



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: **CH069876** Company **WPX ENERGY**
 Well **YOUBERG RMF 533-23**
 API No: **05045182460000** Field **RULISON**
 County **GARFIELD** State **COLORADO**

Location
 23 65 94# SHL: 1402' FSL, 2313' FEL
 RMF: 33-23 PAD BHL: 2265' FSL, 1815' FEL
 NABORS 577 SEC 23 TWP 6S RGE 94#

Permanent Datum **GL** Elevation **5501.5 ft**
 Log Measured From **KB** **26 ft** Above P. D.
 Drill Measured From **KELLY BUSHING**
 Other Services **RPM**
 Elevations **KB 5527.5 ft**
DF
GL 5501.5 ft

Date	23/APR/15
Run	ONE
Service Order	575109
Depth Driller	8206 ft
Depth Logger	8161 ft
Bottom Logged Interval	8151 ft
Top Logged Interval	26 ft
Time Started	1300
Time Finished	1630
Operator Rig Time	3.5 HRS
Type of Fluid in Hole	WATER
Fluid Density	NA
Salinity	NA
Fluid Level	82 ft
Logged Cement Top	NA
Wellhead Pressure	0 psi
Maximum Hole Deviation	NA
Nominal Logging Speed	45 fpm
Maximum Recorded Temperature	235 degF
Reference Log	NONE
Reference Log Date	NA
Equipment No.	4271
Location	FLOYD RENEAU GRAND JCT
Recorded By	JEFF DUCY
Witnessed By	

- 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.

Bit Size	From	To
13.5 In	0 ft	1111 ft
8.75 In	1111 ft	8206 ft

Size	Weight	Grade	From	To
9.625 In			0 ft	1111 ft
4.6 In	11.6 lbm/ft	I-80	0 ft	8206 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 0 feet.

Logged with zero PSI at wellhead.

BHT = 235°F

SJ = 4805'-4825'

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	310.000	usec	29.806	8178.000
RAL	Amp Gate Start Near	195.000	usec	29.806	8178.000
RAL	Amp Gate Start Radial	195.000	usec	29.806	8178.000
RAL	Amp Gate Width Far	25.000	usec	29.806	8178.000
RAL	Amp Gate Width Near	25.000	usec	29.806	8178.000
RAL	Amp Gate Width Radial	25.000	usec	29.806	8178.000
RAL	casing od	4.500	inches	29.806	8178.000
RAL	casing wt	11.600	lbm/ft	29.806	8178.000
RAL	FB Start Far	291.900	usec	29.806	8178.000
RAL	FB Start Near	180.000	usec	29.806	8178.000
RAL	FB Start Radial	180.000	usec	29.806	8178.000
RAL	FB Thresh Far	15.000	mv	29.806	8178.000
RAL	FB Thresh Near	10.000	mv	29.806	8178.000
RAL	FB Thresh Radial	10.000	mv	29.806	8178.000
RAL	Fluid Travel Time	200.000	usec/ft	29.806	8177.900

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

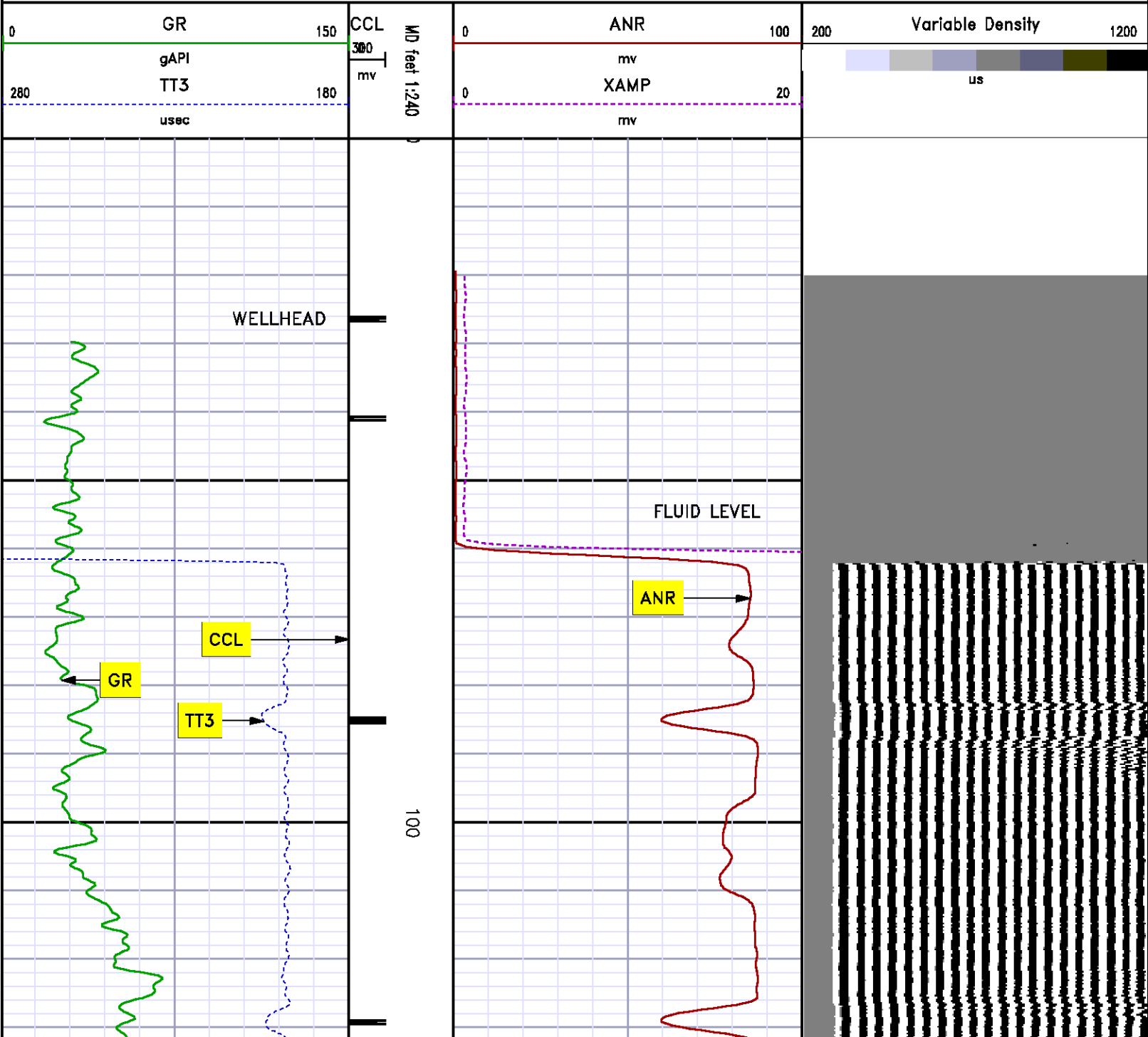
Well : YOUBERG RWF 533-23

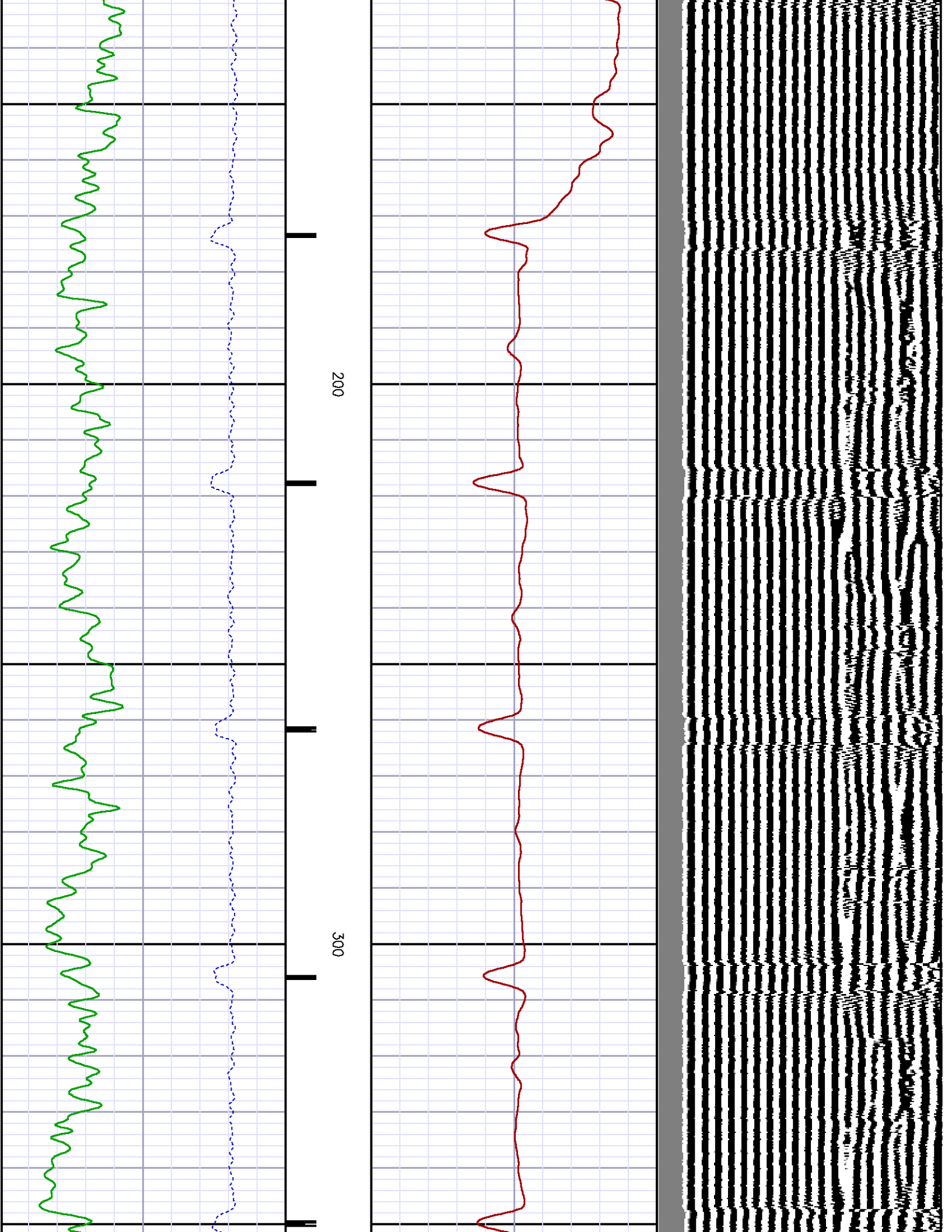
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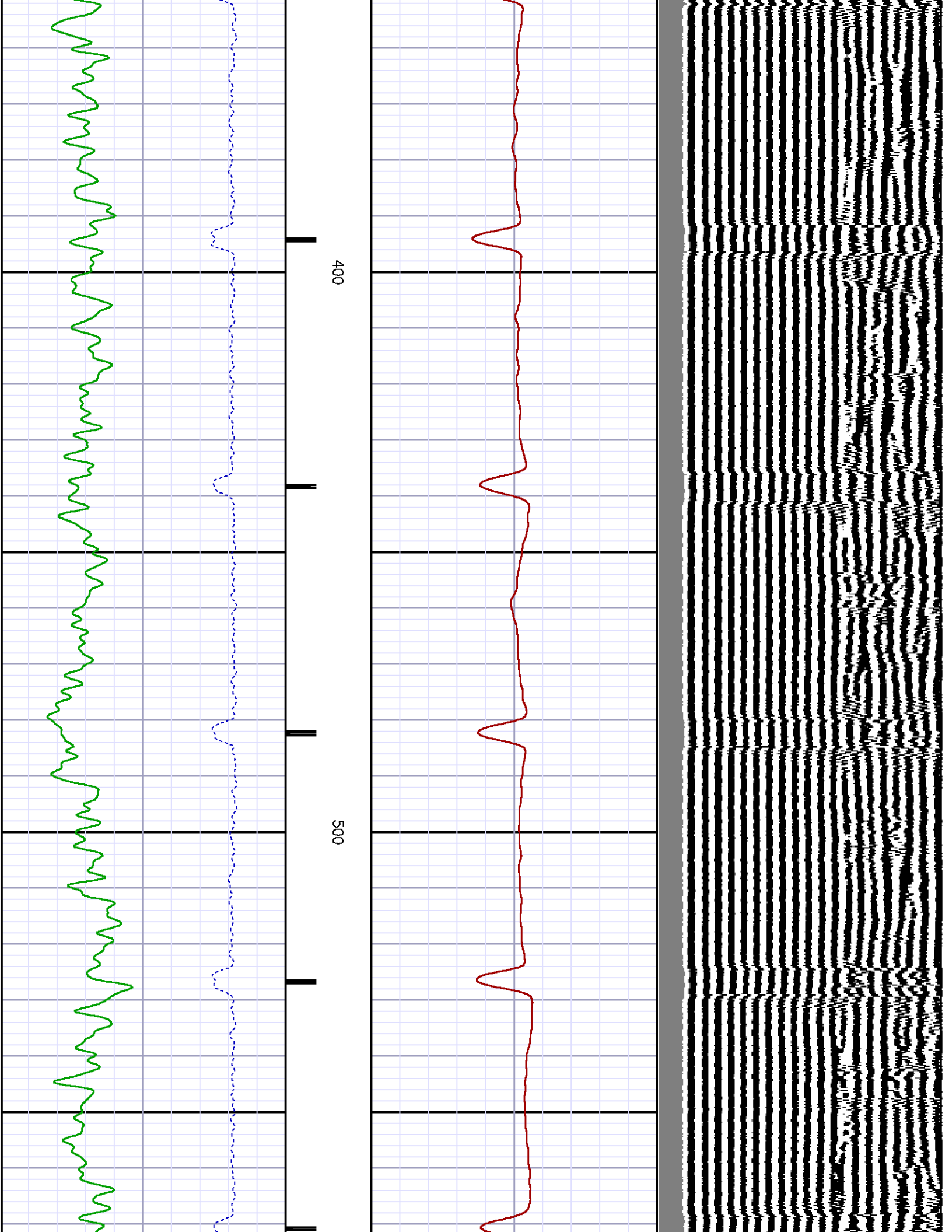
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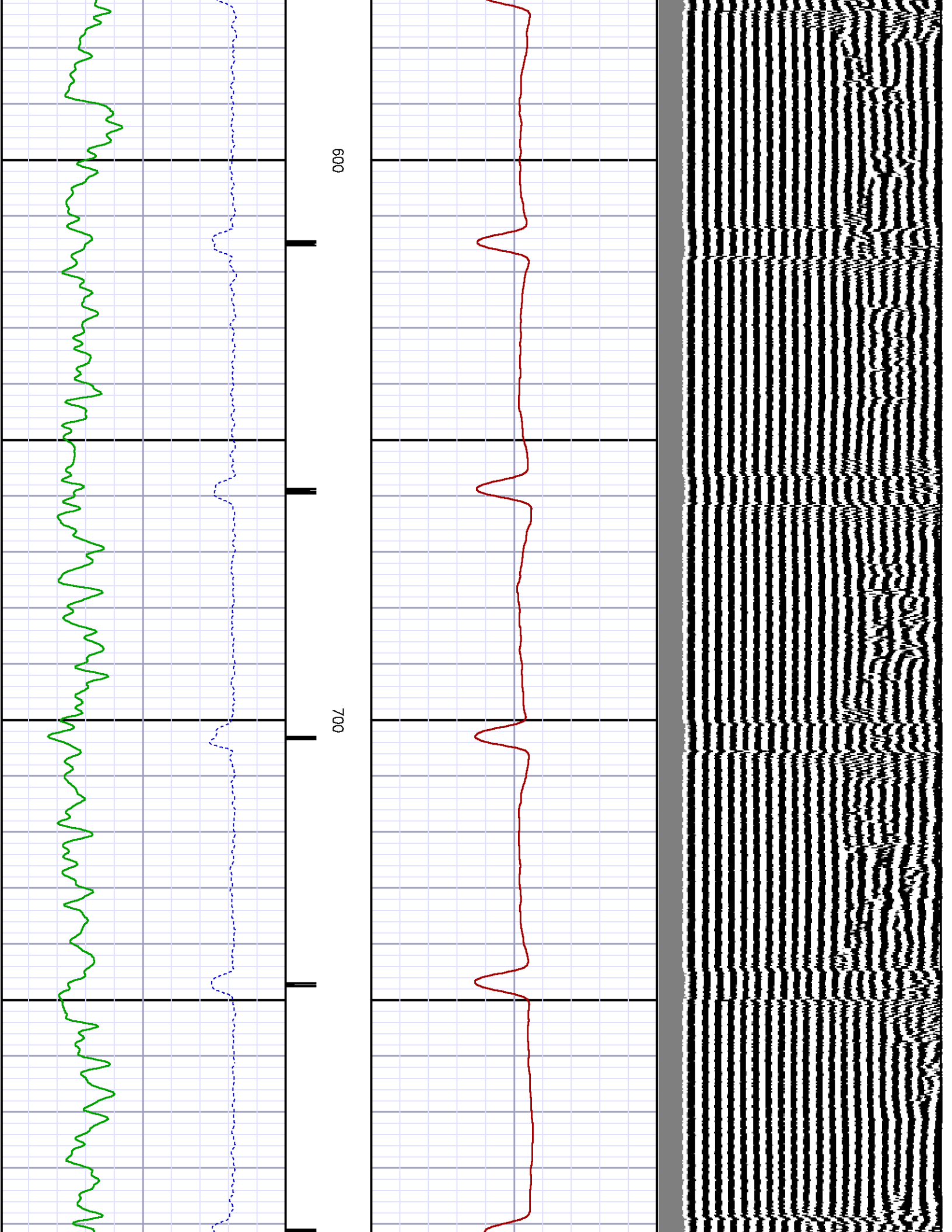
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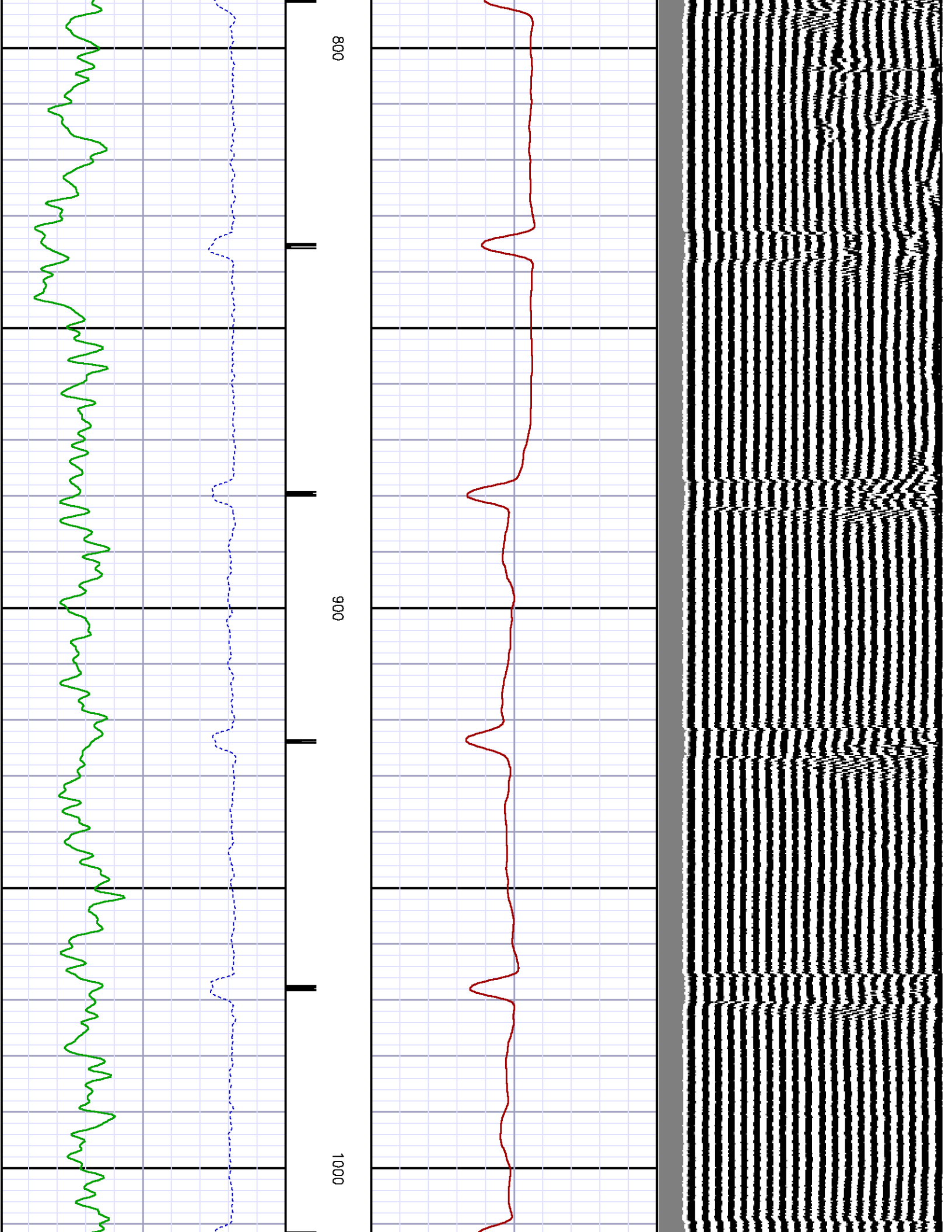
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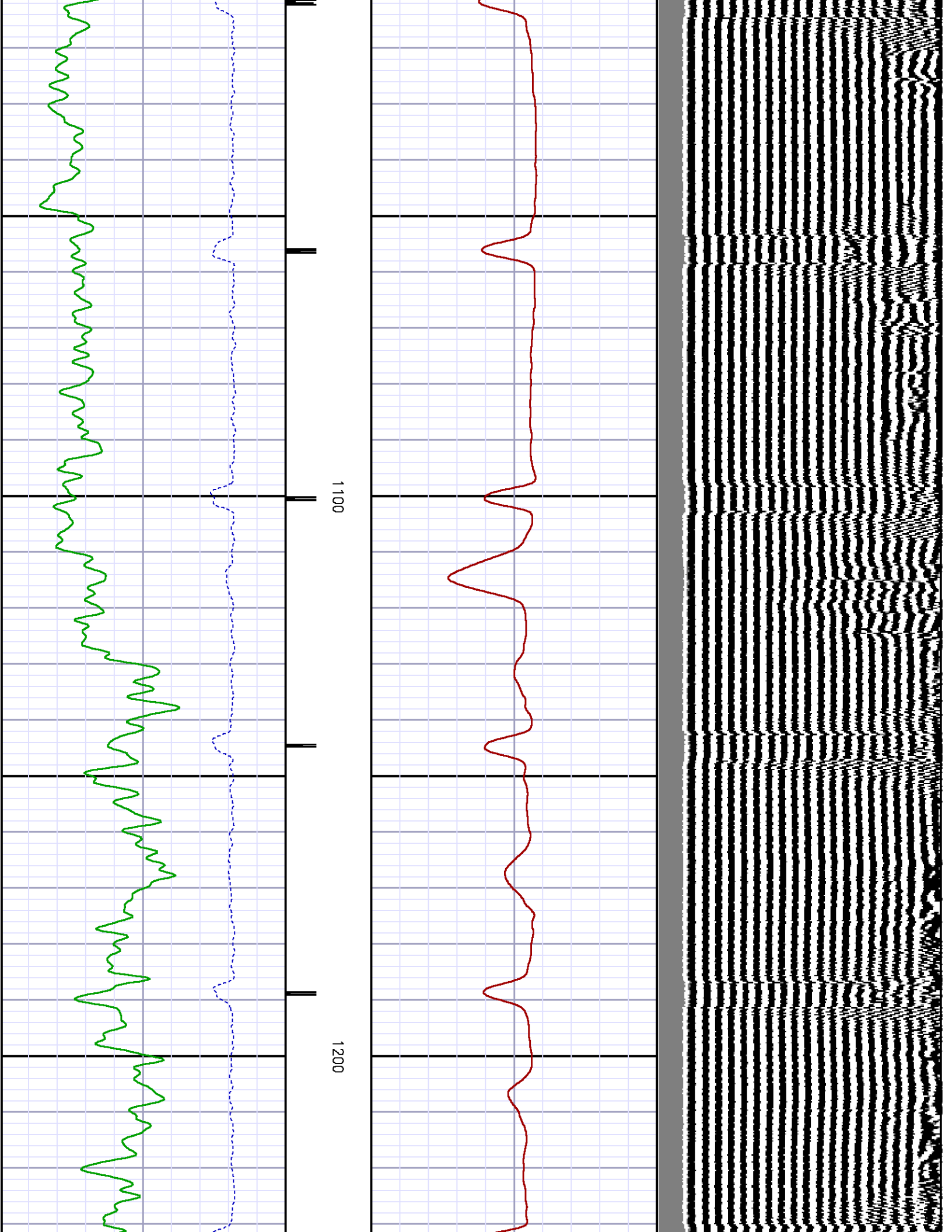


