



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: GH081686	Company Well Field County	WPX ENERGY SAVAGE RWF 12-25 RULISON GARFIELD	State COLORADO
API No: 06046219740000	Location SHL: 2493' FNL & 1387' FWL RWF 22-25 PAD BHL: 2068' FNL & 664' FWL (SWSM) CYCLONE 17 SEC 25 TWP 6S RGE 94W		
Permanent Datum Log Measured From Drill Measured From		Other Services RPM KB 6098 ft DF GL 6037 ft	
OL KB KELLY BUSHING		Elevation 21 ft Above P. D.	

Date	08/JAN/14	
Run	ONE	
Service Order	US626084	
Depth Driller	8688 ft	
Depth Logger	8669 ft	
Bottom Logged Interval	8669 ft	
Top Logged Interval	21 ft	
Time Started	0830	
Time Finished	1300	
Operator Rig Time	4.5 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	67 ft	
Logged Cement Top	NA	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	NA	
Nominal Logging Speed	65 fpm	
Maximum Recorded Temperature	228 degF	
Reference Log	NONE	
Reference Log Date	NA	
Equipment No.	4271	GRANDUCT
Recorded By	FLOYD RENEAU	
Witnessed By	COLE APPLIGATE	

- 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	1110 ft
8.75 in	1110 ft	8601 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in			0 ft	1110 ft
4.5 in	11.6 lbm/ft	I-80	0 ft	8688 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 7 feet.
Logged with zero PSI at wellhead.
BHT = 228°F
SJ = 5375'- 5399'

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1426XA	10218496	CENT
1	1	GRICCL	2459XA	10124121	CENT

PRIMARY PRESENTATION

0 PSI

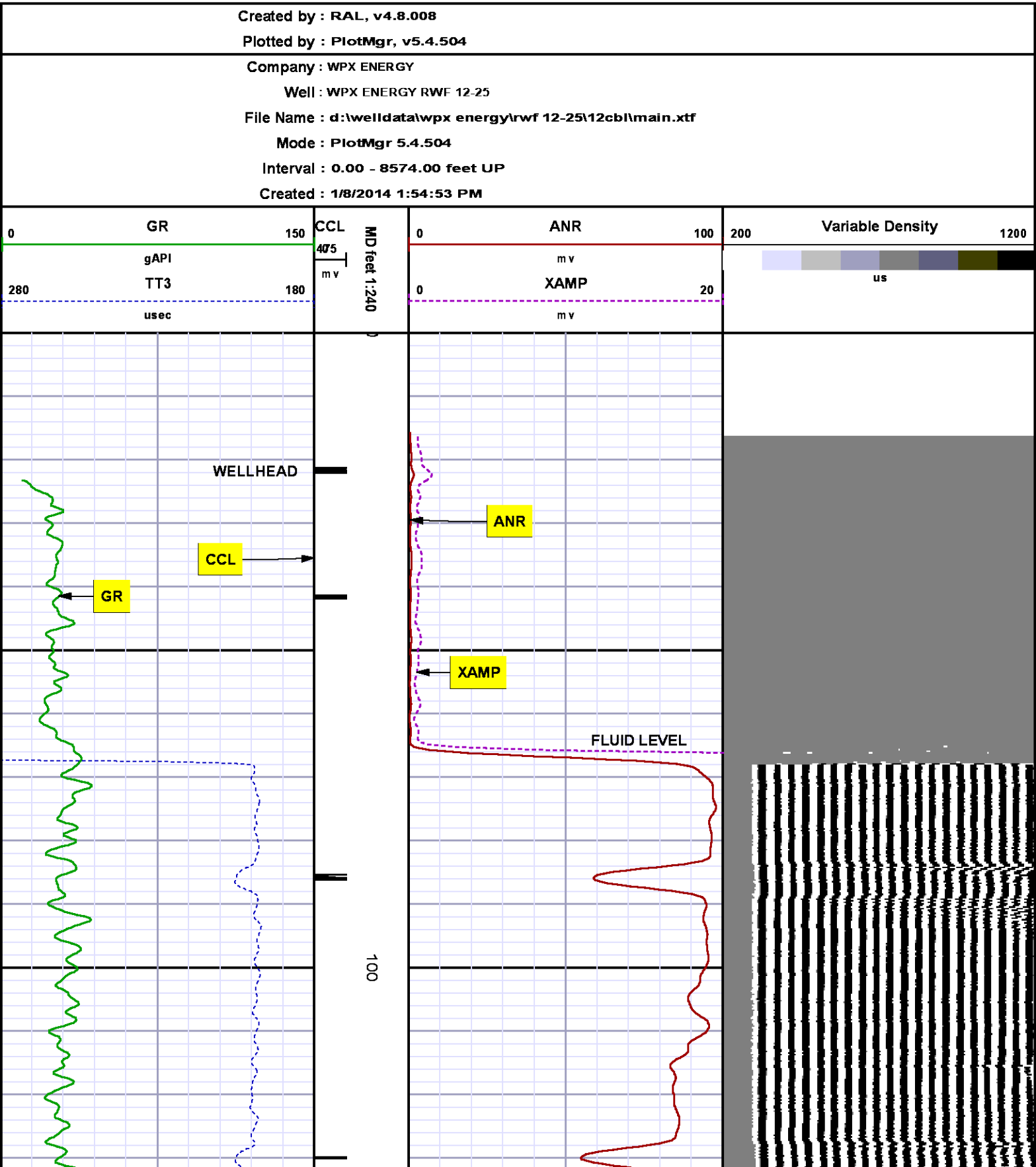
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	27.468	8586.000
RAL	Amp Gate Start Near	195.000	usec	27.468	8586.000
RAL	Amp Gate Start Radial	195.000	usec	27.468	8586.000
RAL	Amp Gate Width Far	25.000	usec	27.468	8586.000
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RAL	Amp Gate Width Radial	25.000	usec	27.468	8586.000
RAL	casing od	4.500	inches	27.468	8586.000
RAL	casing wt	11.600	lbm/ft	27.468	8586.000
RAL	FB Start Far	291.900	usec	27.468	8586.000
RAL	FB Start Near	180.000	usec	27.468	8586.000
RAL	FB Start Radial	180.000	usec	27.468	8586.000
RAL	FB Thresh Far	10.000	mv	27.468	8586.000
RAL	FB Thresh Near	4.000	mv	27.468	8586.000
RAL	FB Thresh Radial	4.000	mv	27.468	8586.000
RAL	Fluid Travel Time	200.000	usec/ft	27.468	8586.968

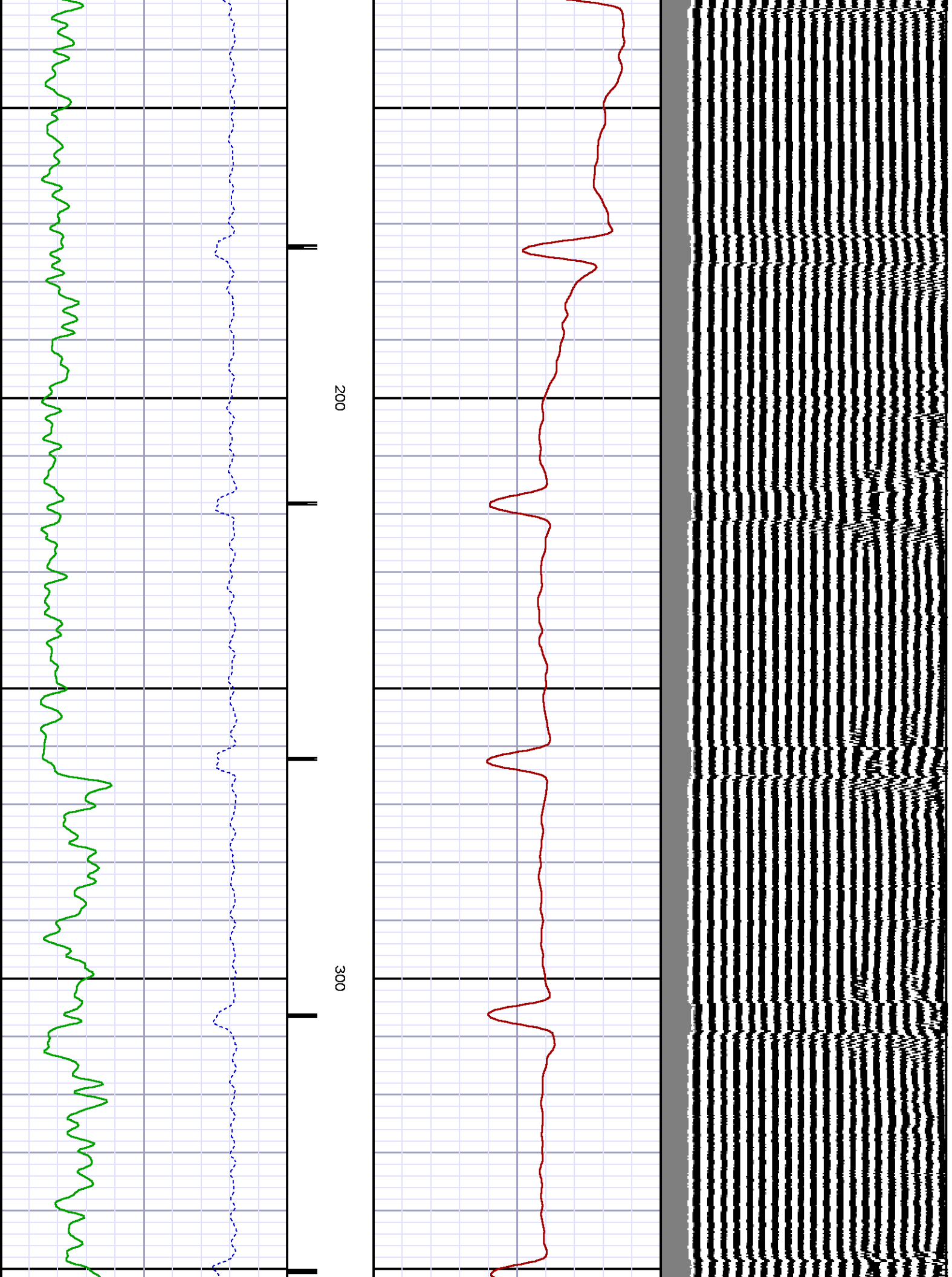
DEPTH OFFSETS

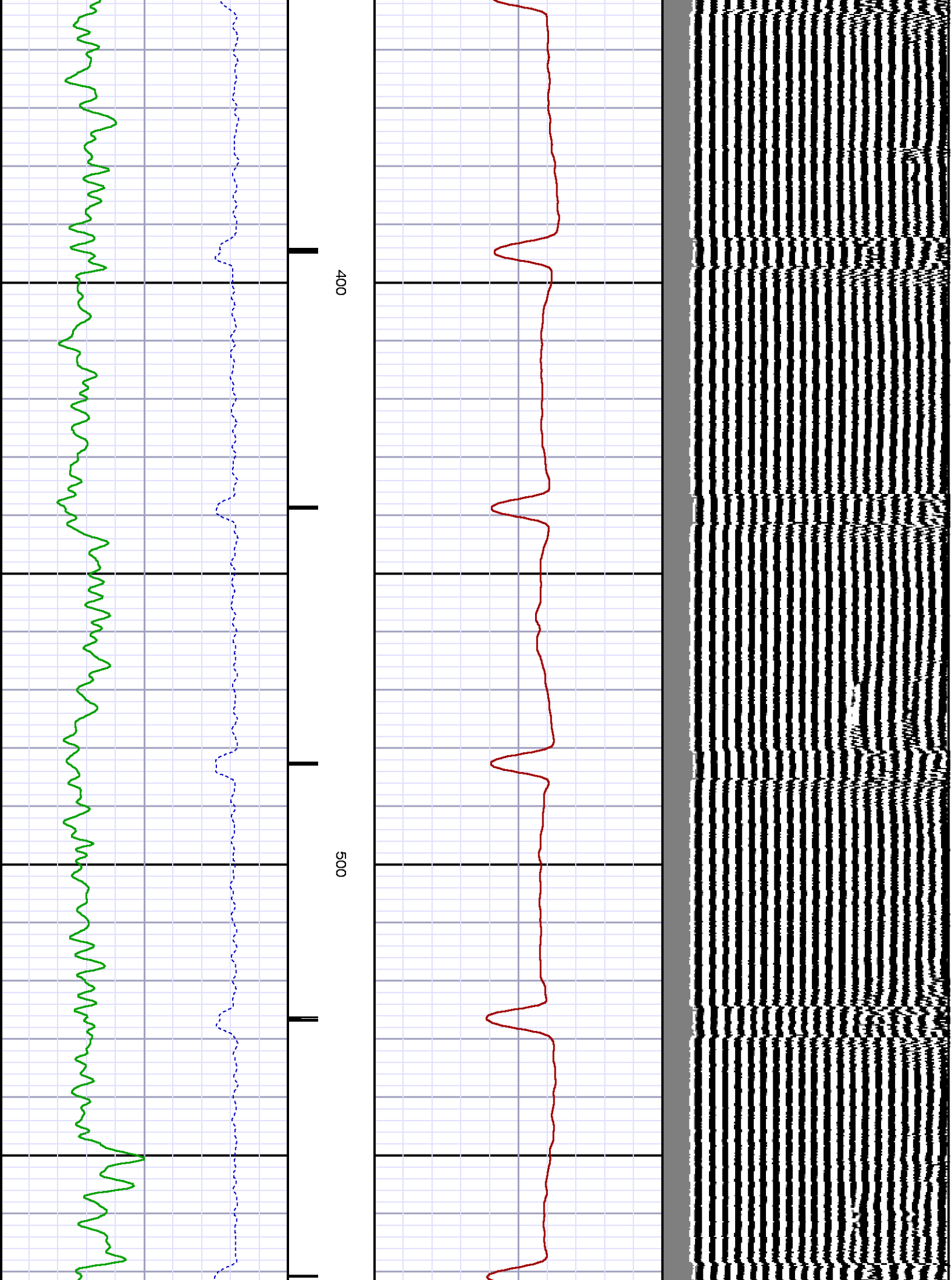
(for Acquired Curves)

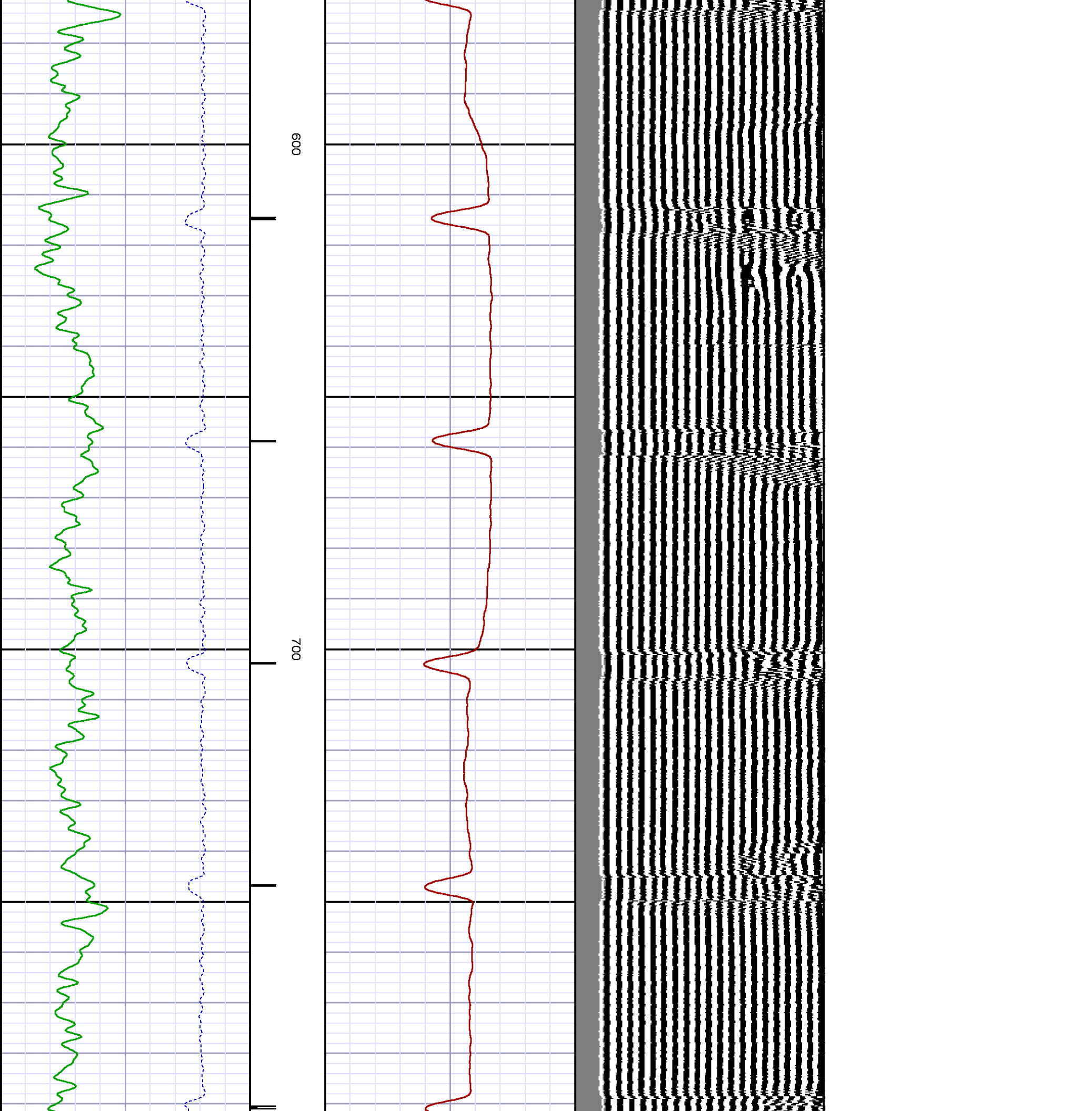
SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-12.360	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	CHV	FPR2

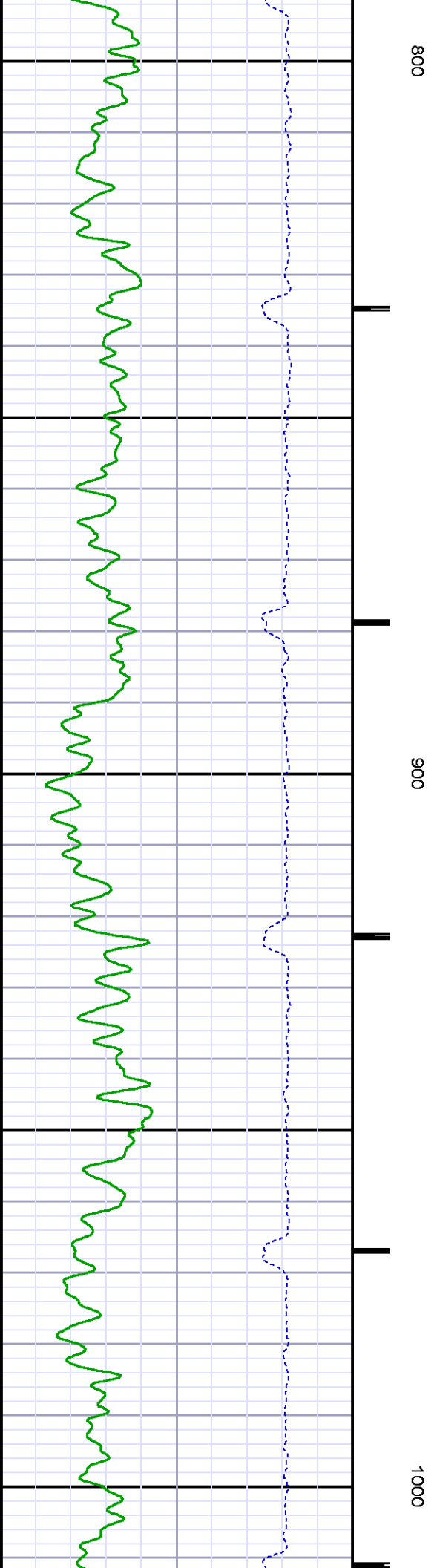
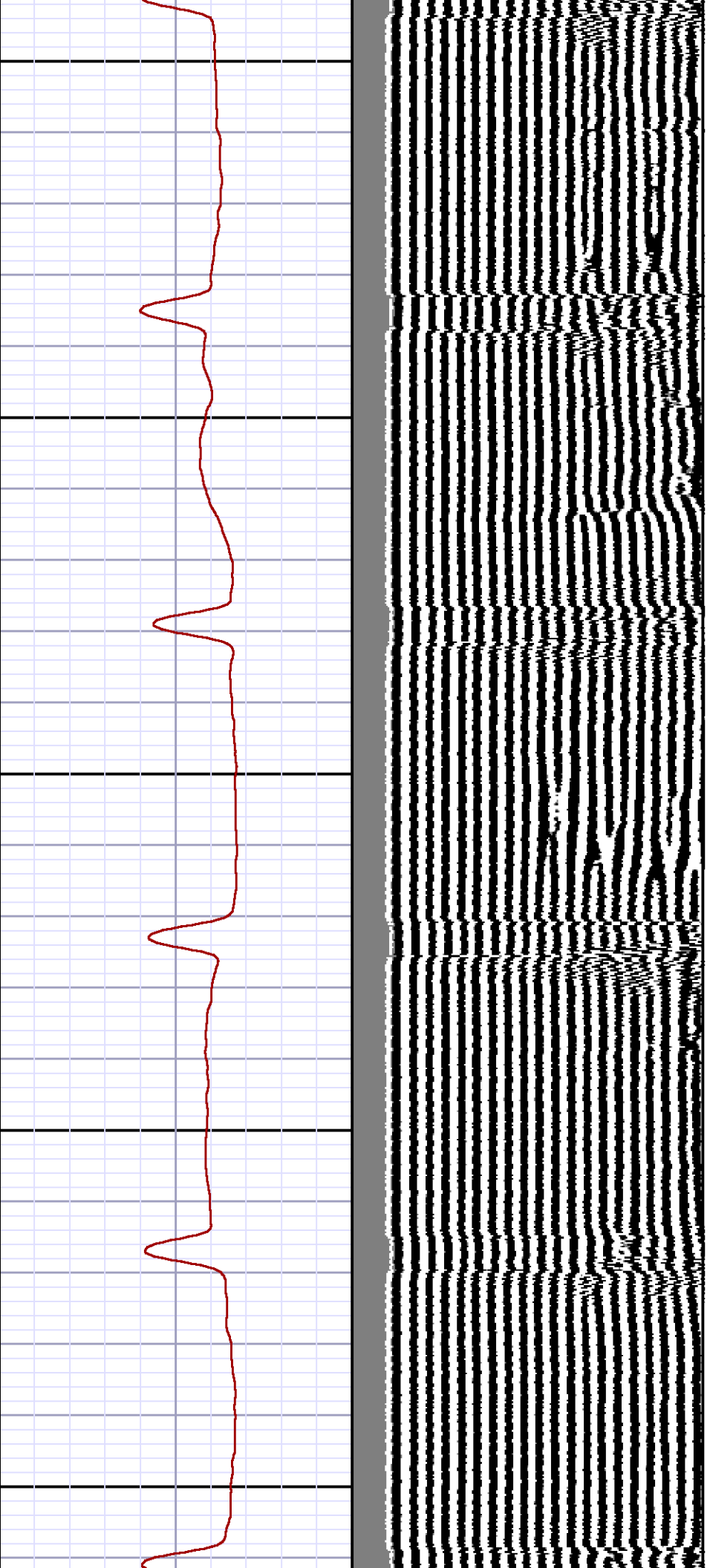
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	-11.360	AFAR	SIG	TT5			
2459XA	-7.250	CCL					
2459XA	-5.390	GR					
2459XA	0.000	NEU					

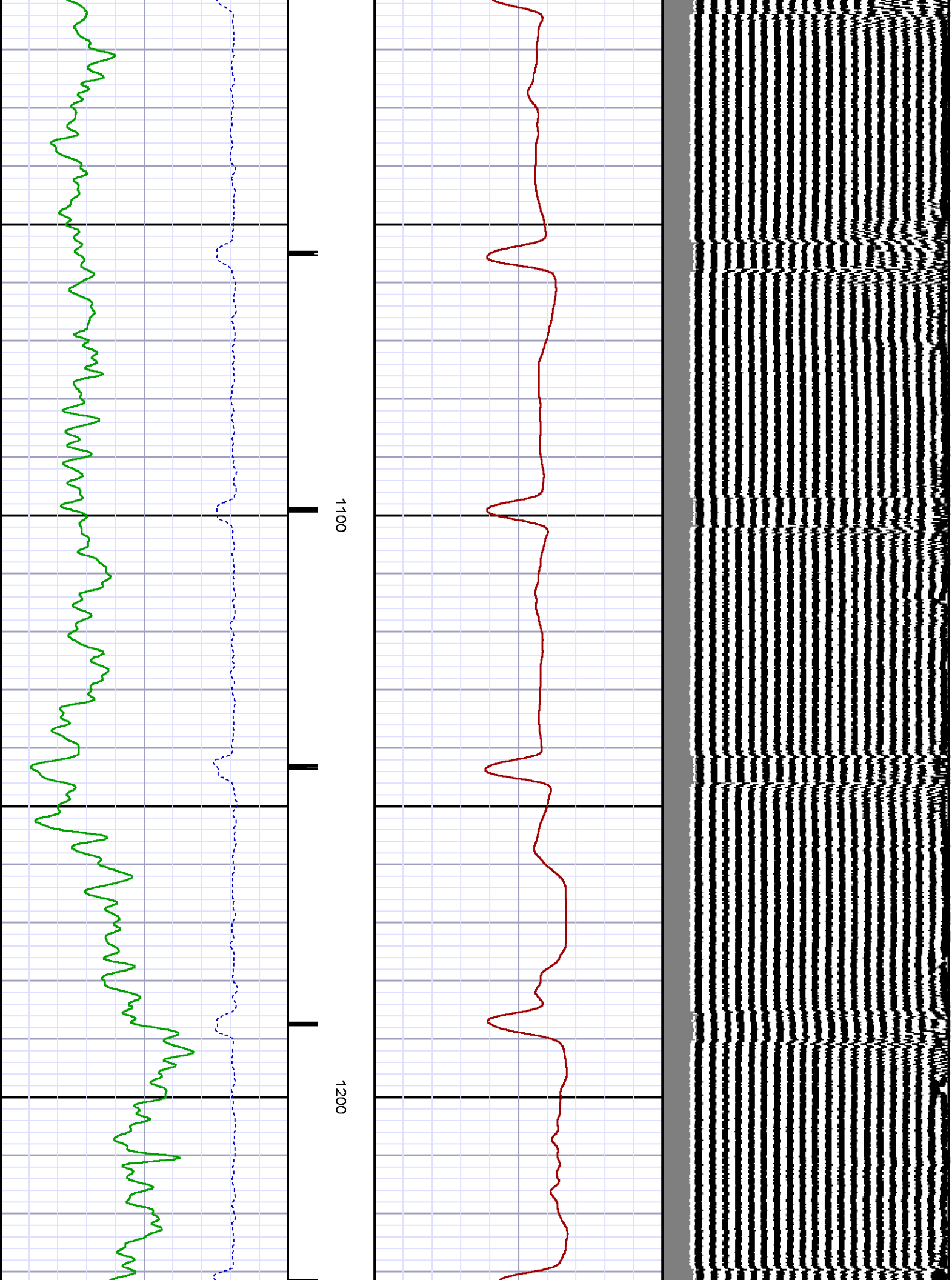


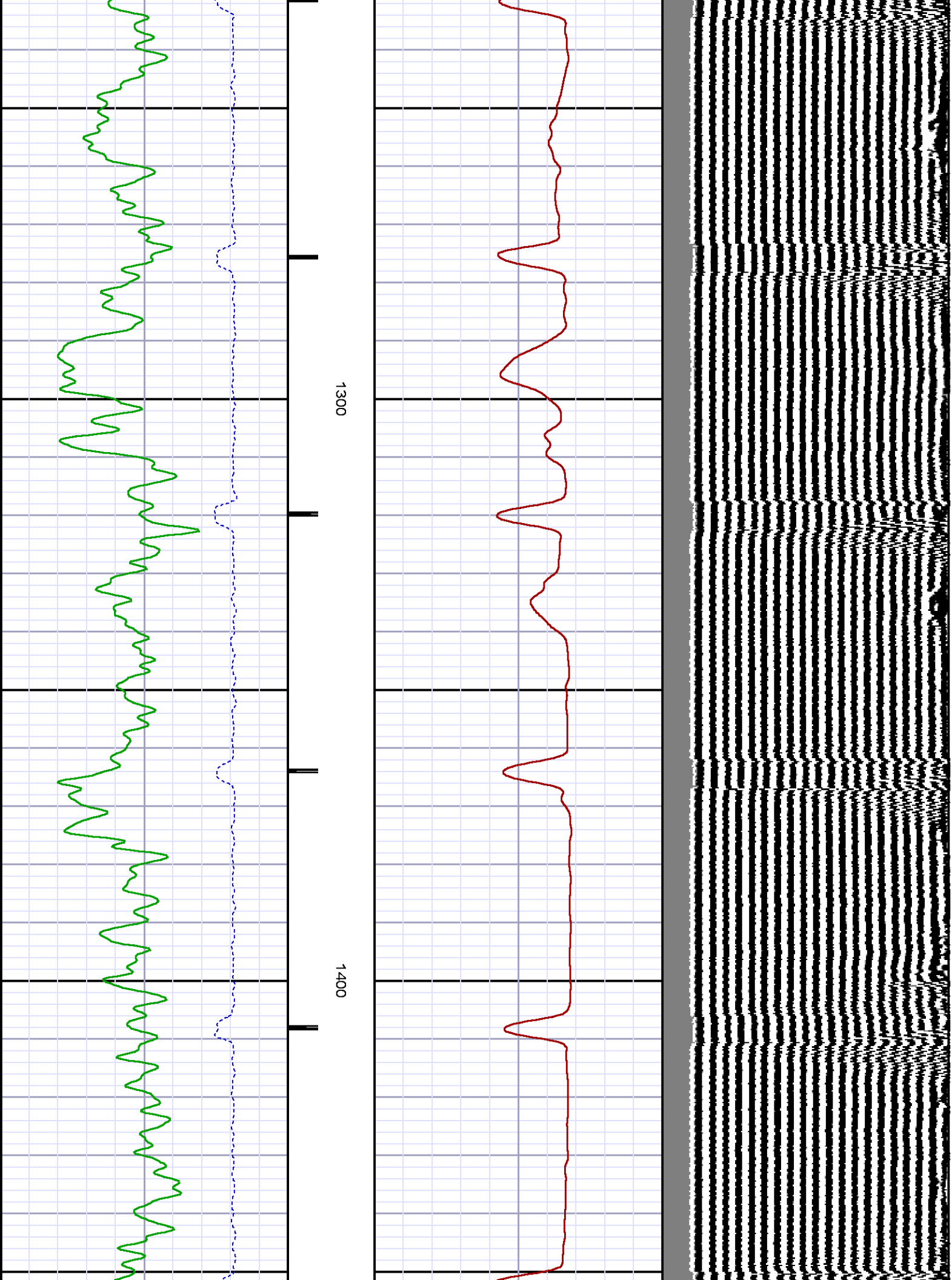


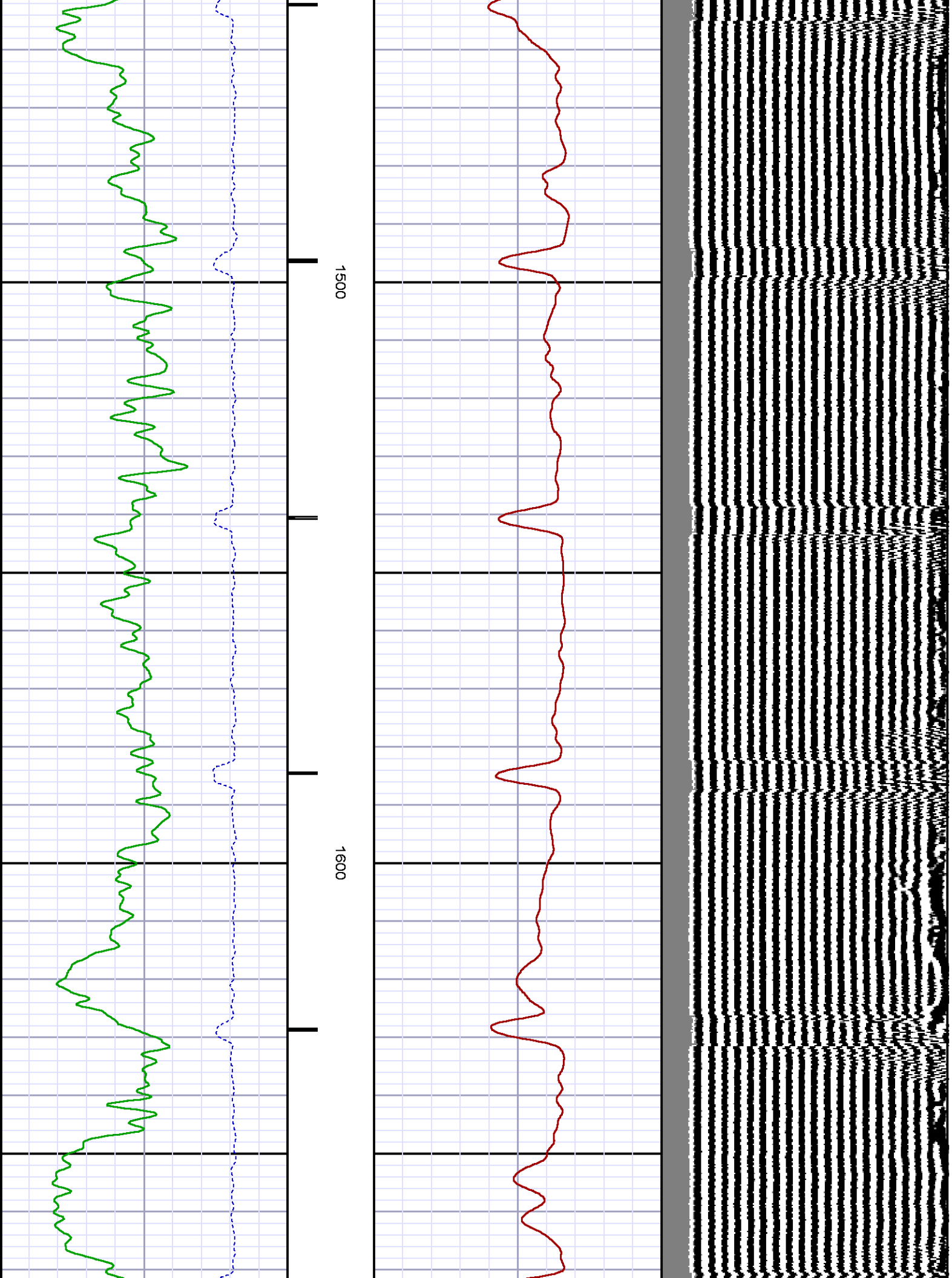


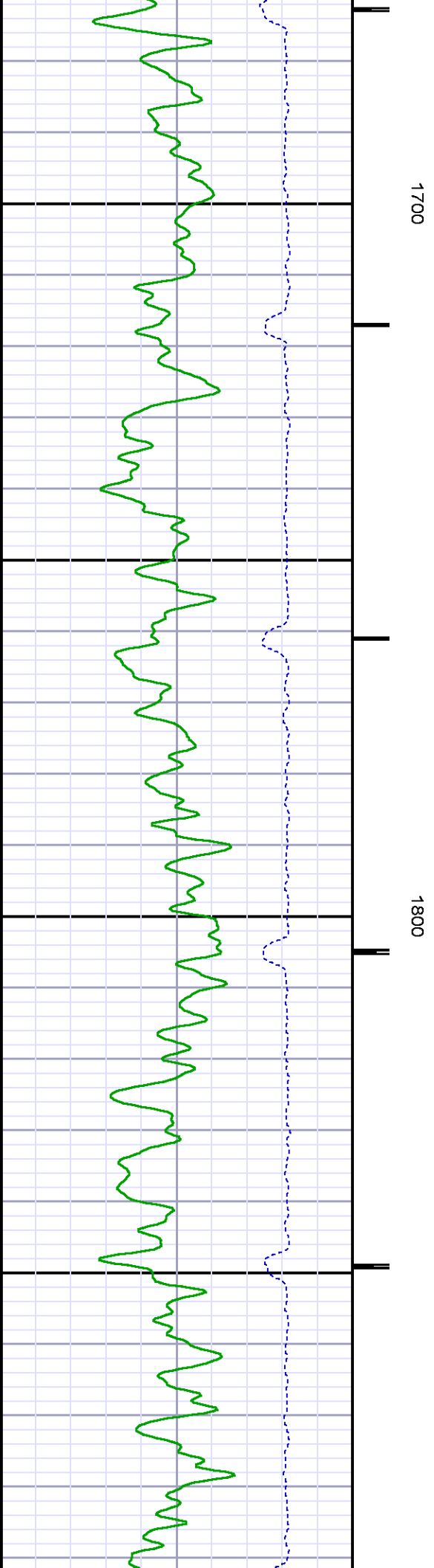
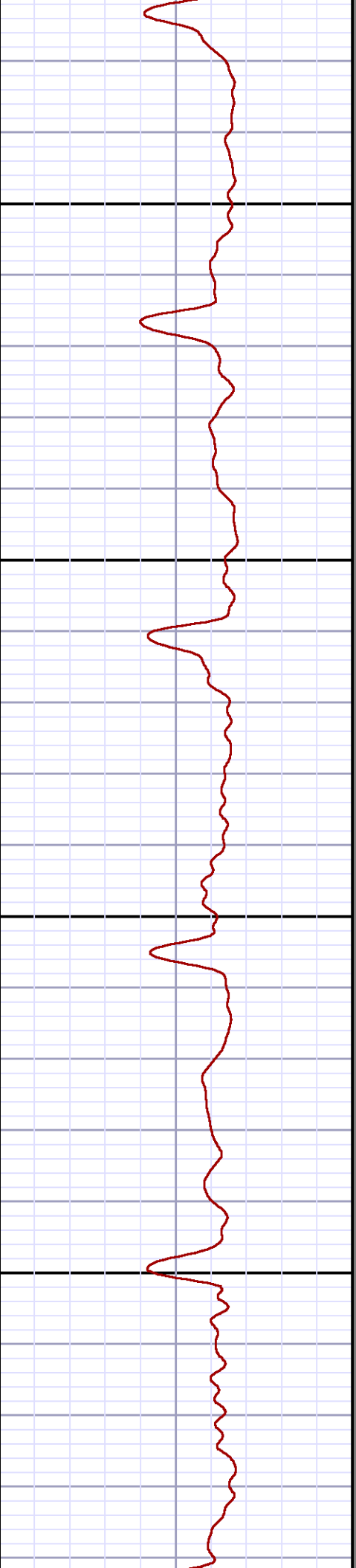
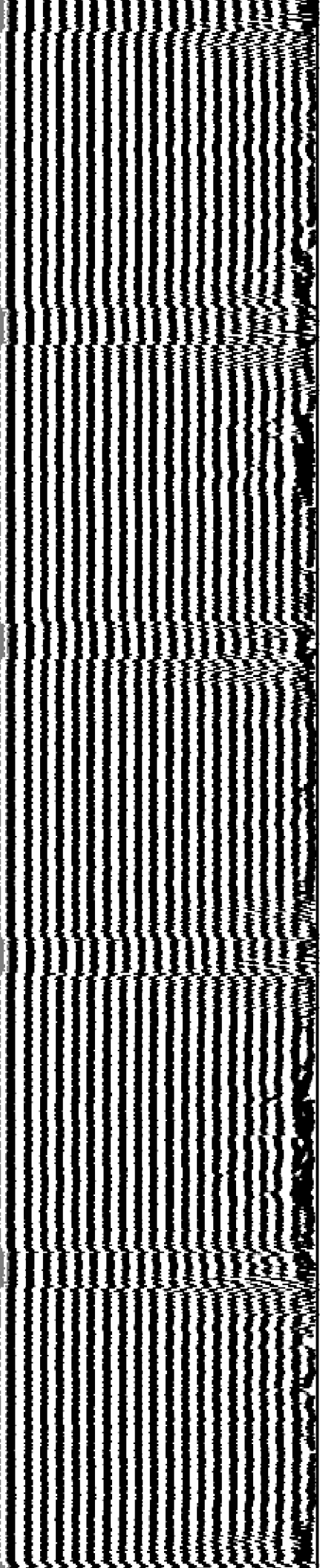


