



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: CH074109	Company Well Field County	WPX ENERGY HOEPPLI RMF 33-36 RULLISON GARFIELD	State COLORADO
API No: 05045215520000			
56 SS 94W RMF 33-35 NABORS SSD 576	Location SHL: 2607' FNL & 2601' FEL BHL: 1292' FSL & 1749' FEL SEC 36 TWP 6S RGE 94W	Other Services RPM	
Permanent Datum Log Measured From Drill Measured From	G.L. _____ Elevation 6528 ft K.B. _____ 26 ft Above P. D. KELLY BUSHING	Elevations KB 5554 ft DF GL 6528 ft	

Date	20/JUL/13	
Run	ONE	
Service Order	B24A54	
Depth Driller	9016 ft	
Depth Logger	8979 ft	
Bottom Logged Interval	8969 ft	
Top Logged Interval	26 ft	
Time Started	7:30	
Time Finished	12:00	
Operator Rig Time	4.5 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	N/A	
Salinity	N/A	
Fluid Level	73 ft	
Logged Cement Top	N/A	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	N/A	
Nominal Logging Speed	45 fpm	
Maximum Recorded Temperature	241 degF	
Reference Log	N/A	
Reference Log Date	N/A	
Equipment No.	4271	GRAND JUNCTION
Recorded By	W. KINSEL	9712
Witnessed By	MR. BOB CADY	GRAND JUNCTION

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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	1127.25 ft
8.75 In	0 ft	9097 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 In	N/A	N/A	0 ft	1100 ft
4.5 In	11.6 lbm/ft	1-80	0 ft	9016 ft

Remarks
ALL DATA IN THIS LOG WAS DEPTH SHIFTED TO MATCH THE TOP CCL MARK WITH KB LEVEL
AT THE CLIENT'S REQUEST. THE AMOUNT OF LINEAR SHIFT WAS 11 FEET DOWN.
SHORT JOINT: 5589' - 5612'
BHT: 241 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	306.674	usec	33.143	9001.301
RAL	Amp Gate Start Near	199.599	usec	33.143	9001.301
RAL	Amp Gate Start Radial	199.599	usec	33.143	9001.301
RAL	Amp Gate Width Far	25.000	usec	33.143	9001.301
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RAL	casing od	4.500	inches	33.143	9001.301
RAL	casing wt	11.600	lbm/ft	33.143	9001.301
RAL	FB Start Far	291.900	usec	33.143	9001.301
RAL	FB Start Near	175.391	usec	33.143	9001.301
RAL	FB Start Radial	175.391	usec	33.143	9001.301
RAL	FB Thresh Far	10.000	mv	33.143	9001.301
RAL	FB Thresh Near	4.000	mv	33.143	9001.301
RAL	FB Thresh Radial	4.000	mv	33.143	9001.301
RAL	Fluid Travel Time	200.000	usec/ft	33.143	9000.831

DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
		ACAL	ANR	AR1	AR2	AR3	AR4
1426XA	-11.000	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

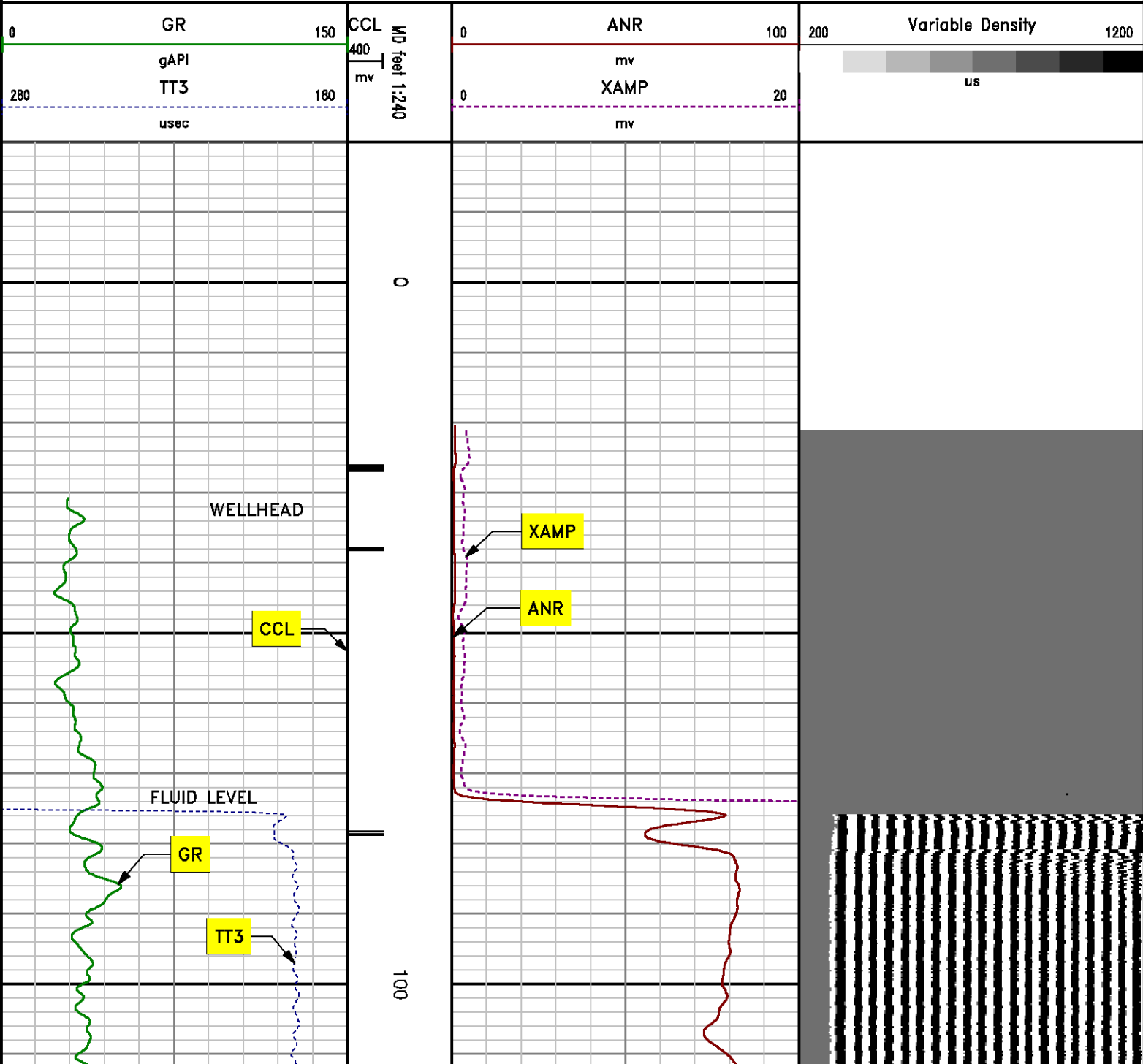
Well : HOEPPLI RWF 33-36

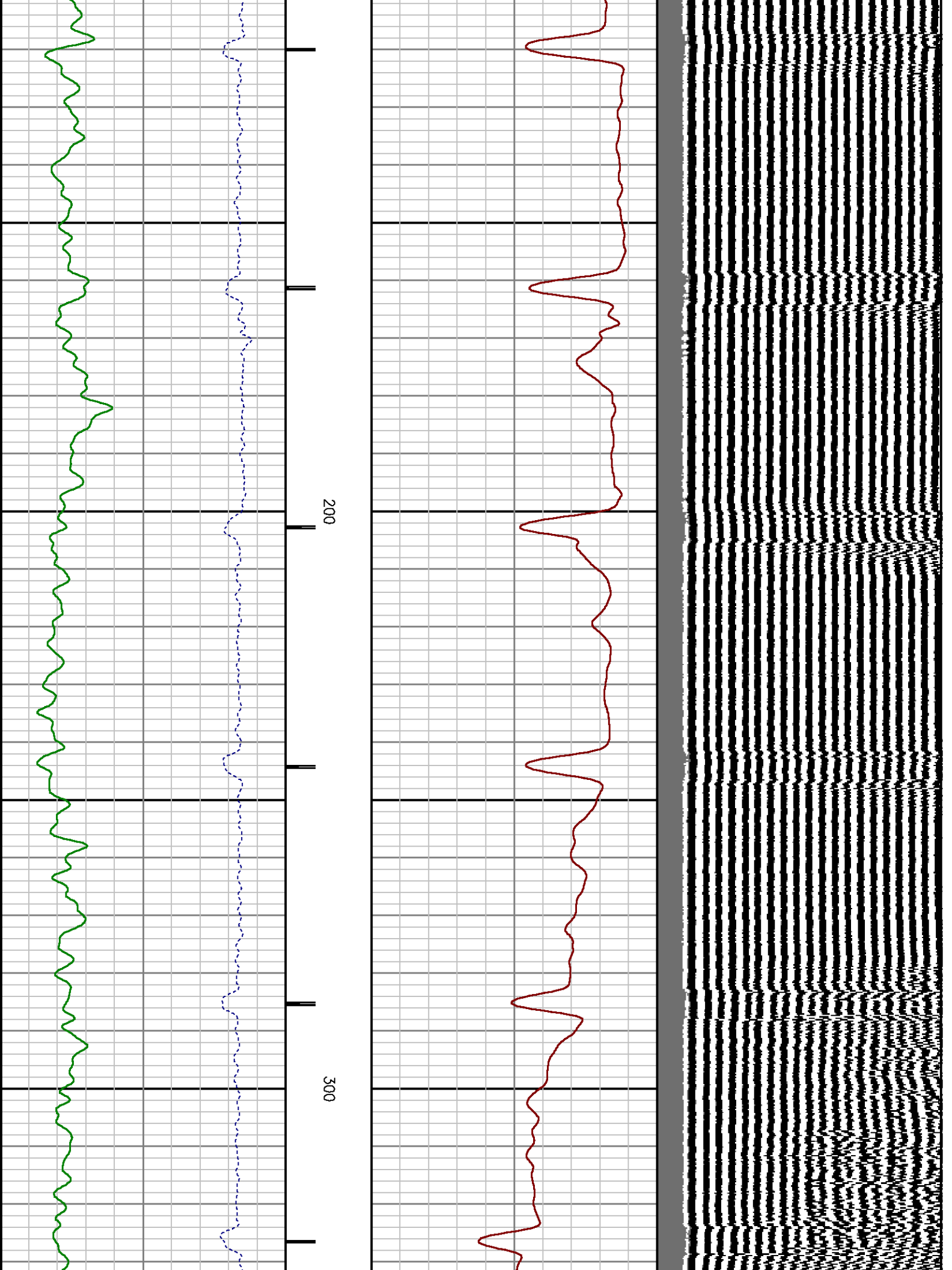
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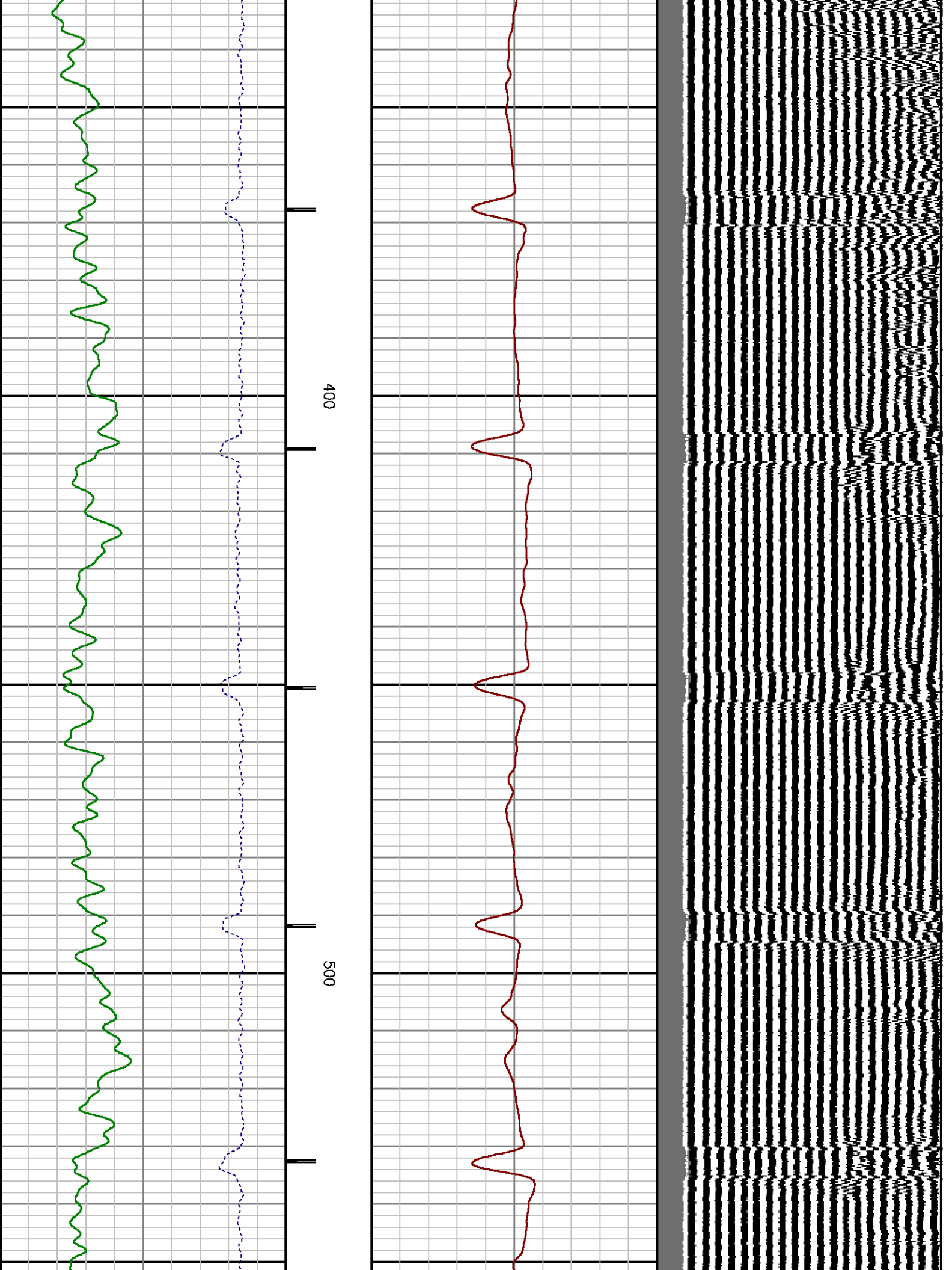
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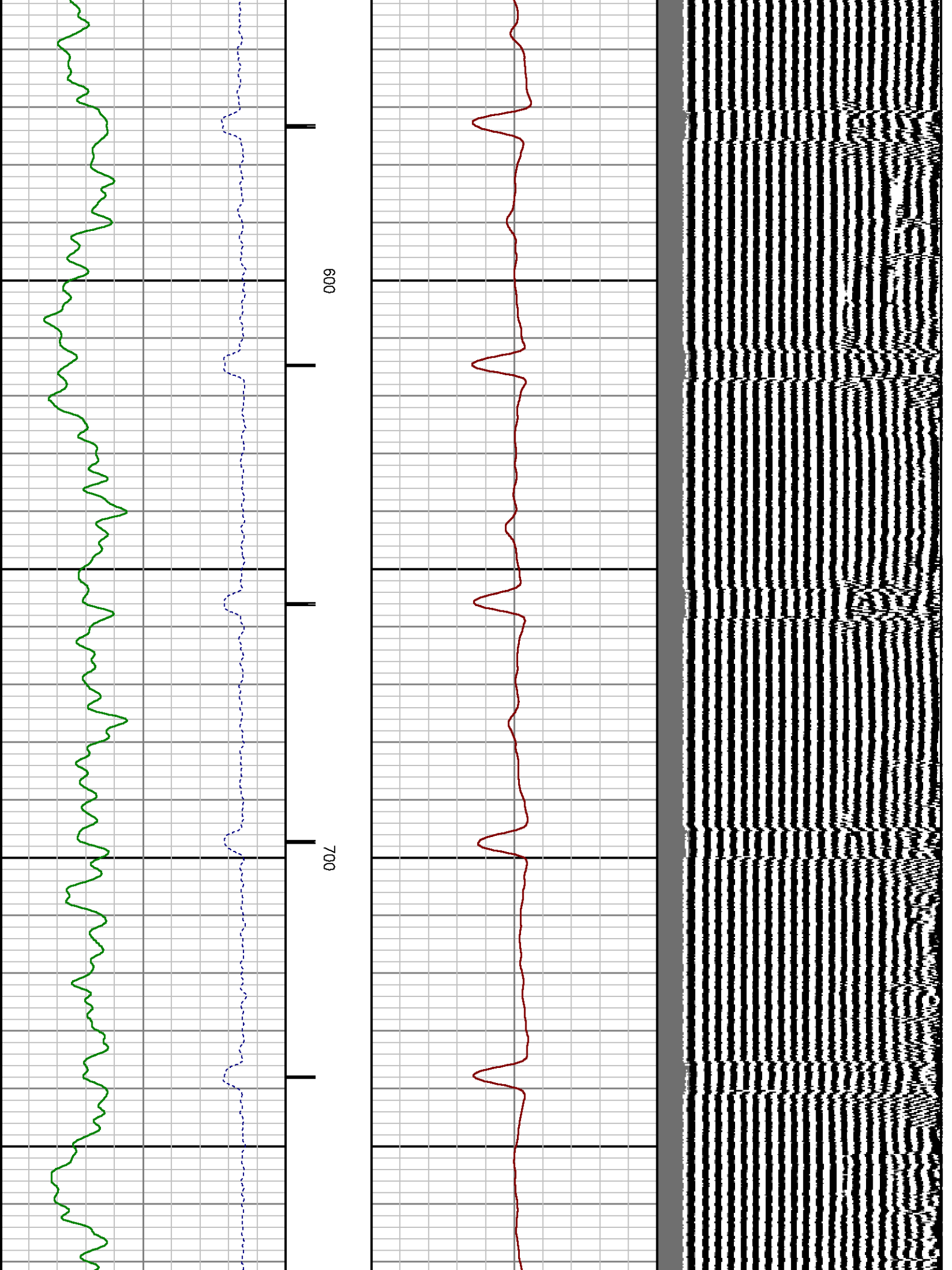
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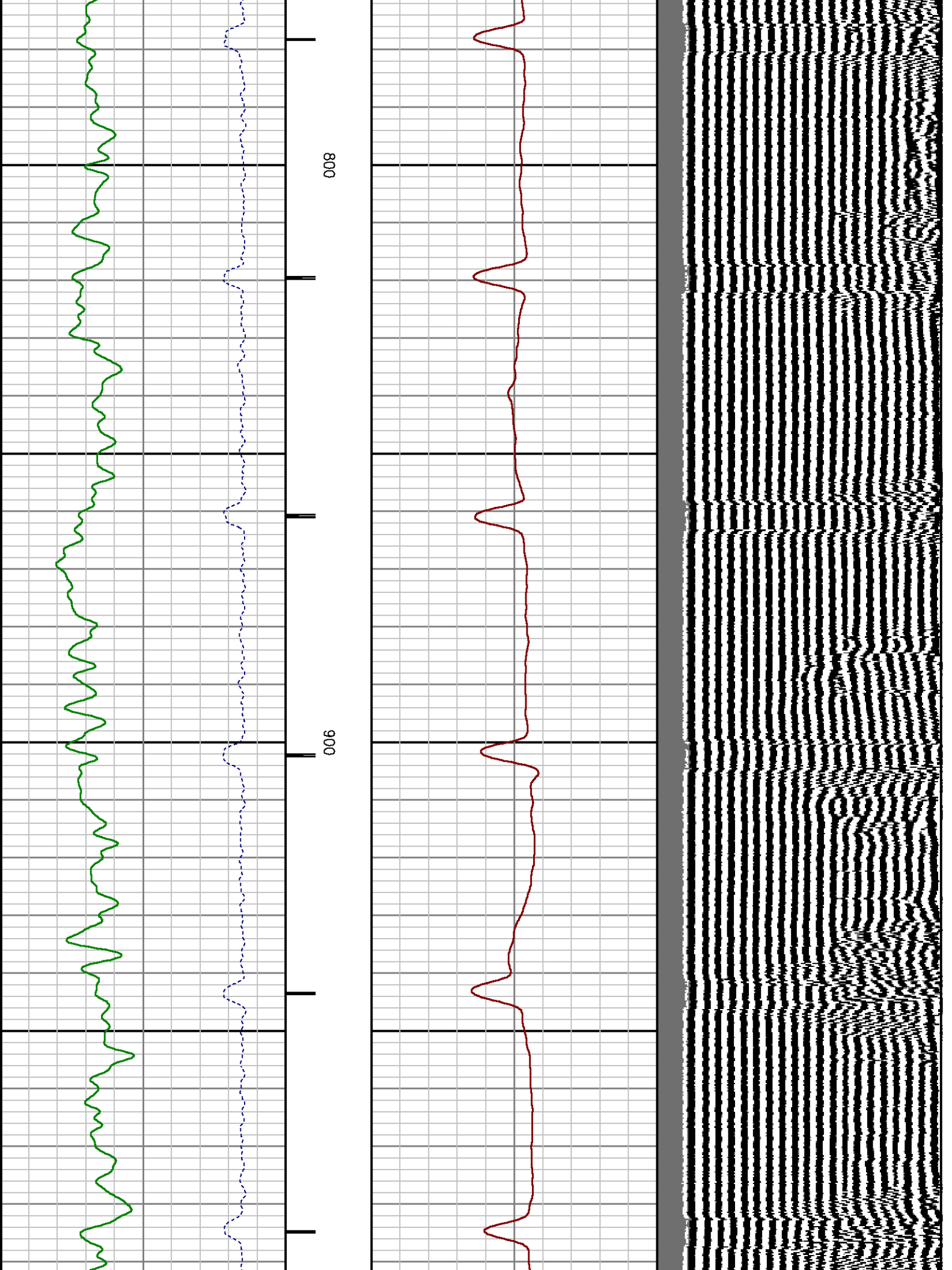
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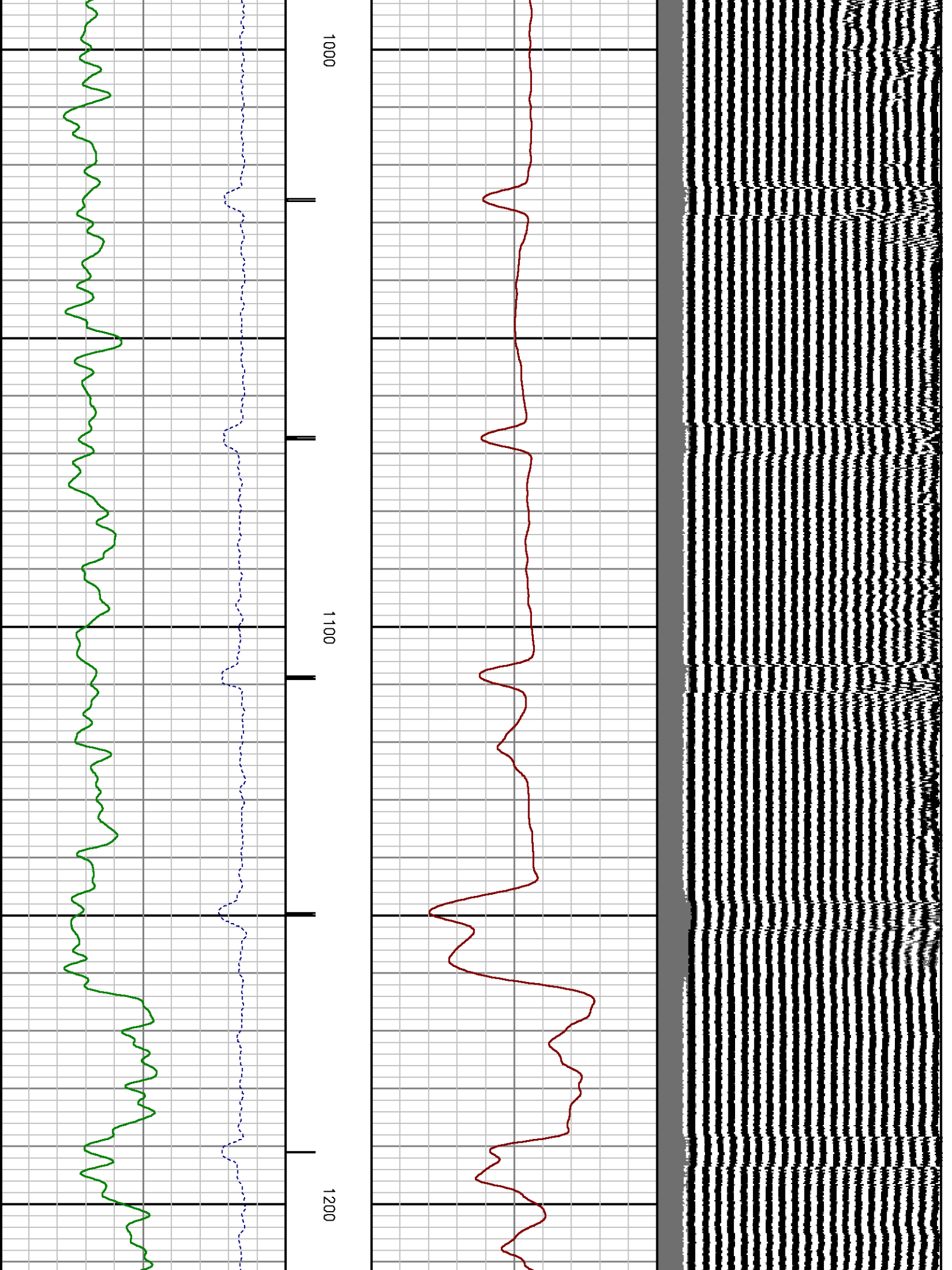


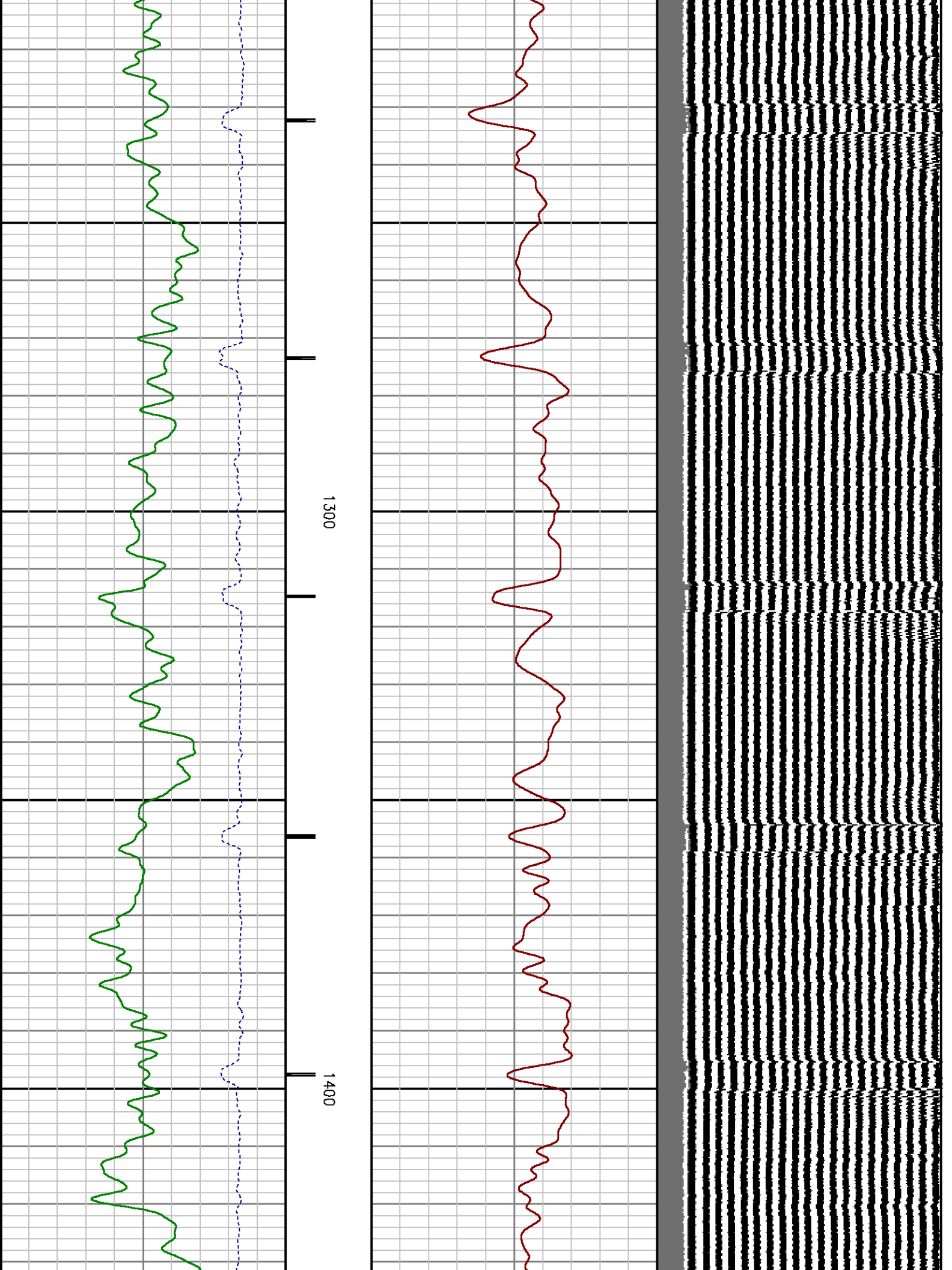


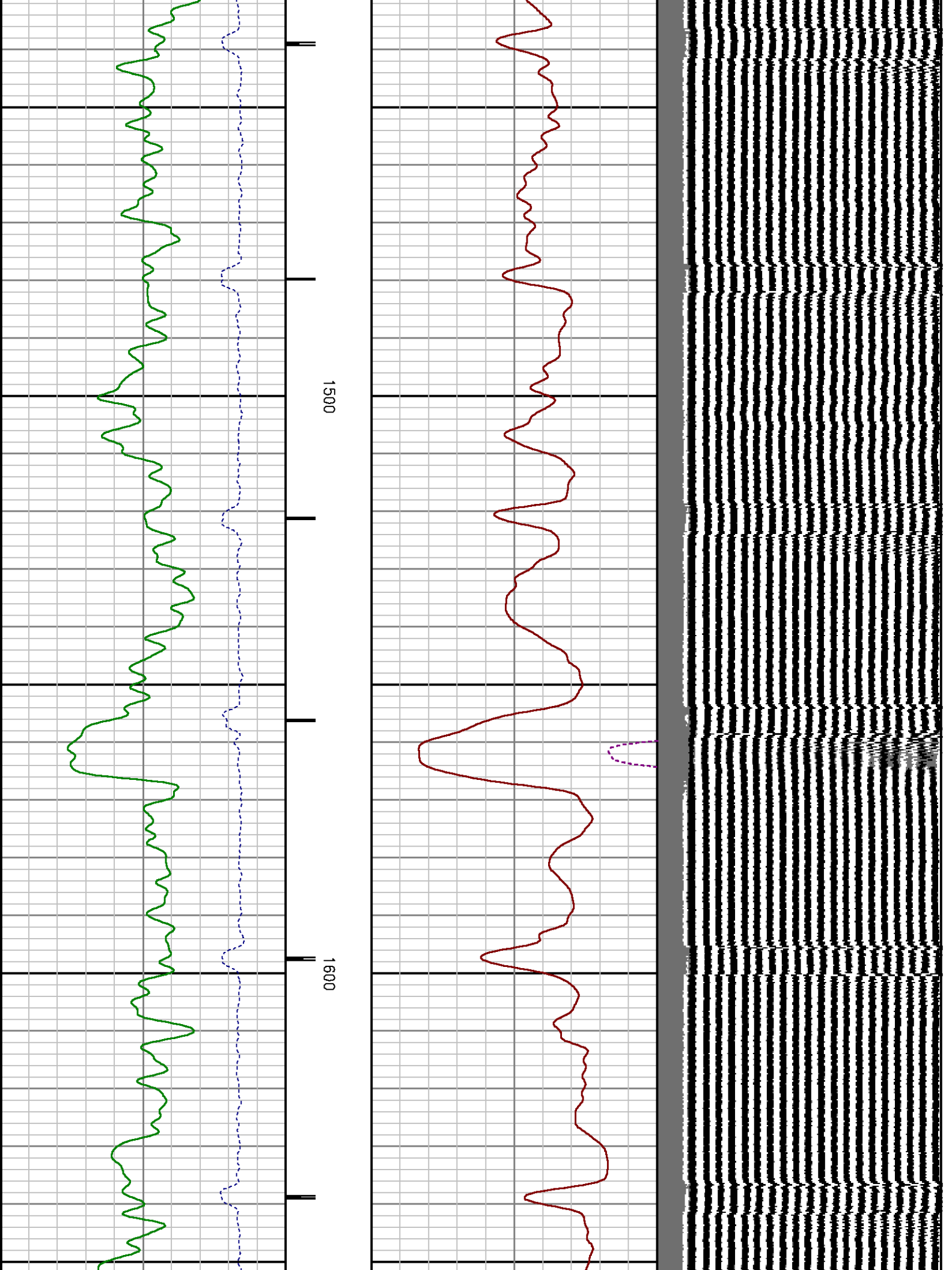


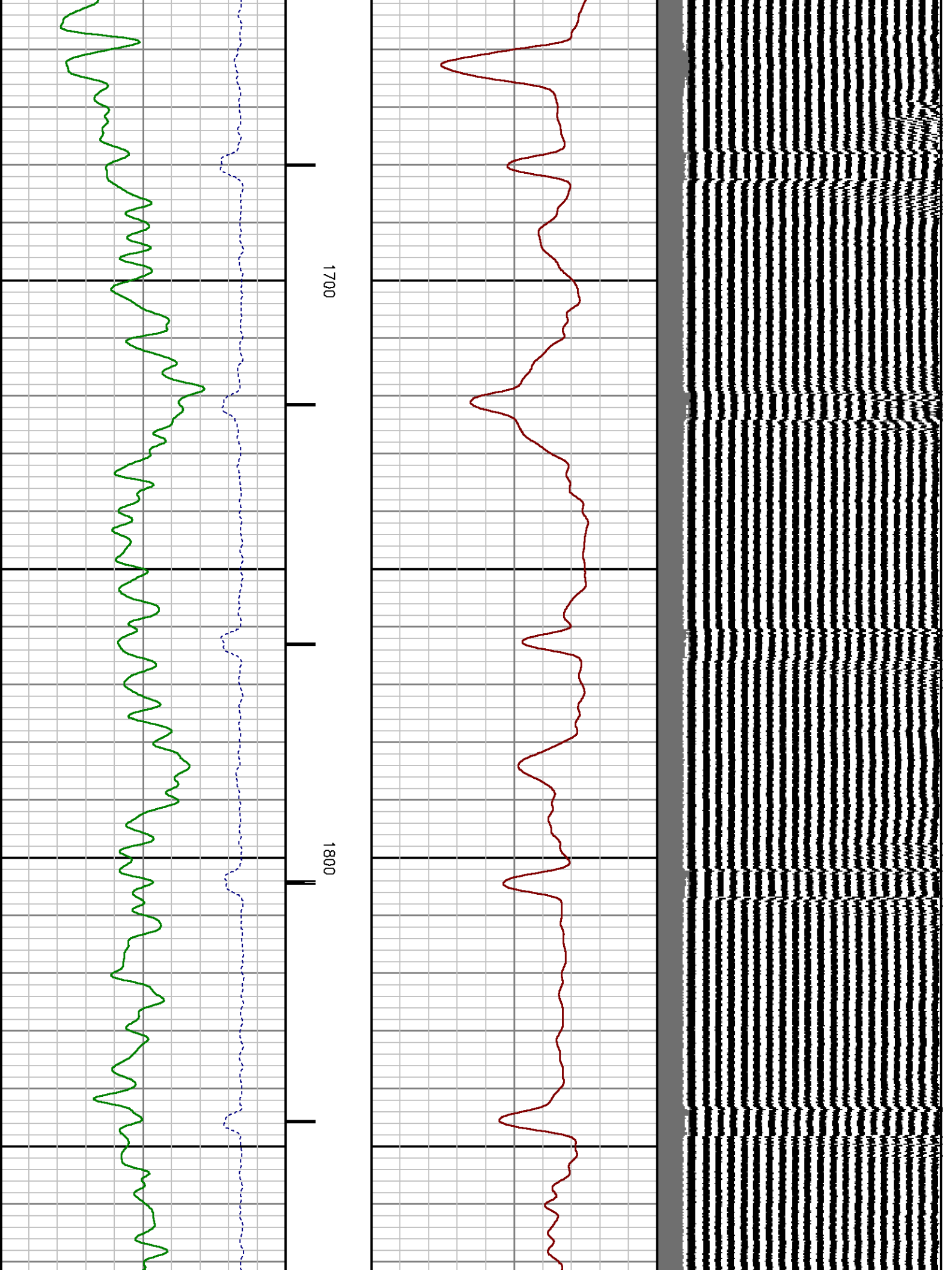


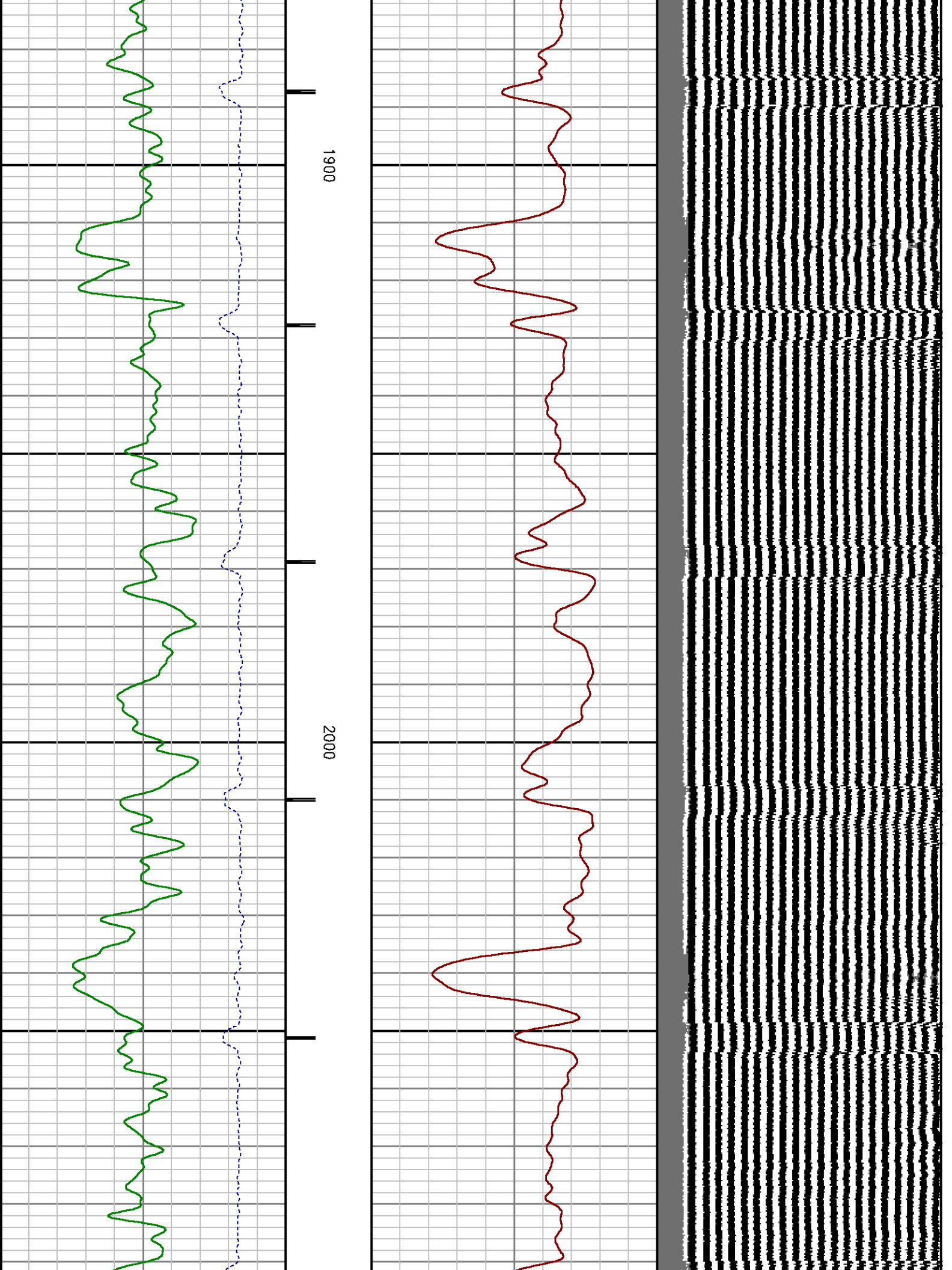


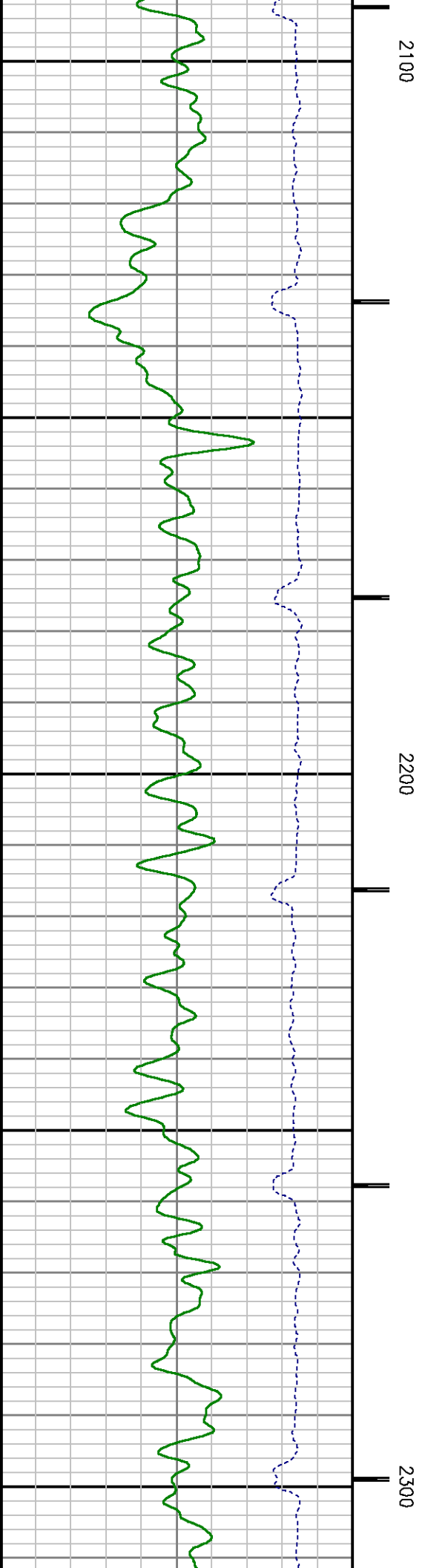
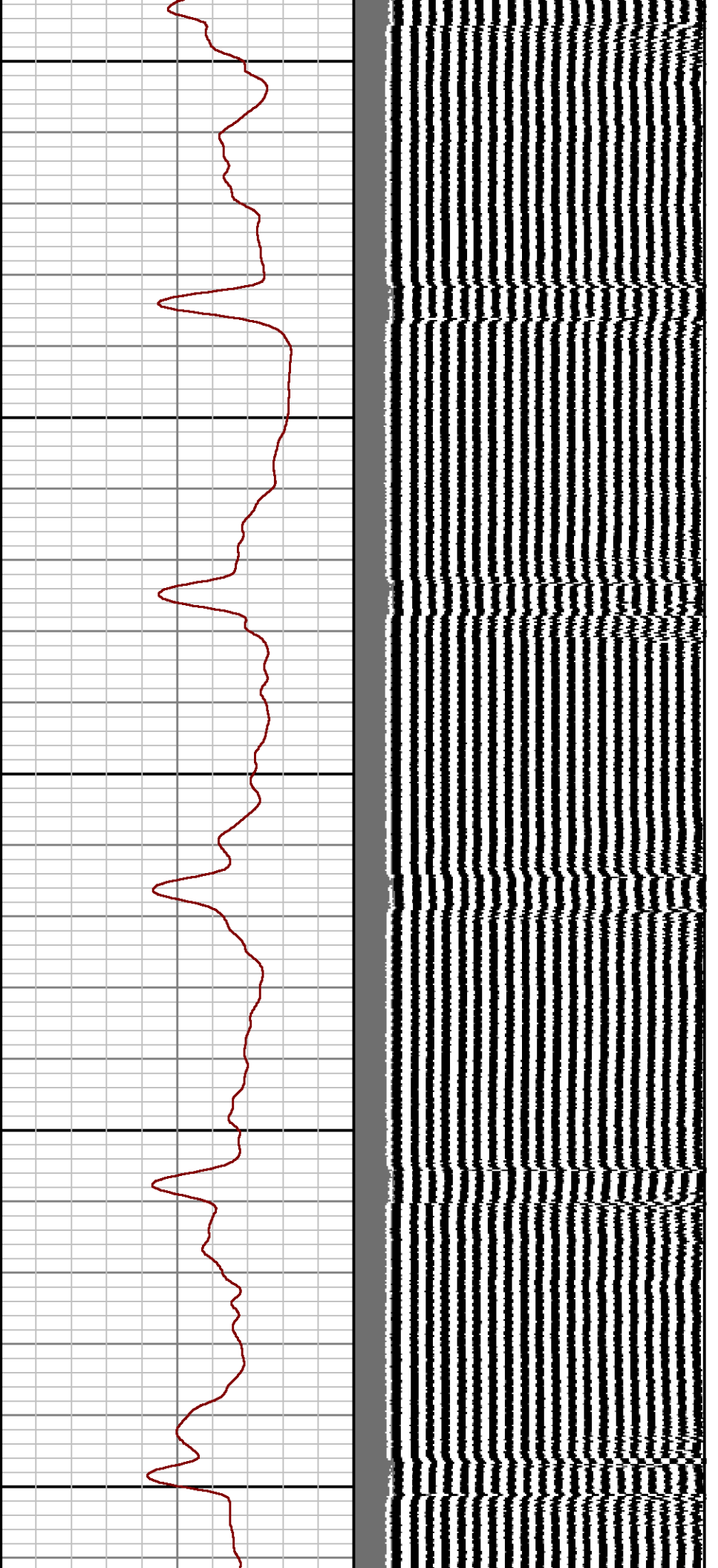


