



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: CH075927	Company WPX ENERGY	Well WPX ENERGY GM 313-34
API No: 05045193070000	Field GRAND VALLEY	GRAND VALLEY
	County GARFIELD	State COLORADO
	Location	Other Services
34-65-96W GM 23-34 PAD NABORS 574	SHL: 1962' FSL X 2153' FWL BHL: 1681' FSL X 848' FWL (NWSW)	RPM
Permanent Datum Log Measured From Drill Measured From	GL KB KELLY BUSHING	Elevations KB 5355.5 ft DF GL 5355.5 ft
	SEC 34 TWP 6S RGE 96W	

Date	18/AUG/13	
Run	ONE	
Service Order	624403	
Depth Driller	6669 ft	
Depth Logger	6585 ft	
Bottom Logged Interval	6680 ft	
Top Logged Interval	26 ft	
Time Started	0800	
Time Finished	1030	
Operator Rig Time	2.5 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	62 ft	
Logged Cement Top	NA	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	NA	
Nominal Logging Speed	45 fpm	
Maximum Recorded Temperature	211 degF	
Reference Log	NONE	
Reference Log Date	NA	
Equipment No.	4271	GRAND JCT
Recorded By	FLOYD RENEAU	
Witnessed By	LEWIS CARTER	

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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	900 ft
8.75 in	900 ft	6669 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in			0 ft	900 ft
4.5 in	11.6 lbm/ft	1-80	0 ft	6669 ft

Remarks
All data on this log is shifted using the CCL curve to put the wellhead (top CCL mark) on depth with ground level elevation at the client's request.
The amount of linear shift is 5.5 feet.
Logged with zero PSI at wellhead.
BHT = 211°F
SJ = 3274' - 3299'

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	30.575	6600.500
RAL	Amp Gate Start Near	195.000	usec	30.575	6600.500
RAL	Amp Gate Start Radial	195.000	usec	30.575	6600.500
RAL	Amp Gate Width Far	25.000	usec	30.575	6600.500
RAL	Amp Gate Width Near	25.000	usec	30.575	6600.500
RAL	Amp Gate Width Radial	25.000	usec	30.575	6600.500
RAL	casing od	4.500	inches	30.575	6600.500
RAL	casing wt	11.600	lbm/ft	30.575	6600.500
RAL	FB Start Far	291.900	usec	30.575	6600.500
RAL	FB Start Near	180.000	usec	30.575	6600.500
RAL	FB Start Radial	180.000	usec	30.575	6600.500
RAL	FB Thresh Far	10.000	mv	30.575	6600.500
RAL	FB Thresh Near	4.000	mv	30.575	6600.500
RAL	FB Thresh Radial	4.000	mv	30.575	6600.500
RAL	Fluid Travel Time	200.000	usec/ft	30.575	6600.387

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

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

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

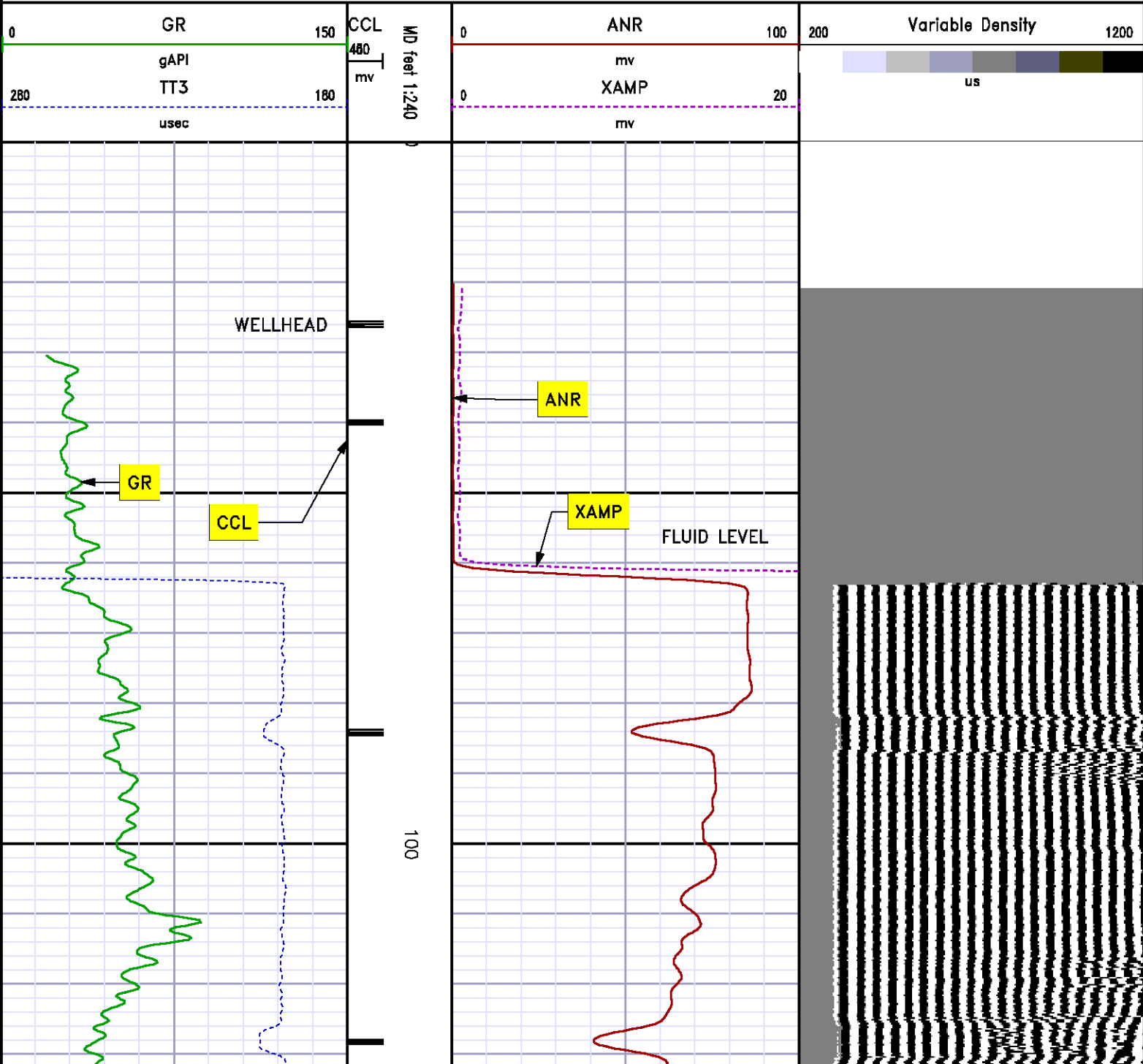
Well : WPX ENERGY GM 313-34

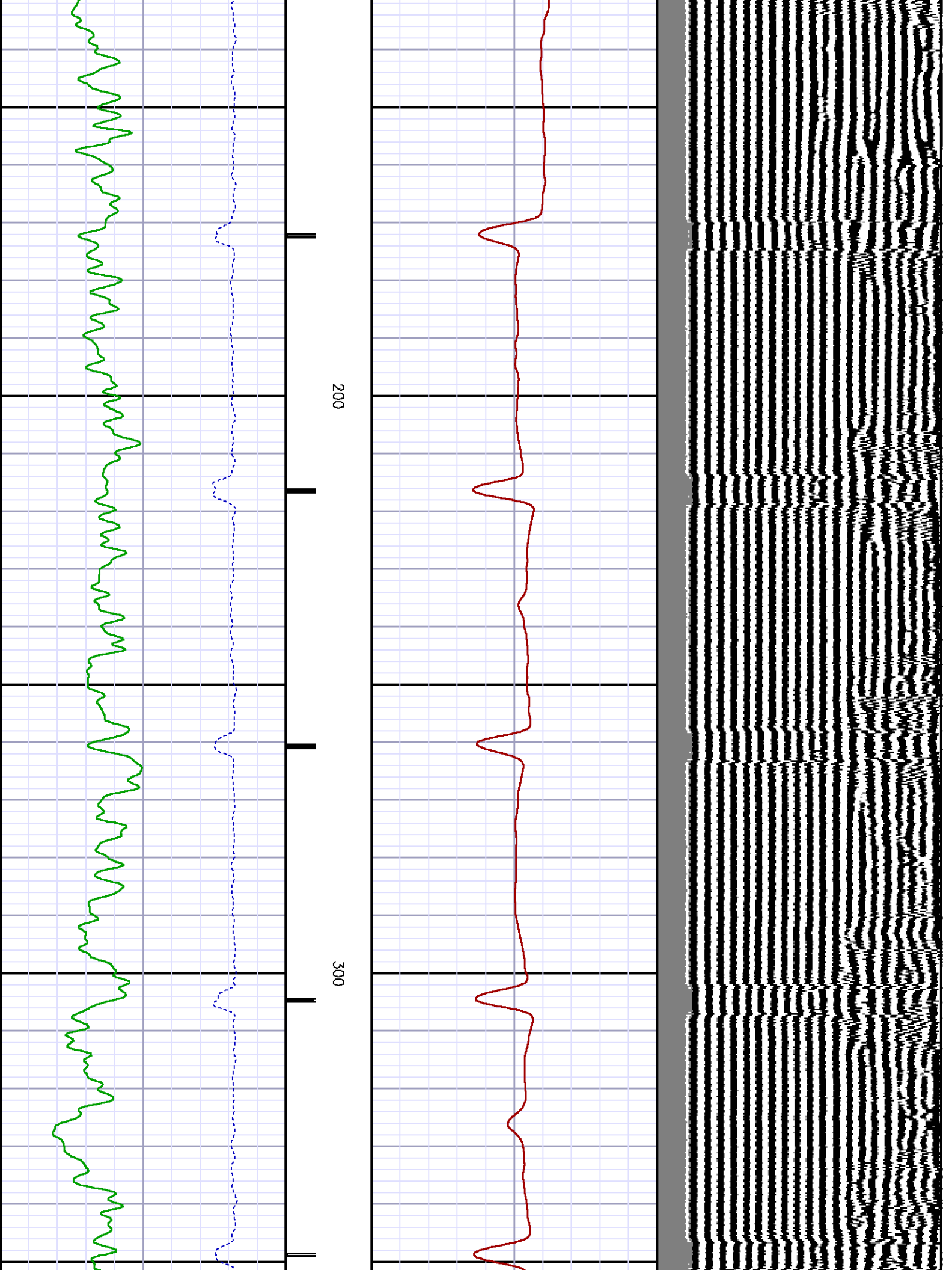
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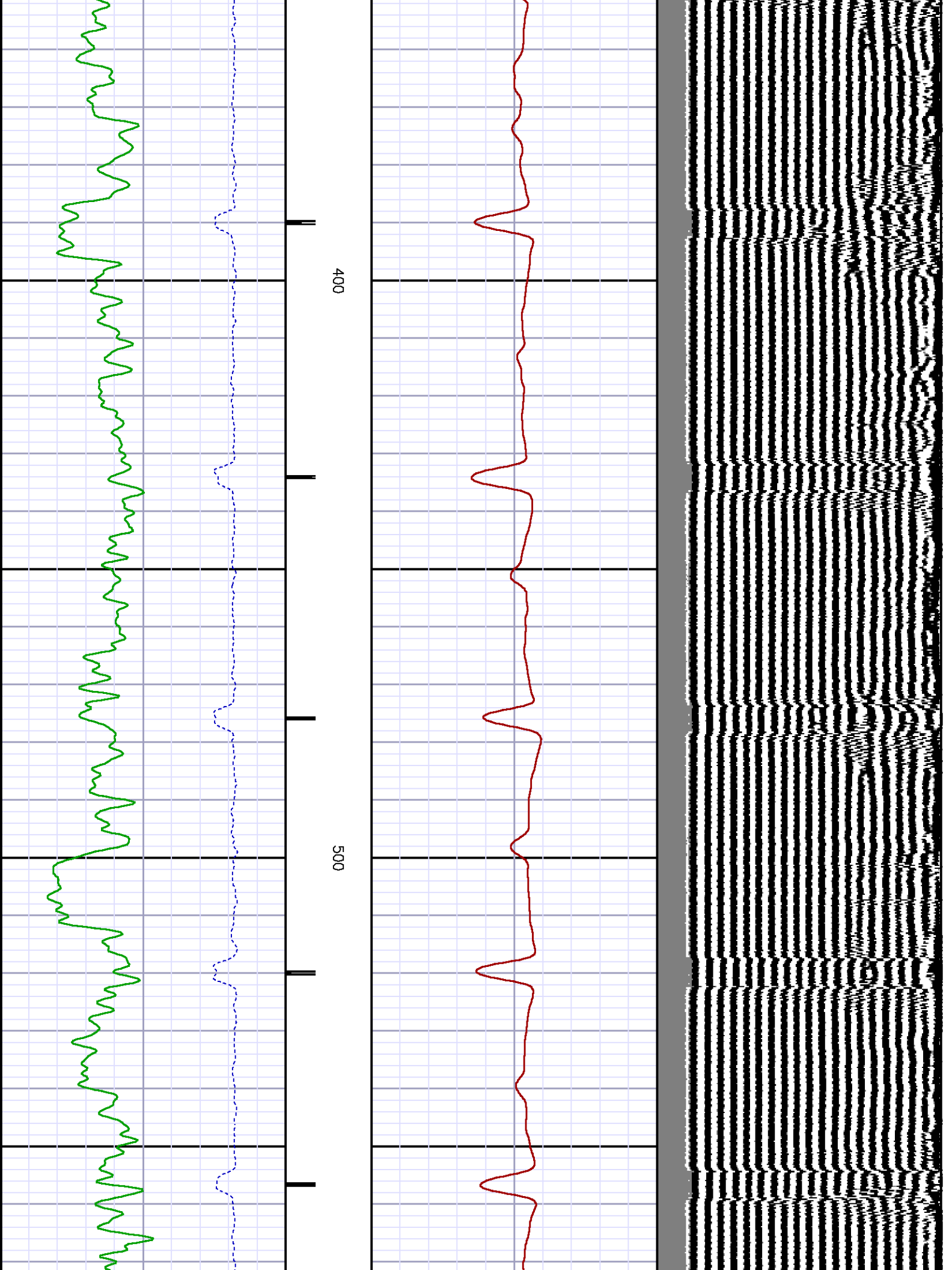
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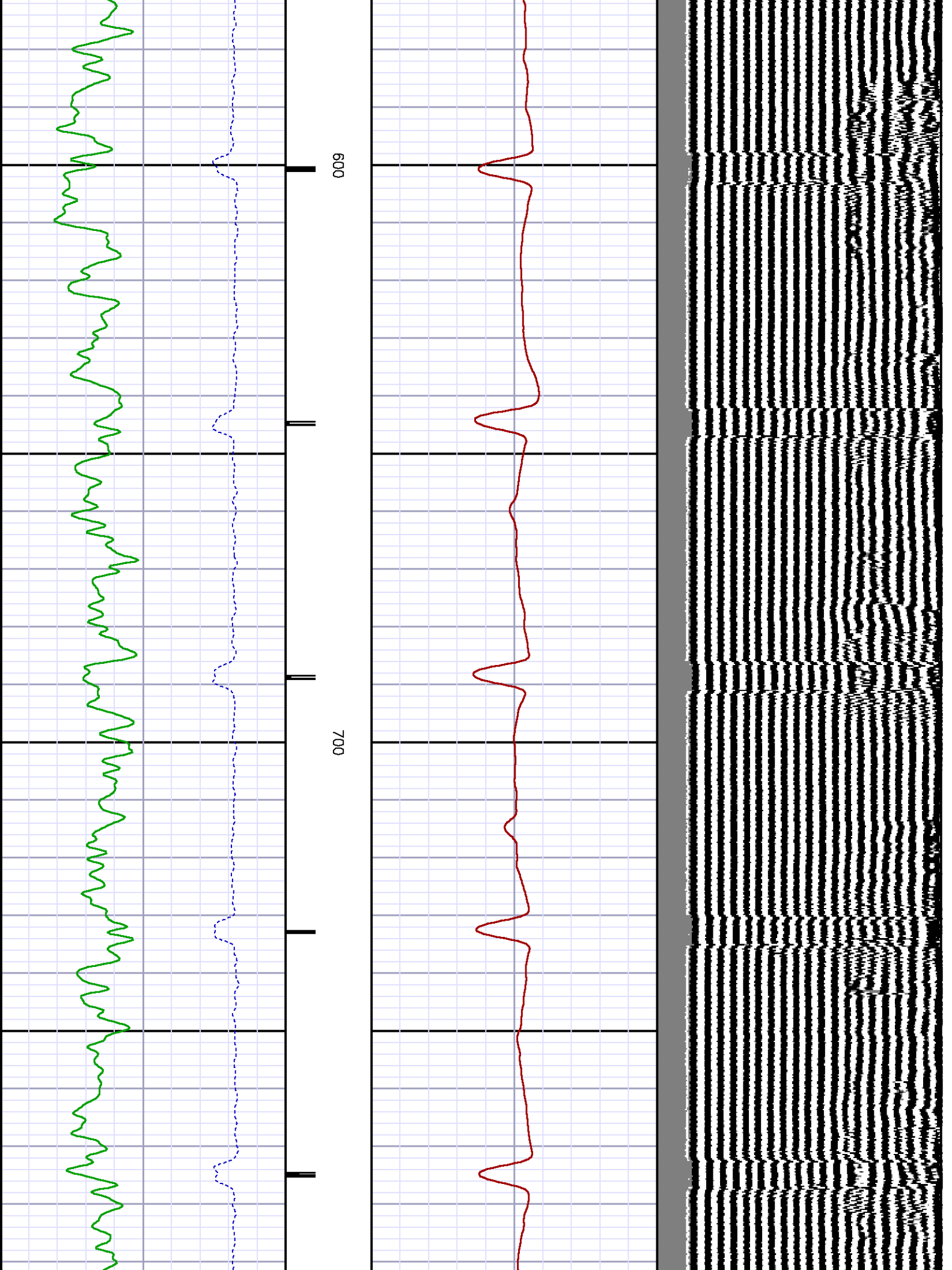
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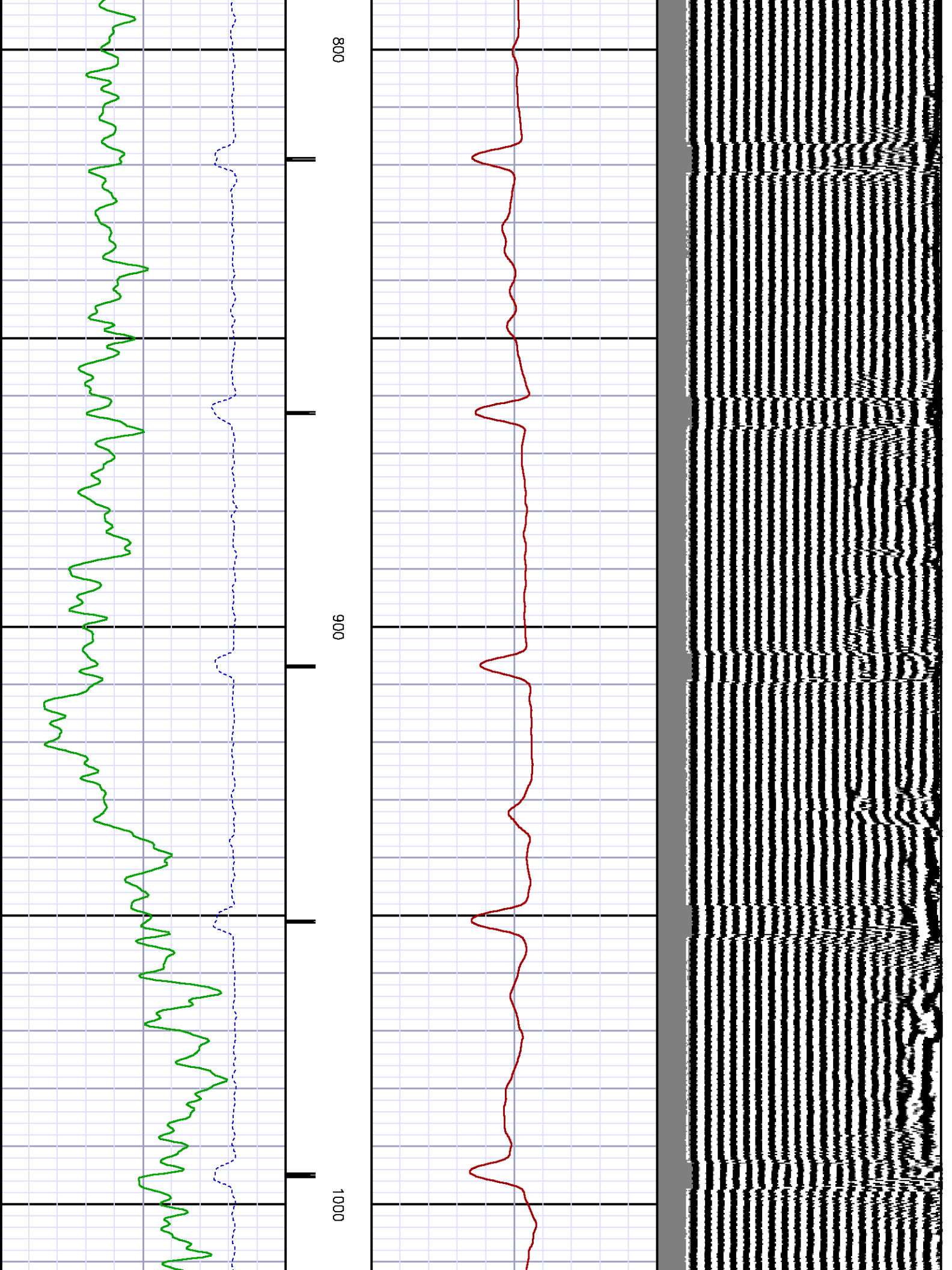
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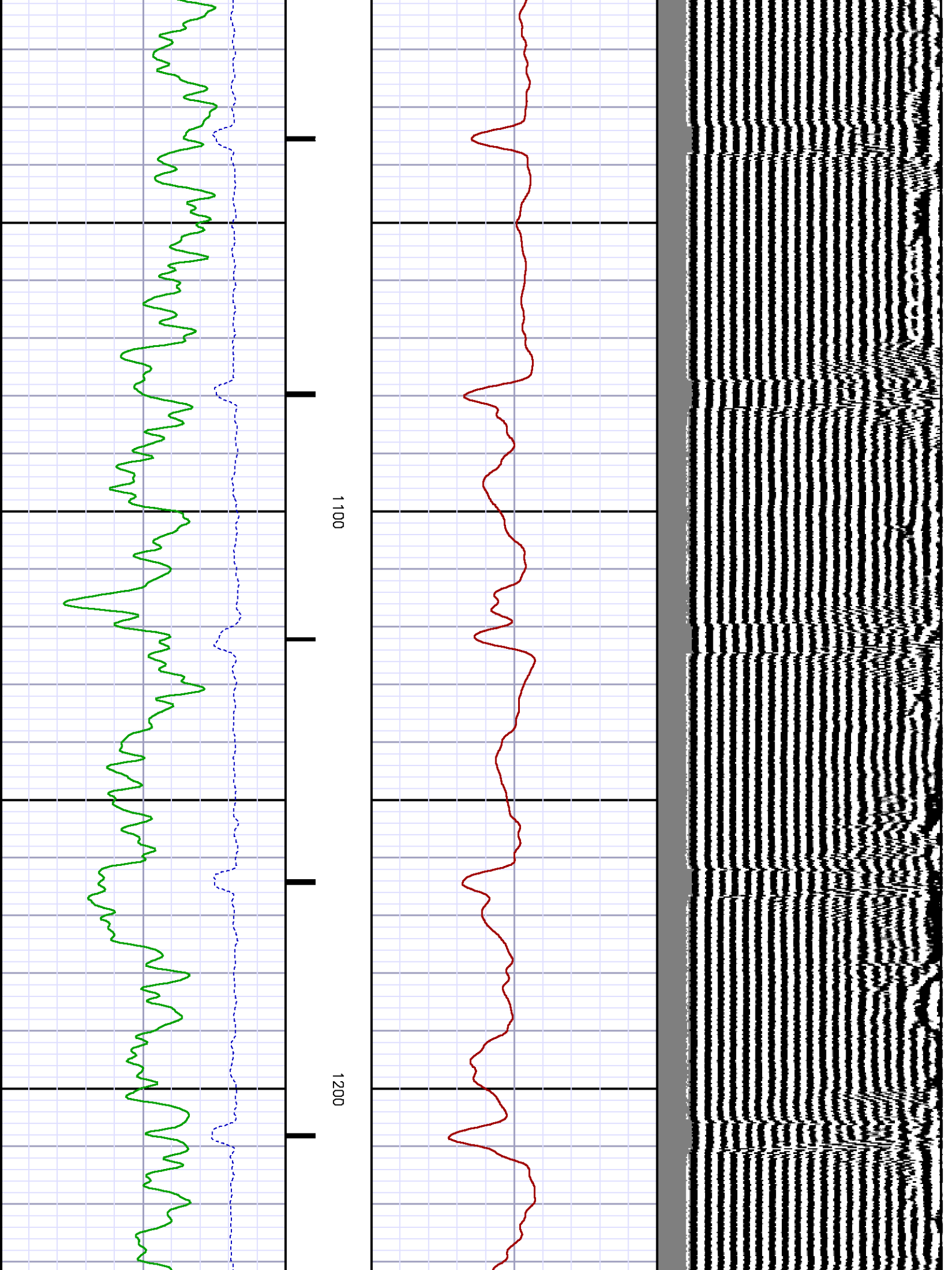