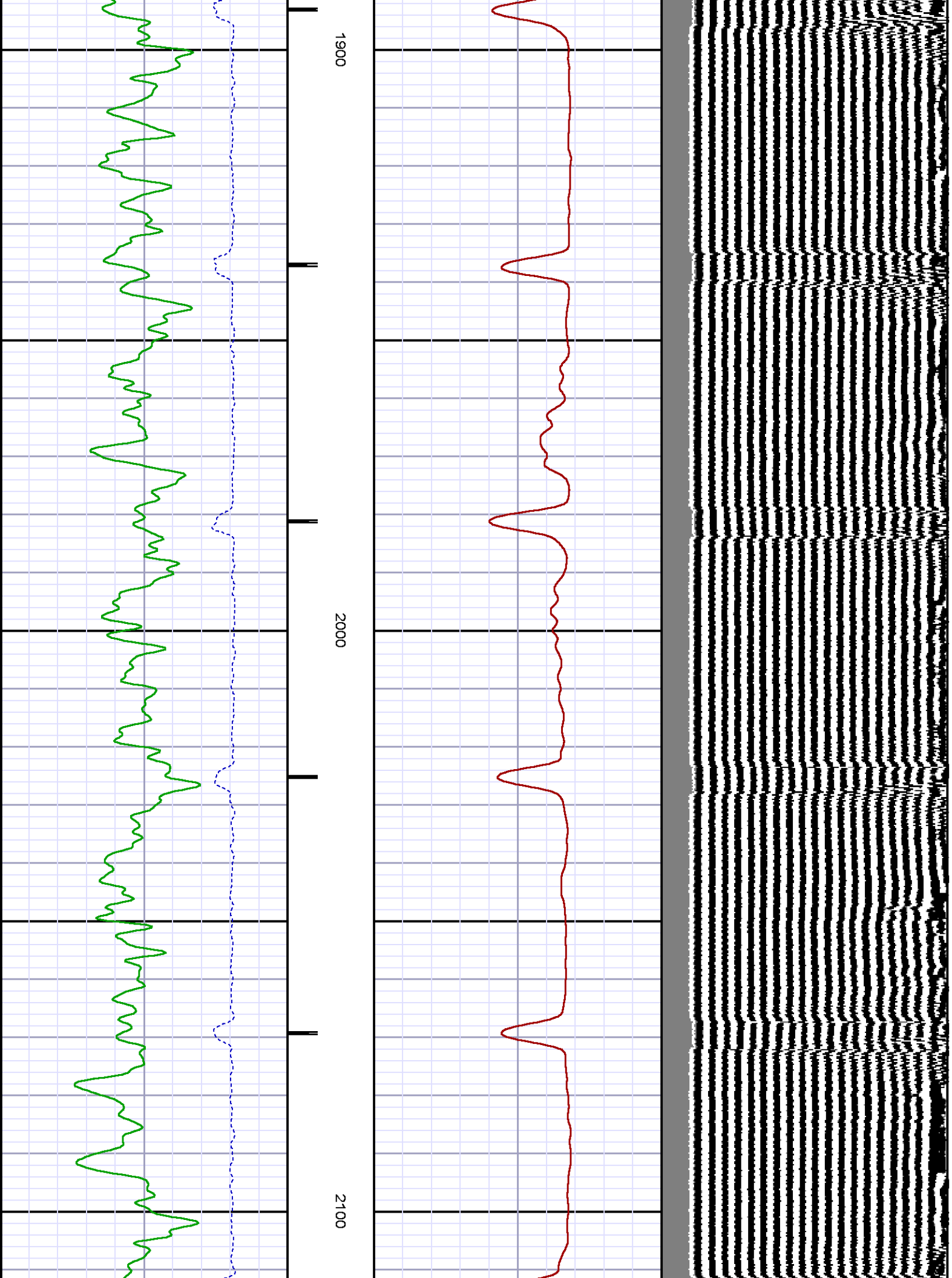


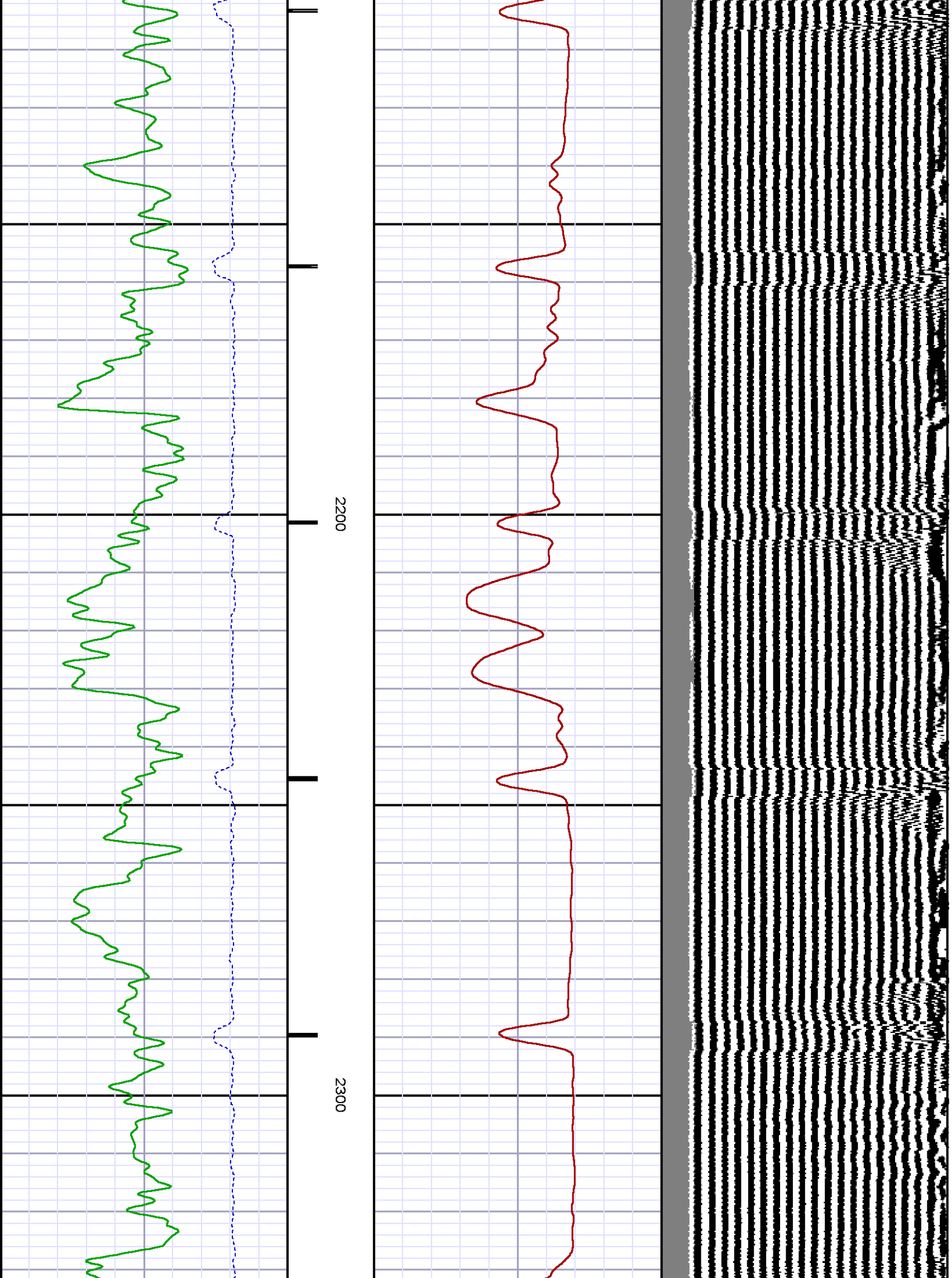


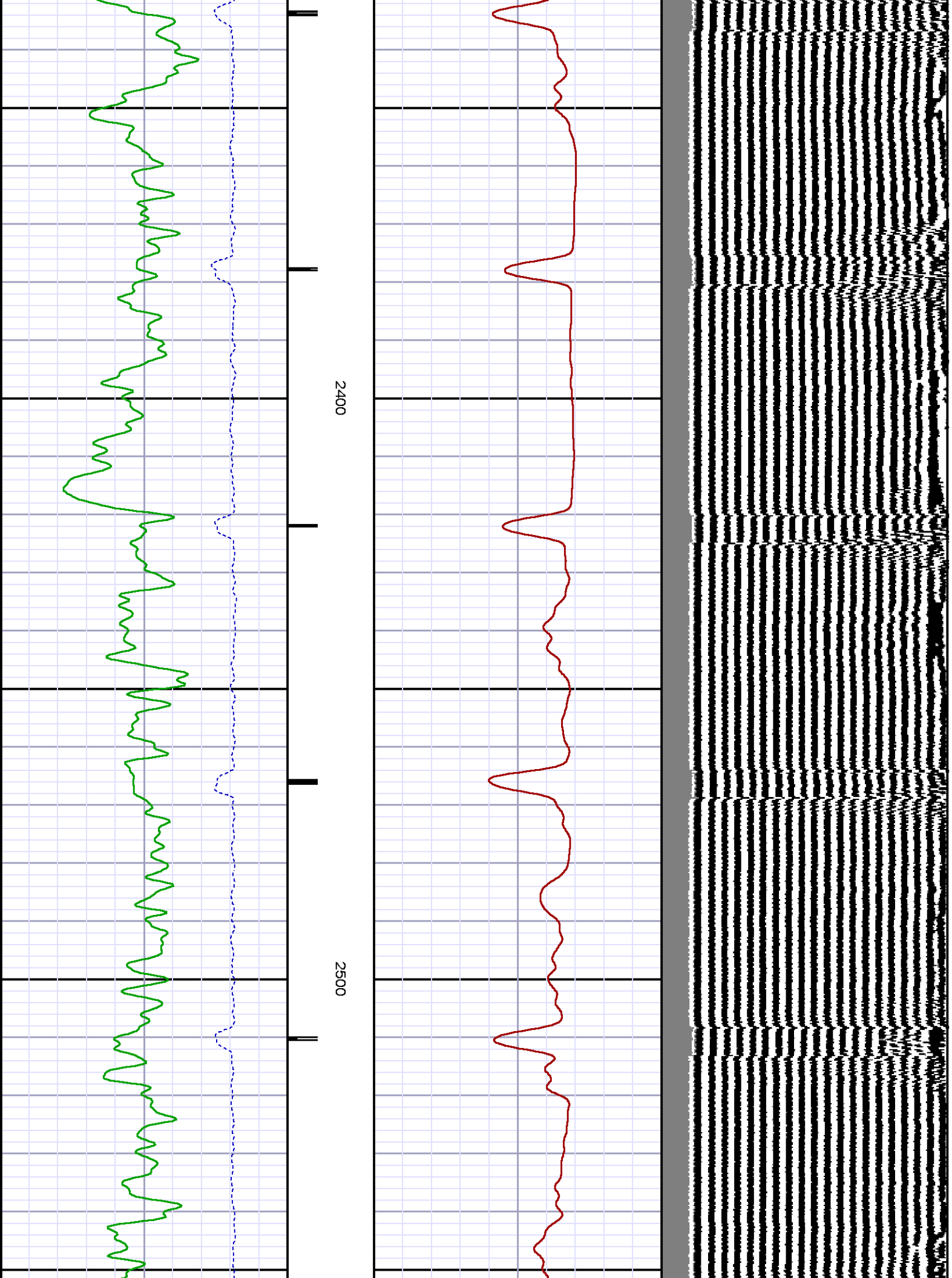


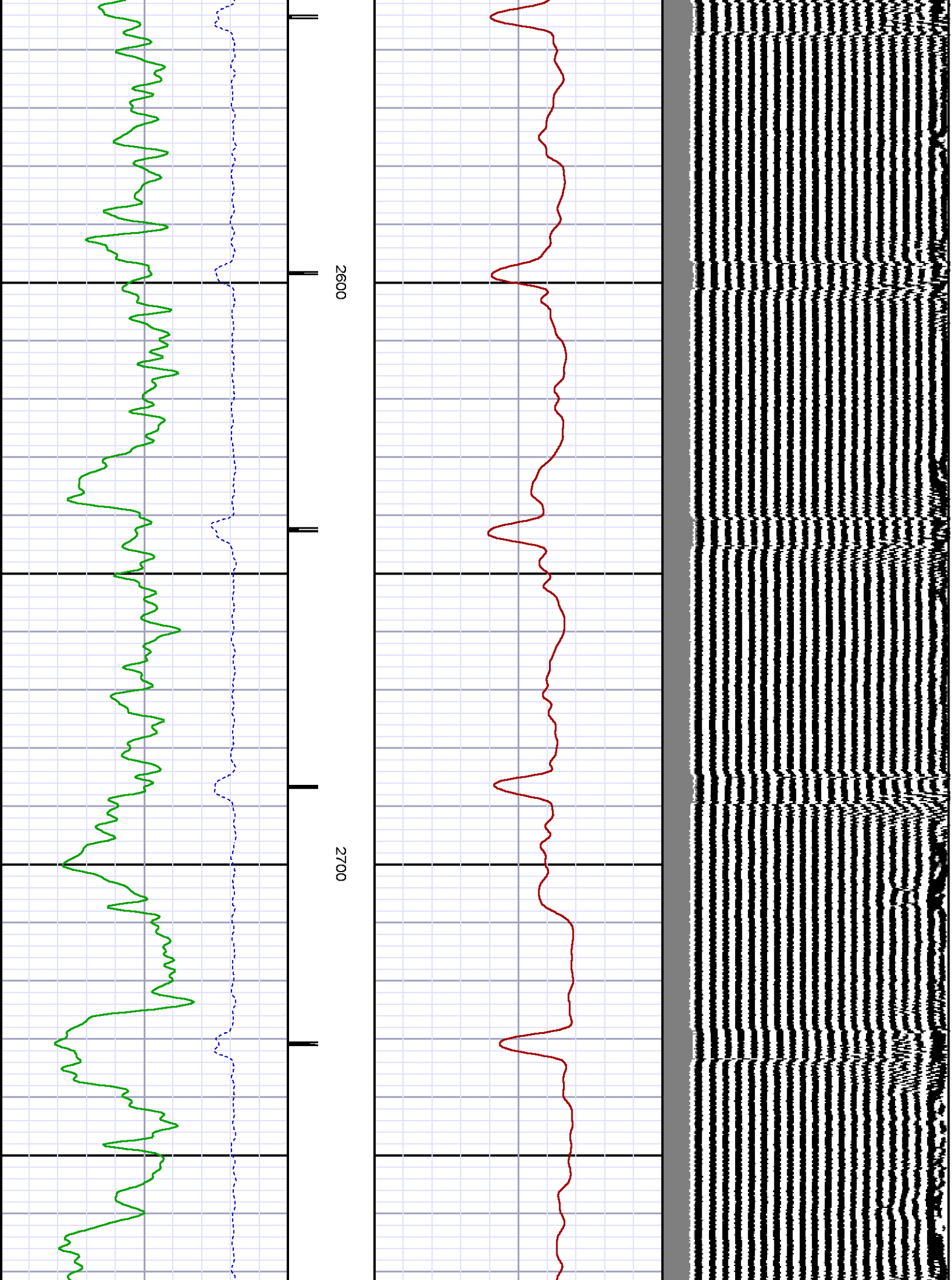


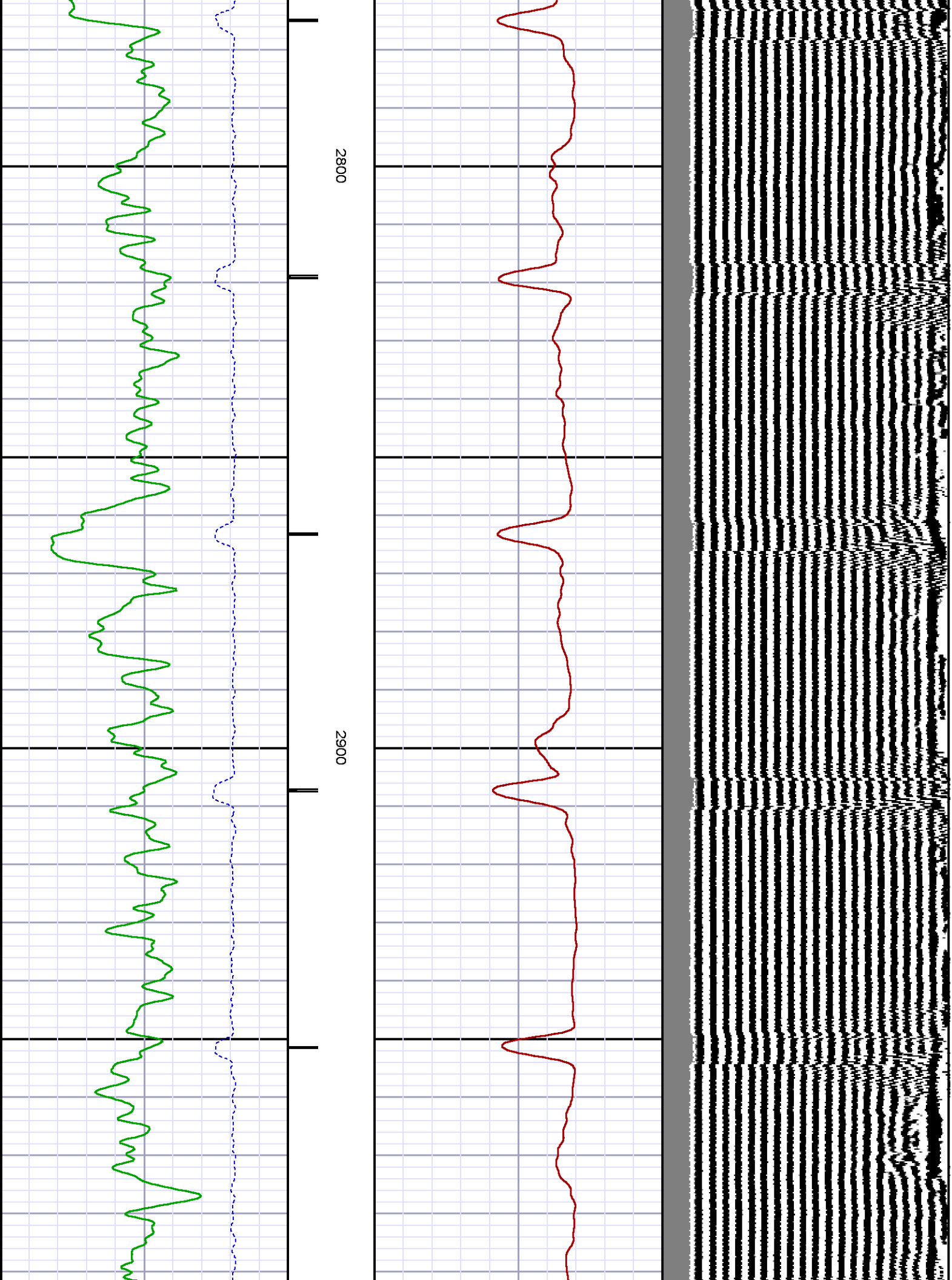


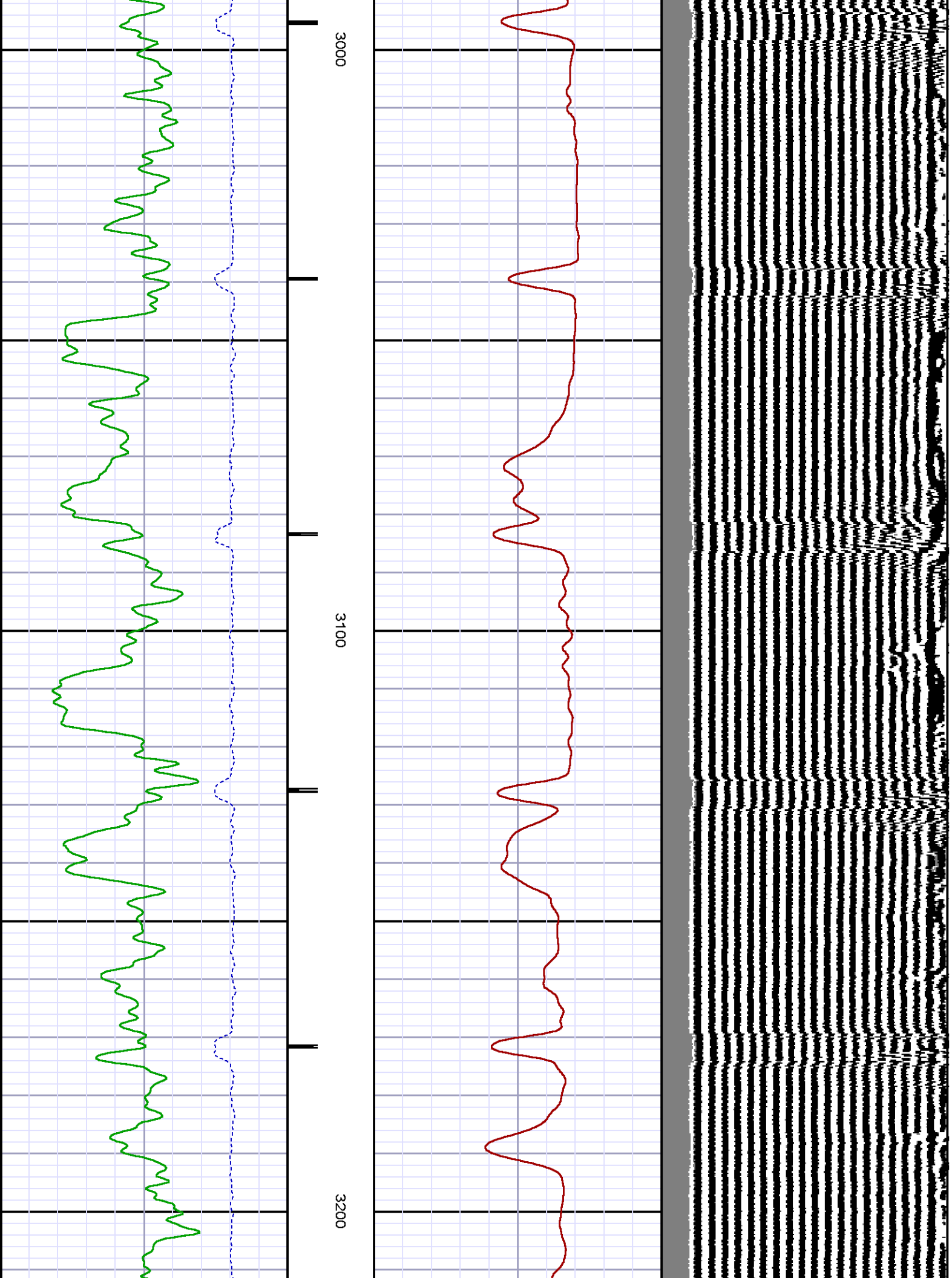


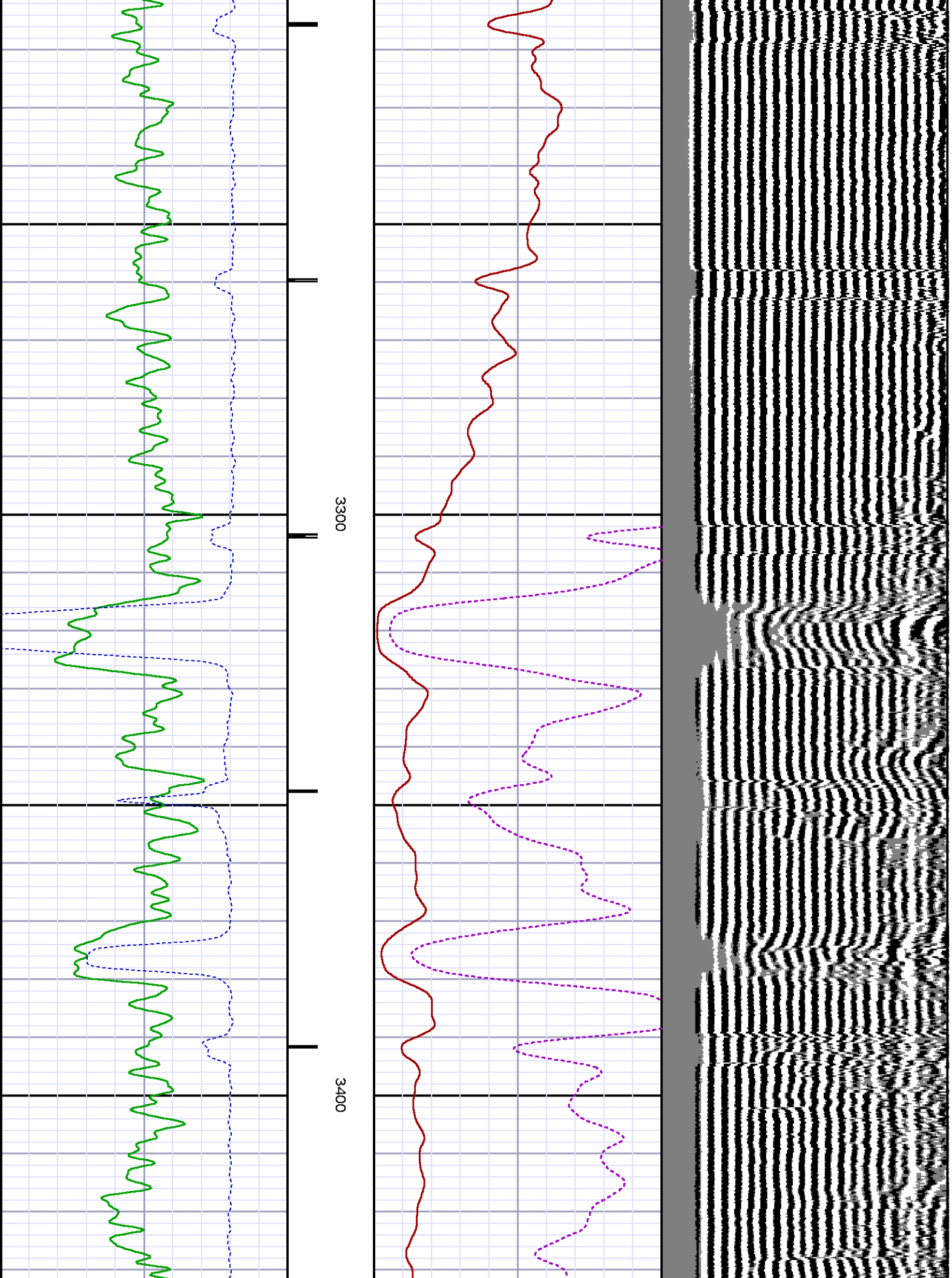


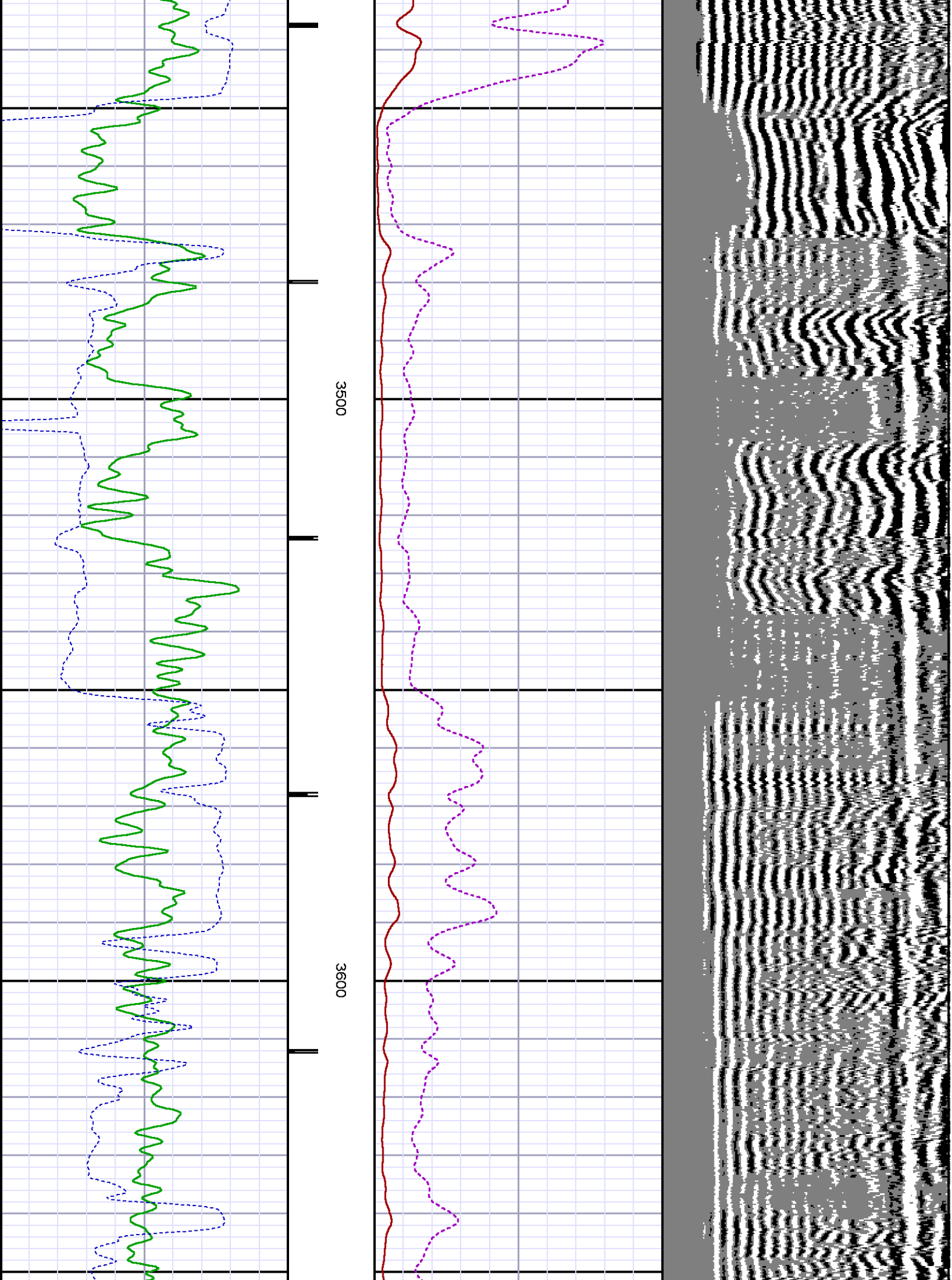


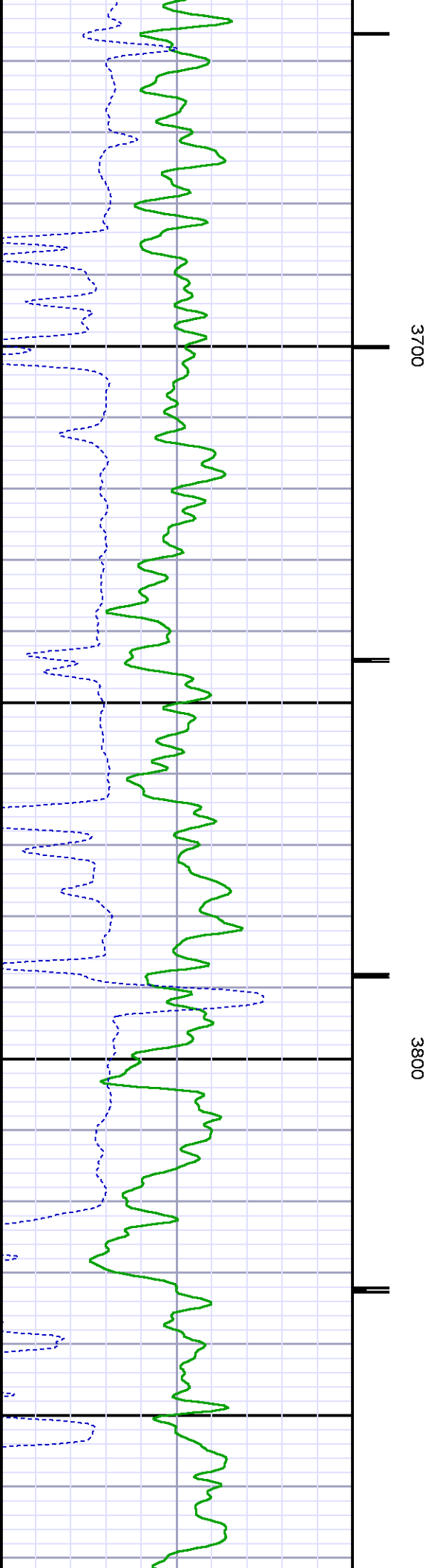
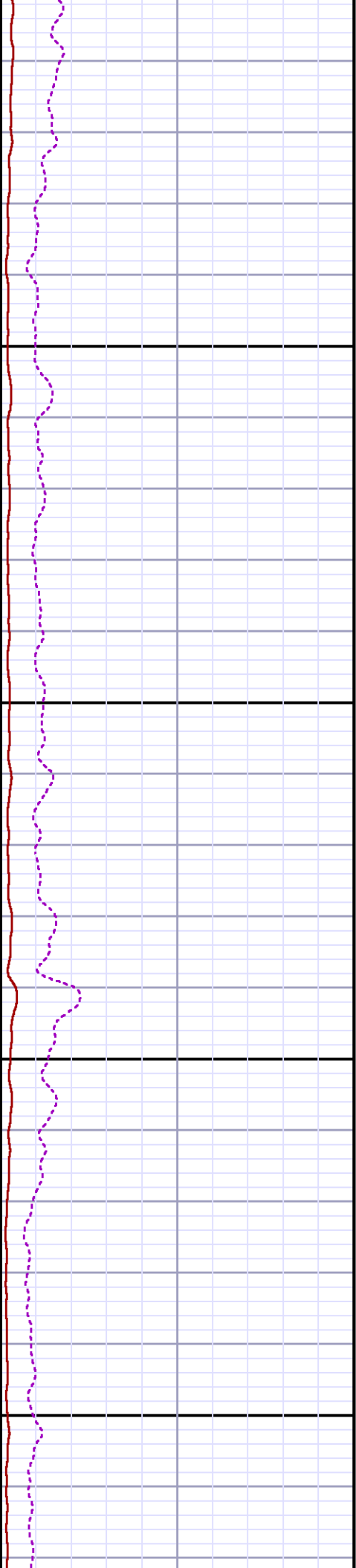
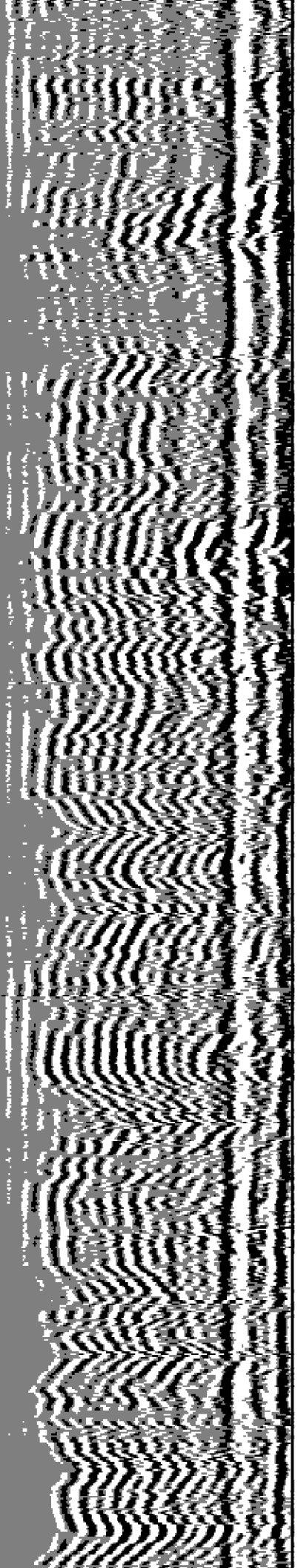


