



# RADIAL ANALYSIS BOND LOG

## Baker Atlas

File No: GH073168	Company Well	WPX ENERGY GOLDSBOROUGH PA 522-11
API No: 06046218240000	Field County	PARACHUTE GARFIELD
	State	COLORADO
PA 22-11 PAD 11 7S 9SW CYCLONE 17	Location SHL: 2413' FNL, 2067' FWL BHL: 2366' FNL, 2109' FWL SEC 11 TWP 7S RGE 9SW	Other Services RPM
Permanent Datum Log Measured From Drill Measured From	OL KB KELLY BUSHING	Elevations KB 6296 ft DF GL 6274 ft

Date	13/JUN/13	
Run	ONE	
Service Order	624426	
Depth Driller	7664 ft	
Depth Logger	7648 ft	
Bottom Logged Interval	7638 ft	
Top Logged Interval	26 ft	
Time Started	2100	
Time Finished	0000	
Operator Rig Time	3 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	69 ft	
Logged Cement Top	NA	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	NA	
Nominal Logging Speed	45 fpm	
Maximum Recorded Temperature	221 degF	
Reference Log	NONE	
Reference Log Date	NA	
Equipment No.	4271	GRANDUCT
Recorded By	RENEAU	
Witnessed By	DUSTIN WELSH	

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

Borehole Record		
Bit Size	From	To
13.5 in	0 ft	880 ft
8.75 in	880 ft	7664 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in	32 lbm/ft		0 ft	880 ft
4.5 in	11.6 lbm/ft	I-80	0 ft	7664 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 12 feet.
BHT = 221°F
SJ = 4412'-4436'

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

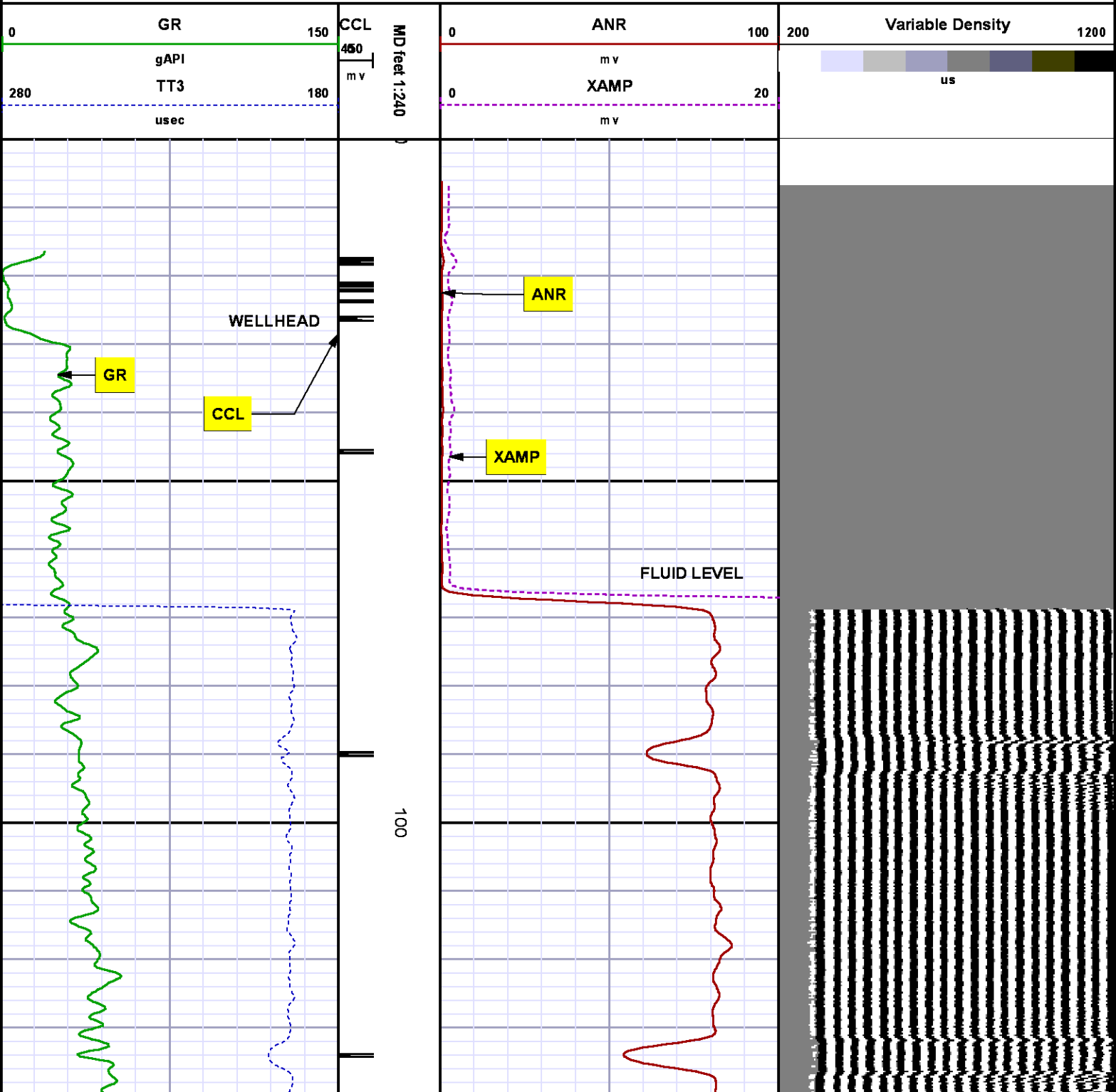
PRIMARY PRESENTATION  
0 PSI

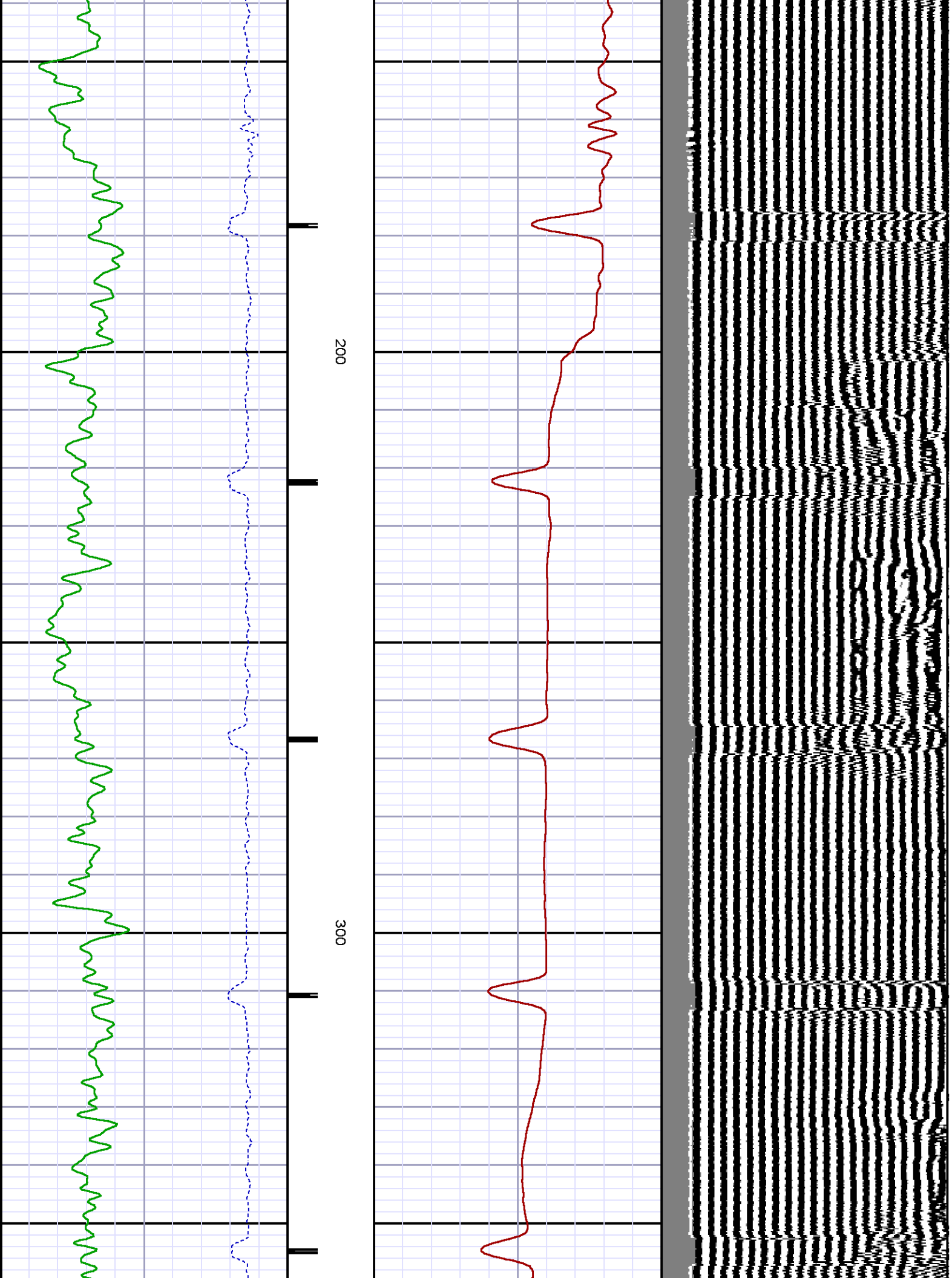
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	21.481	7669.000
RAL	Amp Gate Start Near	195.000	usec	21.481	7669.000
RAL	Amp Gate Start Radial	195.000	usec	21.481	7669.000
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RAL	casing od	4.500	inches	21.481	7669.000
RAL	casing wt	11.600	lbm/ft	21.481	7669.000
RAL	FB Start Far	291.900	usec	21.481	7669.000
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RAL	FB Start Radial	180.000	usec	21.481	7669.000
RAL	FB Thresh Far	10.000	mv	21.481	7669.000
RAL	FB Thresh Near	4.000	mv	21.481	7669.000
RAL	FB Thresh Radial	4.000	mv	21.481	7669.000
RAL	Fluid Travel Time	200.000	usec/ft	21.481	7668.606

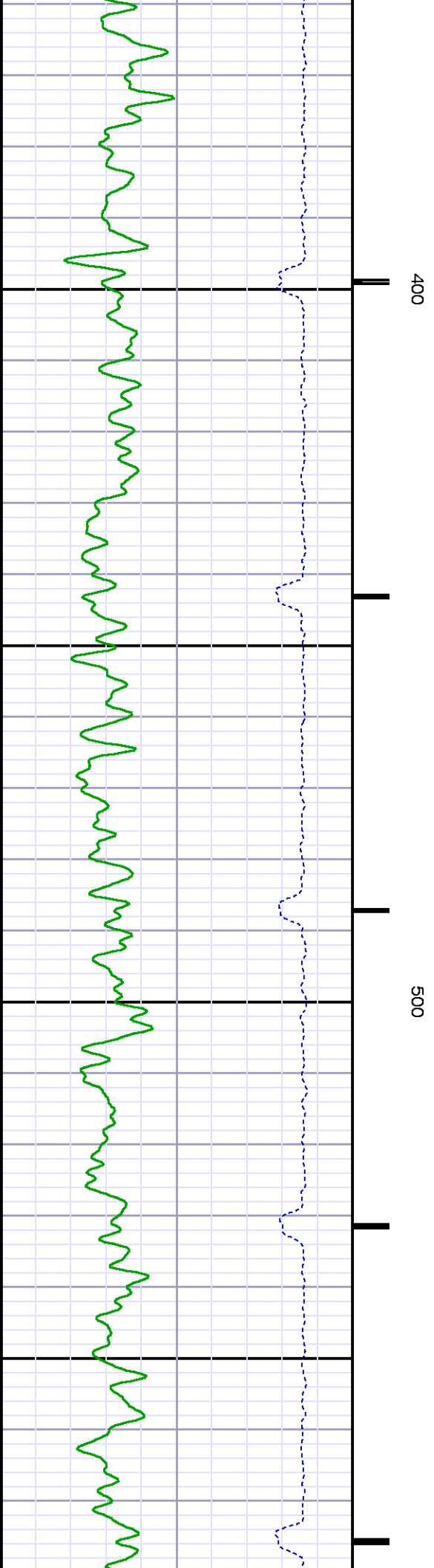
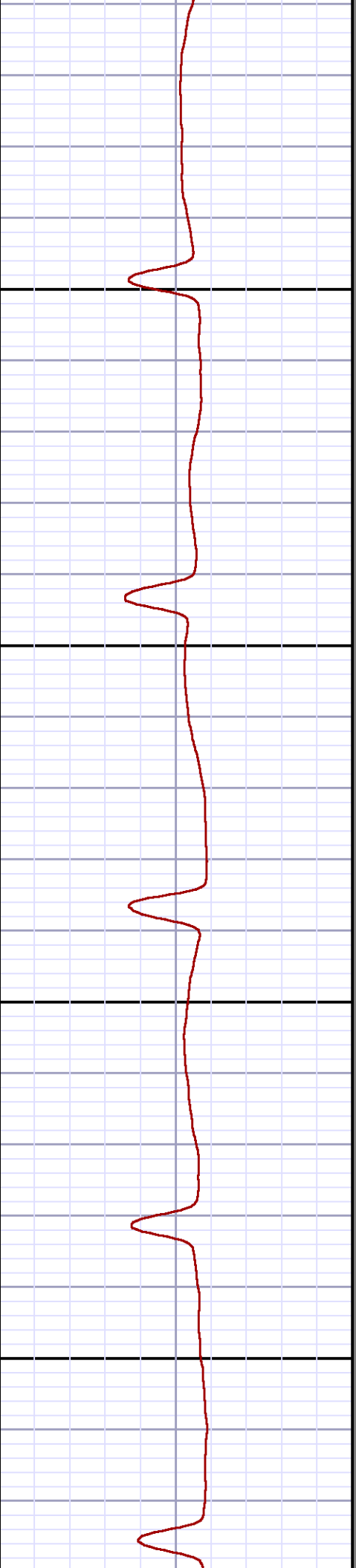
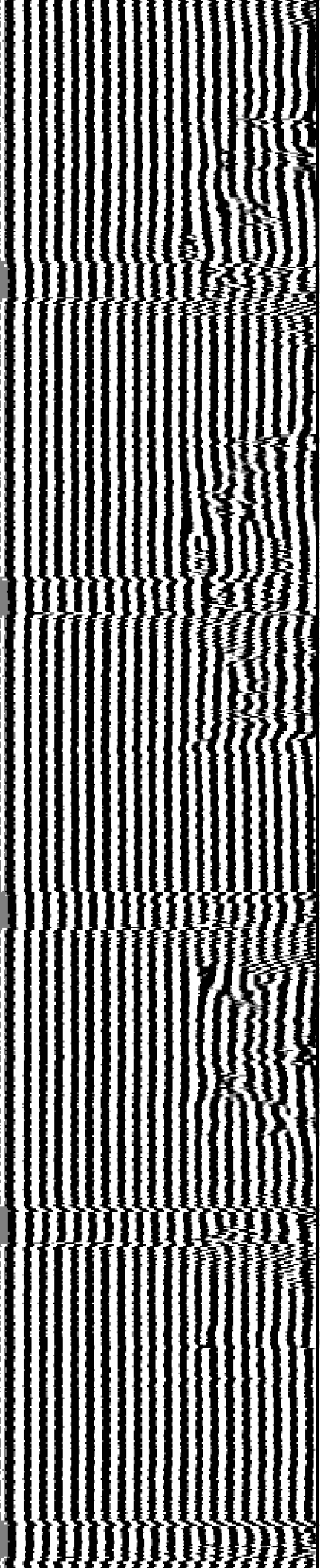
DEPTH OFFSETS (for Acquired Curves)							
SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-11.000	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	CHV	FPR2
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP

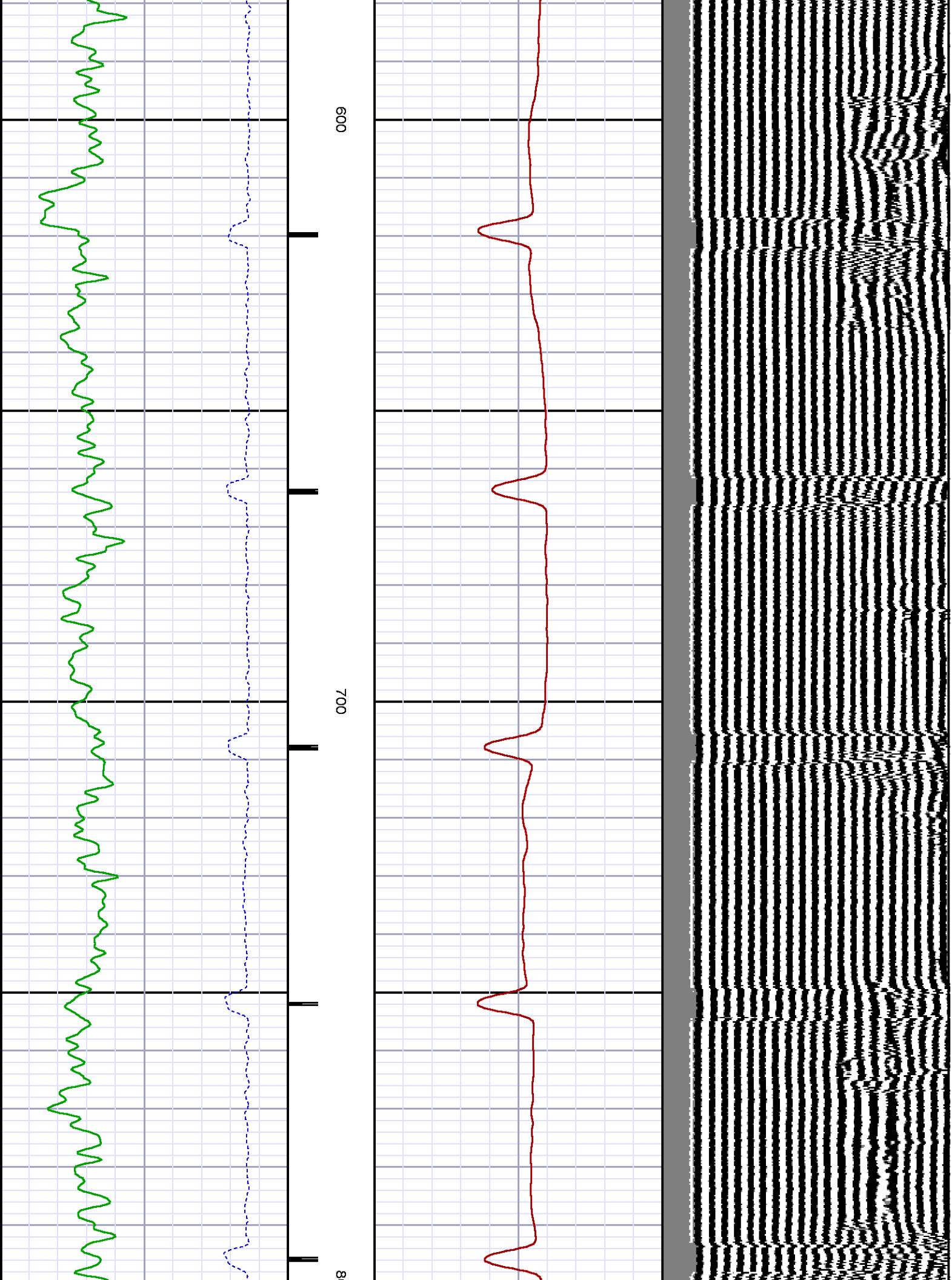
1426XA	-10.040	AFAR	SIG	TT5
1355XA	-5.620	CCL		
1355XA	-1.500	GR		
1355XA	0.000	TEMP		

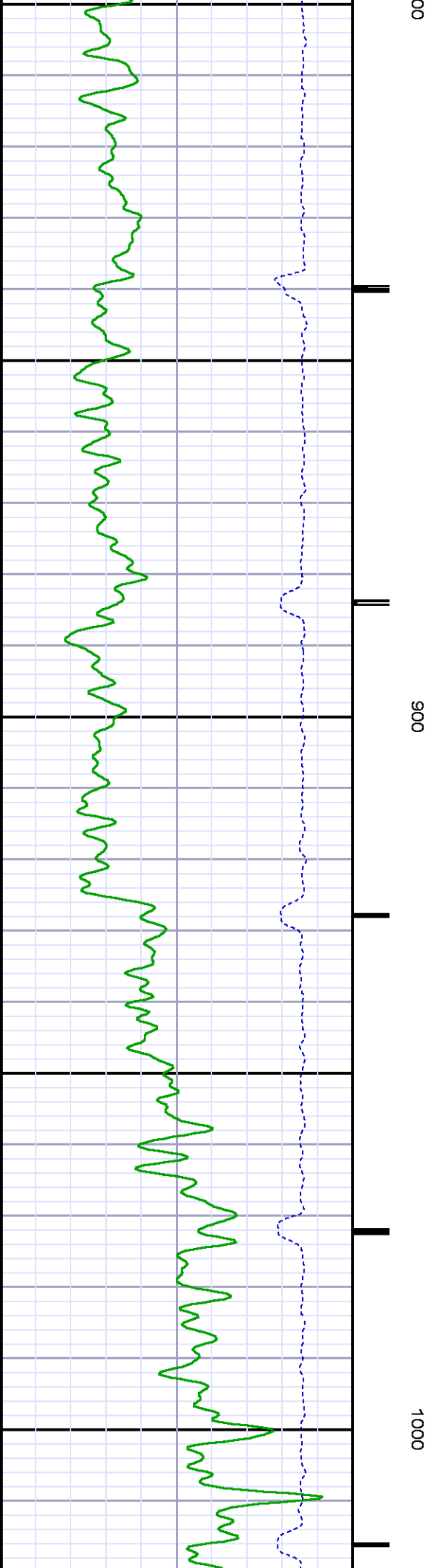
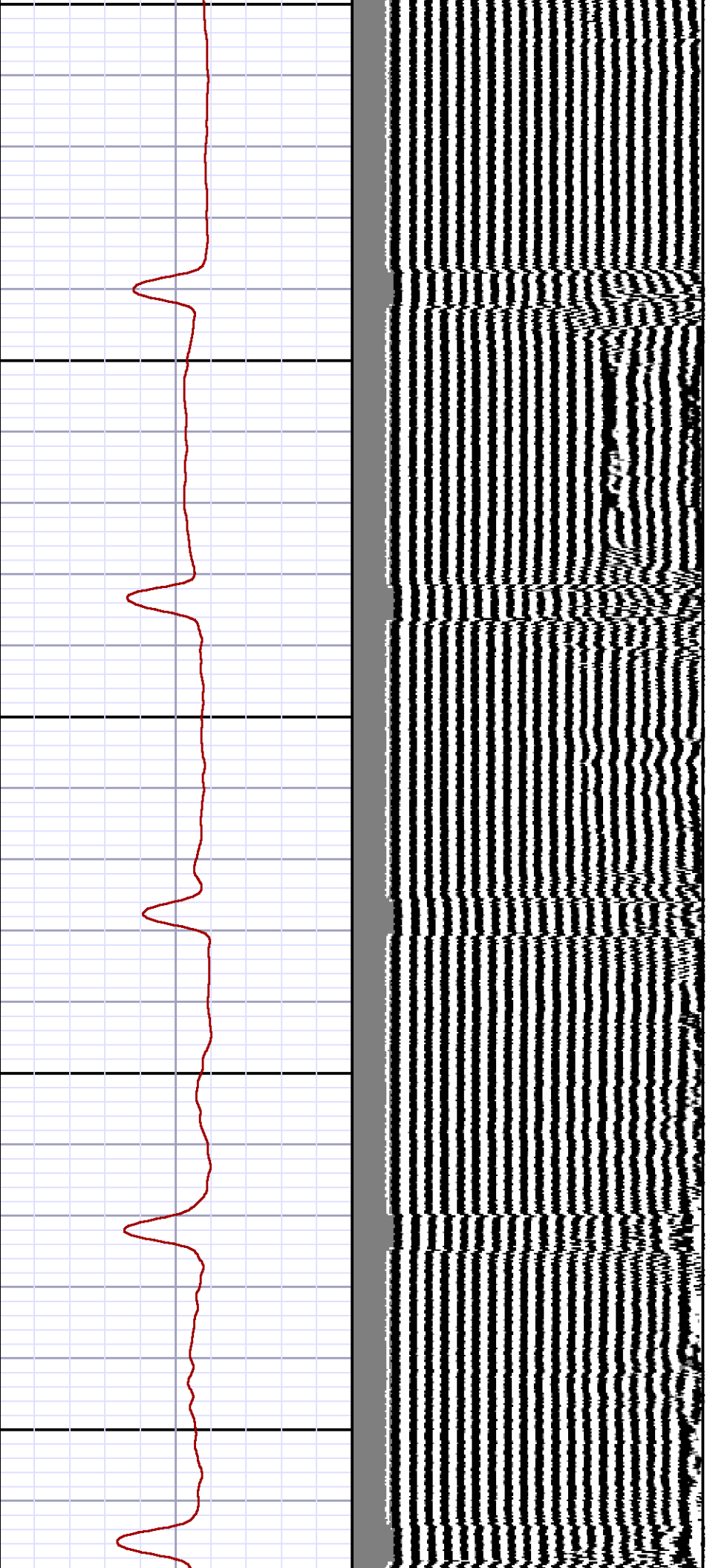
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Plotted by : PlotMgr, v5.4.504				
Company : WPX ENERGY				
Well : GOLDSBOROUGH PA 522-11				
File Name : d:\well\data\wpx energy\pa 522-11\ral522\main.xtf				
Mode : PlotMgr 5.4.504				
Interval : 0.00 - 7654.00 feet UP				
Created : 6/13/2013 9:38:13 PM				



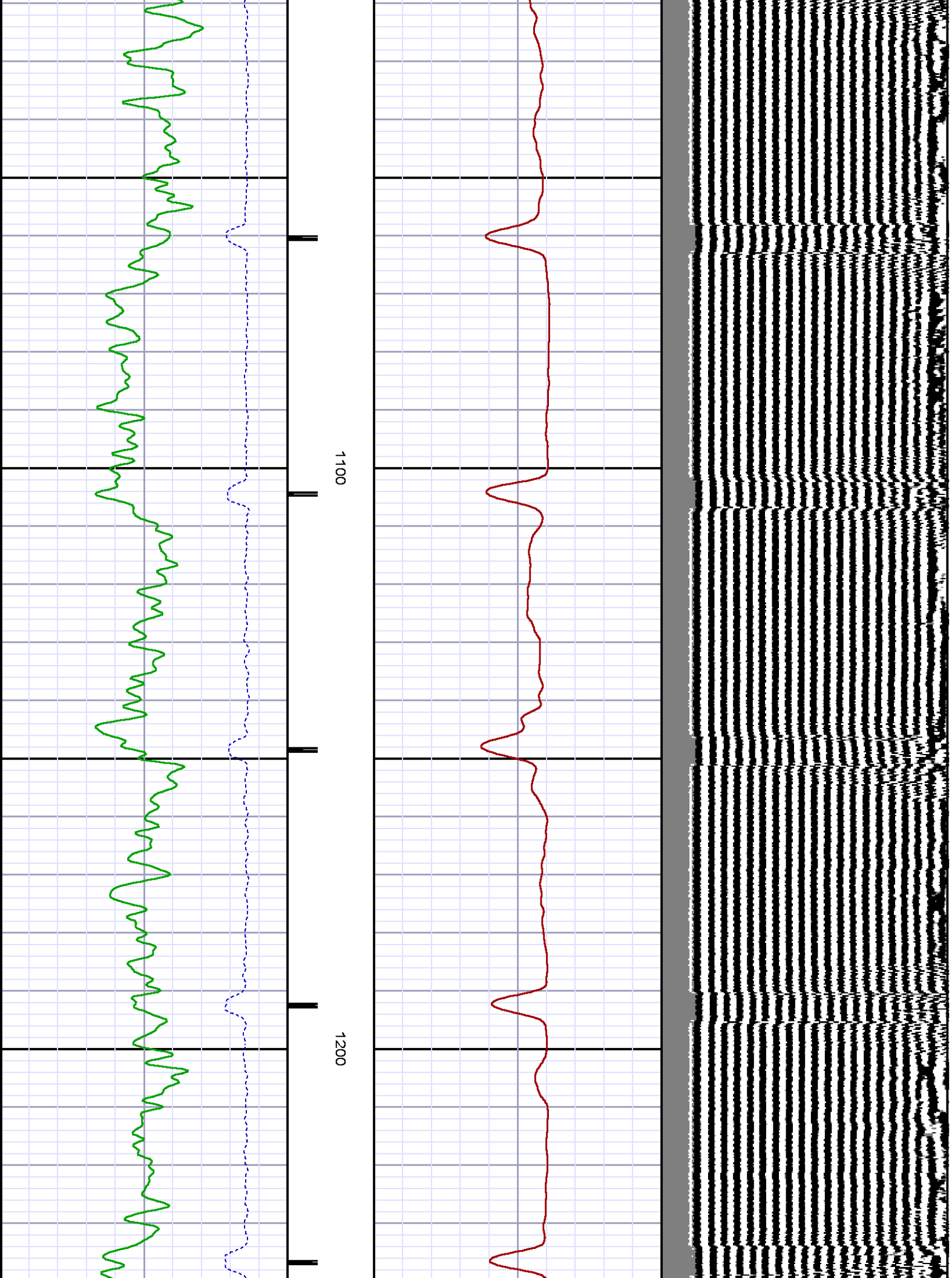




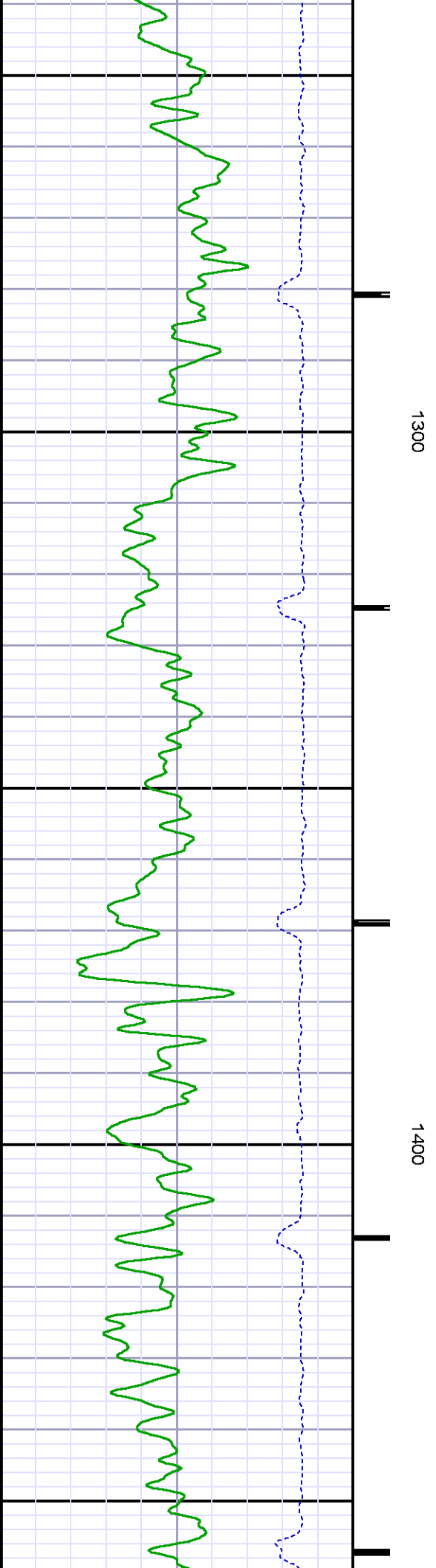
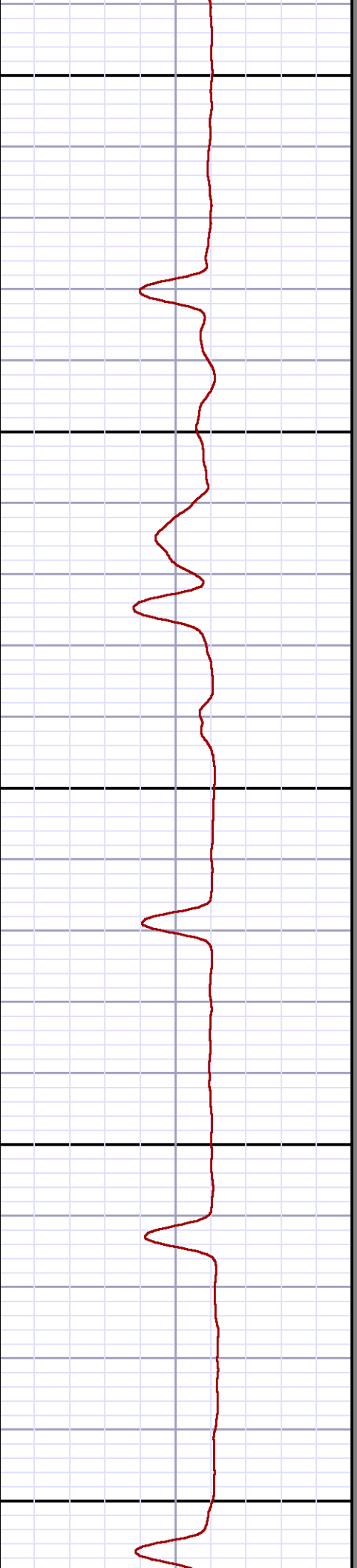
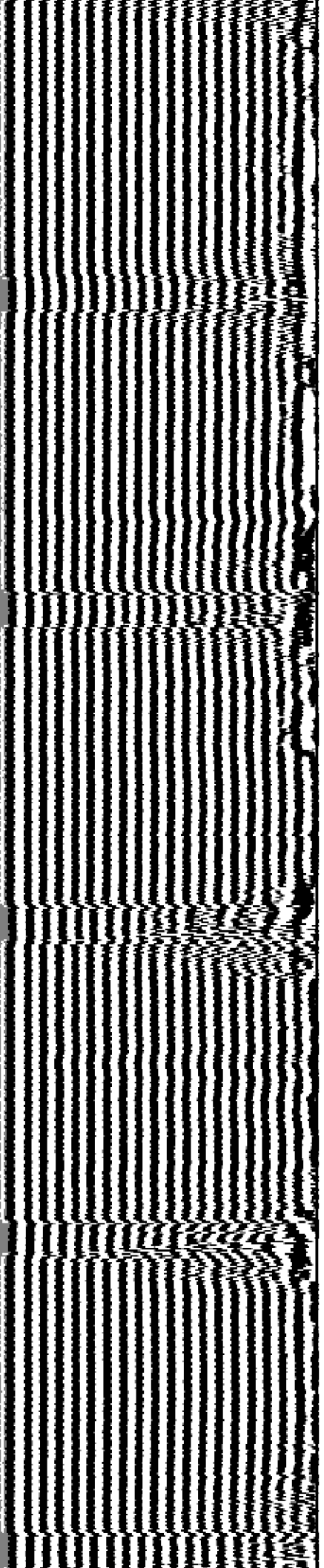