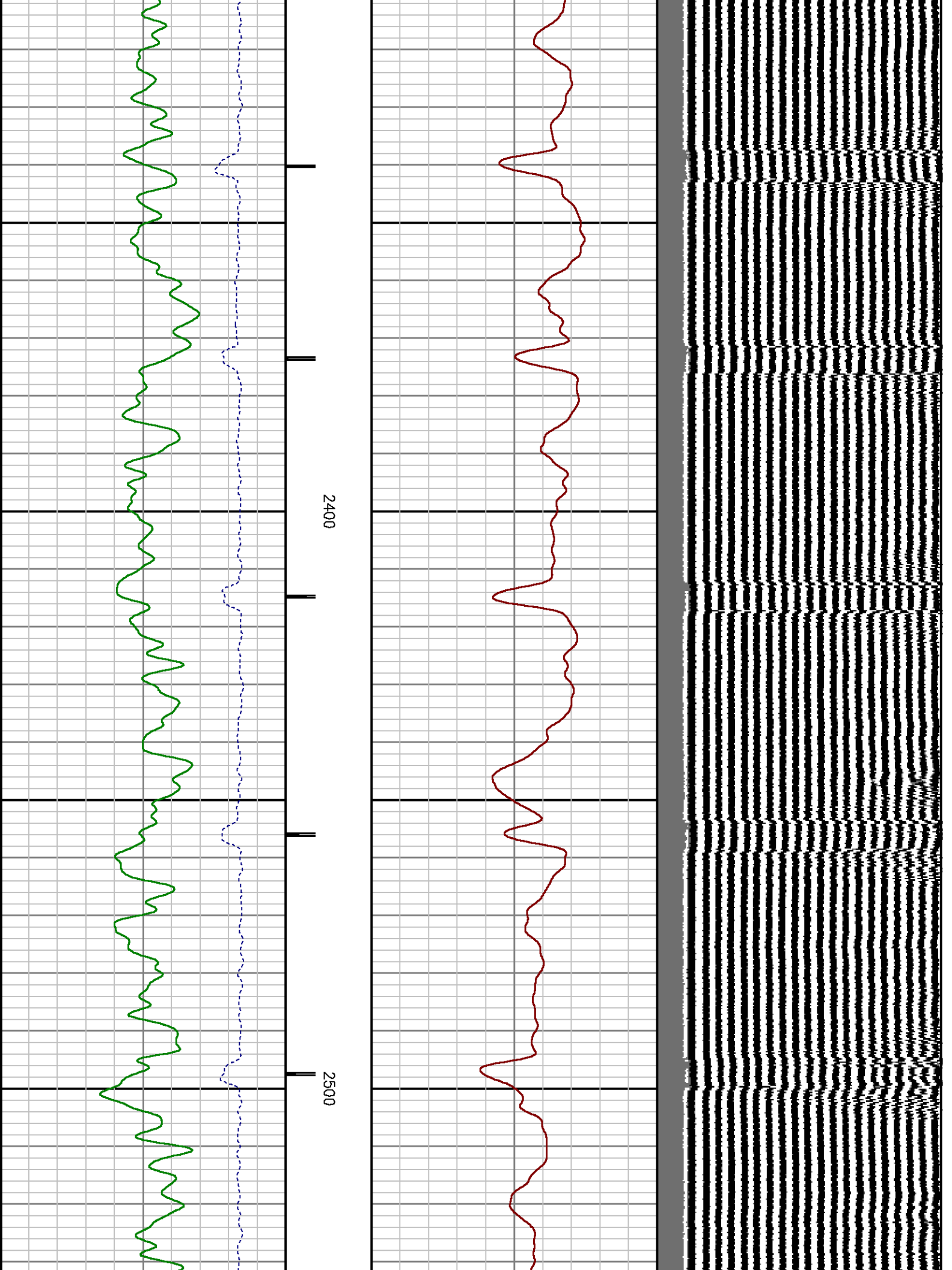


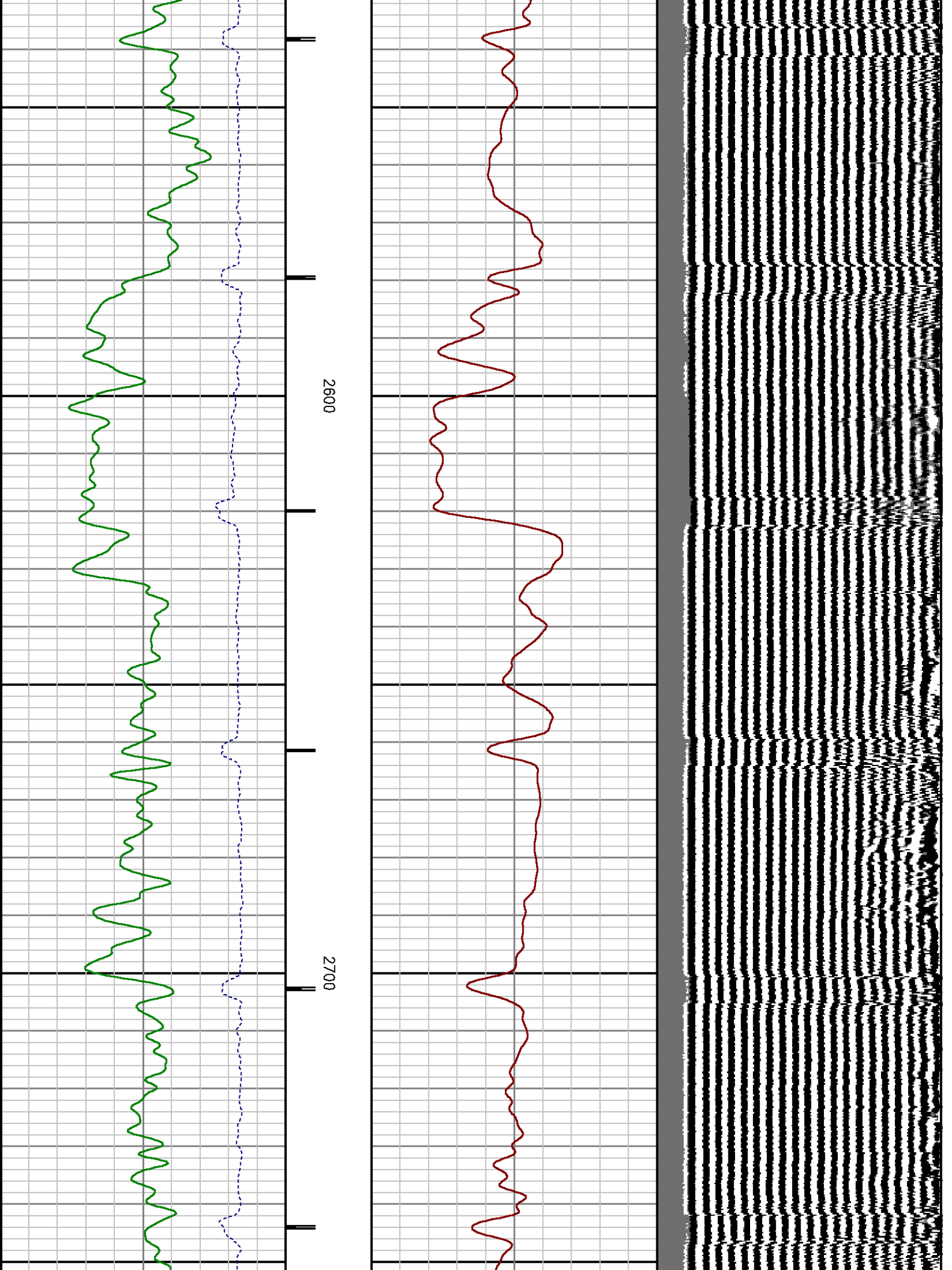


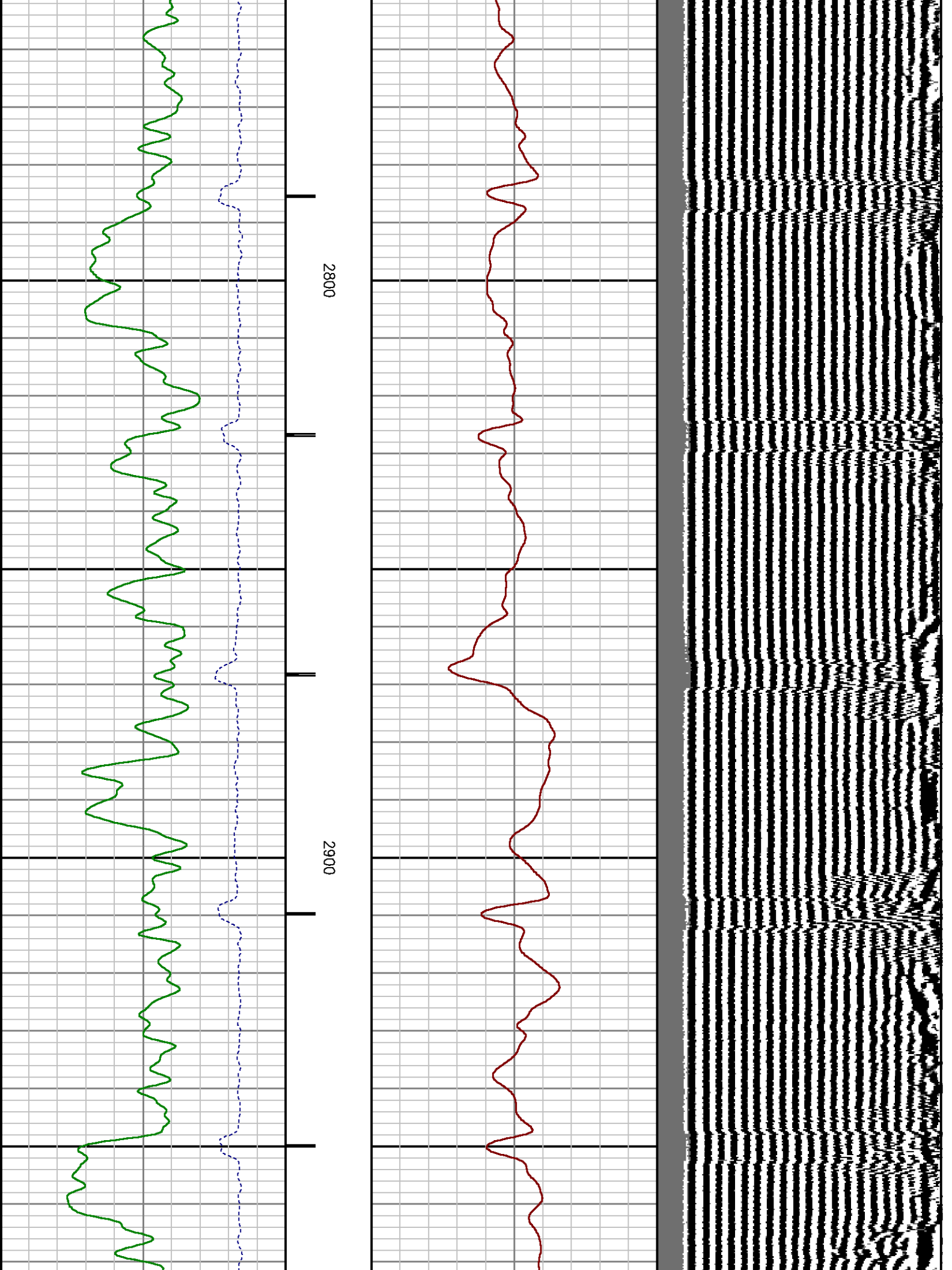


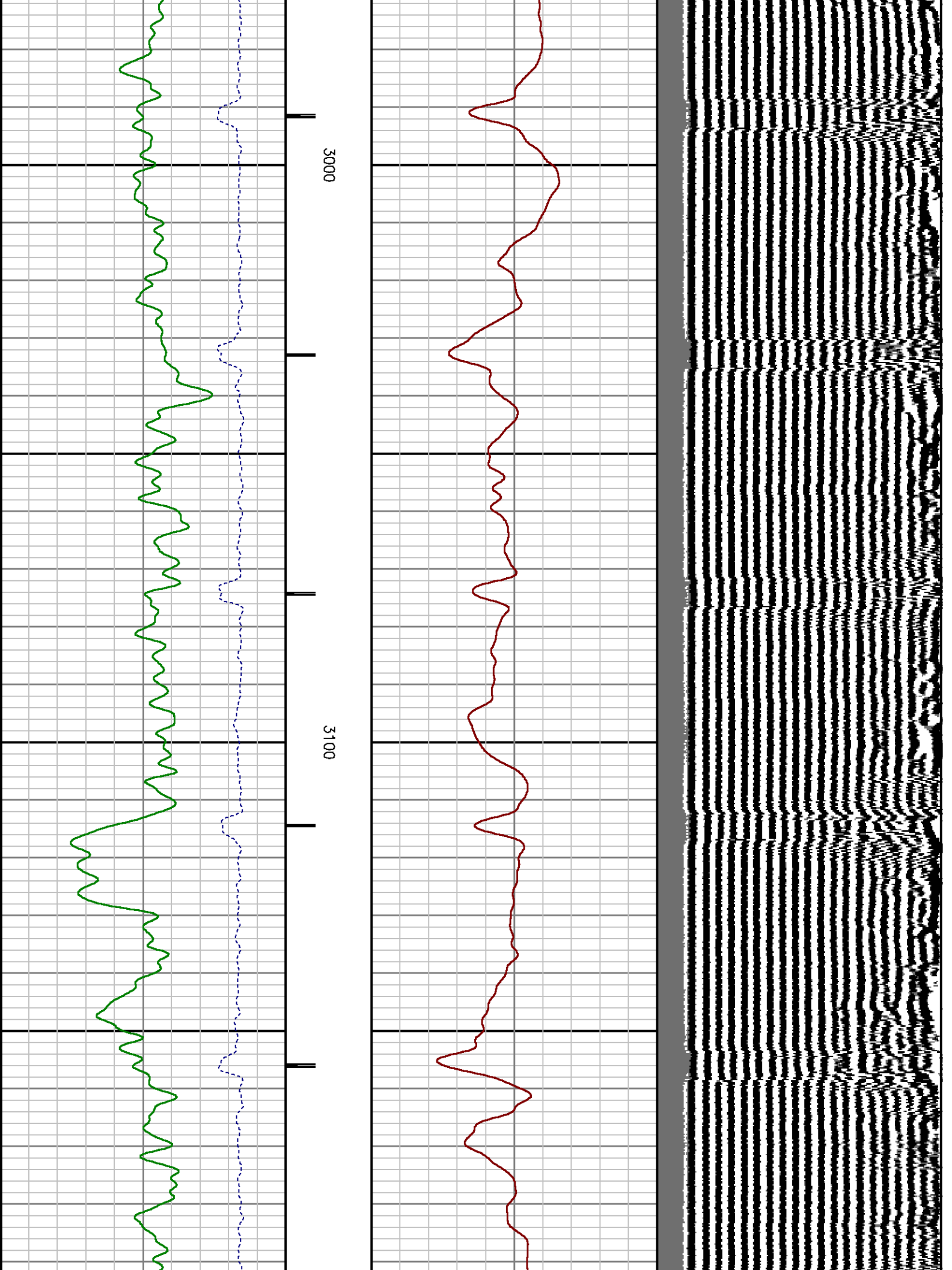


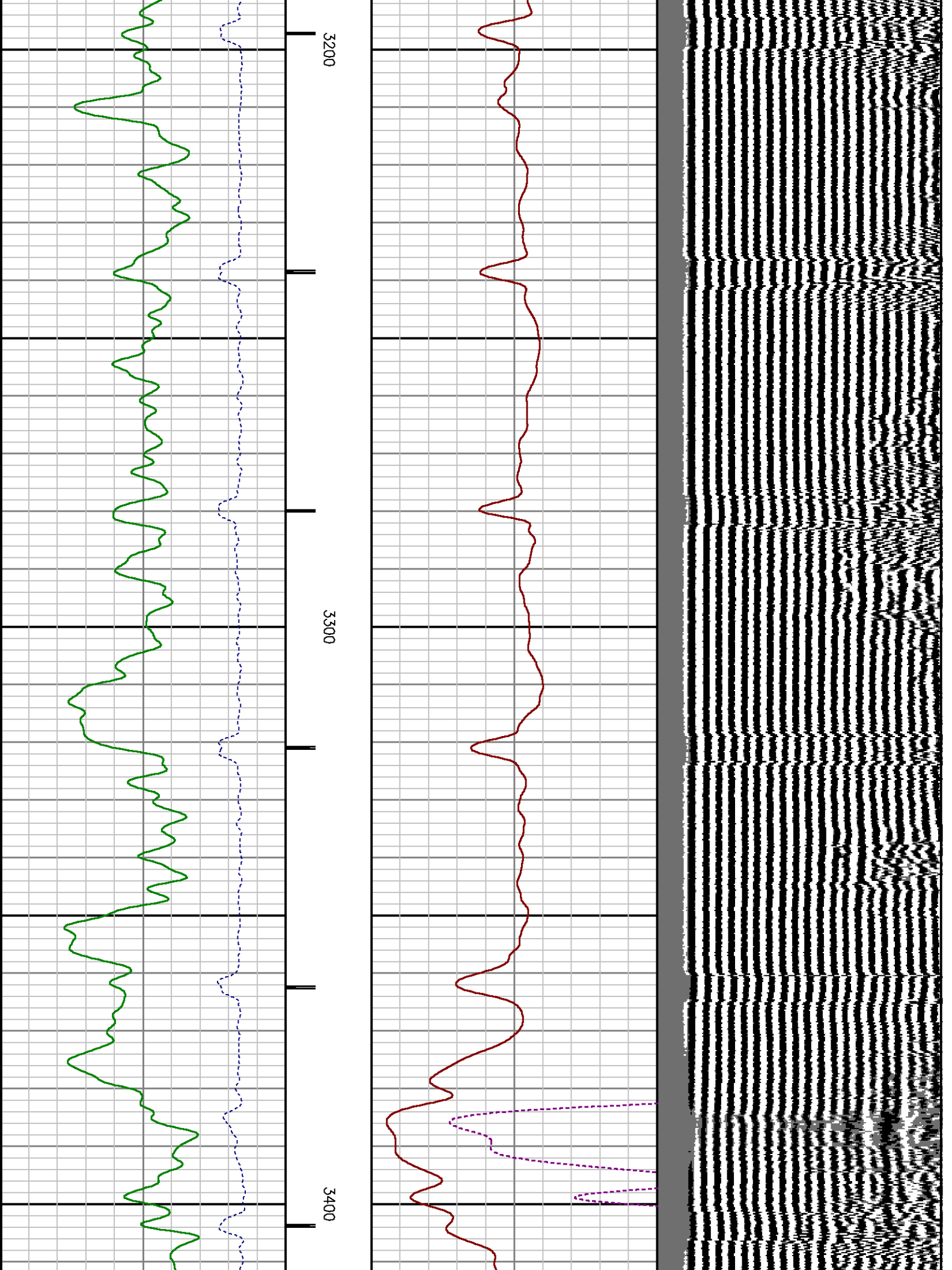


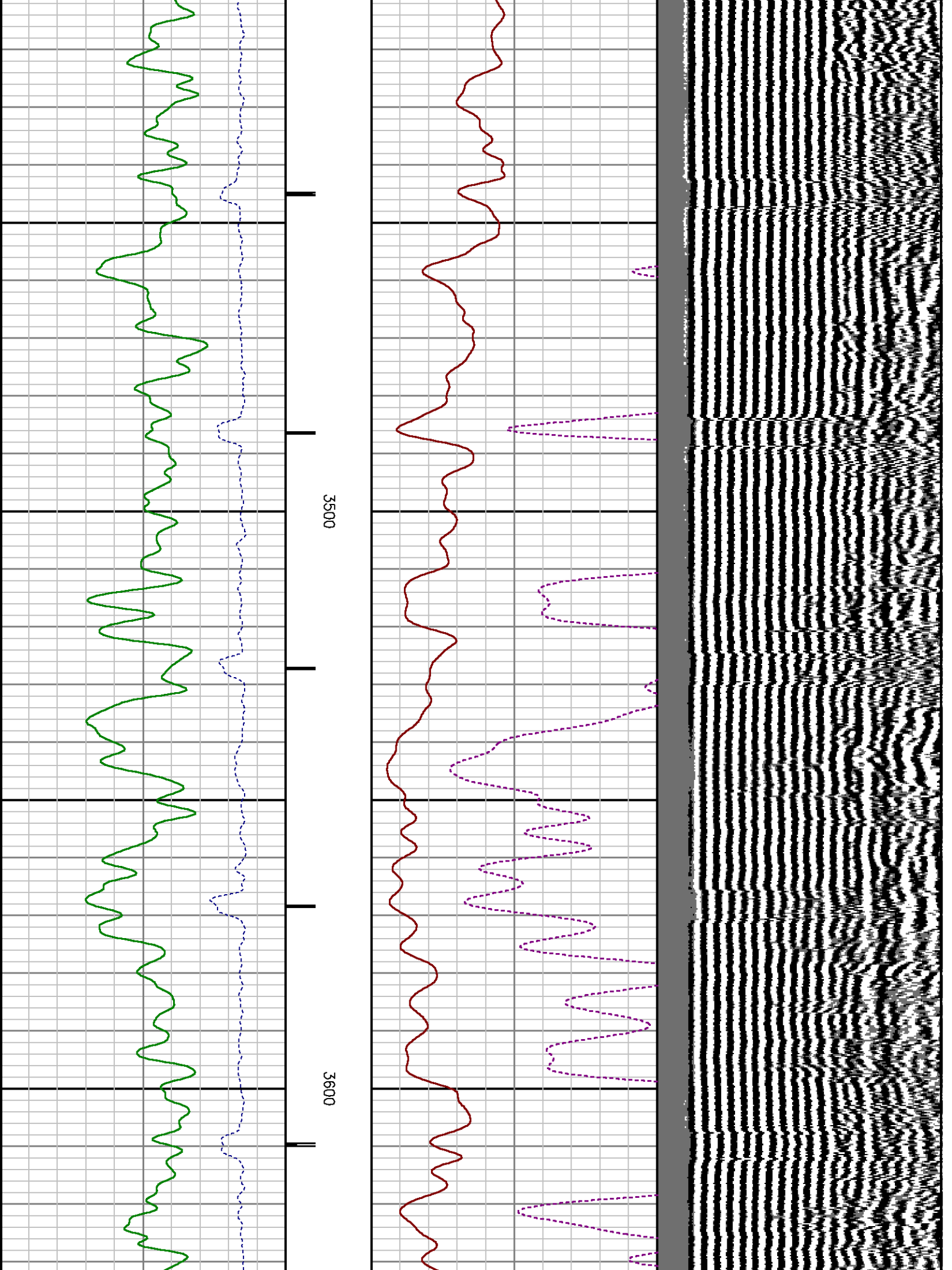


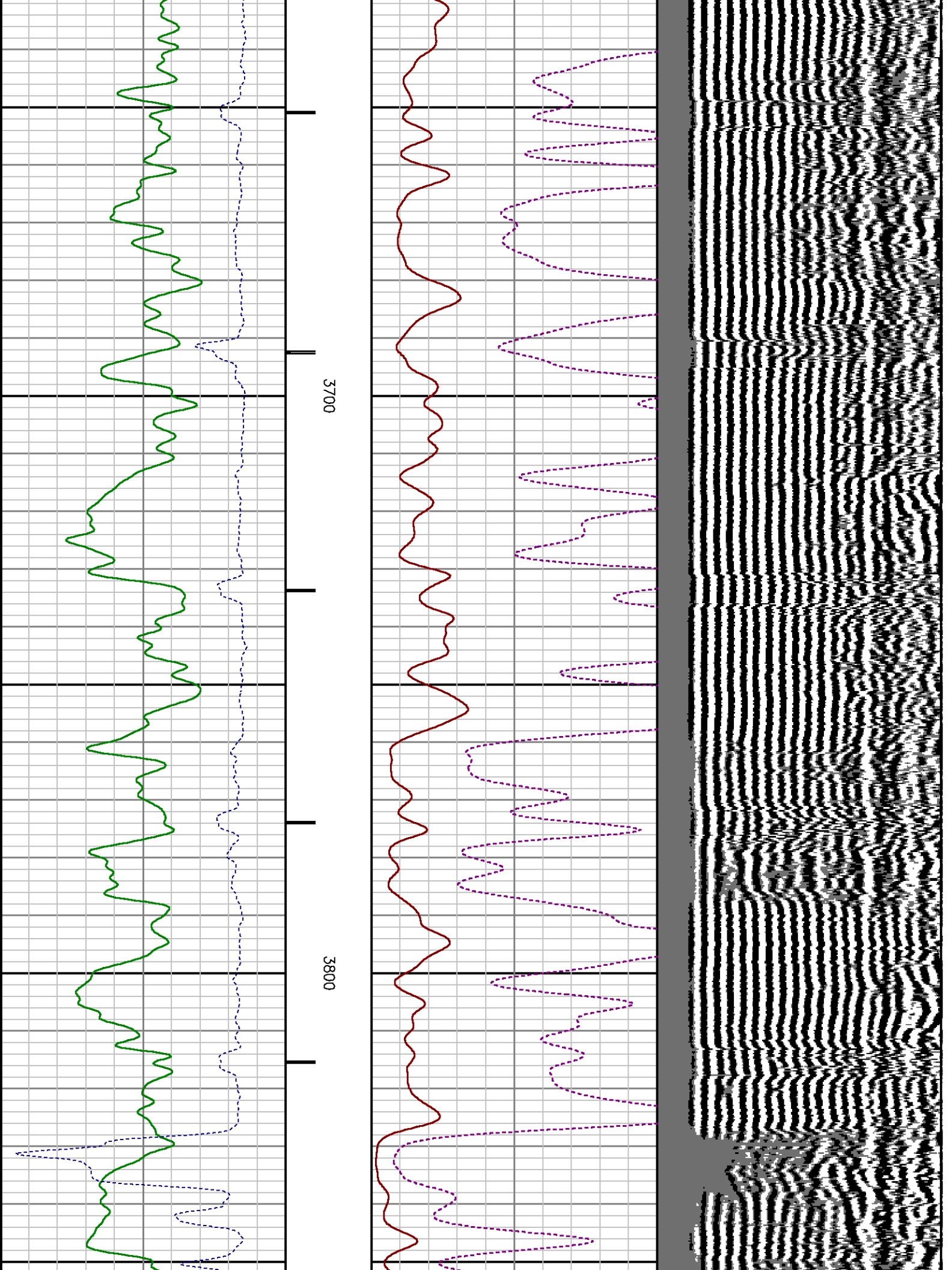


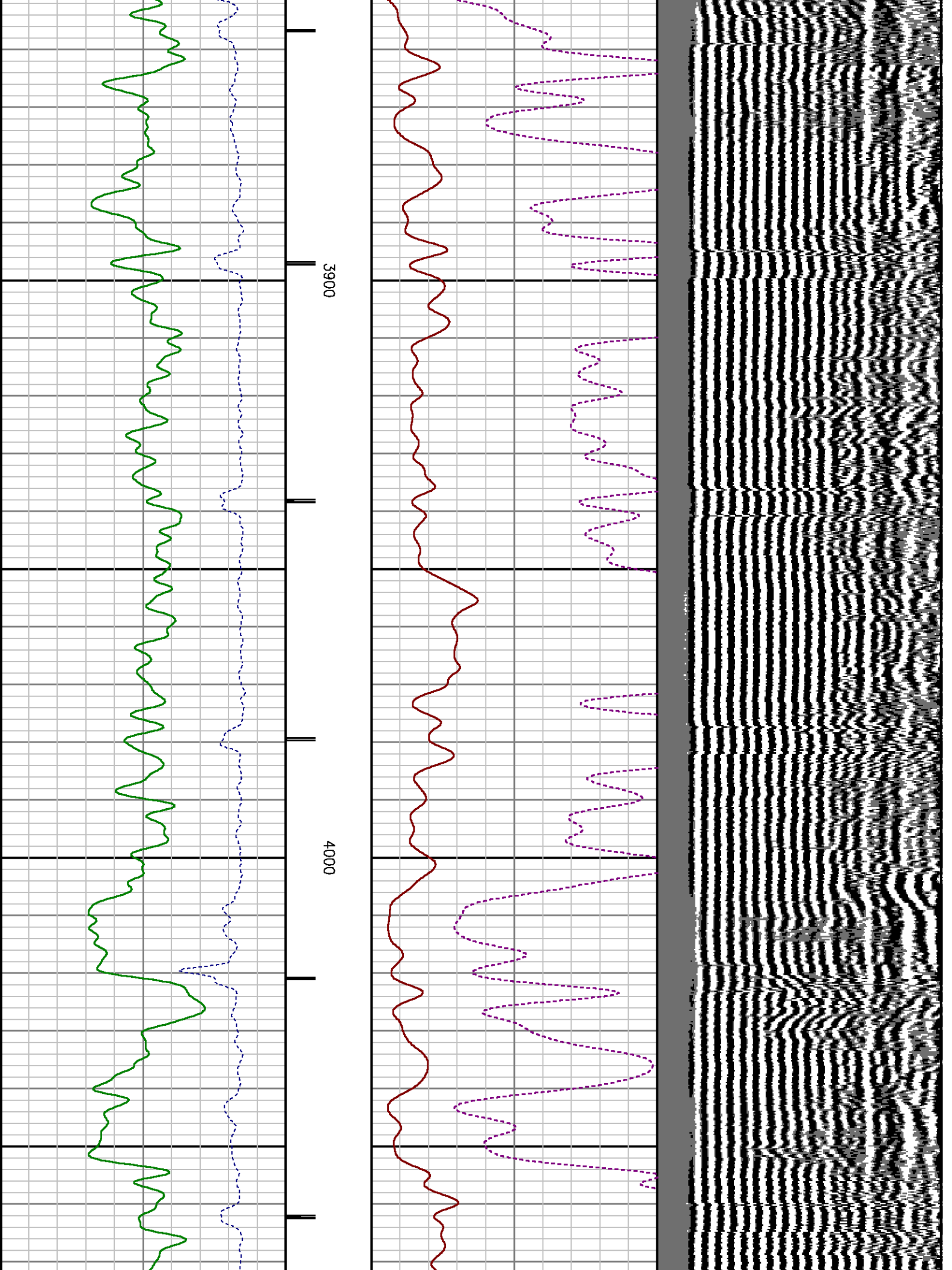


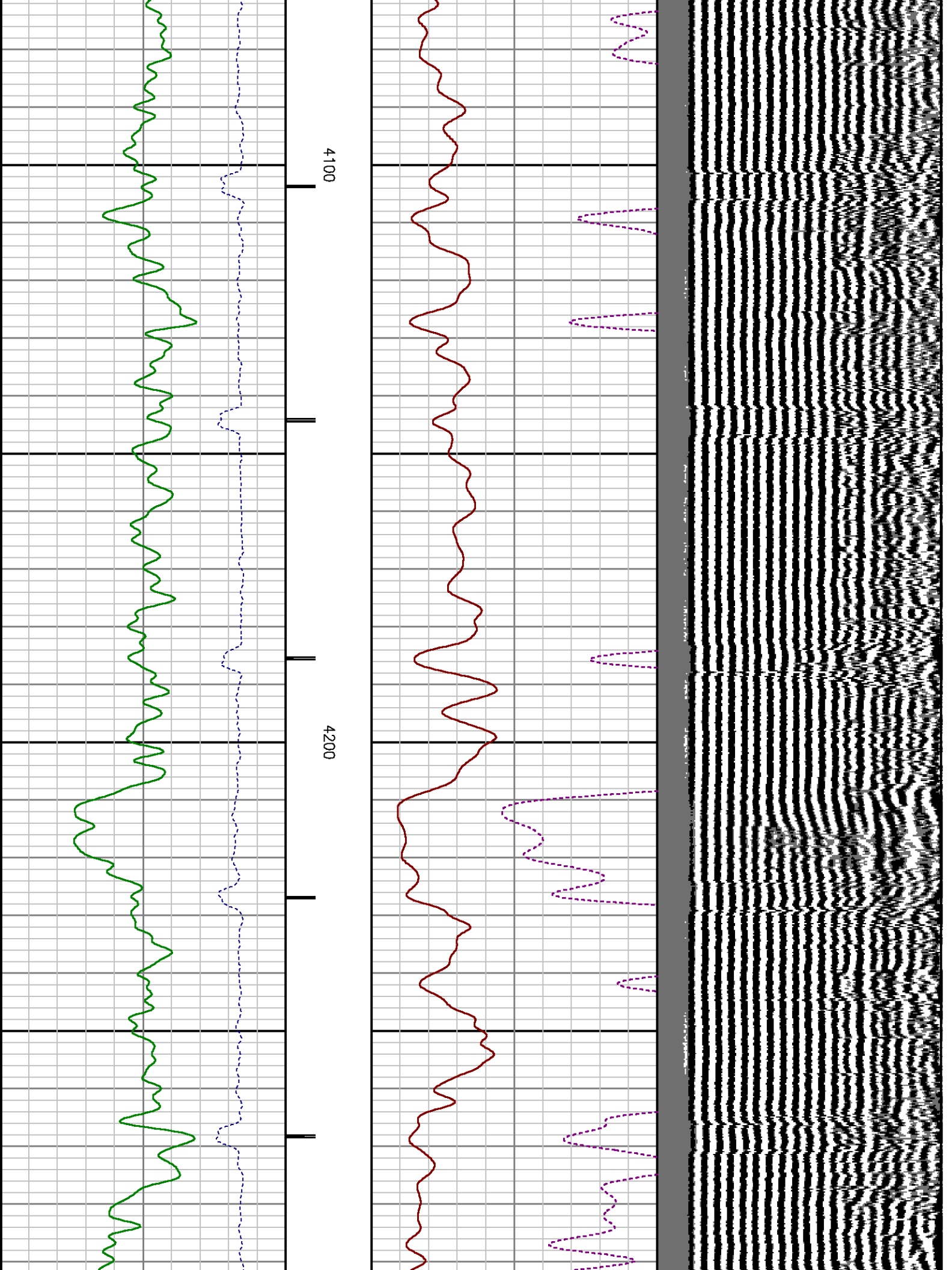


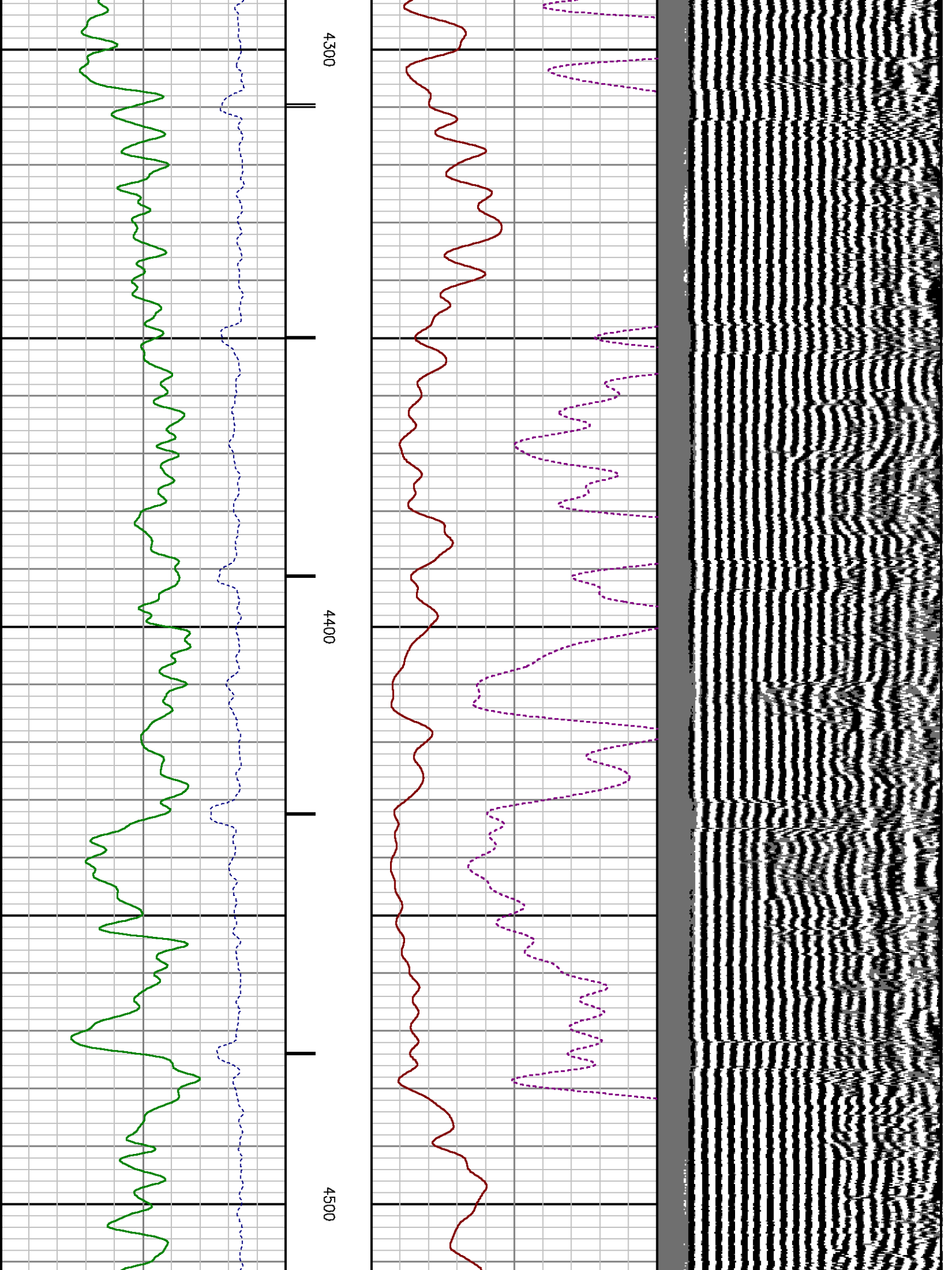


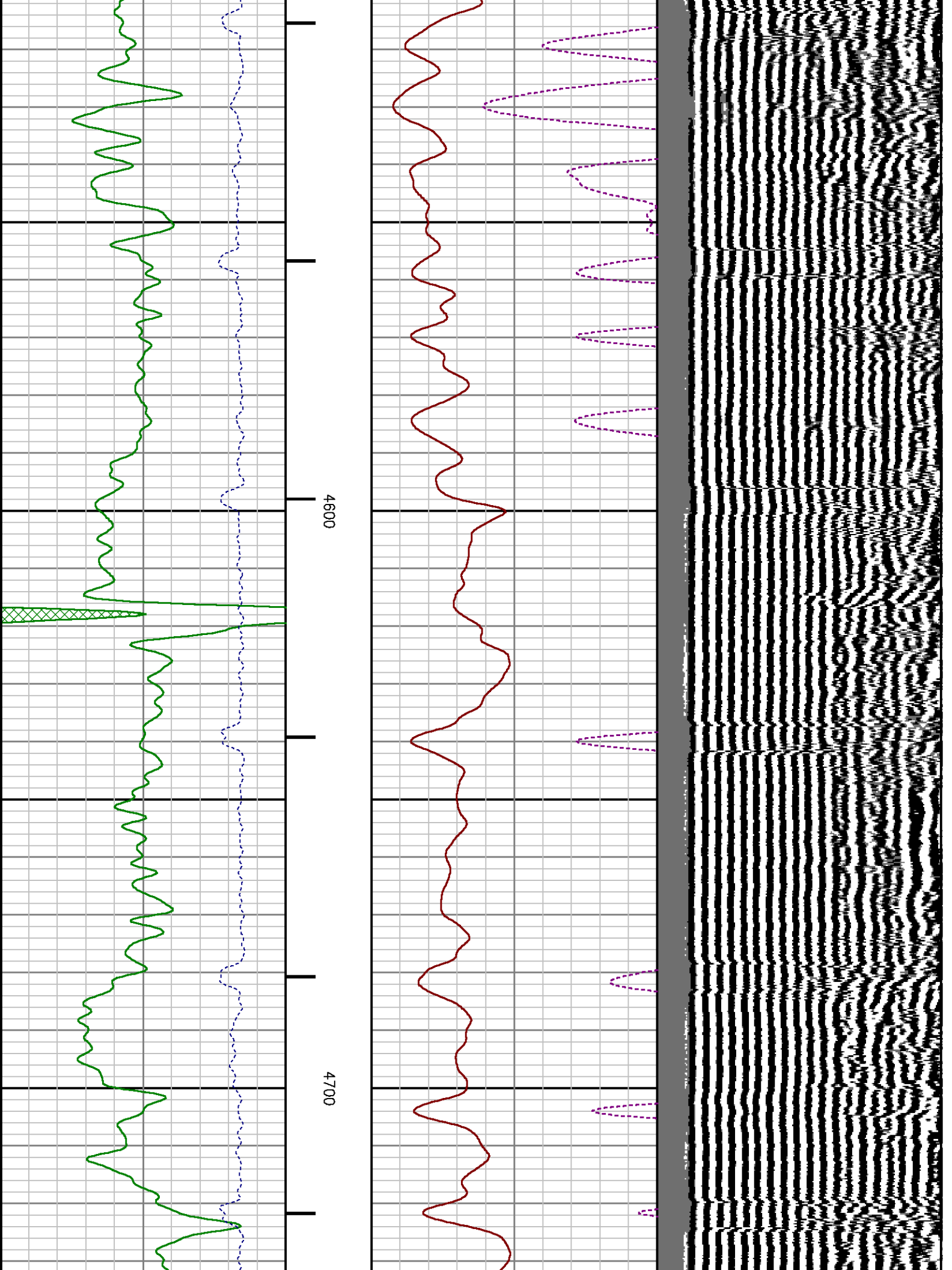