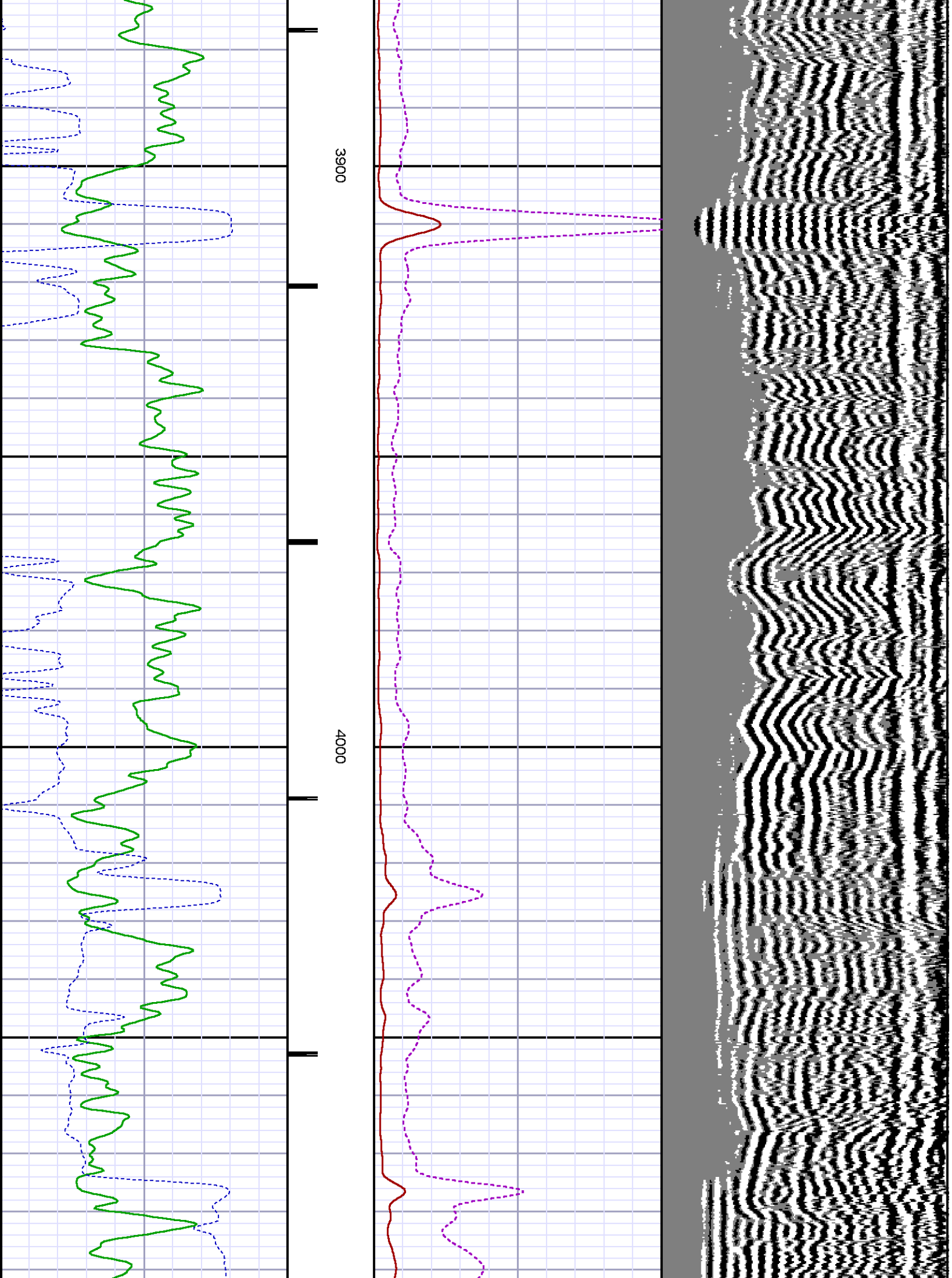


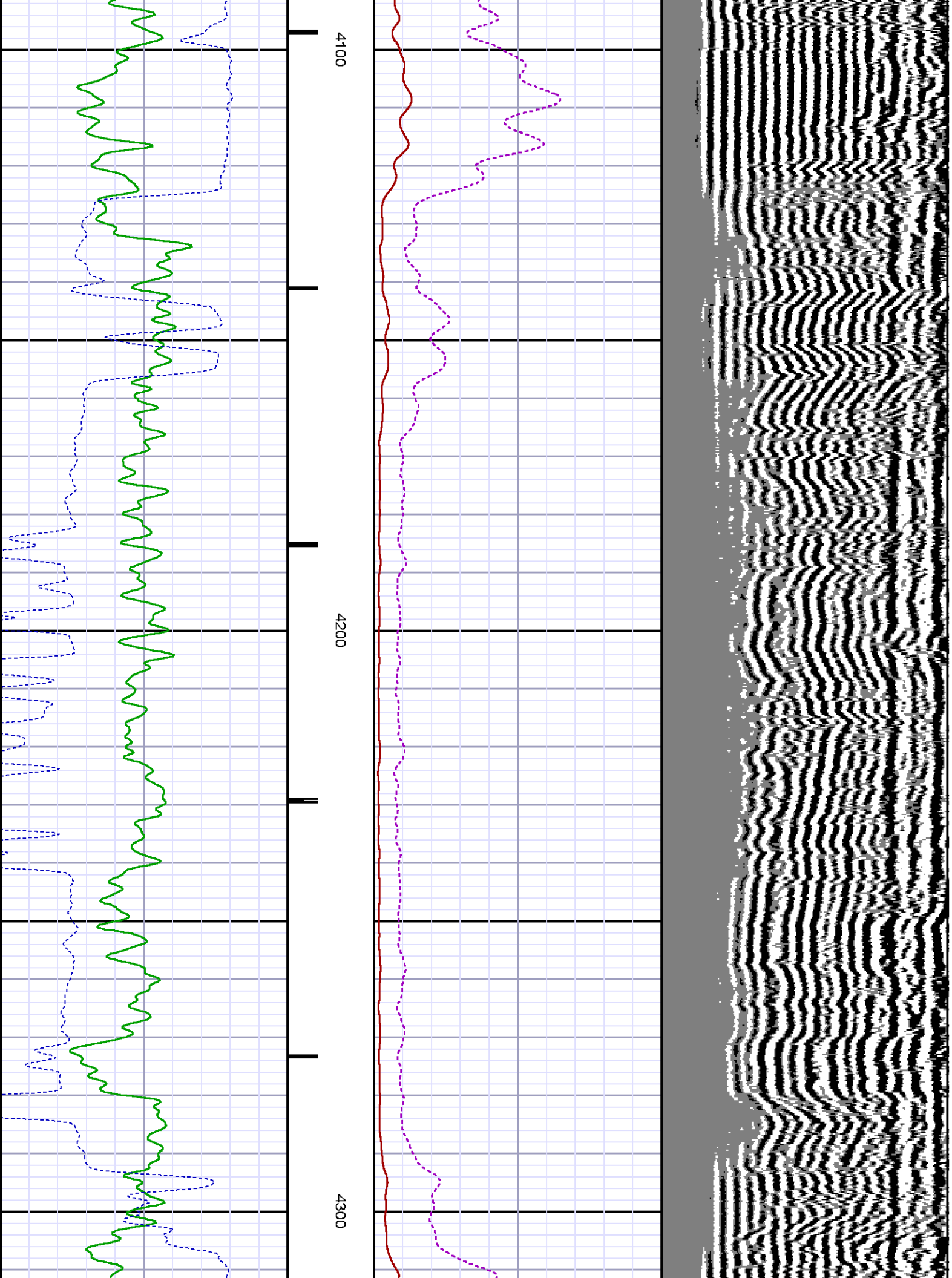


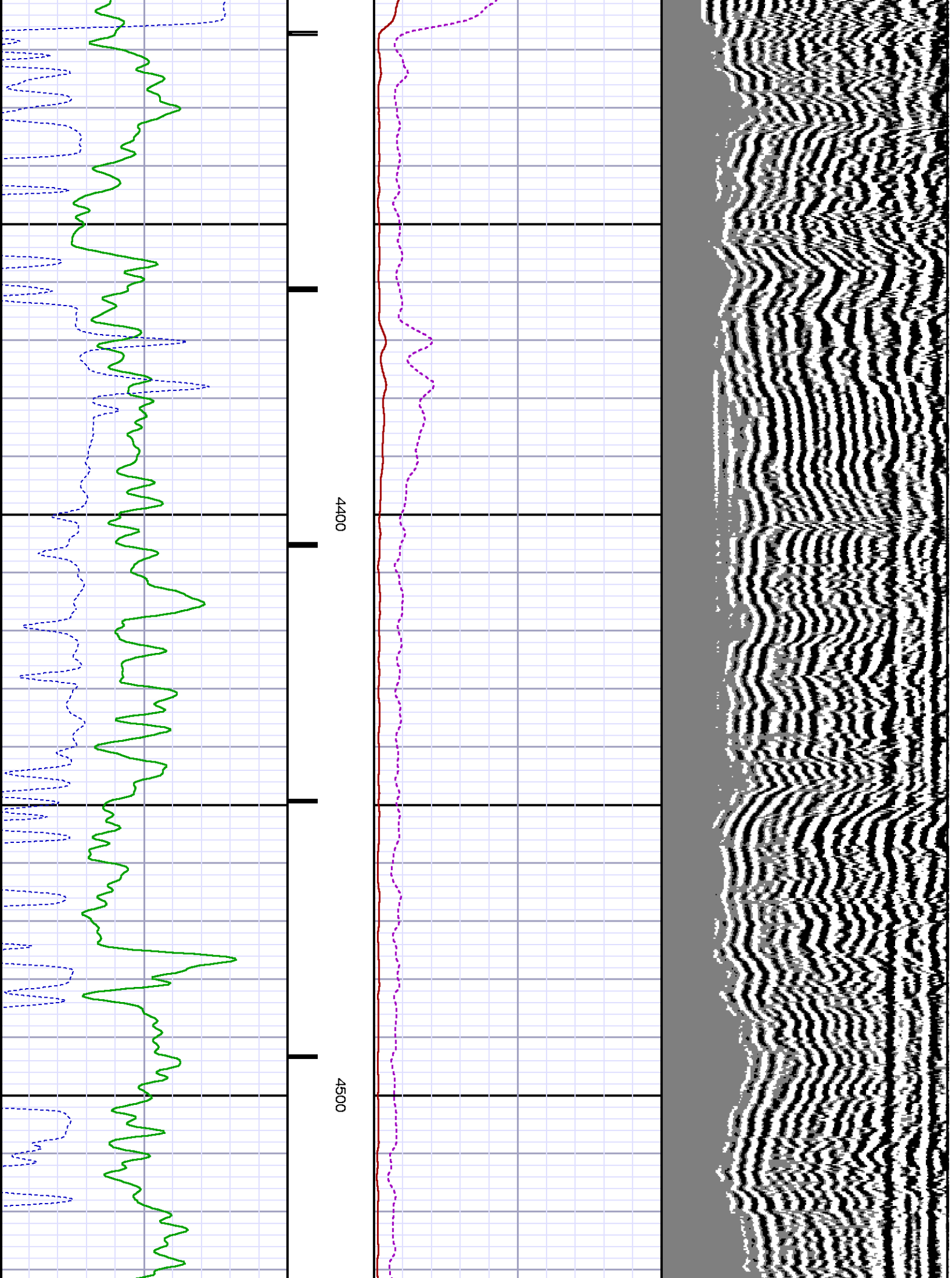


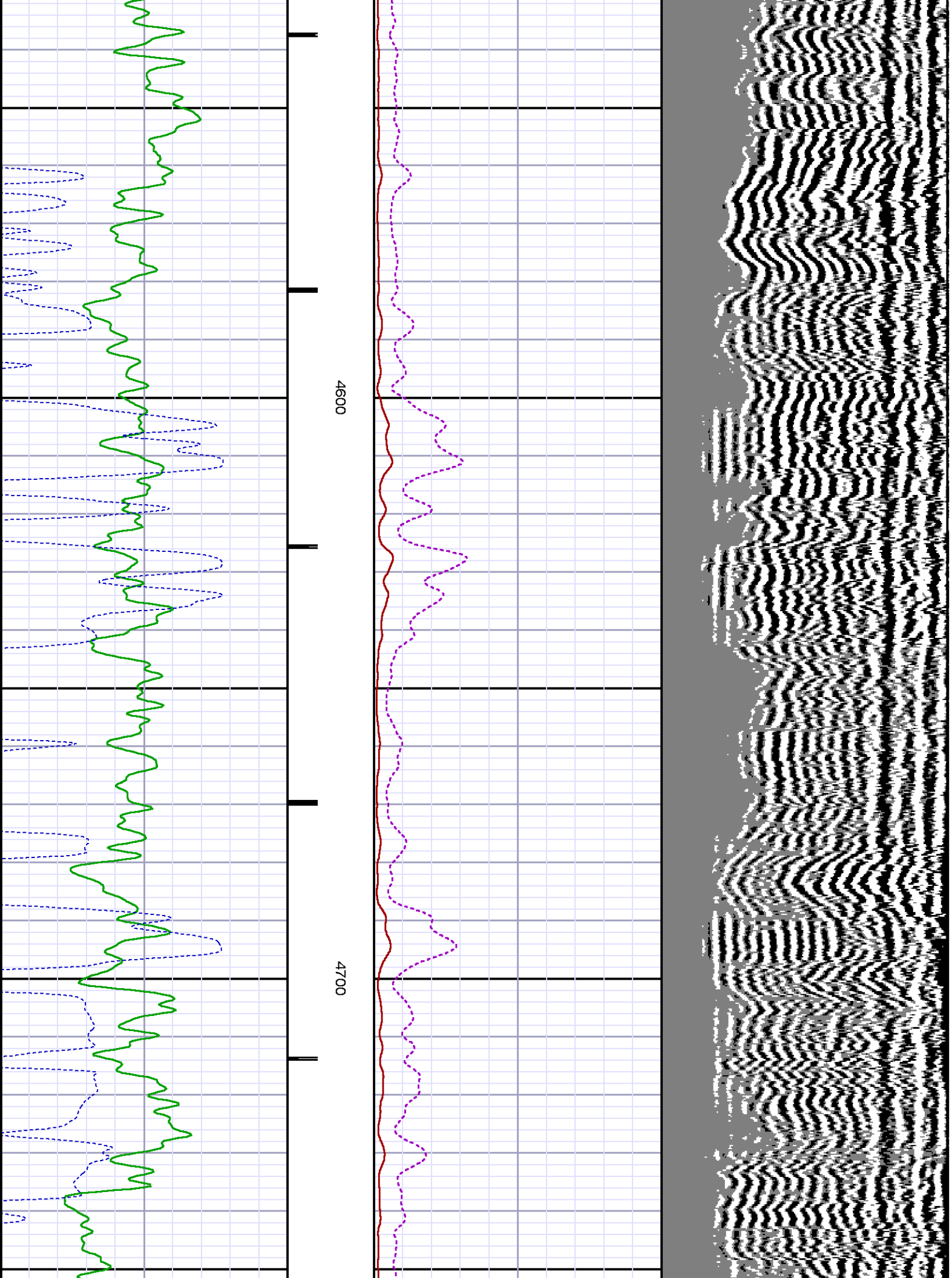


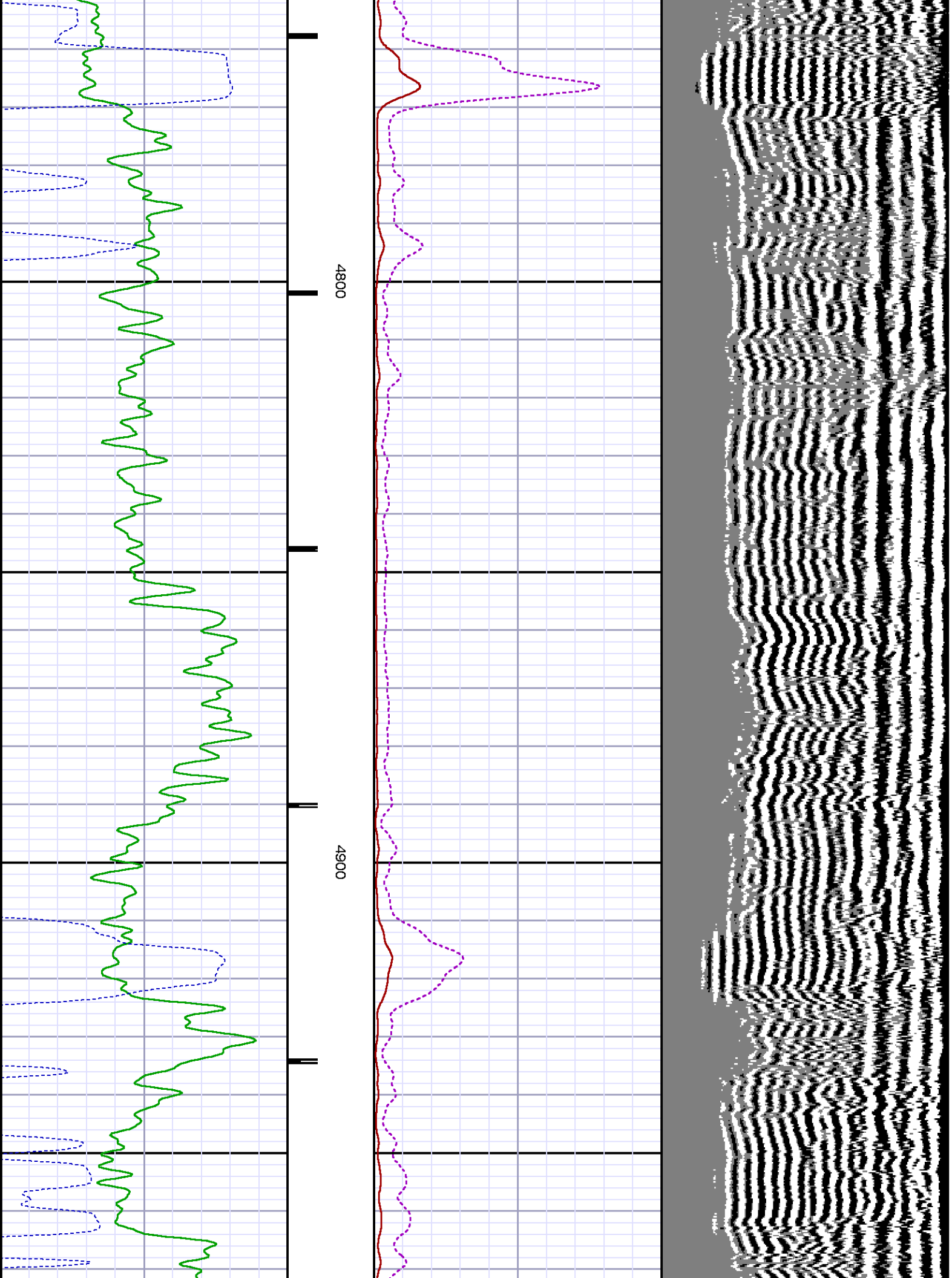


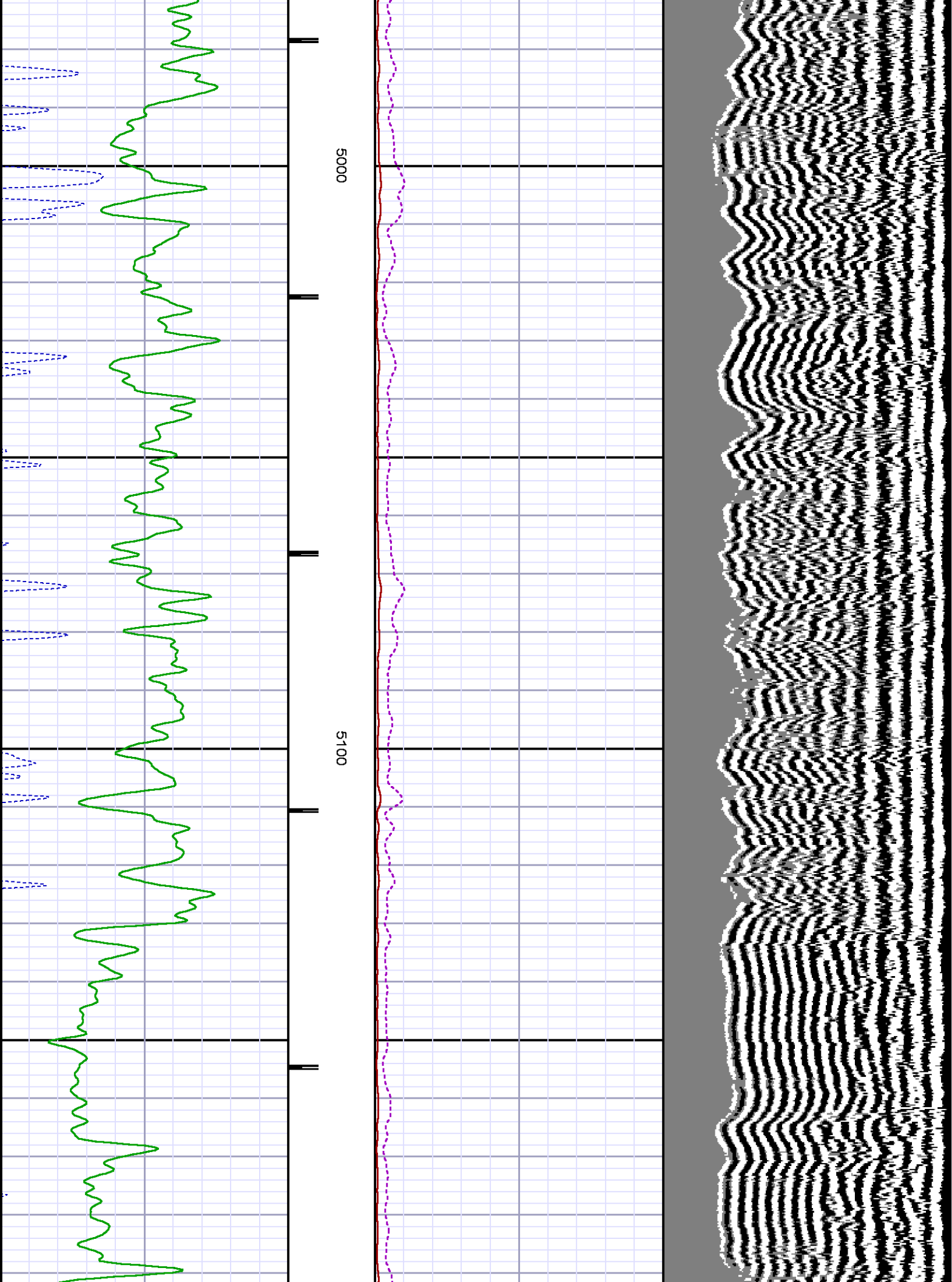


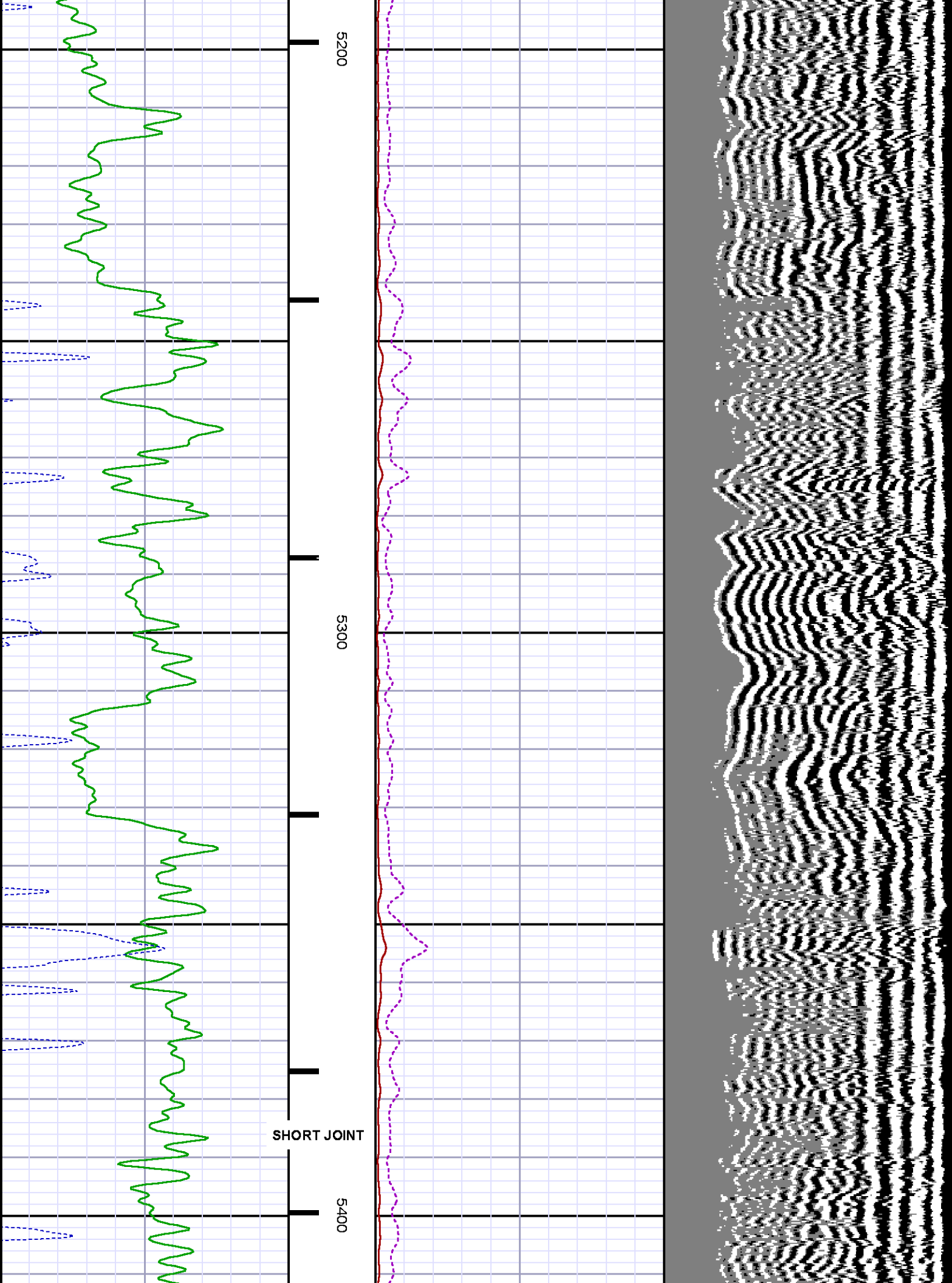


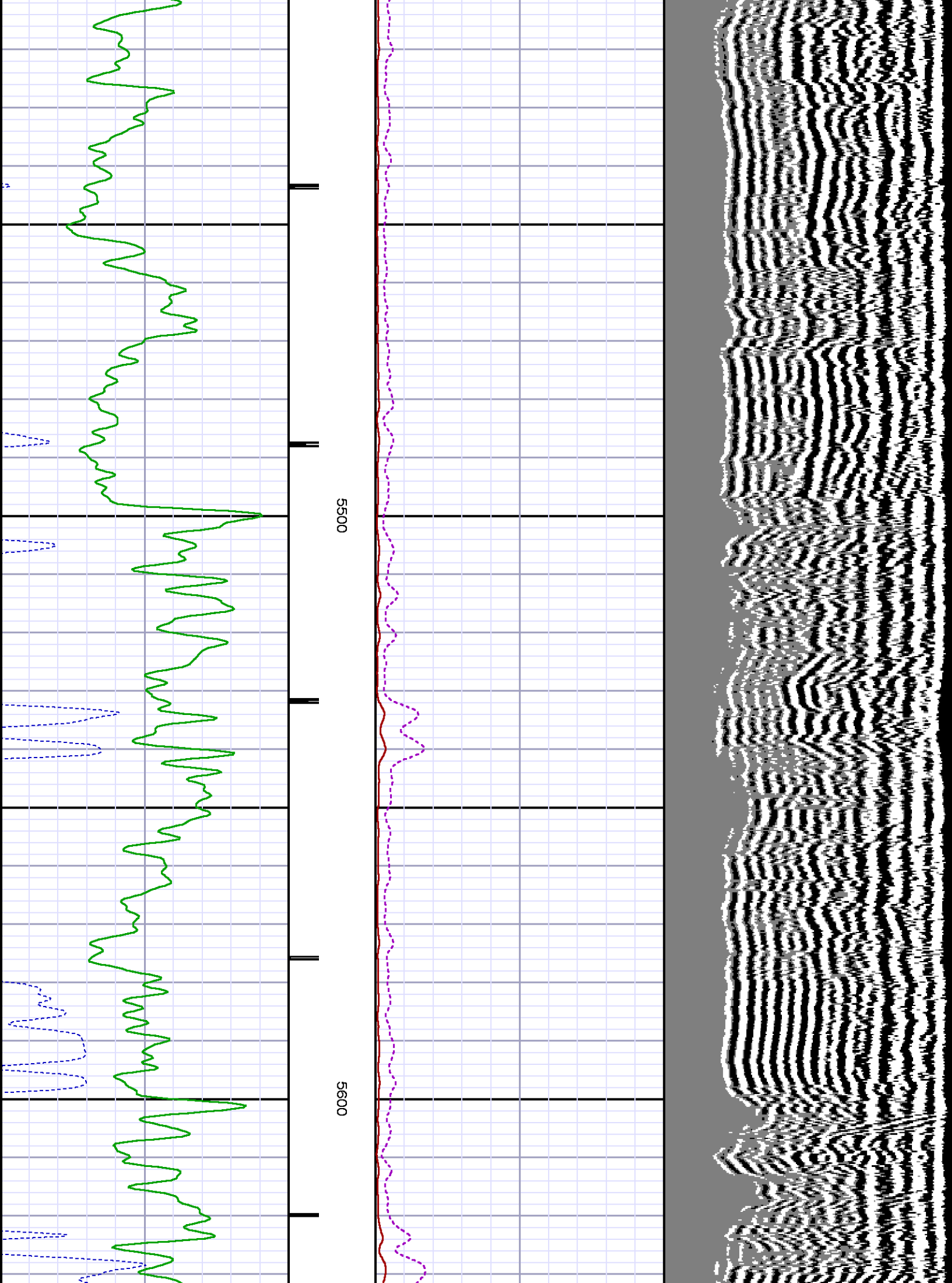


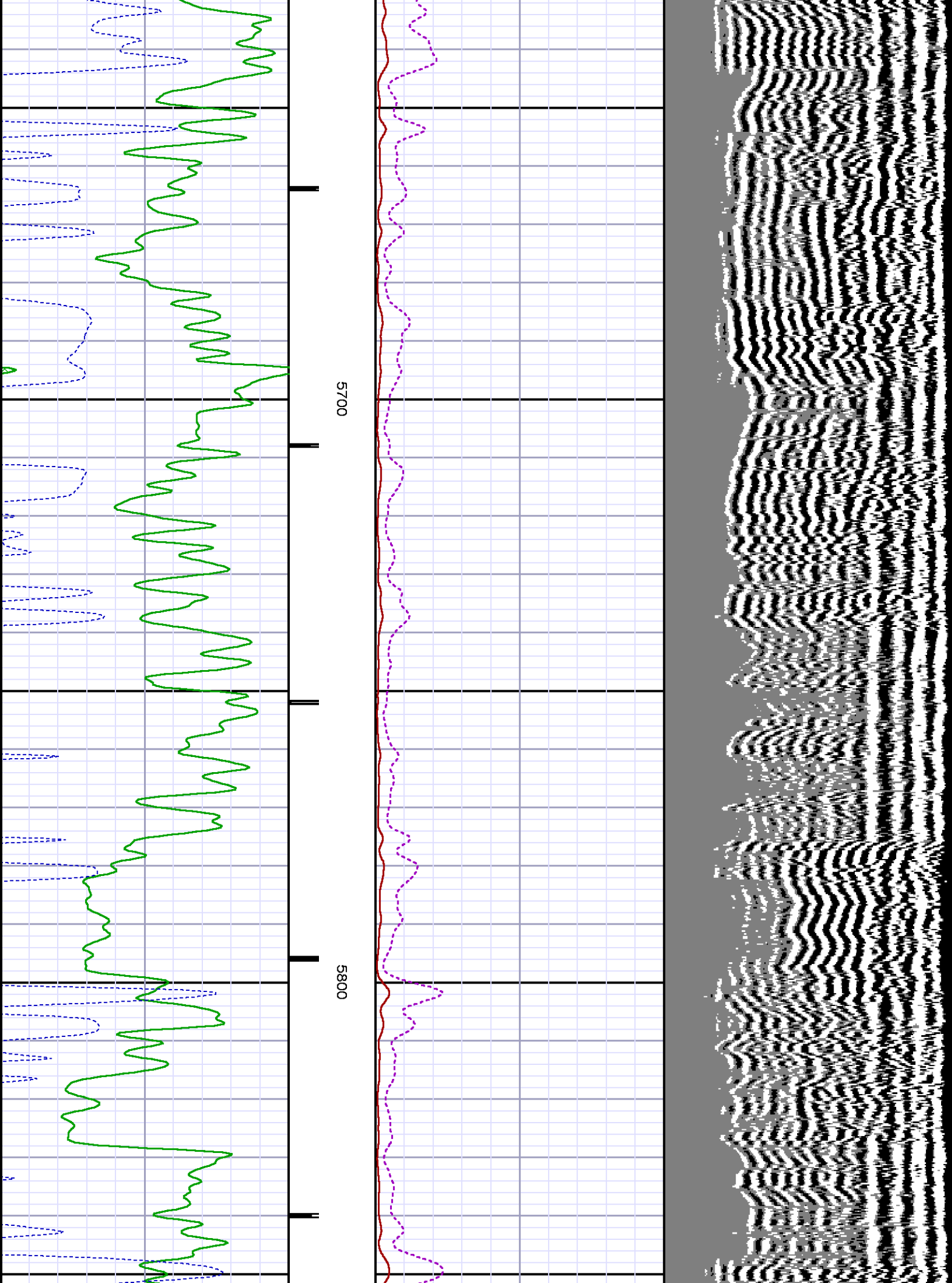


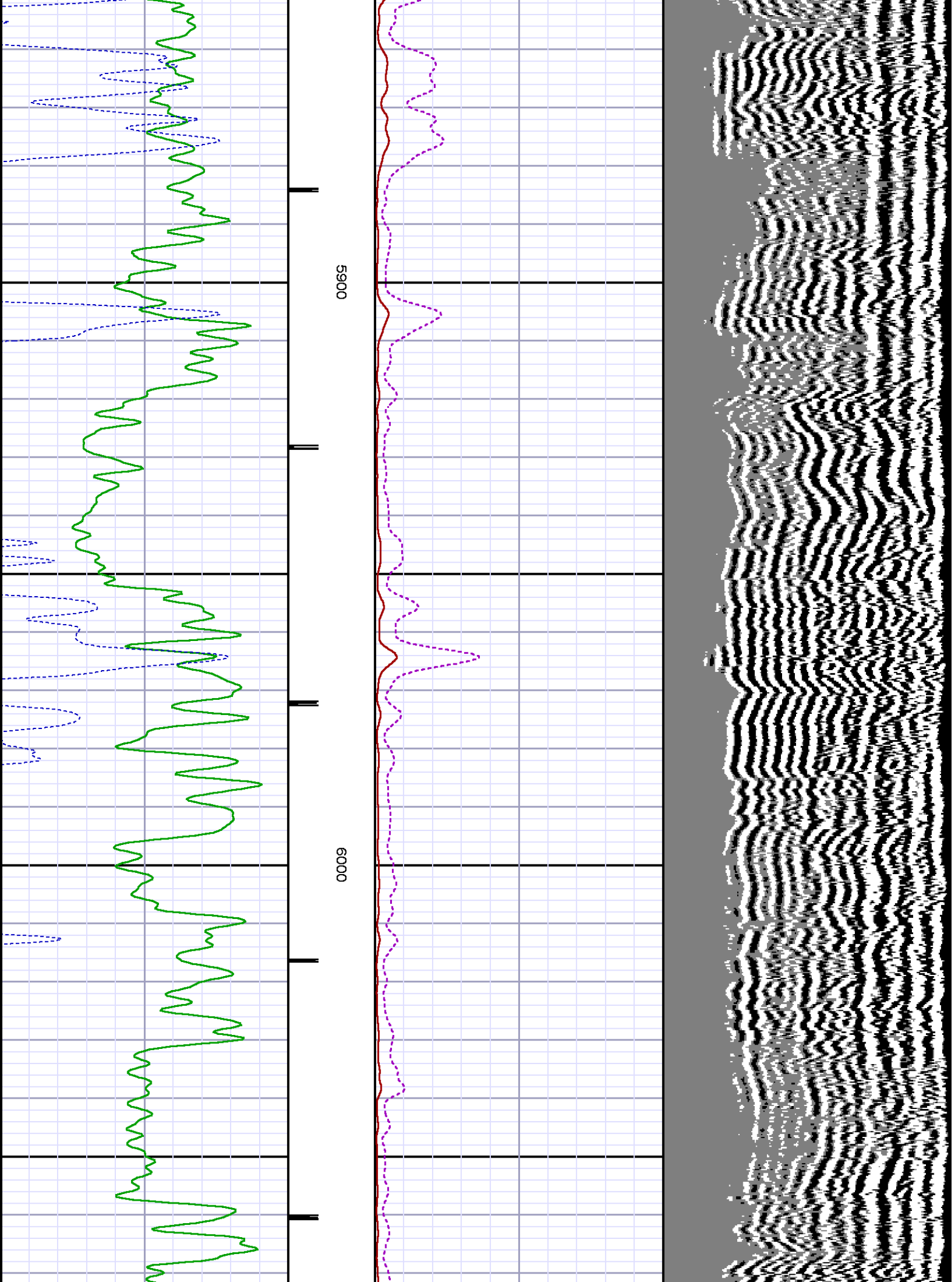


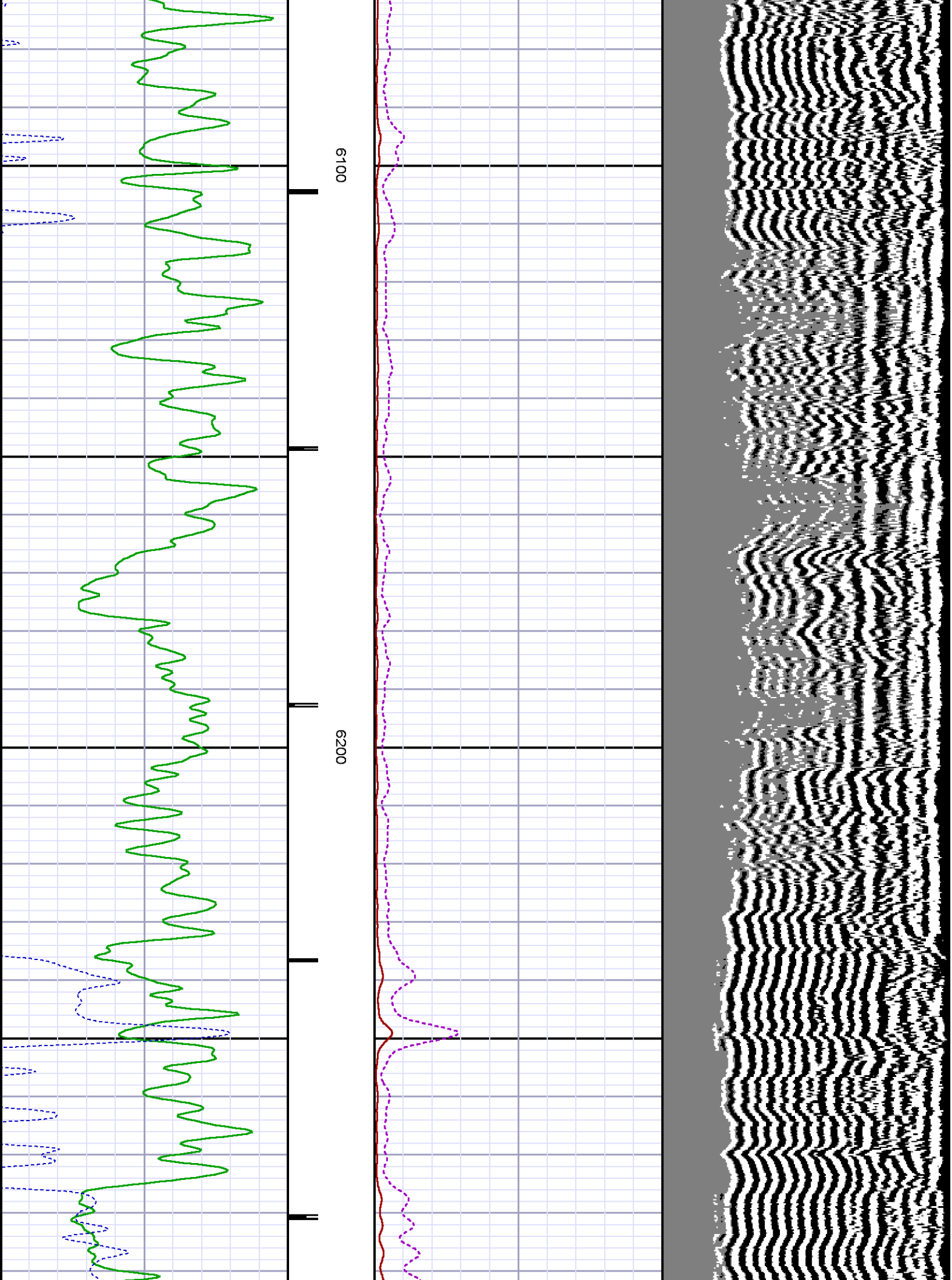


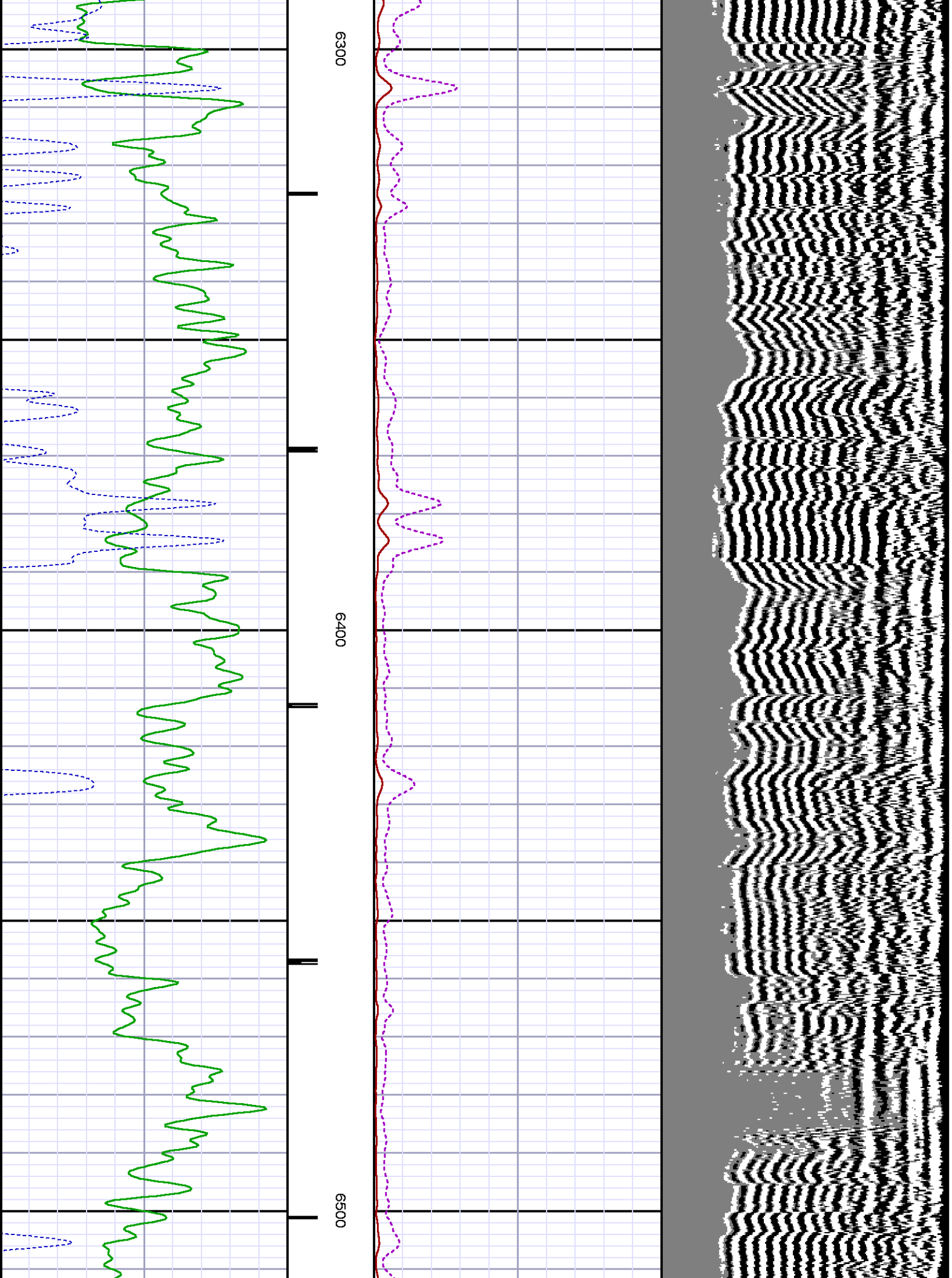


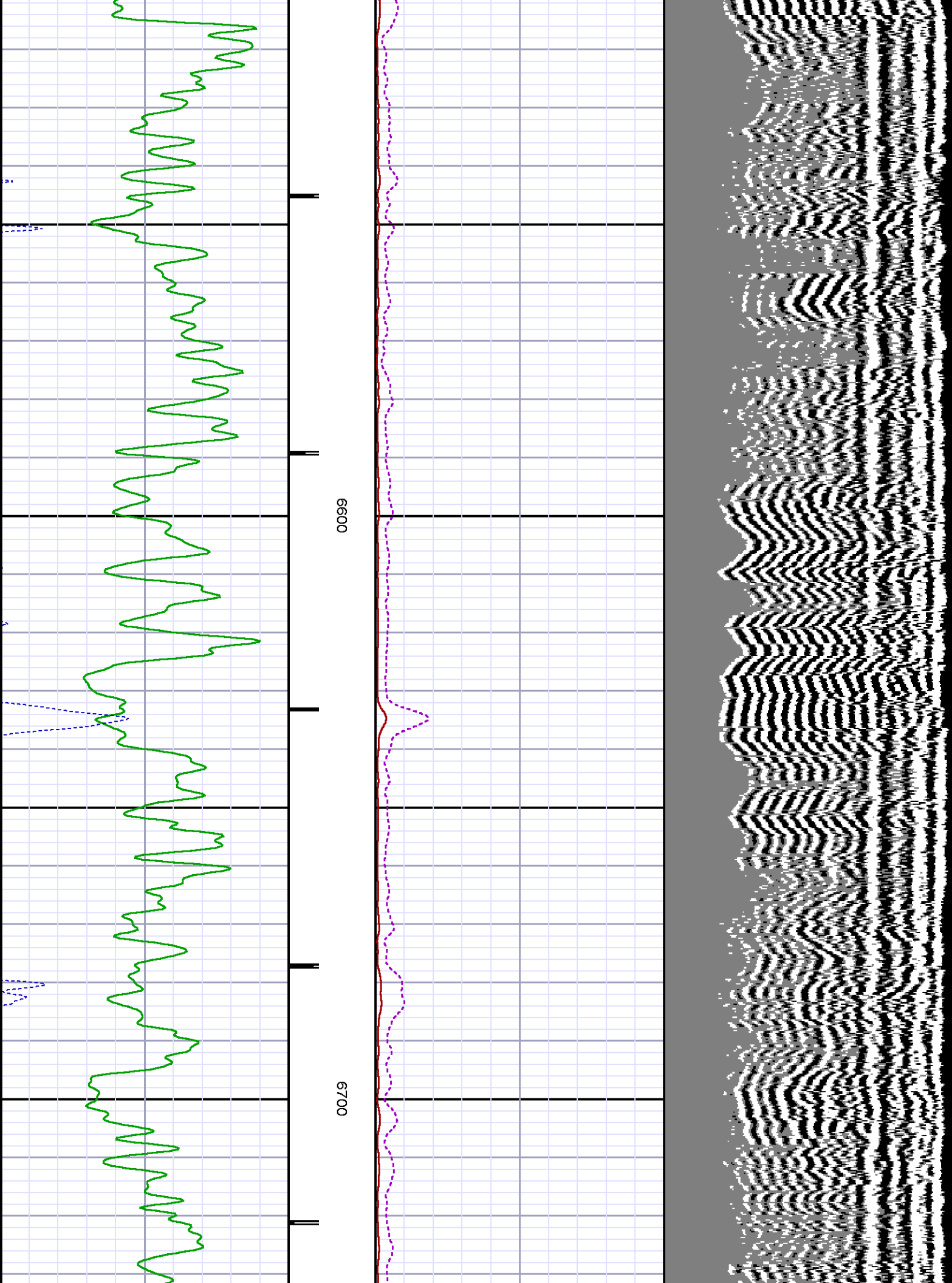


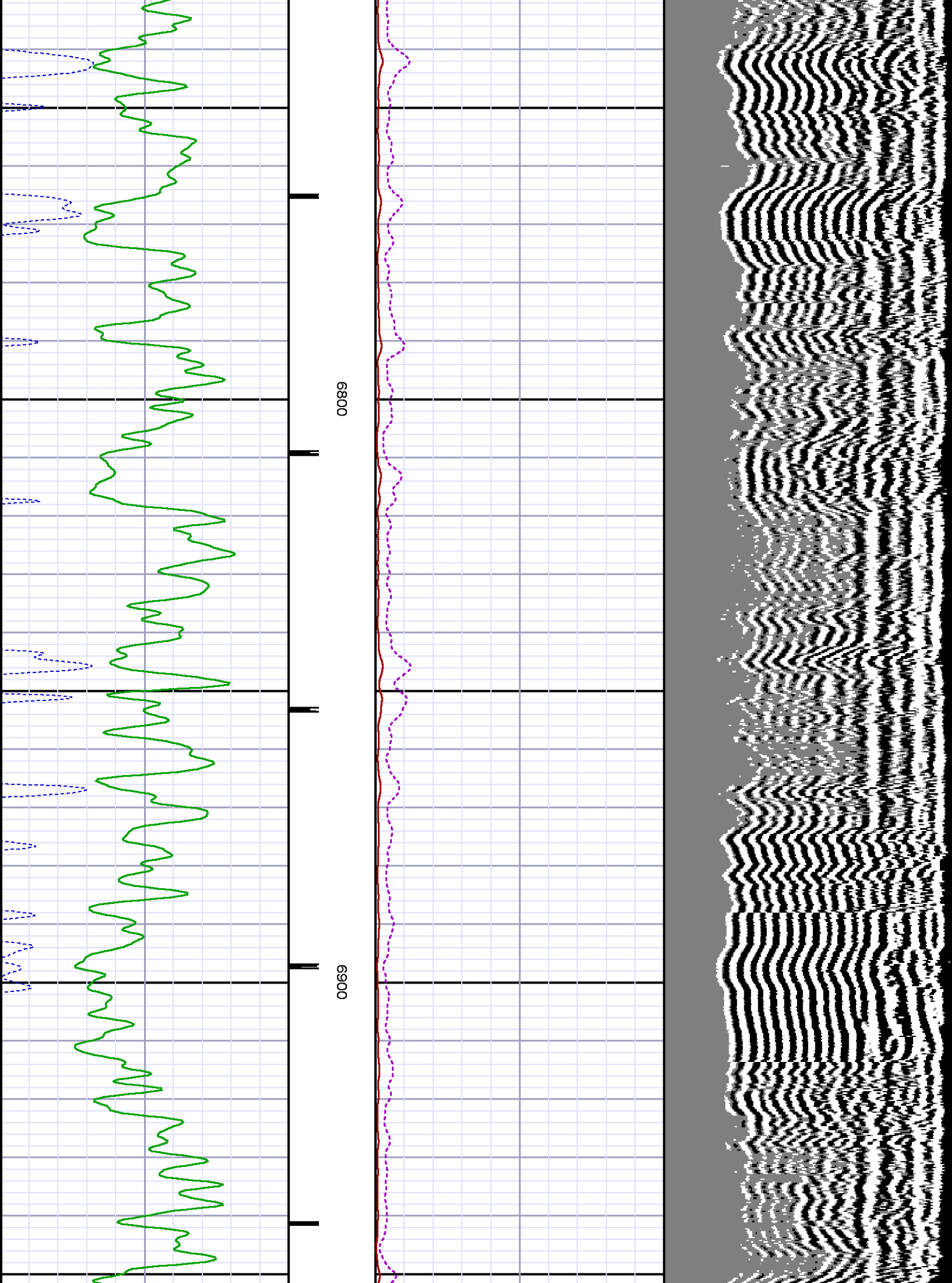


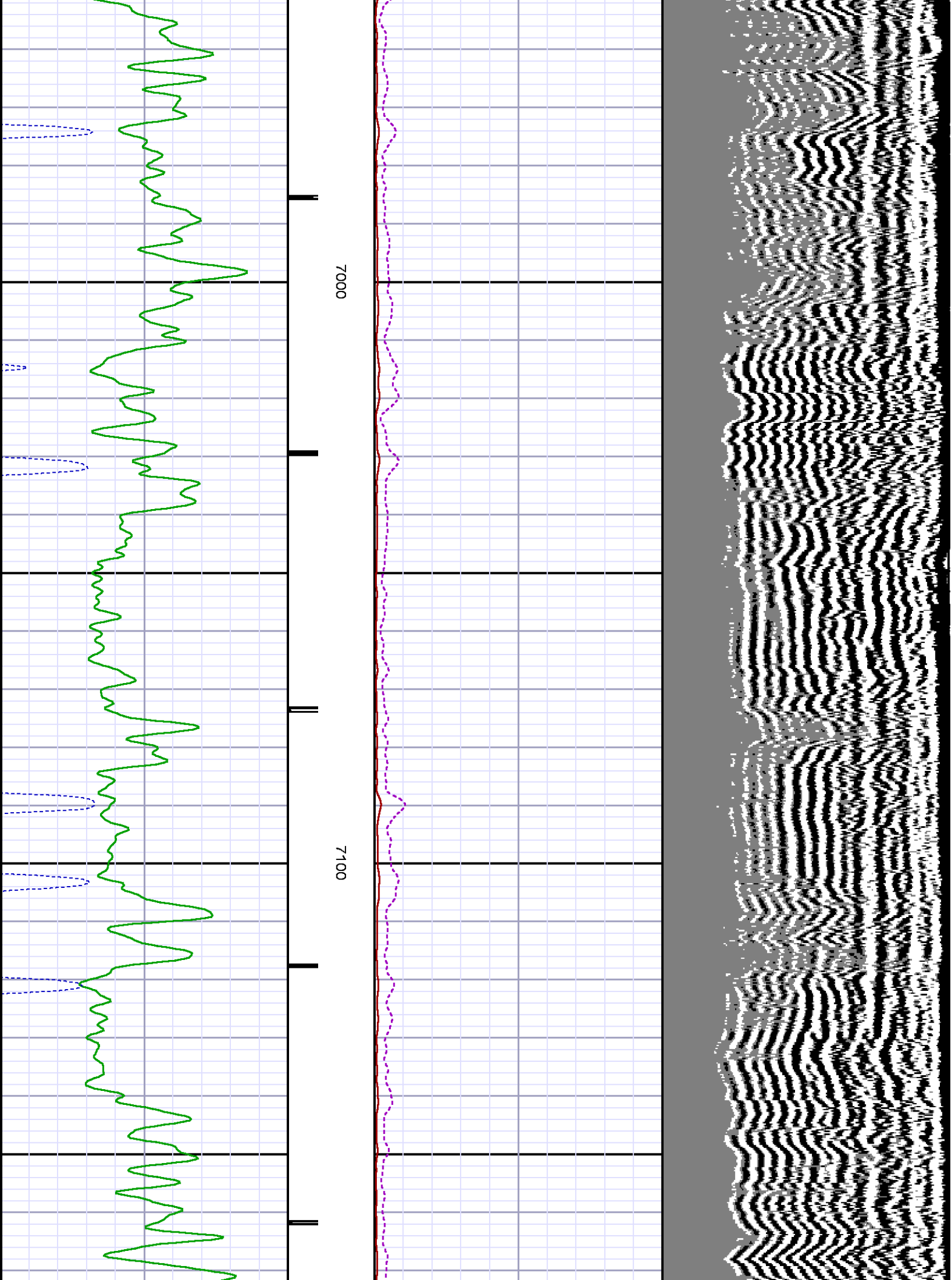


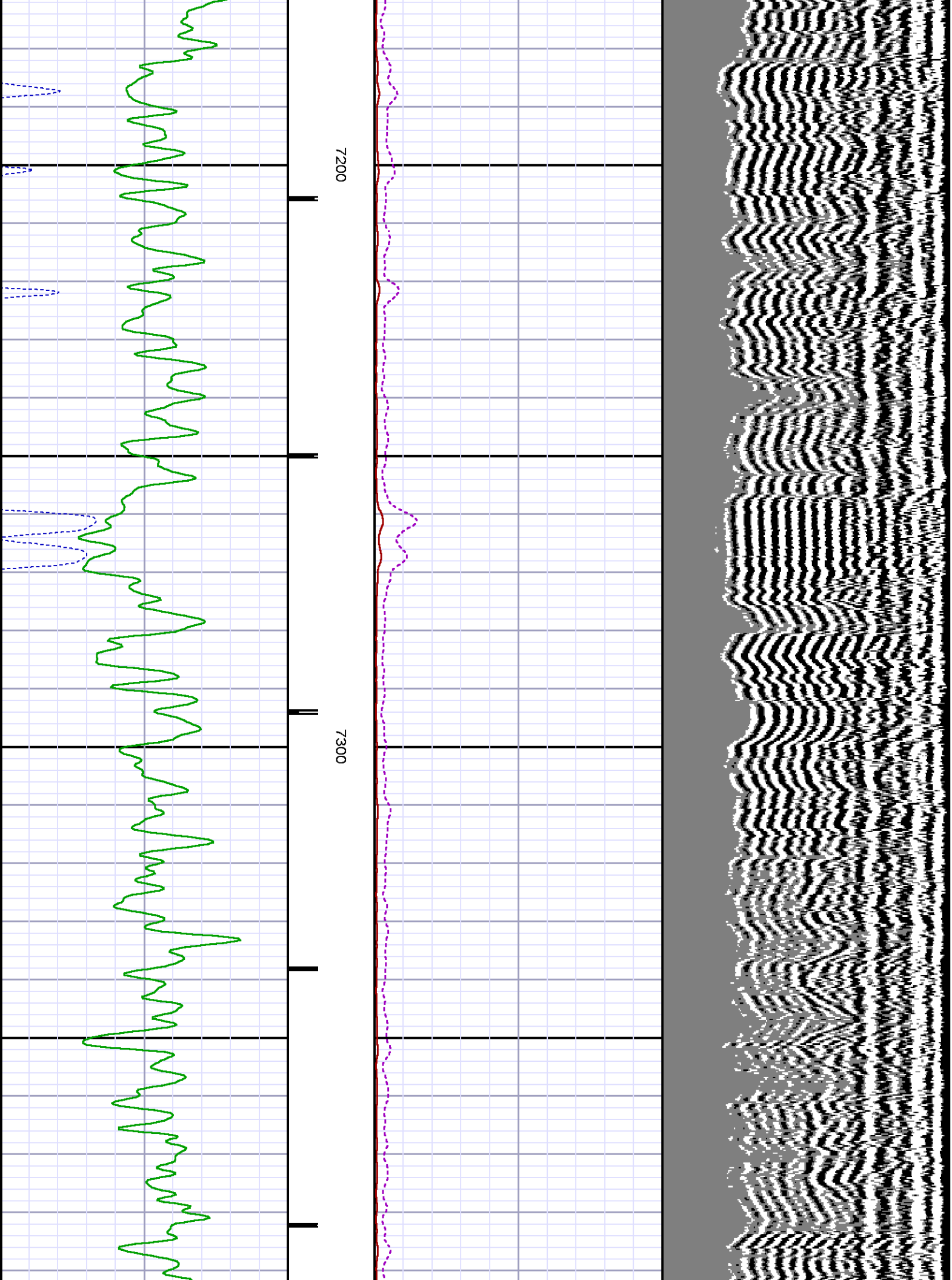


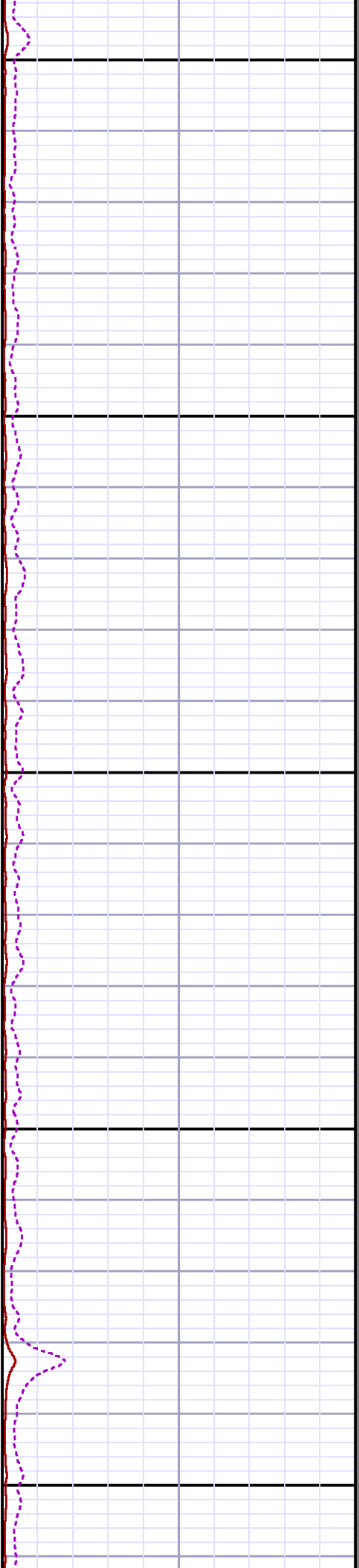
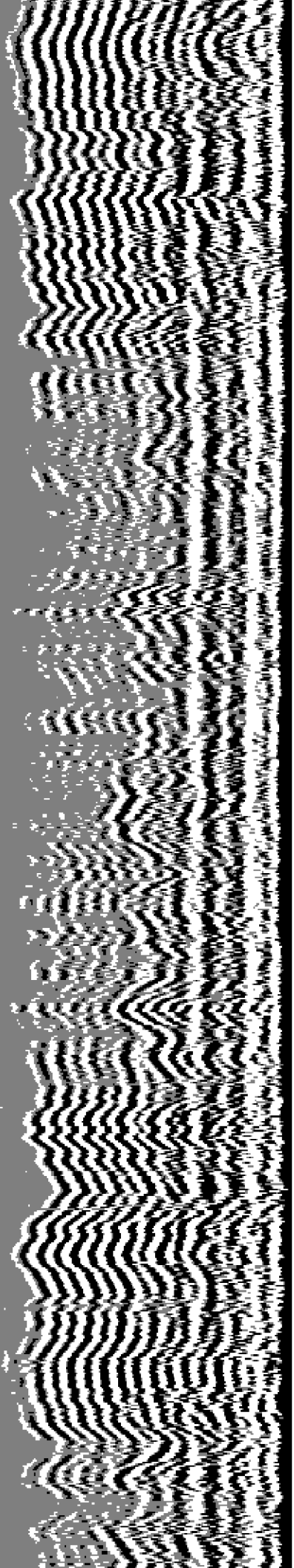








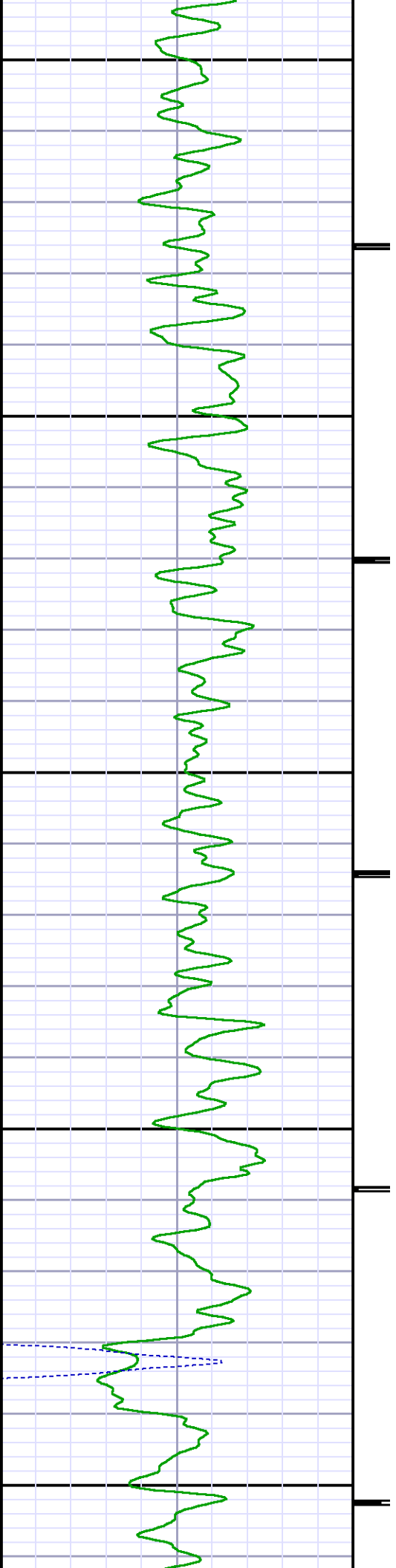


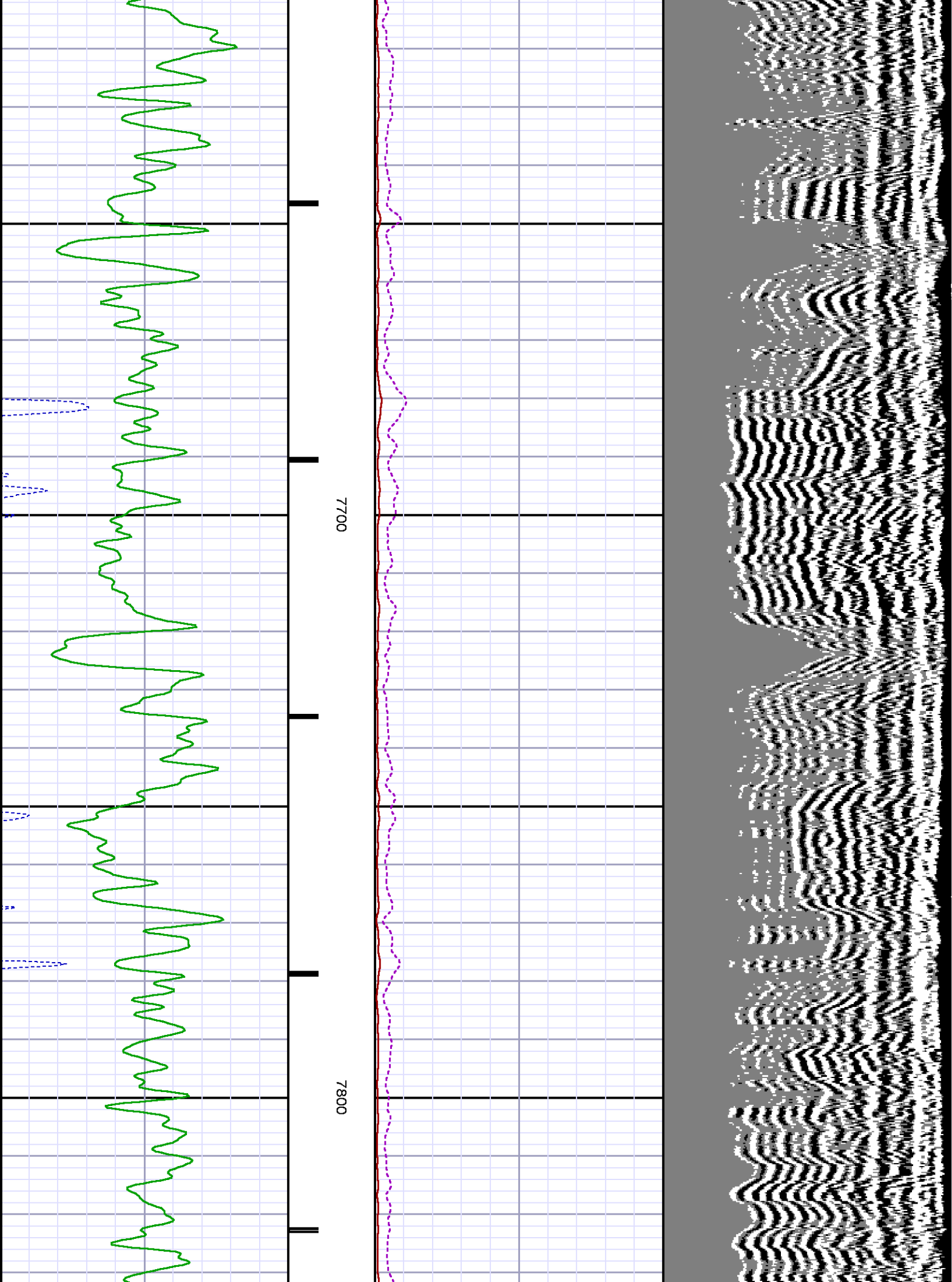


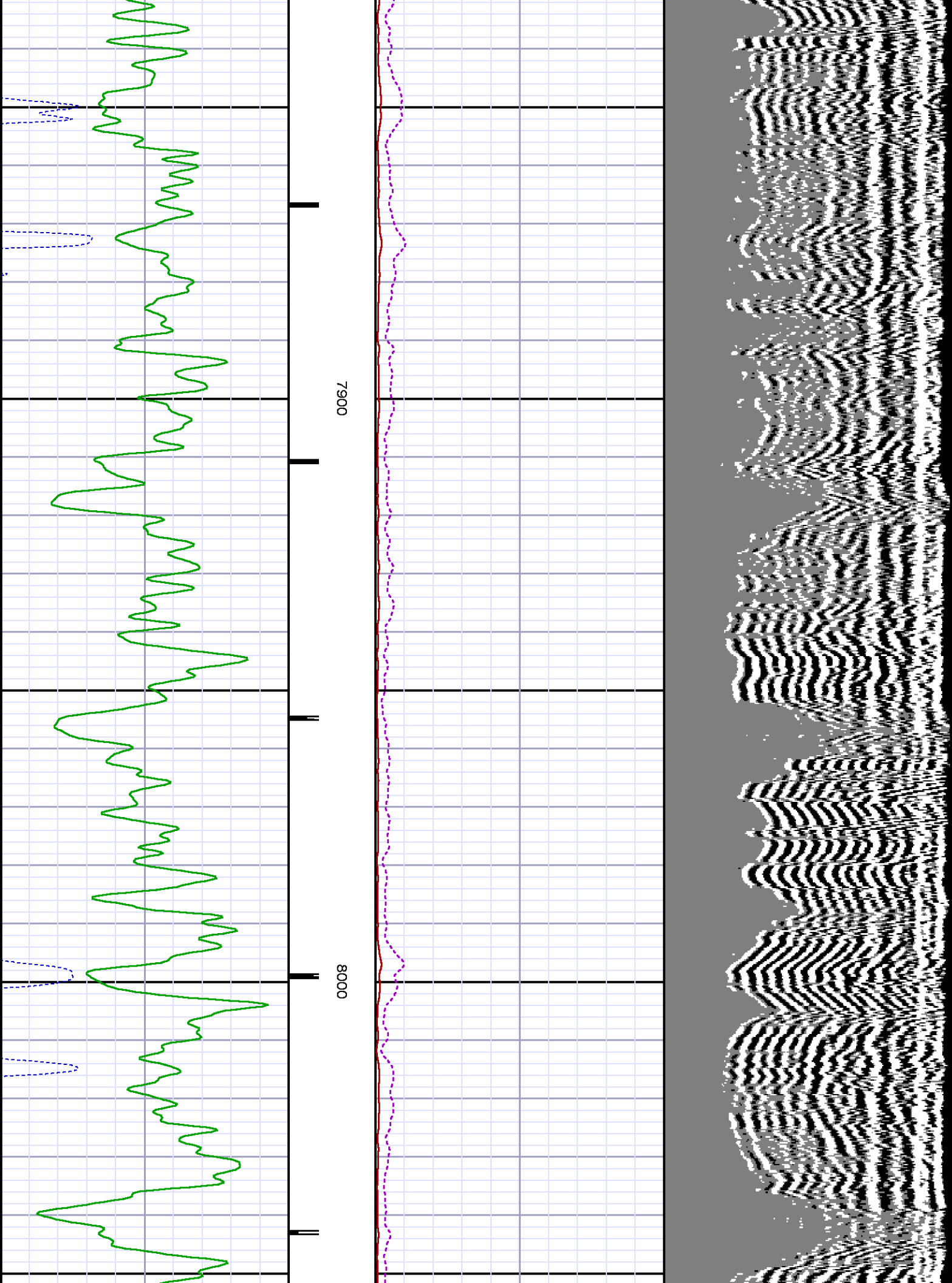
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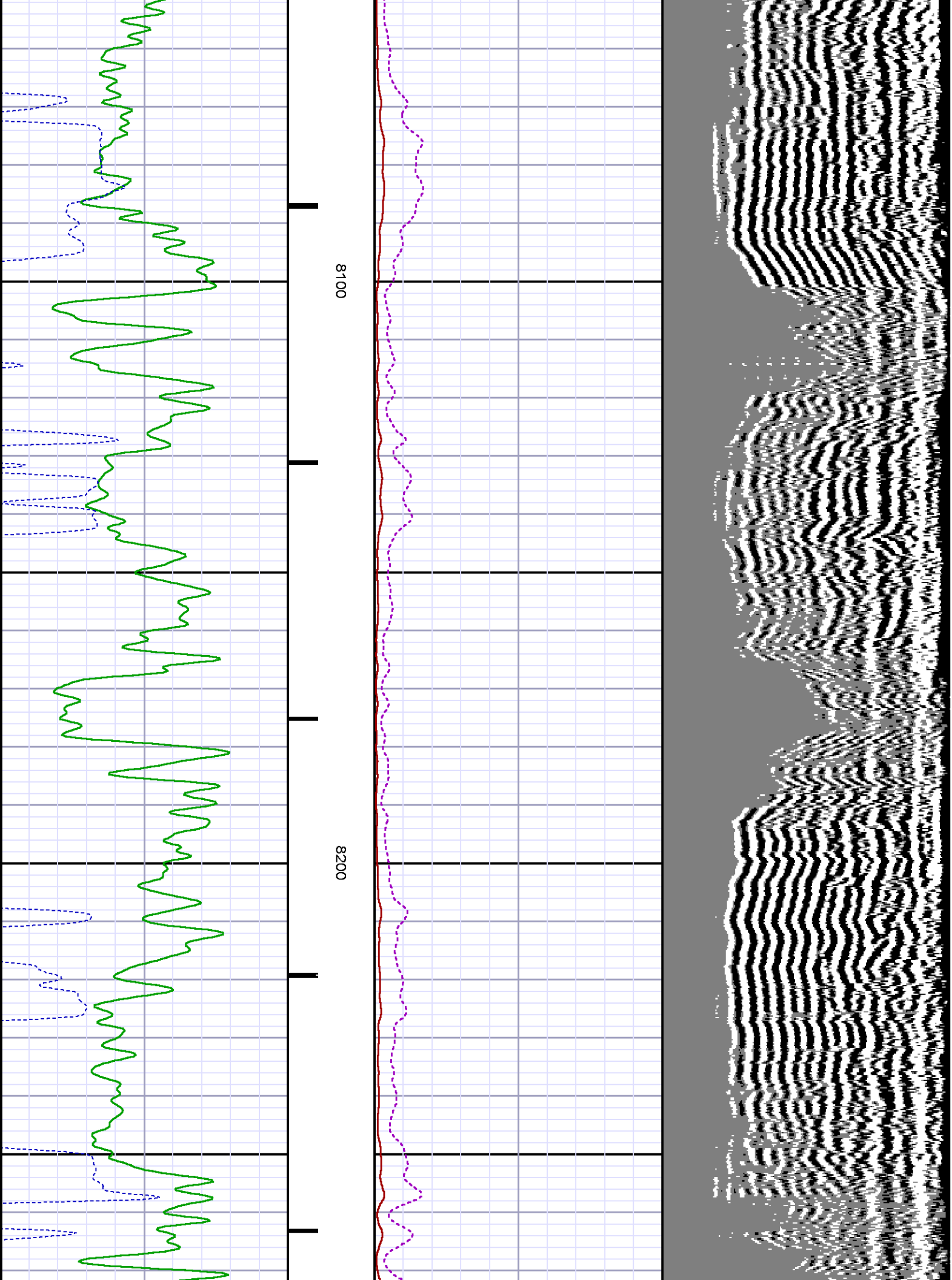
