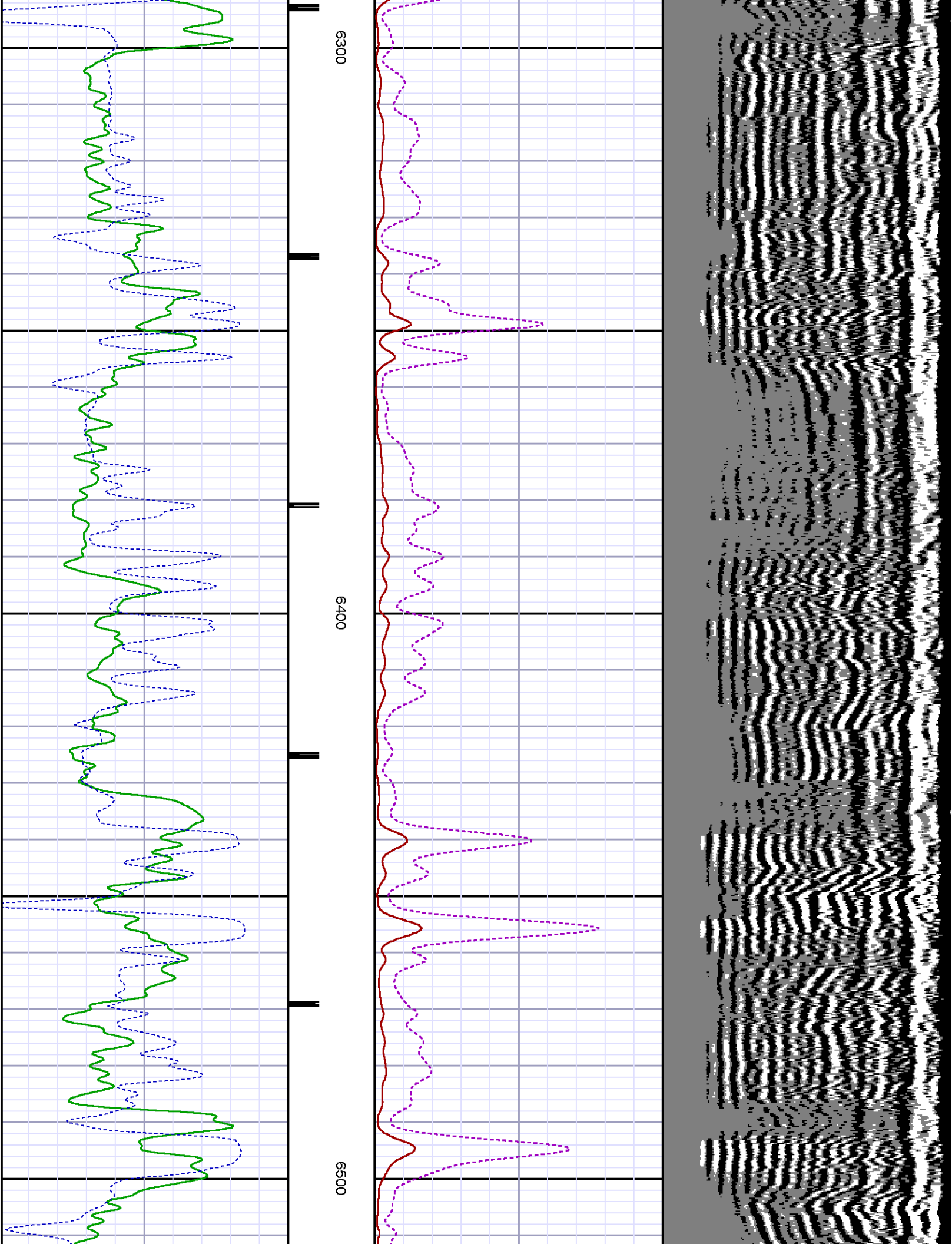


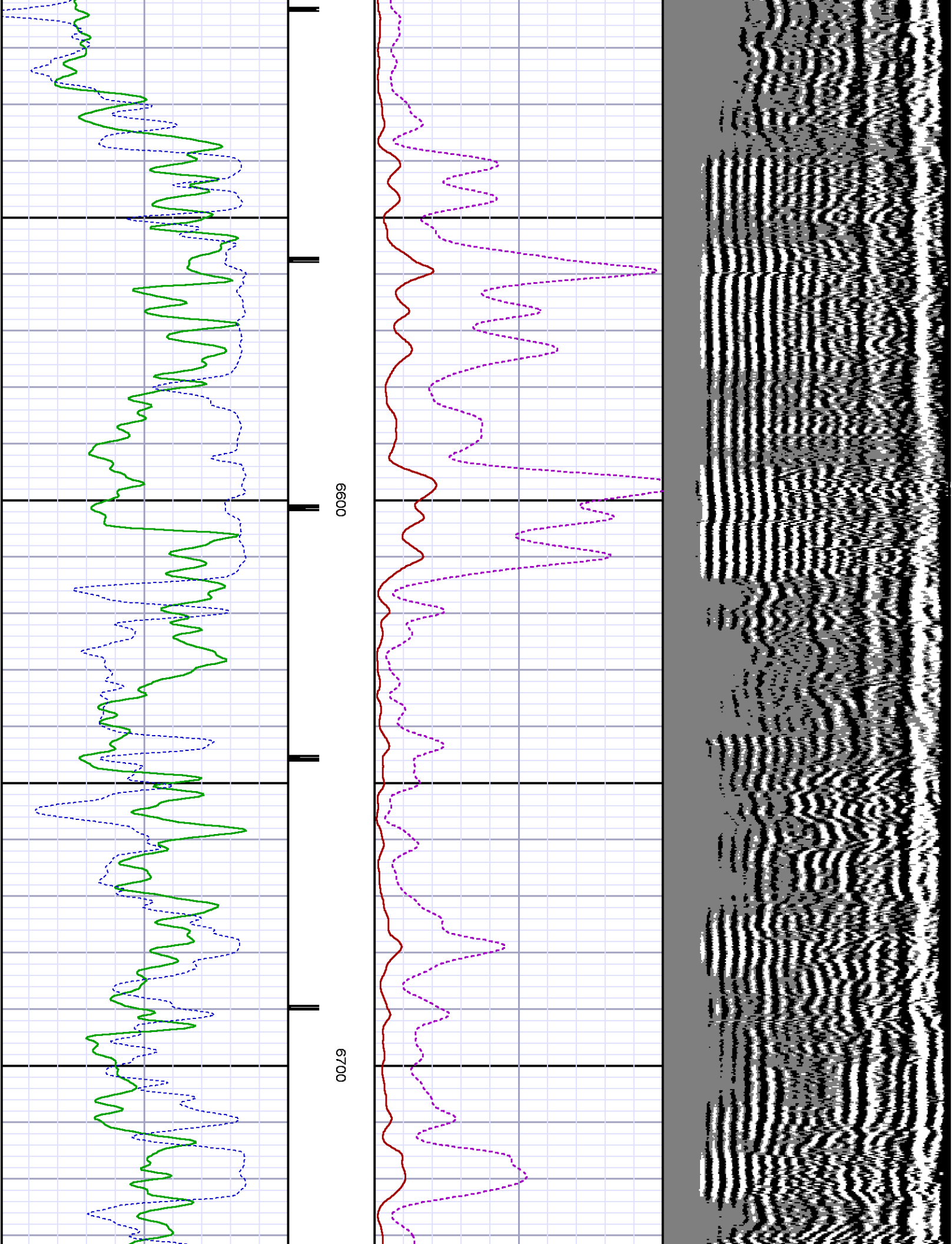


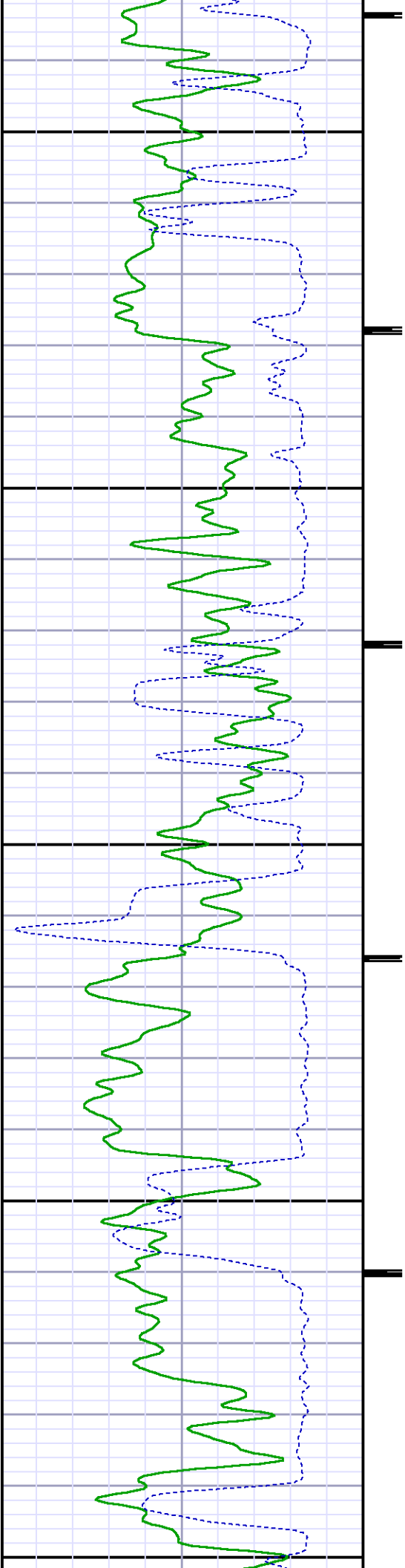






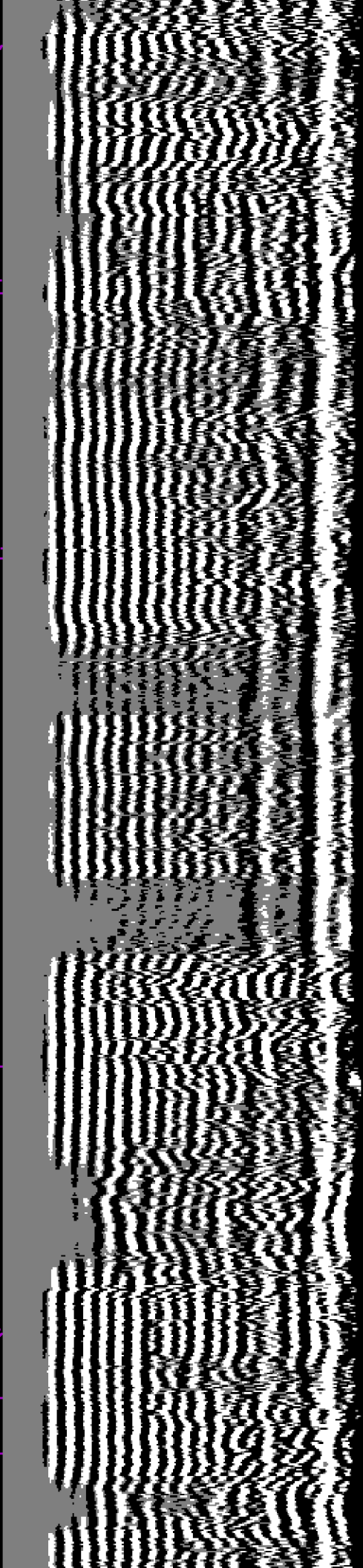
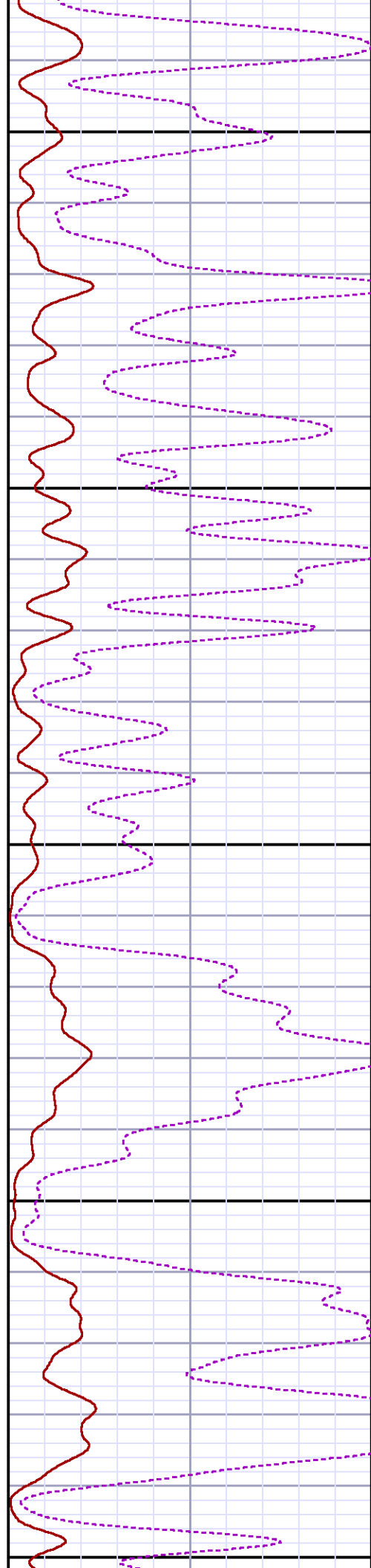


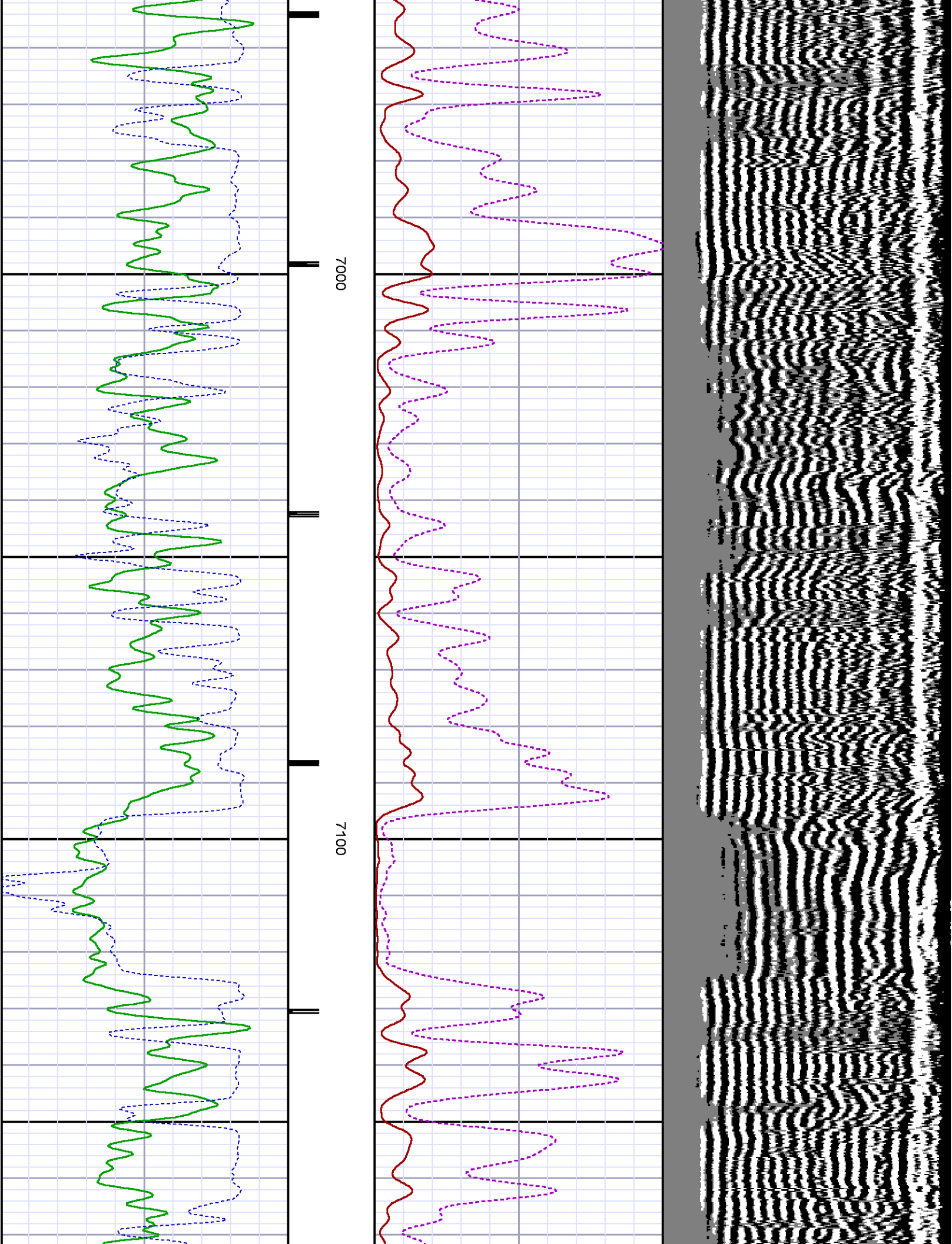


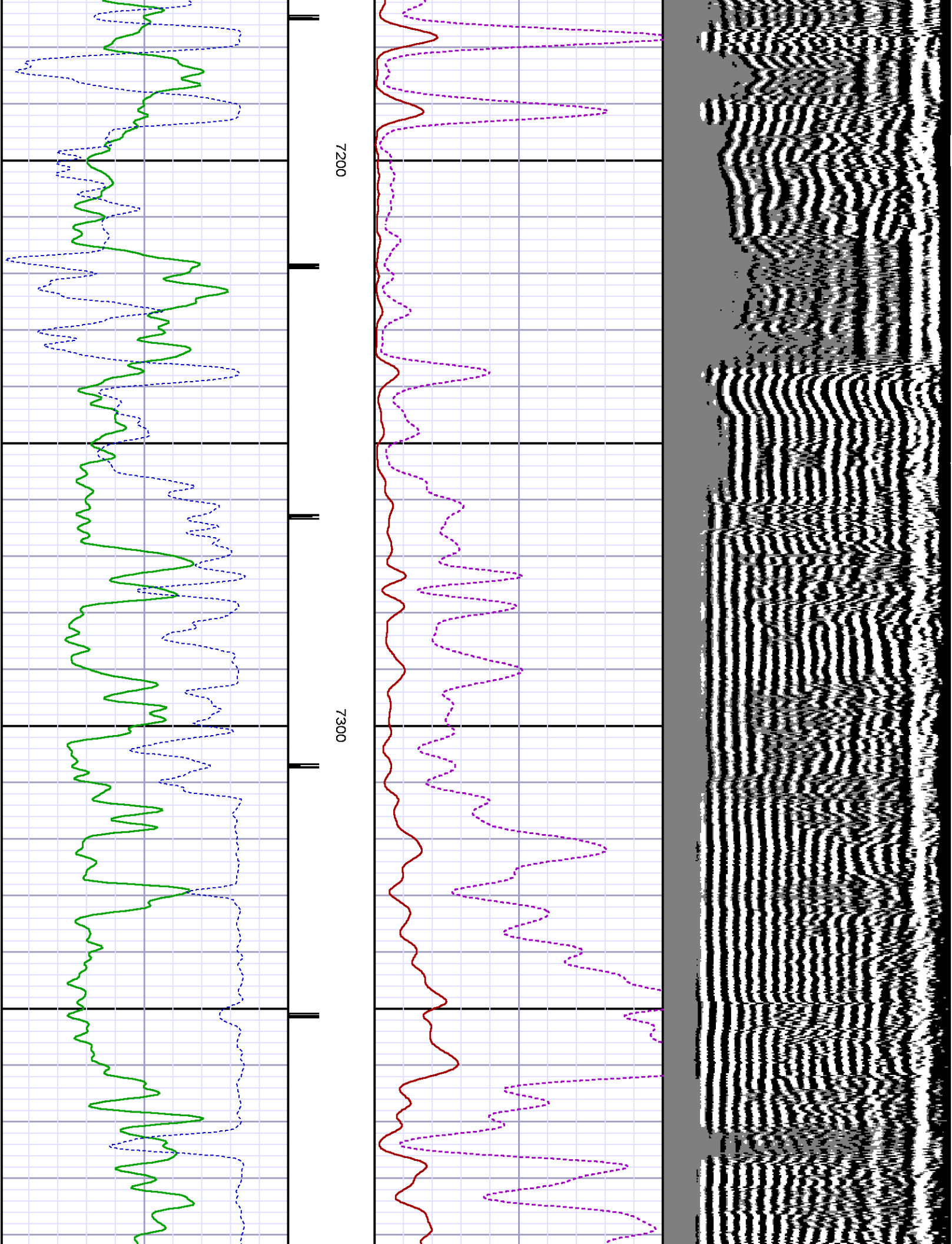


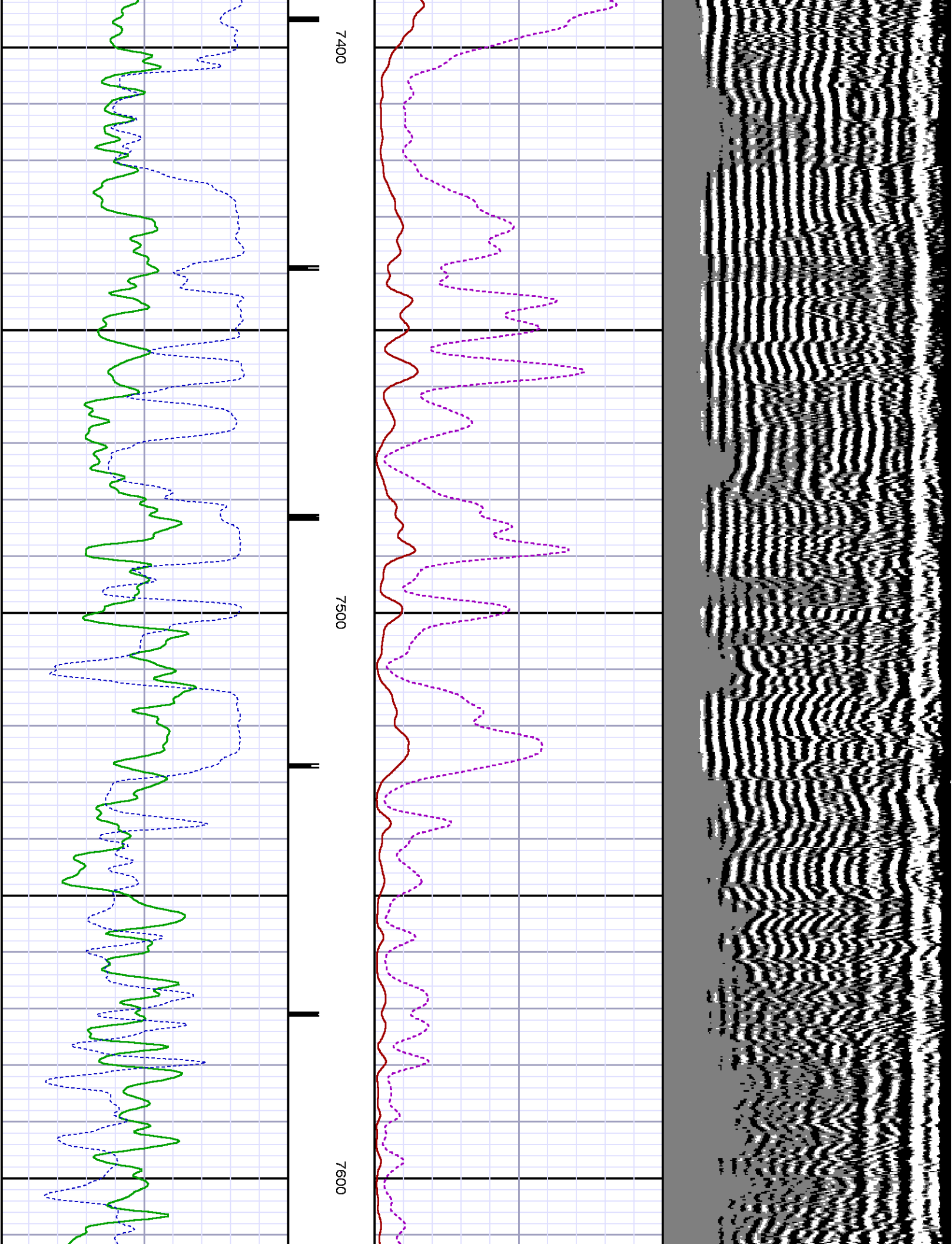
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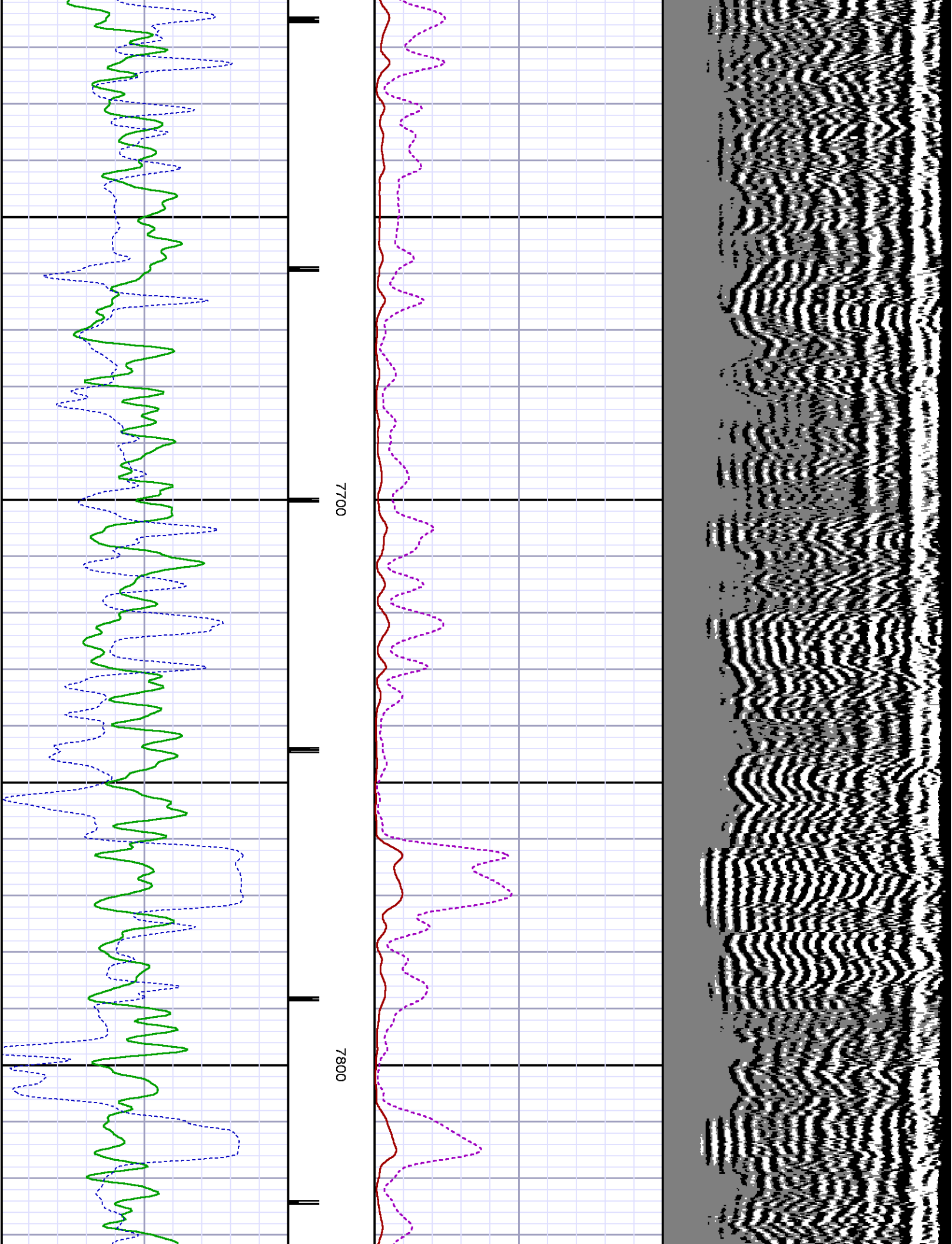
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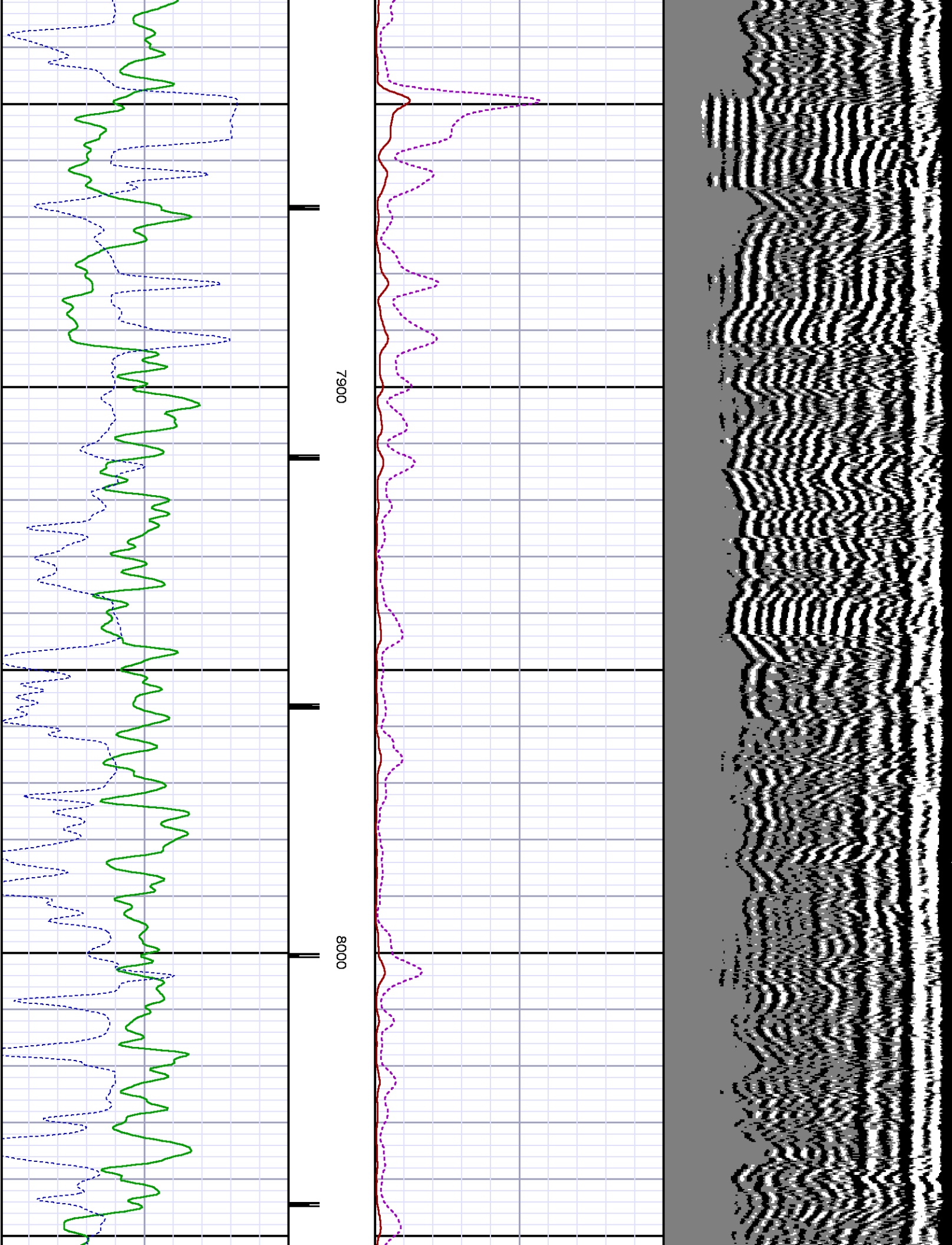


