



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No:	Company	WPX ENERGY
CH070848	Well	HOEPPLI RWF 532-36
API No:	Field	RULISON
05045215500000	County	GARFIELD
	State	COLORADO
56 6S 94W RWF 33-36 PAD NABORS 576	Location SHL: 2567' FNL, 2567' FEL BHL: 2158' FNL, 2016' FEL SEC 36 TWP 6S RGE 94W	Other Services RPM
Permanent Datum	GL	Elevation 6528 ft
Log Measured From	KB	26 ft Above P. D.
Drill Measured From	KELLY BUSHING	KB 6554 ft DF GL 6528 ft

Date	12/APR/13
Run	ONE
Service Order	US575104
Depth Driller	8896 ft
Depth Logger	8890 ft
Bottom Logged Interval	8870 ft
Top Logged Interval	26 ft
Time Started	0730
Time Finished	1100
Operator Rig Time	3.5 HRS
Type of Fluid in Hole	WATER
Fluid Density	NA
Salinity	NA
Fluid Level	83 ft
Logged Cement Top	NA
Wellhead Pressure	0 psi
Maximum Hole Deviation	NA
Nominal Logging Speed	45 fpm
Maximum Recorded Temperature	233 degF
Reference Log	BAKER HUGHES BOND LOG
Reference Log Date	14/MAR/2015
Equipment No.	4271
Location	FLOYD RENEAU
Recorded By	BOB CADY
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.

Borehole Record		
Bit Size	From	To
13.5 In	26 ft	1105 ft
8.75 In	26 ft	8896 ft

Casing Record				
Size	Weight	Grade	From	To
9.825 In	32.3 lbm/ft	H-40	26 ft	1100 ft
4.5 In	11.8 lbm/ft	I-80	26 ft	8896 ft

Remarks
All data on this log is shifted and depth matched using the Gamma Ray curve to the Baker Hughes bond log dated 3/14/2013 at the client's request.
The amount of linear shift is 11 feet.
Logged with zero PSI at wellhead.
BHT = 233°F
SJ = 5382'- 5403'

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1426XA	10218496	CENT
1	1	GR/CCL	2546XA	10414456	CENT

PRIMARY PRESENTATION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	26.624	8885.000
RAL	Amp Gate Start Near	195.000	usec	26.624	8885.000
RAL	Amp Gate Start Radial	195.000	usec	26.624	8885.000
RAL	Amp Gate Width Far	25.000	usec	26.624	8885.000
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RAL	Amp Gate Width Radial	25.000	usec	26.624	8885.000
RAL	casing od	4.500	inches	26.624	8885.000
RAL	casing wt	11.600	lbm/ft	26.624	8885.000
RAL	FB Start Far	291.900	usec	26.624	8885.000
RAL	FB Start Near	185.000	usec	26.624	8885.000
RAL	FB Start Radial	180.000	usec	26.624	8885.000
RAL	FB Thresh Far	10.000	mv	26.624	8885.000
RAL	FB Thresh Near	4.000	mv	26.624	8885.000
RAL	FB Thresh Radial	4.000	mv	26.624	8885.000
RAL	Fluid Travel Time	200.000	usec/ft	26.624	8885.000

DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-16.750	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	CHV	FPR2

1426XA -15.750
2459XA -11.340
2459XA -9.490
2459XA -4.090

FPR3	FPR5	TT3	TTR1	TTR2	TTR3
TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
AFAR	SIG	TT5			
CCL					
GR					
NEU					

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

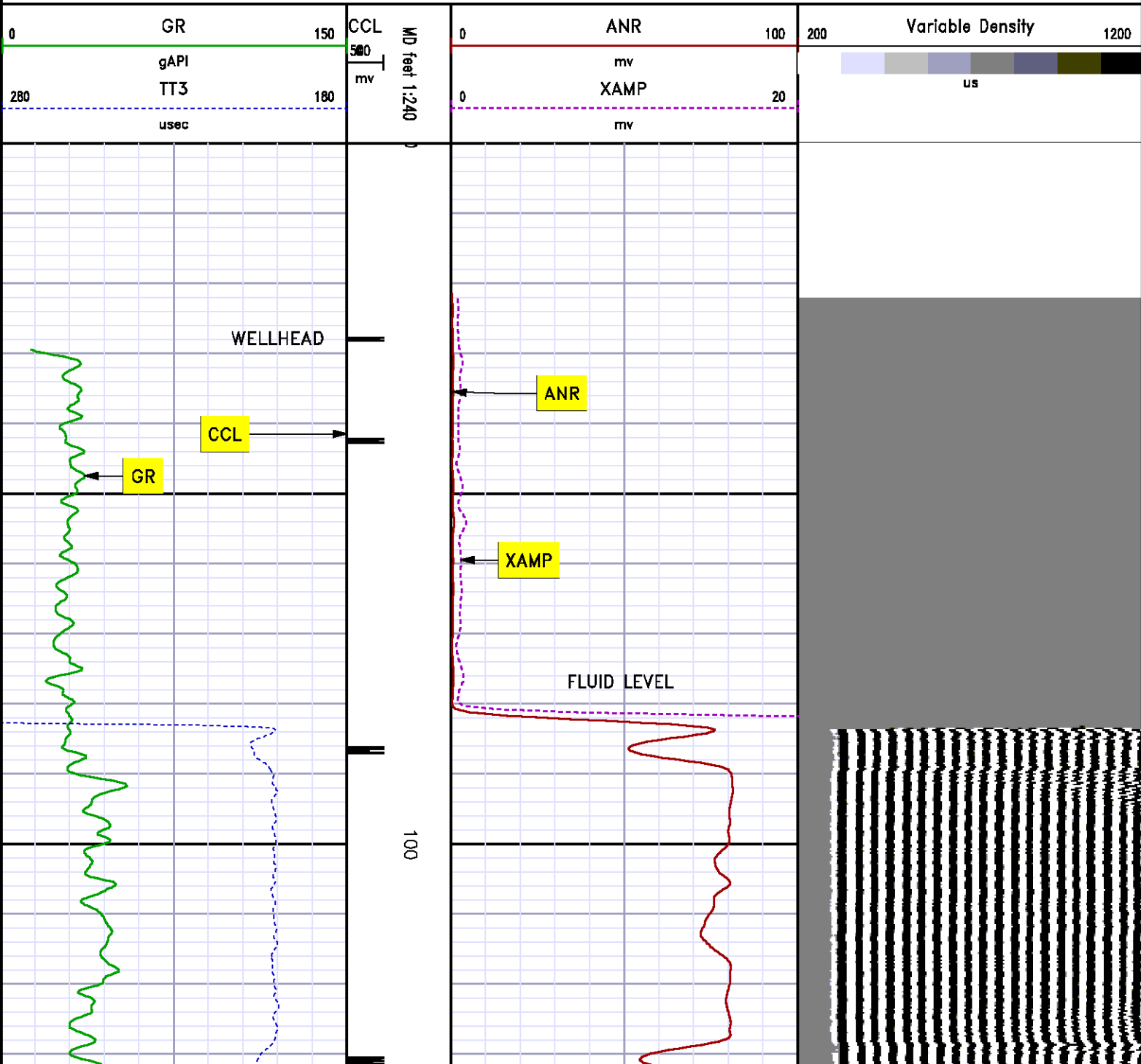
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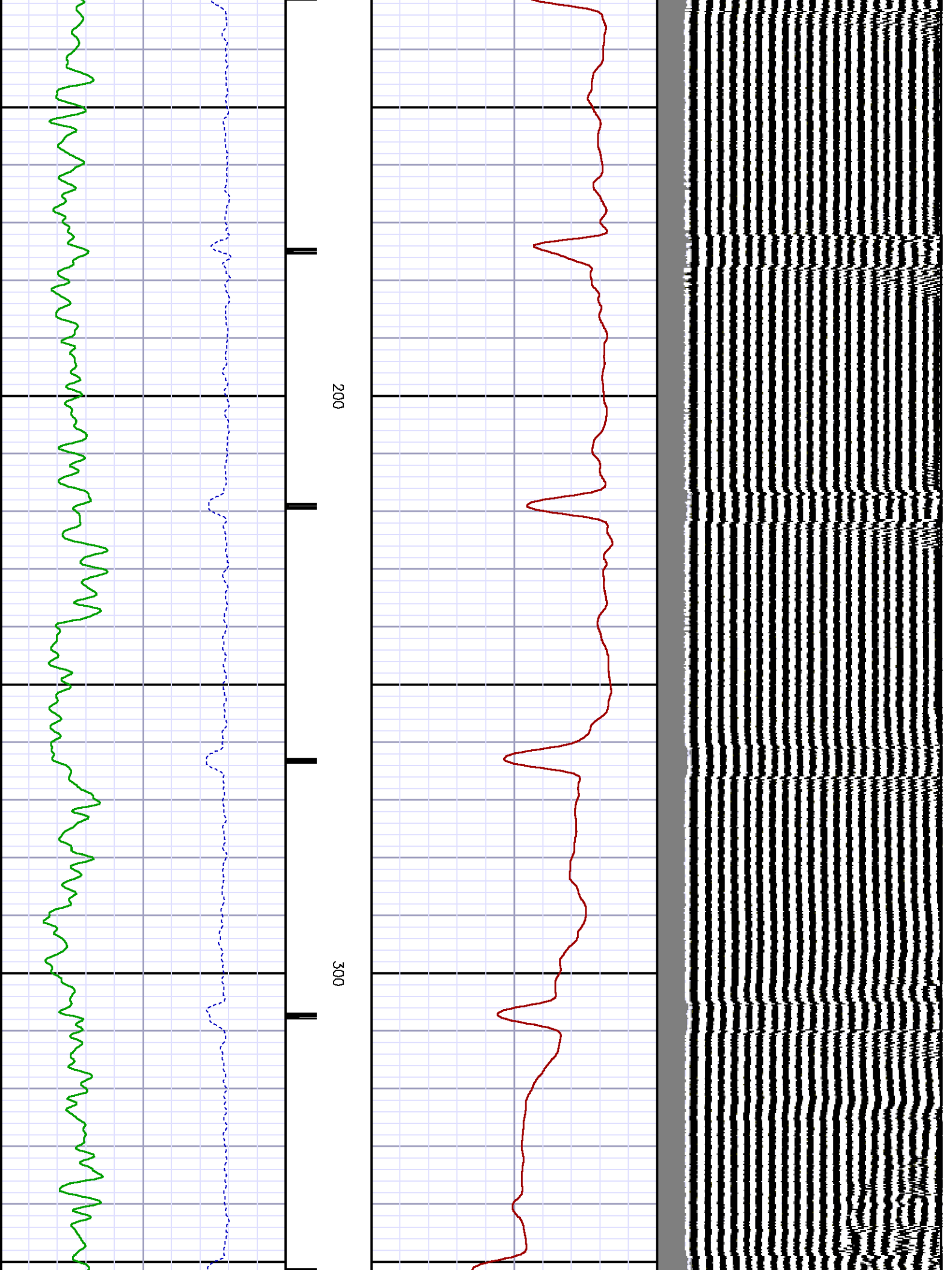
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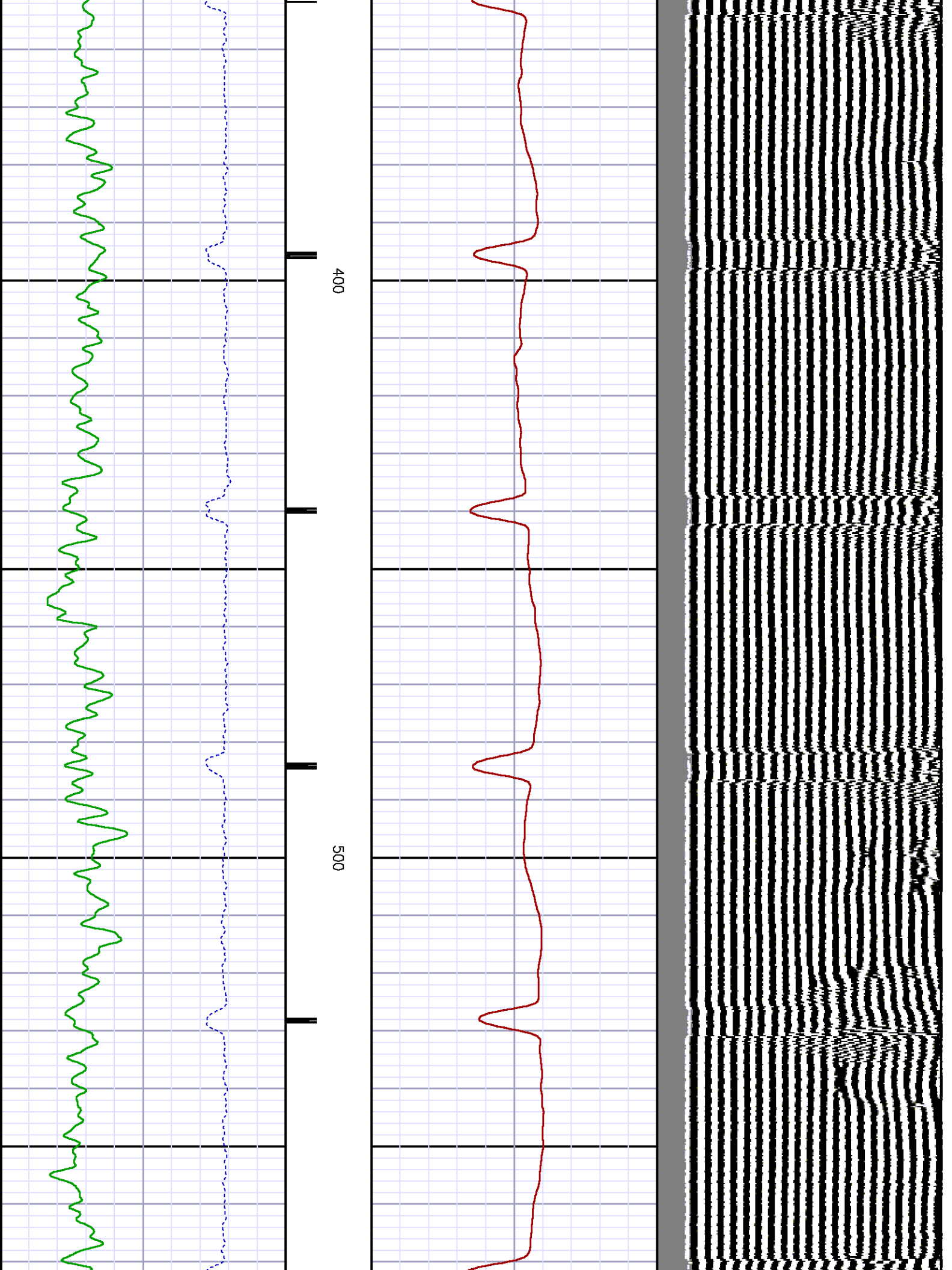
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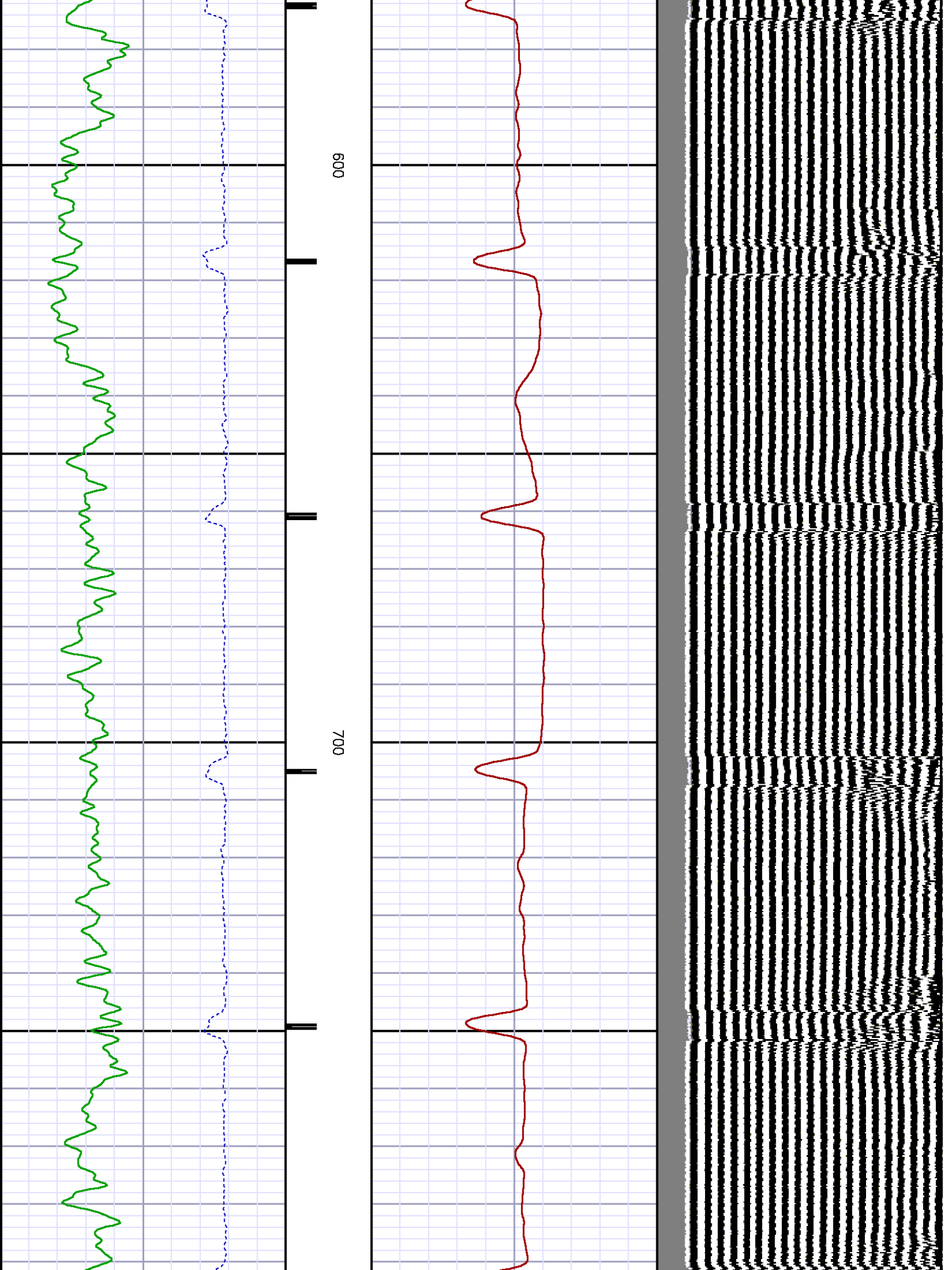
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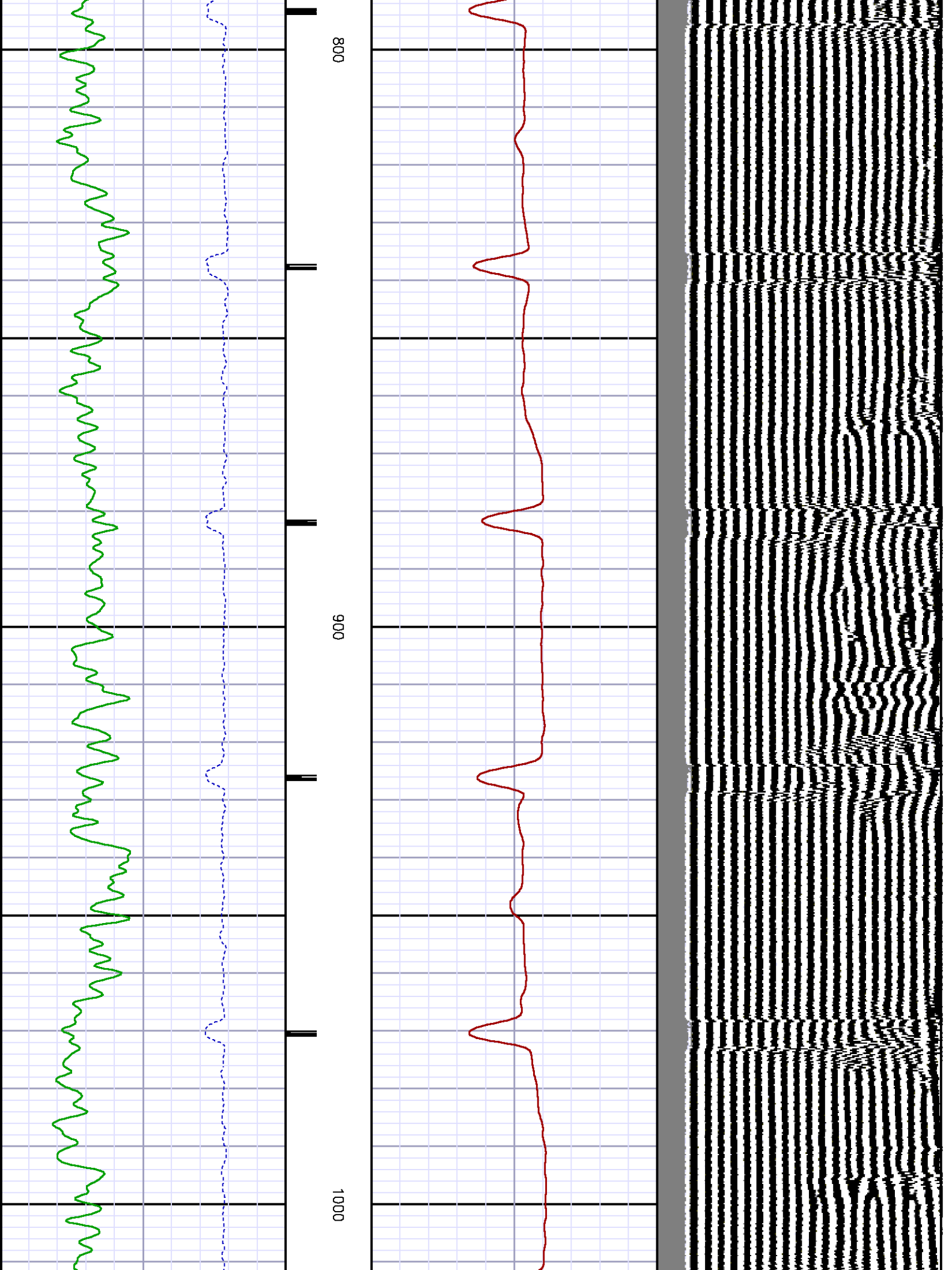
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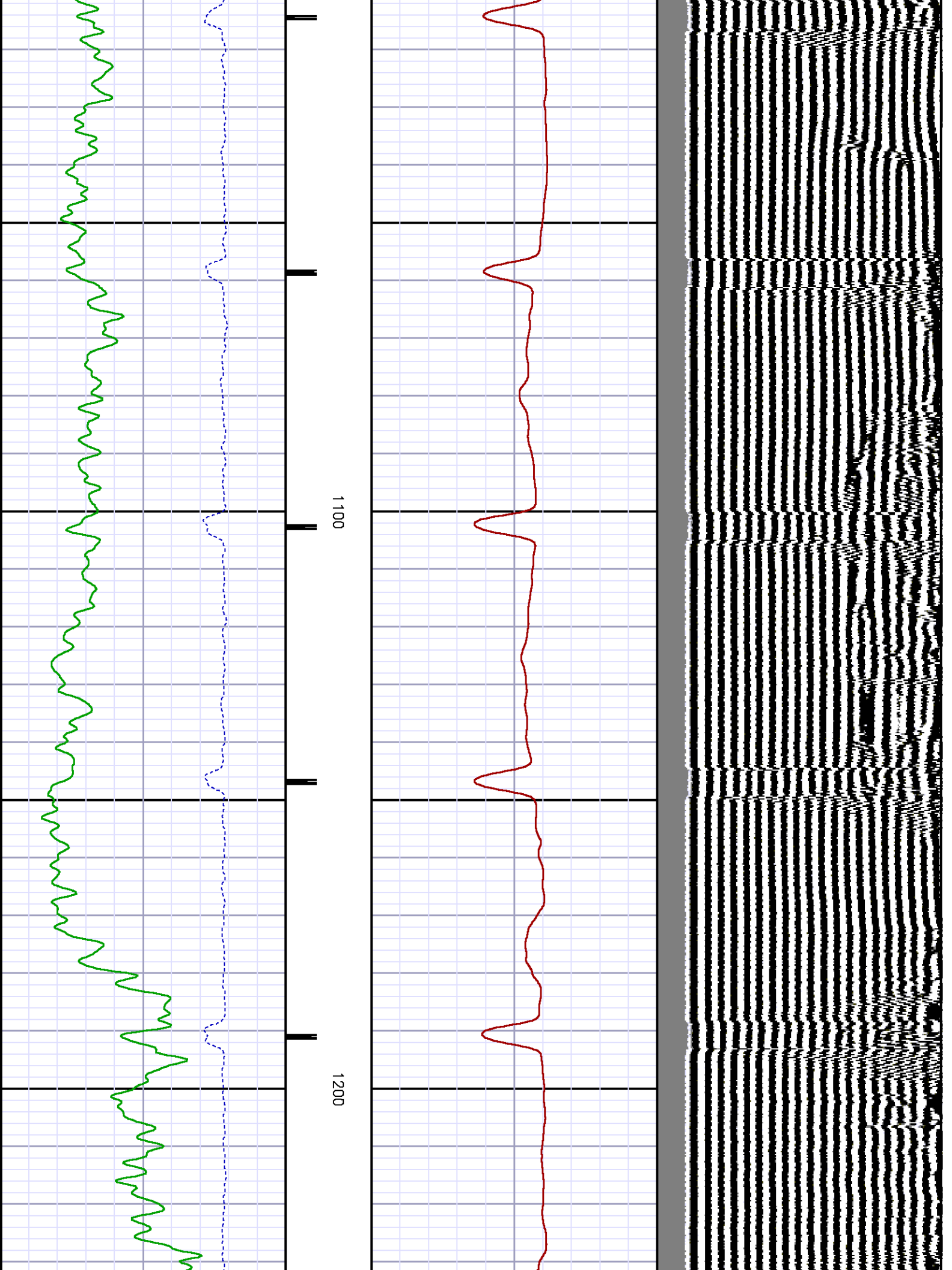


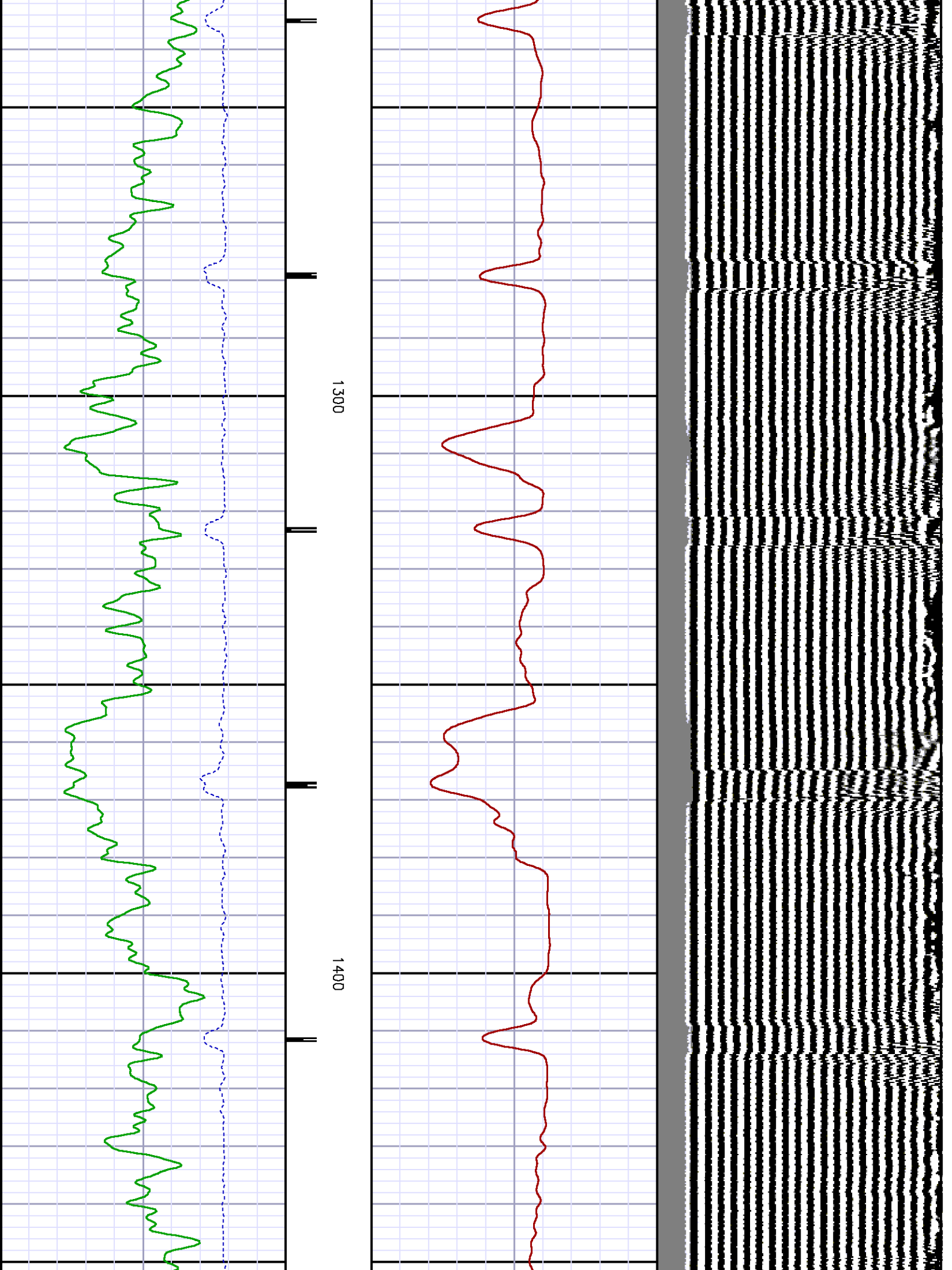


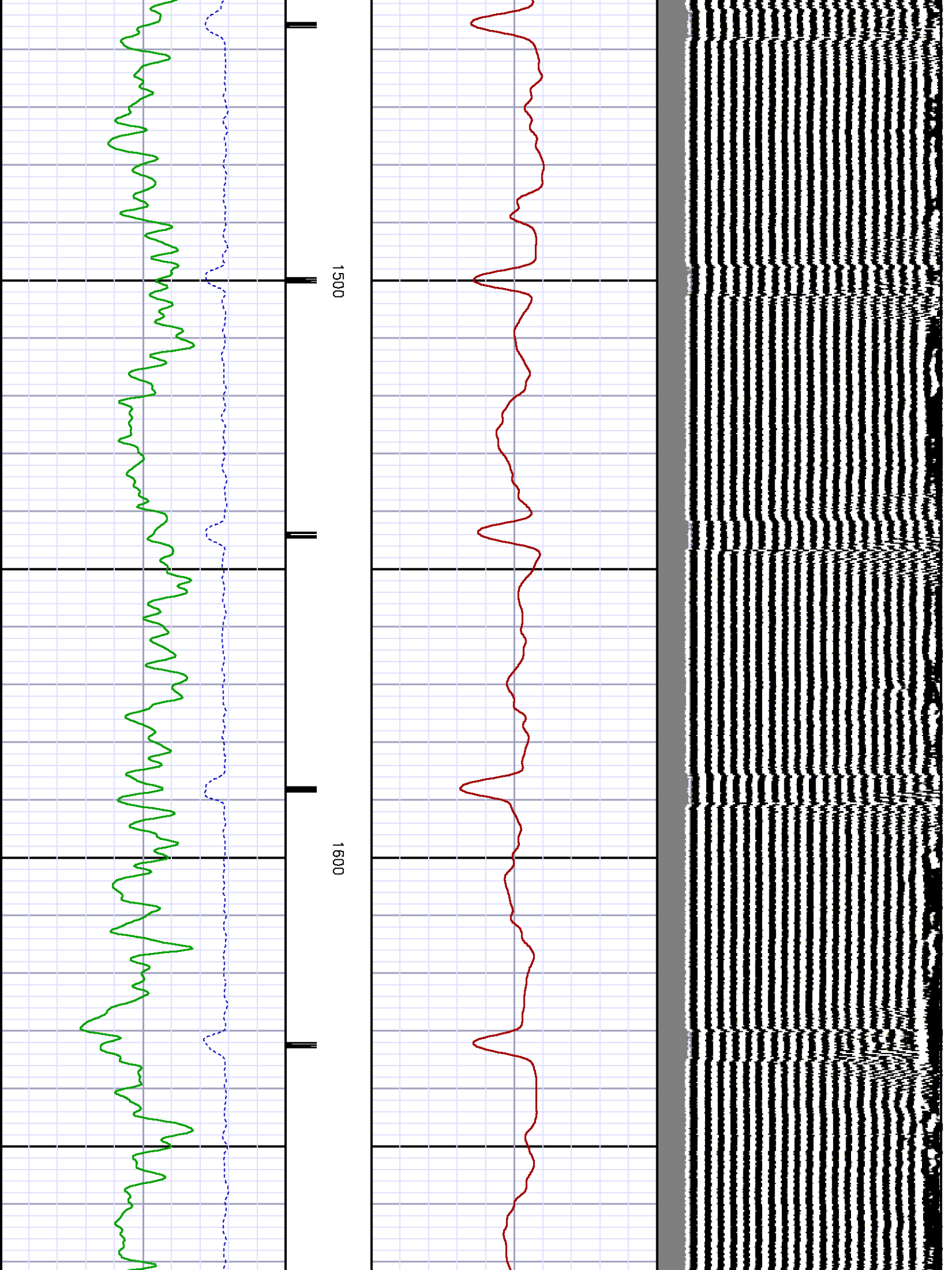


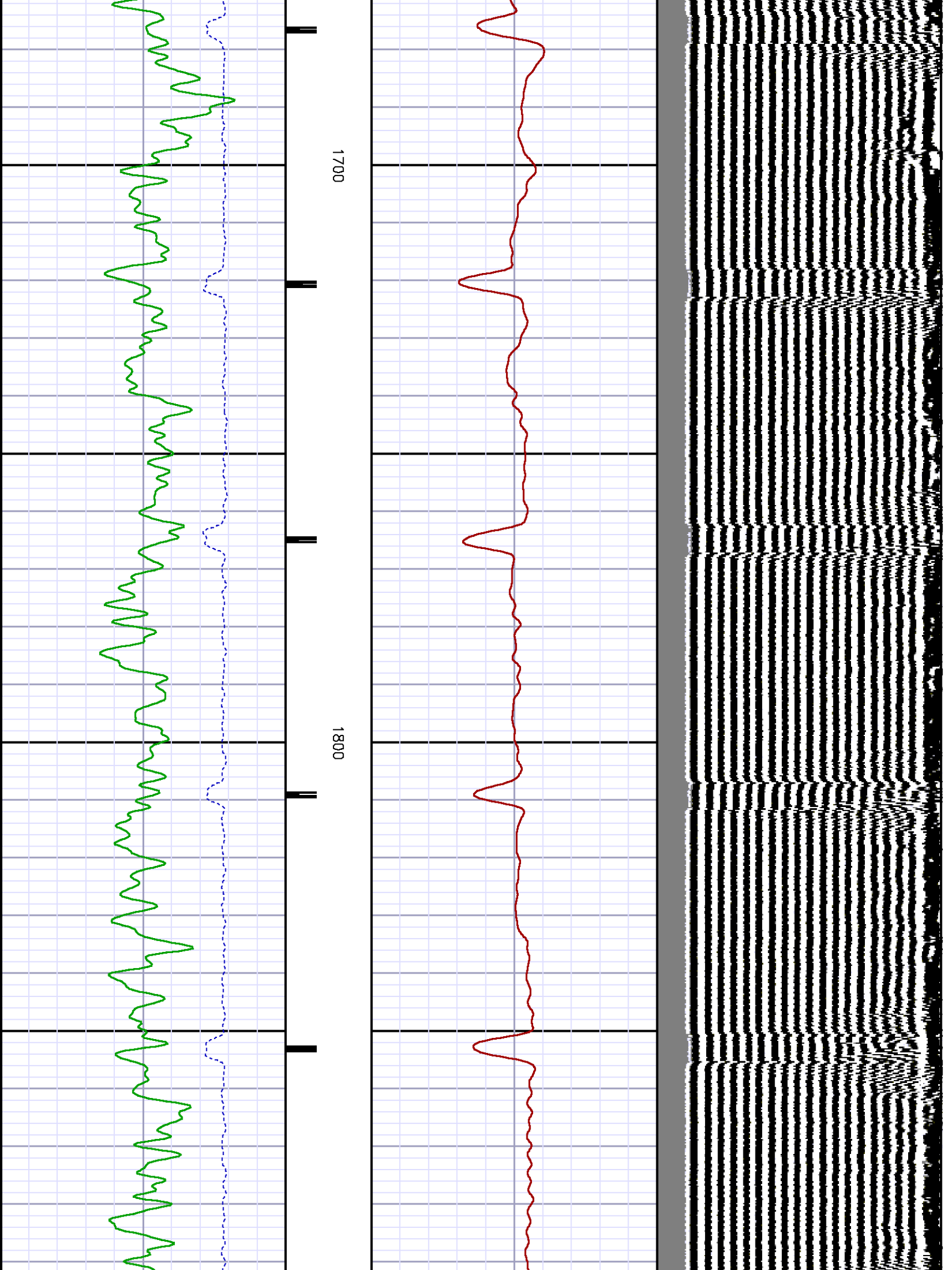


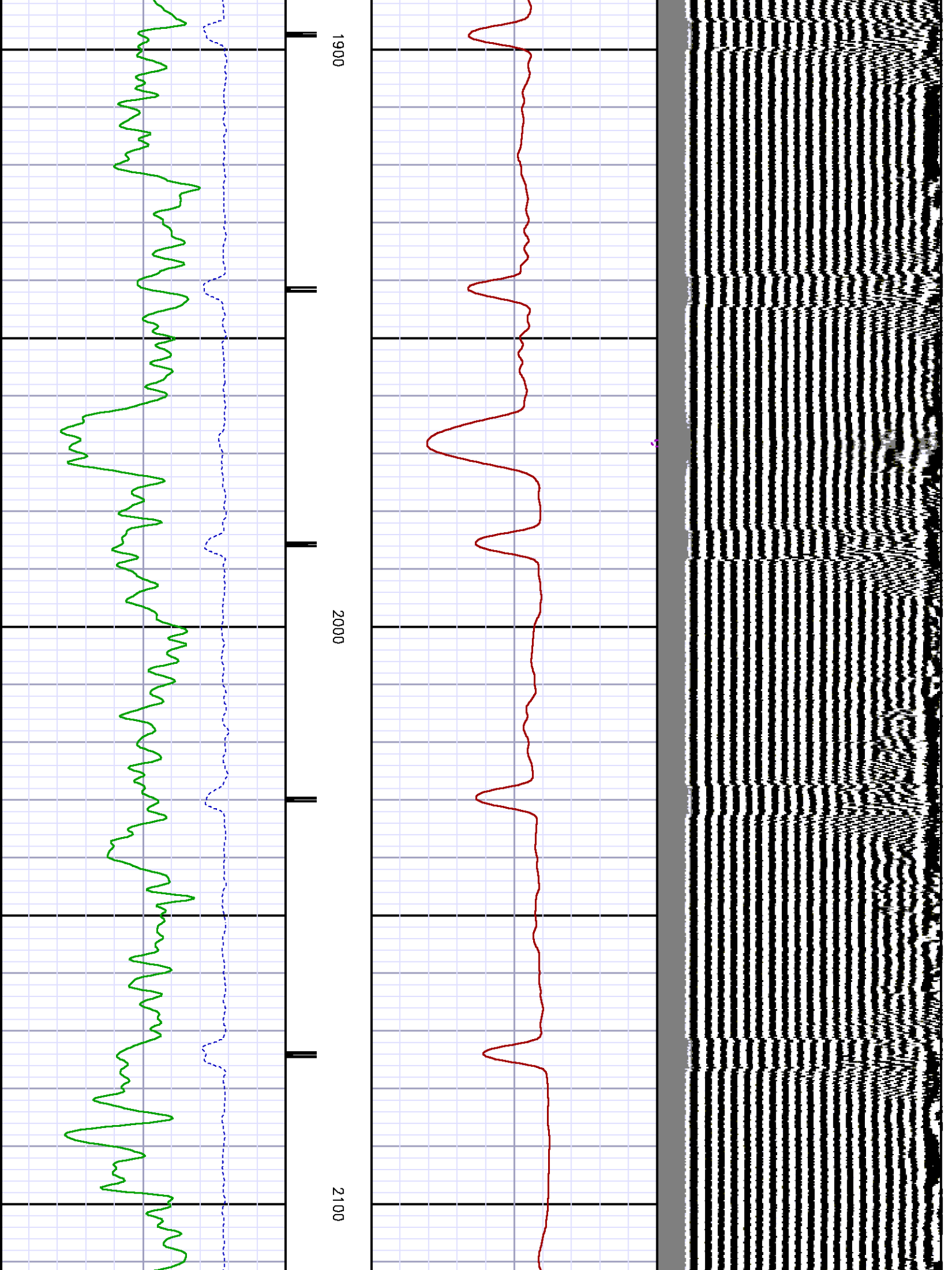


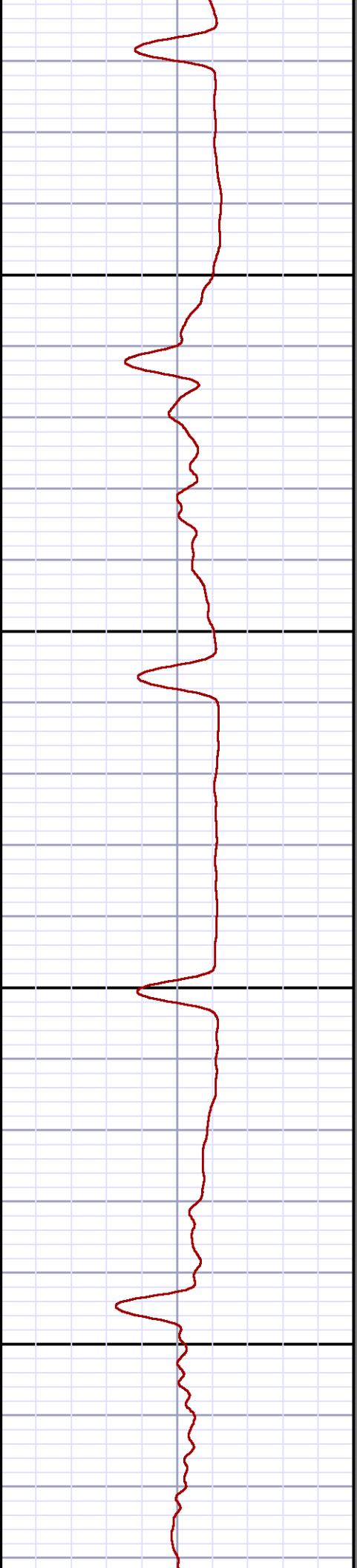
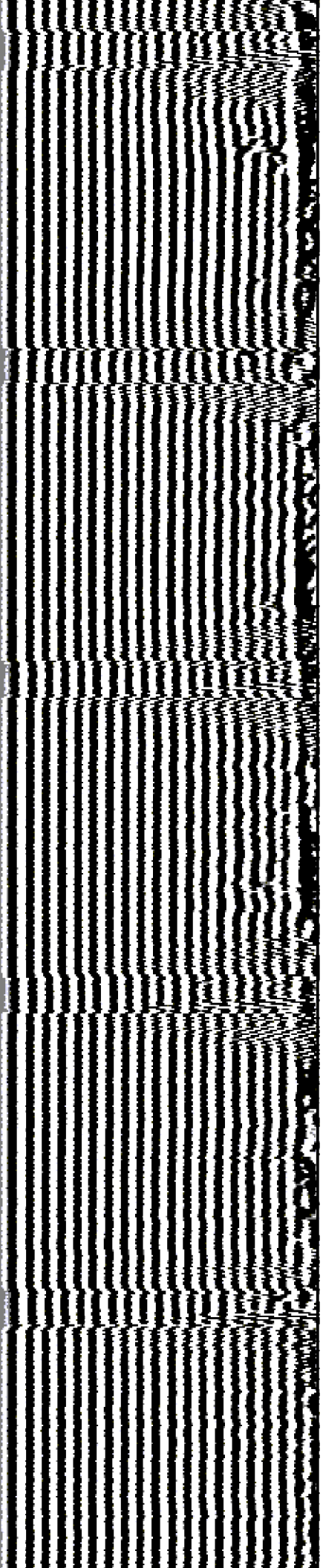