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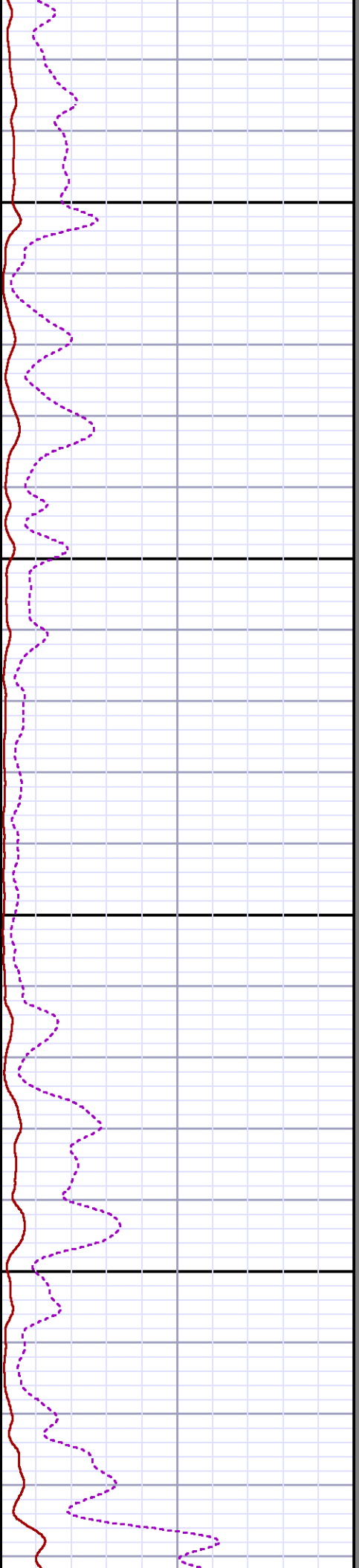
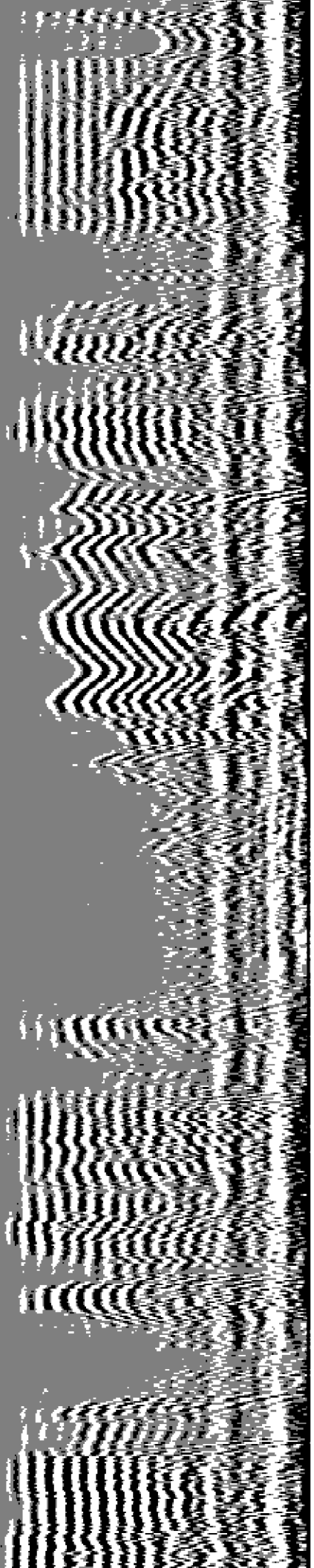
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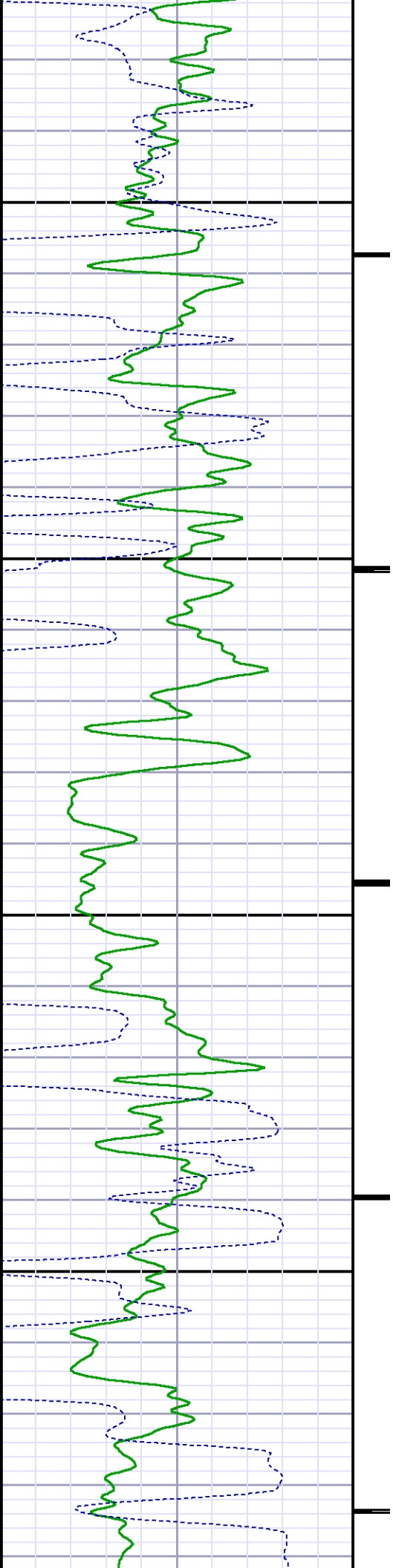


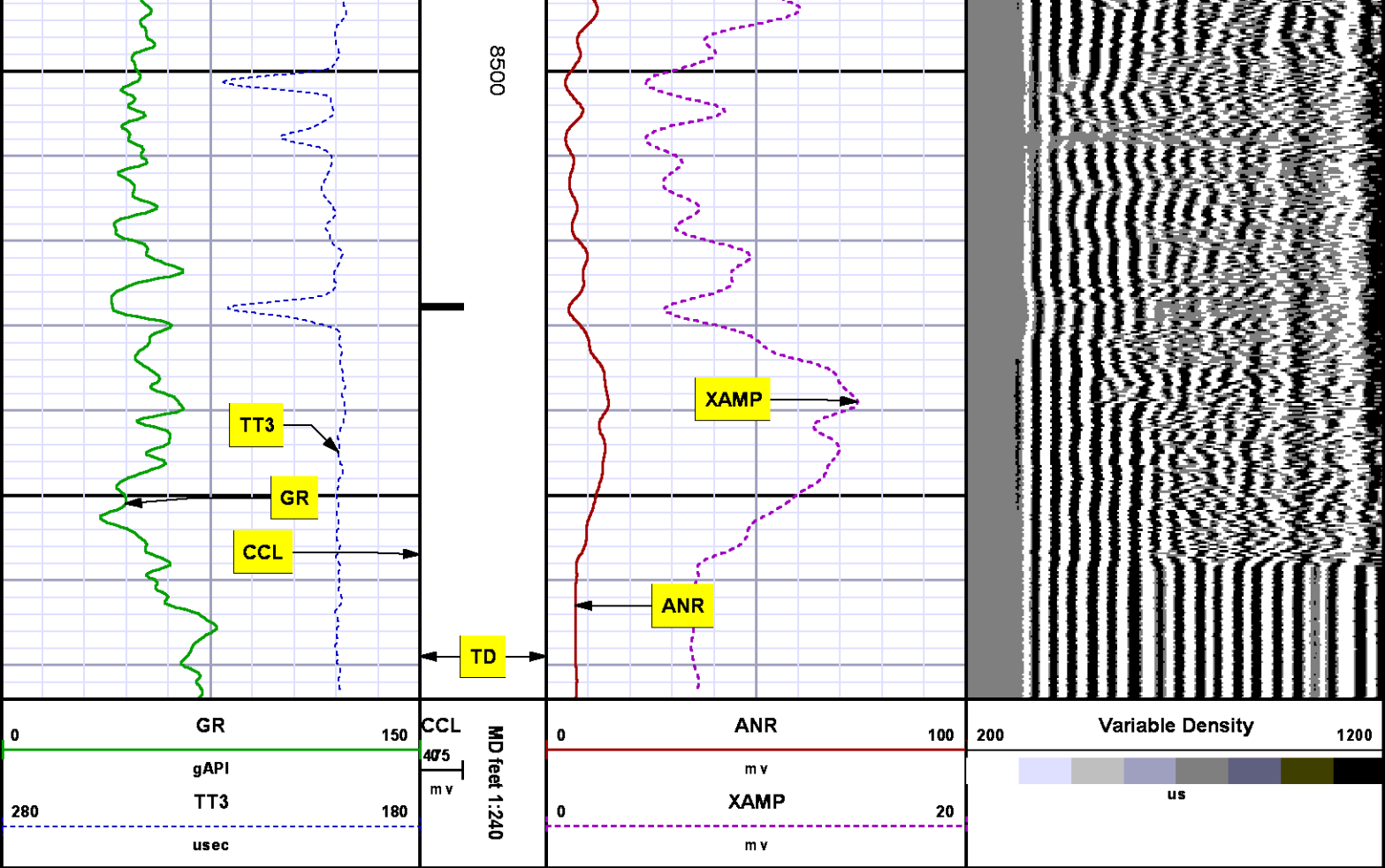




8300

8400





SECONDARY PRESENTATION

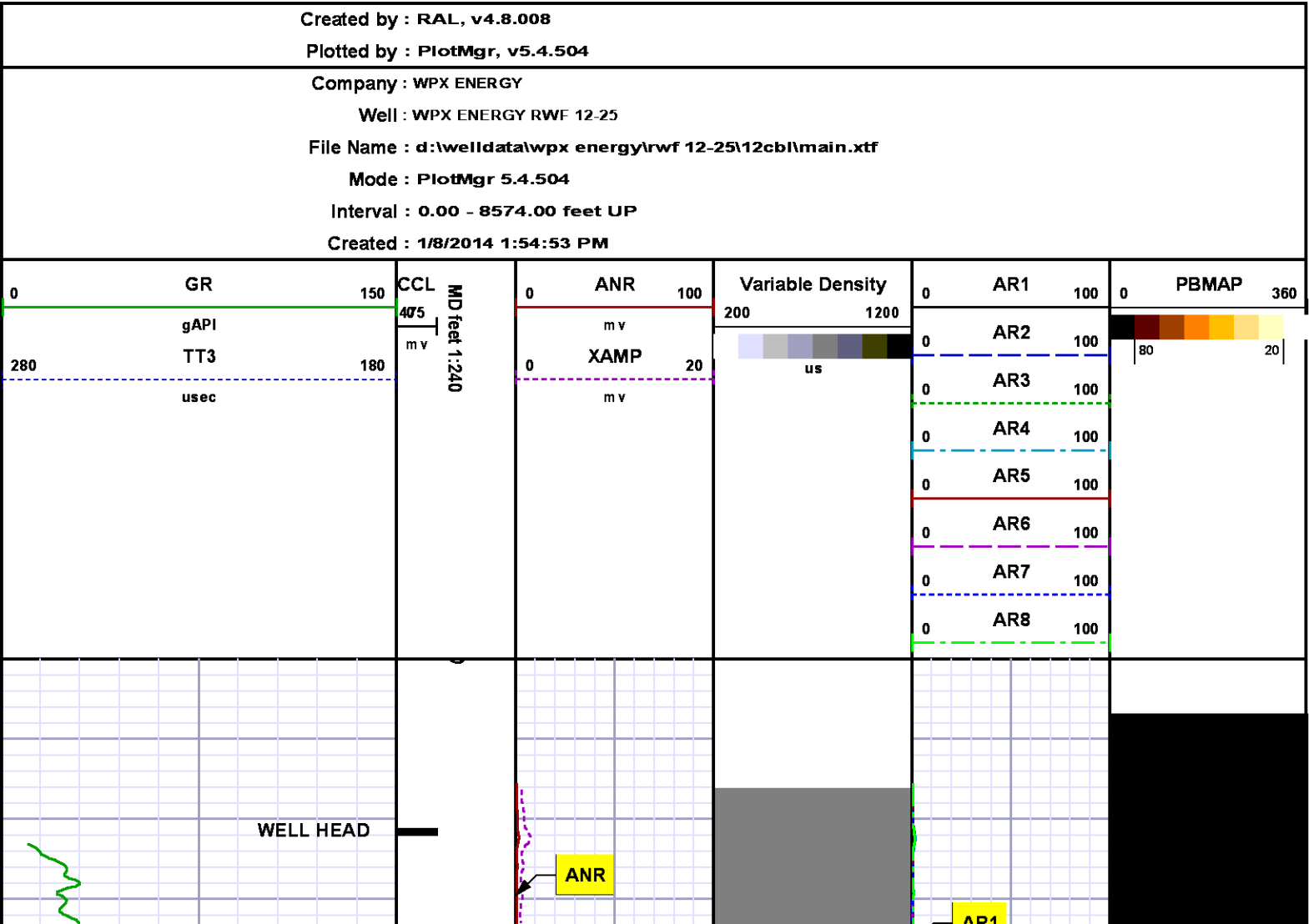
0 PSI

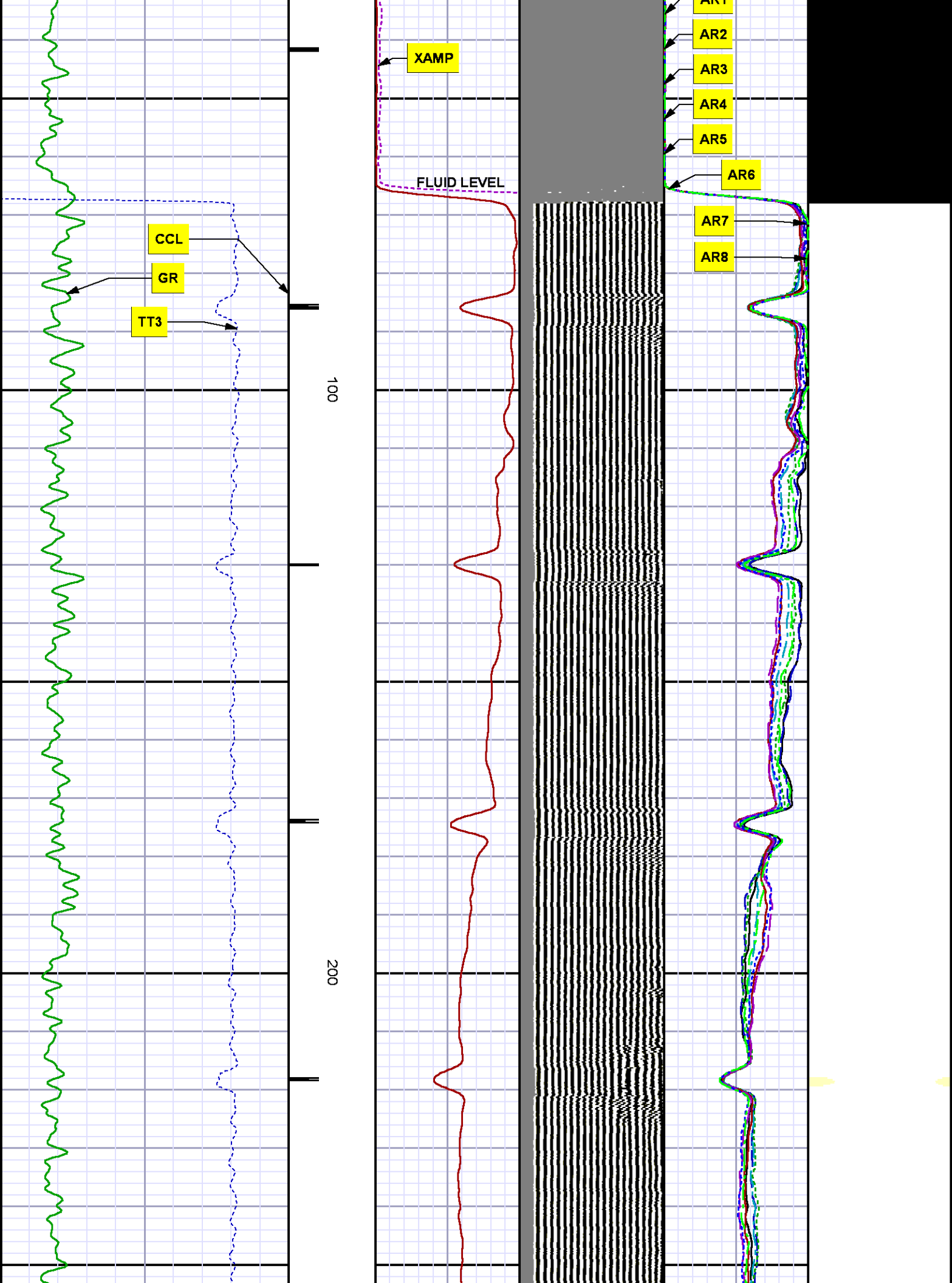
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	27.468	8586.000
RAL	Amp Gate Start Near	195.000	usec	27.468	8586.000
RAL	Amp Gate Start Radial	195.000	usec	27.468	8586.000
RAL	Amp Gate Width Far	25.000	usec	27.468	8586.000
RAL	Amp Gate Width Near	25.000	usec	27.468	8586.000
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RAL	casing od	4.500	inches	27.468	8586.000
RAL	casing wt	11.600	lbm/ft	27.468	8586.000
RAL	FB Start Far	291.900	usec	27.468	8586.000
RAL	FB Start Near	180.000	usec	27.468	8586.000