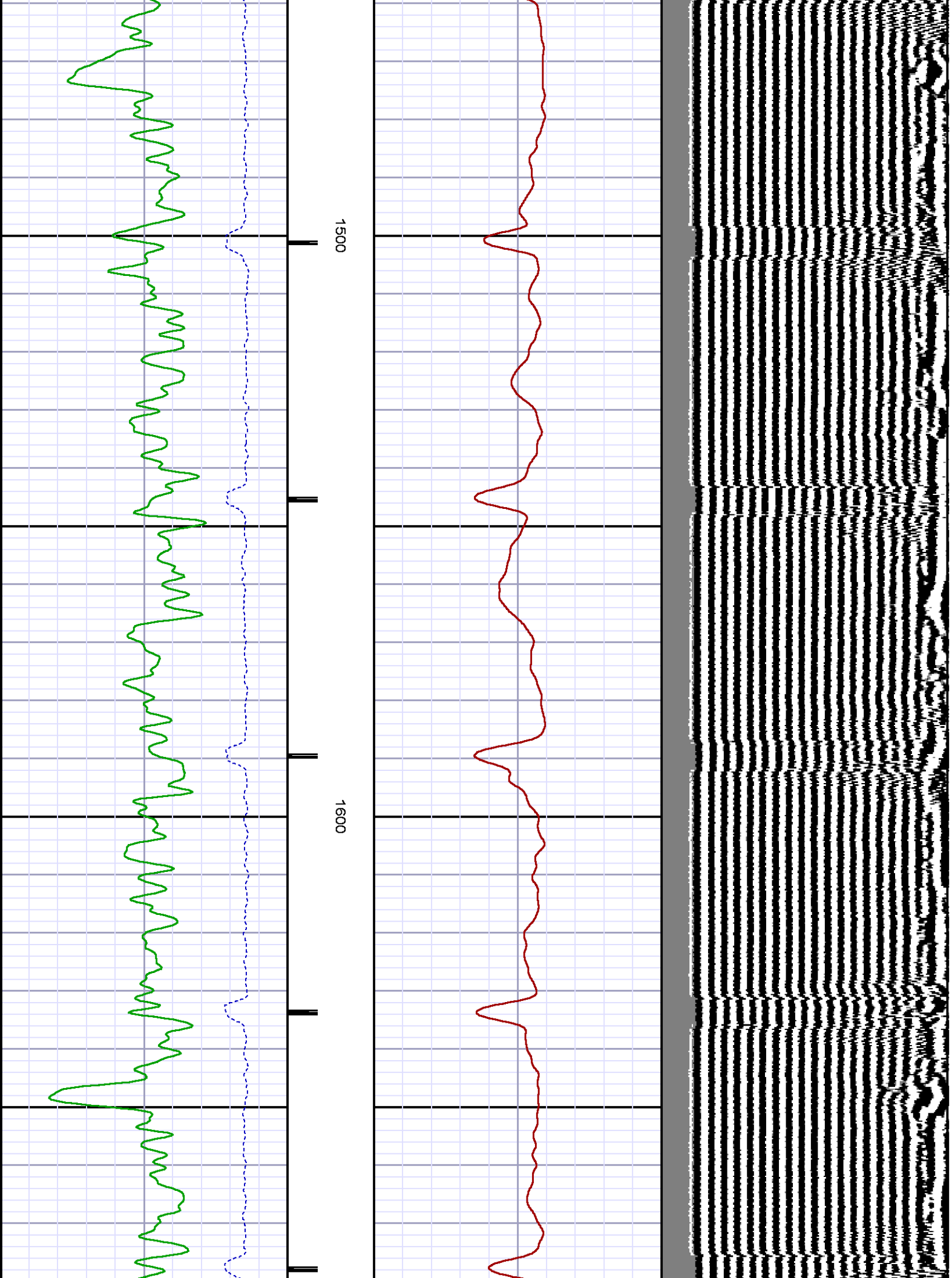


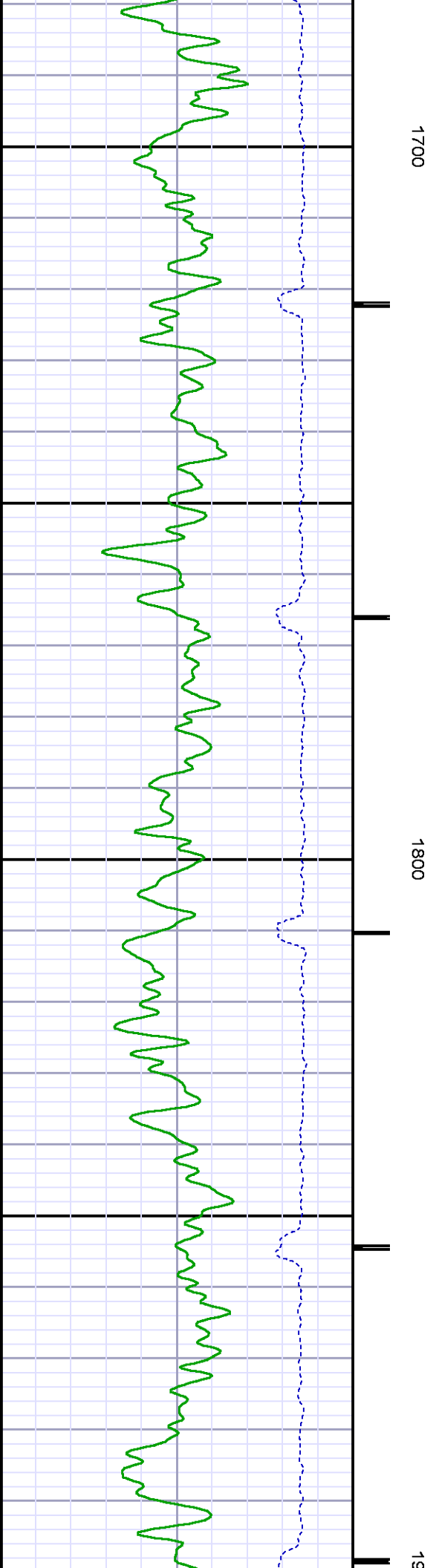
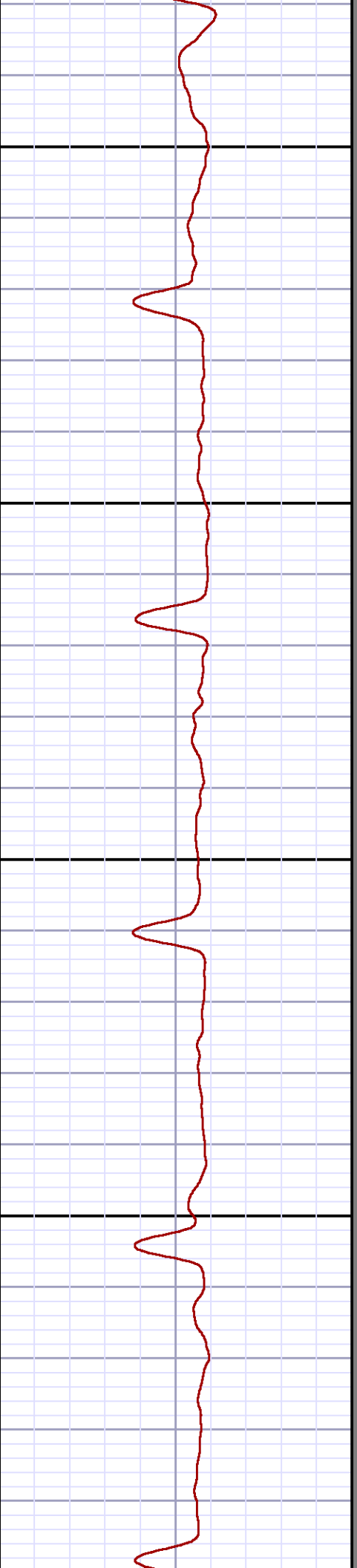
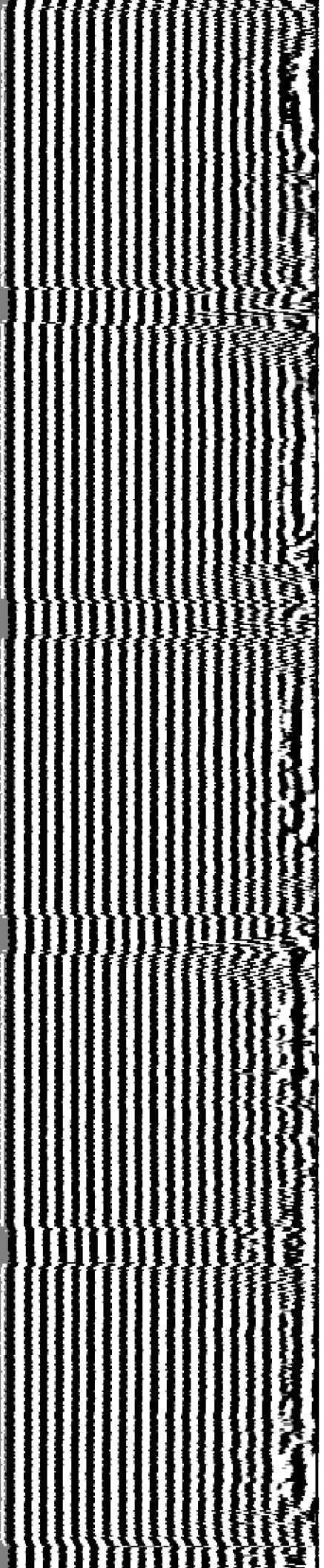


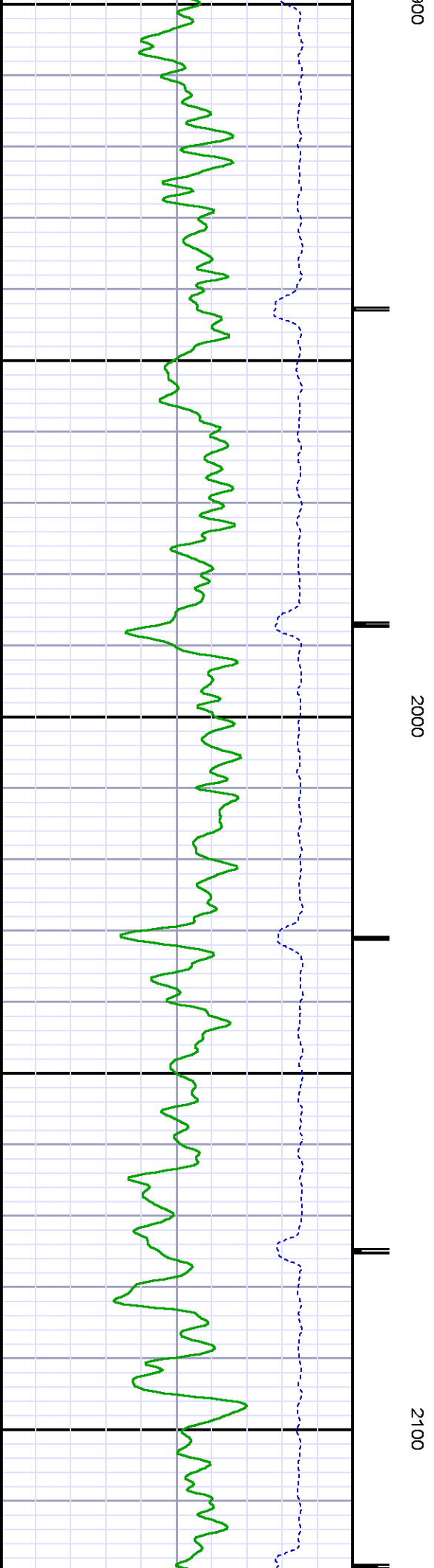
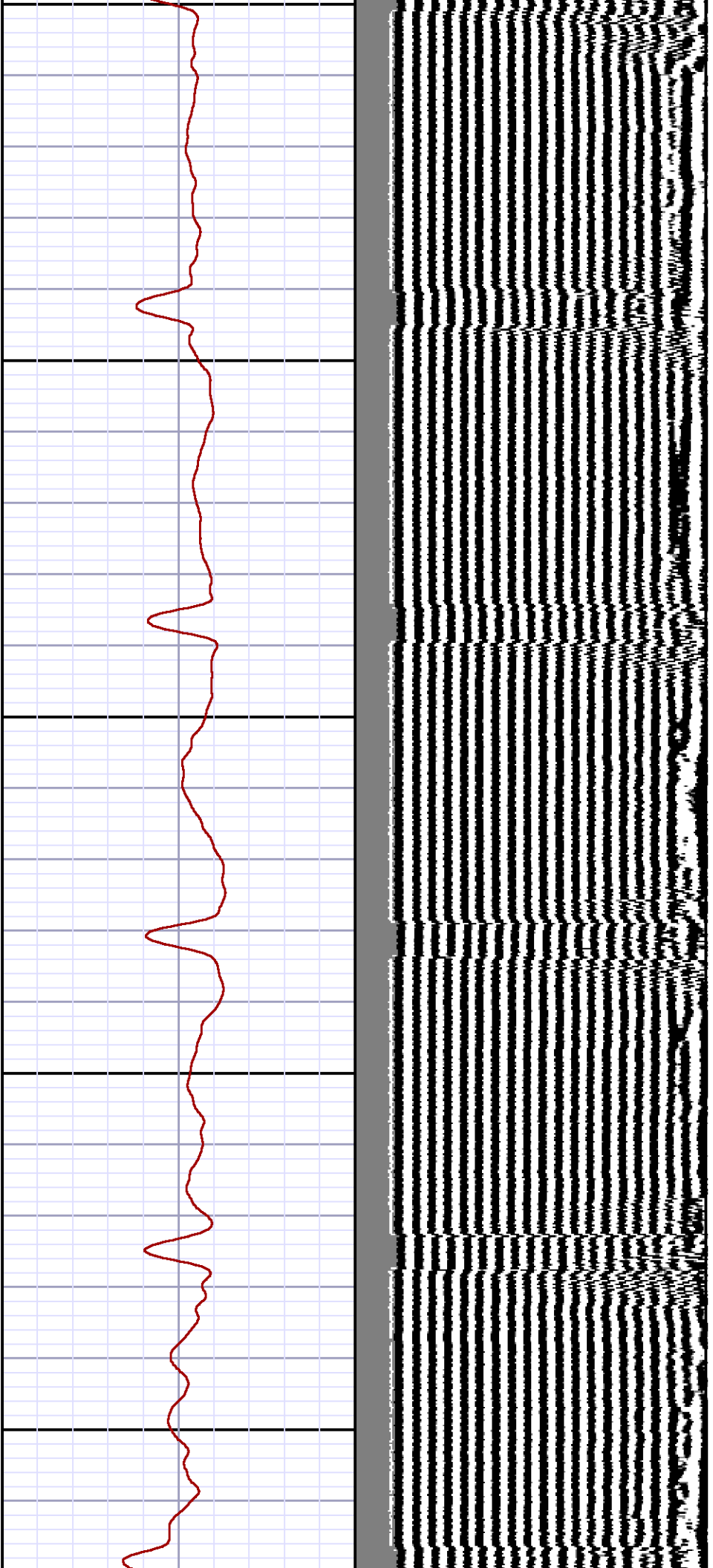


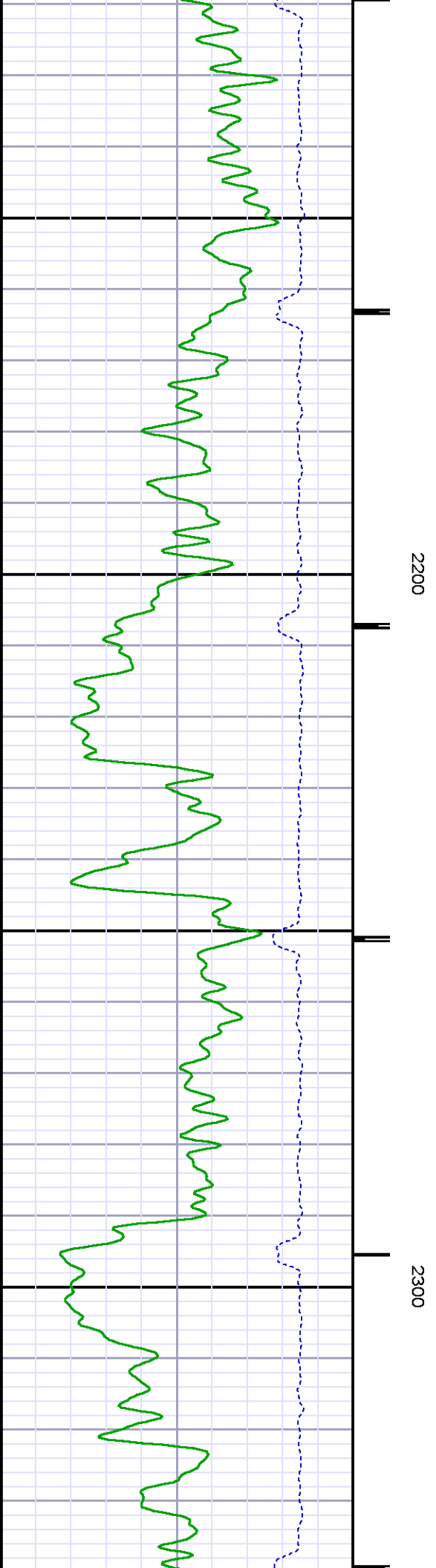
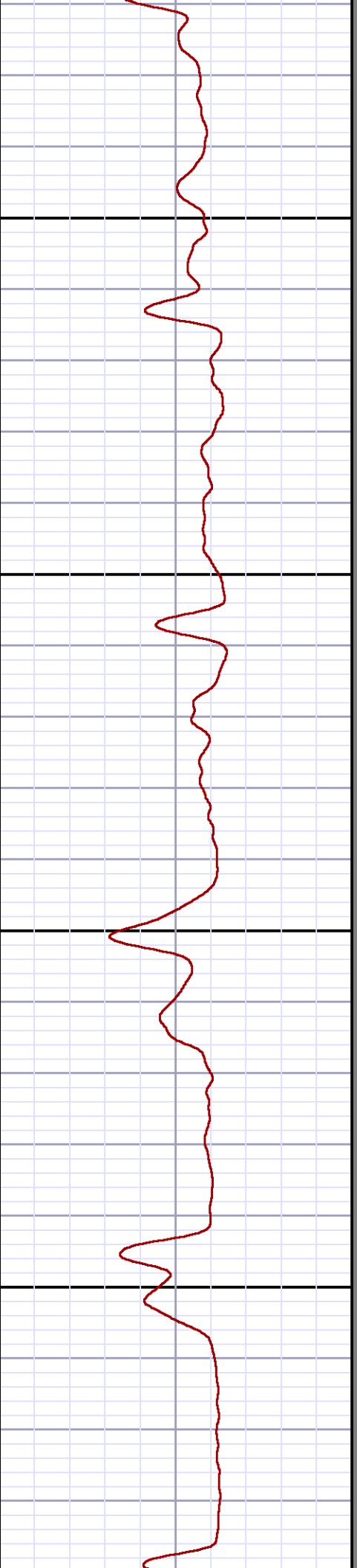
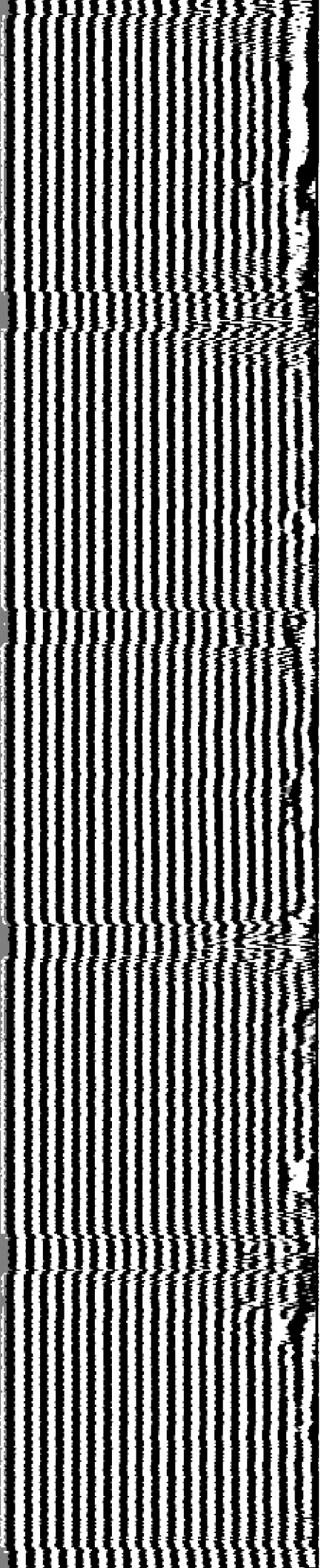




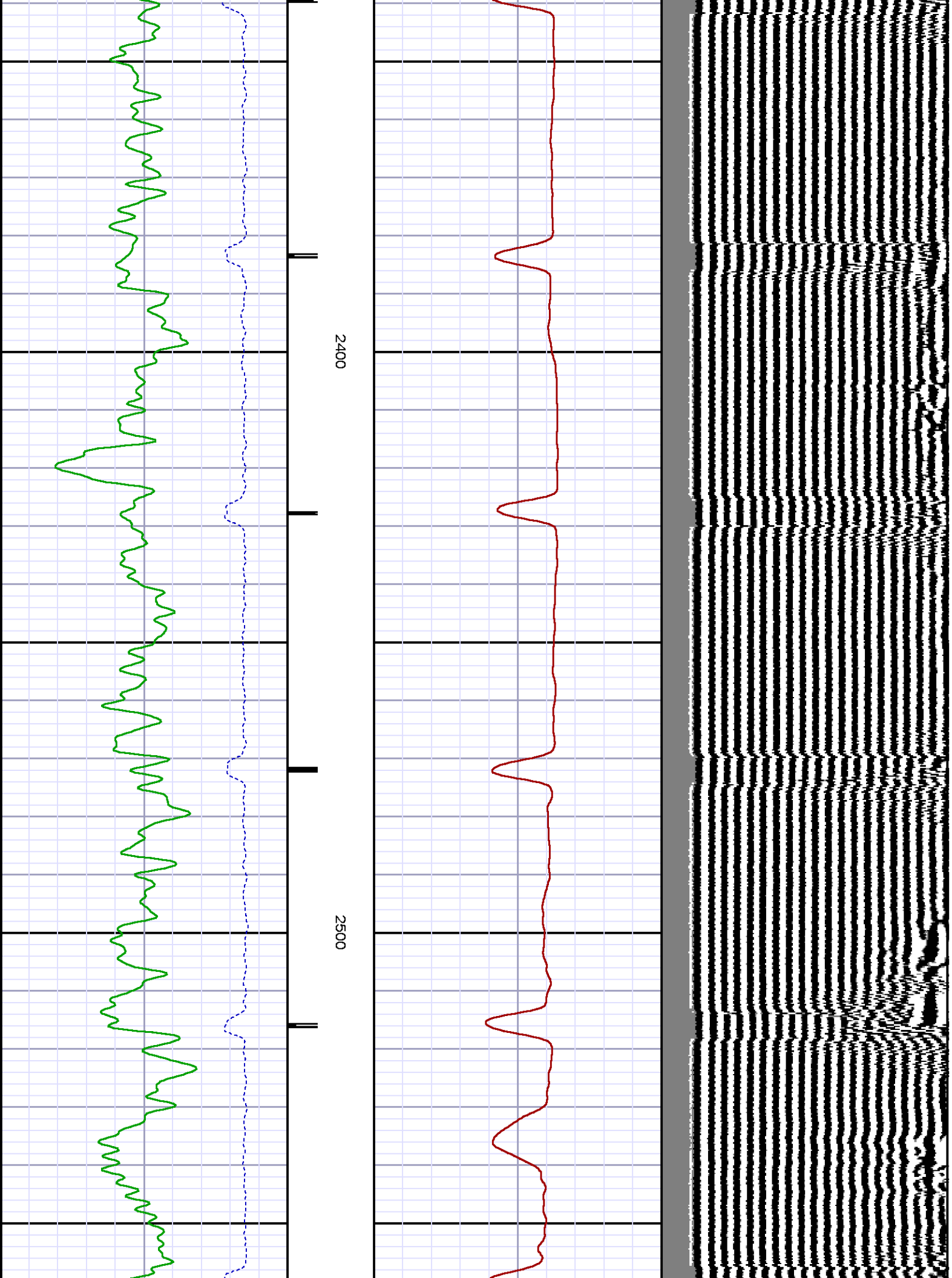


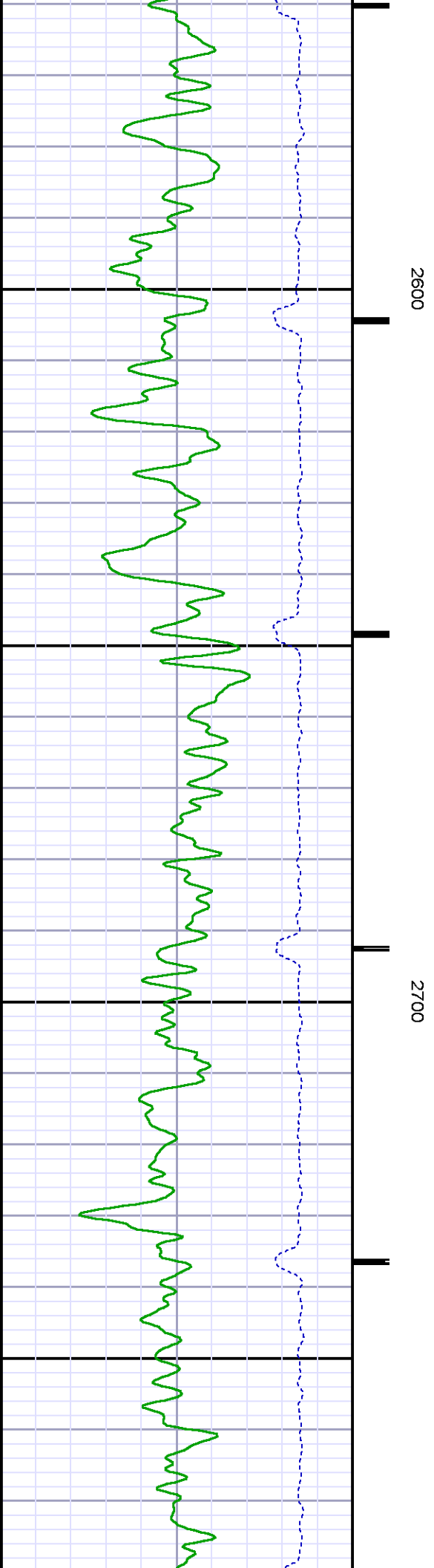
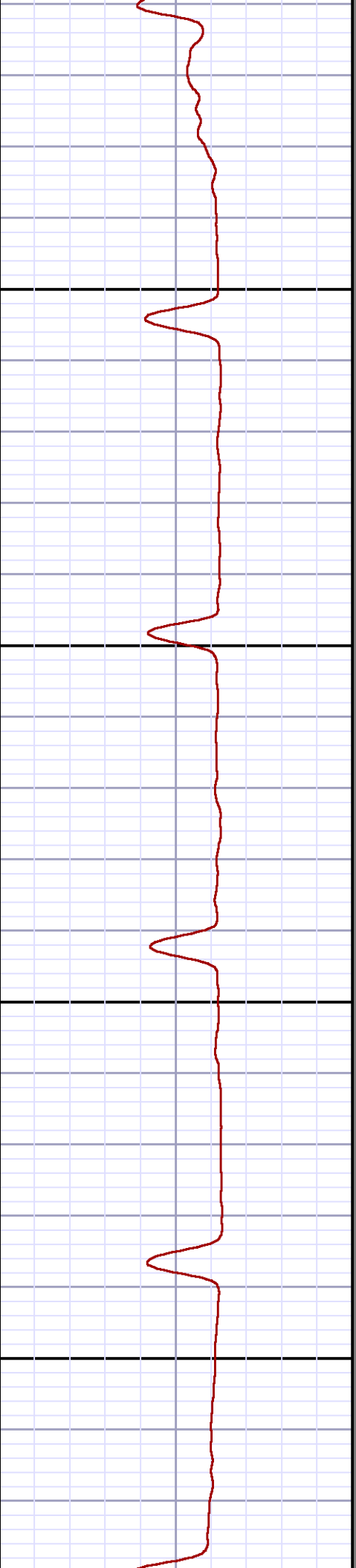
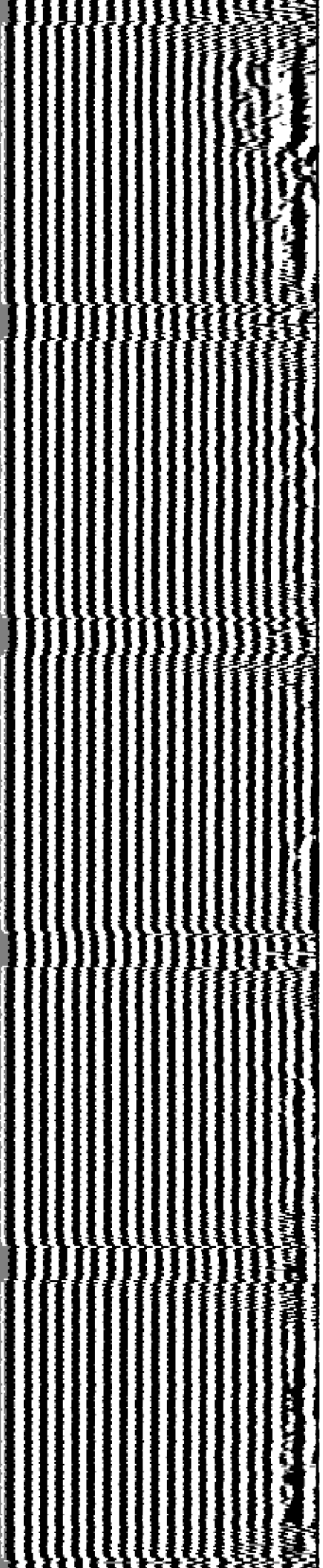