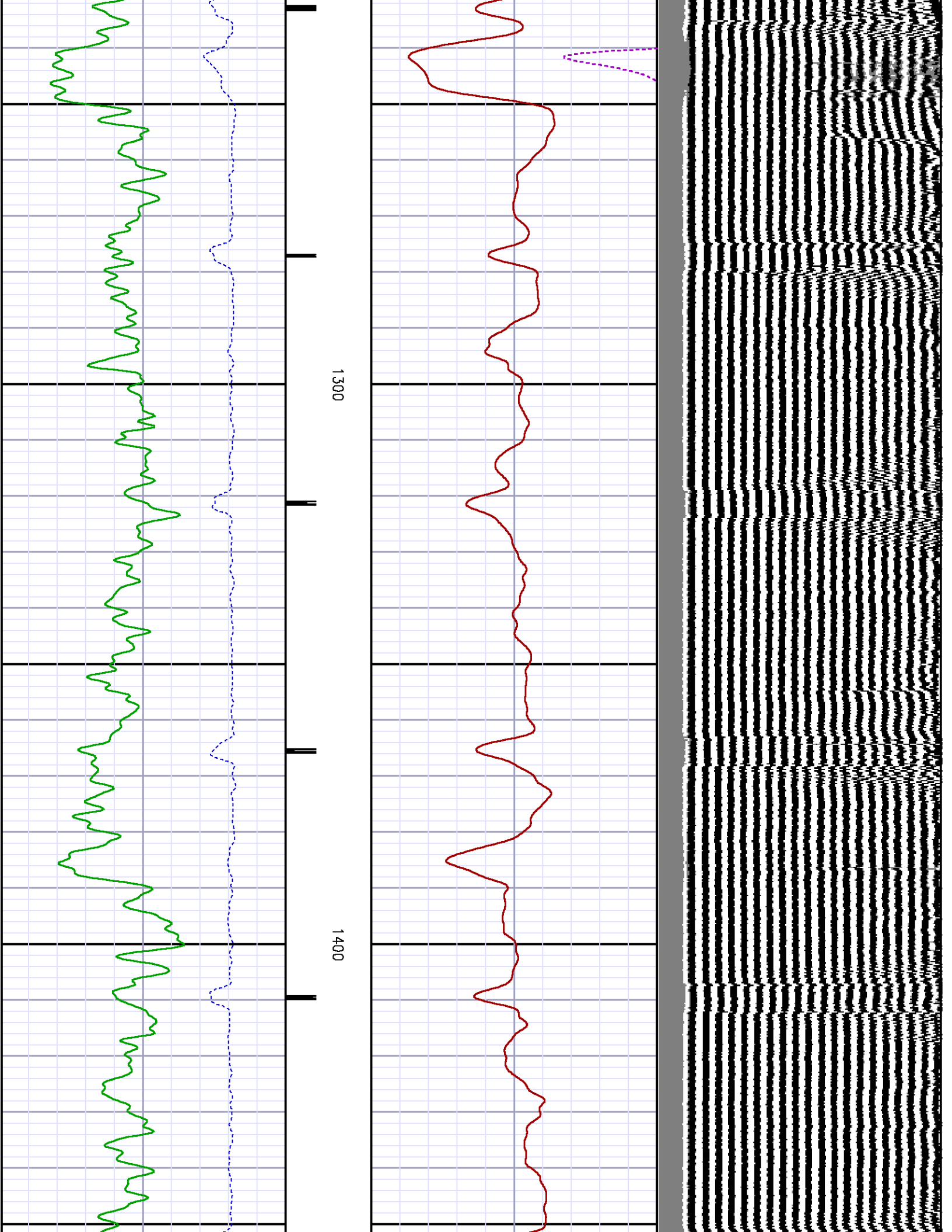


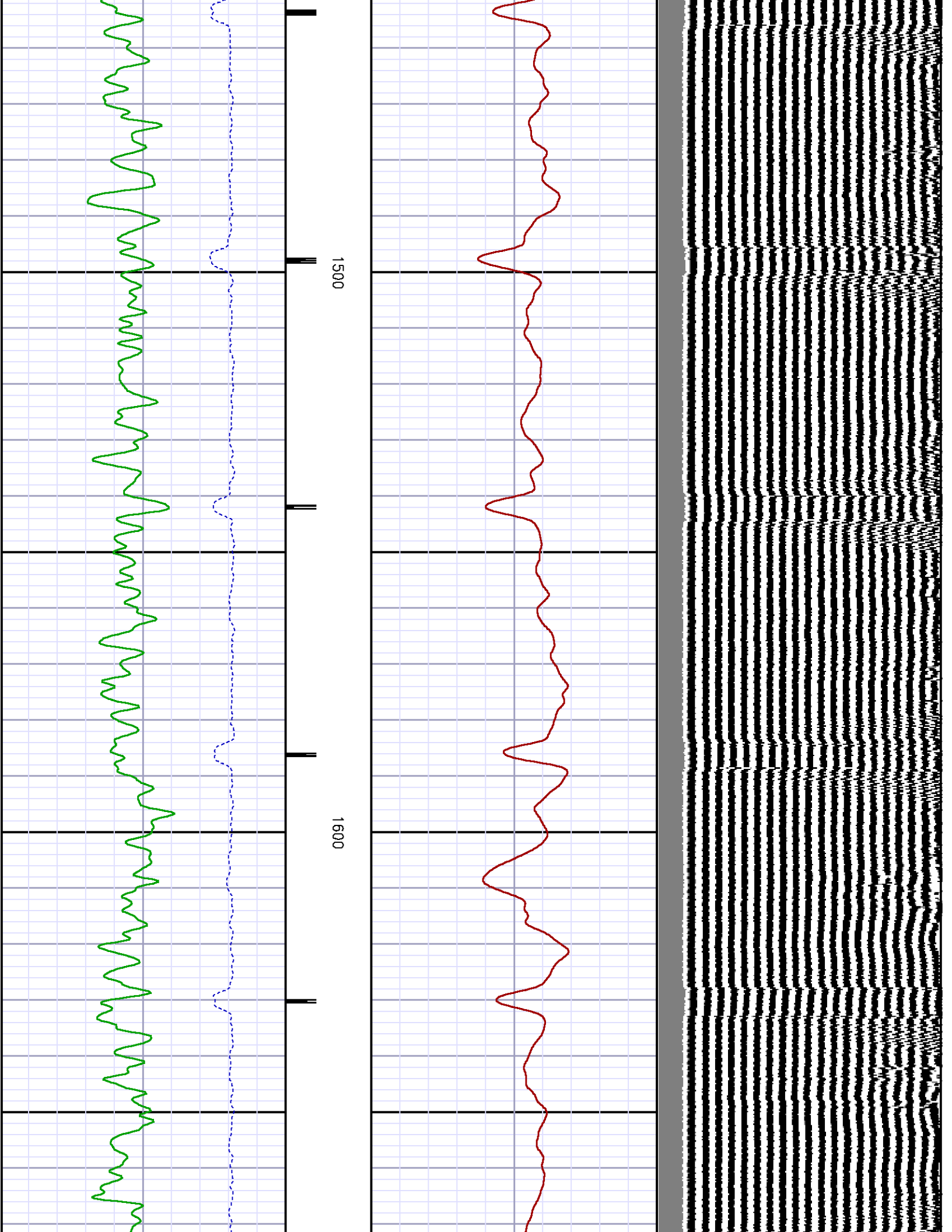


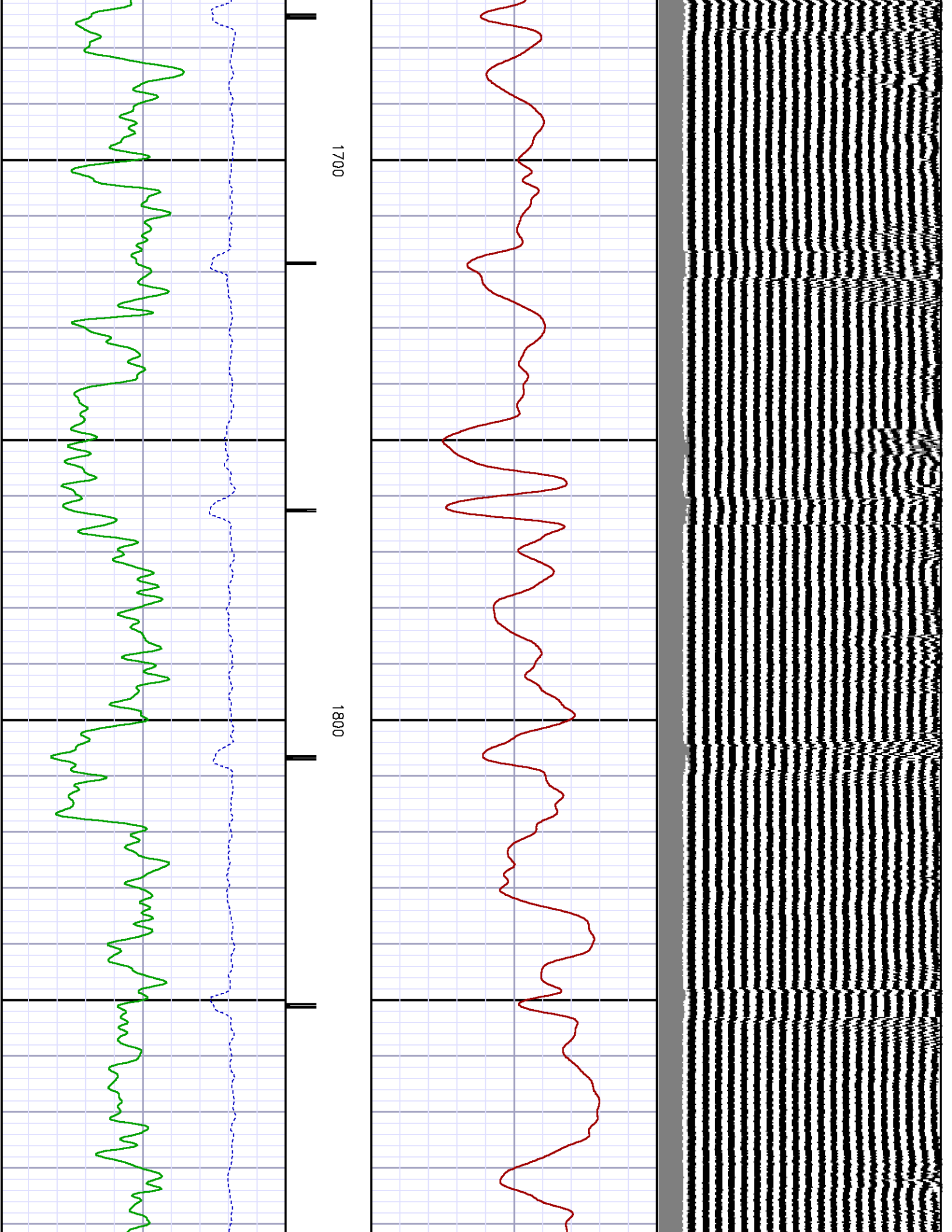


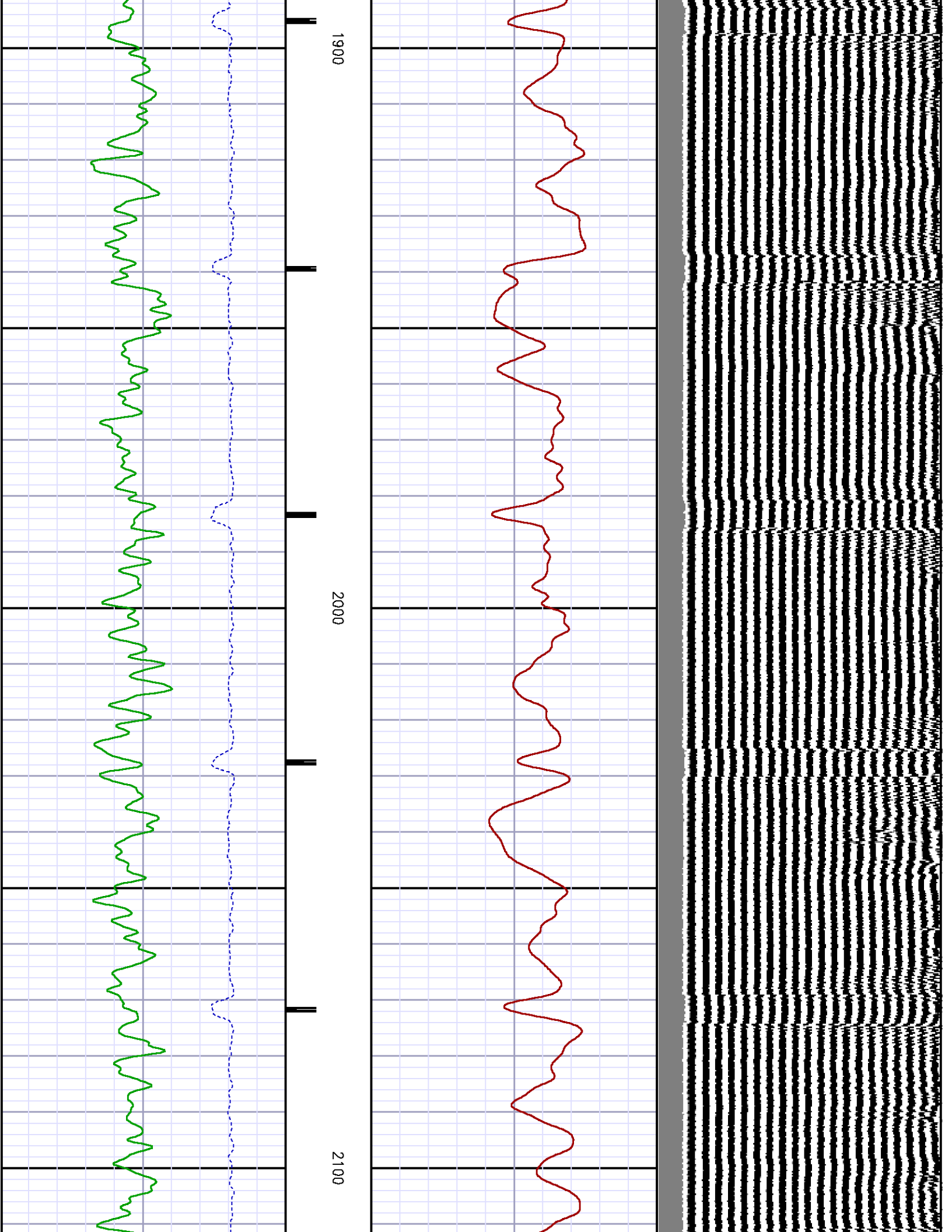


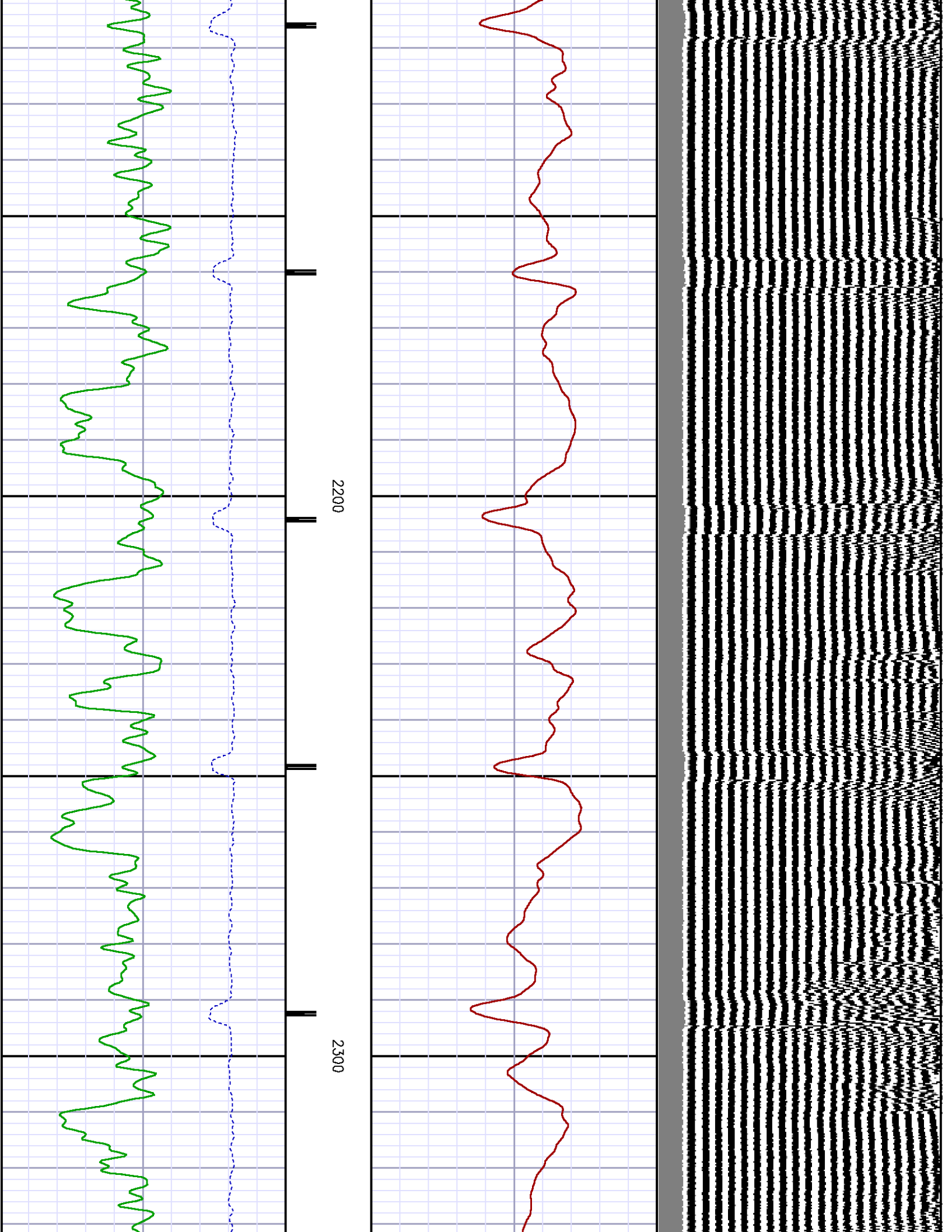


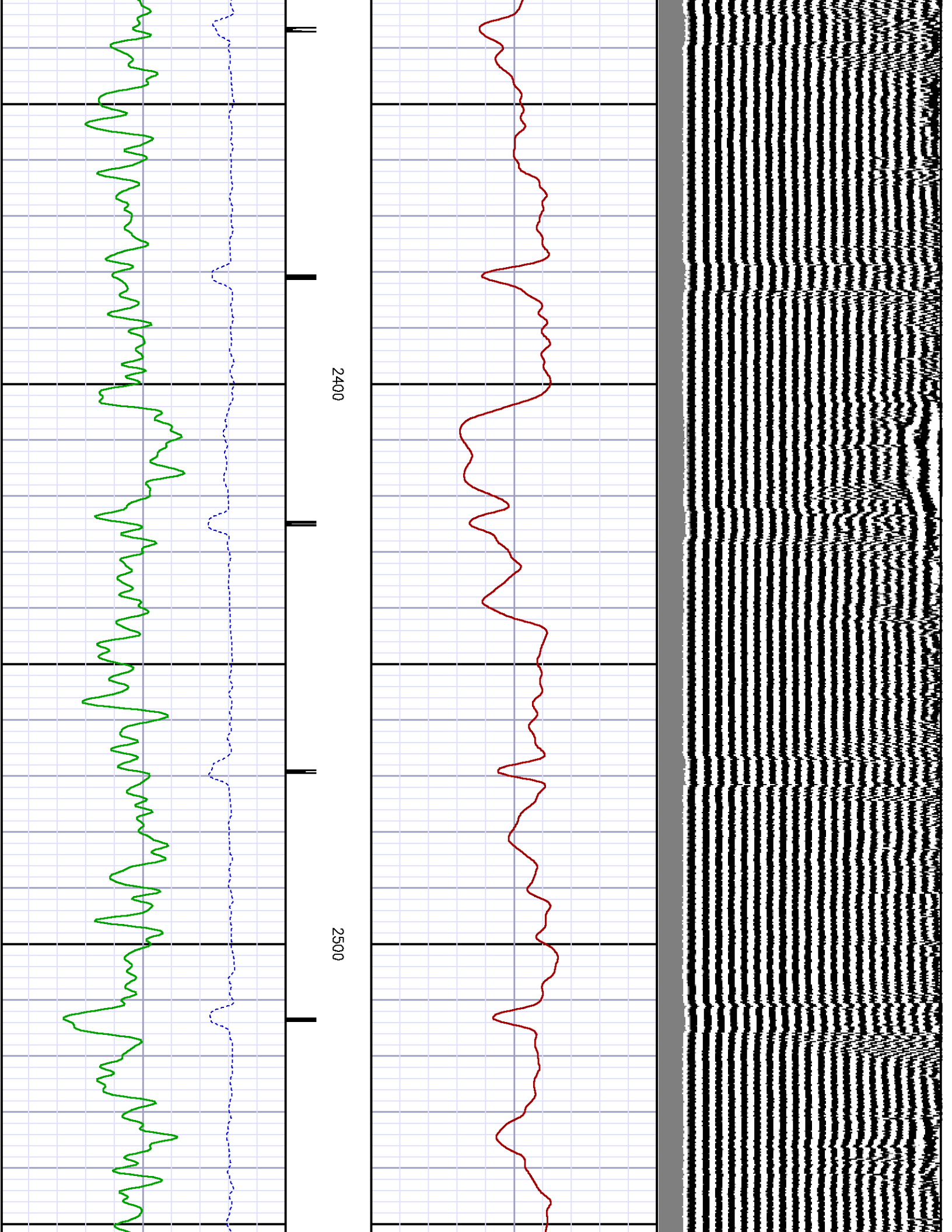


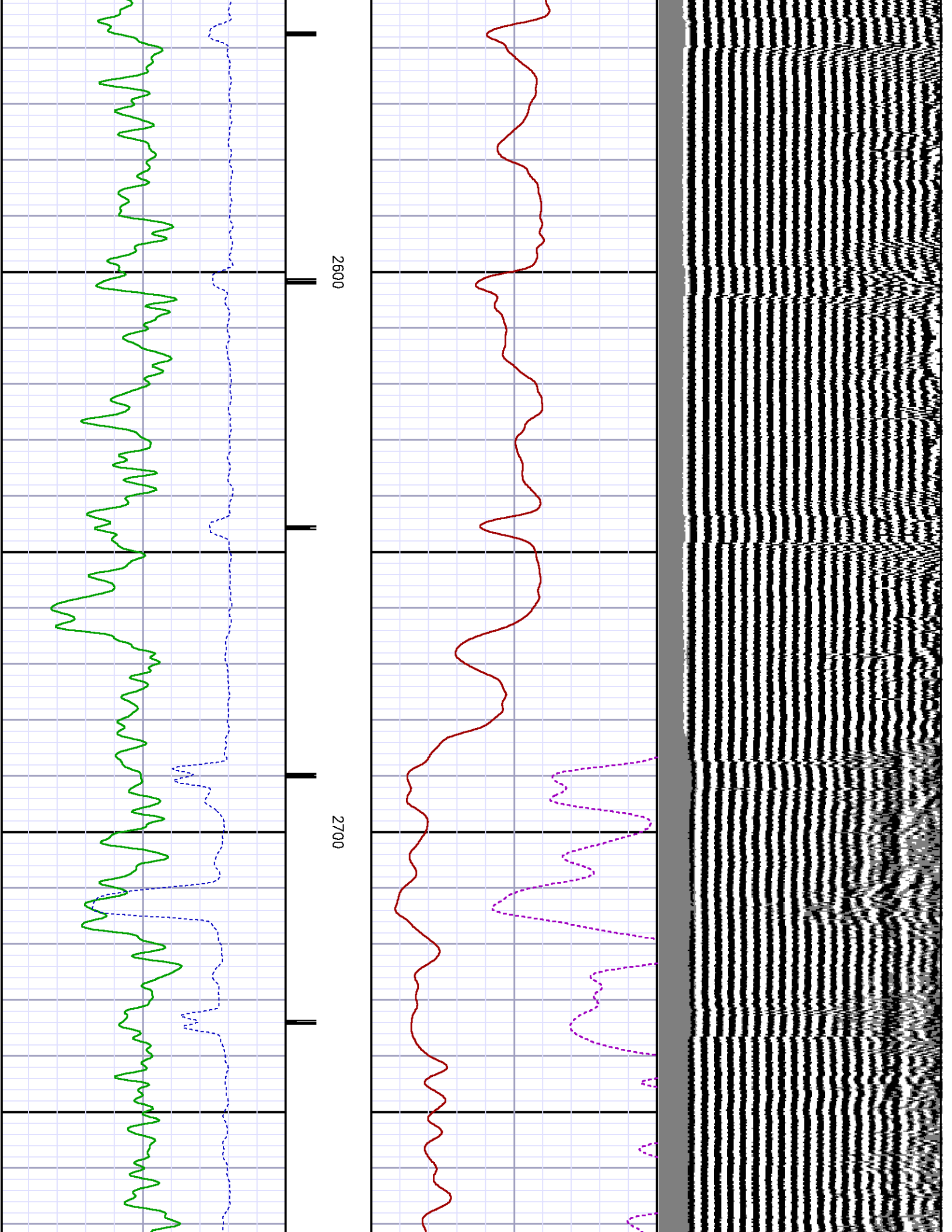


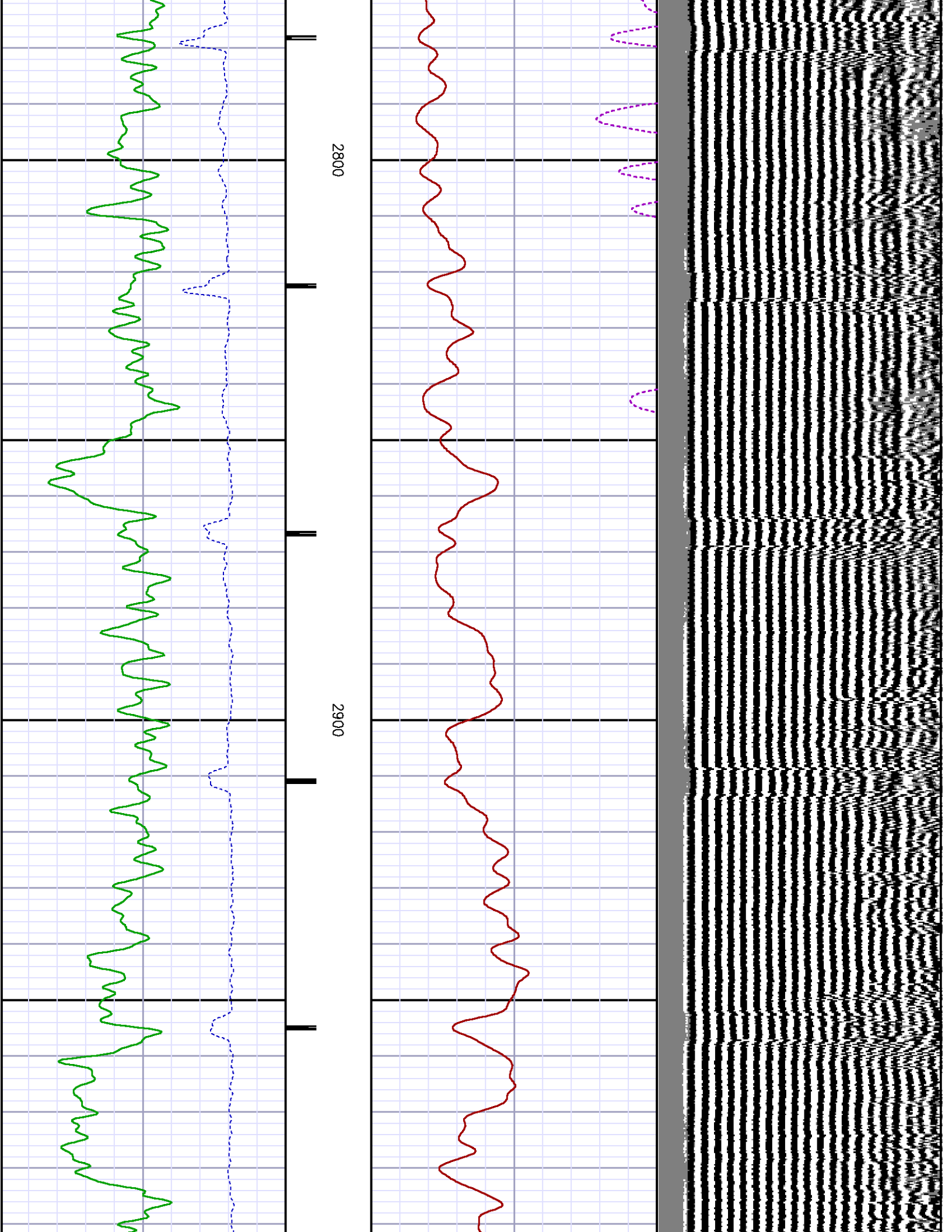


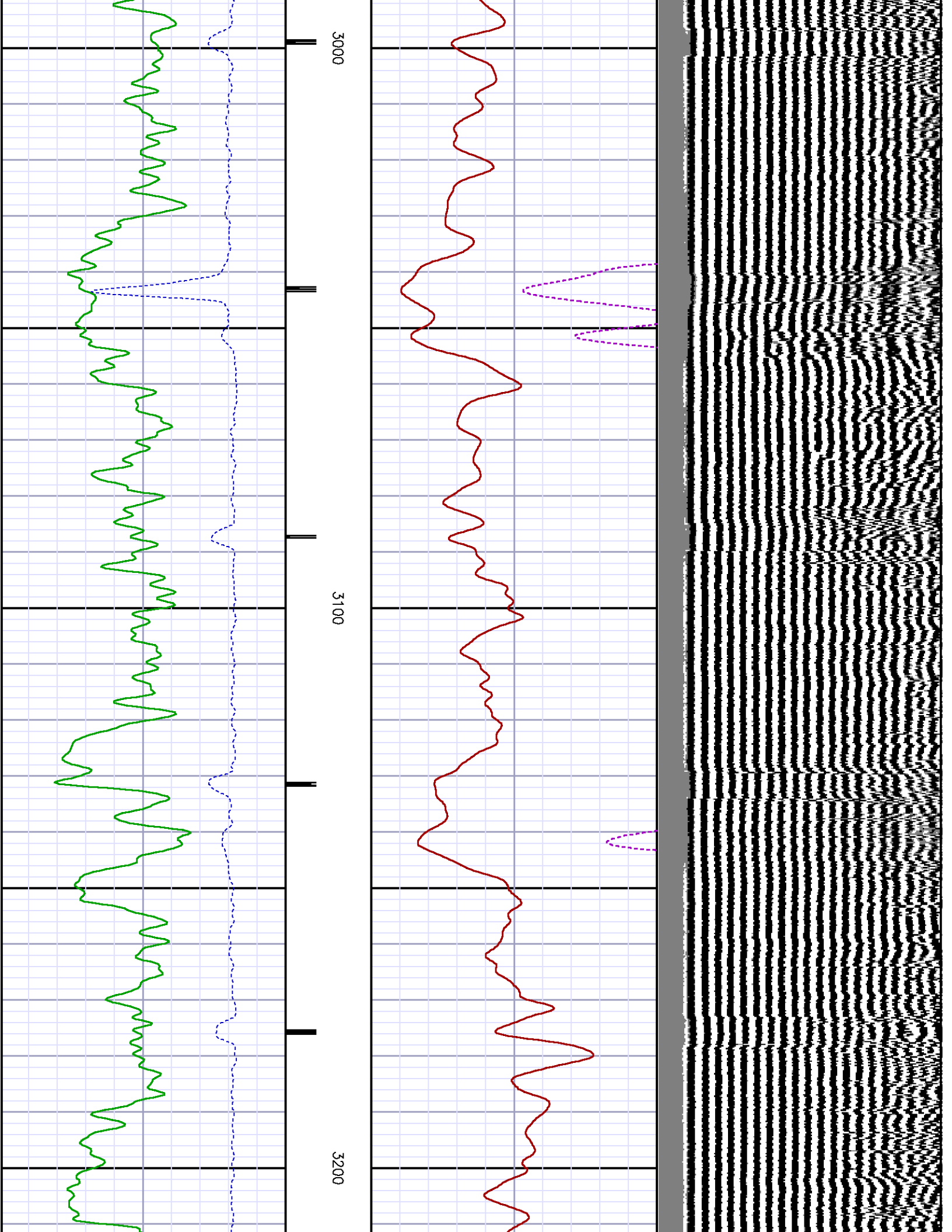


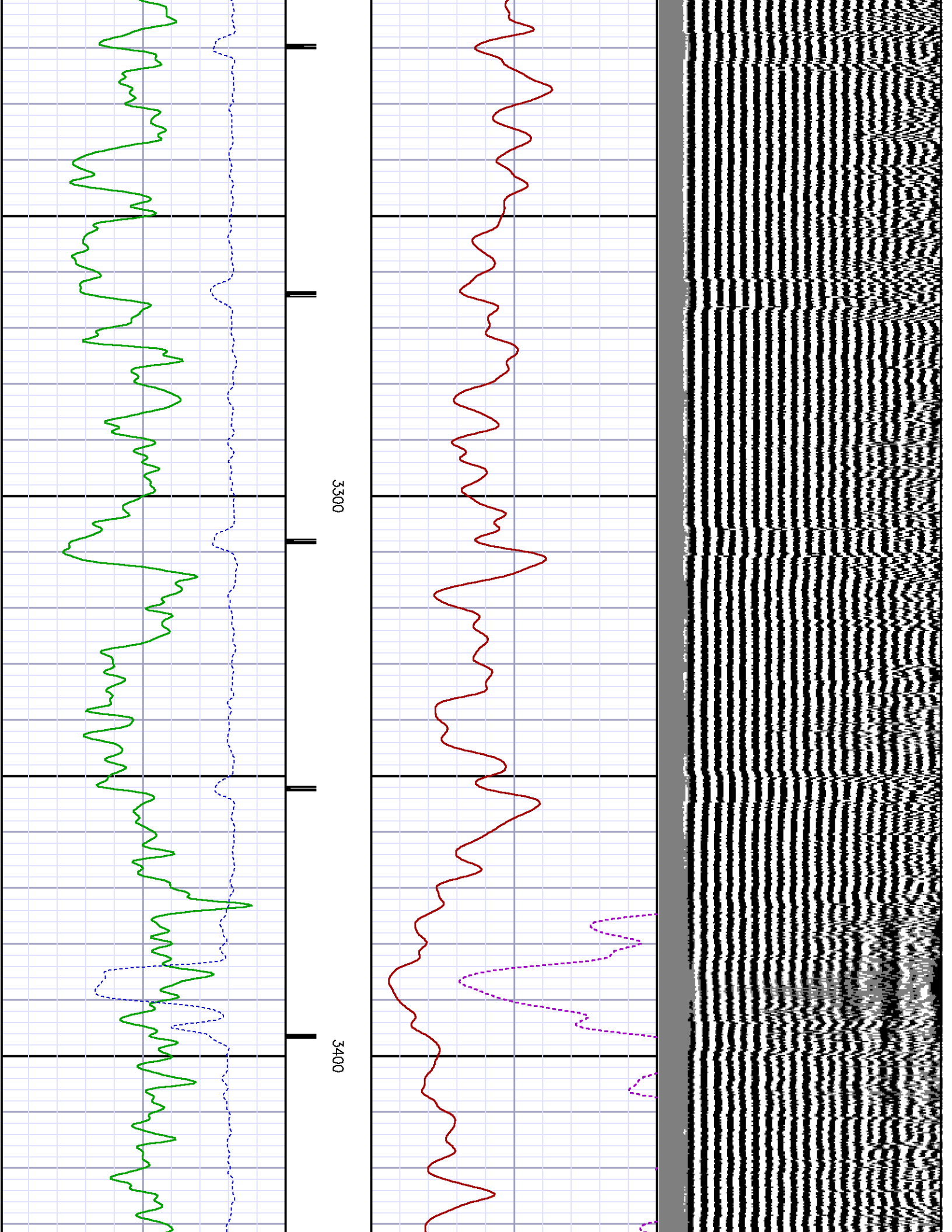


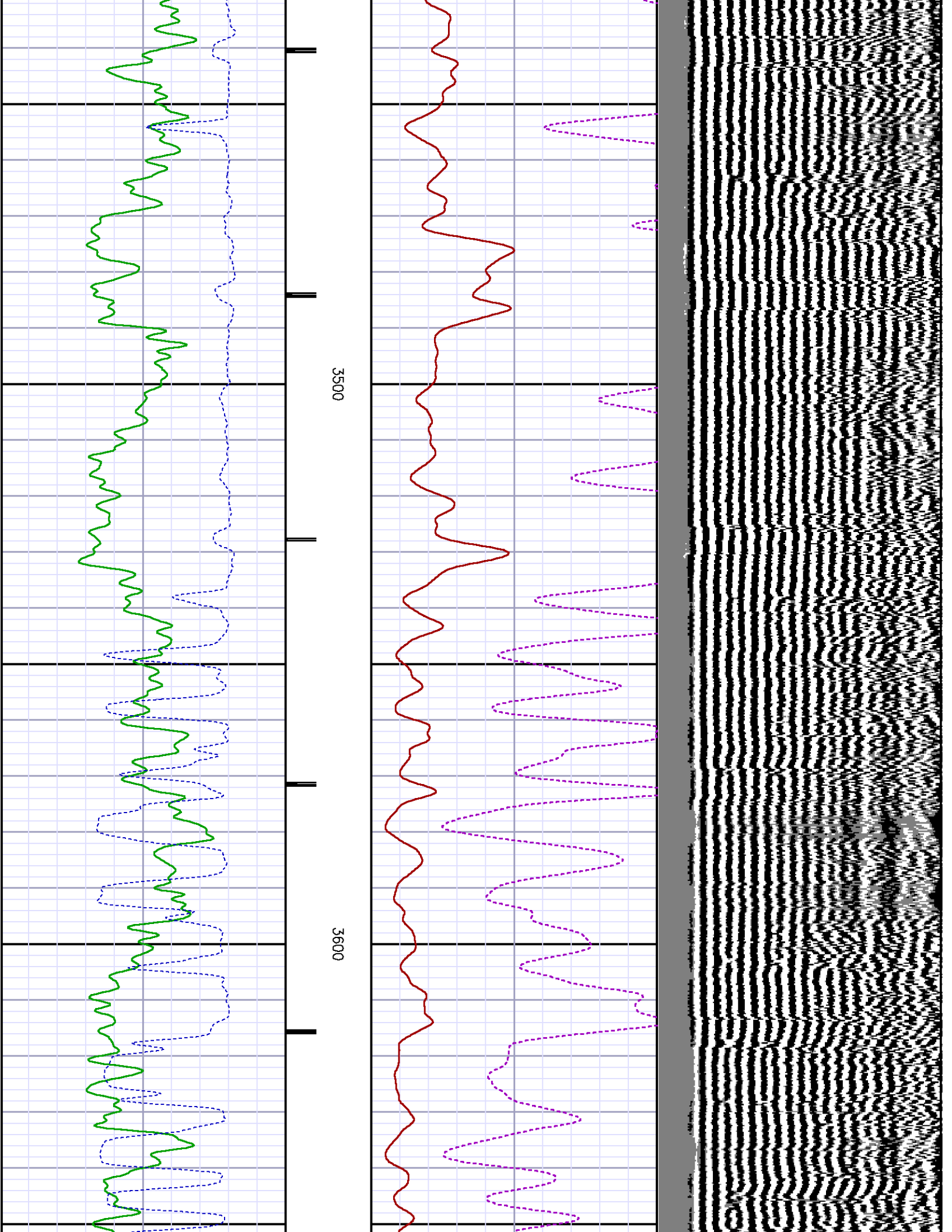


