



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: CH79533	Company Well Field County	WPX ENERGY FEDERAL PA 313-12 PARACHUTE GARFIELD	State CO
API No: 05045206530000	Location SHL: 2586' FSL & 1723' FWL BHL: 2143' FSL & 518' FWL SEC 12 TWP 75 RGE 95W		
12 7S 95W PA 23-12 PAD MABORS 577	Other Services Elevations KB 6533 ft DF GL 6507 ft		
Permanent Datum Log Measured From Drill Measured From	GL KB Elevation 6507 ft KB 26 ft Above P. D. KB GL 6507 ft		

Date	22/NOV/13	
Run	ONE	
Service Order	US625034	
Depth Driller	8197 ft	
Depth Logger	8081 ft	
Bottom Logged Interval	8081 ft	
Top Logged Interval	26 ft	
Time Started	10:50	
Time Finished	13:30	
Operator Rig Time	3 HOURS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	63 ft	
Logged Cement Top	NA	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	NA	
Nominal Logging Speed	65 fpm	
Maximum Recorded Temperature	232 degF	
Reference Log	BAKER HUGHES OPEN HOLE LOG	
Reference Log Date	27/OCT/13	
Equipment No.	4271	GRAND JCT.
Recorded By	TIM NEWELL	
Witnessed By	BILL CADY	

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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	827 ft
7.875 In	827 ft	8272 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 In			0 ft	827 ft
4.5 In	11.6 lbm/ft	1-80	0 ft	8272 ft

Remarks
All data on this log is shifted and depth matched using the Gamma Ray curve to the Baker Hughes HDIL/ZDL/CN/GR open hole log dated 10/27/2011 at the clients request.
The amount of linear shift is 10 feet.
Logged with zero PSI at wellhead.

BHT = 232 °F
SJ = 4679'-4703'

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

PRIMARY PRESENTATION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	29.750	8092.000
RAL	Amp Gate Start Near	195.000	usec	29.750	8092.000
RAL	Amp Gate Start Radial	195.000	usec	29.750	8092.000
RAL	Amp Gate Width Far	25.000	usec	29.750	8092.000
RAL	Amp Gate Width Near	25.000	usec	29.750	8092.000
RAL	Amp Gate Width Radial	25.000	usec	29.750	8092.000
RAL	casing od	4.500	inches	29.750	8092.000
RAL	casing wt	11.600	lbm/ft	29.750	8092.000
RAL	FB Start Far	291.900	usec	29.750	8092.000
RAL	FB Start Near	180.000	usec	29.750	8092.000
RAL	FB Start Radial	180.000	usec	29.750	8092.000
RAL	FB Thresh Far	10.000	mv	29.750	8092.000
RAL	FB Thresh Near	4.000	mv	29.750	8092.000
RAL	FB Thresh Radial	4.000	mv	29.750	8092.000
RAL	Fluid Travel Time	200.000	usec/ft	29.750	8092.000

DEPTH OFFSETS
(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-11.000	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	AR9	AR10

1426XA -10.040
1355XA -5.620
1355XA -1.500
1355XA 0.000

AR3	AR6	AR7	AR8	CHV	FPR2
FPR3	FPR5	TT3	TTR1	TTR2	TTR3
TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
AFAR	SIG	TT5			
CCL					
GR					
TEMP					

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

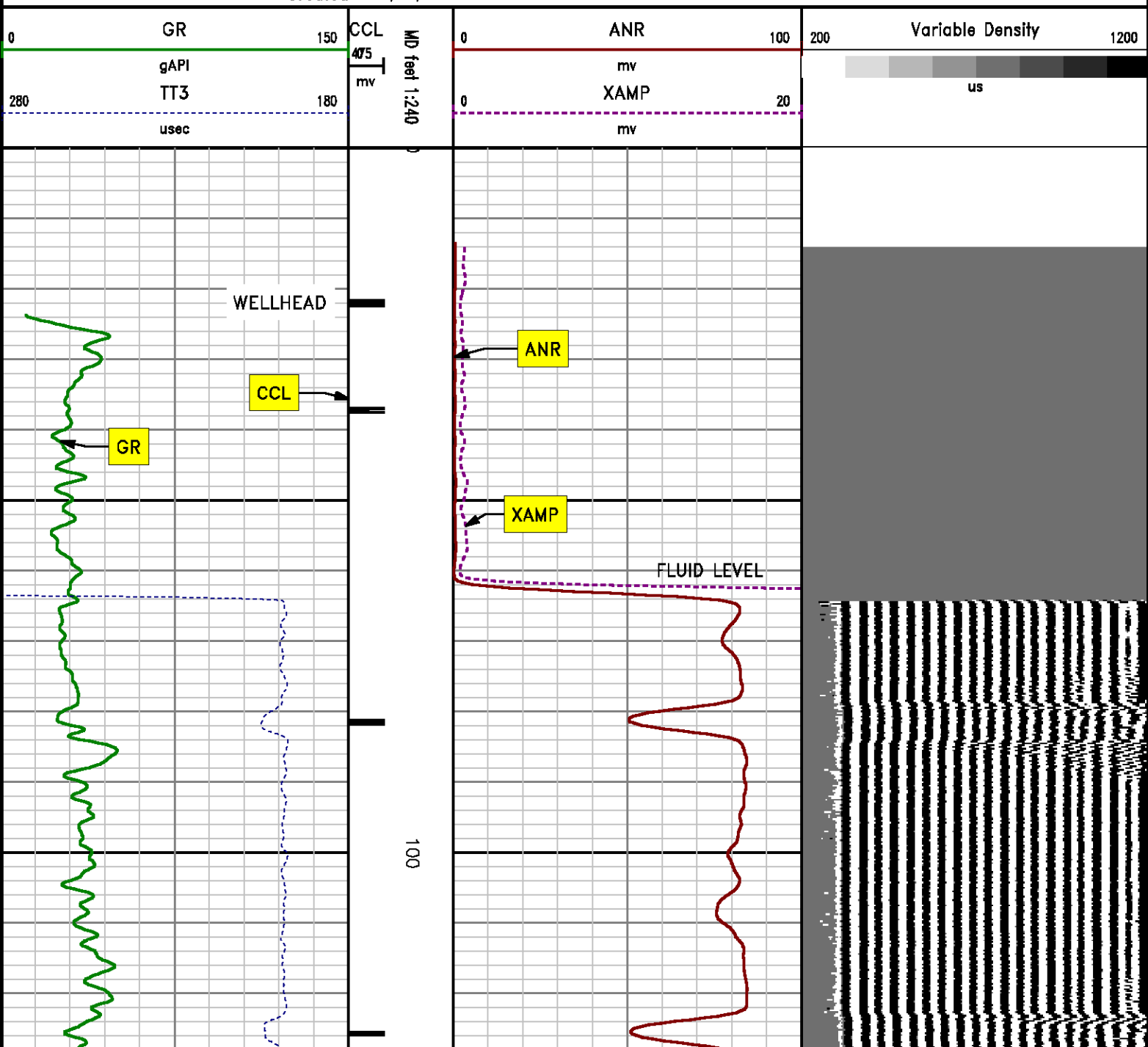
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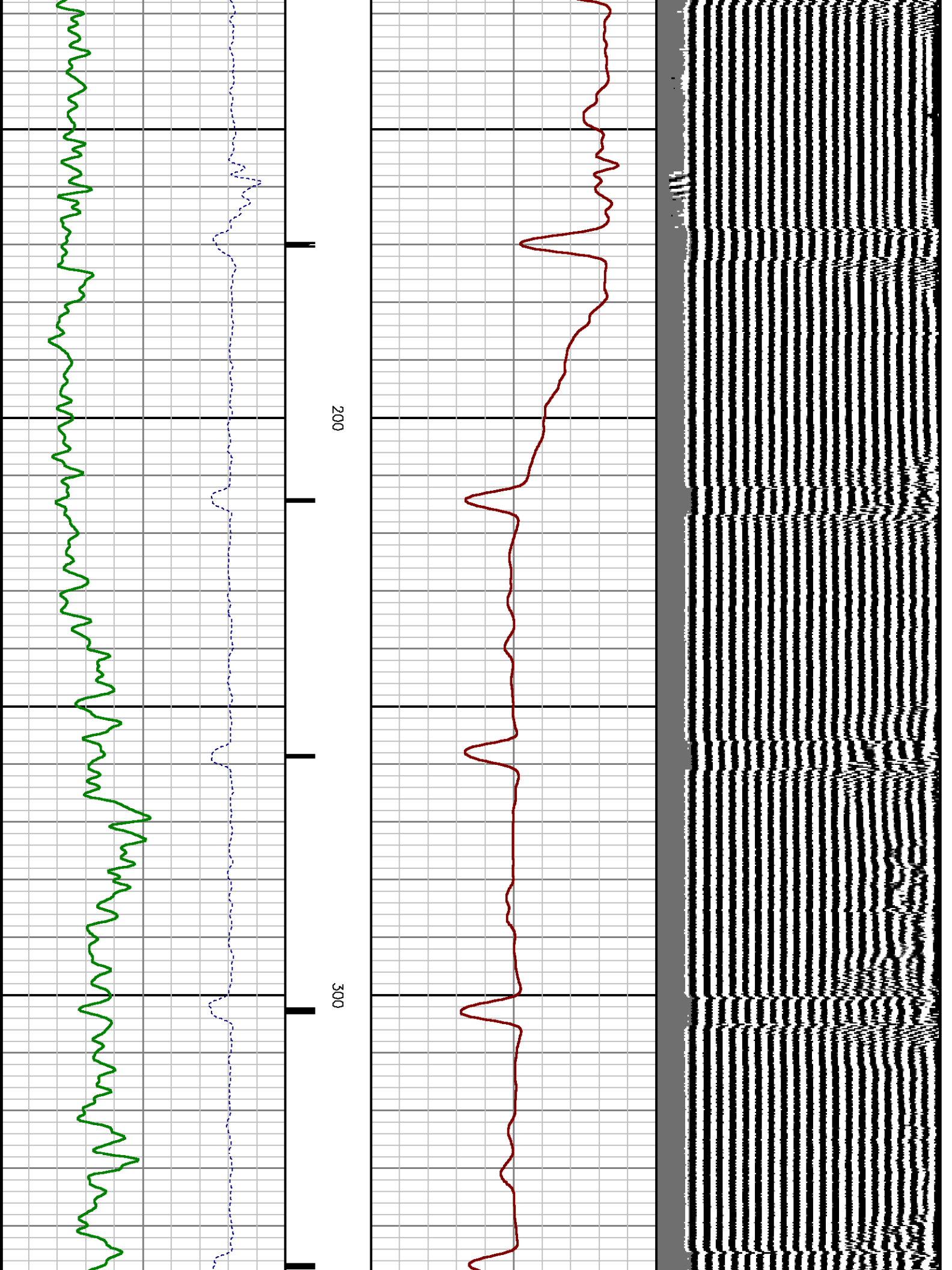
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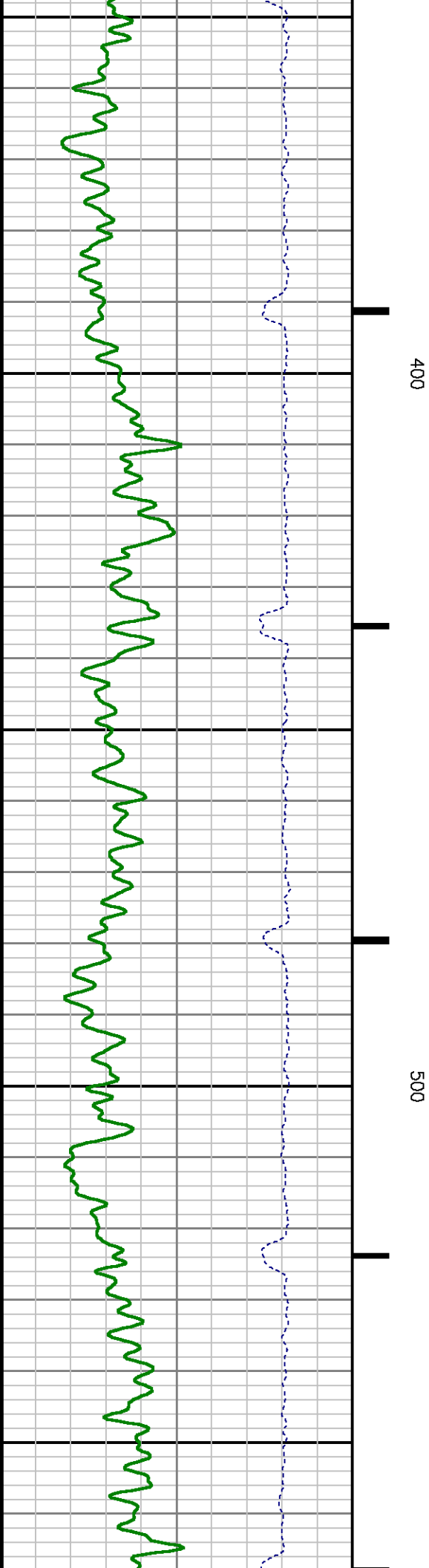
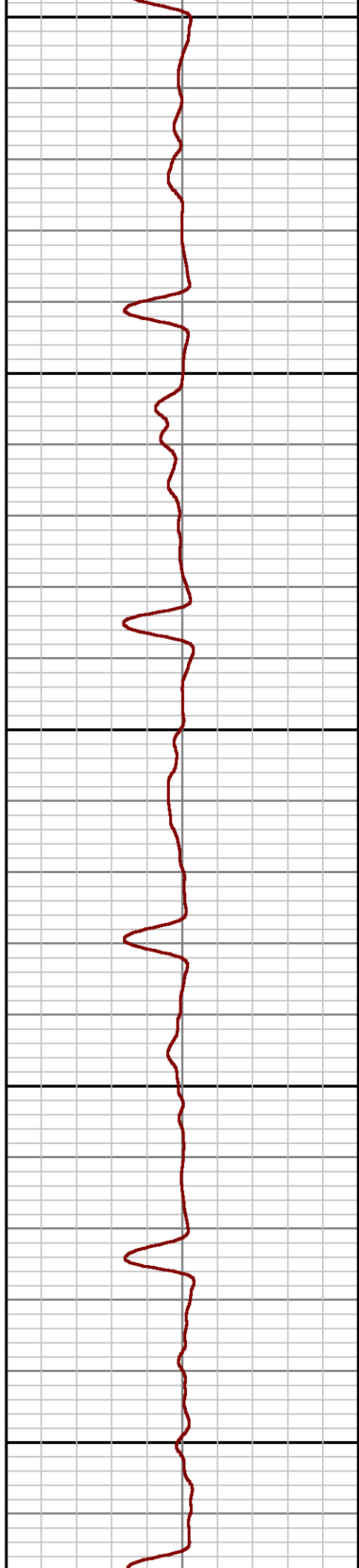
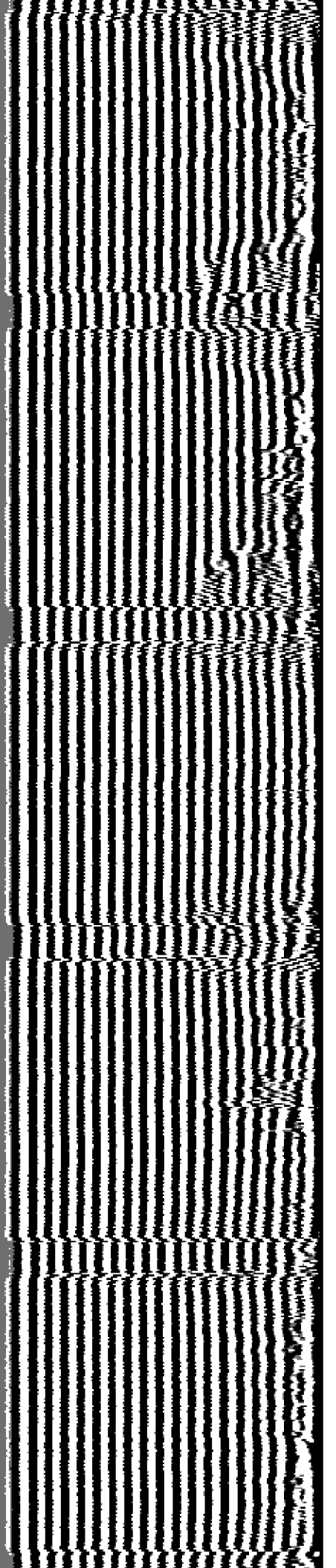
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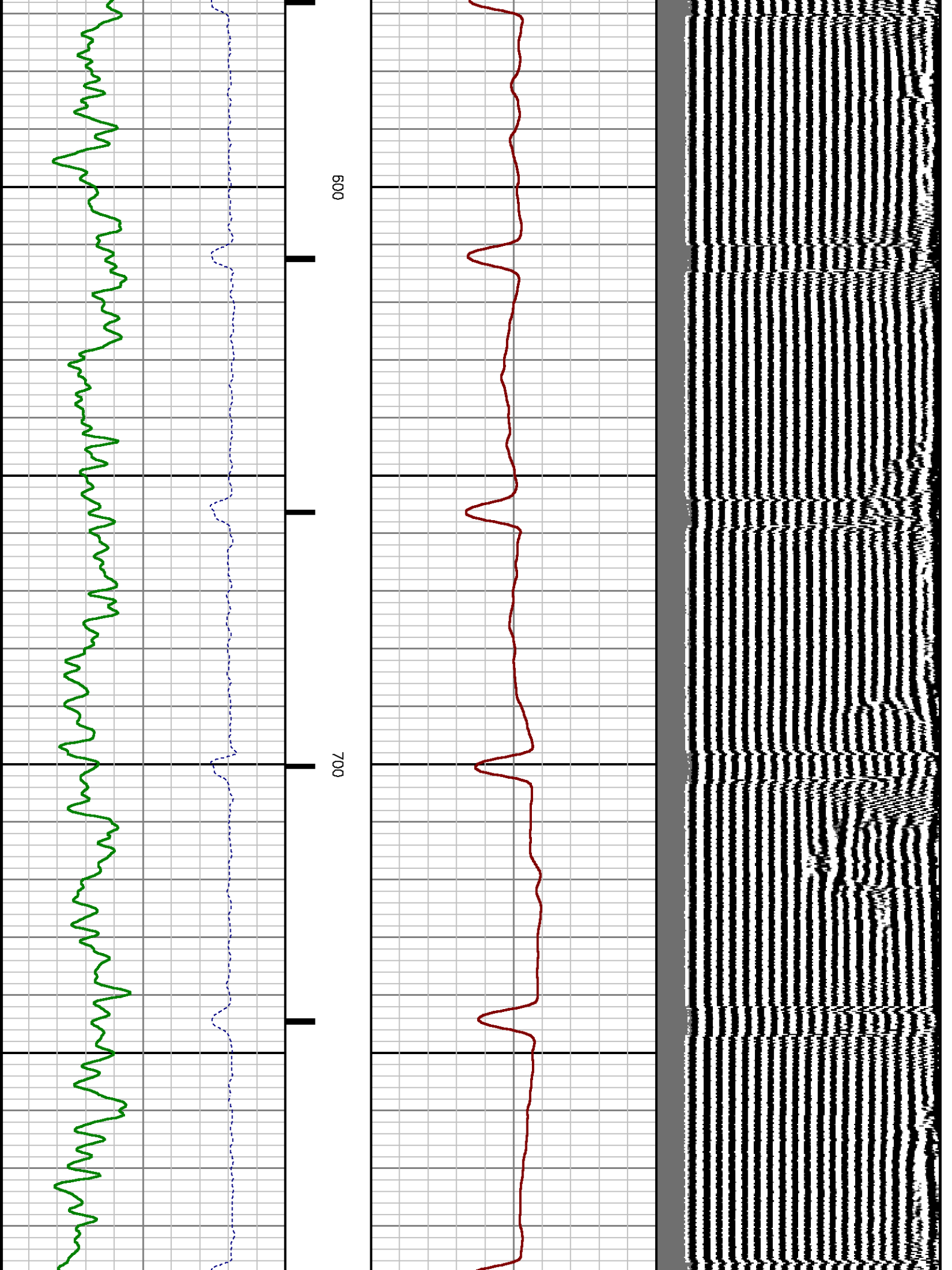
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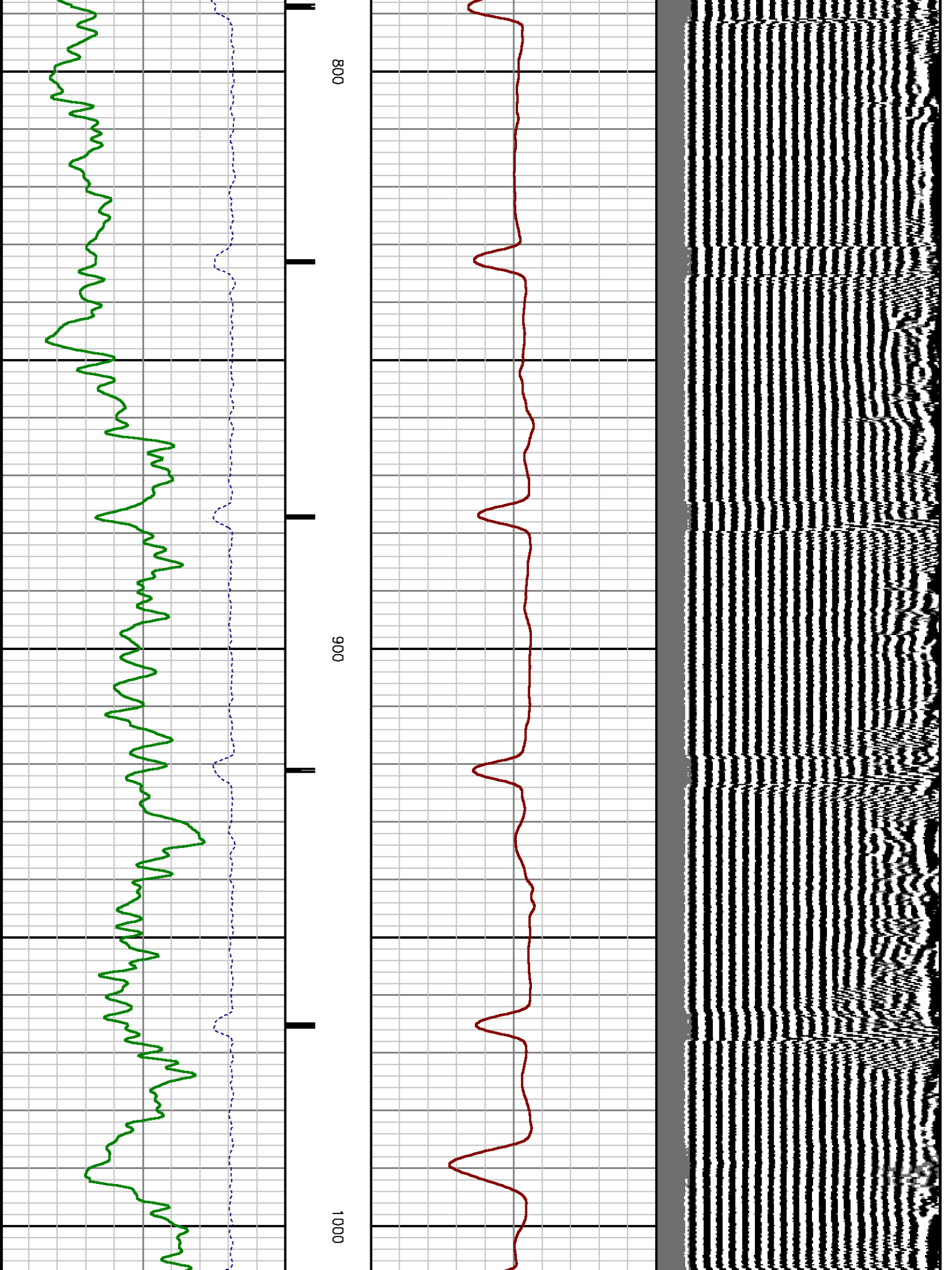
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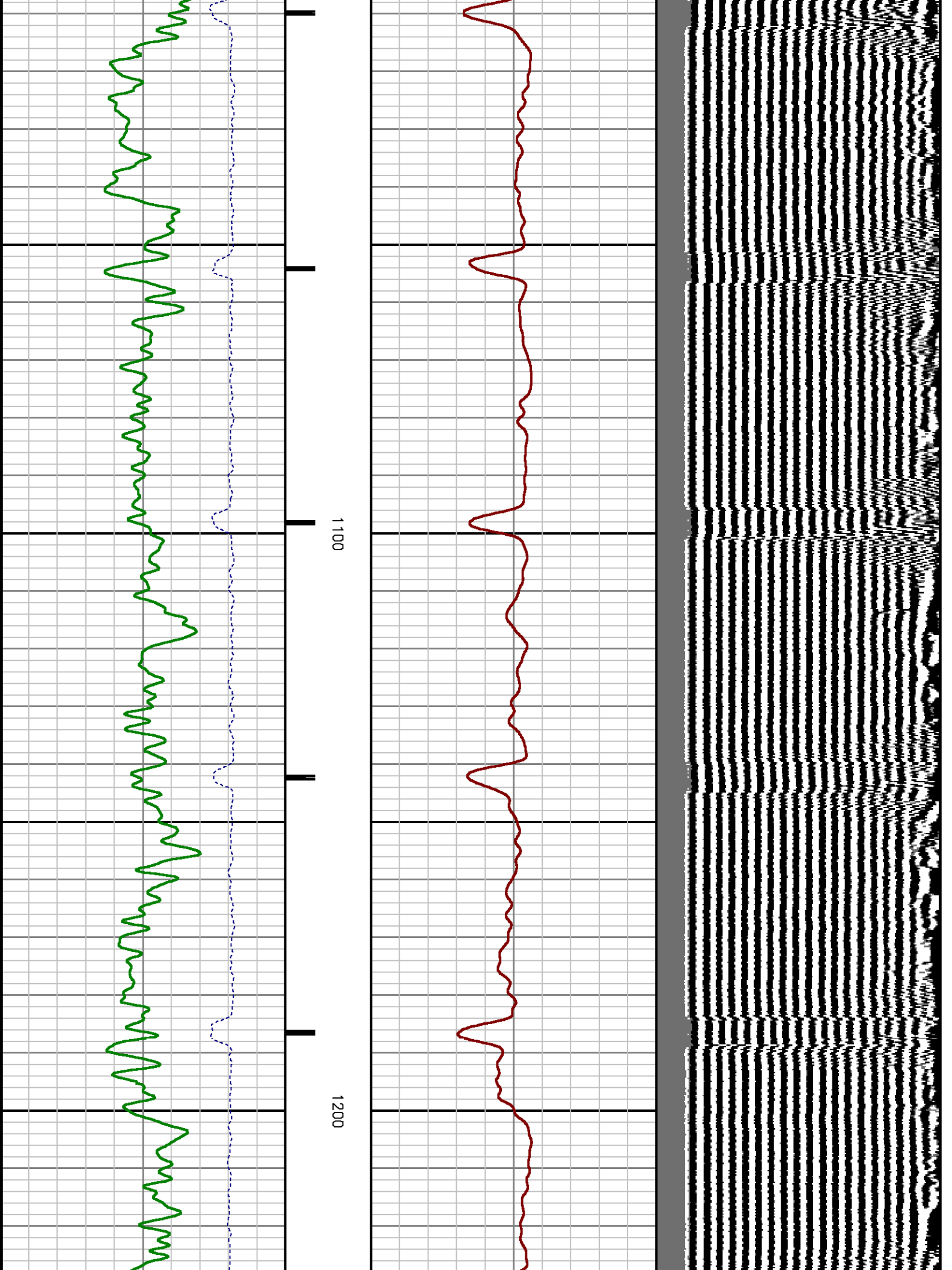


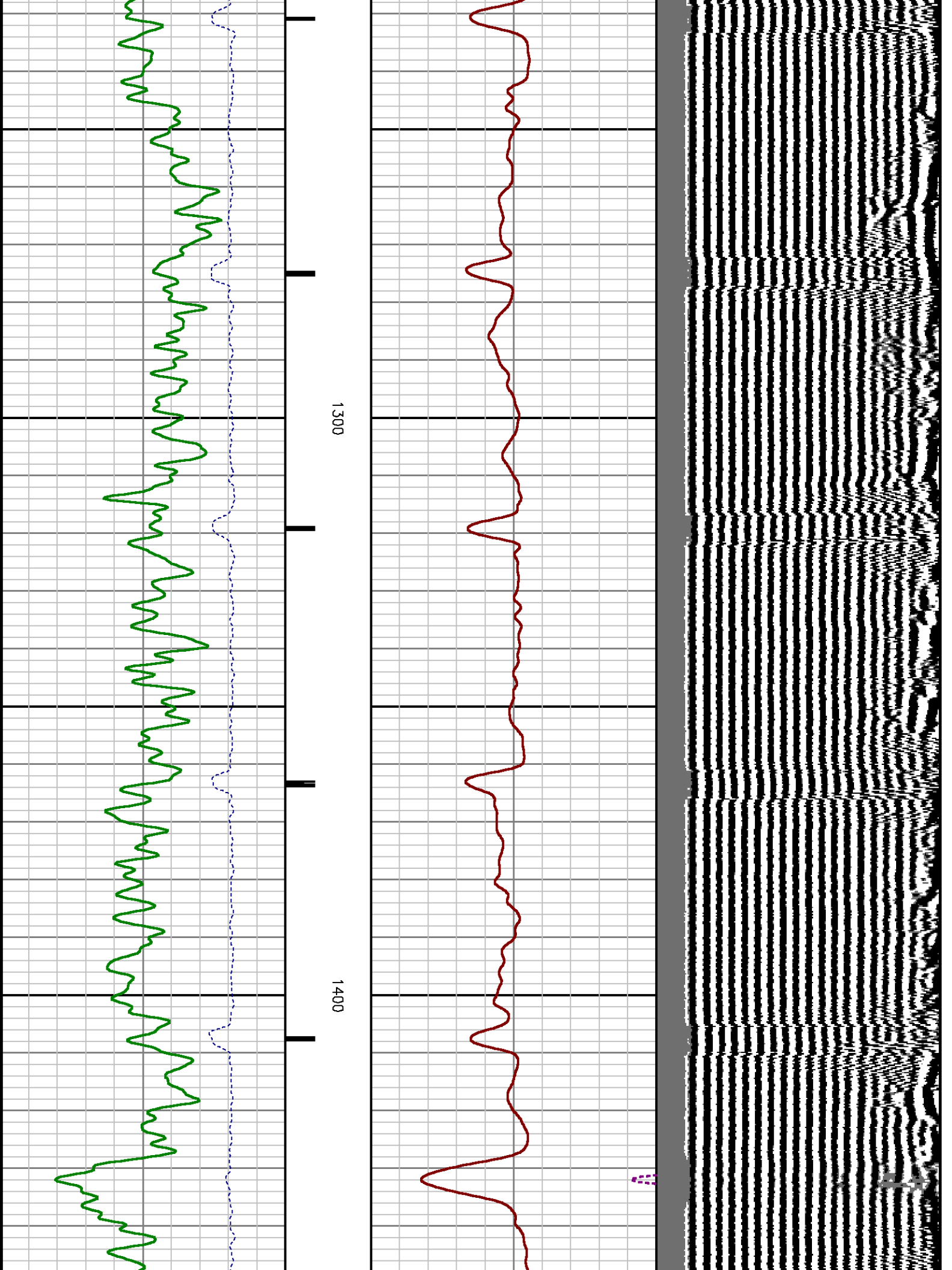


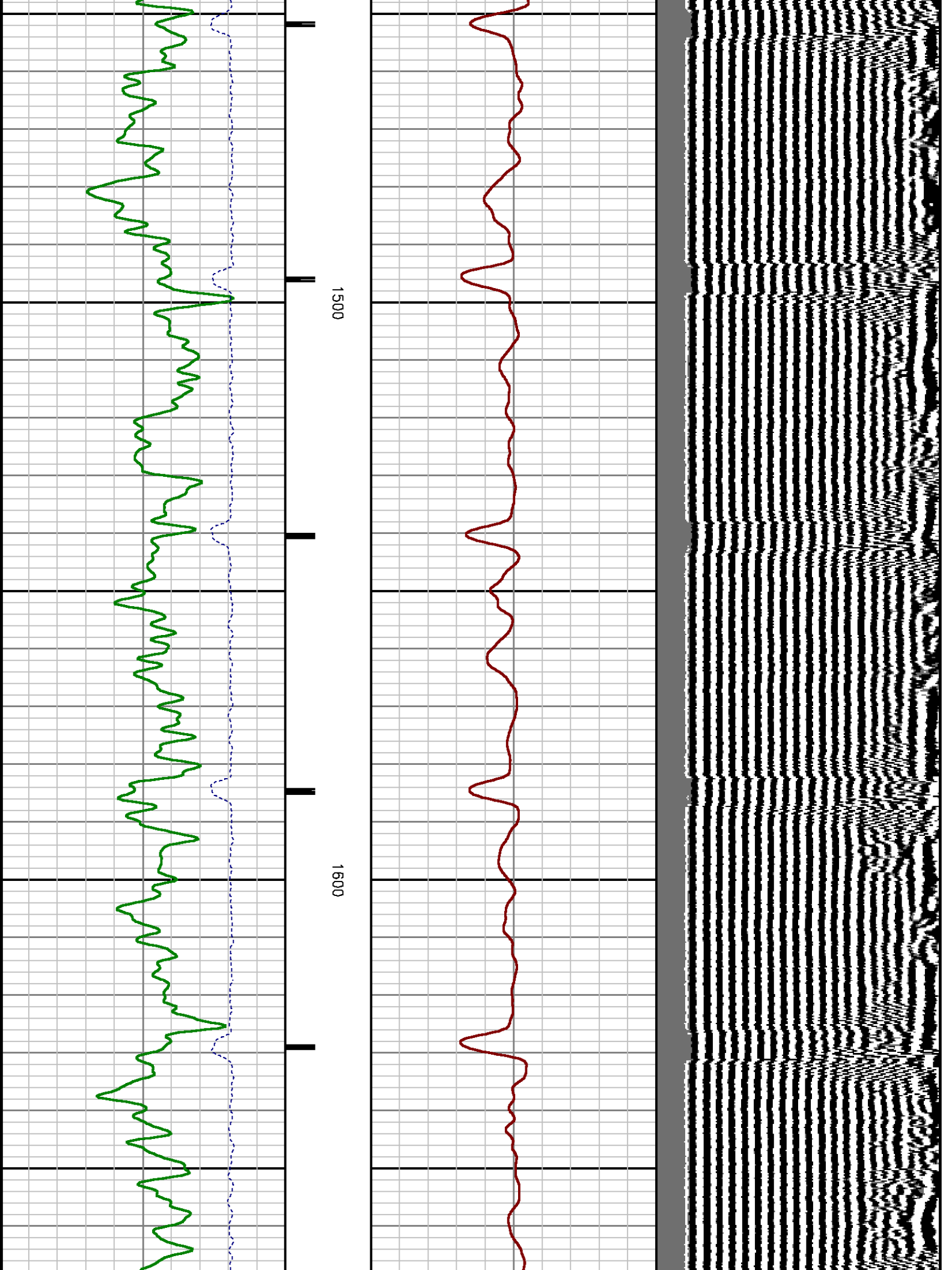


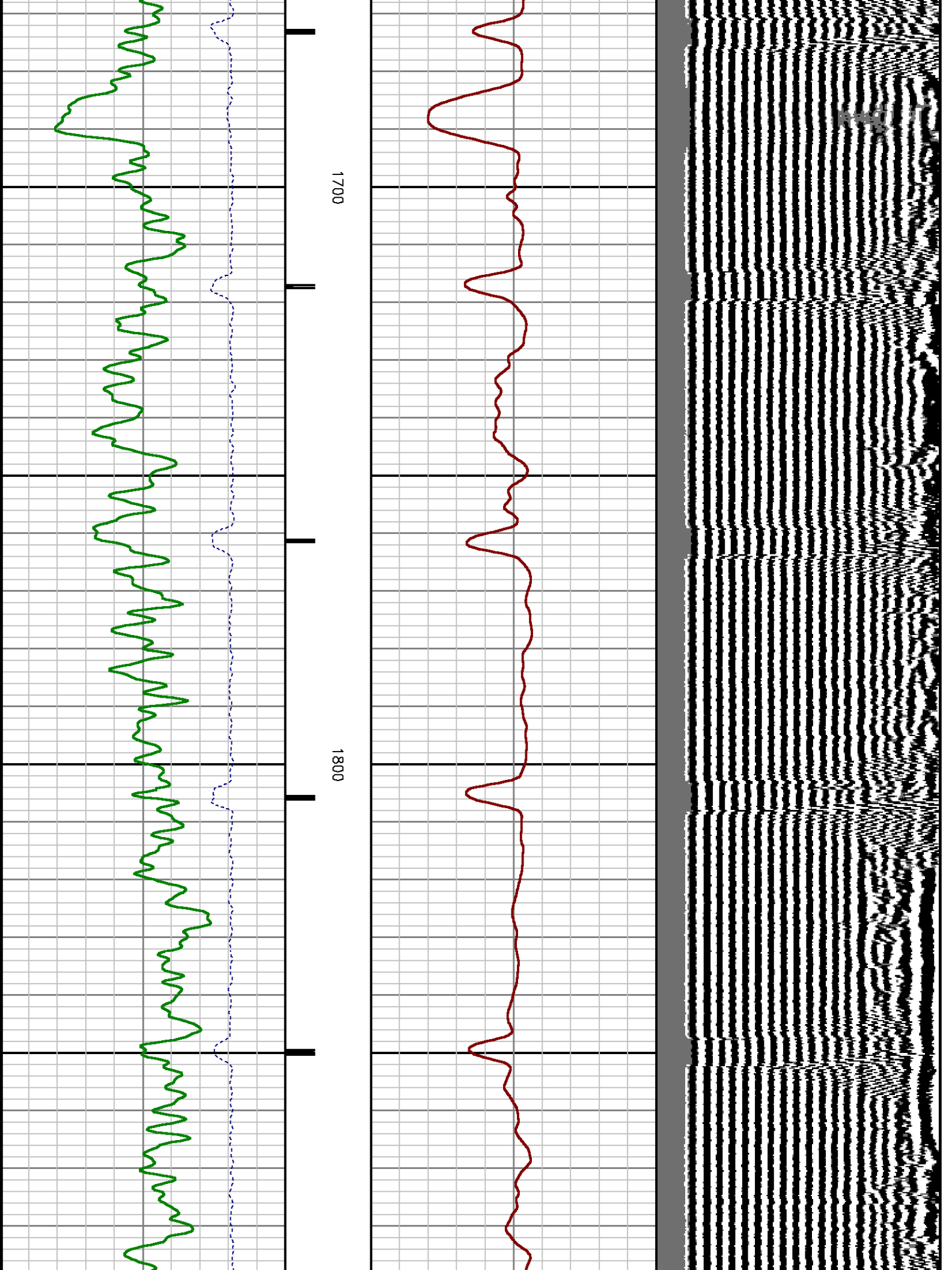


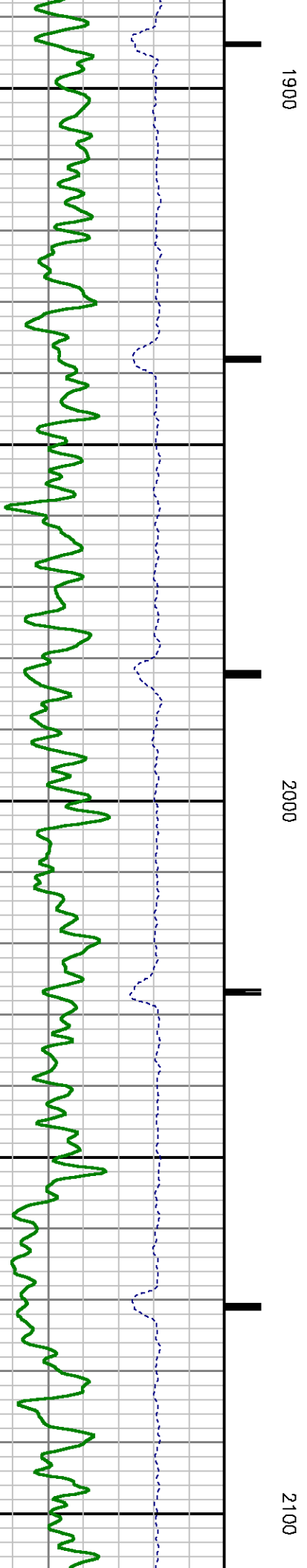
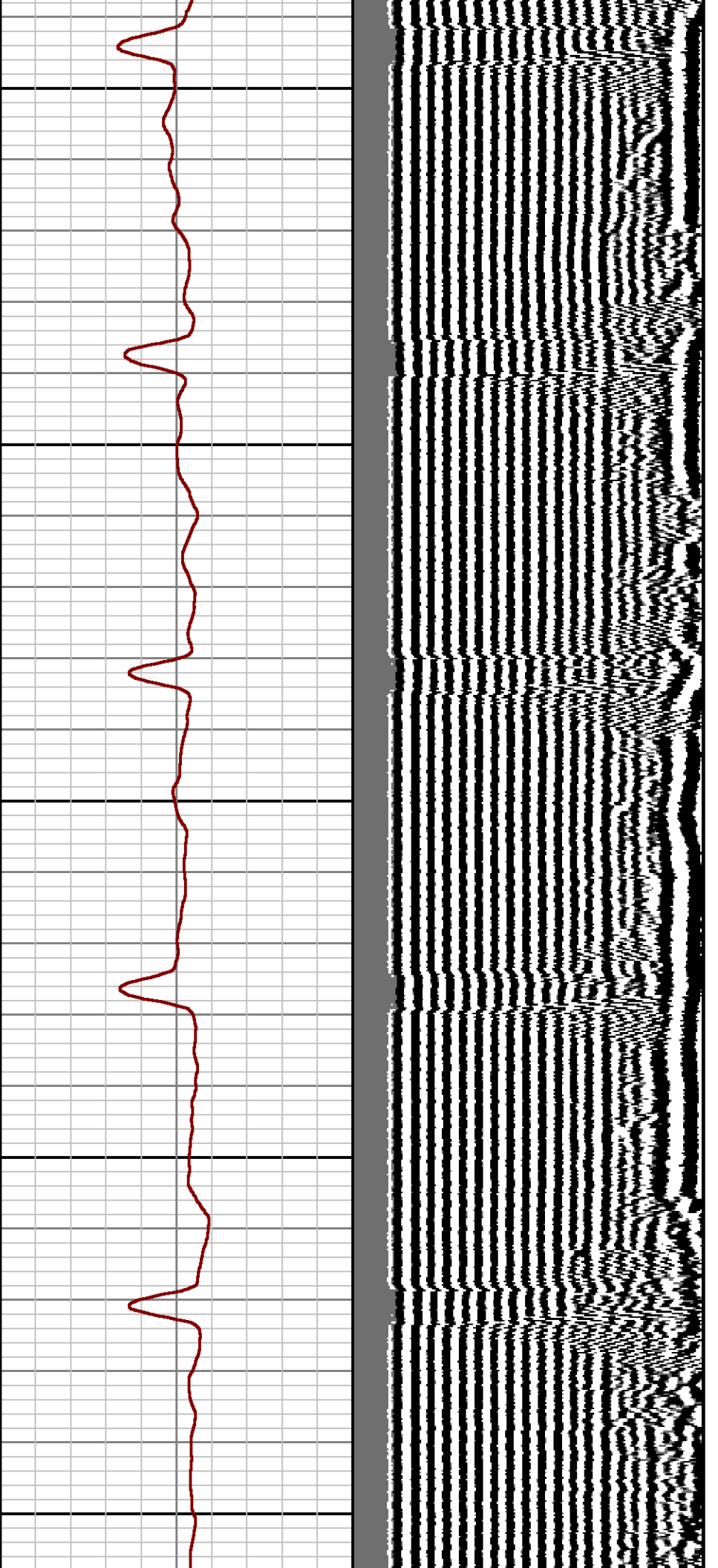