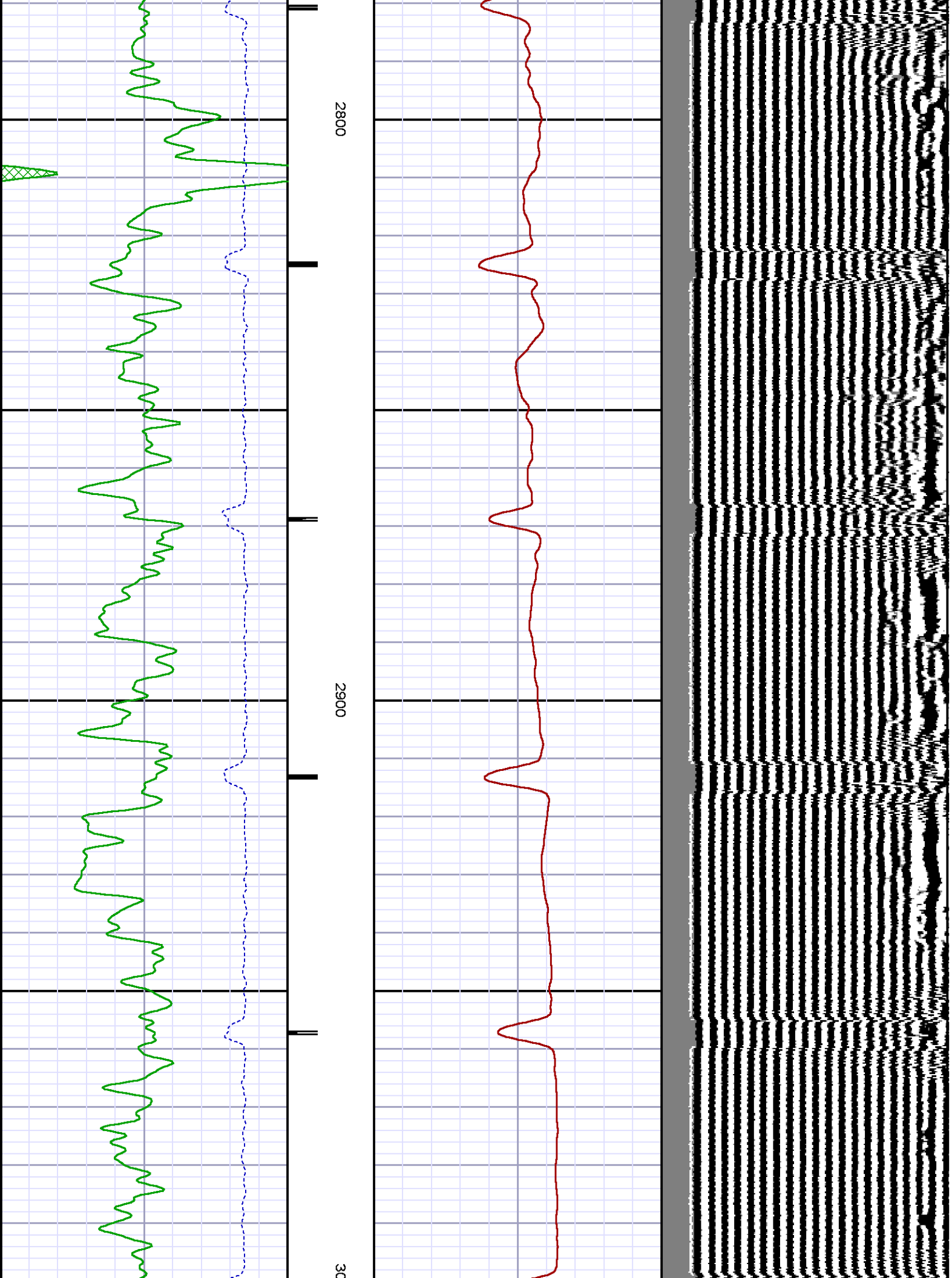


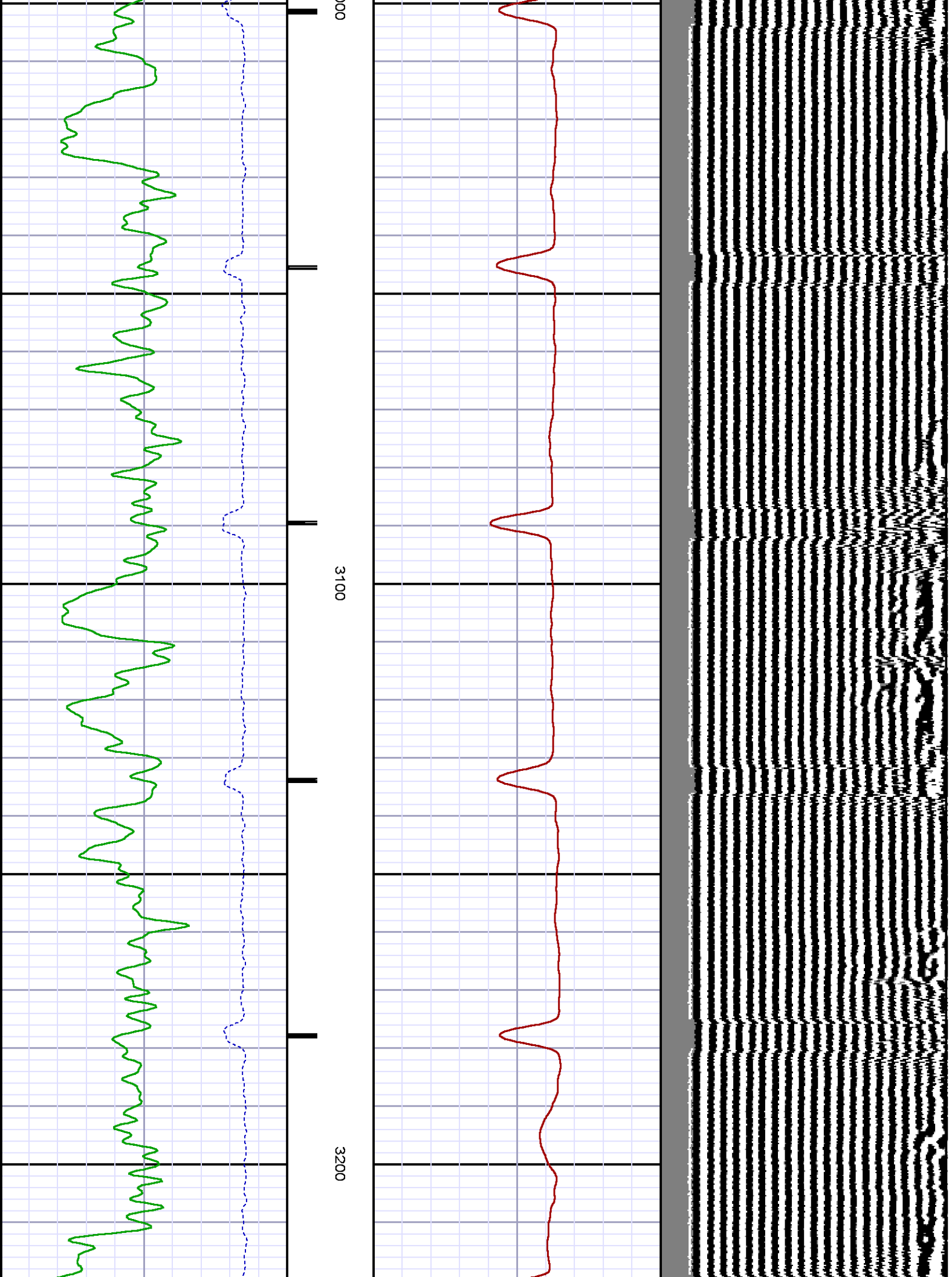


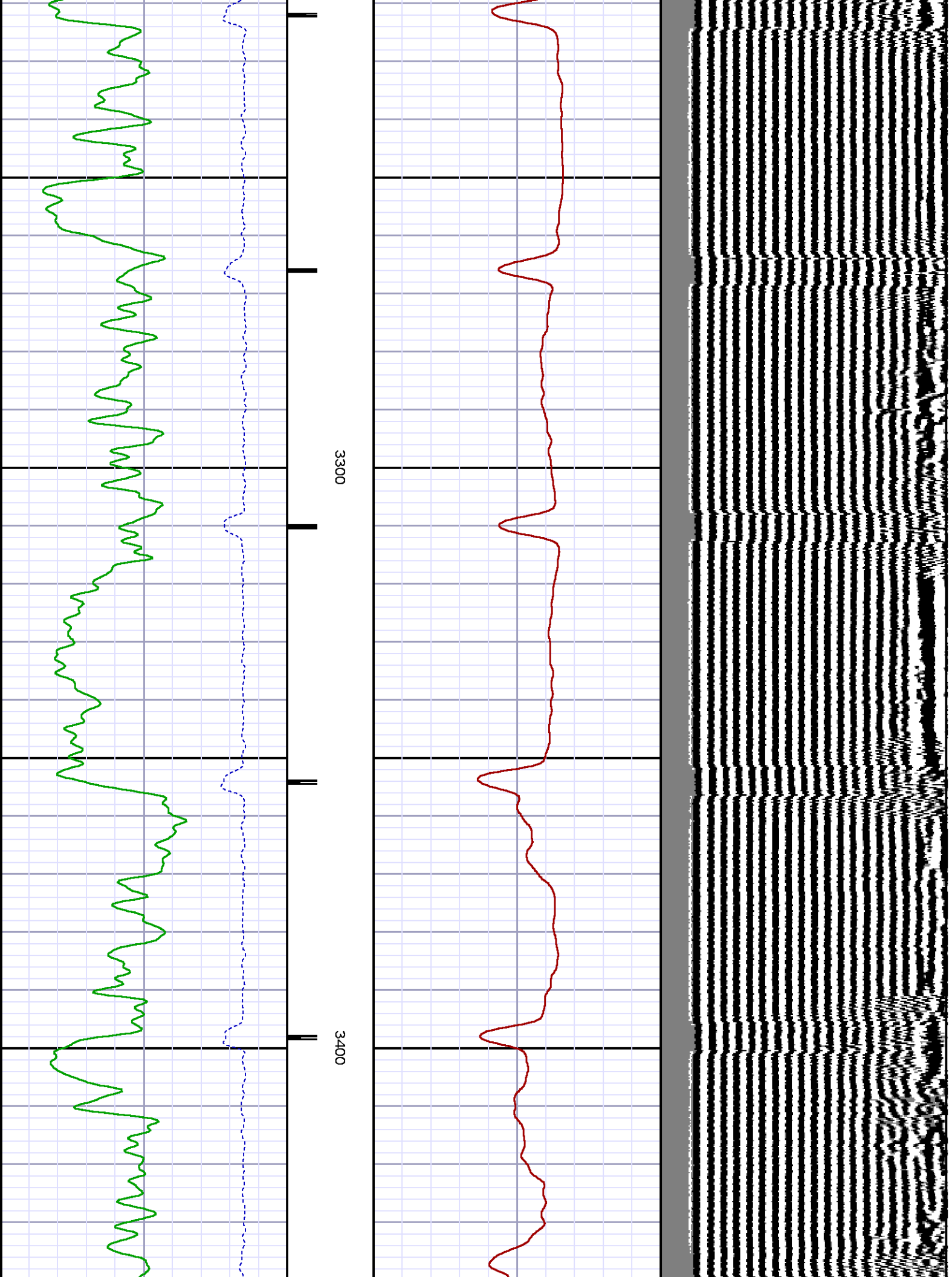


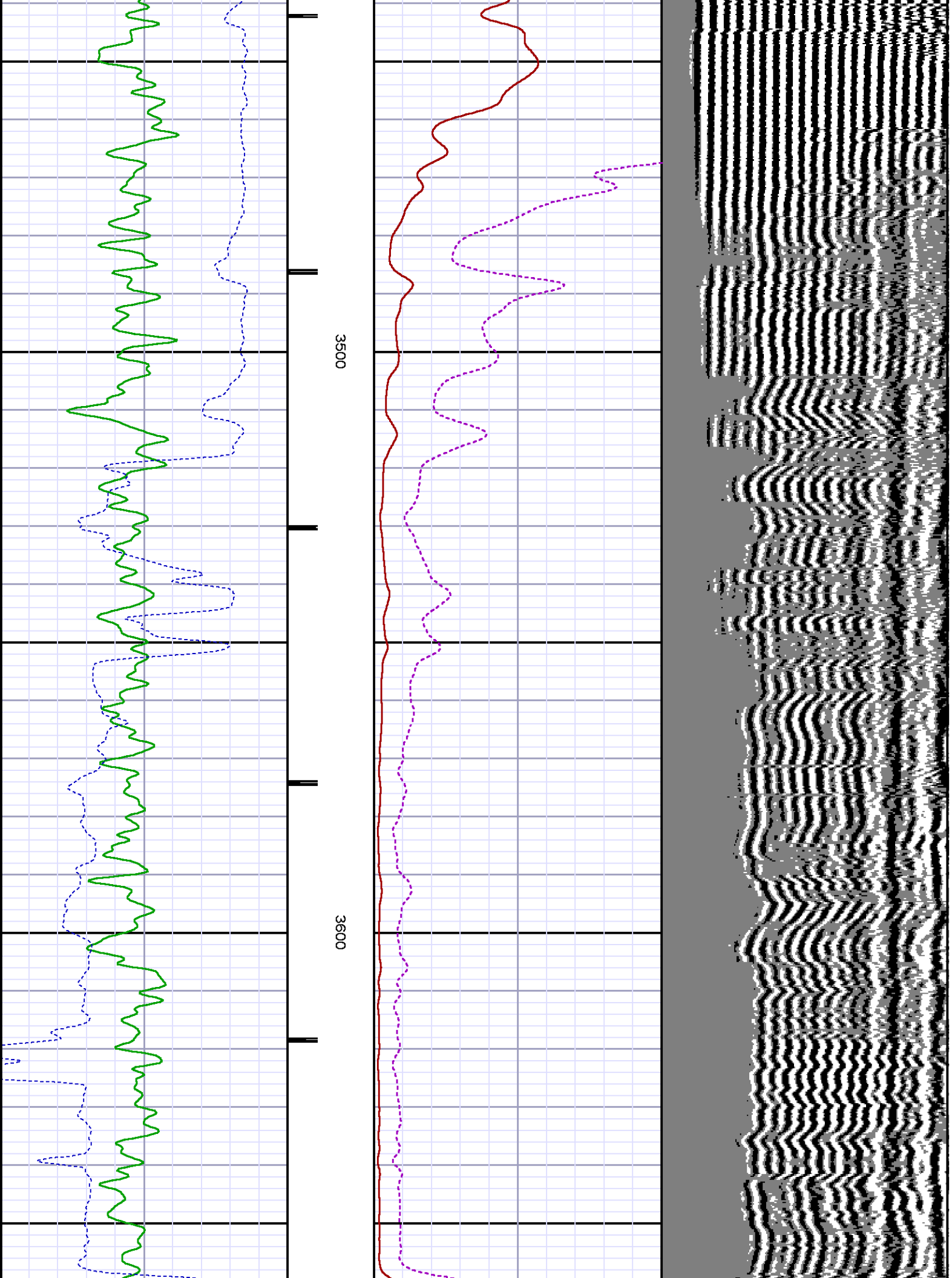


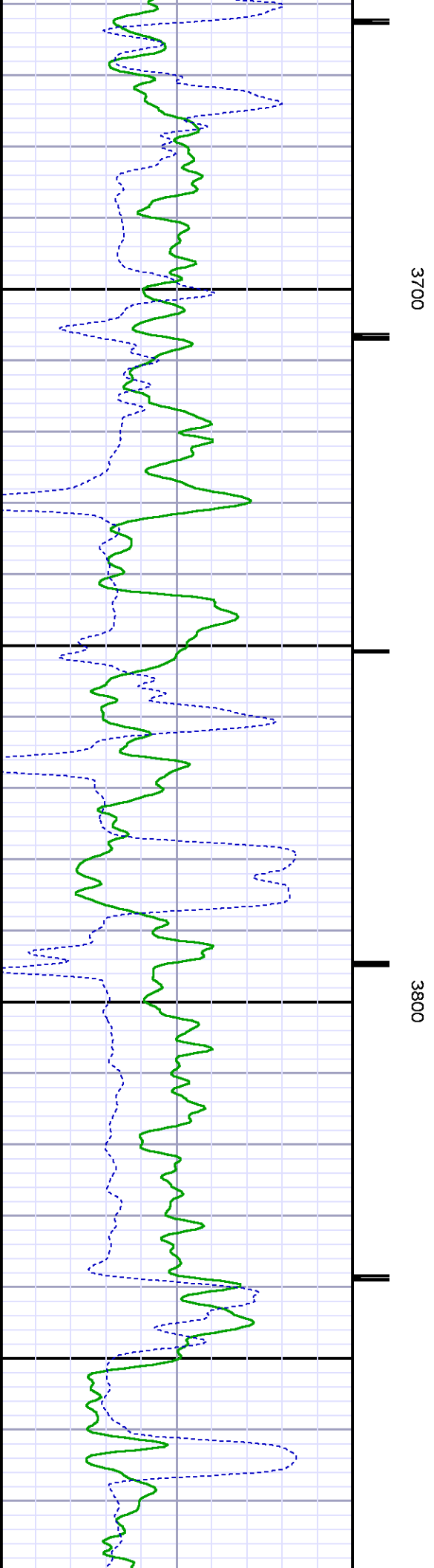
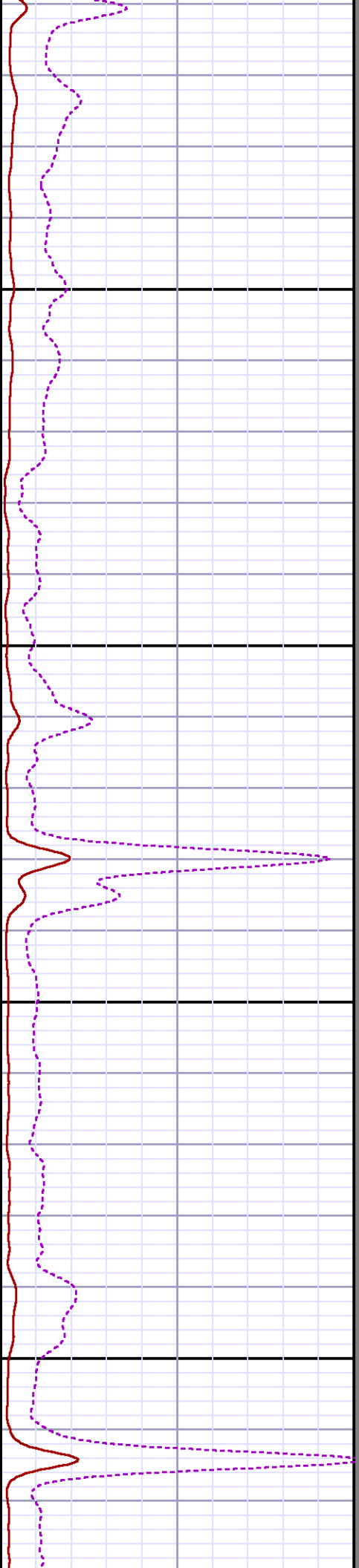
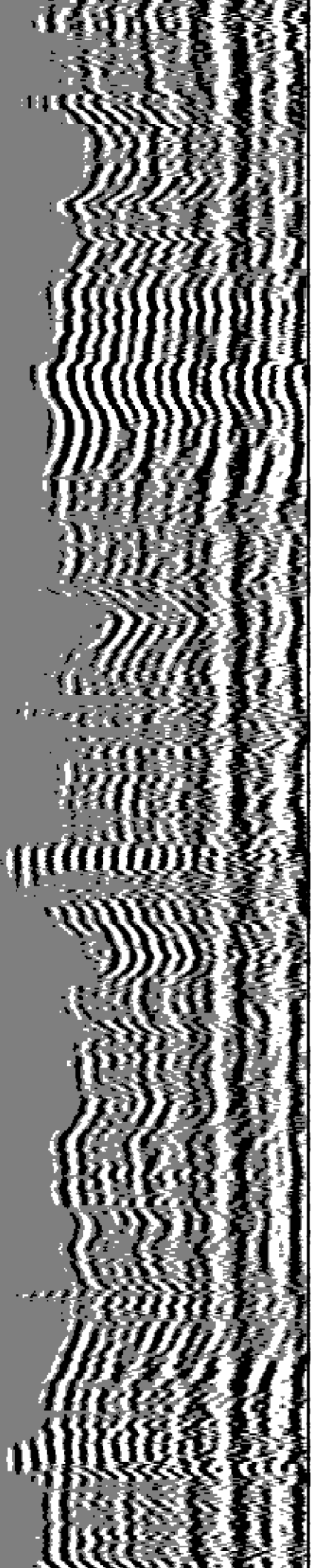




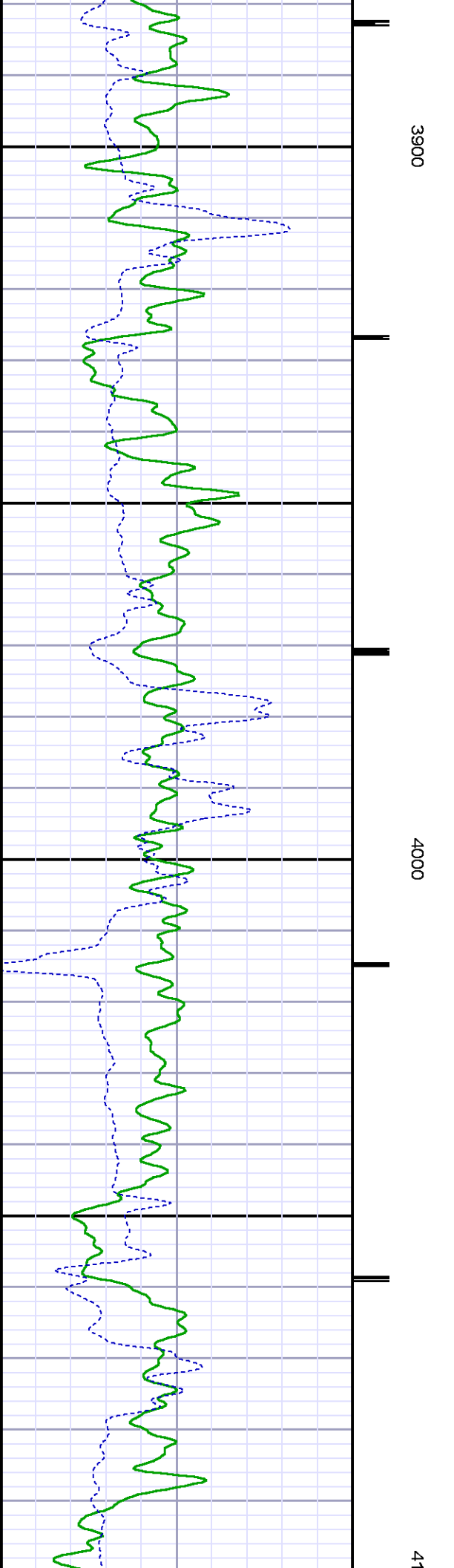
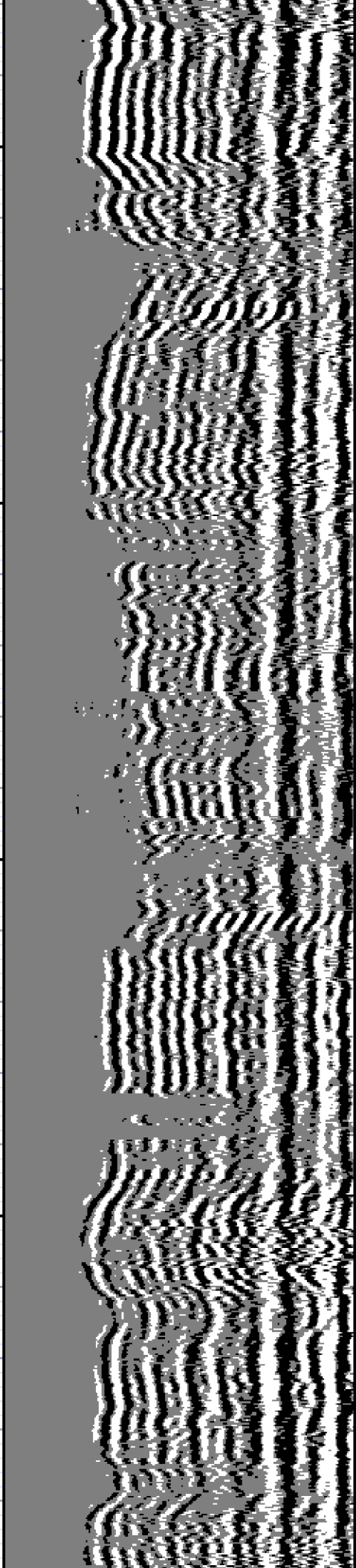


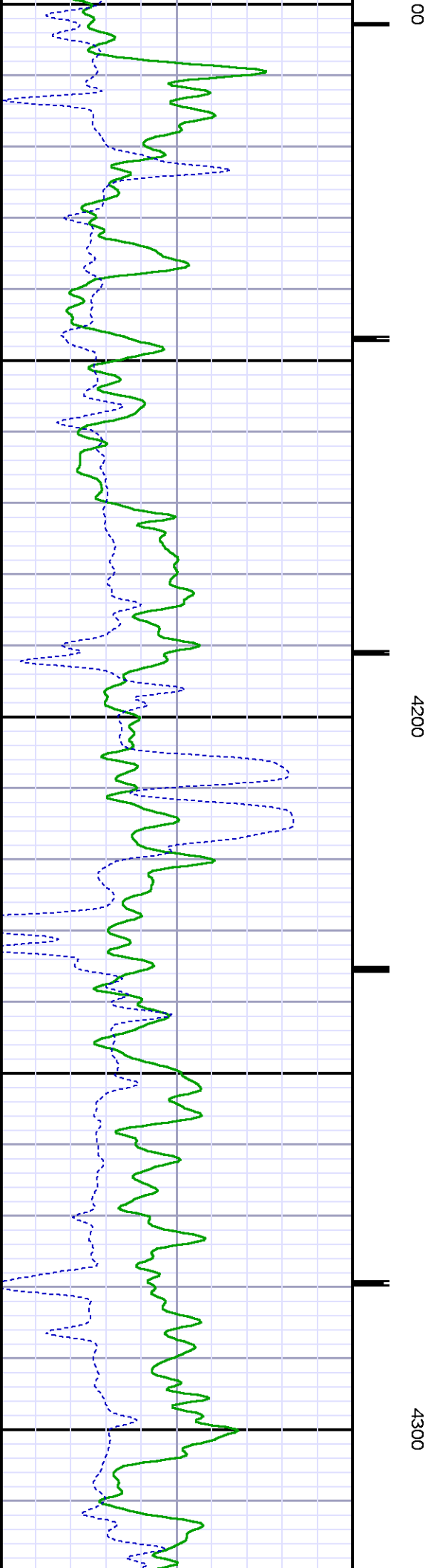
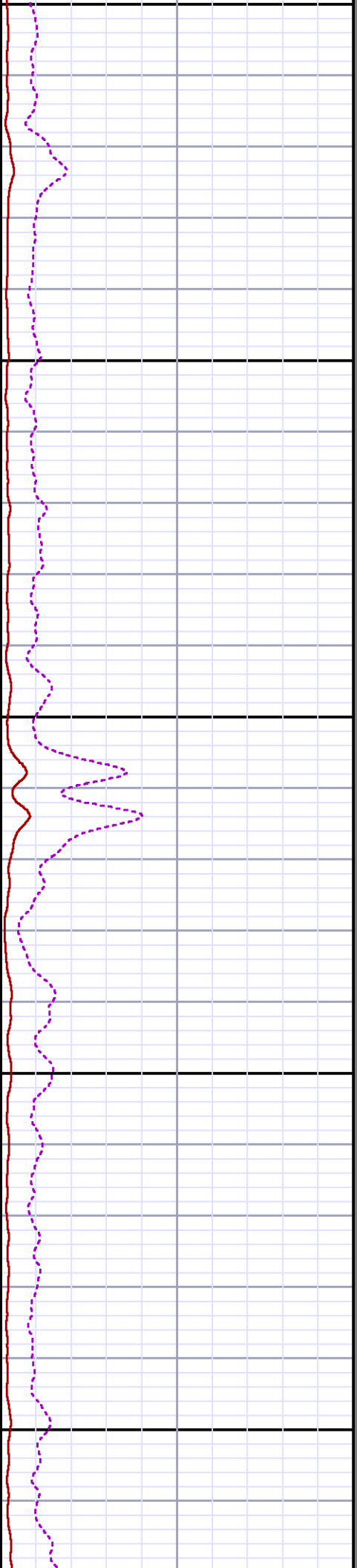
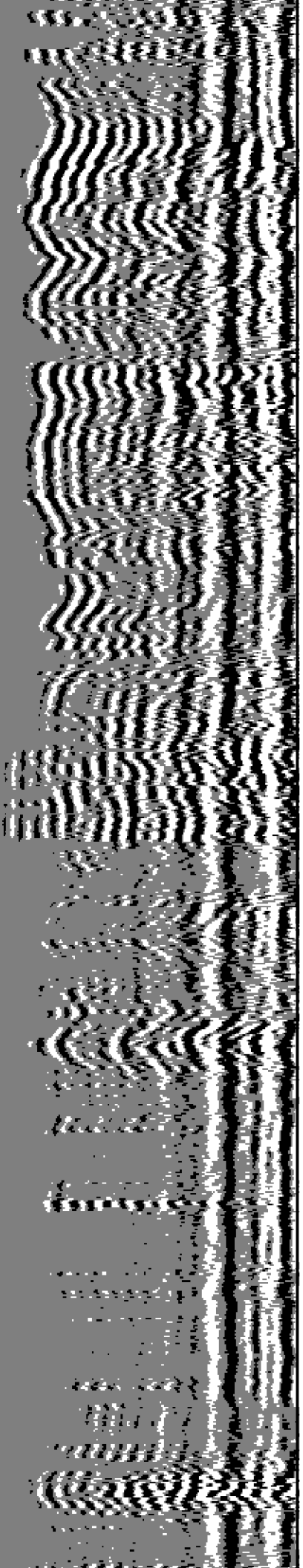




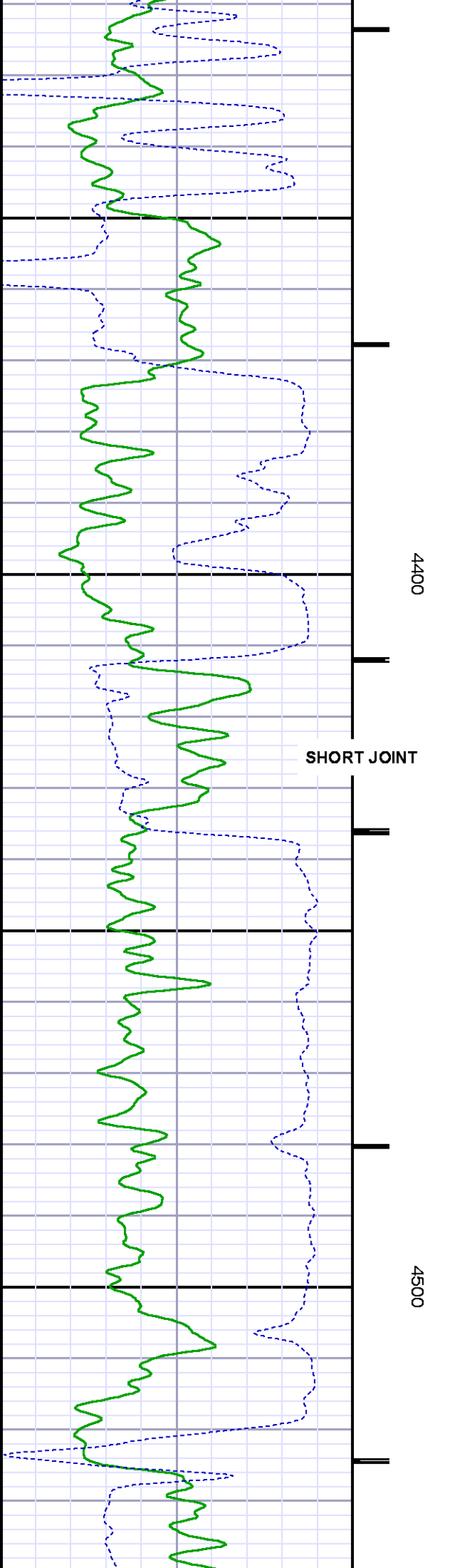
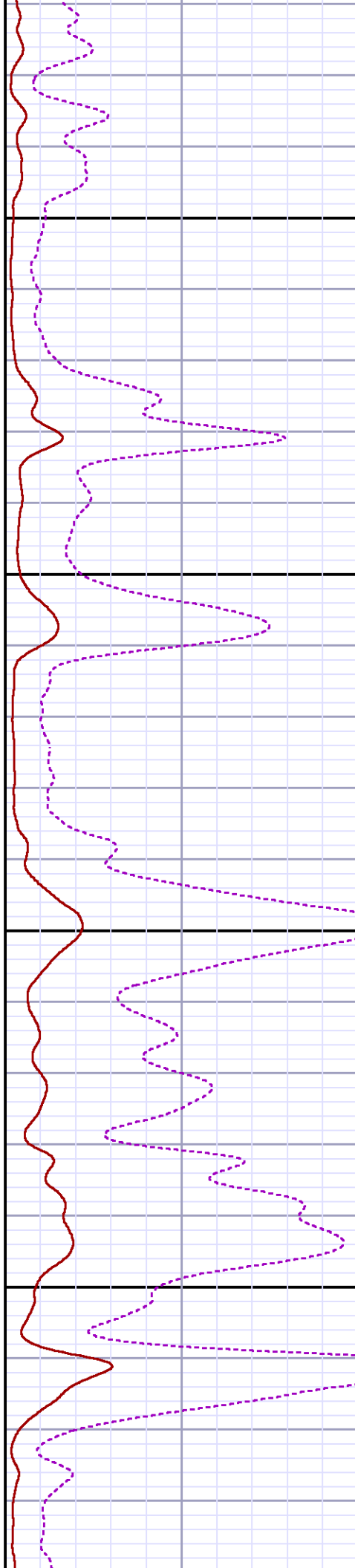
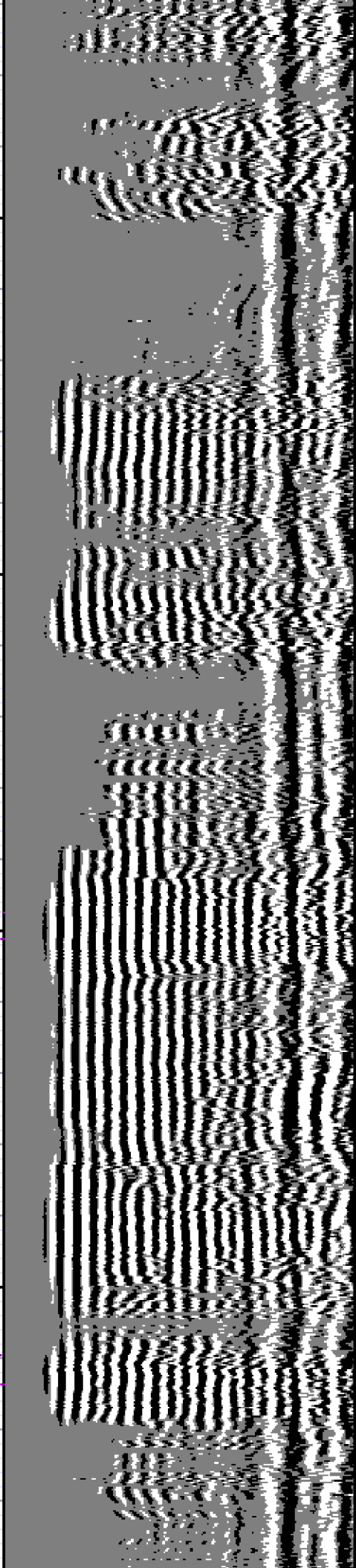


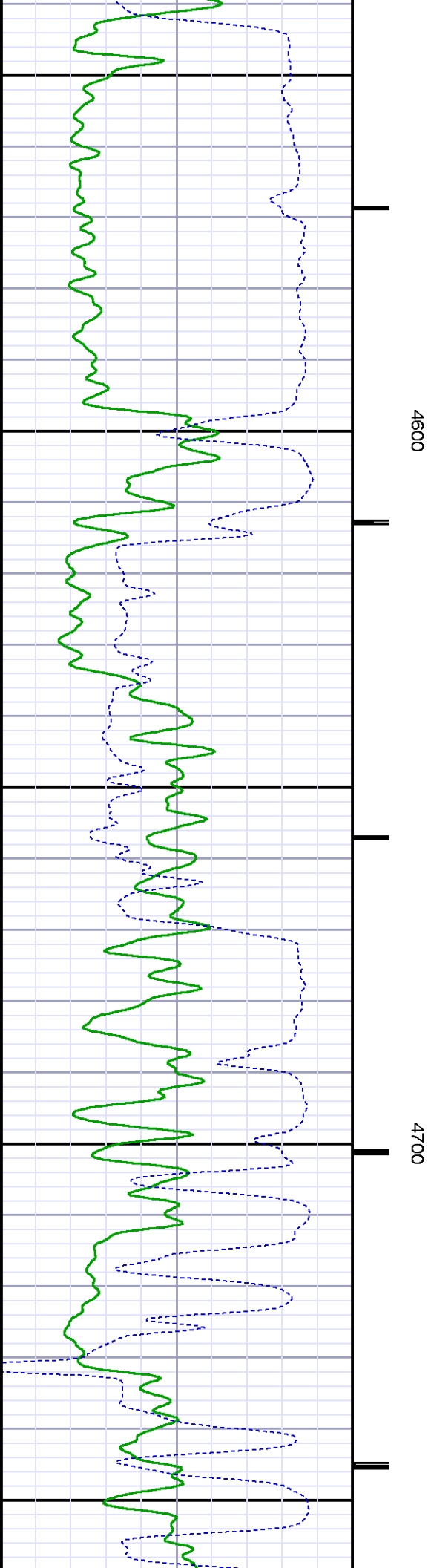
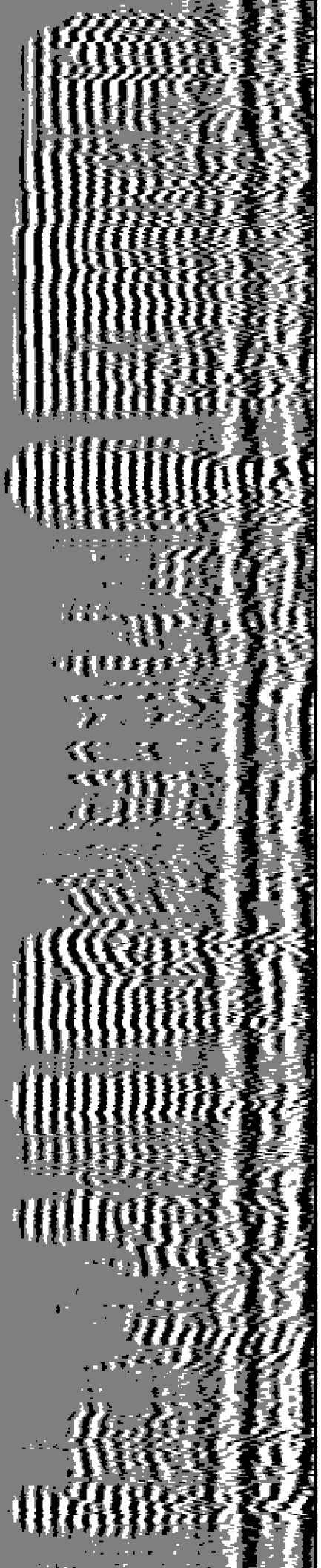


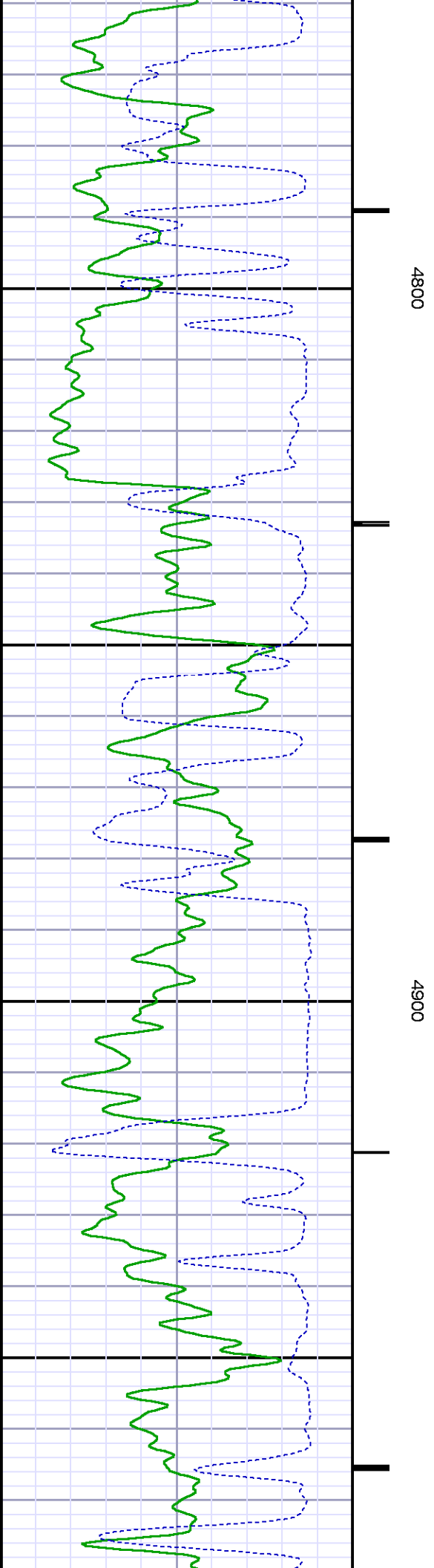
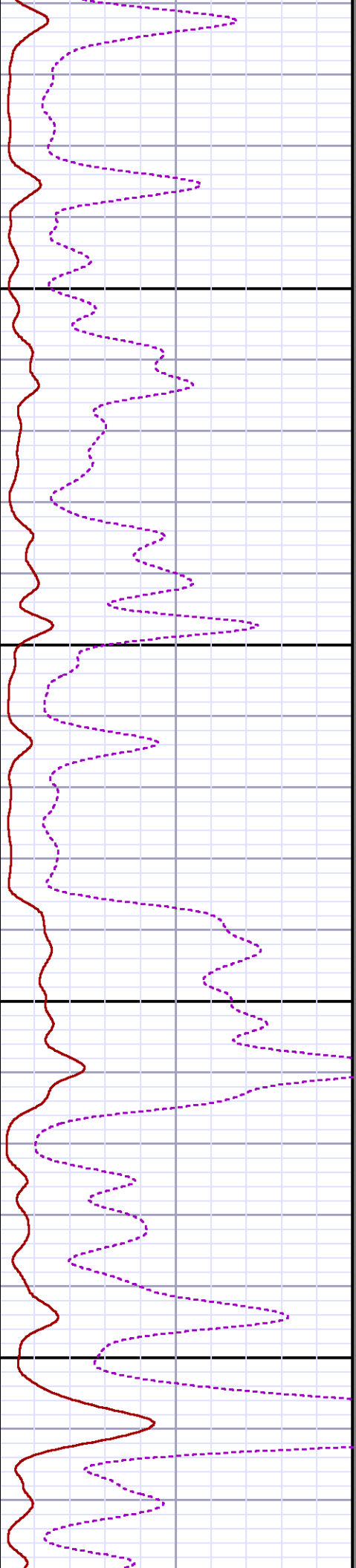
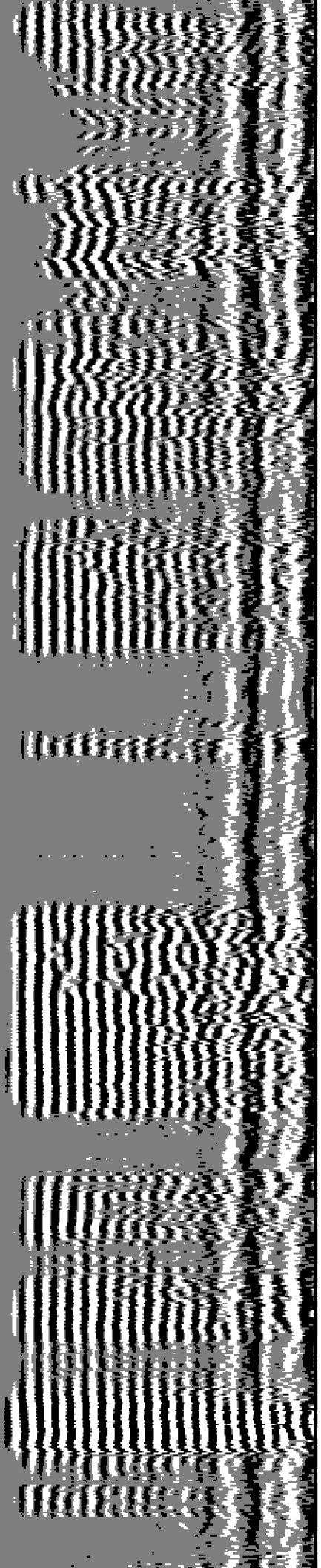


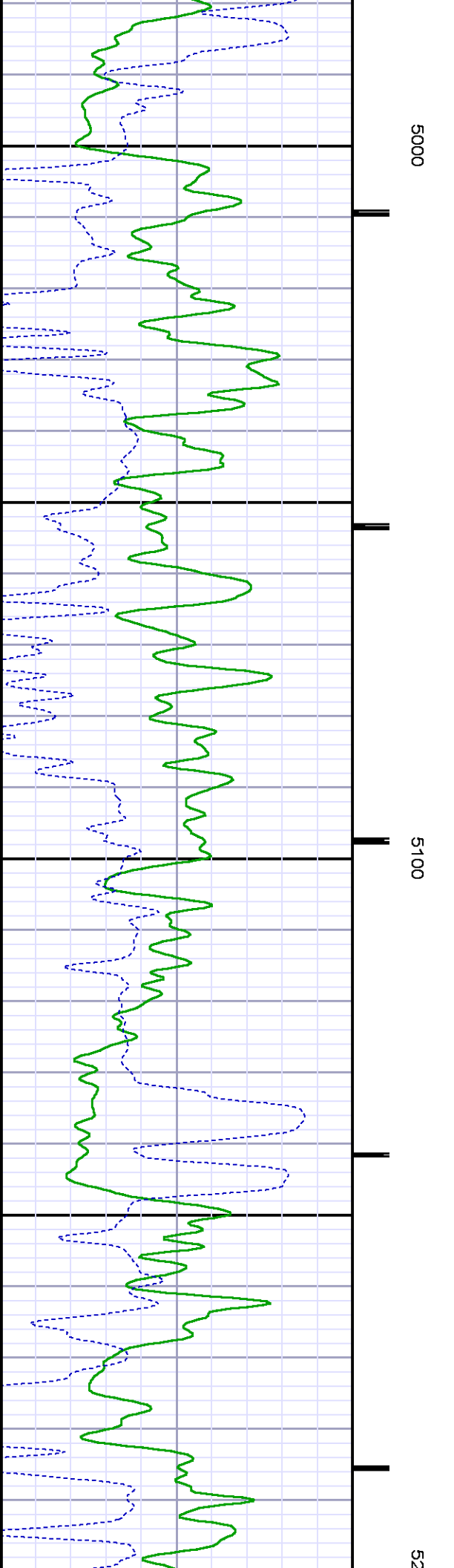
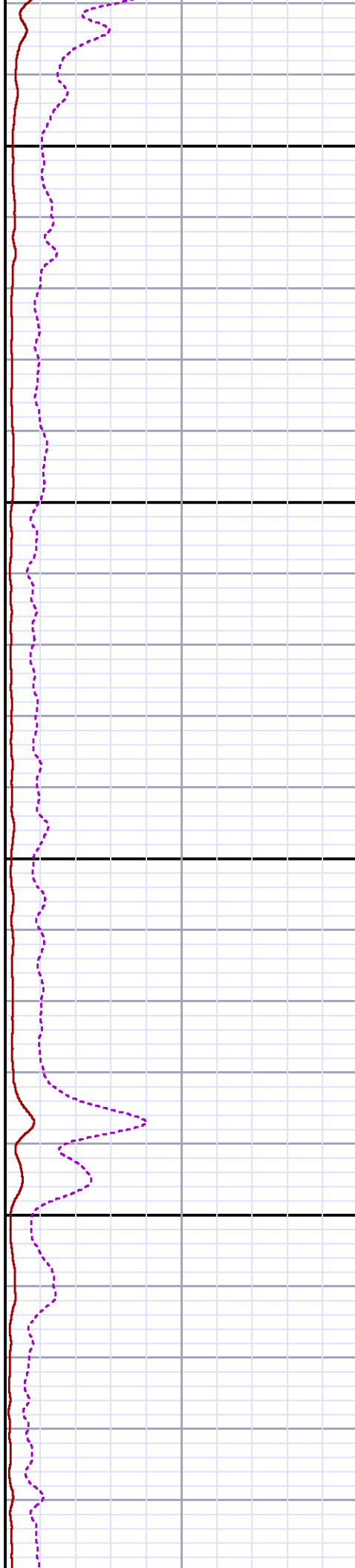
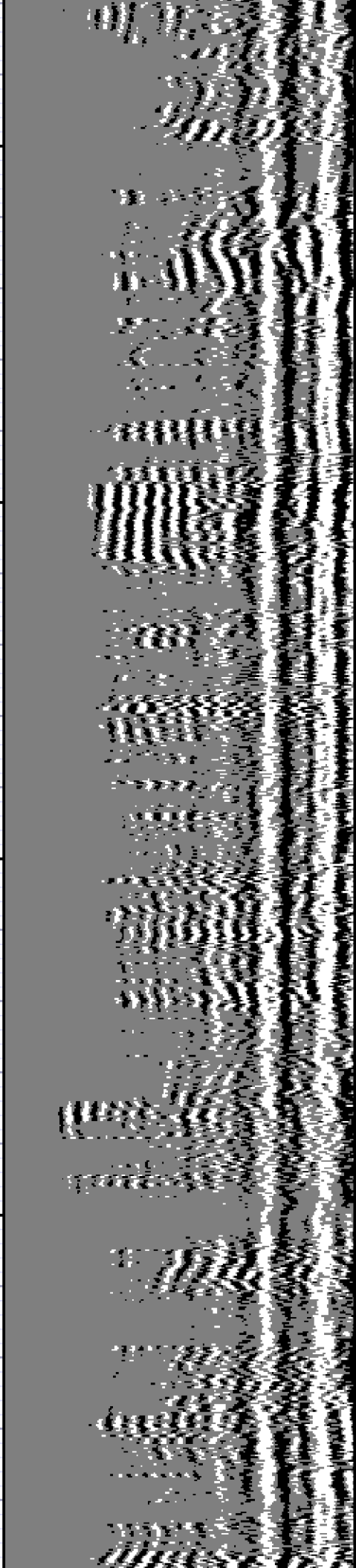