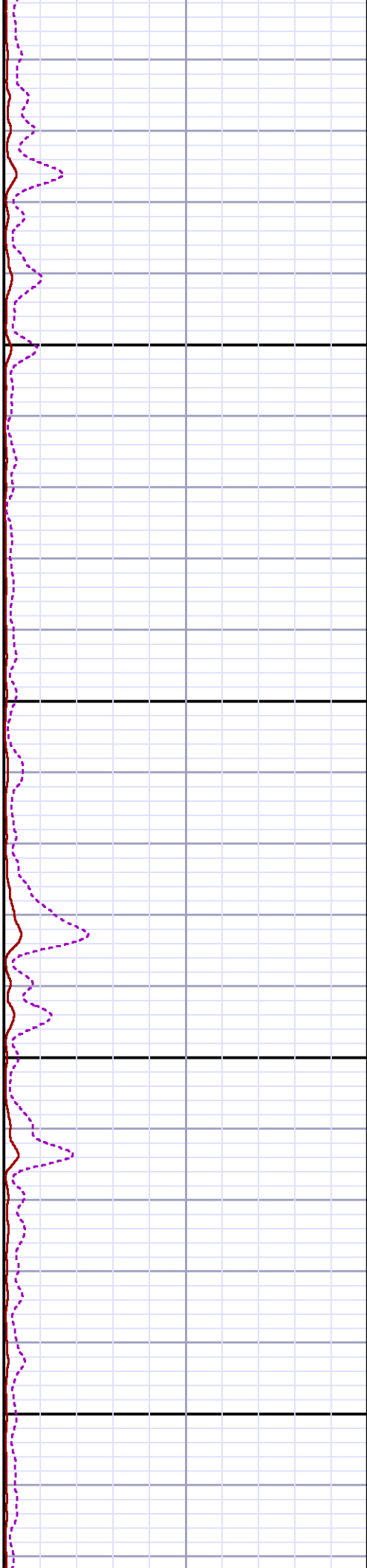
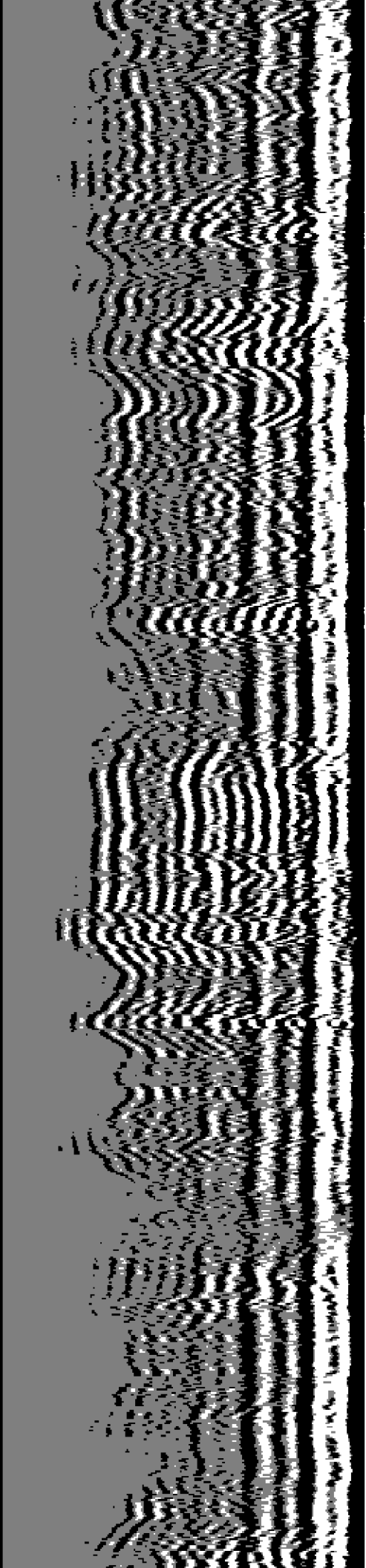






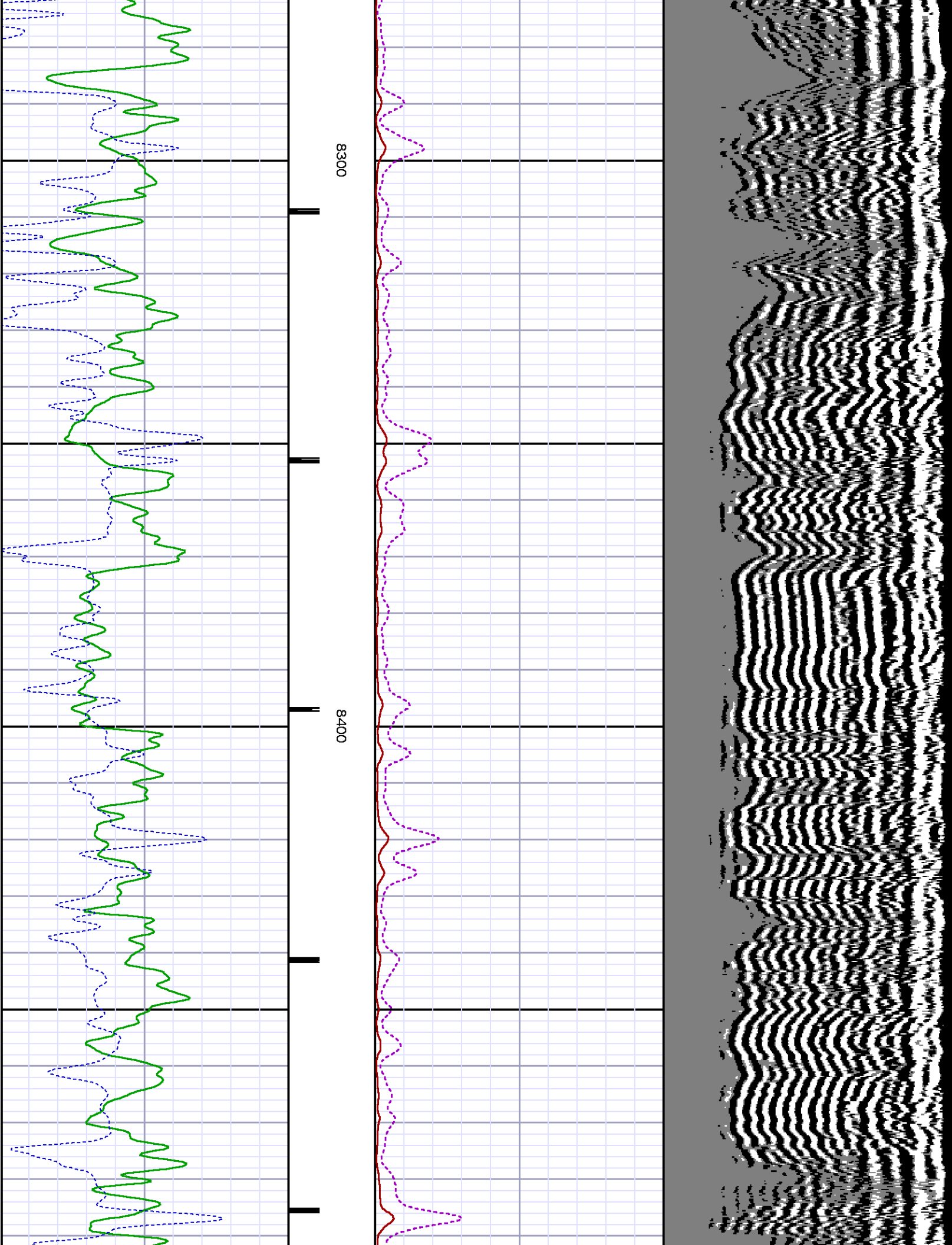


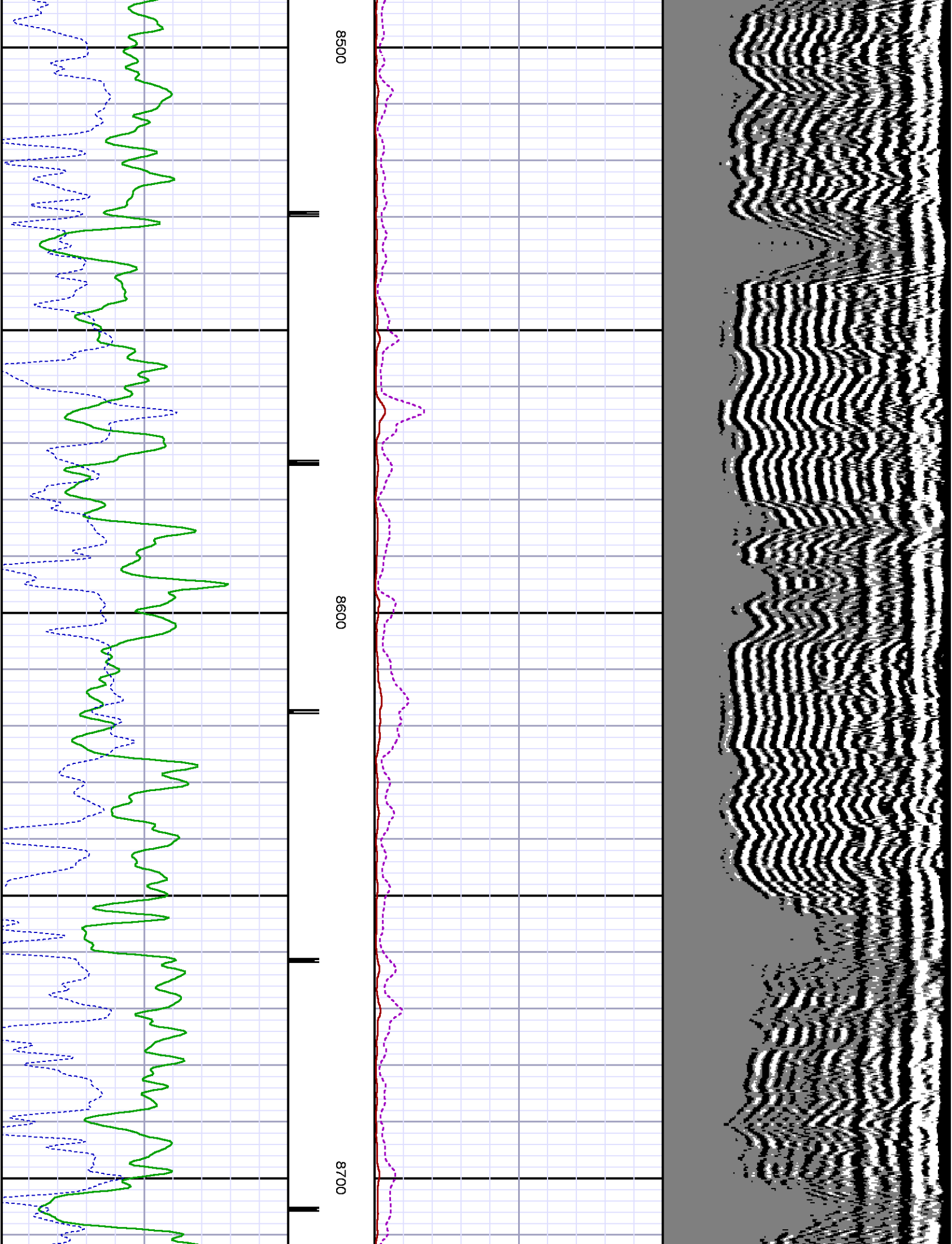


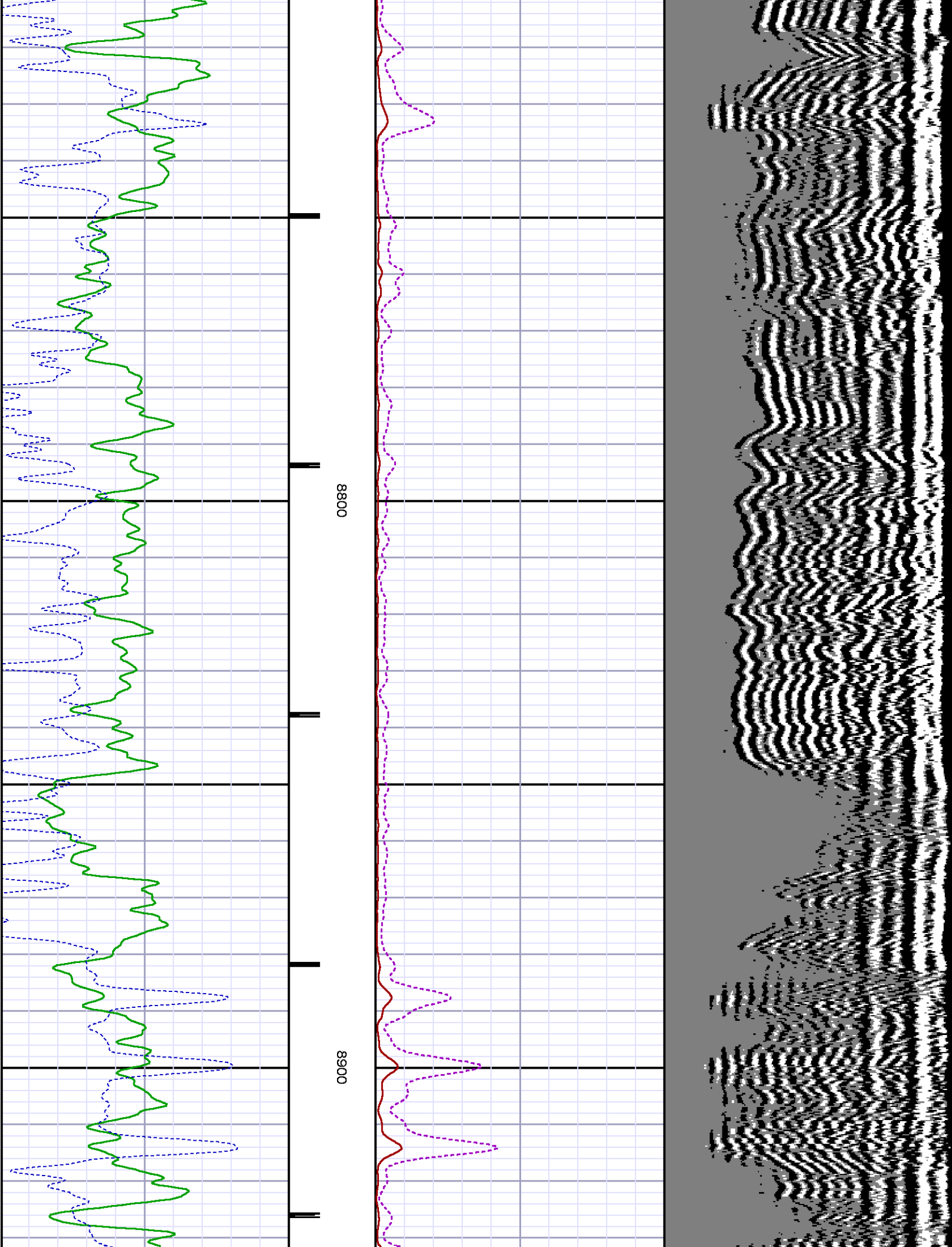


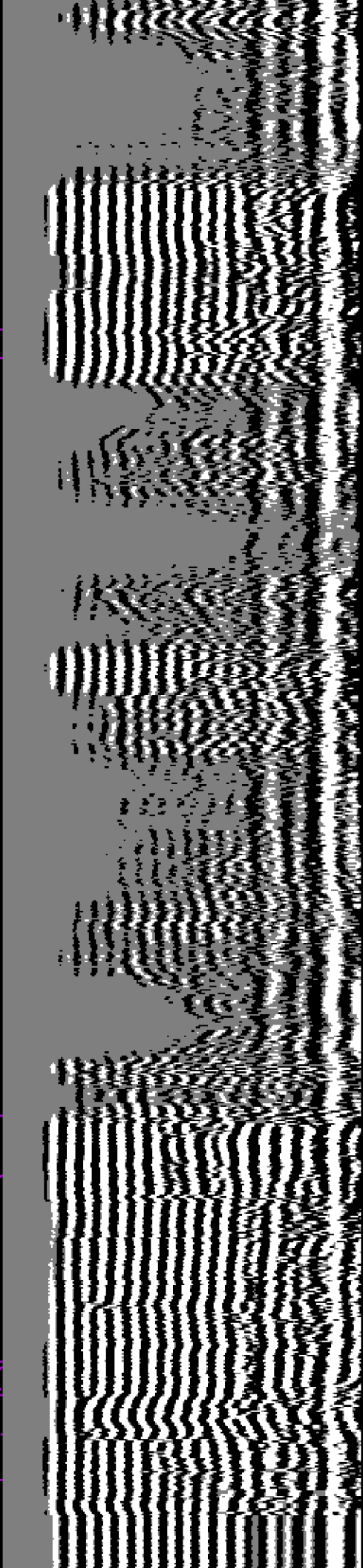
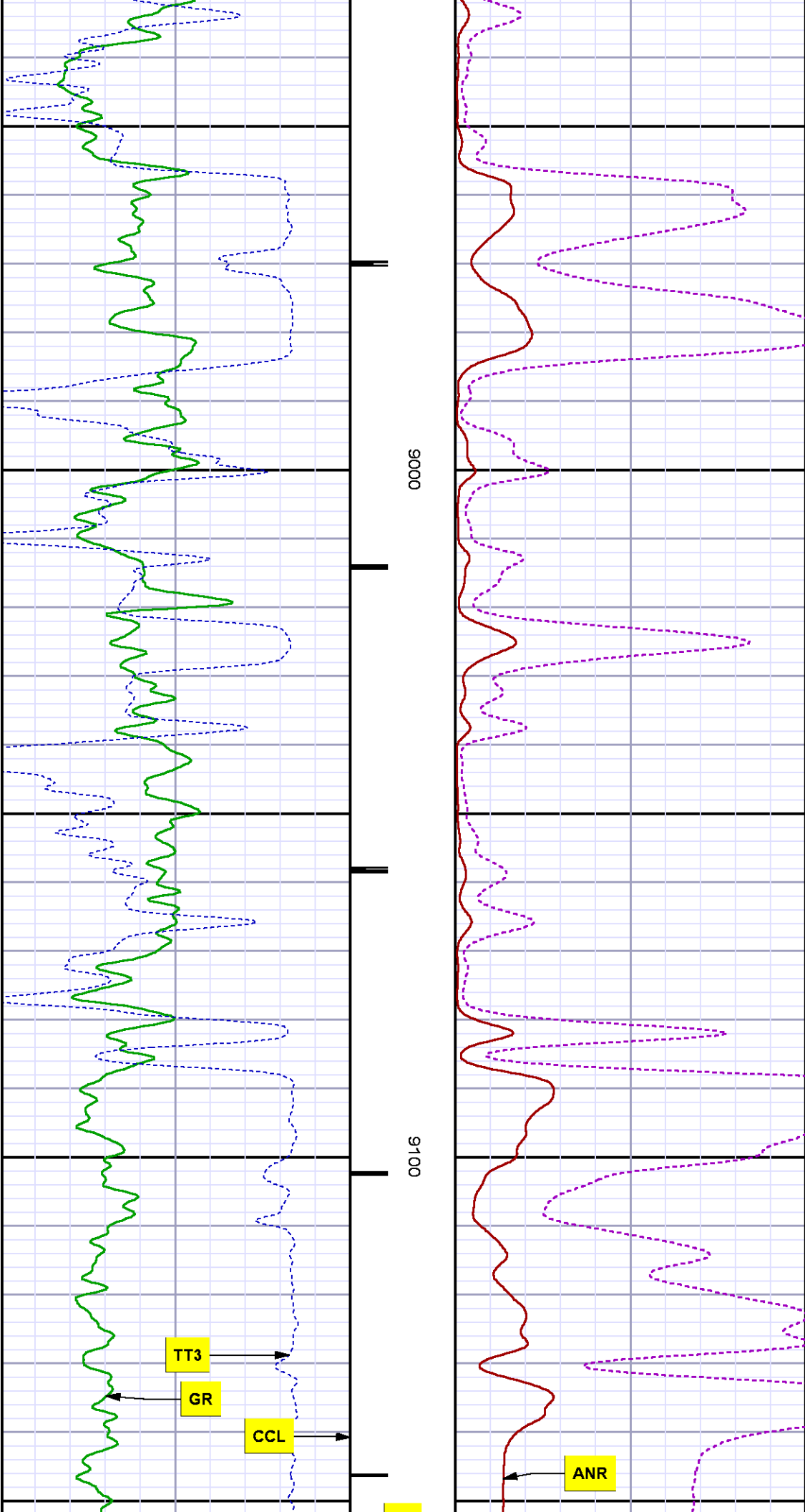
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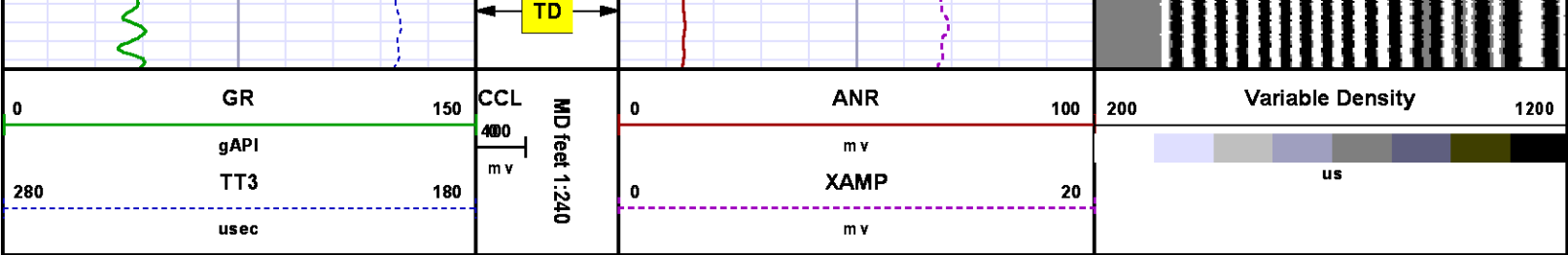
8200











SECONDARY PRESENTATION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	310.000	usec	29.718	9173.500
RAL	Amp Gate Start Near	195.000	usec	29.718	9173.500
RAL	Amp Gate Start Radial	195.000	usec	29.718	9173.500
RAL	Amp Gate Width Far	25.000	usec	29.718	9173.500
RAL	Amp Gate Width Near	25.000	usec	29.718	9173.500
RAL	Amp Gate Width Radial	25.000	usec	29.718	9173.500
RAL	casing od	4.500	inches	29.718	9173.500
RAL	casing wt	11.600	lbm/ft	29.718	9173.500
RAL	FB Start Far	291.900	usec	29.718	9173.500
RAL	FB Start Near	180.000	usec	29.718	9173.500
RAL	FB Start Radial	180.000	usec	29.718	9173.500
RAL	FB Thresh Far	10.000	mv	29.718	9173.500
RAL	FB Thresh Near	4.000	mv	29.718	9173.500
RAL	FB Thresh Radial	4.000	mv	29.718	9173.500
RAL	Fluid Travel Time	200.000	usec/ft	29.718	9173.093

