



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: CH073477	Company Well Field County	WPX ENERGY HOEPPLI RWF 444-36 RULLISON GARFIELD	State COLORADO
API No: 05045215550000			
56 SS 94W RWF 33-35 NABORS SSD 576	Location SHL: 2625' FNL & 2605' FEL BHL: 187' FSL & 1549' 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 6554 ft DF GL 6528 ft	

Date	06/AUG/13		
Run	ONE		
Service Order	B24467		
Depth Driller	9373 ft		
Depth Logger	9345 ft		
Bottom Logged Interval	9335 ft		
Top Logged Interval	26 ft		
Time Started	7:00		
Time Finished	11:00		
Operator Rig Time	4 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	231 degF		
Reference Log	N/A		
Reference Log Date	N/A		
Equipment No.	Location	GRAND JUNCTION	
Recorded By	U. KINSEL	9712	GRAND JUNCTION
Witnessed By	MR. BOB CADY		

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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	1183.5 ft
8.75 In	0 ft	9422 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	9373 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 8 FEET DOWN.
SHORT JOINT: 6114' - 6138'
BHT: 231 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	307.440	usec	33.937	9363.250
RAL	Amp Gate Start Near	198.578	usec	33.937	9363.250
RAL	Amp Gate Start Radial	198.578	usec	33.937	9363.250
RAL	Amp Gate Width Far	25.000	usec	33.937	9363.250
RAL	Amp Gate Width Near	25.000	usec	33.937	9363.250
RAL	Amp Gate Width Radial	25.000	usec	33.937	9363.250
RAL	casing od	4.500	inches	33.937	9363.250
RAL	casing wt	11.600	lbm/ft	33.937	9363.250
RAL	FB Start Far	291.900	usec	33.937	9363.250
RAL	FB Start Near	175.391	usec	33.937	9363.250
RAL	FB Start Radial	175.391	usec	33.937	9363.250
RAL	FB Thresh Far	10.000	mv	33.937	9363.250
RAL	FB Thresh Near	4.000	mv	33.937	9363.250
RAL	FB Thresh Radial	4.000	mv	33.937	9363.250
RAL	Fluid Travel Time	200.000	usec/ft	33.937	9363.250

DEPTH OFFSETS

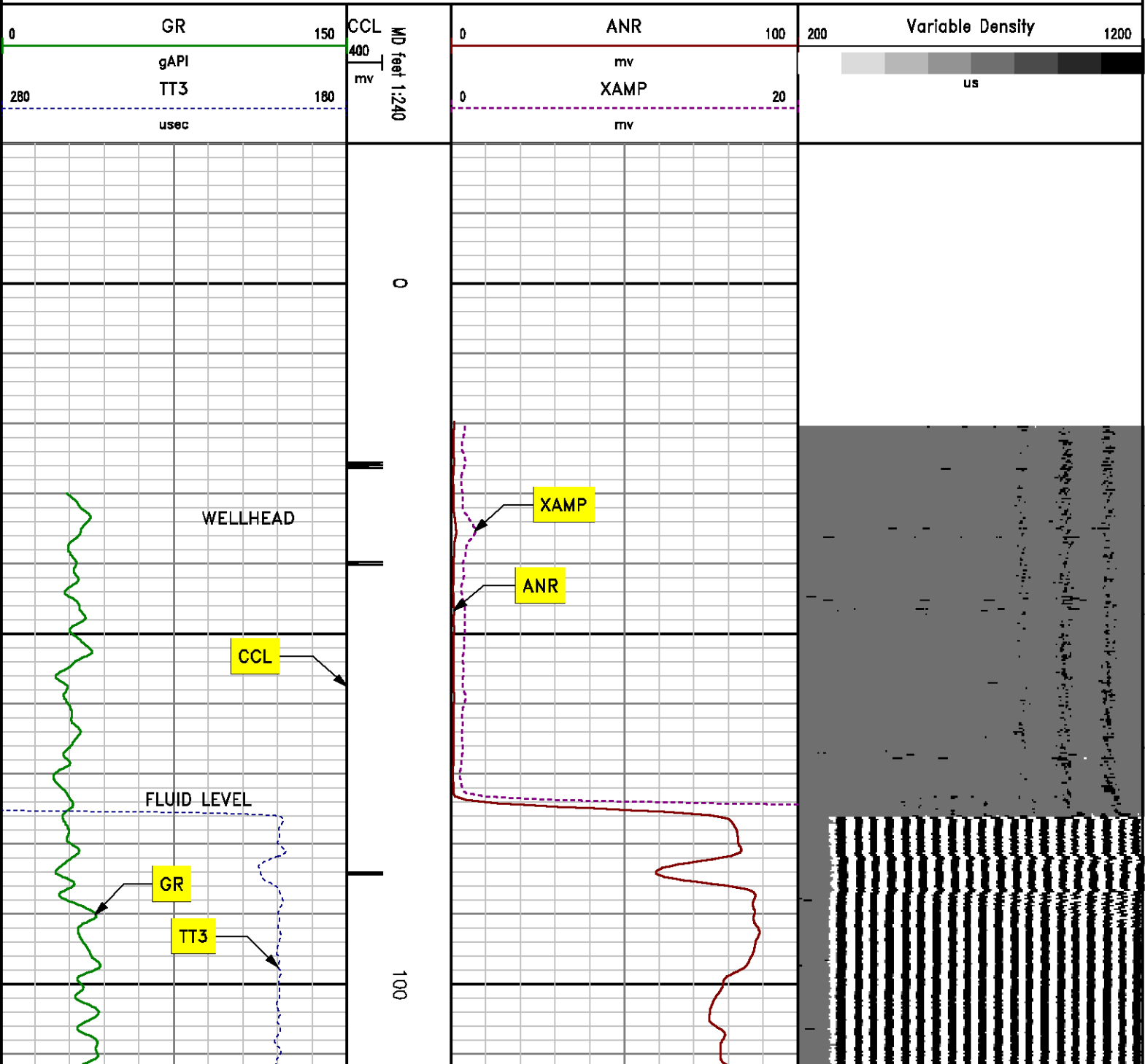
(for Acquired Curves)

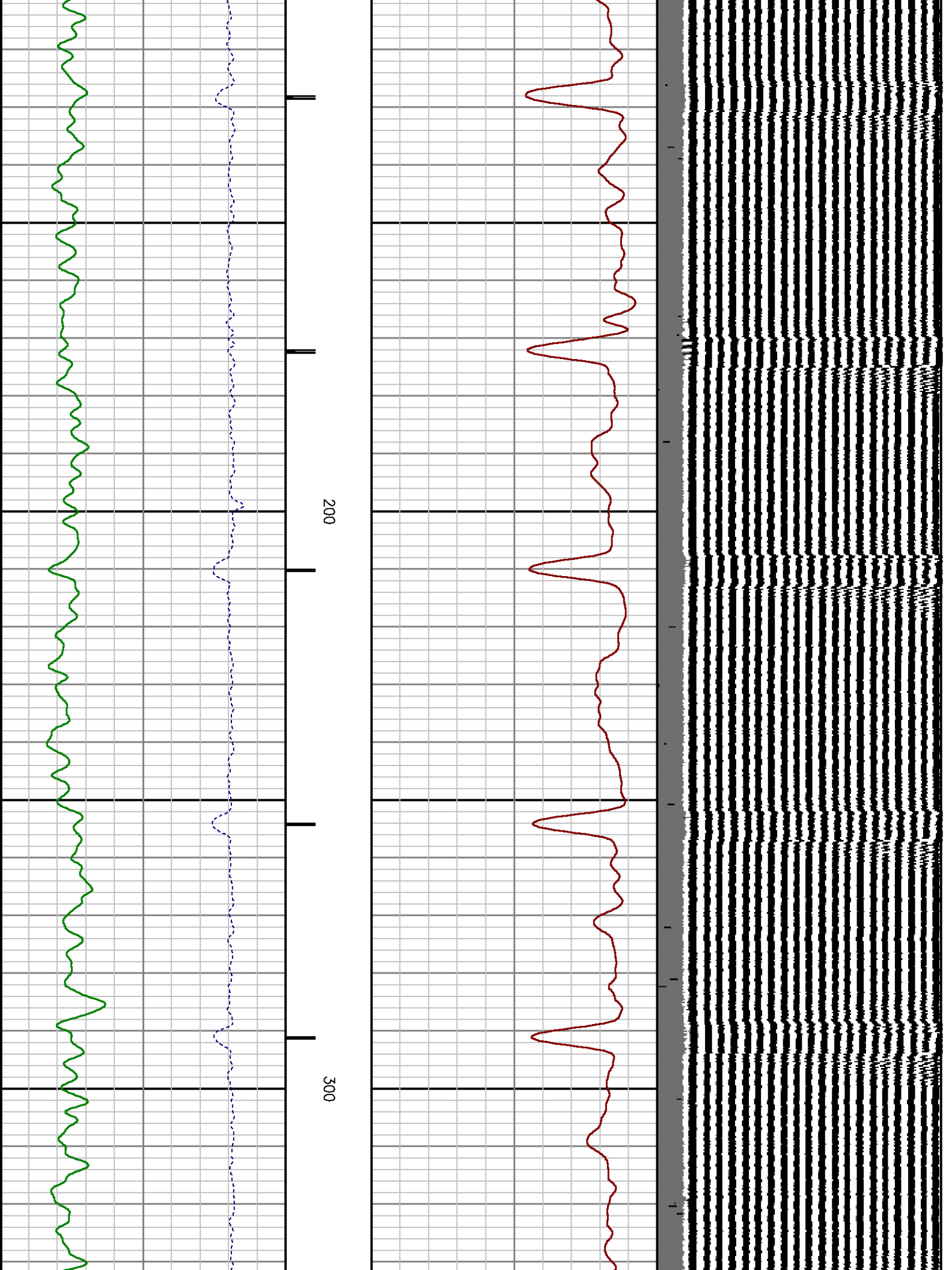
SERIES	DEPTH OFFSET	ACQUIRED CURVES					
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		AR5	AR6	AR7	AR8	CHV	FPR2

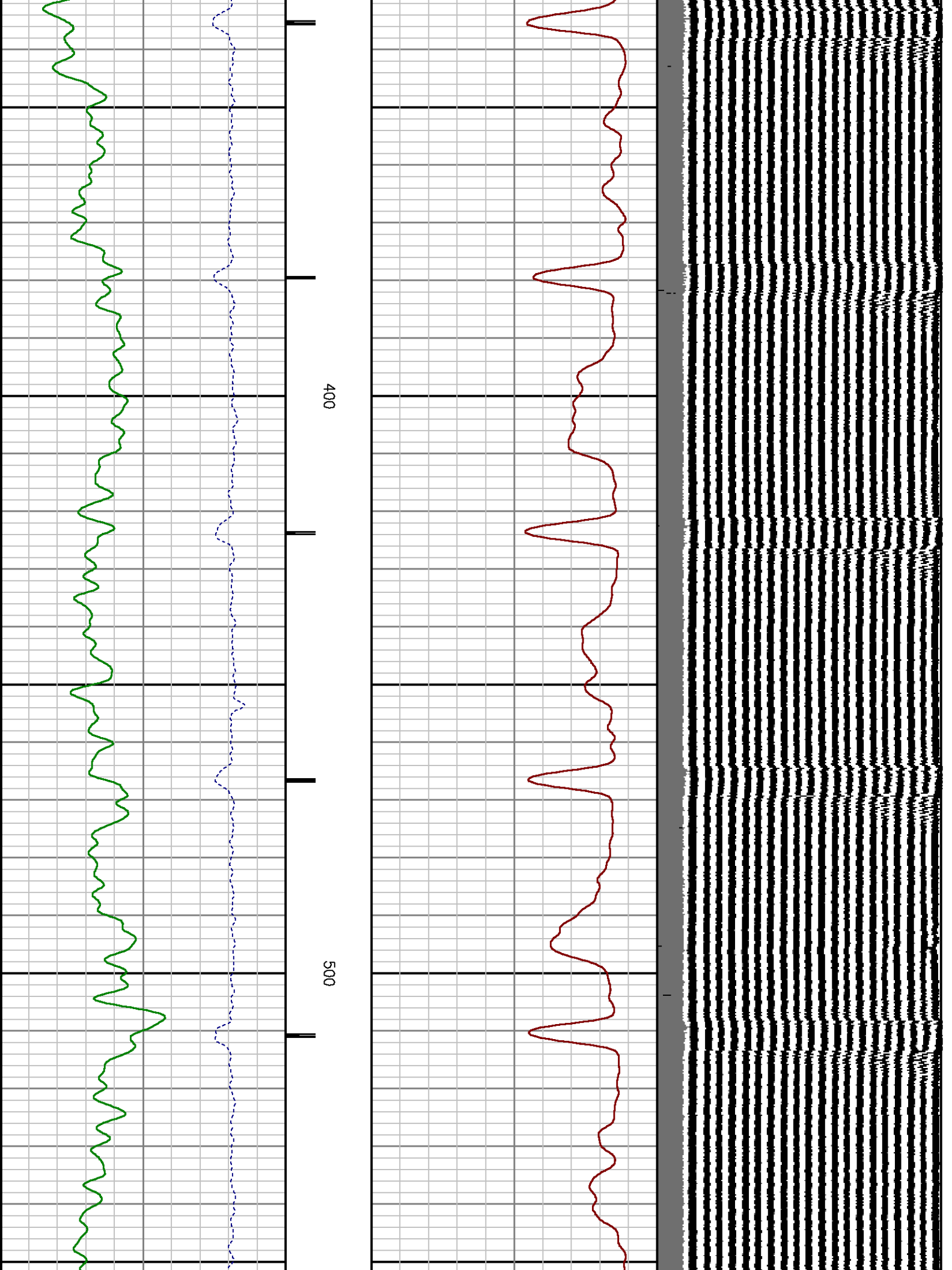
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 1355XA -5.620
 1355XA -1.500
 1355XA 0.000

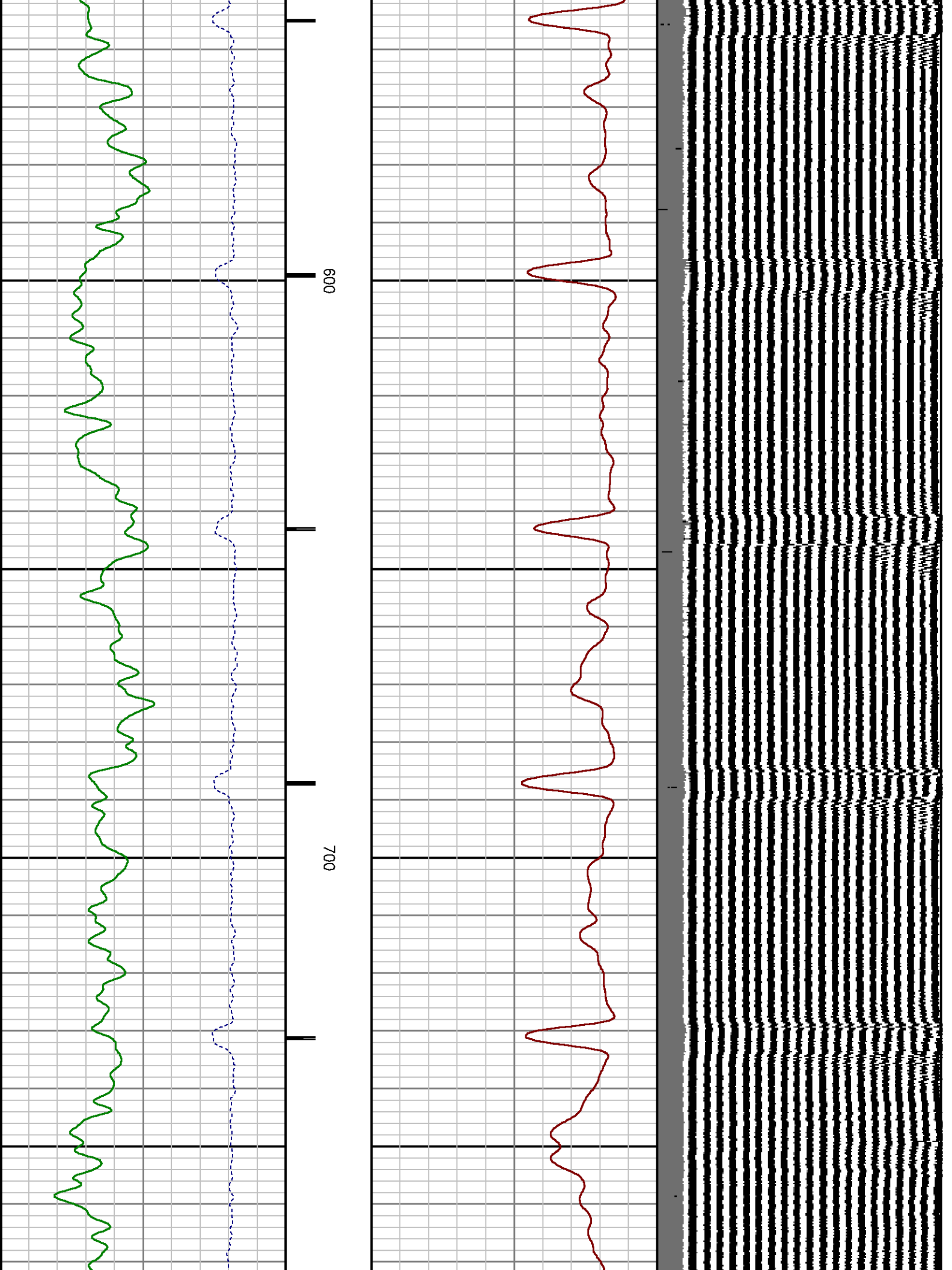
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 TTR4 TTR5 TTR6 TTR7 TTR8 XAMP
 AFAR SIG TT5
 CCL
 GR
 TEMP

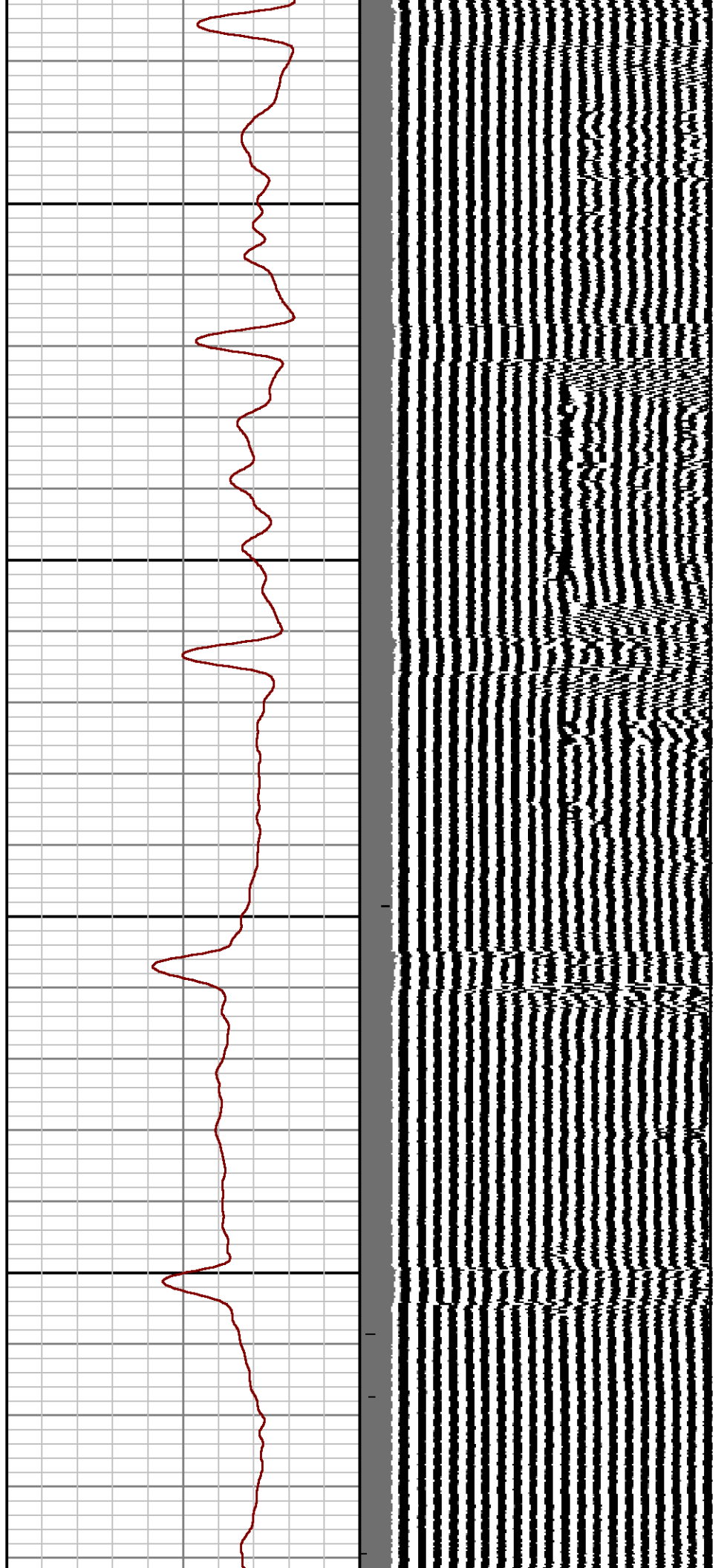
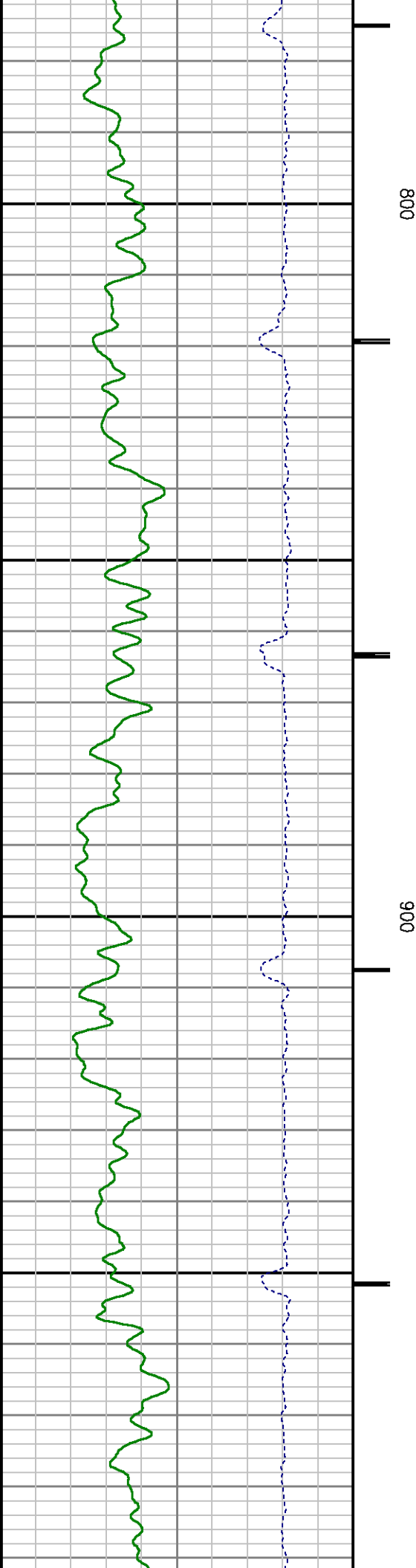
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 Plotted by : PlotMgr, v5.4.504
 Company : WPX ENERGY
 Well : HOEPPLI RWF 444-36
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 Mode : PlotMgr 5.4.504
 Interval : -20.00 - 9350.00 feet UP
 Created : 8/8/2013 8:26:21 AM

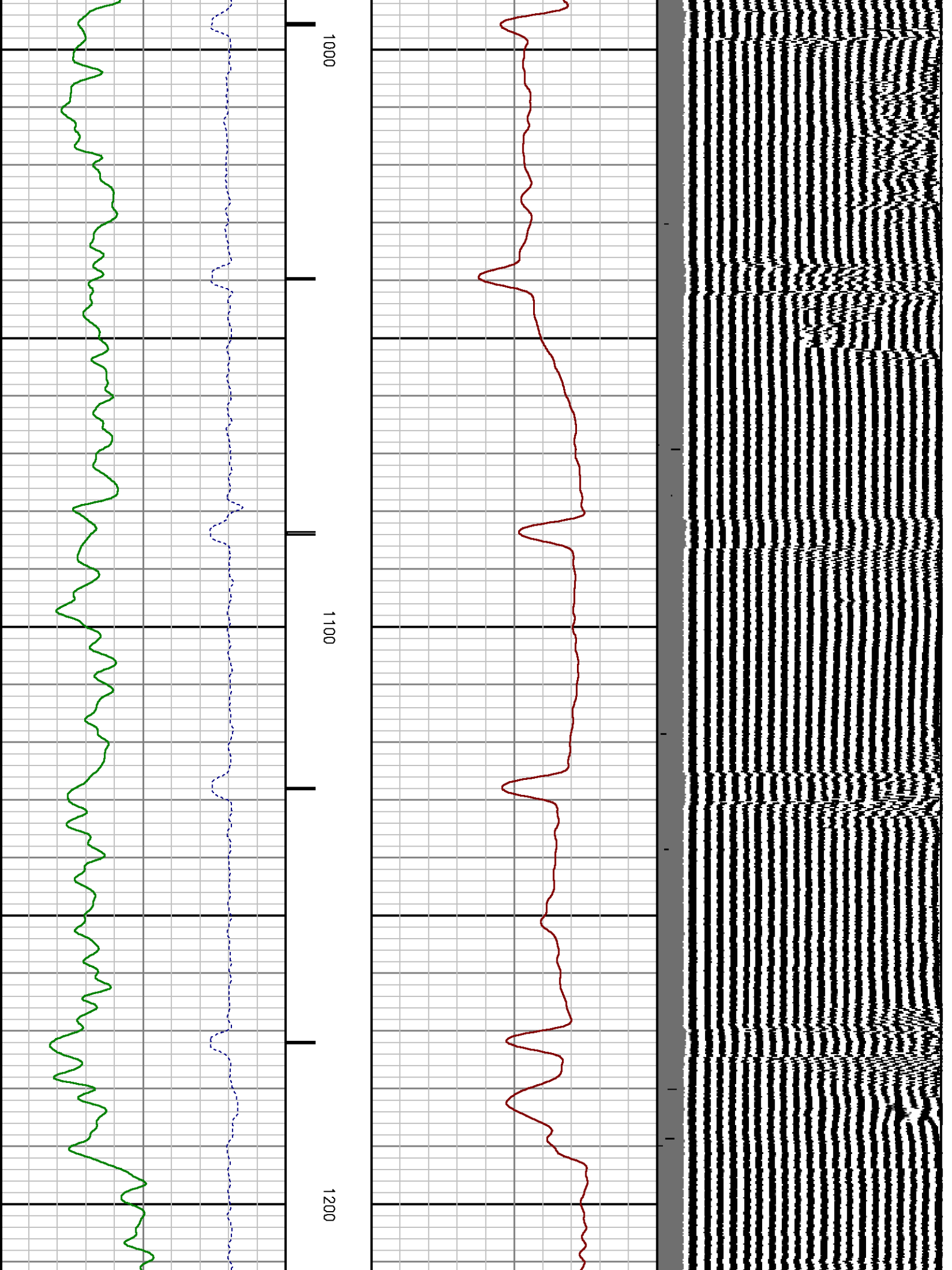


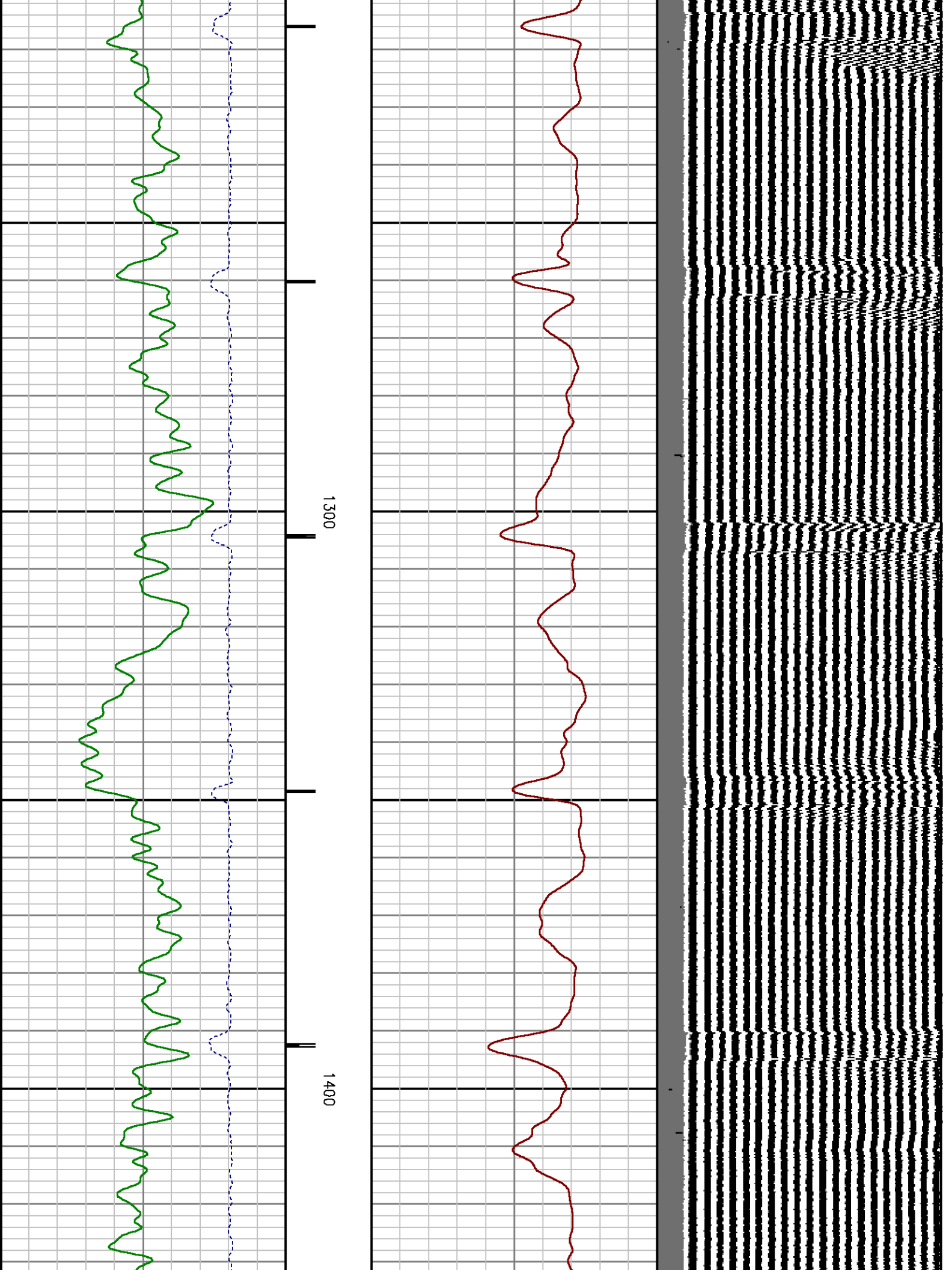


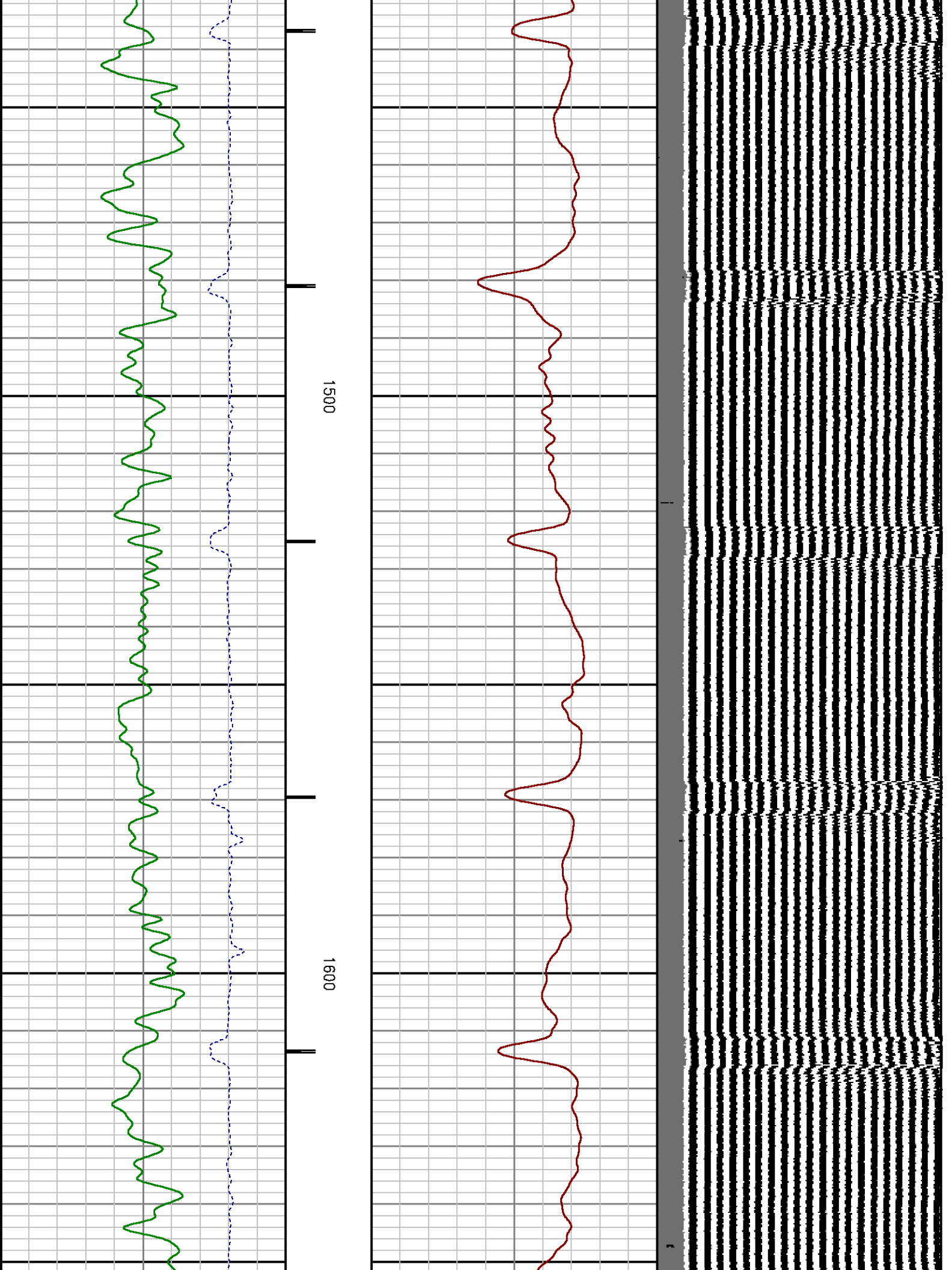


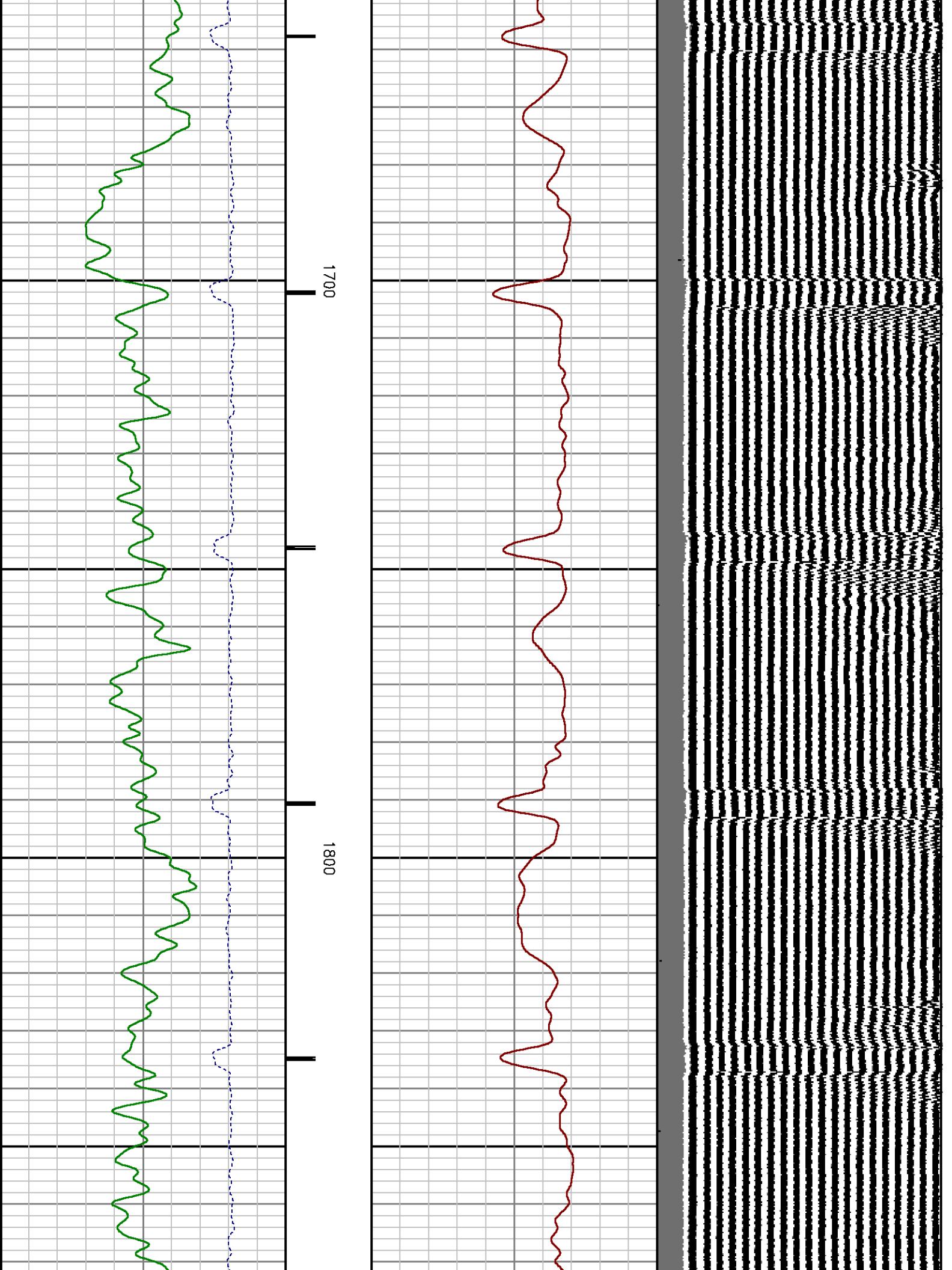


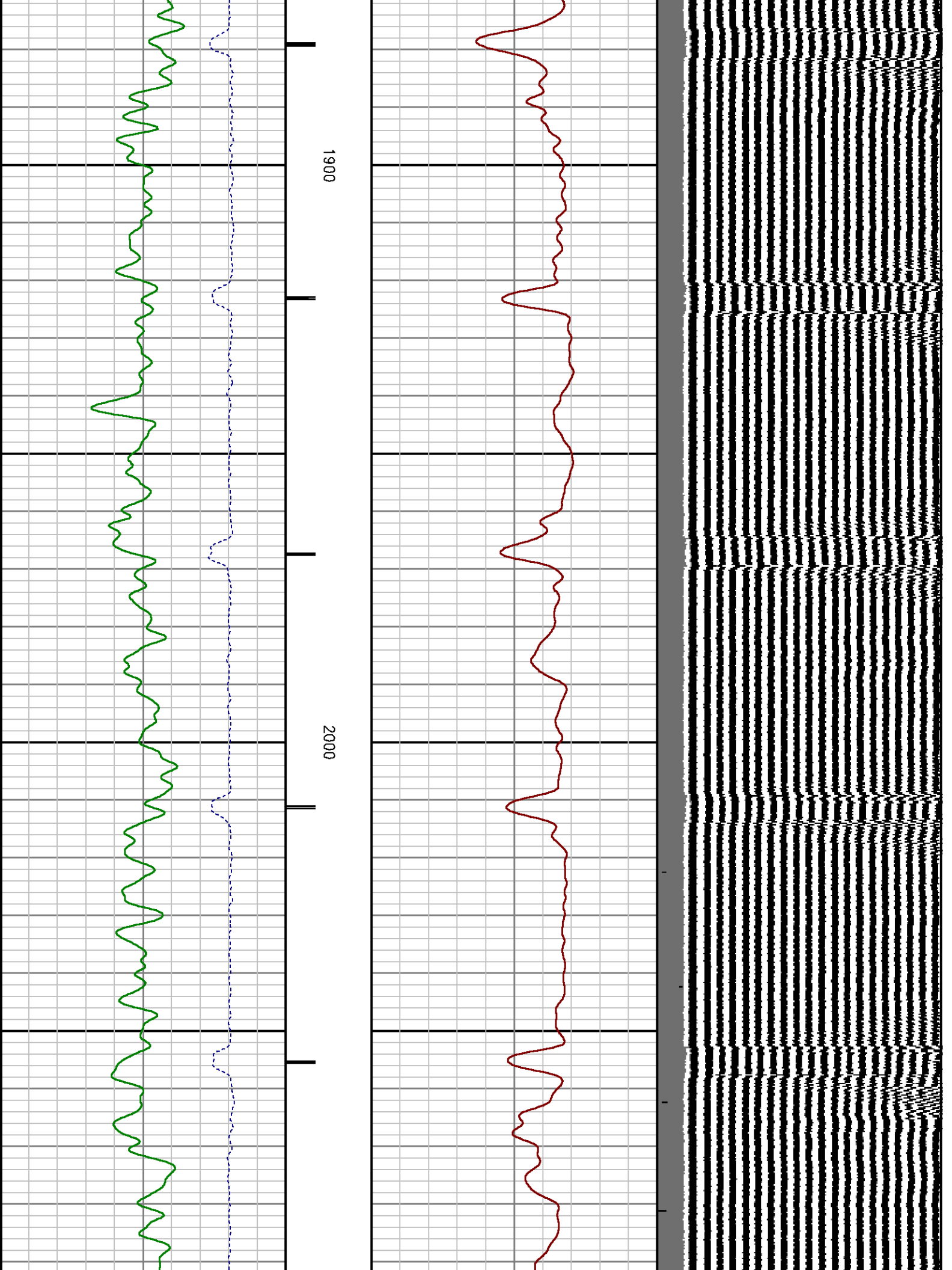


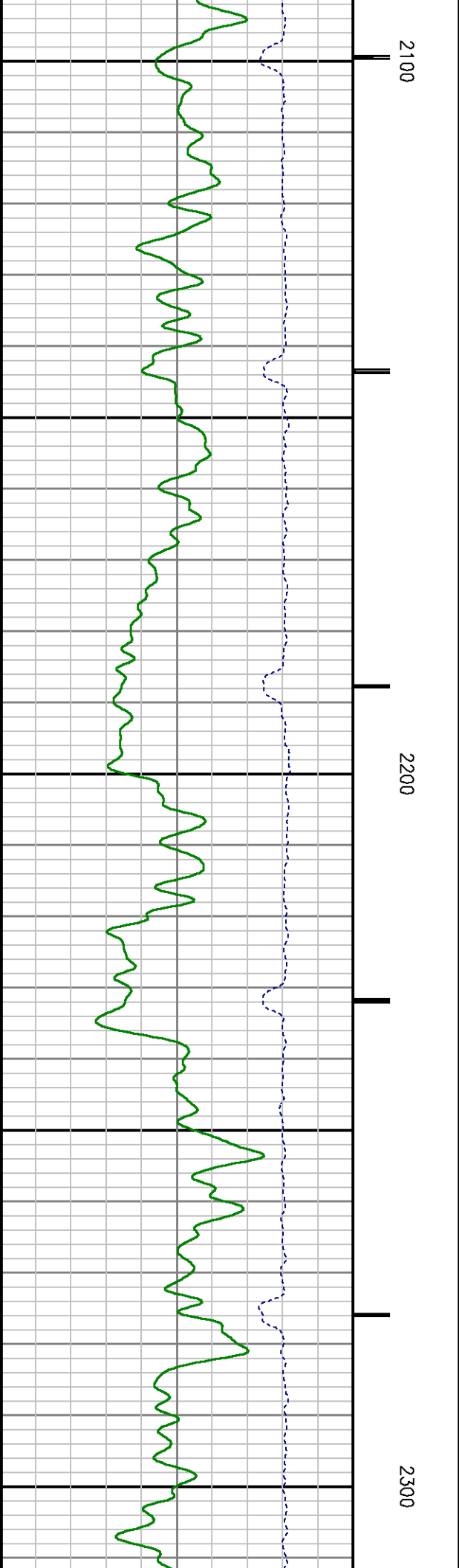
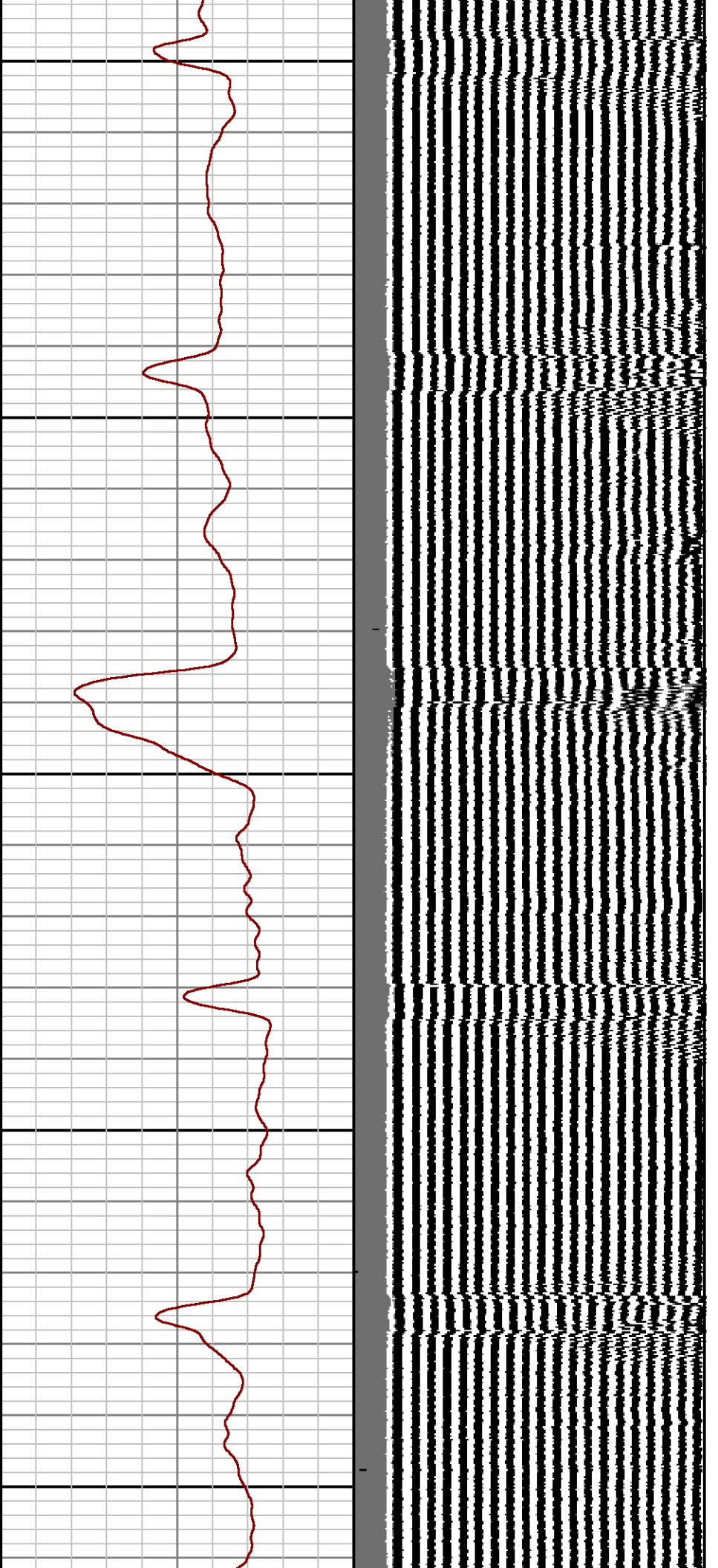