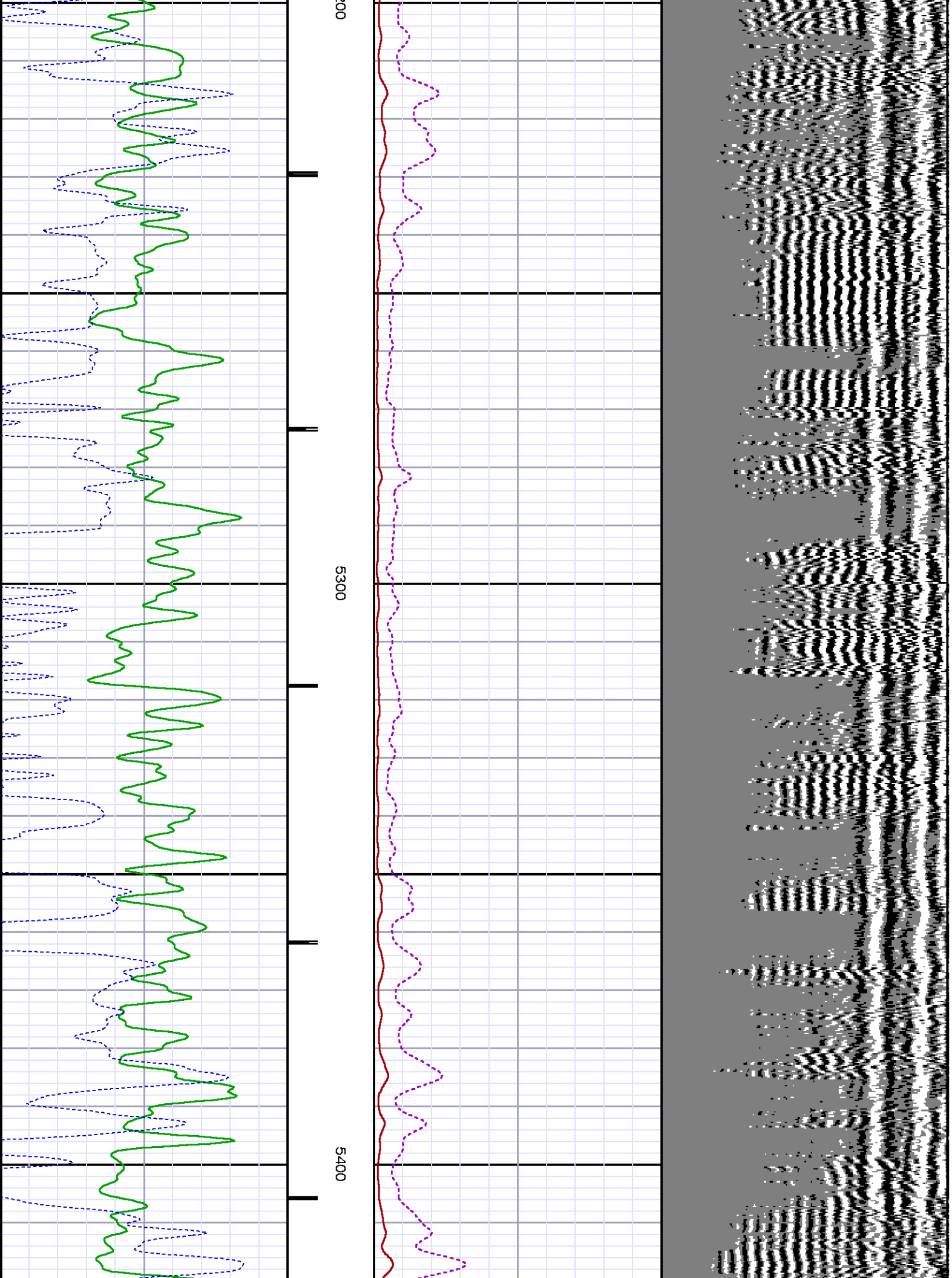




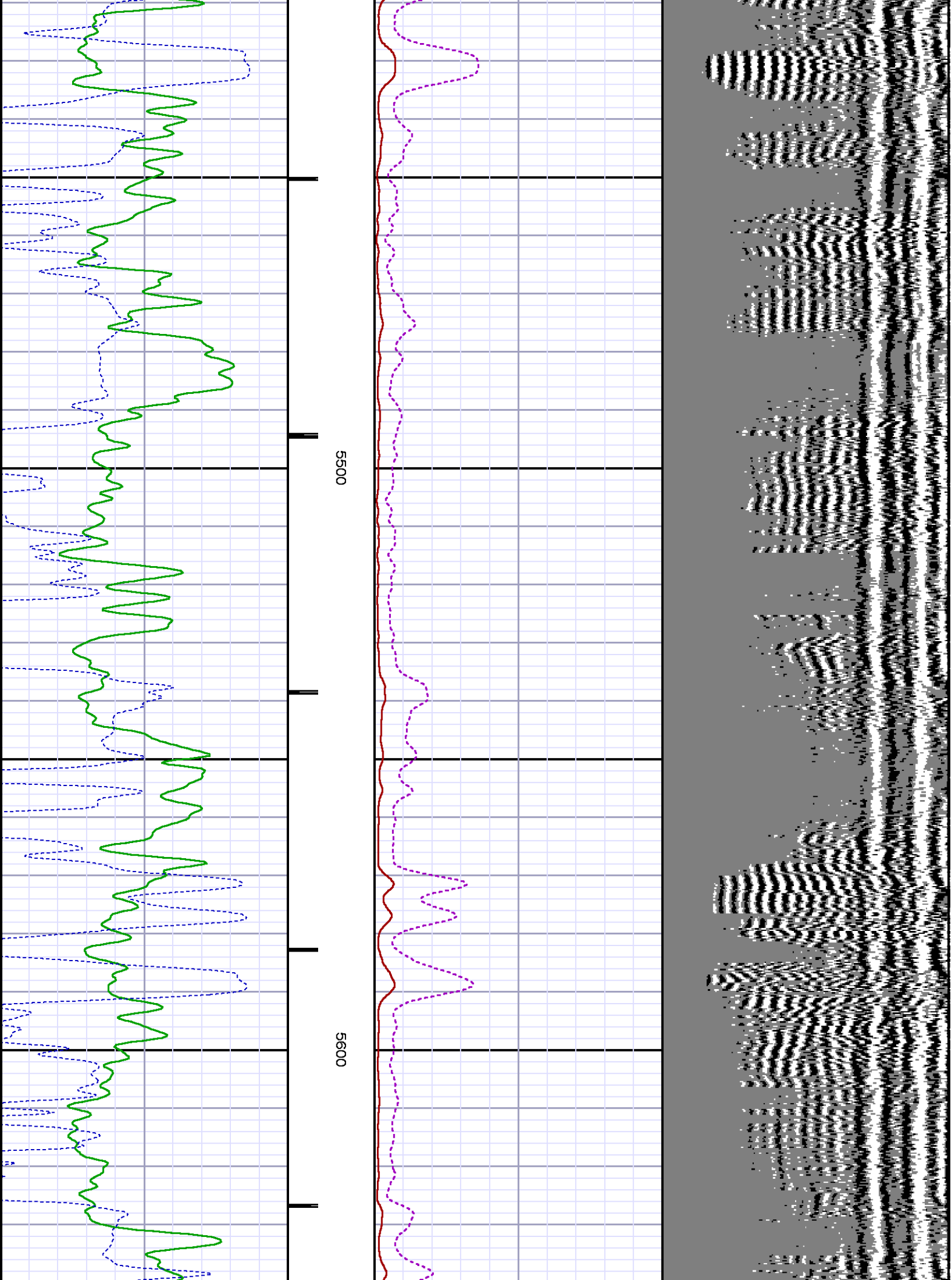


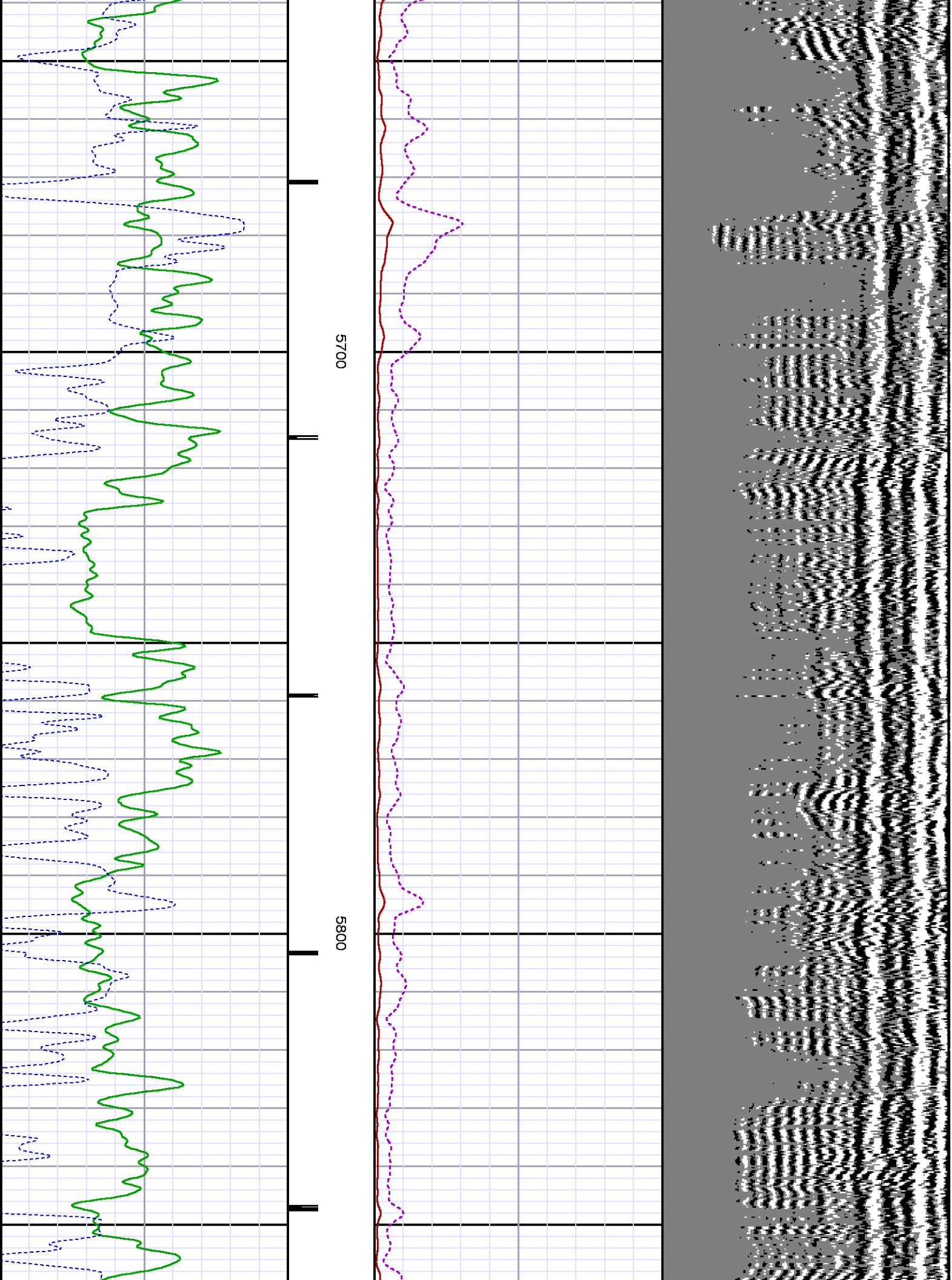




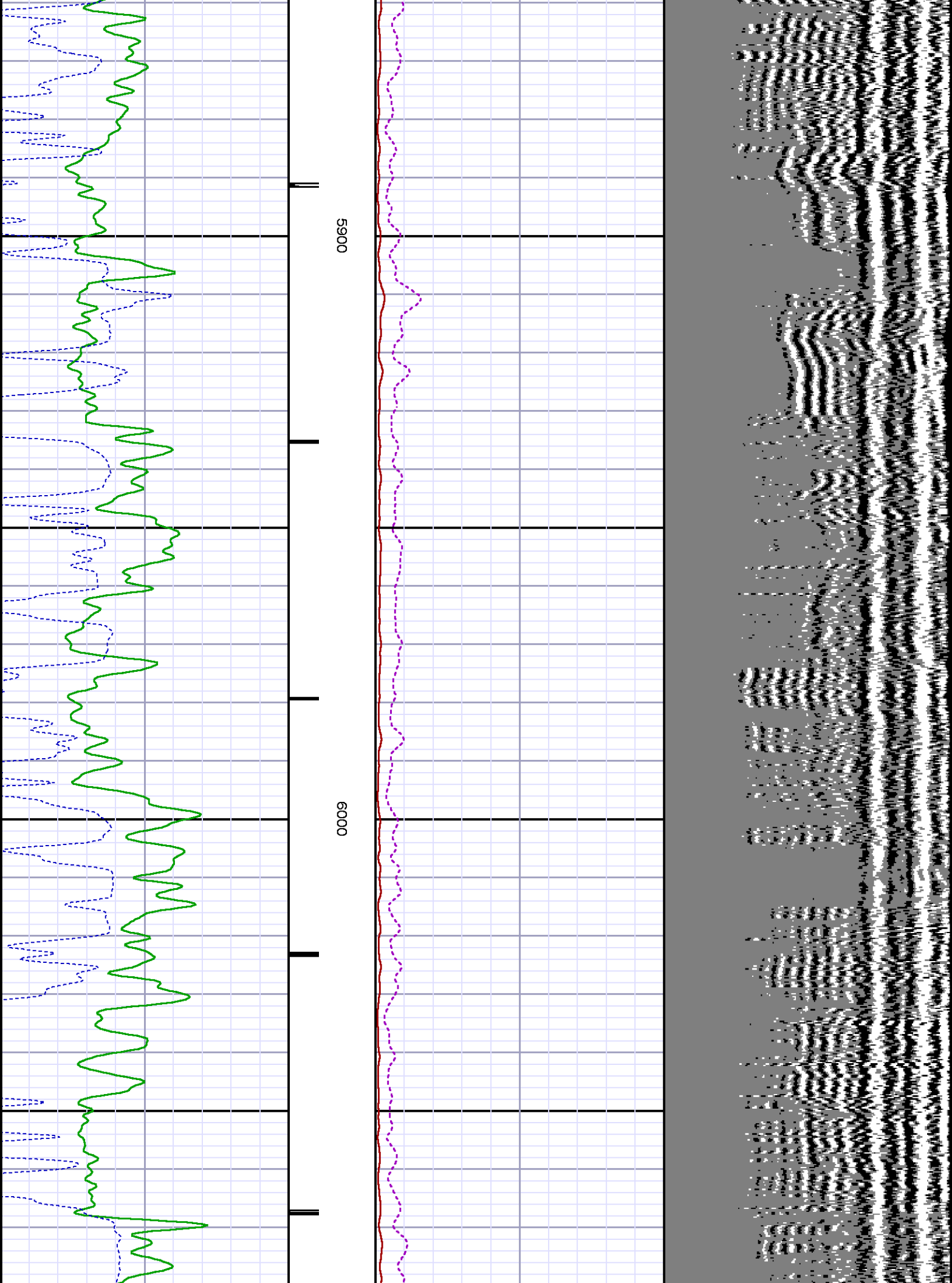


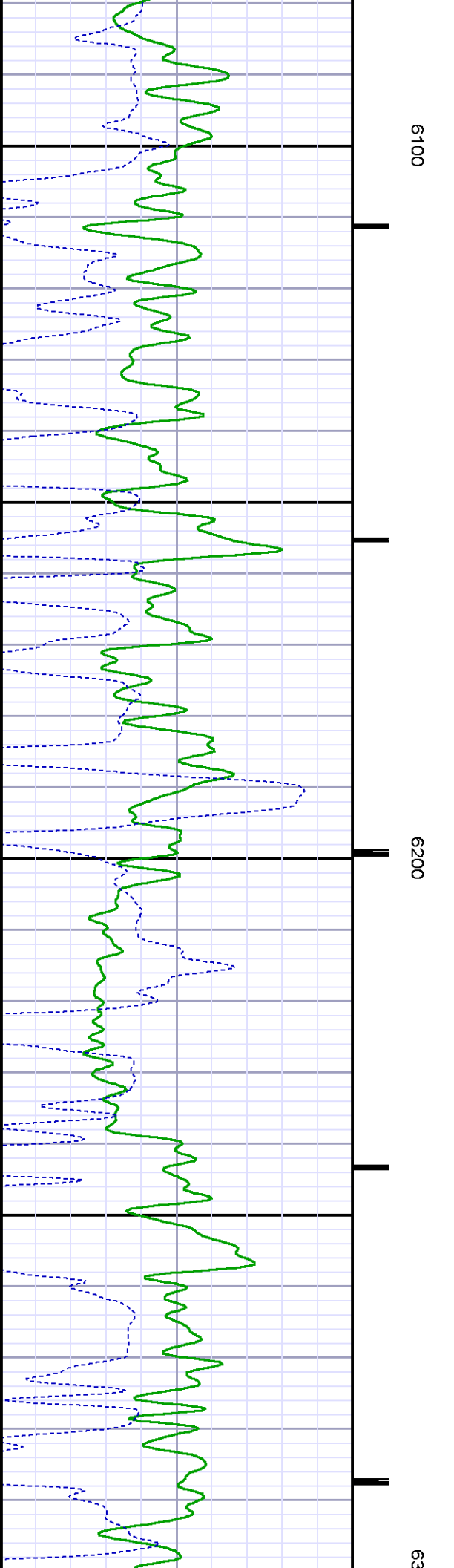
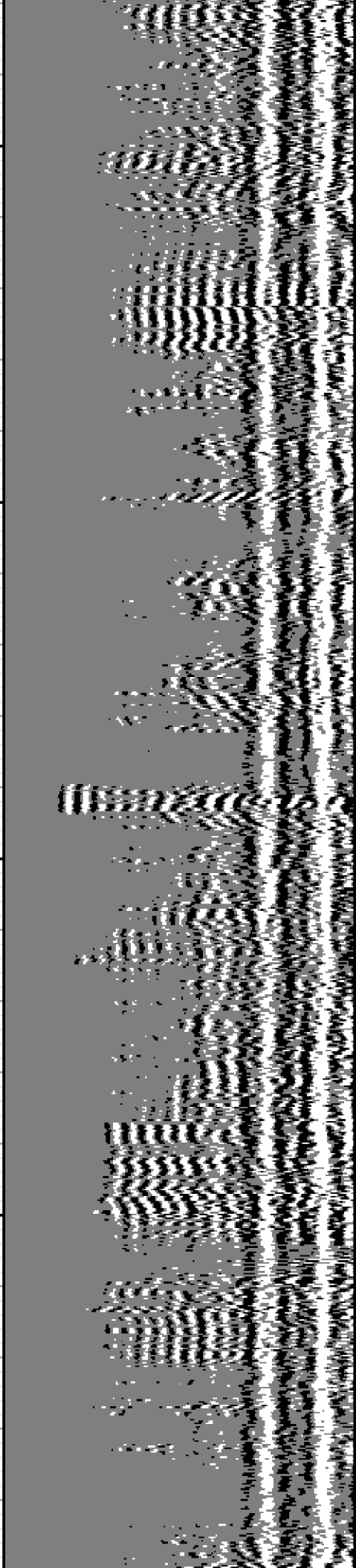


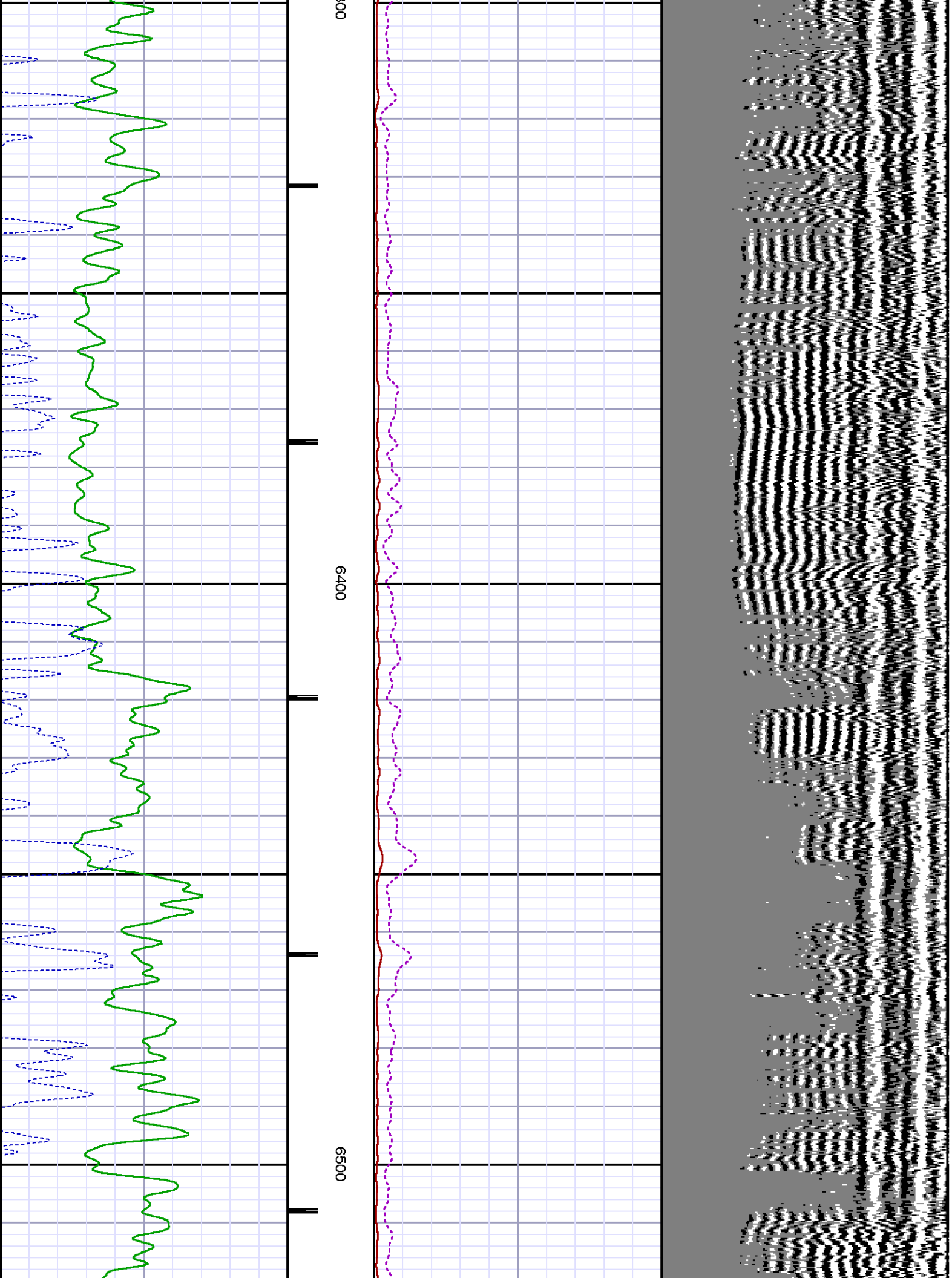


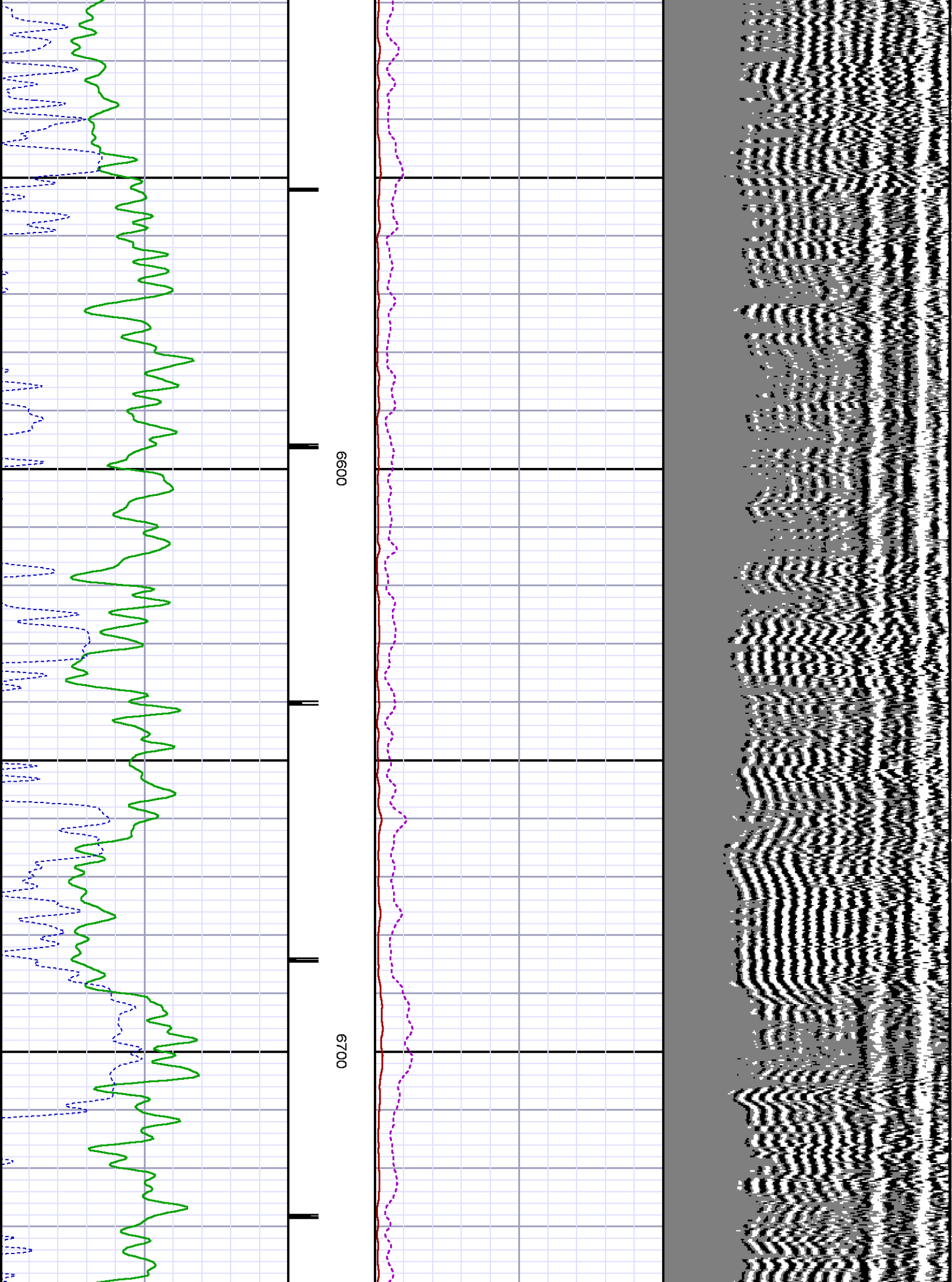


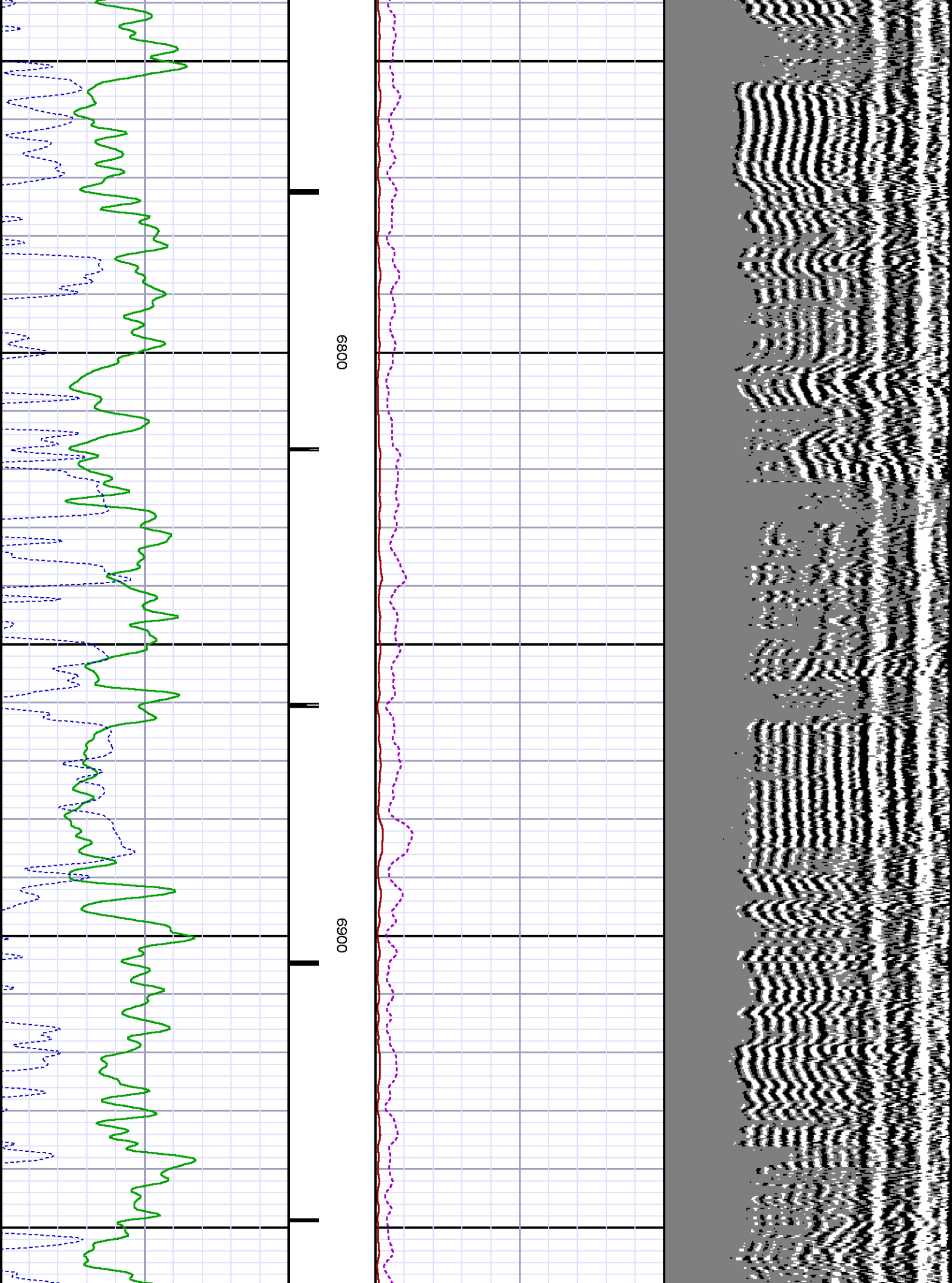


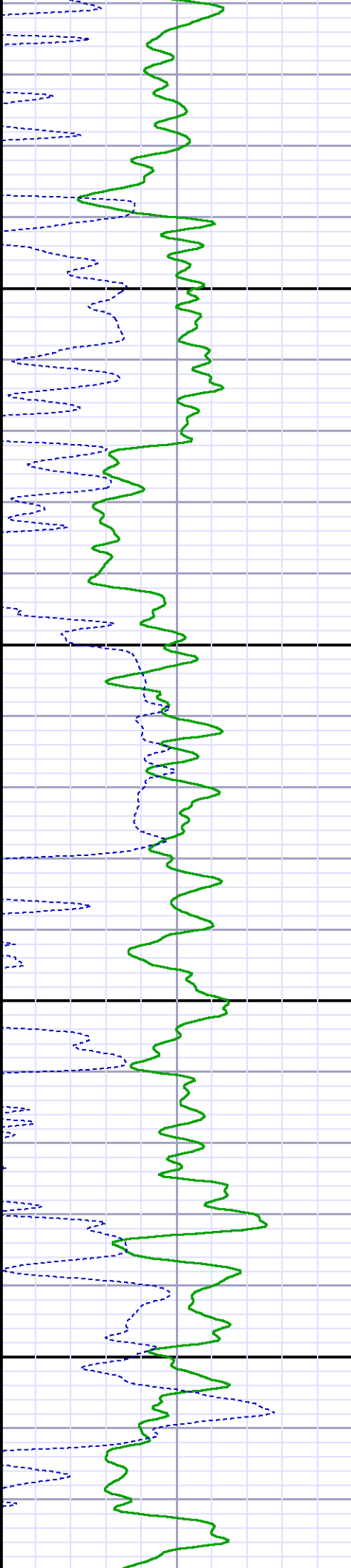
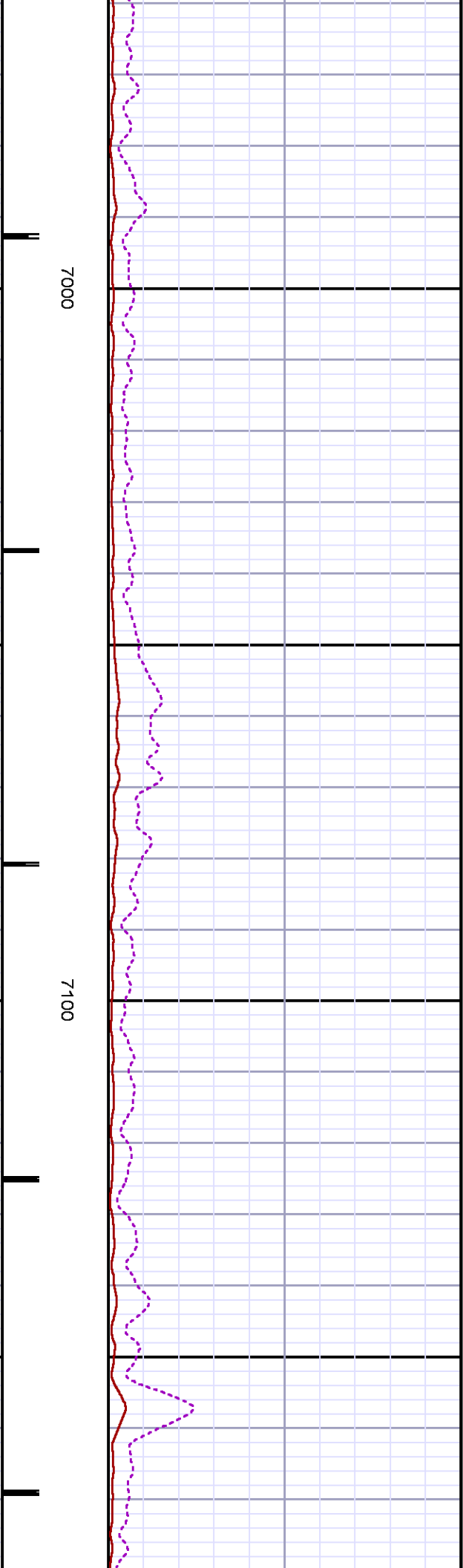
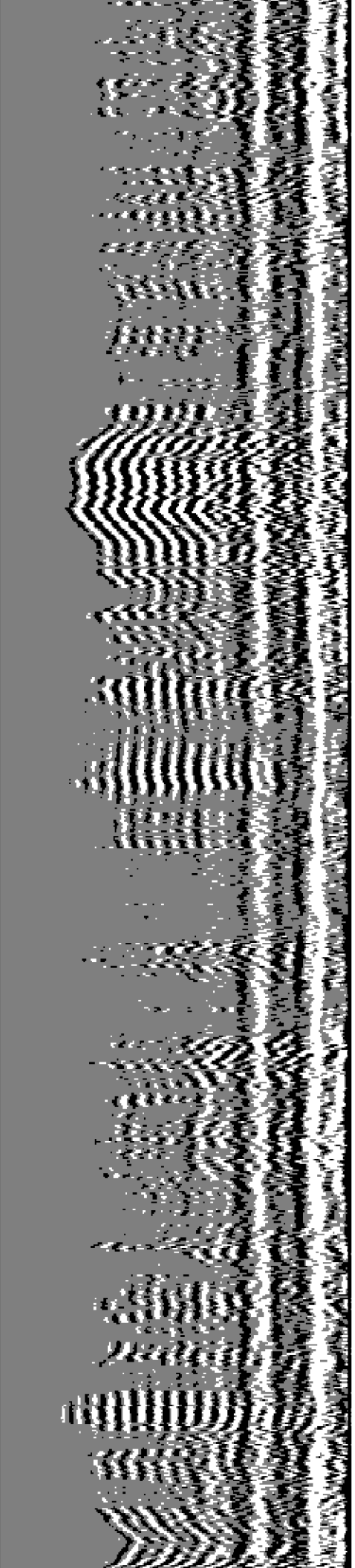




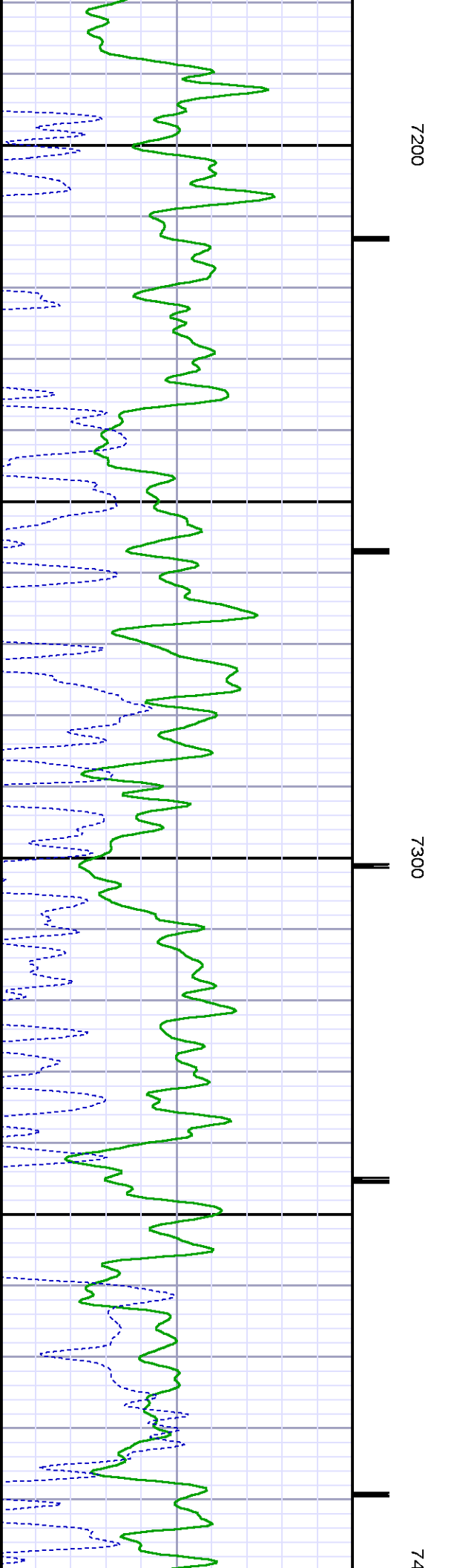
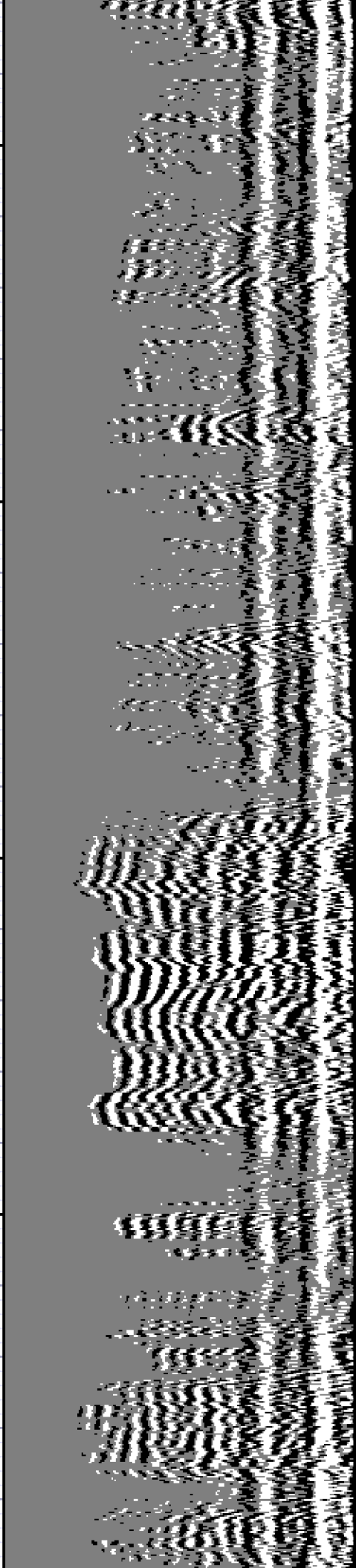




