



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: CH075708	Company Well Field County	WPX ENERGY FEDERAL PA 421-27 PARACHUTE GARFIELD	State COLORADO
API No: 05045218600000	Location SHL: 2113' FNL X 1307' FWL DOE 1-W-27 PAD BHL: 902' FNL X 1903' FWL (NENW) NABORS 573		Other Services RPM
Permanent Datum Log Measured From Drill Measured From	GL KB KELLY BUSHING	Elevation 26 ft Above P. D.	Elevations KB 5886 ft DF GL 5840 ft

Date	20/AUG/13		
Run	ONE		
Service Order	624406		
Depth Driller	8551 ft		
Depth Logger	8495 ft		
Bottom Logged Interval	8485 ft		
Top Logged Interval	26 ft		
Time Started	0800		
Time Finished	1200		
Operator Rig Time	4 HRS		
Type of Fluid in Hole	WATER		
Fluid Density	NA		
Salinity	NA		
Fluid Level	72 ft		
Logged Cement Top	NA		
Wellhead Pressure	0 psi		
Maximum Hole Deviation	NA		
Nominal Logging Speed	45 fpm		
Maximum Recorded Temperature	262 degF		
Reference Log	NONE		
Reference Log Date	NA		
Equipment No.	Location	4271	GRAND JCT
Recorded By	FLOYD RENEAU		
Witnessed By	ORAN JACOBS		

- 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	2765 ft
8.75 in	2765 ft	8551 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in			0 ft	2765 ft
4.5 in	11.6 lbm/ft	I-80	0 ft	8551 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 foot.
Logged with zero PSI at wellhead.
BHT = 262°F
SJ = 5182'-5206'

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1426XA	10124106	CENT
1	1	GR/CCL	1355XA	10580209	CENT

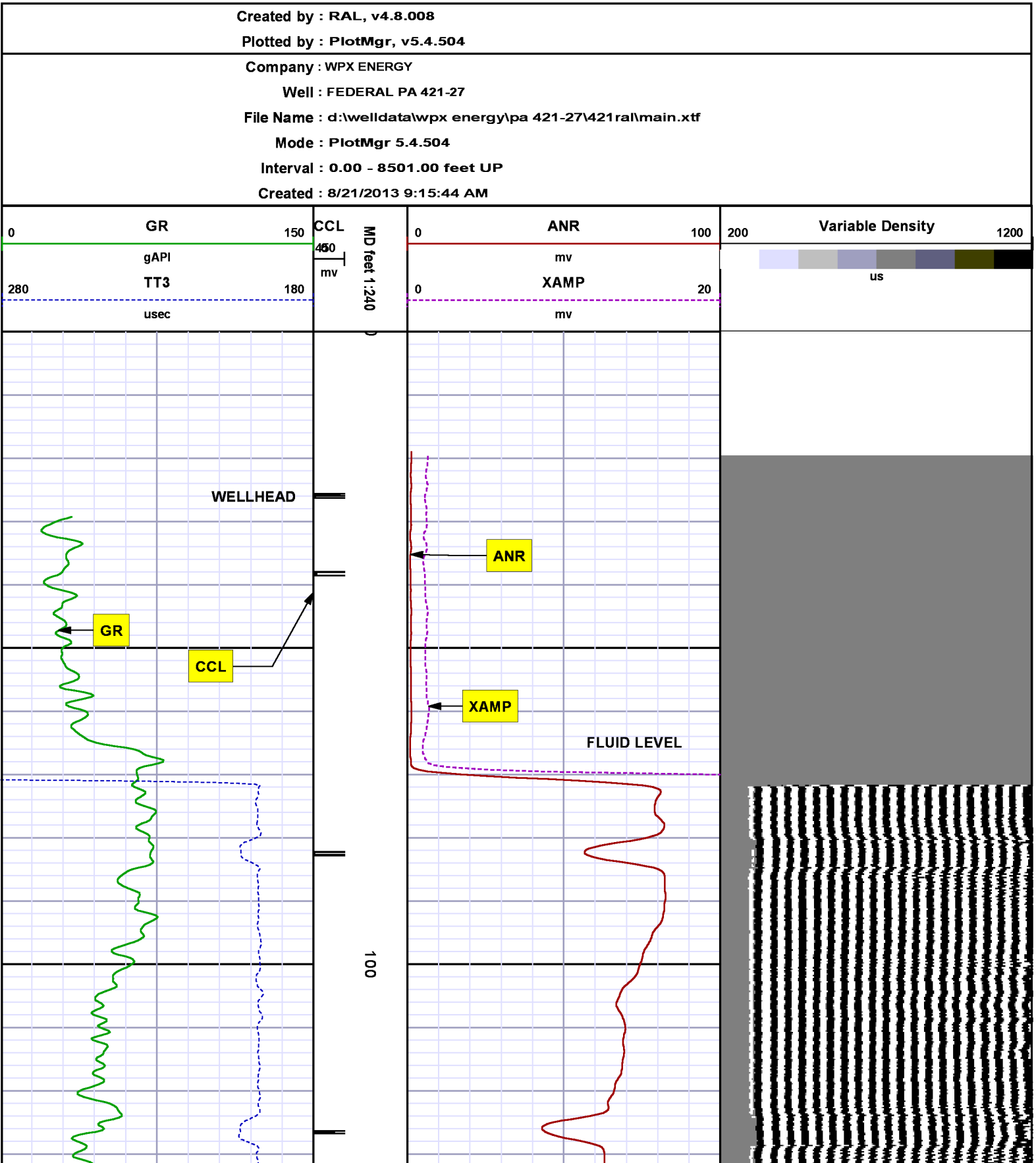
PRIMARY PRESENTATION
0 PSI

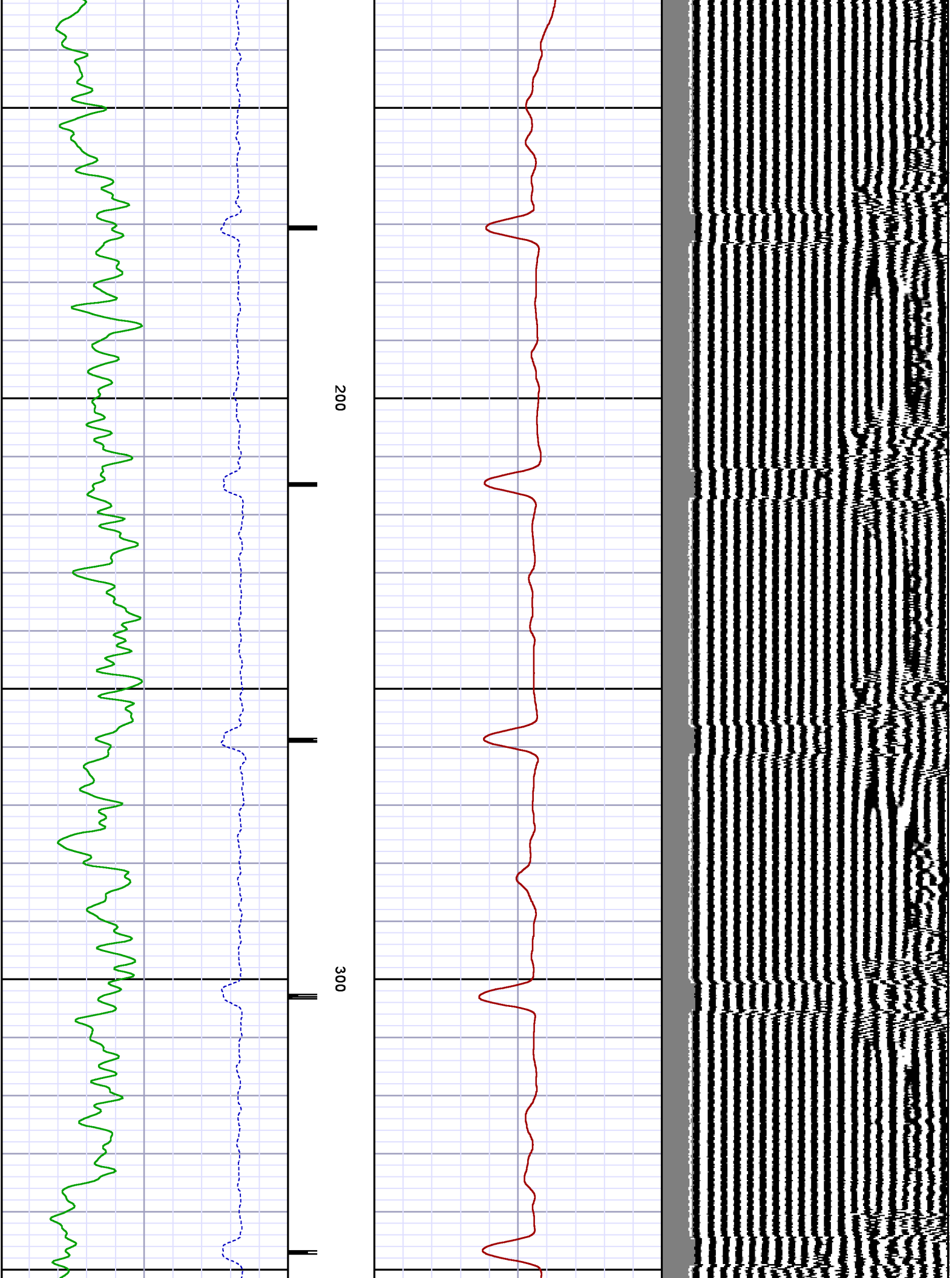
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	29.405	8514.500
RAL	Amp Gate Start Near	195.000	usec	29.405	8514.500
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RAL	FB Start Far	291.900	usec	29.405	8514.500
RAL	FB Start Near	180.000	usec	29.405	8514.500
RAL	FB Start Radial	180.000	usec	29.405	8514.500
RAL	FB Thresh Far	10.000	mv	29.405	8514.500
RAL	FB Thresh Near	4.000	mv	29.405	8514.500
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RAL	Fluid Travel Time	200.000	usec/ft	29.405	8514.093

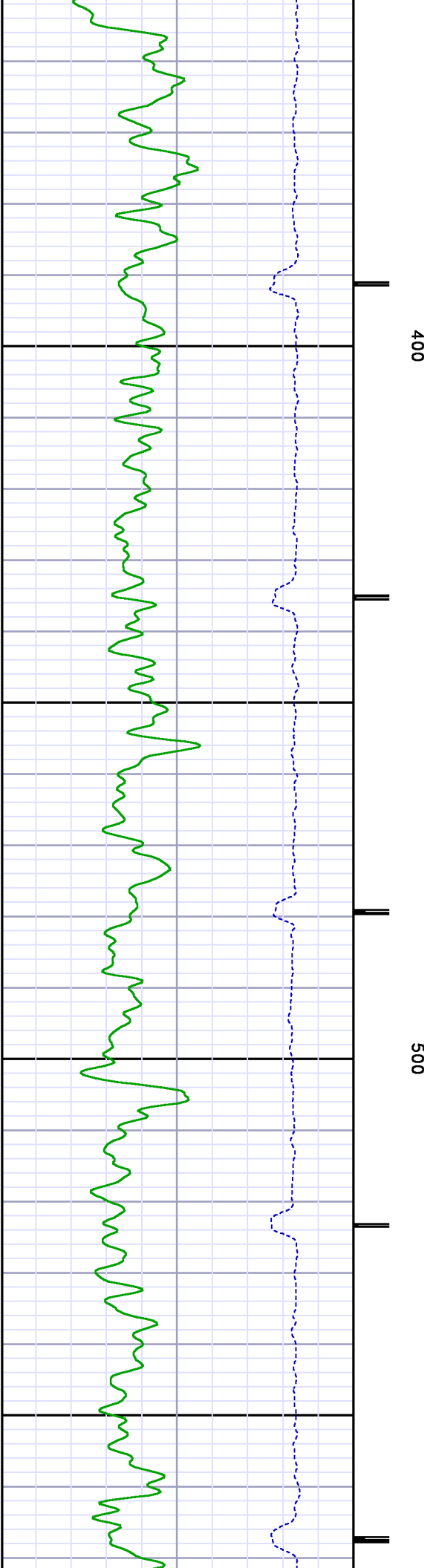
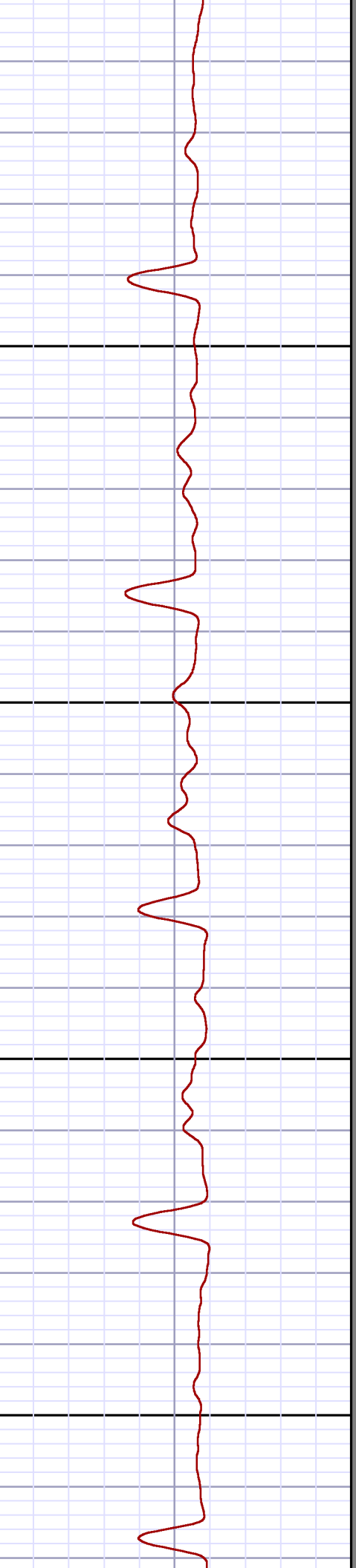
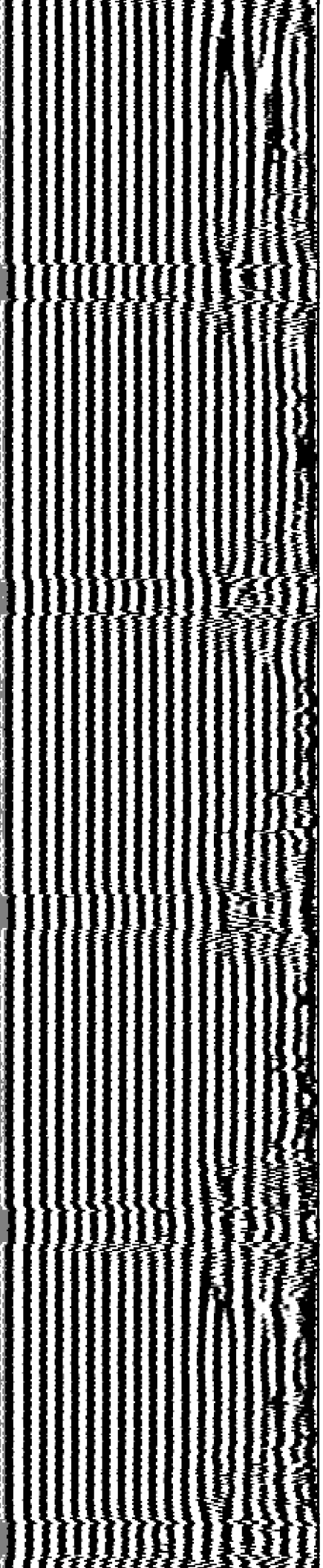
DEPTH OFFSETS
(for Acquired Curves)

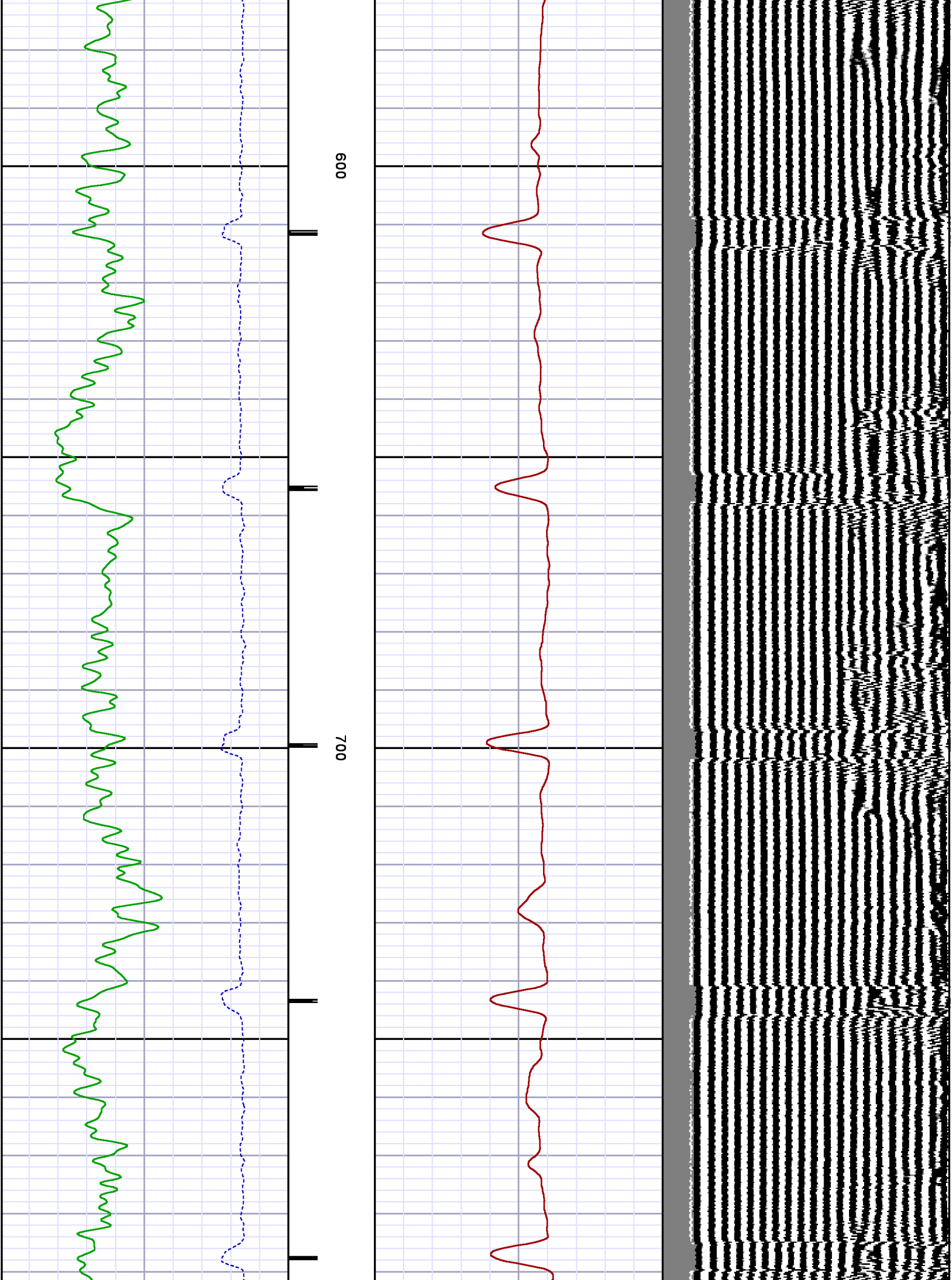
SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-11.000	ACAL	ANR	AR1	AR2	AR3	AR4
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		FBF1	FBF2	FBF3	FBF4	FBF5	FBF6

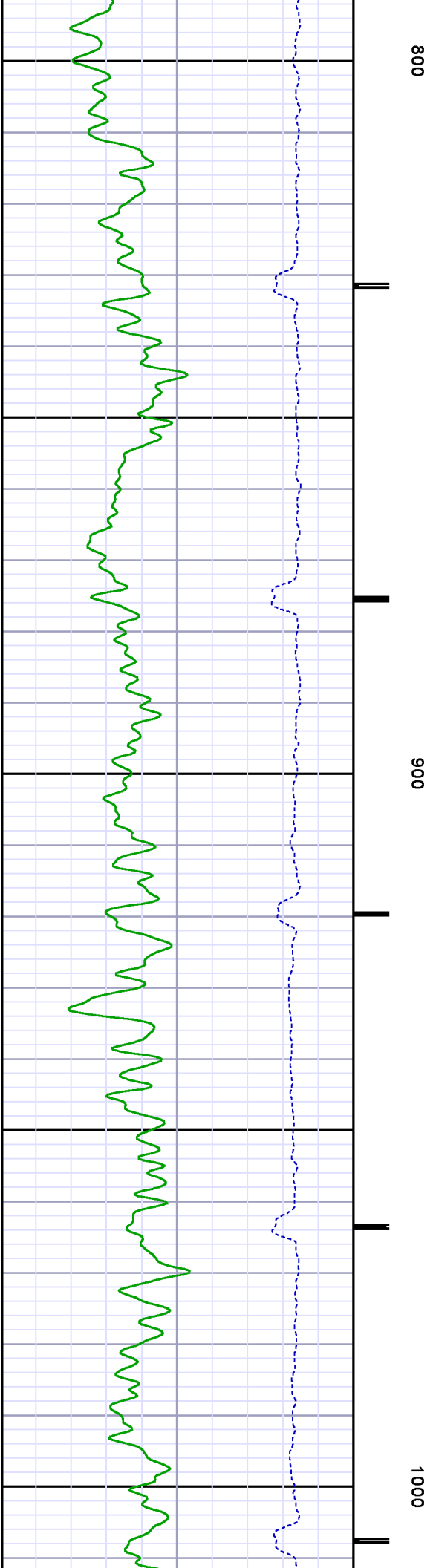
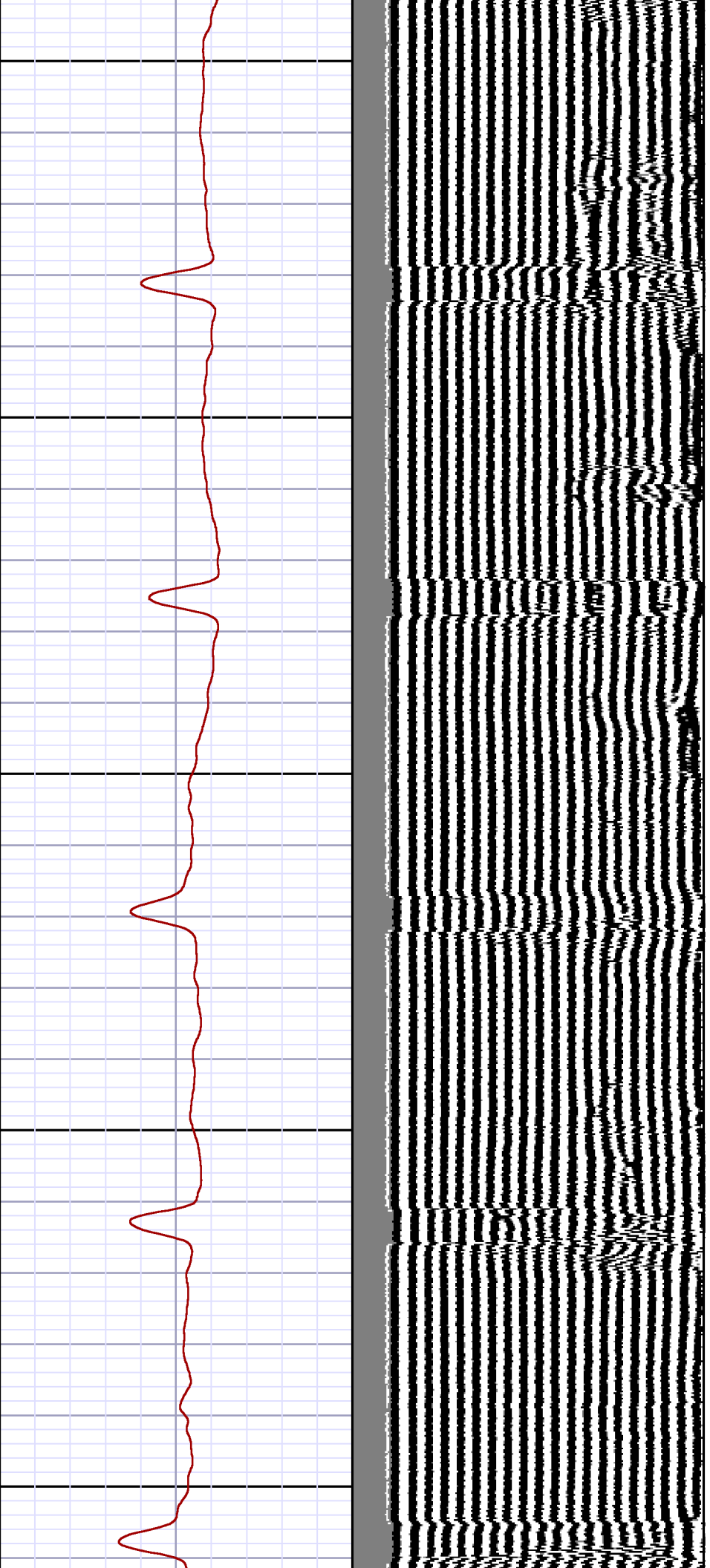
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	-10.040	AFAR	SIG	TT5			
1355XA	-5.620	CCL					
1355XA	-1.500	GR					
1355XA	0.000	TEMP					

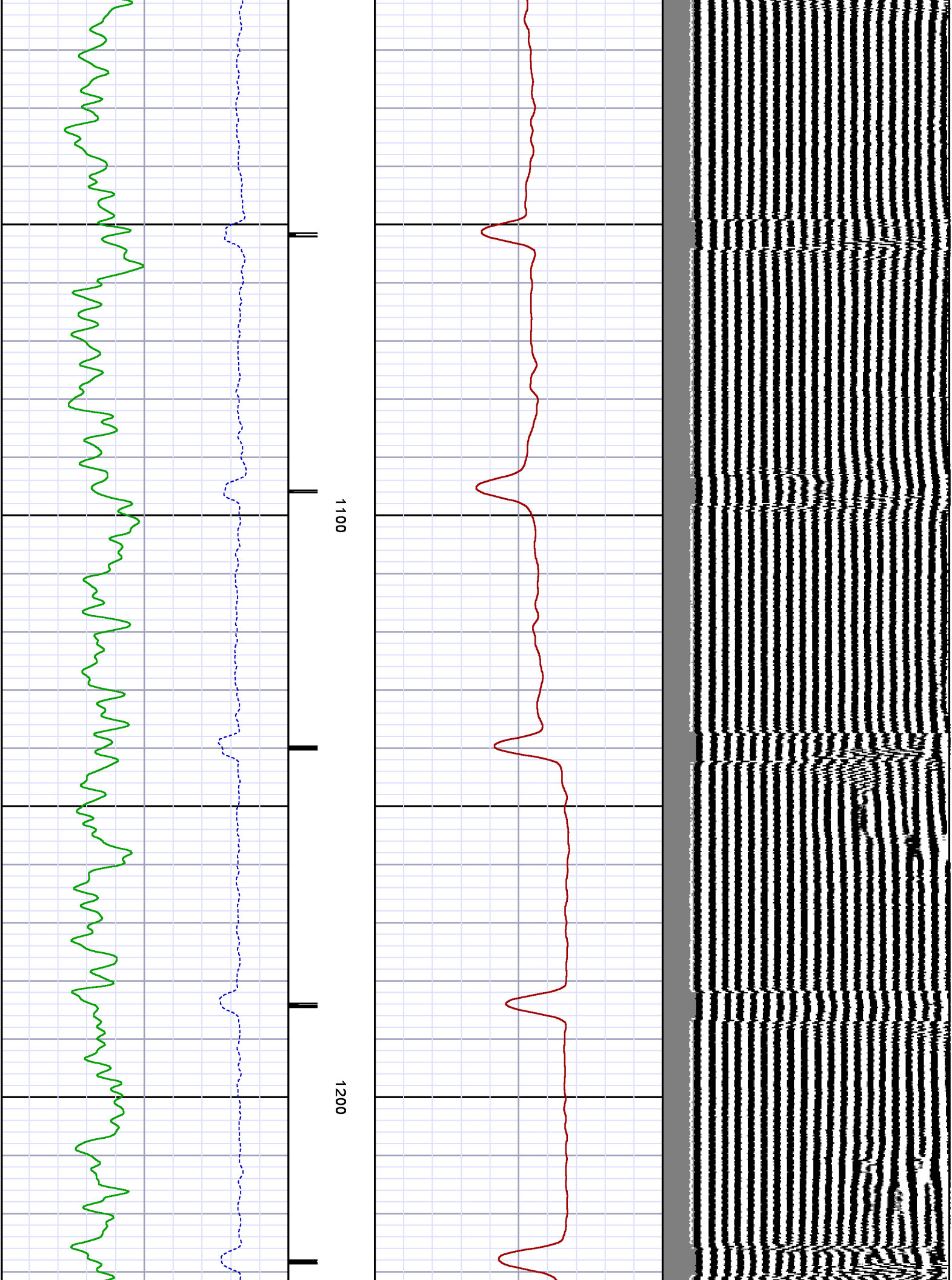


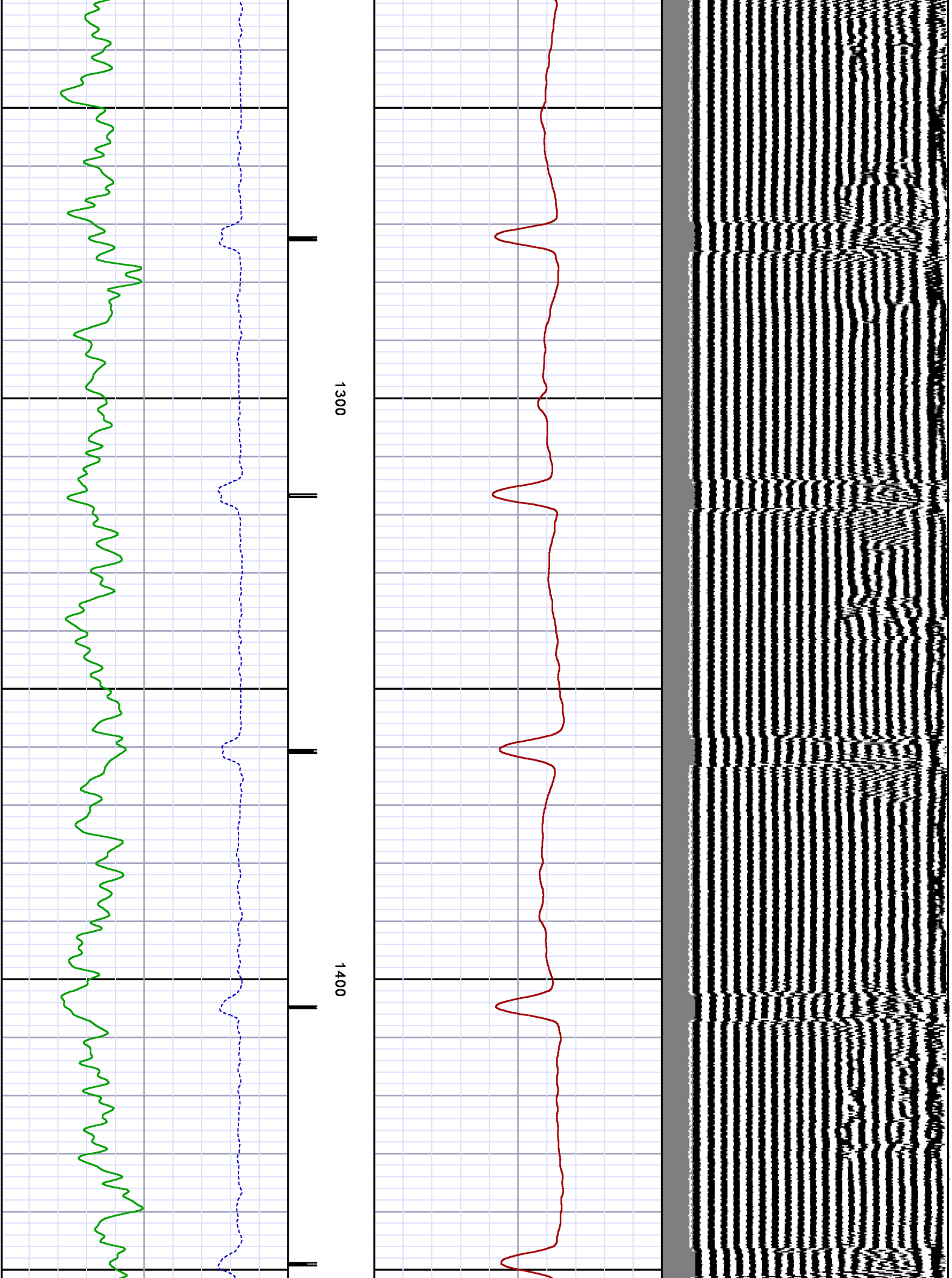


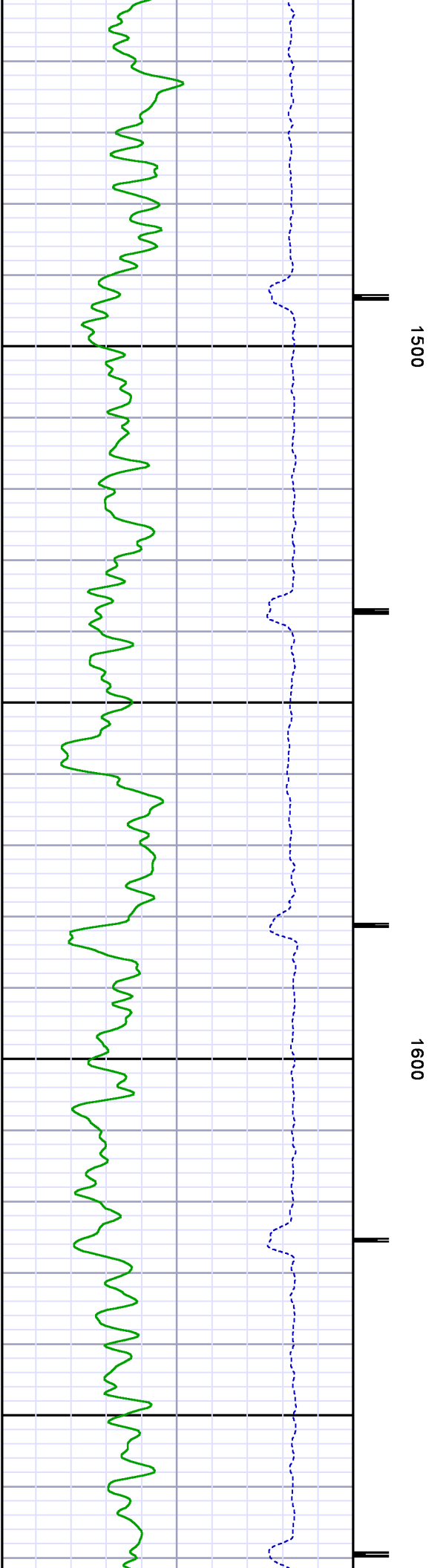
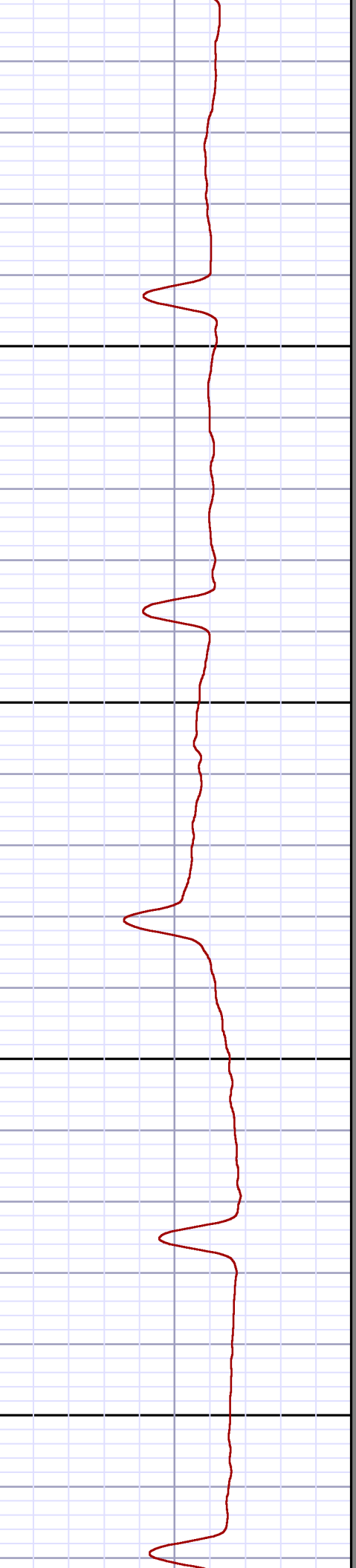
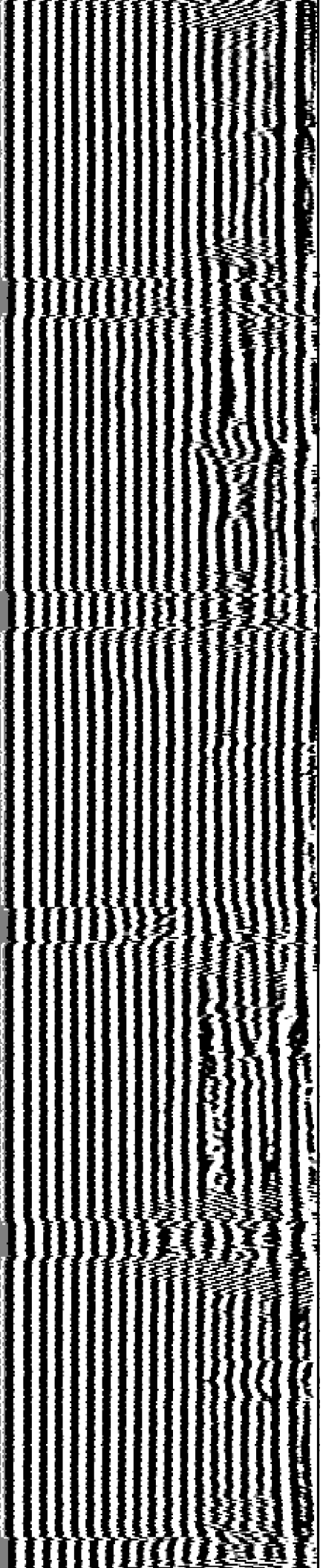


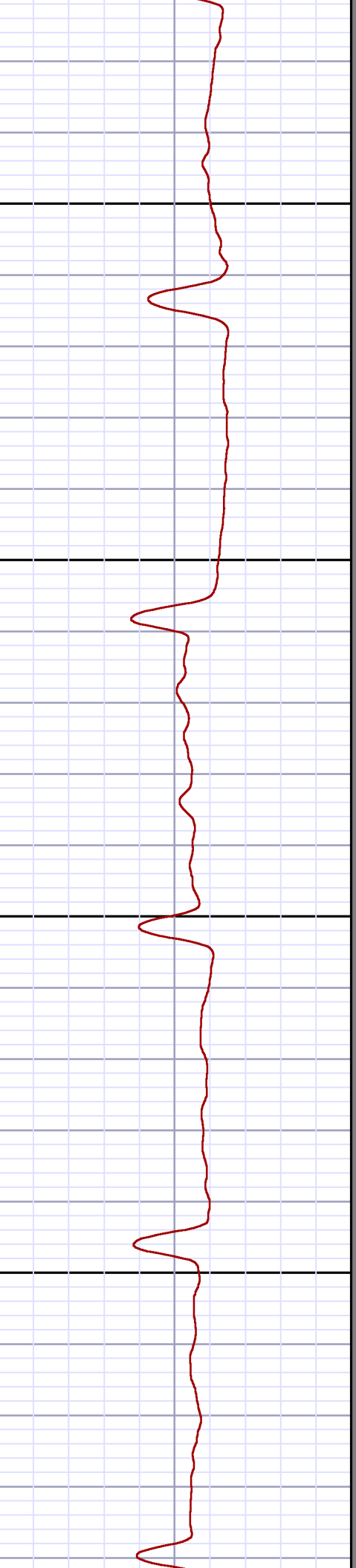
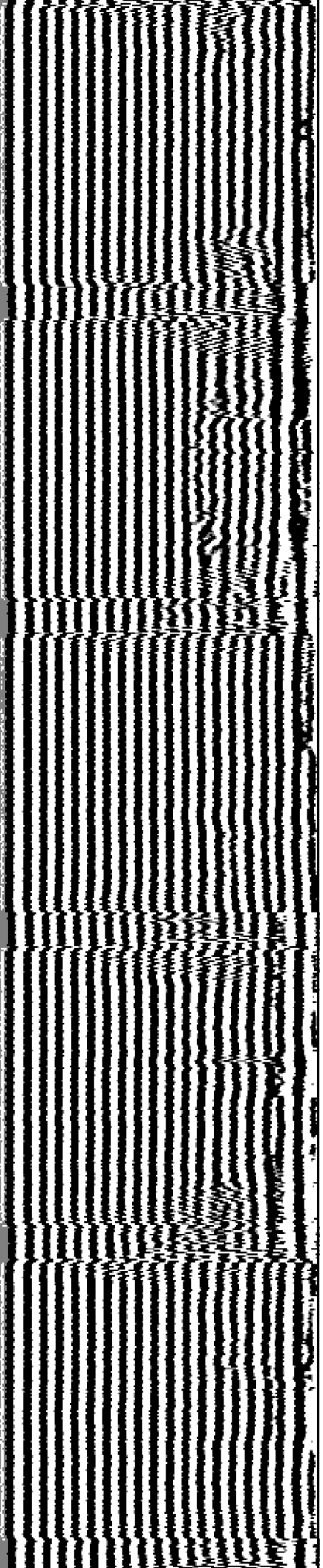