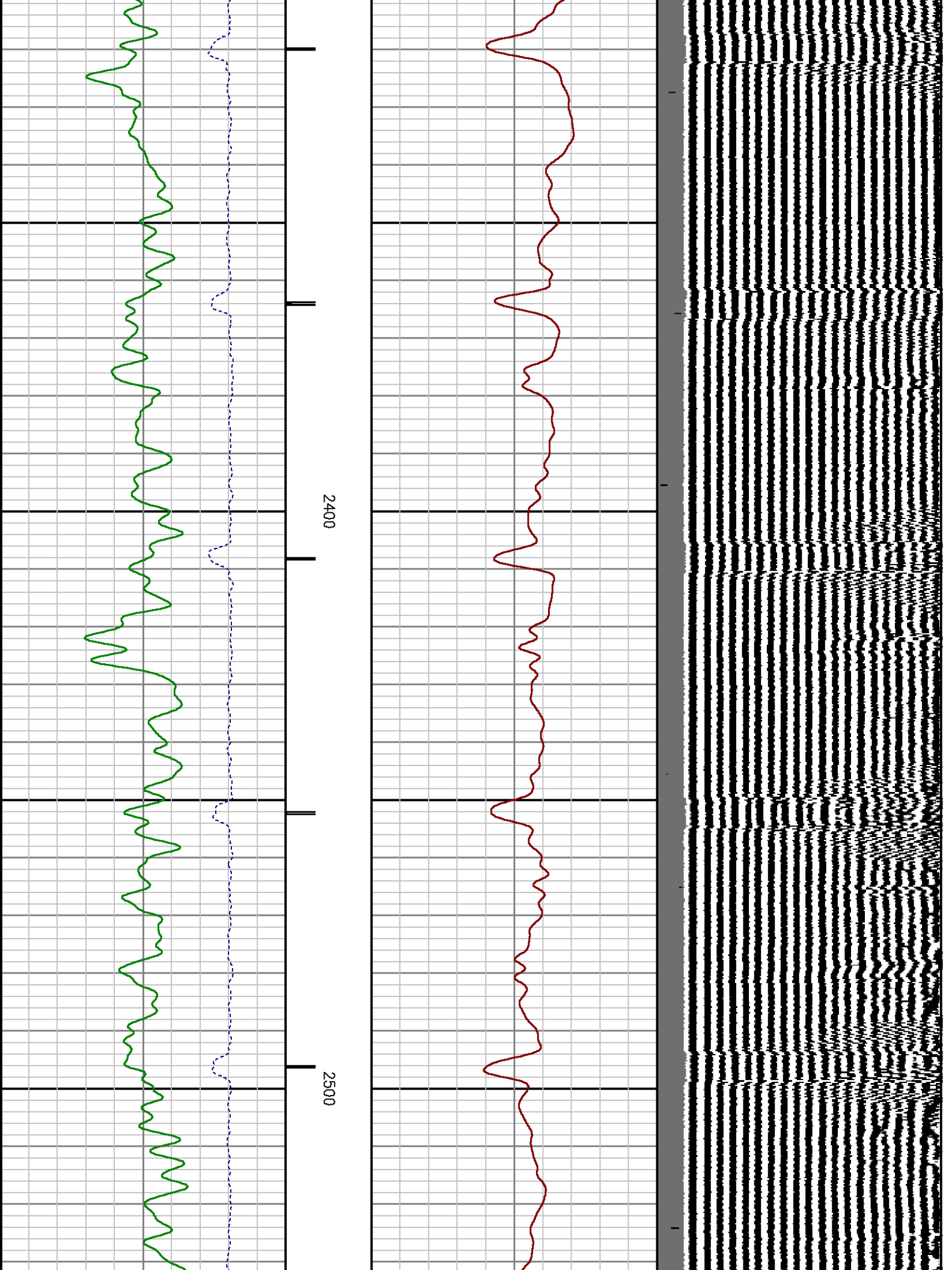


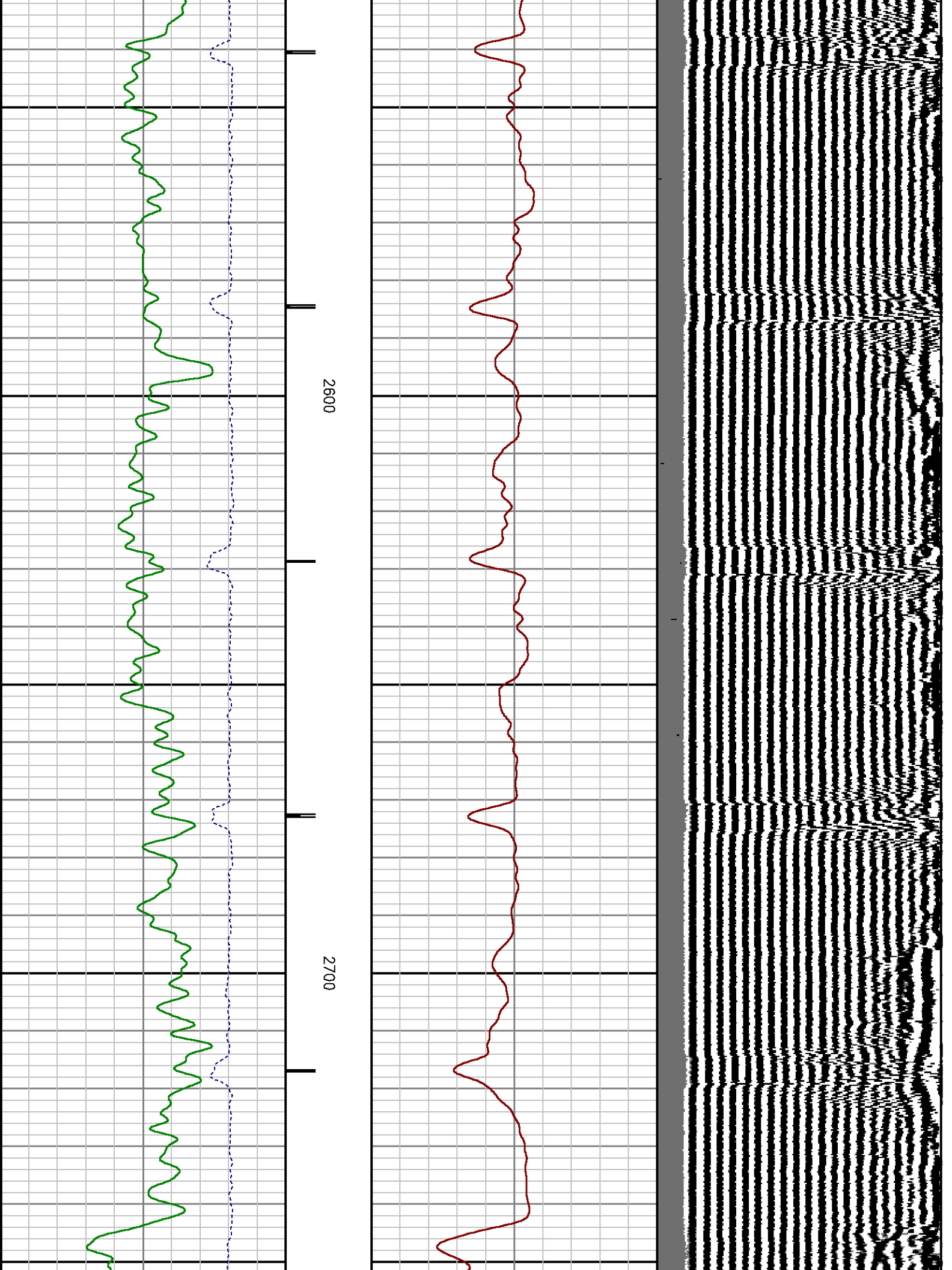


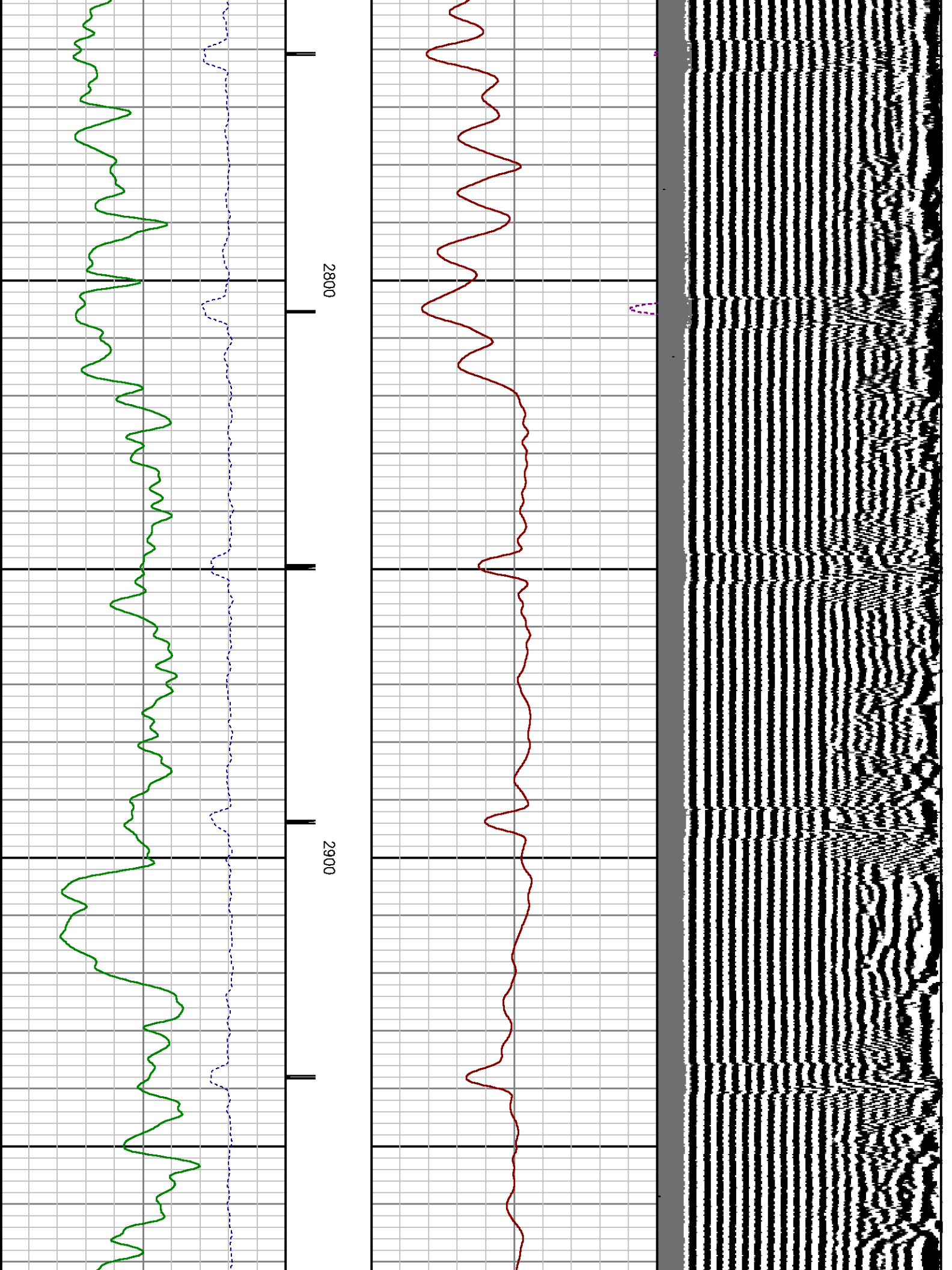


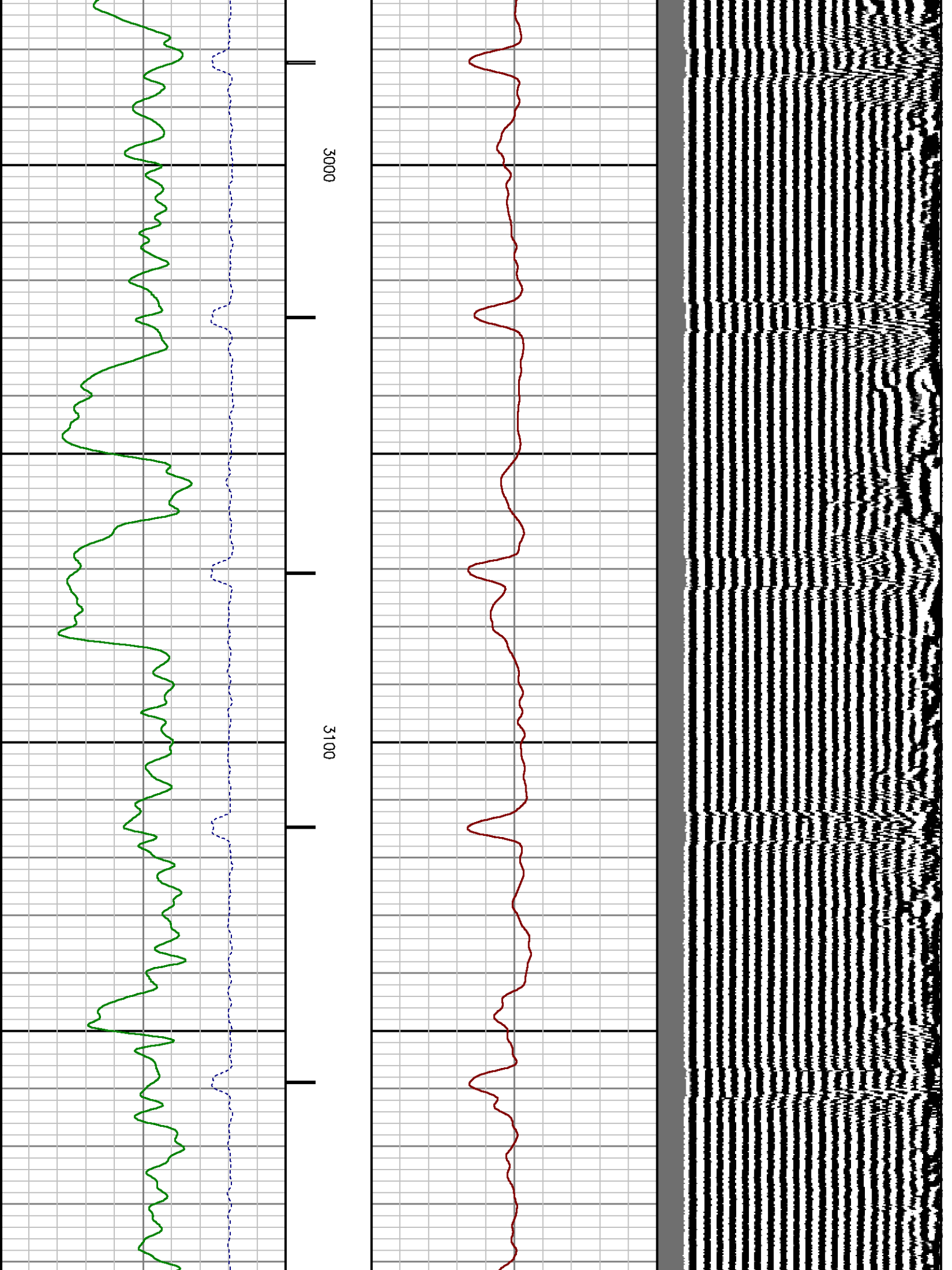


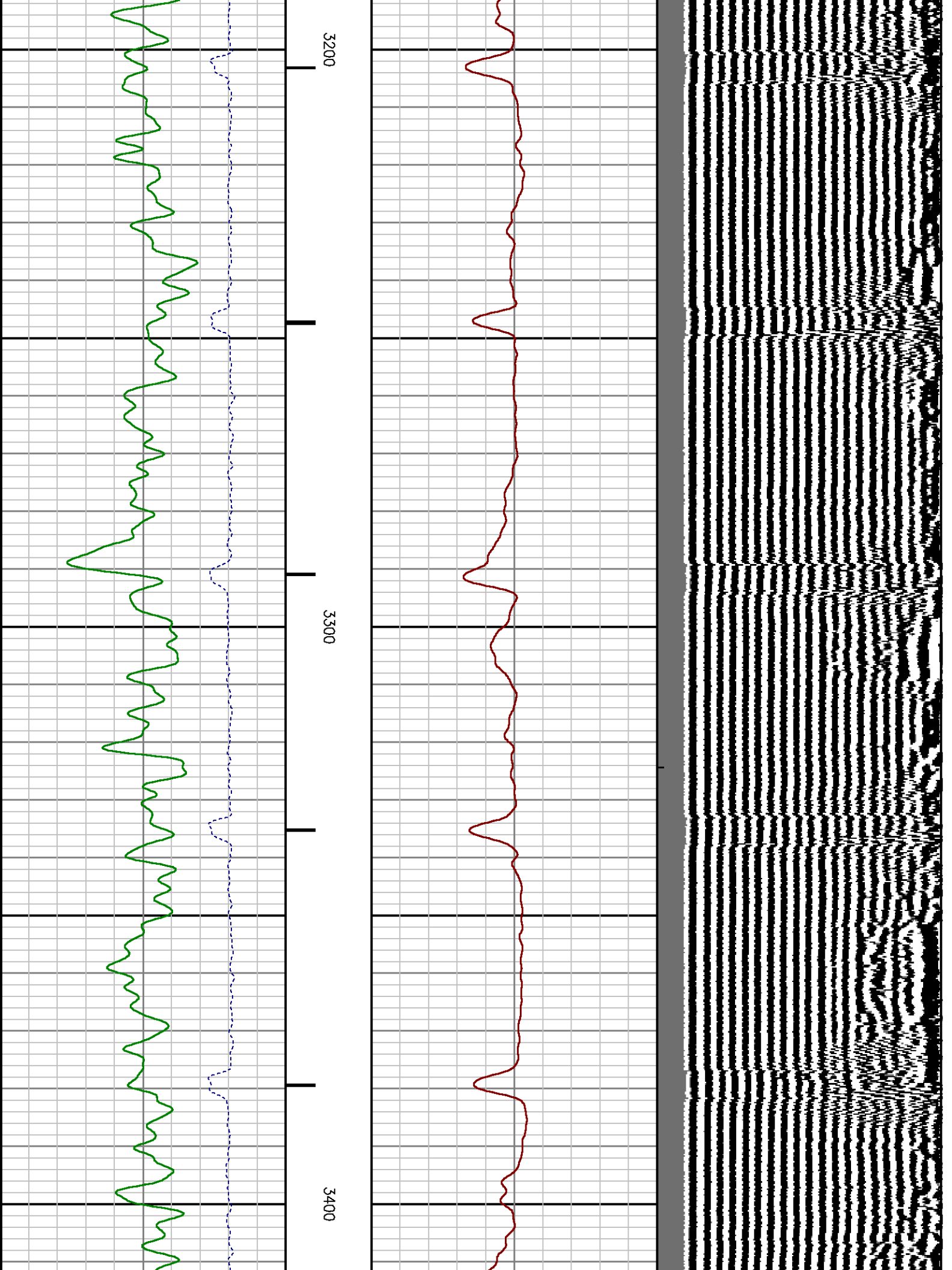


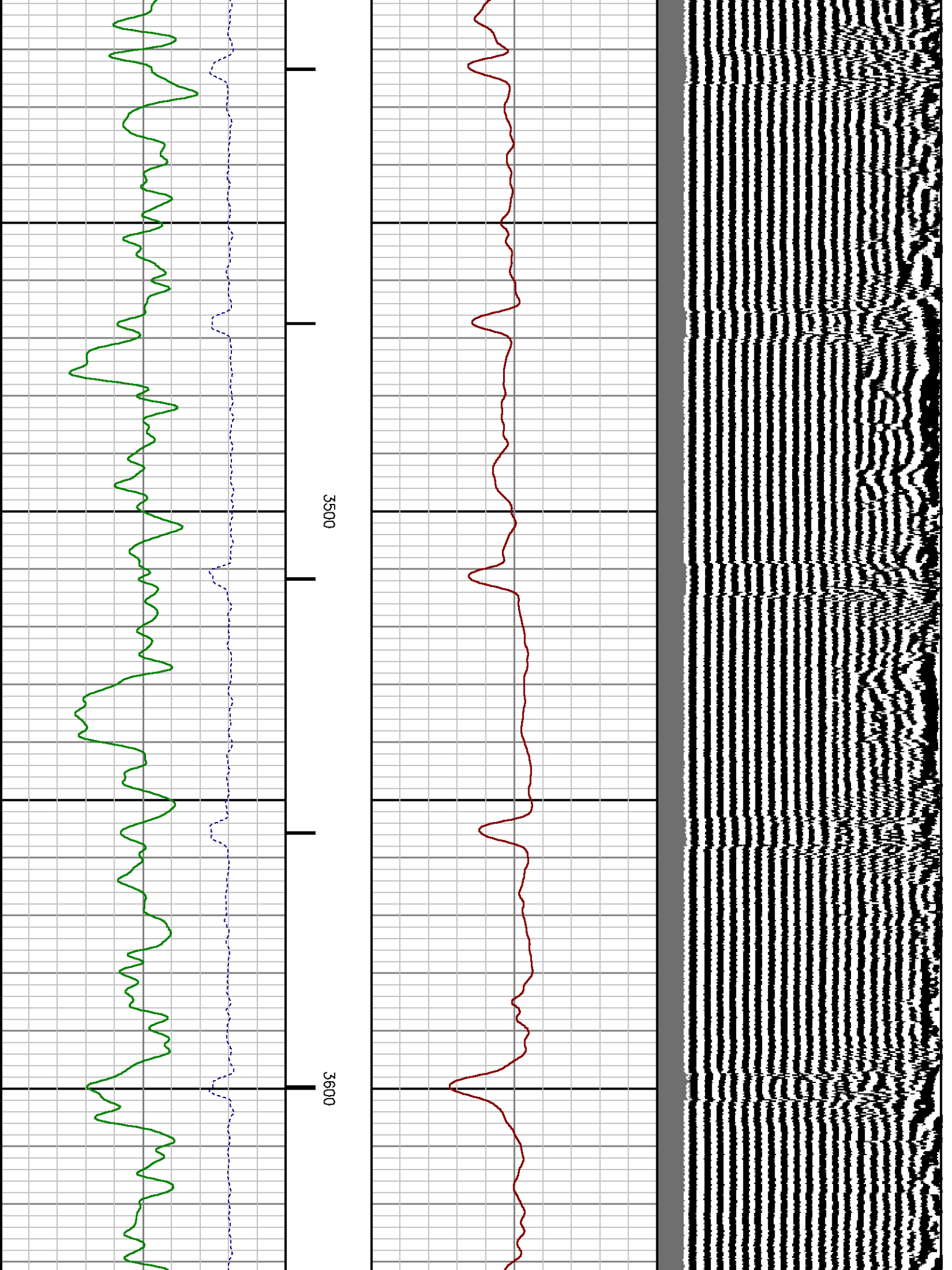


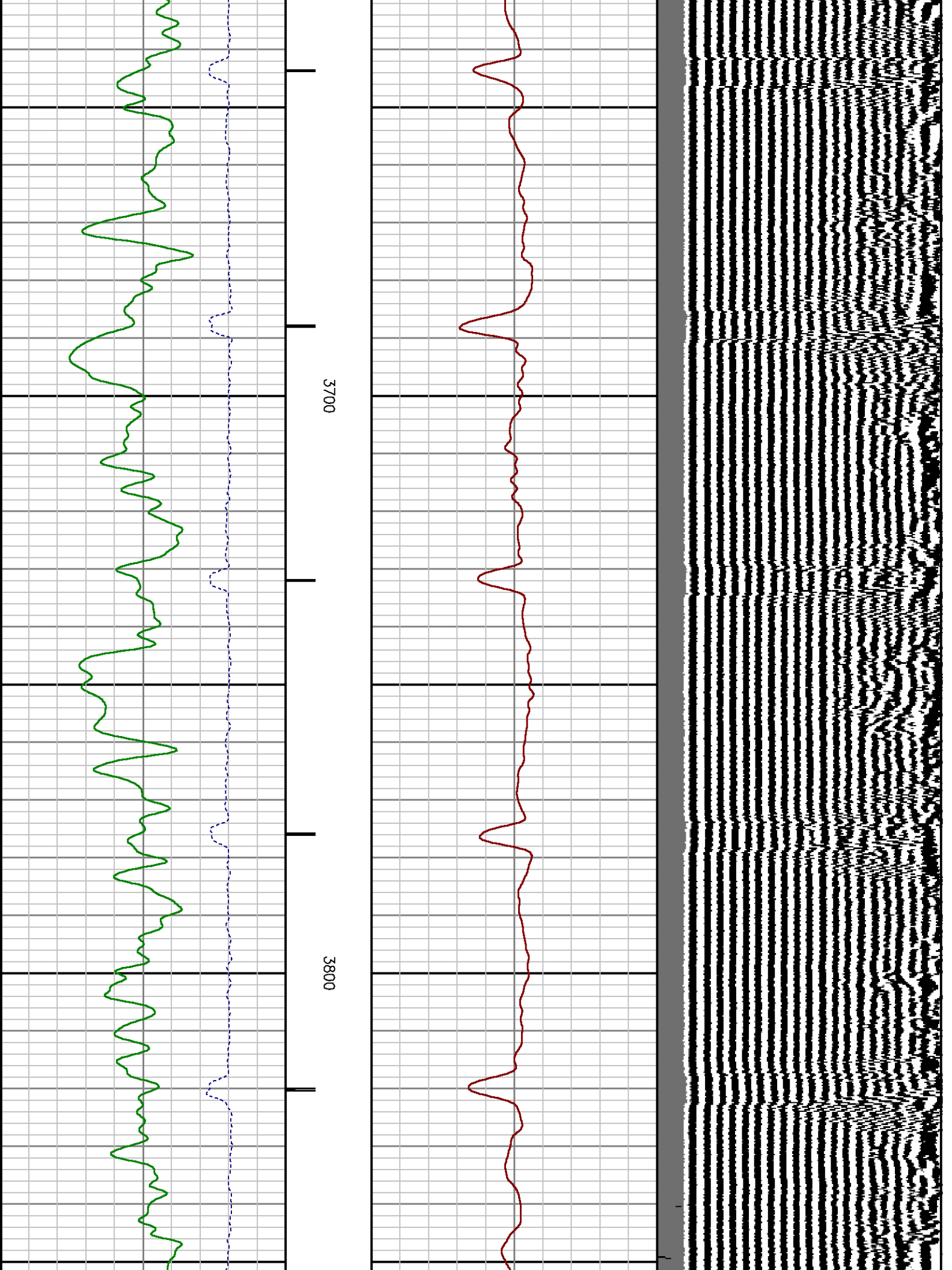


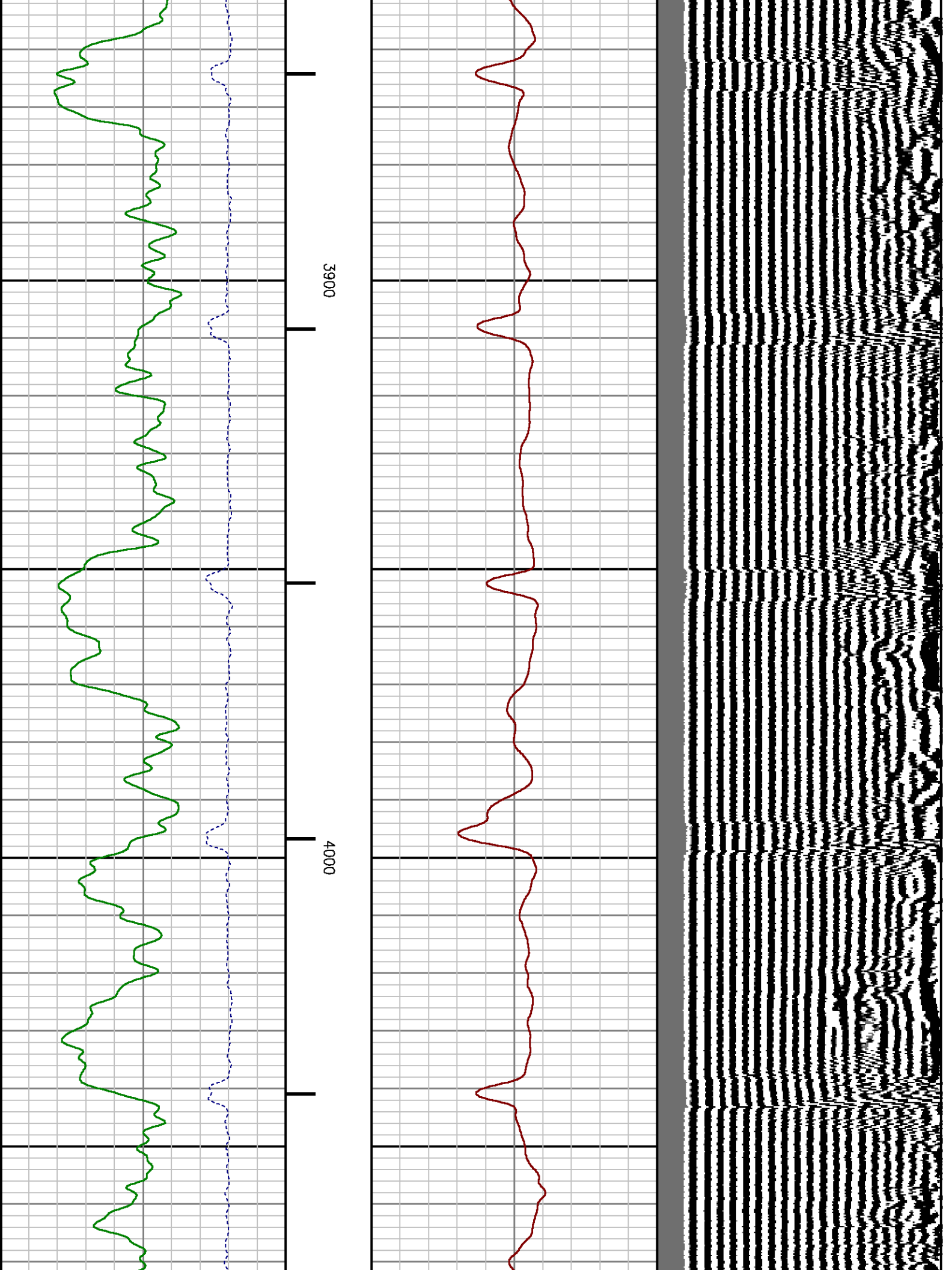


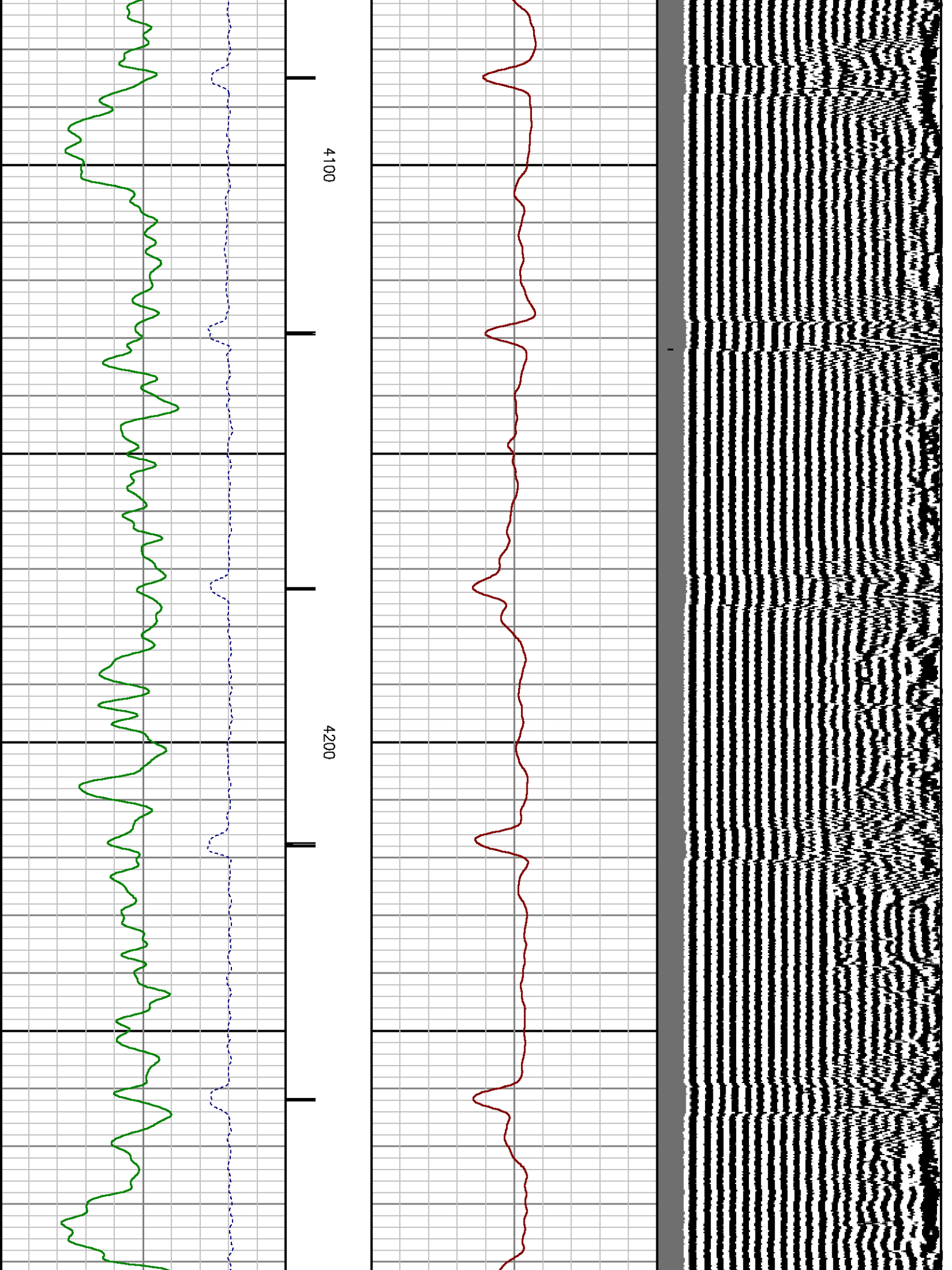


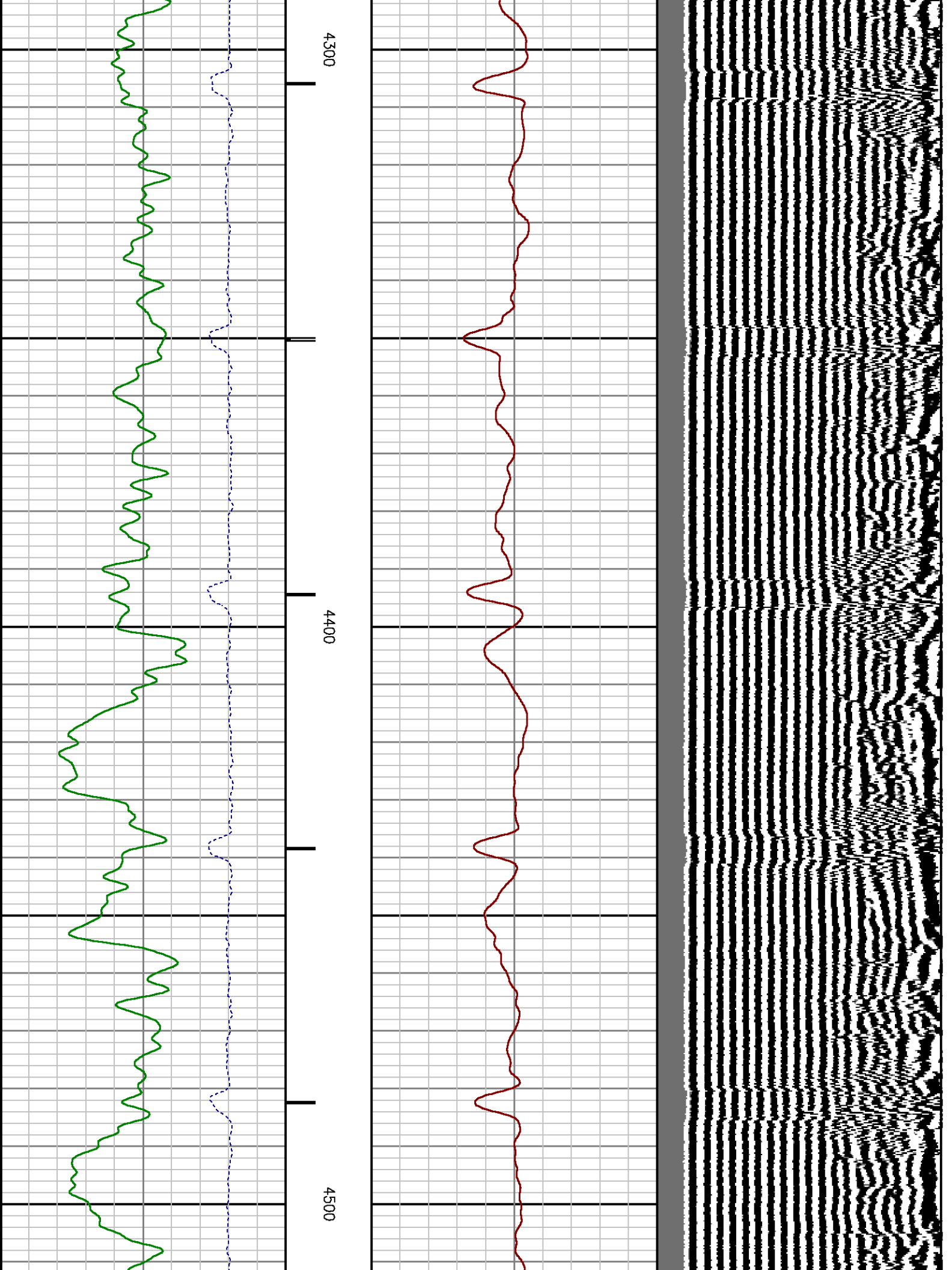


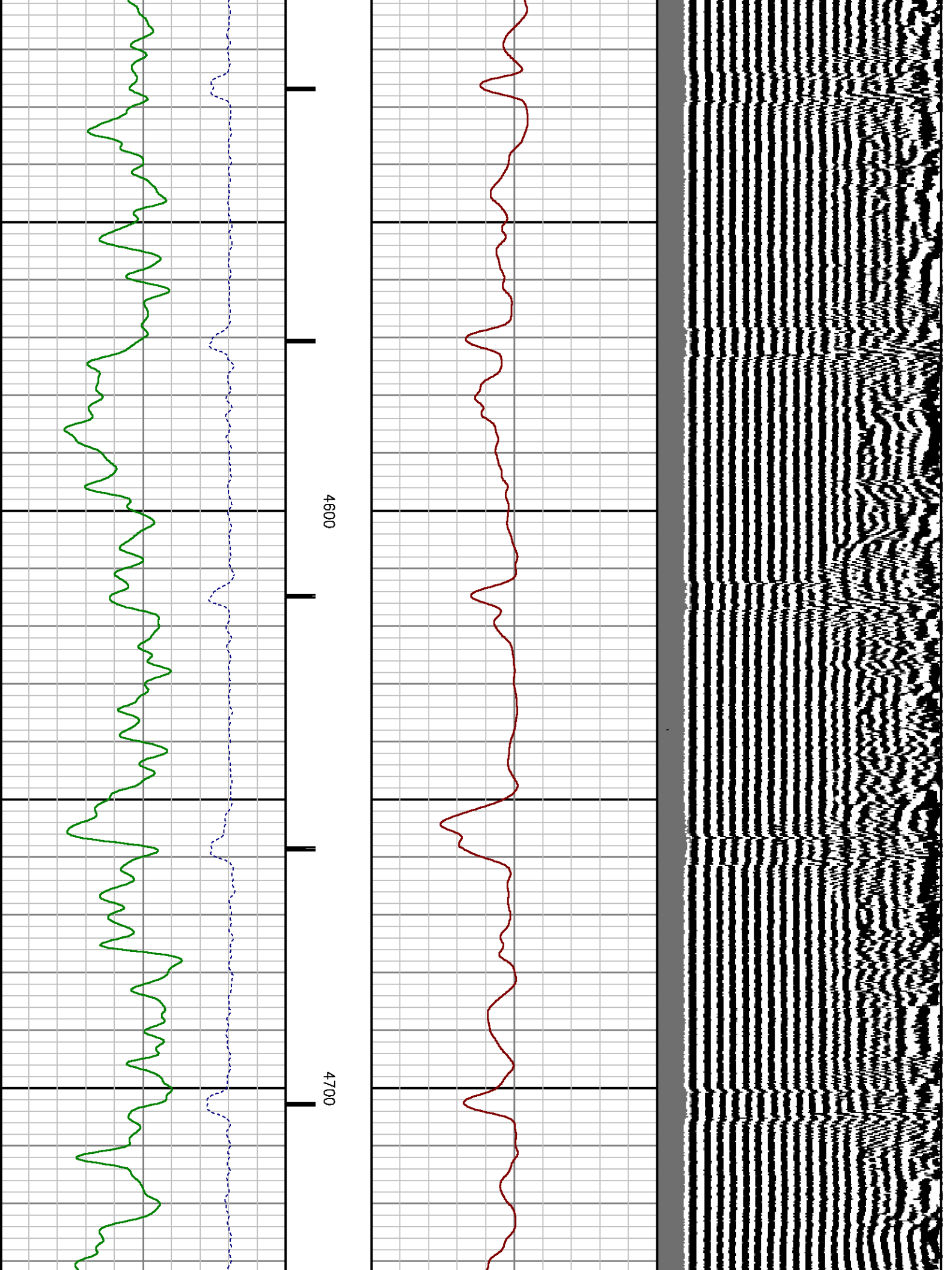


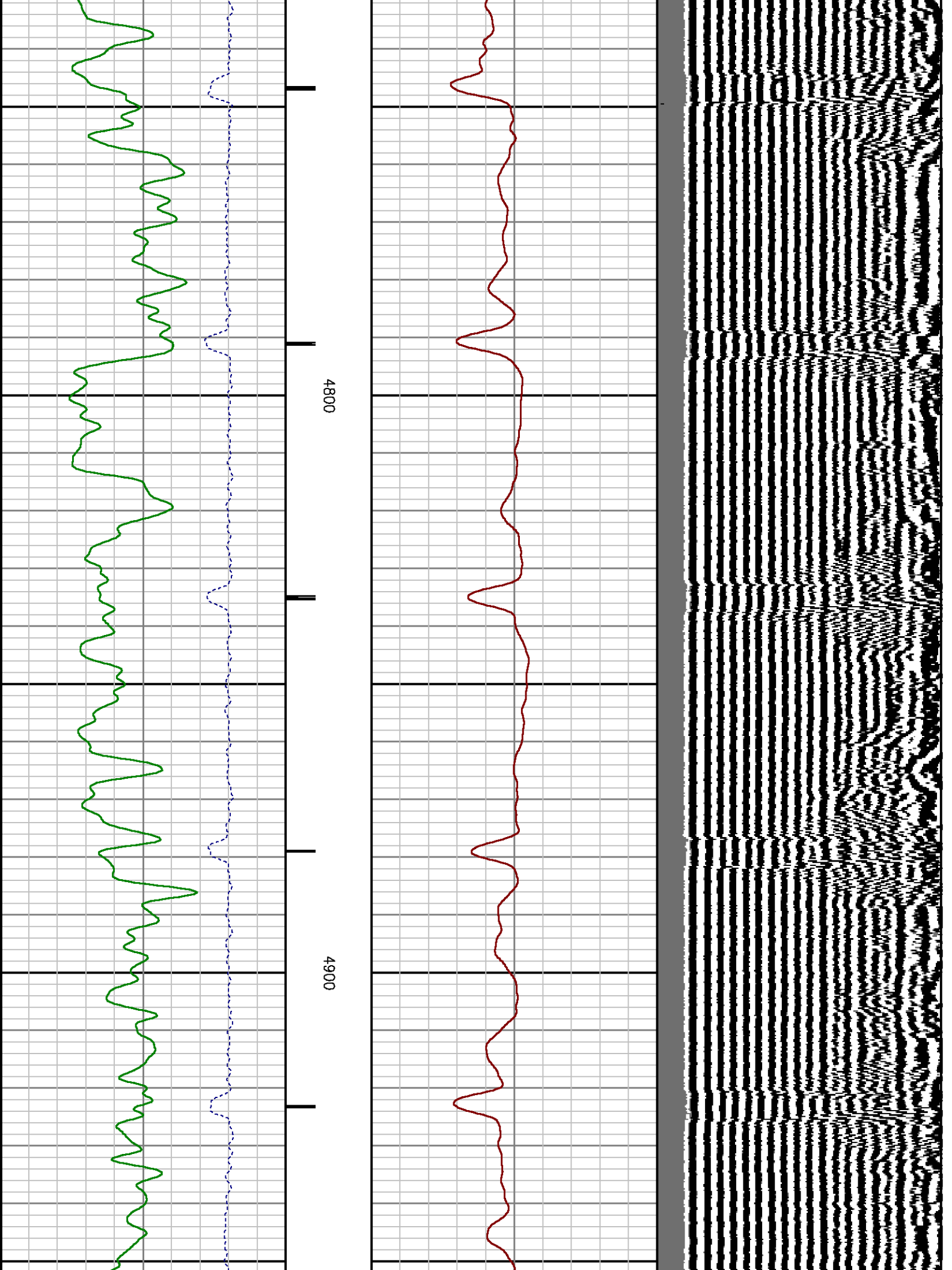