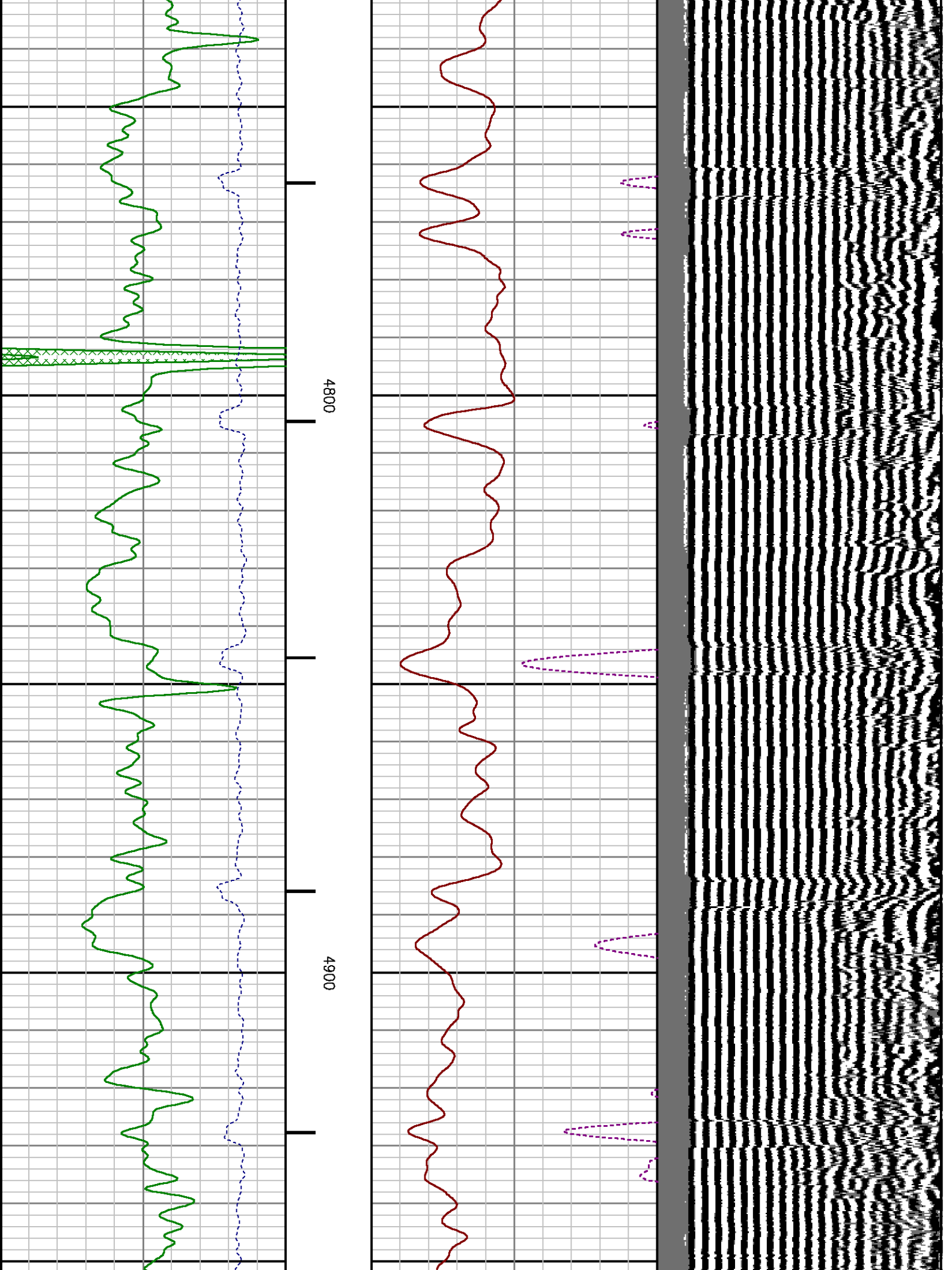


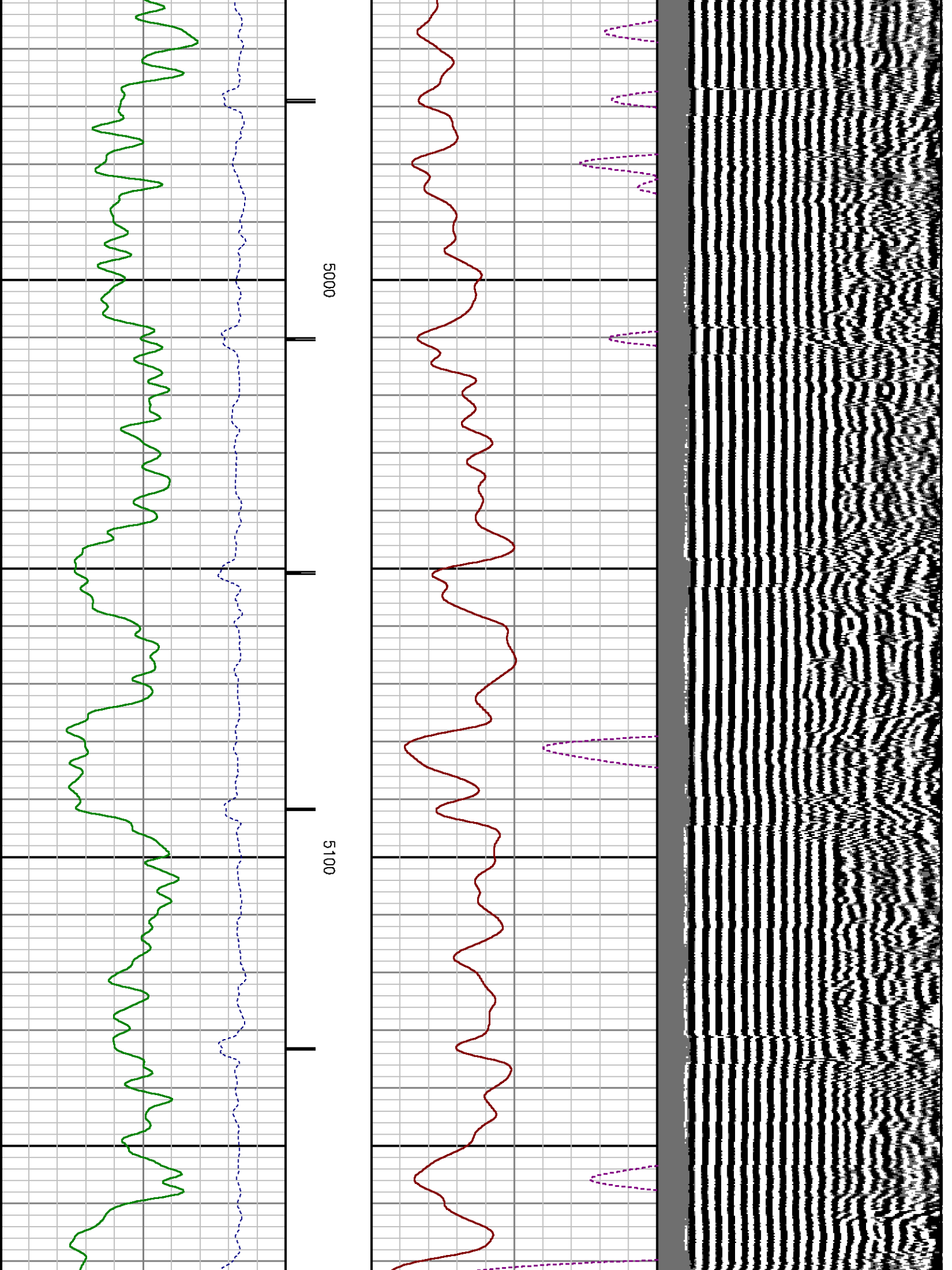


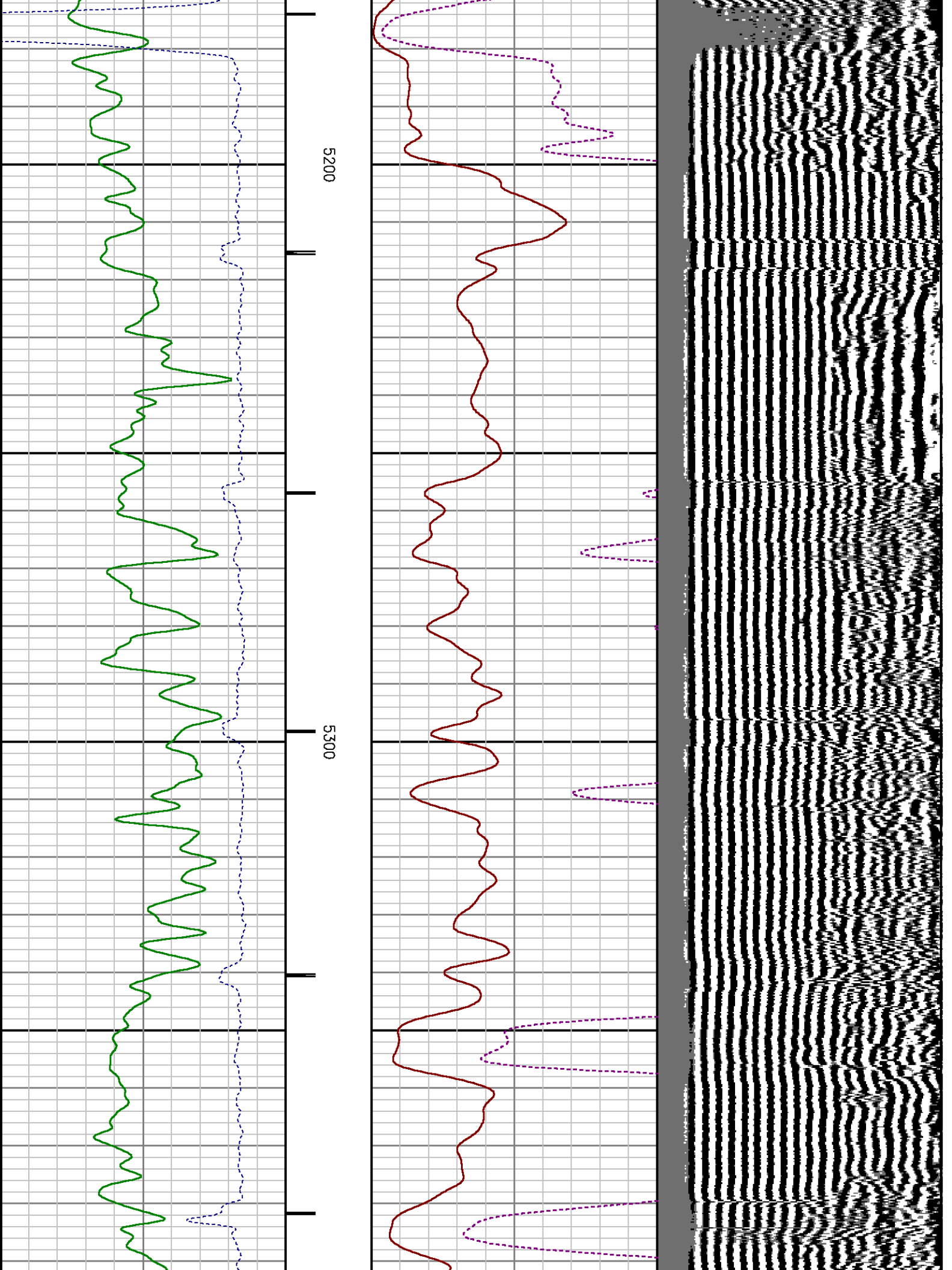


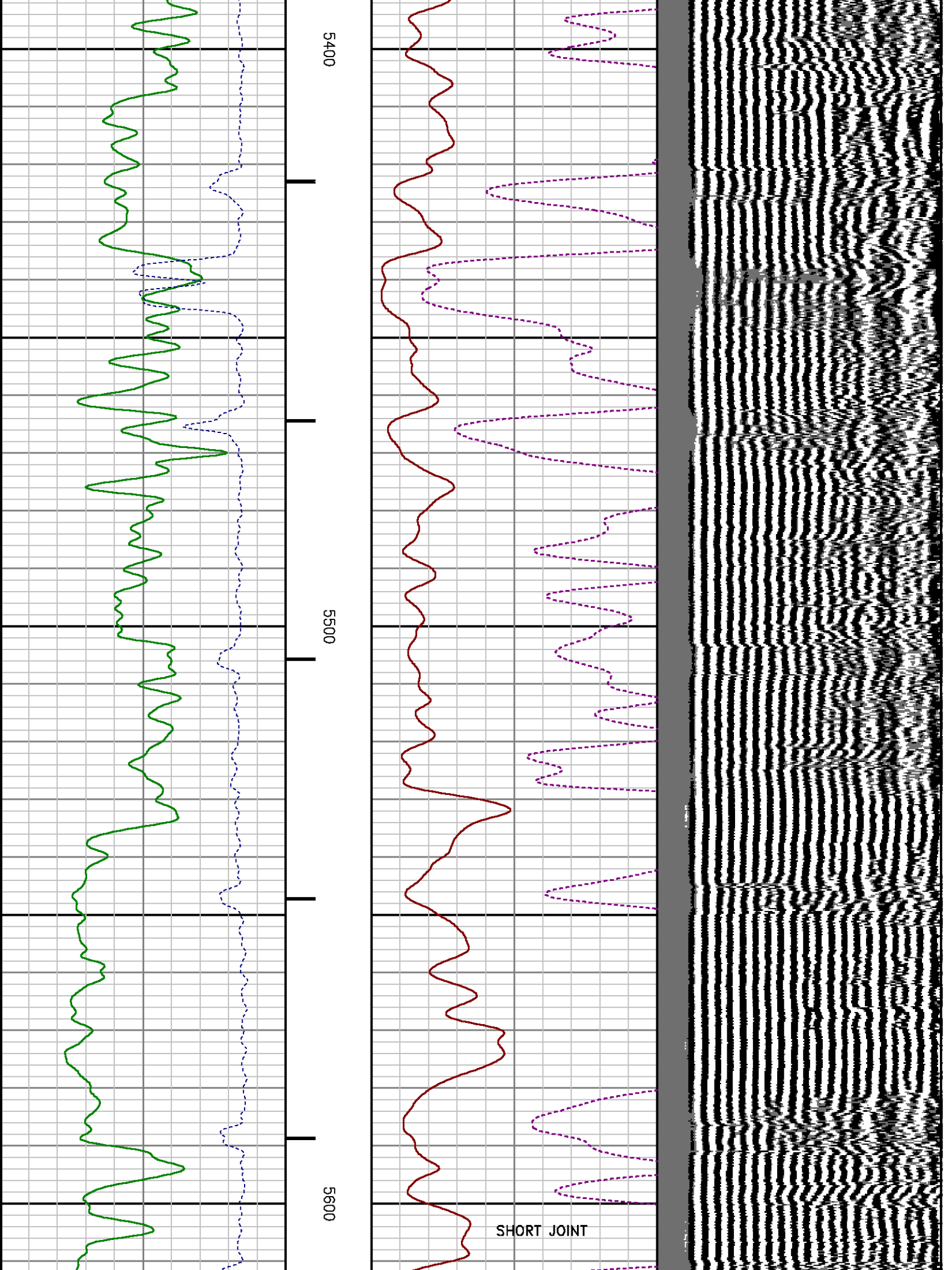


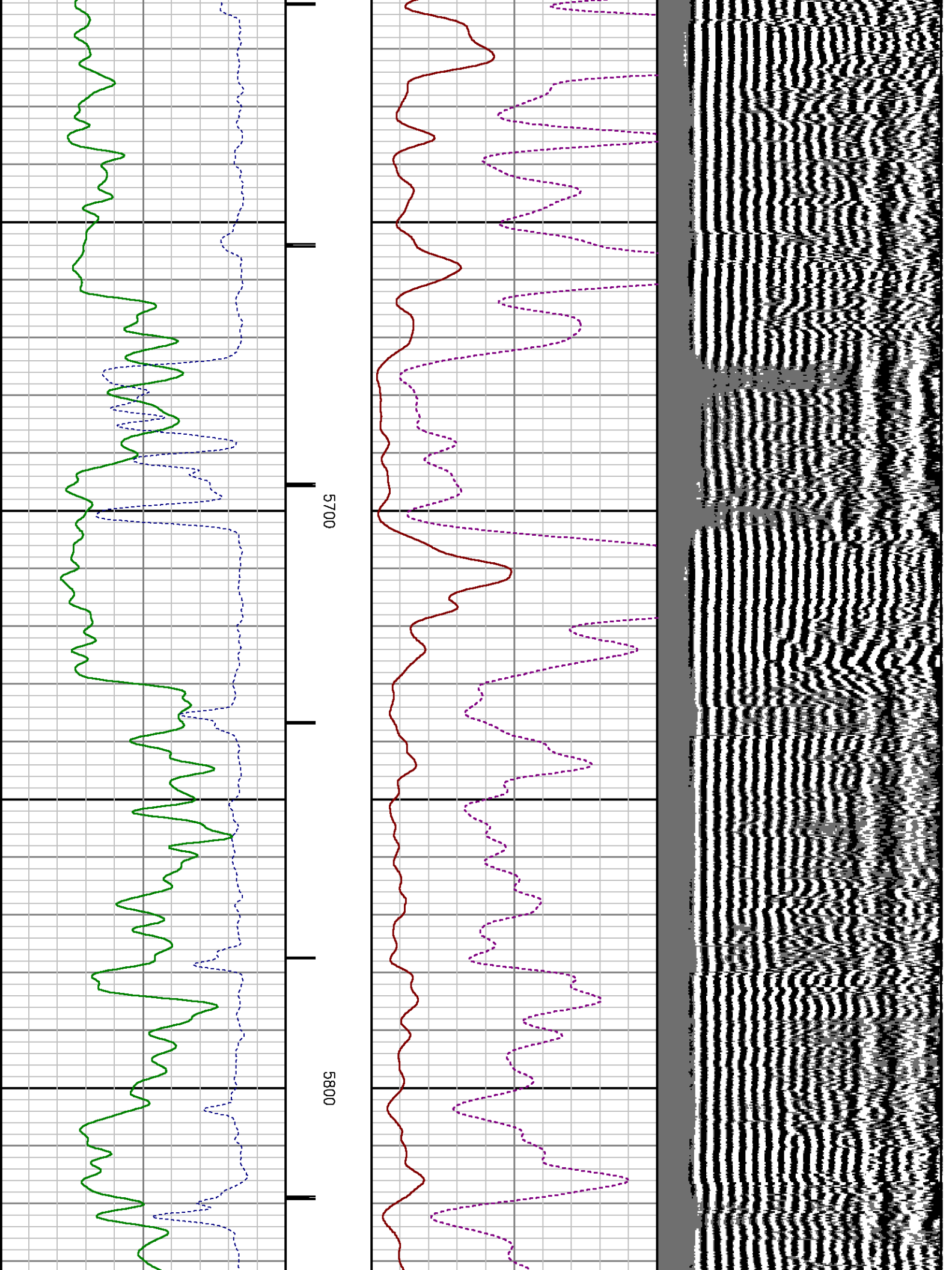


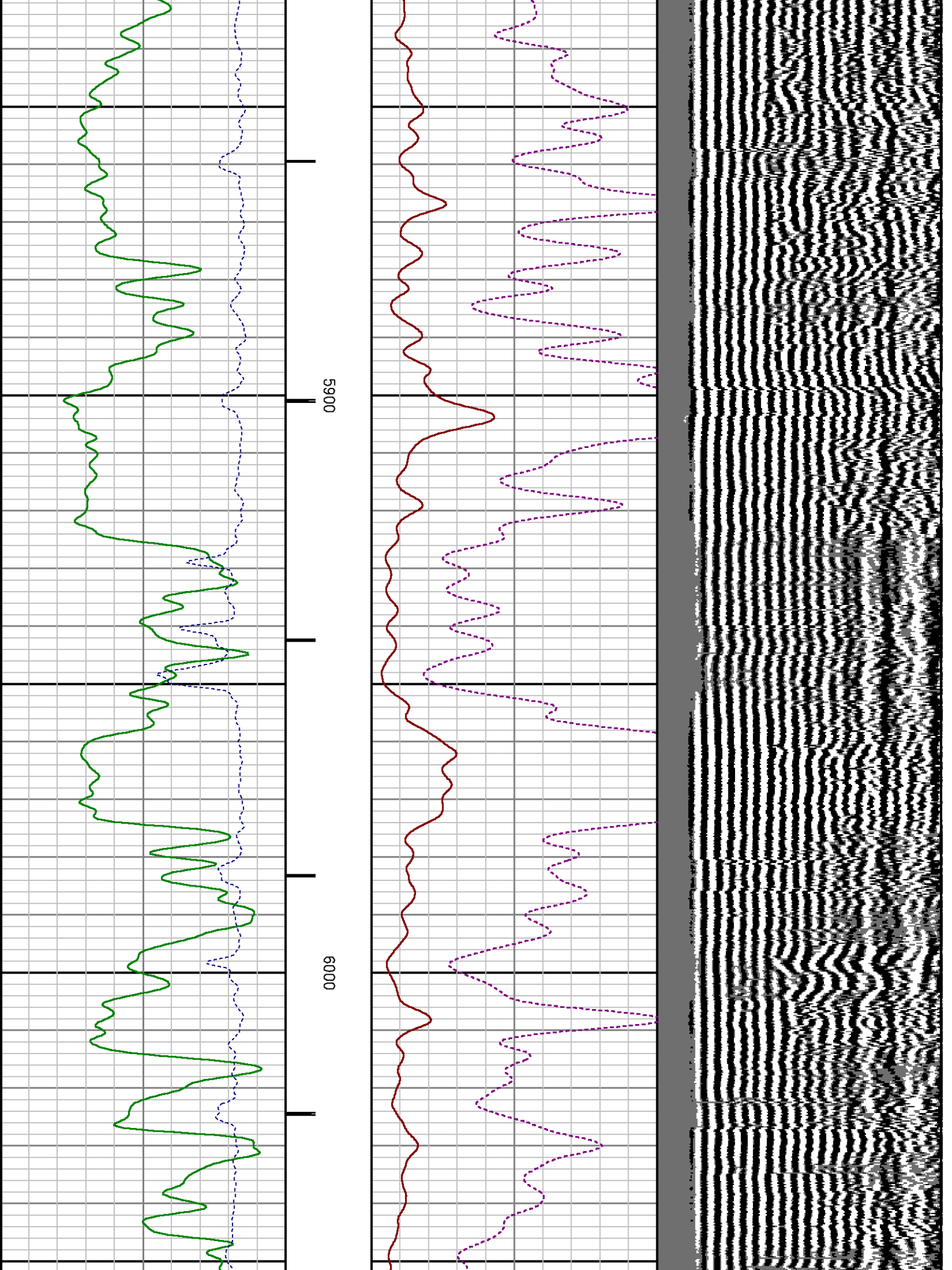


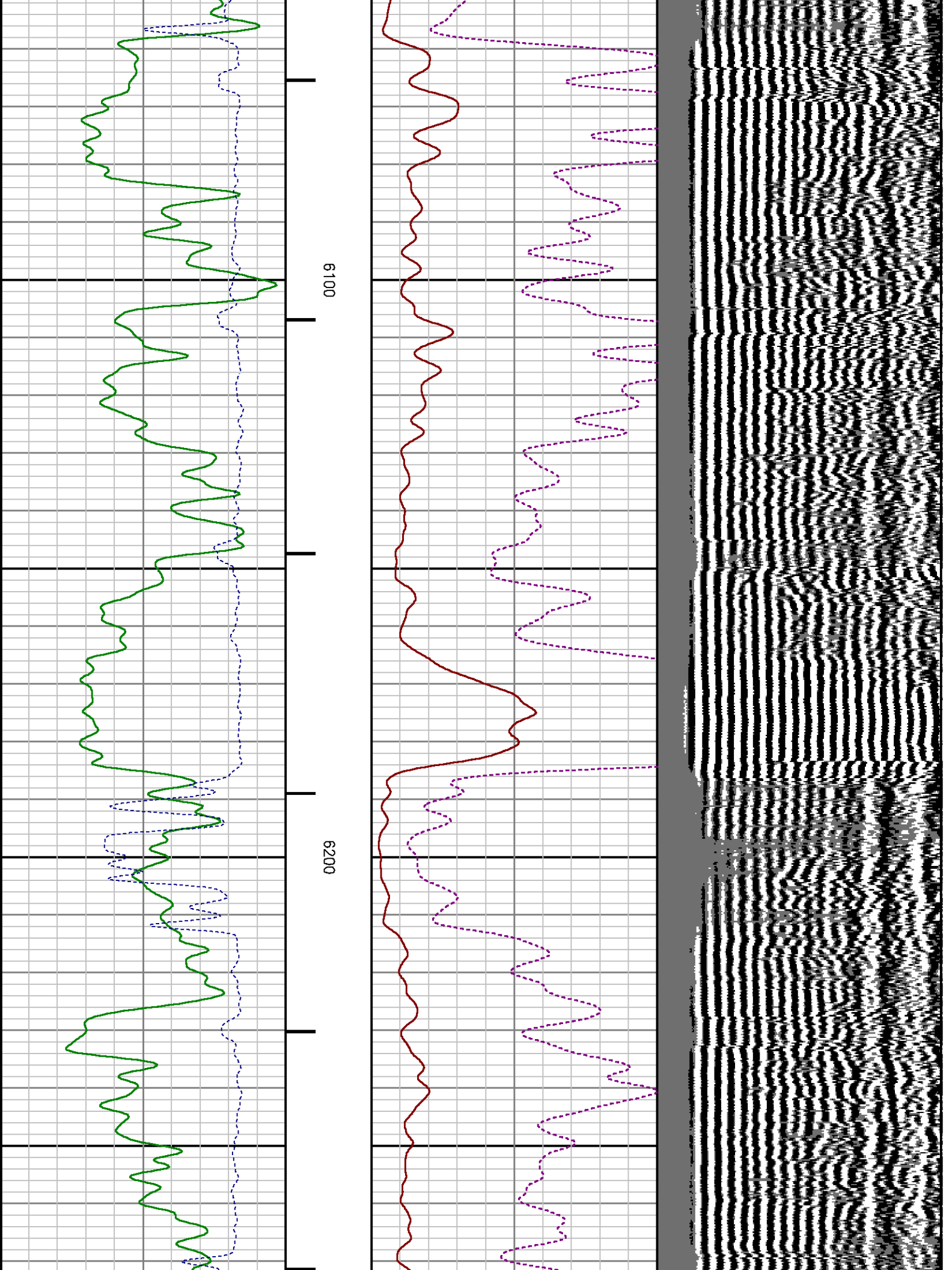


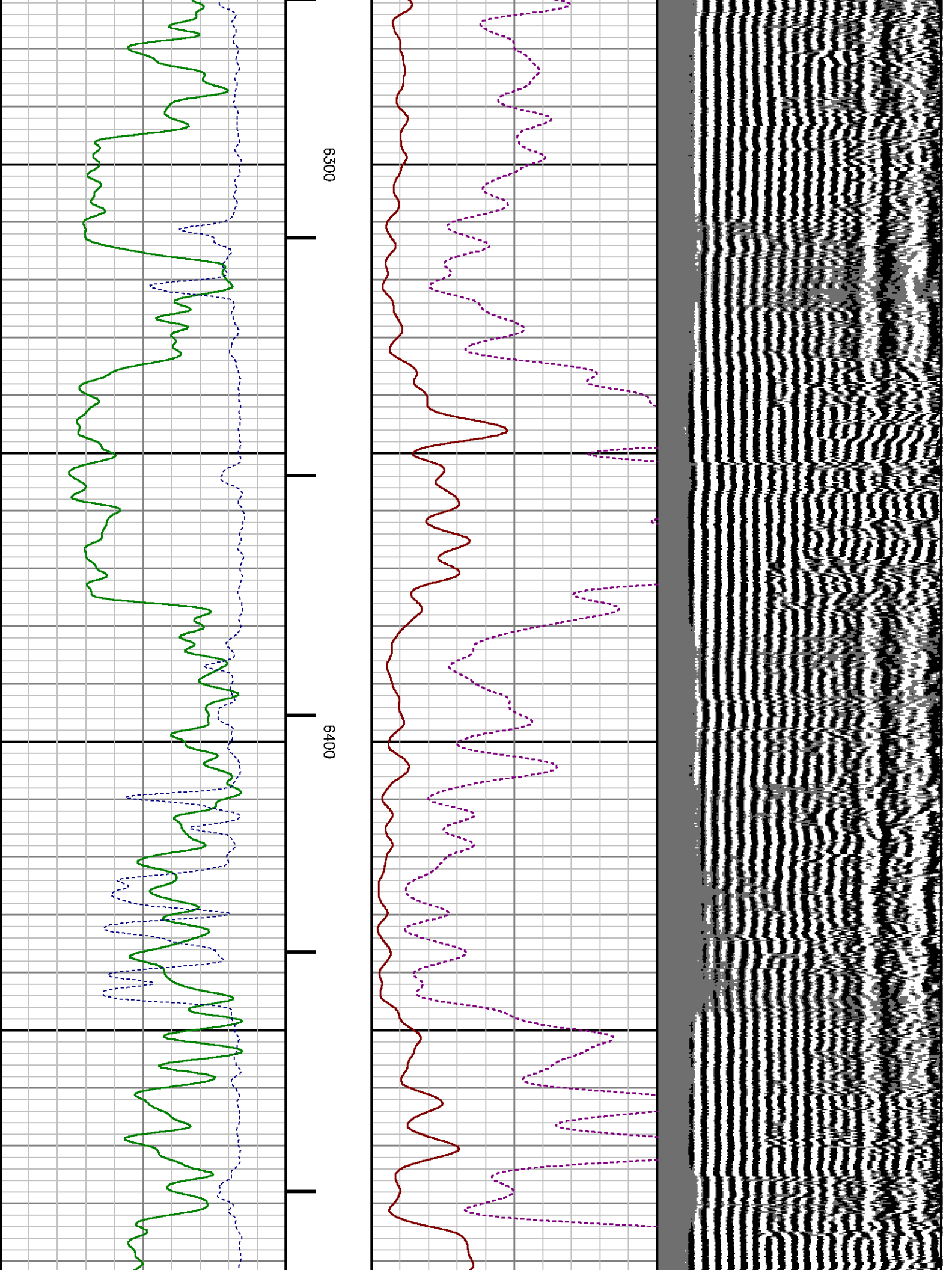


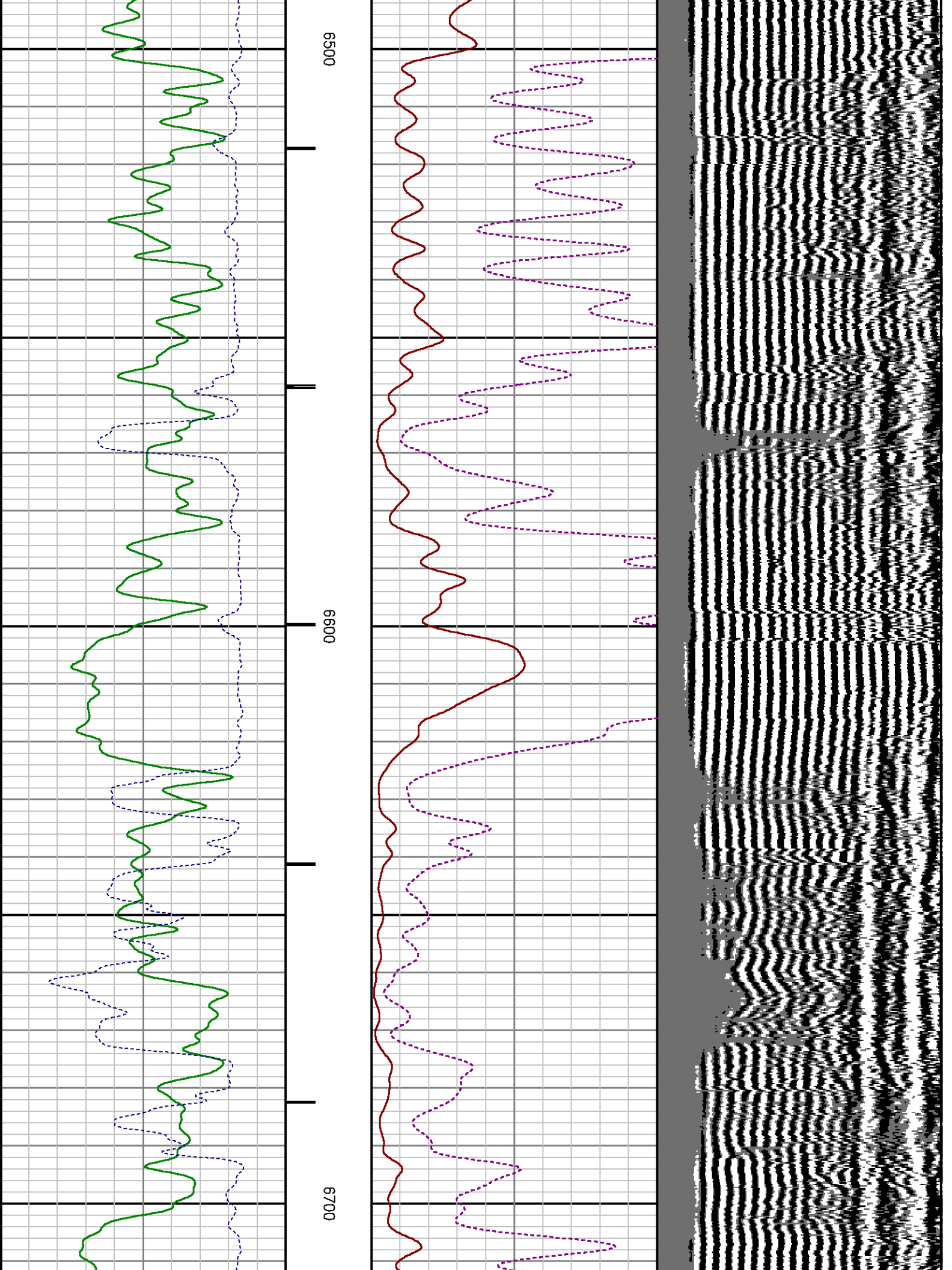


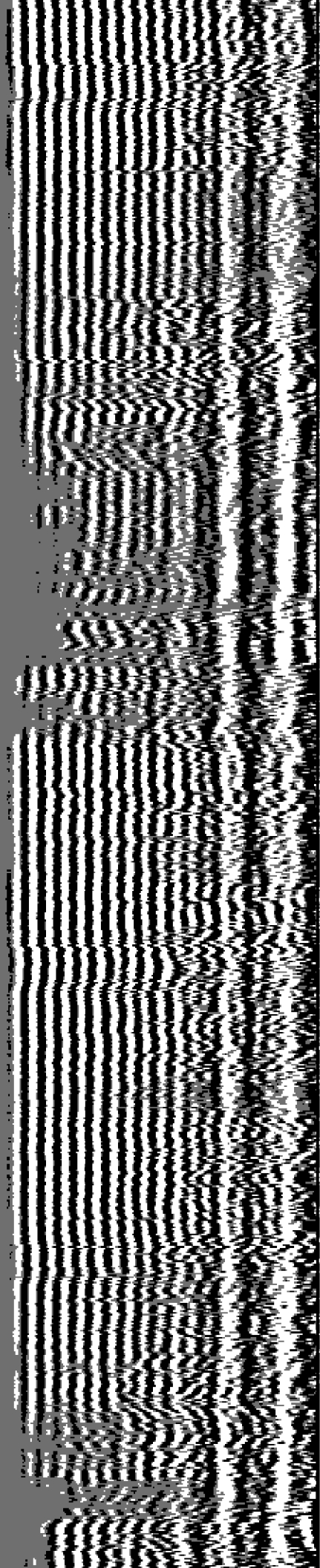
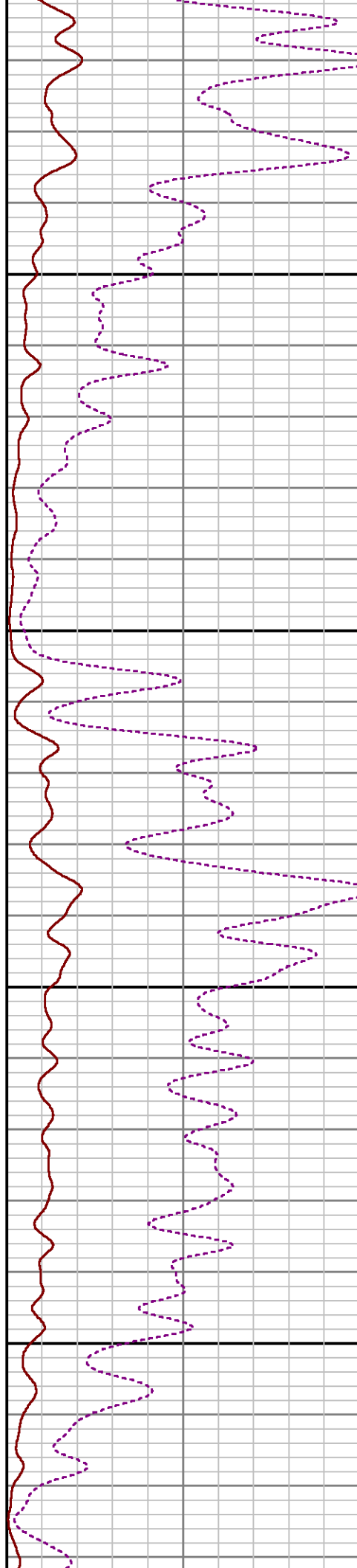
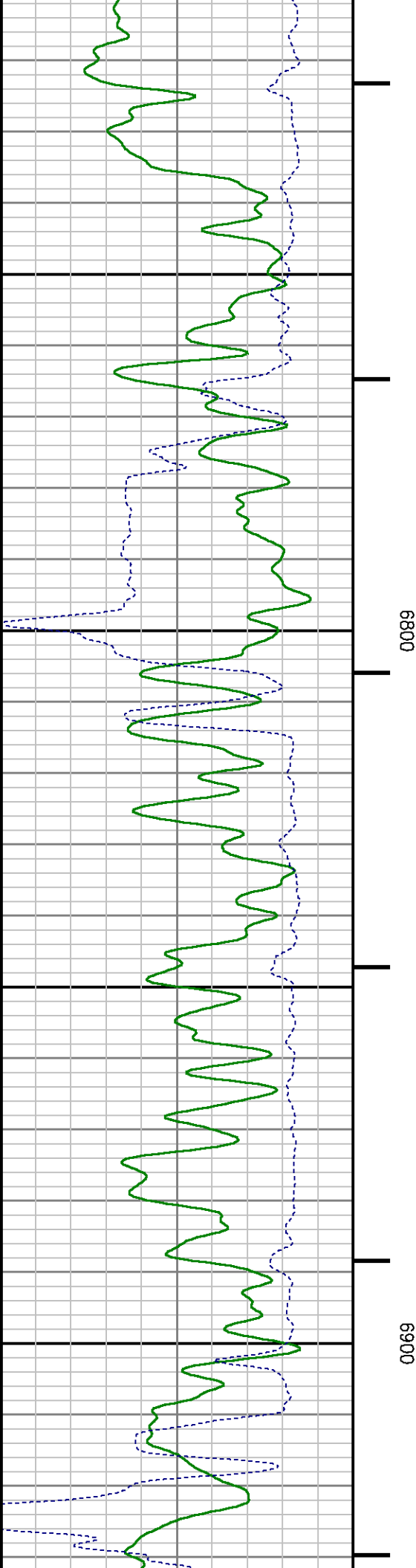