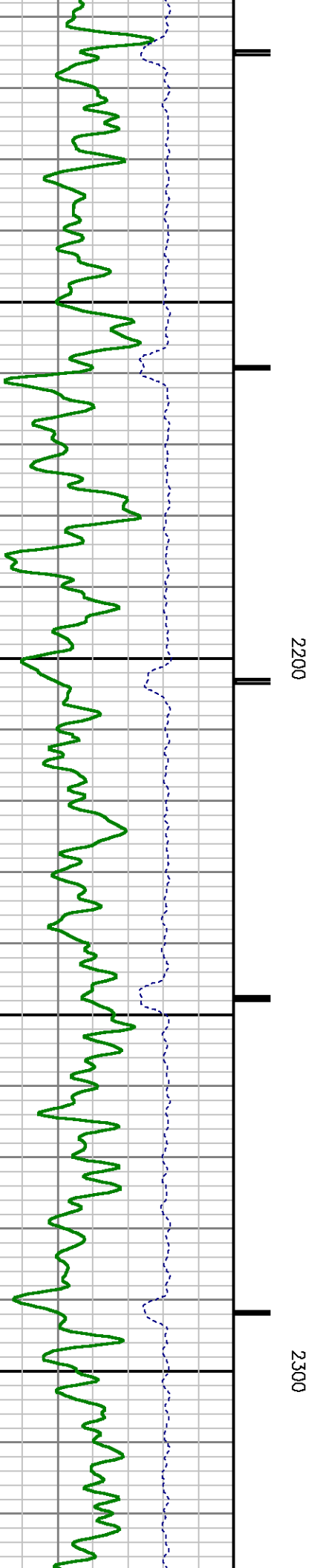
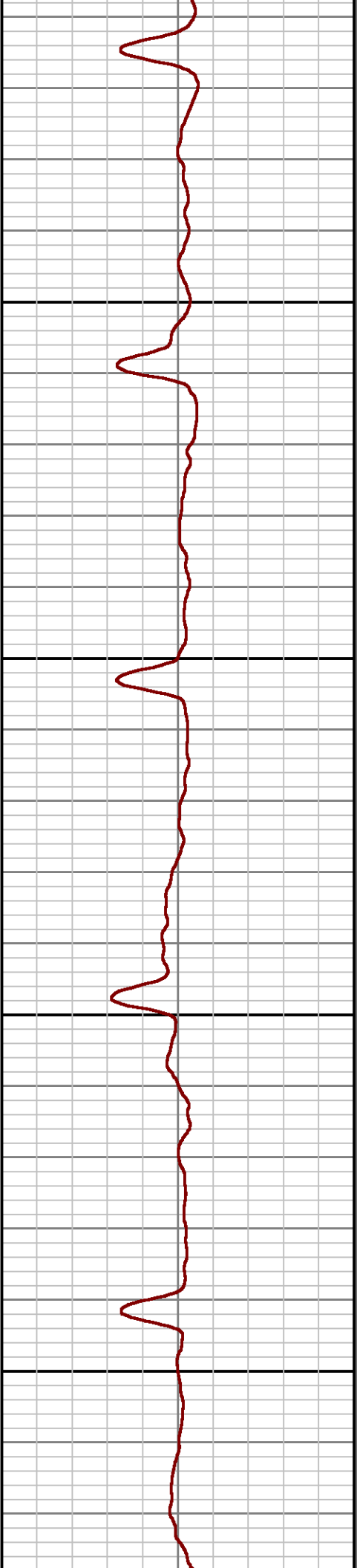
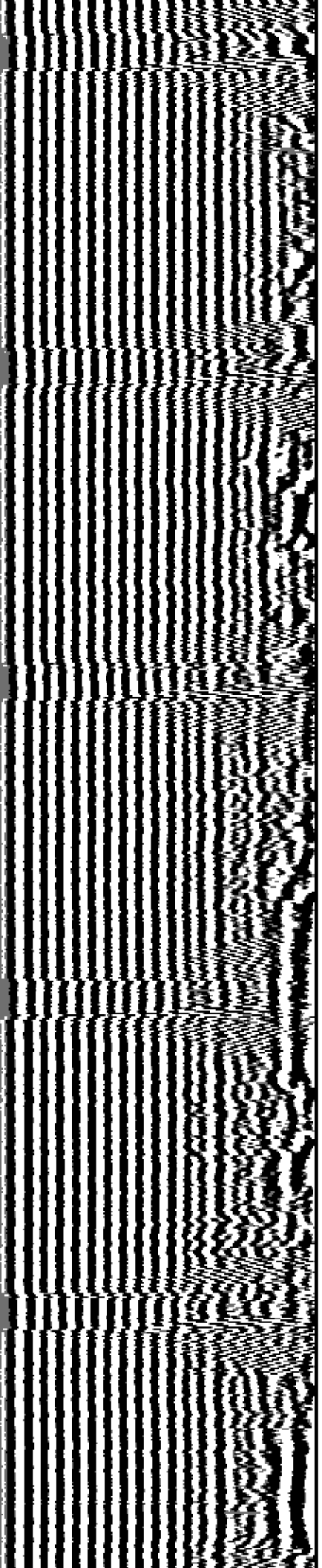


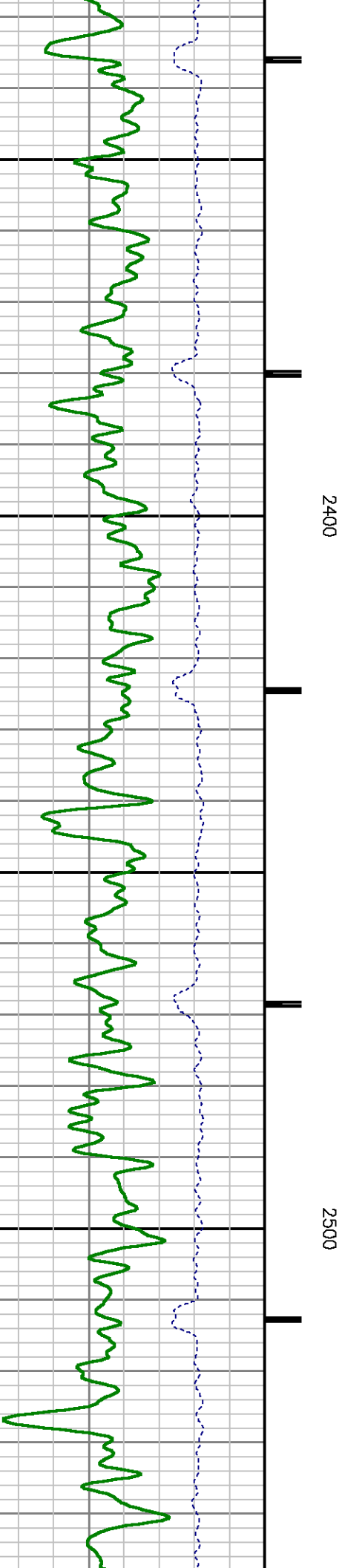
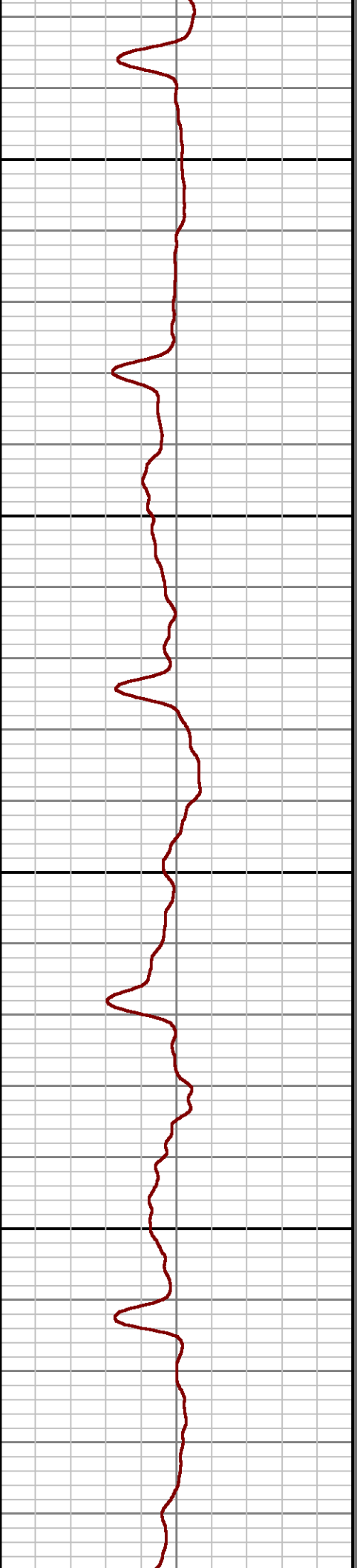
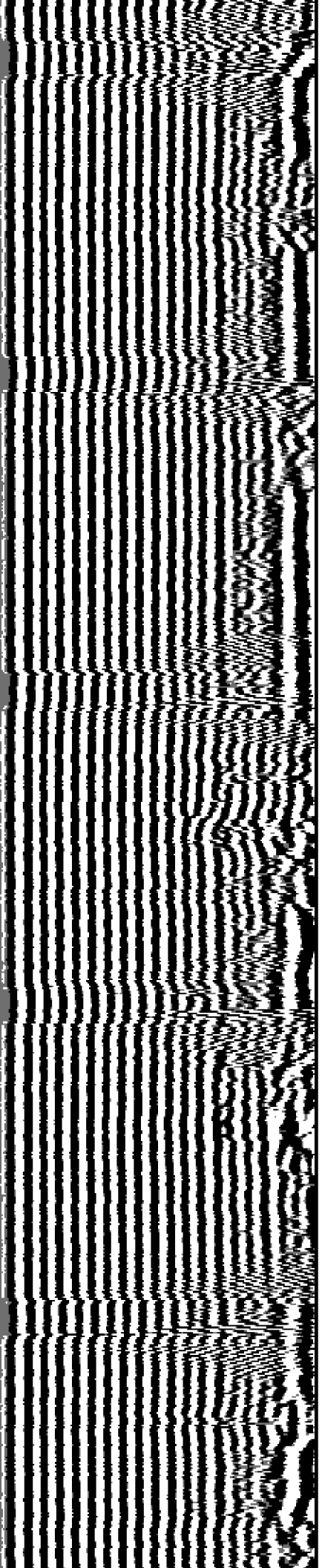