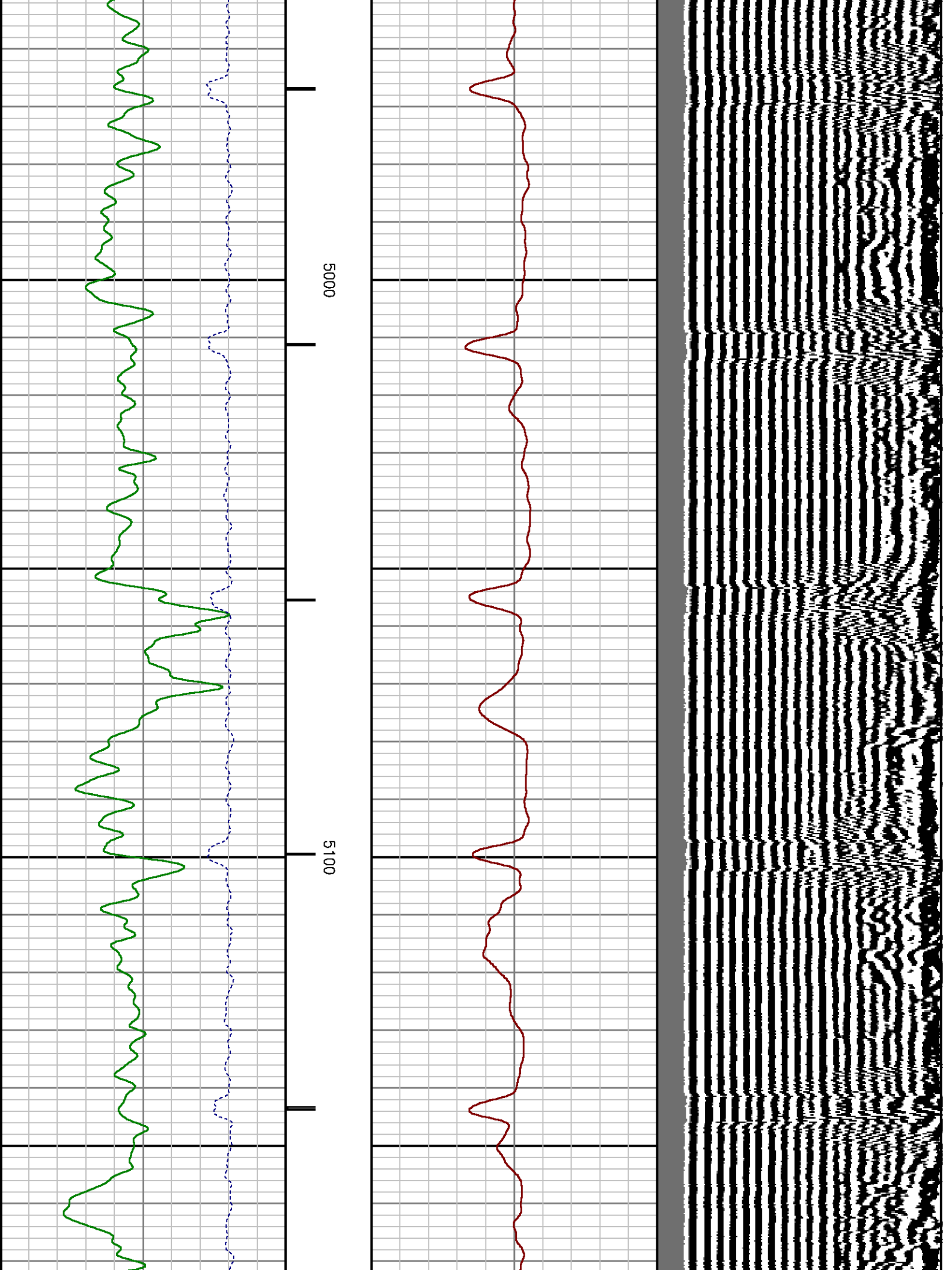


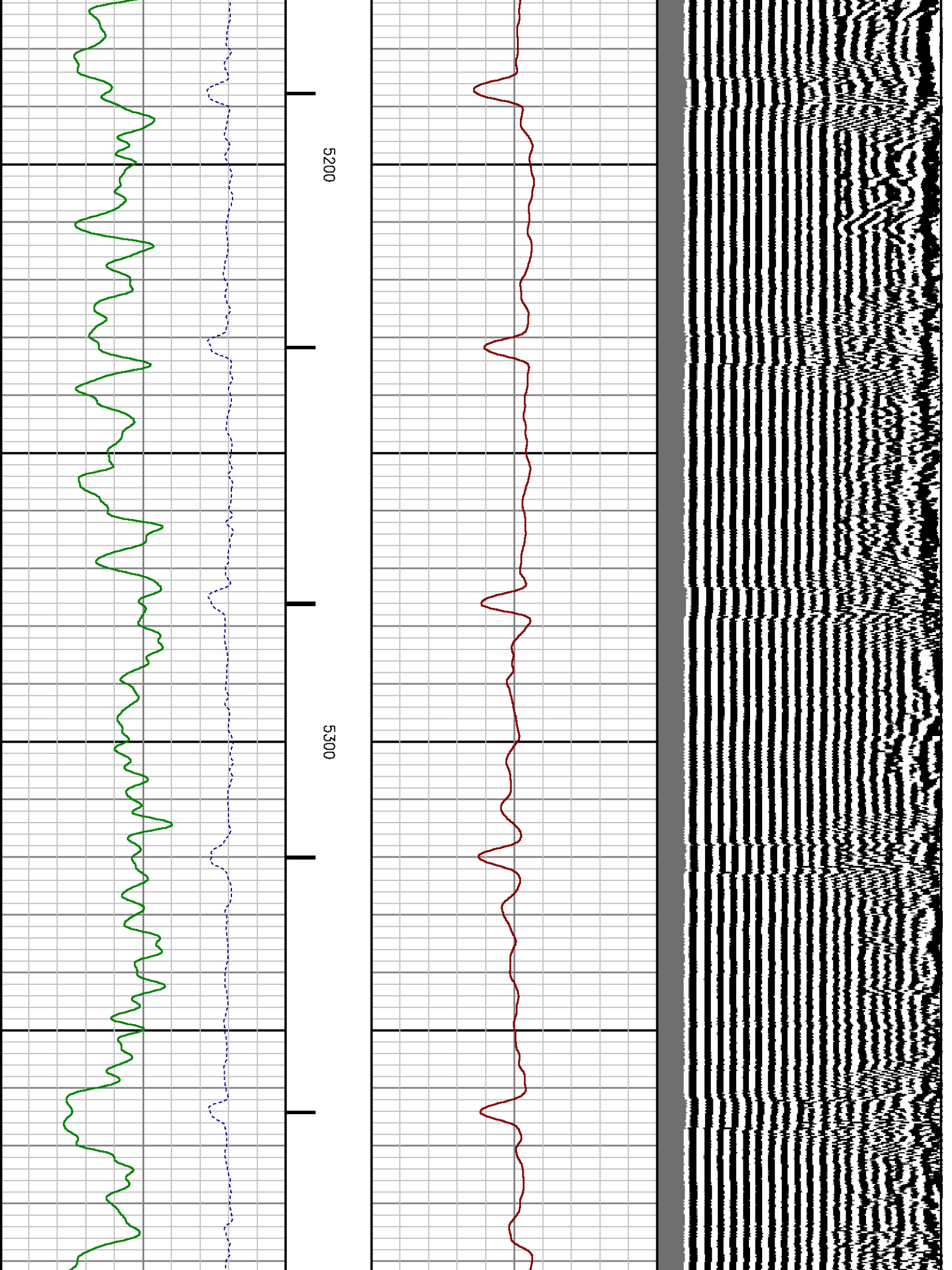


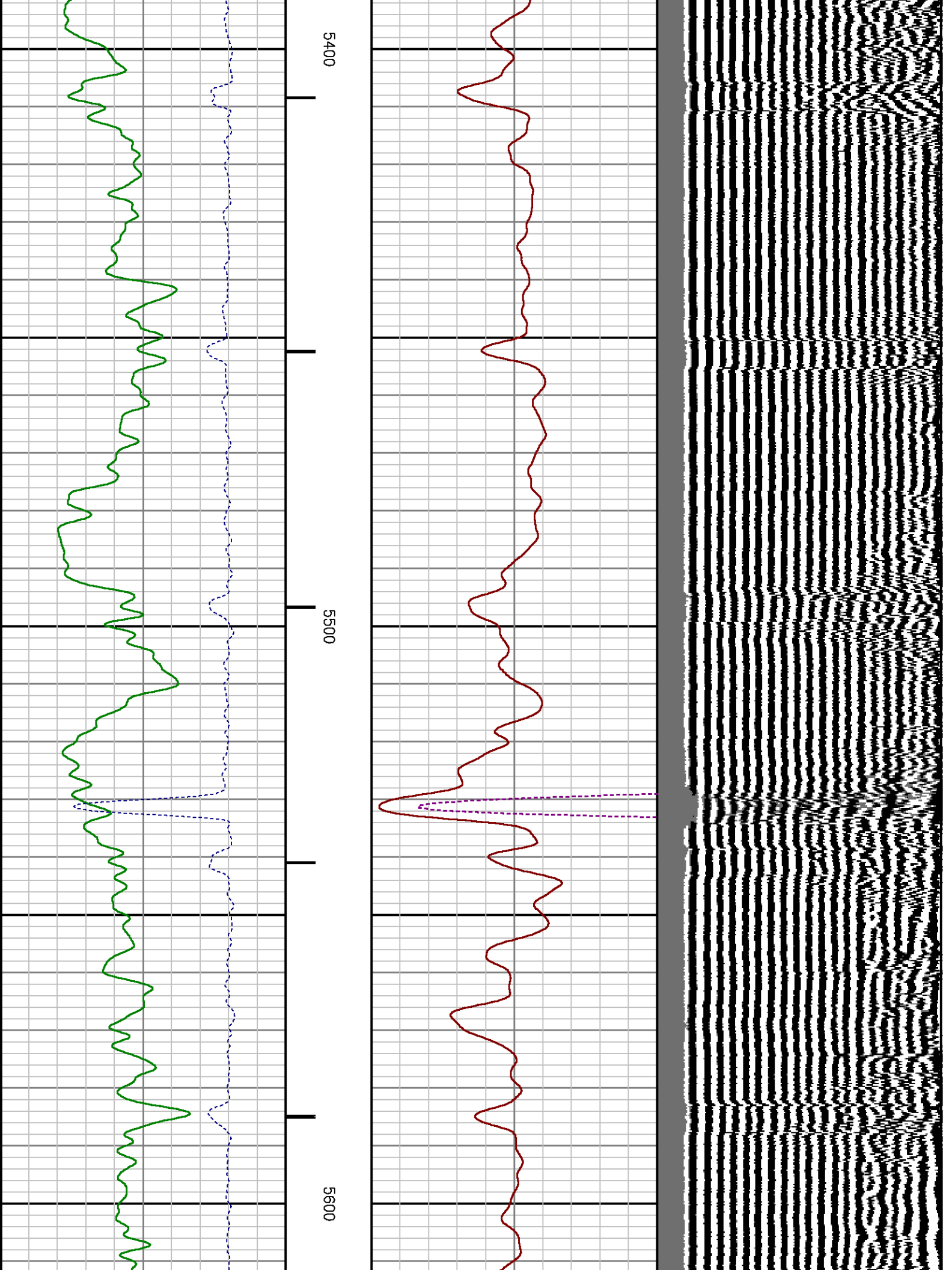


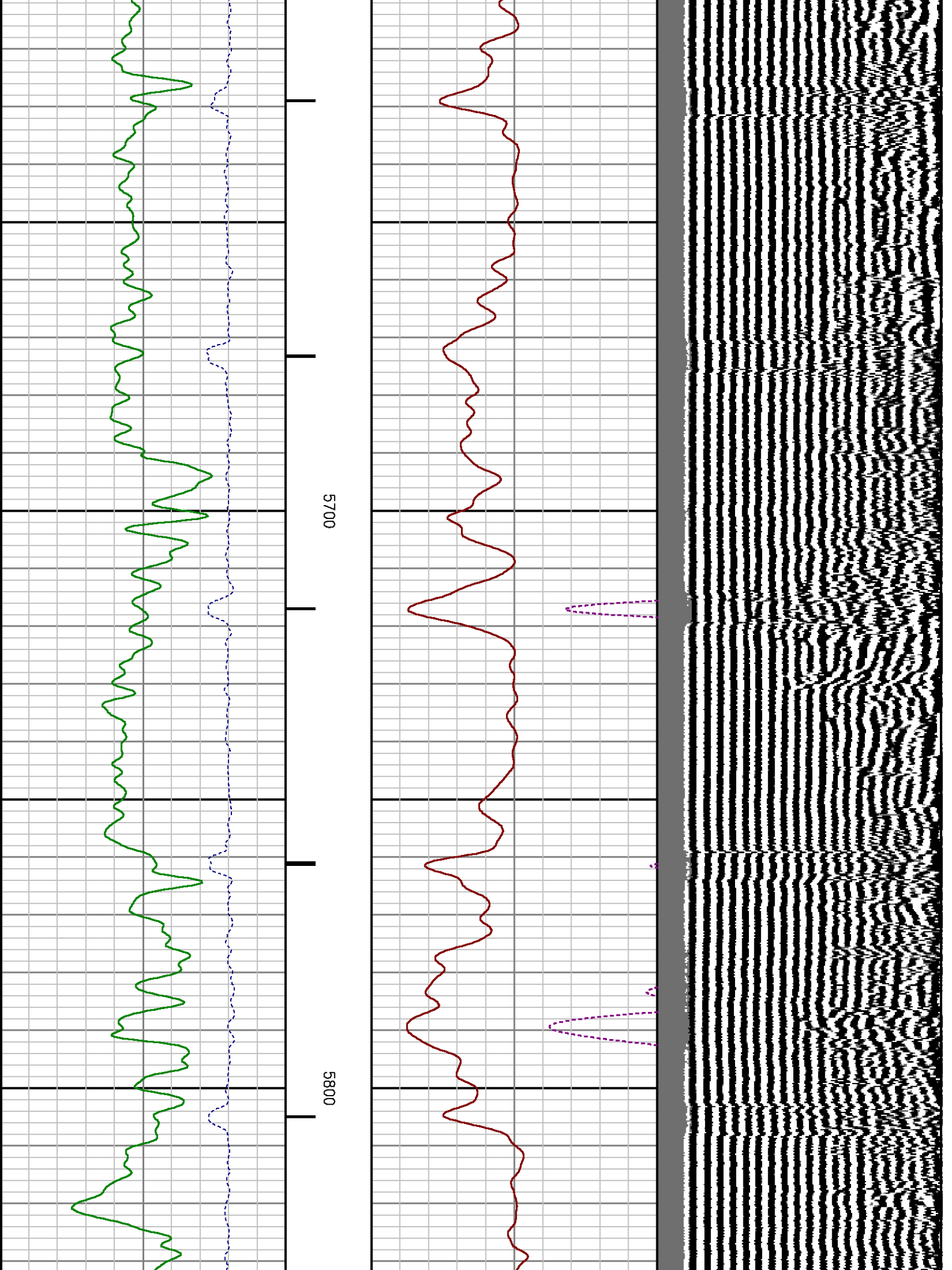


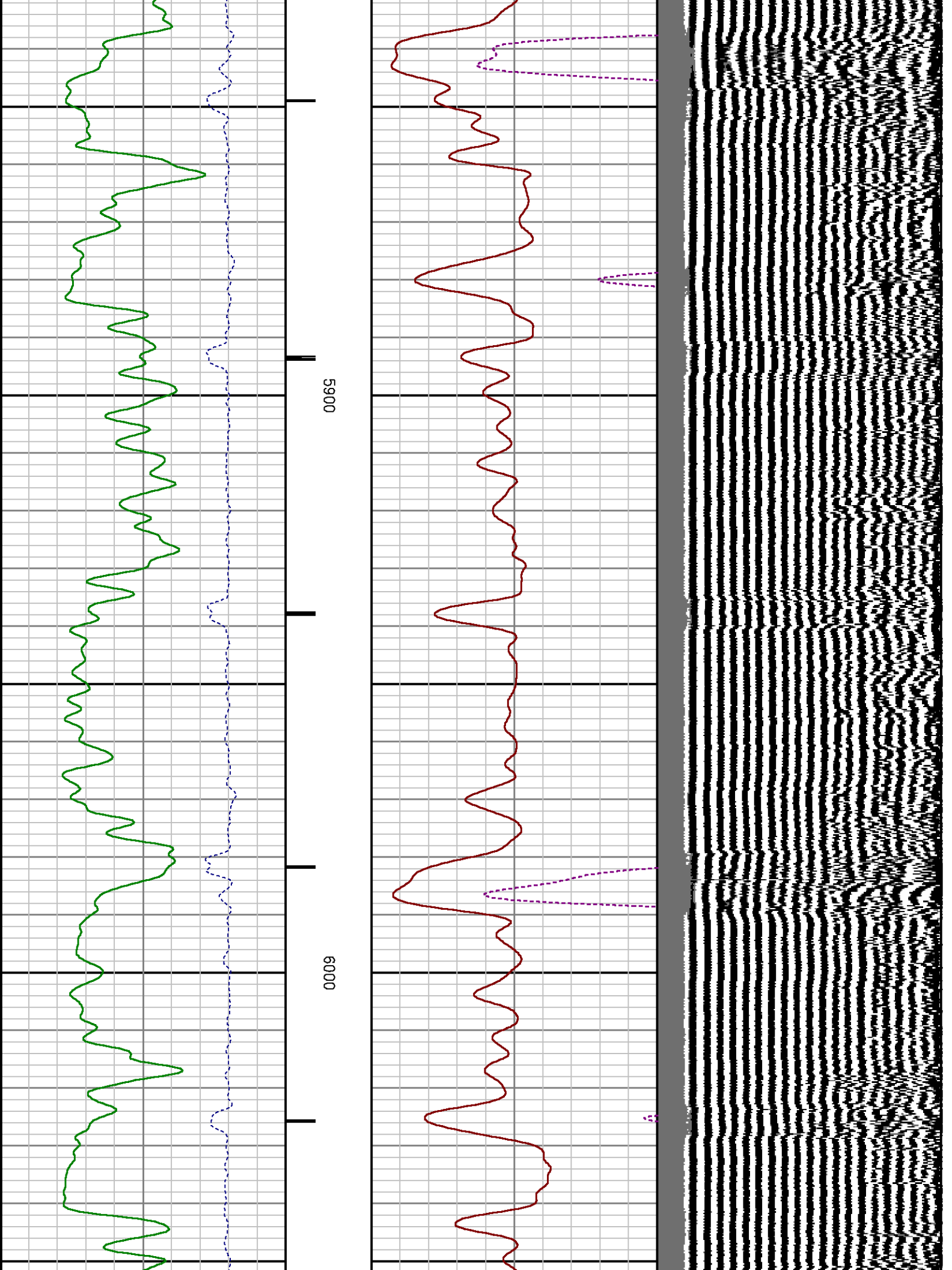


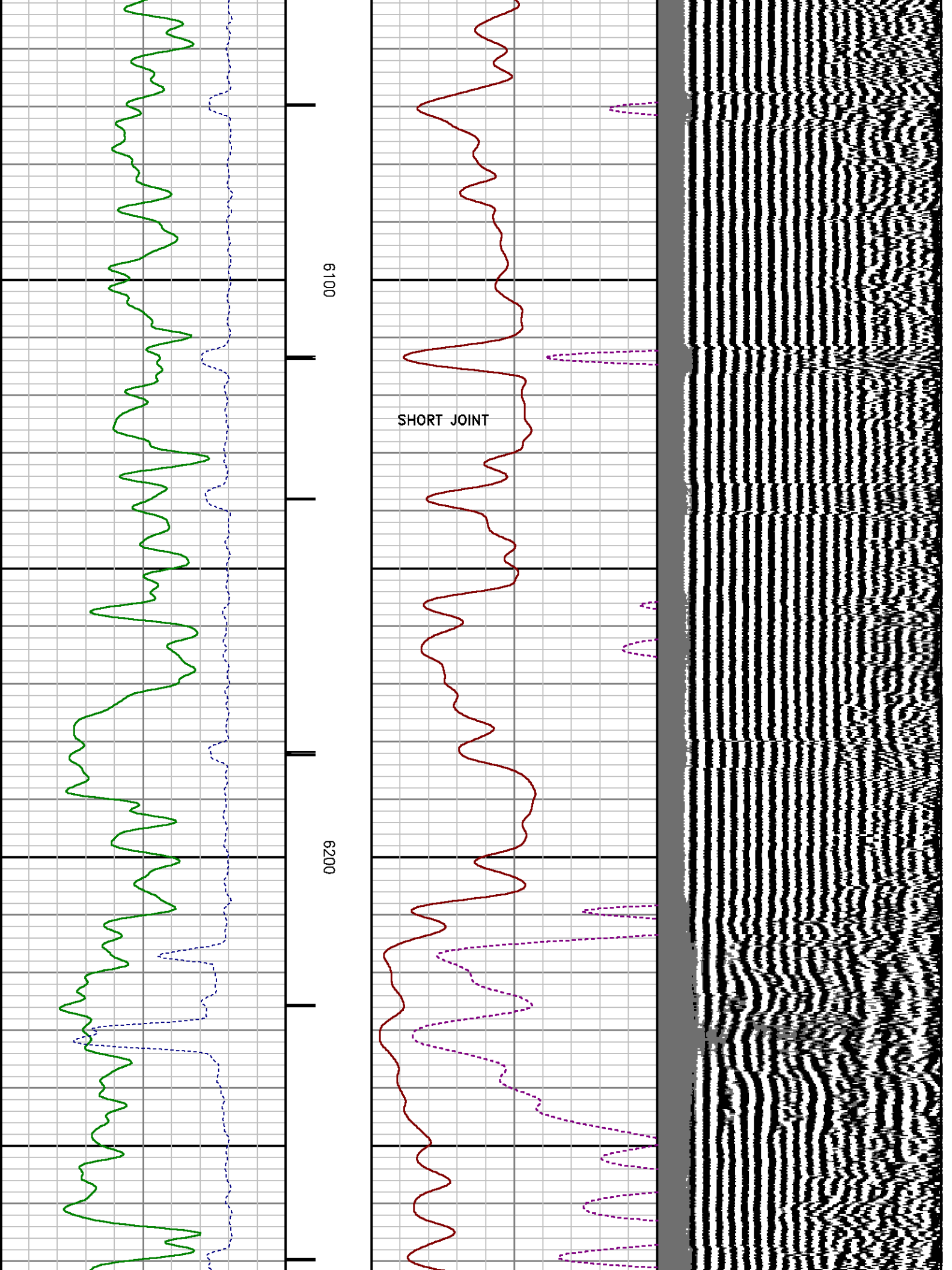


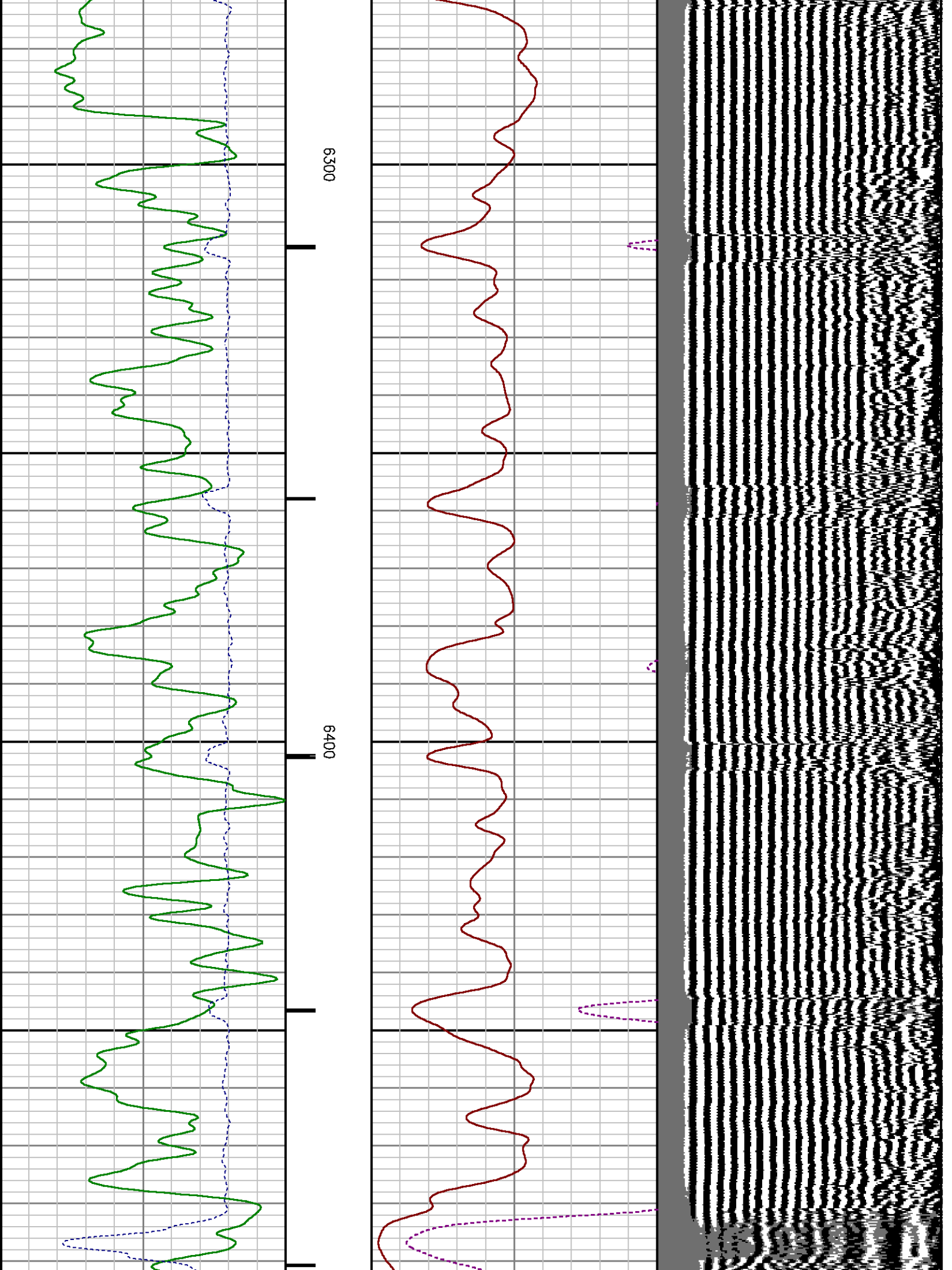


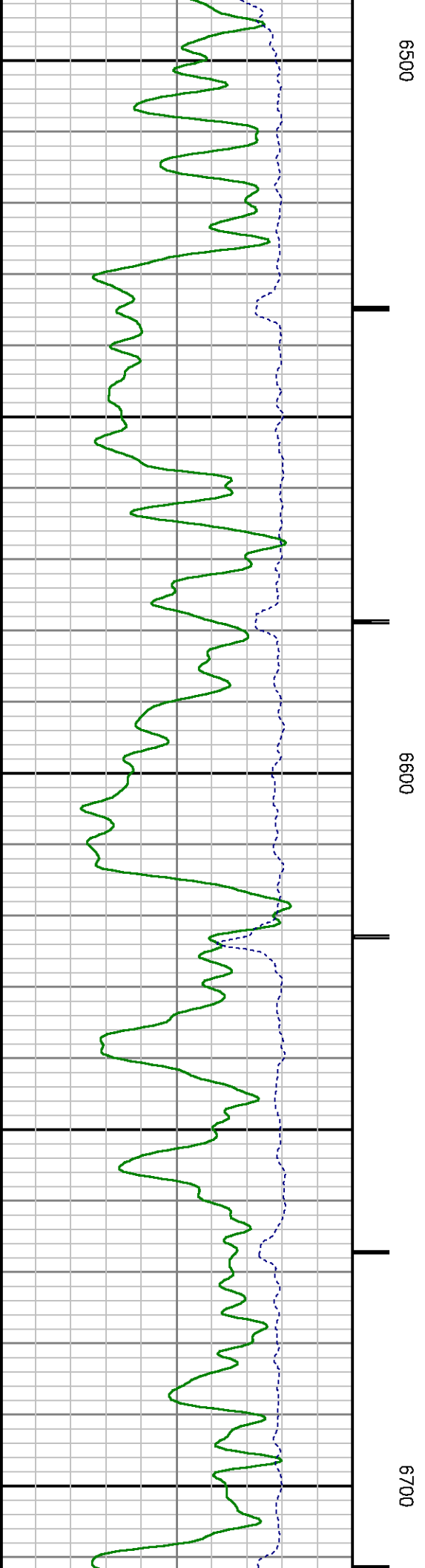
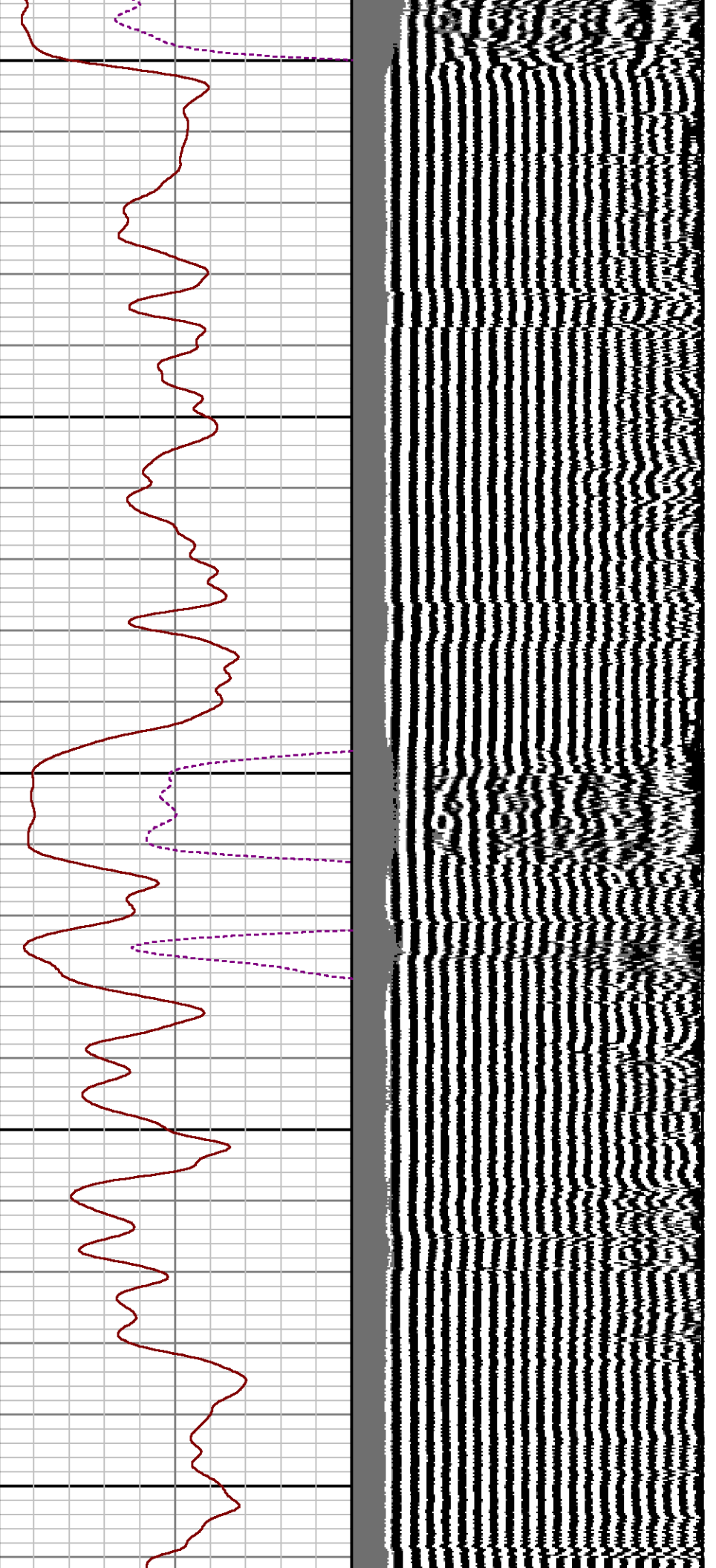


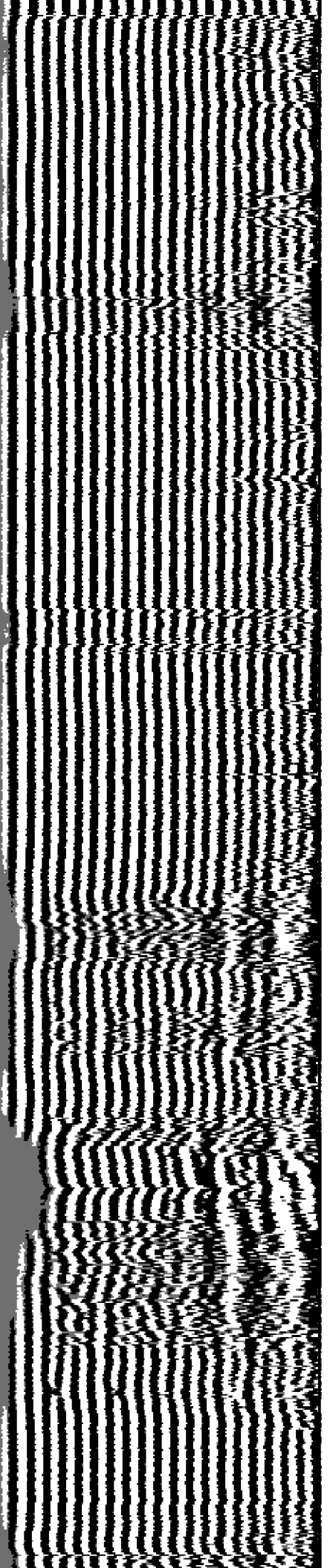
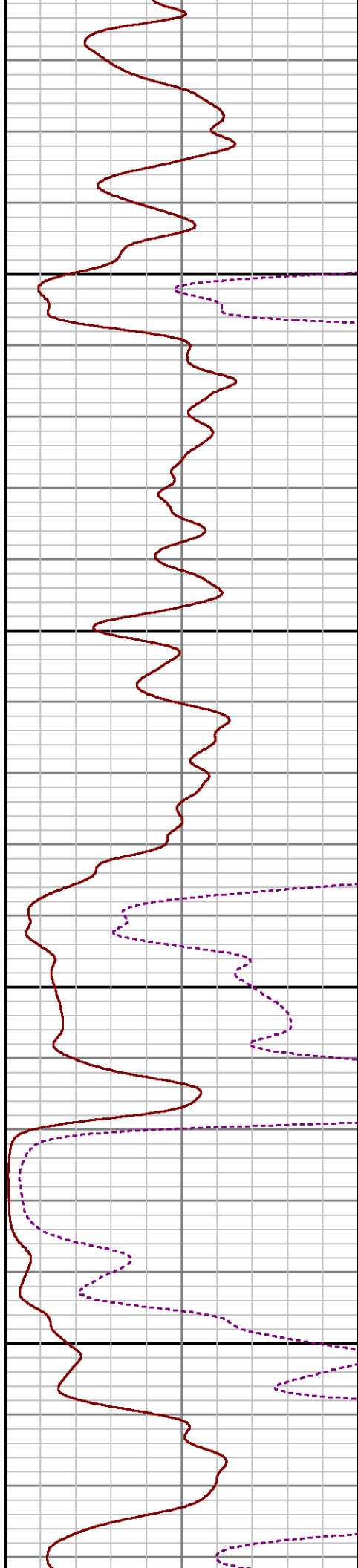
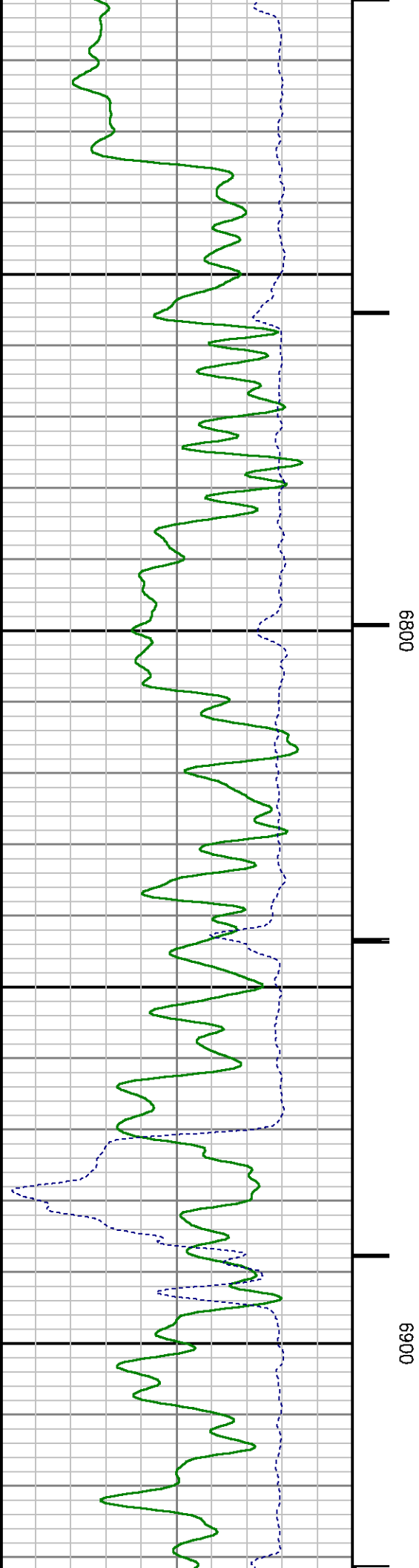