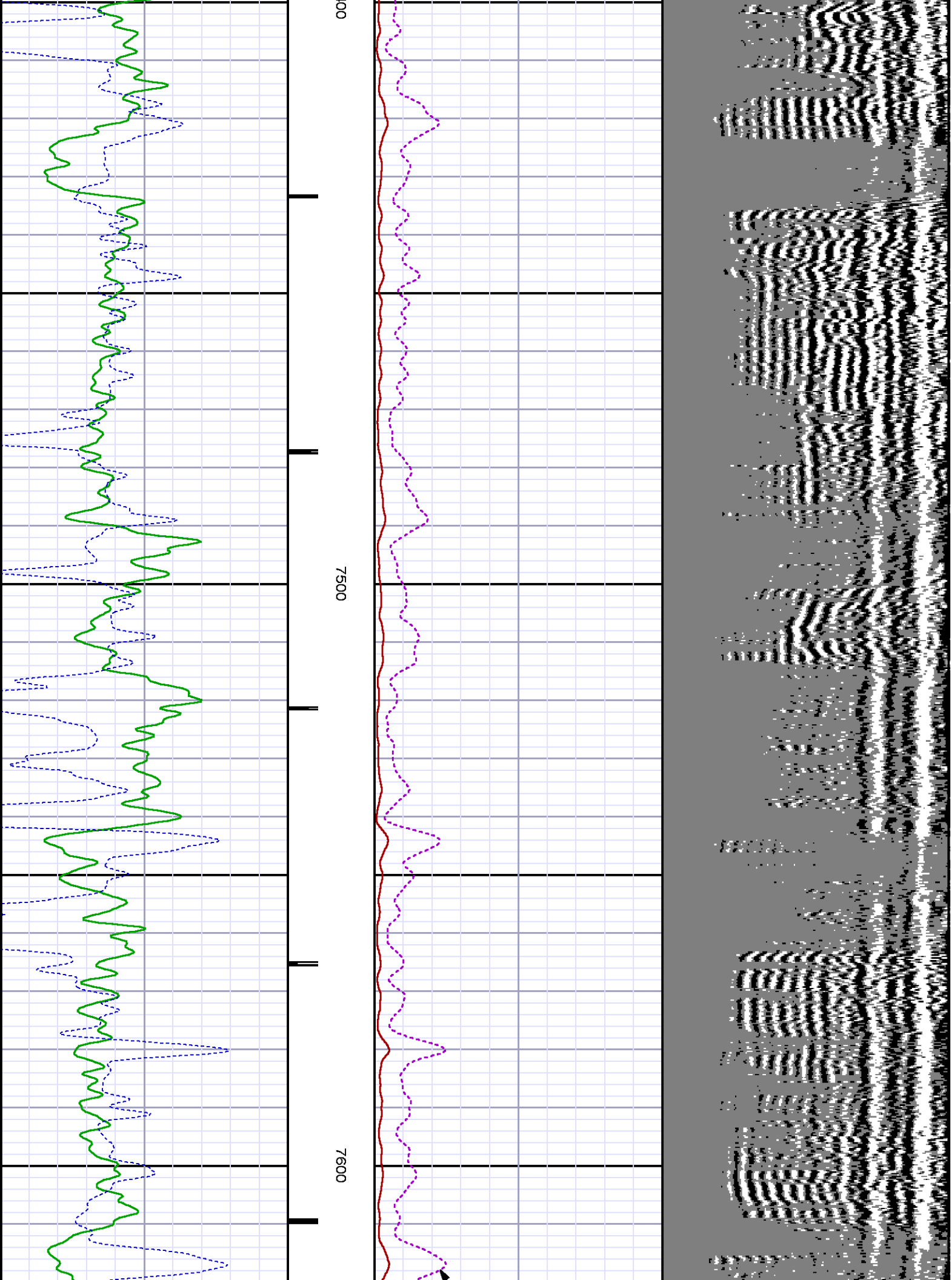


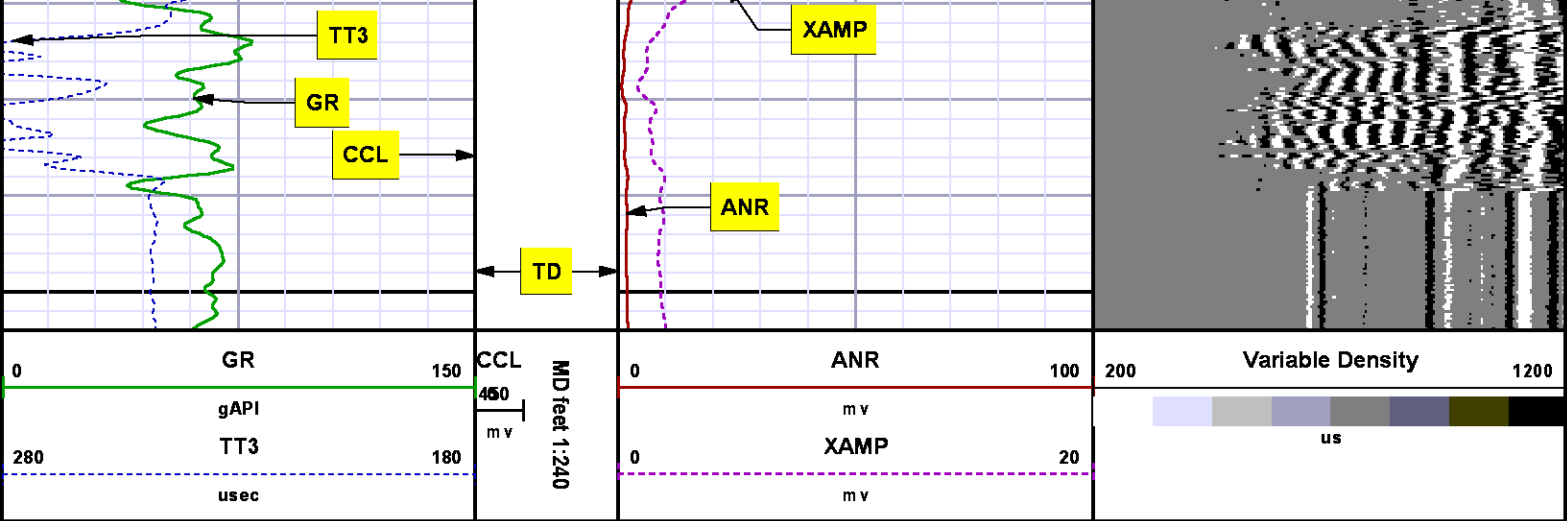












*SECONDARY PRESENTATION*  
*0 PSI*

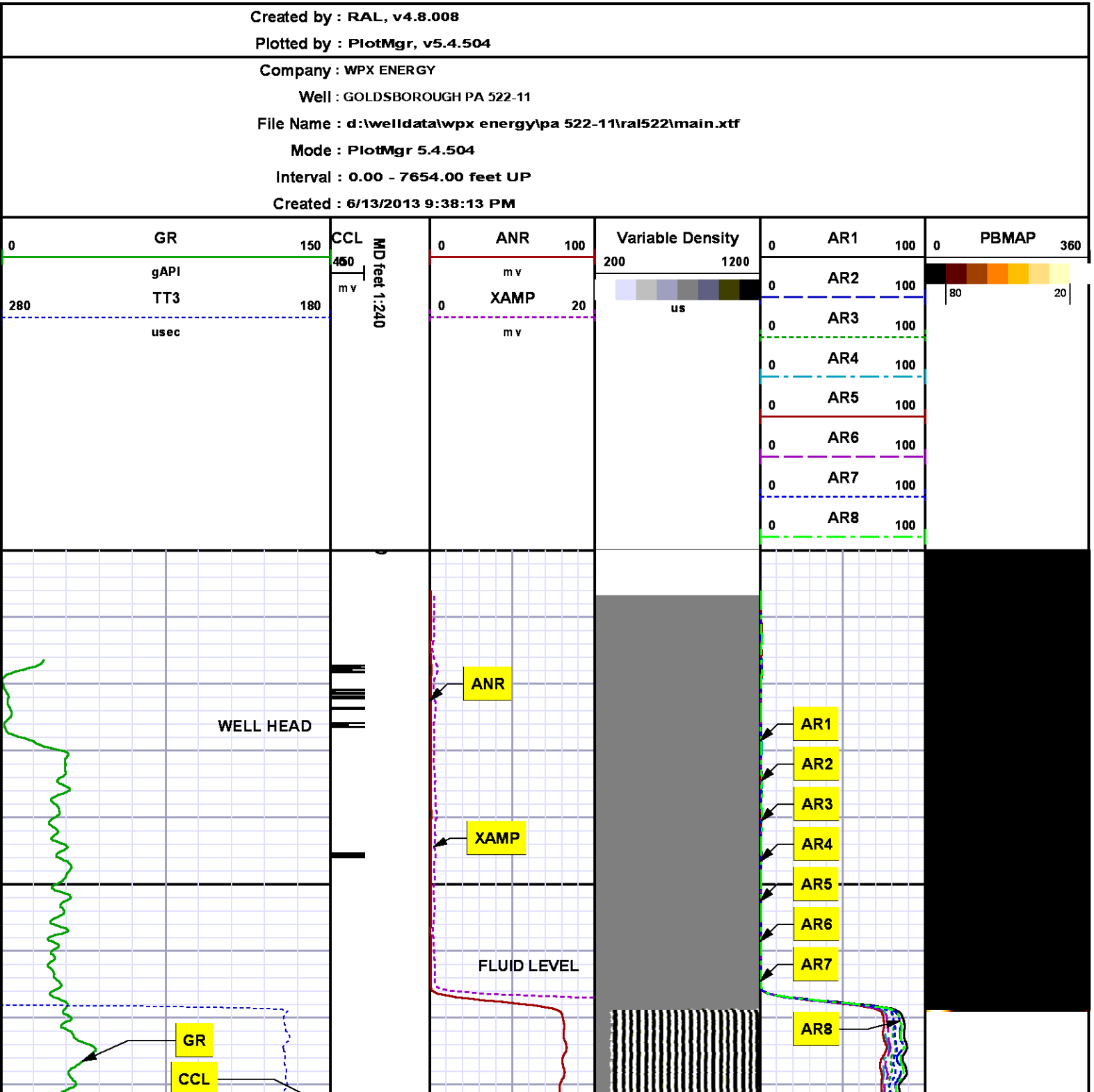
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RAL	casing od	4.500	inches	21.481	7669.000
RAL	casing wt	11.600	lbm/ft	21.481	7669.000
RAL	FB Start Far	291.900	usec	21.481	7669.000
RAL	FB Start Near	180.000	usec	21.481	7669.000
RAL	FB Start Radial	180.000	usec	21.481	7669.000
RAL	FB Thresh Far	10.000	mv	21.481	7669.000
RAL	FB Thresh Near	4.000	mv	21.481	7669.000
RAL	FB Thresh Radial	4.000	mv	21.481	7669.000
RAL	Fluid Travel Time	200.000	usec/ft	21.481	7668.606

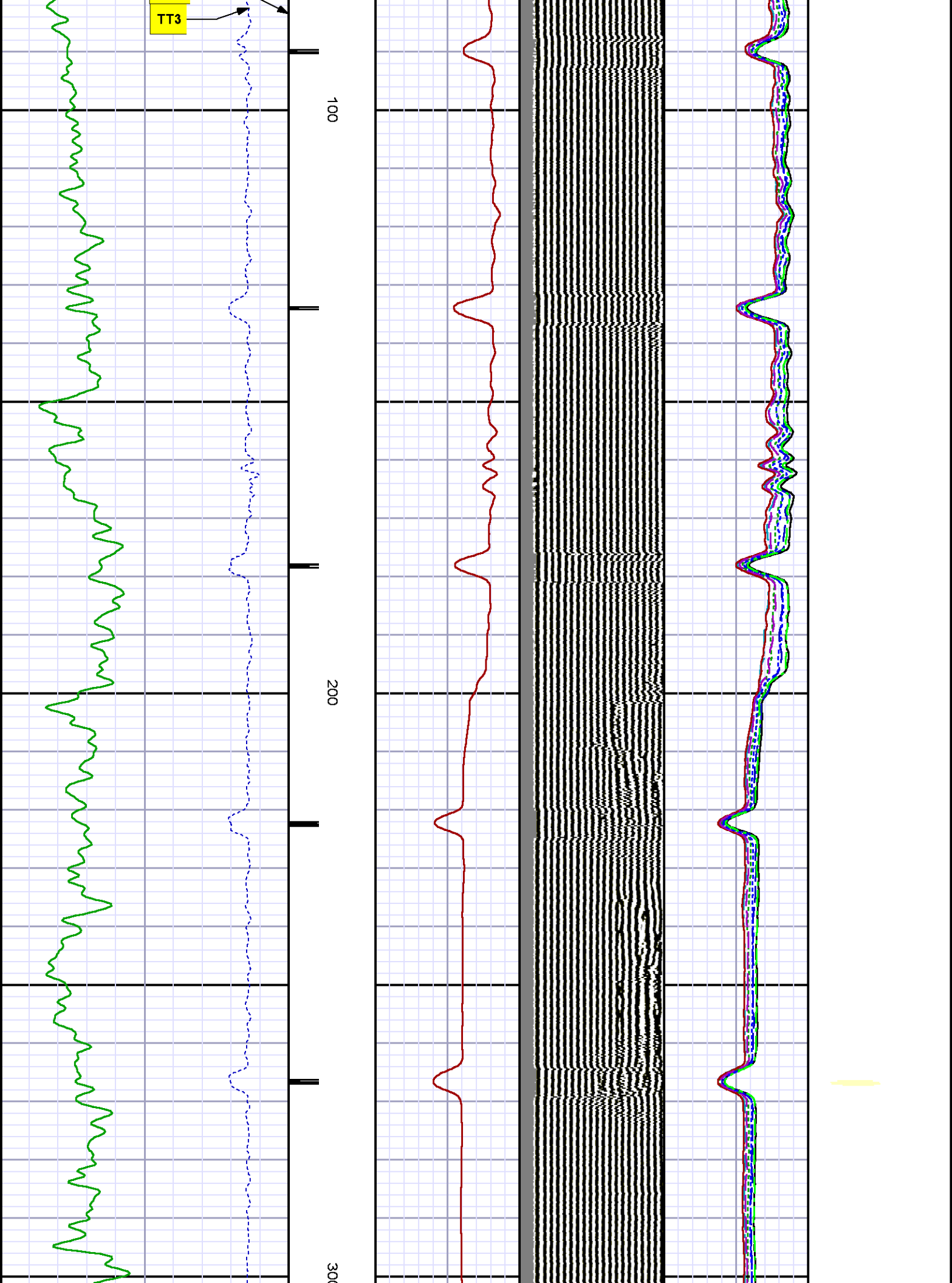
**DEPTH OFFSETS**

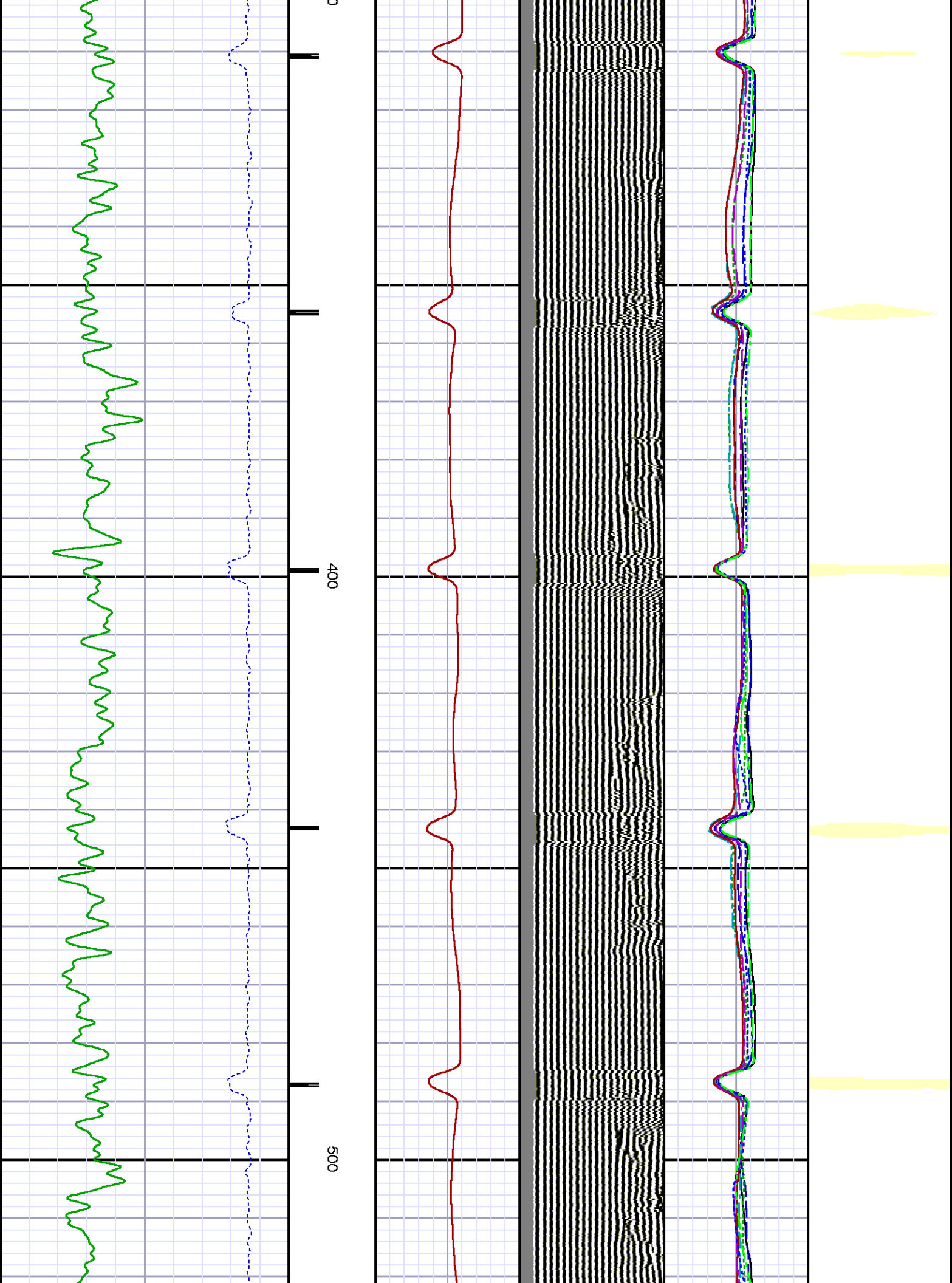
(for Acquired Curves)

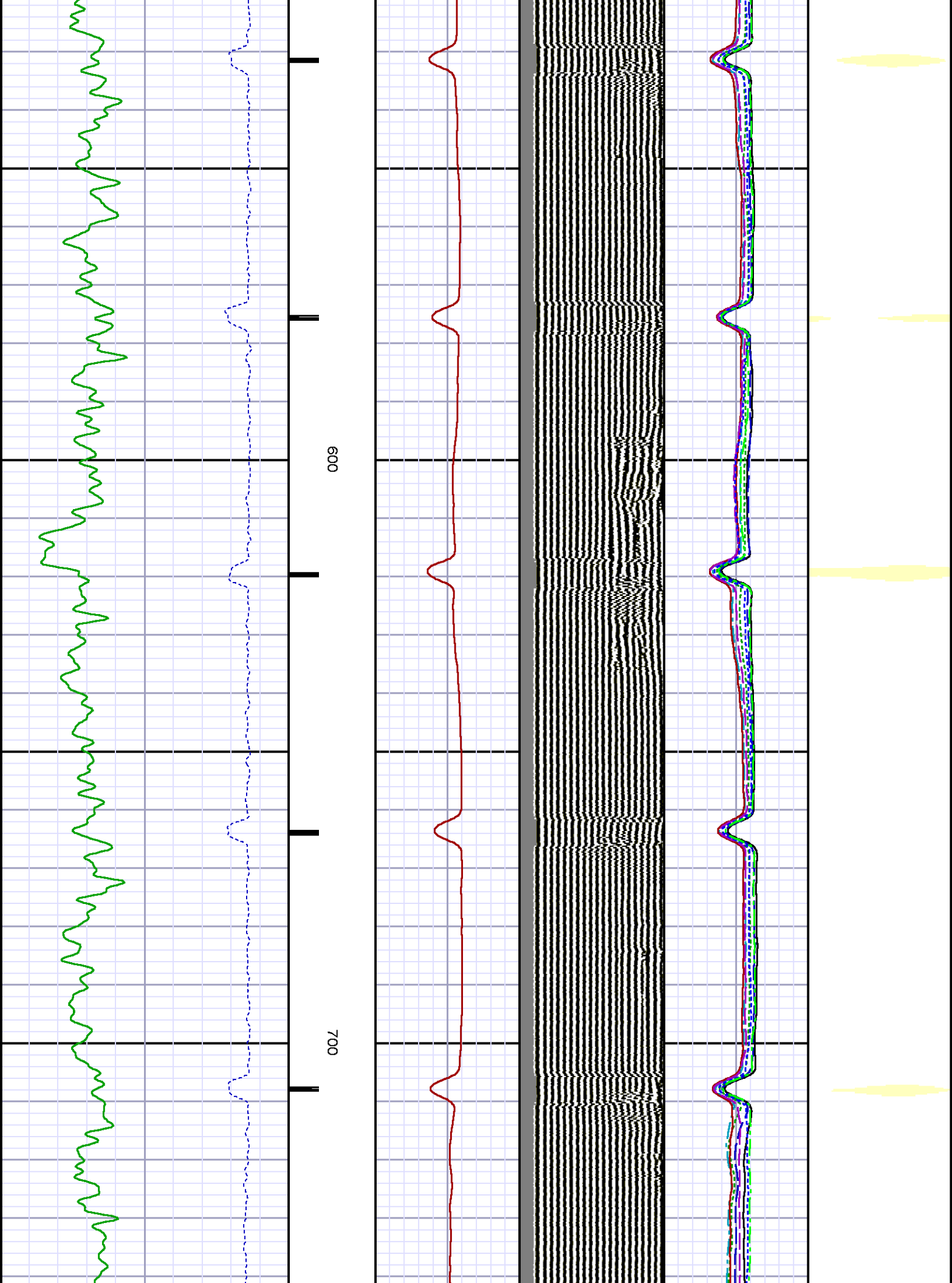
(Optional Curves)