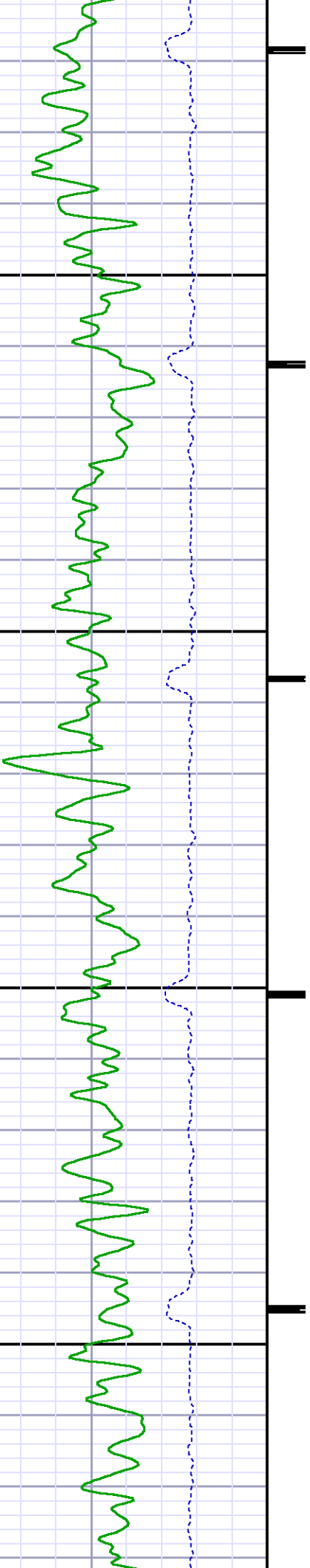


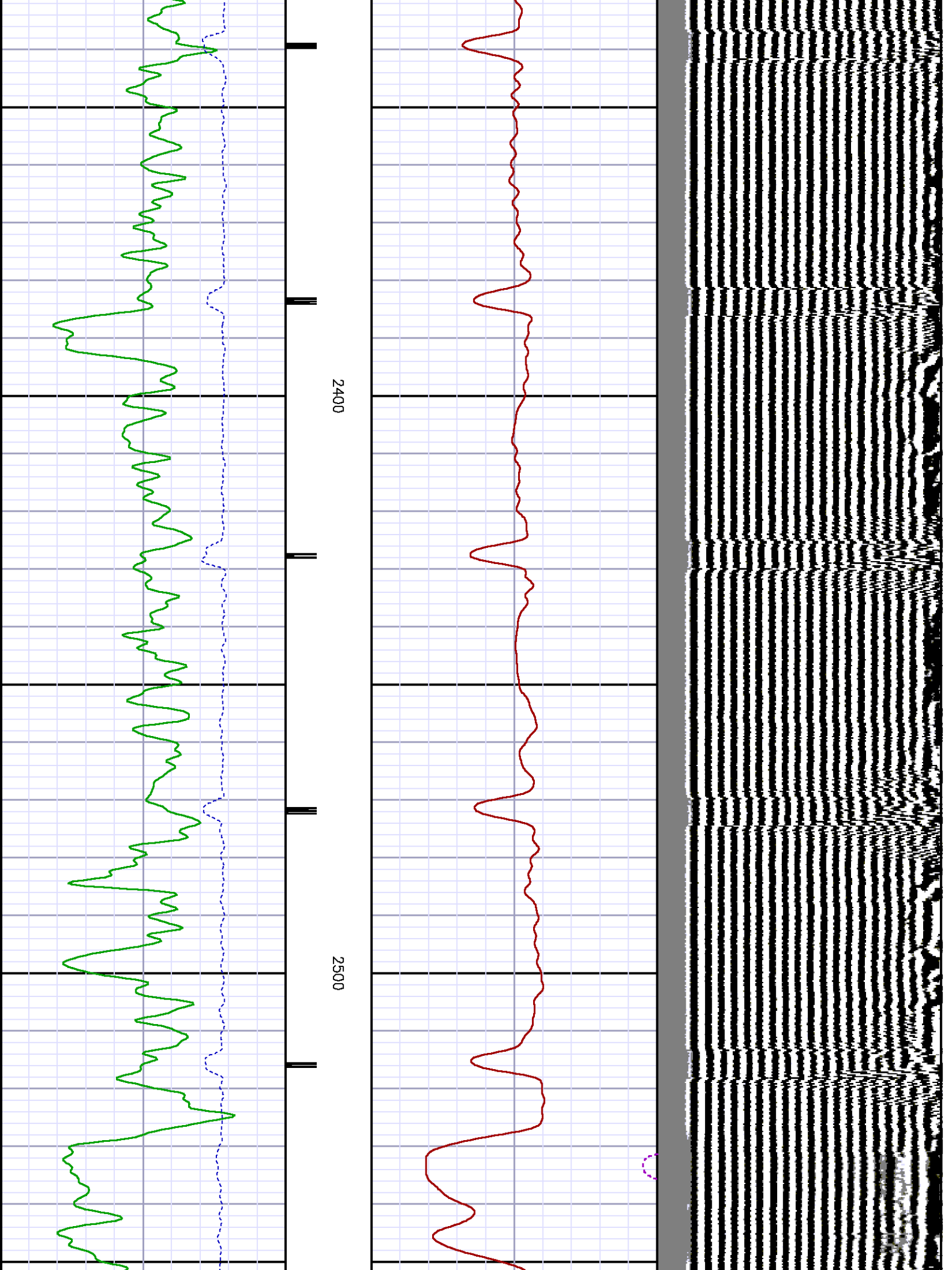


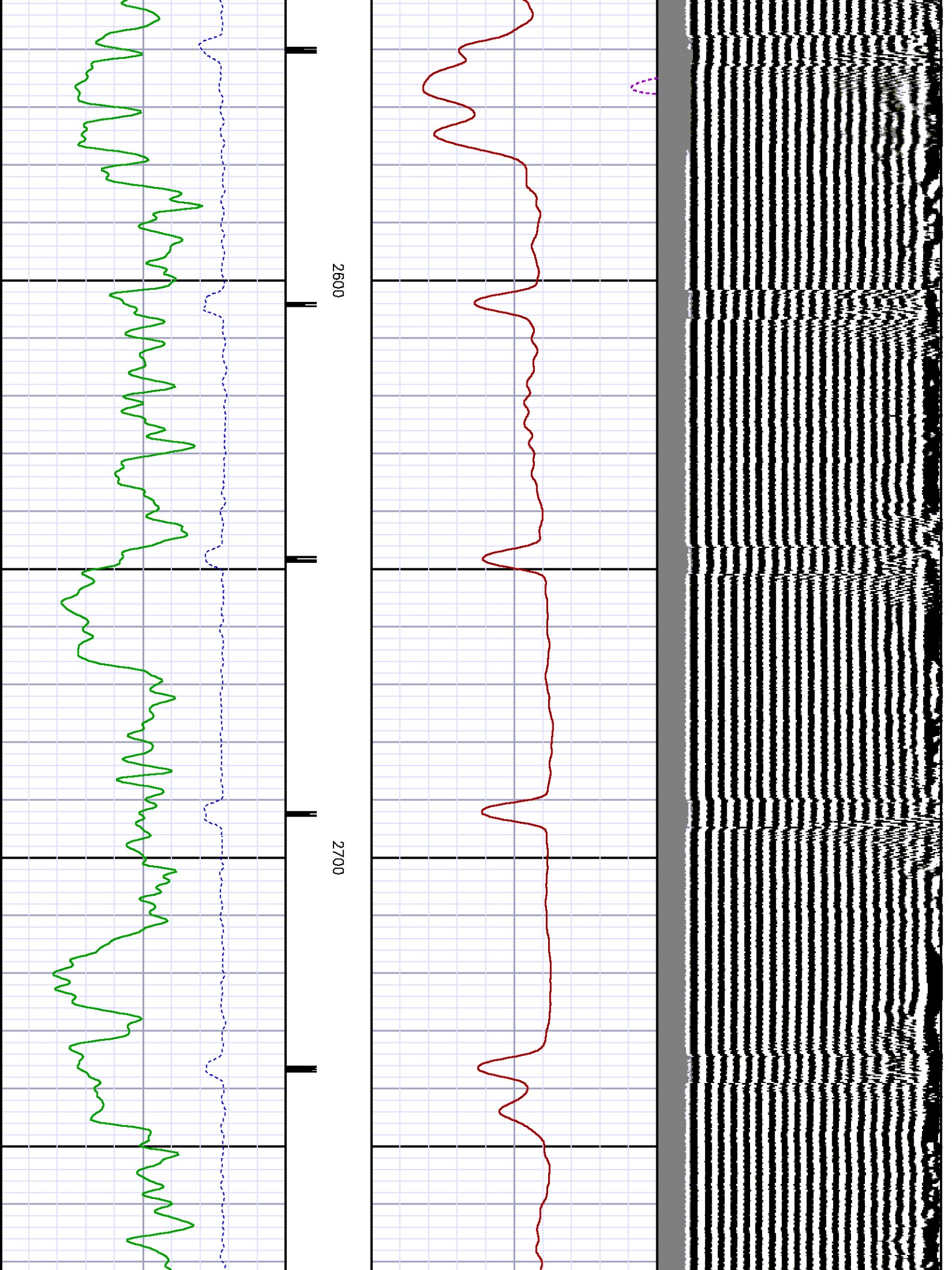


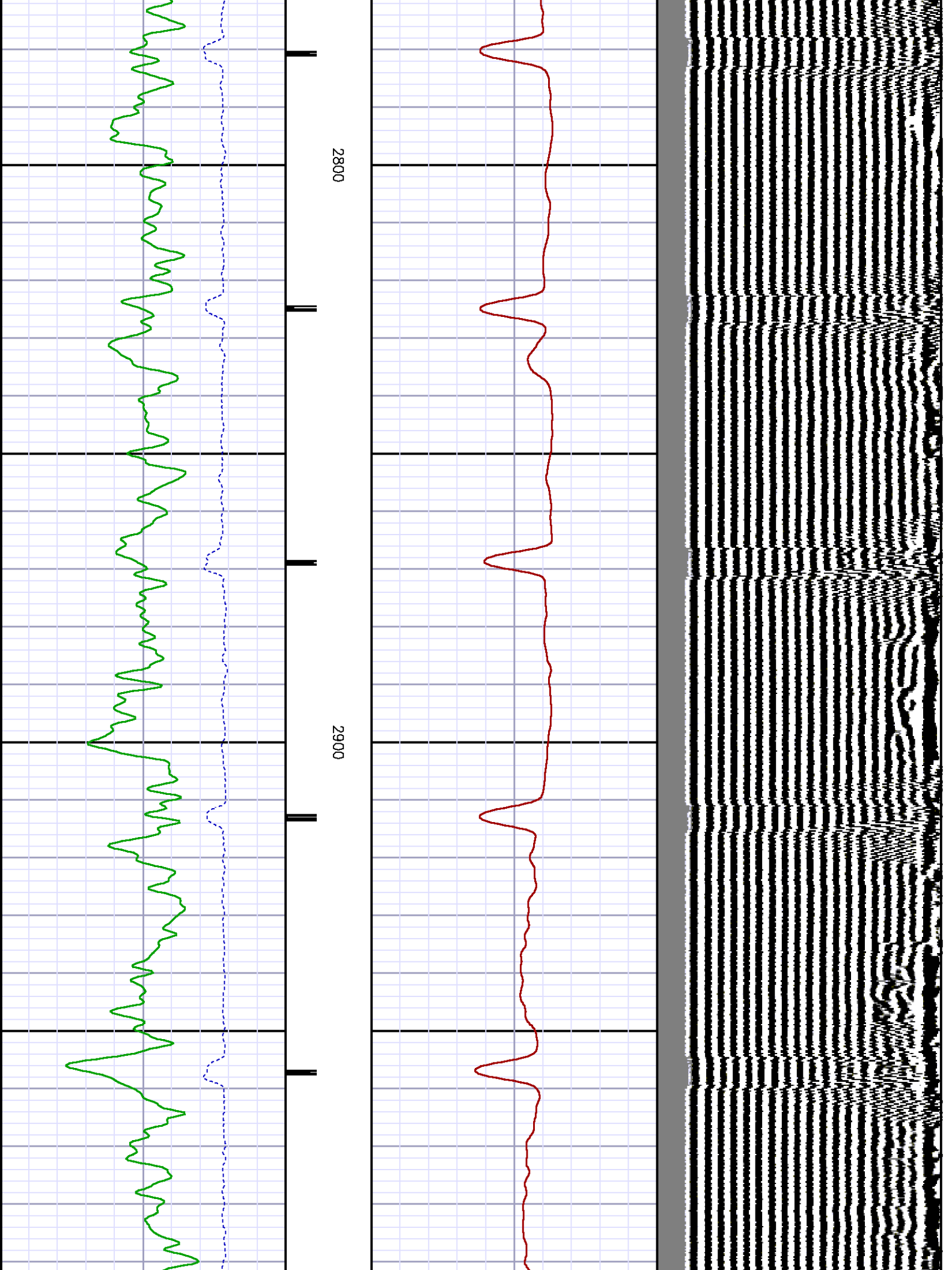
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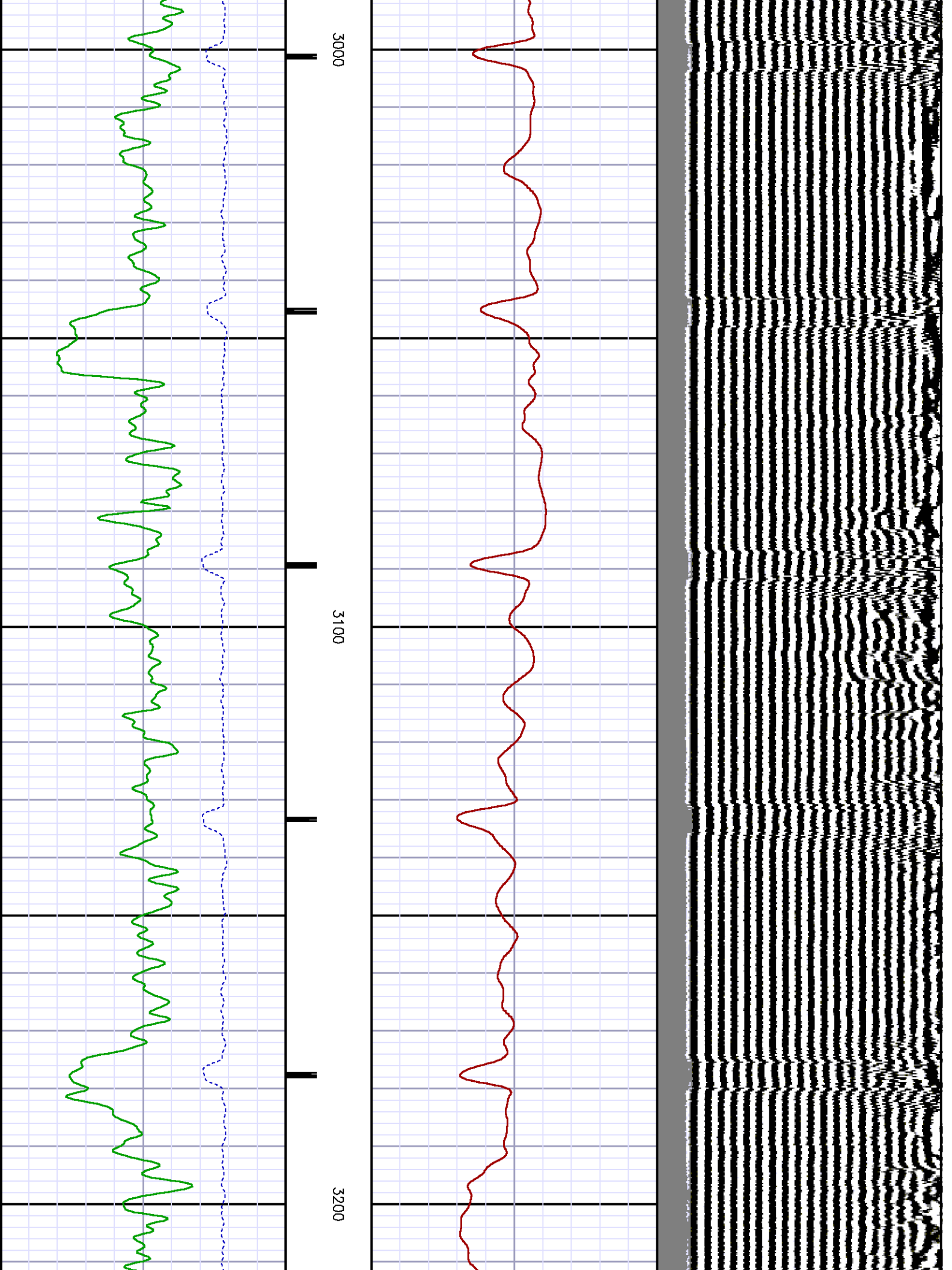
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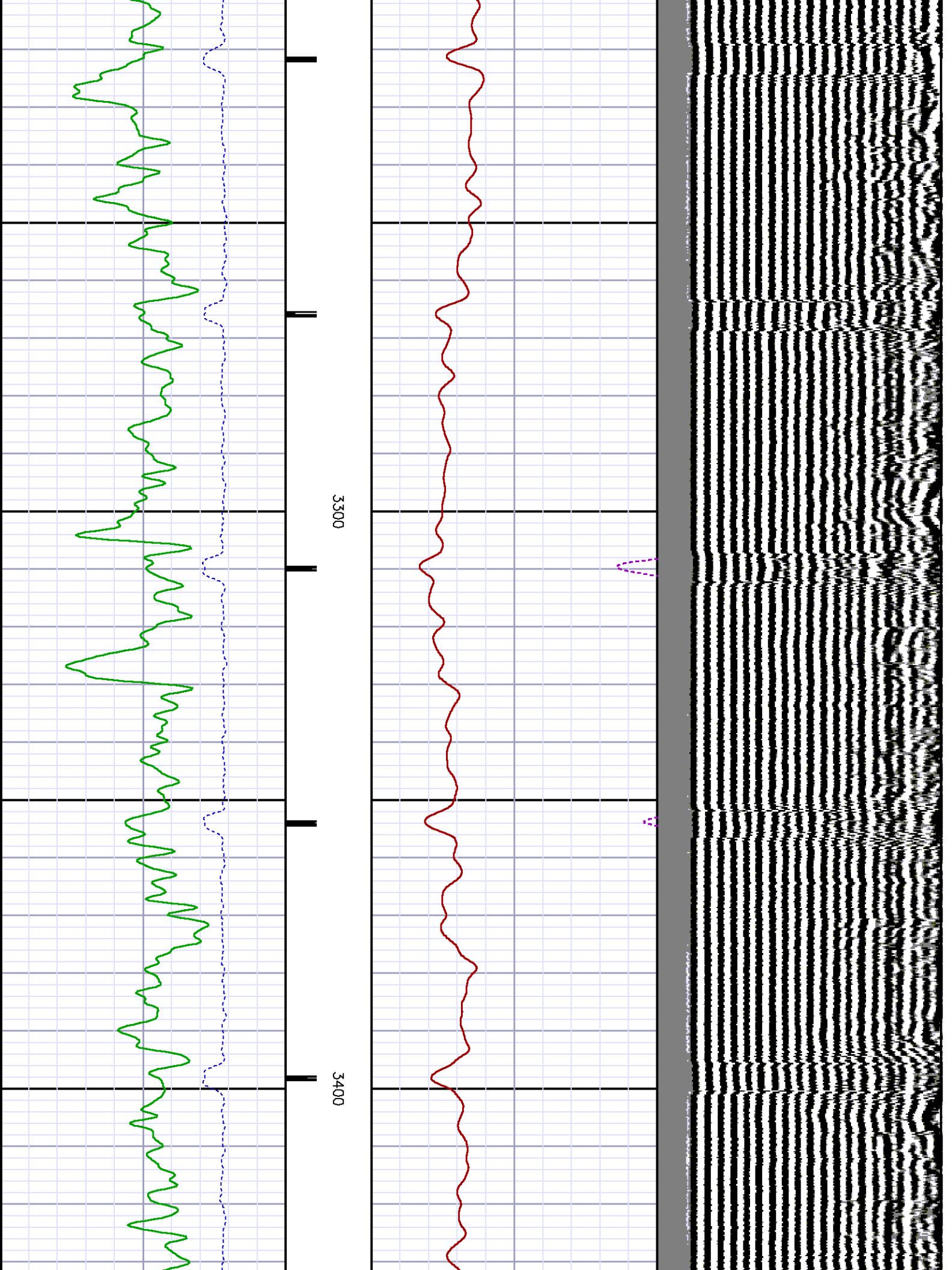