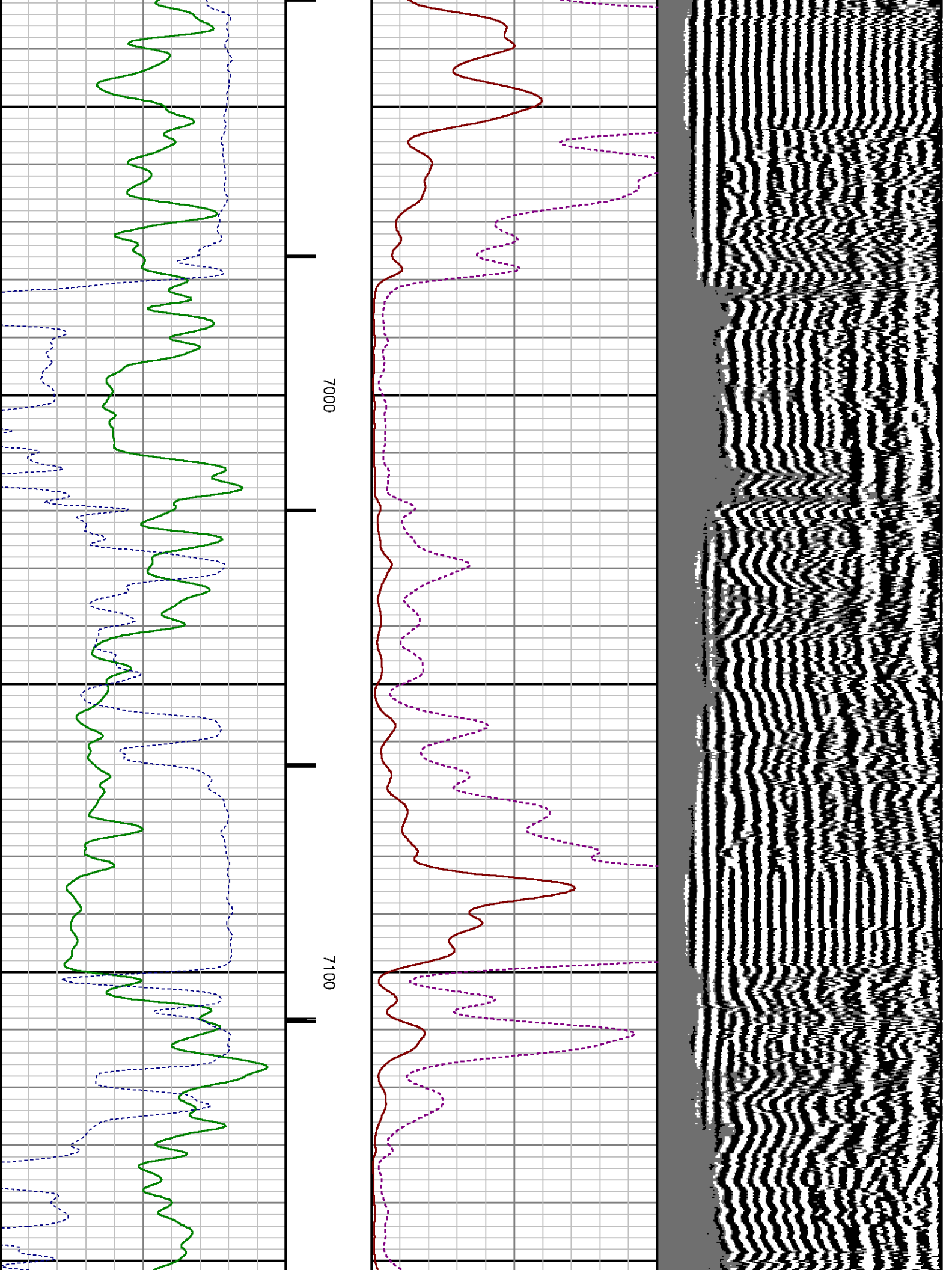


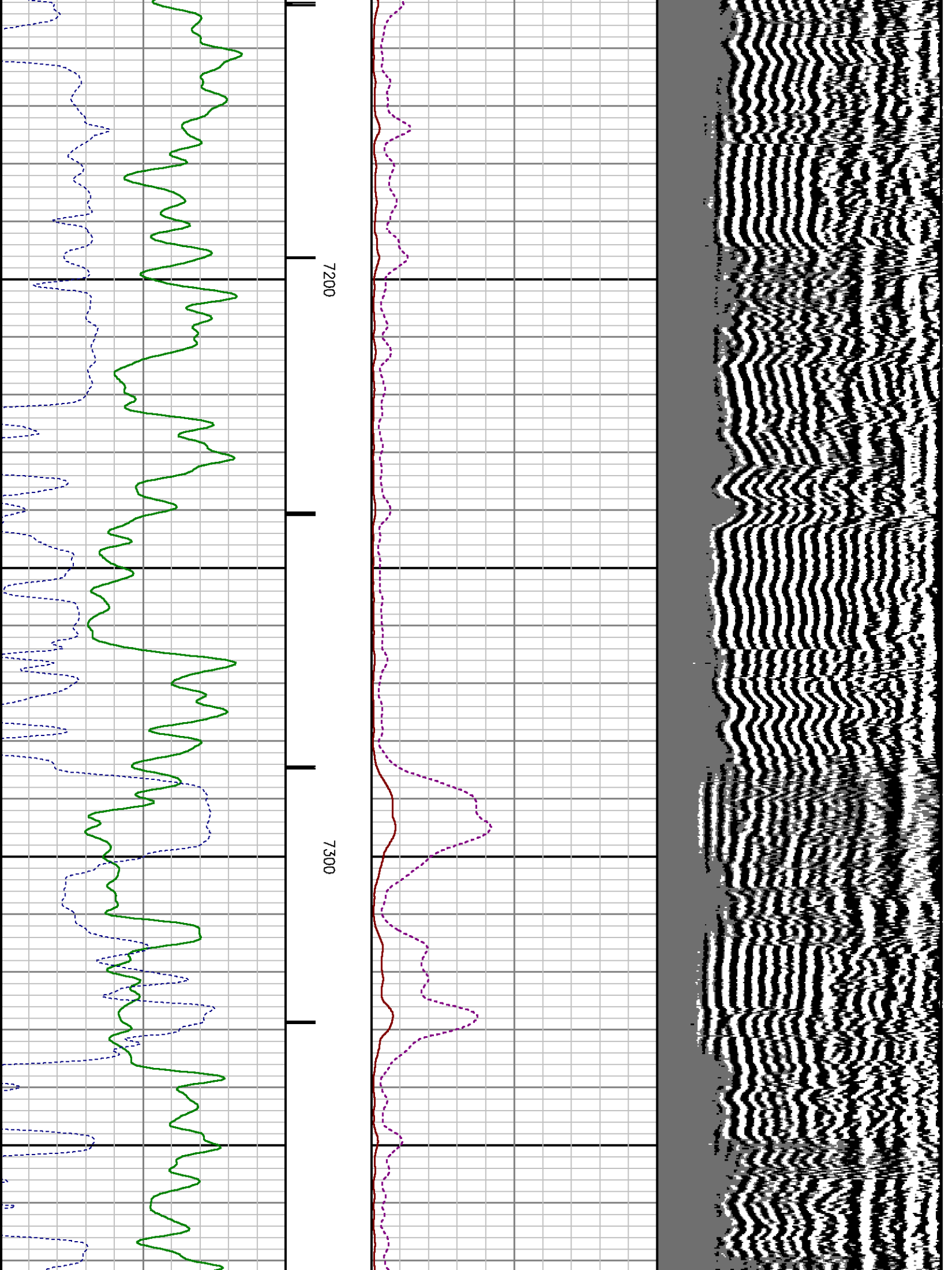


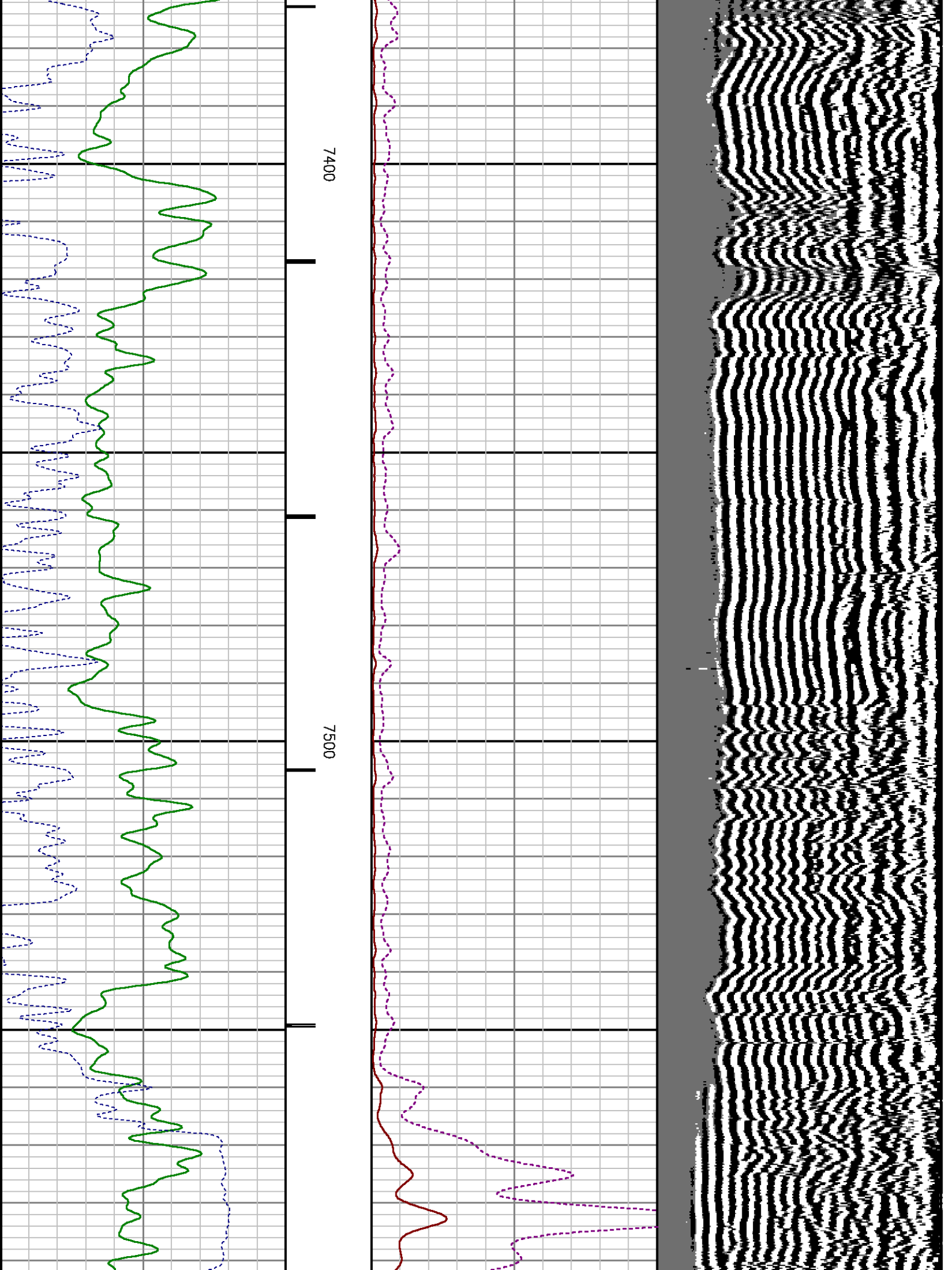


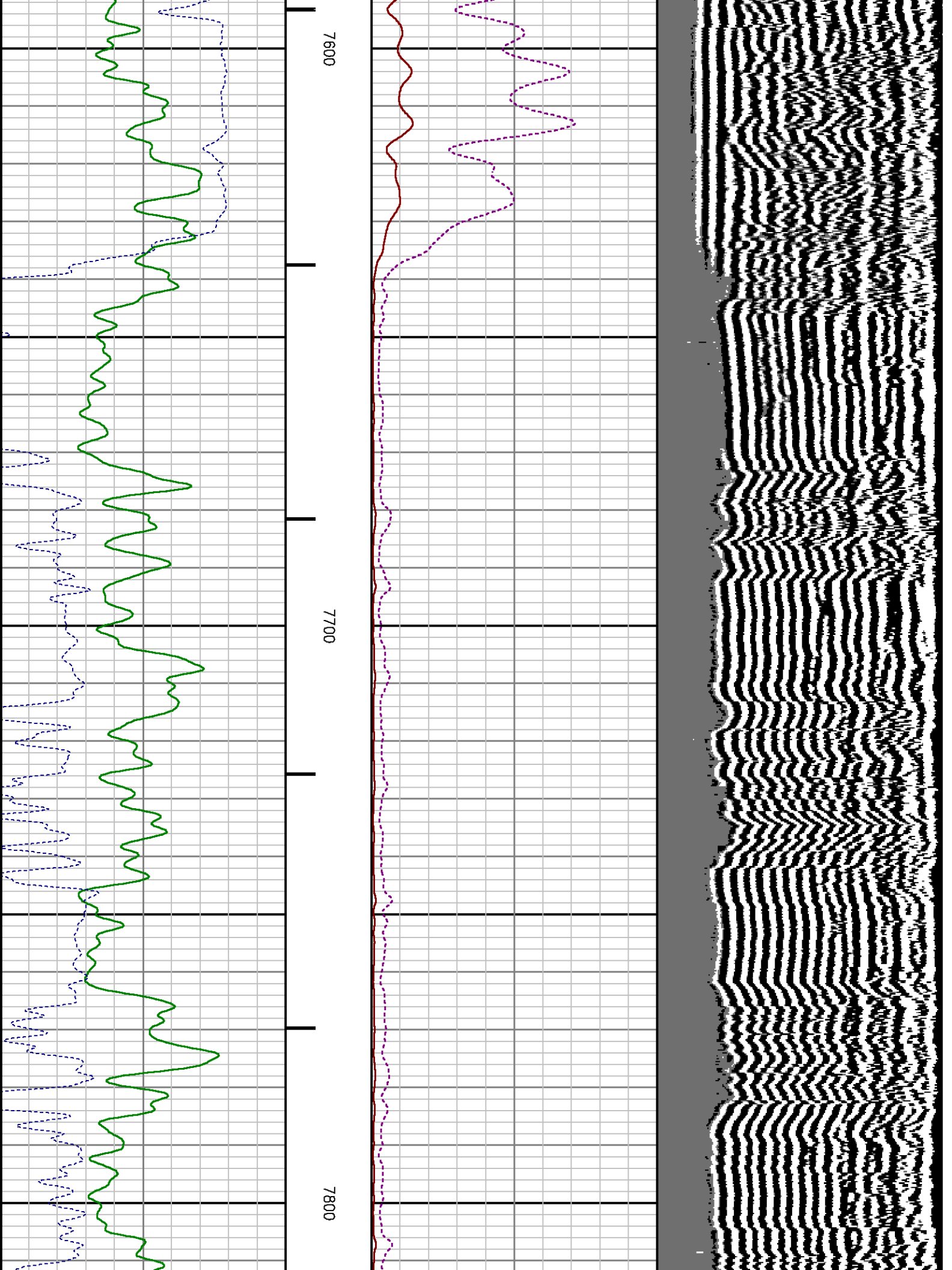


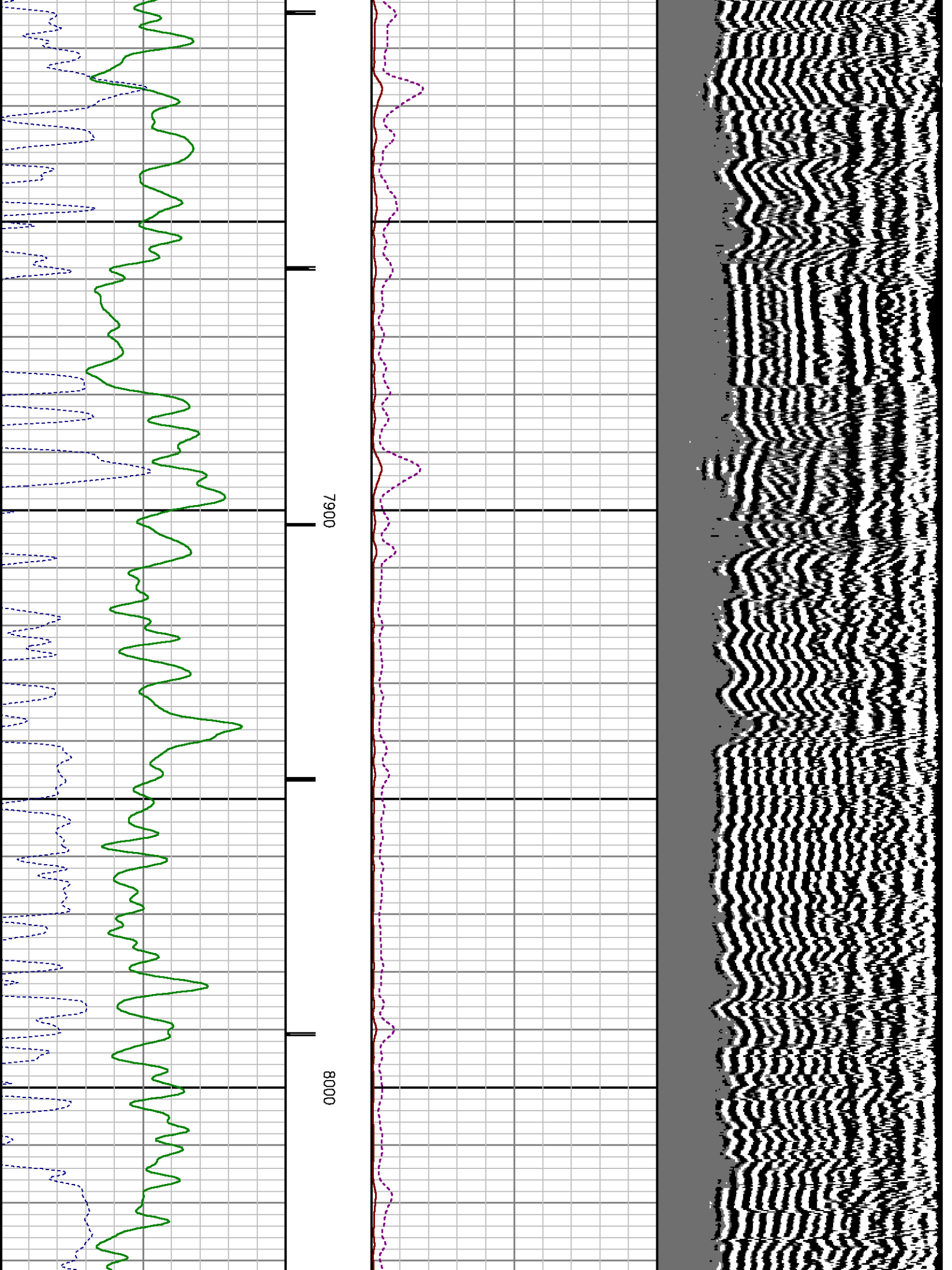


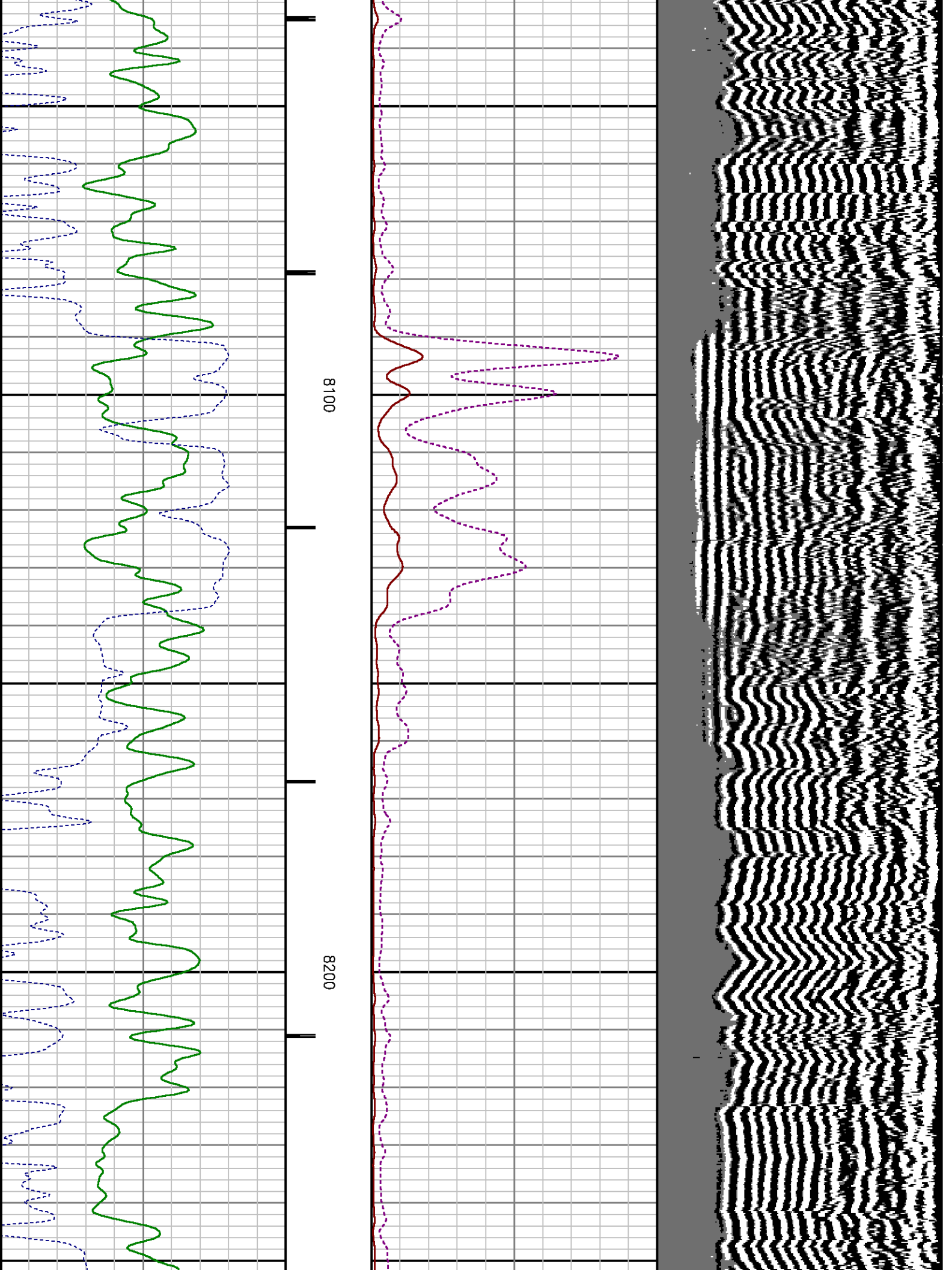


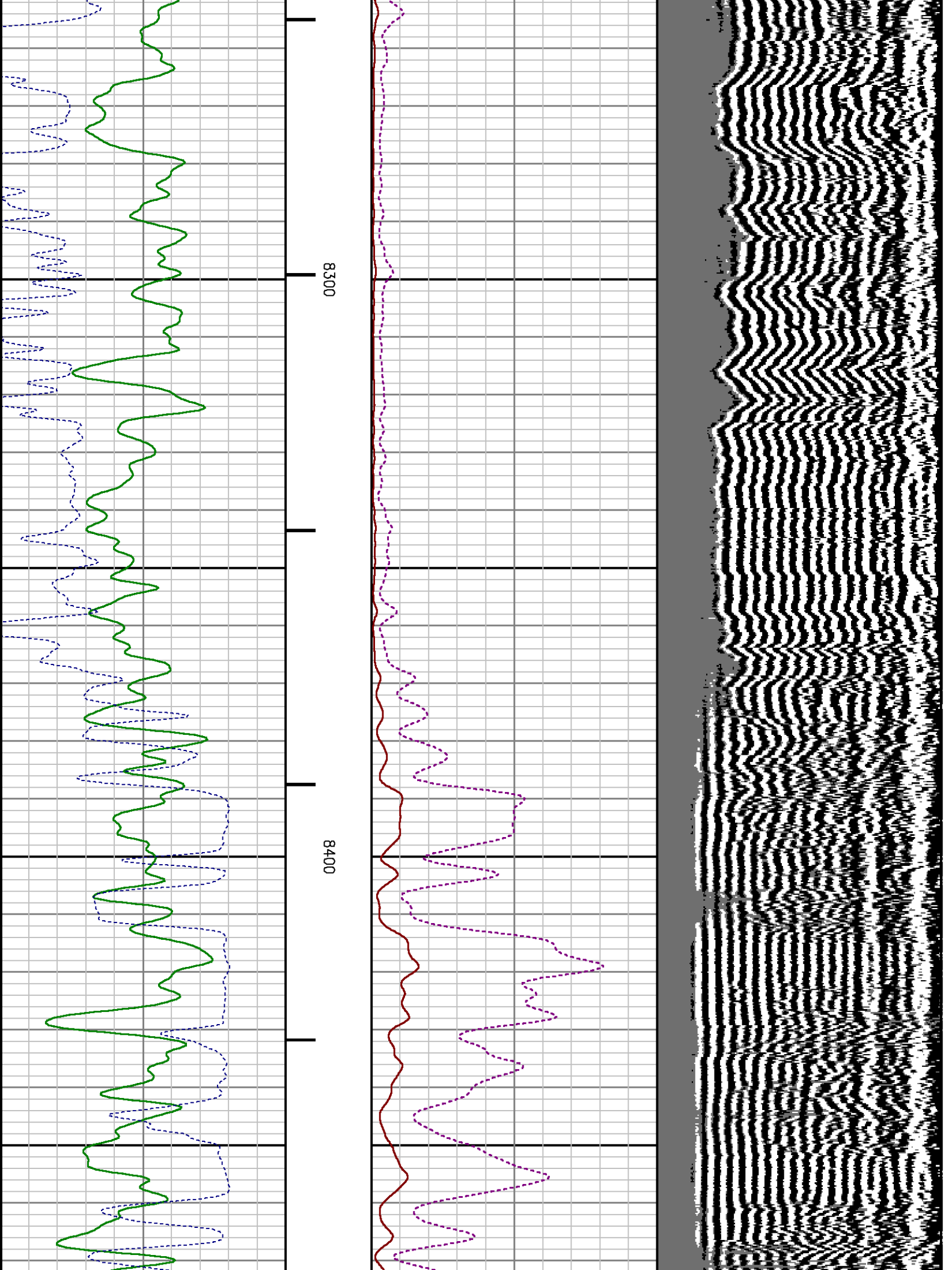


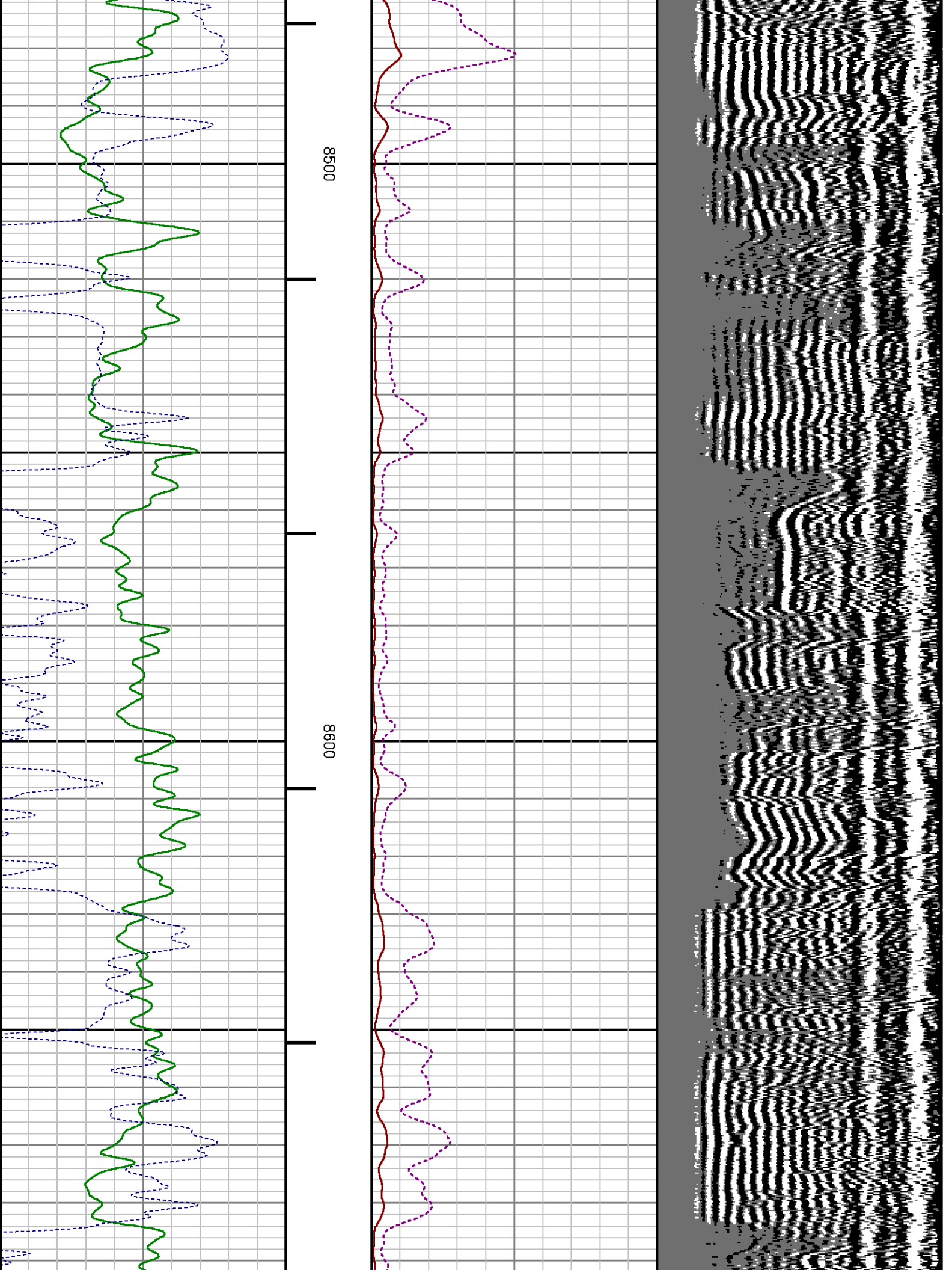


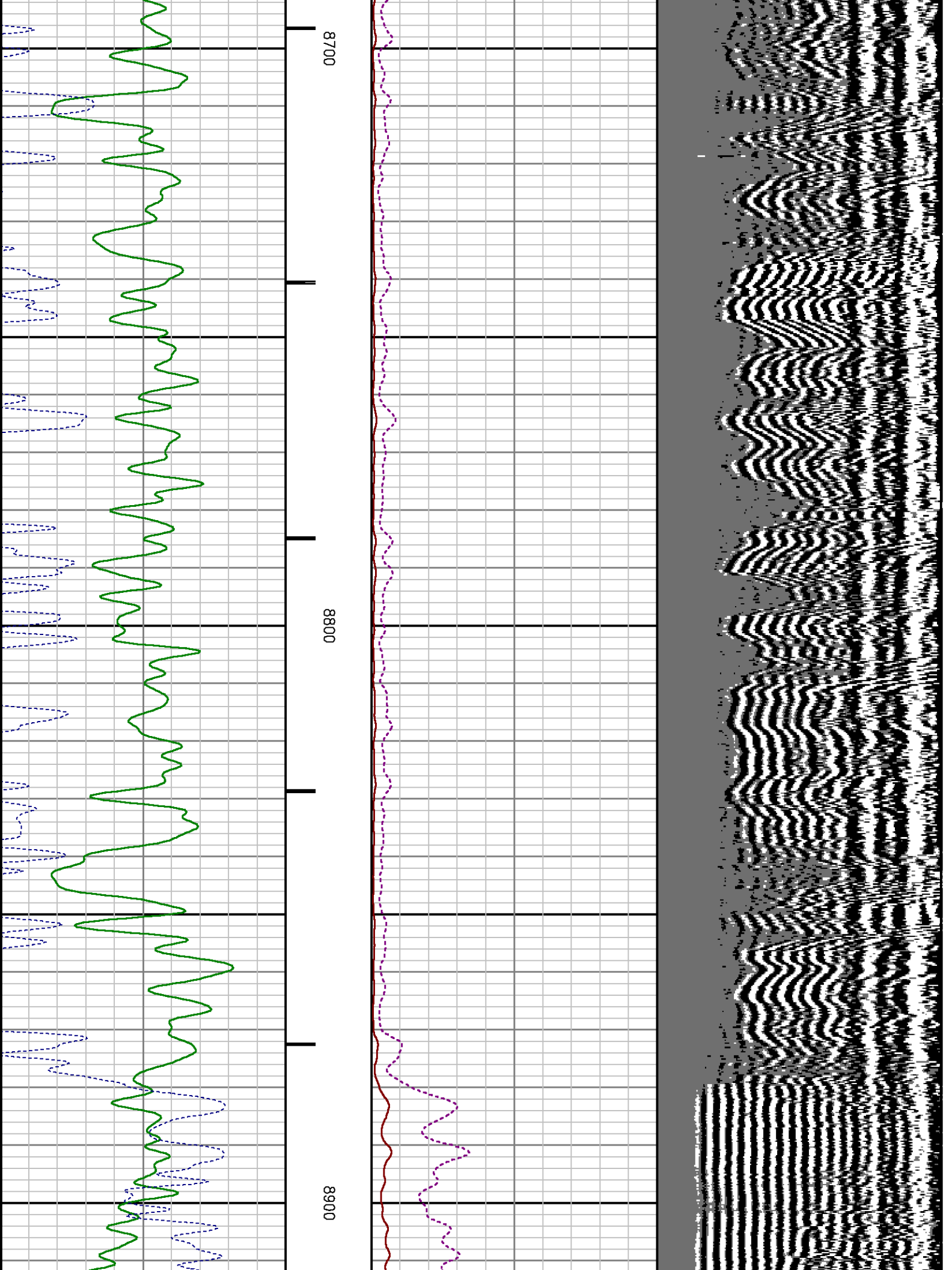


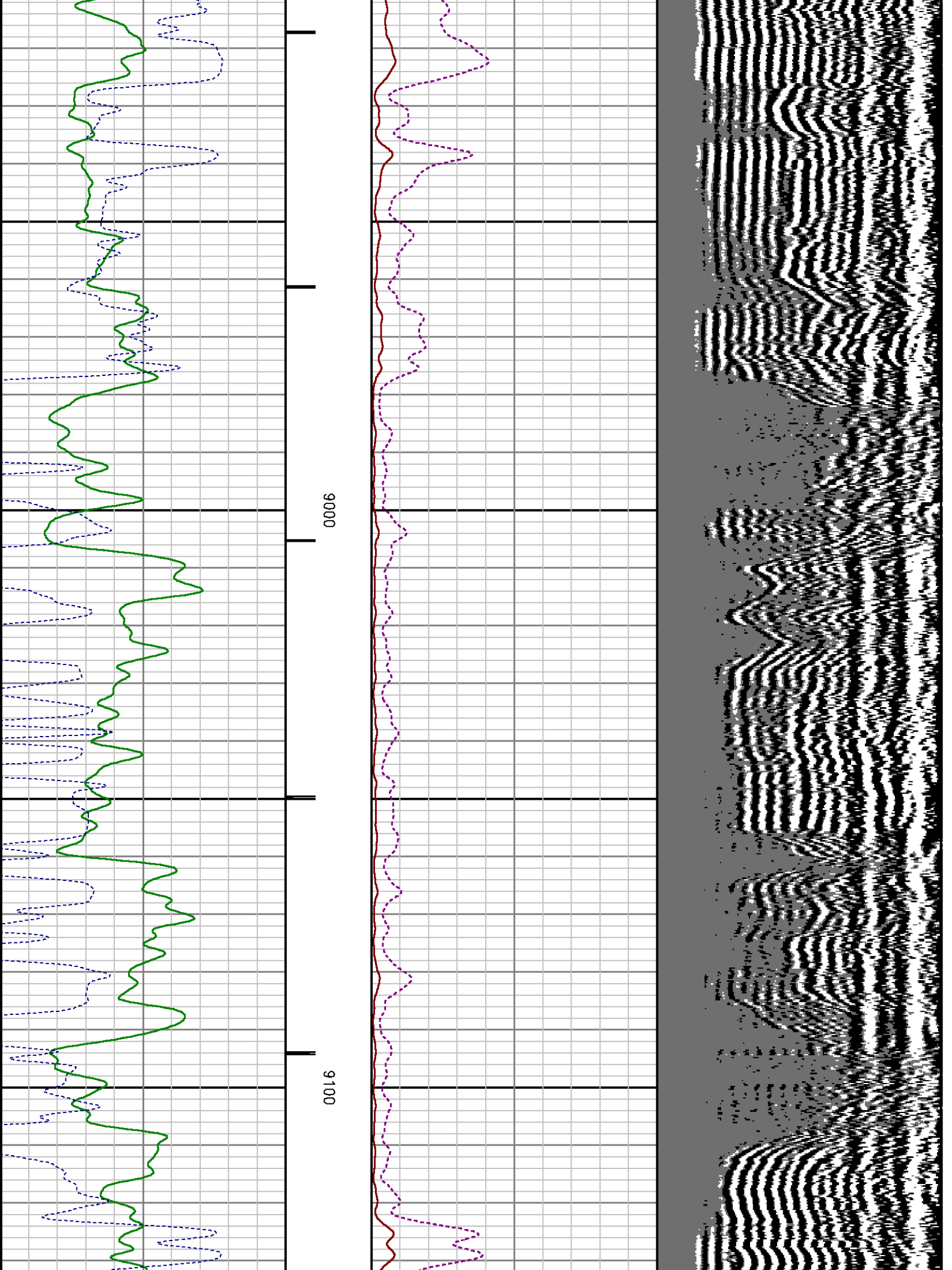


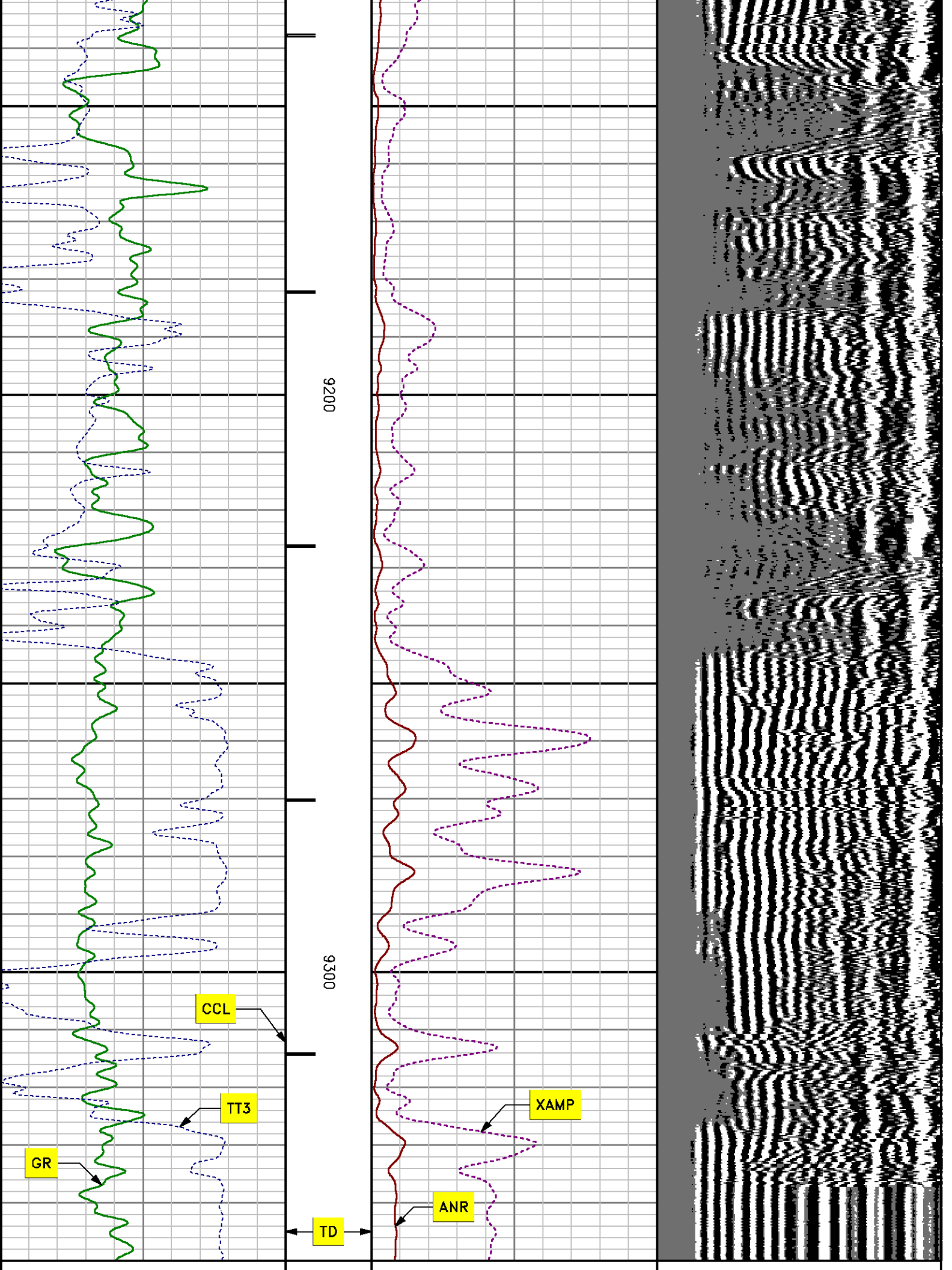


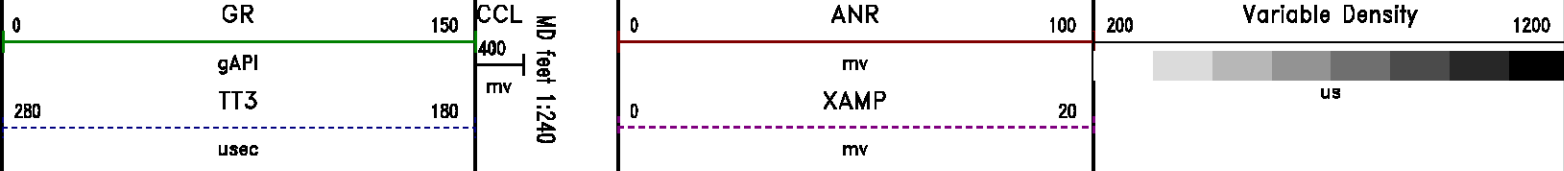












MAIN LOG SECONDARY PRESENTATION

0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	307.440	usec	33.937	9363.250
RAL	Amp Gate Start Near	198.578	usec	33.937	9363.250
RAL	Amp Gate Start Radial	198.578	usec	33.937	9363.250
RAL	Amp Gate Width Far	25.000	usec	33.937	9363.250
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RAL	FB Thresh Near	4.000	mv	33.937	9363.250
RAL	FB Thresh Radial	4.000	mv	33.937	9363.250
RAL	Fluid Travel Time	200.000	usec/ft	33.937	9363.250

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
		AFAR	SIG	TT5			
1426XA	-10.040	AFAR	SIG	TT5			
1355XA	-5.620	CCL					