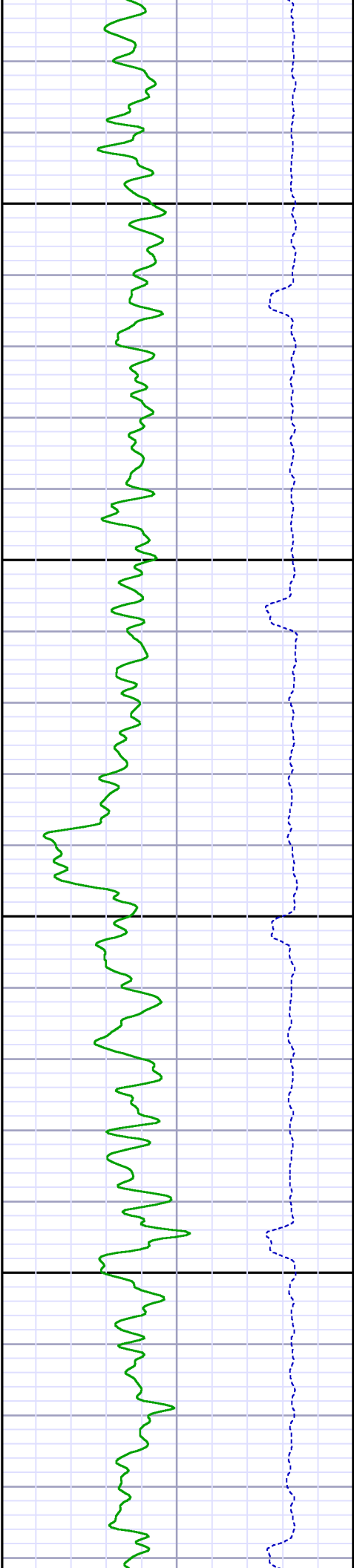


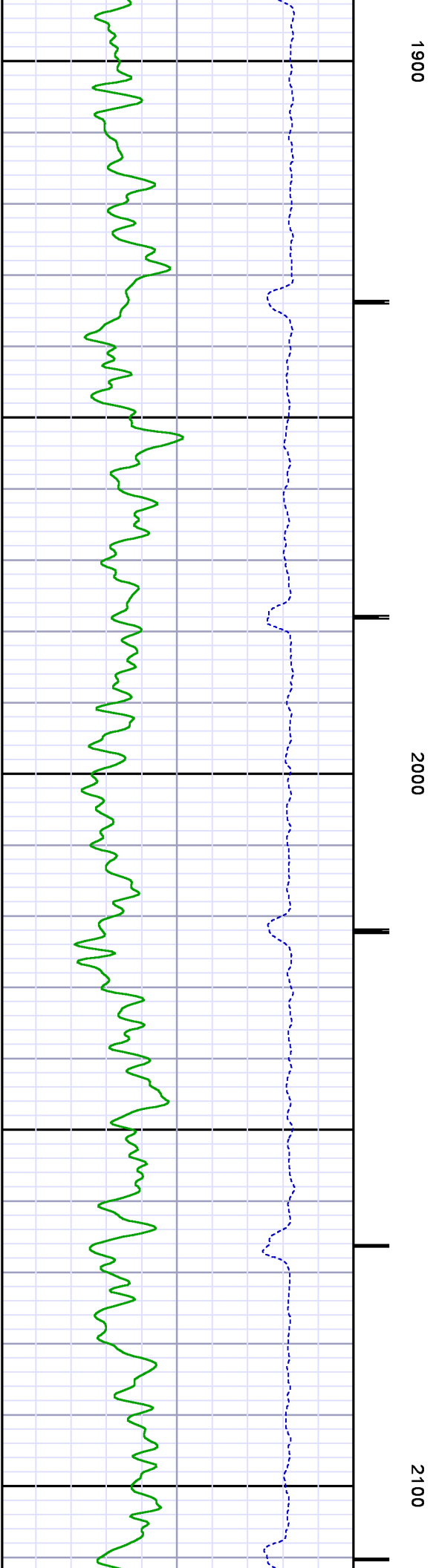
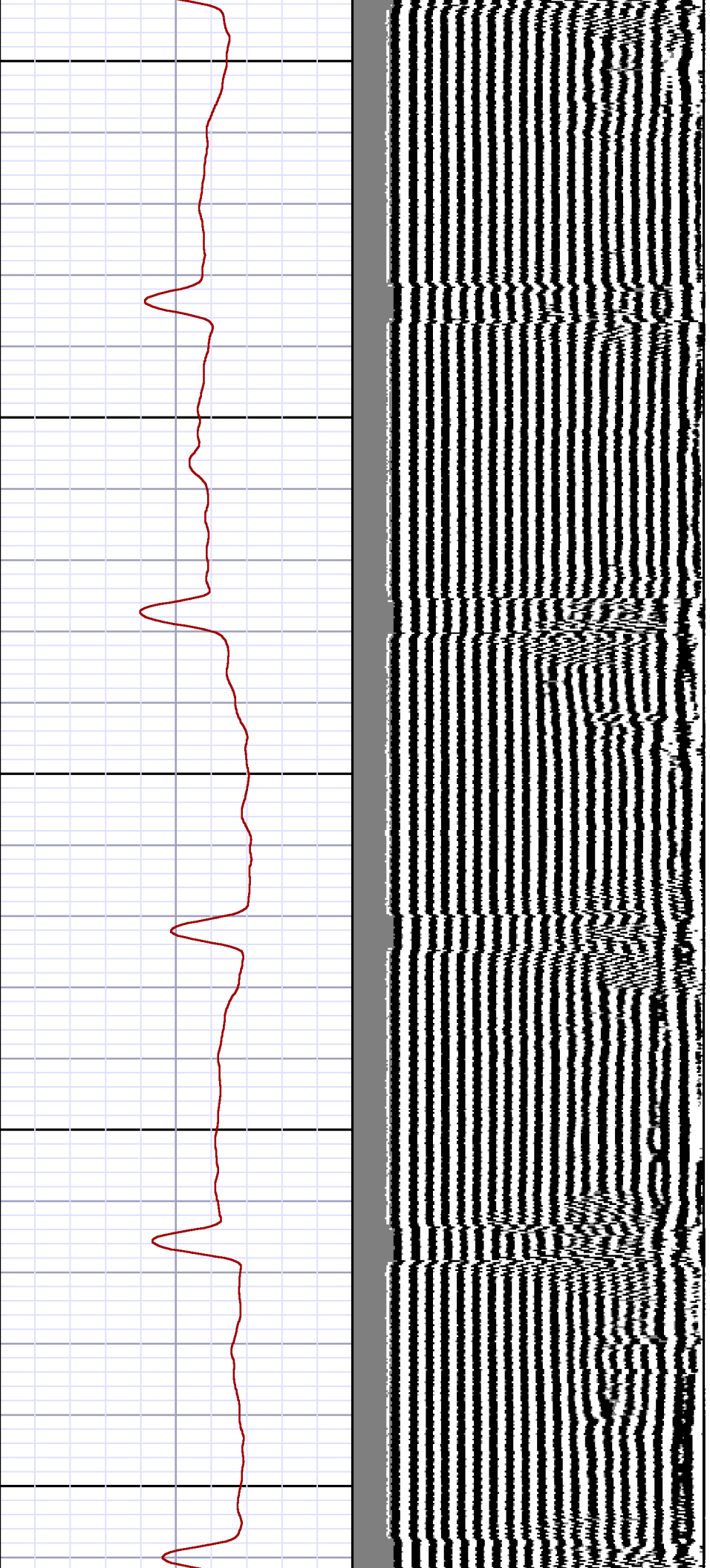


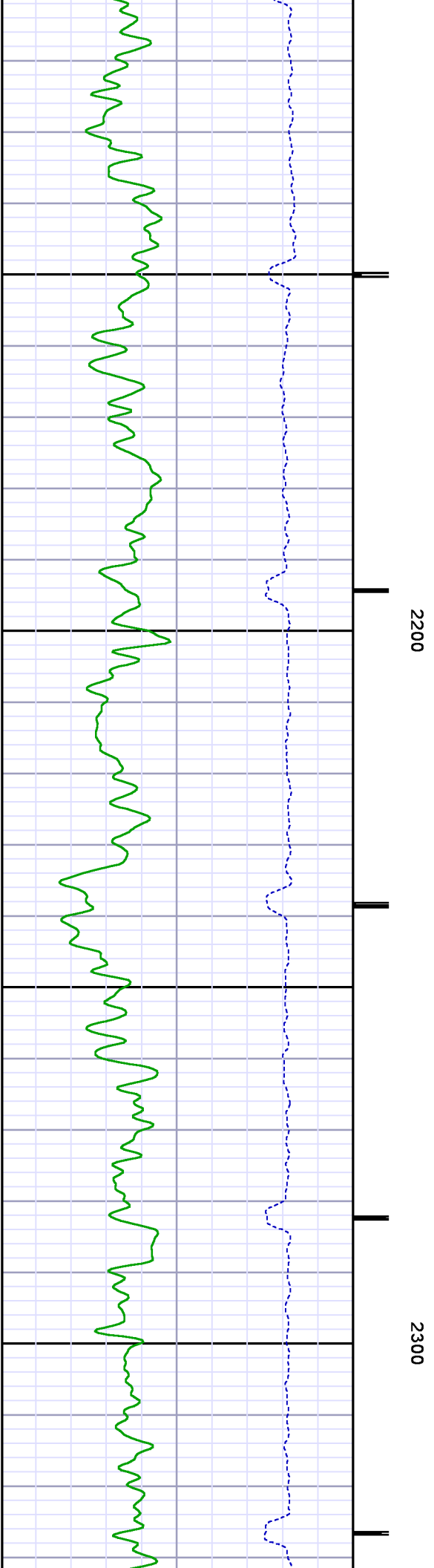
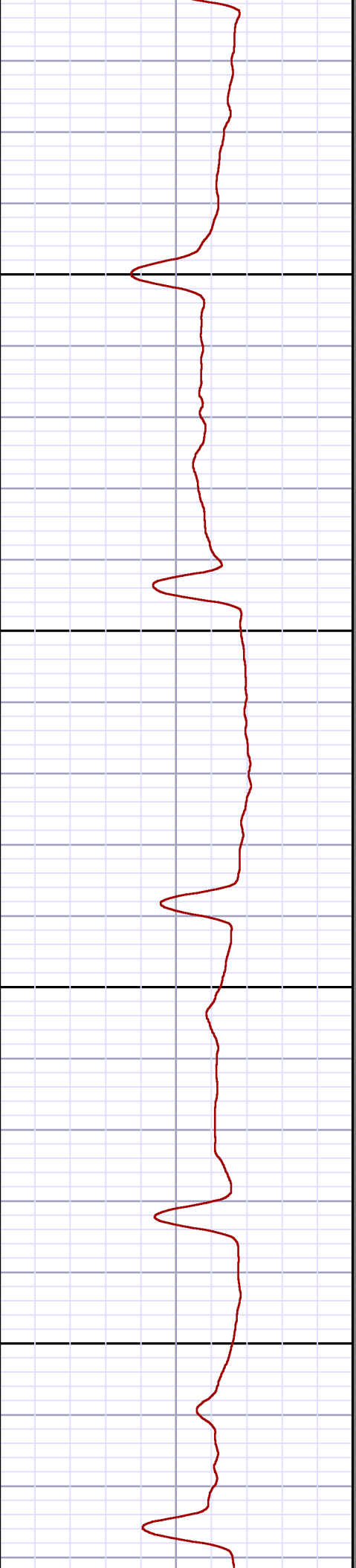
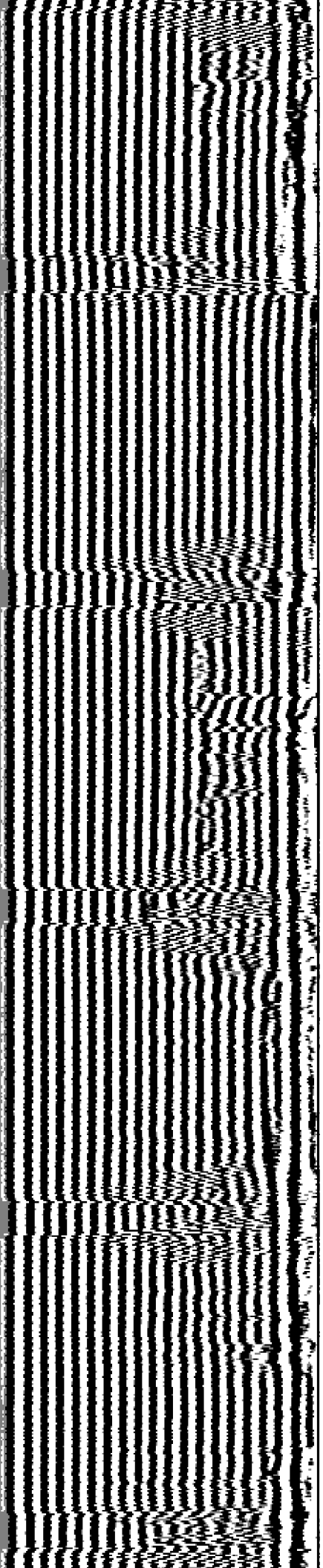


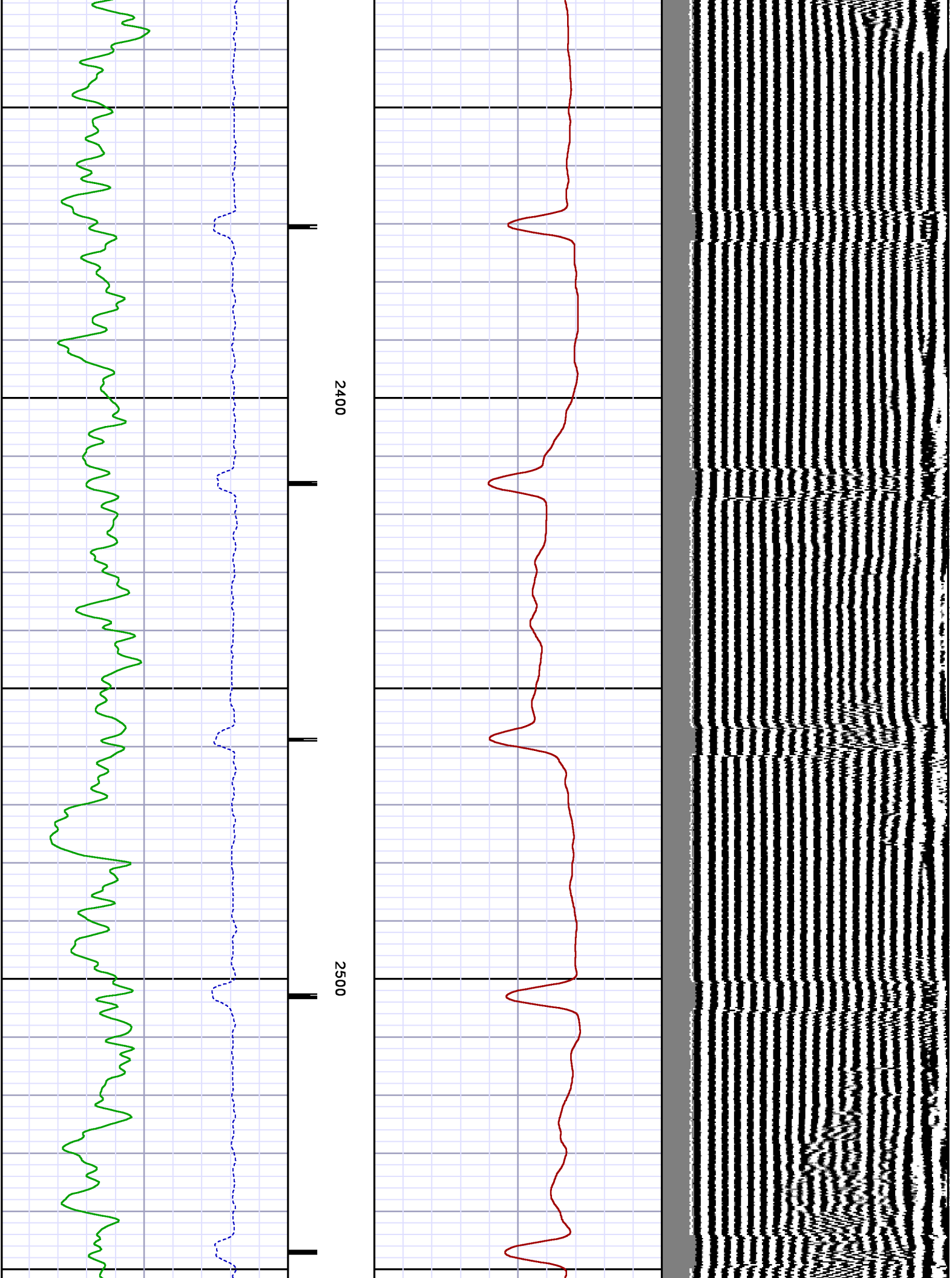
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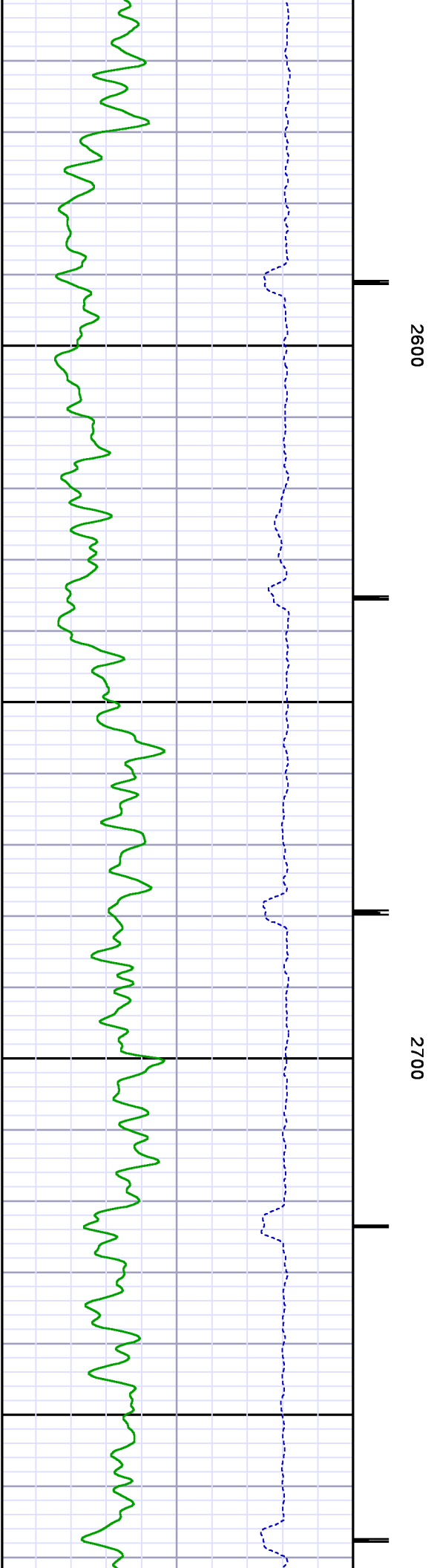
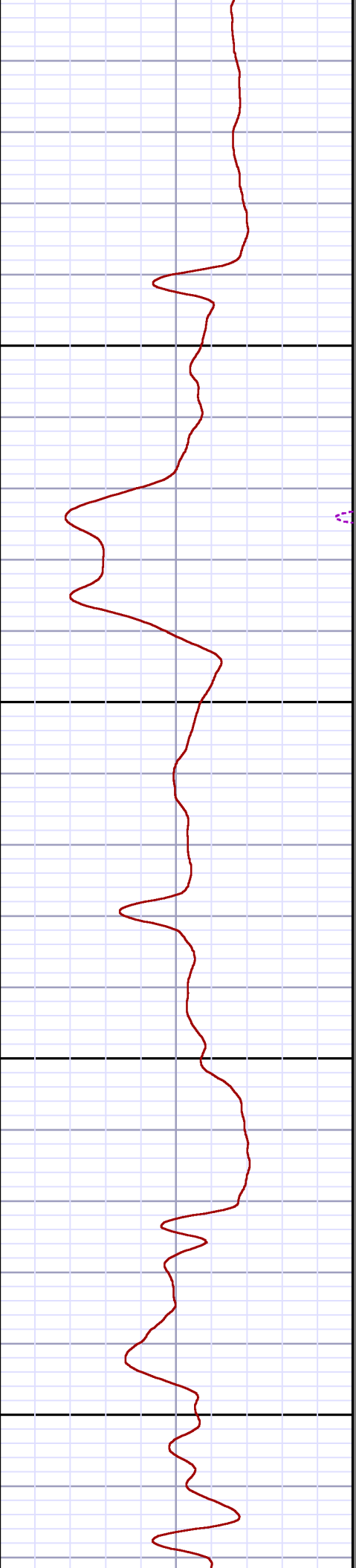
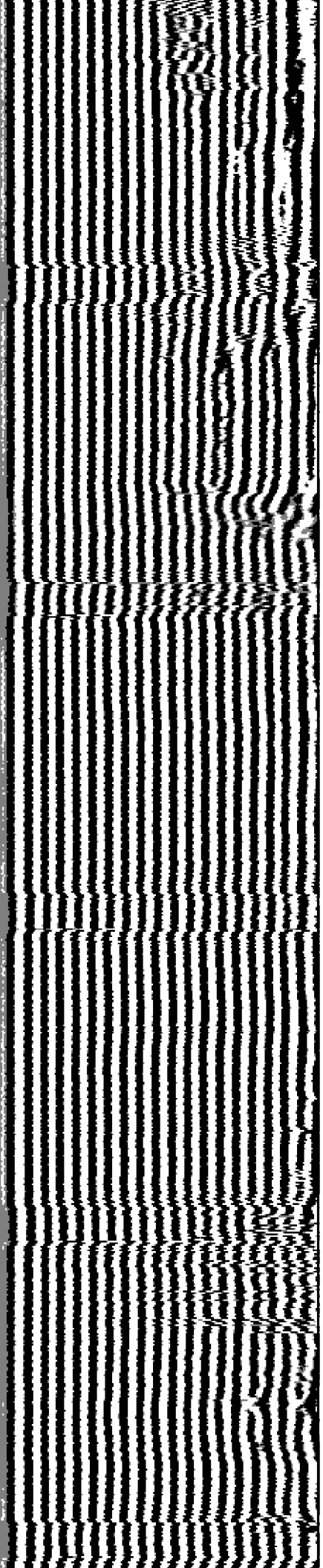
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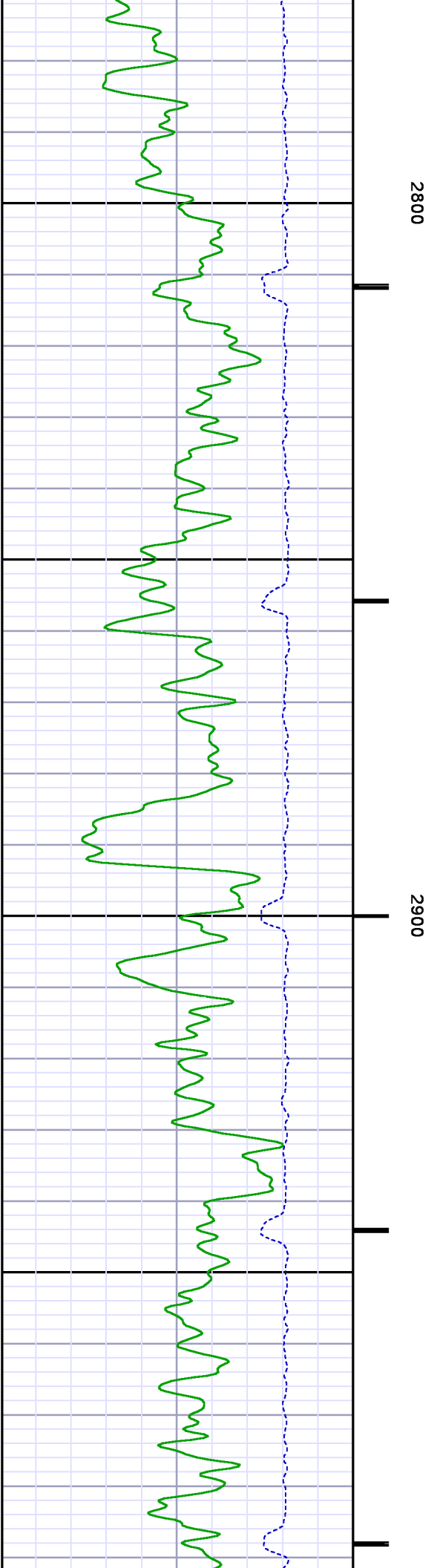
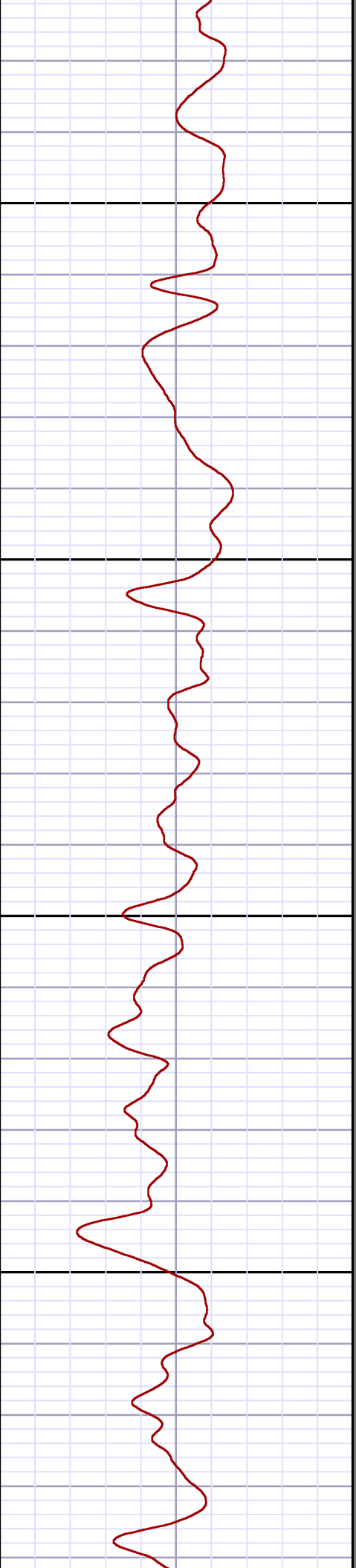
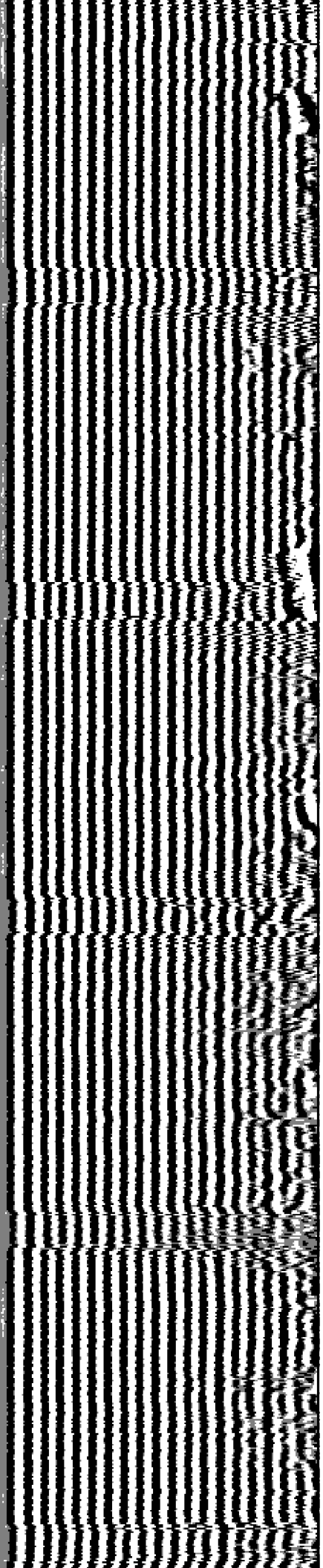


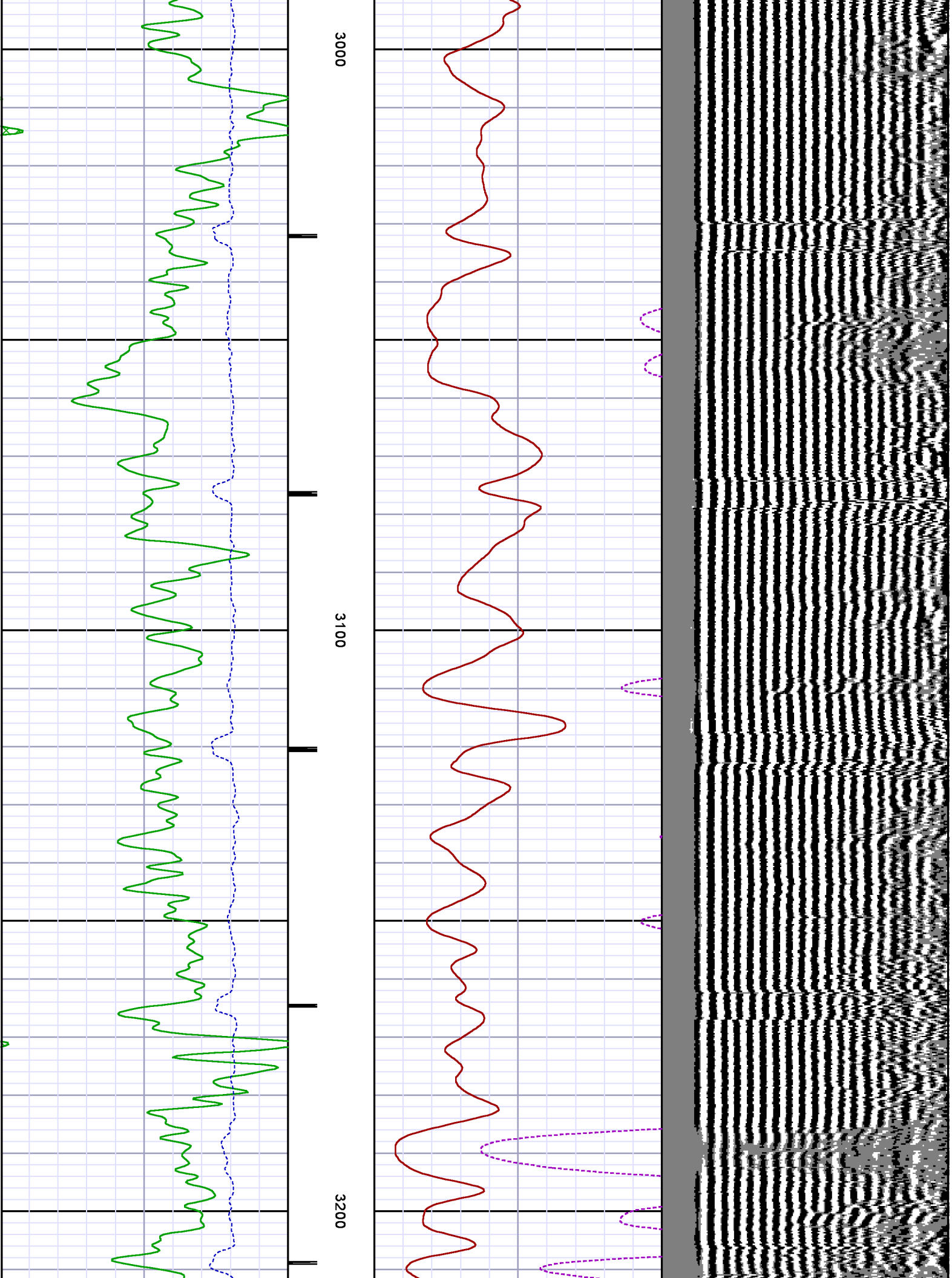


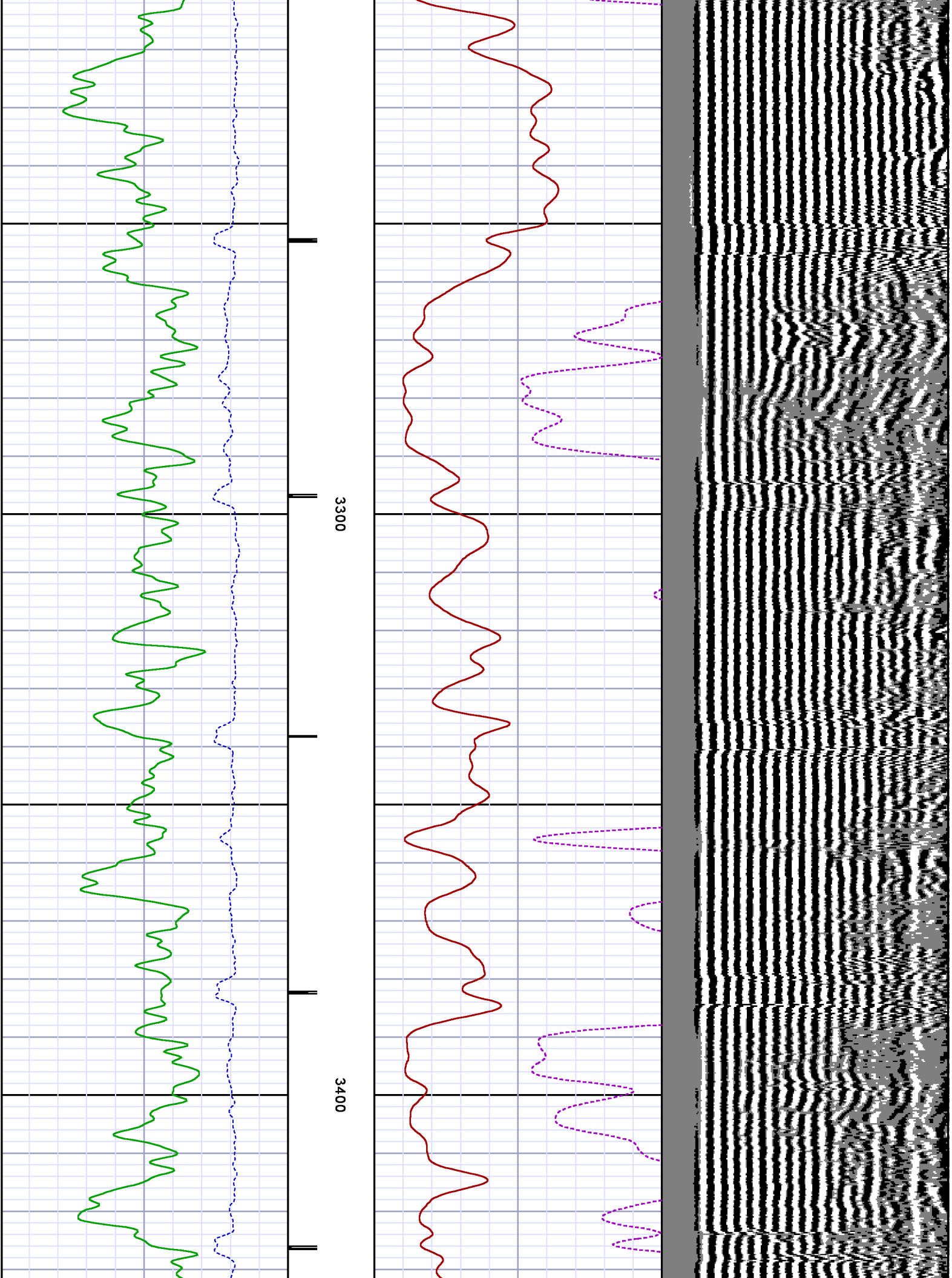


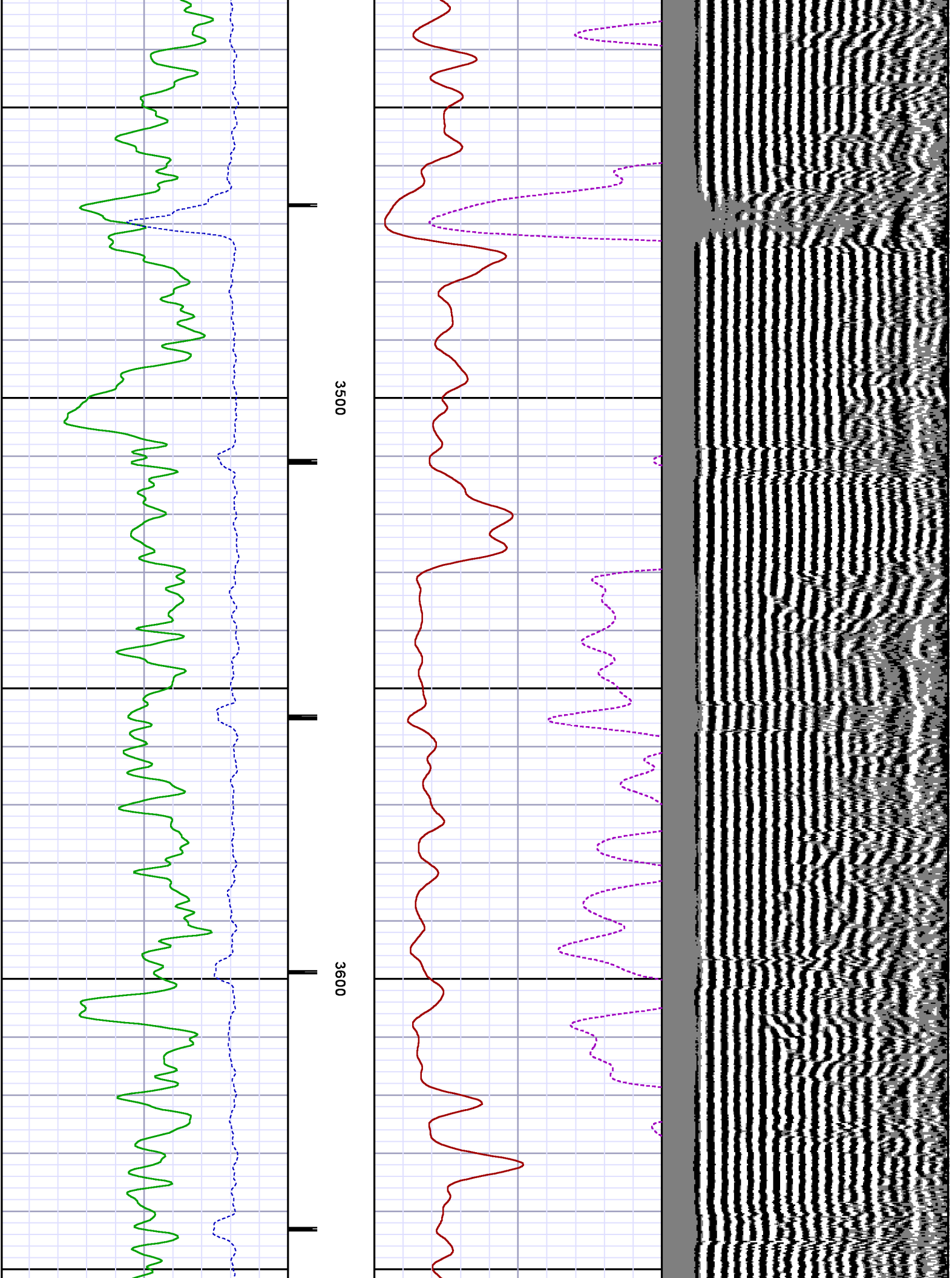


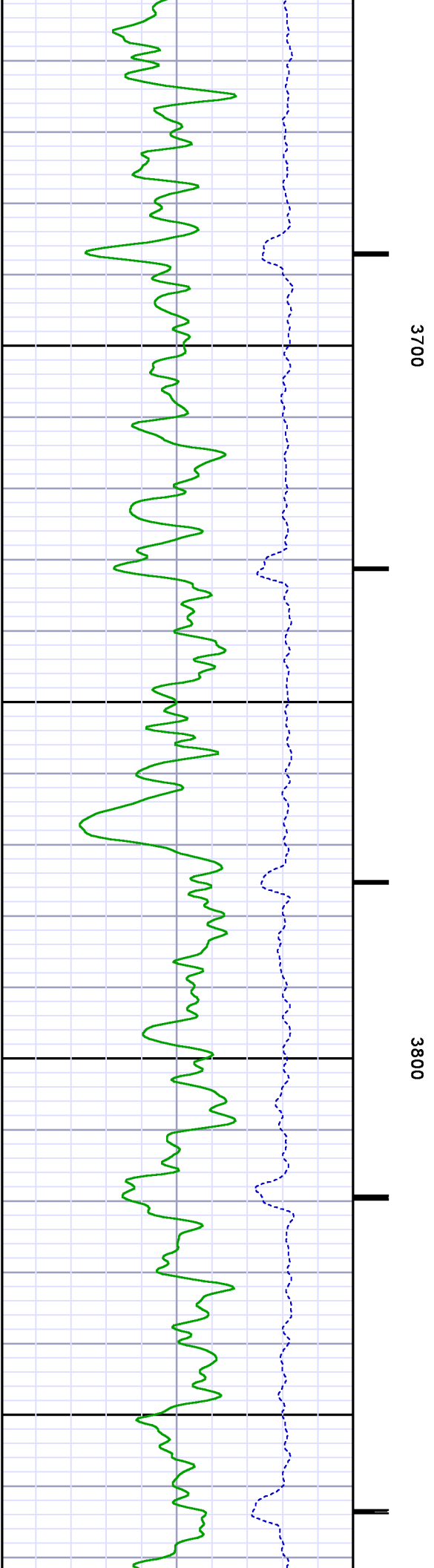
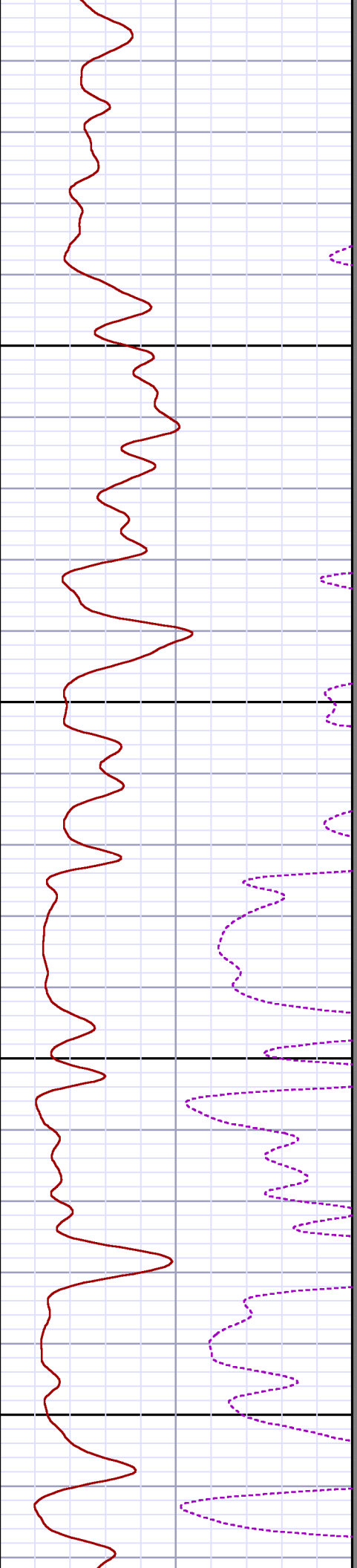
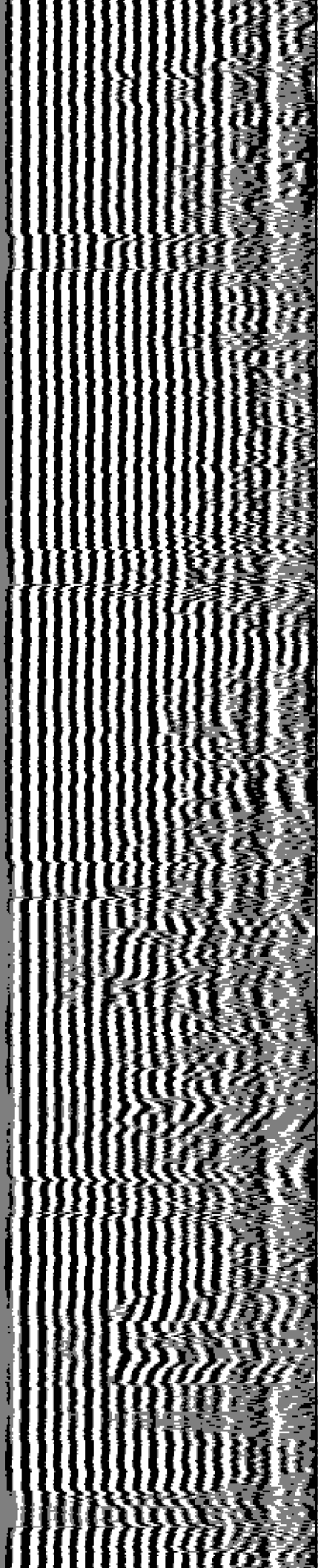