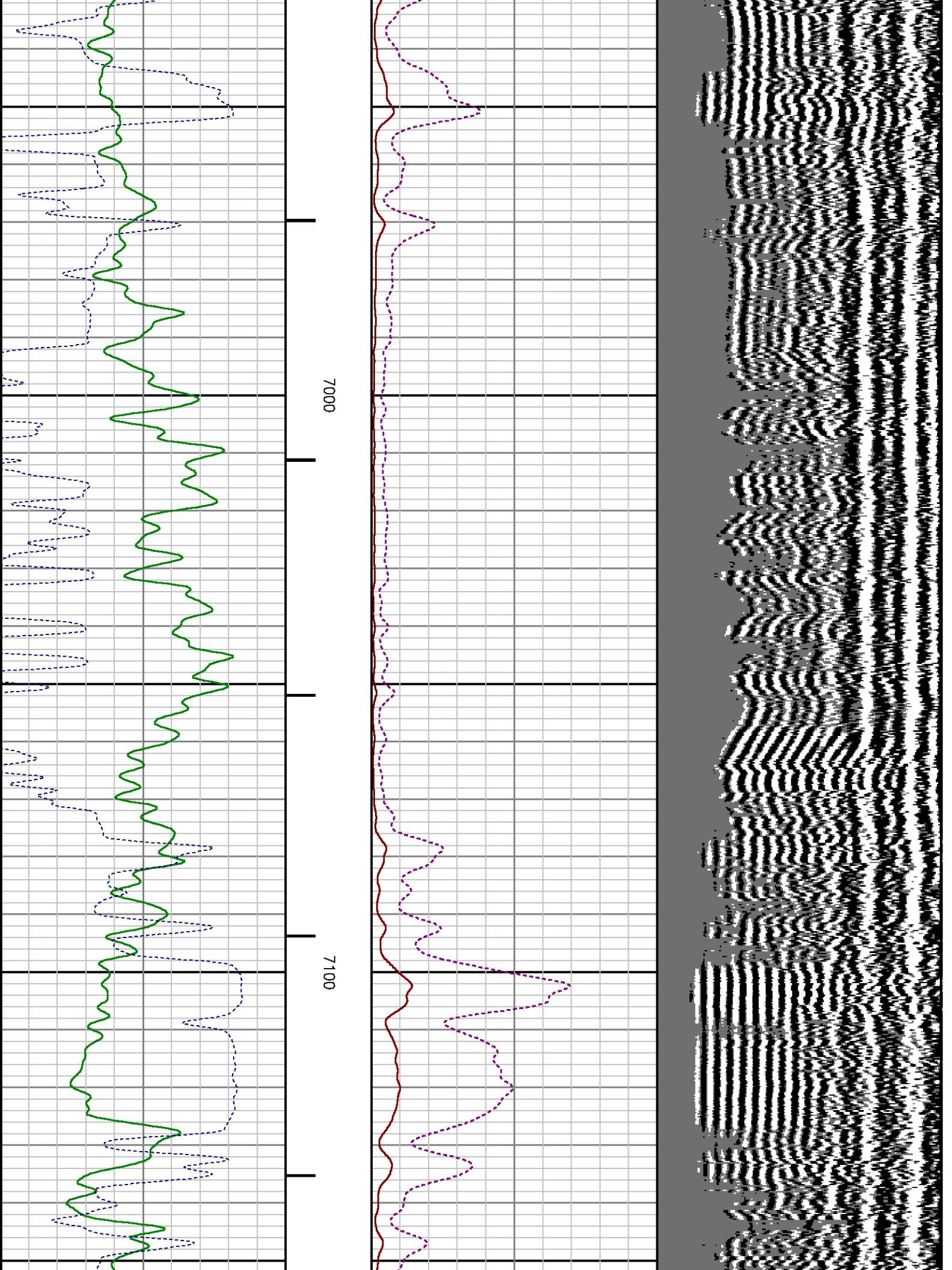


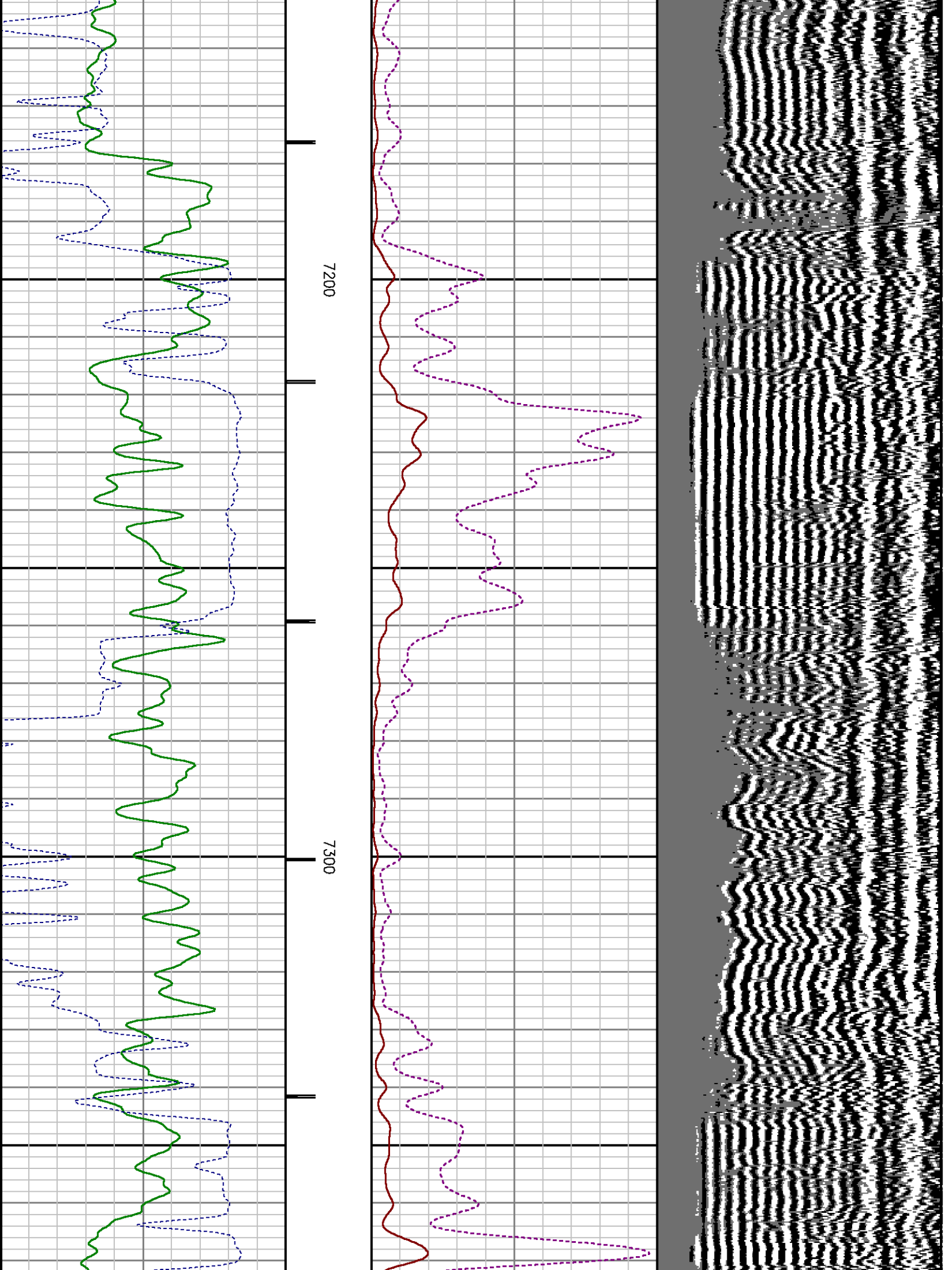


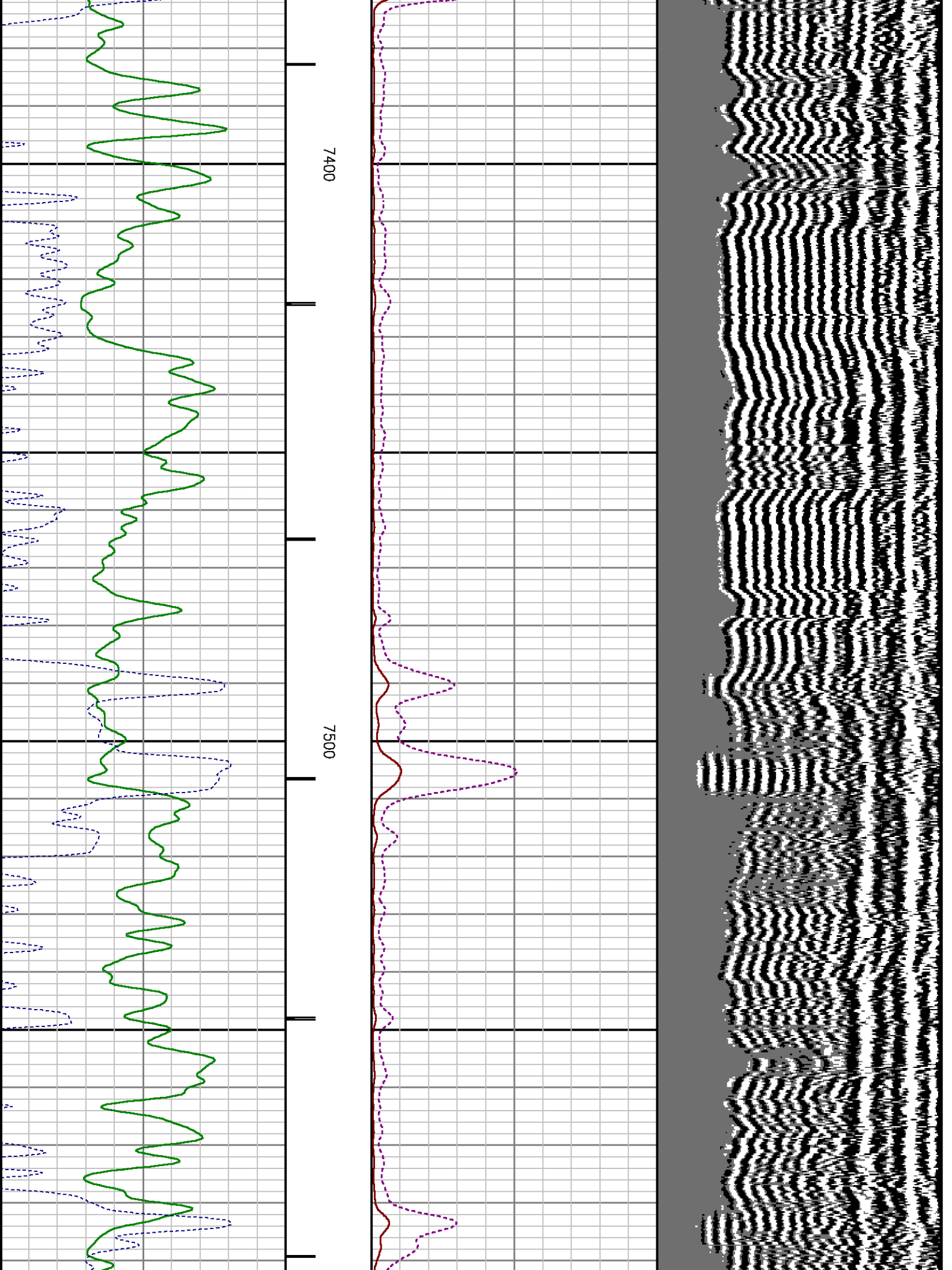


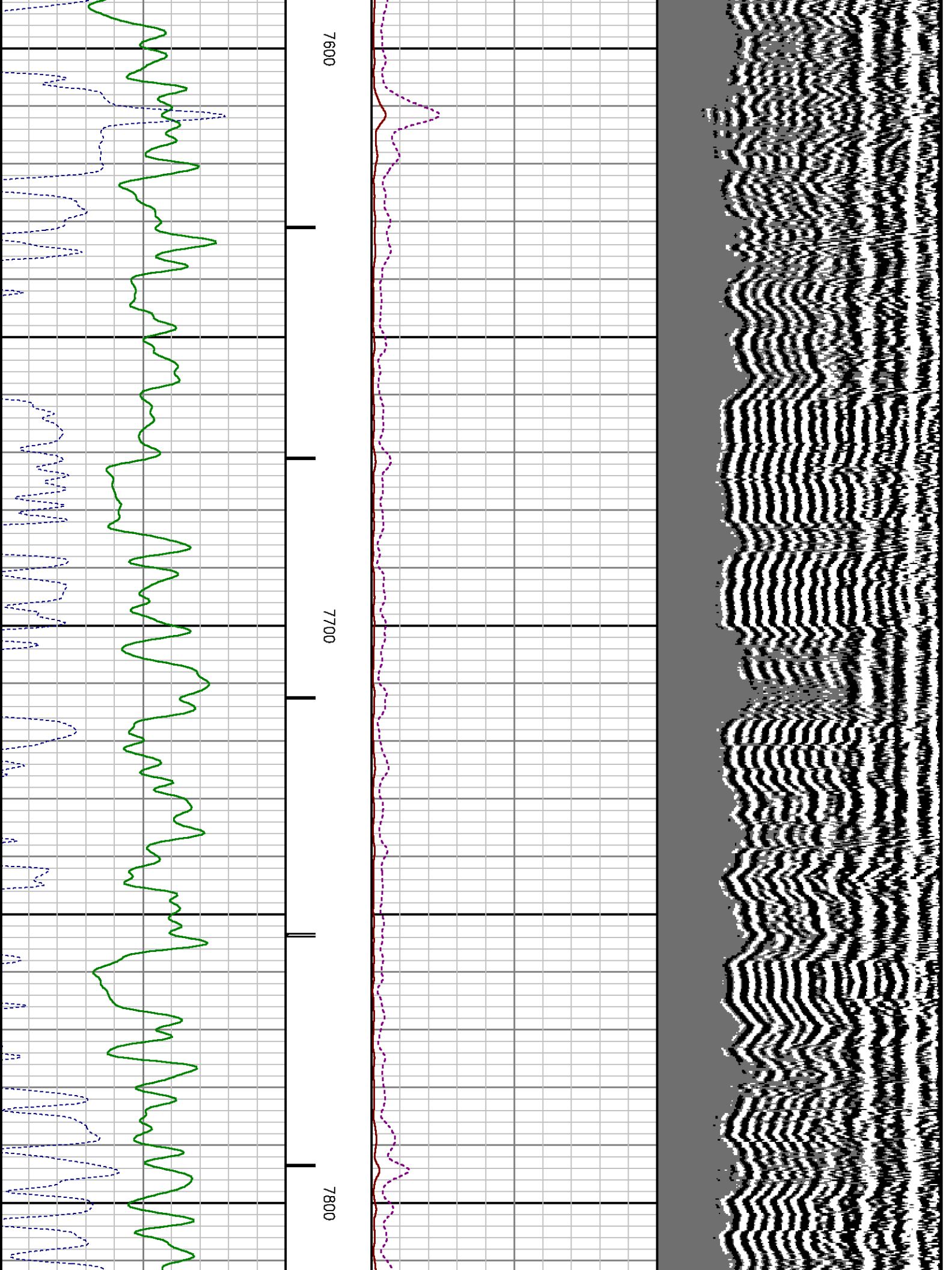


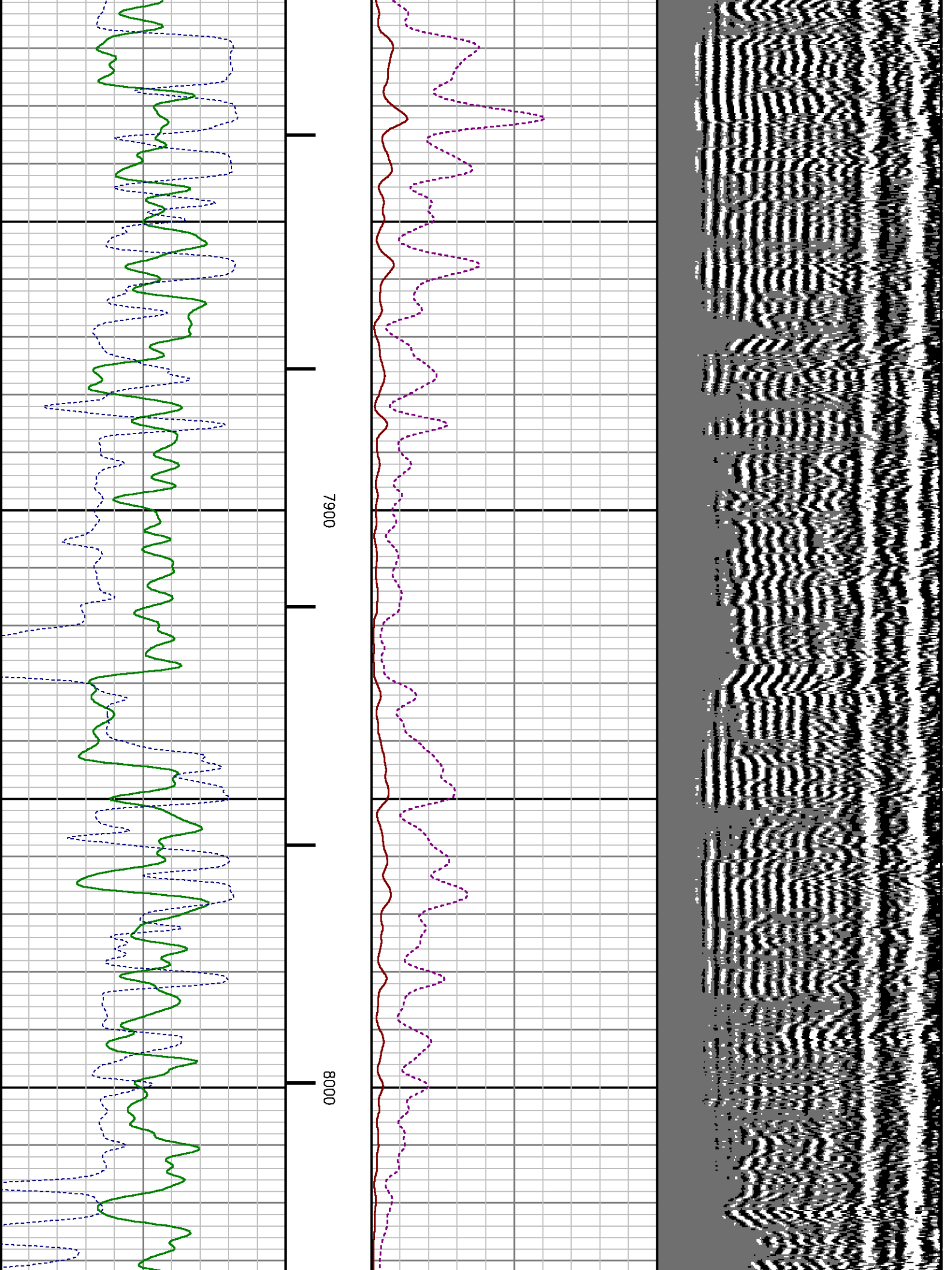


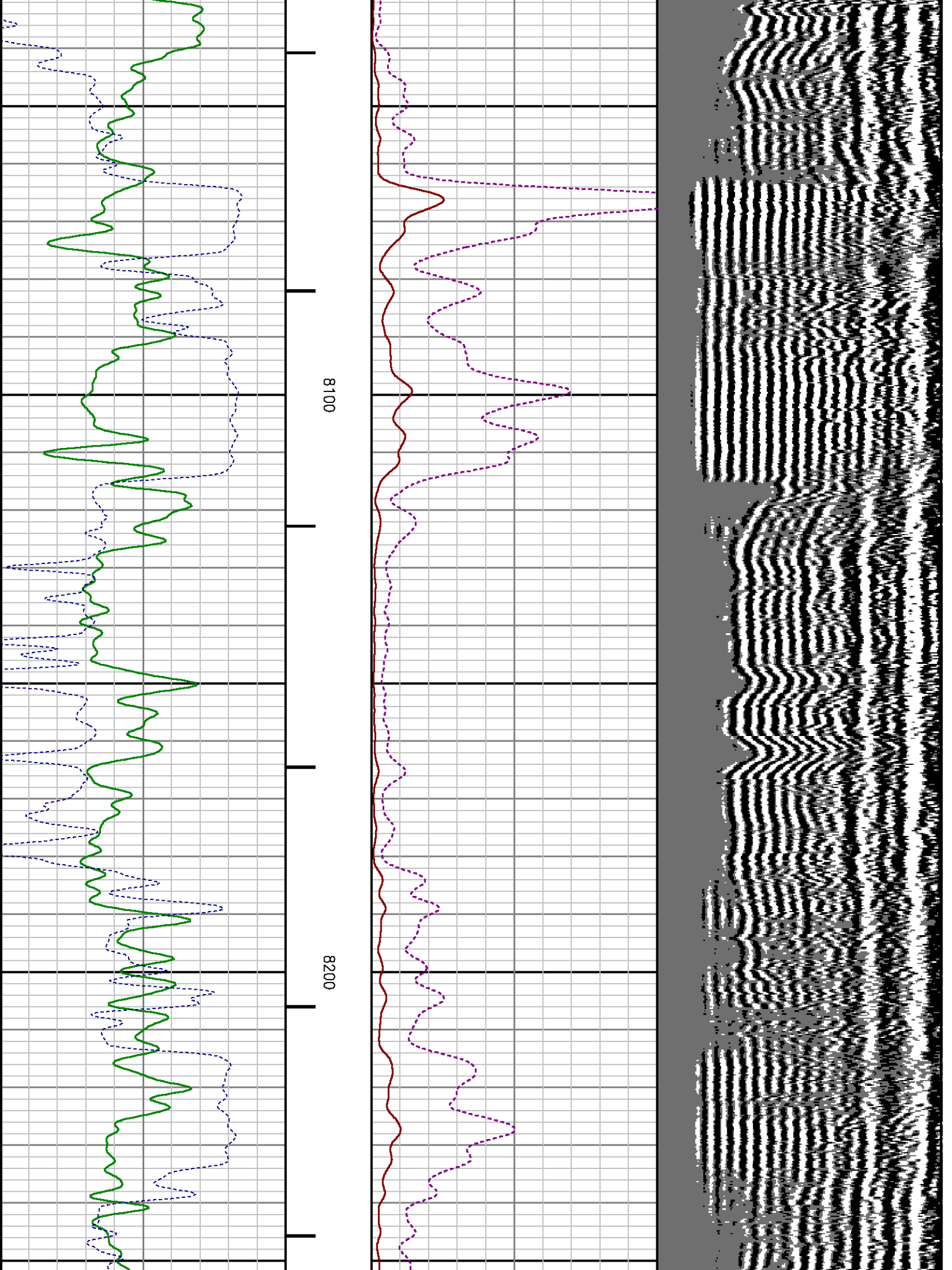


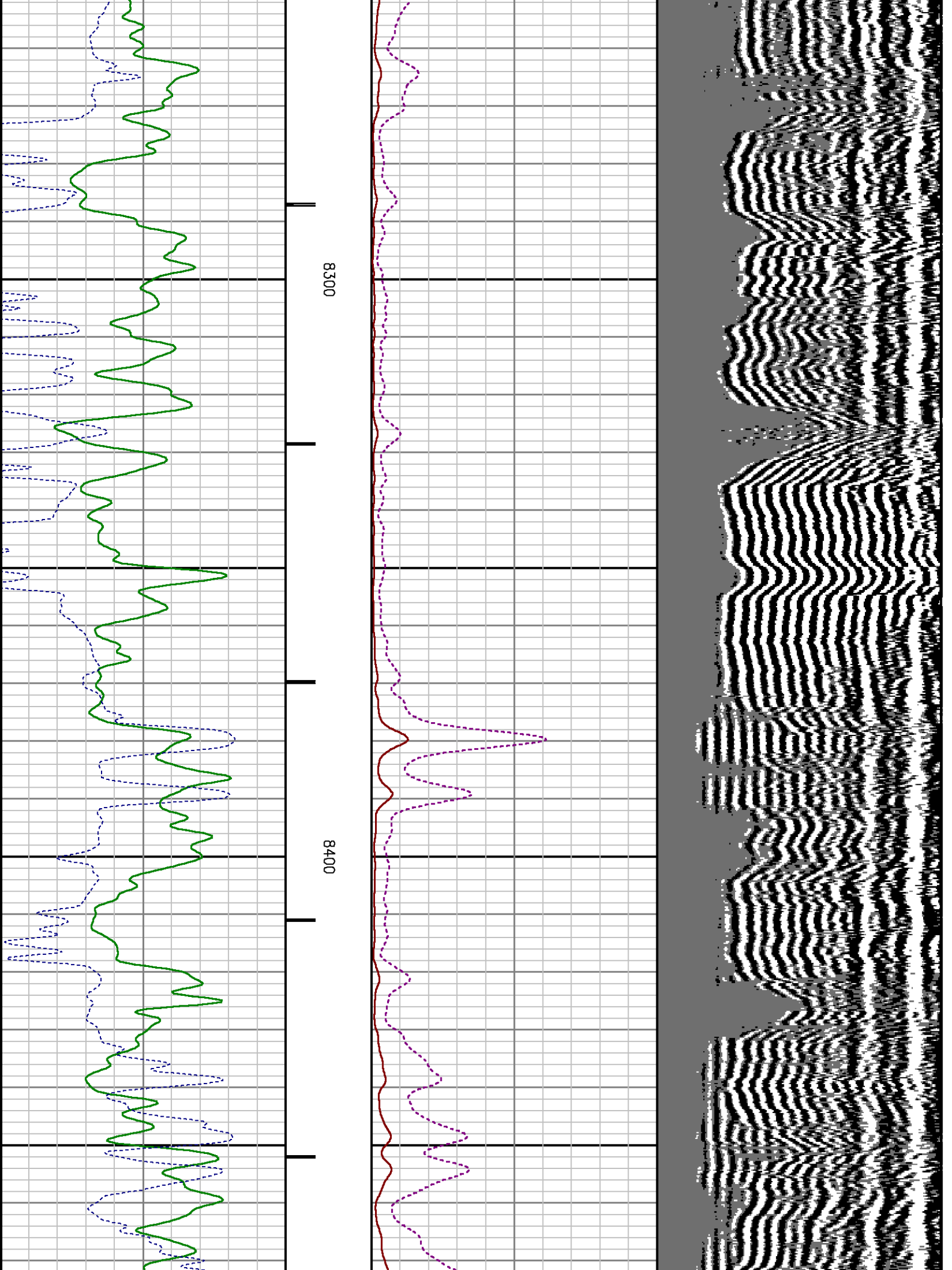


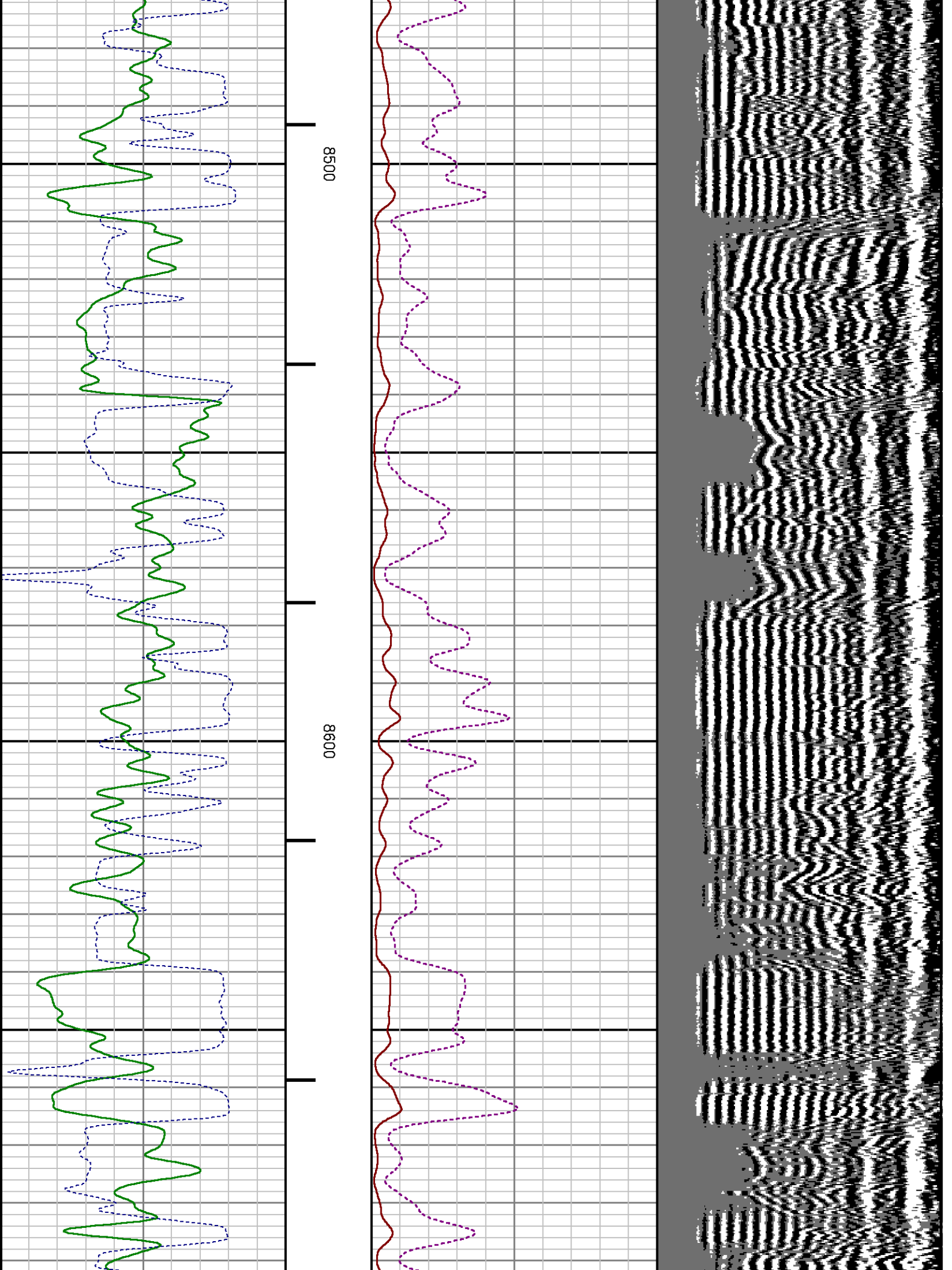


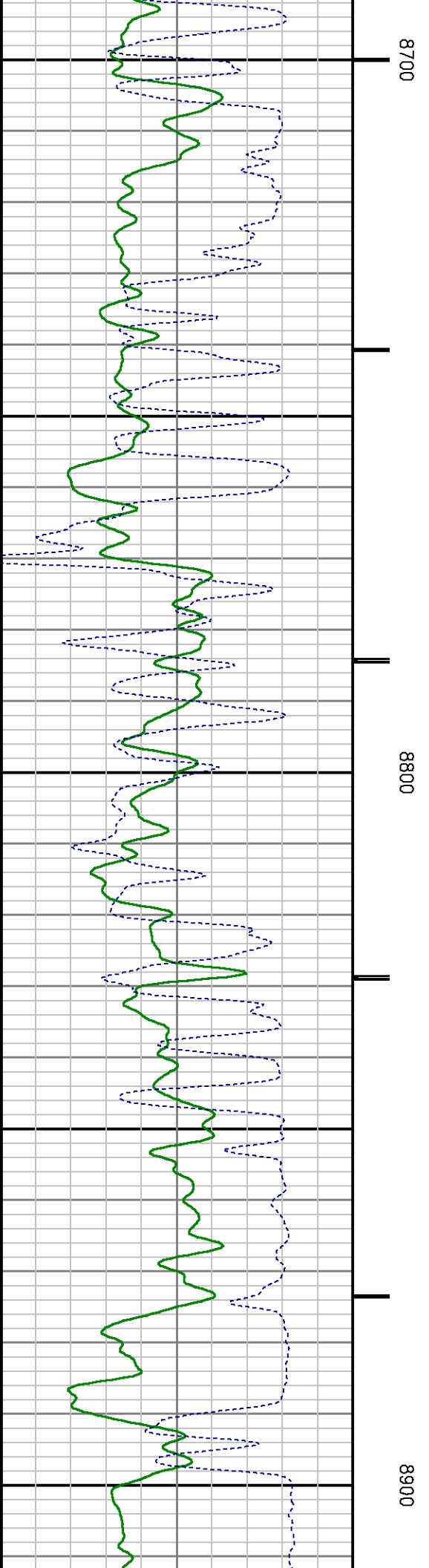
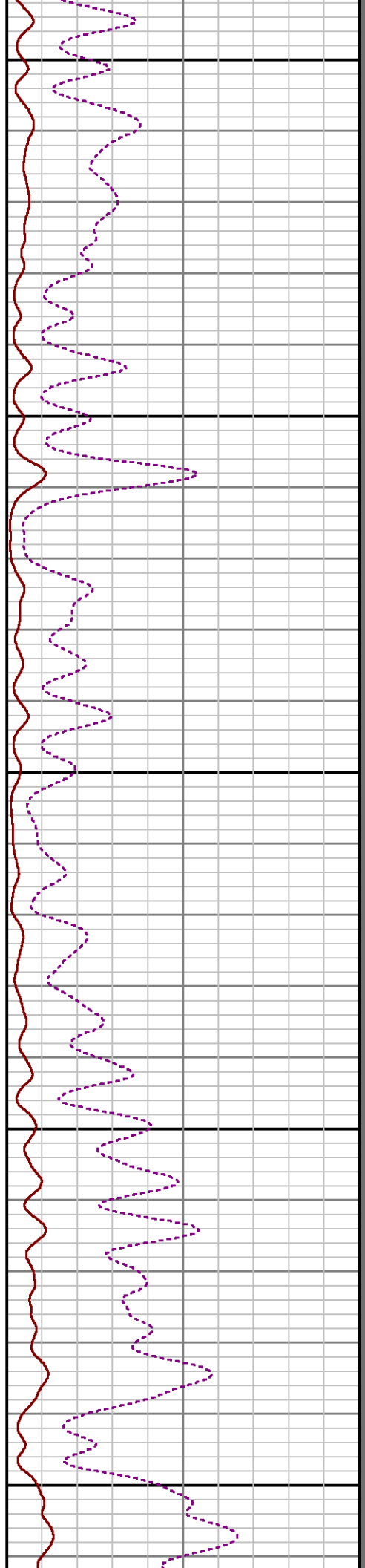
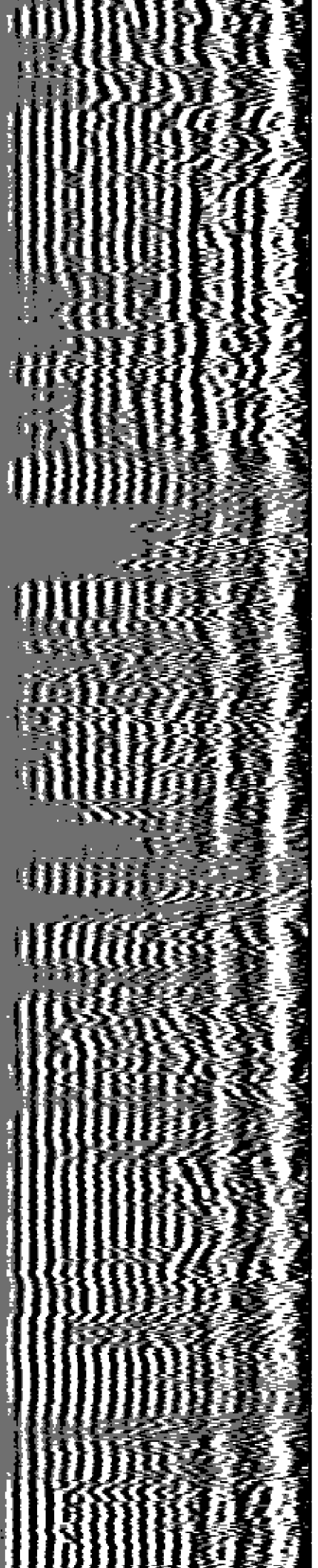


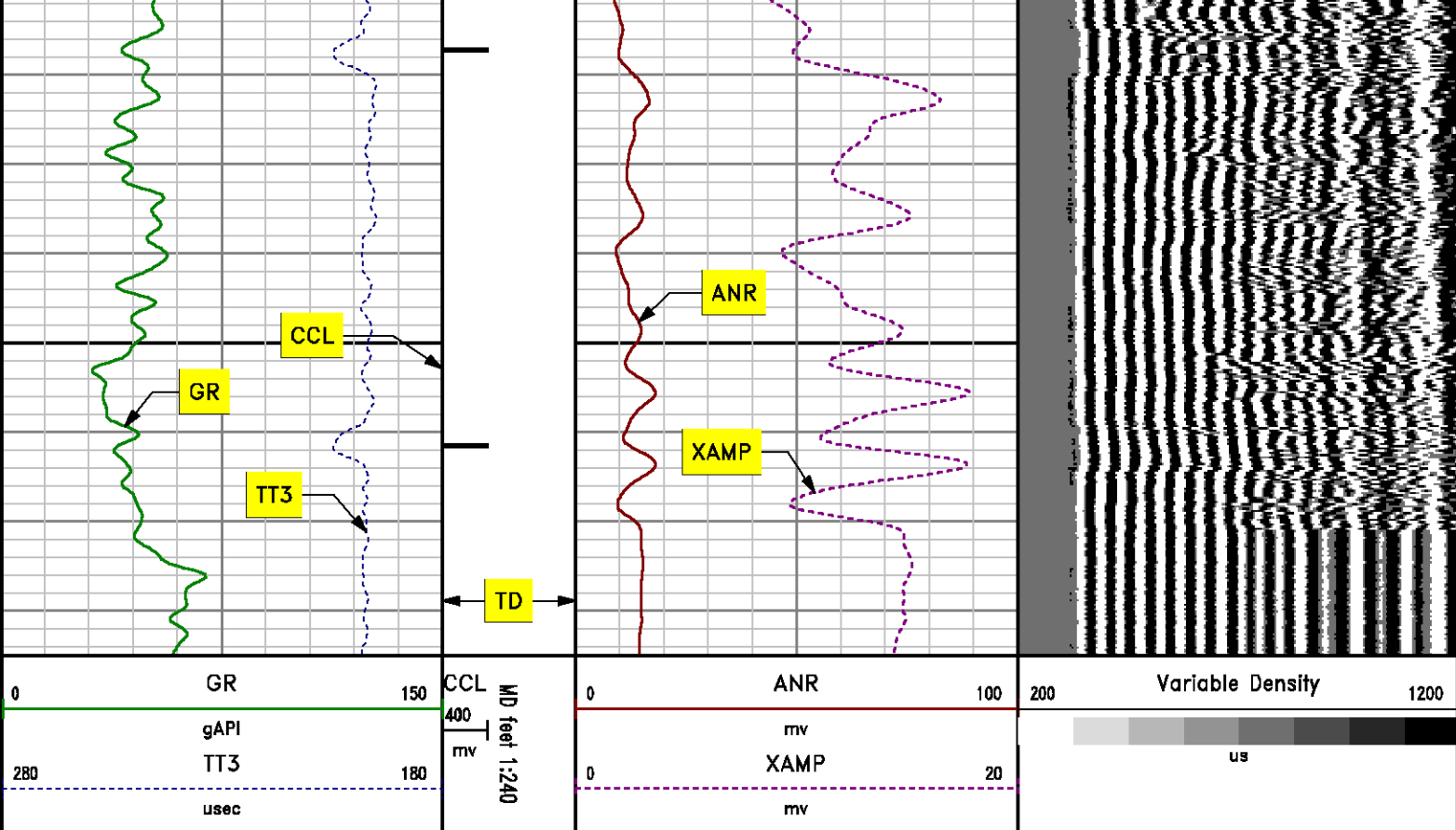










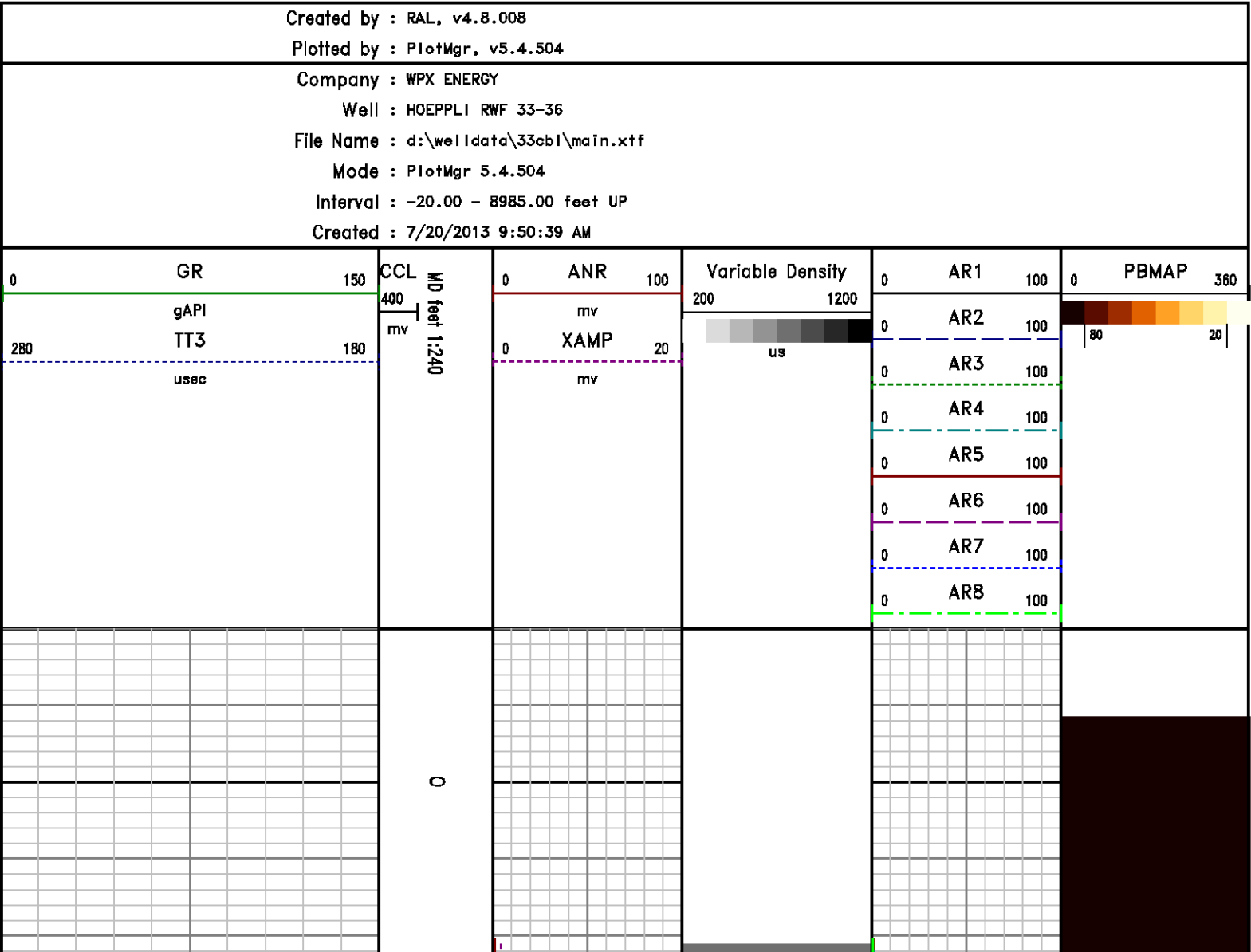


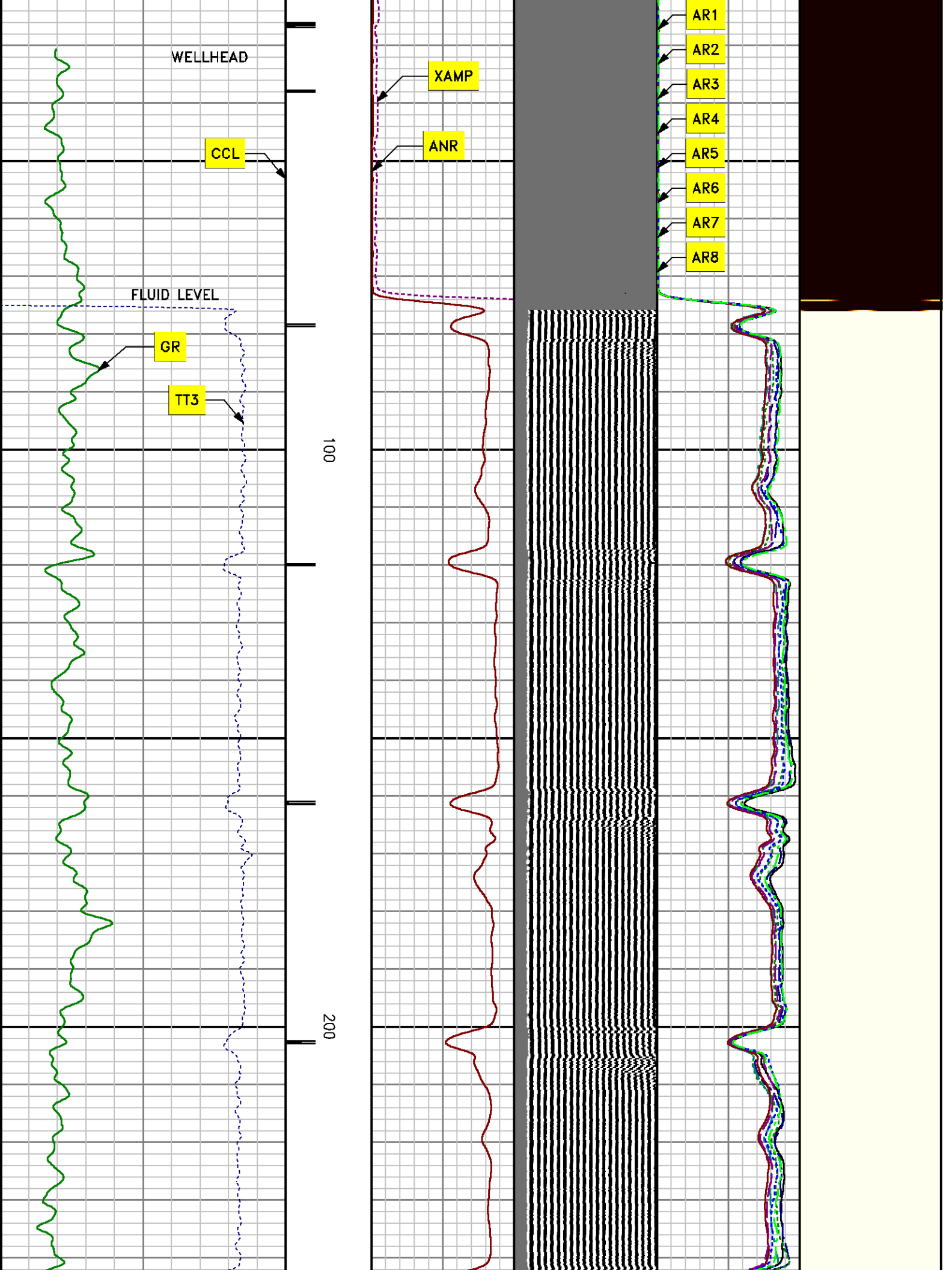
MAIN LOG SECONDARY PRESENTATION ***0 PSI***