1355XA
1355XA

-1.500
0.000

GR
TEMP

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

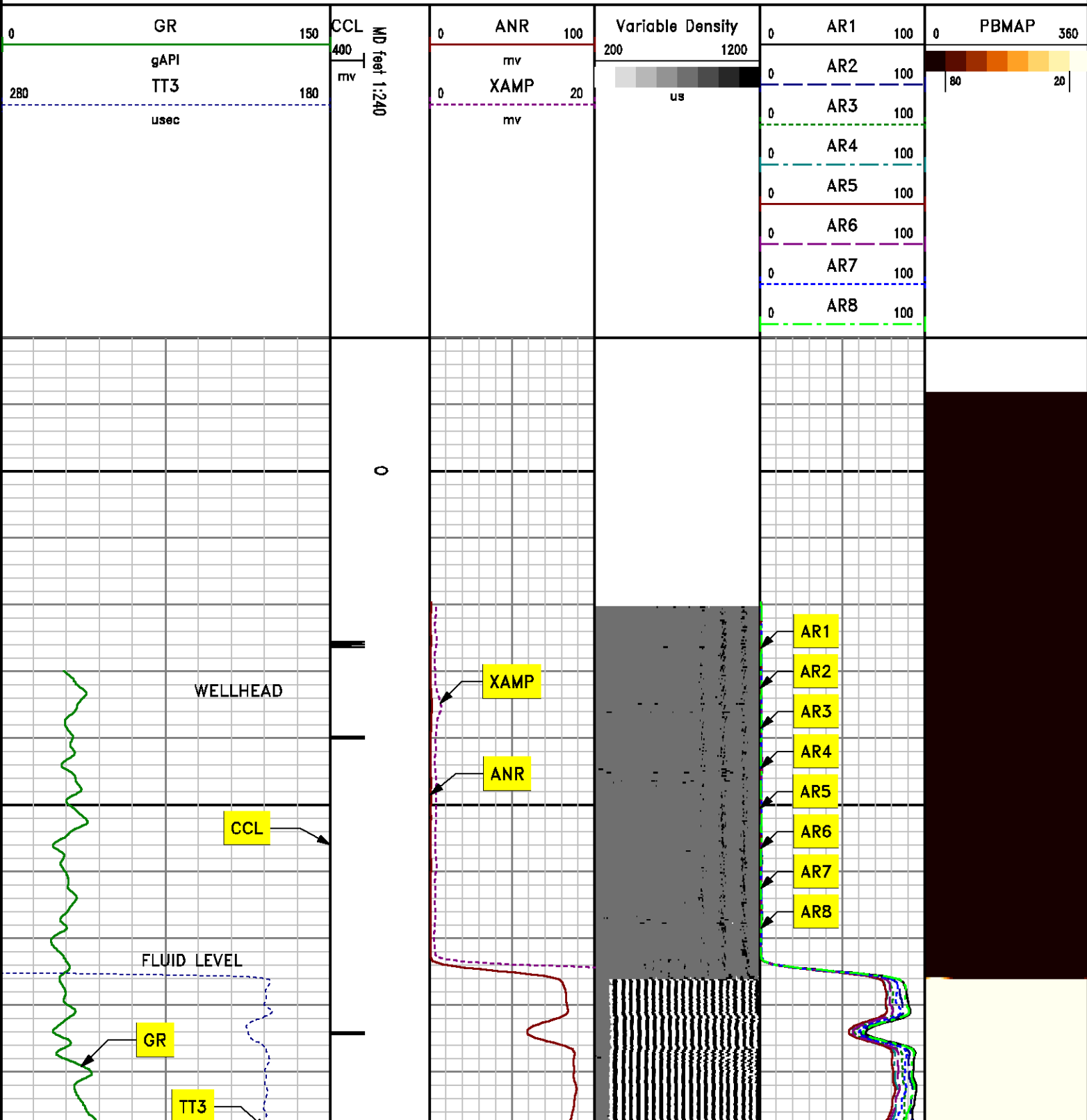
Well : HOEPPLI RWF 444-36

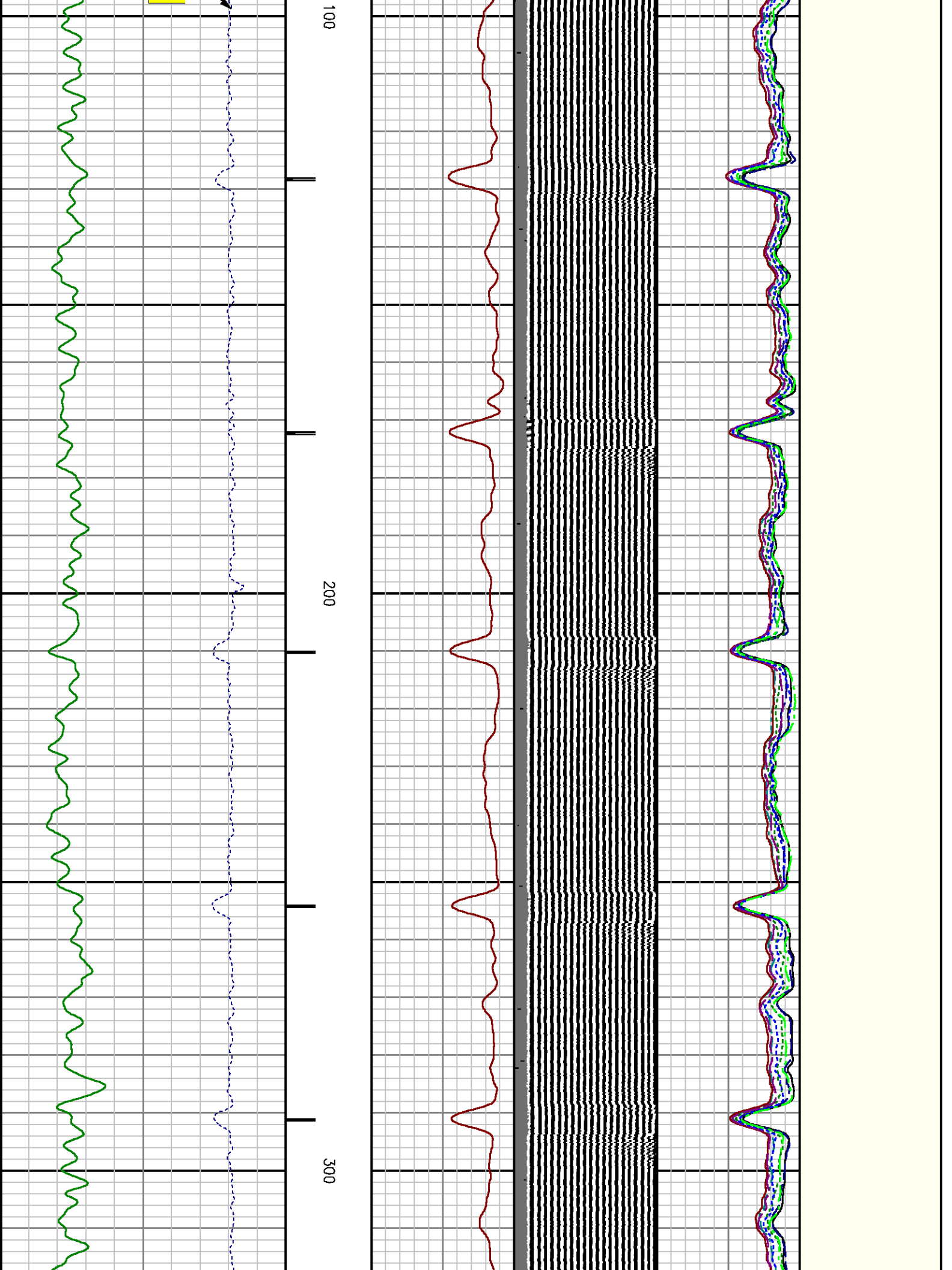
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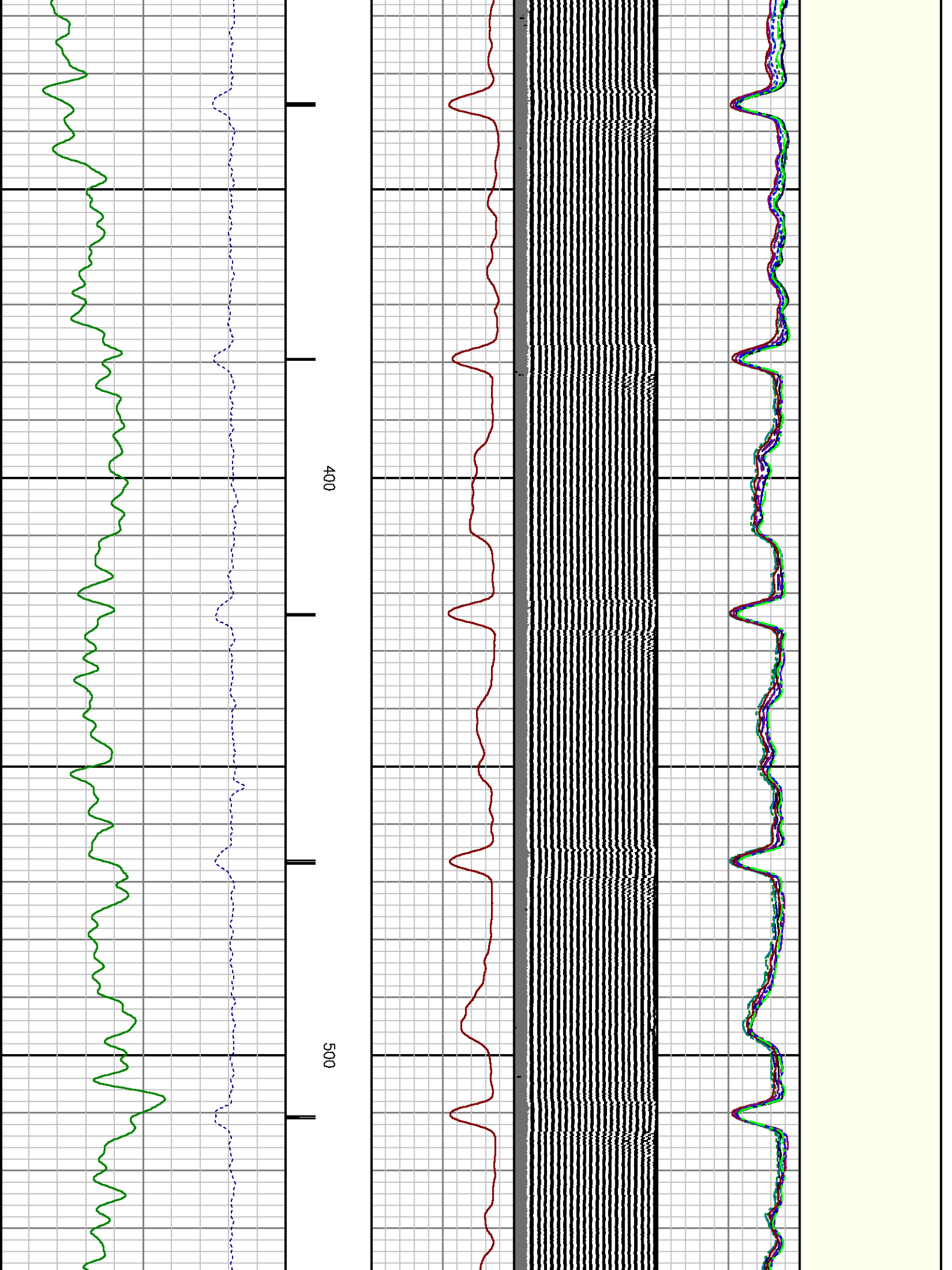
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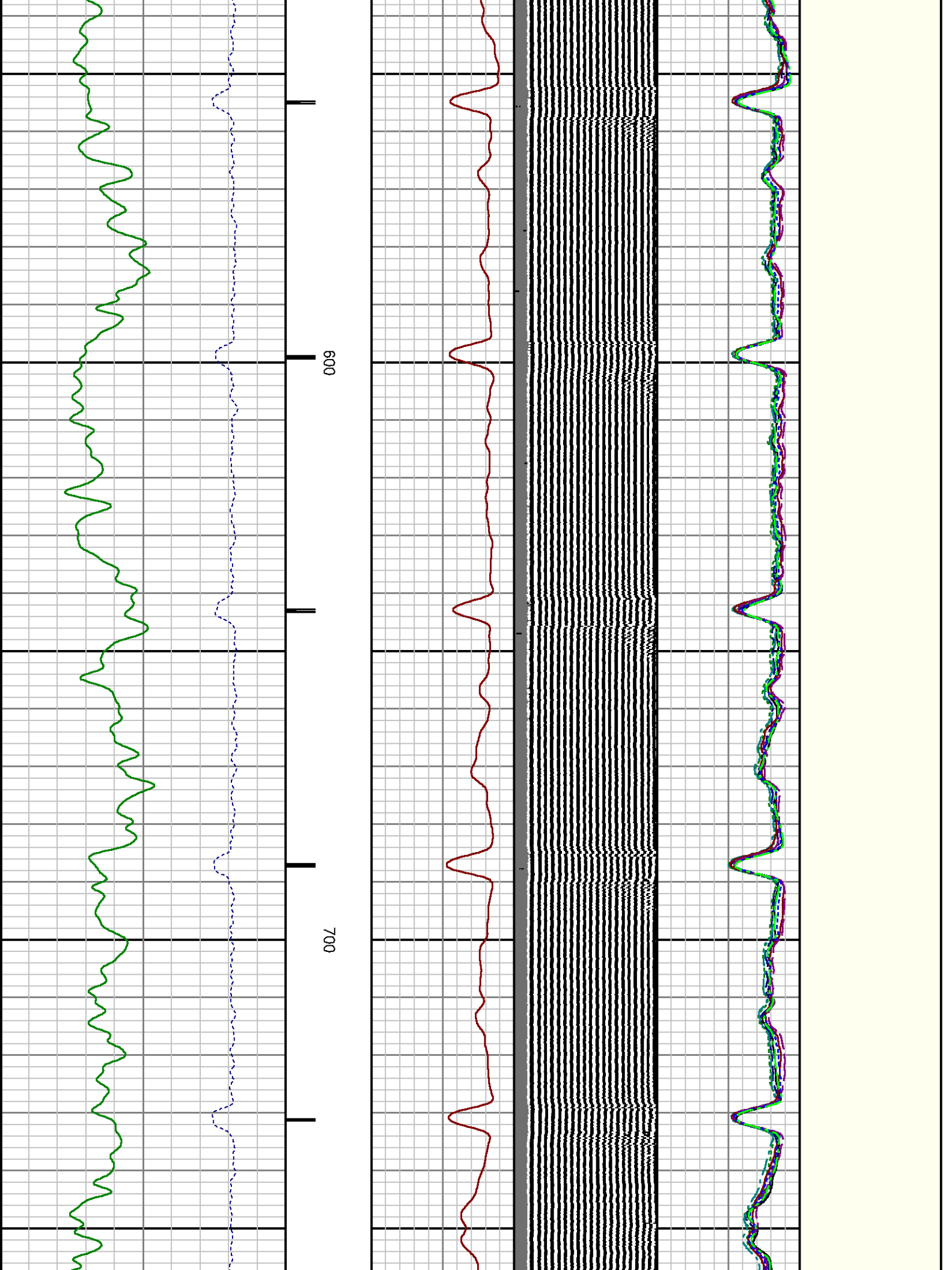
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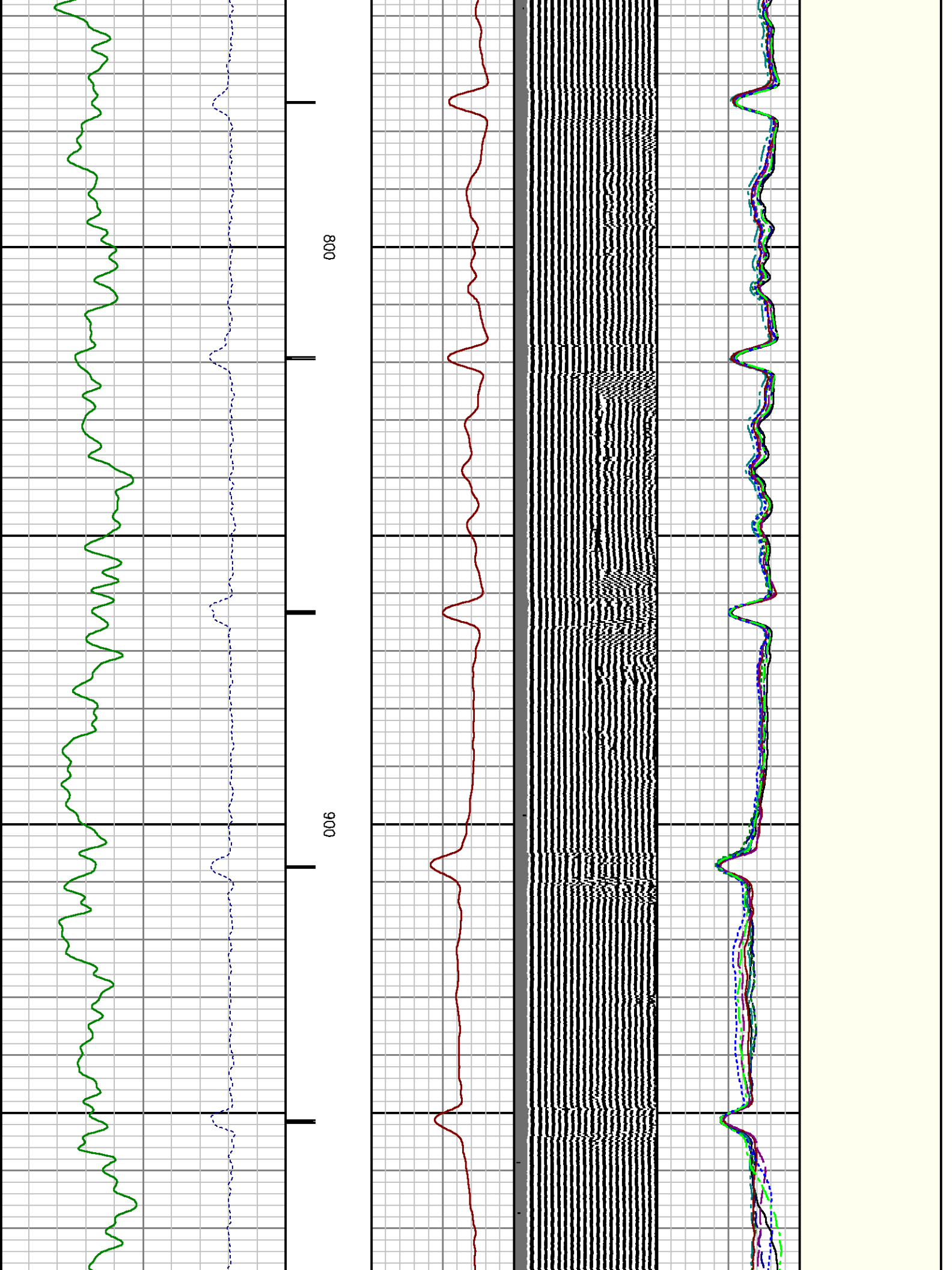
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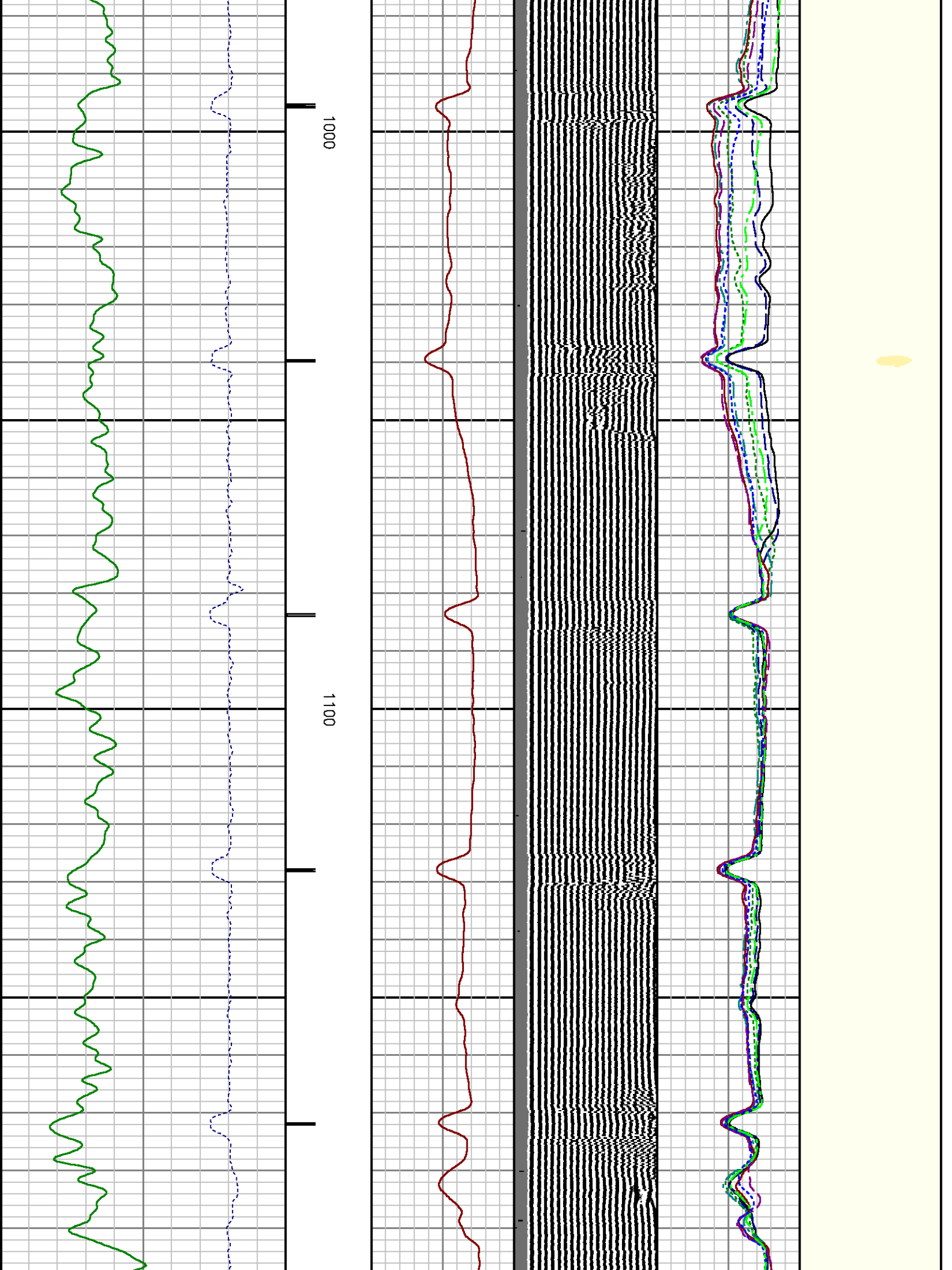