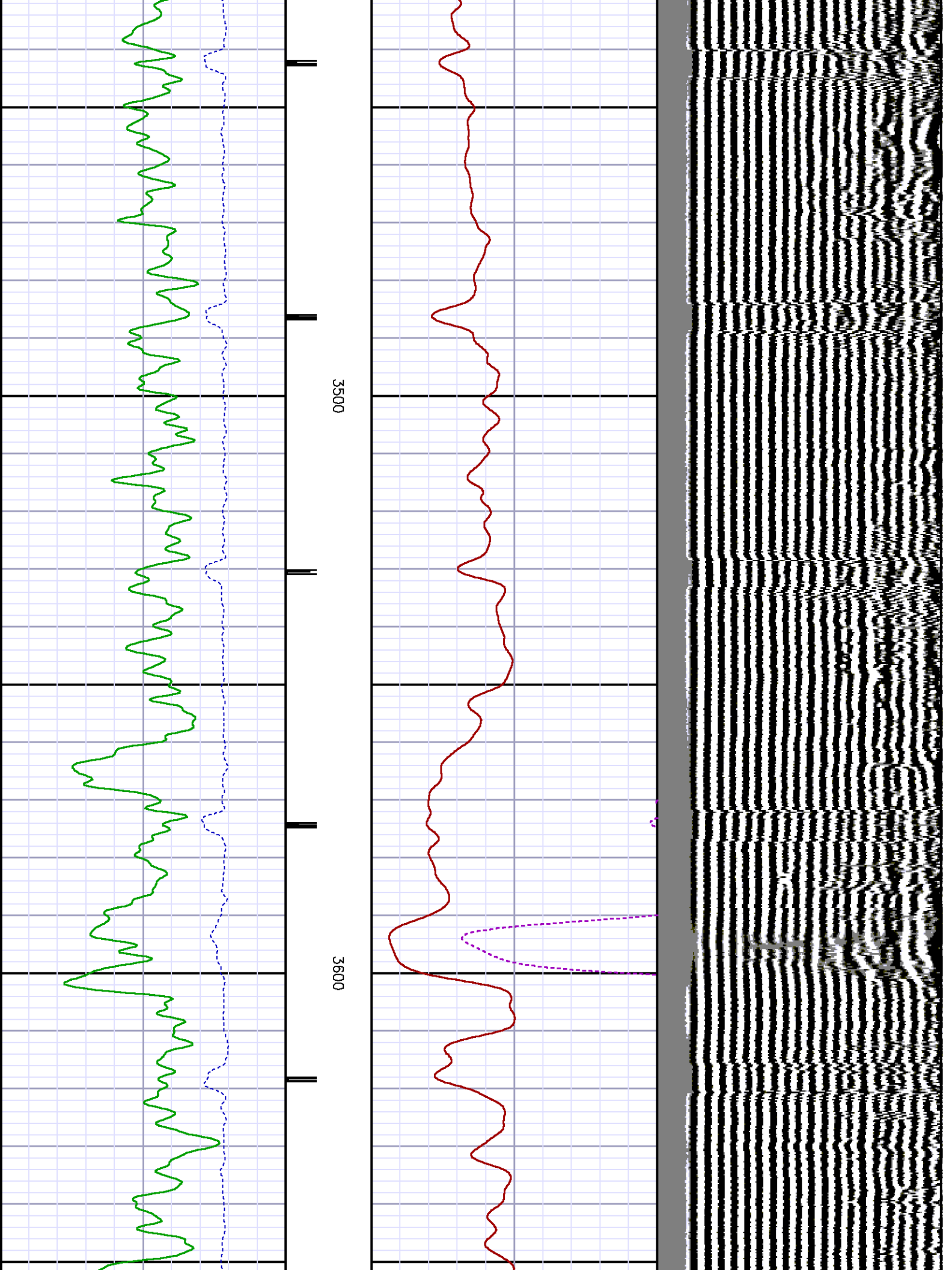


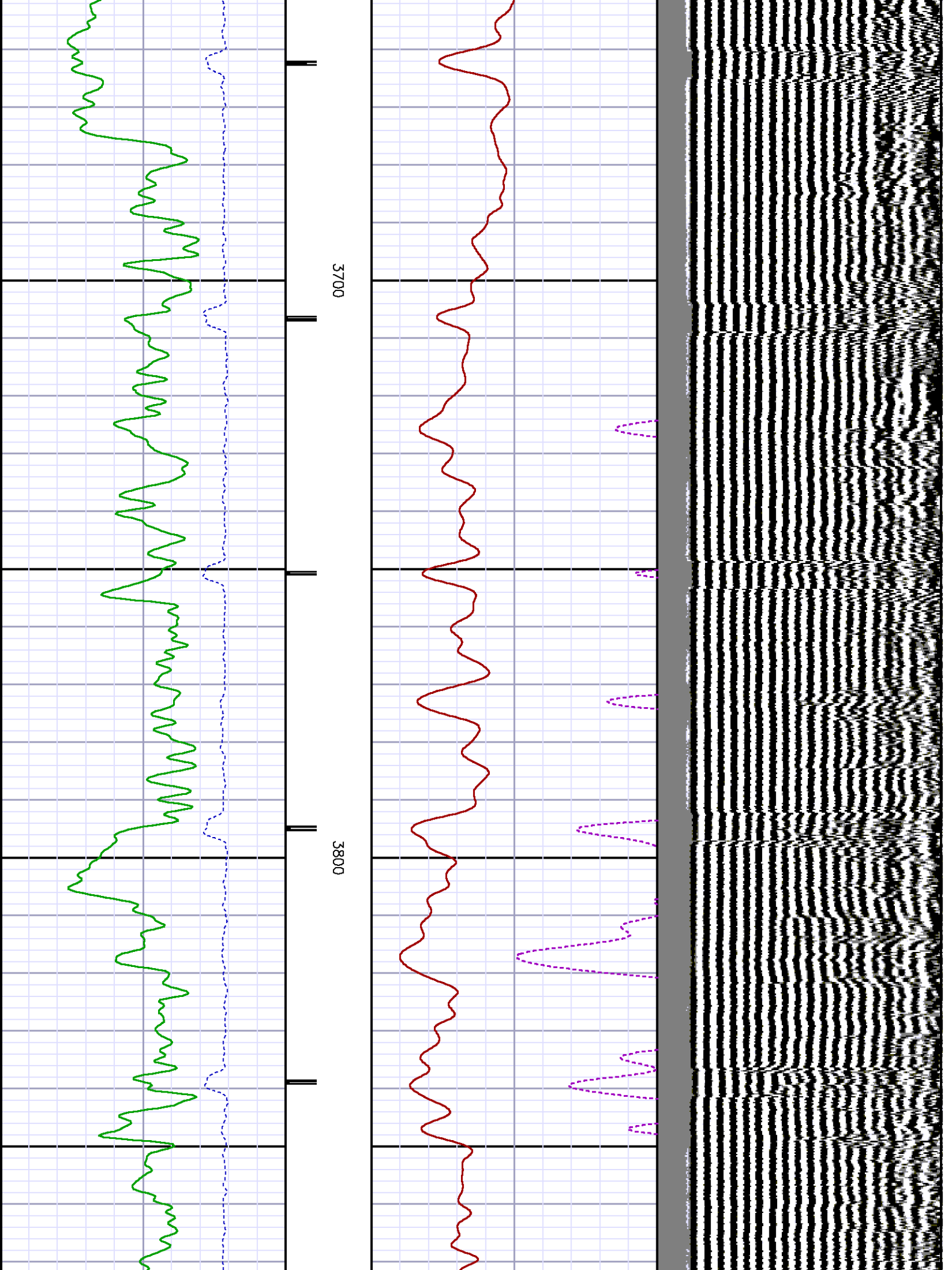


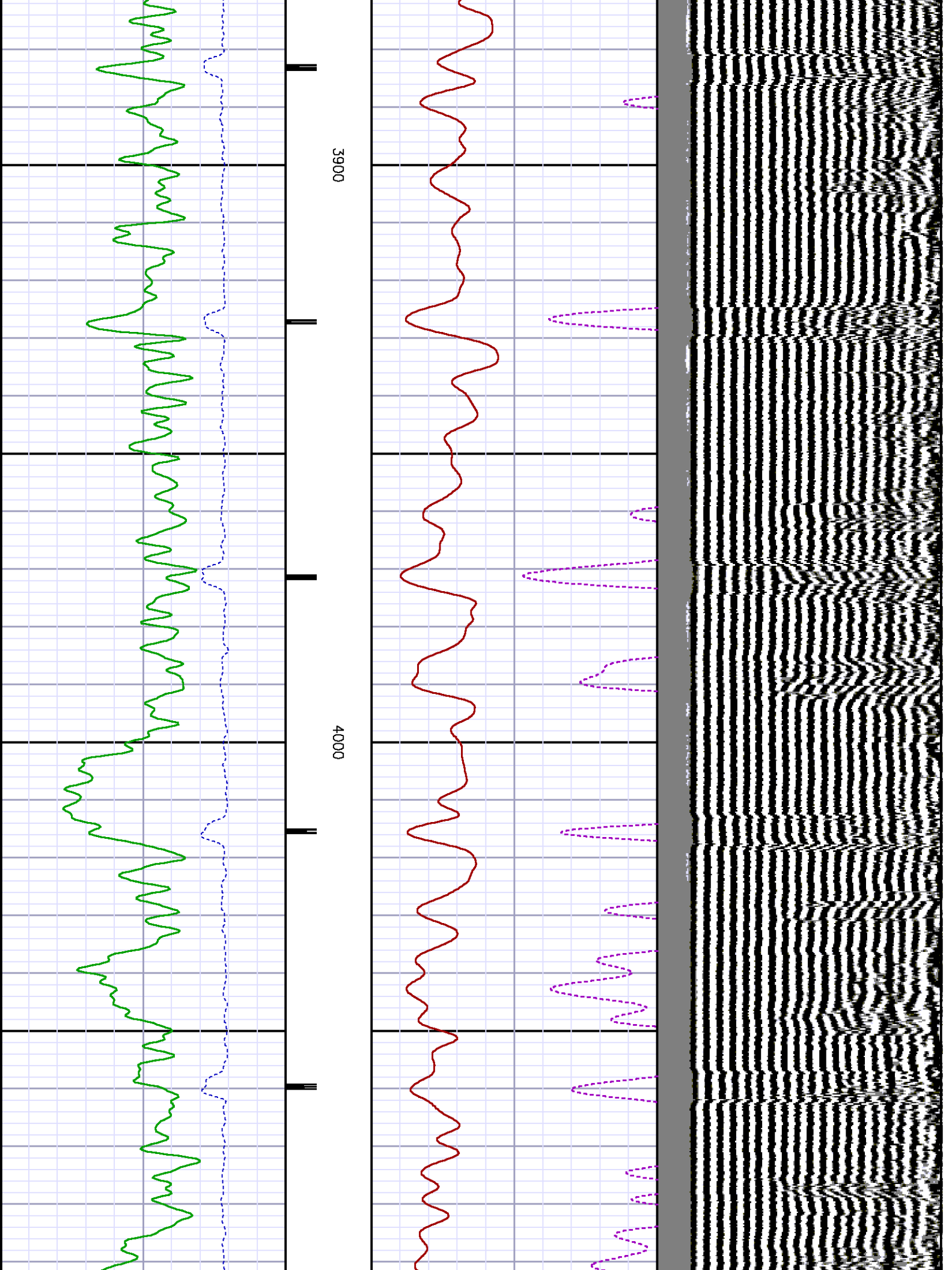


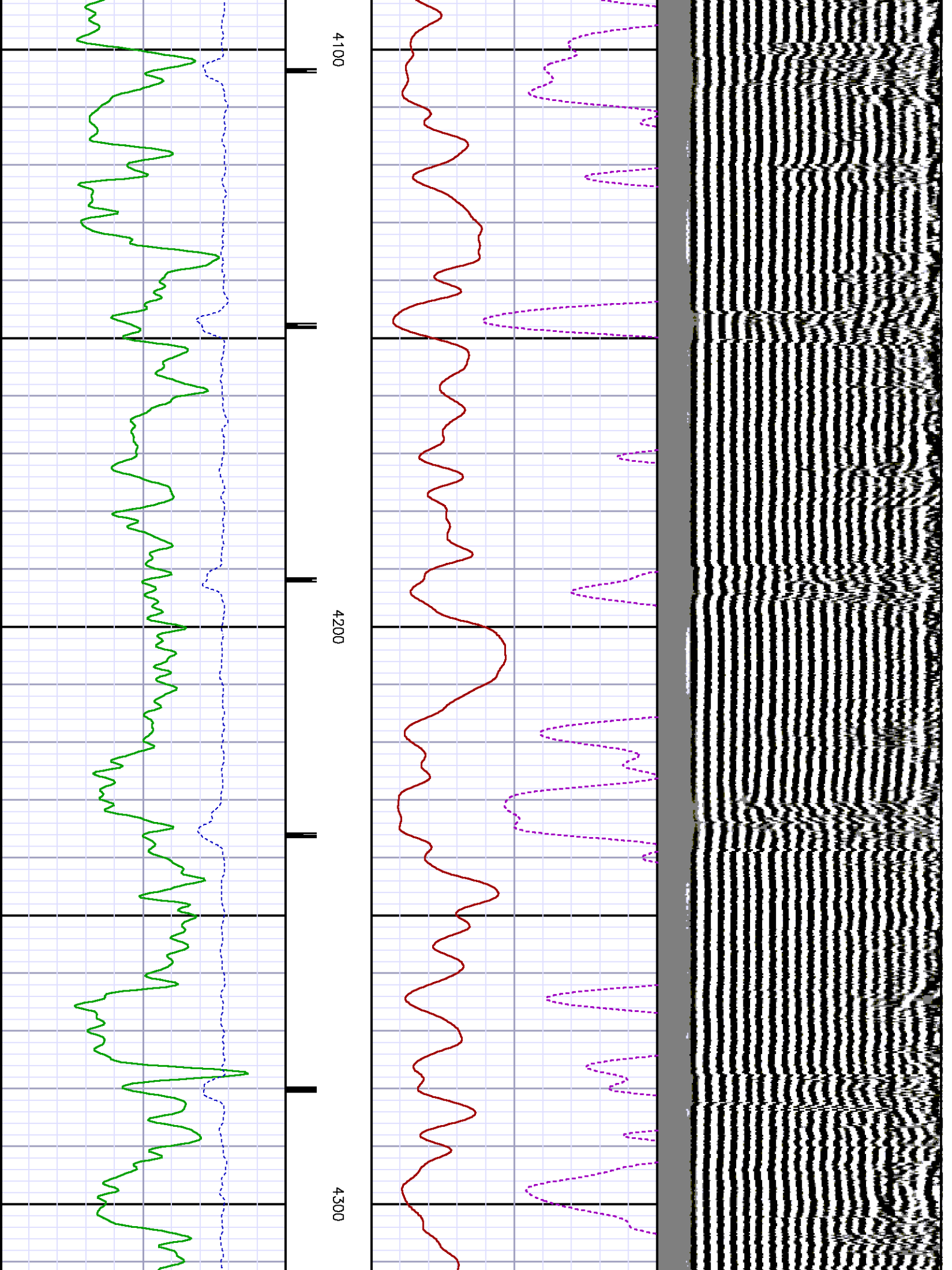


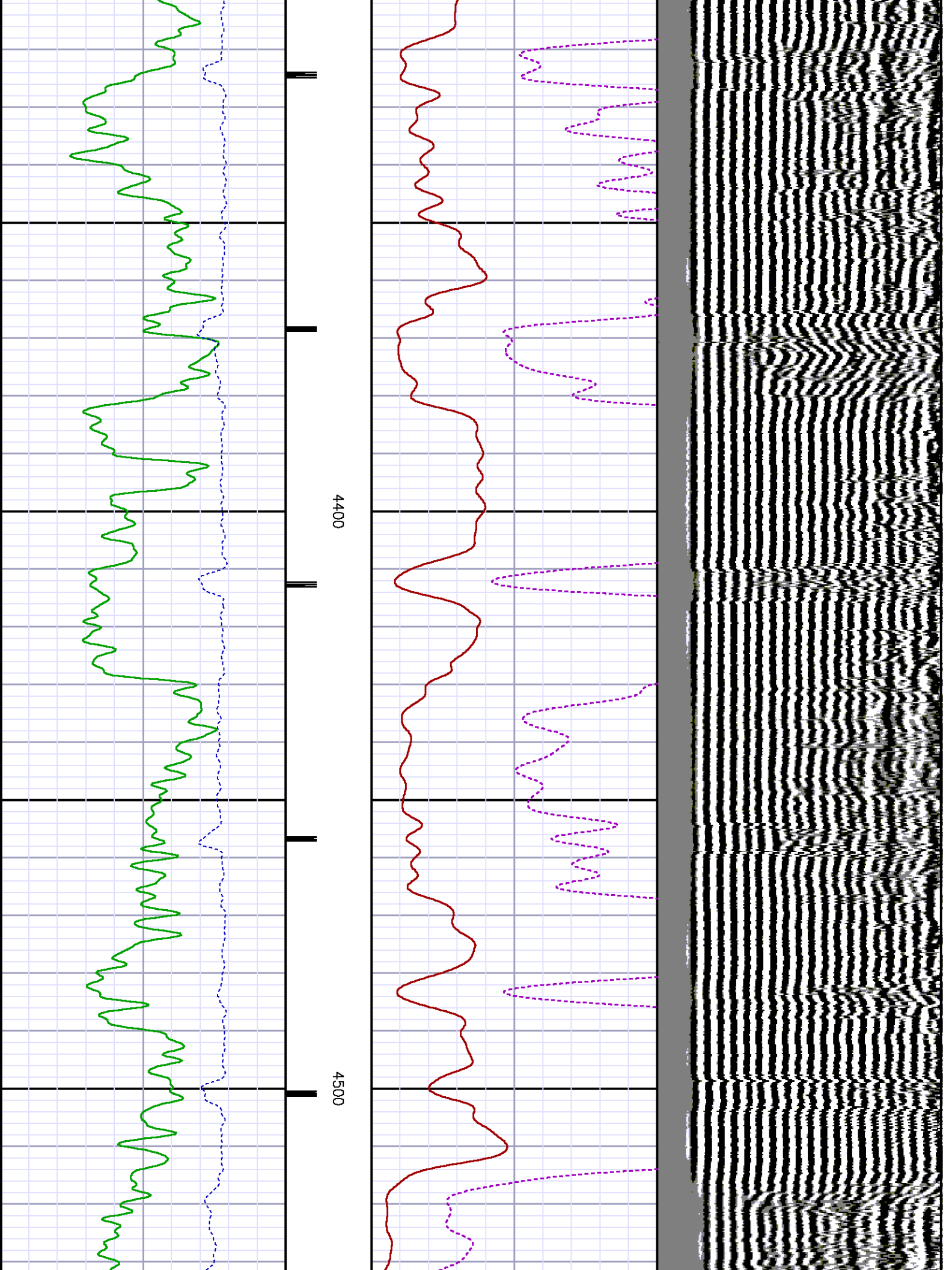


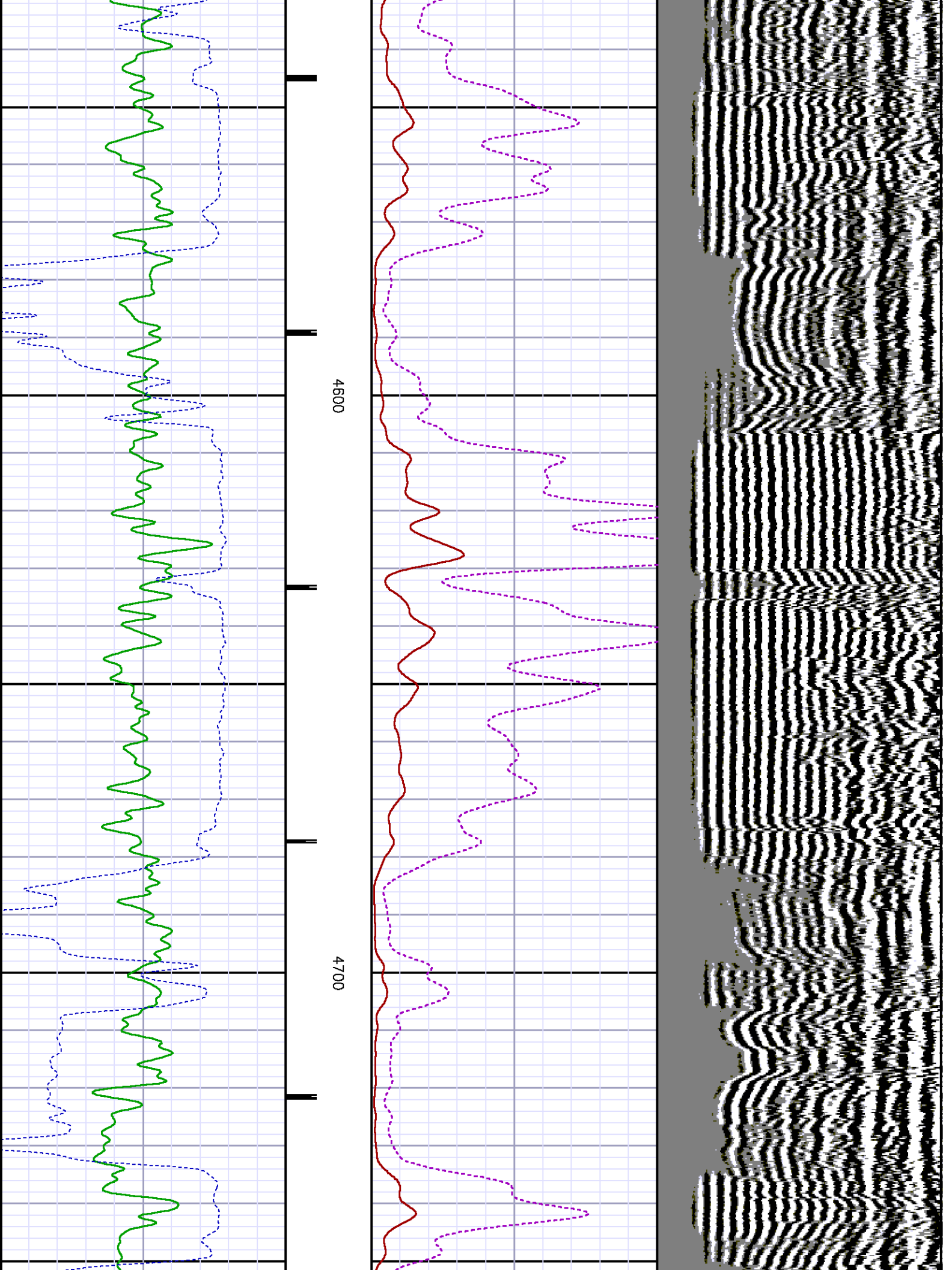


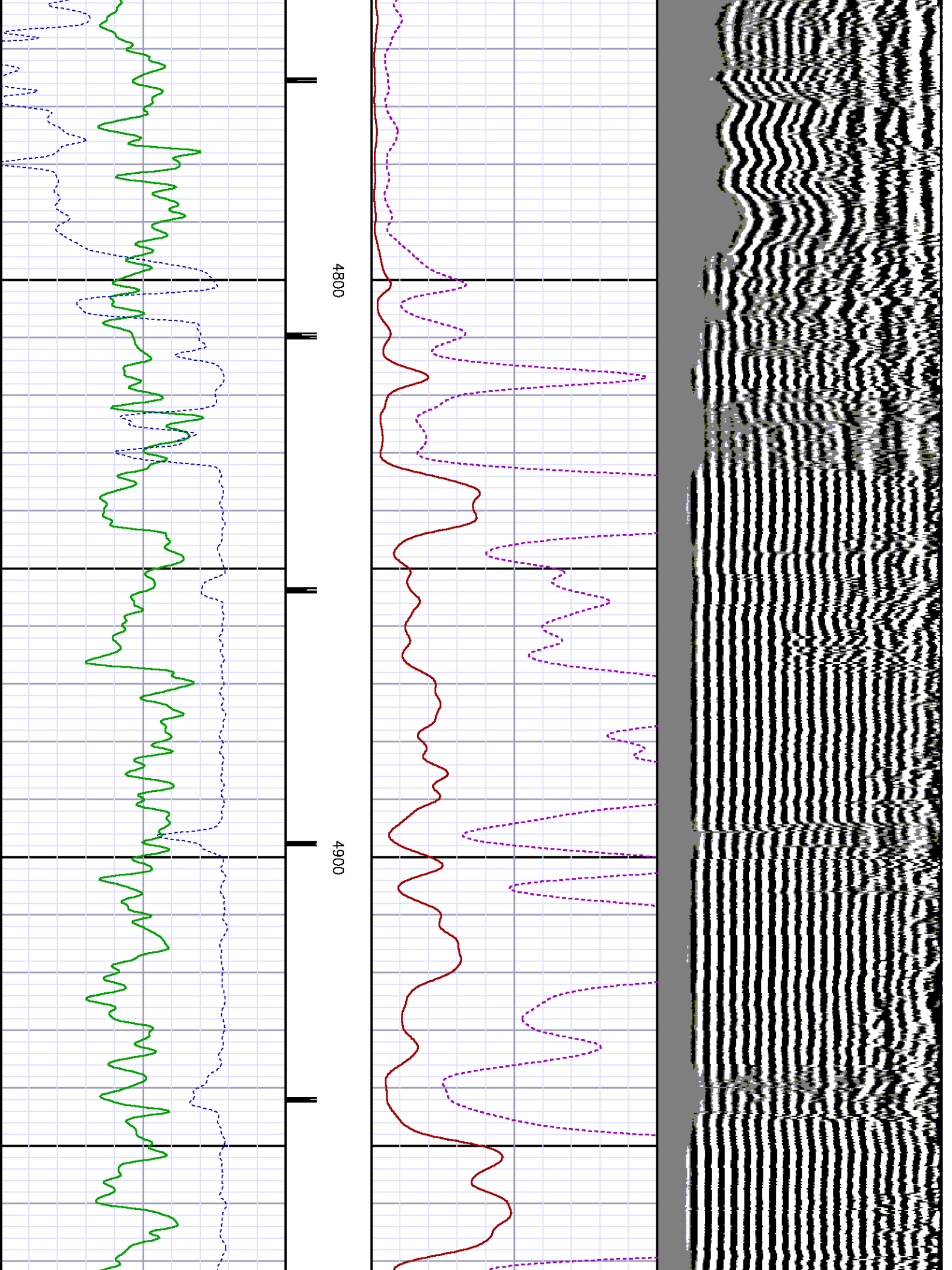


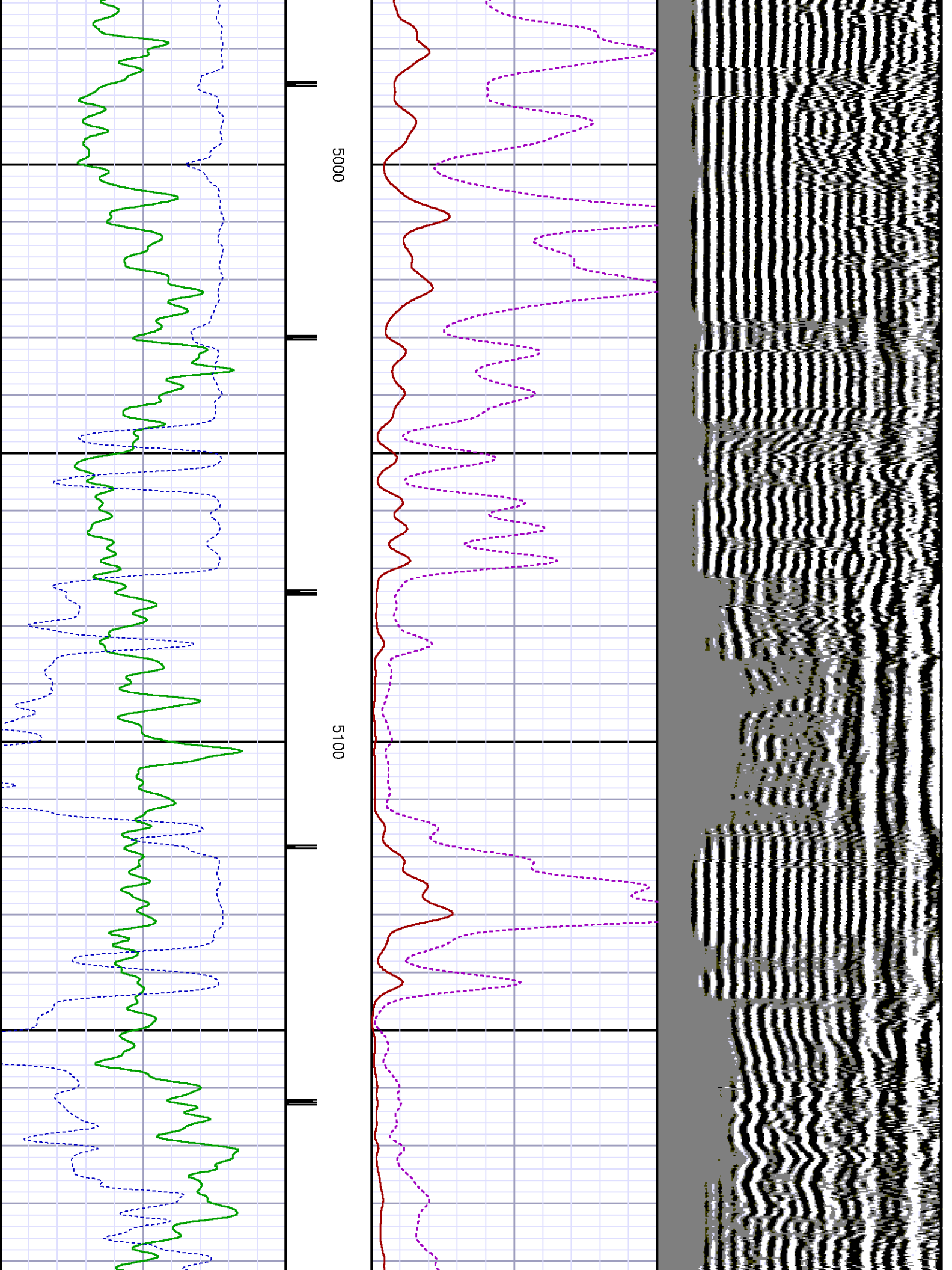


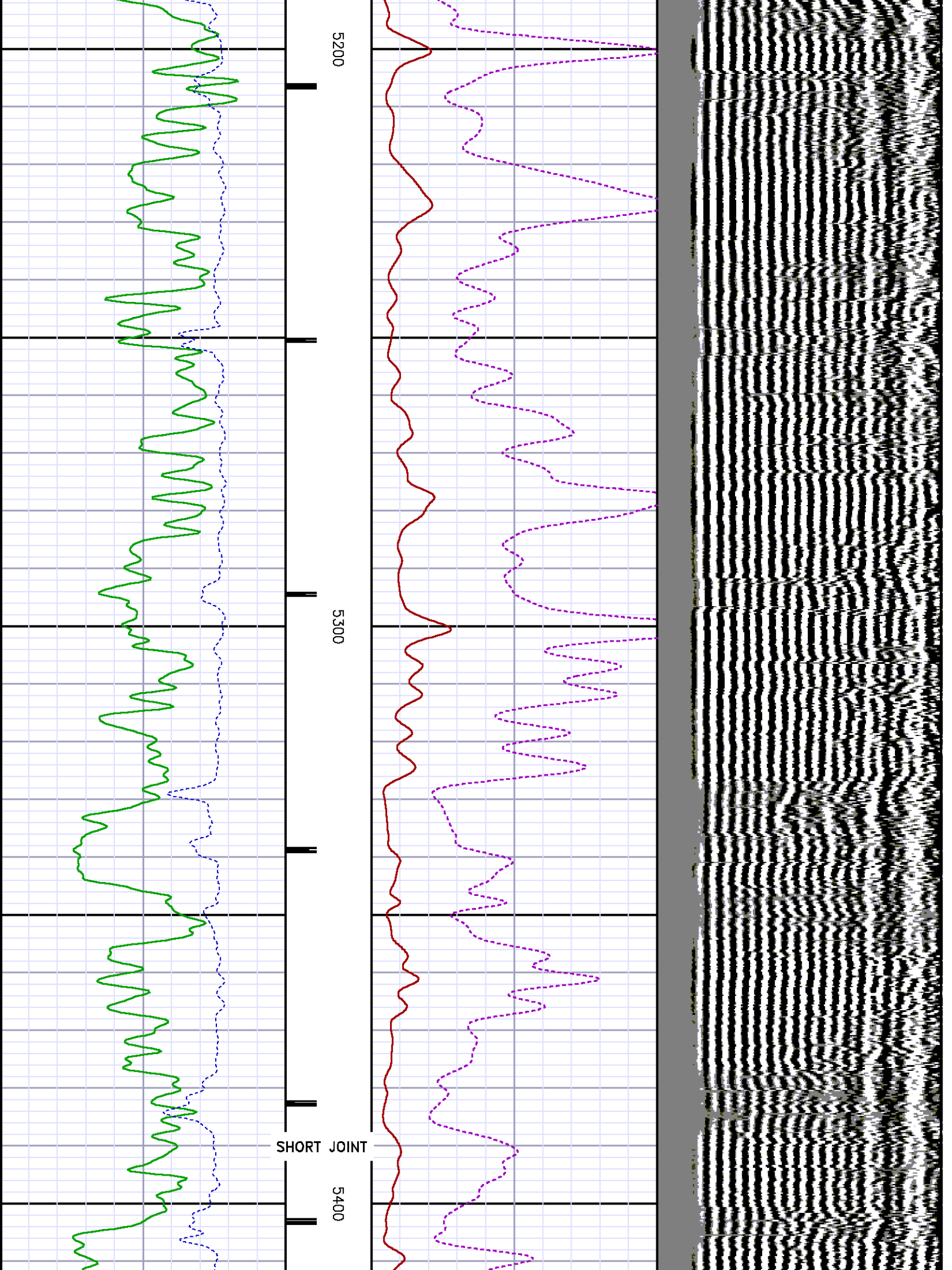


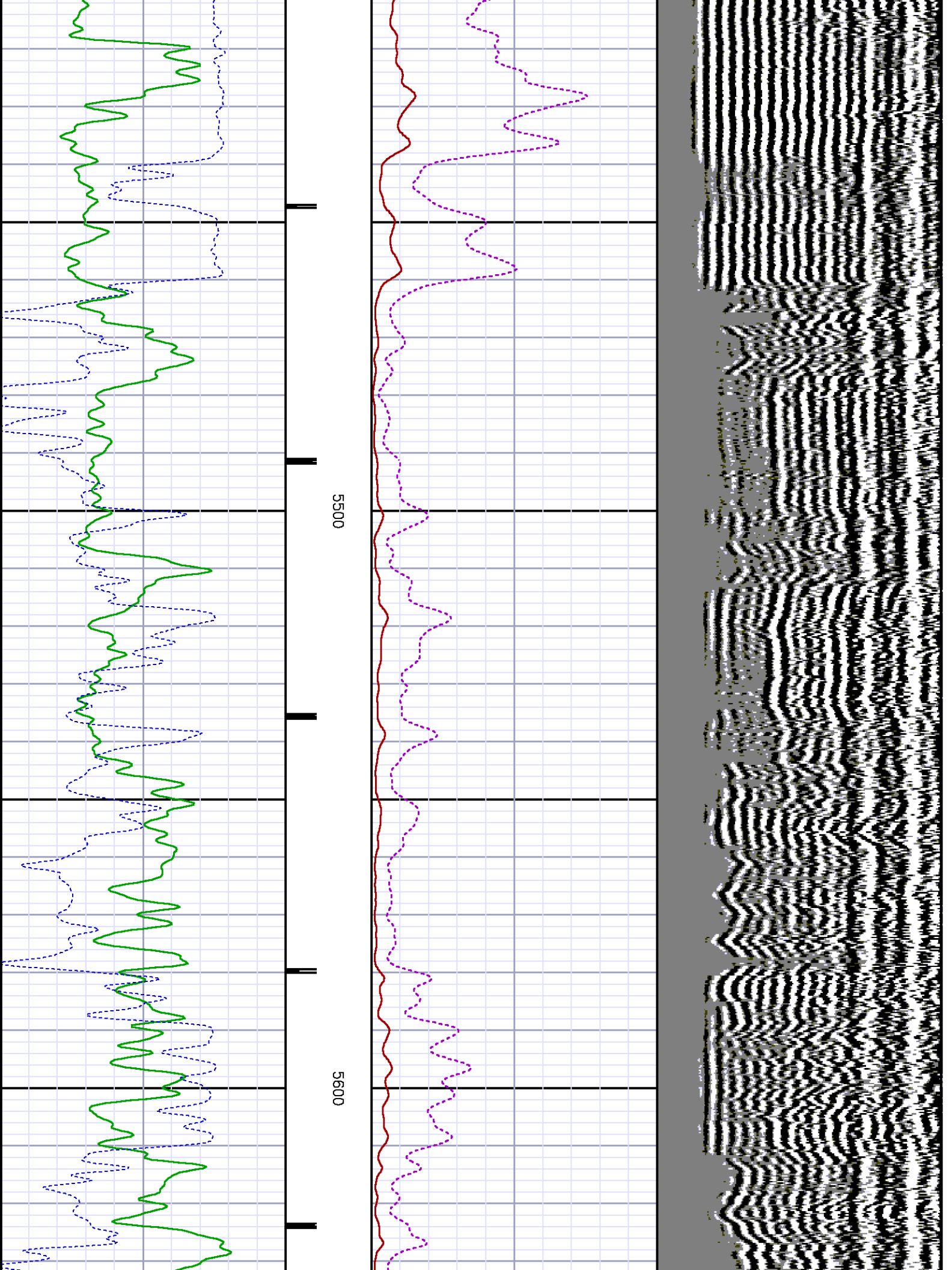


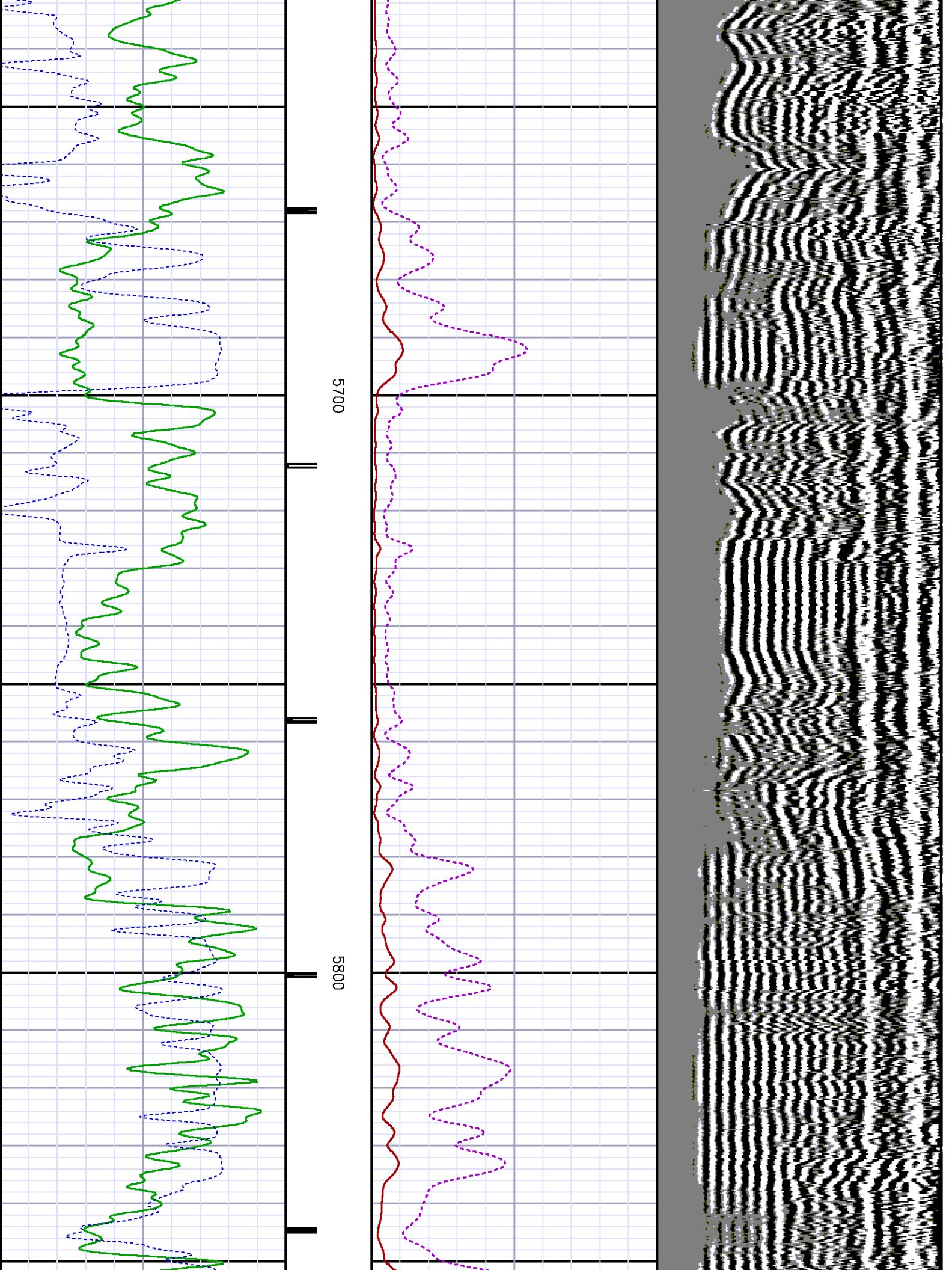


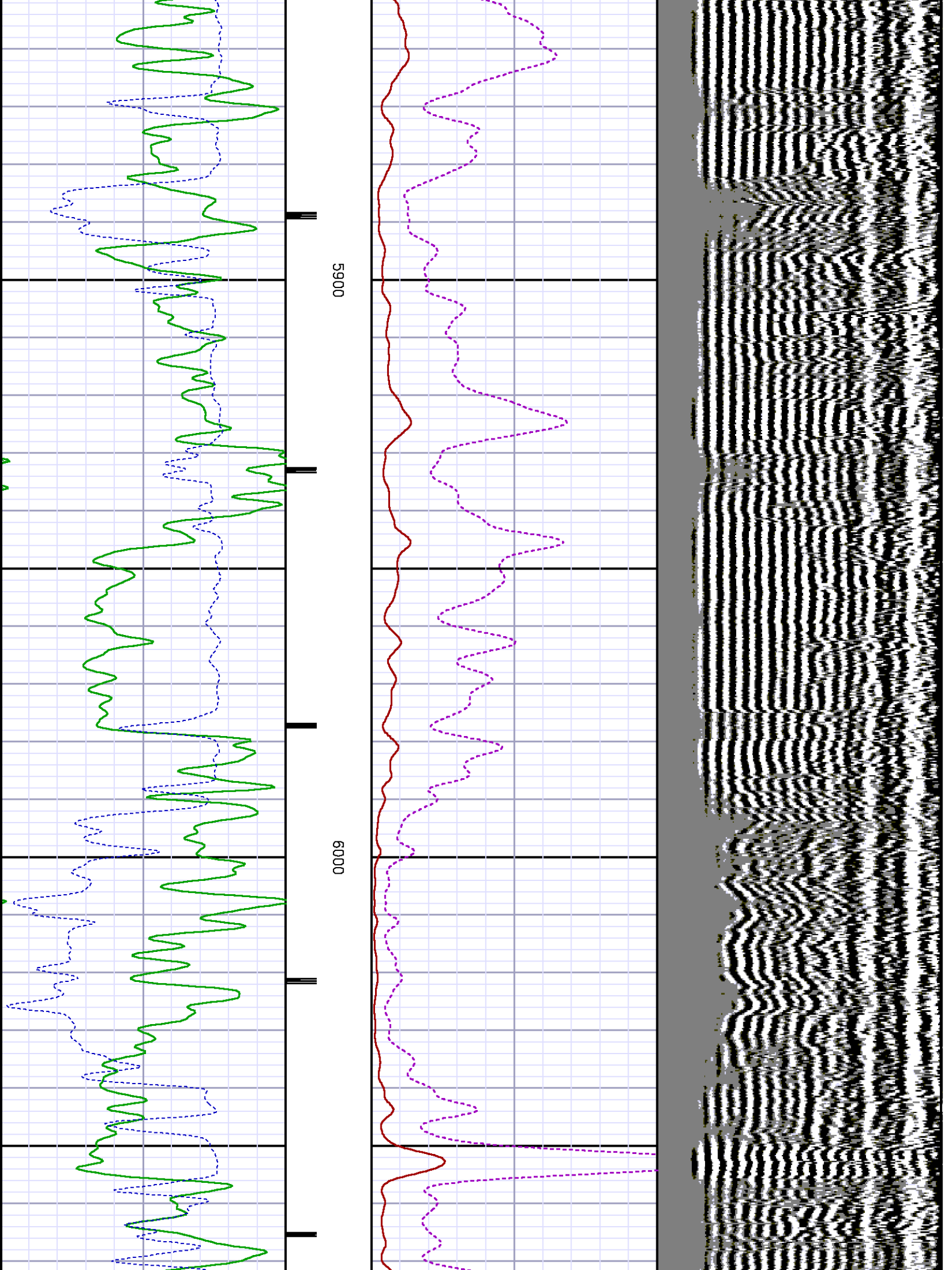


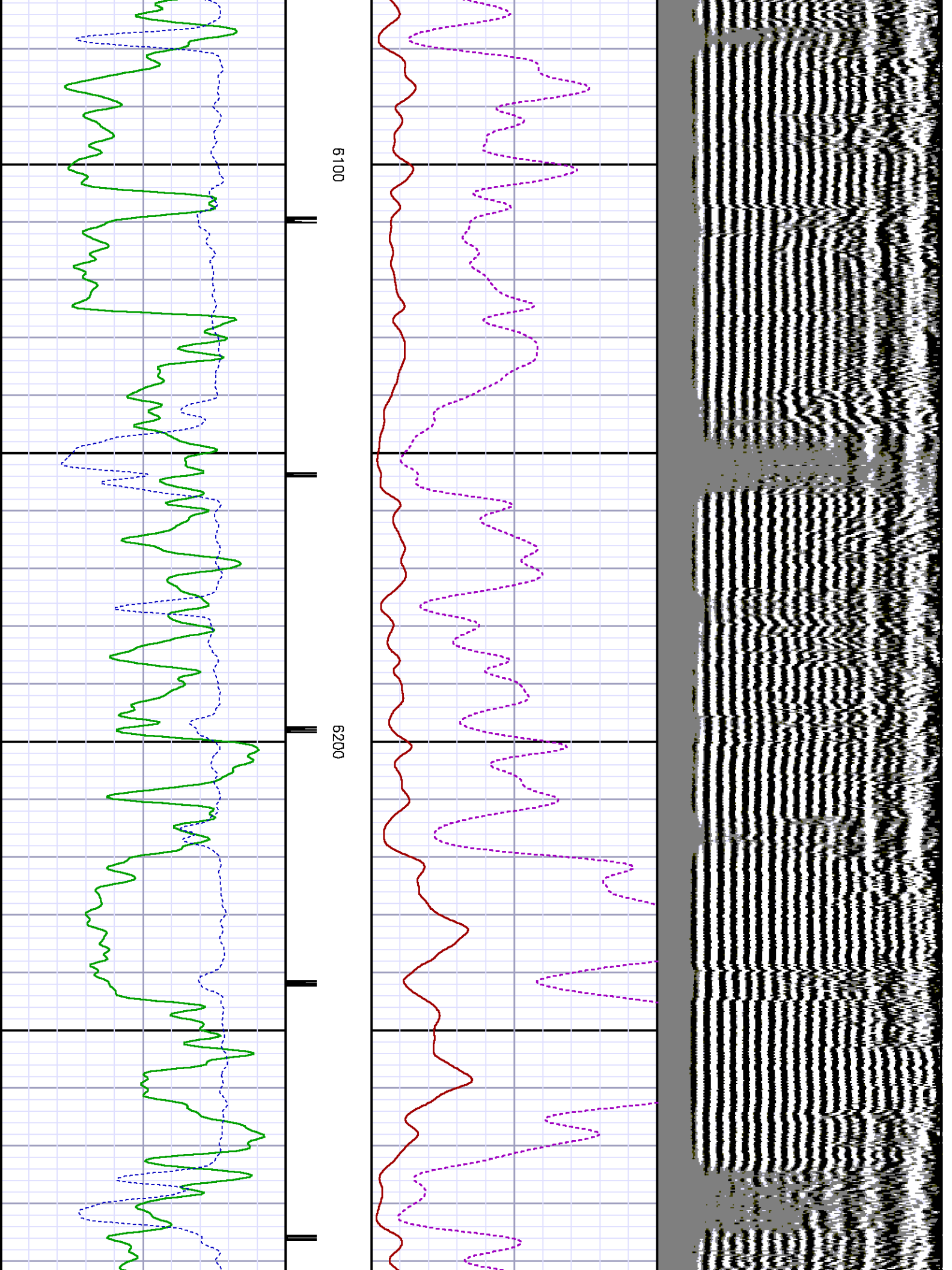


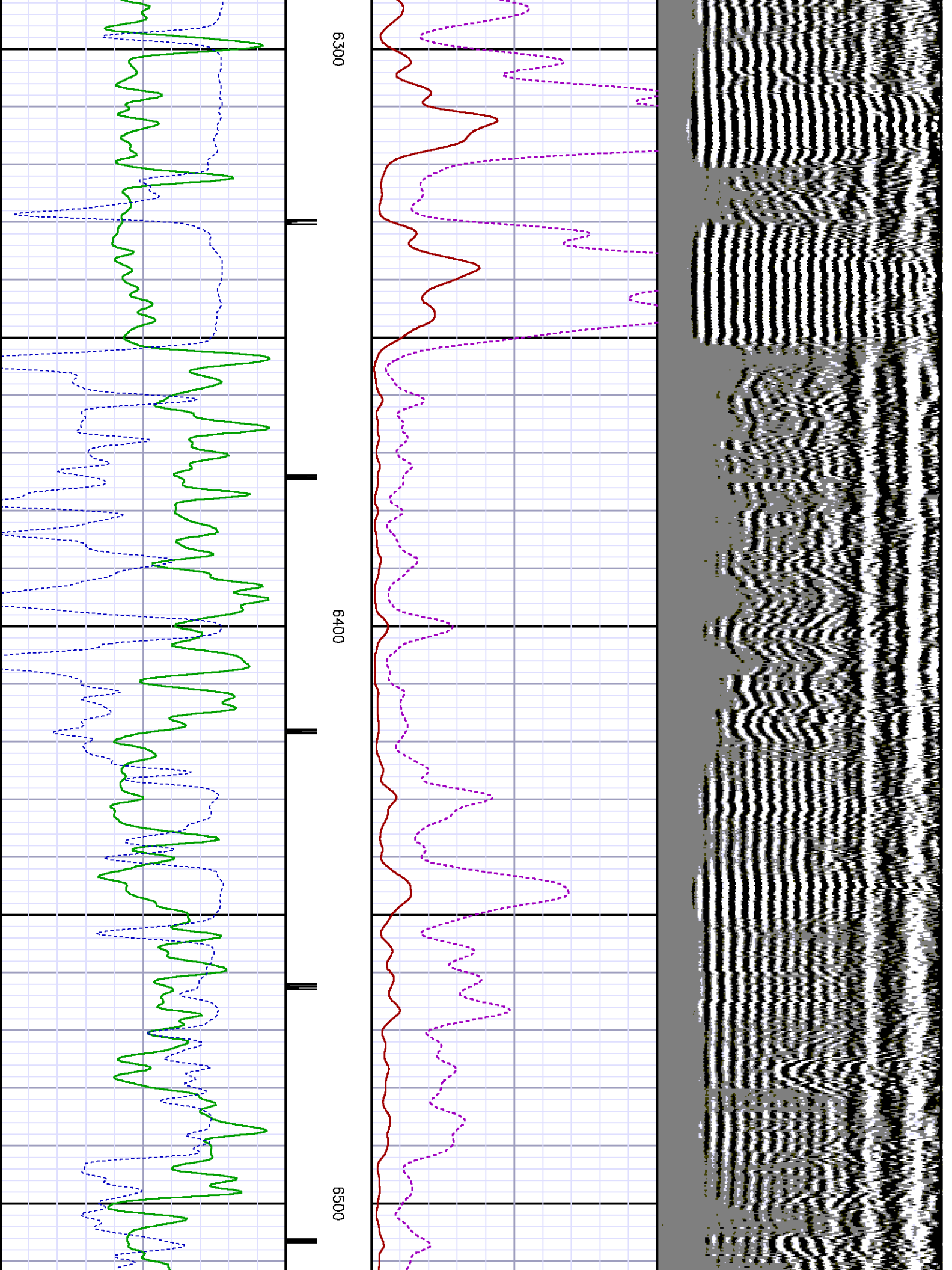


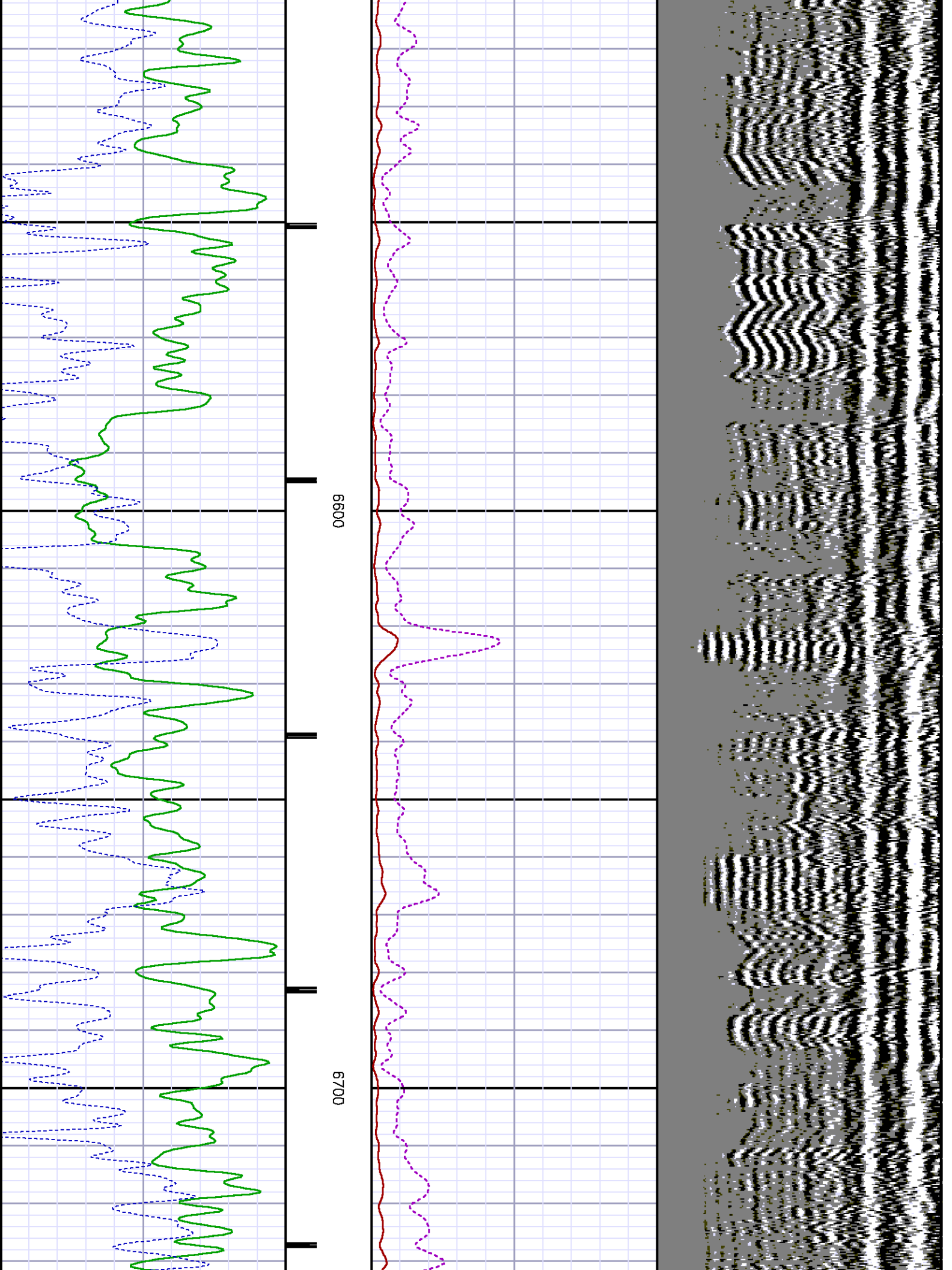


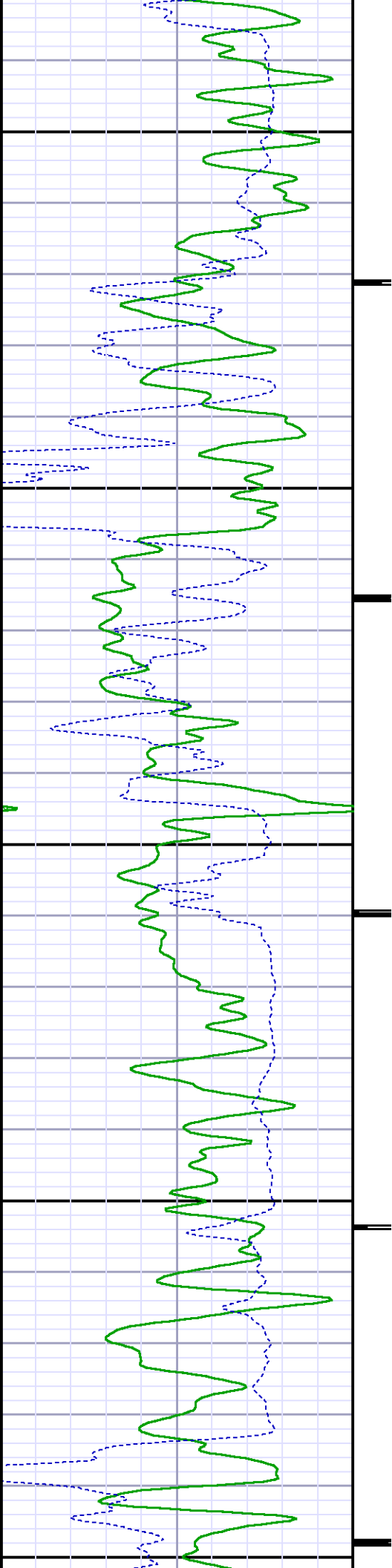






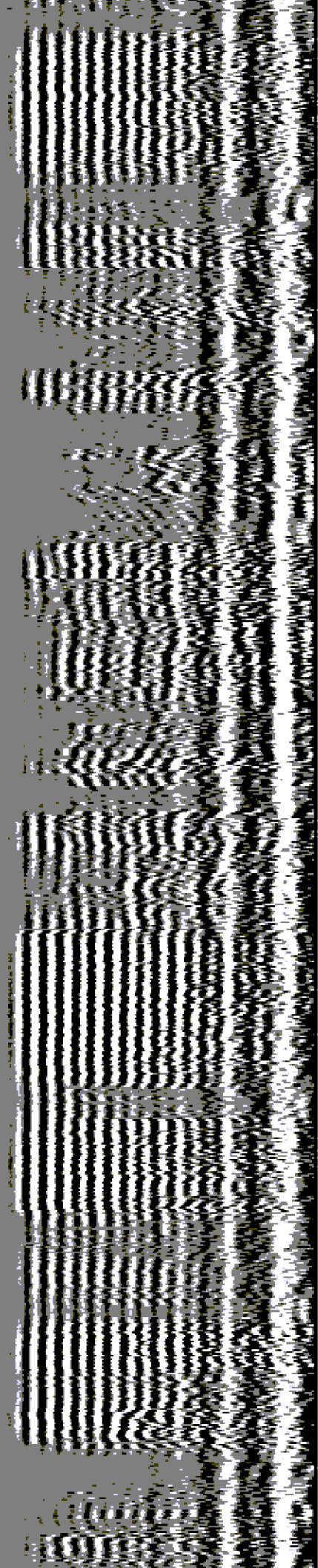


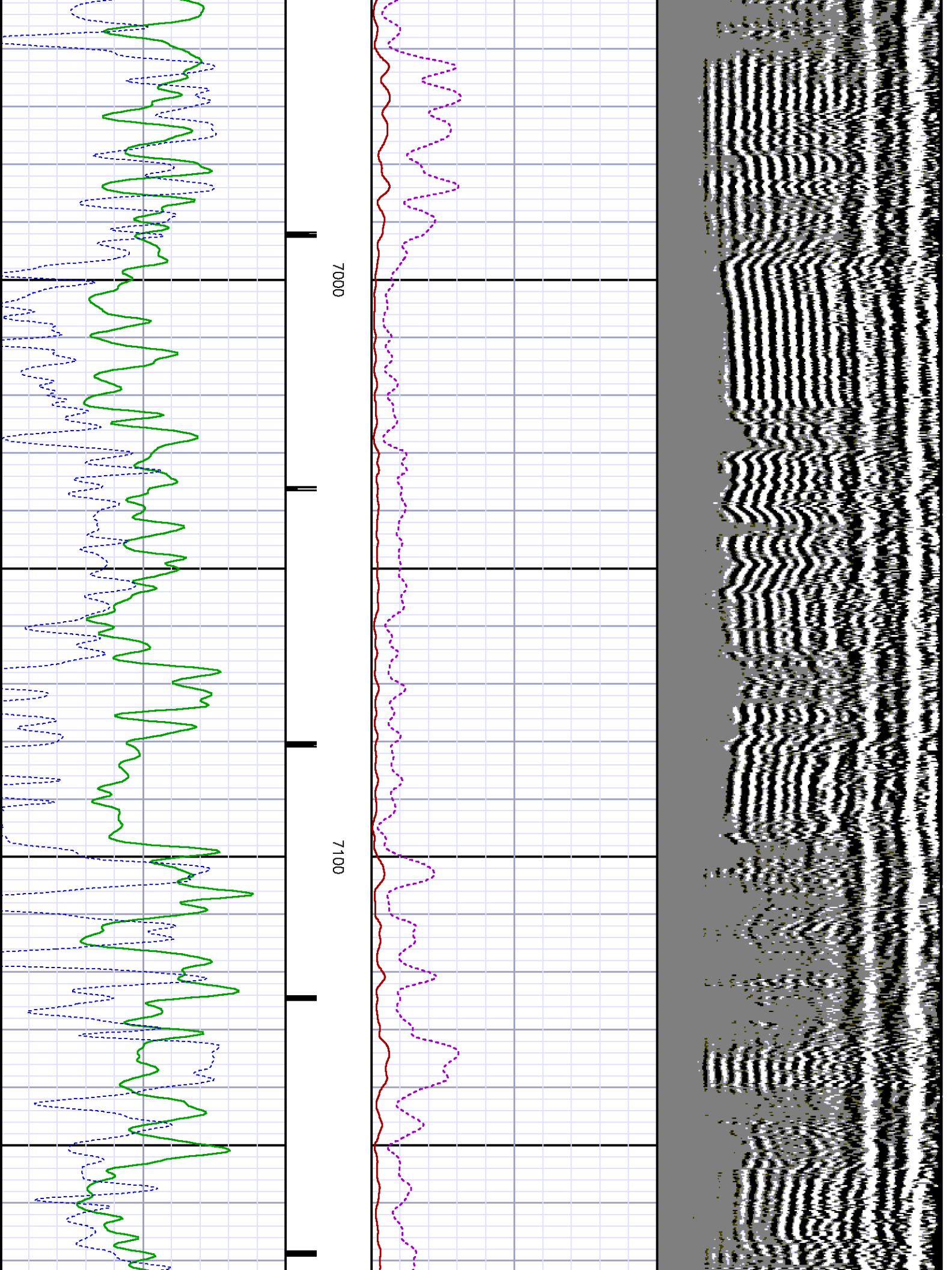


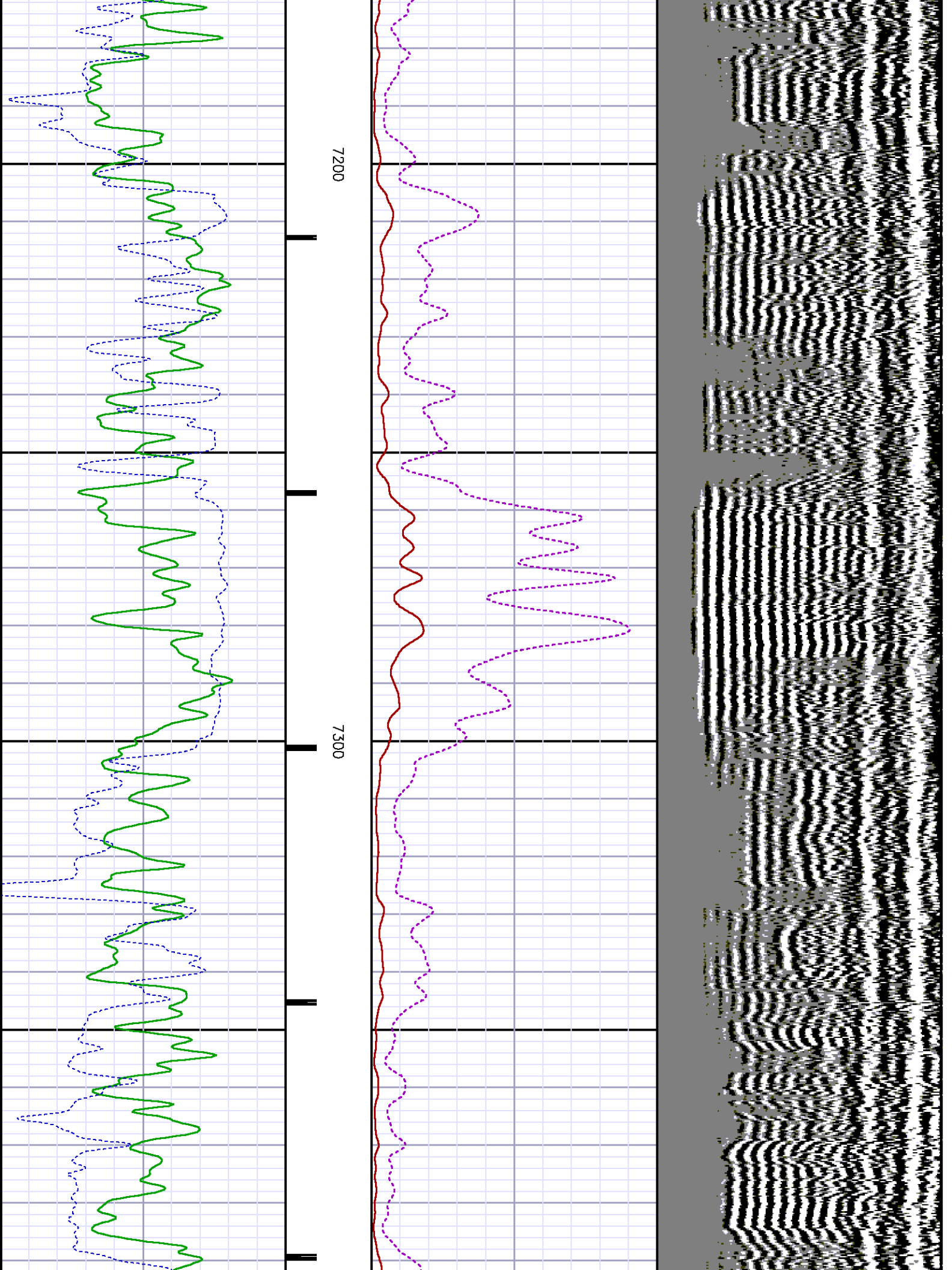


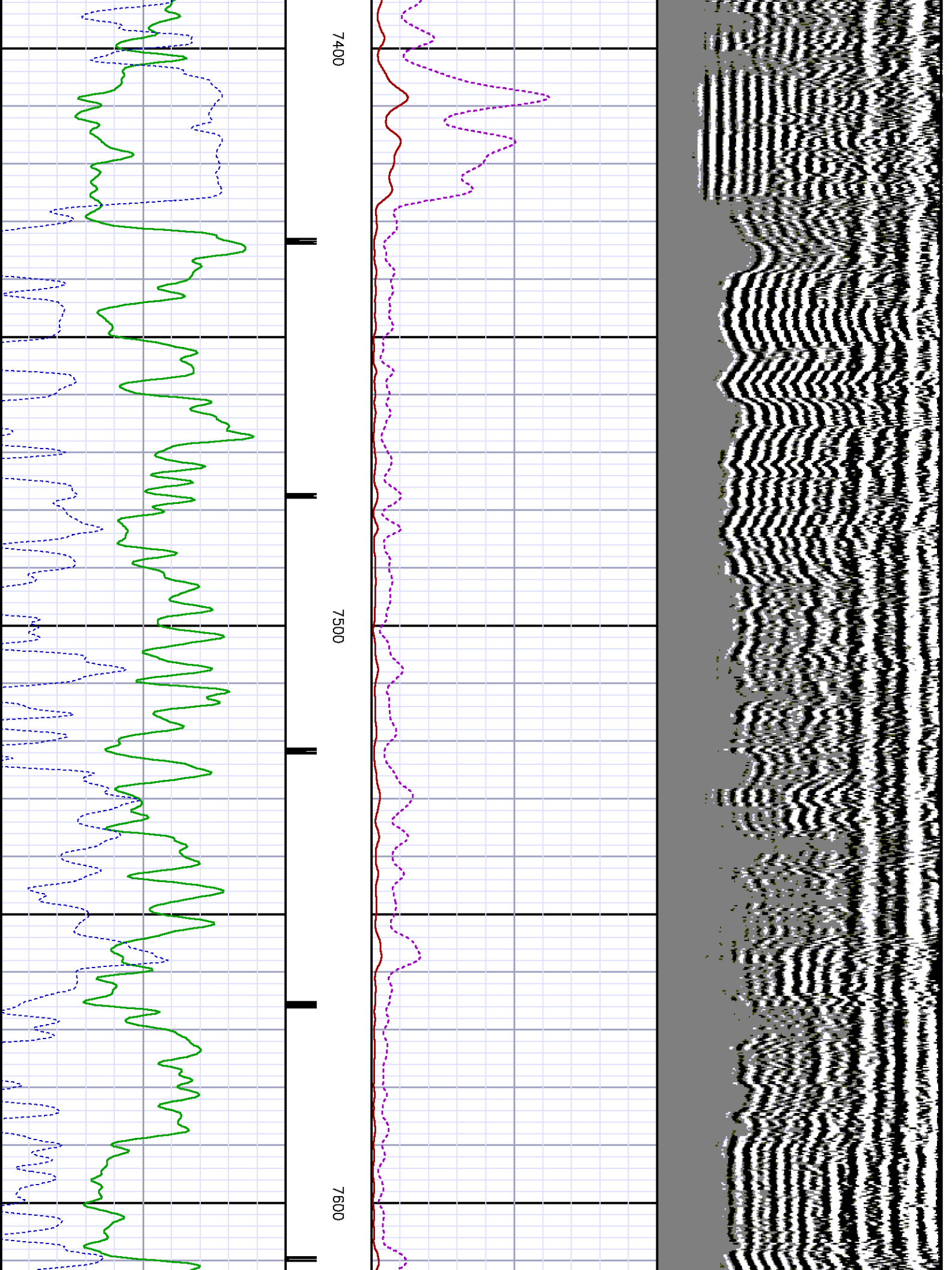
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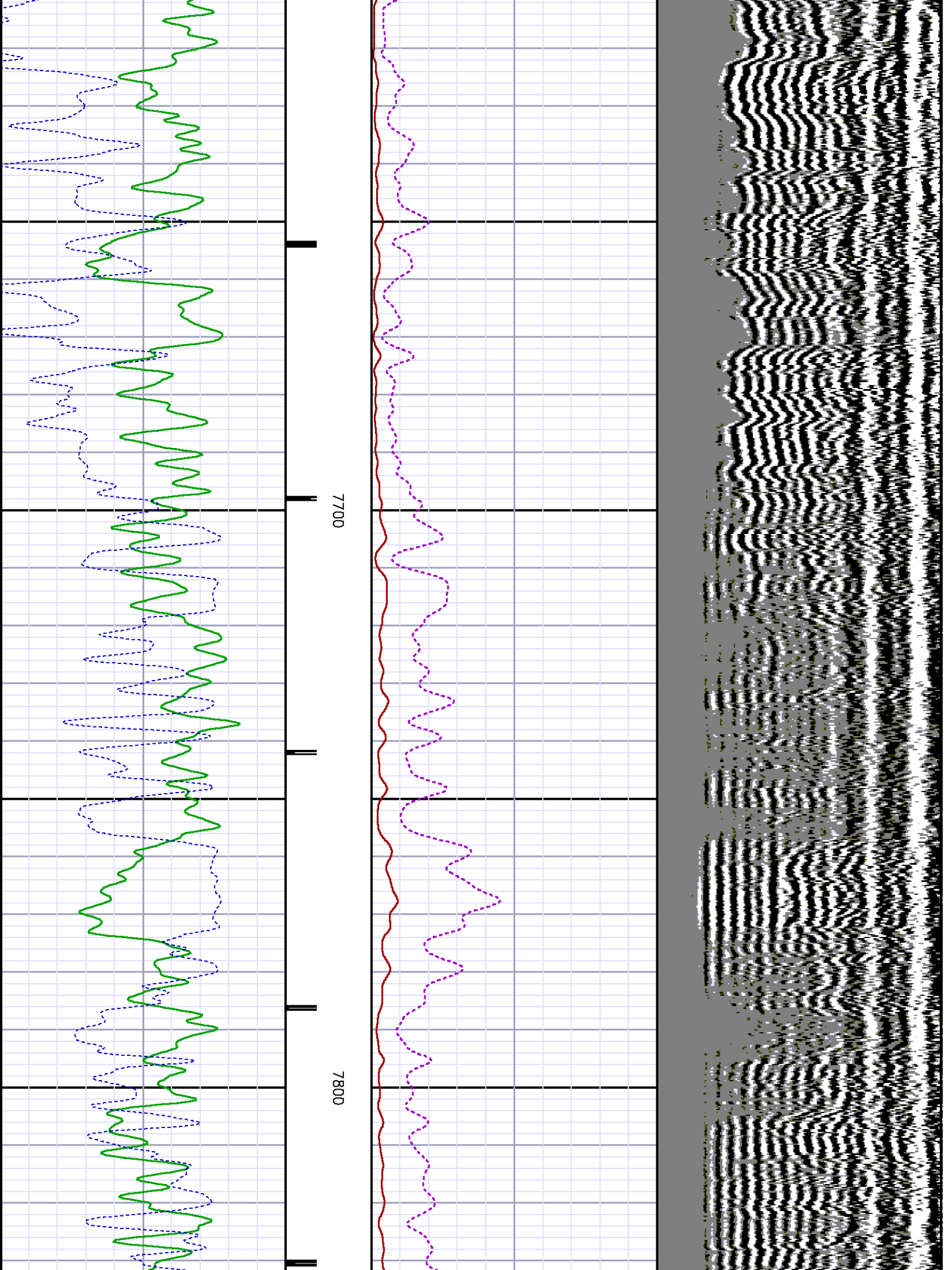