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

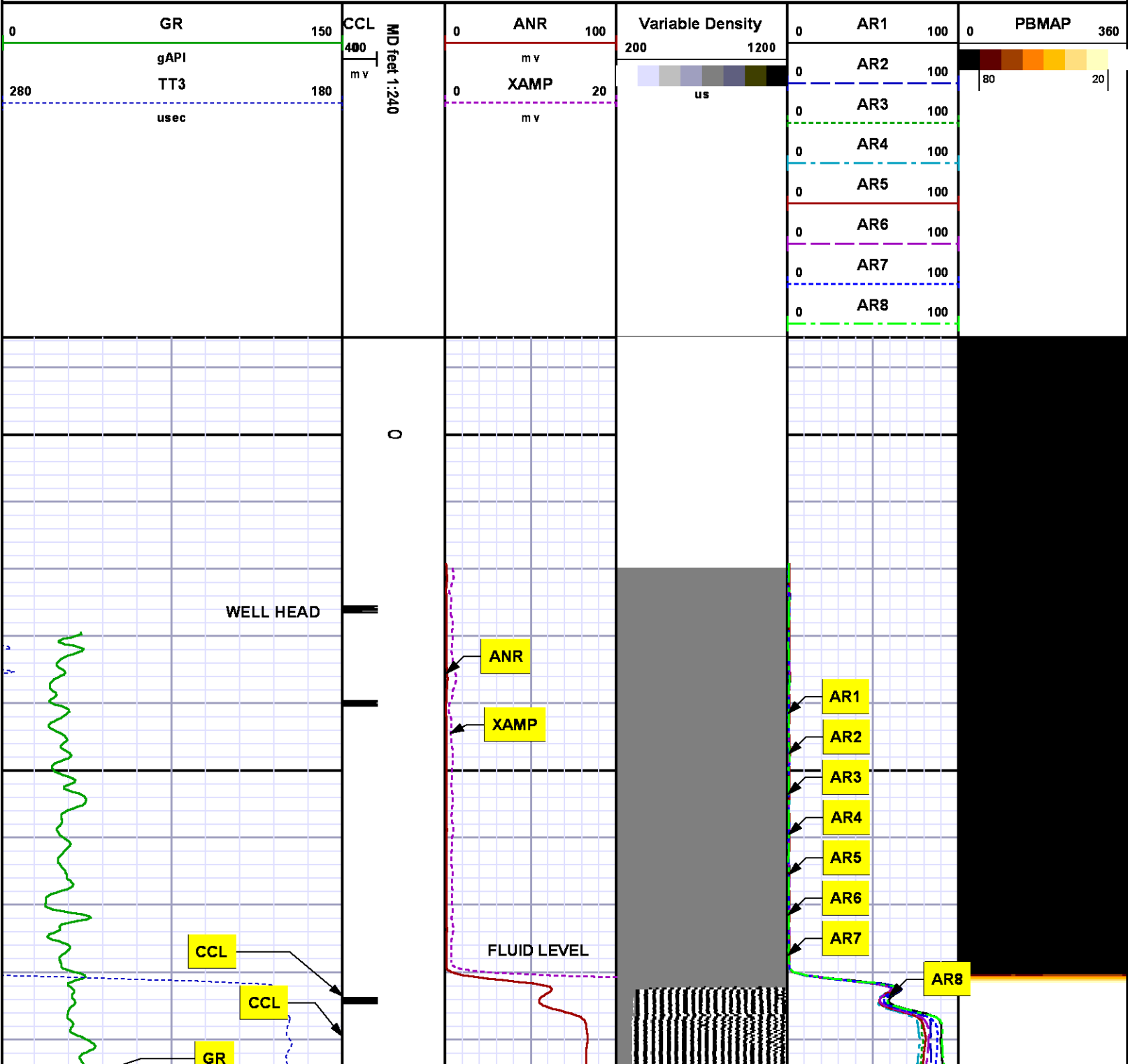
Well : HOEPPLI RWF 43-36

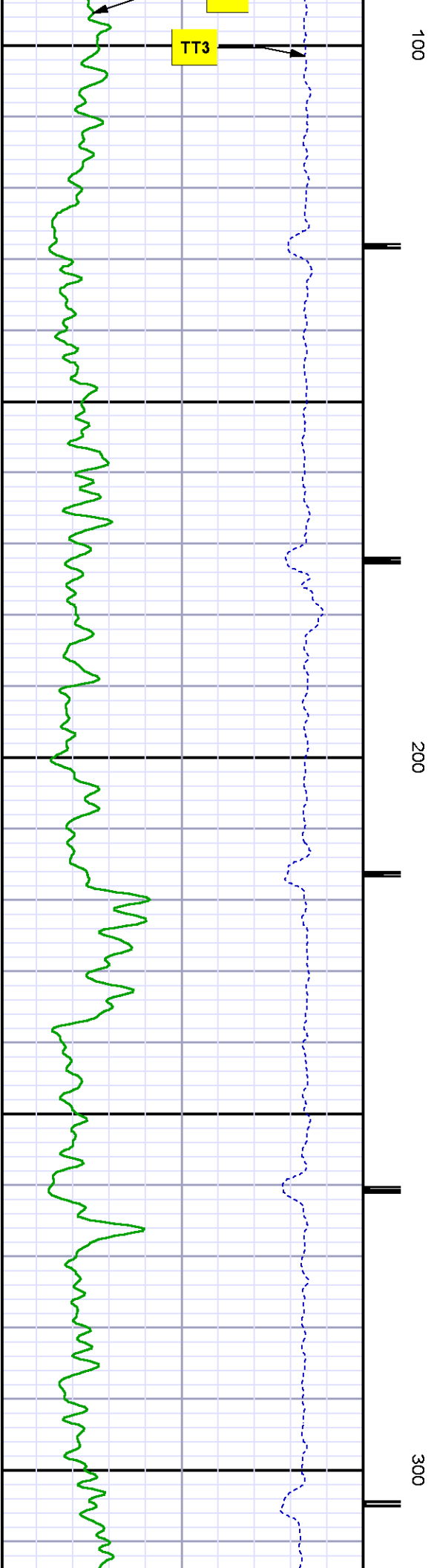
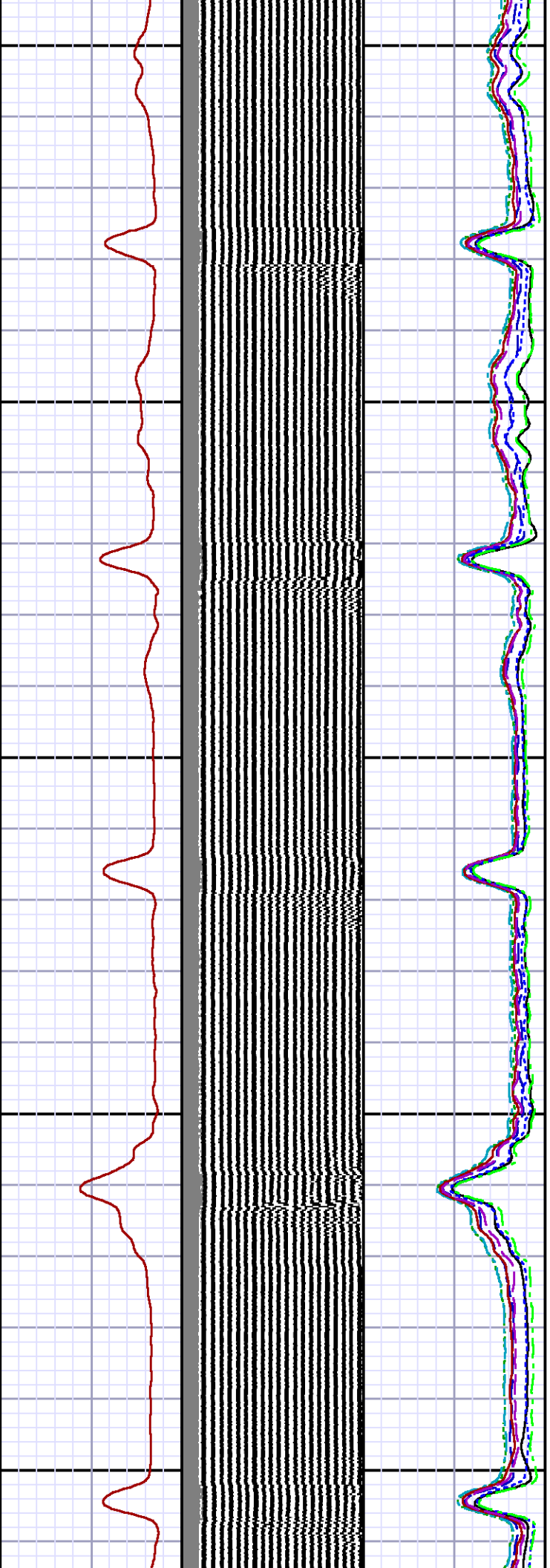
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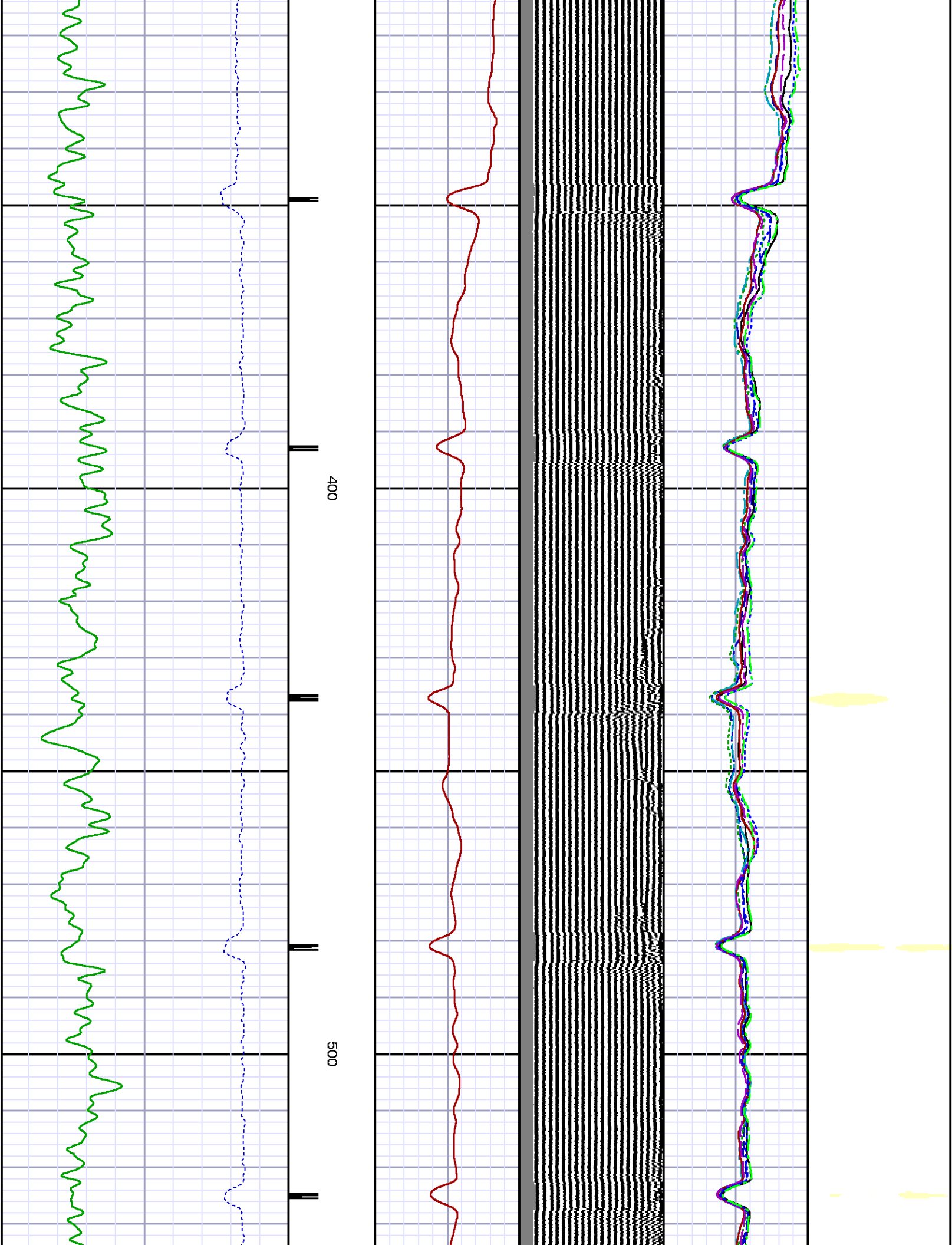
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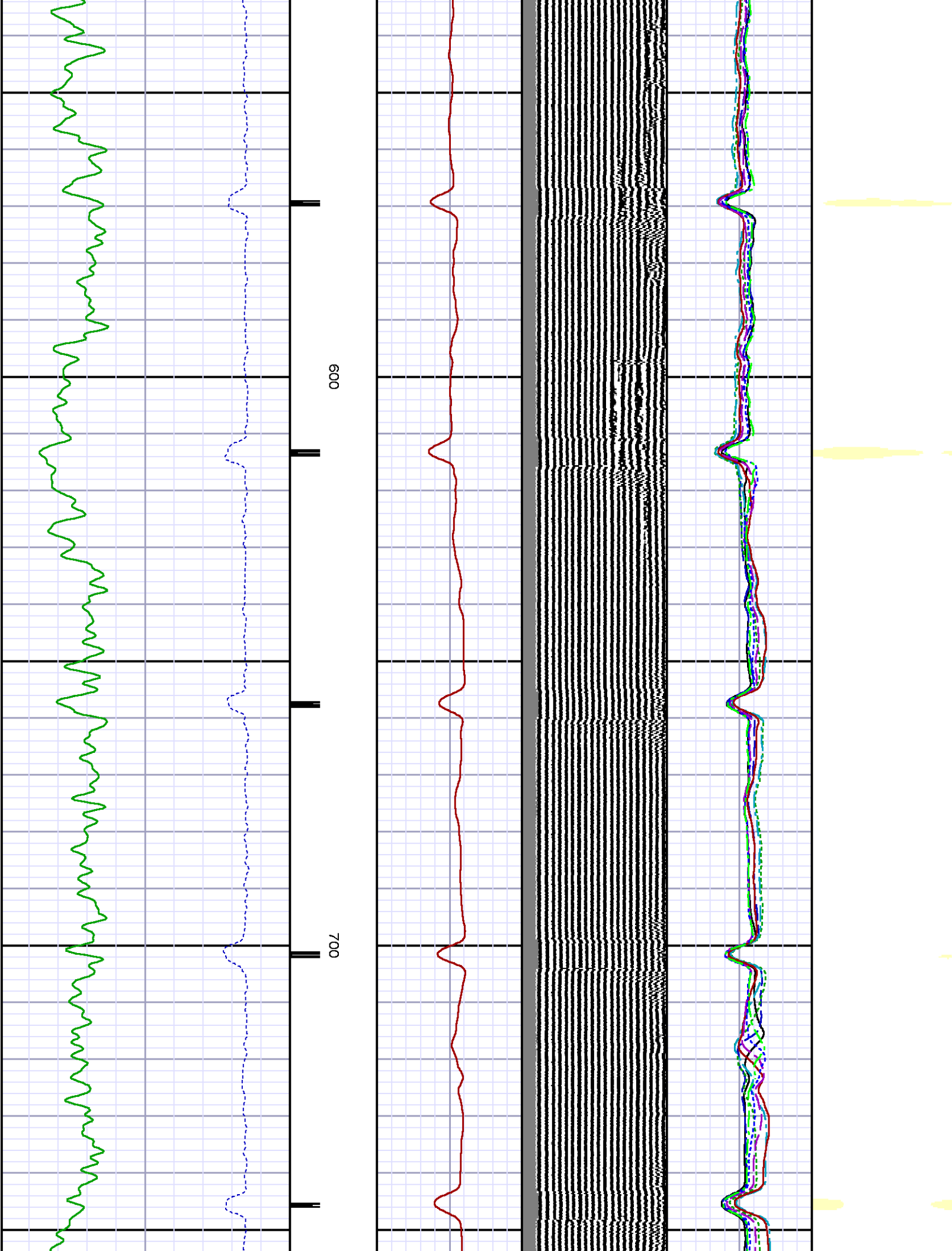
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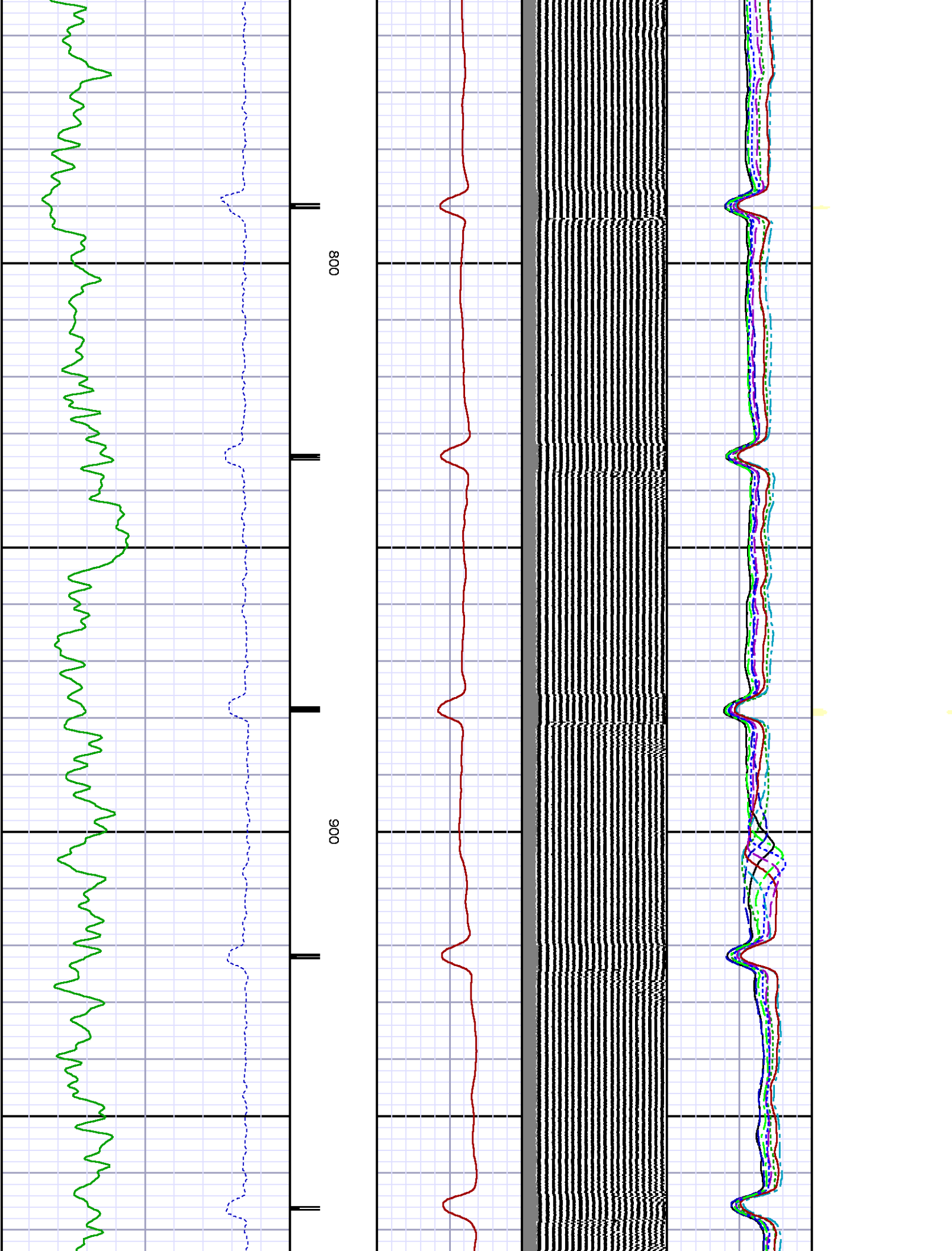
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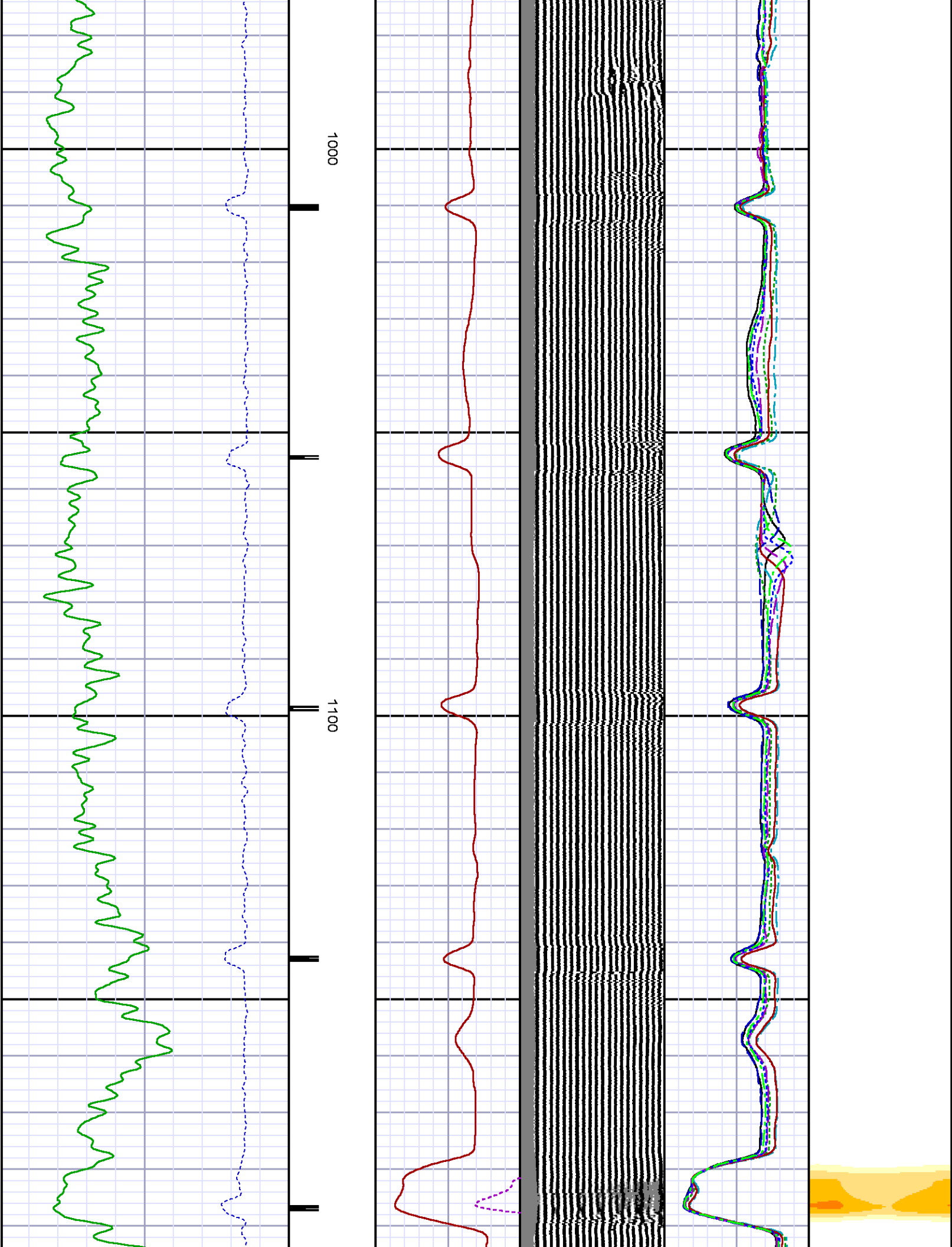