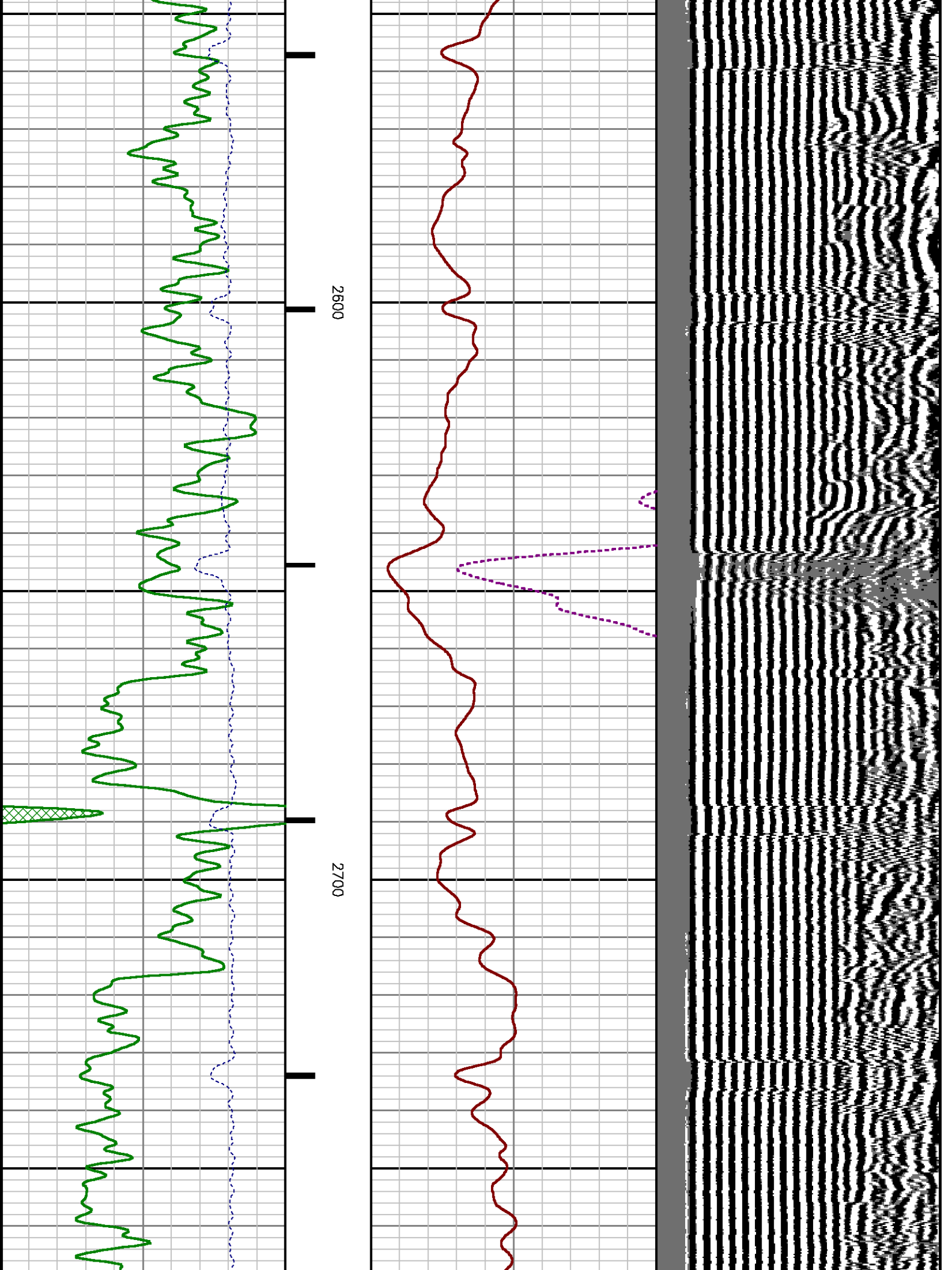


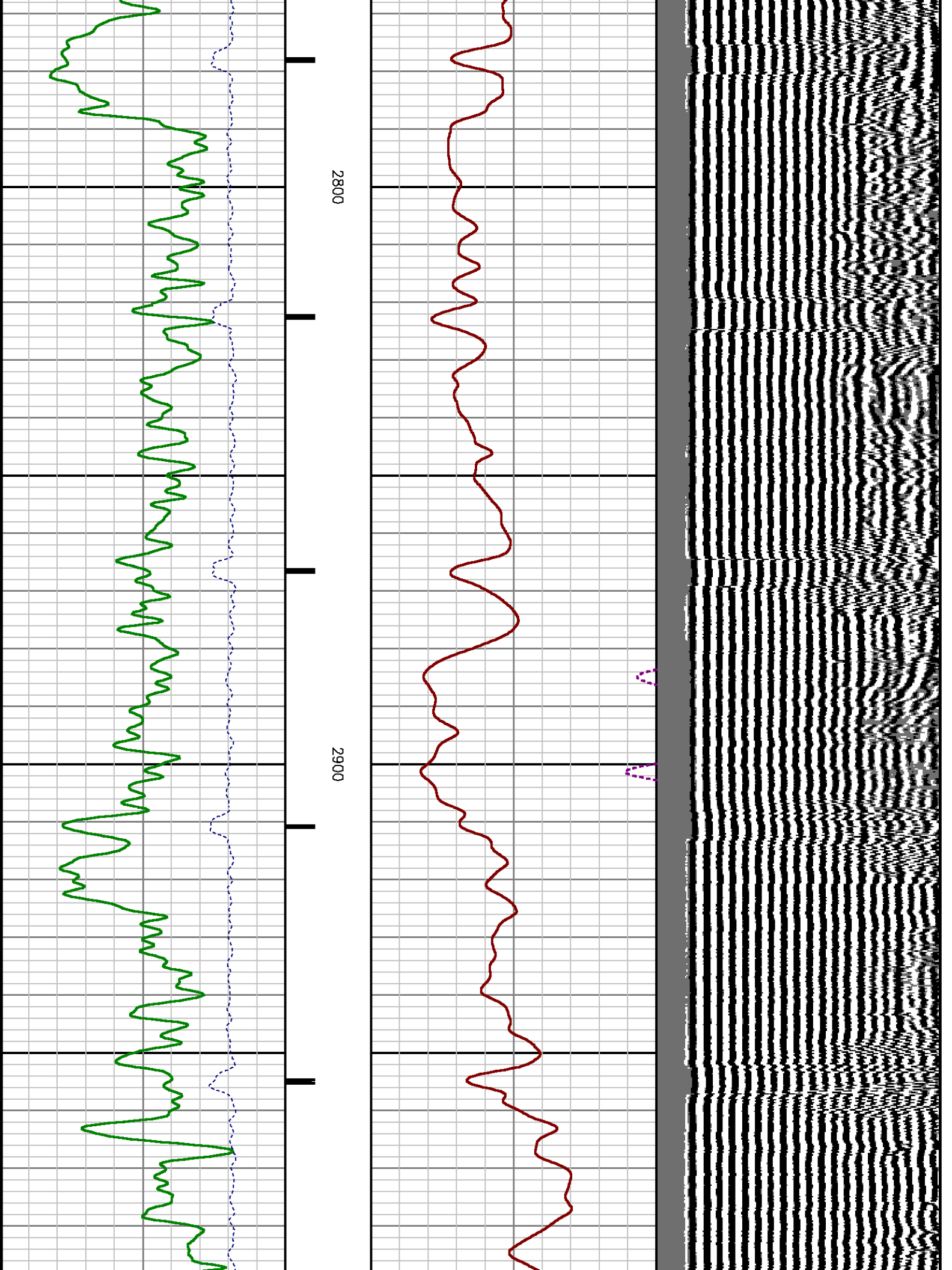


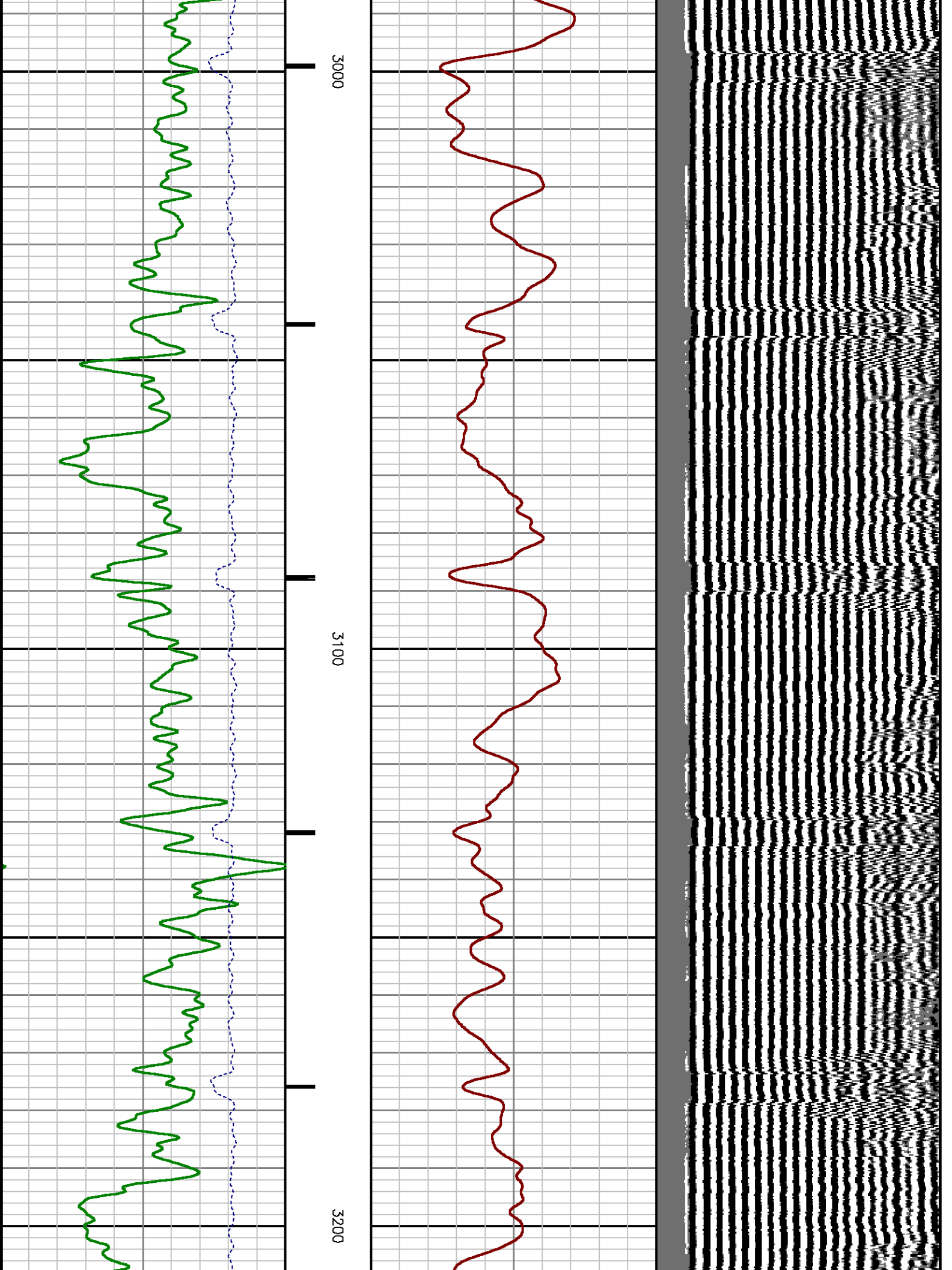


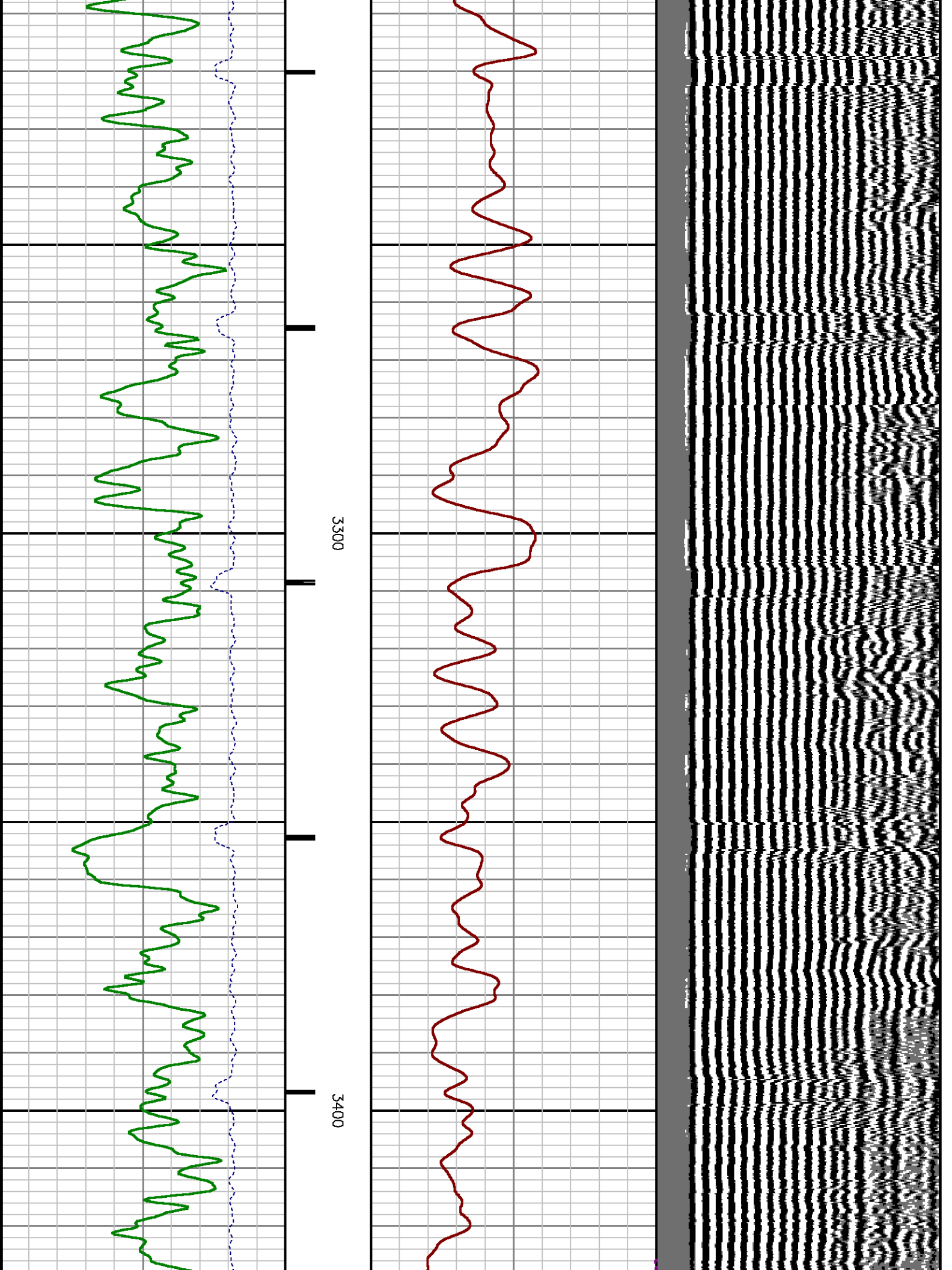


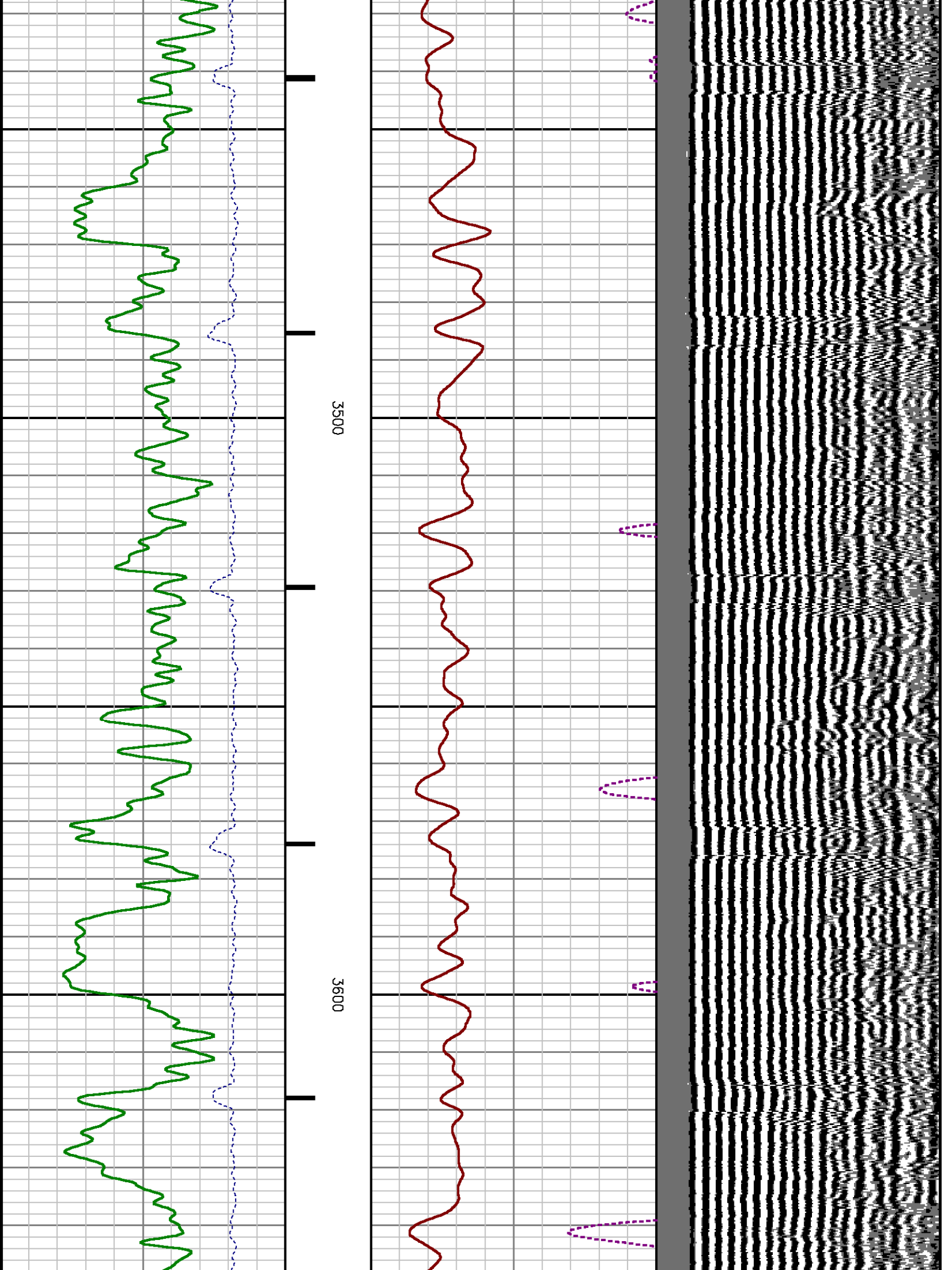


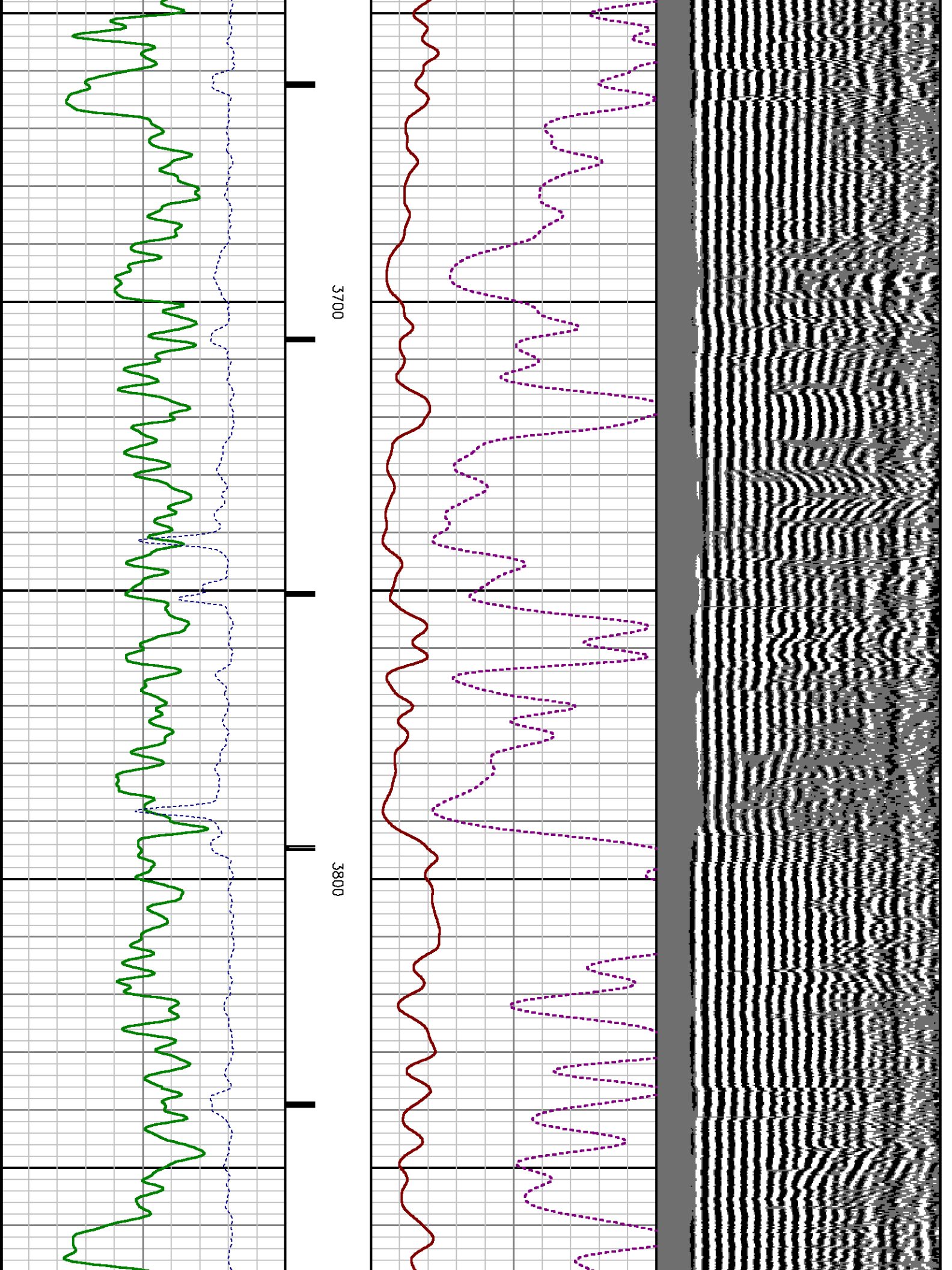


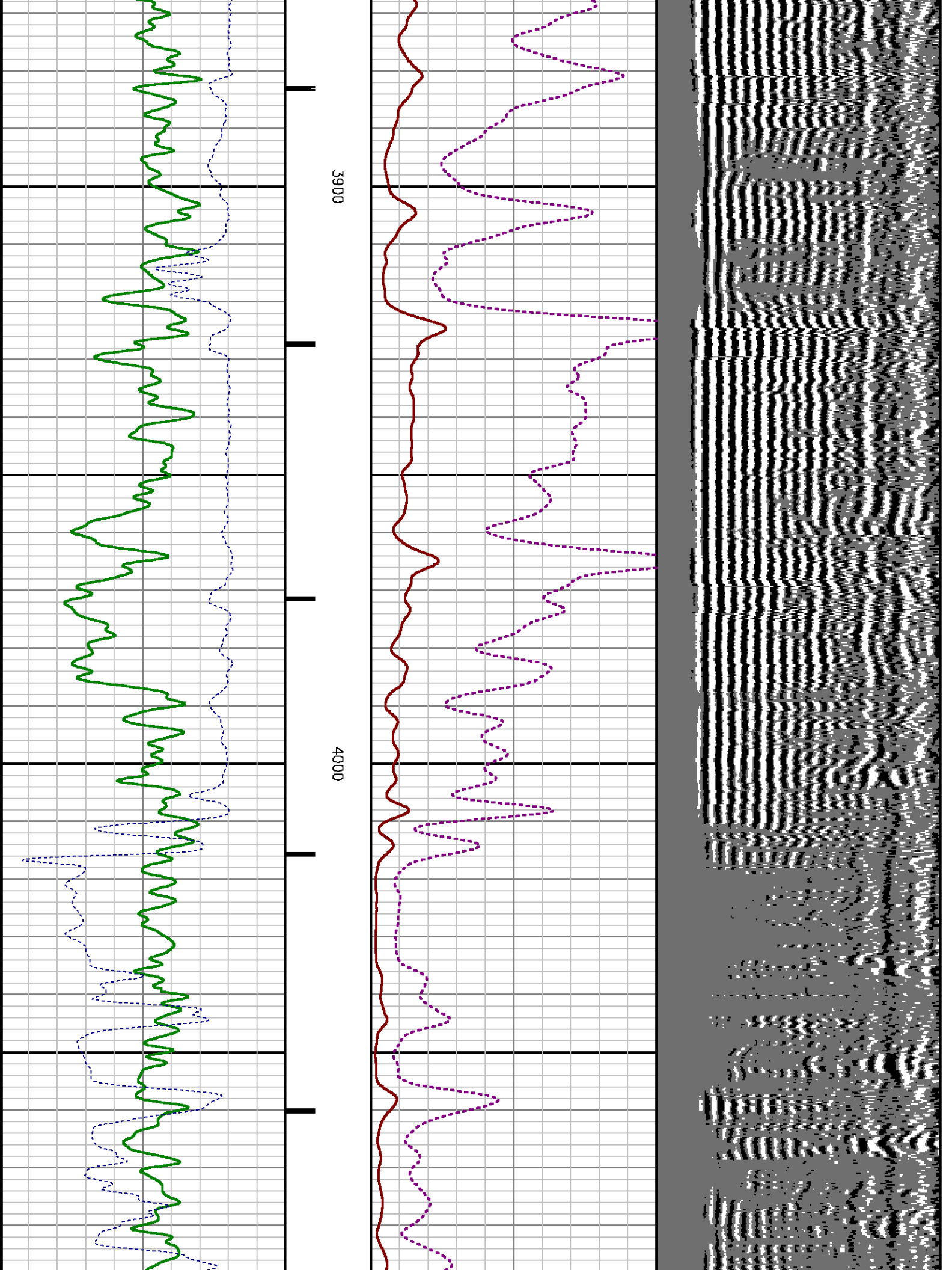


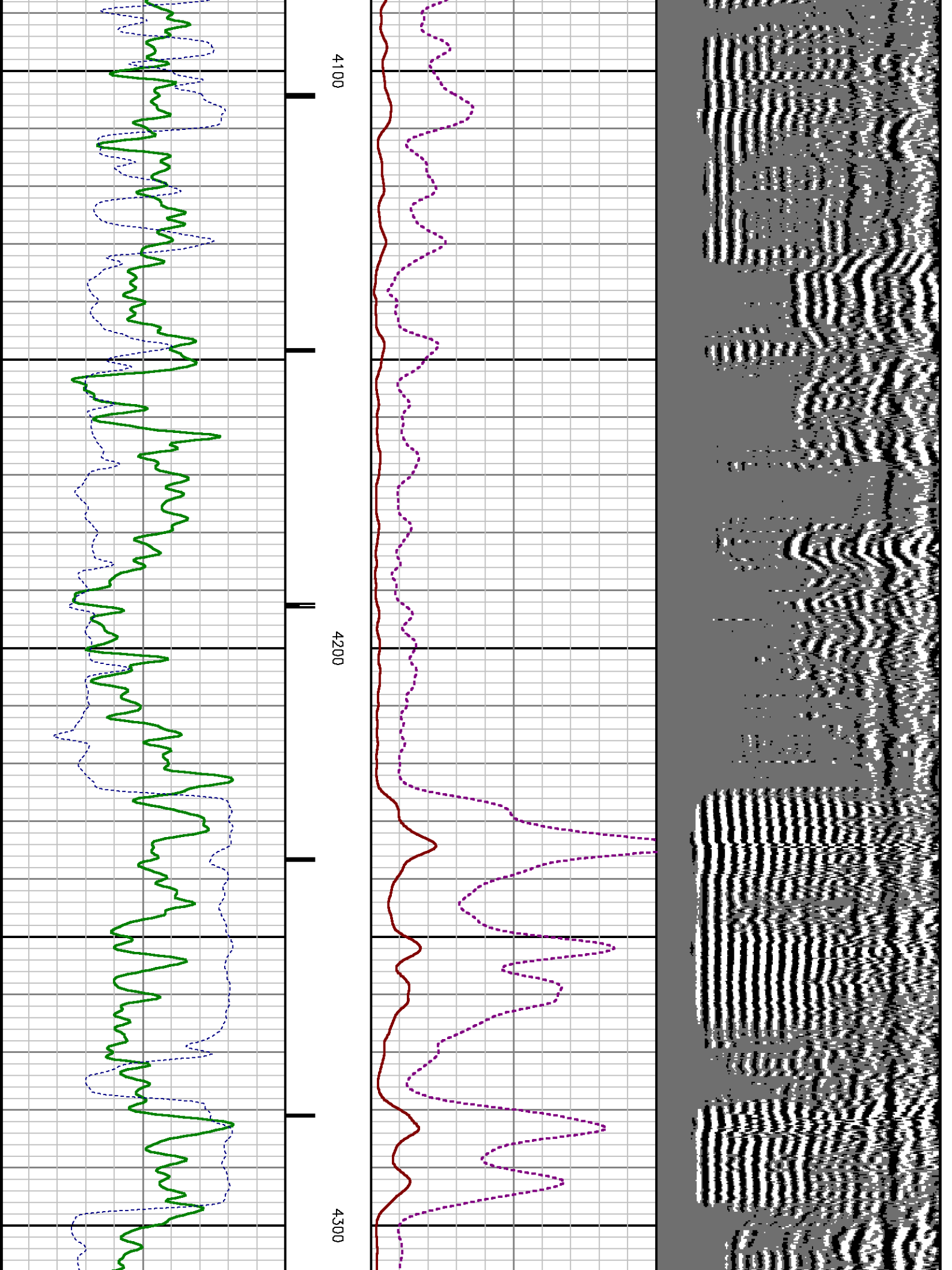


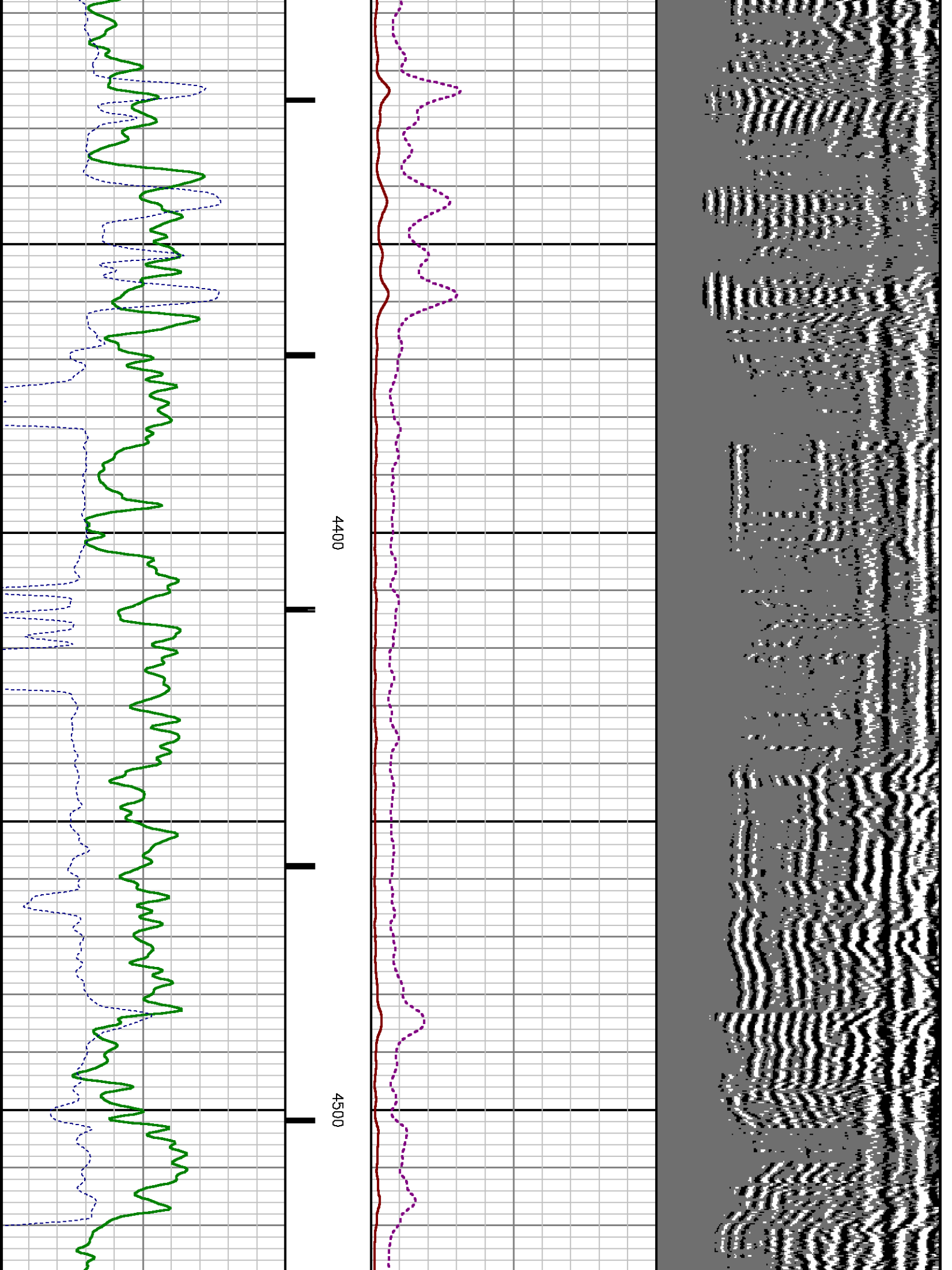


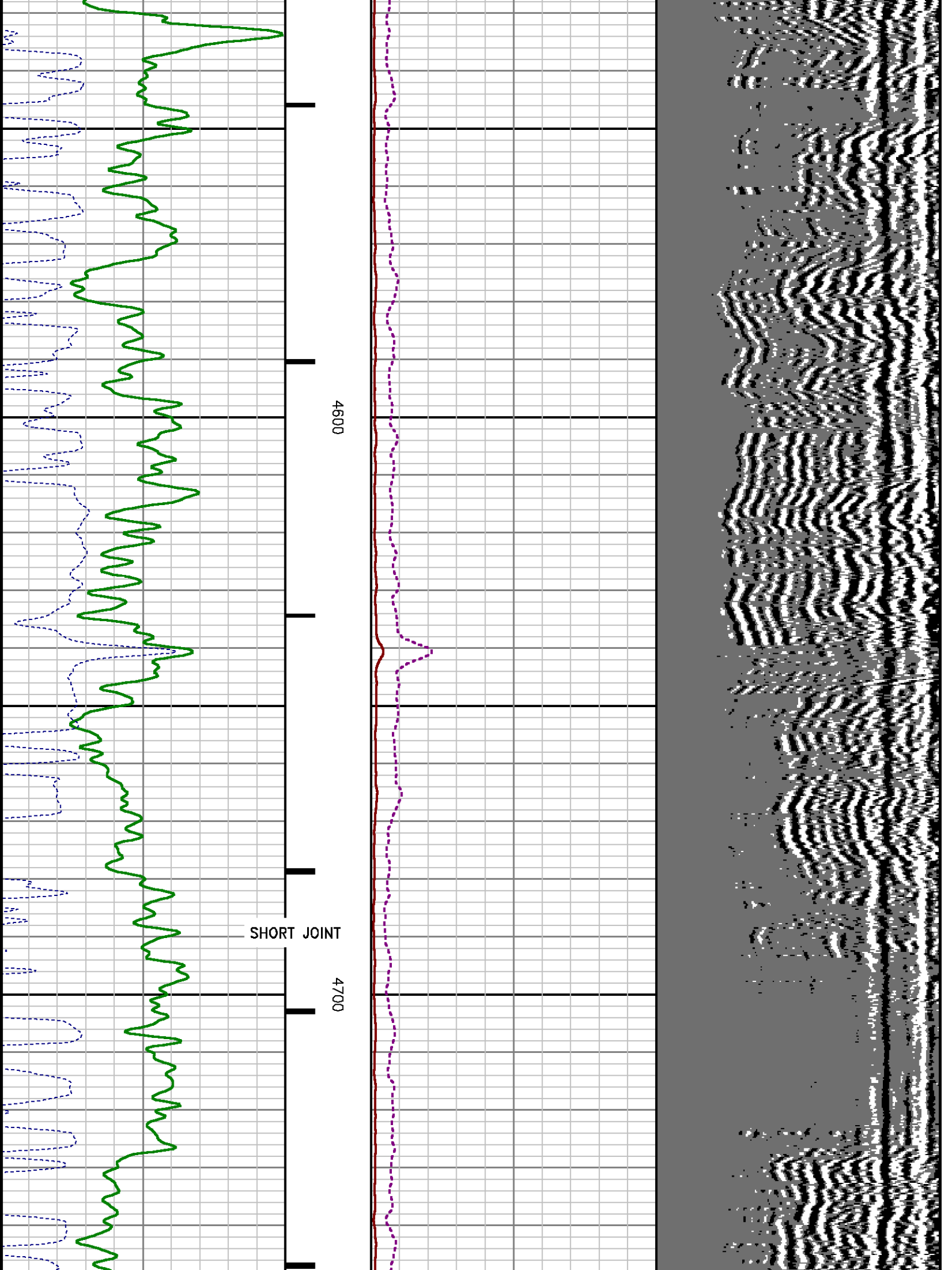


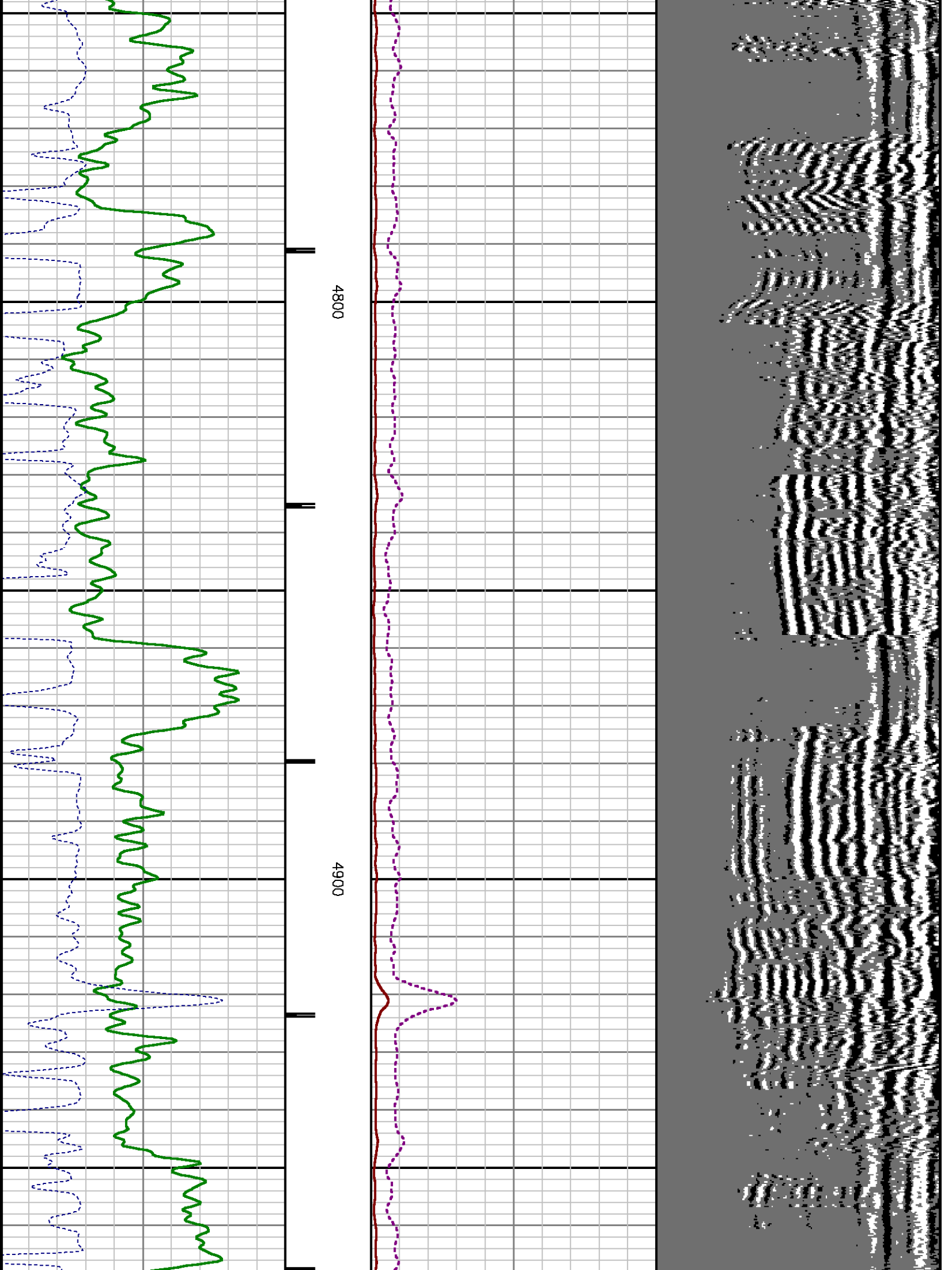


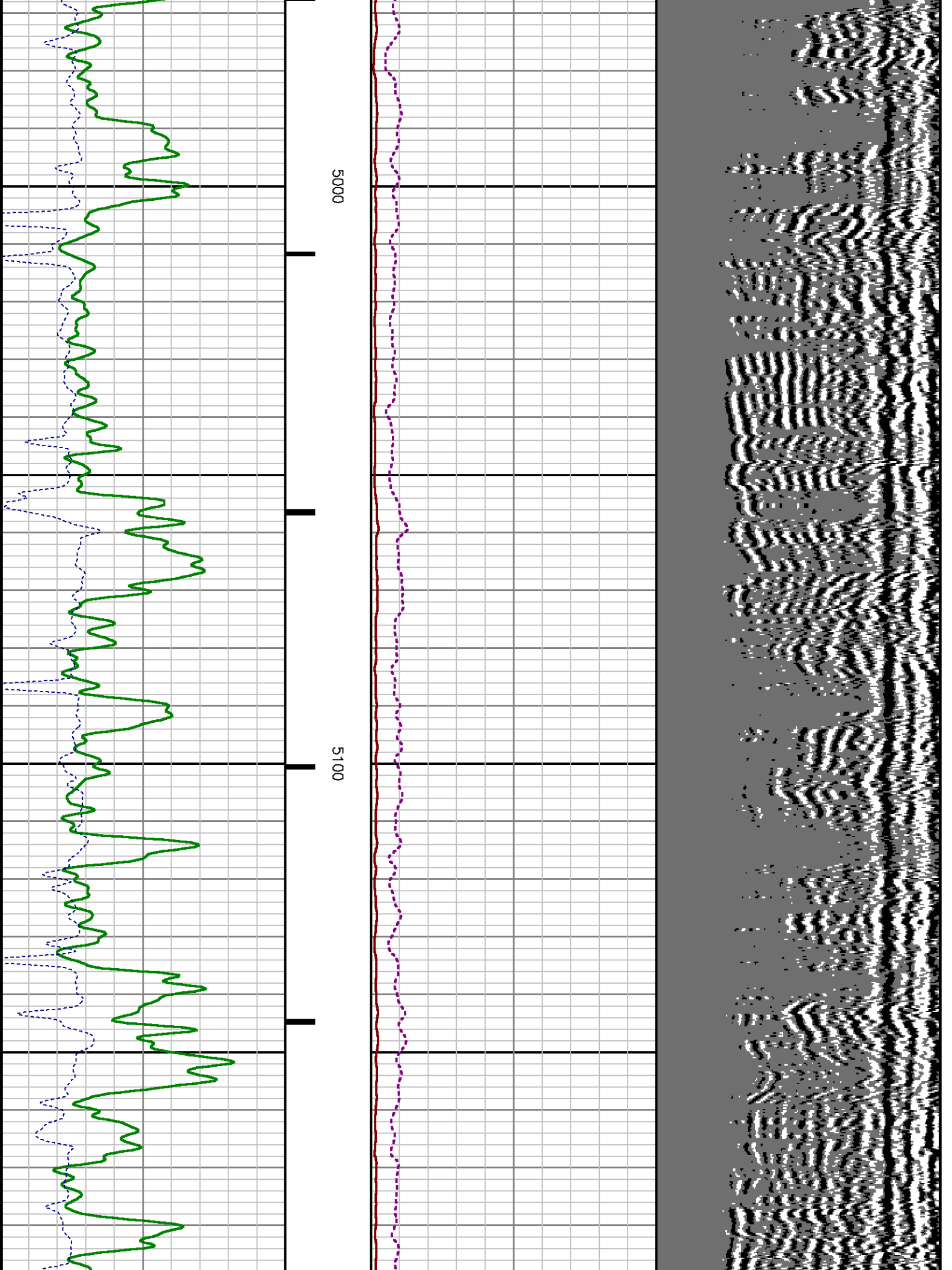


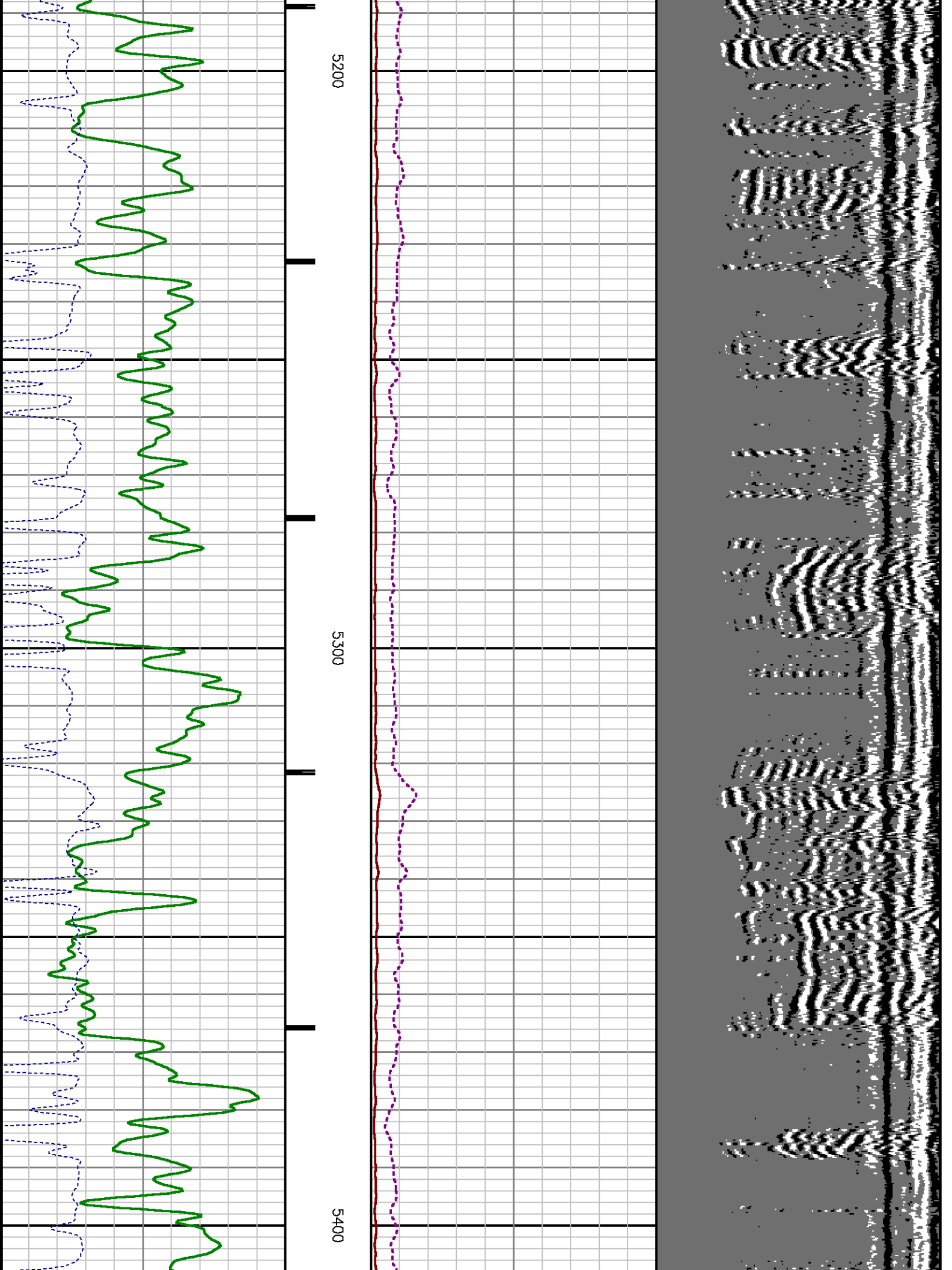


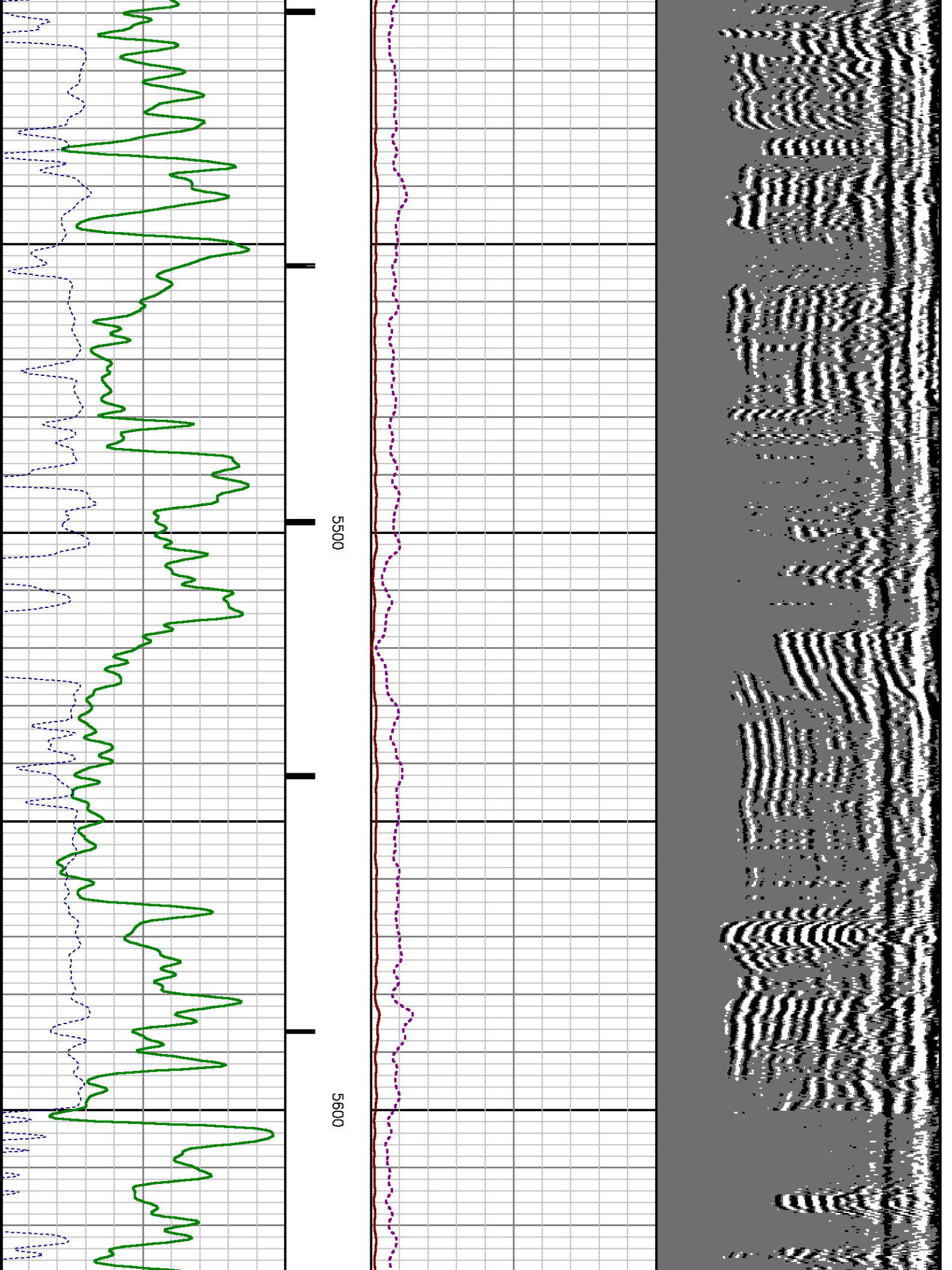


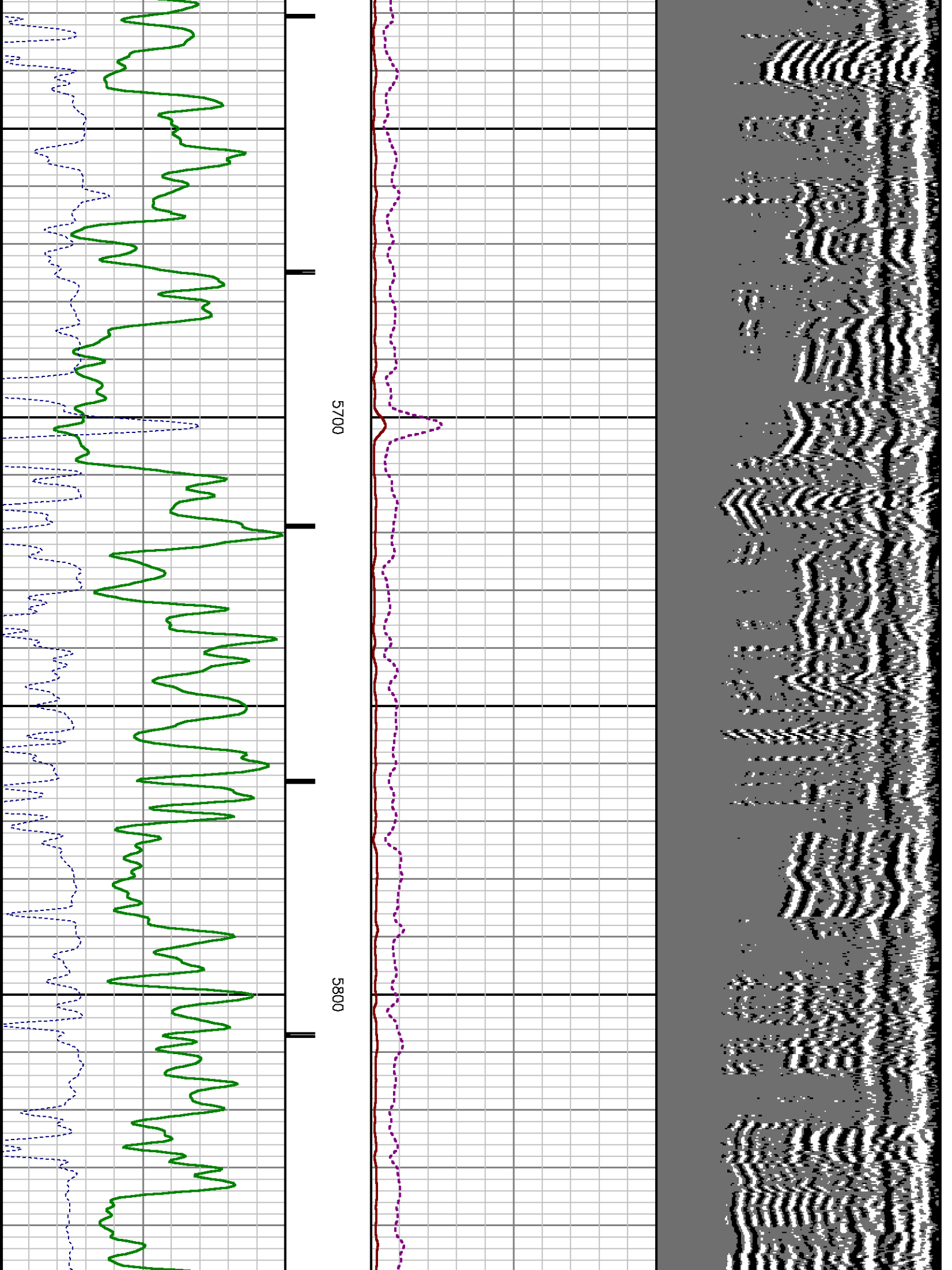


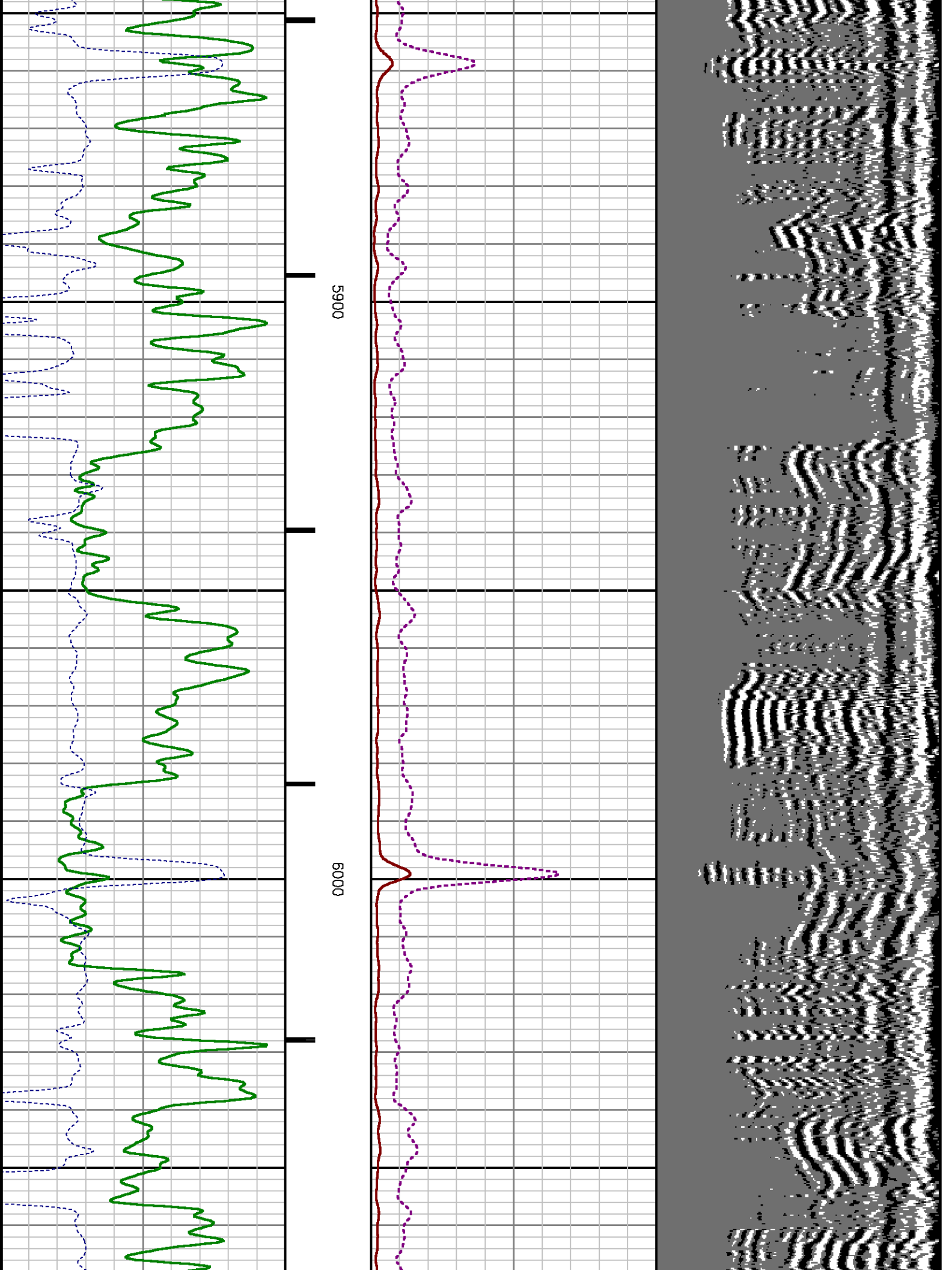


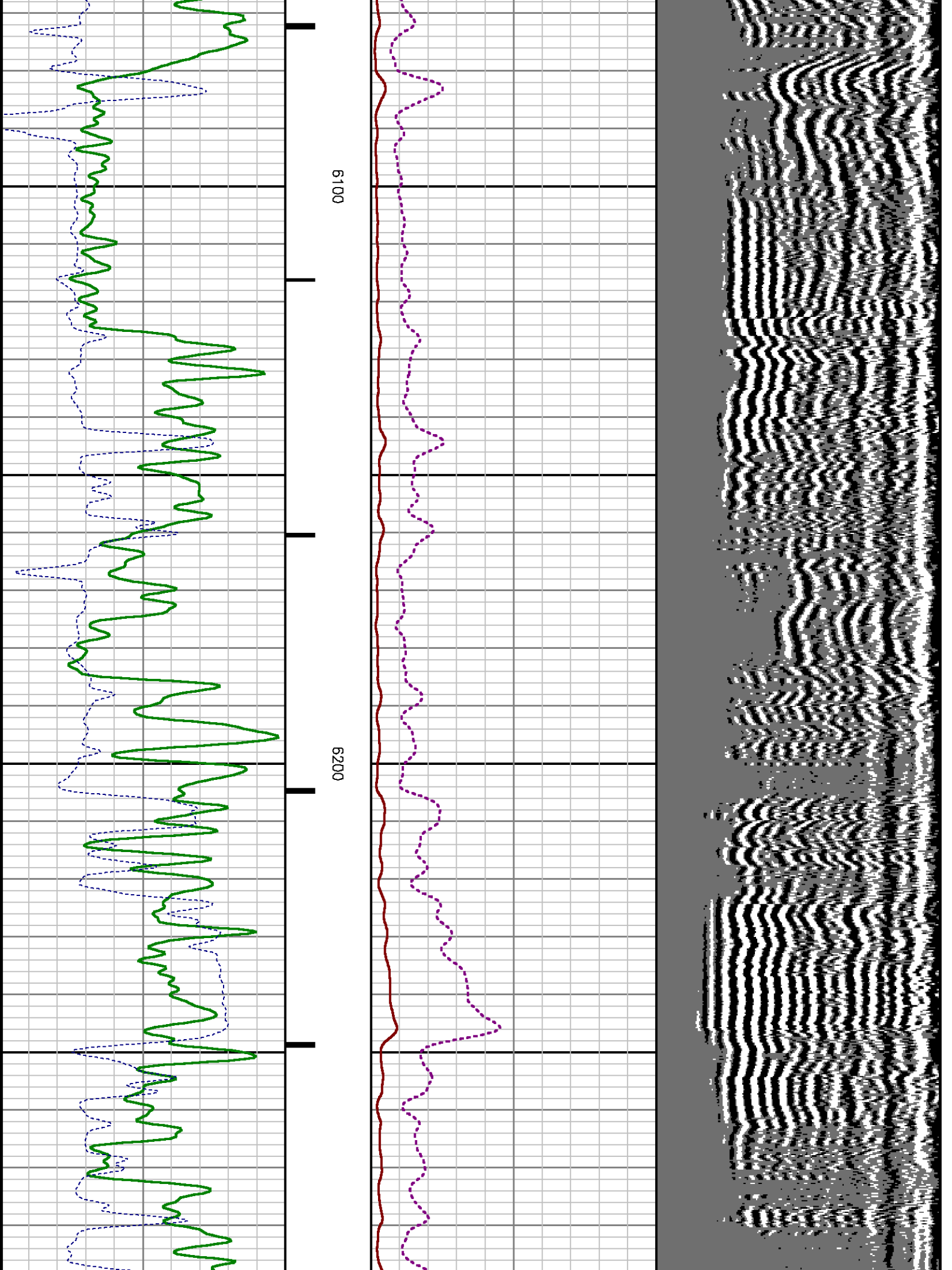


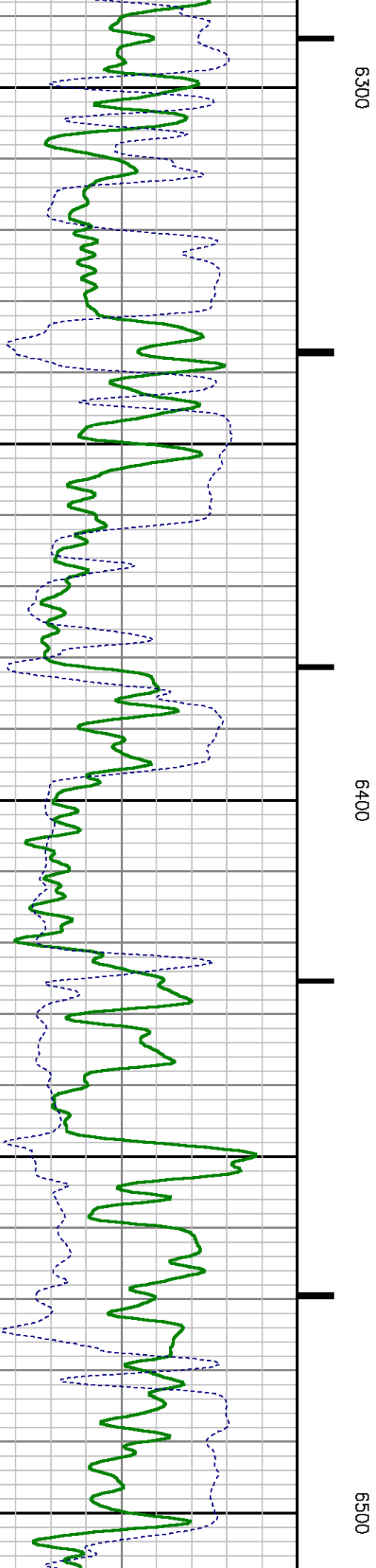
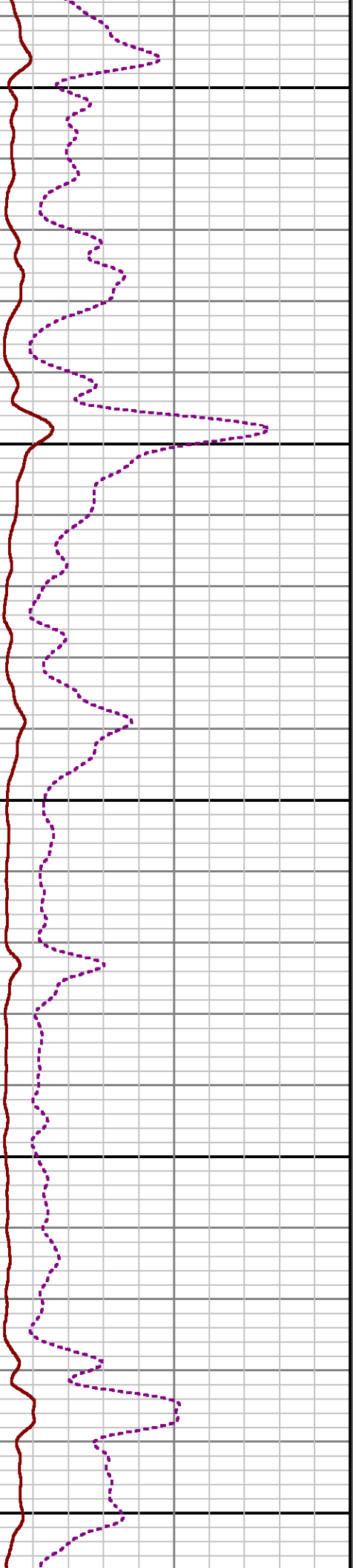
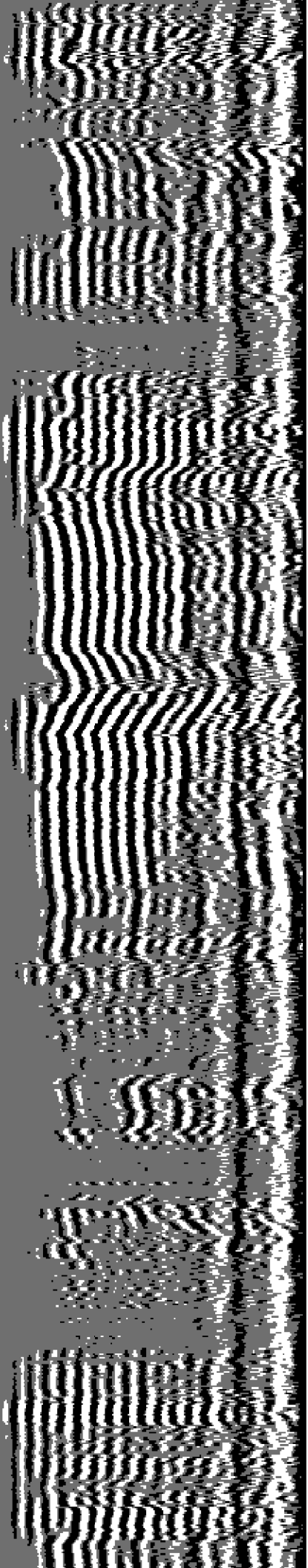