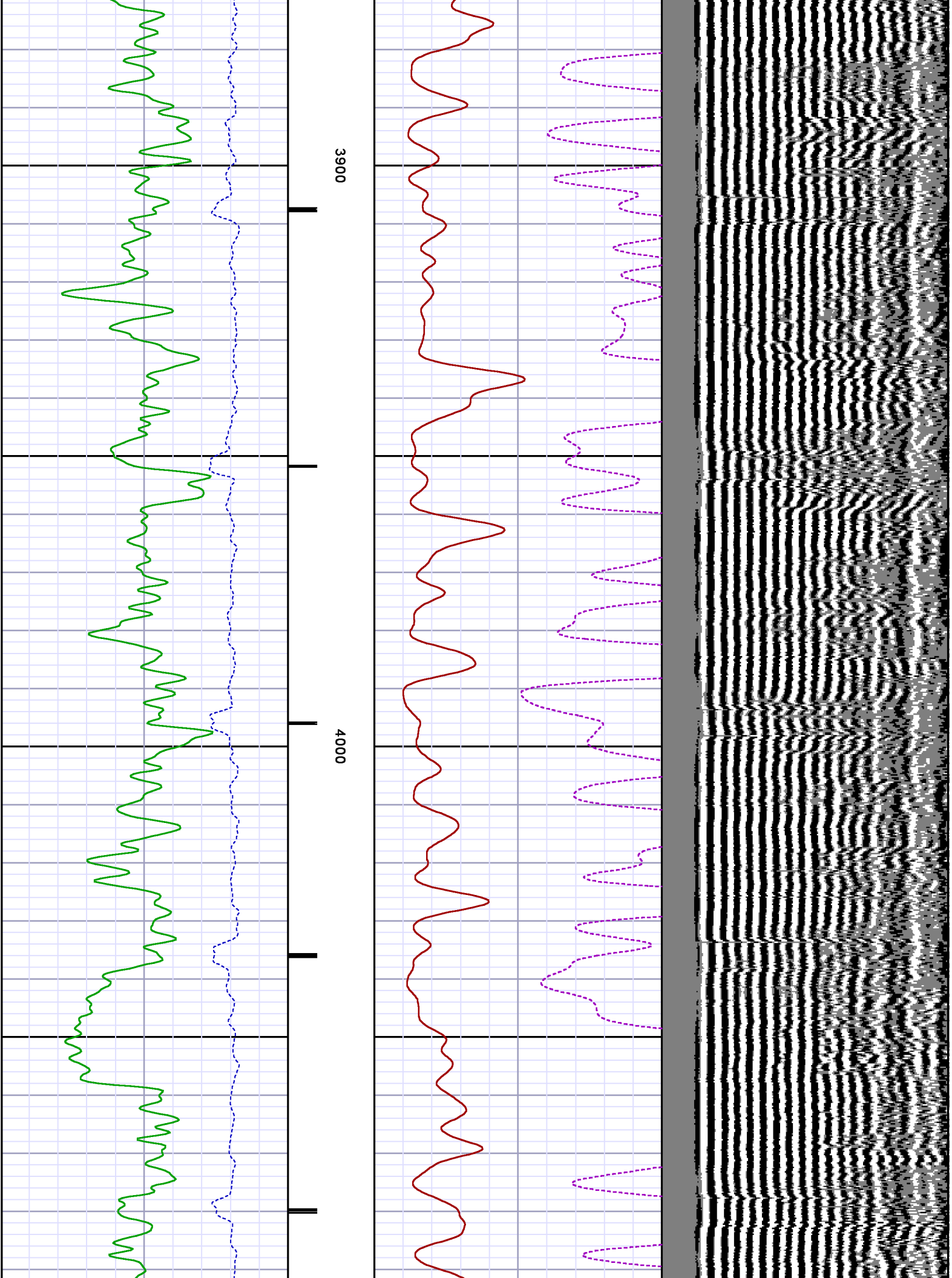


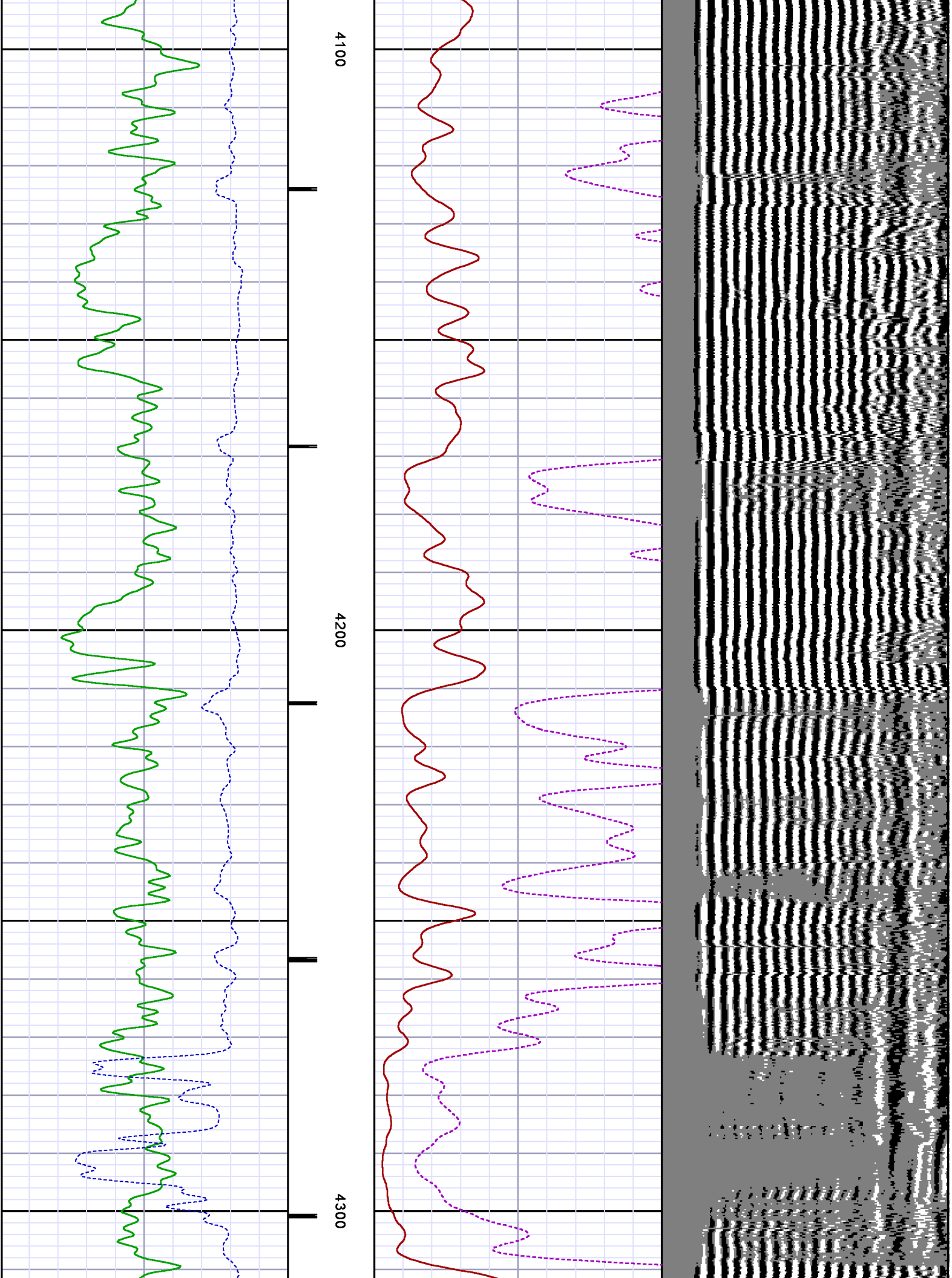


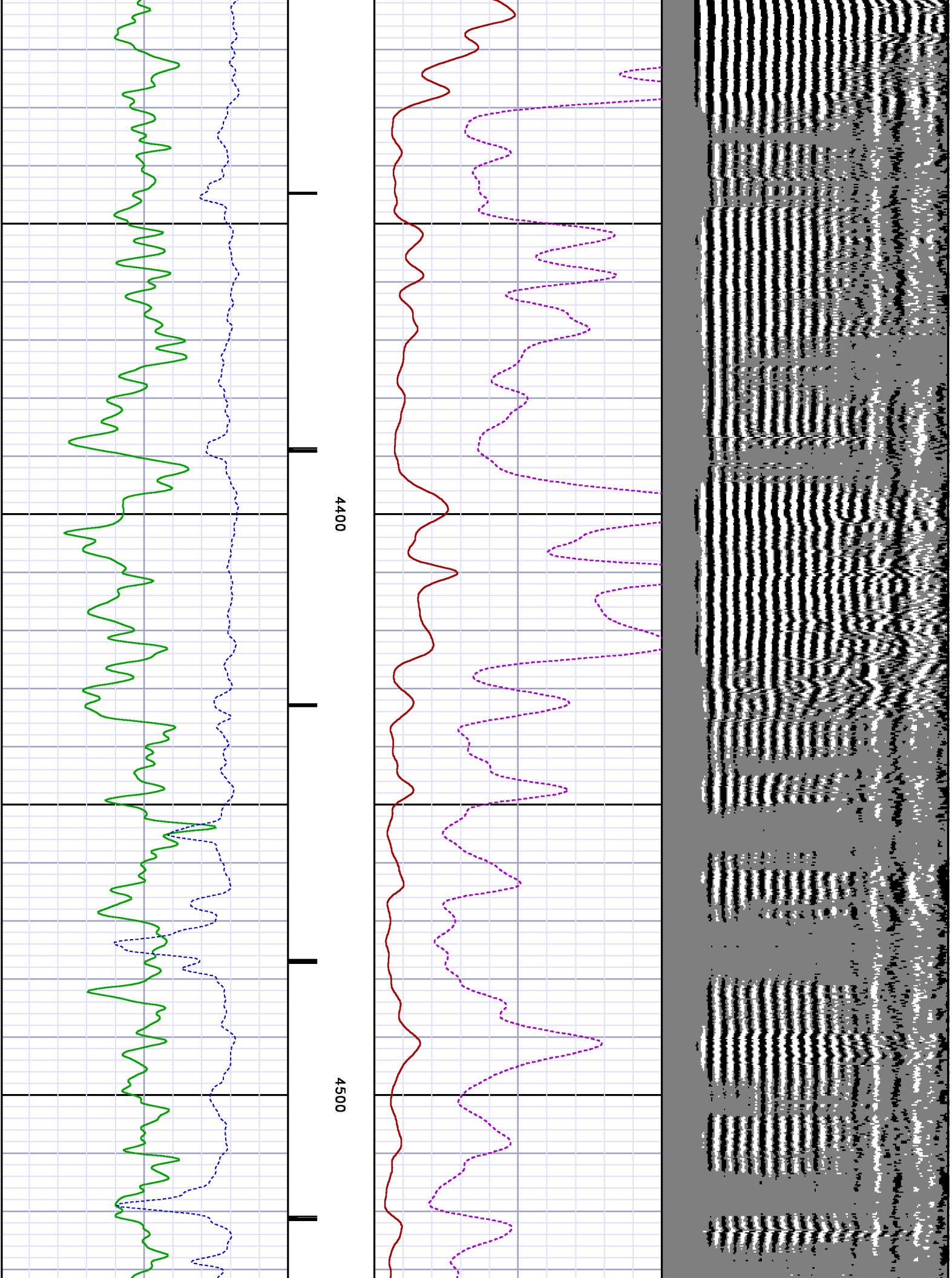


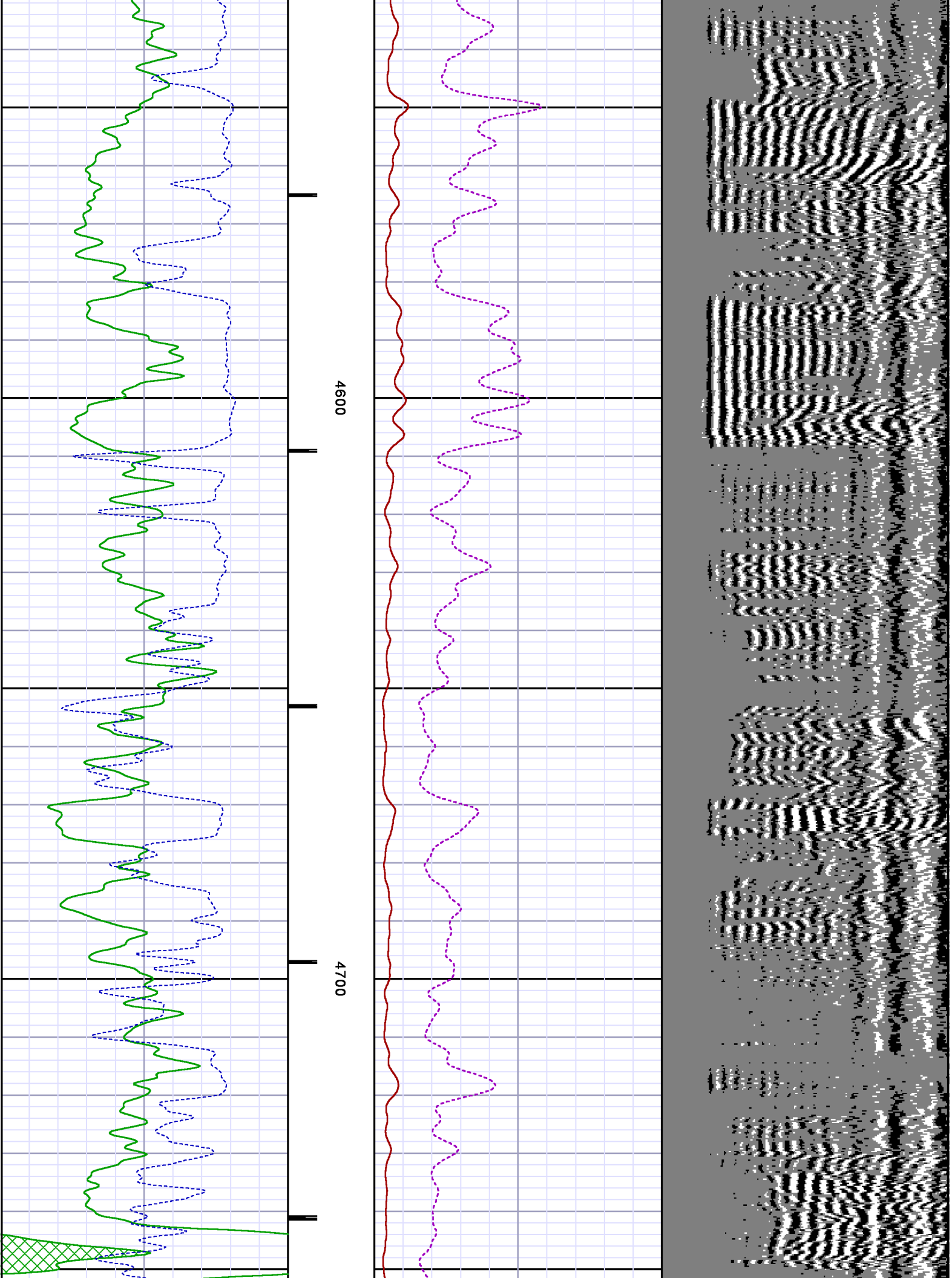


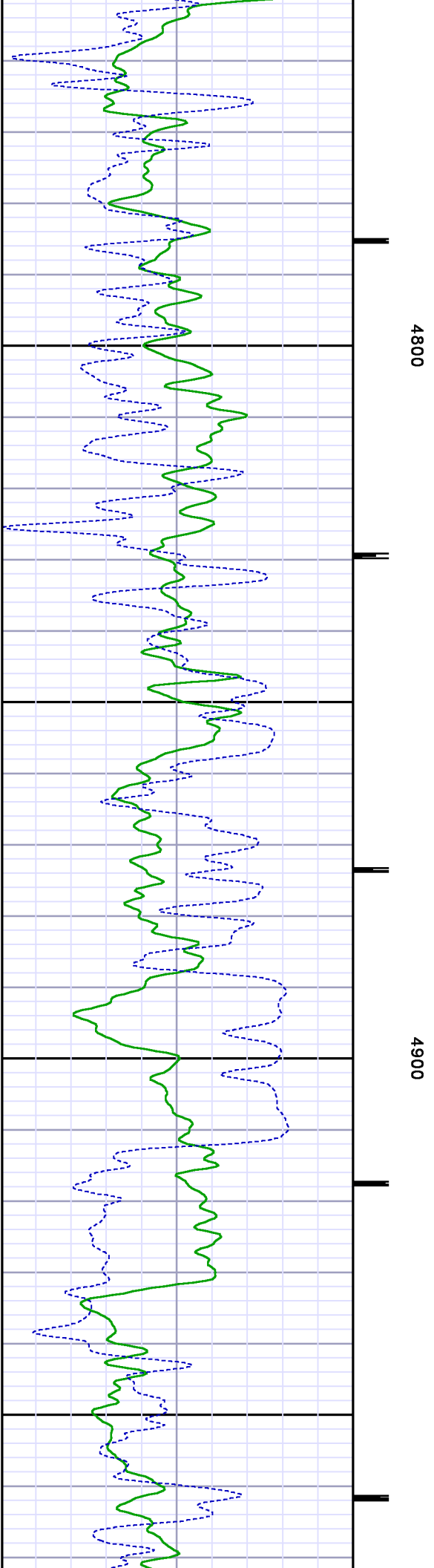
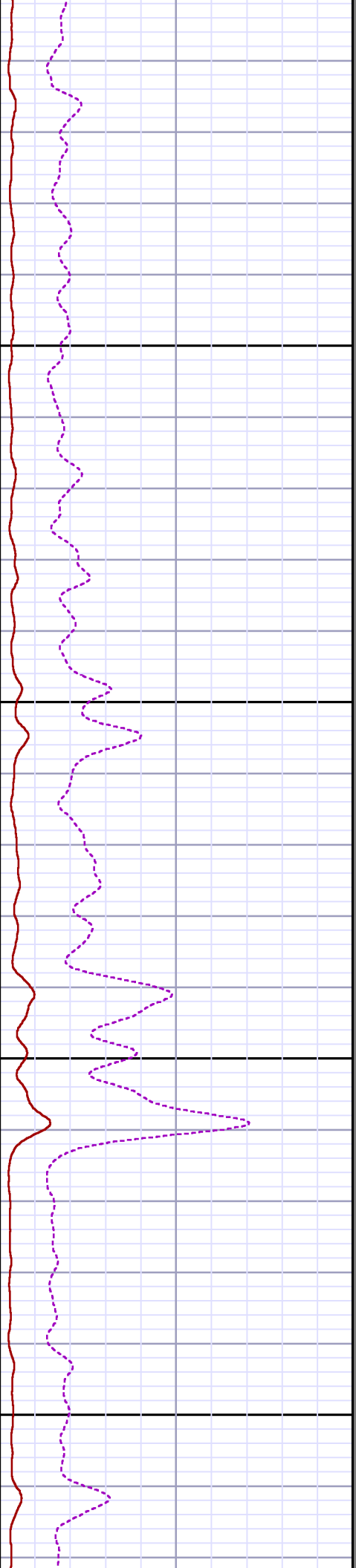
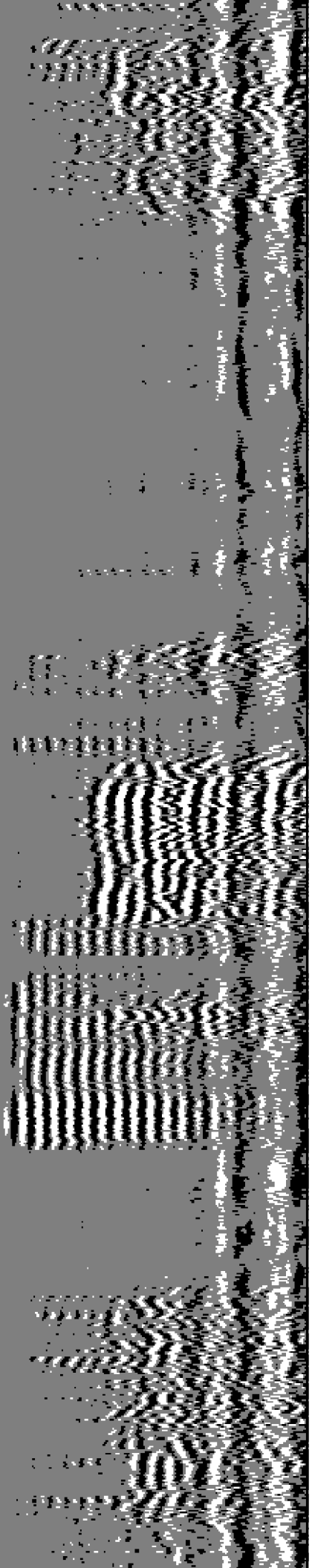


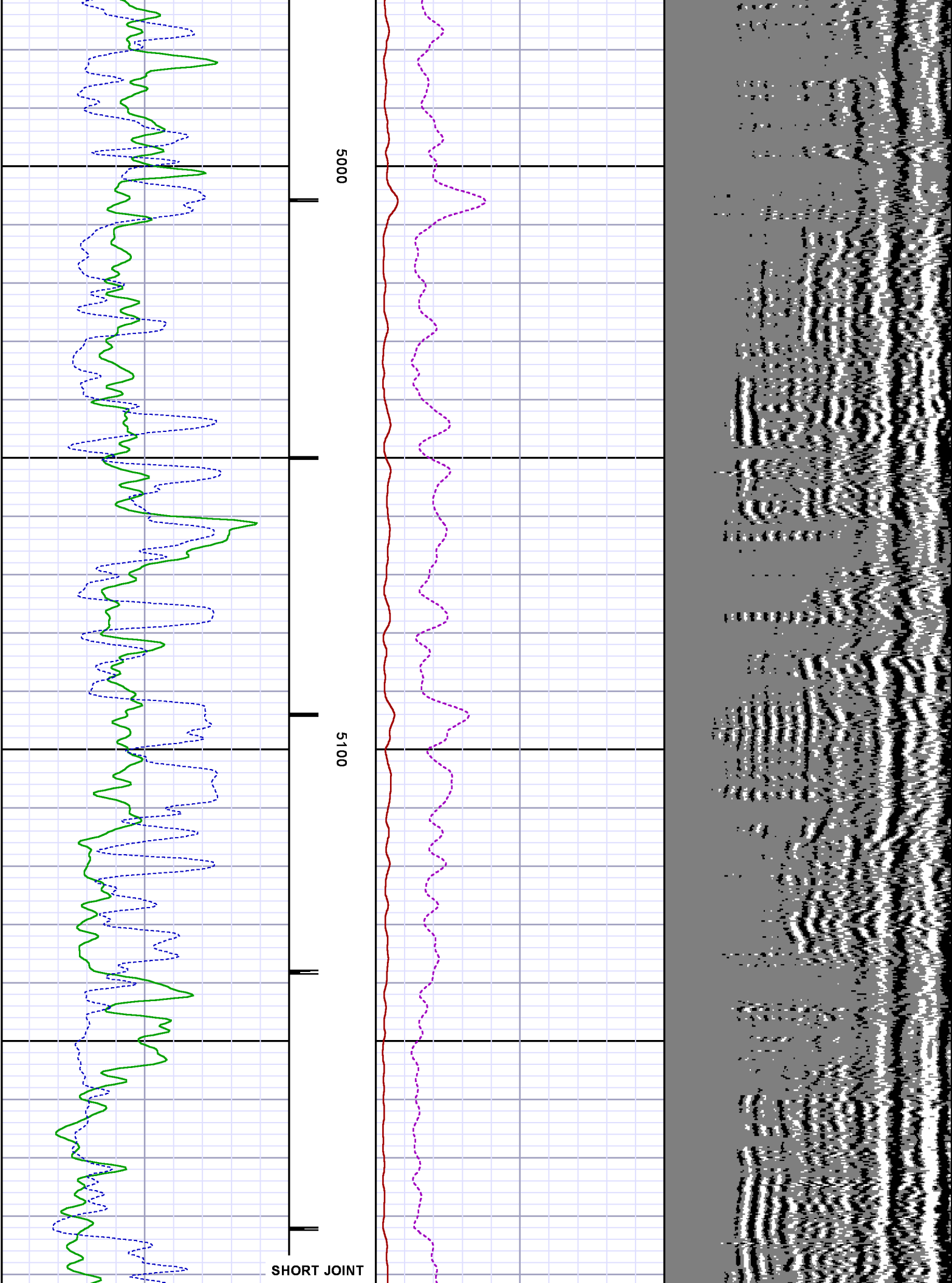


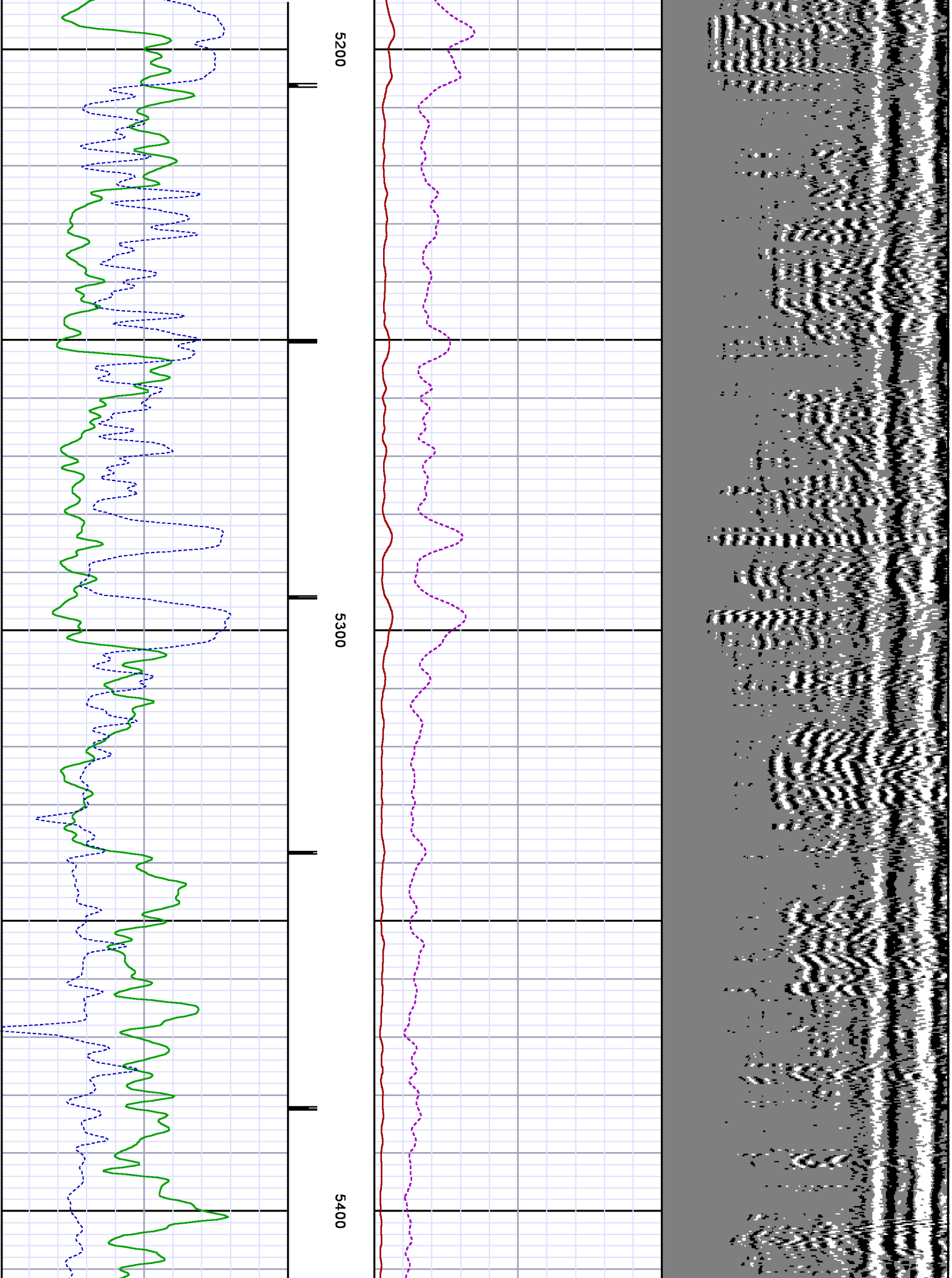


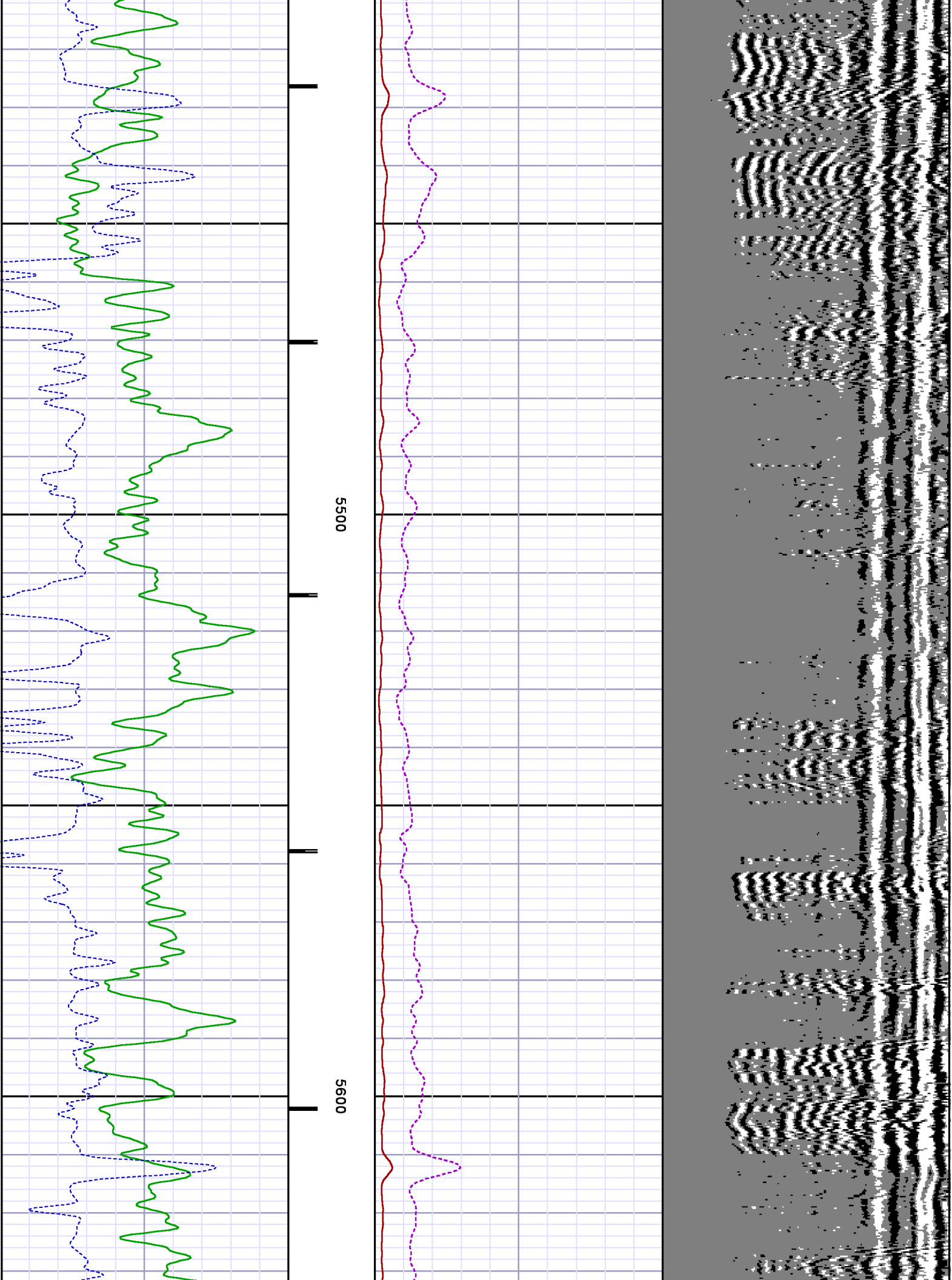


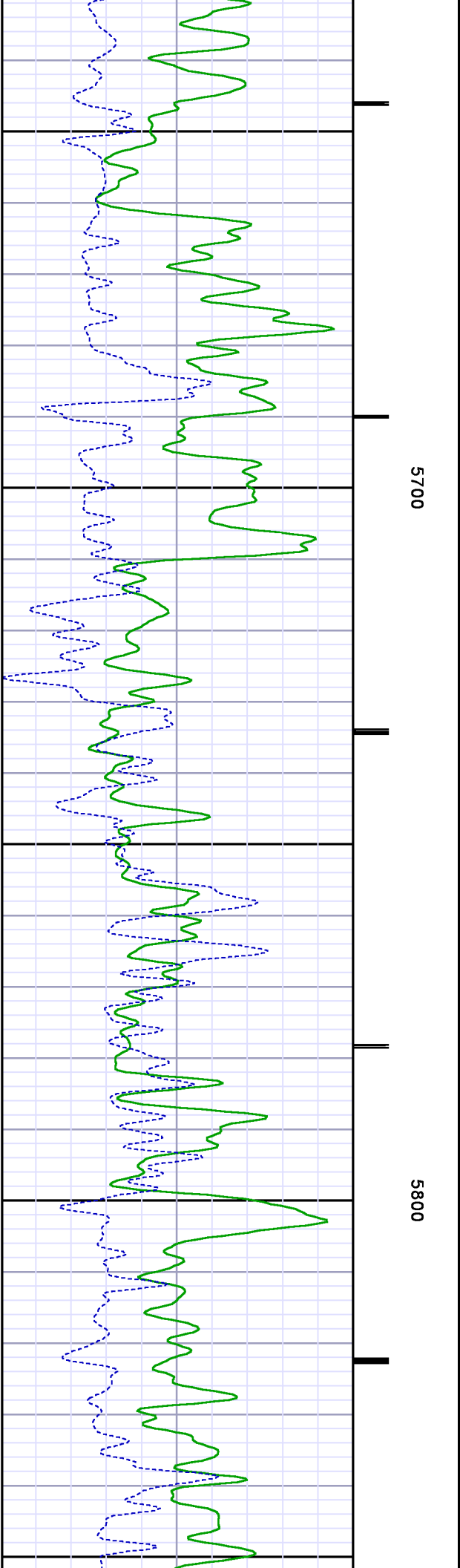
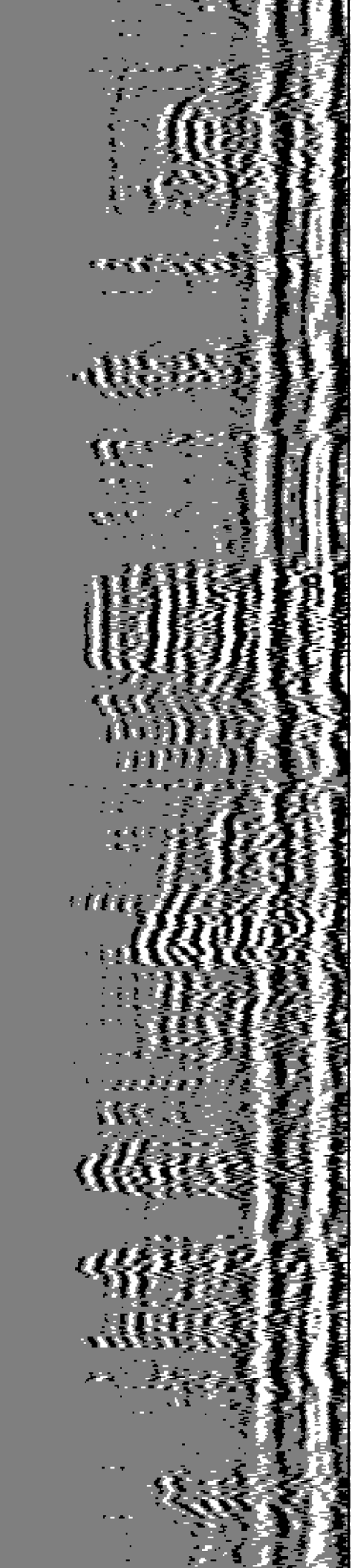


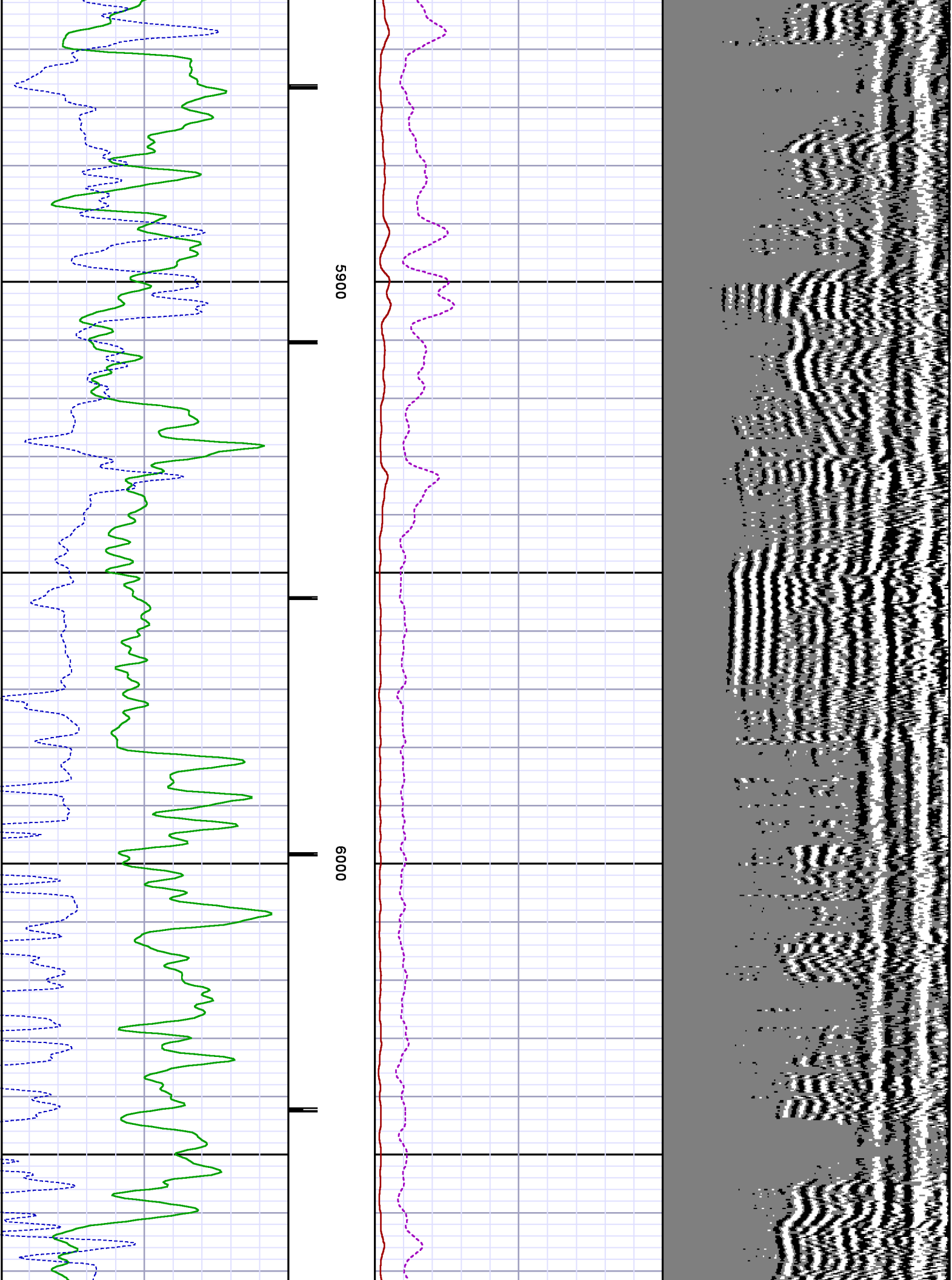


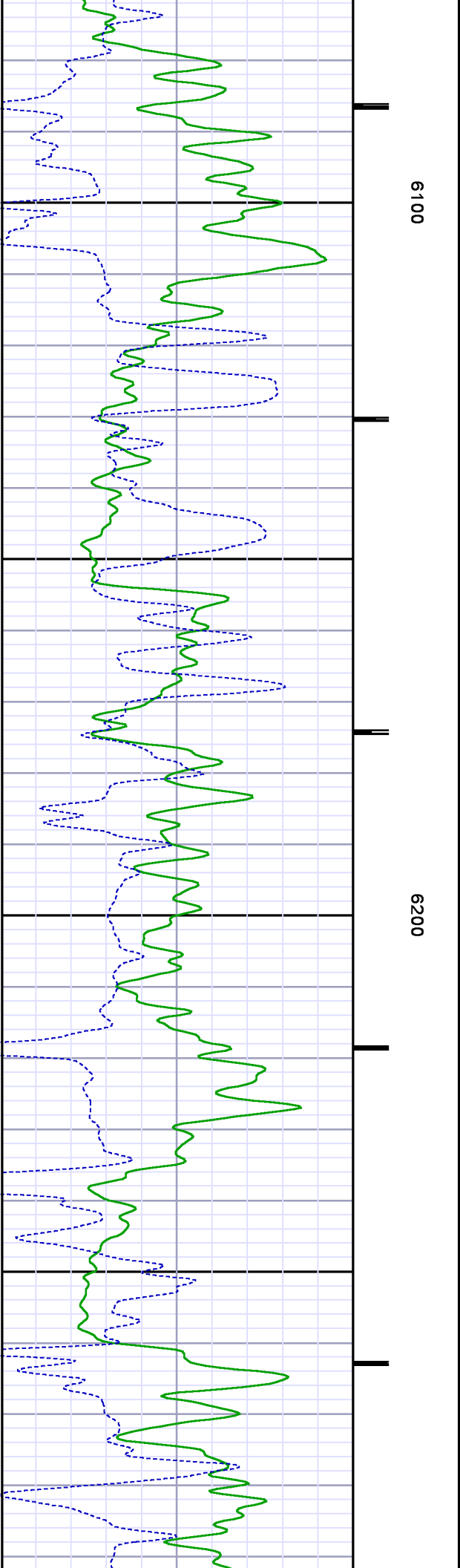
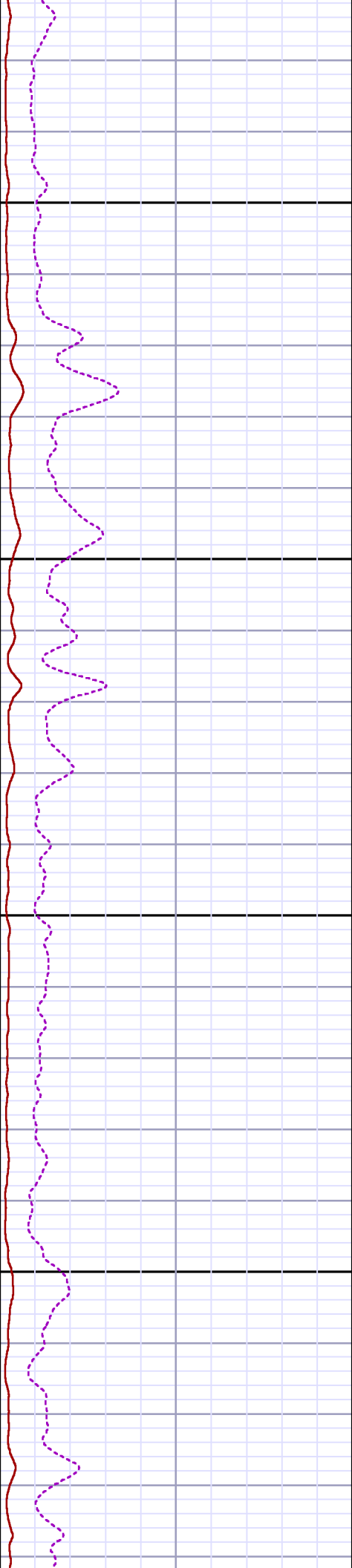
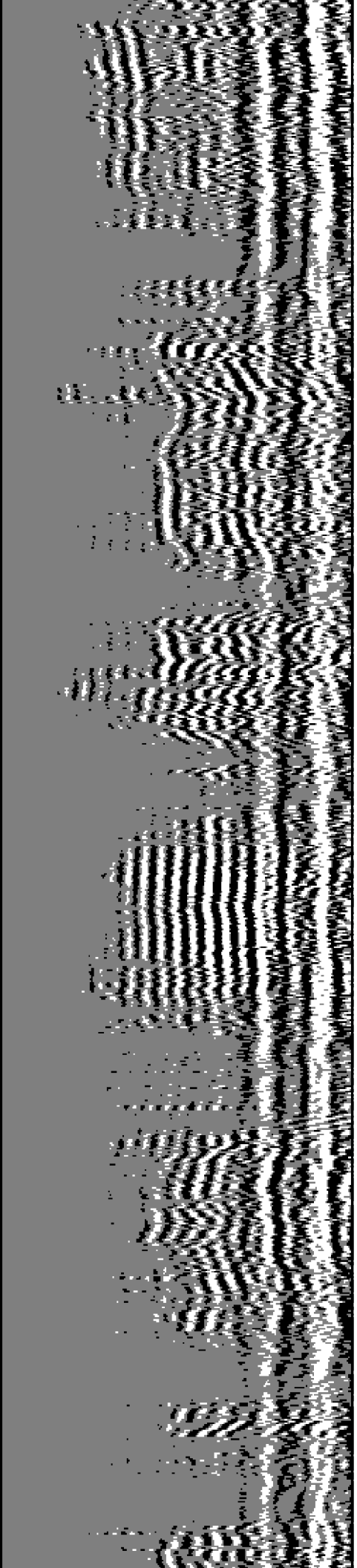