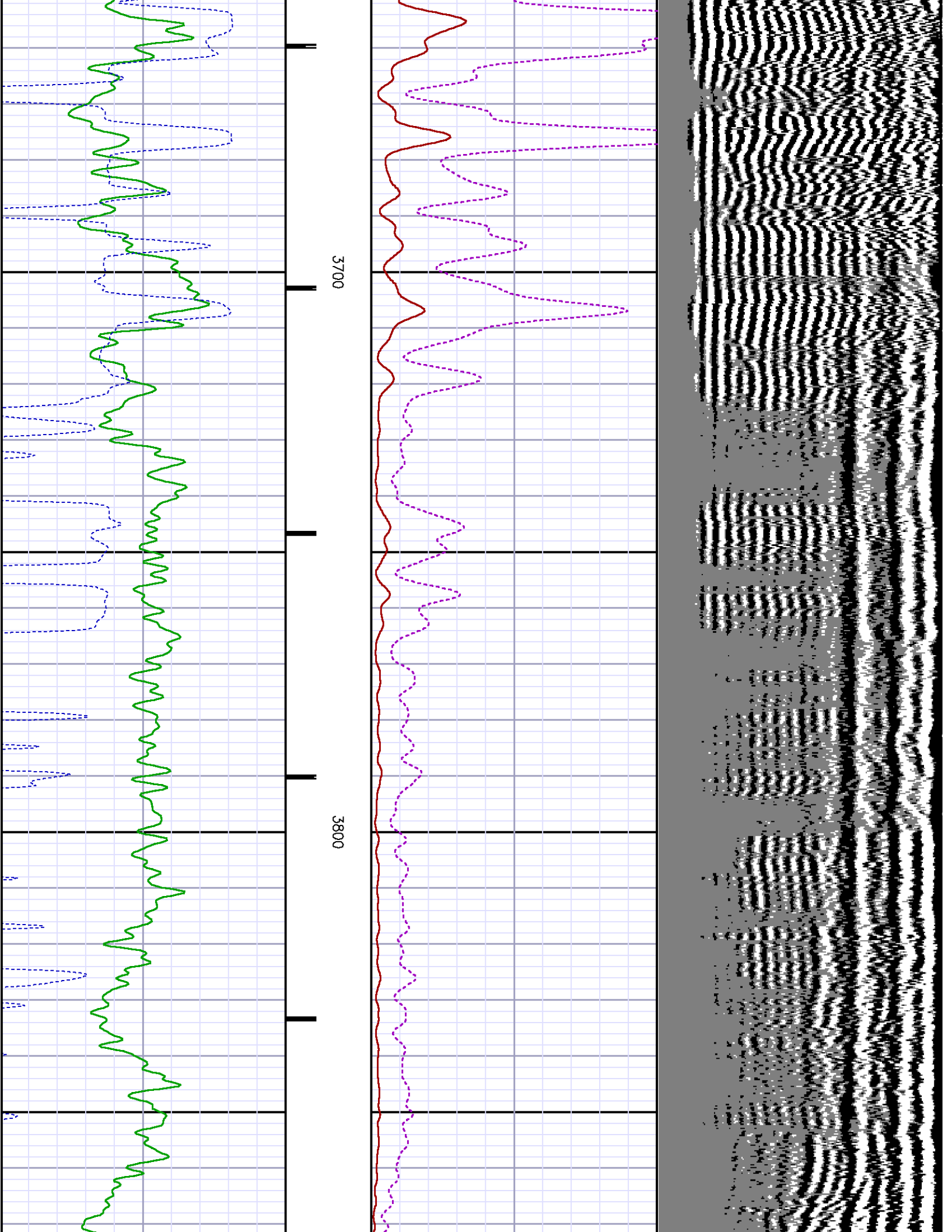


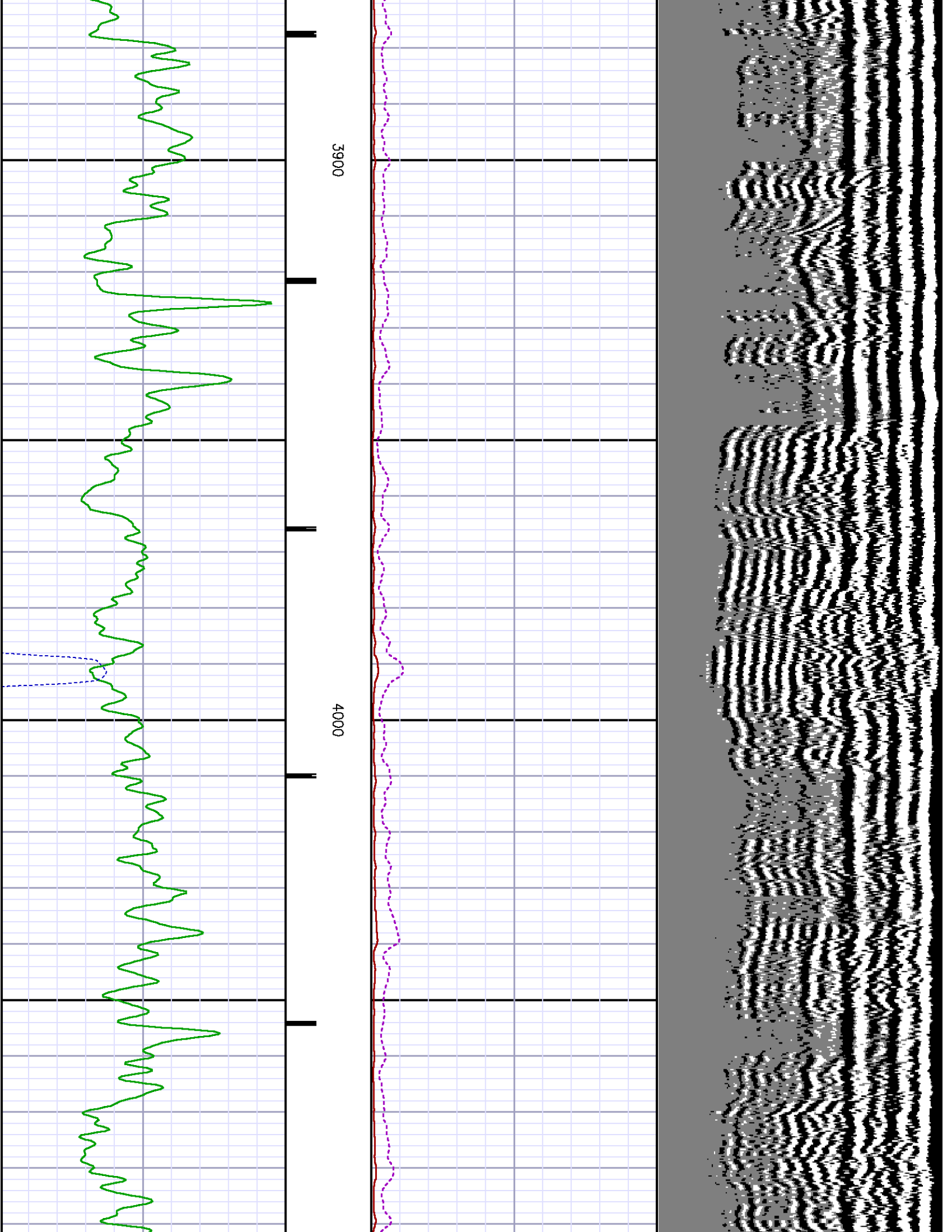


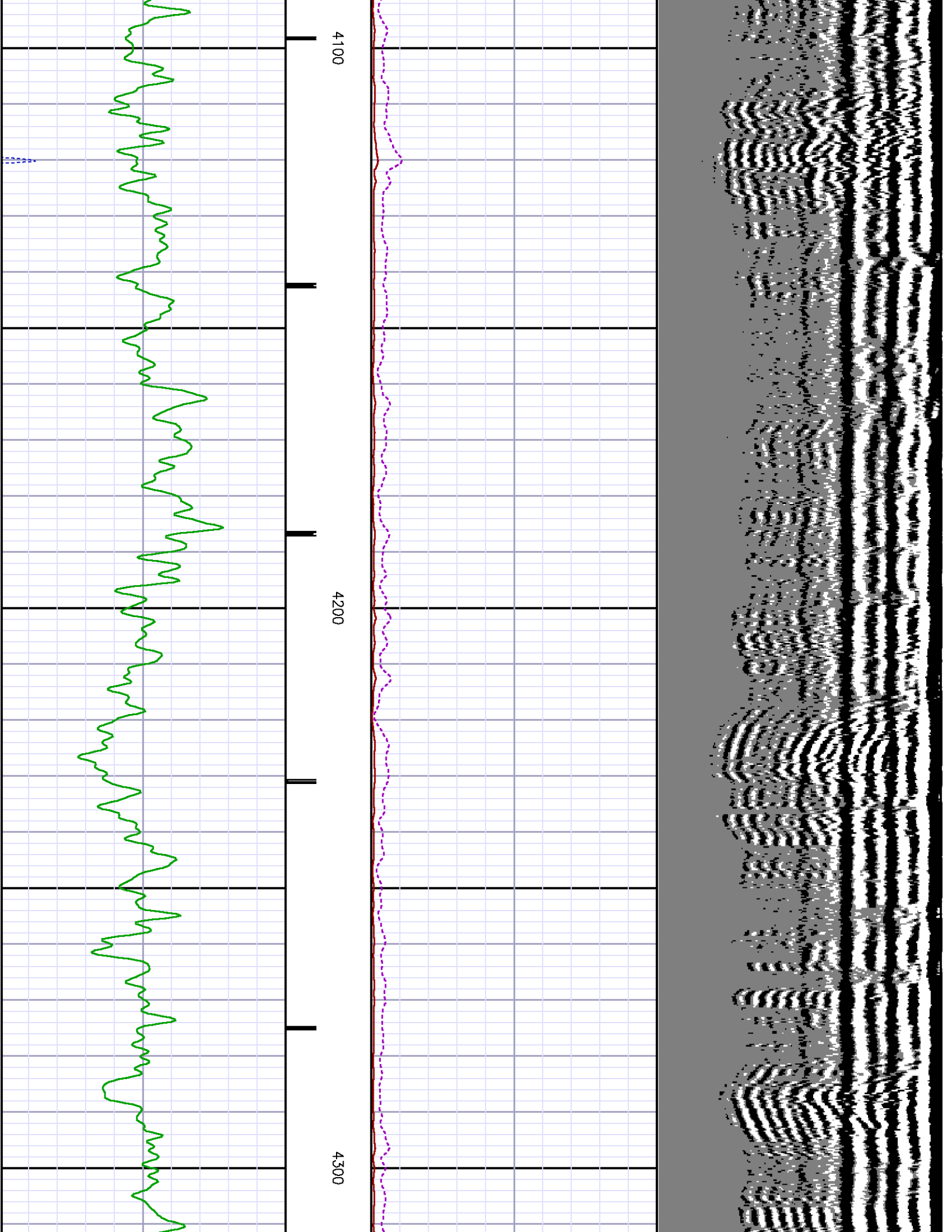


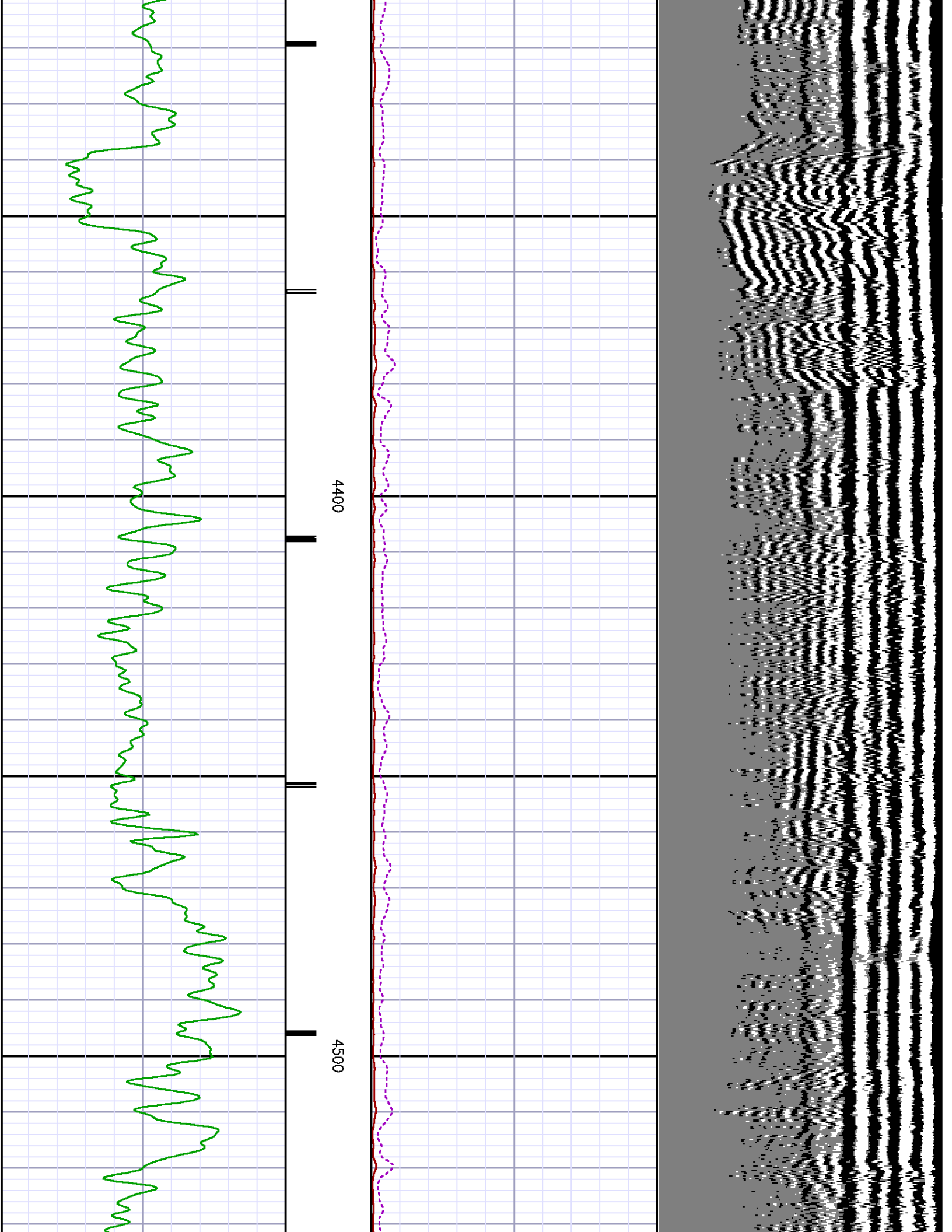


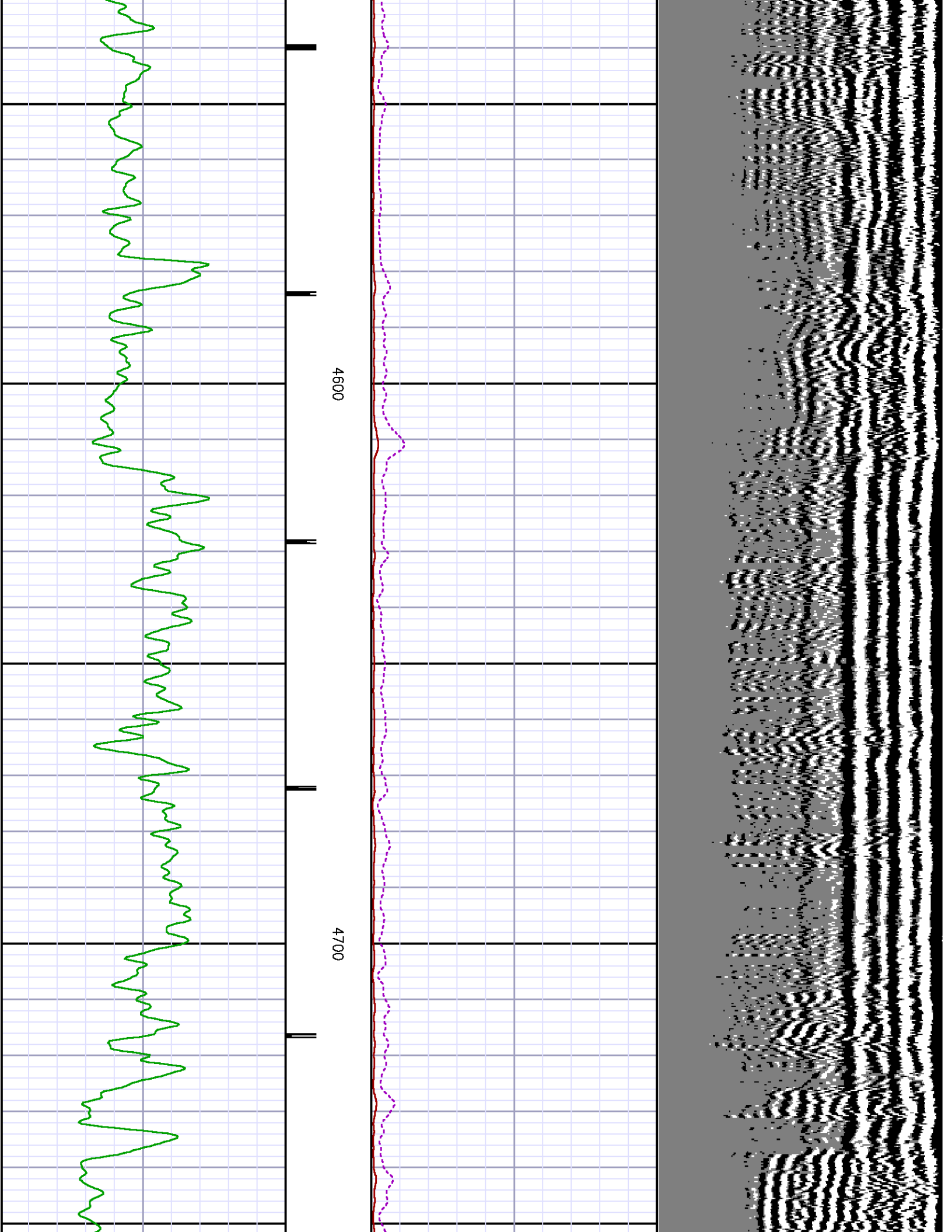


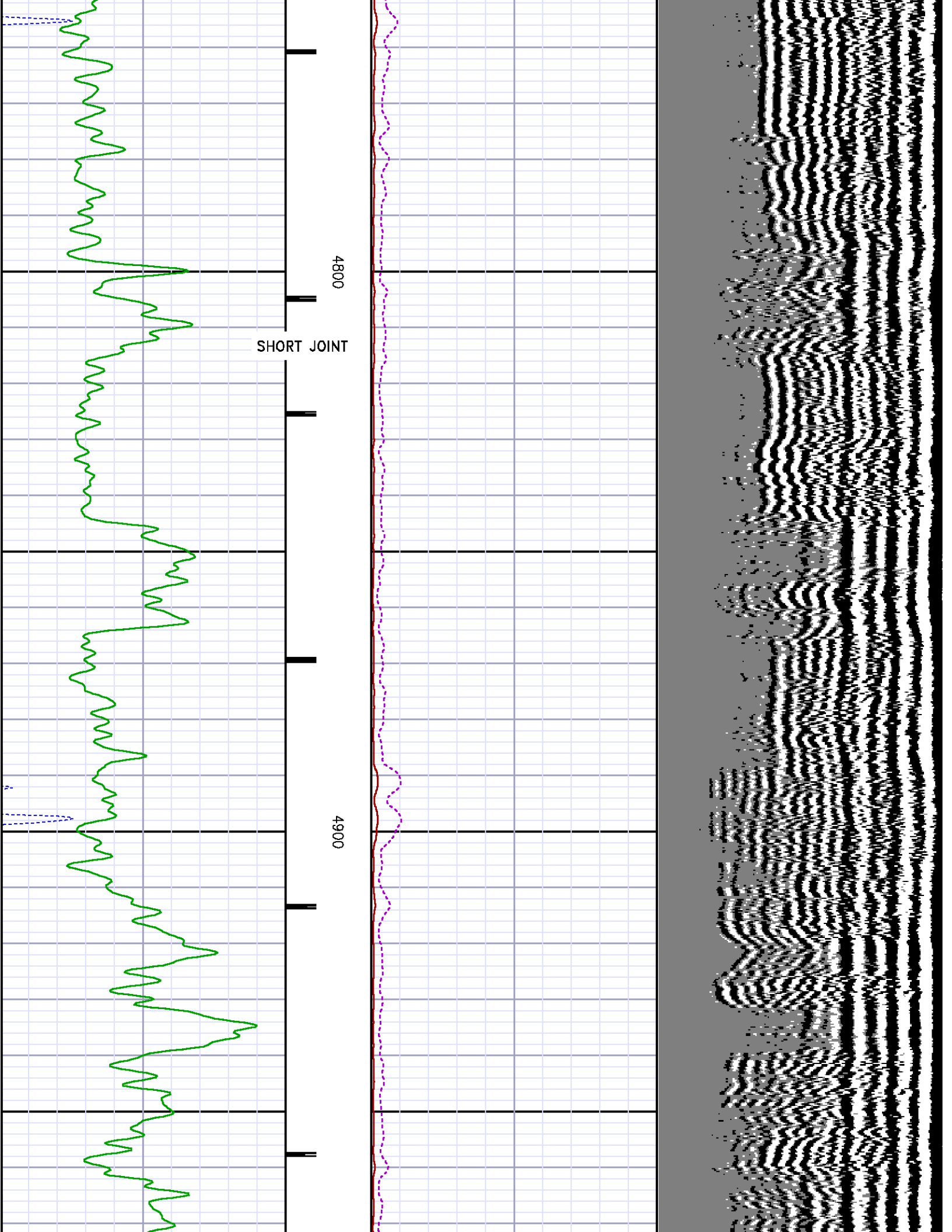


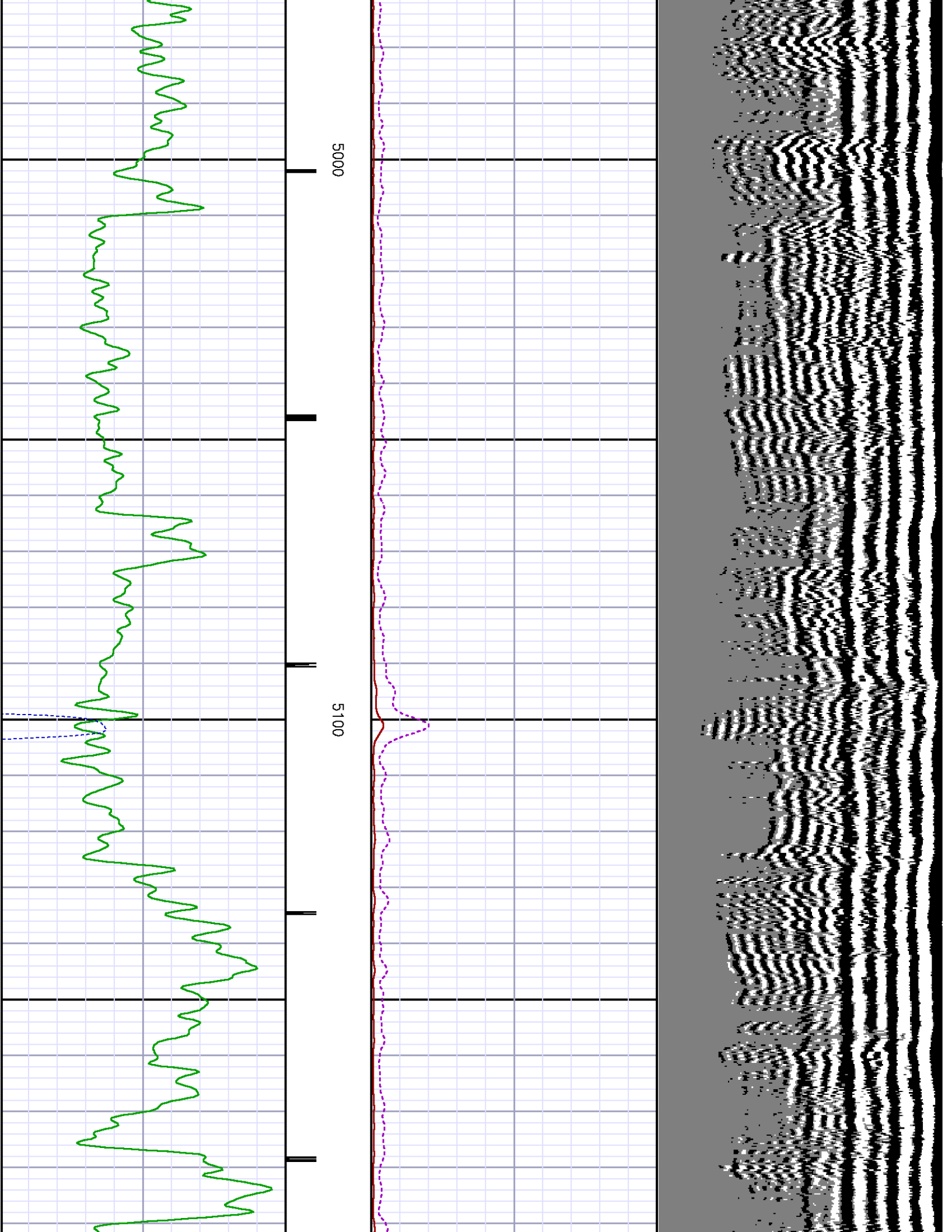


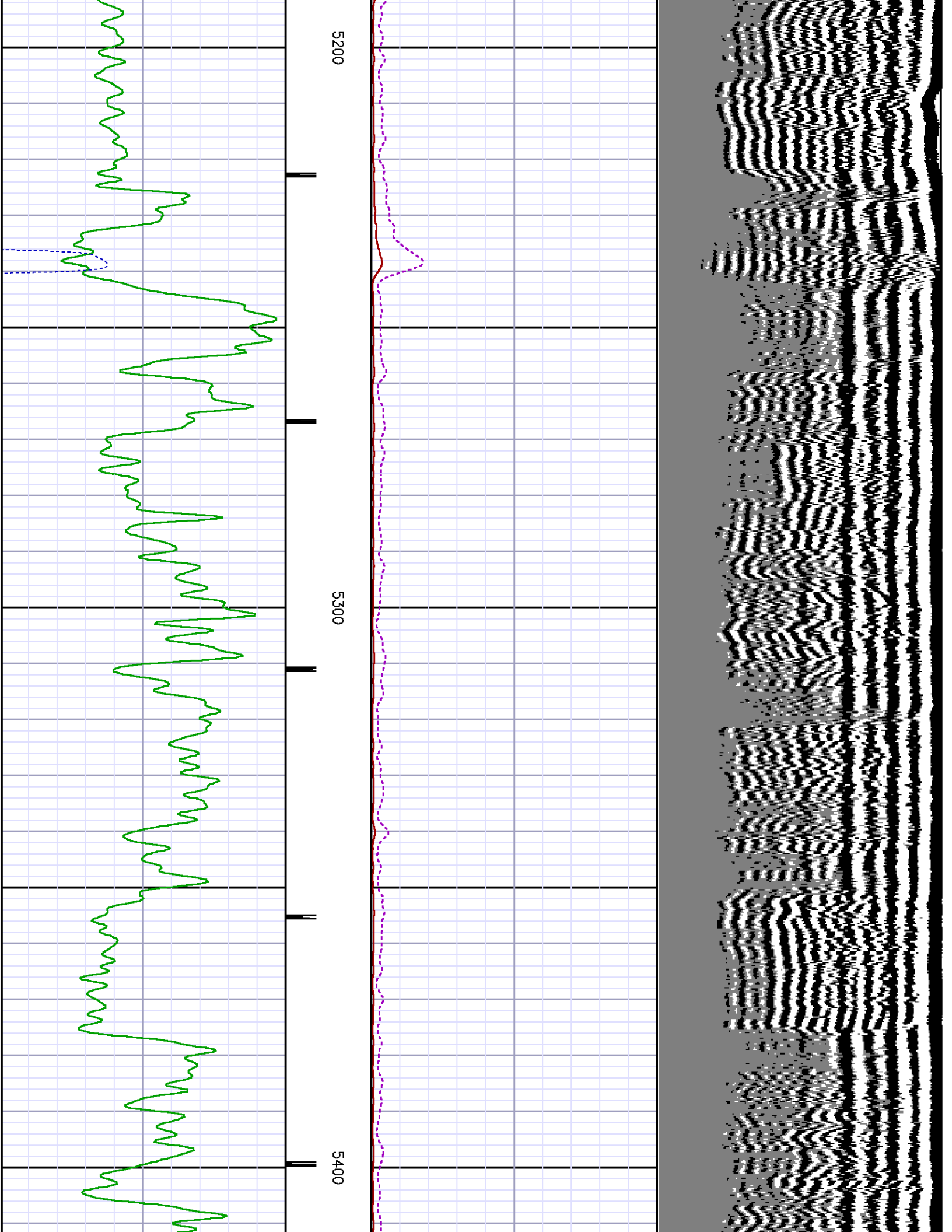


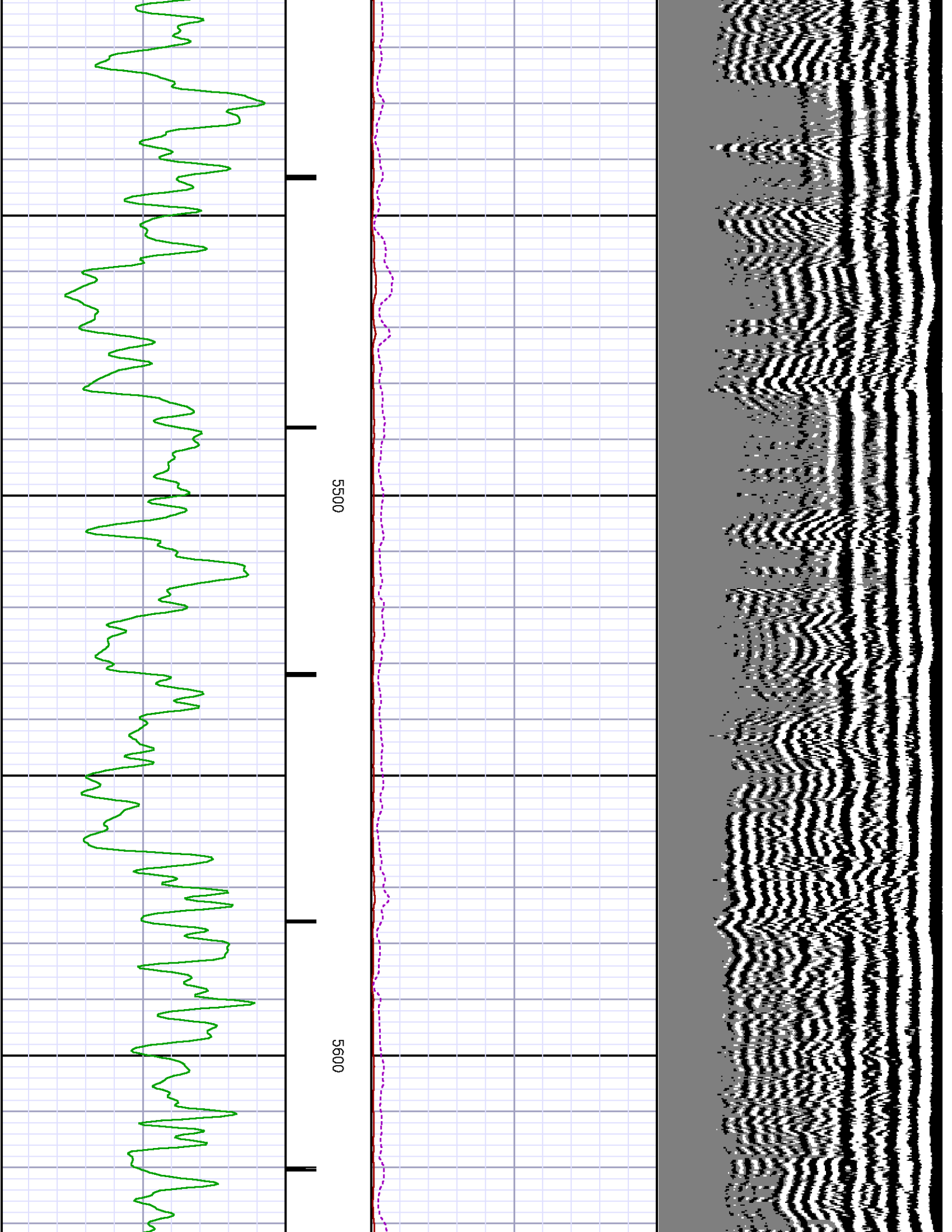


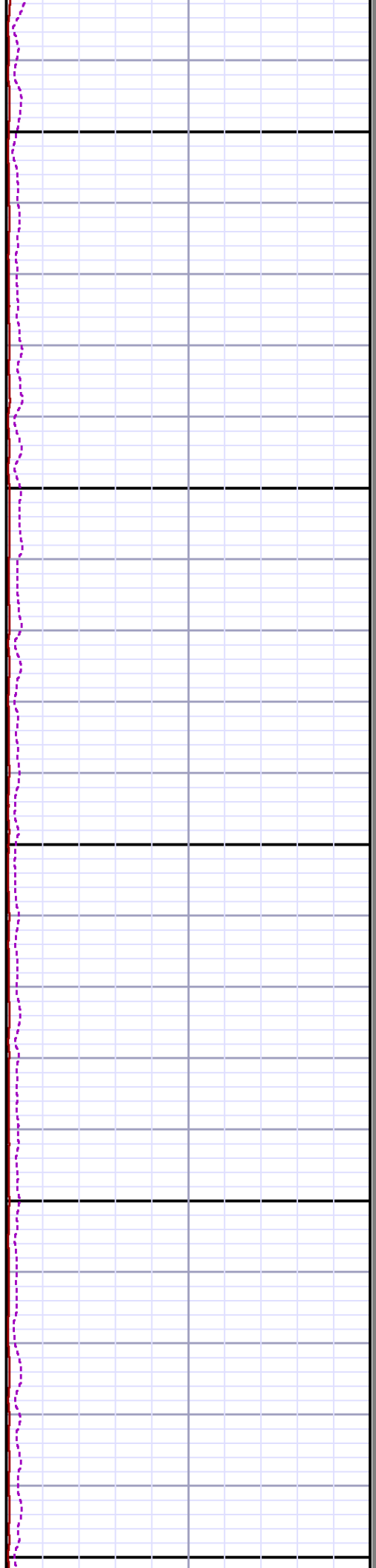
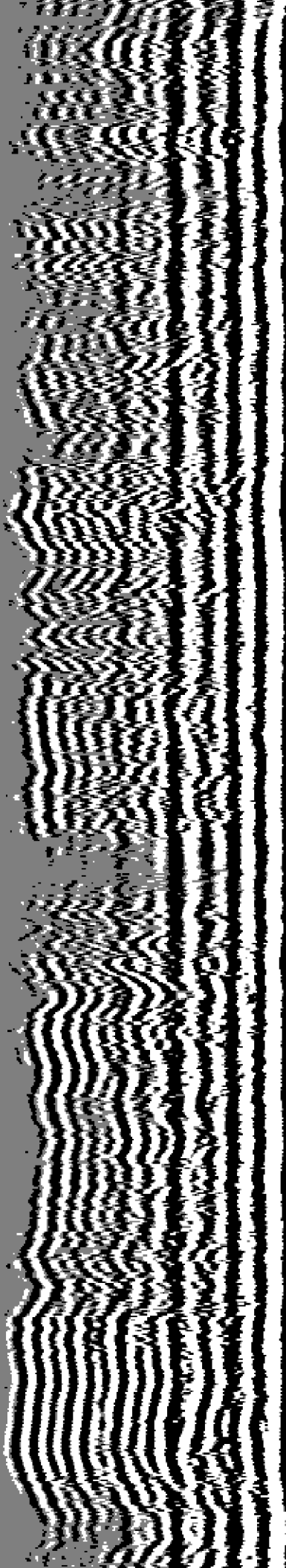