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					

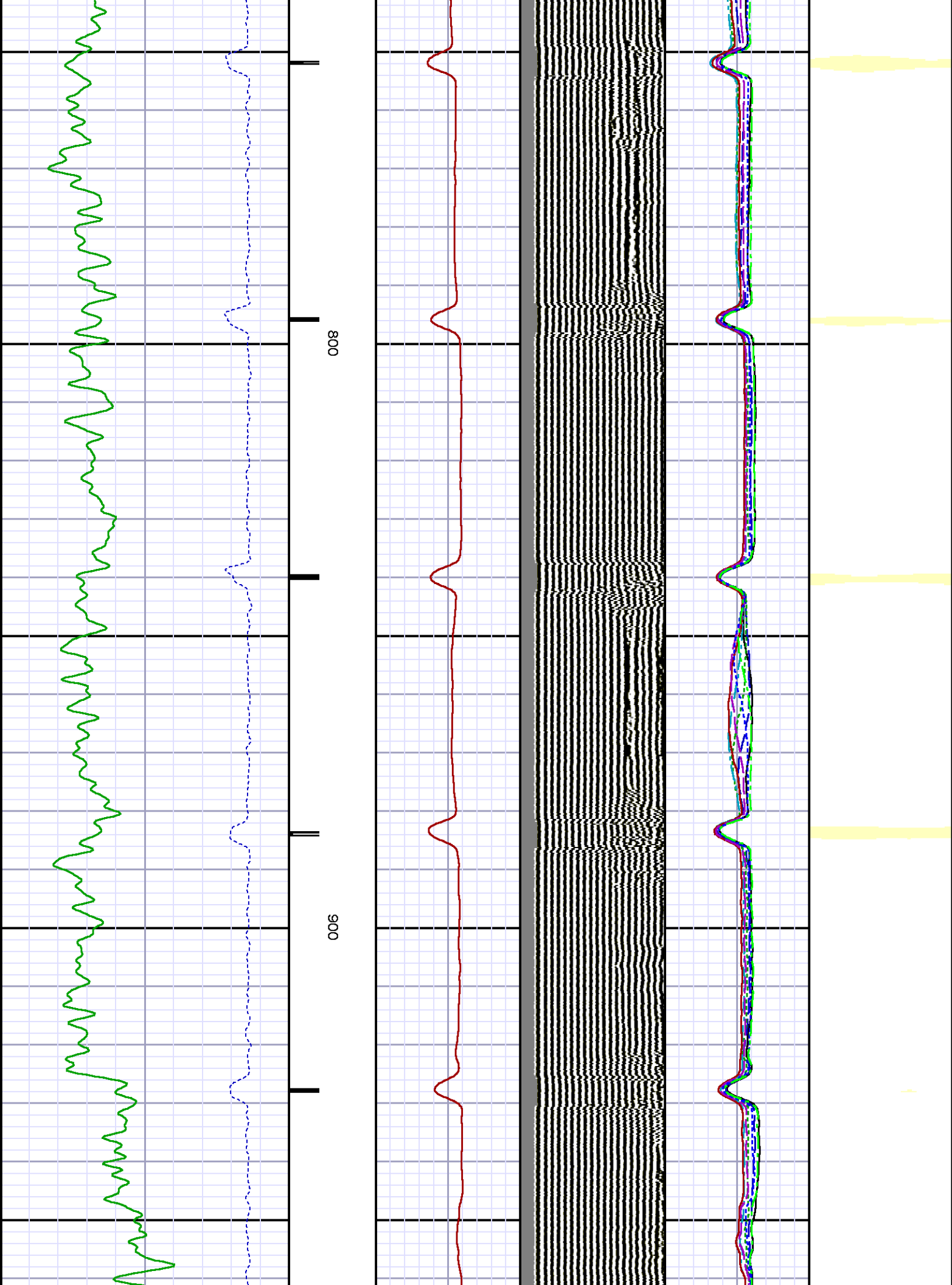


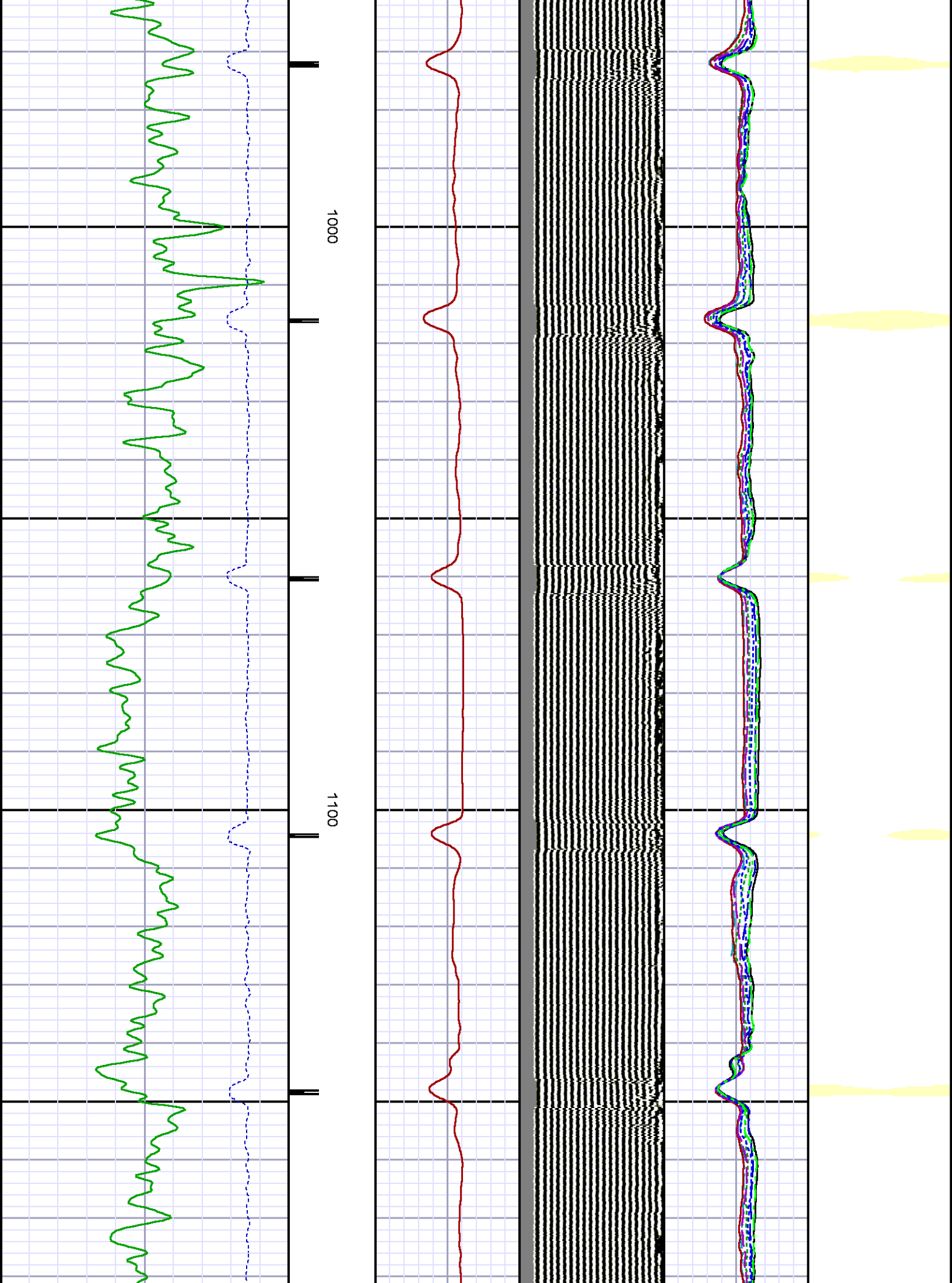


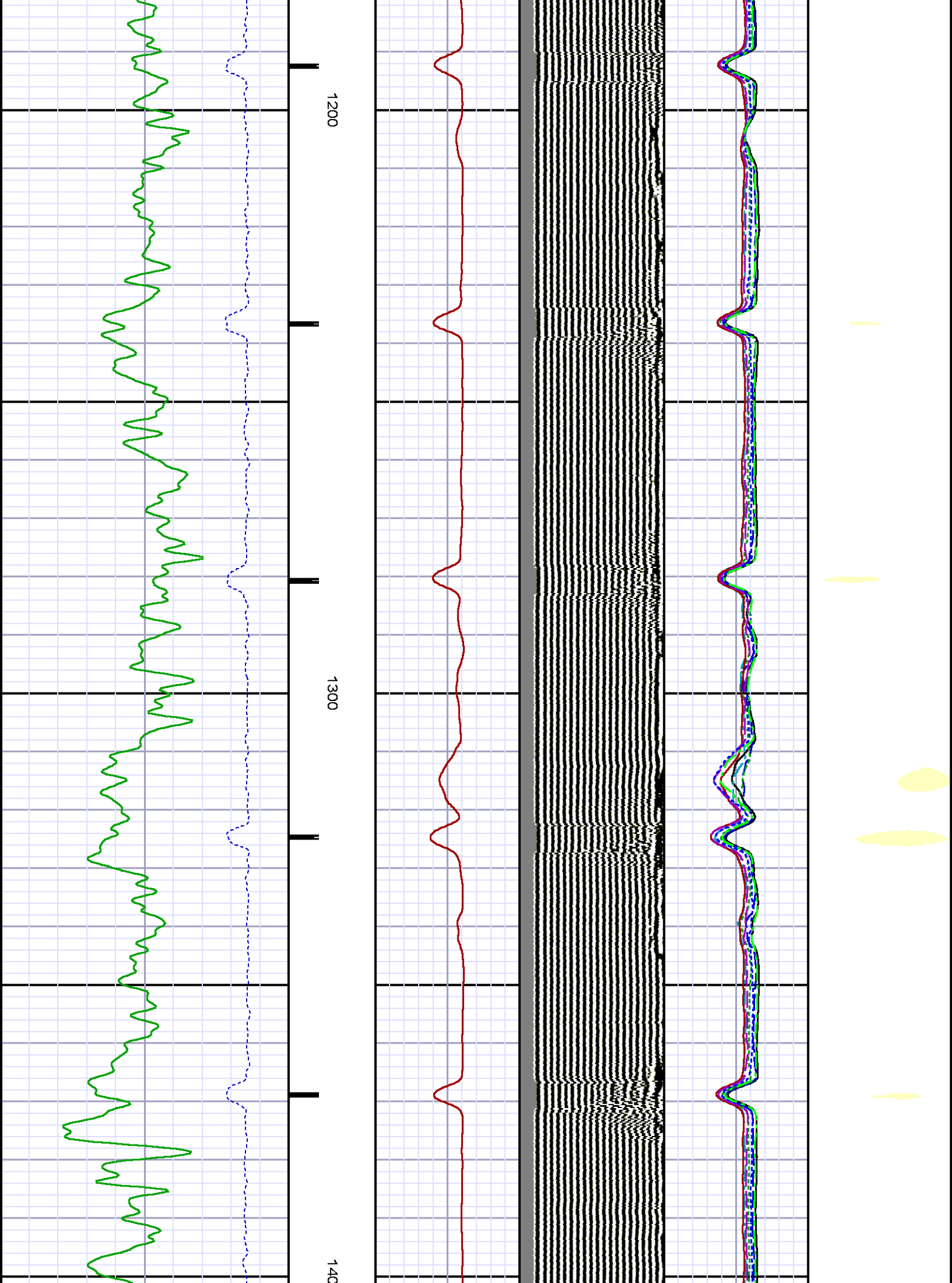


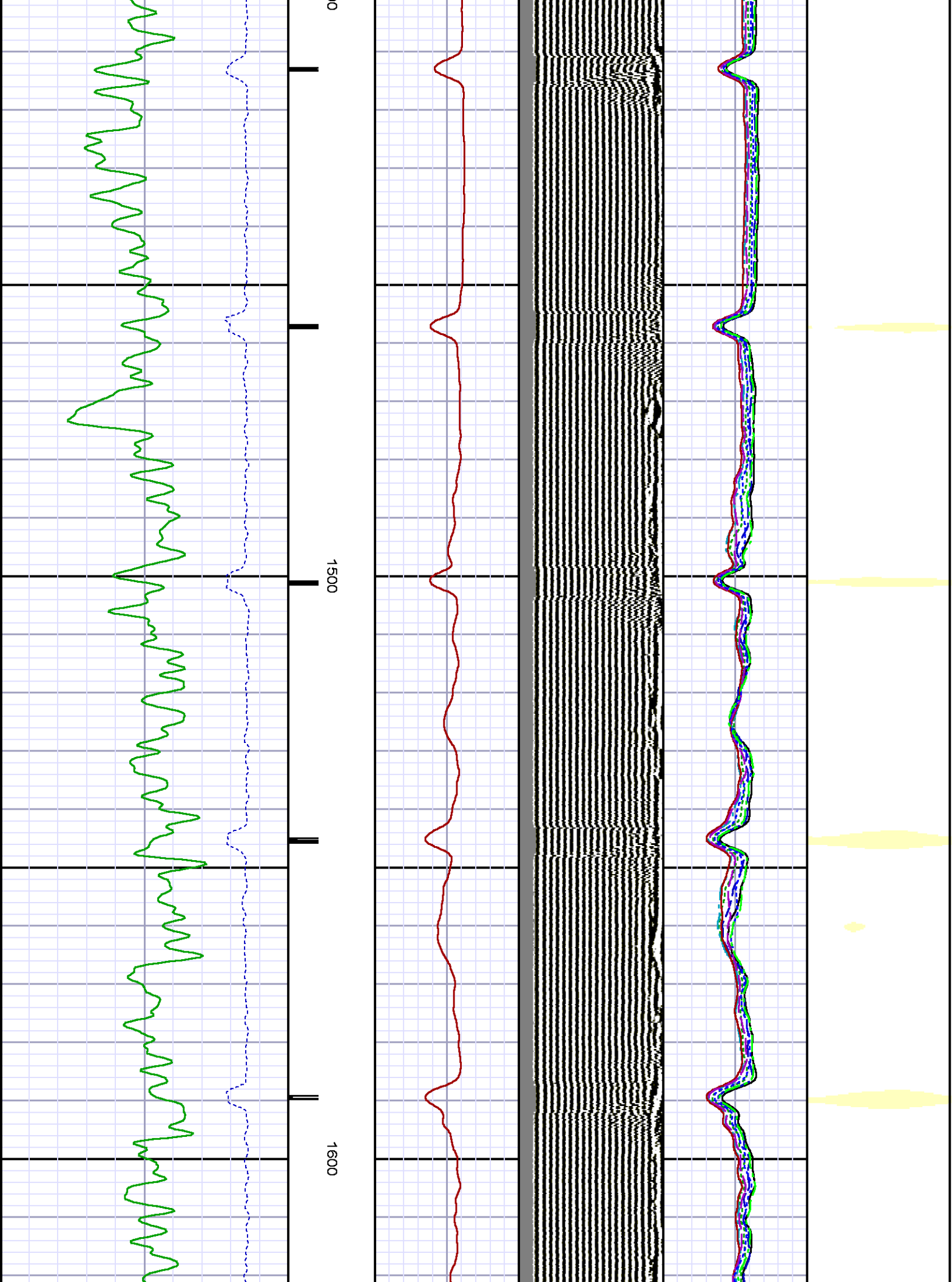


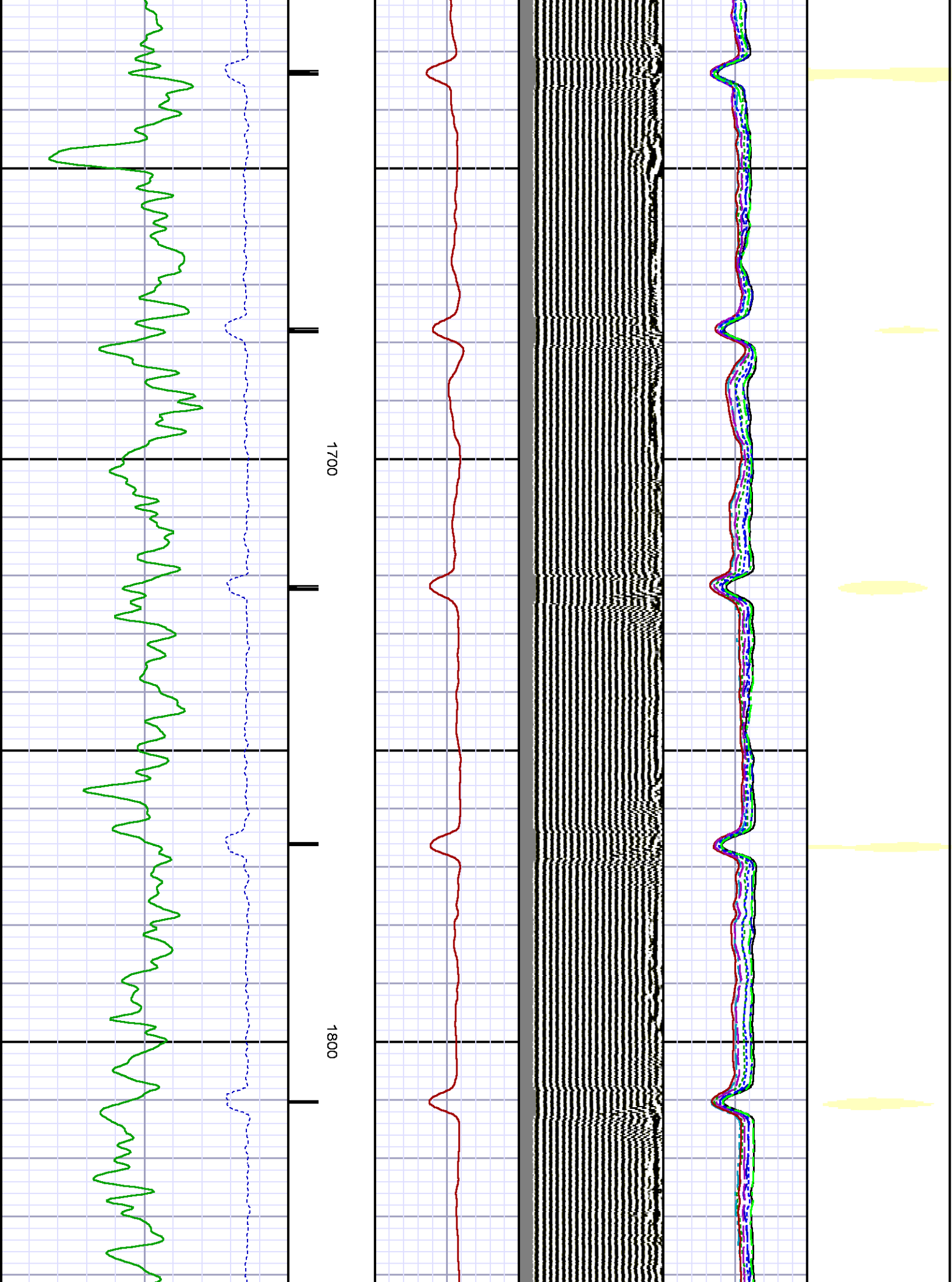




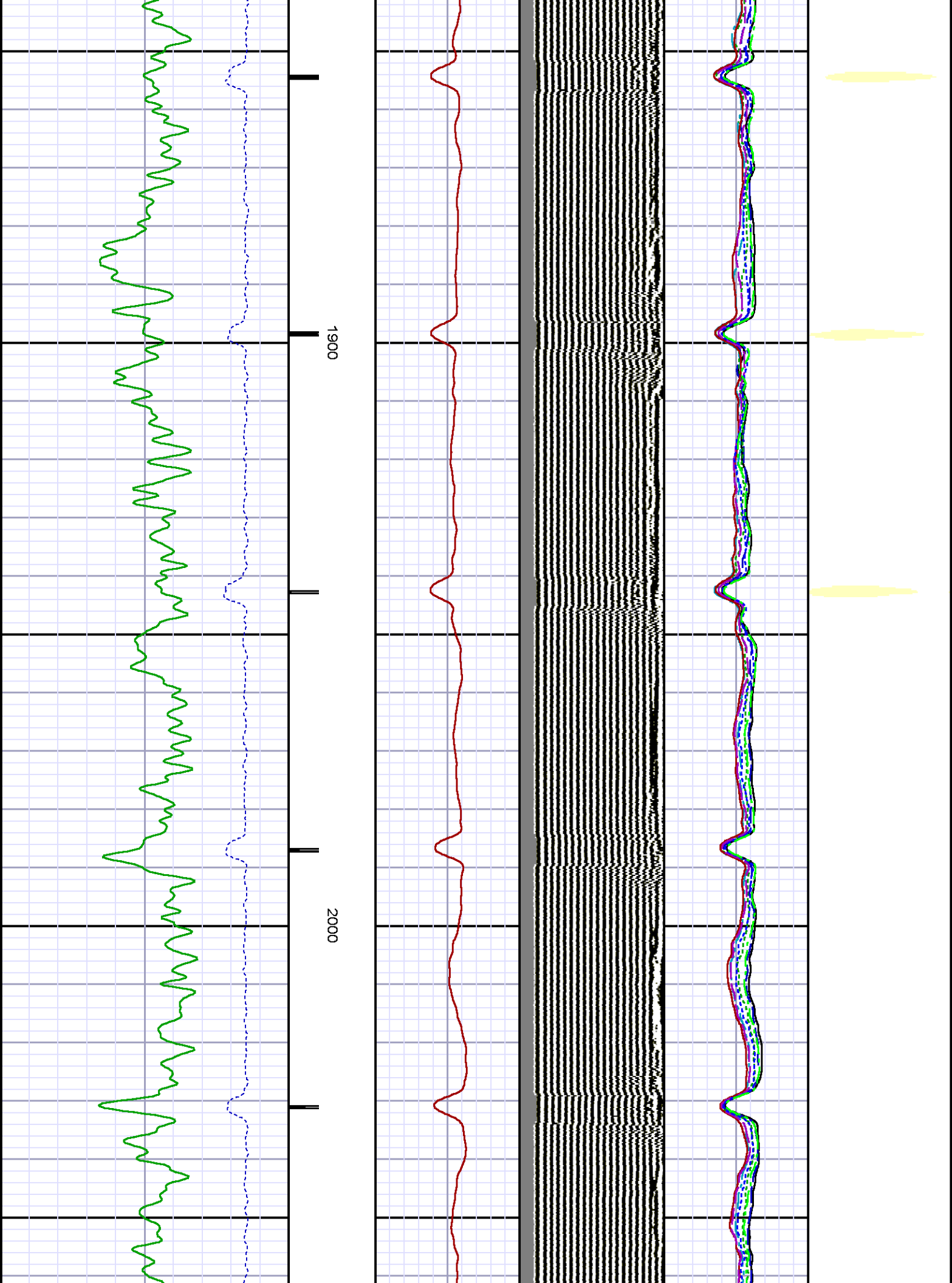




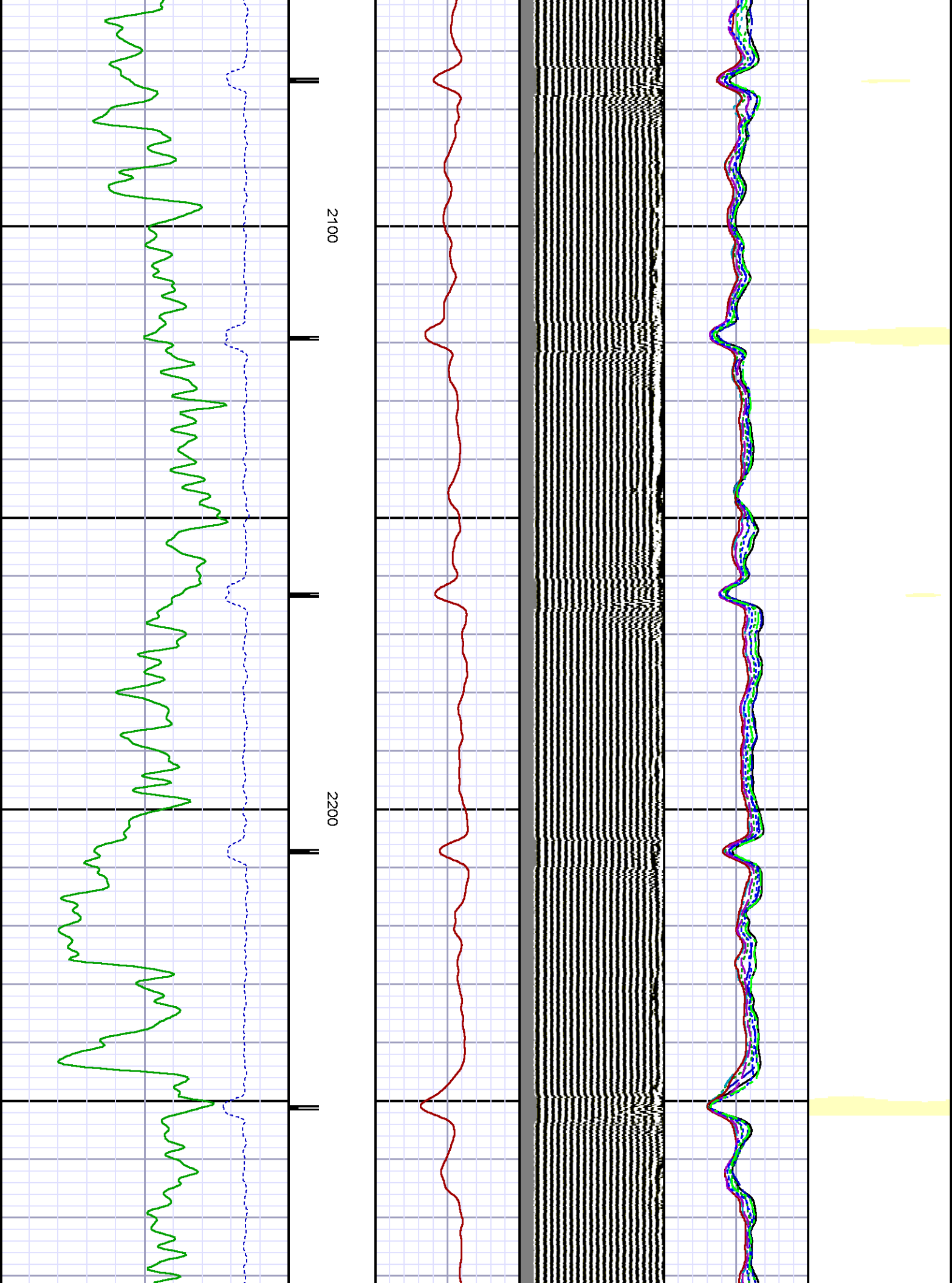


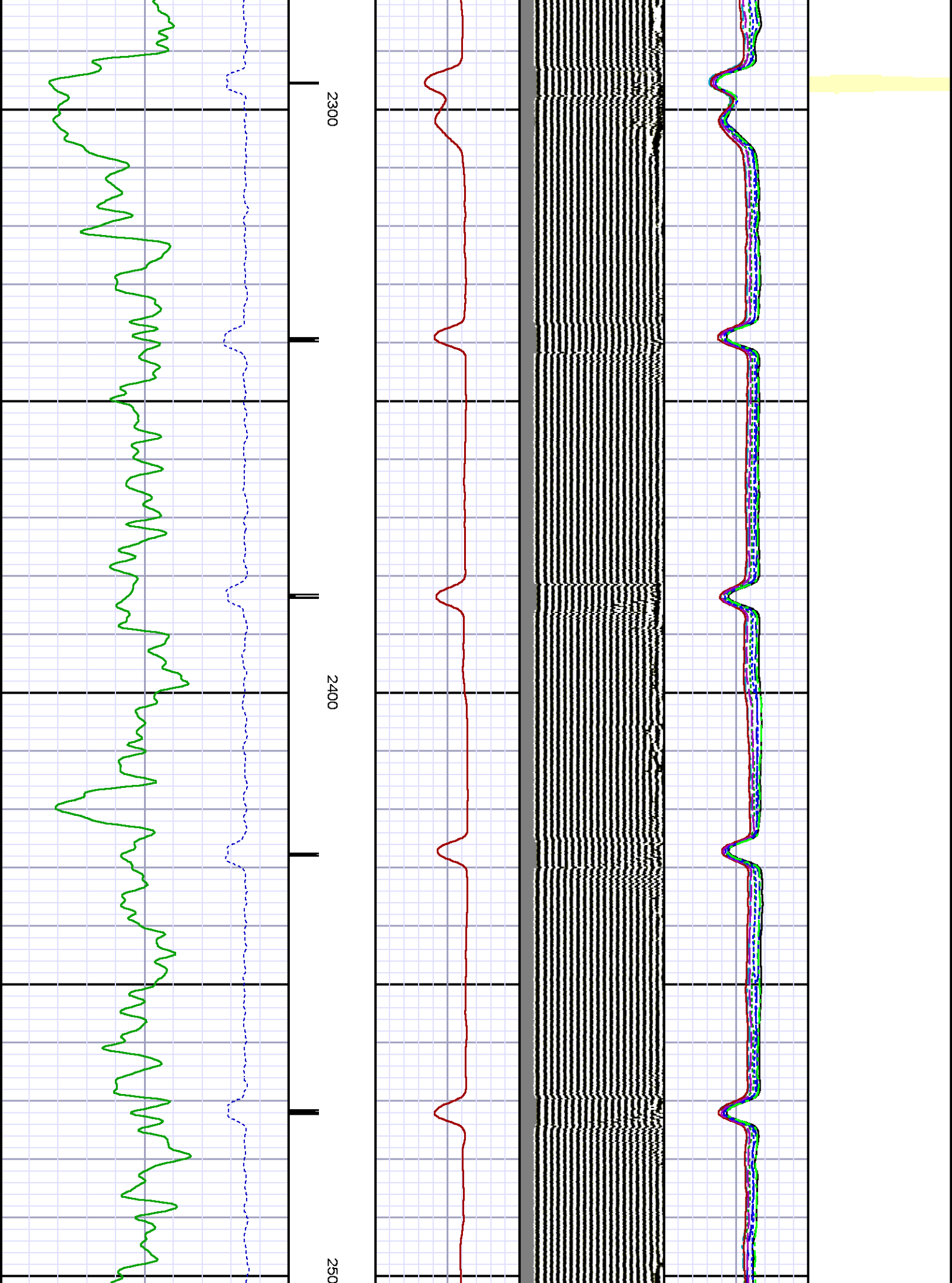


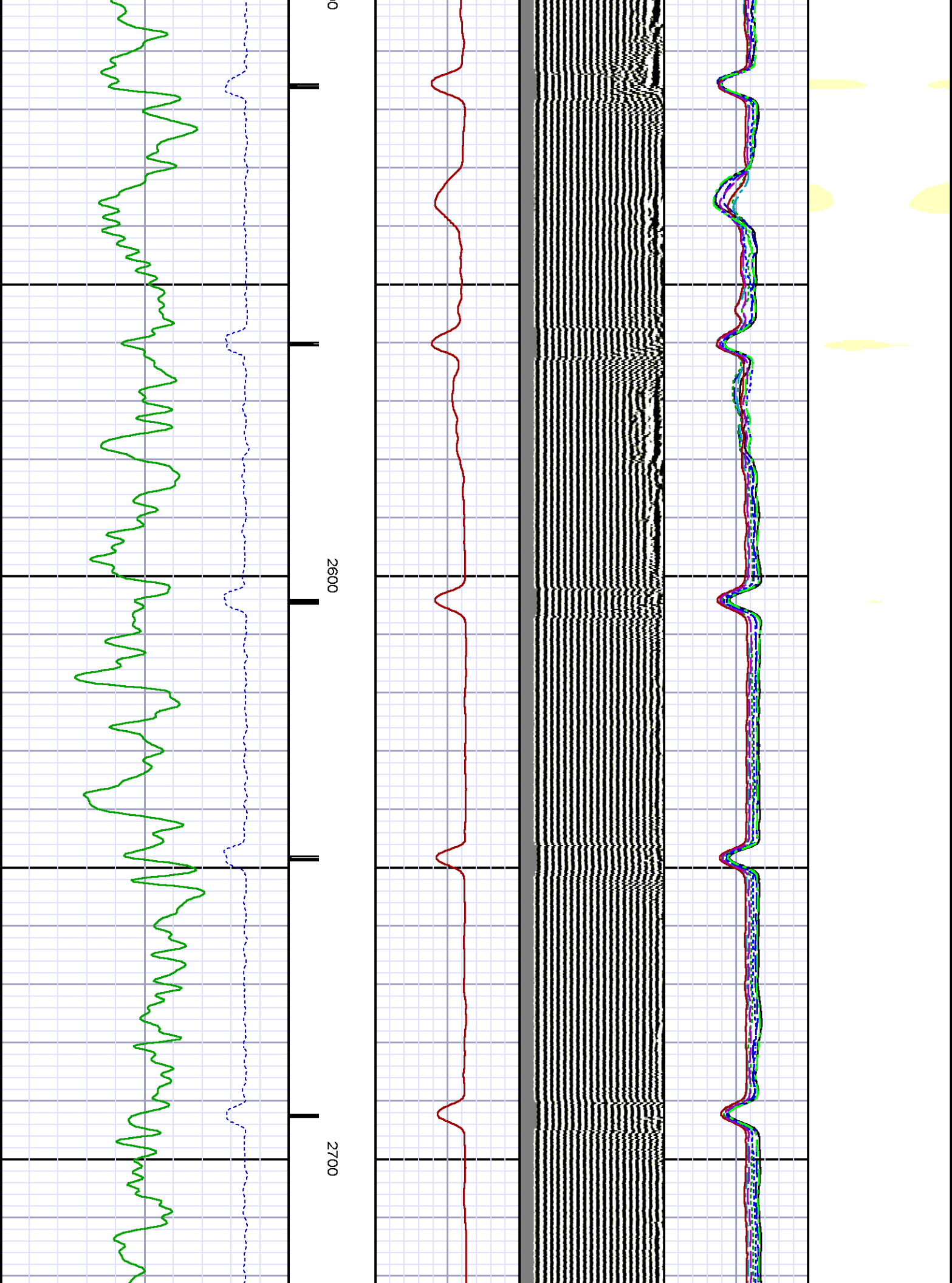


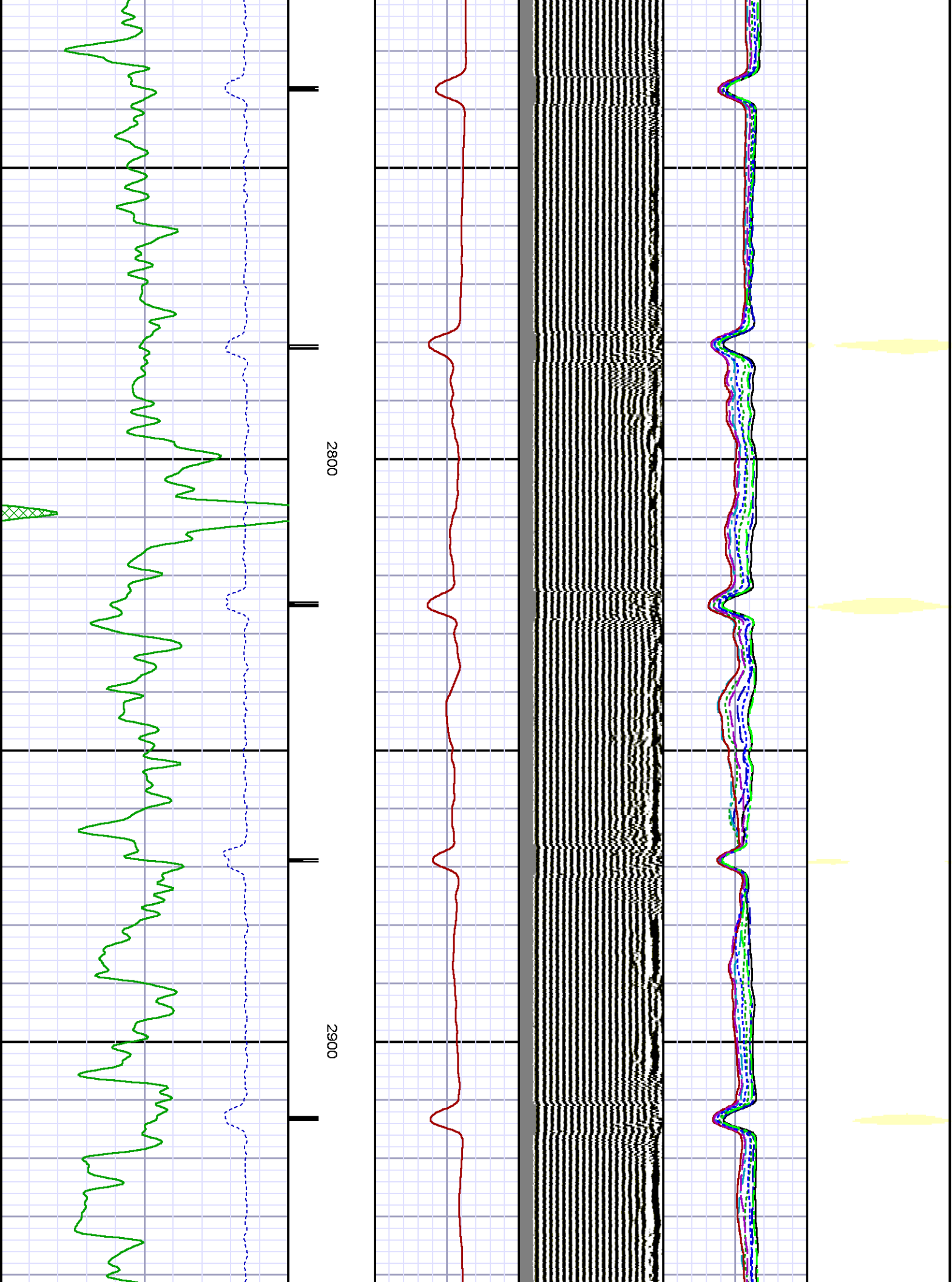


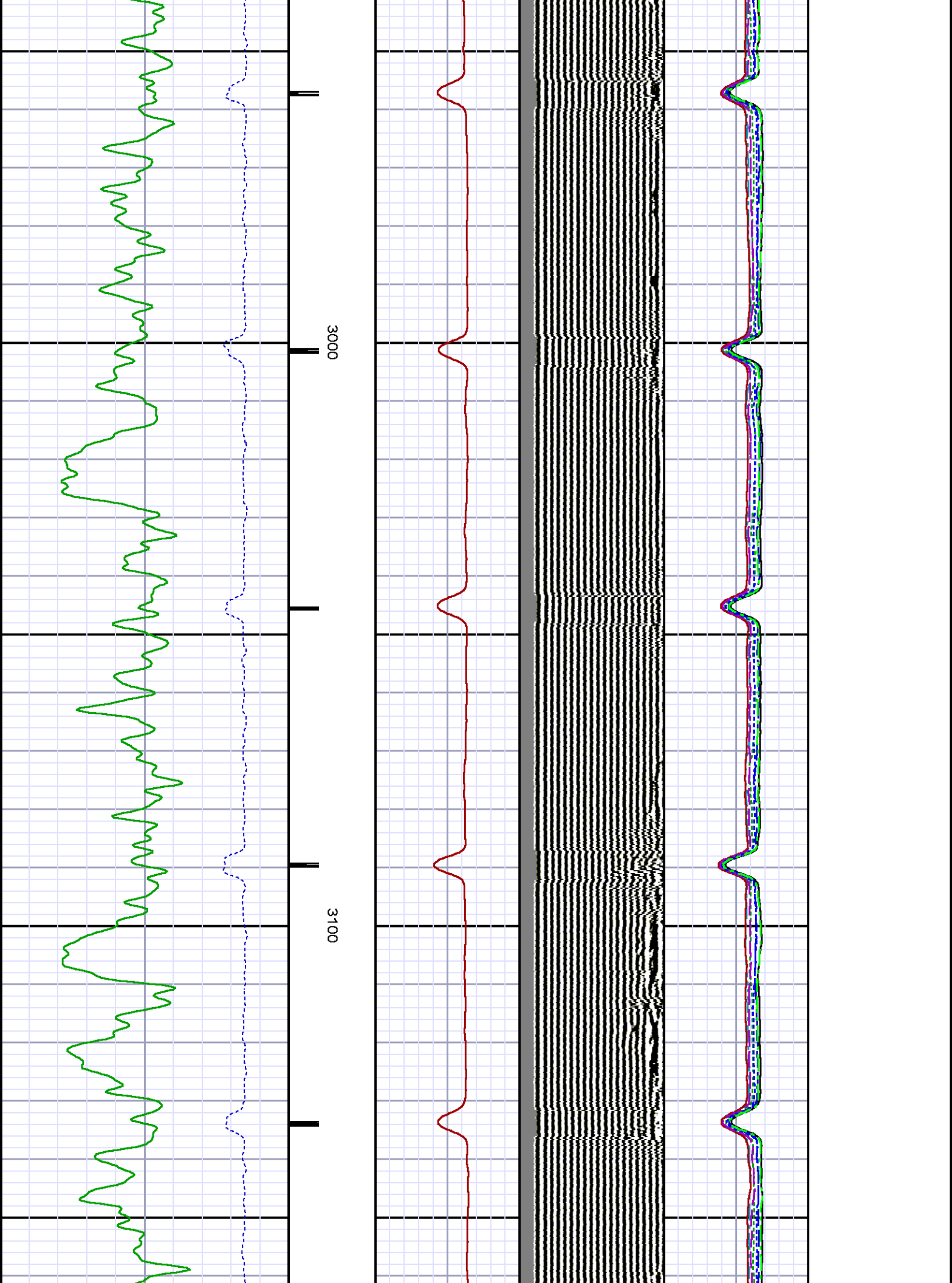




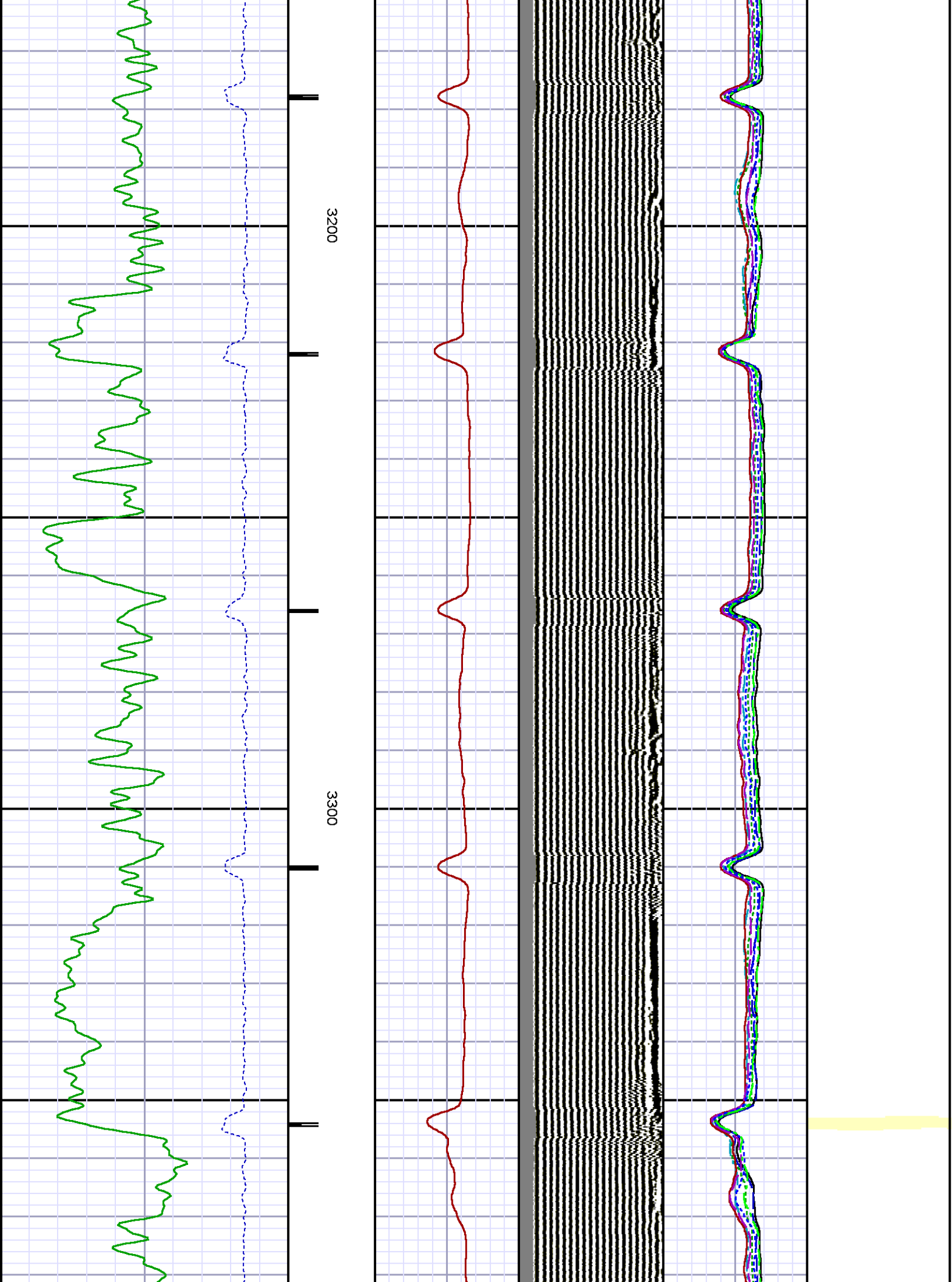




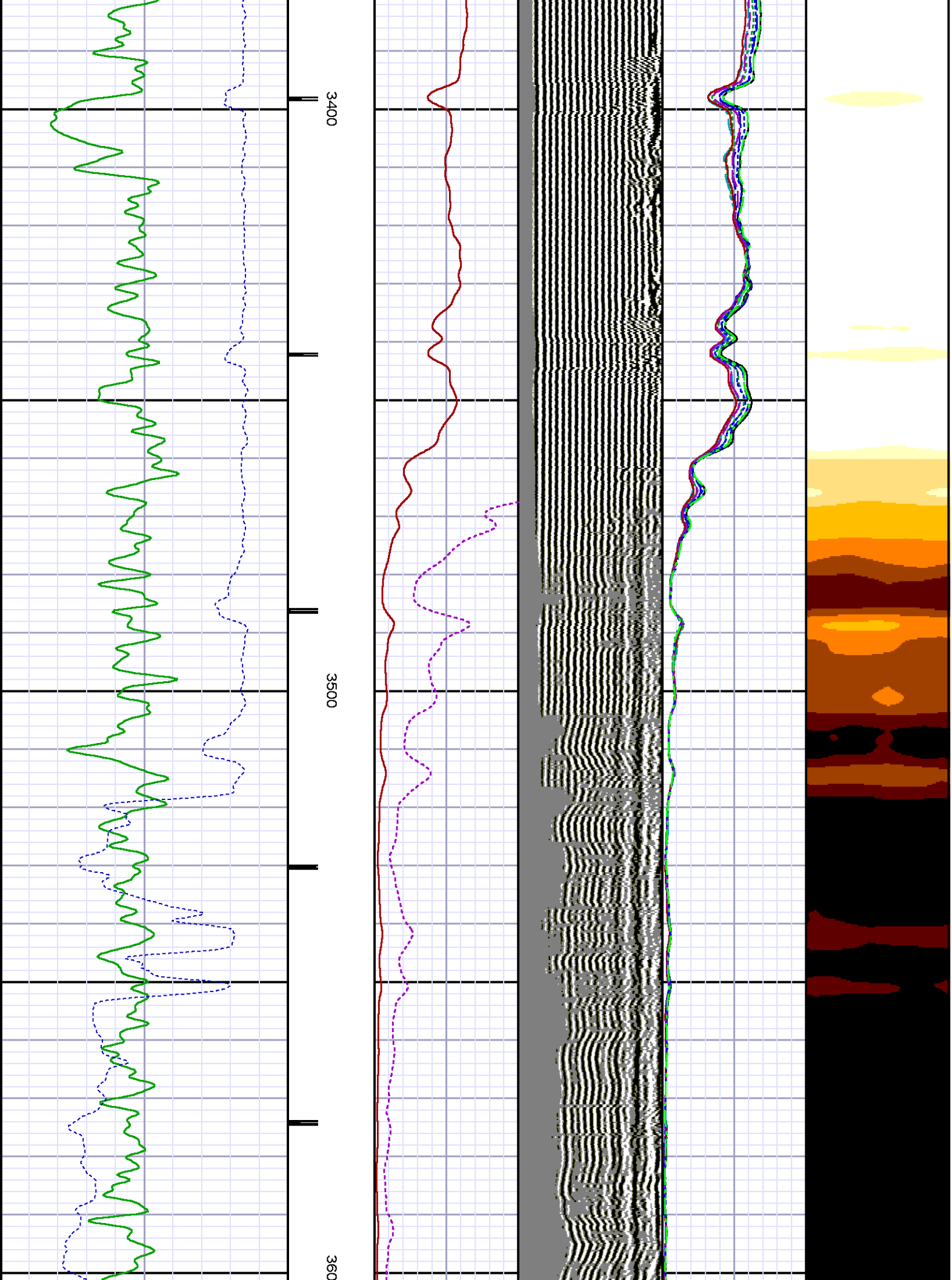


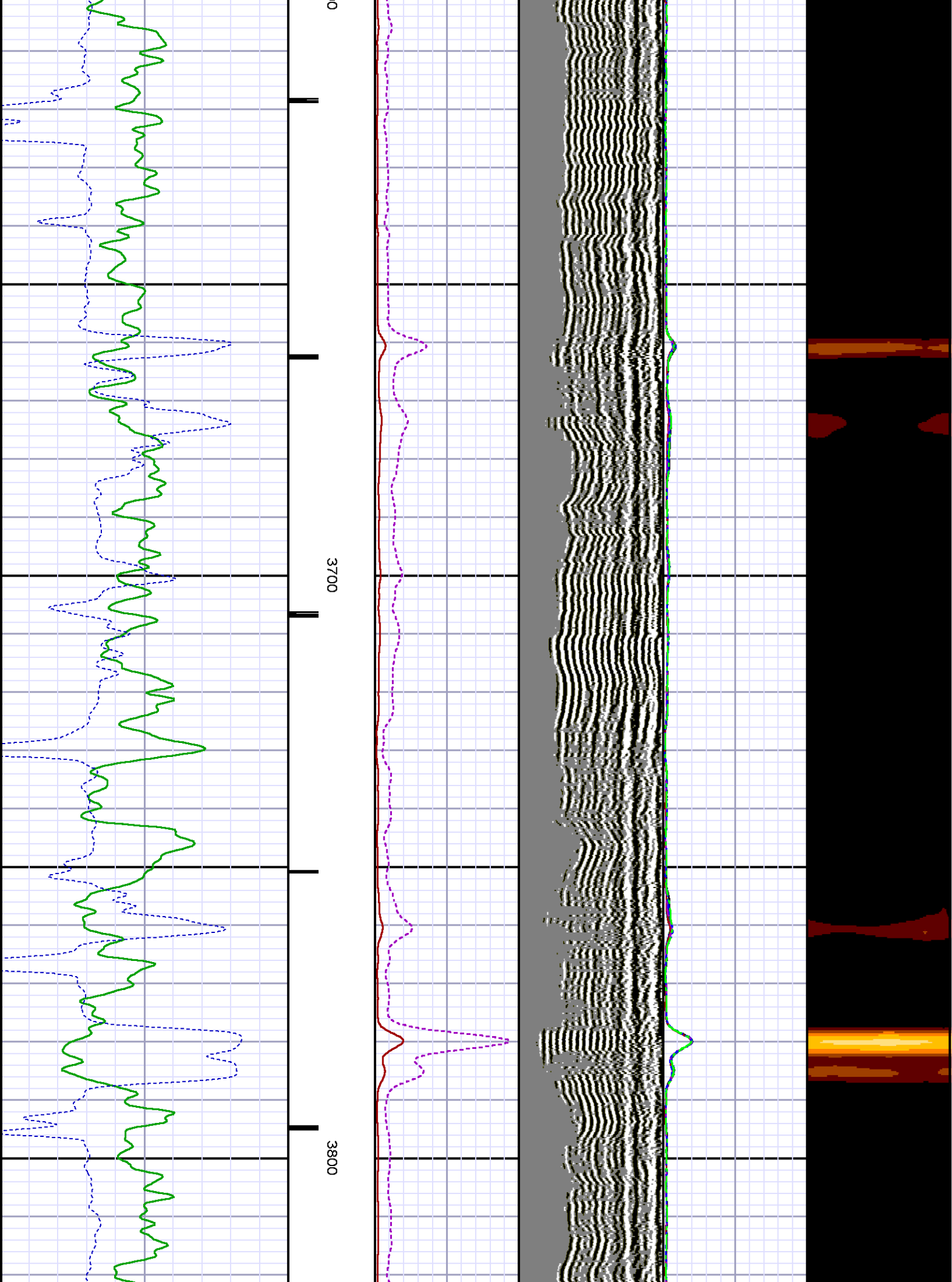


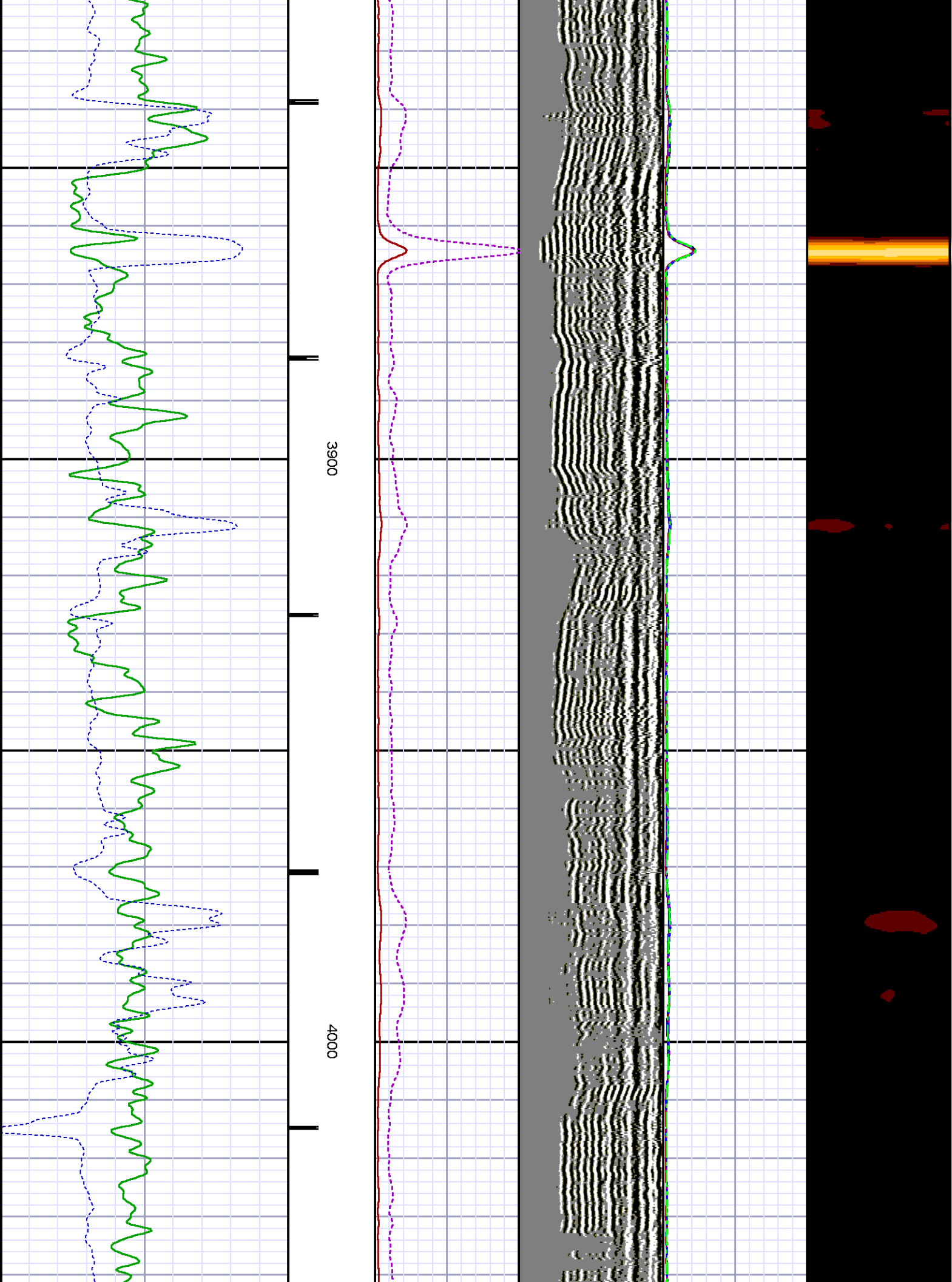


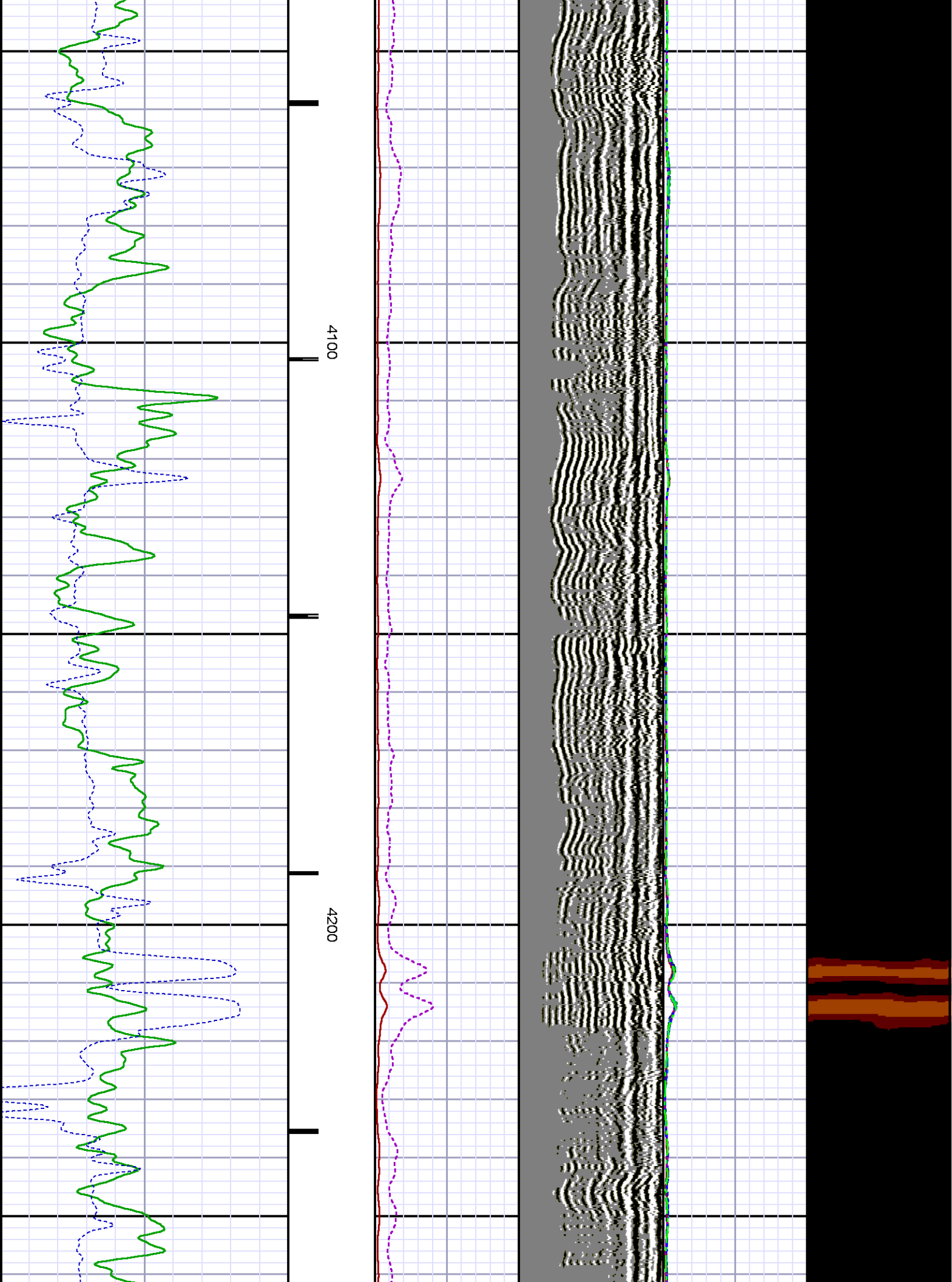


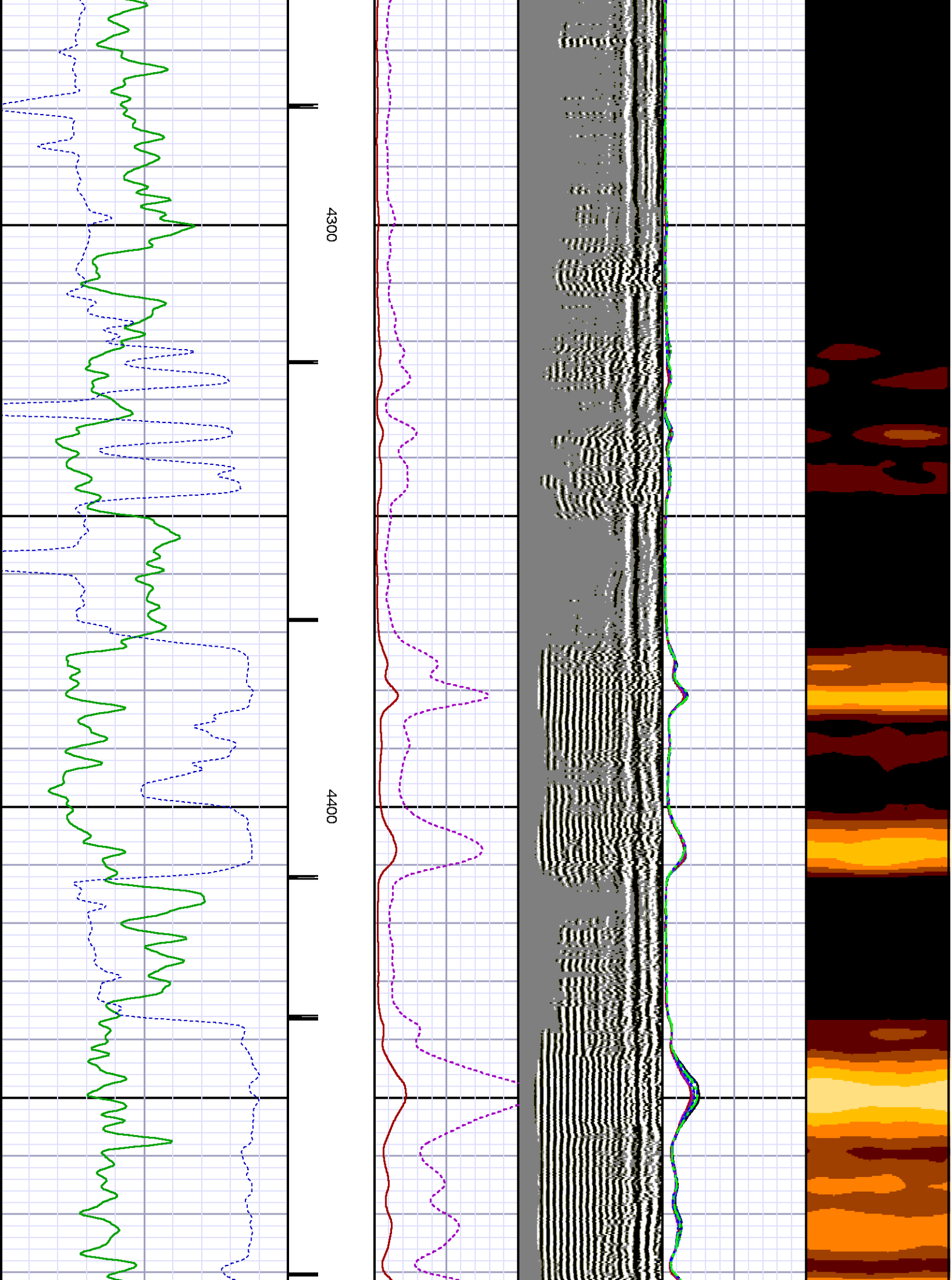




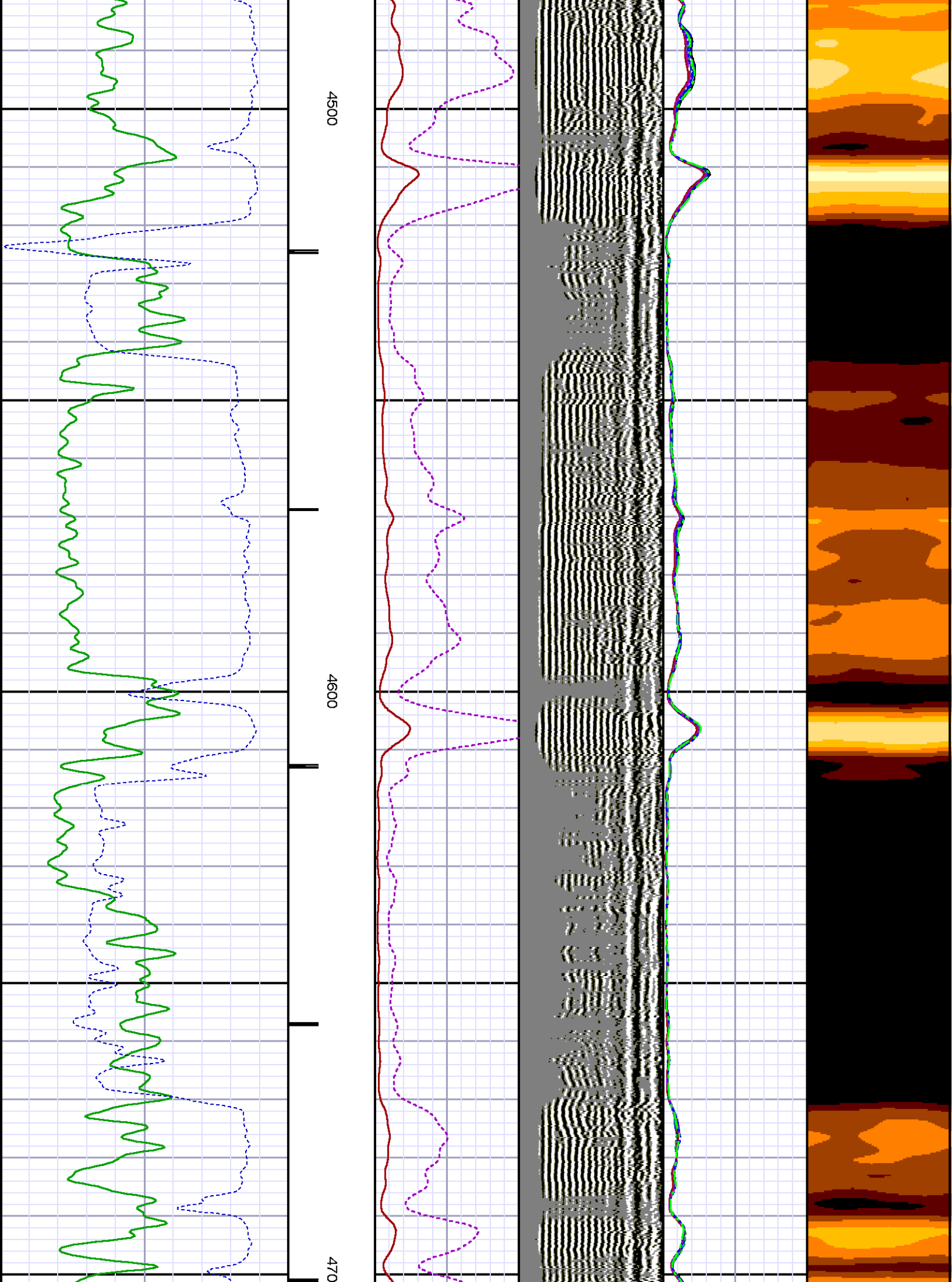




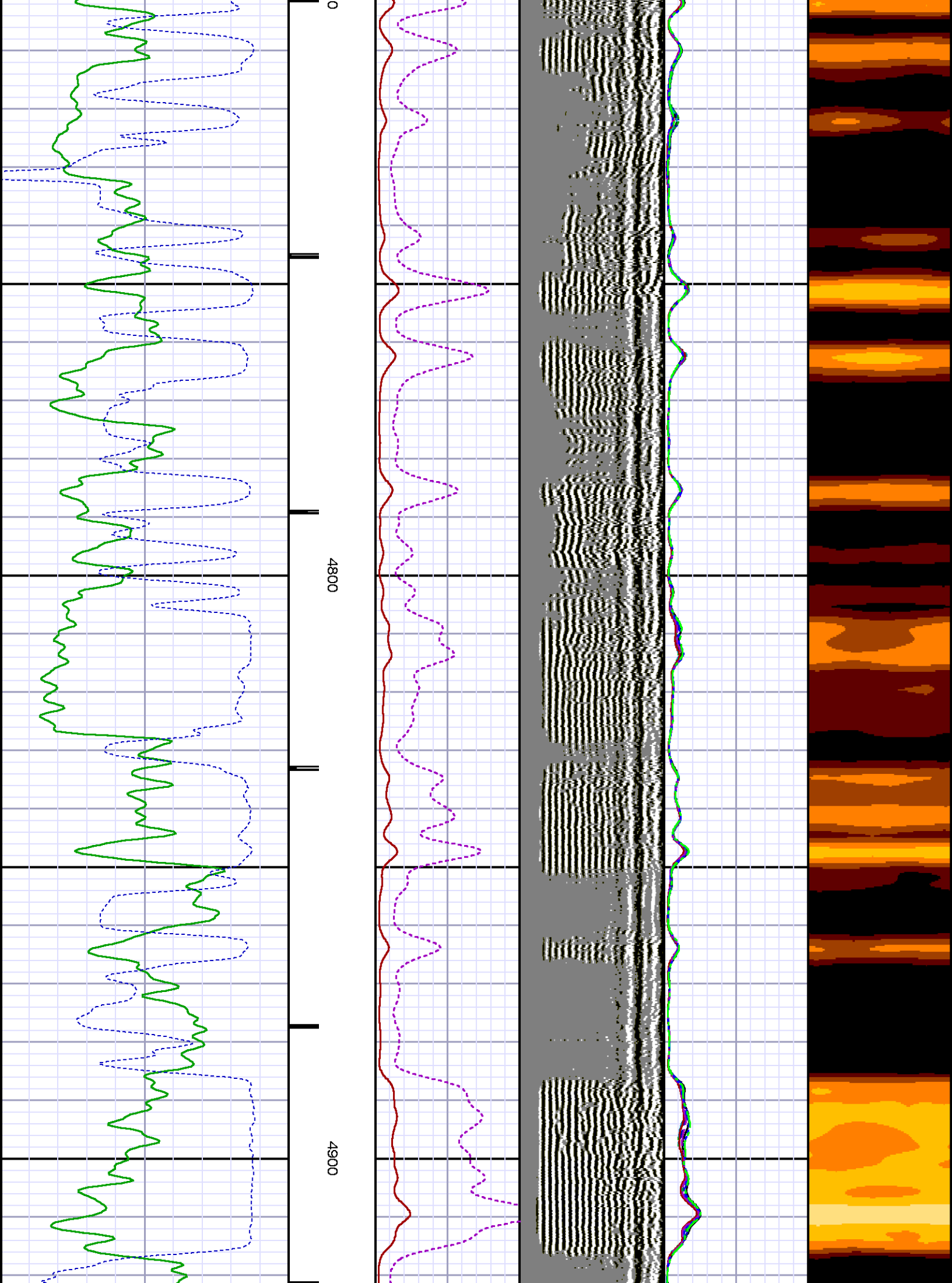


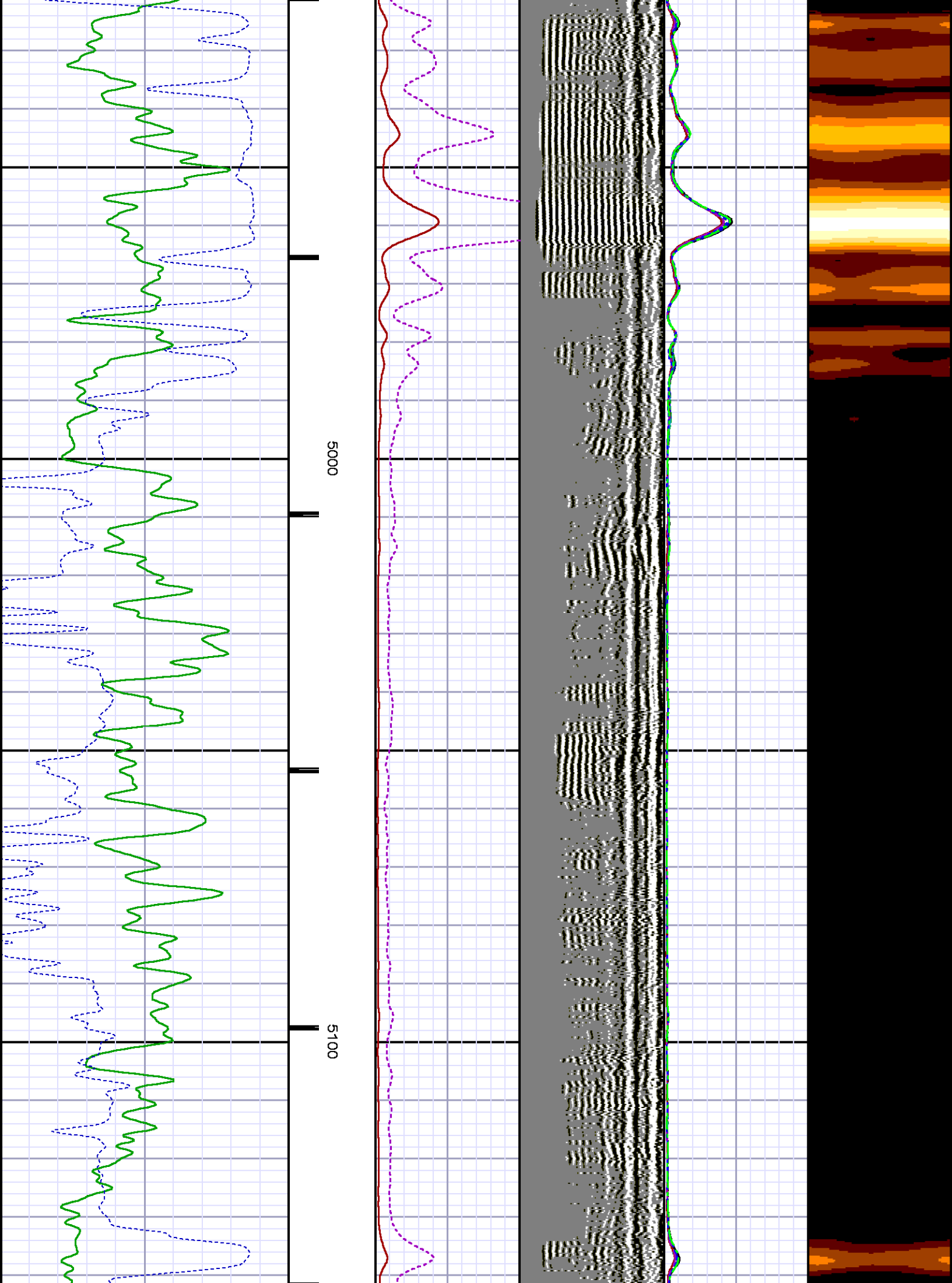


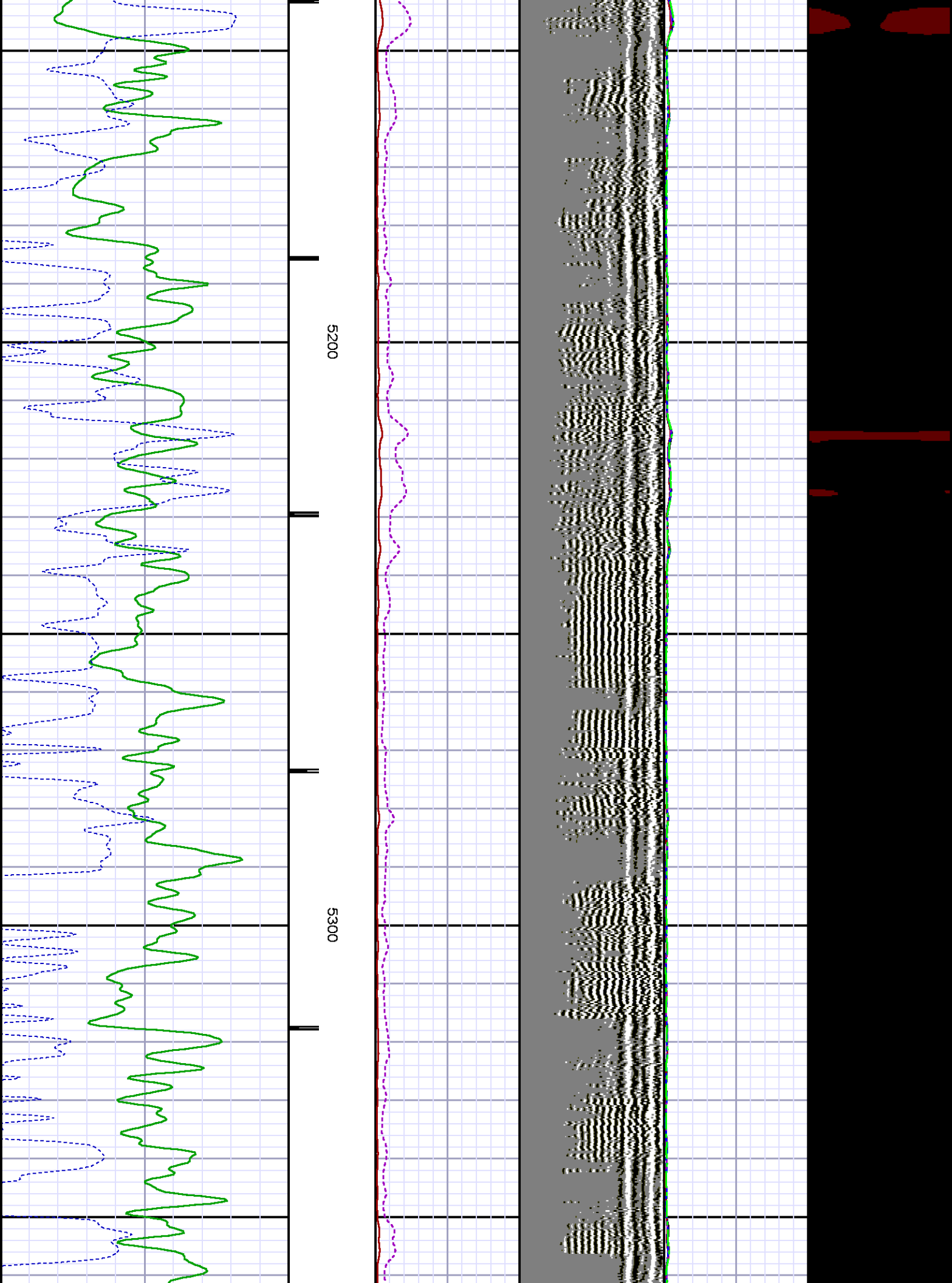


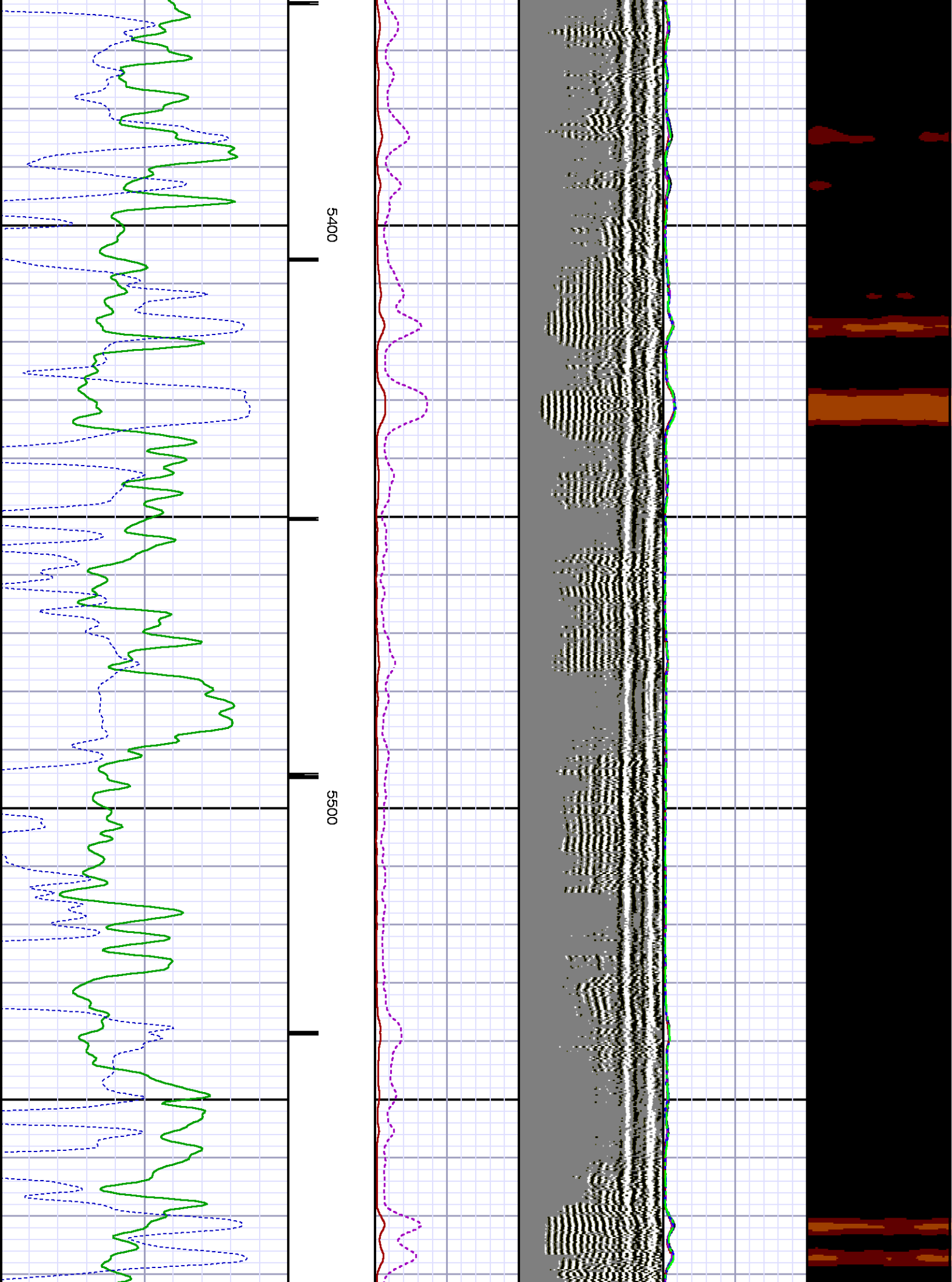


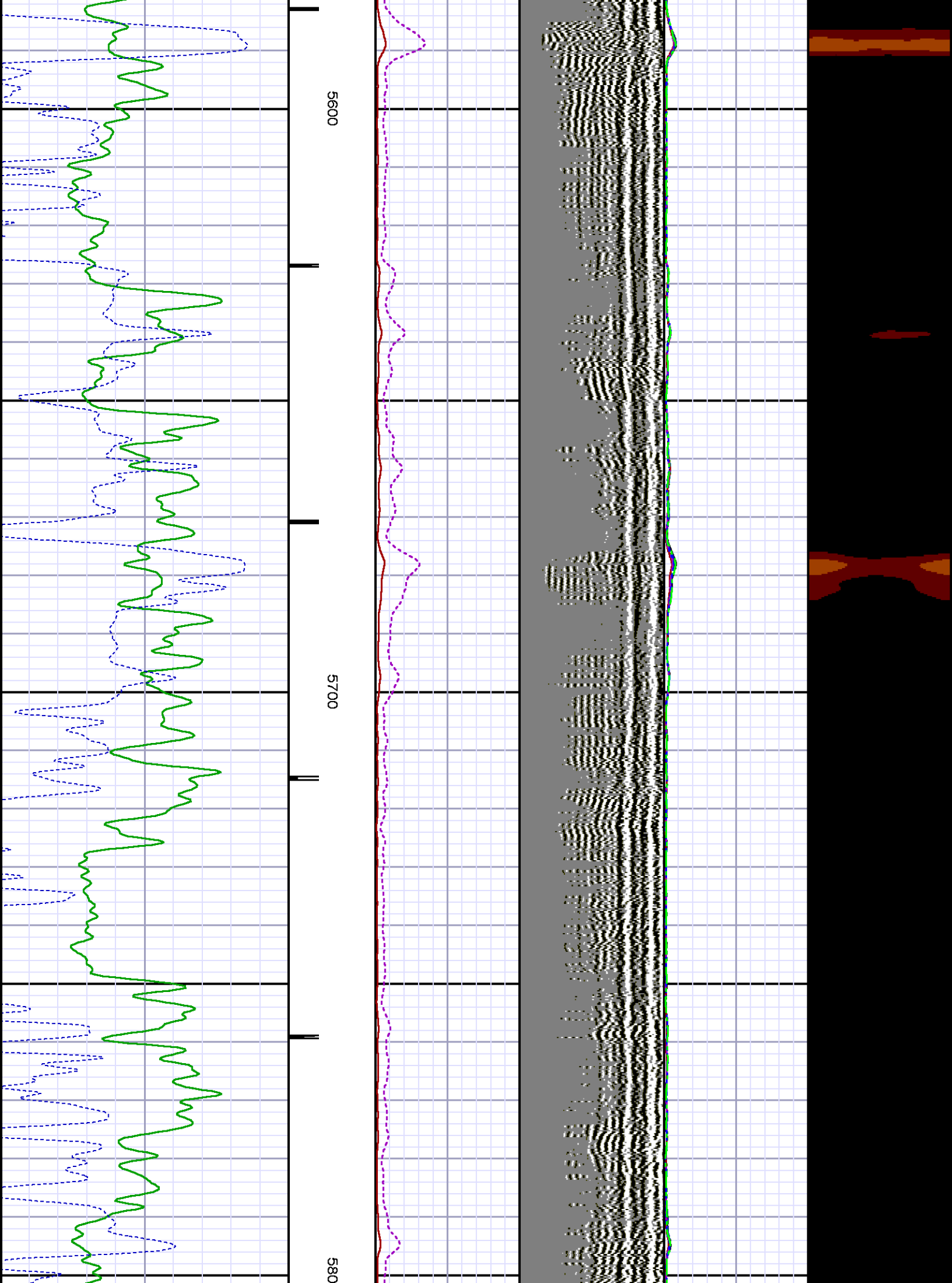




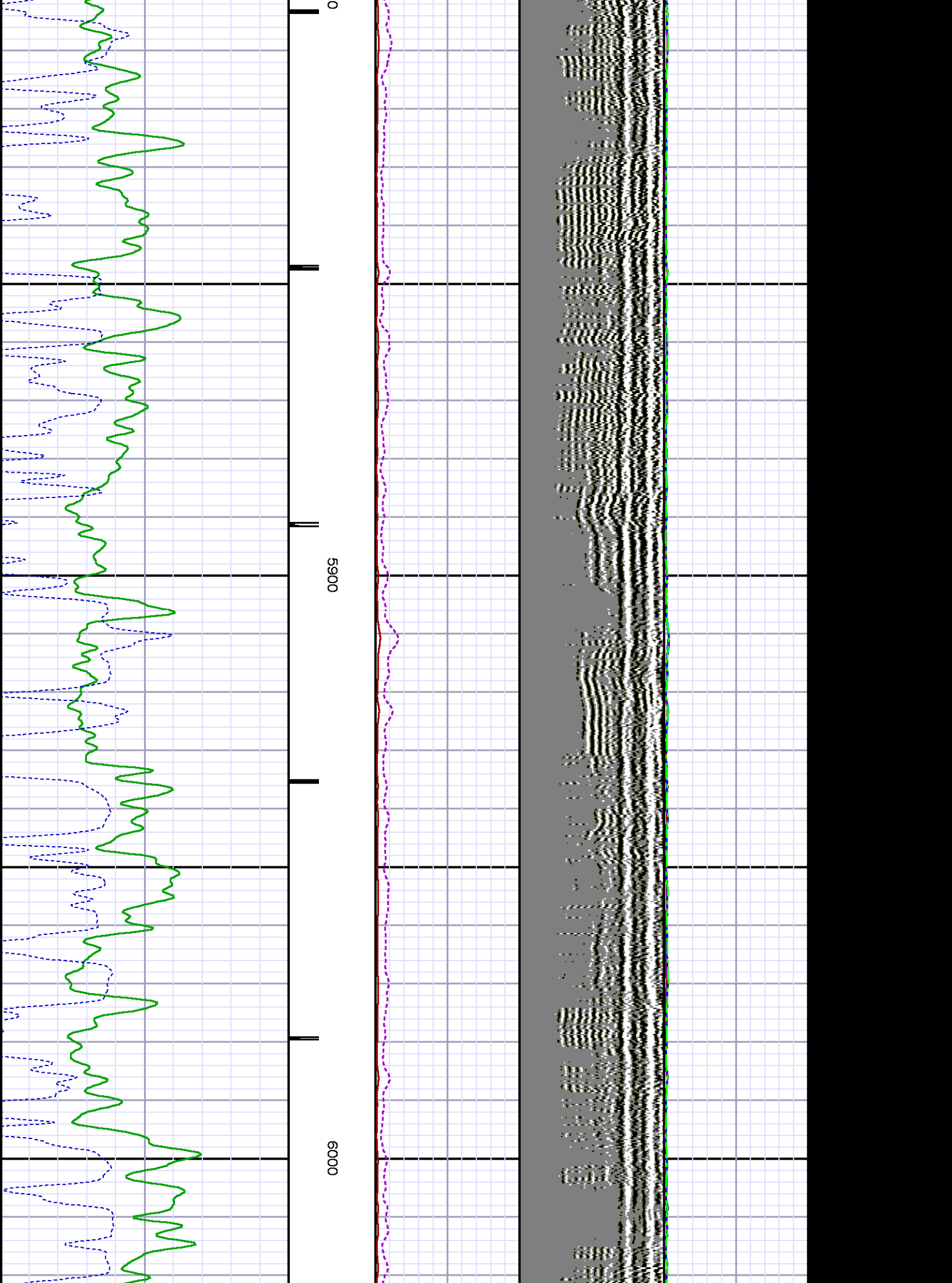




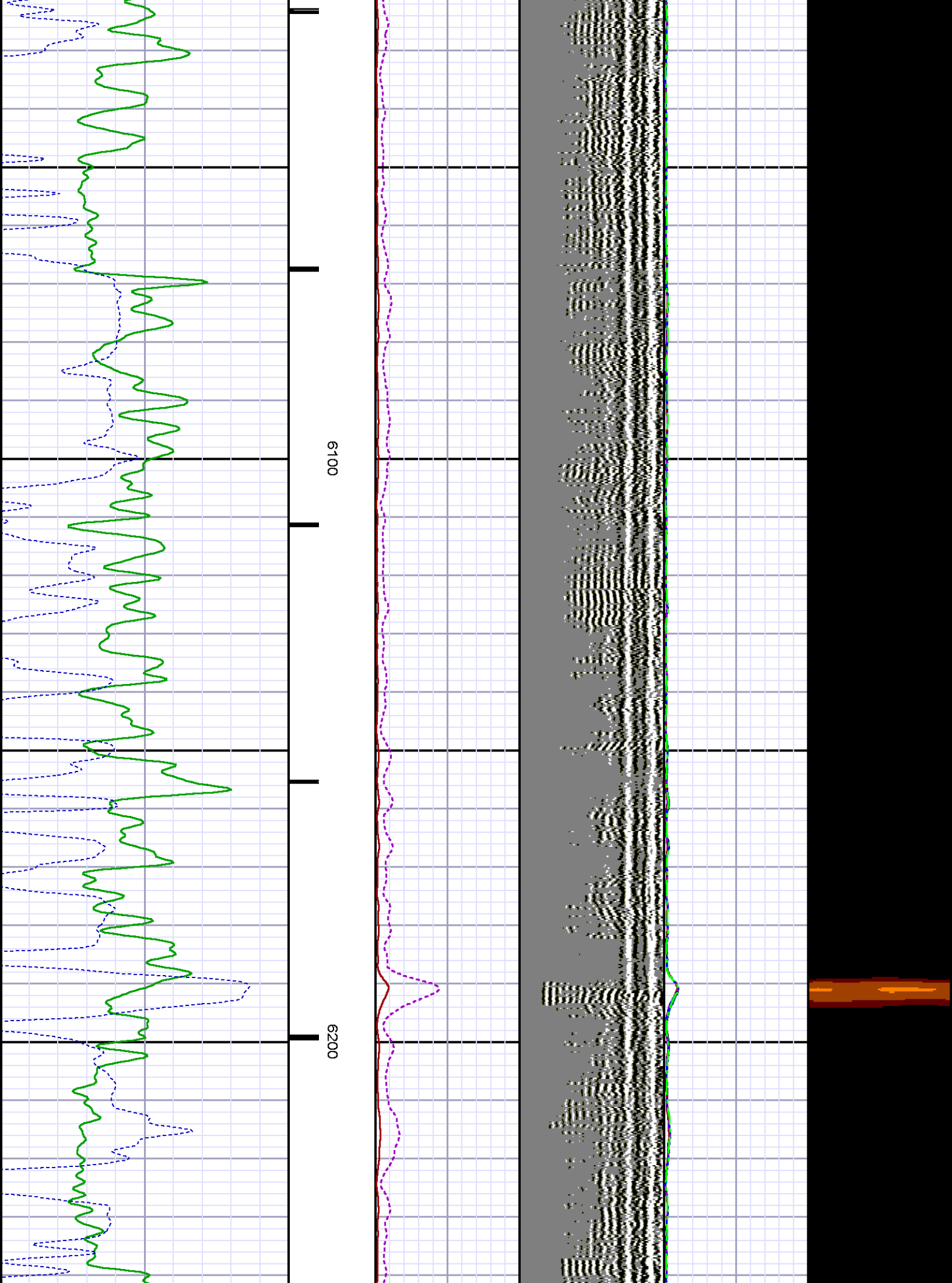


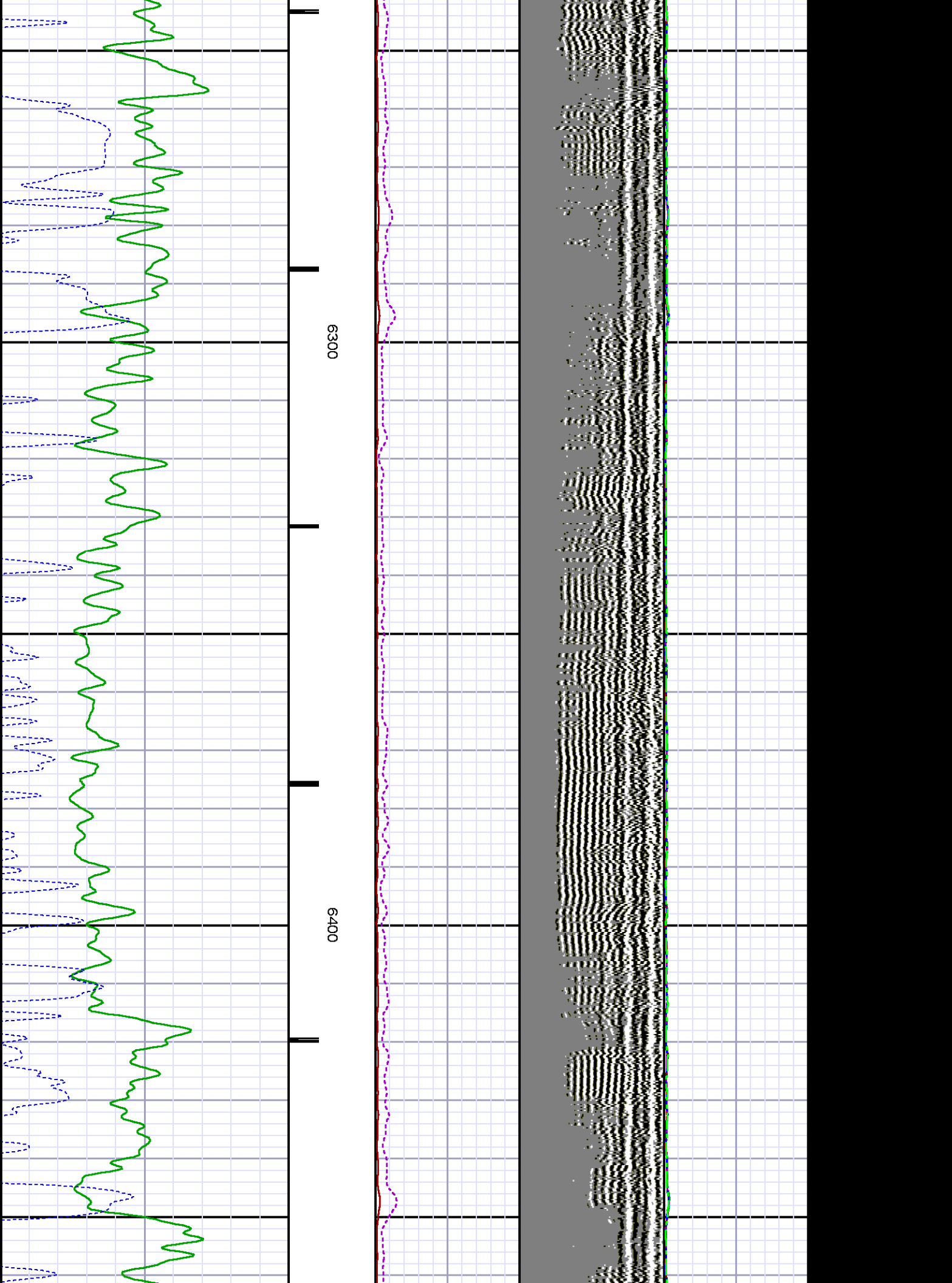


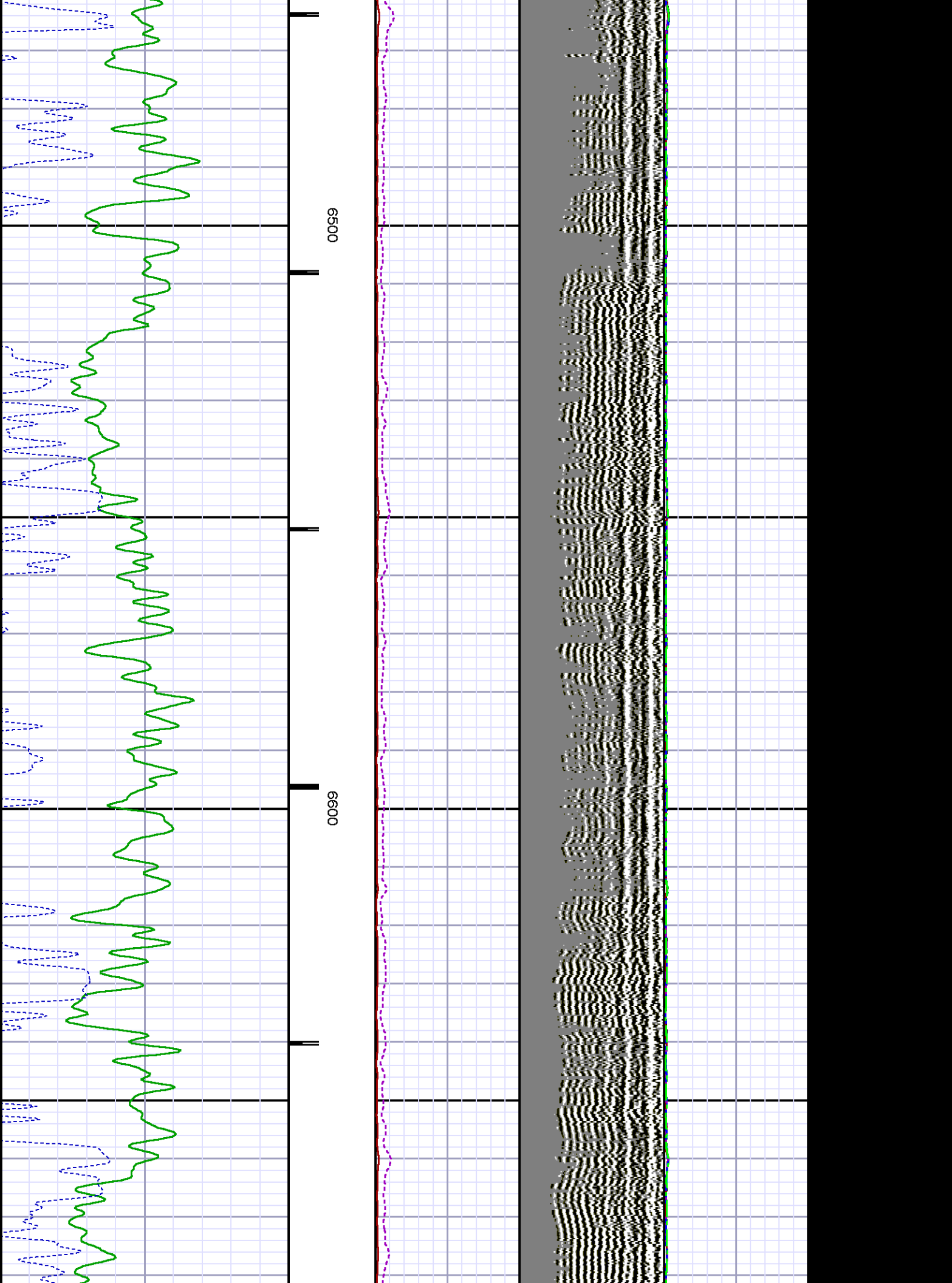


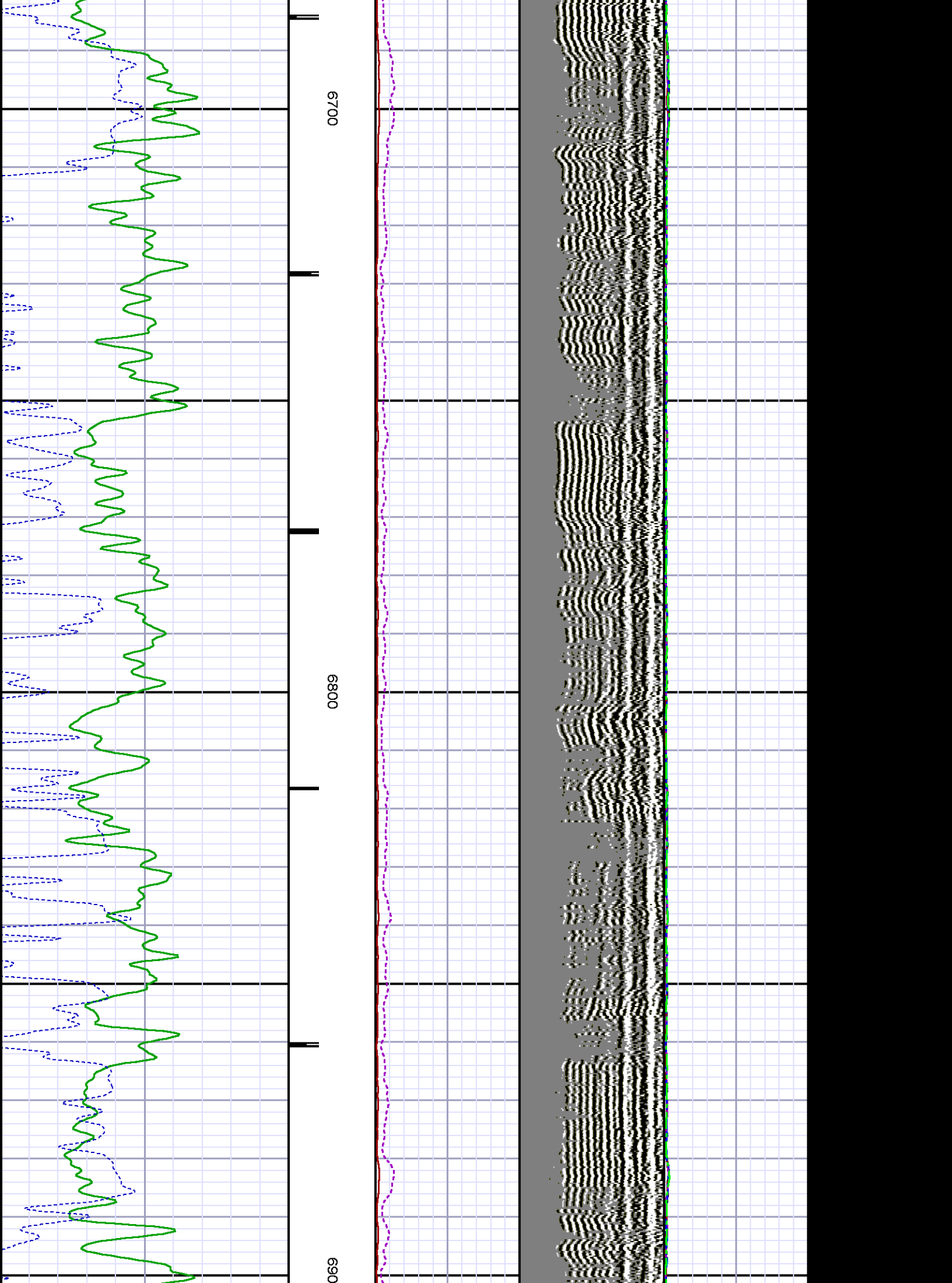


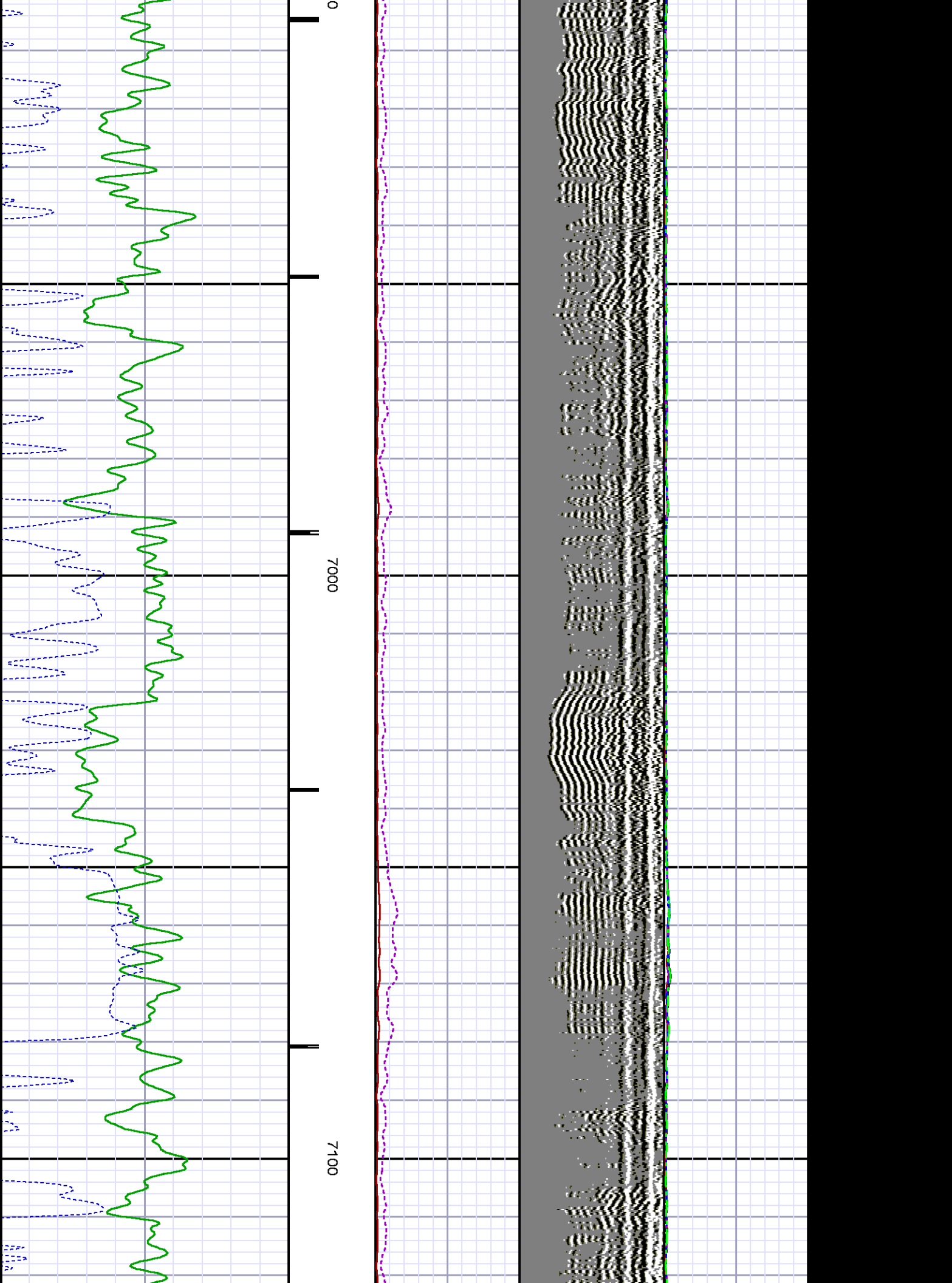




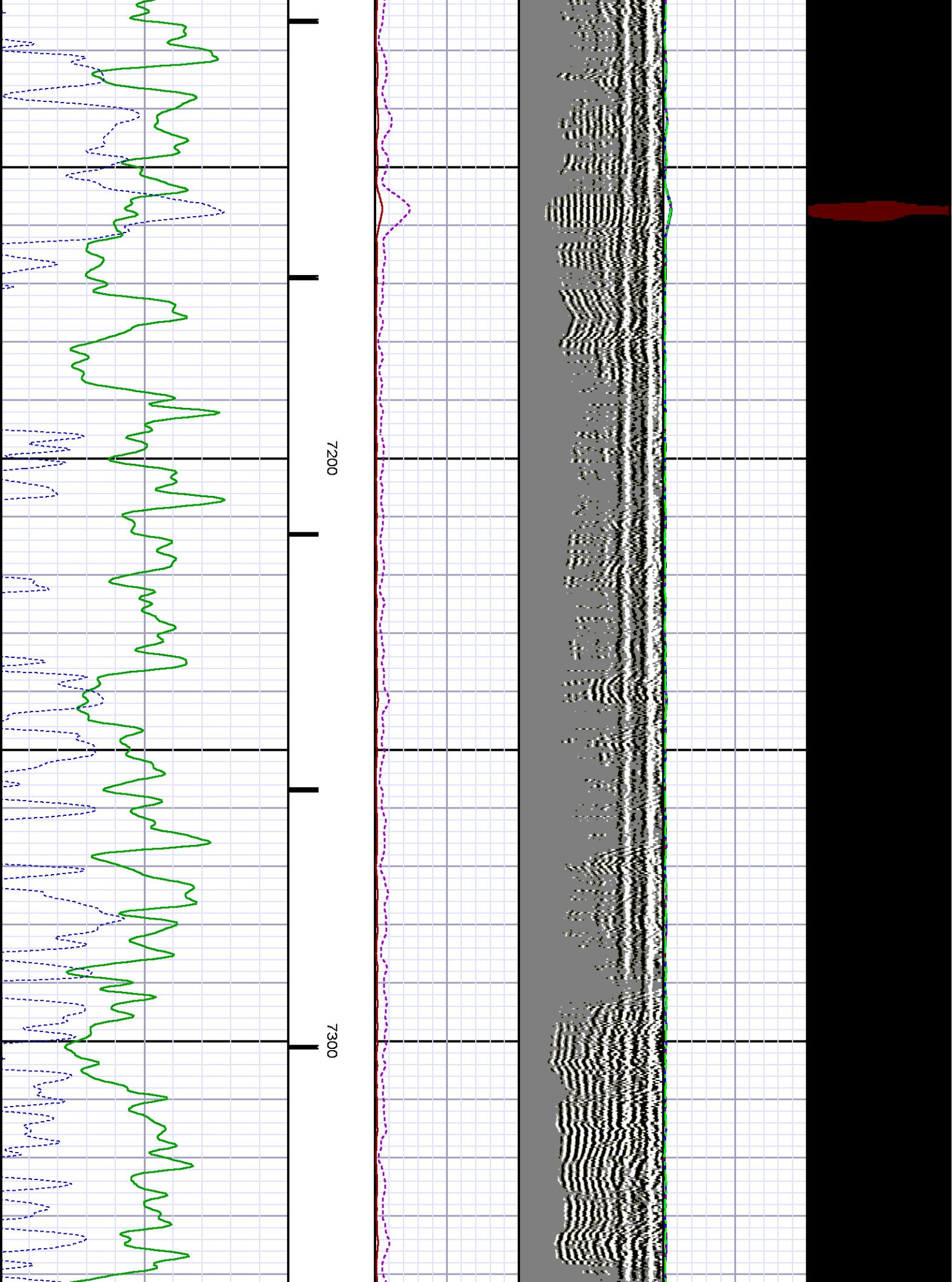




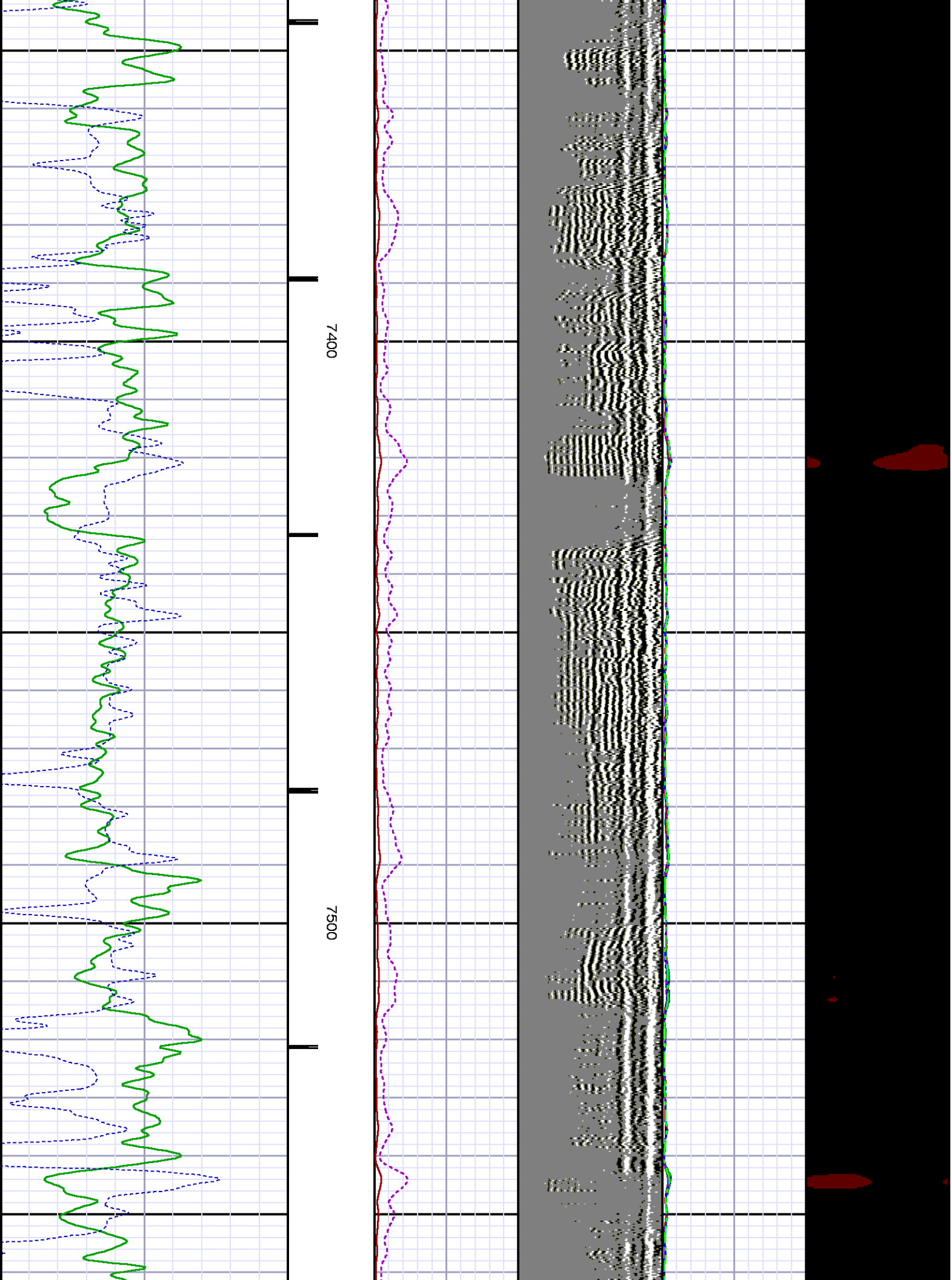


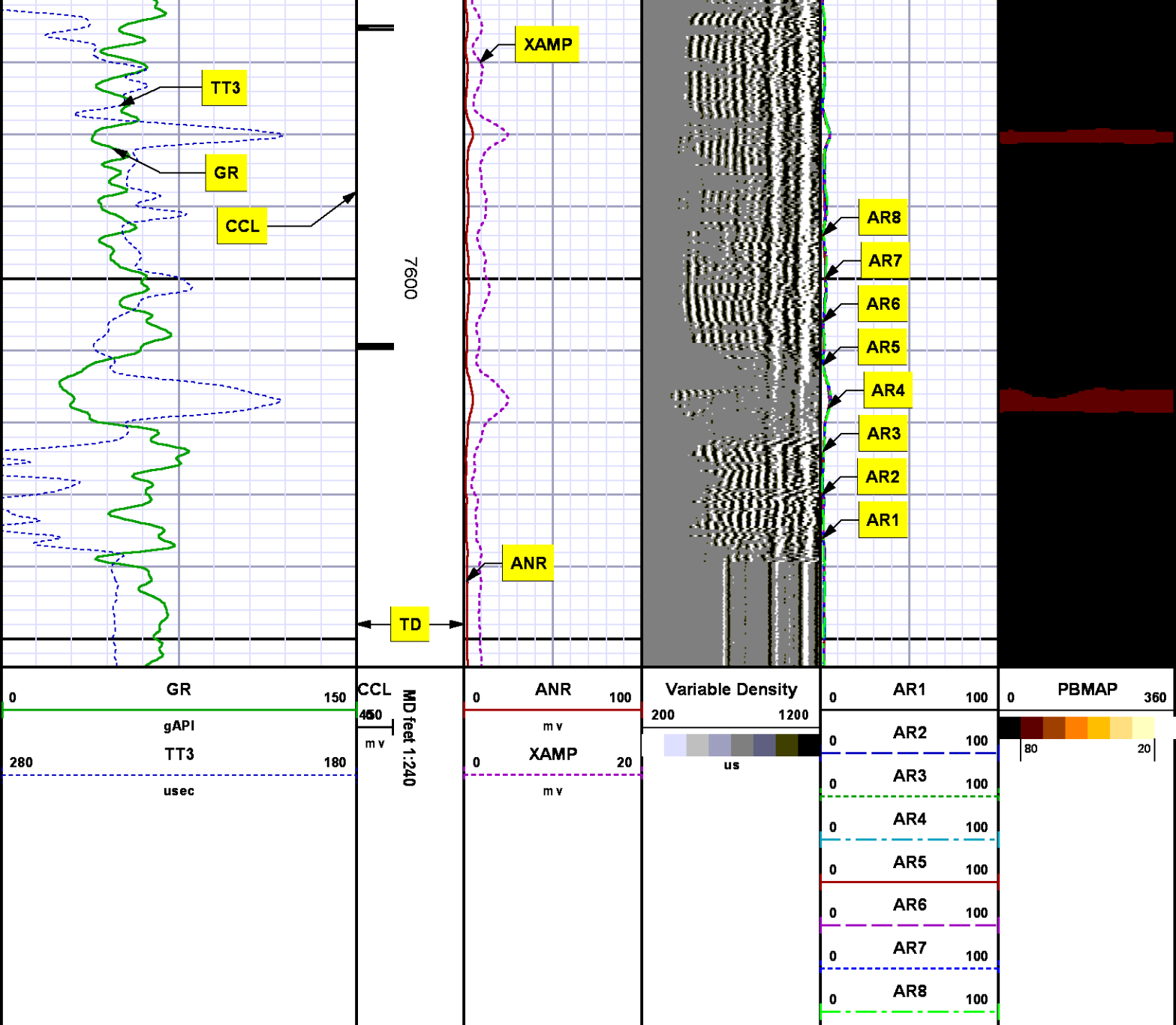












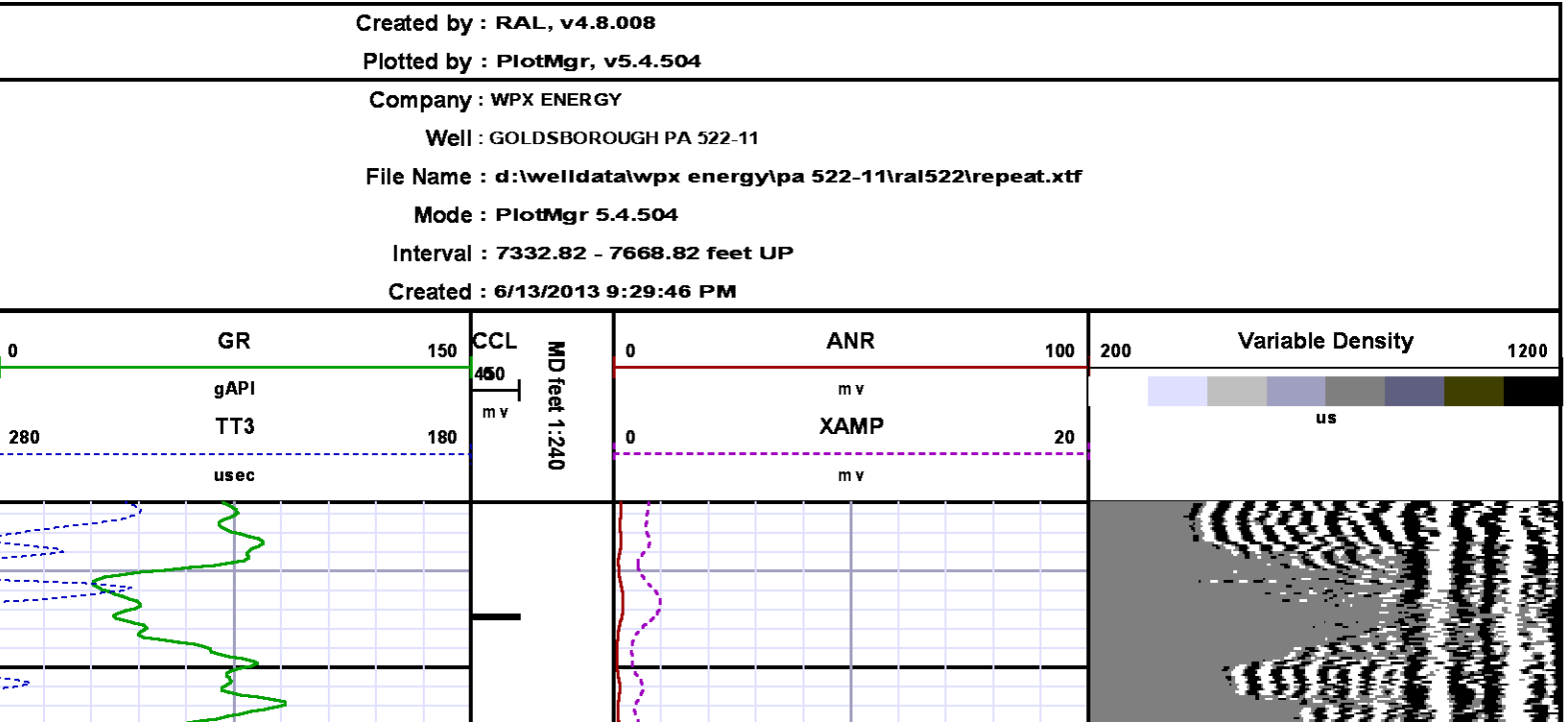
REPEAT SECTION  
0 PSI