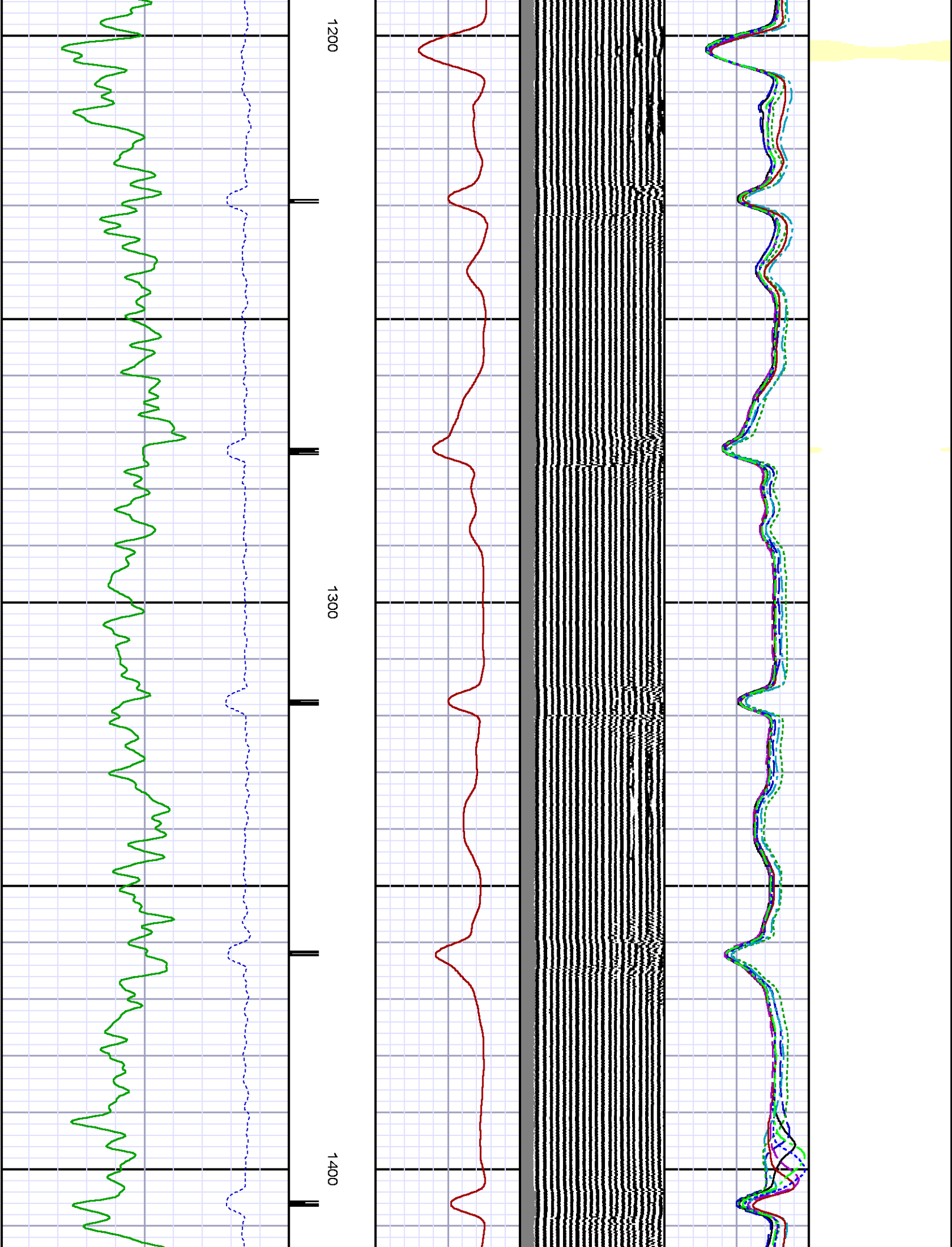


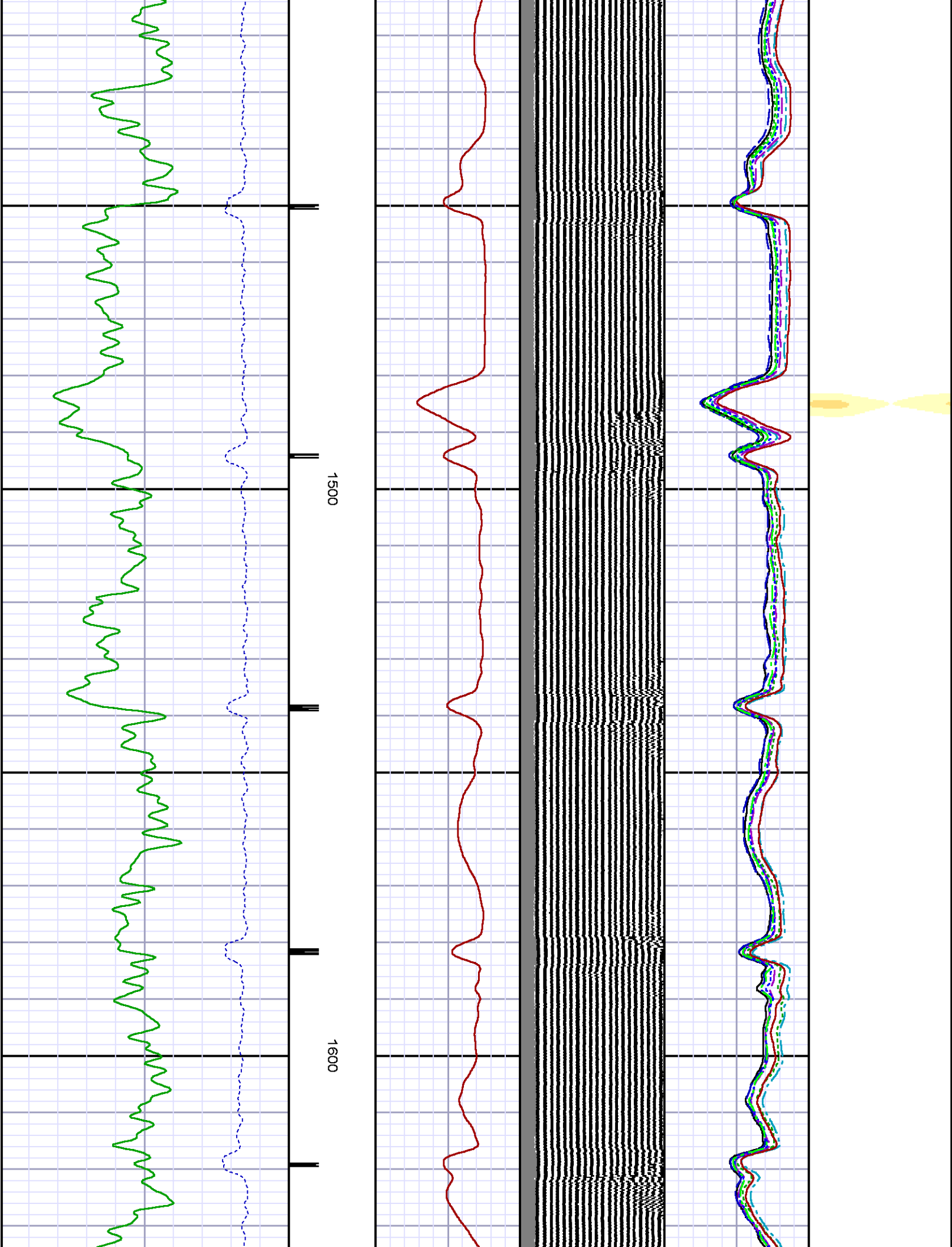


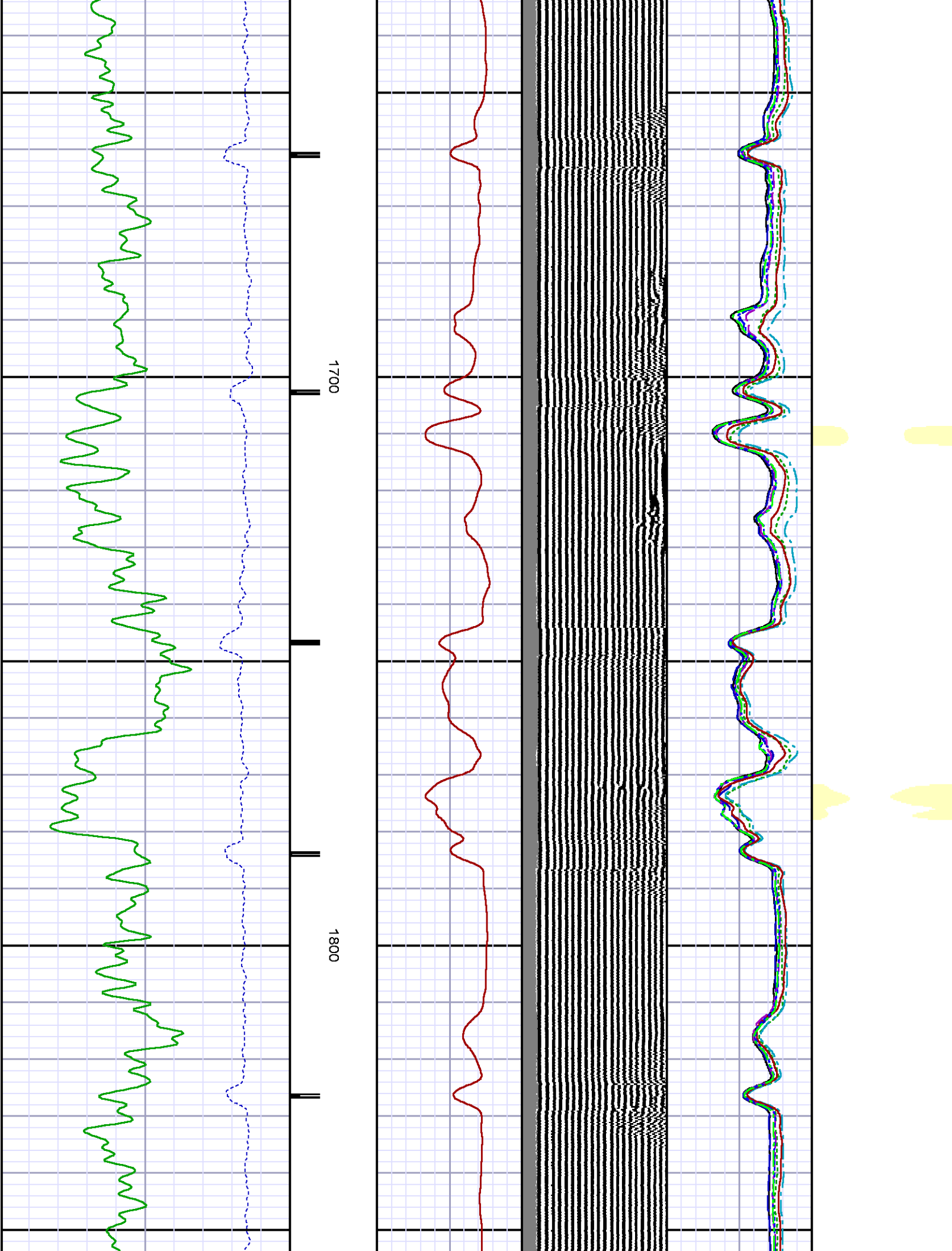


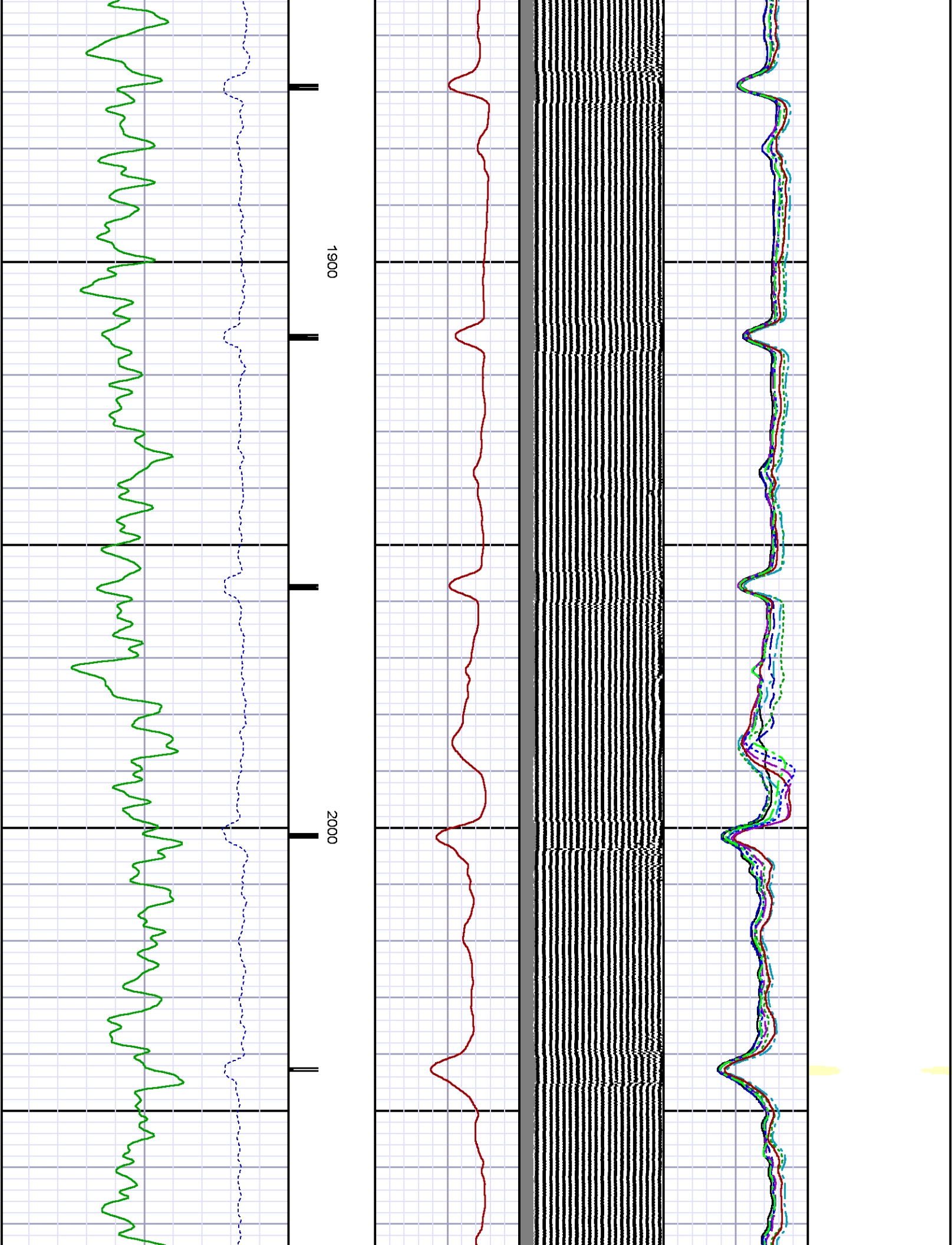


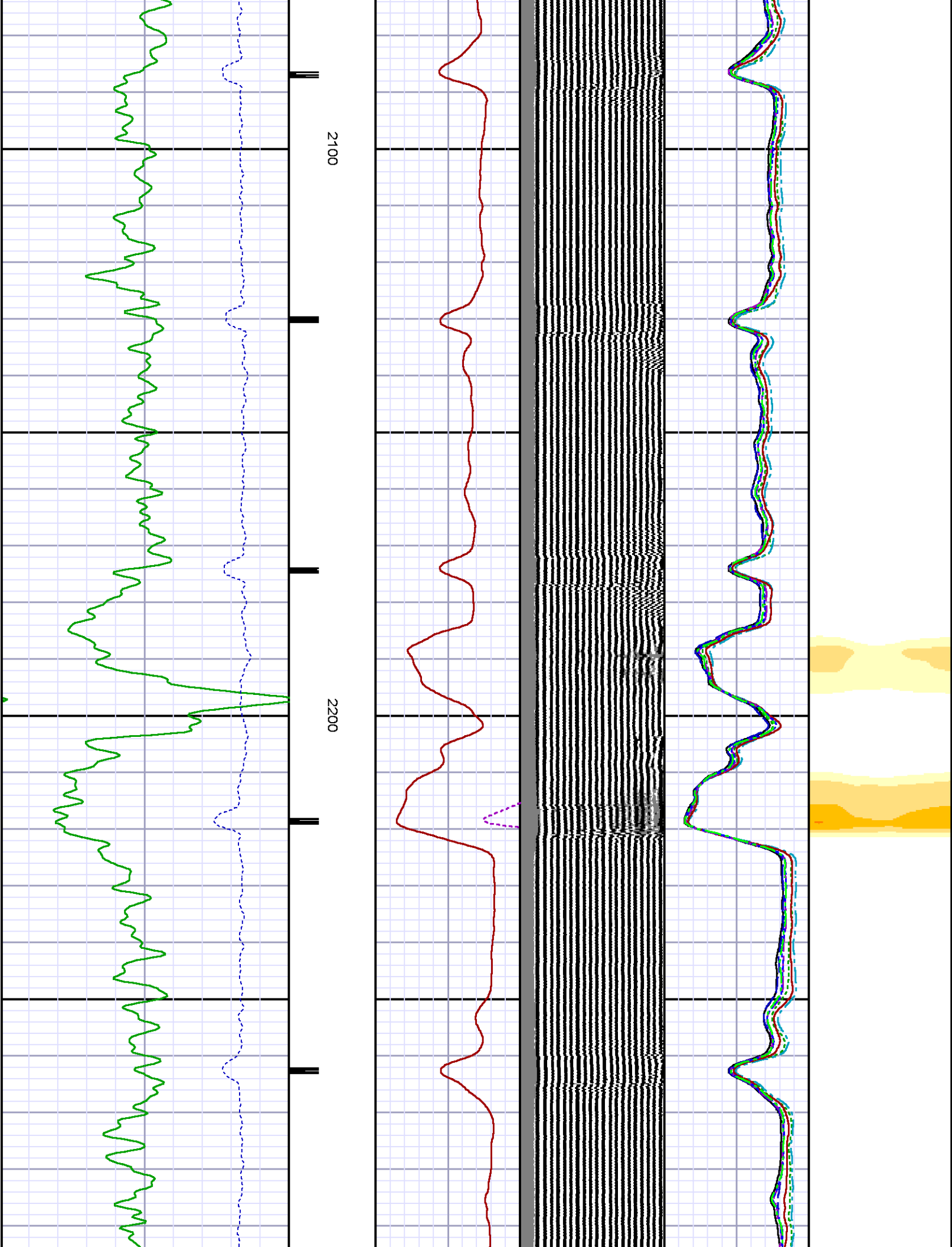


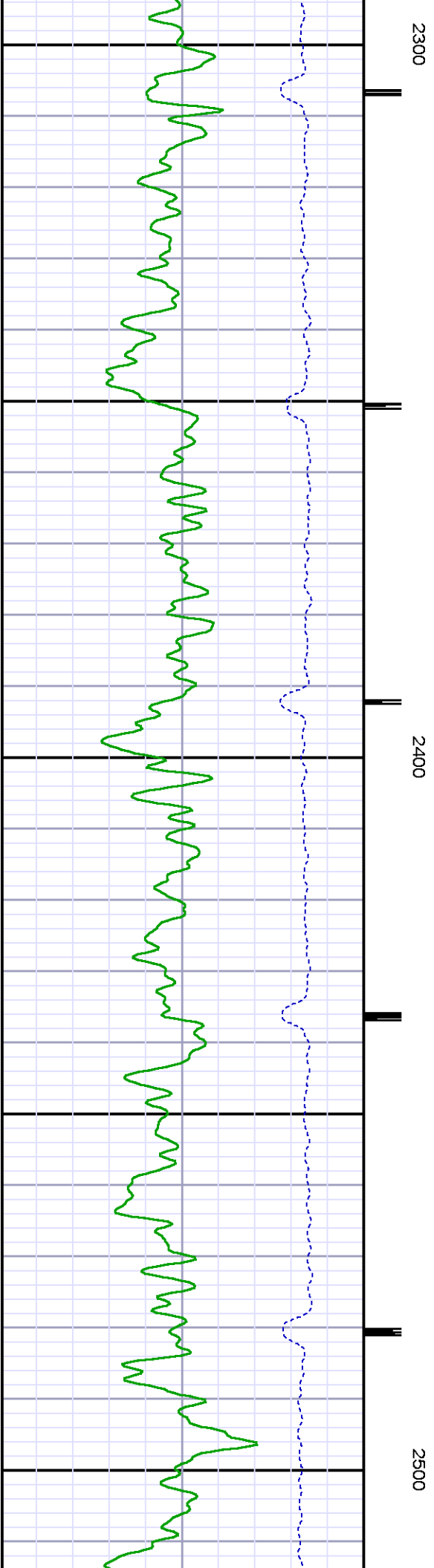
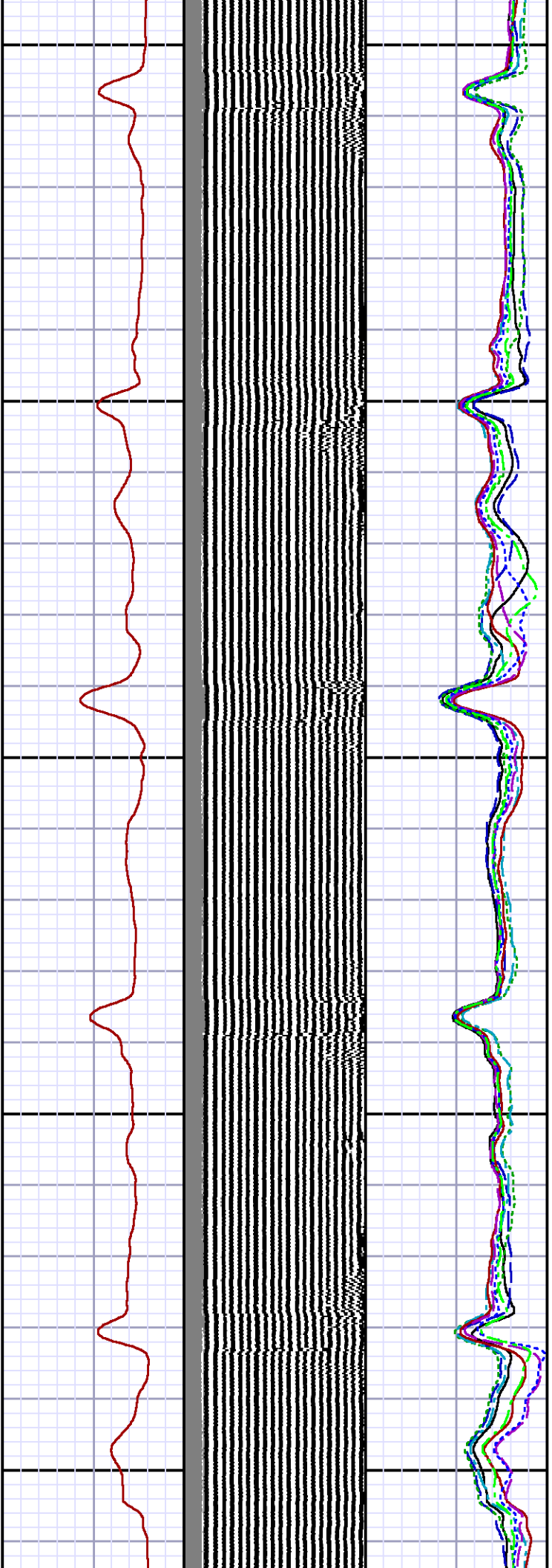