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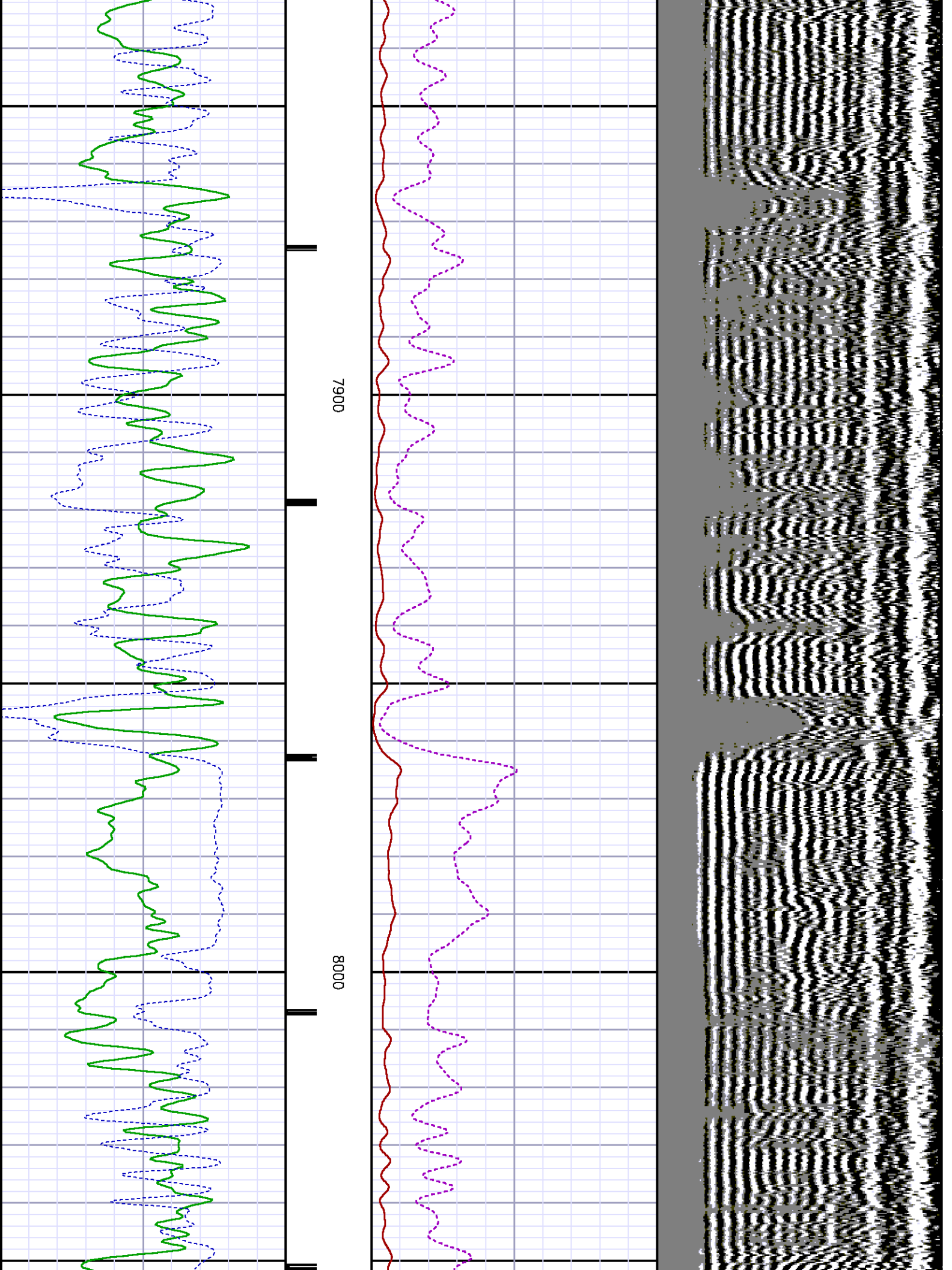


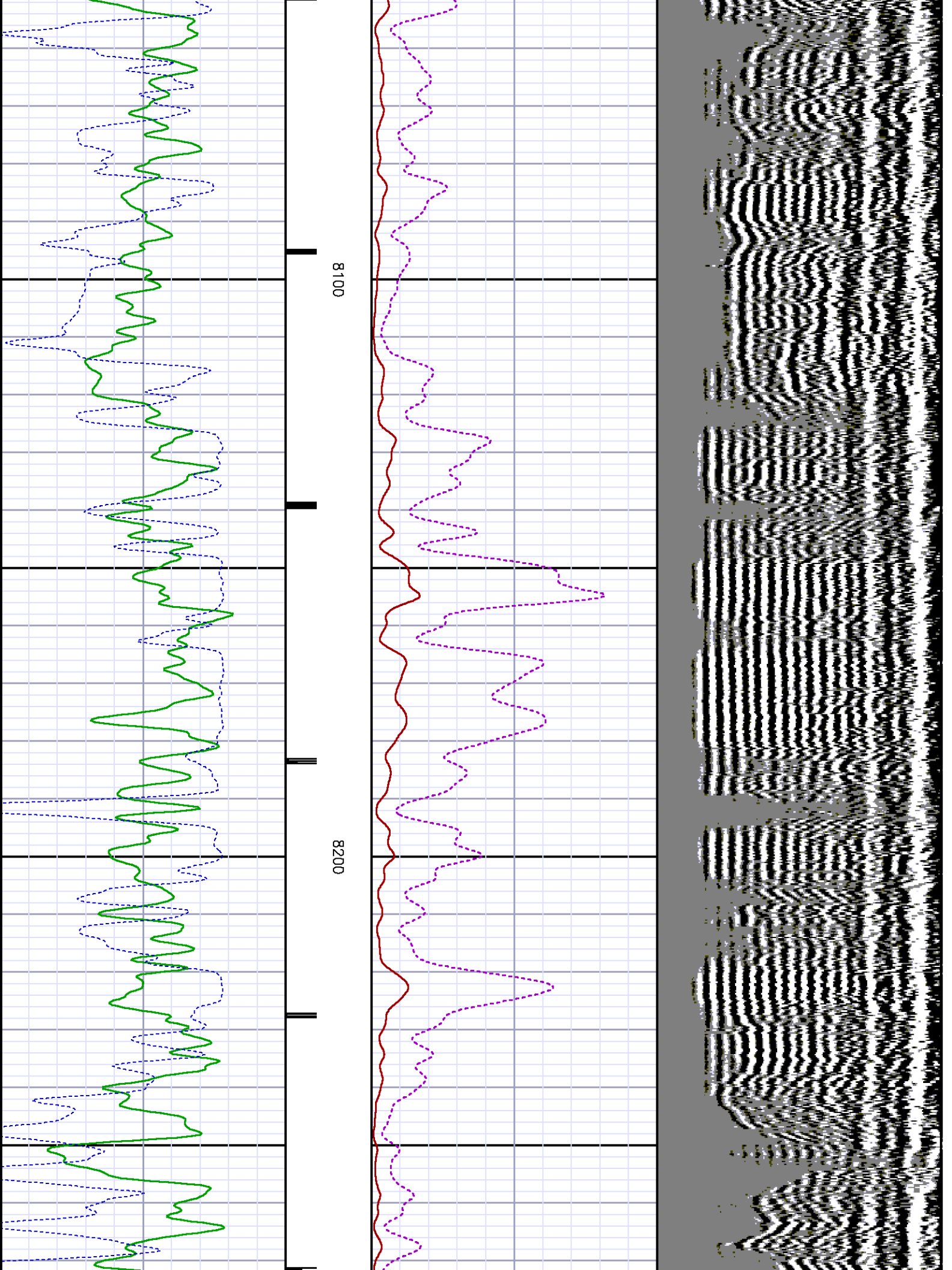


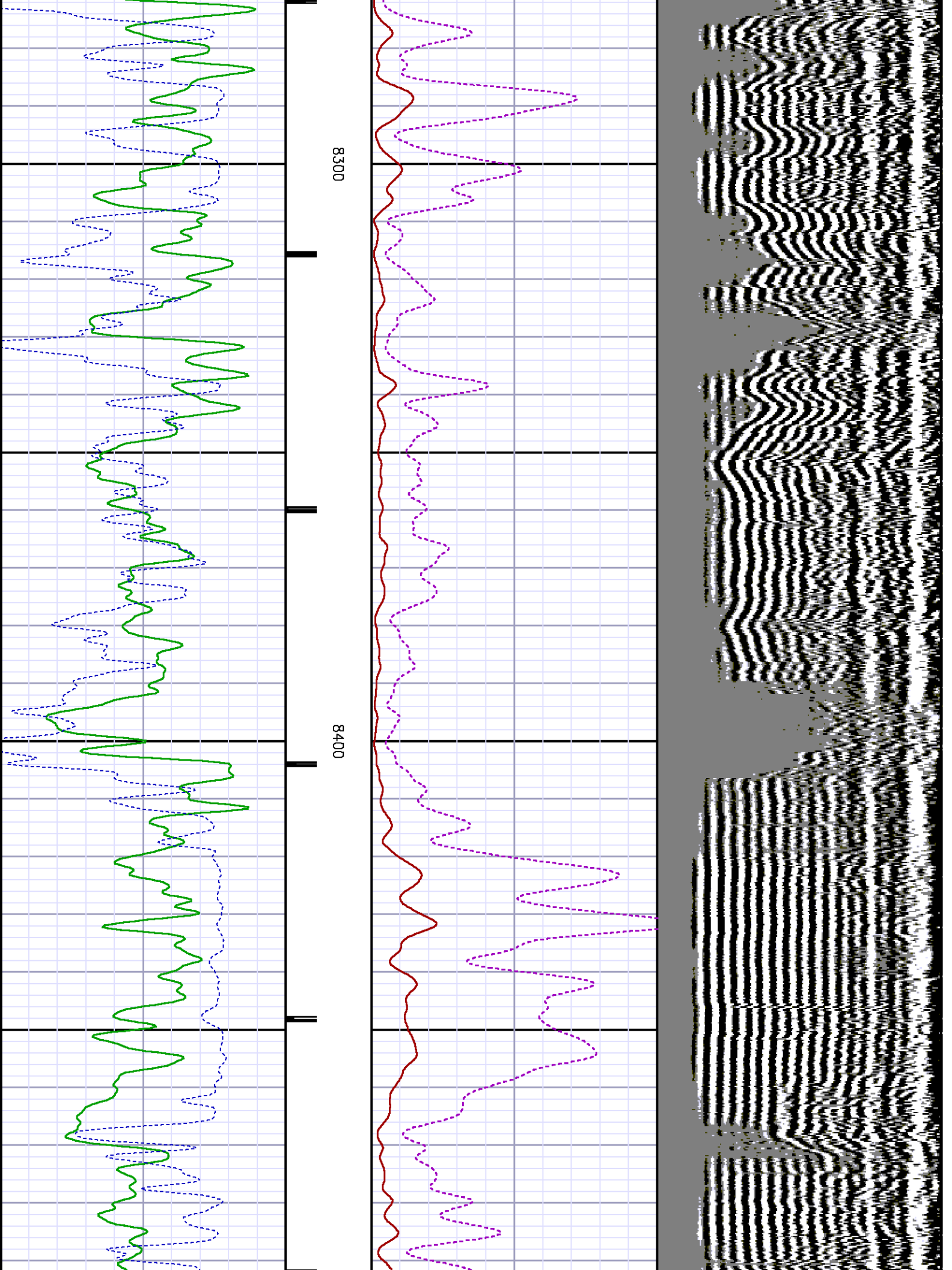


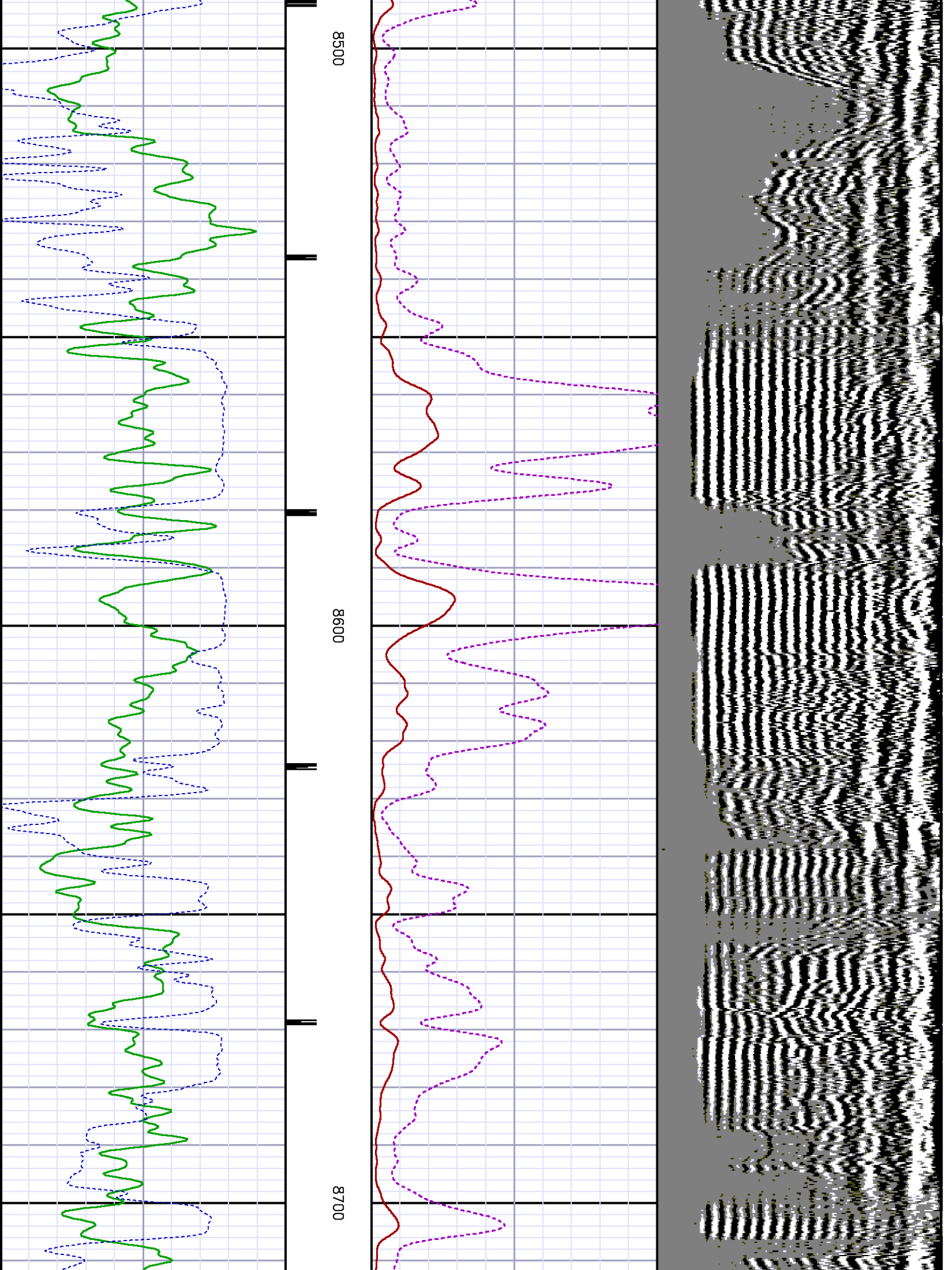


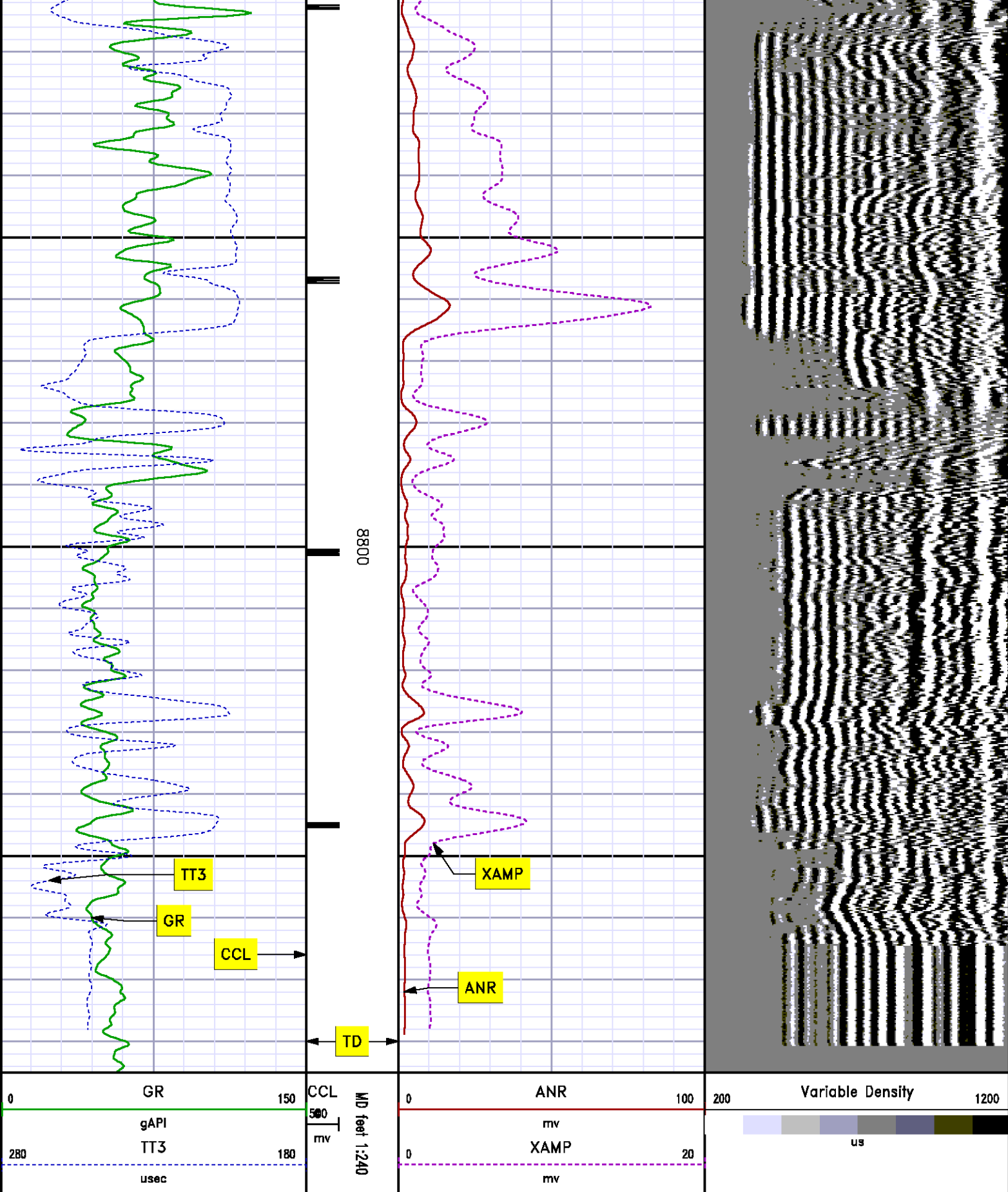












SECONDARY PRESENTATION

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	26.624	8885.000
RAL	Amp Gate Start Near	195.000	usec	26.624	8885.000
RAL	Amp Gate Start Radial	195.000	usec	26.624	8885.000
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RAL	Fluid Travel Time	200.000	usec/ft	26.624	8885.000

DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-16.750	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	-15.750	AFAR	SIG	TT5			
2459XA	-11.340	CCL					
2459XA	-9.490	GR					
2459XA	-4.090	NEU					

Created by : RAL, v4.8.008

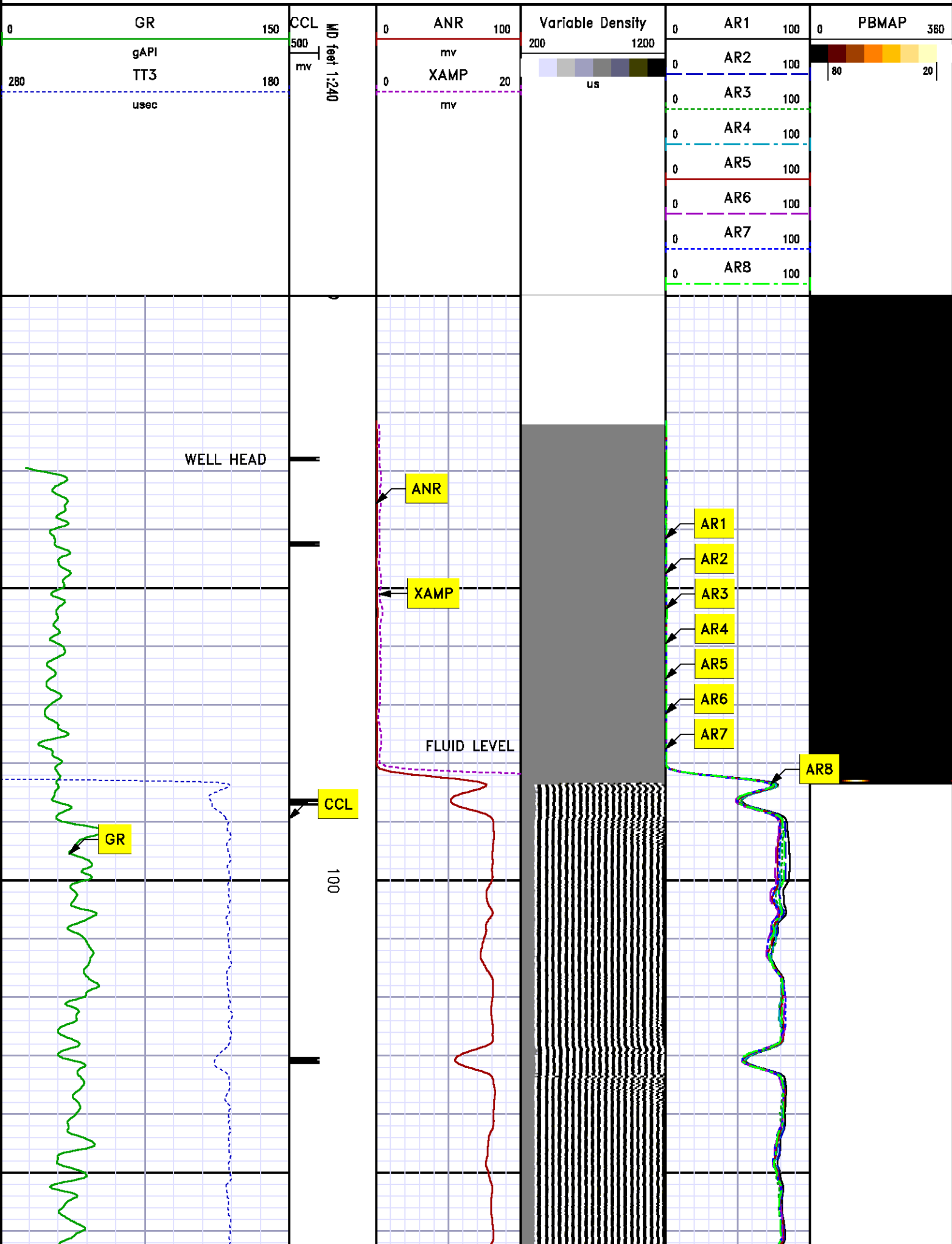
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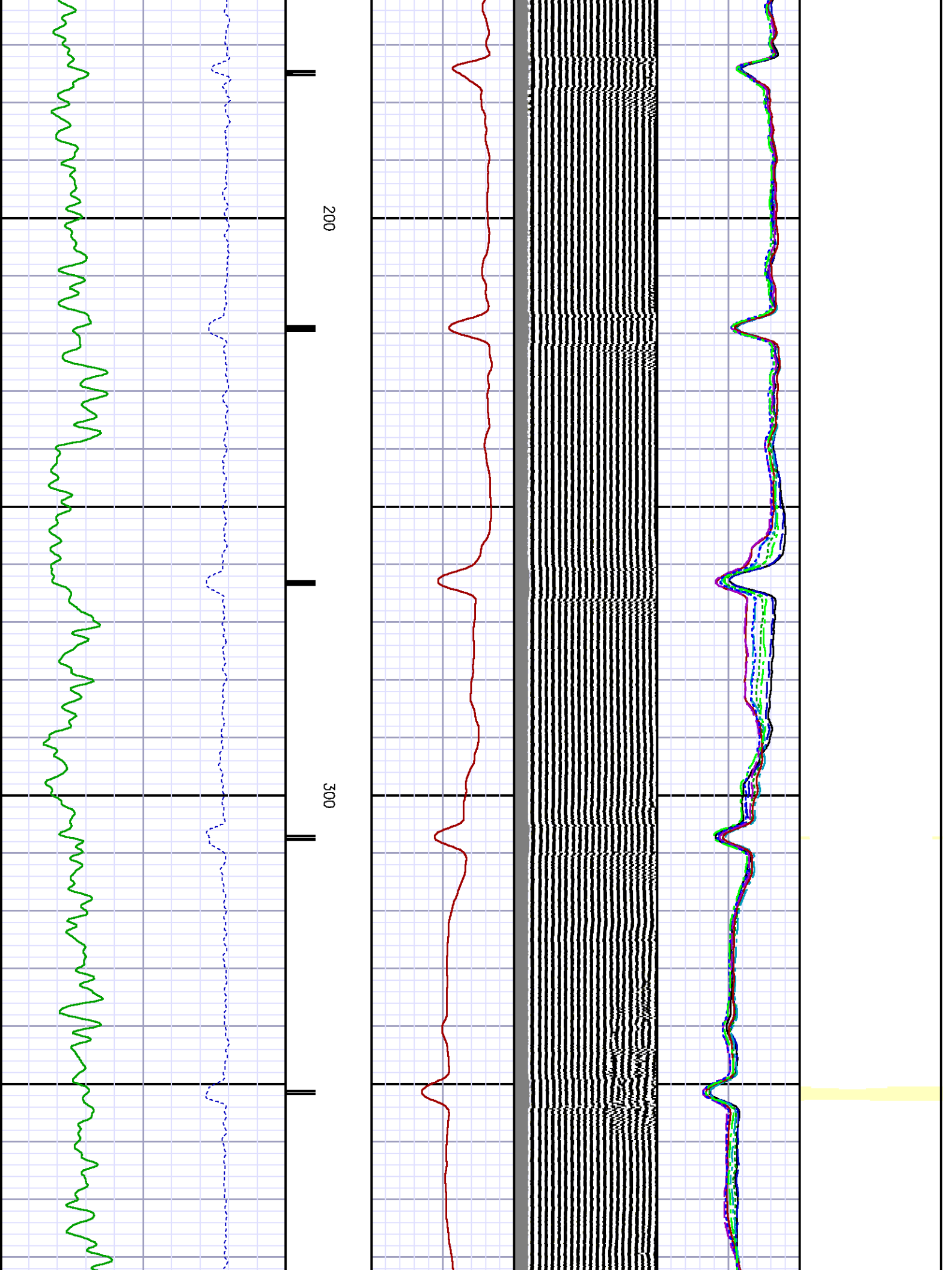
Company : WPX ENERGY