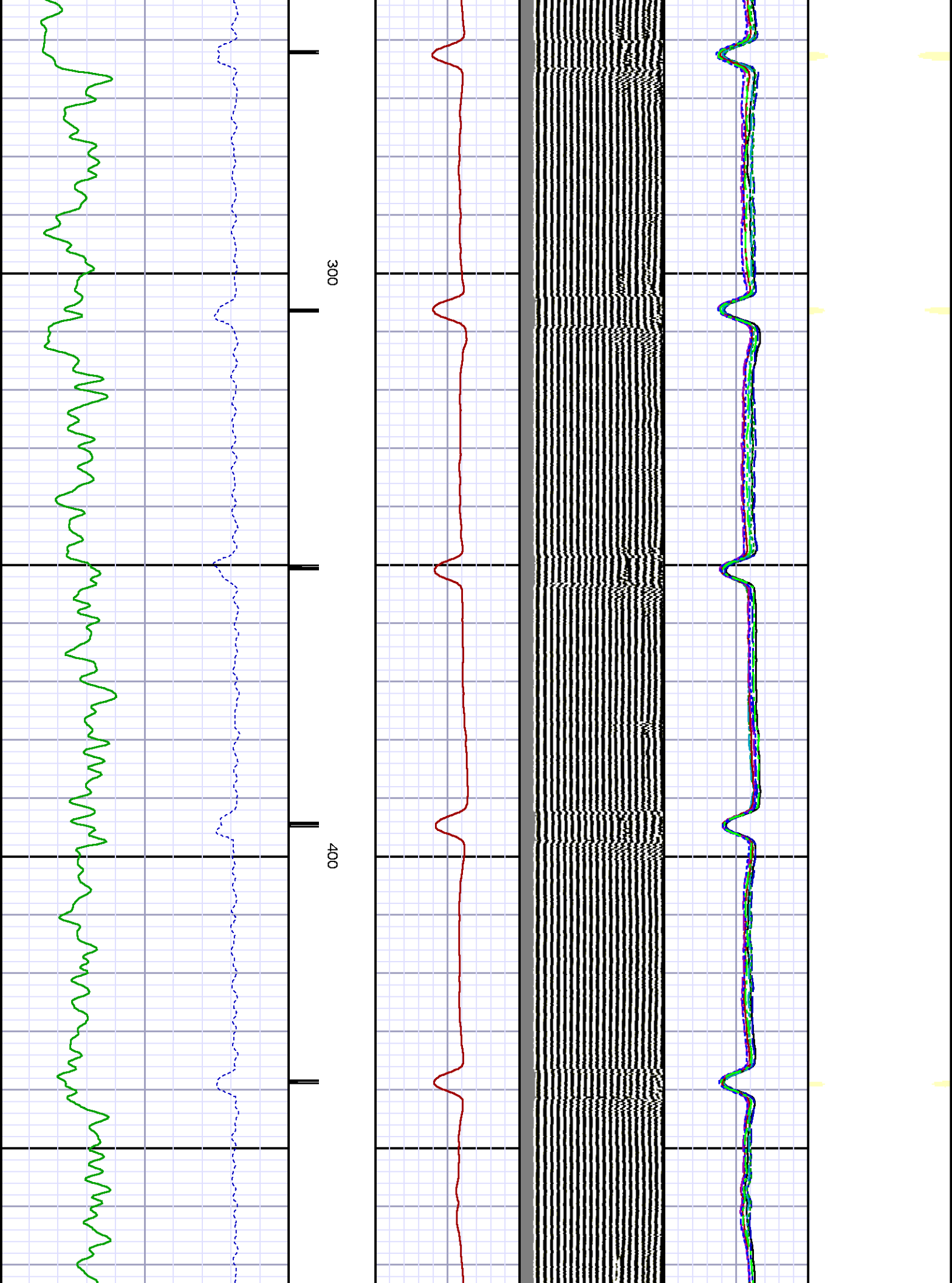
RAL	FB Start Radial	180.000	u sec	27.468	8586.000
RAL	FB Thresh Far	10.000	mv	27.468	8586.000
RAL	FB Thresh Near	4.000	mv	27.468	8586.000
RAL	FB Thresh Radial	4.000	mv	27.468	8586.000
RAL	Fluid Travel Time	200.000	u sec/ft	27.468	8586.968

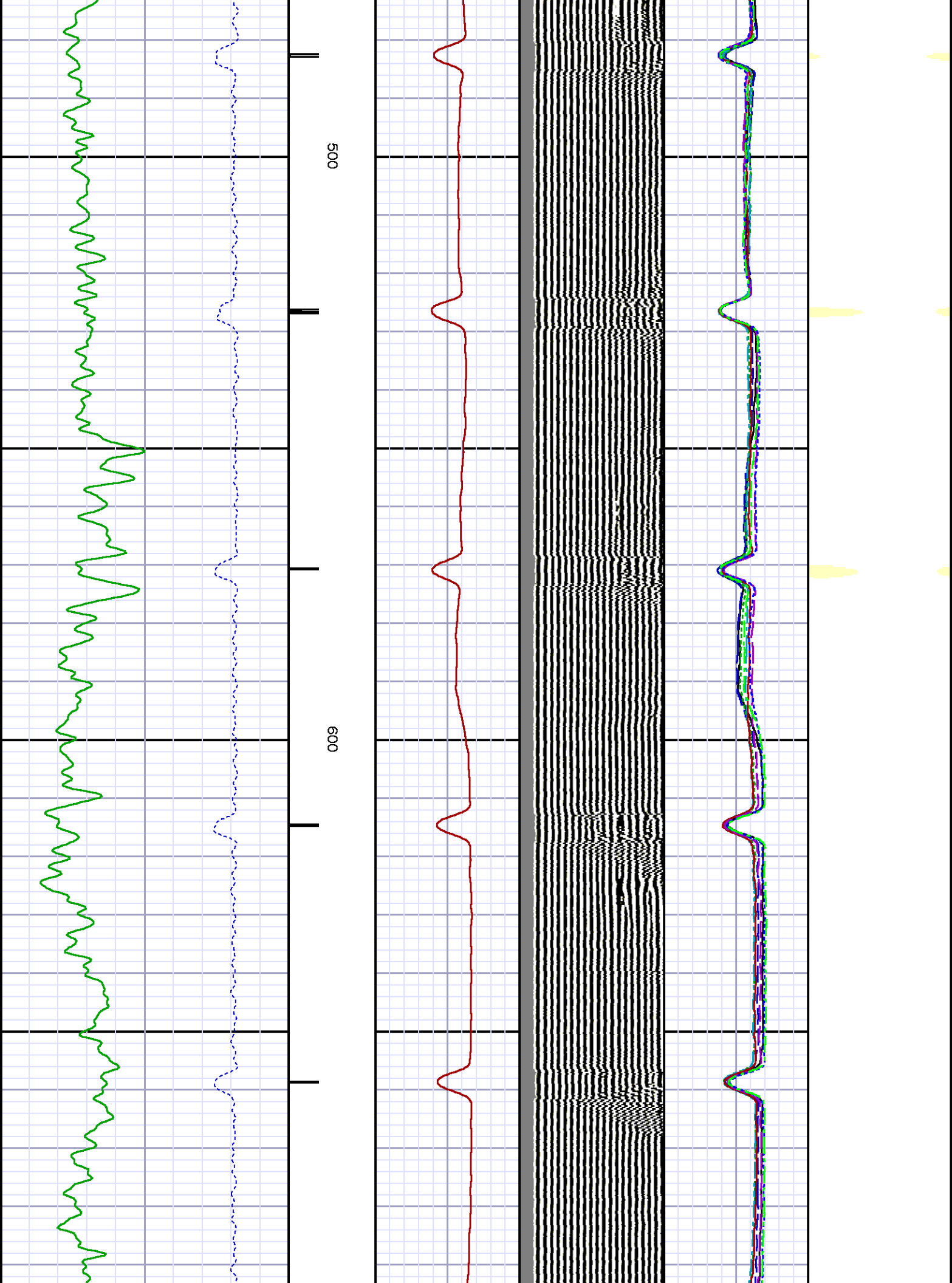
DEPTH OFFSETS
(for Acquired Curves)

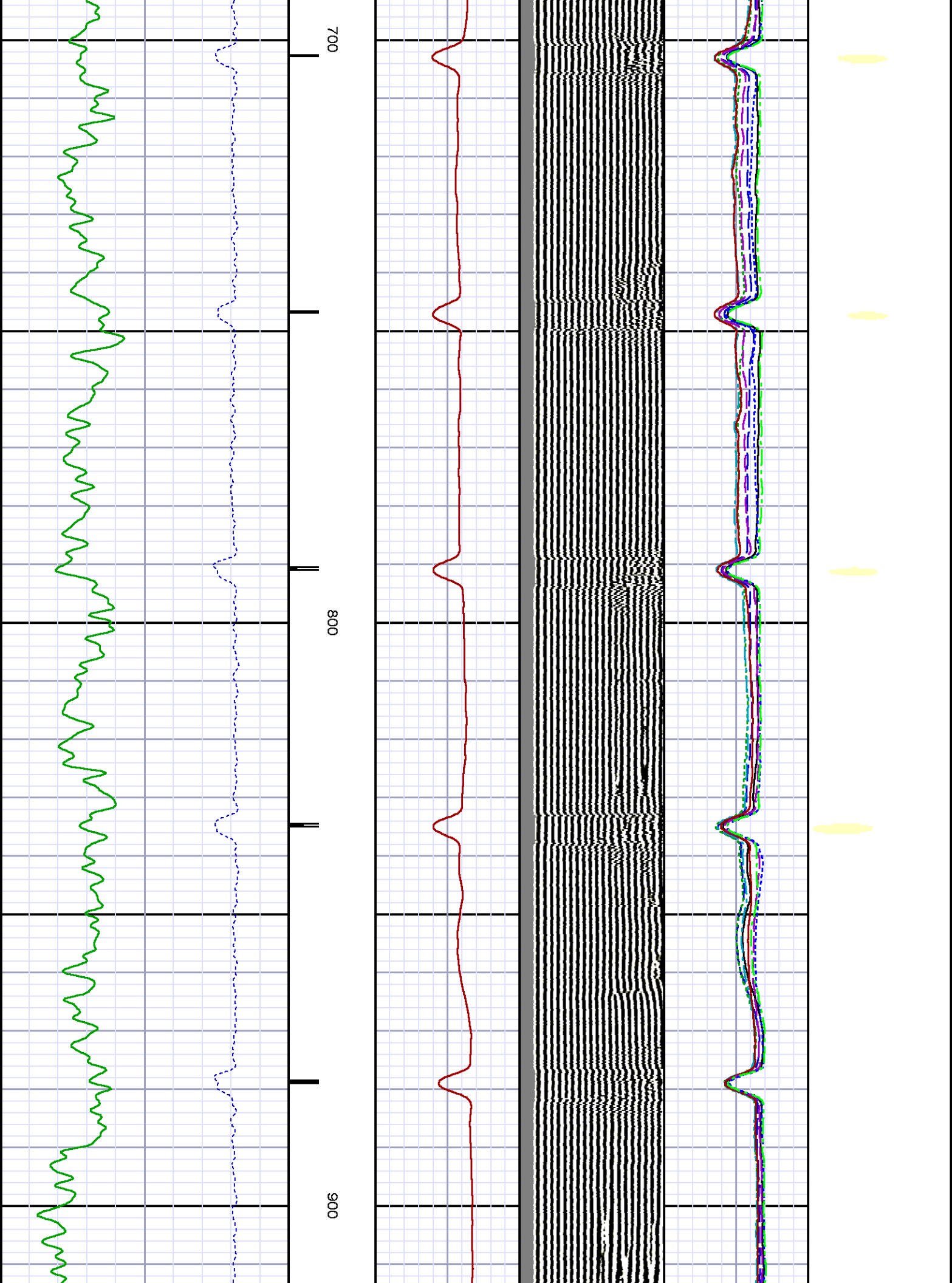
SERIES	DEPTH OFFSET	ACQUIRED CURVES
1426XA	-12.360	ACAL ANR AR1 AR2 AR3 AR4 AR5 AR6 AR7 AR8 CHV FPR2 FPR3 FPR5 TT3 TTR1 TTR2 TTR3 TTR4 TTR5 TTR6 TTR7 TTR8 XAMP
1426XA	-11.360	AFAR SIG TT5
2459XA	-7.250	CCL
2459XA	-5.390	GR
2459XA	0.000	NEU