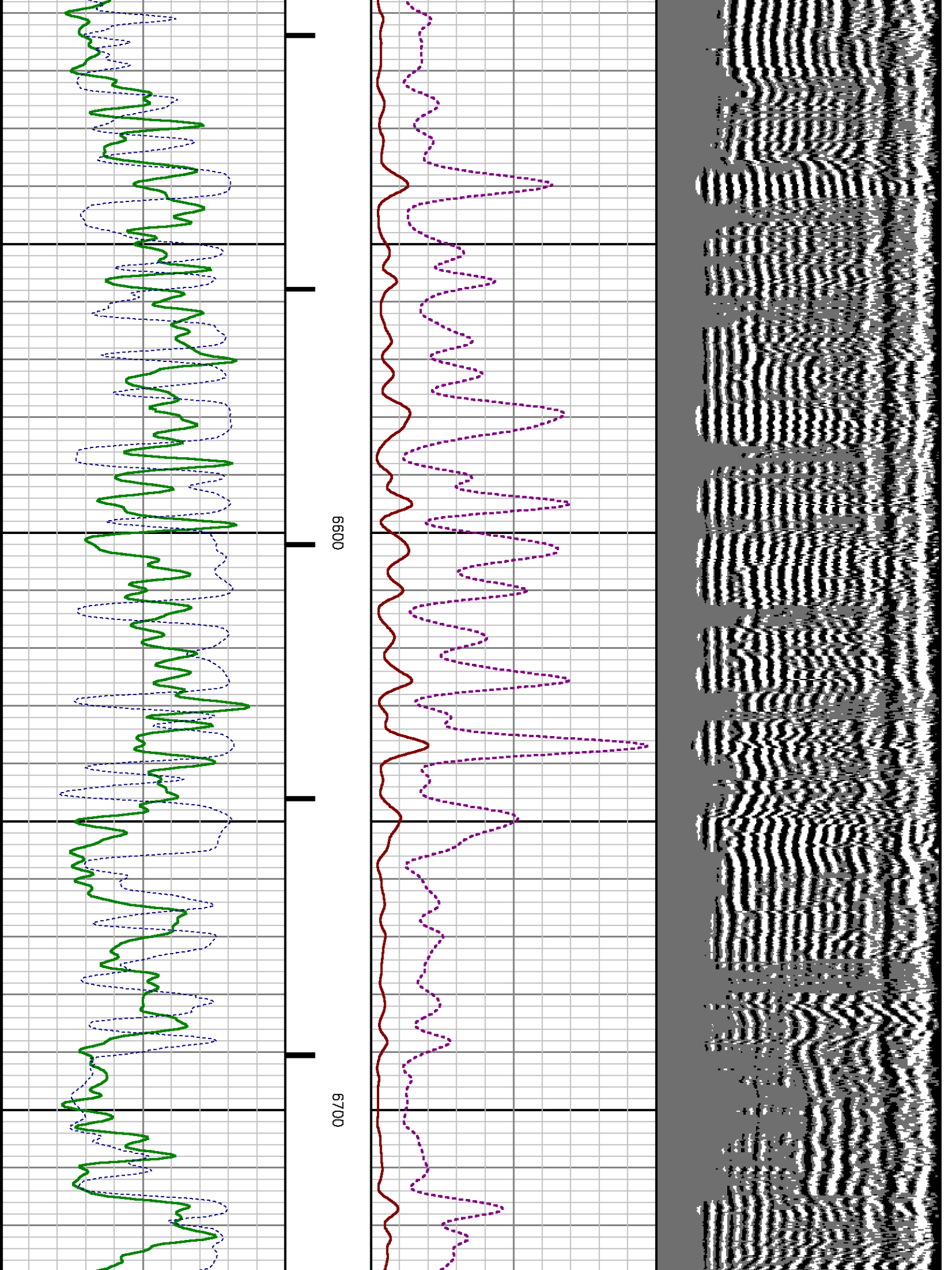


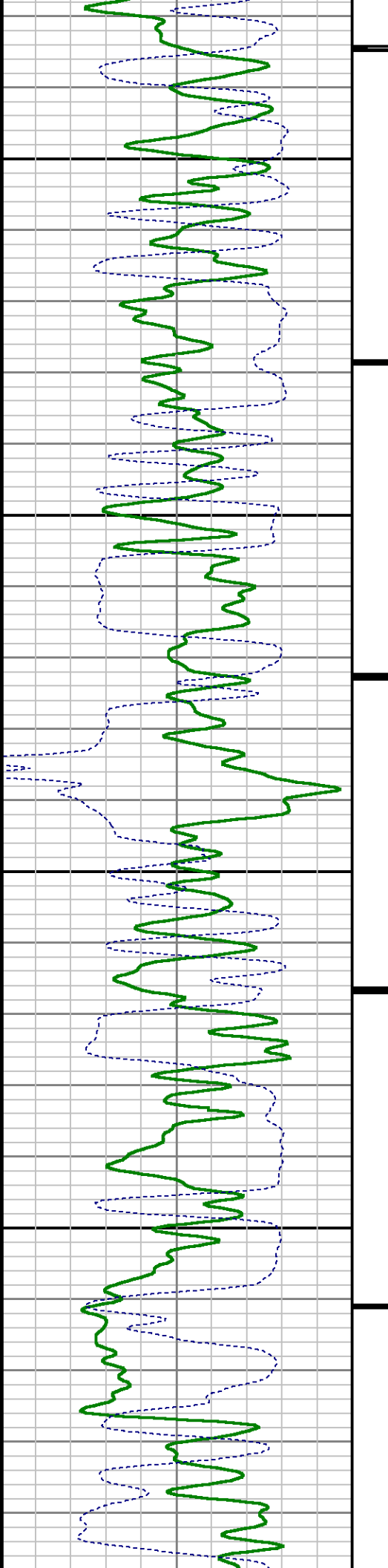






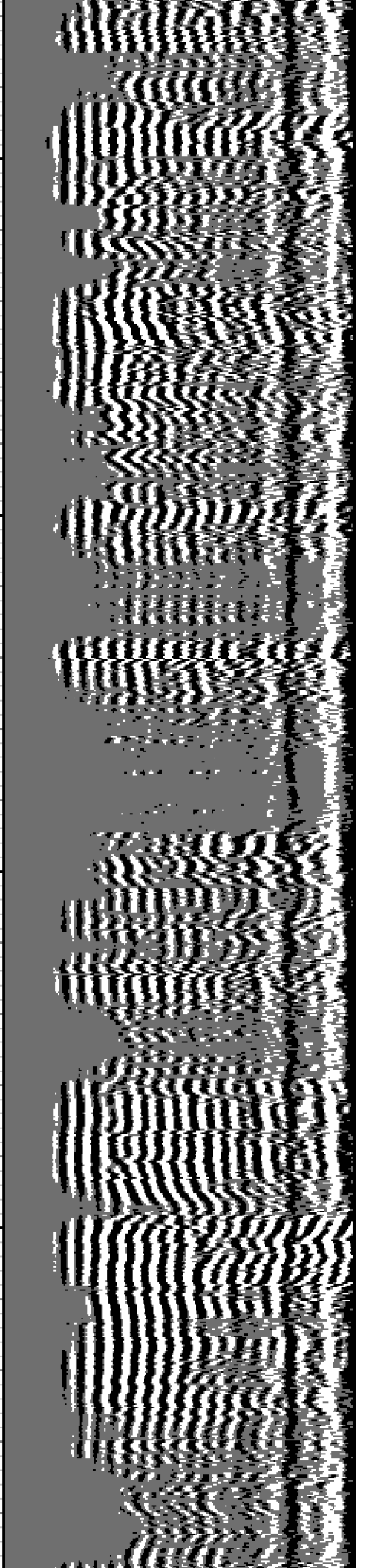
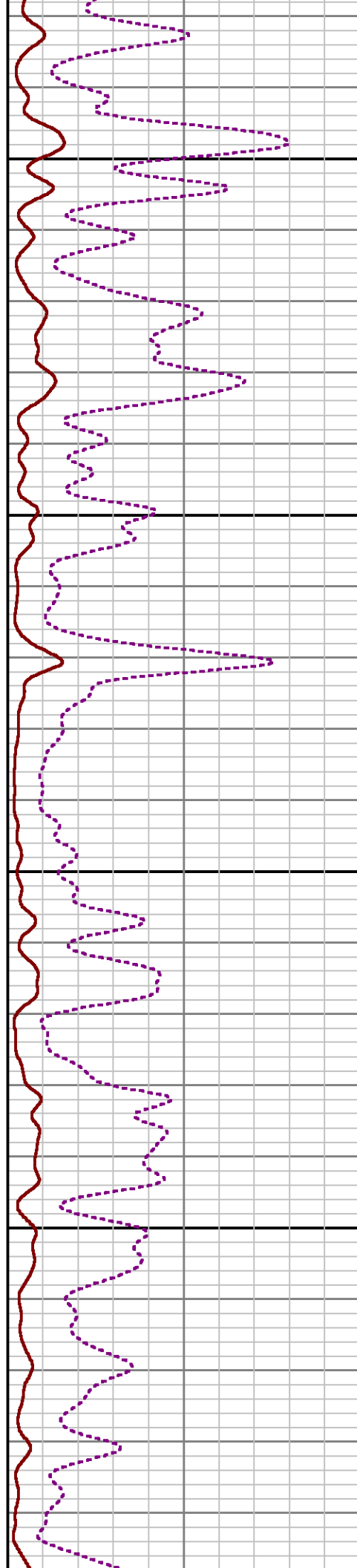


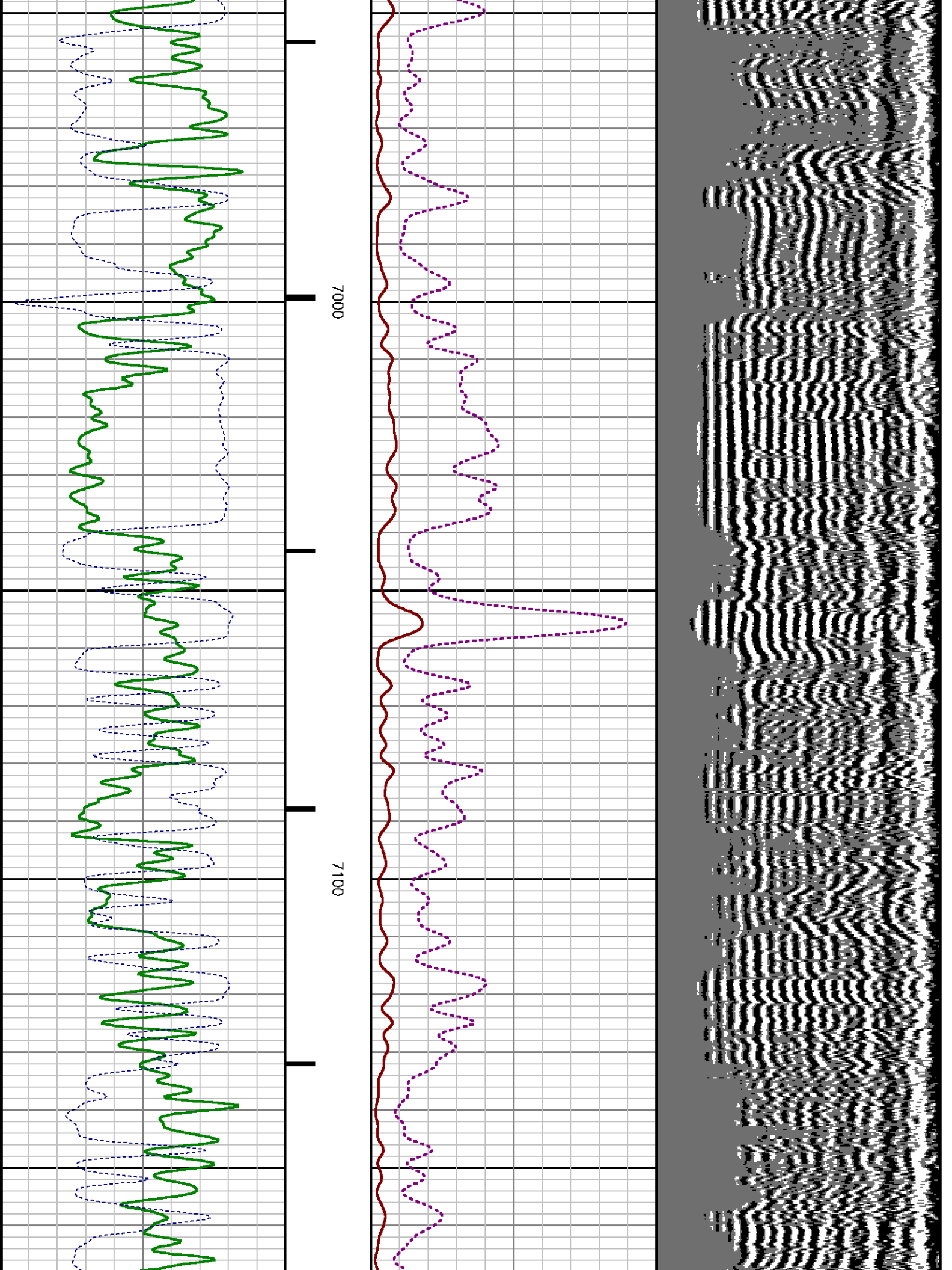


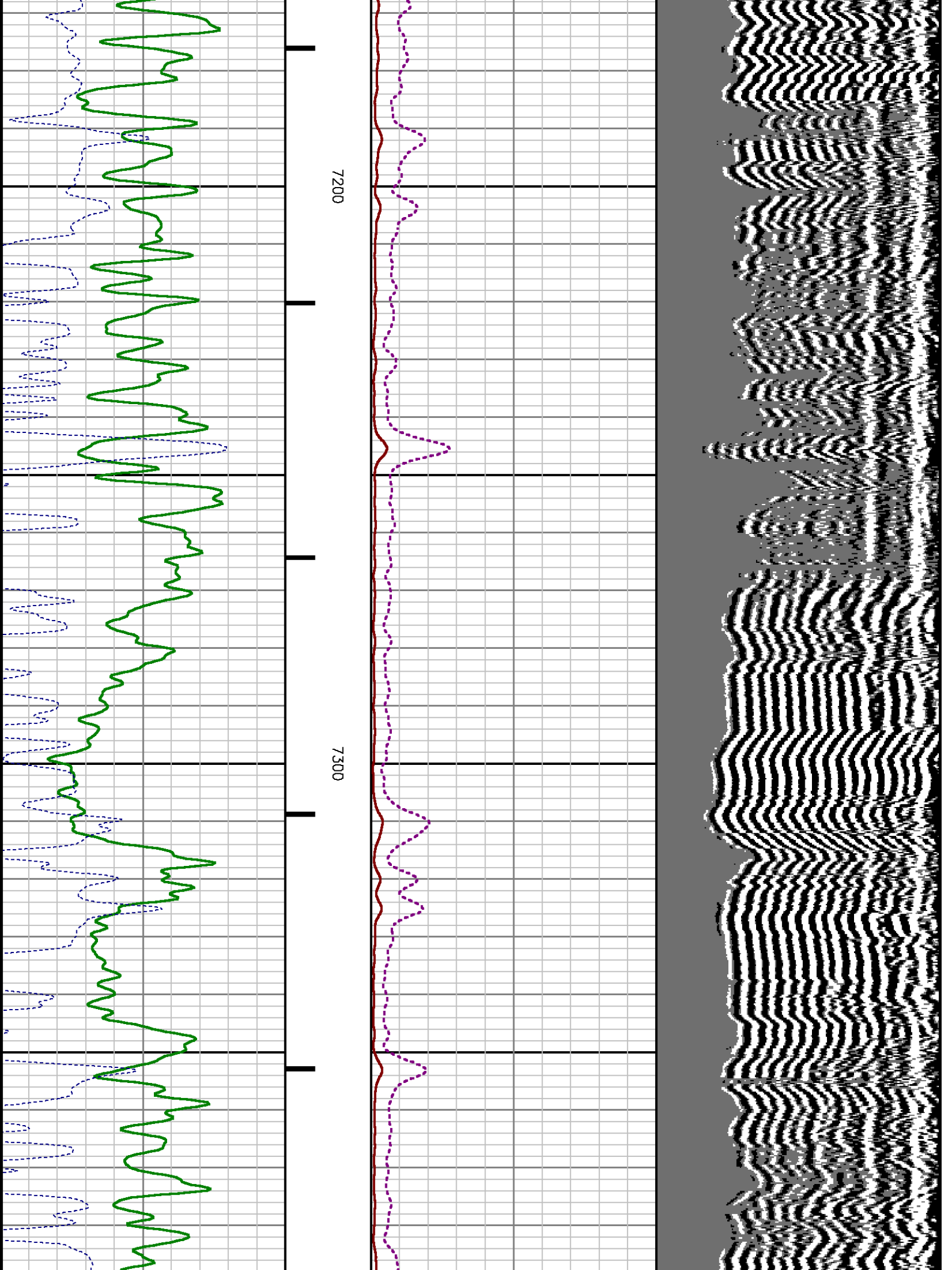


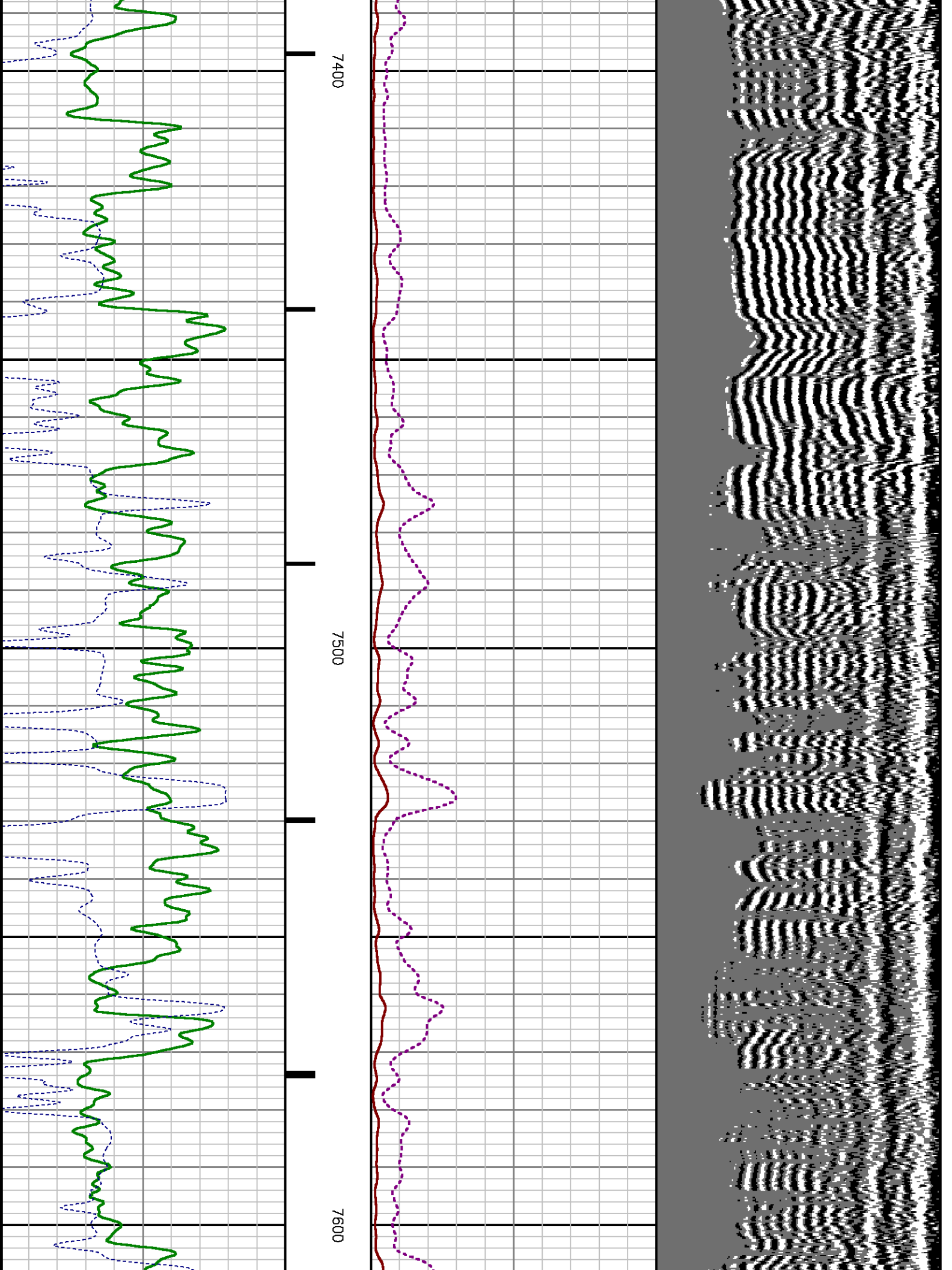
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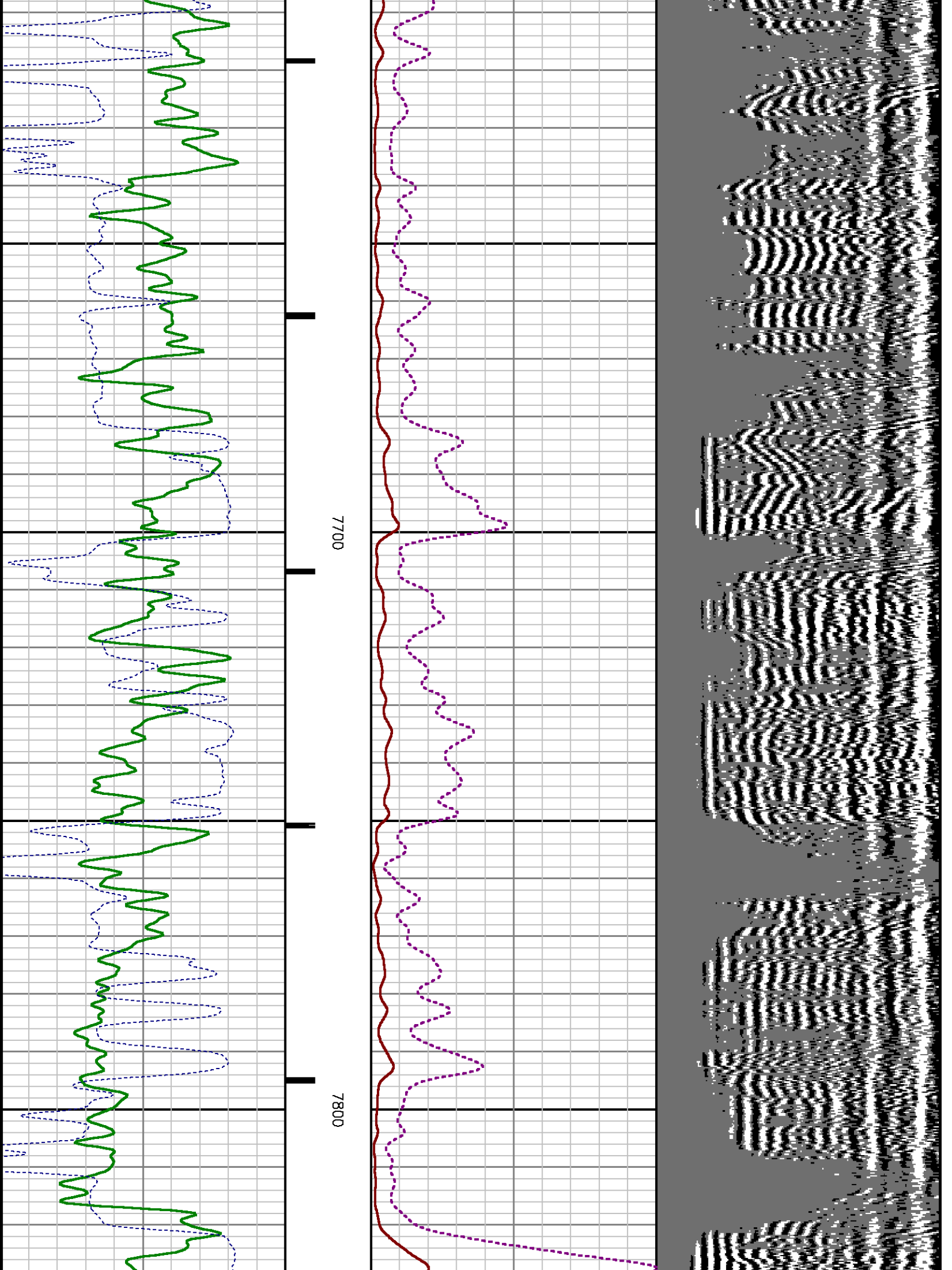
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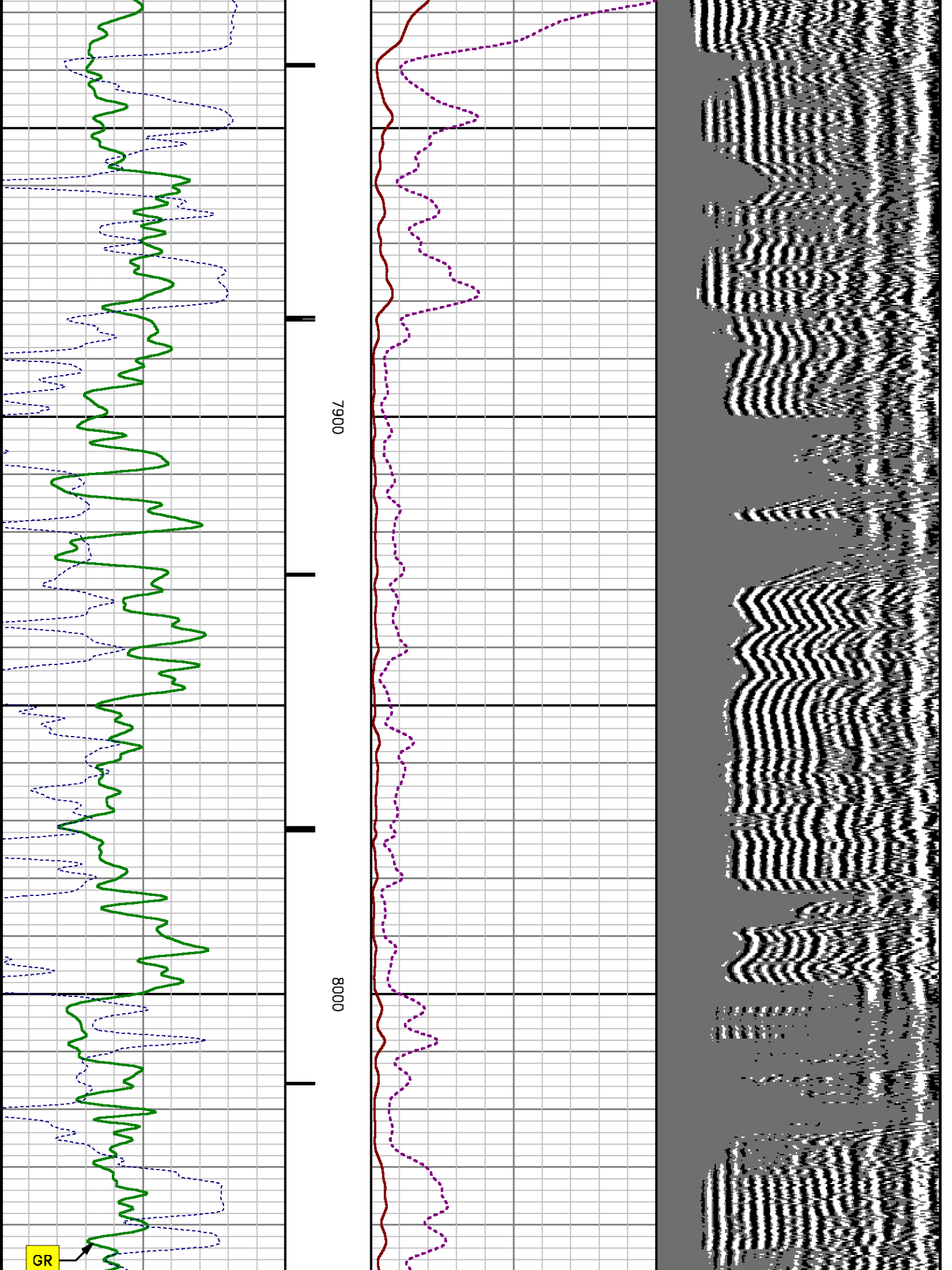


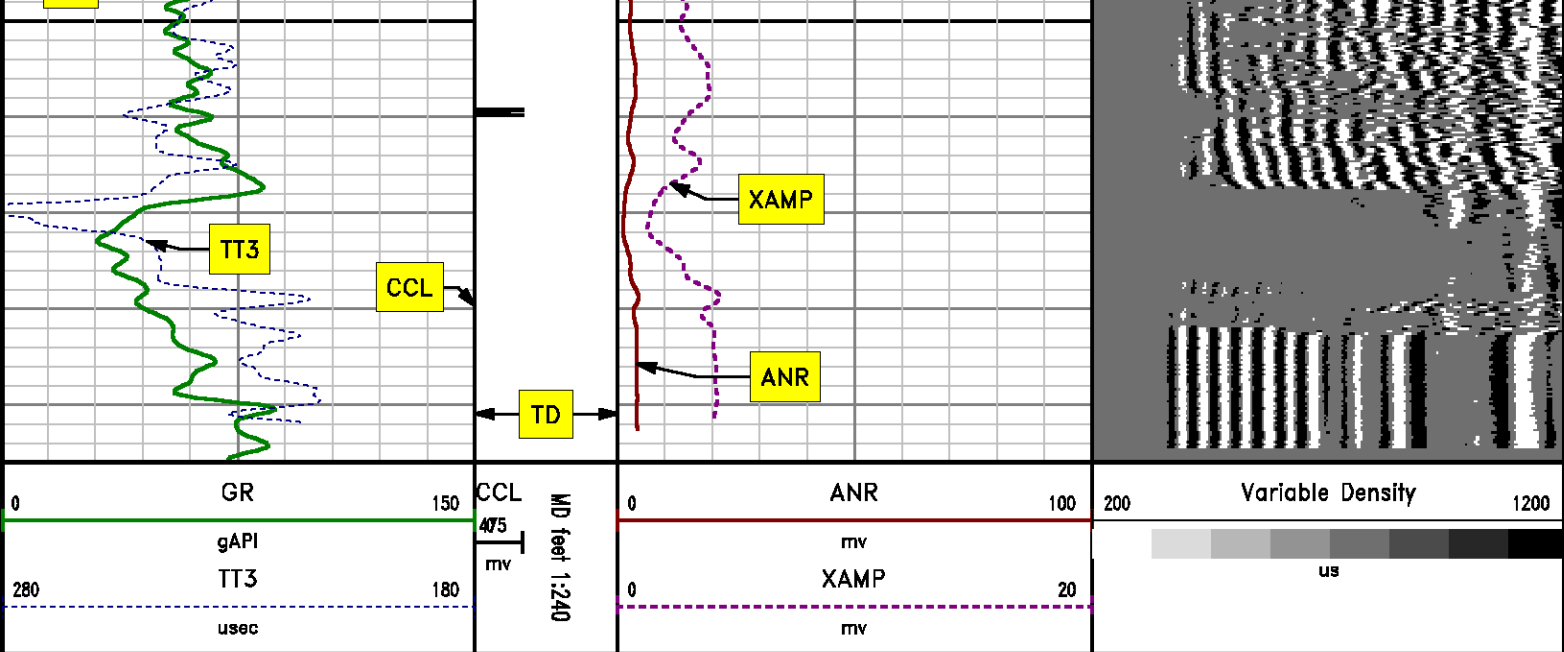












SECONDARY PRESENTATION

0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	29.750	8092.000
RAL	Amp Gate Start Near	195.000	usec	29.750	8092.000
RAL	Amp Gate Start Radial	195.000	usec	29.750	8092.000
RAL	Amp Gate Width Far	25.000	usec	29.750	8092.000
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RAL	casing od	4.500	inches	29.750	8092.000
RAL	casing wt	11.600	lbm/ft	29.750	8092.000
RAL	FB Start Far	291.900	usec	29.750	8092.000
RAL	FB Start Near	180.000	usec	29.750	8092.000
RAL	FB Start Radial	180.000	usec	29.750	8092.000
RAL	FB Thresh Far	10.000	mv	29.750	8092.000
RAL	FB Thresh Near	4.000	mv	29.750	8092.000
RAL	FB Thresh Radial	4.000	mv	29.750	8092.000
RAL	Fluid Travel Time	200.000	usec/ft	29.750	8092.000

DEPTH OFFSETS

(for Acquired Curves)