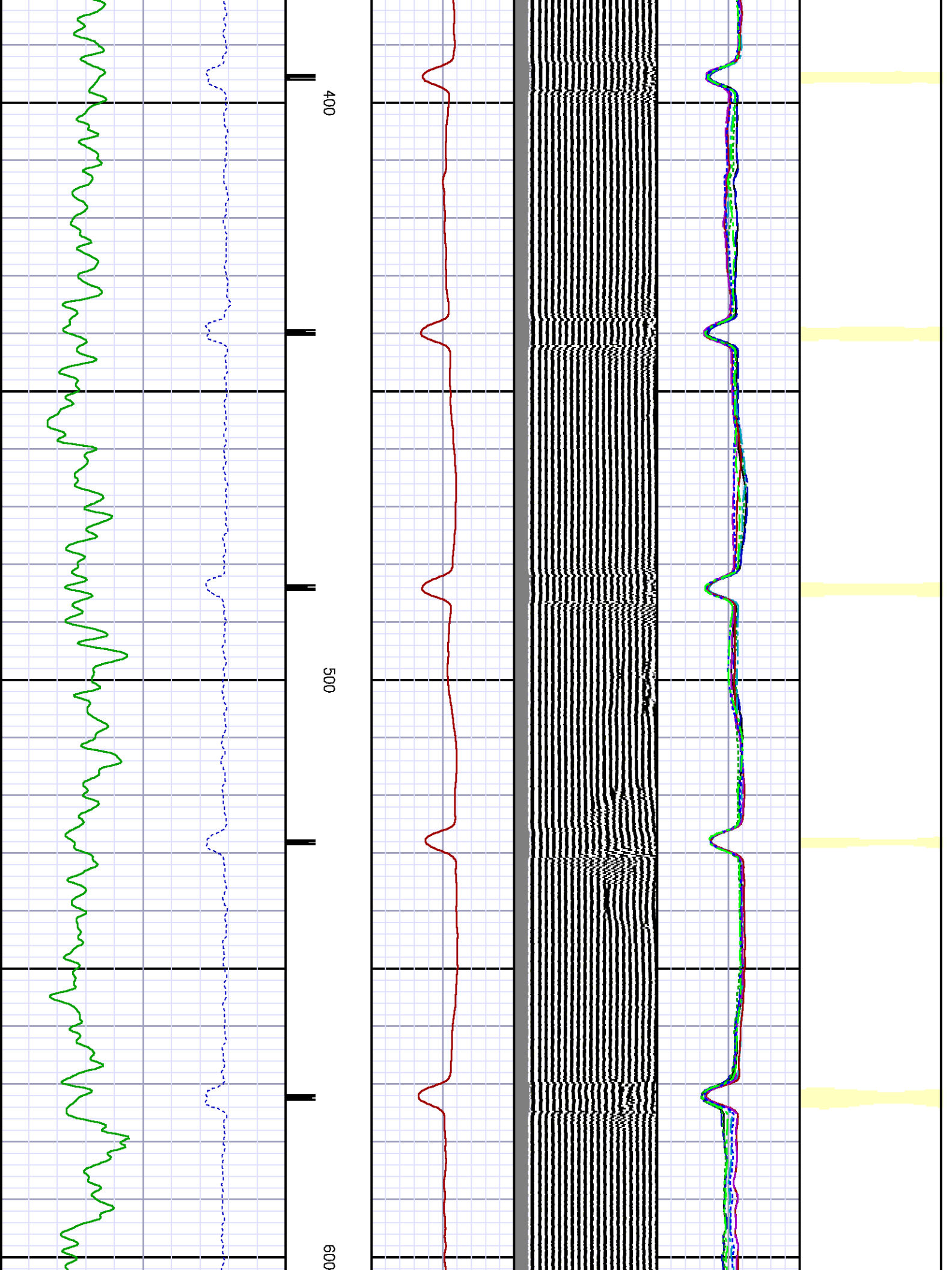
Well : HOEPPLI RWF 532-36

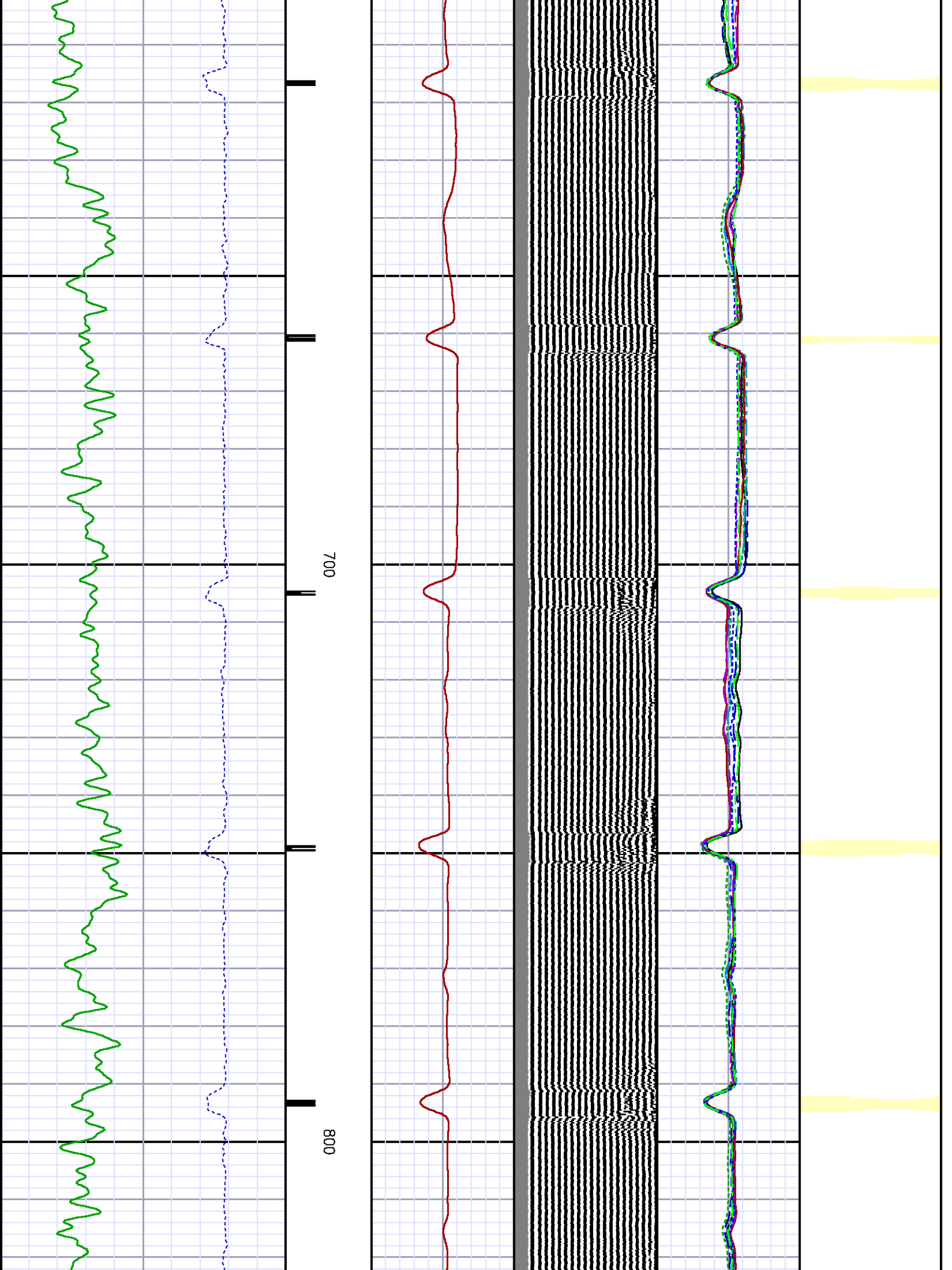
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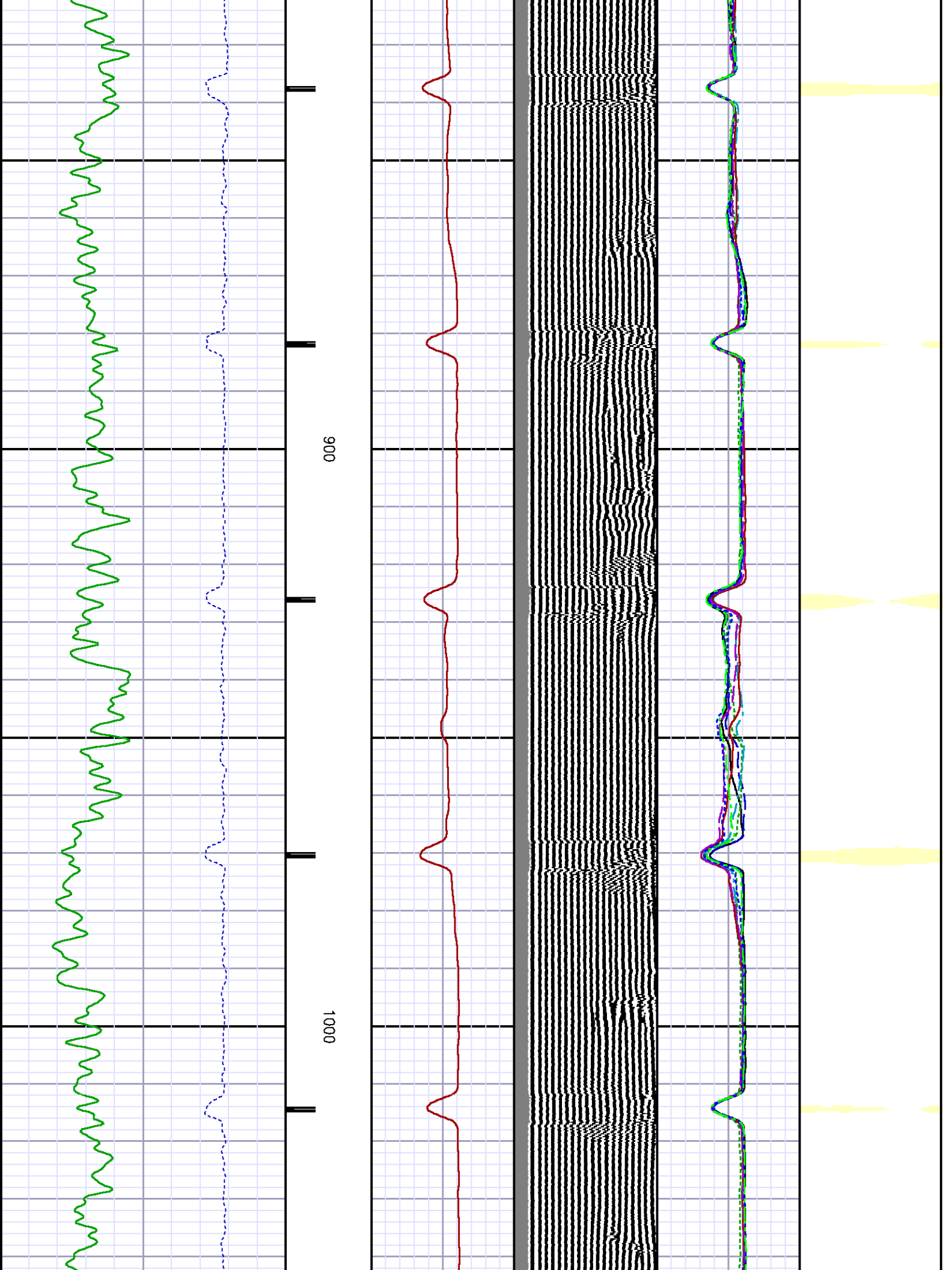
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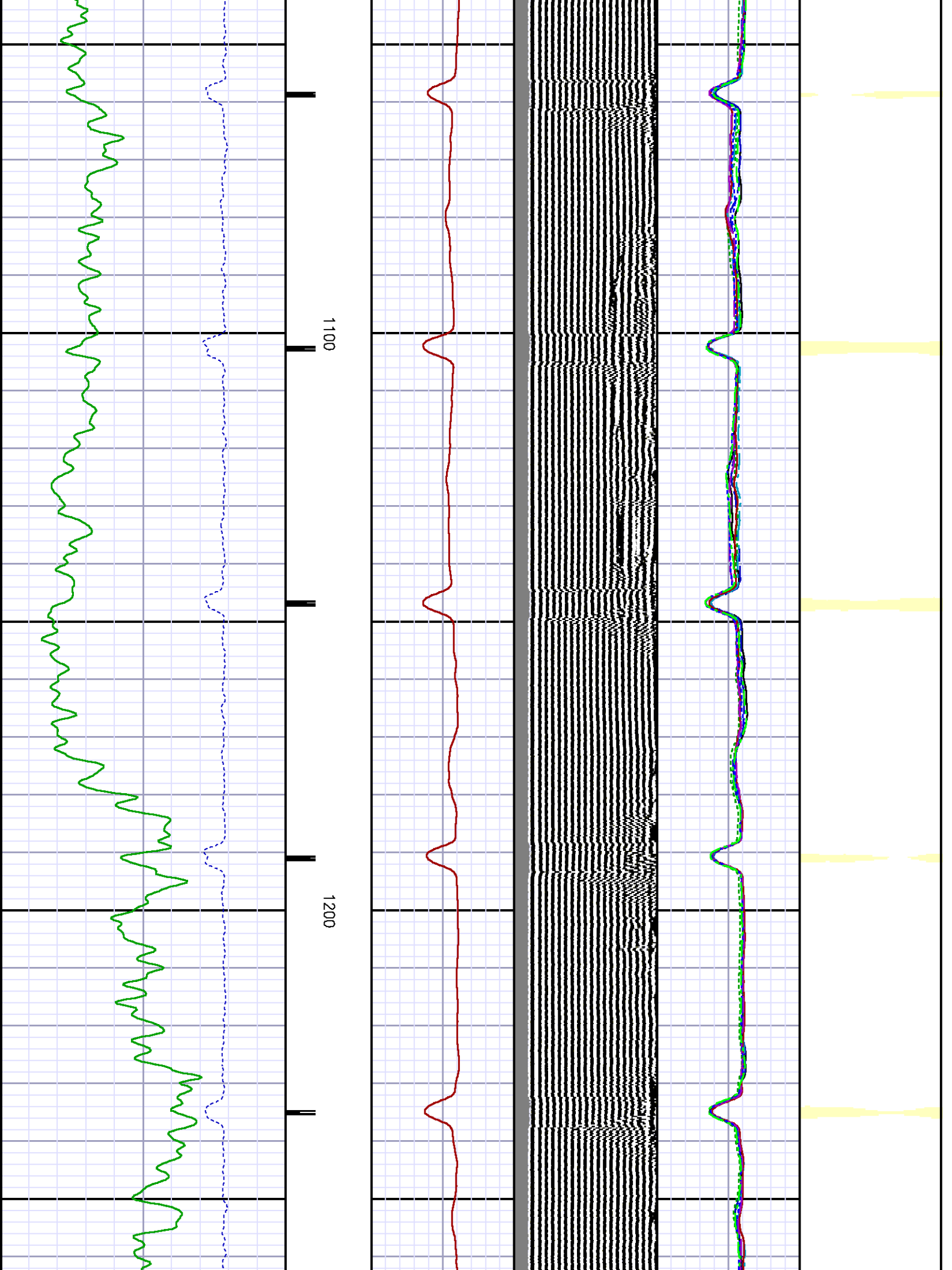