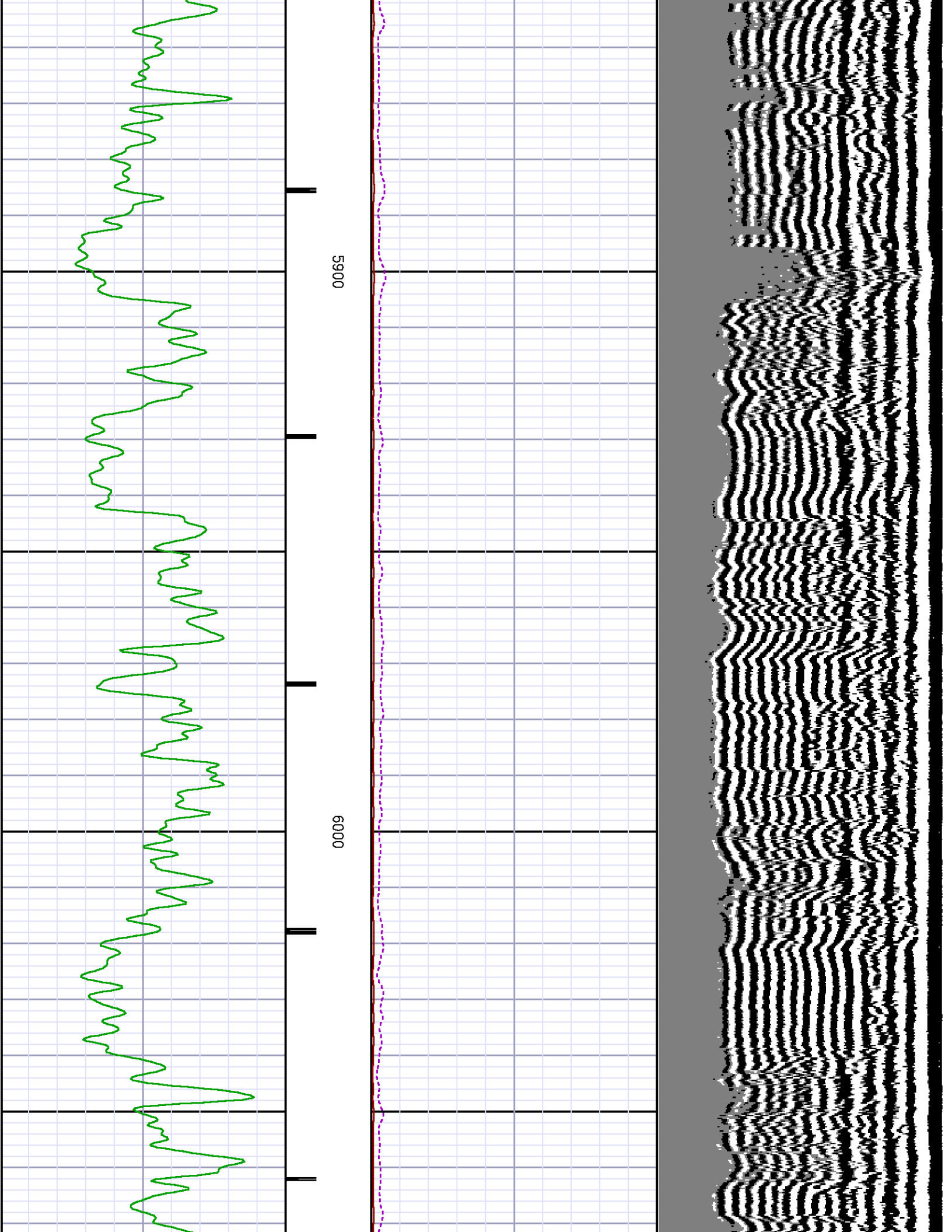


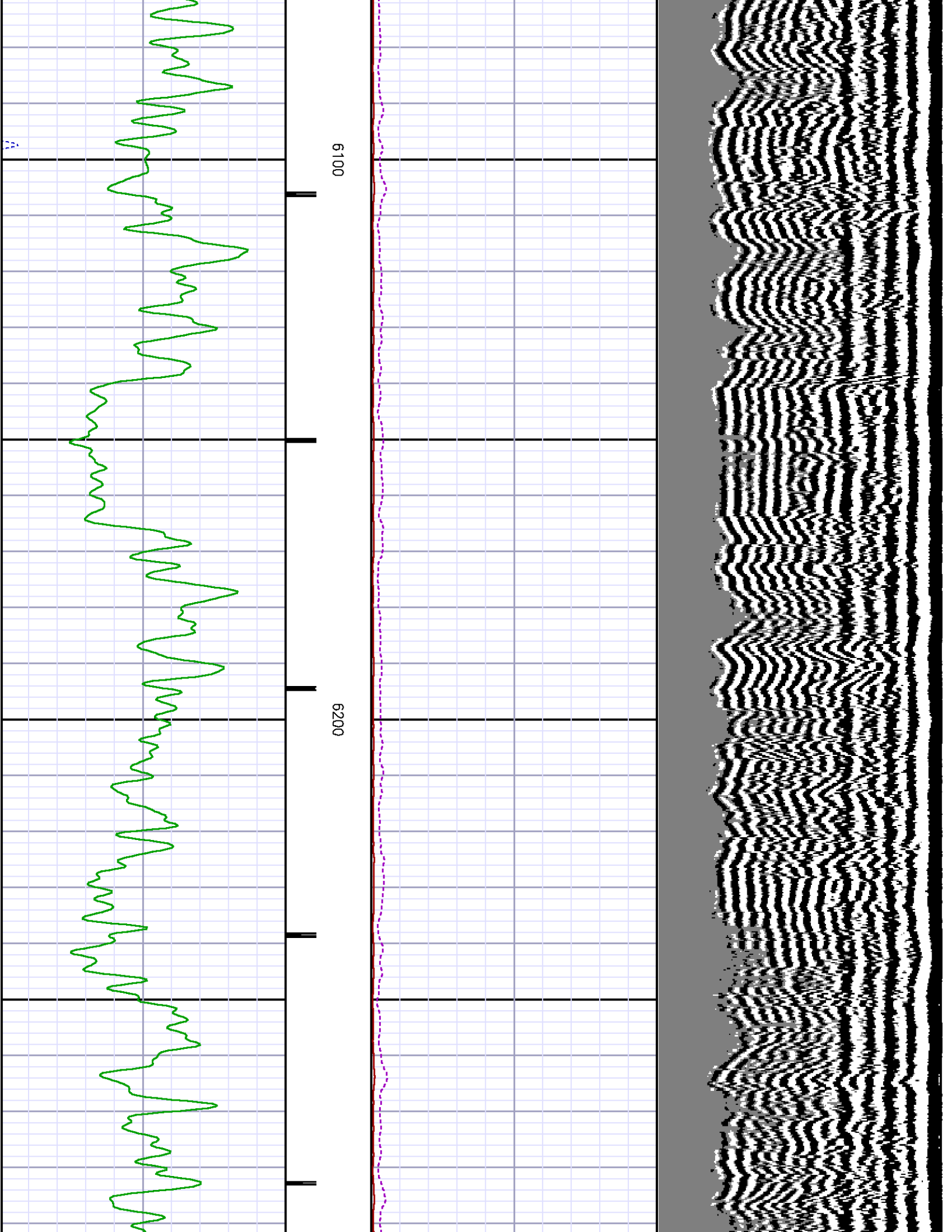


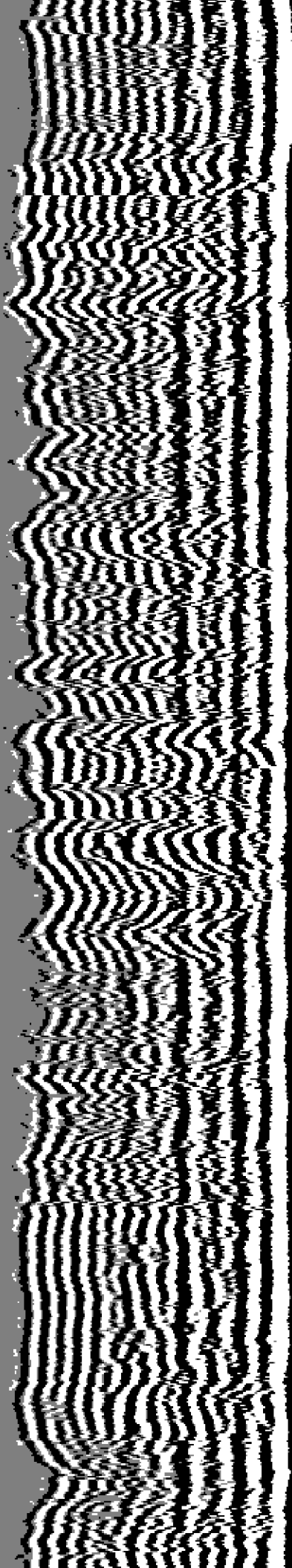










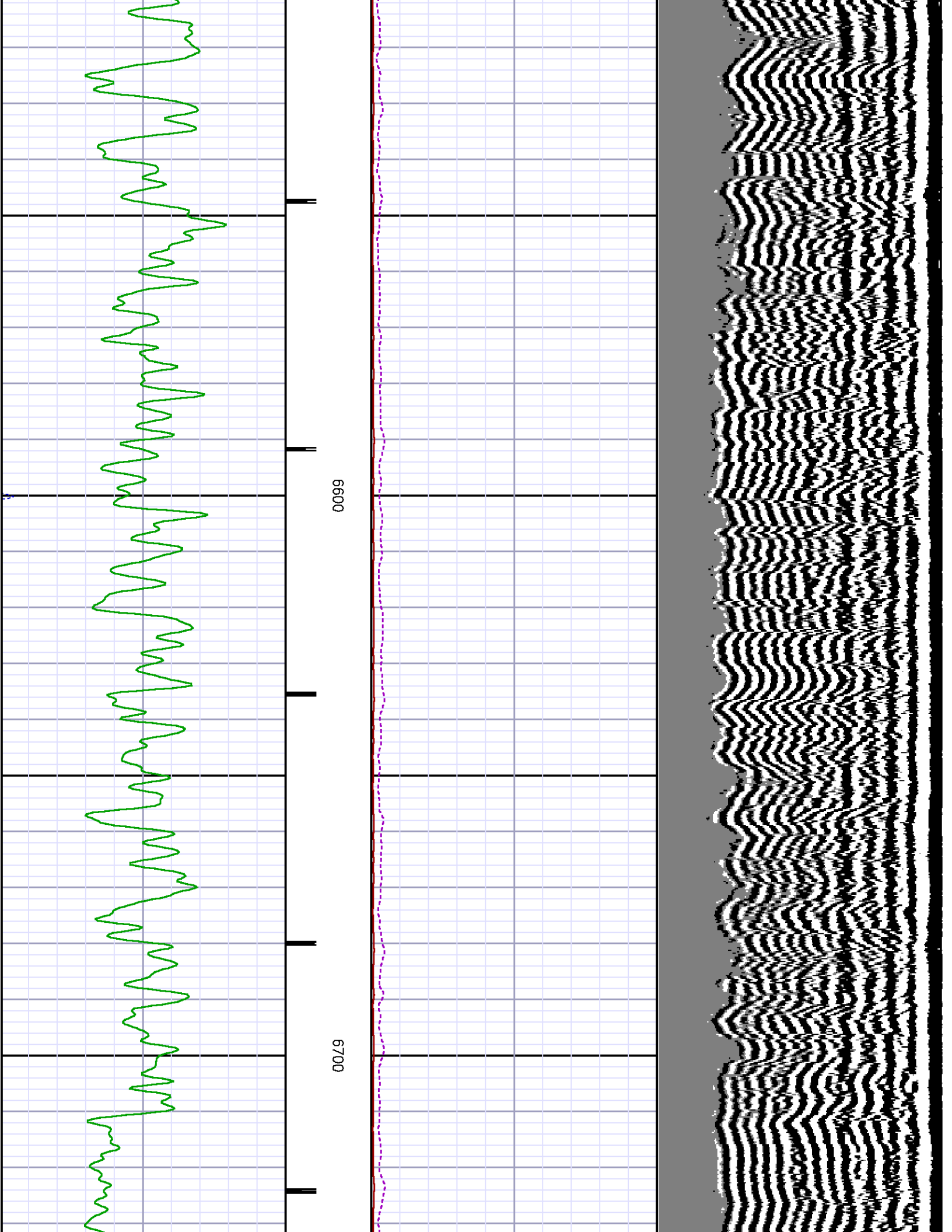


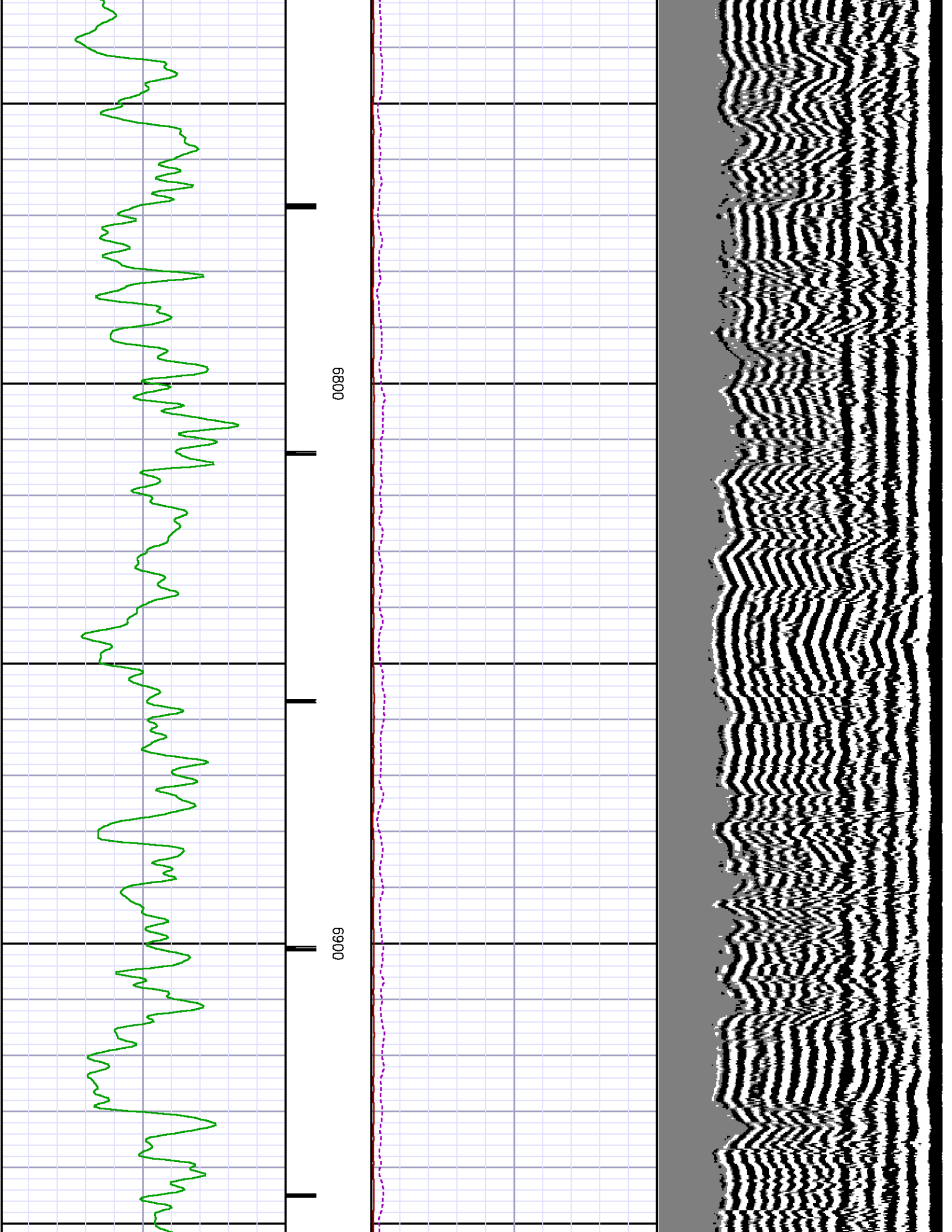
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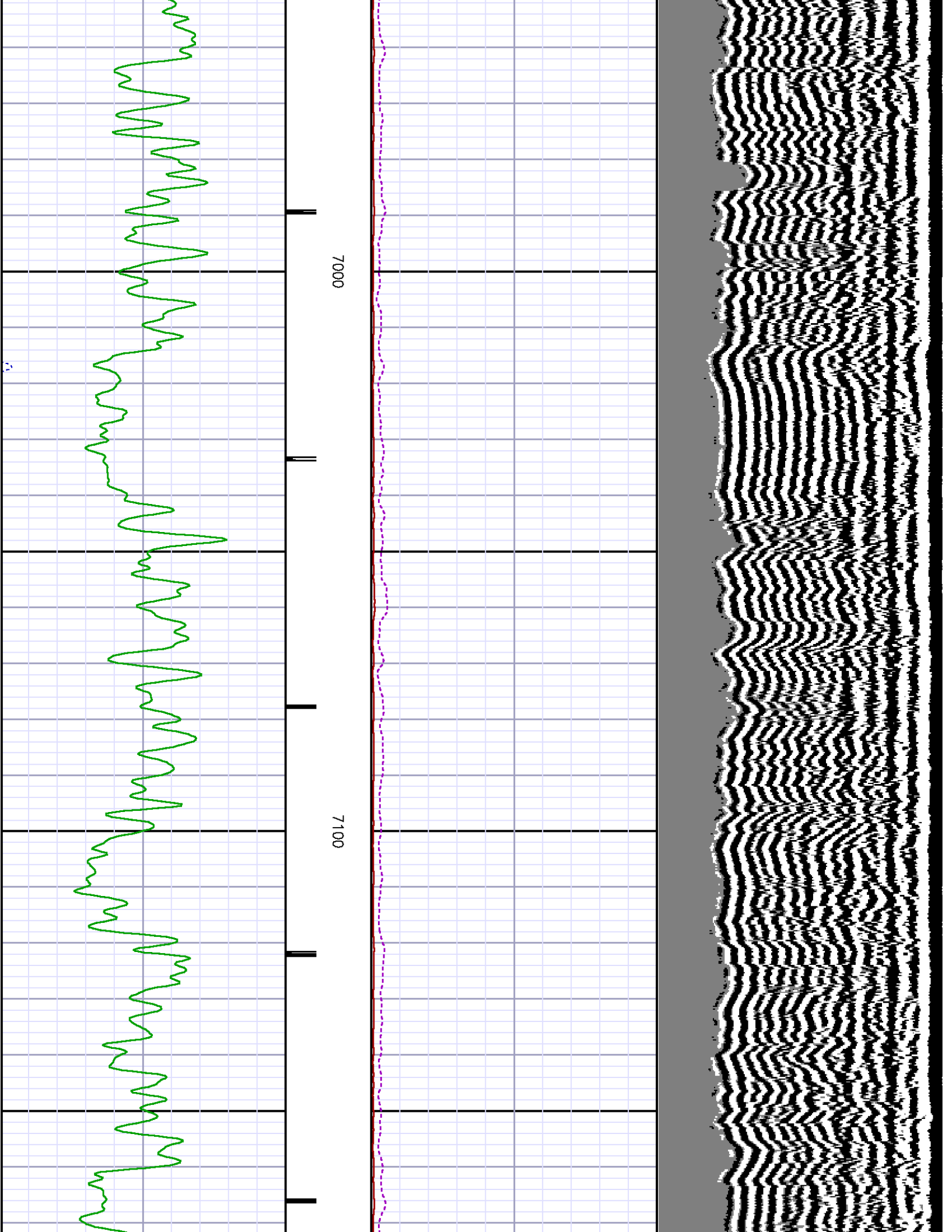
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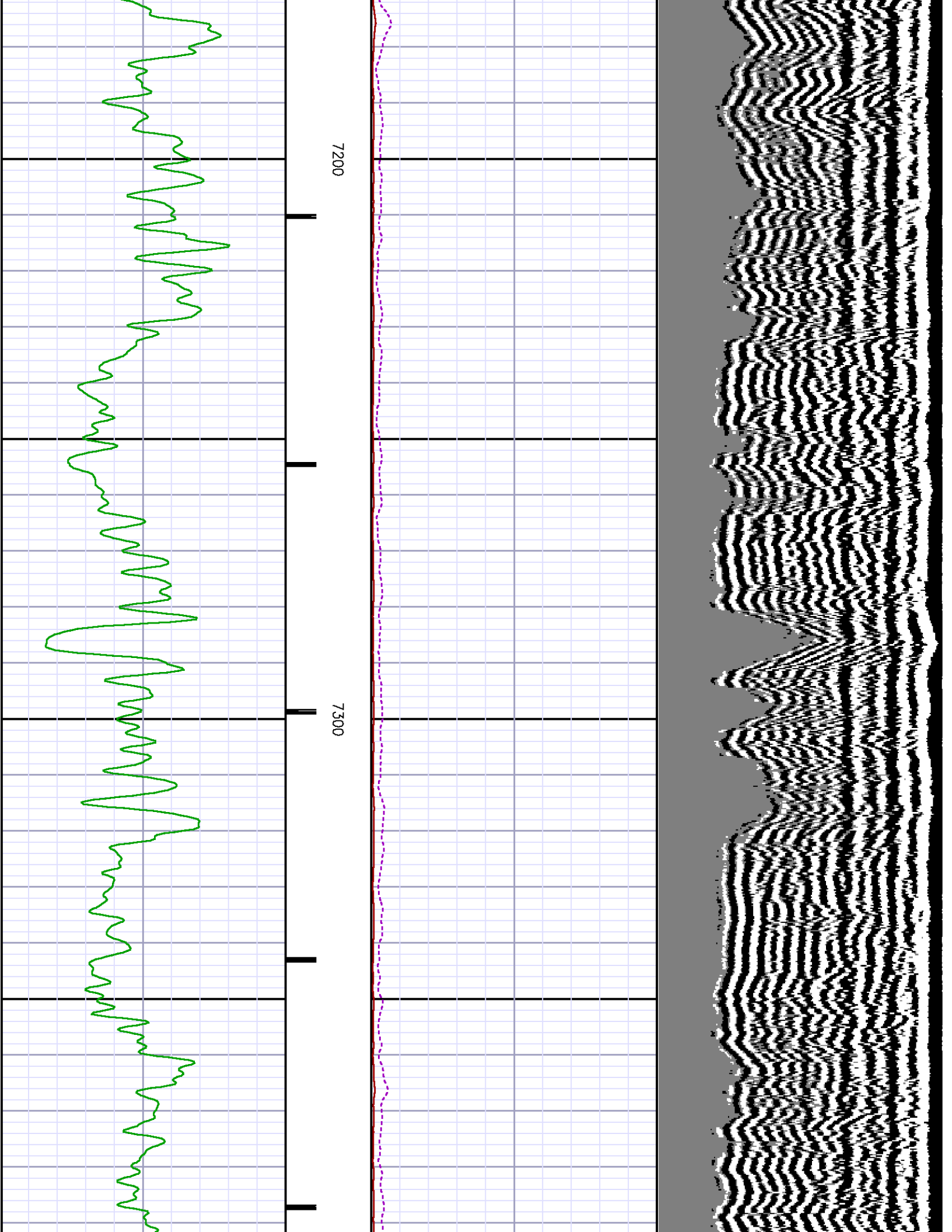
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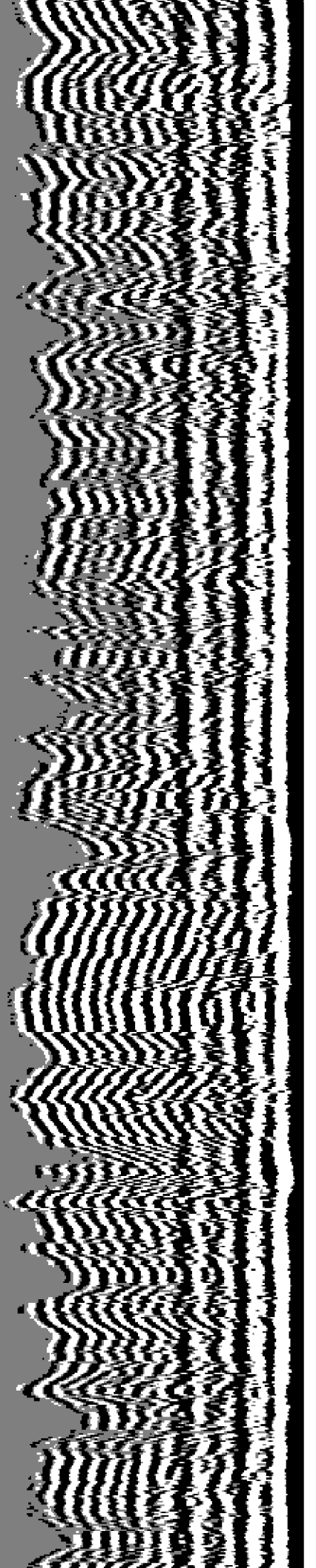








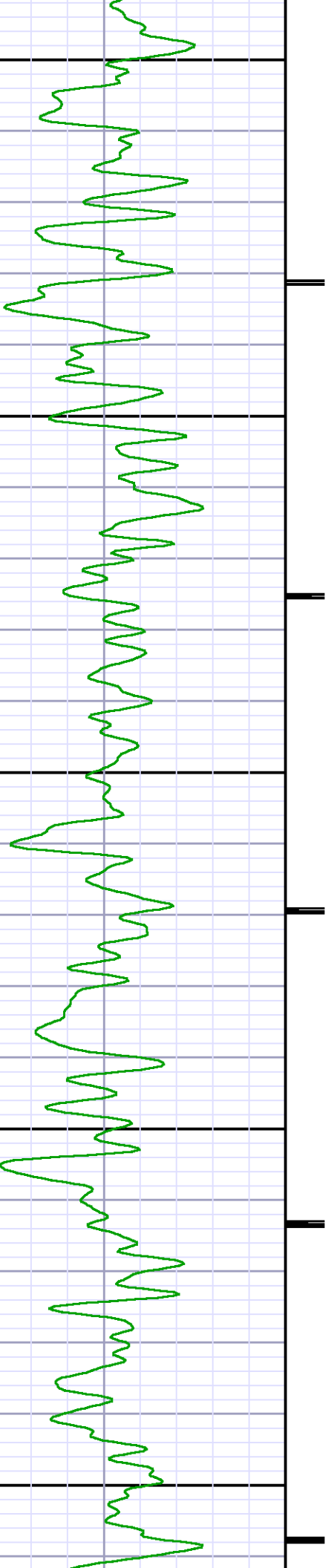


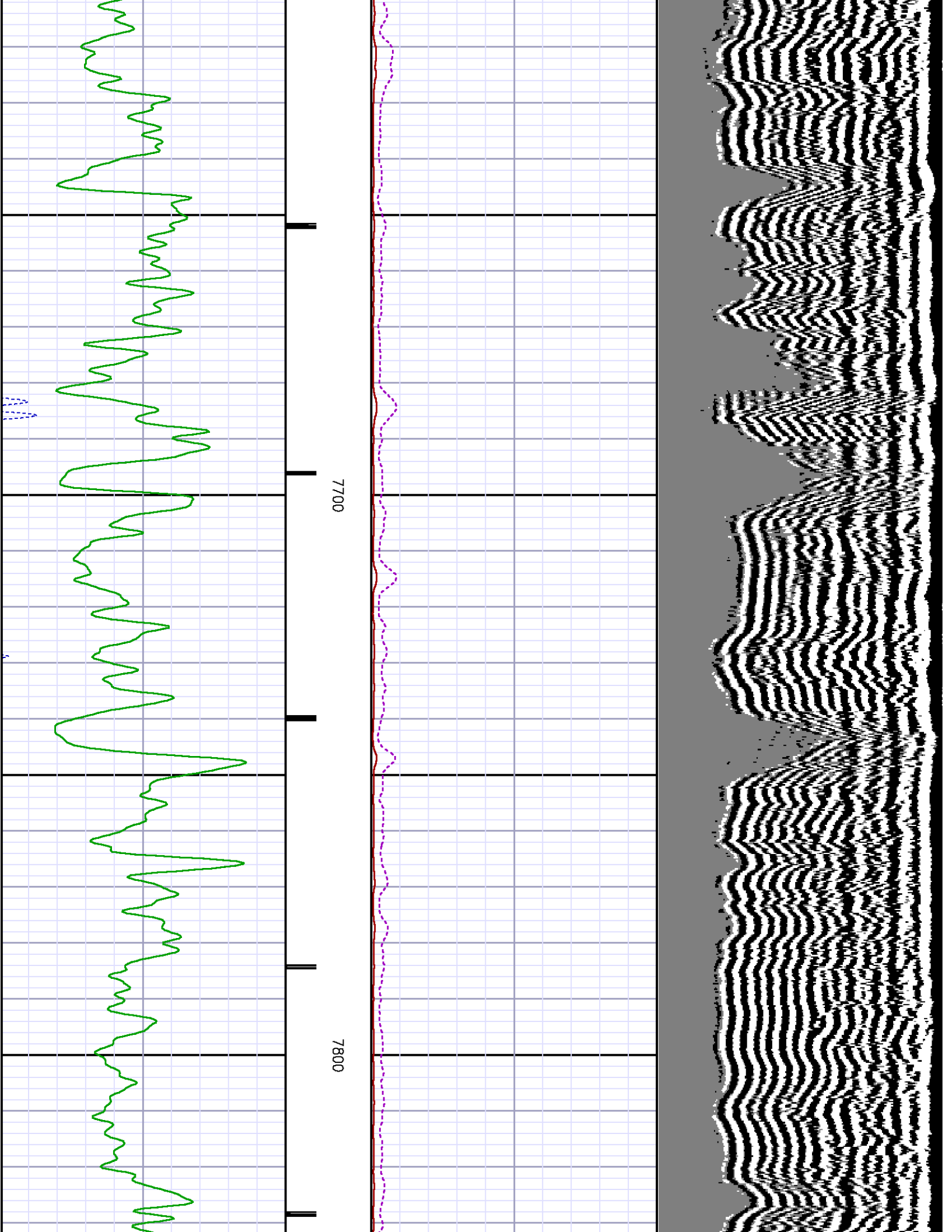


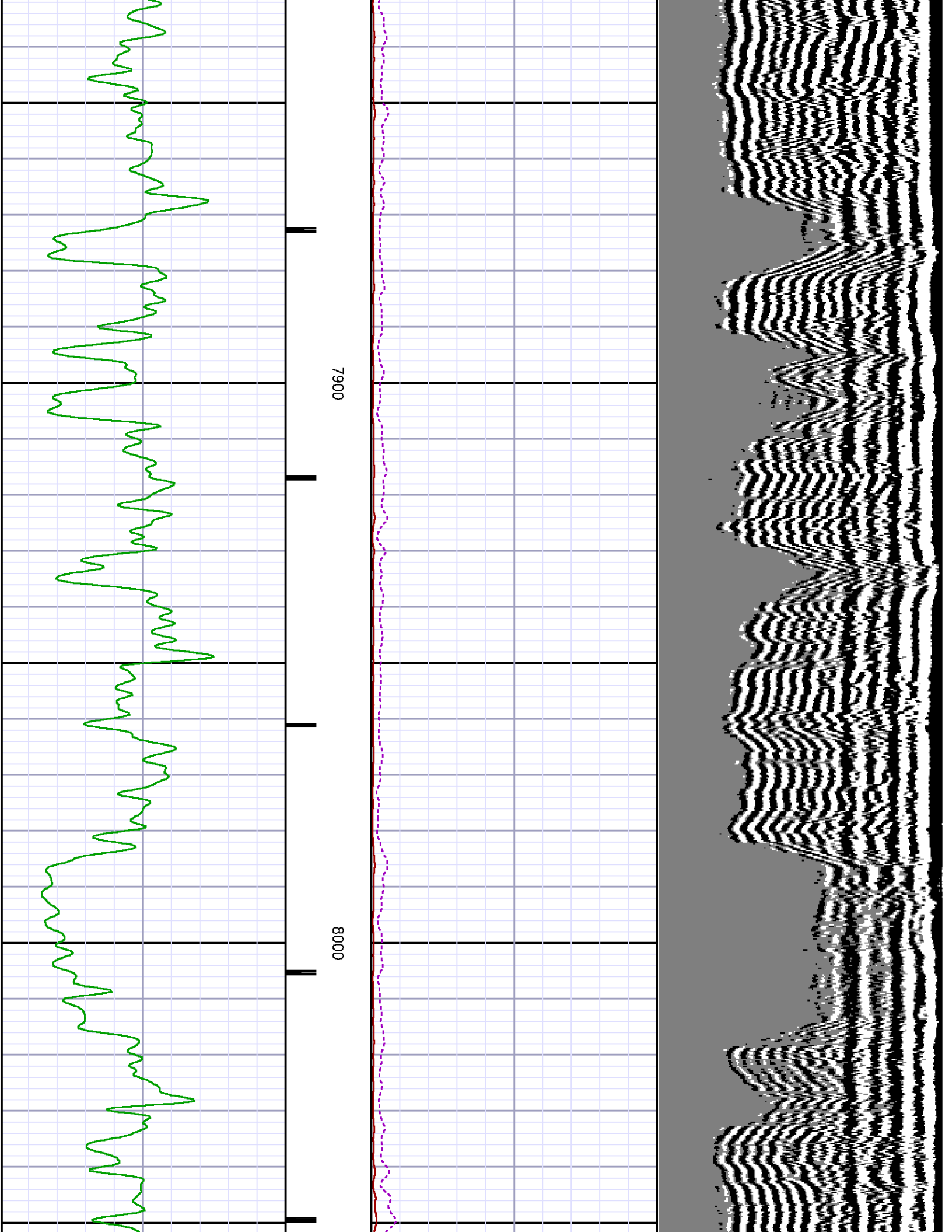
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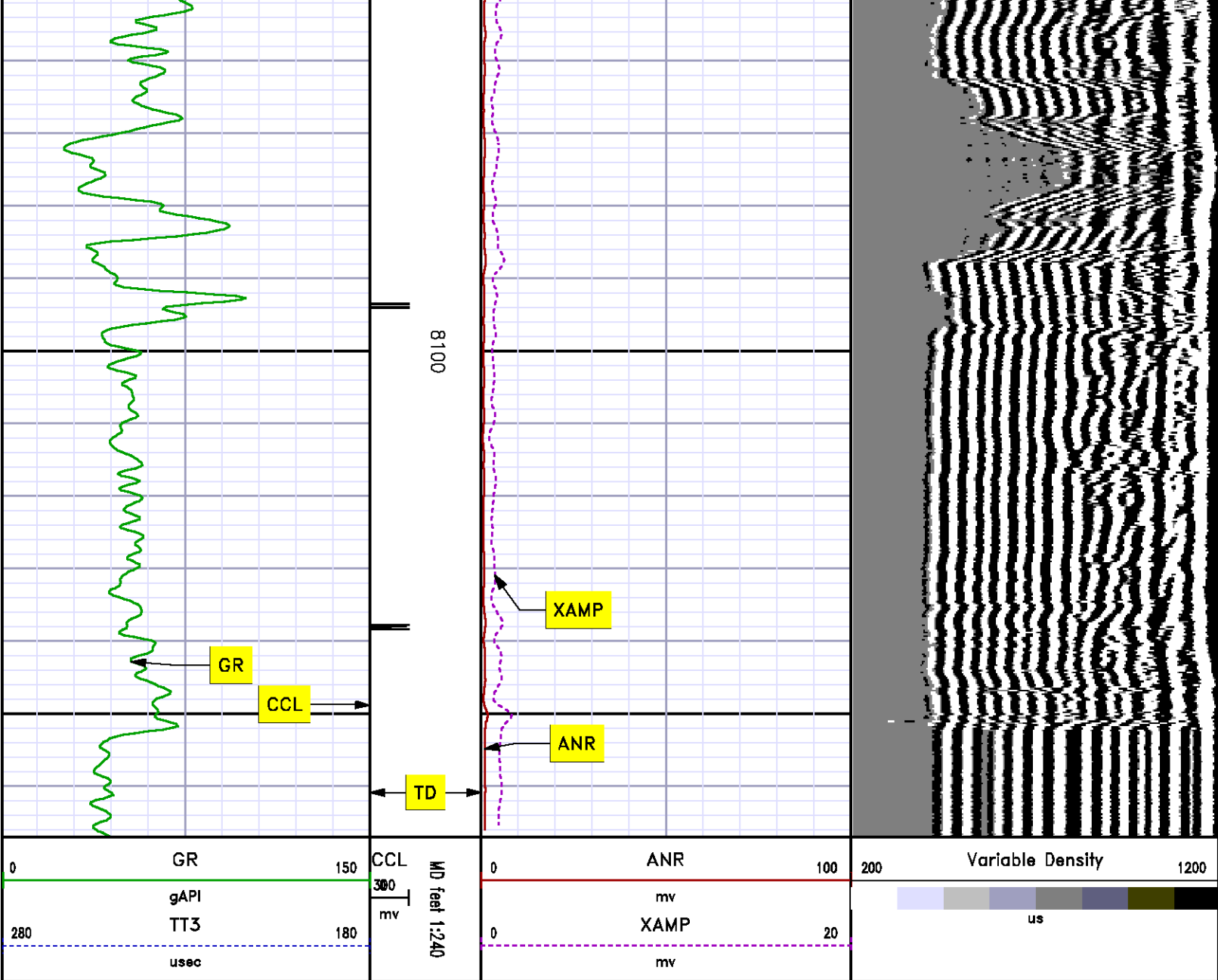
7500

7600









SECONDARY PRESENTATION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	310.000	usec	29.806	8178.000
RAL	Amp Gate Start Near	195.000	usec	29.806	8178.000

RAL	Amp Gate Start Radial	195.000	usec	29.806	8178.000
RAL	Amp Gate Width Far	25.000	usec	29.806	8178.000
RAL	Amp Gate Width Near	25.000	usec	29.806	8178.000
RAL	Amp Gate Width Radial	25.000	usec	29.806	8178.000
RAL	casing od	4.500	inches	29.806	8178.000
RAL	casing wt	11.600	lbm/ft	29.806	8178.000
RAL	FB Start Far	291.900	usec	29.806	8178.000
RAL	FB Start Near	180.000	usec	29.806	8178.000
RAL	FB Start Radial	180.000	usec	29.806	8178.000
RAL	FB Thresh Far	15.000	mv	29.806	8178.000
RAL	FB Thresh Near	10.000	mv	29.806	8178.000
RAL	FB Thresh Radial	10.000	mv	29.806	8178.000
RAL	Fluid Travel Time	200.000	usec/ft	29.806	8177.900

DEPTH OFFSETS (for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES							
		ACAL	ANR	AR1	AR2	AR3	AR4	AR5	AR6
1426XA	-11.000	FPR3	FPR5	TT3	TTR1	TTR2	TTR3	TTR4	TTR5
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

