



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: CH075476	Company WPIX ENERGY	Well FEDERAL GM 702-4-HN1
API No: 0504522090000	Field GRAND VALLEY	State COLORADO
	County GARFIELD	

Location SHL: 1401' FNL & 2554' FEL SEC:4 BHL: 1974' FNL & 1702' FEL SEC:9	Other Services N/A
9 7S 96W GM 32-4 AZTEC 1000	SEC 9 TWP 7S RGE 96W

Permanent Datum Log Measured From Drill Measured From	E.L. _____ Elevation 5532 ft K.B. _____ 25 ft Above P. D. KELLY BUSHING
	Elevations KB 5557 ft DF _____ GL 5532 ft

Date	10/AUG/15
Run	ONE
Service Order	824469
Depth Driller	10682 ft
Depth Logger	N/A
Bottom Logged Interval	10331 ft
Top Logged Interval	1300 ft
Time Started	11:00
Time Finished	16:00
Operator Rig Time	5 HRS
Type of Fluid in Hole	WATER
Fluid Density	N/A
Salinity	N/A
Fluid Level	1510 ft
Logged Cement Top	N/A
Wellhead Pressure	0 psi
Maximum Hole Deviation	N/A
Nominal Logging Speed	45 fpm
Maximum Recorded Temperature	315 degF
Reference Log	N/A
Reference Log Date	N/A
Equipment No.	4271
Recorded By	M. KINSEL
Witnessed By	MR. BRANDON HAIRE

- 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
24 In	0 ft	120 ft
17.5 In	0 ft	2436 ft
9.875 In	0 ft	10358 ft

Casing Record				
Size	Weight	Grade	From	To
20 In	N/A	N/A	0 ft	120 ft
13.375 In	N/A	N/A	0 ft	2433 ft
7.625 In	29.7 lbm/ft	N/A	0 ft	10682 ft

Remarks

LOGGED INTO CURVE AS DEEP AS POSSIBLE. DEPTH OBTAINED WAS 10,341'

BHT: 315 degF

LOG DONE WITH 0 PSI ON WELLHEAD

Equipment Data

Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1426XA	10124106	CENTRALIZED
1	1	GAMMA RAY/CCL	1355XA	10580209	CENTRALIZED

MAIN LOG PRIMARY PRESENTATION

0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	367.688	usec	1309.750	10352.000
RAL	Amp Gate Start Near	258.680	usec	1309.750	10352.000
RAL	Amp Gate Start Radial	257.805	usec	1309.750	10352.000
RAL	Amp Gate Width Far	25.000	usec	1309.750	10352.000
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RAL	FB Thresh Far	10.000	mv	1309.750	10352.000
RAL	FB Thresh Near	4.000	mv	1309.750	10352.000
RAL	FB Thresh Radial	4.000	mv	1309.750	10352.000
RAL	Fluid Travel Time	200.000	usec/ft	1309.750	10351.968

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	-5.000	COI							

1355XA	-5.620	CCL
1355XA	-1.500	GR
1355XA	0.000	TEMP

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

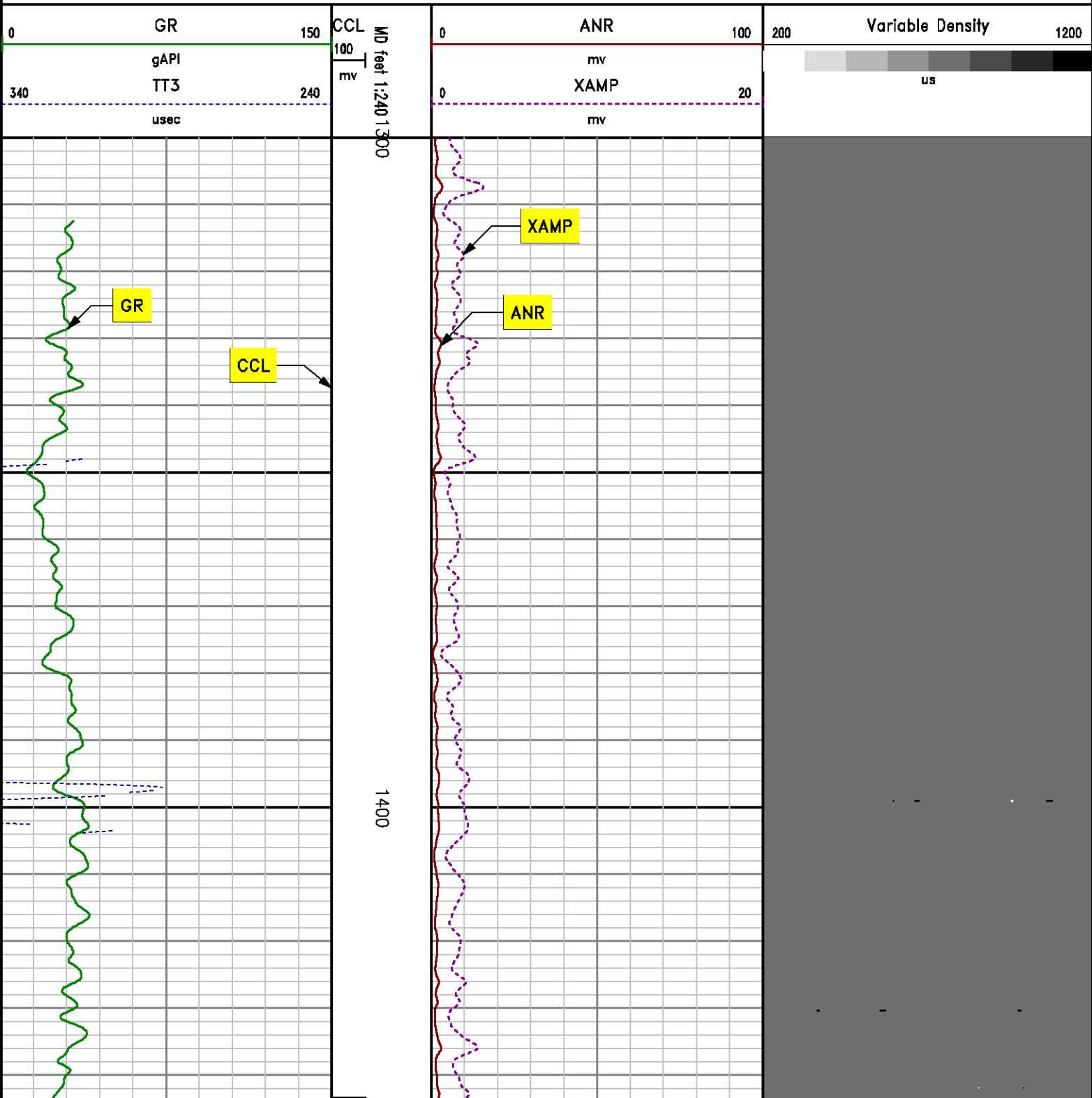
Well : FEDERAL GM 702-4-HN1

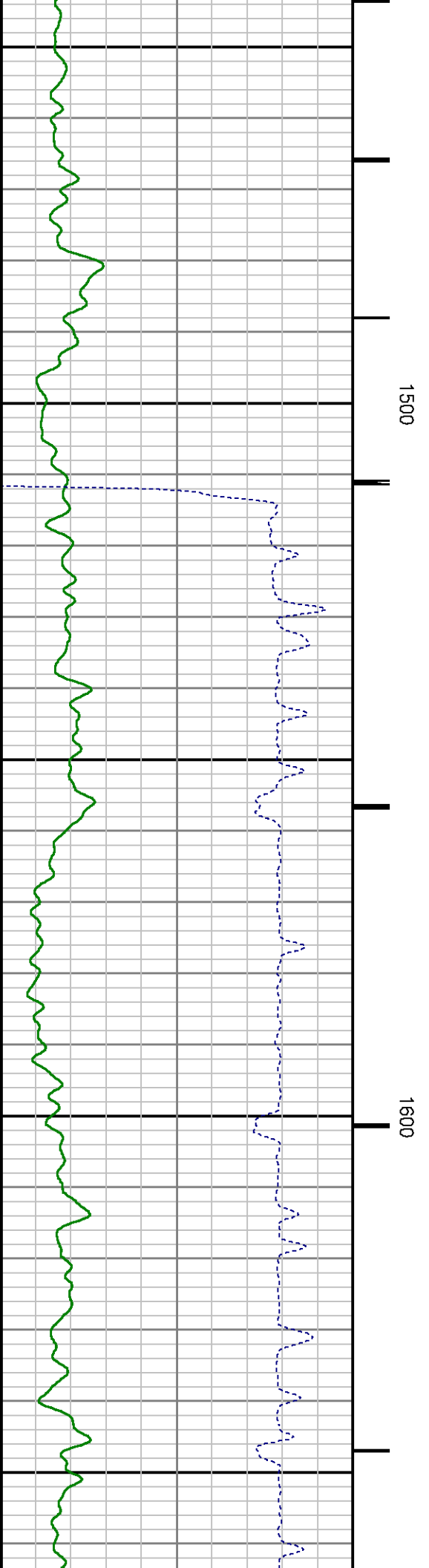
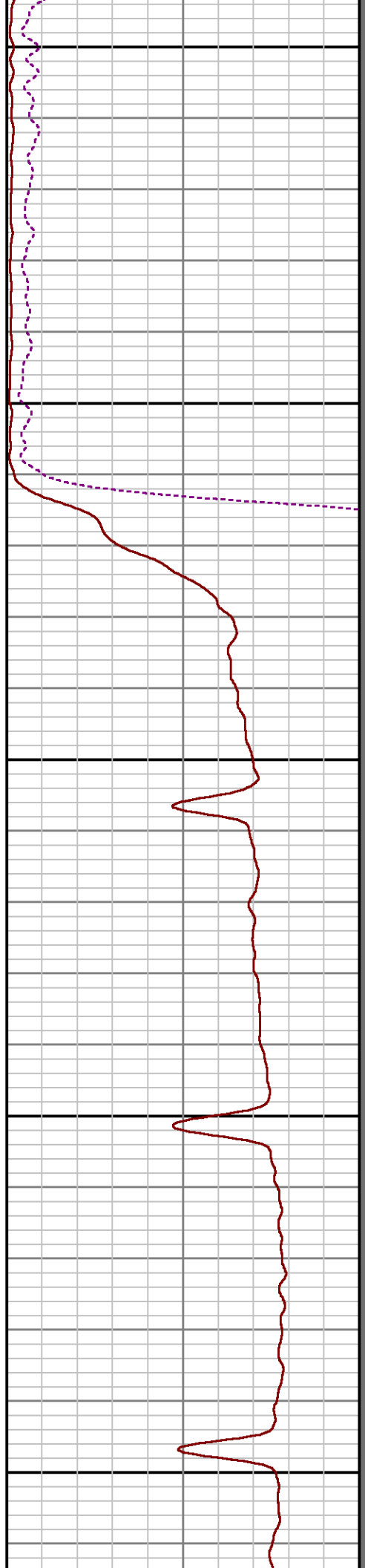
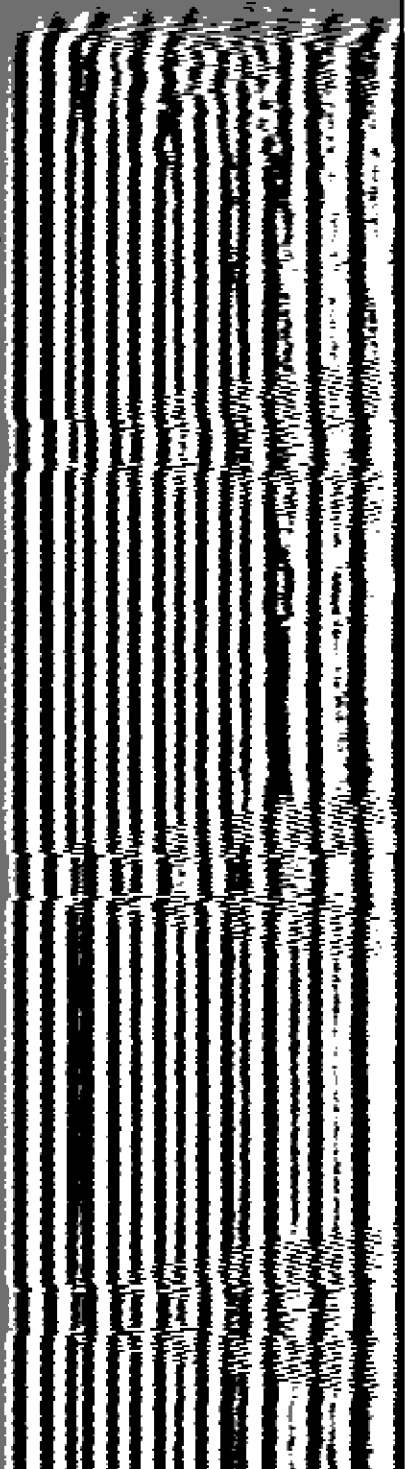
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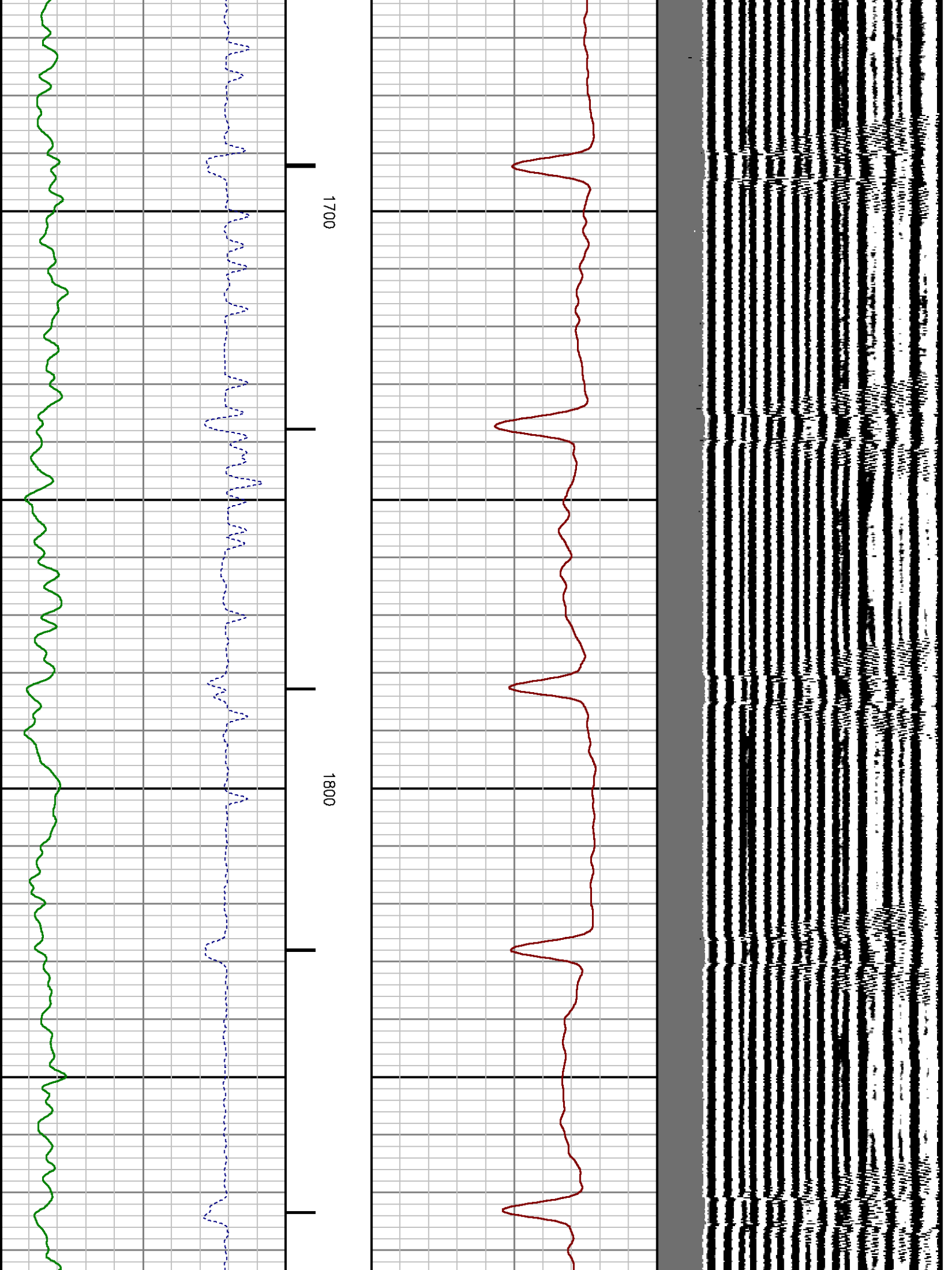
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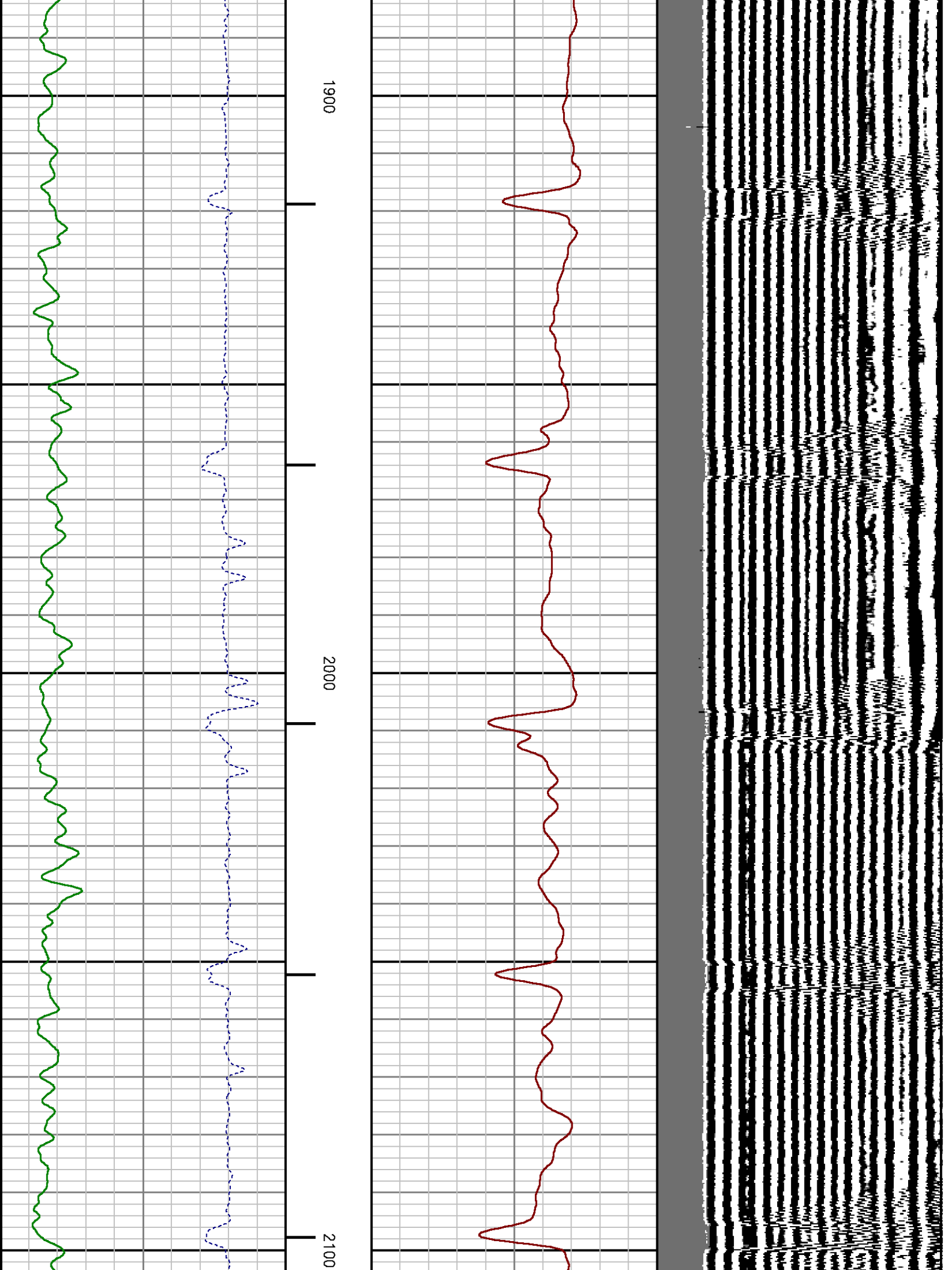
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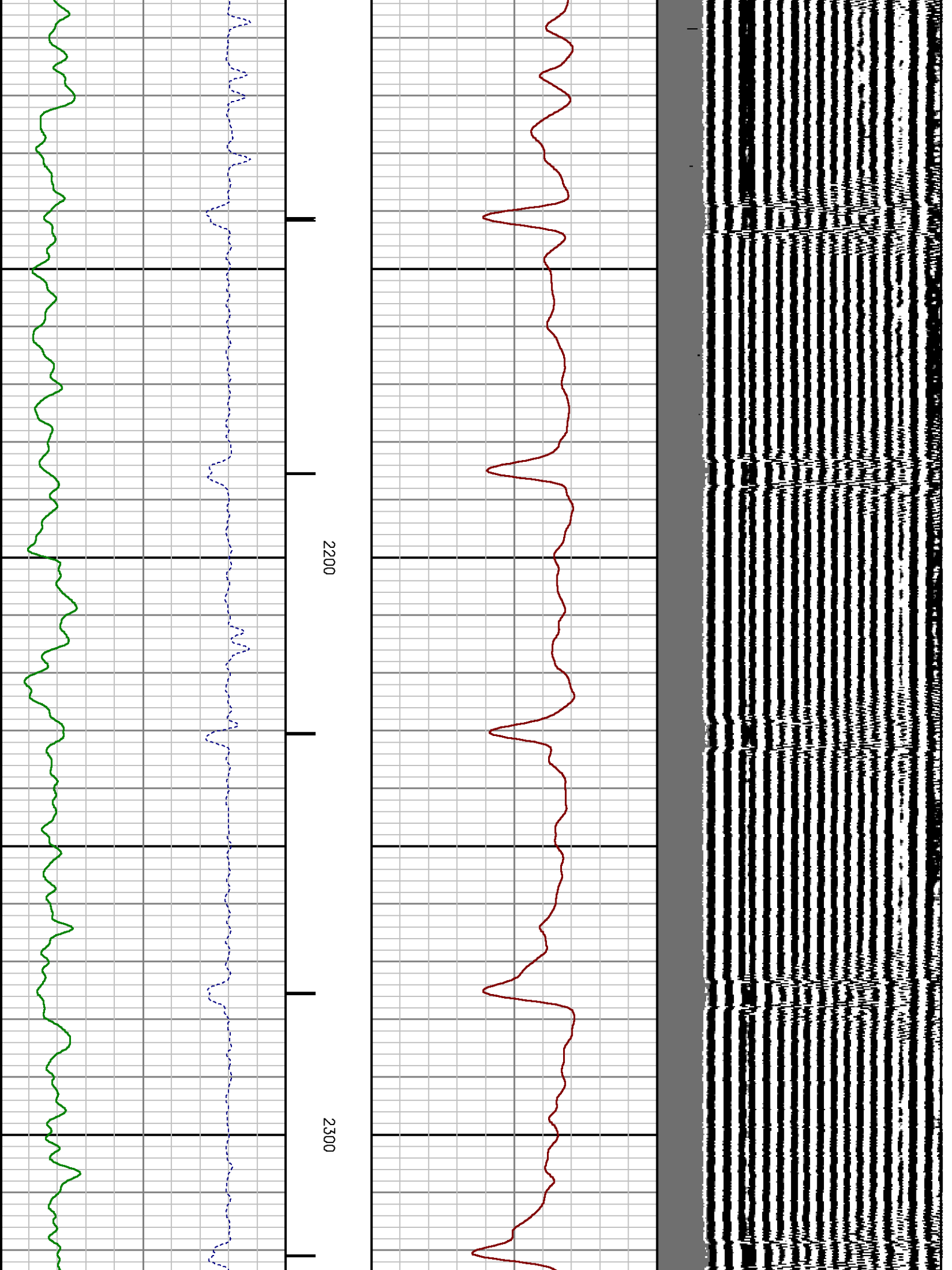
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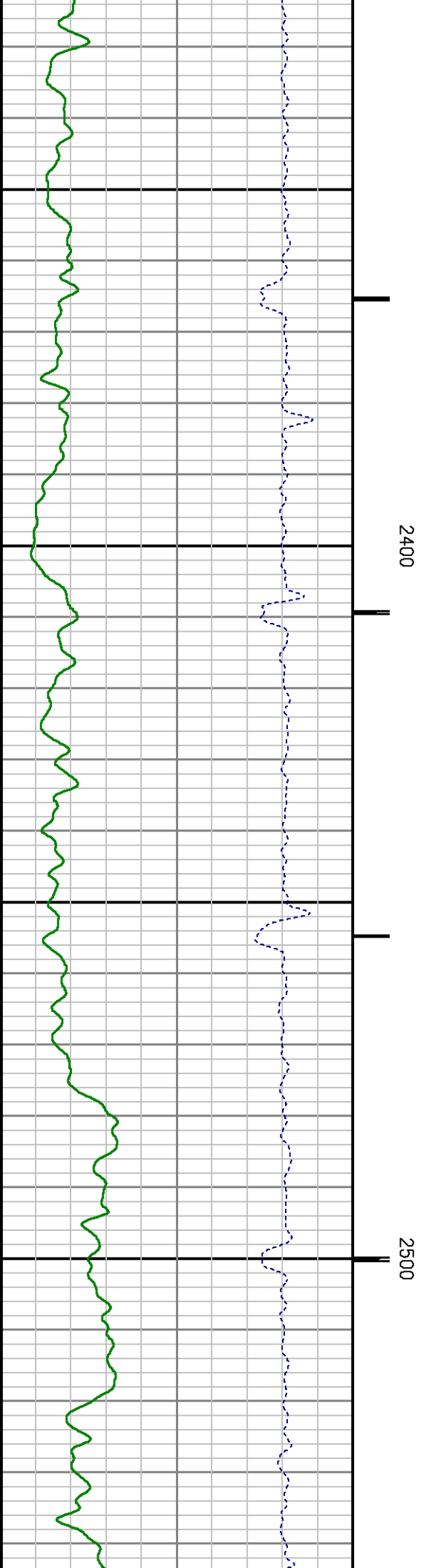
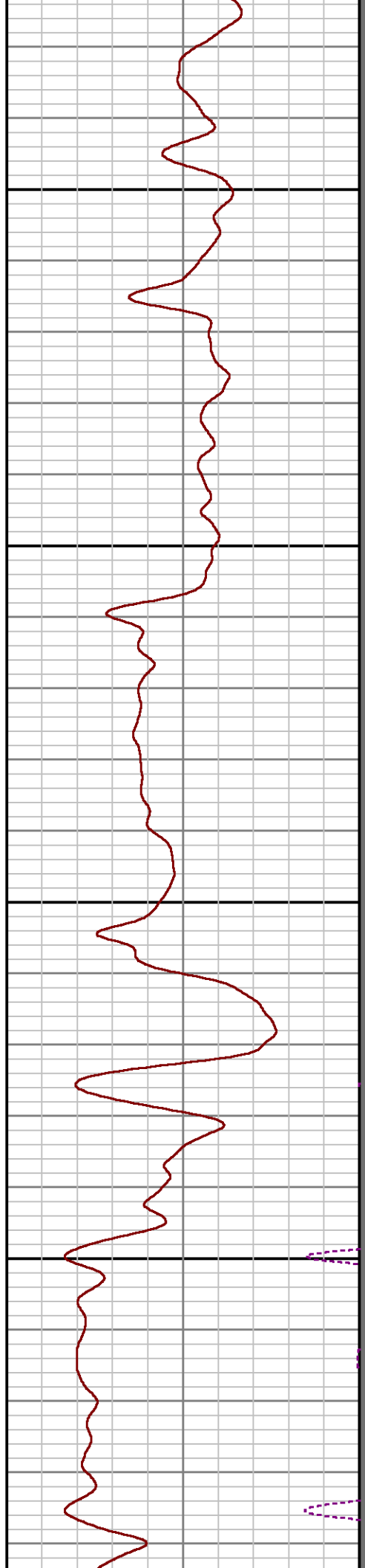
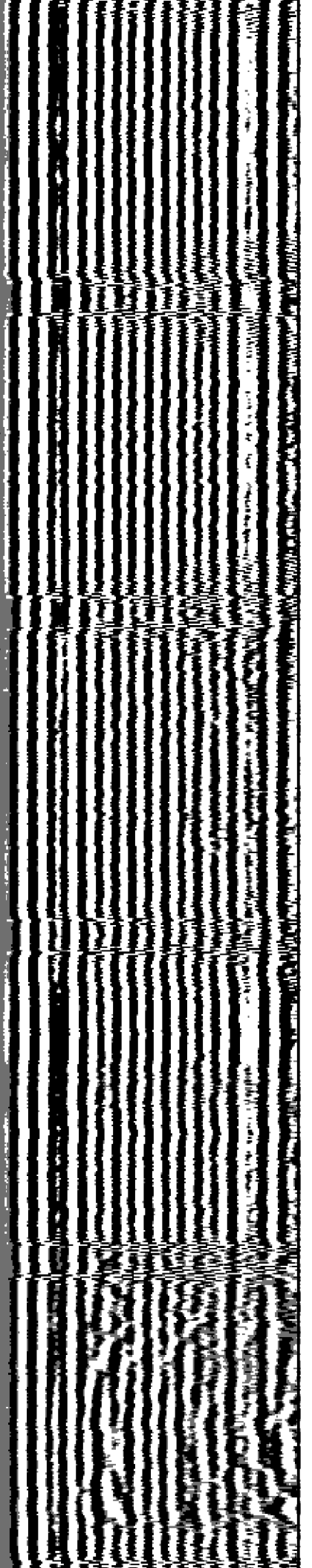