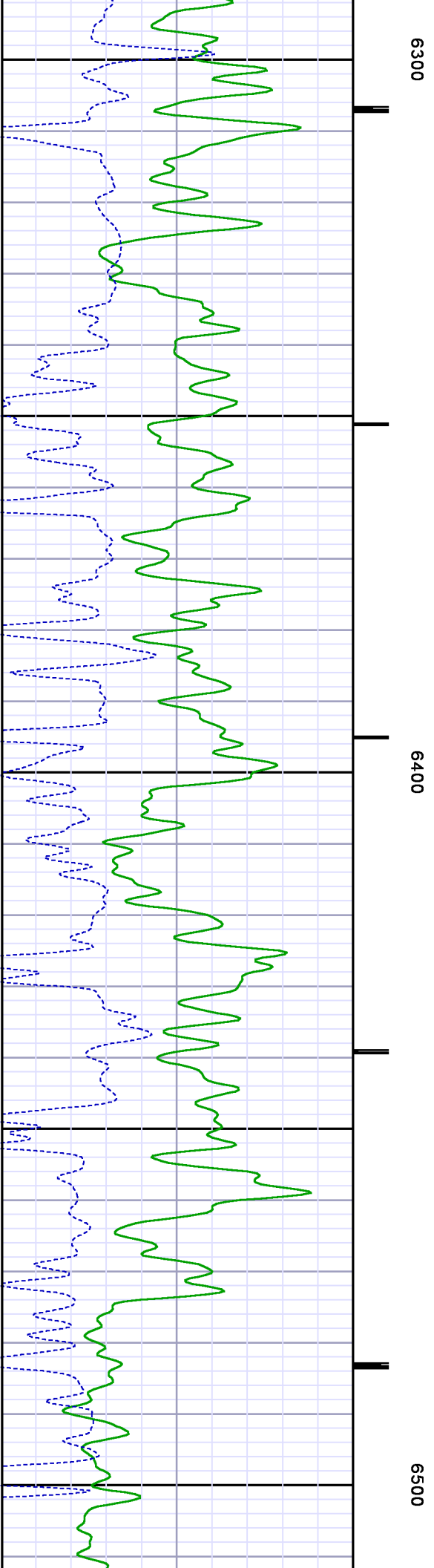
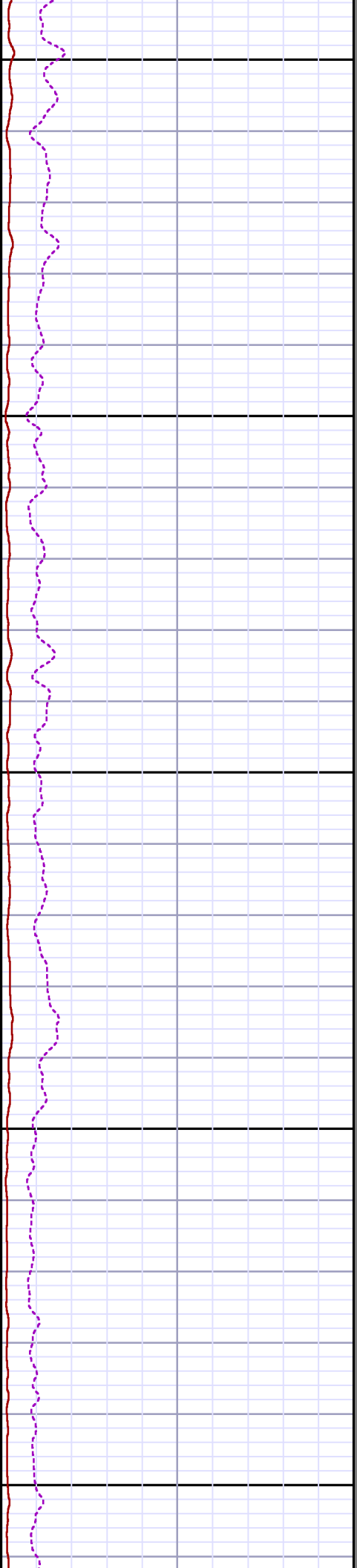
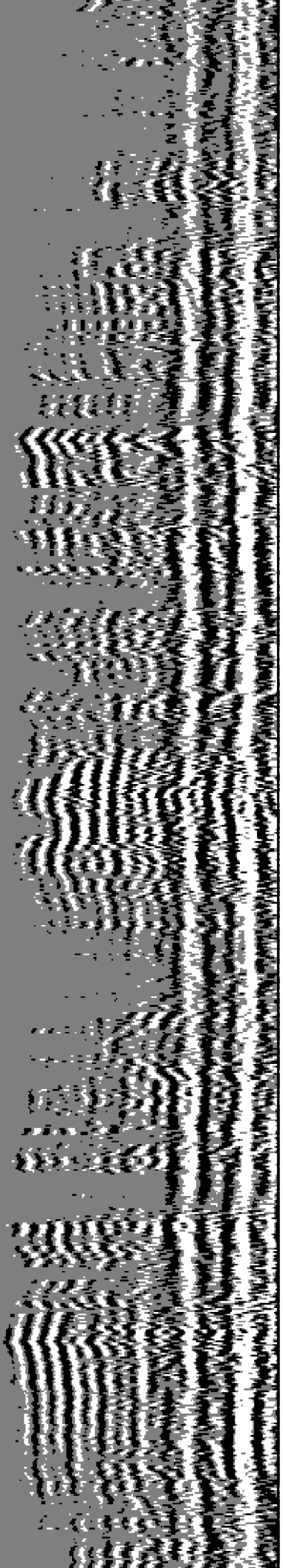