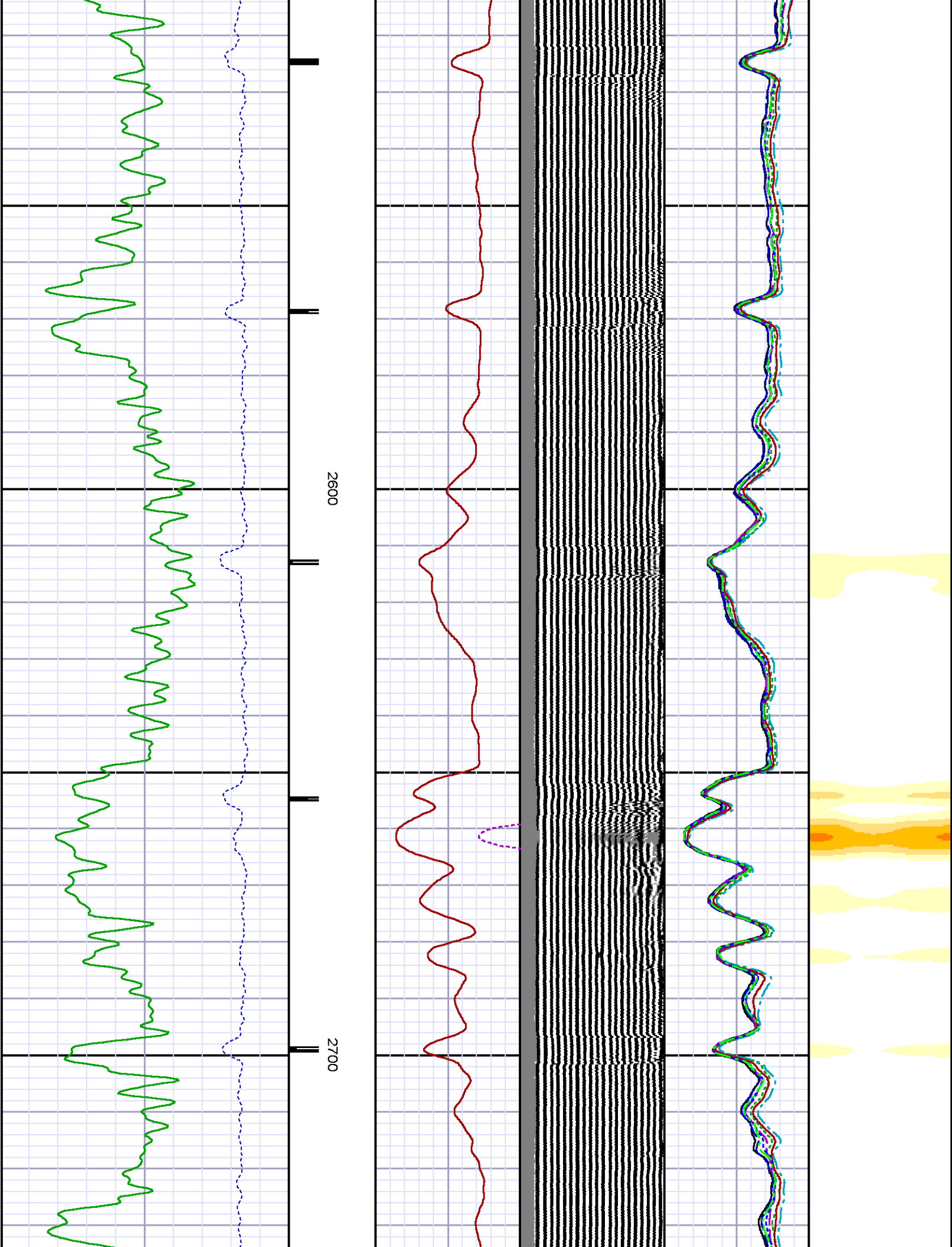


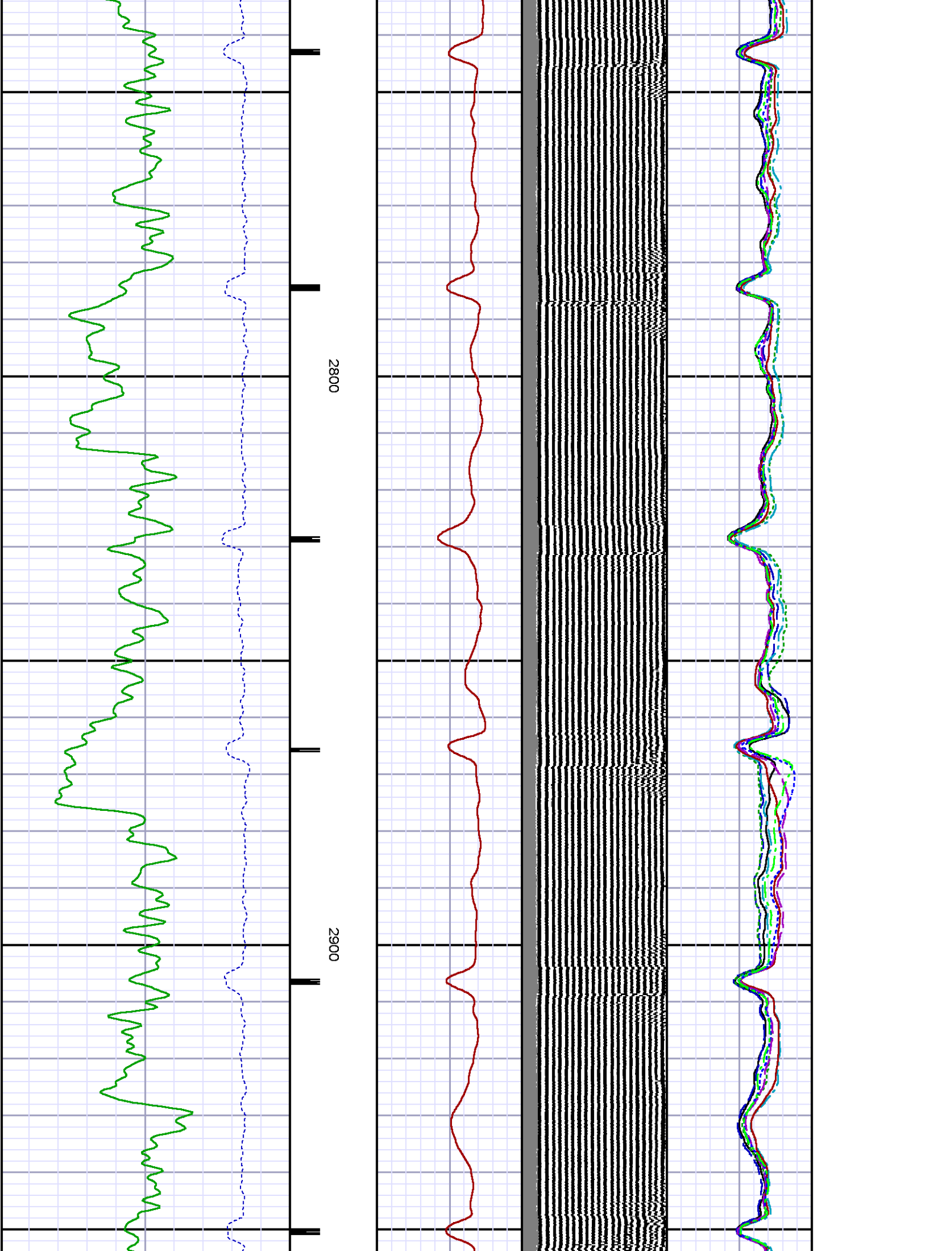


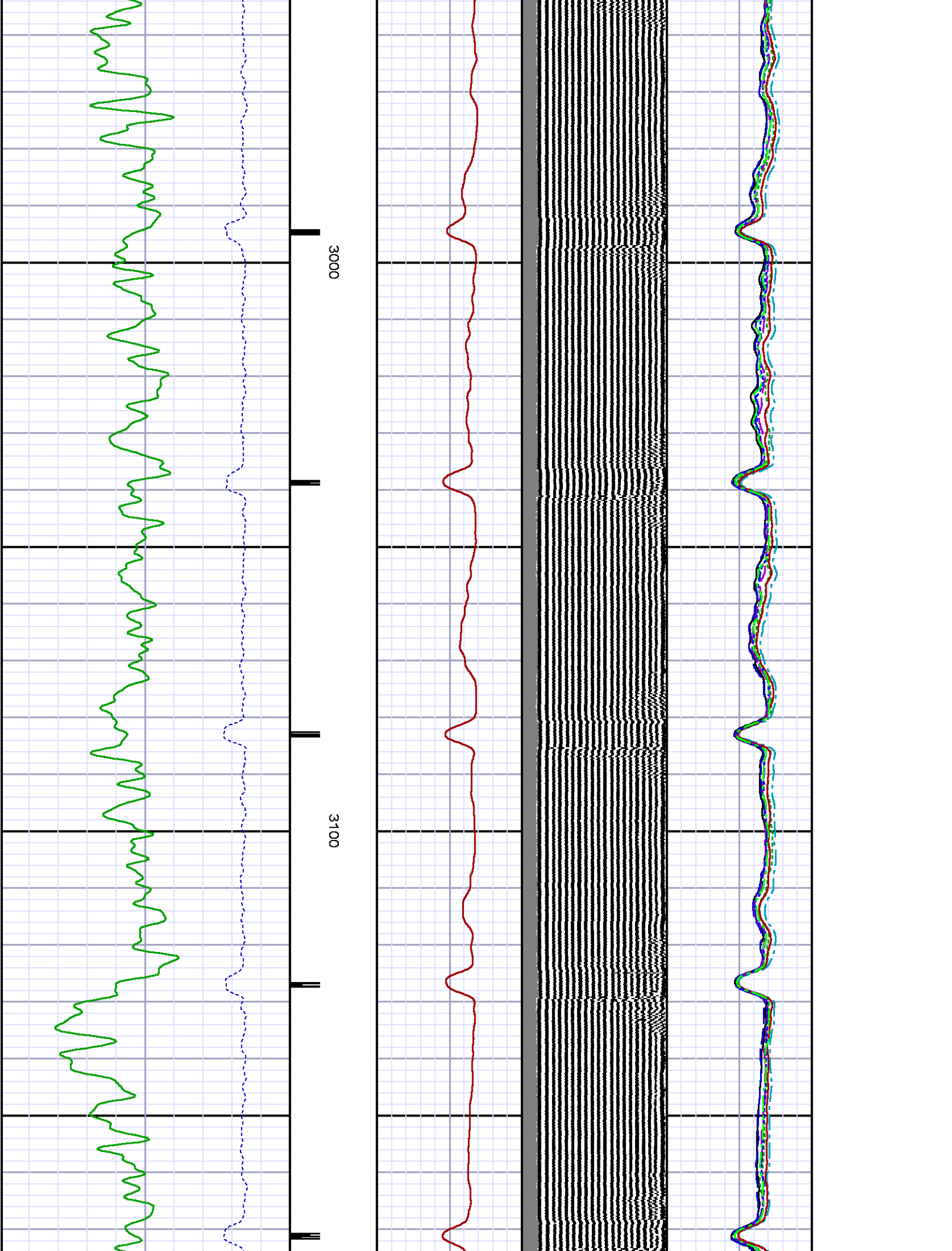


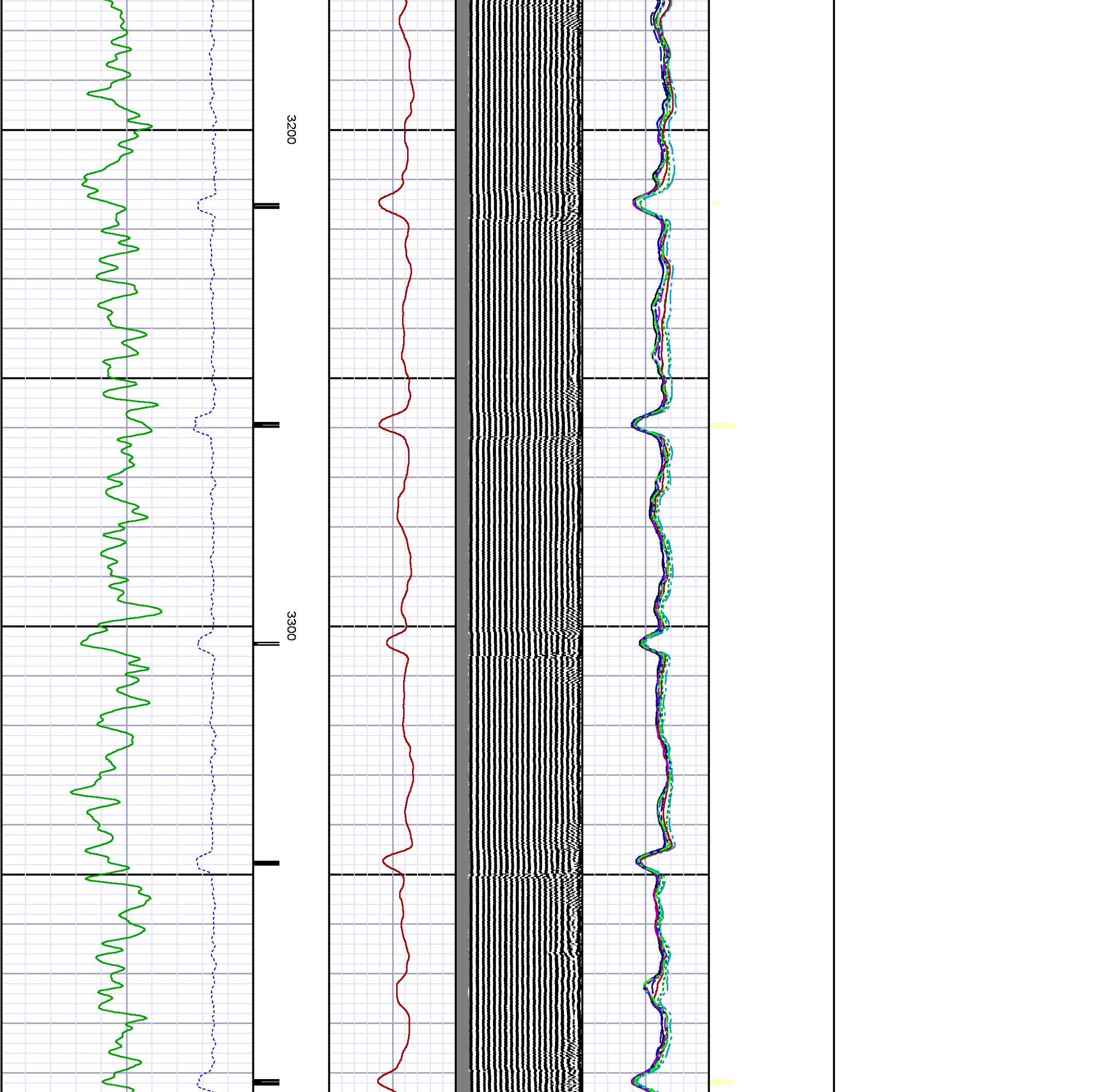


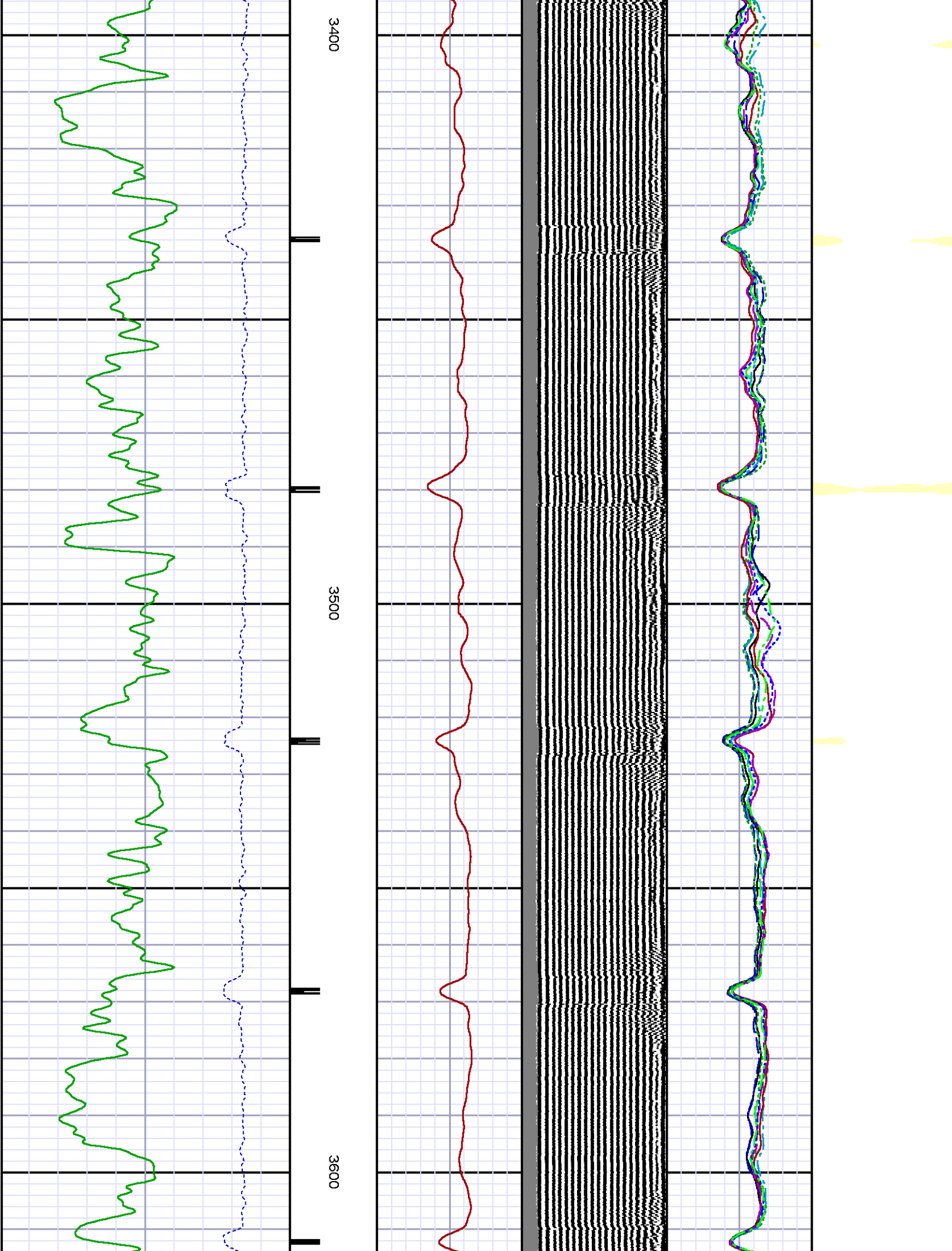


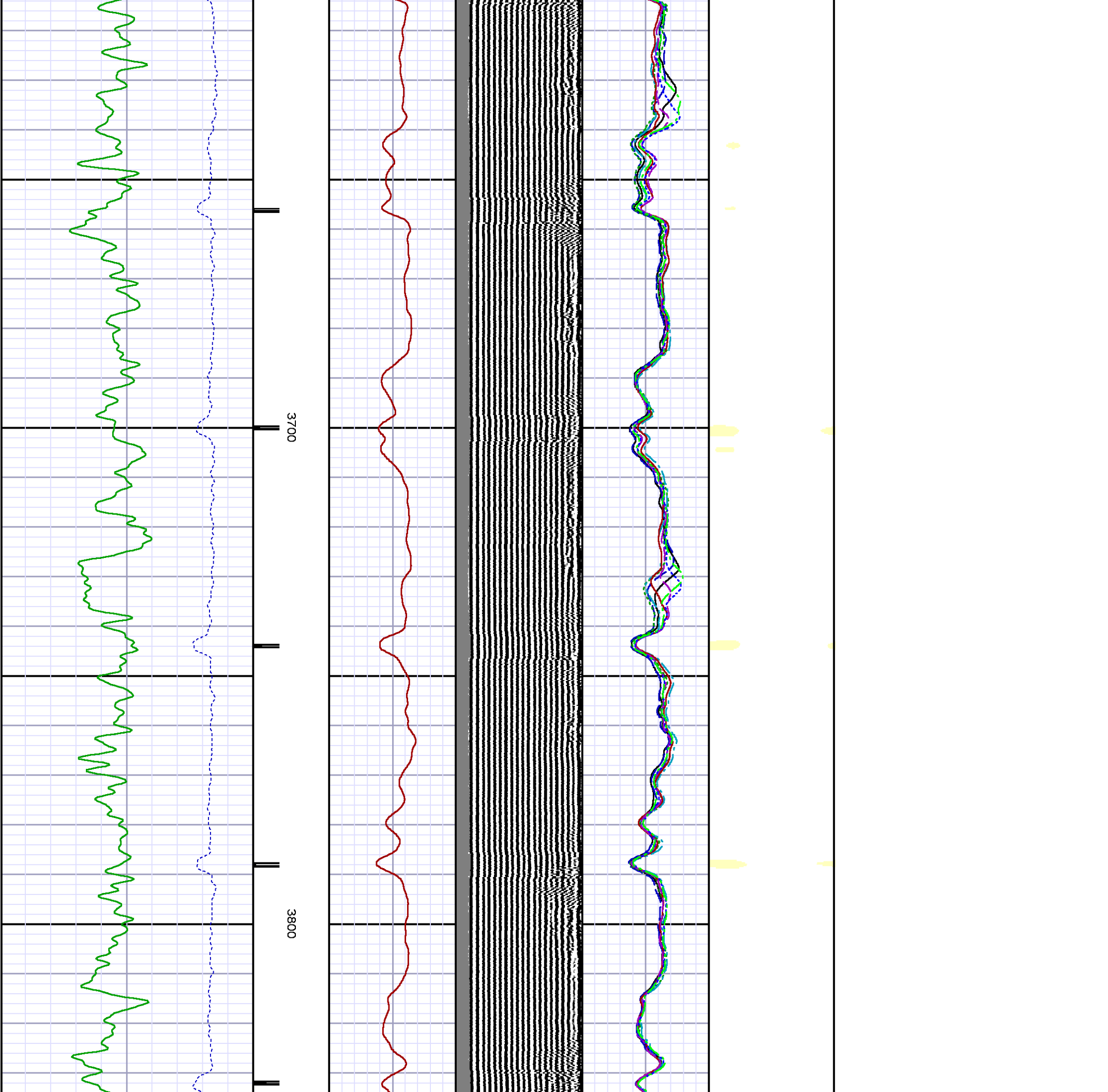


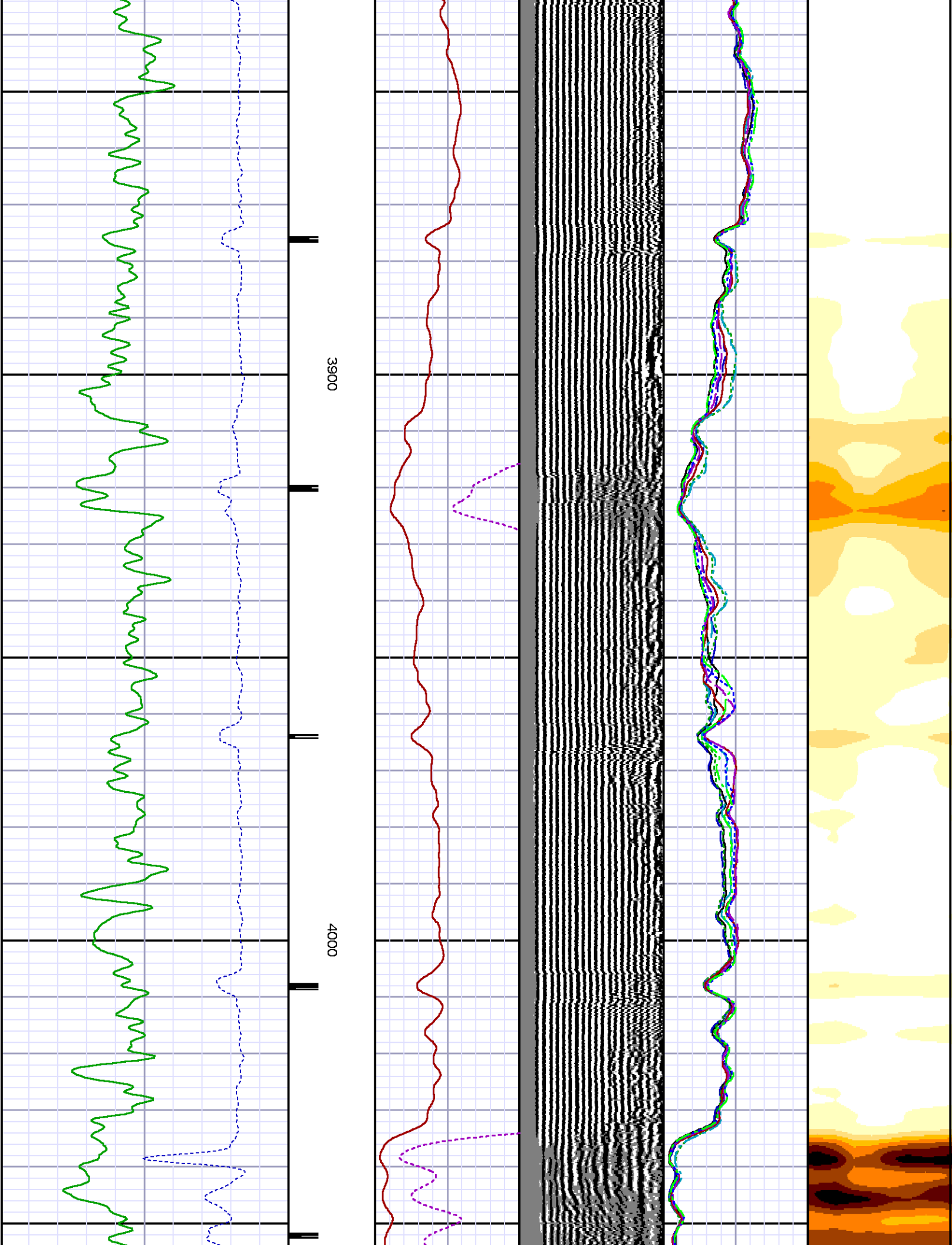


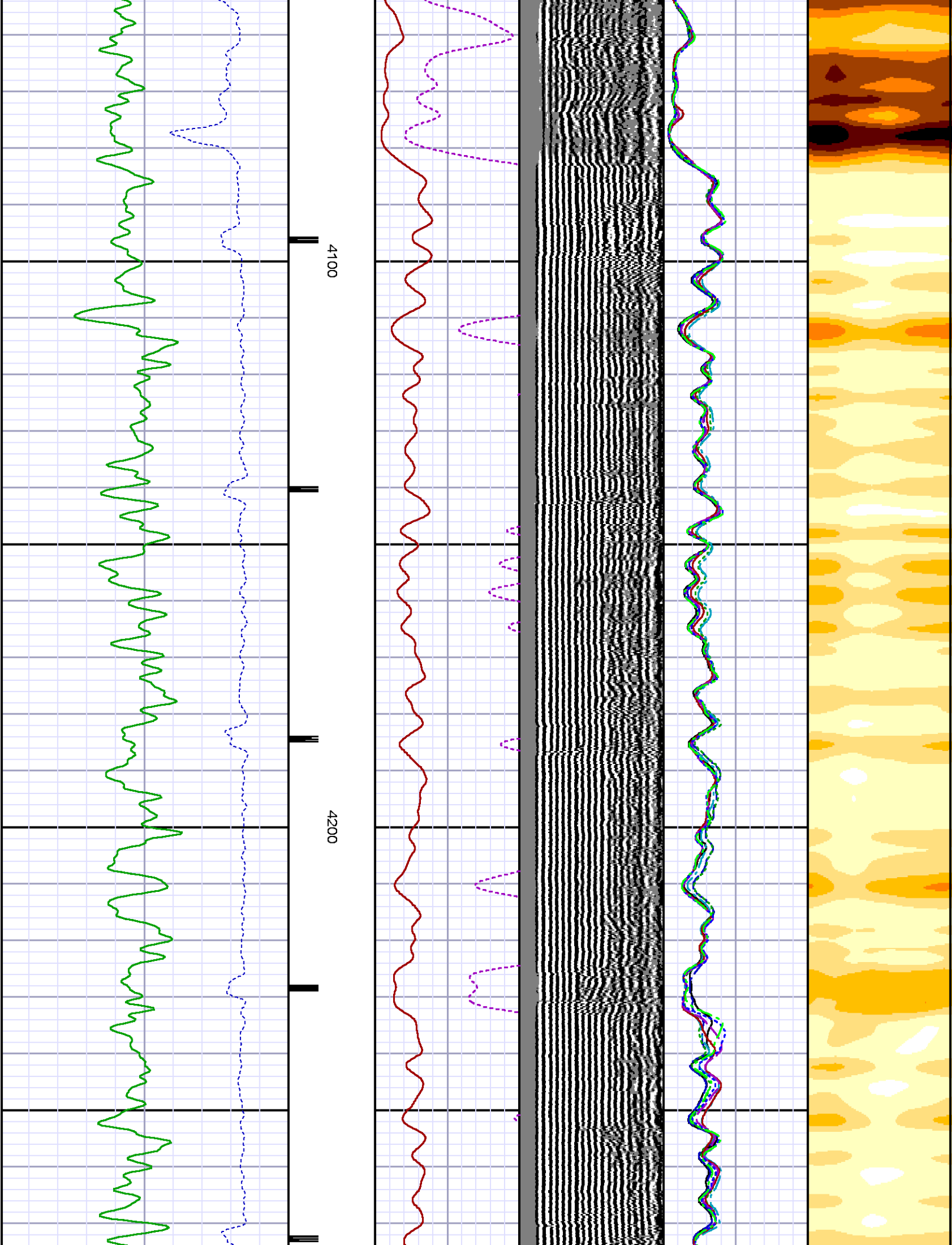


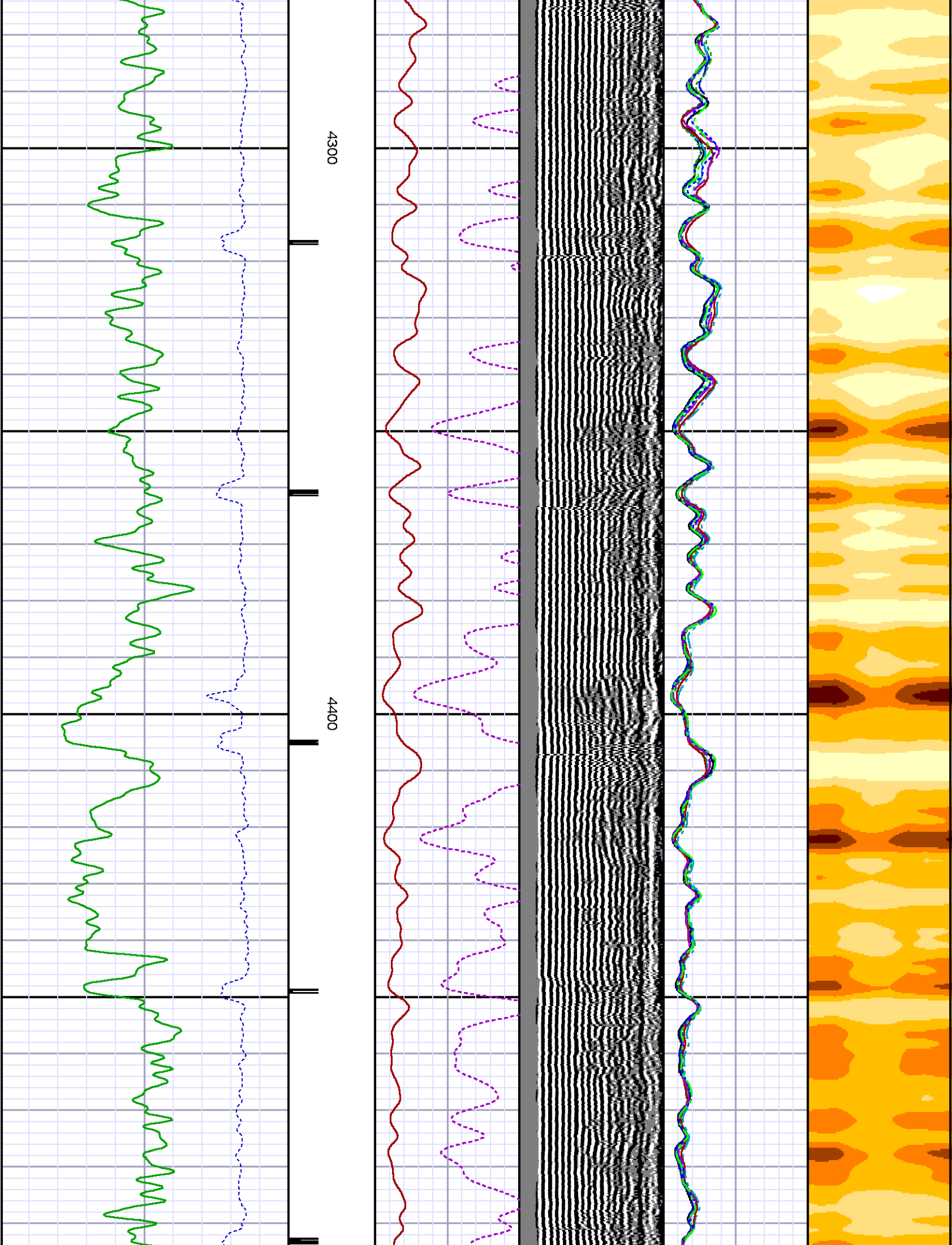


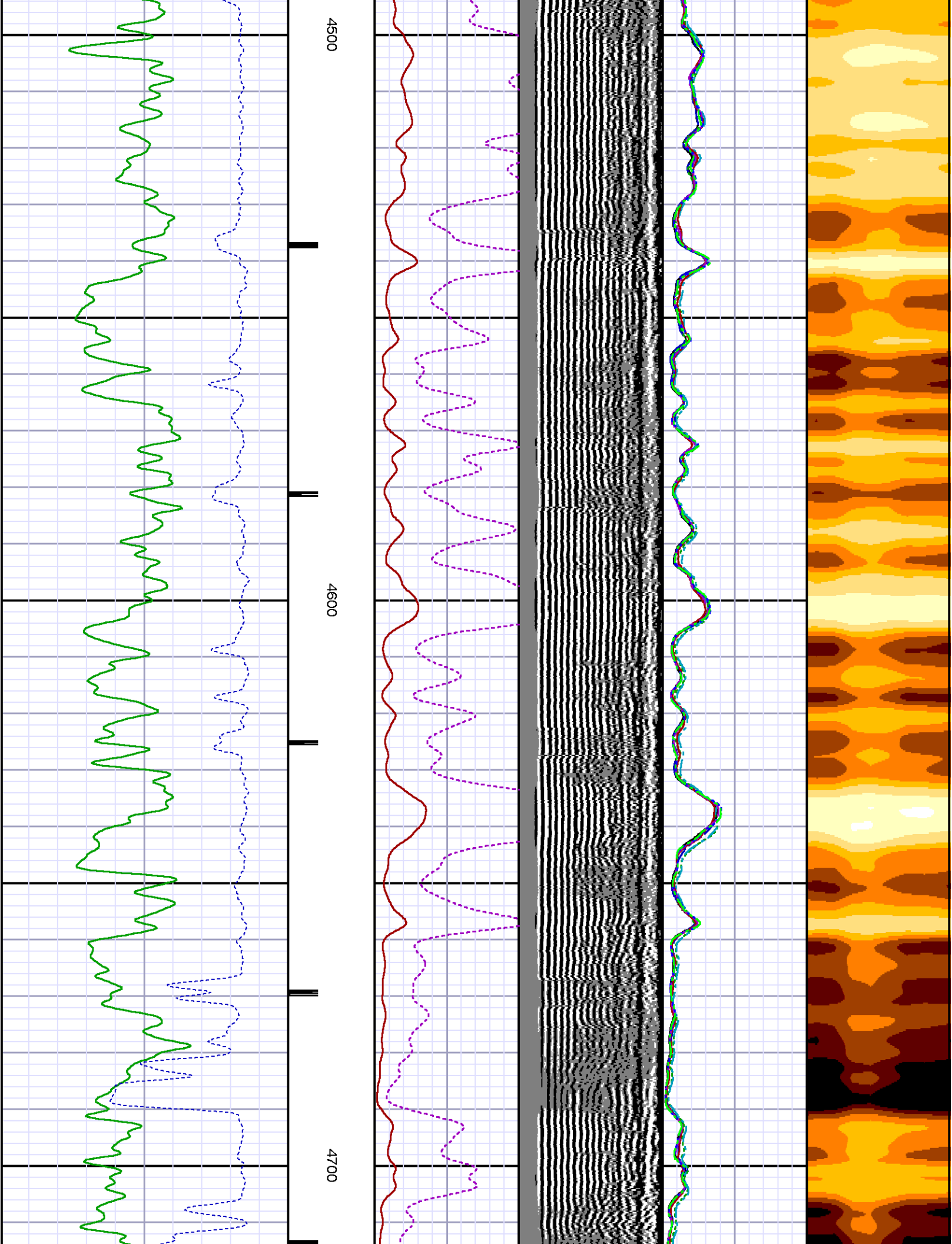


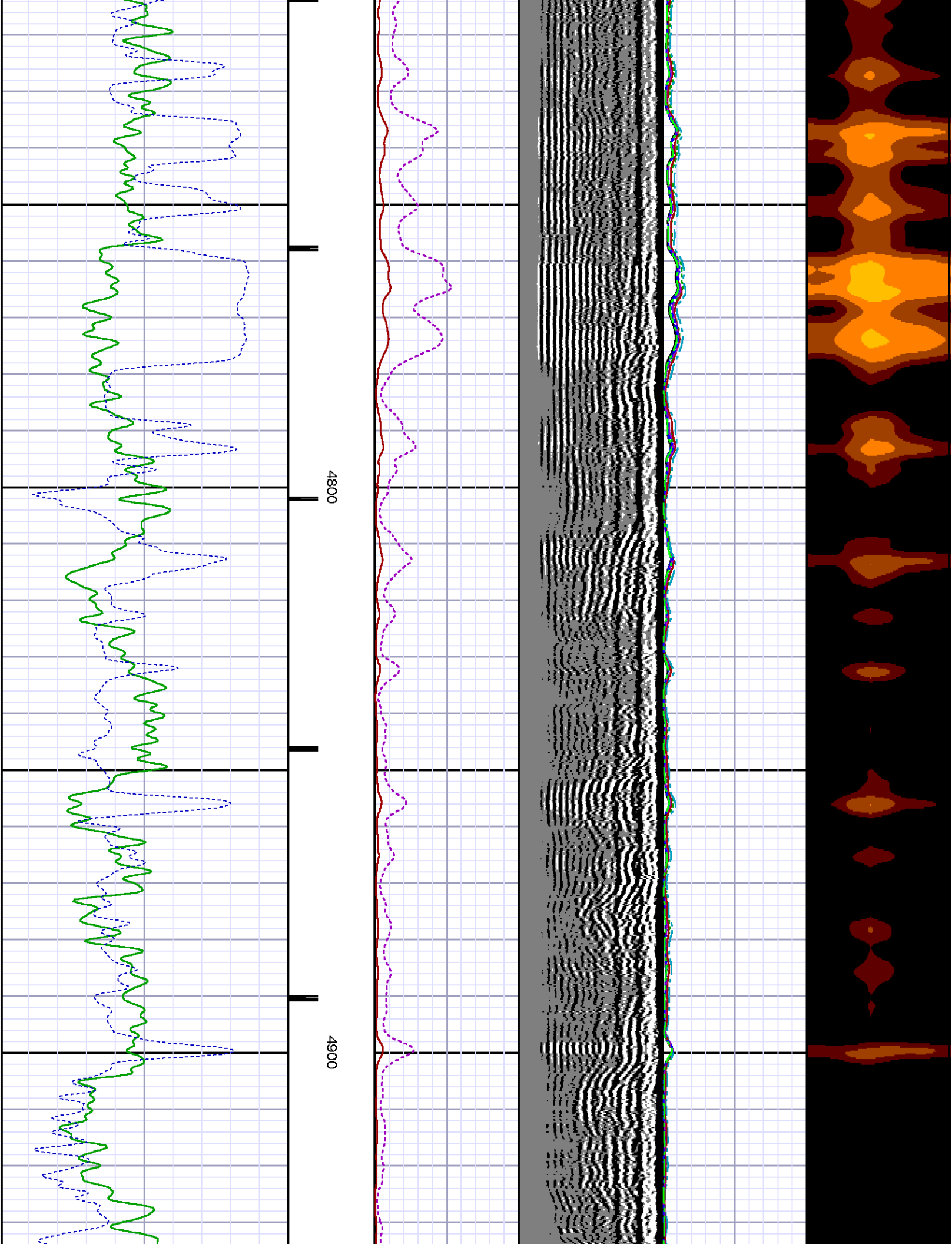


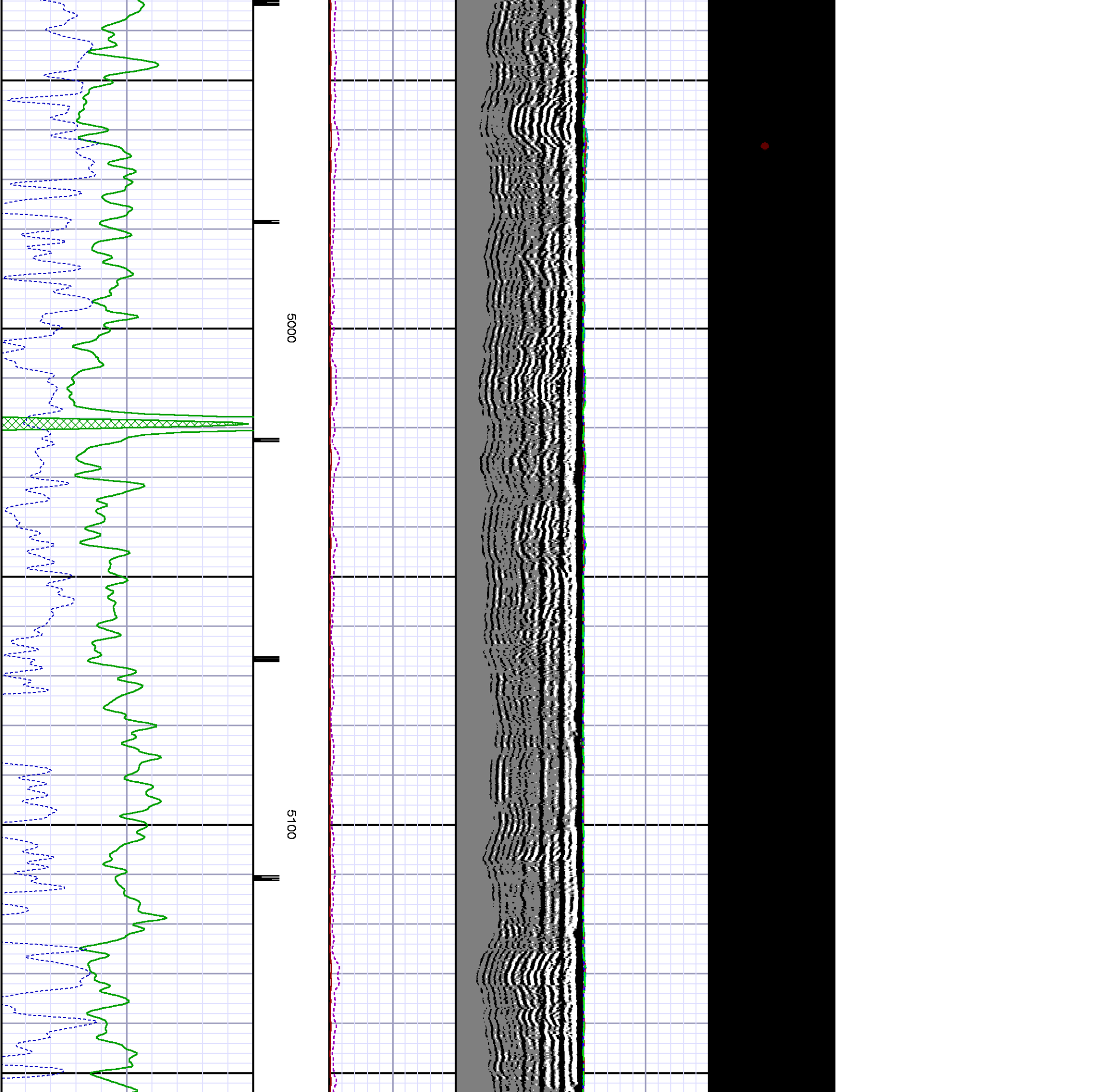


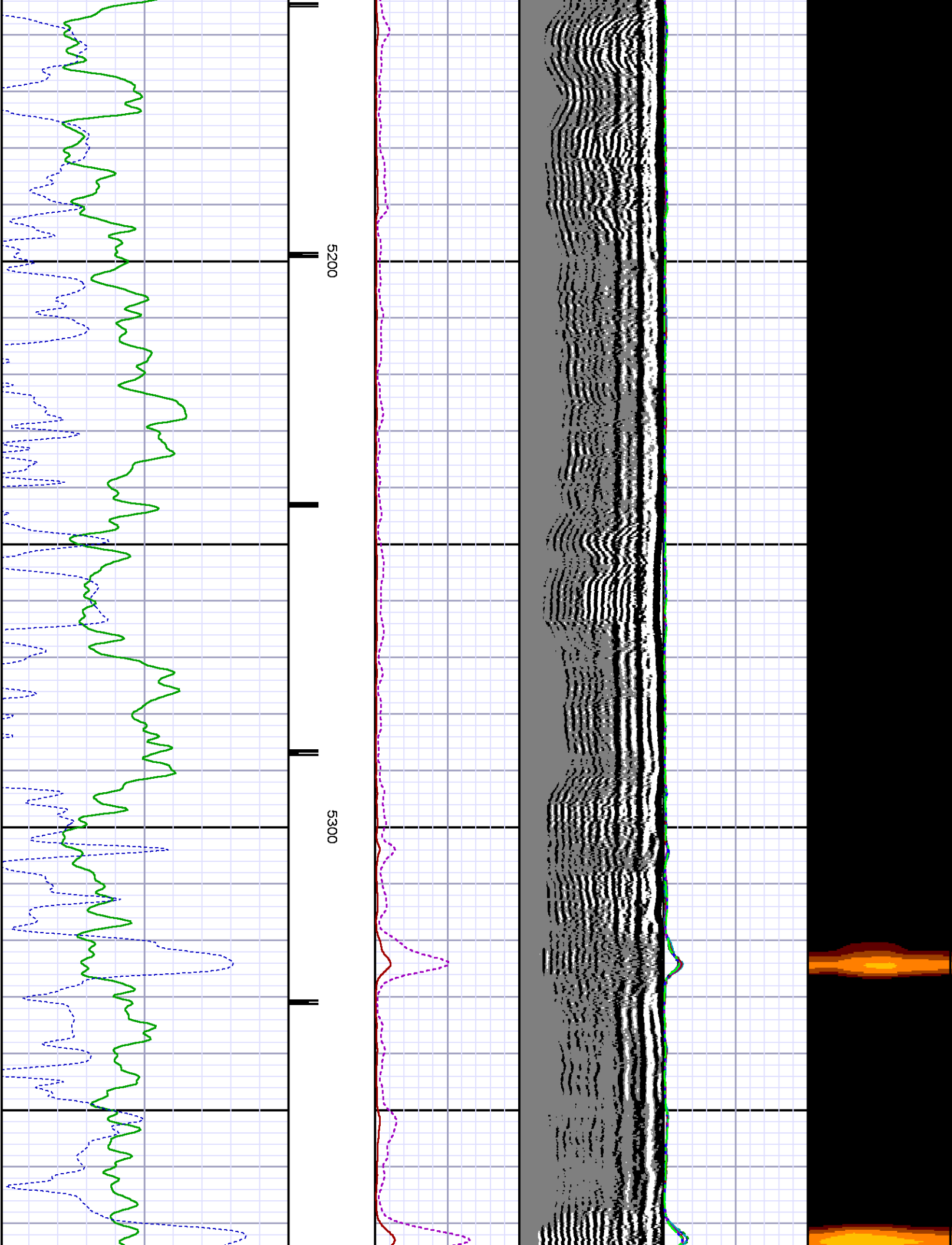


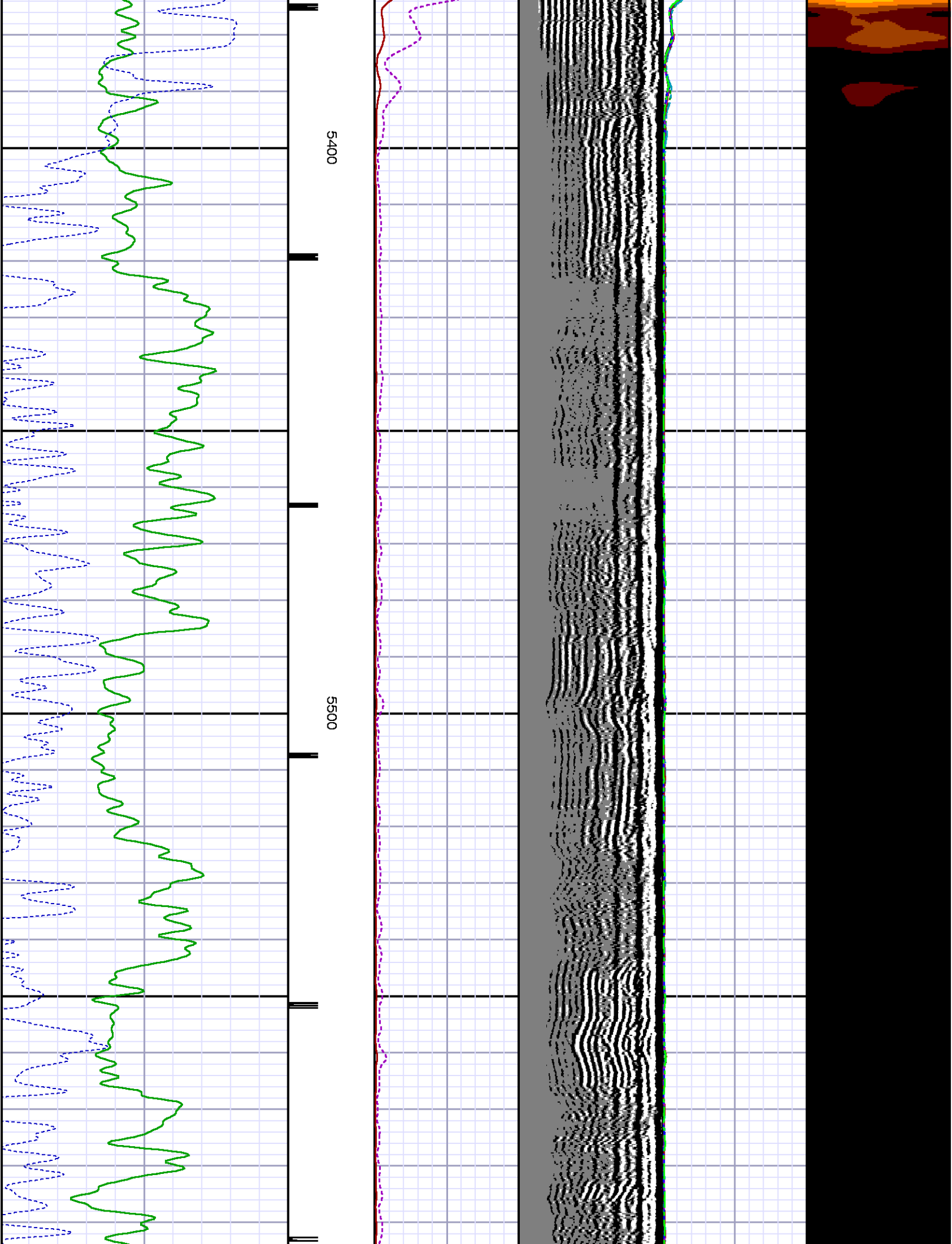


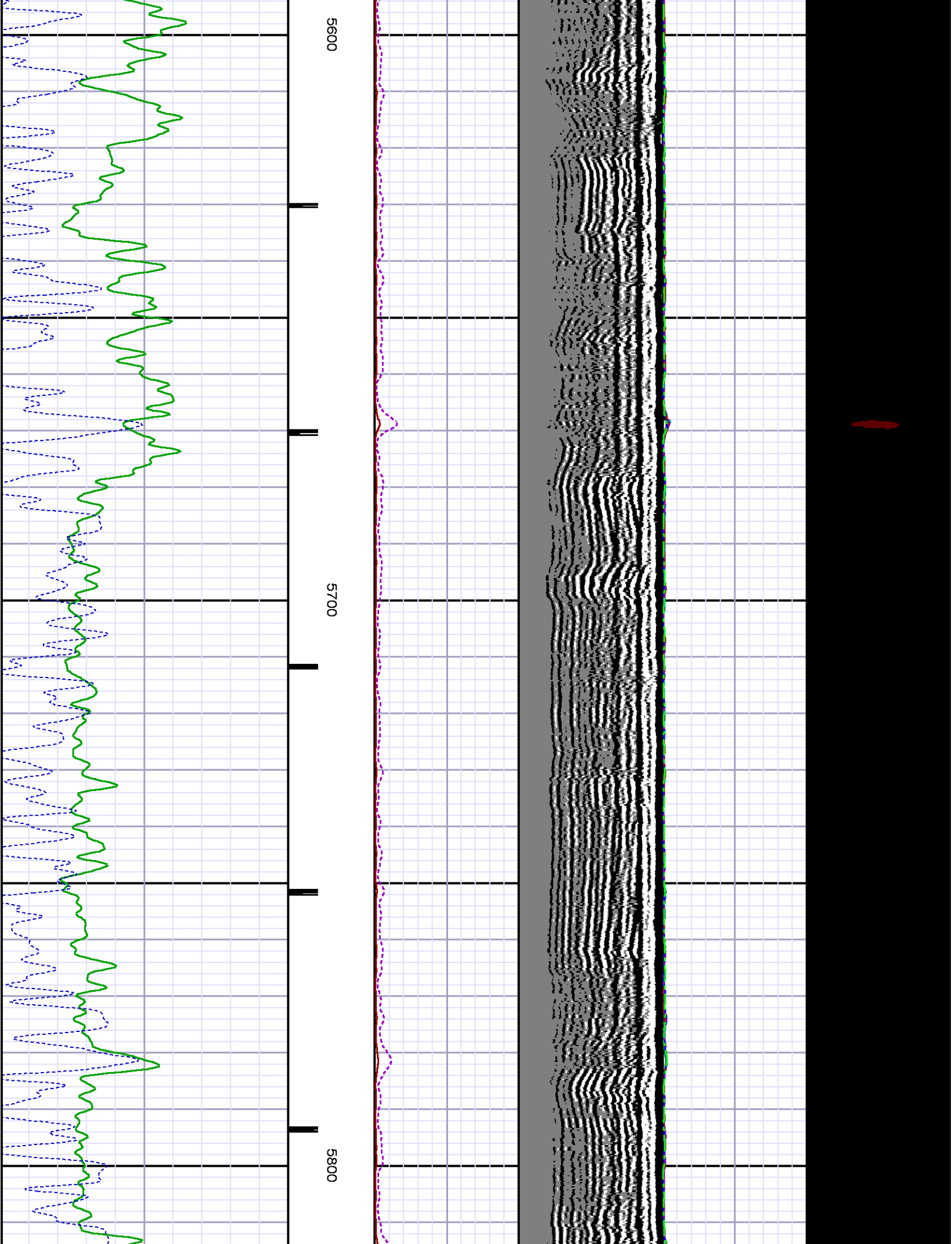


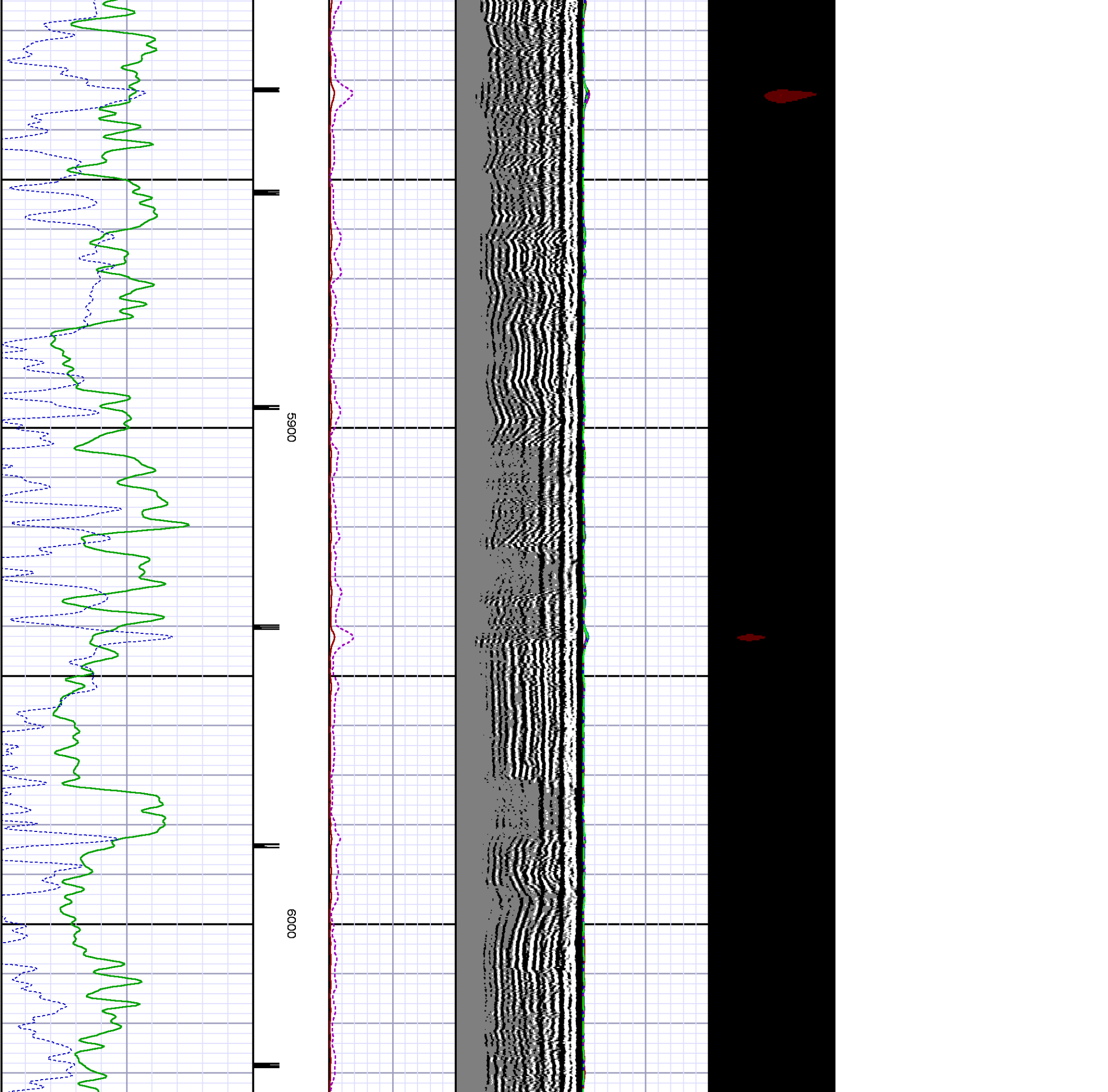


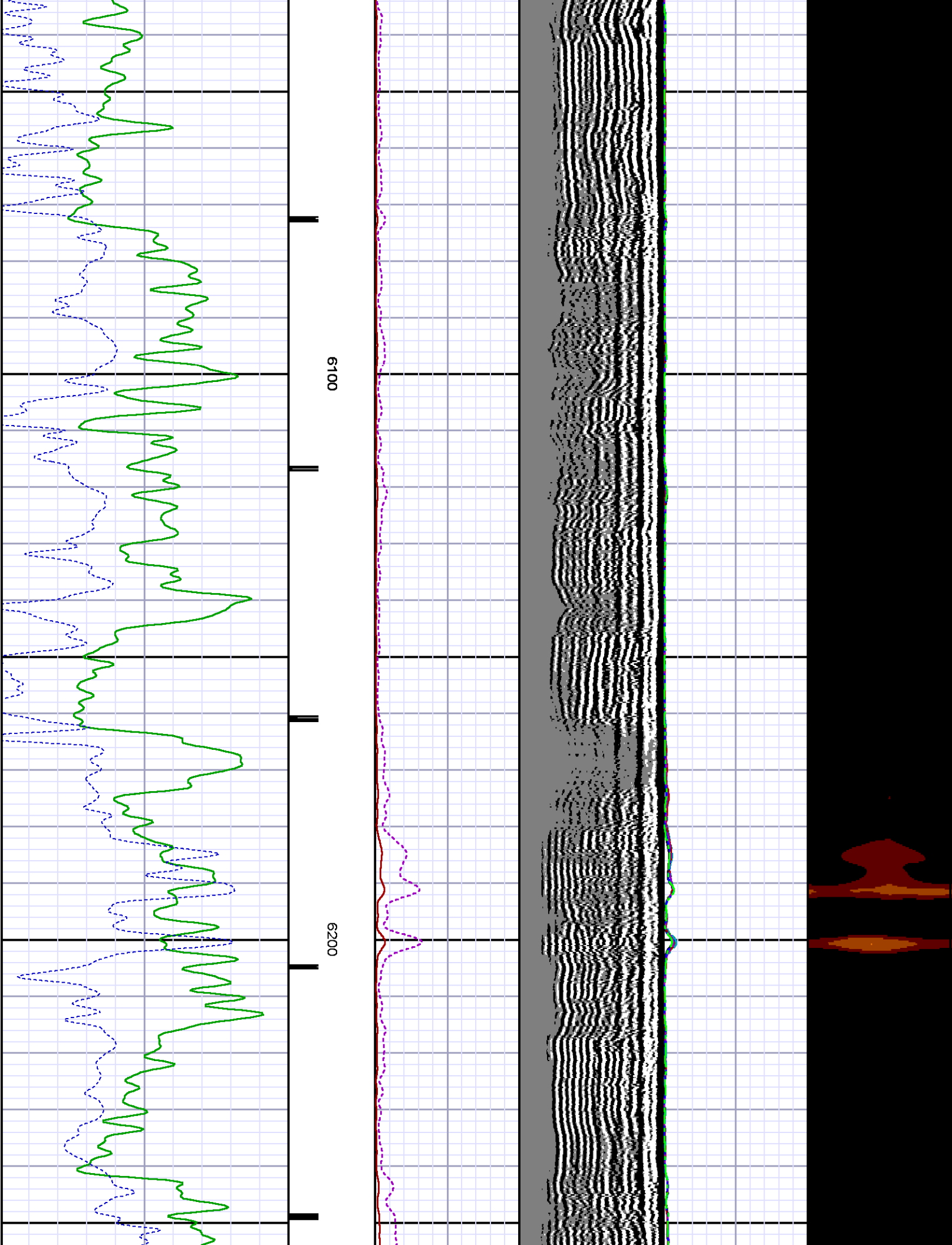


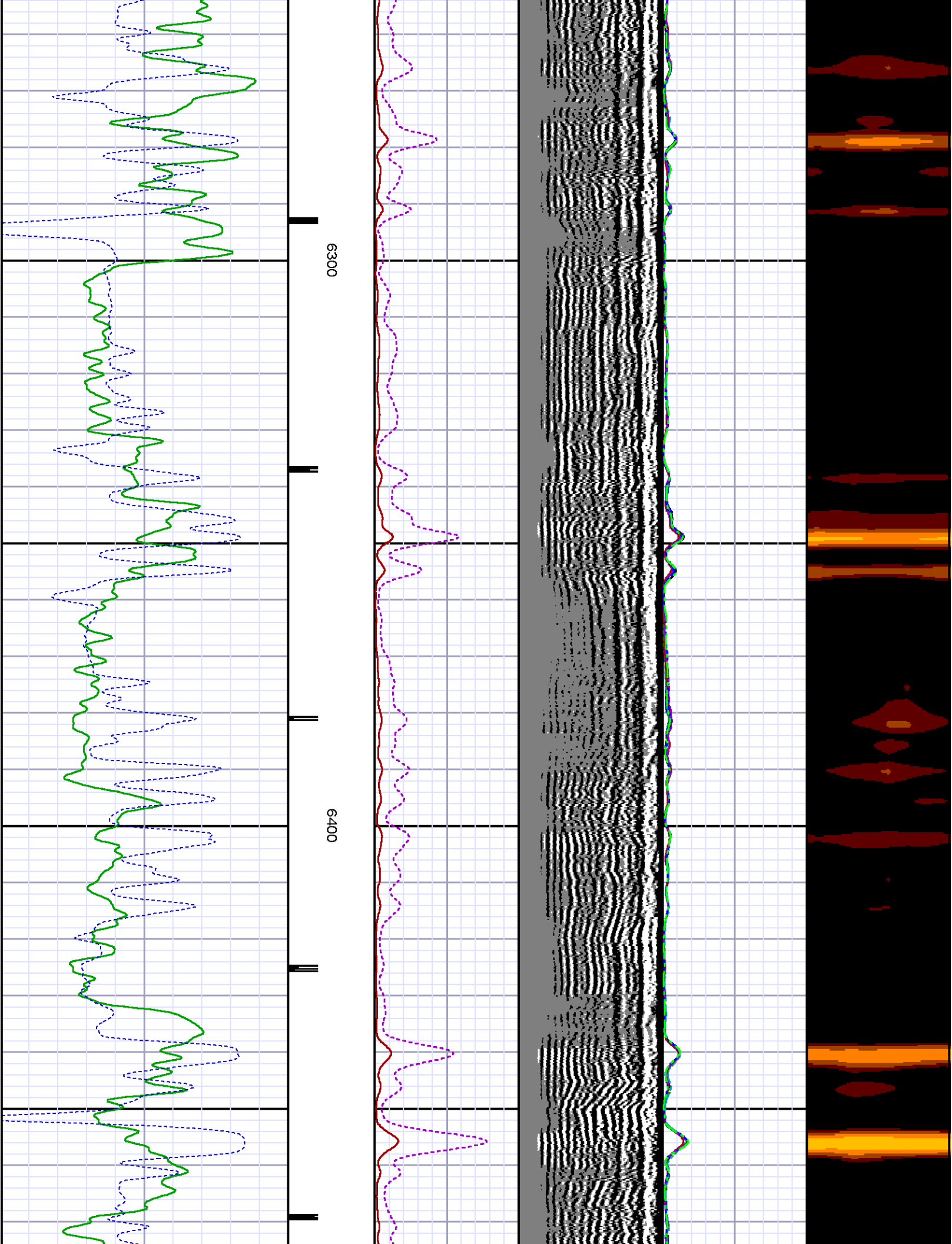


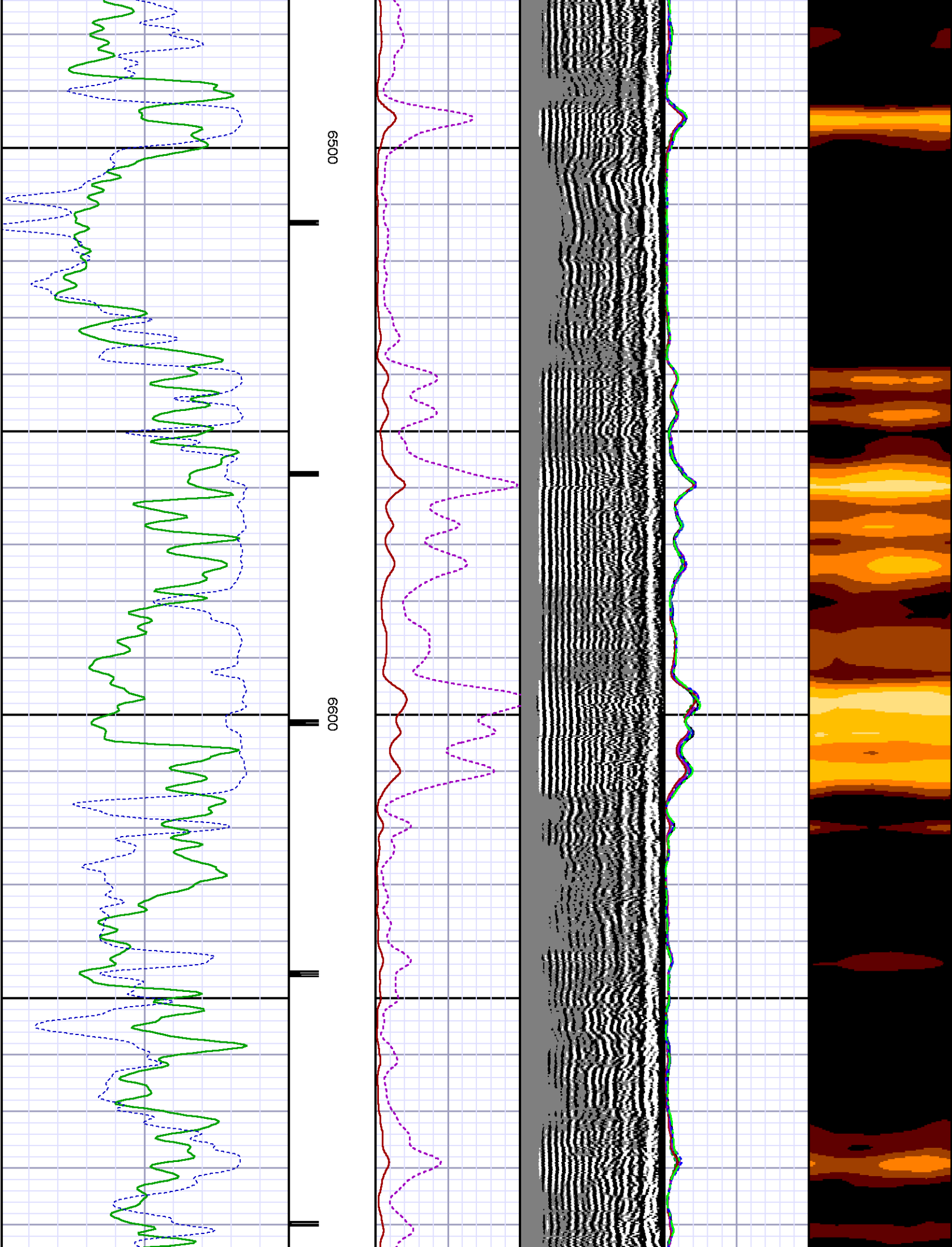


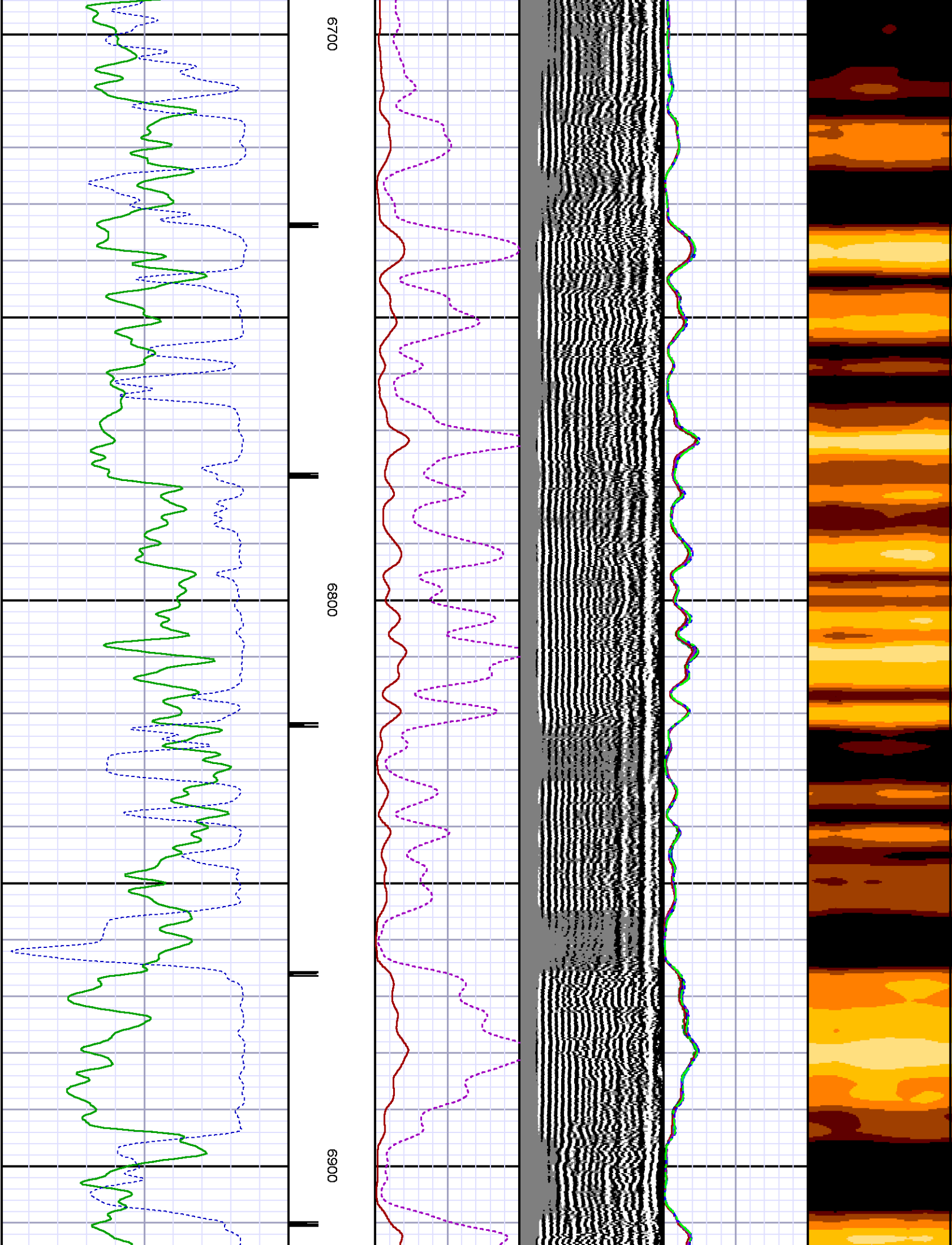


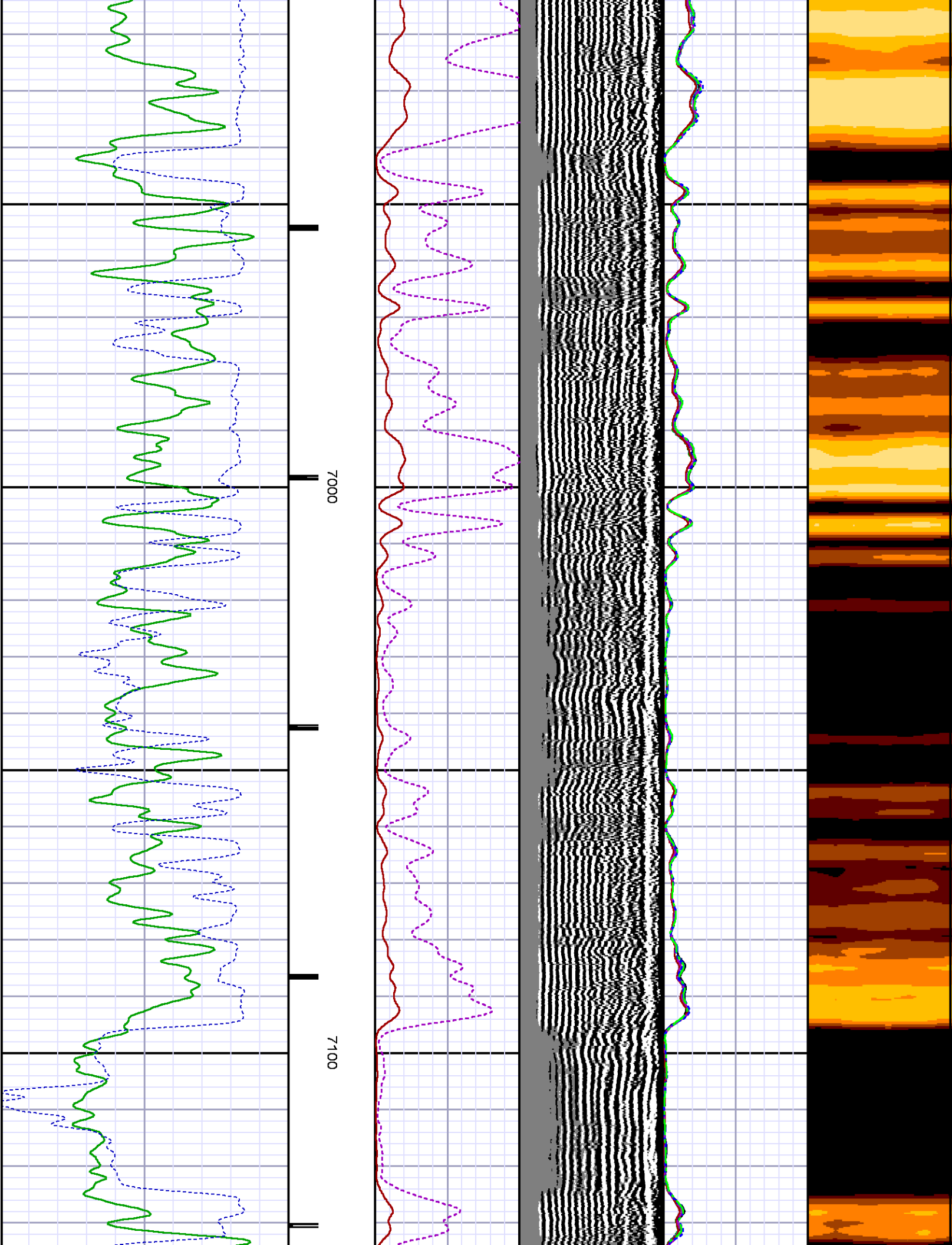


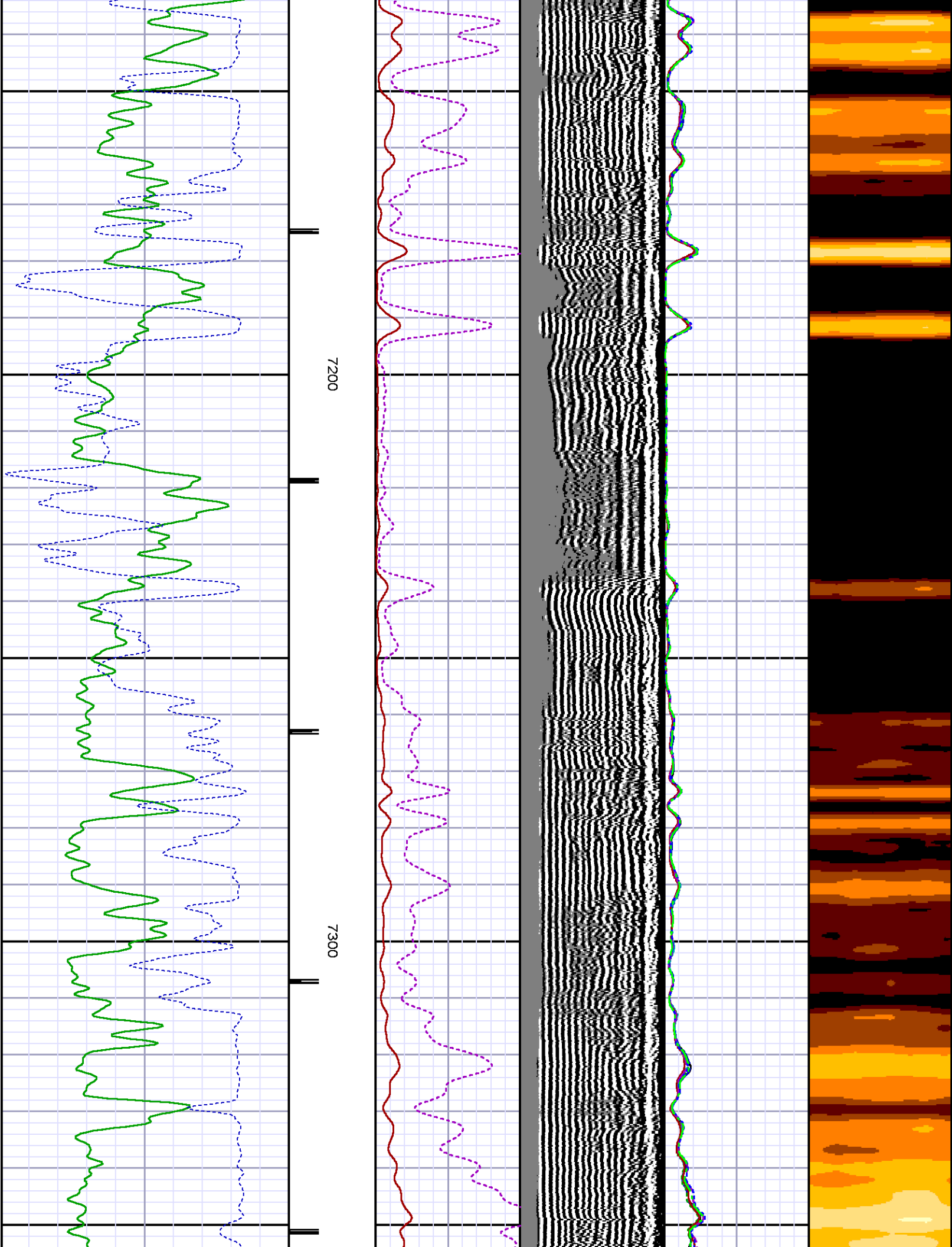


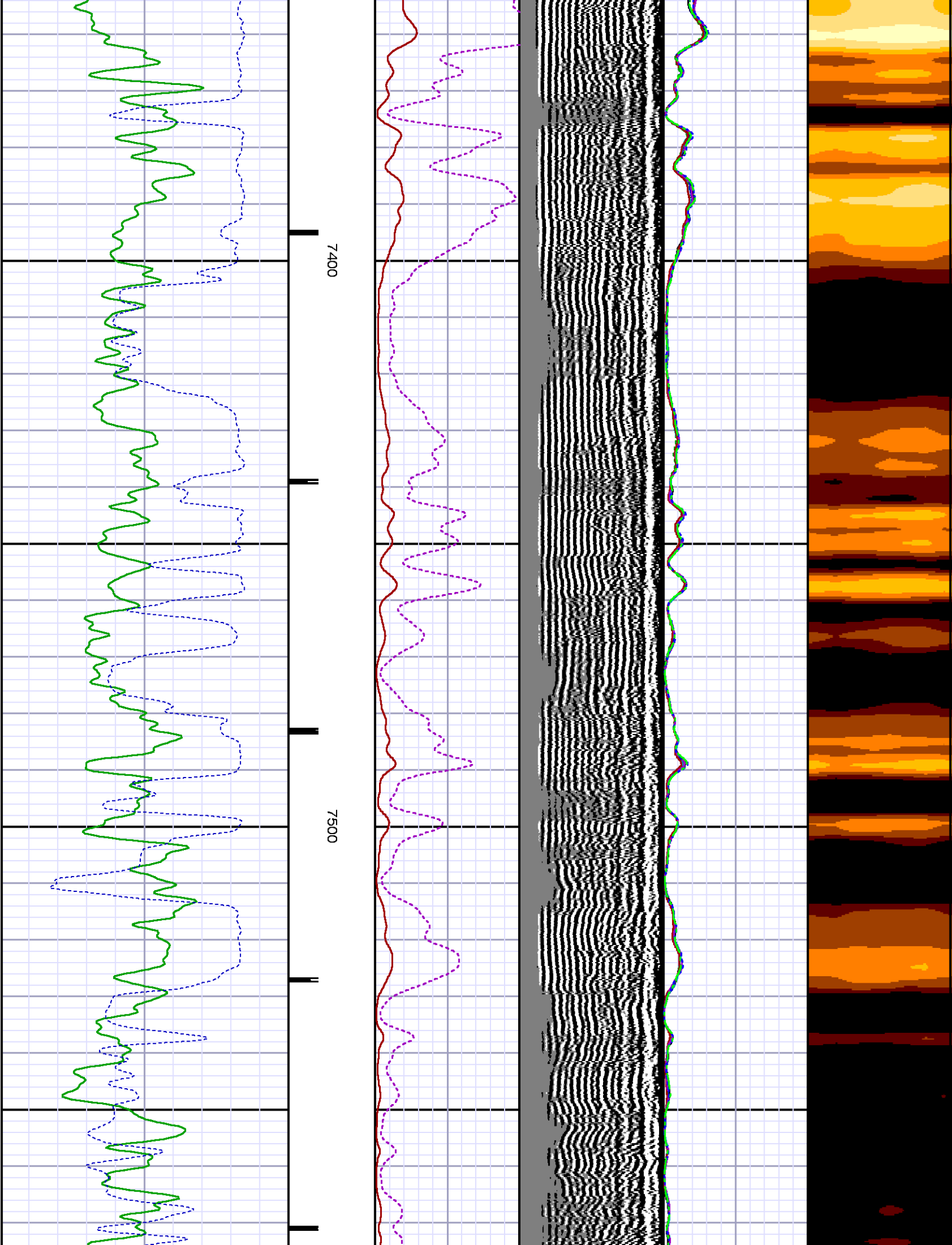


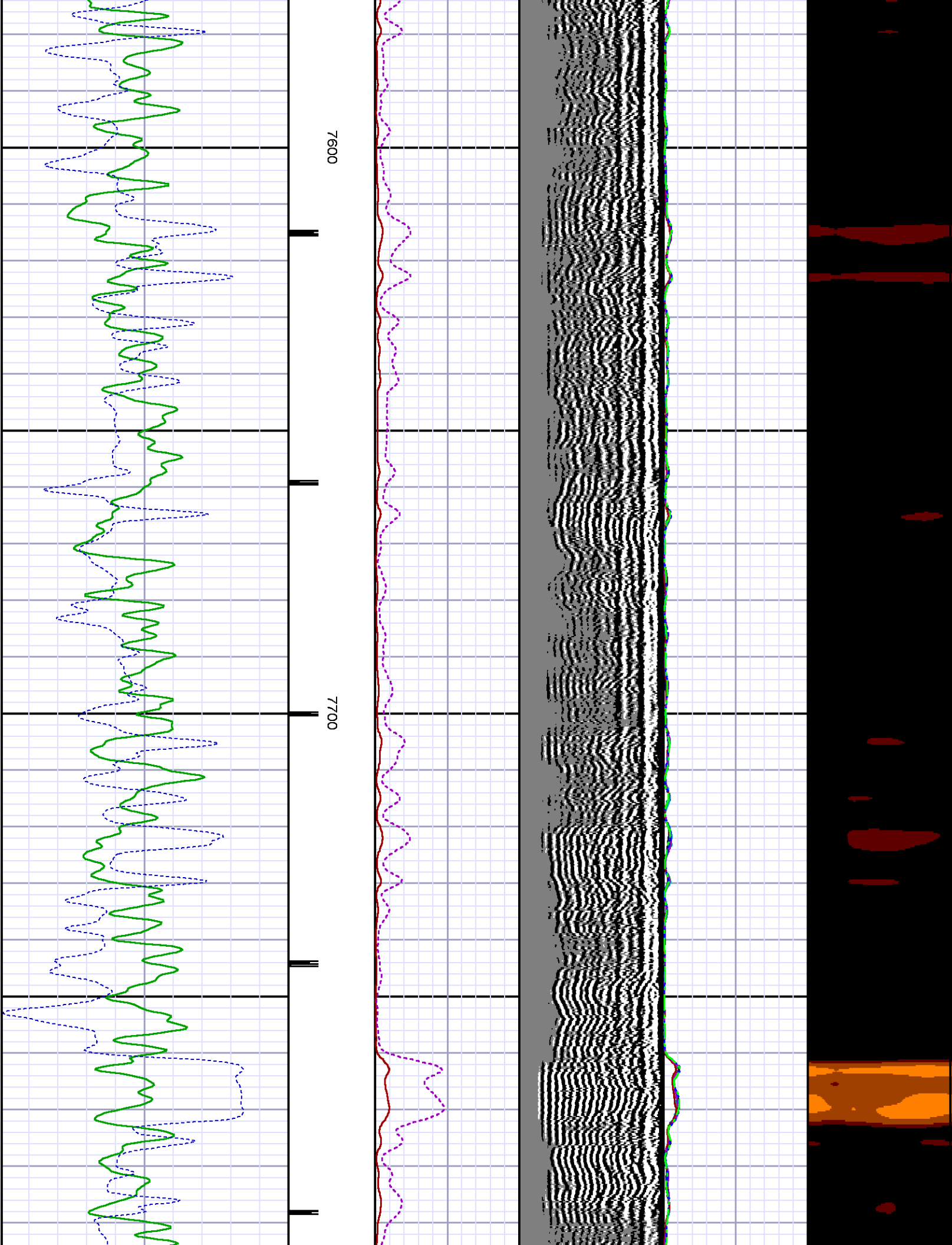


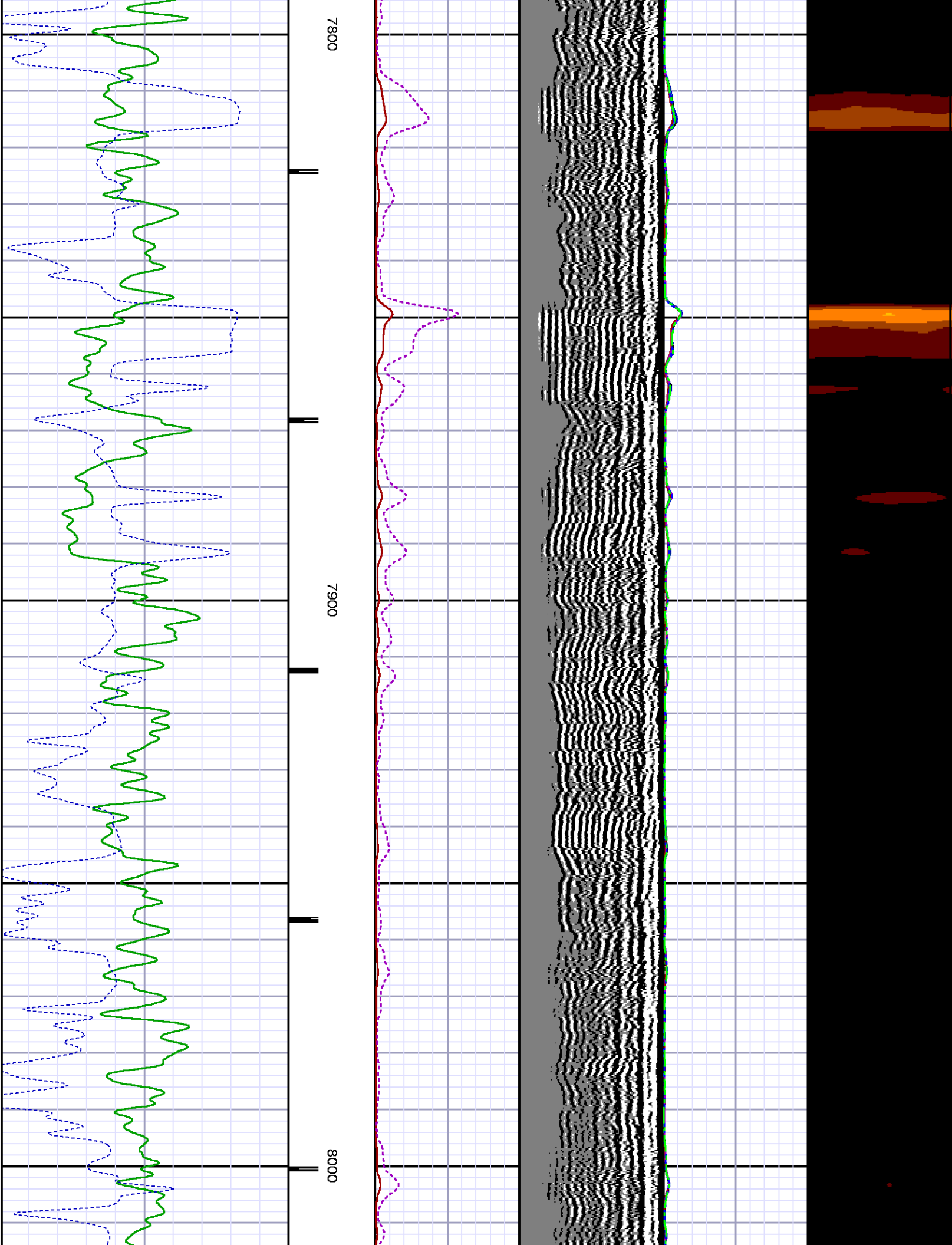


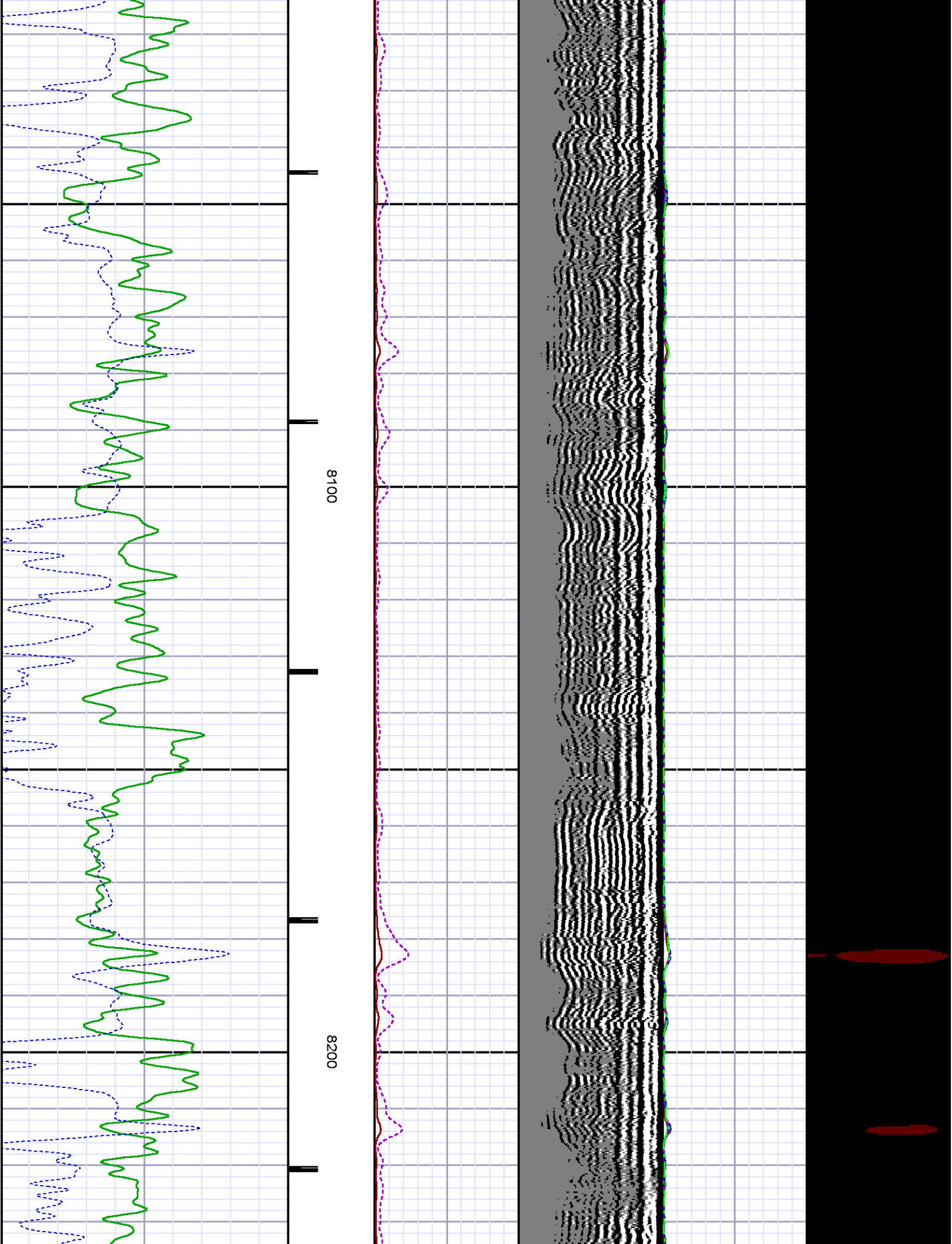


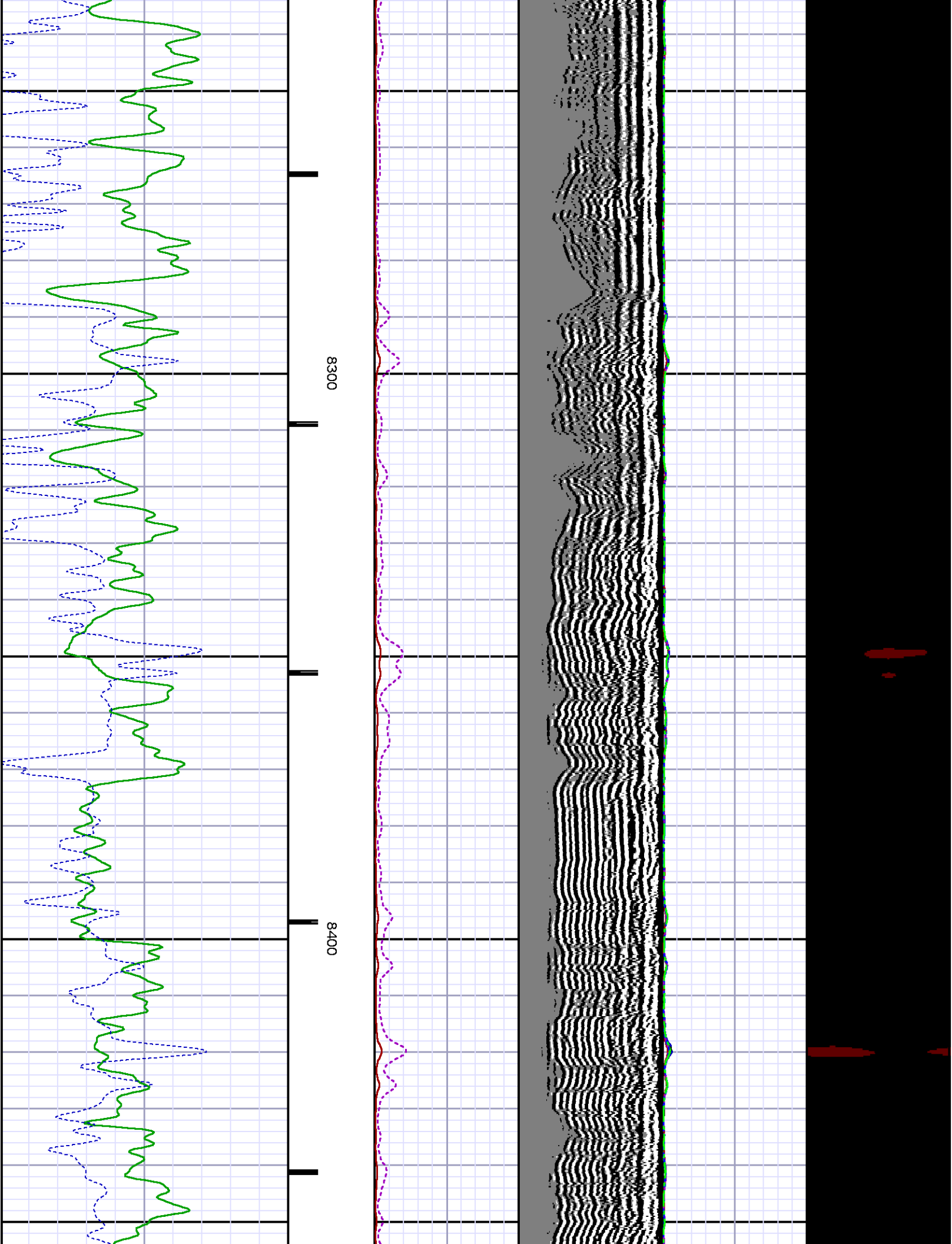


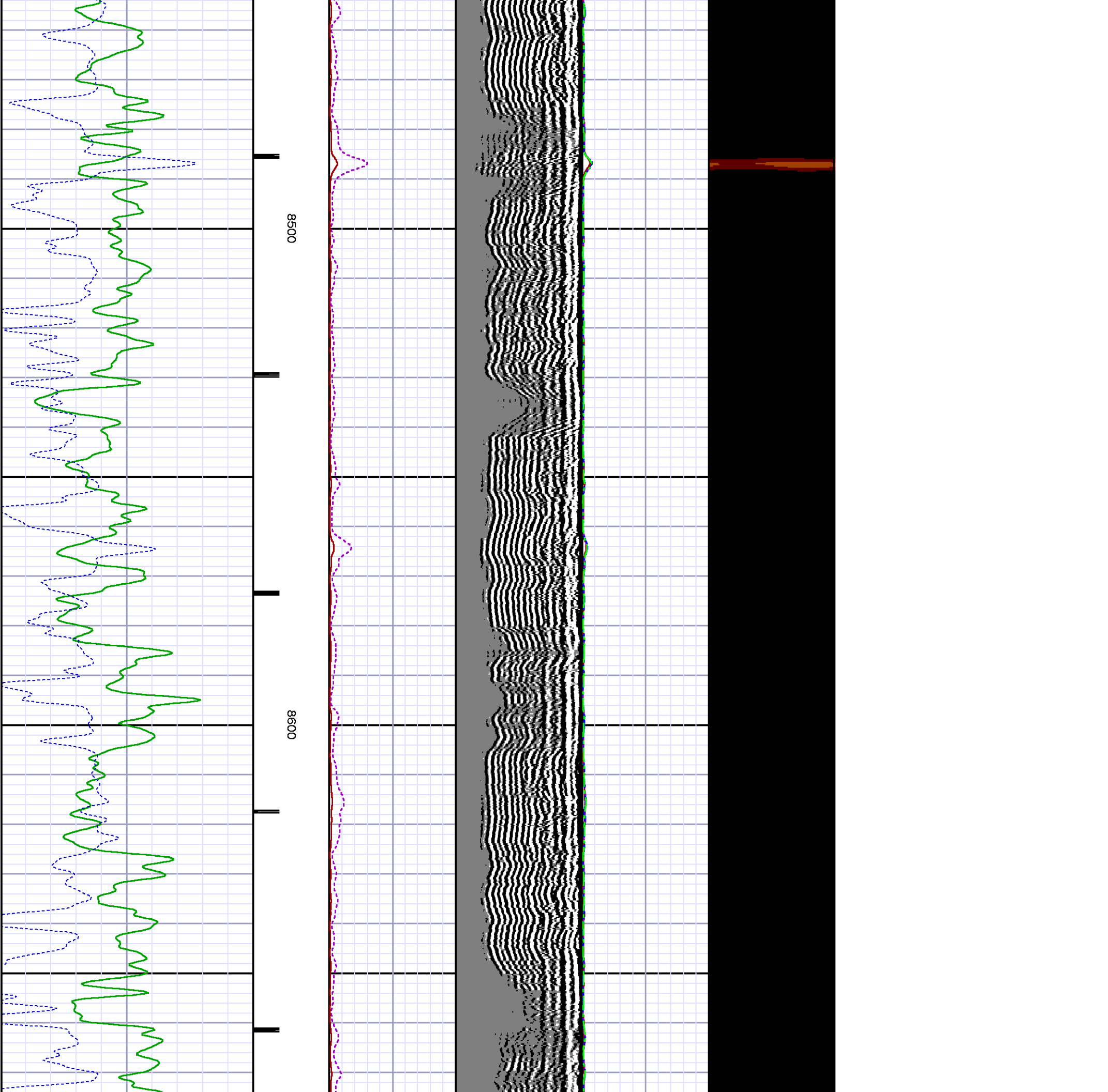