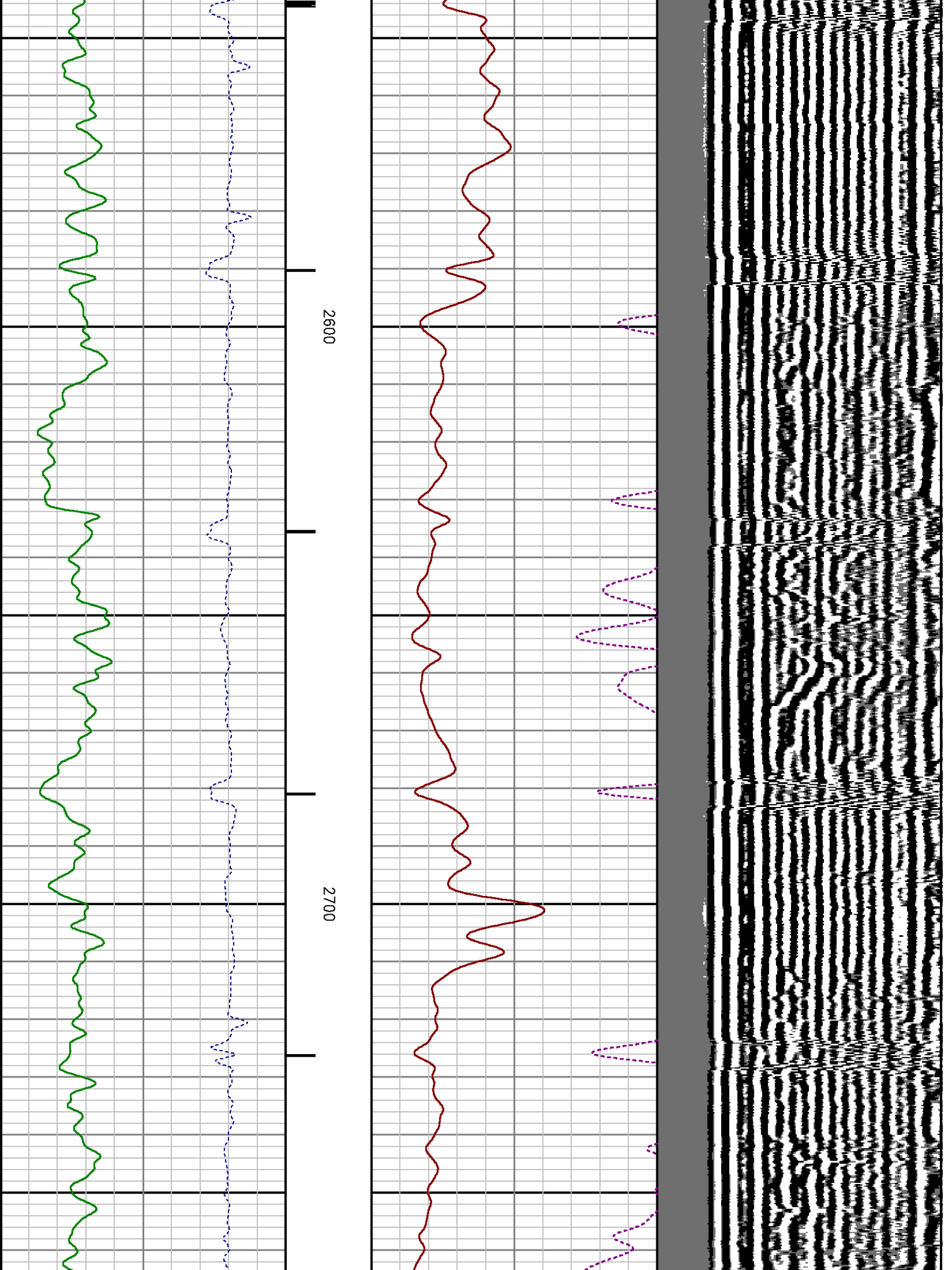


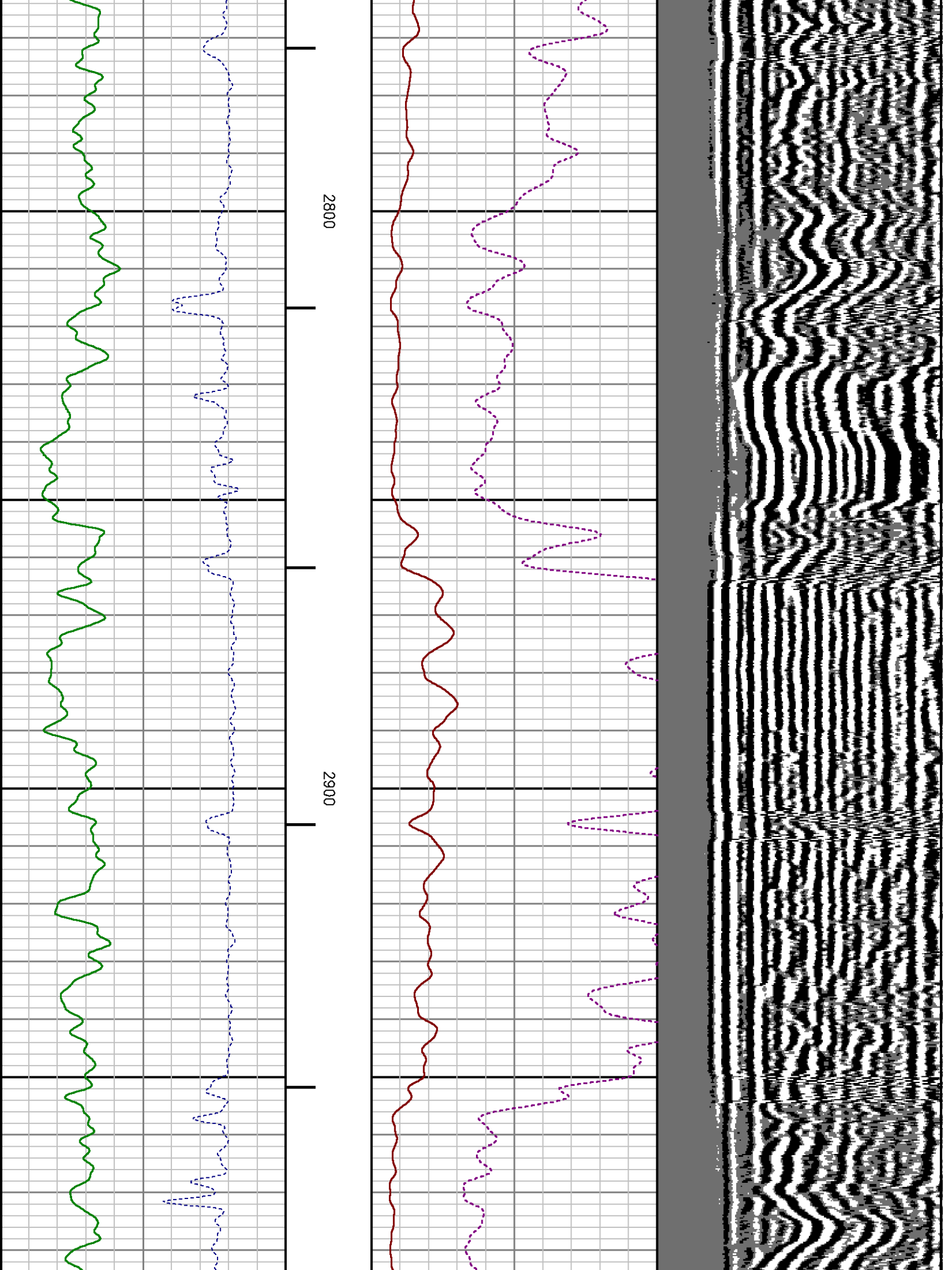


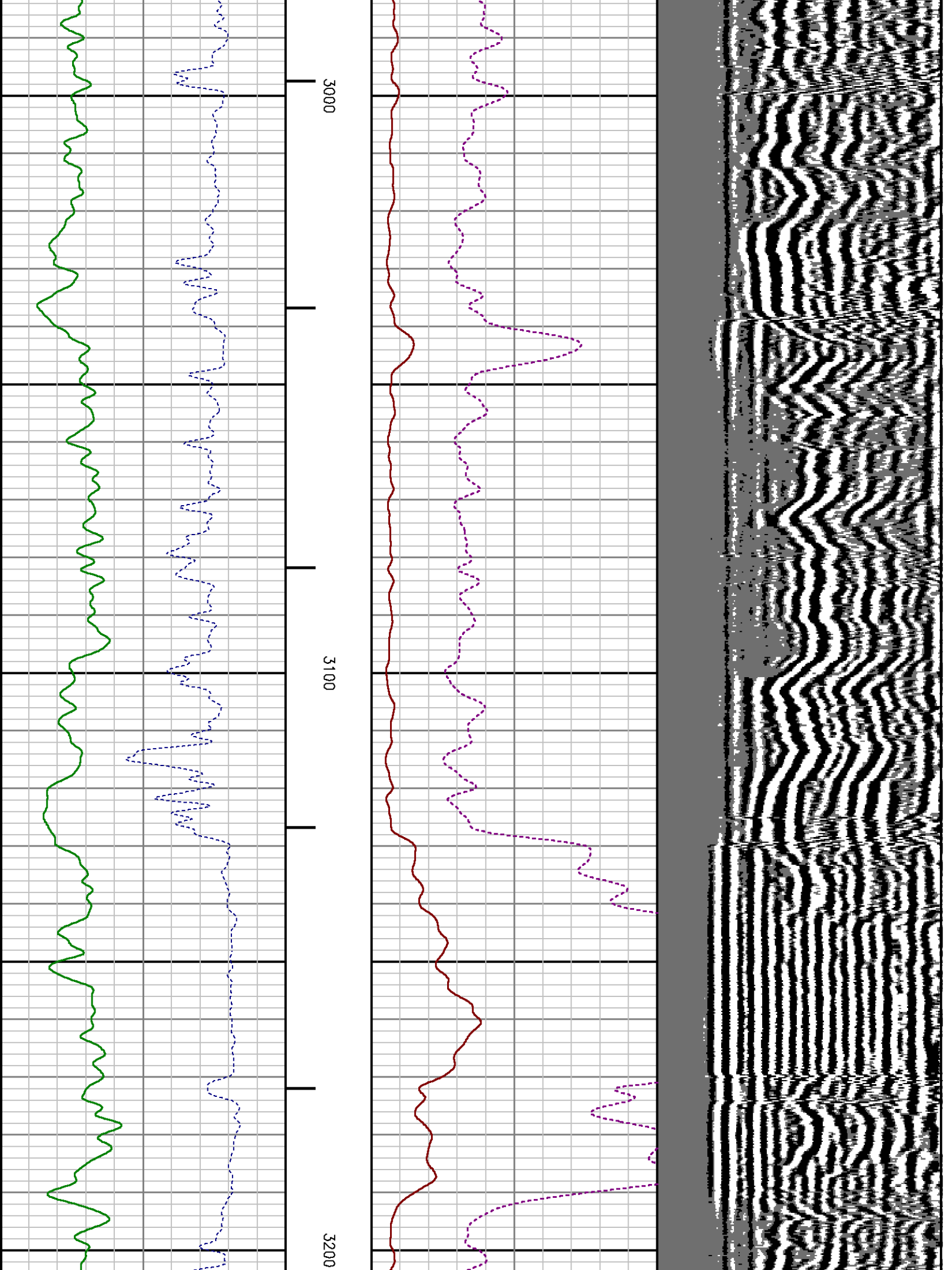


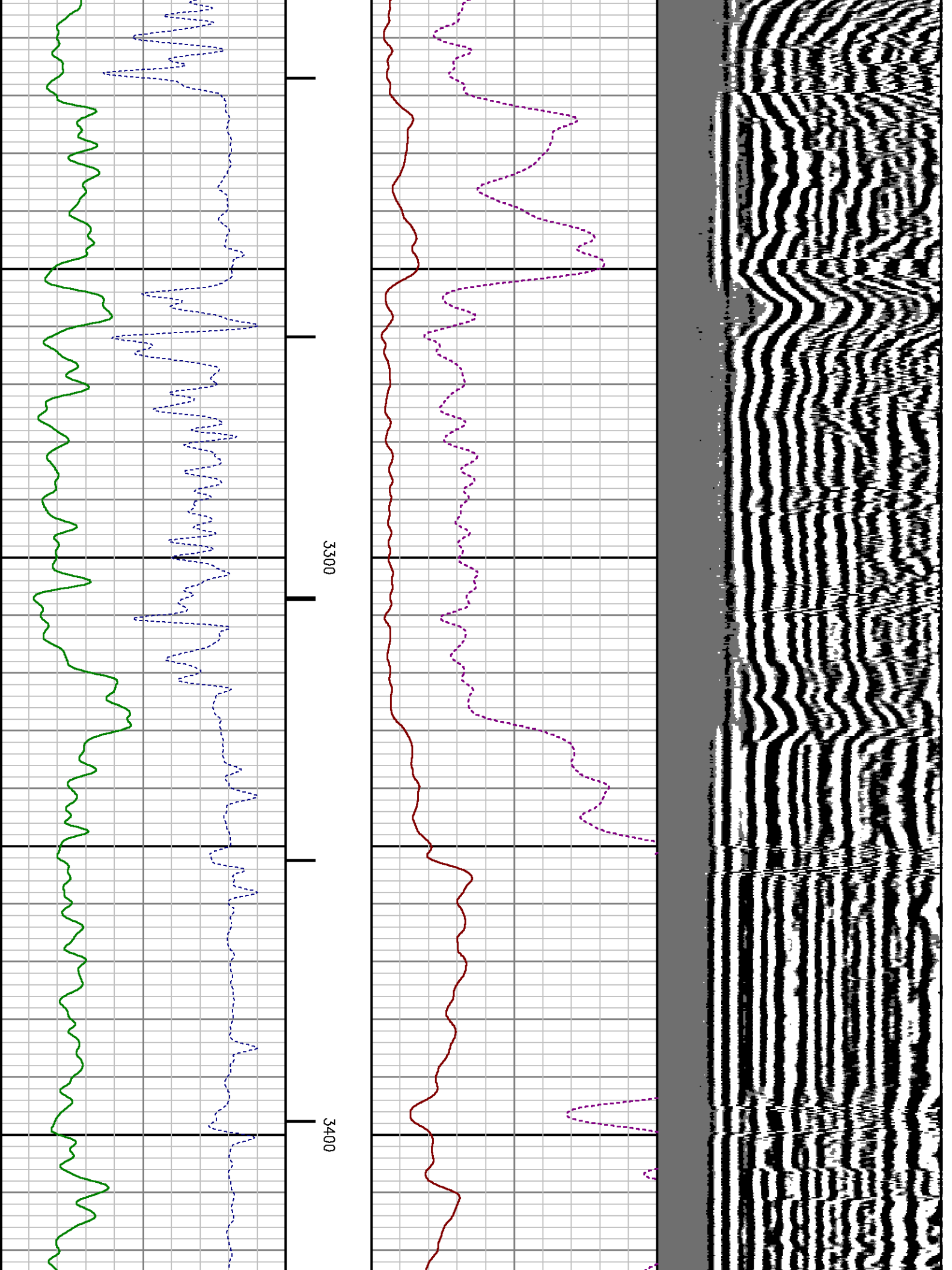


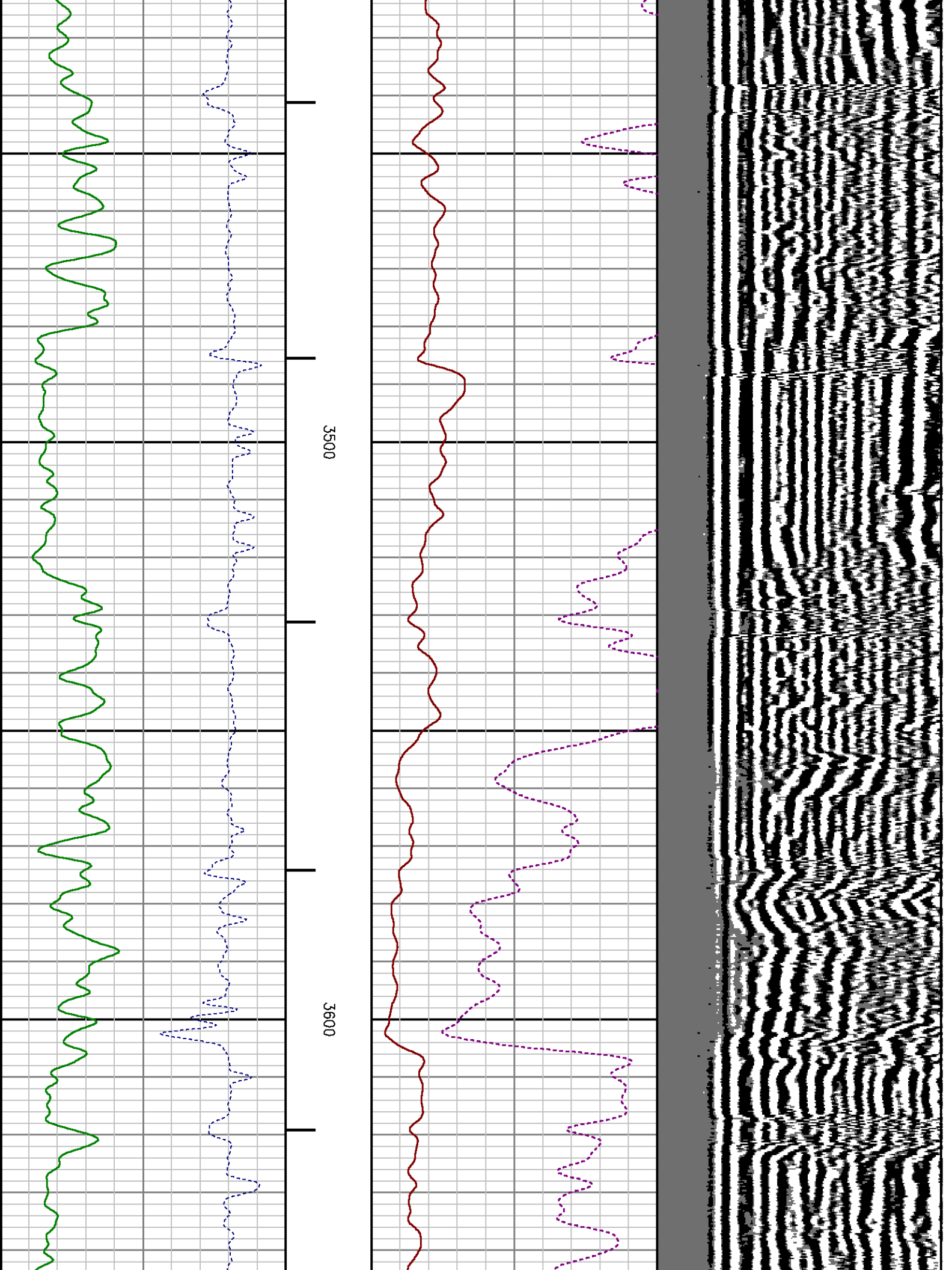


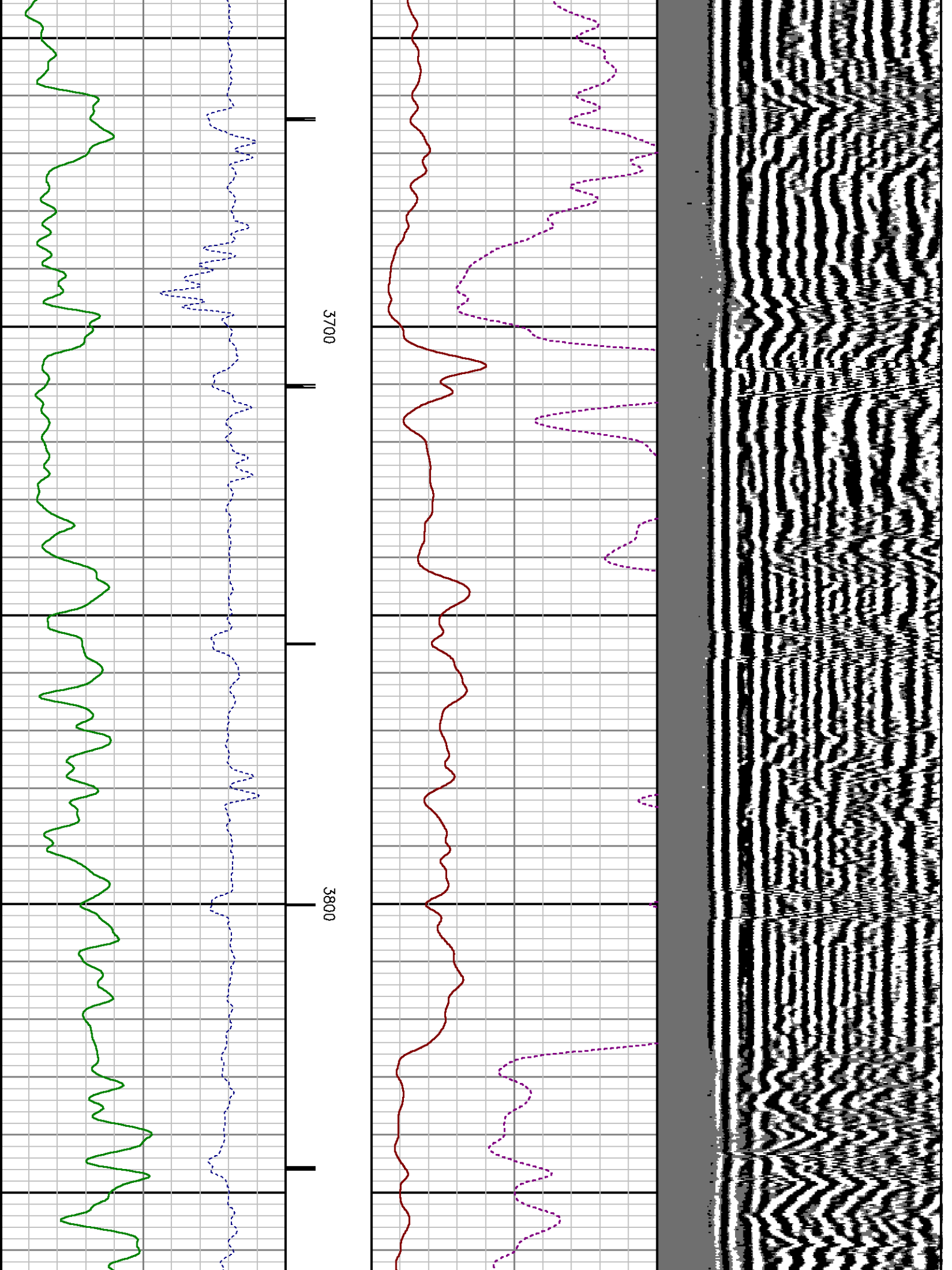


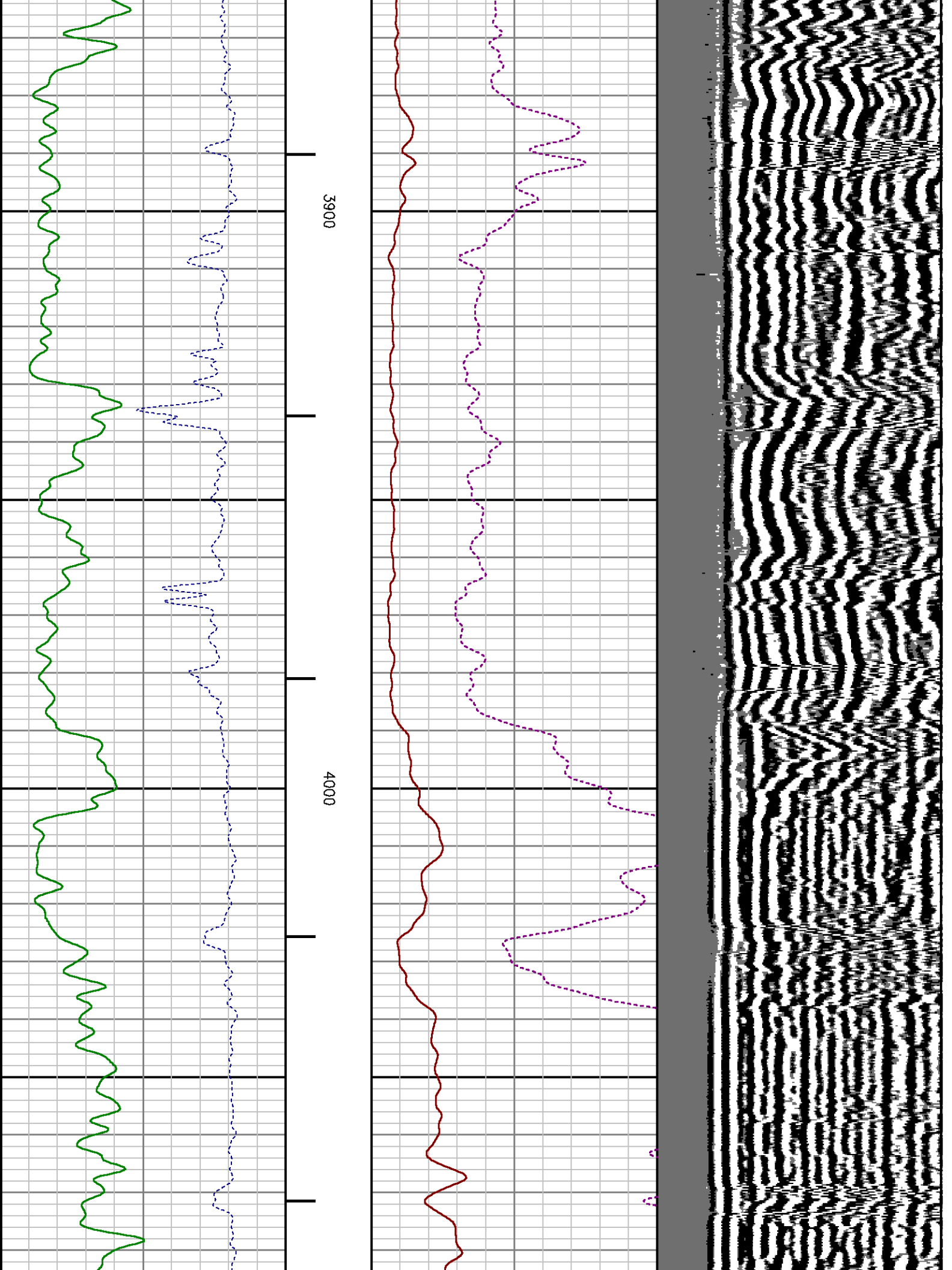


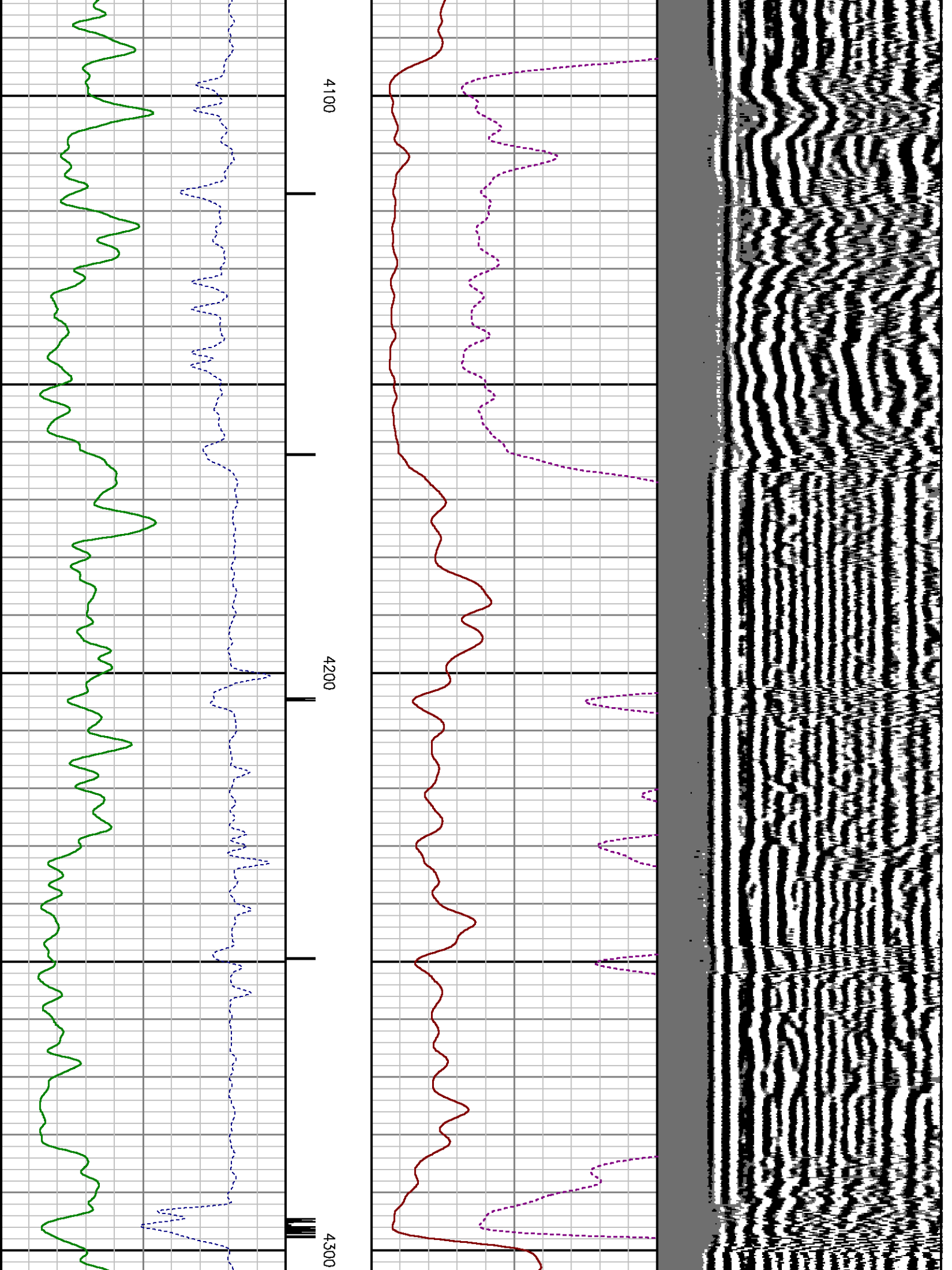


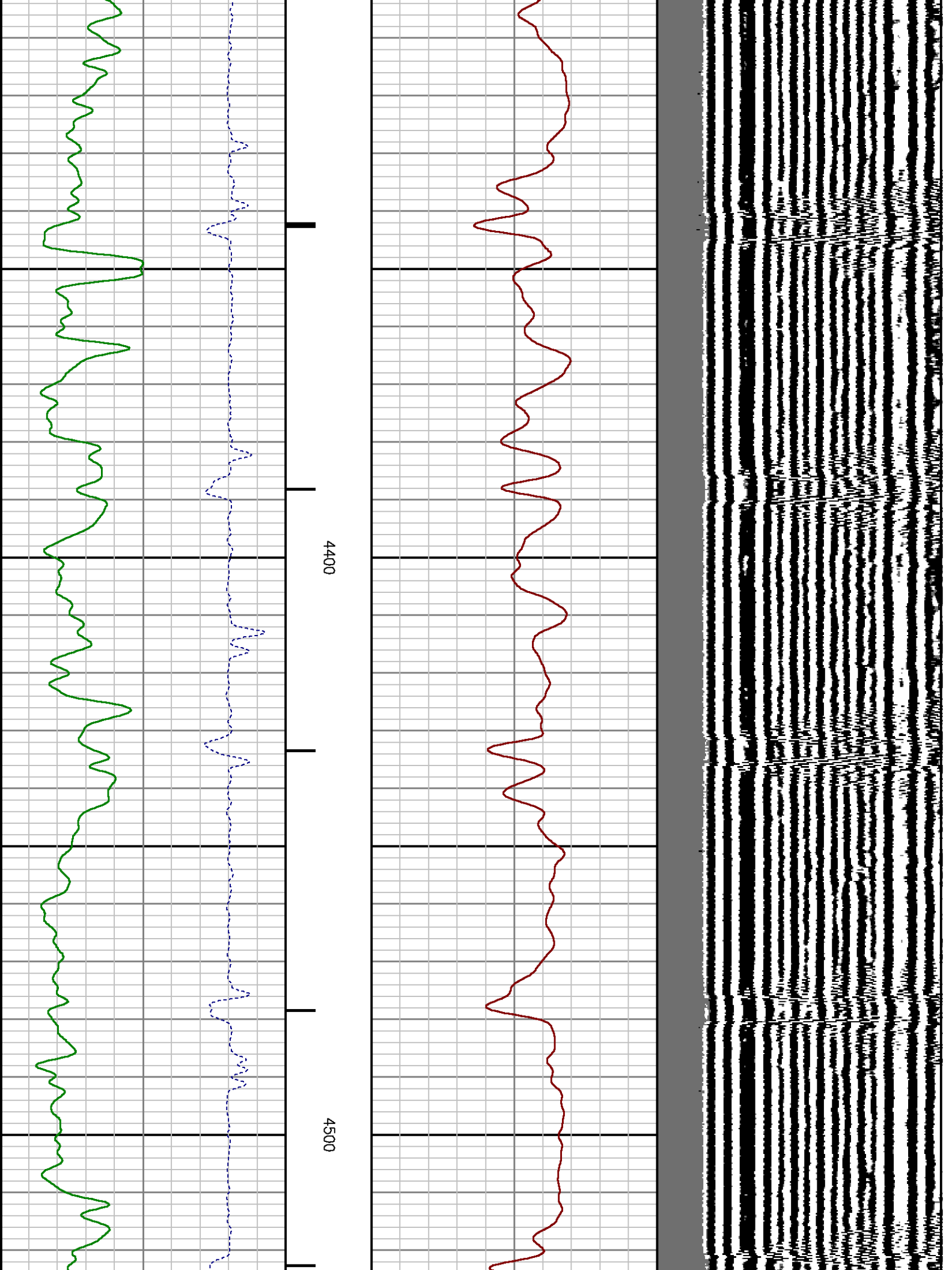


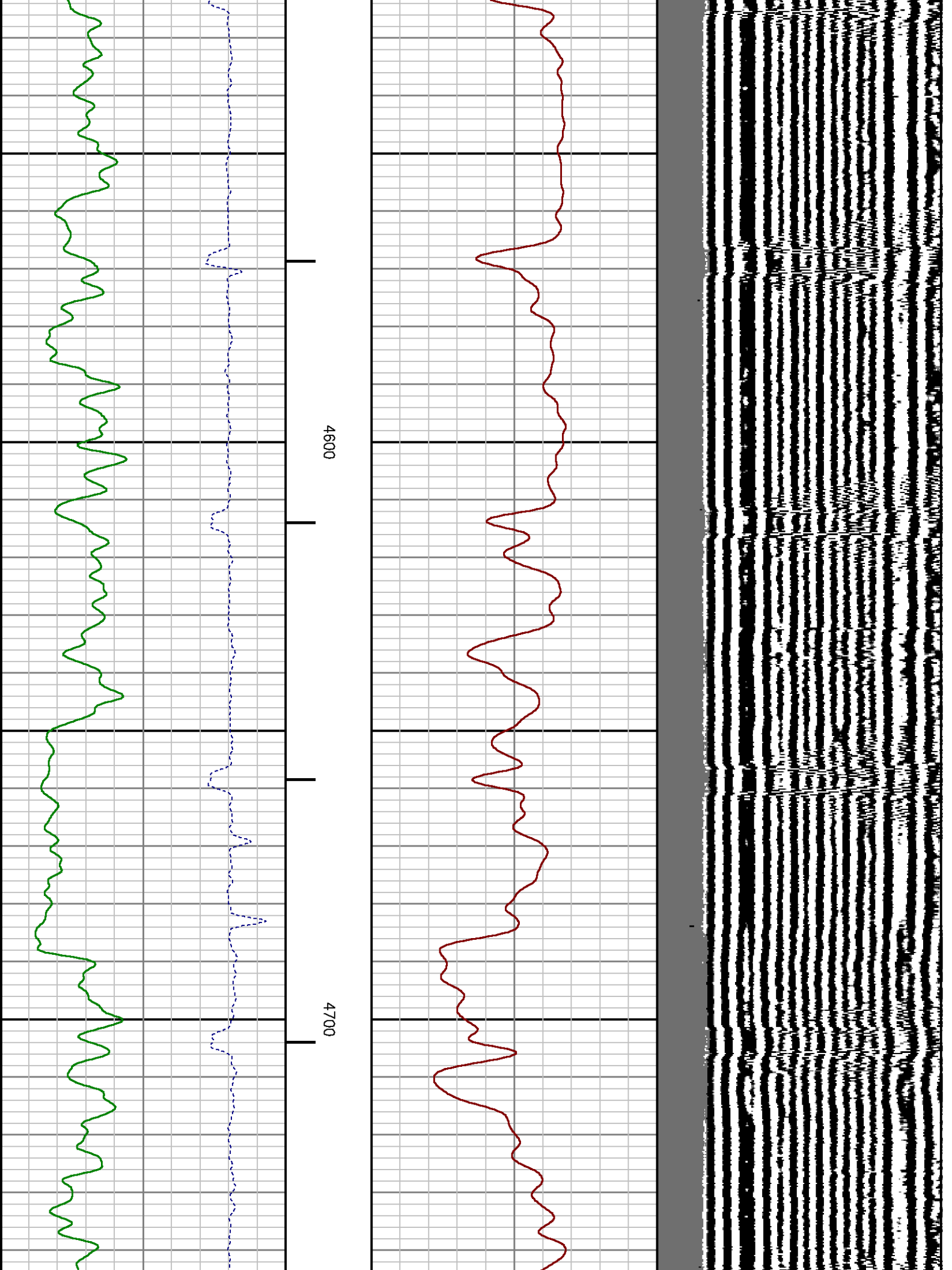


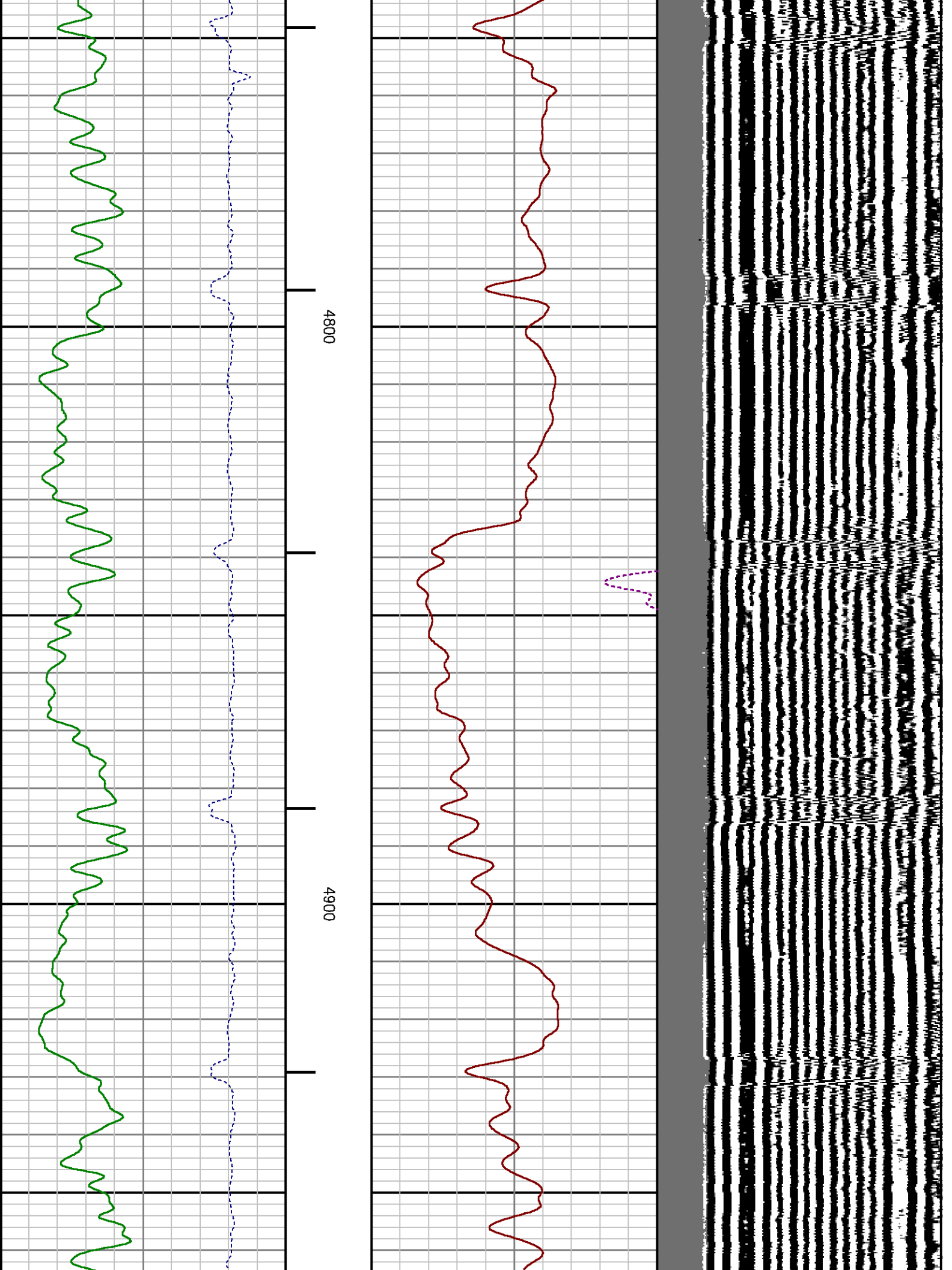


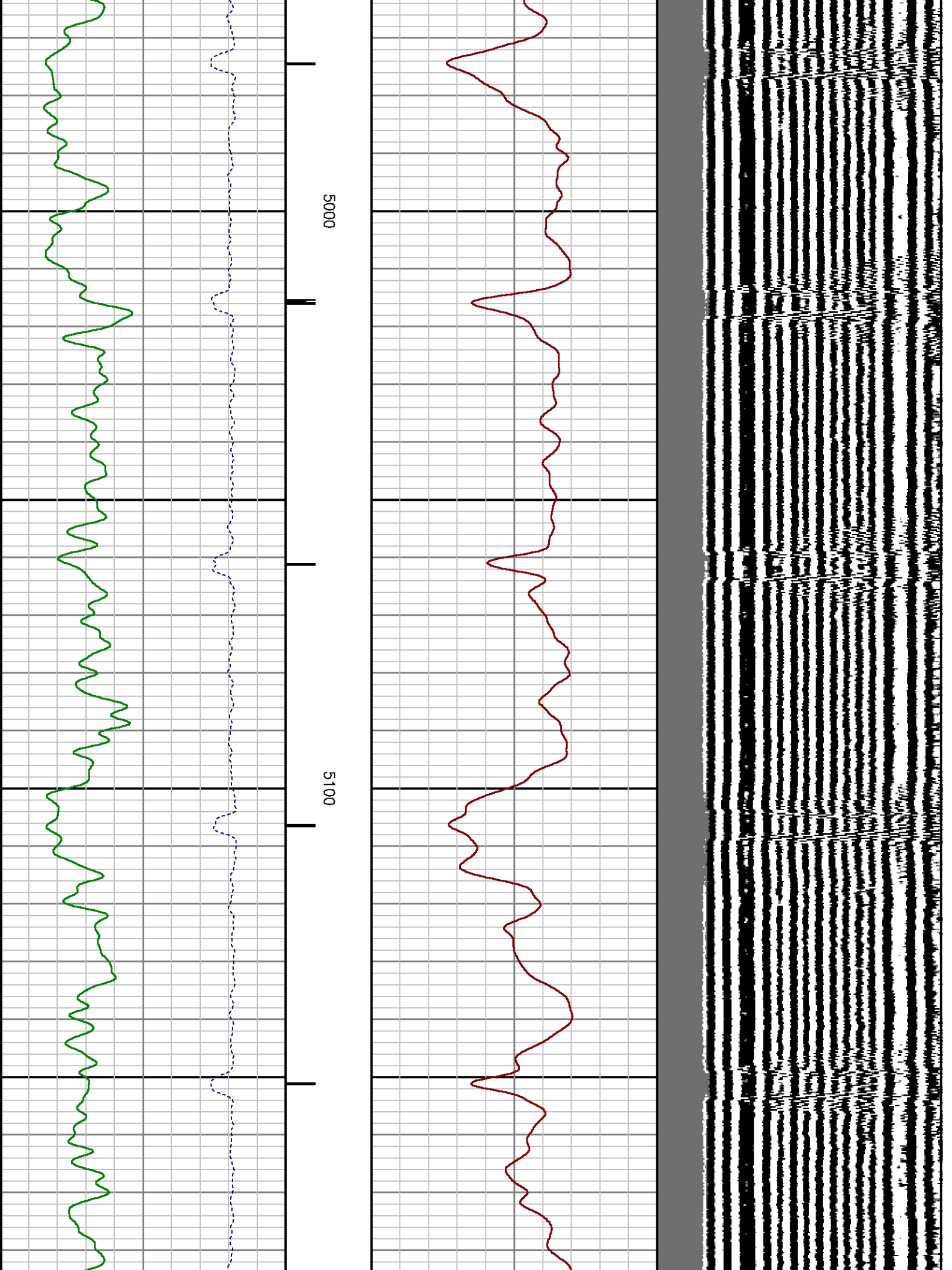


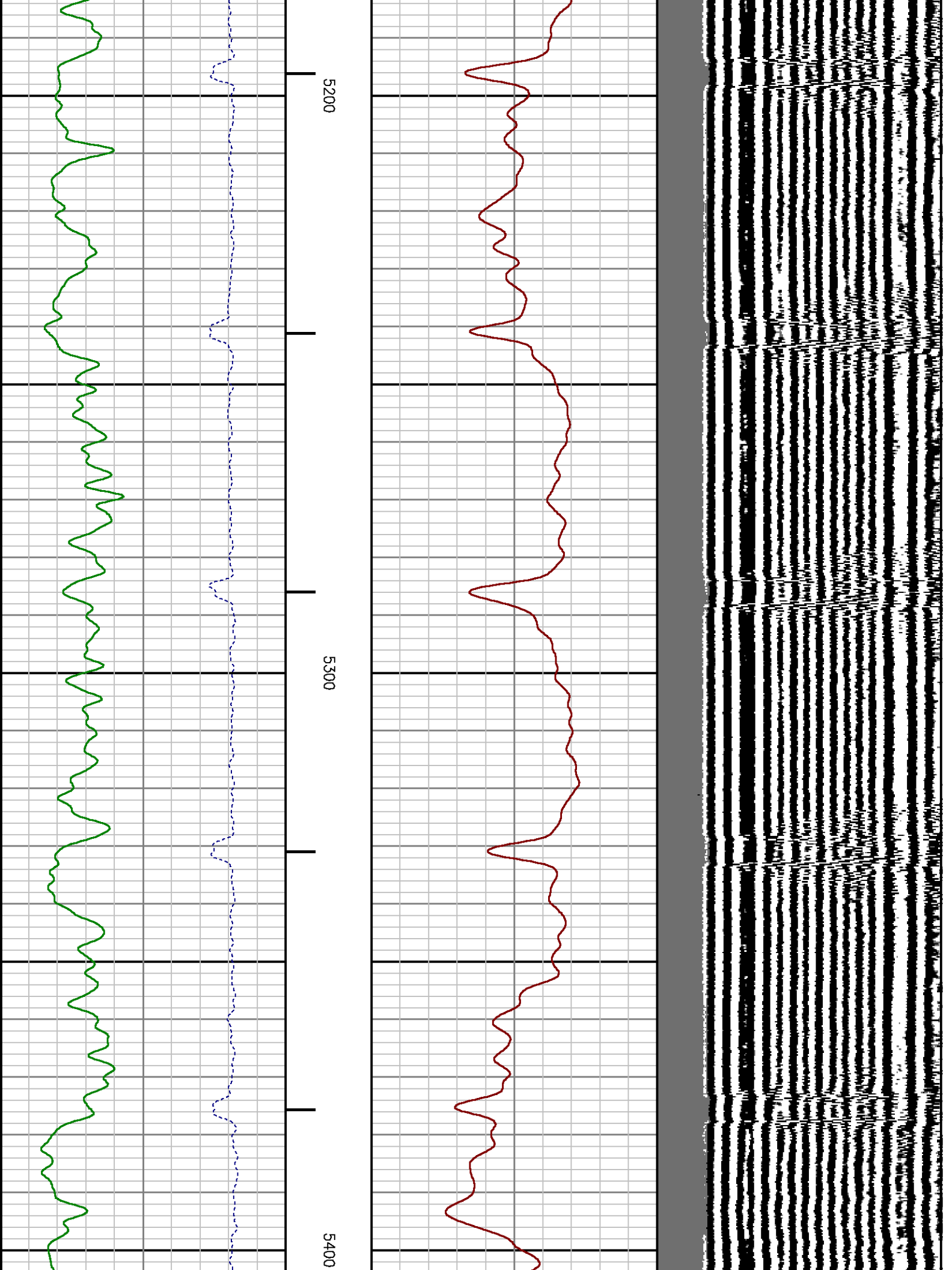


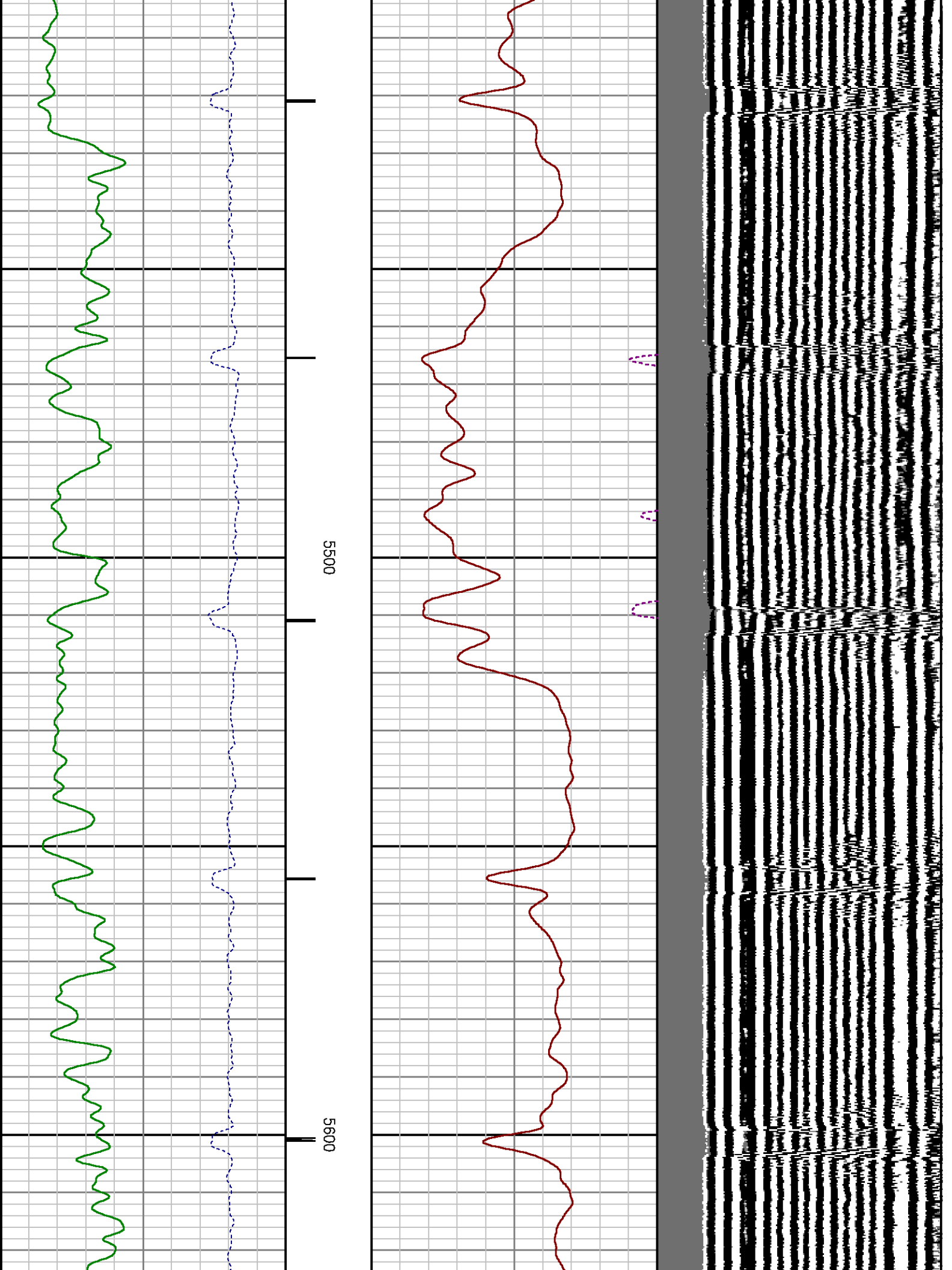


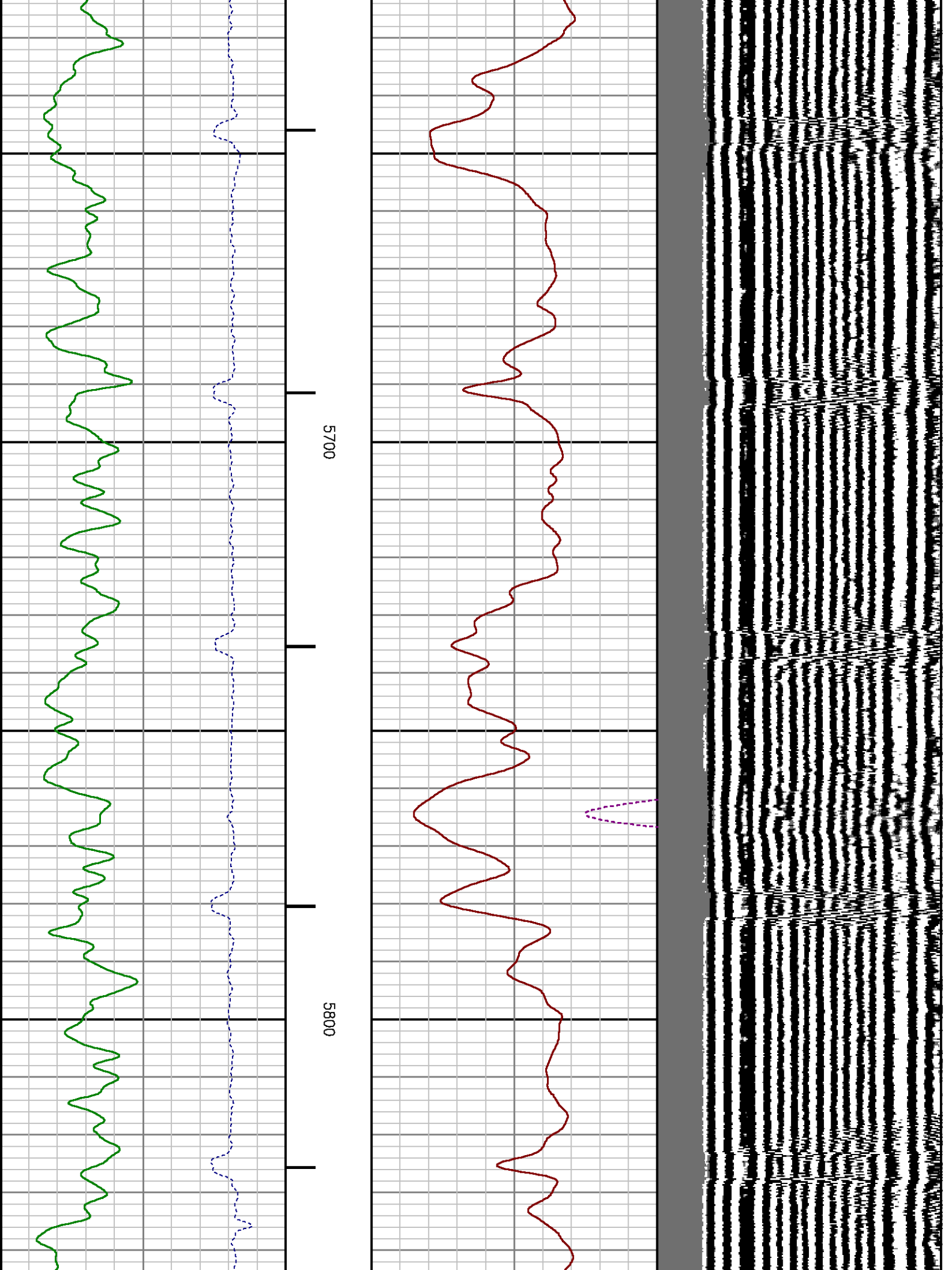


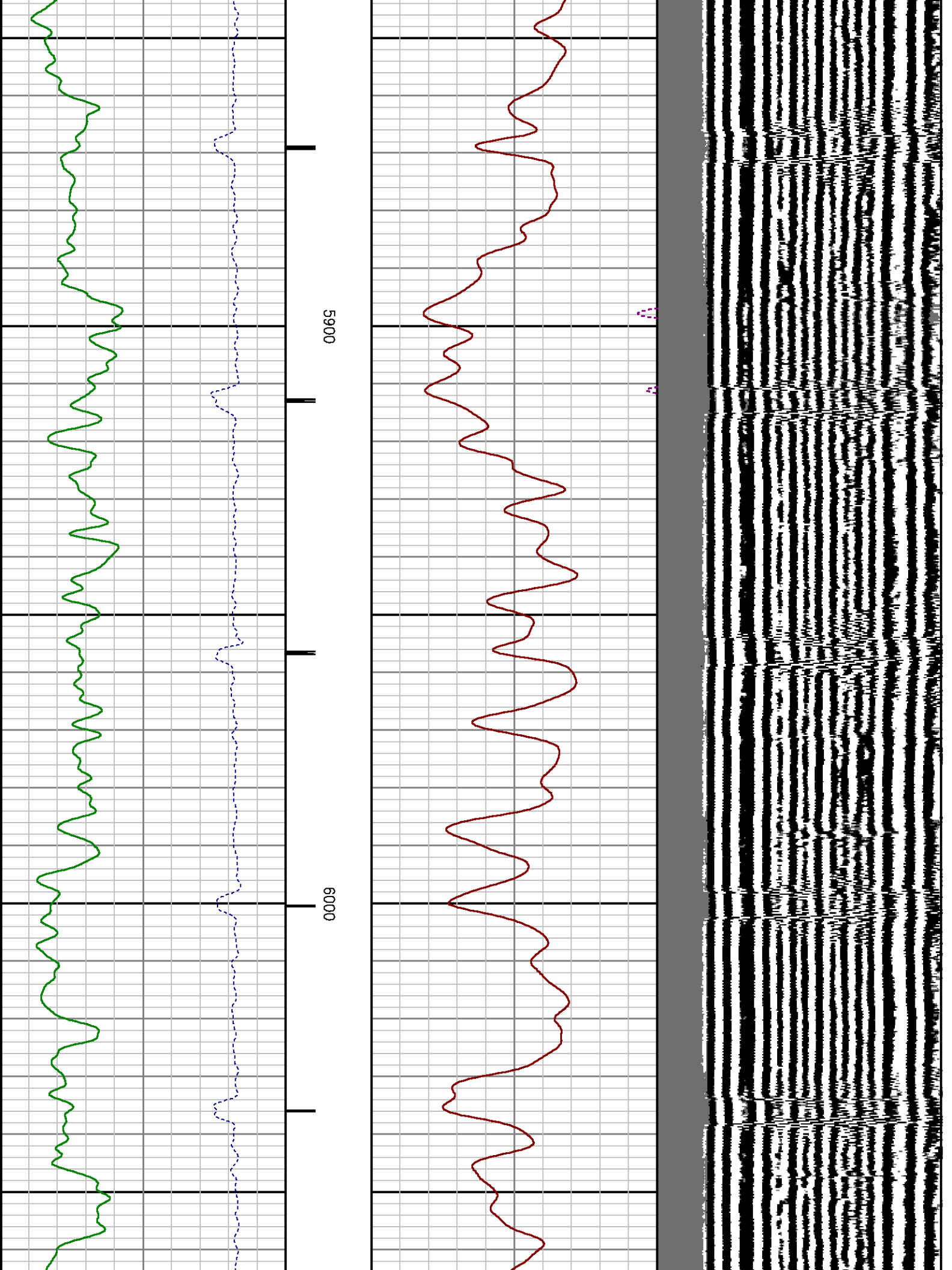


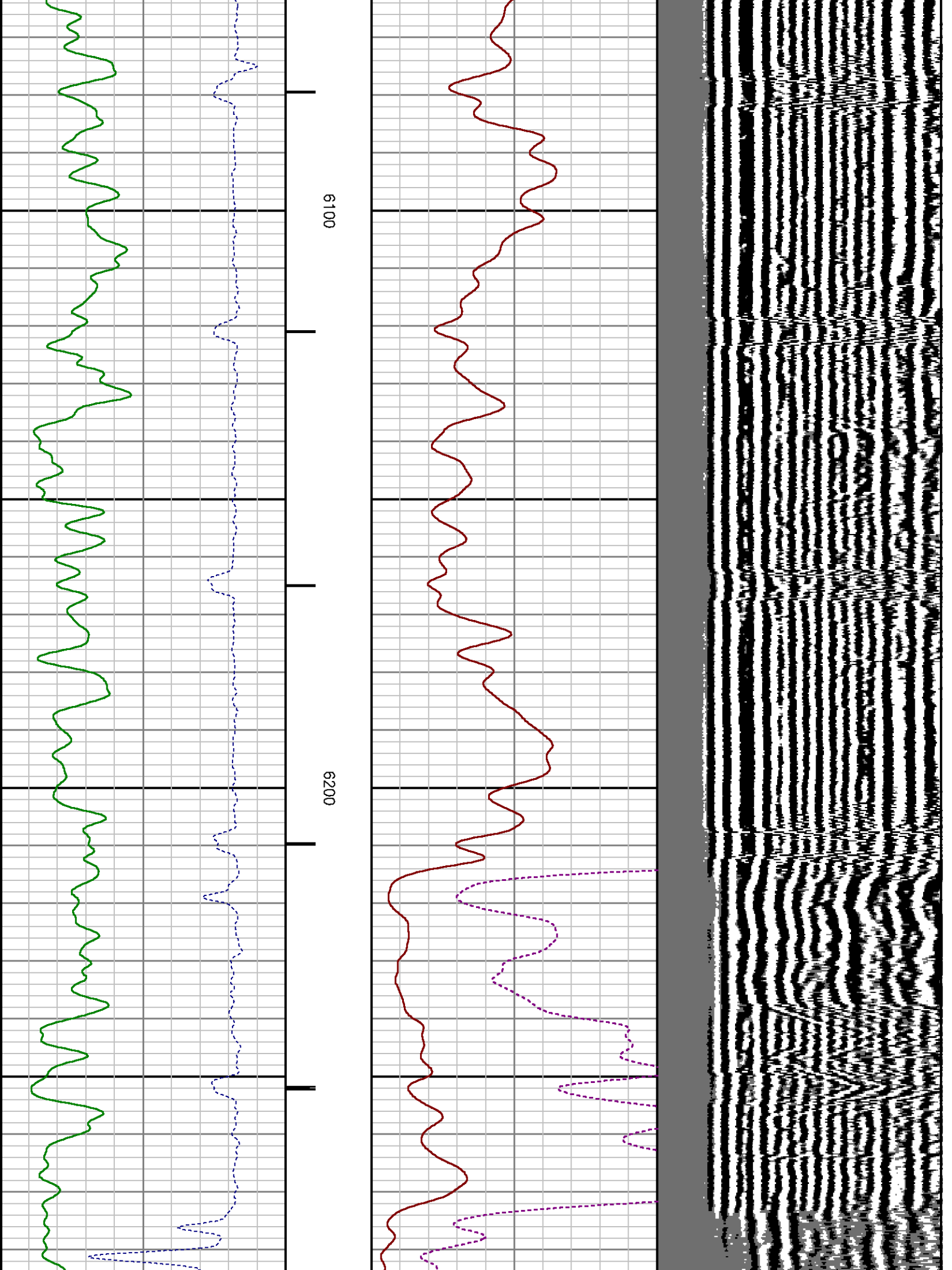