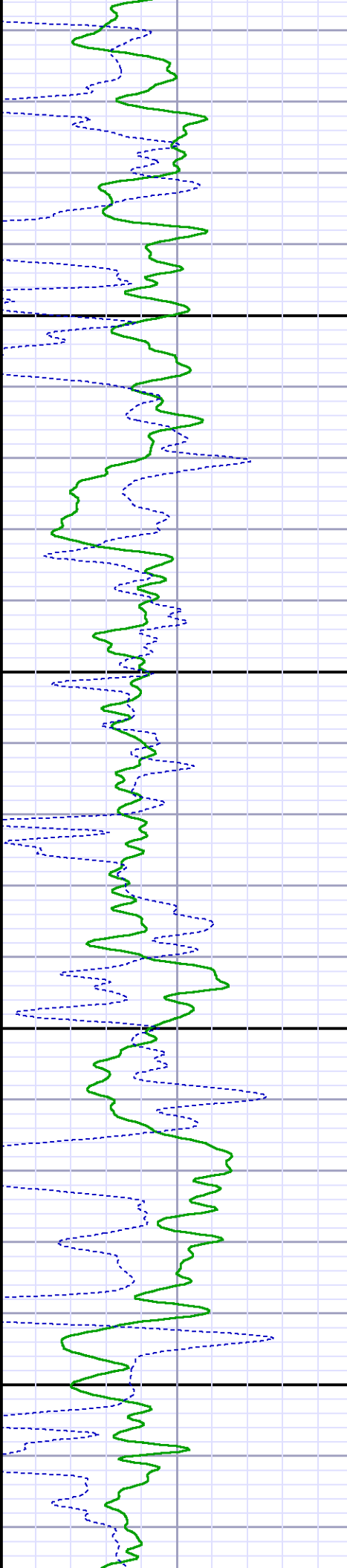
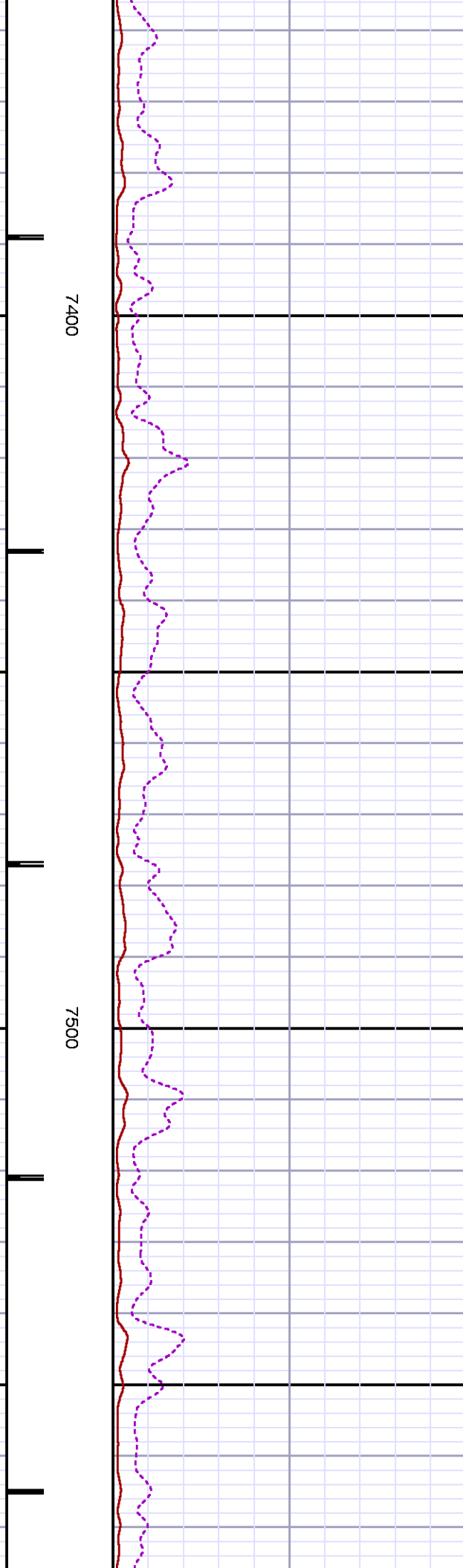
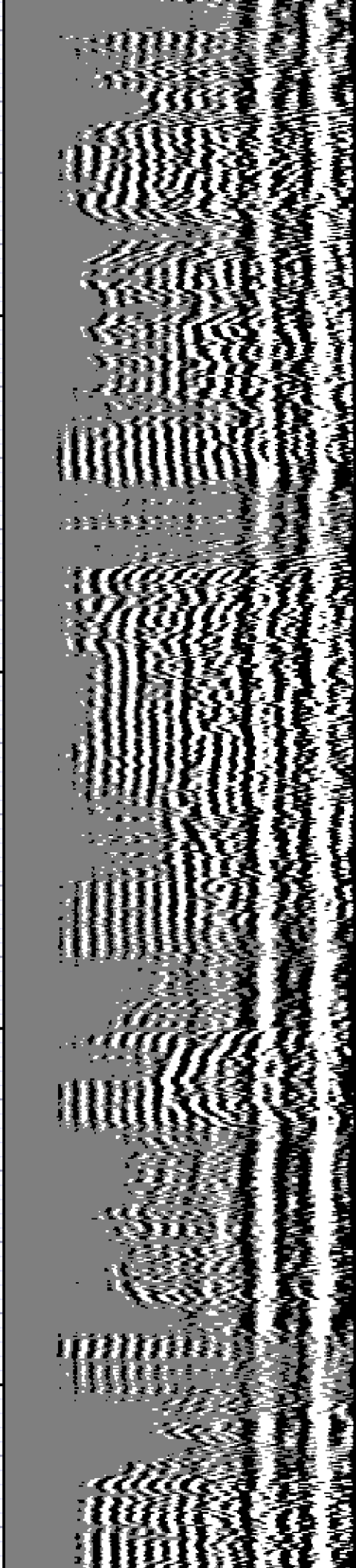
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
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RAL	Amp Gate Start Far	305.000	usec	7332.707	7668.820
RAL	Amp Gate Start Near	195.000	usec	7332.707	7668.820
RAL	Amp Gate Start Radial	195.000	usec	7332.707	7668.820
RAL	Amp Gate Width Far	25.000	usec	7332.707	7668.820
RAL	Amp Gate Width Near	25.000	usec	7332.707	7668.820
RAL	Amp Gate Width Radial	25.000	usec	7332.707	7668.820
RAL	casing od	4.500	inches	7332.707	7668.820
RAL	casing wt	11.600	lbm/ft	7332.707	7668.820
RAL	FB Start Far	291.900	usec	7332.707	7668.820
RAL	FB Start Near	180.000	usec	7332.707	7668.820
RAL	FB Start Radial	180.000	usec	7332.707	7668.820
RAL	FB Thresh Far	10.000	mv	7332.707	7668.820
RAL	FB Thresh Near	4.000	mv	7332.707	7668.820
RAL	FB Thresh Radial	4.000	mv	7332.707	7668.820
RAL	Fluid Travel Time	200.000	usec/ft	7332.707	7668.707

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







Radial #1	216	216	30	141	25	0.242	100.00	0.18
Radial #2	216	216	30	141	25	0.132	100.00	0.18
Radial #3	216	216	30	141	25	-0.311	100.00	0.18
Radial #4	216	216	30	141	25	-0.140	100.00	0.18
Radial #5	216	216	30	141	25	-0.105	100.00	0.18
Radial #6	216	216	30	141	25	-0.012	100.00	0.18
Radial #7	215	216	30	141	25	-0.433	100.00	0.18
Radial #8	216	216	30	141	25	-0.239	100.00	0.18

## RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\106J13\_fid.cal

### WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Jun 13 15:28:26 2013 TOOL SERIES: 1426XA ASSET: 106 SEQ: J13

Tool Delay [usec] -62.00 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	-0.177	0.000	1.00	100.000
3 Ft. Receiver	195	25	-0.487			
5 Ft. Receiver	305	25	-0.183			
Radial #1	195	25	-1.644			
Radial #2	195	25	-0.846			
Radial #3	195	25	-0.656			
Radial #4	195	25	-0.905			
Radial #5	195	25	-0.579			
Radial #6	195	25	-0.583			
Radial #7	195	25	-0.549			
Radial #8	195	25	-0.499			

## GAMMA RAY

Calibration File: C:\case\calver\GR\209J1.cal

### CALIBRATION SUMMARY

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

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

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

### PRIMARY LOG VERIFICATION



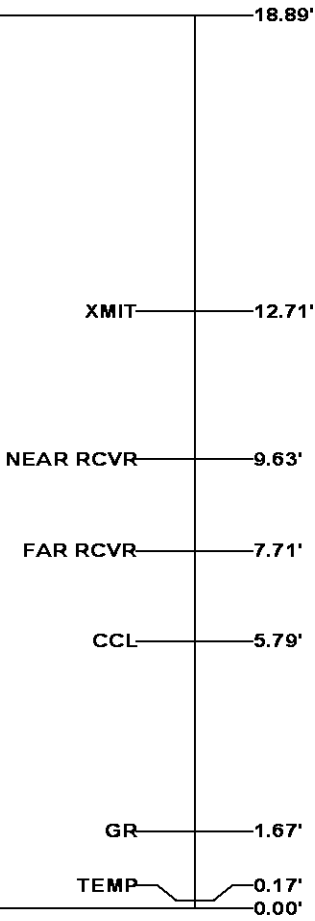
DATE/TIME PERFORMED:		Mon Jun 03 09:10:36 2013		TOOL SERIES:	1355XA	ASSET:	209	SEQ:	J1
Calibrator #		Background	Calibrator On	Multiplicative		Background	Calibrator On	Differential	
		[cps]	[cps]			[api]	[api]	[api]	
S2K	WA612	150.93	617.24	0.405		61.17	250.17	189.00	

# TOOL DIAGRAM


OTA SHORT CABLE HEAD

<b>PROBE 2 3/4 DUAL RECEIVER RADII</b>	
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

<b>RAL GR/TEMP/CCL/CHV DETECTOR</b>	
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:	CH073168
	Well	GOLDSBOROUGH PA 522-11		API No:	05045218240000
	Field	PARACHUTE			
	County	GARFIELD	State	COLORADO	
	Location			Elevations	

CASE

SHL: 2413' FNL, 2067' FWL

BHL: 2356' FNL, 2105' FWL

SEC 11 TWP 7S RGE 95W

KB 6296 ft

DF

GL 6274 ft

PA 22-11 PAD

11 7S 95W

CYCLONE 17