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

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

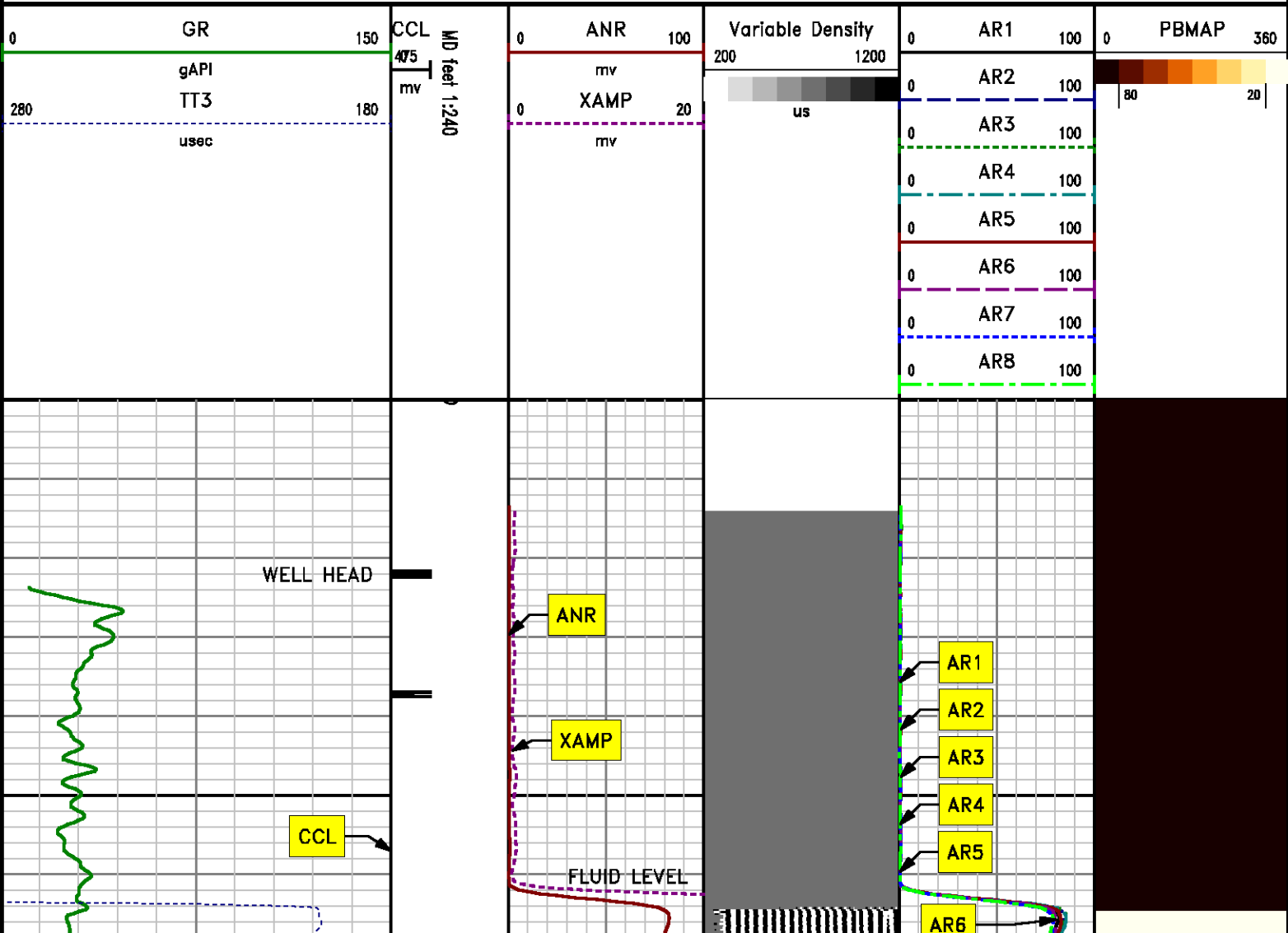
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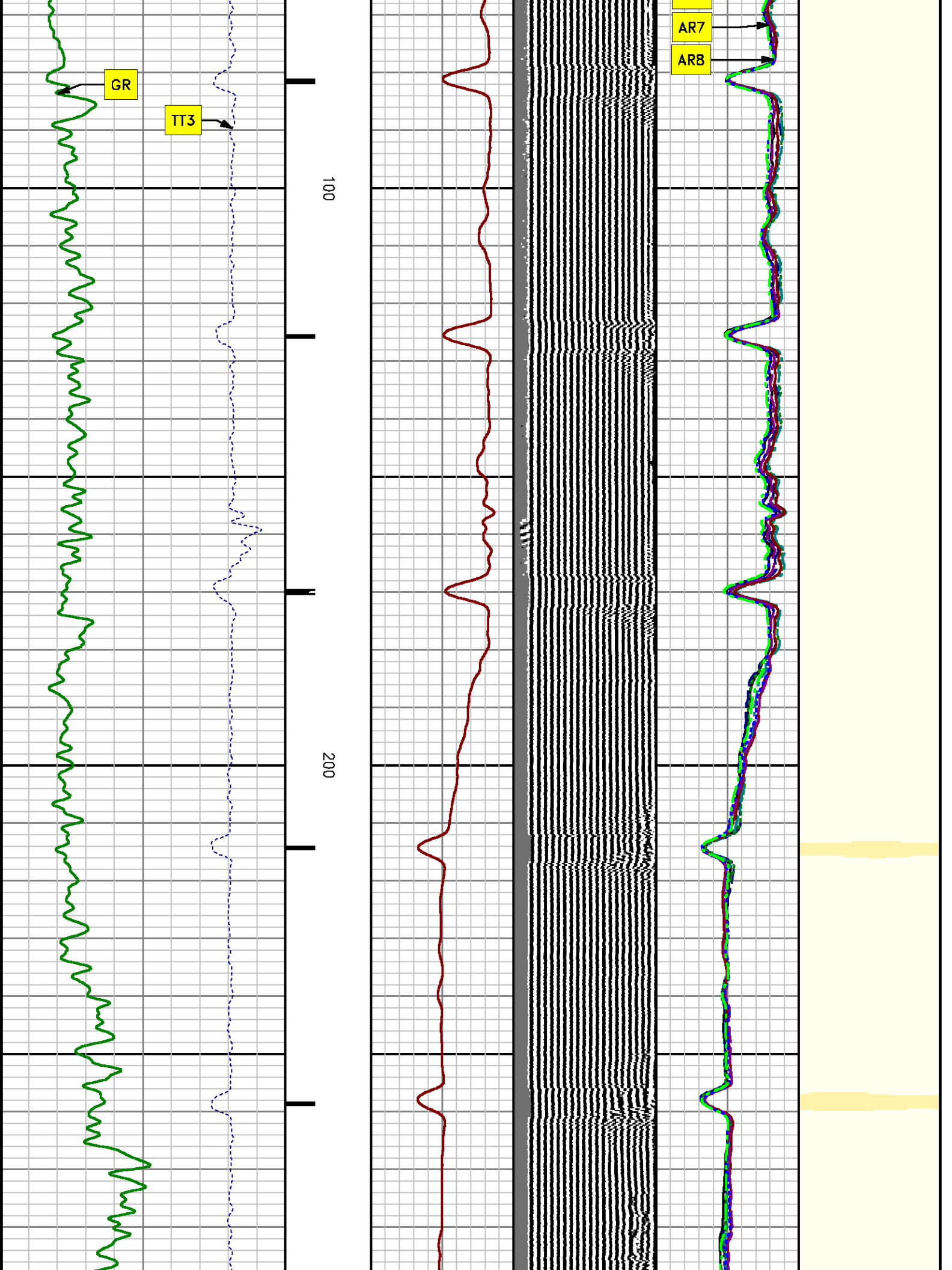
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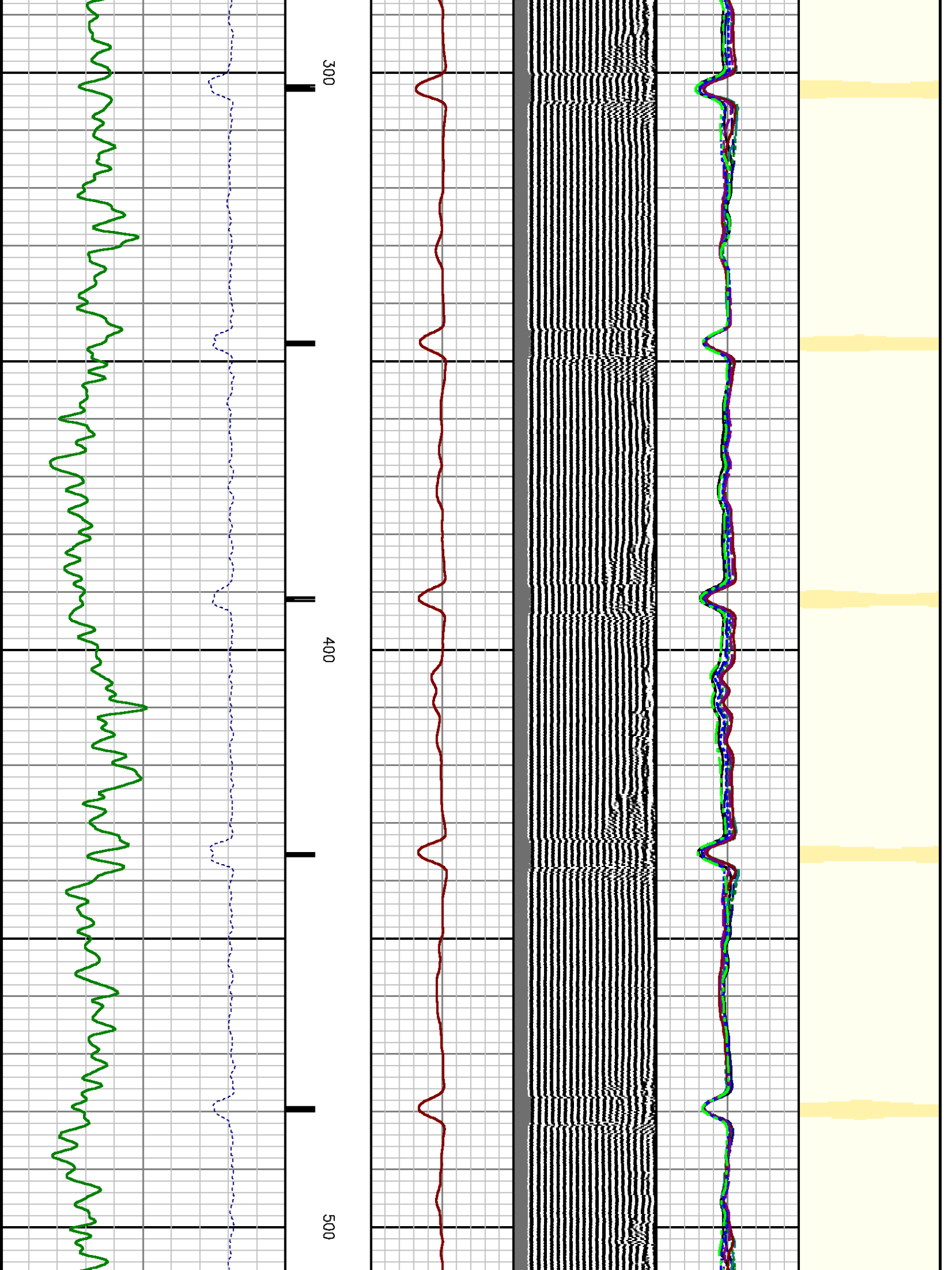
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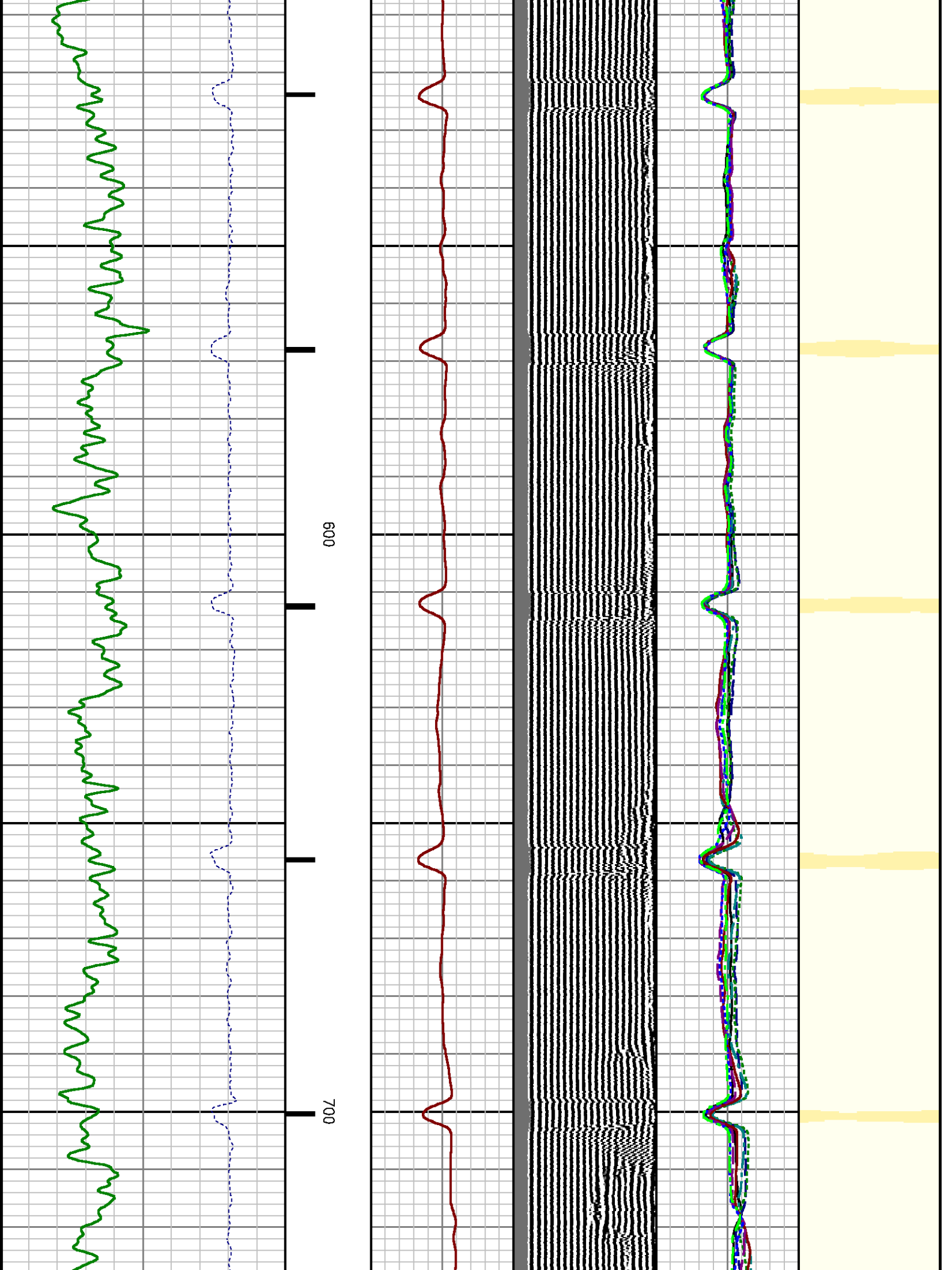
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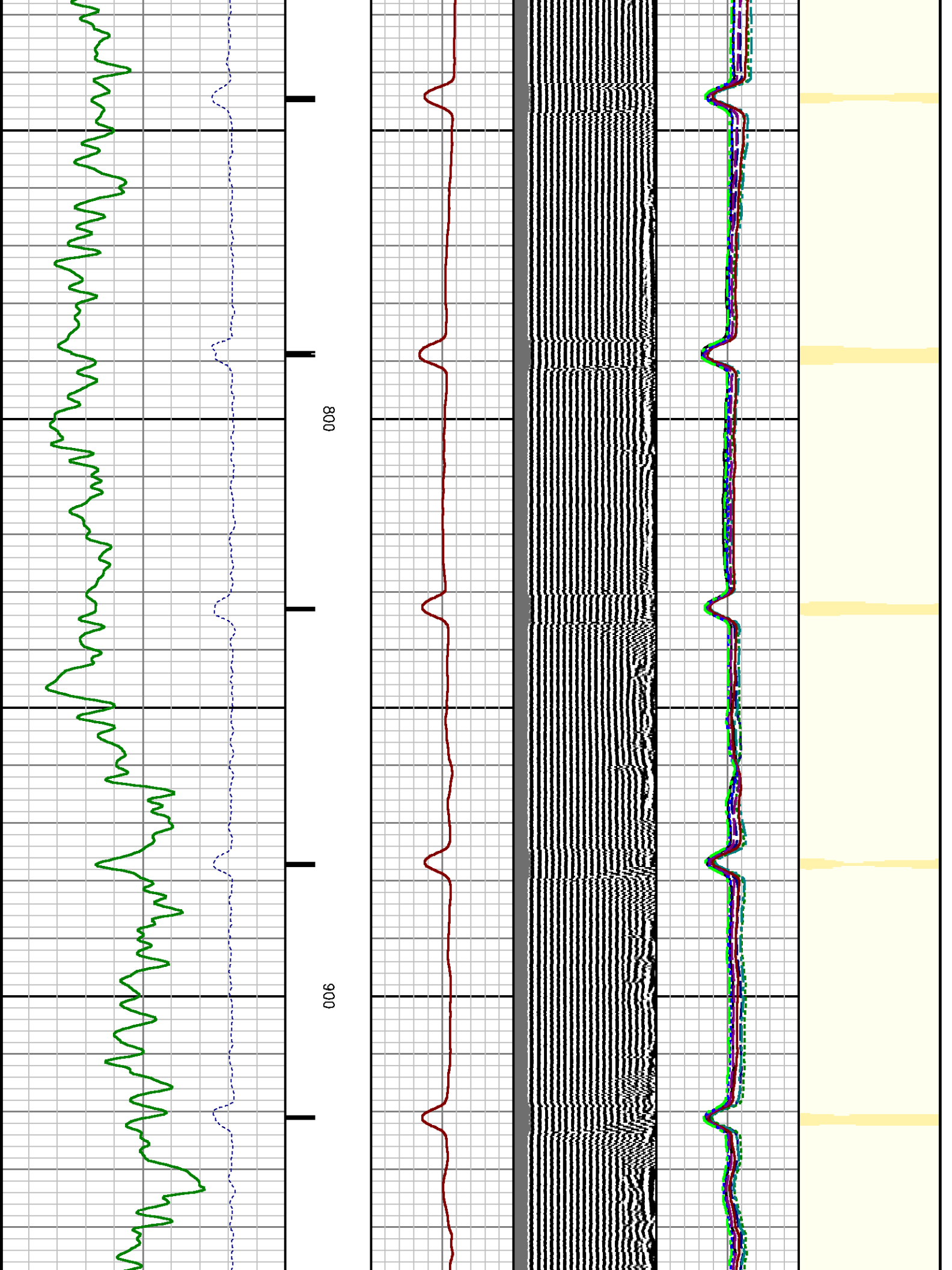
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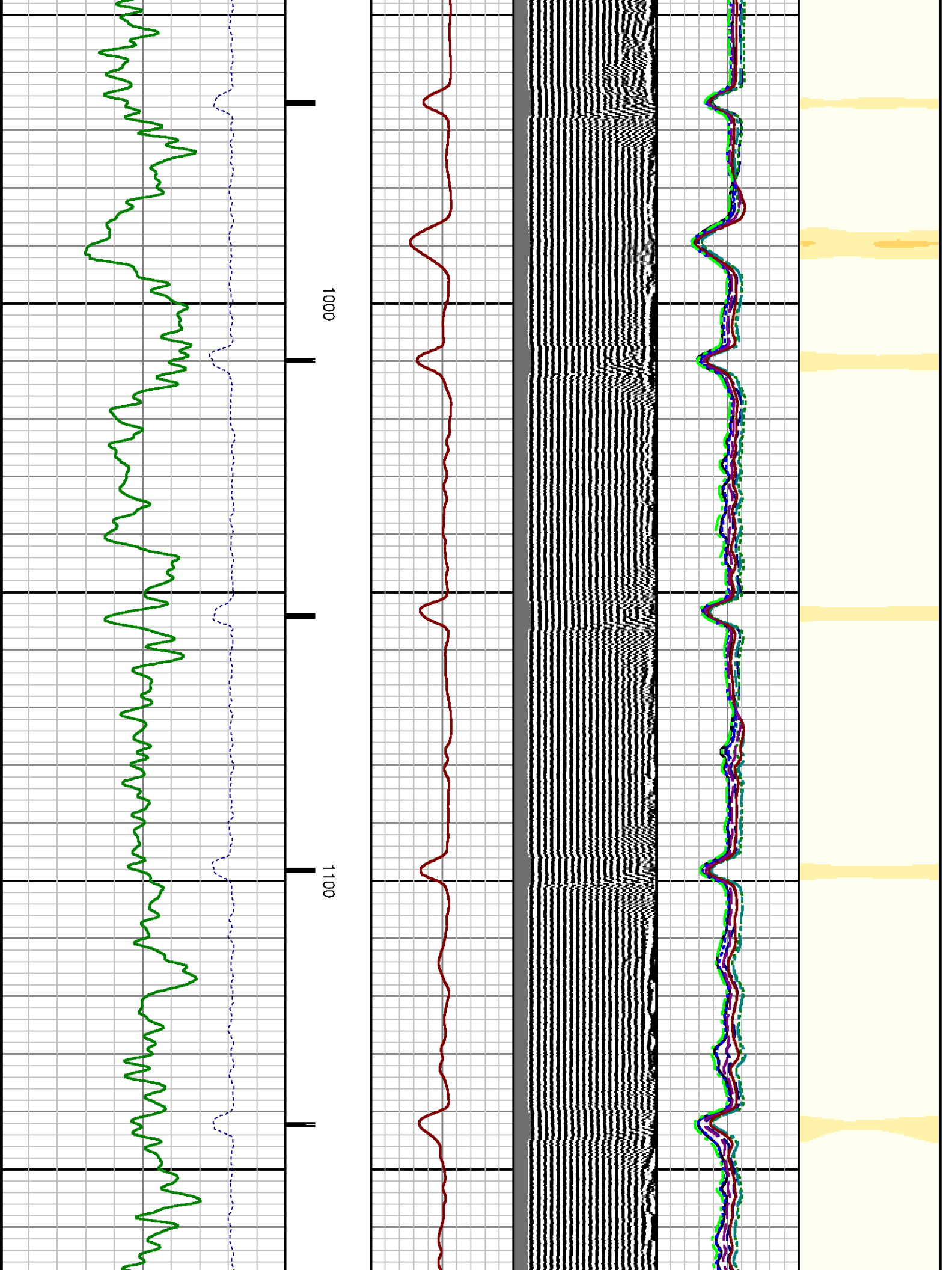