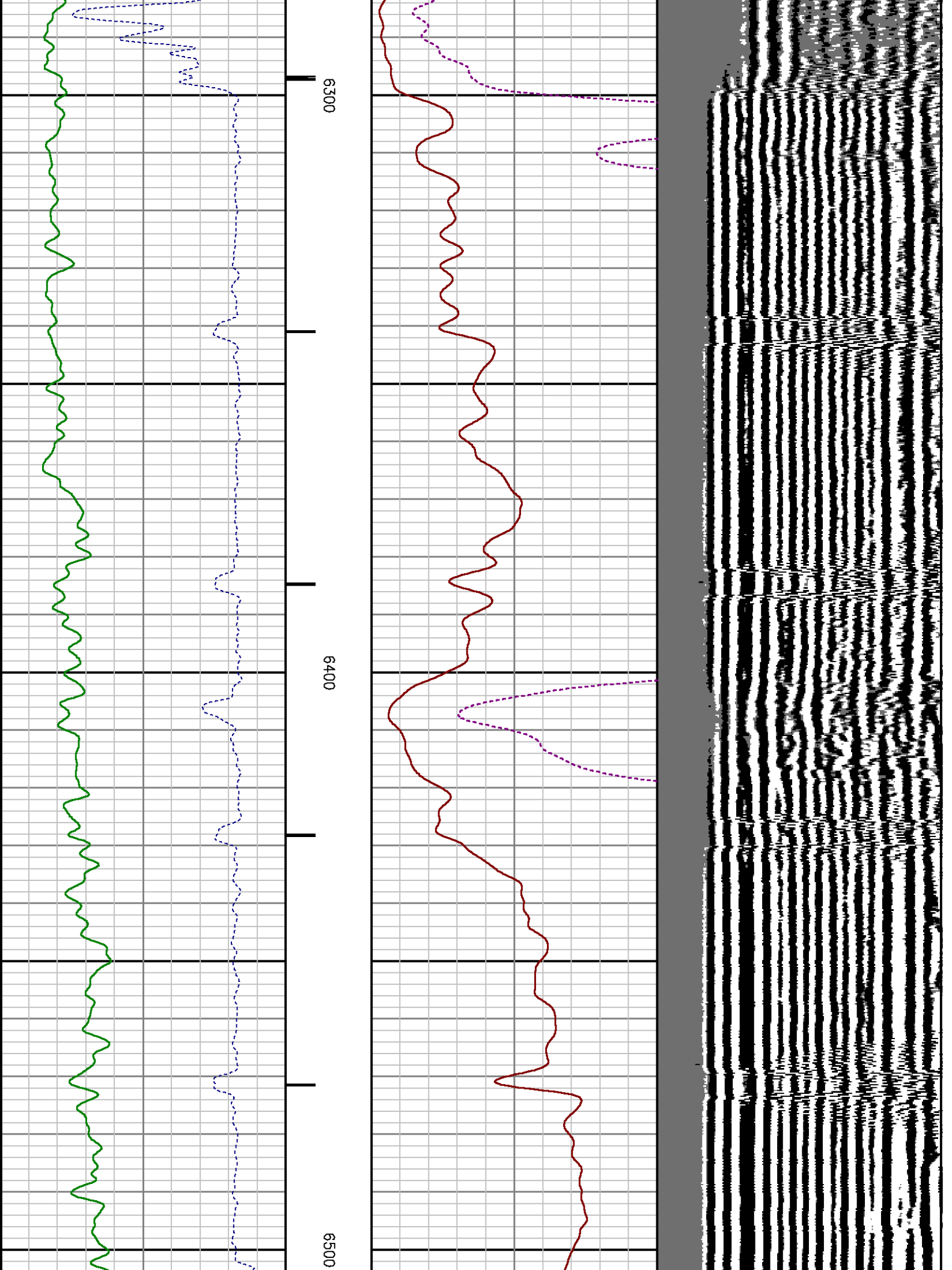


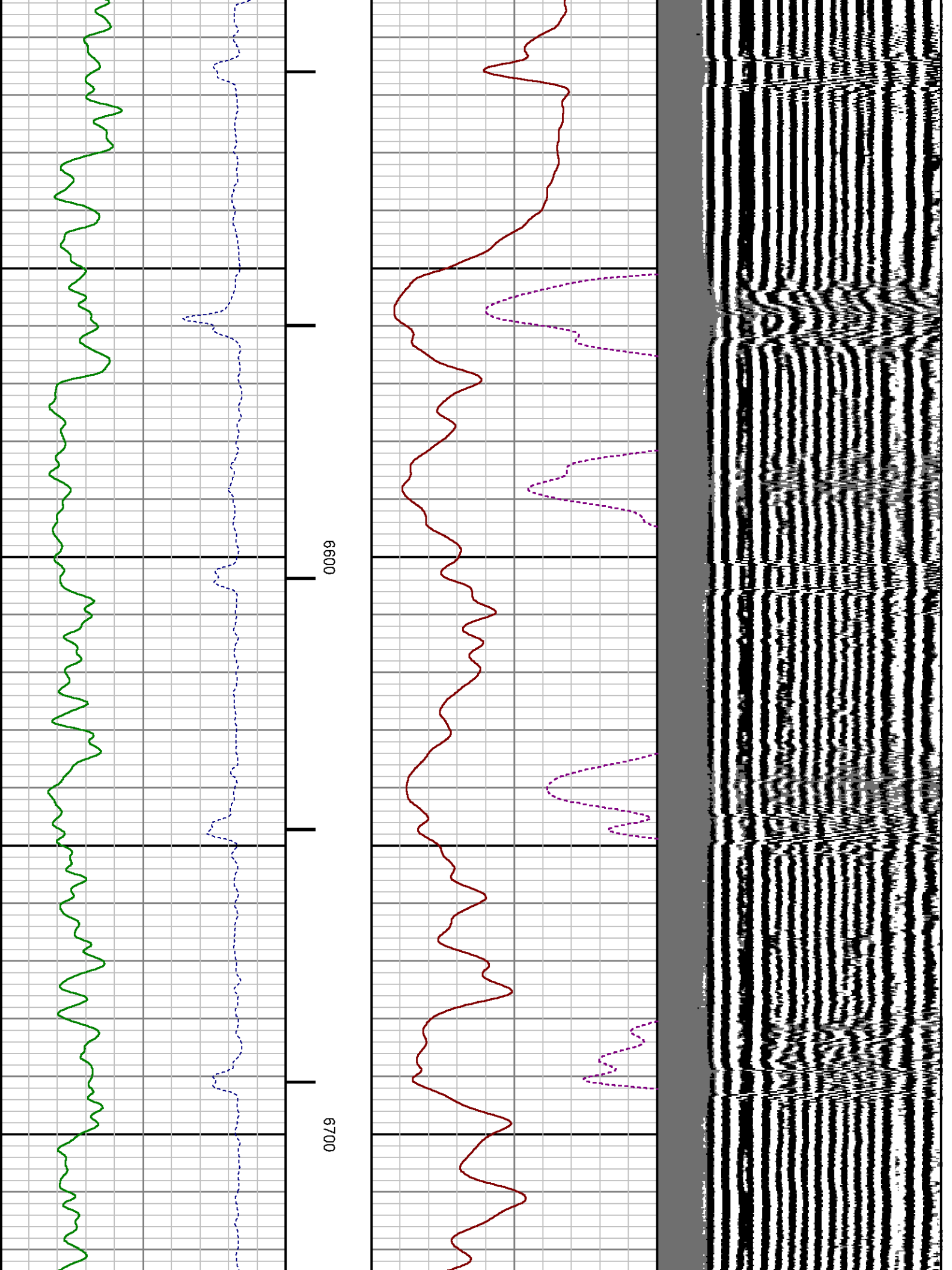


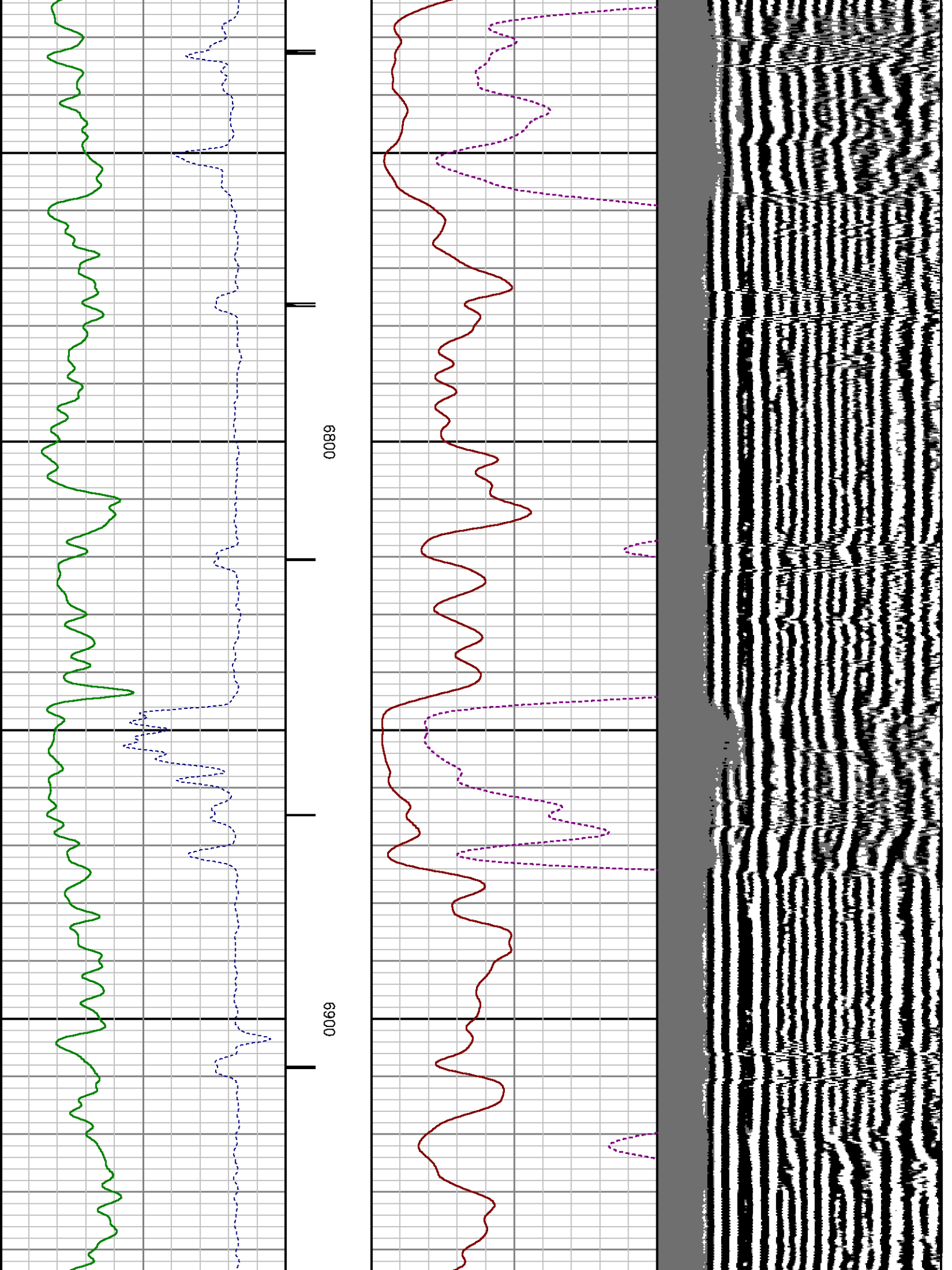


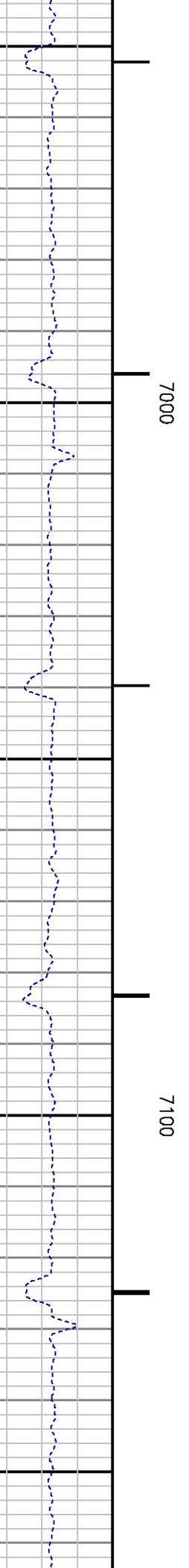
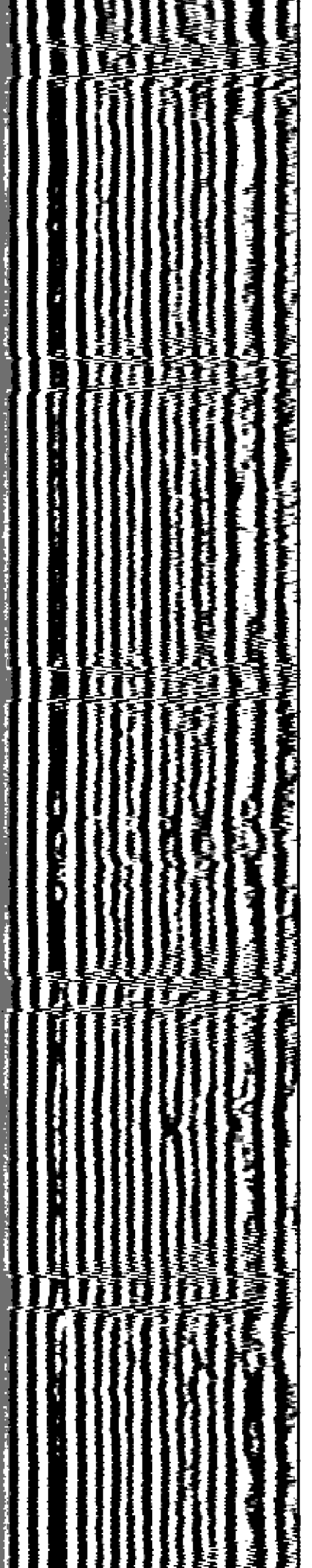






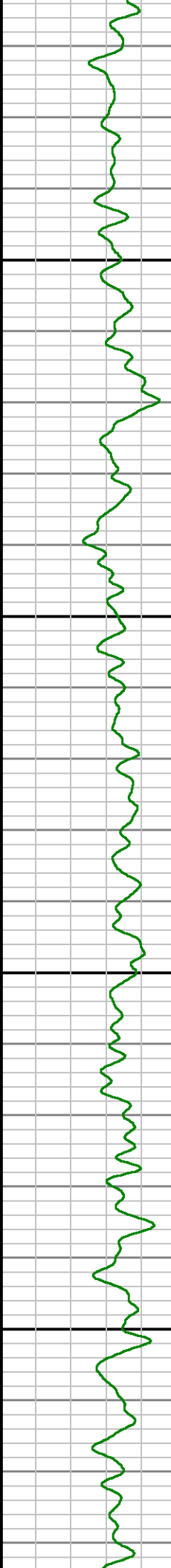
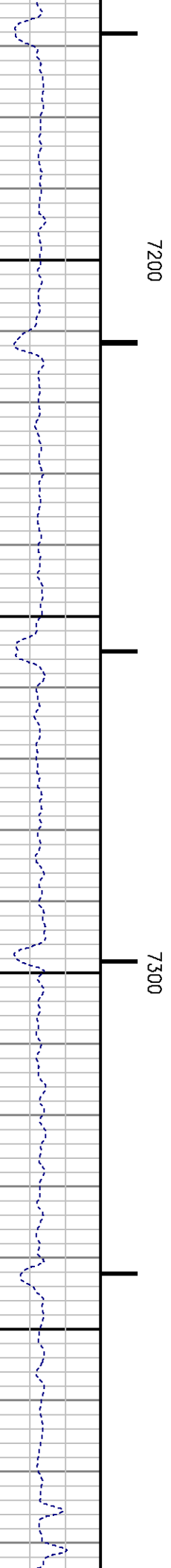
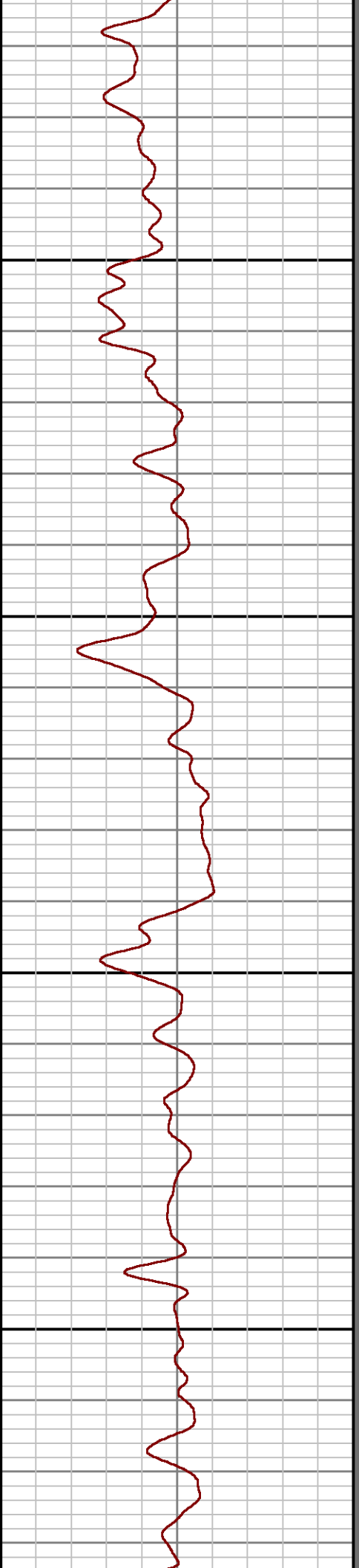
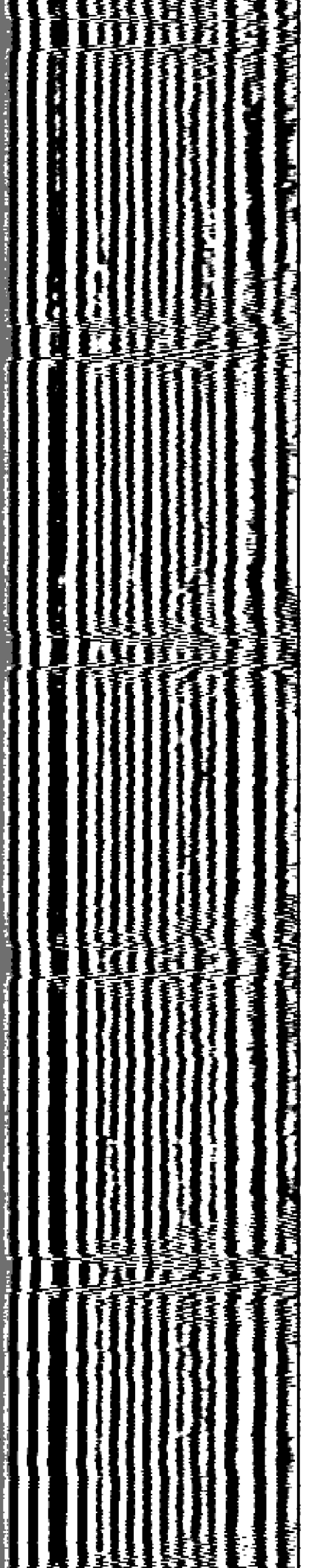






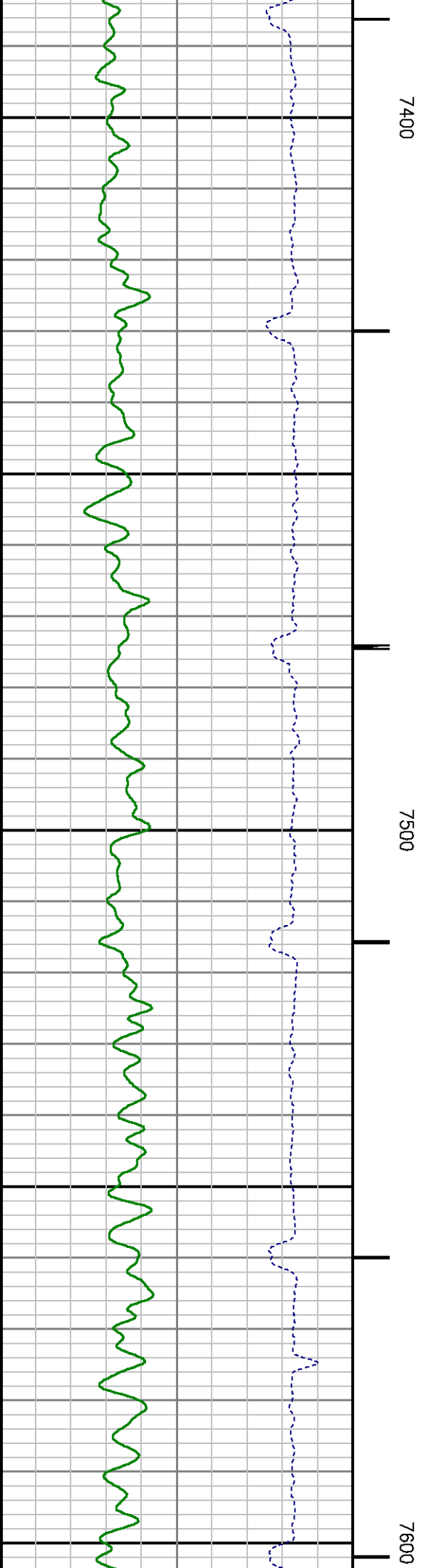
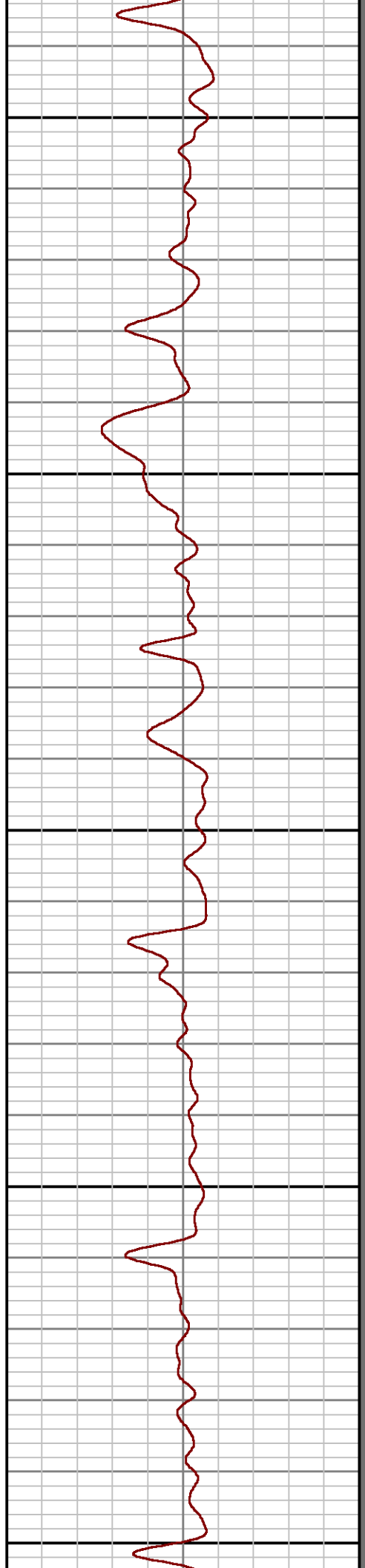
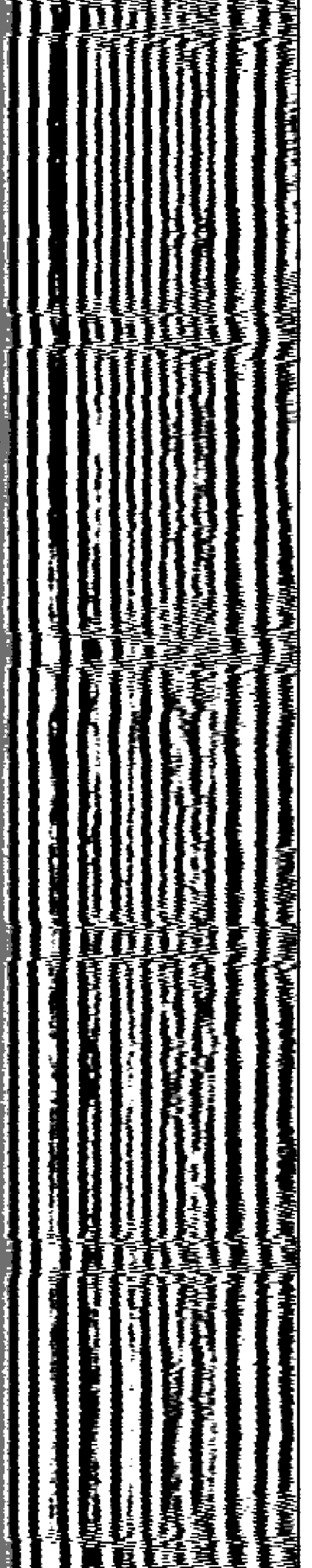
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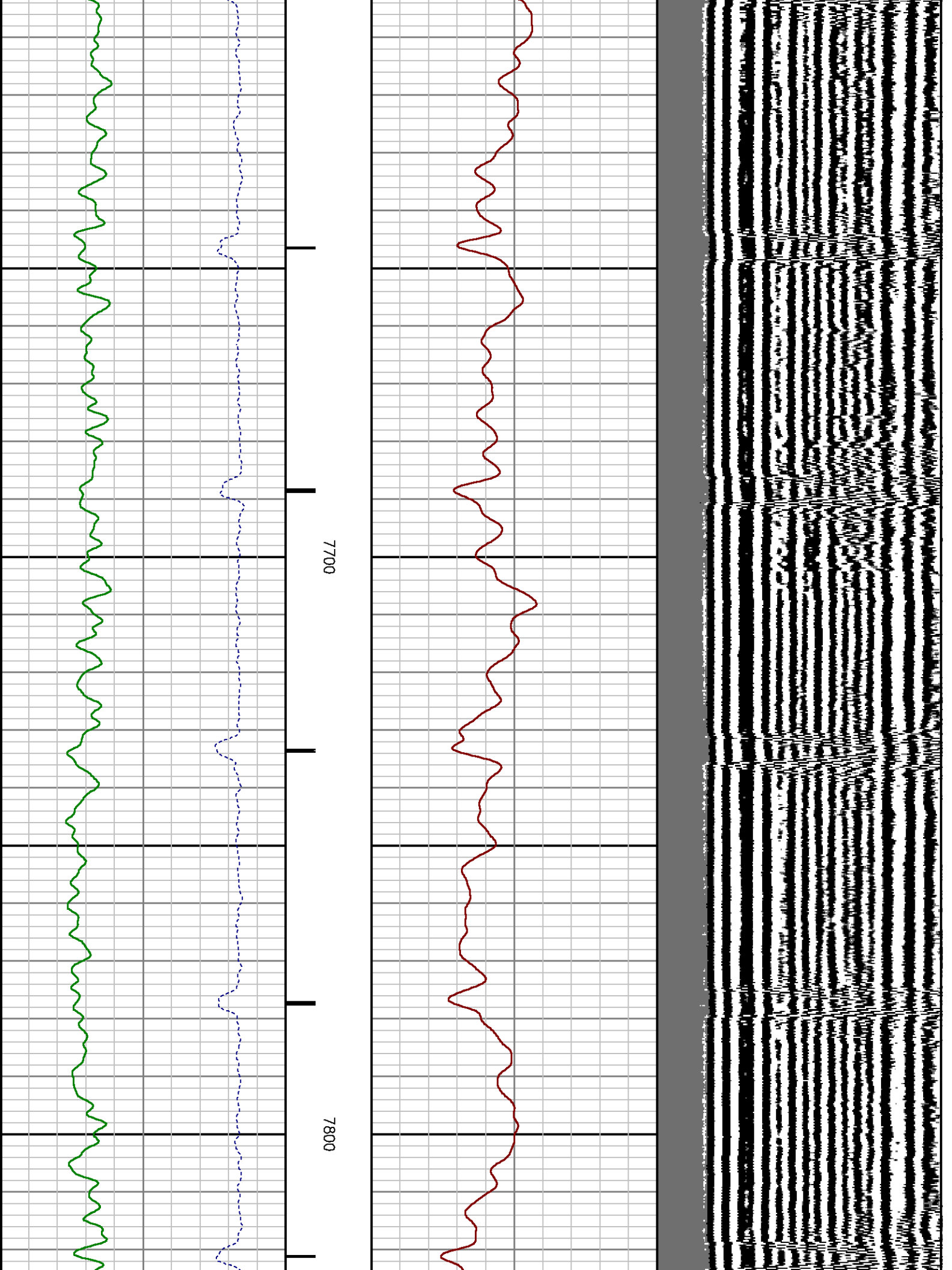
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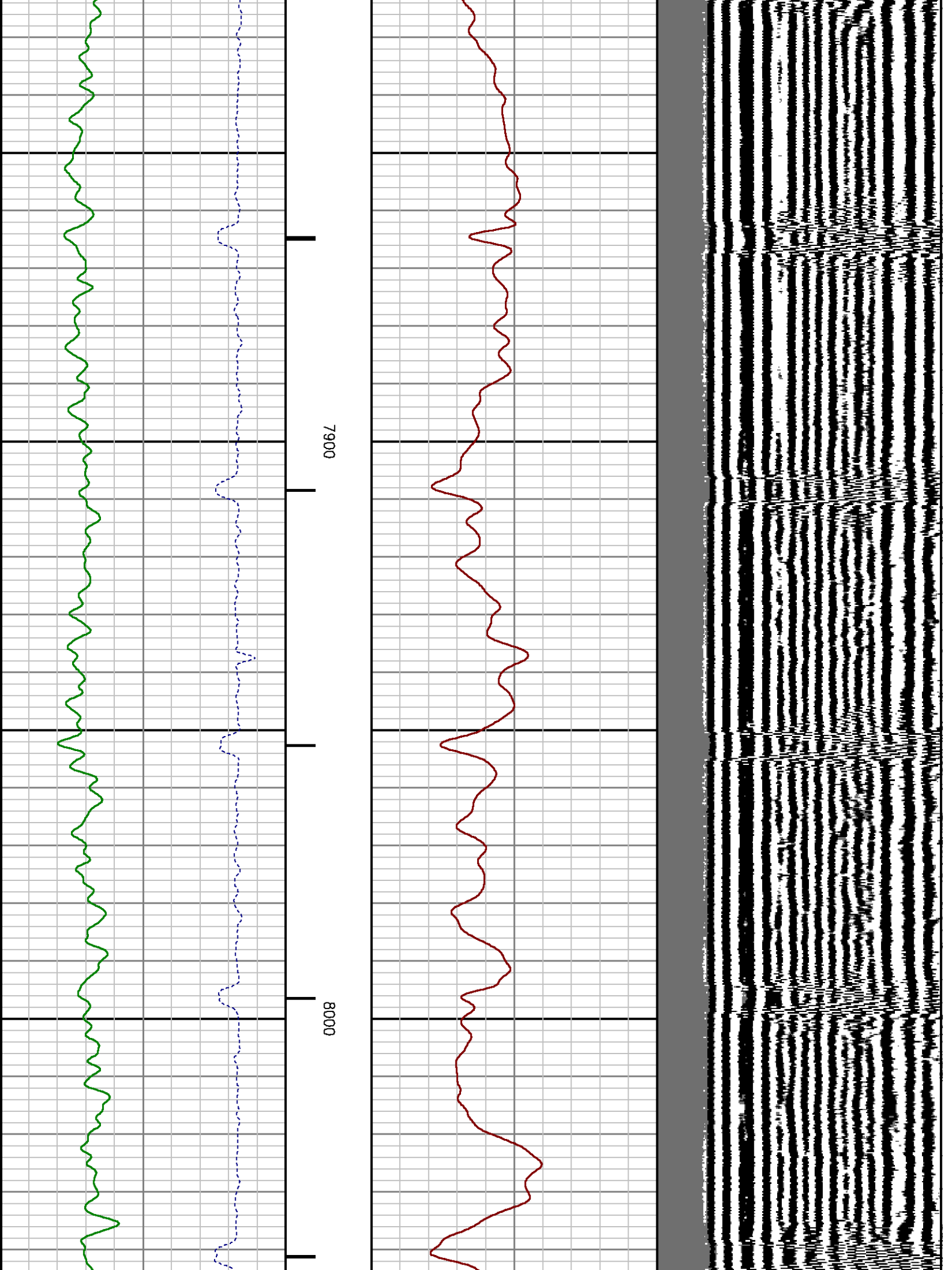