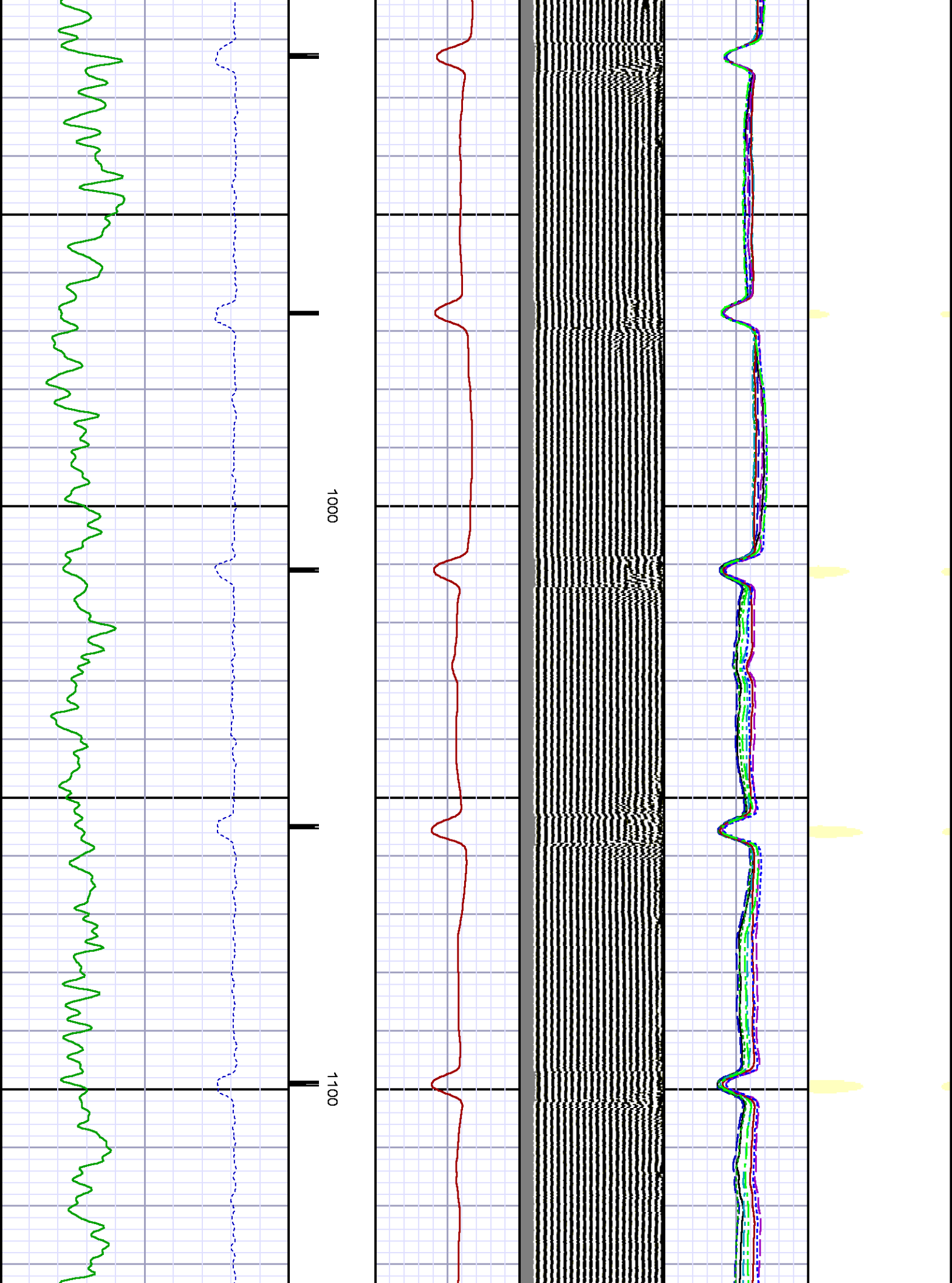


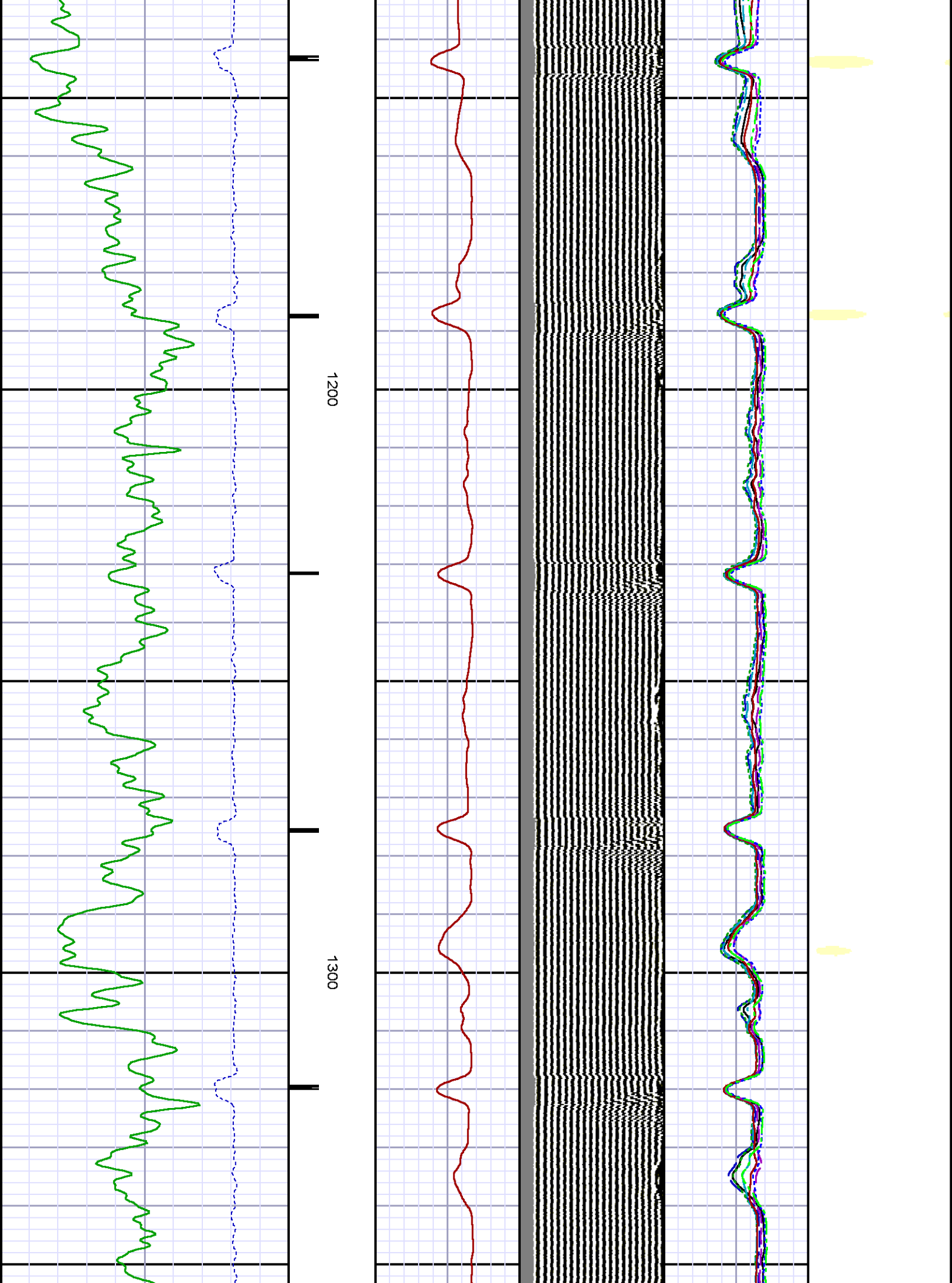


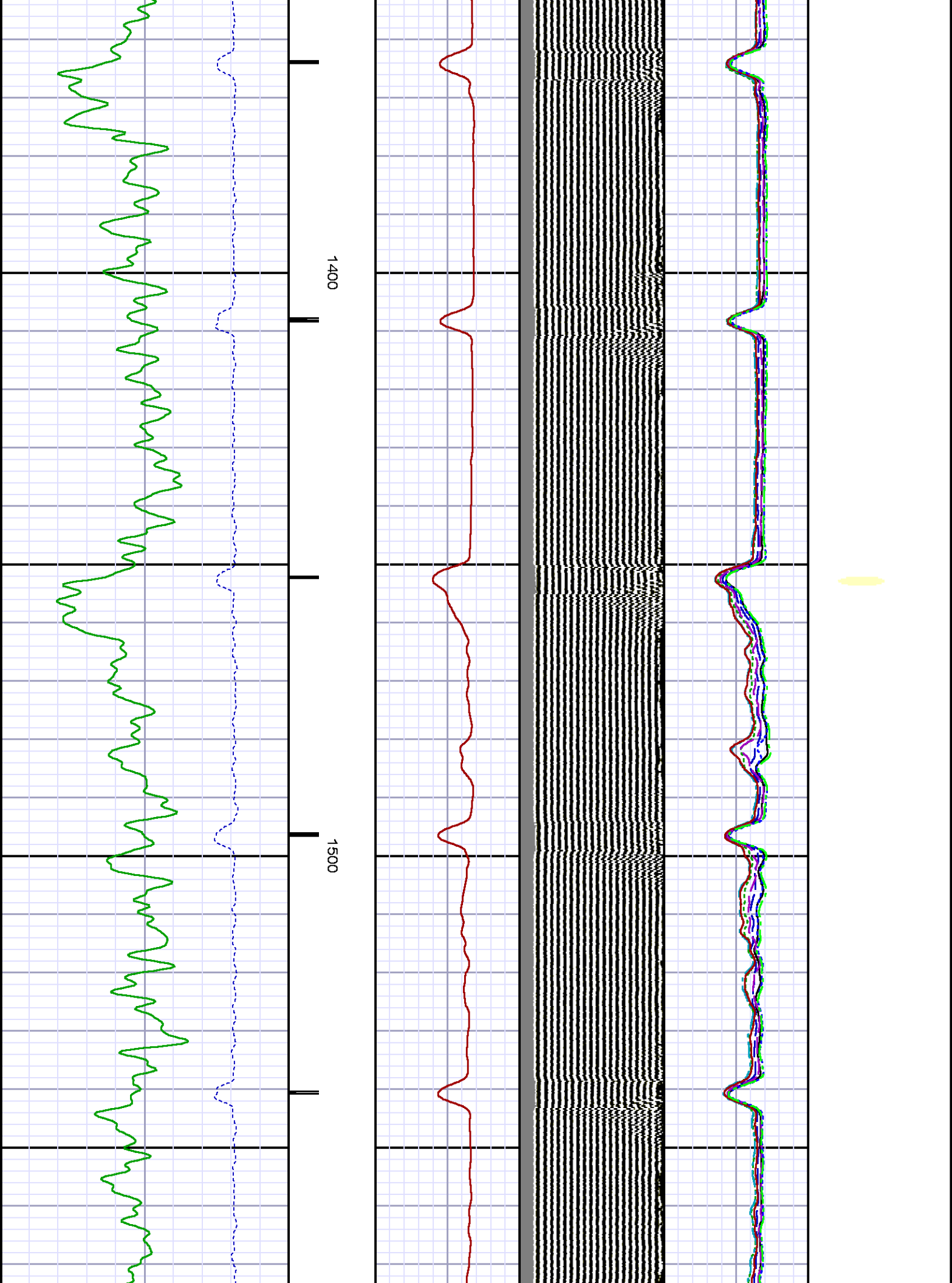


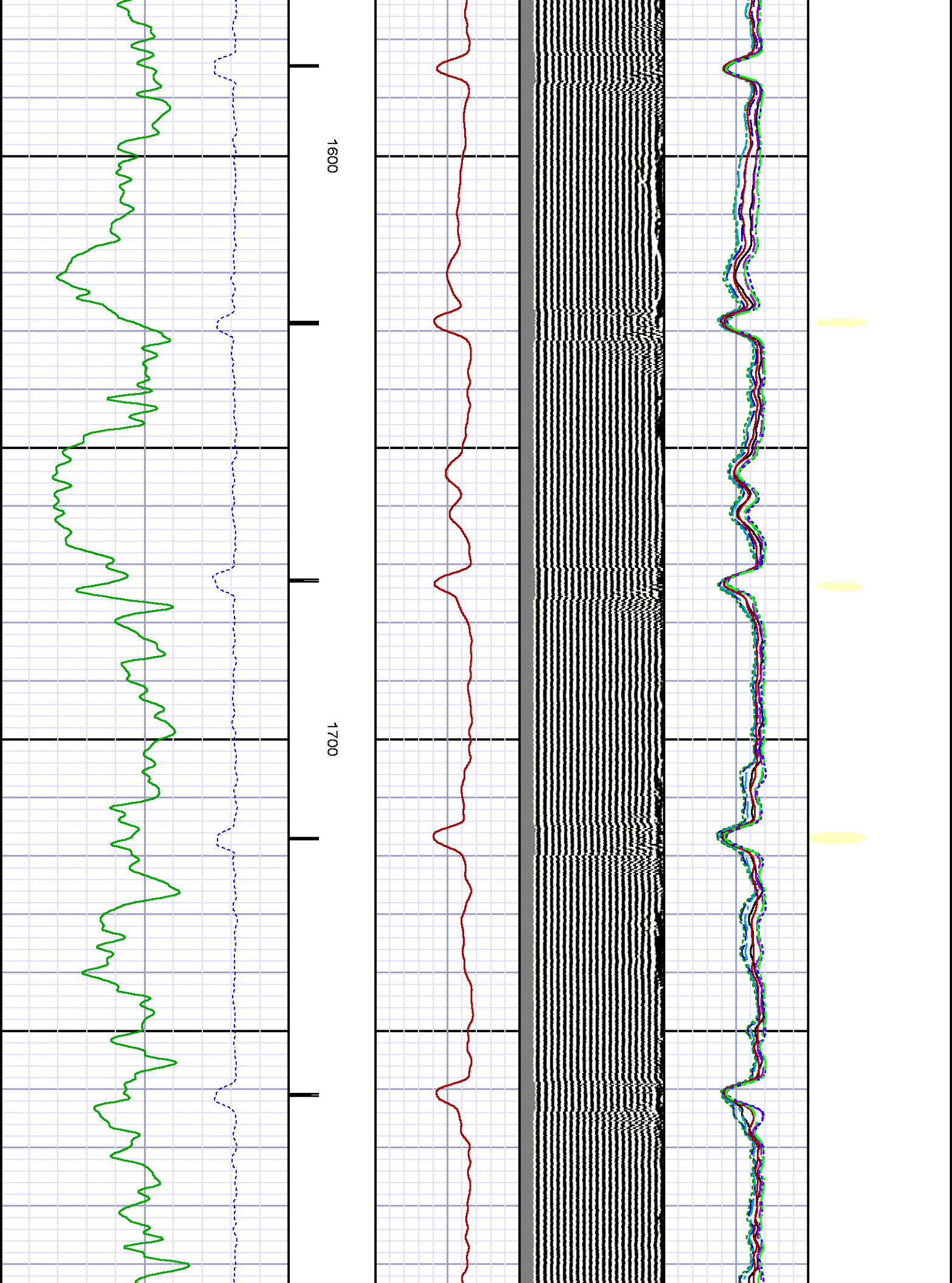


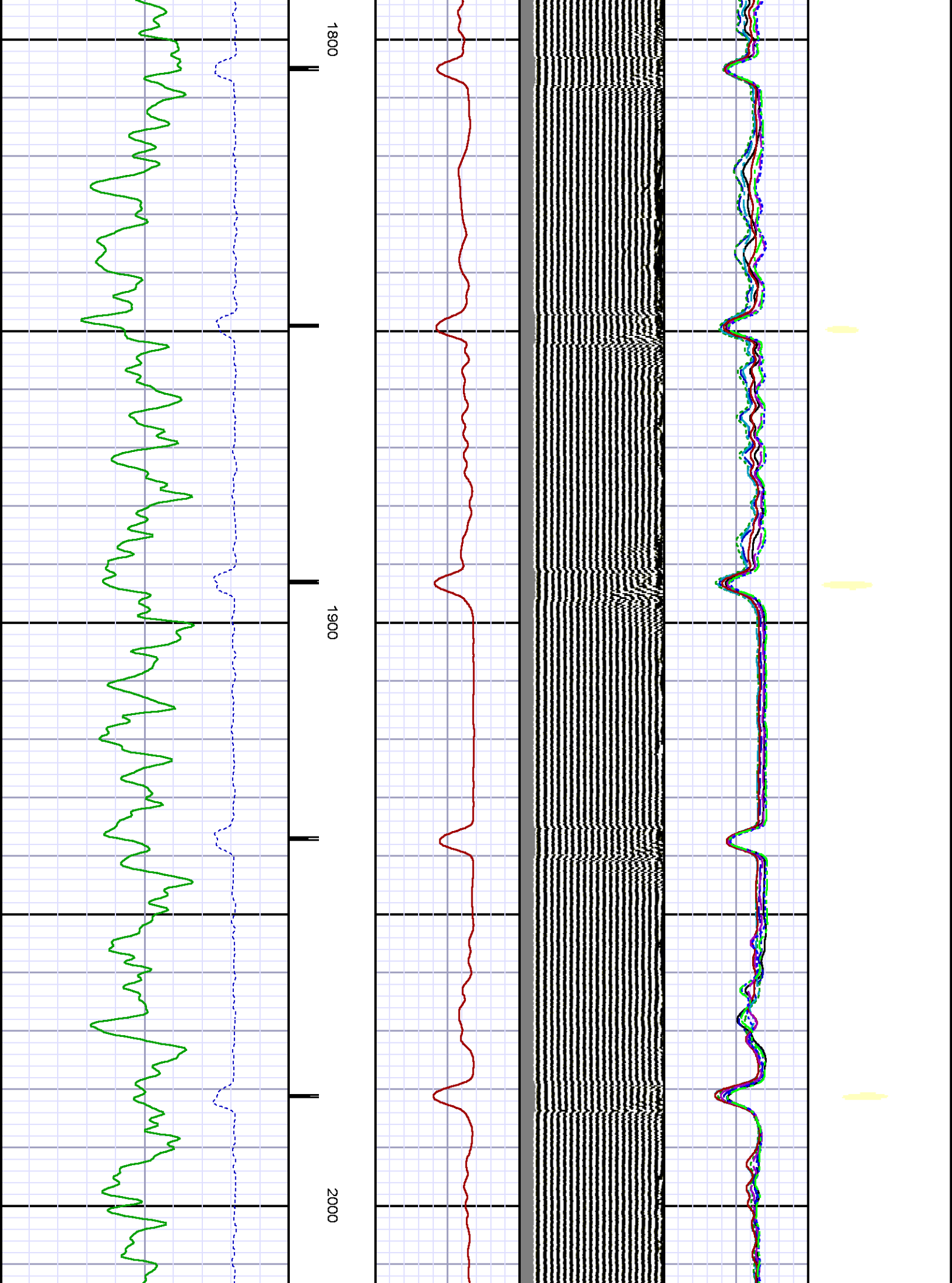


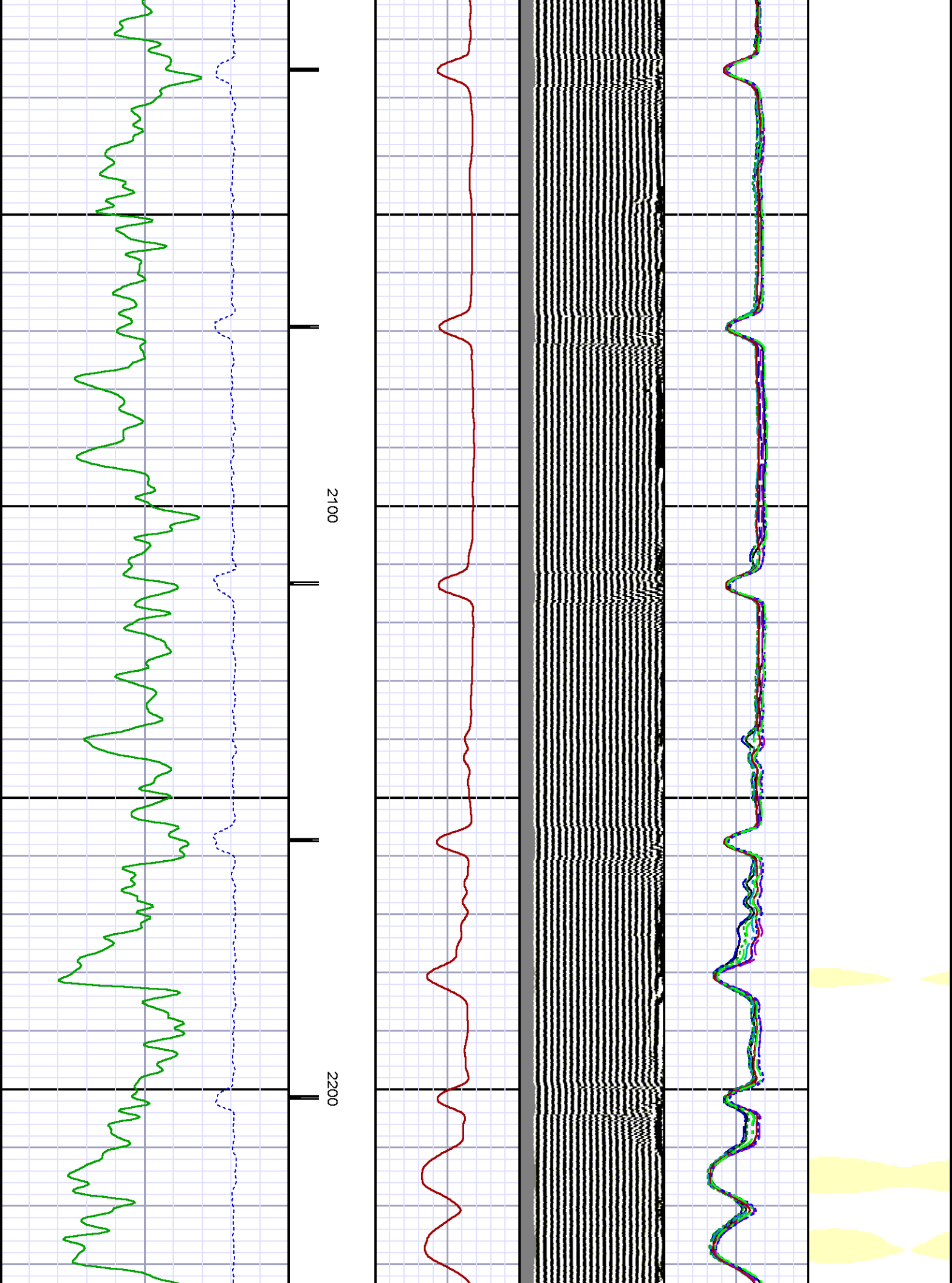


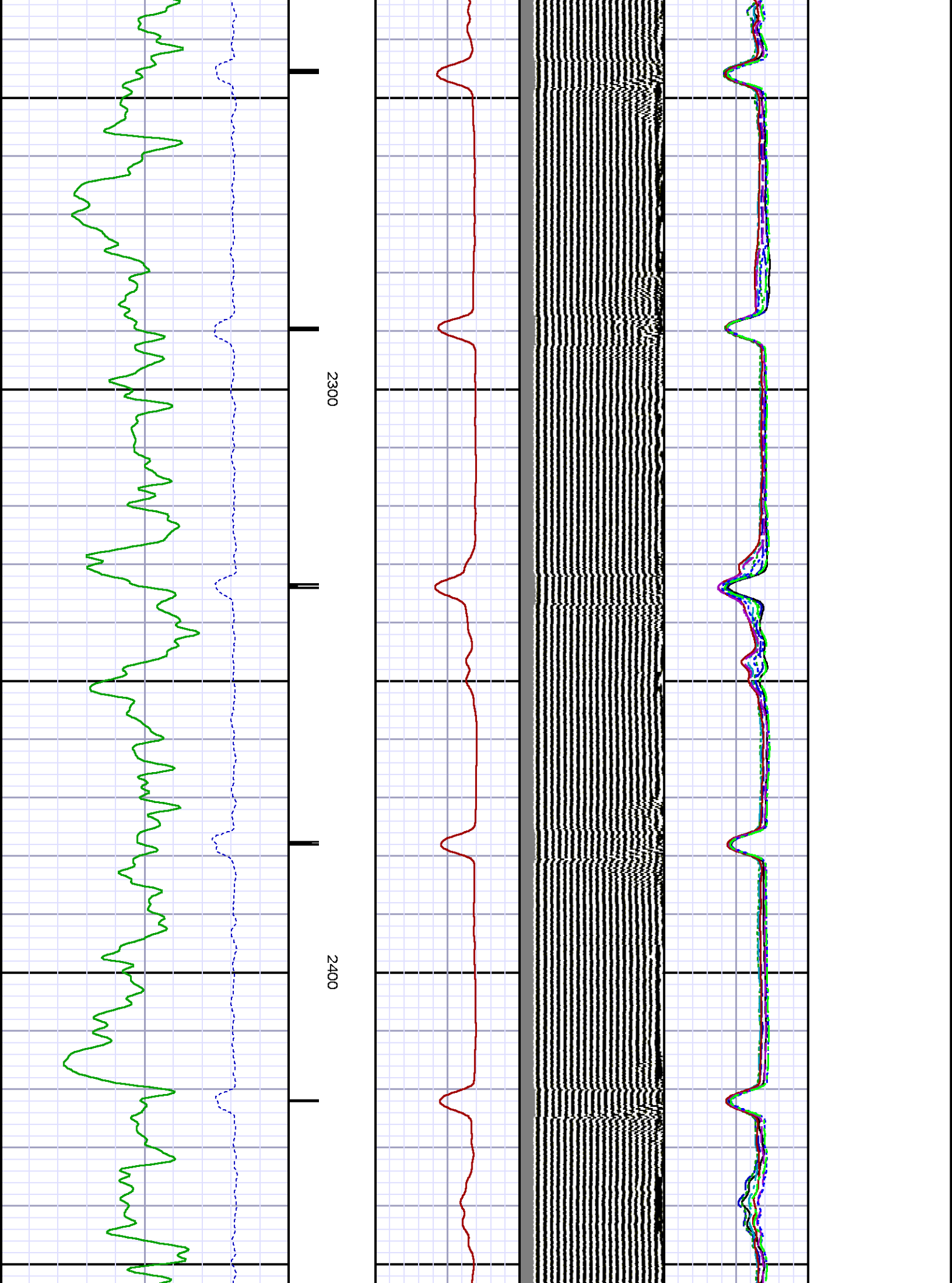


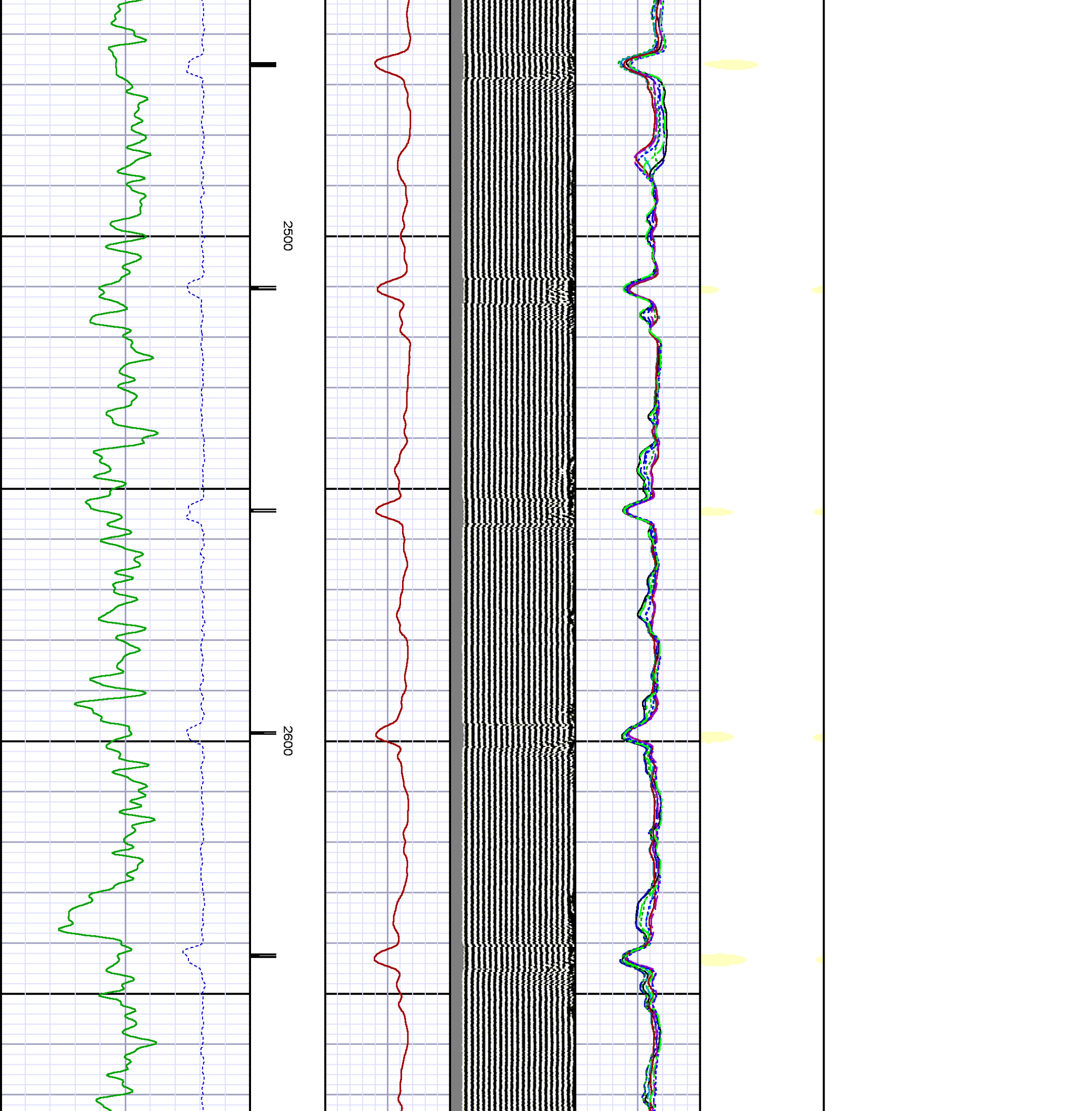


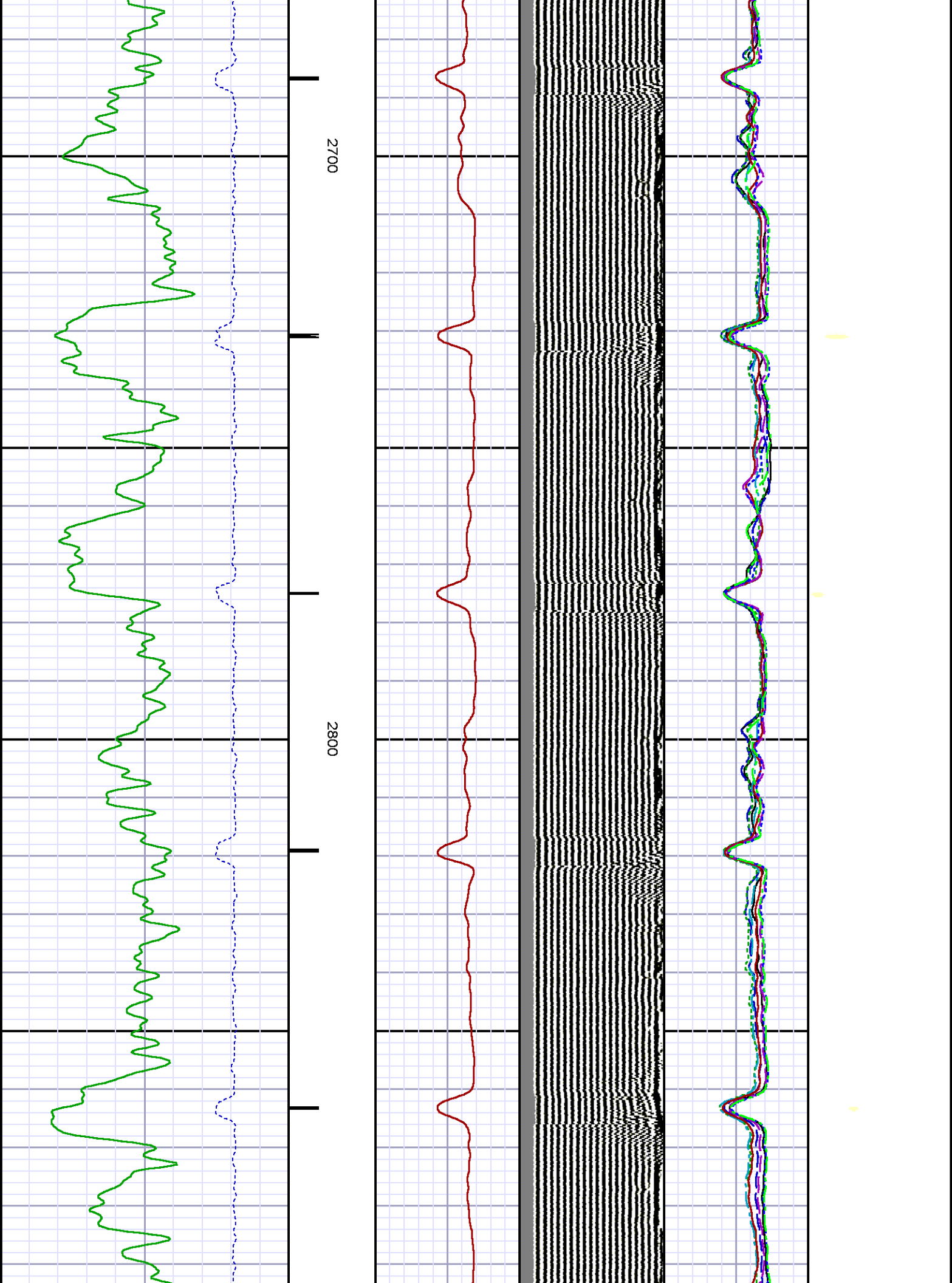


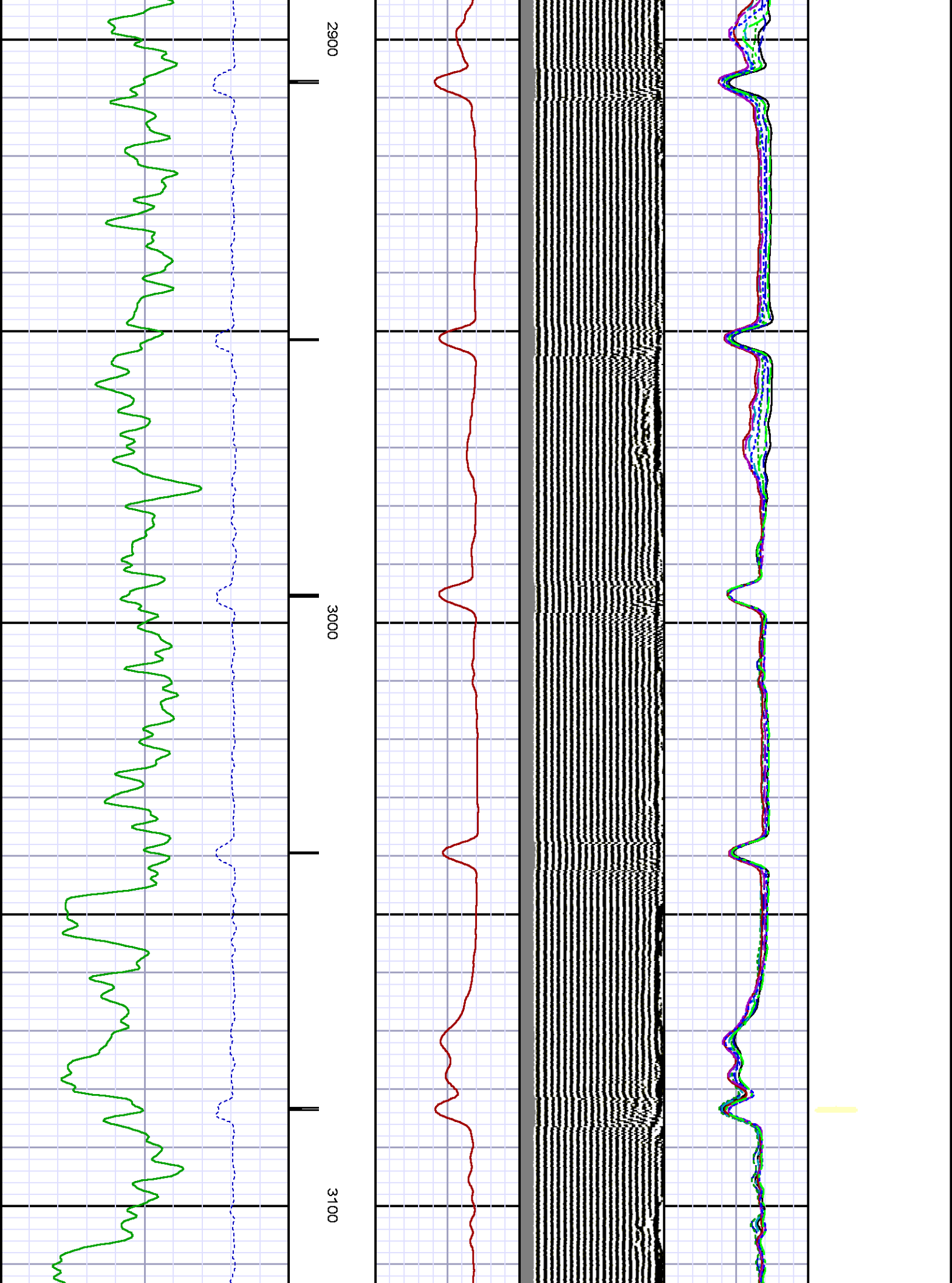


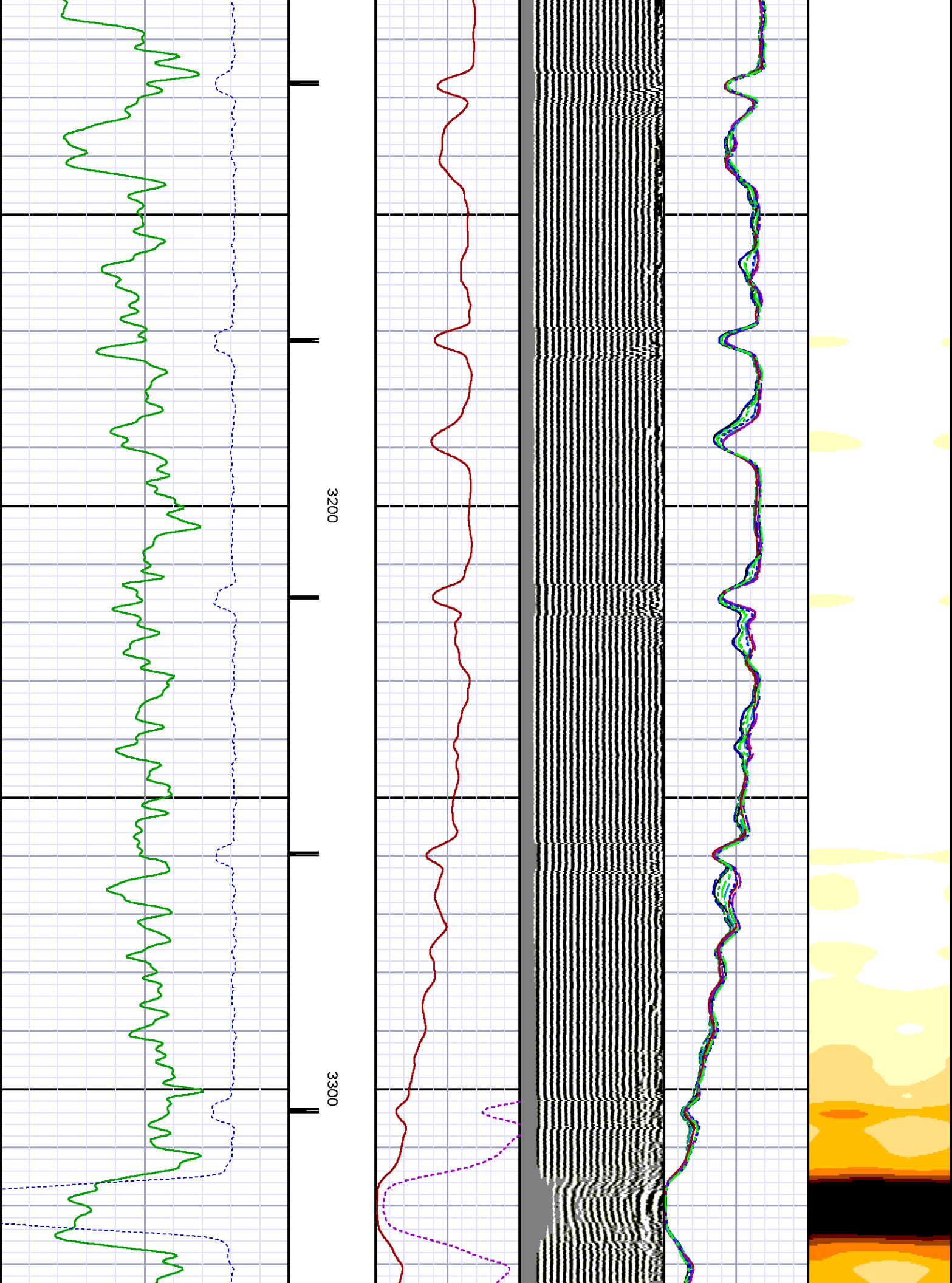