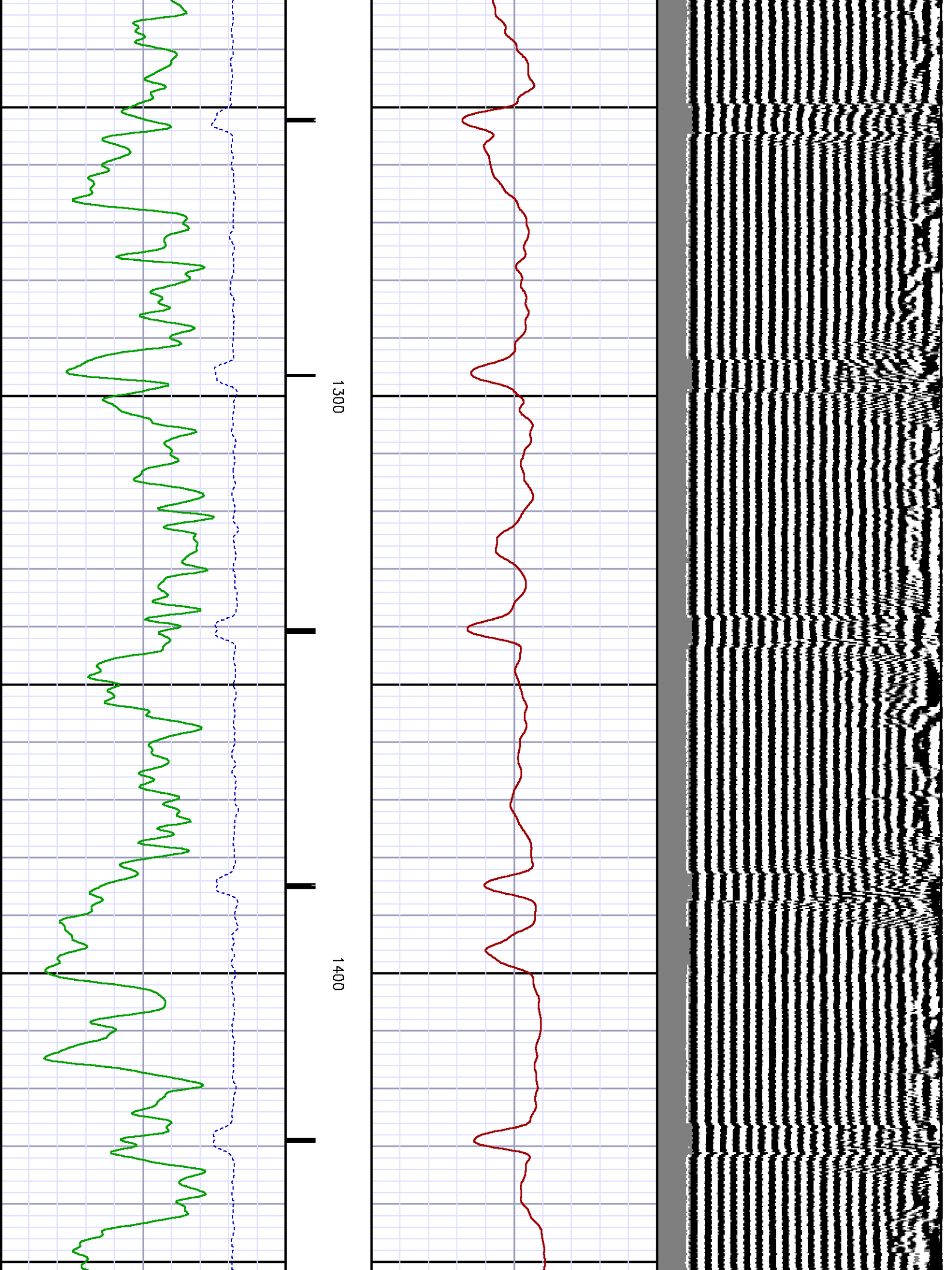


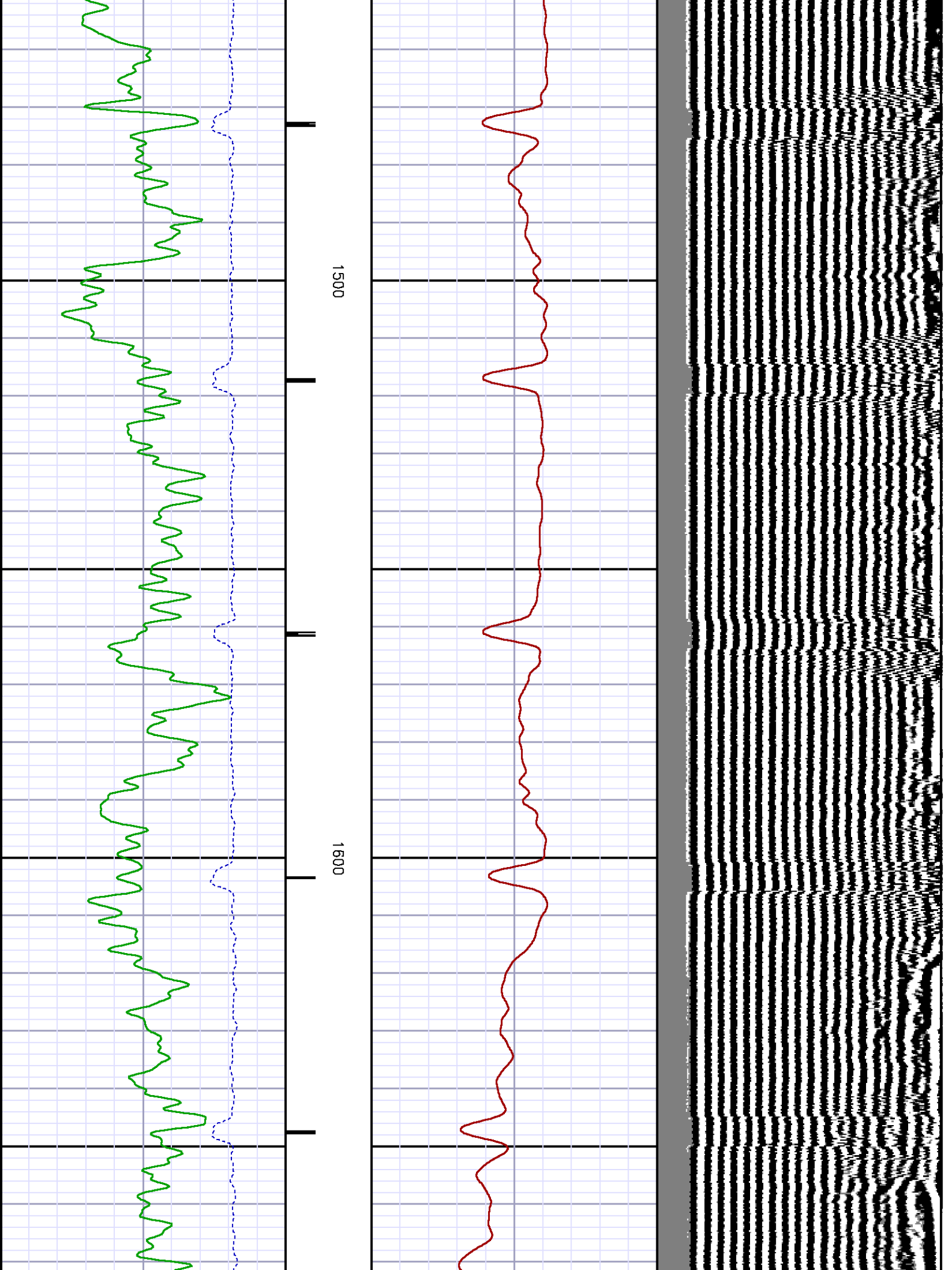


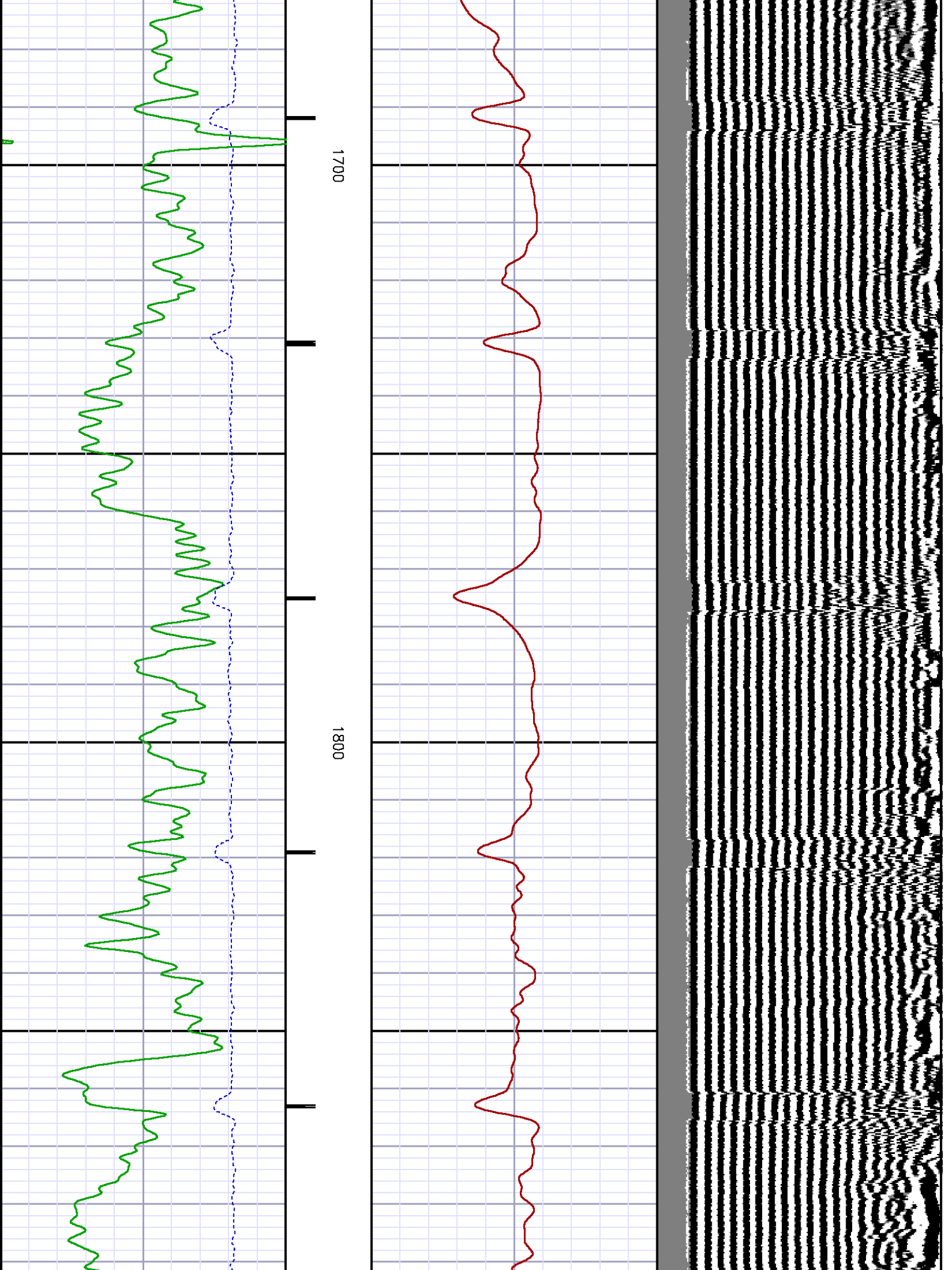


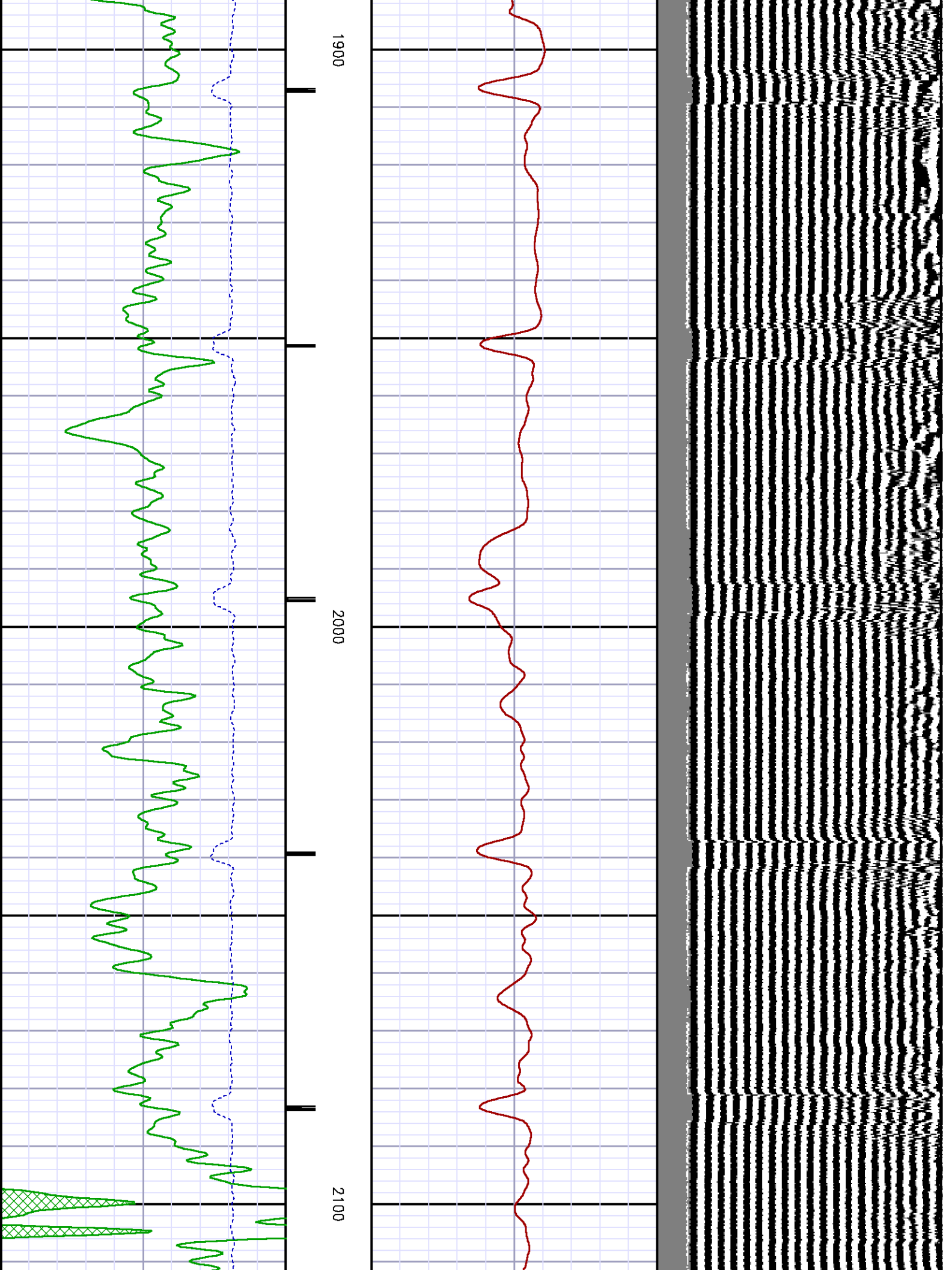


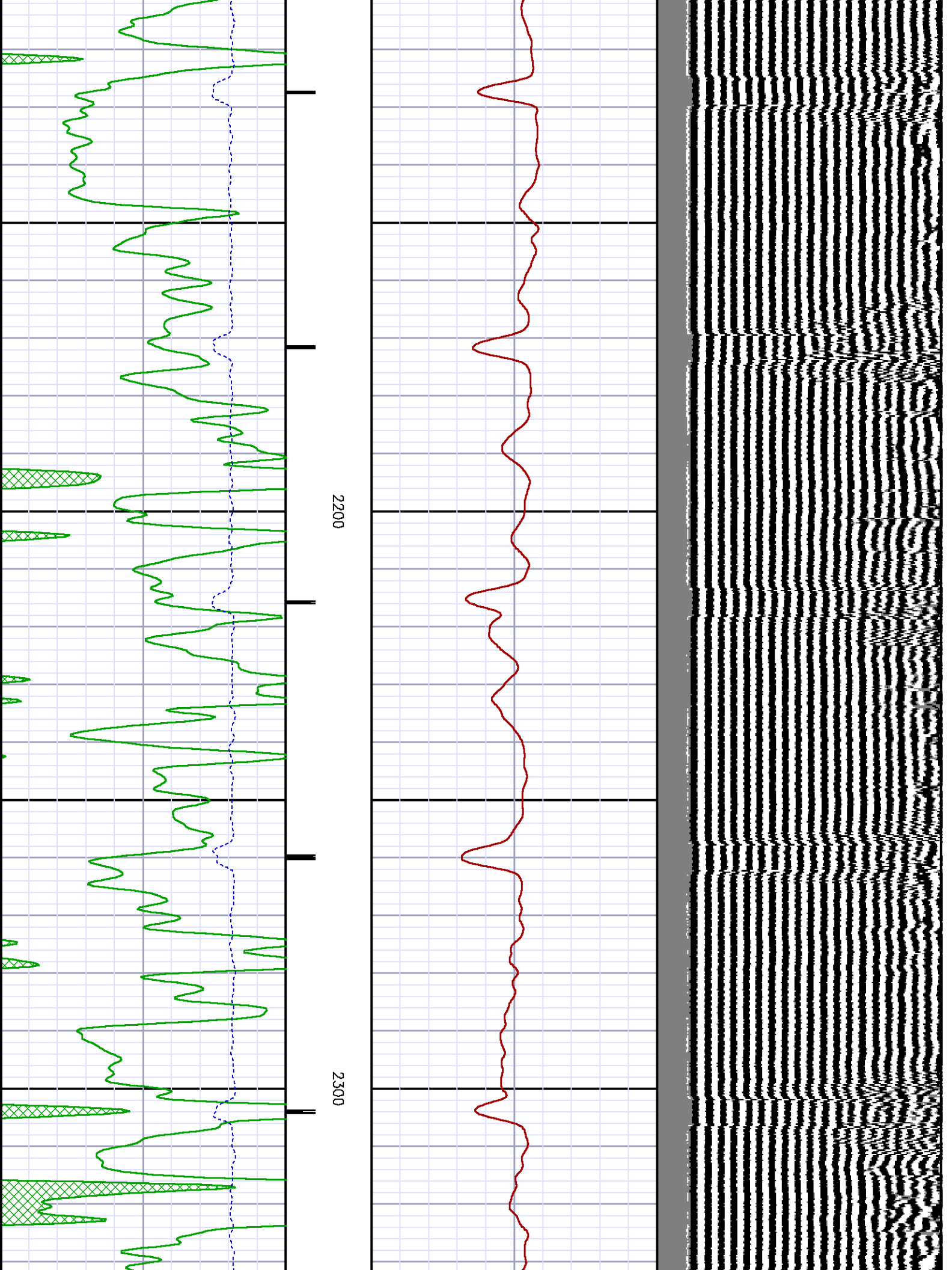


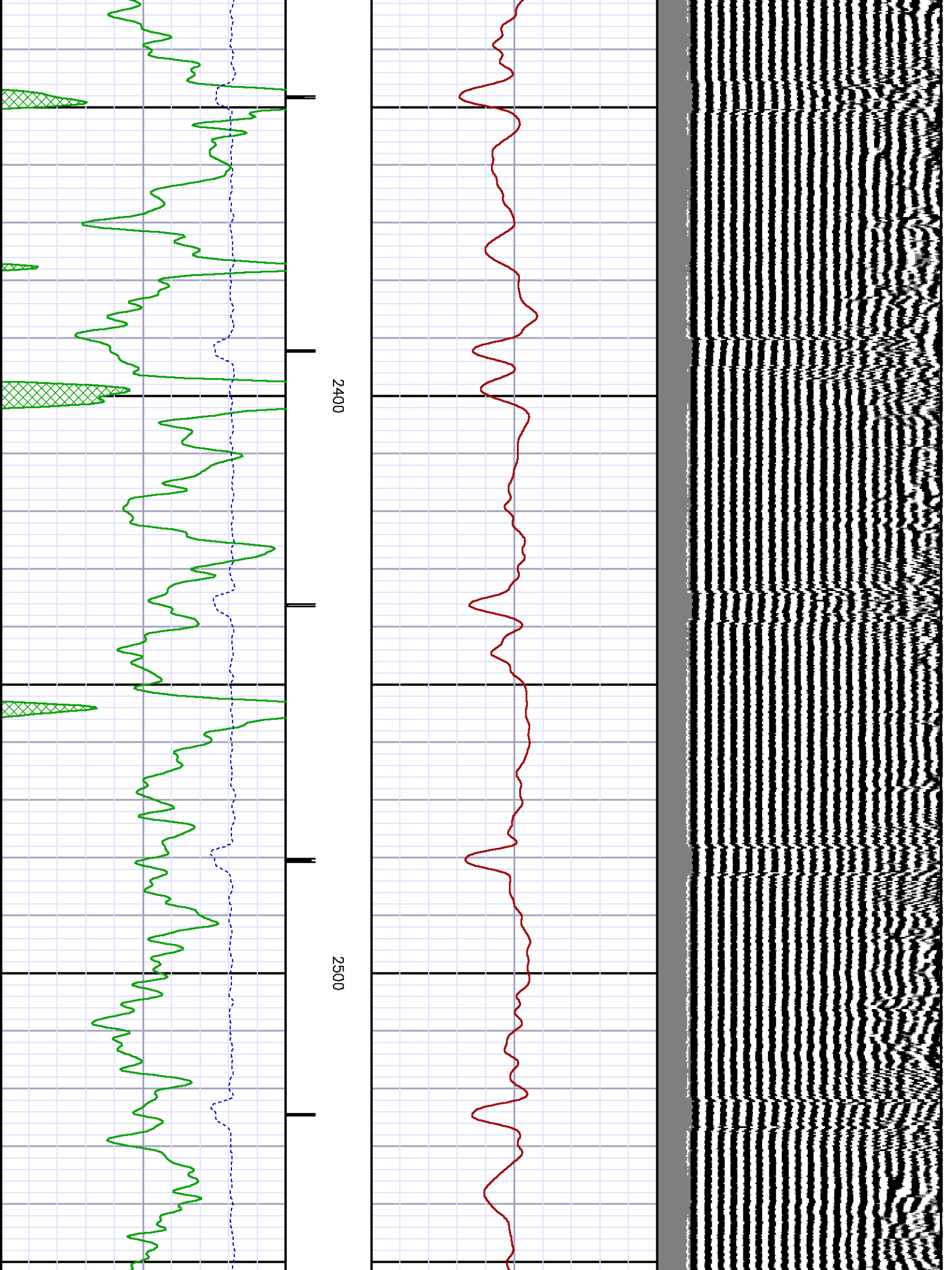


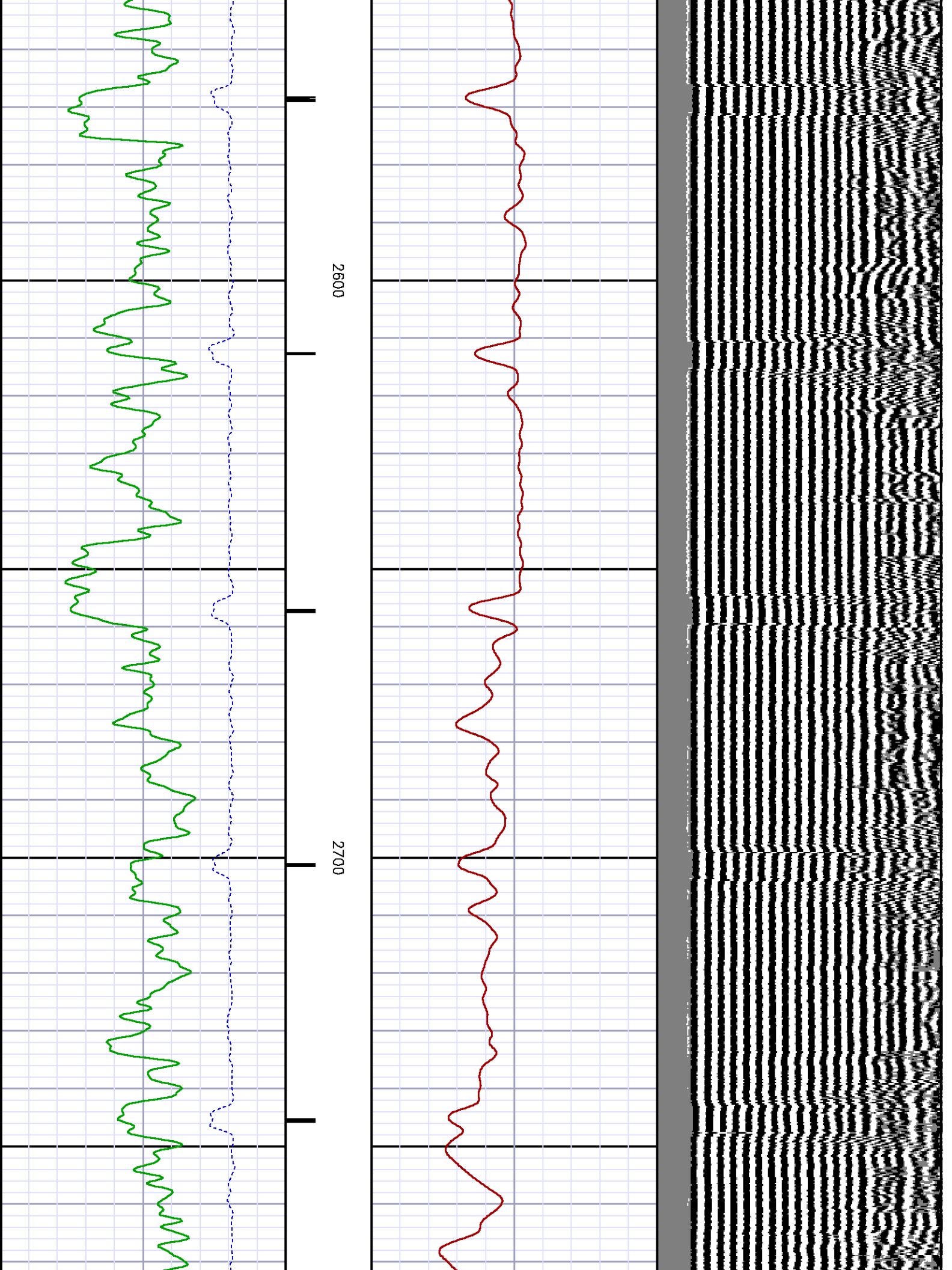


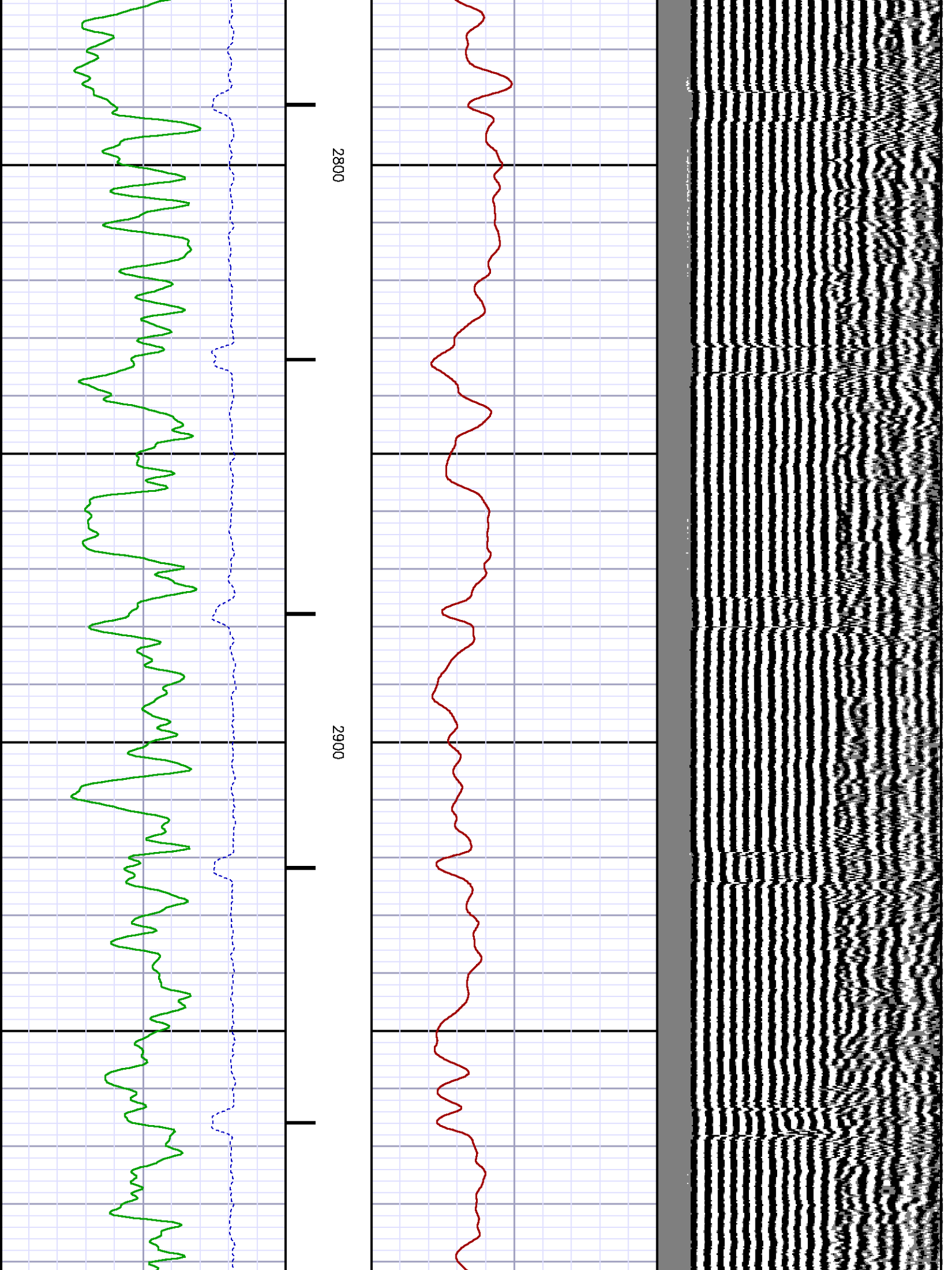


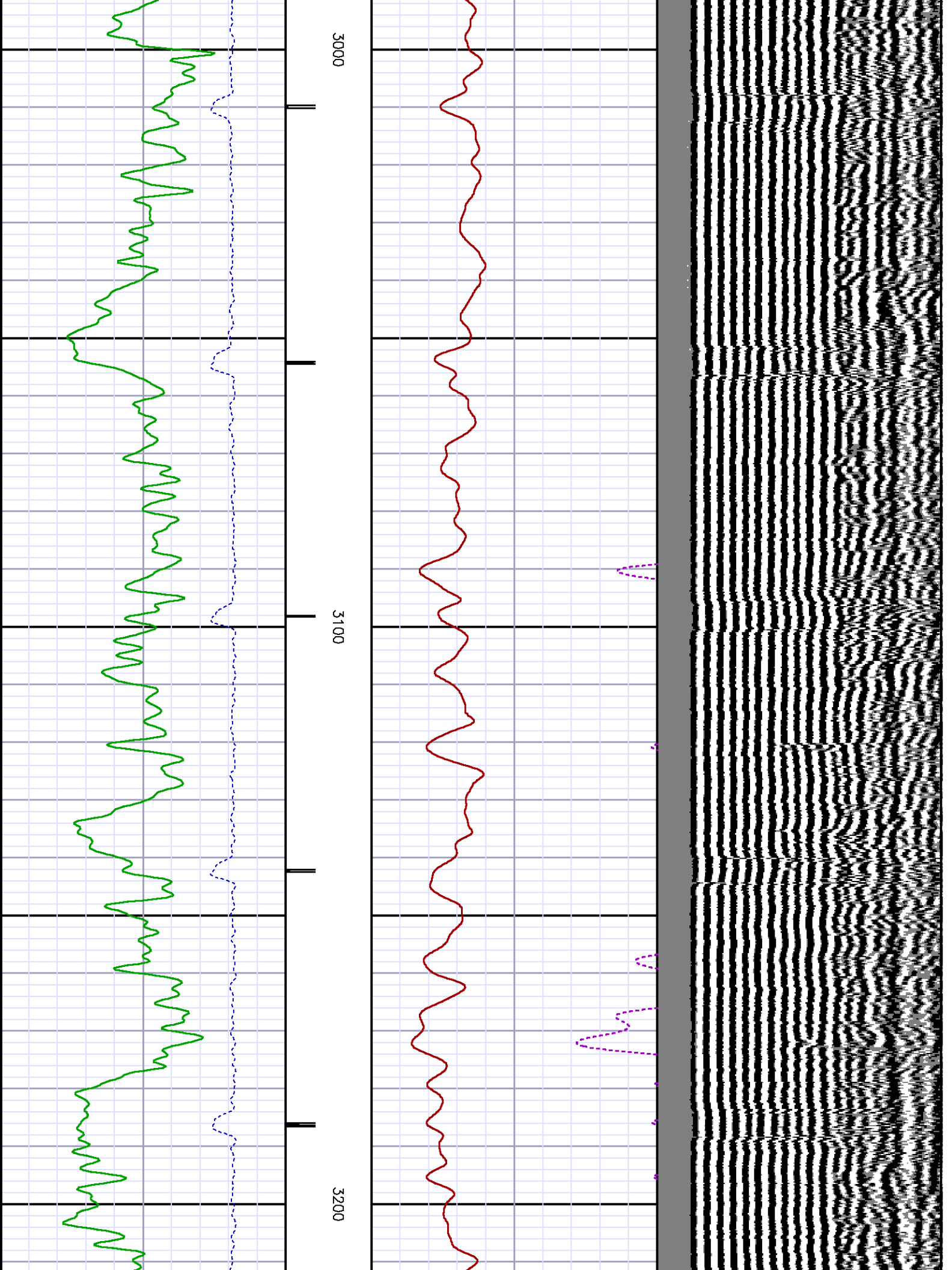


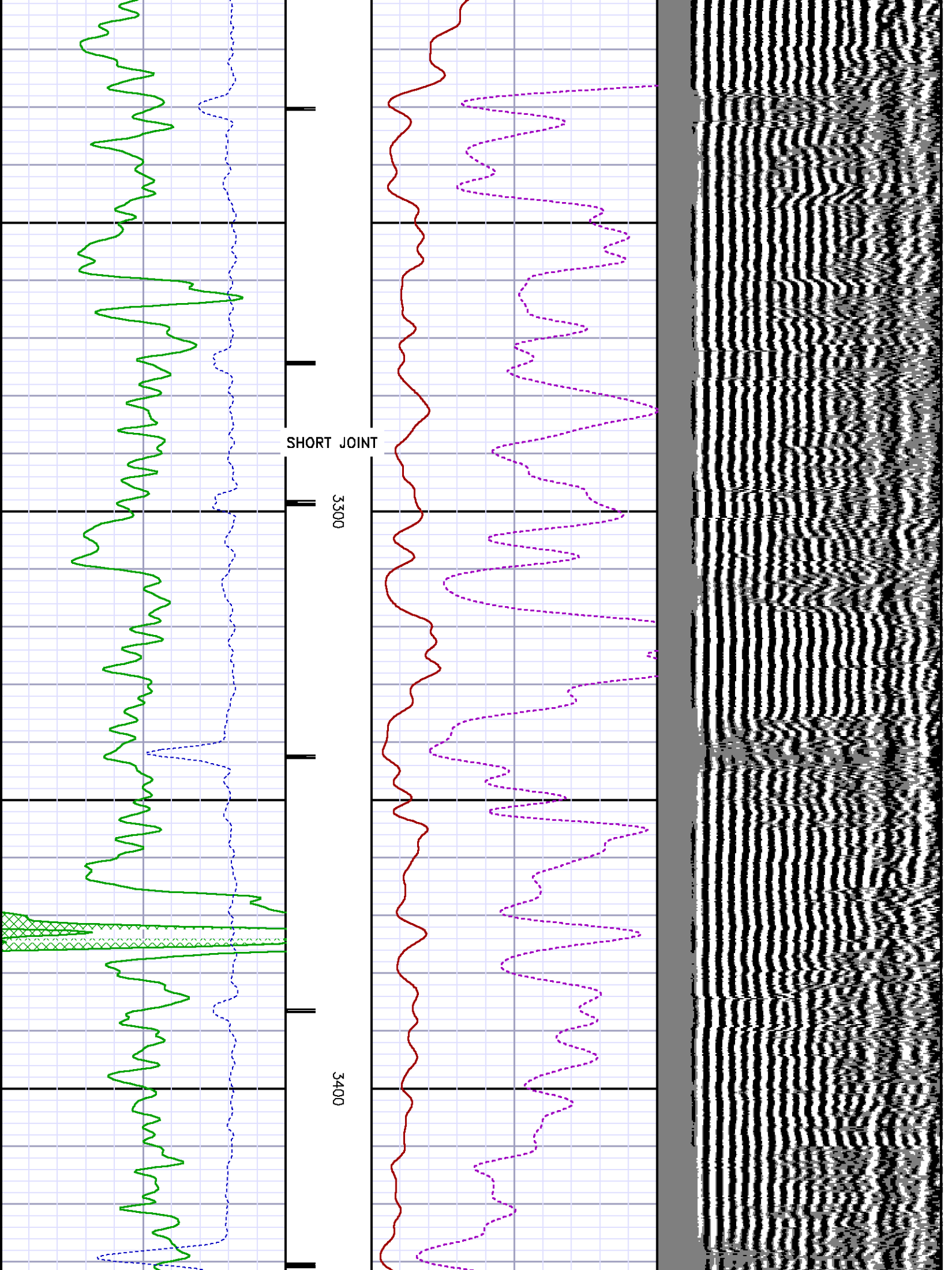


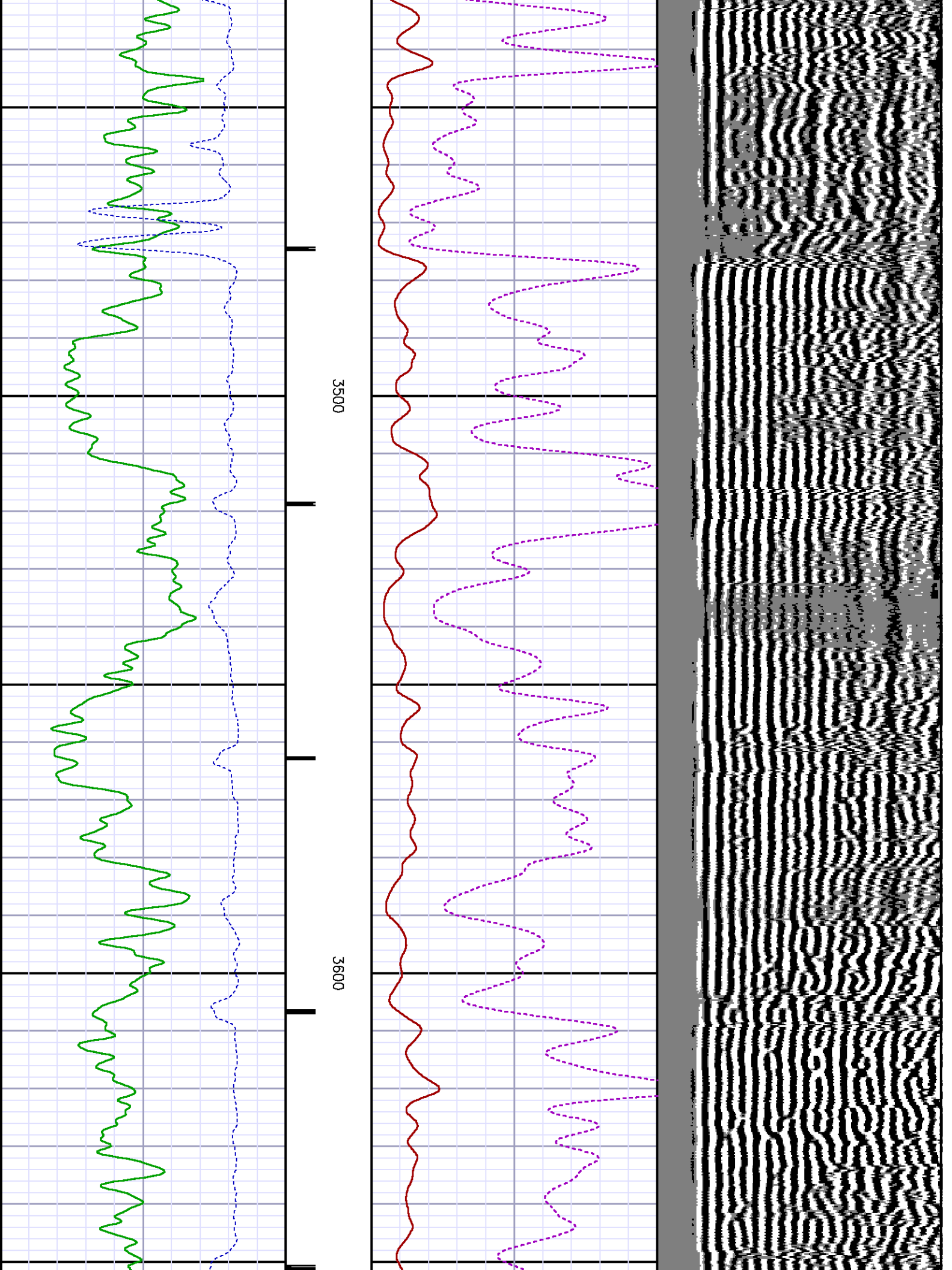


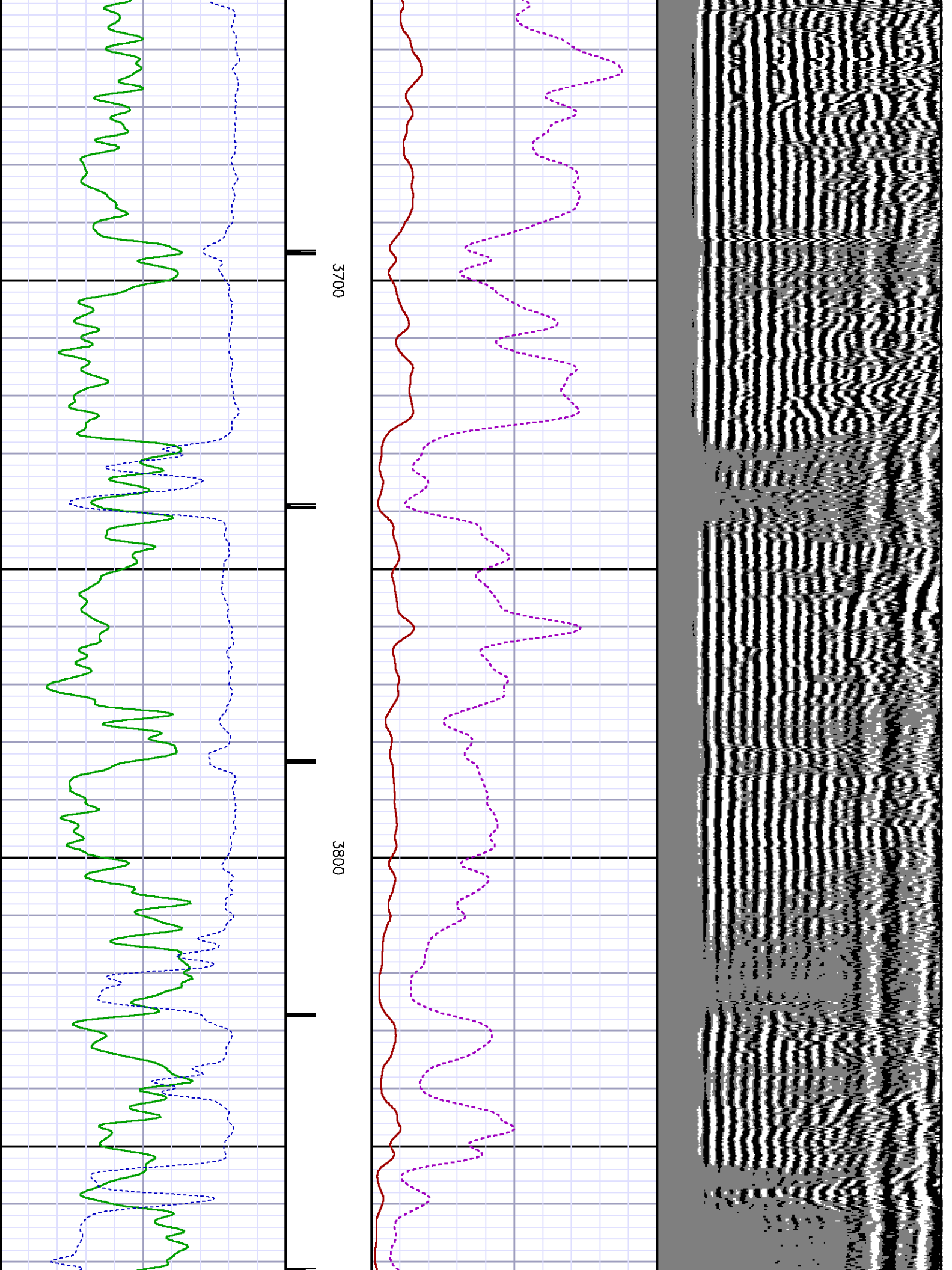


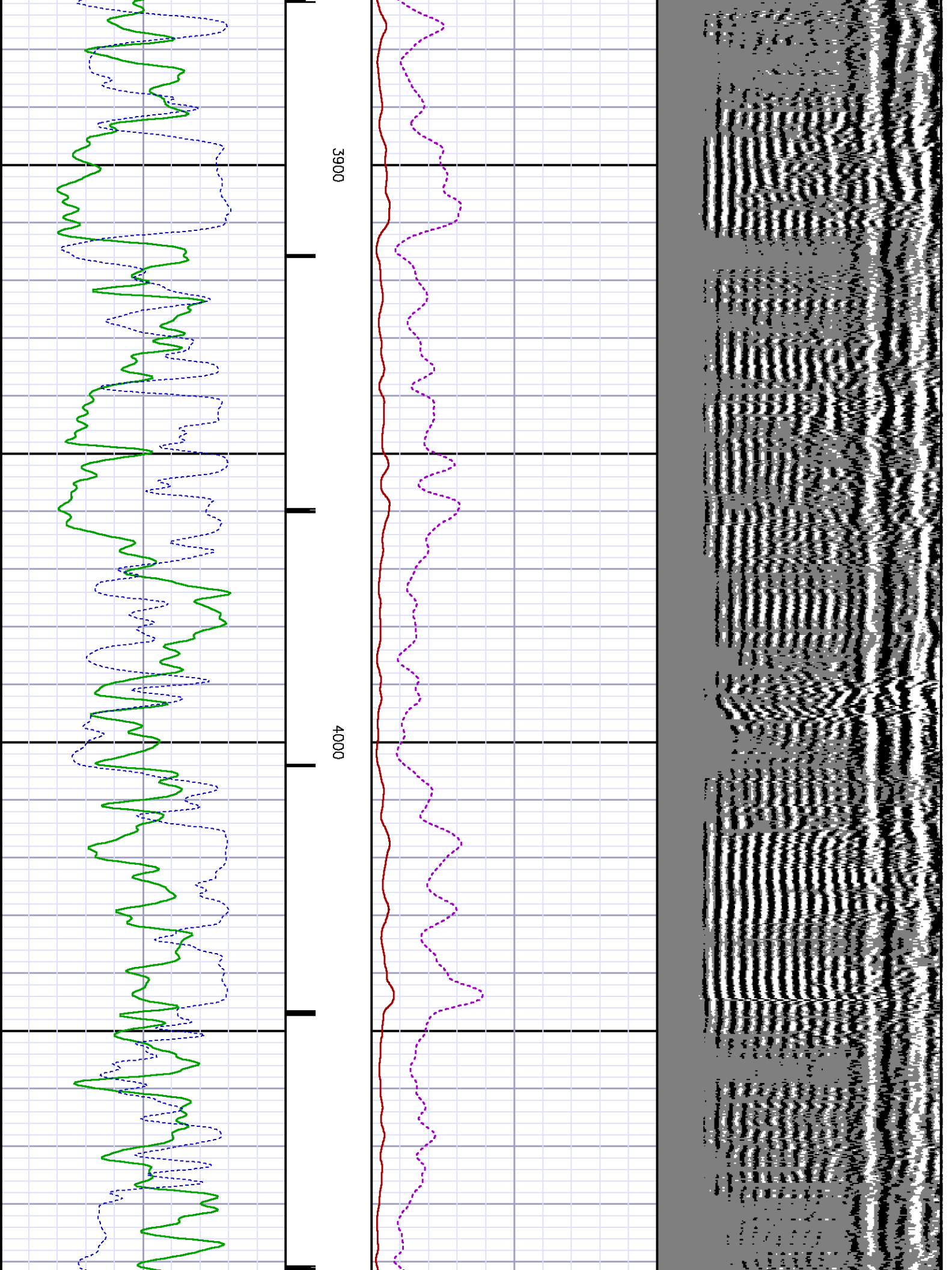


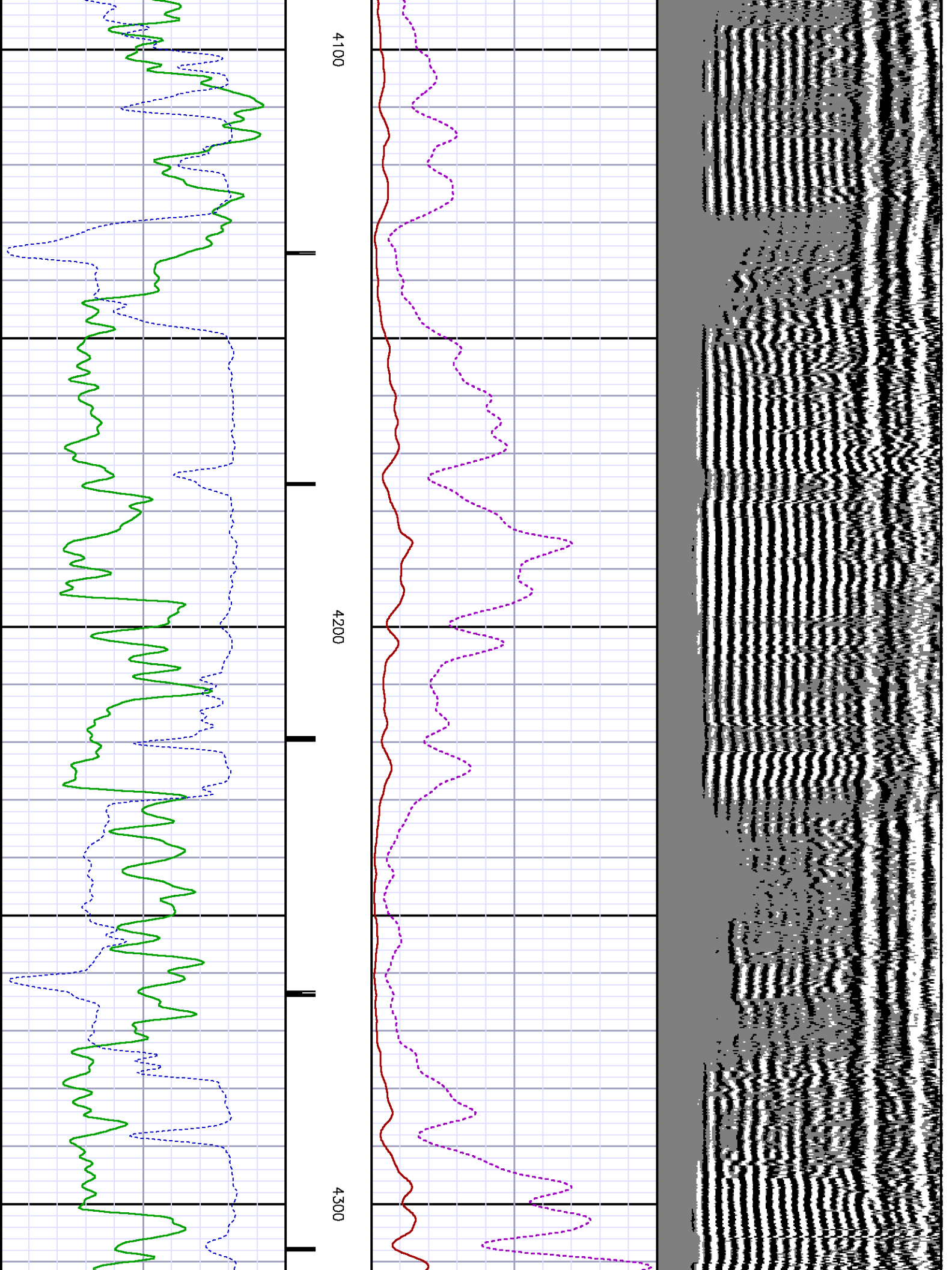


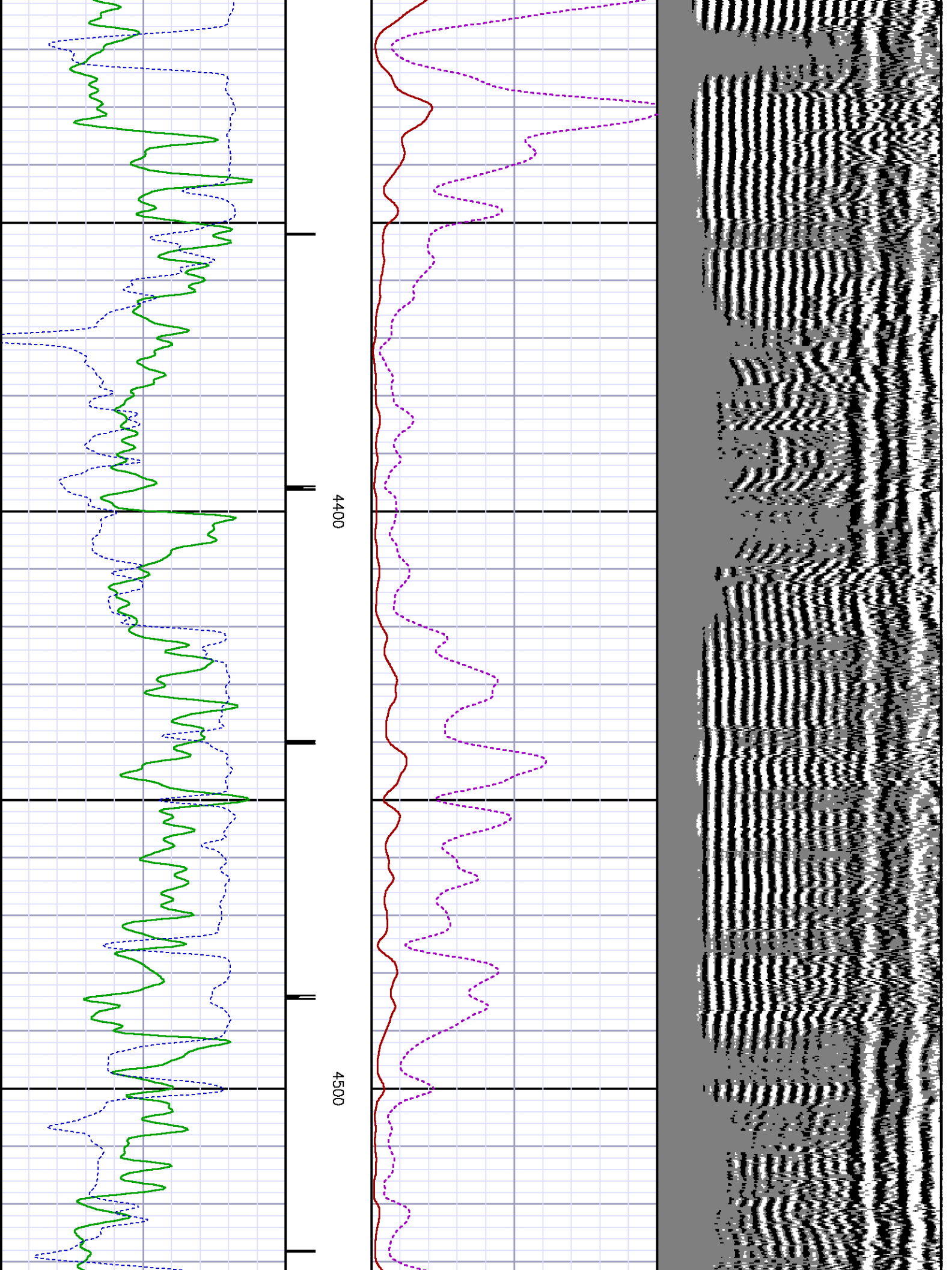


