



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: CH059092	Company Well	WPX ENERGY FEDERAL KP 524-18
API No: 05045206330000	Field County	KOKOPELLI GARFIELD
	State	COLORADO
18 6S 91W KP 34-18 PAD MADORS 574	Location SHL: 699' FSL, 1948 FEL BHL: 221' FSL, 1960' FWL SEC 18 TWP 6S RGE 91W	Other Services NONE
Permanent Datum Log Measured From Drill Measured From	GL KB KELLY BUSHING	Elevations KB 5944 ft DF GL 5918 ft

Date	09/AUG/12
Run	ONE
Service Order	575180
Depth Driller	7580 ft
Depth Logger	7541 ft
Bottom Logged Interval	7531 ft
Top Logged Interval	26 ft
Time Started	0700
Time Finished	1100
Operator Rig Time	4
Type of Fluid in Hole	WATER
Fluid Density	NA
Salinity	NA
Fluid Level	NA
Logged Cement Top	NA
Wellhead Pressure	0 psi
Maximum Hole Deviation	NA
Nominal Logging Speed	45 fpm
Maximum Recorded Temperature	202 degF
Reference Log	BAKER HUGHES HDIL/ZDL/CN/GR
Reference Log Date	26/JUL/12
Equipment No.	4271
Recorded By	FLOYD RENEAU
Witnessed By	JEFF BRADY

- 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	0 ft	1410 ft
7.875 in	0 ft	7580 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in			0 ft	1410 ft
4.5 in				7580 ft

Remarks
All data on this log is shifted and depth matched using the Gamma Ray curve to the Baker Hughes HDIL/ZDL/CN/GR open hole log dated 7/28/2012 at the client's request.
The amount of linear shift is 11 feet.
Logged with zero PSI at wellhead.
The depth matching process creates potential for collar lengths to vary from those recorded on other cased hole wireline units without a Gamma Ray reference.

BHT = 202°F

SJ = 4047'–4067'

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1428XA	10124108	CENT
1	1	GR/CCL	2459XA	10404544	CENT

PRIMARY PRESENTATION

0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	35.093	7568.000
RAL	Amp Gate Start Near	195.000	usec	35.093	7568.000
RAL	Amp Gate Start Radial	195.000	usec	35.093	7568.000
RAL	Amp Gate Width Far	25.000	usec	35.093	7568.000
RAL	Amp Gate Width Near	25.000	usec	35.093	7568.000
RAL	Amp Gate Width Radial	25.000	usec	35.093	7568.000
RAL	casing od	4.500	inches	35.093	7568.000
RAL	casing wt	11.600	lbm/ft	35.093	7568.000
RAL	FB Start Far	291.900	usec	35.093	7568.000
RAL	FB Start Near	180.000	usec	35.093	7568.000
RAL	FB Start Radial	180.000	usec	35.093	7568.000
RAL	FB Thresh Far	15.000	mv	35.093	7568.000
RAL	FB Thresh Near	10.000	mv	35.093	7568.000
RAL	FB Thresh Radial	10.000	mv	35.093	7568.000
RAL	Fluid Travel Time	200.000	usec/ft	35.093	7568.687