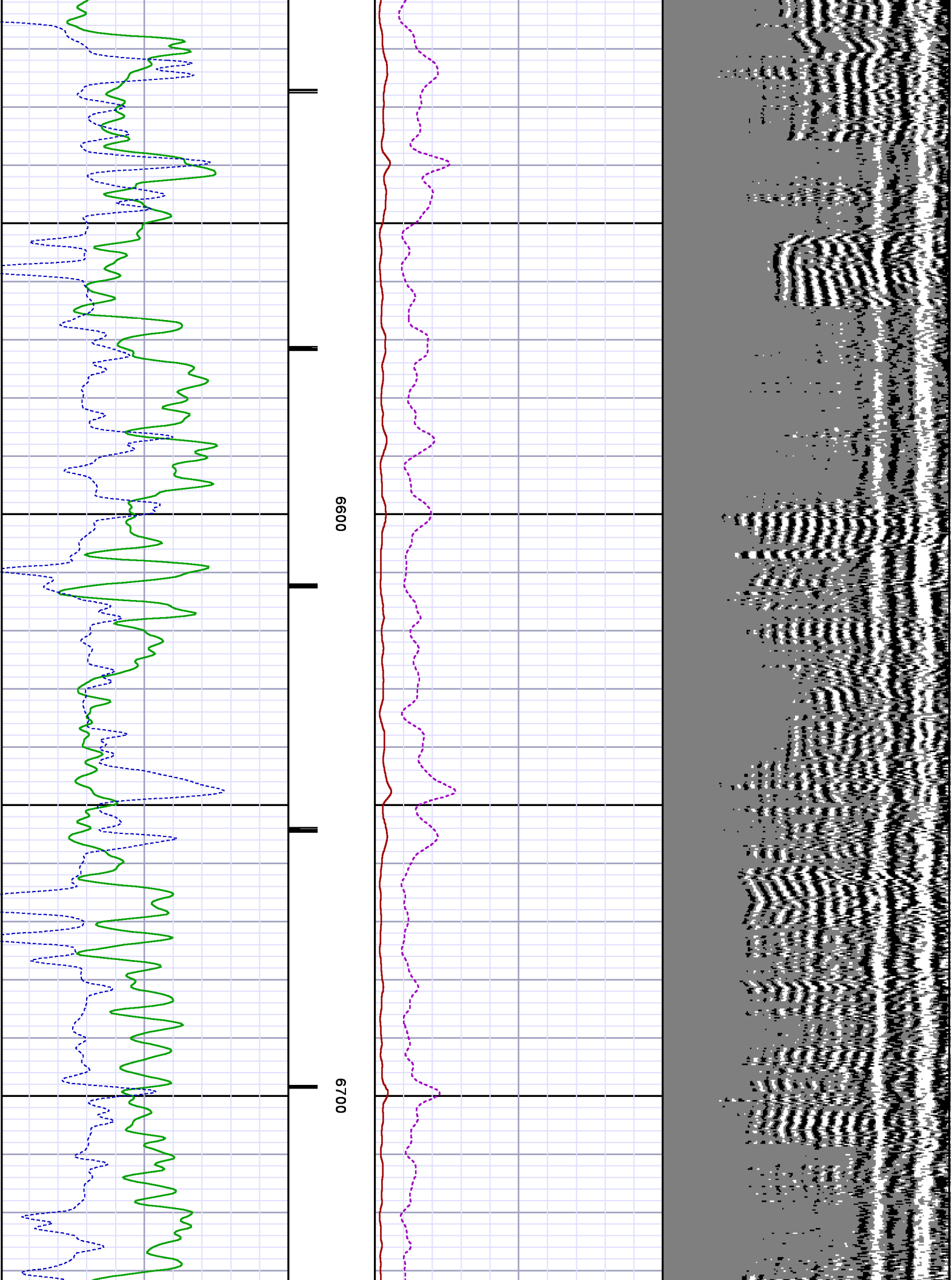


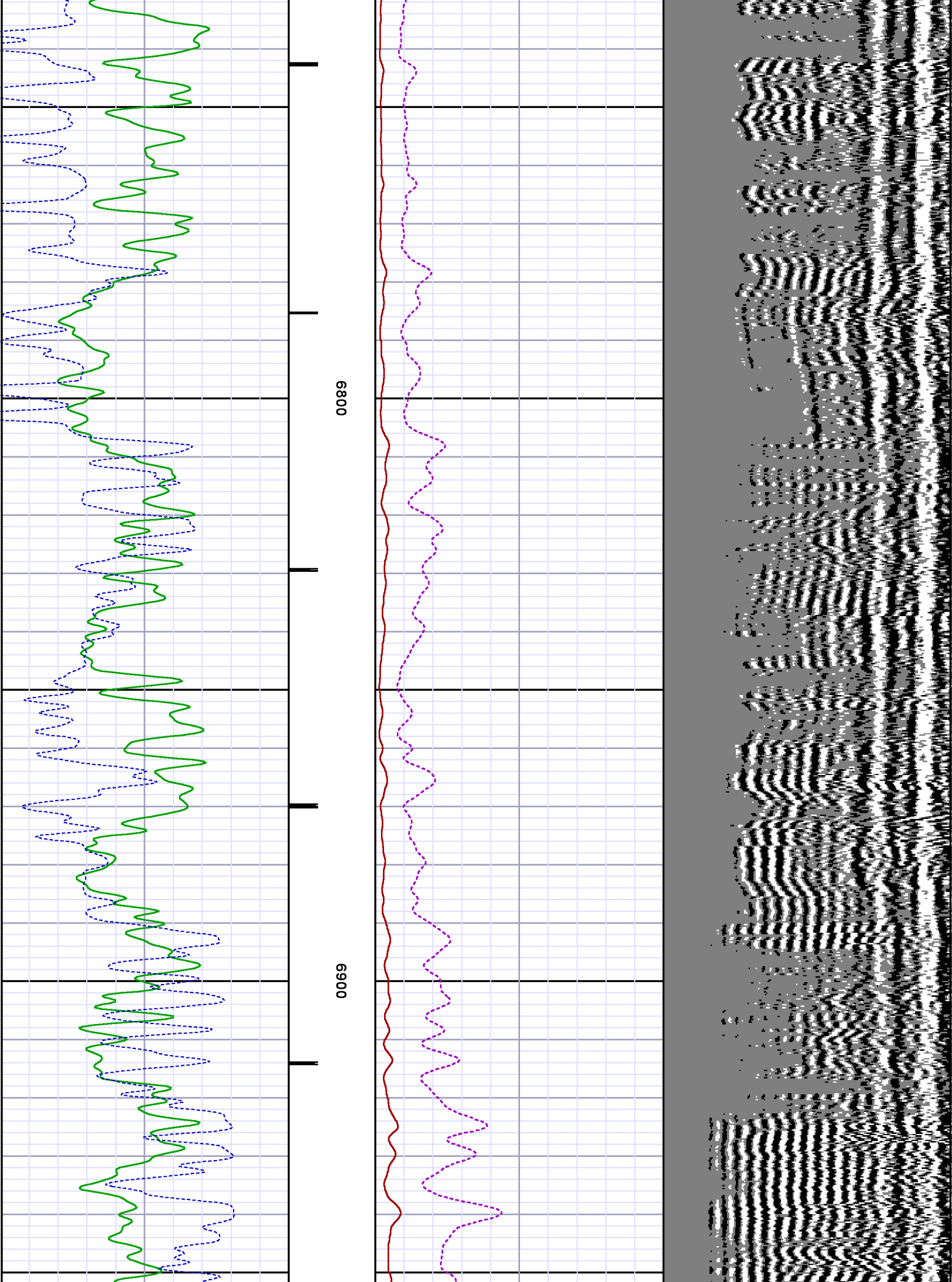


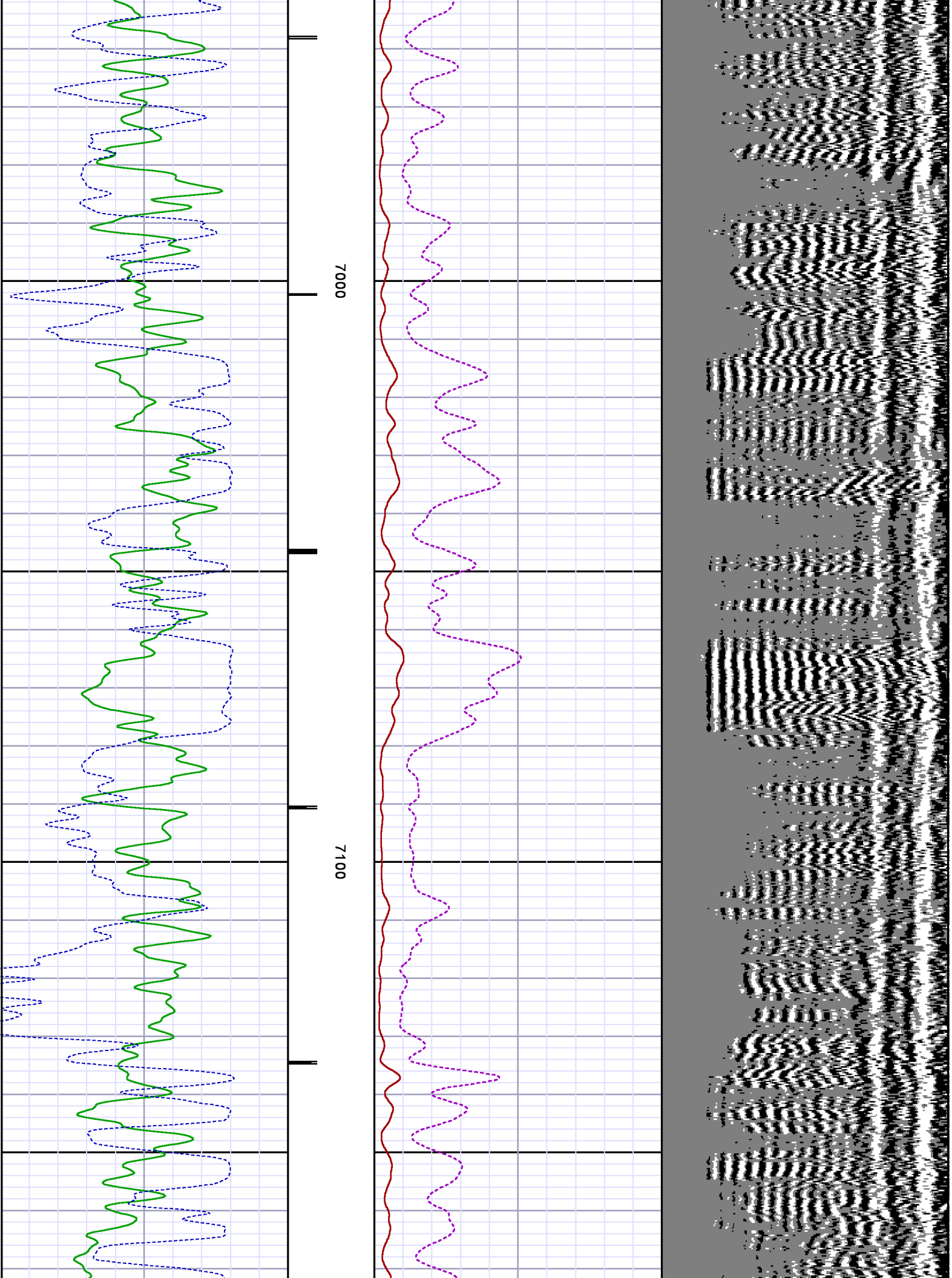


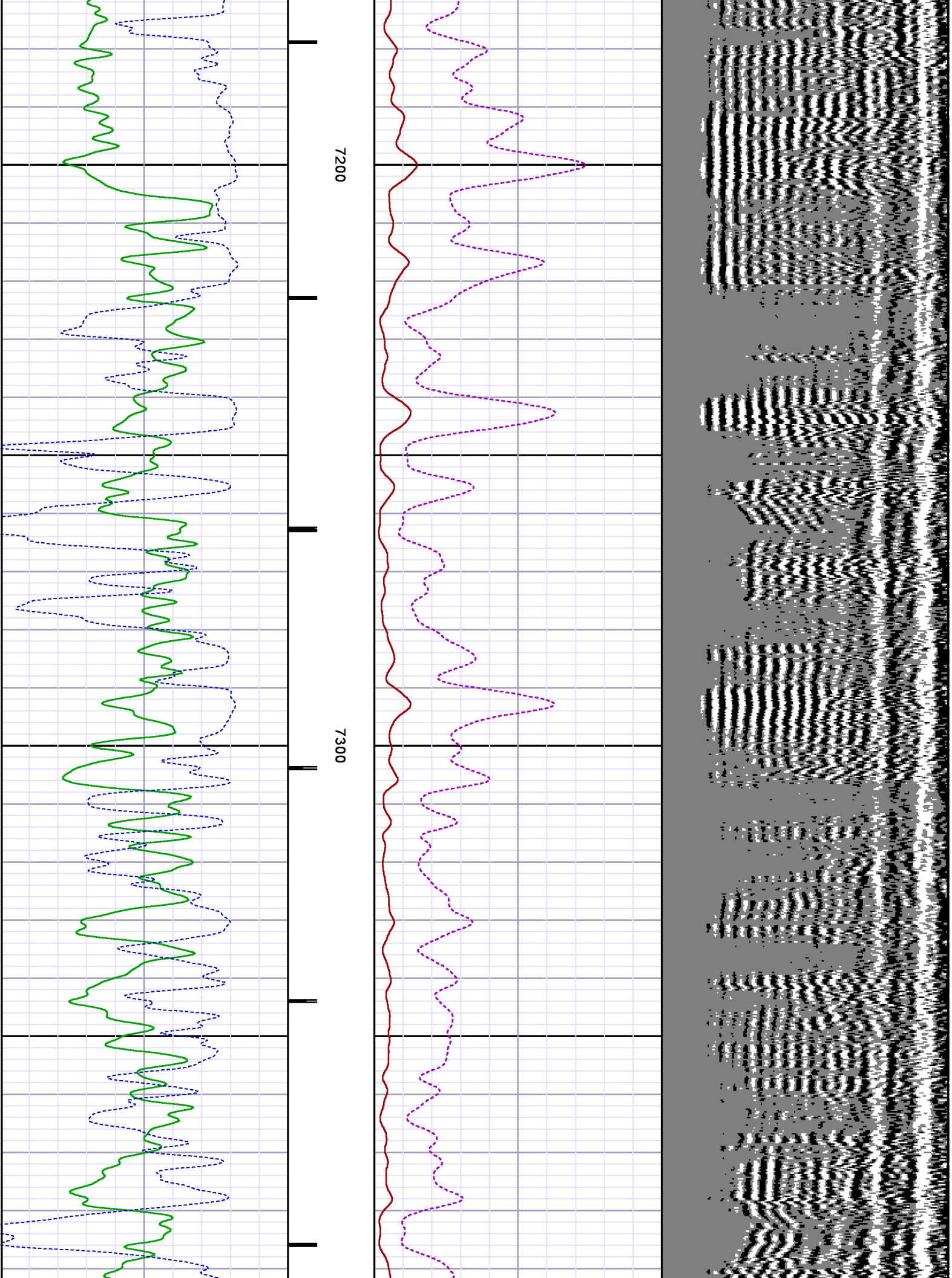


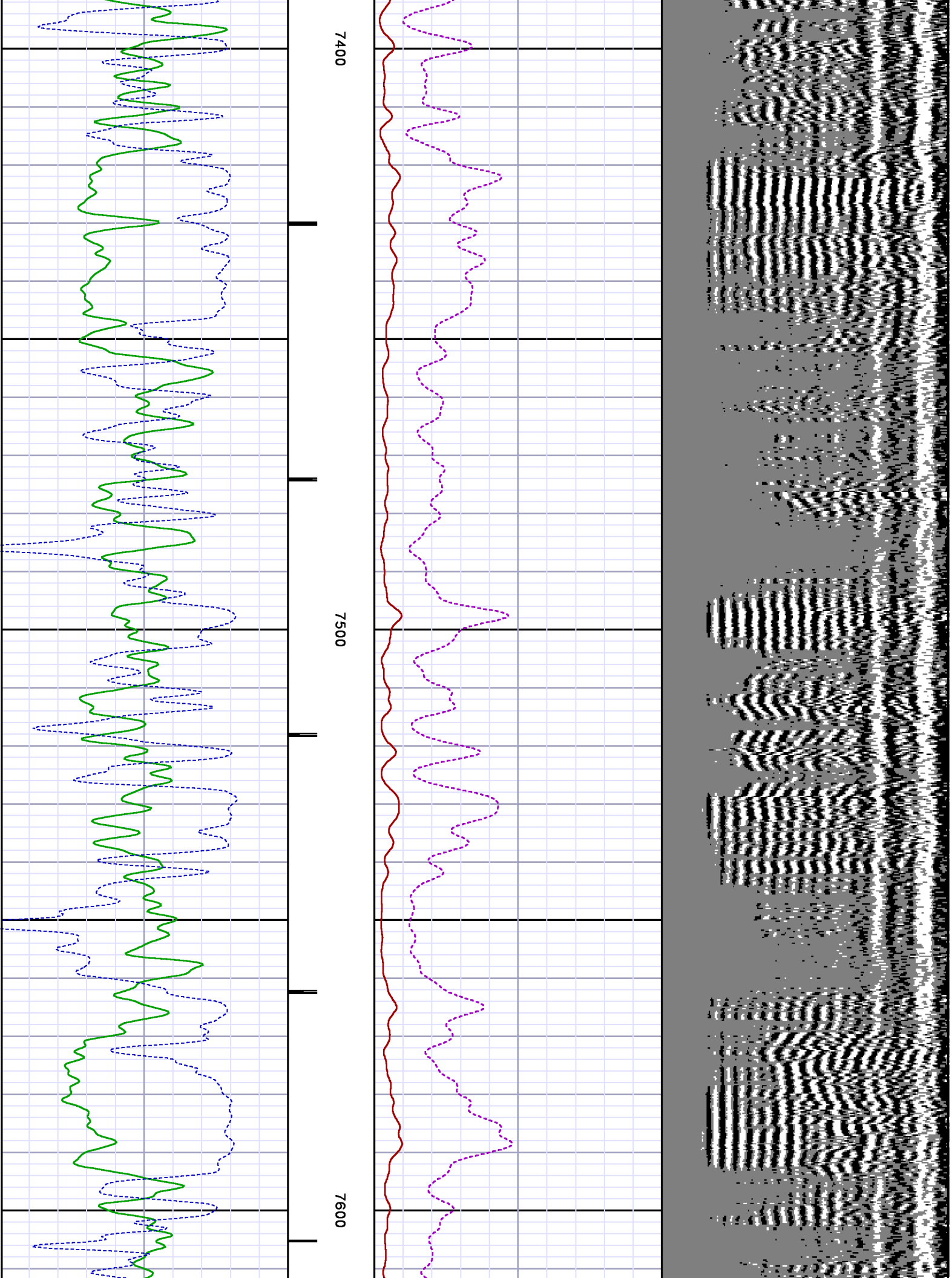


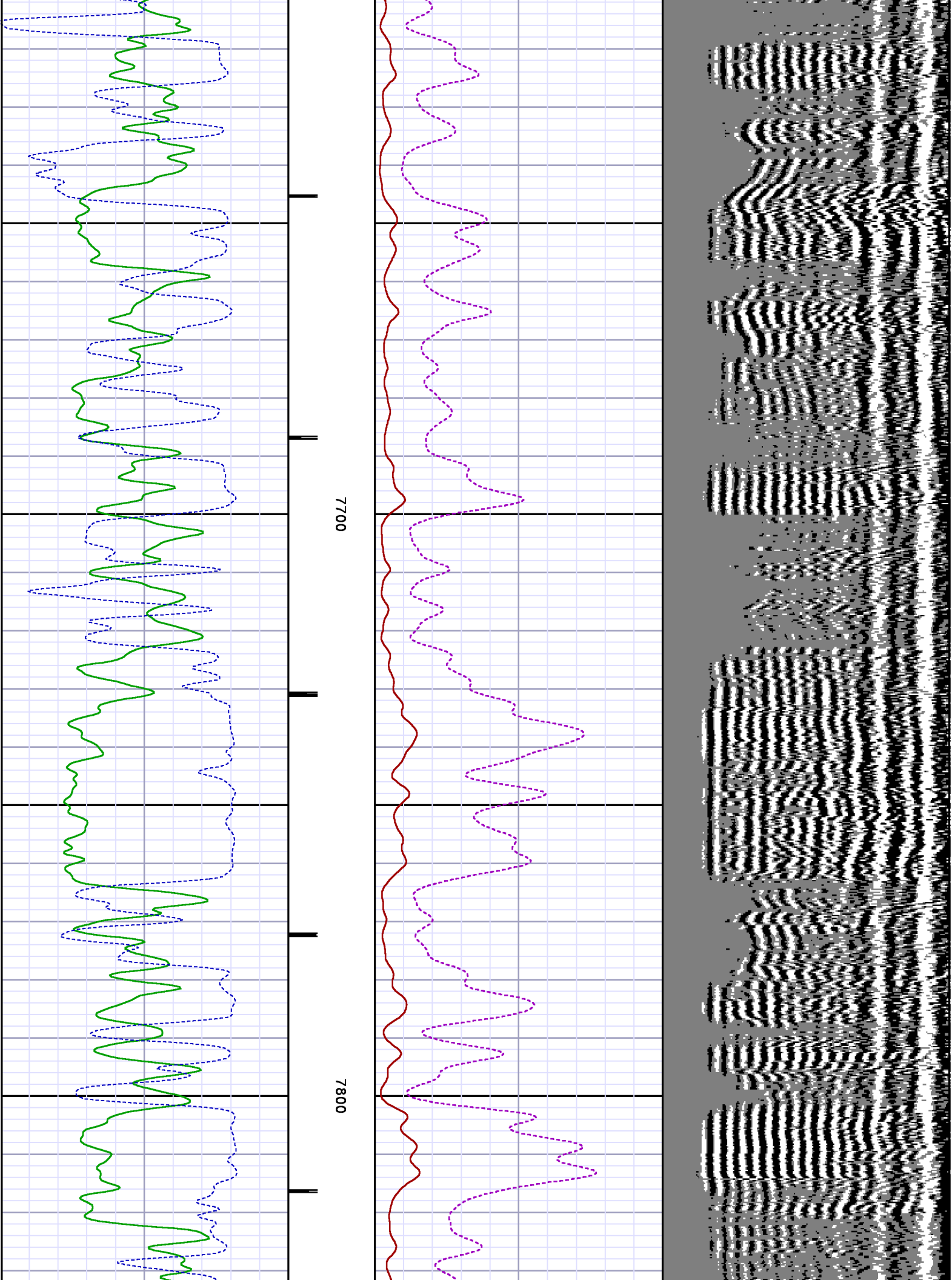


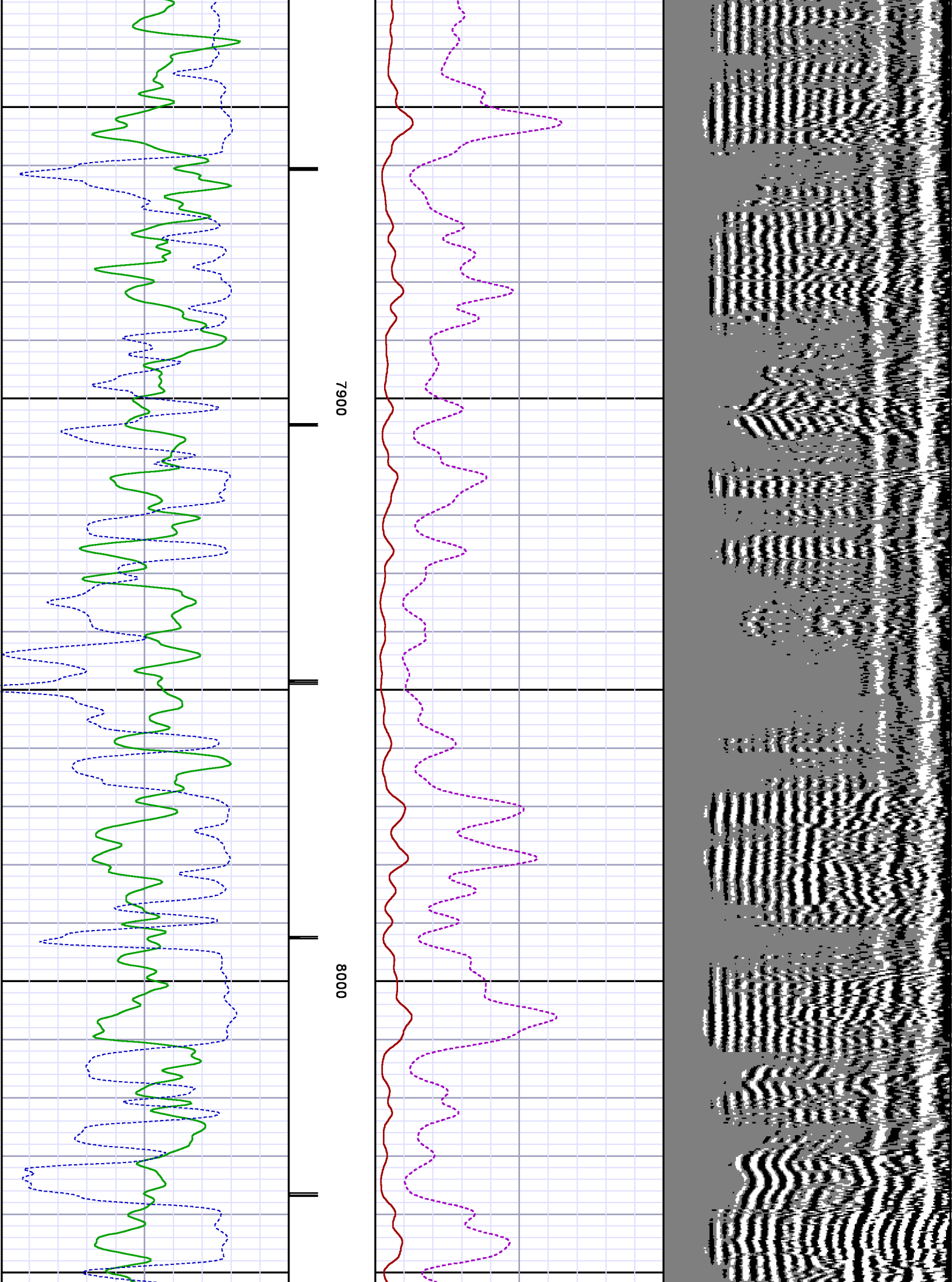


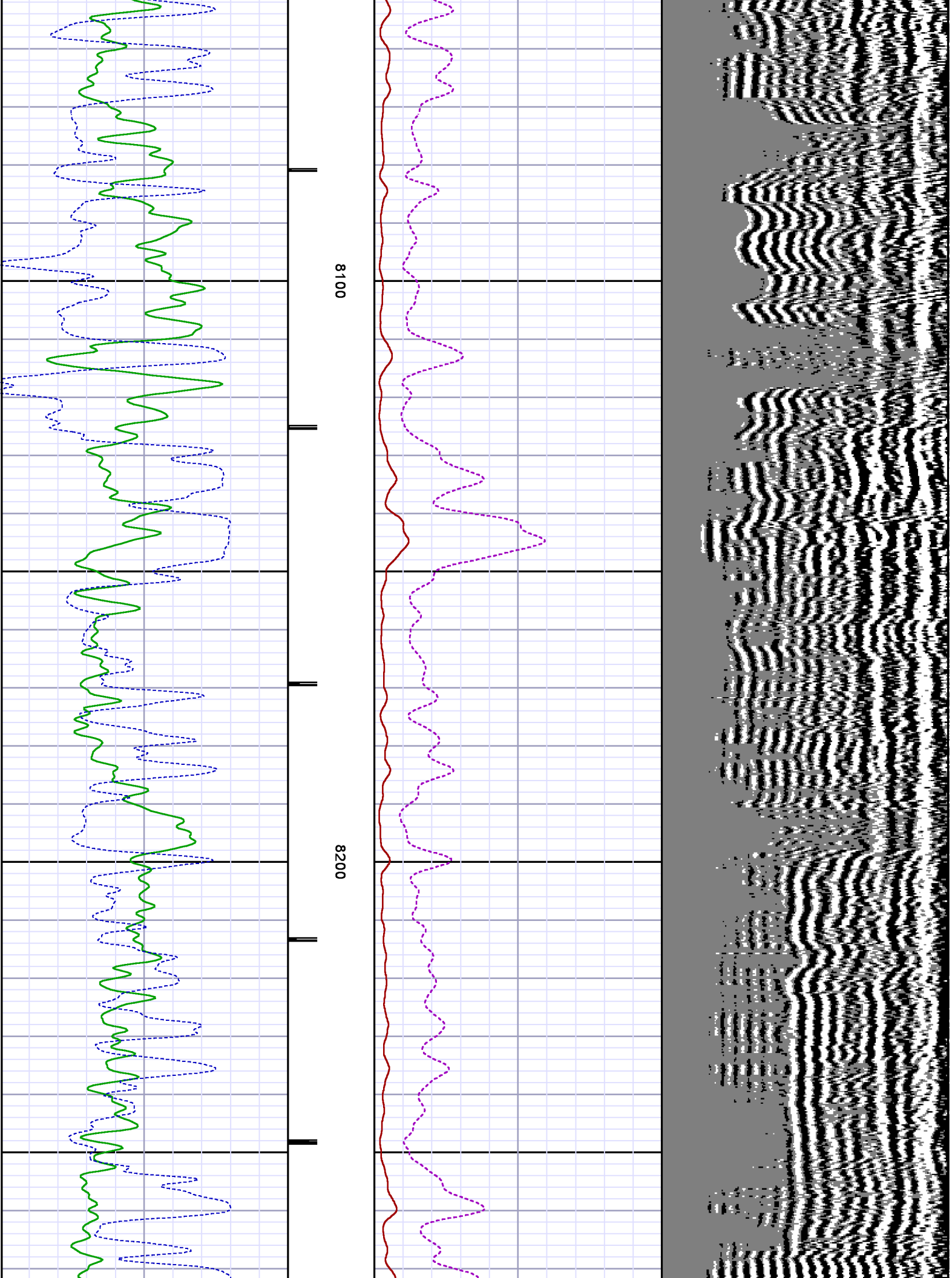


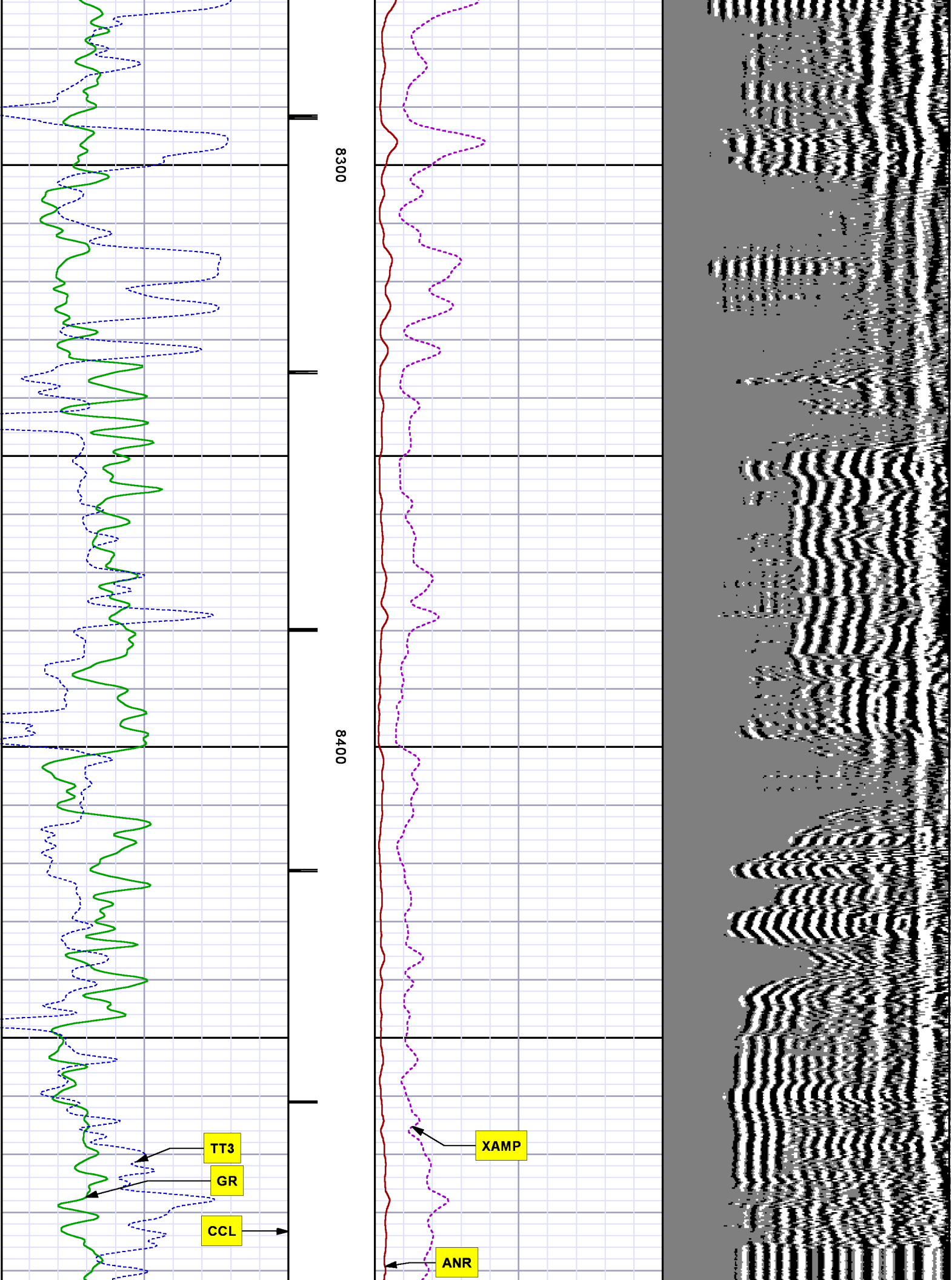


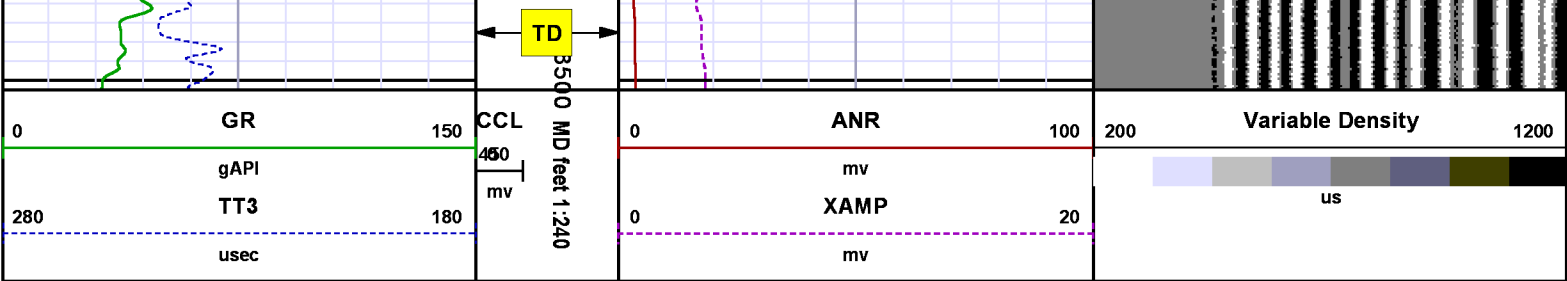












SECONDARY PRESENTATION
O PSI

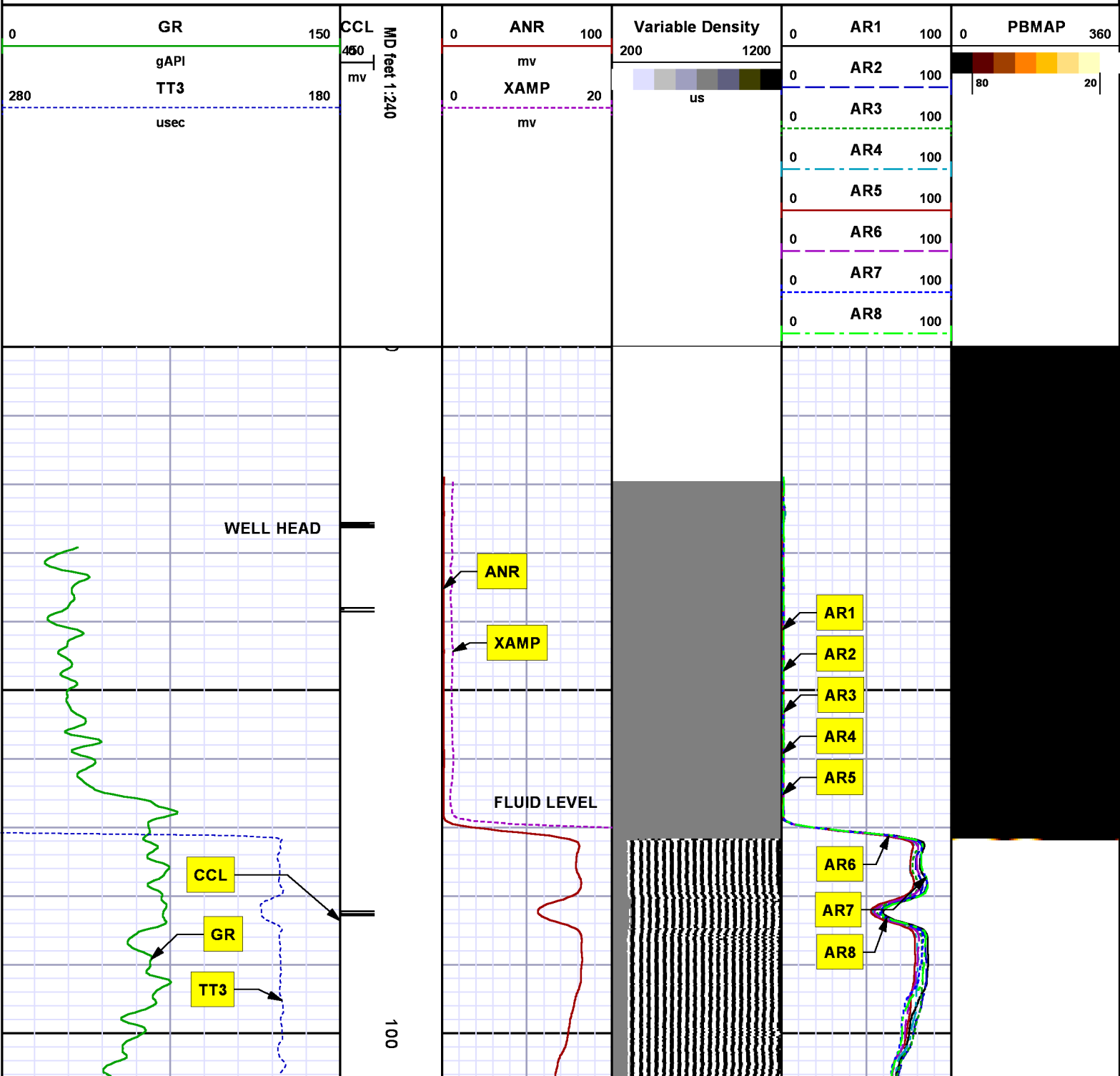
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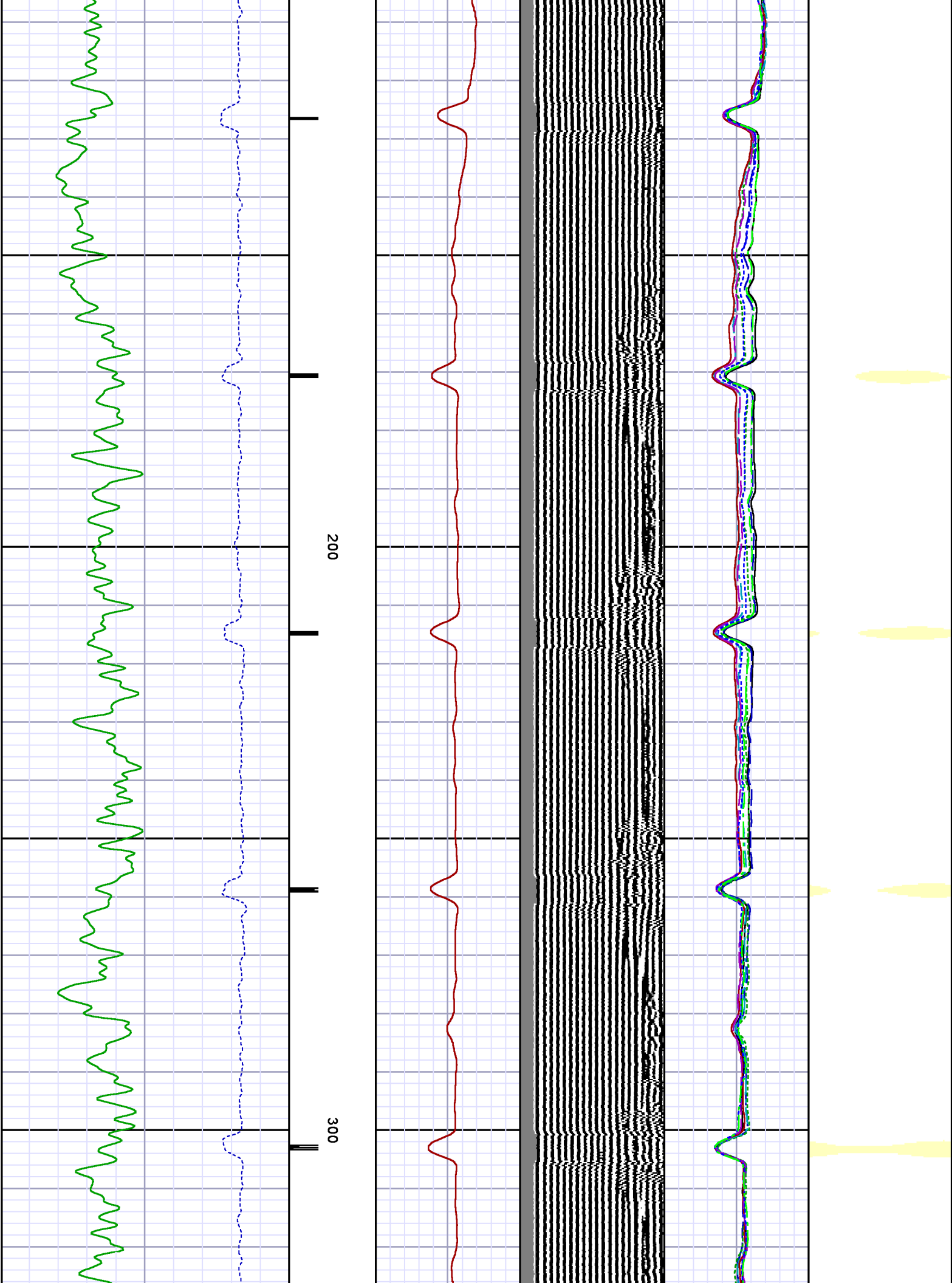
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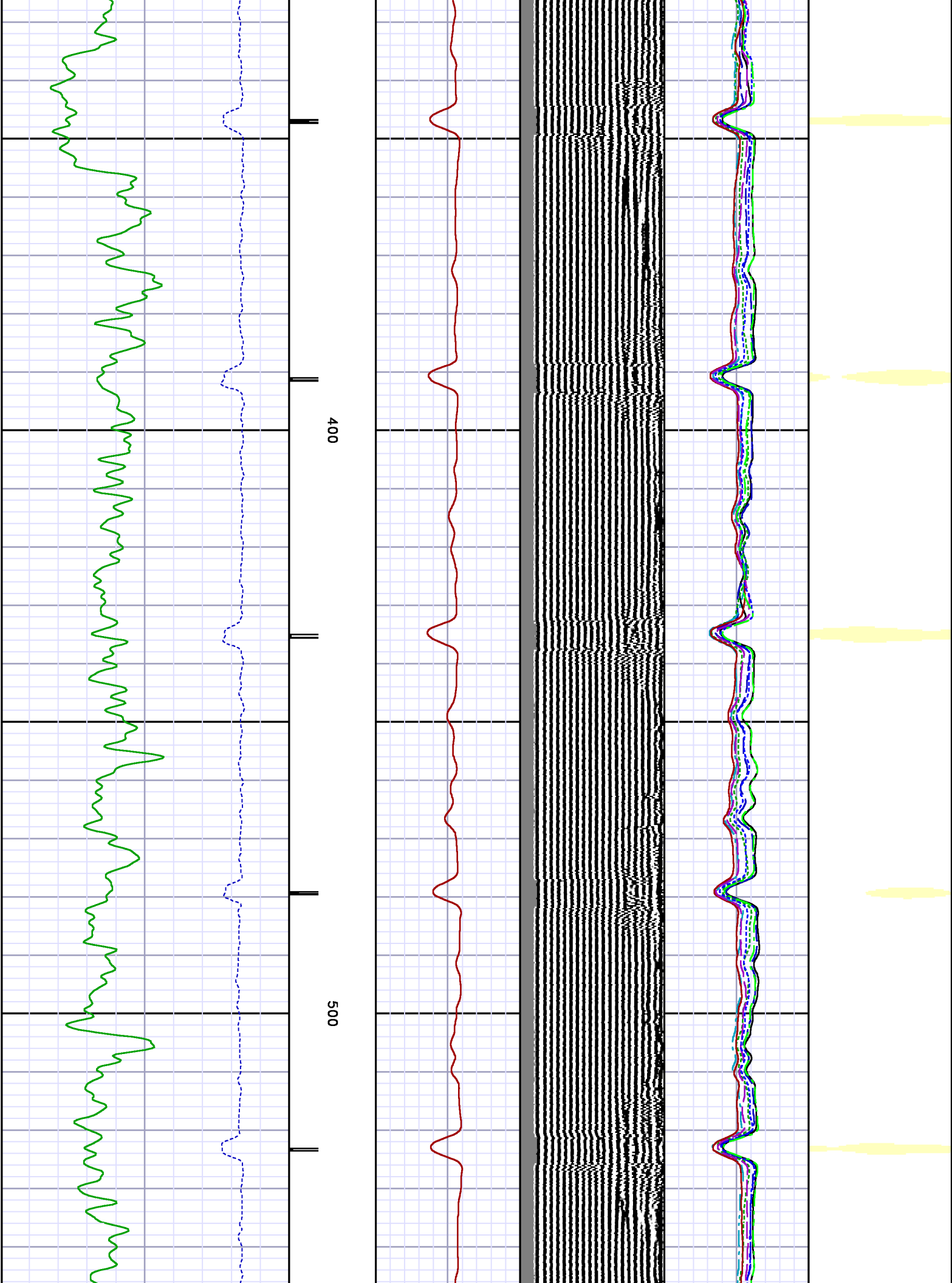
SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-11.000	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	CHV	FPR2
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP

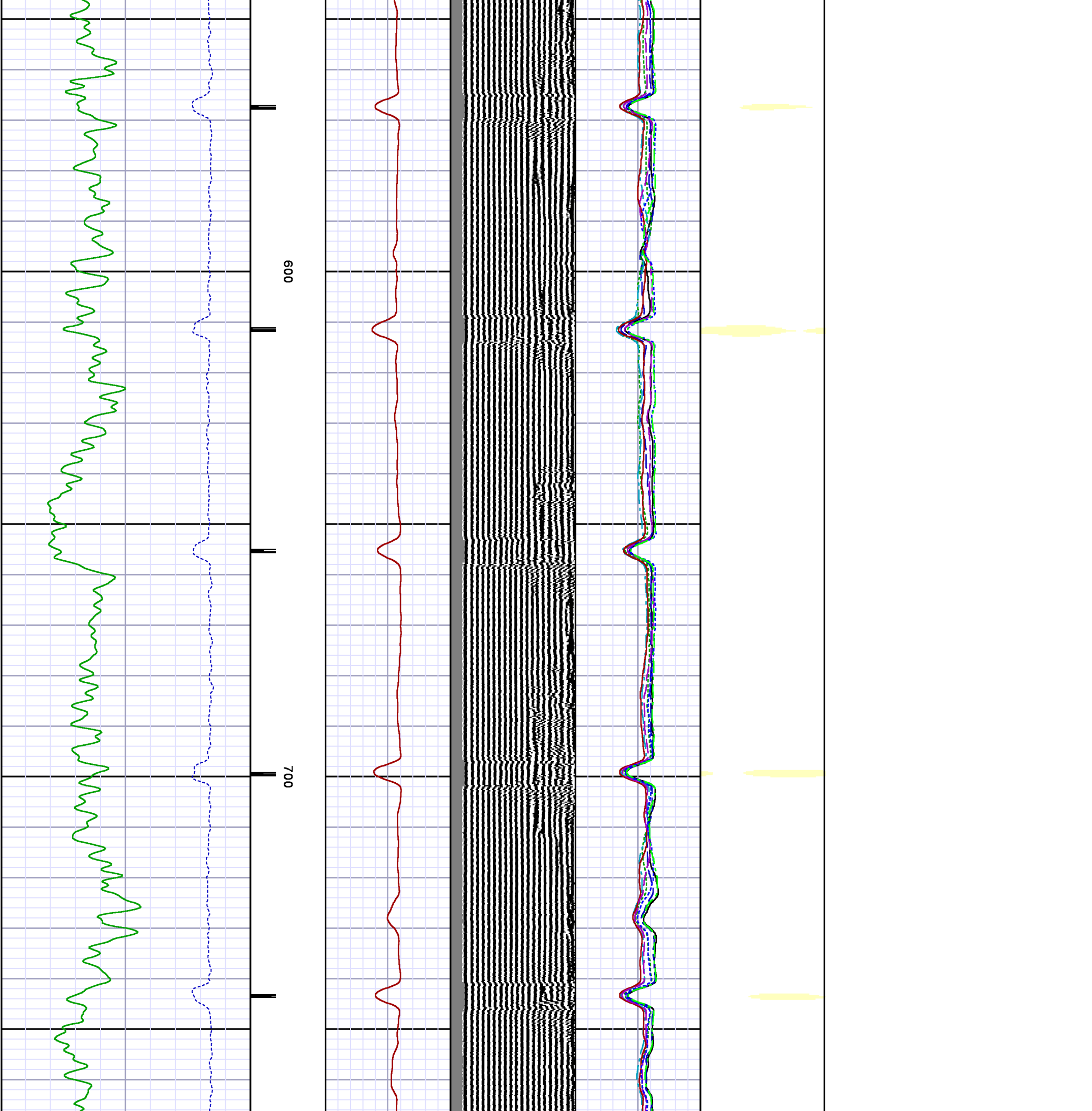
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1355XA	-5.620	CCL		
1355XA	-1.500	GR		
1355XA	0.000	TEMP		

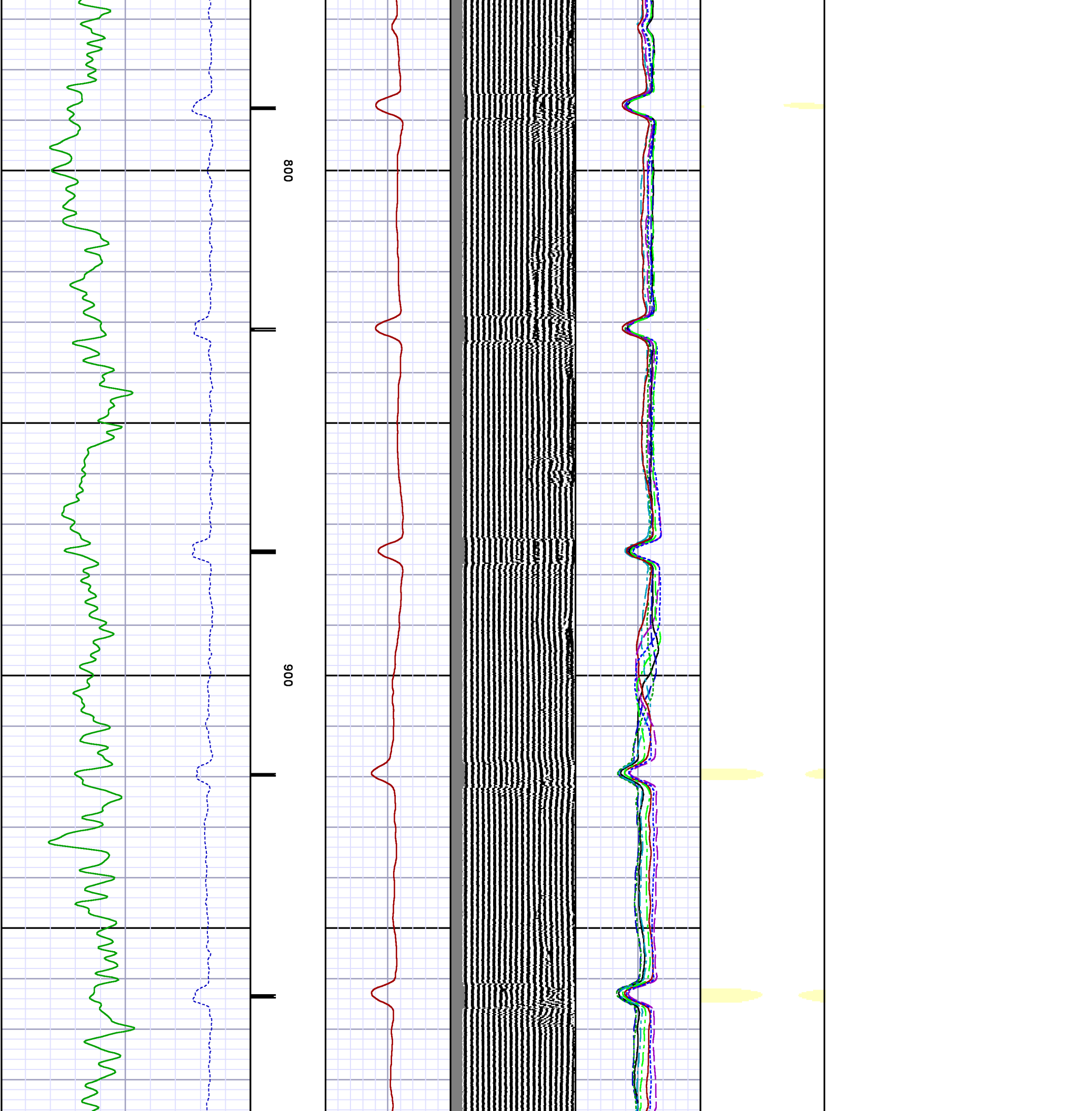
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Plotted by : PlotMgr, v5.4.504
Company : WPX ENERGY
Well : FEDERAL PA 421-27
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Mode : PlotMgr 5.4.504
Interval : 0.00 - 8501.00 feet UP
Created : 8/21/2013 9:15:44 AM