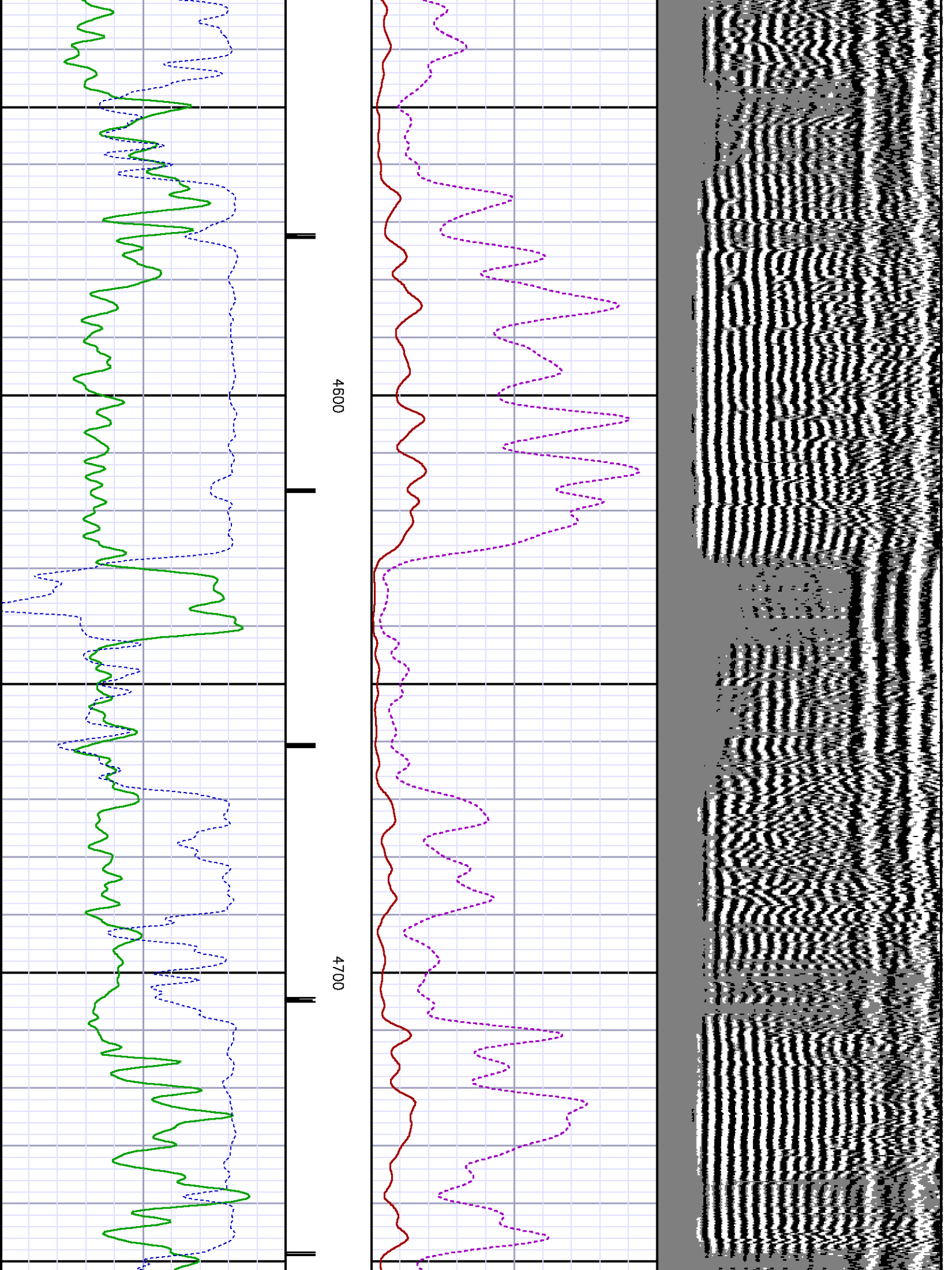


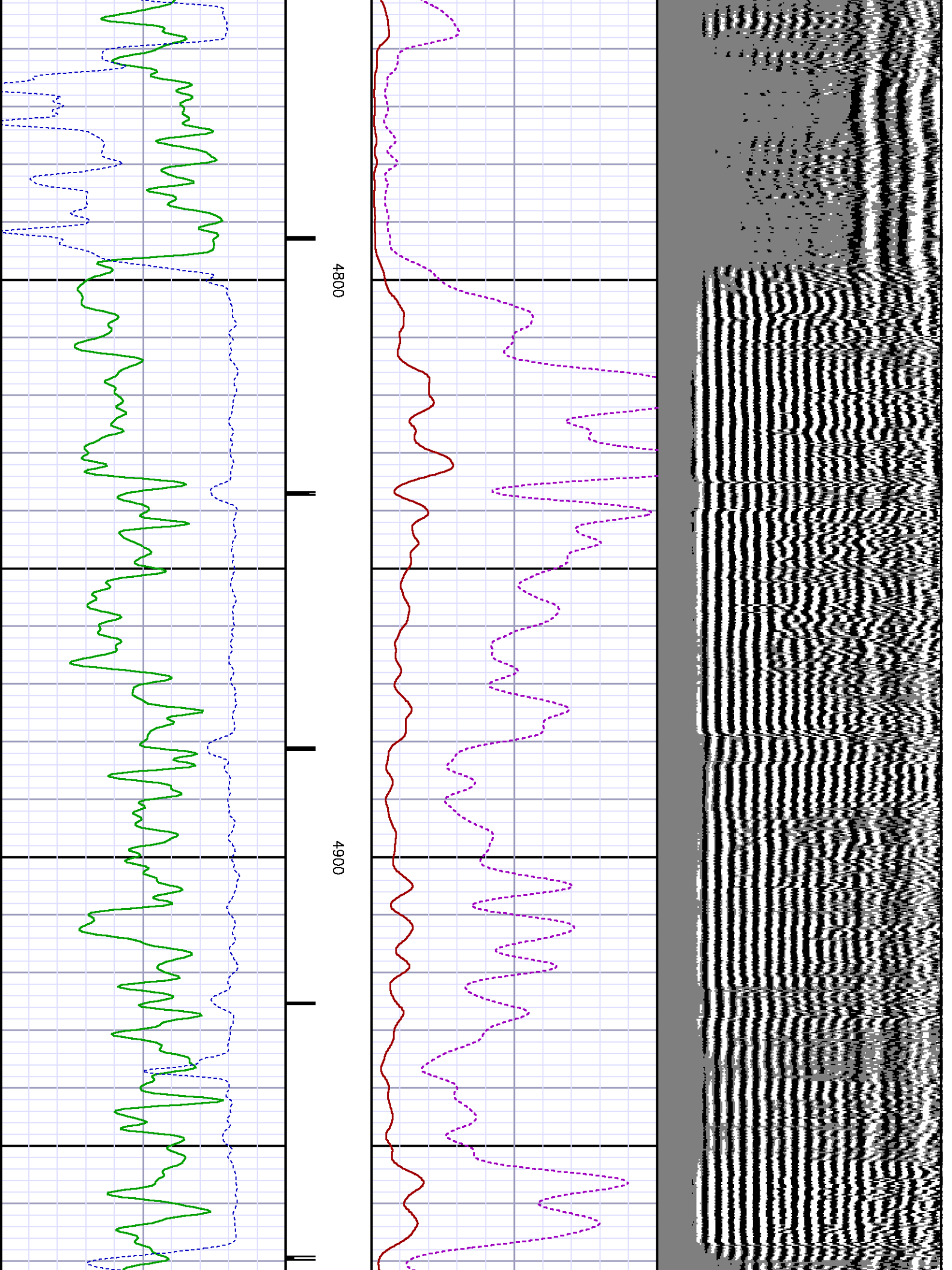


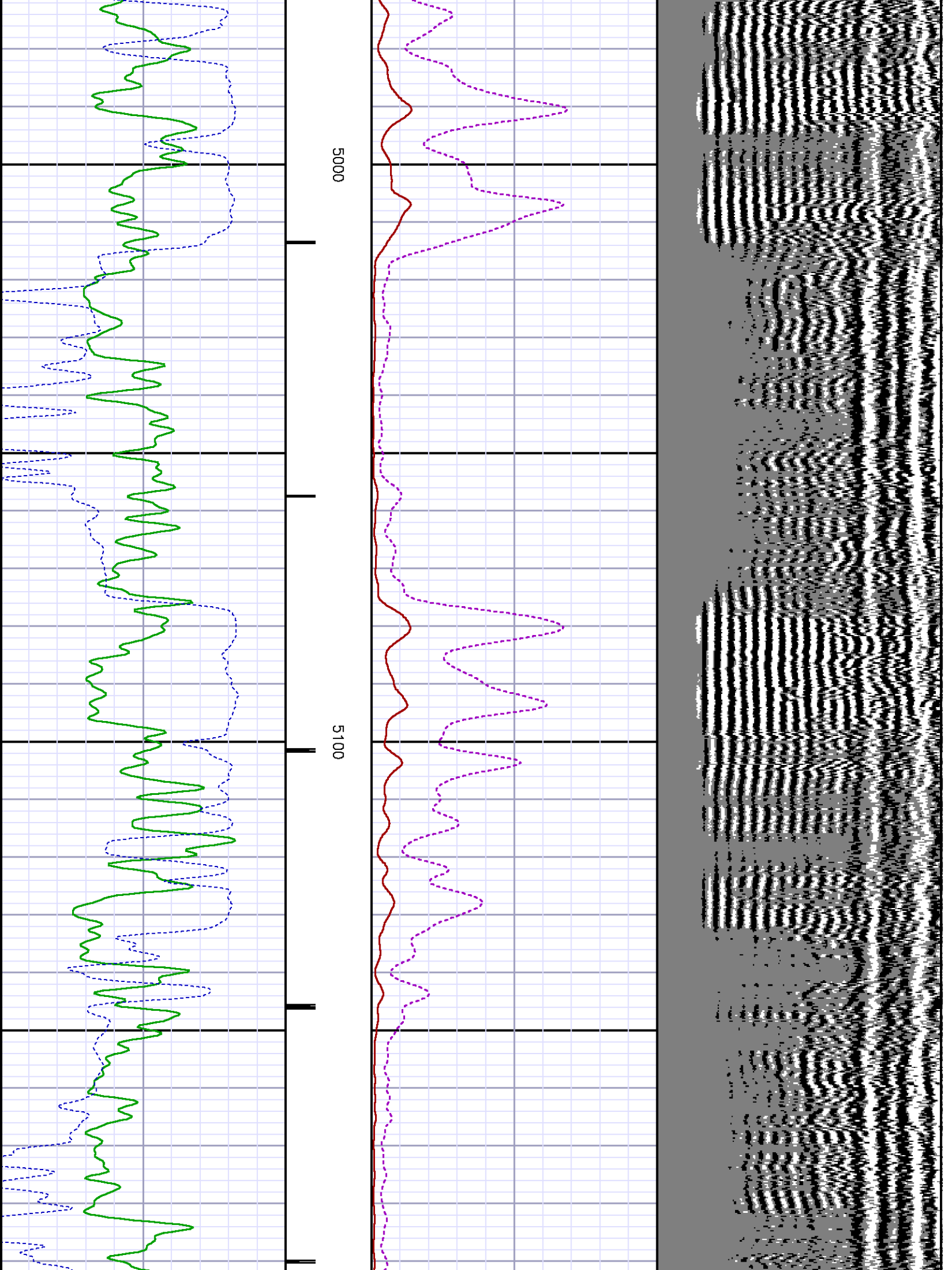


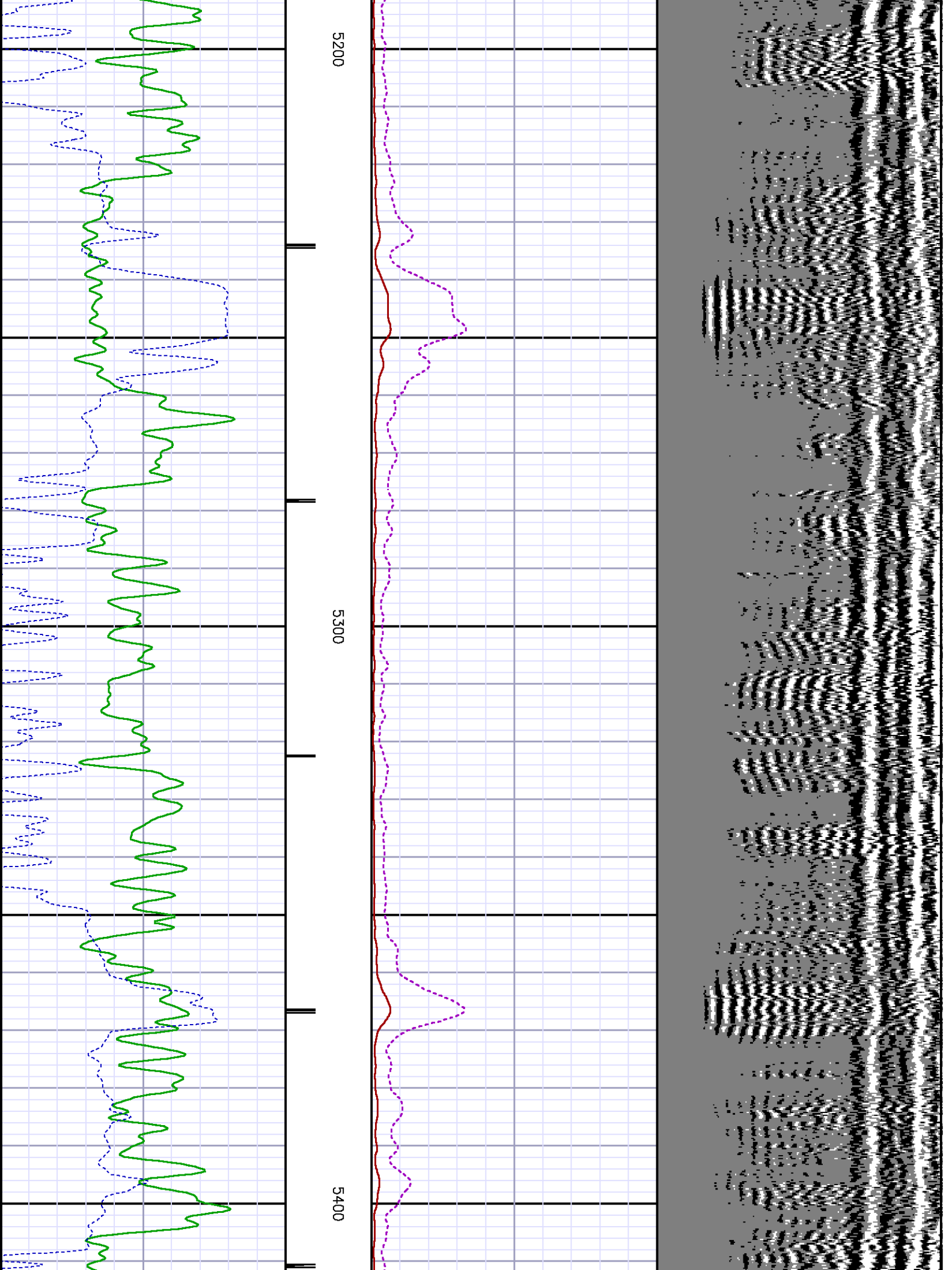


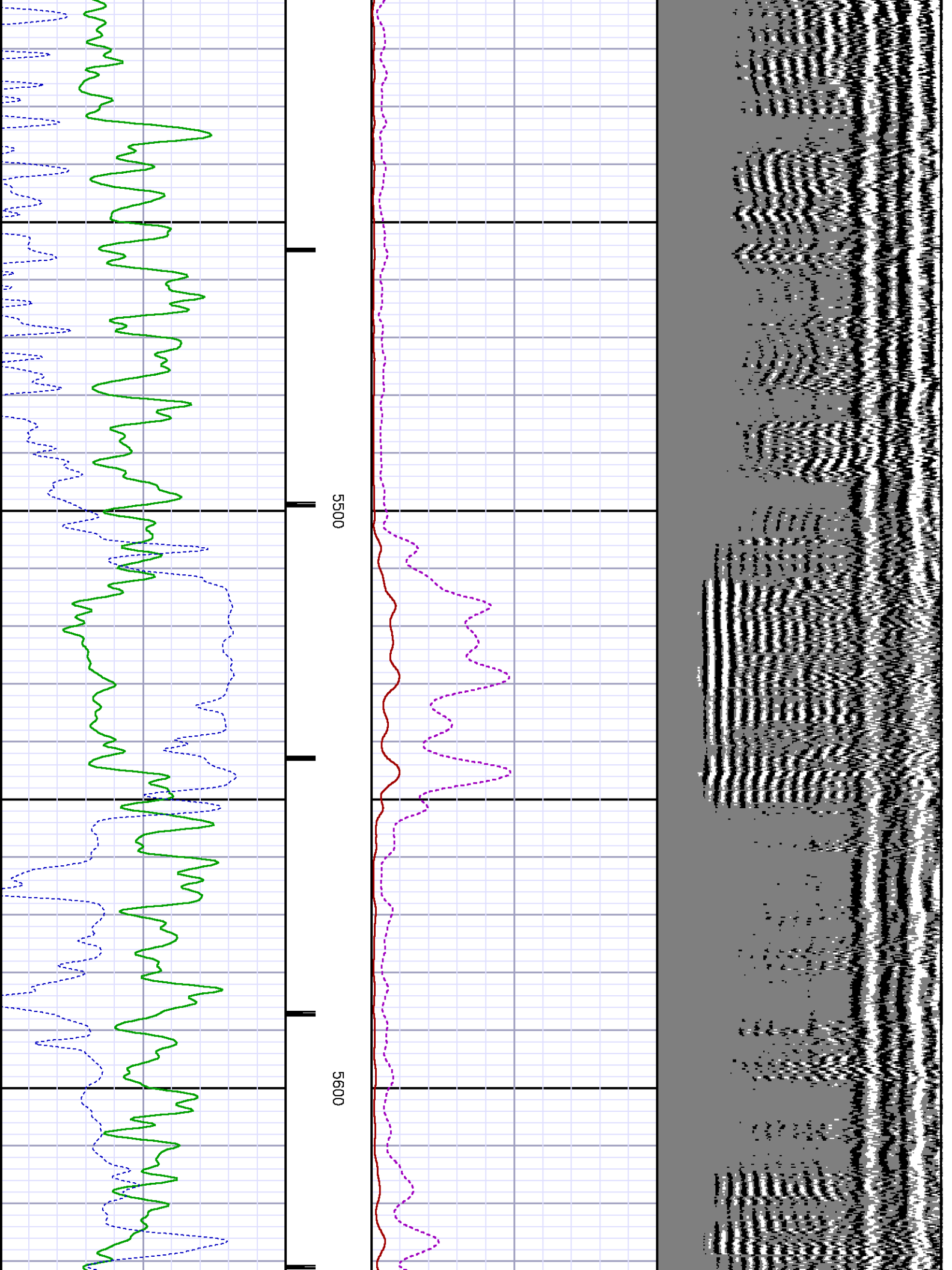


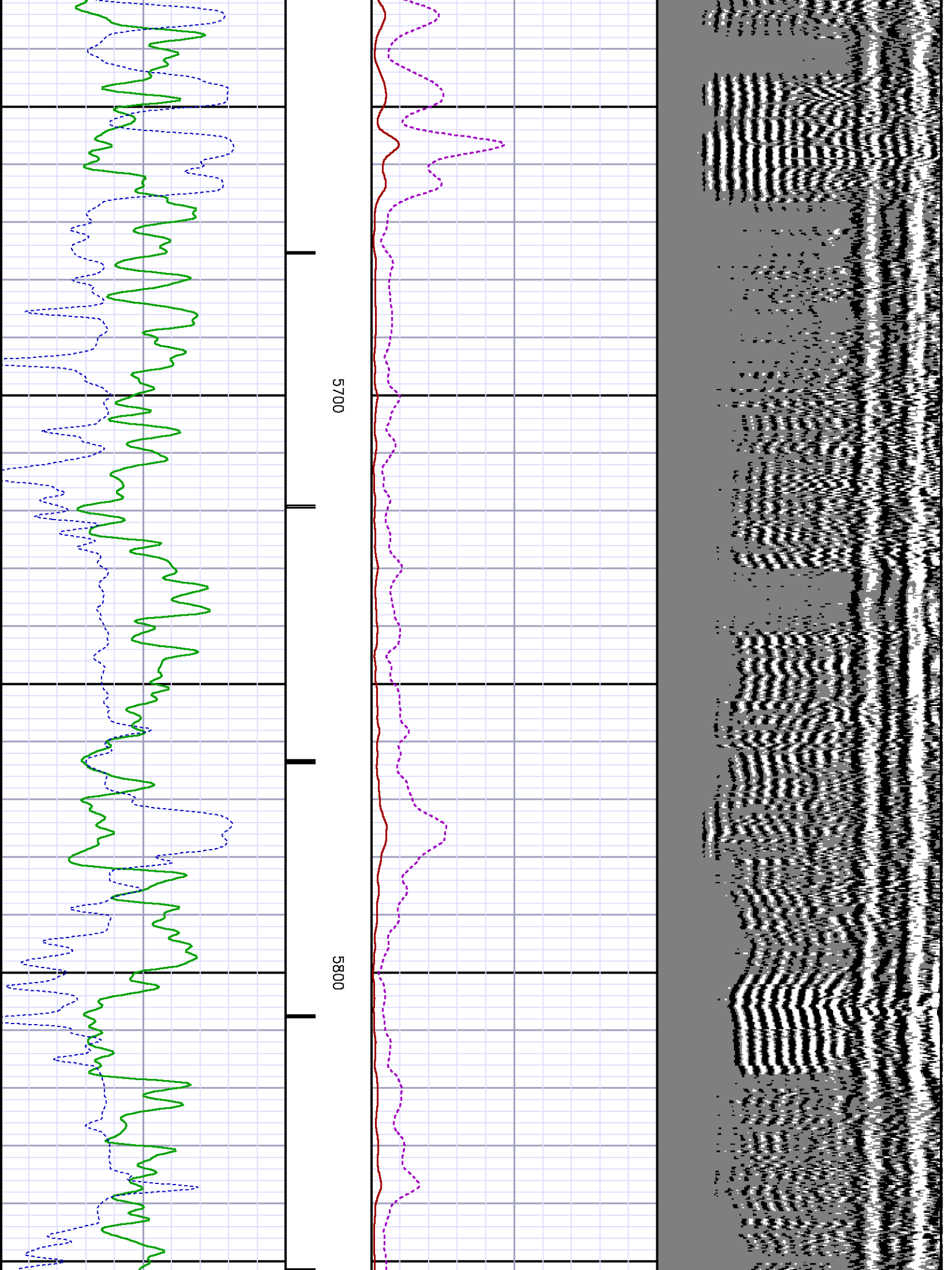


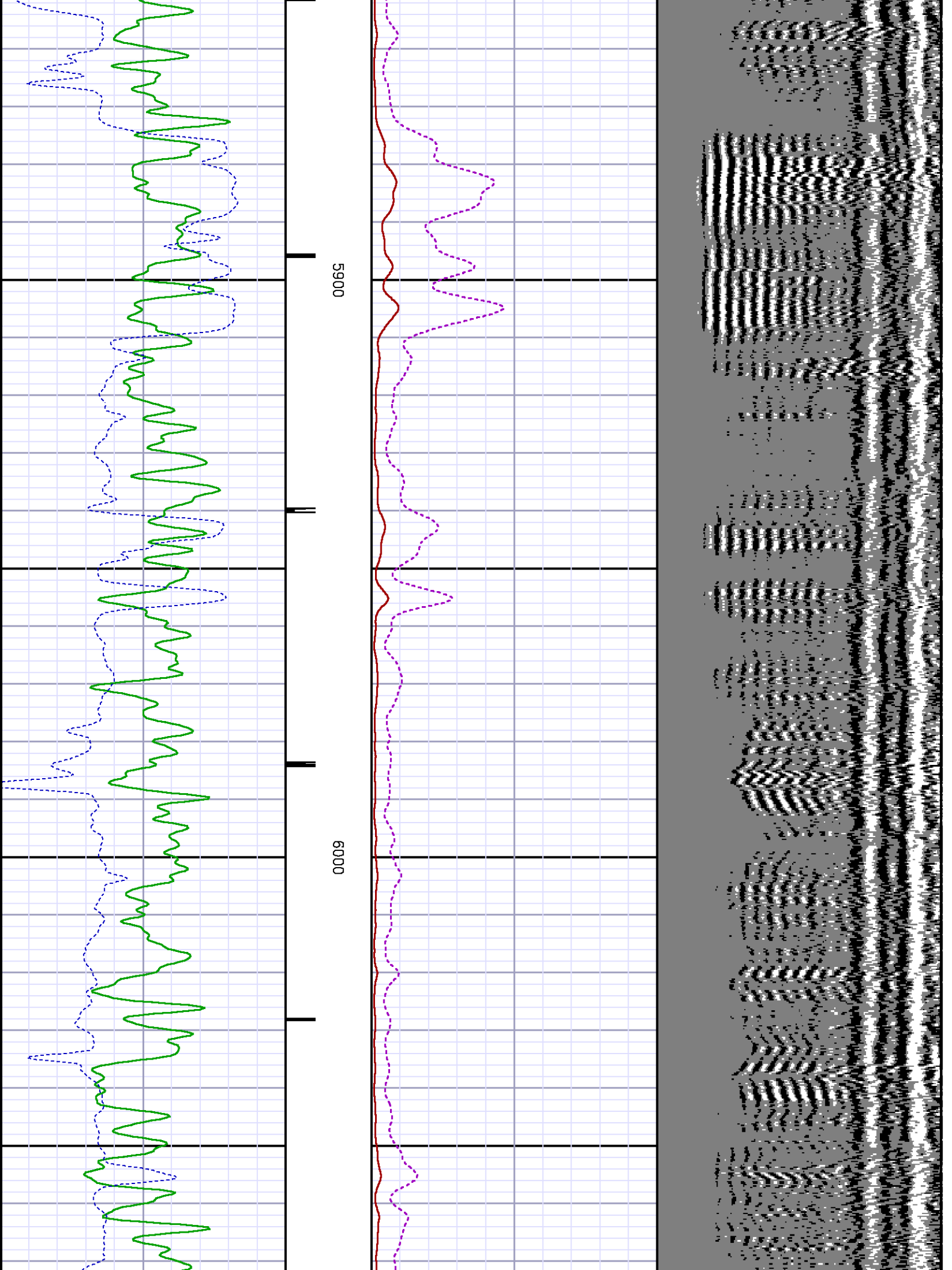


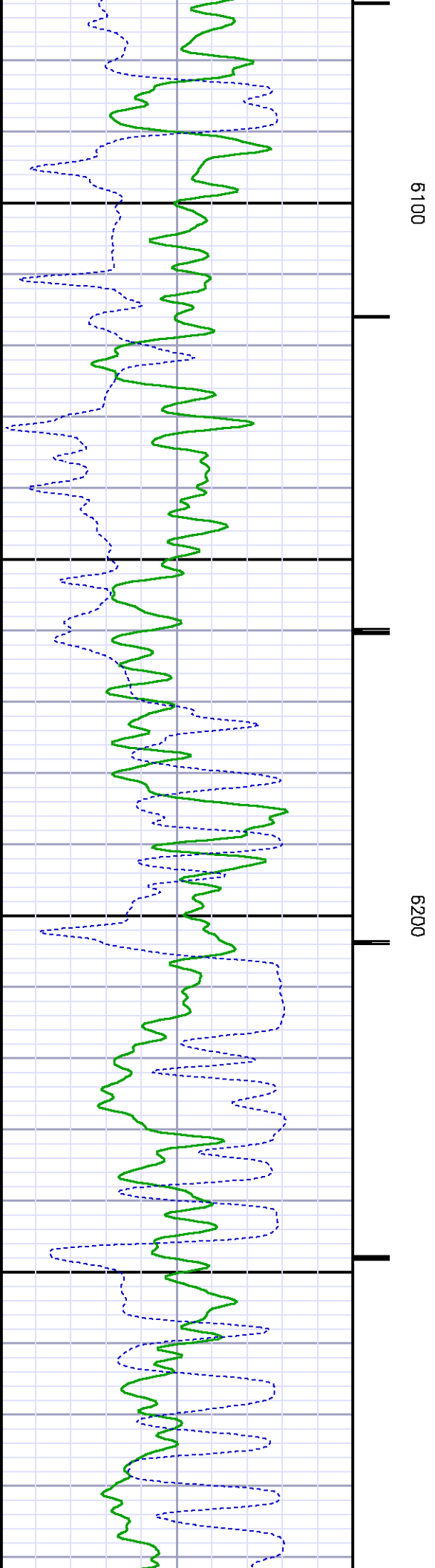
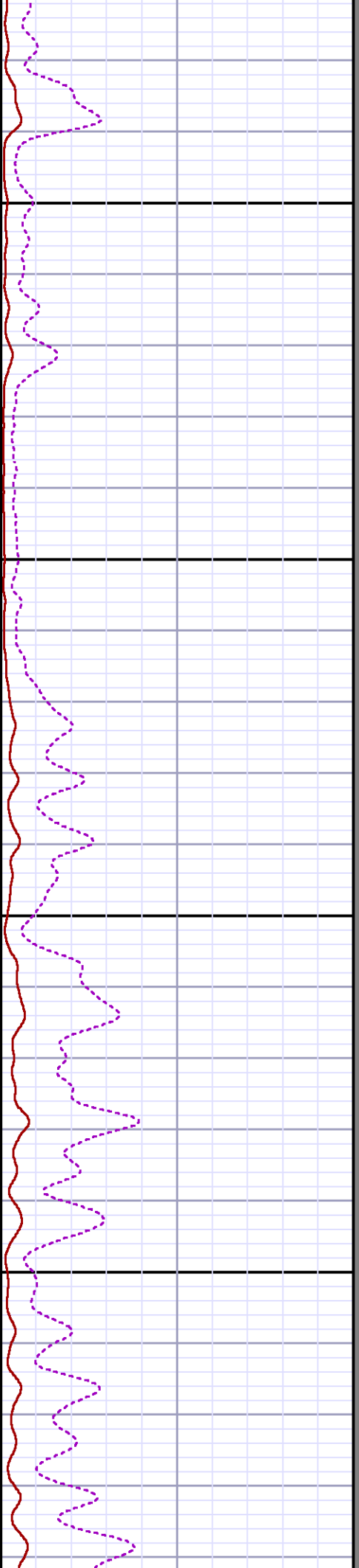
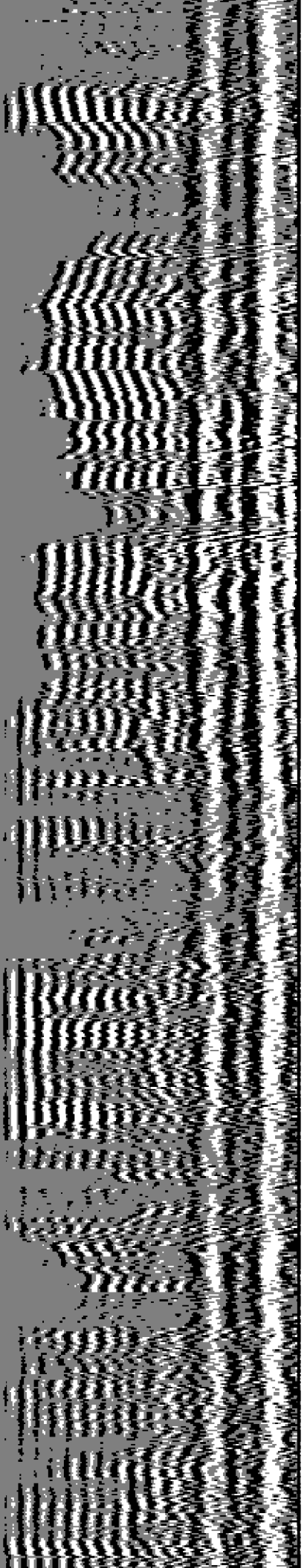


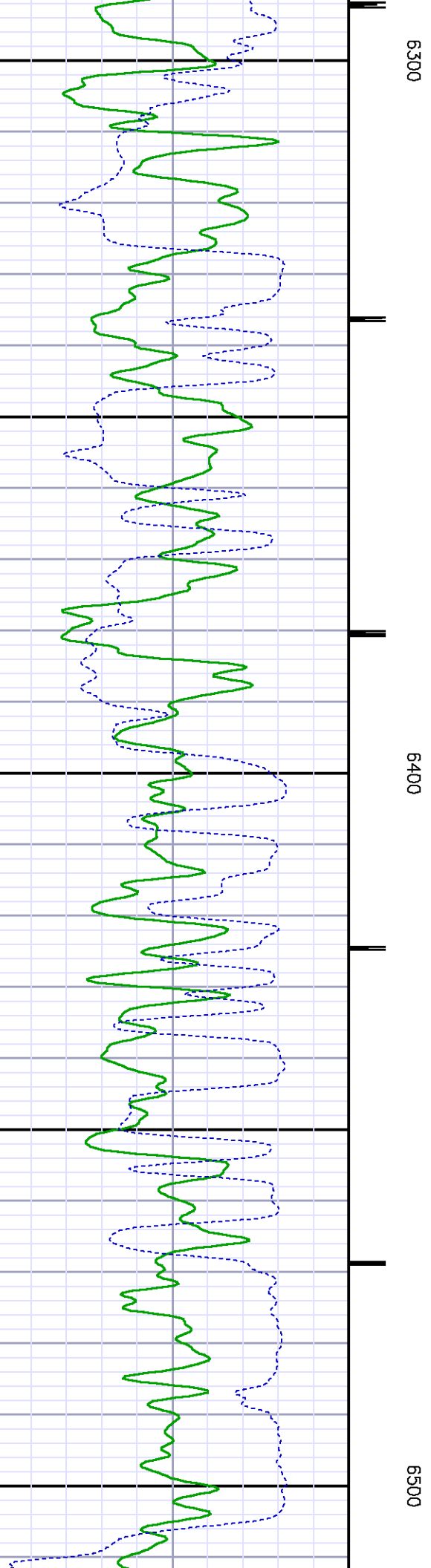
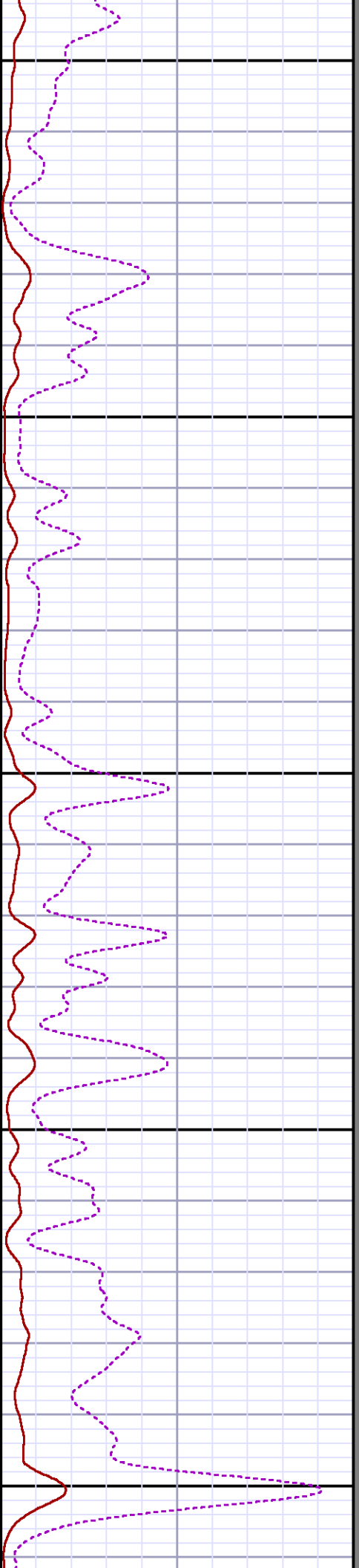
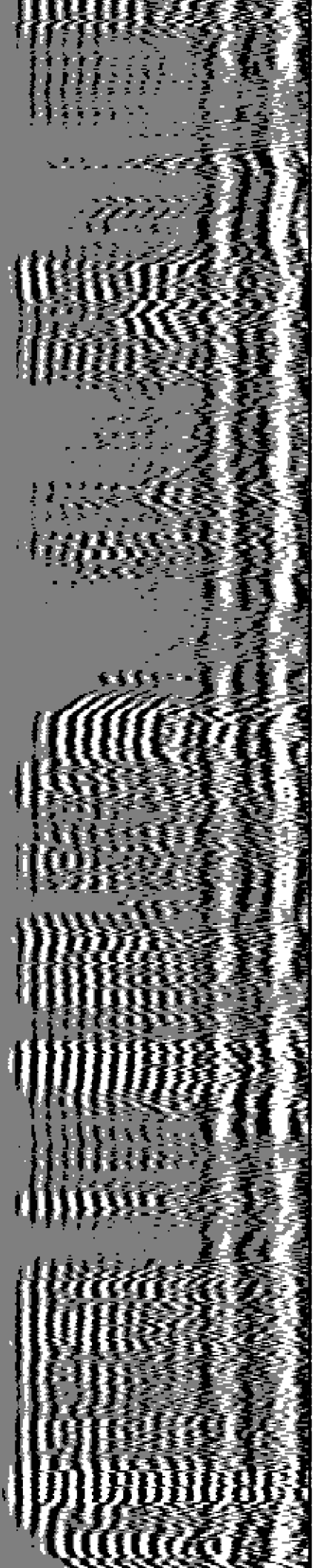


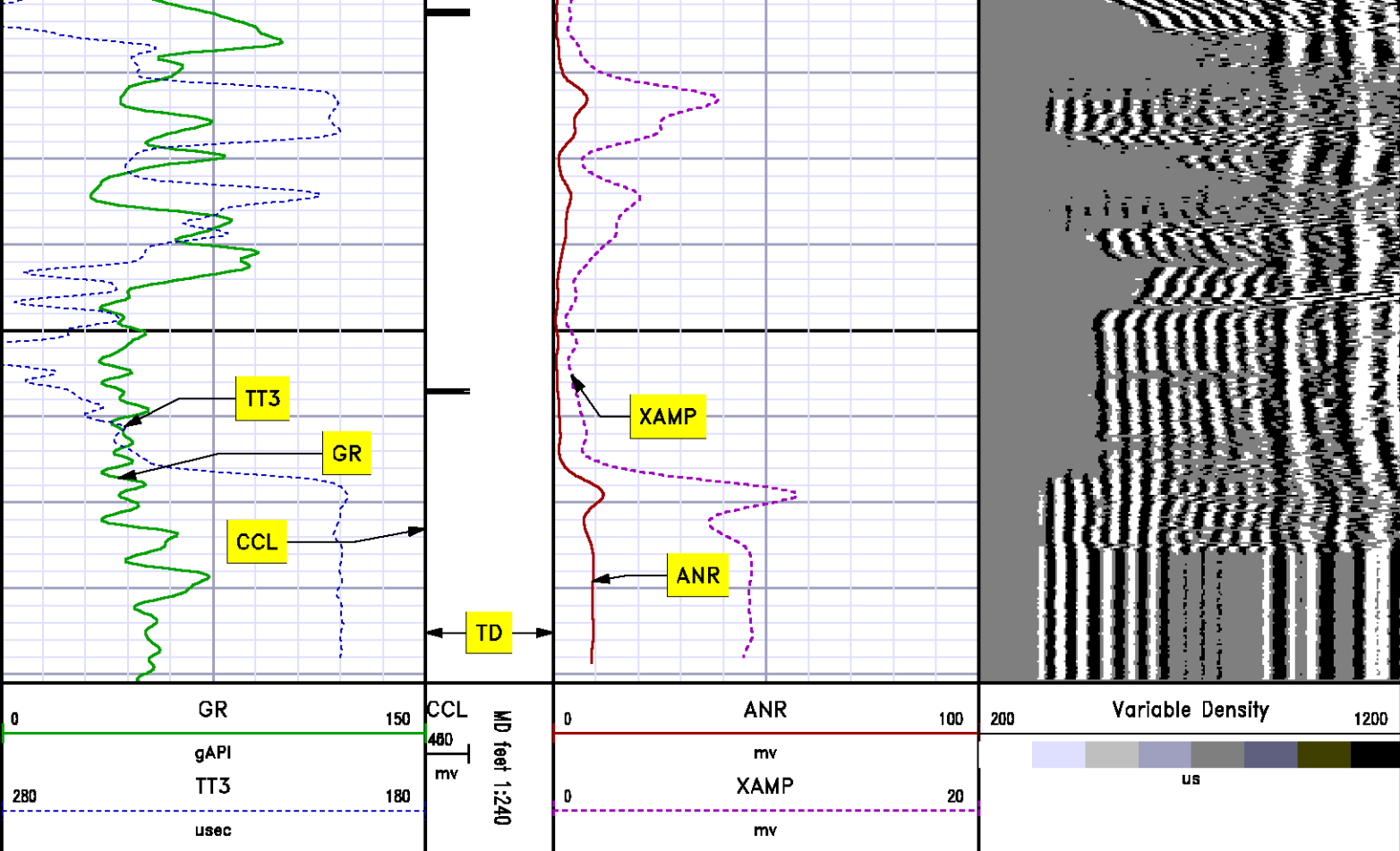












SECONDARY PRESENTATION

0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	30.575	6600.500
RAL	Amp Gate Start Near	195.000	usec	30.575	6600.500
RAL	Amp Gate Start Radial	195.000	usec	30.575	6600.500
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RAL	Amp Gate Width Radial	25.000	usec	30.575	6600.500
RAL	casing od	4.500	inches	30.575	6600.500
RAL	casing wt	11.600	lbm/ft	30.575	6600.500
RAL	FB Start Far	291.900	usec	30.575	6600.500
RAL	FB Start Near	180.000	usec	30.575	6600.500
RAL	FB Start Radial	180.000	usec	30.575	6600.500

RAL	FB Thresh Far	10.000	mv	30.575	6600.500
RAL	FB Thresh Near	4.000	mv	30.575	6600.500
RAL	FB Thresh Radial	4.000	mv	30.575	6600.500
RAL	Fluid Travel Time	200.000	usec/ft	30.575	6600.387