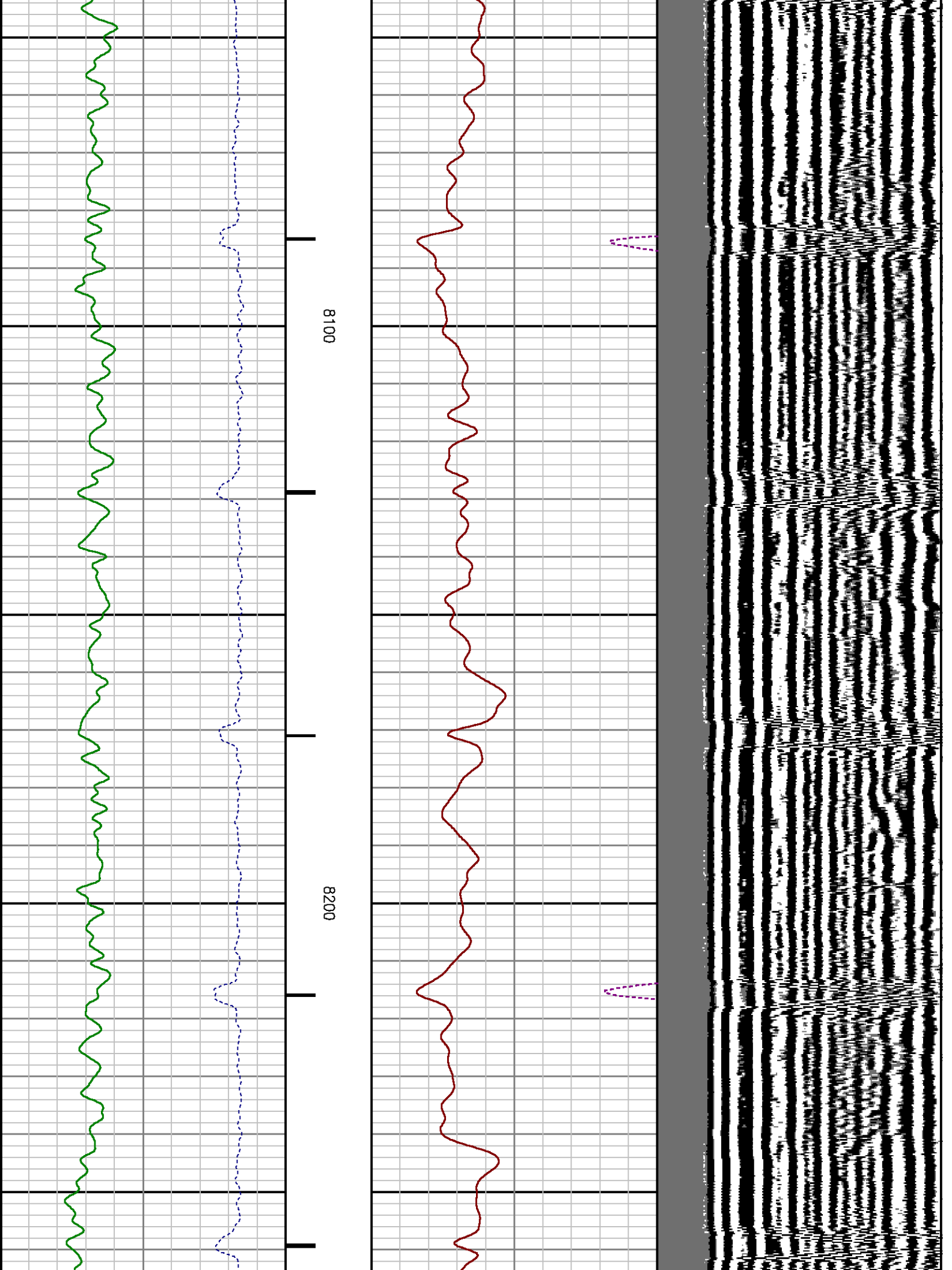
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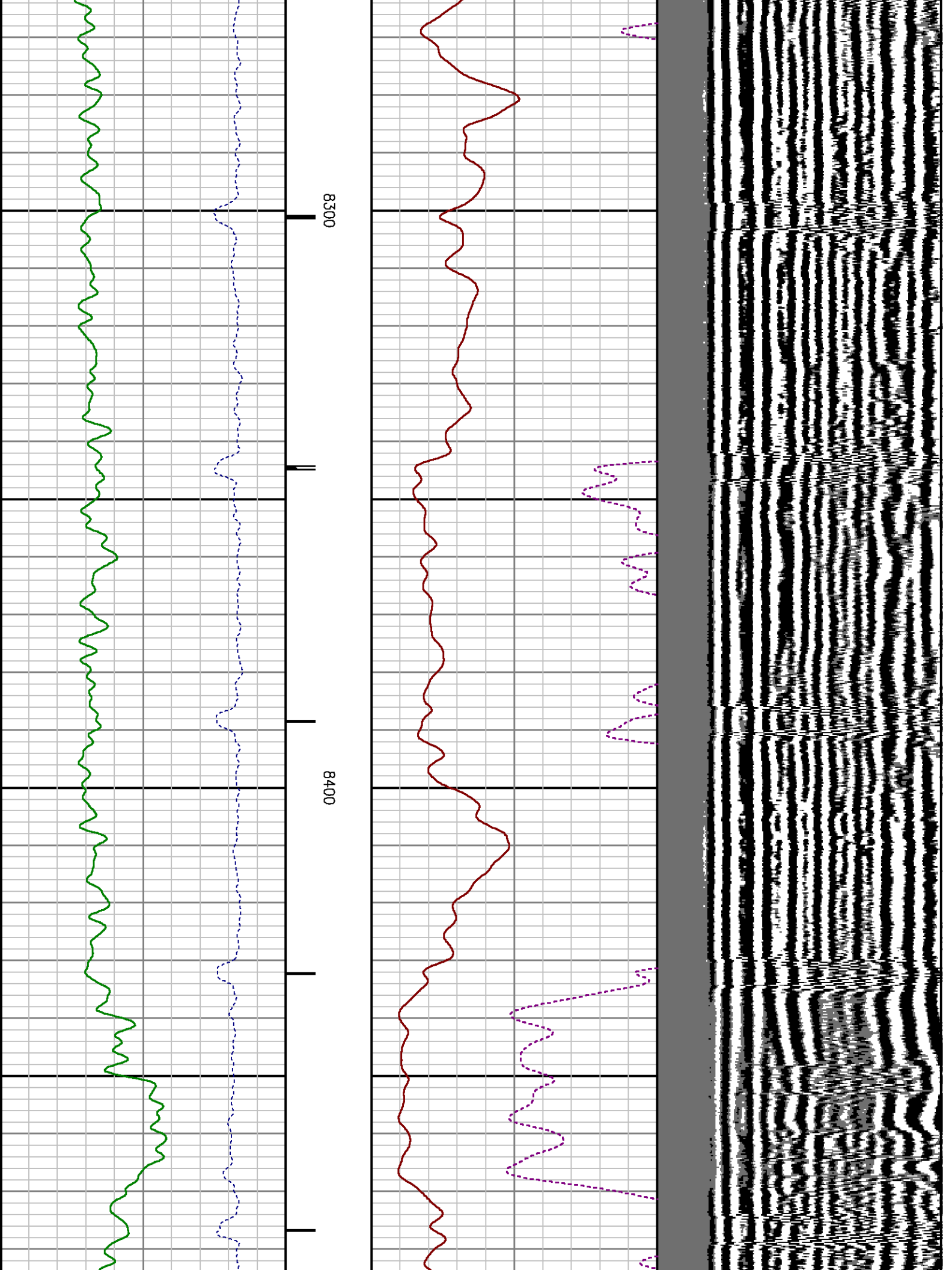
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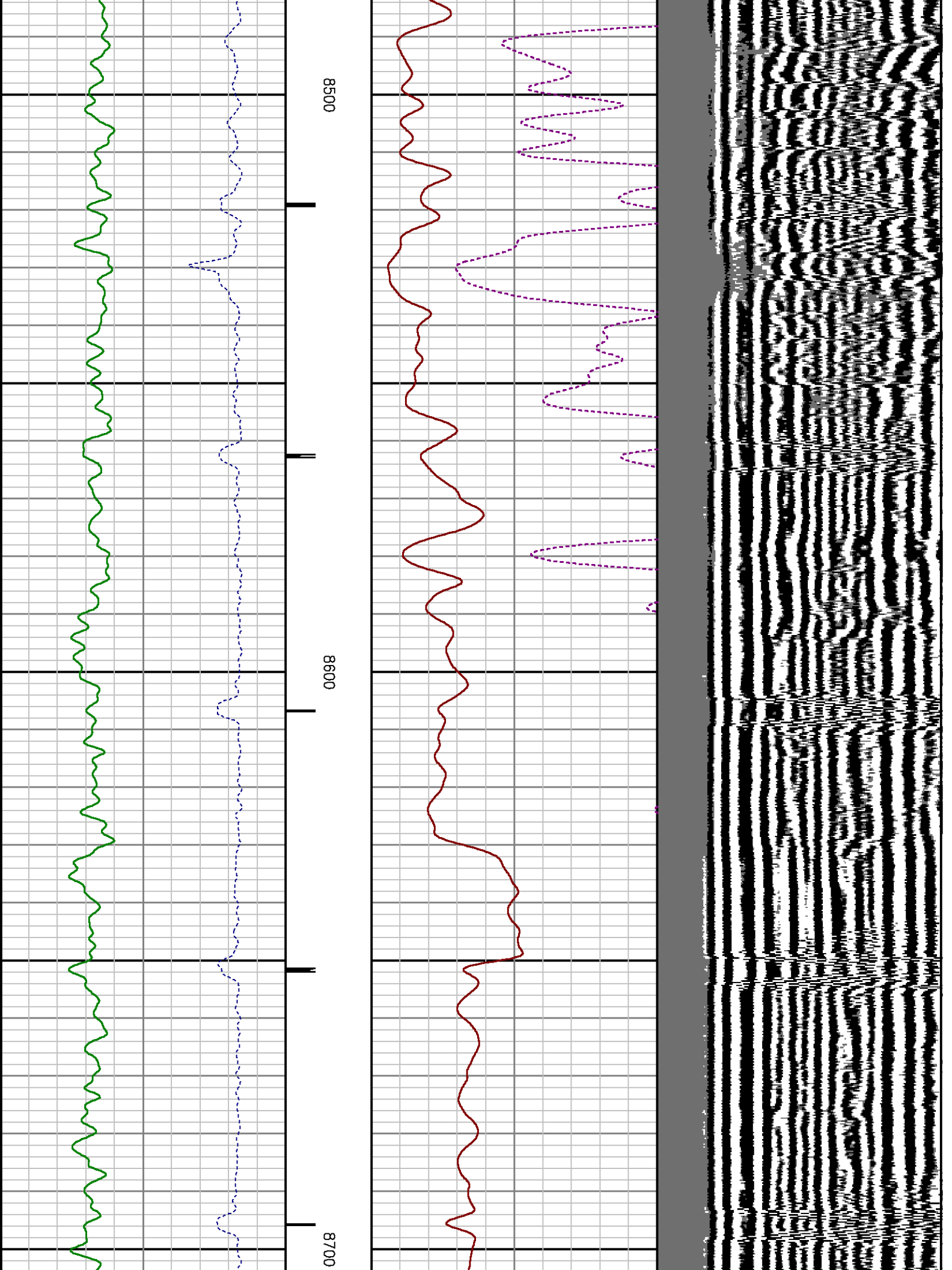


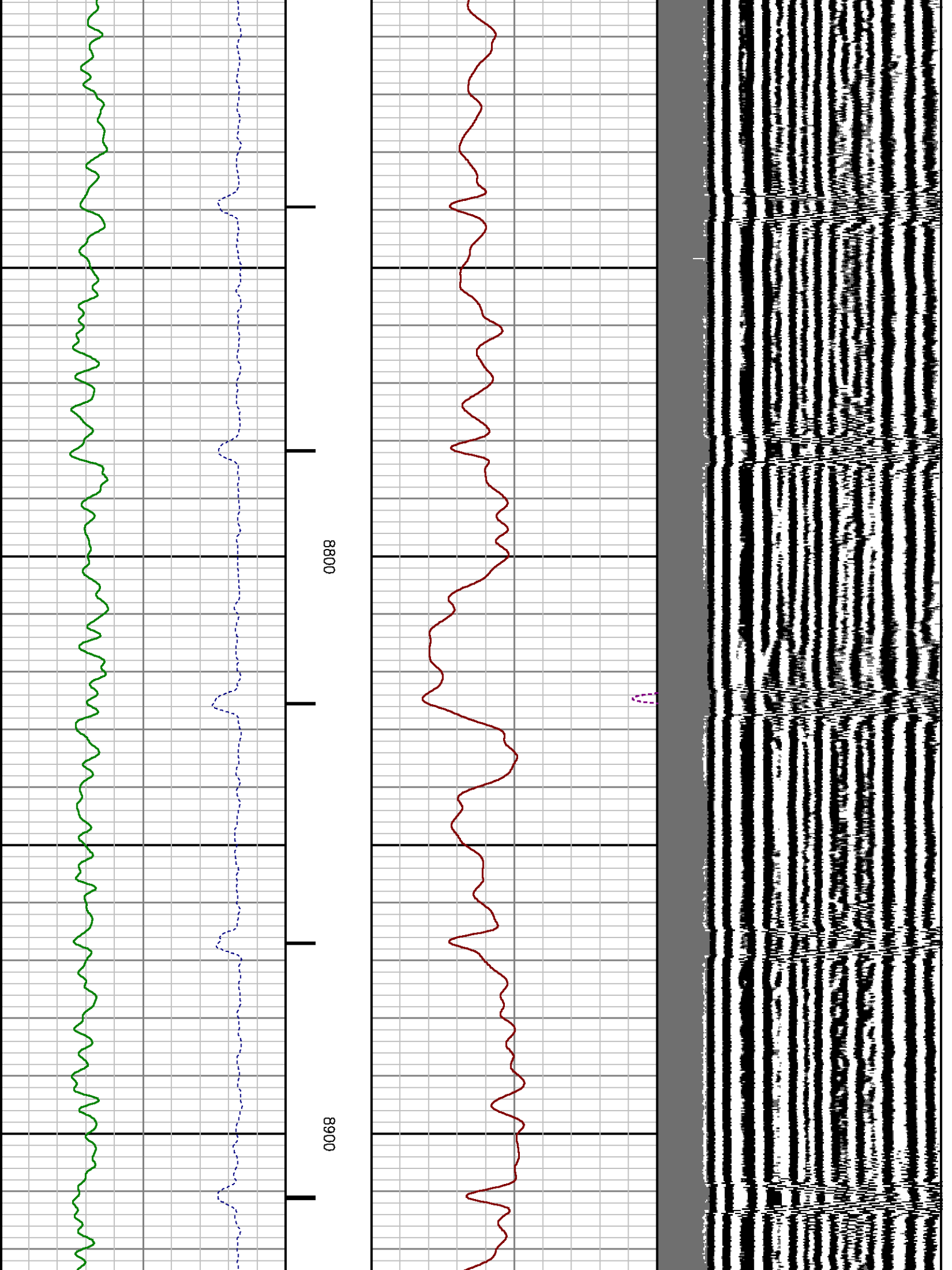


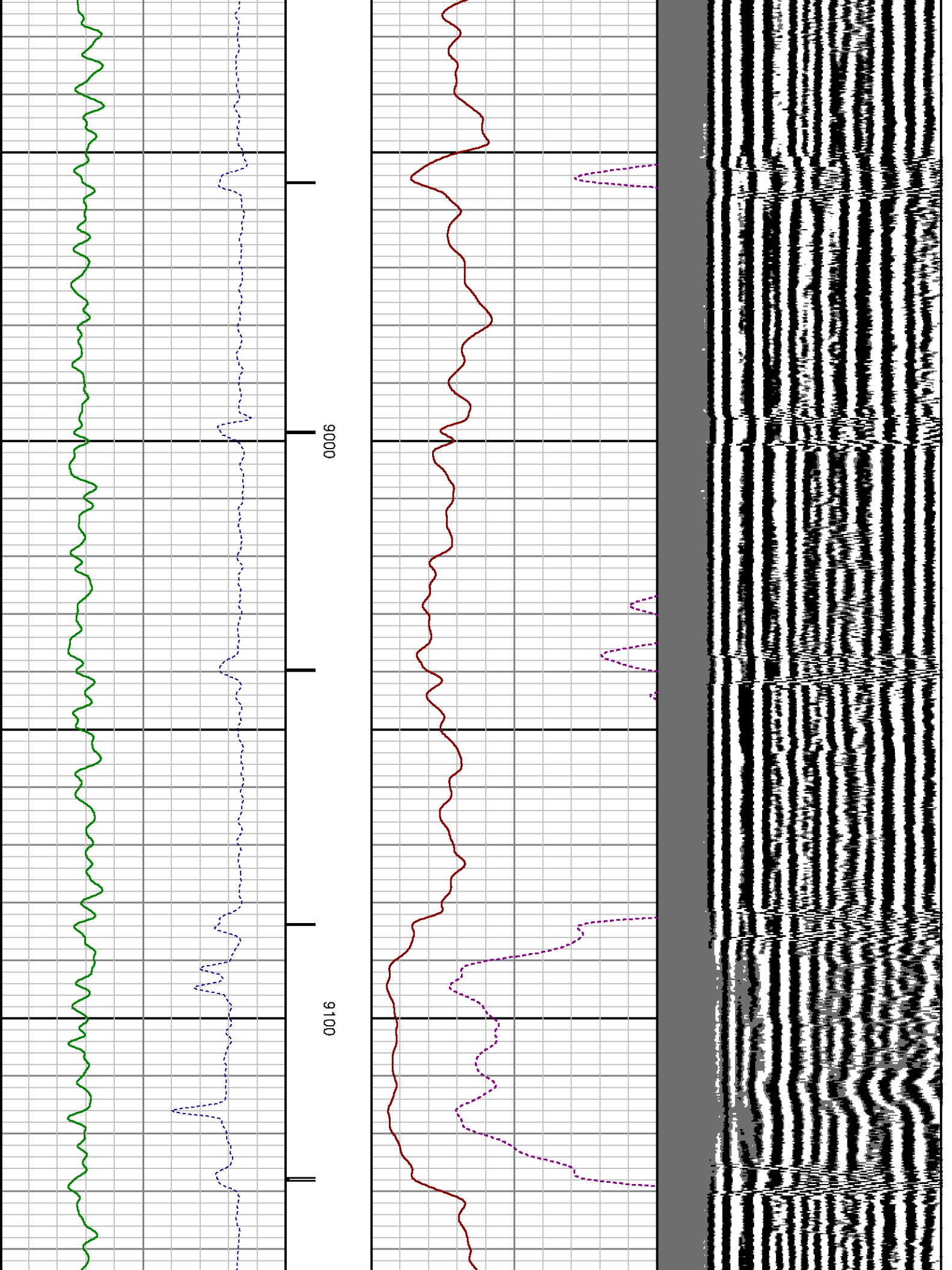


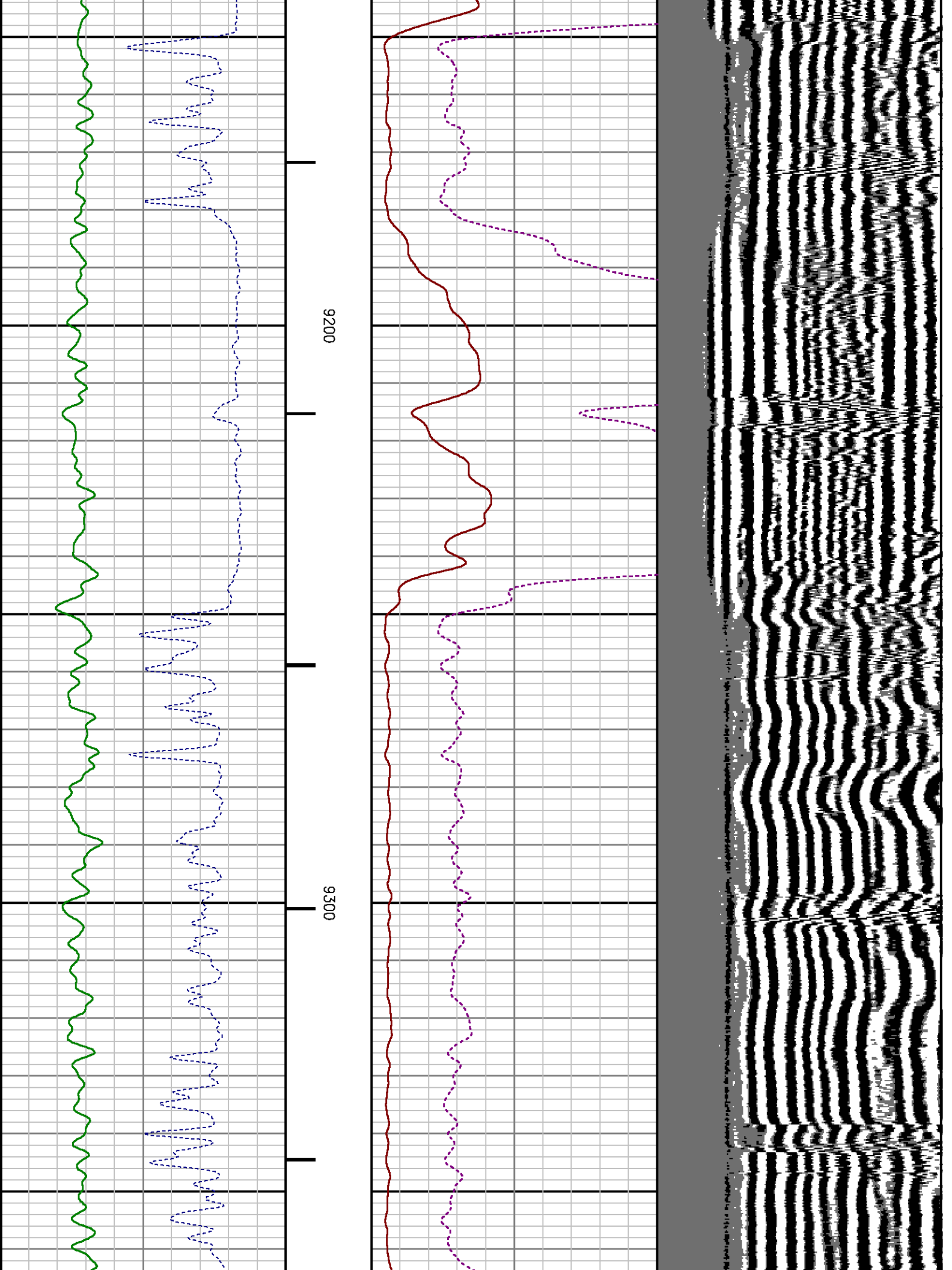


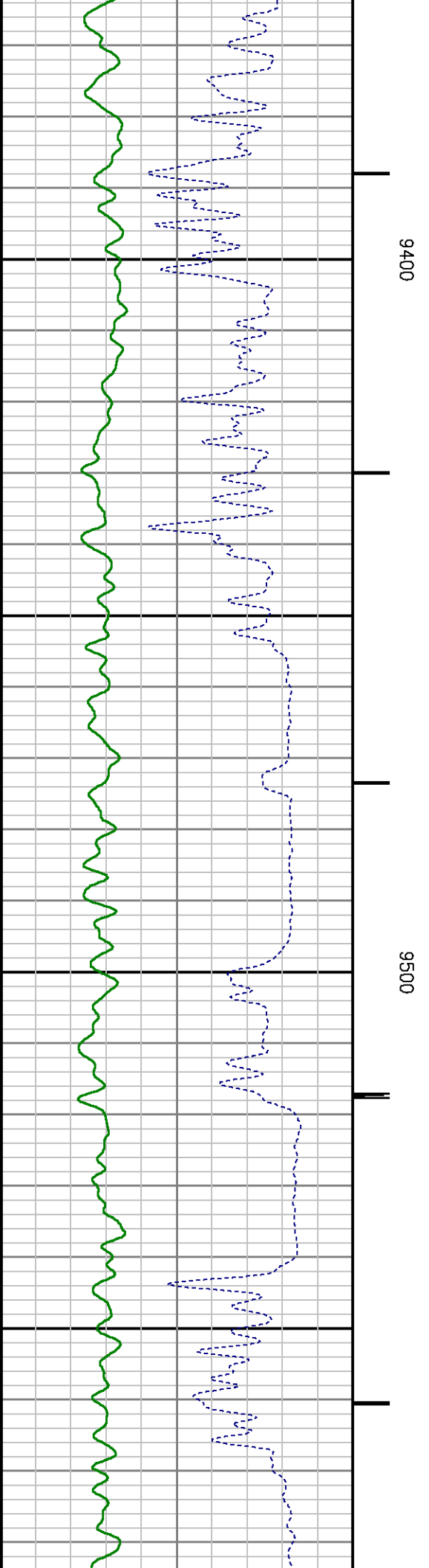
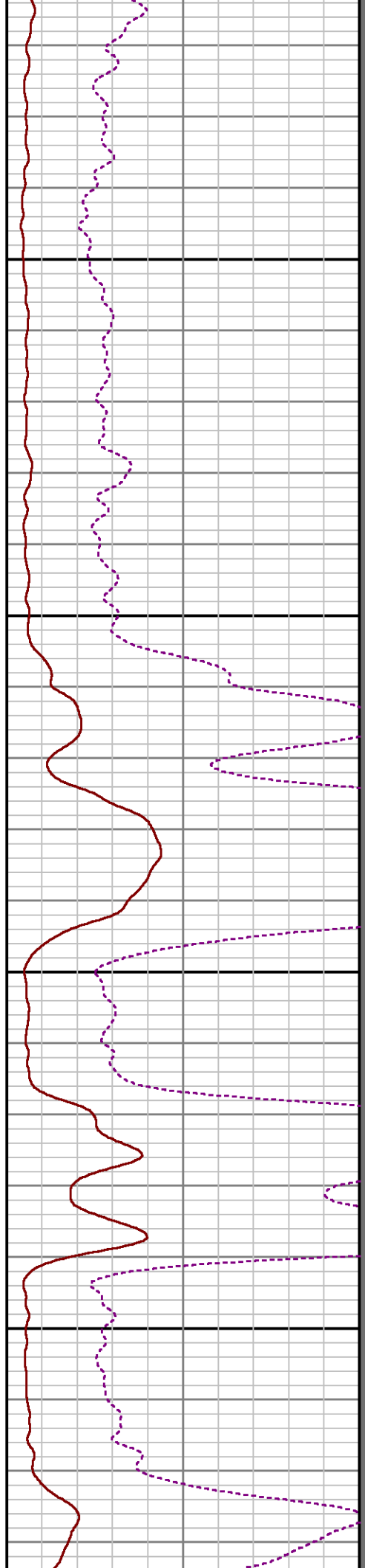
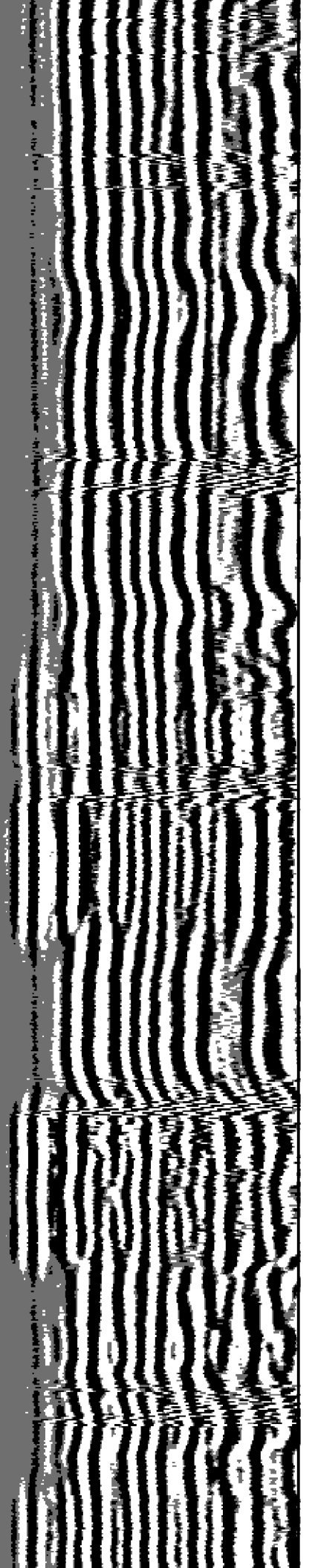


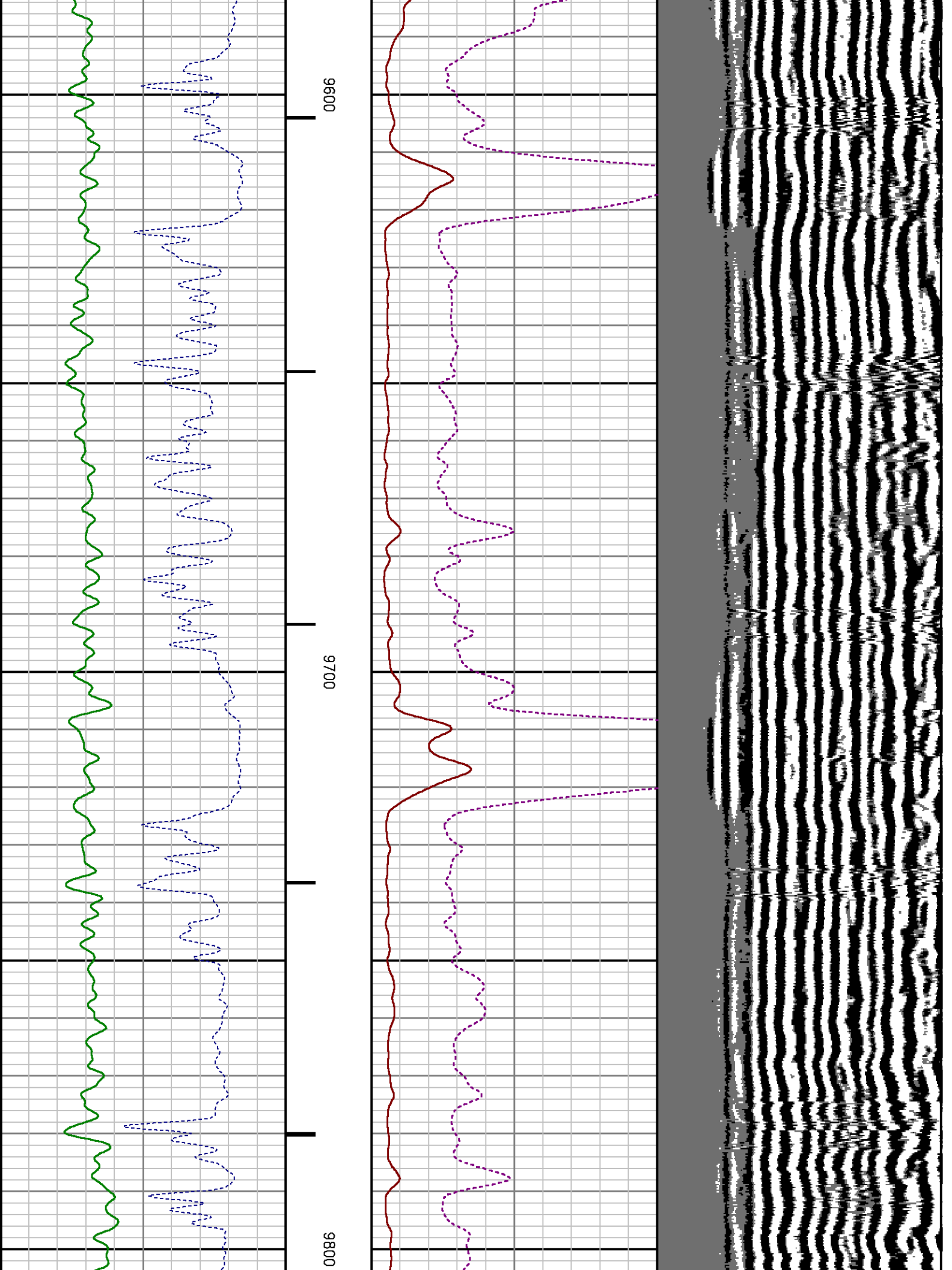


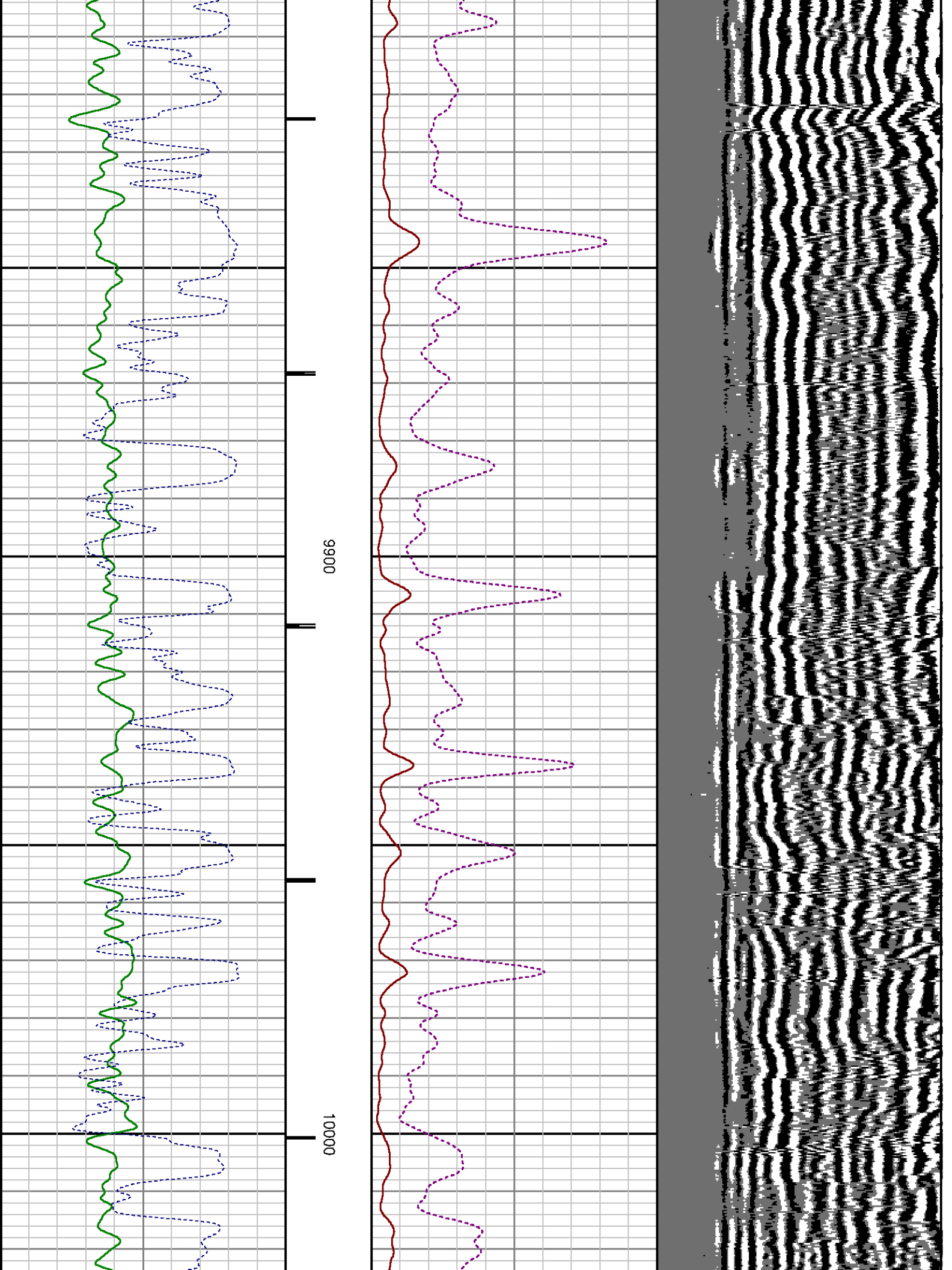


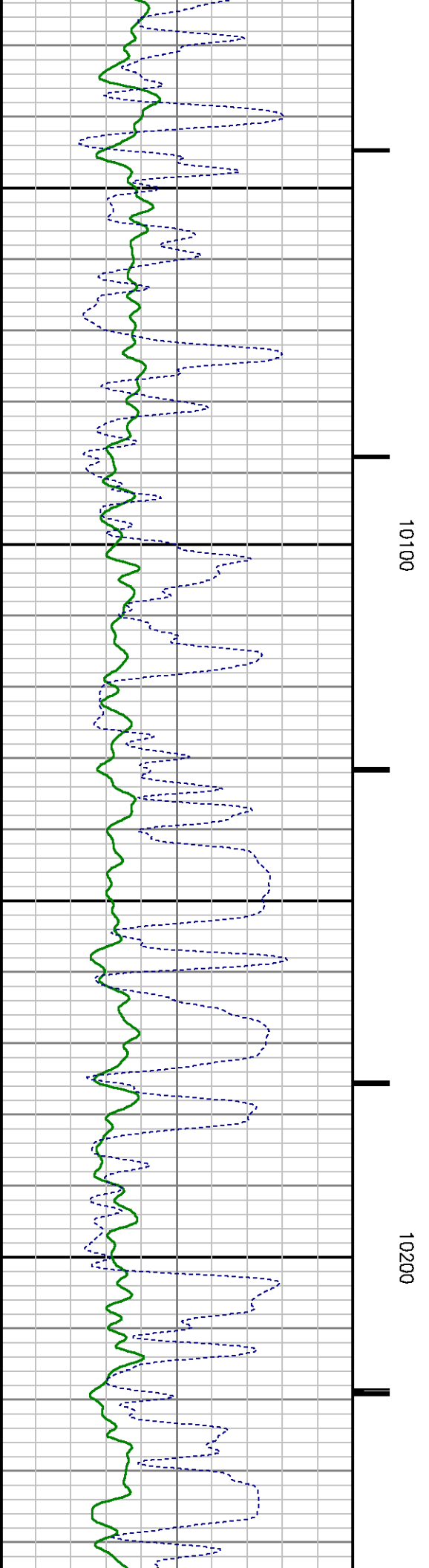
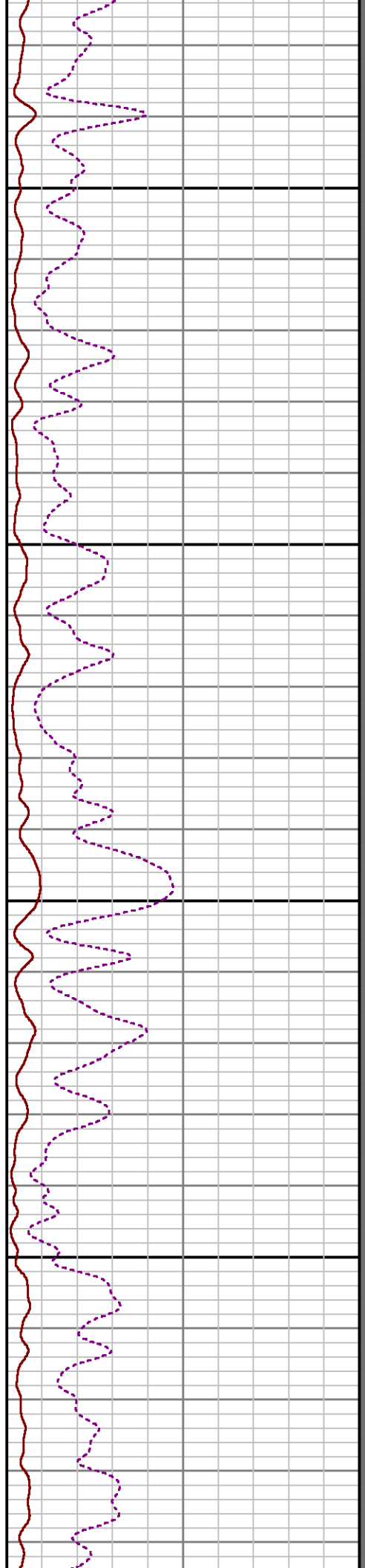
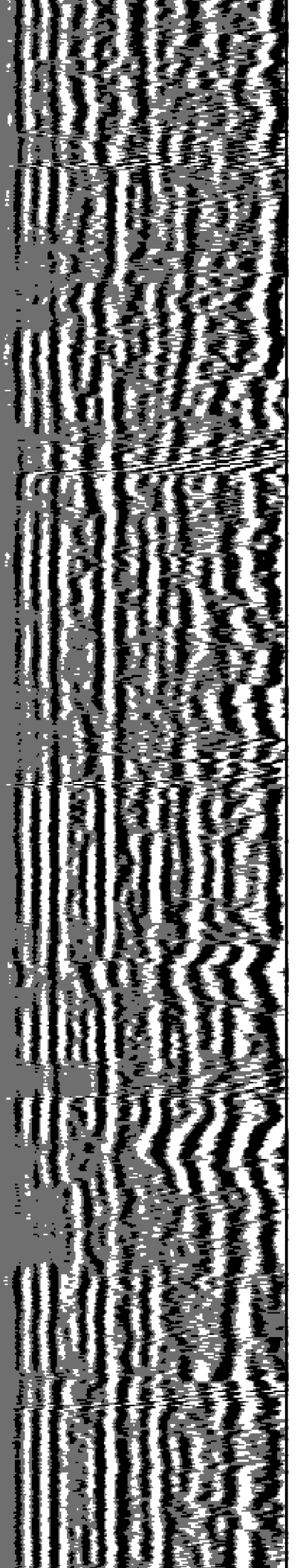