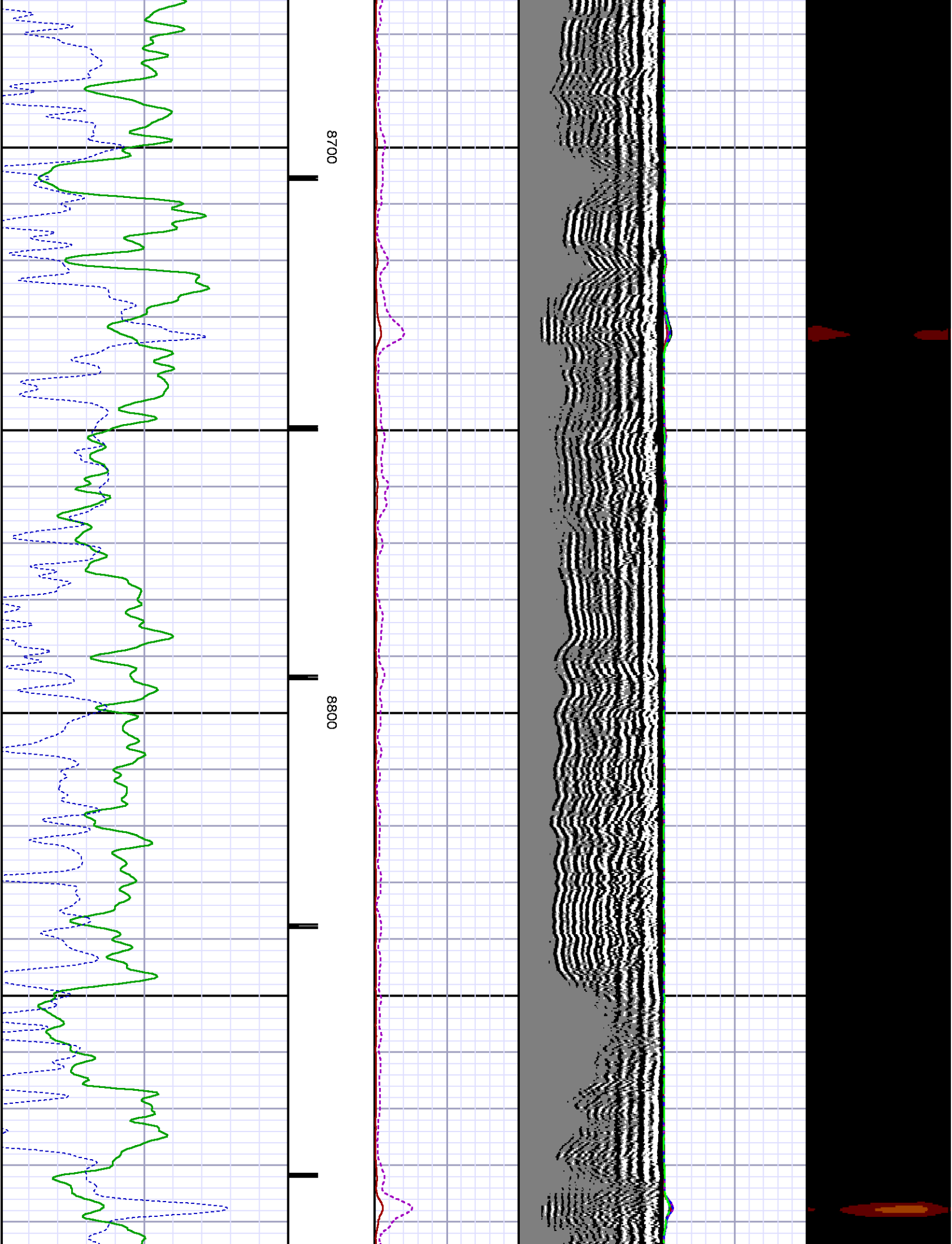


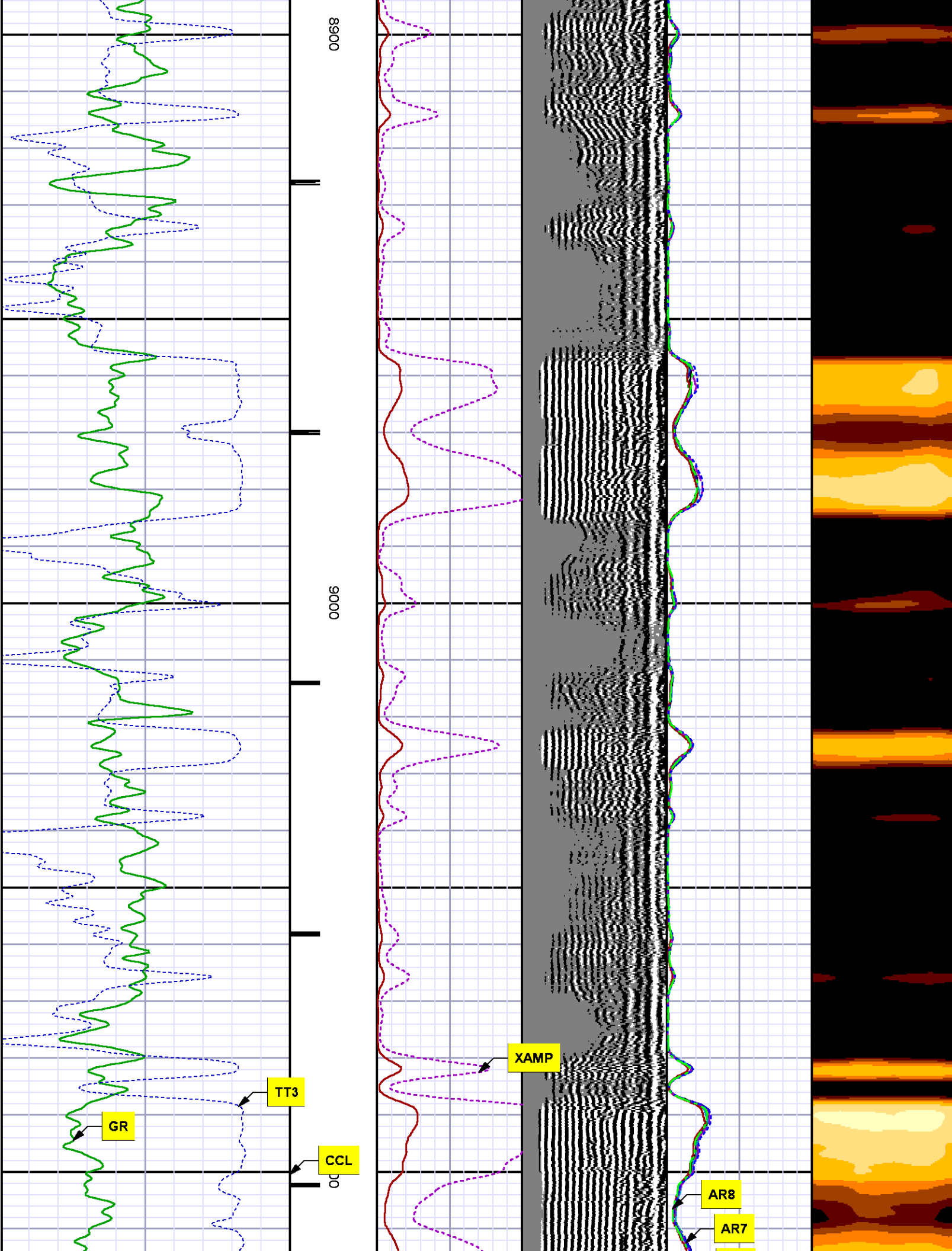


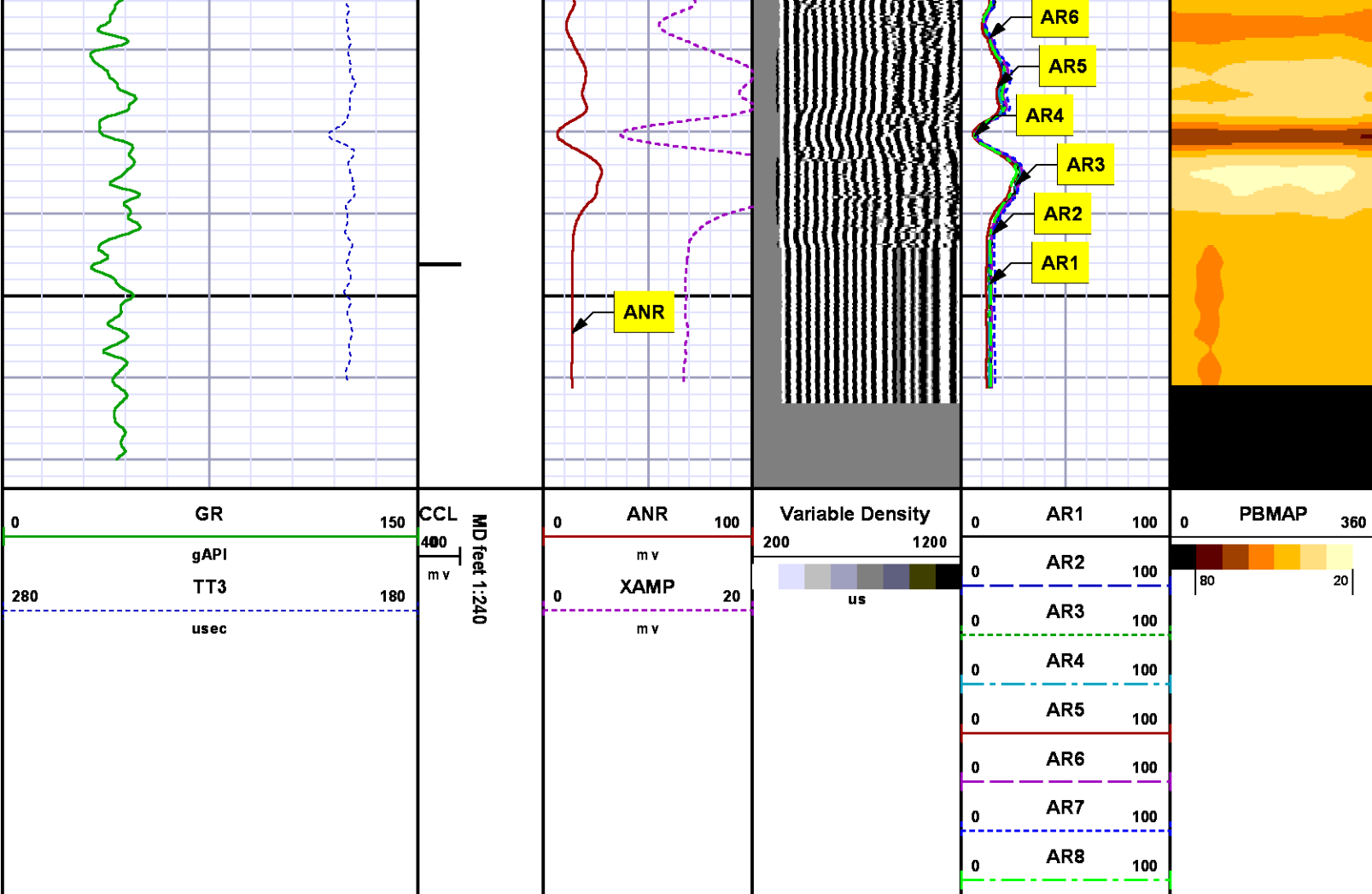












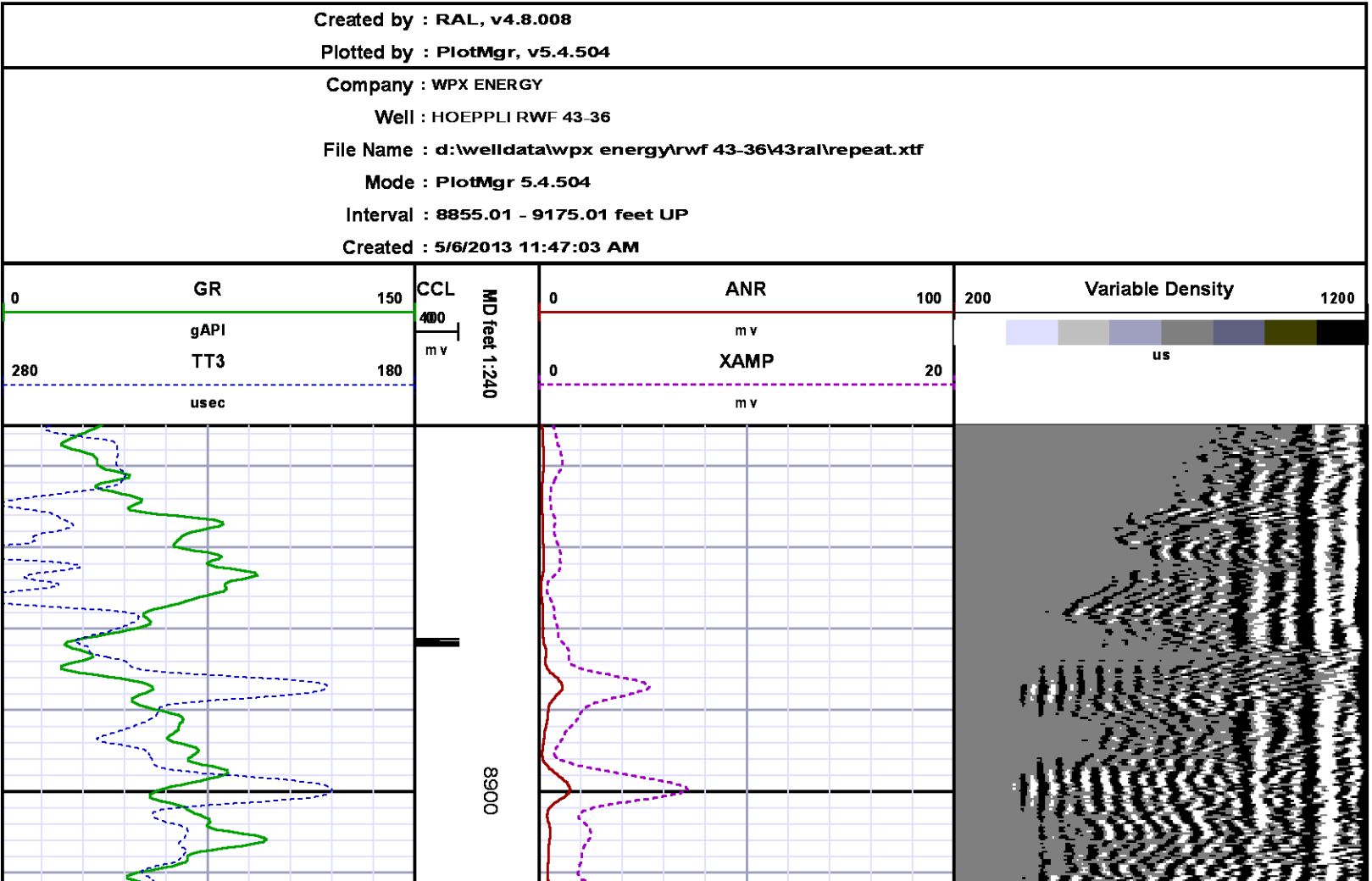
REPEAT SECTION
0 PSI

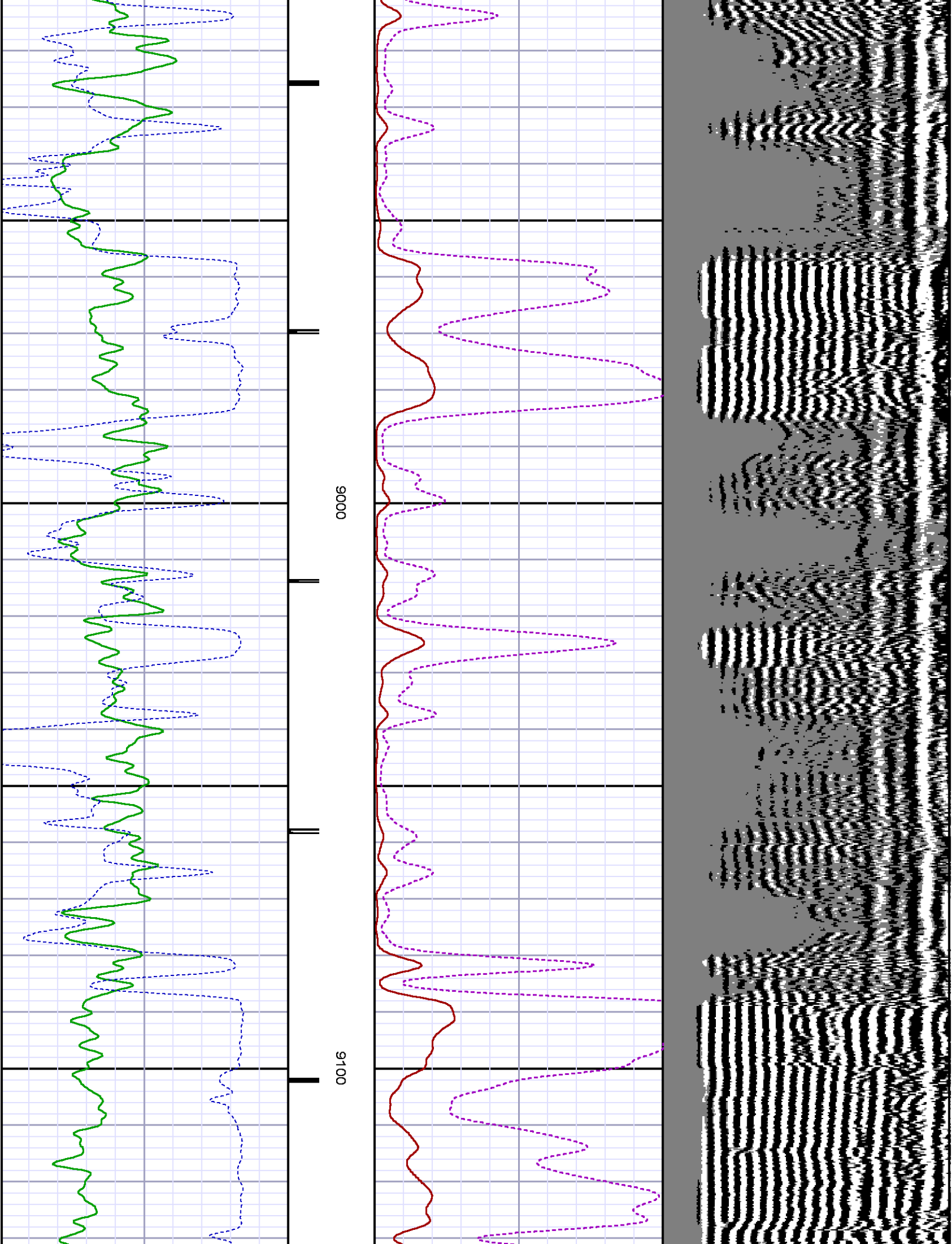
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	310.000	usec	8854.821	9175.010
RAL	Amp Gate Start Near	195.000	usec	8854.821	9175.010
RAL	Amp Gate Start Radial	195.000	usec	8854.821	9175.010
RAL	Amp Gate Width Far	25.000	usec	8854.821	9175.010
RAL	Amp Gate Width Near	25.000	usec	8854.821	9175.010
RAL	Amp Gate Width Radial	25.000	usec	8854.821	9175.010
RAL	casing od	4.500	inches	8854.821	9175.010
RAL	casing wt	11.600	lbm/ft	8854.821	9175.010
RAL	FB Start Far	281.800	usec	8854.821	9175.010

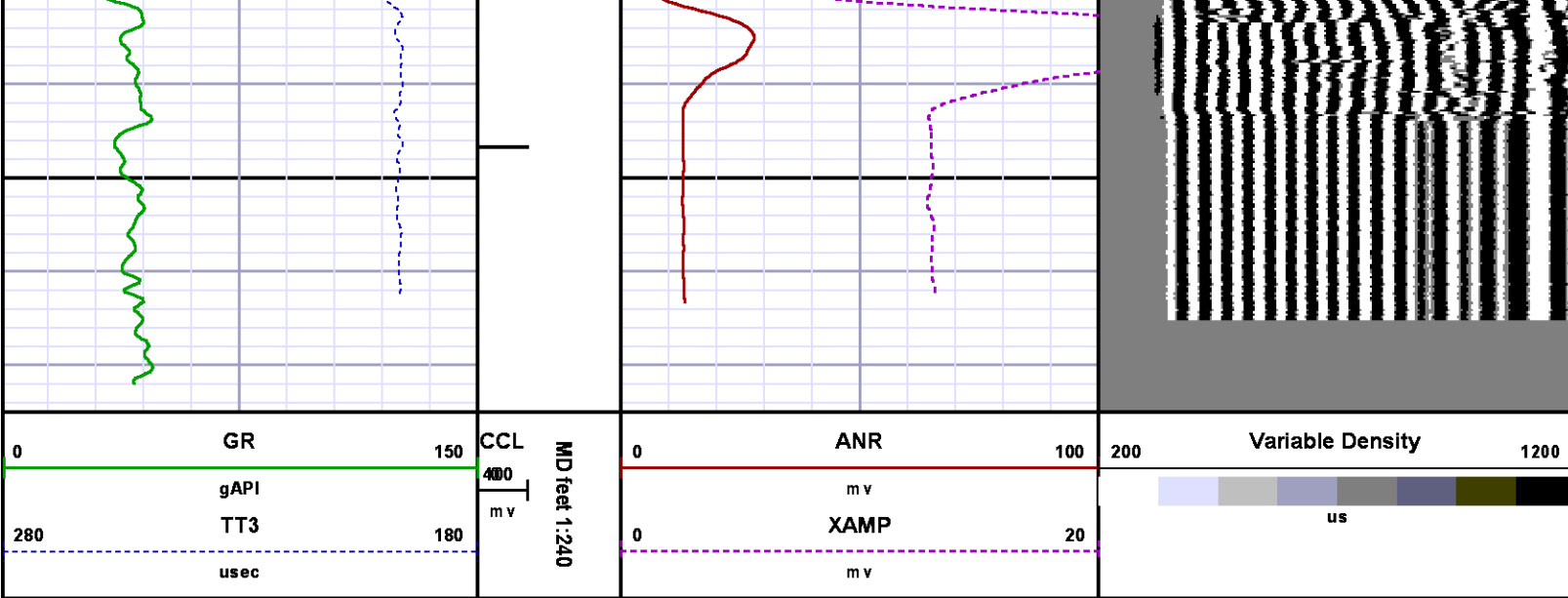
RAL	FB Start Near	200.000	u sec	8854.821	9175.010
RAL	FB Start Far	180.000	u sec	8854.821	9175.010
RAL	FB Start Radial	180.000	u sec	8854.821	9175.010
RAL	FB Thresh Far	10.000	mv	8854.821	9175.010
RAL	FB Thresh Near	4.000	mv	8854.821	9175.010
RAL	FB Thresh Radial	4.000	mv	8854.821	9175.010
RAL	Fluid Travel Time	200.000	u sec/ft	8854.821	9175.009