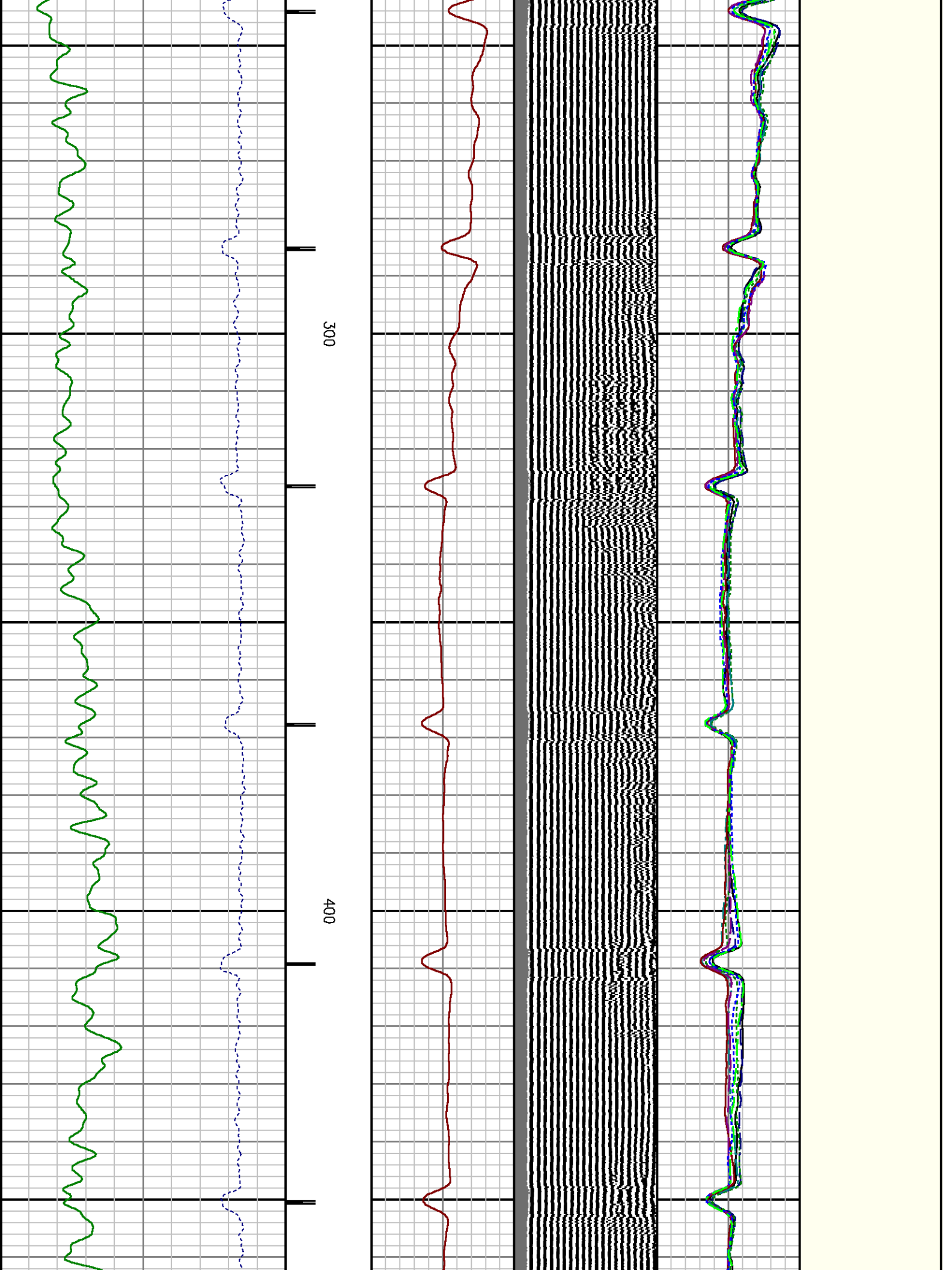
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	306.674	usec	33.143	9001.301
RAL	Amp Gate Start Near	199.599	usec	33.143	9001.301
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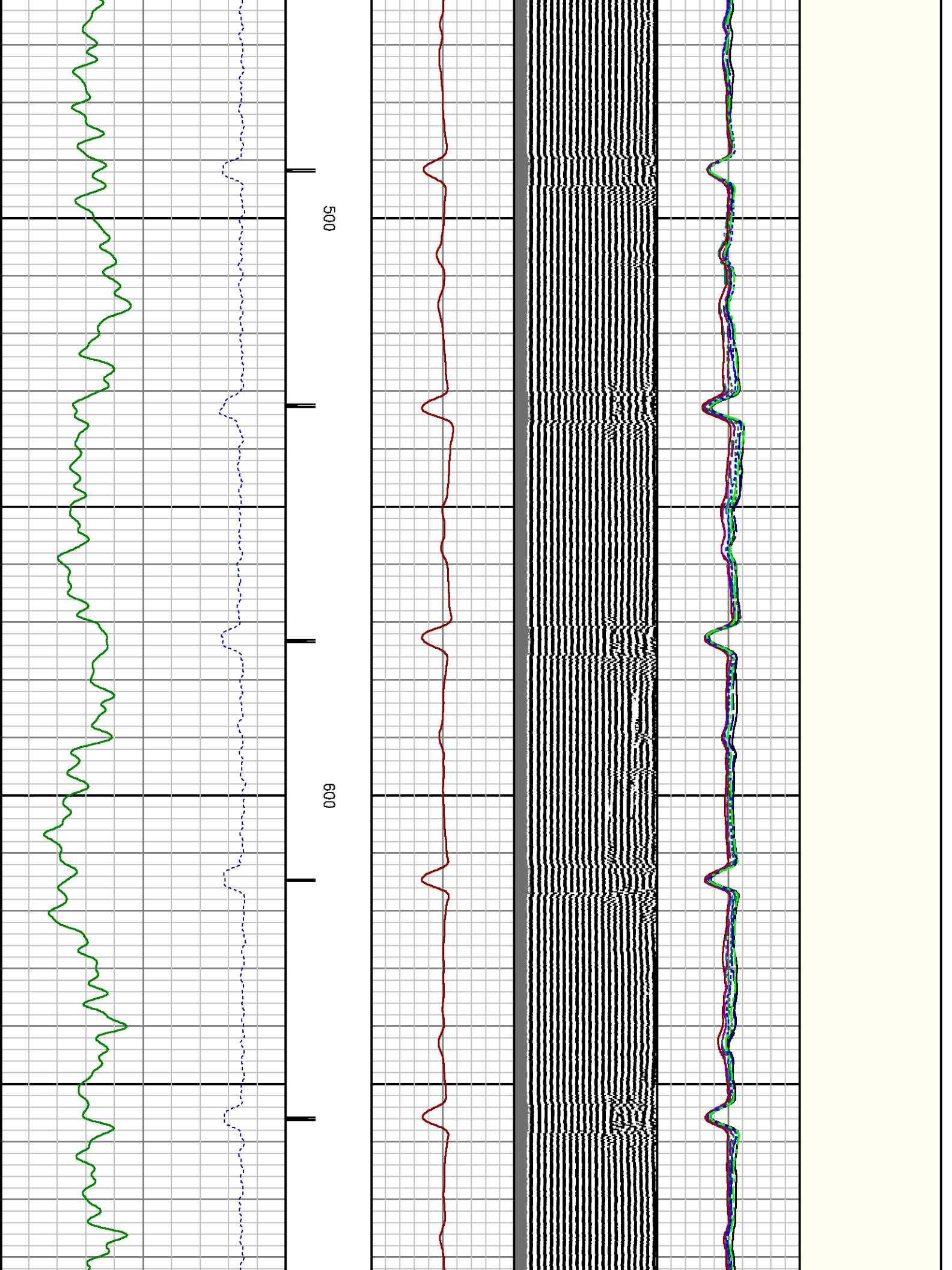
RALE	FB Thresh Radial	4.000	mv	33.143	9001.301
RAL	Fluid Travel Time	200.000	usec/ft	33.143	9000.831

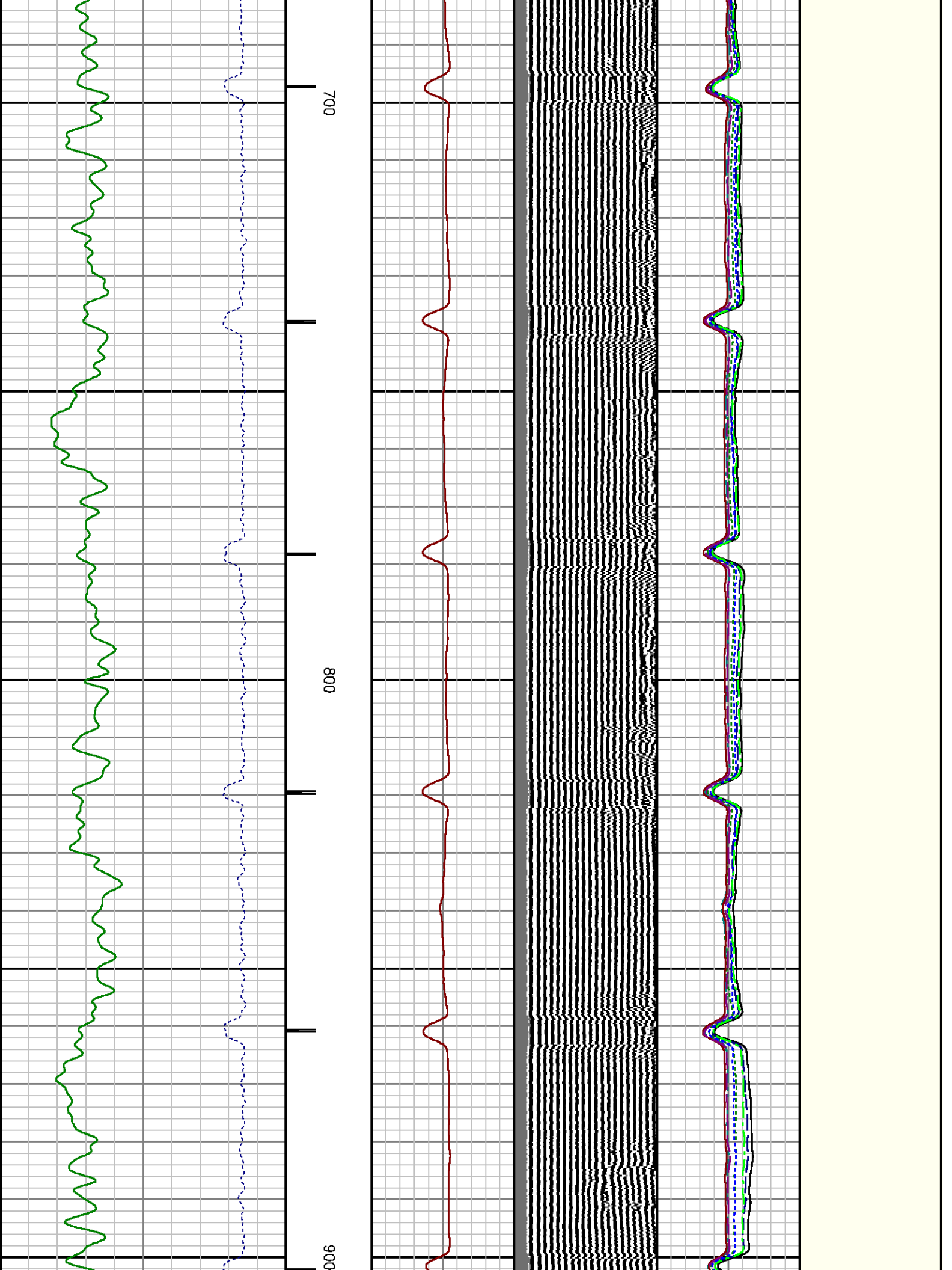
DEPTH OFFSETS							
(for Acquired Curves)							
SERIES	DEPTH OFFSET	ACQUIRED CURVES					
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		AR5	AR6	AR7	AR8	CHV	FPR2
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
		AFAR	SIG	TT5			
1426XA	-10.040						
1355XA	-5.620	CCL					
1355XA	-1.500	GR					
1355XA	0.000	TEMP					