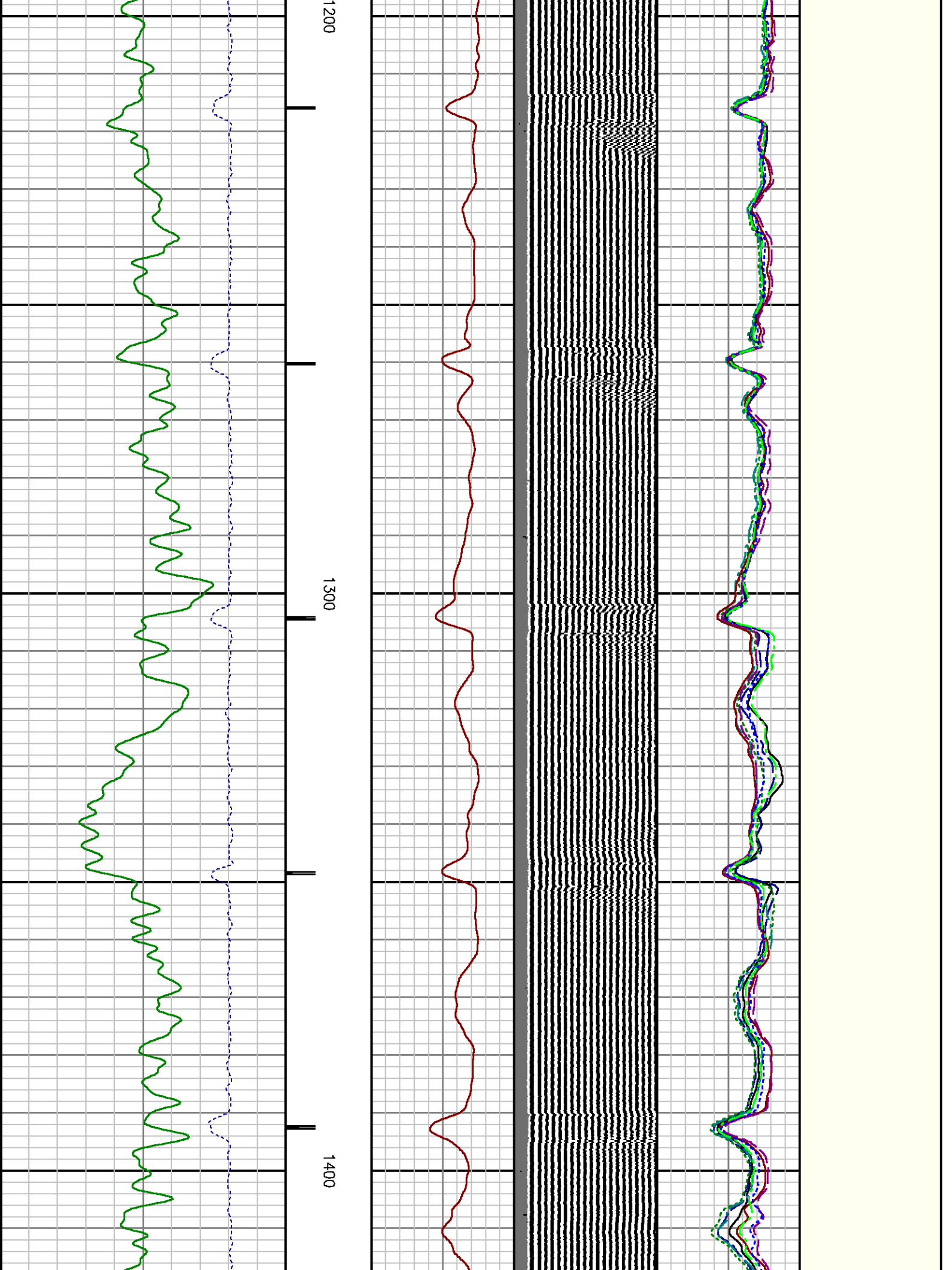


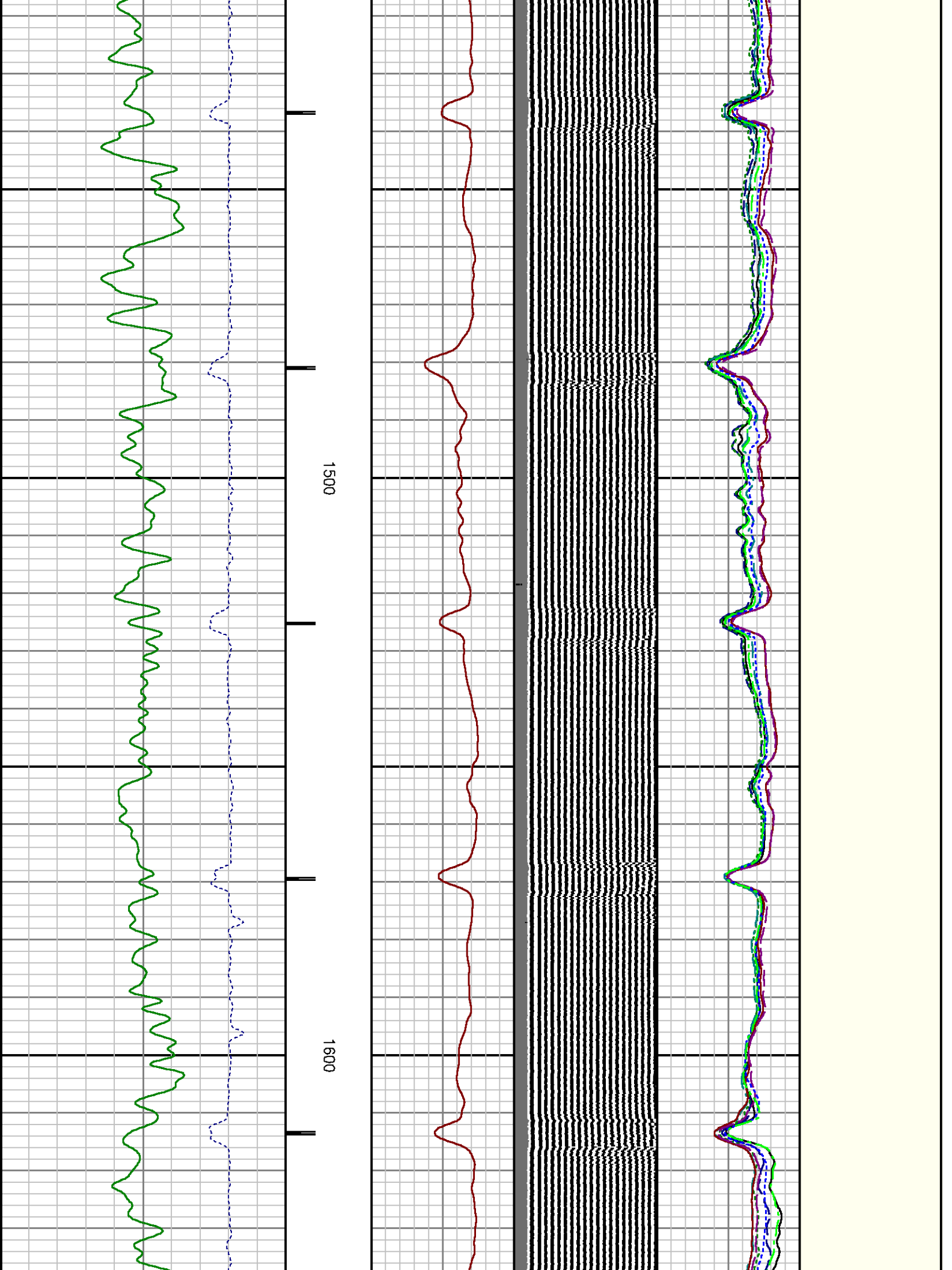


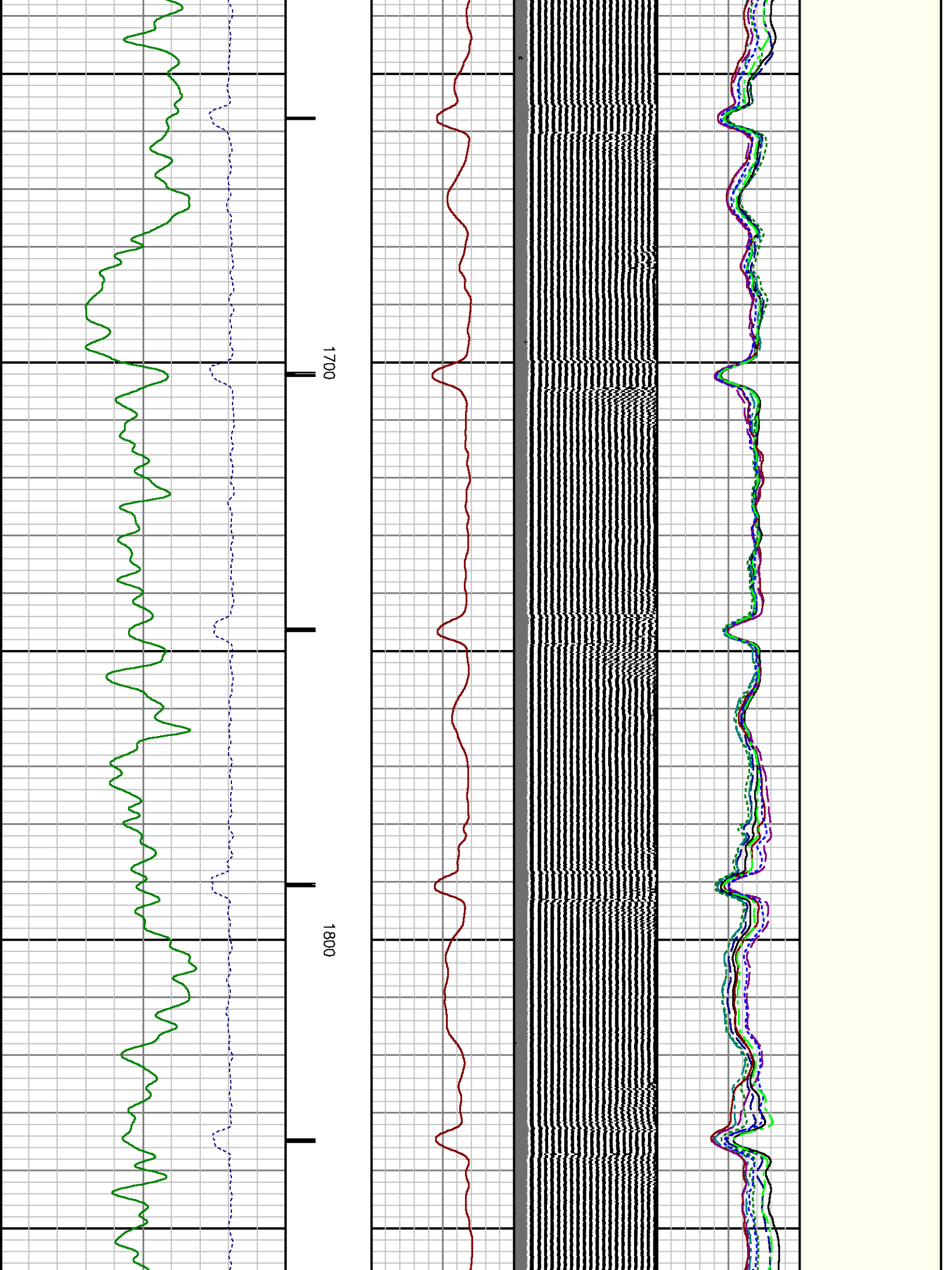


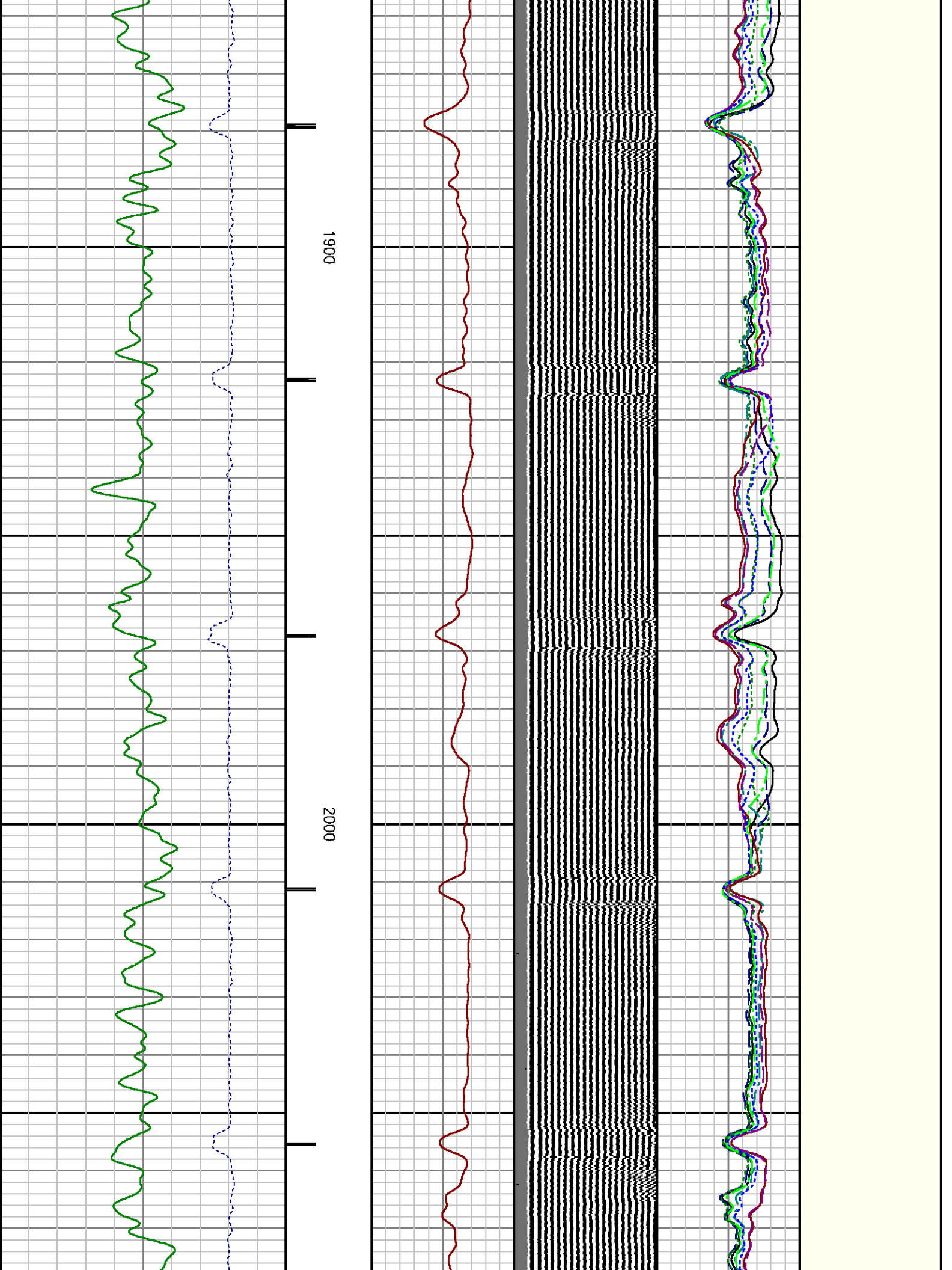


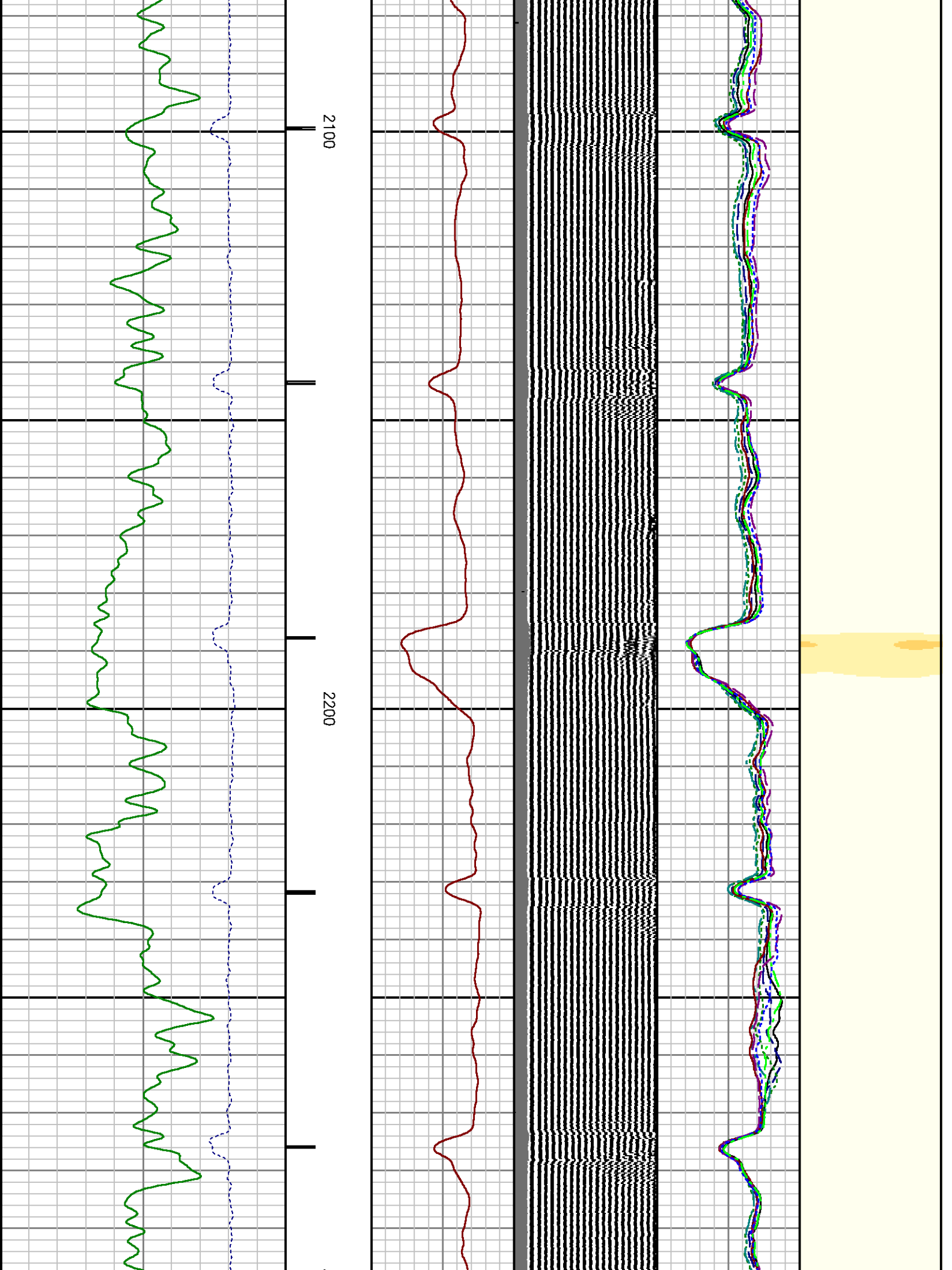


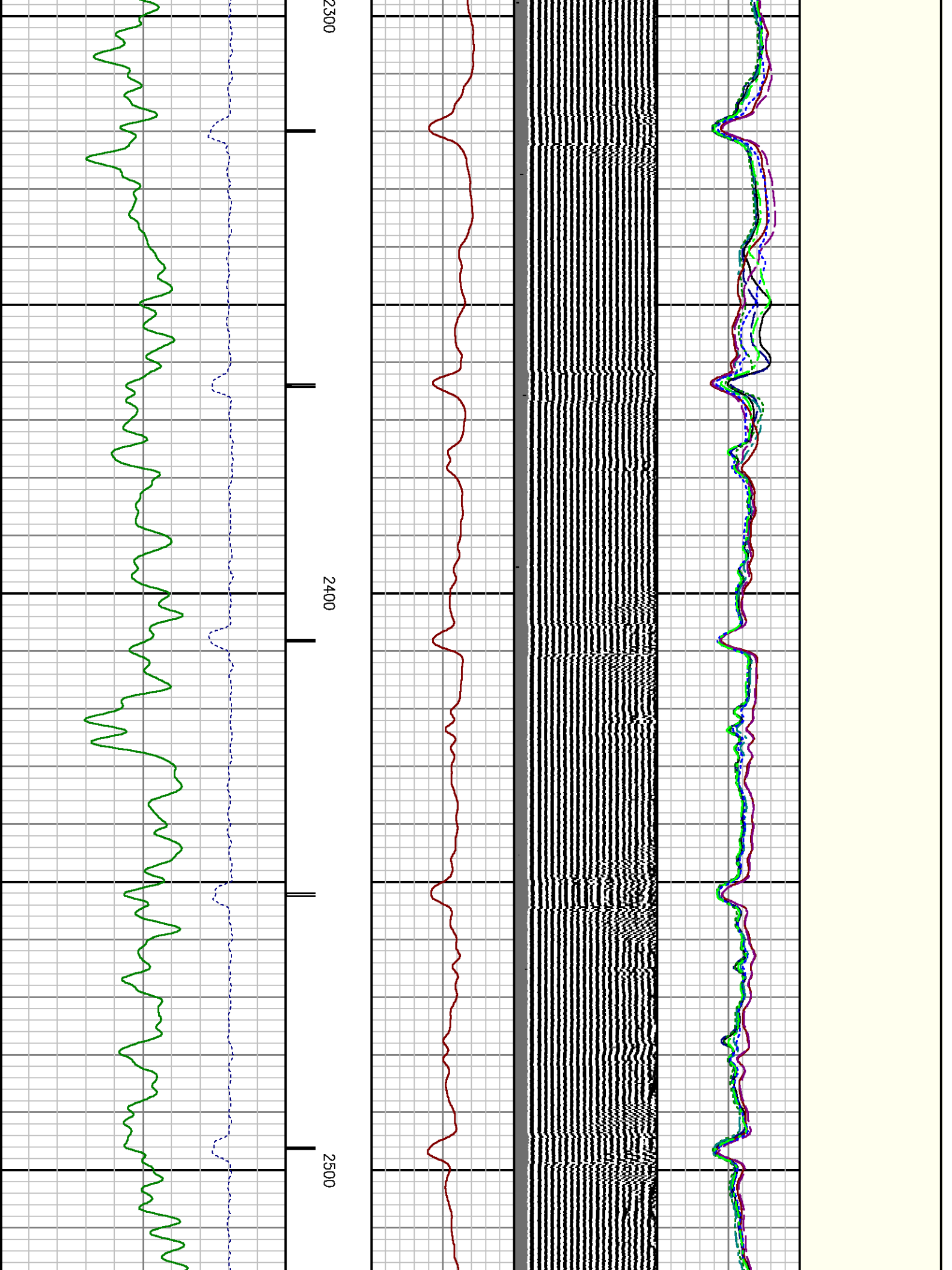


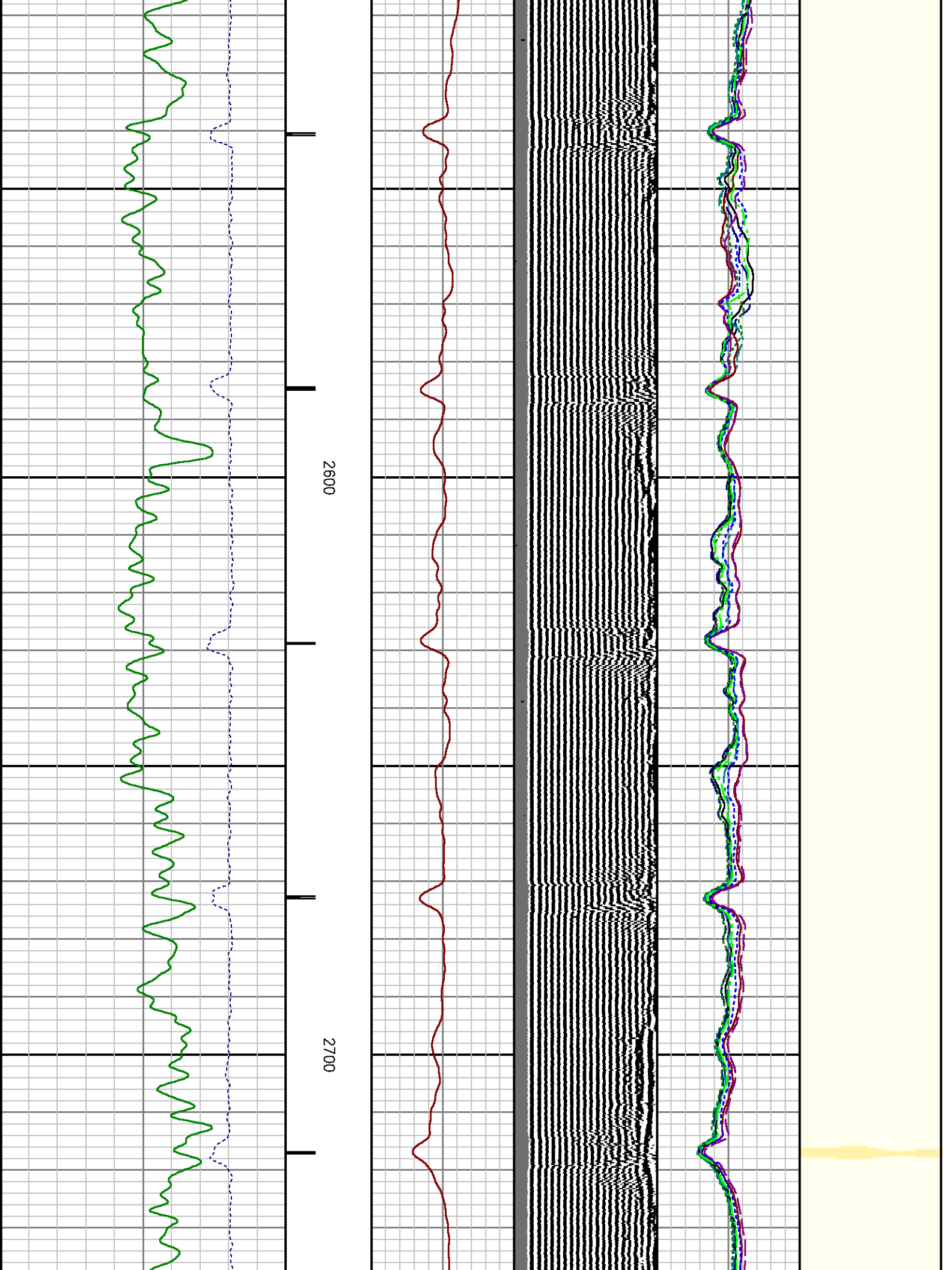


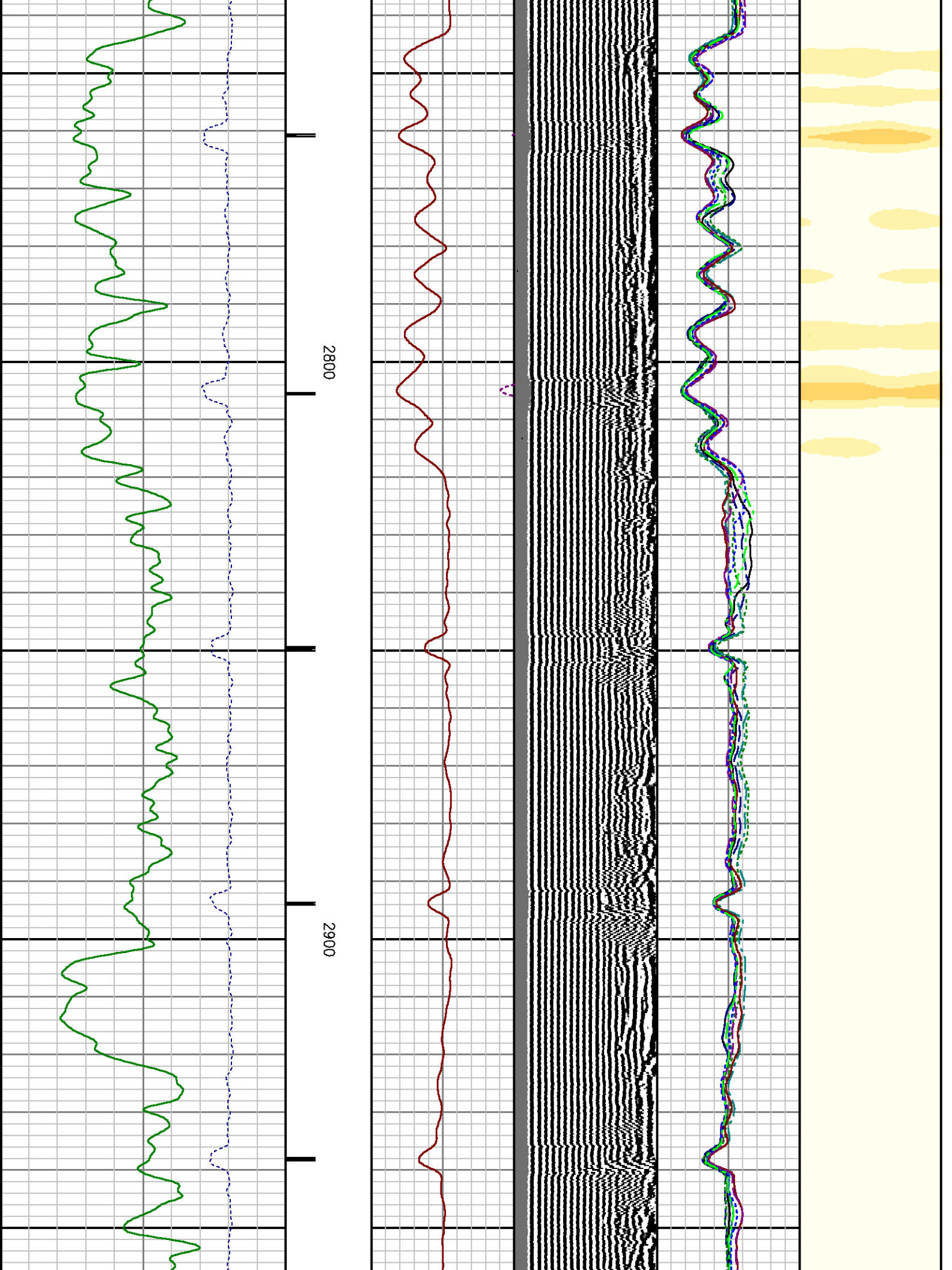


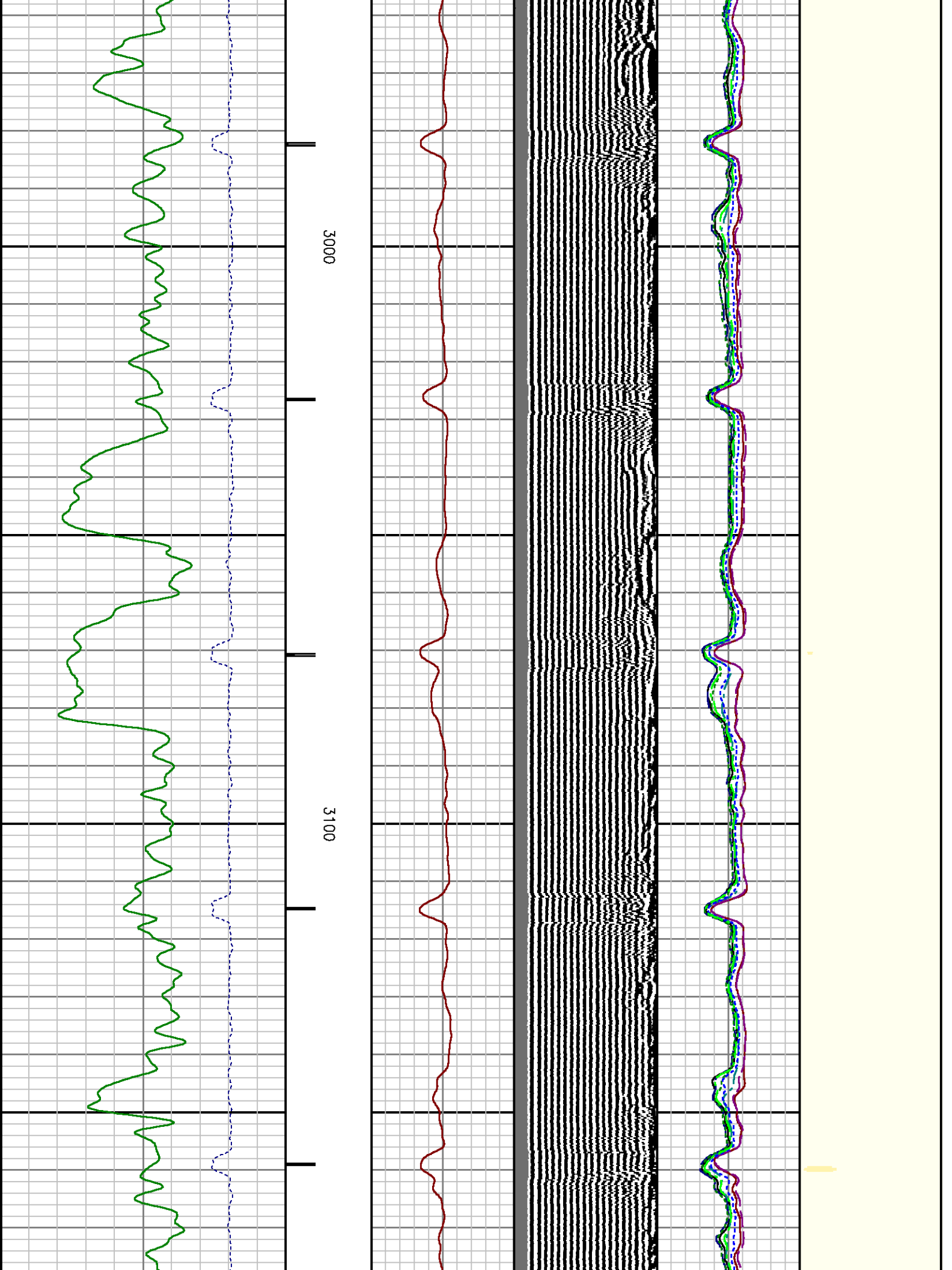


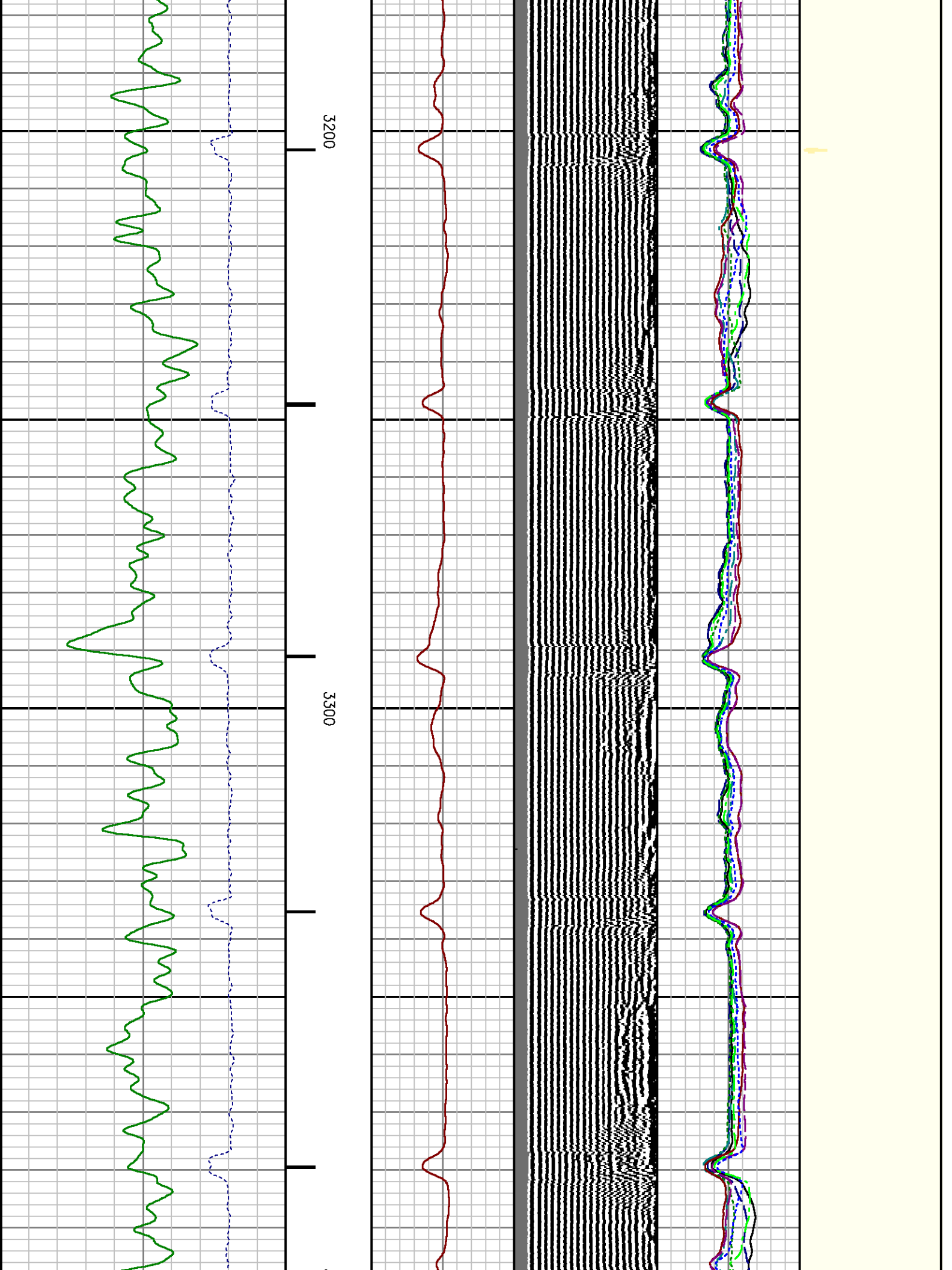


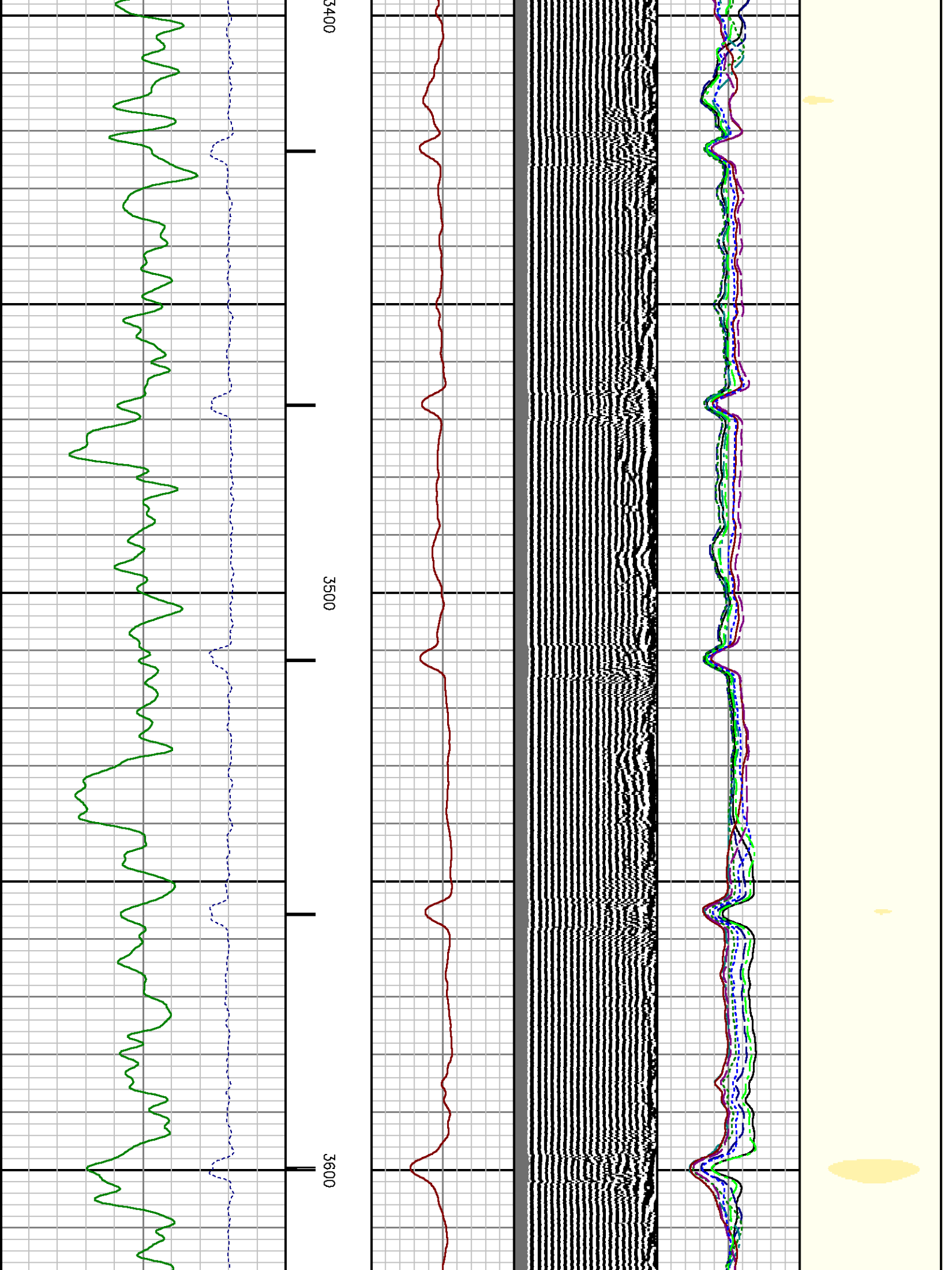


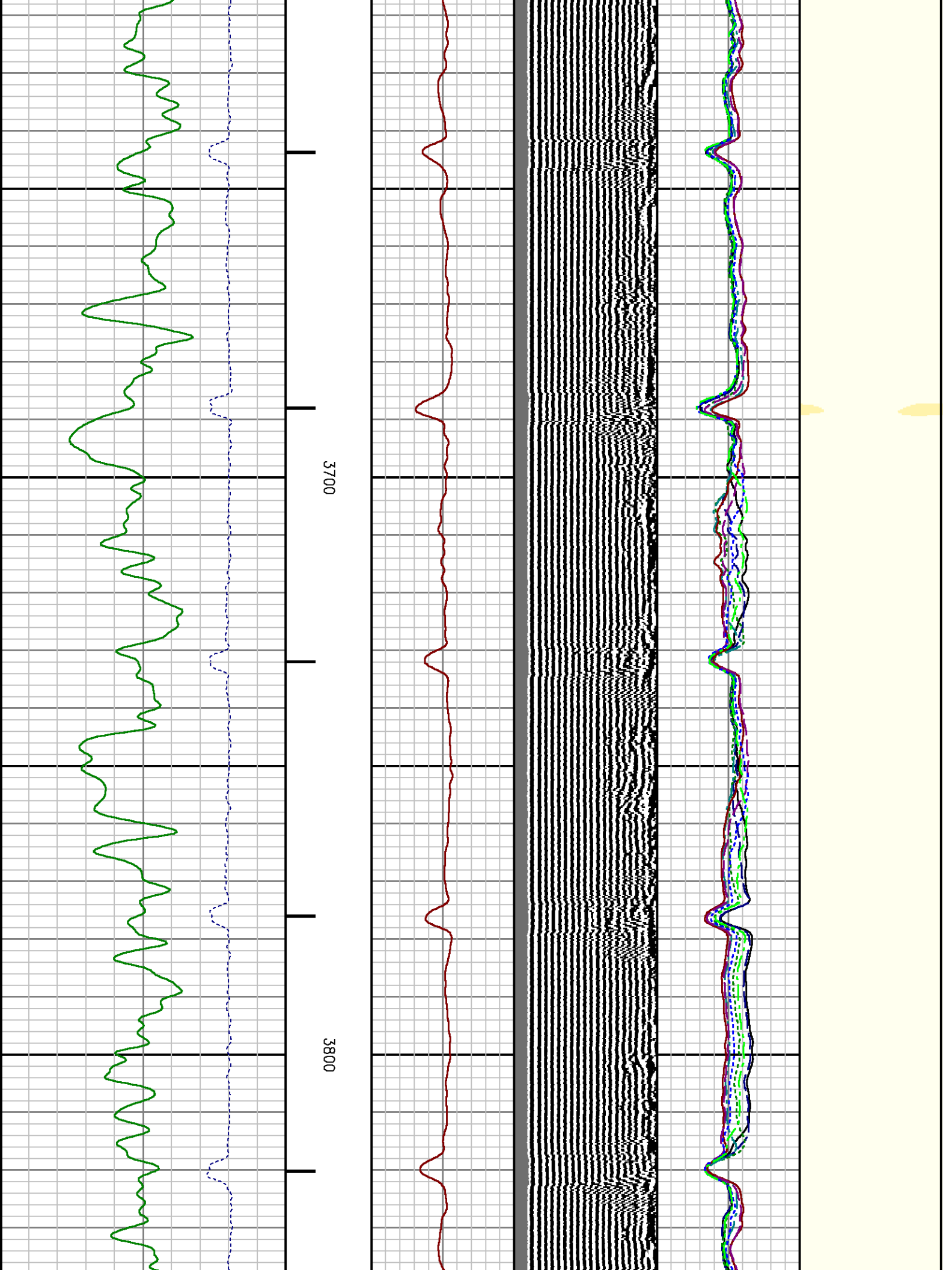


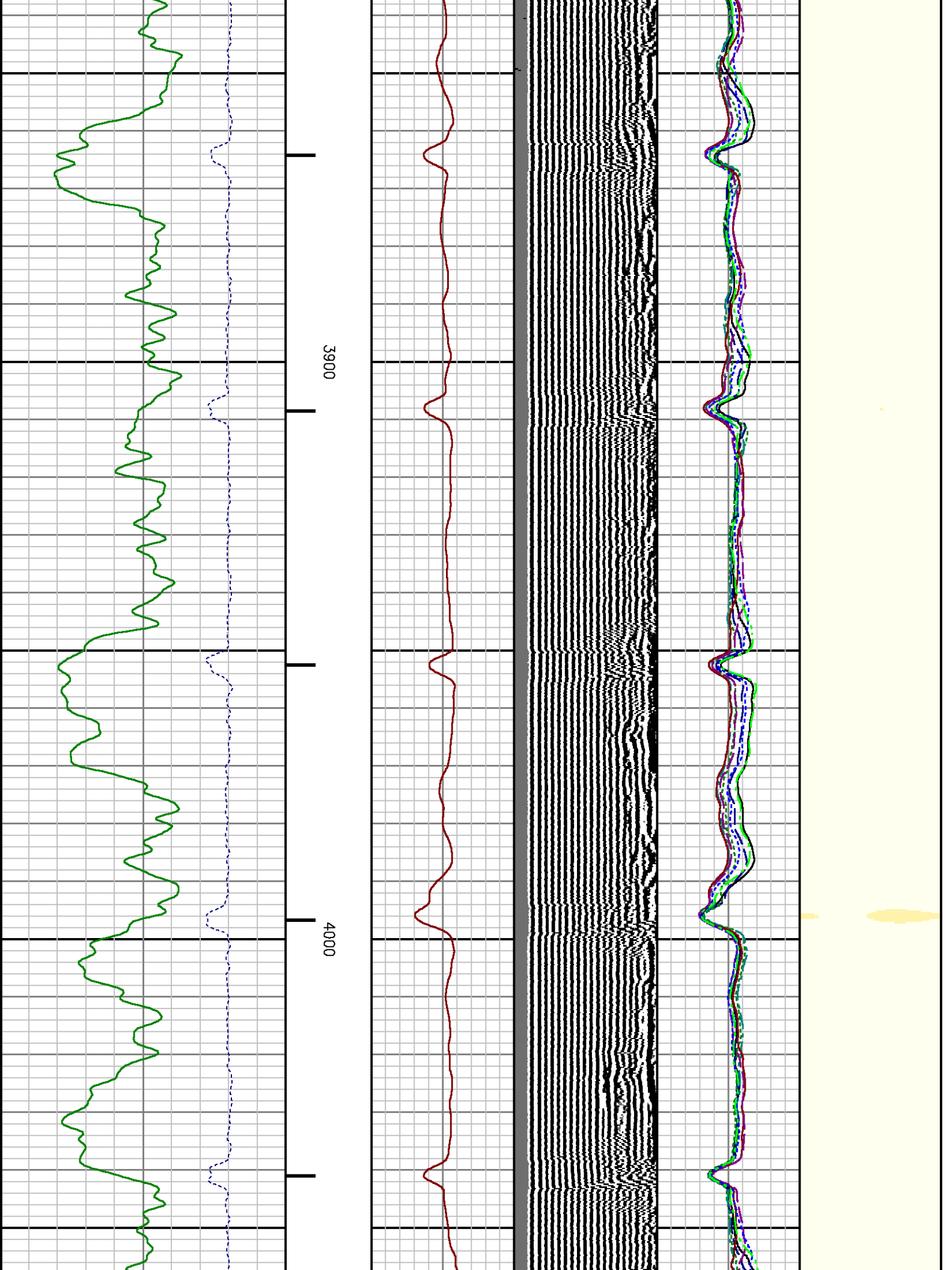


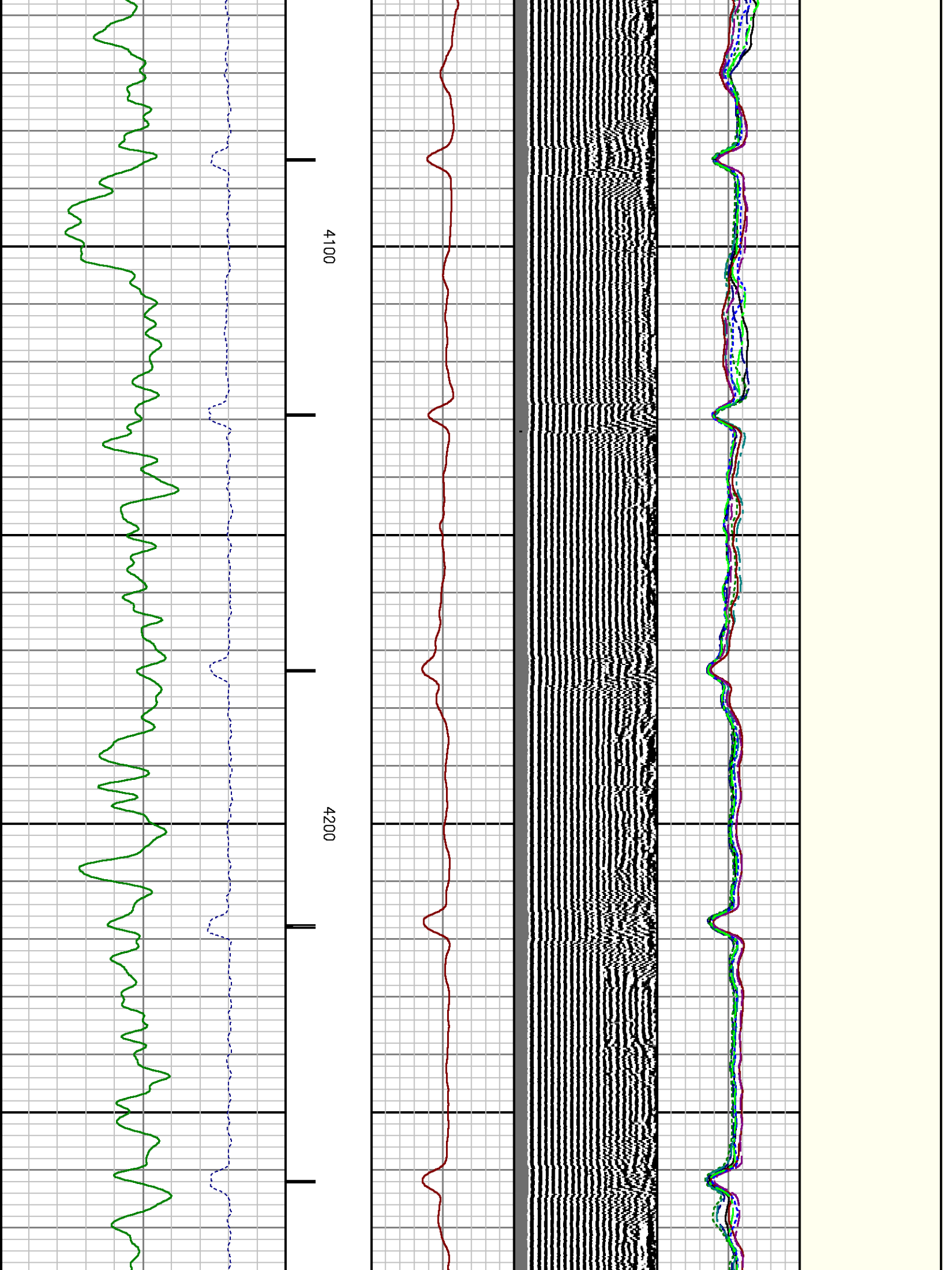


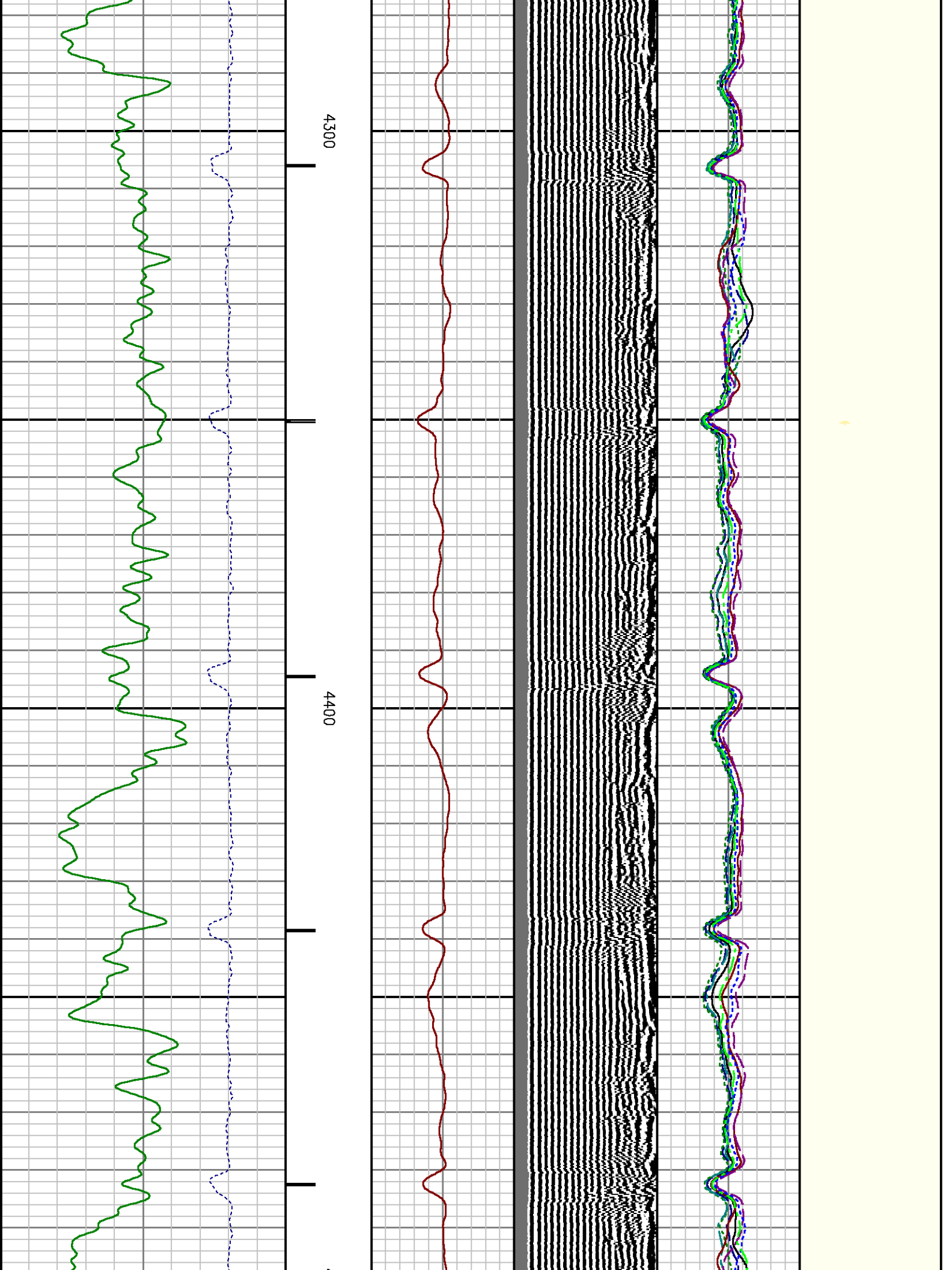


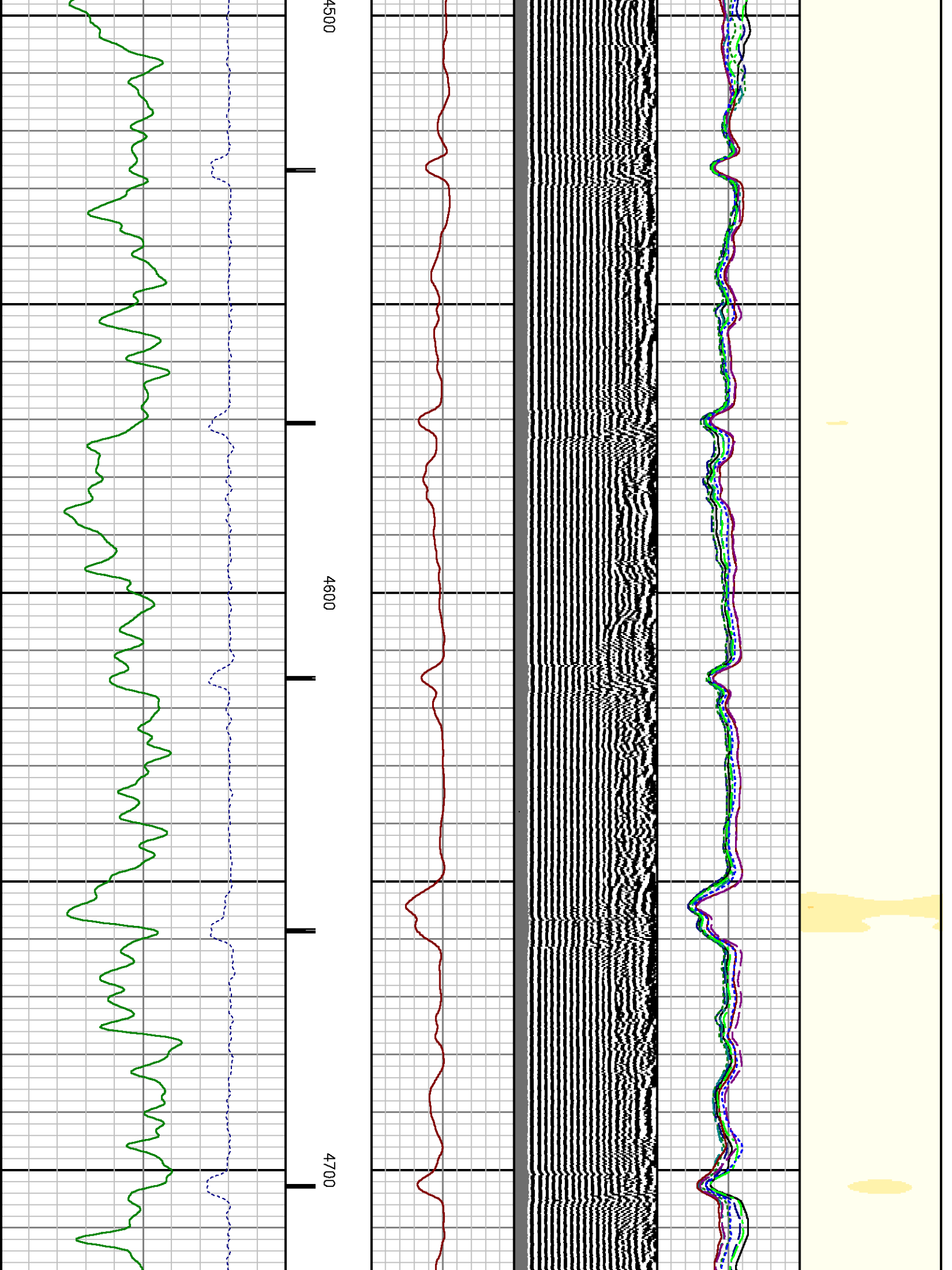


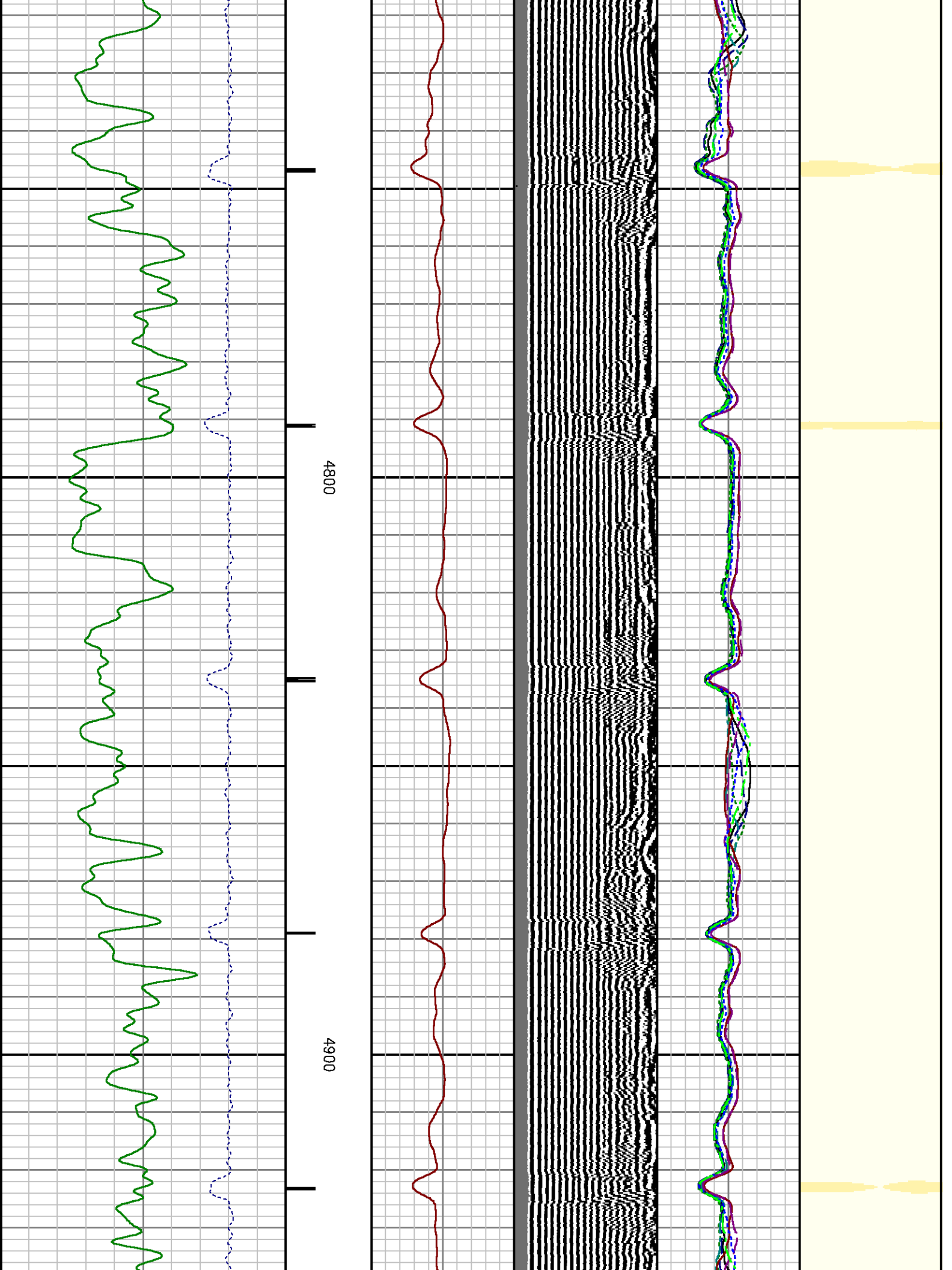


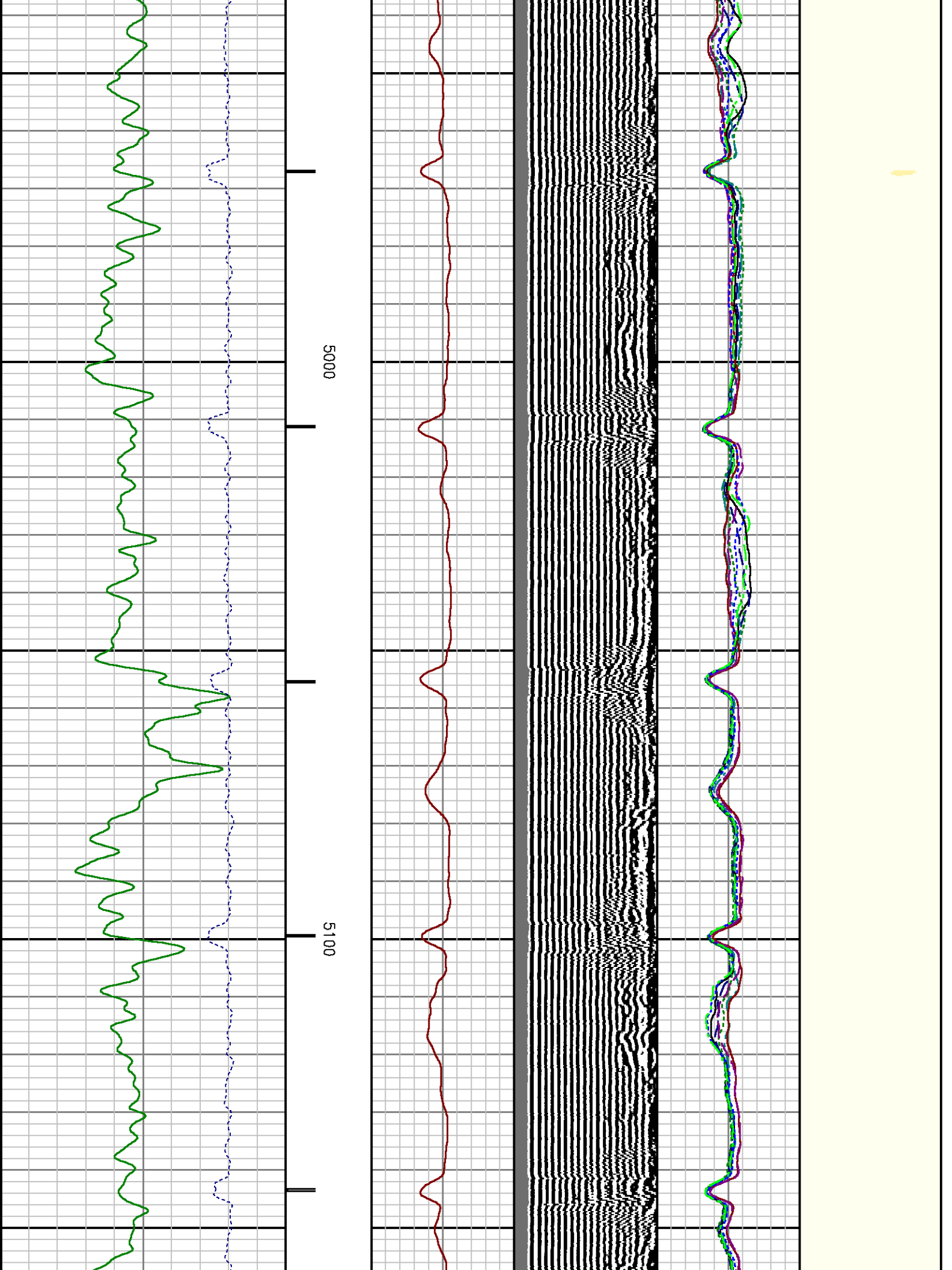


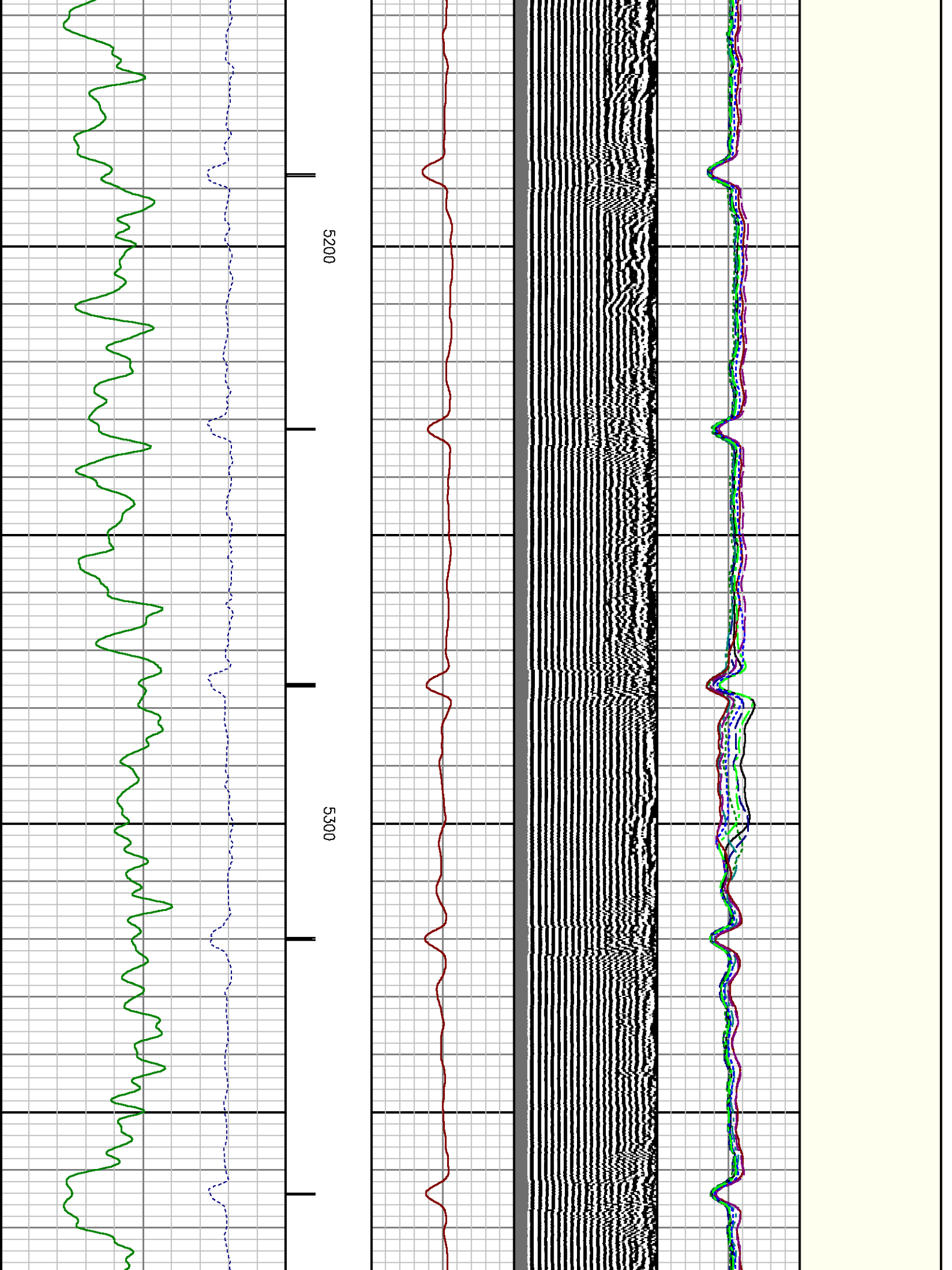


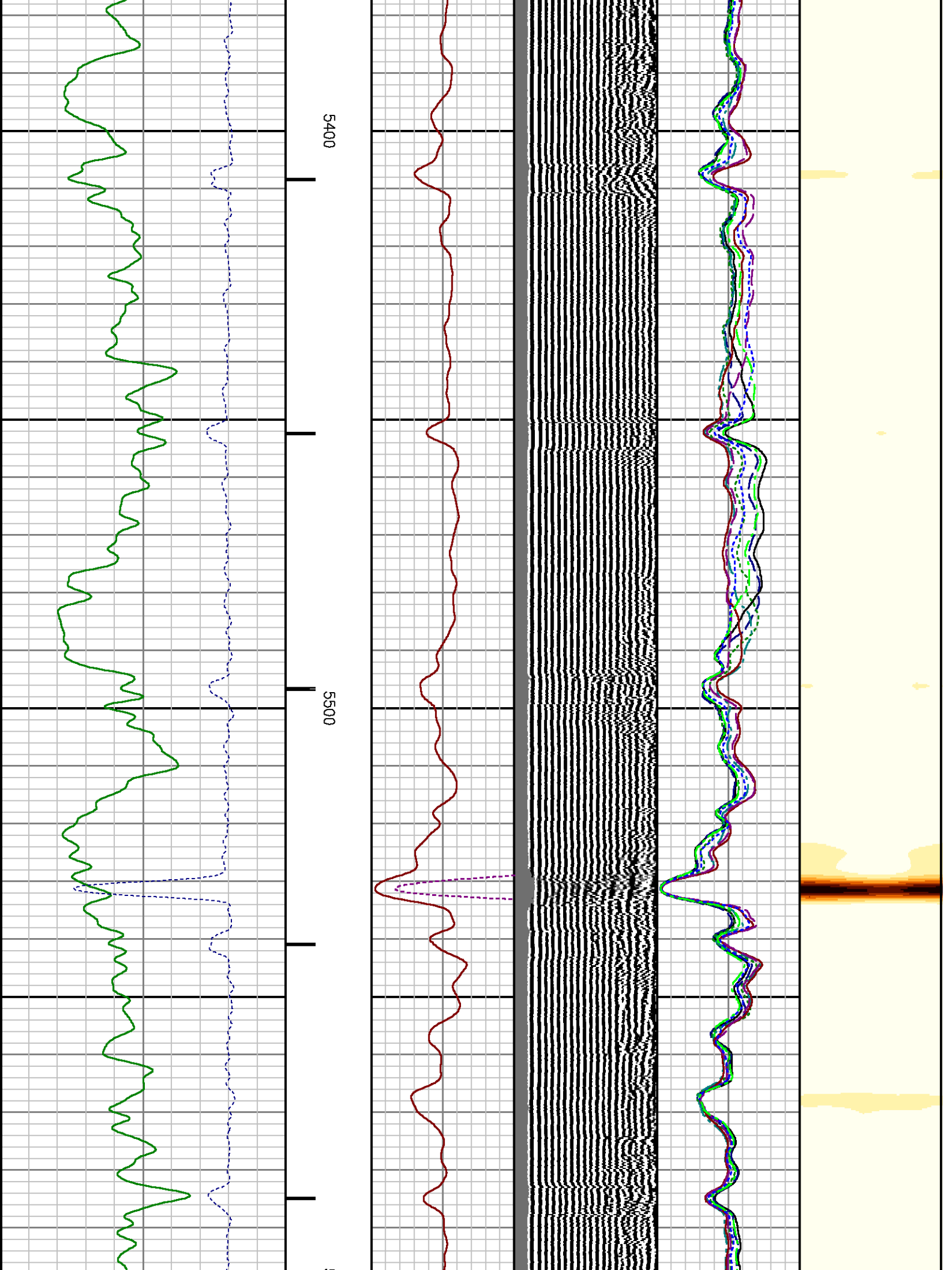


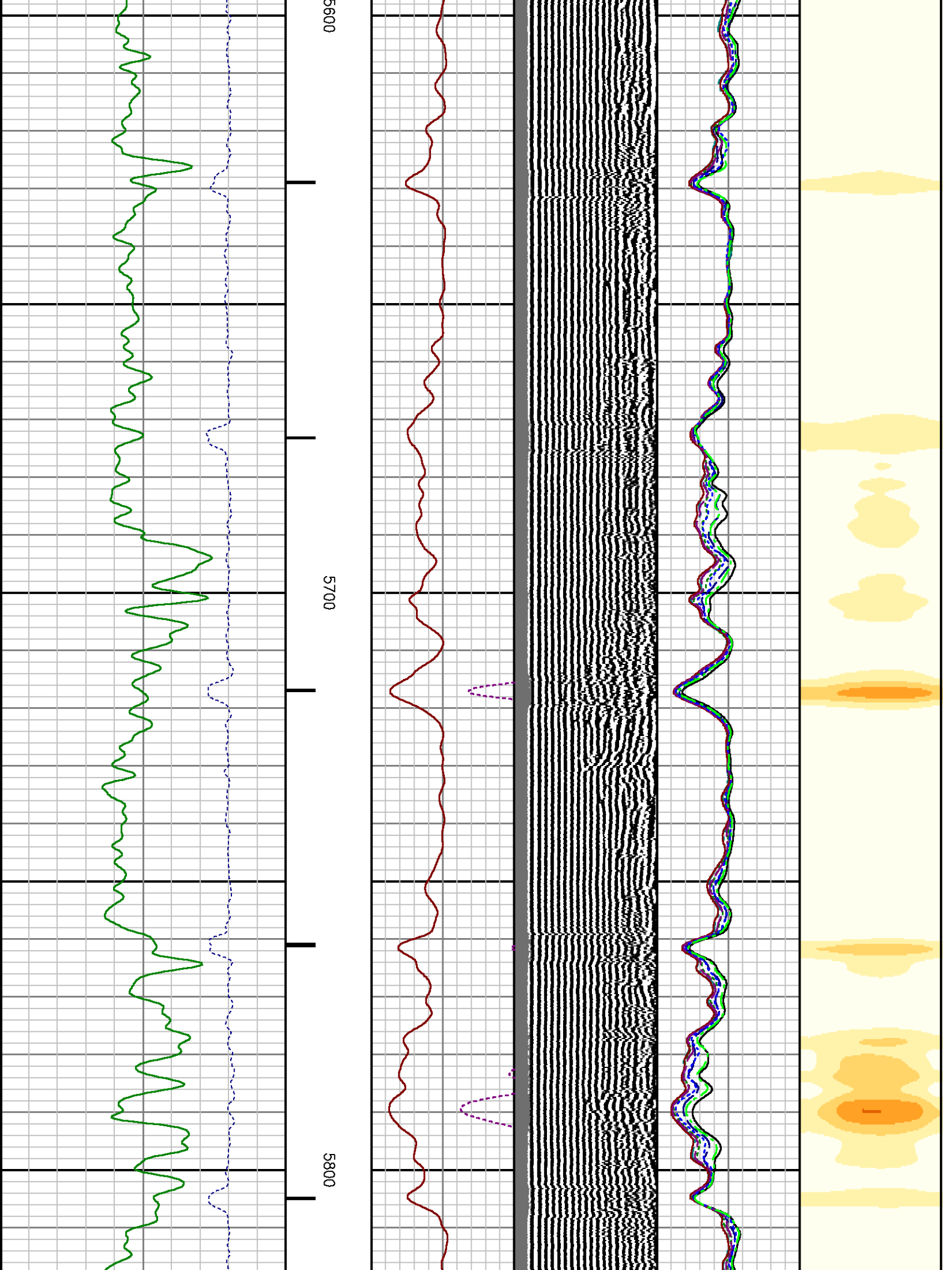


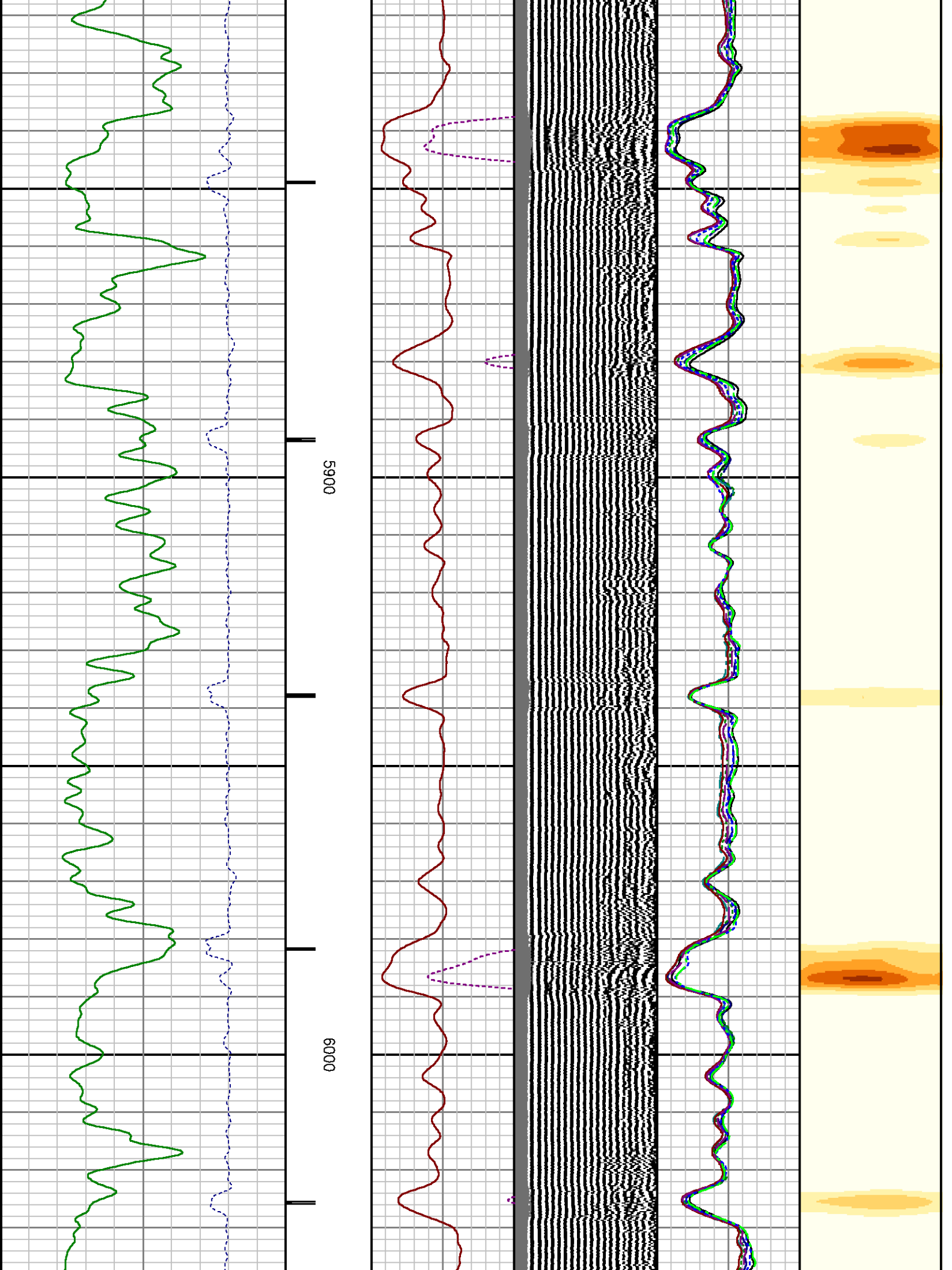


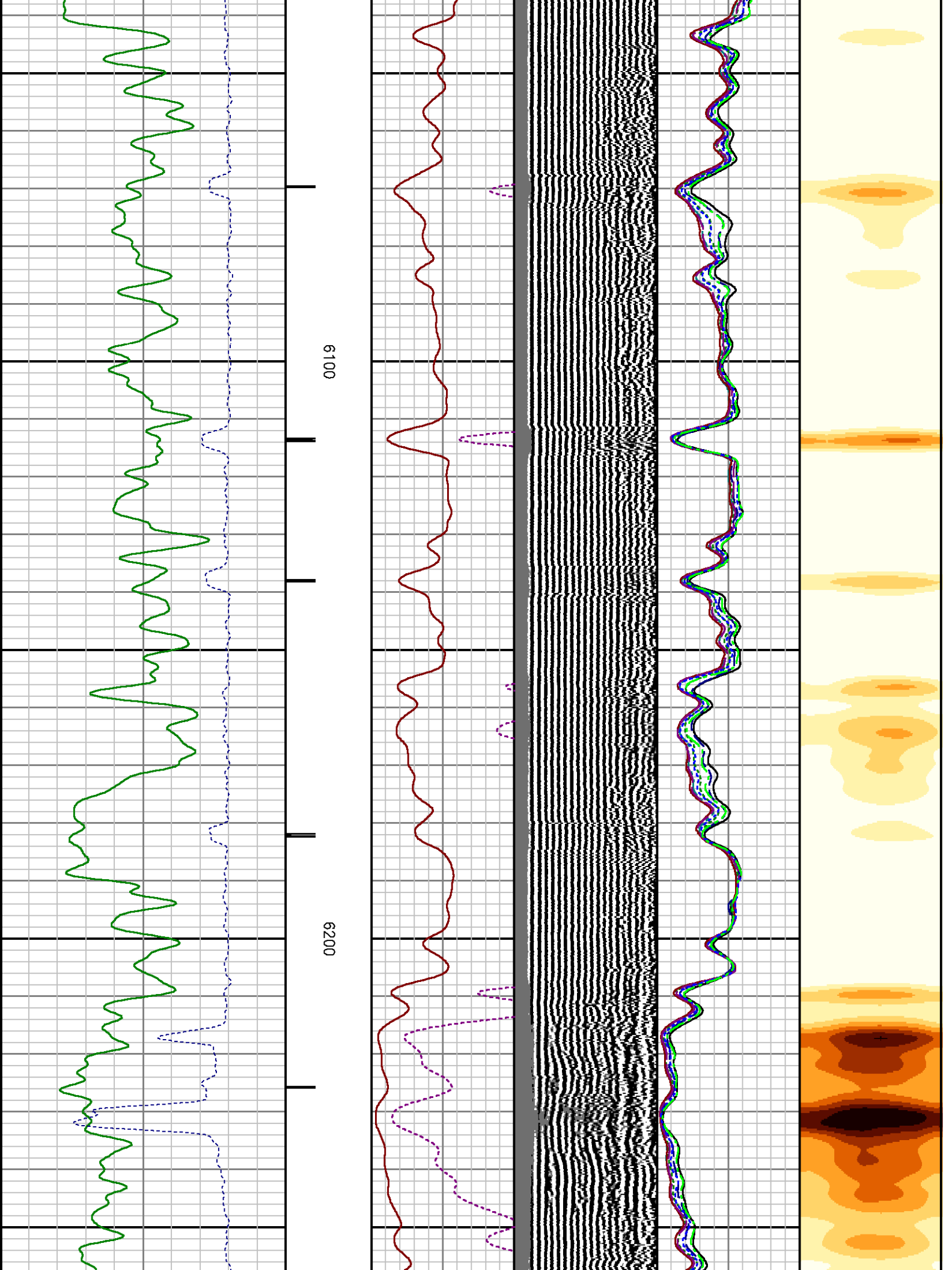


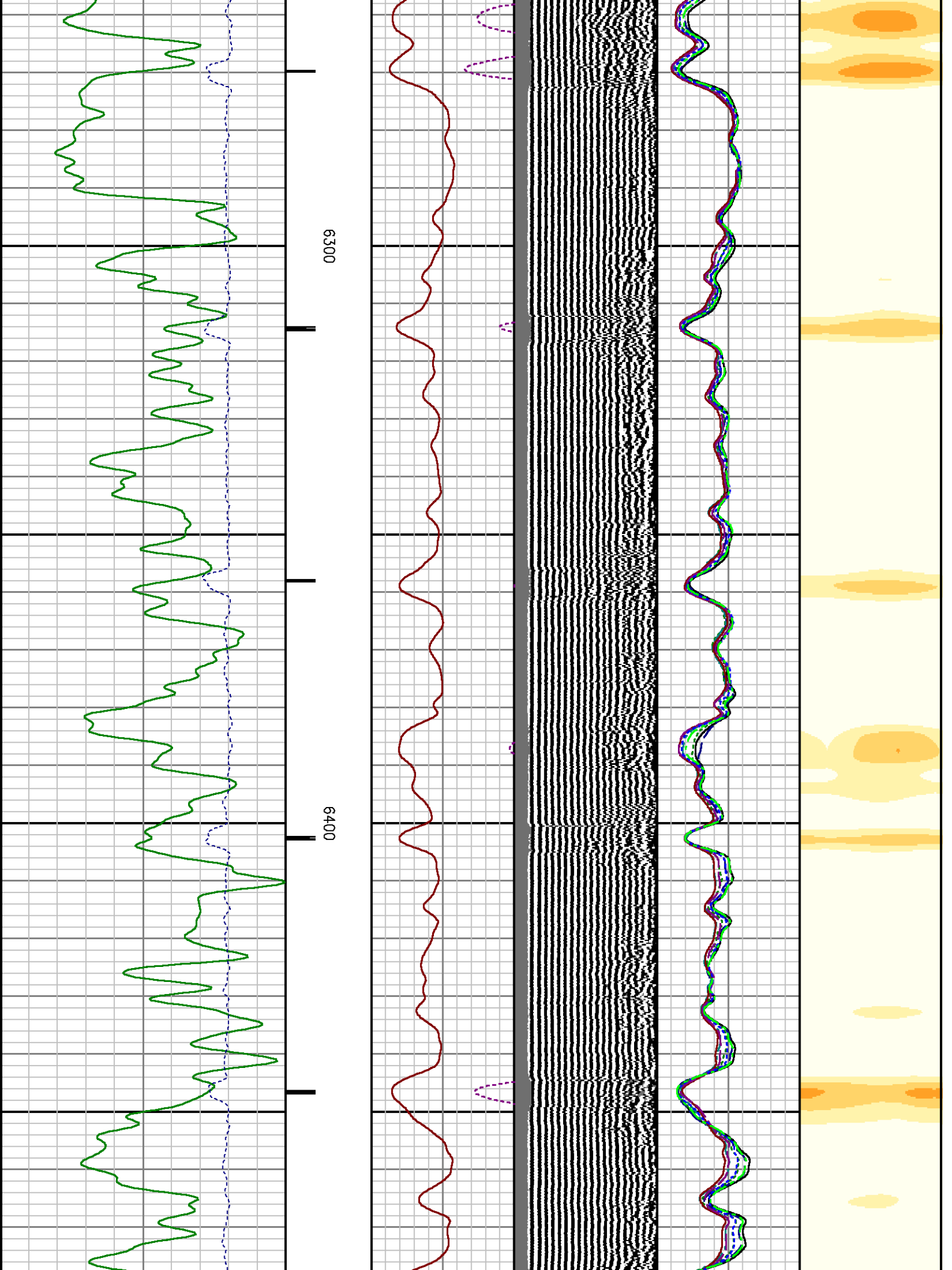


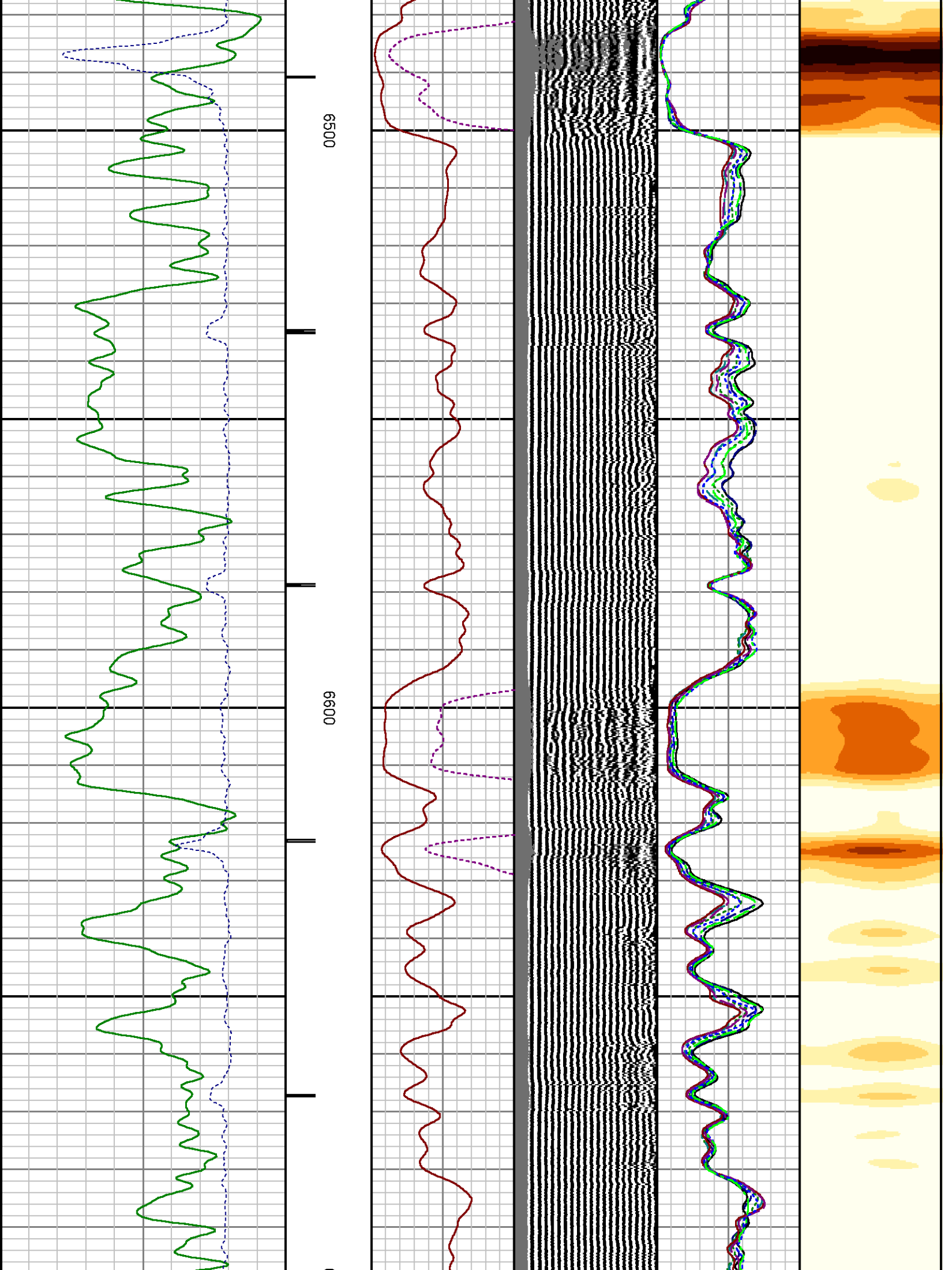


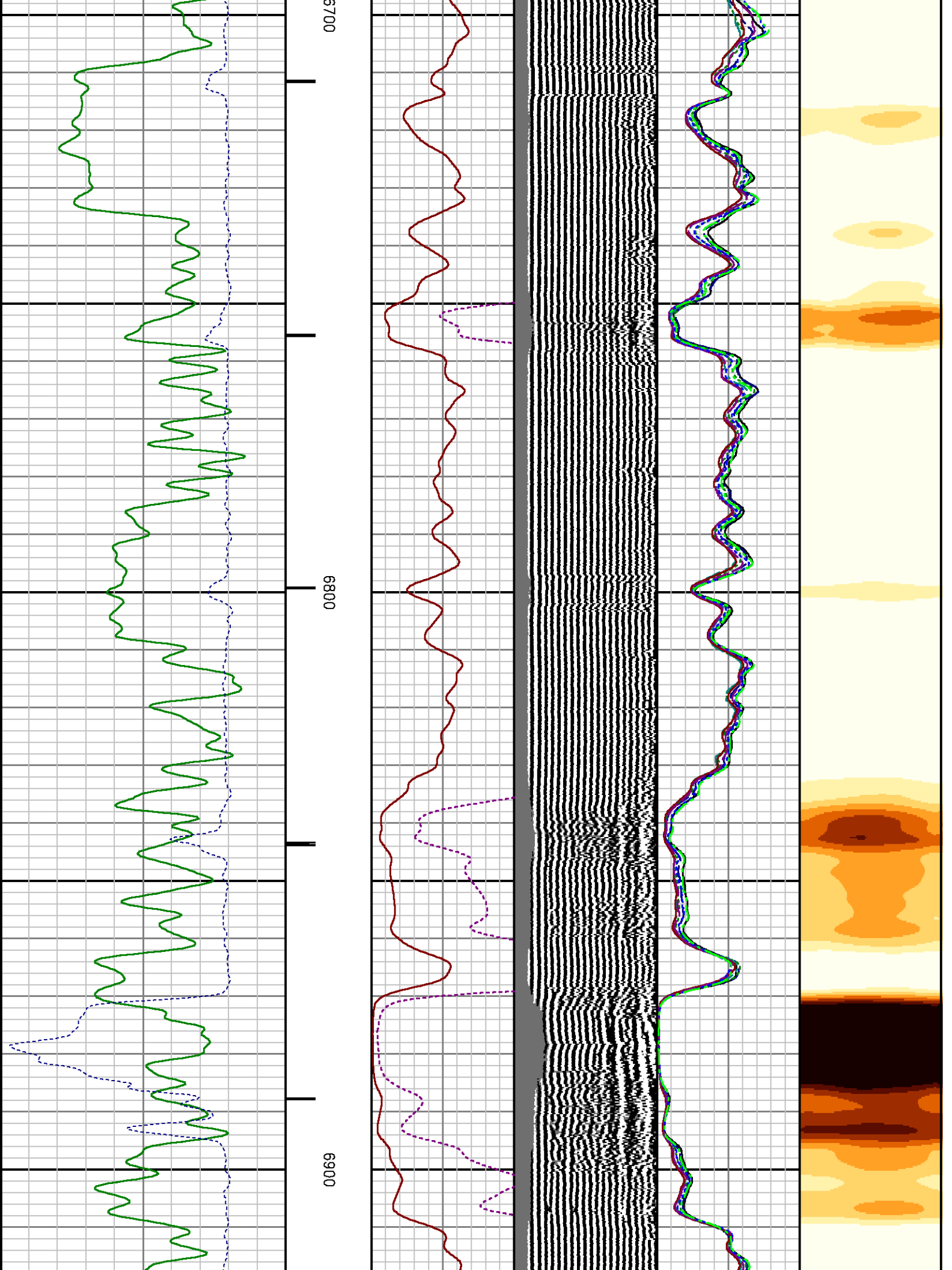


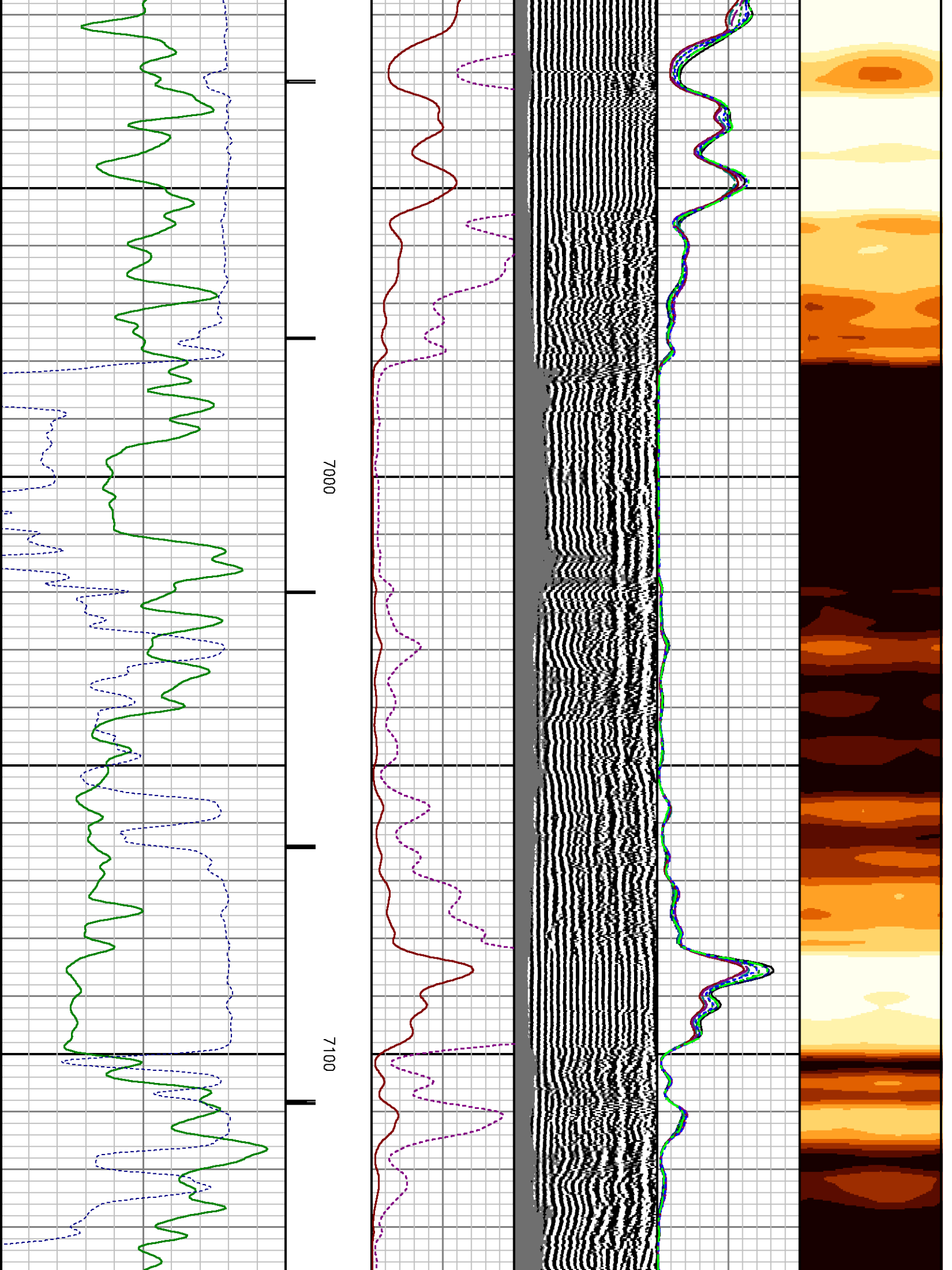


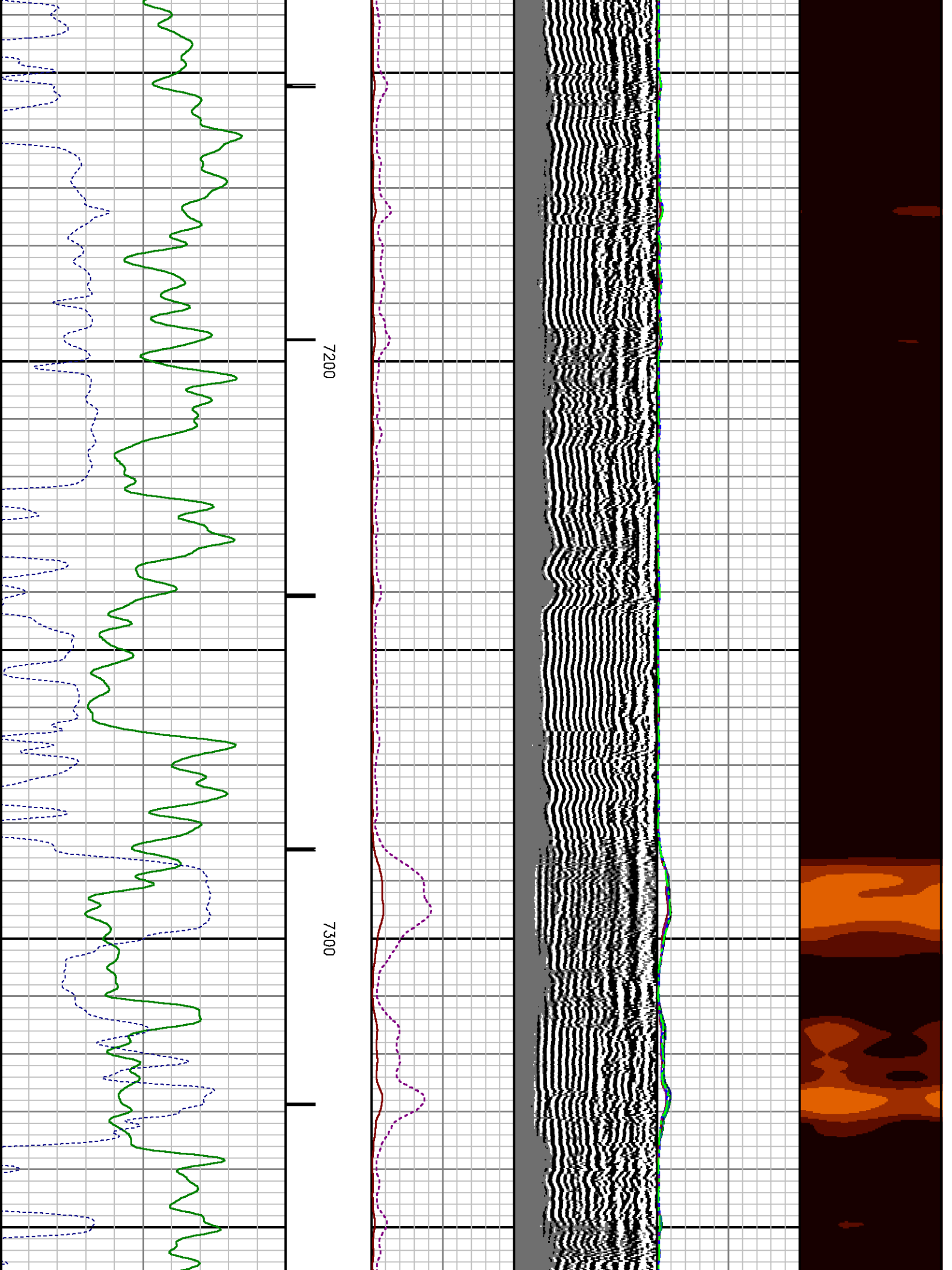


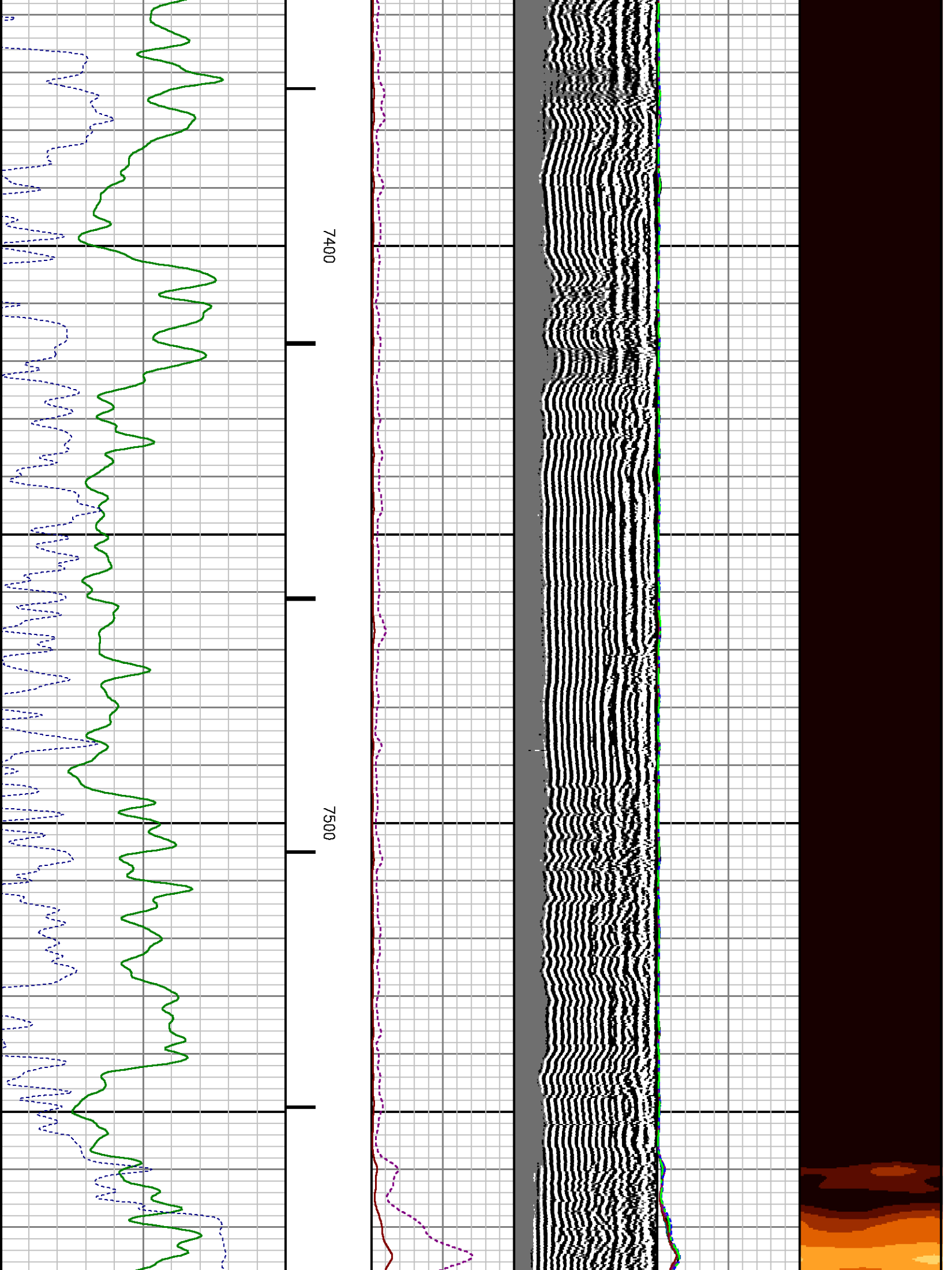


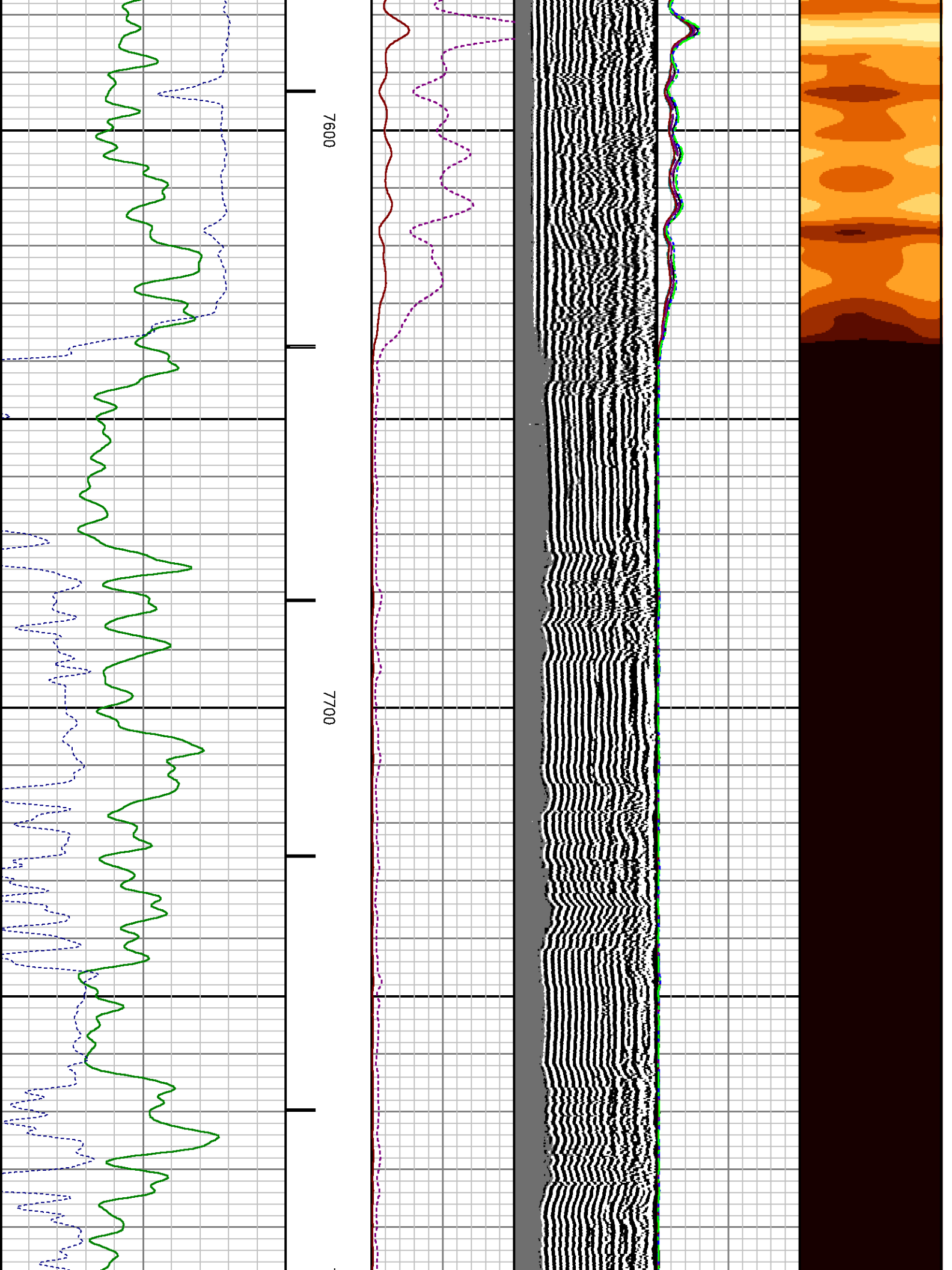


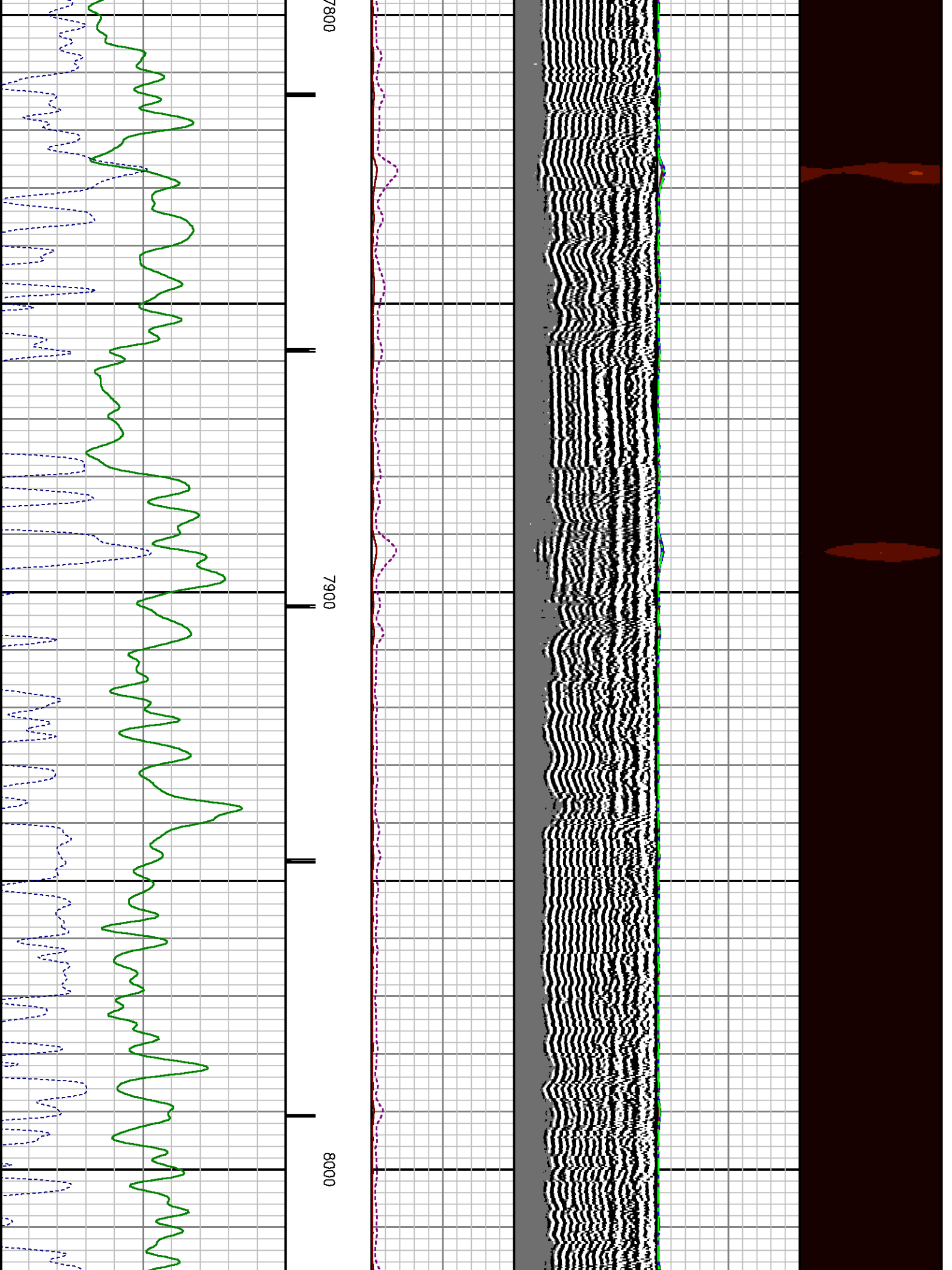


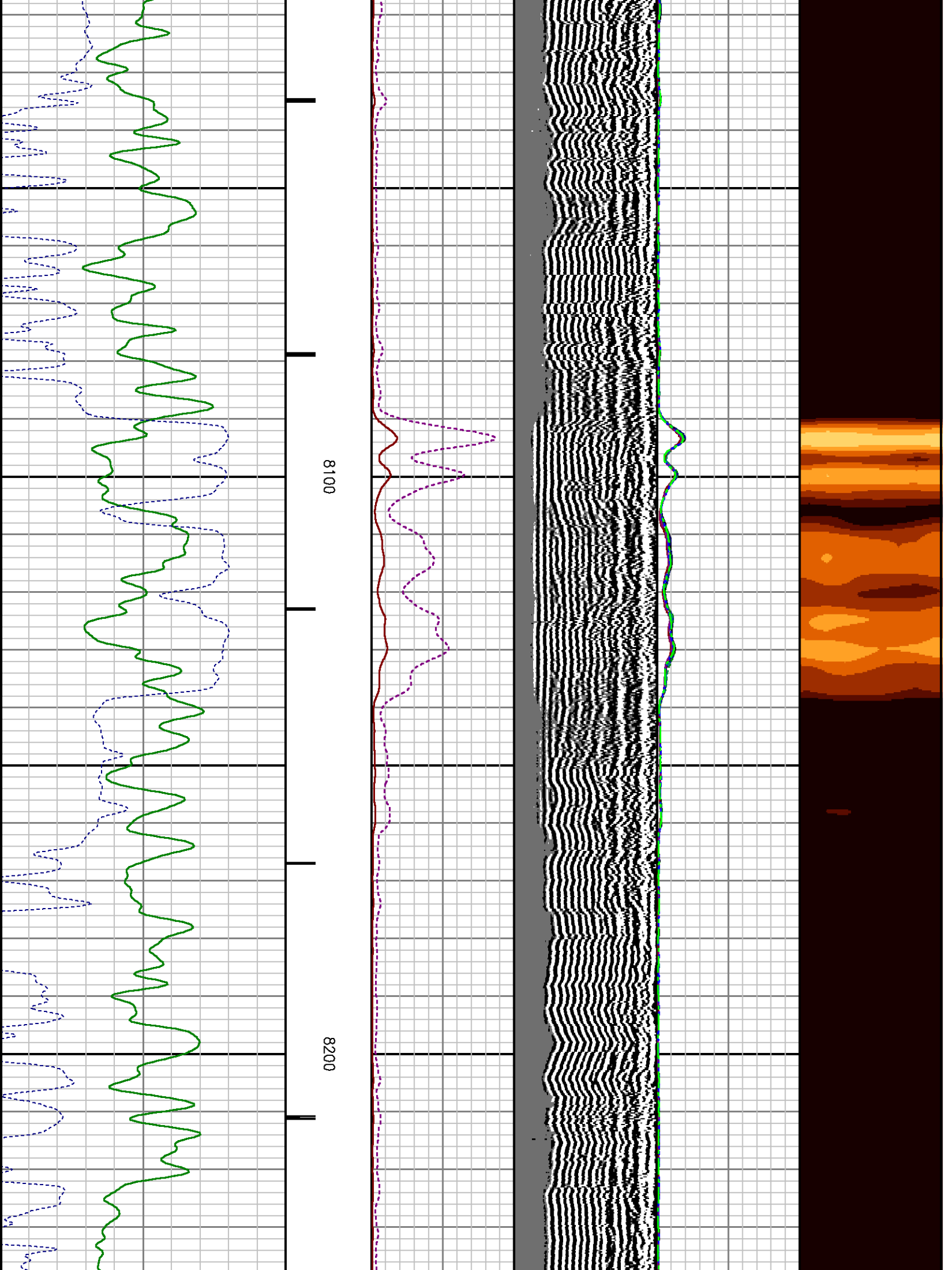


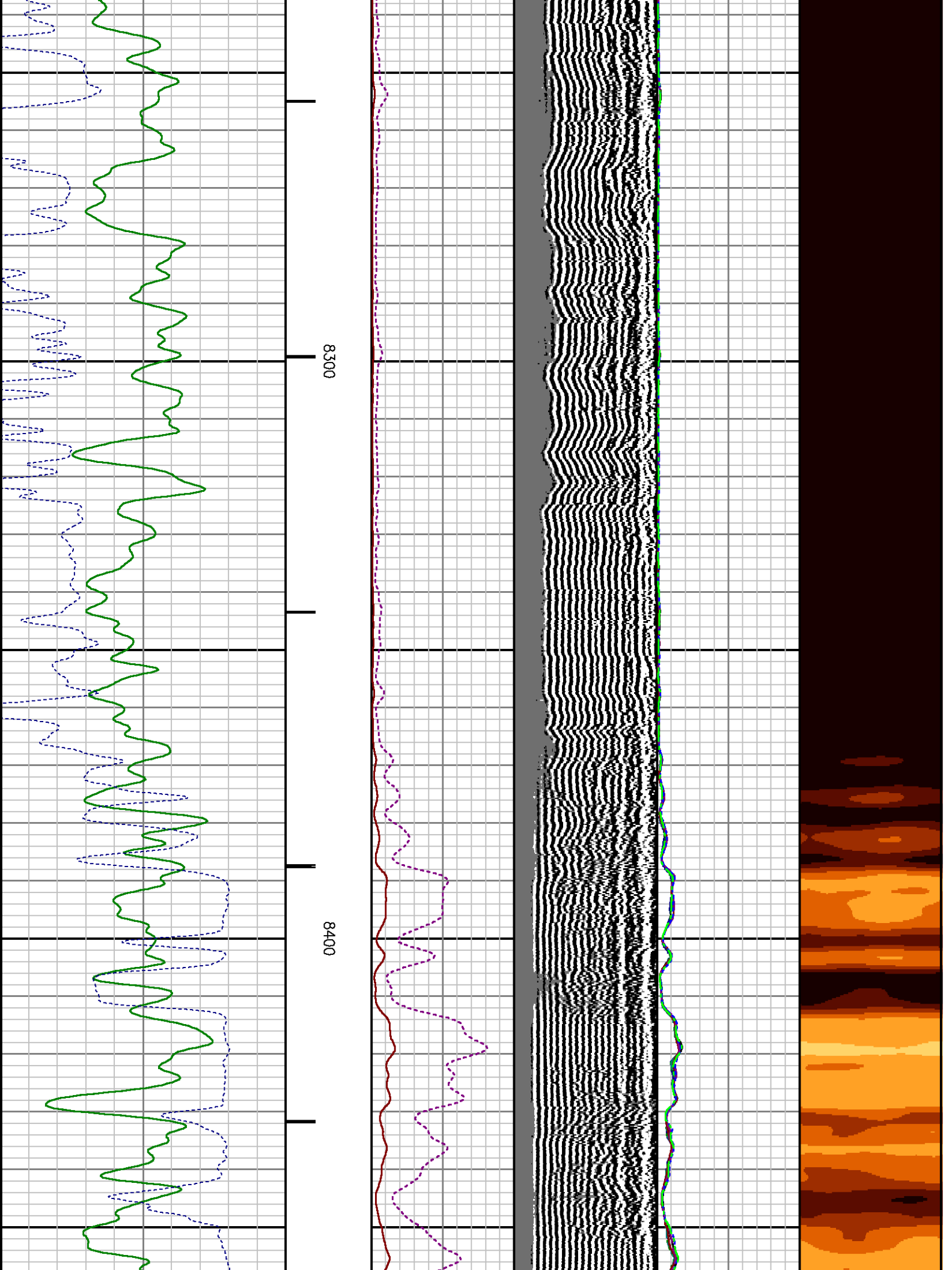


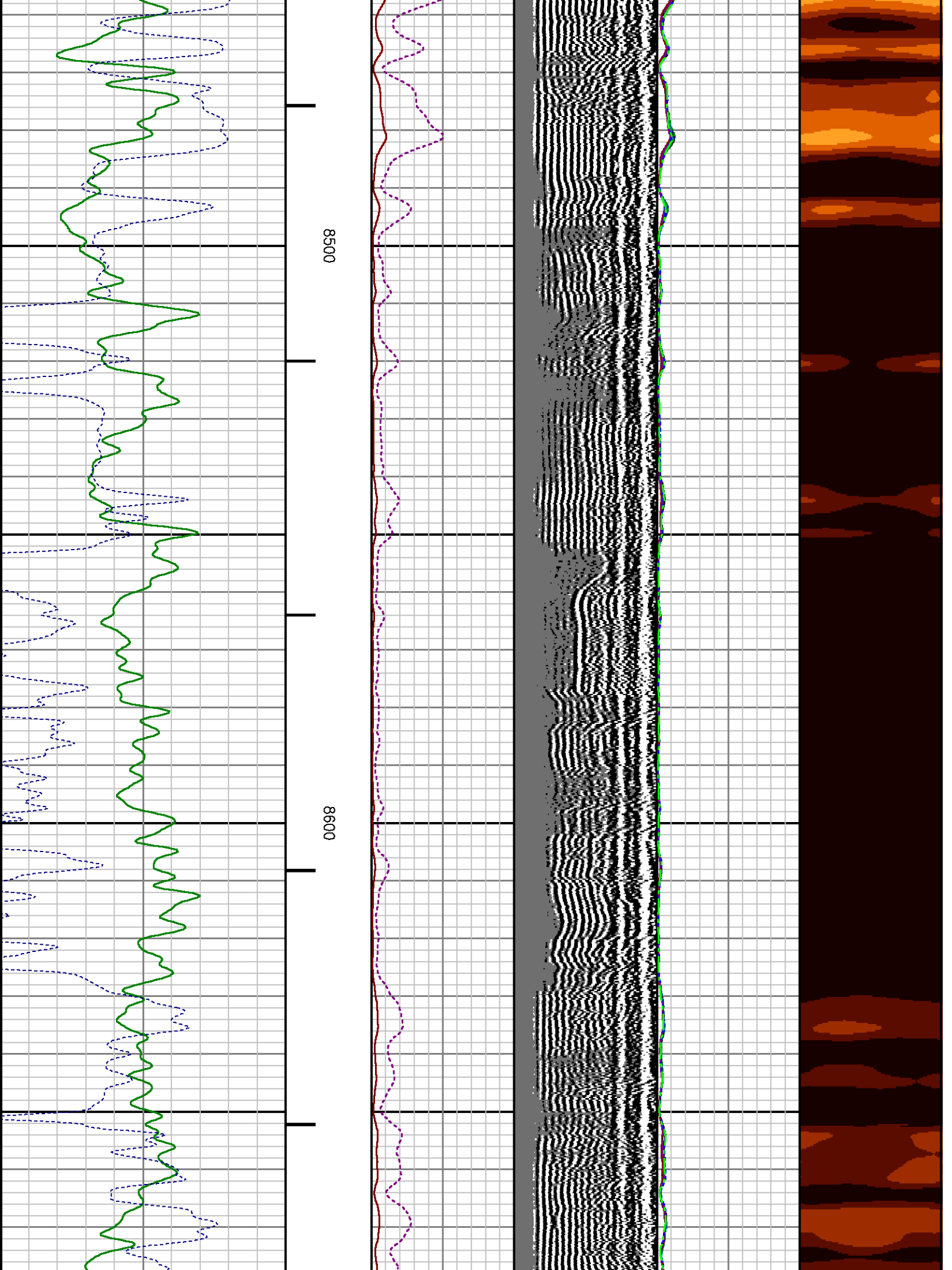


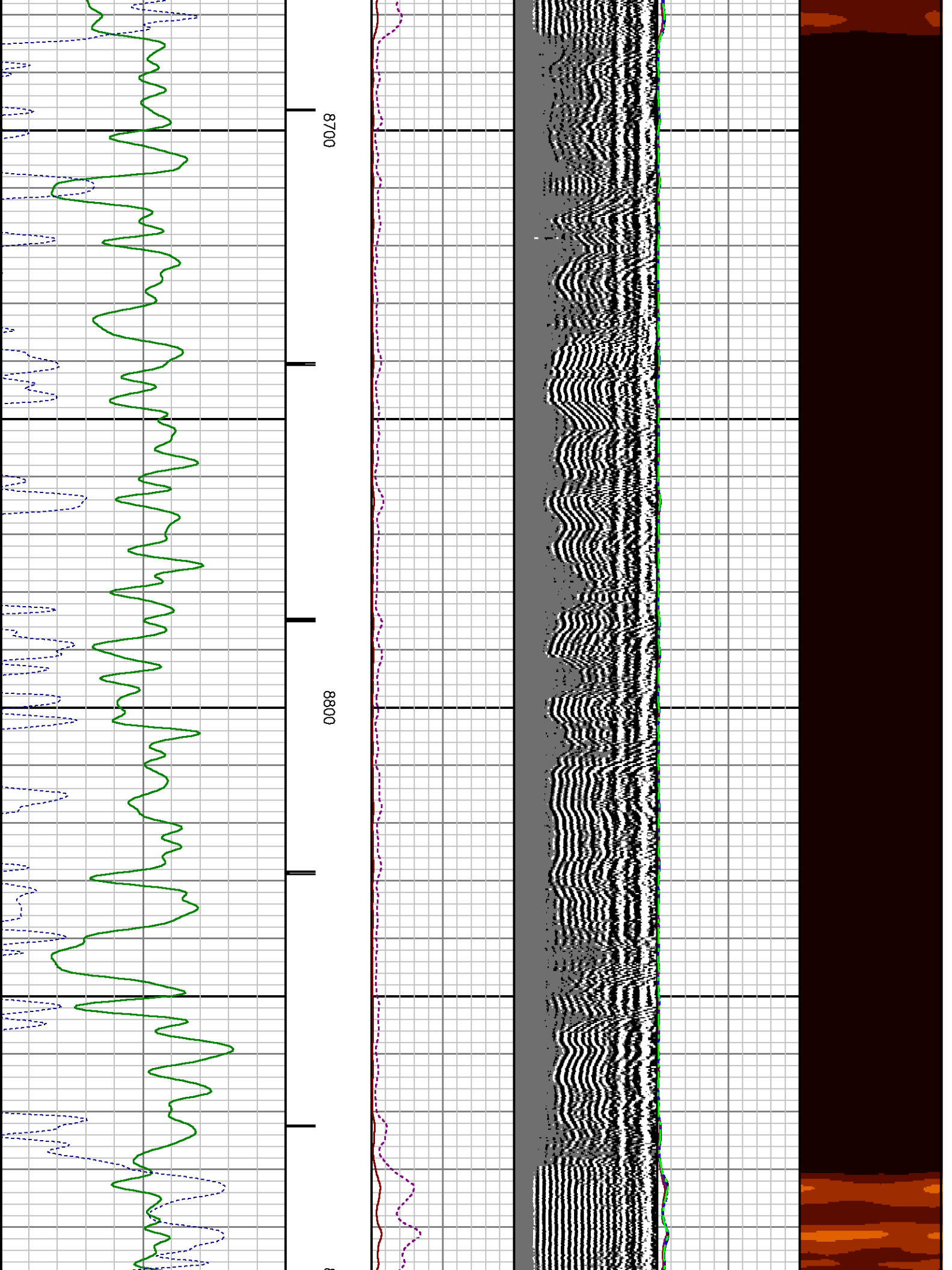


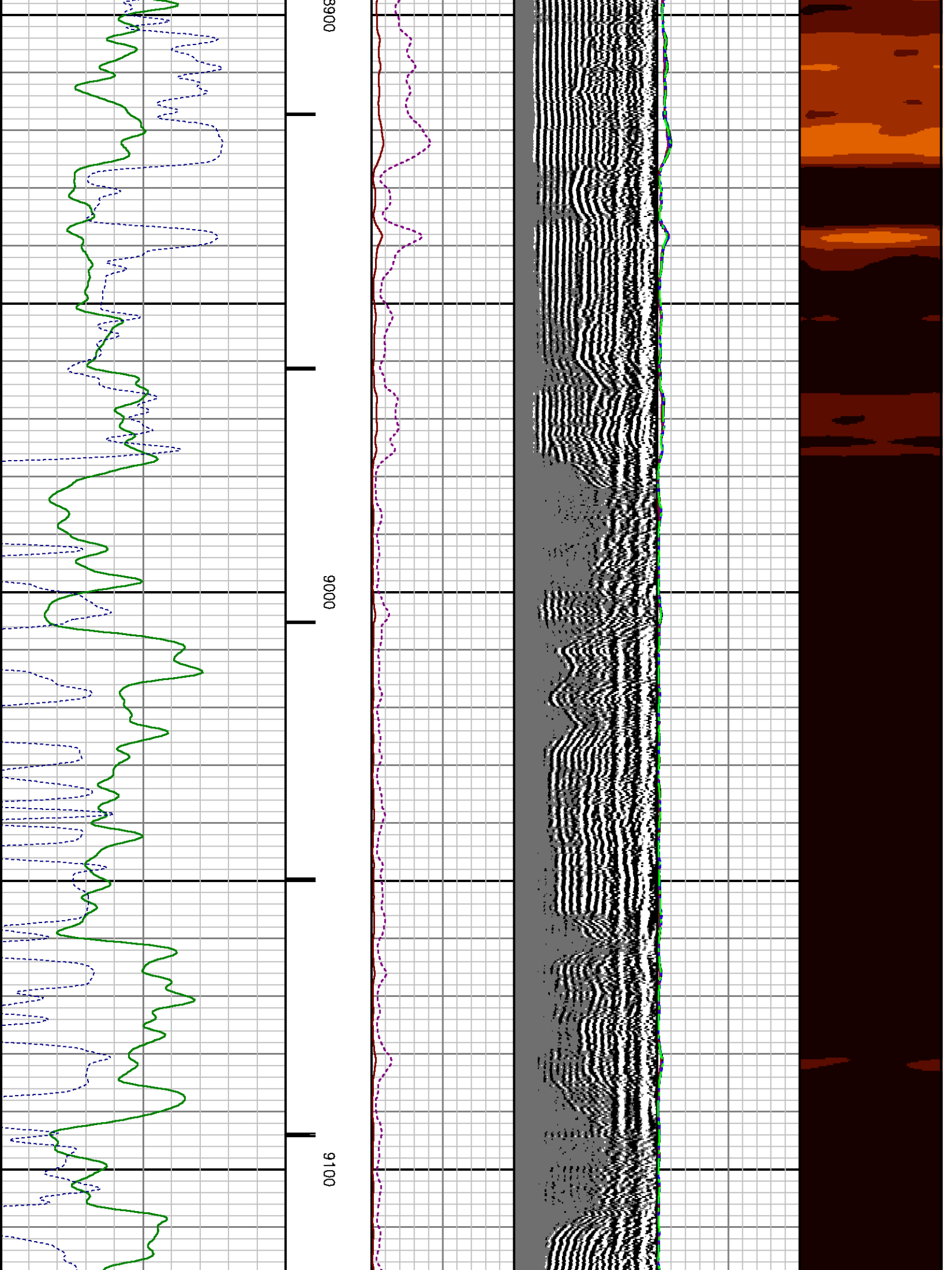


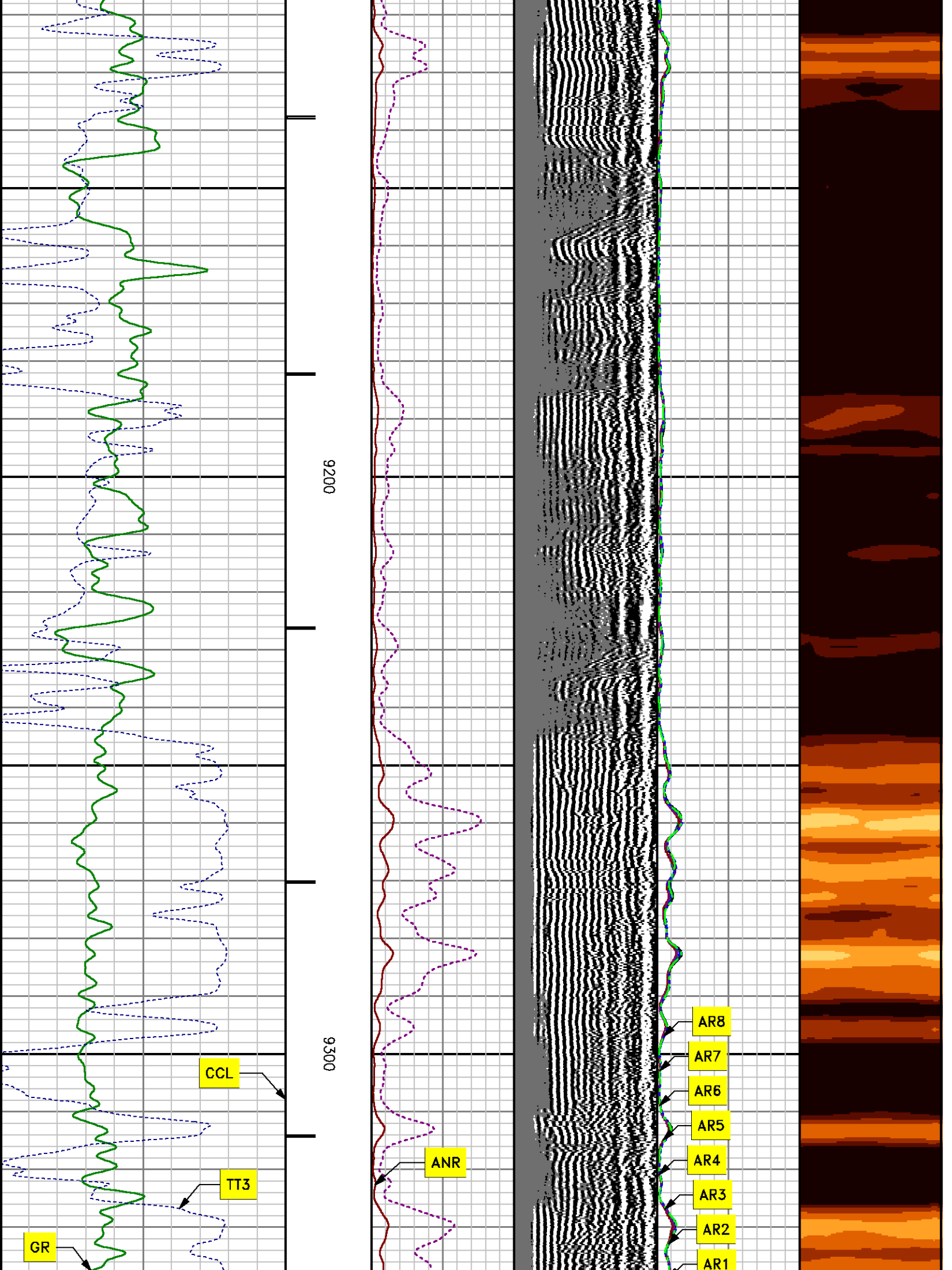


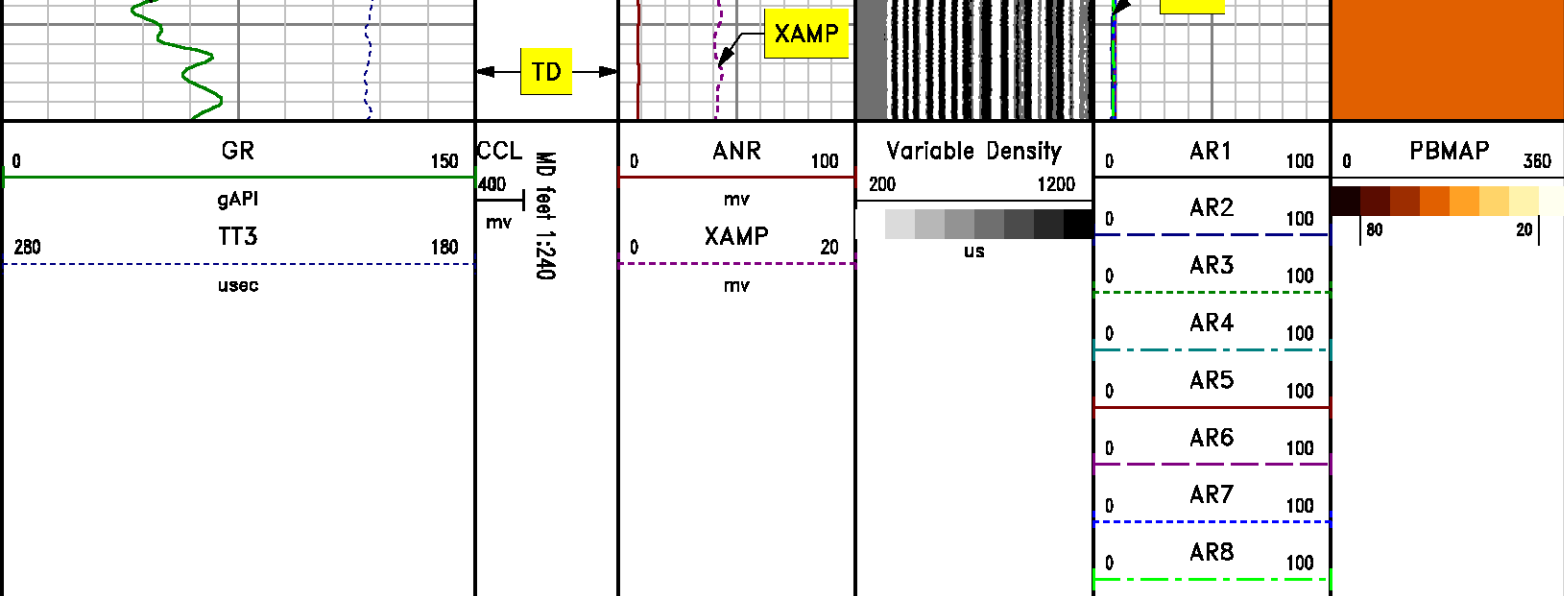












REPEAT PASS
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	307.440	usec	9049.905	9366.000