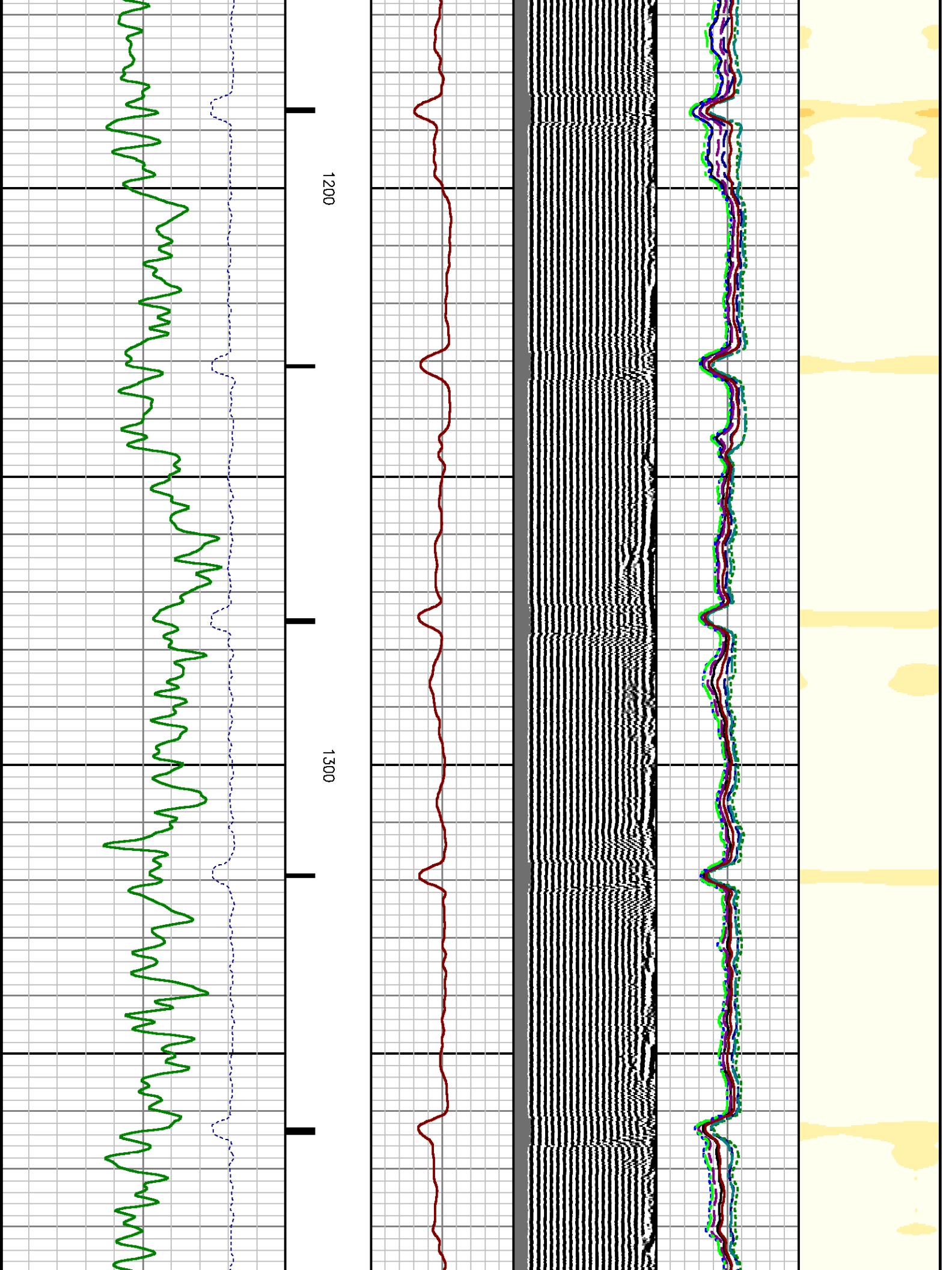


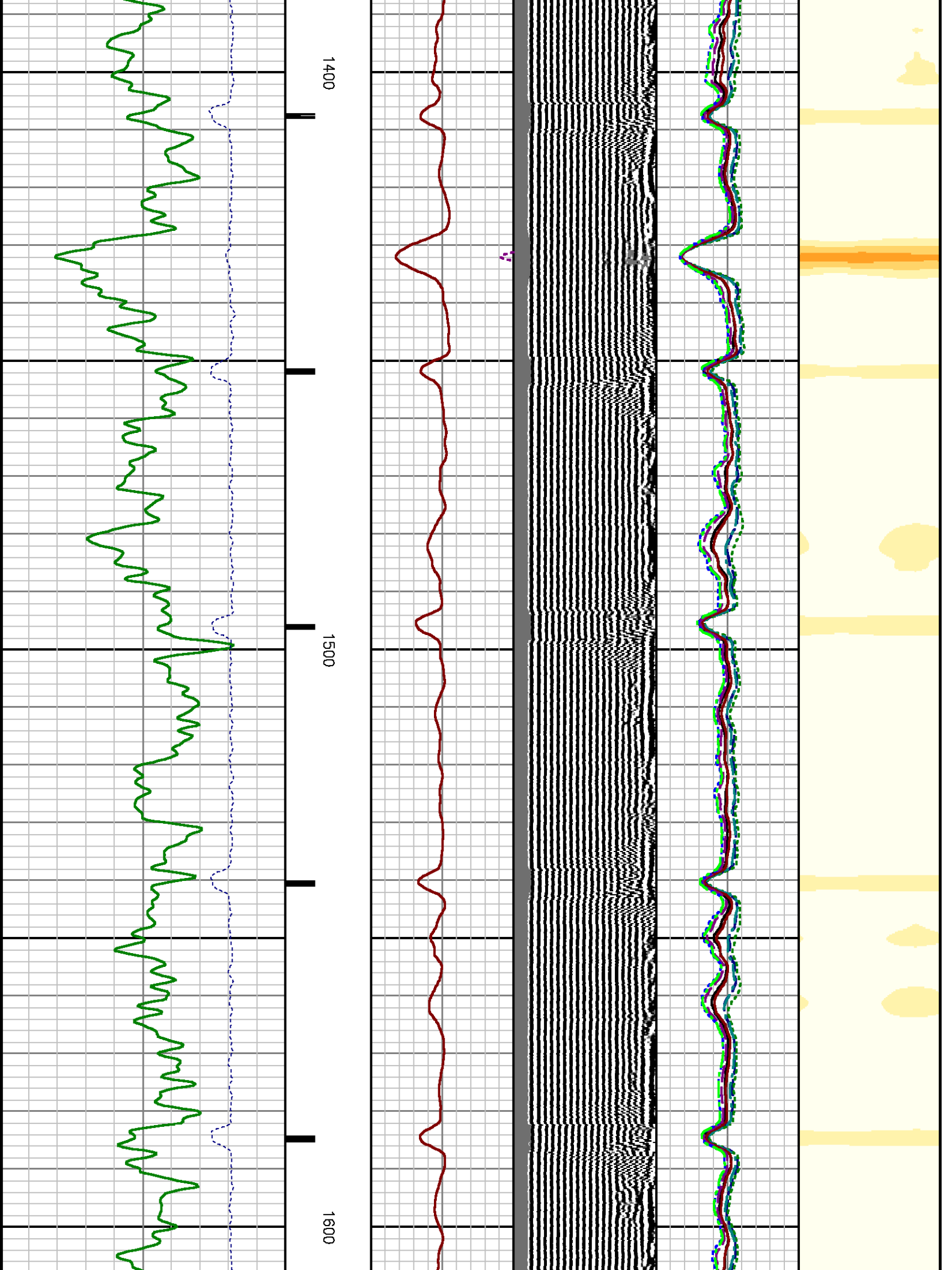


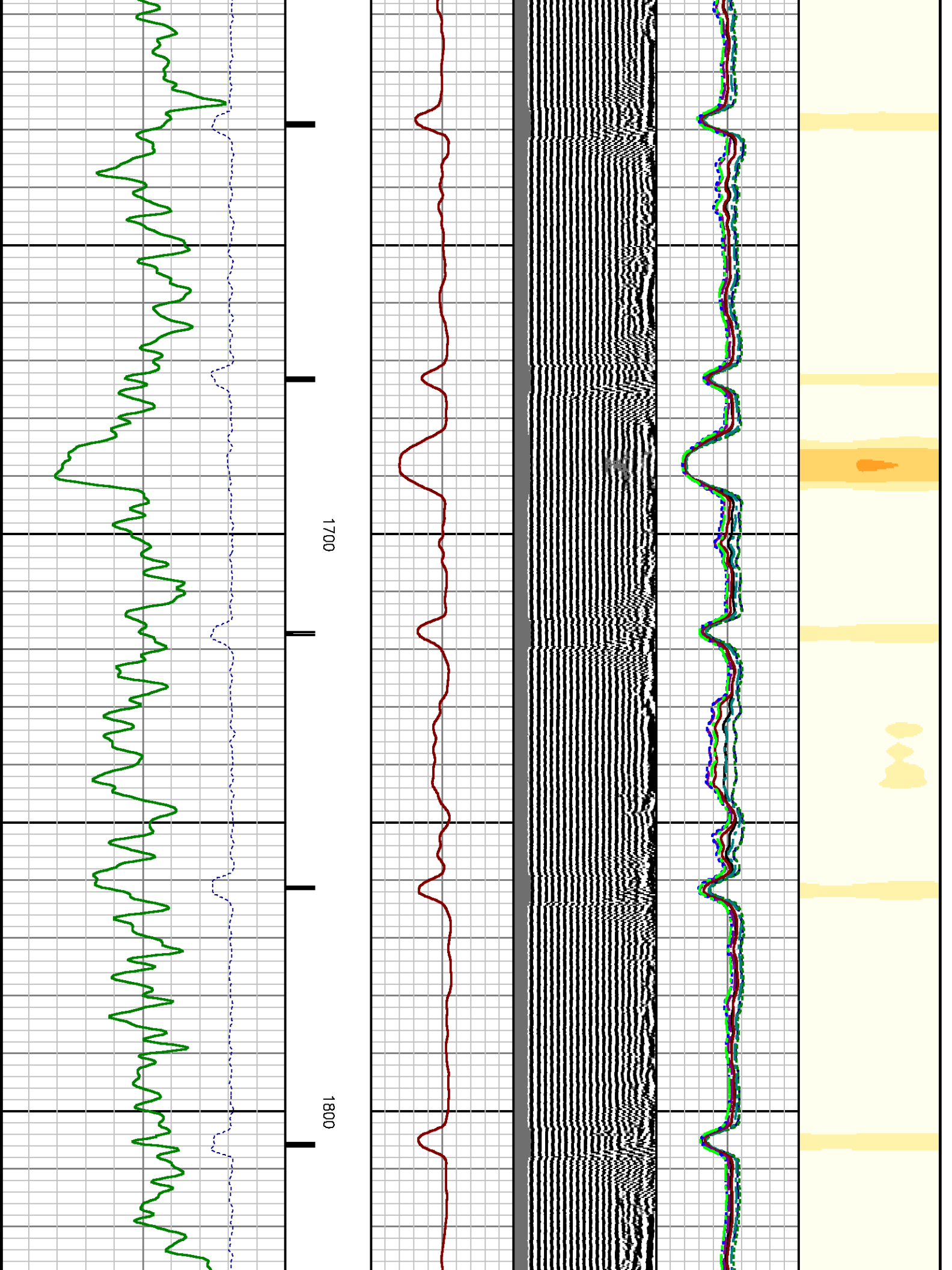


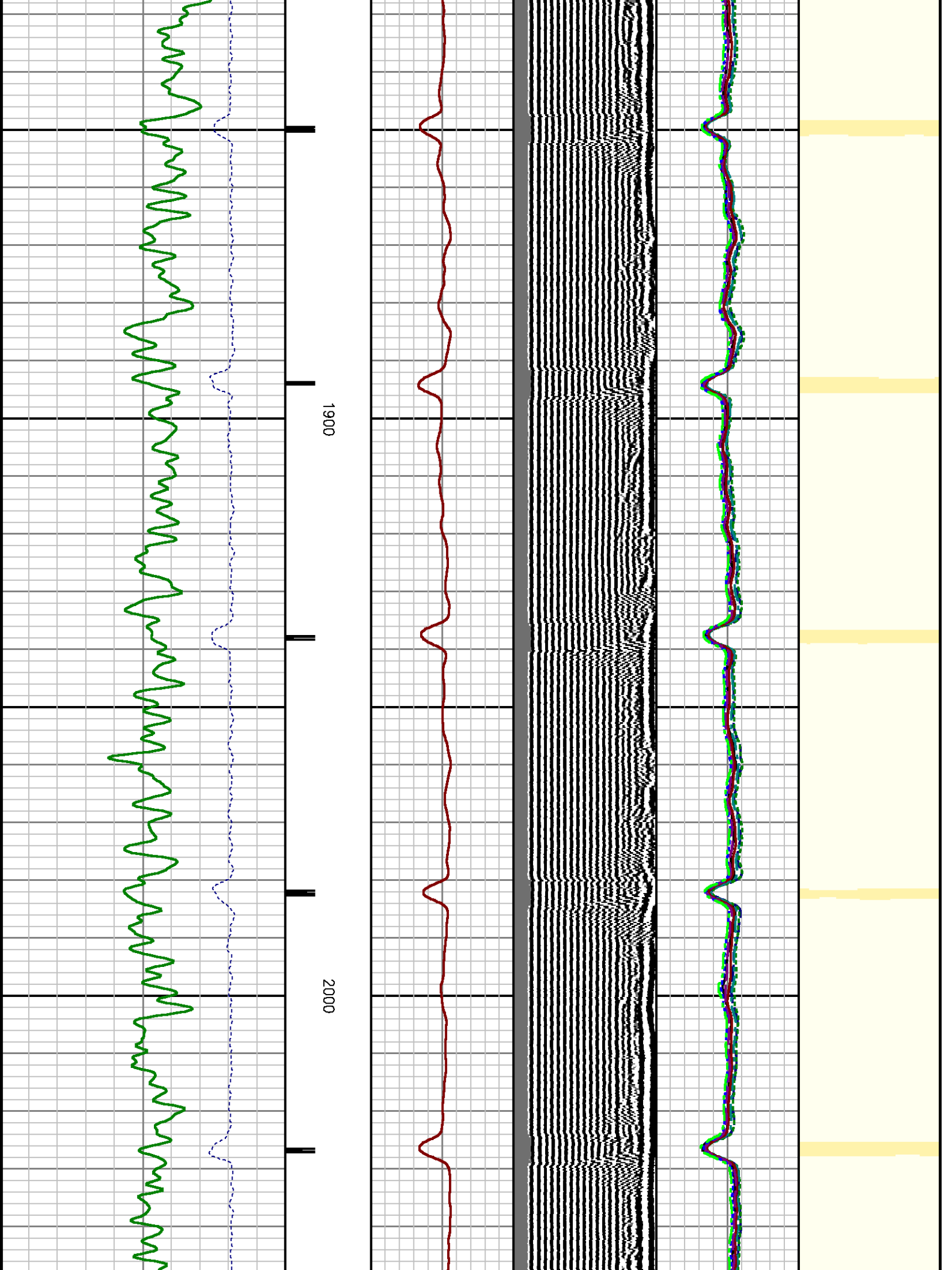


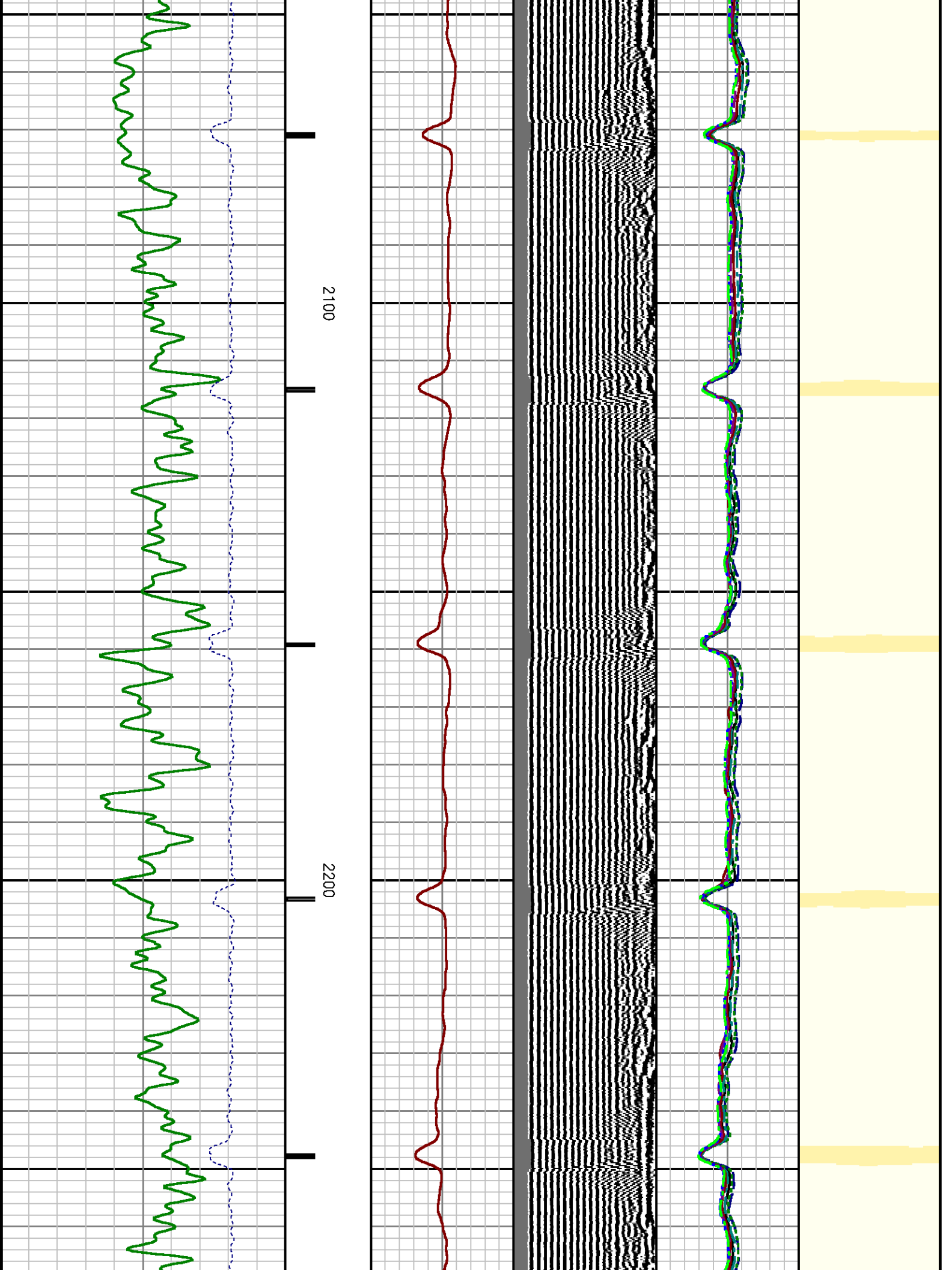


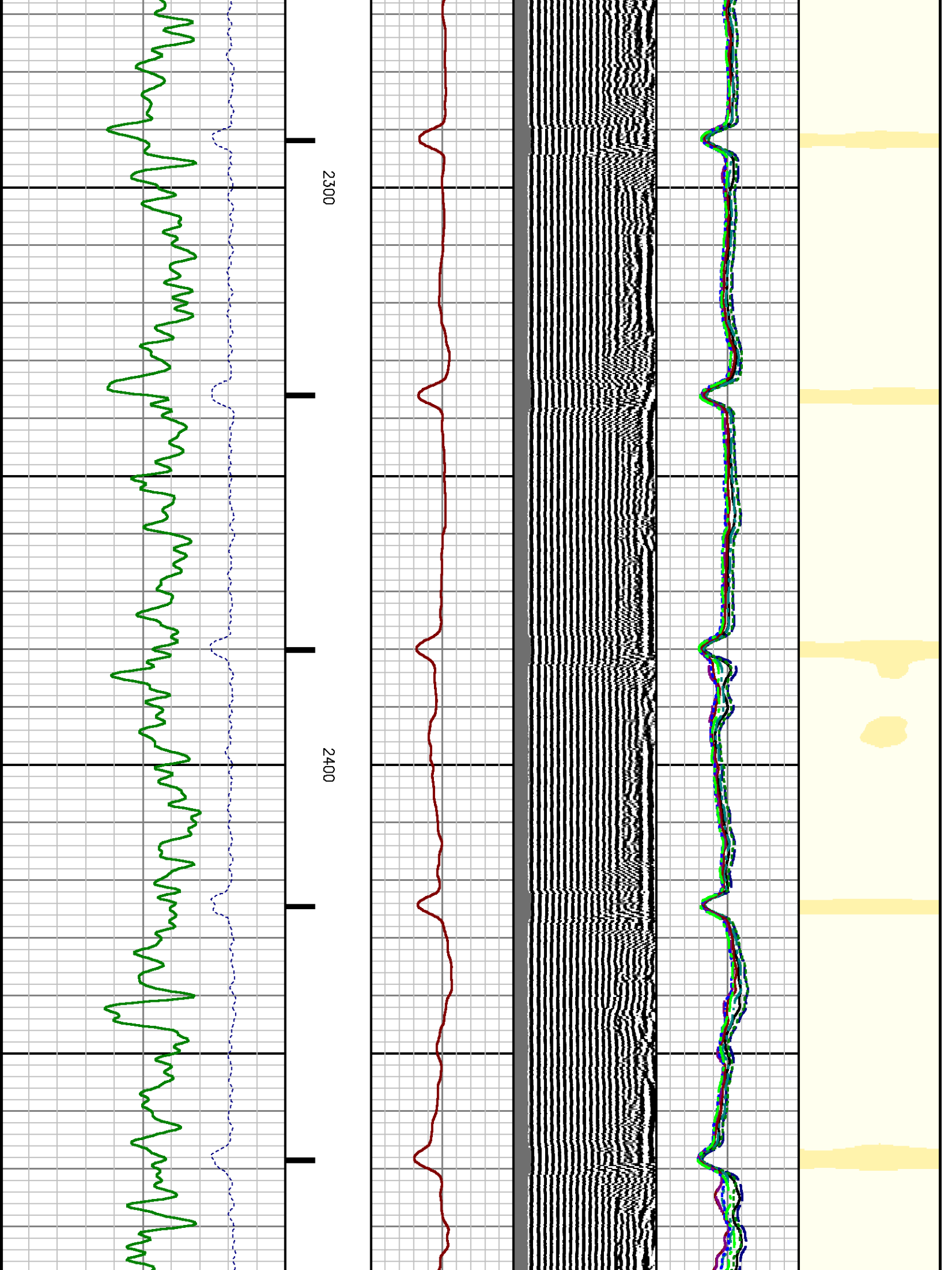


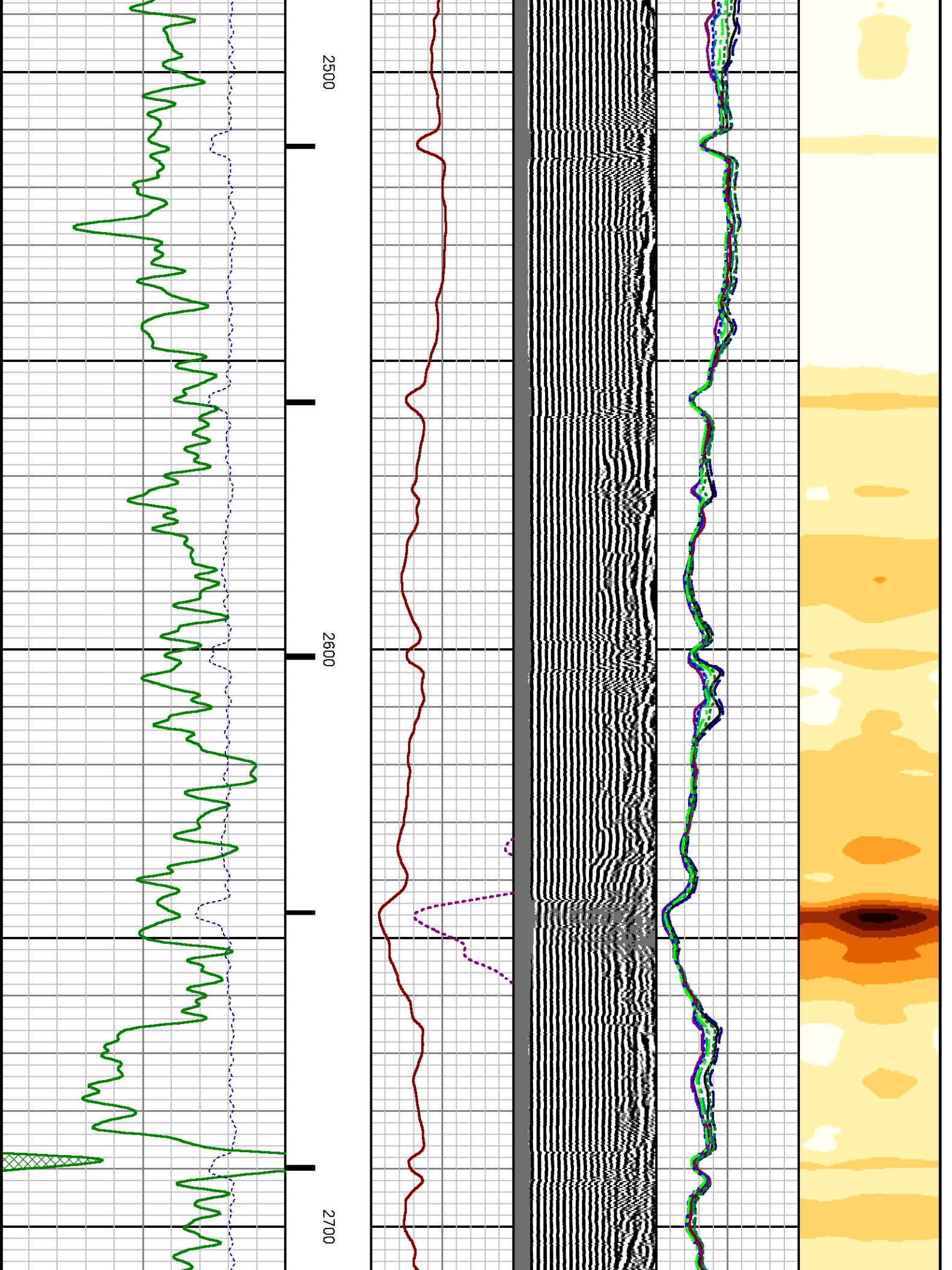


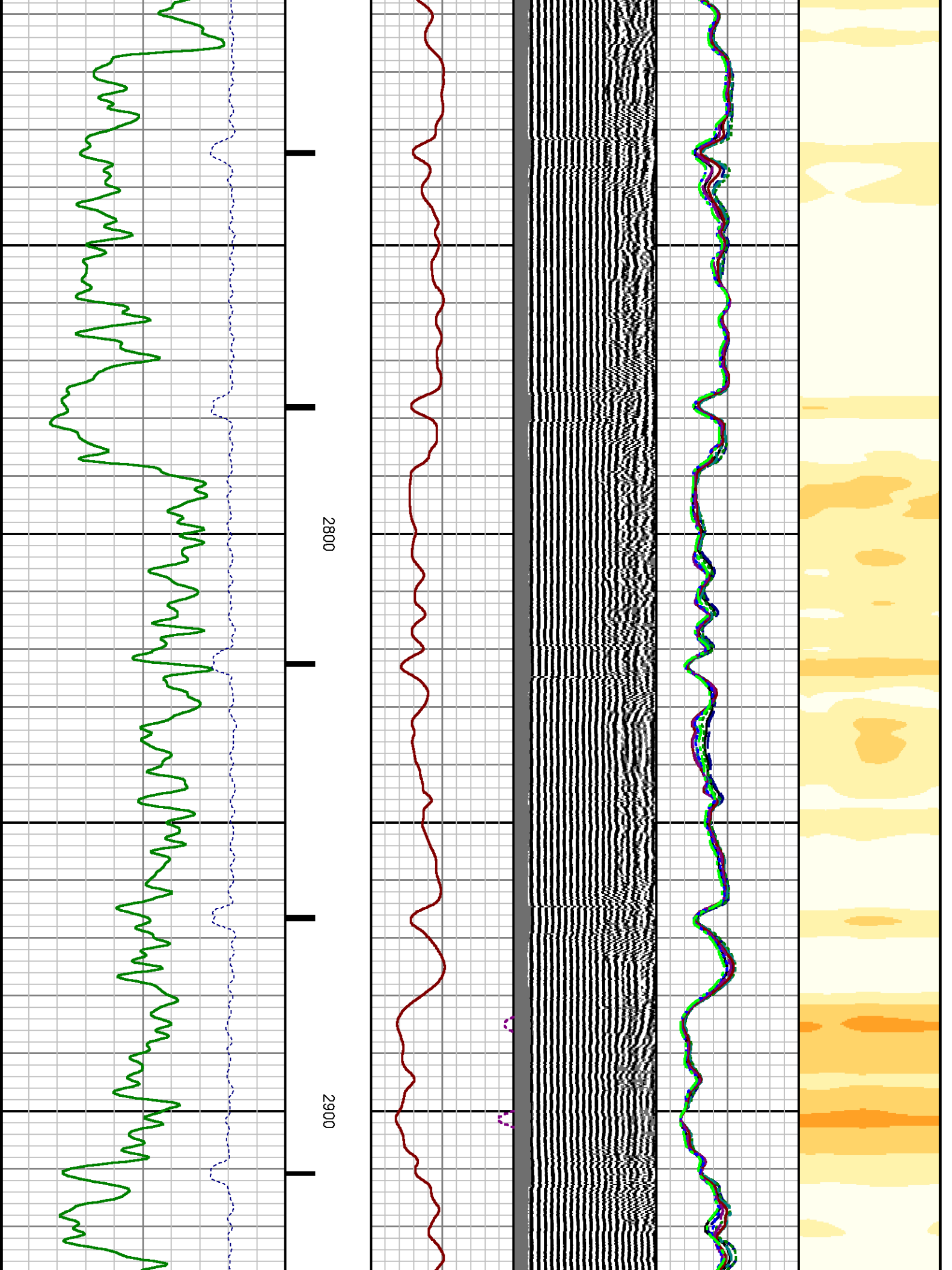


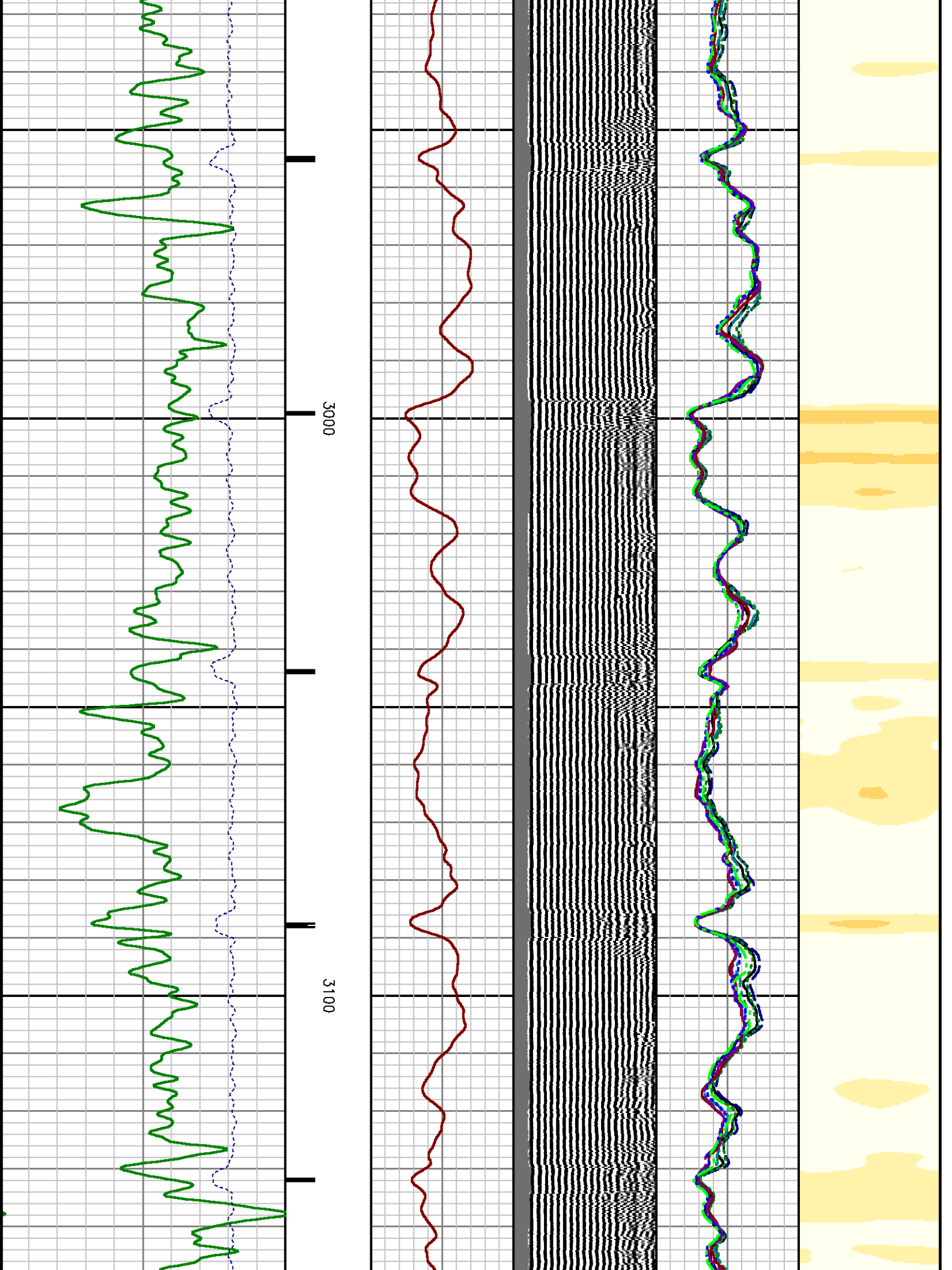


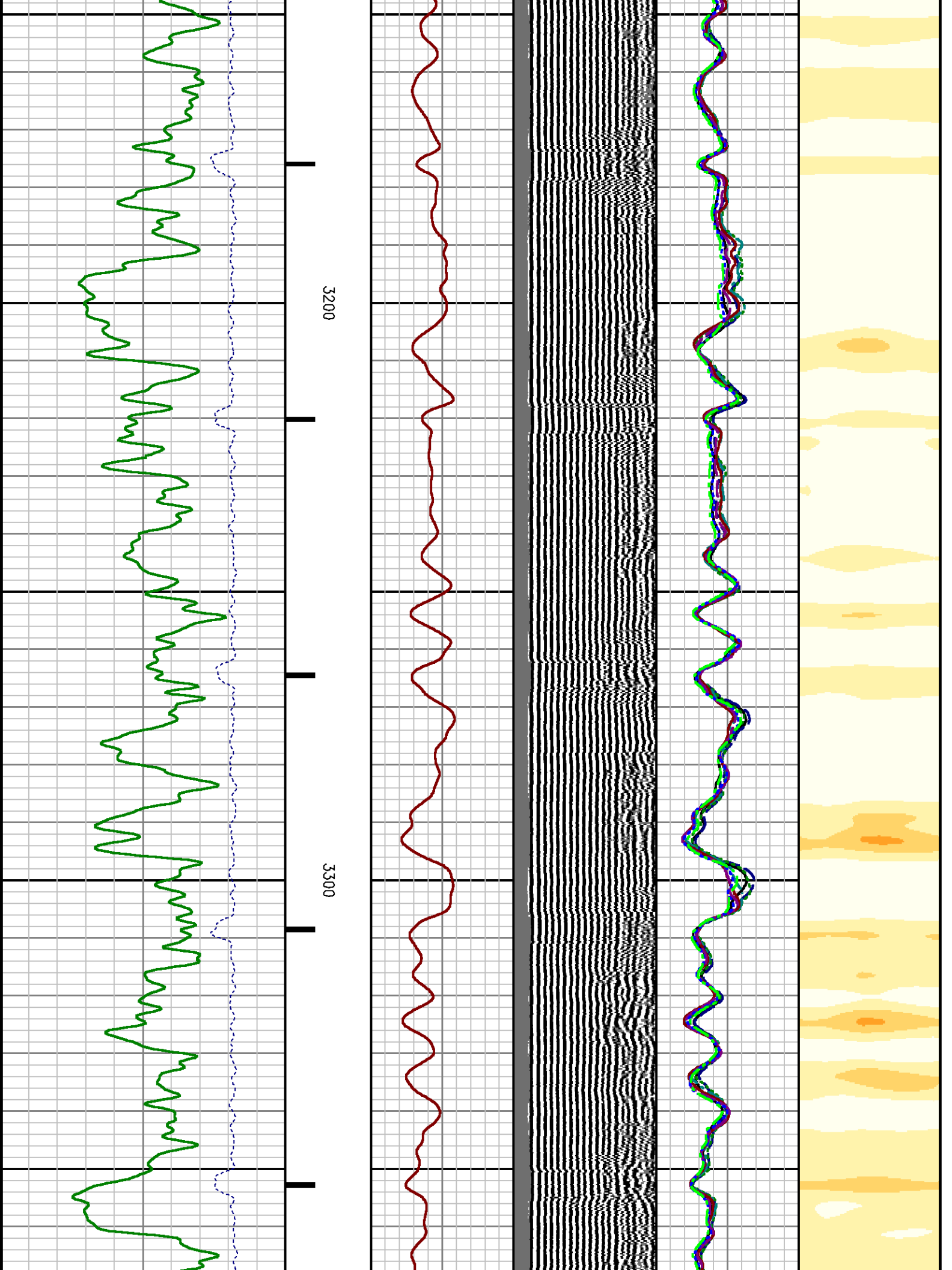


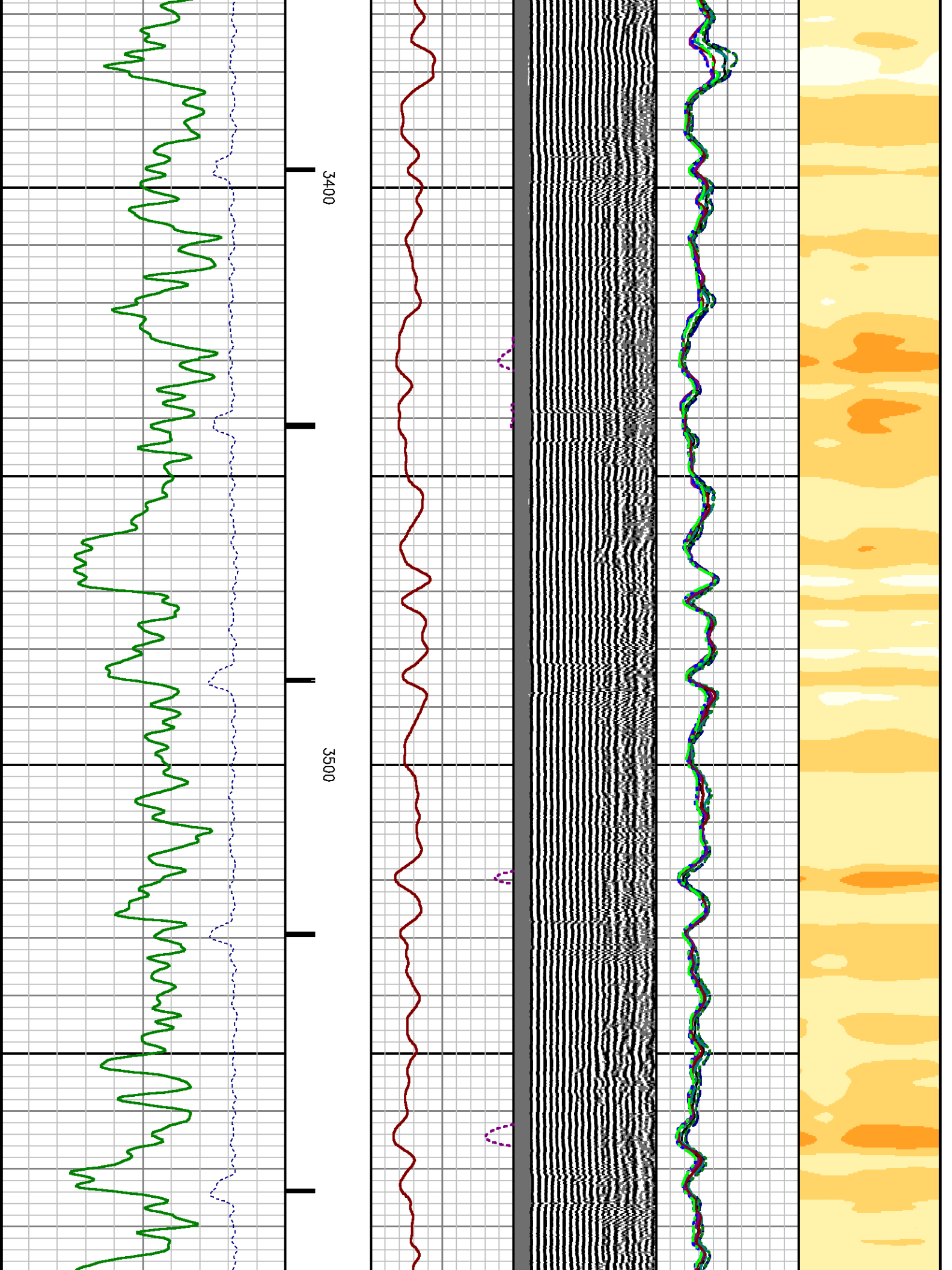


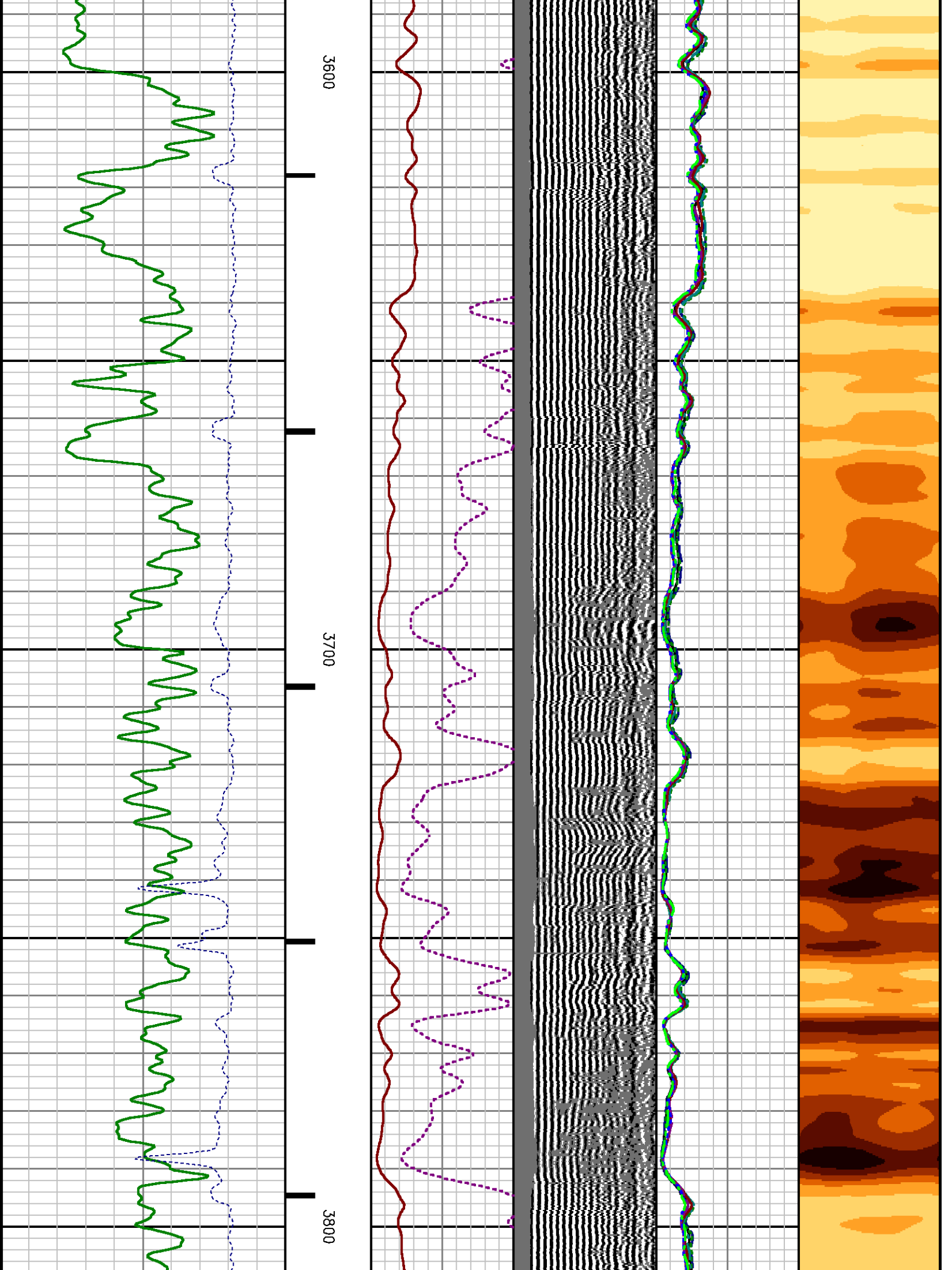


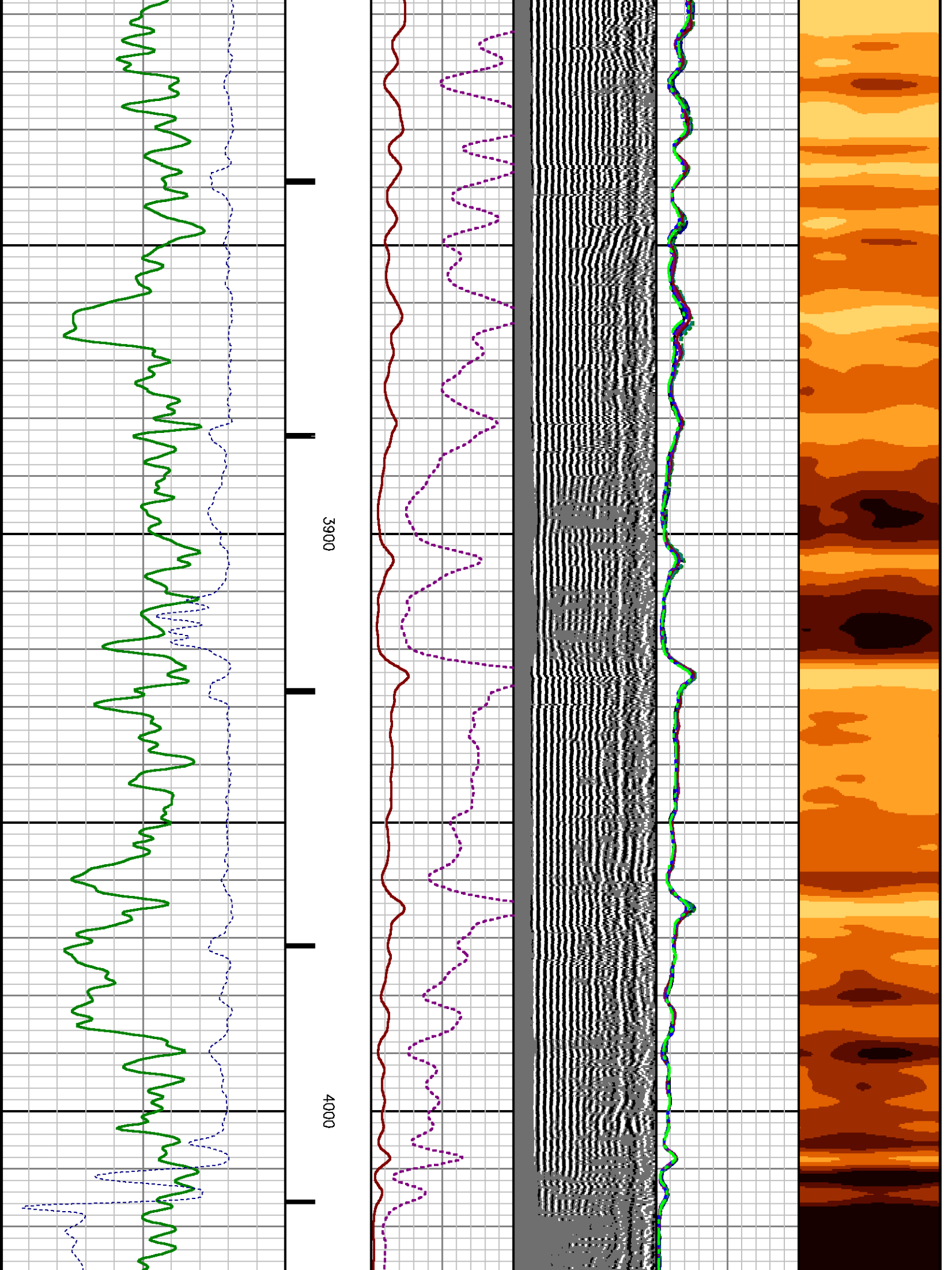


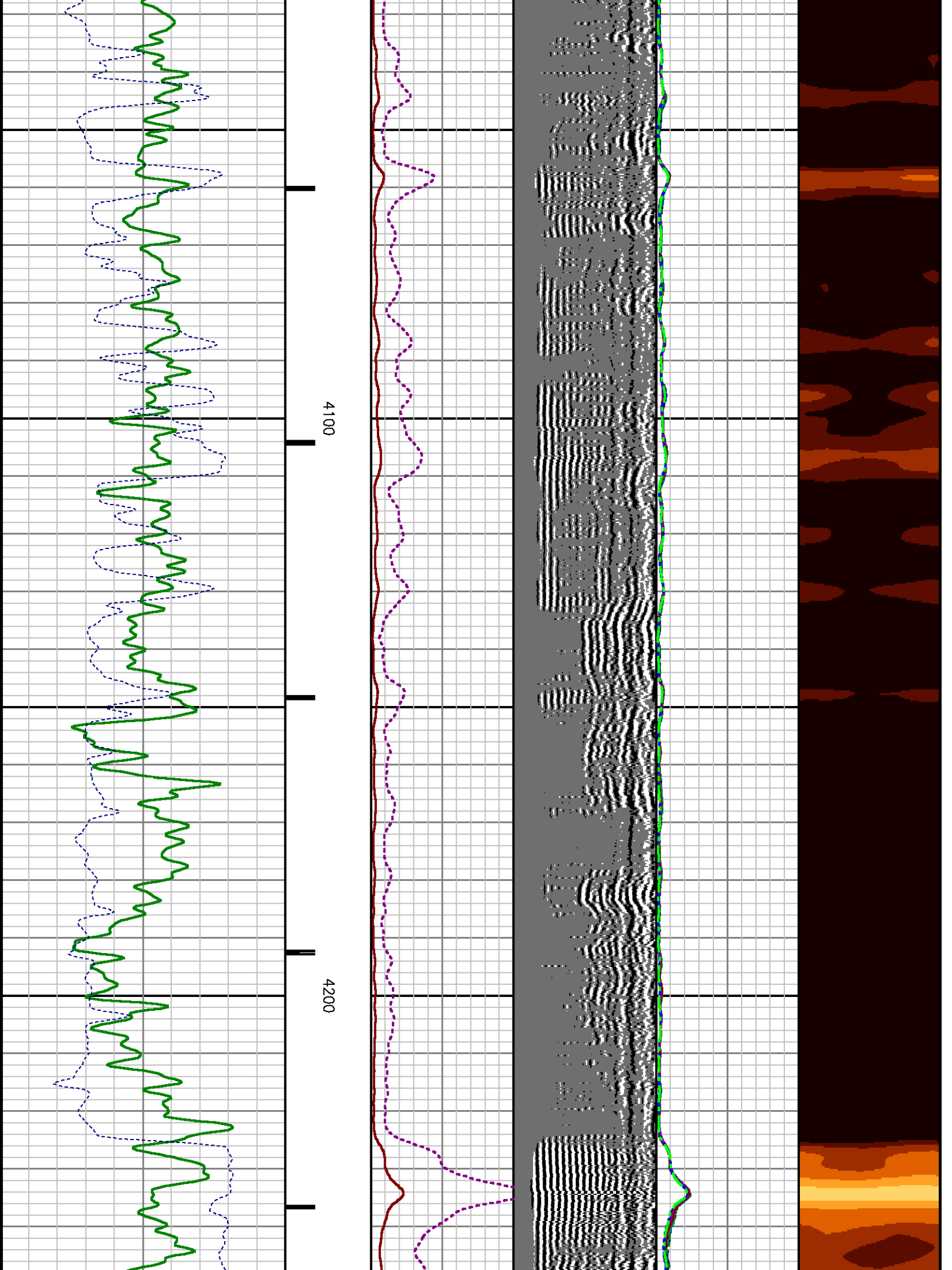


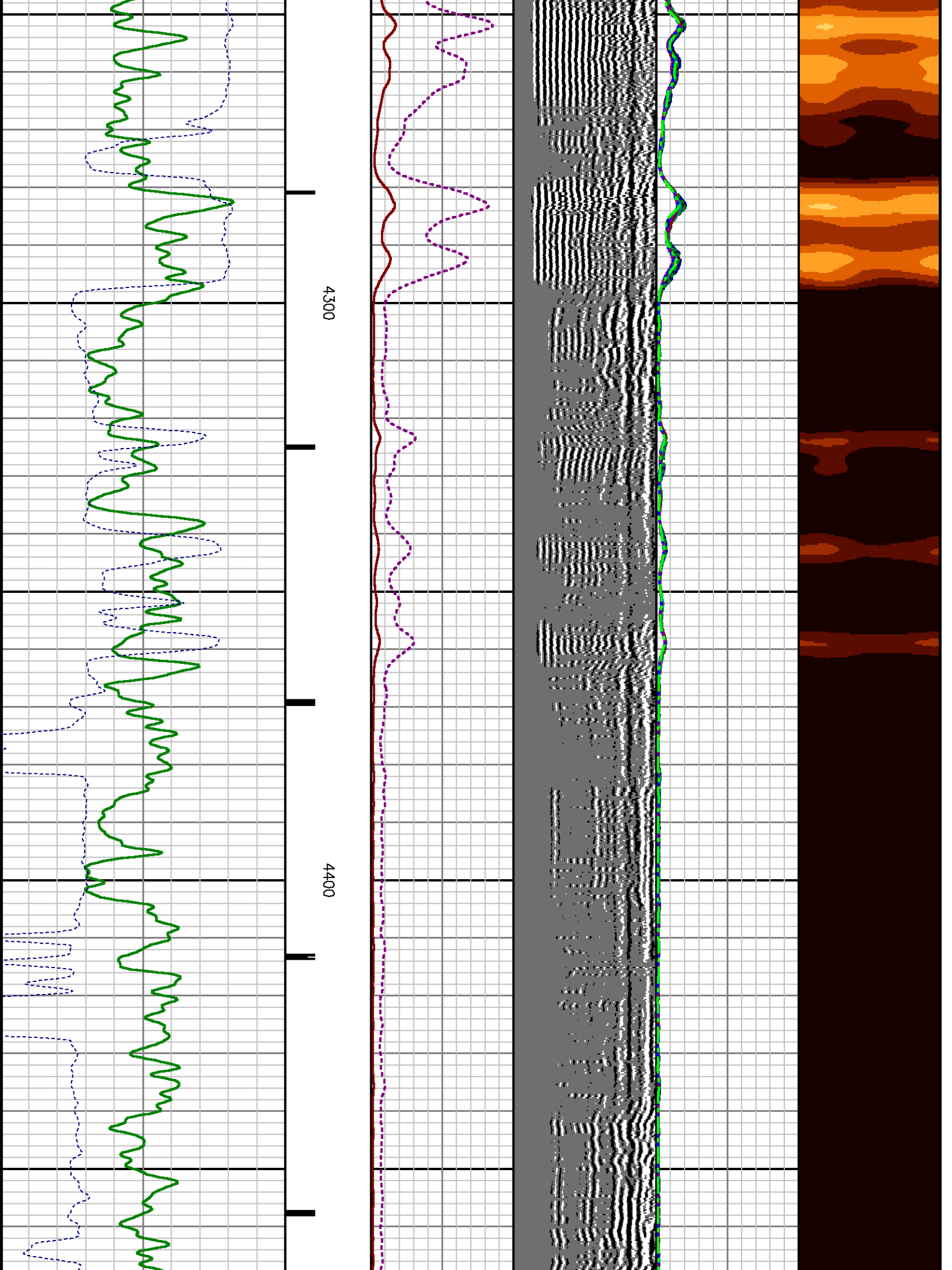


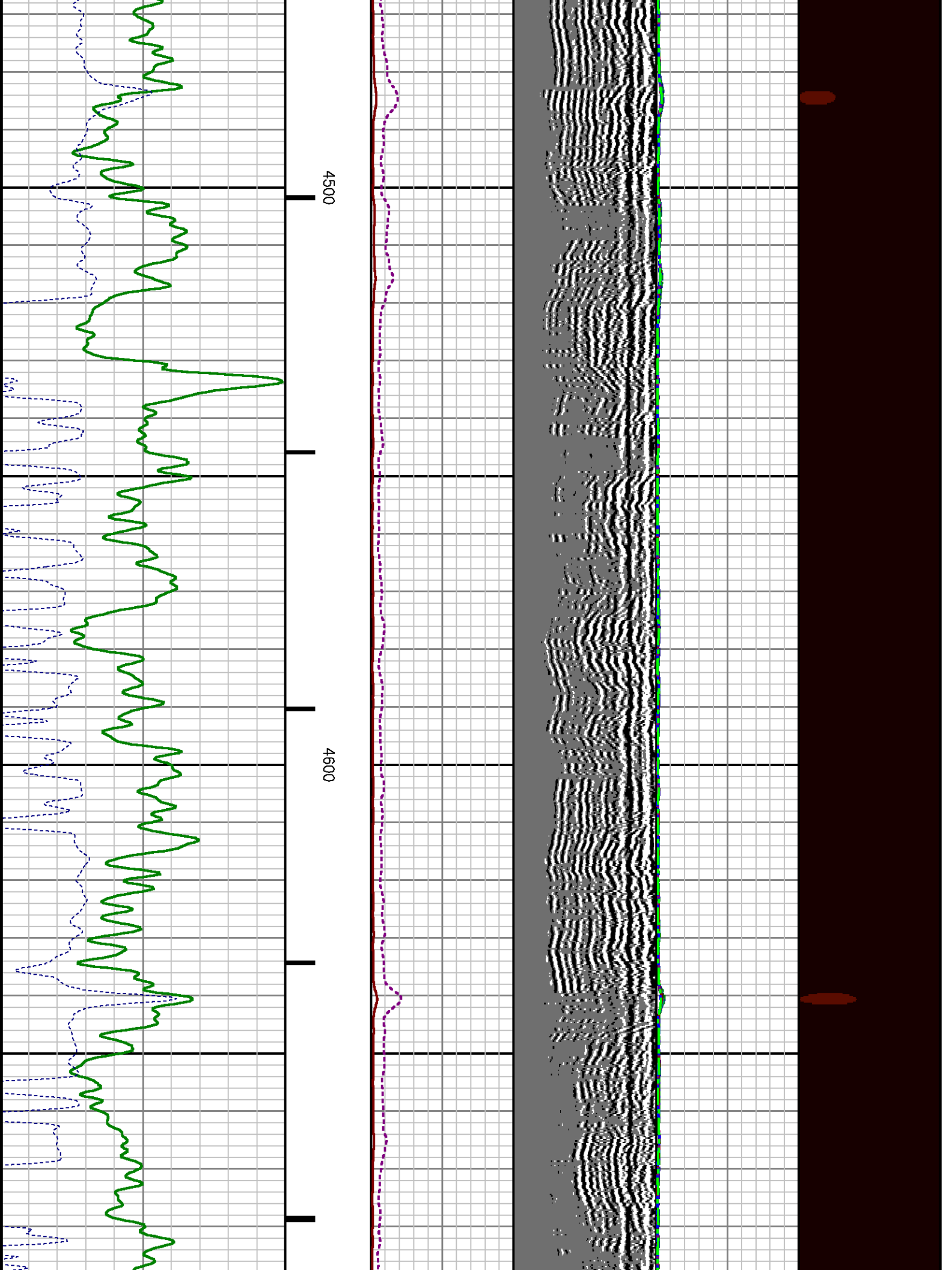


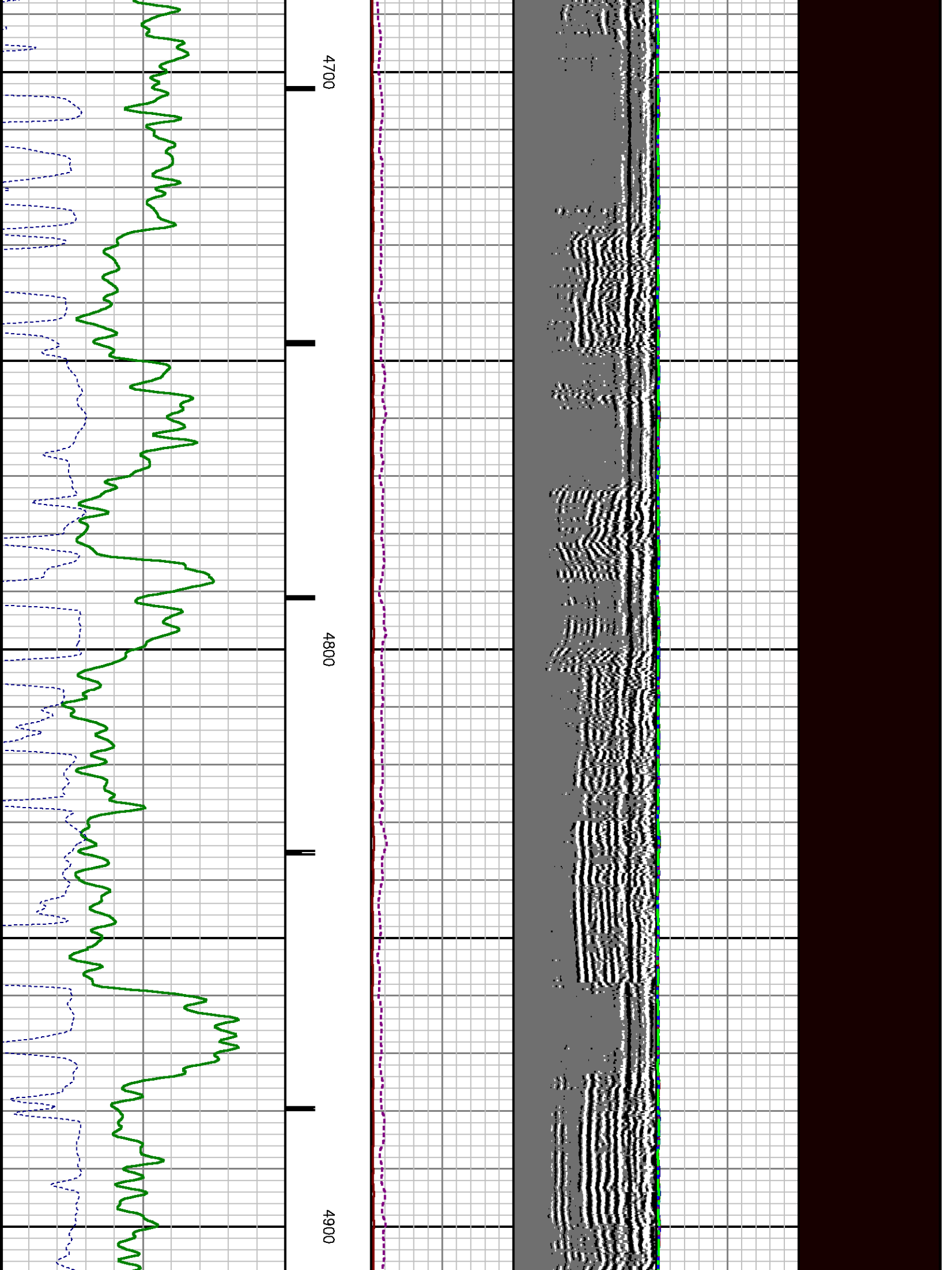


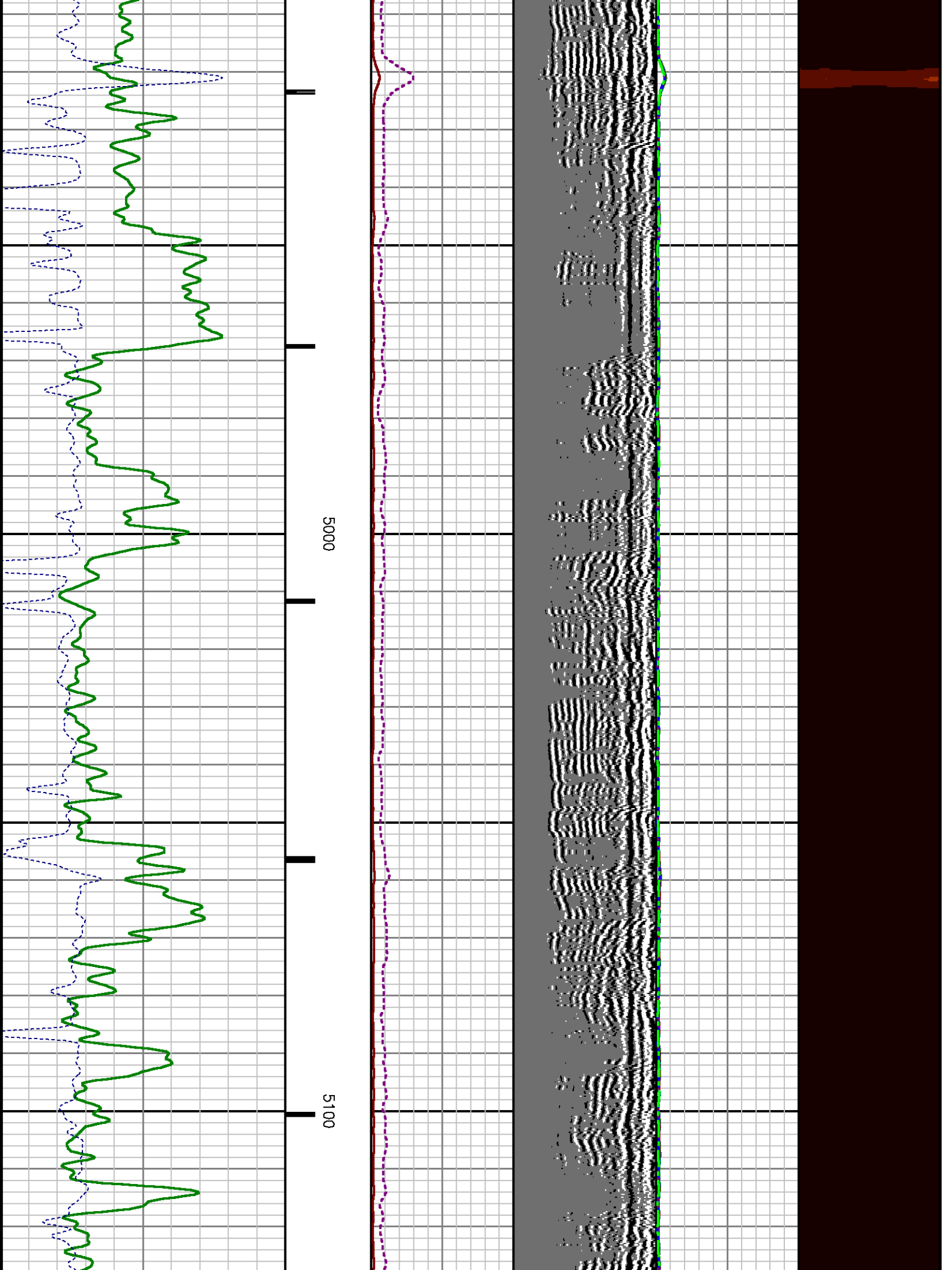


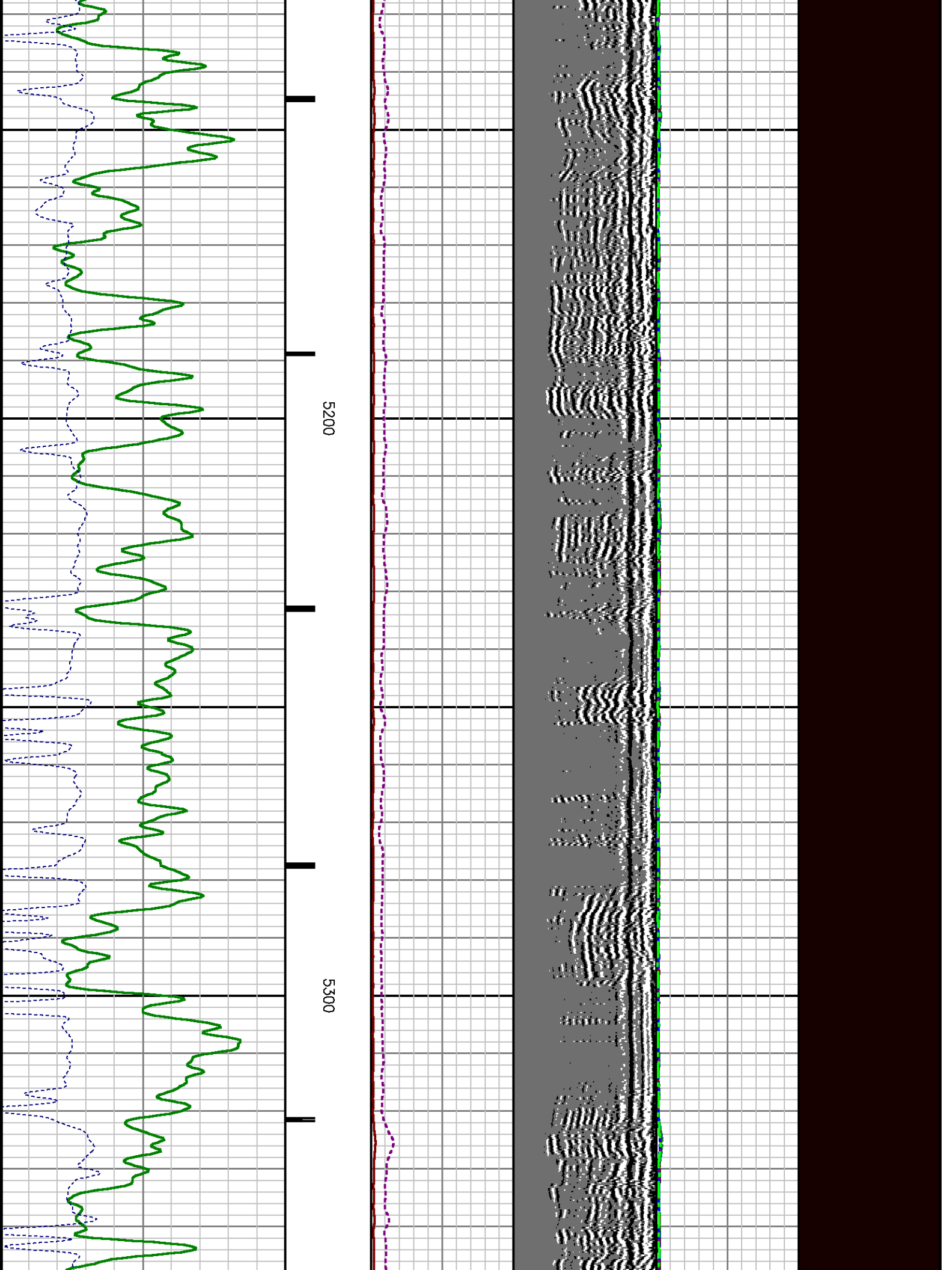


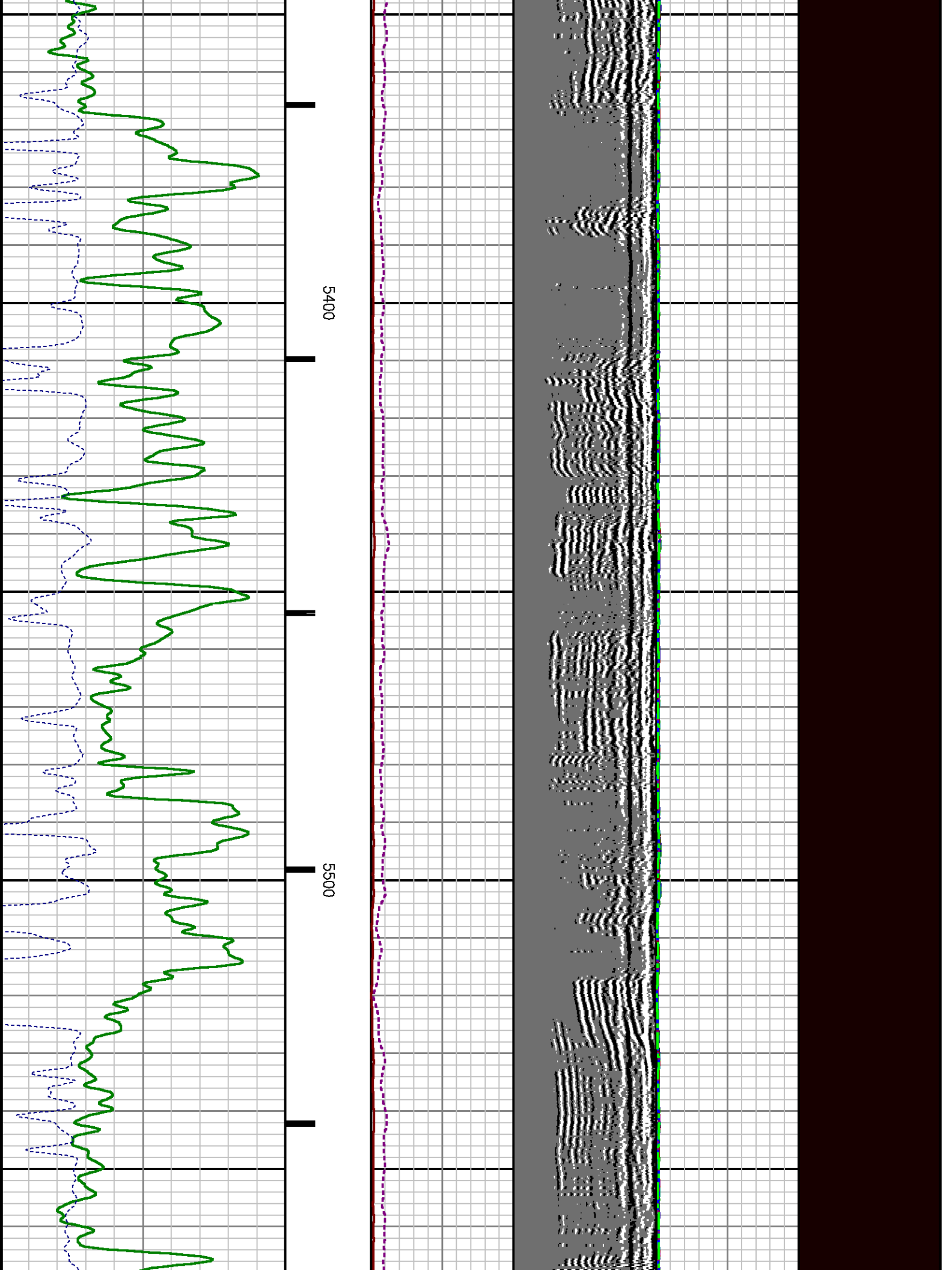


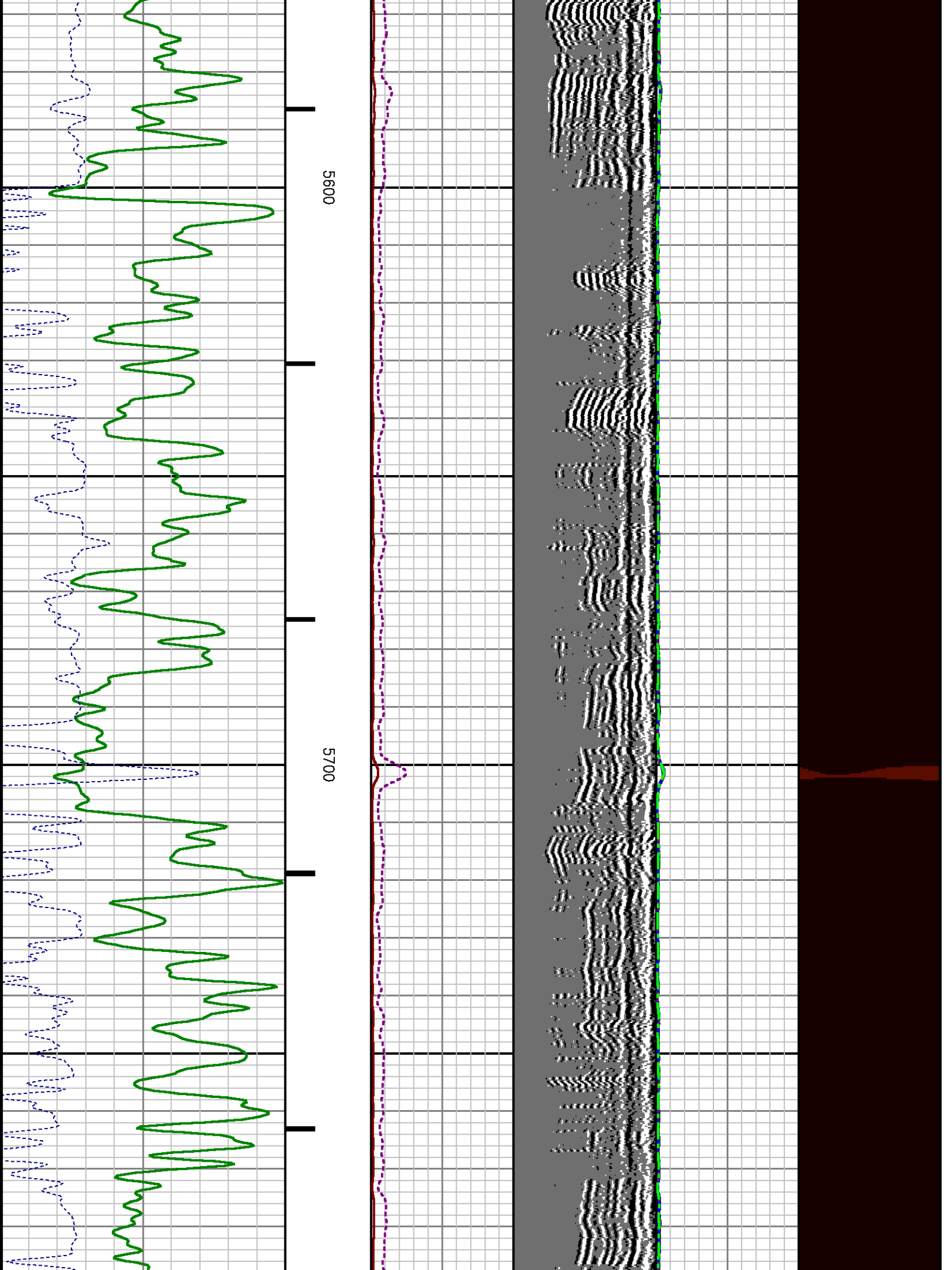


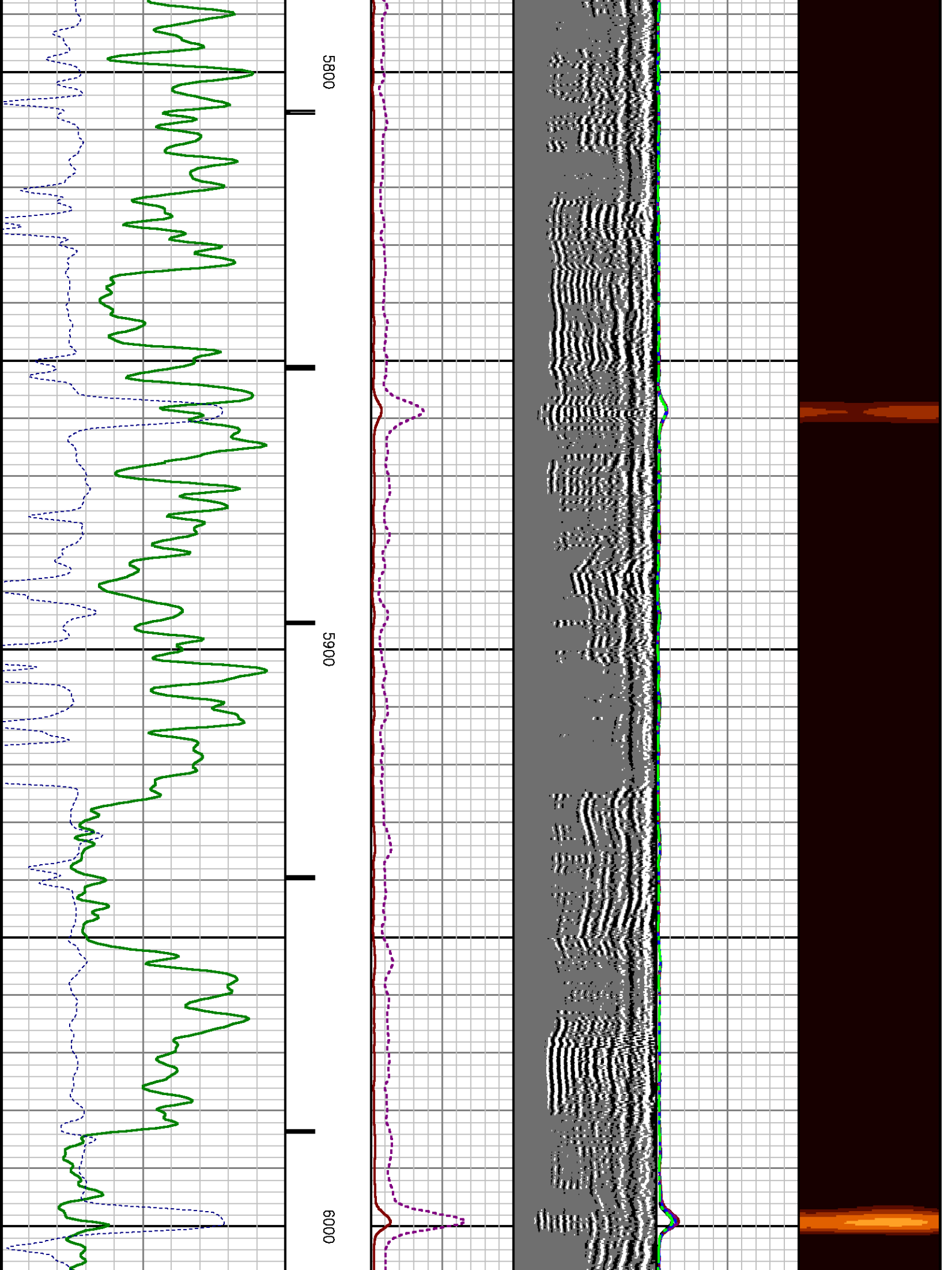


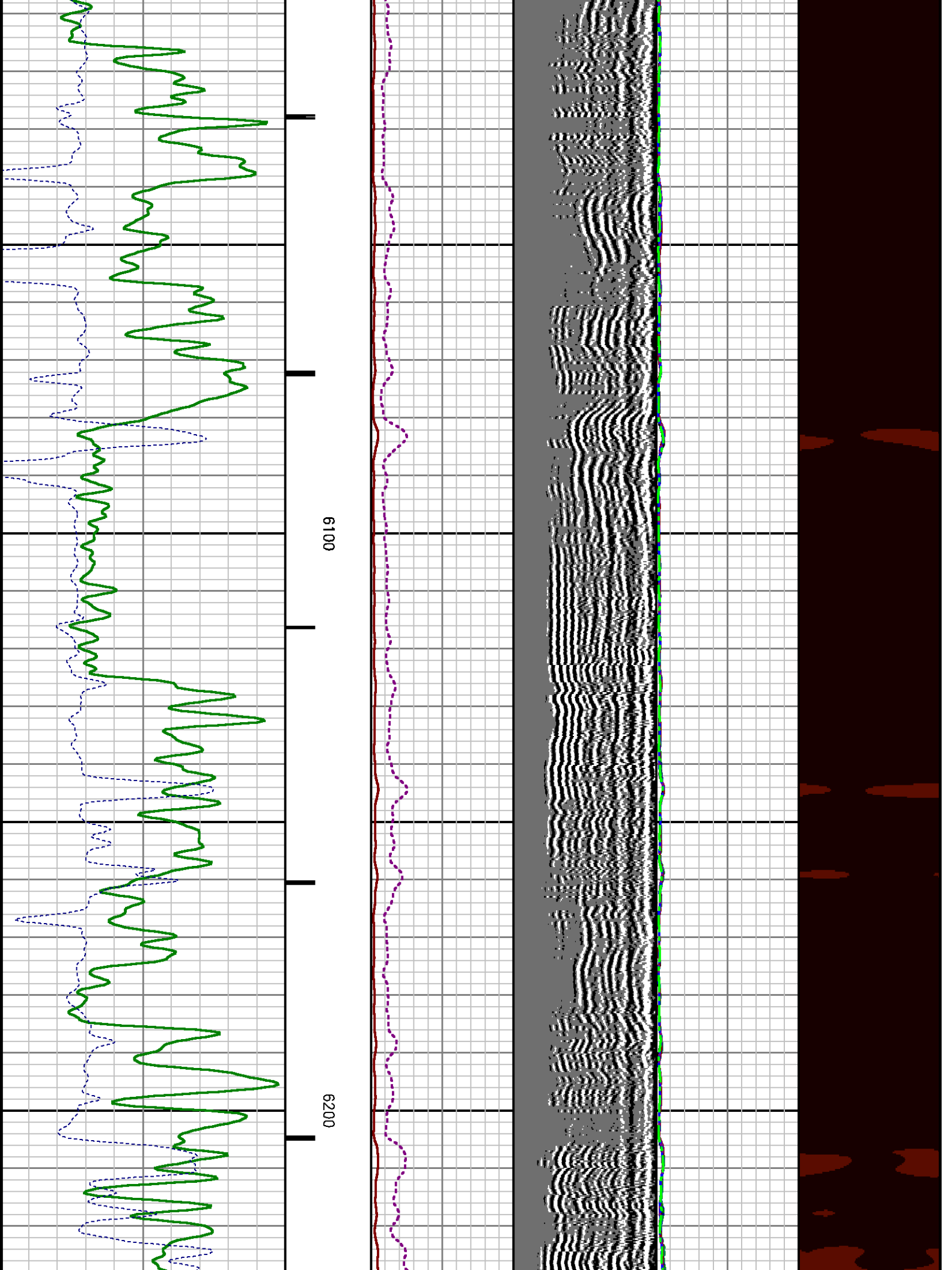


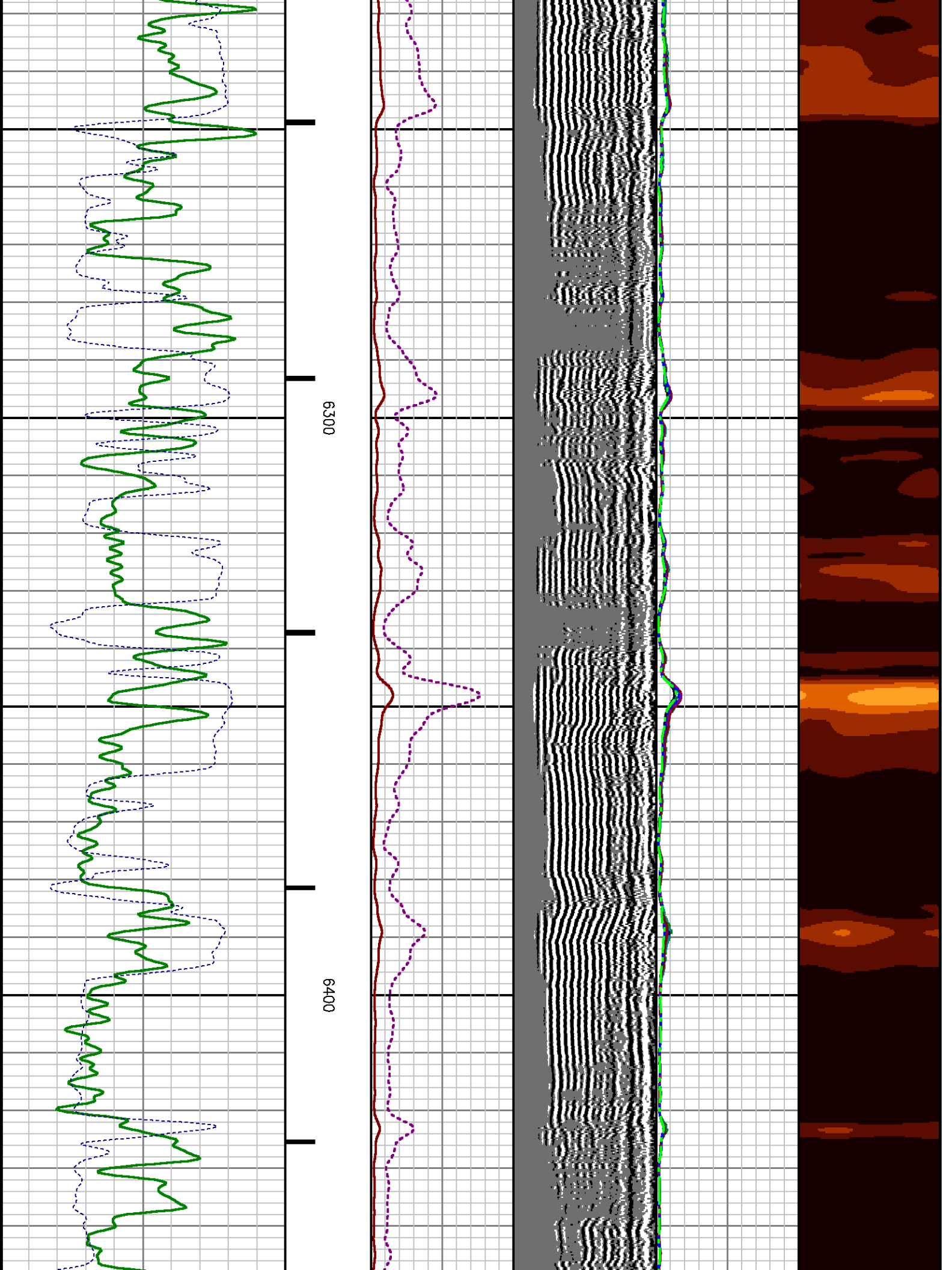


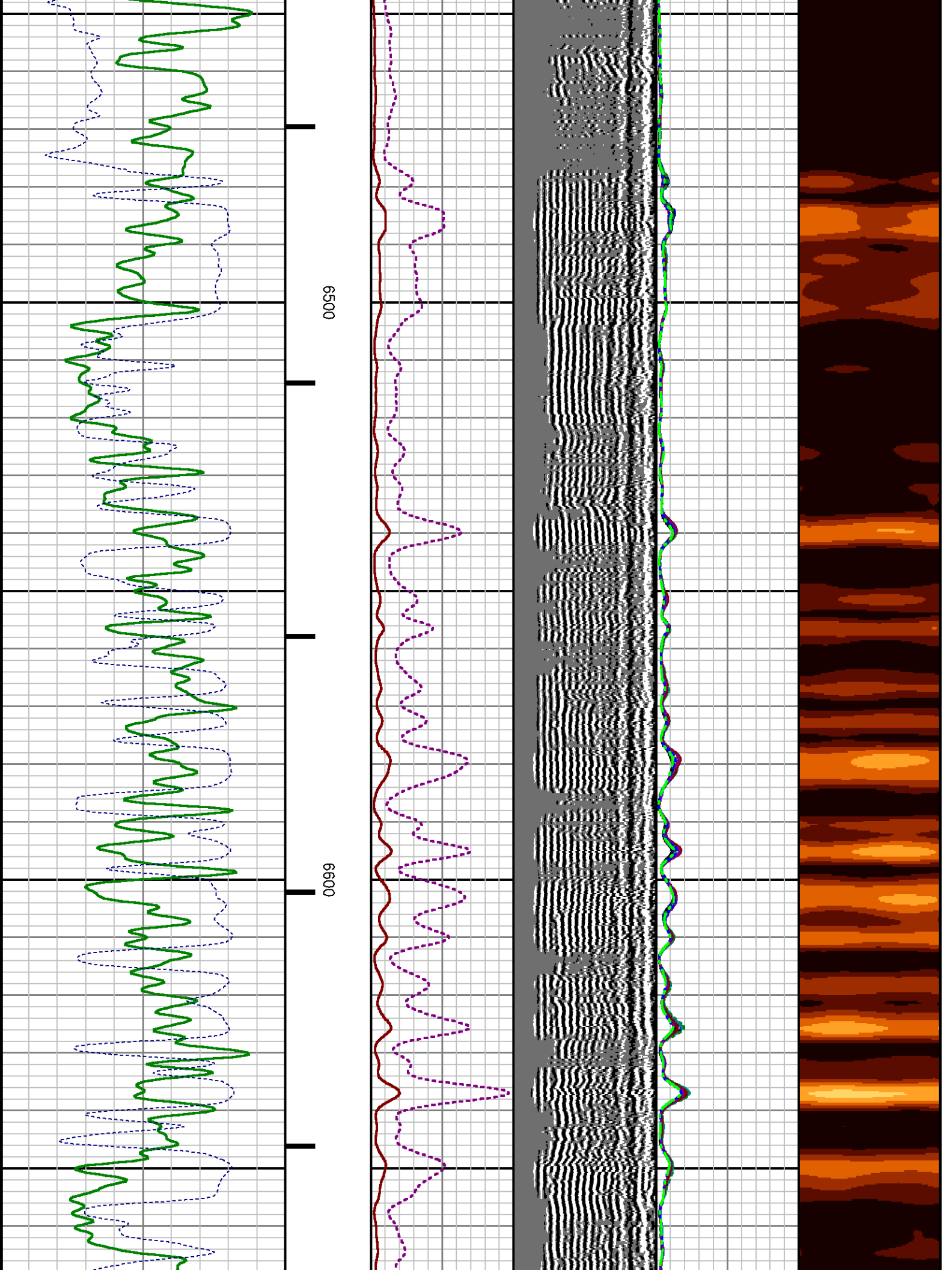


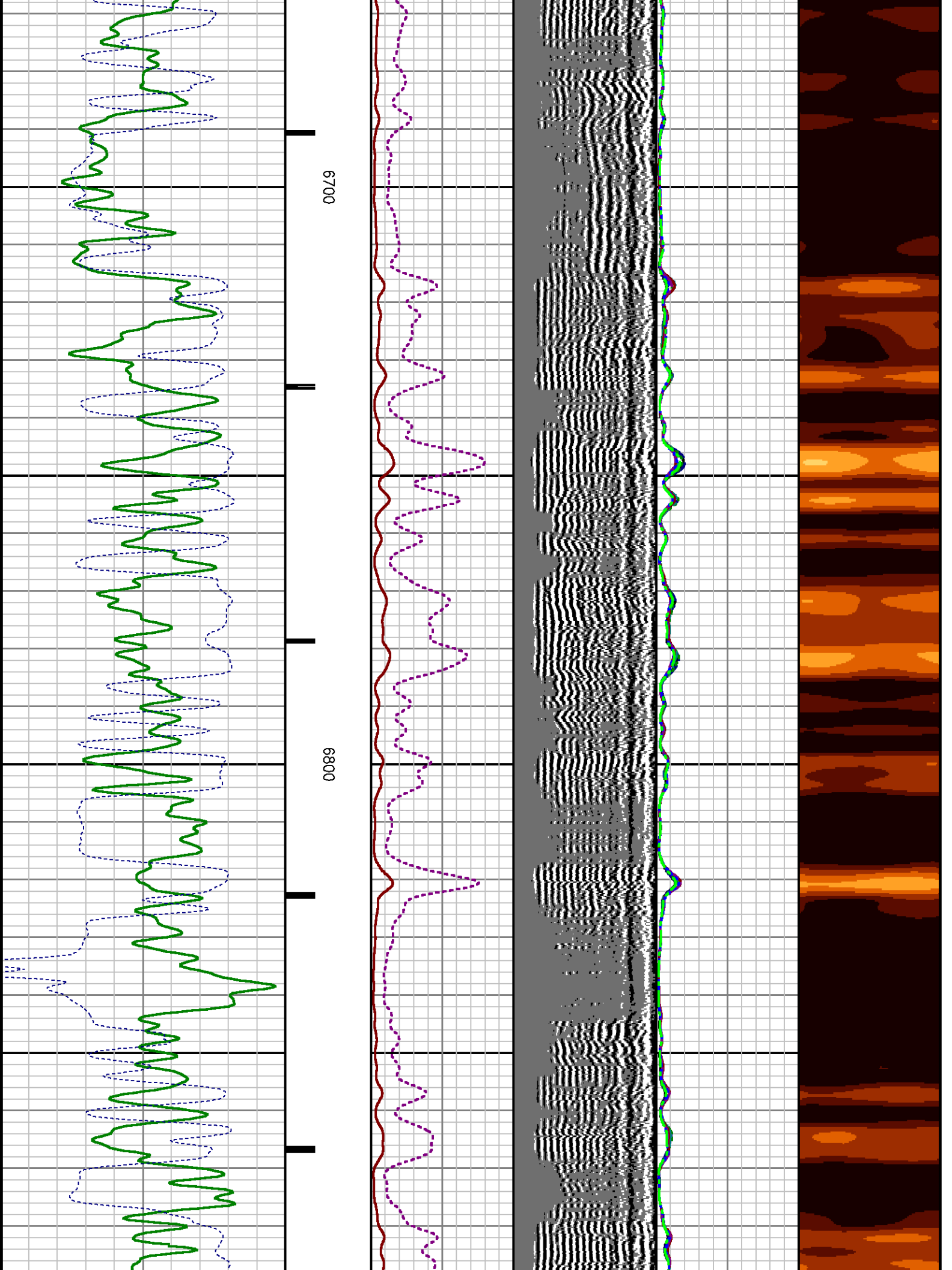


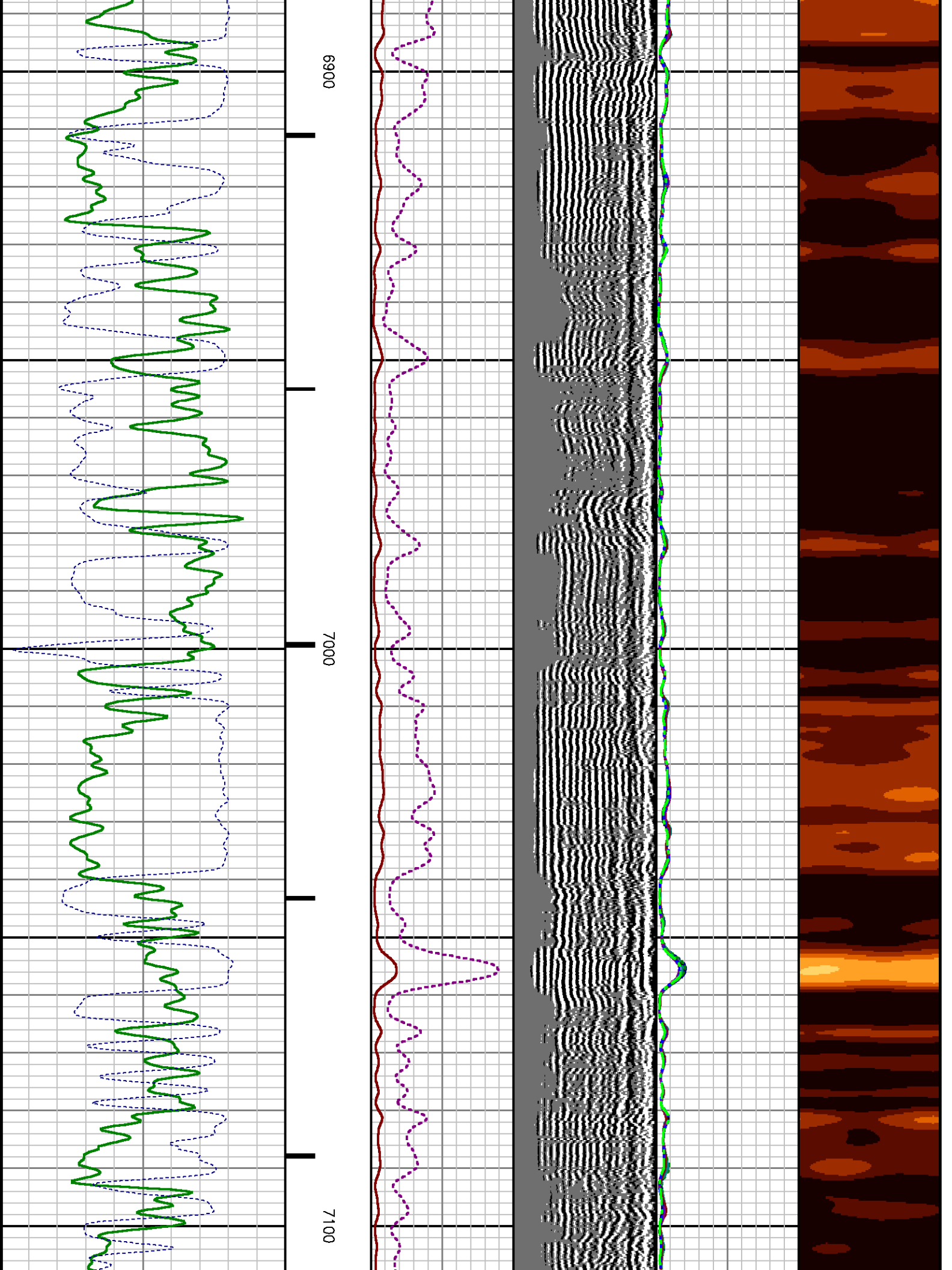


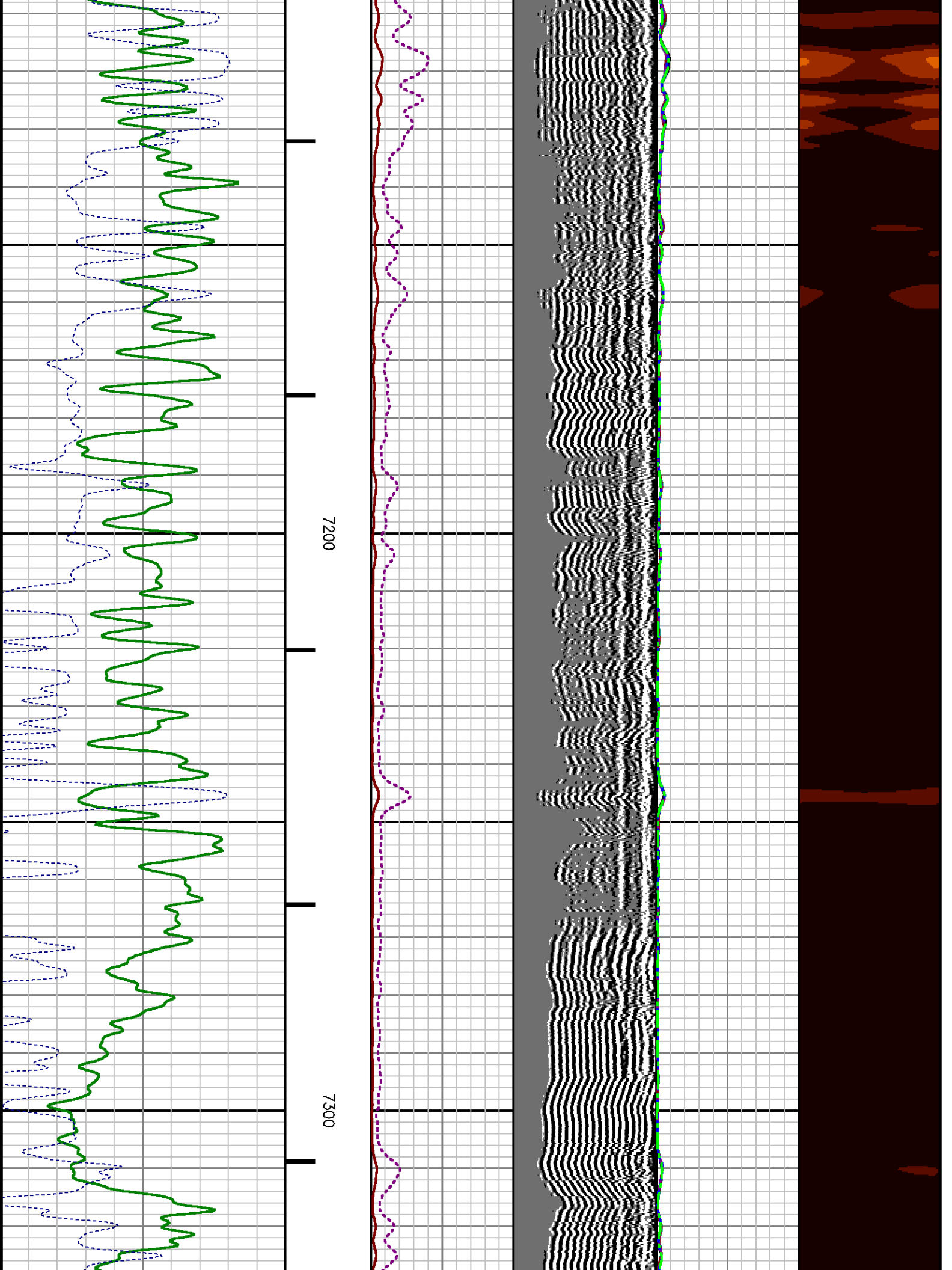


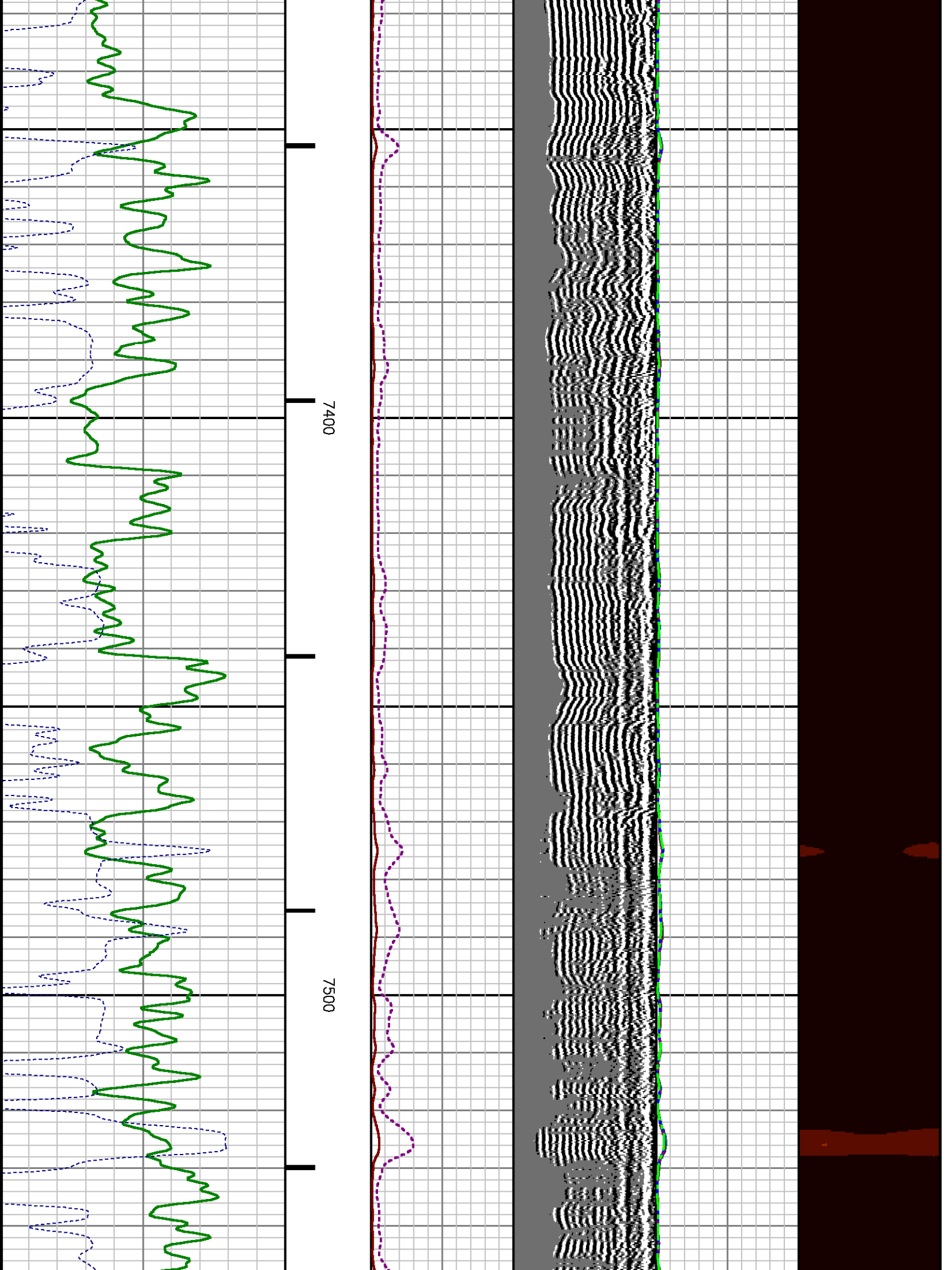


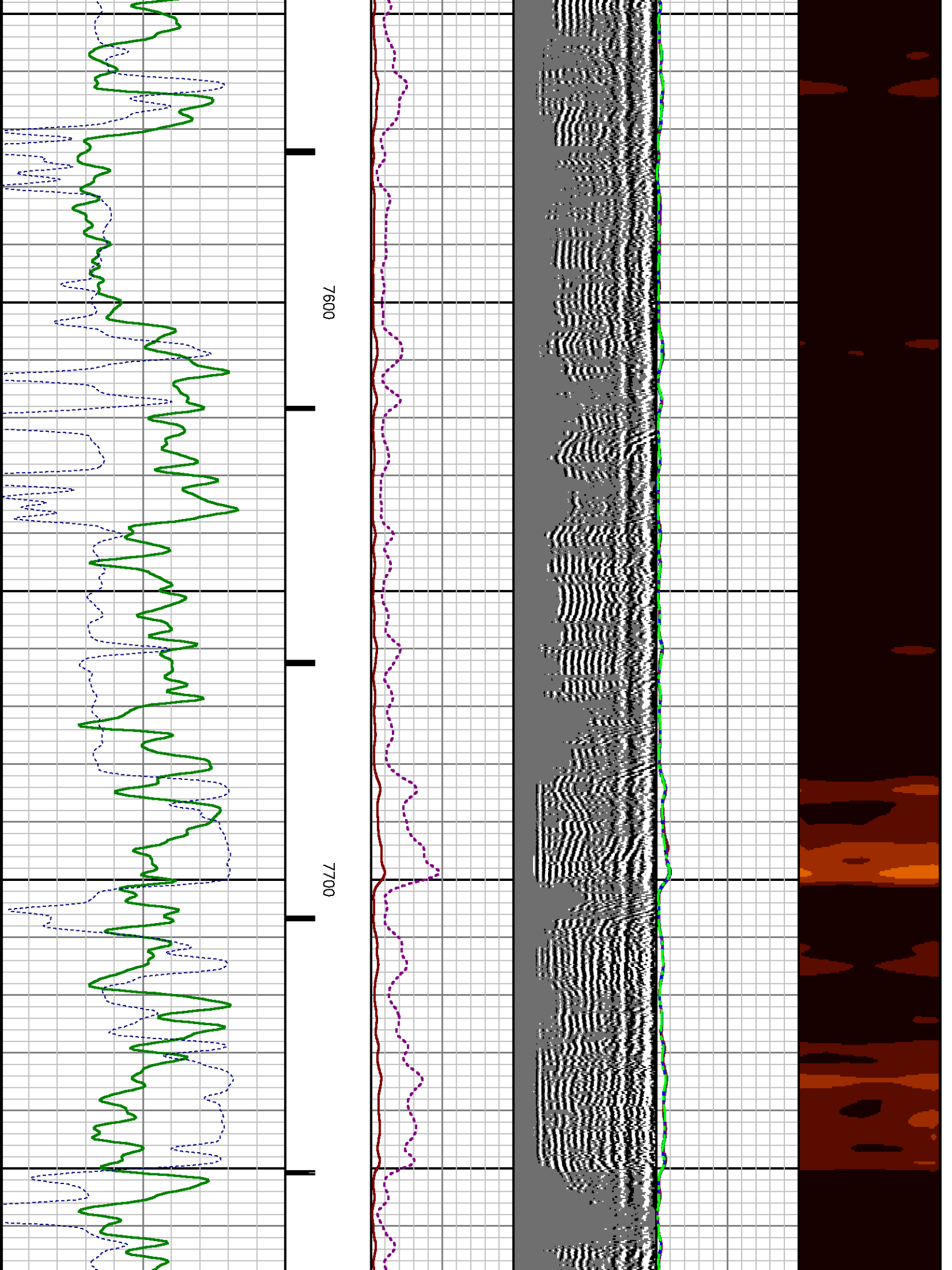


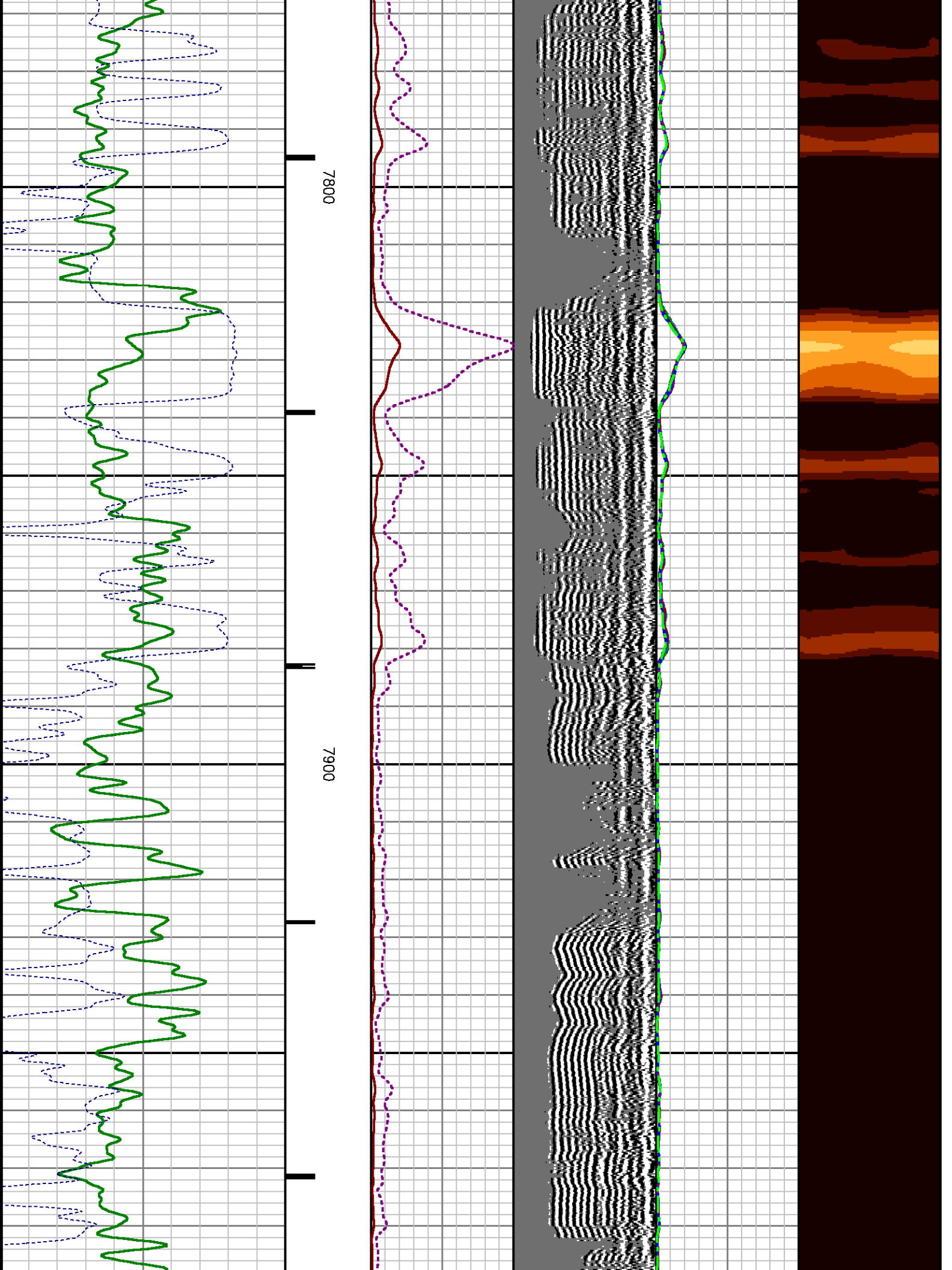


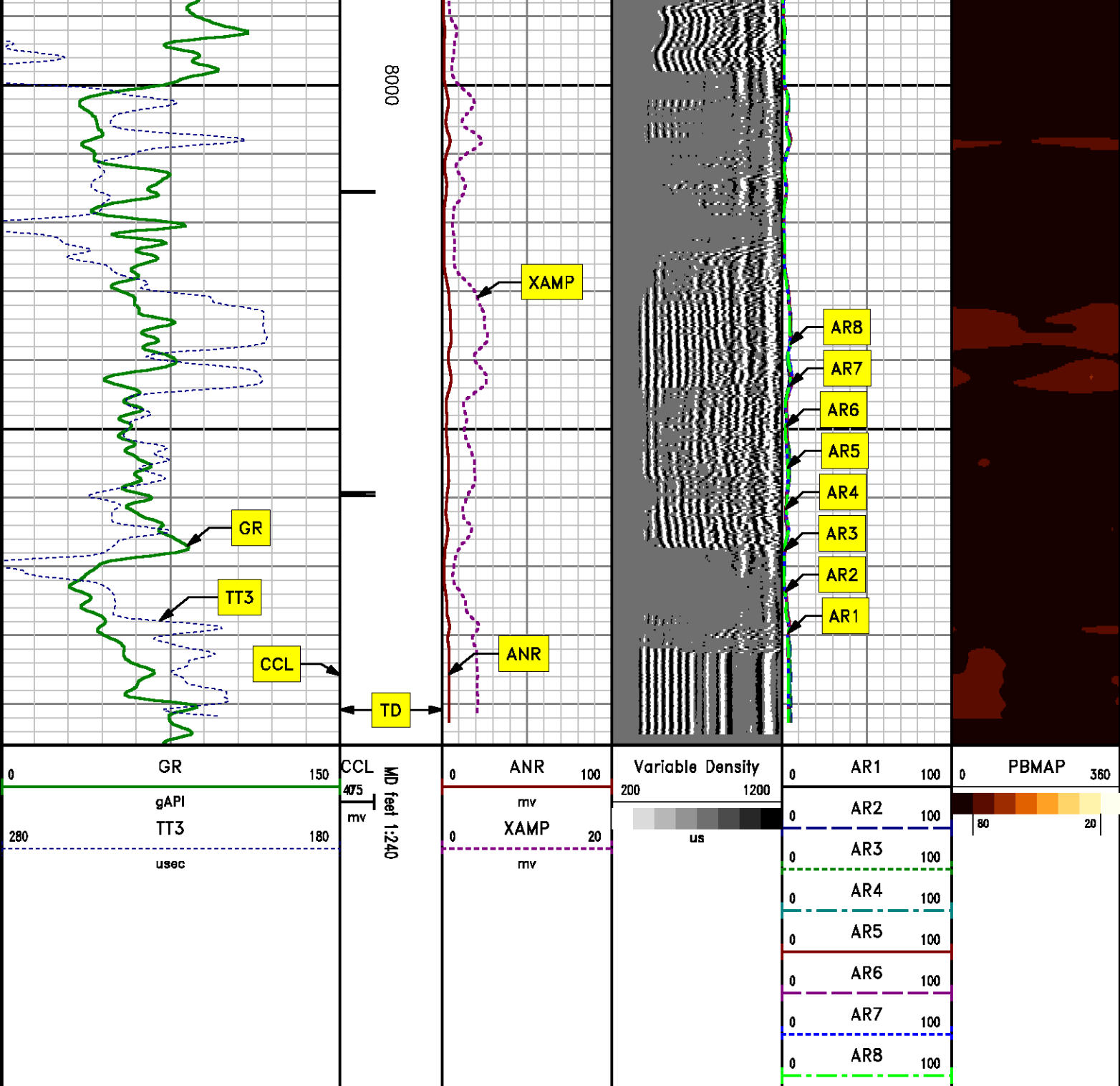












REPEAT SECTION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	7786.652	8106.840
RAL	Amp Gate Start Near	195.000	usec	7786.652	8106.840
RAL	Amp Gate Start Radial	195.000	usec	7786.652	8106.840
RAL	Amp Gate Width Far	25.000	usec	7786.652	8106.840
RAL	Amp Gate Width Near	25.000	usec	7786.652	8106.840
RAL	Amp Gate Width Radial	25.000	usec	7786.652	8106.840