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

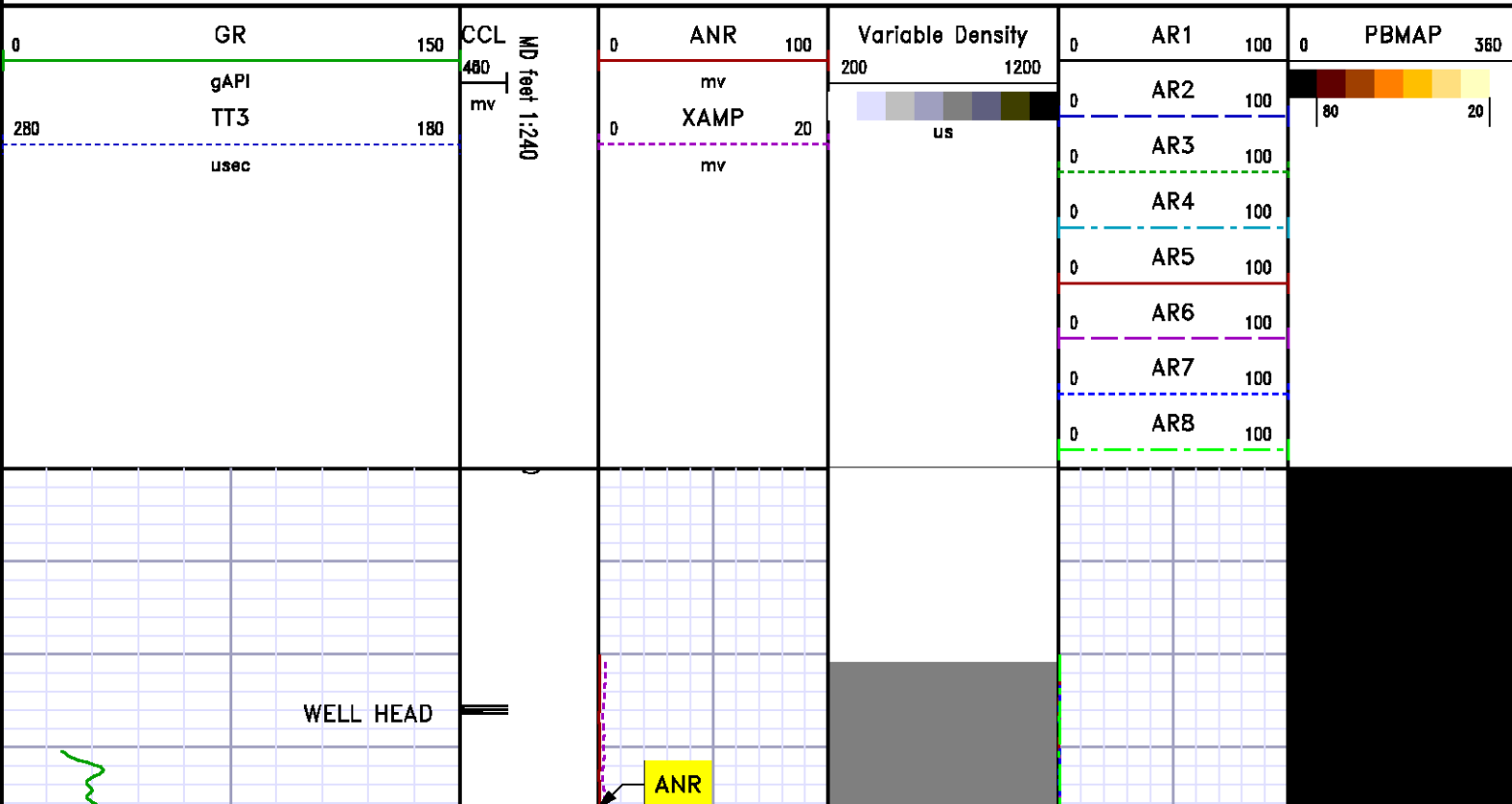
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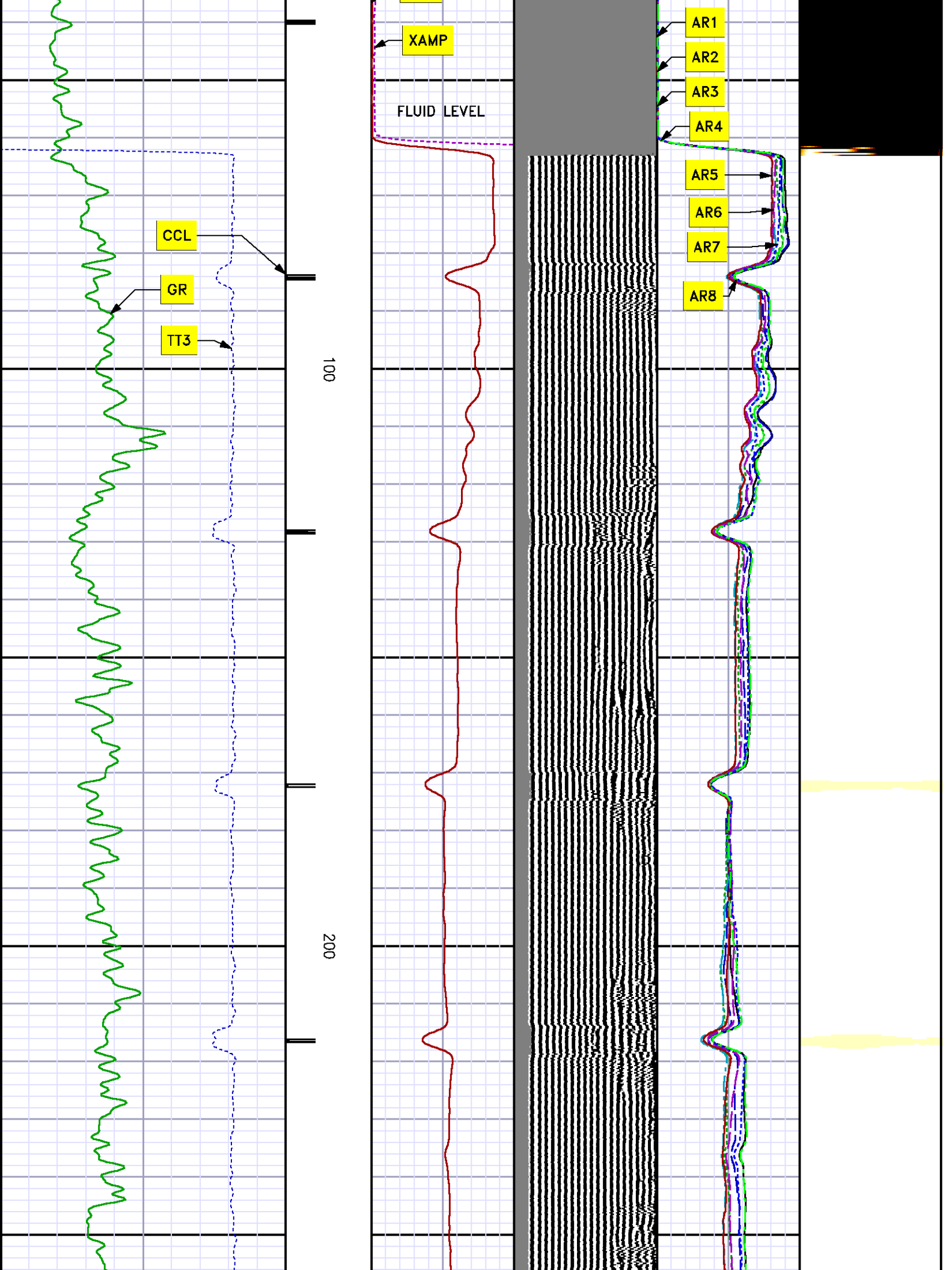
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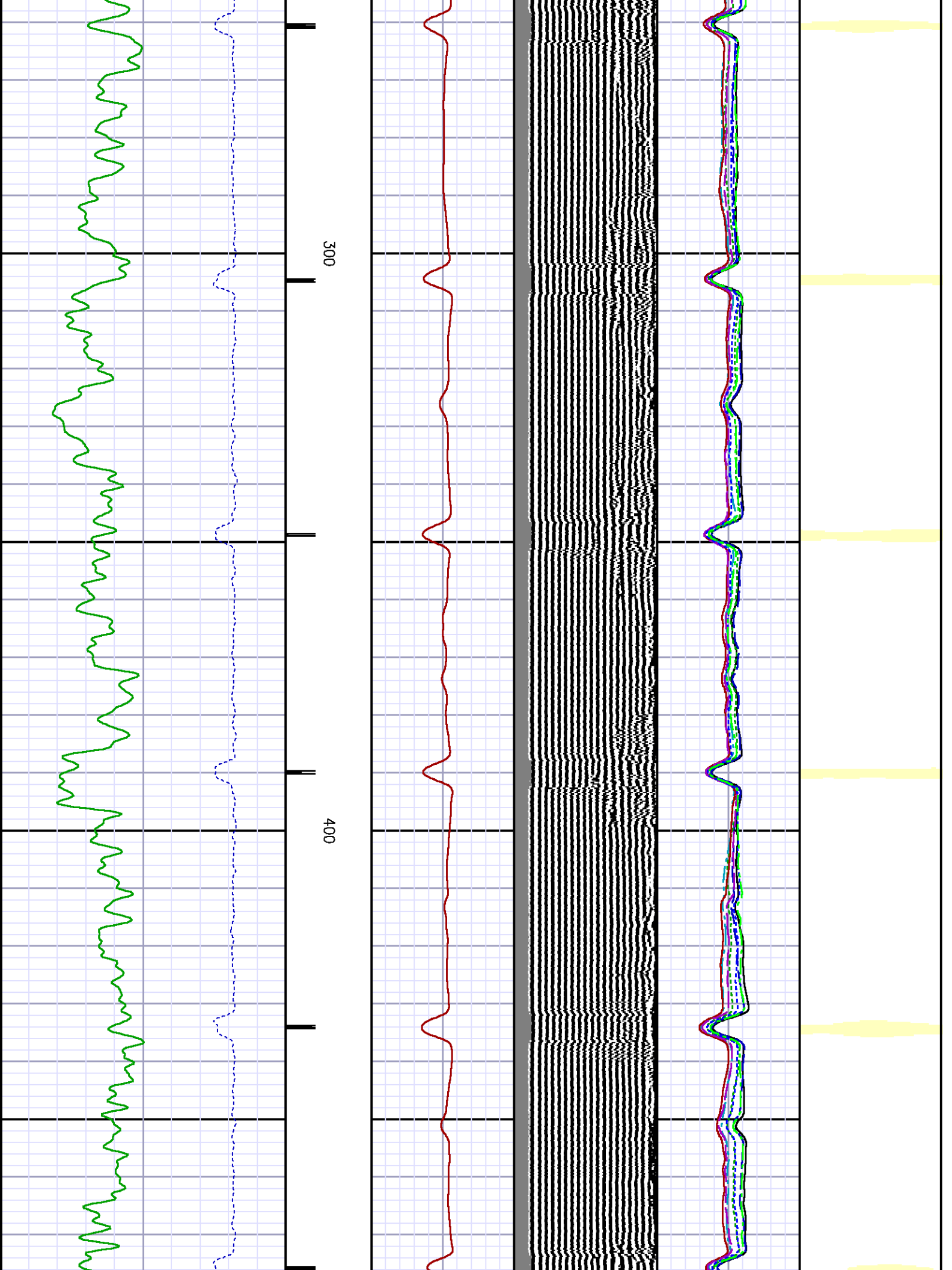
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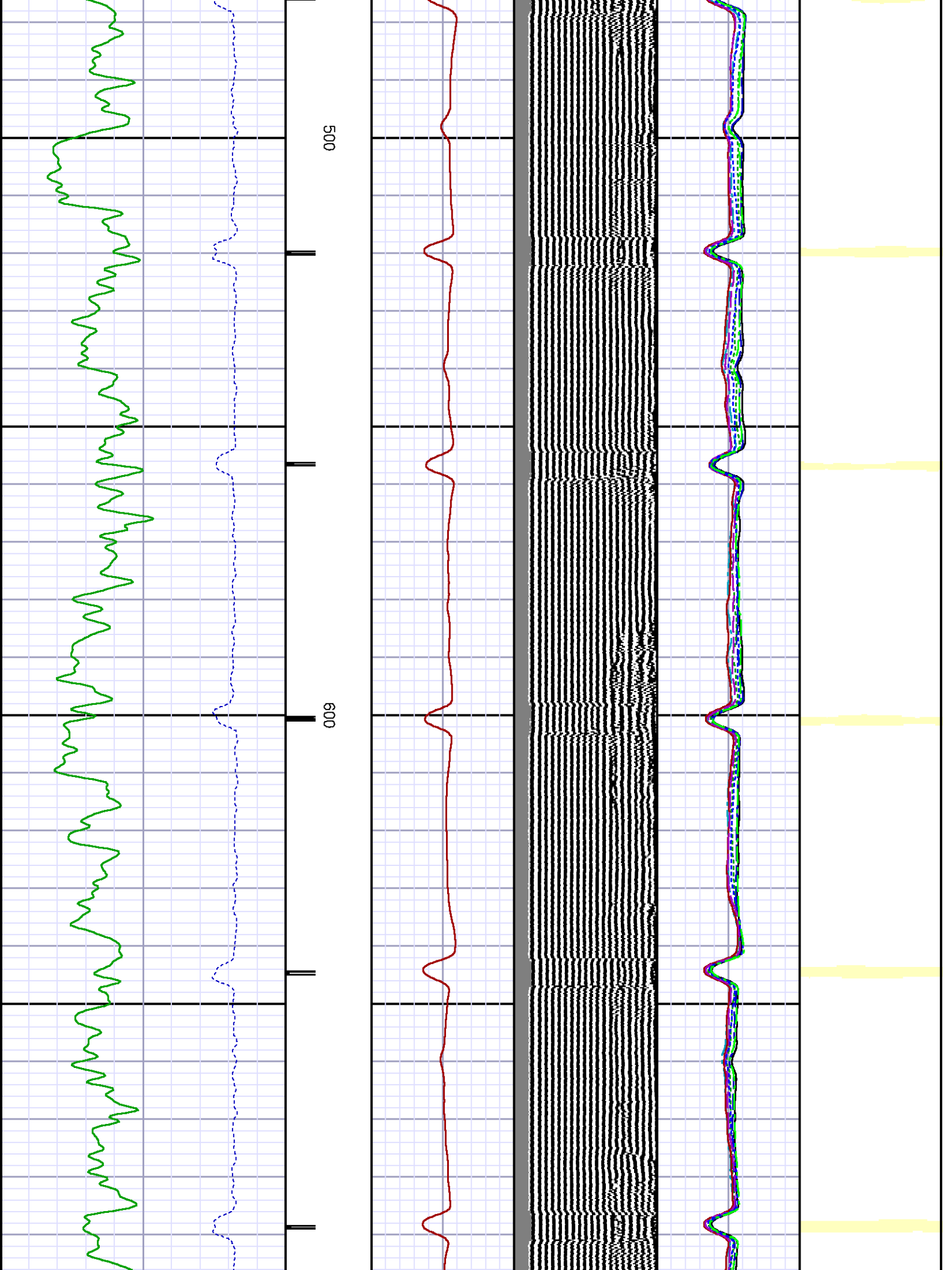
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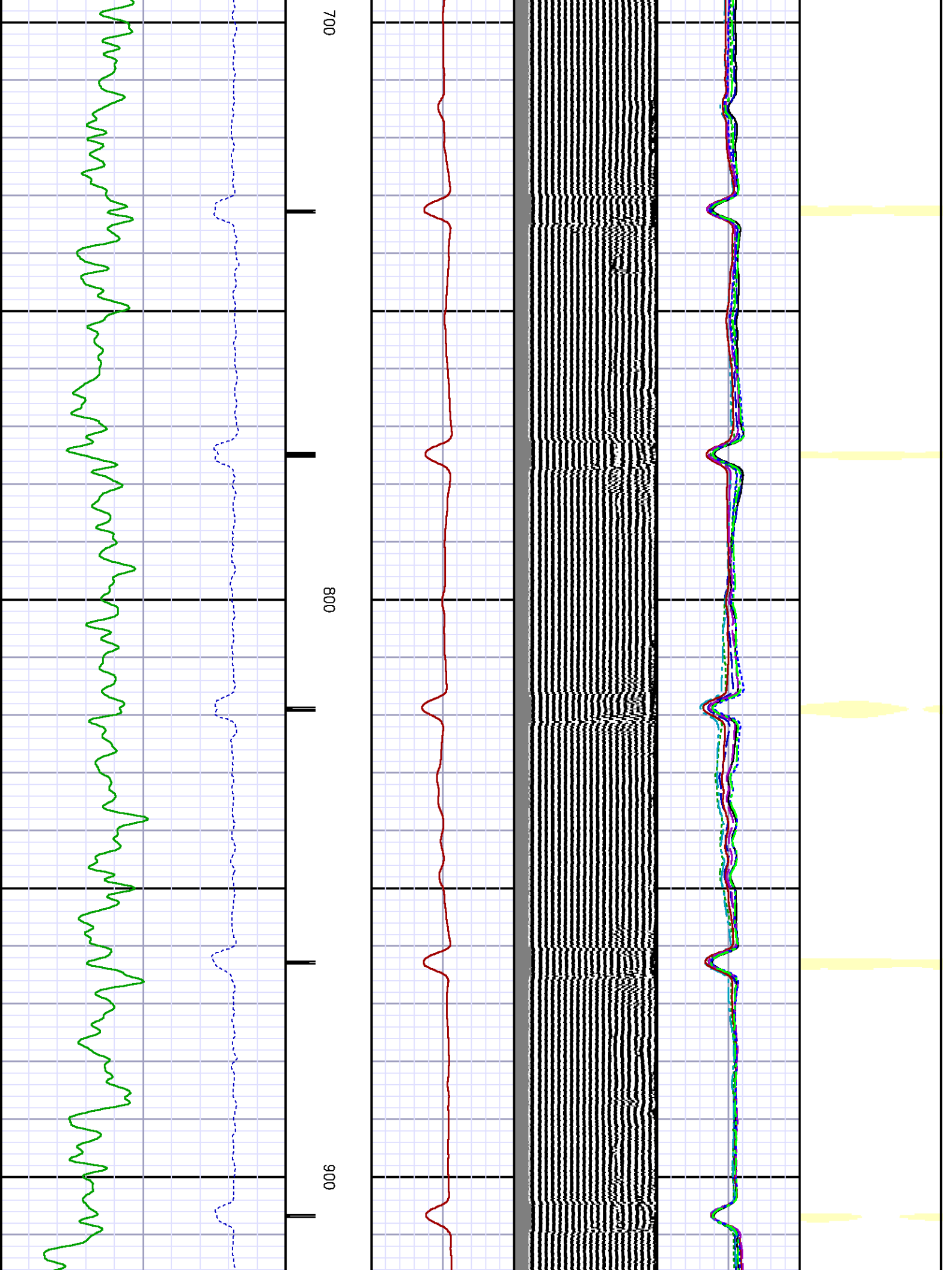
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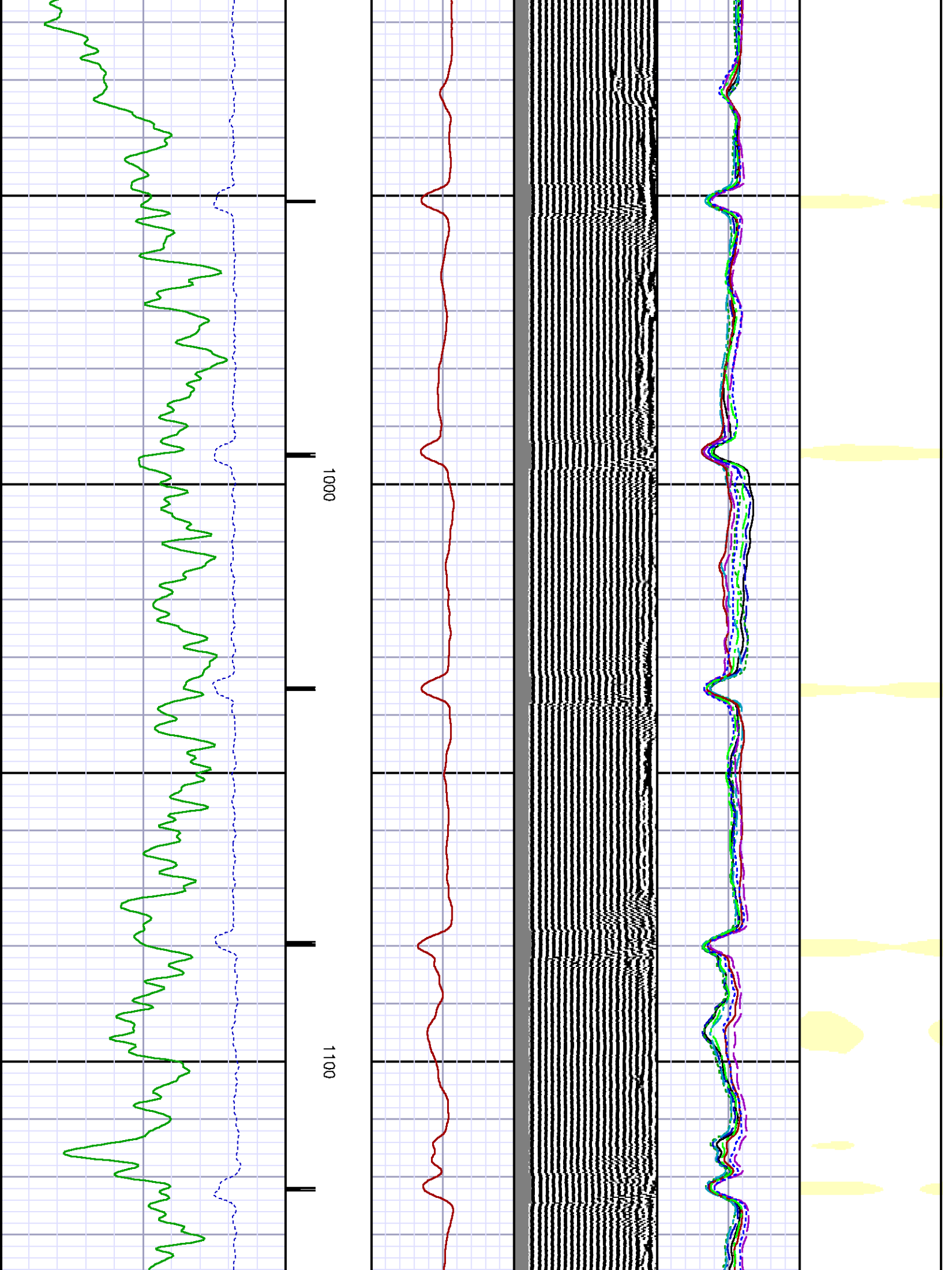