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

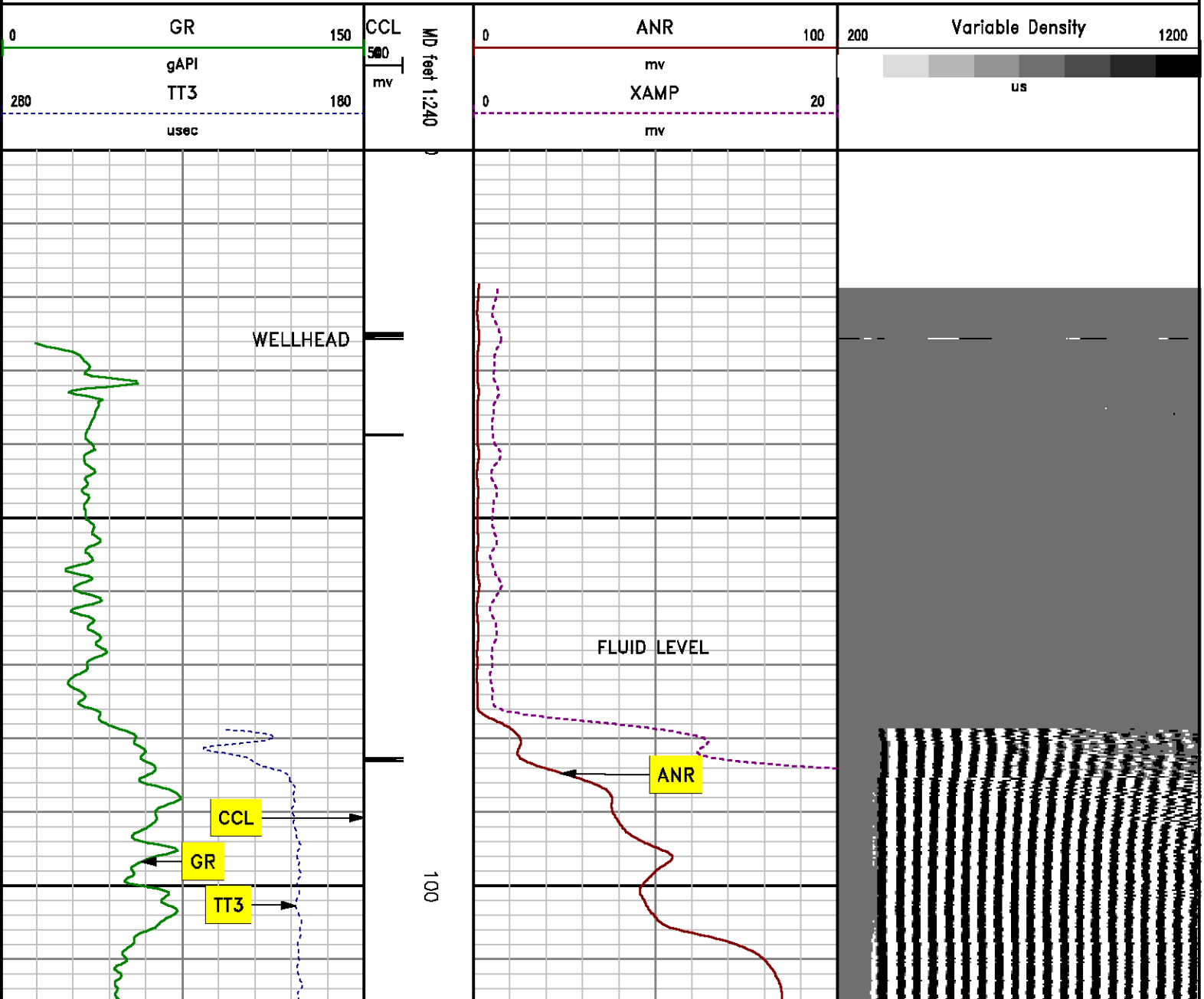
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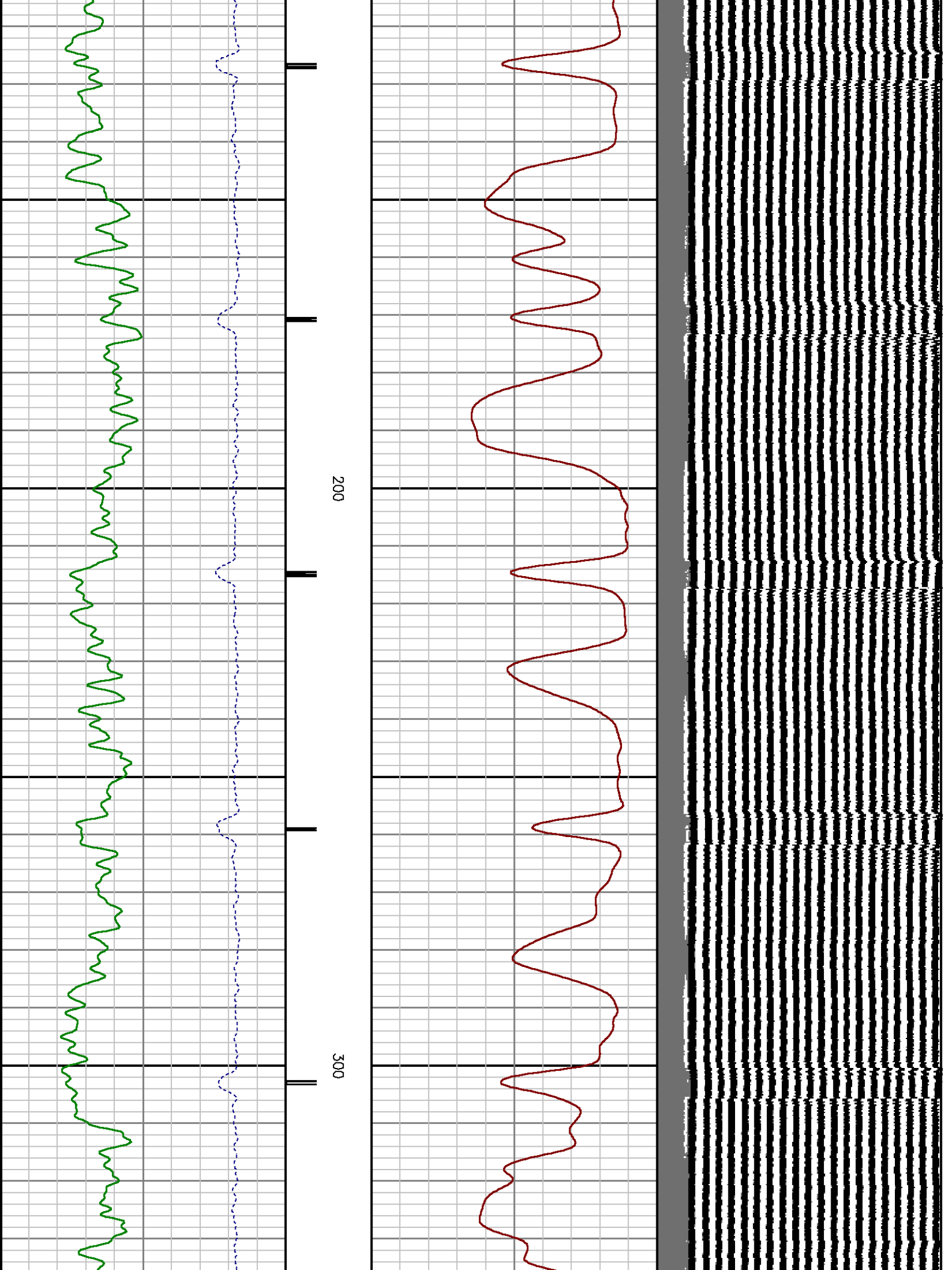
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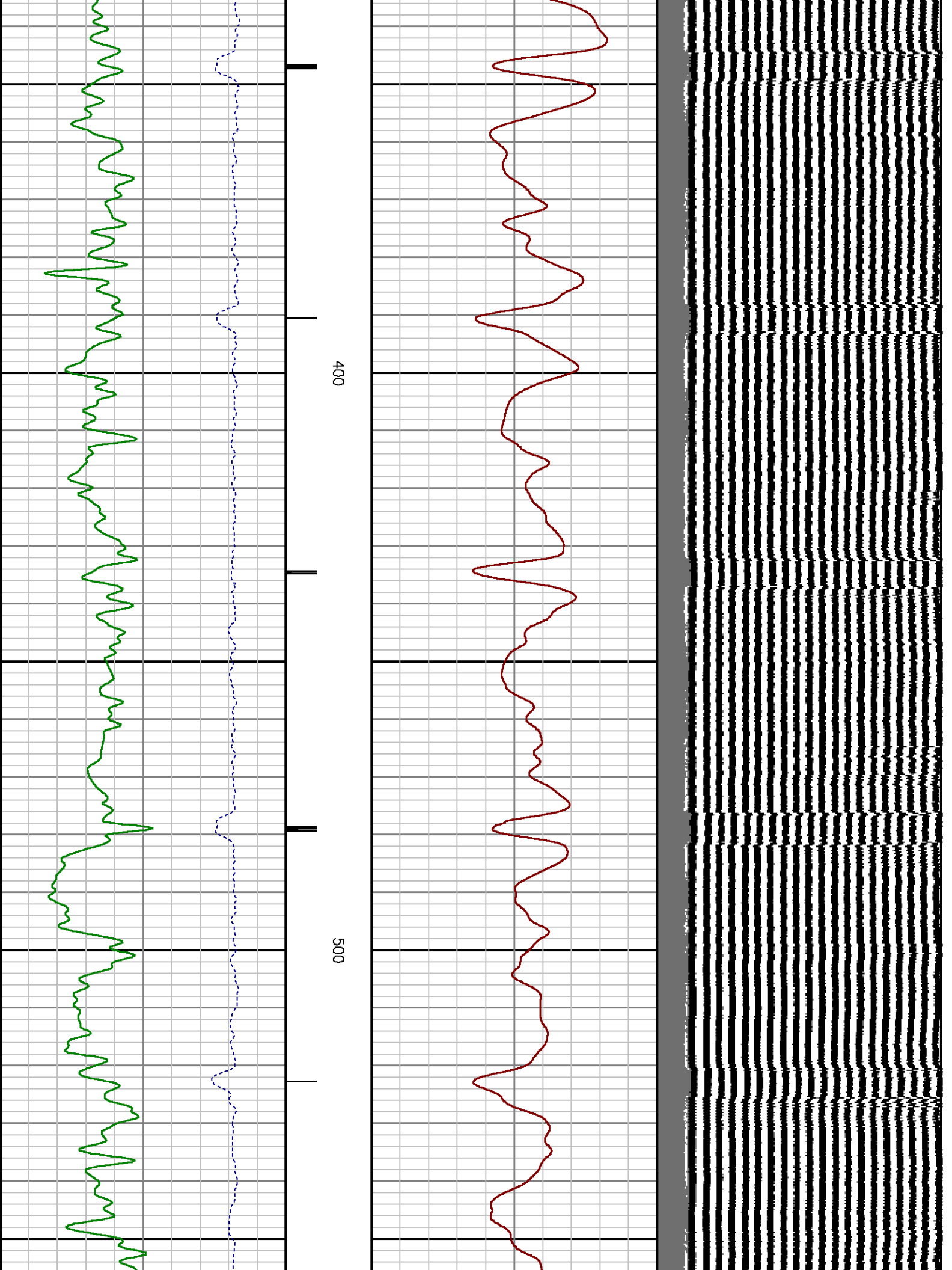
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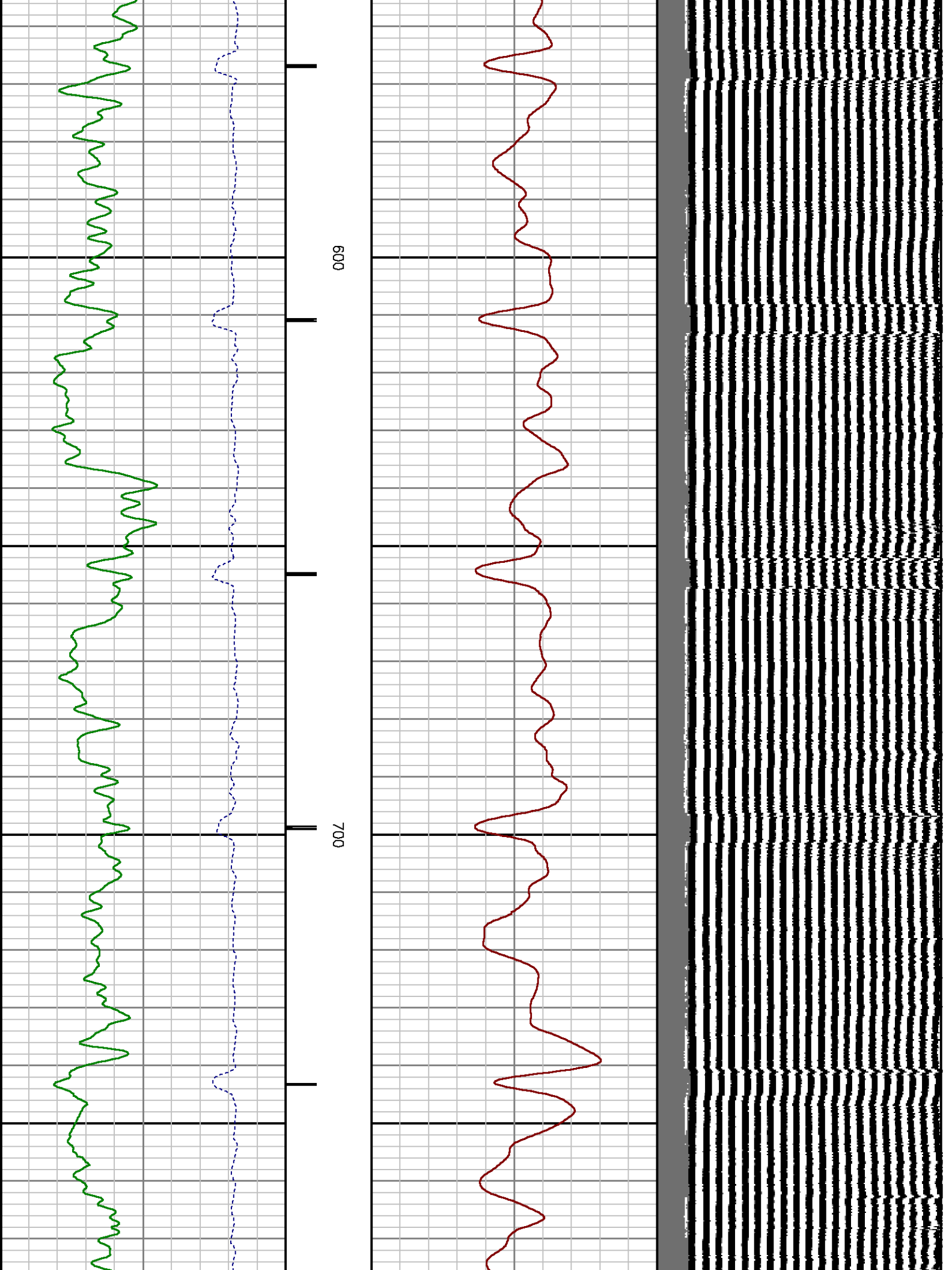
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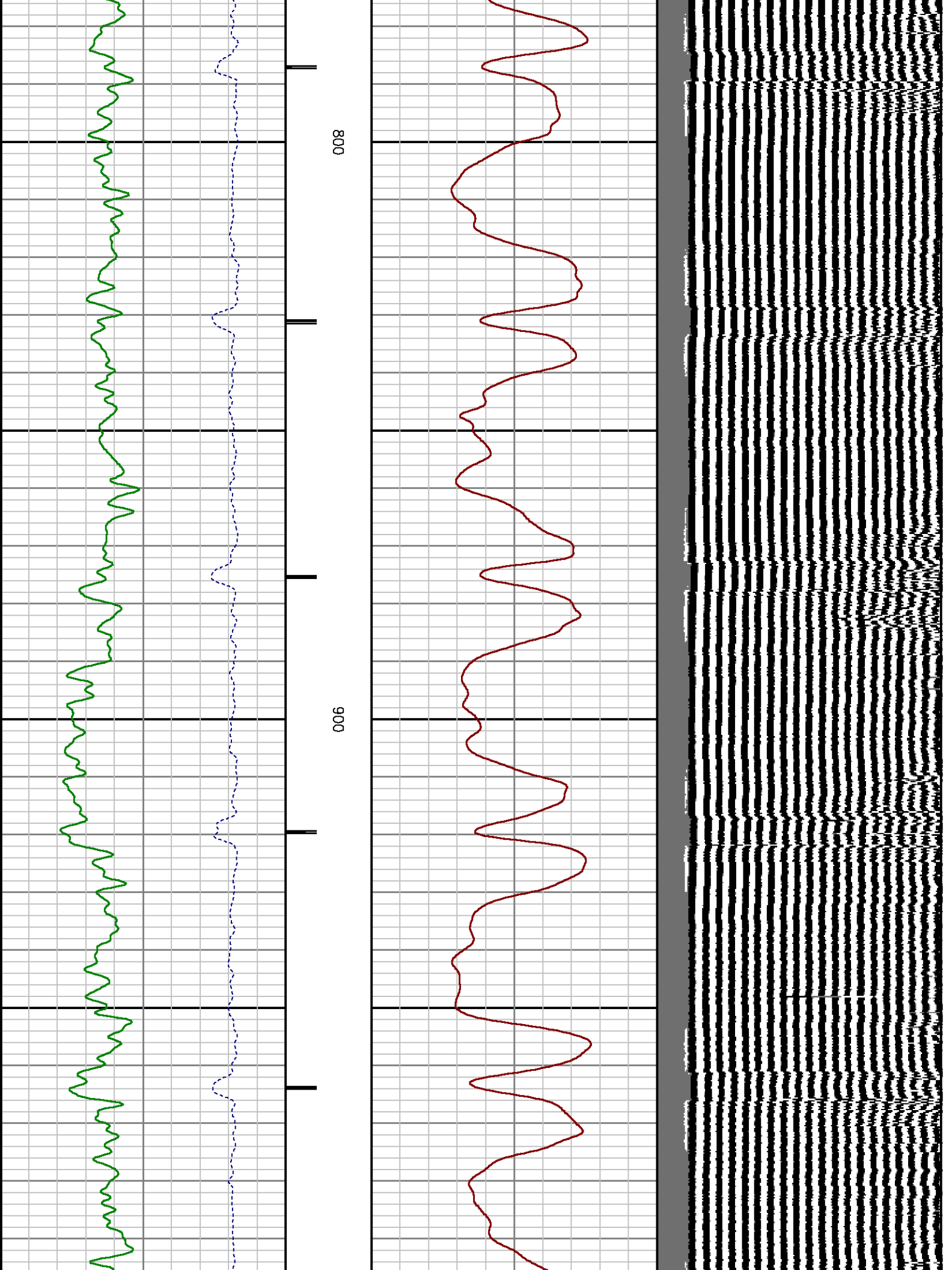
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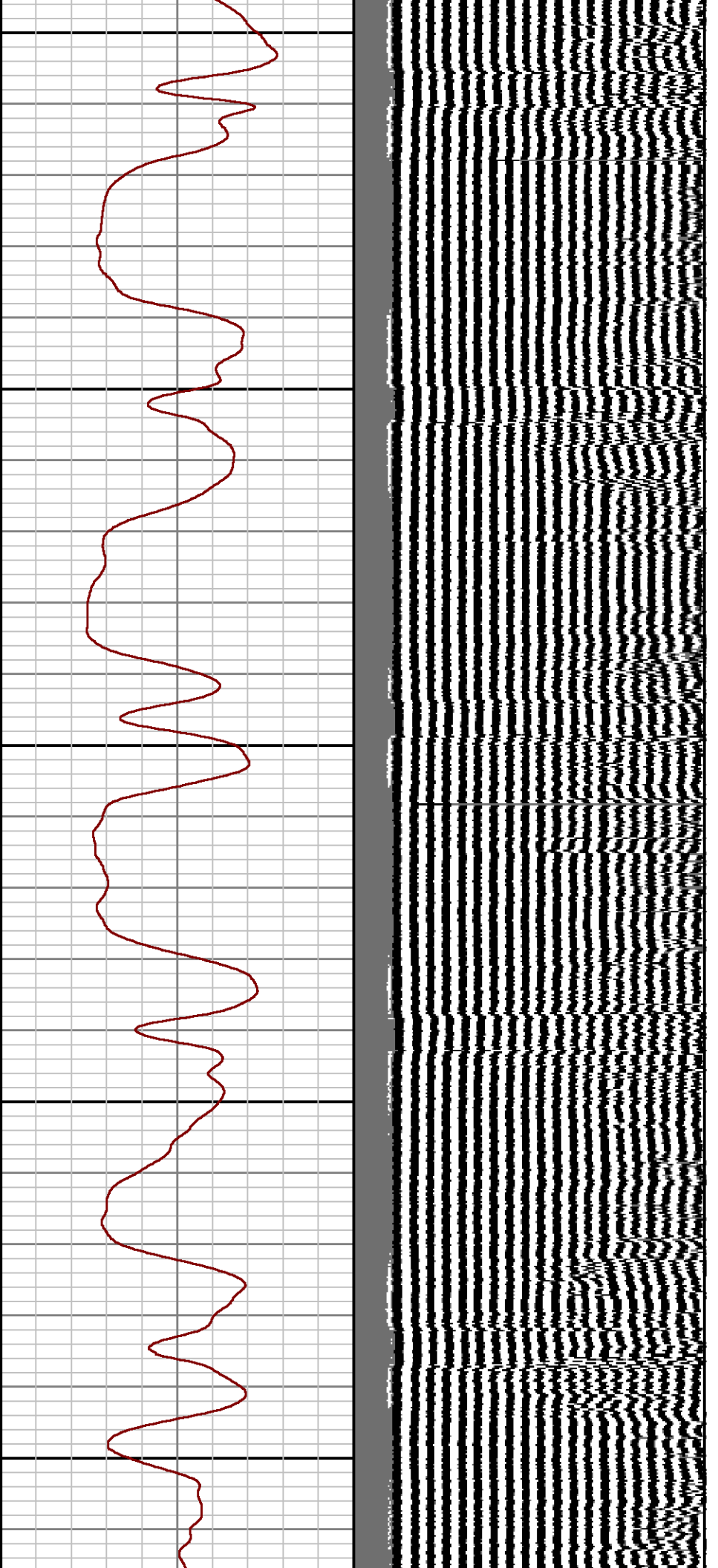