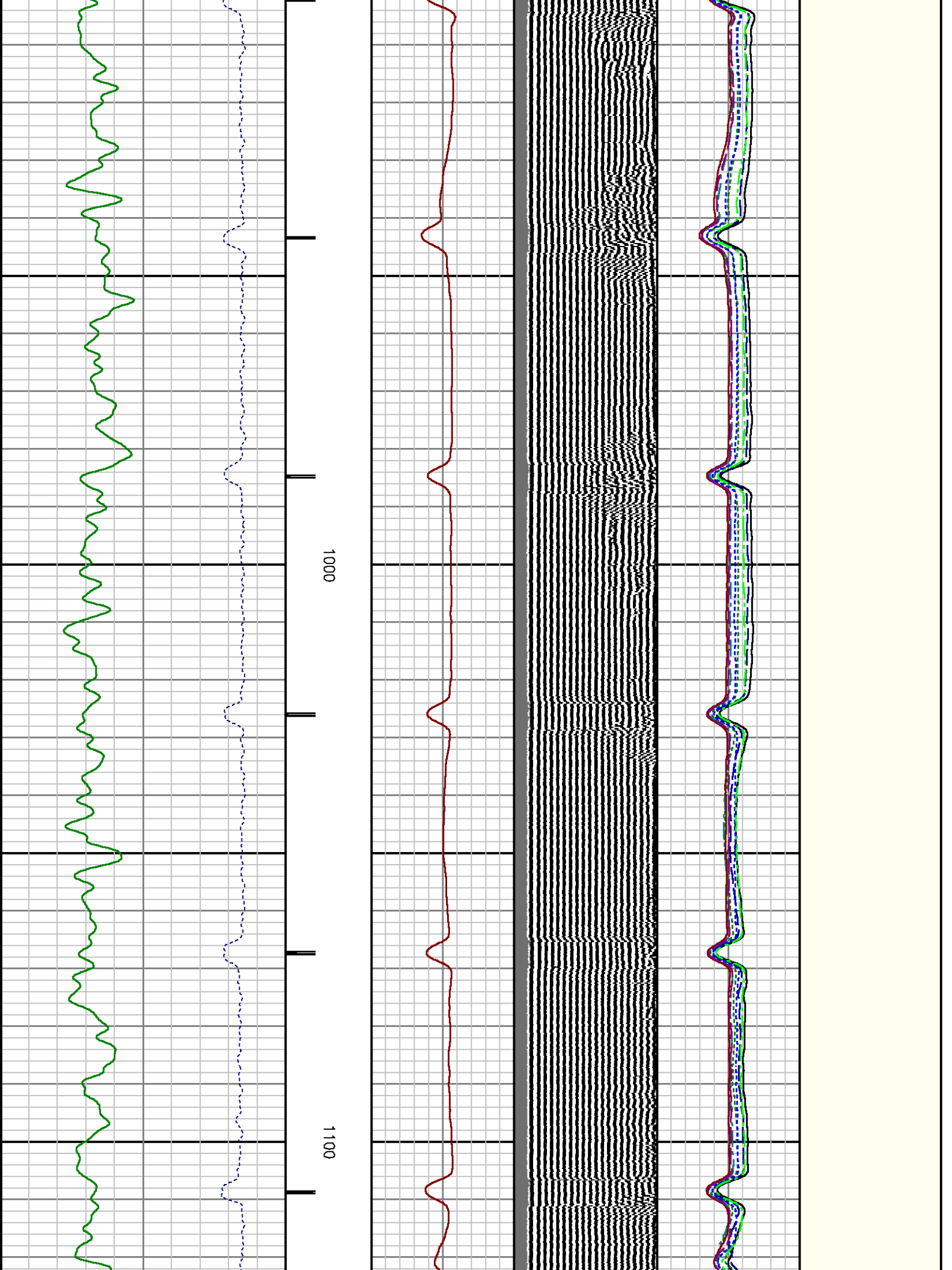


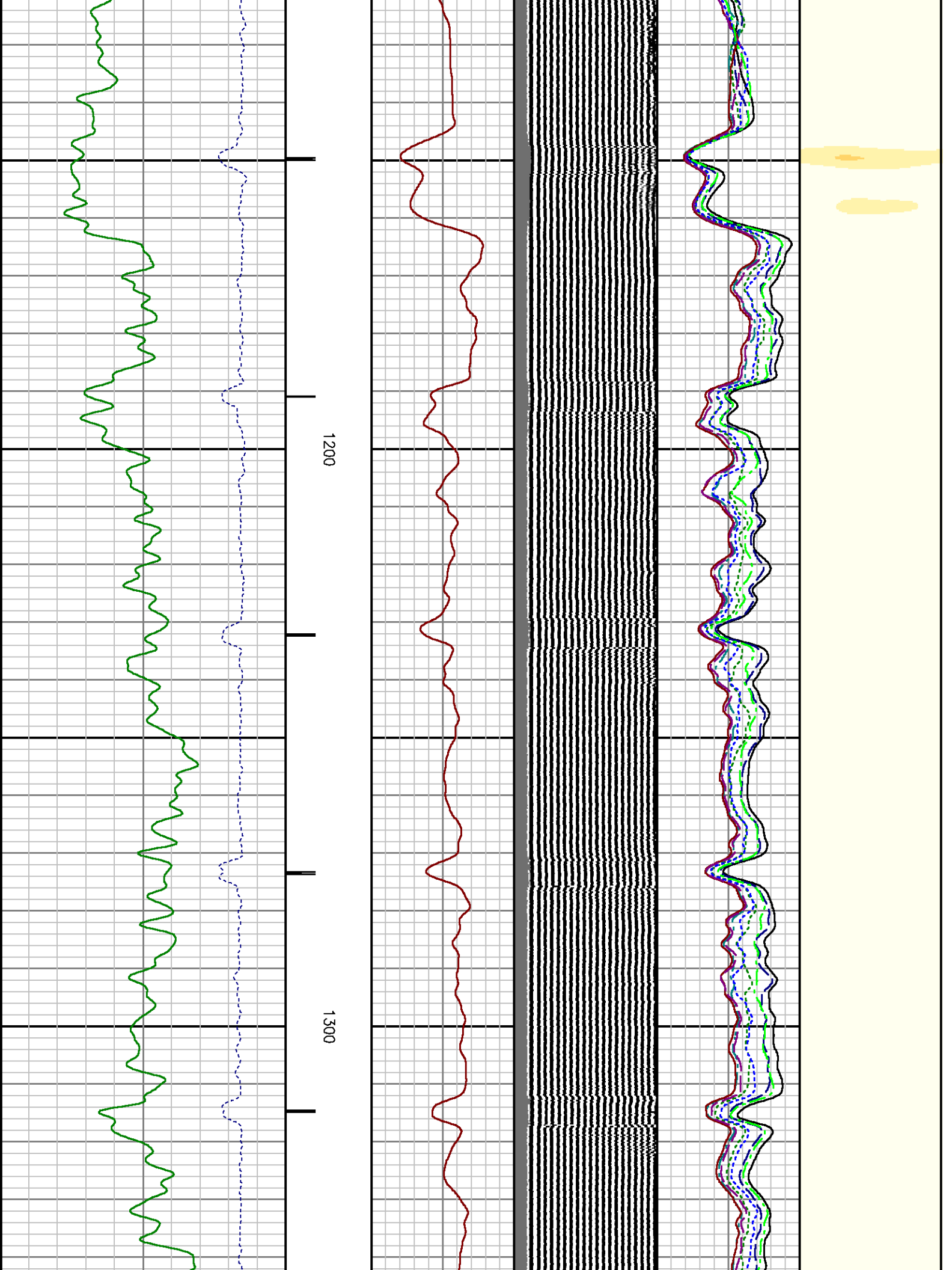


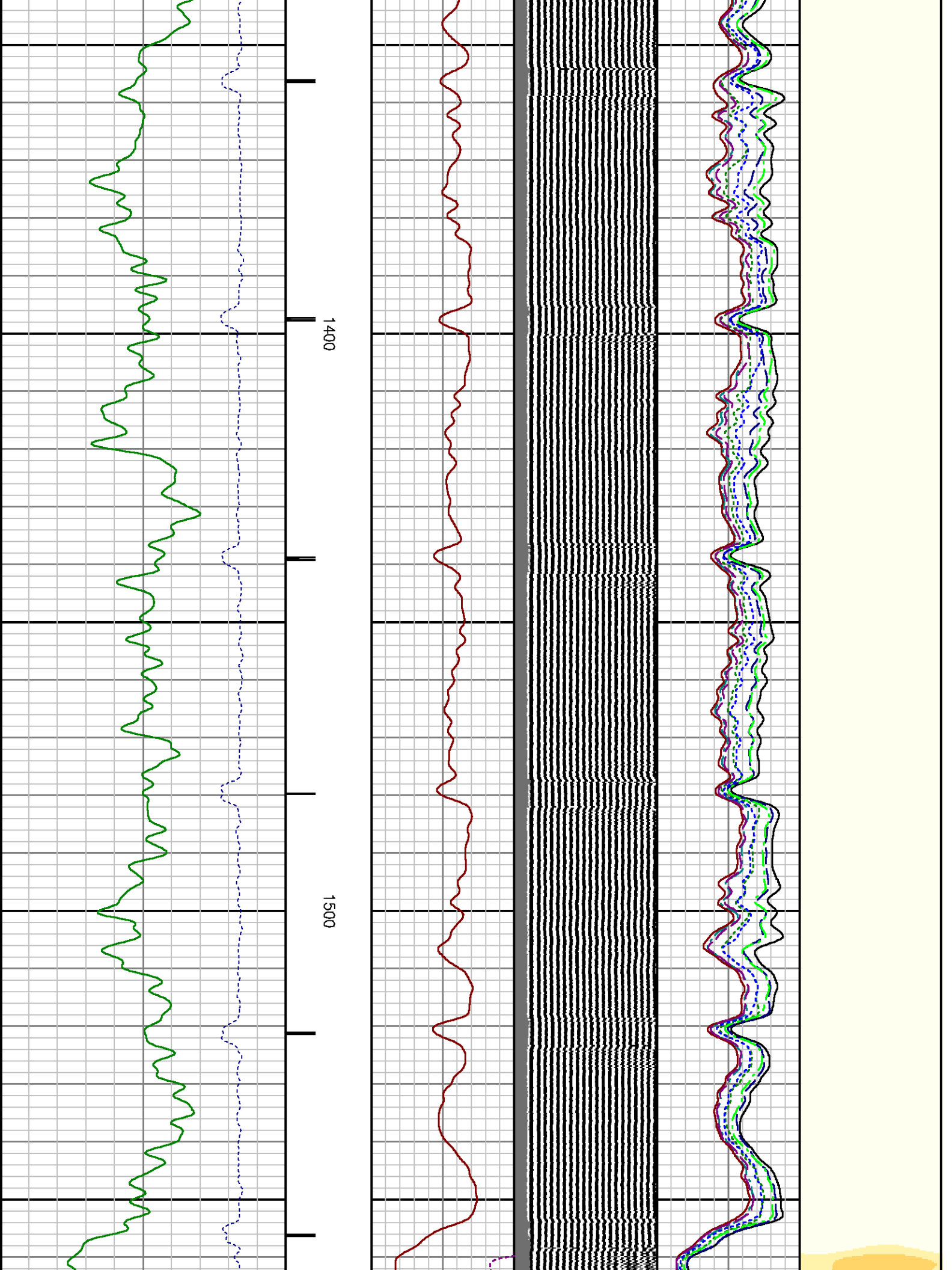


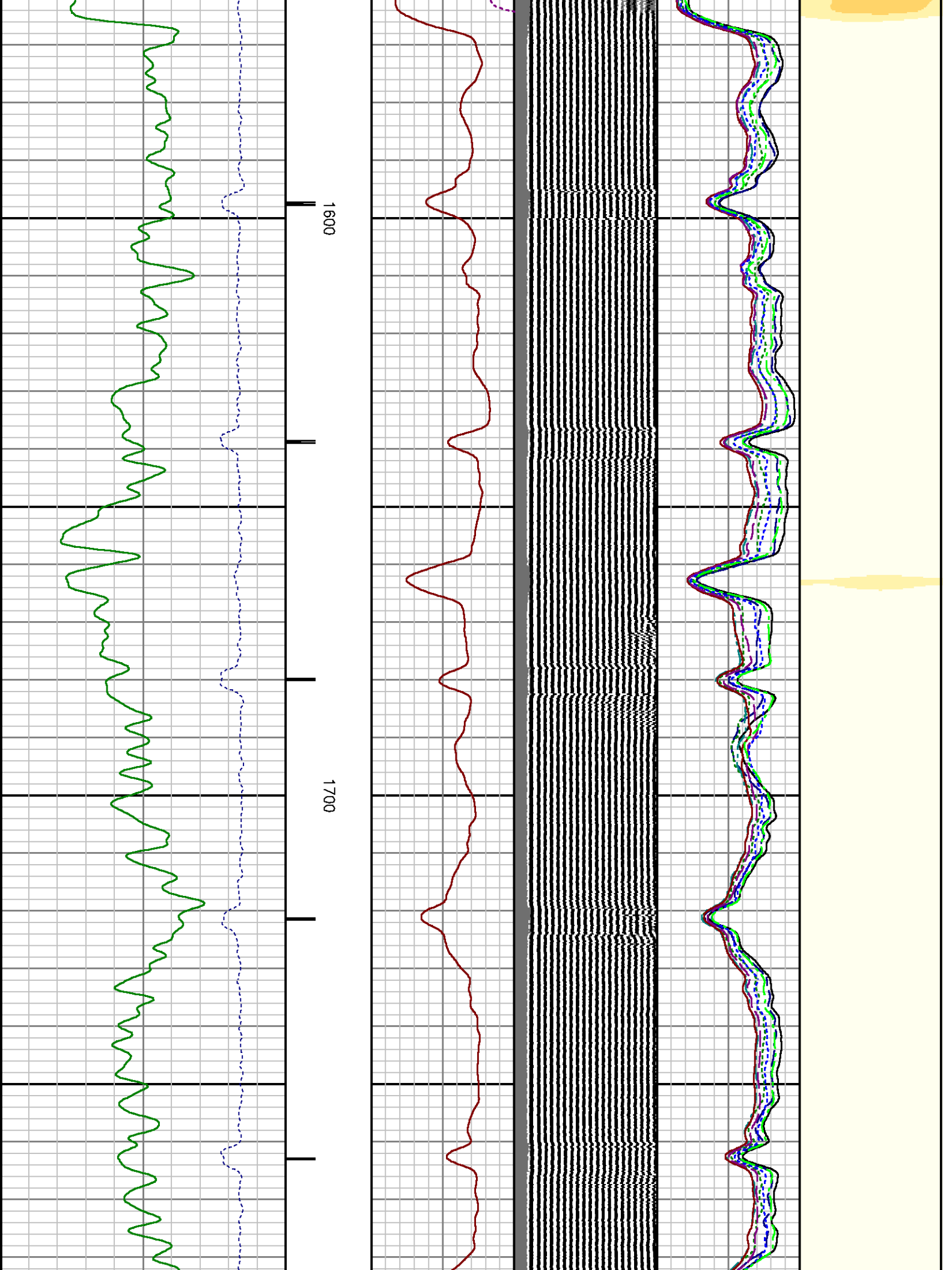


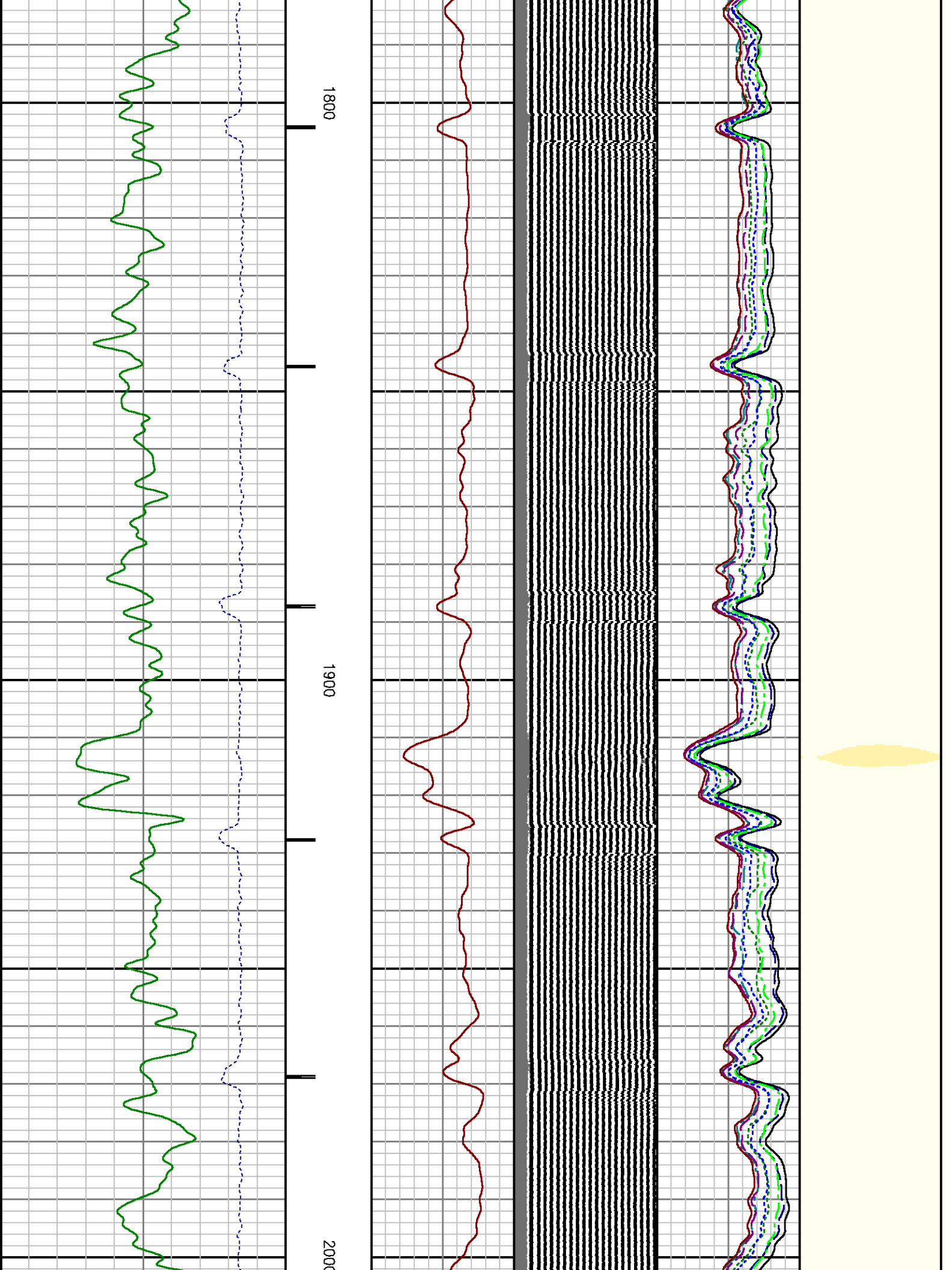


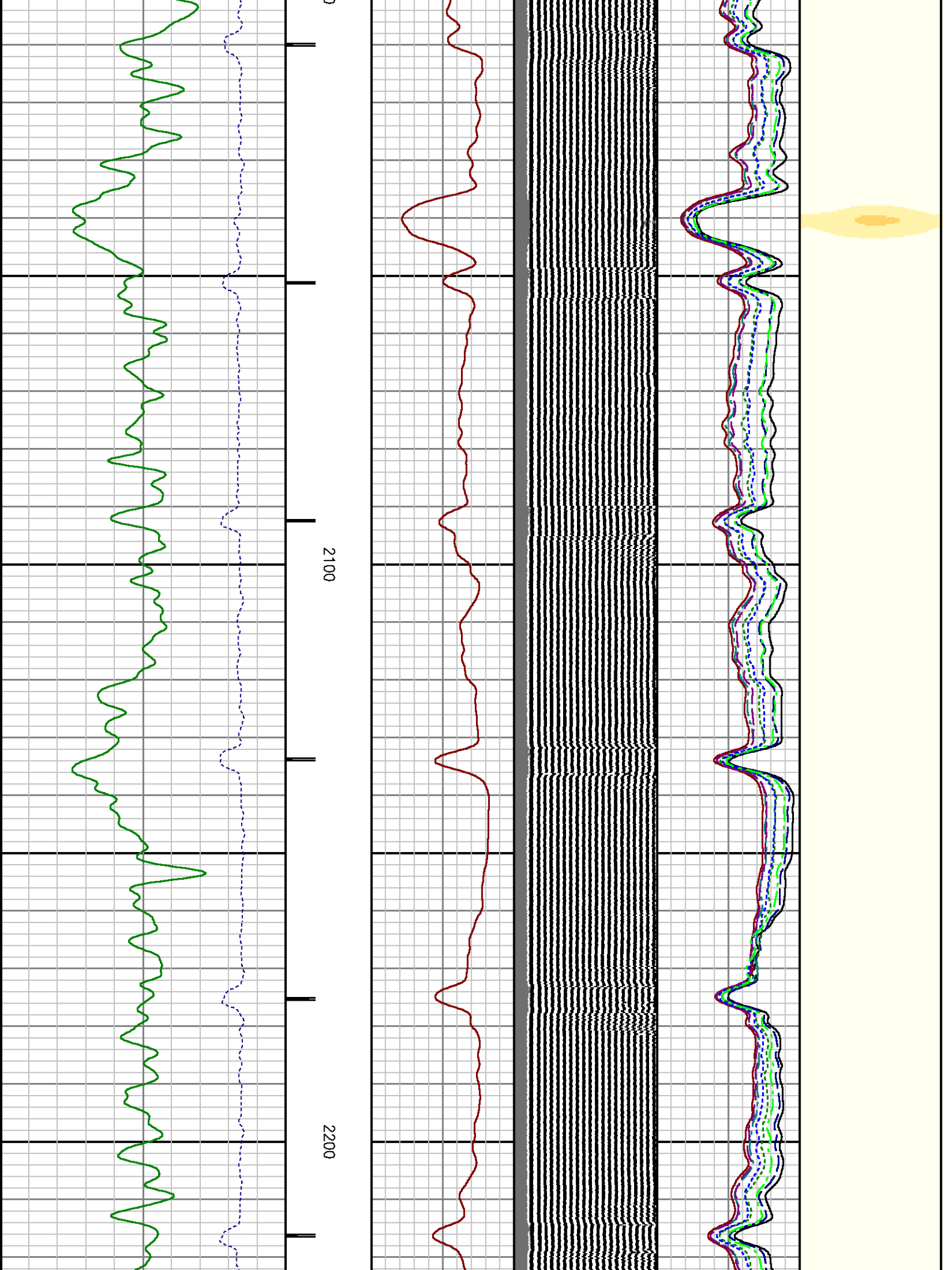


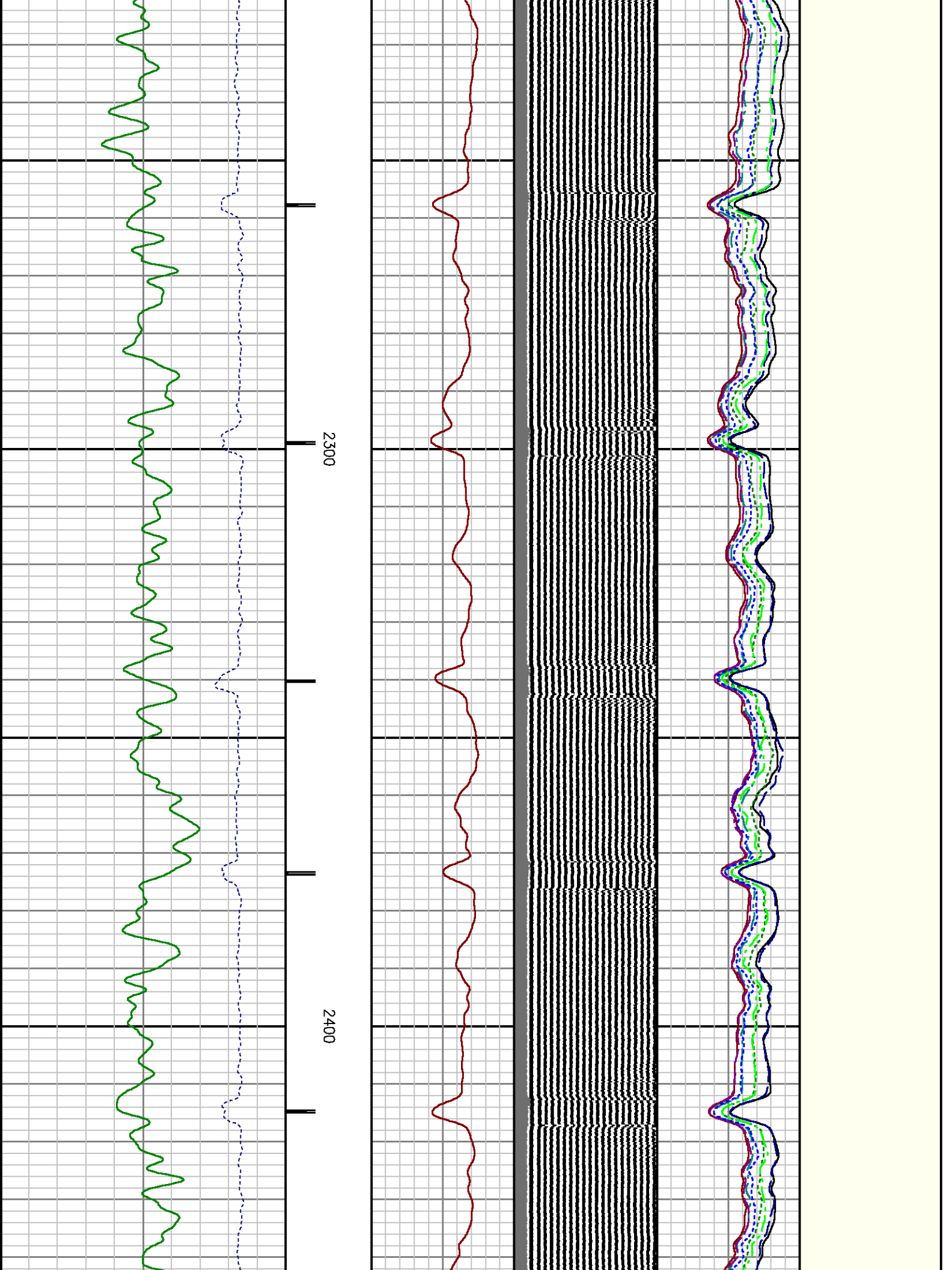


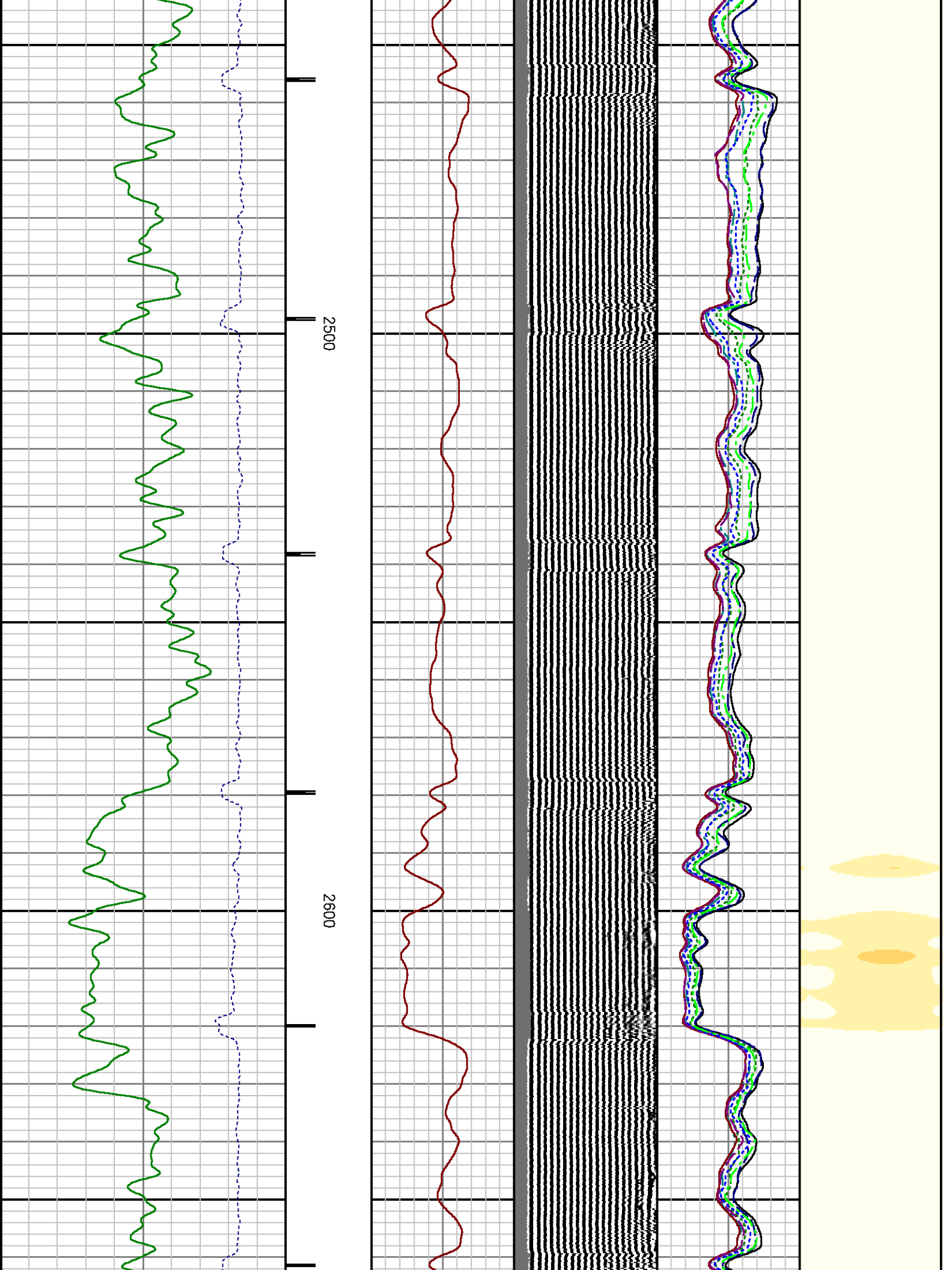


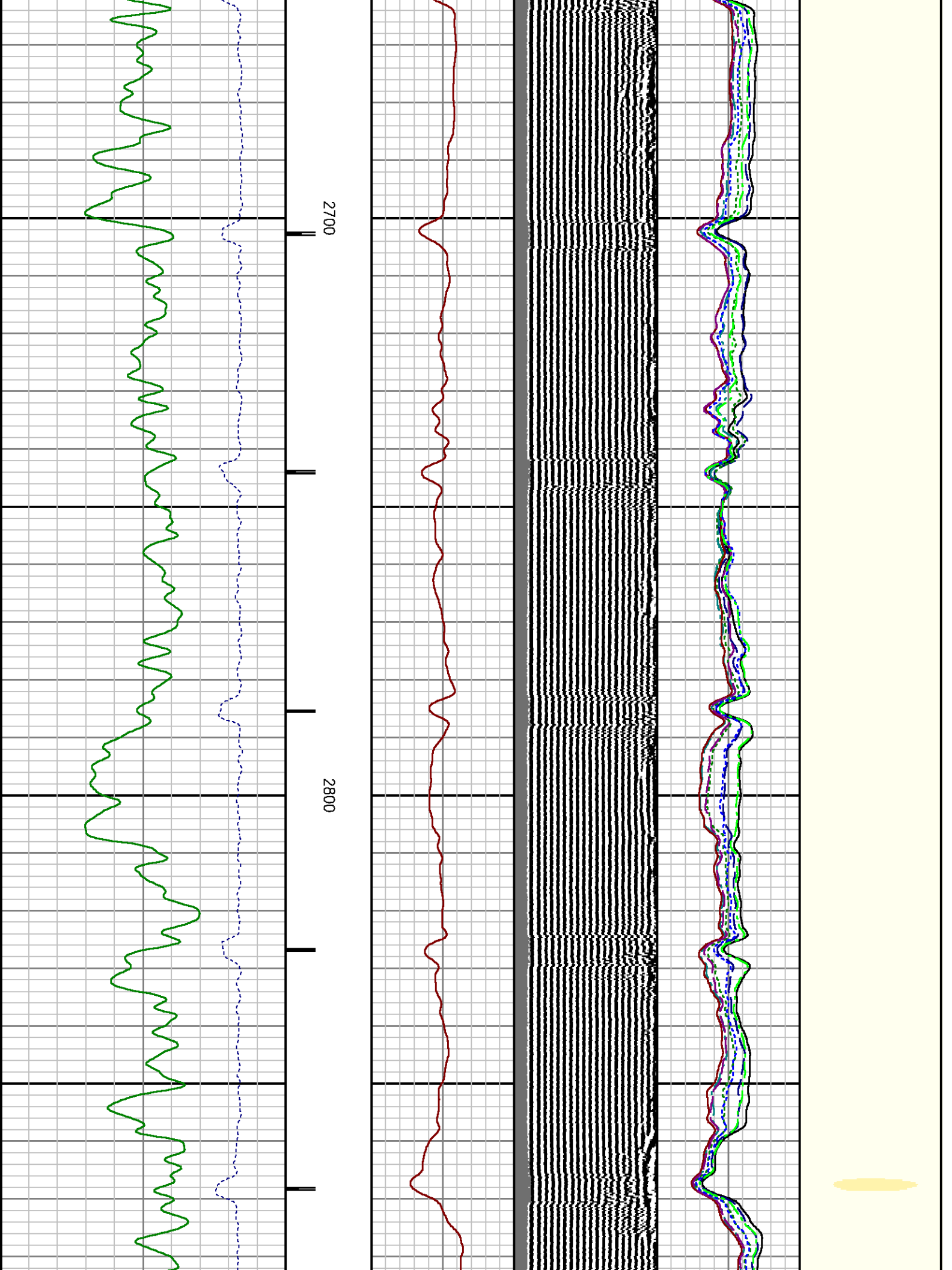


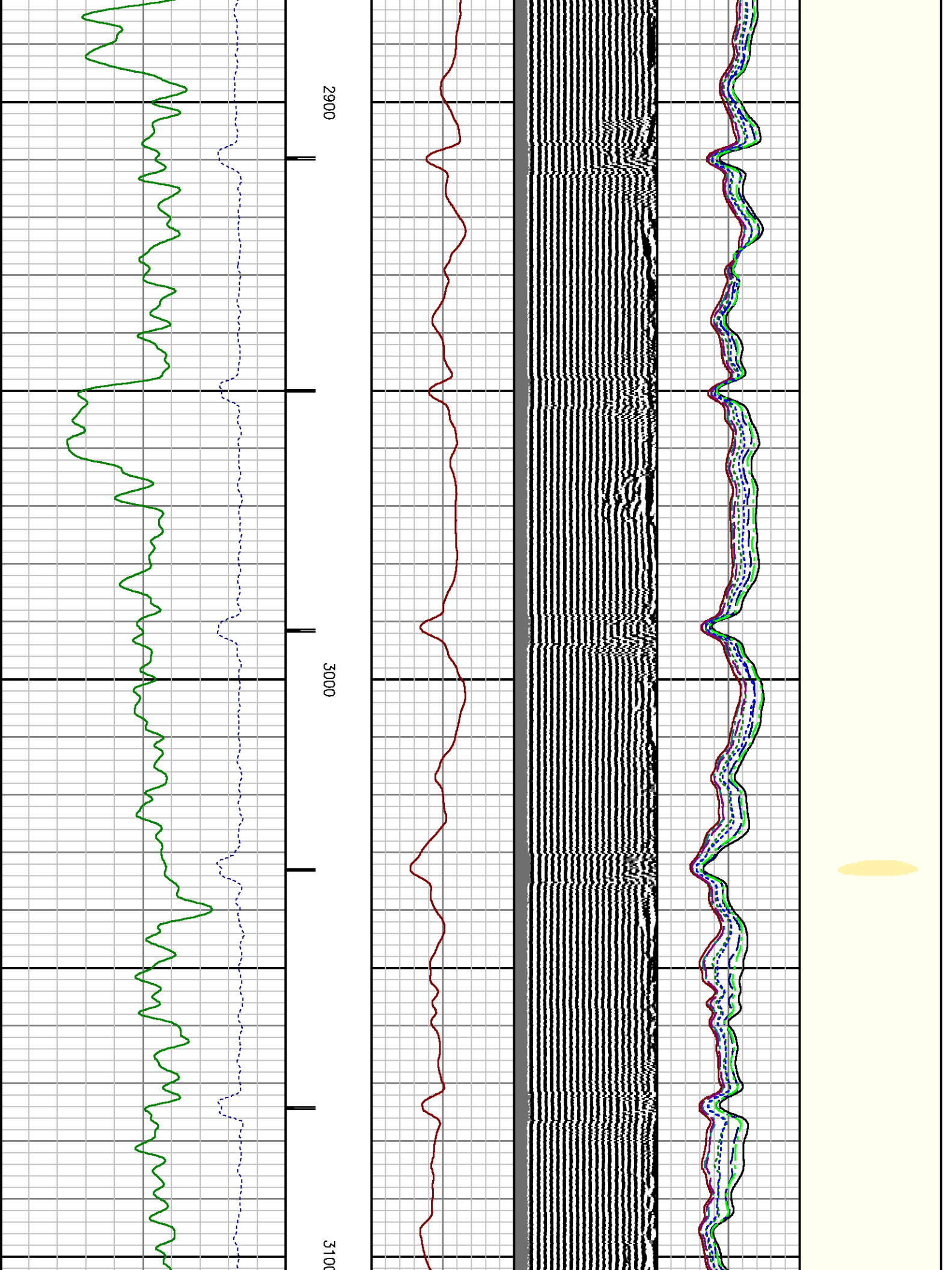


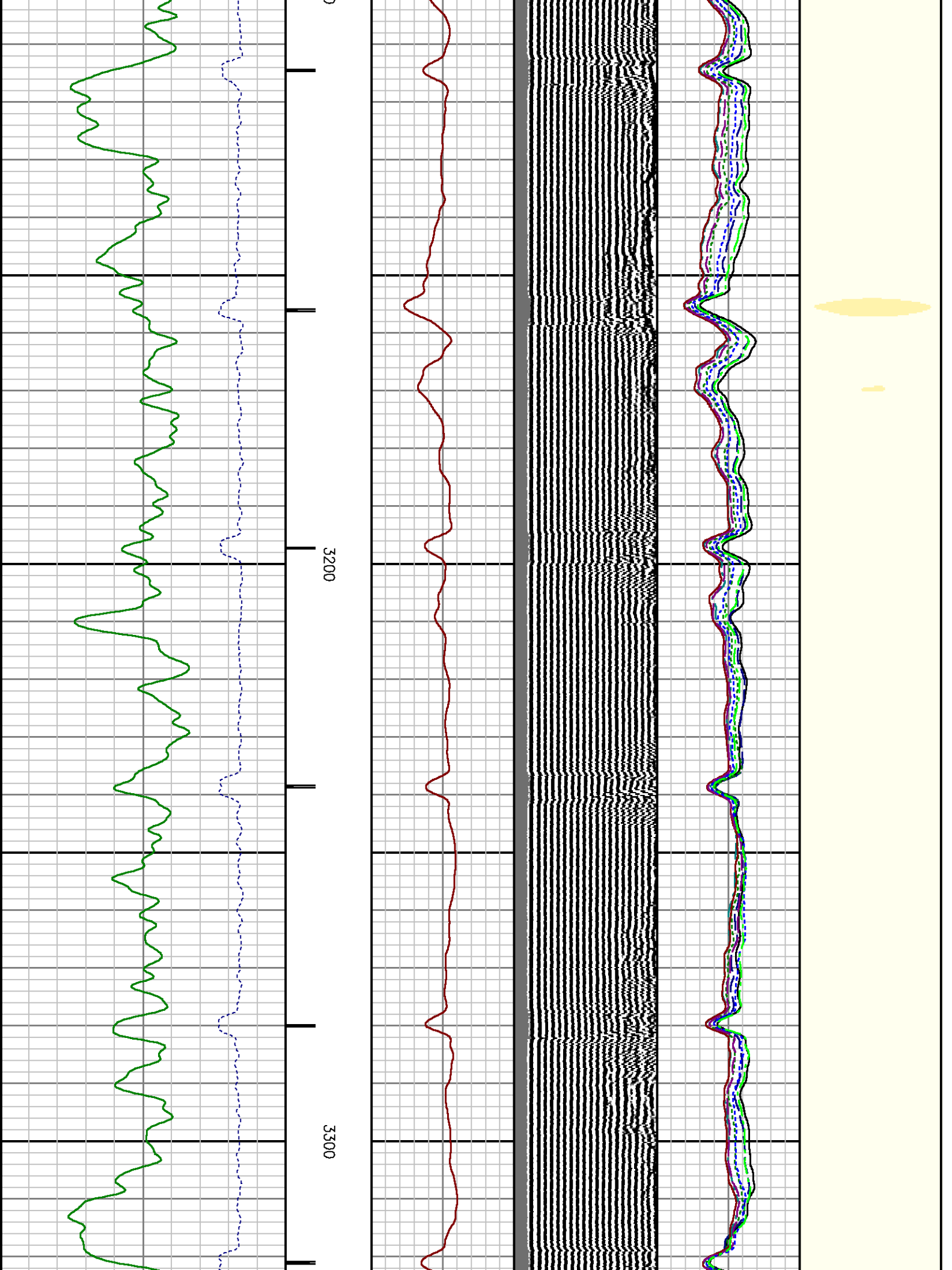


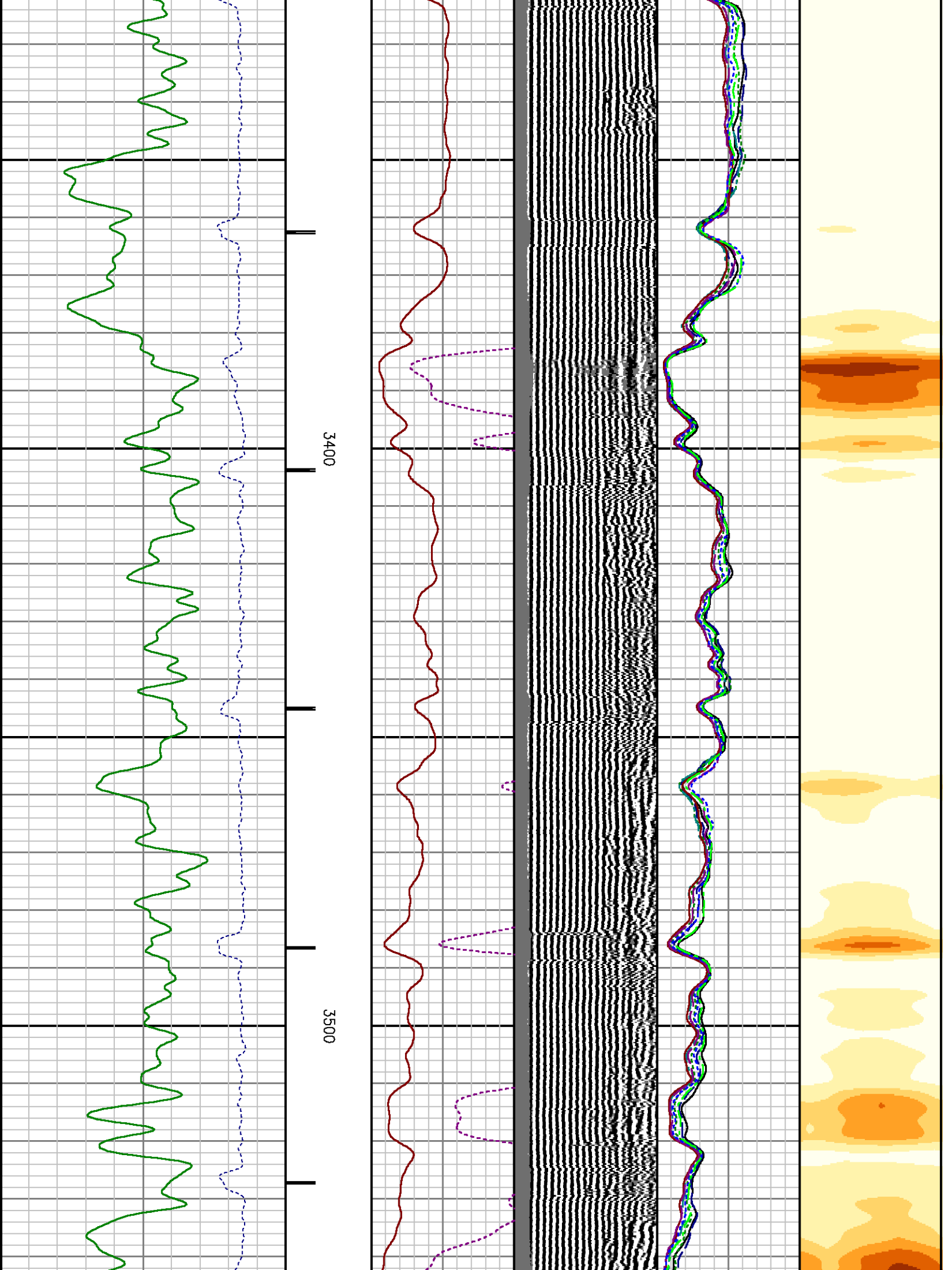


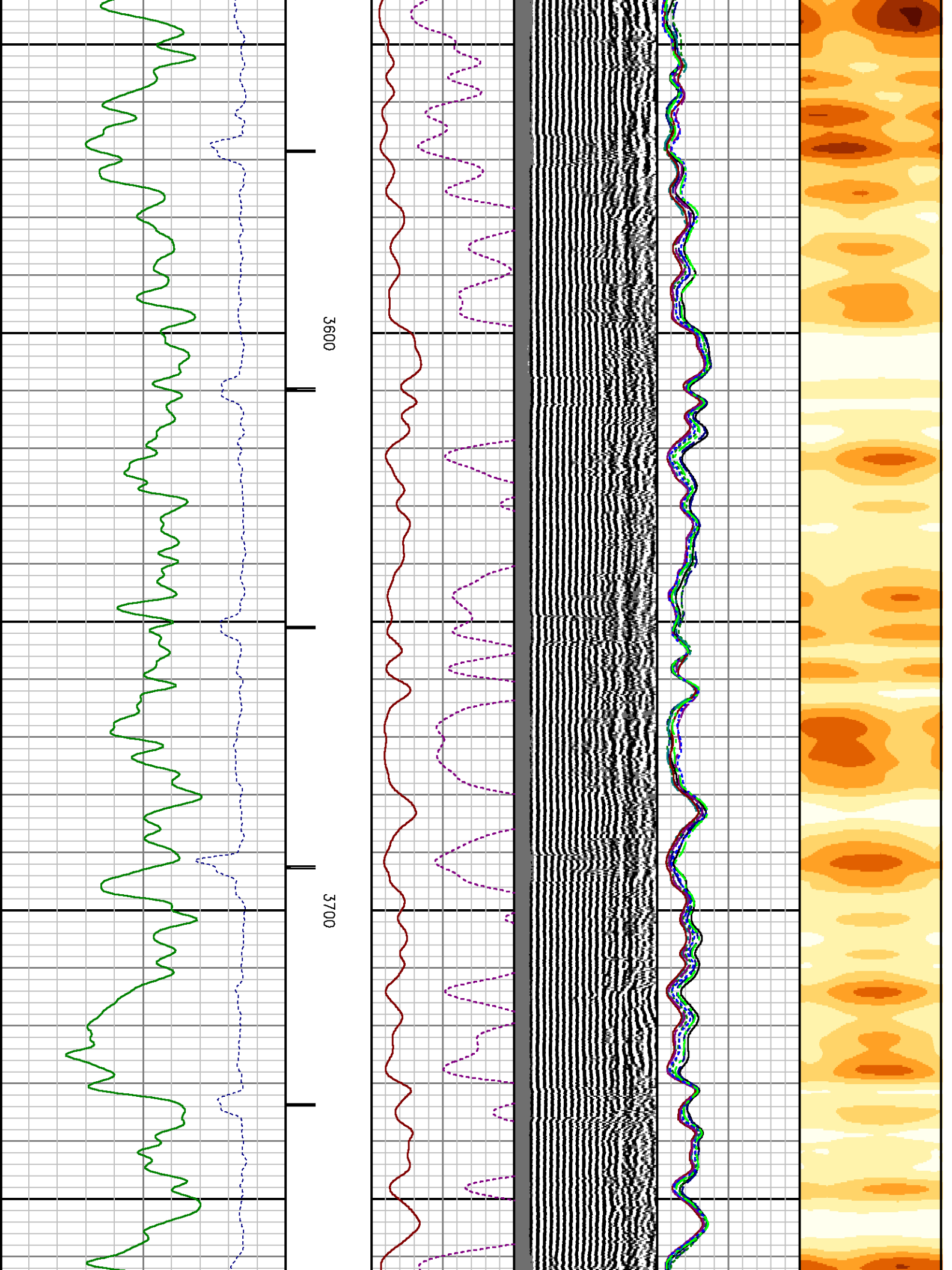


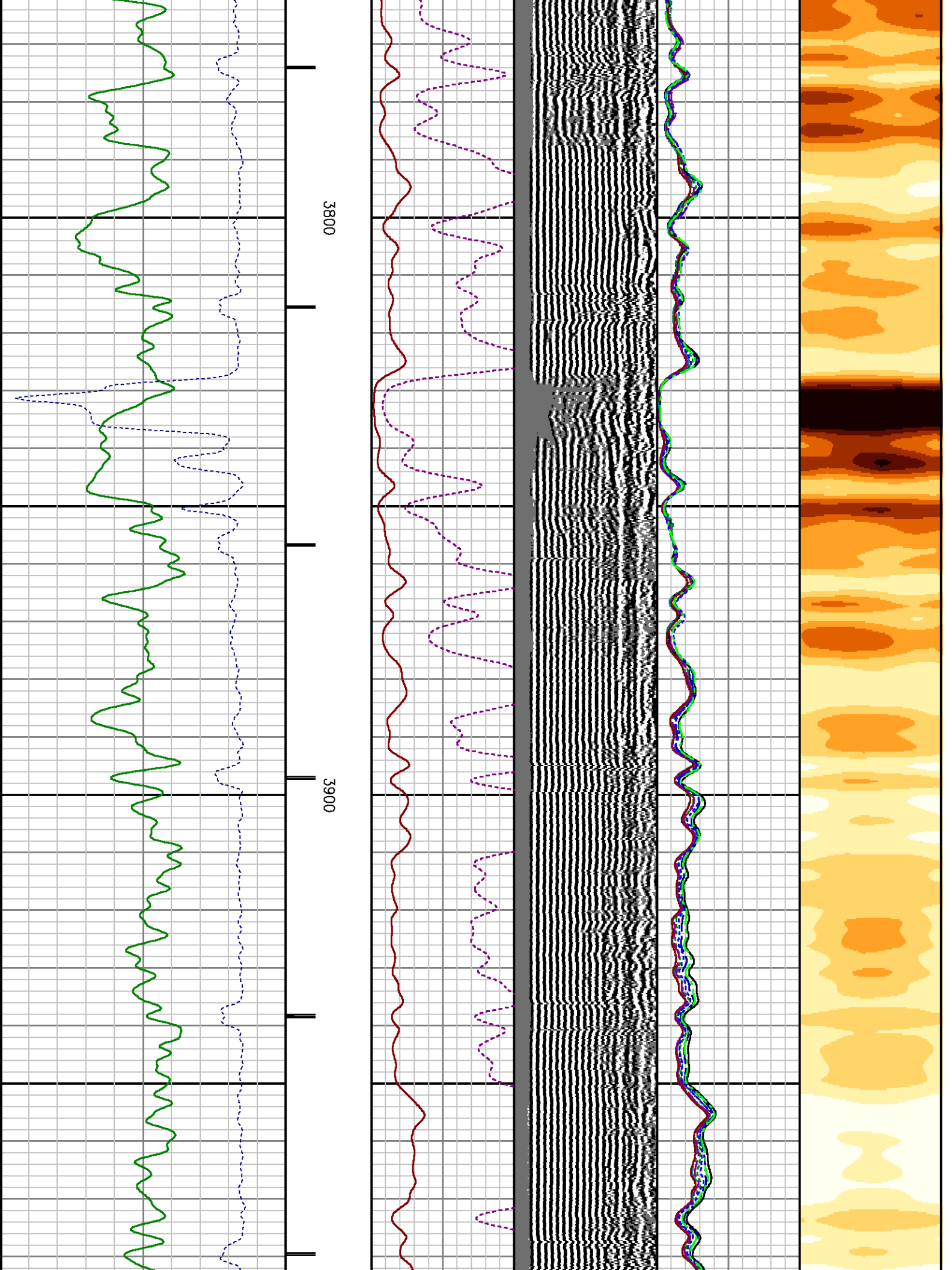


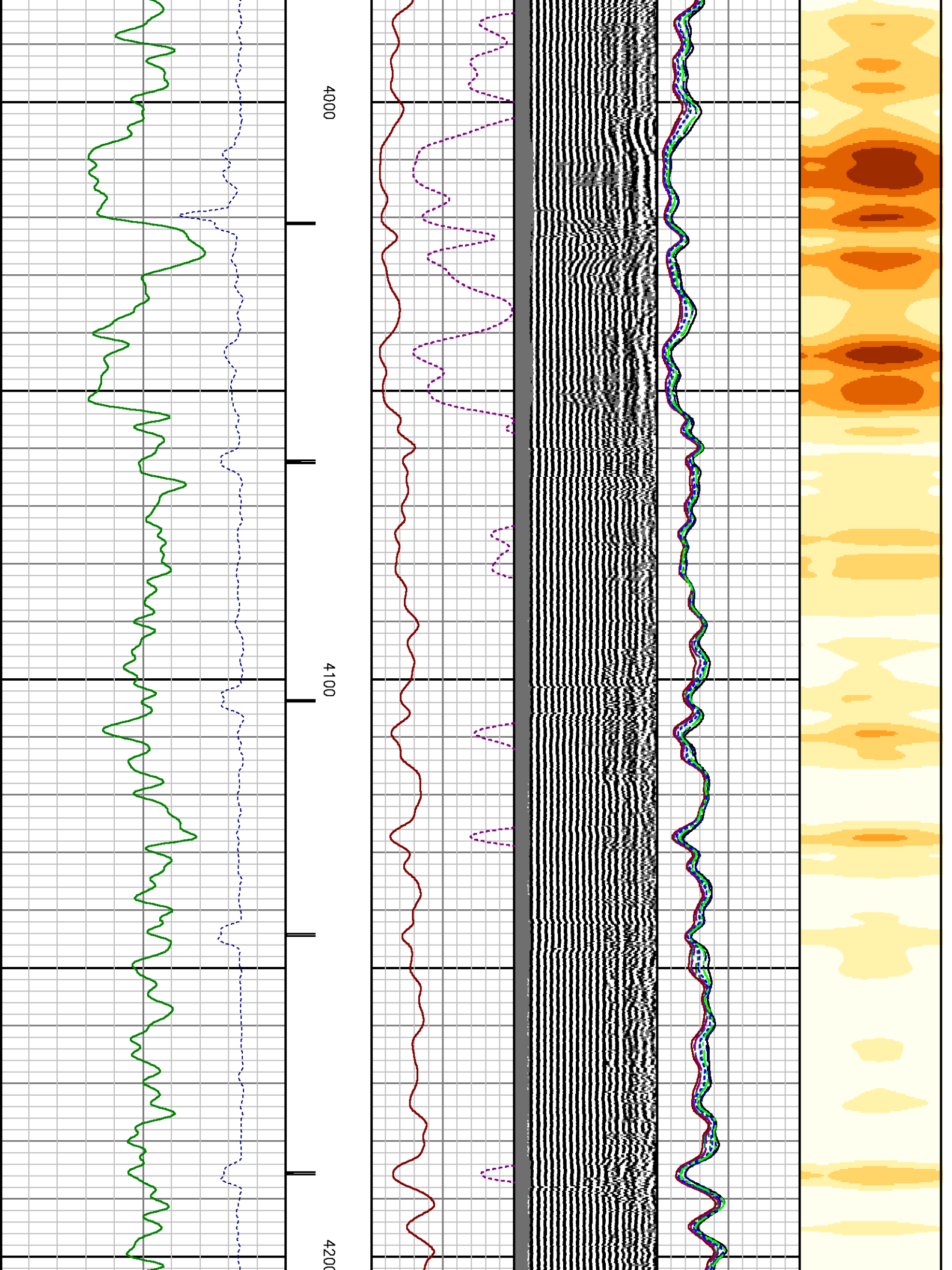


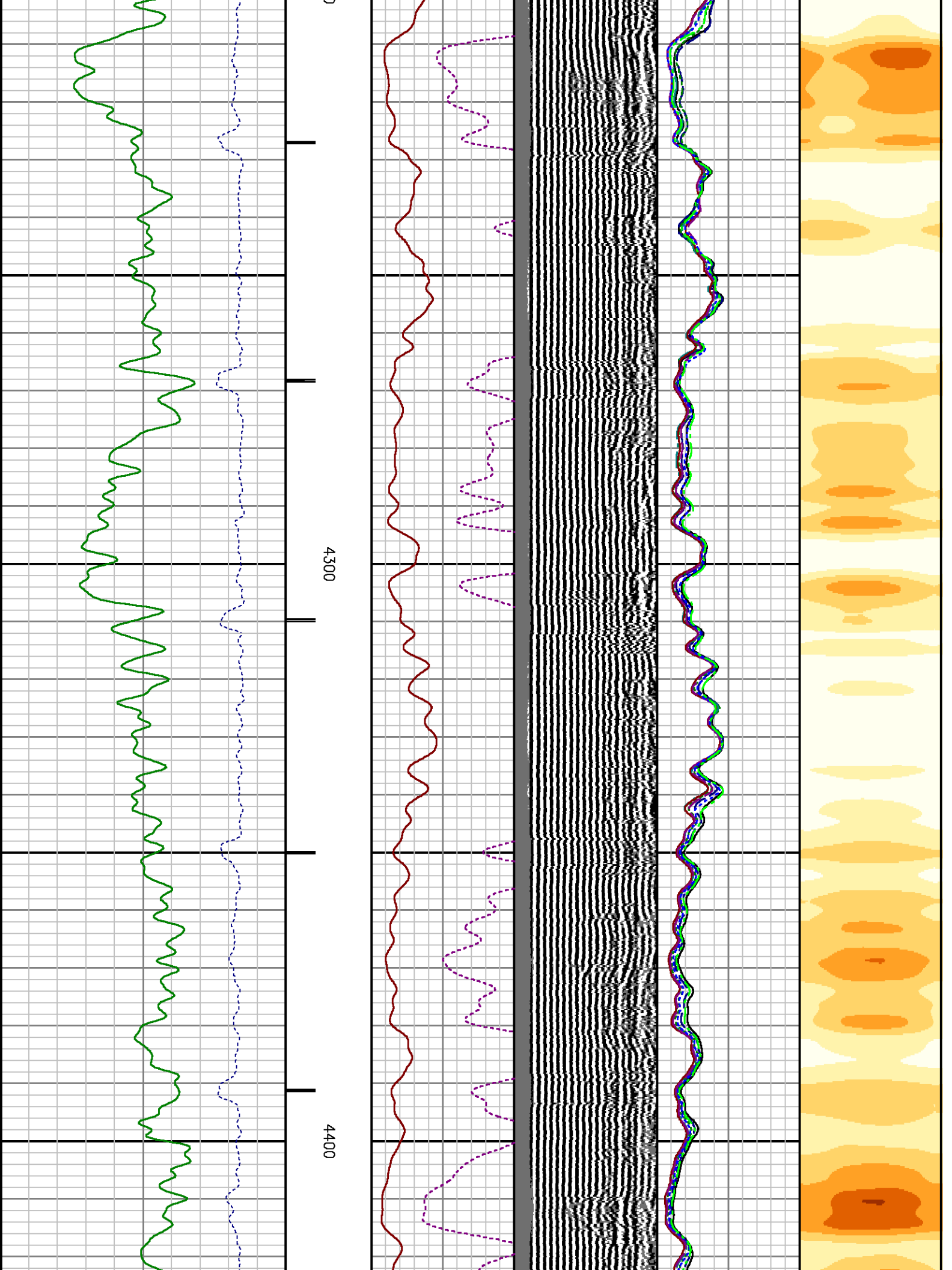


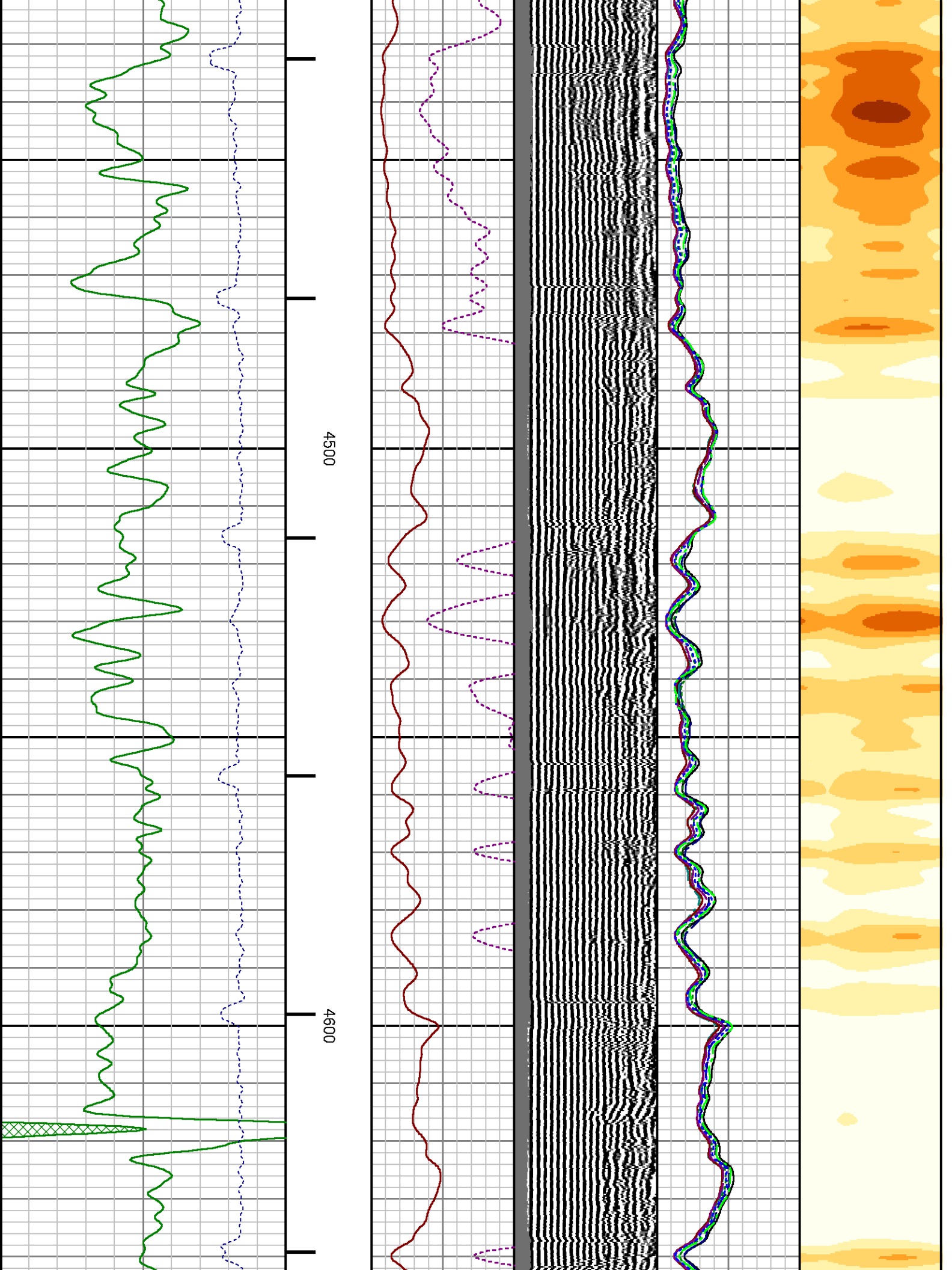


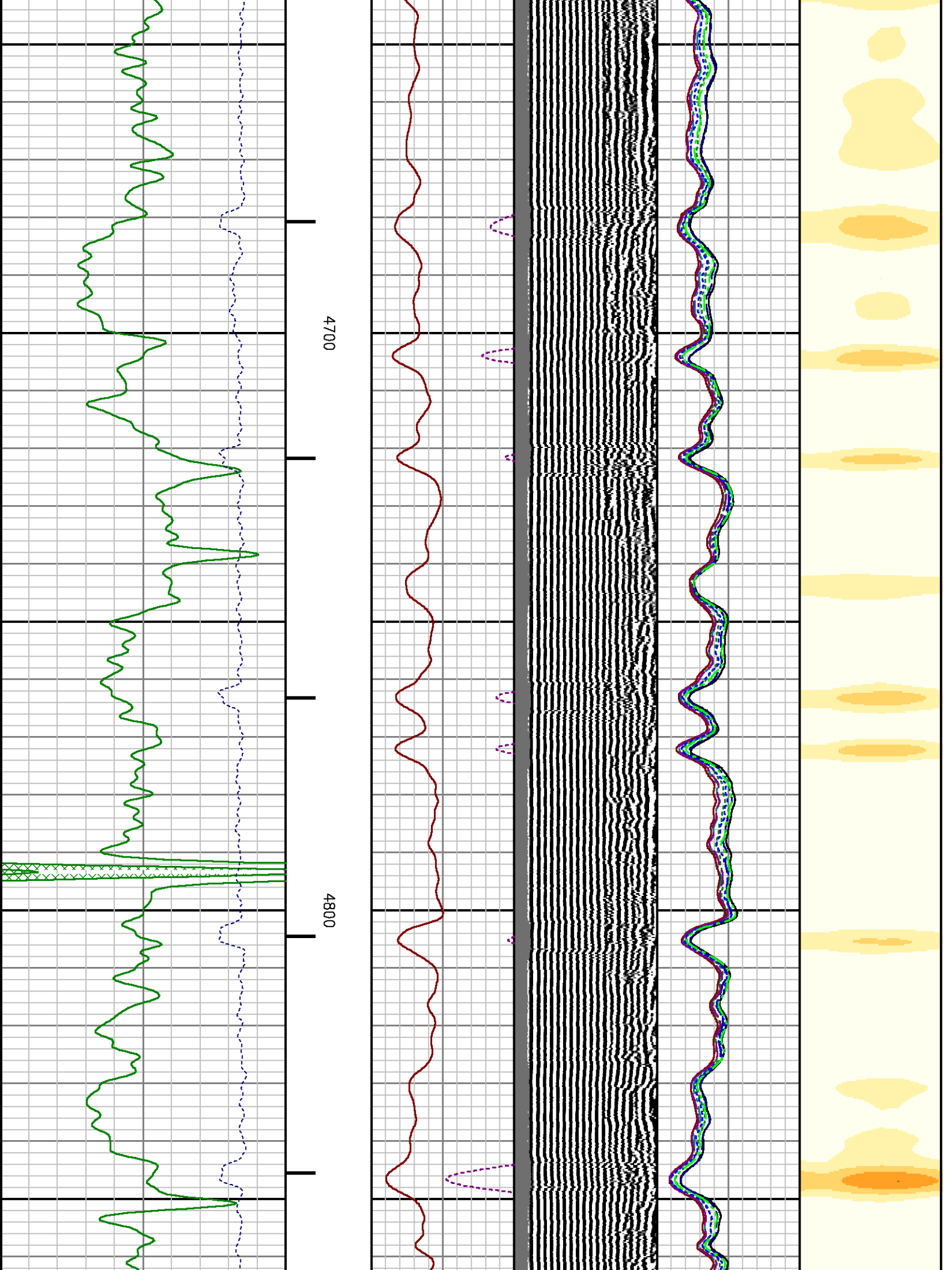


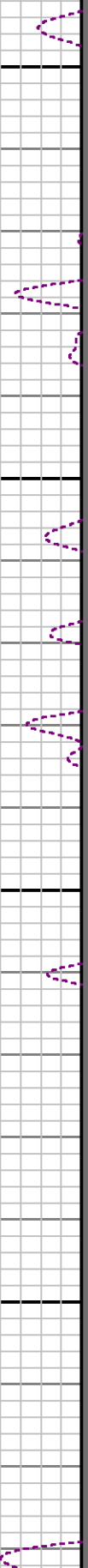
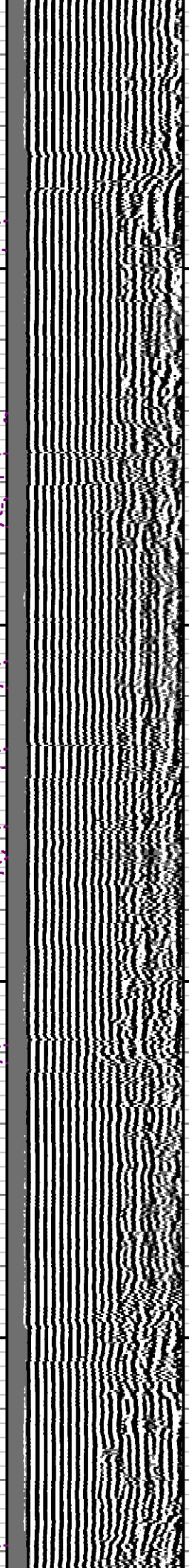
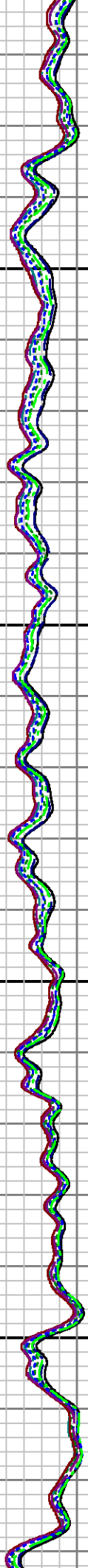
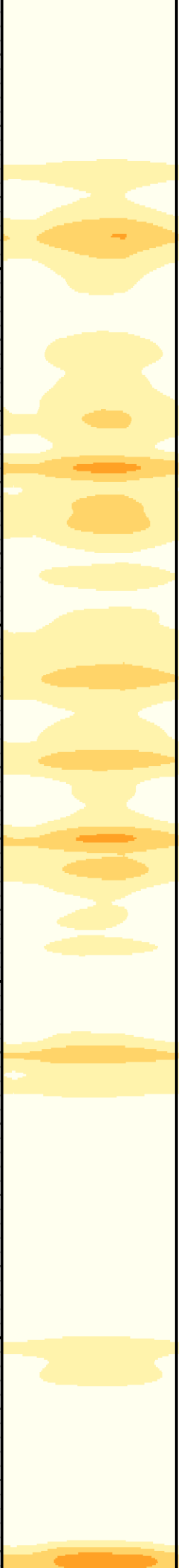