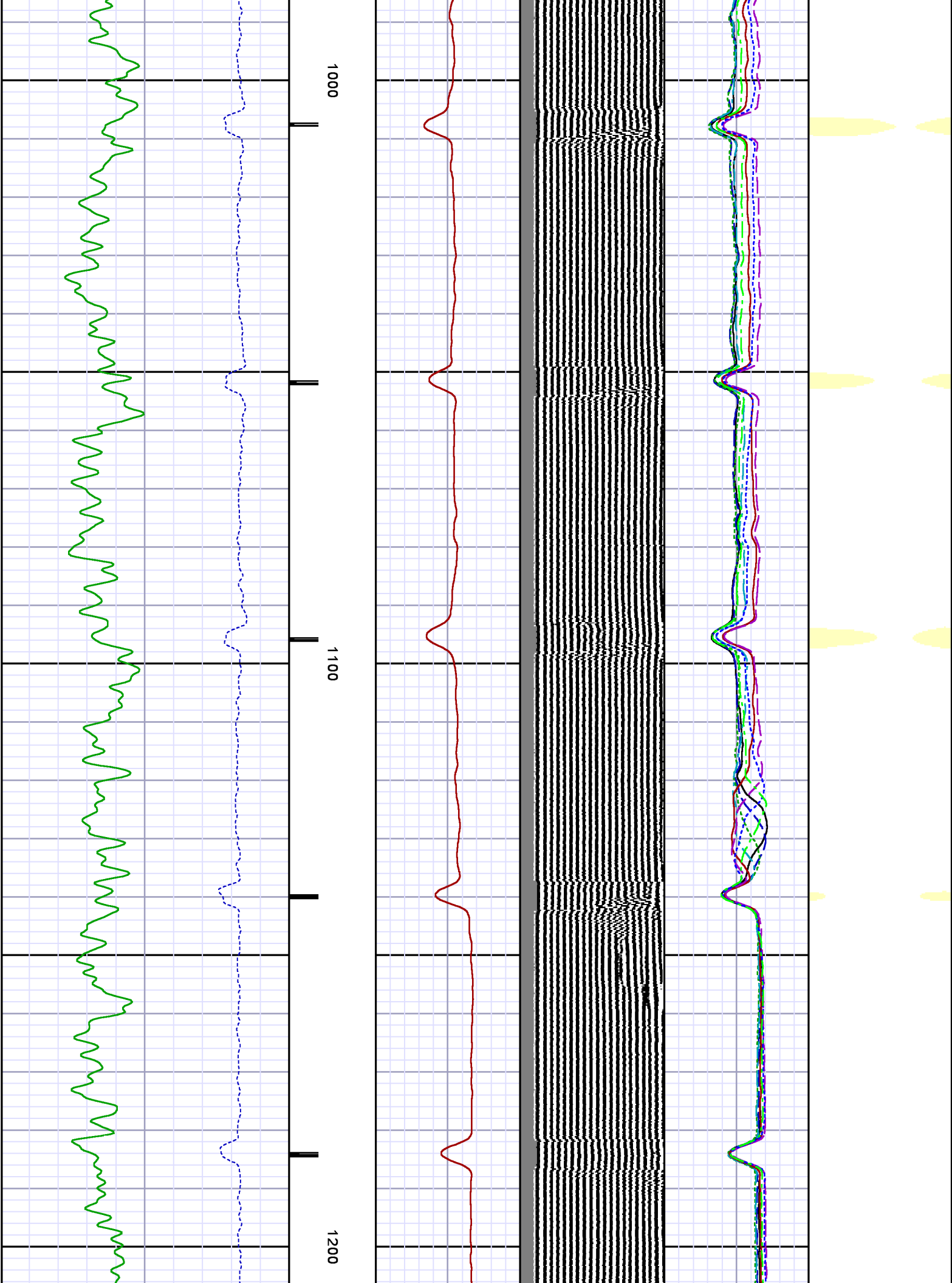


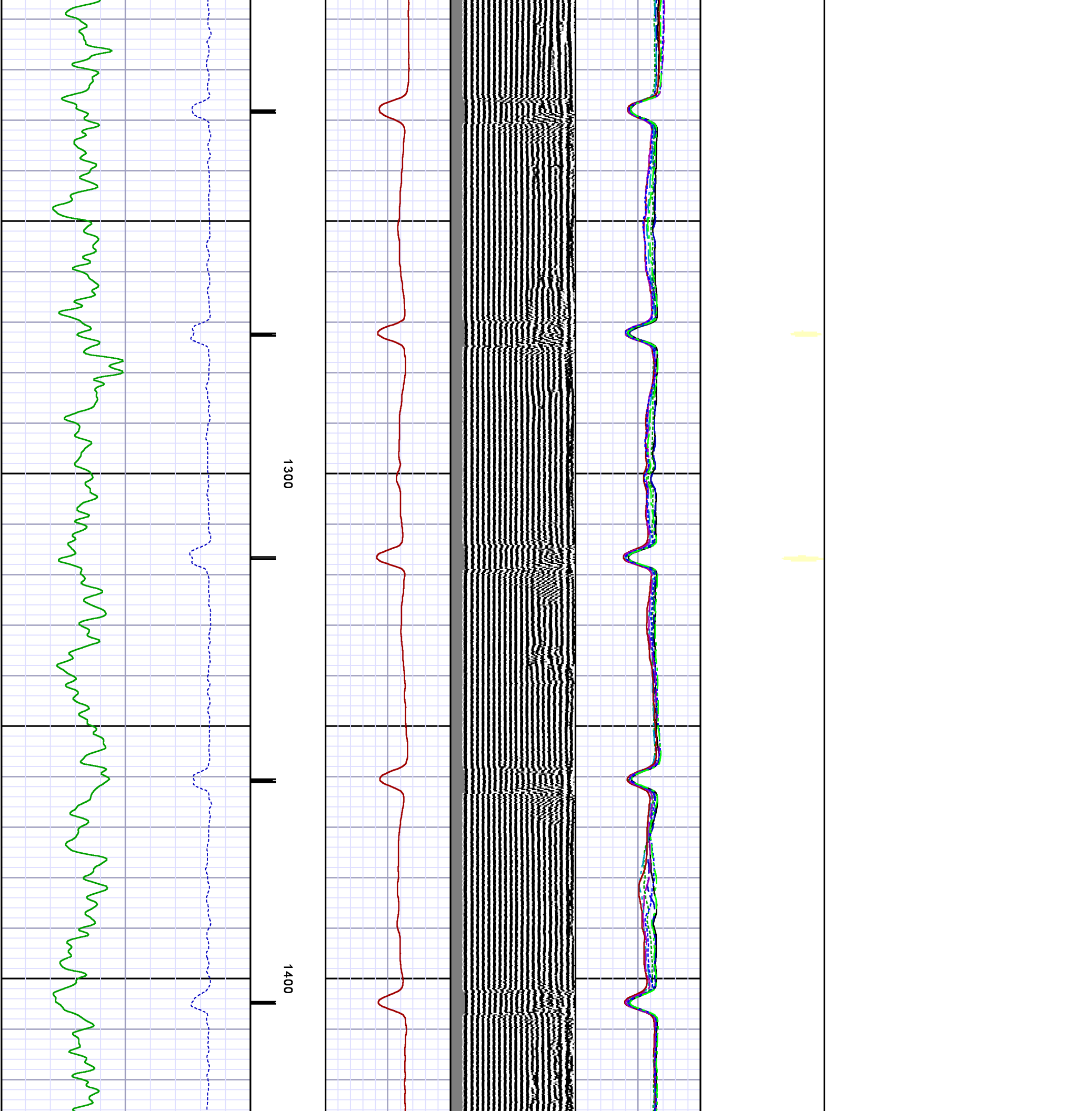


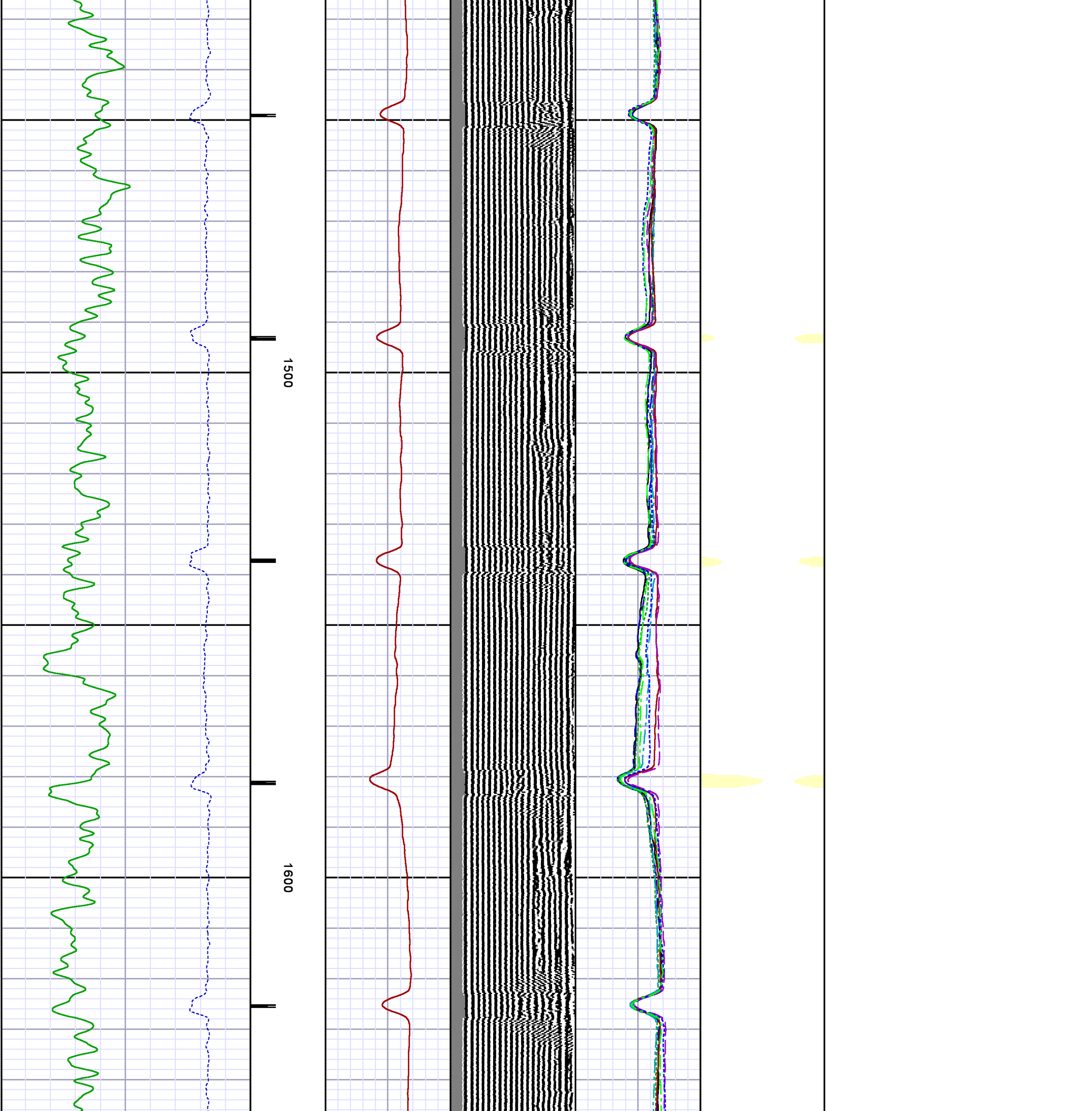


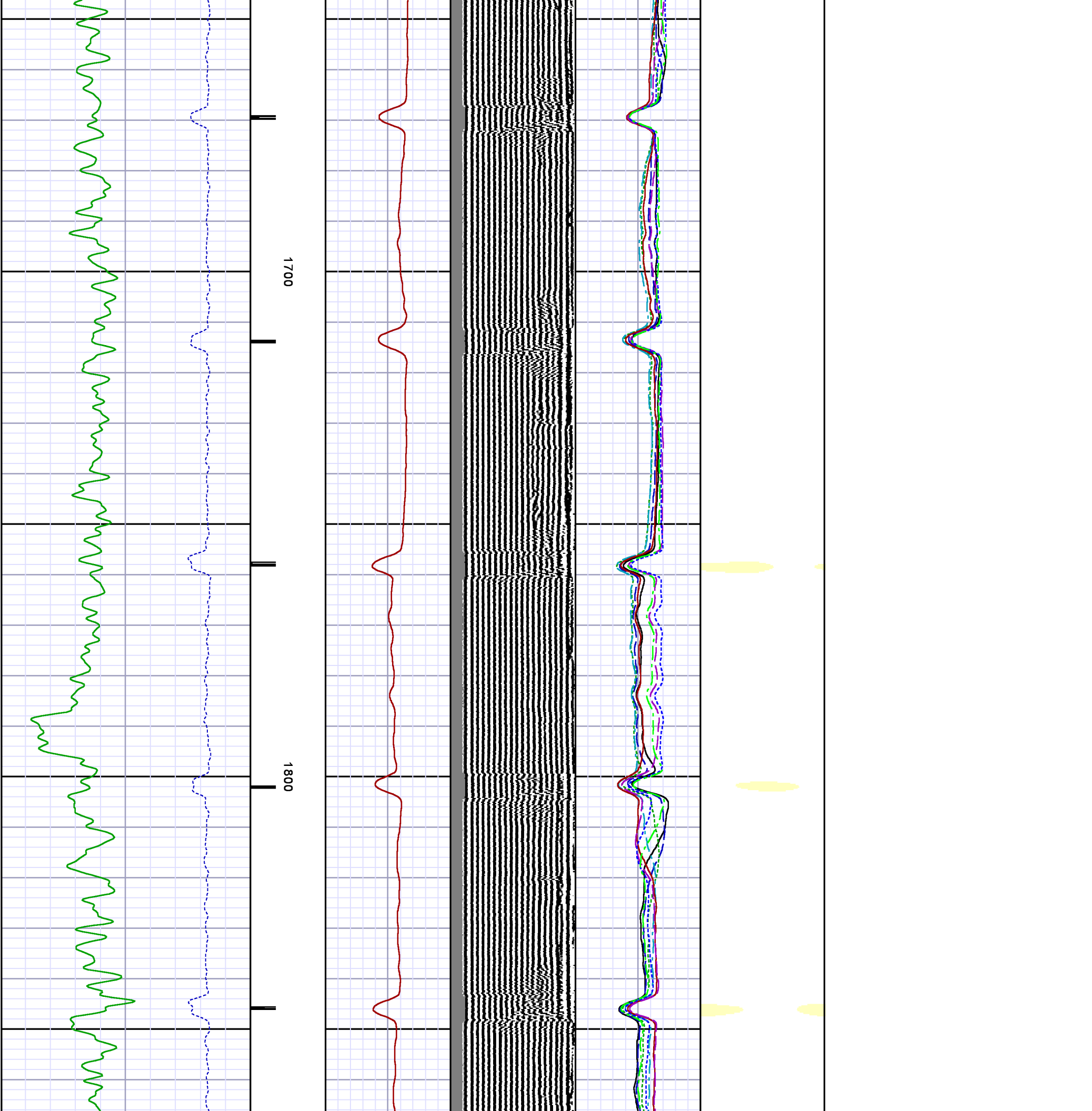


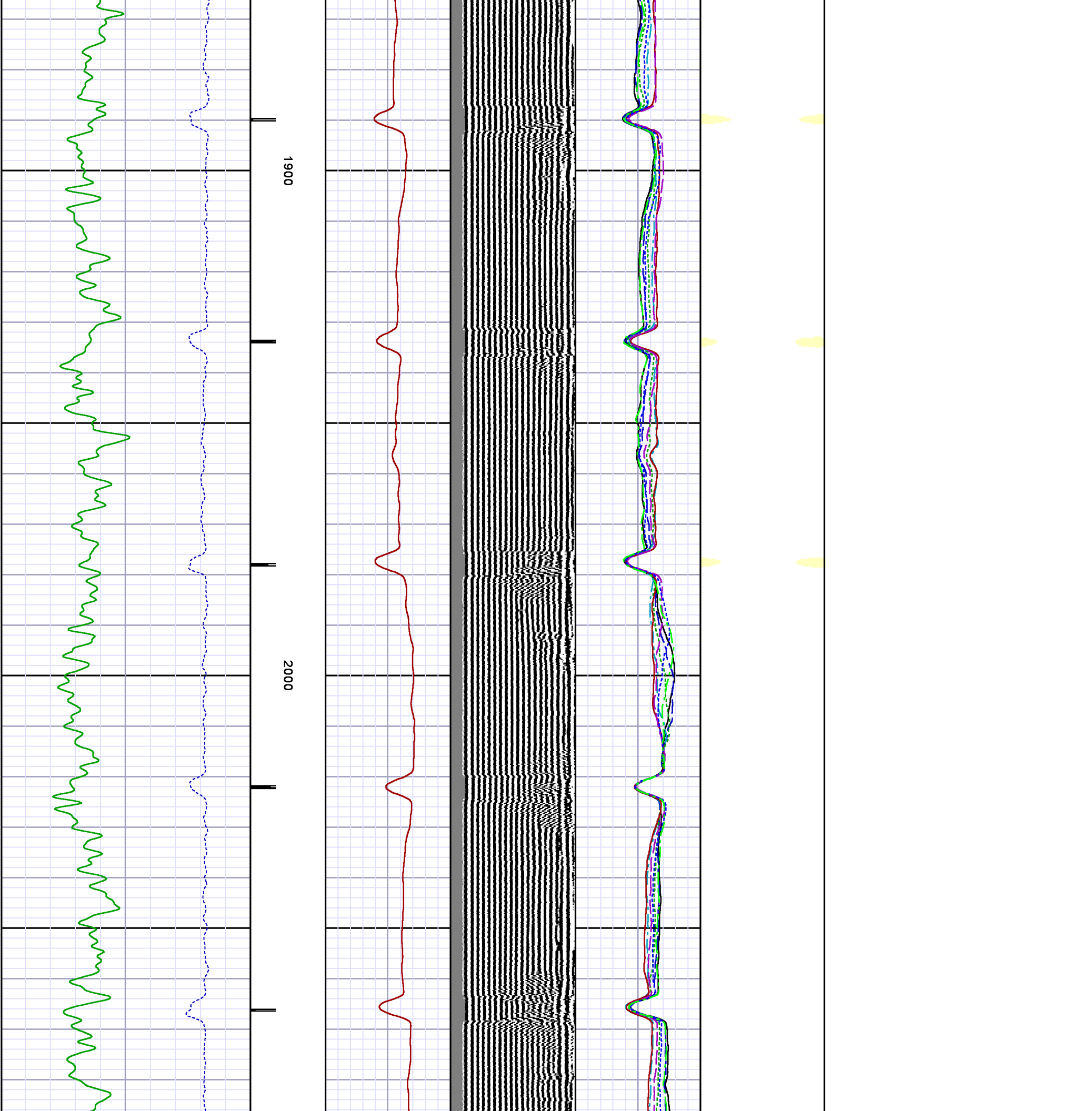


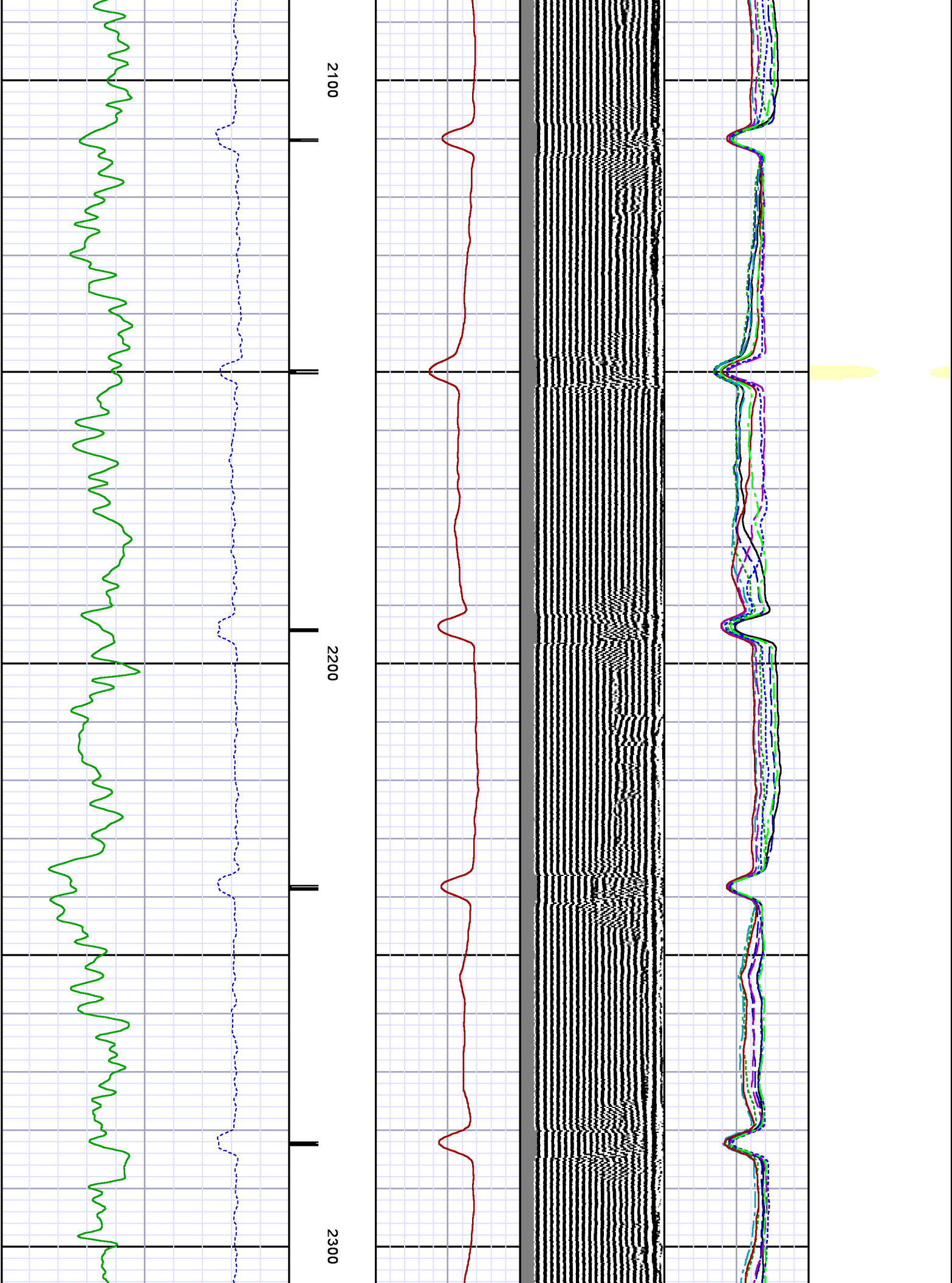


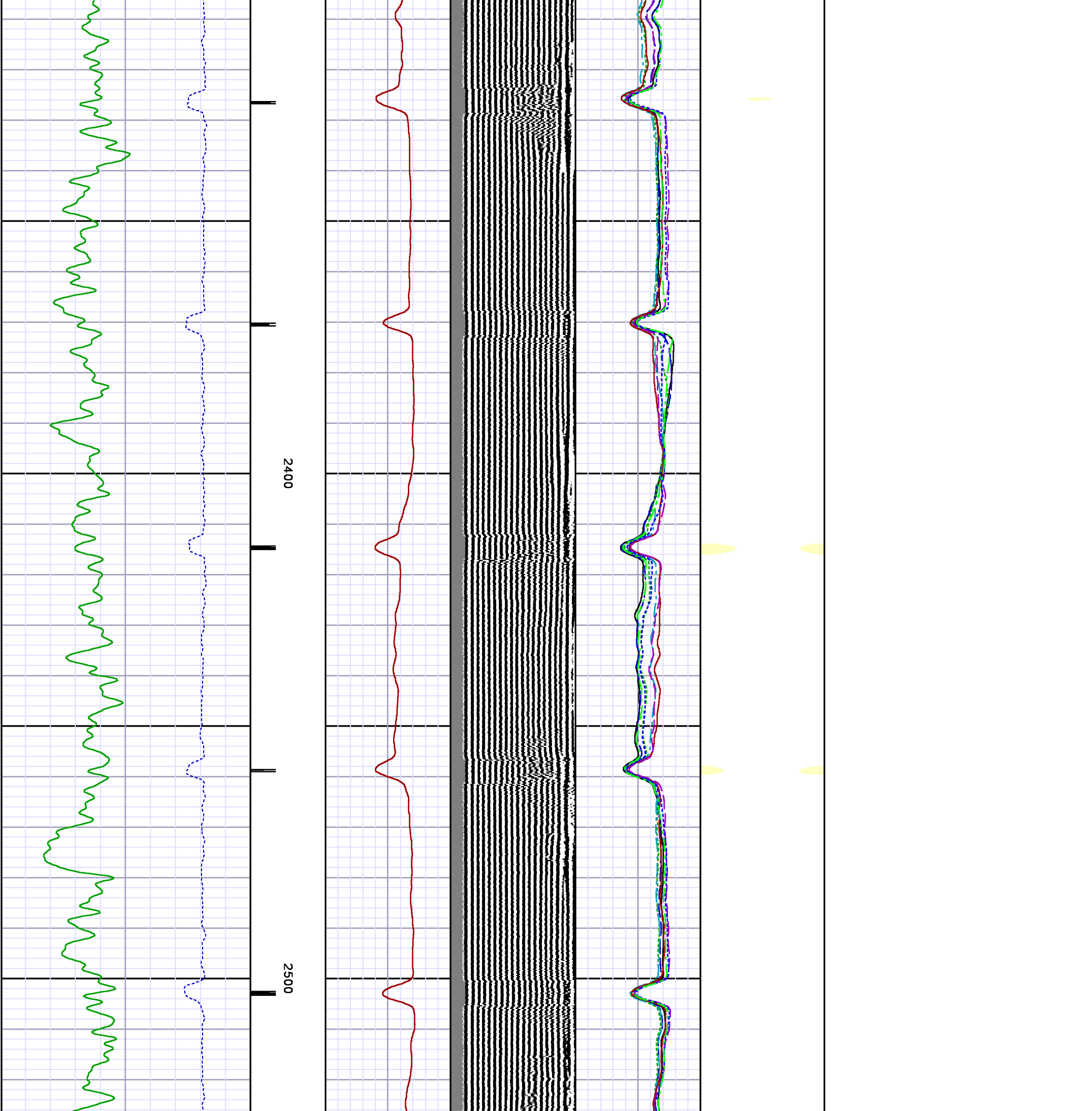


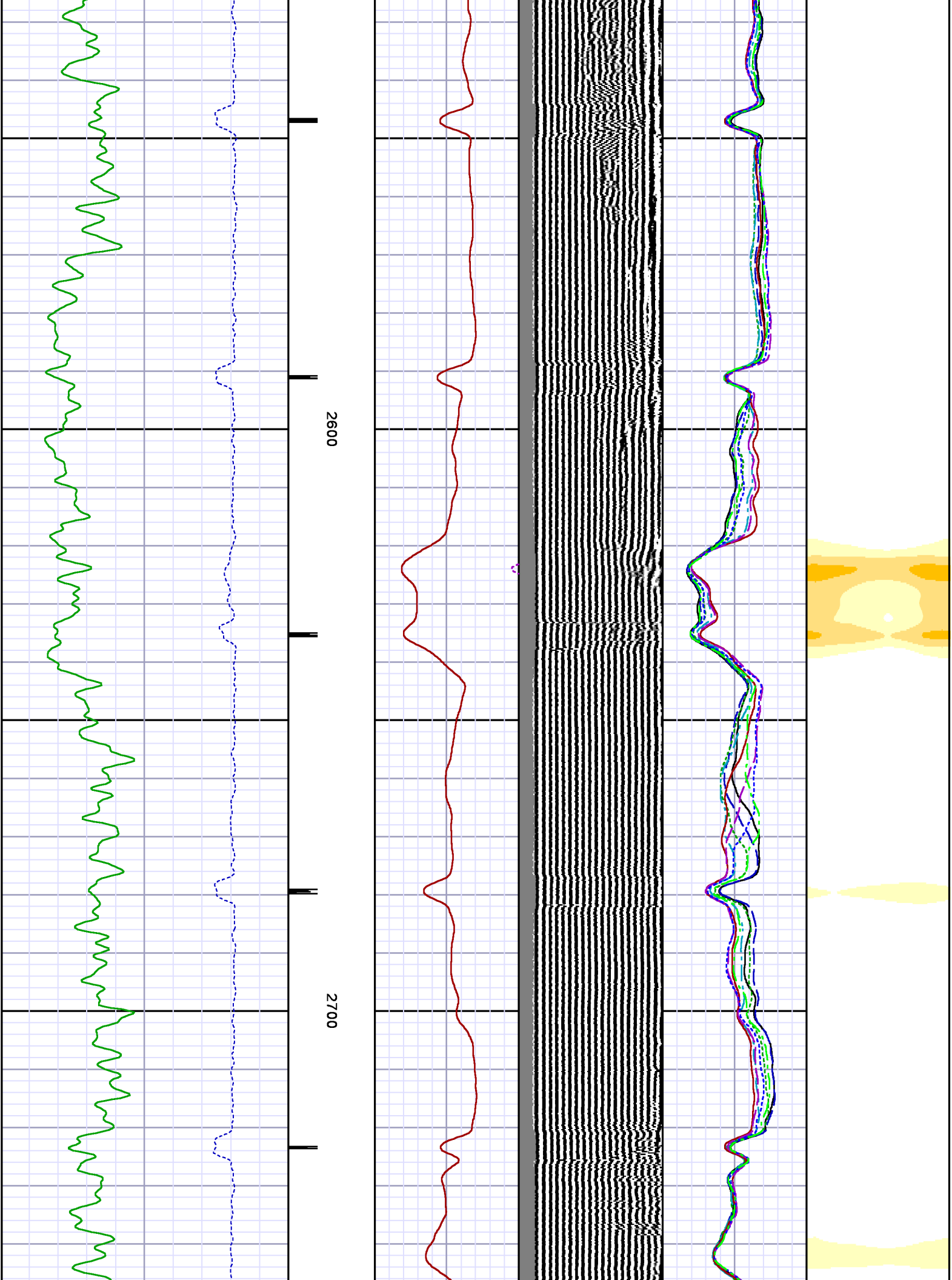


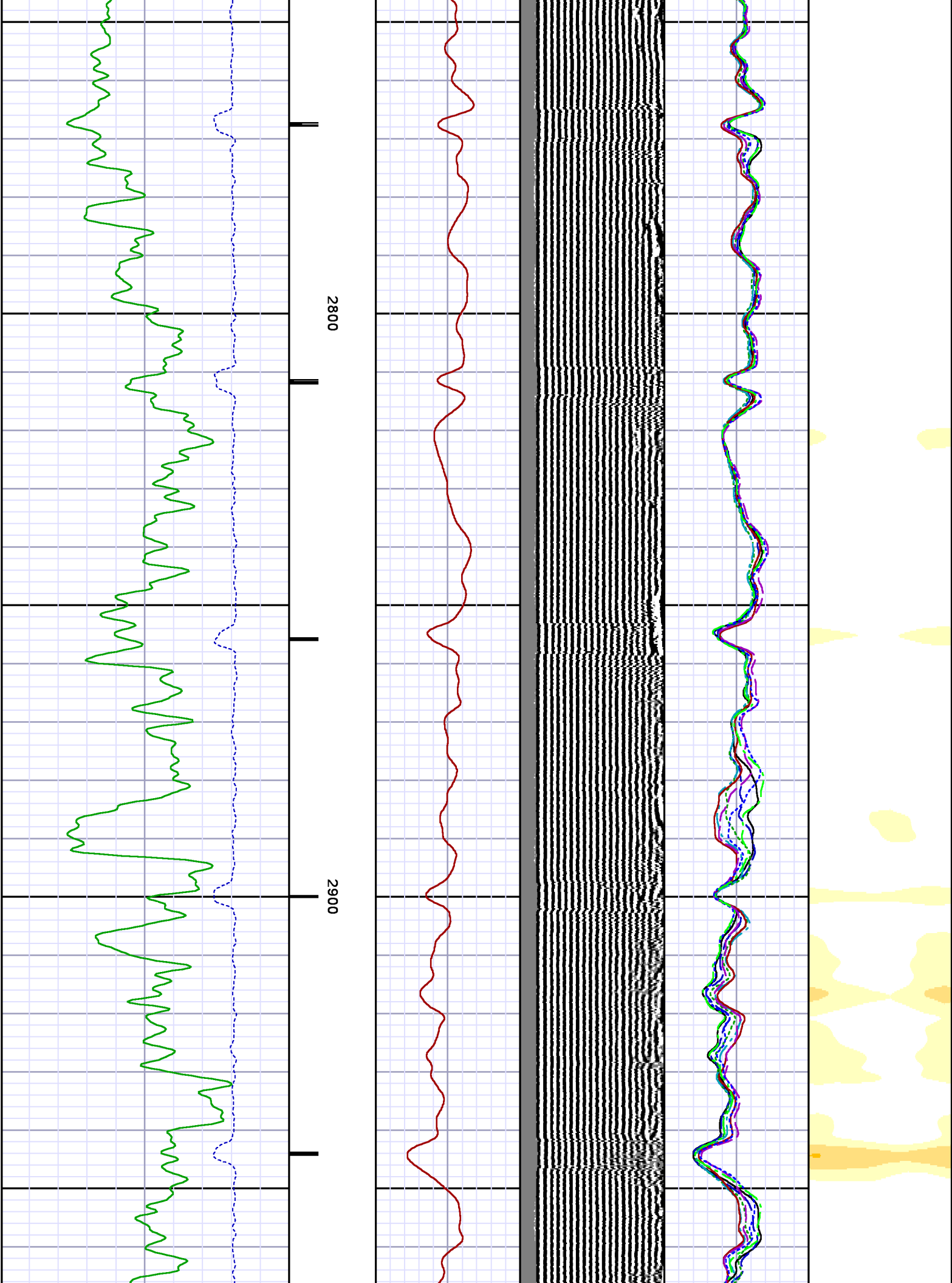


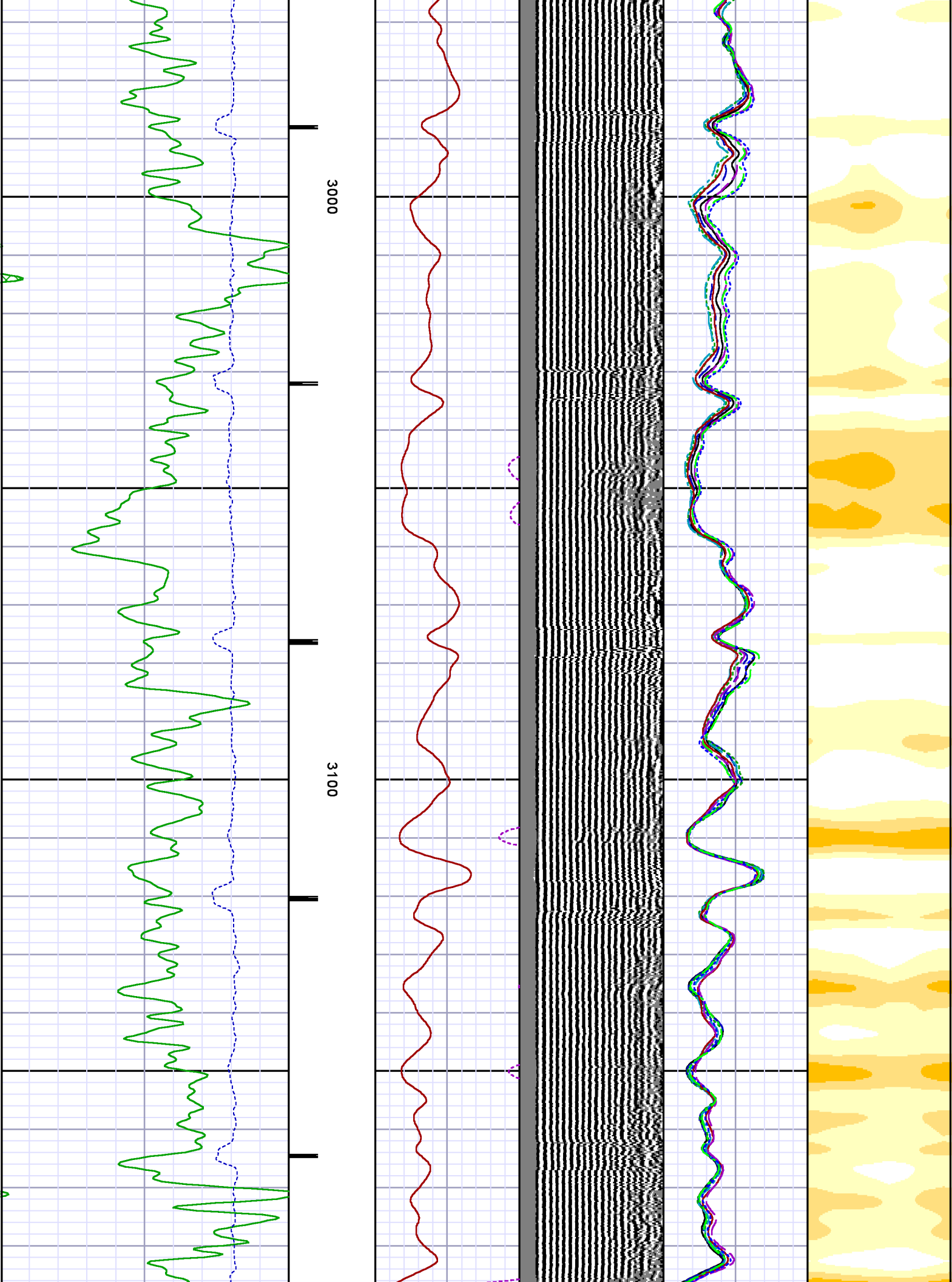


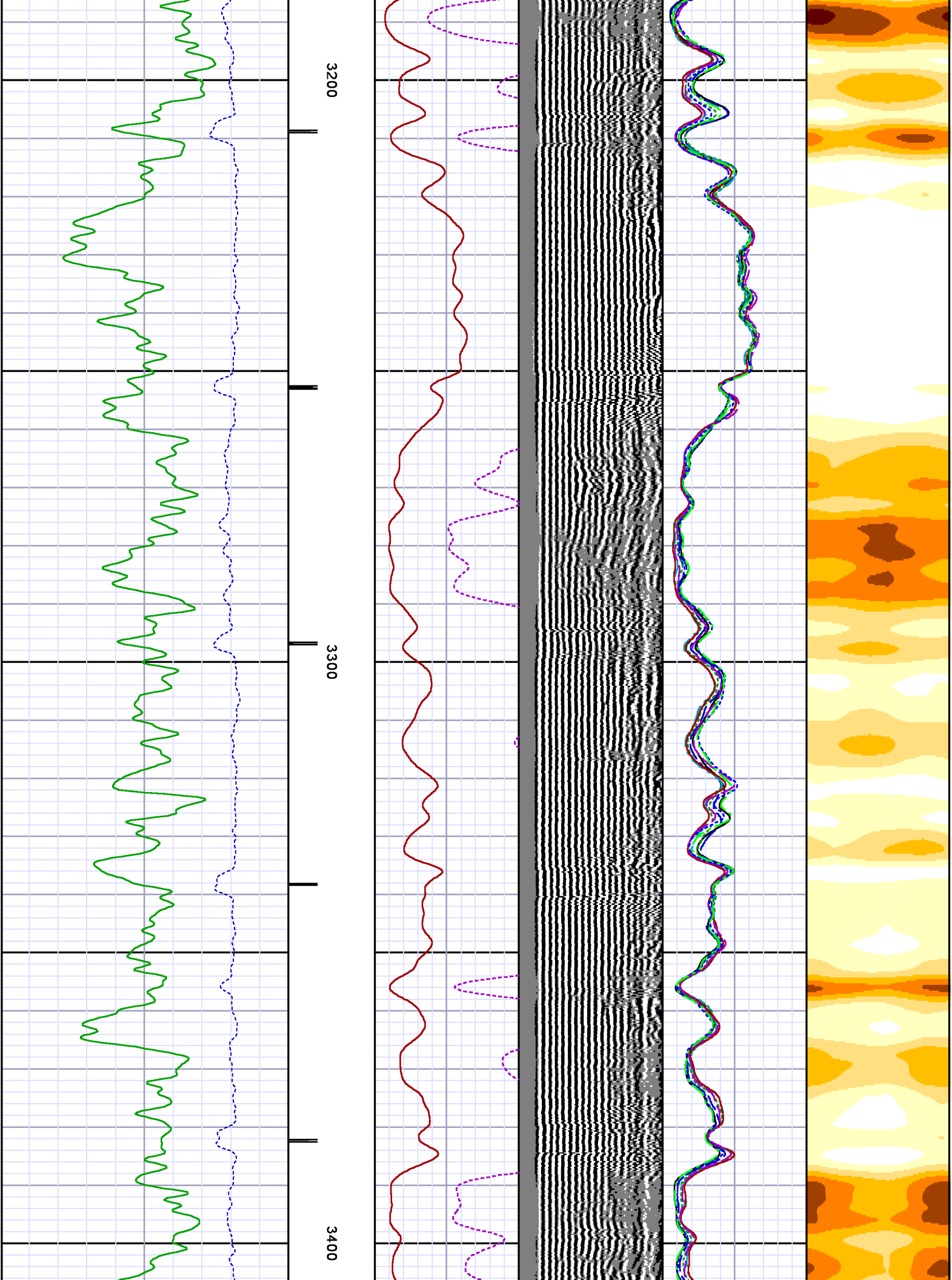


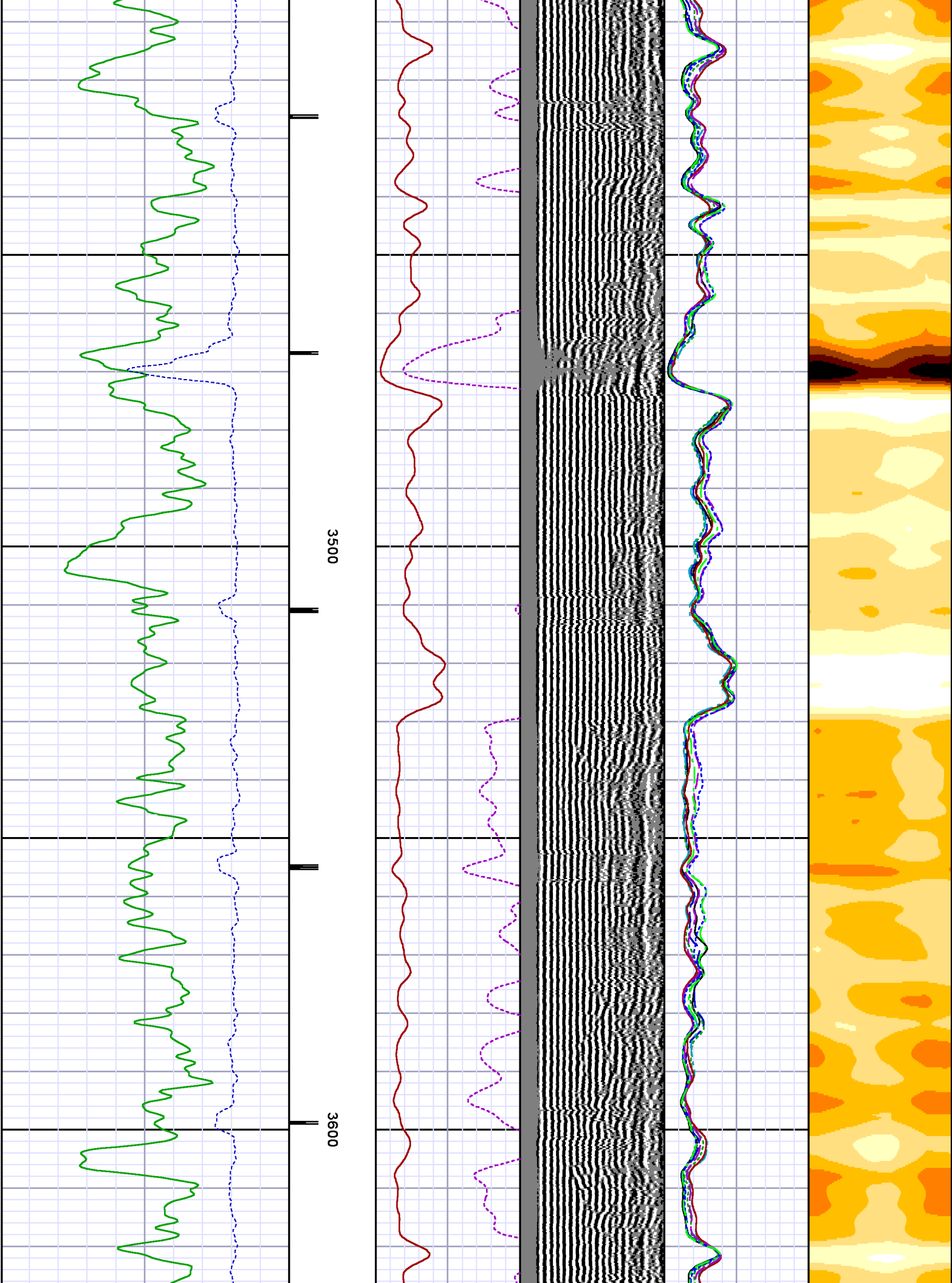