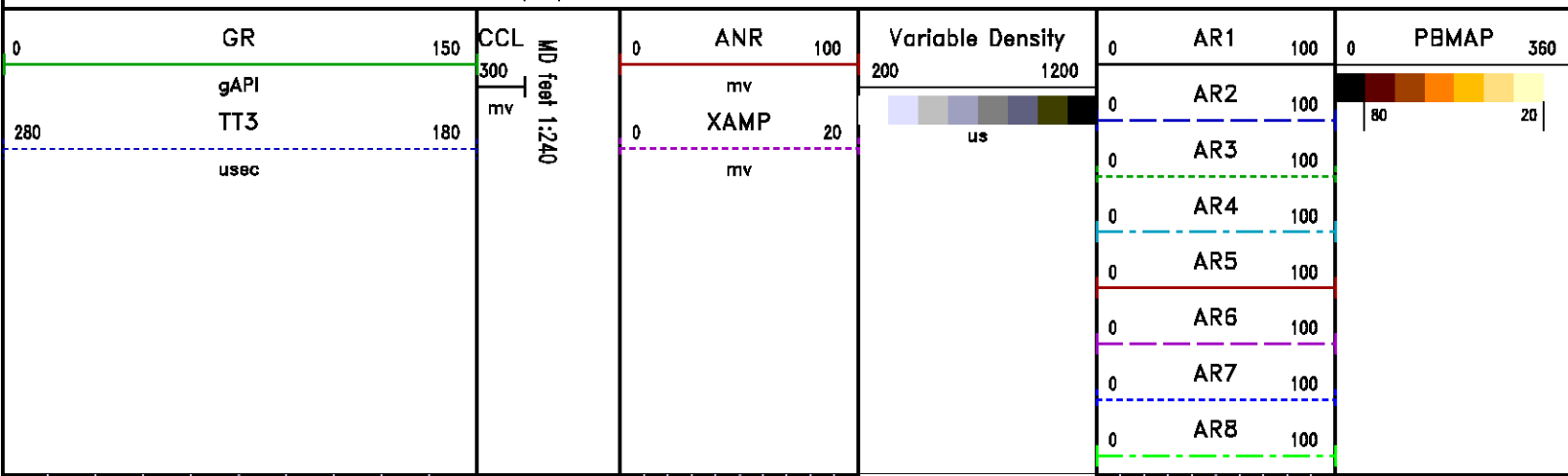
Well : YOUBERG RWF 533-23

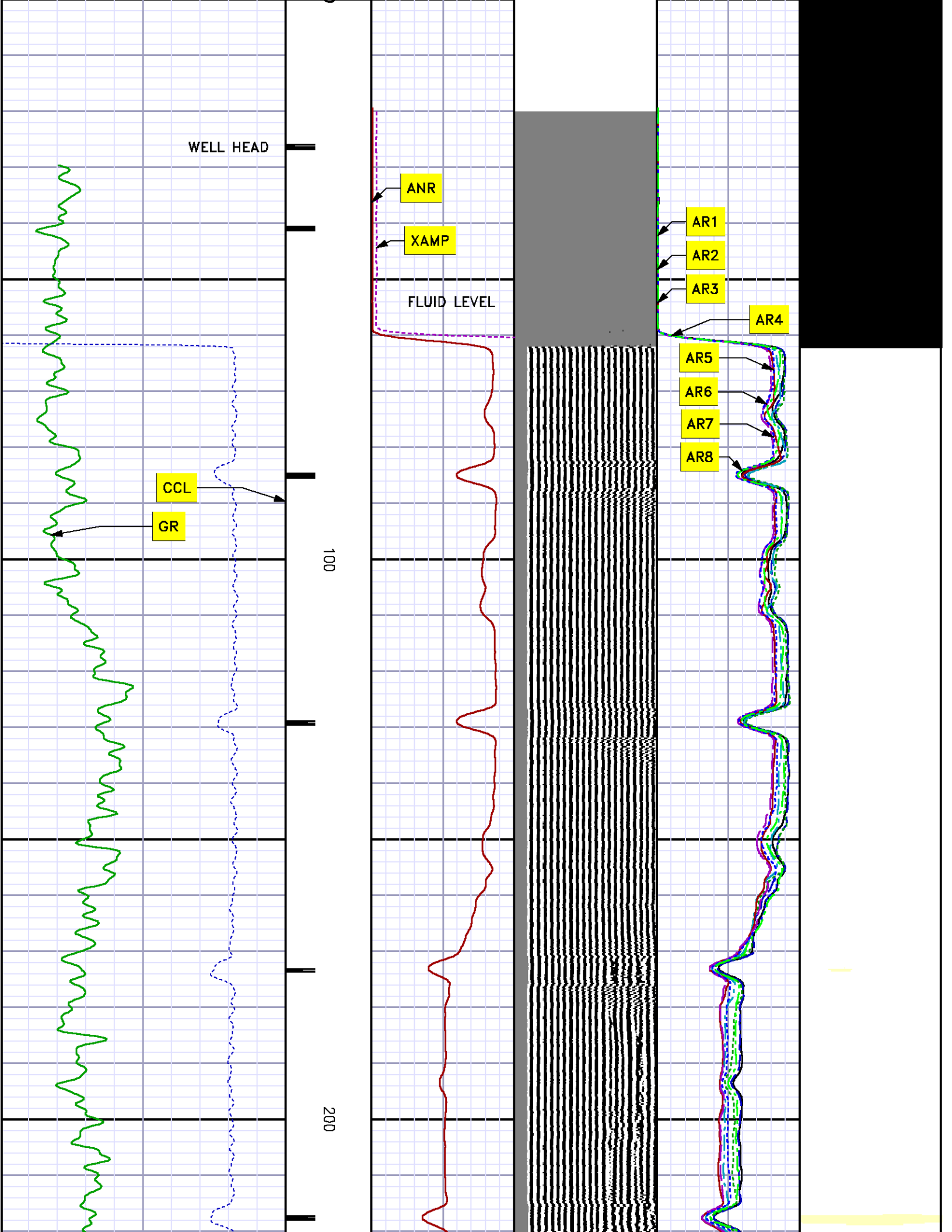
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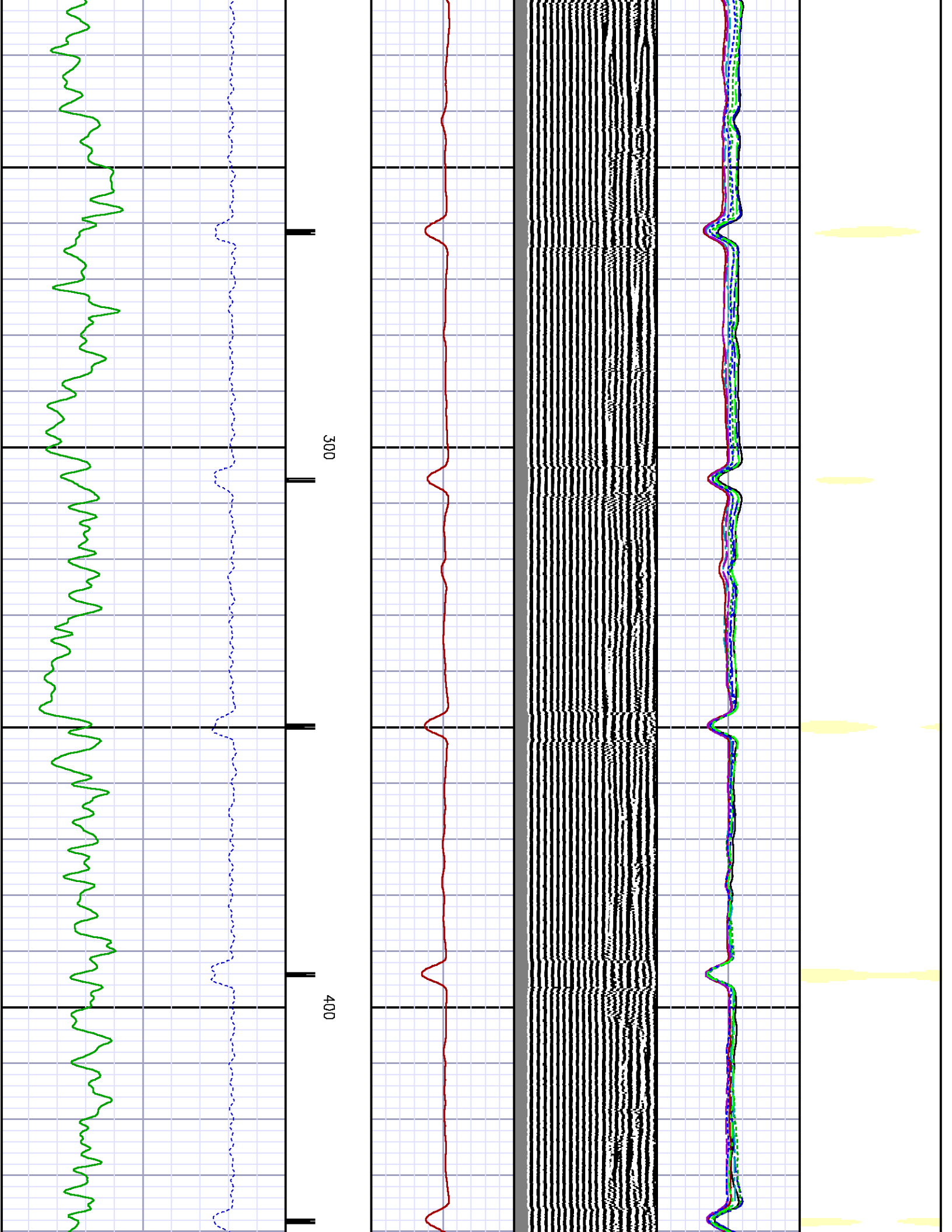
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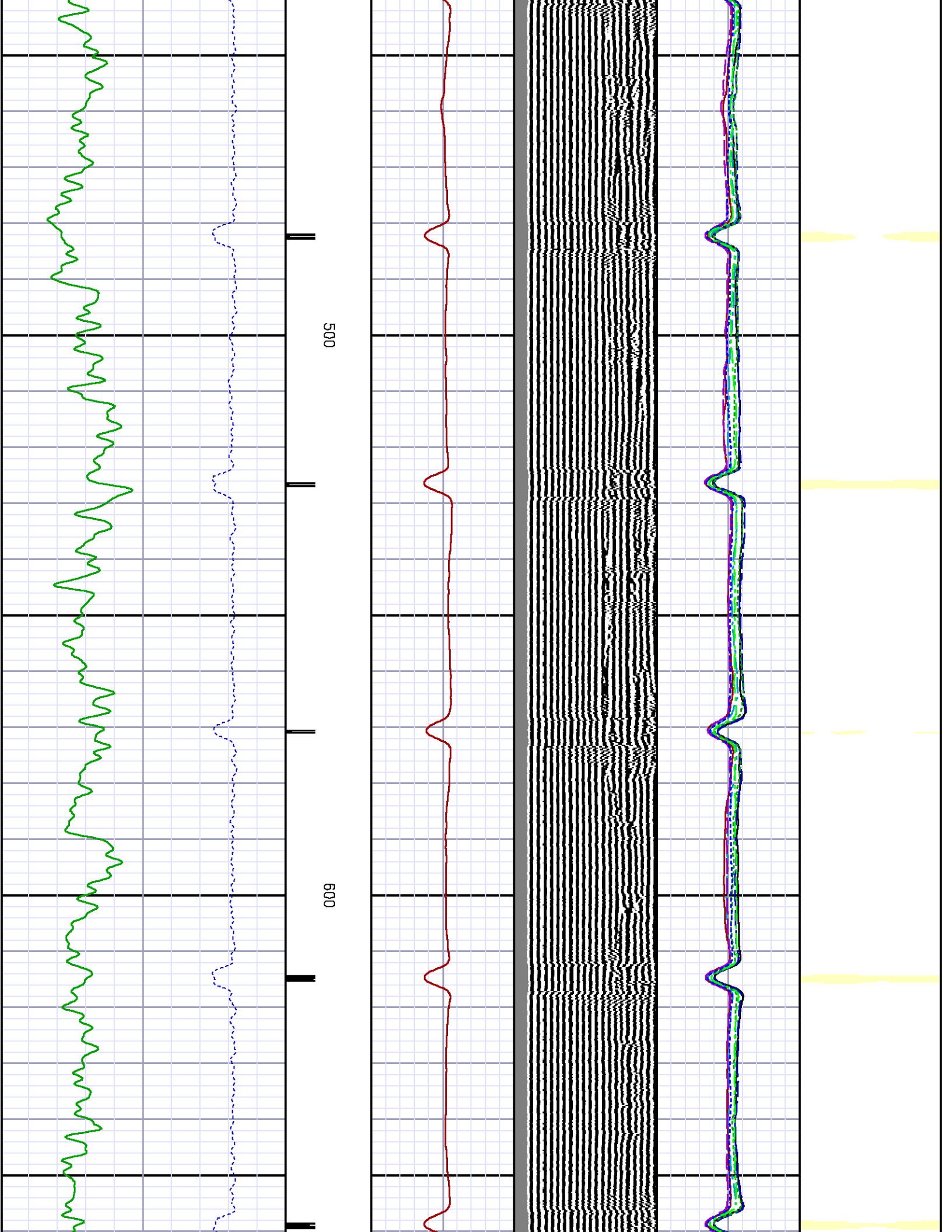
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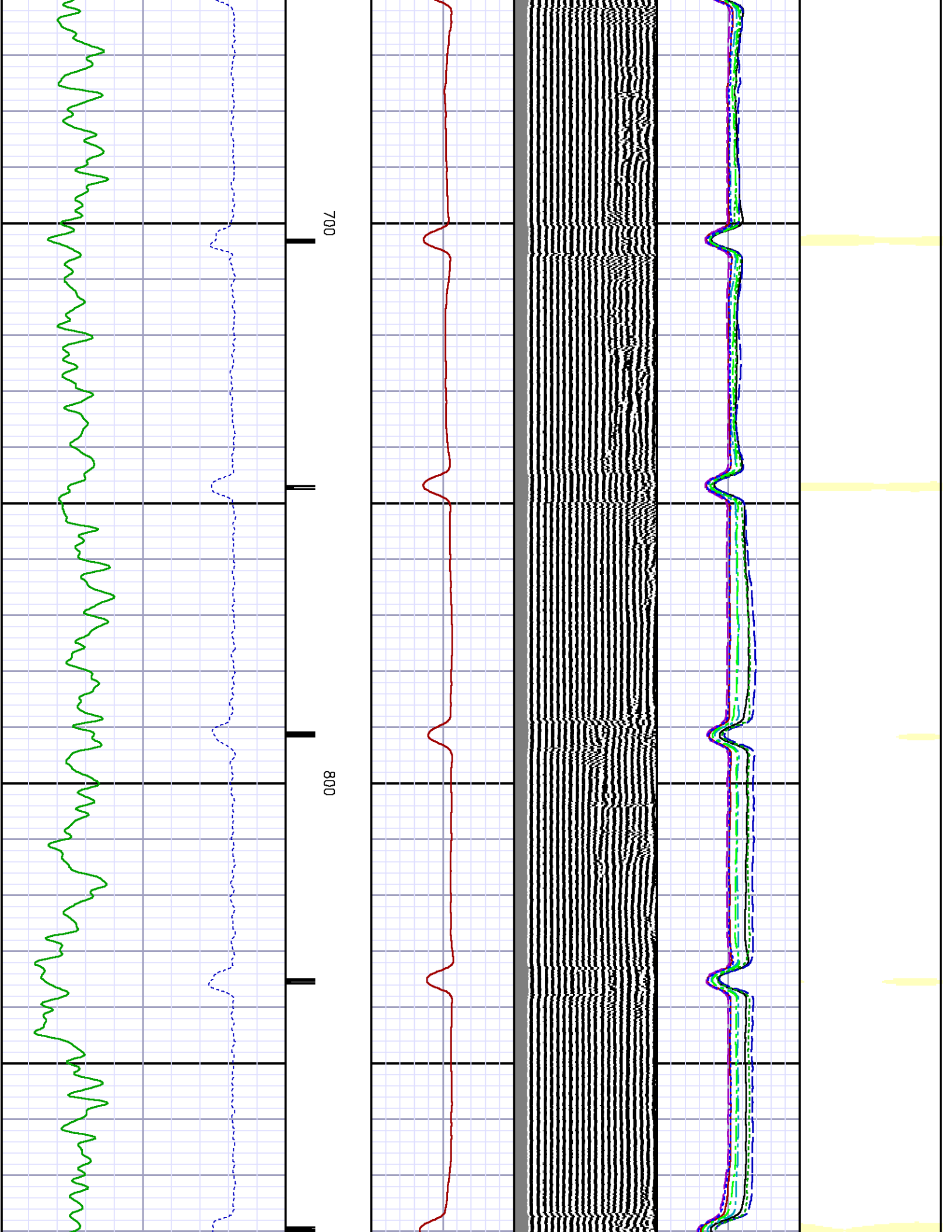
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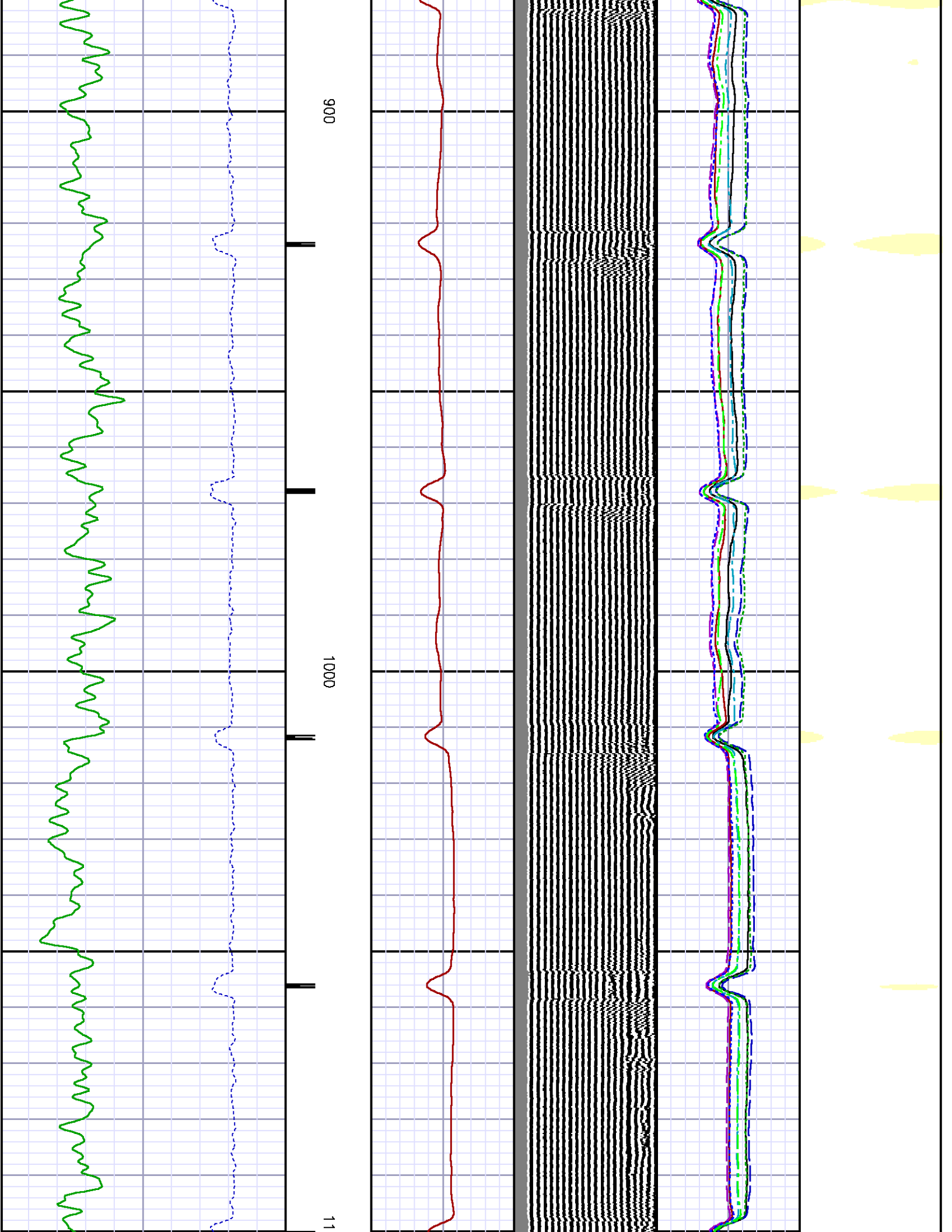