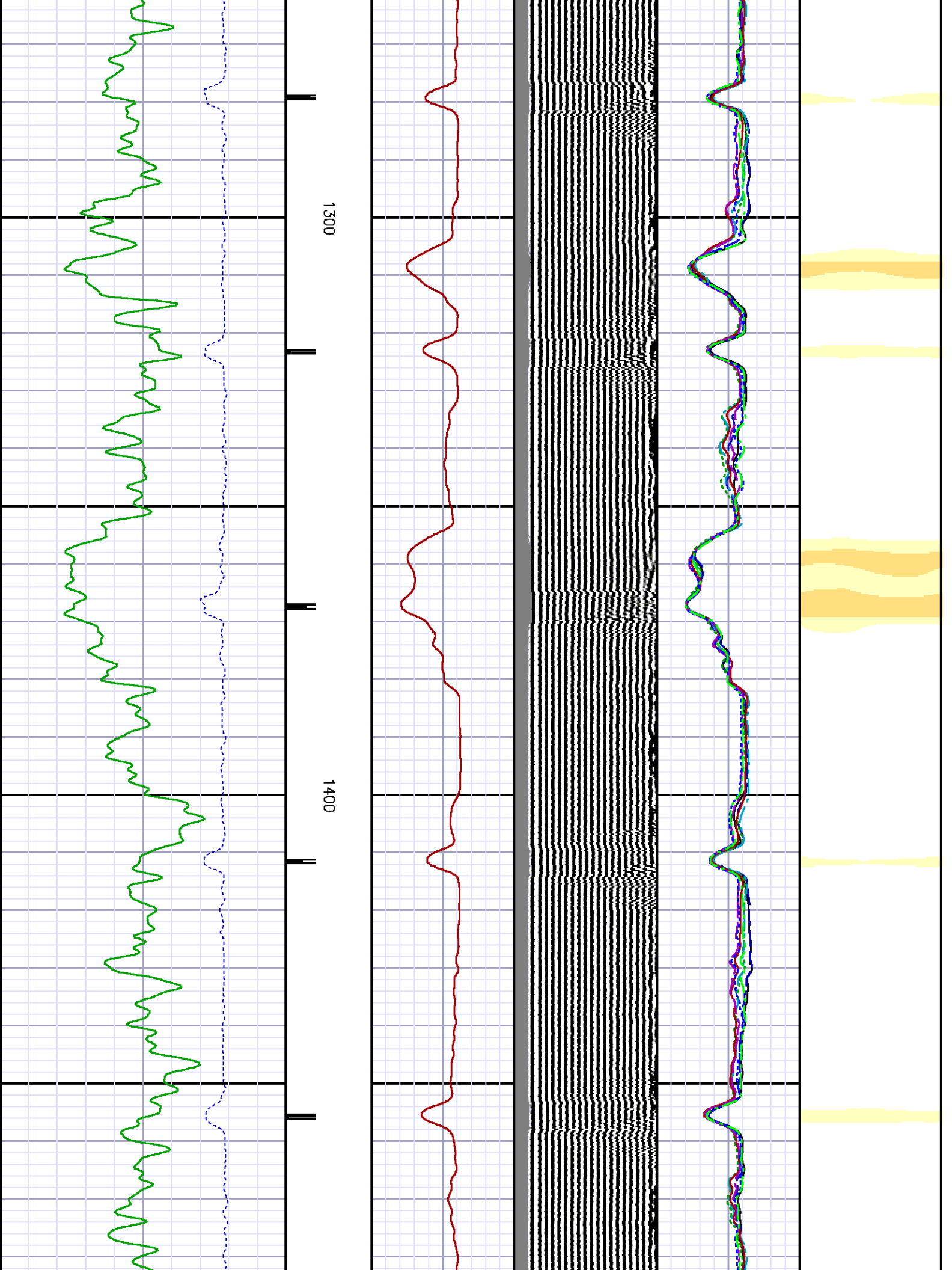


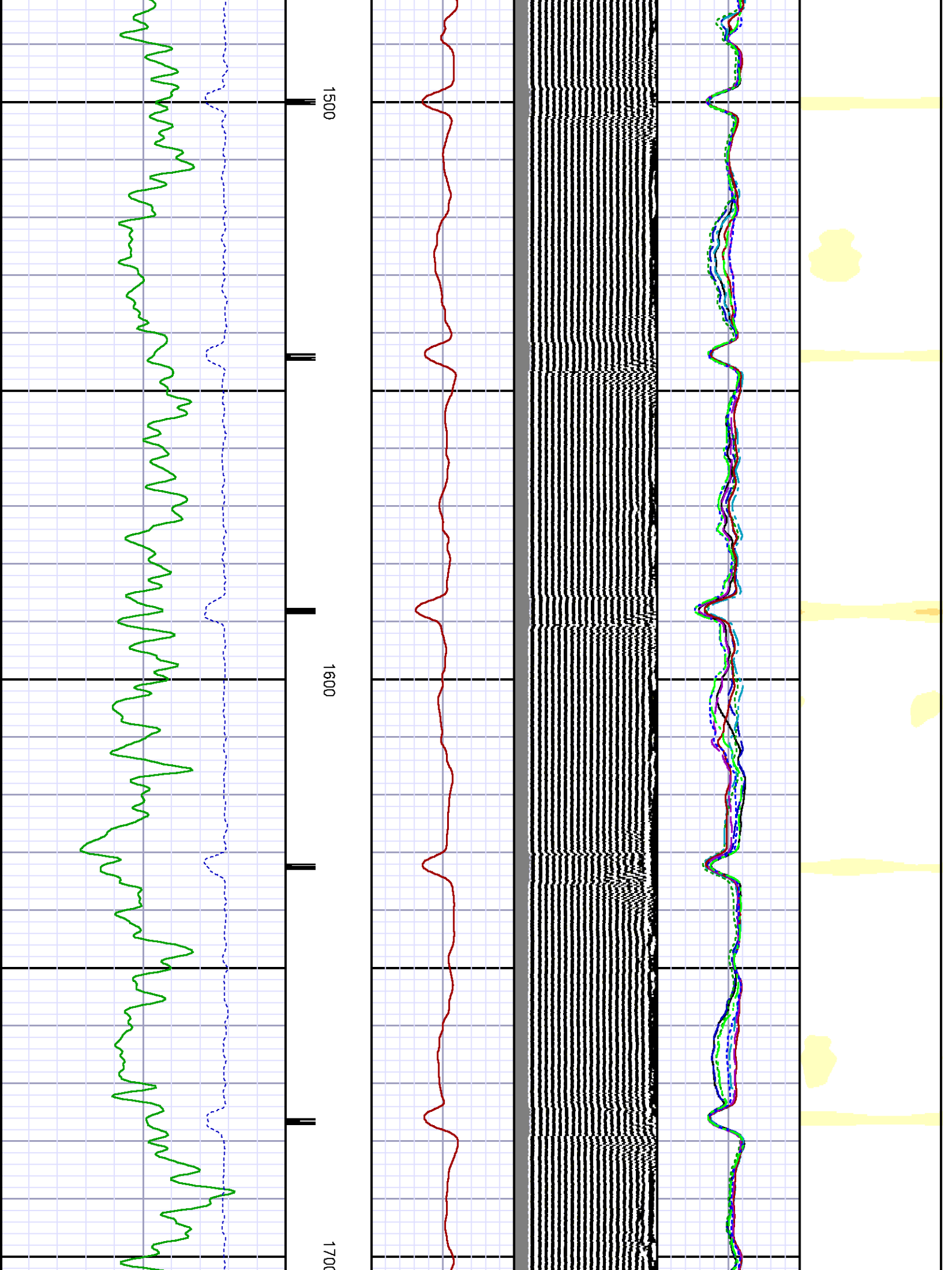


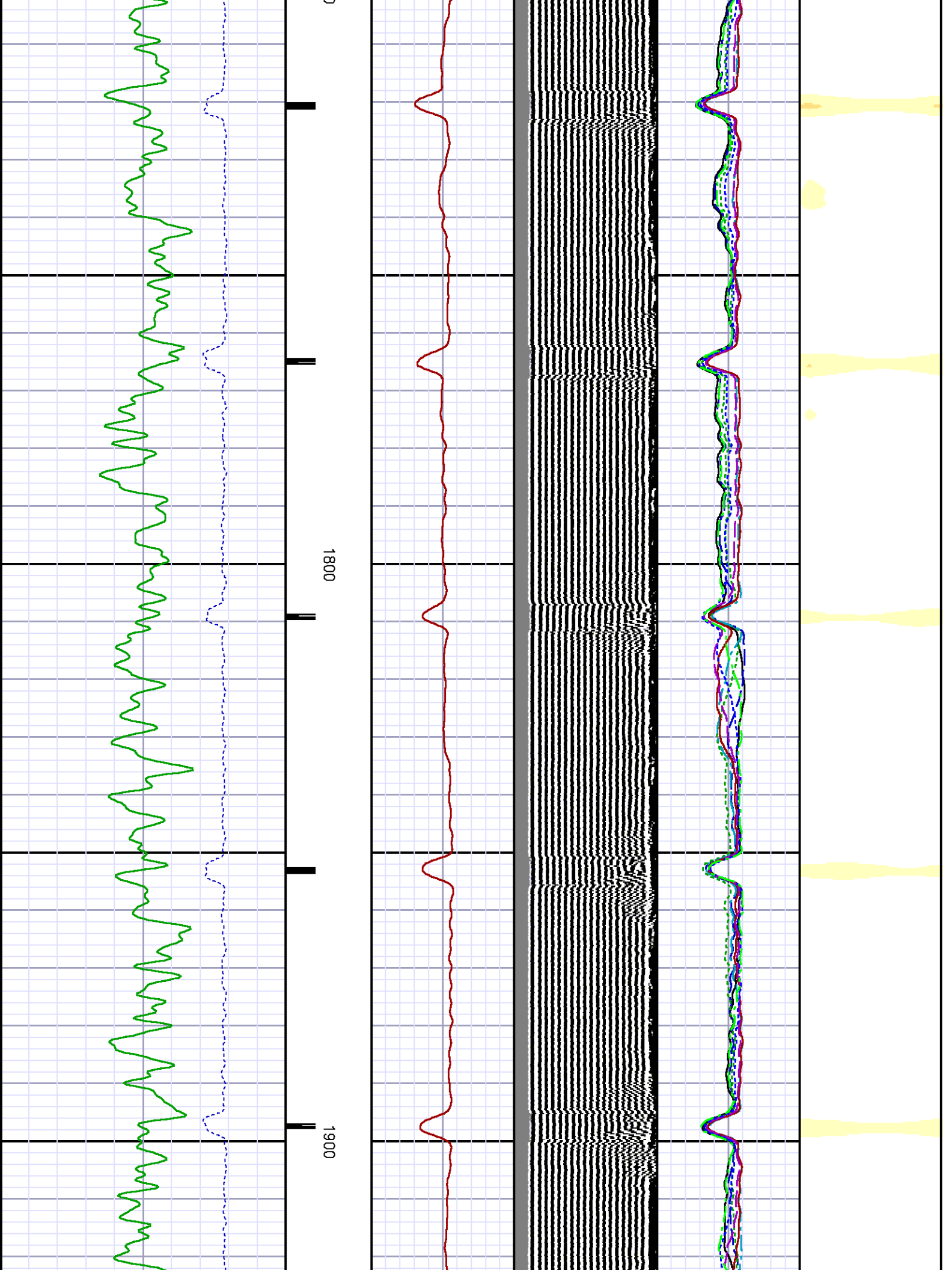


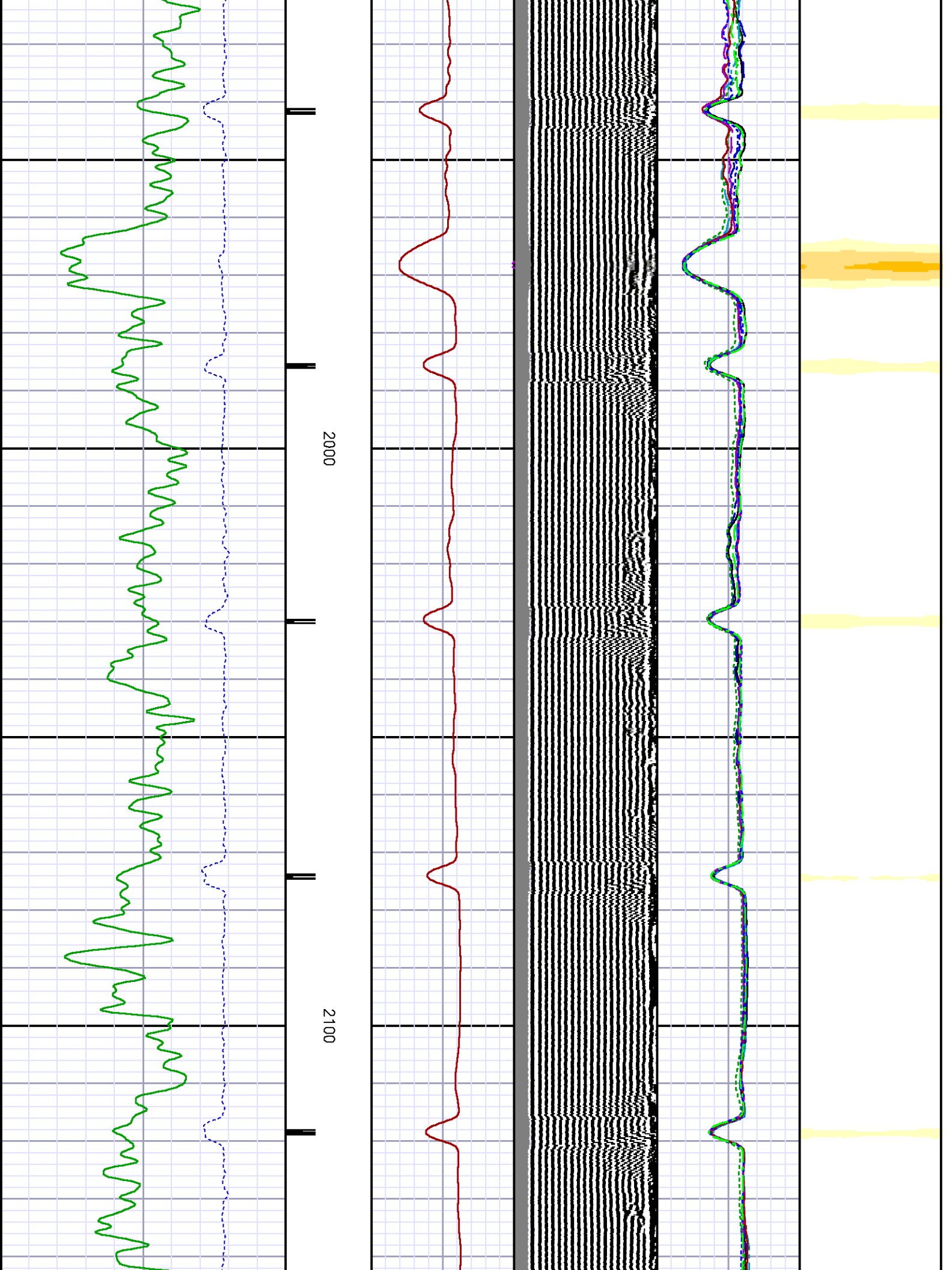


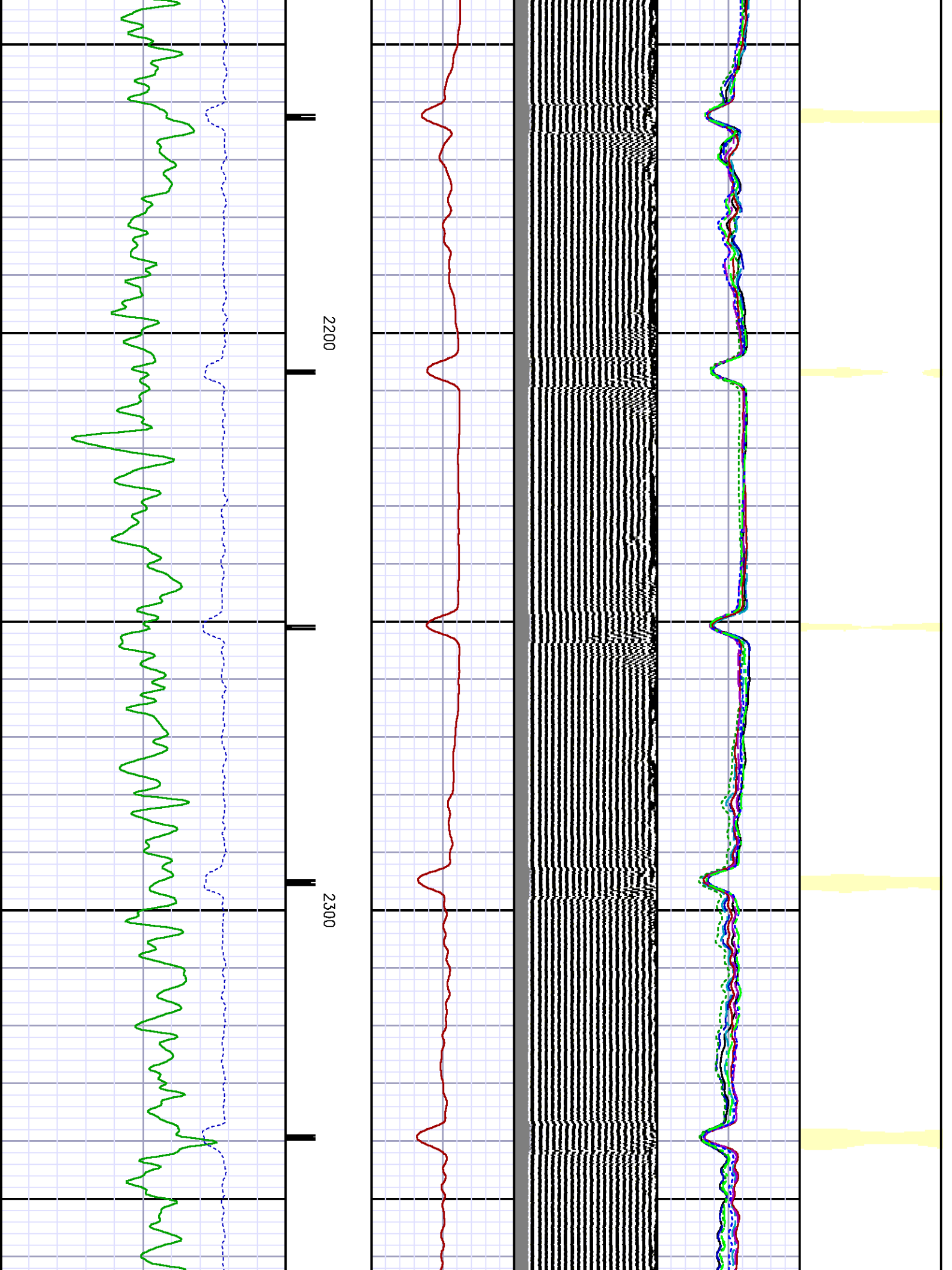


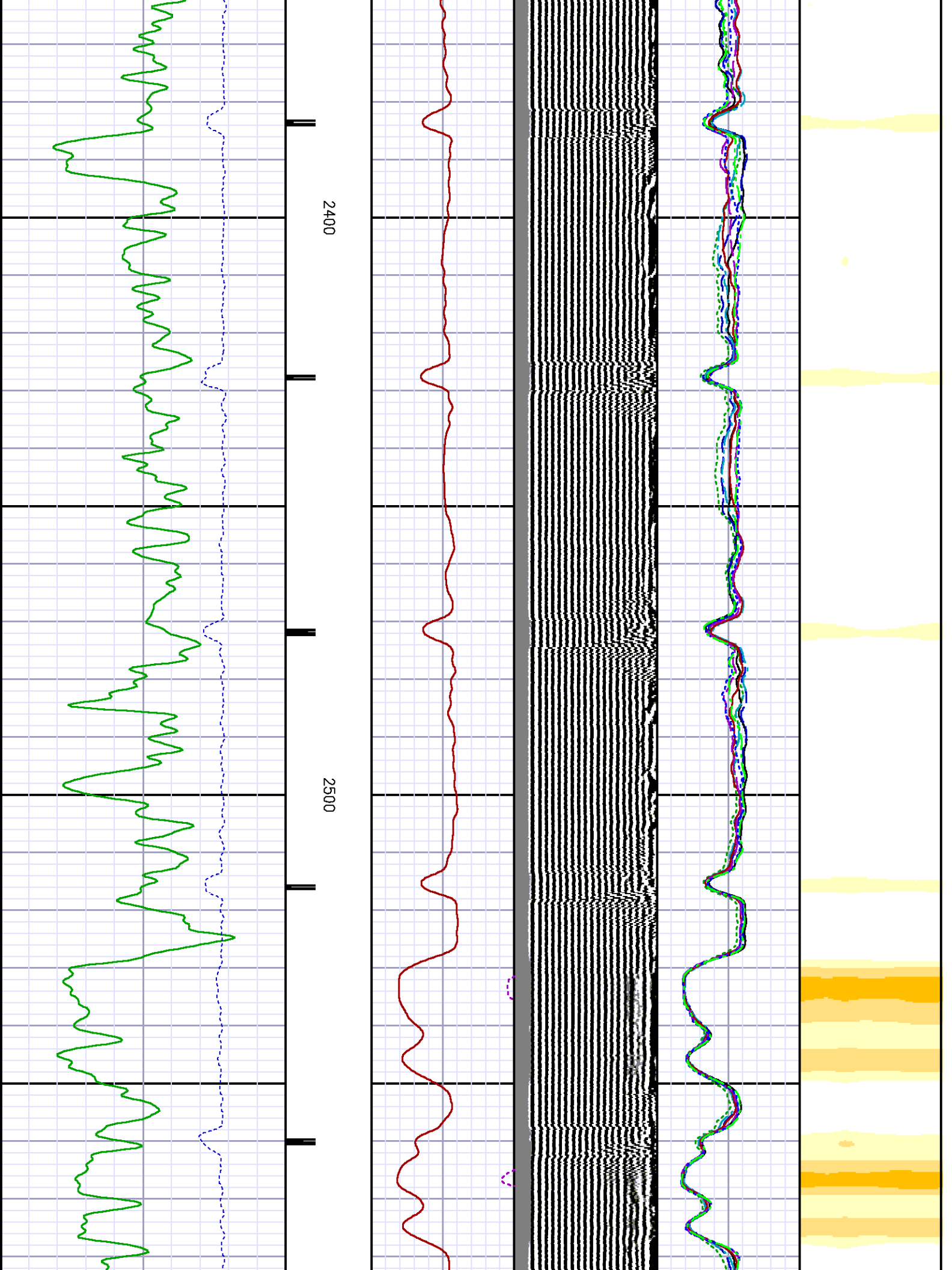


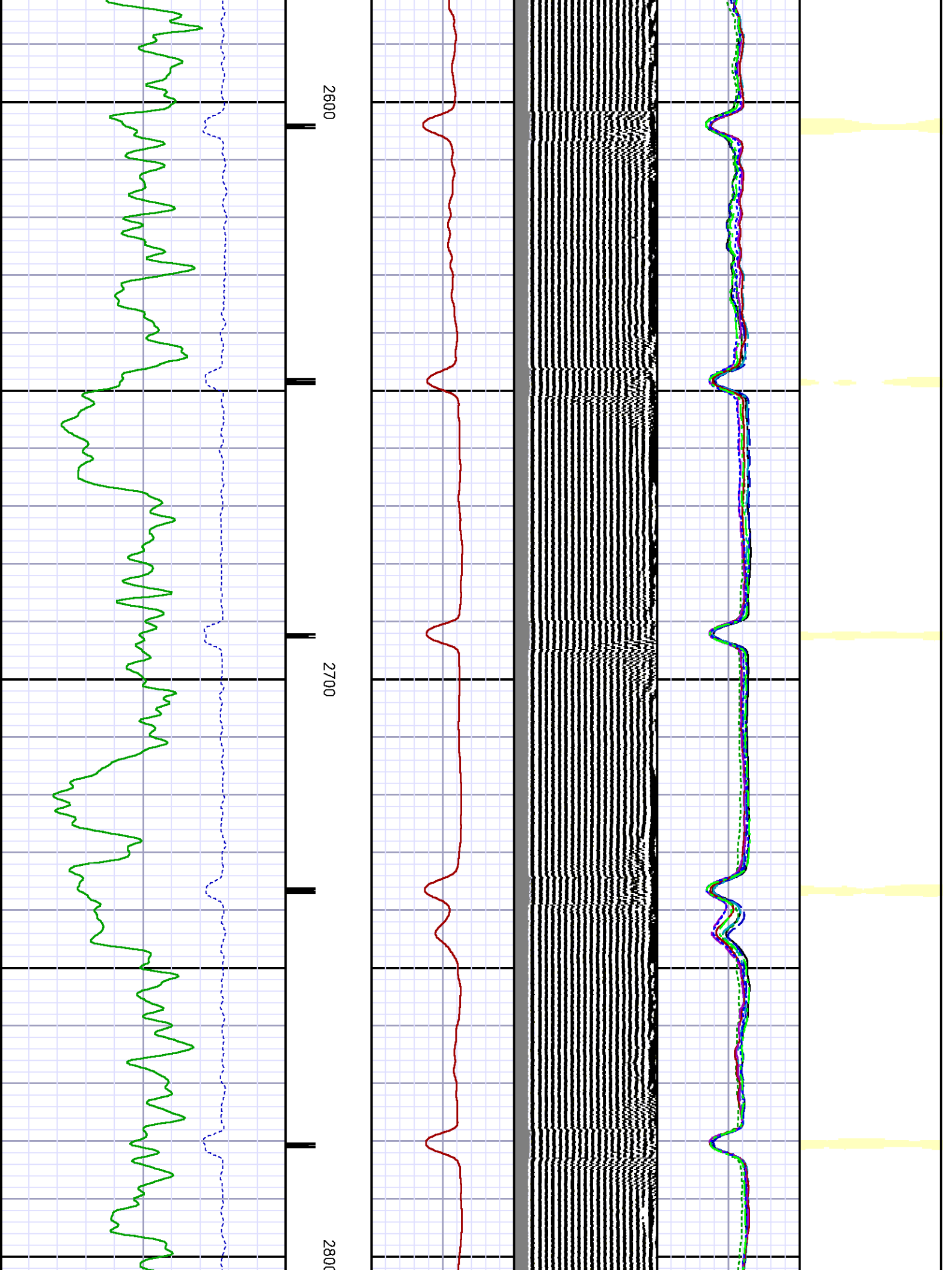


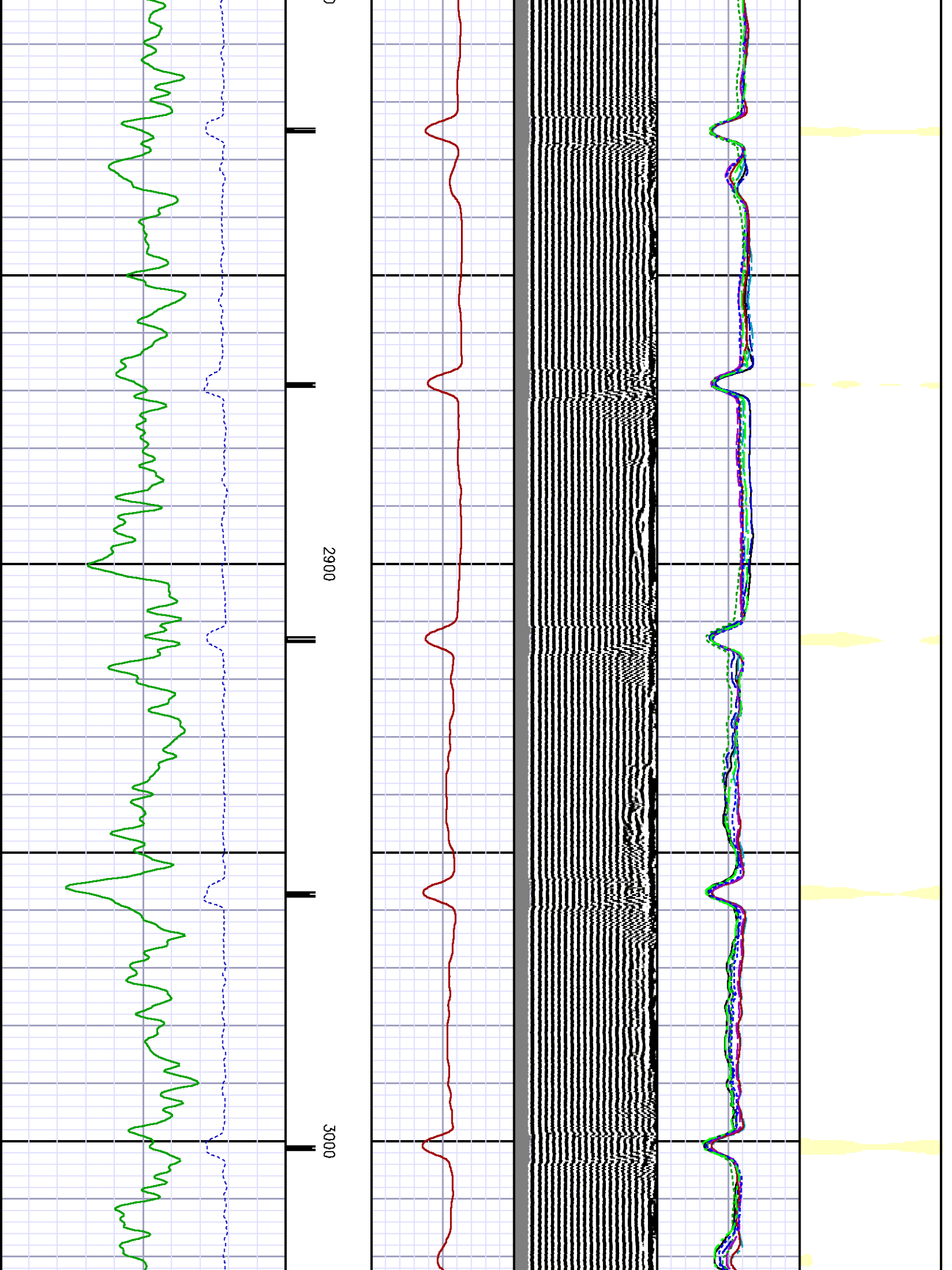


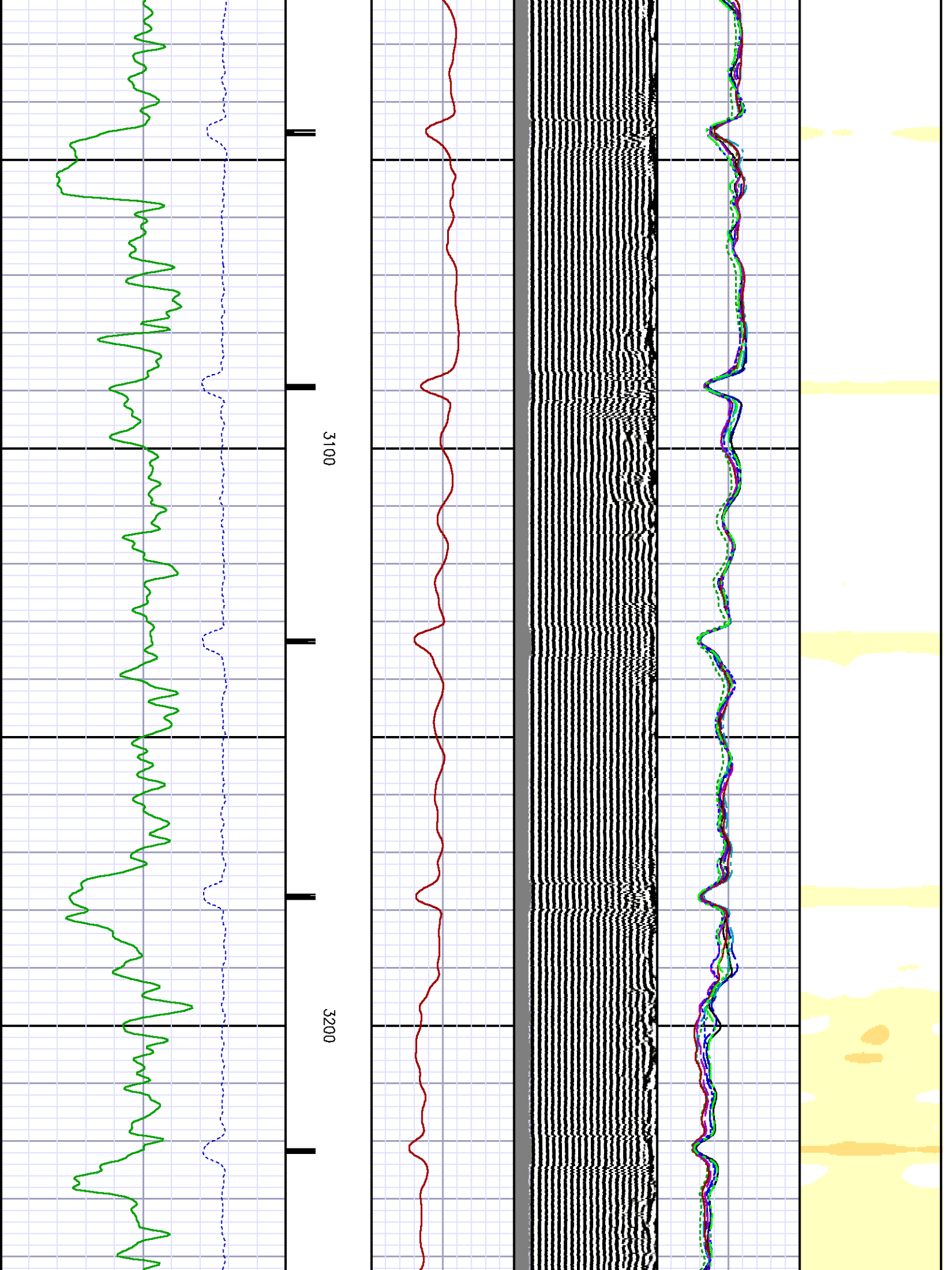


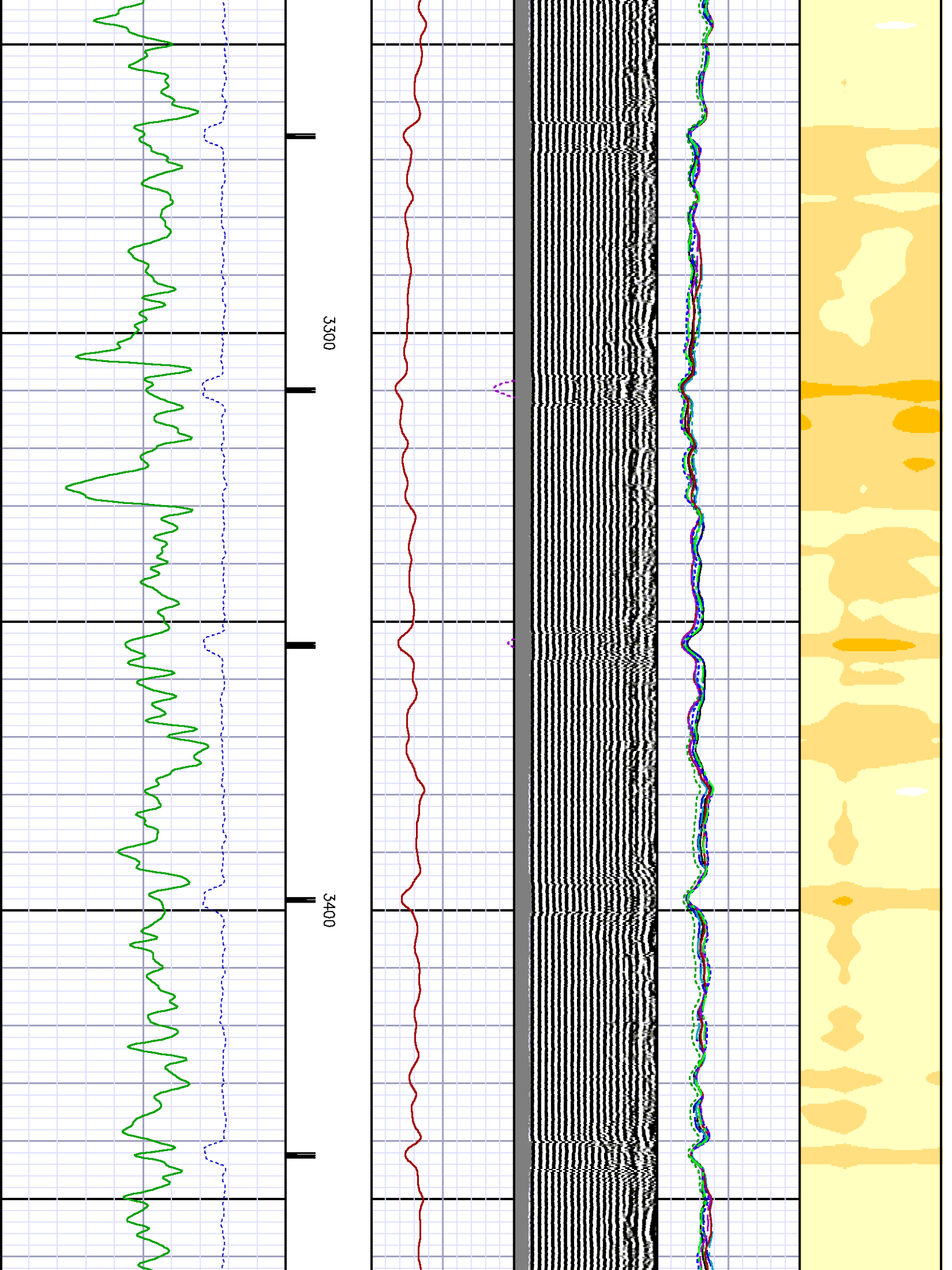


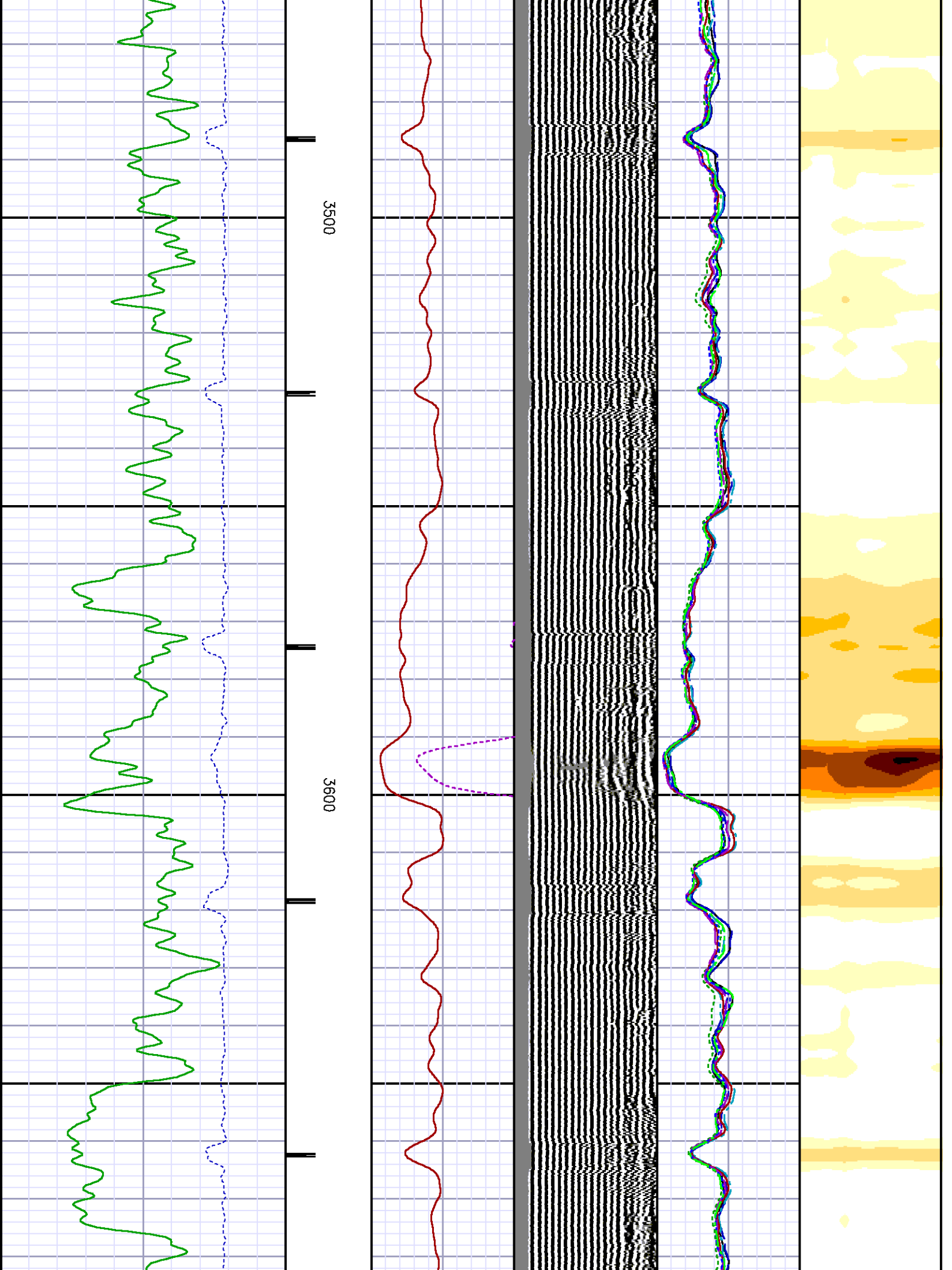


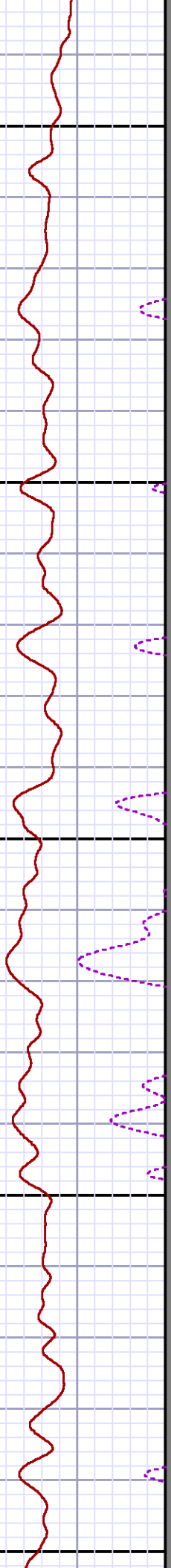
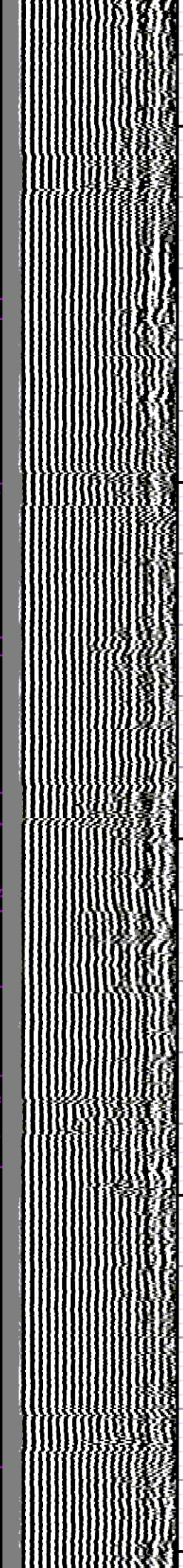
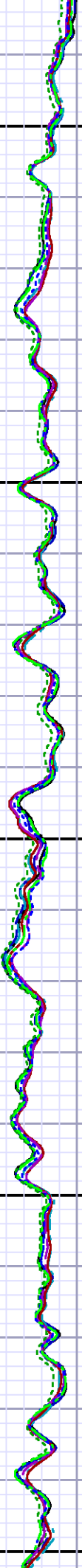
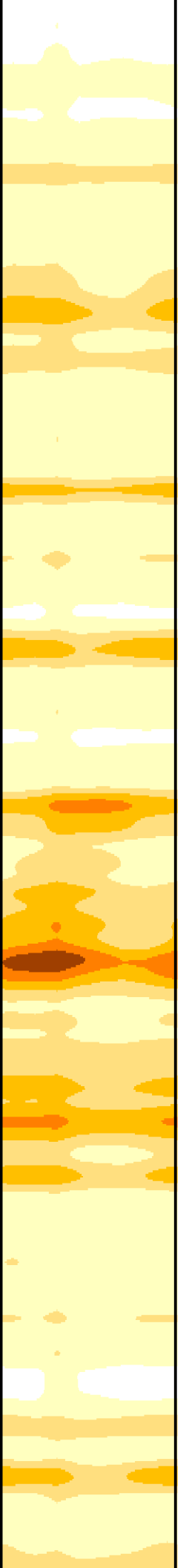








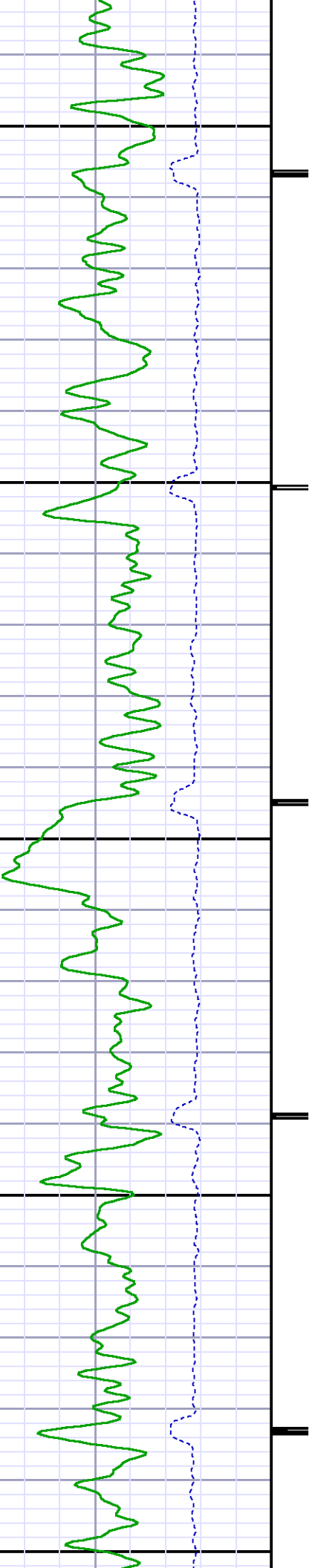


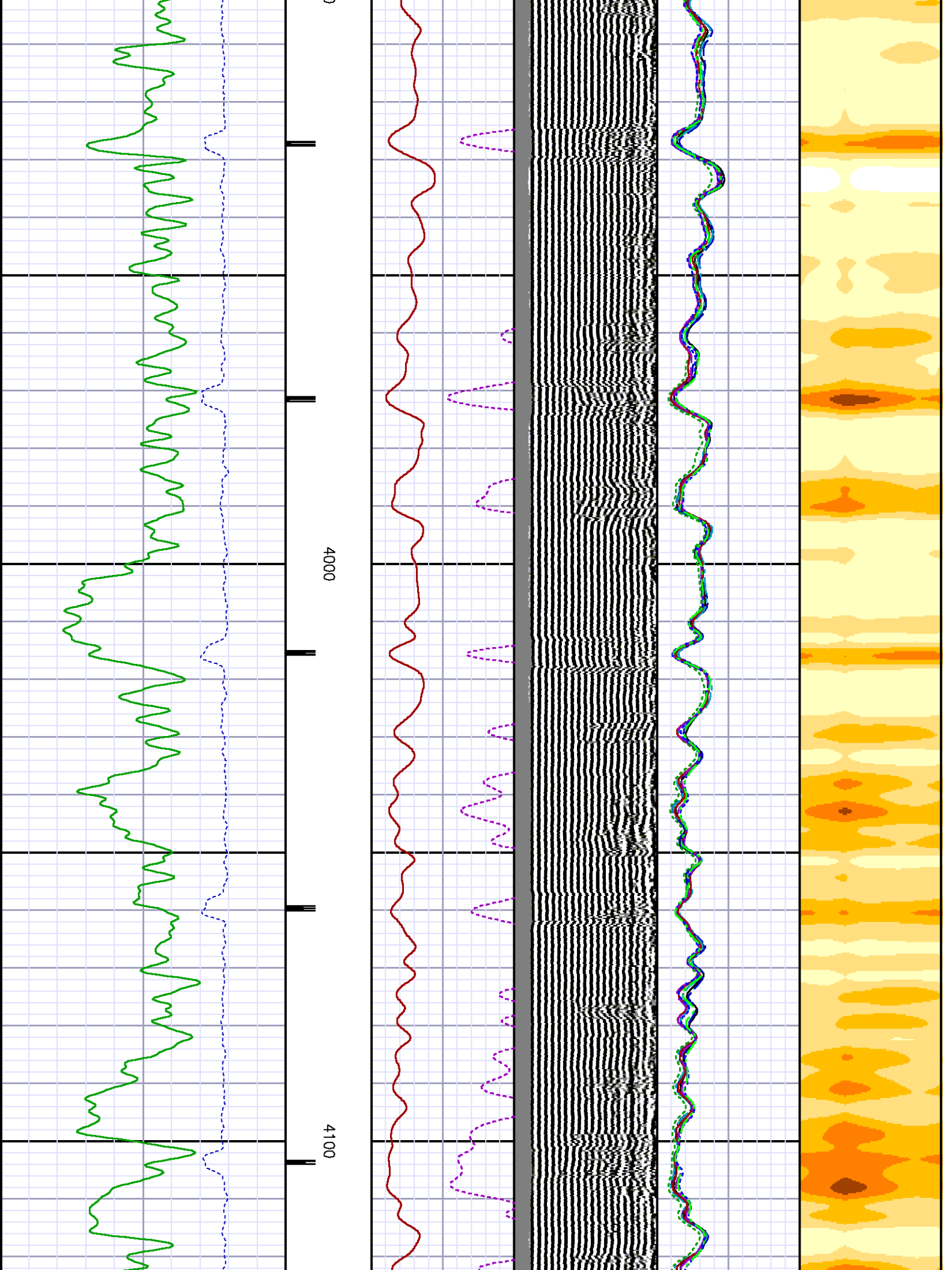


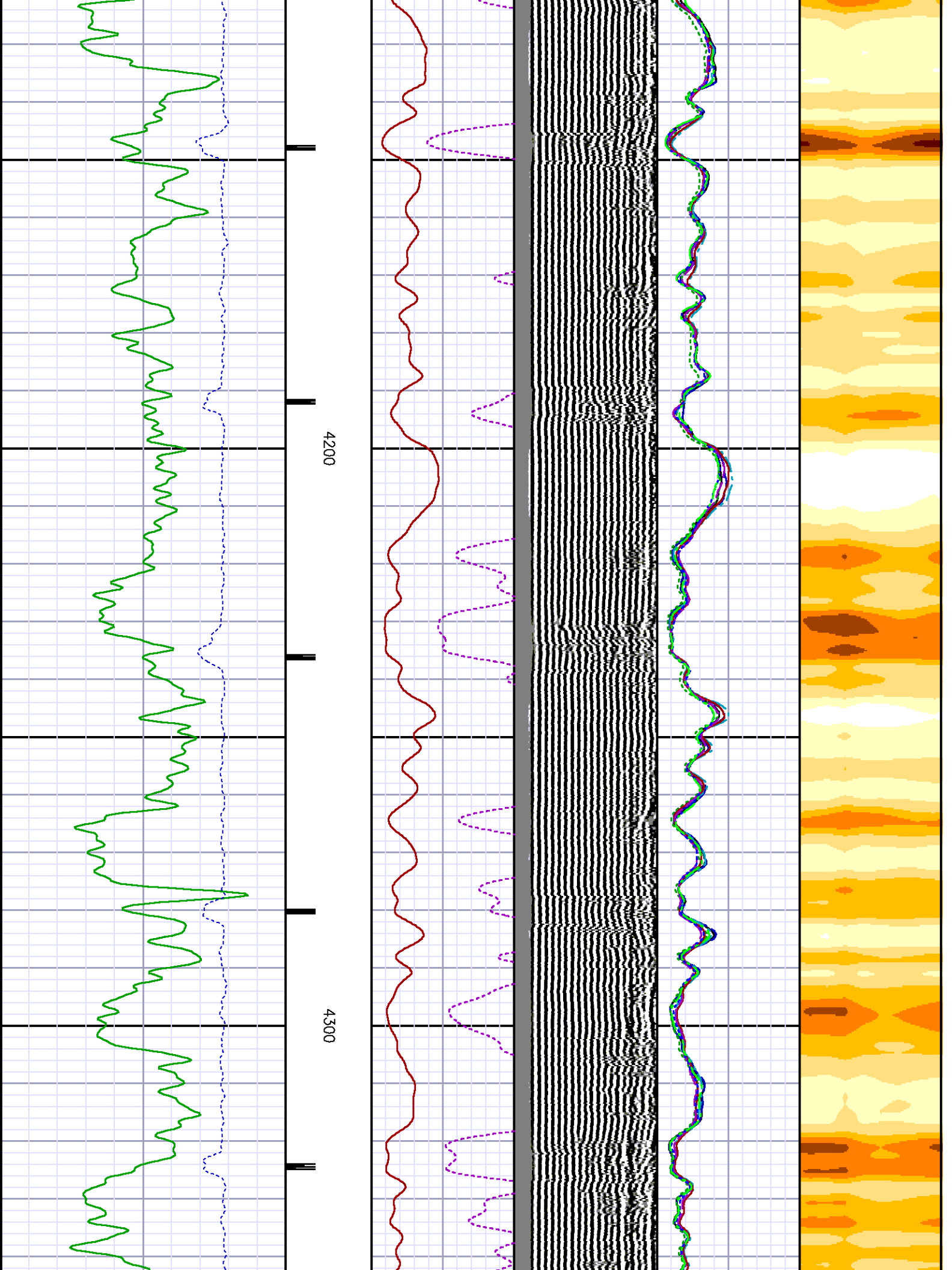
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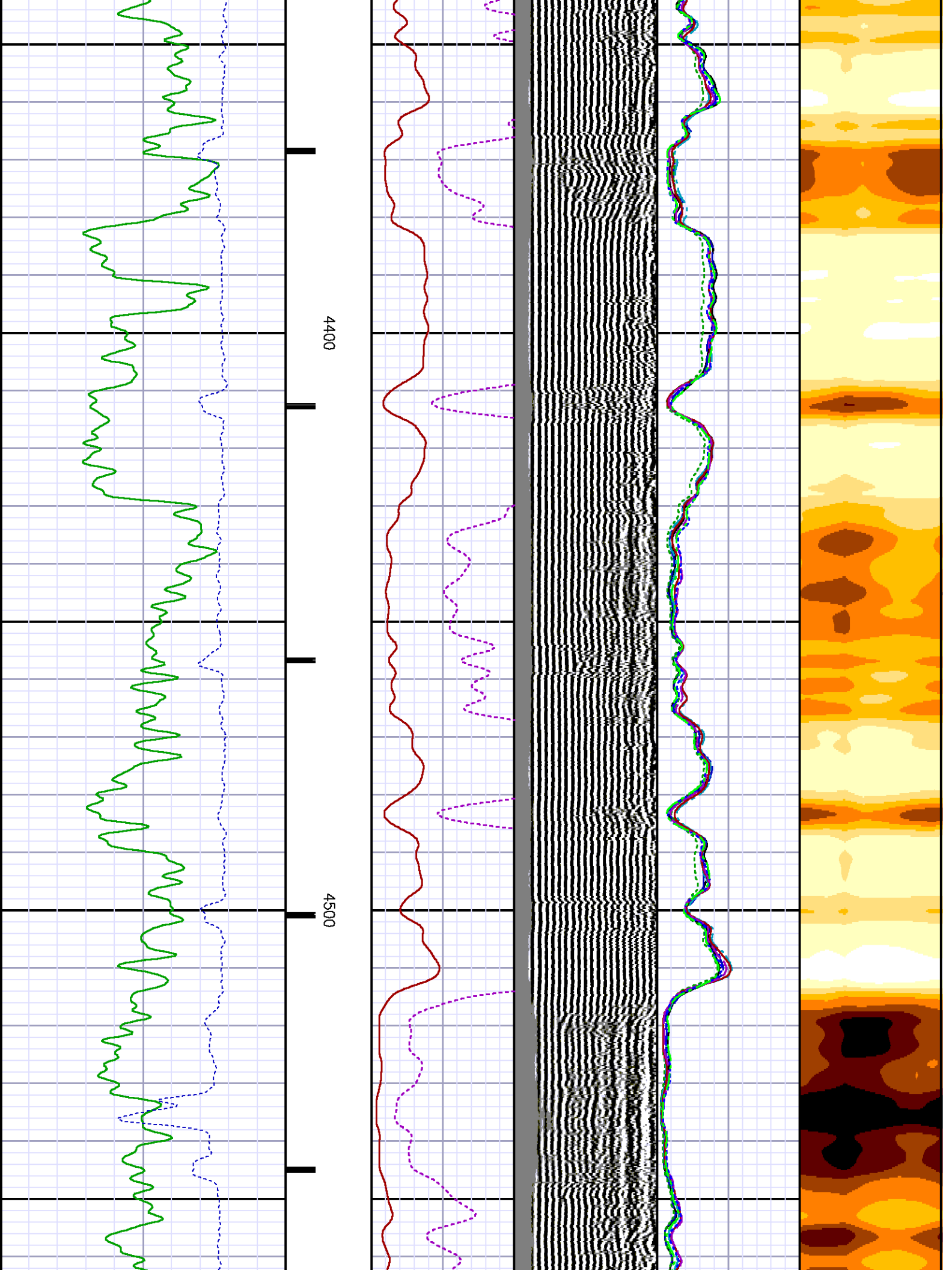
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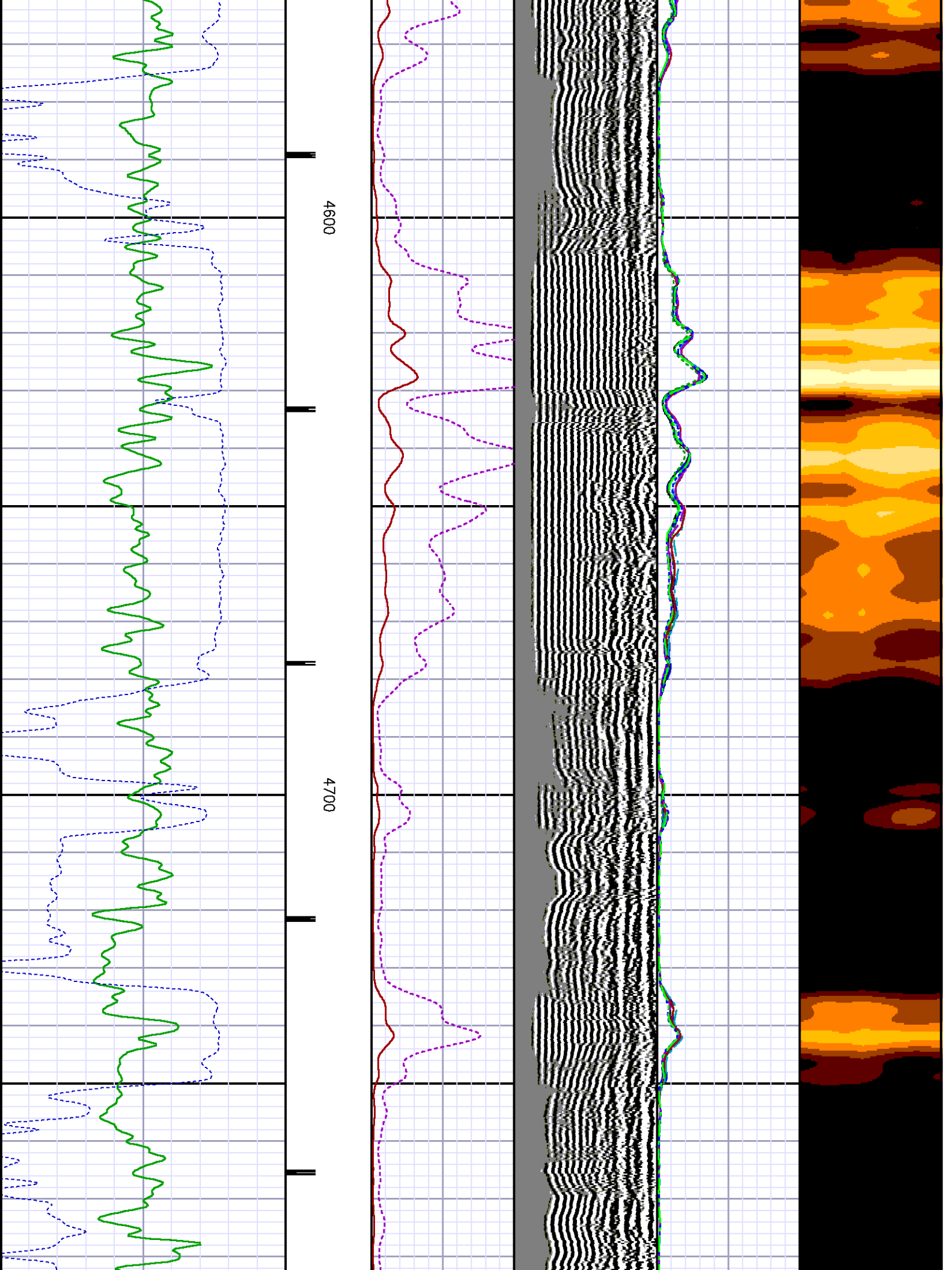
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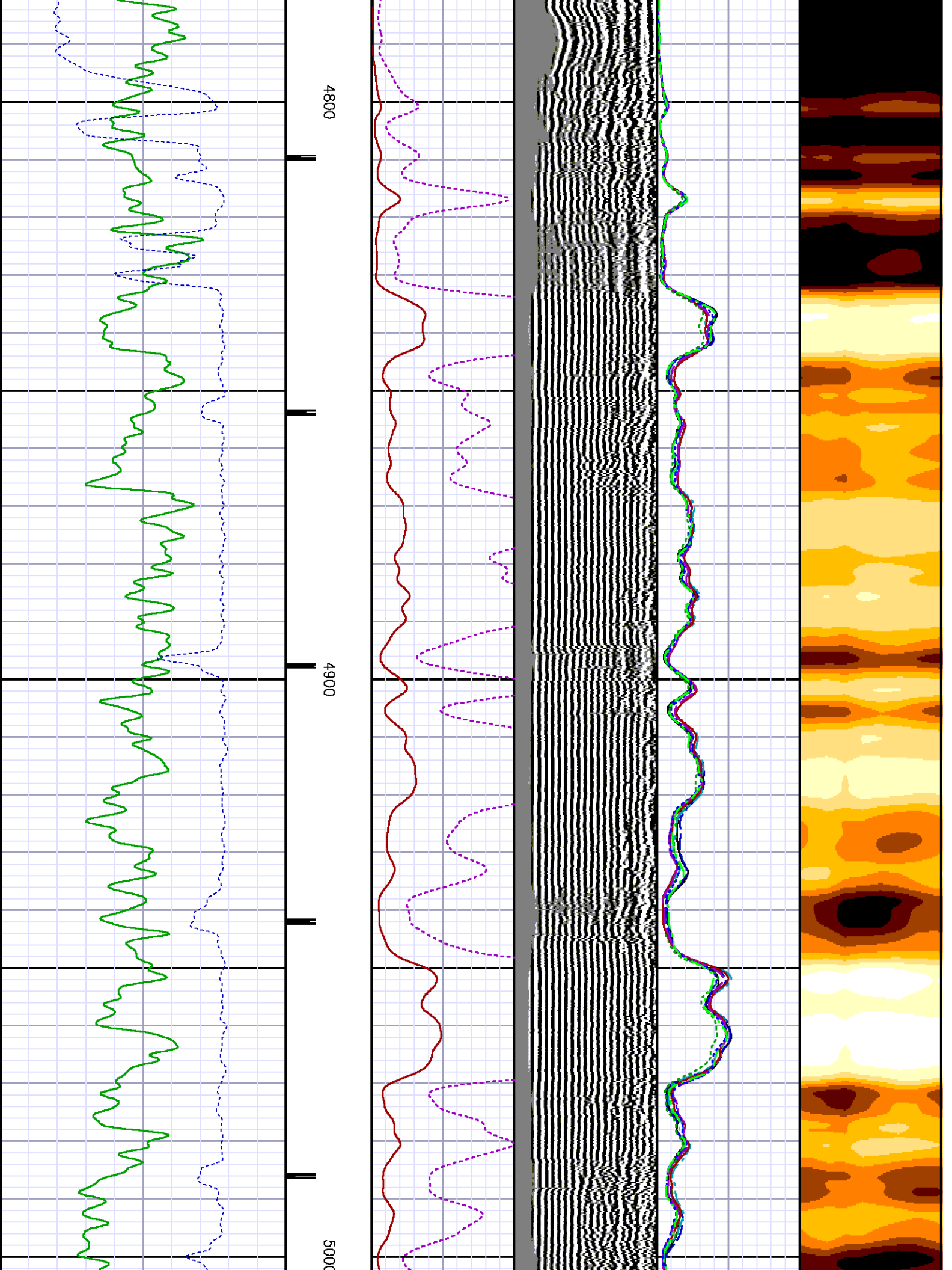