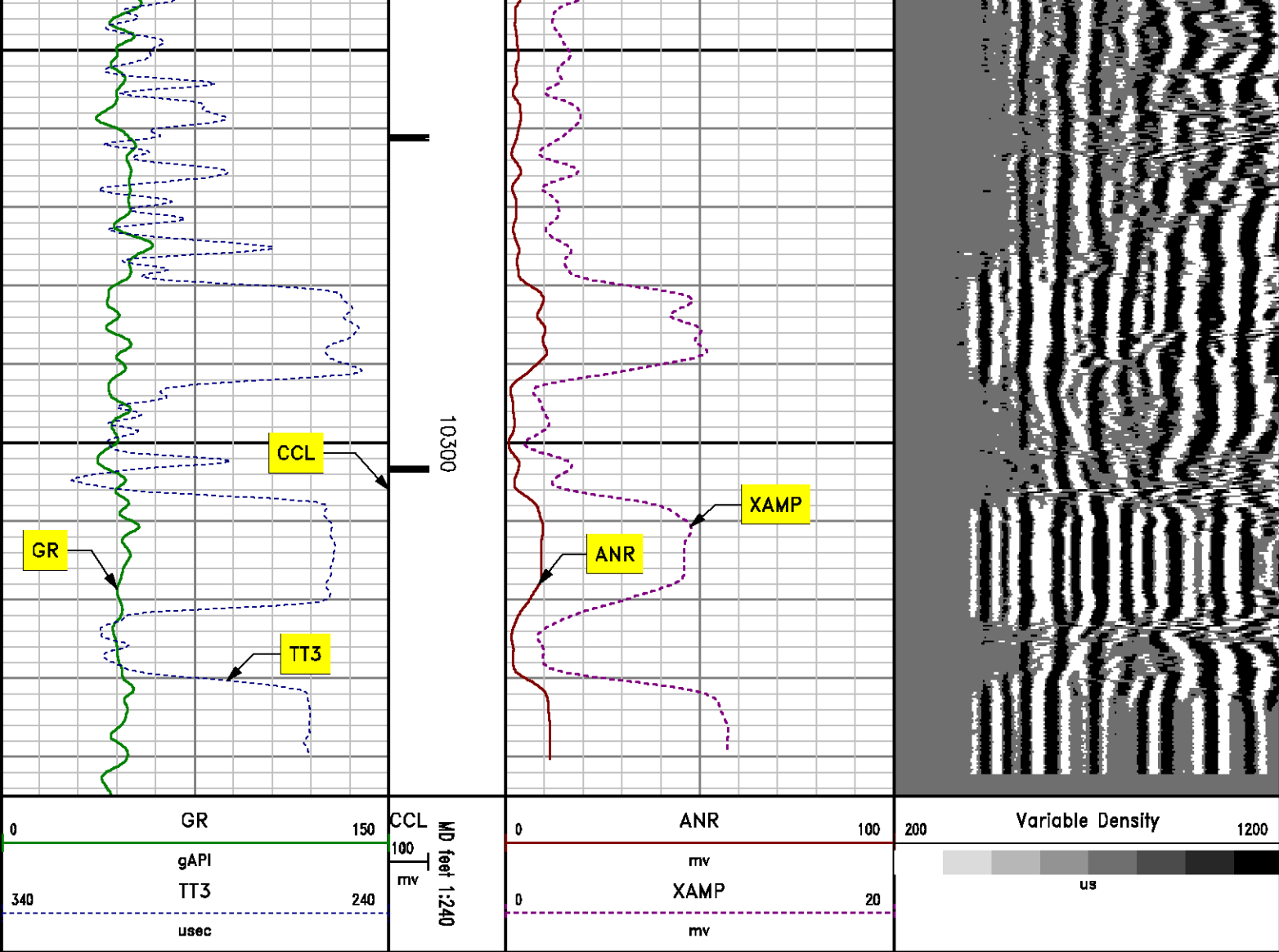












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		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP		
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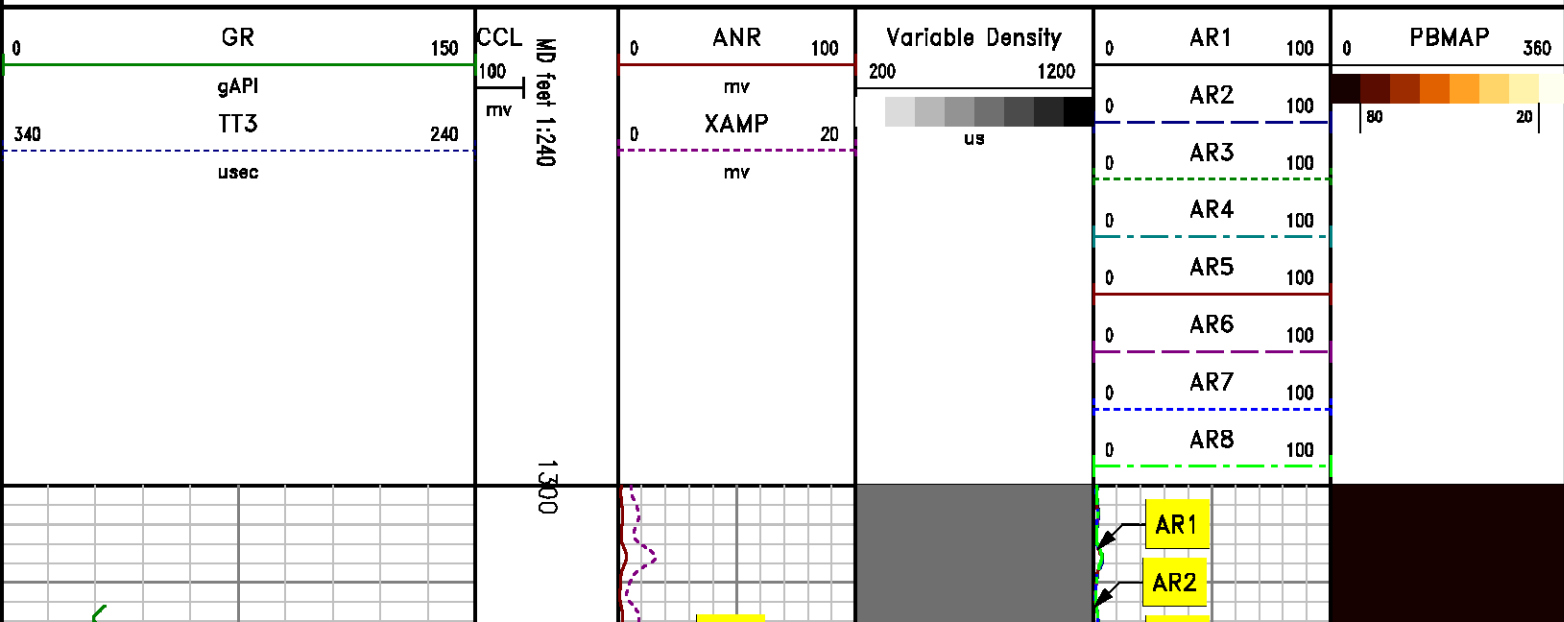
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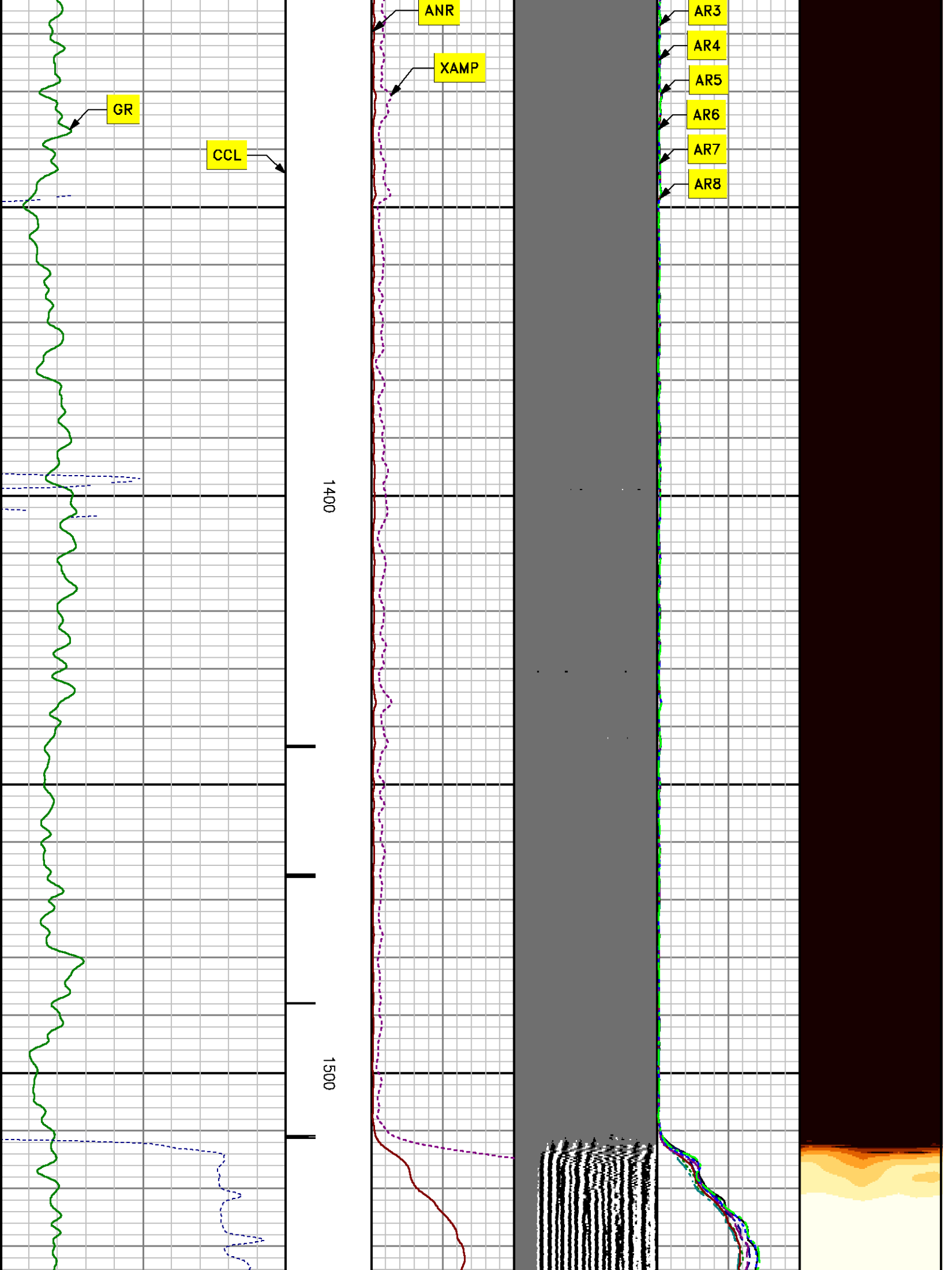
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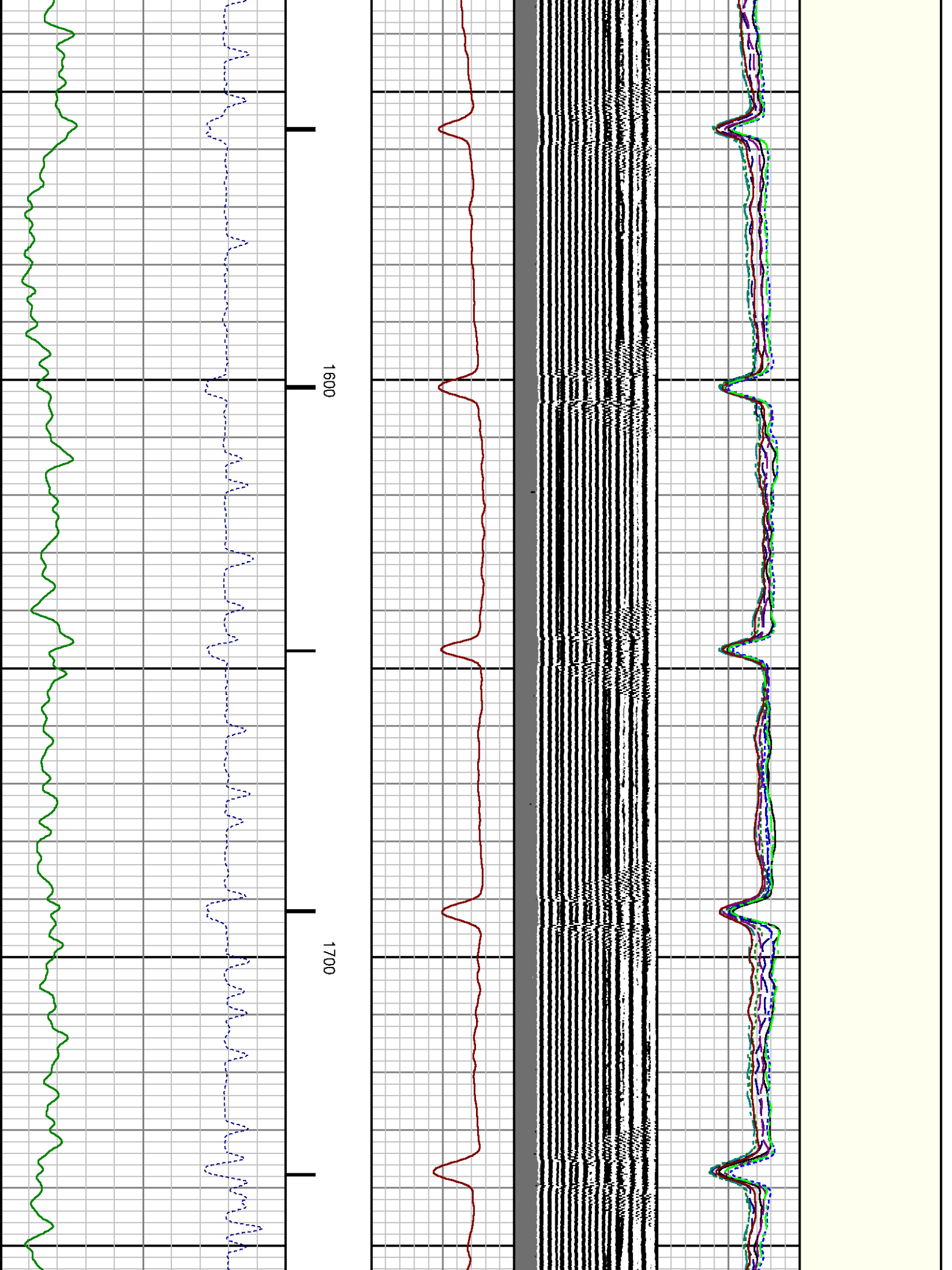
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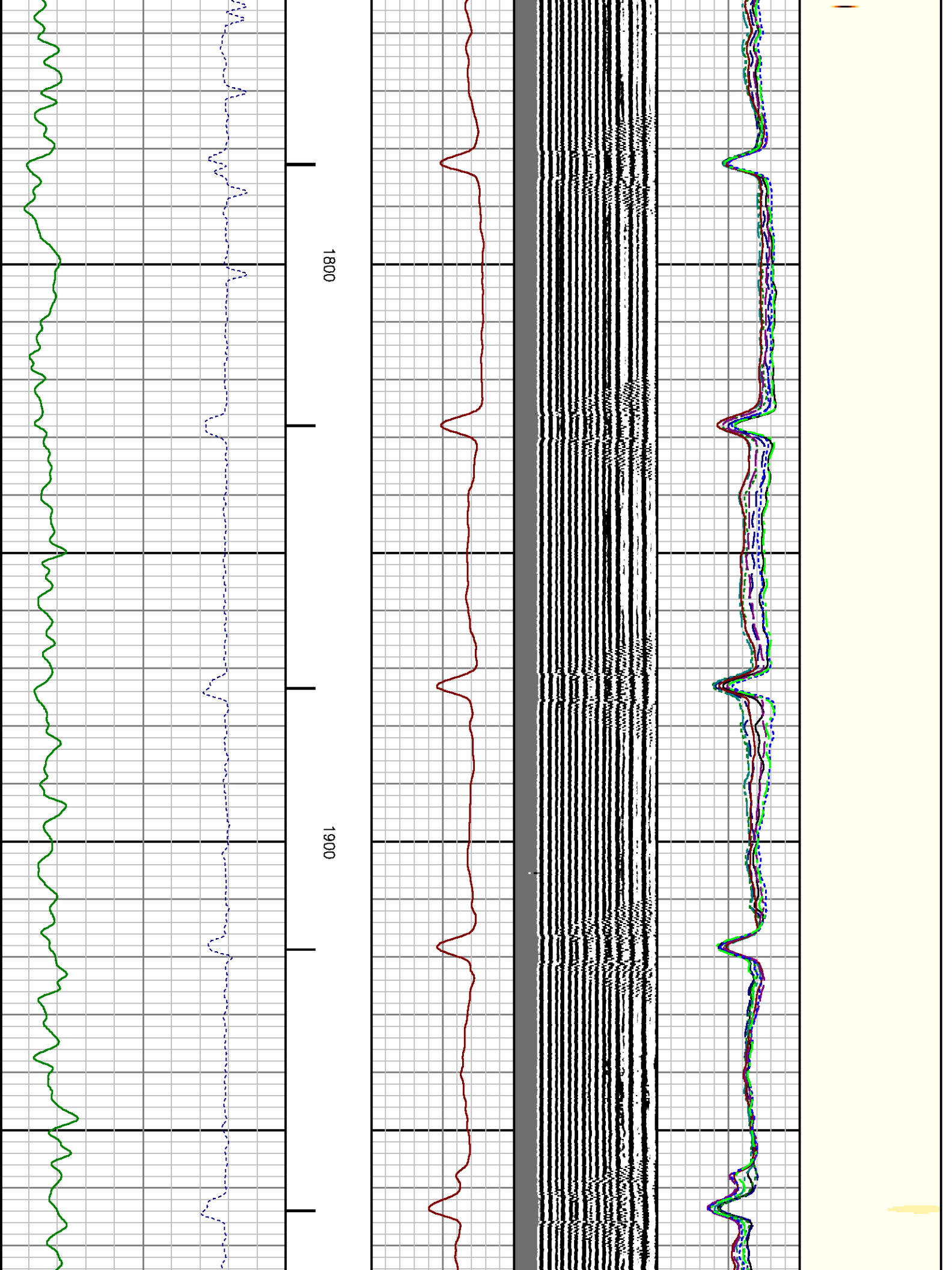
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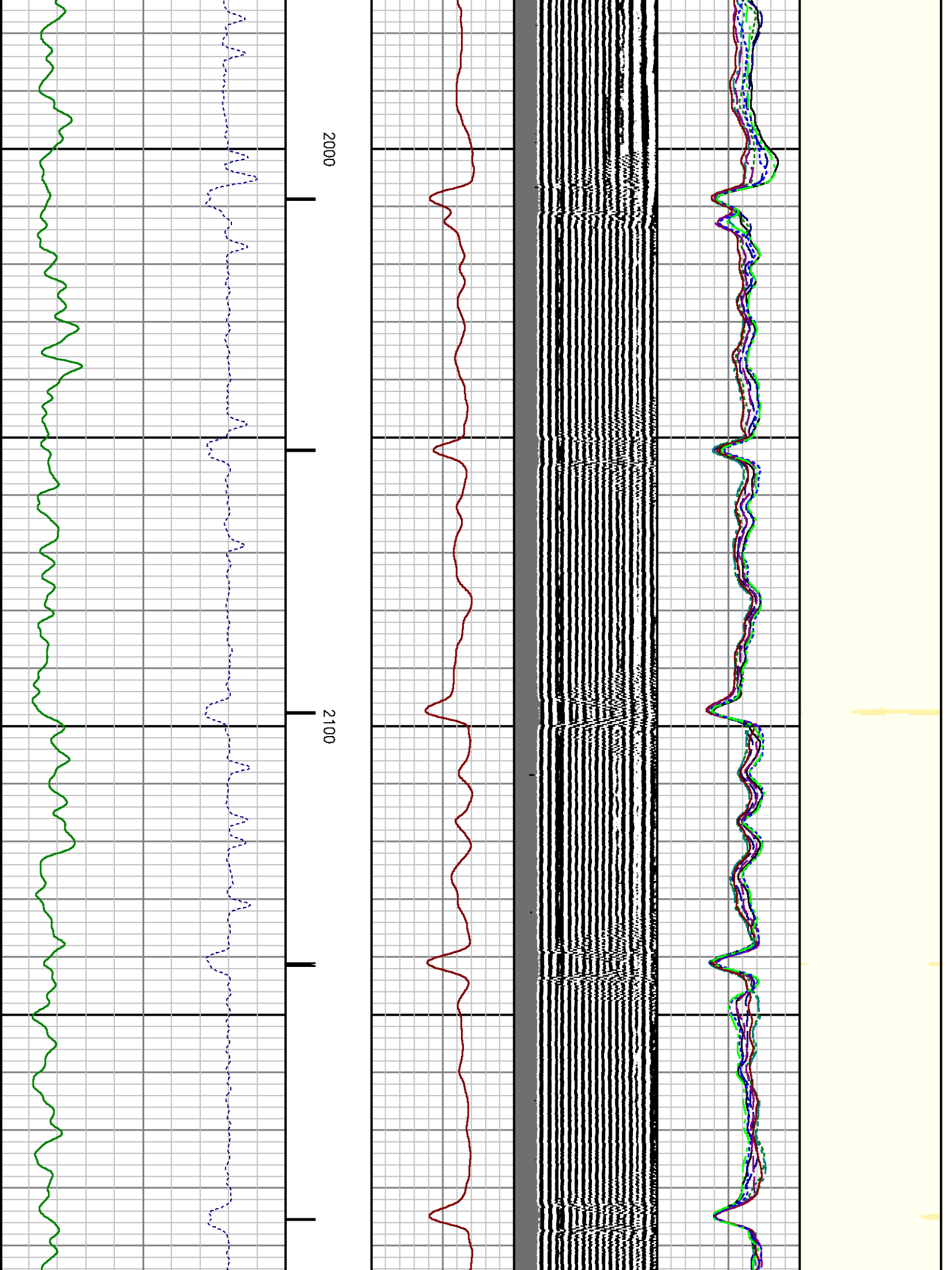
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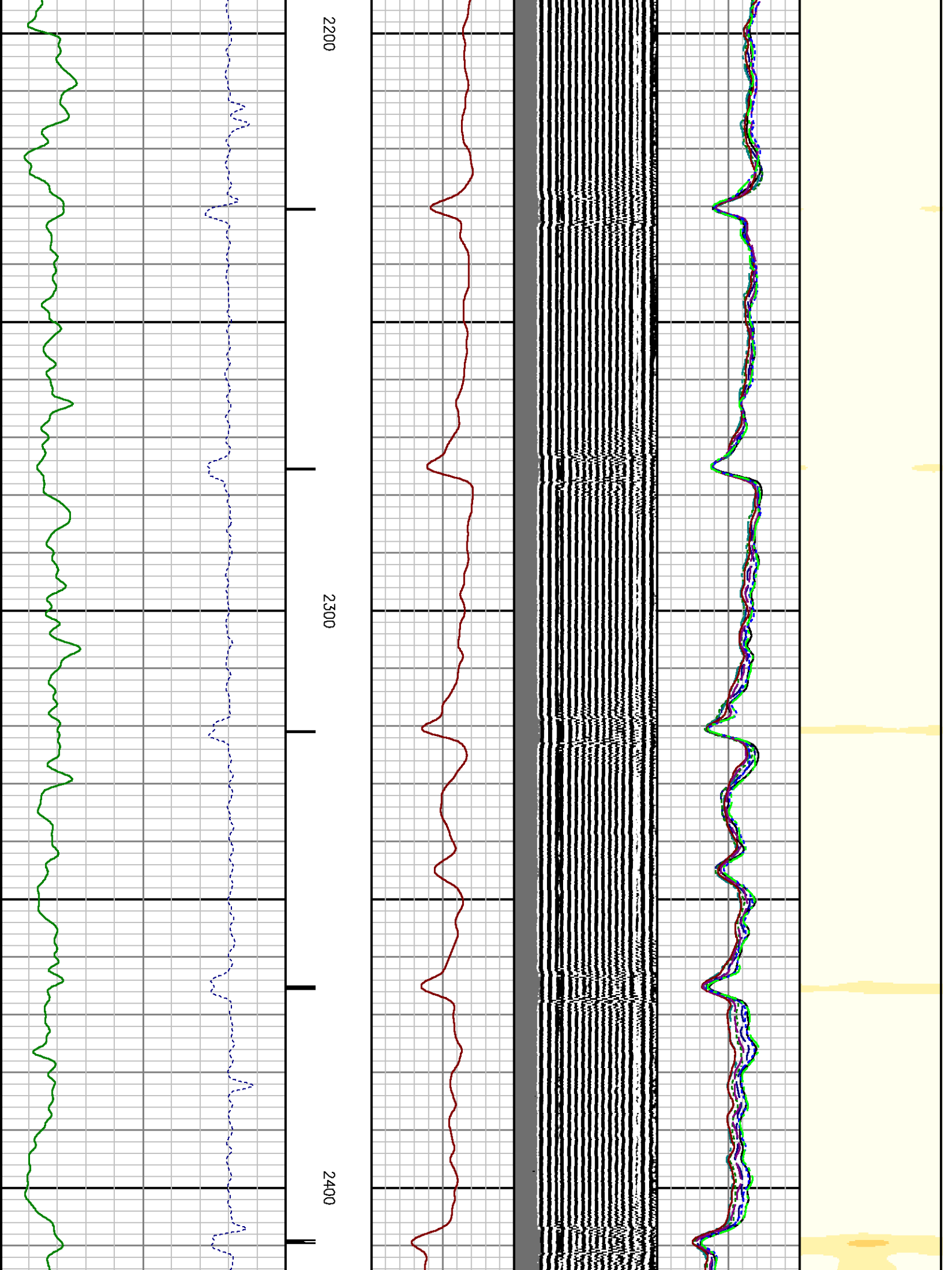