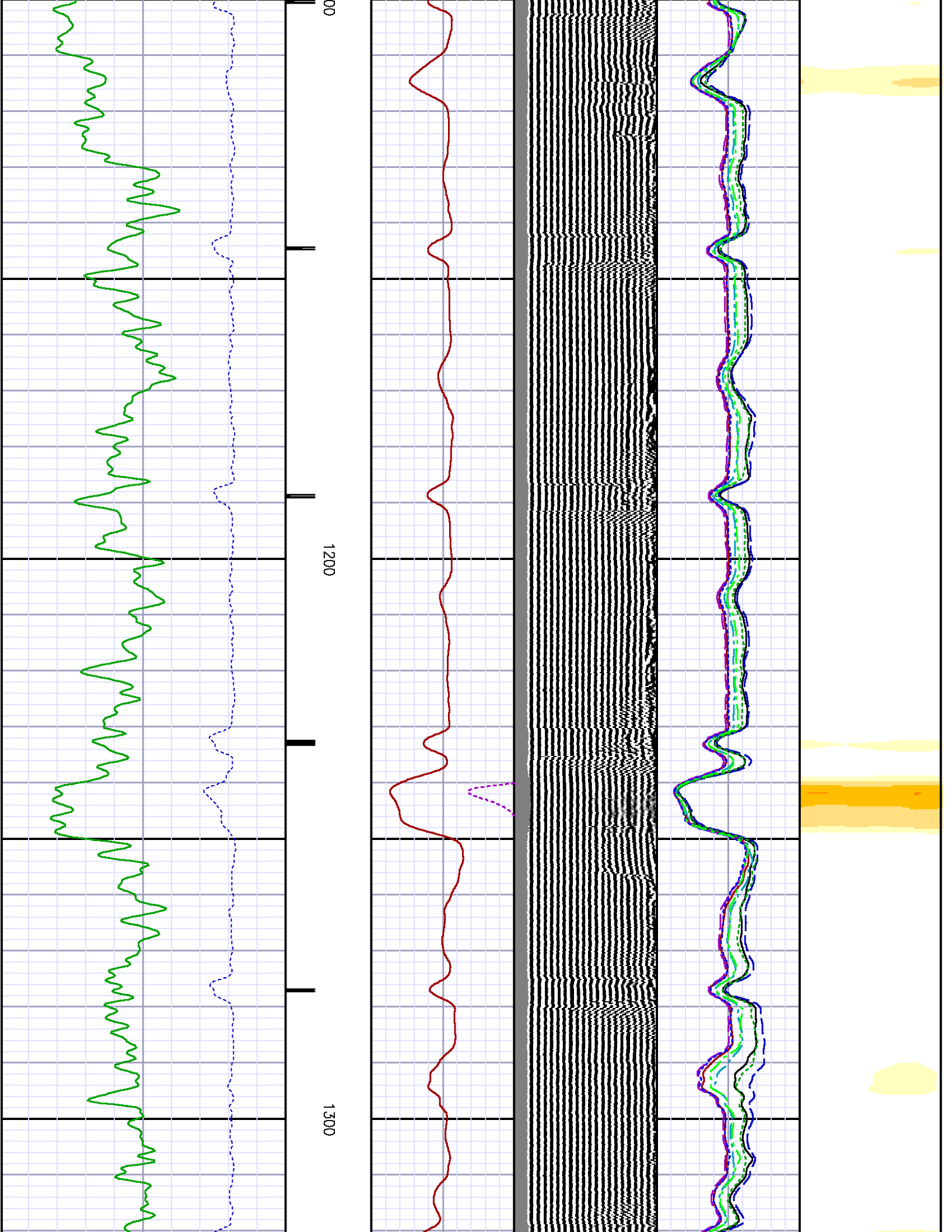


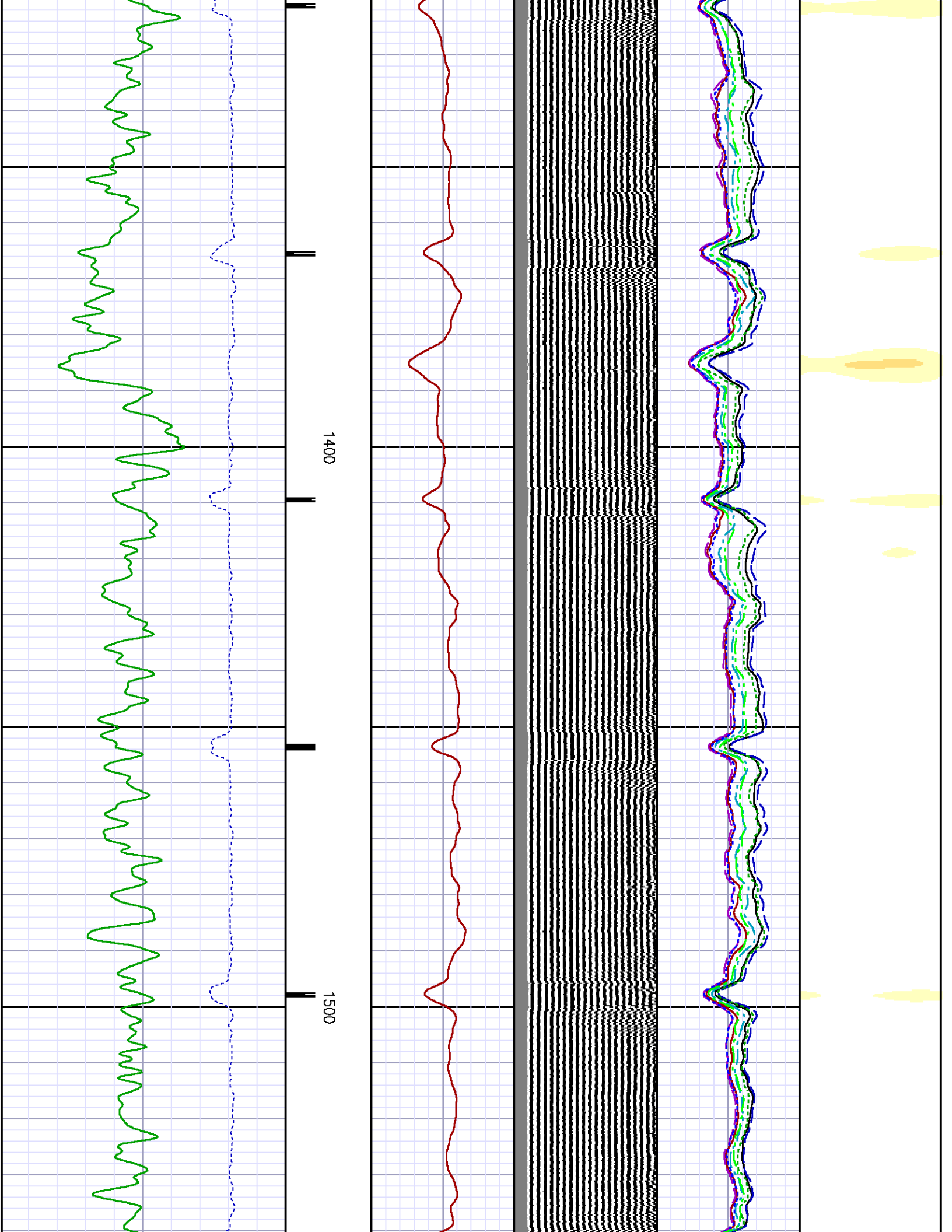


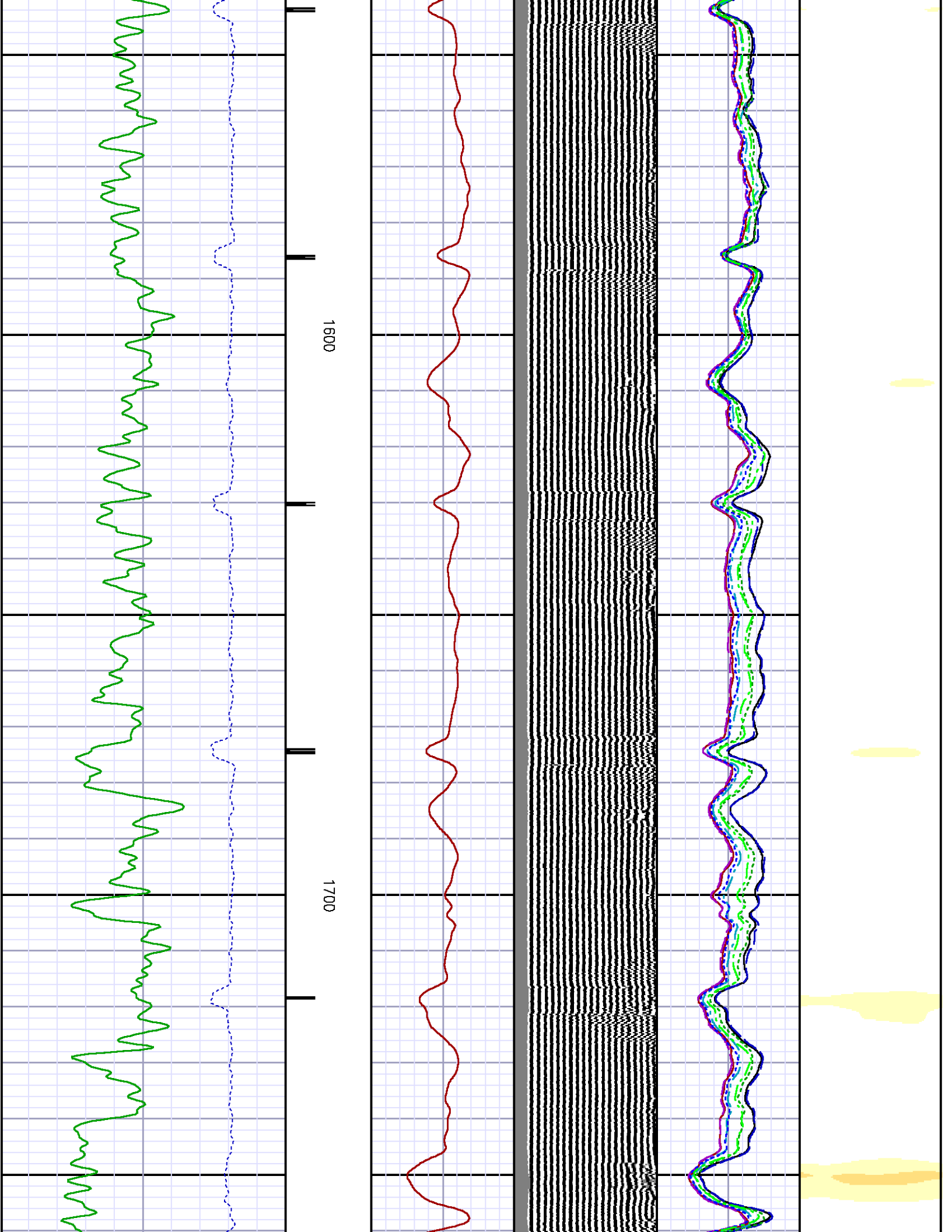


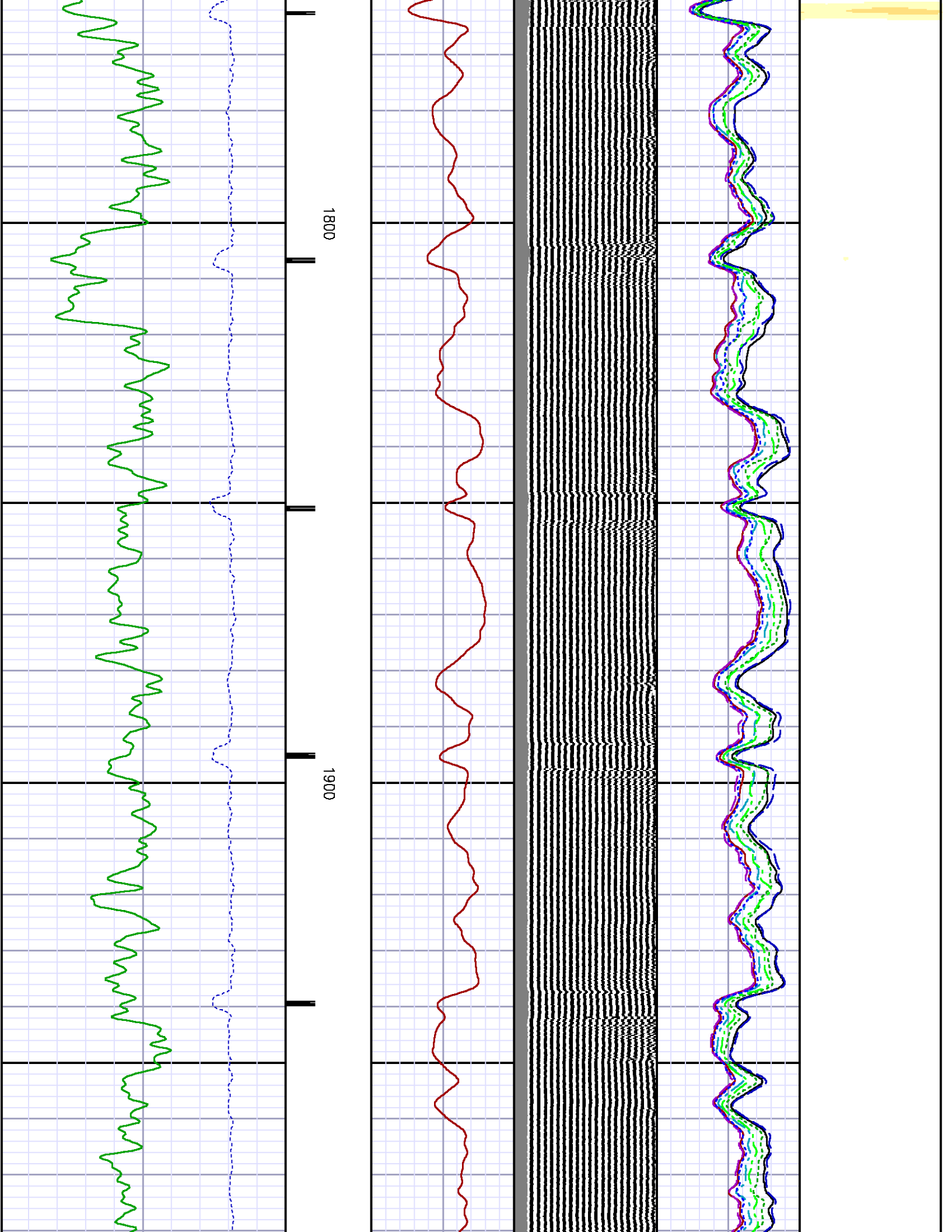


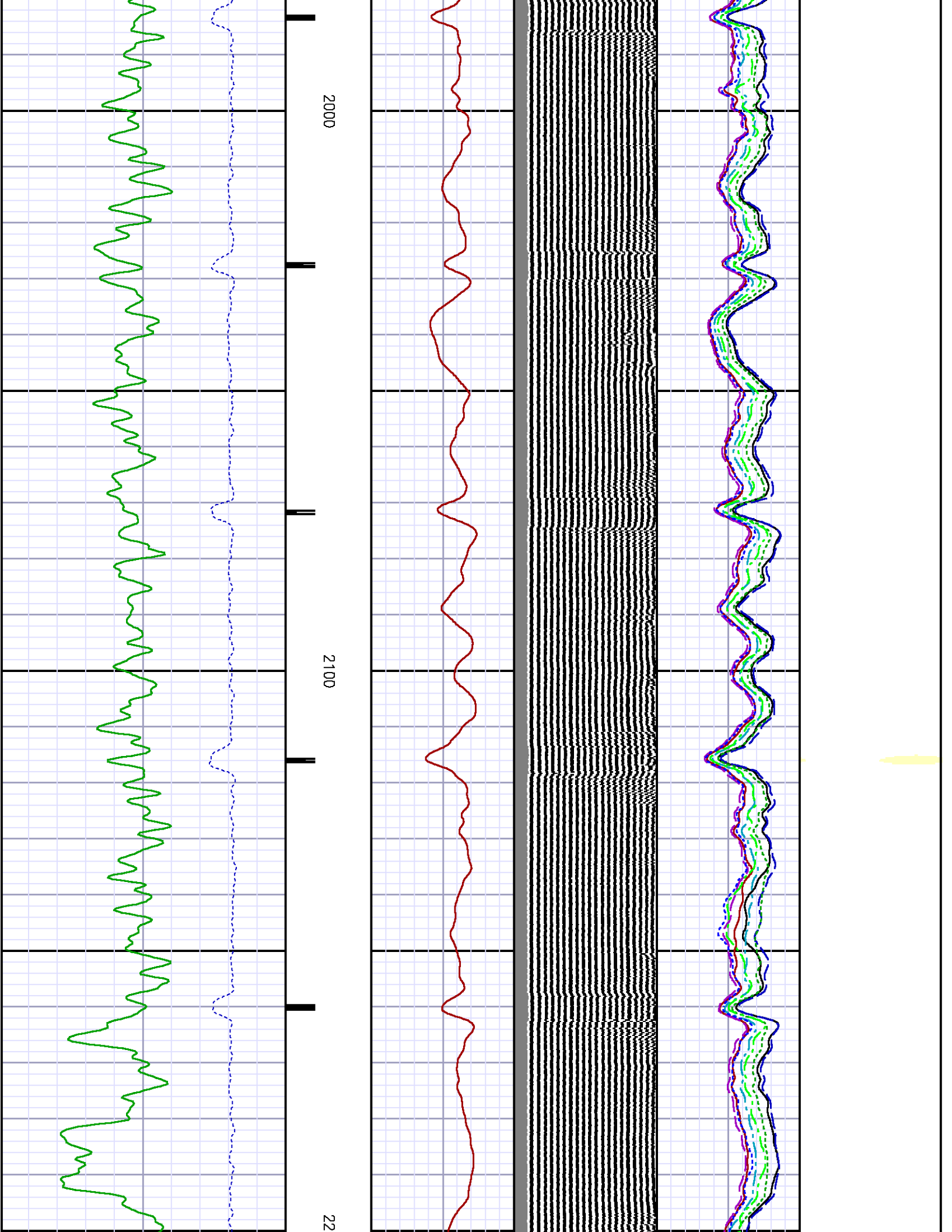


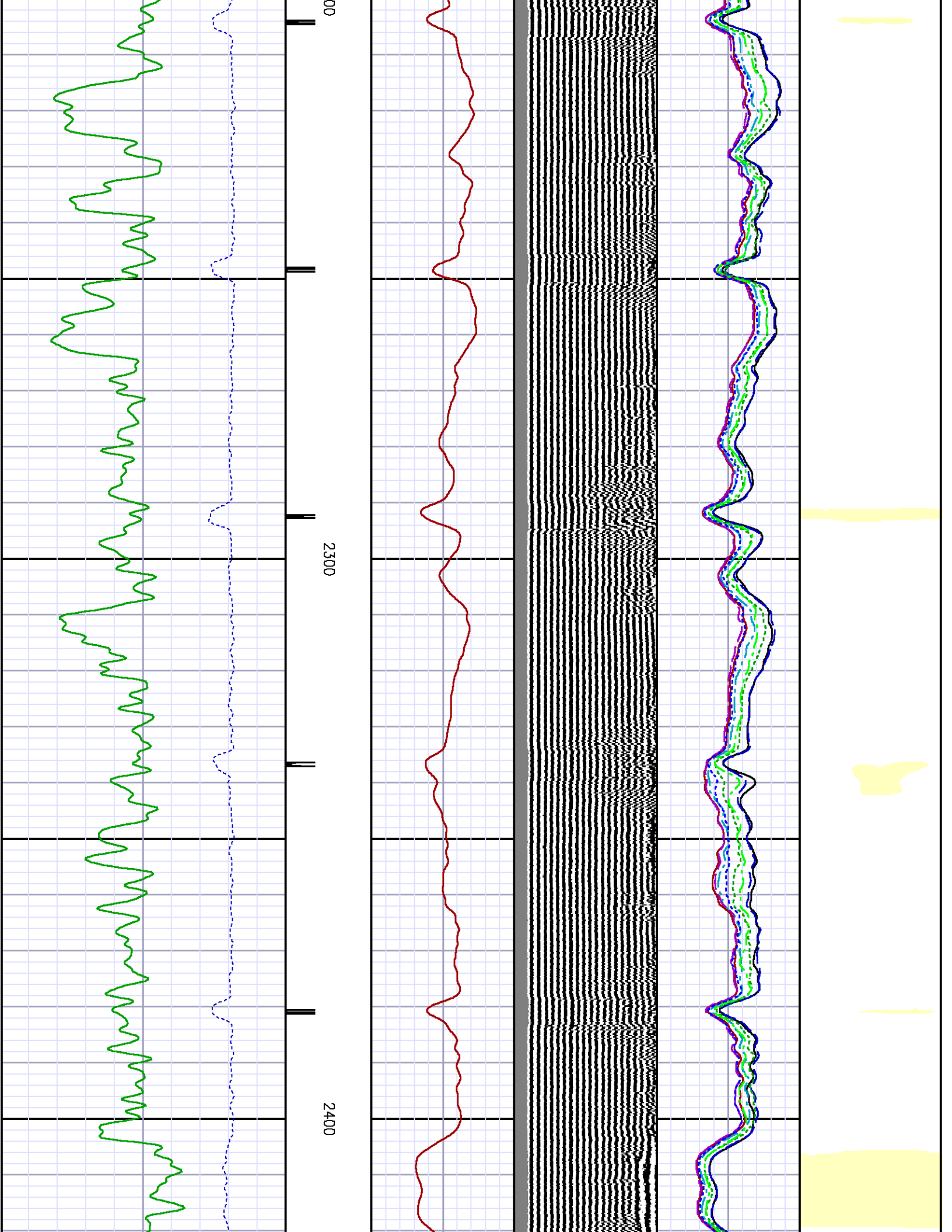


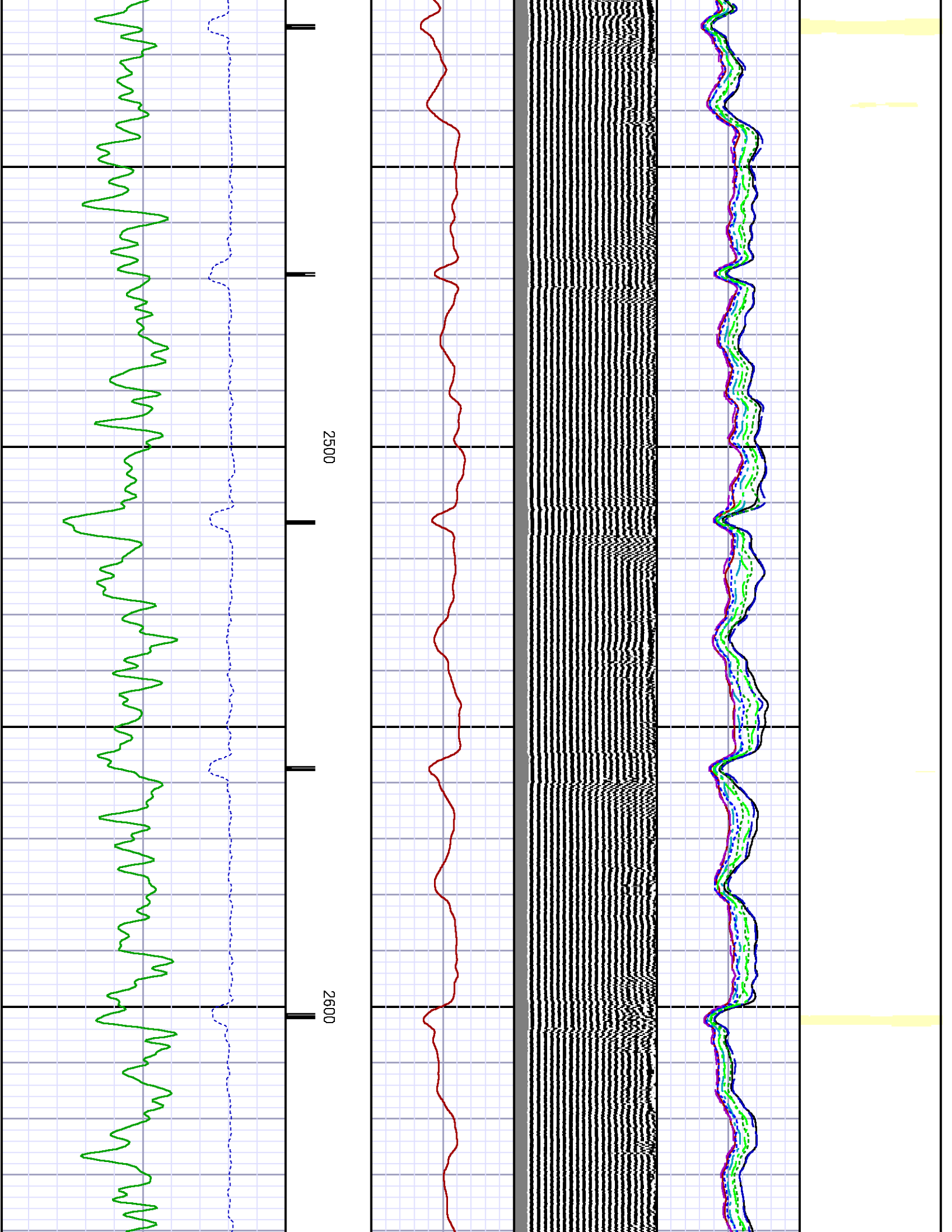


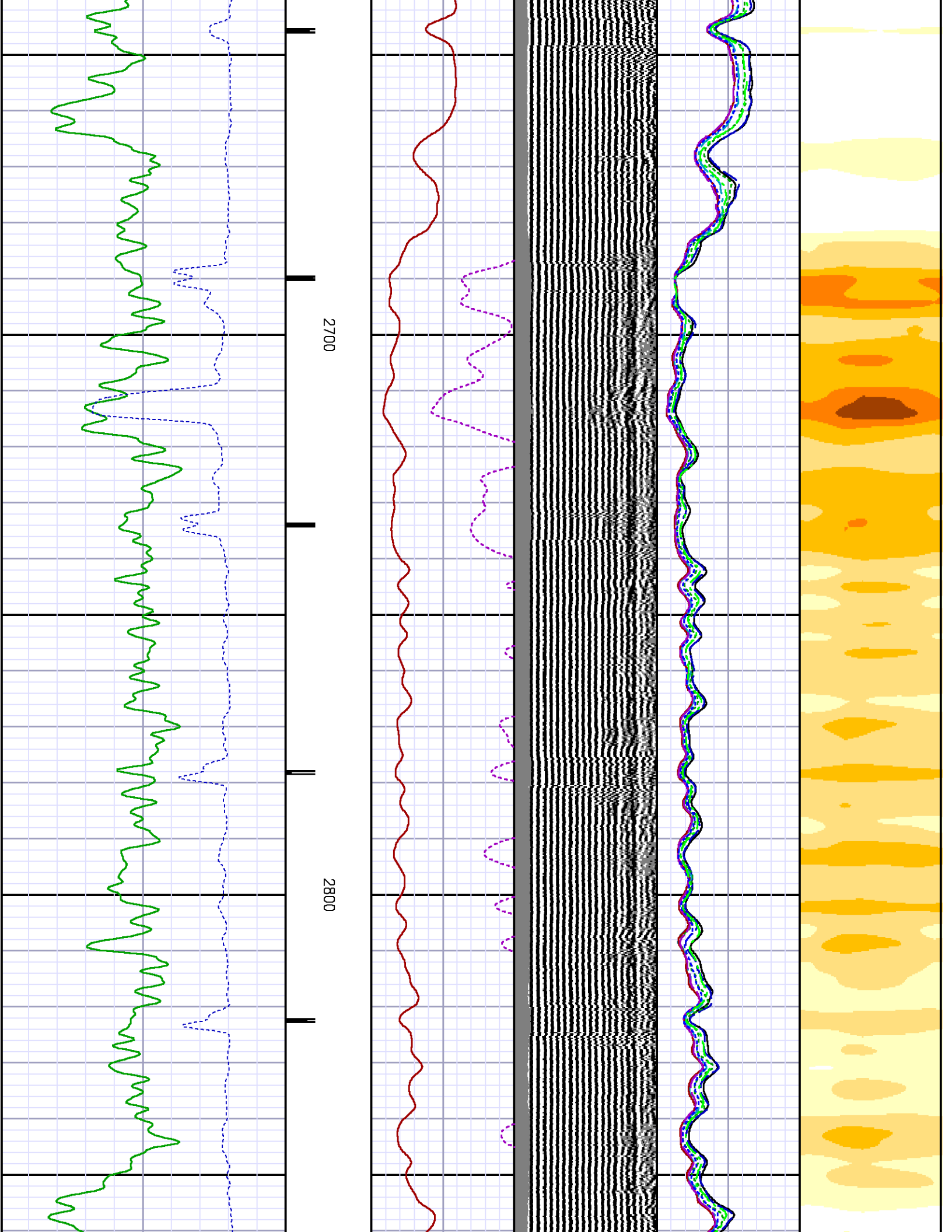


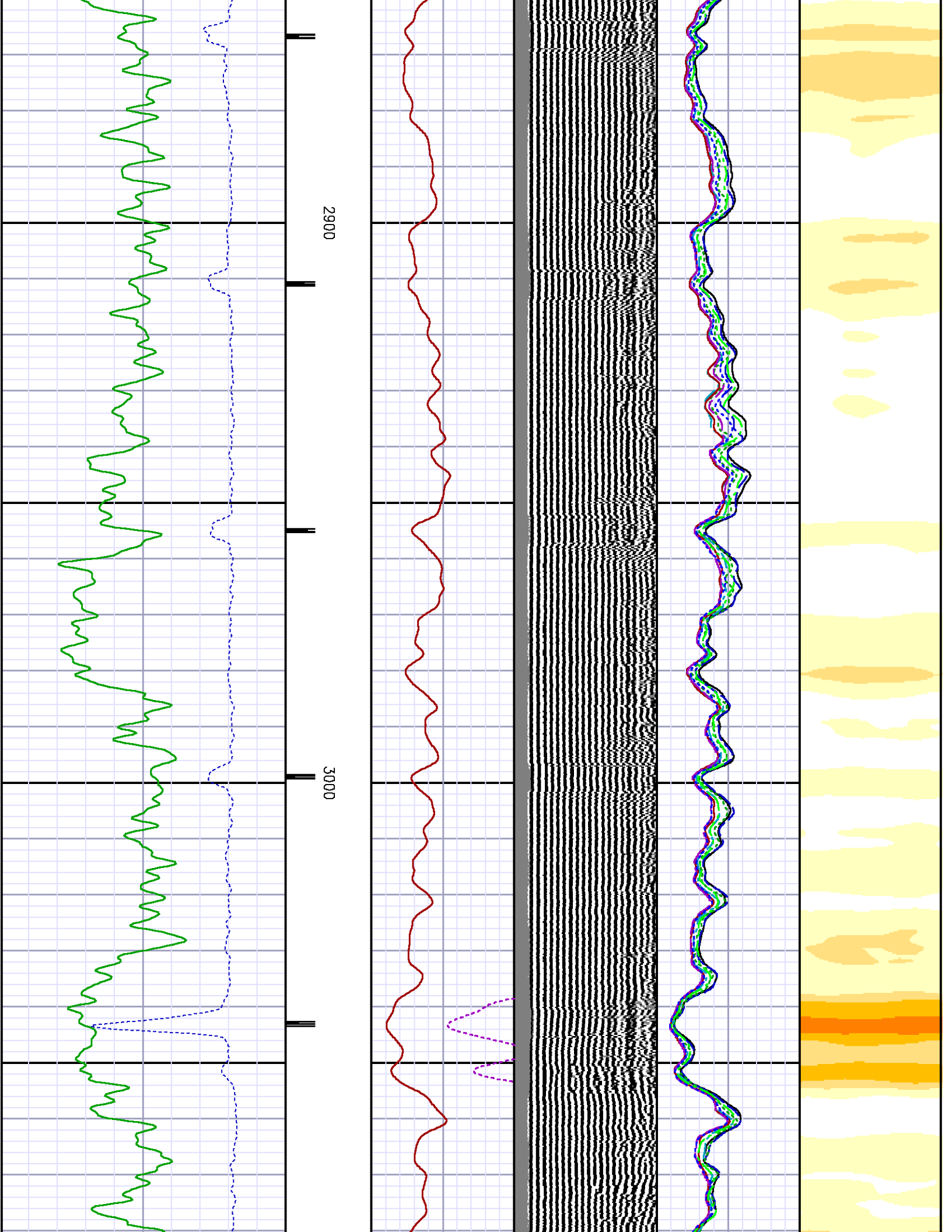


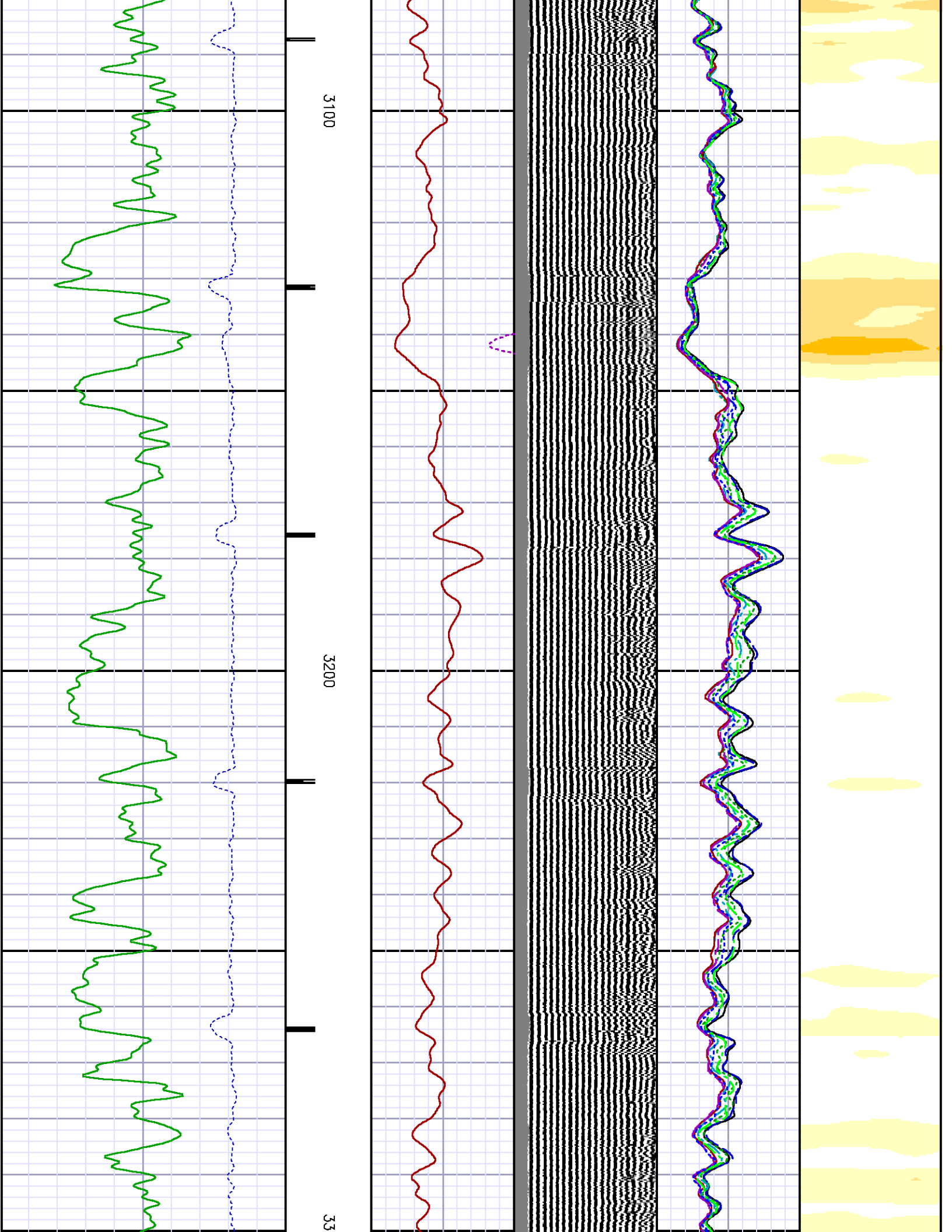


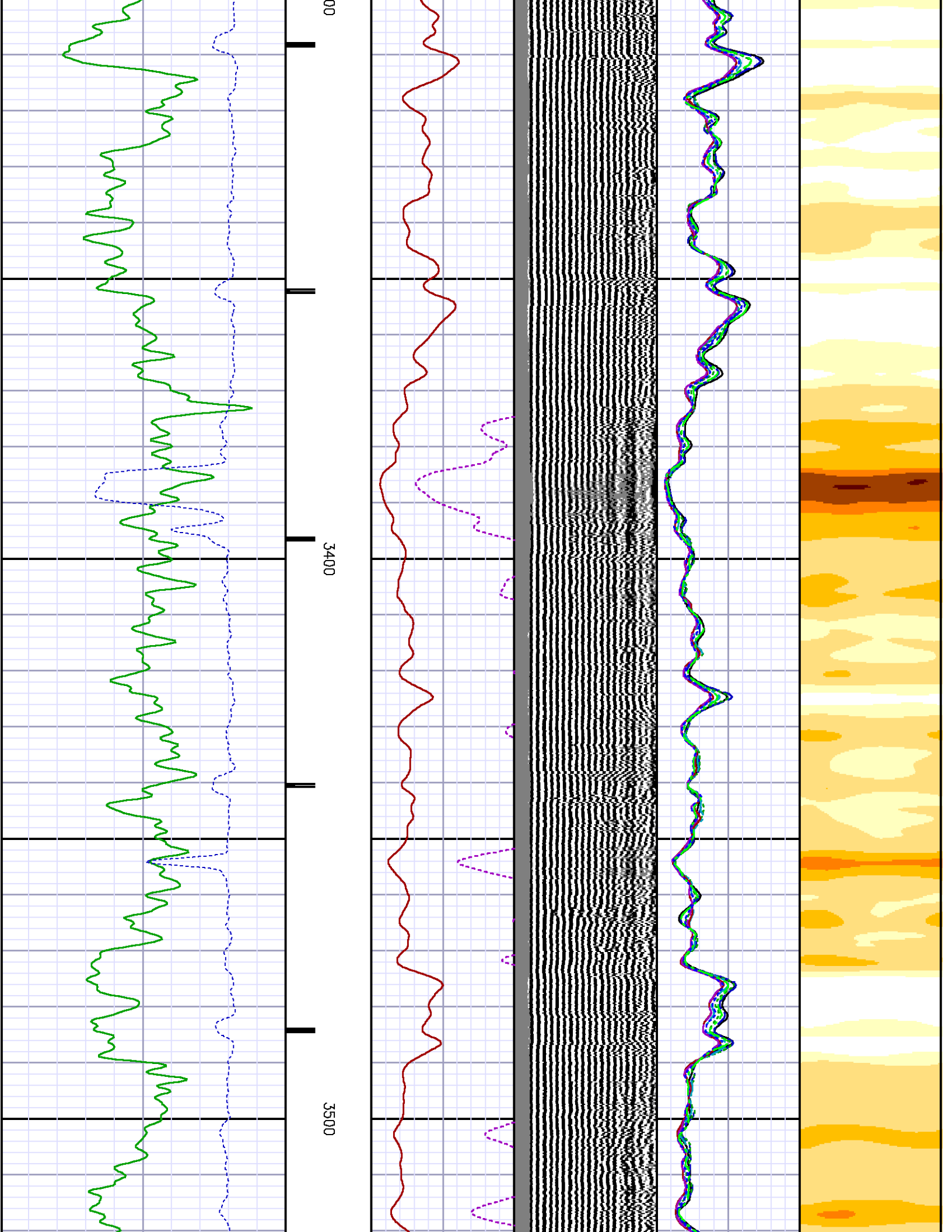


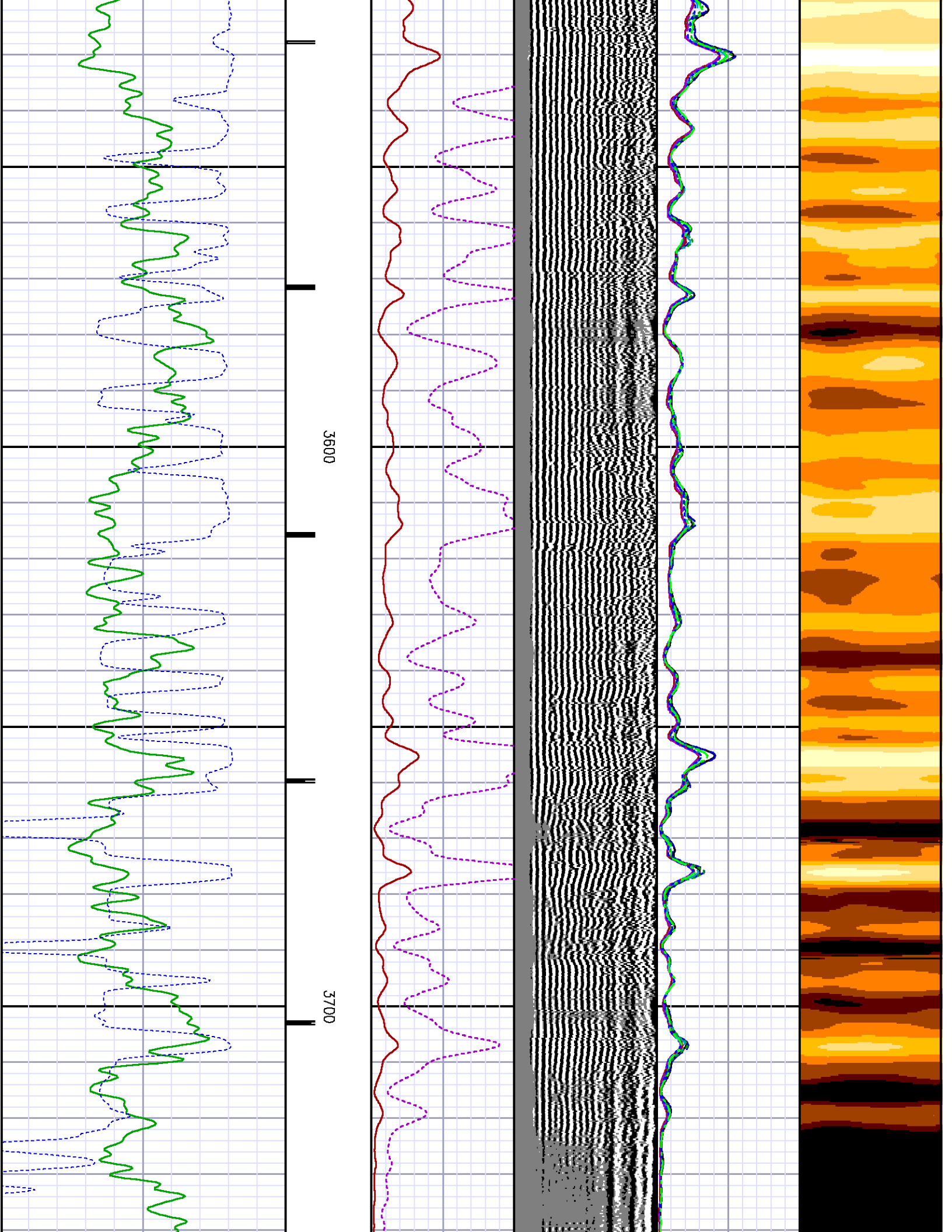


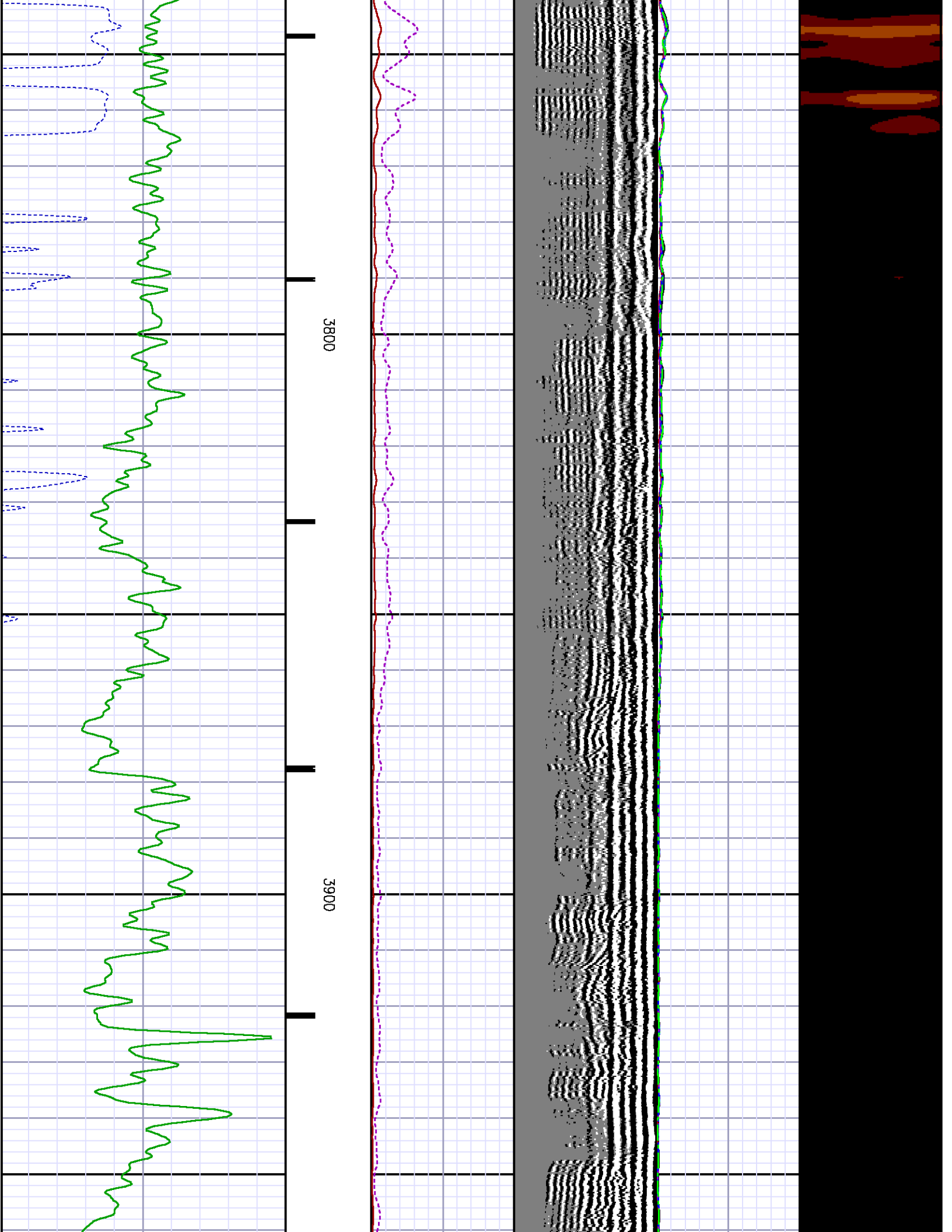


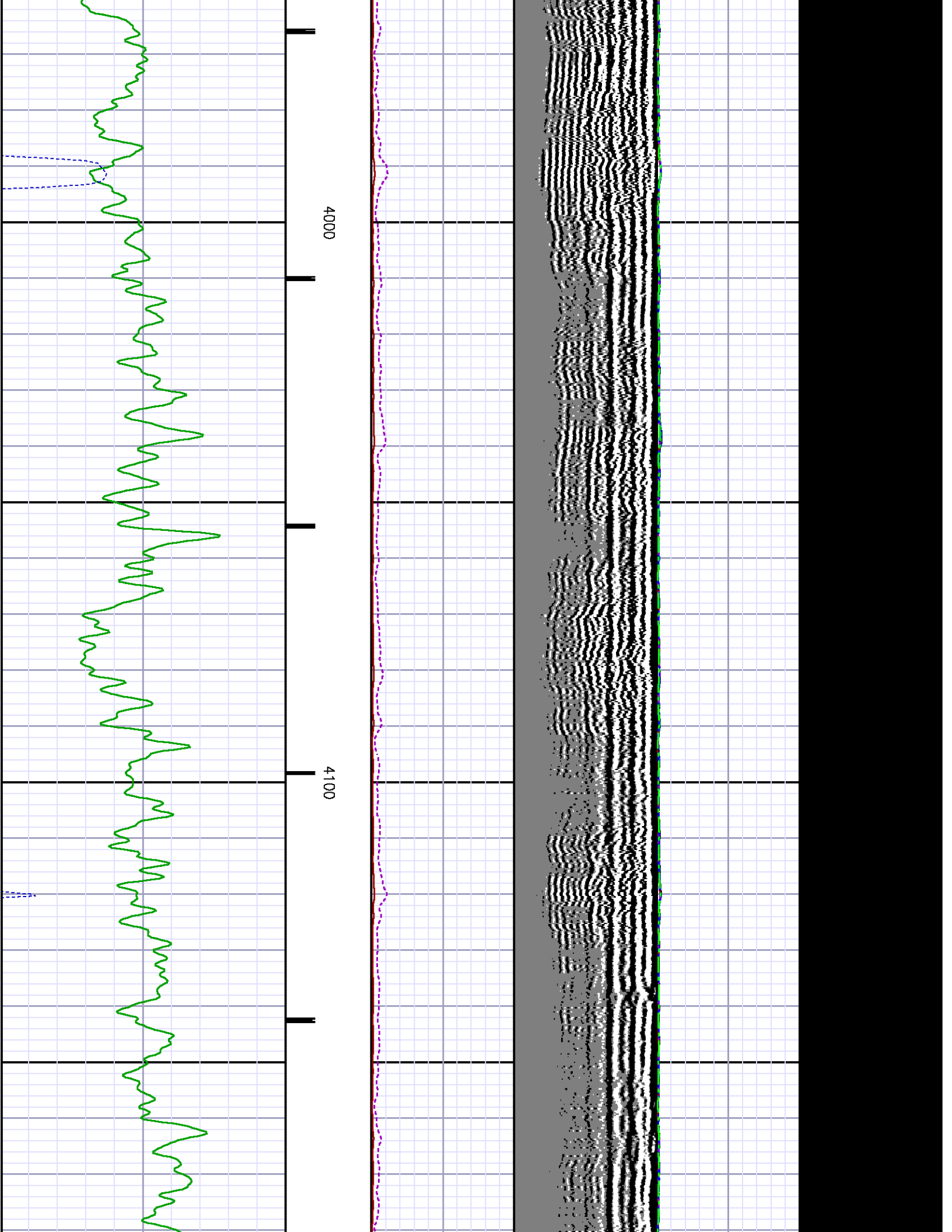


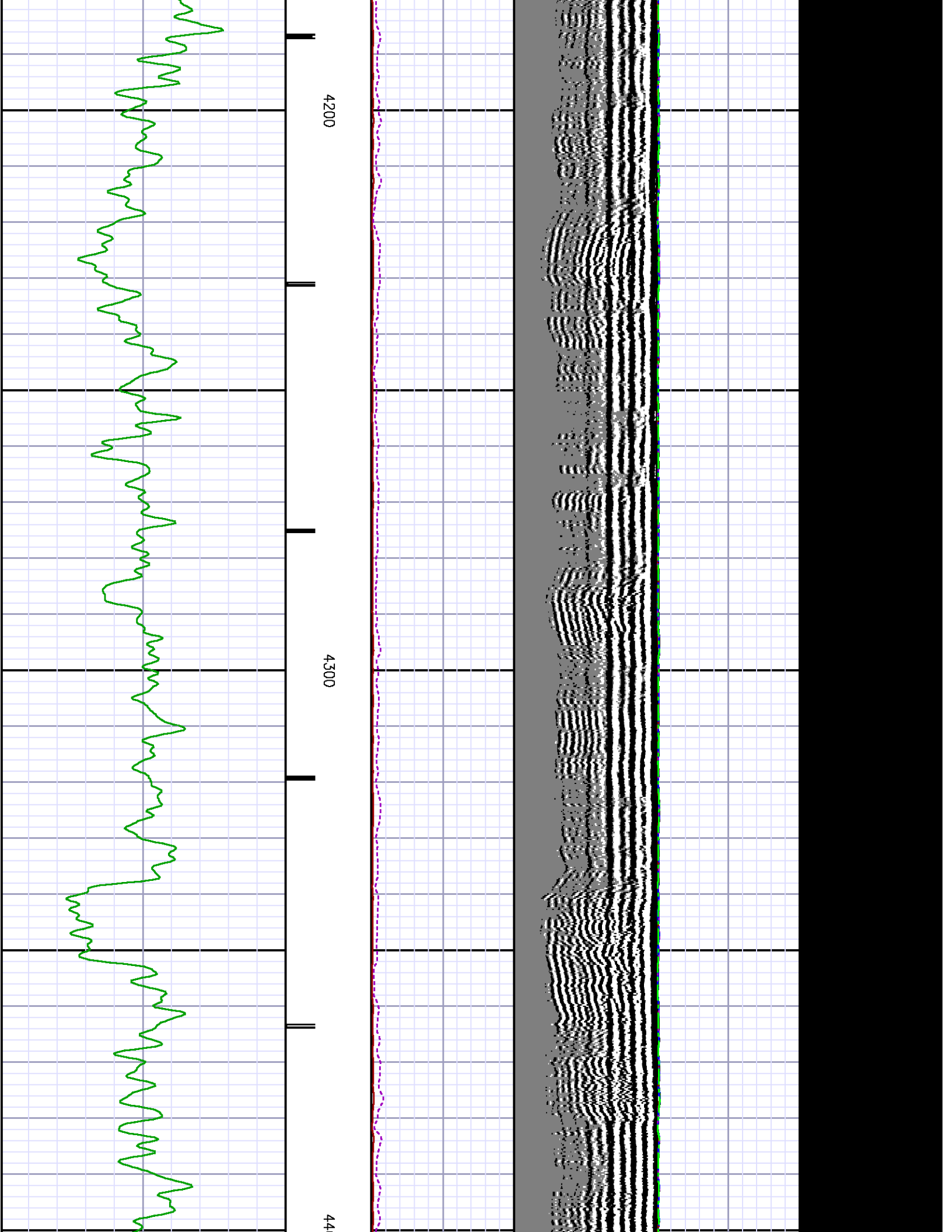


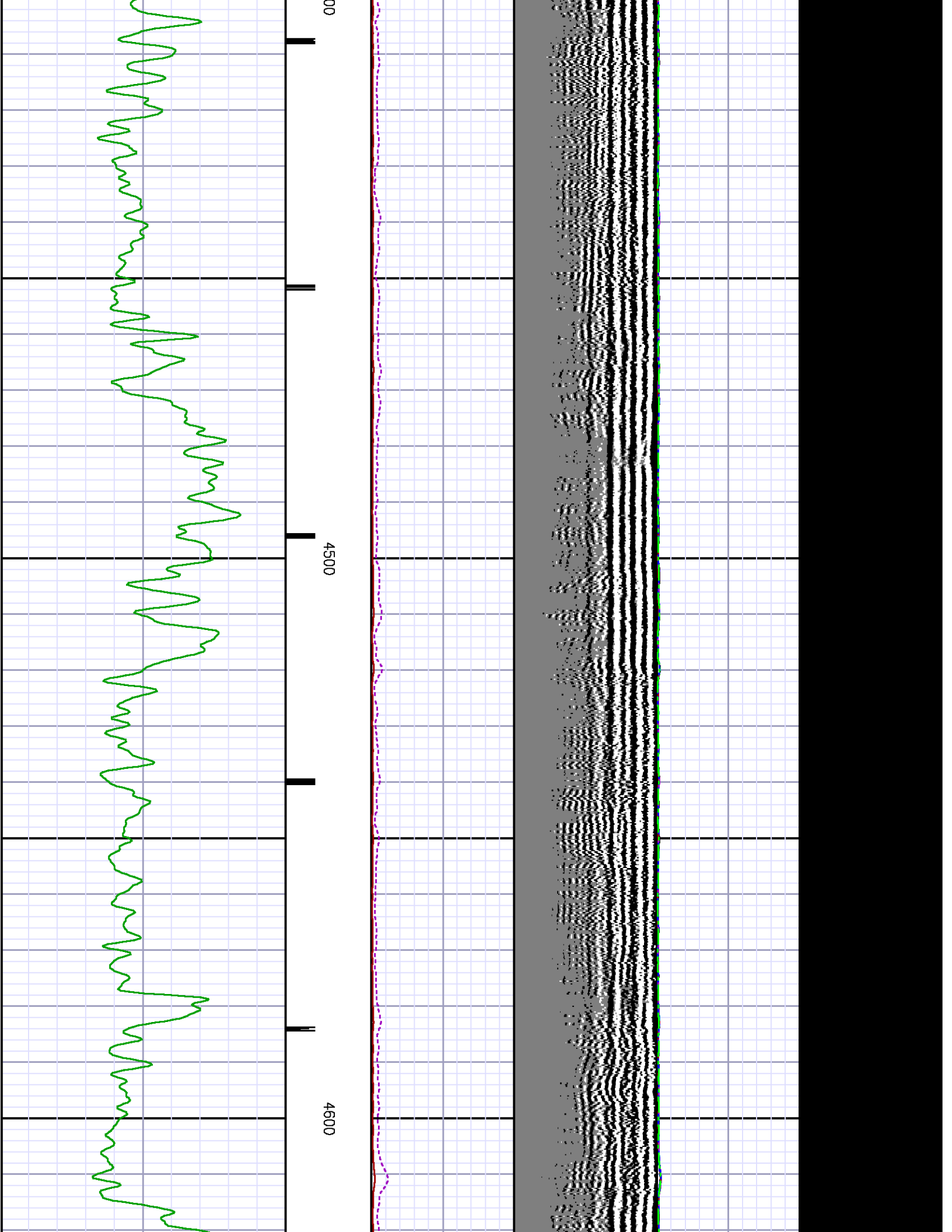


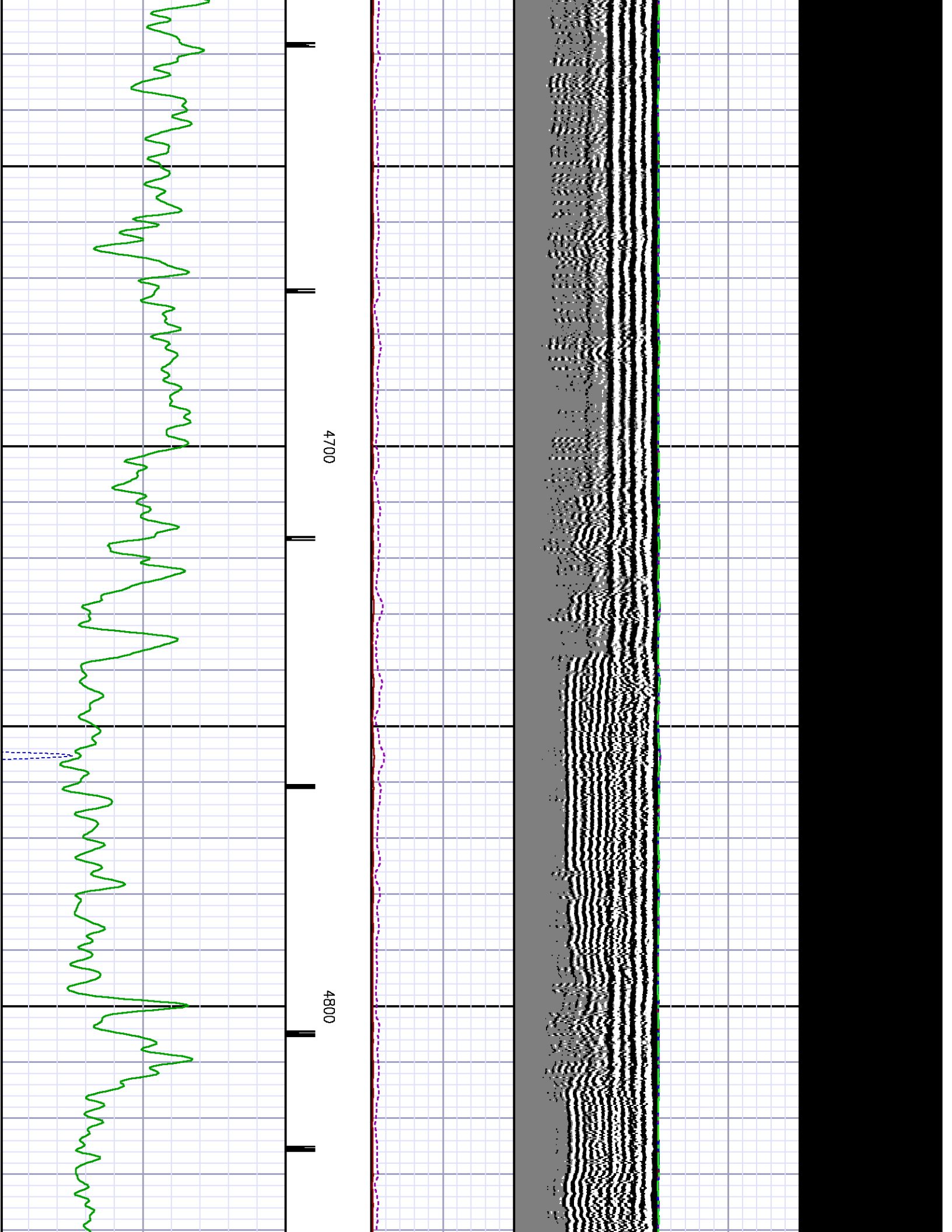


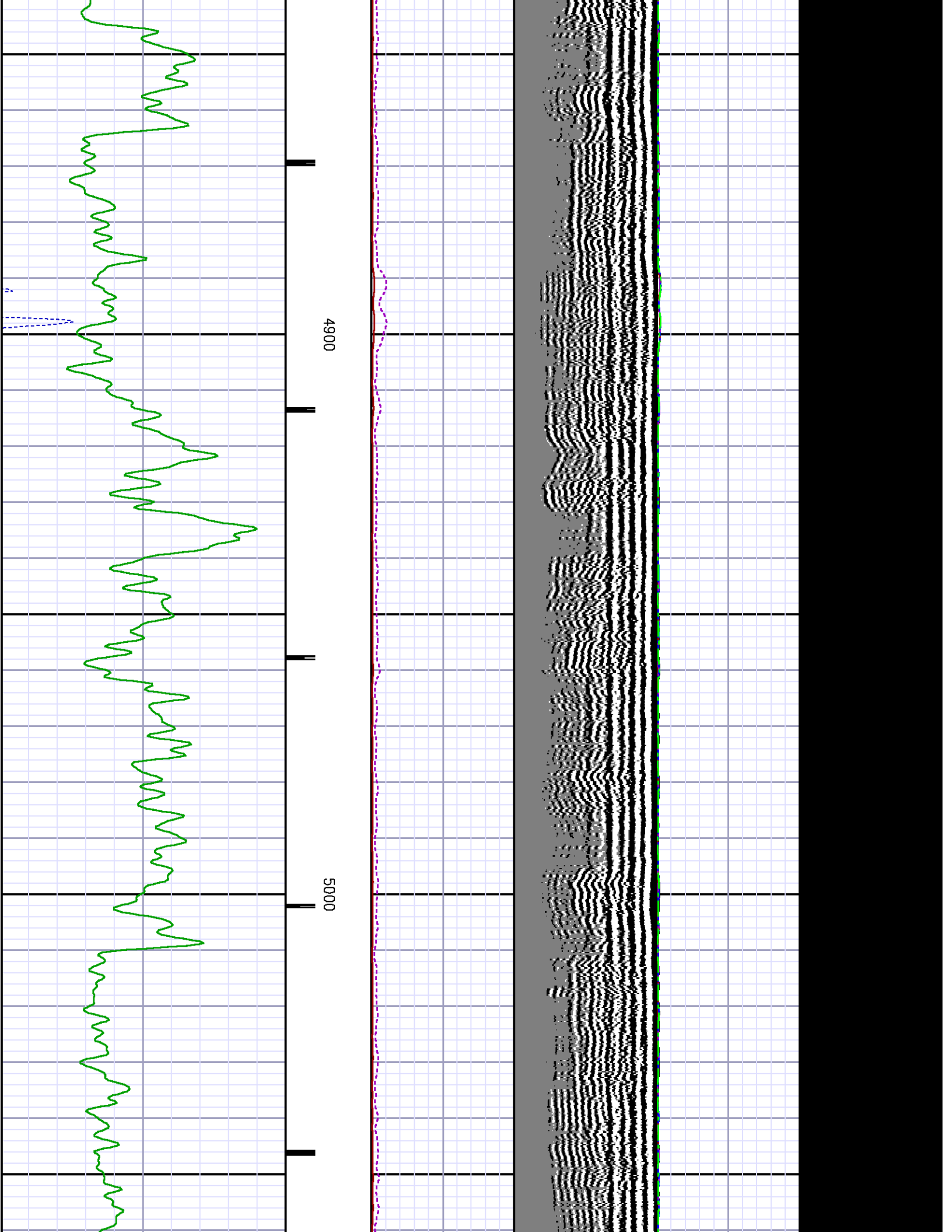


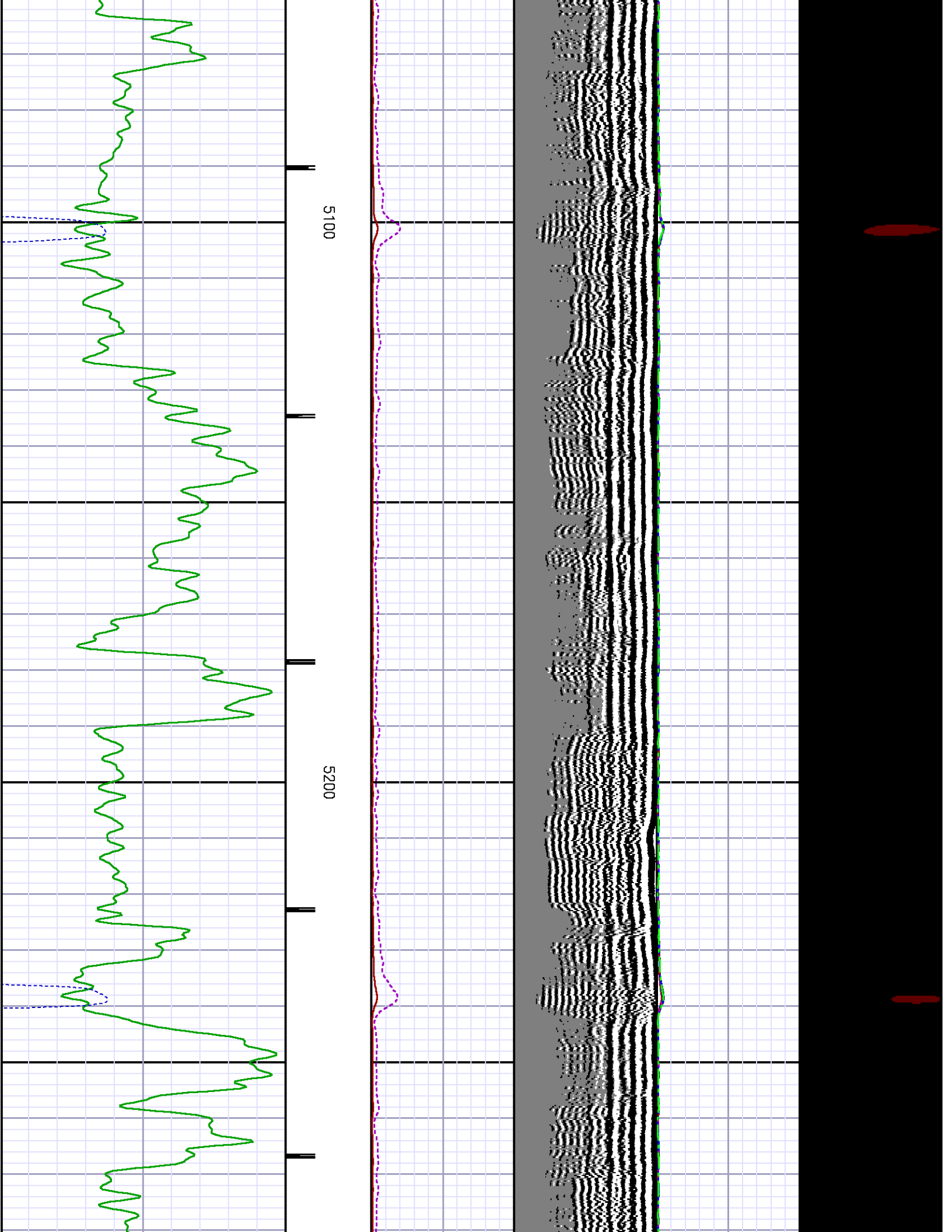


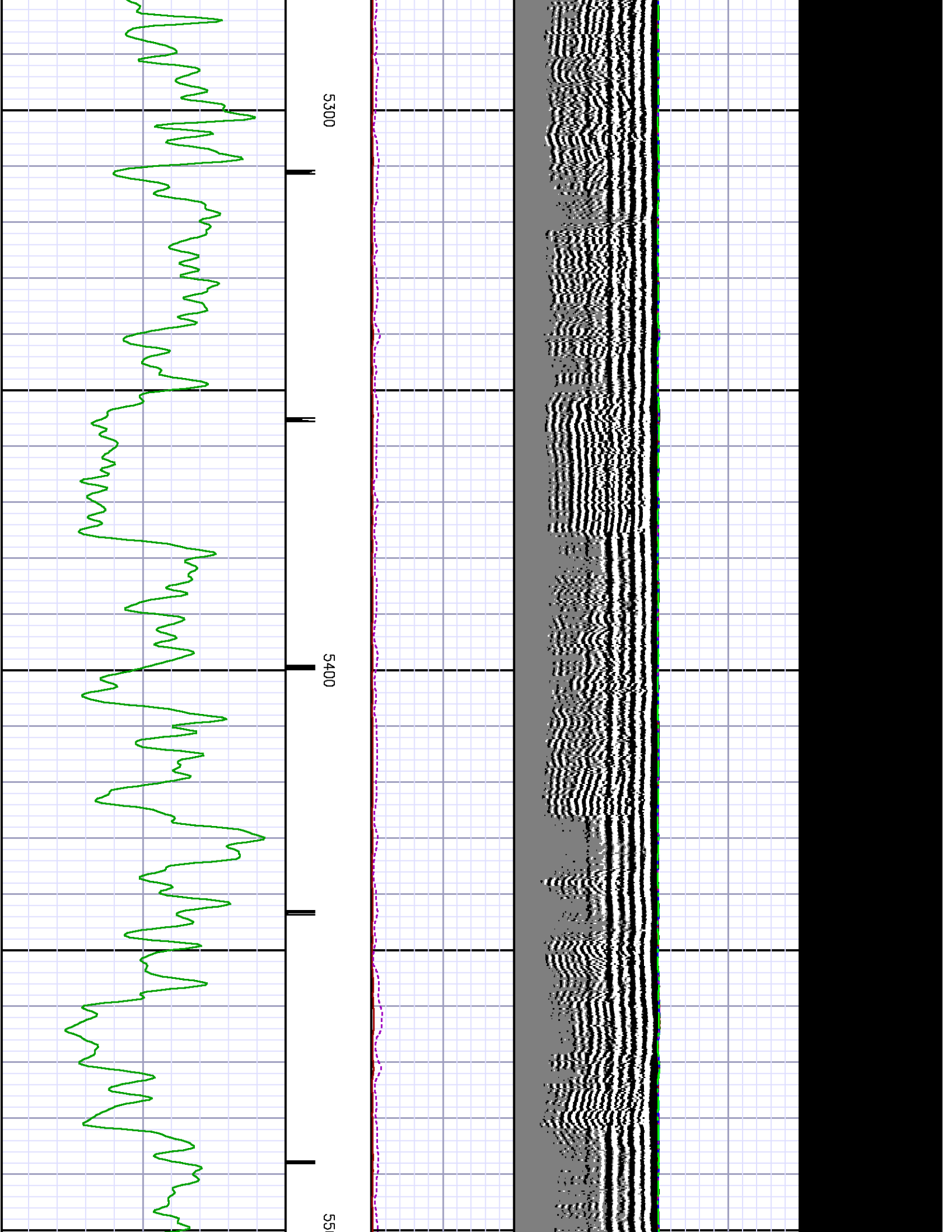


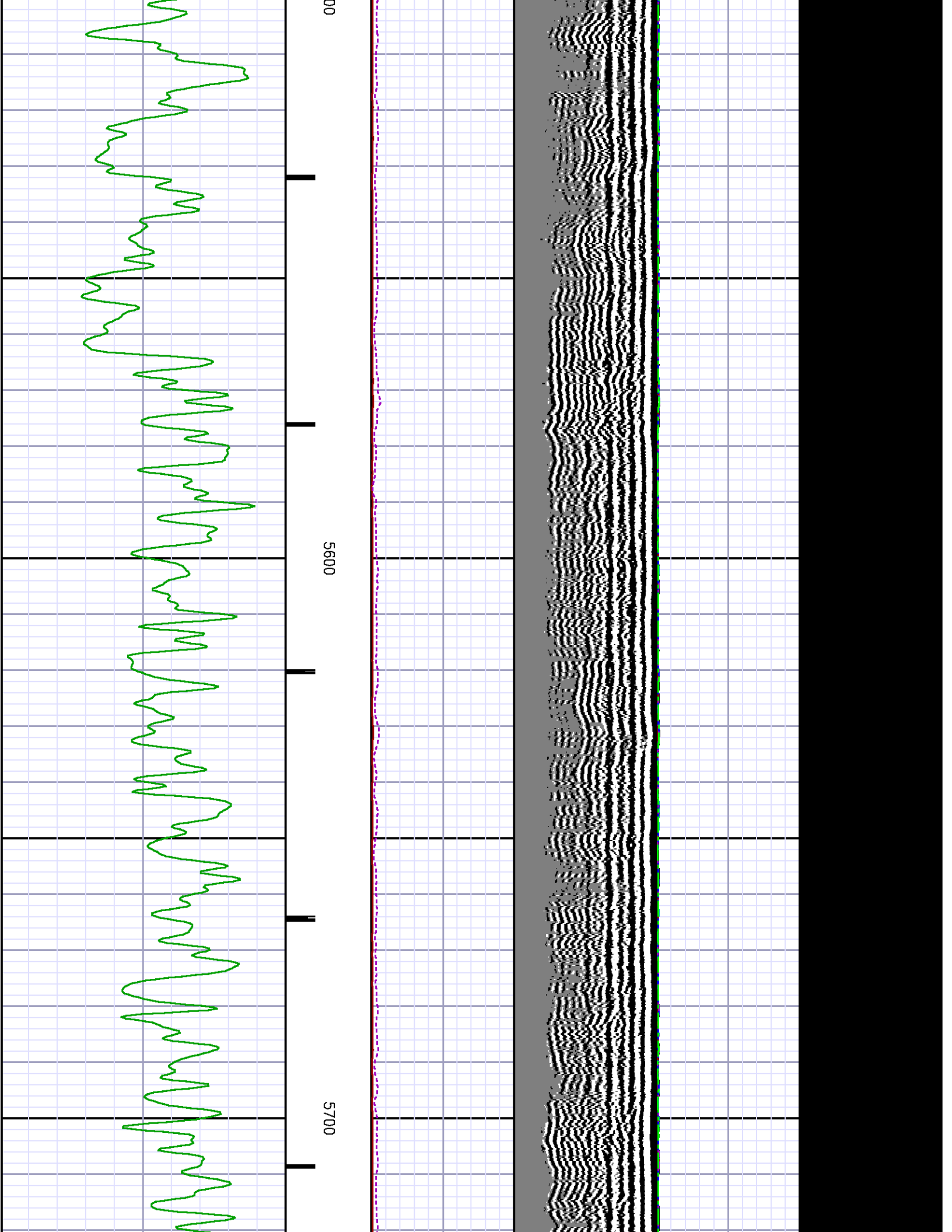


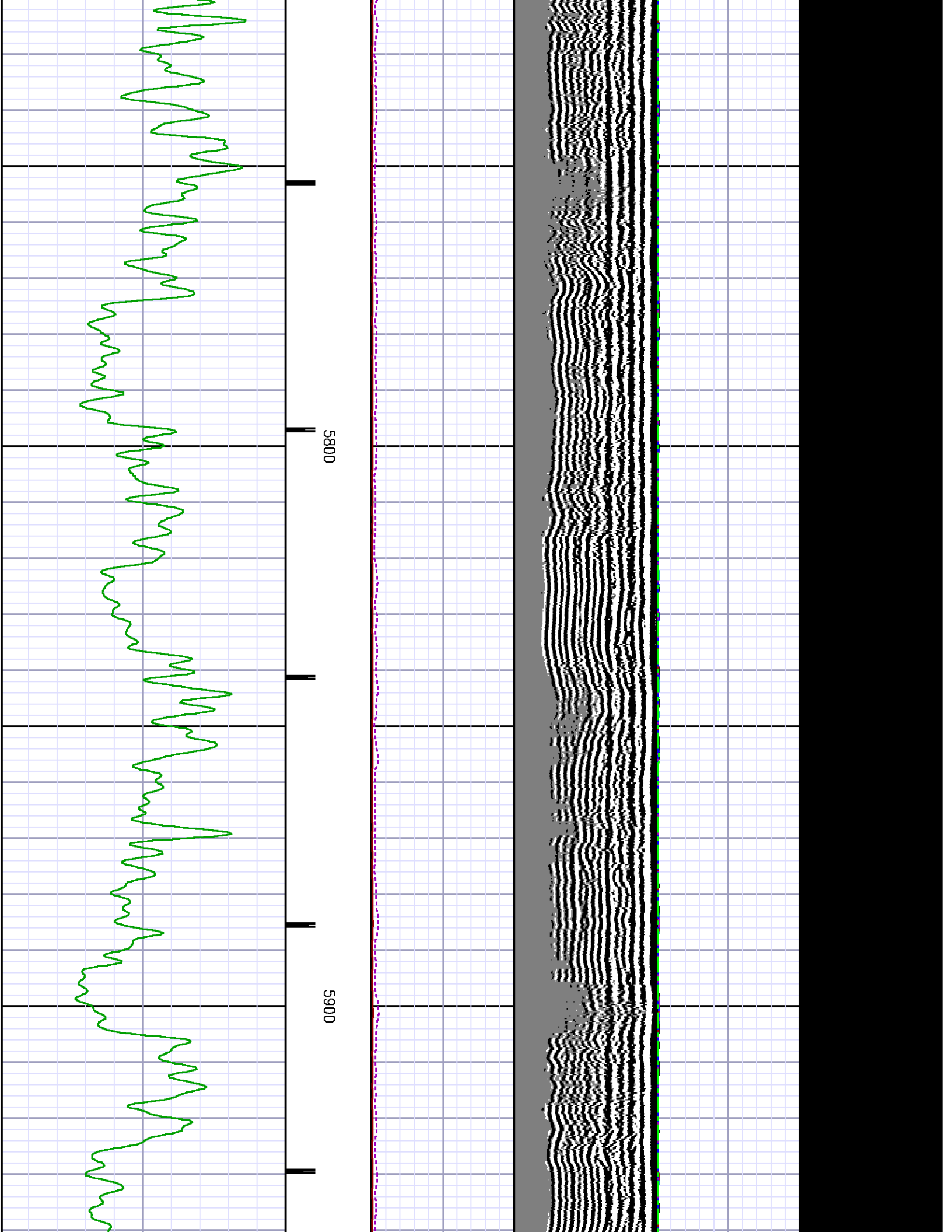


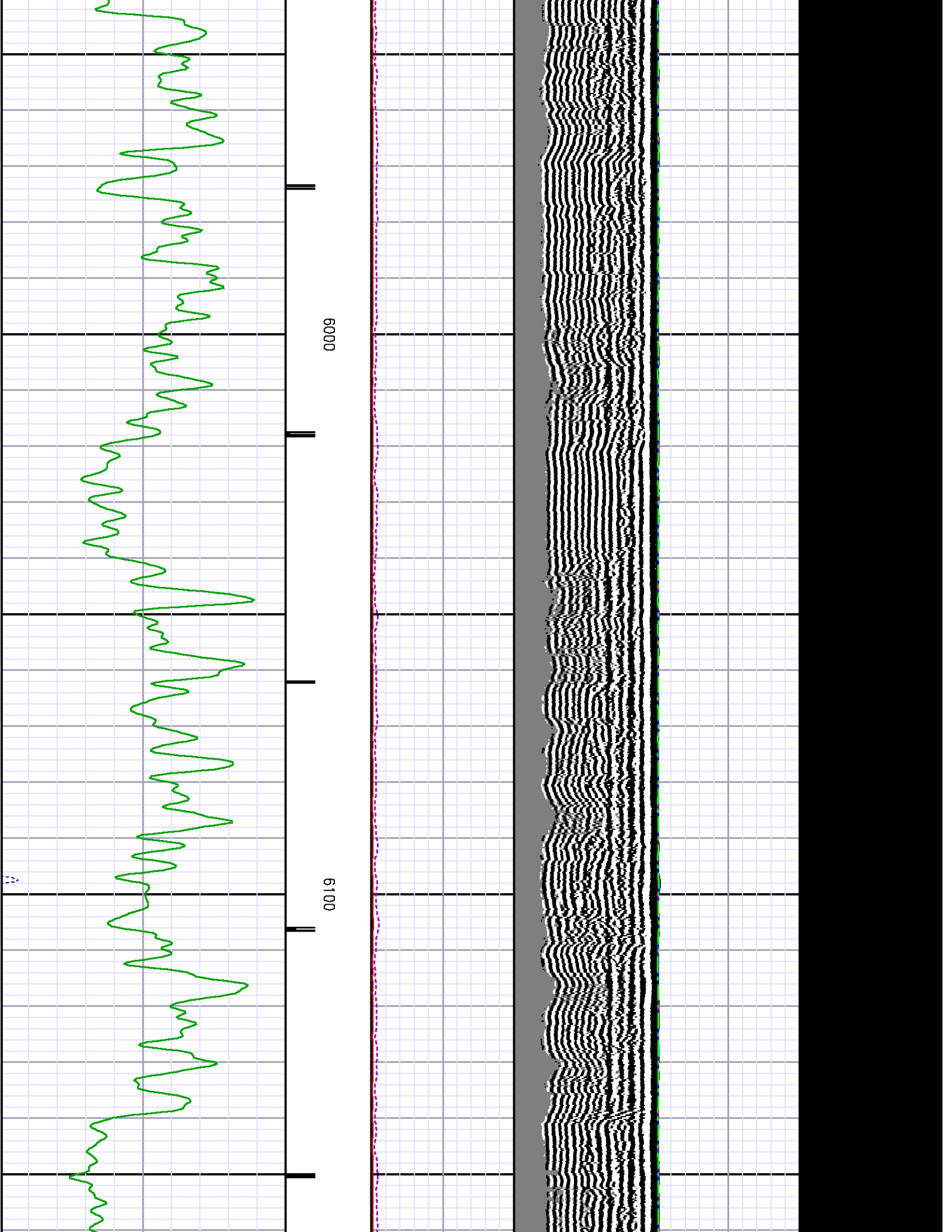


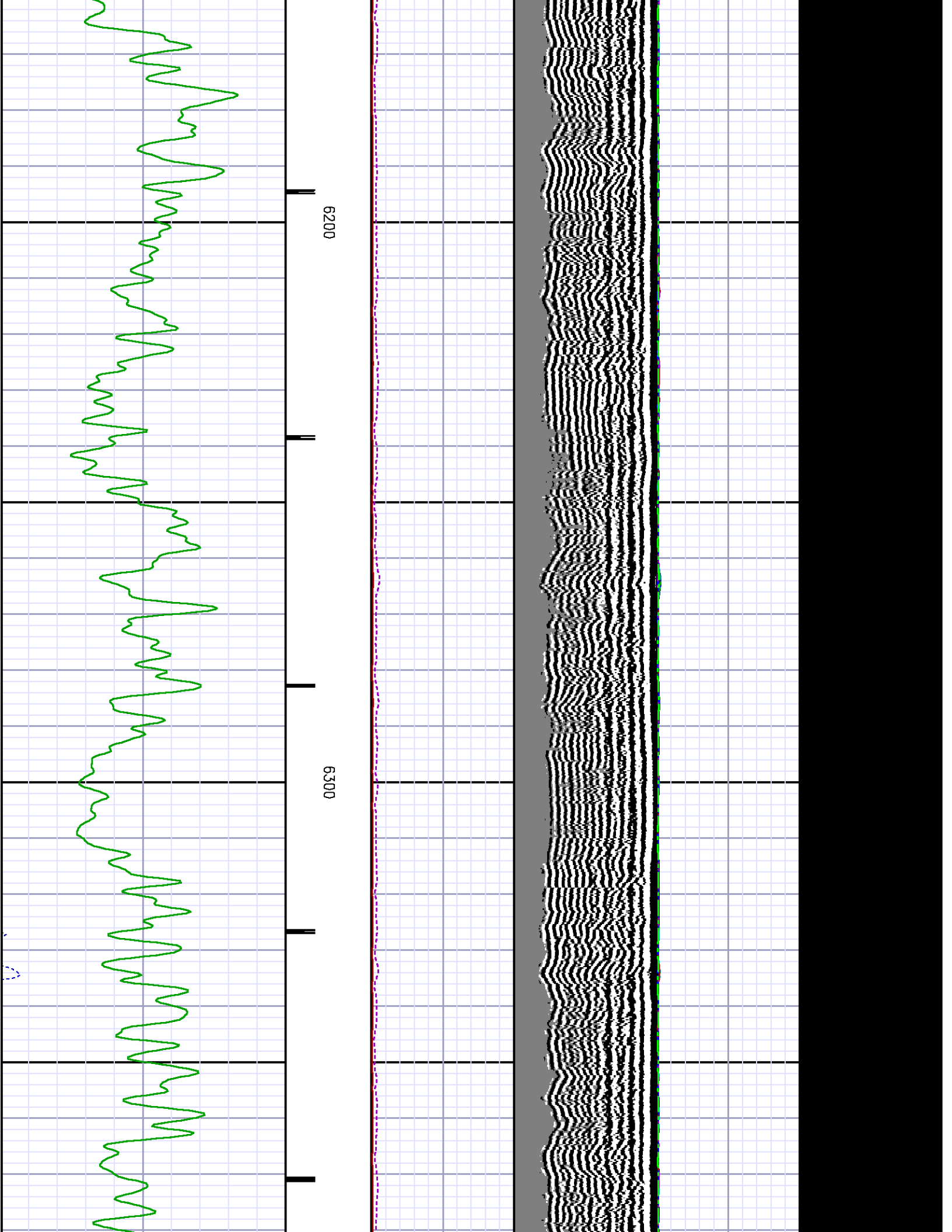


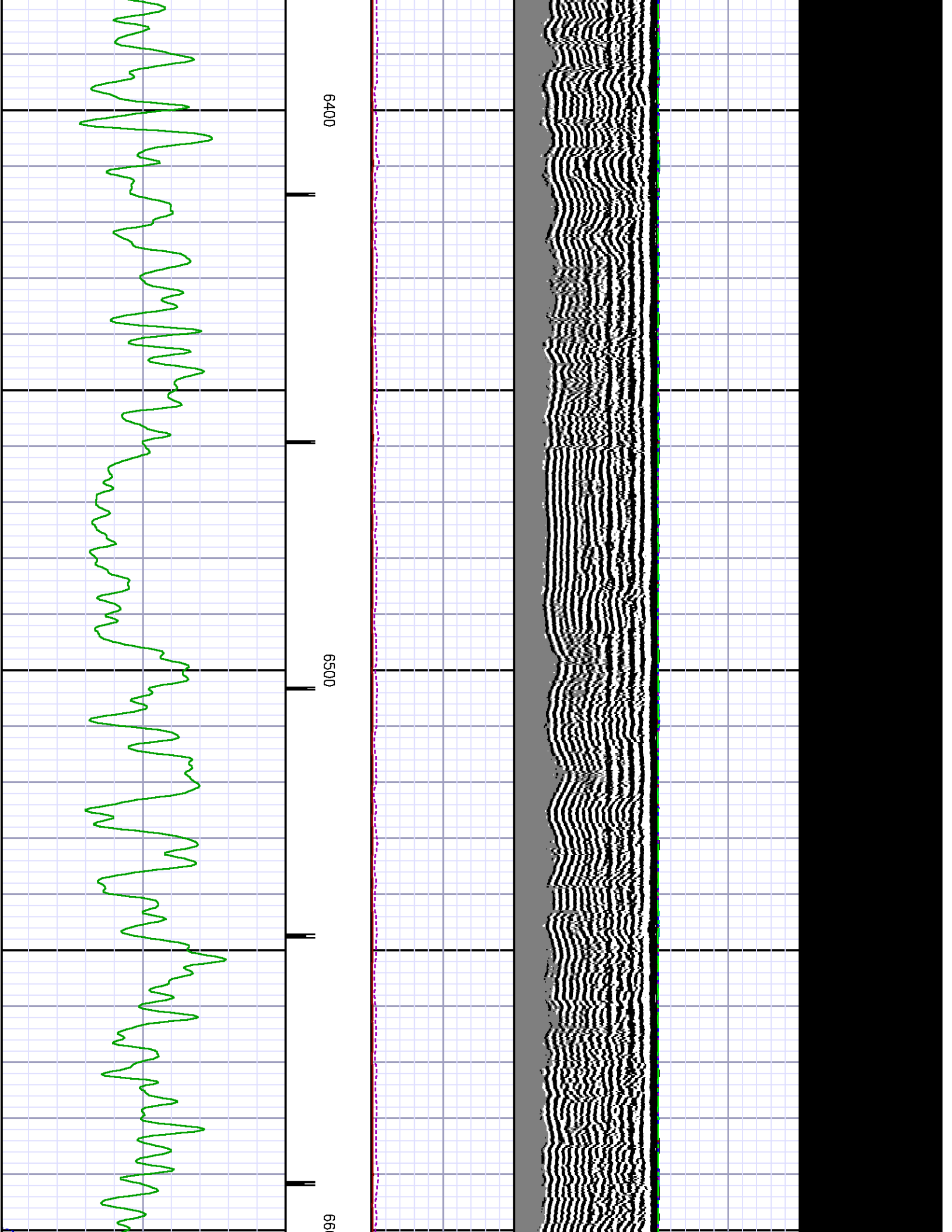


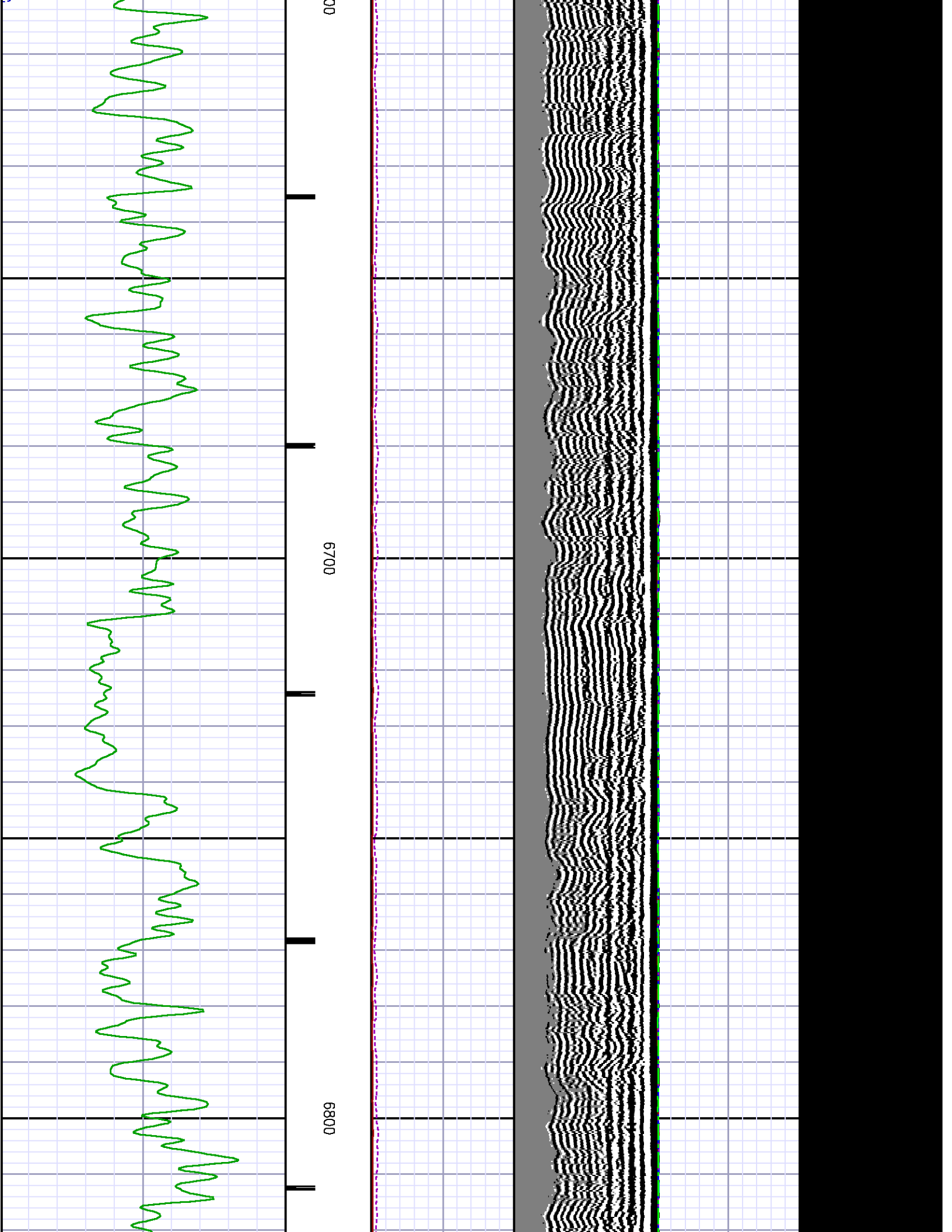


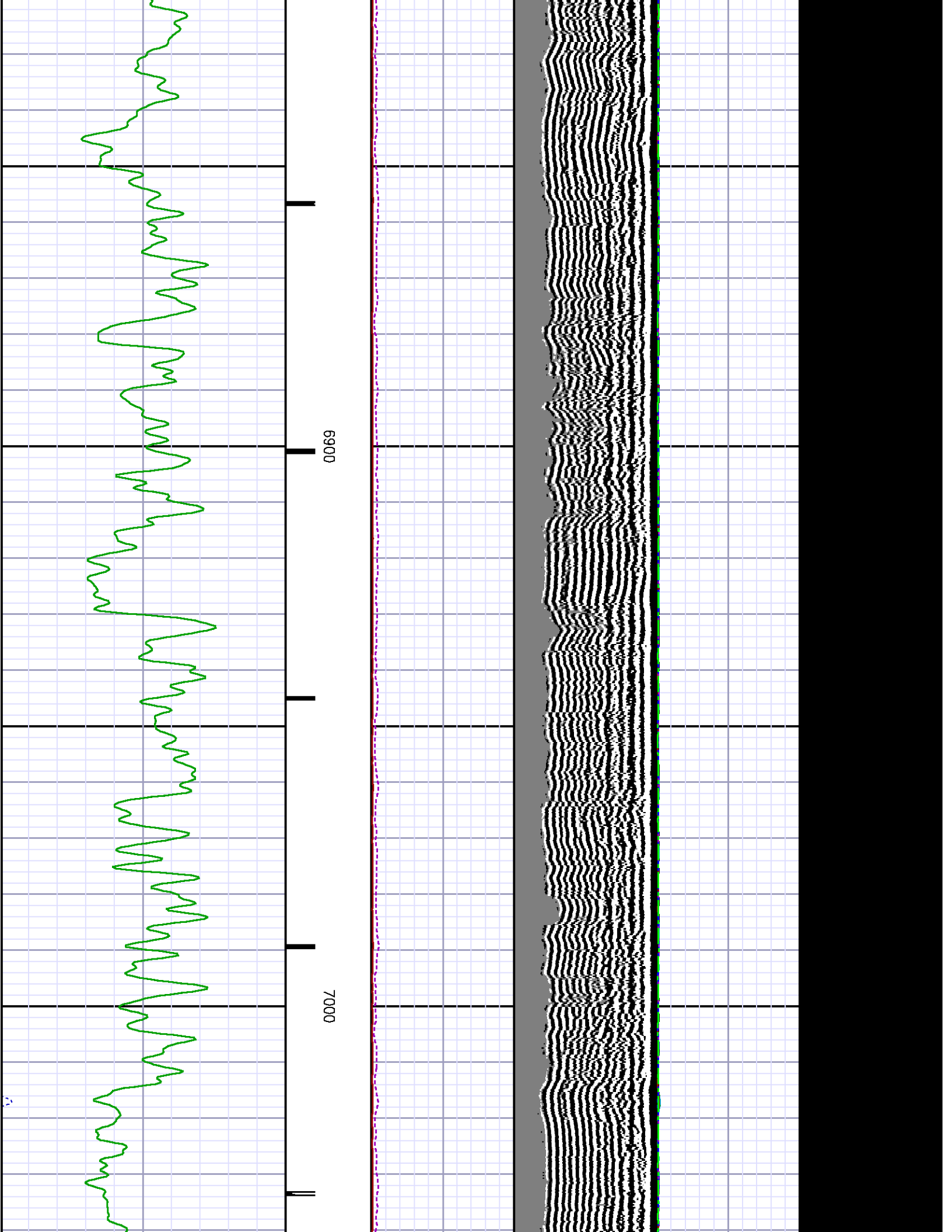


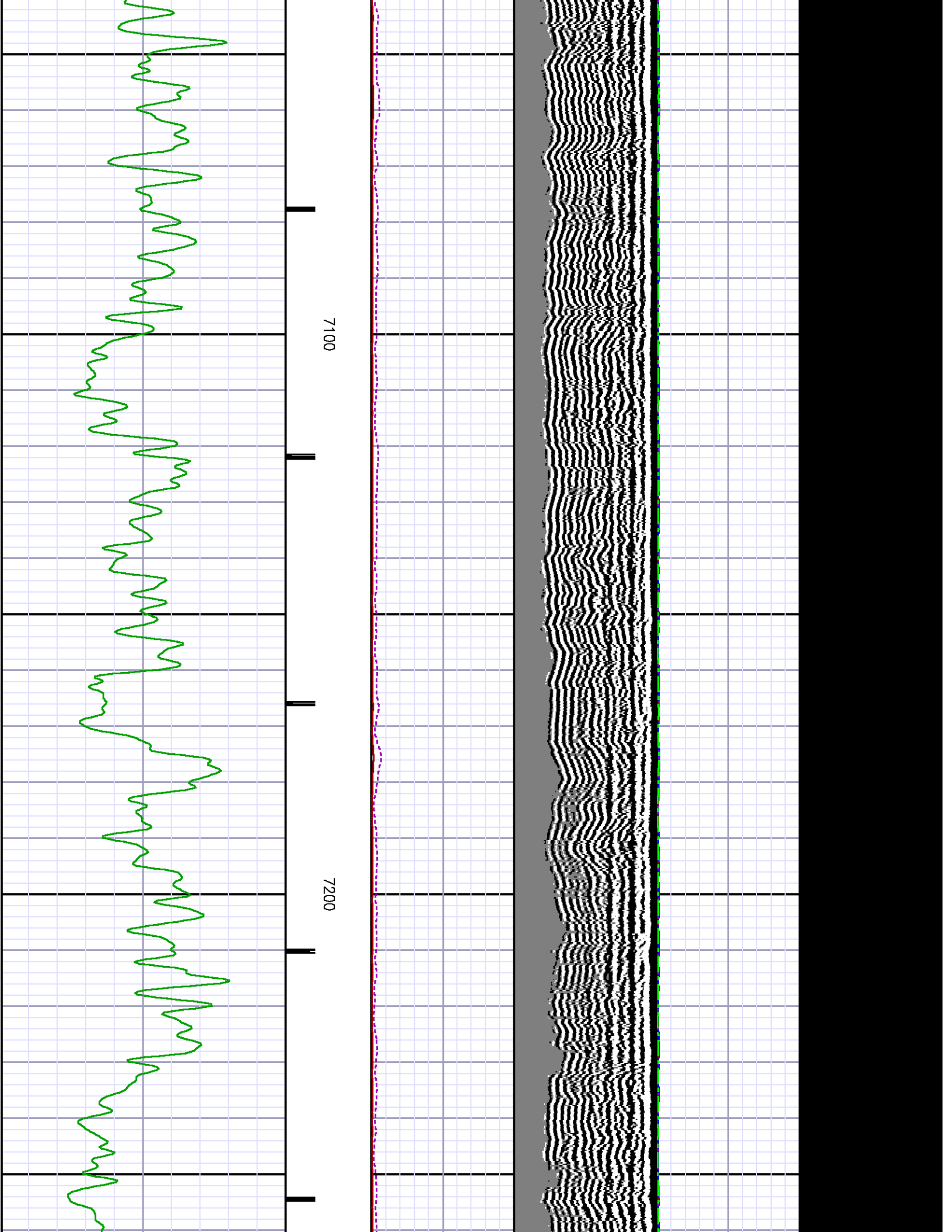


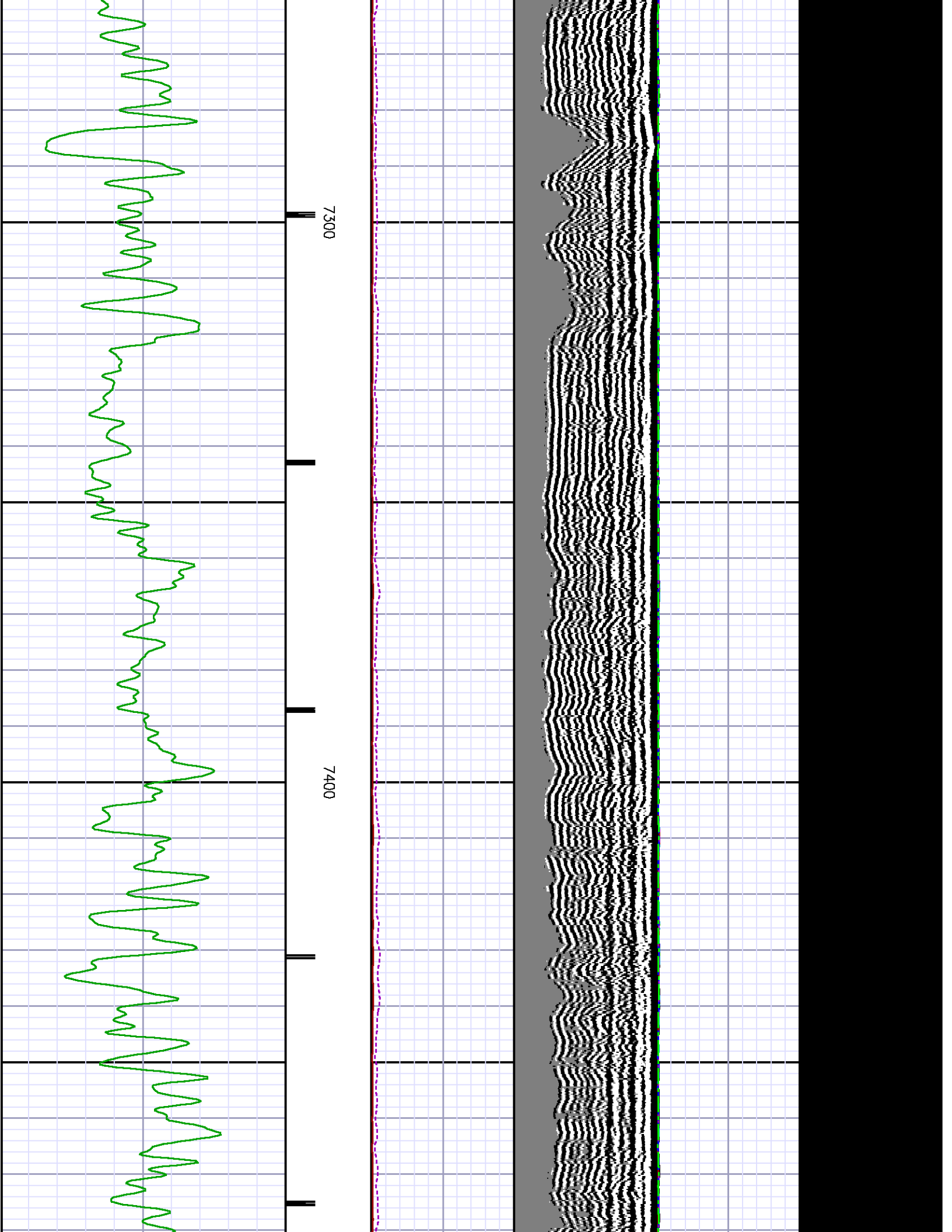


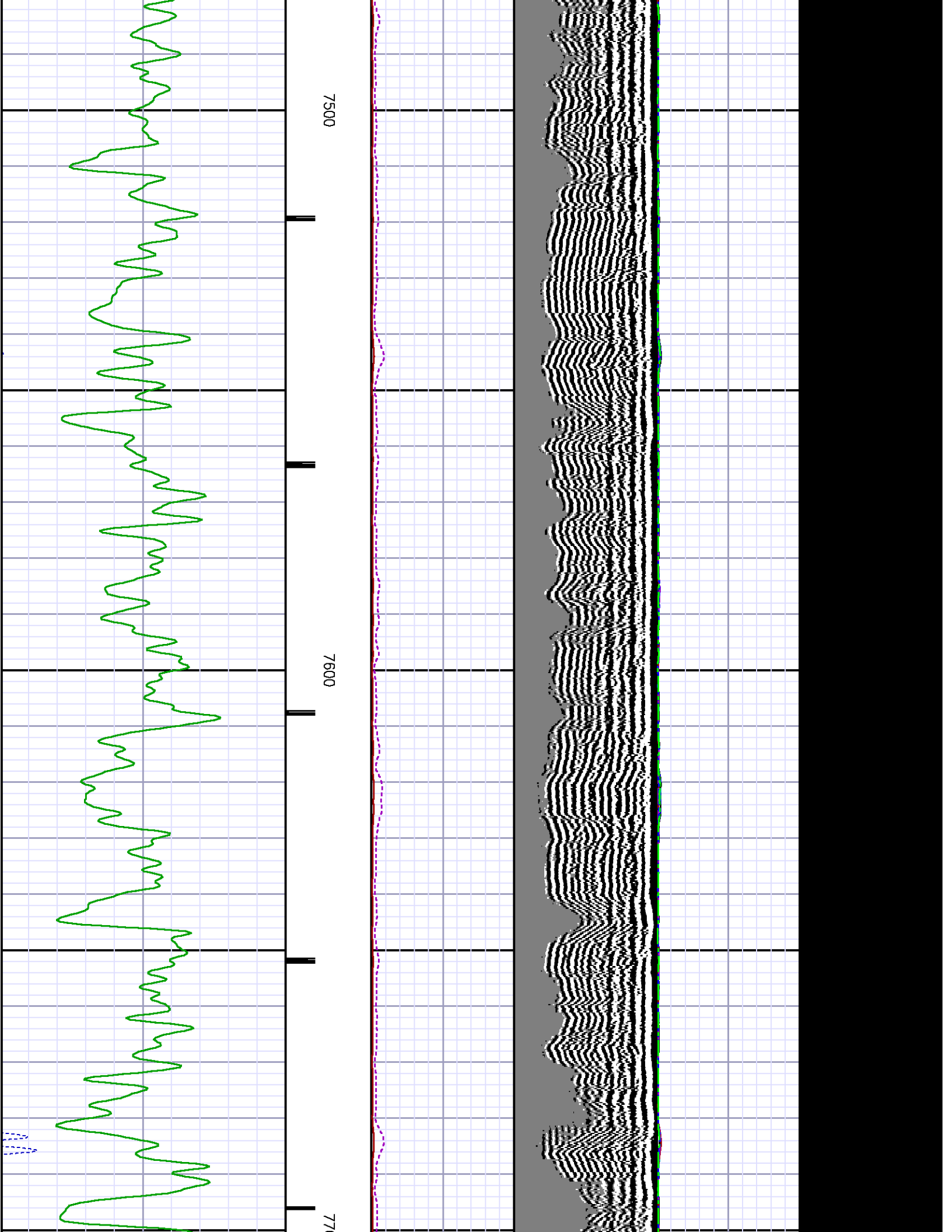


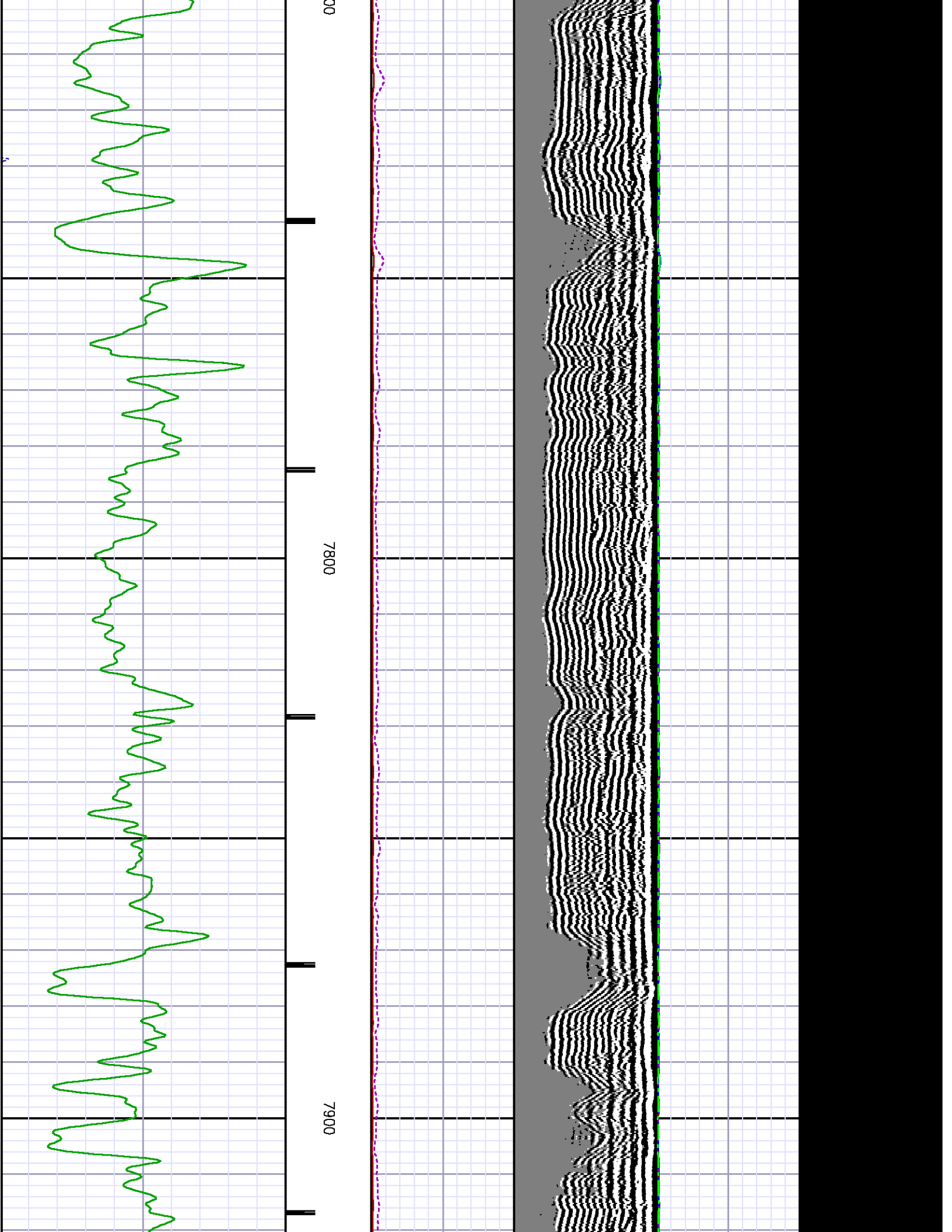


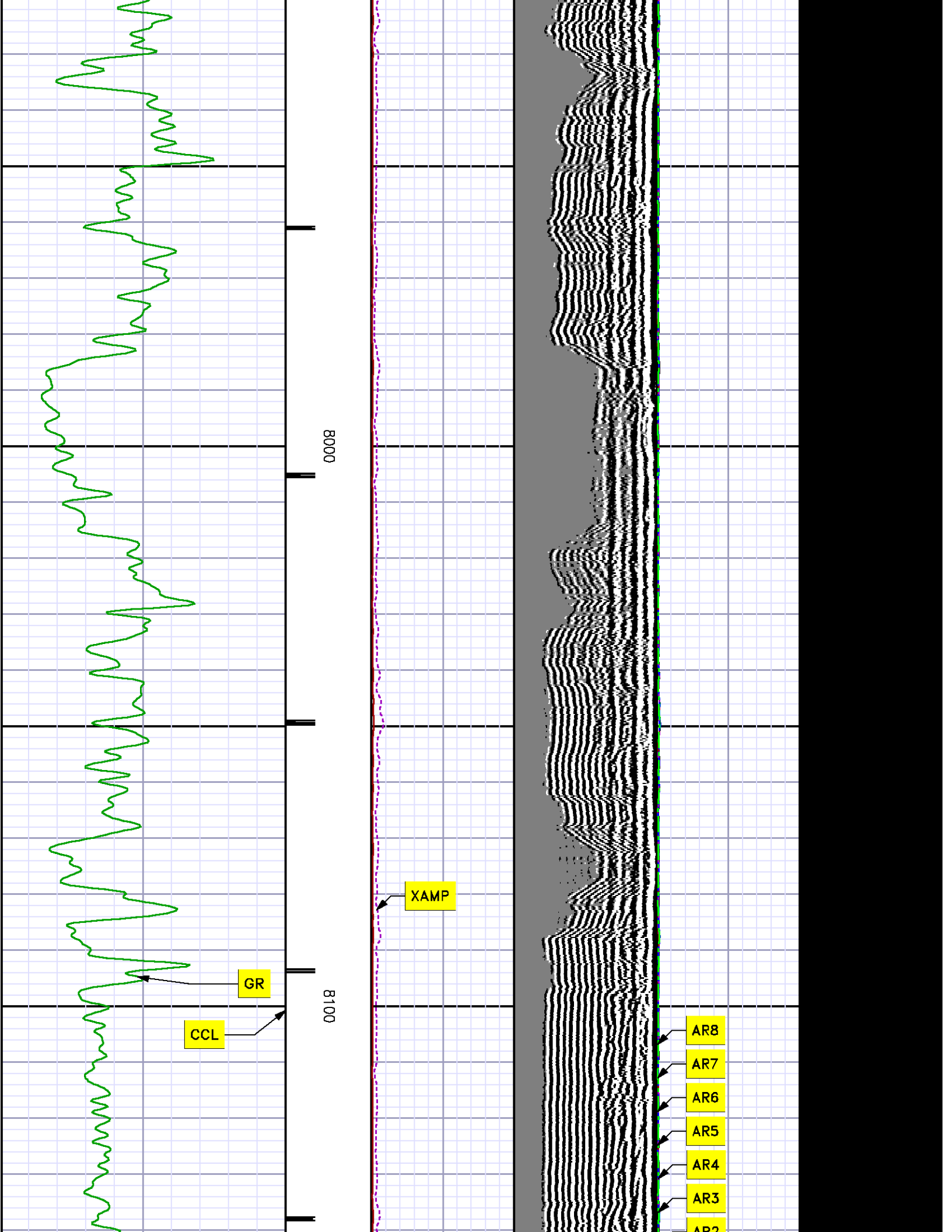












8000

8100

GR

CCL

XAMP

AR8

AR7

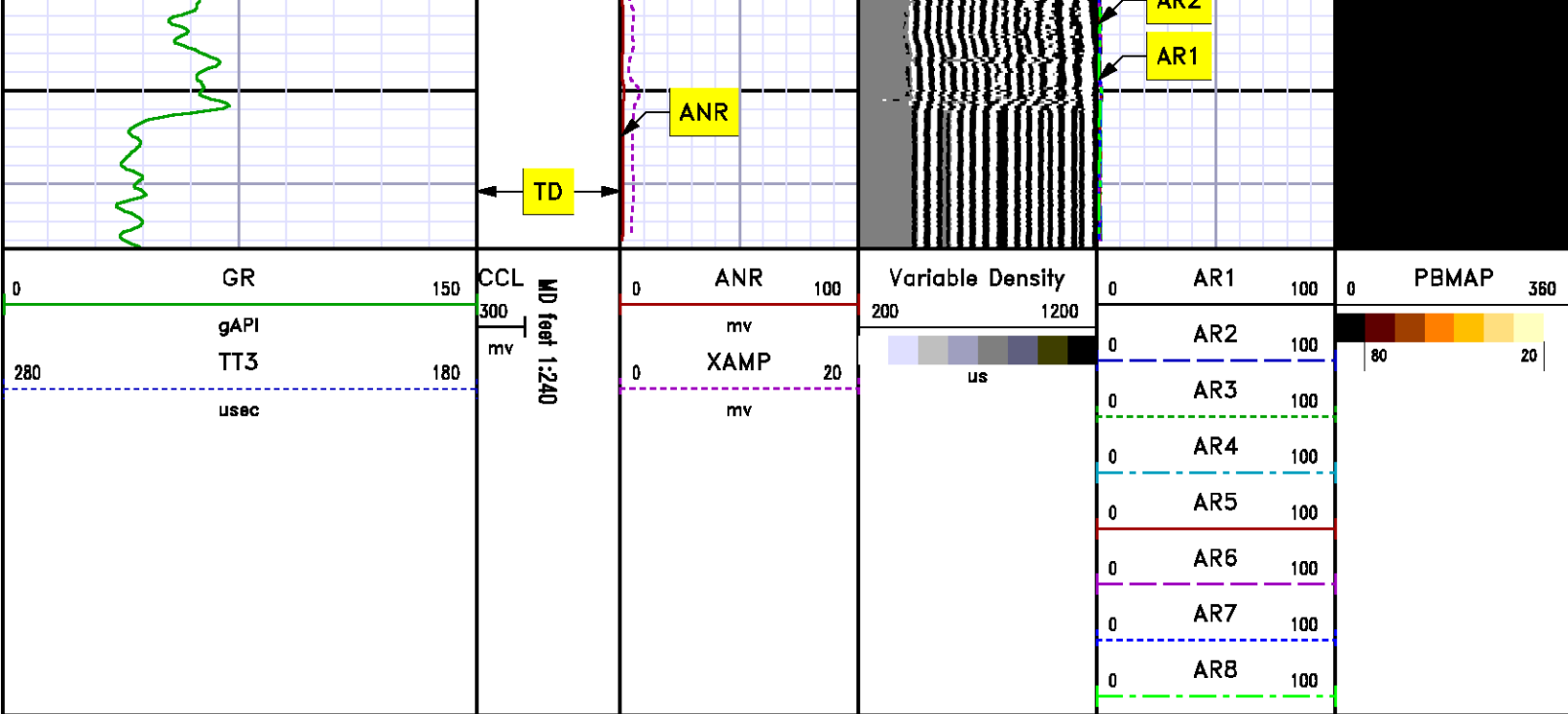
AR6

AR5

AR4

AR3

AR2



***REPEAT SECTION
0 PSI***

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	310.000	usec	7849.869	8180.000
RAL	Amp Gate Start Near	195.000	usec	7849.869	8180.000
RAL	Amp Gate Start Radial	195.000	usec	7849.869	8180.000
RAL	Amp Gate Width Far	25.000	usec	7849.869	8180.000
RAL	Amp Gate Width Near	25.000	usec	7849.869	8180.000
RAL	Amp Gate Width Radial	25.000	usec	7849.869	8180.000
RAL	casing od	4.500	inches	7849.869	8180.000
RAL	casing wt	11.600	lbm/ft	7849.869	8180.000
RAL	FB Start Far	291.900	usec	7849.869	8180.000