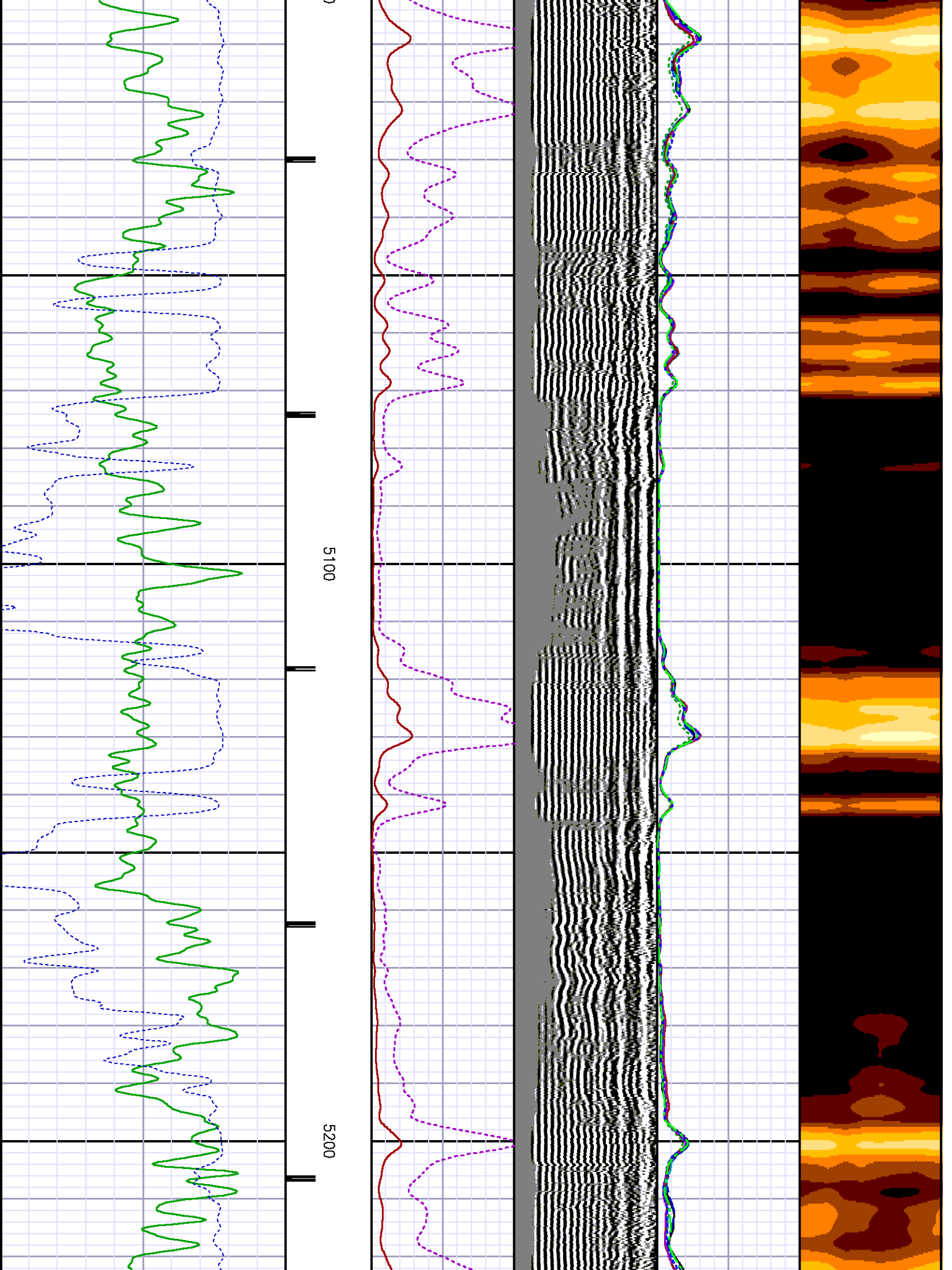


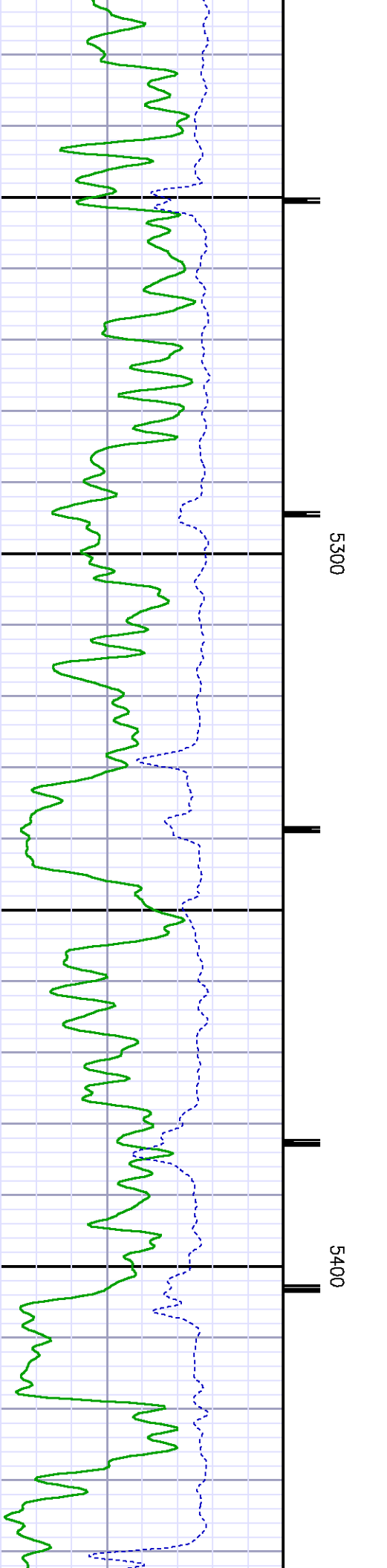
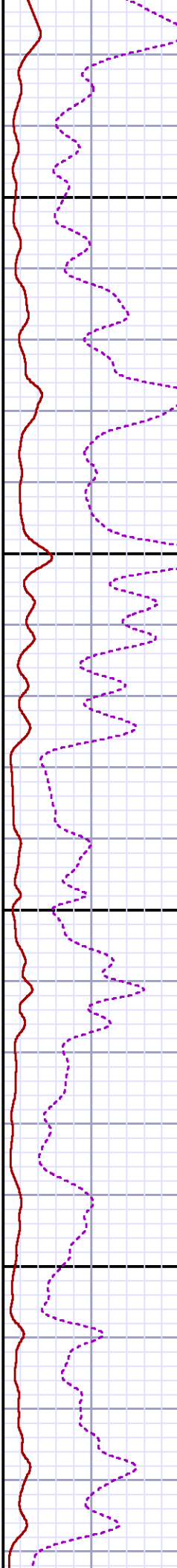
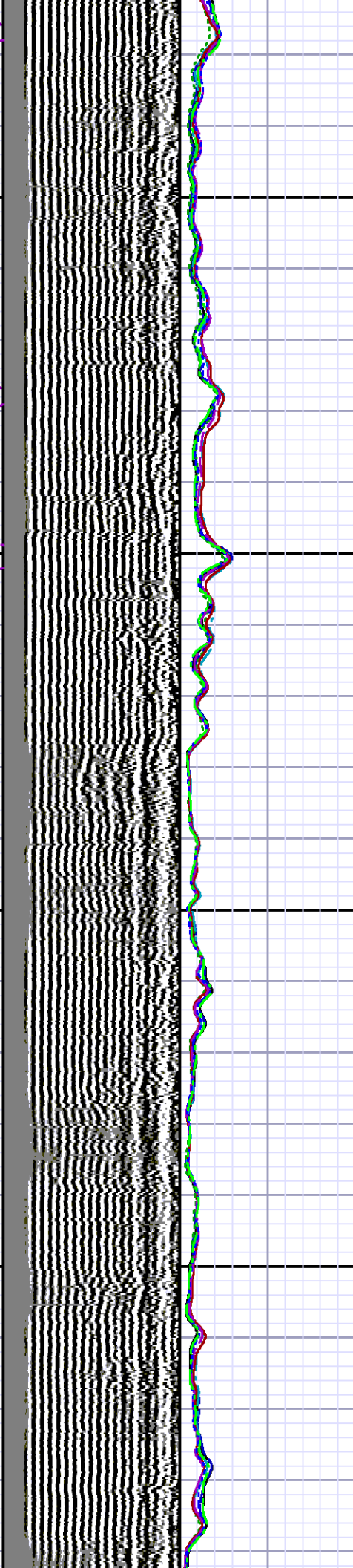


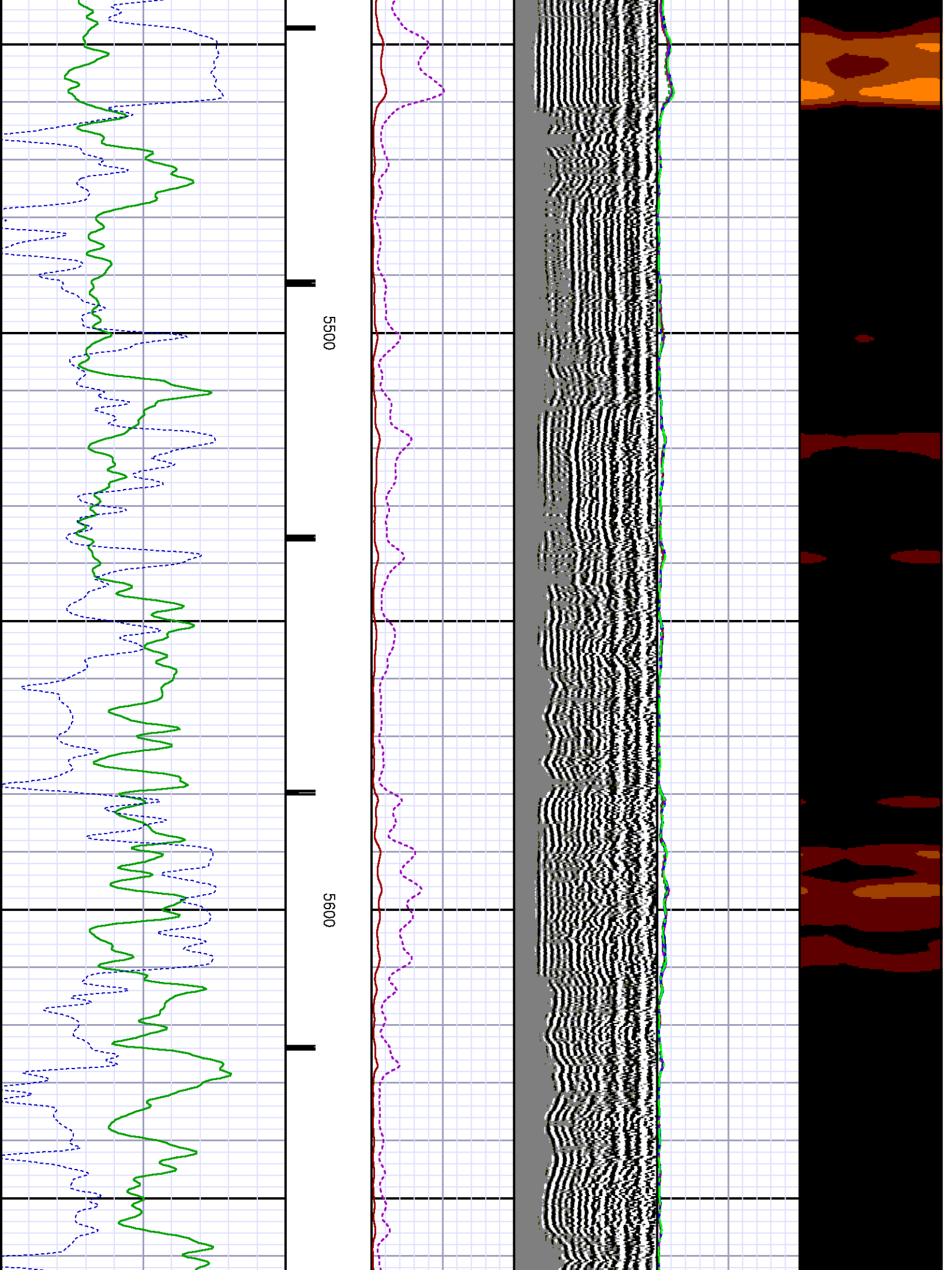


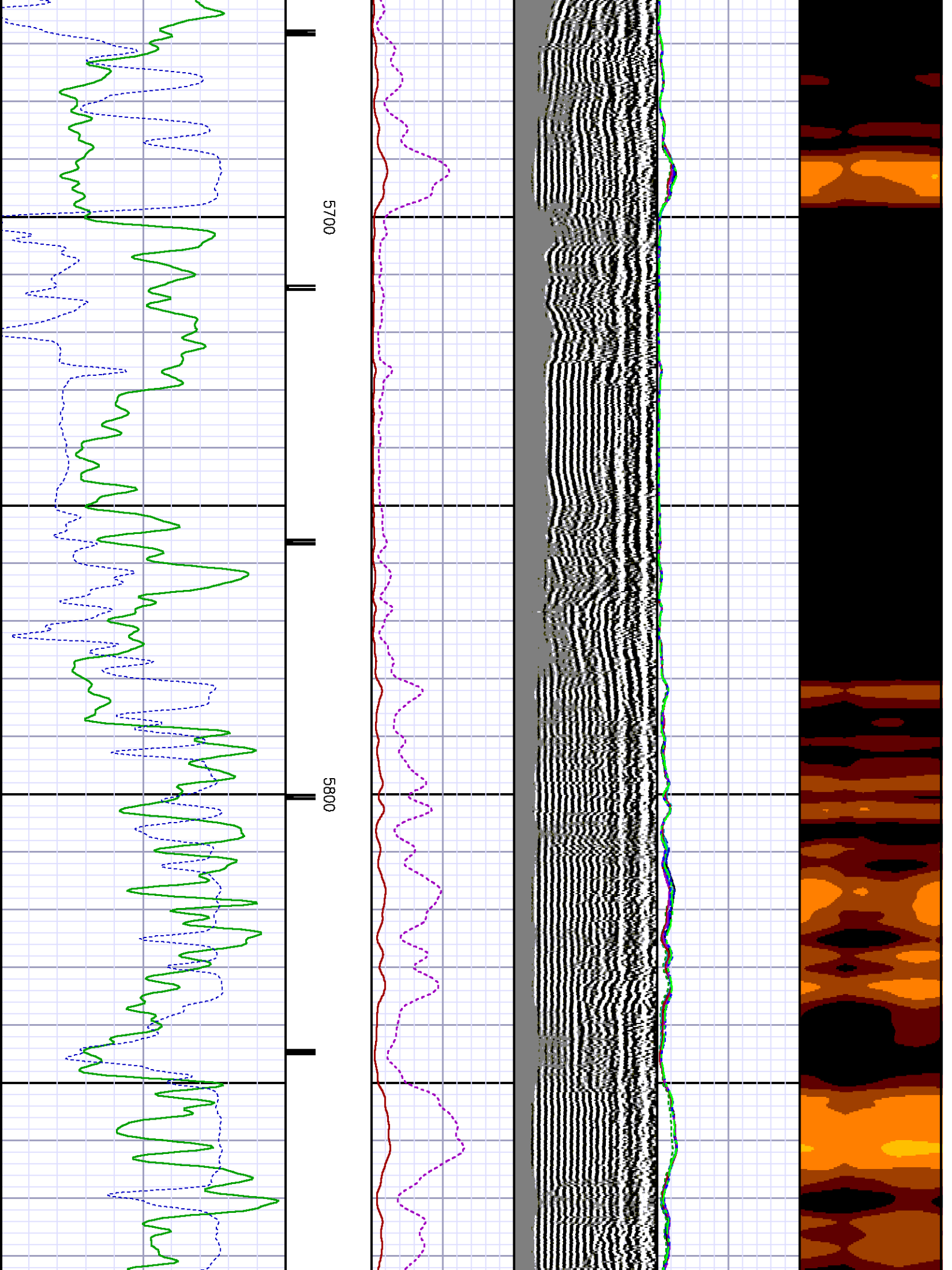


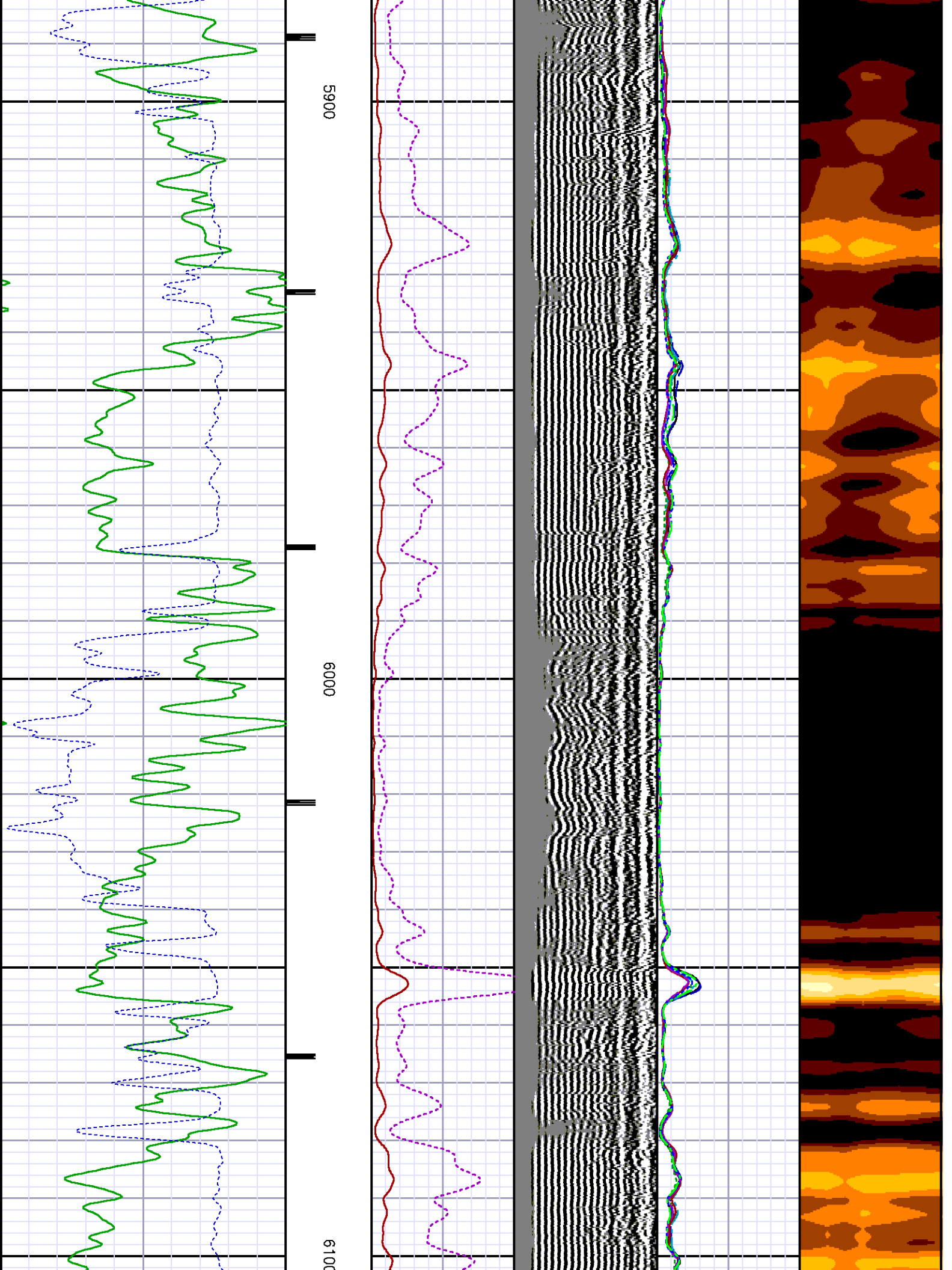


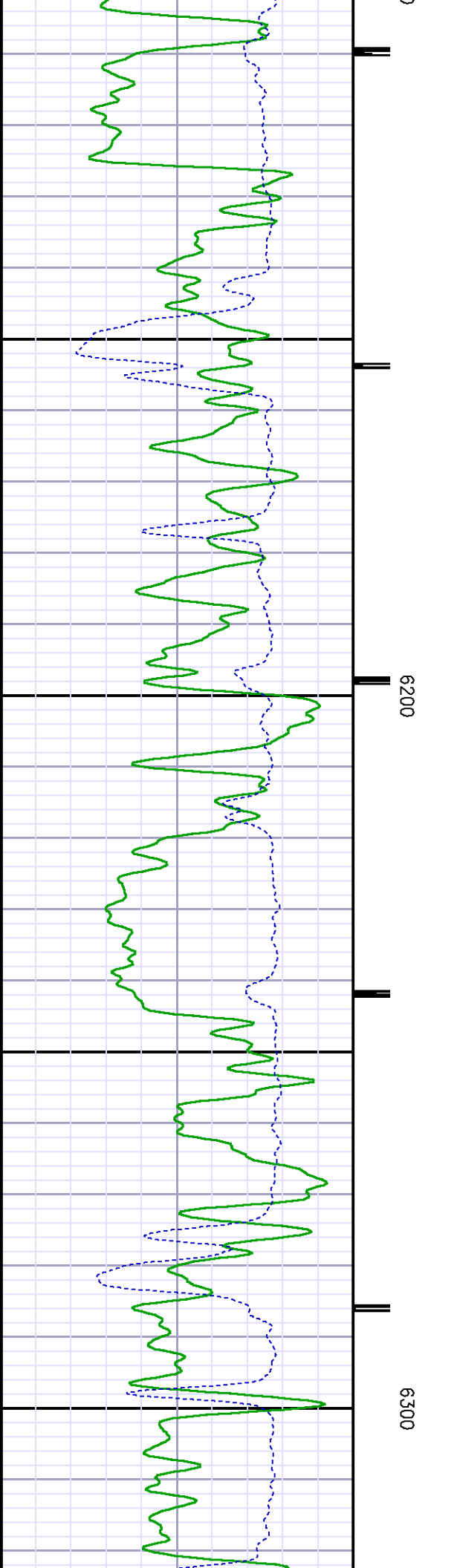
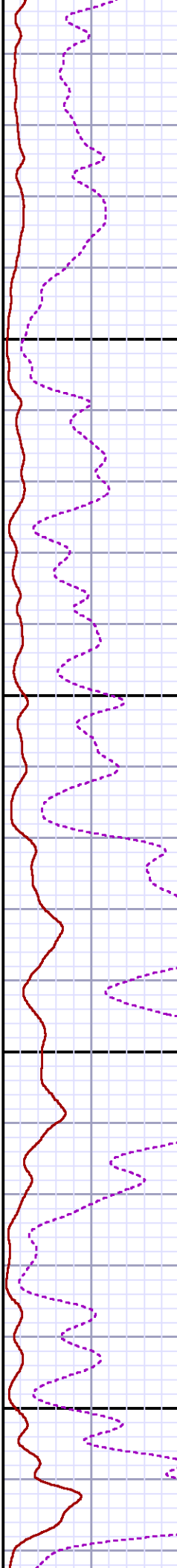
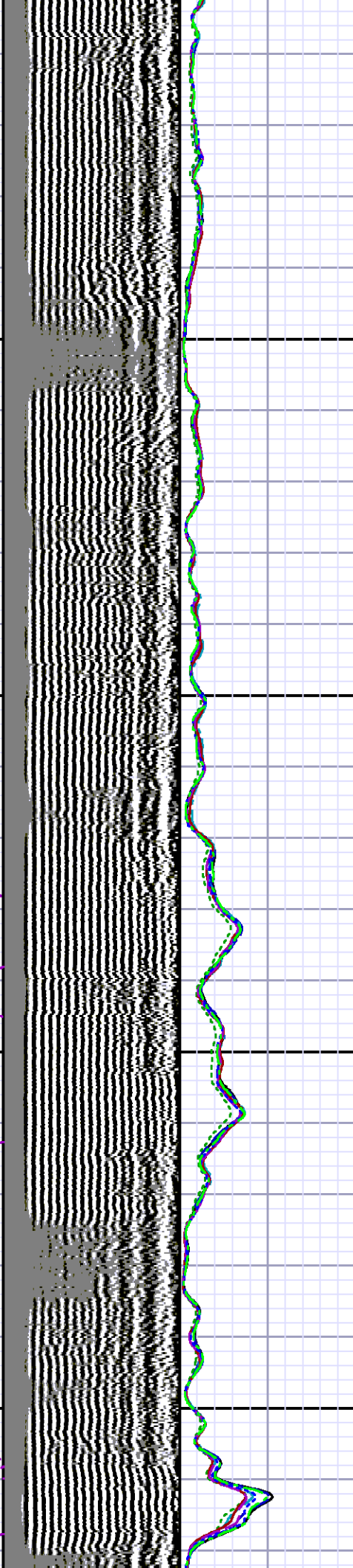