RAL	Amp Gate Start Near	198.578	usec	9049.905	9366.000
RAL	Amp Gate Start Radial	198.578	usec	9049.905	9366.000
RAL	Amp Gate Width Far	25.000	usec	9049.905	9366.000
RAL	Amp Gate Width Near	25.000	usec	9049.905	9366.000
RAL	Amp Gate Width Radial	25.000	usec	9049.905	9366.000
RAL	casing od	4.500	inches	9049.905	9366.000
RAL	casing wt	11.600	lbm/ft	9049.905	9366.000
RAL	FB Start Far	291.900	usec	9049.905	9366.000
RAL	FB Start Near	175.391	usec	9049.905	9366.000
RAL	FB Start Radial	175.391	usec	9049.905	9366.000
RAL	FB Thresh Far	10.000	mv	9049.905	9366.000
RAL	FB Thresh Near	4.000	mv	9049.905	9366.000
RAL	FB Thresh Radial	4.000	mv	9049.905	9366.000
RAL	Fluid Travel Time	200.000	usec/ft	9049.905	9365.999

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

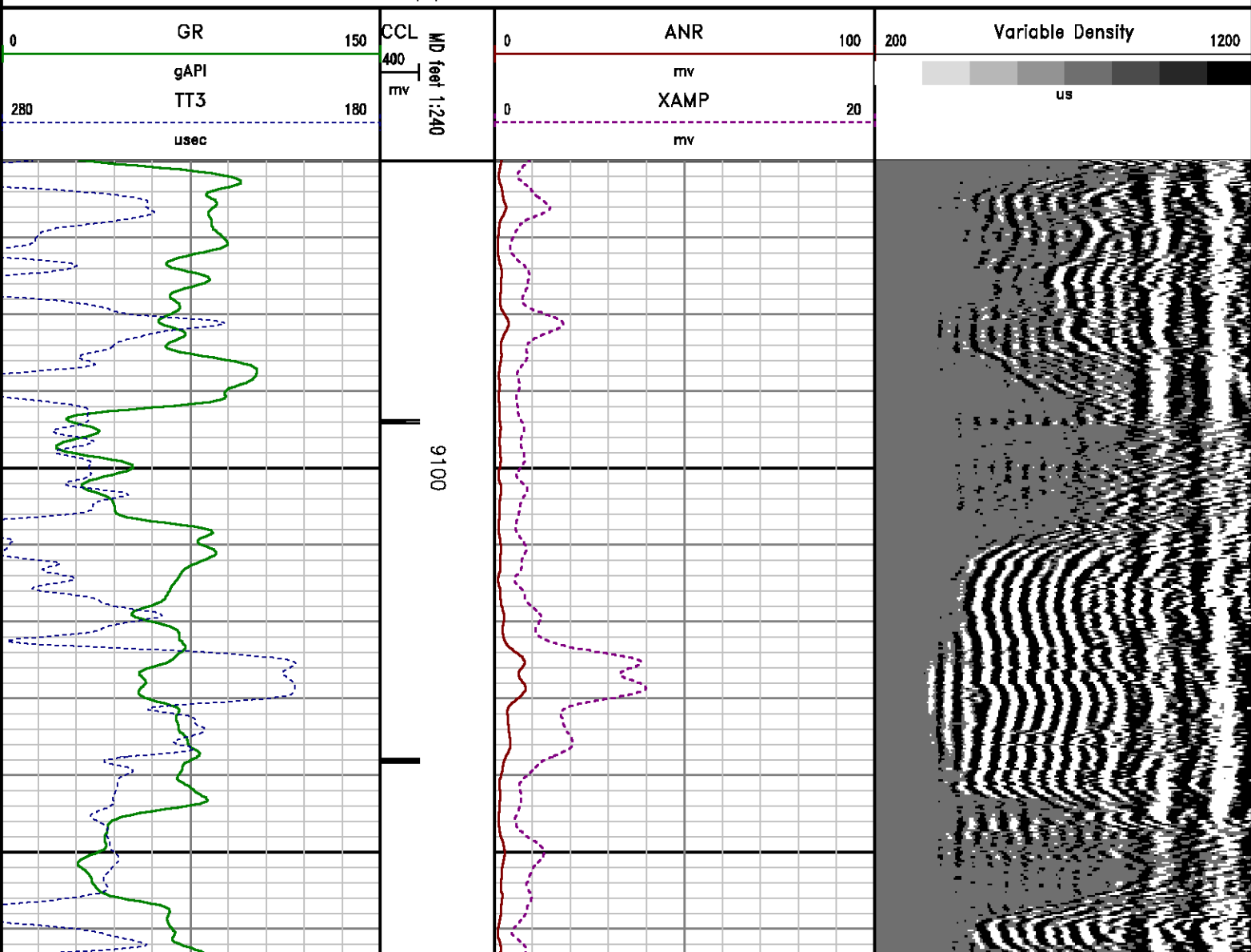
Well : HOEPPLI RWF 444-36

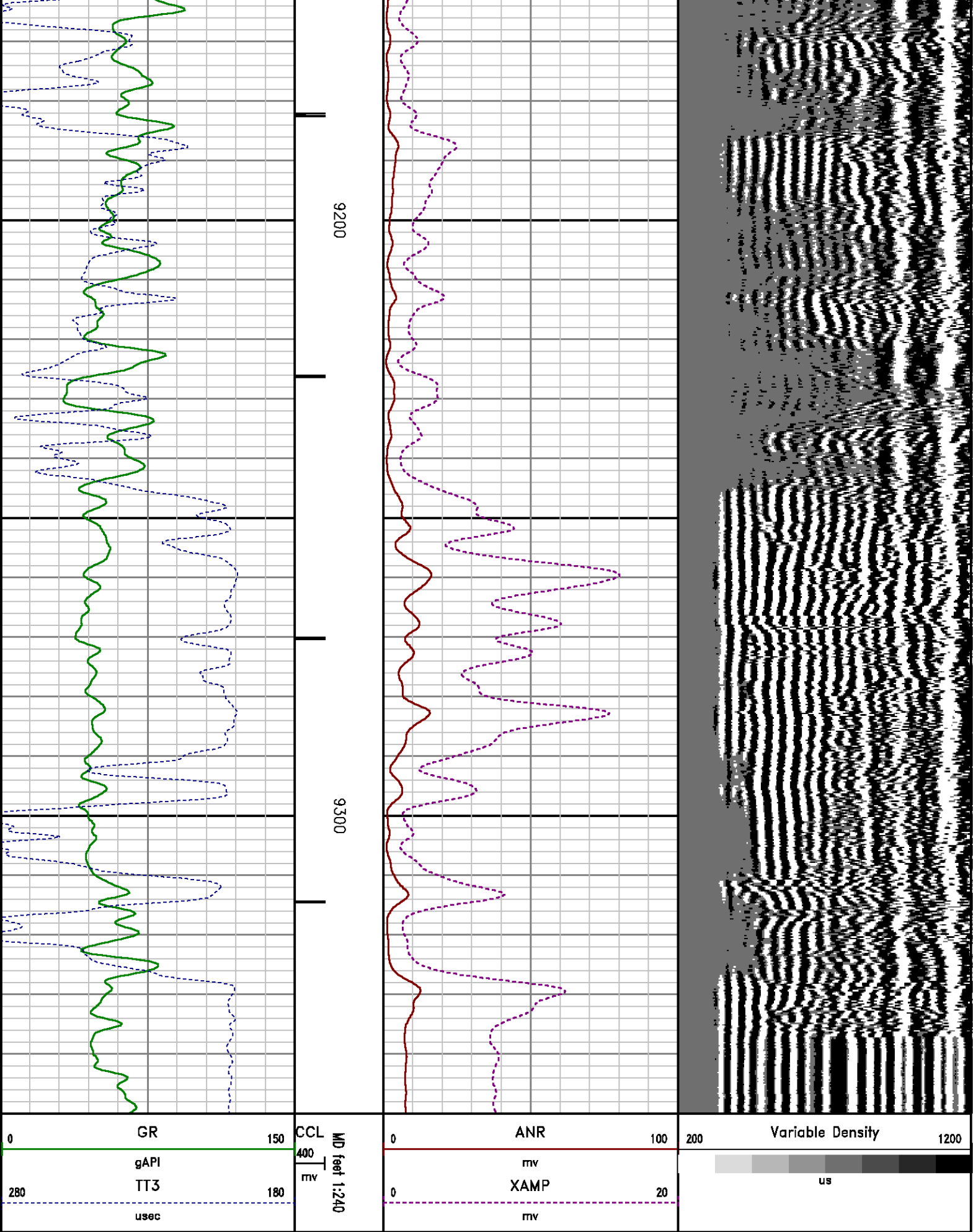
File Name : d:\welldata\444cbl\repeat.xtf

Mode : PlotMgr 5.4.504

Interval : 9060.00 - 9350.00 feet UP

Created : 8/8/2013 8:18:56 AM





CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP\106AUG7 shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Wed Aug 07 09:06:32 2013 TOOL SERIES: 1426XA ASSET: 106 SEQ: AUG7

Tool Delay [usec] -58.00 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	217	216	30	166	25	-0.407	100.00	0.20
3 Ft. Receiver	218	216	30	166	25	-0.834	100.00	0.20
5 Ft. Receiver	327	332	30	264	25	0.468	150.00	0.32
Radial #1	217	216	30	166	25	-0.086	100.00	0.20
Radial #2	217	216	30	166	25	0.270	100.00	0.20
Radial #3	218	216	30	166	25	-0.435	100.00	0.20
Radial #4	218	216	30	166	25	-1.137	100.00	0.20
Radial #5	219	216	30	166	25	-0.317	100.00	0.20
Radial #6	217	216	30	166	25	-0.275	100.00	0.20
Radial #7	217	216	30	166	25	-0.234	100.00	0.20
Radial #8	217	216	30	166	25	0.240	100.00	0.20