RAL	FB Start Near	180.000	usec	7849.869	8180.000
RAL	FB Start Radial	180.000	usec	7849.869	8180.000
RAL	FB Thresh Far	15.000	mv	7849.869	8180.000
RAL	FB Thresh Near	10.000	mv	7849.869	8180.000
RAL	FB Thresh Radial	10.000	mv	7849.869	8180.000
RAL	Fluid Travel Time	200.000	usec/ft	7849.869	8180.000

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

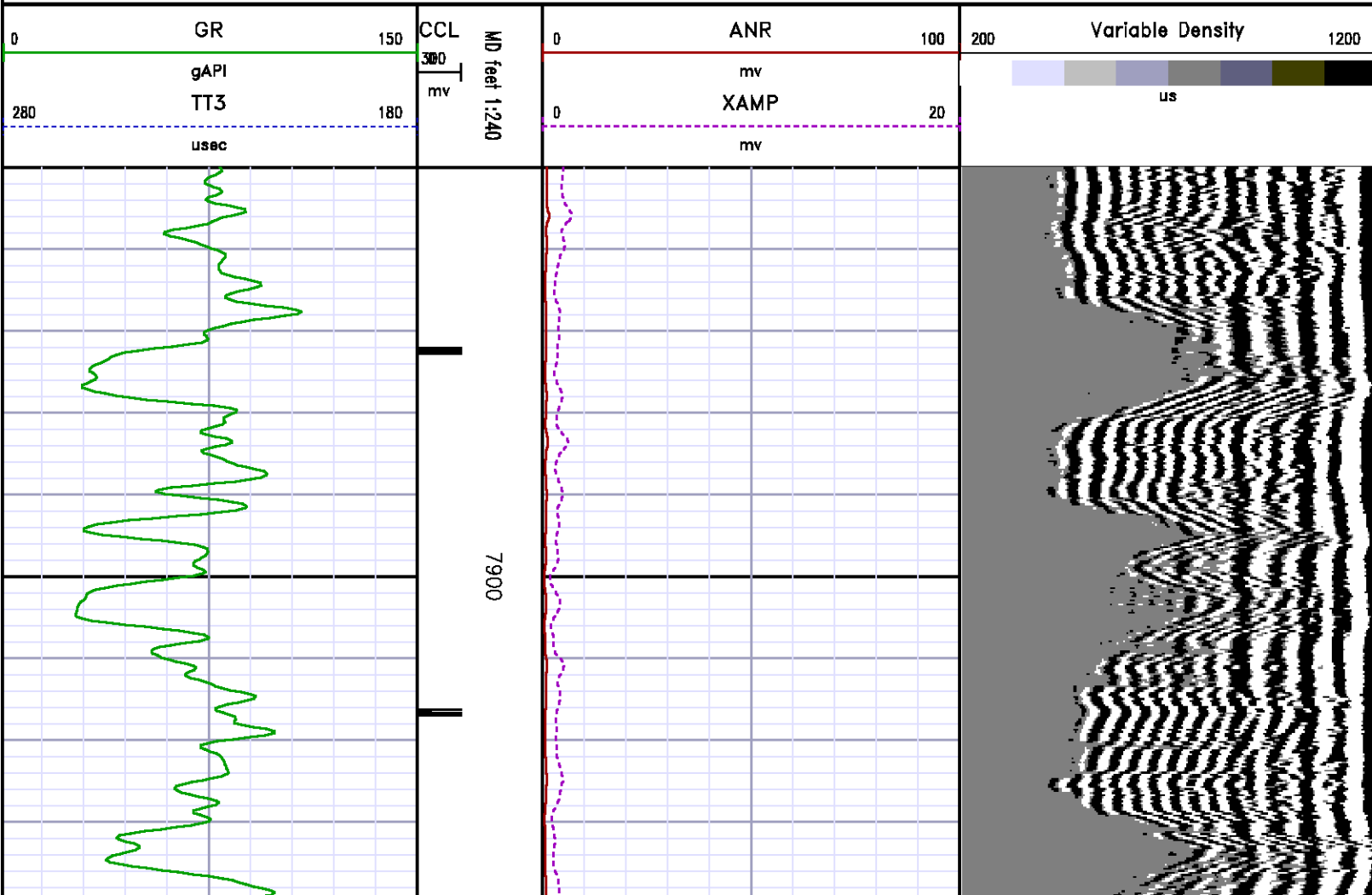
Well : YOUBERG RWF 533-23

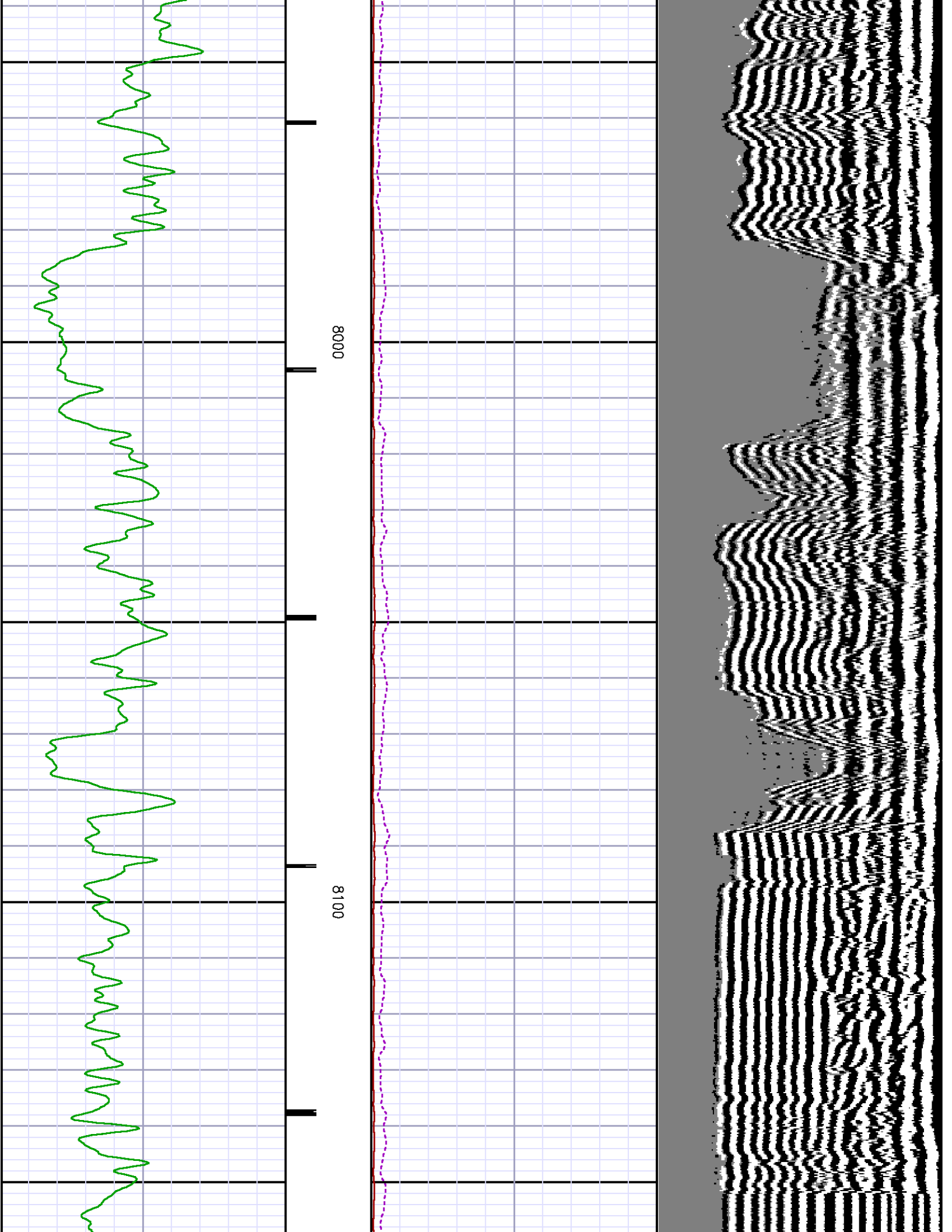
File Name : d:\welldata\wpx energy\rwf 533-23\ral533\repeat.xtf

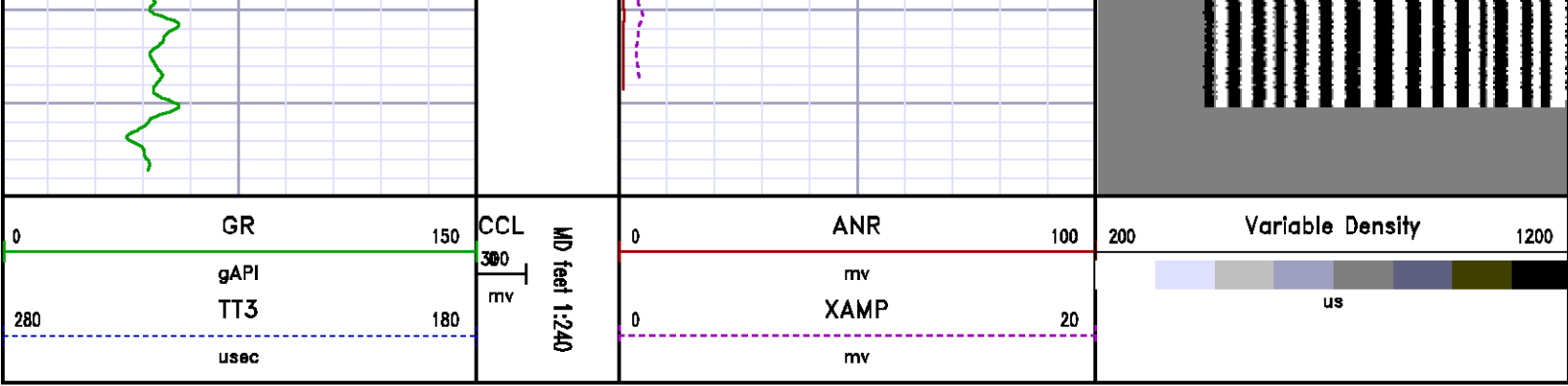
Mode : PlotMgr 5.4.504

Interval : 7850.00 - 8180.00 feet UP

Created : 4/23/2013 1:56:17 PM







CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP\106A21 shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sun Apr 21 13:42:09 2013 TOOL SERIES: 1426XA ASSET: 106 SEQ: A21

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	216	216	30	166	25	-0.376	100.00	0.11
3 Ft. Receiver	216	216	30	143	25	-0.320	100.00	0.10
5 Ft. Receiver	324	320	30	244	25	0.486	150.00	0.12
Radial #1	216	216	30	147	25	0.396	100.00	0.10
Radial #2	216	216	30	147	25	-0.016	100.00	0.10
Radial #3	216	216	30	147	25	0.095	100.00	0.10
Radial #4	216	216	30	147	25	-0.165	100.00	0.10
Radial #5	216	216	30	147	25	-0.195	100.00	0.11
Radial #6	216	216	30	147	25	0.010	100.00	0.11
Radial #7	216	216	30	147	25	-0.094	100.00	0.11
Radial #8	216	216	30	147	25	-0.356	100.00	0.11

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\106A21 fld.cal

DATE/TIME PERFORMED: Sun Apr 21 15:31:36 2013 TOOL SERIES: 1426XA ASSET: 106 SEQ: A21

Tool Delay [usec] Casing OD In Casing Wt lbm/ft Casing ID In

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="-0.051"/>	<input type="text" value="0.000"/>	<input type="text" value="0.99"/>	<input type="text" value="100.000"/>
3 Ft. Receiver	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-1.083"/>			
5 Ft. Receiver	<input type="text" value="305"/>	<input type="text" value="25"/>	<input type="text" value="-1.114"/>			