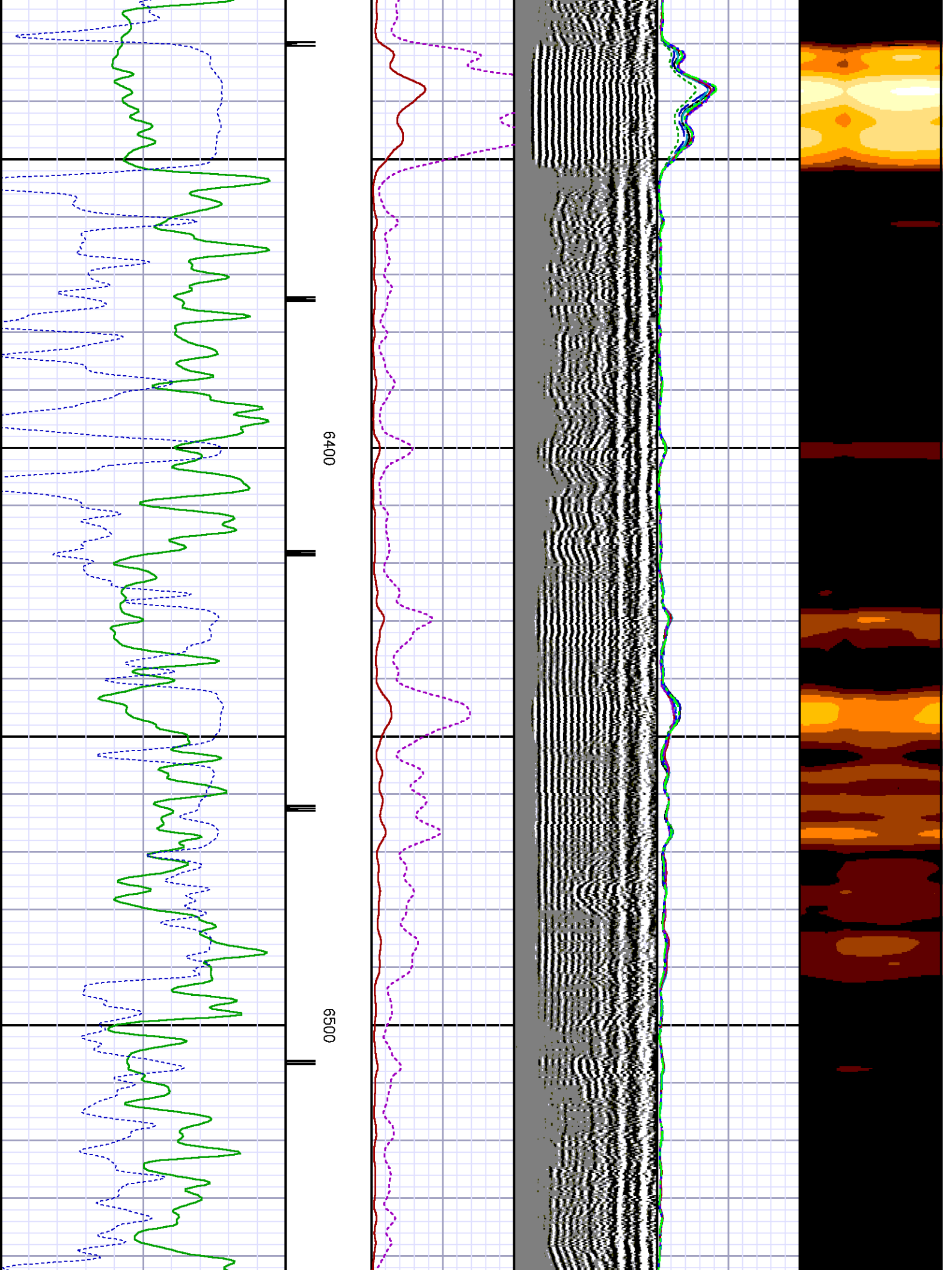


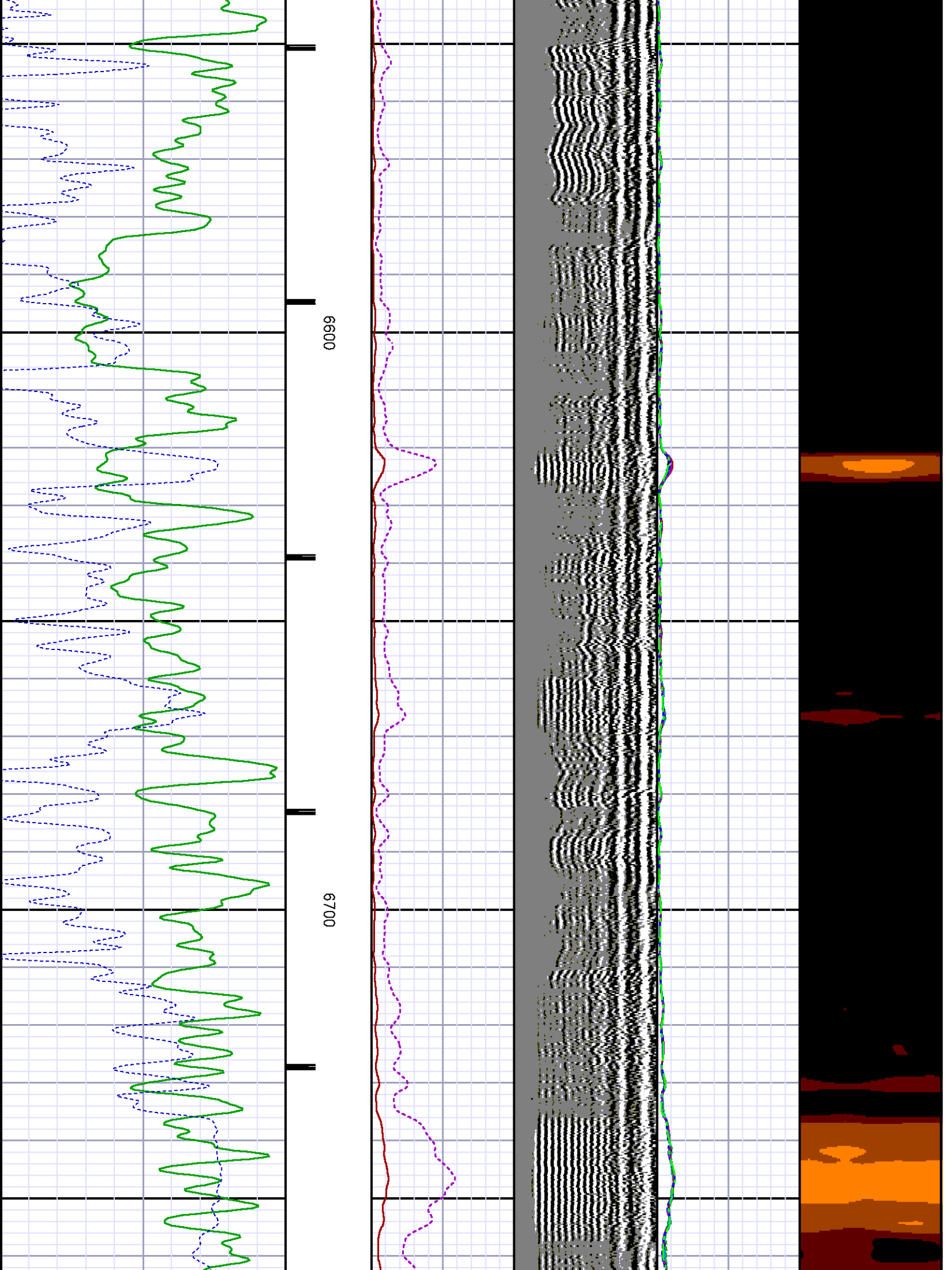


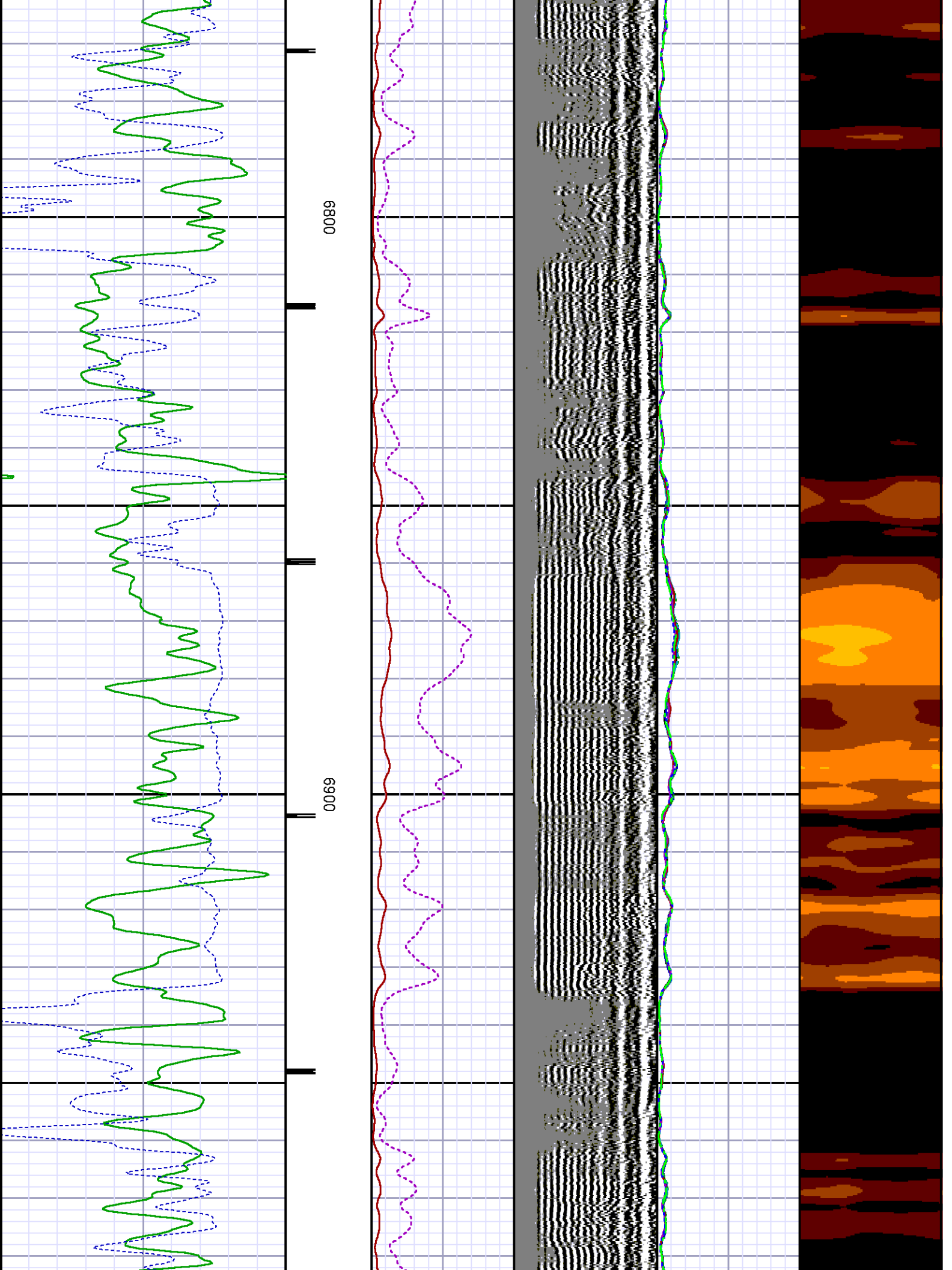


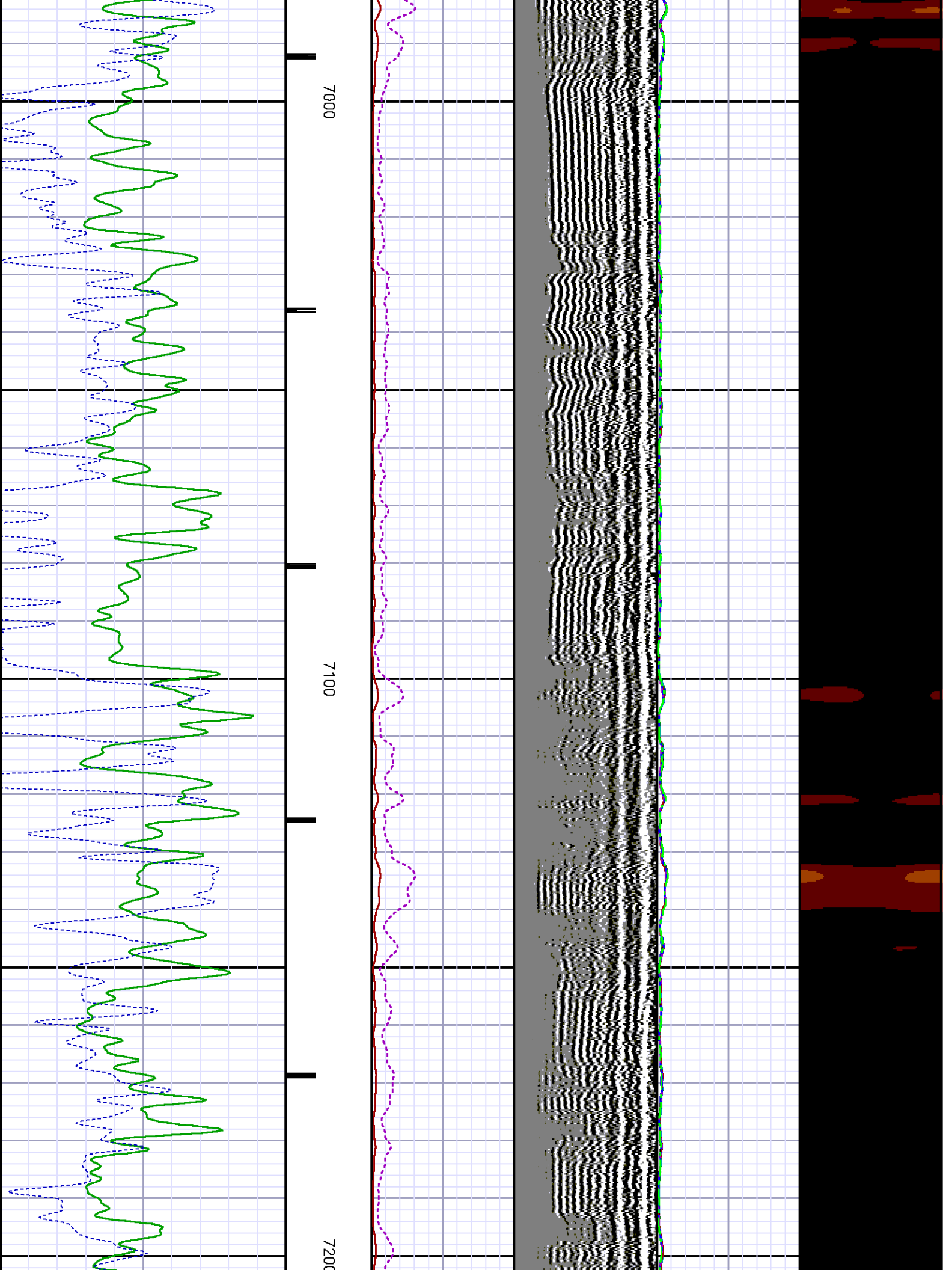


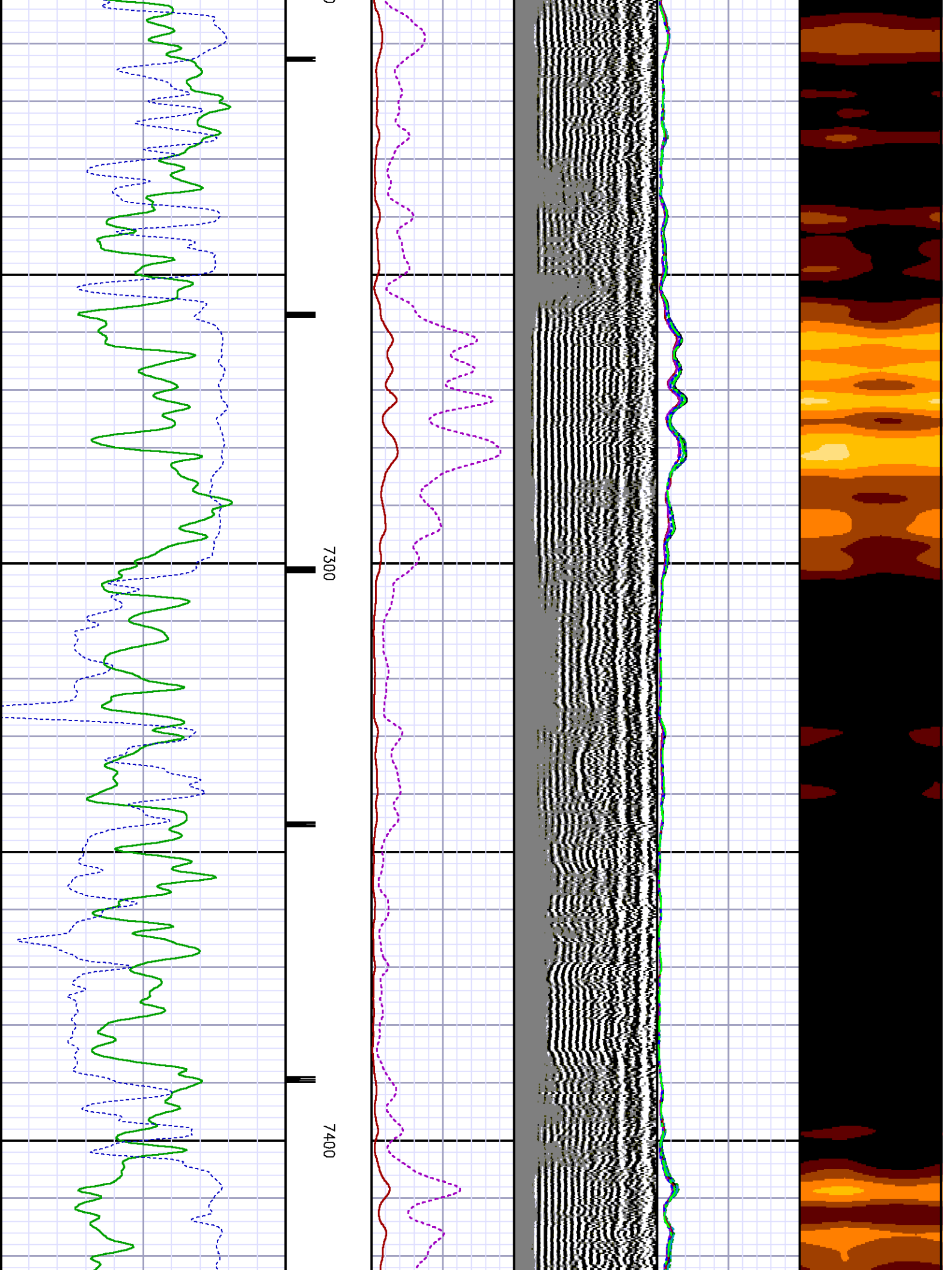


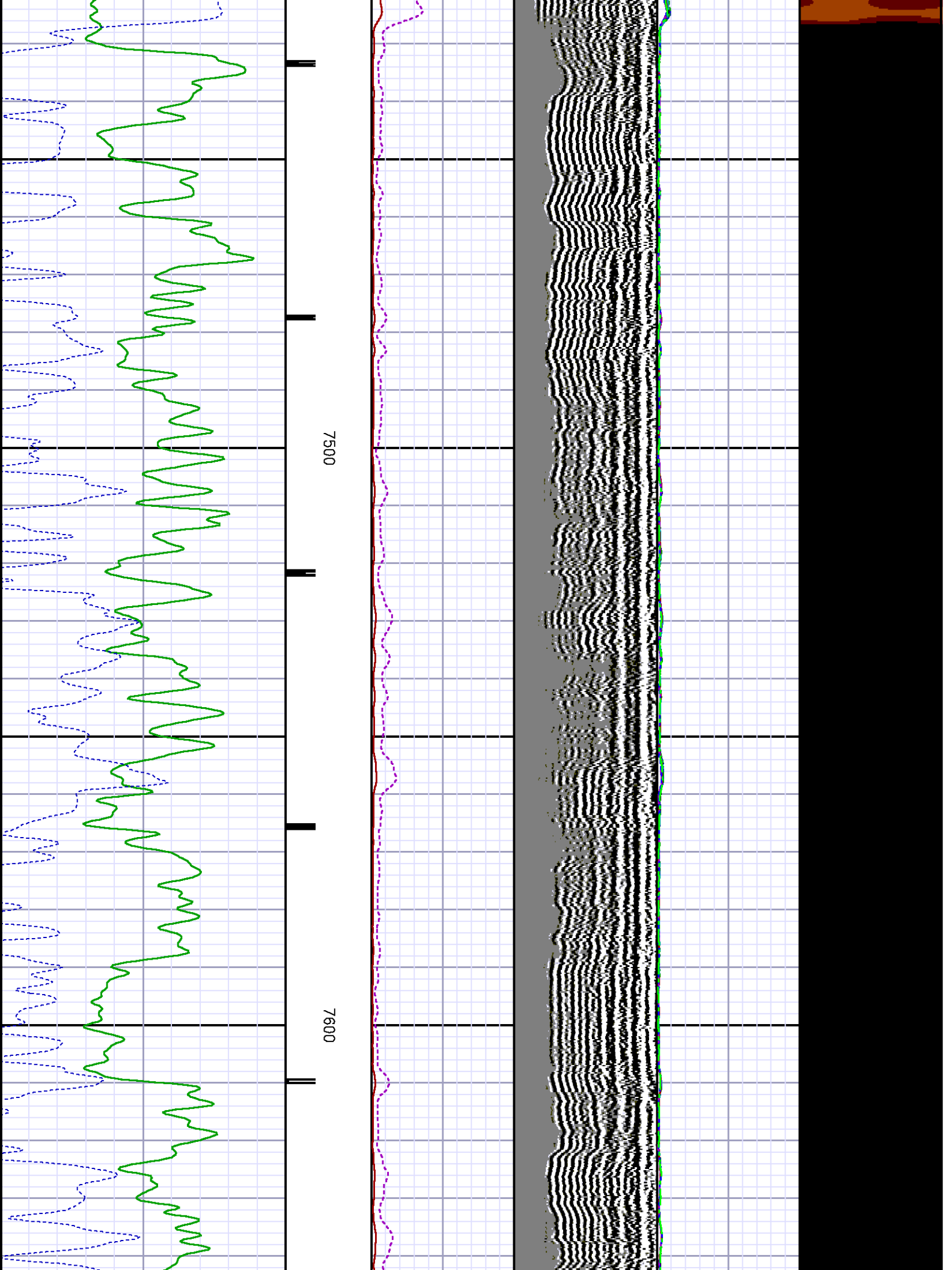


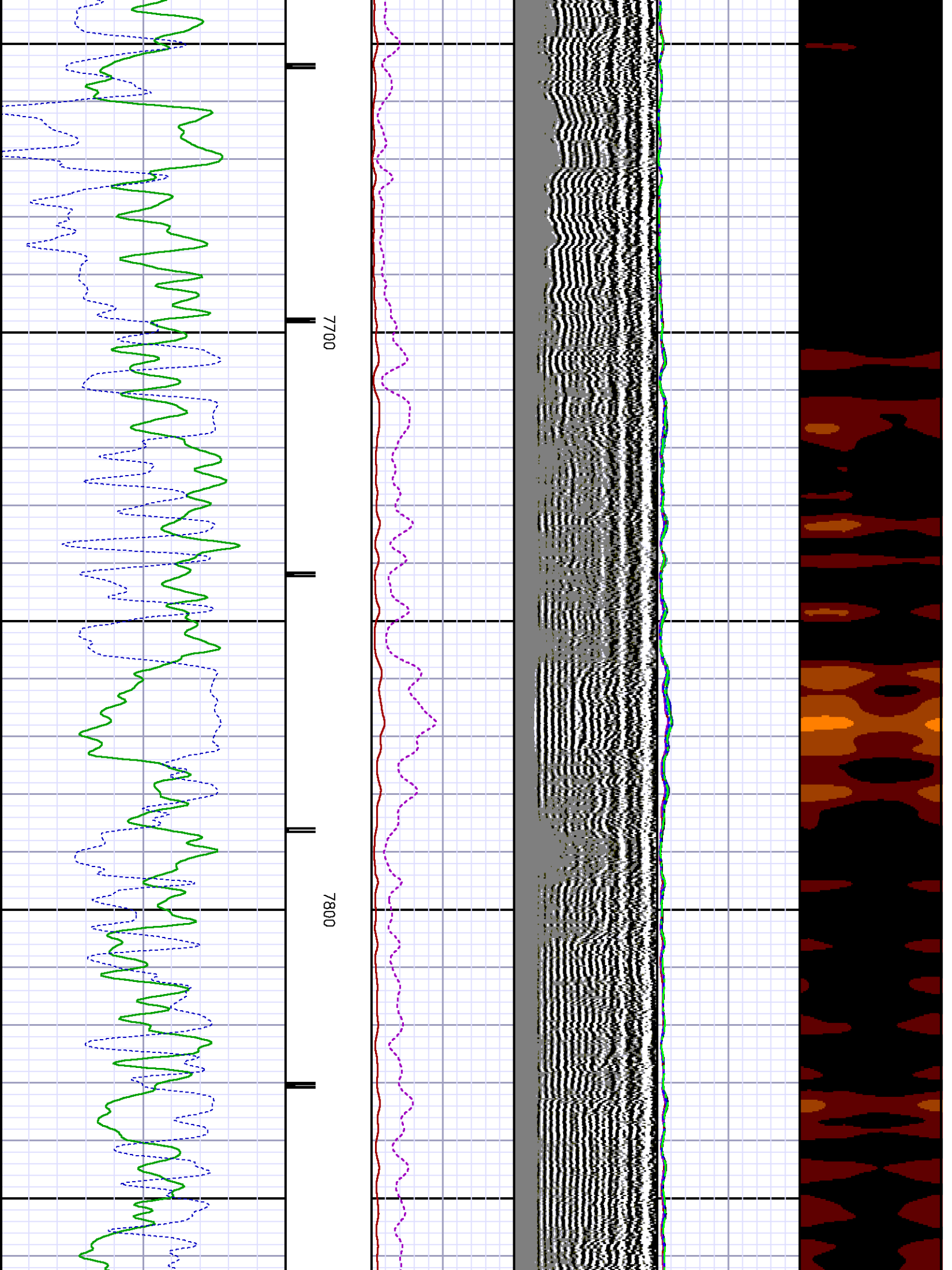


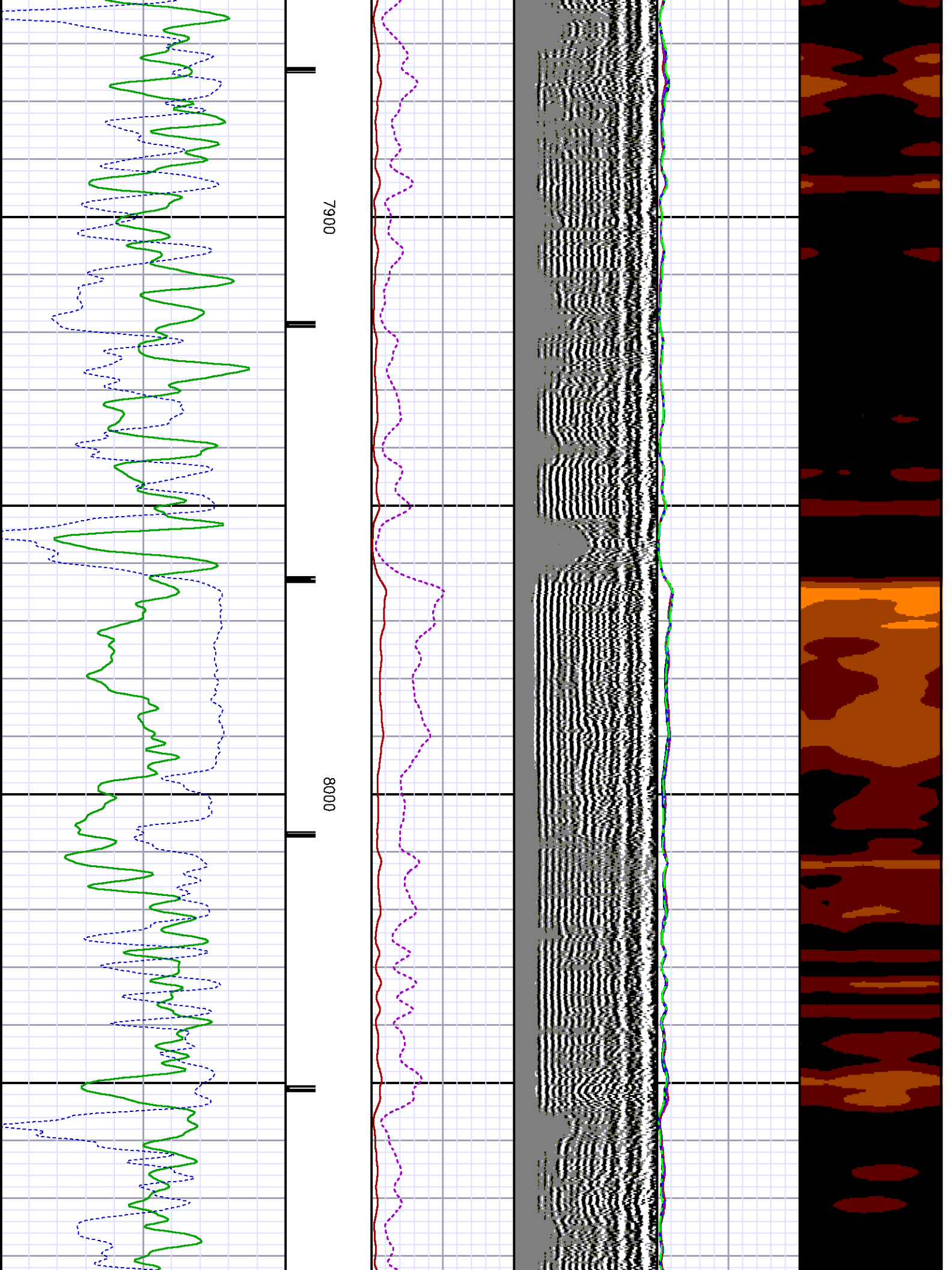


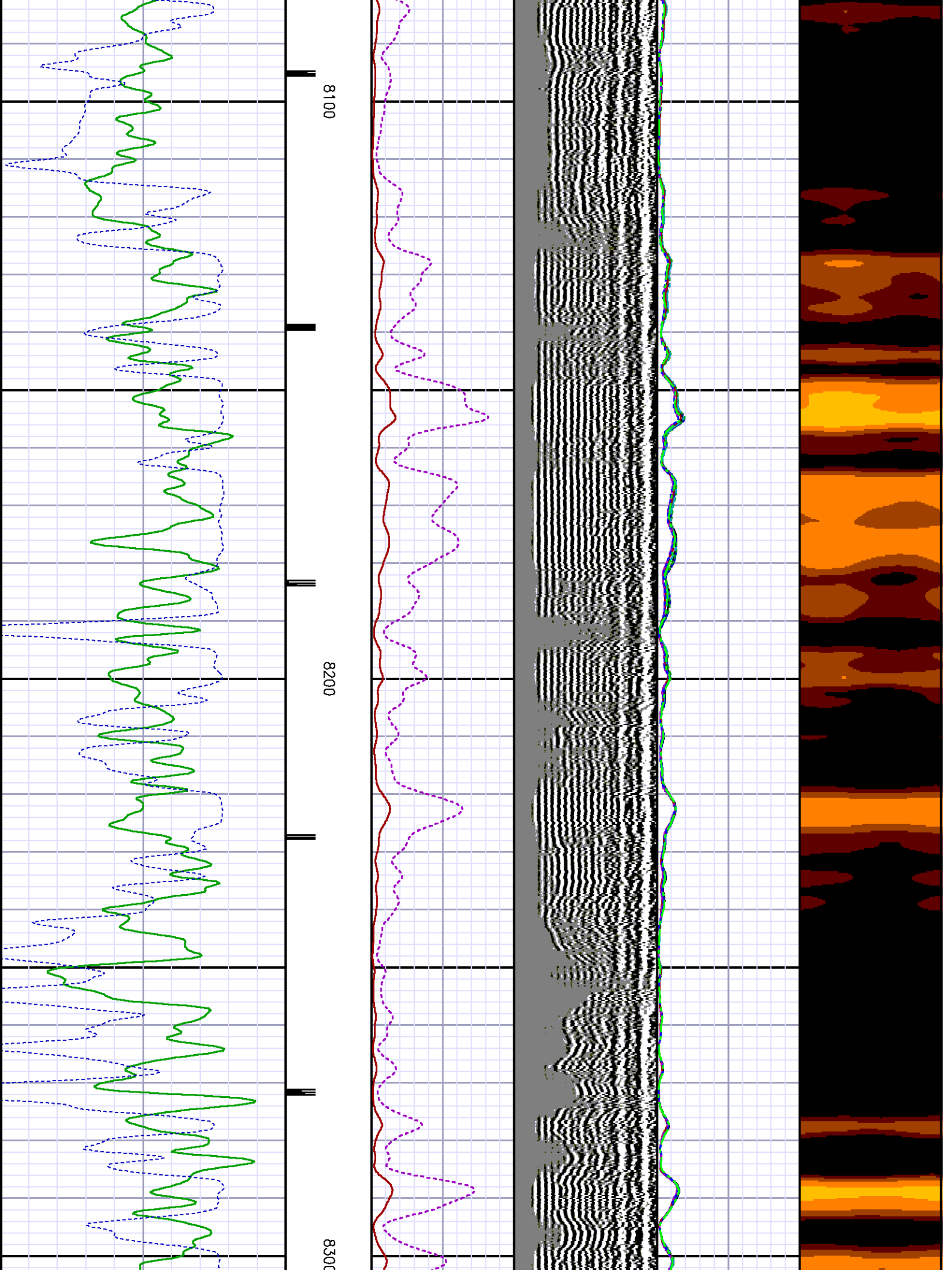


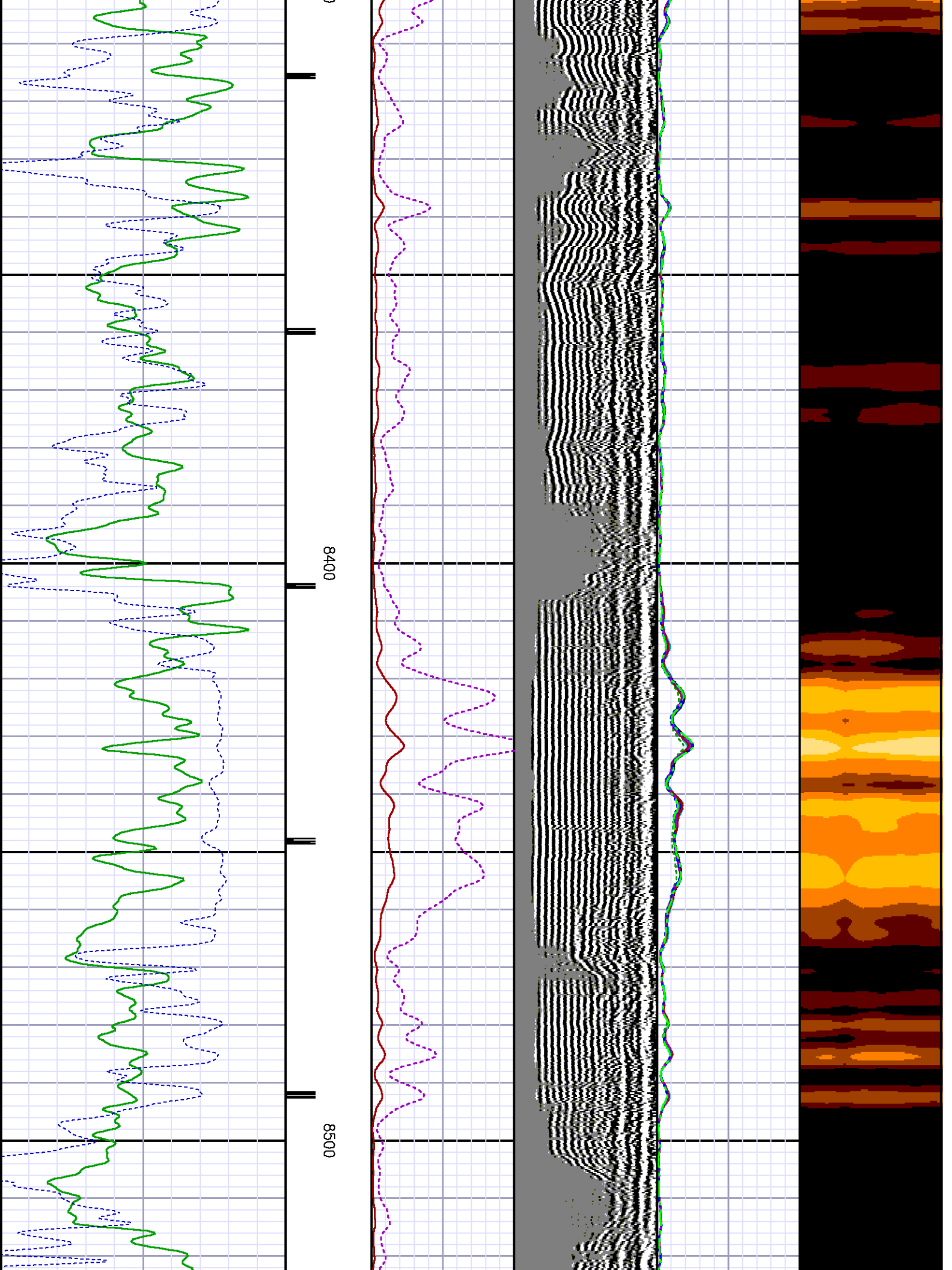


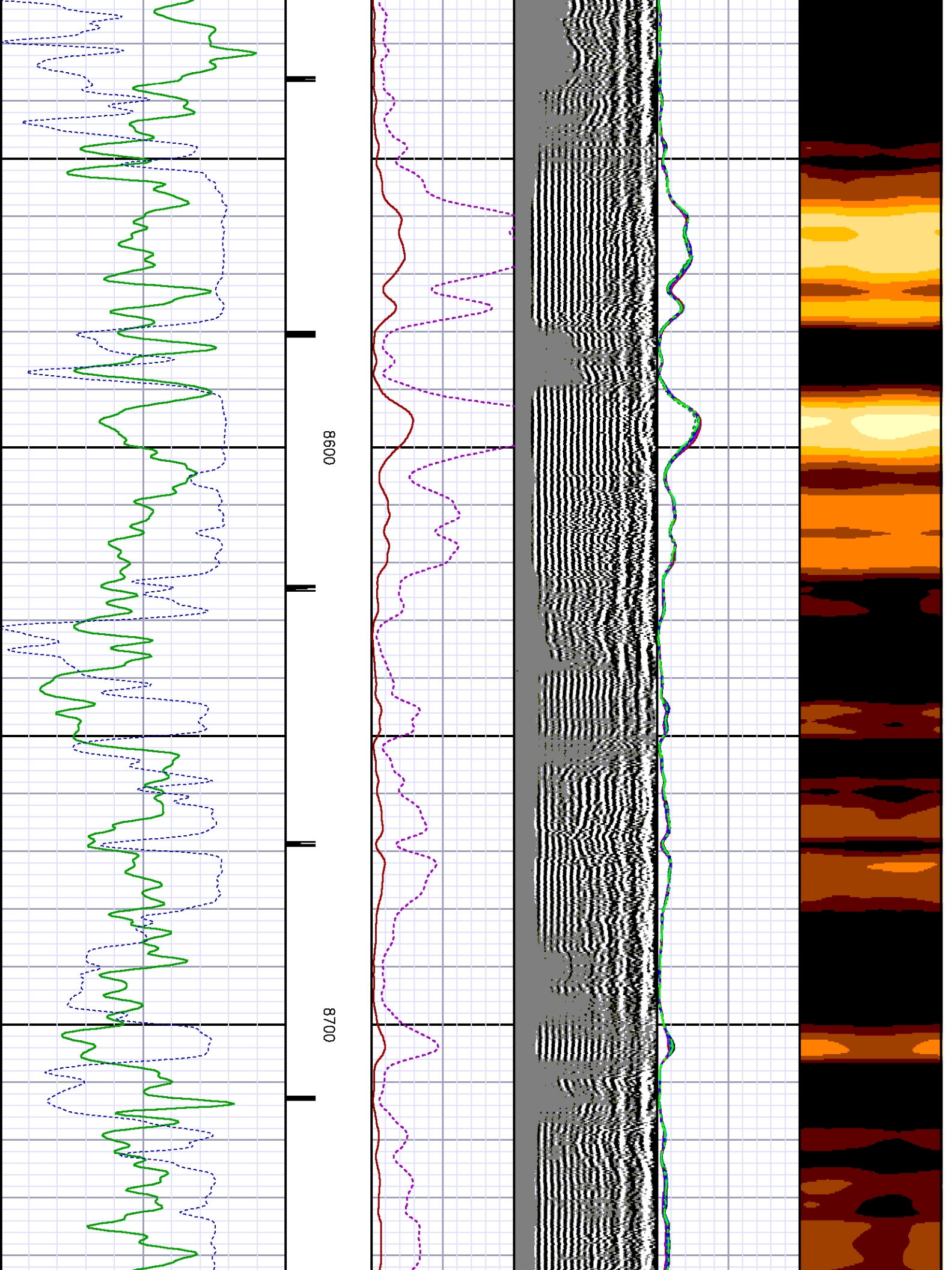


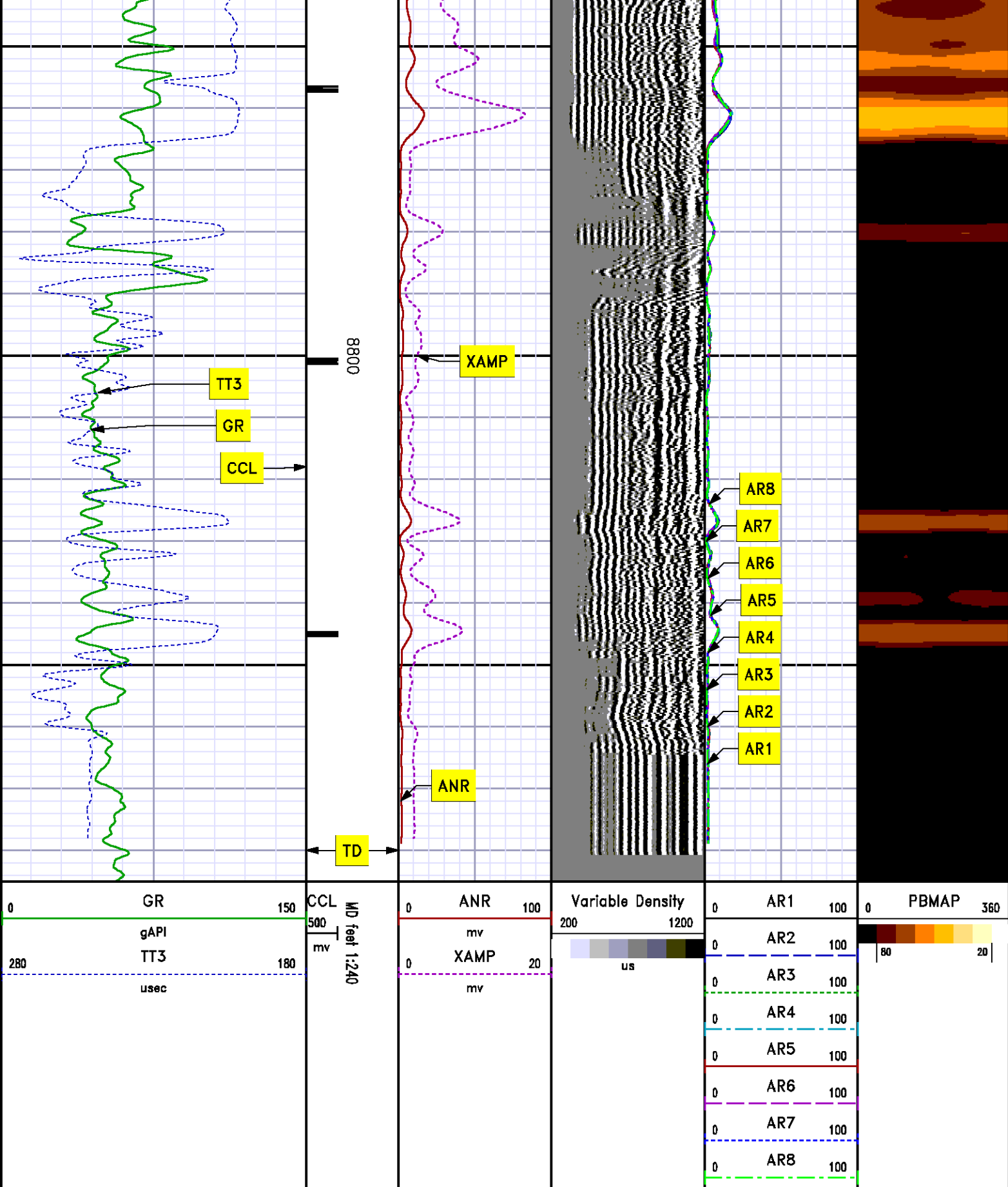












REPEAT SECTION

0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	8560.902	8901.060
RAL	Amp Gate Start Near	195.000	usec	8560.902	8901.060
RAL	Amp Gate Start Radial	195.000	usec	8560.902	8901.060
RAL	Amp Gate Width Far	25.000	usec	8560.902	8901.060
RAL	Amp Gate Width Near	25.000	usec	8560.902	8901.060
RAL	Amp Gate Width Radial	25.000	usec	8560.902	8901.060
RAL	casing od	4.500	inches	8560.902	8901.060
RAL	casing wt	11.600	lbm/ft	8560.902	8901.060
RAL	FB Start Far	291.900	usec	8560.902	8901.060
RAL	FB Start Near	185.000	usec	8560.902	8901.060
RAL	FB Start Radial	180.000	usec	8560.902	8901.060
RAL	FB Thresh Far	10.000	mv	8560.902	8901.060
RAL	FB Thresh Near	4.000	mv	8560.902	8901.060
RAL	FB Thresh Radial	4.000	mv	8560.902	8901.060
RAL	Fluid Travel Time	200.000	usec/ft	8560.902	8901.027

DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-16.750	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	-15.750	AFAR	SIG	TT5			
2459XA	-11.340	CCL					
2459XA	-9.490	GR					
2459XA	-4.090	NEU					

Created by : RAL, v4.8.008

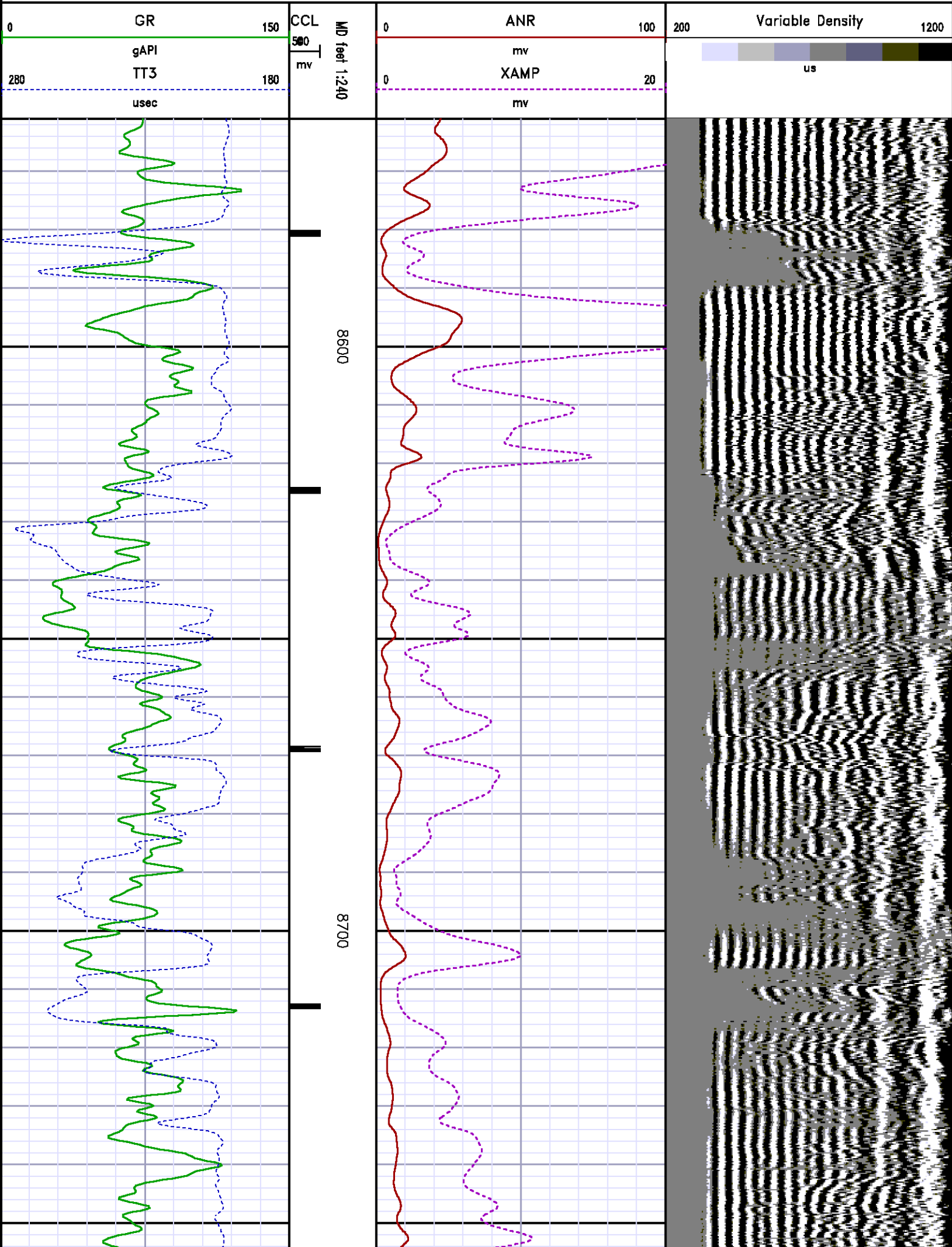
Plotted by : PlotMgr, v5.4.504

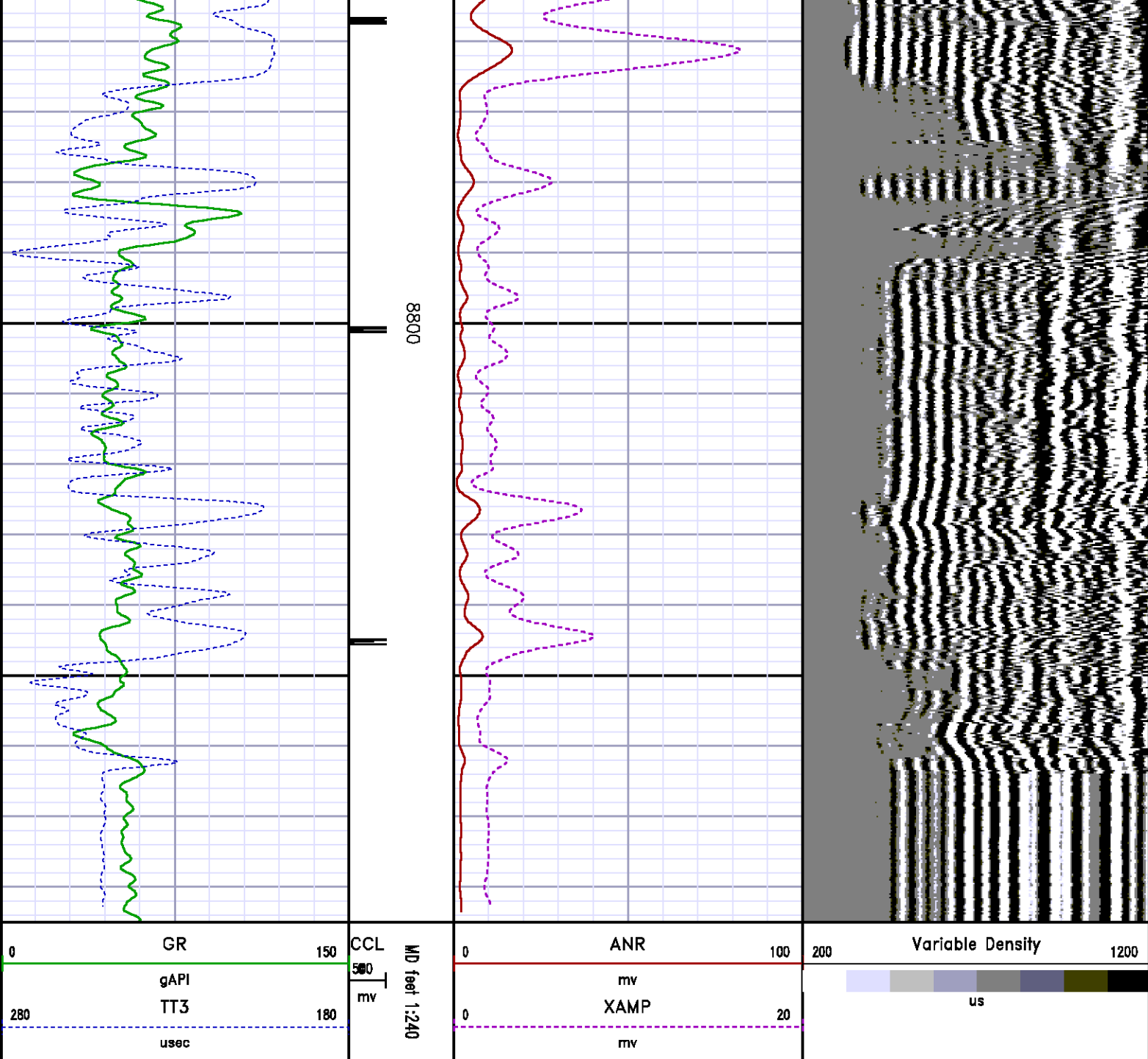
Company : WPX ENERGY

Well : HOEPPLI RWF 532-36

File Name : d:\welldata\wpx energy\rwf 532-36\532ral\repeat.xtf

Mode : PlotMgr 5.4.504





CALIBRATION SUMMARY

RALSHP

DATE/TIME PERFORMED:

Thu Apr 11 11:39:41 2013

TOOL SERIES:

1426XA

ASSET:

496

SEQ: A11

Tool Delay
[usec]

-56.00

Tank OD
In

5.50

Tank Wt
lbm/ft

15.50

Tank ID
In

4.95

RECEIVER	Travel Time [usec]	Amp. Gate Start [usec]	Amp. Gate Width [usec]	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Amp Ref. [mV]	Shop Factor
CAL Pulse	218	216	30	166	25	0.144	100.00	0.23
3 Ft. Receiver	217	216	30	166	25	2.928	100.00	0.23
5 Ft. Receiver	326	323	30	247	25	0.072	150.00	0.15
Radial #1	217	216	30	166	25	1.893	100.00	0.23
Radial #2	217	216	30	166	25	2.018	100.00	0.22
Radial #3	216	216	30	166	25	2.350	100.00	0.23
Radial #4	216	216	30	166	25	3.085	100.00	0.23
Radial #5	211	216	30	166	25	3.159	100.00	0.24
Radial #6	216	216	30	166	25	2.425	100.00	0.24
Radial #7	216	216	30	166	25	2.157	100.00	0.23
Radial #8	218	216	30	166	25	1.833	100.00	0.23

RALFLD

WellSite Calibration: C:\case\calver\RALFLD\496A11 fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED:

Fri Apr 12 08:02:55 2013

TOOL SERIES:

1426XA

ASSET:

496

SEQ: A11

Tool Delay
[usec]

-56.00

Casing OD
In

4.50

Casing Wt
lbm/ft

11.60

Casing ID
In

4.00

RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	166	25	-0.044	0.000	0.80	100.000
3 Ft. Receiver	195	25	-0.990			
5 Ft. Receiver	305	25	-1.067			
Radial #1	195	25	-2.644			
Radial #2	195	25	-1.693			
Radial #3	195	25	-1.412			
Radial #4	195	25	-1.470			
Radial #5	195	25	-1.138			
Radial #6	195	25	-1.033			
Radial #7	195	25	-0.805			
Radial #8	195	25	-1.020			

GAMMA RAY

Calibration File: C:\case\calver\GR\456A1.cal

DATE/TIME PERFORMED: Thu Apr 11 11:25:15 2013 TOOL SERIES: 2459XA ASSET: 456 SEQ: A1

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	71.07	331.91	0.709	50.40	235.40	185.00

Verification File: C:\case\calver\GR\456A1.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Thu Apr 11 11:26:40 2013 TOOL SERIES: 2459XA ASSET: 456 SEQ: A1

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	76.40	329.60	0.709	54.19	233.76	179.58

*TOOL DIAGRAM**OTA SHORT CABLE HEAD**PROBE 2 3/4 DUAL RECEIVER RADII*

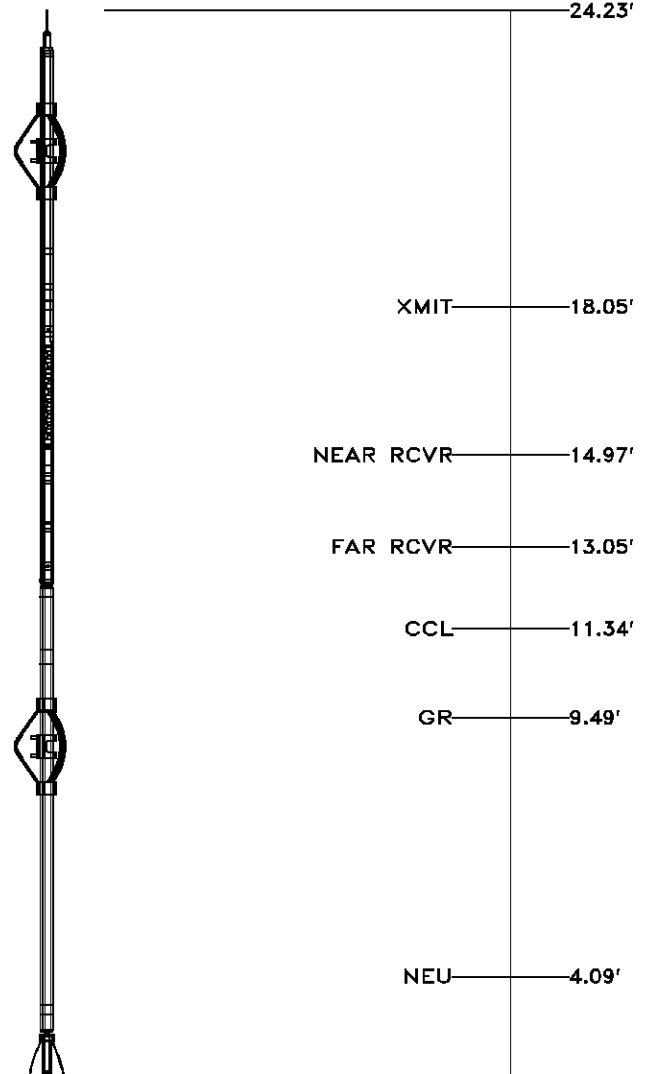
Series 1426XA
 Mnemonic PROB
 Diameter 2.75"
 Length 11.17'
 Measure Point 0.75' FAR RCVR
 Measure Point 2.67' NEAR RCVR
 Measure Point 5.75' XMIT
 Temp Rating 350.00 °F
 Press Rating 18000.00 PSI

Probe GR/CCL/NEU

Series 2459XA
 Mnemonic PROB
 Diameter 2.75"
 Length 9.42'
 Measure Point 1.21' NEU
 Measure Point 6.60' GR
 Measure Point 8.46' CCL

CENTRALIZER

Series BALCENT



Series
Mnemonic
Diameter
Weight

RALCENT
CENT
3.12"
20.00 lb



0.00'

Total Length: 24.23'
Total Weight: Not Available
Max Diameter: 0' 3.12"



Company

WPX ENERGY

Well

HOEPPLI RWF 532-36

Field

RULISON

County

GARFIELD

State

COLORADO

File No:

CH070848

API No:

05045215500000

Location

SHL: 2567' FNL, 2567' FEL

BHL: 2158' FNL, 2016' FEL

Elevations

KB 6554 ft

DF

GL 6528 ft

36 6S 94W

RWF 33-36 PAD

NABORS 576

SEC 36

TWP 6S

RGE 94W

CASE

Baker Atlas