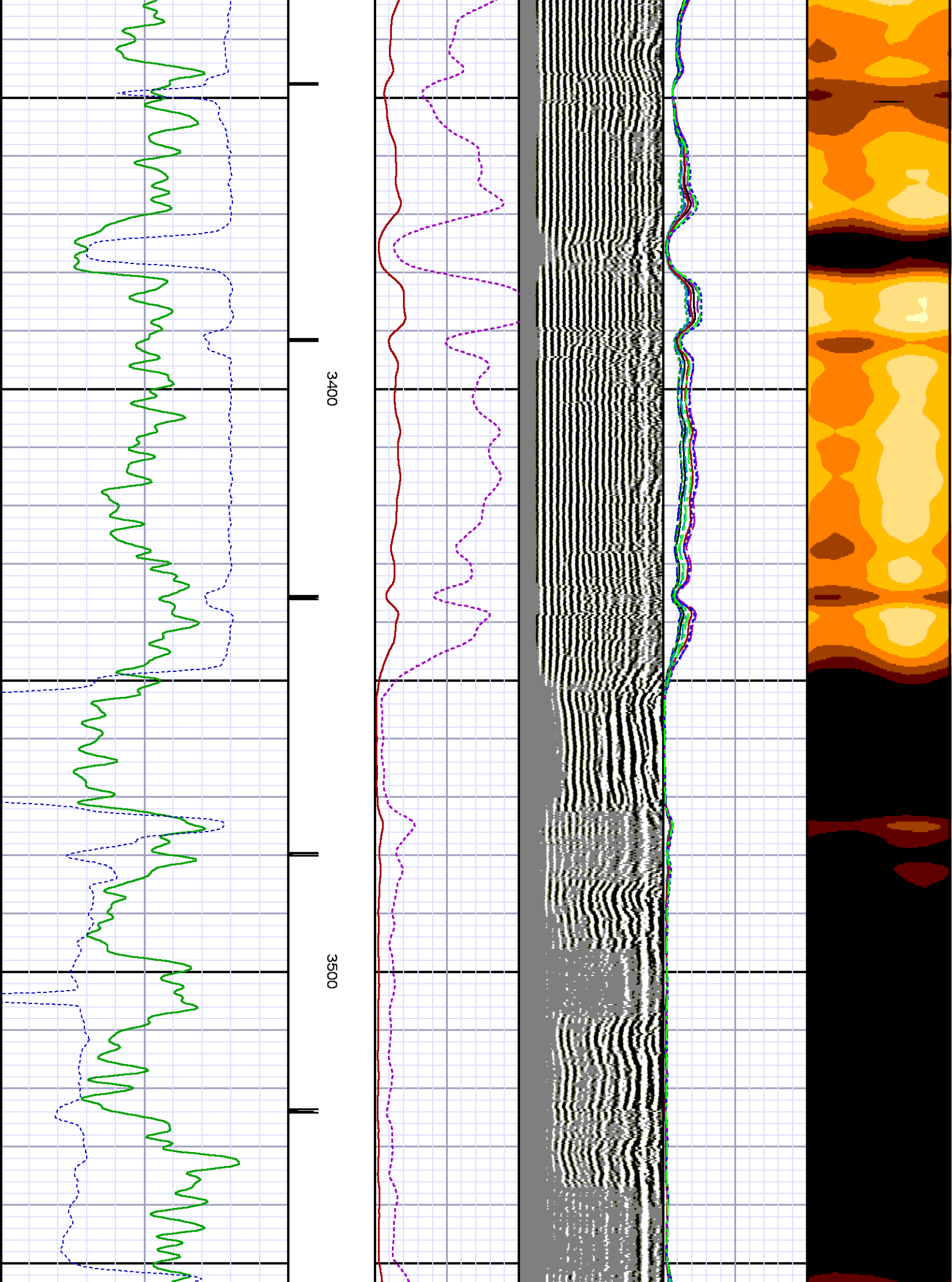


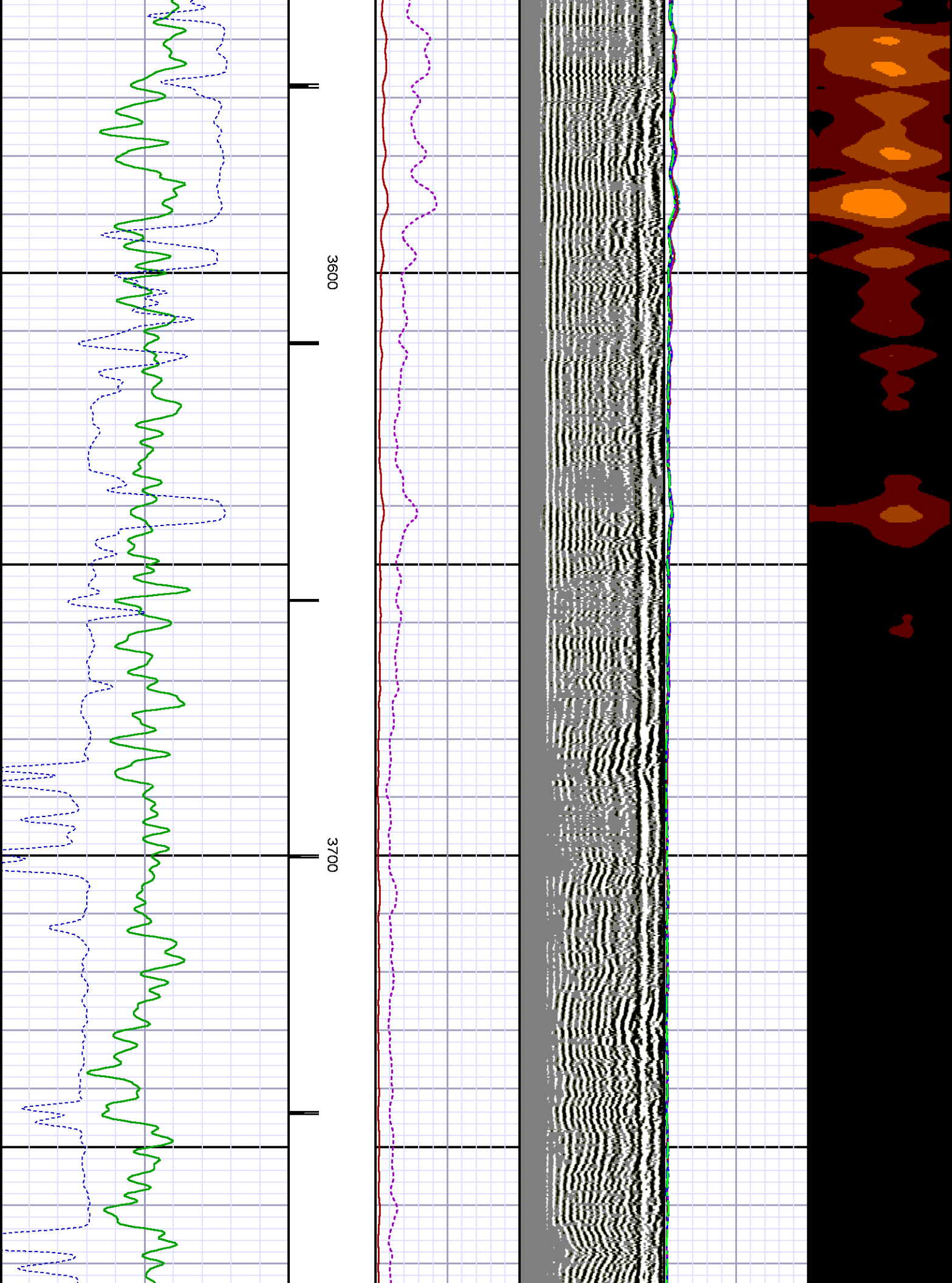


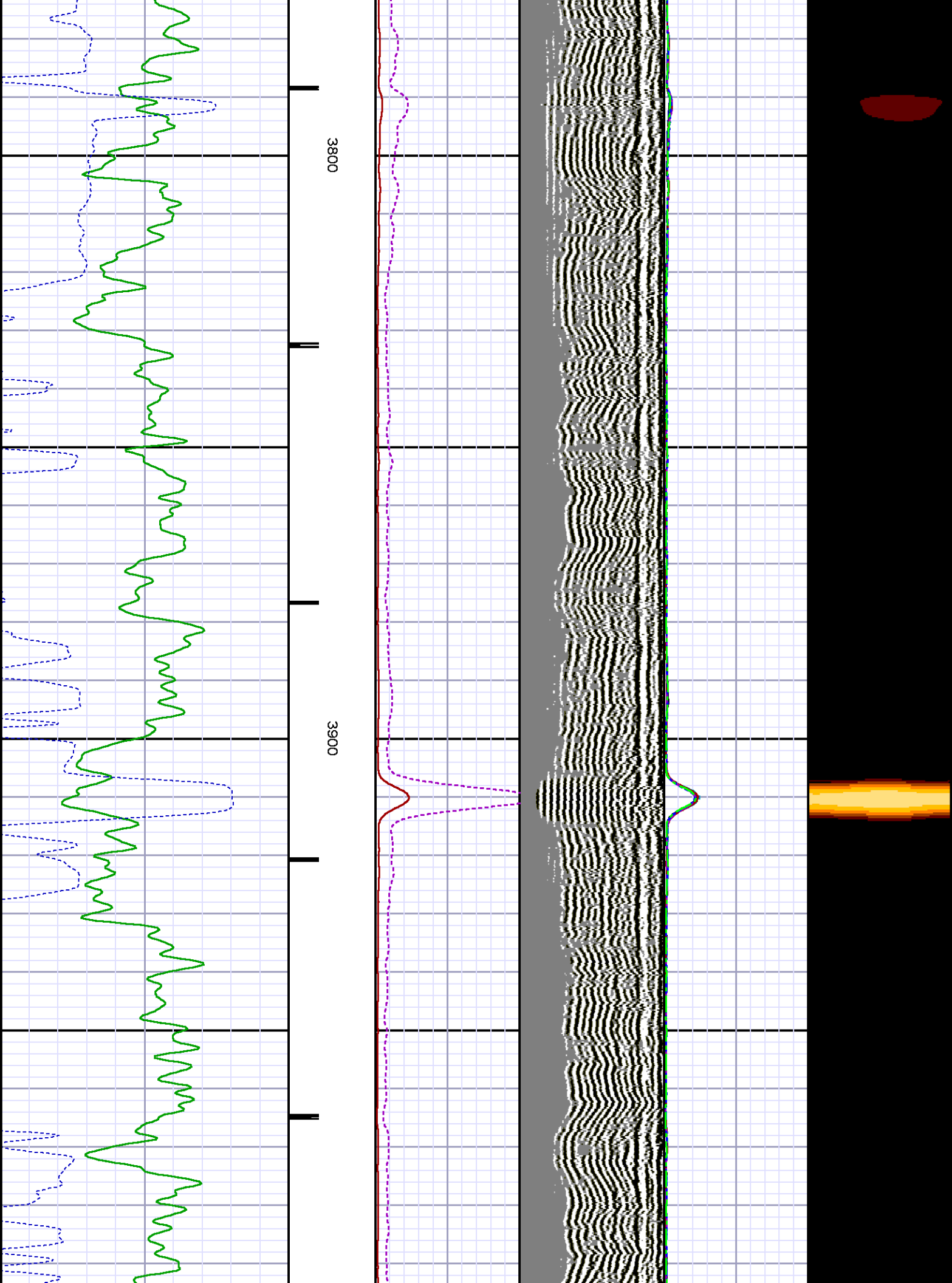


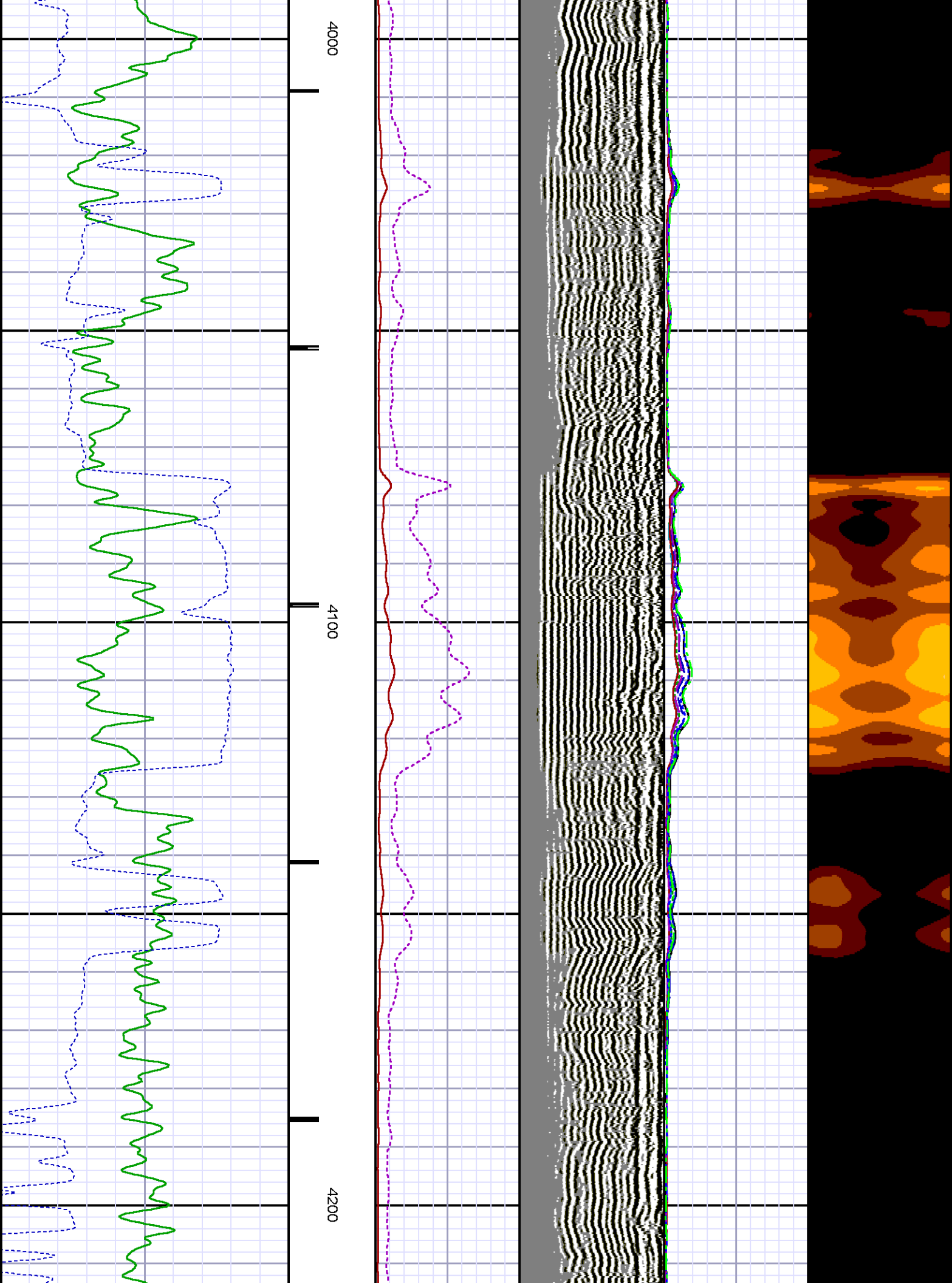


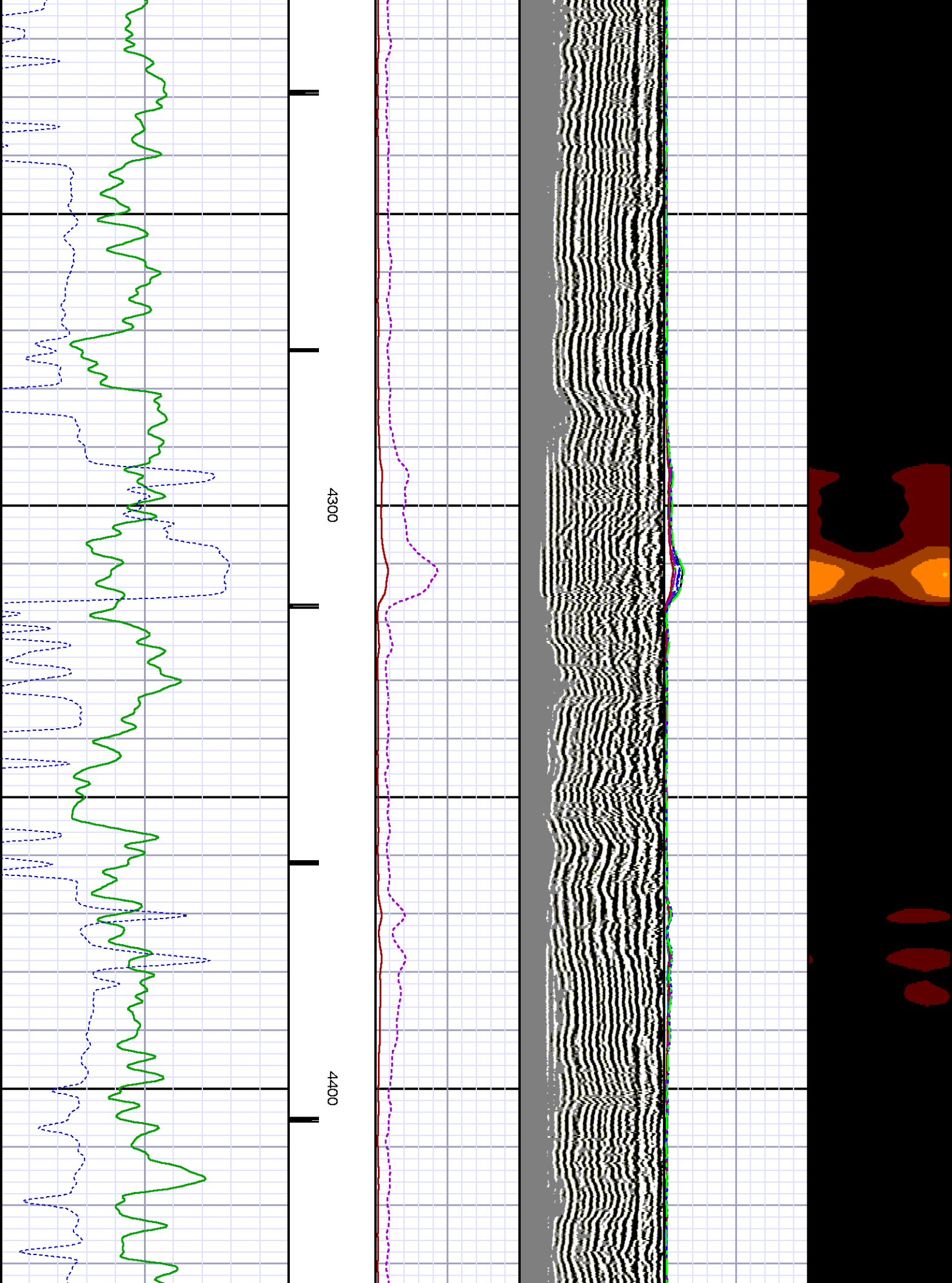


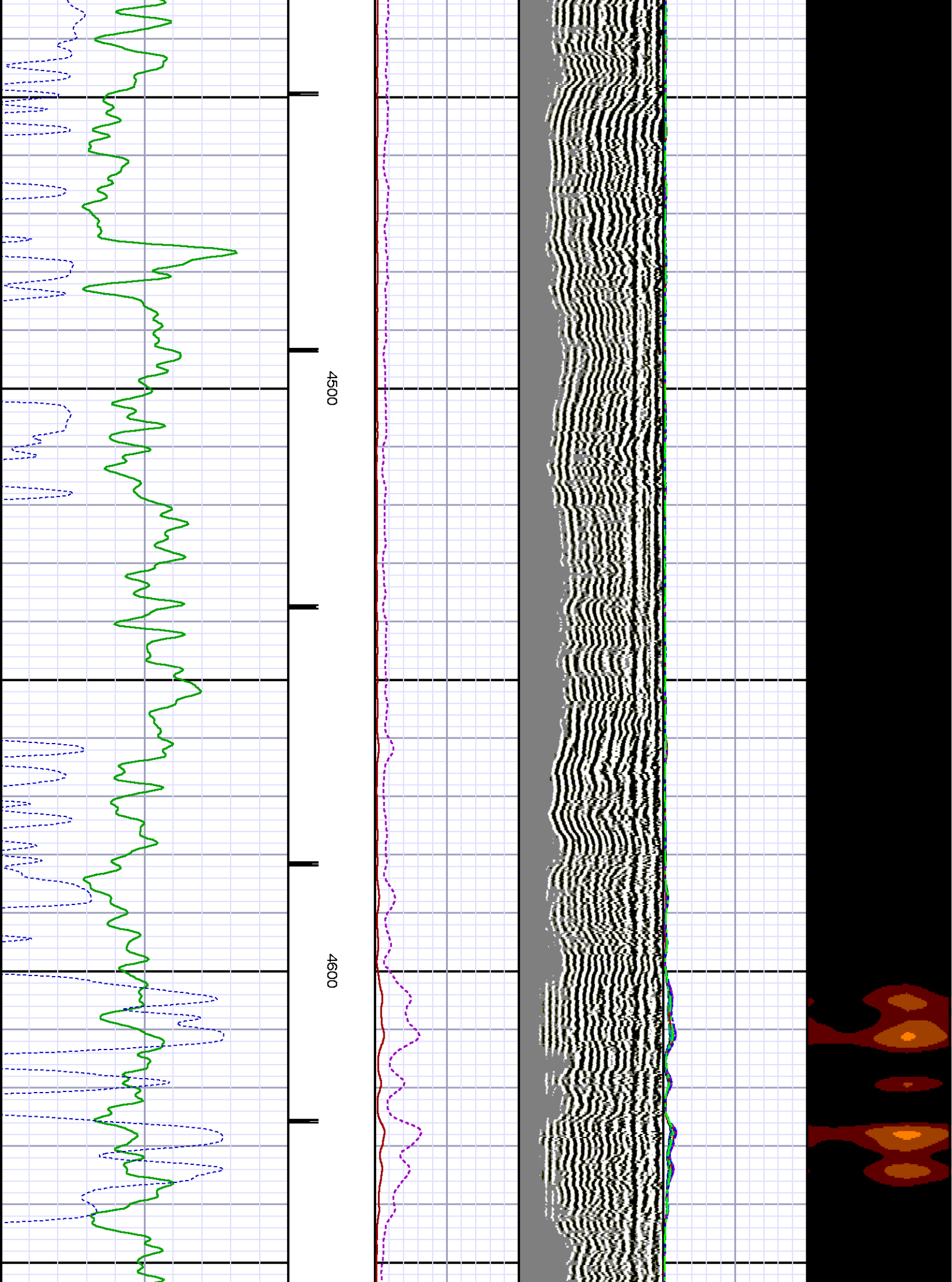


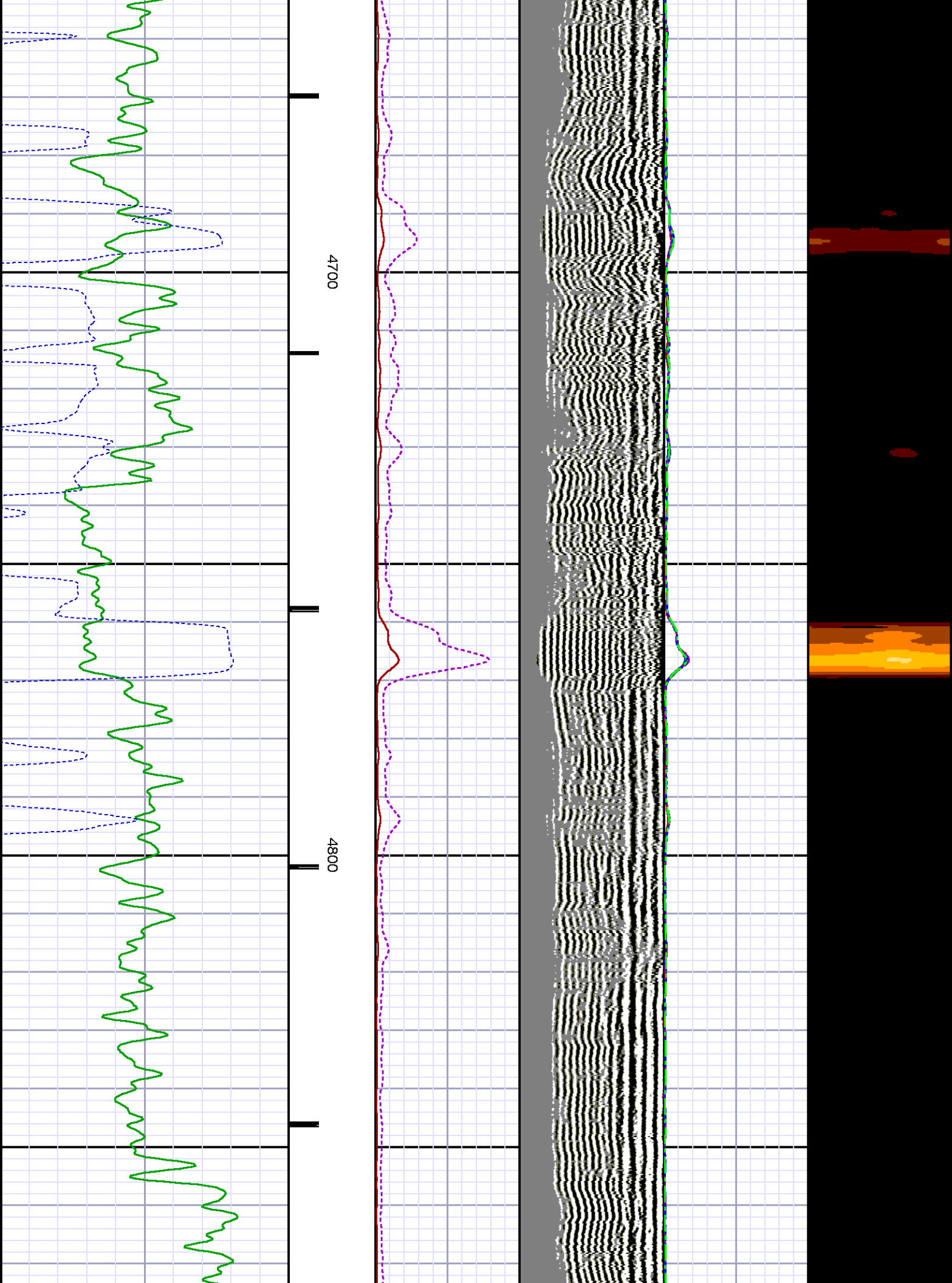


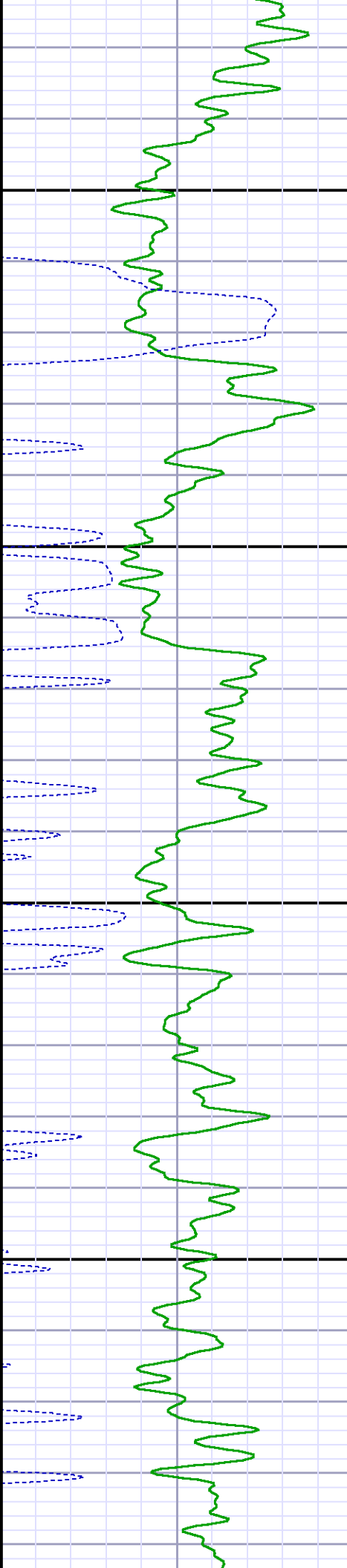
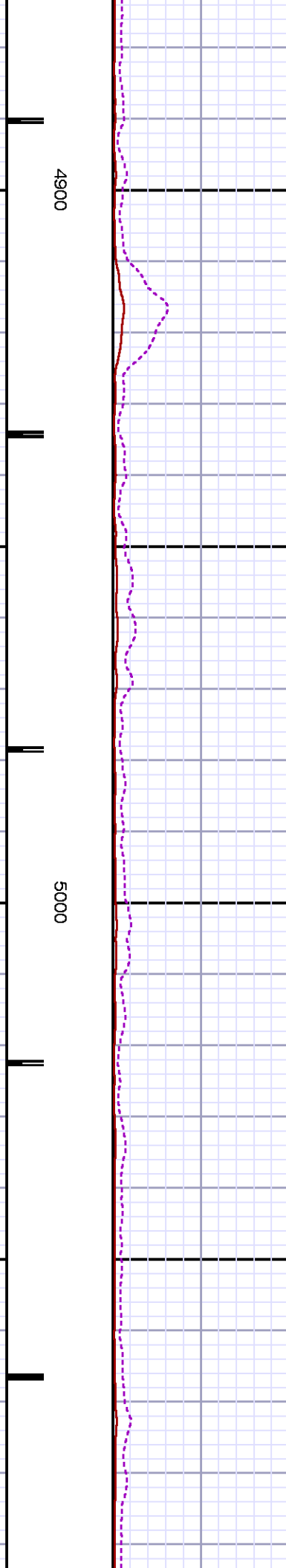
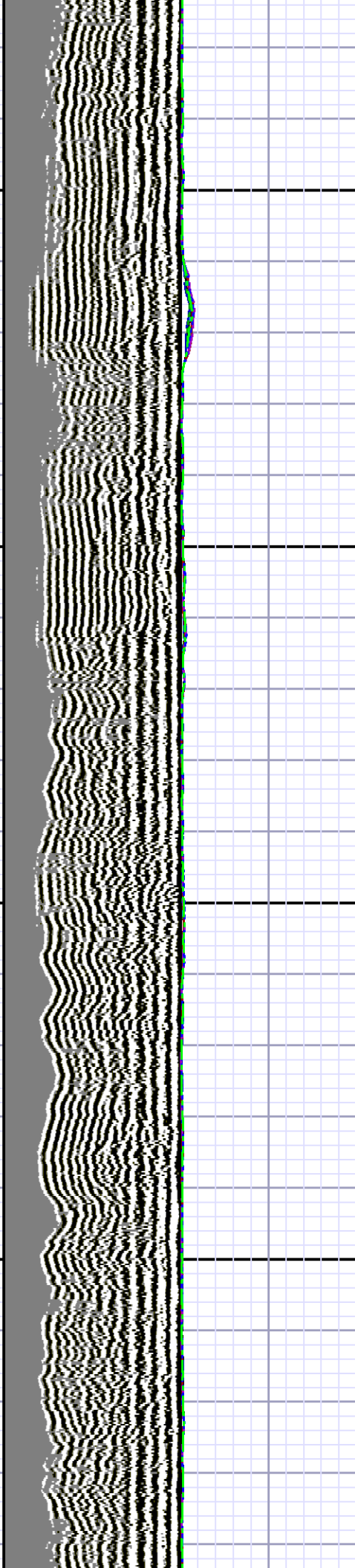
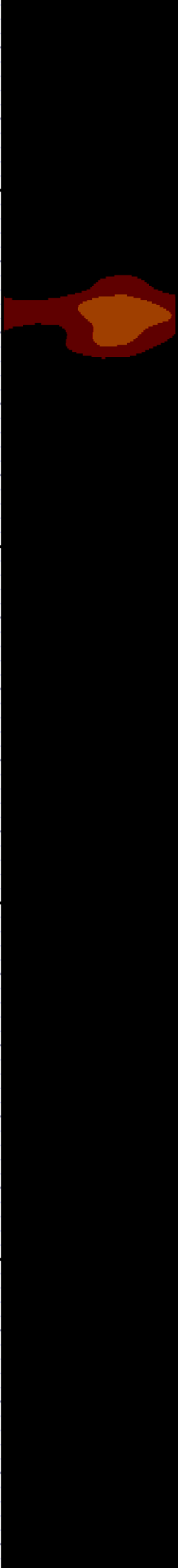