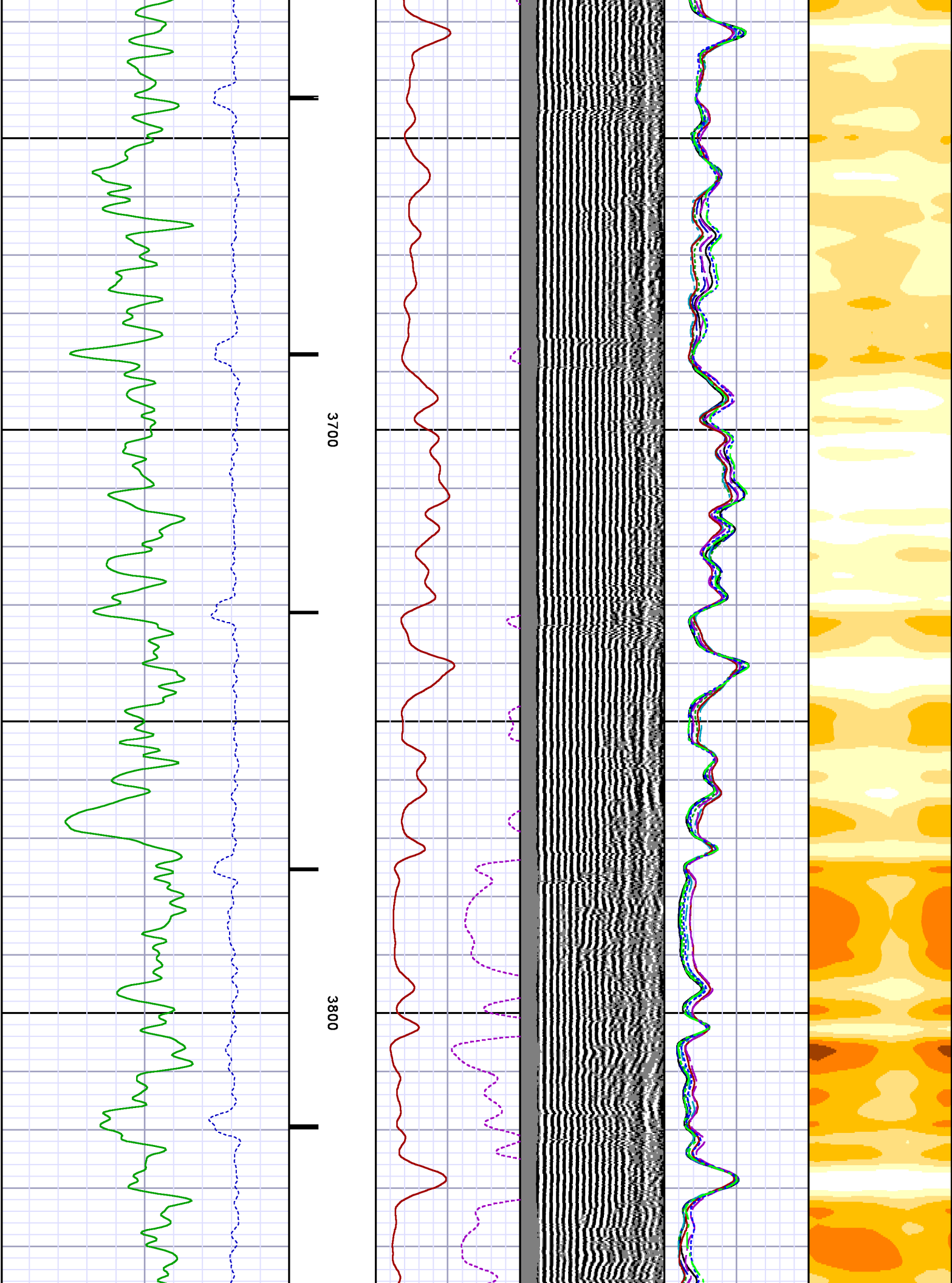


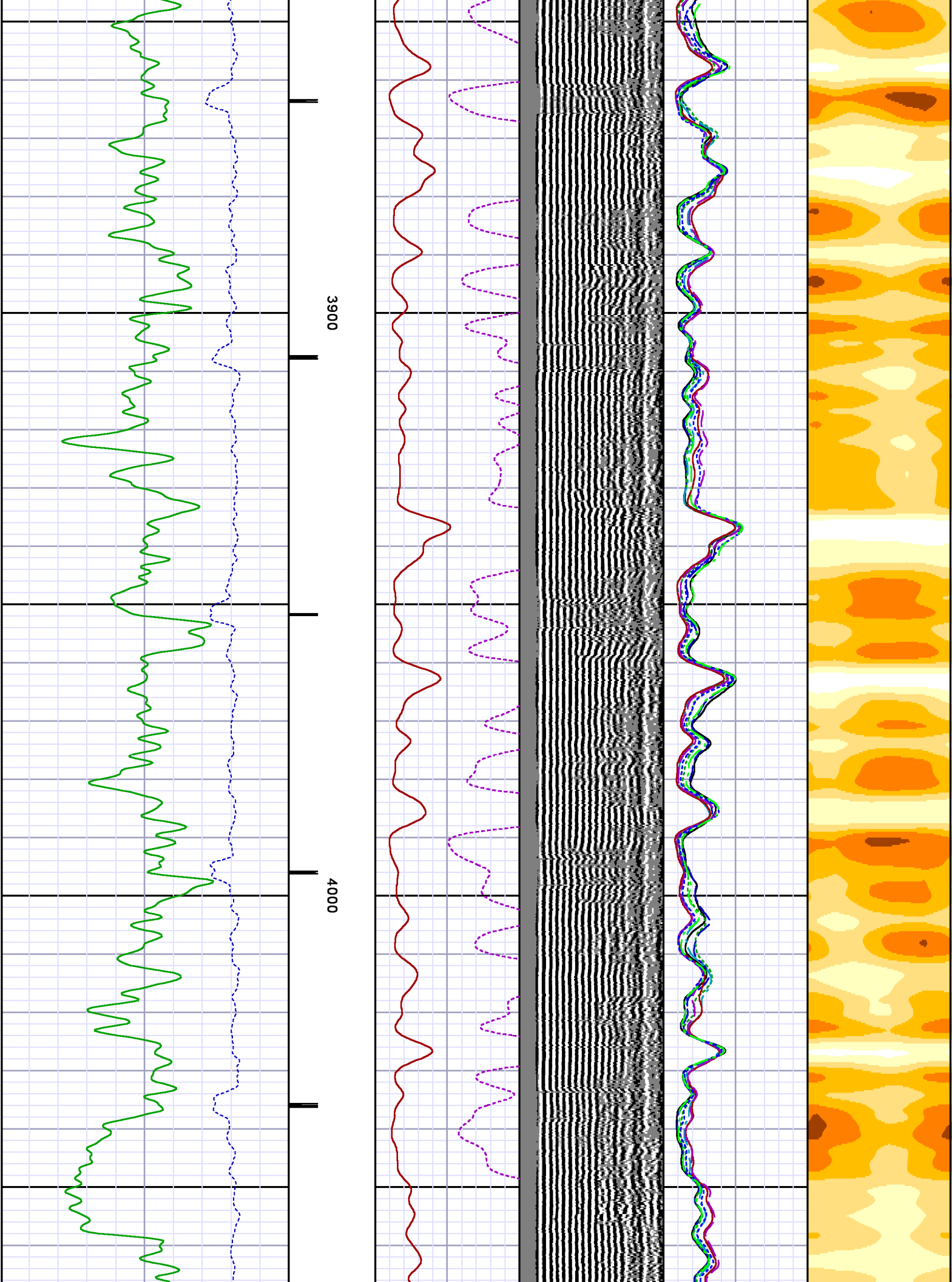


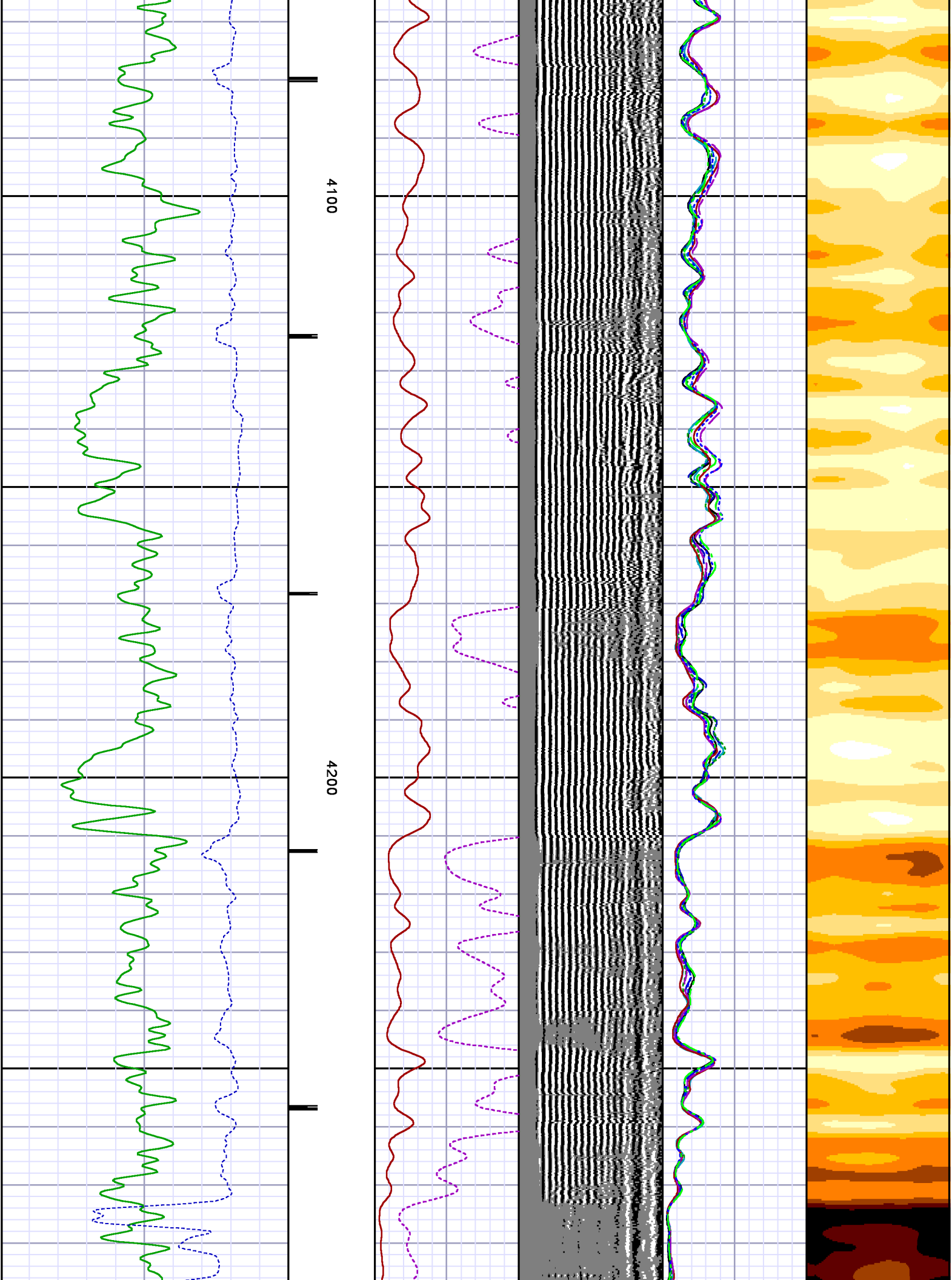


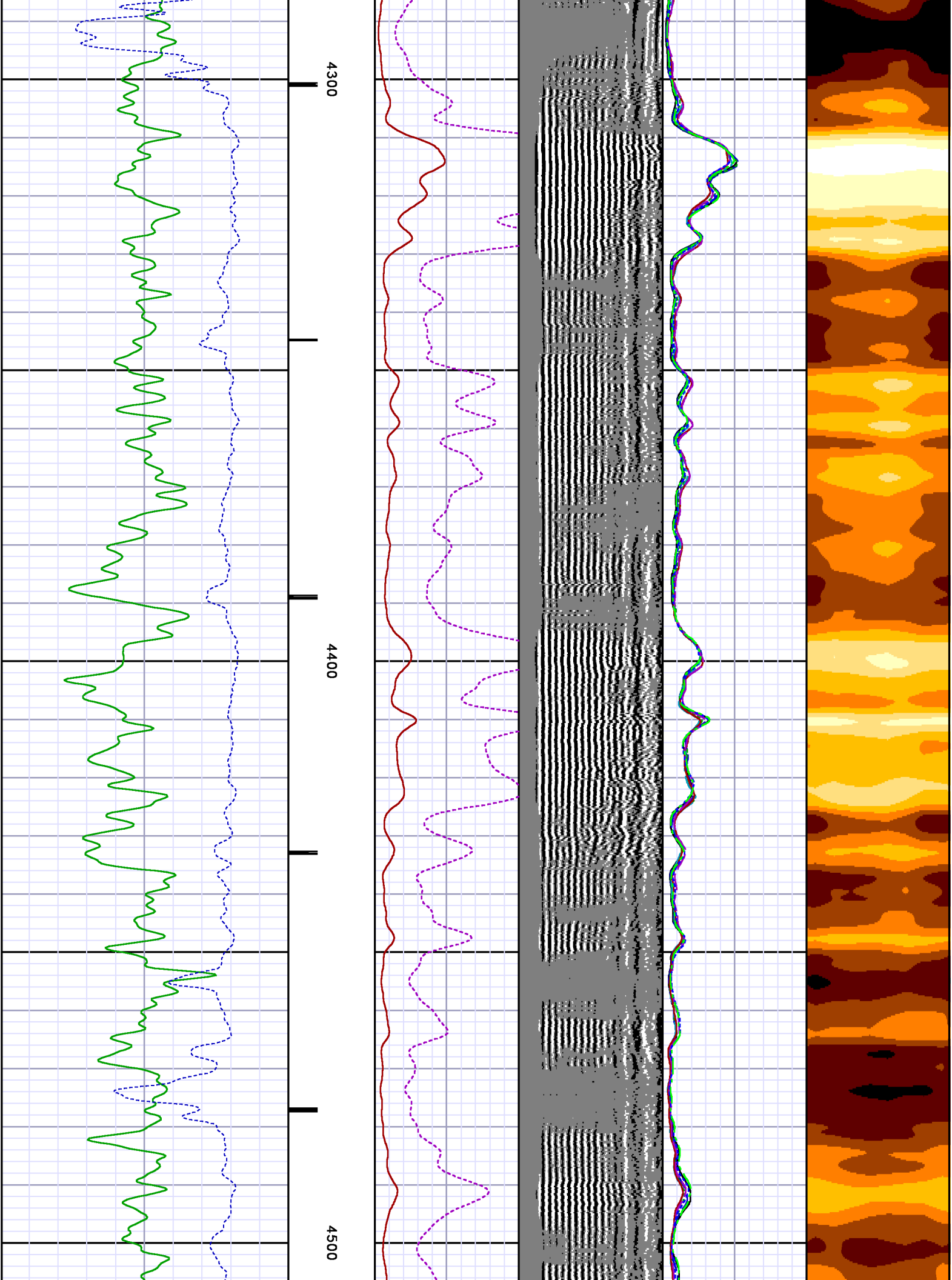


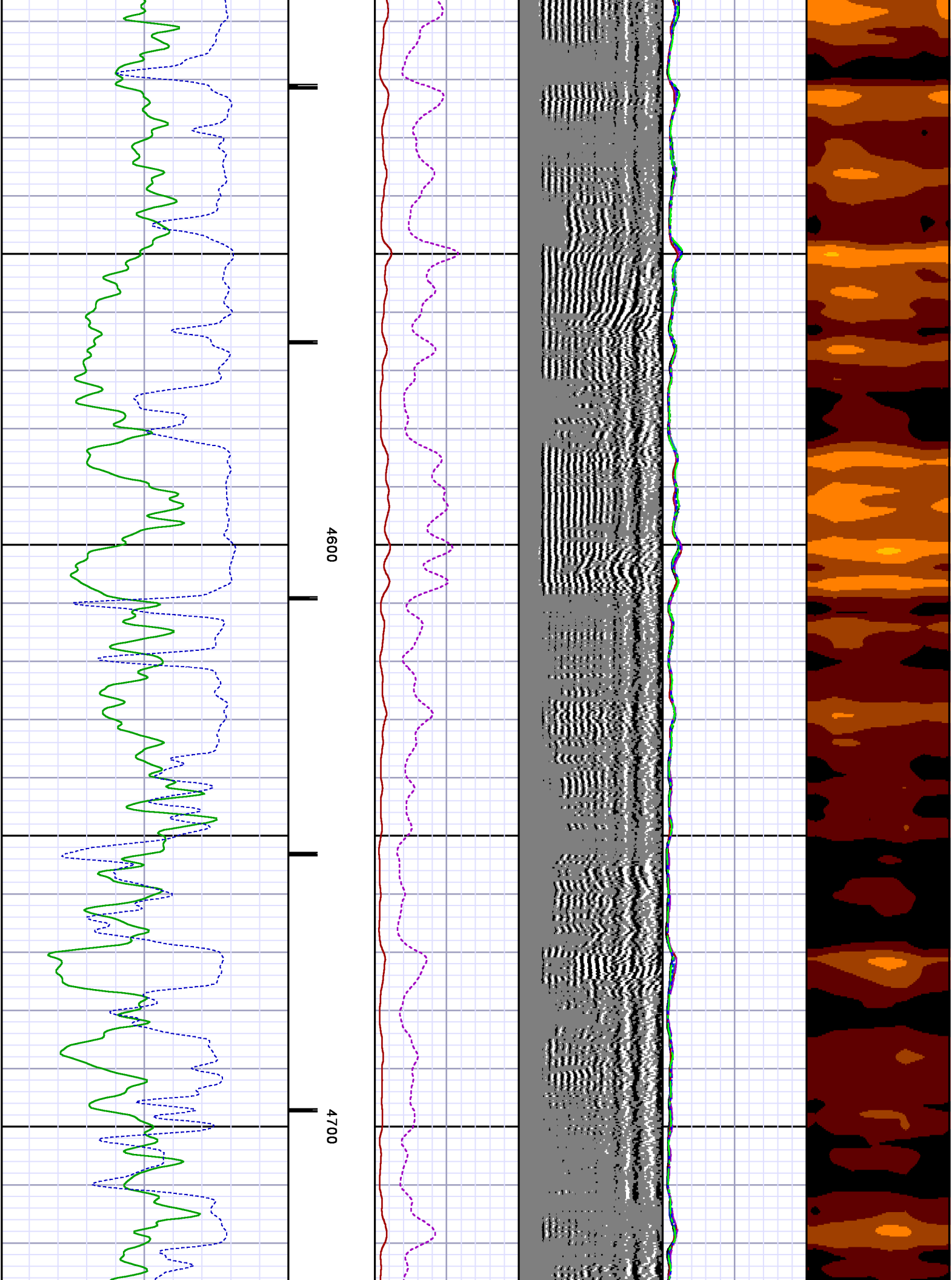


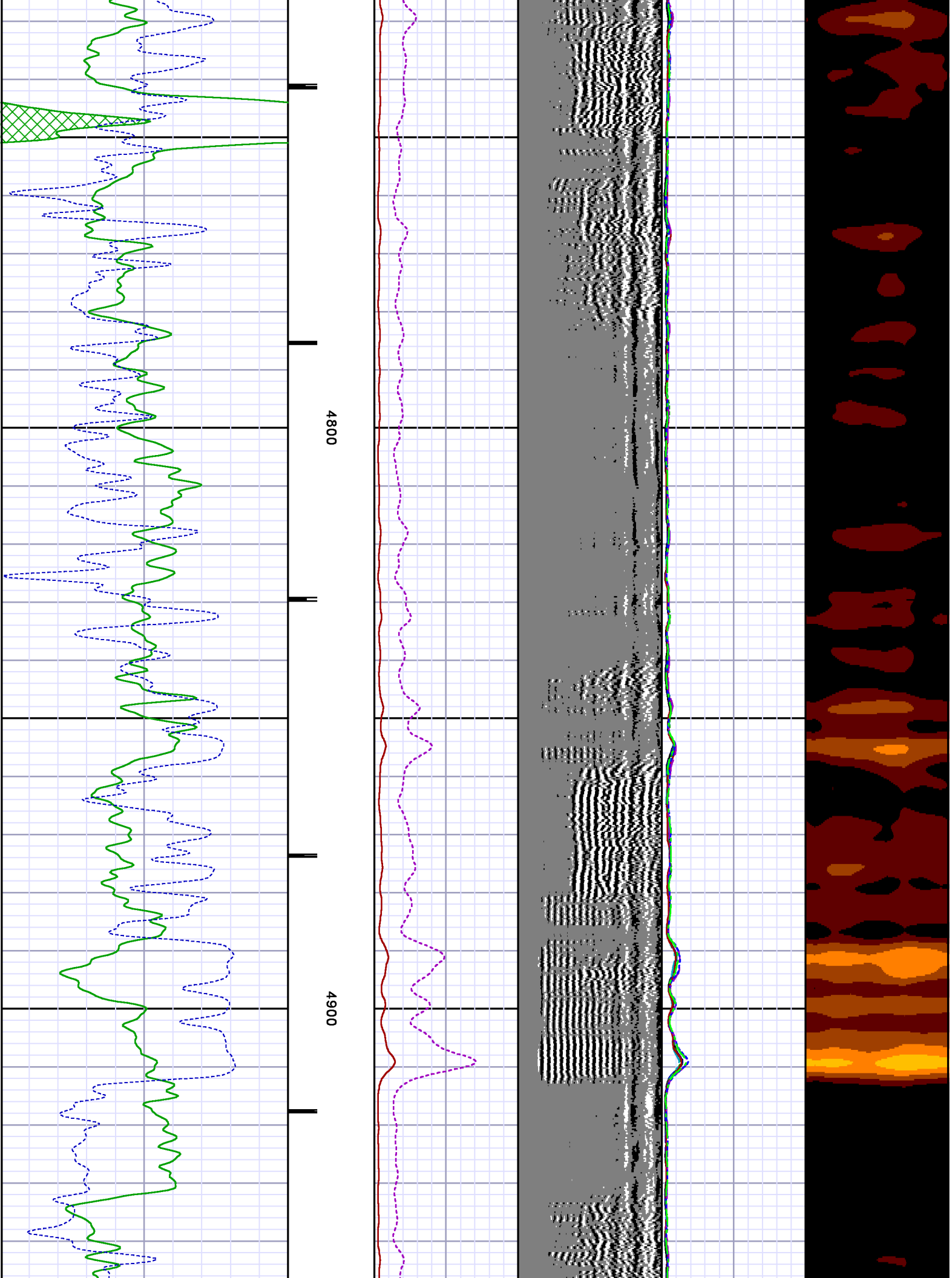


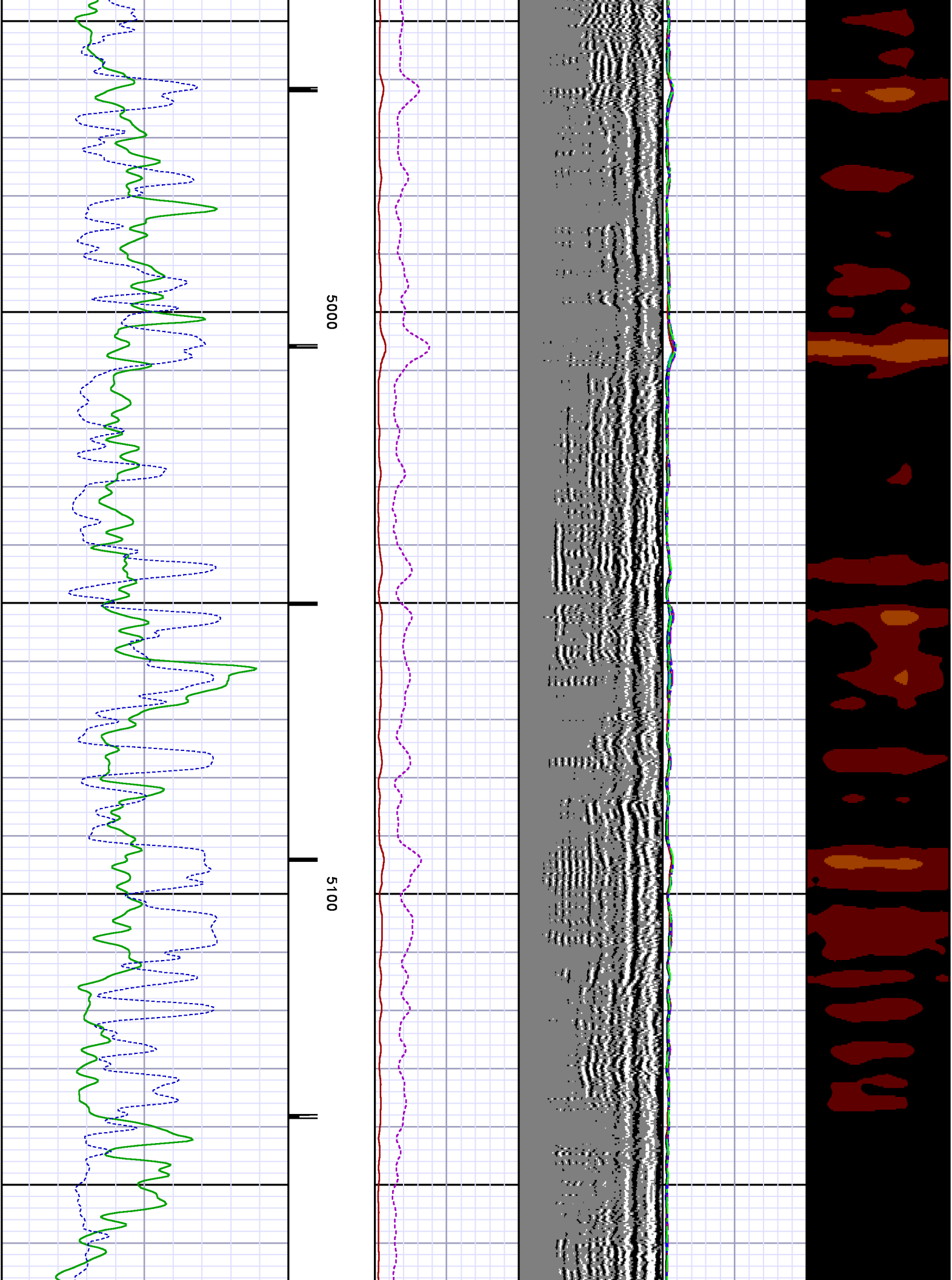


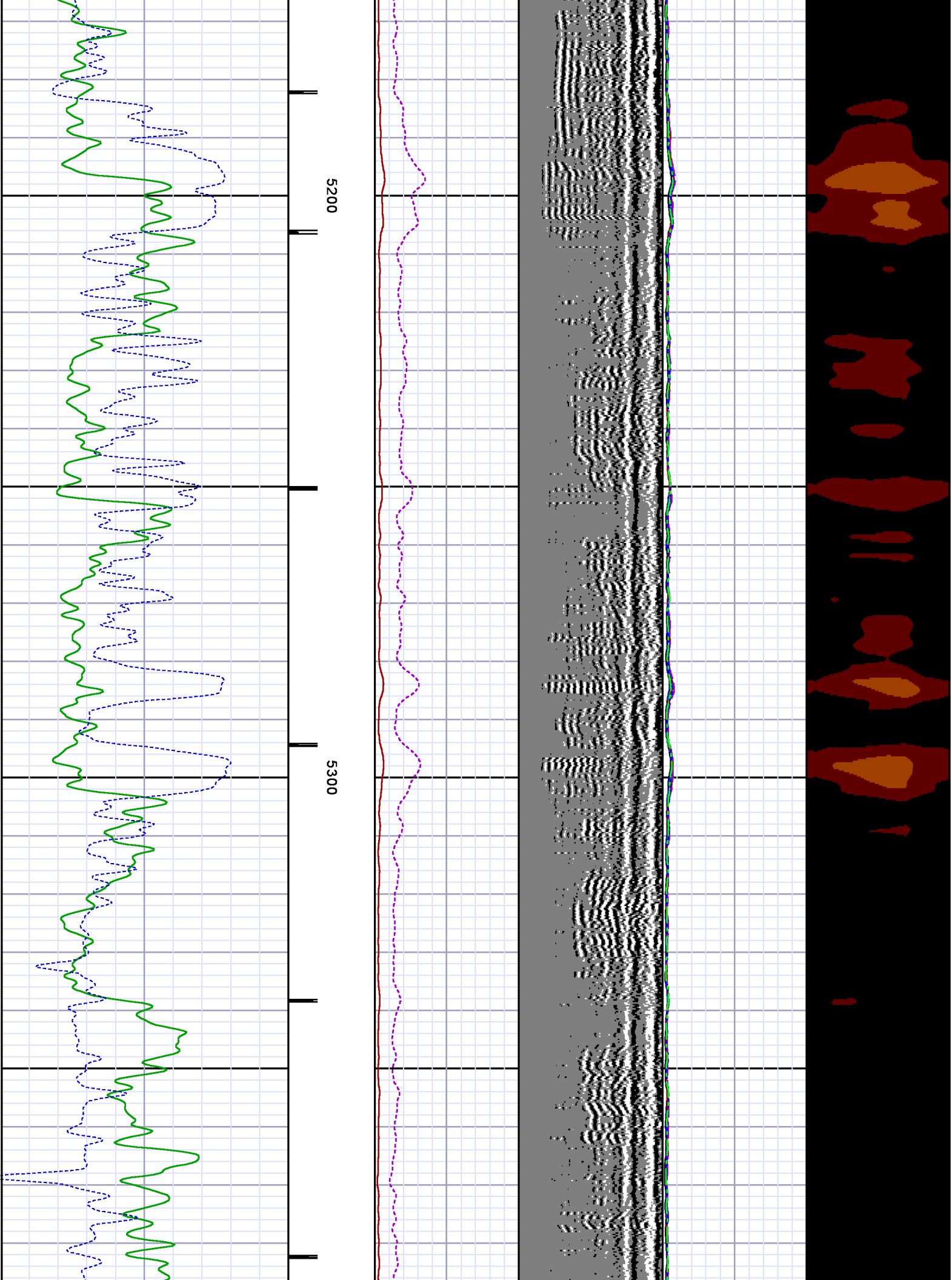


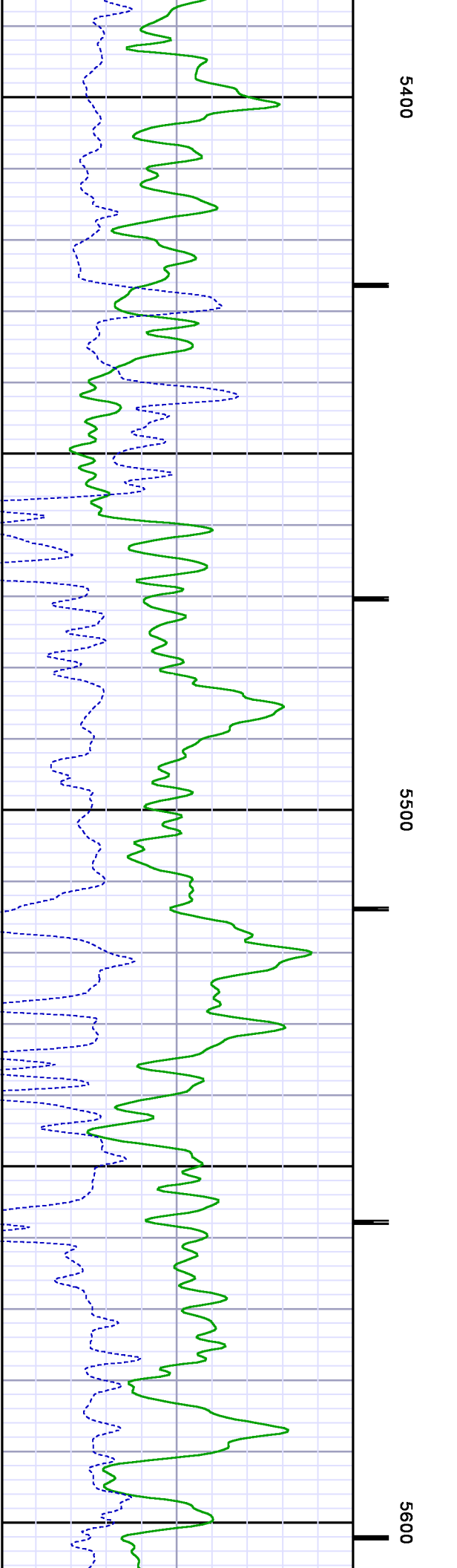
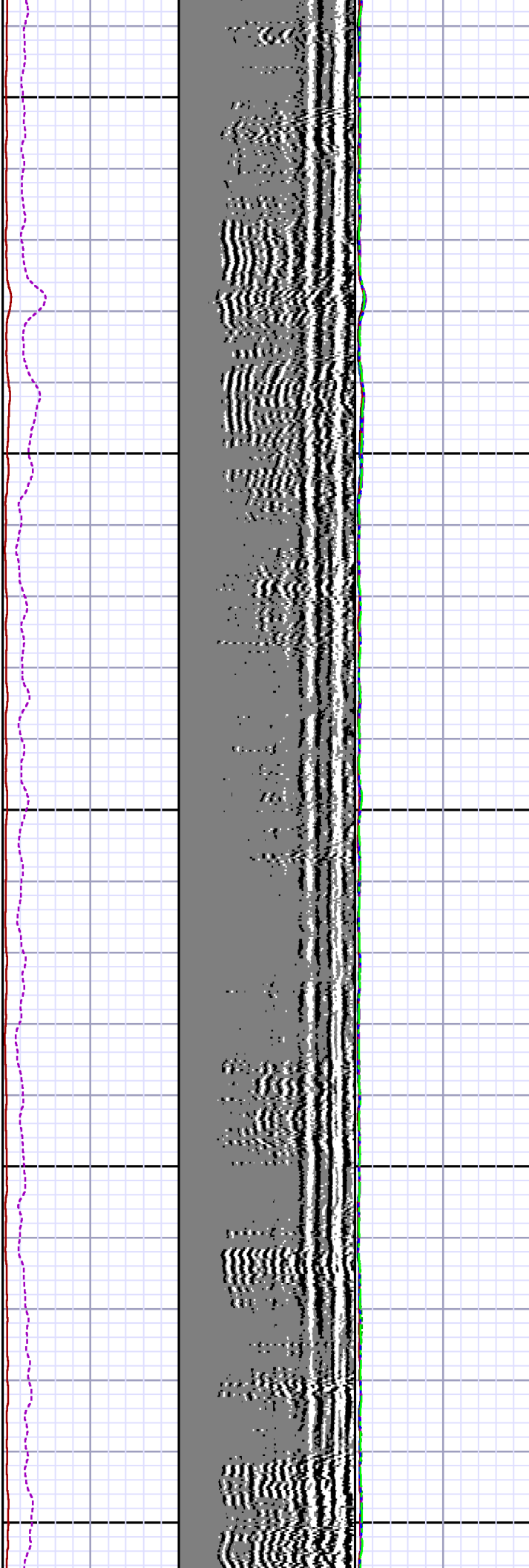


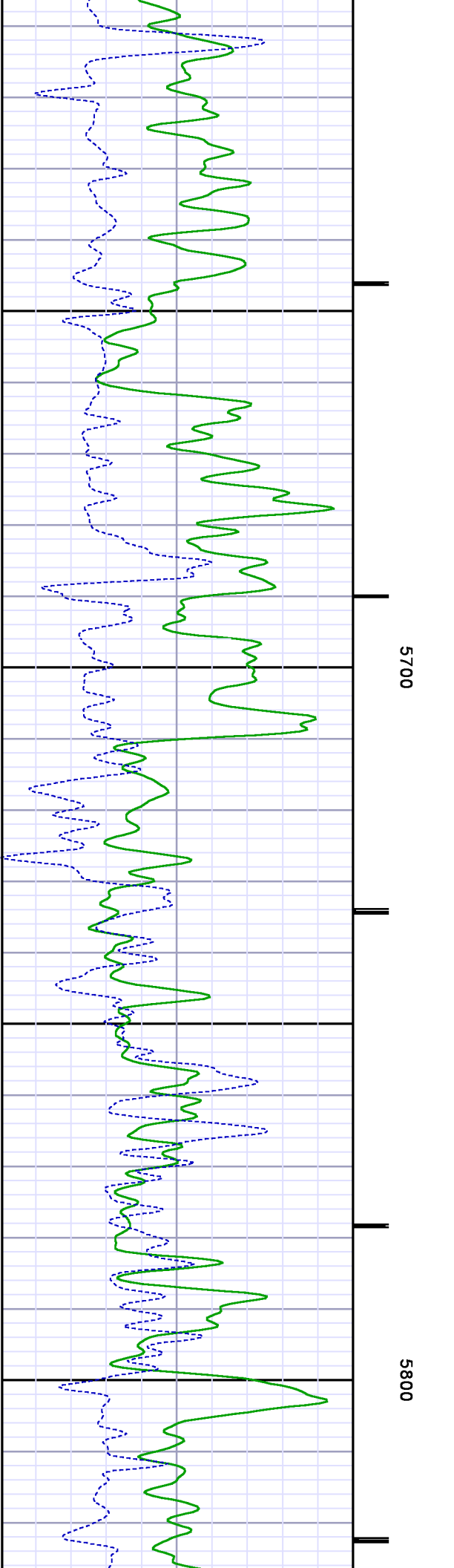
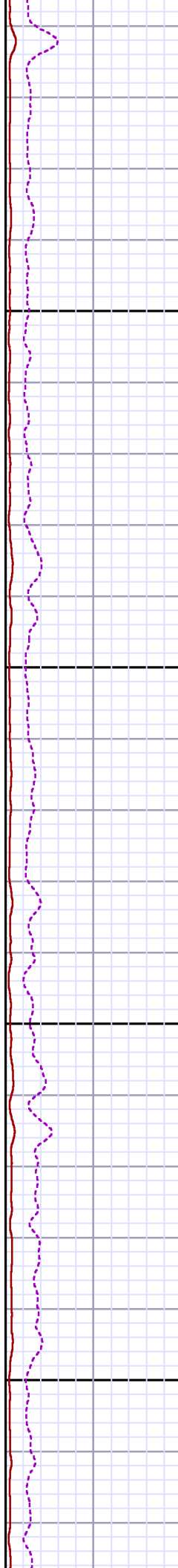
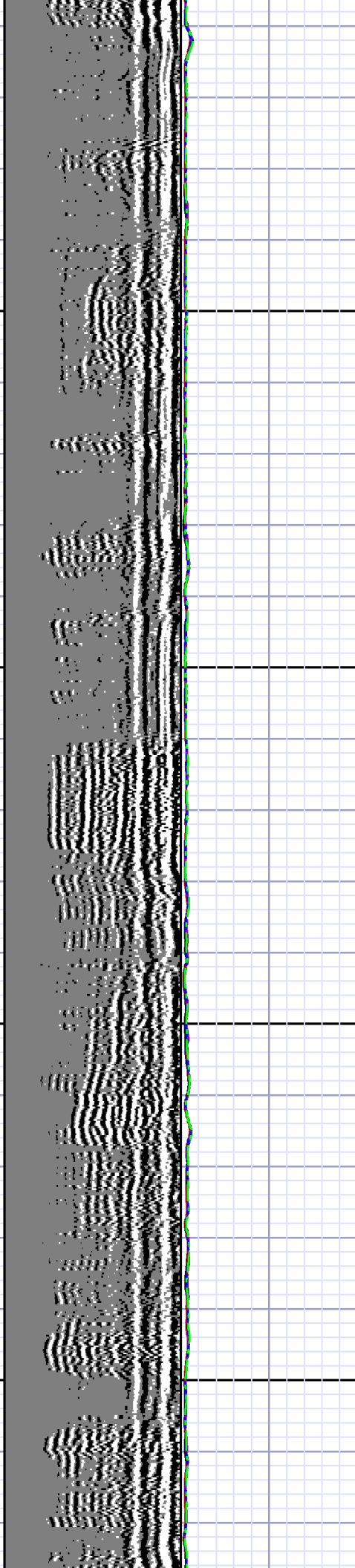