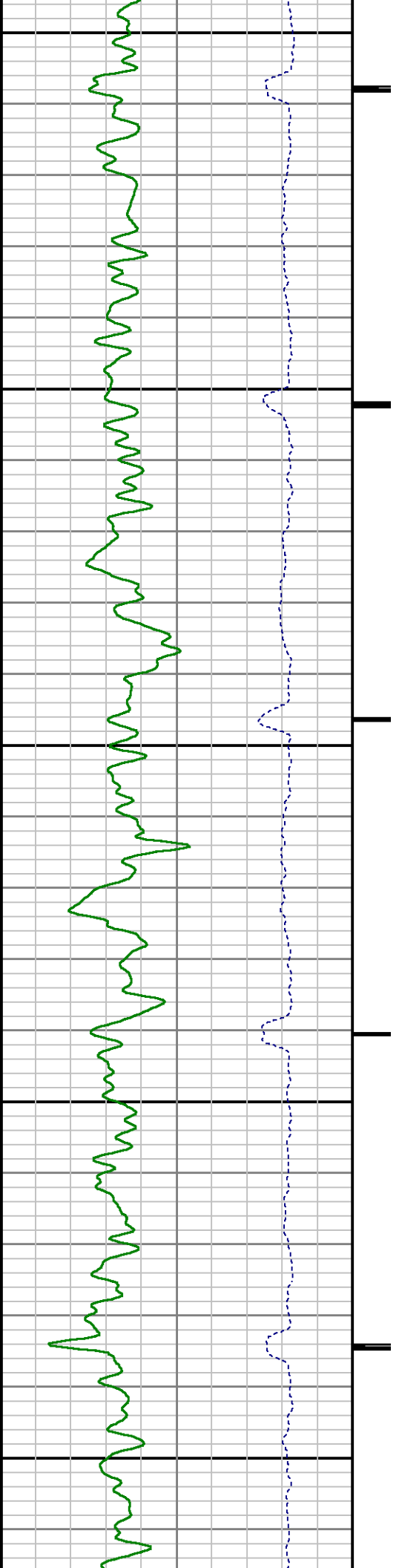


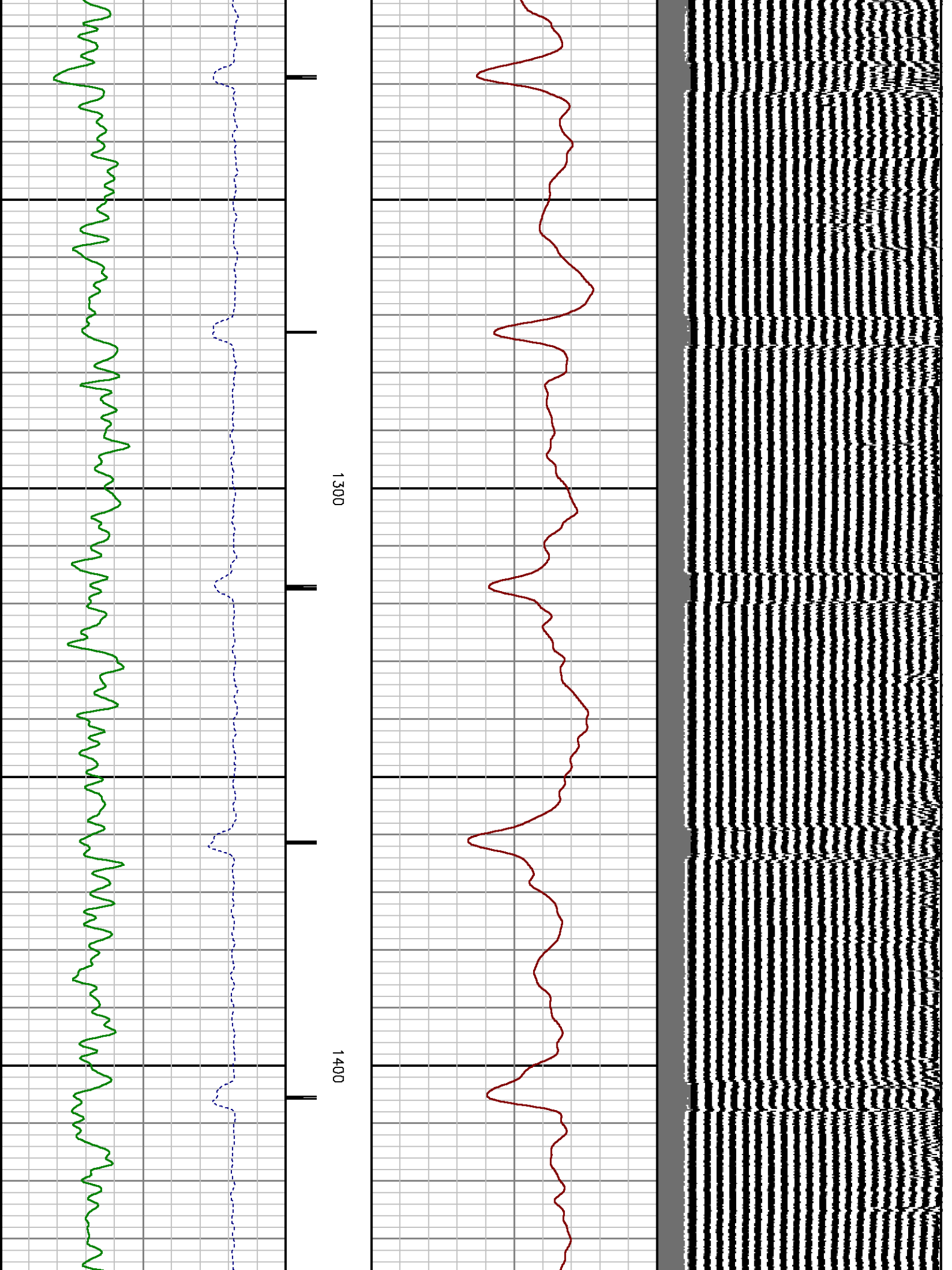


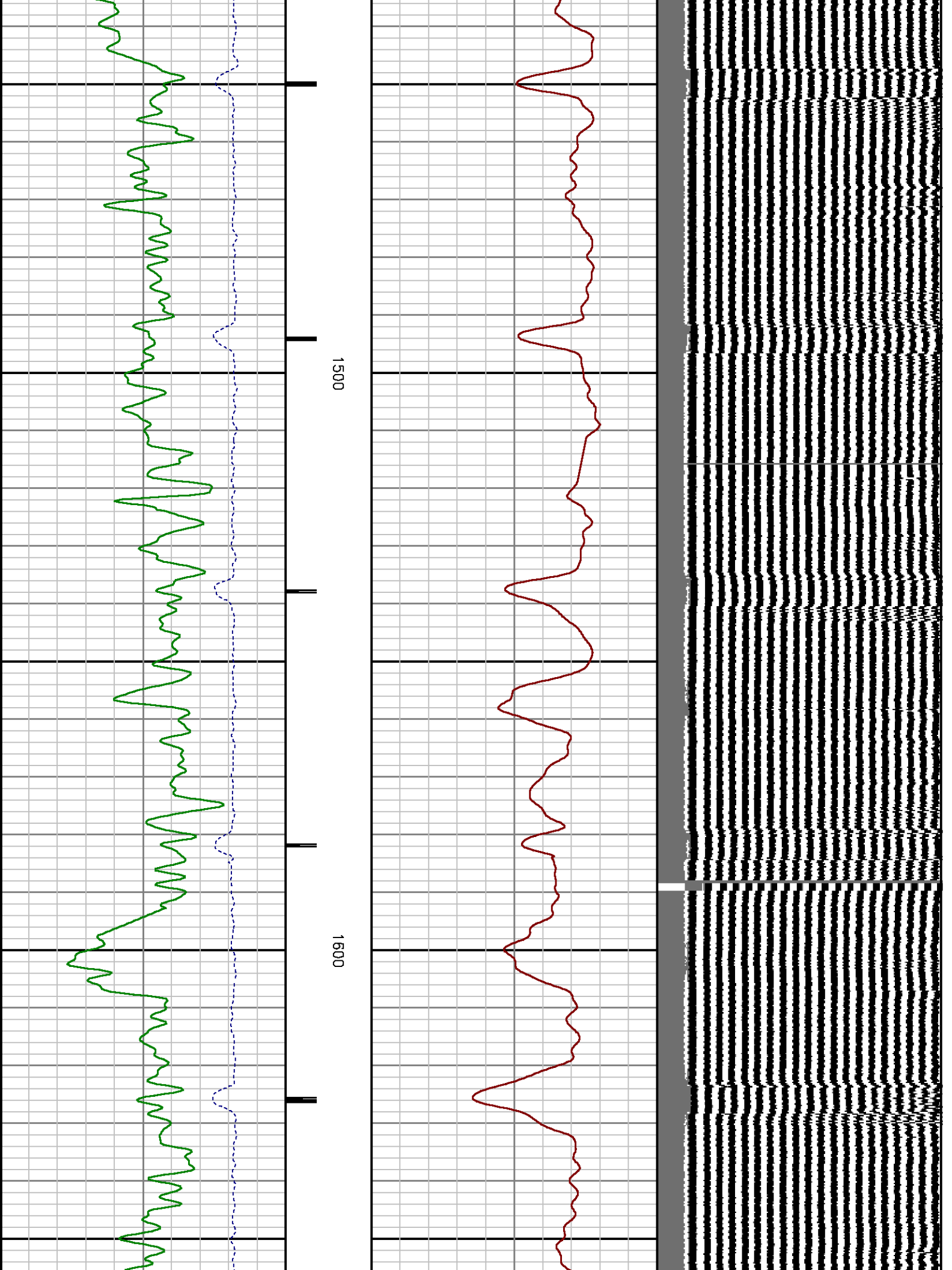
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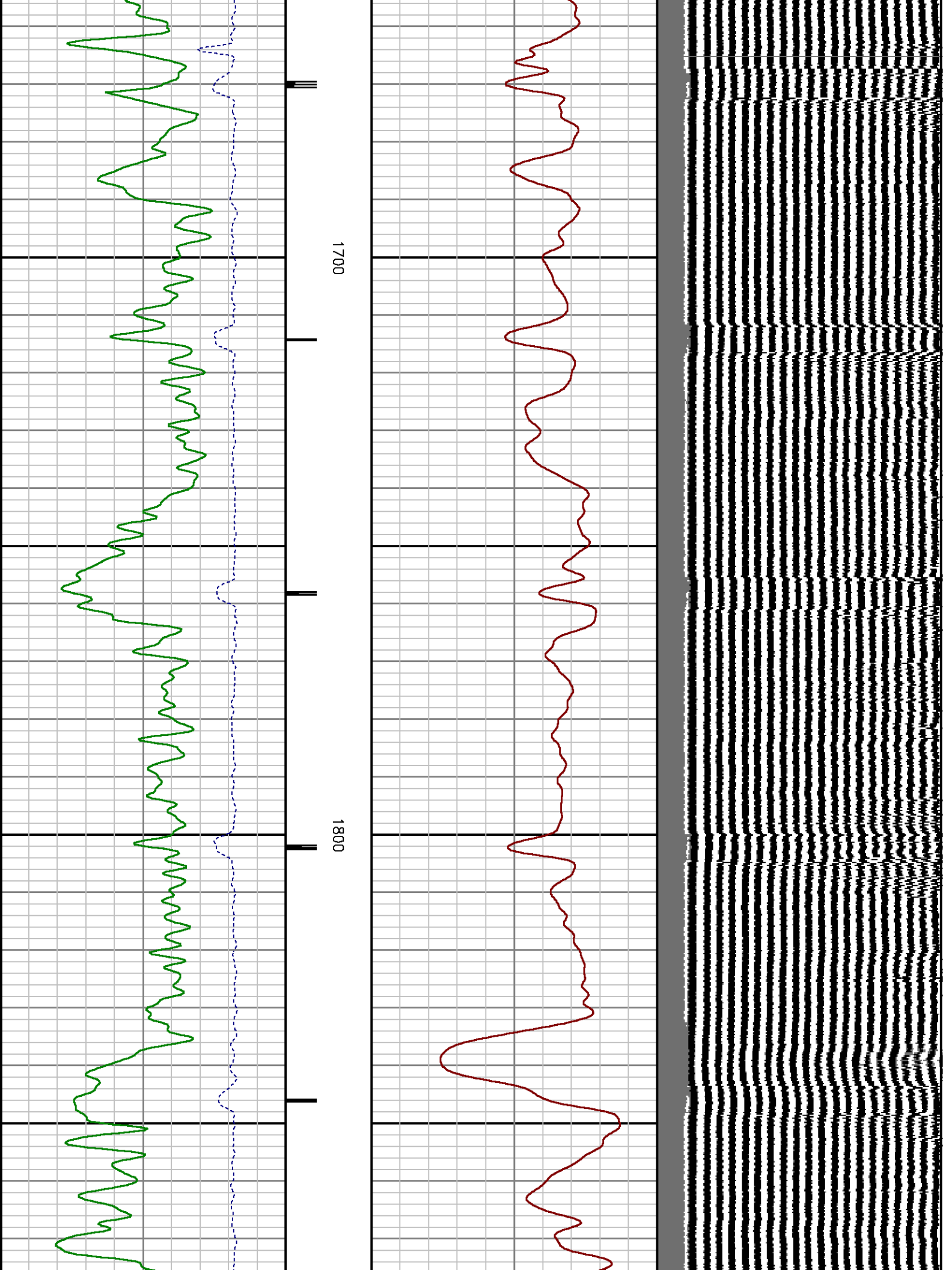
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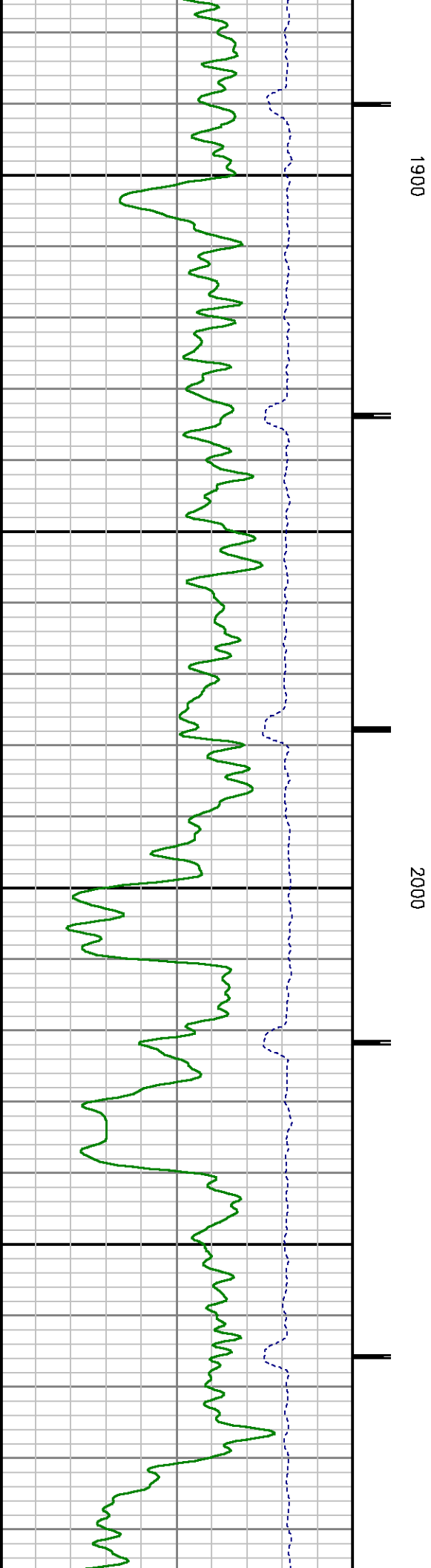
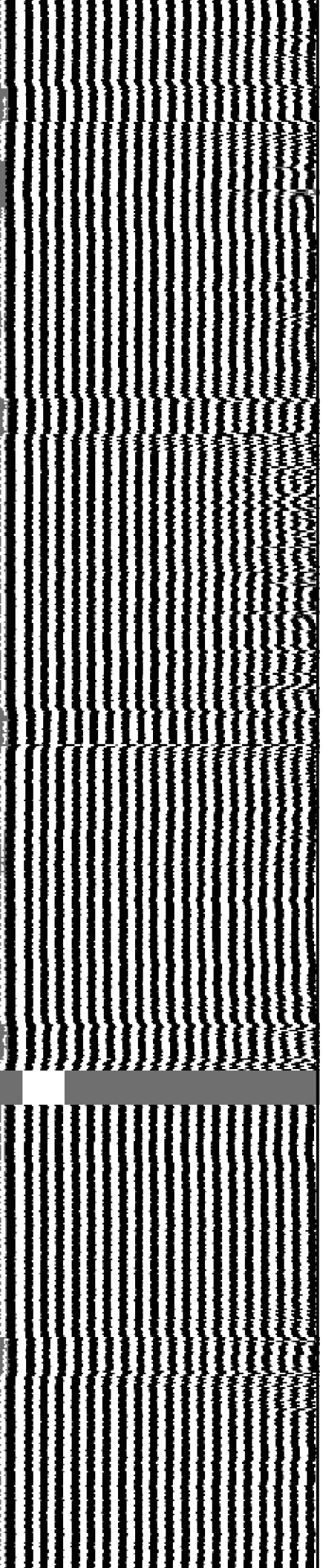
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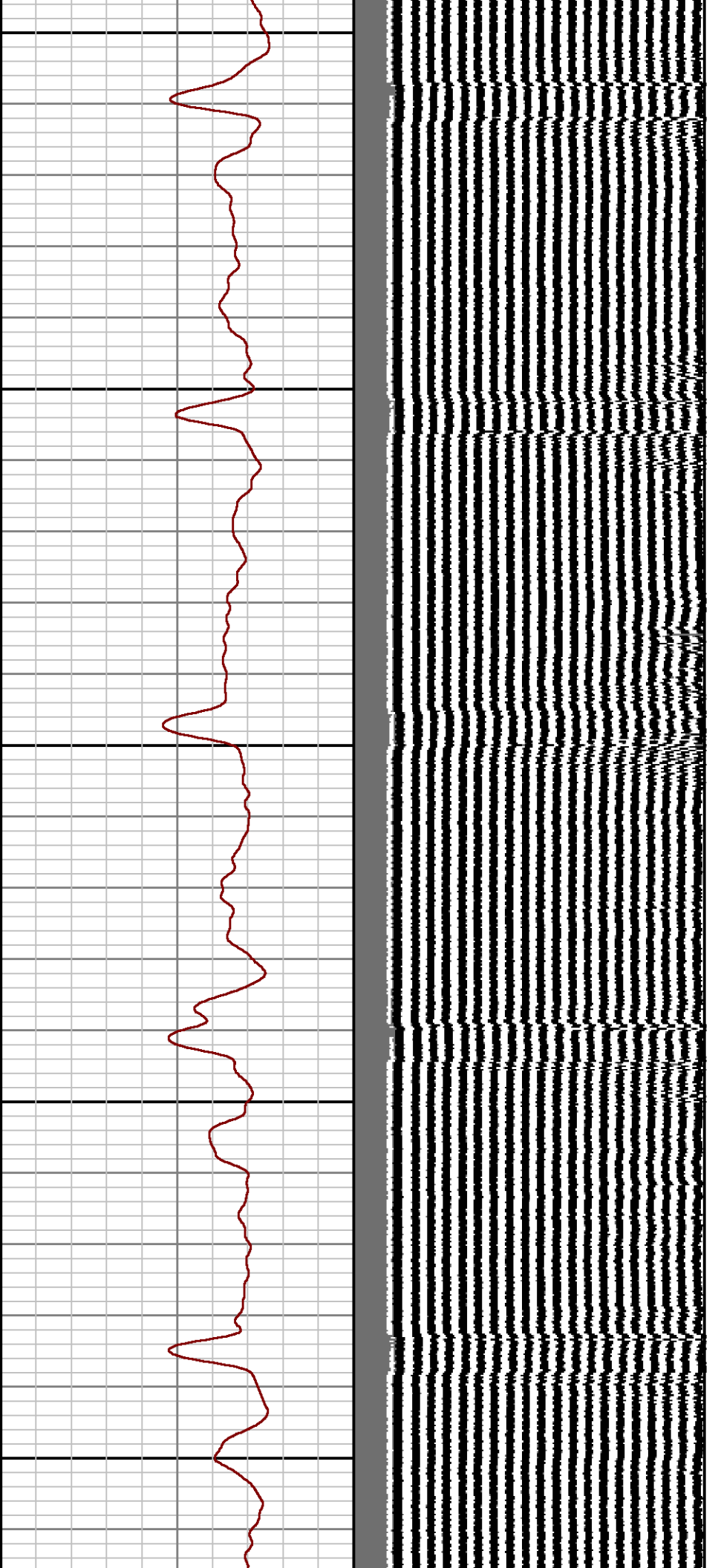