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







CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calven\RALSHP\539M6_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Mon May 06 07:56:42 2013 TOOL SERIES: 1426XA ASSET: 539 SEQ: M6

Tool Delay [usec] -58.00 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	149	25	1.105	100.00	0.19
3 Ft. Receiver	217	216	30	150	25	-0.992	100.00	0.18
5 Ft. Receiver	325	320	30	232	25	1.002	150.00	0.20
Radial #1	218	216	30	136	25	1.912	100.00	0.18
Radial #2	218	216	30	136	25	0.577	100.00	0.18
Radial #3	217	216	30	136	25	-0.122	100.00	0.18
Radial #4	217	216	30	136	25	0.504	100.00	0.18
Radial #5	217	216	30	136	25	0.159	100.00	0.18
Radial #6	217	216	30	136	25	-0.513	100.00	0.18
Radial #7	217	216	30	136	25	0.419	100.00	0.18
Radial #8	218	216	30	136	25	-0.099	100.00	0.18

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\539M6_fid.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Mon May 06 07:59:33 2013 TOOL SERIES: 1426XA ASSET: 539 SEQ: M6

Tool Delay [usec] -58.00 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	149	25	-0.090	0.000	1.00	100.000
3 Ft. Receiver	200	25	-3.314			
5 Ft. Receiver	305	25	-5.724			
Radial #1	200	25	-4.703			