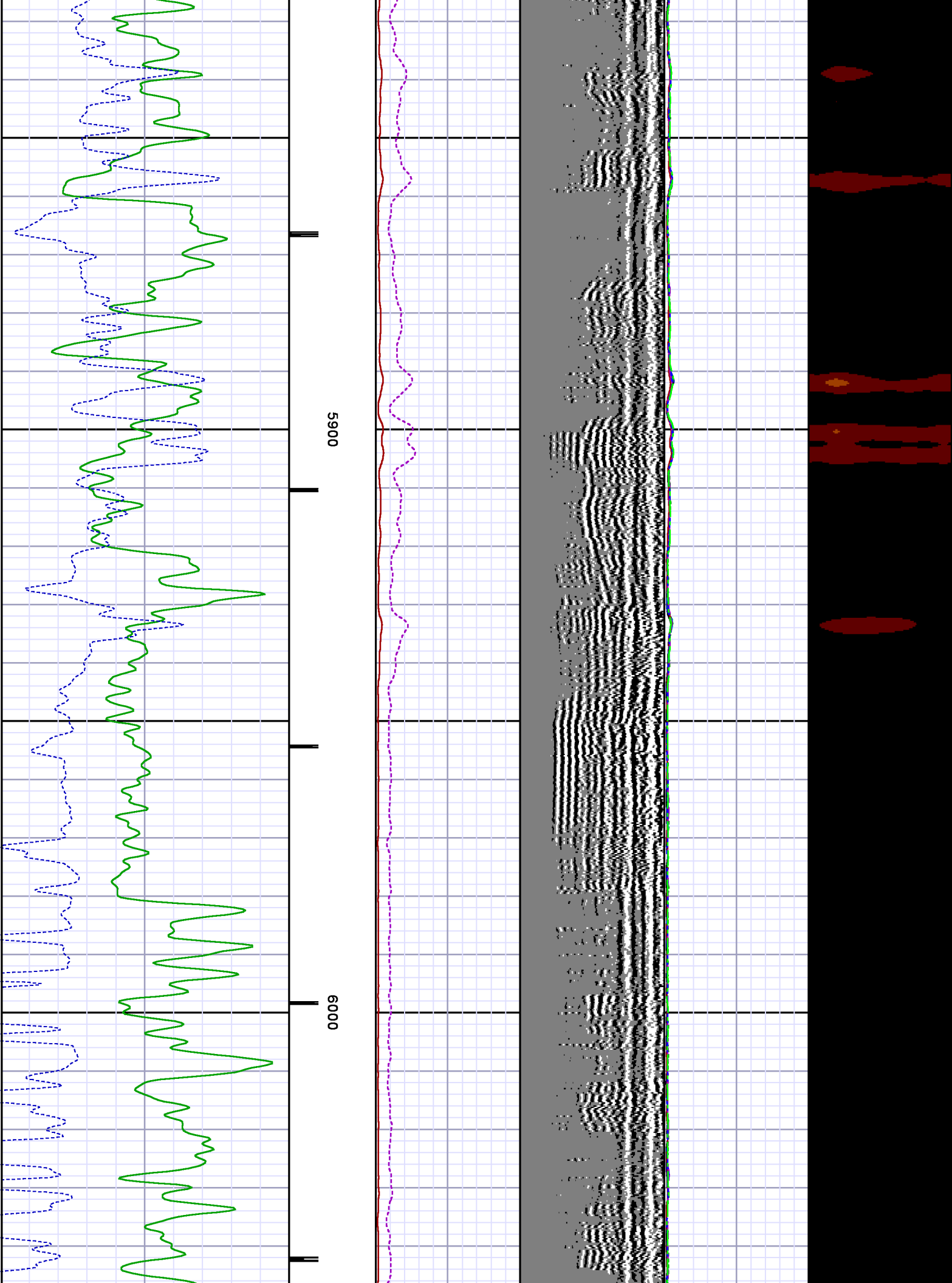


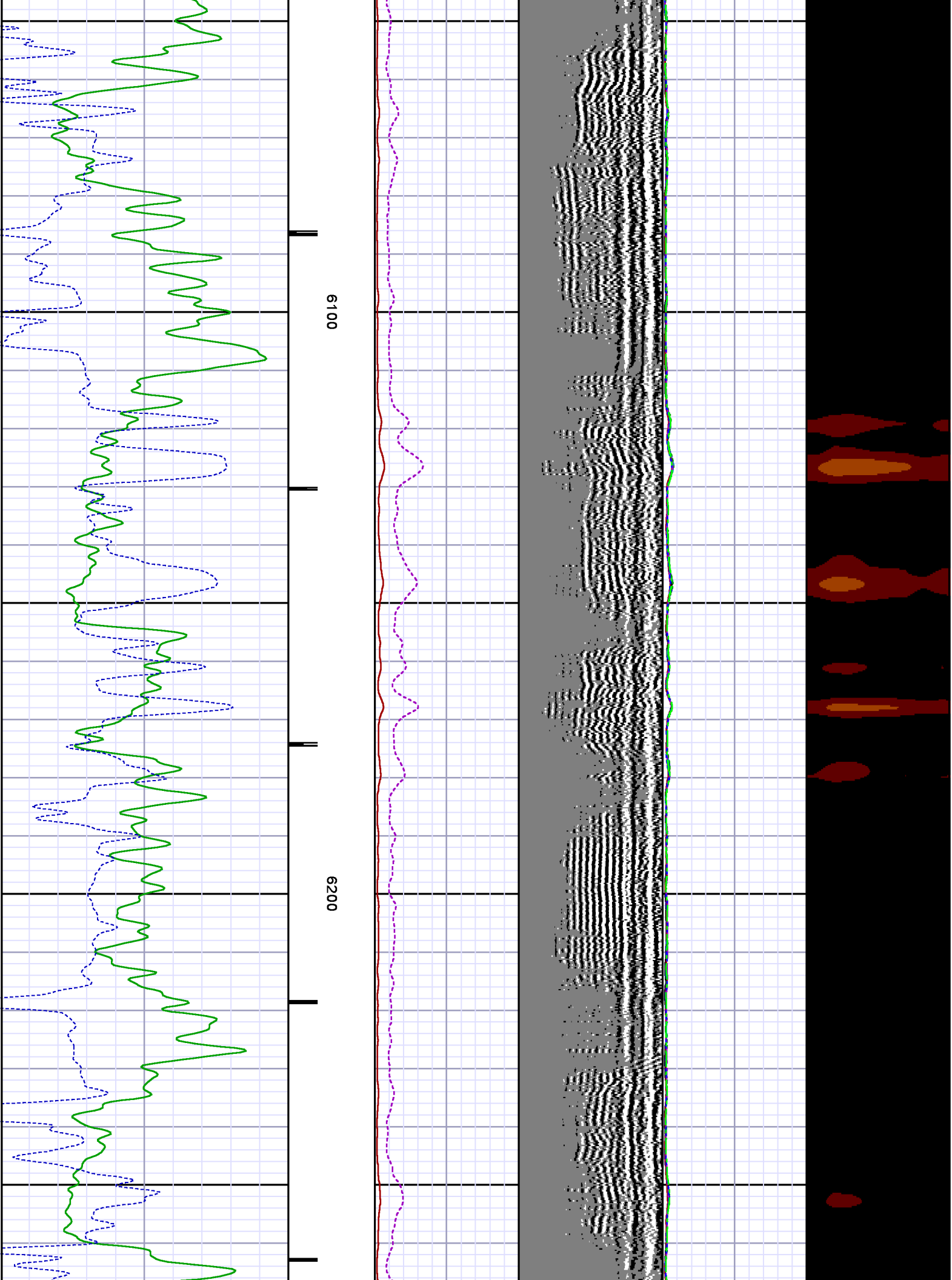


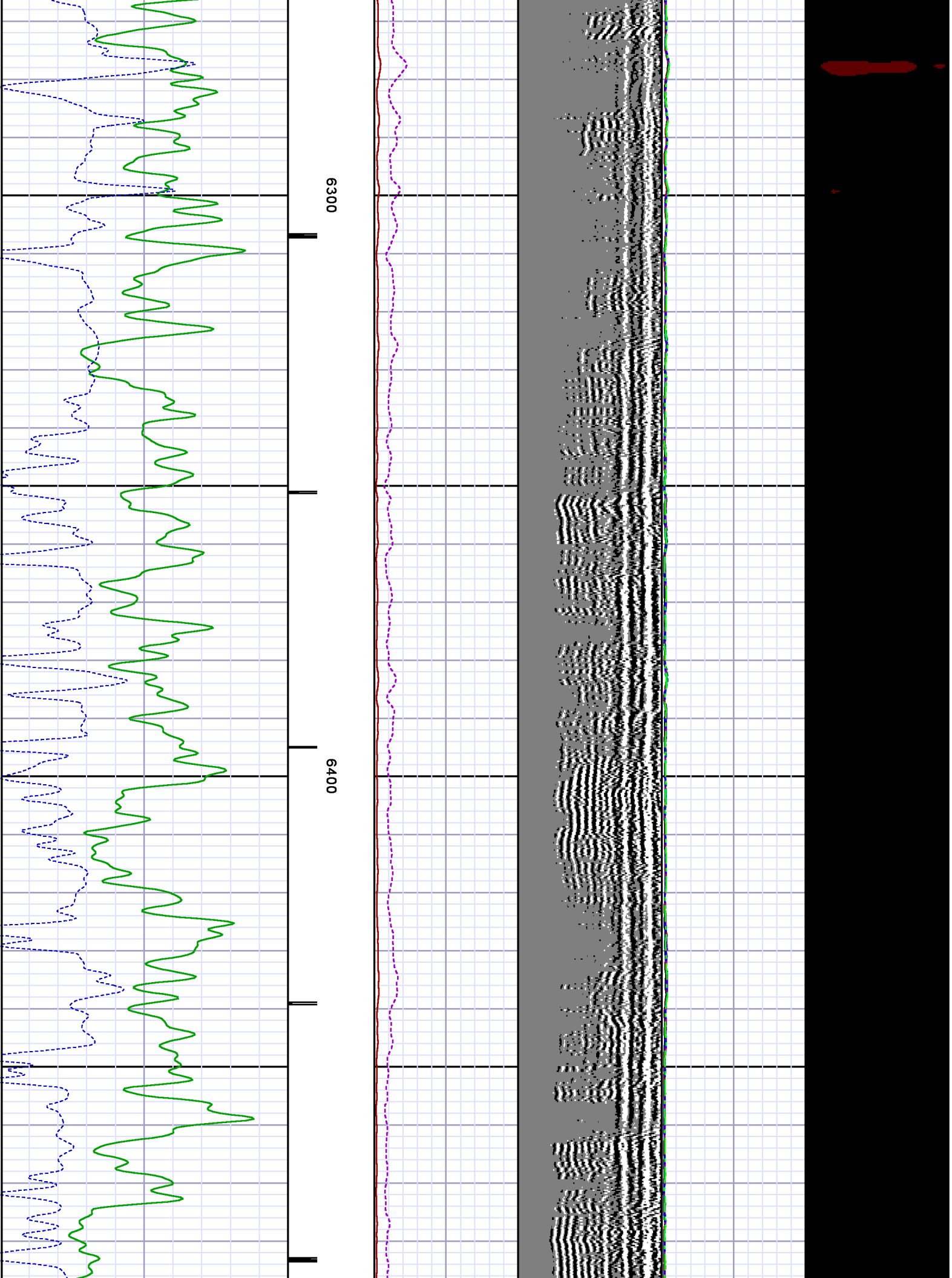


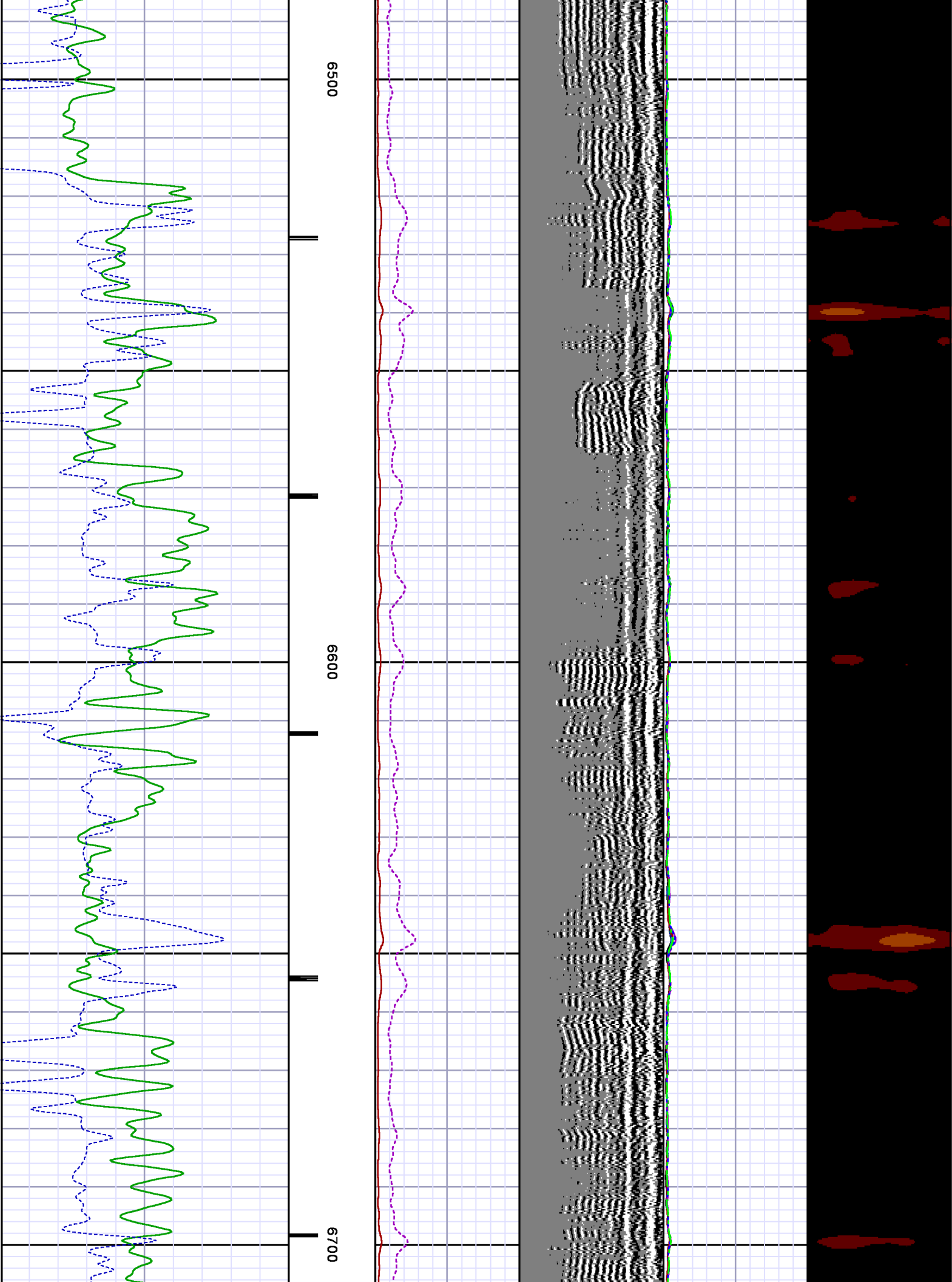


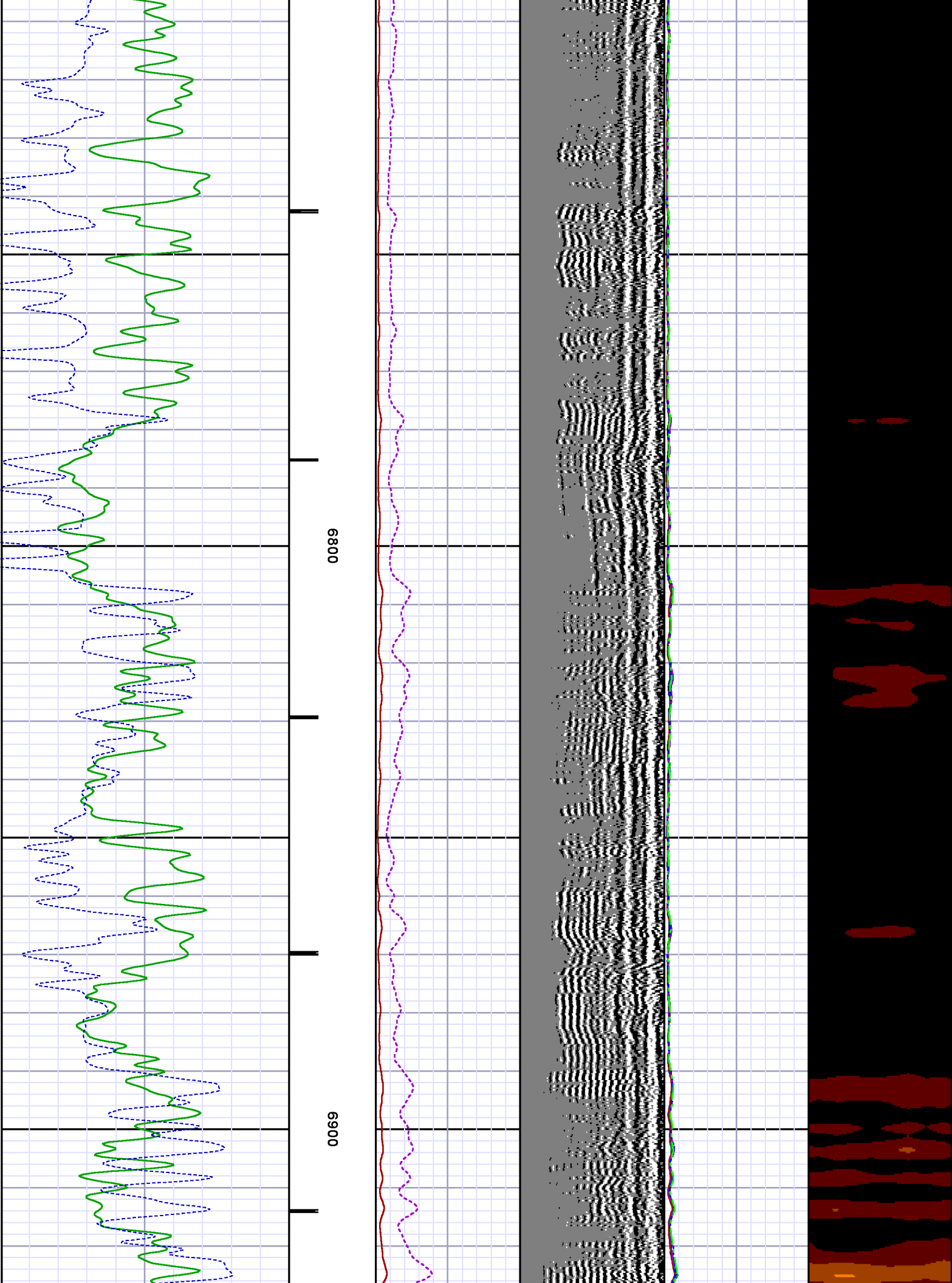


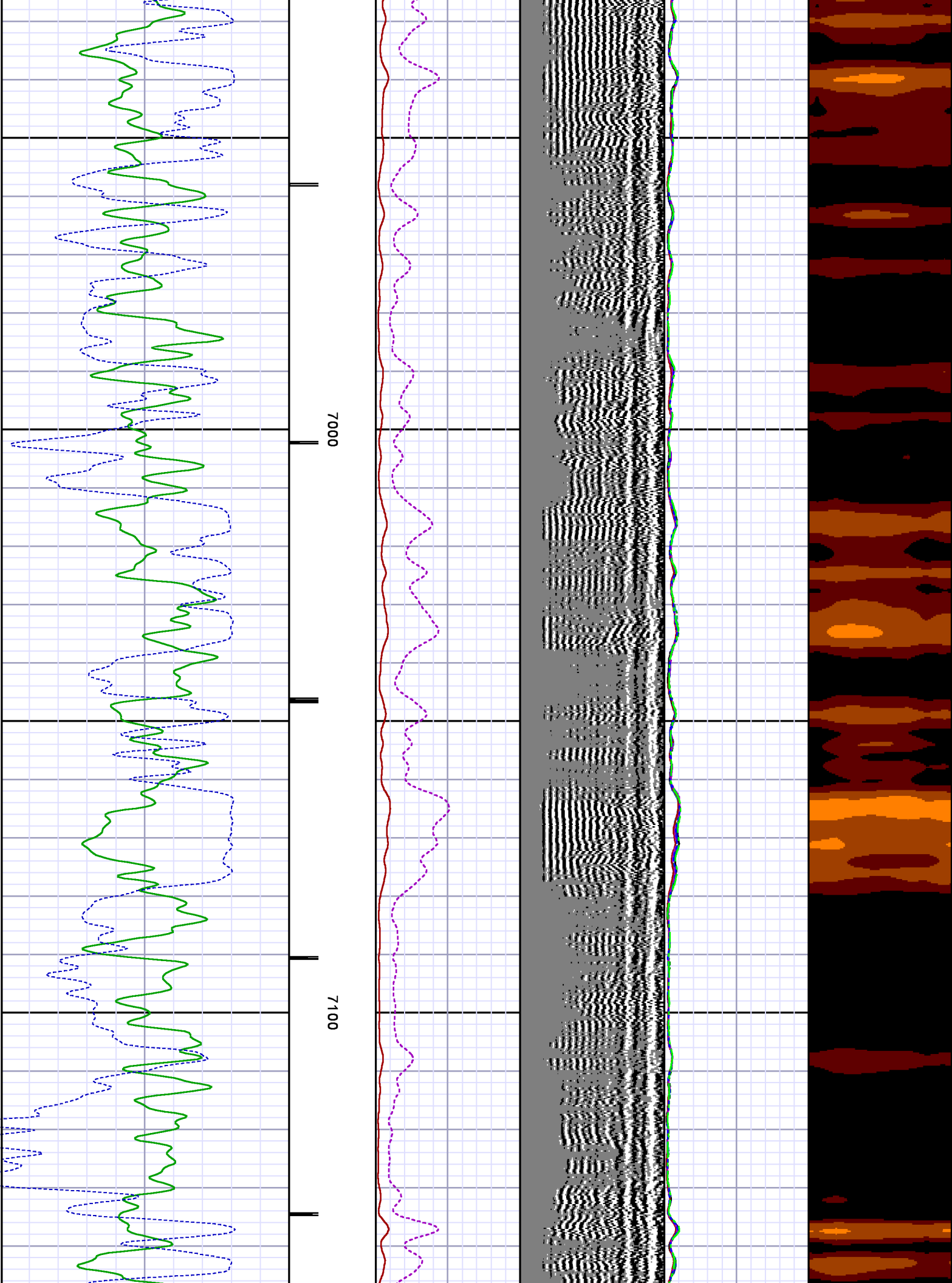


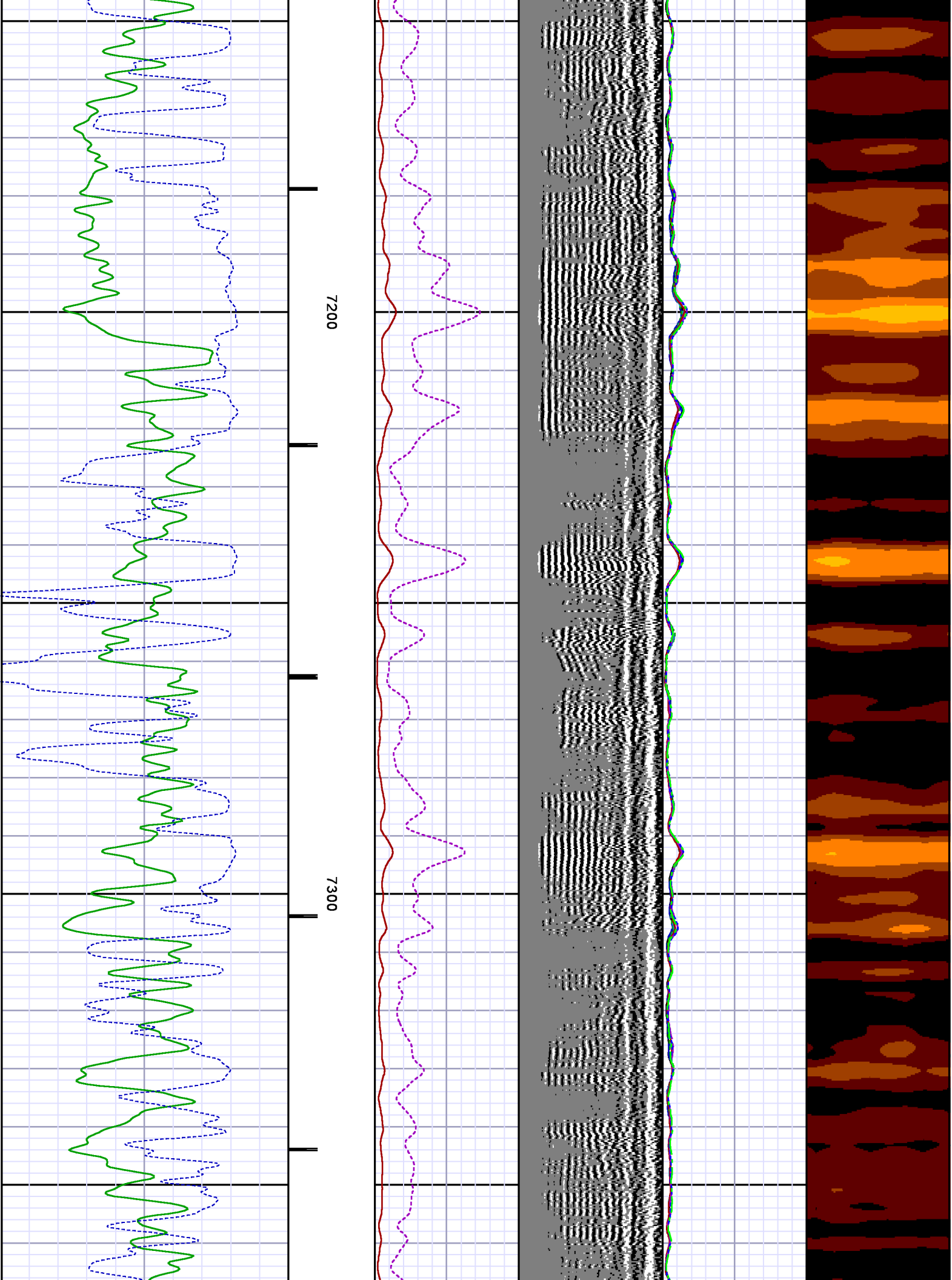


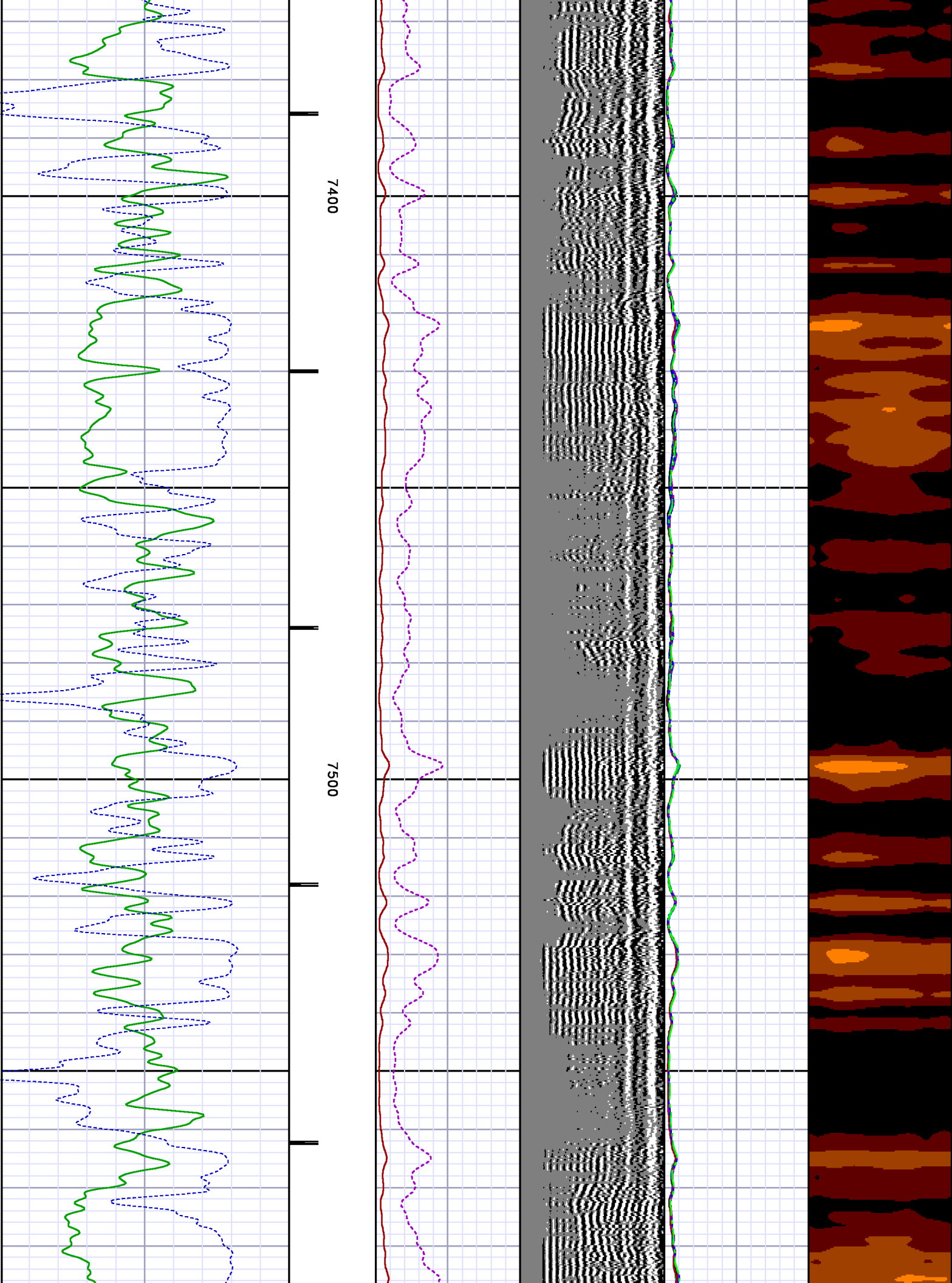


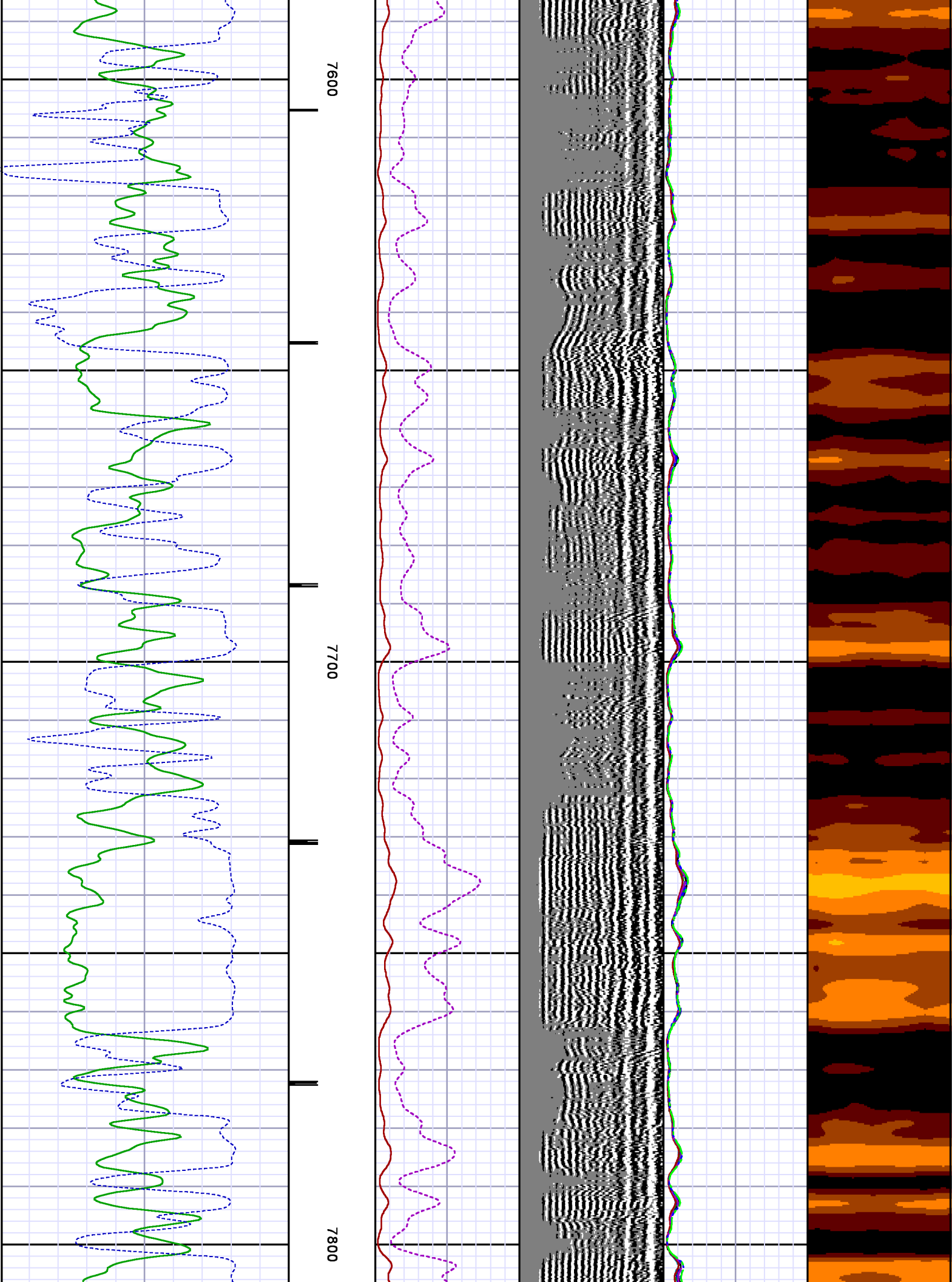


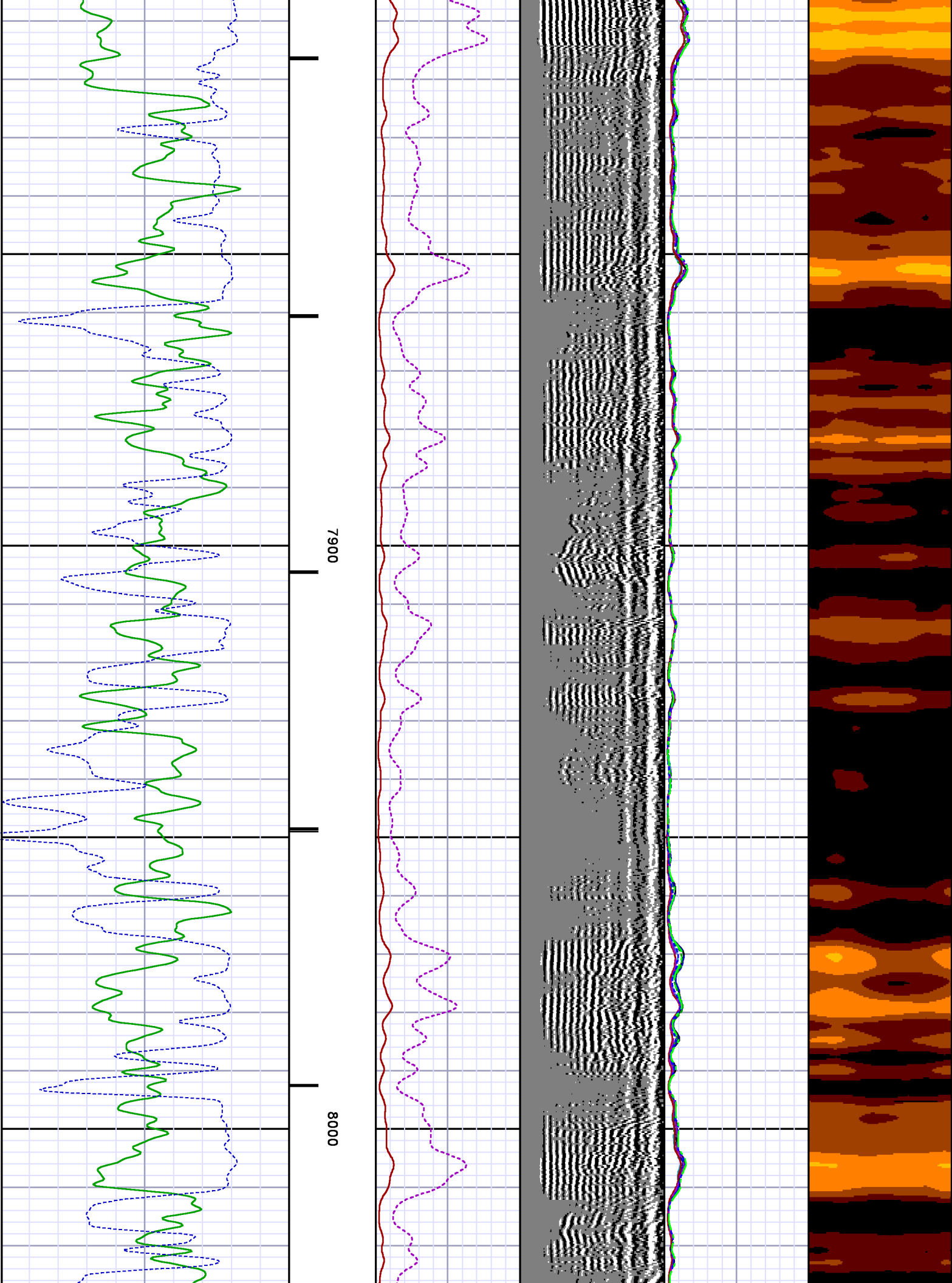


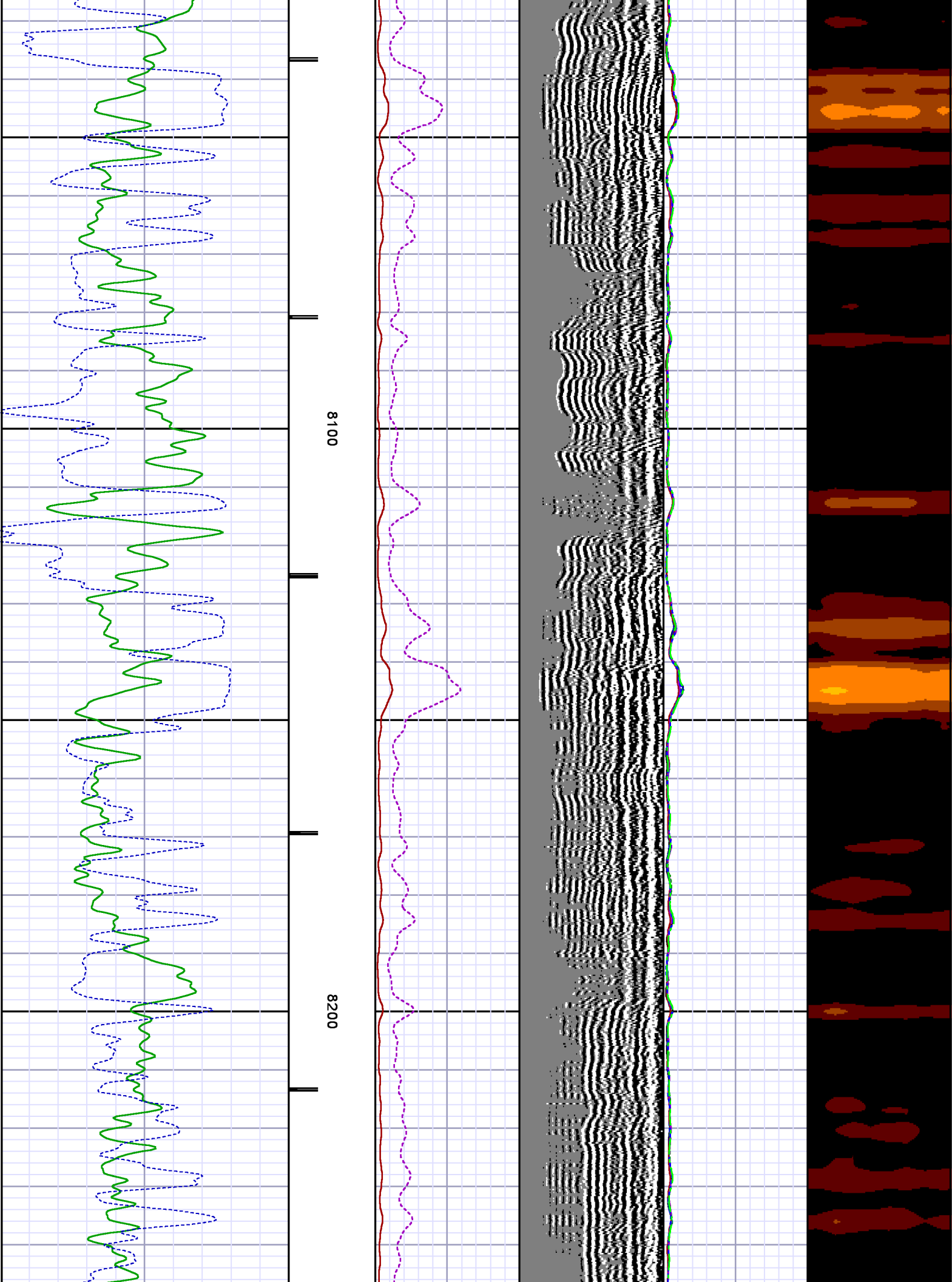


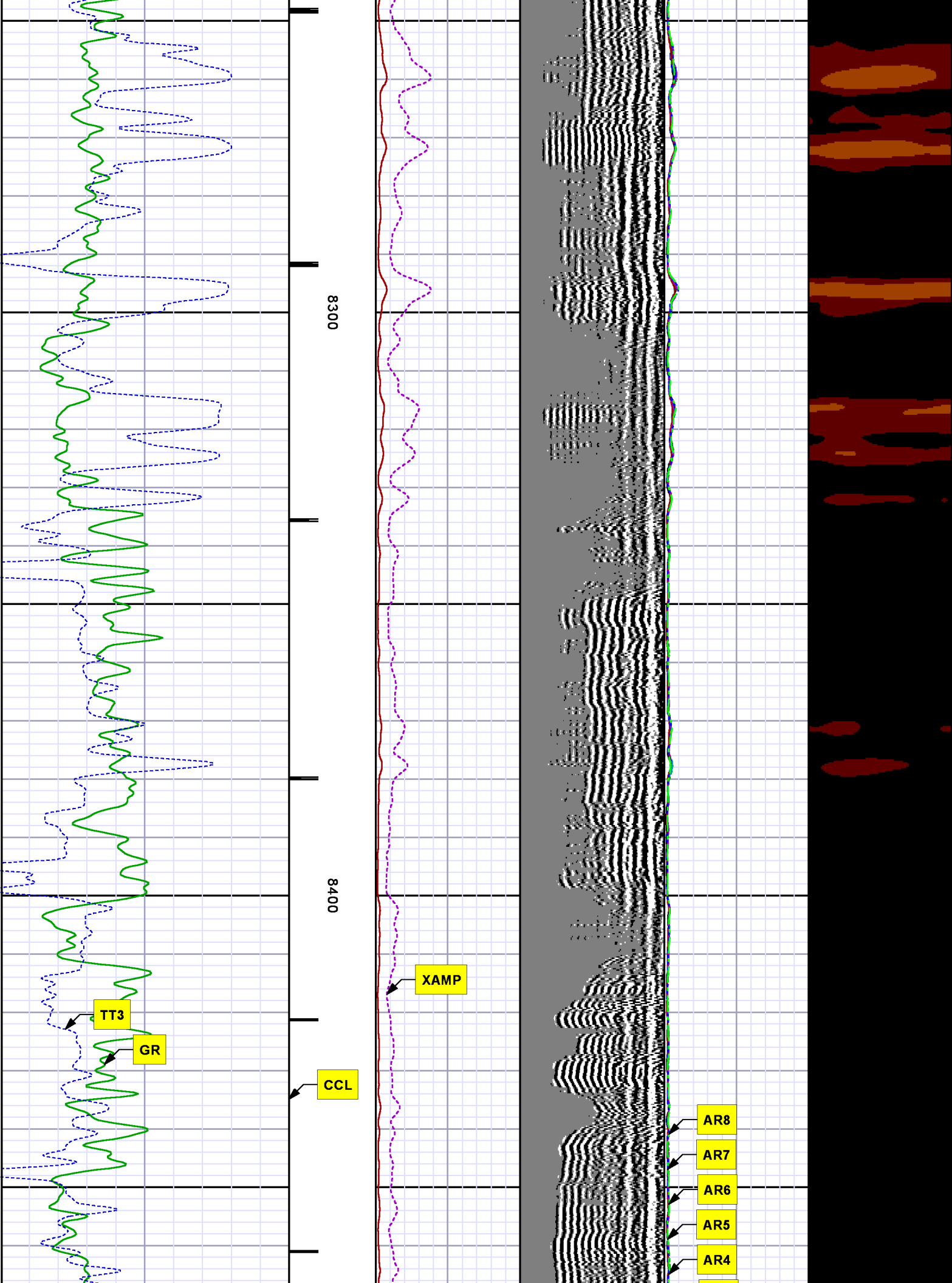


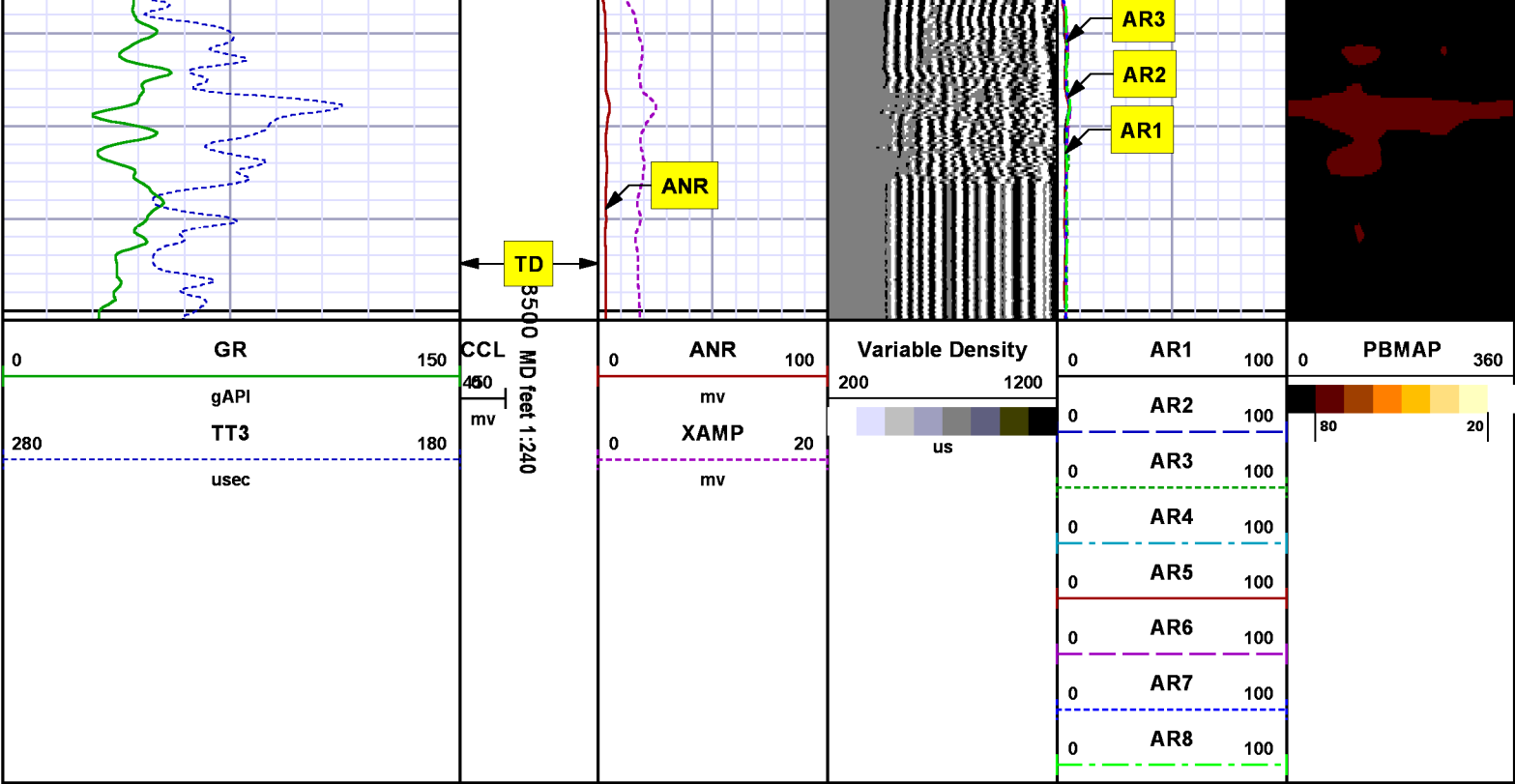












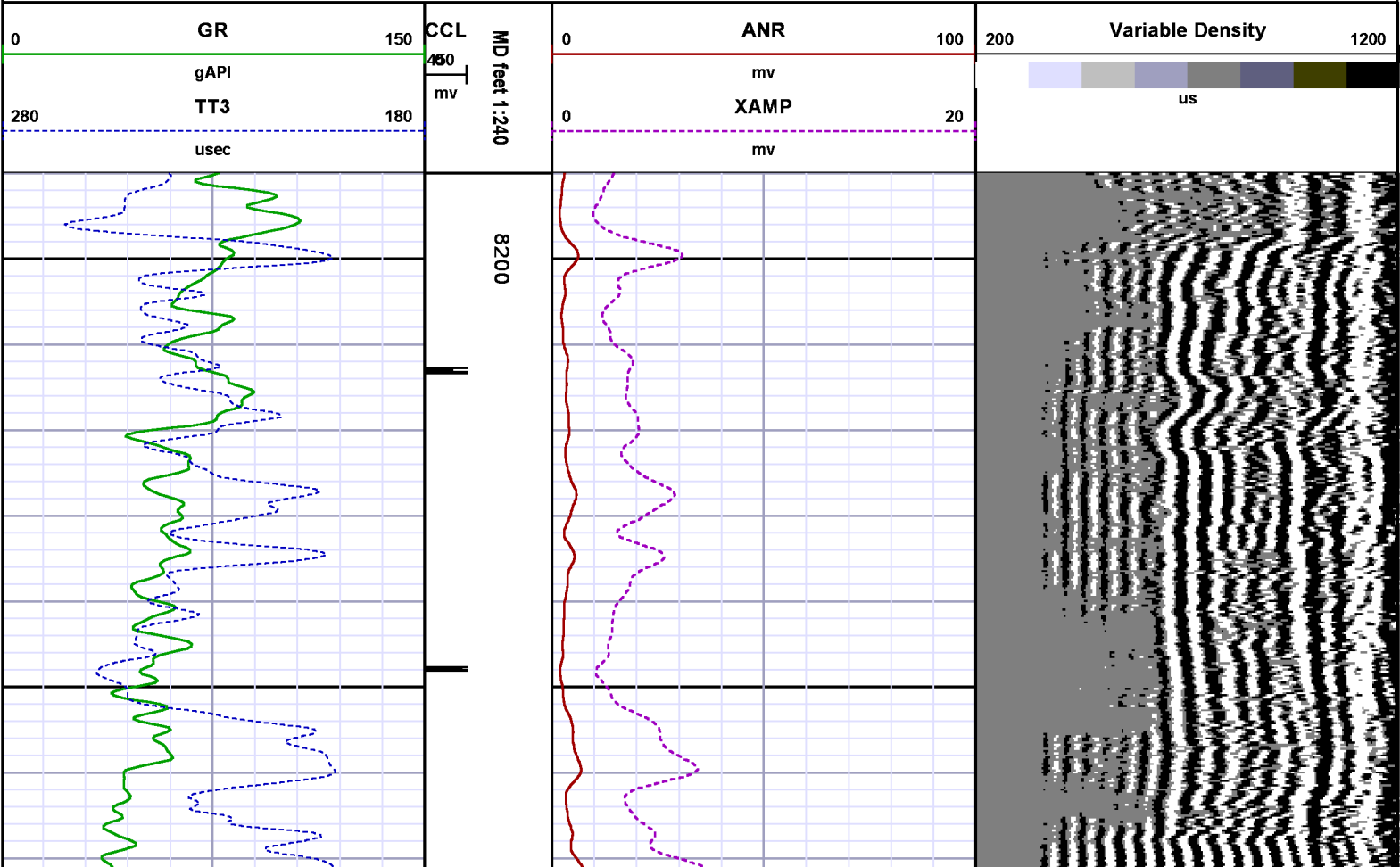
REPEAT SECTION
0 PSI

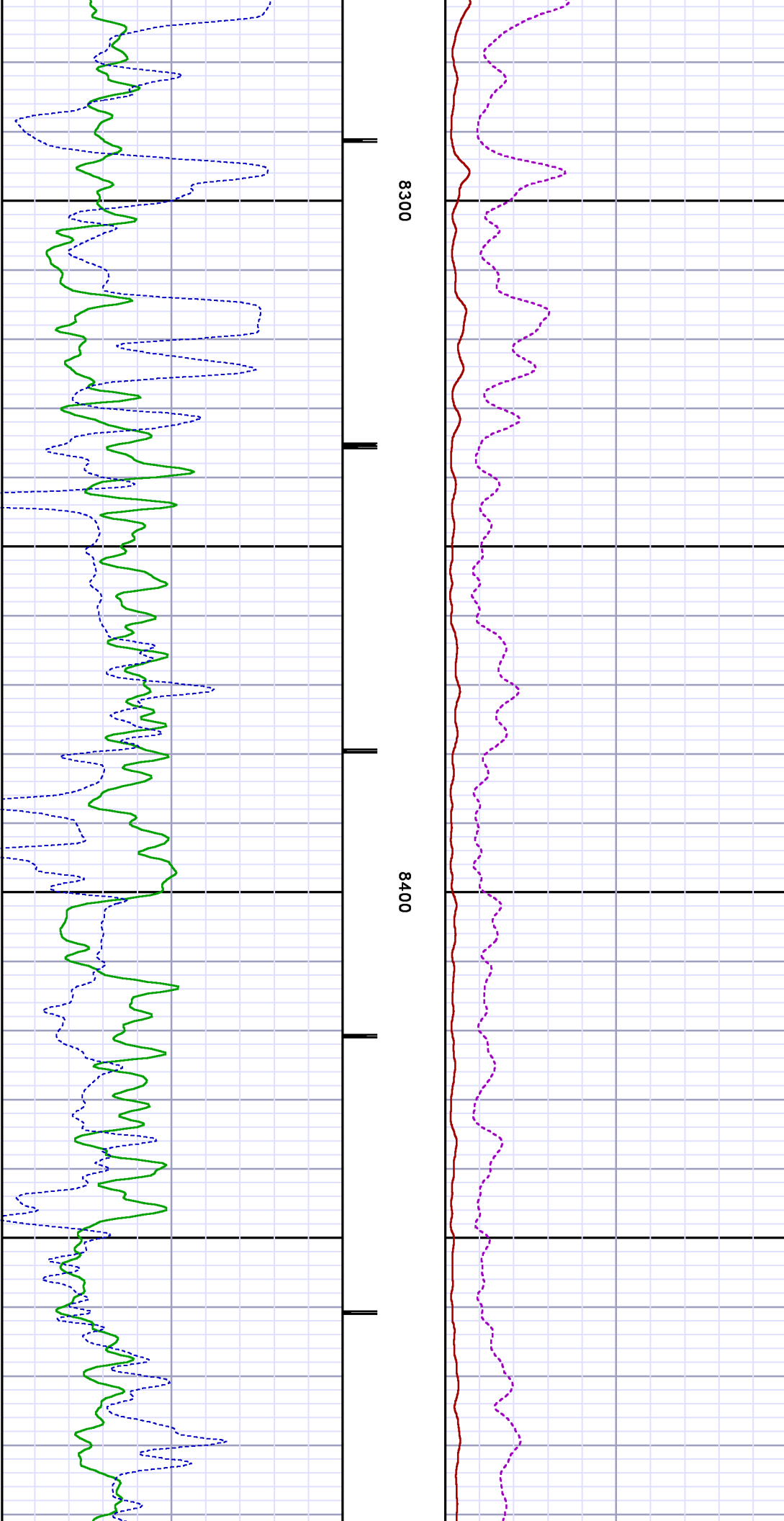
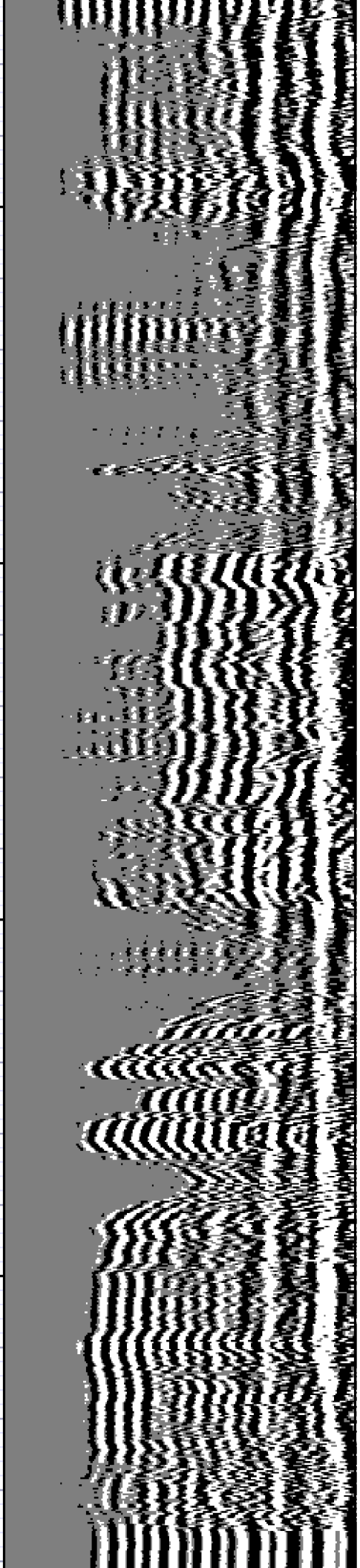
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	8189.905	8516.000
RAL	Amp Gate Start Near	195.000	usec	8189.905	8516.000
RAL	Amp Gate Start Radial	195.000	usec	8189.905	8516.000
RAL	Amp Gate Width Far	25.000	usec	8189.905	8516.000
RAL	Amp Gate Width Near	25.000	usec	8189.905	8516.000
RAL	Amp Gate Width Radial	25.000	usec	8189.905	8516.000
RAL	casing od	4.500	inches	8189.905	8516.000
RAL	casing wt	11.600	lbm/ft	8189.905	8516.000
RAL	FB Start Far	291.900	usec	8189.905	8516.000
RAL	FB Start Near	180.000	usec	8189.905	8516.000
RAL	FB Start Radial	180.000	usec	8189.905	8516.000
RAL	FB Thresh Far	10.000	mv	8189.905	8516.000
RAL	FB Thresh Near	4.000	mv	8189.905	8516.000
RAL	FB Thresh Radial	4.000	mv	8189.905	8516.000
RAL	Fluid Travel Time	200.000	usec/ft	8189.905	8515.624

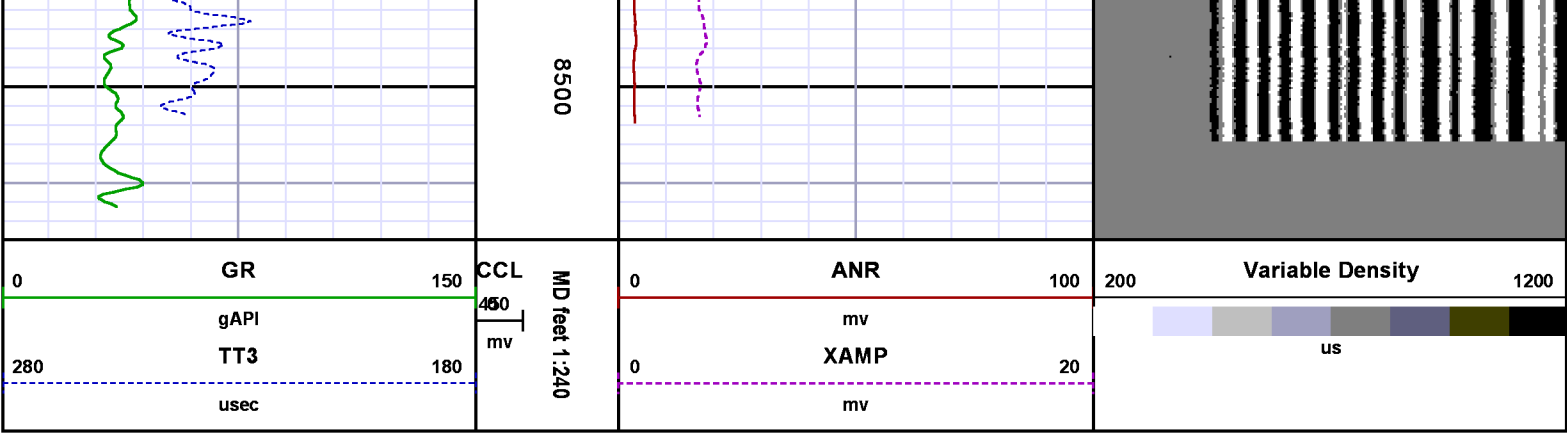
DEPTH OFFSETS
(for Acquired Curves)

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 : FEDERAL PA 421-27
File Name : d:\welldata\wpx energy\pa 421-27\421ral\repeat.xtf
Mode : PlotMgr 5.4.504
Interval : 8190.00 - 8516.00 feet UP
Created : 8/21/2013 9:08:22 AM







CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP\106A20_shp.cal

SHOP CALIBRATION SUMMARY								
DATE/TIME PERFORMED:		Tue Aug 20 08:37:18 2013		TOOL SERIES:		1426XA		ASSET:
						106		SEQ: A20
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	166	25	-0.319	100.00	0.21
3 Ft. Receiver	218	216	30	152	25	-0.053	100.00	0.20
5 Ft. Receiver	326	324	30	263	25	0.384	150.00	0.23
Radial #1	217	216	30	143	25	0.622	100.00	0.20
Radial #2	217	216	30	143	25	-0.009	100.00	0.20
Radial #3	218	216	30	143	25	-0.339	100.00	0.20
Radial #4	218	216	30	143	25	0.168	100.00	0.20
Radial #5	218	216	30	143	25	-0.394	100.00	0.20
Radial #6	218	216	30	143	25	-0.259	100.00	0.20
Radial #7	216	216	30	143	25	-0.030	100.00	0.20
Radial #8	218	216	30	143	25	-0.287	100.00	0.20

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\106A20_fld.cal

WELLSITE CALIBRATION SUMMARY															
DATE/TIME PERFORMED:		Tue Aug 20 08:38:21 2013		TOOL SERIES:		1426XA	ASSET:		106	SEQ:		A20			
Tool Delay [usec]		-58.00		Casing OD in		5.50		Casing Wt lbm/ft		15.50		Casing ID in		4.95	
RECEIVER		Zero Gate Start [usec]		Zero Gate Width [usec]		Zero Amp. [mV]		Full Amp. [mV]		Wellsite Factor		Amp. Ref [mV]			
CAL Pulse		166		25		-0.173		0.000		0.96		100.000			
3 Ft. Receiver		216		30		-1.151									
5 Ft. Receiver		332		30		-1.119									
Radial #1		216		30		-1.851									
Radial #2		216		30		-1.436									
Radial #3		216		30		-1.402									
Radial #4		216		30		-1.464									
Radial #5		216		30		-1.069									
Radial #6		216		30		-1.360									
Radial #7		216		30		-1.062									
Radial #8		216		30		-1.176									

GAMMA RAY

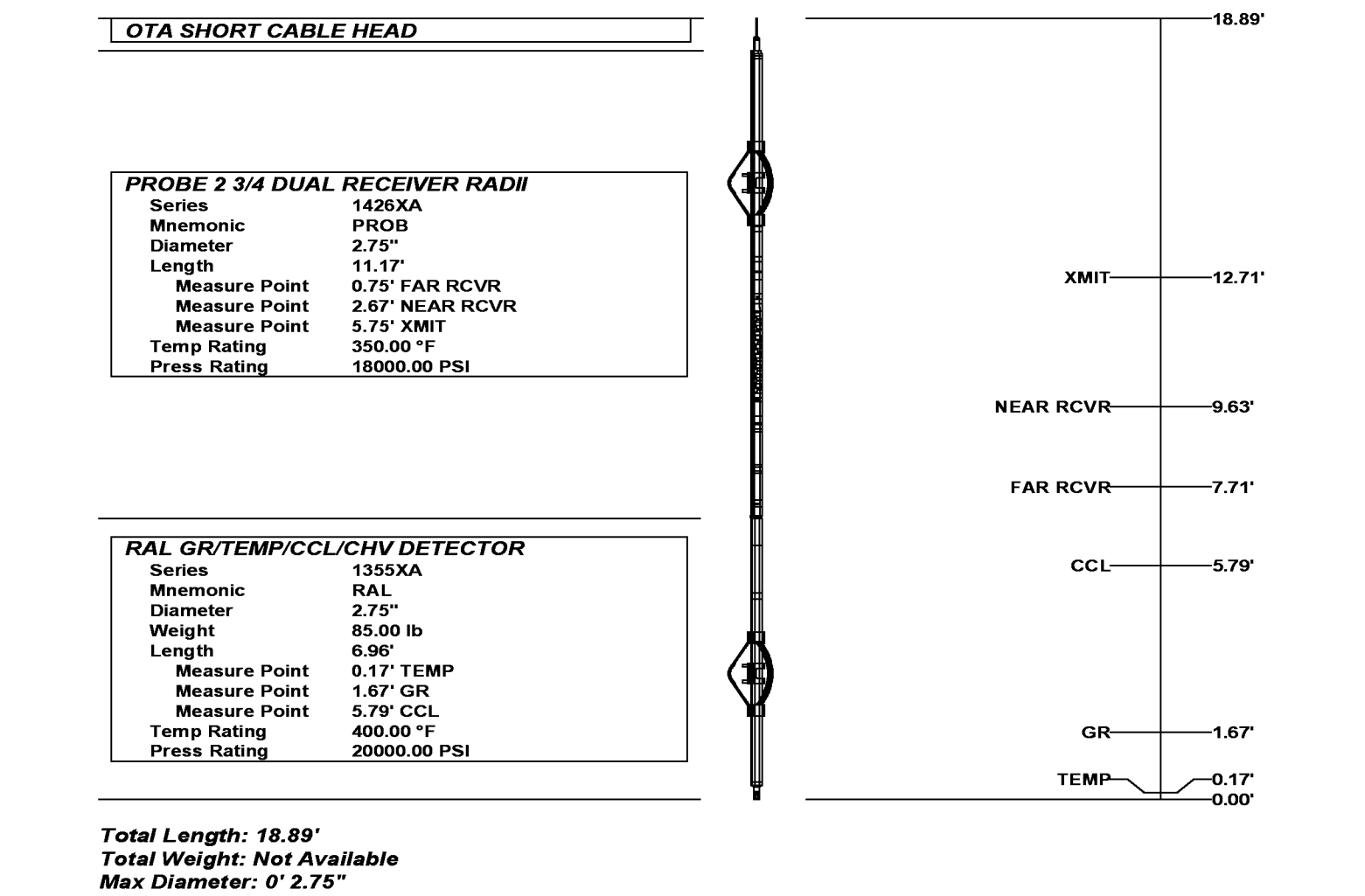
Calibration File: C:\case\calver\GRV209J3.cal

CALIBRATION SUMMARY													
DATE/TIME PERFORMED:		Tue Jul 30 08:43:58 2013		TOOL SERIES:		1355XA	ASSET:		209	SEQ:		J3	
Calibrator #		Background [cps]		Calibrator On [cps]		Multiplicative		Background [api]		Calibrator On [api]		Differential [api]	
SHOP JIG		113.02		548.53		0.425		48.01		233.01		185.00	

Verification File: C:\case\calver\GRV209J3.VP

PRIMARY LOG VERIFICATION													
DATE/TIME PERFORMED:		Tue Jul 30 08:46:06 2013		TOOL SERIES:		1355XA	ASSET:		209	SEQ:		J3	
Calibrator #		Background [cps]		Calibrator On [cps]		Multiplicative		Background [api]		Calibrator On [api]		Differential [api]	
SHOP JIG		112.22		543.20		0.425		47.67		230.74		183.07	

TOOL DIAGRAM



<div><div><div><div></div><div>BAKER HUGHES</div></div><div>Baker Atlas</div><div>CASE</div></div></div>	Company		WPX ENERGY		File No:
	Well		FEDERAL PA 421-27		CH075708
	Field		PARACHUTE		API No:
	County	GARFIELD	State	COLORADO	05045218600000
Location			Elevations		27 6S 95W DOE 1-W-27 PAD NABORS 573
SHL: 2113' FNL X 1307' FWL			KB	5866 ft	
BHL: 902' FNL X 1903' FWL (NENW)			DF		
			GL	5840 ft	
SEC	27	TWP	6S	RGE	