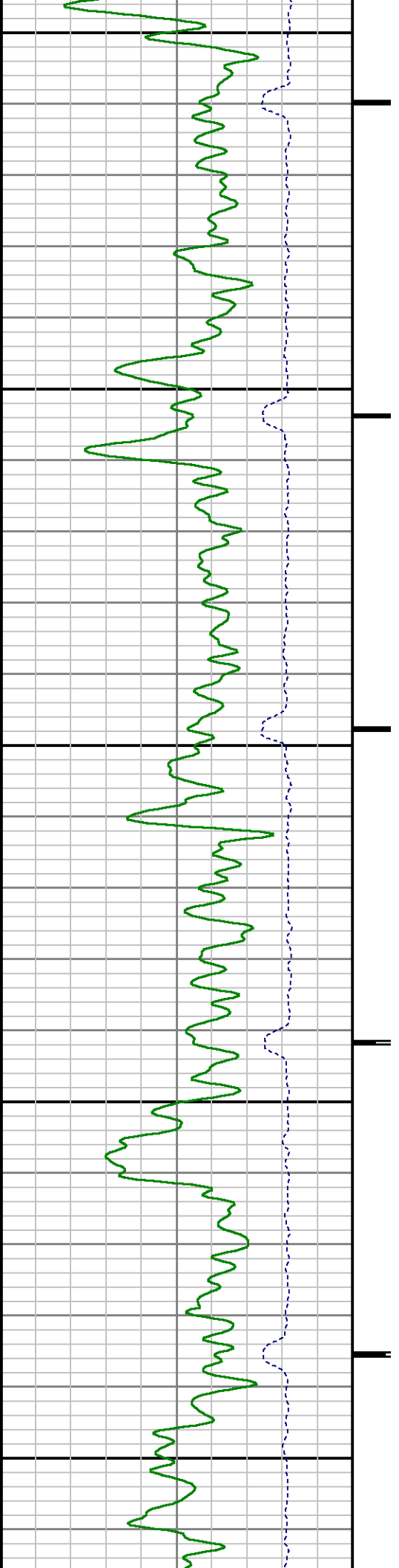


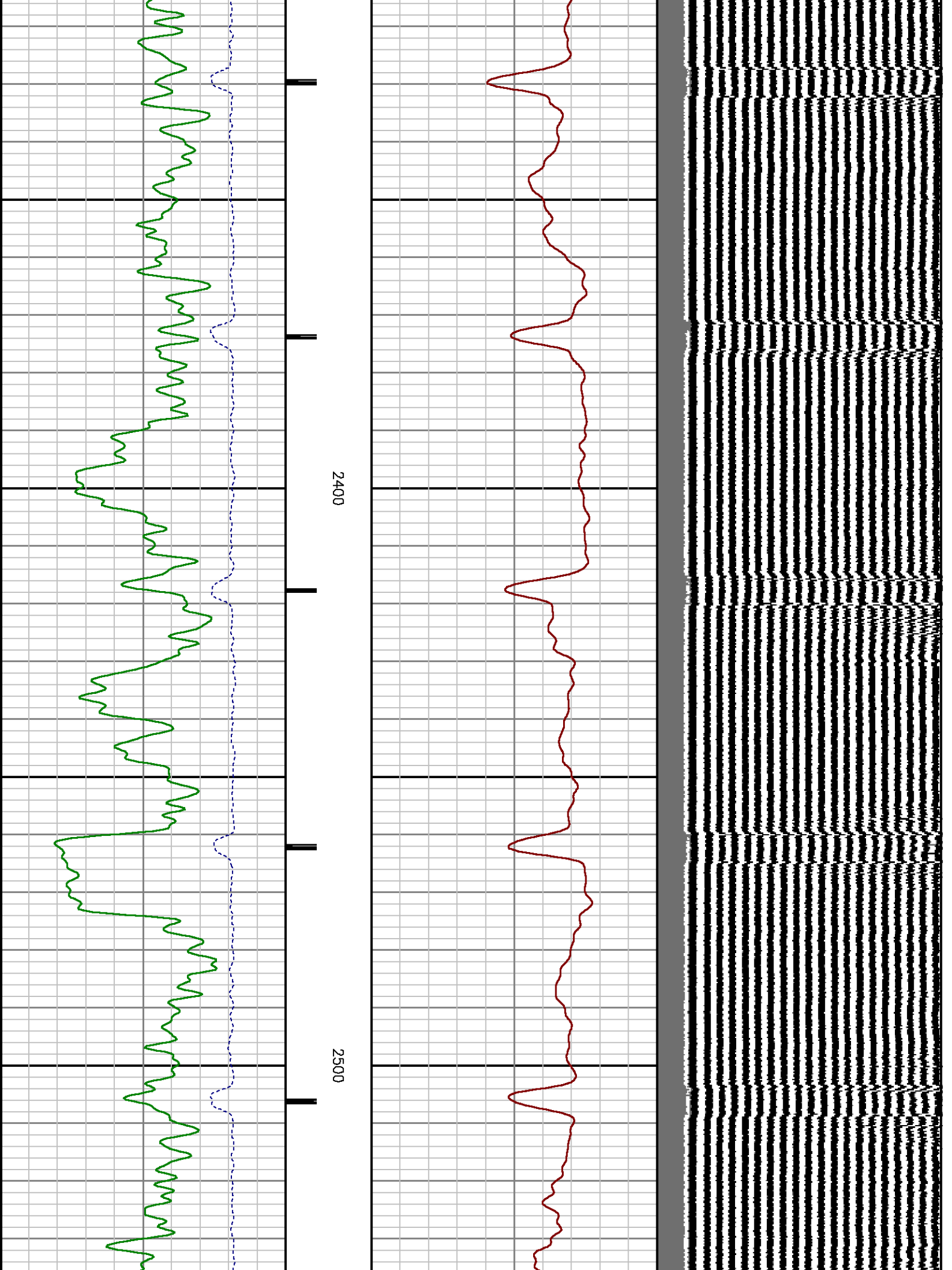


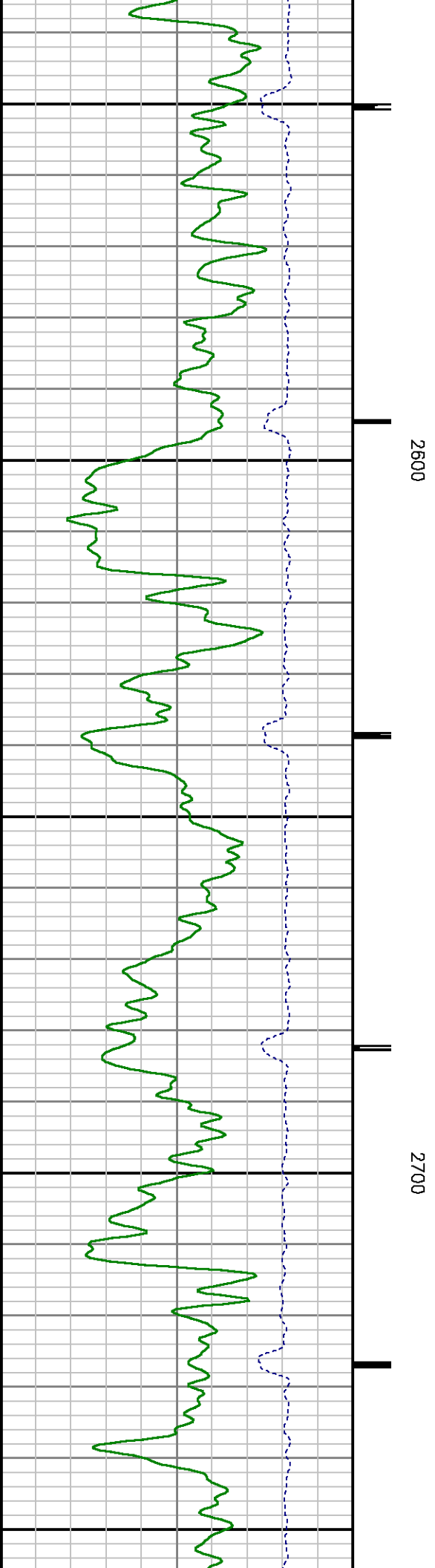
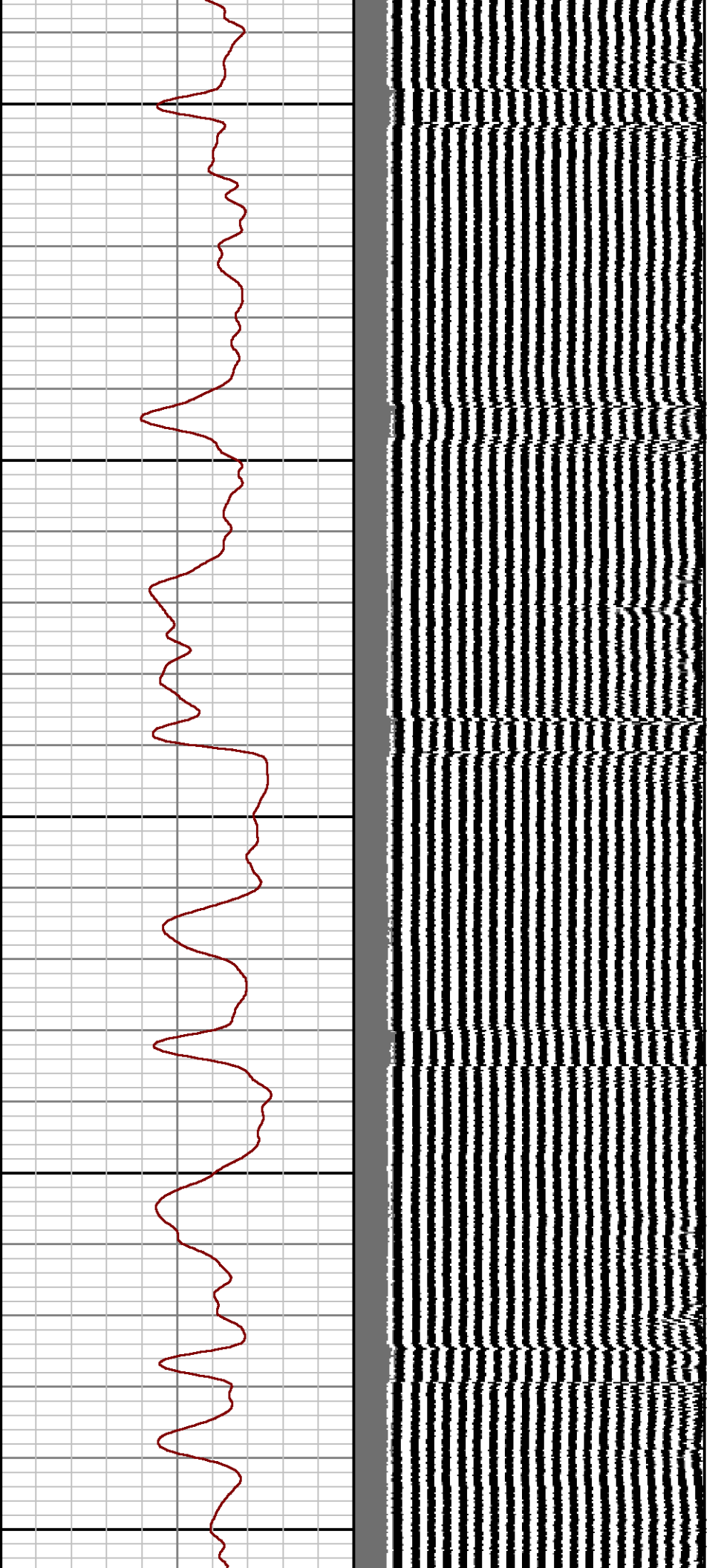
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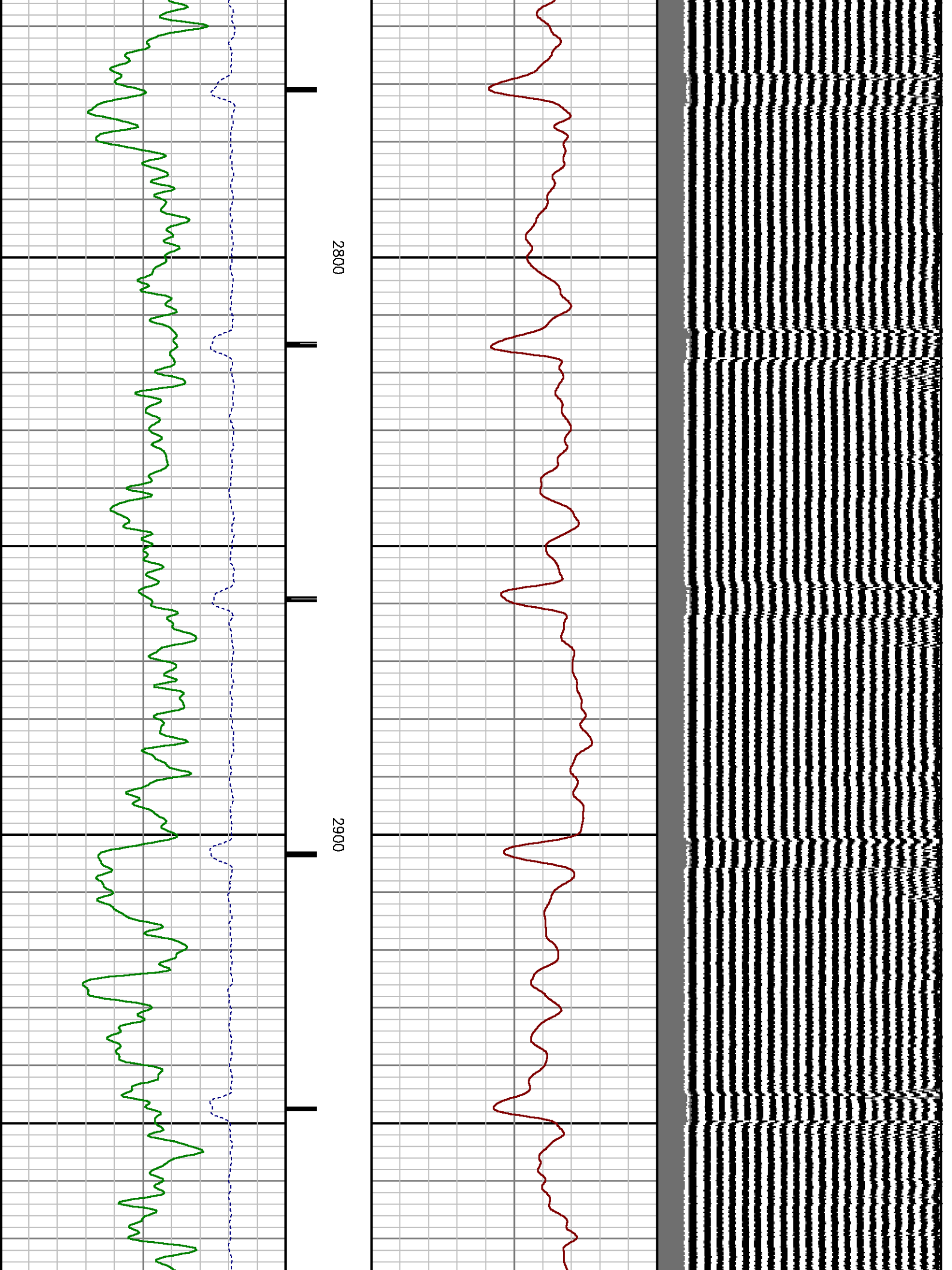