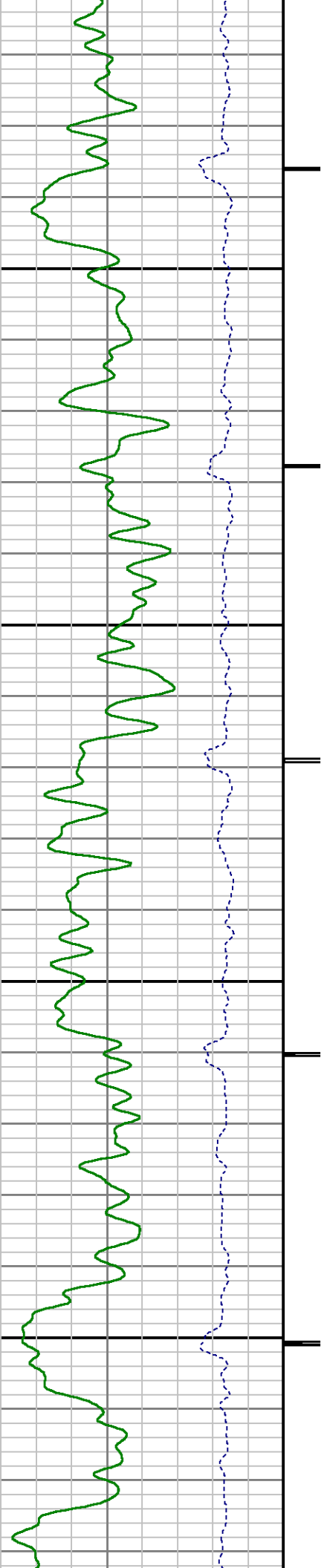


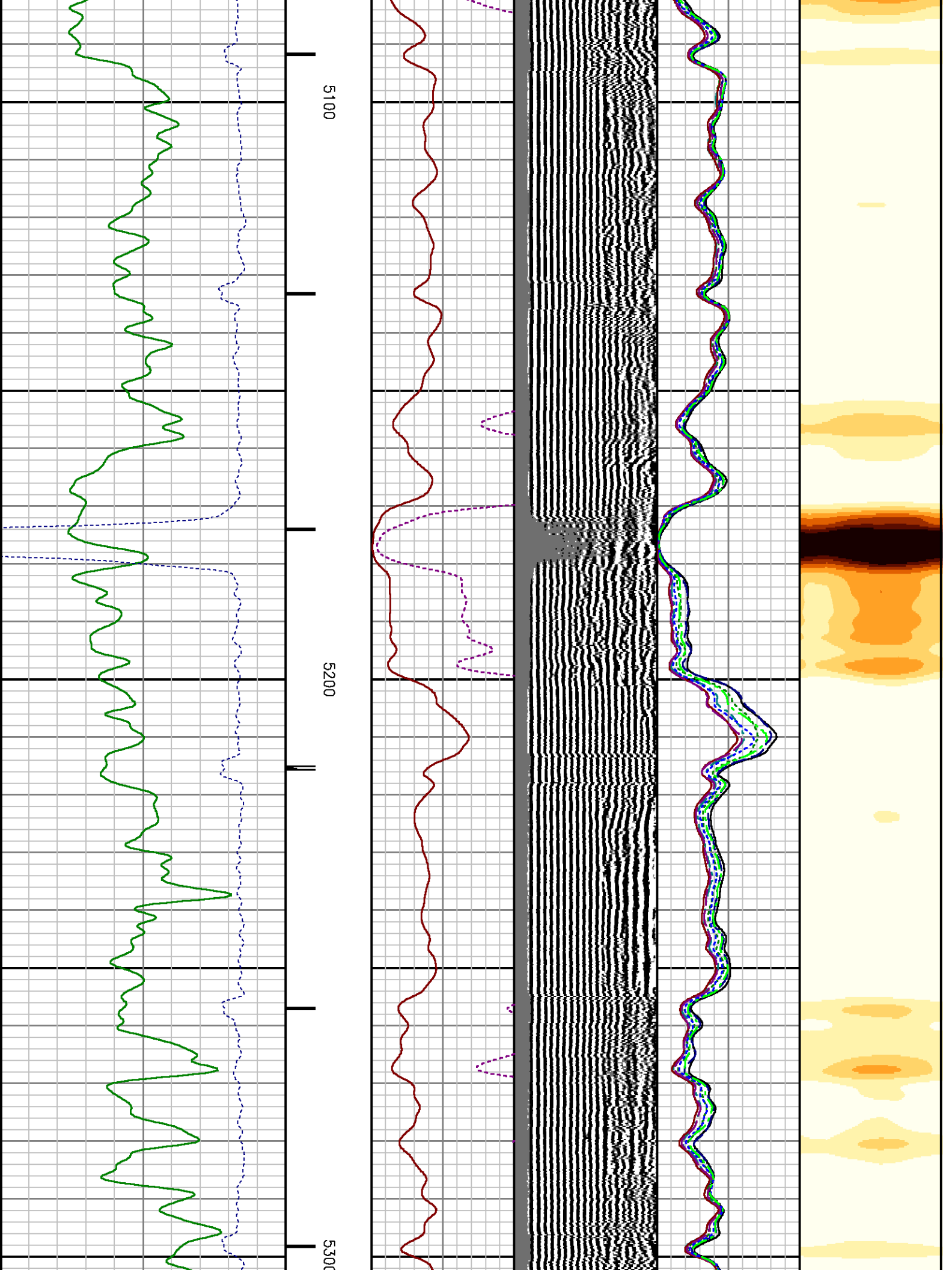


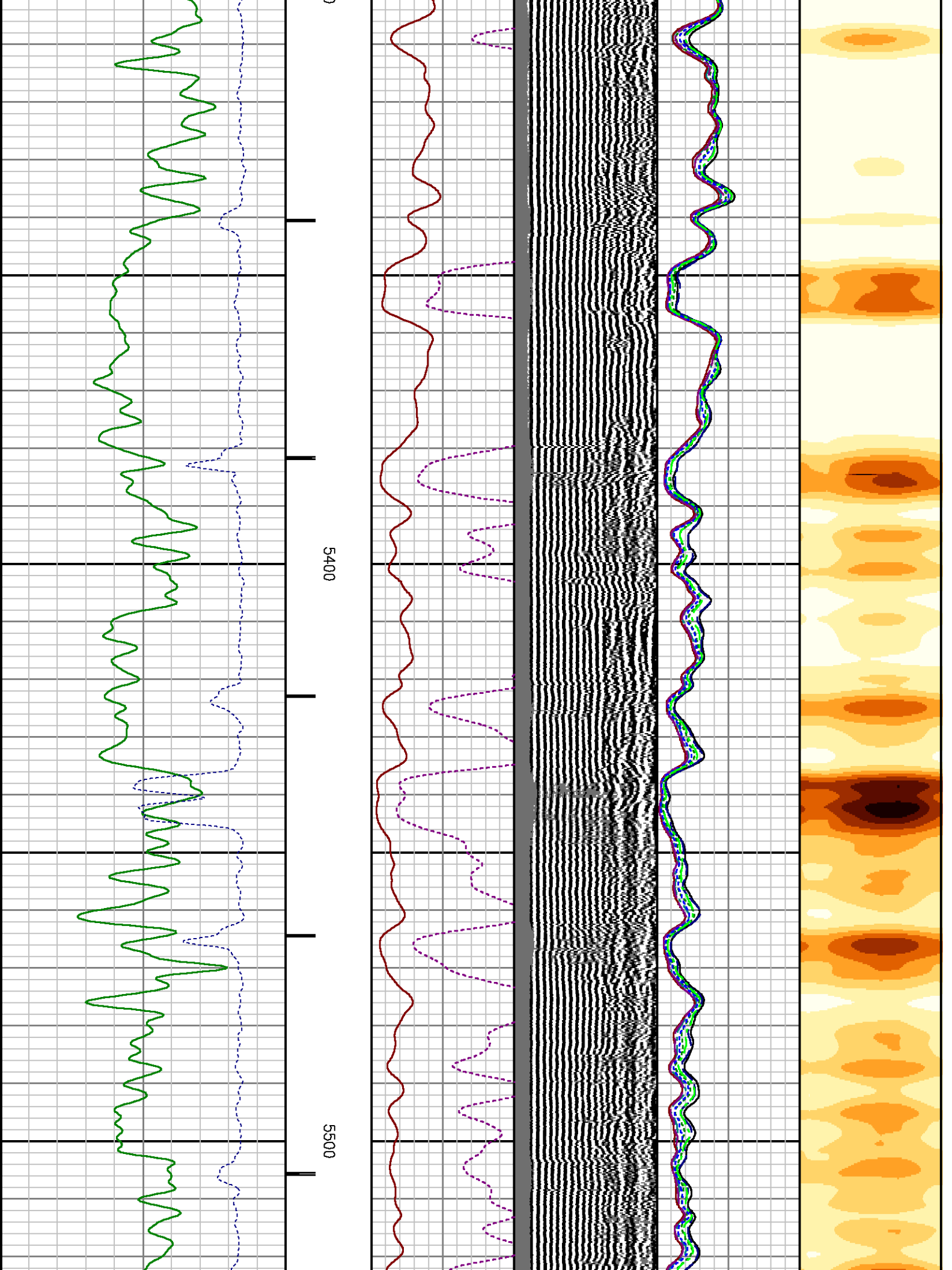


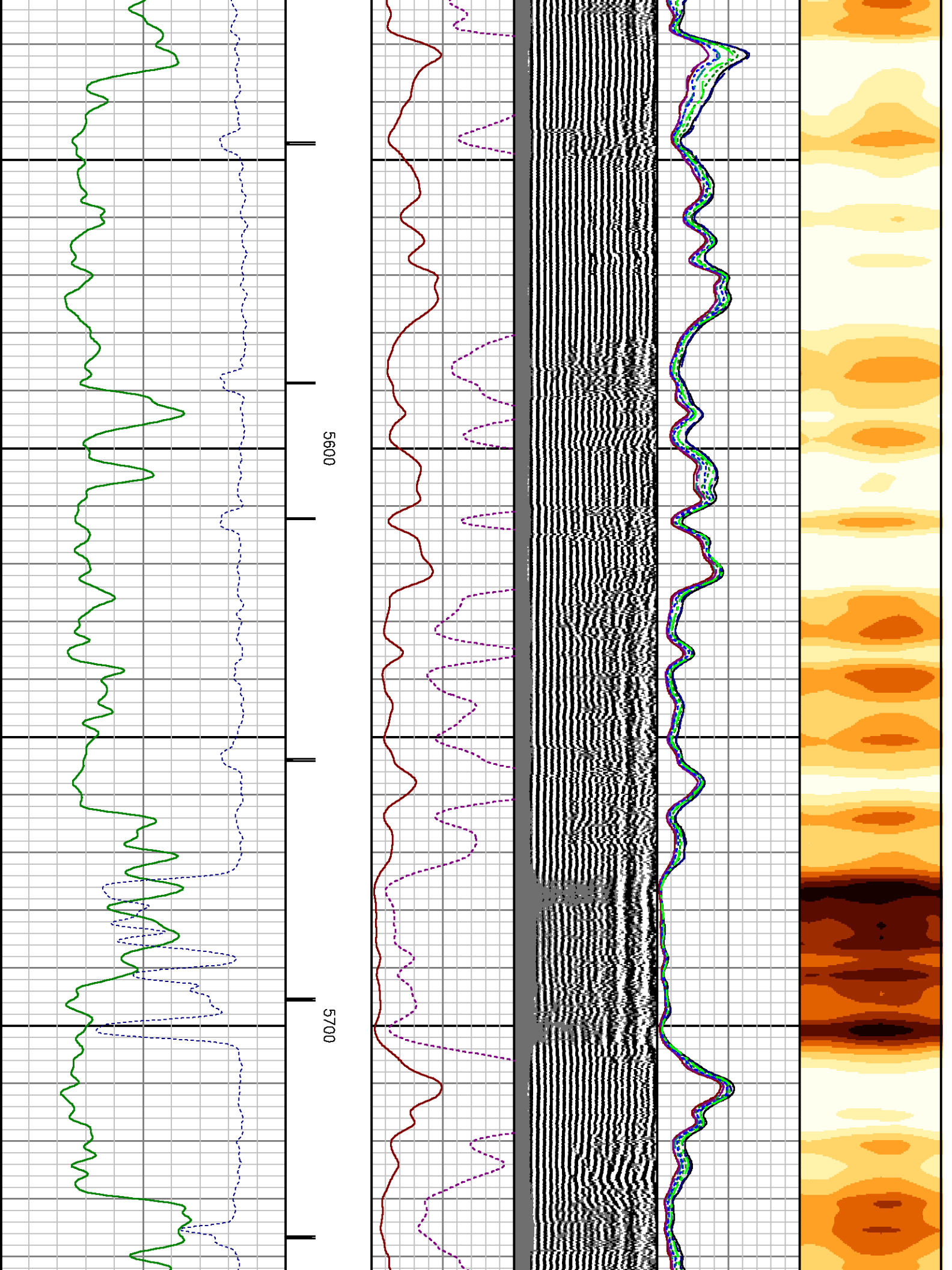
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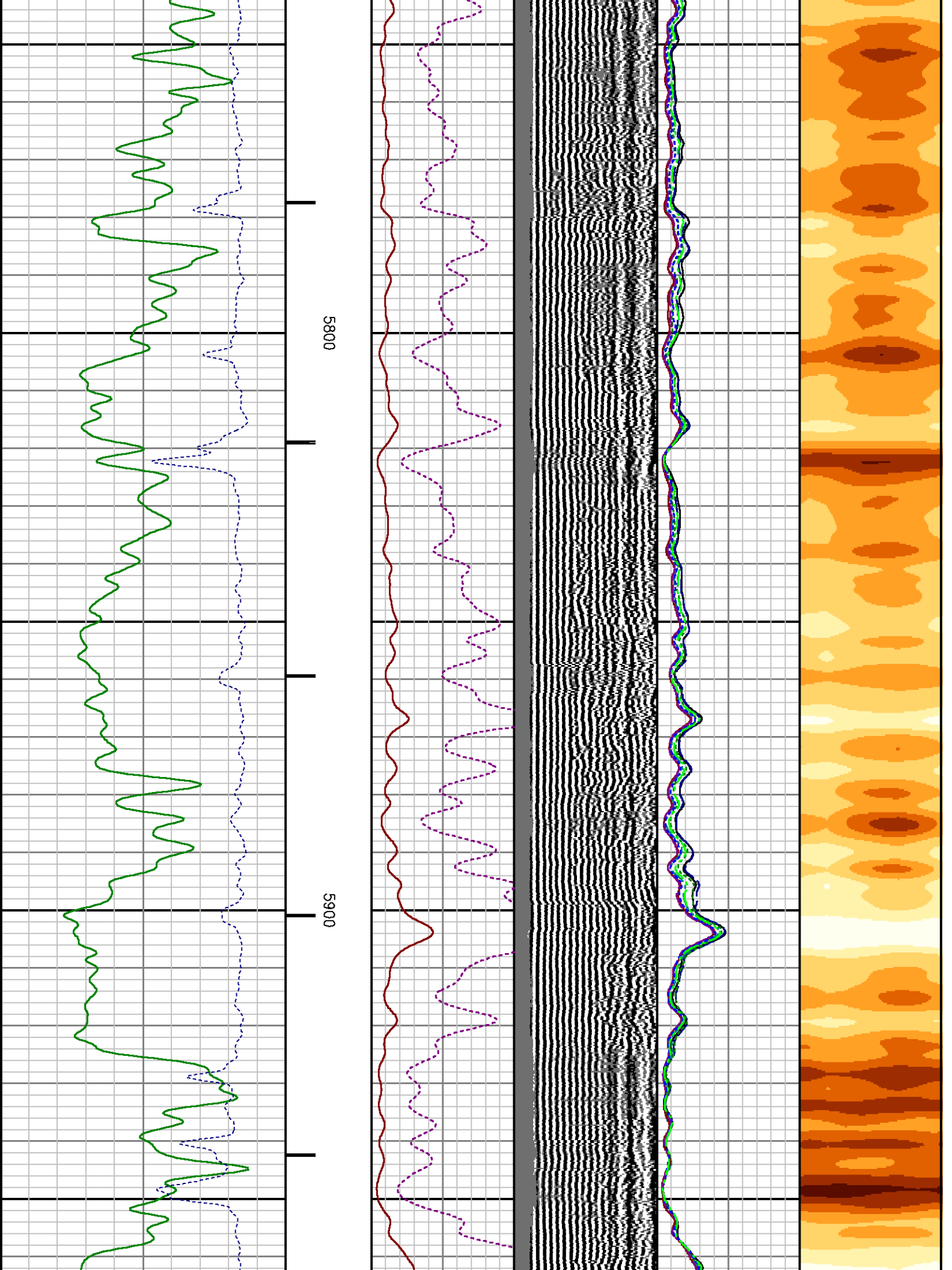
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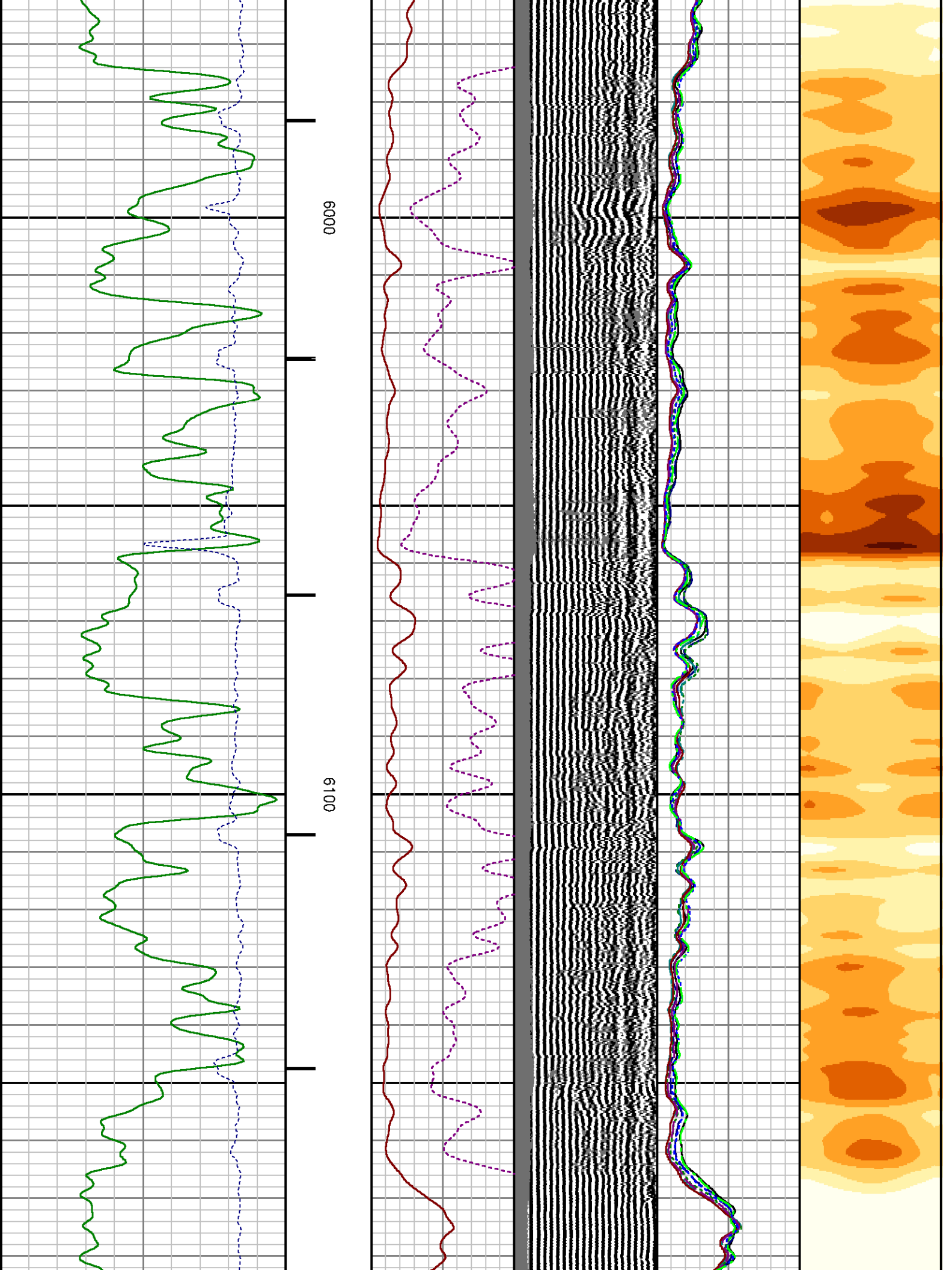