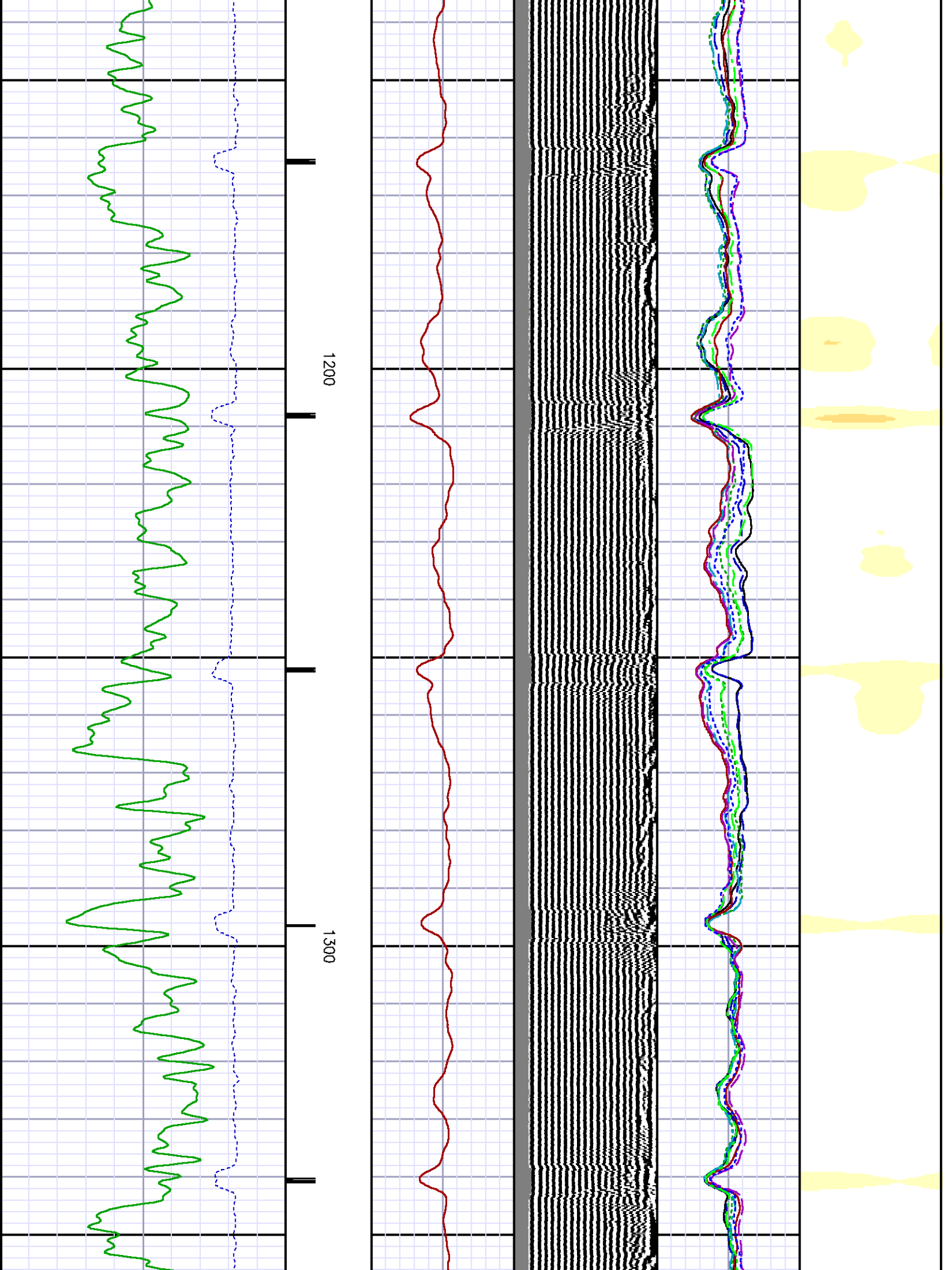


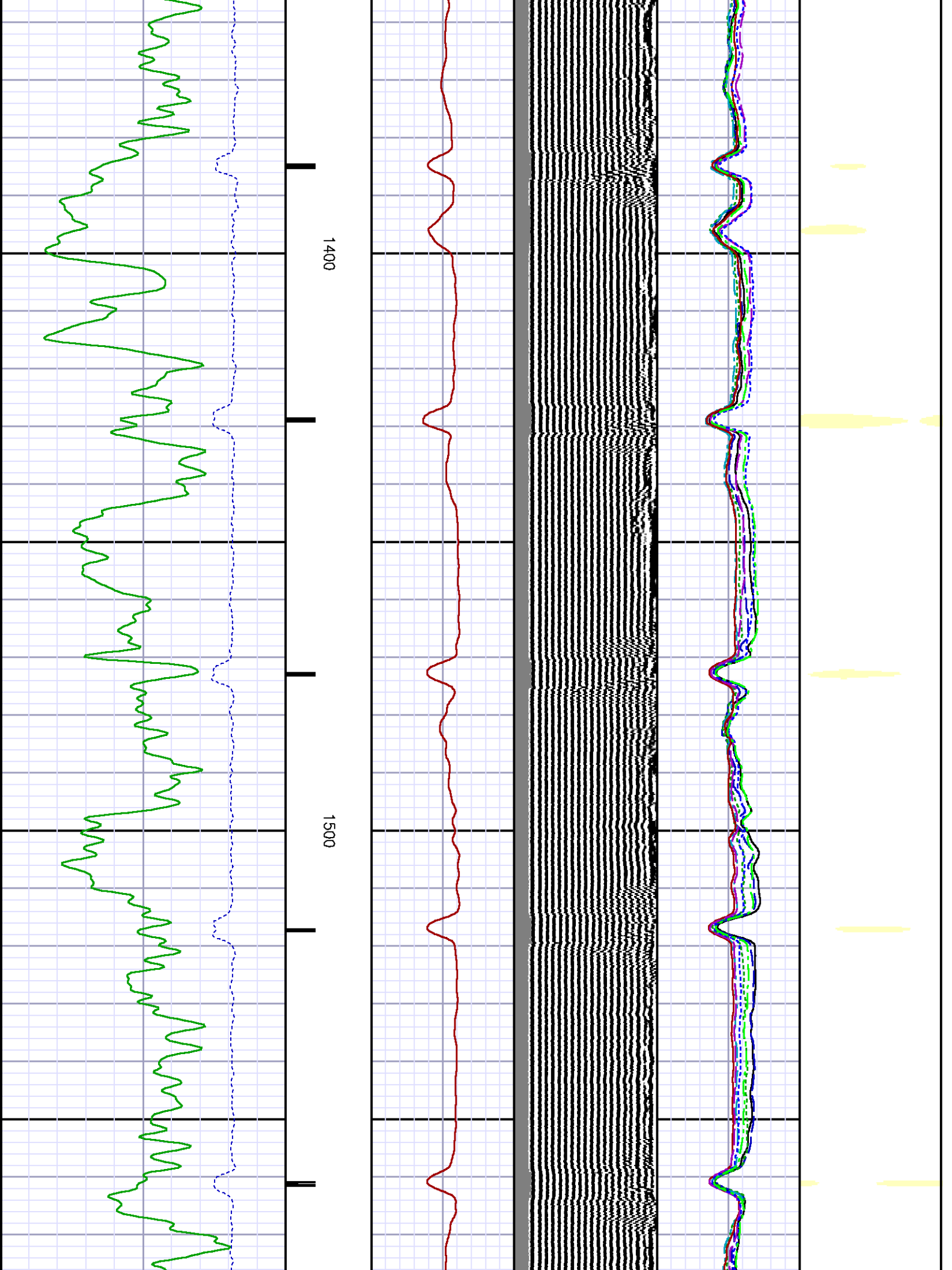


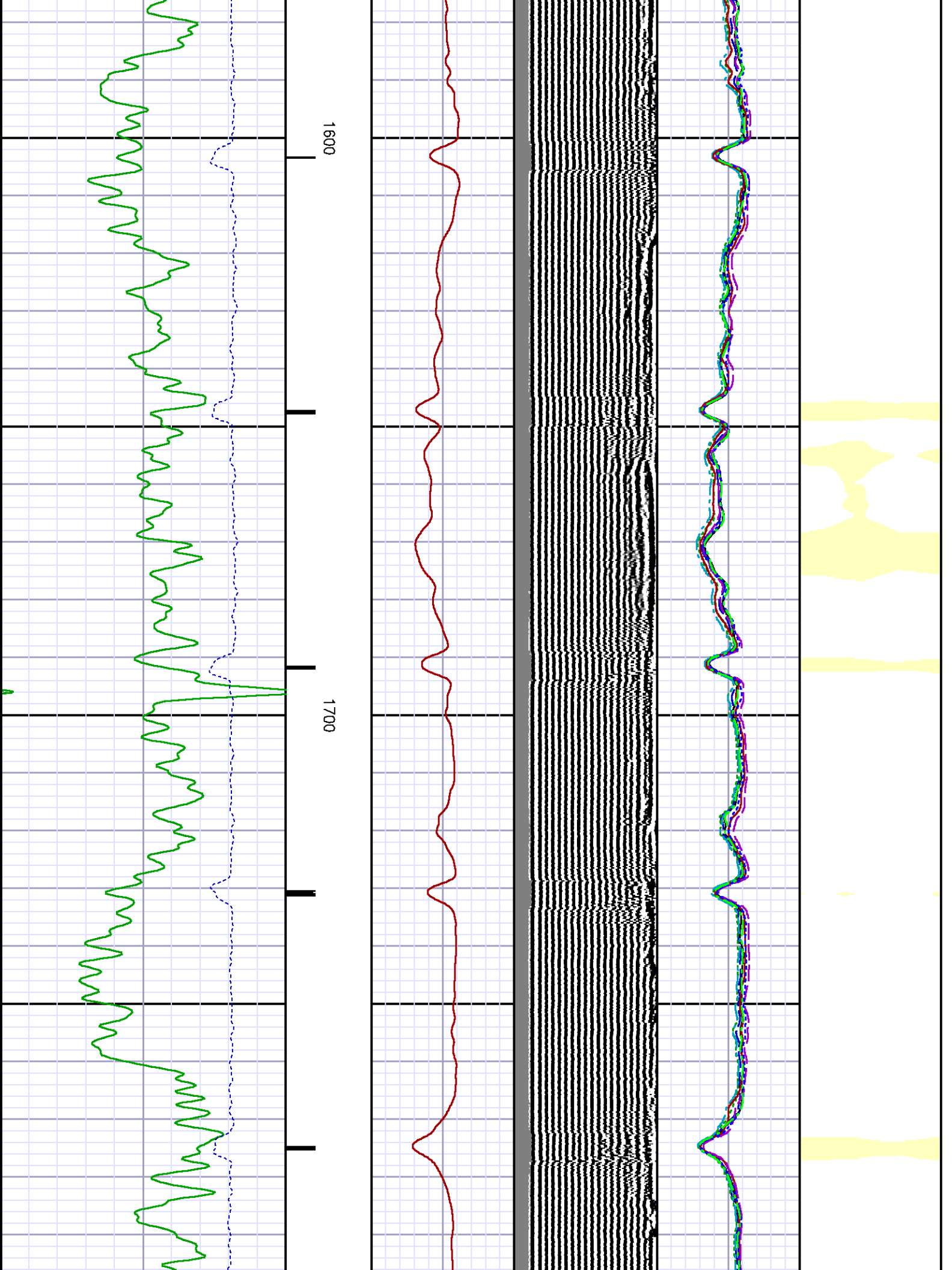


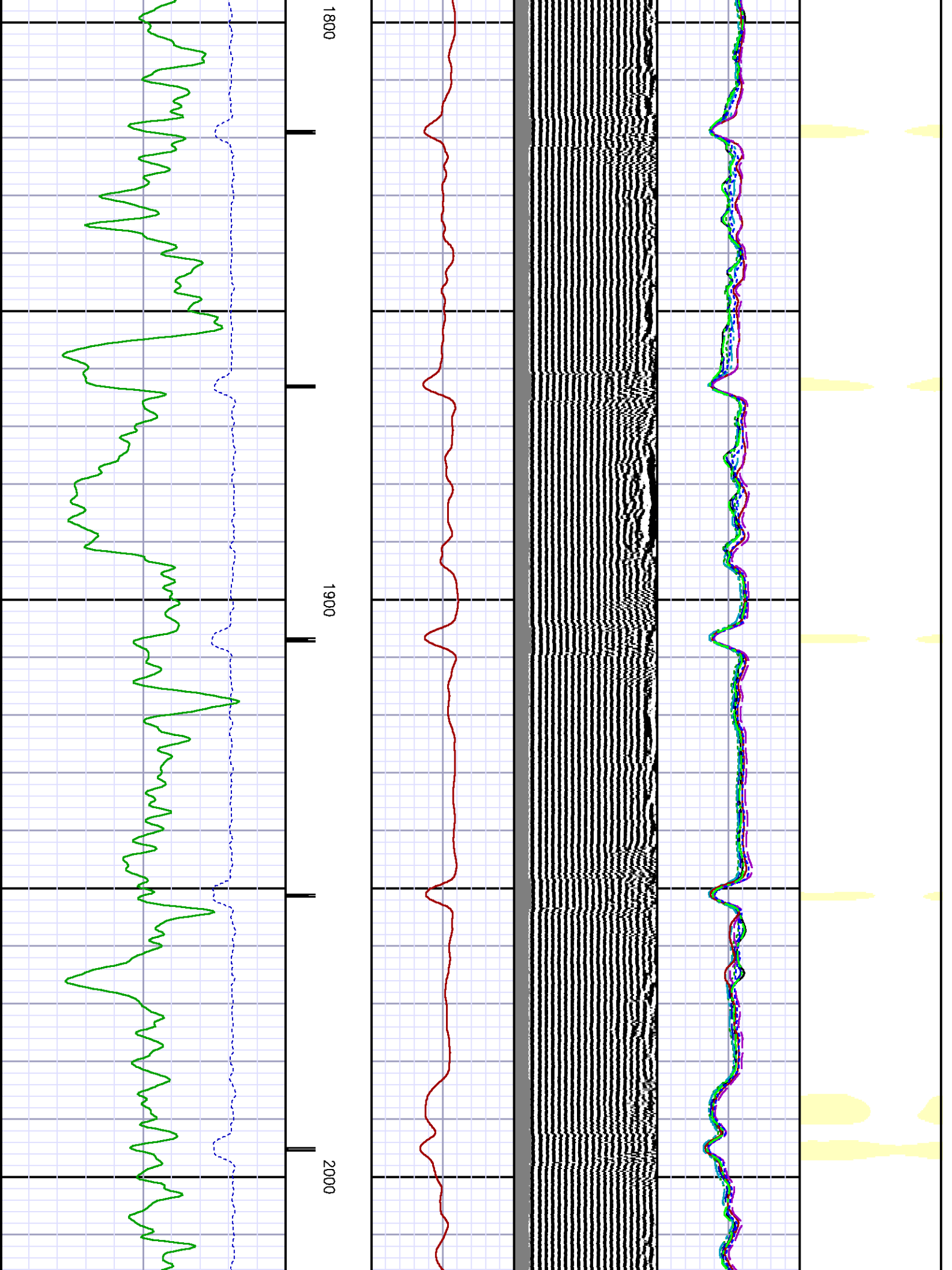


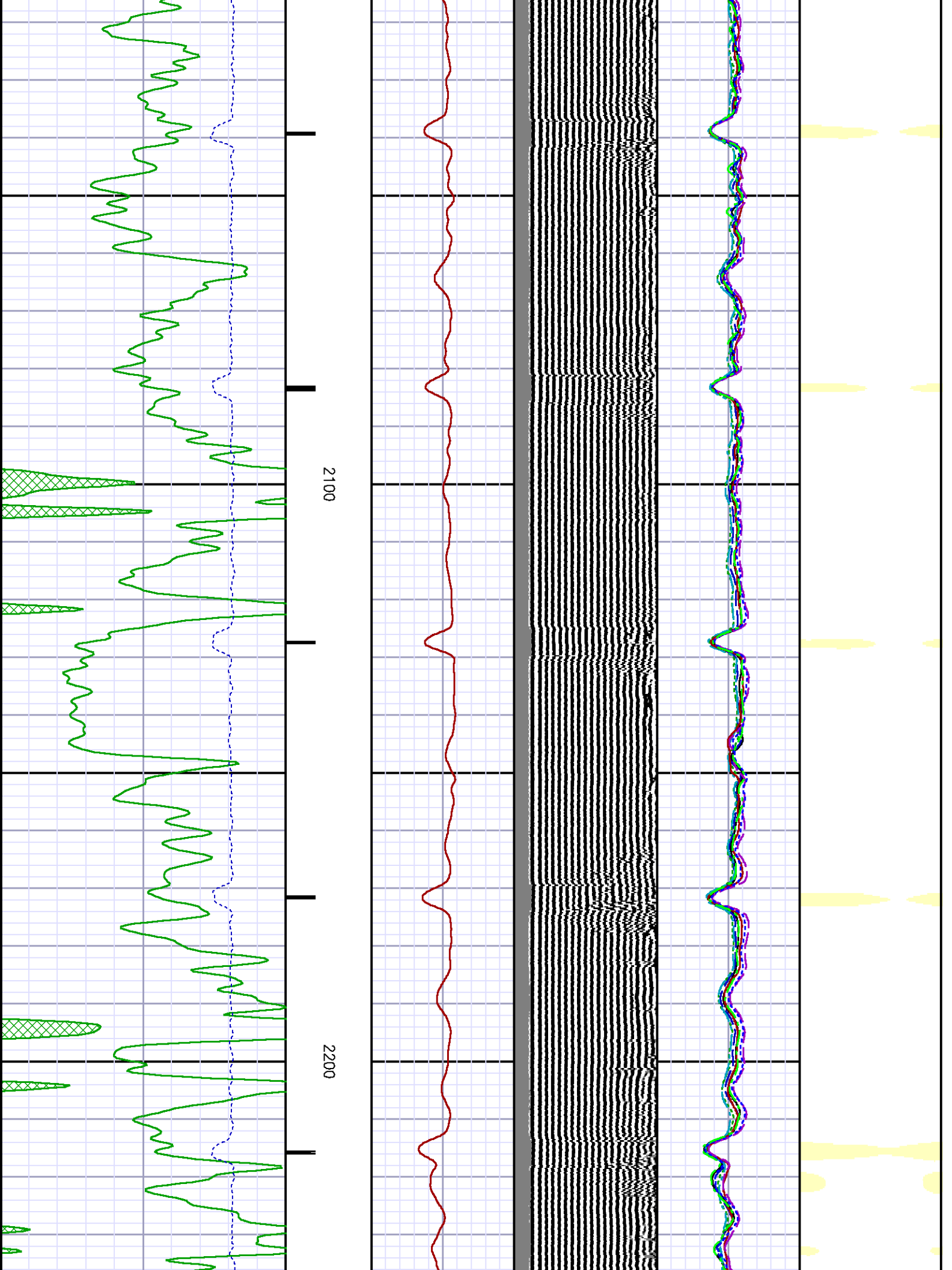


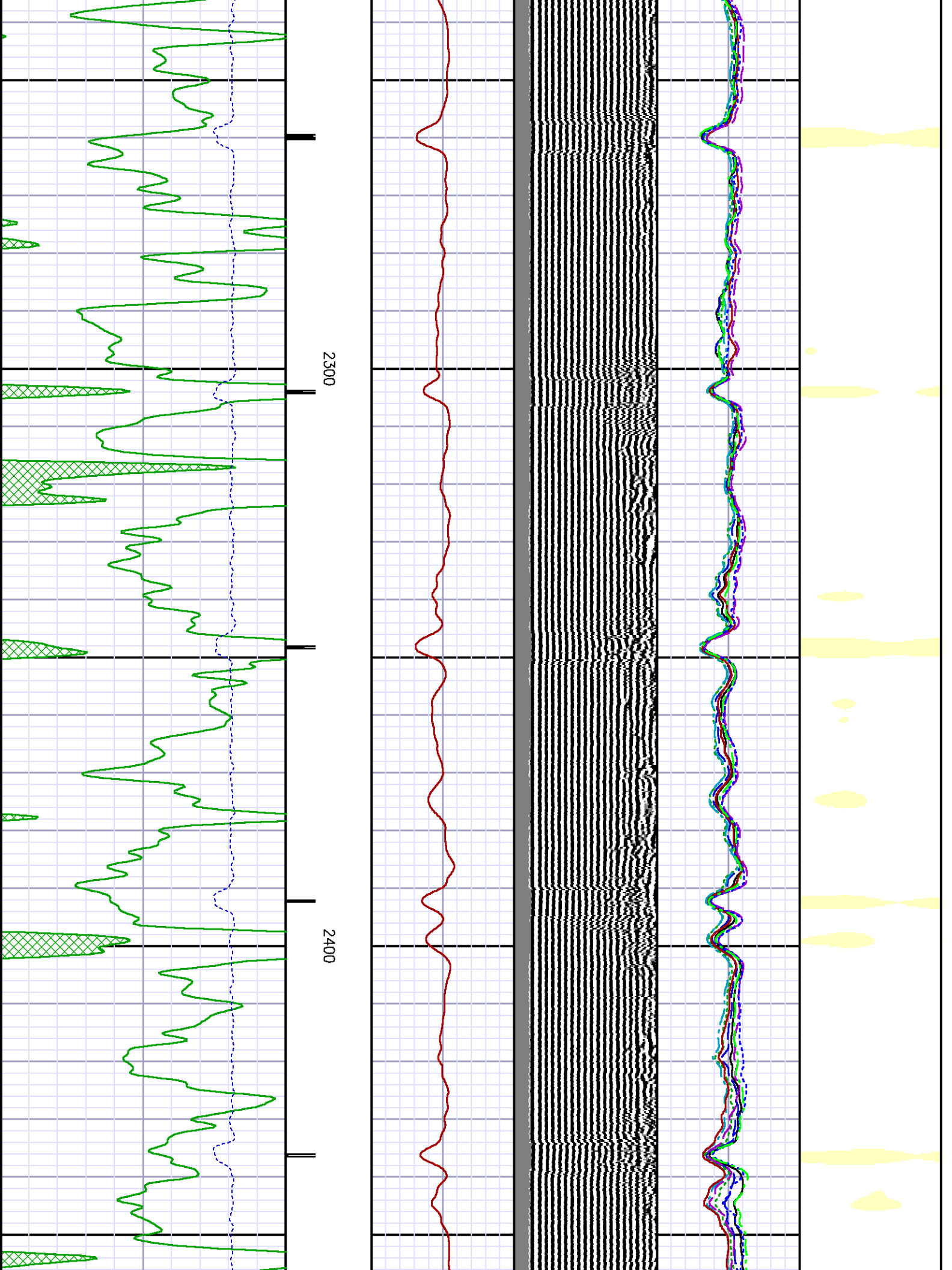


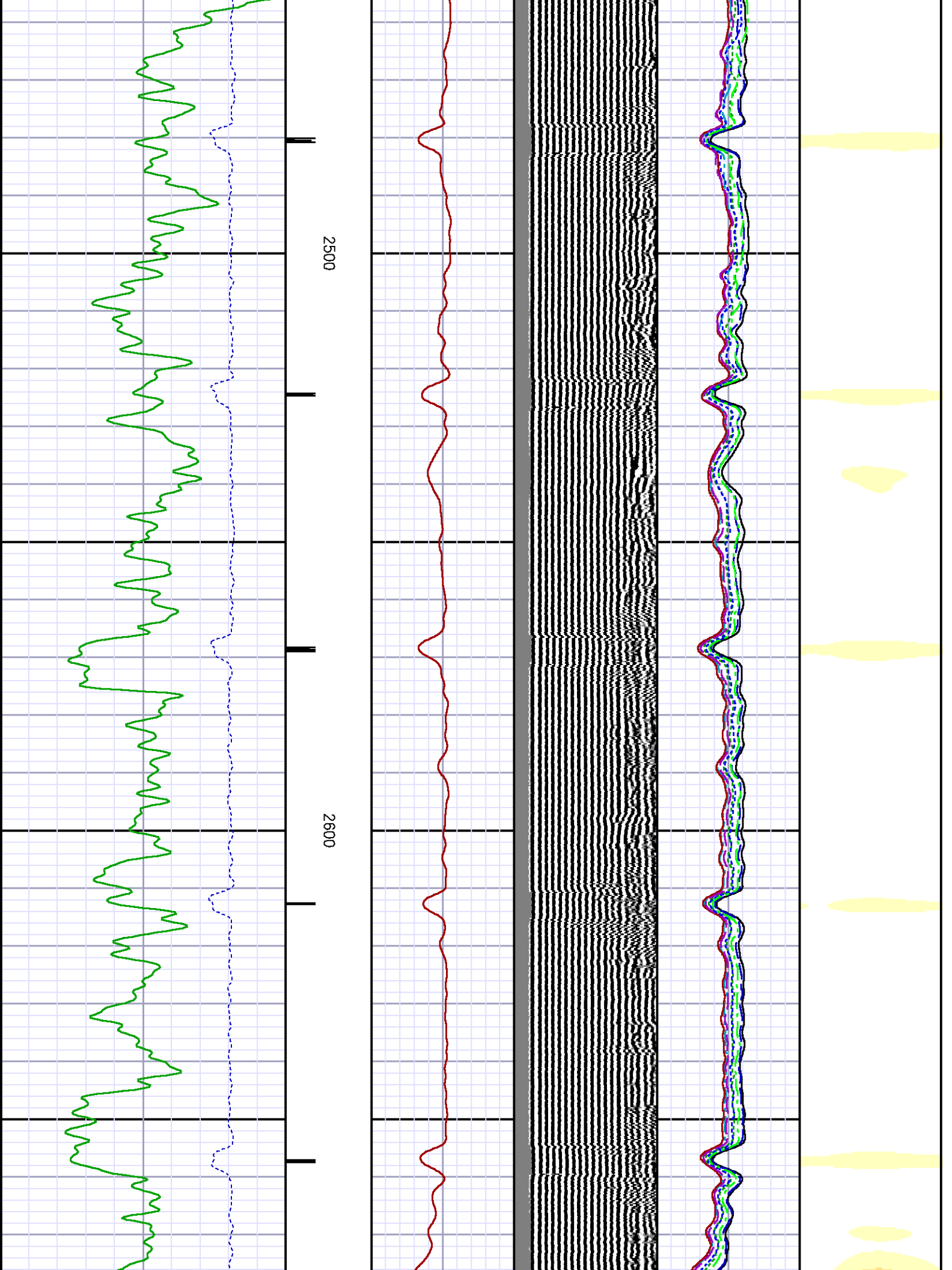


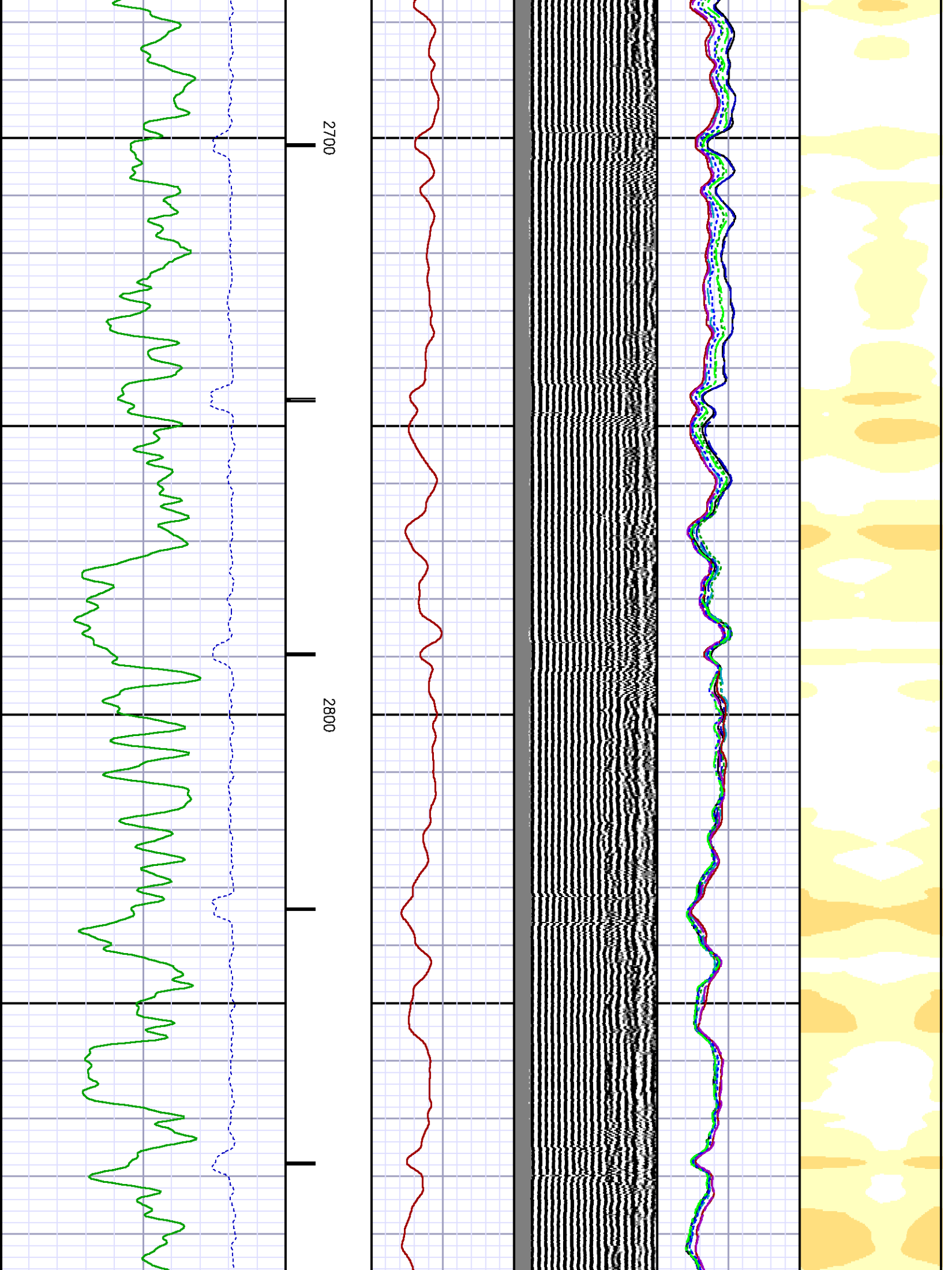


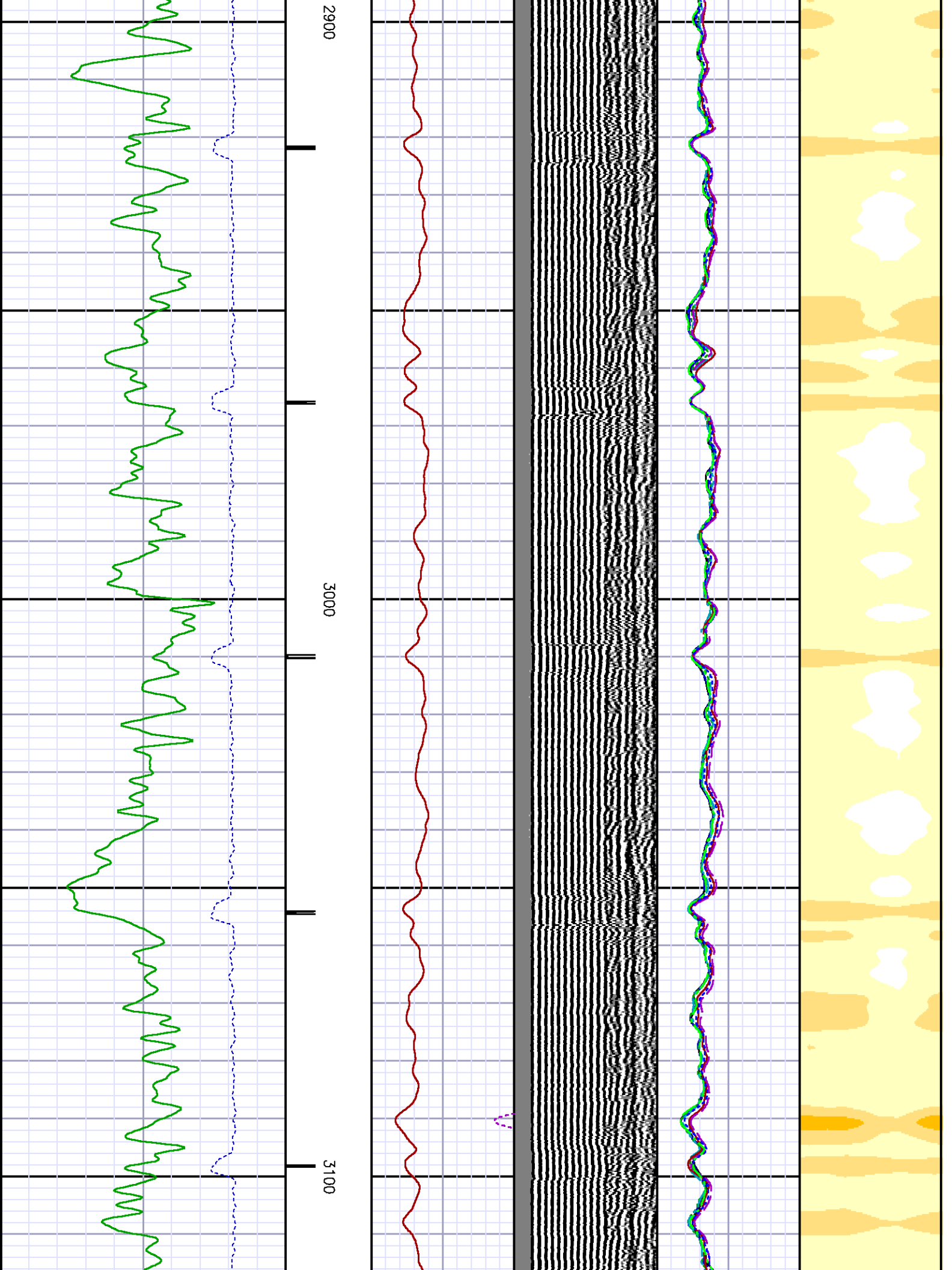


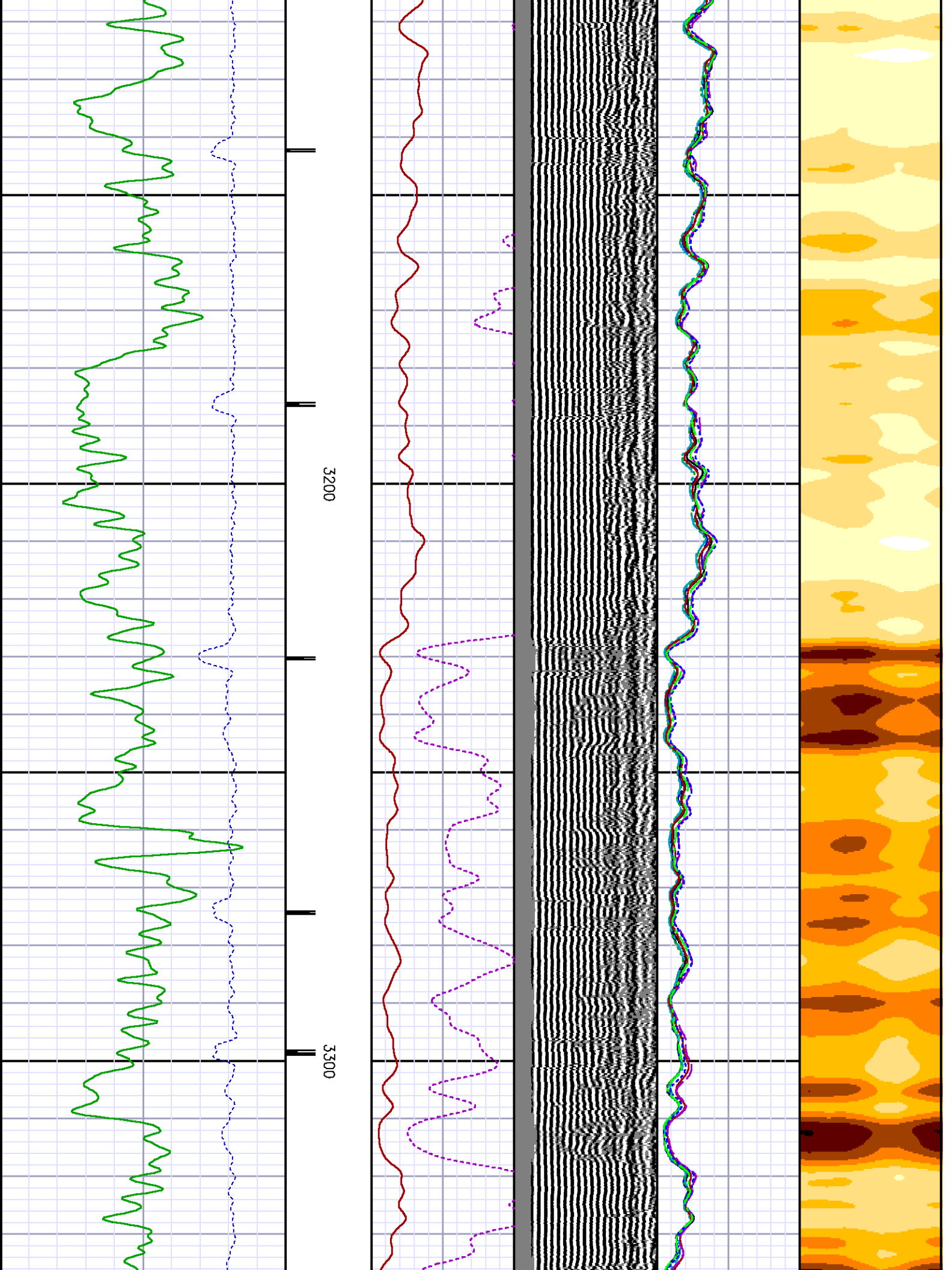


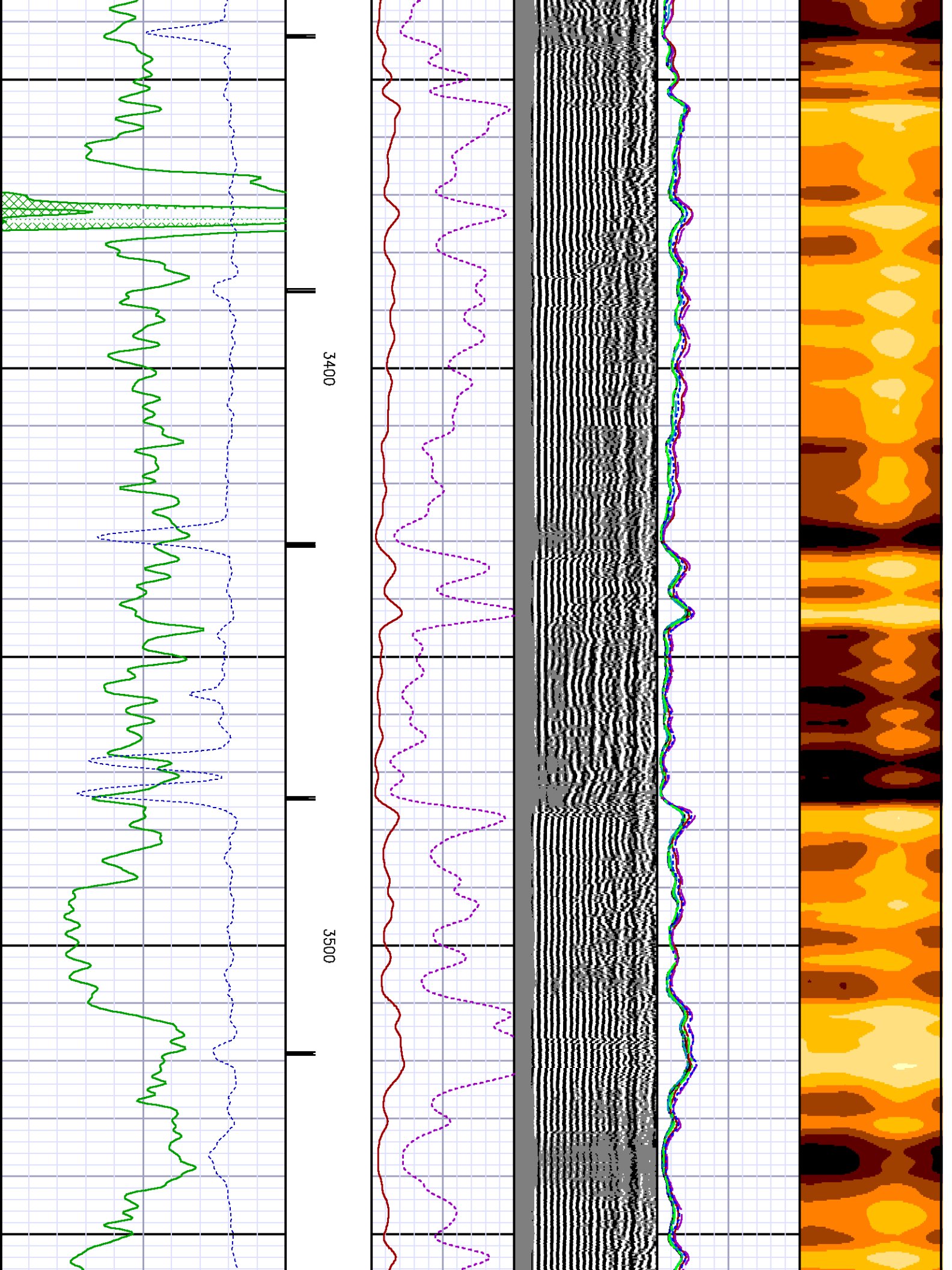


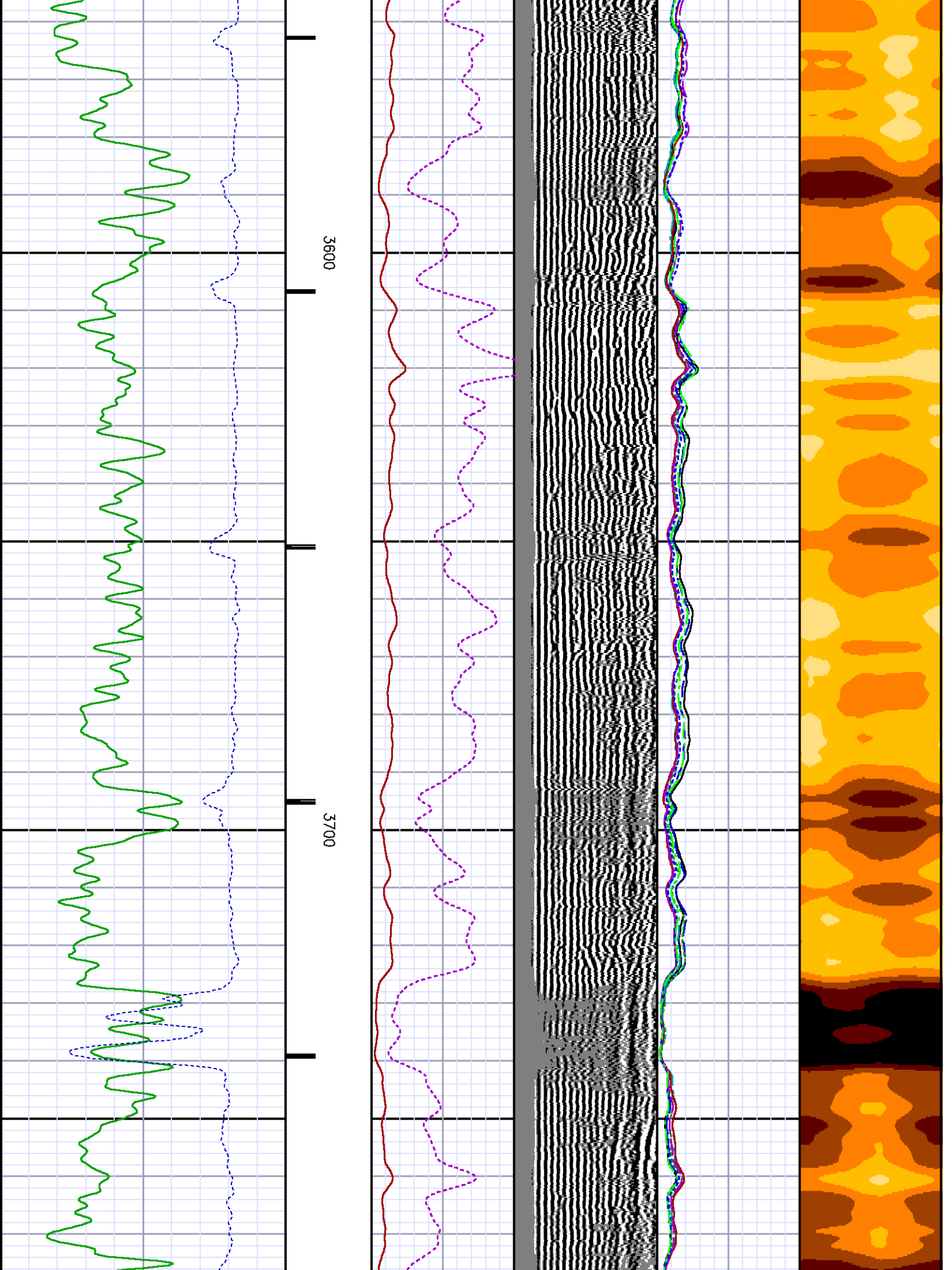


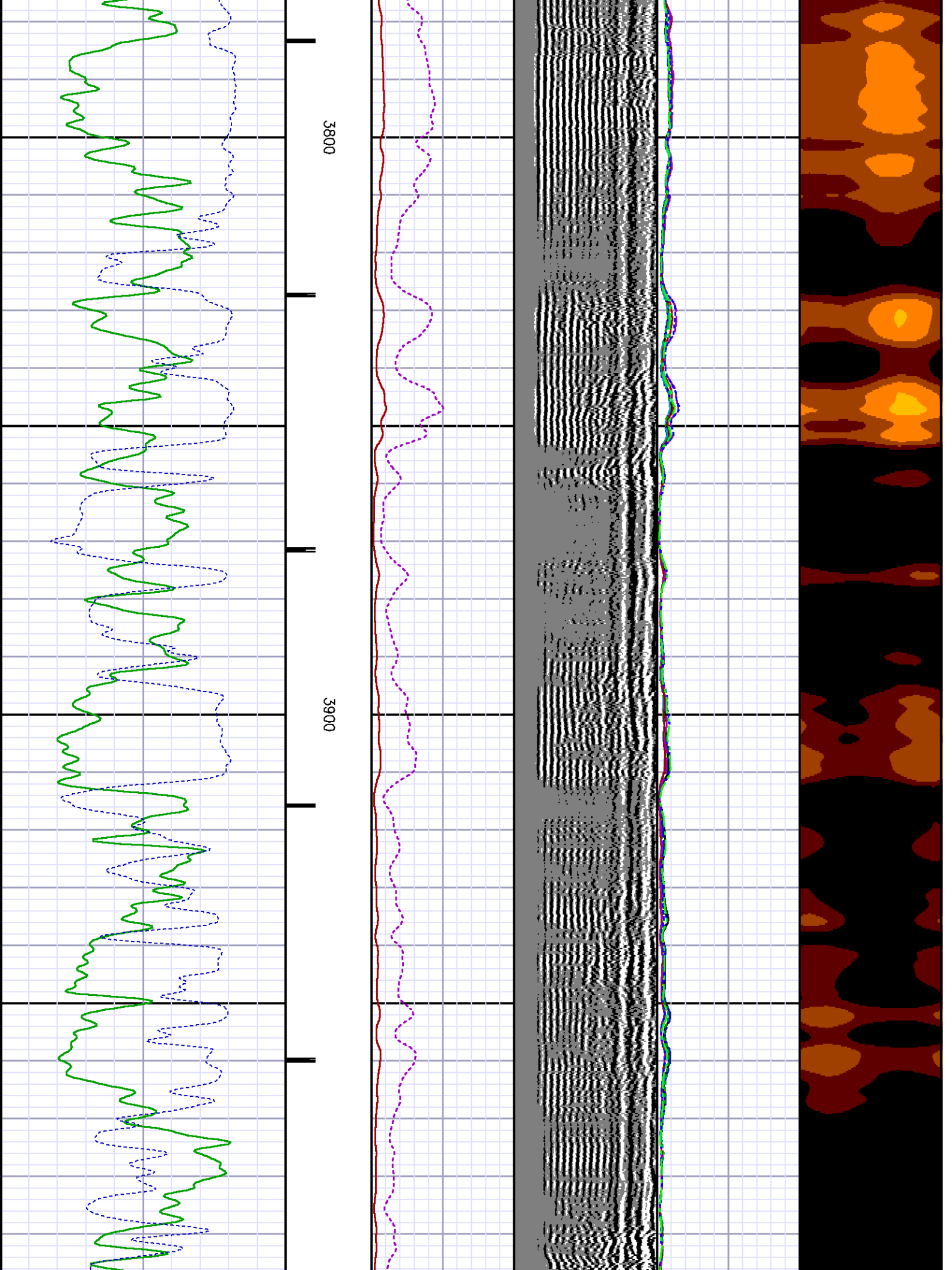


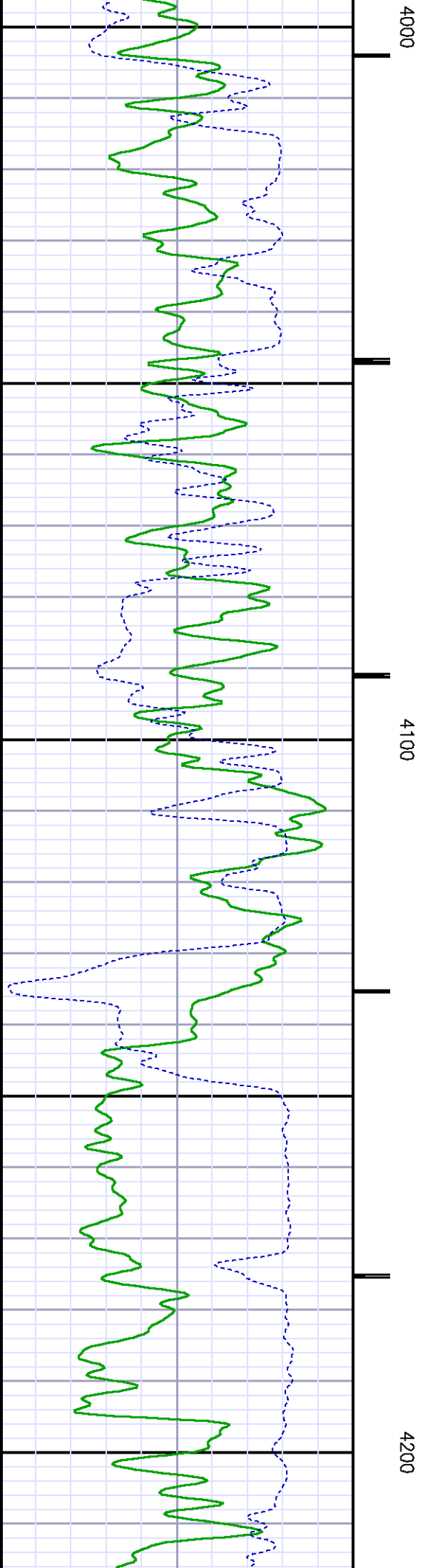
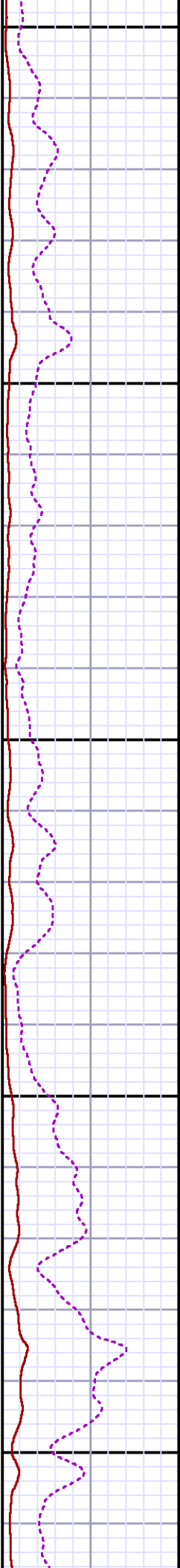
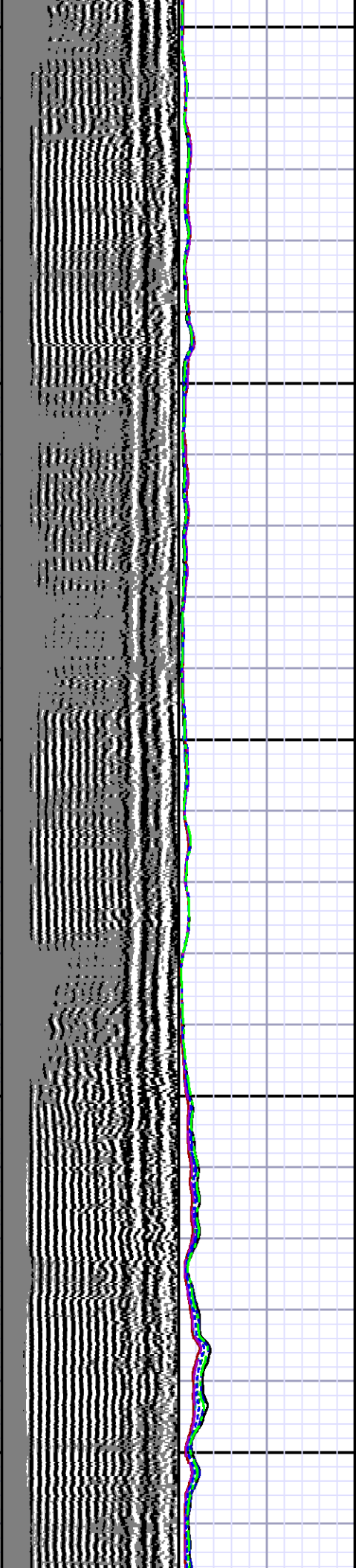