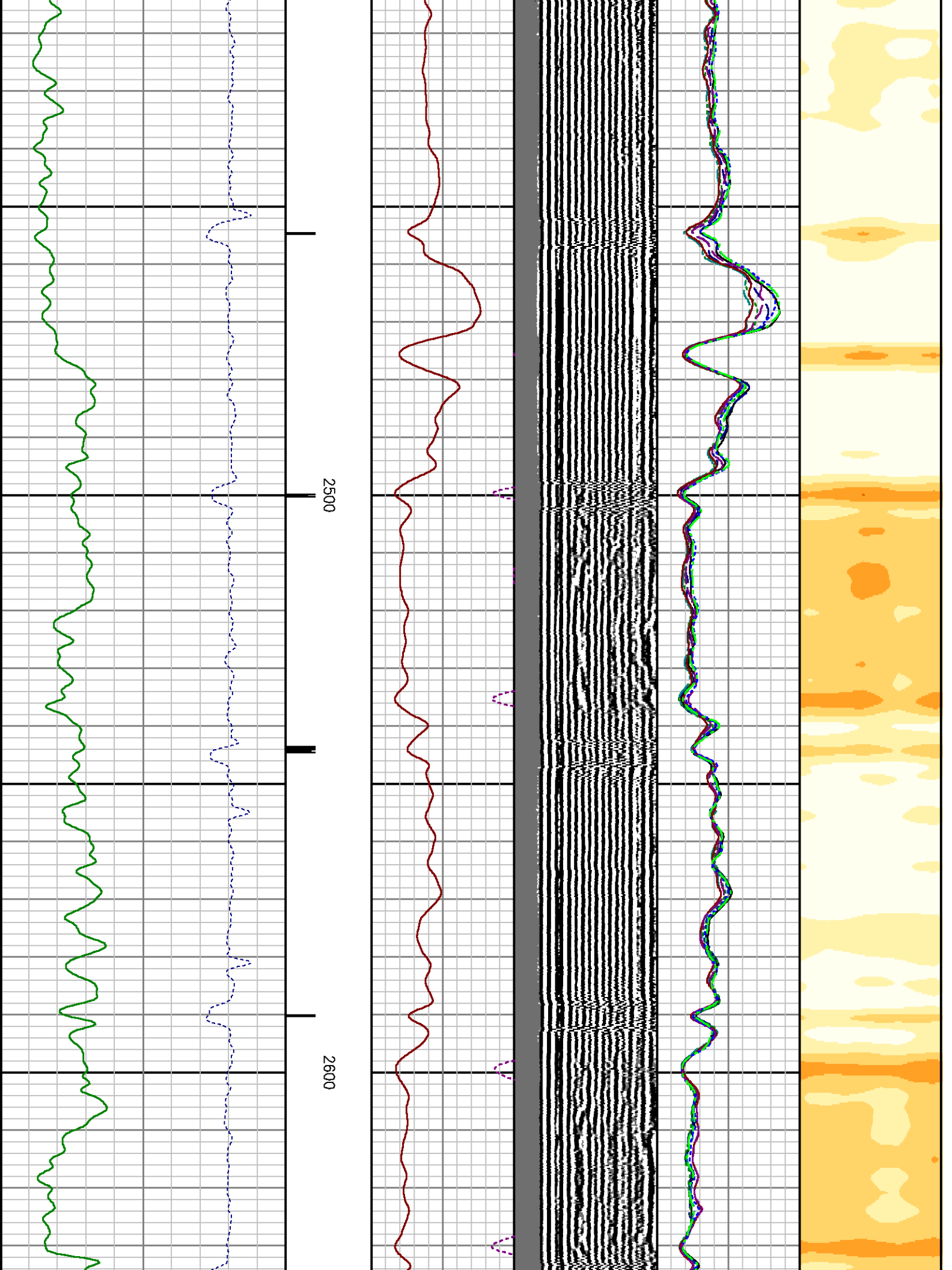


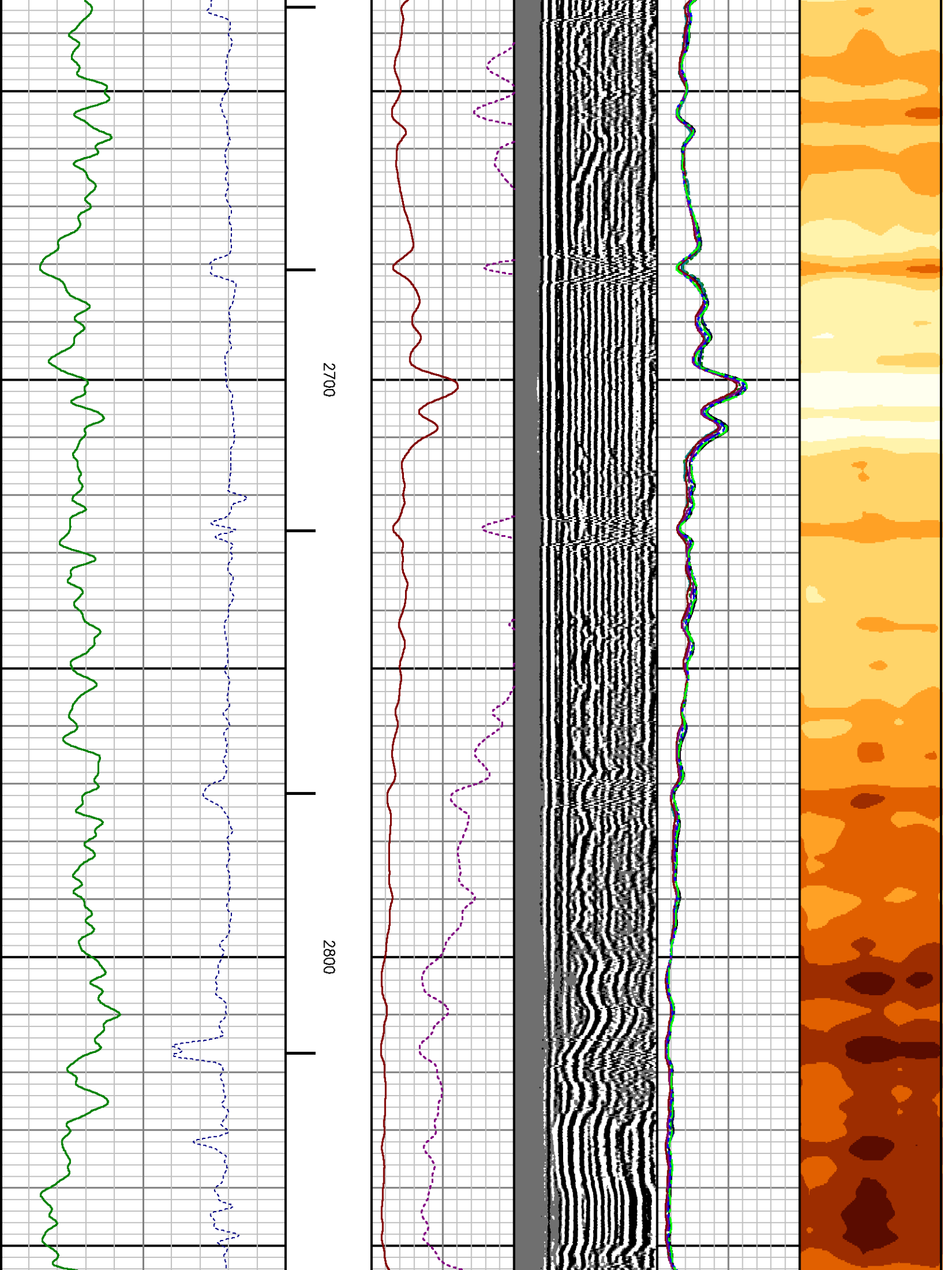


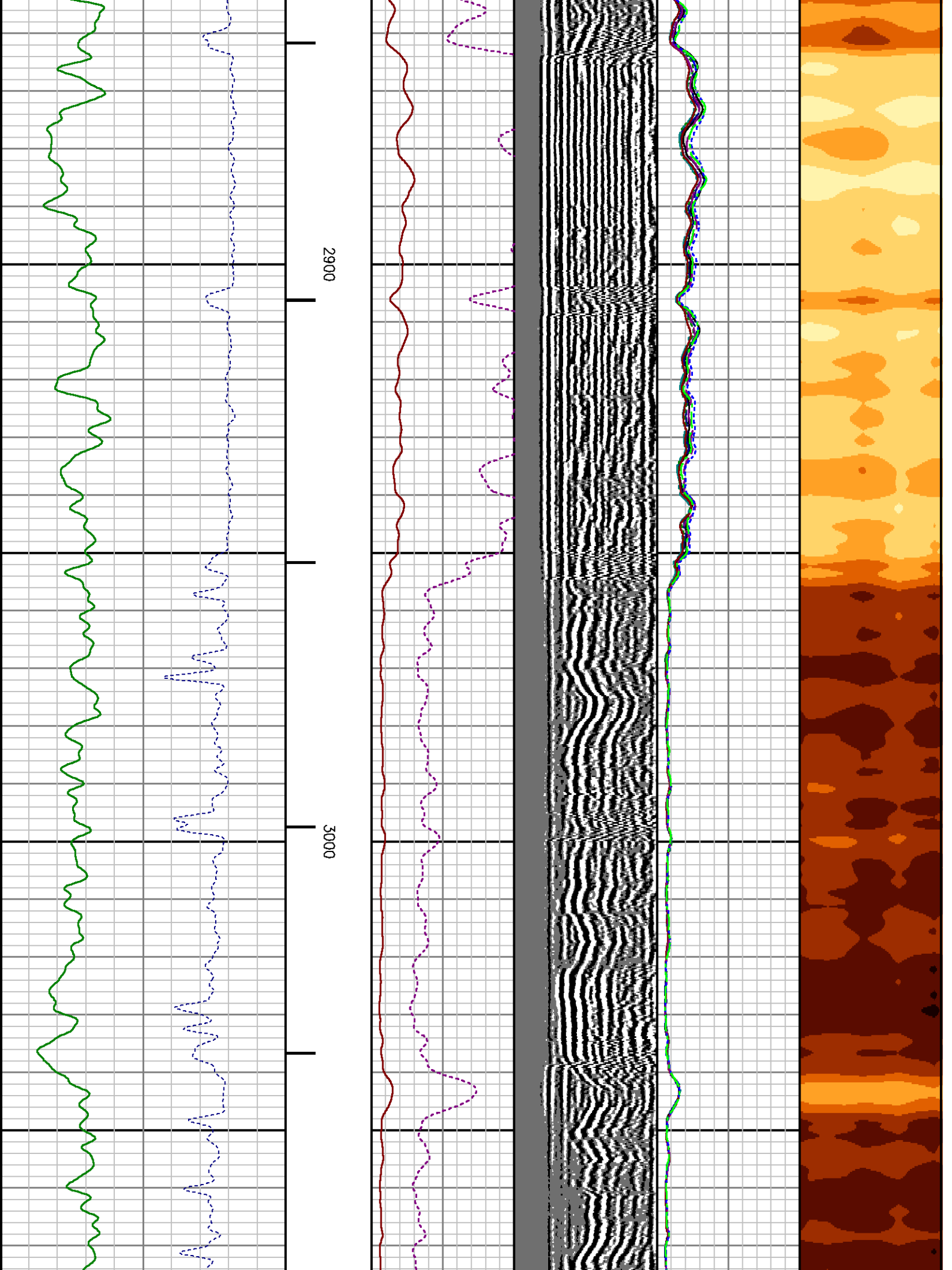


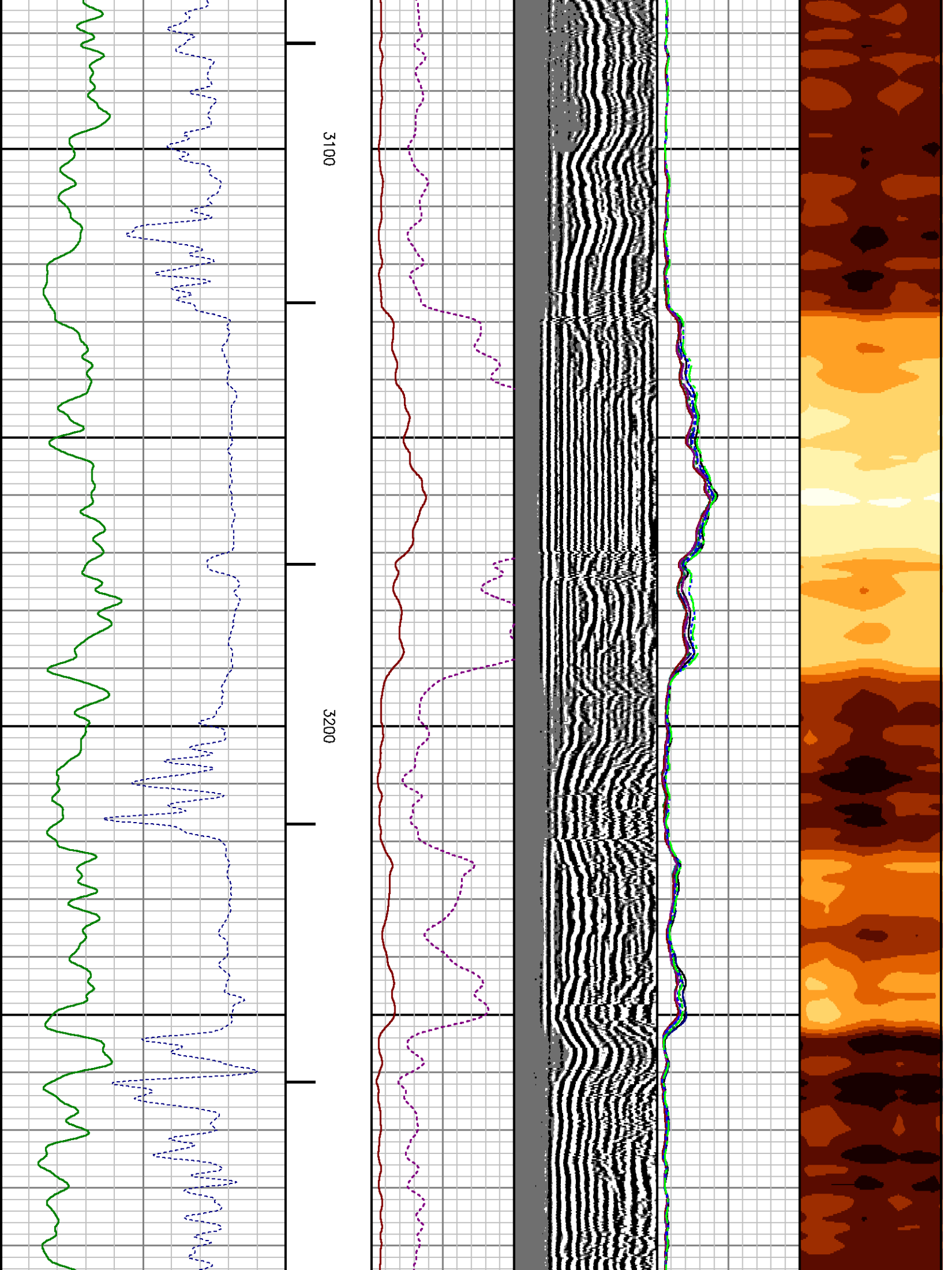


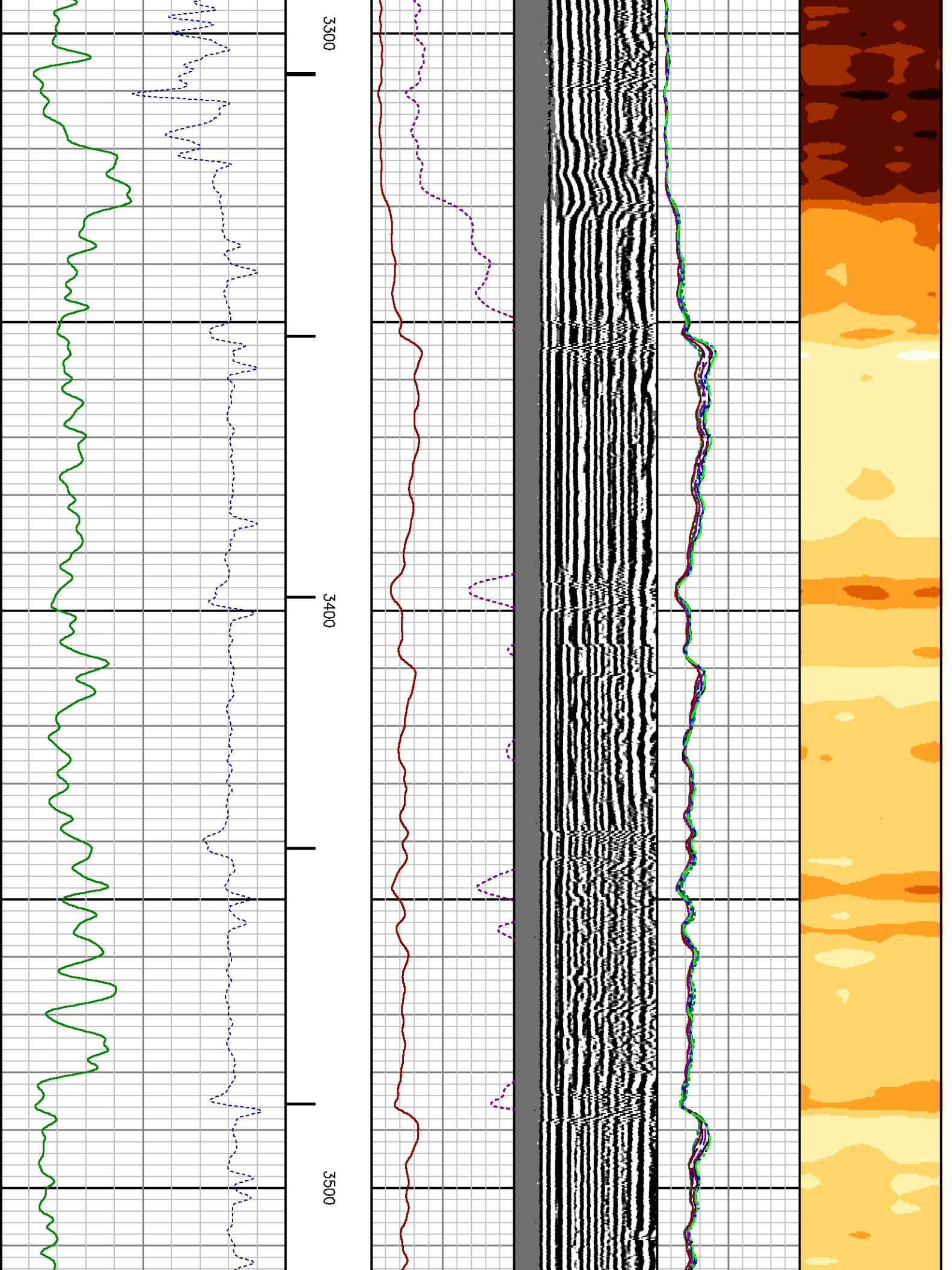


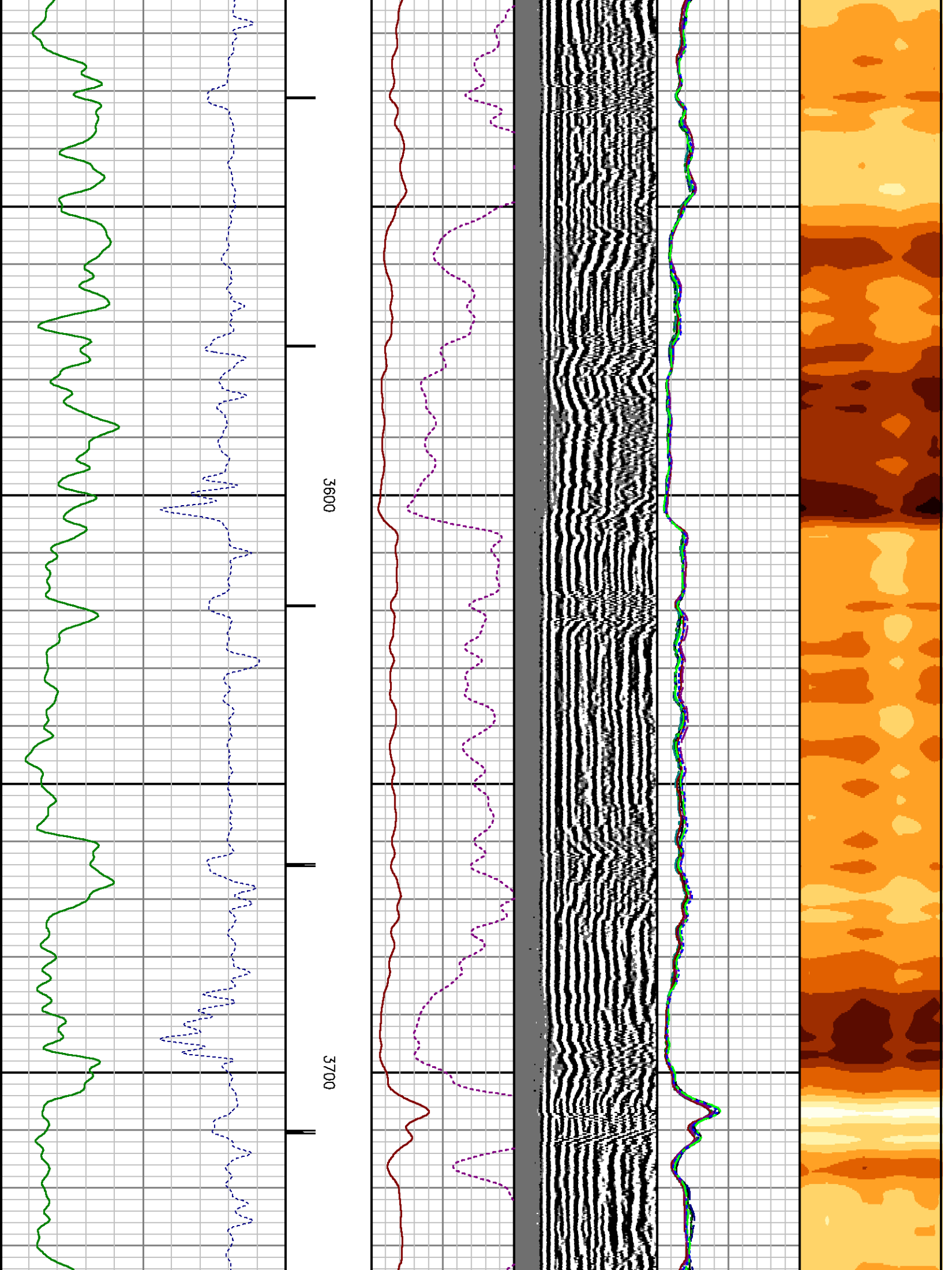


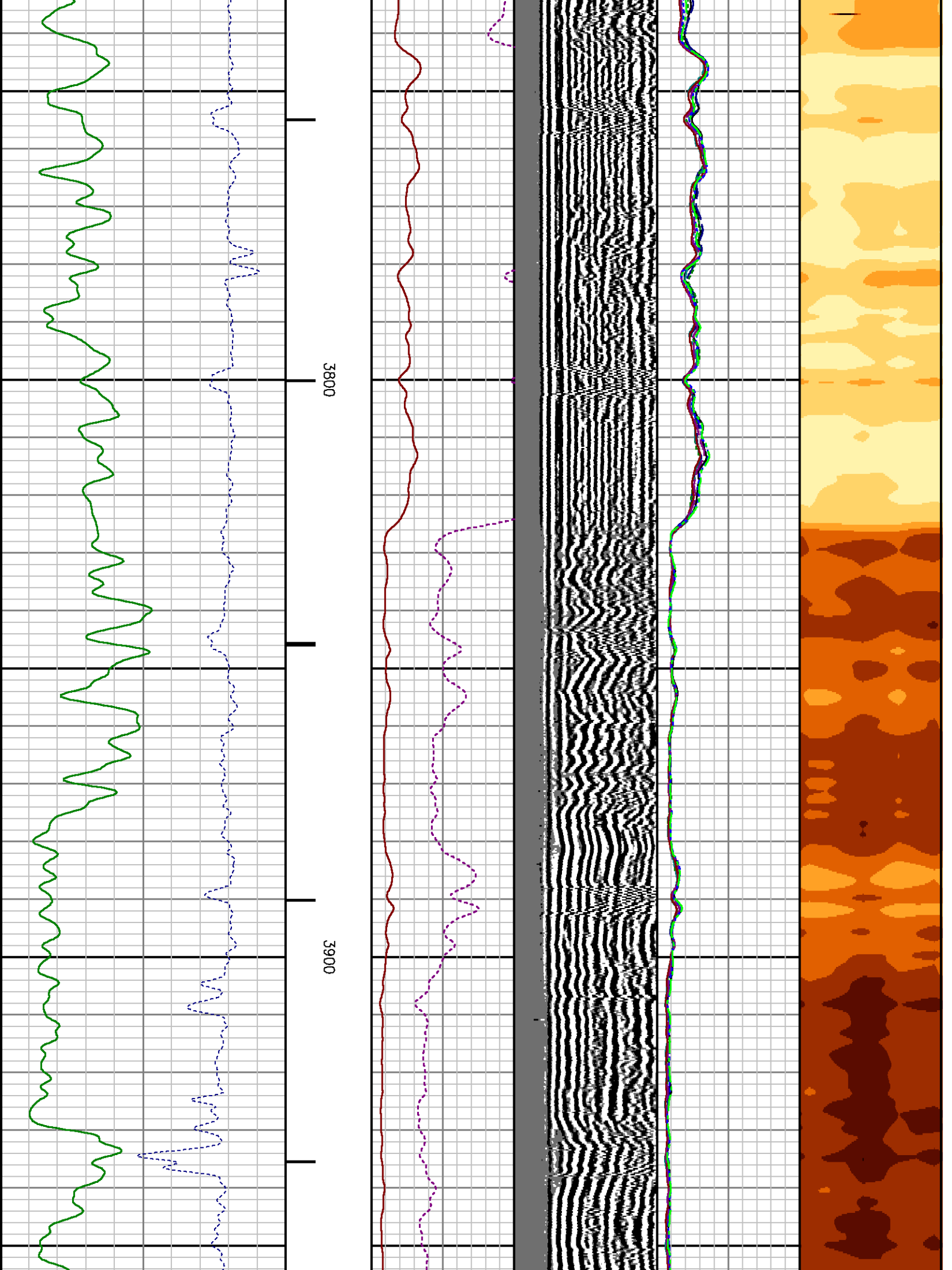


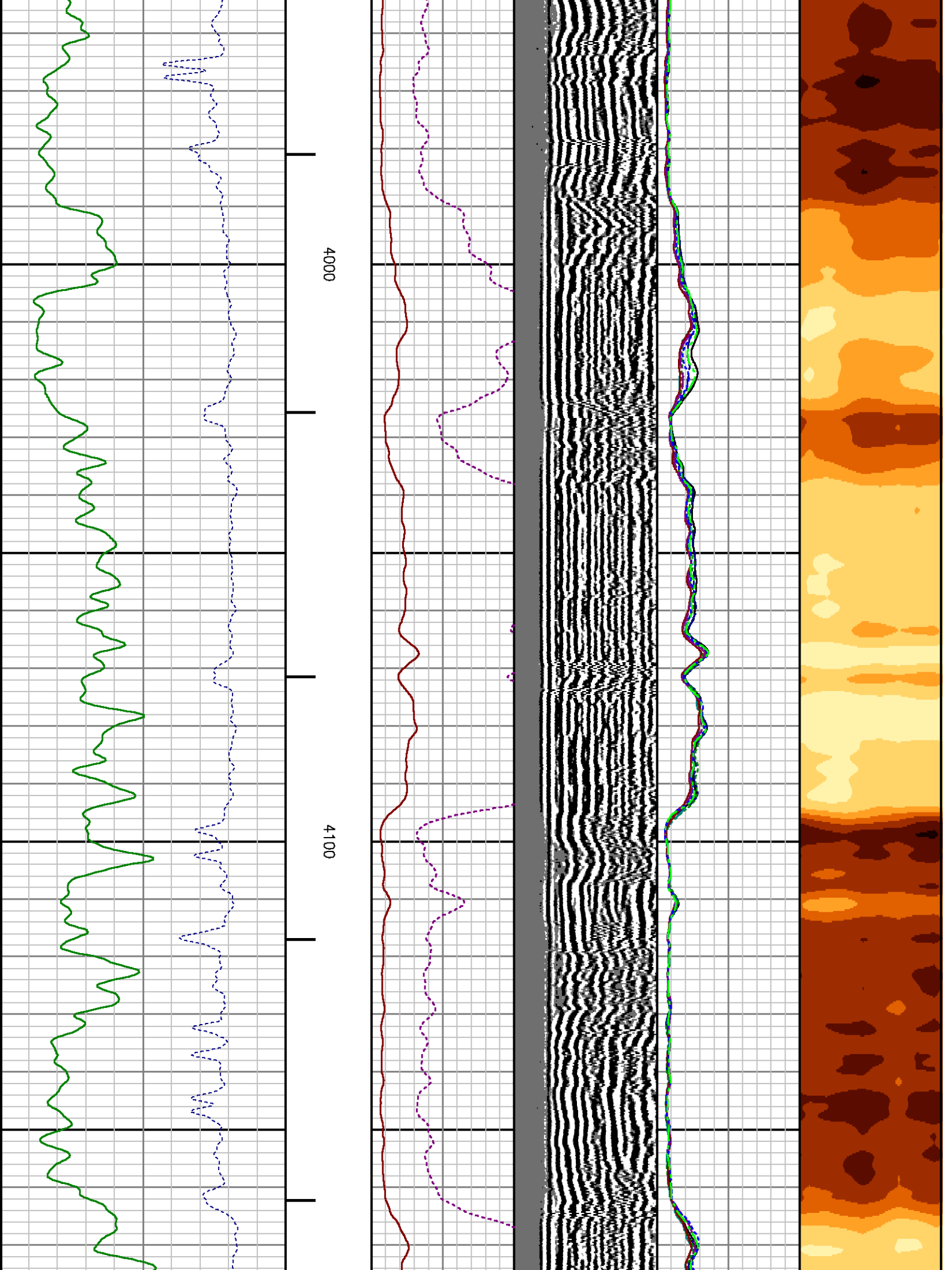


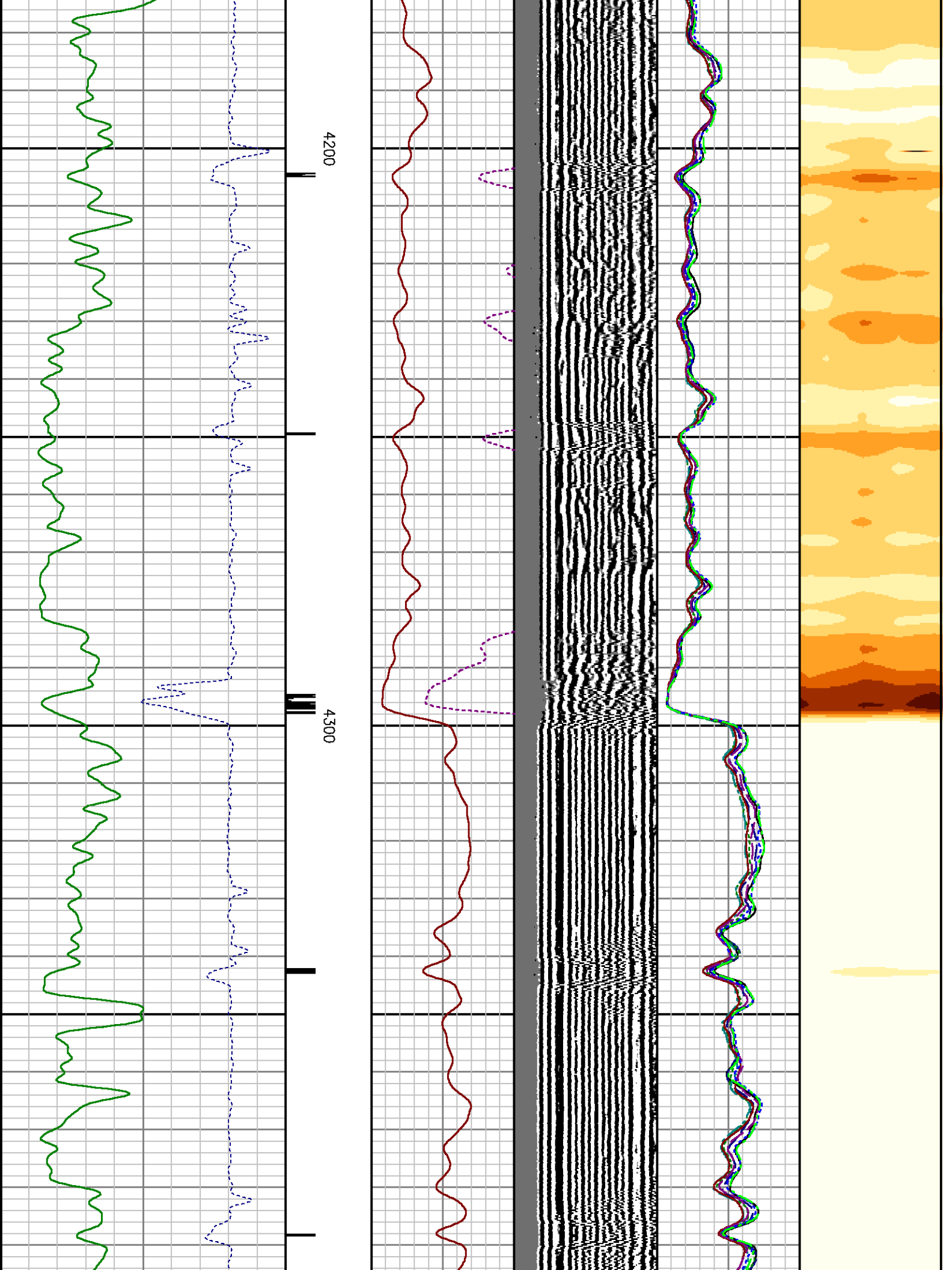


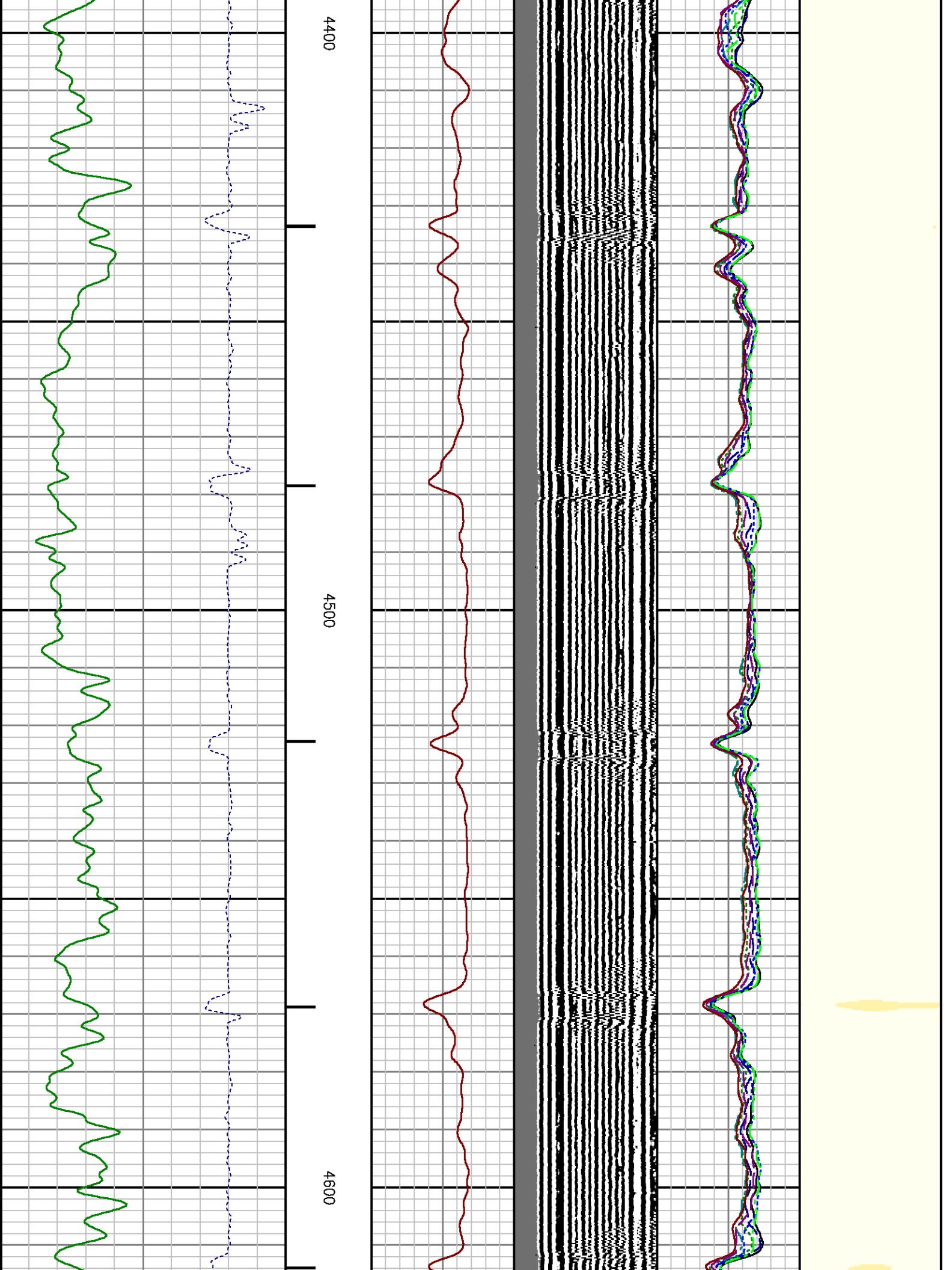


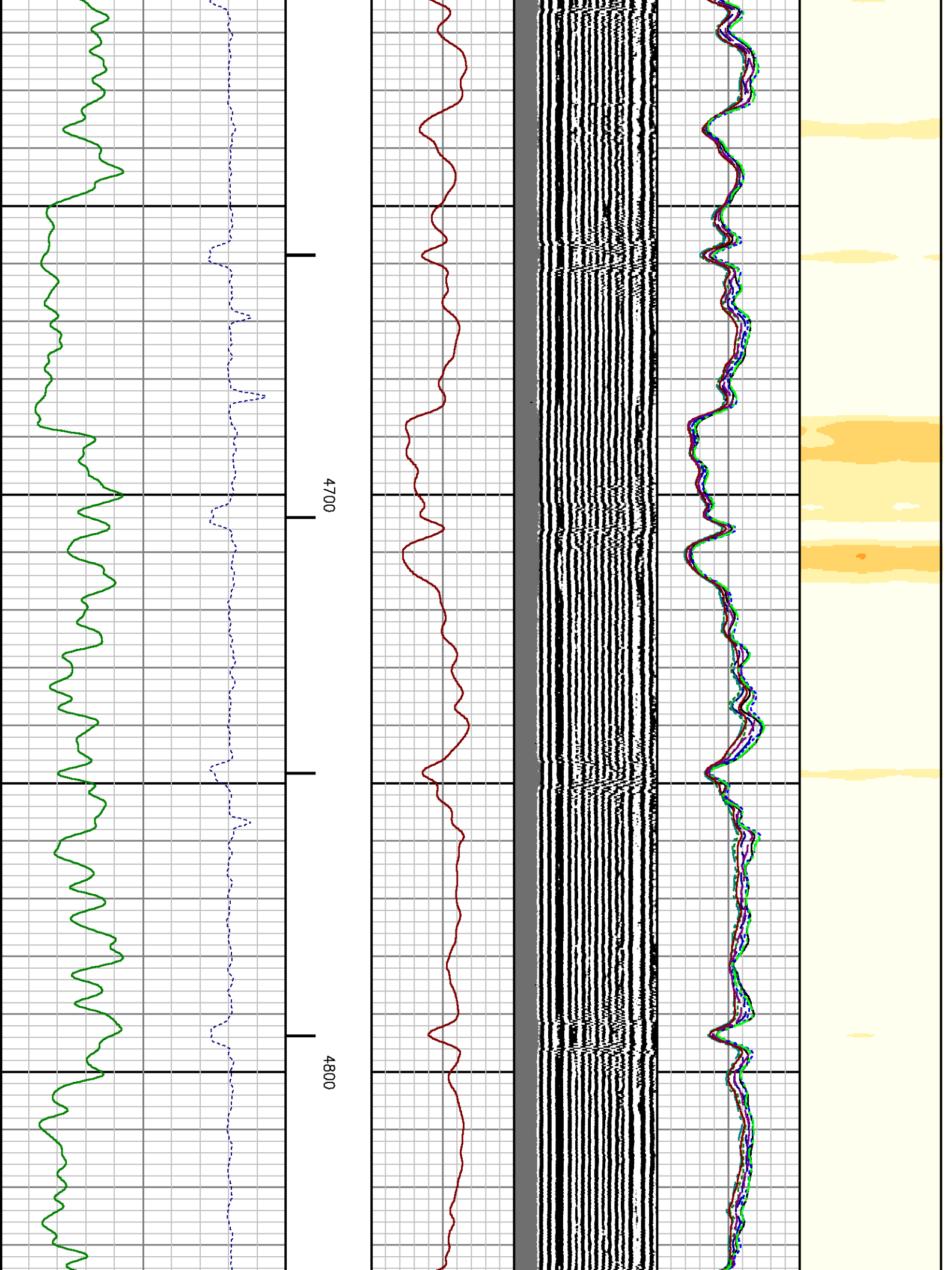


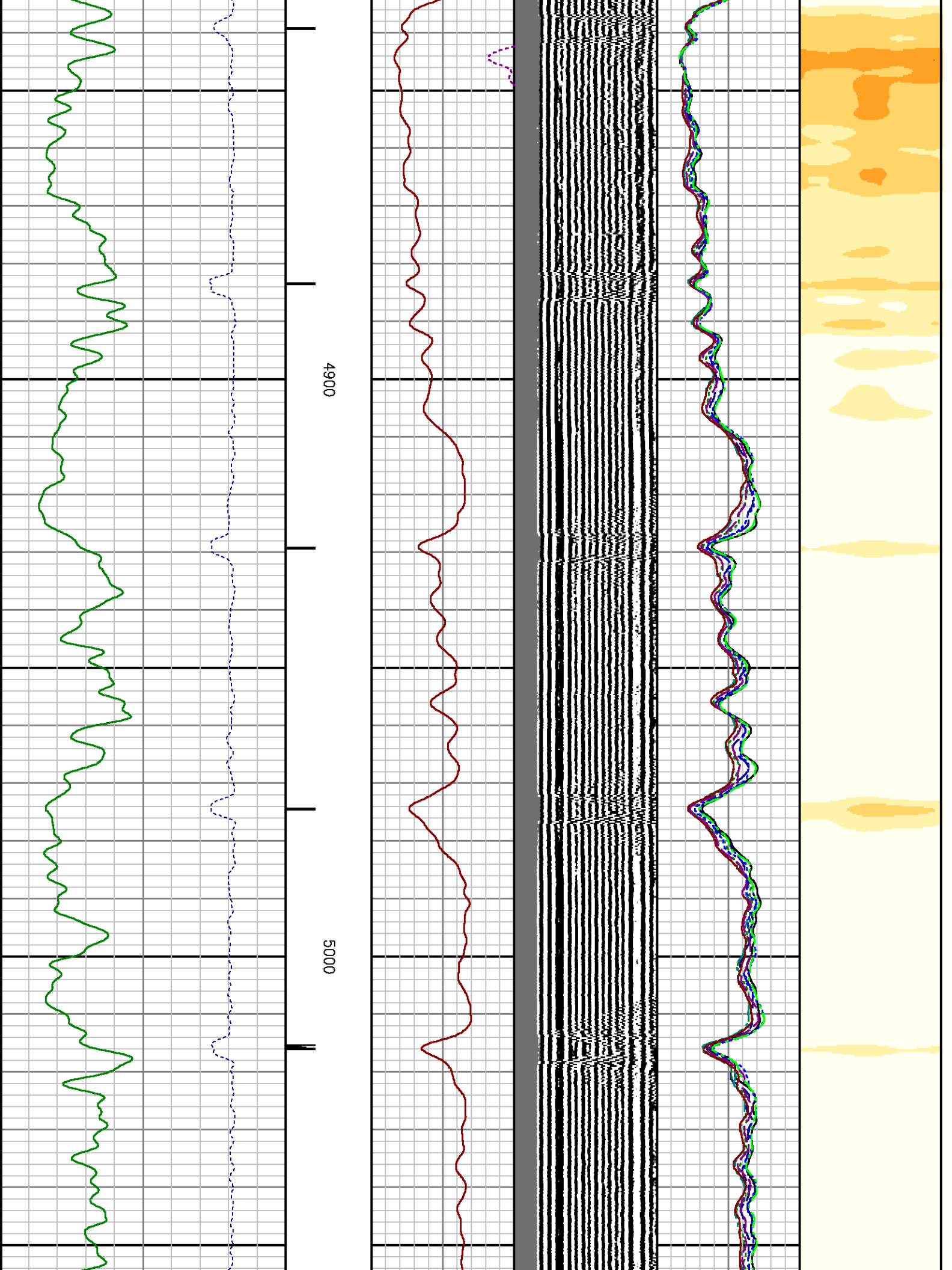


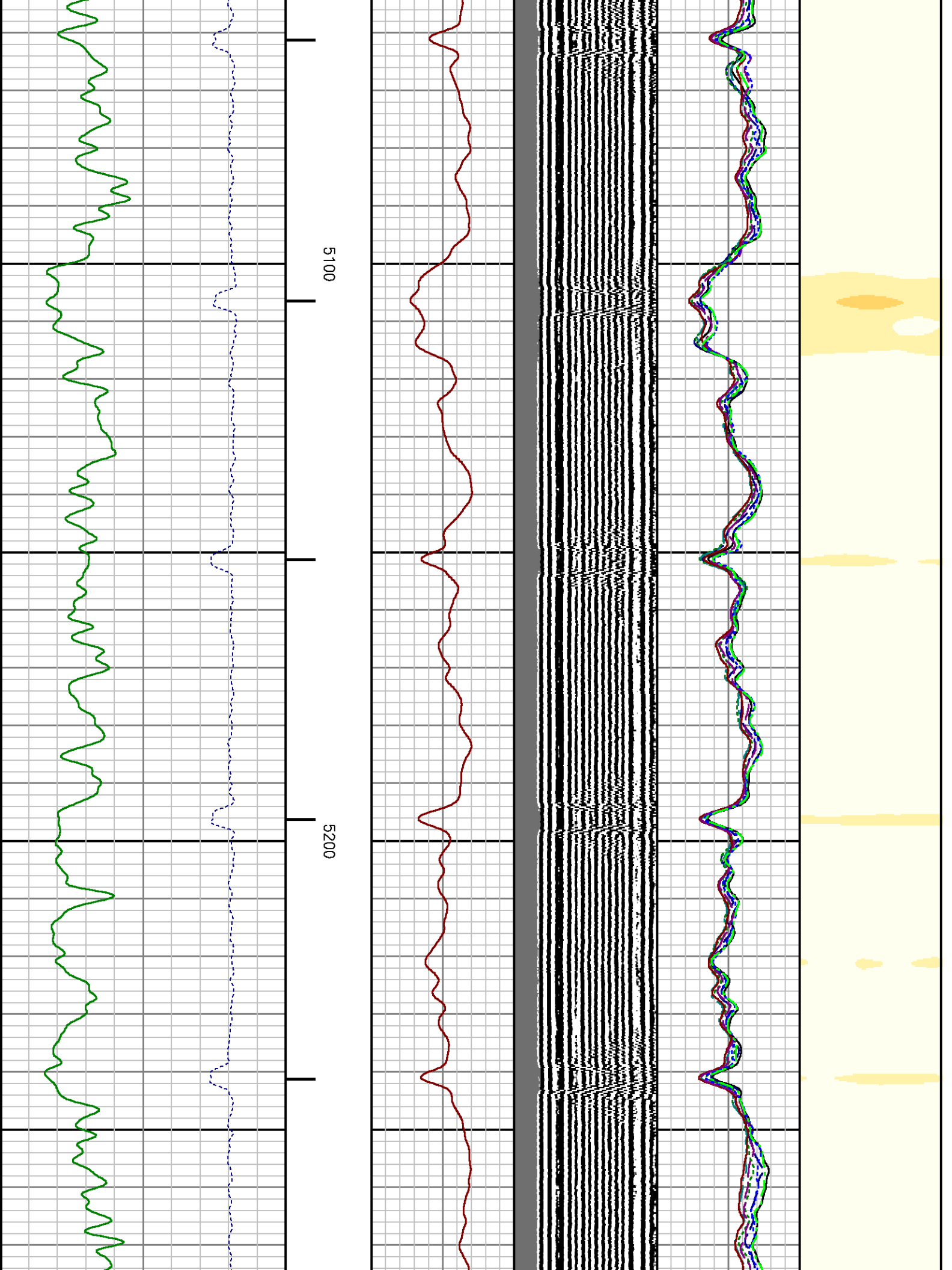


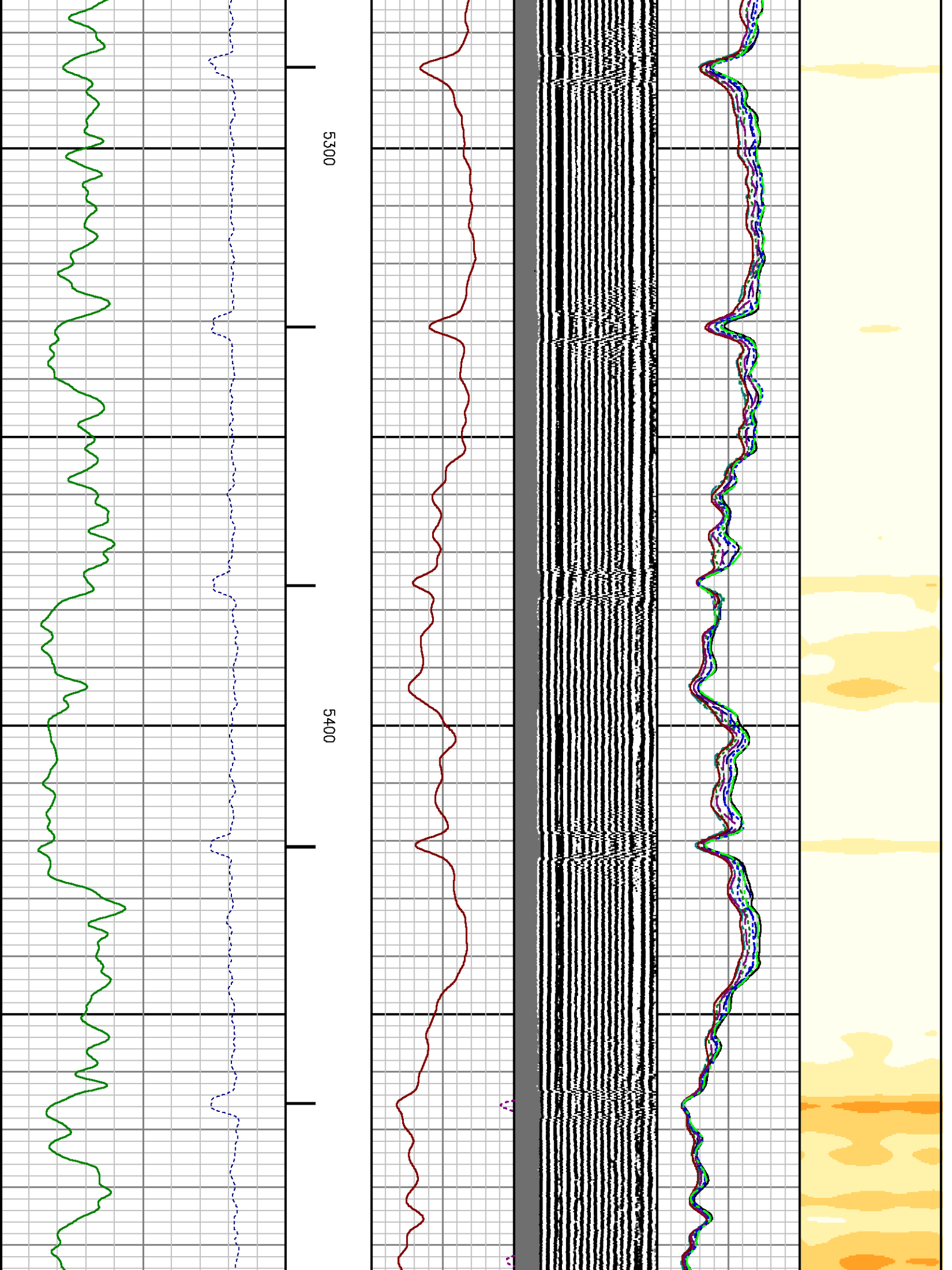


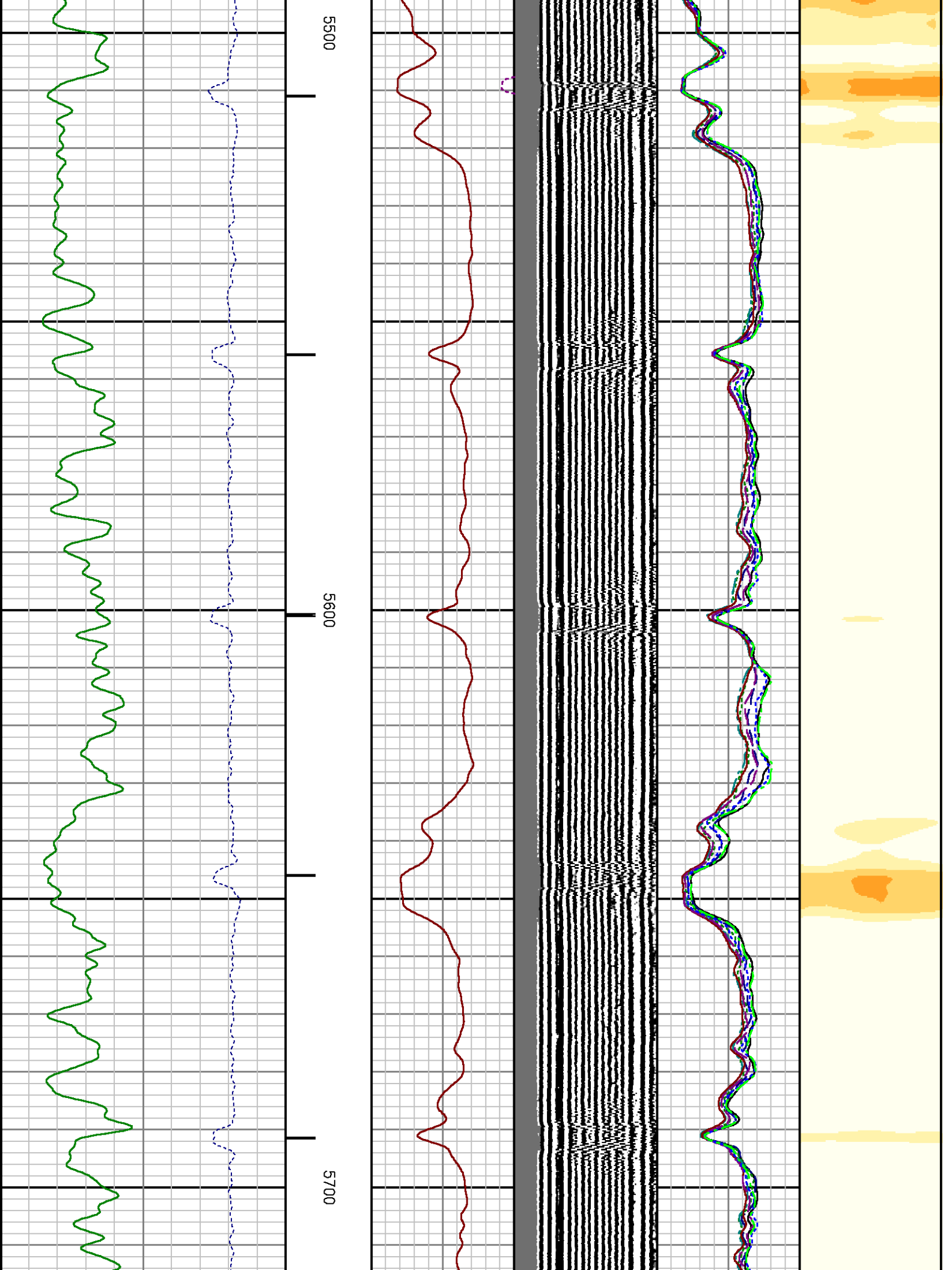


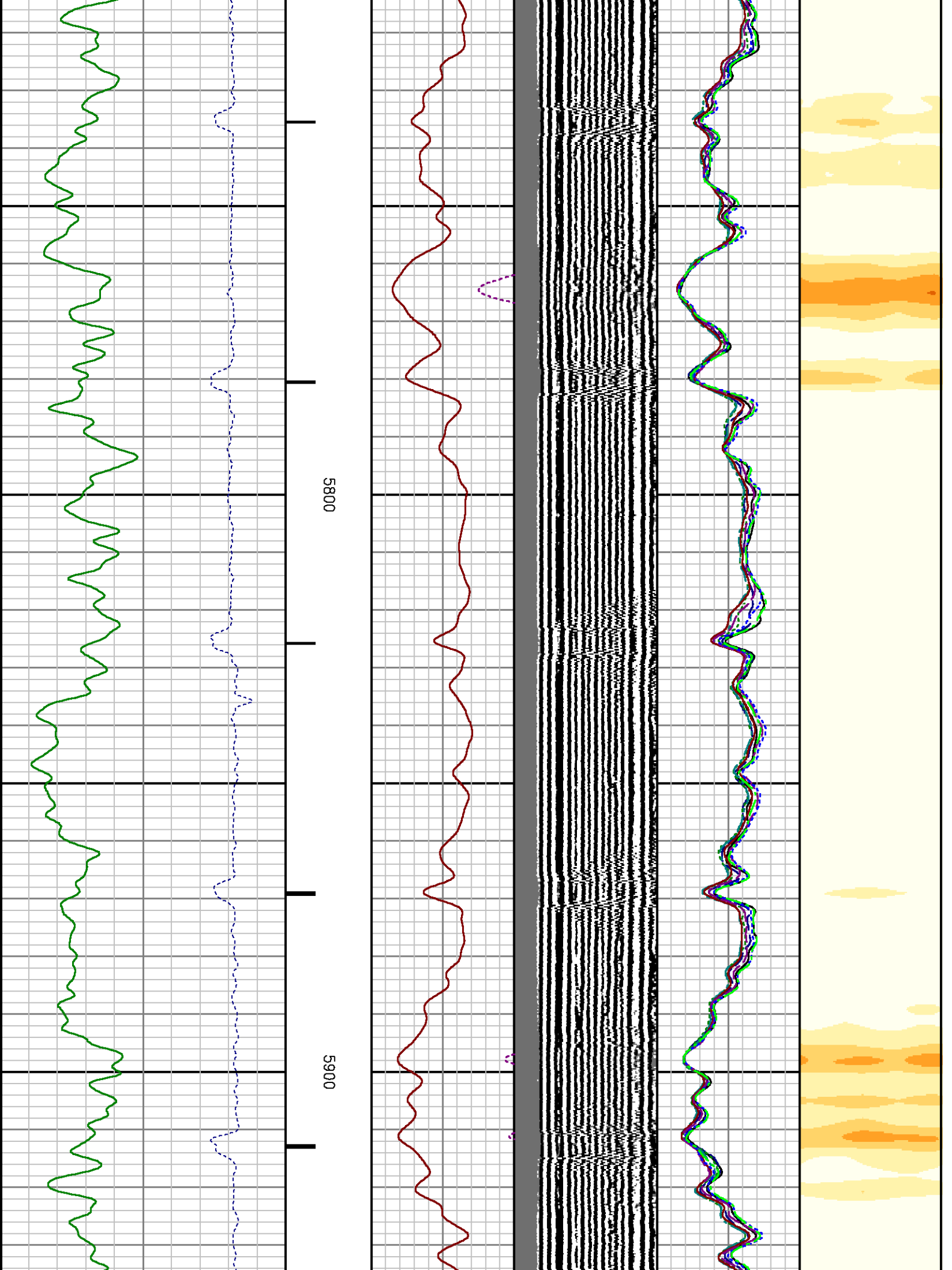


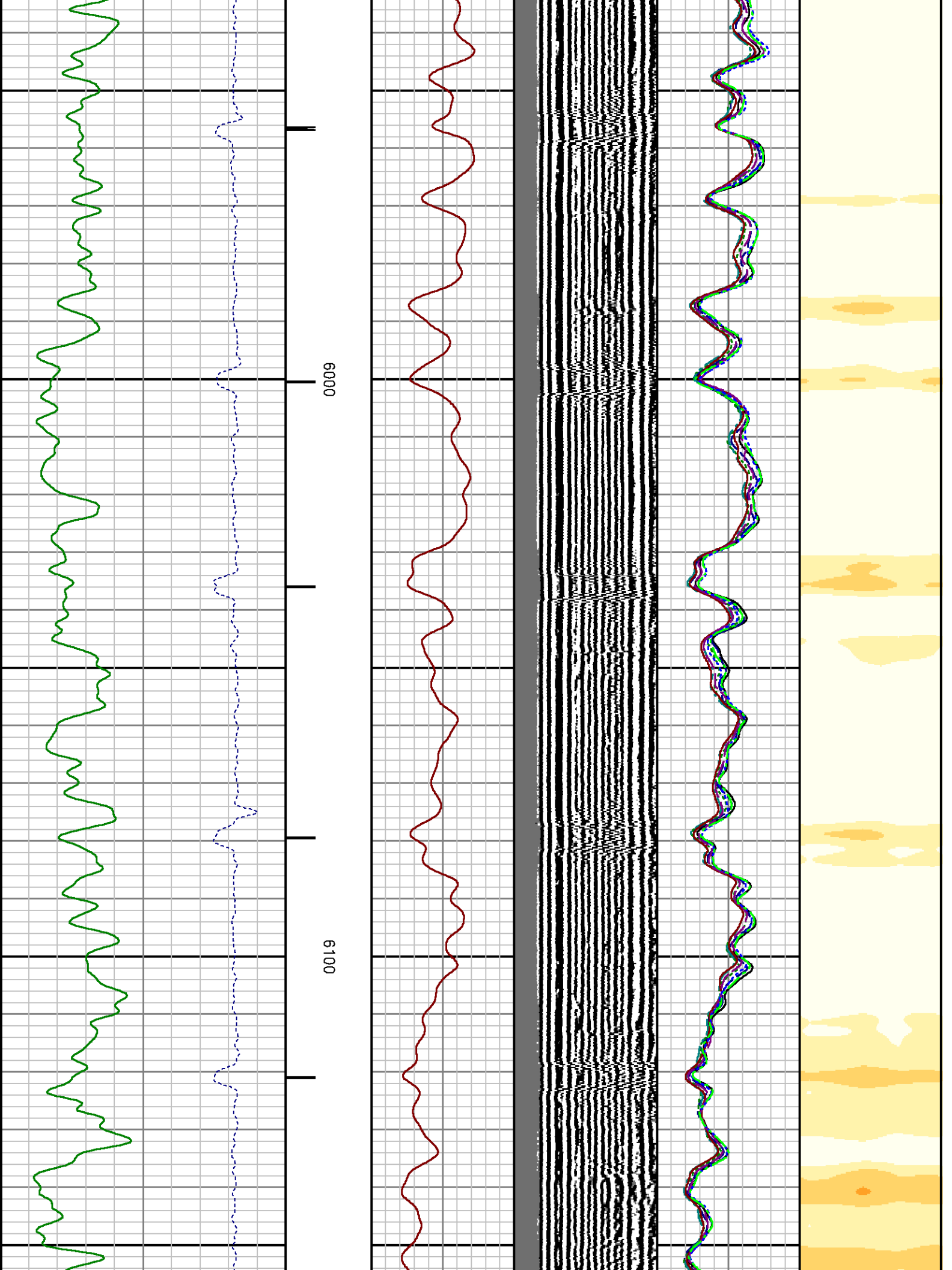


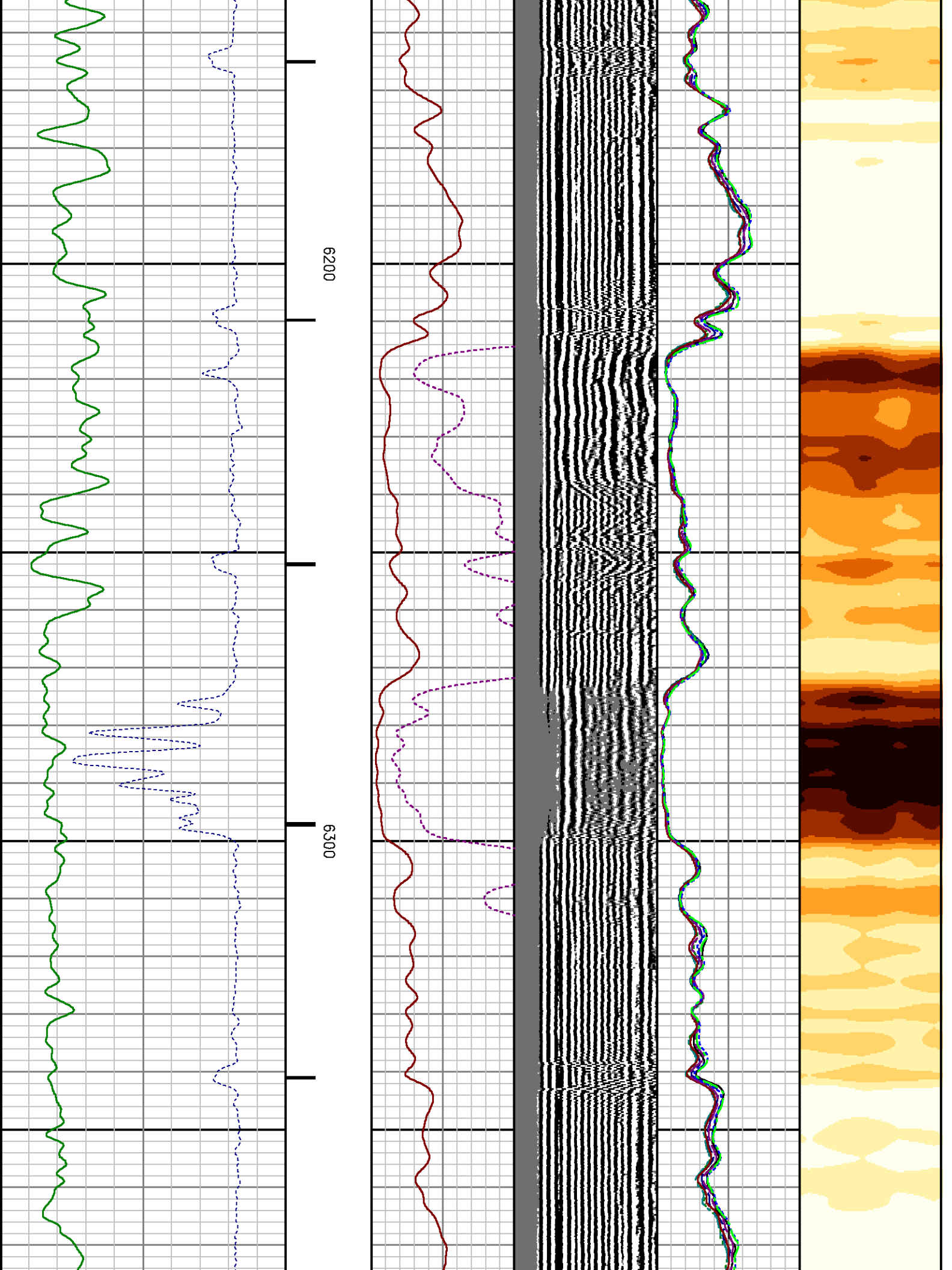


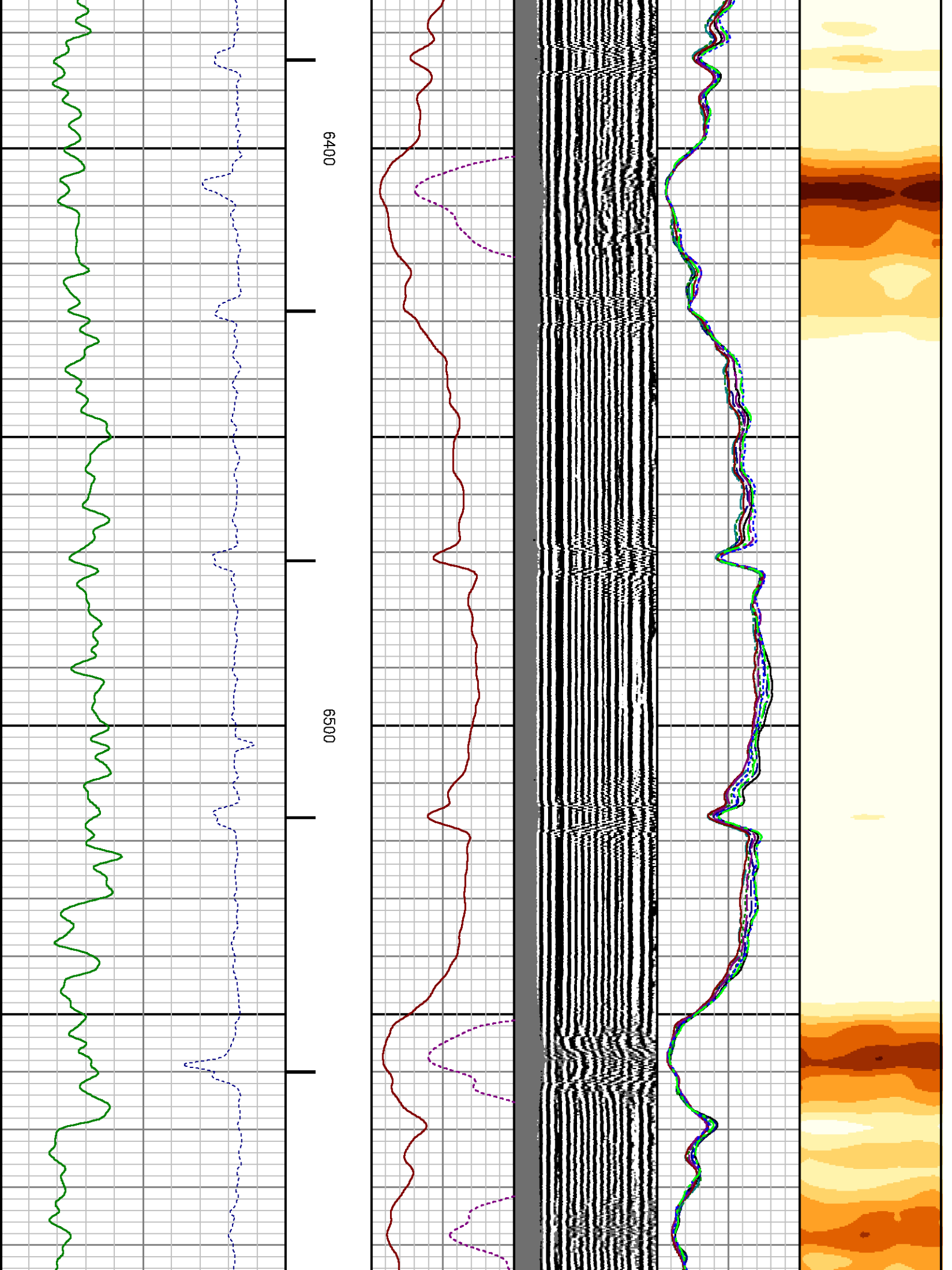


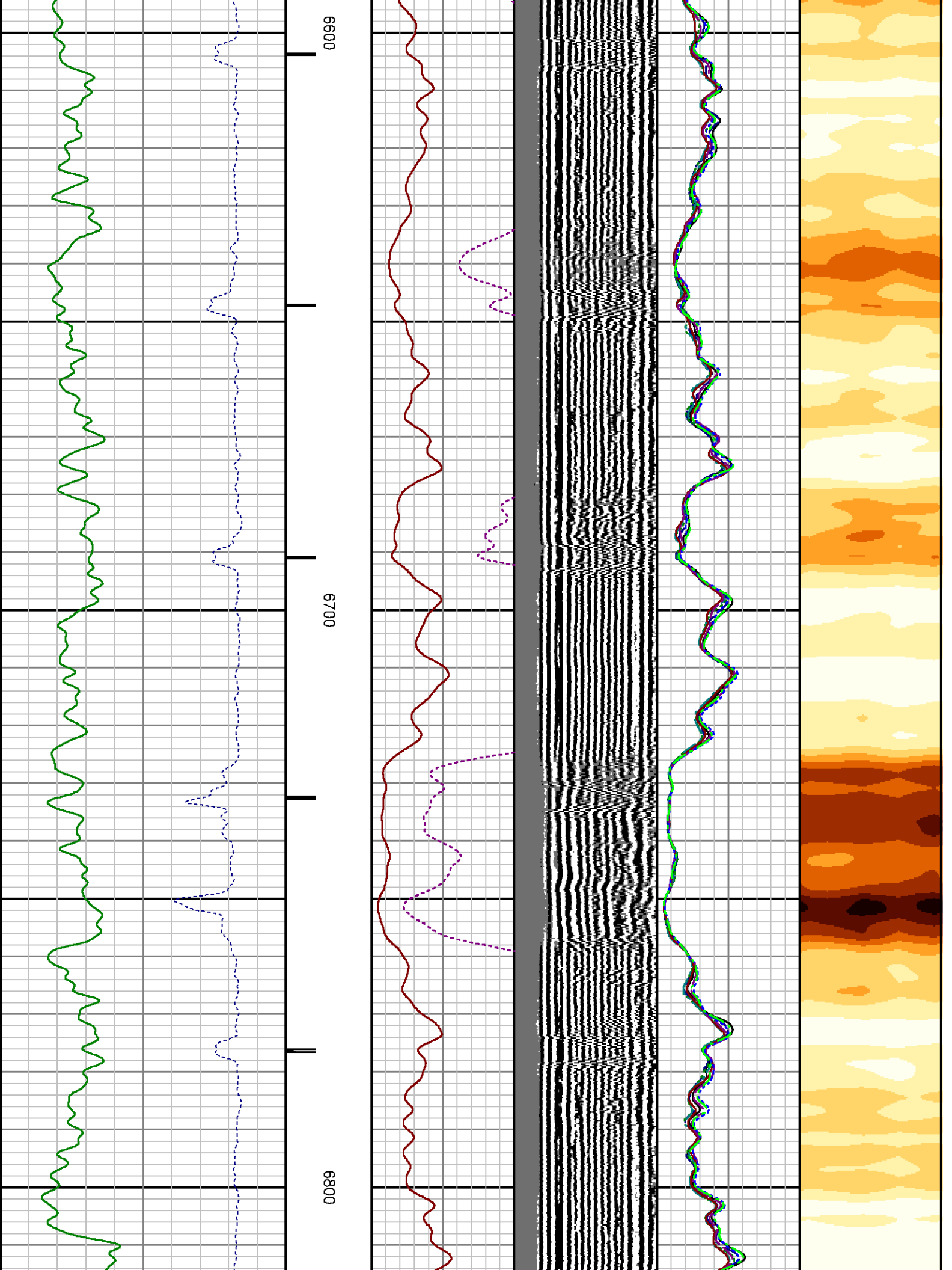


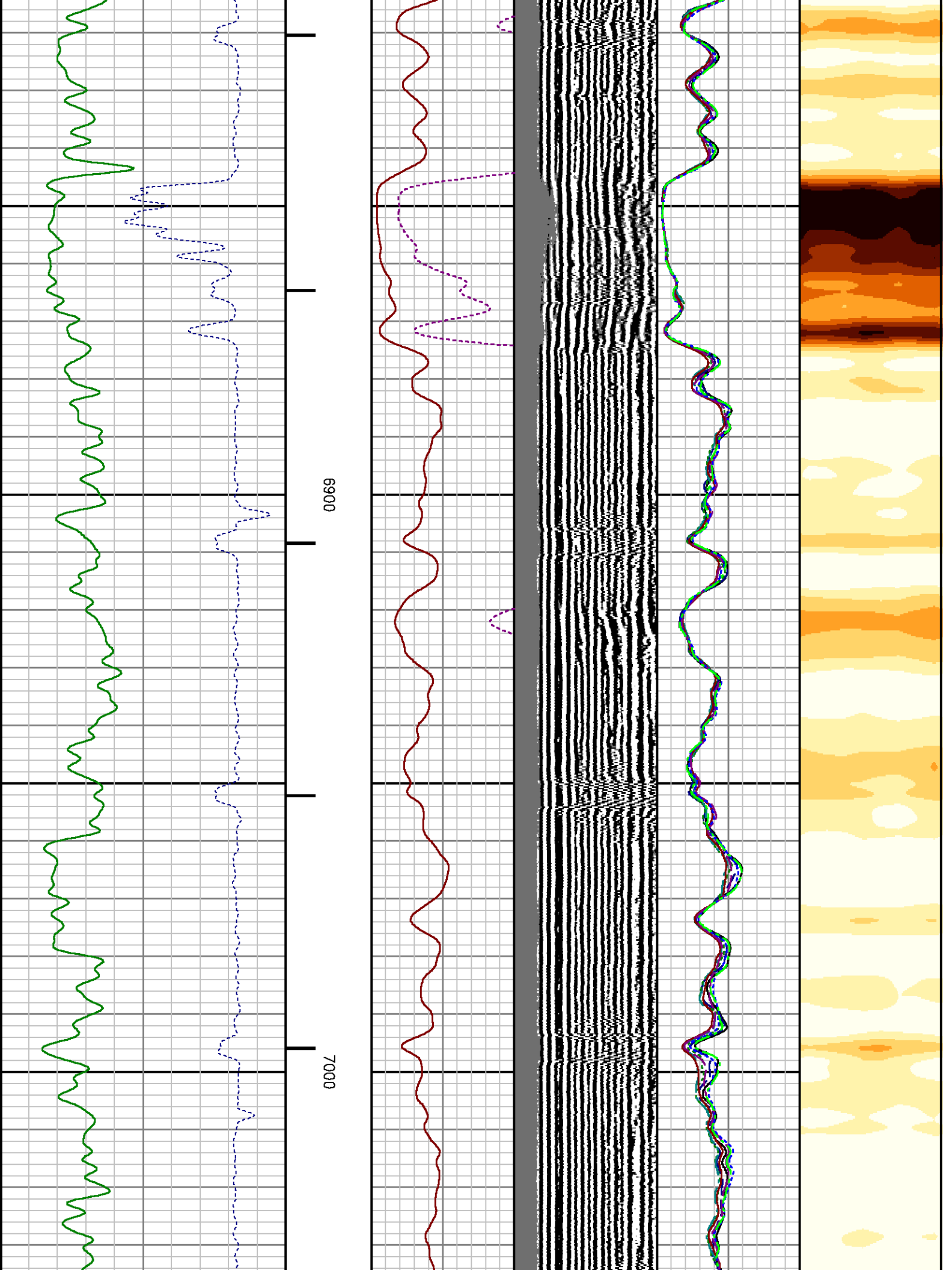


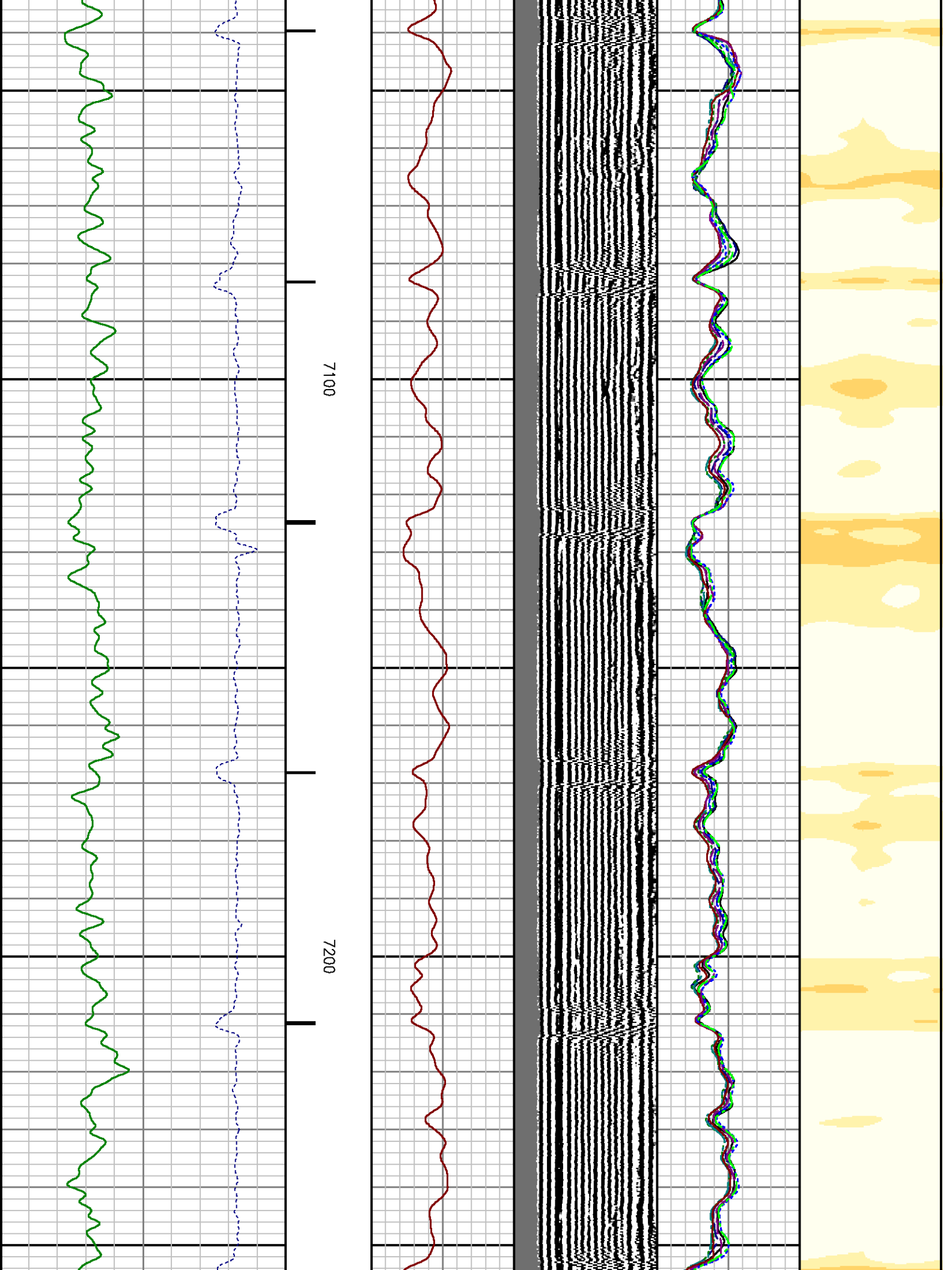


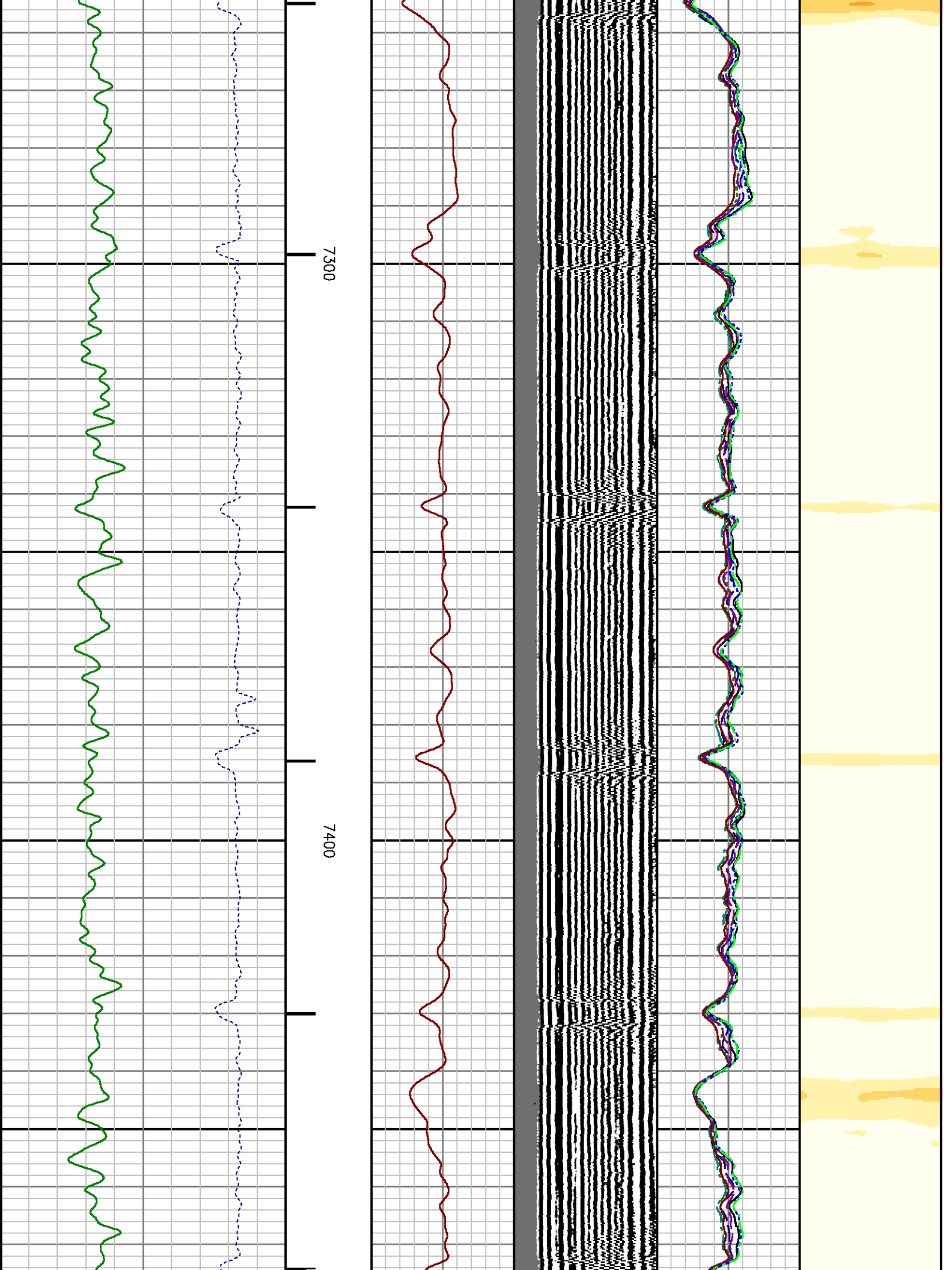


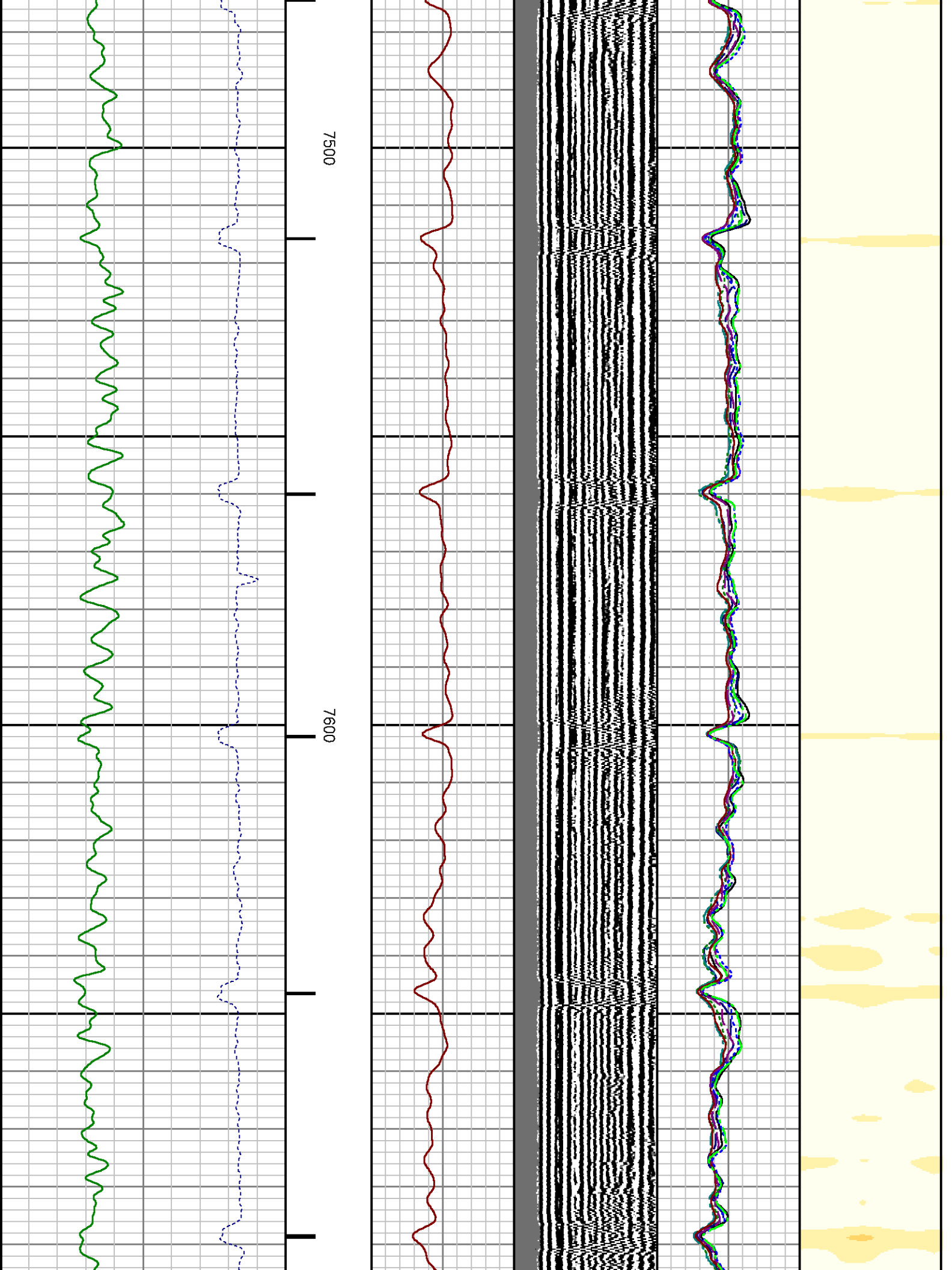


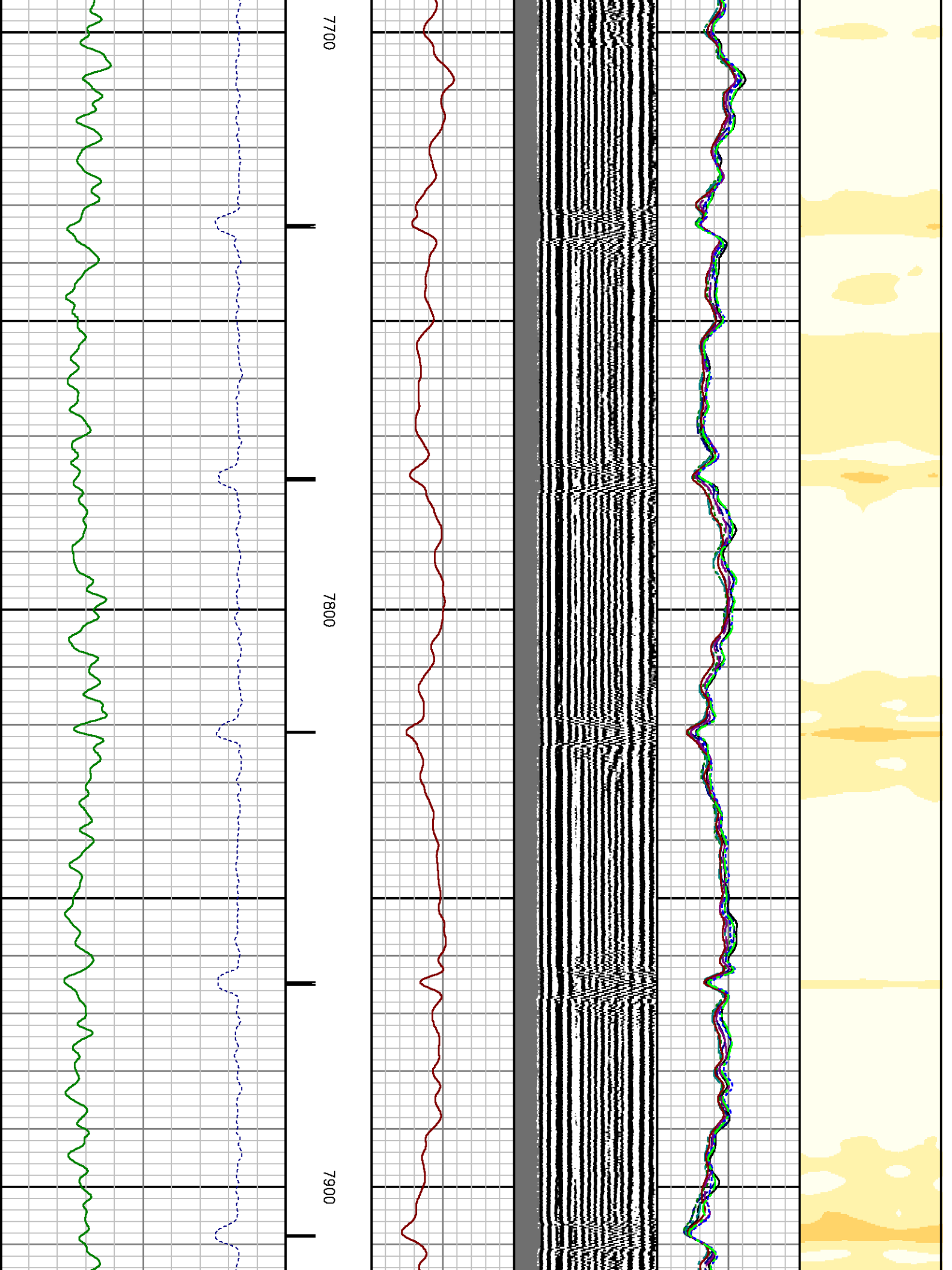


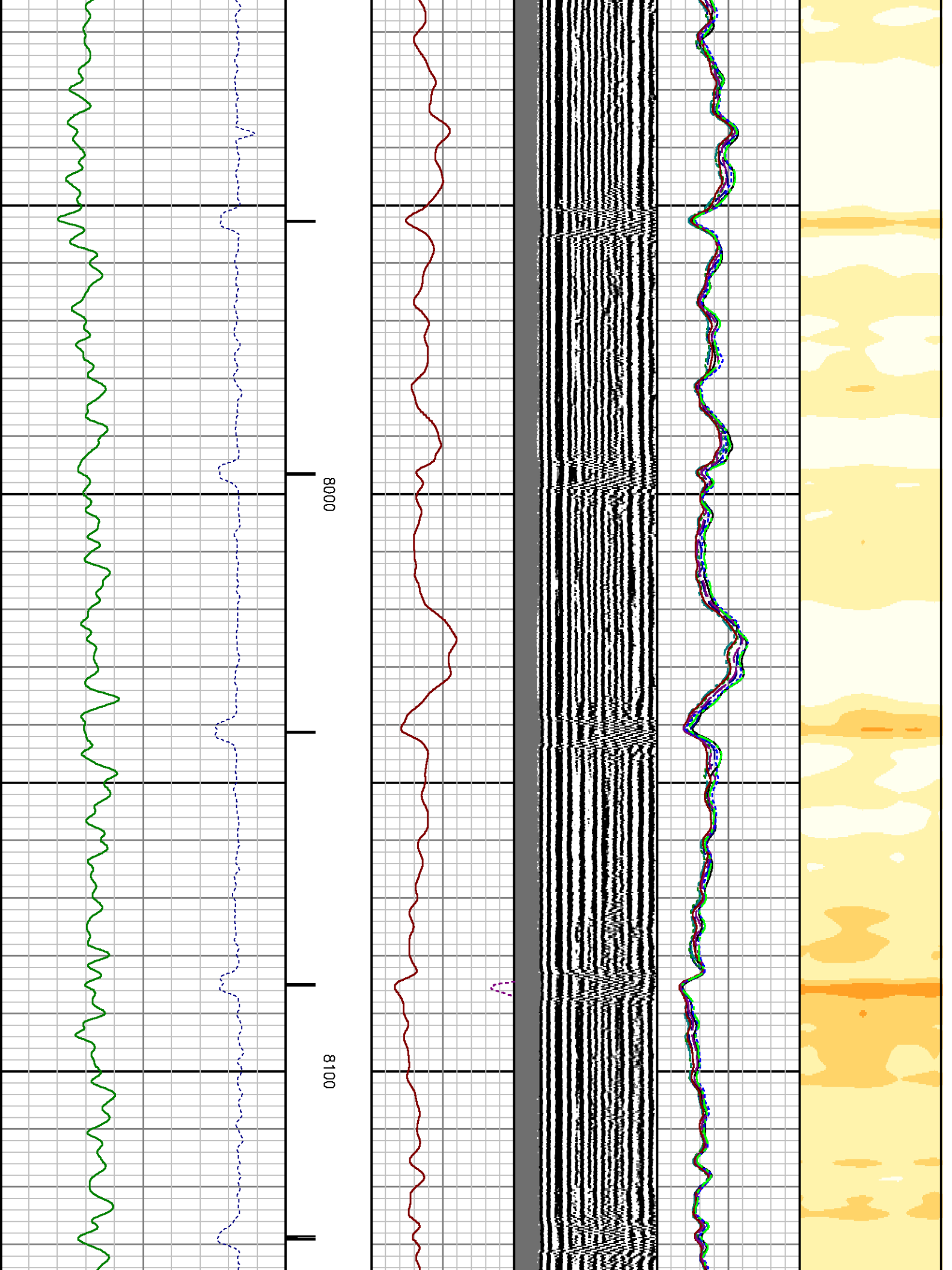


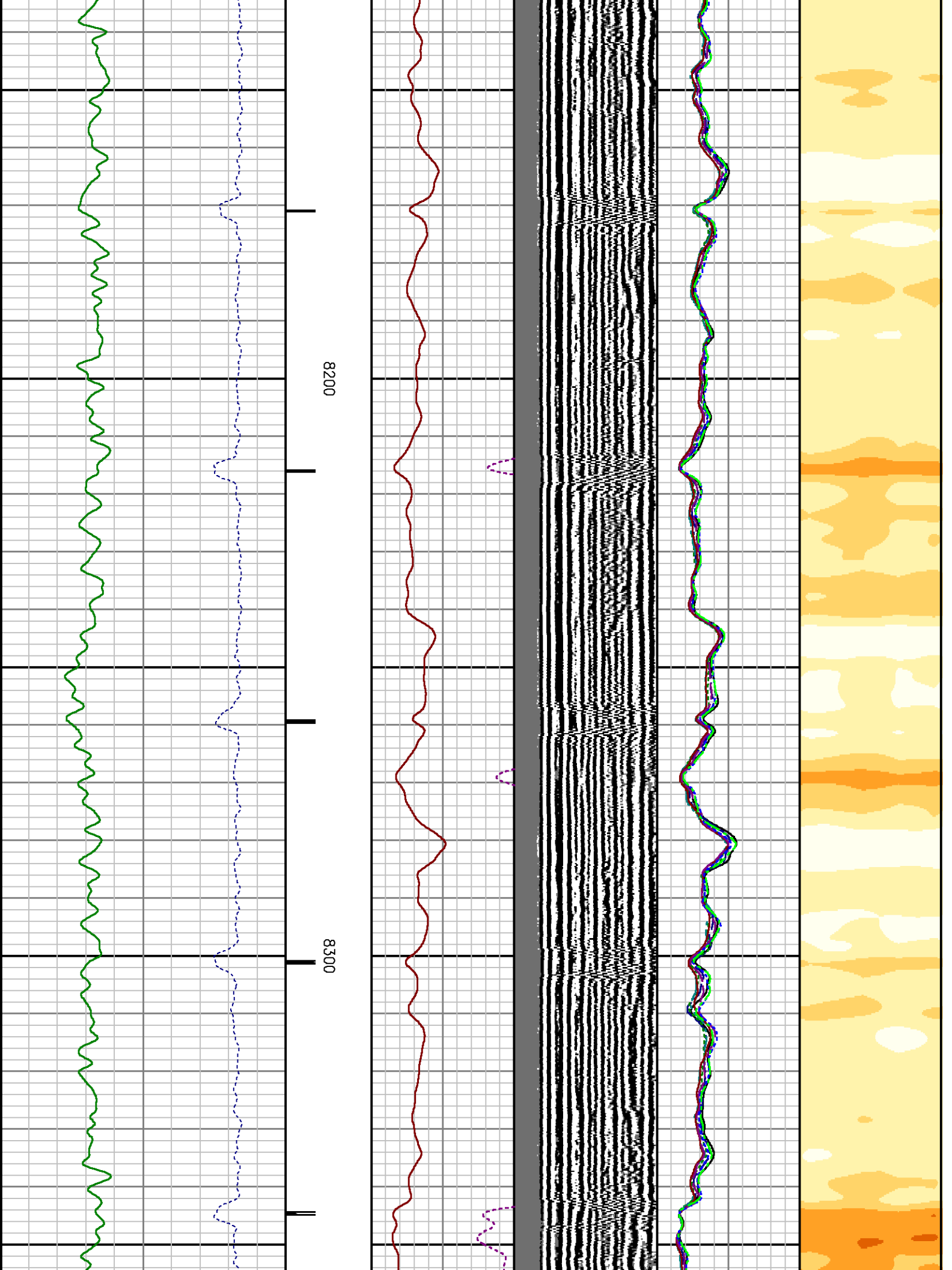


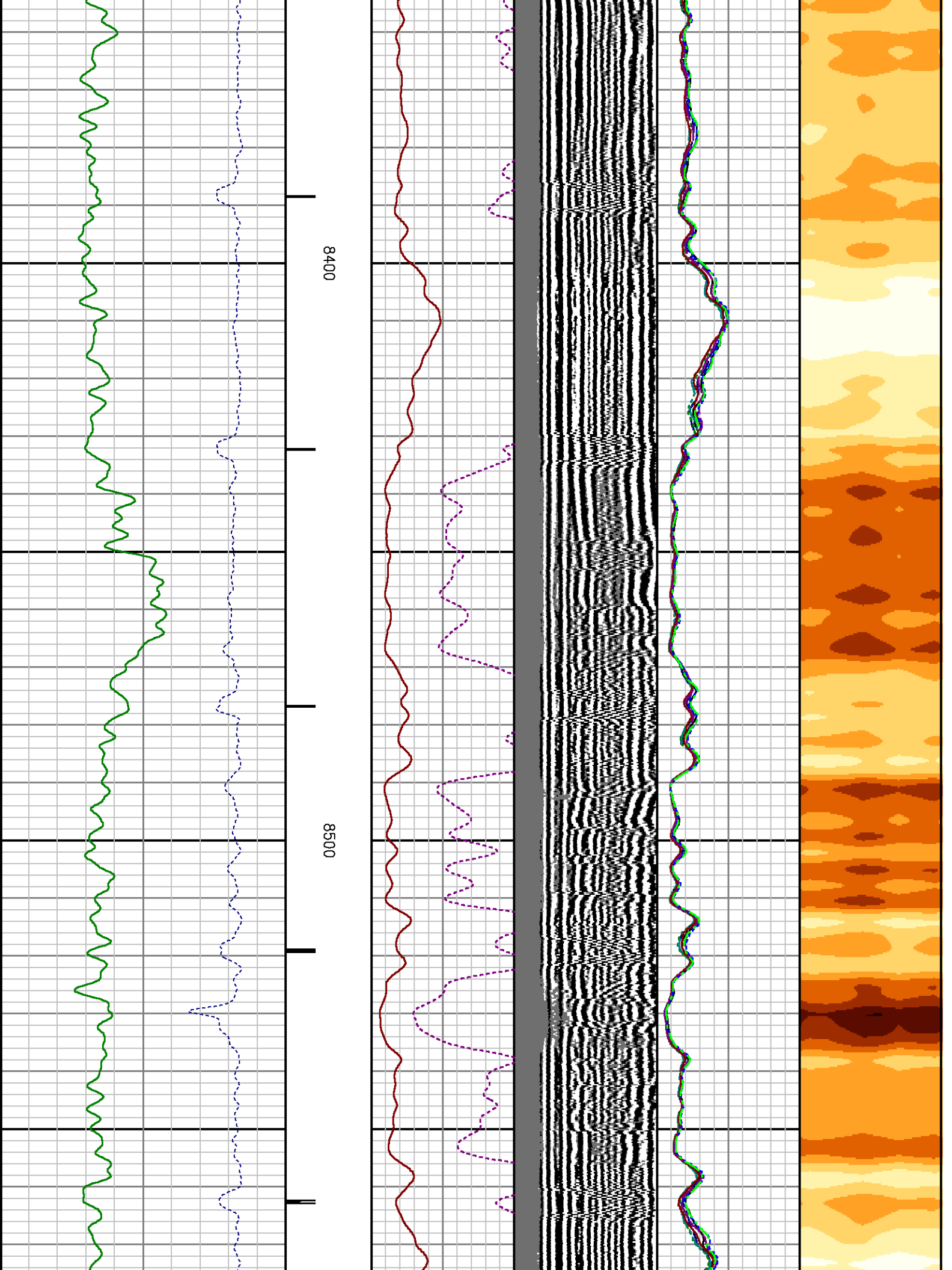


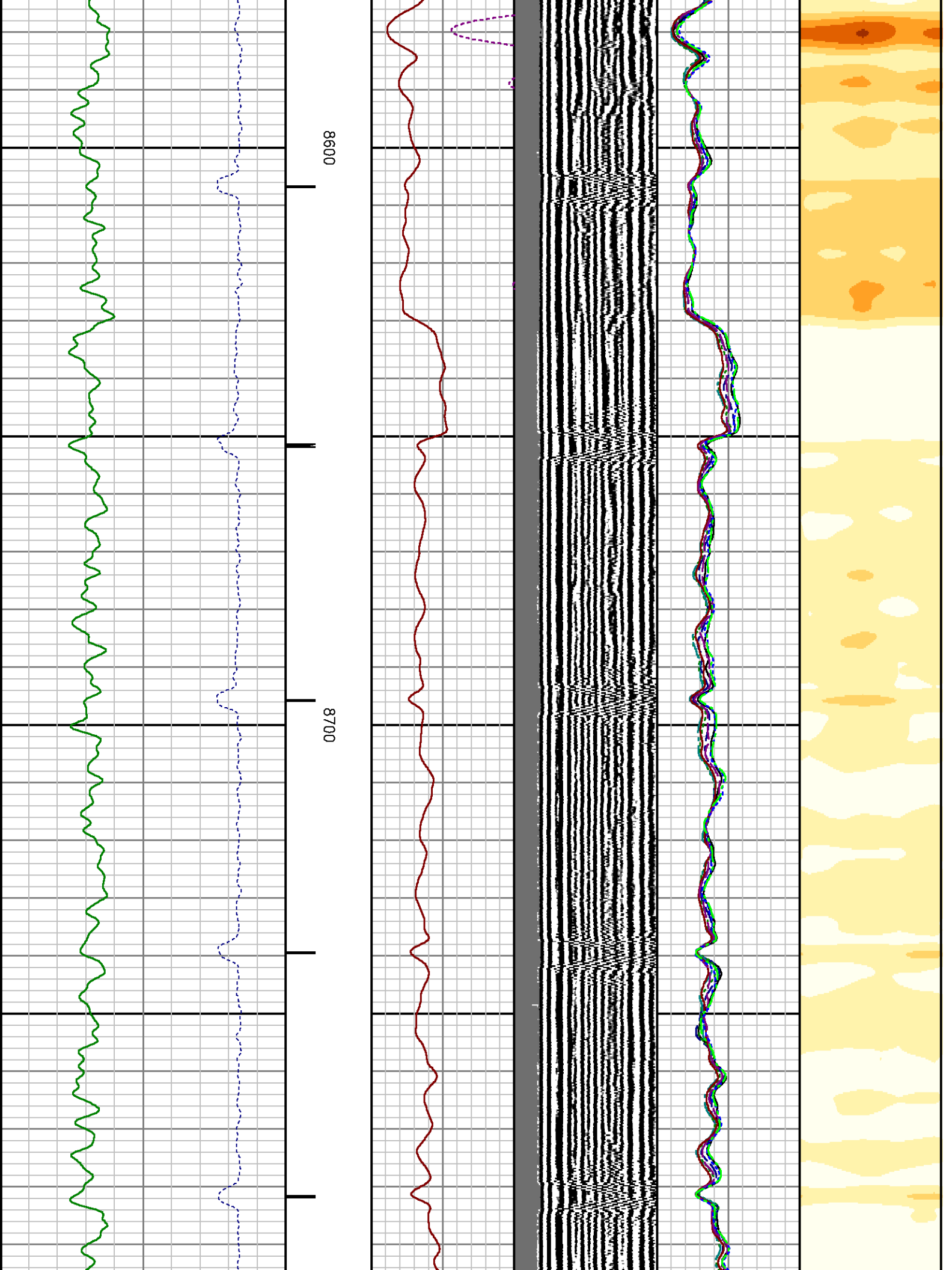


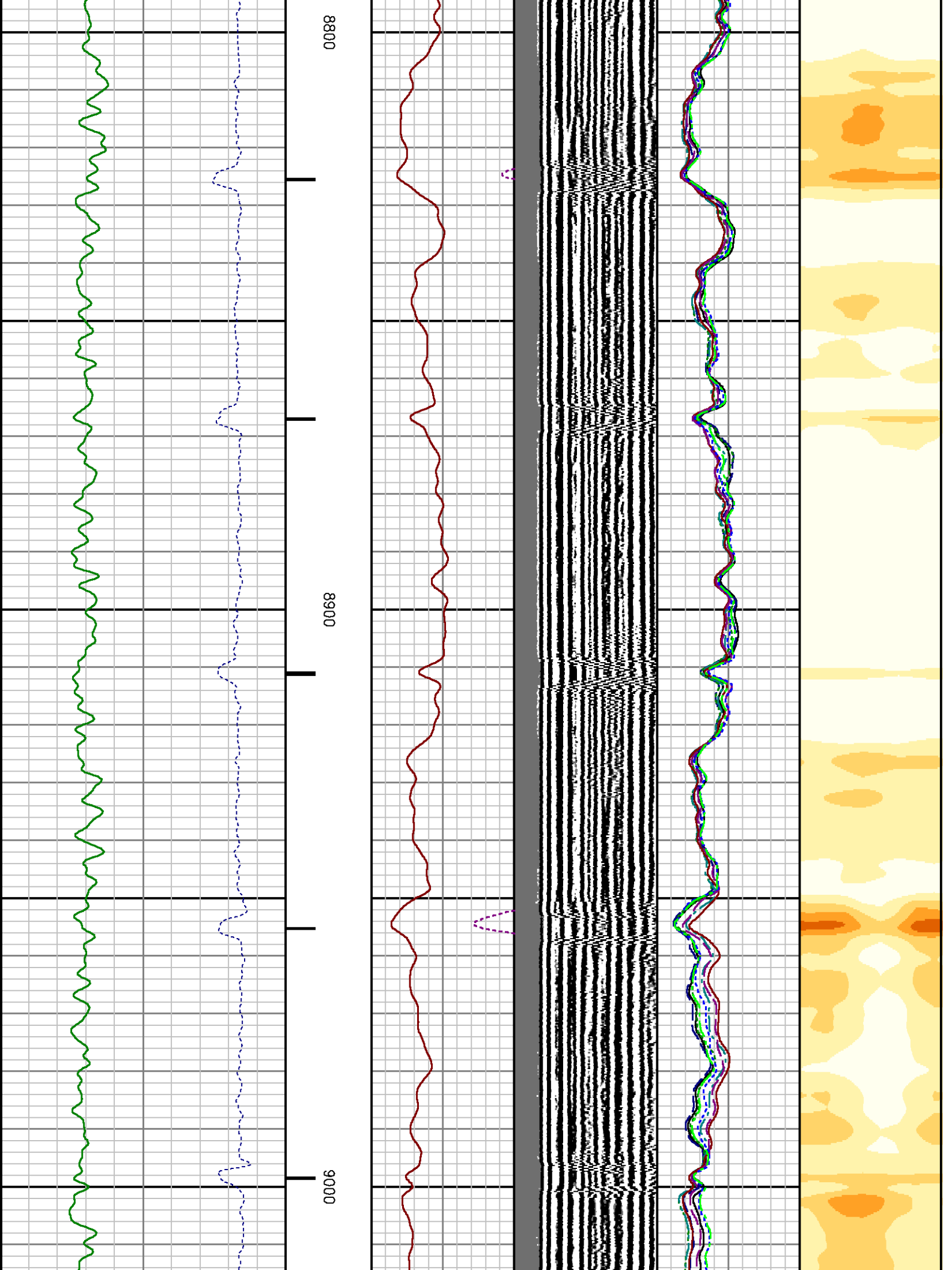


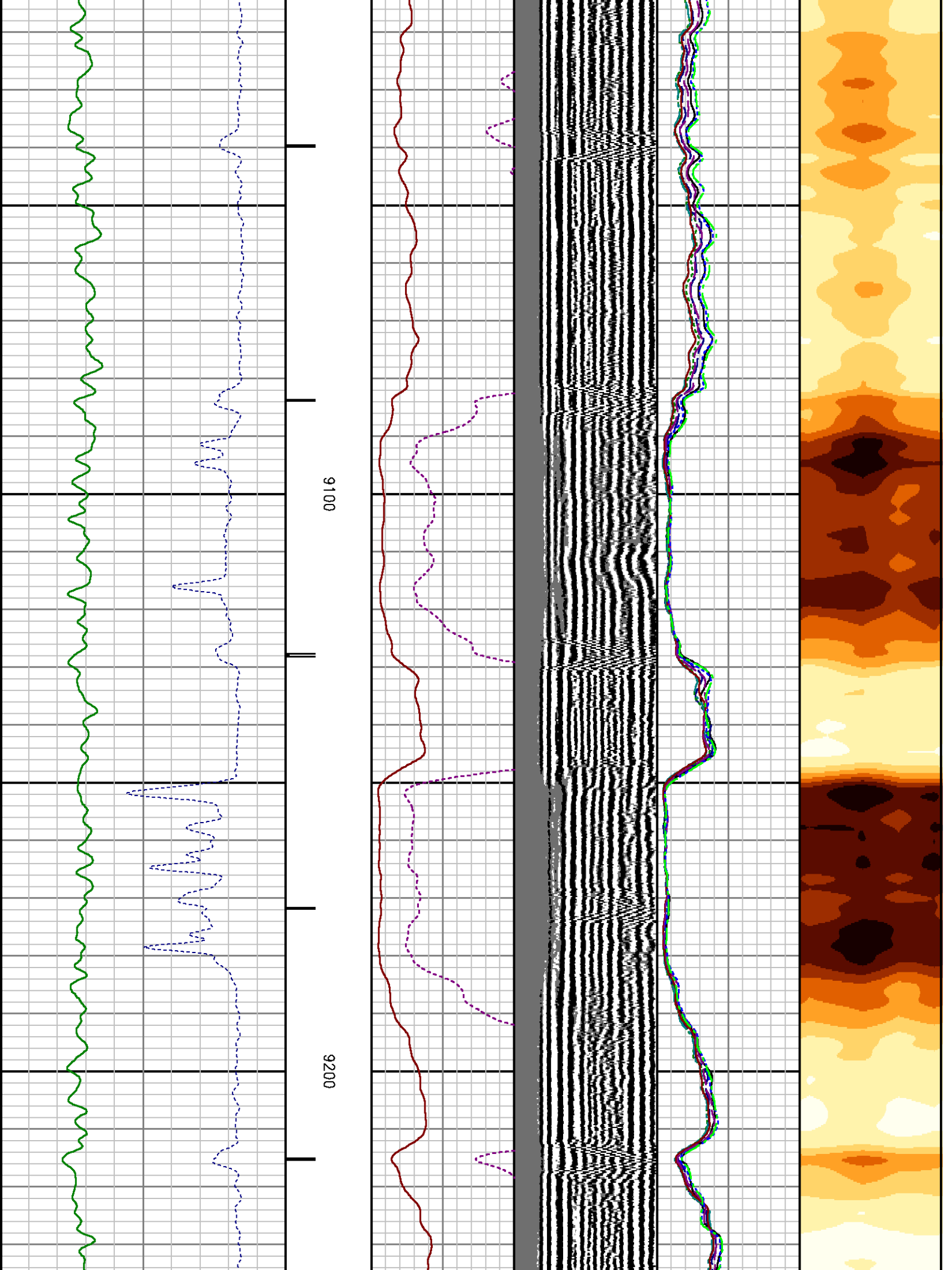






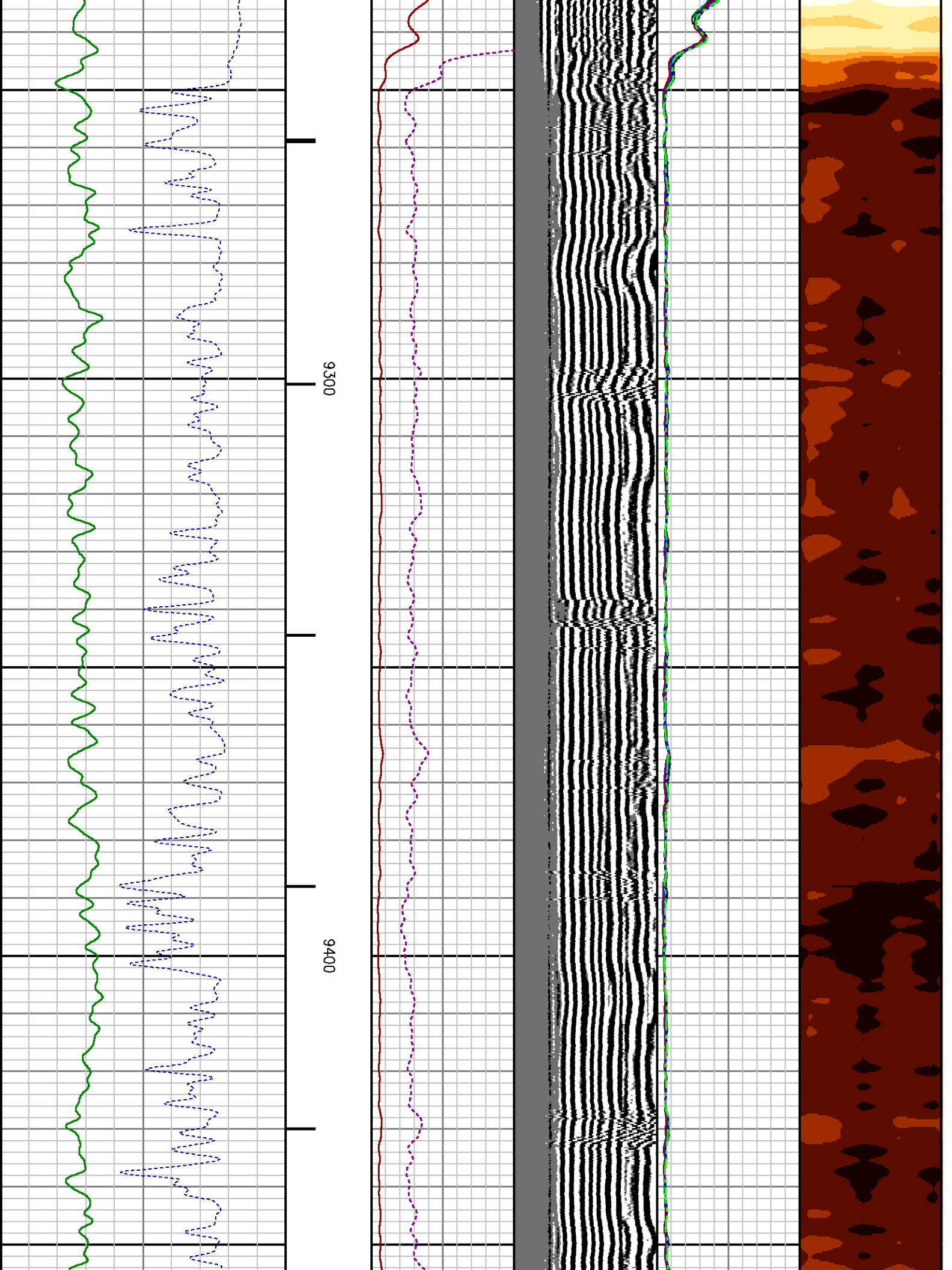


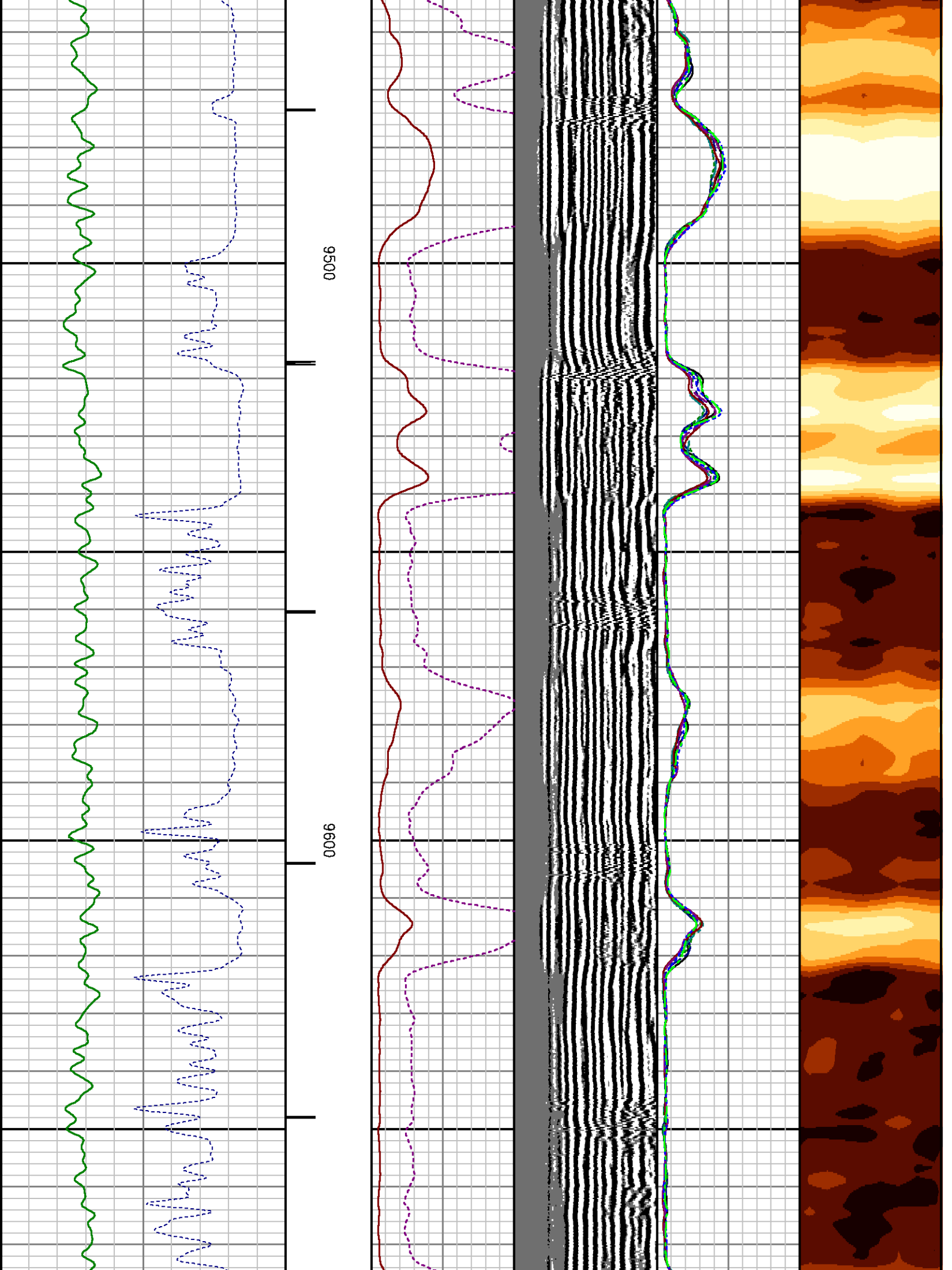


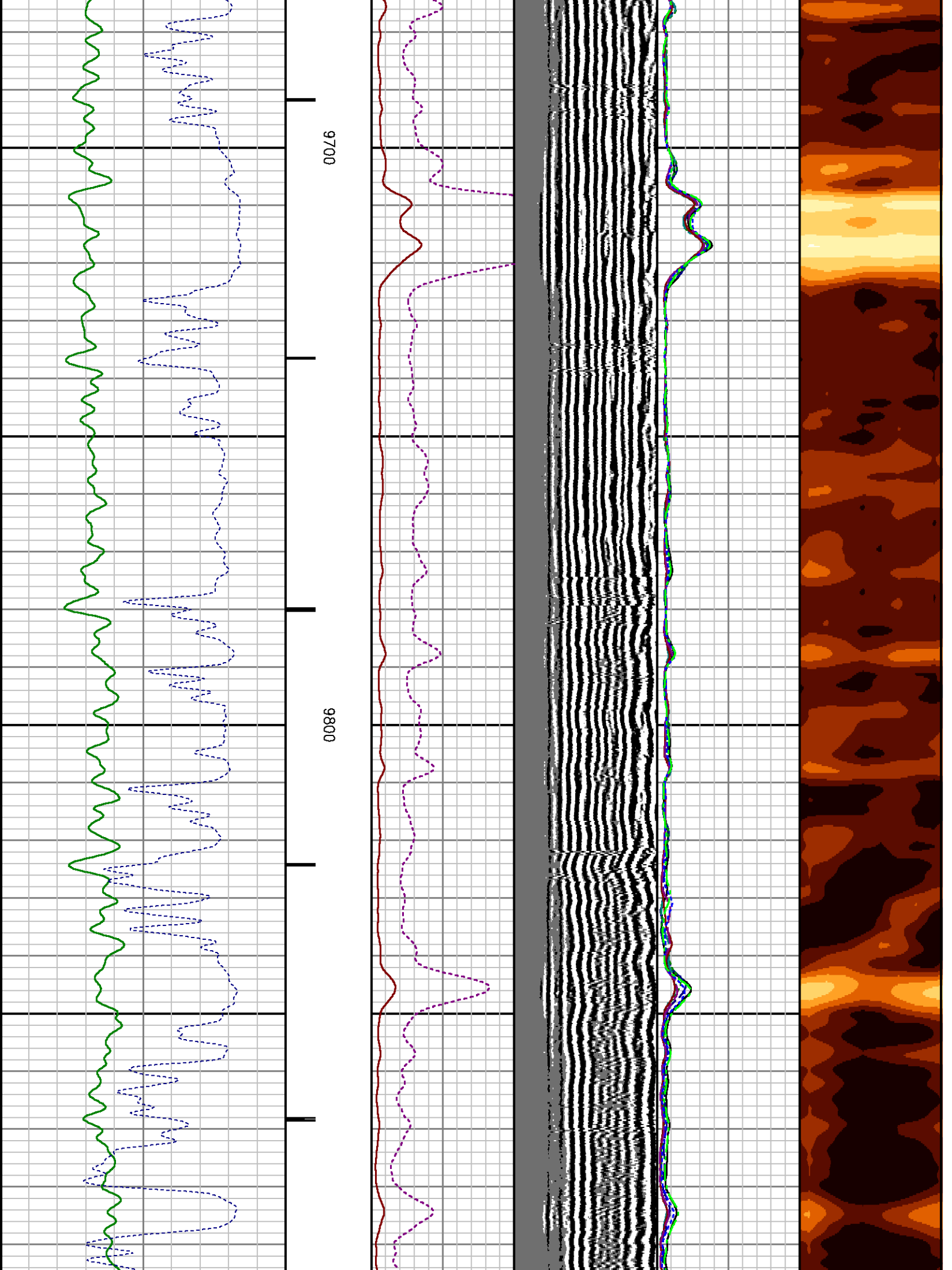


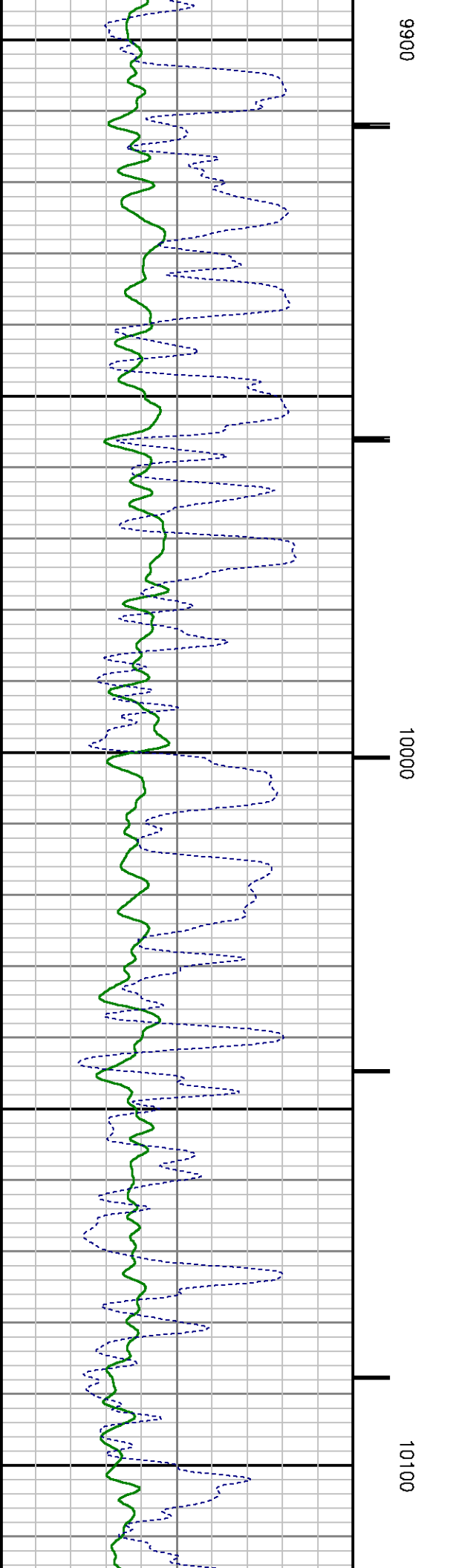
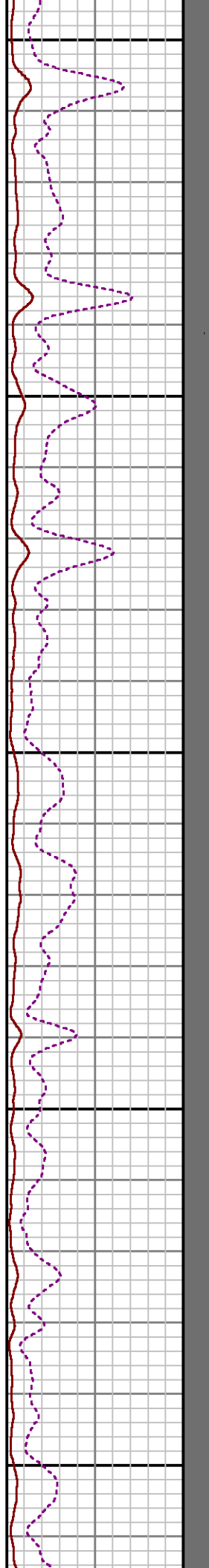
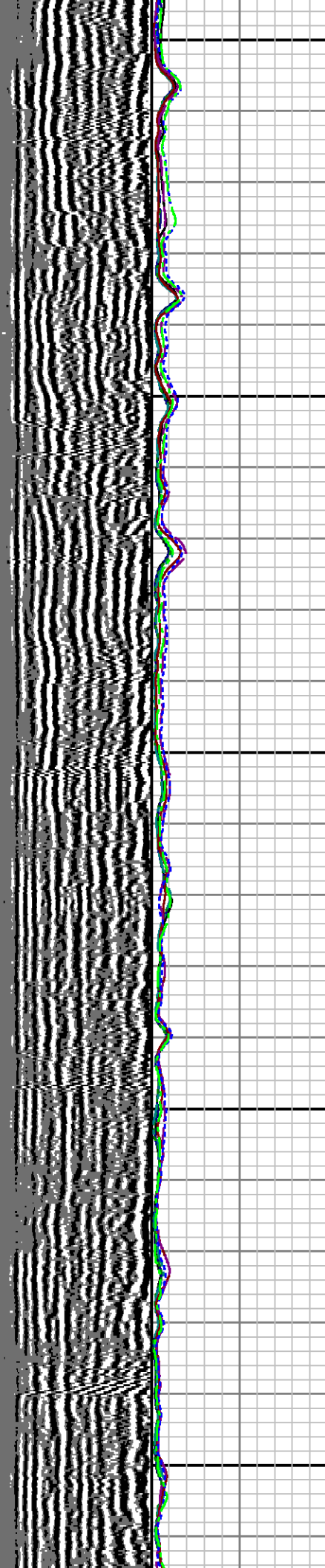
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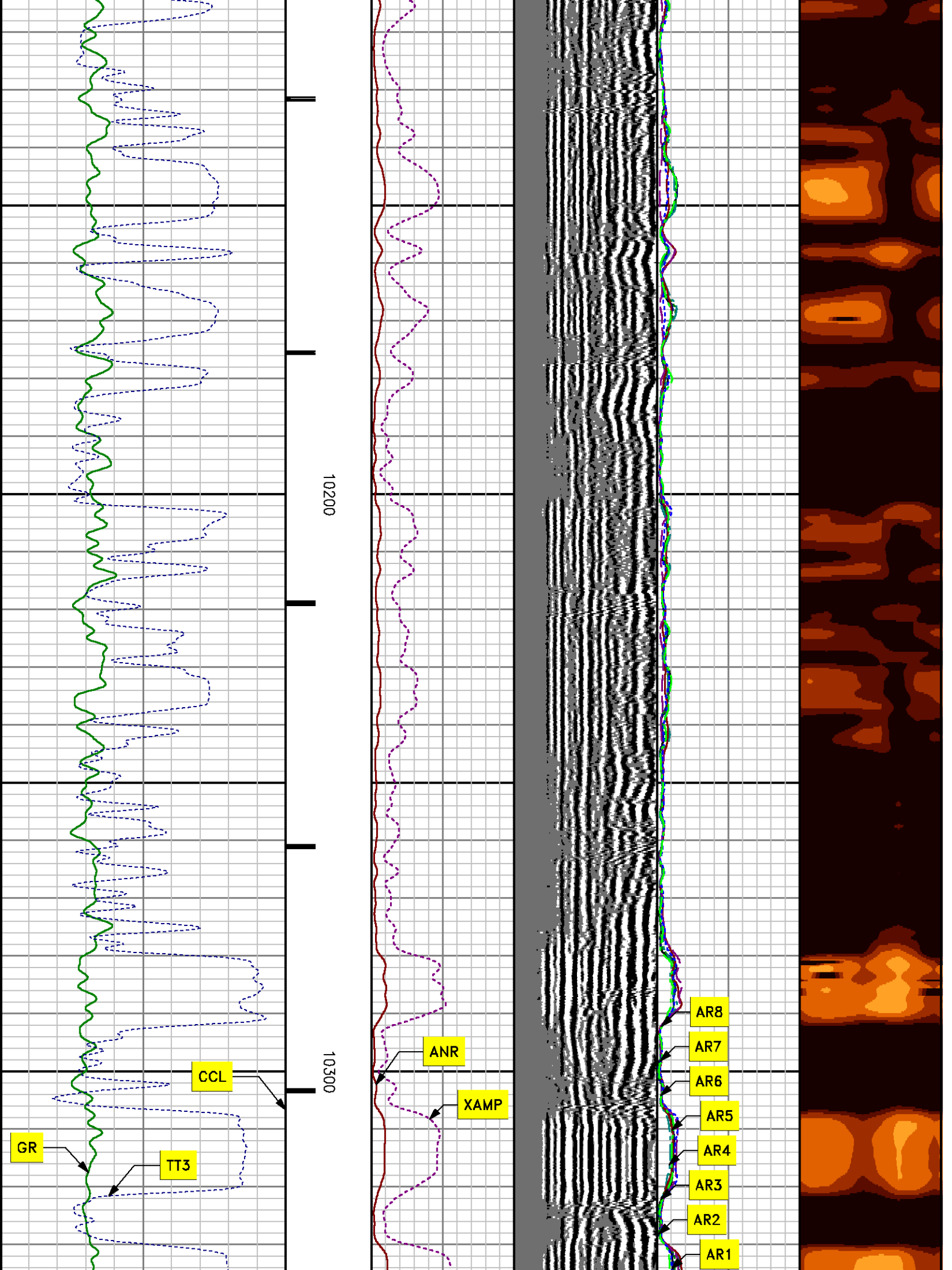
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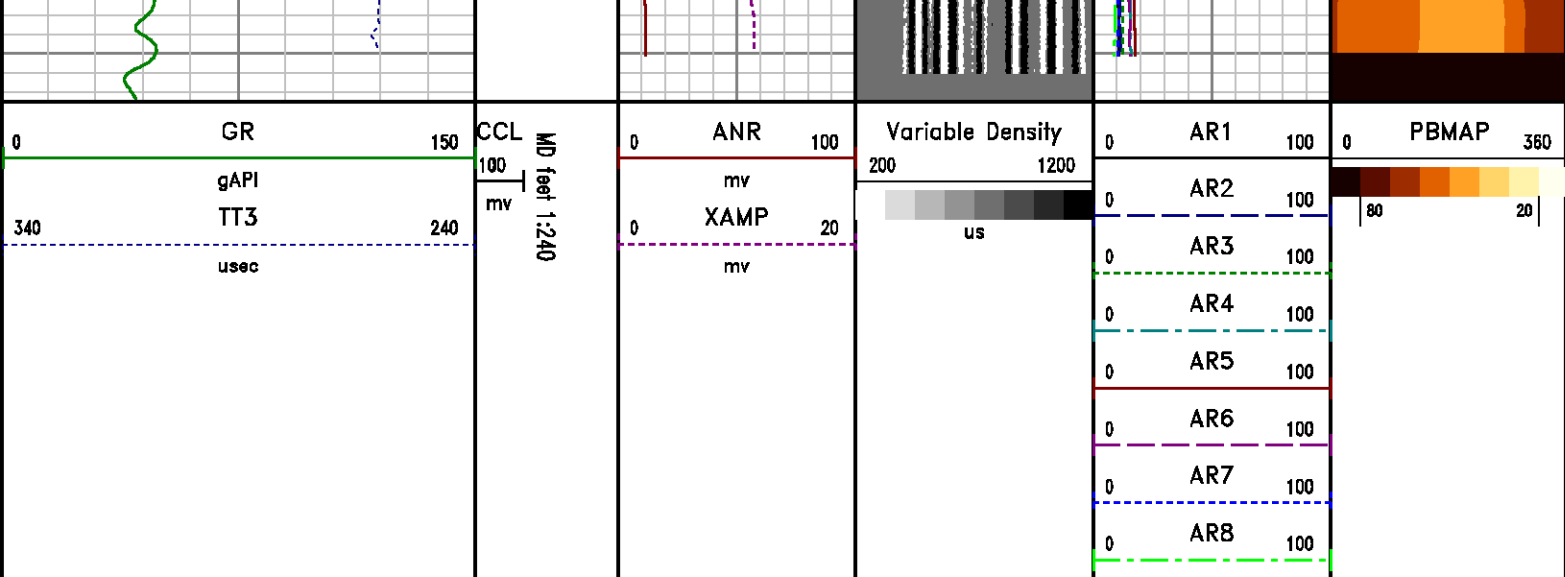












*REPEAT PASS
0 PSI*