RAL	casing od	4.500	inches	7786.652	8106.840
RAL	casing wt	11.600	lbm/ft	7786.652	8106.840
RAL	FB Start Far	291.900	usec	7786.652	8106.840
RAL	FB Start Near	180.000	usec	7786.652	8106.840
RAL	FB Start Radial	180.000	usec	7786.652	8106.840
RAL	FB Thresh Far	10.000	mv	7786.652	8106.840
RAL	FB Thresh Near	4.000	mv	7786.652	8106.840
RAL	FB Thresh Radial	4.000	mv	7786.652	8106.840
RAL	Fluid Travel Time	200.000	usec/ft	7786.652	8106.840

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

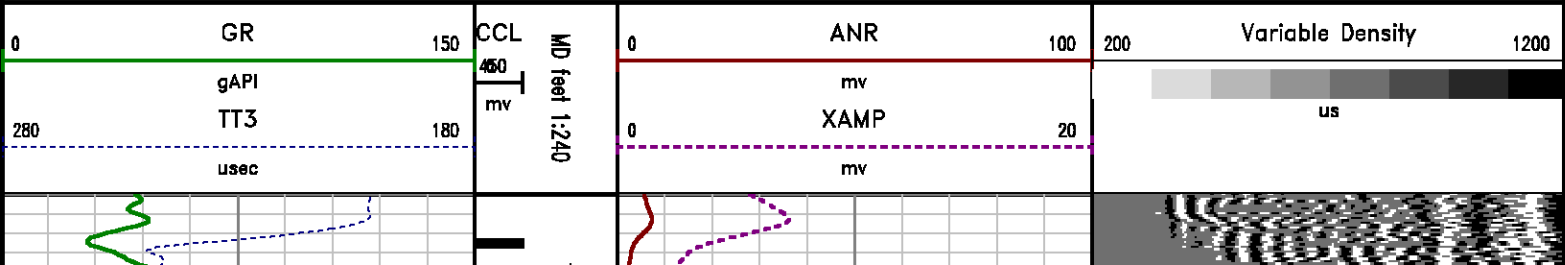
Well : FEDERAL PA 313-12

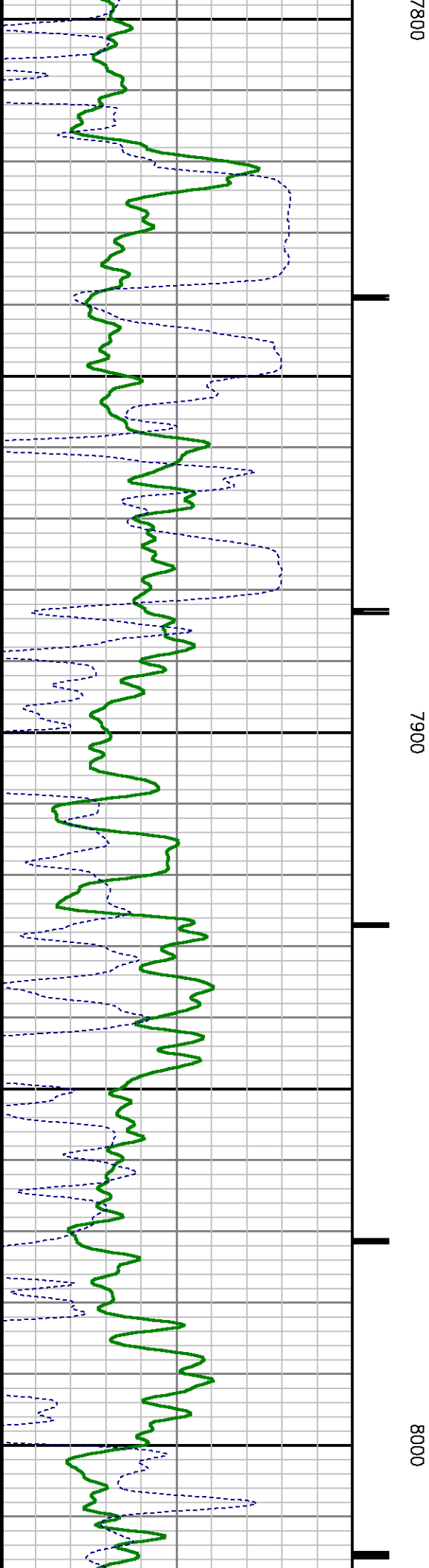
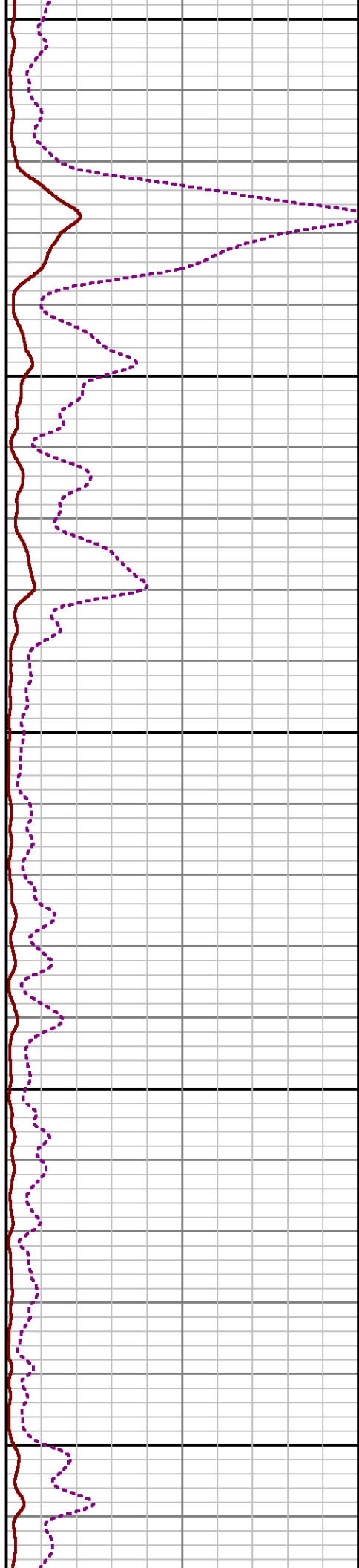
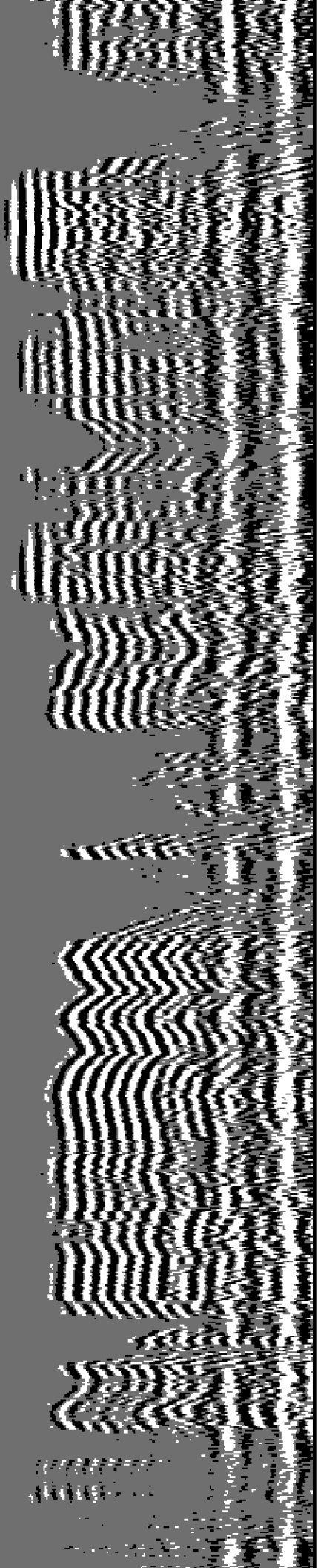
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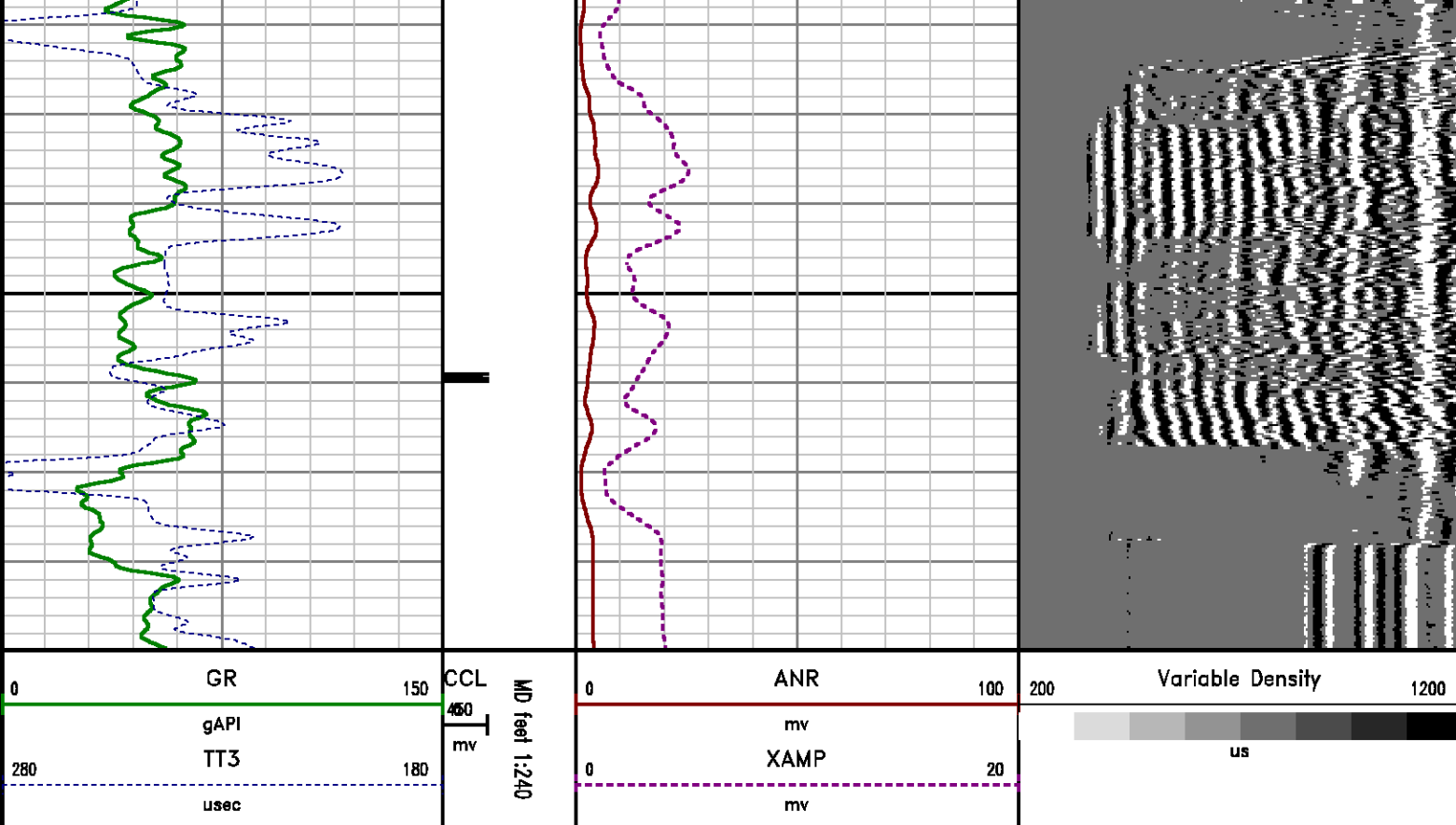
Mode : PlotMgr 5.4.504

Interval : 7790.00 - 8090.00 feet UP

Created : 11/22/2013 11:20:52 AM







CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP\49521_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Nov 21 12:27:33 2013 TOOL SERIES: 1426XA ASSET: 495 SEQ: 21

Tool Delay [usec] -57.00 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	219	216	30	166	25	-0.247	100.00	0.14
3 Ft. Receiver	218	216	30	166	25	-2.108	100.00	0.14
5 Ft. Receiver	328	325	30	258	25	-1.445	150.00	0.15
Radial #1	219	216	30	166	25	1.815	100.00	0.14
Radial #2	218	216	30	166	25	1.790	100.00	0.14
Radial #3	217	216	30	166	25	-0.283	100.00	0.14
Radial #4	216	216	30	166	25	-0.760	100.00	0.14
Radial #5	216	216	30	166	25	-1.378	100.00	0.14

Radial #6	216	216	30	166	25	-1.844	100.00	0.14
Radial #7	217	216	30	166	25	-1.149	100.00	0.14
Radial #8	219	216	30	166	25	-1.184	100.00	0.14

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\49521 fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Nov 21 12:29:31 2013 TOOL SERIES: 1426XA ASSET: 495 SEQ: 21