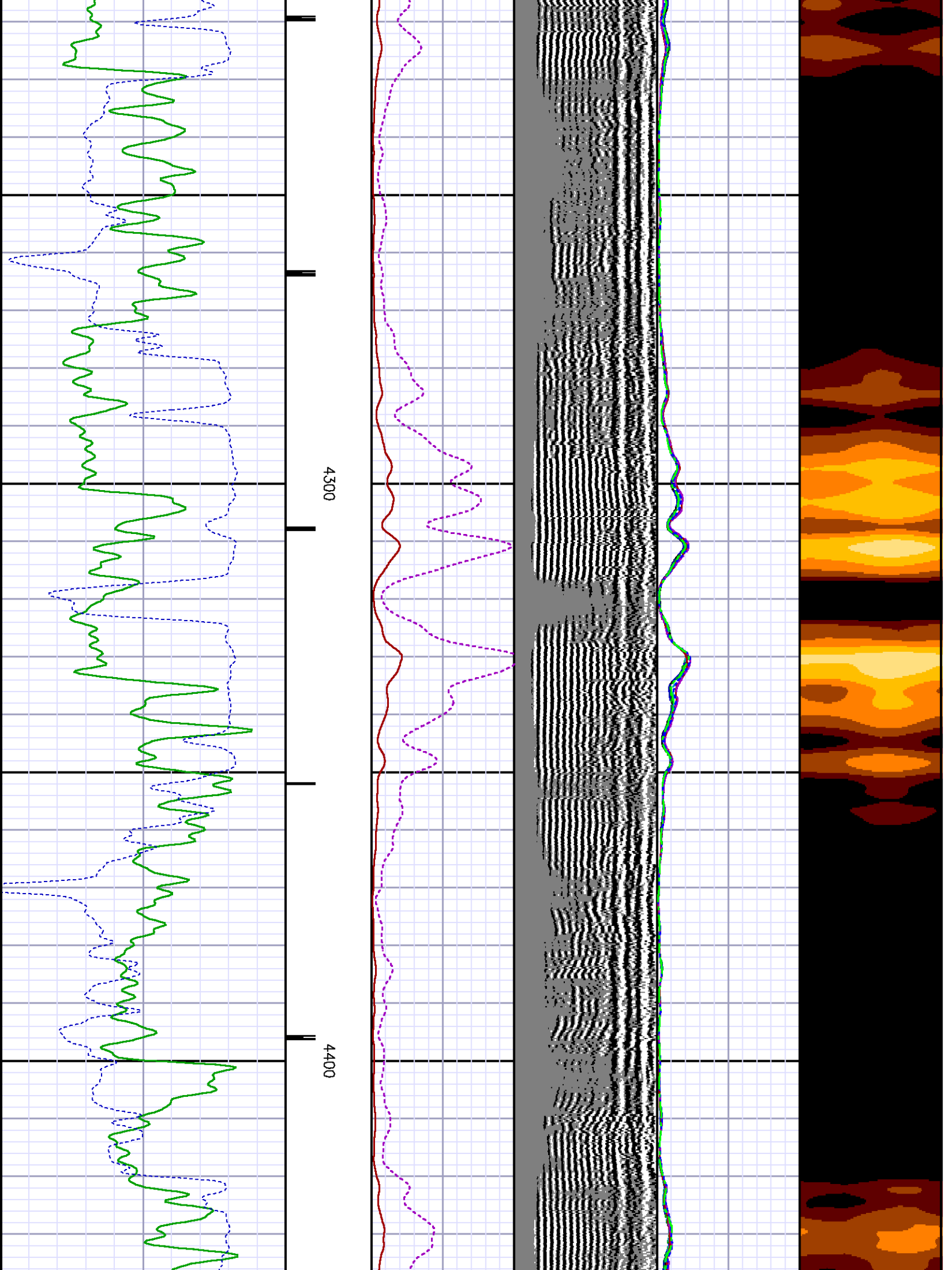


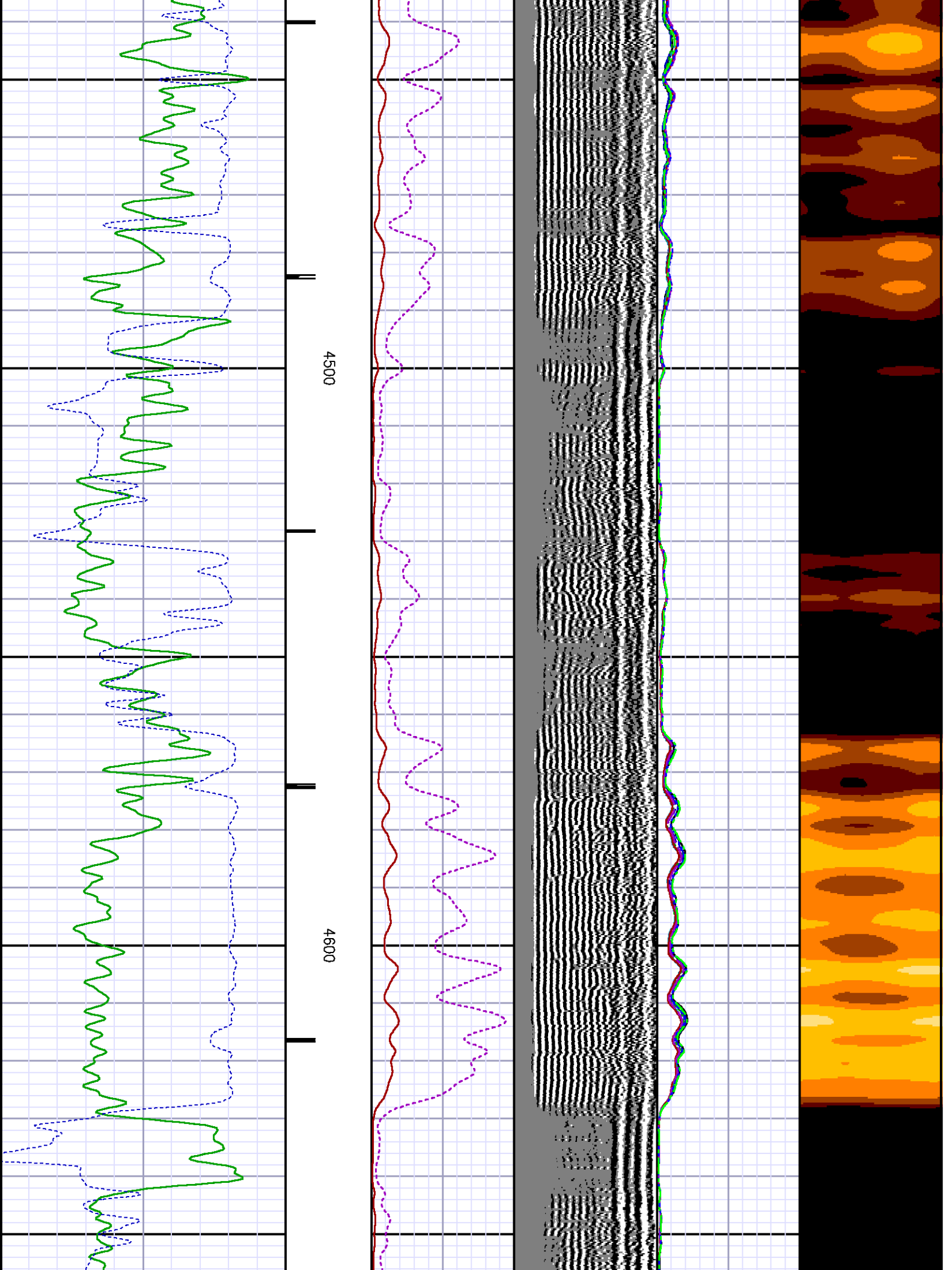


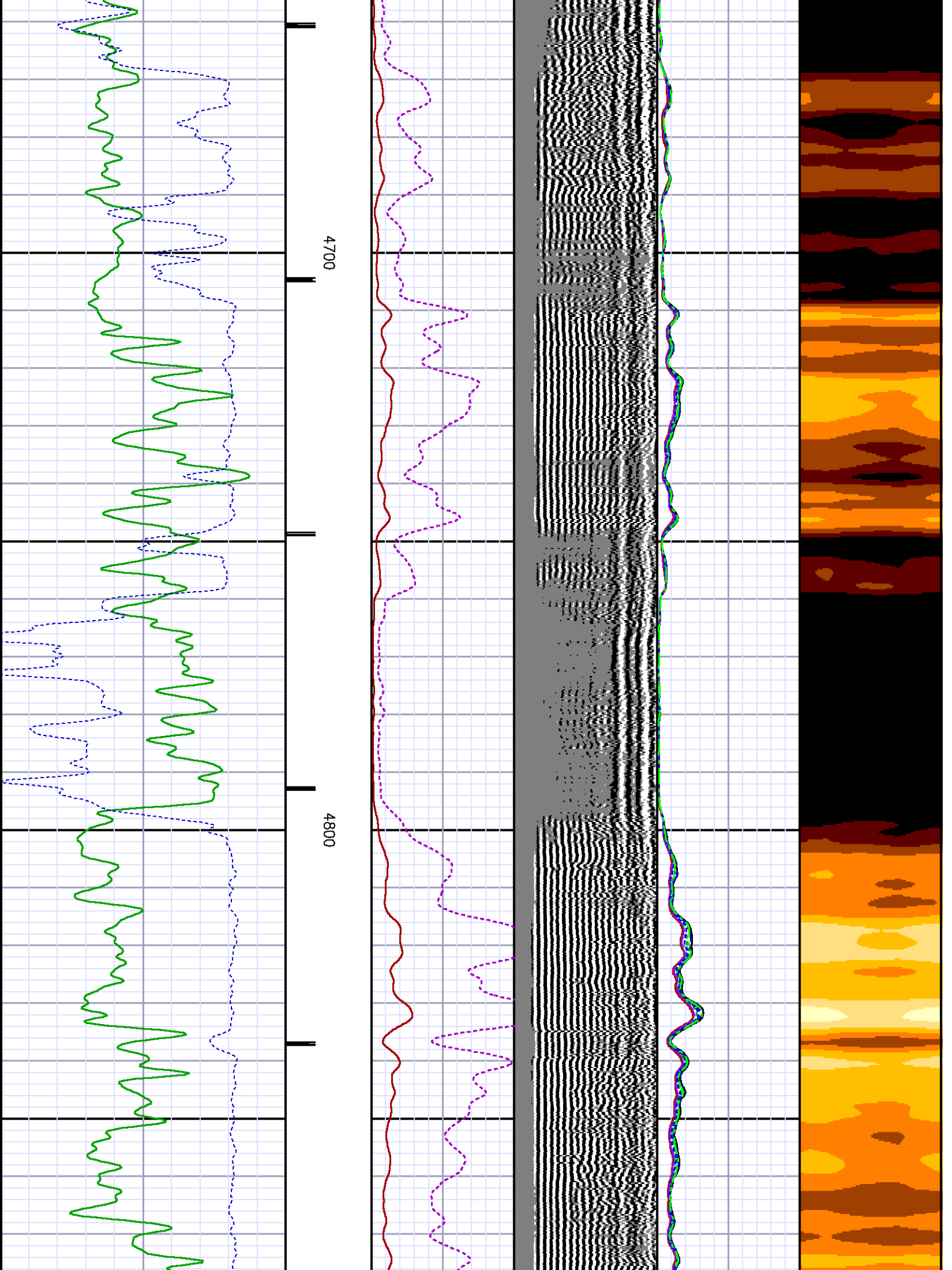


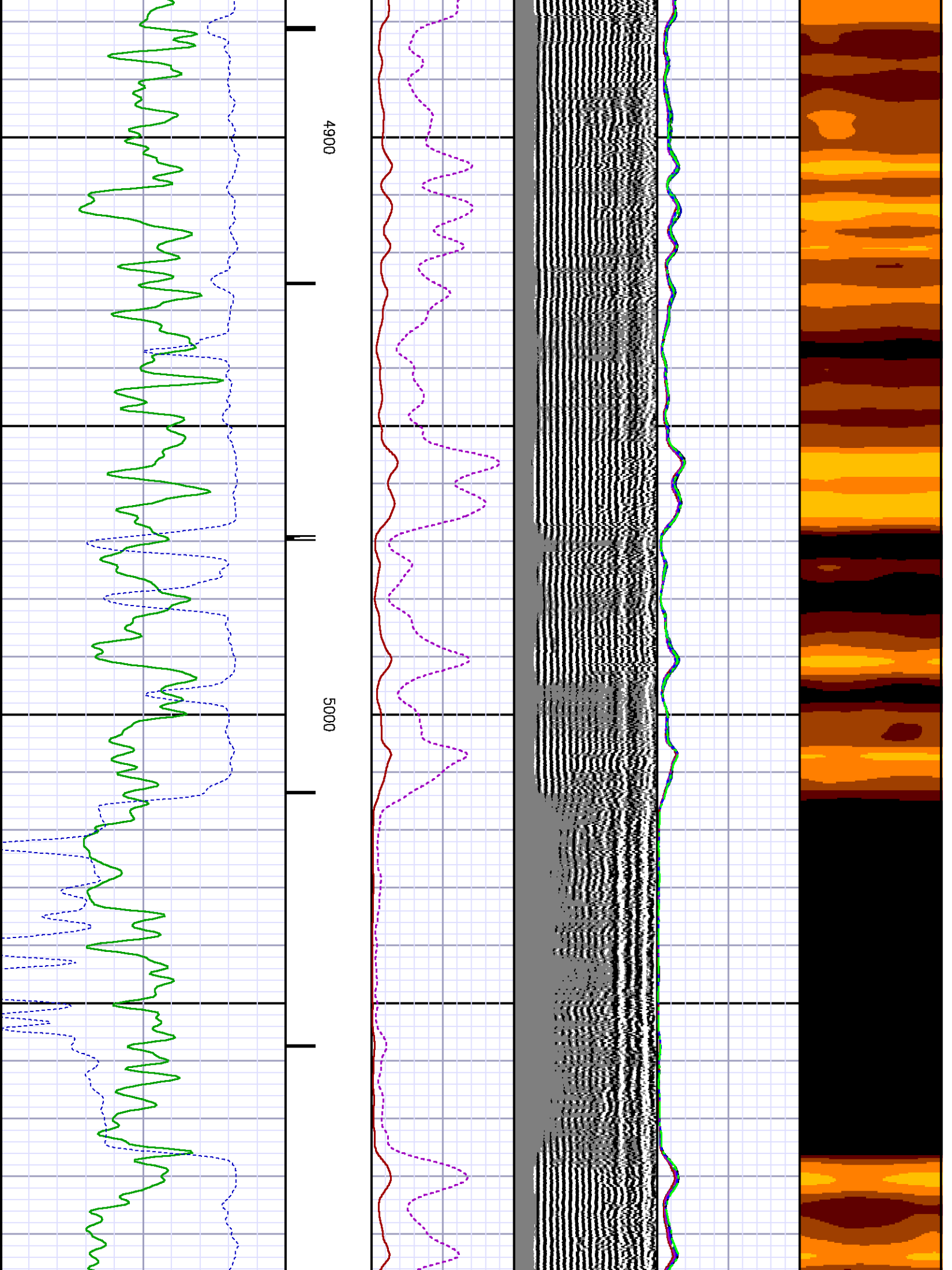


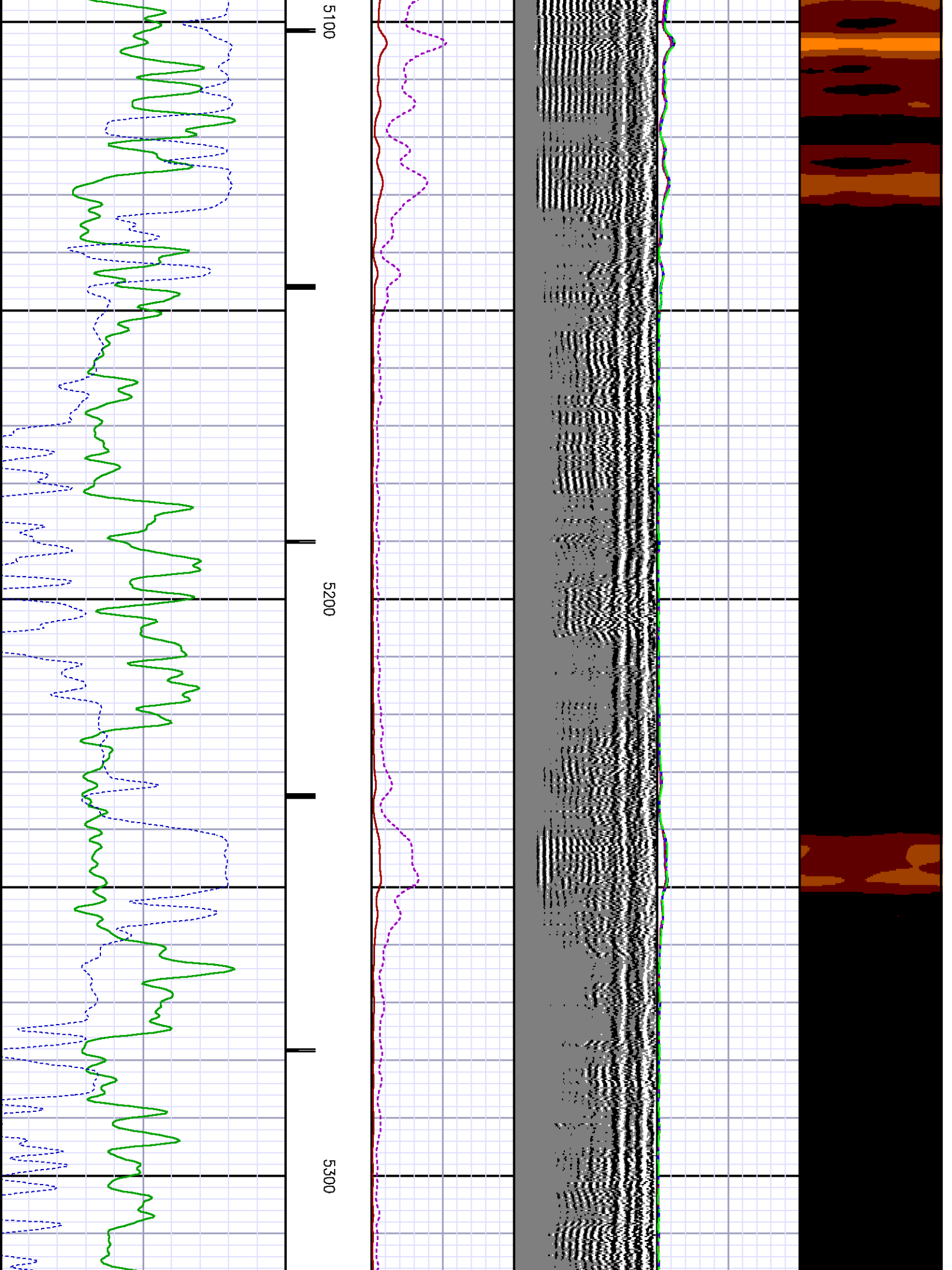


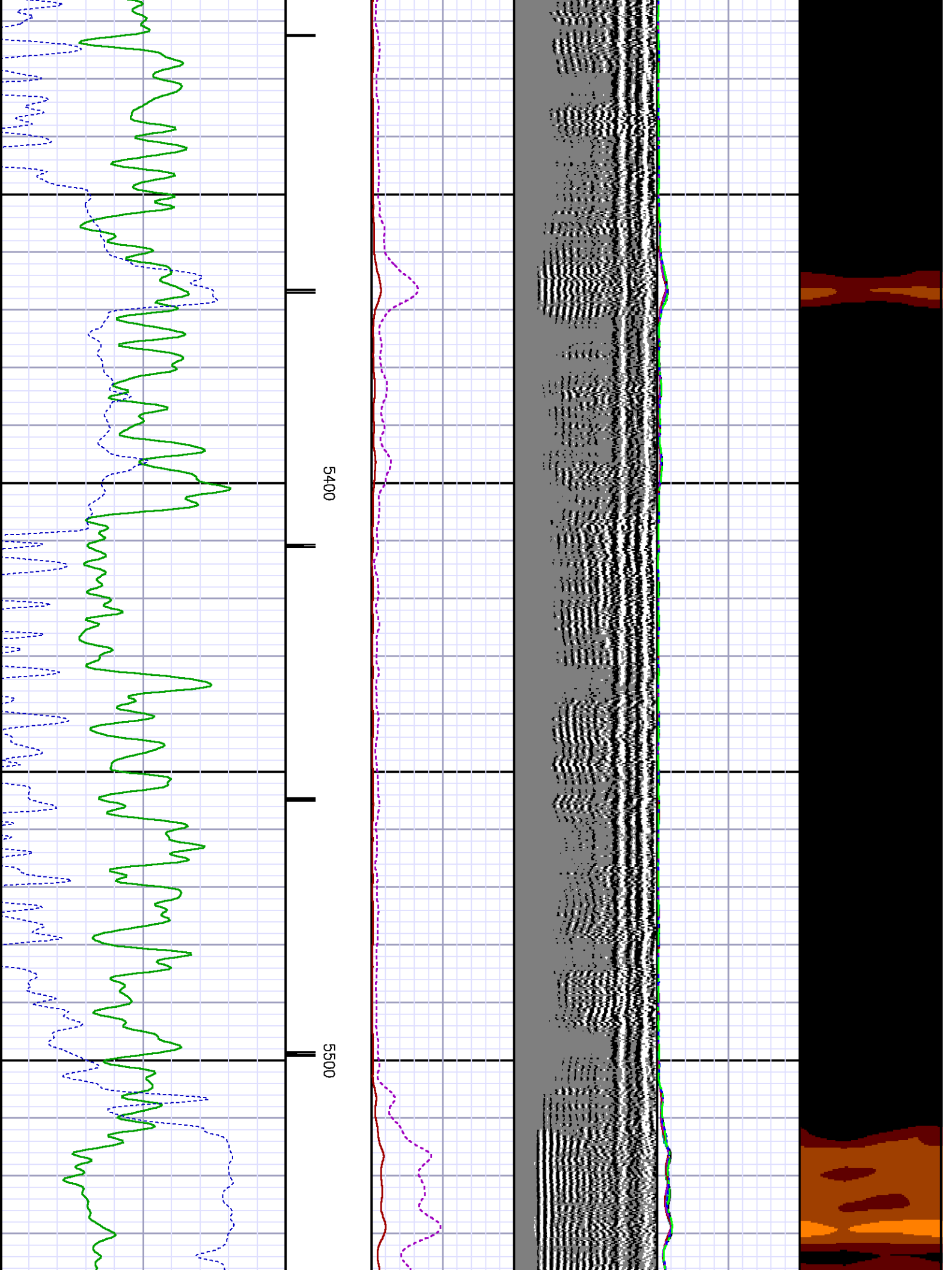


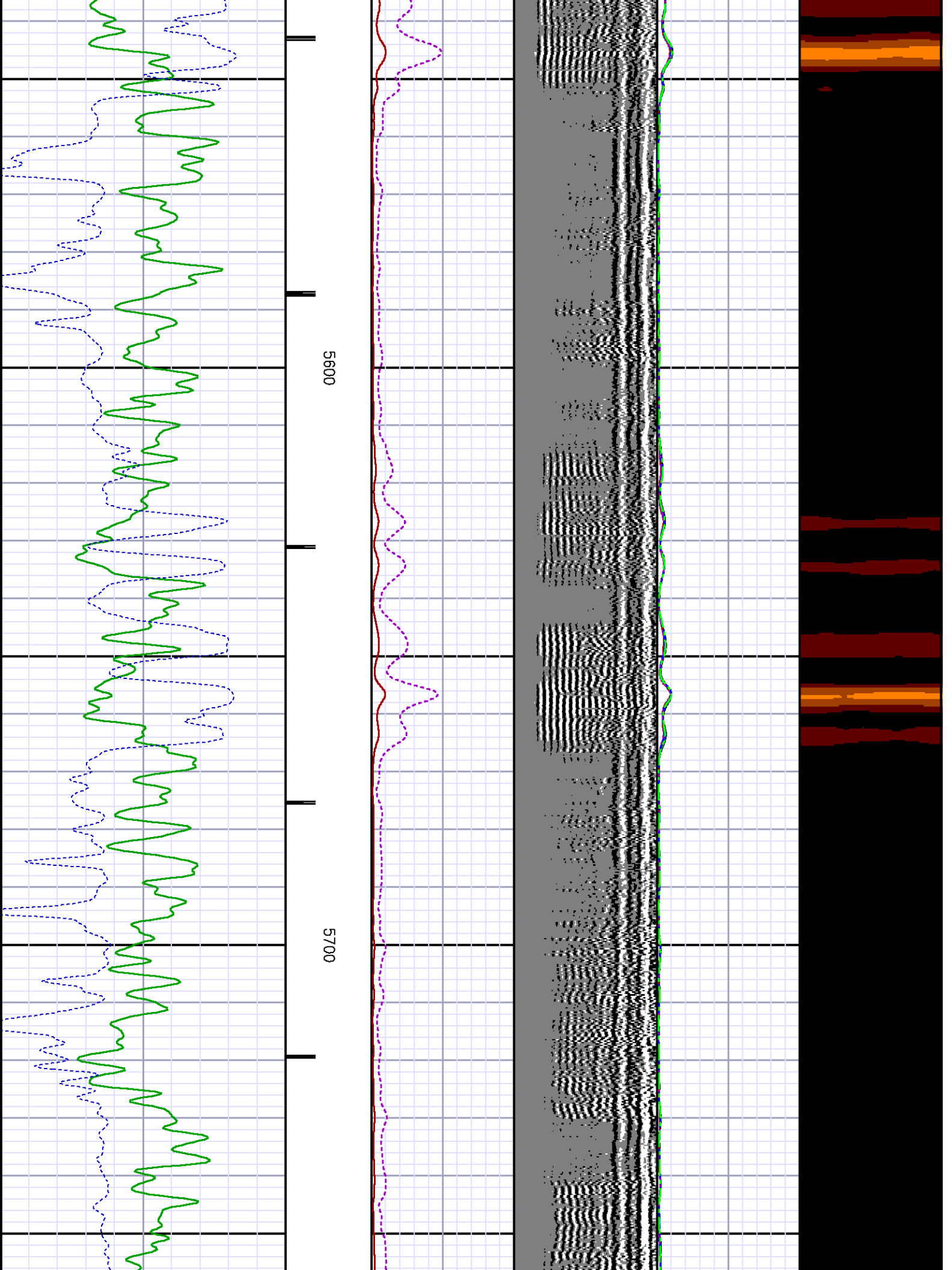


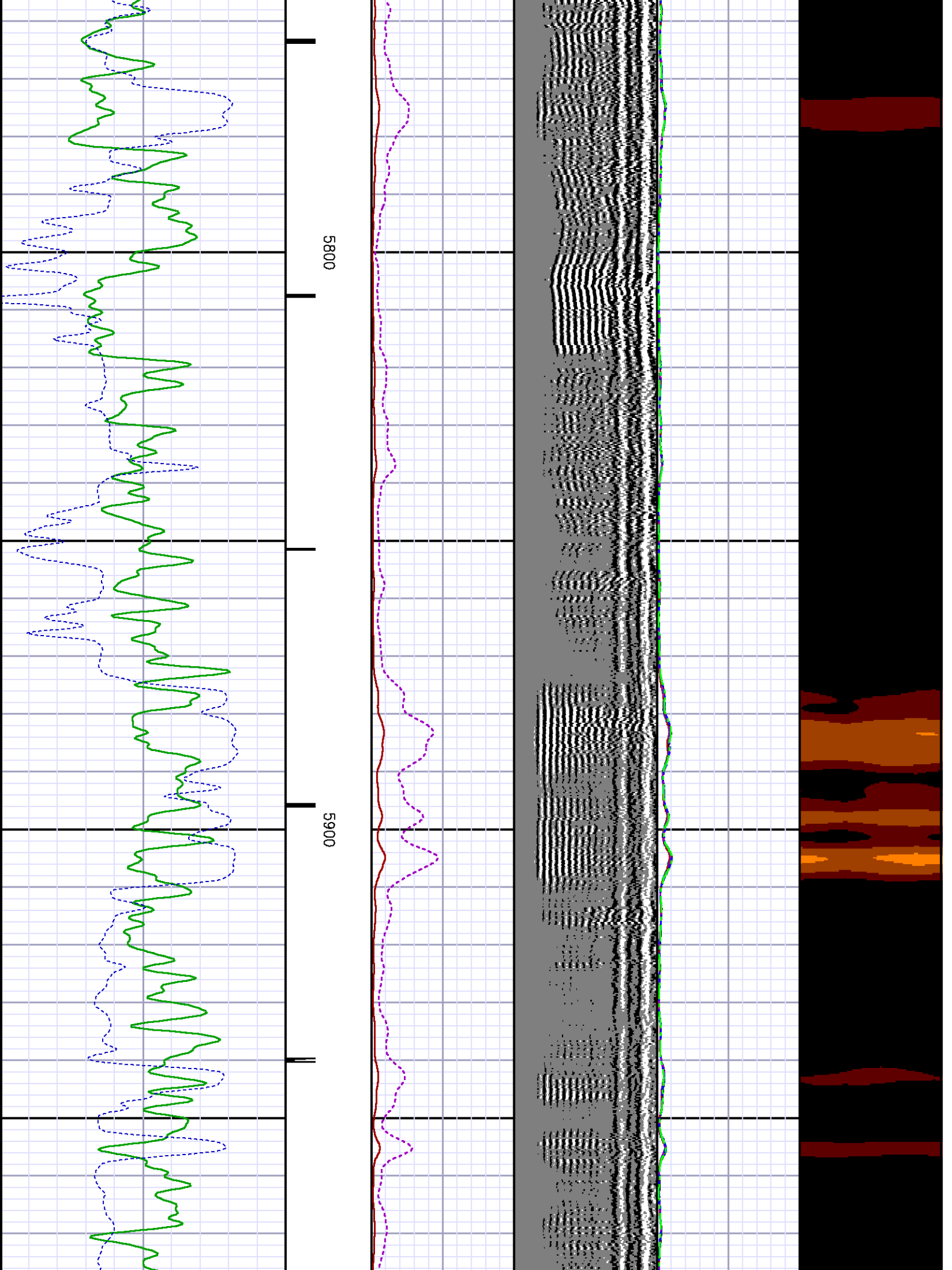


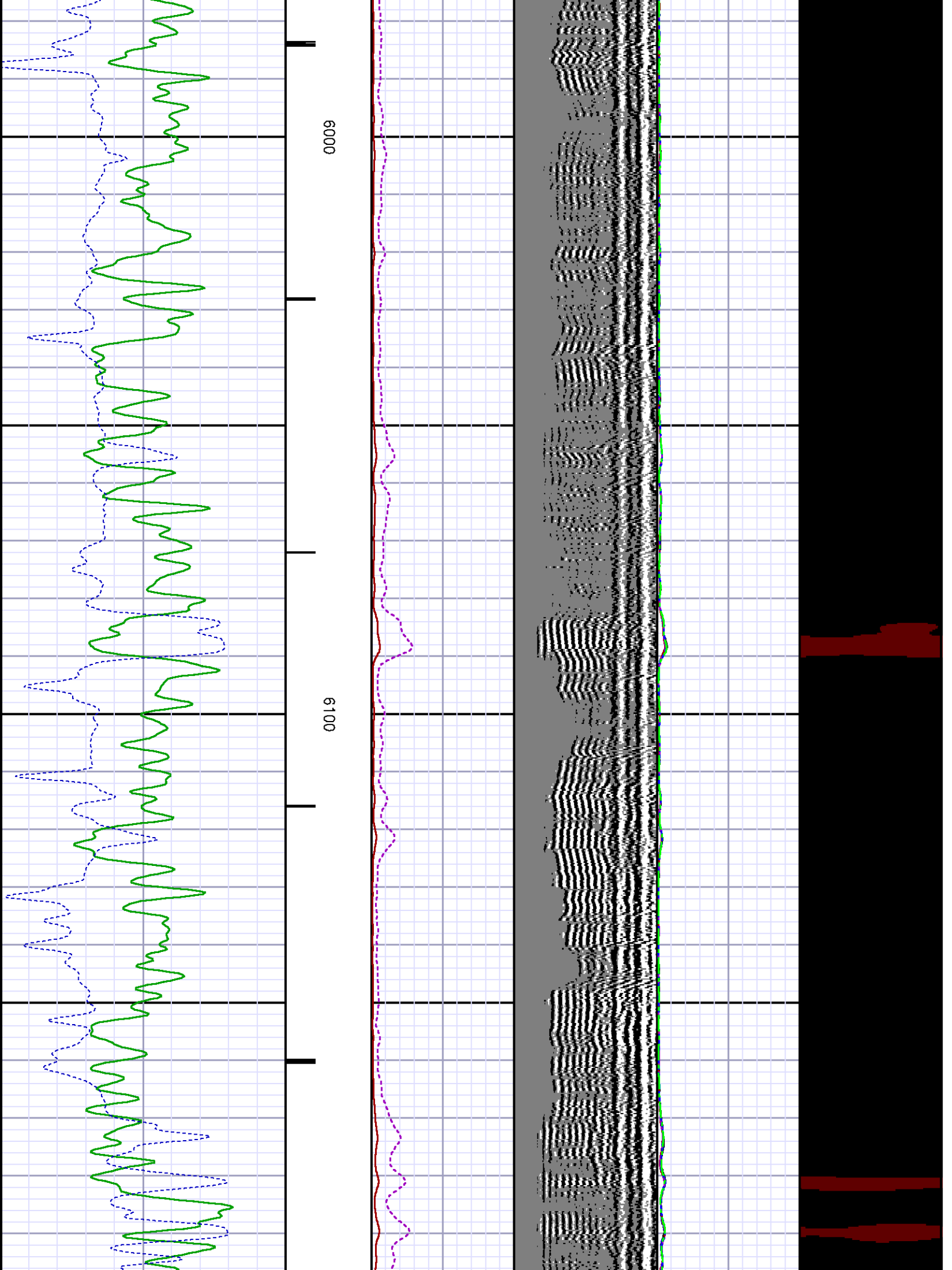


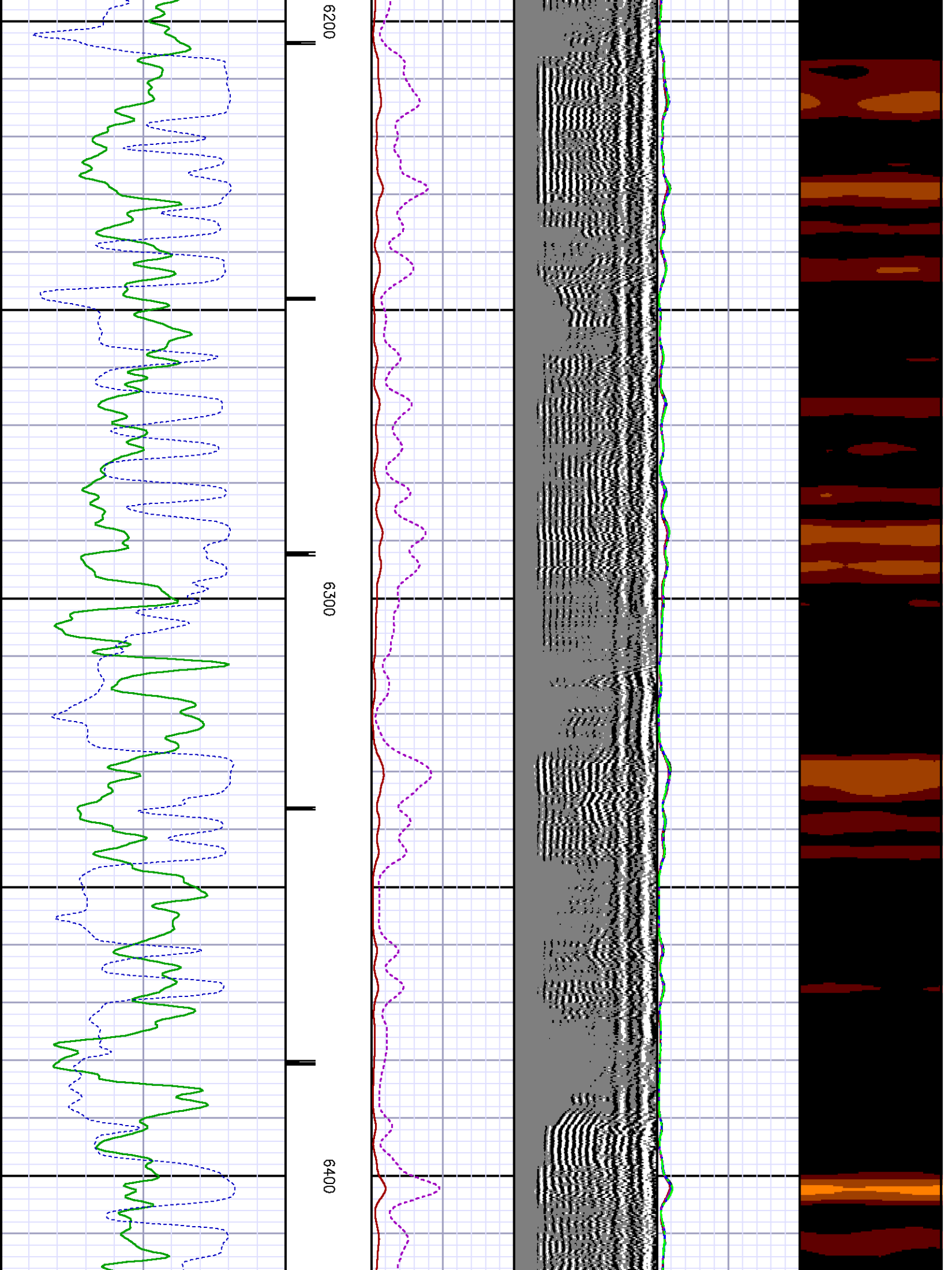


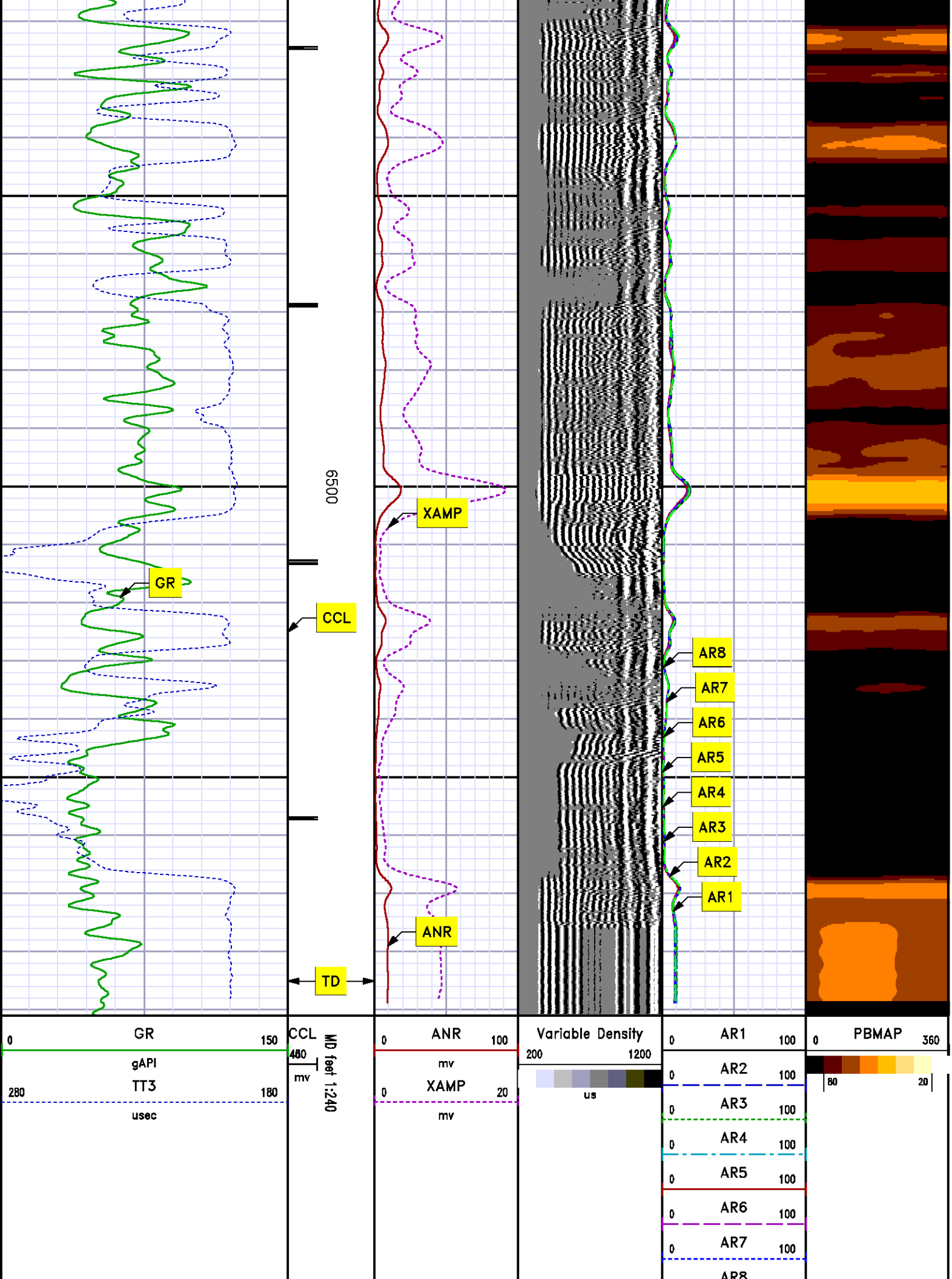












REPEAT SECTION

0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	6253.870	6595.120
RAL	Amp Gate Start Near	195.000	usec	6253.870	6595.120
RAL	Amp Gate Start Radial	195.000	usec	6253.870	6595.120
RAL	Amp Gate Width Far	25.000	usec	6253.870	6595.120
RAL	Amp Gate Width Near	25.000	usec	6253.870	6595.120
RAL	Amp Gate Width Radial	25.000	usec	6253.870	6595.120
RAL	casing od	4.500	inches	6253.870	6595.120
RAL	casing wt	11.600	lbm/ft	6253.870	6595.120
RAL	FB Start Far	291.900	usec	6253.870	6595.120
RAL	FB Start Near	180.000	usec	6253.870	6595.120
RAL	FB Start Radial	180.000	usec	6253.870	6595.120
RAL	FB Thresh Far	10.000	mv	6253.870	6595.120
RAL	FB Thresh Near	4.000	mv	6253.870	6595.120
RAL	FB Thresh Radial	4.000	mv	6253.870	6595.120
RAL	Fluid Travel Time	200.000	usec/ft	6253.870	6594.851

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

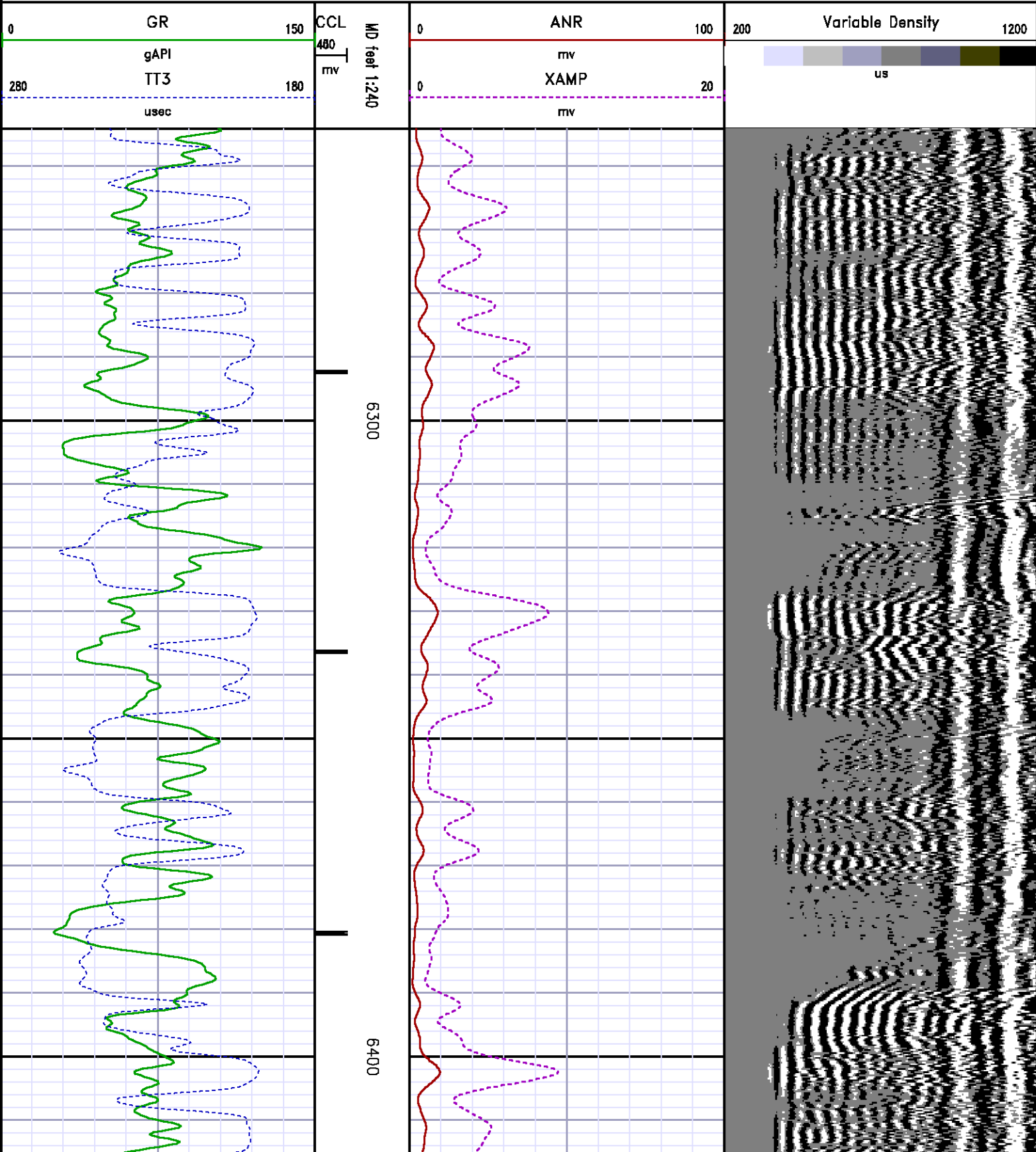
Well : WPX ENERGY GM 313-34

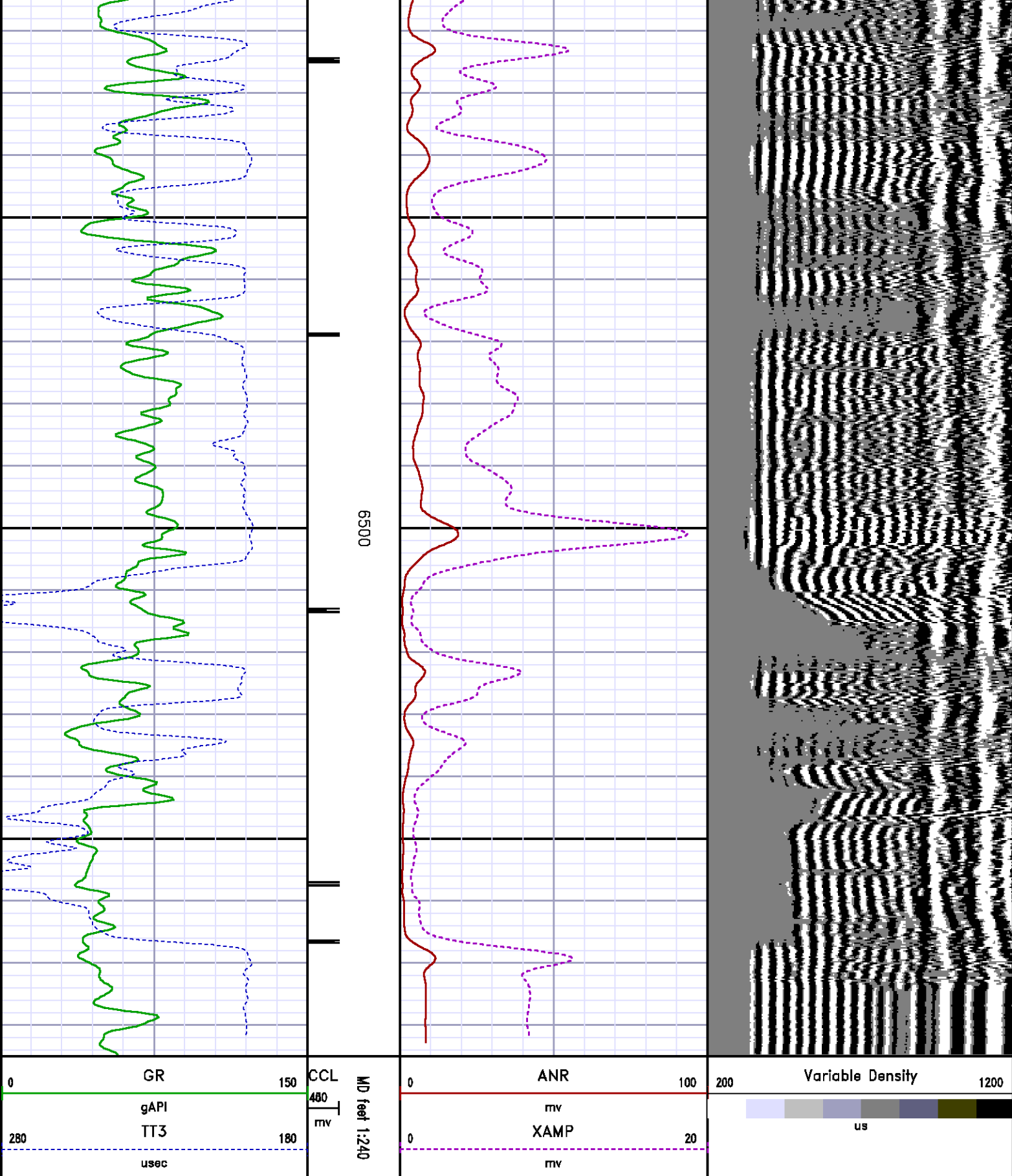
File Name : d:\welldata\wpx energy\gm 313-34\313ral\repeat.xtf

Mode : PlotMgr 5.4.504

Interval : 6254.12 - 6585.00 feet UP

Created : 8/18/2013 8:37:31 AM





CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP\106A16_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Fri Aug 16 07:31:17 2013 TOOL SERIES: 1426XA ASSET: 106 SEQ: A16

Tool Delay [usec] Tank OD Tank Wt Tank ID

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	<input type="text" value="218"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.273"/>	<input type="text" value="100.00"/>	<input type="text" value="0.21"/>
3 Ft. Receiver	<input type="text" value="218"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="157"/>	<input type="text" value="25"/>	<input type="text" value="-0.250"/>	<input type="text" value="100.00"/>	<input type="text" value="0.21"/>
5 Ft. Receiver	<input type="text" value="326"/>	<input type="text" value="324"/>	<input type="text" value="30"/>	<input type="text" value="225"/>	<input type="text" value="25"/>	<input type="text" value="0.201"/>	<input type="text" value="150.00"/>	<input type="text" value="0.23"/>
Radial #1	<input type="text" value="217"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.647"/>	<input type="text" value="100.00"/>	<input type="text" value="0.21"/>
Radial #2	<input type="text" value="217"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.044"/>	<input type="text" value="100.00"/>	<input type="text" value="0.21"/>
Radial #3	<input type="text" value="218"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.436"/>	<input type="text" value="100.00"/>	<input type="text" value="0.21"/>