Radial #2	200	25	-4.256			
Radial #3	200	25	-4.108			
Radial #4	200	25	-4.462			
Radial #5	200	25	-5.950			
Radial #6	200	25	-4.690			
Radial #7	200	25	-4.719			
Radial #8	200	25	-4.747			

GAMMA RAY

Calibration File: C:\case\calver\GR\209A1.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Apr 11 12:00:10 2013 TOOL SERIES: 1355XA ASSET: 209 SEQ: A1

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	147.33	600.49	0.408	60.15	245.15	185.00

Verification File: C:\case\calver\GR\209A1.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Thu Apr 11 12:01:16 2013 TOOL SERIES: 1355XA ASSET: 209 SEQ: A1

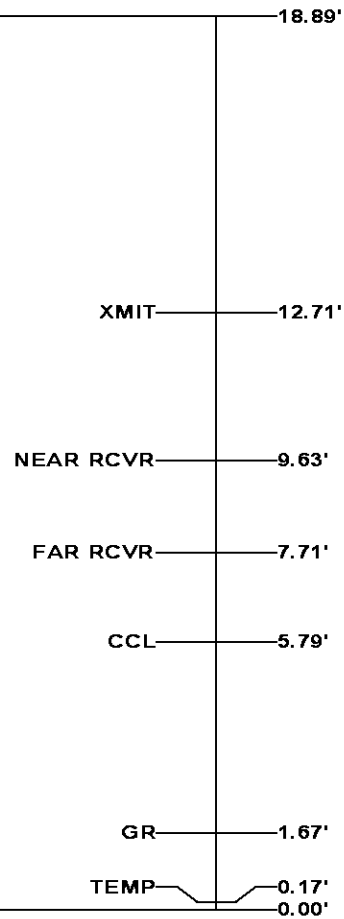
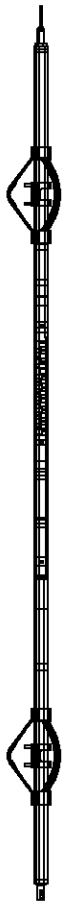
Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	149.69	589.51	0.408	61.11	240.67	179.56

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"

 Baker Atlas 	Company	WPX ENERGY		File No:	CH071653
	Well	HOEPPLI RWF 43-36		API No:	05045215540000
	Field	RULISON			
	County	GARFIELD	State	COLORADO	
Location		Elevations		36 6S 94W	
SHL: 2578' FNL, 2577' FEL (SWNE)		KB 6554 ft		RWF 33-36 EAST PAD	
BHL: 1990' FSL, 735' FEL (NESE)		DF		NABORS 576	
SEC 36 TWP 6S RGE 94W		GL 6528 ft			