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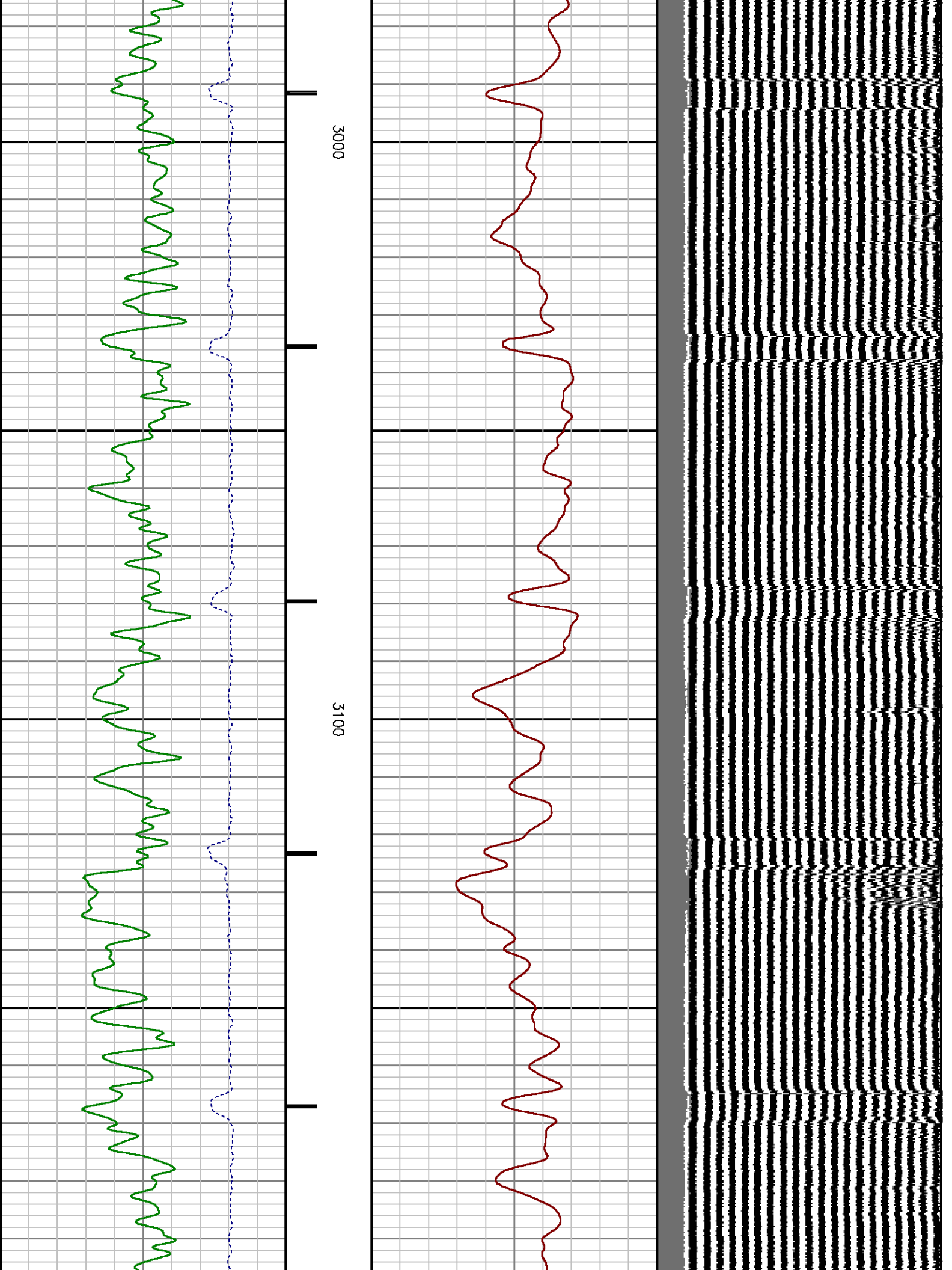
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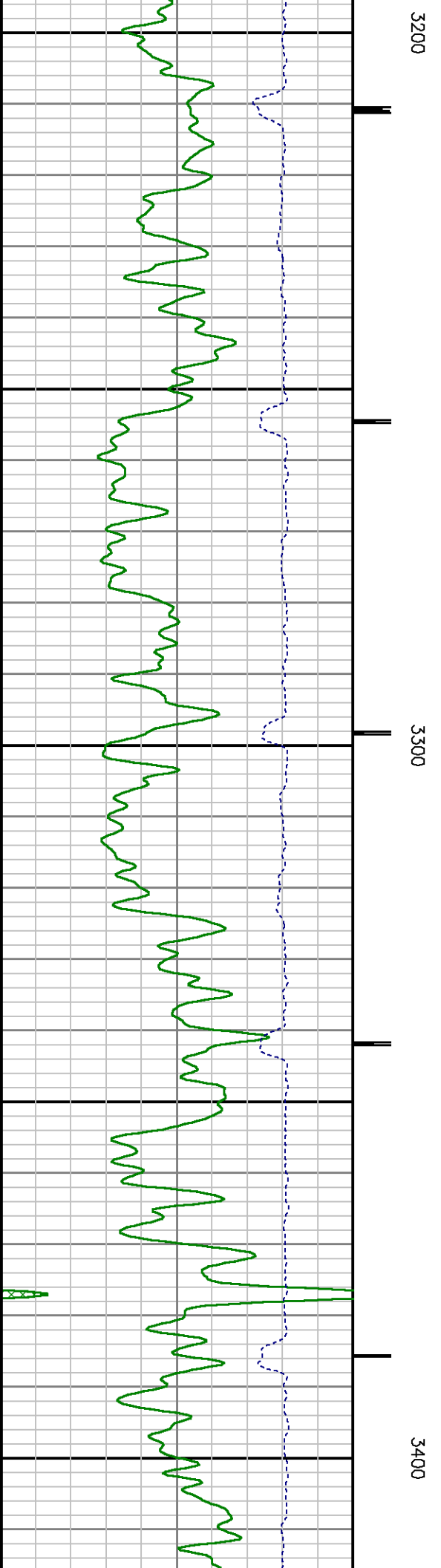
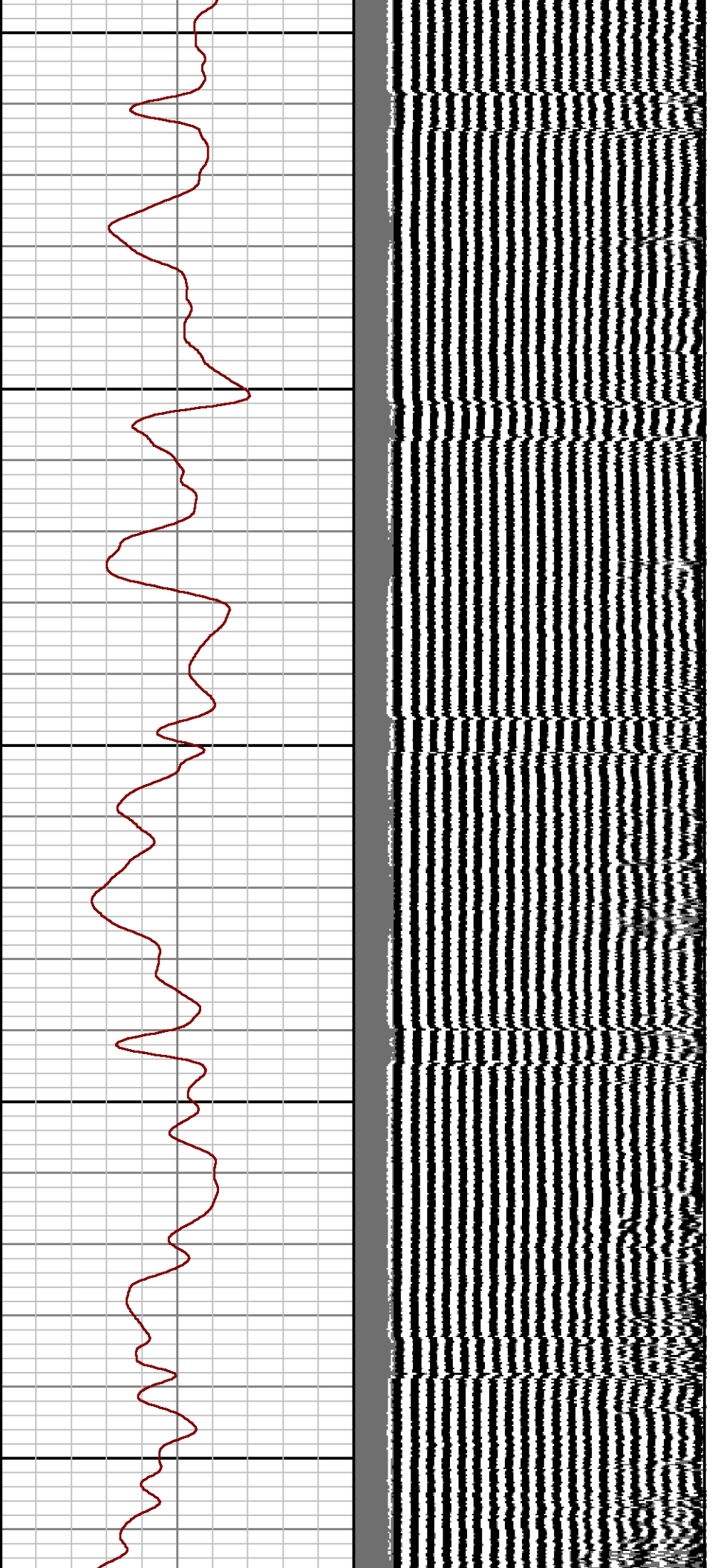