Radial #1	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-1.807"/>			
Radial #2	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-1.529"/>			
Radial #3	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-1.276"/>			
Radial #4	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-1.417"/>			
Radial #5	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-1.213"/>			
Radial #6	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-1.279"/>			
Radial #7	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-0.977"/>			
Radial #8	<input type="text" value="195"/>	<input type="text" value="25"/>	<input type="text" value="-1.080"/>			

GAMMA RAY

Calibration File: C:\case\calver\GR\209A1.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Apr 11 12:00:10 2013 TOOL SERIES: 1355XA ASSET: 209 SEQ: A1

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	<input type="text" value="147.33"/>	<input type="text" value="600.49"/>	<input type="text" value="0.408"/>	<input type="text" value="60.15"/>	<input type="text" value="245.15"/>	<input type="text" value="185.00"/>

Verification File: C:\case\calver\GR\209A1.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Thu Apr 11 12:01:16 2013 TOOL SERIES: 1355XA ASSET: 209 SEQ: A1

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	<input type="text" value="149.69"/>	<input type="text" value="589.51"/>	<input type="text" value="0.408"/>	<input type="text" value="61.11"/>	<input type="text" value="240.67"/>	<input type="text" value="179.56"/>

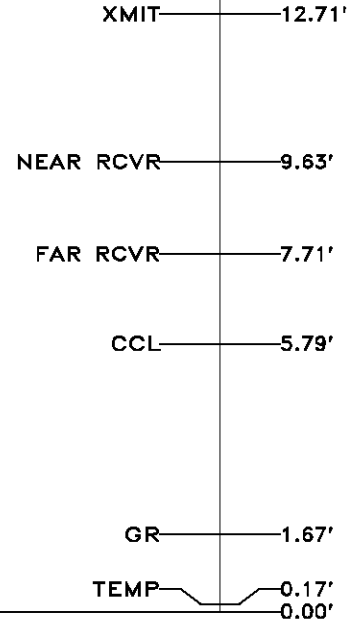
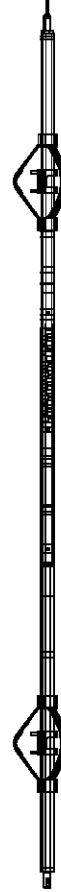
TOOL DIAGRAM

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"



Baker Atlas



Company WPX ENERGY
 Well YOUBERG RWF 533-23
 Field RULISON
 County GARFIELD State COLORADO

File No: CH069876
 API No: 05045182460000

Location
 SHL: 1402' FSL, 2313' FEL
 BHL: 2265' FSL, 1815' FEL
 SEC 23 TWP 6S RGE 94W

Elevations
 KB 5527.5 ft
 DF
 GL 5501.5 ft

23 6S 94W
 RWF 33-23 PAD
 NABORS 577