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	367.688	usec	9278.750	9589.000
RAL	Amp Gate Start Near	258.680	usec	9278.750	9589.000
RAL	Amp Gate Start Radial	257.805	usec	9278.750	9589.000
RAL	Amp Gate Width Far	25.000	usec	9278.750	9589.000
RAL	Amp Gate Width Near	25.000	usec	9278.750	9589.000
RAL	Amp Gate Width Radial	25.000	usec	9278.750	9589.000
RAL	casing od	7.625	inches	9278.750	9589.000
RAL	casing wt	29.700	lbm/ft	9278.750	9589.000
RAL	FB Start Far	337.806	usec	9278.750	9589.000
RAL	FB Start Near	221.297	usec	9278.750	9589.000
RAL	FB Start Radial	221.297	usec	9278.750	9589.000
RAL	FB Thresh Far	10.000	mv	9278.750	9589.000
RAL	FB Thresh Near	4.000	mv	9278.750	9589.000
RAL	FB Thresh Radial	4.000	mv	9278.750	9589.000
RAL	Fluid Travel Time	200.000	usec/ft	9278.750	9589.000

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

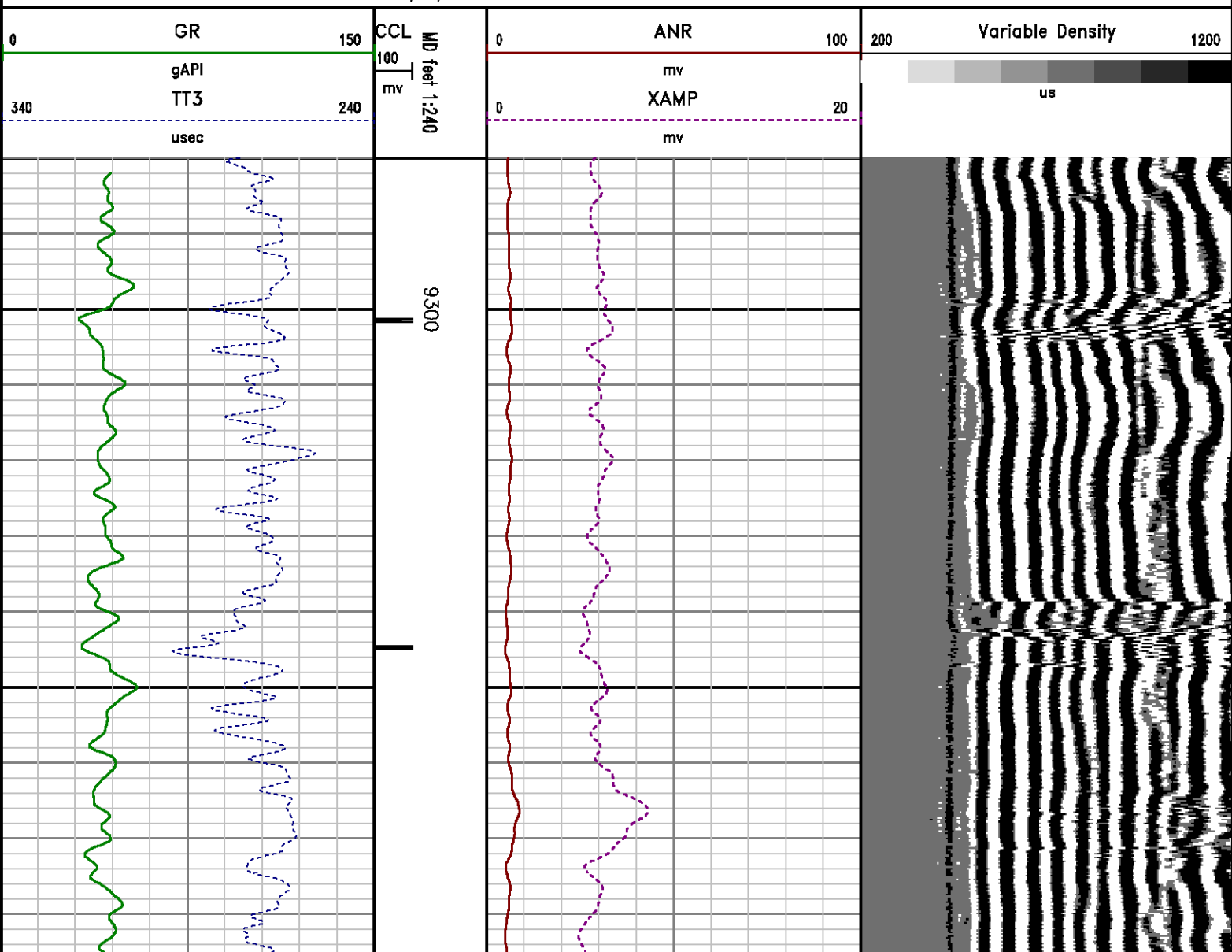
Well : FEDERAL GM 702-4-HN1

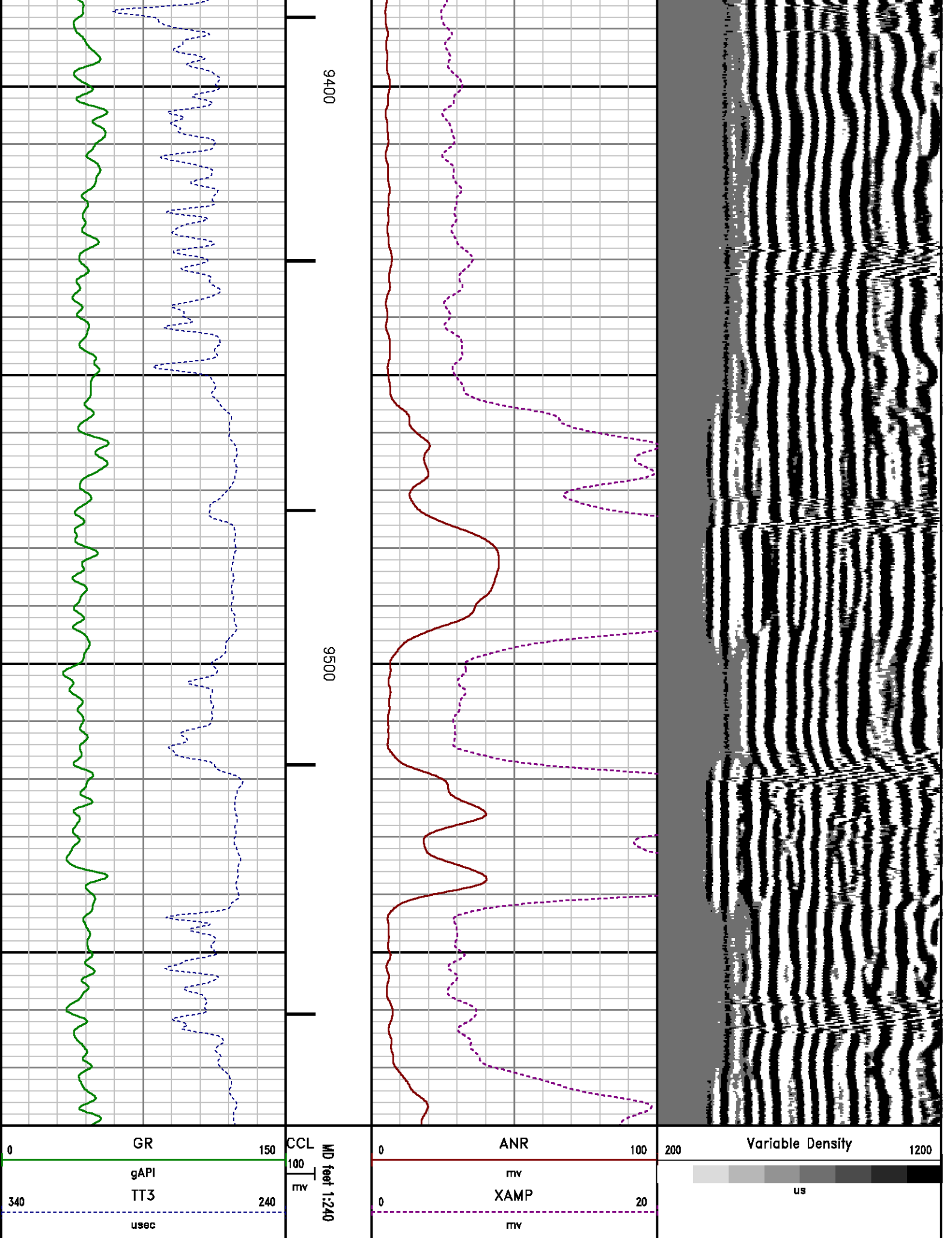
File Name : d:\welldata\702cb1\repeat.xtf

Mode : PlotMgr 5.4.504

Interval : 9280.00 - 9580.00 feet UP

Created : 8/10/2013 12:22:03 PM





9400

9500

0	GR	150
	gAPI	
340	TT3	240
	usec	

CCL	MD feet 1:240
100	mv

0	ANR	100
	mv	
0	XAMP	20
	mv	

200	Variable Density	1200
	us	

CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP\106AUG10_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sat Aug 10 10:44:46 2013 TOOL SERIES: 1426XA ASSET: 106 SEQ: AUG10

Tool Delay [usec] Tank OD in Tank Wt lbm/ft Tank ID in

RECEIVER	Travel Time [usec]	Amp. Gate Start [usec]	Amp. Gate Width [usec]	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Amp Ref. [mV]	Shop Factor
CAL Pulse	219	216	30	166	25	-0.243	100.00	0.19
3 Ft. Receiver	219	216	30	166	25	-0.249	100.00	0.19
5 Ft. Receiver	327	323	30	261	25	0.629	150.00	0.21
Radial #1	218	216	30	166	25	-0.930	100.00	0.19