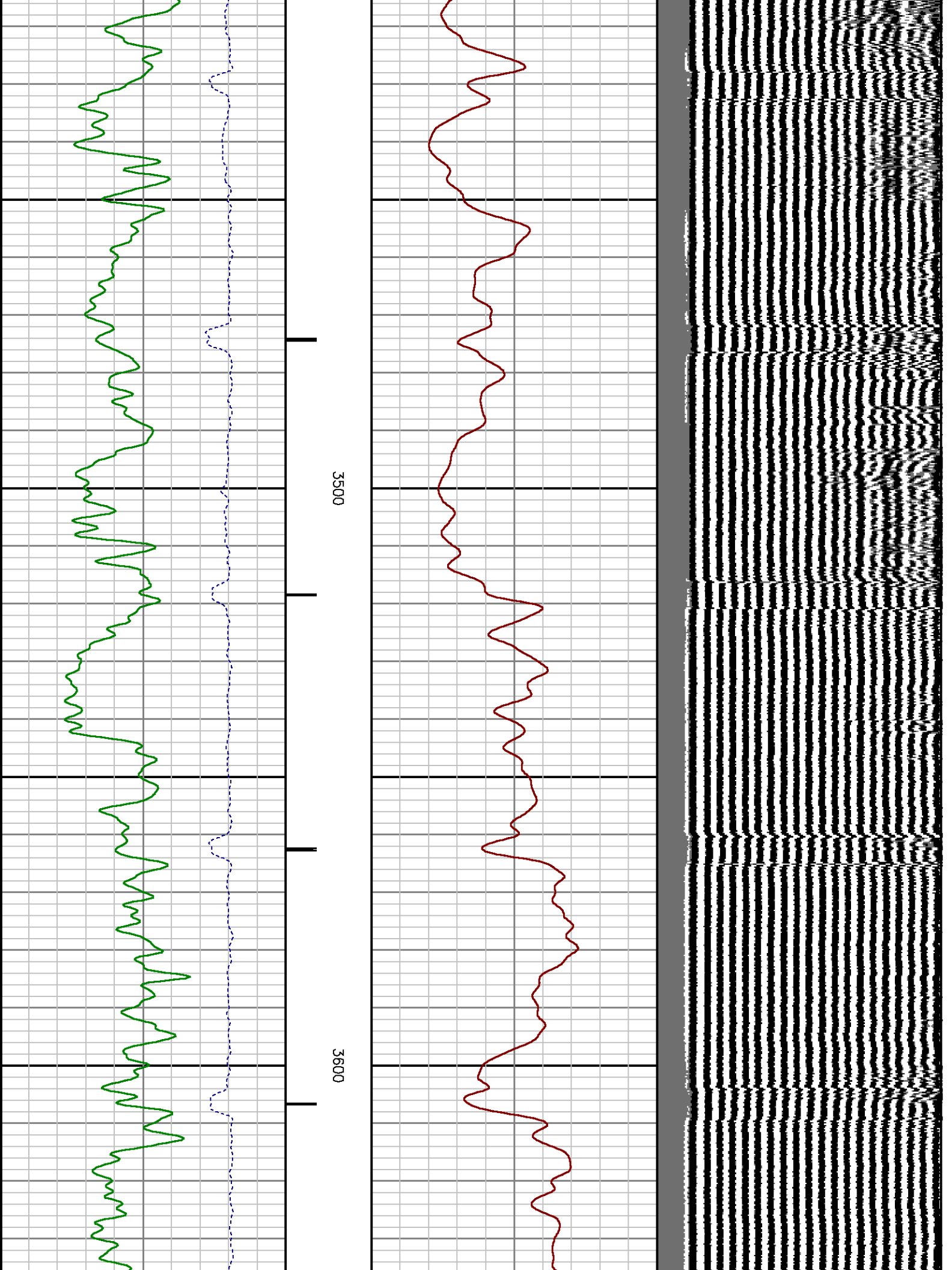


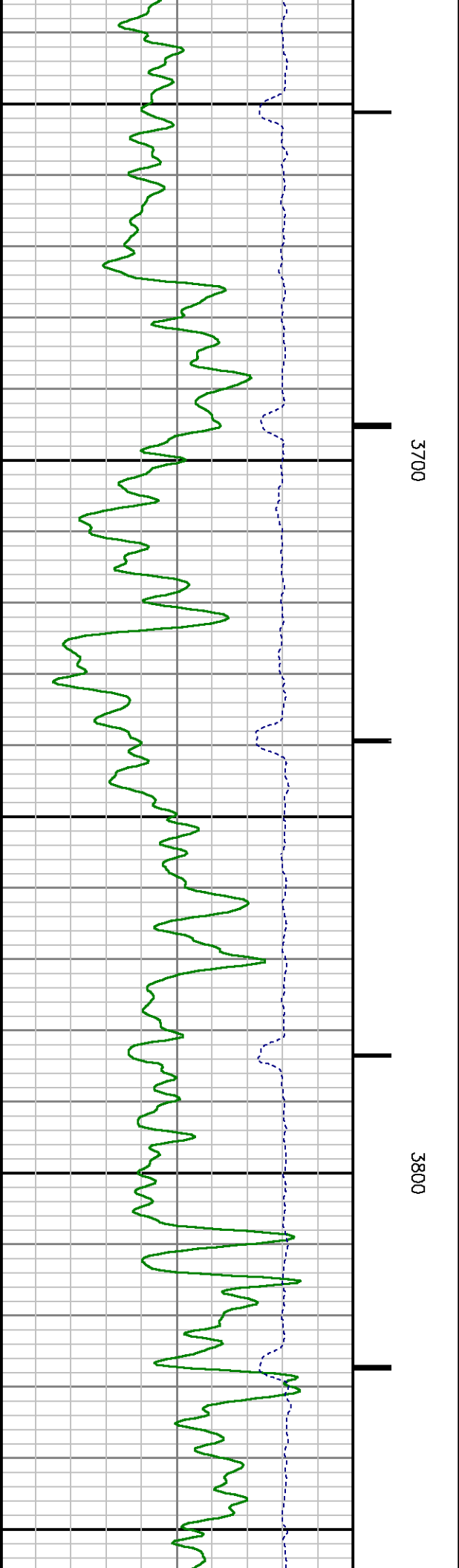
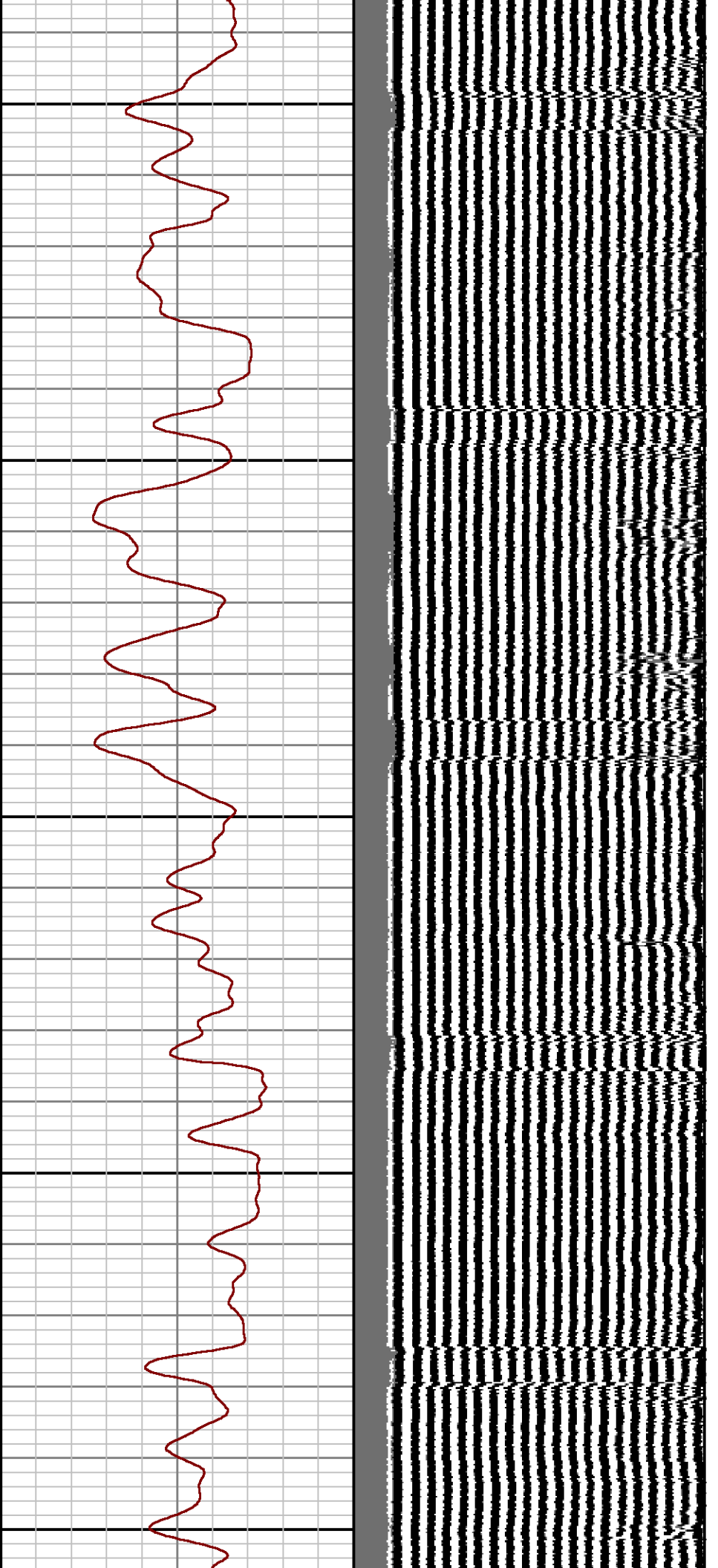