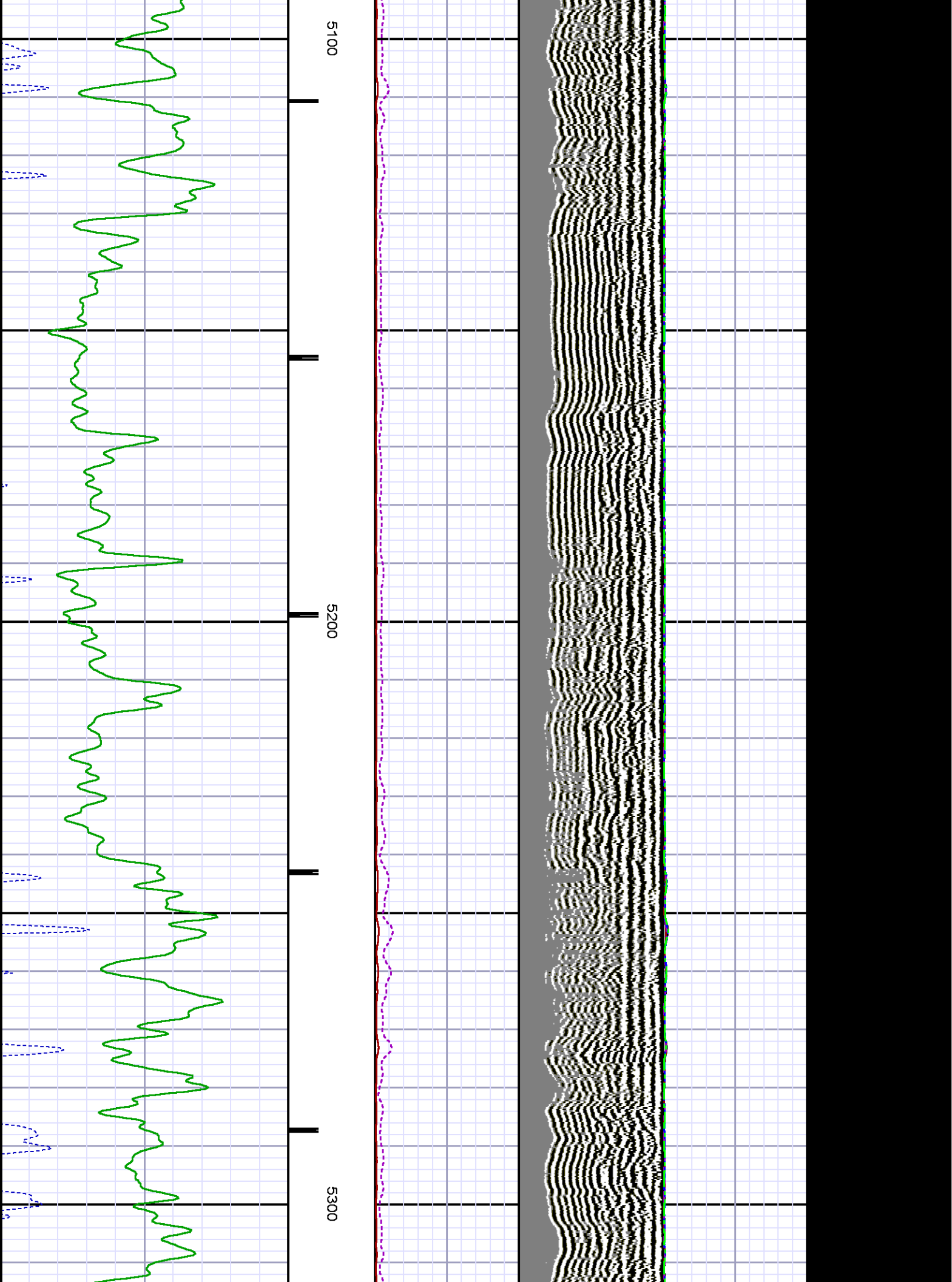


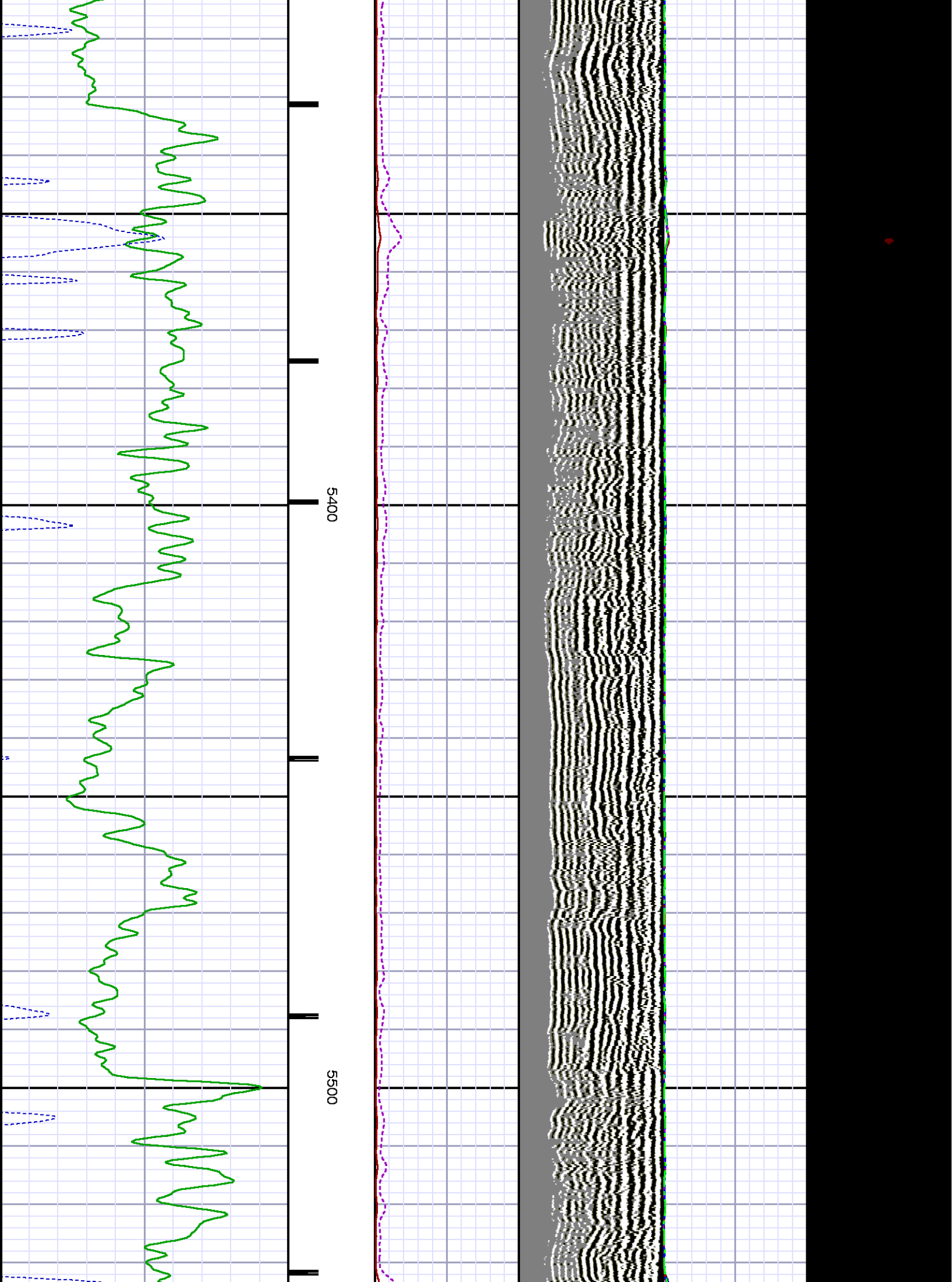


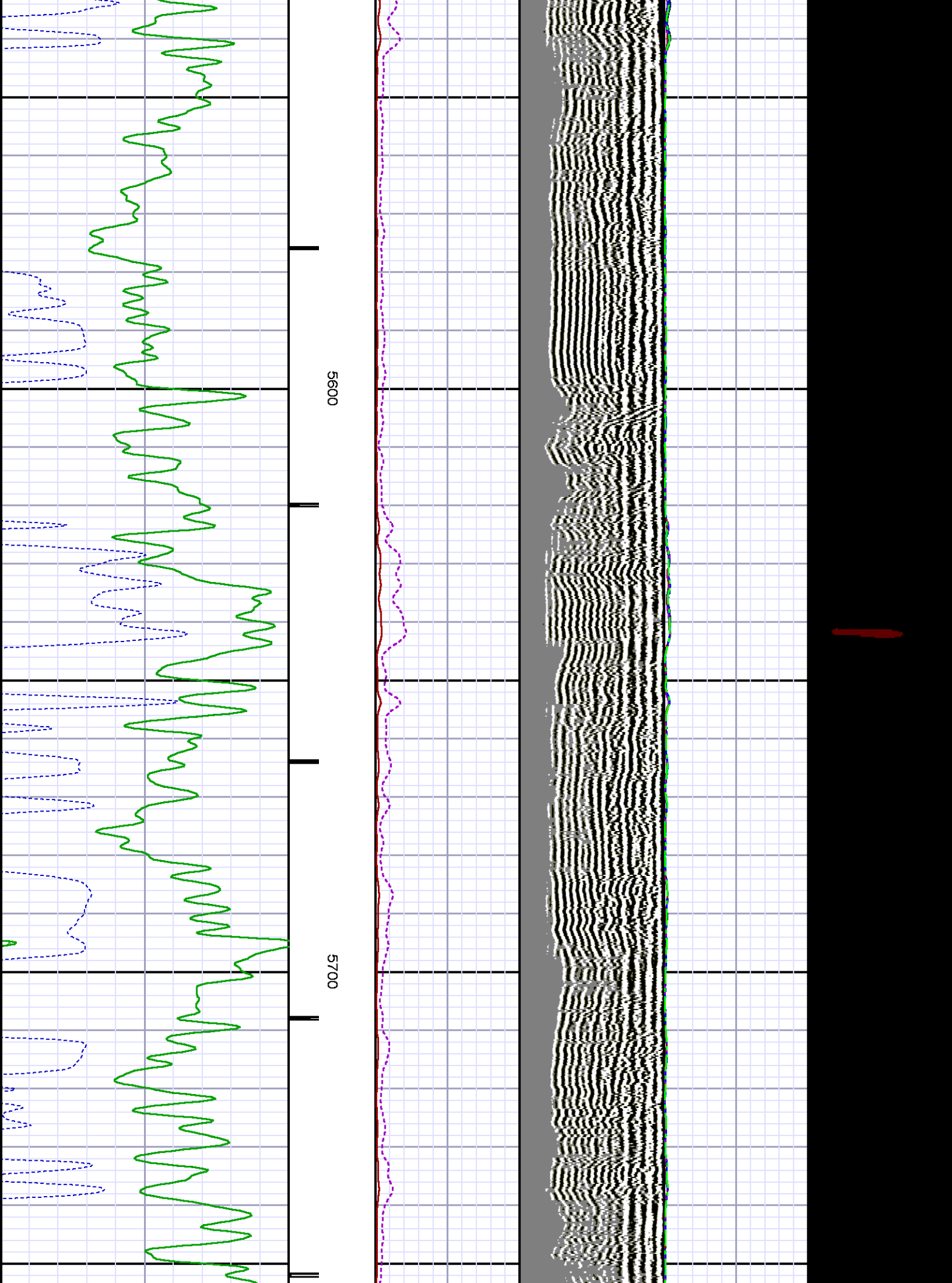


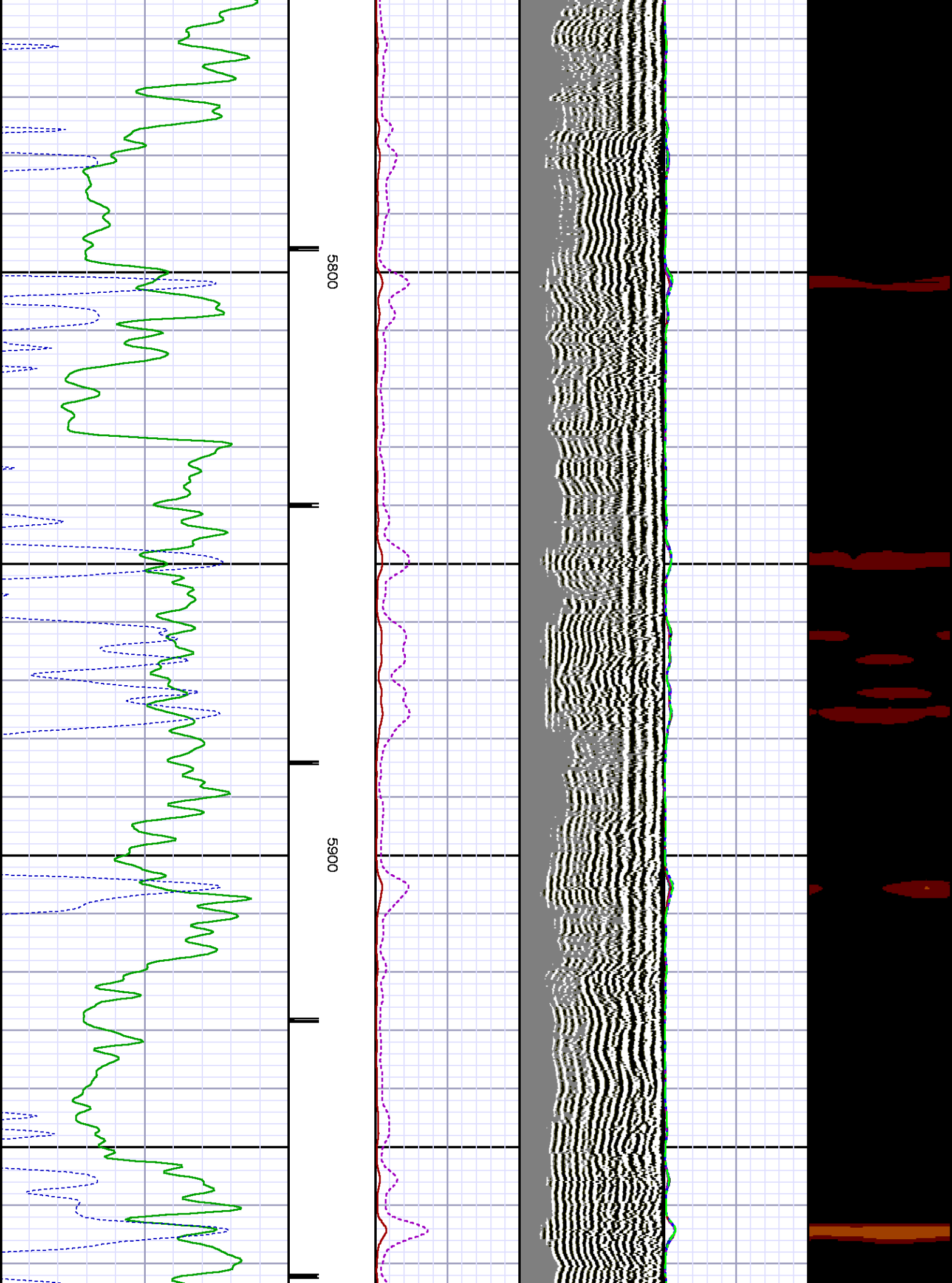


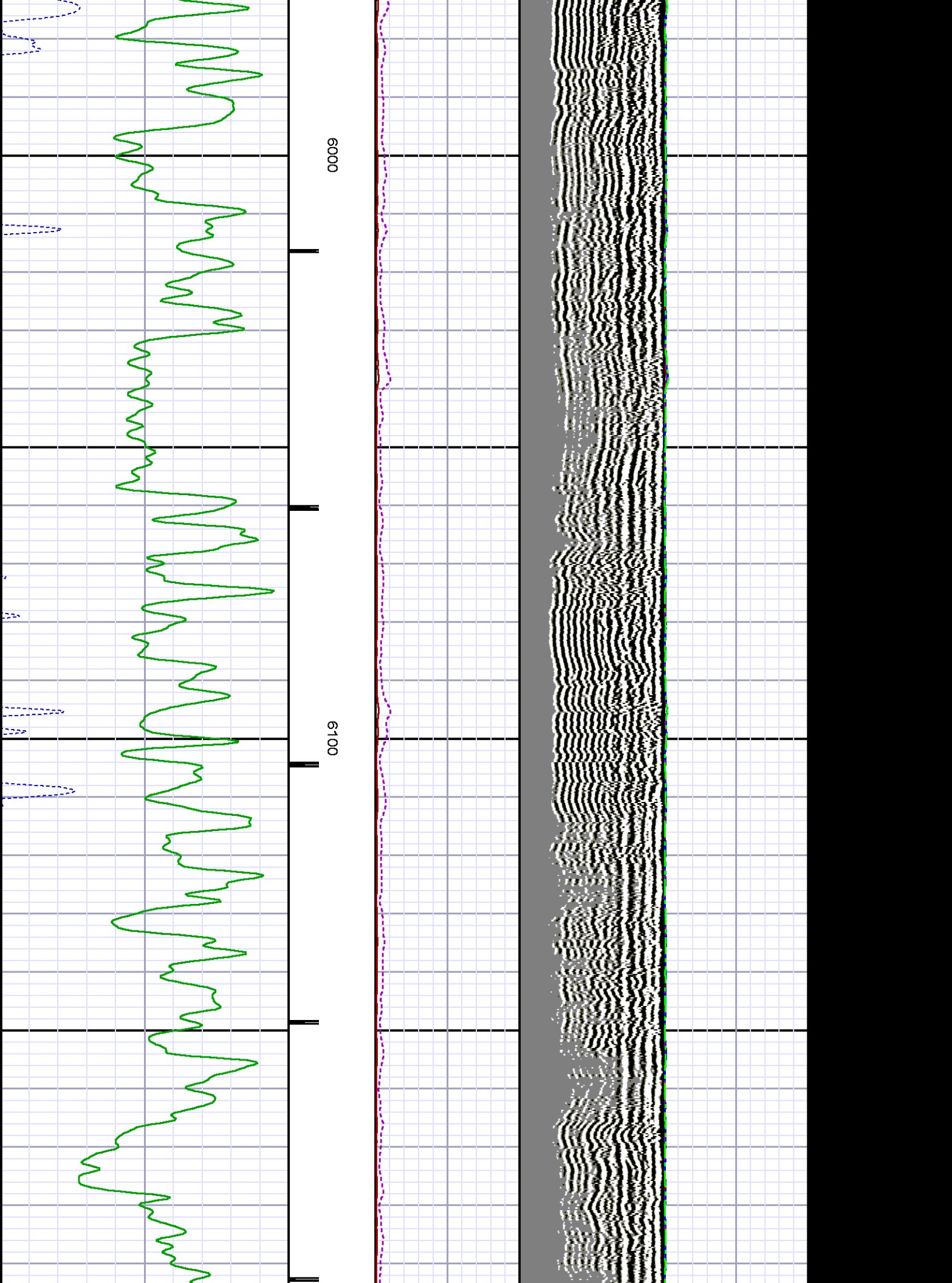


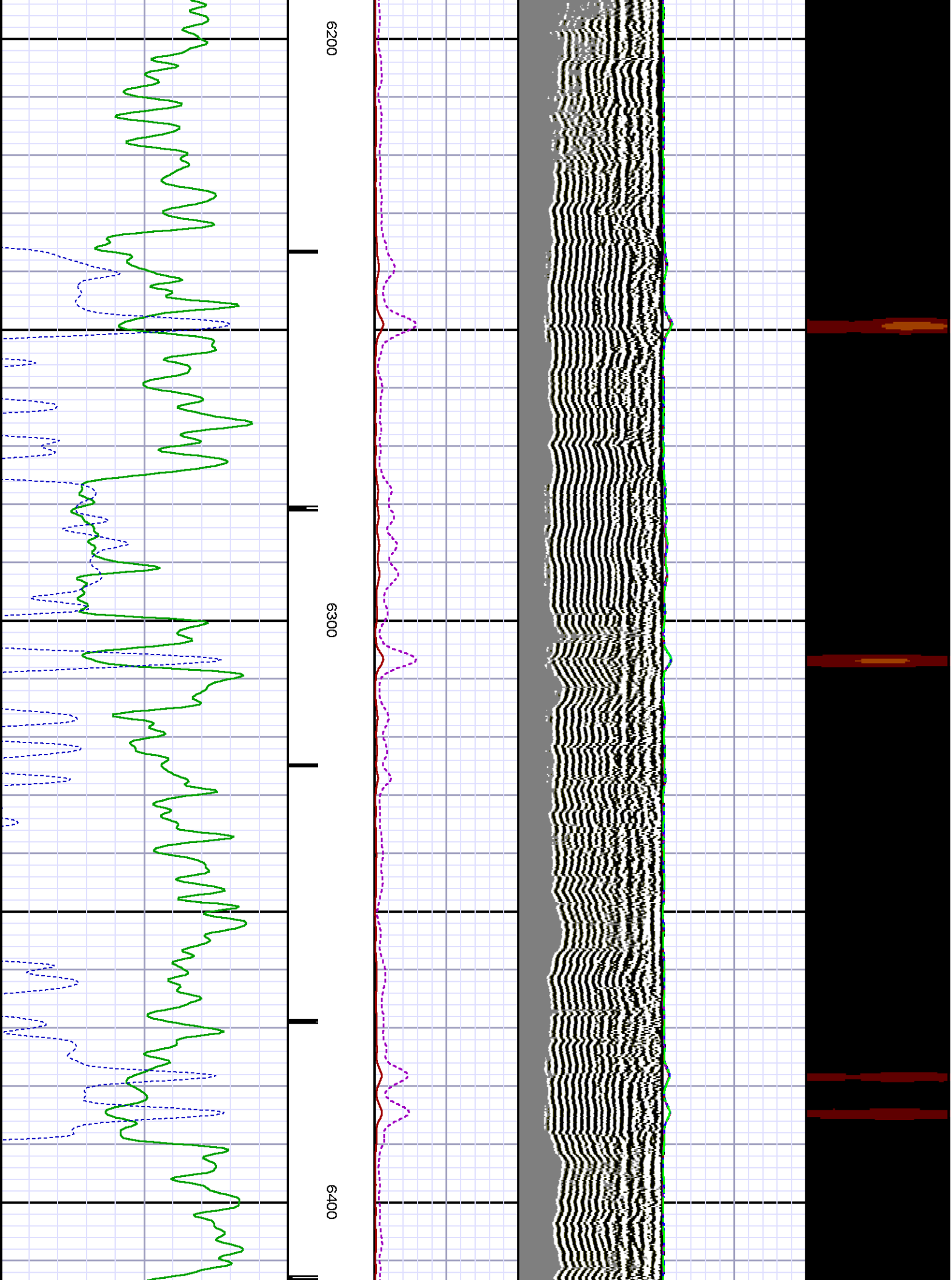


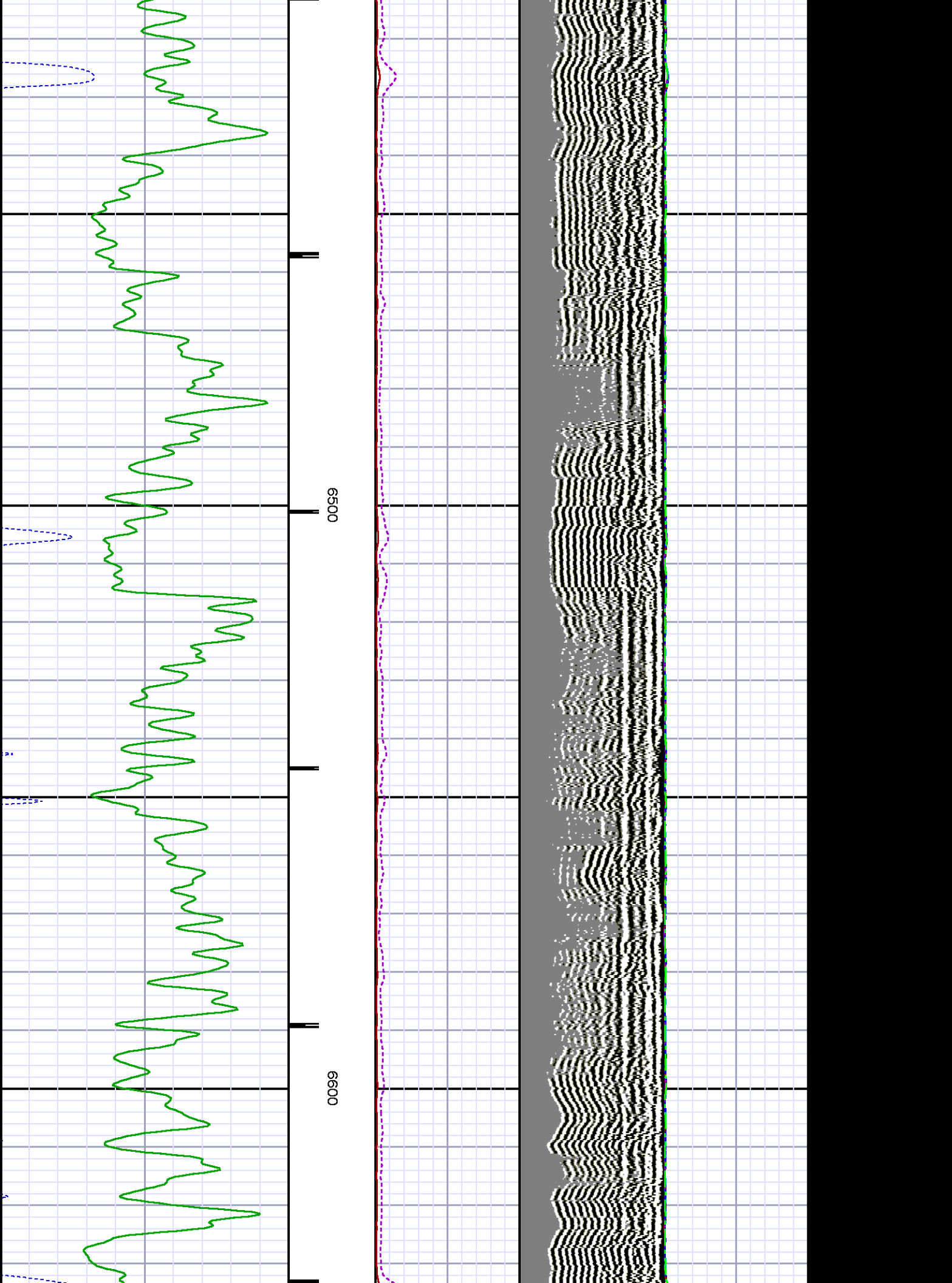


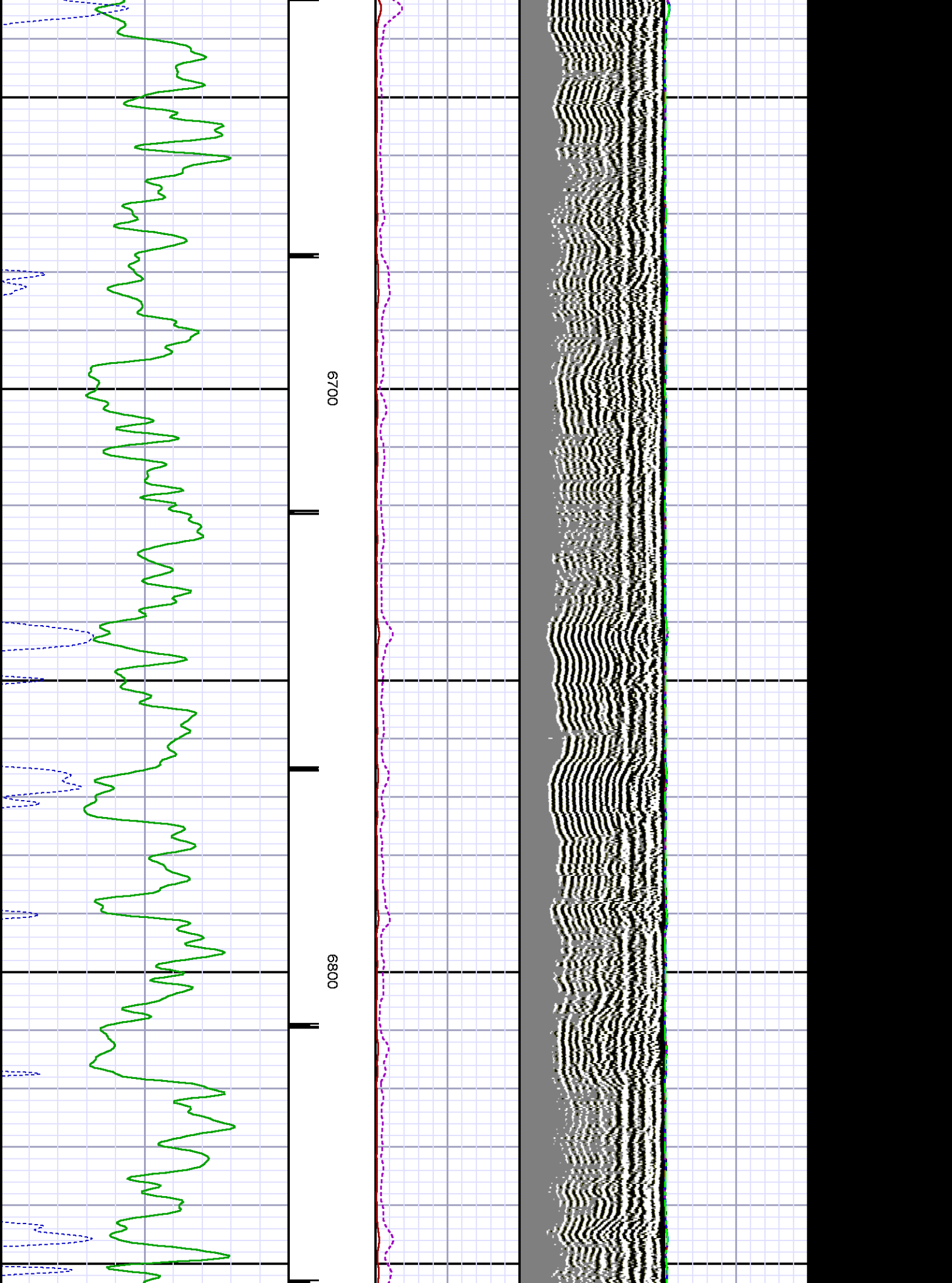


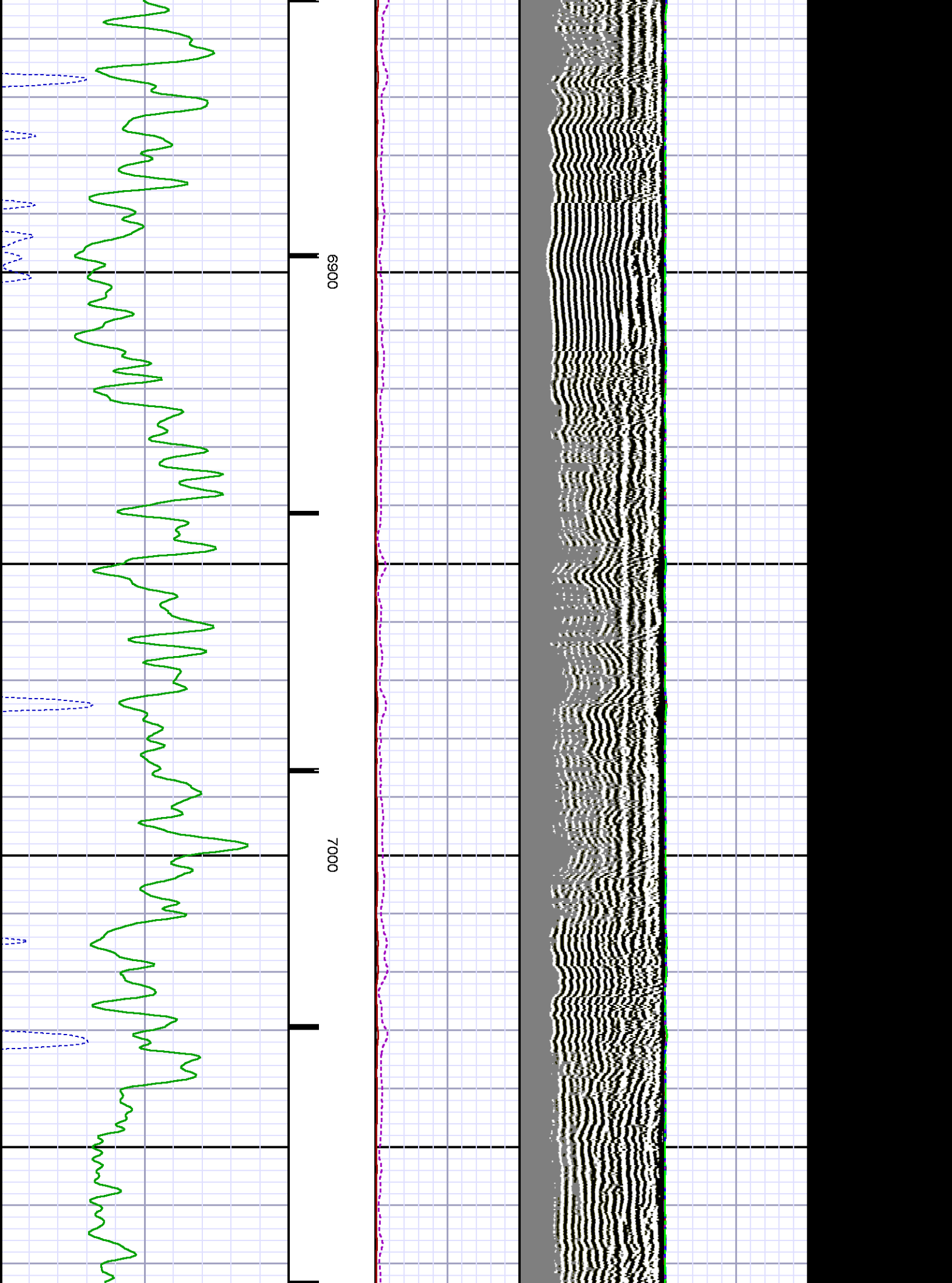


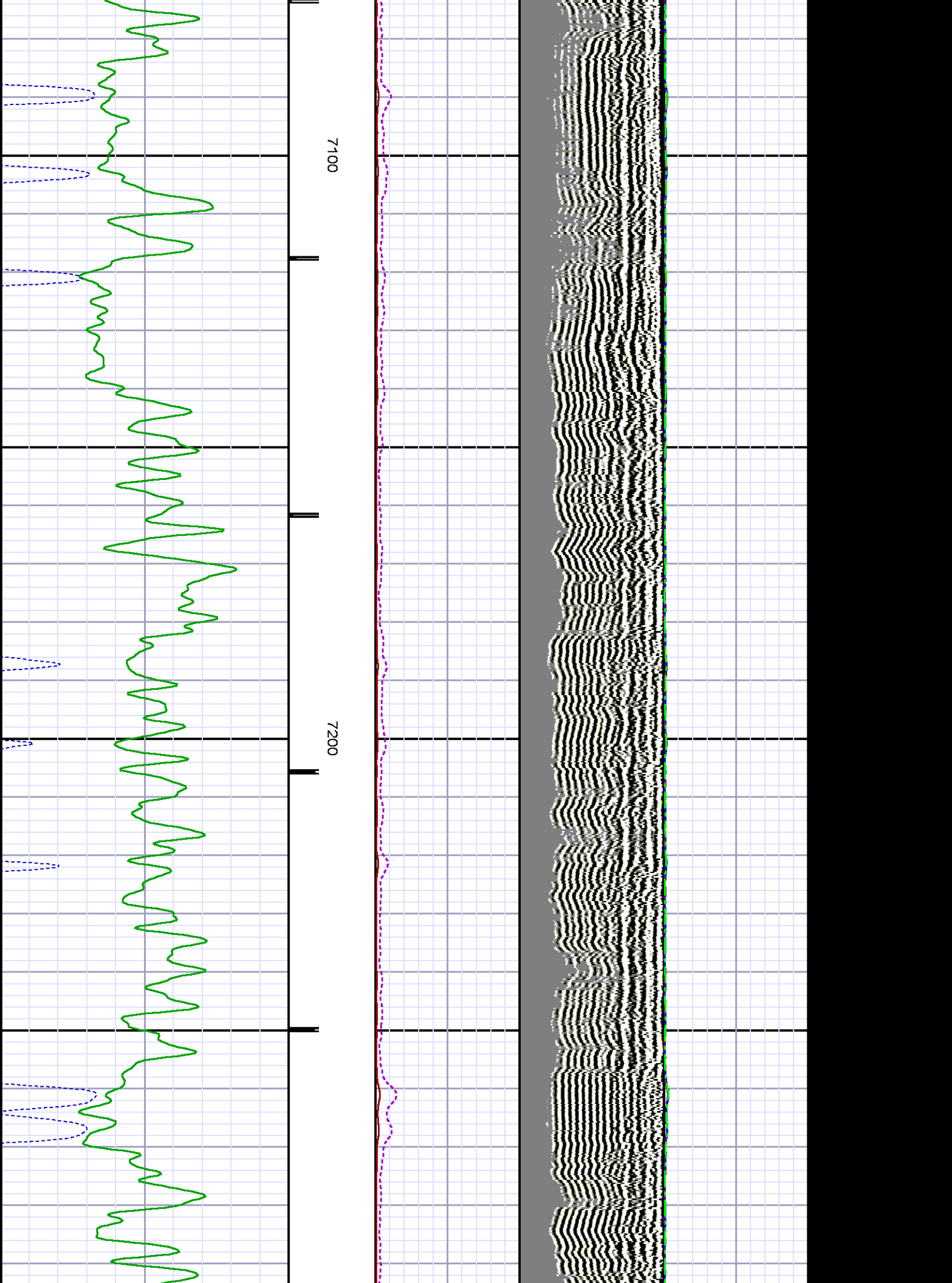


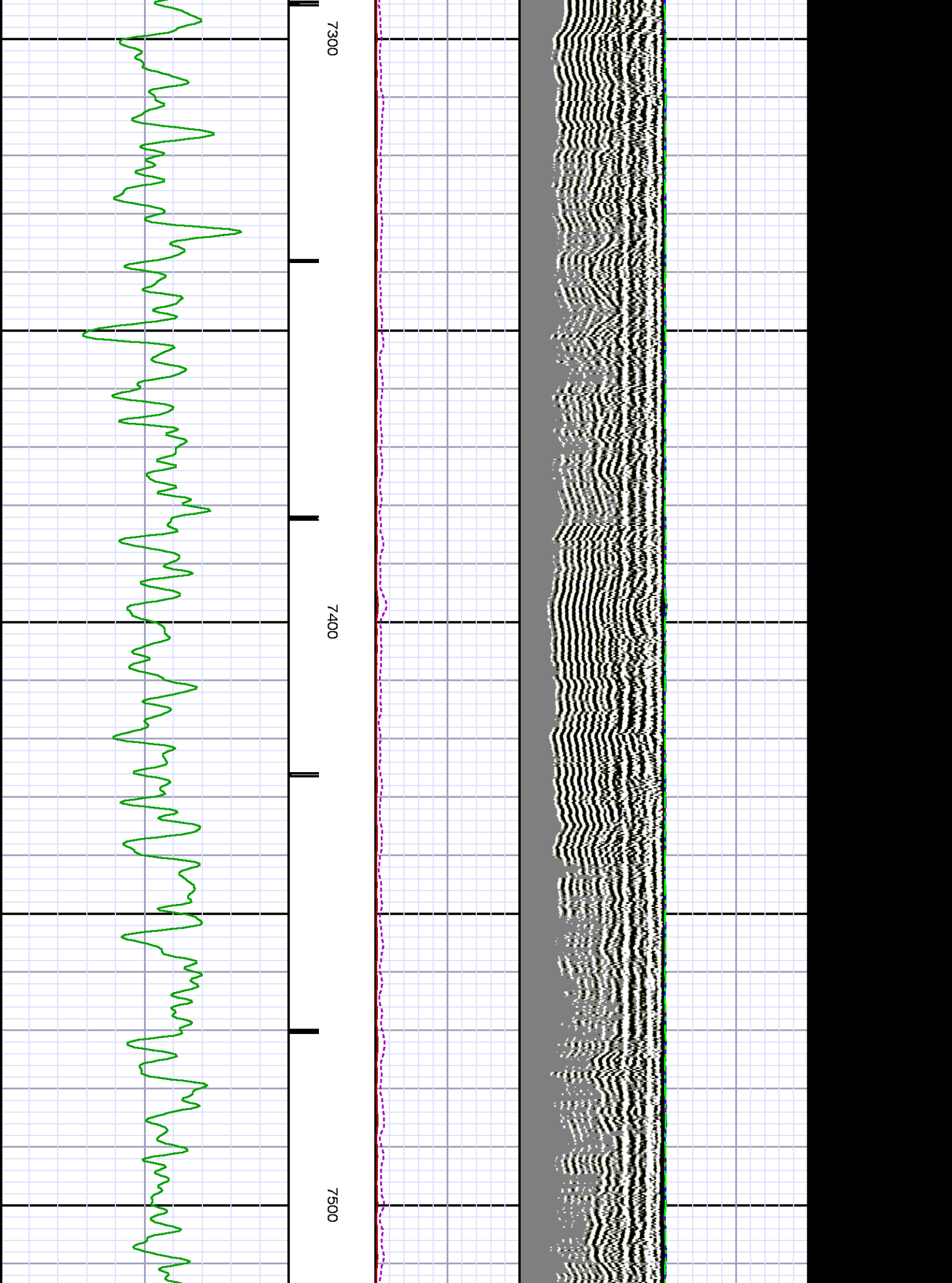


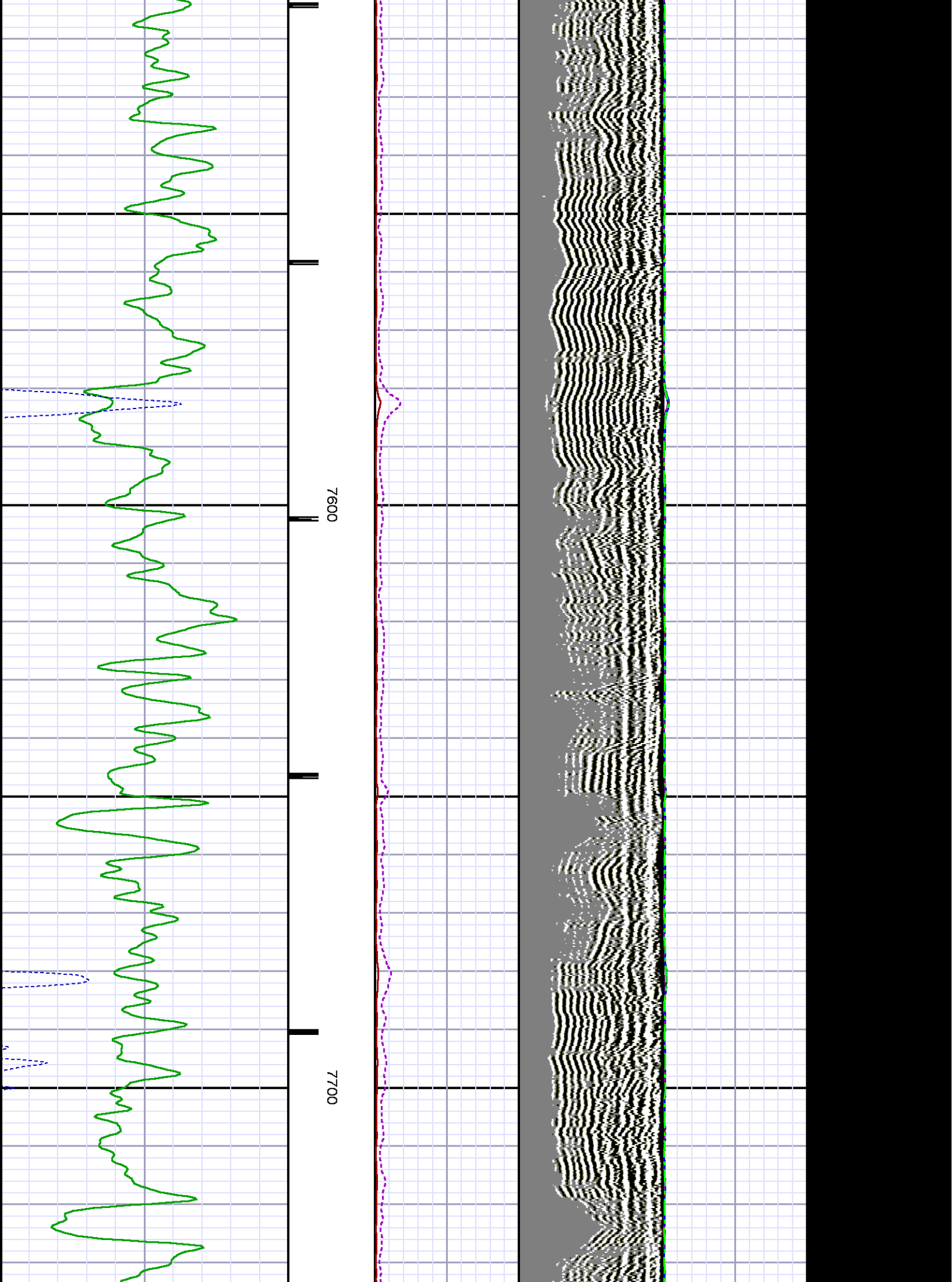


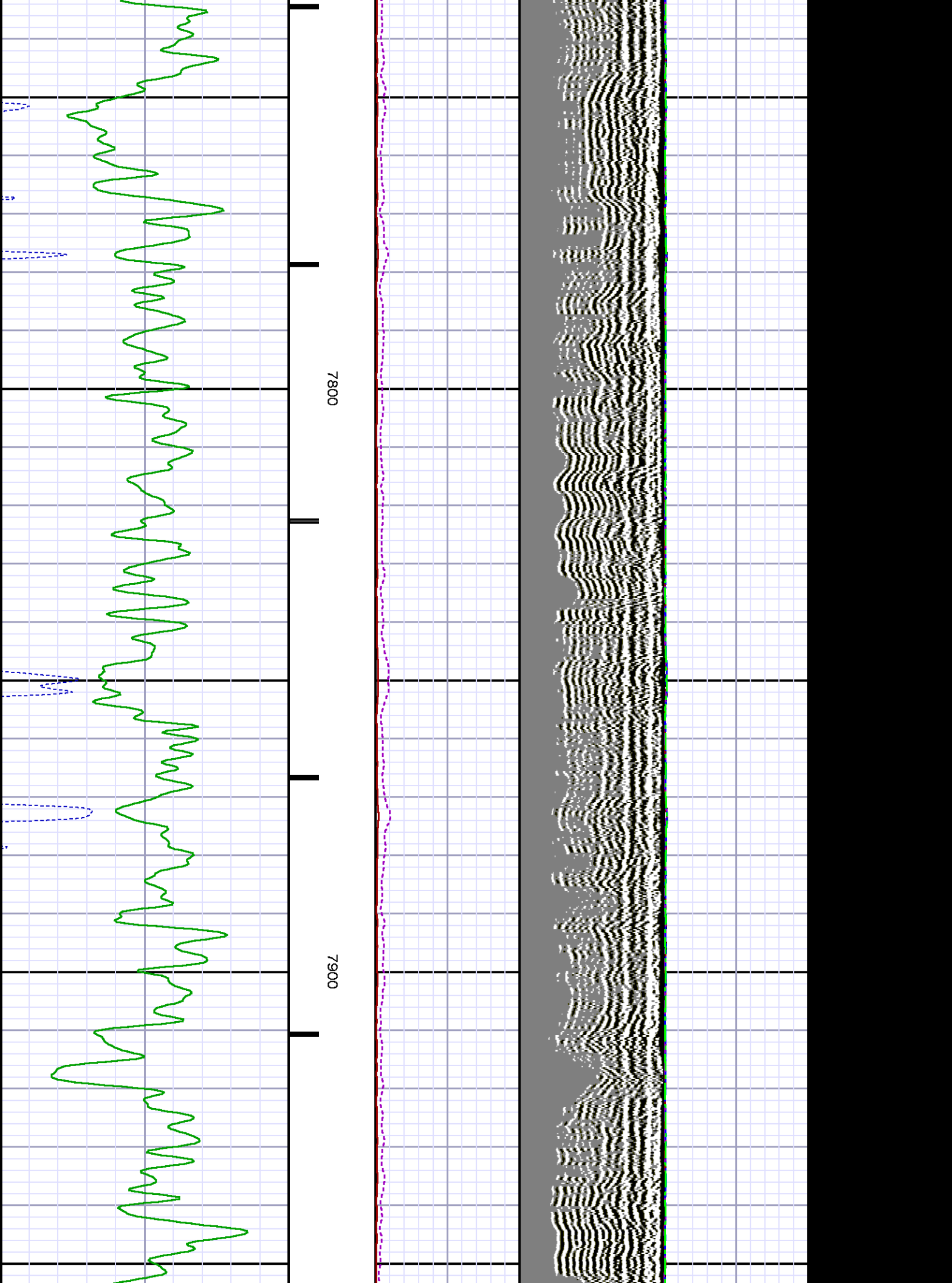


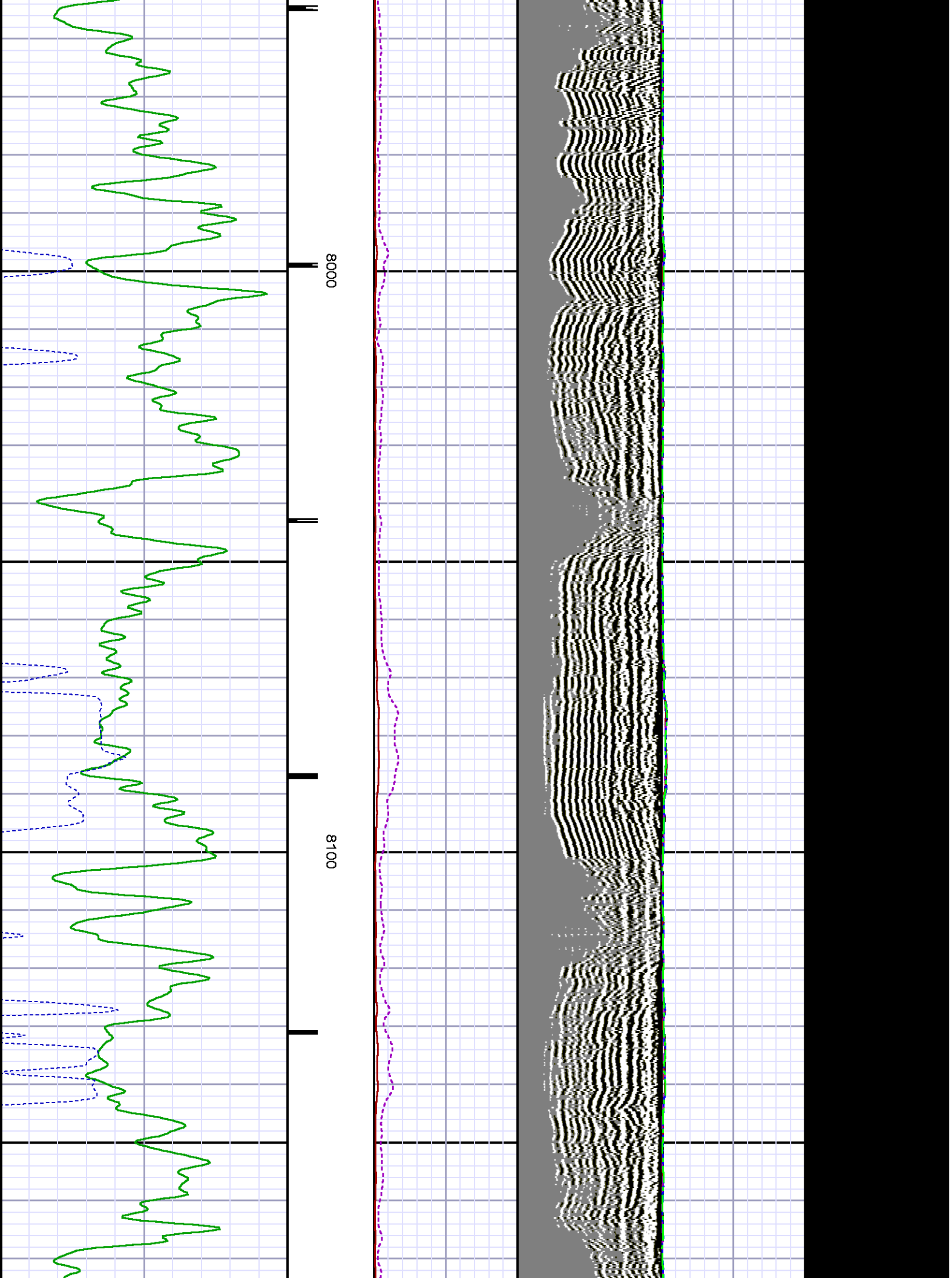


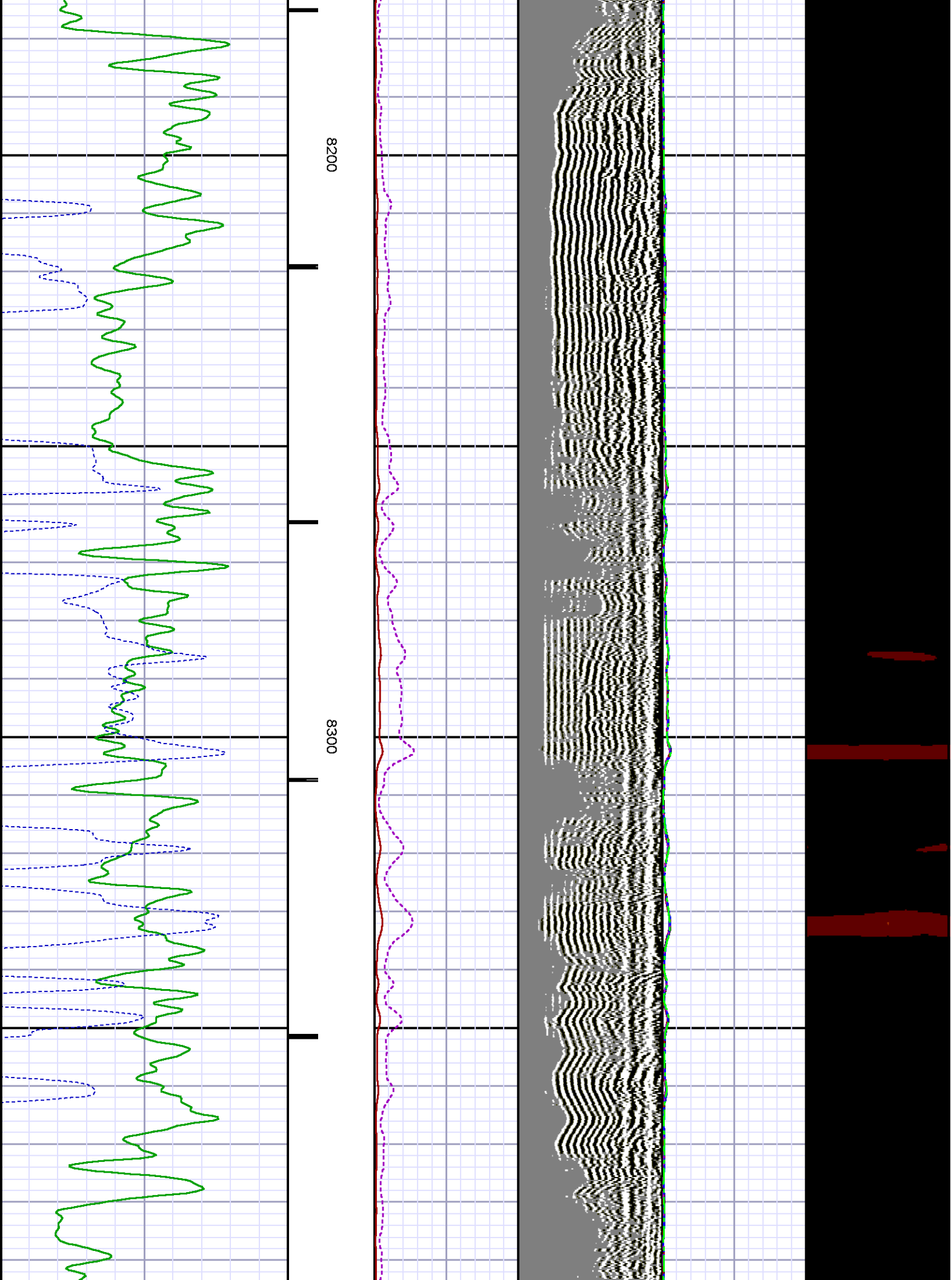


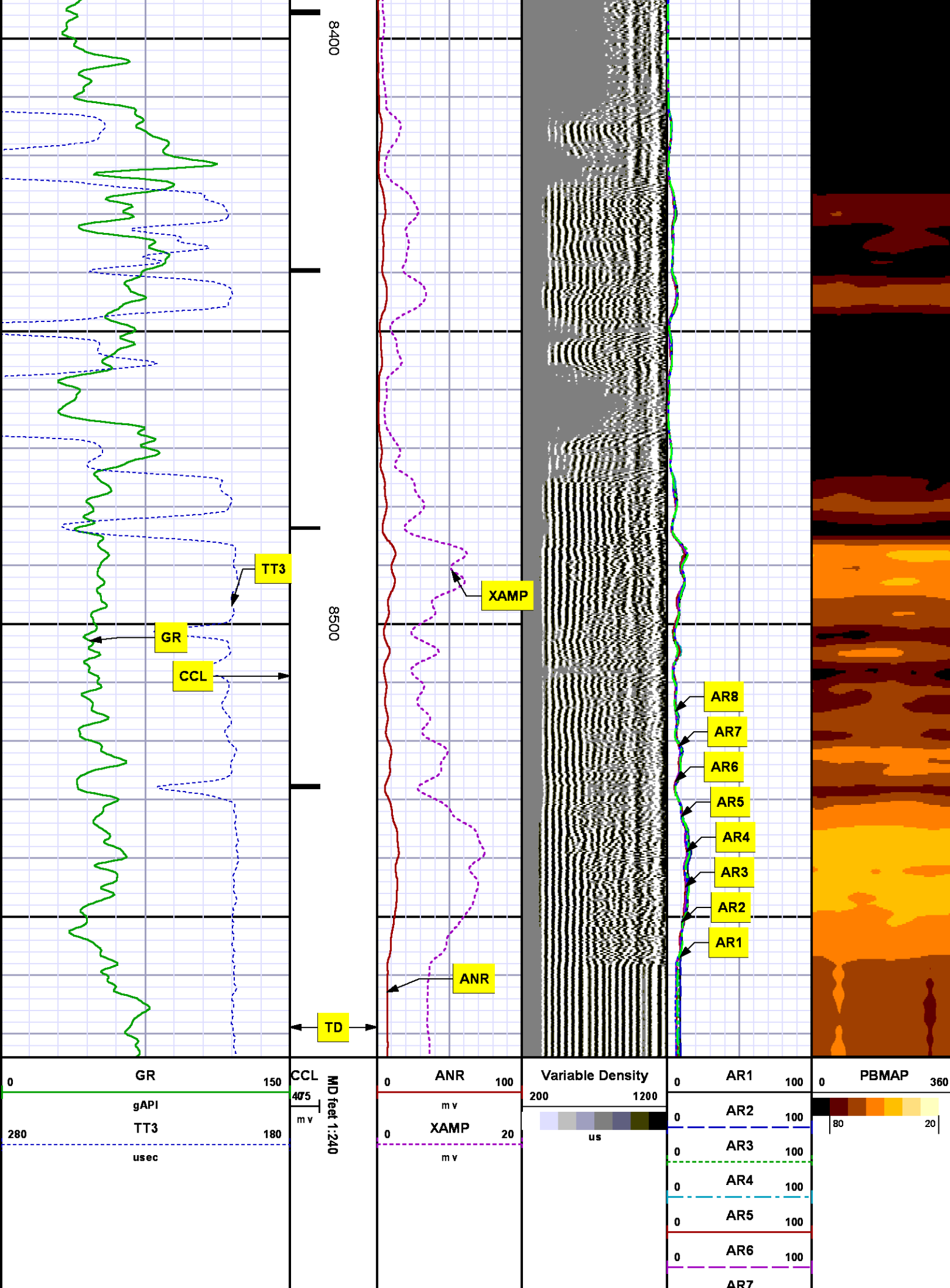












0 GR 150
gAPI
280 TT3 180
u sec

CCL MD feet 1:240
405
m v

0 ANR 100
m v
0 XAMP 20
m v

Variable Density
200 1200
us

0 AR1 100
0 AR2 100
0 AR3 100
0 AR4 100
0 AR5 100
0 AR6 100
AR7

0 PBMAP 360
80 20

				<div> <div>0</div> <div>AR7</div> <div>100</div> </div> <div> <div>0</div> <div>AR8</div> <div>100</div> </div>	
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REPEAT SECTION
 0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	8256.750	8588.750
RAL	Amp Gate Start Near	195.000	usec	8256.750	8588.750
RAL	Amp Gate Start Radial	195.000	usec	8256.750	8588.750
RAL	Amp Gate Width Far	25.000	usec	8256.750	8588.750
RAL	Amp Gate Width Near	25.000	usec	8256.750	8588.750
RAL	Amp Gate Width Radial	25.000	usec	8256.750	8588.750
RAL	casing od	4.500	inches	8256.750	8588.750
RAL	casing wt	11.600	lbm/ft	8256.750	8588.750
RAL	FB Start Far	291.900	usec	8256.750	8588.750
RAL	FB Start Near	180.000	usec	8256.750	8588.750
RAL	FB Start Radial	180.000	usec	8256.750	8588.750
RAL	FB Thresh Far	10.000	mv	8256.750	8588.750
RAL	FB Thresh Near	4.000	mv	8256.750	8588.750
RAL	FB Thresh Radial	4.000	mv	8256.750	8588.750
RAL	Fluid Travel Time	200.000	usec/ft	8256.750	8589.280

DEPTH OFFSETS							
(for Acquired Curves)							
SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-12.360	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	-11.360	AFAR	SIG	TT5			
2459XA	-7.250	CCL					
2459XA	-5.390	GR					
2459XA	0.000	NEU					

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

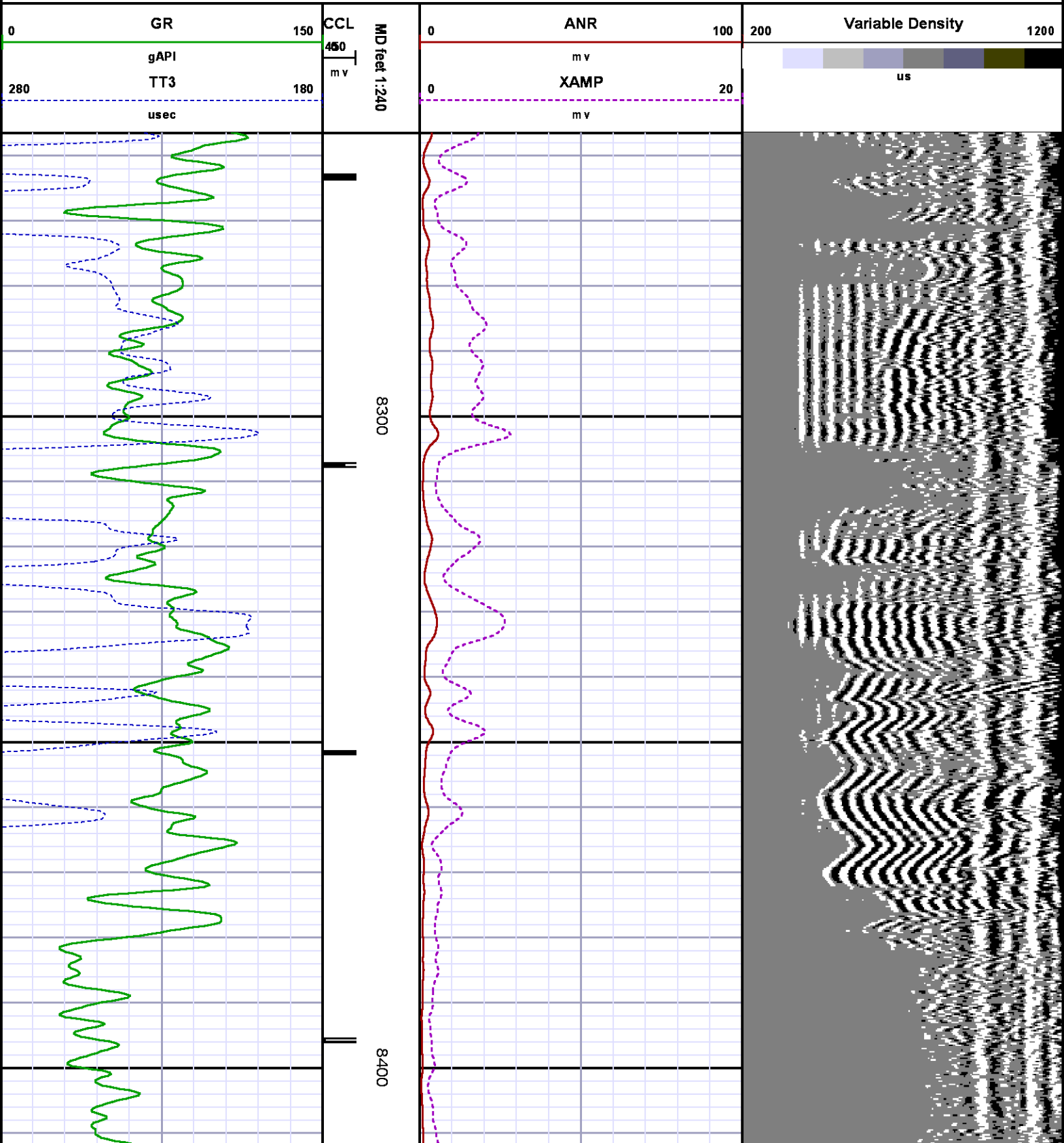
Well : WPX ENERGY RWF 12-25

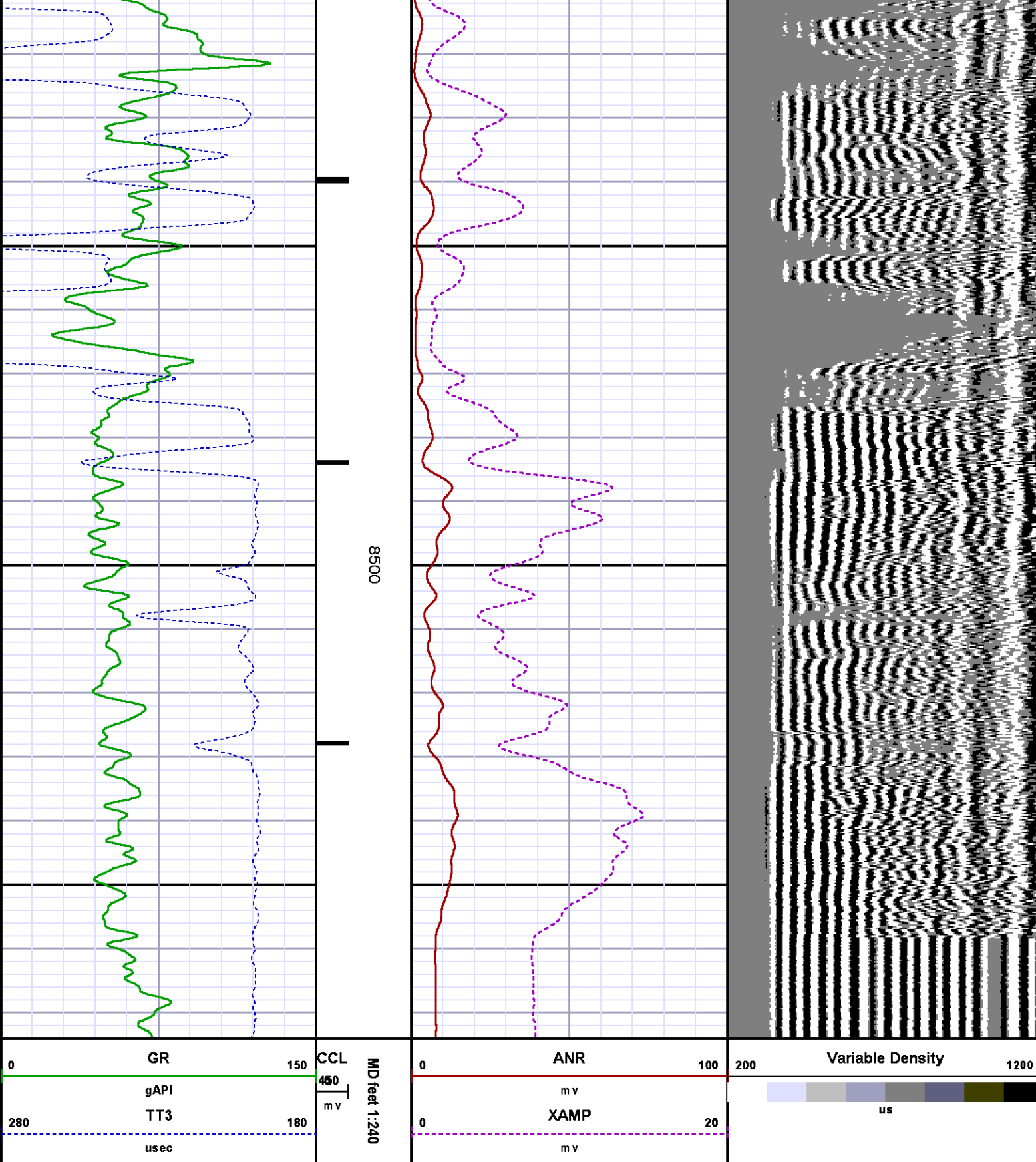
File Name : d:\welldata\wpx energy\rwf 12-25\12cb\repeatxtf.xtf

Mode : PlotMgr 5.4.504

Interval : 8256.50 - 8574.00 feet UP

Created : 1/8/2014 2:04:03 PM





CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP\49608_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Wed Jan 08 12:42:37 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: 08

Tool Delay [usec] -56.00 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	215	216	30	166	25	-0.333	100.00	0.20
3 Ft. Receiver	216	216	30	166	25	2.870	100.00	0.20
5 Ft. Receiver	324	332	30	282	25	3.761	150.00	0.24
Radial #1	216	216	30	166	25	2.438	100.00	0.19
Radial #2	216	216	30	166	25	1.460	100.00	0.19
Radial #3	216	216	30	166	25	1.760	100.00	0.20
Radial #4	216	216	30	166	25	2.544	100.00	0.20
Radial #5	216	216	30	166	25	2.746	100.00	0.20
Radial #6	215	216	30	166	25	2.892	100.00	0.20
Radial #7	214	216	30	166	25	1.342	100.00	0.19
Radial #8	216	216	30	166	25	1.782	100.00	0.19

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\49608 fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Wed Jan 08 12:45:45 2014 TOOL SERIES: 1426XA ASSET: 496 SEQ: 08

Tool Delay [usec] -56.00 Casing OD in 4.50 Casing Wt lbm/ft 11.60 Casing ID in 4.00

RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	166	25	0.041	0.000	0.85	100.000
3 Ft. Receiver	195	25	2.067			
5 Ft. Receiver	305	25	2.805			
Radial #1	195	25	1.478			
Radial #2	195	25	1.616			
Radial #3	195	25	1.771			
Radial #4	195	25	1.767			
Radial #5	195	25	1.997			
Radial #6	195	25	2.135			
Radial #7	195	25	1.770			
Radial #8	195	25	1.733			

GAMMA RAY

Calibration File: C:\case\calver\GR\121D7.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED:		Thu Dec 19 13:07:05 2013		TOOL SERIES:	2459XA	ASSET:	121	SEQ:	D7
Calibrator #	Background	Calibrator On		Multiplicative	Background	Calibrator On	Differential		
	[cps]	[cps]			[api]	[api]	[api]		
S2K WA612	72.18	324.27		0.734	52.97	237.97	185.00		

Verification File: C:\case\calver\GR\121D7.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED:		Thu Dec 19 13:08:40 2013		TOOL SERIES:	2459XA	ASSET:	121	SEQ:	D7
Calibrator #	Background	Calibrator On		Multiplicative	Background	Calibrator On	Differential		
	[cps]	[cps]			[api]	[api]	[api]		
S2K WA612	78.40	322.22		0.734	57.54	236.47	178.93		

TOOL DIAGRAM

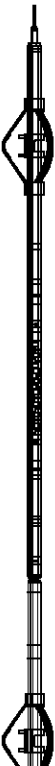
OTA SHORT CABLE HEAD

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

Probe GR/CCL/NEU

Series	2459XA
Mnemonic	PROB





	21.54'
XMIT	15.35'
NEAR RCVR	12.27'
FAR RCVR	10.35'
CCL	8.65'
GR	6.79'

Diameter	2.75"
Length	9.42'
Measure Point	1.21' NEU
Measure Point	6.60' GR
Measure Point	8.46' CCL

NEU1.40'

0.00'

Total Length: 21.54'
Total Weight: Not Available
Max Diameter: 0' 2.75"

<div> Baker Atlas </div>	Company		WPX ENERGY		File No:	
	Well		SAVAGE RWF 12-25		CH081686	
	Field		RULISON		API No:	
	County		GARFIELD	State	COLORADO	05045219740000
Location		SHL: 2493' FNL & 1387' FWL			Elevations	
BHL: 2058' FNL & 664' FWL (SWSW)					25 6S 94W	
					RWF 22-25 PAD	
					CYCLONE 17	
SEC 25 TWP 6S RGE 94W						