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\106AUG7 fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Wed Aug 07 09:08:02 2013 TOOL SERIES: 1426XA ASSET: 106 SEQ: AUG7

Tool Delay [usec] -58.00 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	0.037	0.000	1.00	100.000
3 Ft. Receiver	200	30	-1.230			
5 Ft. Receiver	317	30	-2.920			
Radial #1	200	30	-2.181			
Radial #2	200	30	-1.764			
Radial #3	200	30	-1.548			
Radial #4	200	30	-1.644			

Radial #1	200	30	-1.275
Radial #5	200	30	-1.530
Radial #6	200	30	-1.231
Radial #7	200	30	-1.441
Radial #8	200	30	-1.441

GAMMA RAY

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

CALIBRATION SUMMARY

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

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

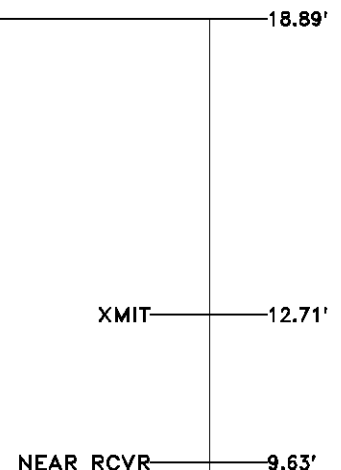
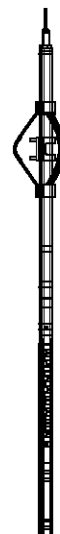
PRIMARY LOG VERIFICATION

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

TOOL DIAGRAM

OTA SHORT CABLE HEAD

PROBE 2 3/4 DUAL RECEIVER RADII	
Series	1426XA
Mnemonic	PROB
Diameter	2.75"
Length	11.17'
Measure Point	0.75' FAR RCVR
Measure Point	2.67' NEAR RCVR
Measure Point	5.75' XMIT
Temp Rating	350.00 °F
Press Rating	18000.00 PSI




RAL GR/TEMP/CCL/CHV DETECTOR	
Series	1355XA
Mnemonic	RAL
Diameter	2.75"
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



FAR RCVR	7.71'
CCL	5.79'
GR	1.67'
TEMP	0.17'
	0.00'

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

 Baker Atlas	Company WPX ENERGY Well HOEPPLI RWF 444-36 Field RULISON County GARFIELD State COLORADO	File No: CH075477 API No: 05045215550000
	Location SHL: 2625' FNL & 2603' FEL BHL: 187' FSL & 1549' FEL SEC 36 TWP 6S RGE 94W	Elevations KB 6554 ft DF GL 6528 ft 36 6S 94W RWF 33-36 NABORS SSD 576