Tool Delay [usec] -57.00 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	0.015	0.000	1.00	100.000
3 Ft. Receiver	195	25	-0.356			
5 Ft. Receiver	305	25	-0.460			
Radial #1	195	25	-0.309			
Radial #2	195	25	-0.391			
Radial #3	195	25	-0.332			
Radial #4	195	25	-0.358			
Radial #5	195	25	-0.353			
Radial #6	195	25	-0.373			
Radial #7	195	25	-0.311			
Radial #8	195	25	-0.307			

GAMMA RAY

Calibration File: C:\case\calver\GR\20903.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sun Nov 03 10:29:26 2013 TOOL SERIES: 1355XA ASSET: 209 SEQ: 03

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA-612	152.76	595.33	0.418	63.85	248.85	185.00

Verification File: C:\case\calver\GR\20903.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Sun Nov 03 10:31:05 2013 TOOL SERIES: 1355XA ASSET: 209 SEQ: 03

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA-612	151.02	589.38	0.418	63.13	246.36	183.24

TOOL DIAGRAM

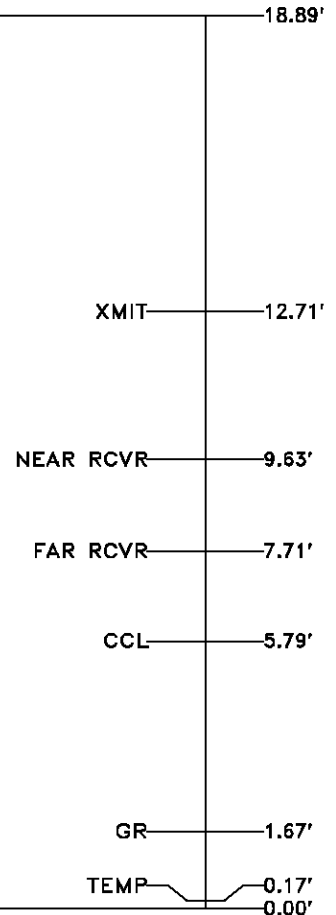
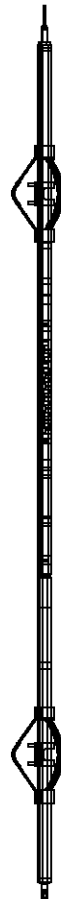
OTA SHORT CABLE HEAD

PROBE 2 3/4 DUAL RECEIVER RADII

Series 1426XA
 Mnemonic PROB
 Diameter 2.75"
 Length 11.17'
 Measure Point 0.75' FAR RCVR
 Measure Point 2.67' NEAR RCVR
 Measure Point 5.75' XMIT
 Temp Rating 350.00 °F
 Press Rating 18000.00 PSI

RAL GR/TEMP/CCL/CHV DETECTOR

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



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



Company

WPX ENERGY

Well

FEDERAL PA 313-12

Field

PARACHUTE

County

GARFIELD

State

CO

Location

SHL: 2586' FSL & 1723' FWL

BHL: 2143' FSL & 518' FWL

Elevations

KB 6533 ft

DF

GL 6507 ft

File No:

CH79533

API No:

05045206550000

12 7S 95W

PA 23-12 PAD

NABORS 577

SEC 12

TWP 7S

RGE 95W

CASE

Baker Atlas