Radial #4	<input type="text" value="218"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.320"/>	<input type="text" value="100.00"/>	<input type="text" value="0.21"/>
Radial #5	<input type="text" value="218"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.200"/>	<input type="text" value="100.00"/>	<input type="text" value="0.21"/>
Radial #6	<input type="text" value="218"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.448"/>	<input type="text" value="100.00"/>	<input type="text" value="0.21"/>
Radial #7	<input type="text" value="216"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.193"/>	<input type="text" value="100.00"/>	<input type="text" value="0.21"/>
Radial #8	<input type="text" value="218"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.130"/>	<input type="text" value="100.00"/>	<input type="text" value="0.21"/>

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\106A16 fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Fri Aug 16 07:33:10 2013 TOOL SERIES: 1426XA ASSET: 106 SEQ: A16

Tool Delay [usec] Casing OD Casing Wt Casing ID

RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.060"/>	<input type="text" value="0.000"/>	<input type="text" value="1.03"/>	<input type="text" value="100.000"/>
3 Ft. Receiver	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-1.884"/>			
5 Ft. Receiver	<input type="text" value="305"/>	<input type="text" value="25"/>	<input type="text" value="-3.120"/>			
Radial #1	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-3.003"/>			
Radial #2	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-2.610"/>			
Radial #3	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-2.282"/>			
Radial #4	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-2.348"/>			
Radial #5	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-2.081"/>			
Radial #6	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-2.142"/>			
Radial #7	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-1.555"/>			
Radial #8	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-1.992"/>			

GAMMA RAY

Calibration File: C:\case\calver\GR\209J3.cal

CALIBRATION SUMMARY

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

Verification File: C:\case\calver\GR\209J3.VP

PRIMARY LOG VERIFICATION

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

TOOL DIAGRAM

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"



	18.89'
XMIT	12.71'
NEAR RCVR	9.63'
FAR RCVR	7.71'
CCL	5.79'

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



GR	1.67'
TEMP	0.17'
	0.00'

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



Company	WPX ENERGY		
Well	WPX ENERGY GM 313-34		
Field	GRAND VALLEY		
County	GARFIELD	State	COLORADO

File No:	CH075927
API No:	05045193070000

Location

SHL: 1962' FSL X 2153' FWL
 BHL: 1681' FSL X 848' FWL (NWSW)

Elevations

KB 5381.5 ft
 DF
 GL 5355.5 ft

SEC 34 TWP 6S RGE 96W

34-6S-96W
 GM 23-34 PAD
 NABORS 574

CASE

Baker Atlas