Radial #2	218	216	30	166	25	-0.313	100.00	0.19
Radial #3	219	216	30	166	25	-0.186	100.00	0.19
Radial #4	219	216	30	166	25	-0.243	100.00	0.19
Radial #5	219	216	30	166	25	-0.066	100.00	0.19
Radial #6	219	216	30	166	25	-0.528	100.00	0.19
Radial #7	217	216	30	166	25	-0.313	100.00	0.19
Radial #8	219	216	30	166	25	-0.516	100.00	0.19

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\106AUG10 fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sat Aug 10 10:47:57 2013 TOOL SERIES: 1426XA ASSET: 106 SEQ: AUG10

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	166	25	0.015	0.000	1.00	100.000
3 Ft. Receiver	246	30	-0.515			
5 Ft. Receiver	363	30	-0.802			
Radial #1	246	30	-0.860			
Radial #2	246	30	-0.715			

Radial #3	246	30	-0.672
Radial #4	246	30	-0.658
Radial #5	246	30	-0.537
Radial #6	246	30	-0.535
Radial #7	246	30	-0.395
Radial #8	246	30	-0.577

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

CENTRALIZER

Series	RALCENT
Mnemonic	CENT
Diameter	3.12"
Weight	20.00 lb

PROBE 2 3/4 DUAL RECEIVER RADII

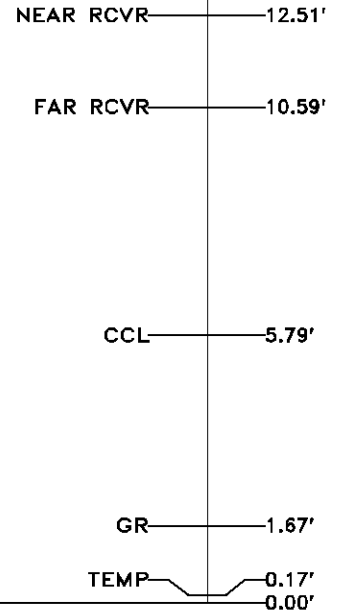
Series	1426XA
Mnemonic	PROB
Diameter	2.75"
Length	11.17'
Measure Point	0.75' FAR RCVR



24.66'

XMIT 15.59'

Measure Point	2.67' NEAR RCVR
Measure Point	5.75' XMIT
Temp Rating	350.00 °F
Press Rating	18000.00 PSI



CENTRALIZER	
Series	RALCENT
Mnemonic	CENT
Diameter	3.12"
Weight	20.00 lb

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: 24.66'
 Total Weight: Not Available
 Max Diameter: 0' 3.12"



Baker Atlas



Company	WPX ENERGY	
Well	FEDERAL GM 702-4-HN1	
Field	GRAND VALLEY	
County	GARFIELD	State COLORADO

File No:	CH075476
API No:	0504522050000

Location	SHL: 1401' FNL & 2354' FEL SEC:4
	BHL: 1974' FNL & 1702' FEL SEC:9
SEC	9
TWP	75
RGE	96W

Elevations	KB 5557 ft
	DF
	GL 5532 ft

9 7S 96W
GM 32-4
AZTEC 1000