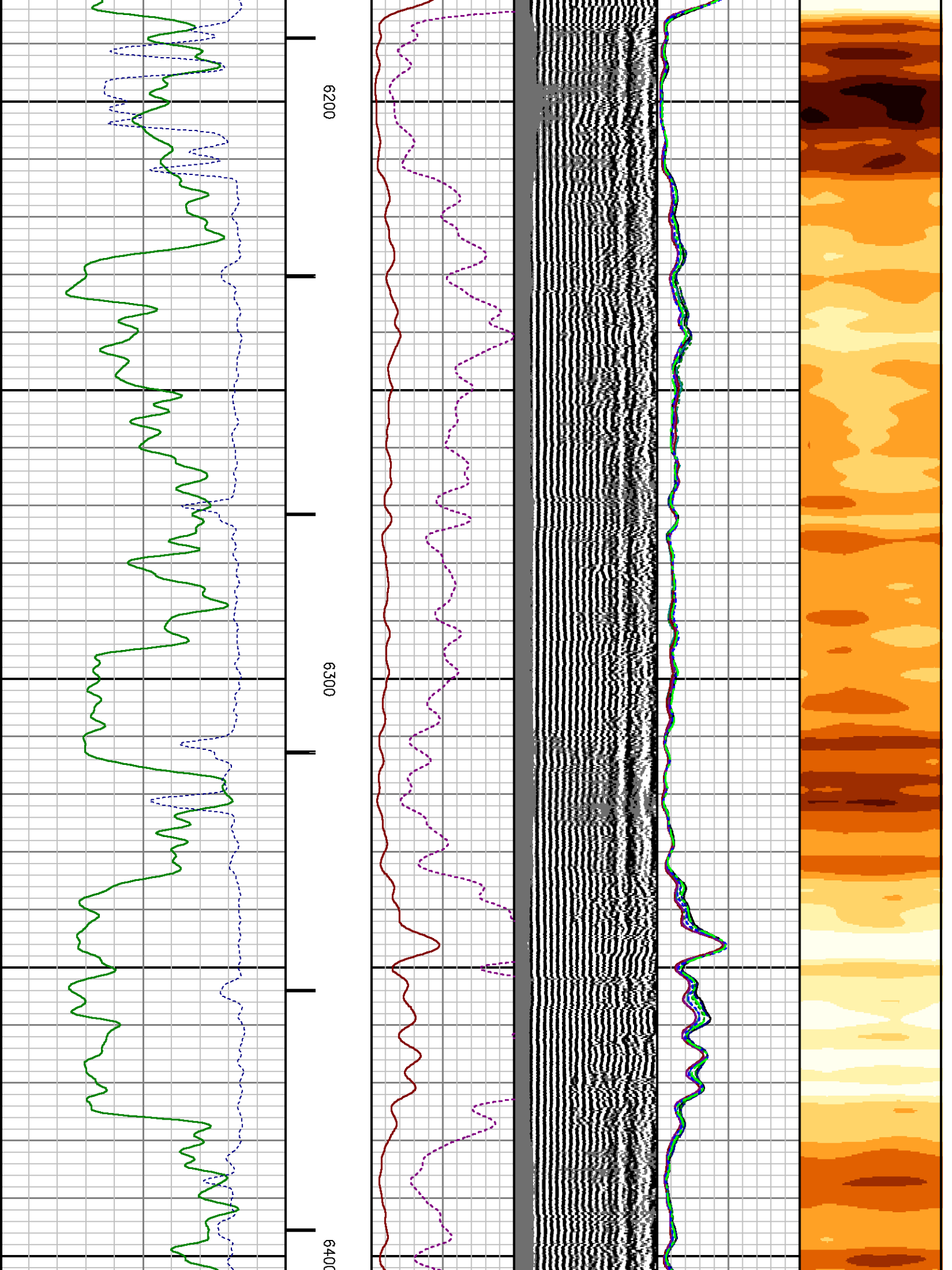


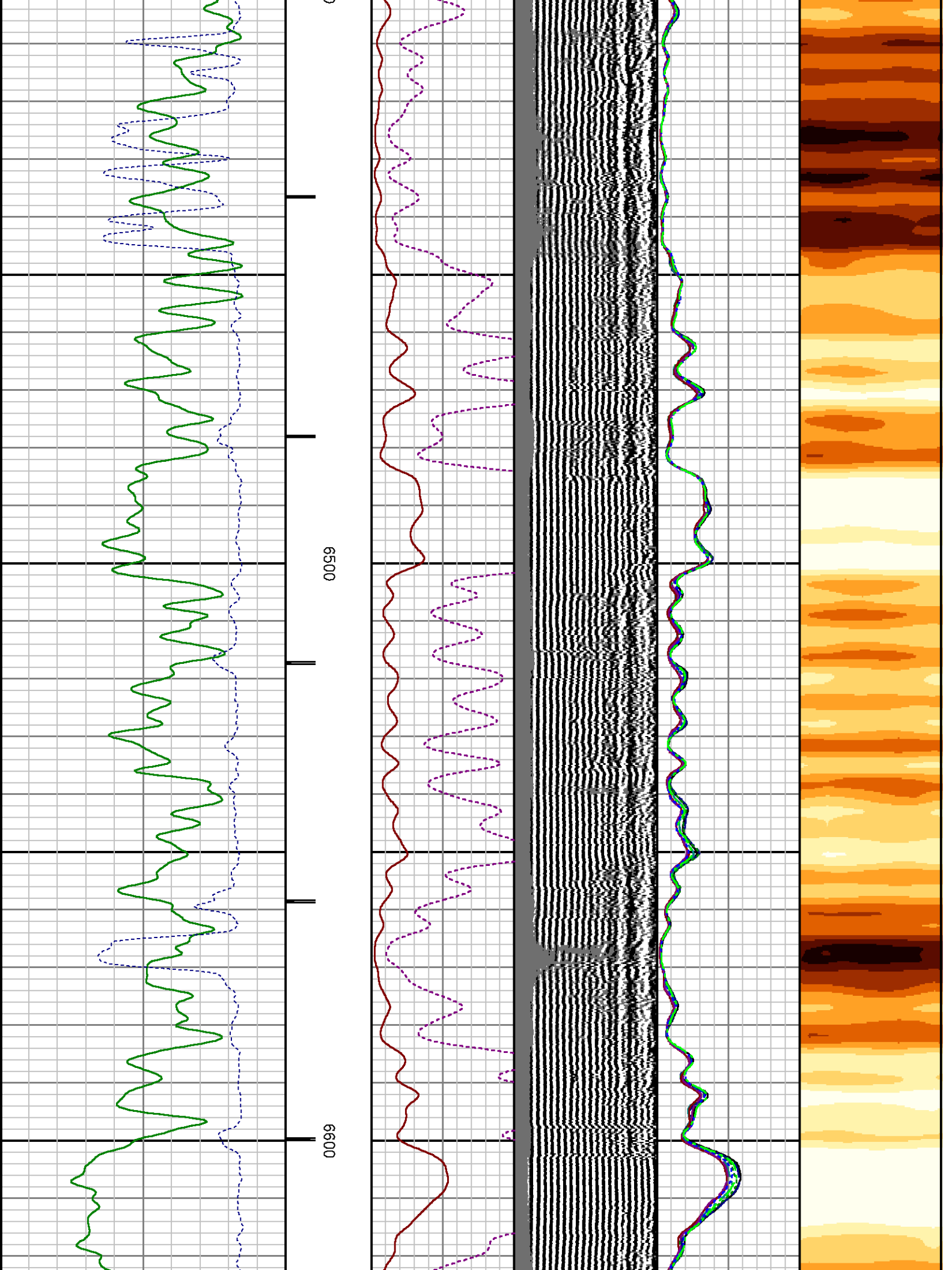


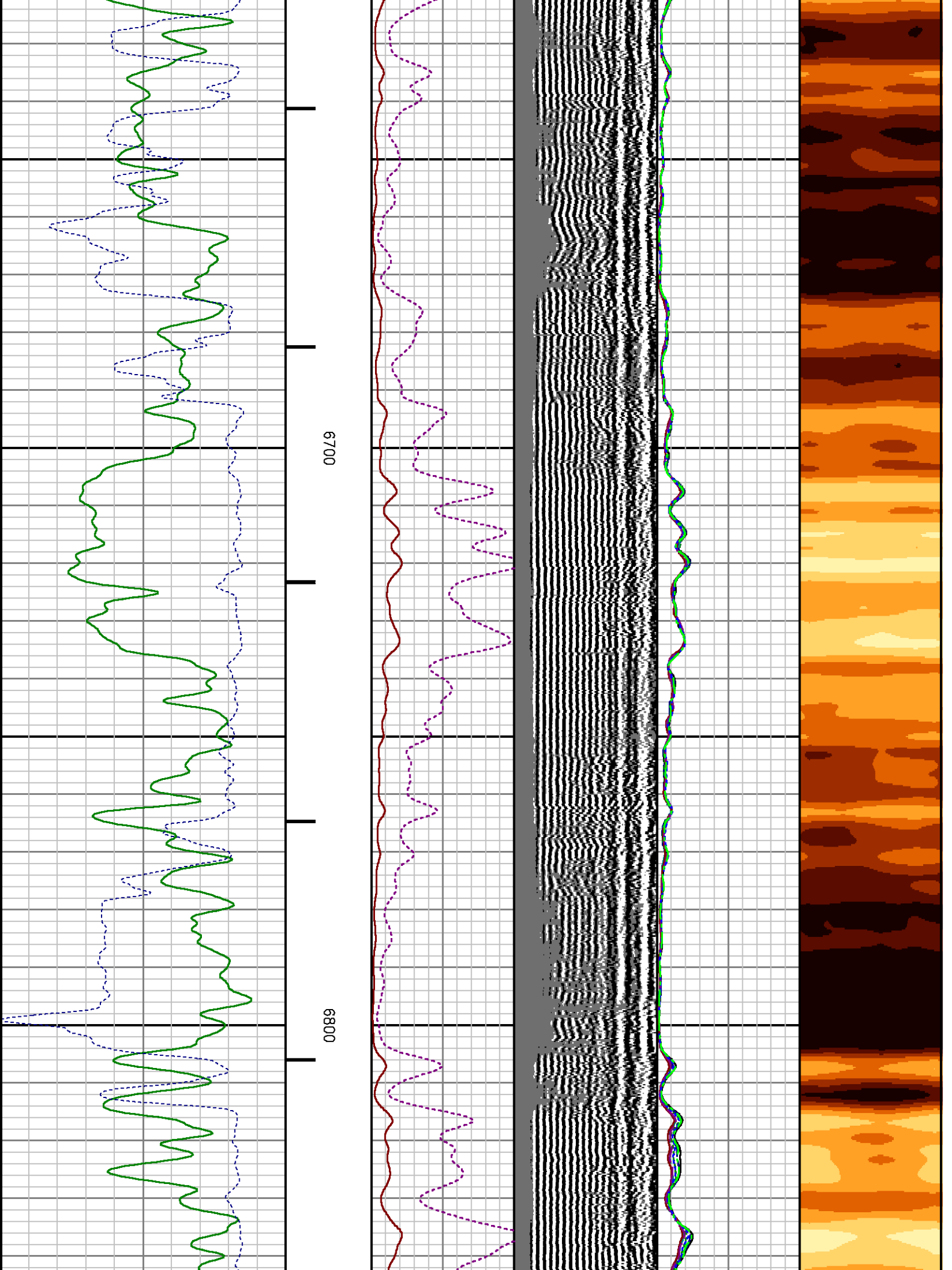


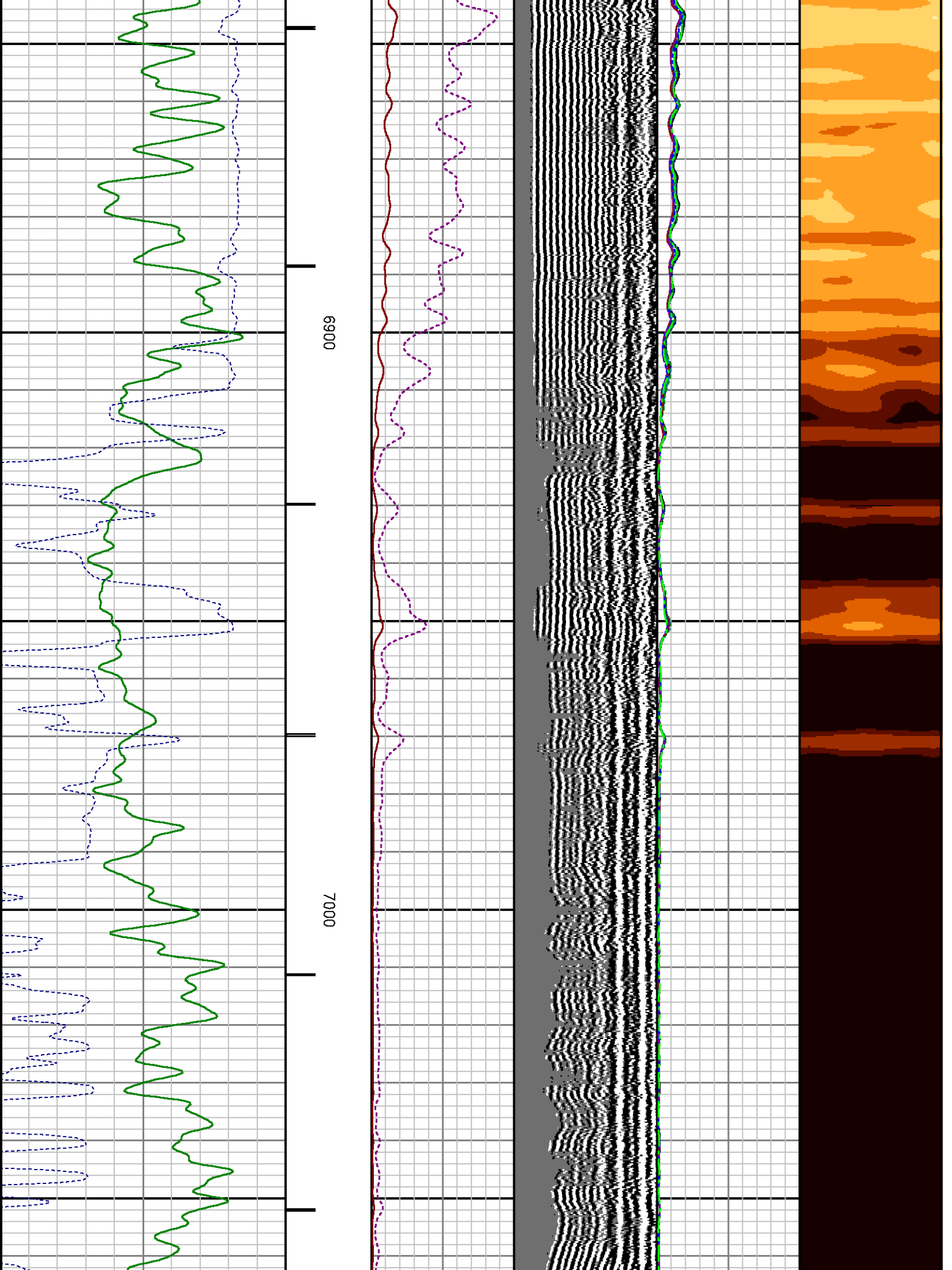


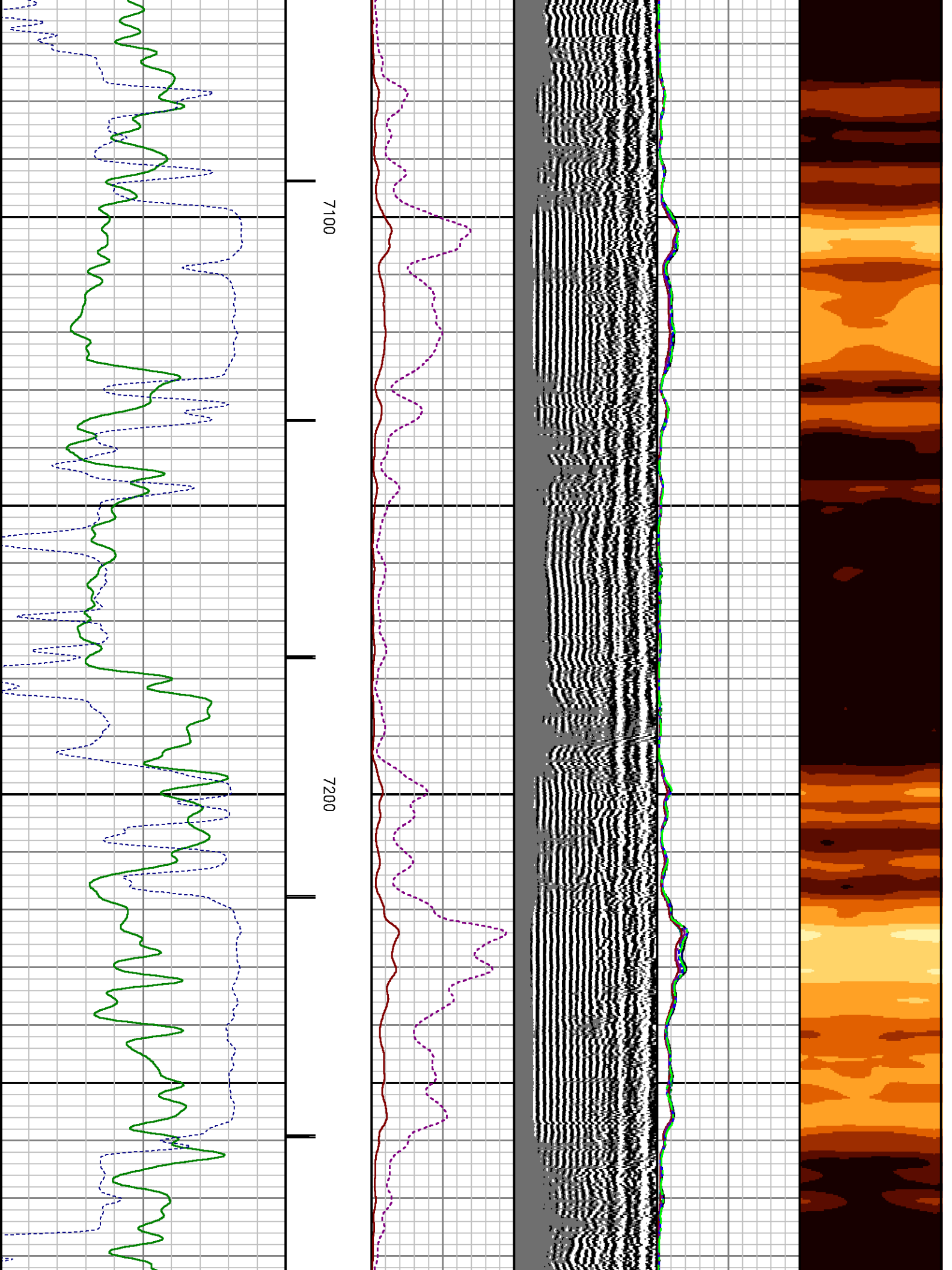


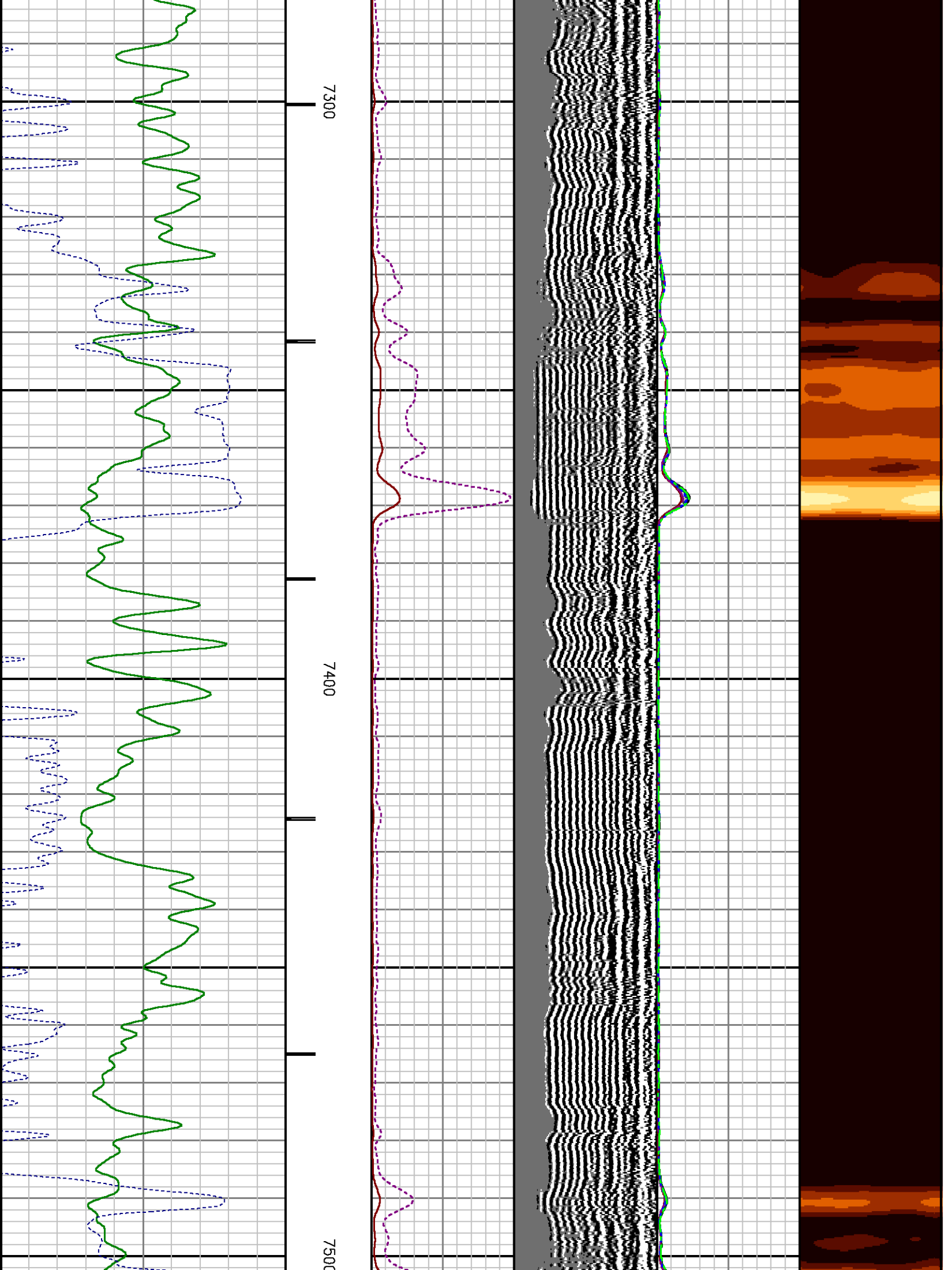


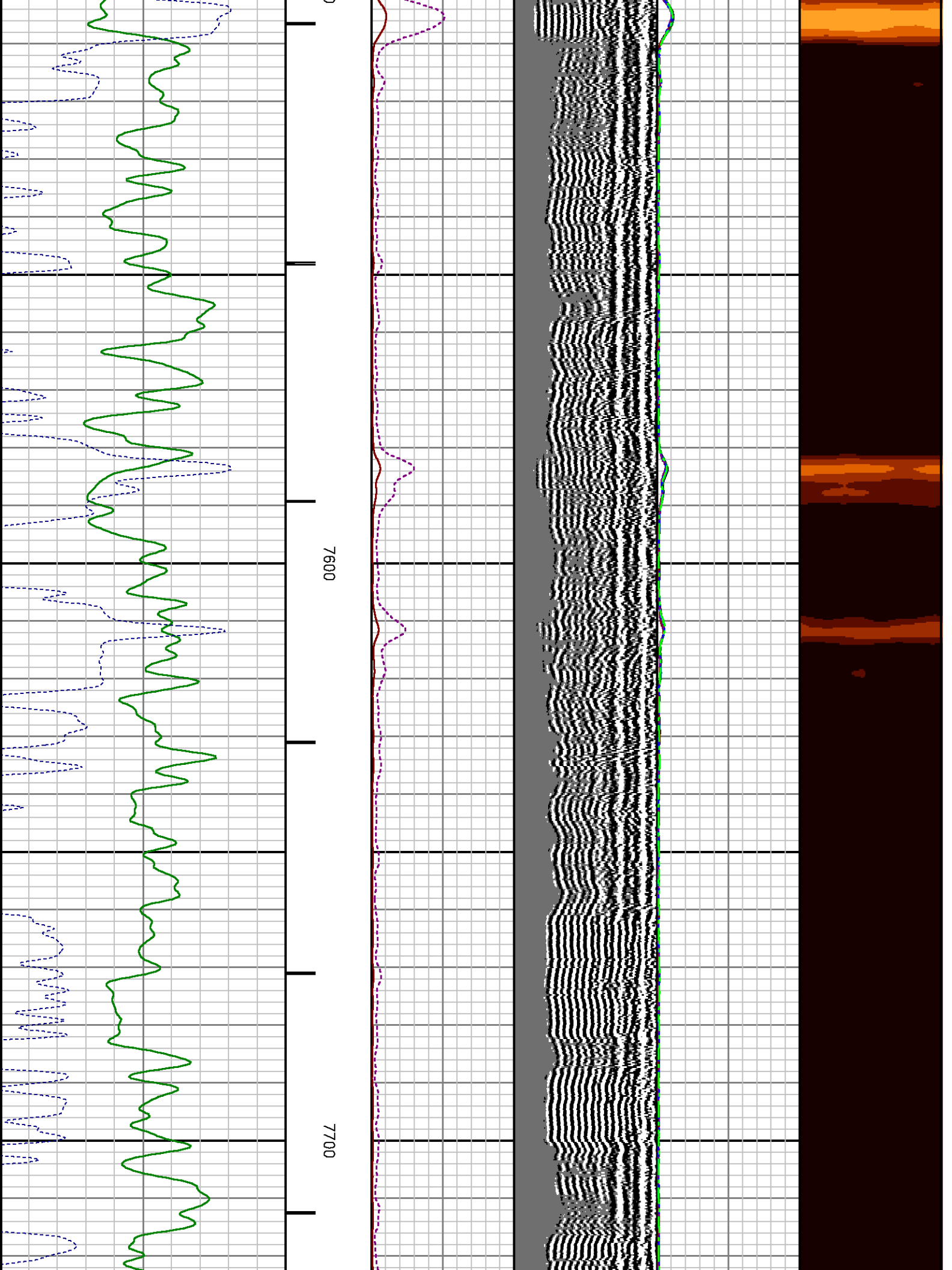


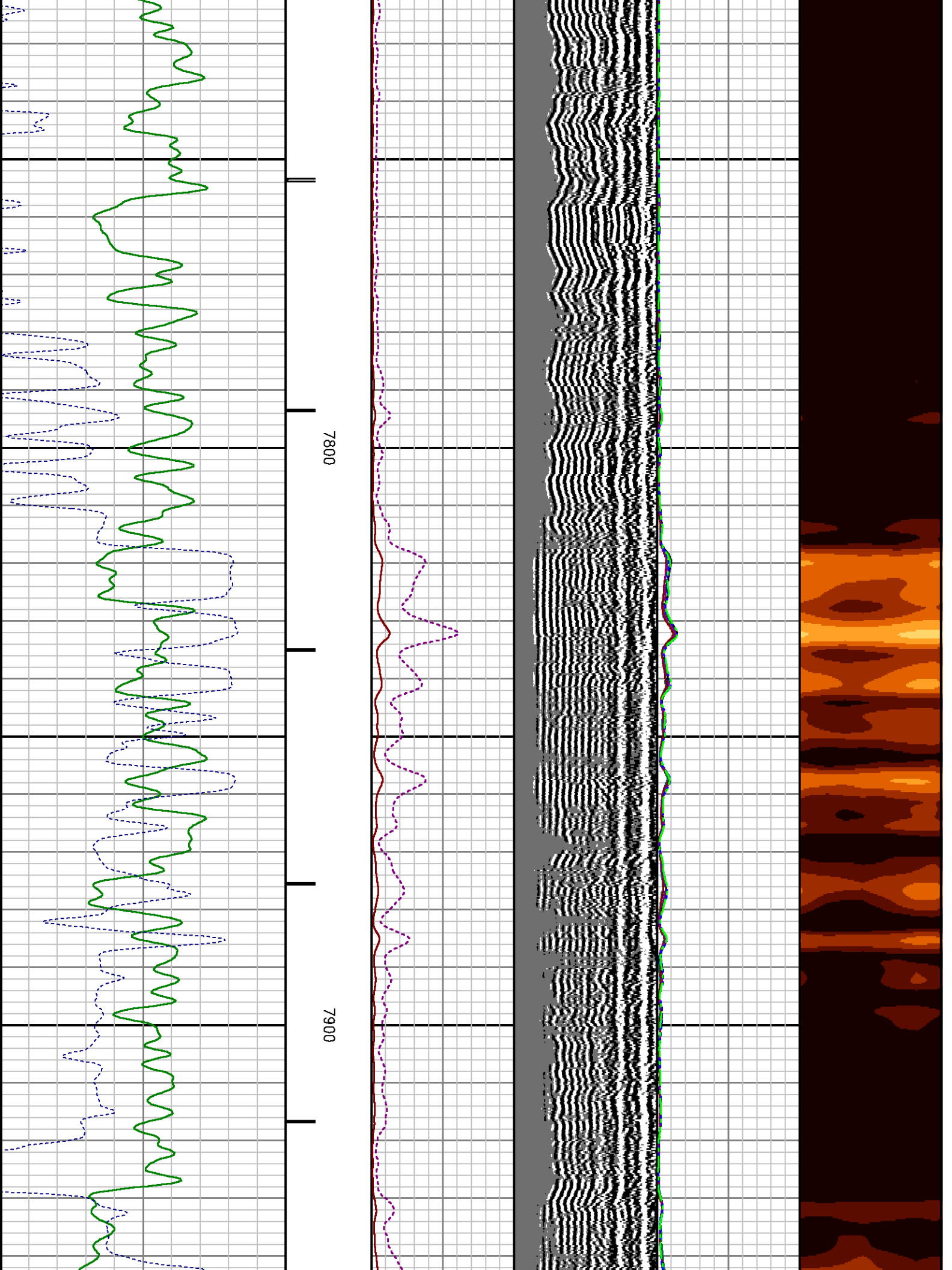


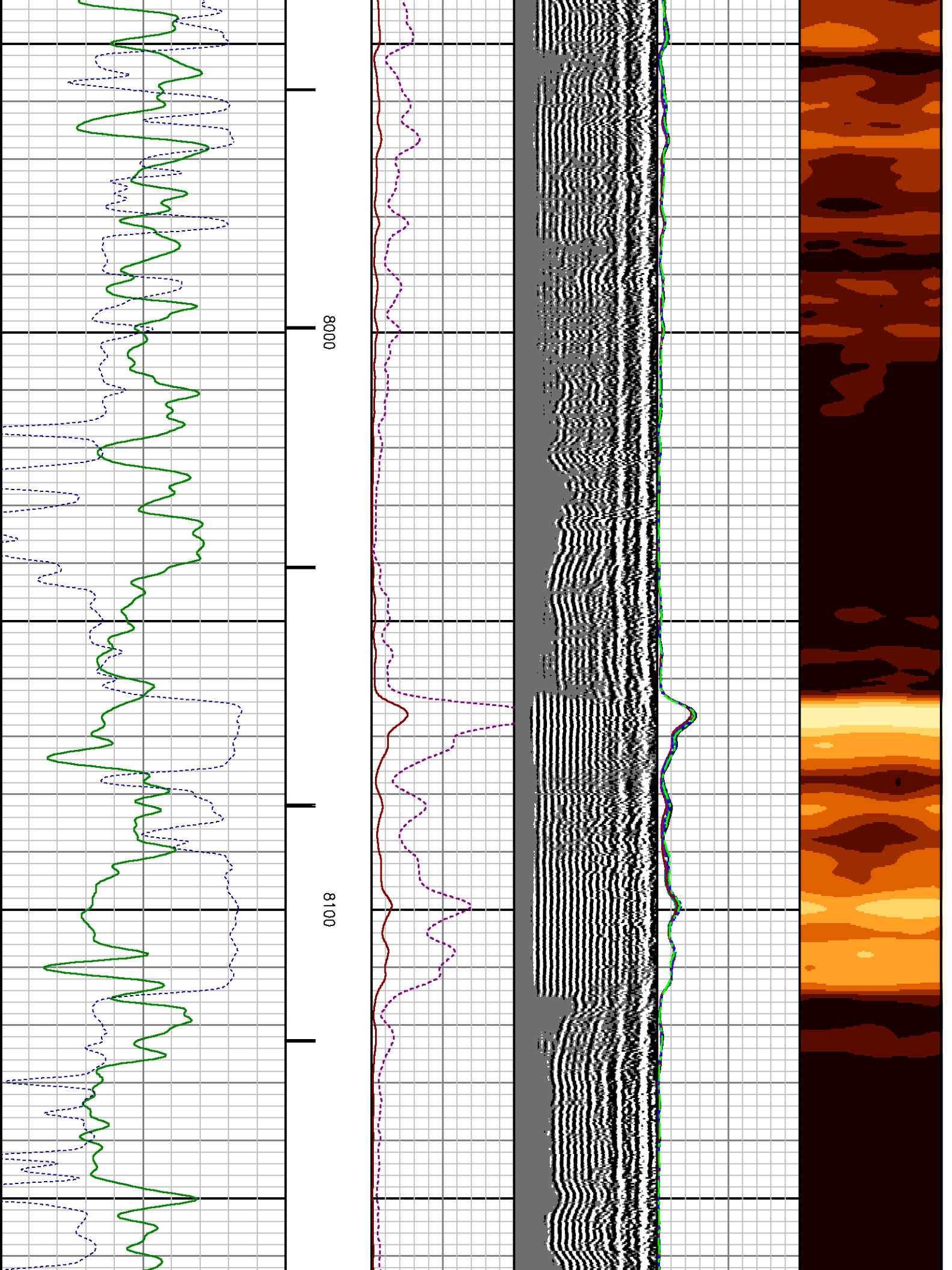


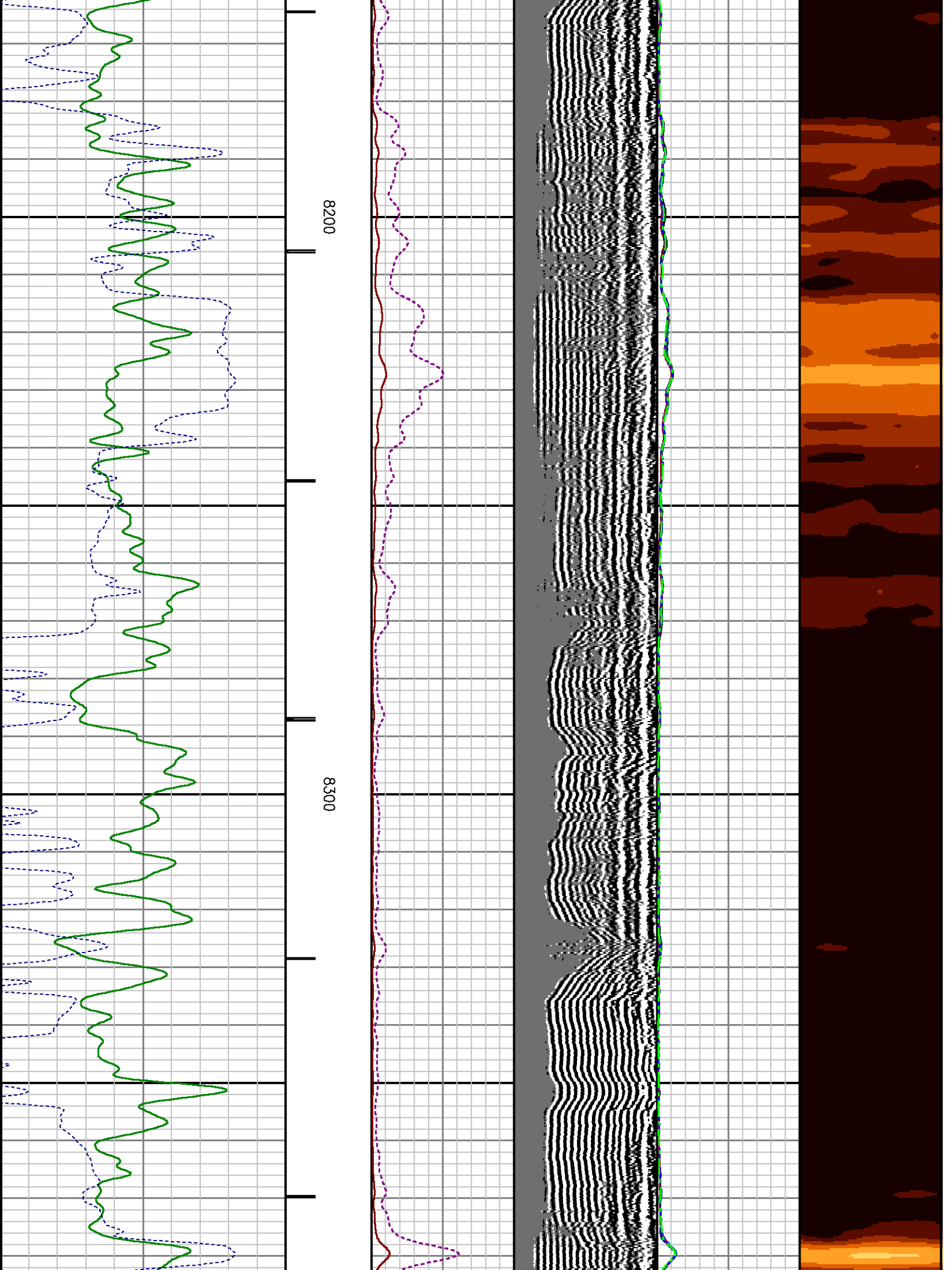


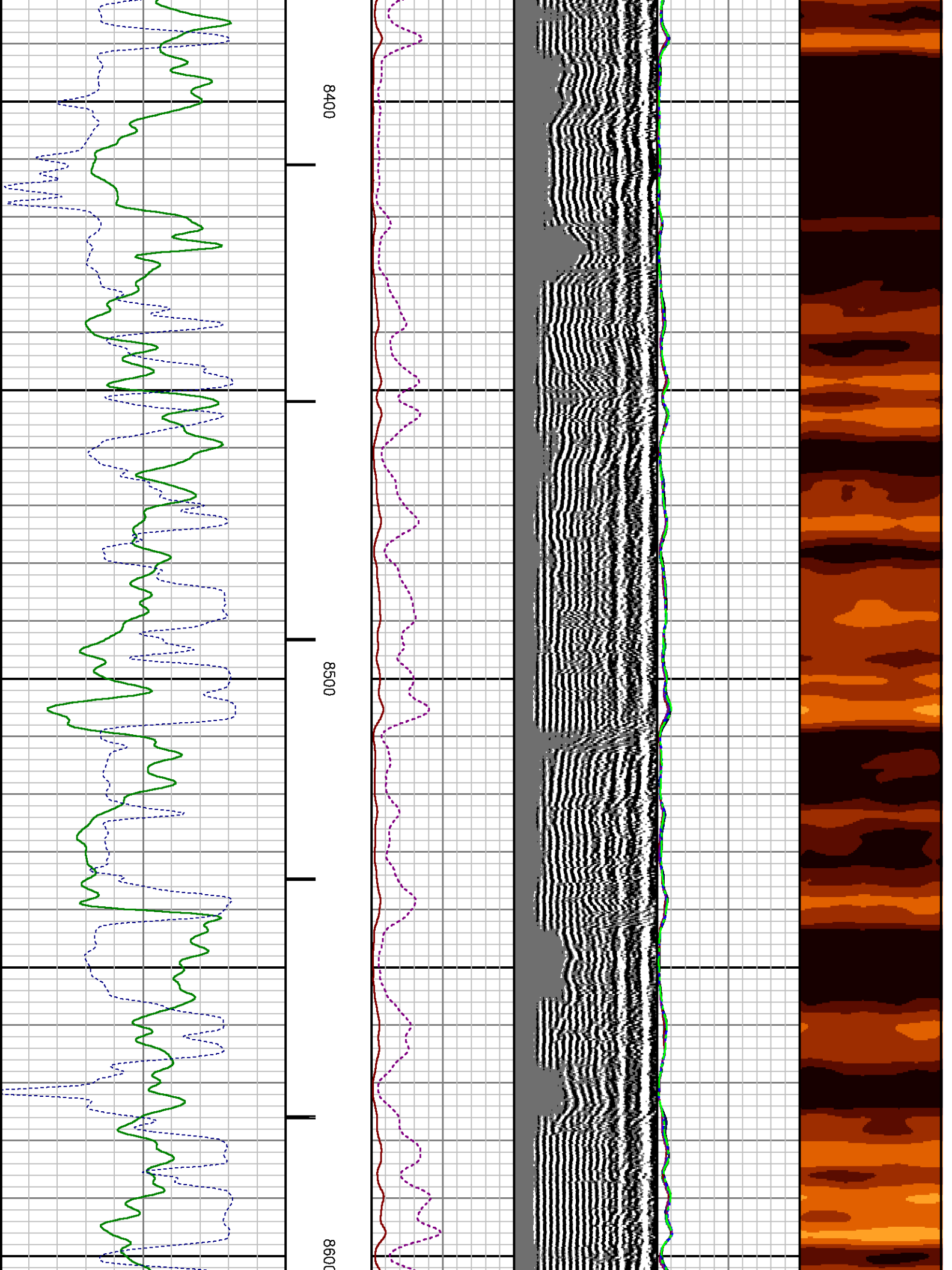


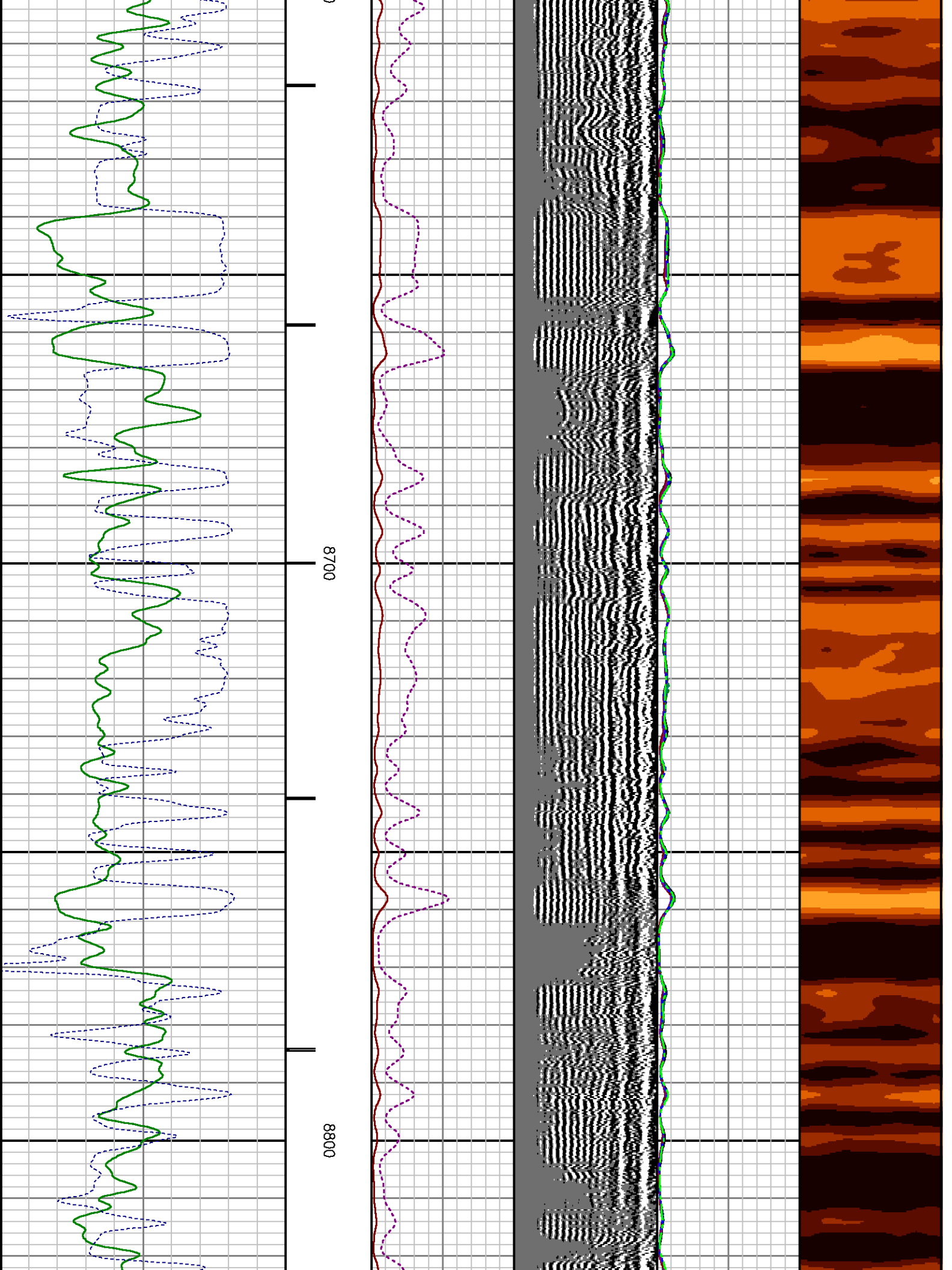


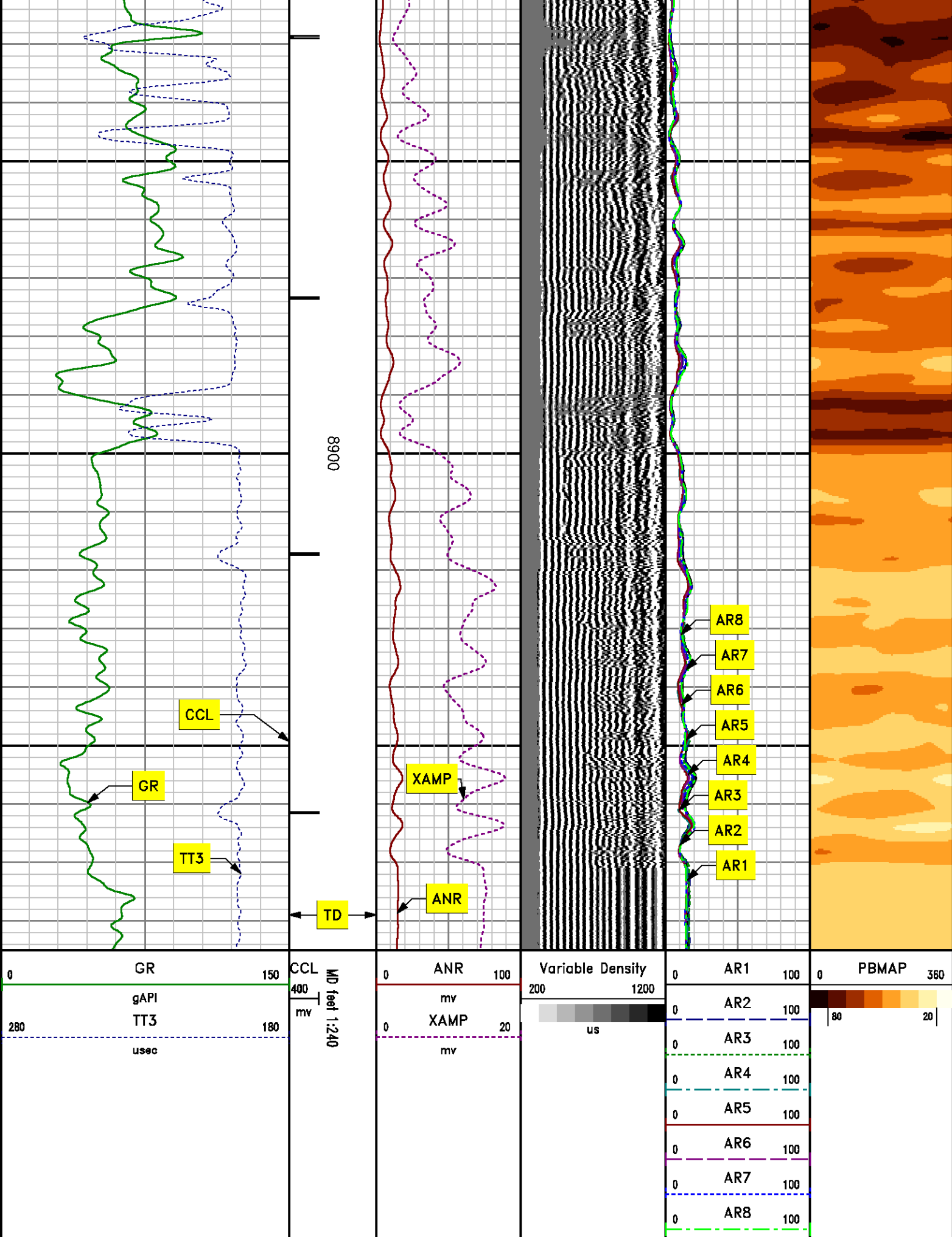












REPEAT PASS

0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	306.674	usec	8659.750	8990.000
RAL	Amp Gate Start Near	199.599	usec	8659.750	8990.000
RAL	Amp Gate Start Radial	199.599	usec	8659.750	8990.000
RAL	Amp Gate Width Far	25.000	usec	8659.750	8990.000
RAL	Amp Gate Width Near	25.000	usec	8659.750	8990.000
RAL	Amp Gate Width Radial	25.000	usec	8659.750	8990.000
RAL	casing od	4.500	inches	8659.750	8990.000
RAL	casing wt	11.600	lbm/ft	8659.750	8990.000
RAL	FB Start Far	291.900	usec	8659.750	8990.000
RAL	FB Start Near	175.391	usec	8659.750	8990.000
RAL	FB Start Radial	175.391	usec	8659.750	8990.000
RAL	FB Thresh Far	10.000	mv	8659.750	8990.000
RAL	FB Thresh Near	4.000	mv	8659.750	8990.000
RAL	FB Thresh Radial	4.000	mv	8659.750	8990.000
RAL	Fluid Travel Time	200.000	usec/ft	8659.750	8989.905

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					

Company : WPX ENERGY

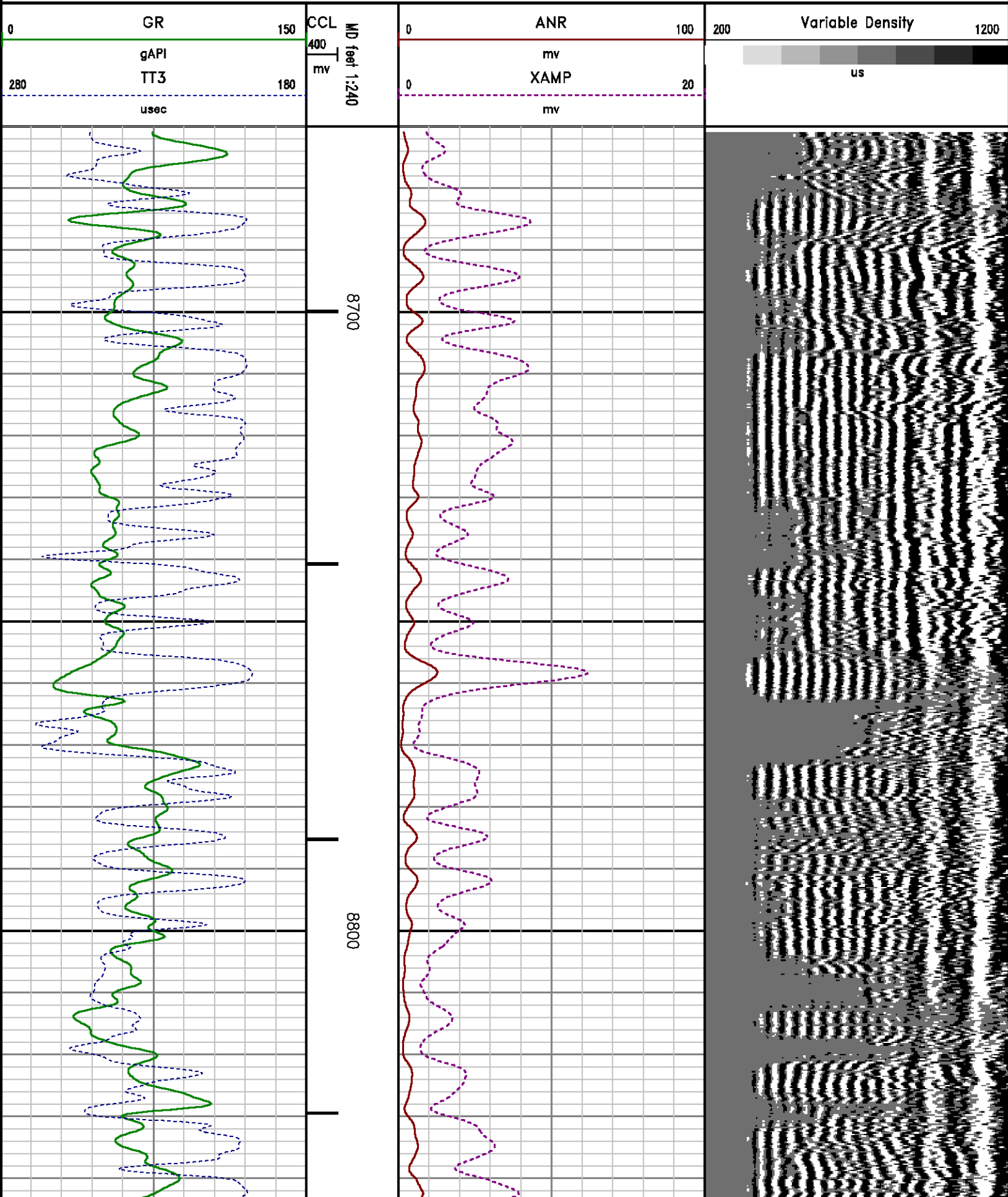
Well : HOEPPLI RWF 33-36

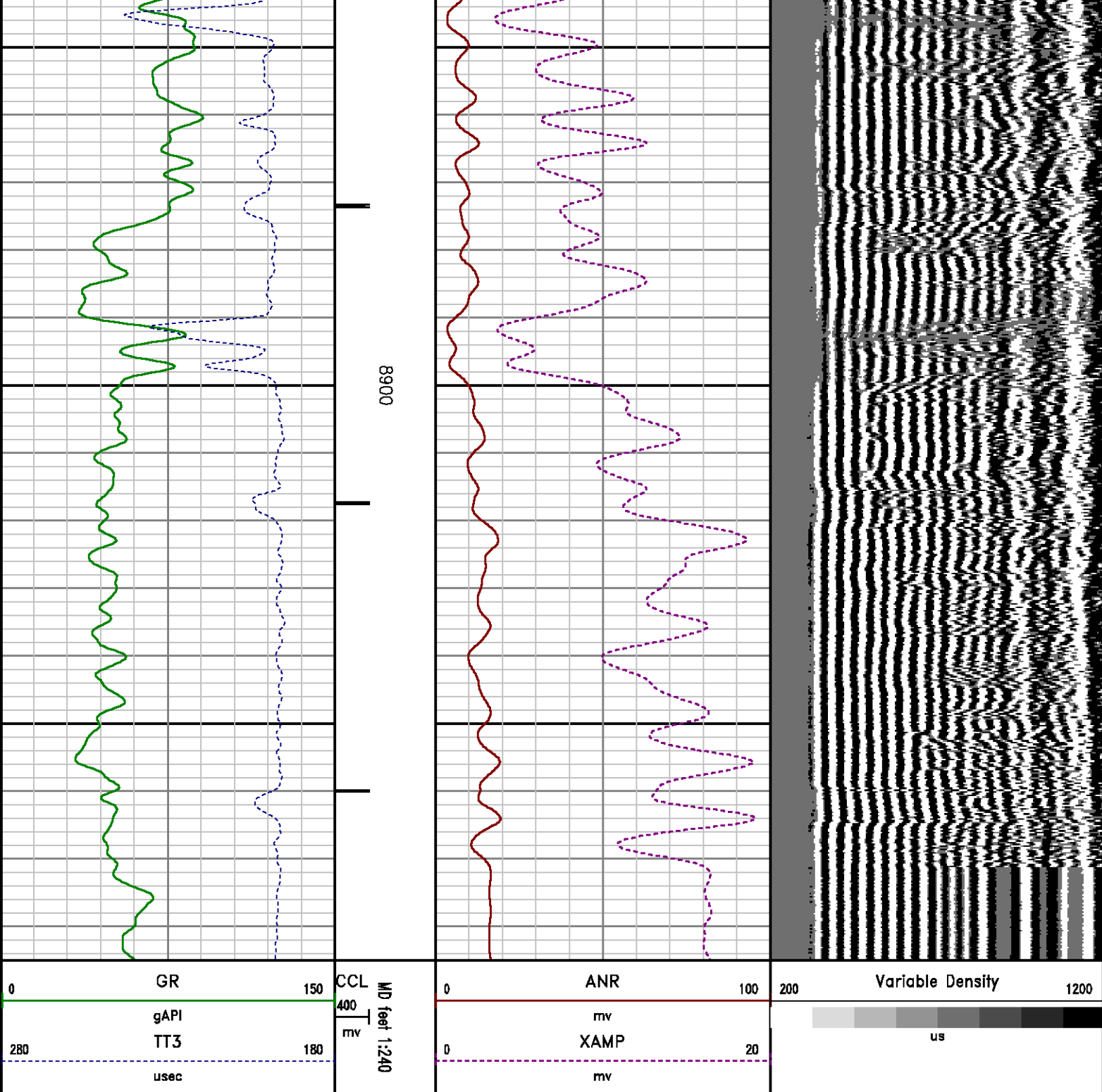
File Name : d:\welldata\33cbl\repeat.xtf

Mode : PlotMgr 5.4.504

Interval : 8670.00 - 8985.00 feet UP

Created : 7/20/2013 9:40:03 AM





CALIBRATION SUMMARY

GAMMA RAY

Calibration File: C:\case\calver\GR\209J7.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Jun 27 10:51:00 2013 TOOL SERIES: 2459XA ASSET: 209 SEQ: J7

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	132.31	583.42	0.410	54.26	239.26	185.00

Verification File: C:\case\calver\GR\209J7.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Thu Jun 27 10:52:46 2013 TOOL SERIES: 2459XA ASSET: 209 SEQ: J7

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	140.71	580.31	0.410	57.71	237.98	180.28

RALSHP

Shop Calibration: C:\case\calver\RALSHP\106JUL20 shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sat Jul 20 08:58:46 2013 TOOL SERIES: 1426XA ASSET: 106 SEQ: JUL20

Tool Delay [usec]	Tank OD in	Tank Wt lbm/ft	Tank ID in
-58.00	5.50	15.50	4.95

RECEIVER	Travel Time [usec]	Amp. Gate Start [usec]	Amp. Gate Width [usec]	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Amp Ref. [mV]	Shop Factor
CAL Pulse	219	216	30	166	25	-1.070	100.00	0.18
3 Ft. Receiver	219	216	30	166	25	-0.491	100.00	0.18
5 Ft. Receiver	327	323	30	258	25	0.284	150.00	0.19
Radial #1	219	216	30	166	25	-0.964	100.00	0.18
Radial #2	219	216	30	166	25	0.060	100.00	0.18
Radial #3	219	216	30	166	25	-0.014	100.00	0.18
Radial #4	219	216	30	166	25	-0.395	100.00	0.18
Radial #5	219	216	30	166	25	-0.625	100.00	0.18
Radial #6	219	216	30	166	25	-0.520	100.00	0.18
Radial #7	217	216	30	166	25	-0.221	100.00	0.18
Radial #8	219	216	30	166	25	0.893	100.00	0.17

RALFLD

Well site Calibration: C:\case\calver\RALFLD\106JUL20 fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sat Jul 20 09:00:10 2013 TOOL SERIES: 1426XA ASSET: 106 SEQ: JUL20

RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	166	25	-0.093	0.000	1.00	100.000
3 Ft. Receiver	200	30	-0.454			
5 Ft. Receiver	317	30	-0.833			
Radial #1	200	30	-1.664			
Radial #2	200	30	-0.889			
Radial #3	200	30	-0.628			
Radial #4	200	30	-0.632			
Radial #5	200	30	-0.332			
Radial #6	200	30	-0.644			
Radial #7	200	30	-0.538			
Radial #8	200	30	-0.658			

TOOL DIAGRAM

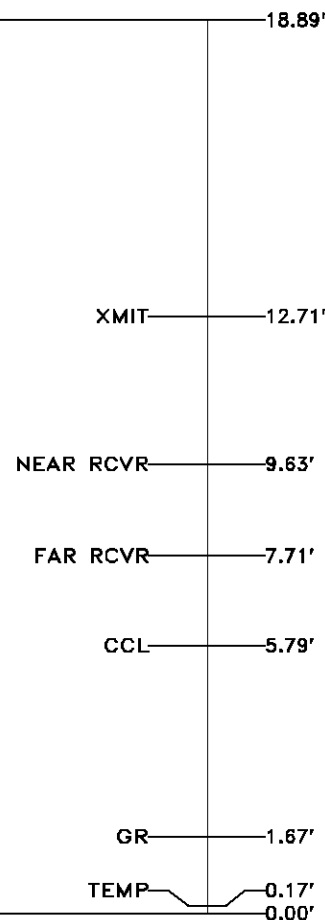
OTA SHORT CABLE HEAD

PROBE 2 3/4 DUAL RECEIVER RADII

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



RAL GR/TEMP/CCL/CHV DETECTOR

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



Total Length: 18.89'

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

<div> Baker Atlas</div> <div></div>	<div><div>Company</div><div>Well</div><div>Field</div><div>County</div></div> <div><div>WPX ENERGY</div><div>HOEPPLI RWF 33-36</div><div>RULISON</div><div>GARFIELD</div></div> <div><div>State</div><div>COLORADO</div></div>	<div>File No:</div> <div>CH074109</div> <div>API No:</div> <div>05045215520000</div>
	<div>Location</div> <div>SHL: 2607' FNL & 2601' FEL</div> <div>BHL: 1292' FSL & 1749' FEL</div> <div>SEC 36TWP 65RGE 94W</div>	<div>Elevations</div> <div>KB 6554 ft</div> <div>DF</div> <div>GL 6528 ft</div> <div>36 6S 94W</div> <div>RWF 33-36</div> <div>NABORS SSD 576</div>