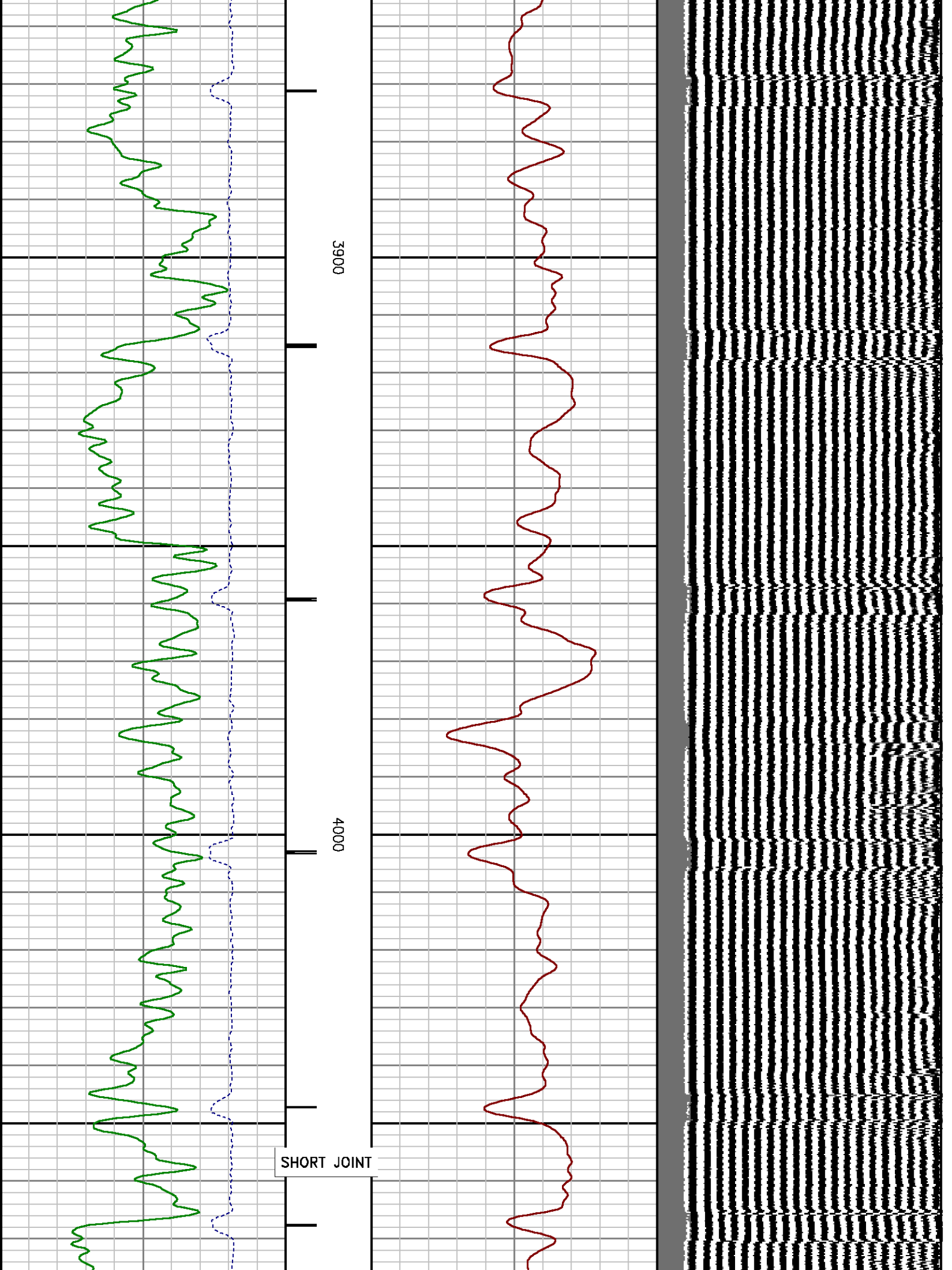


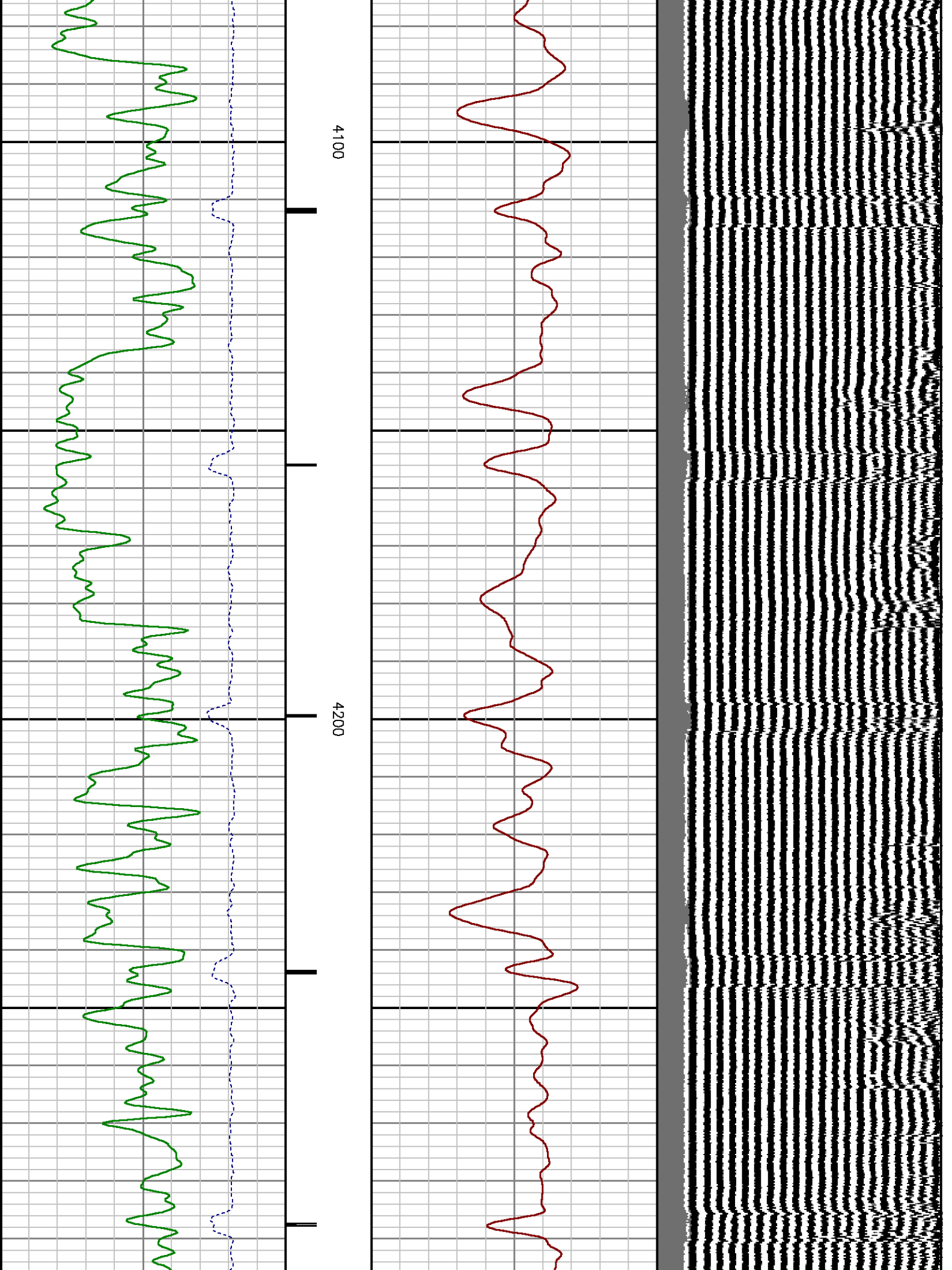


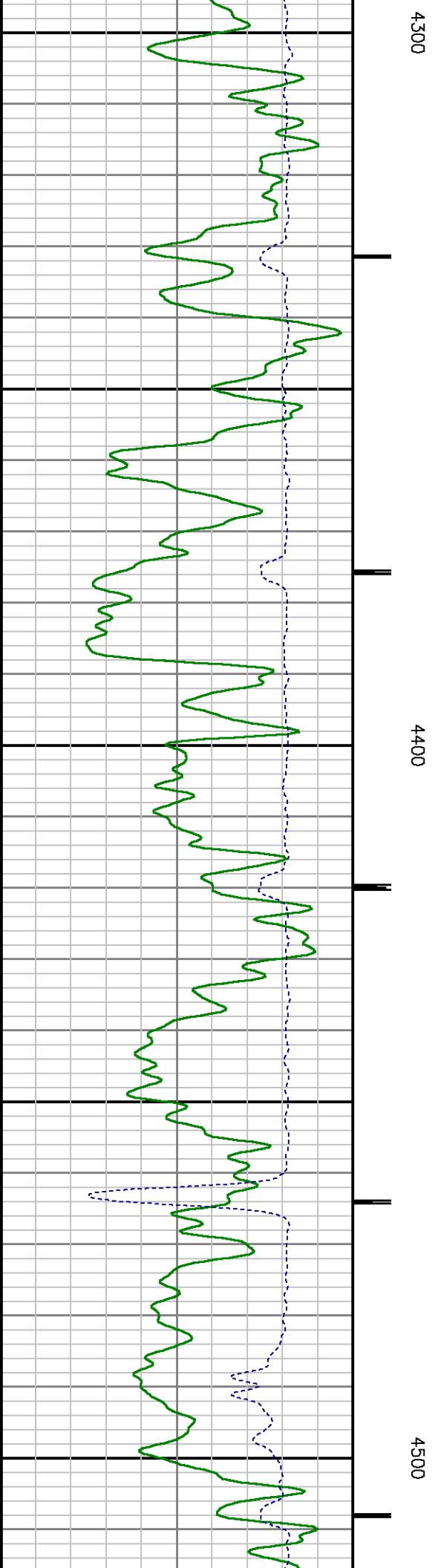
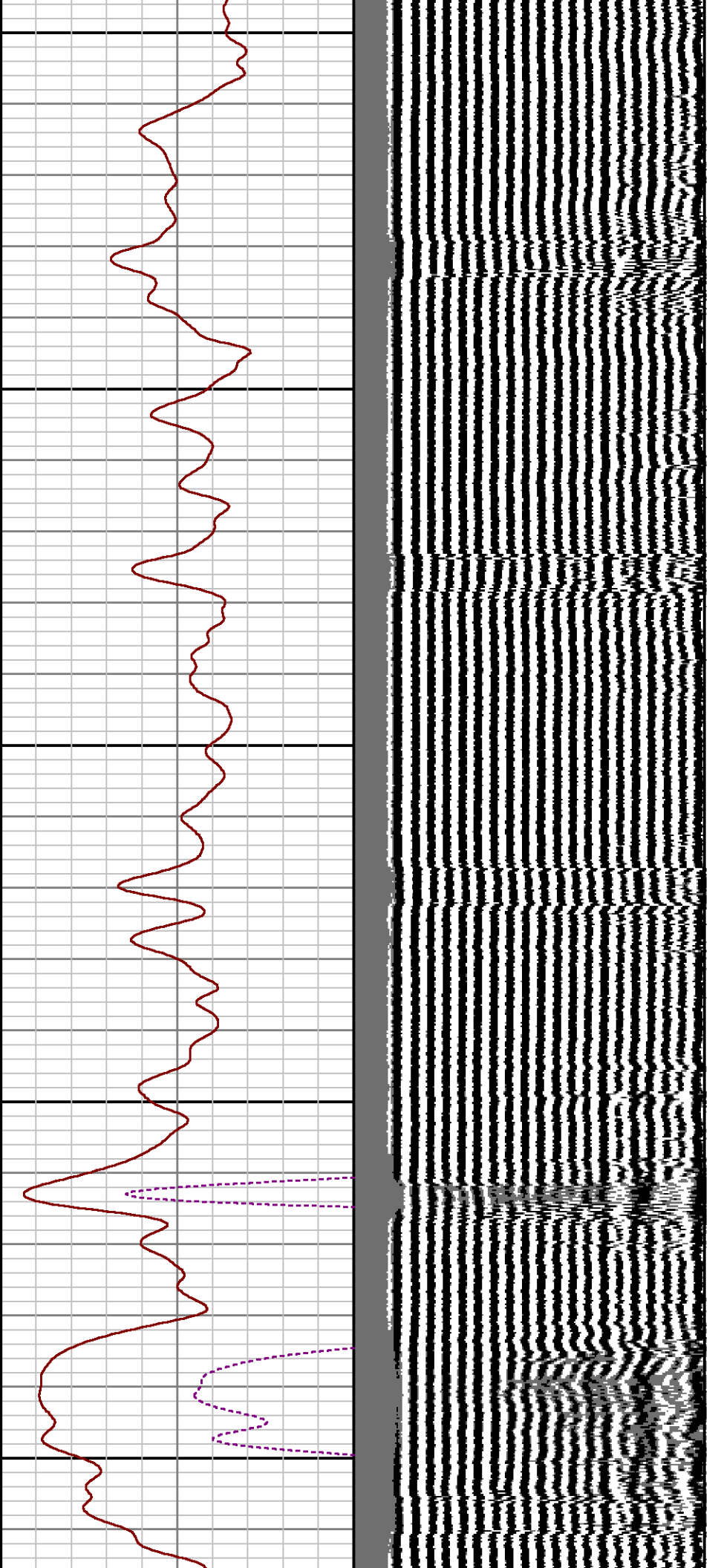


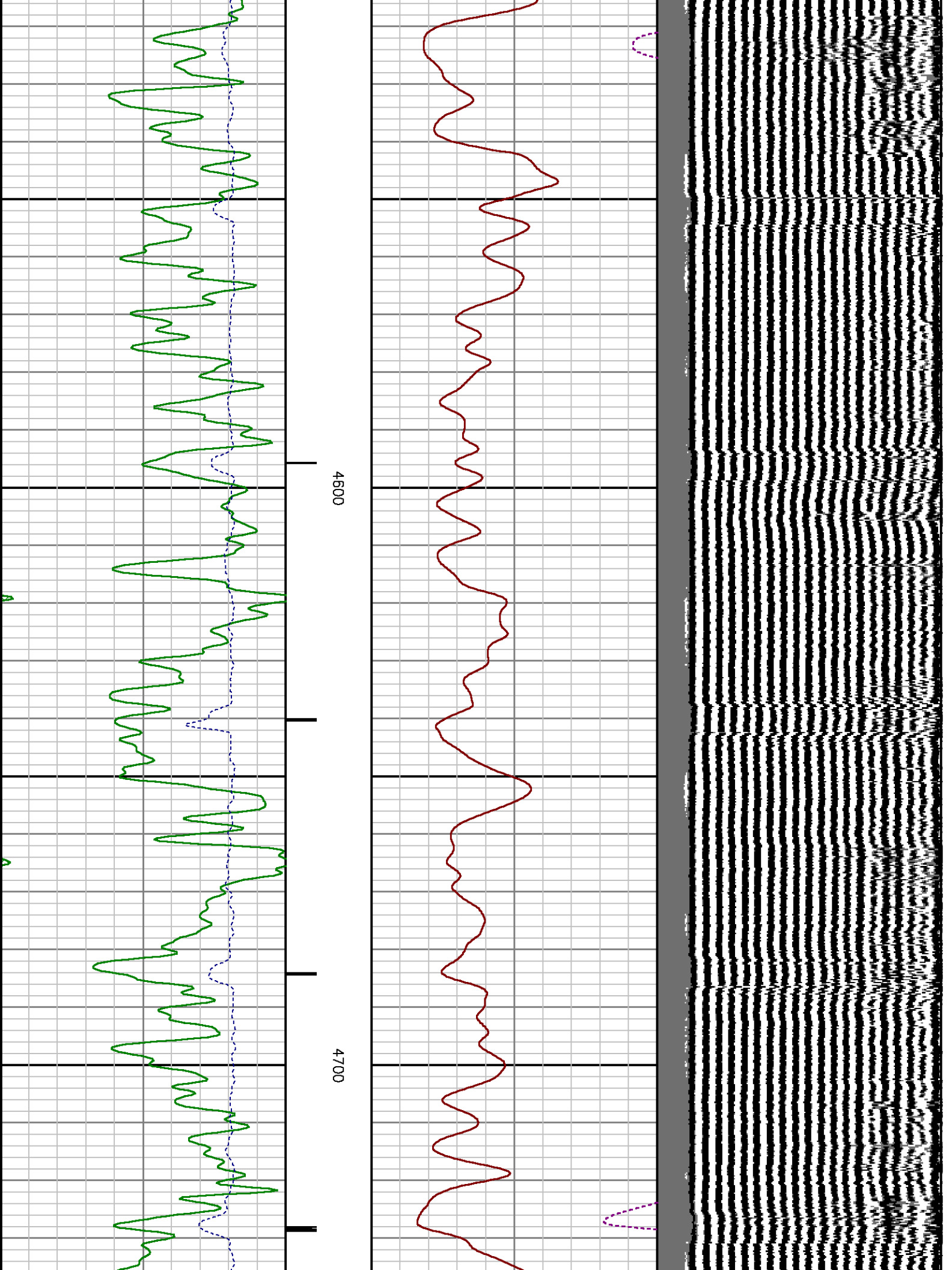


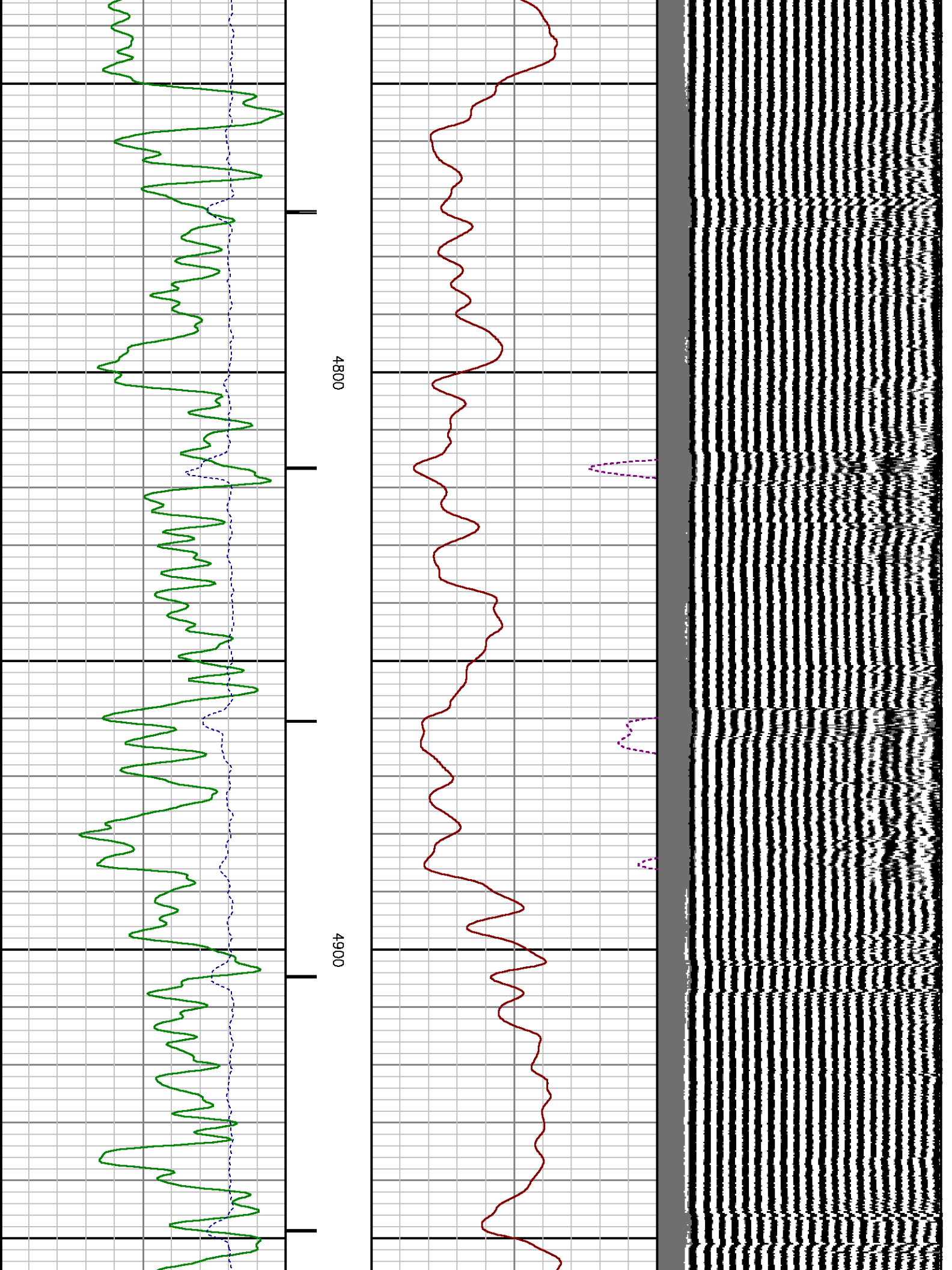


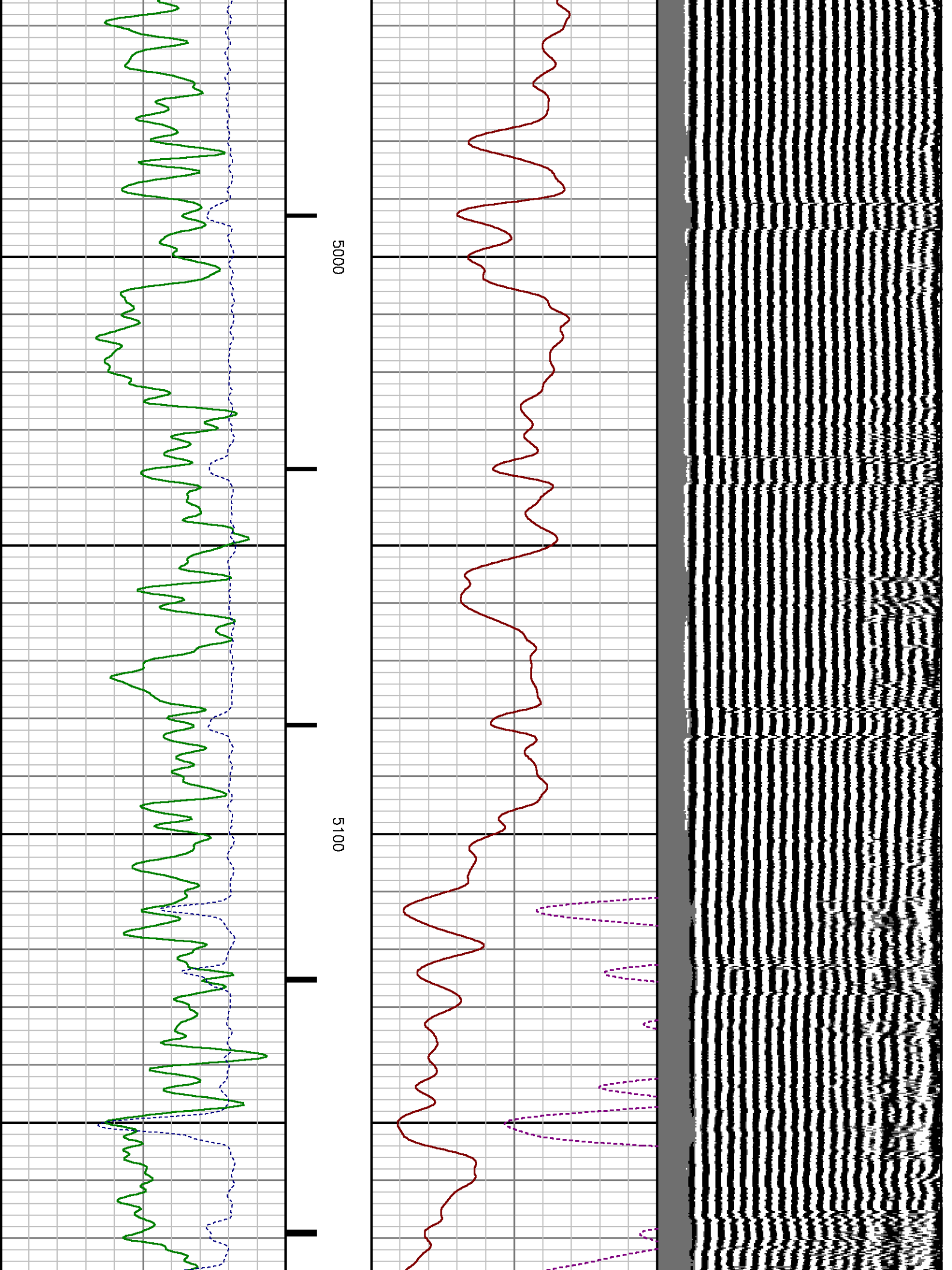


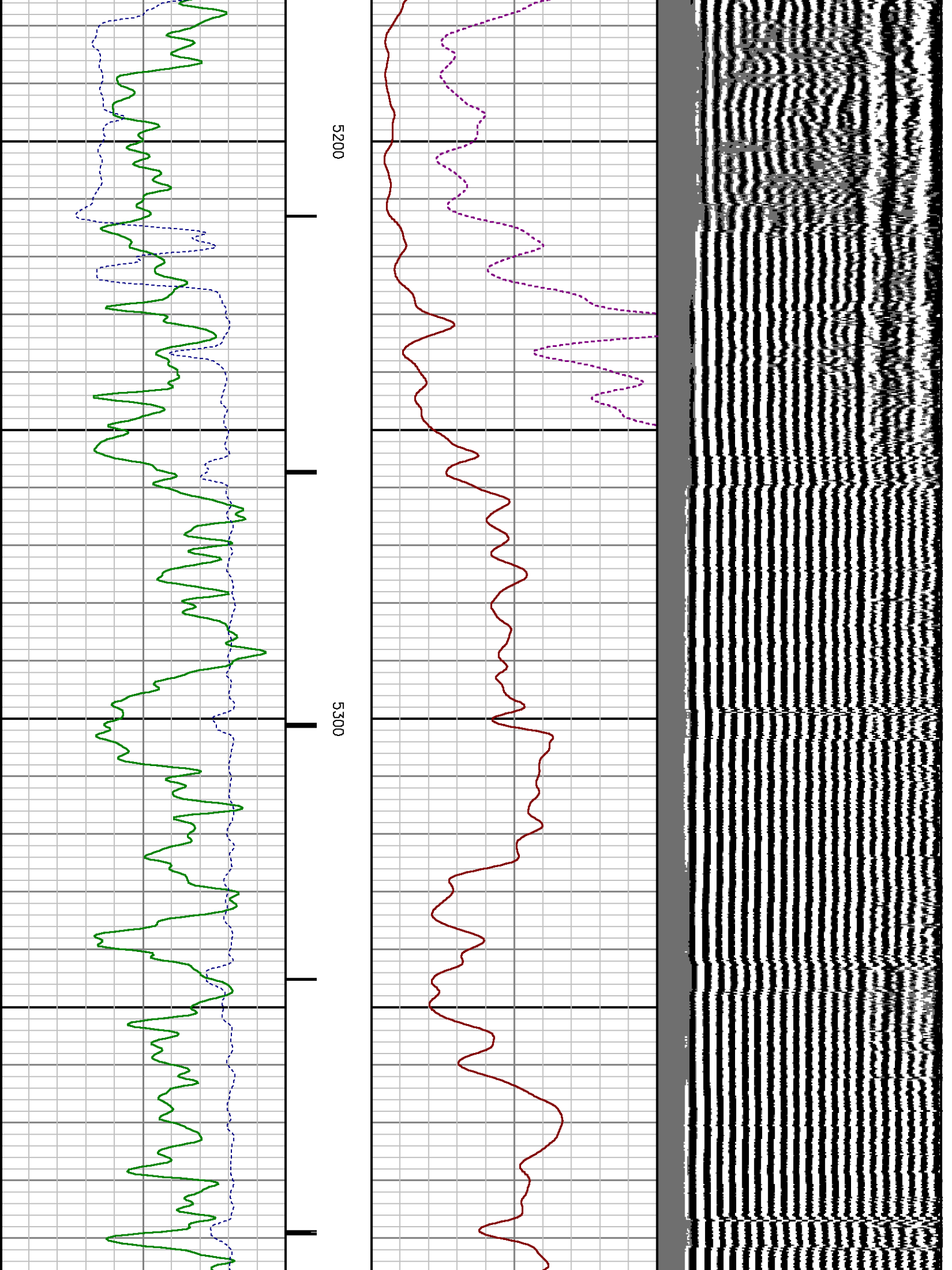


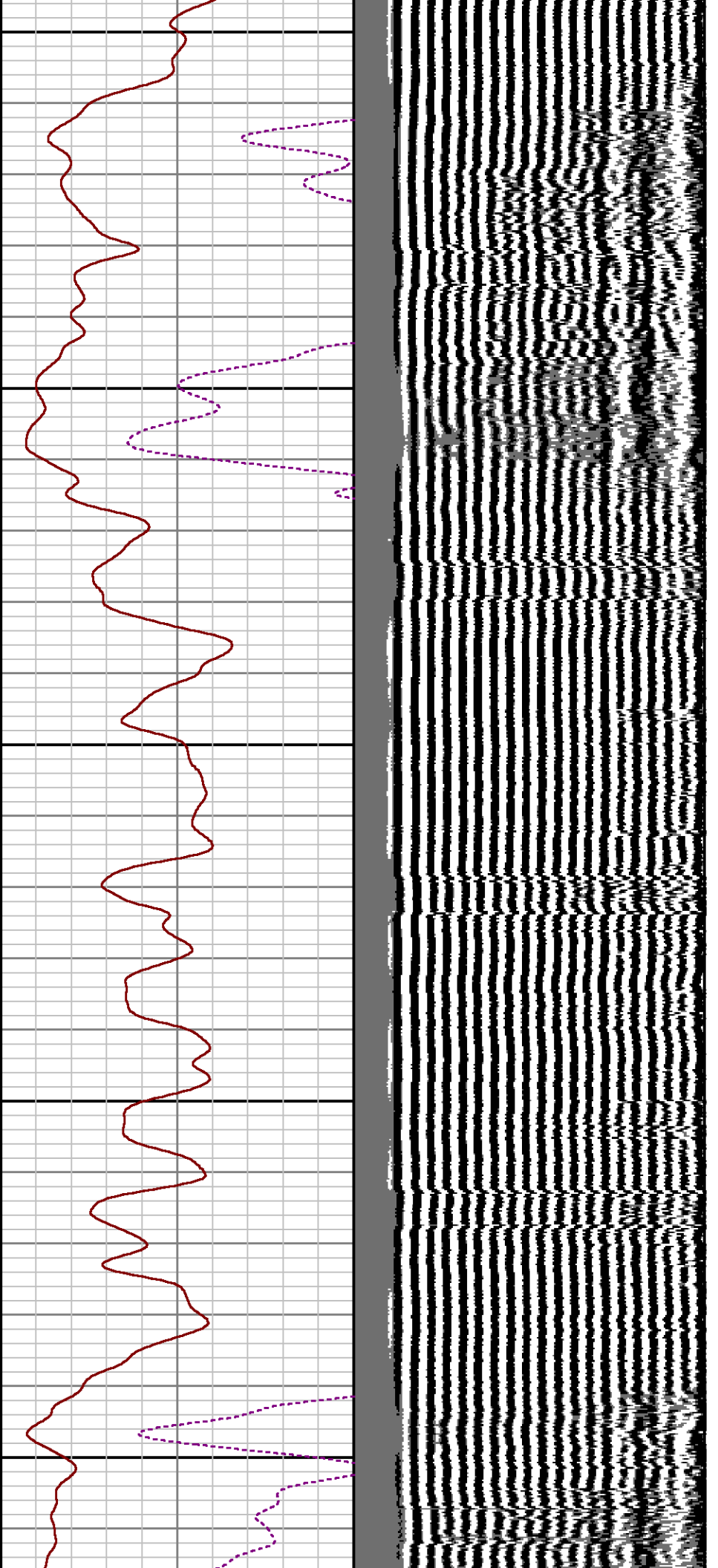








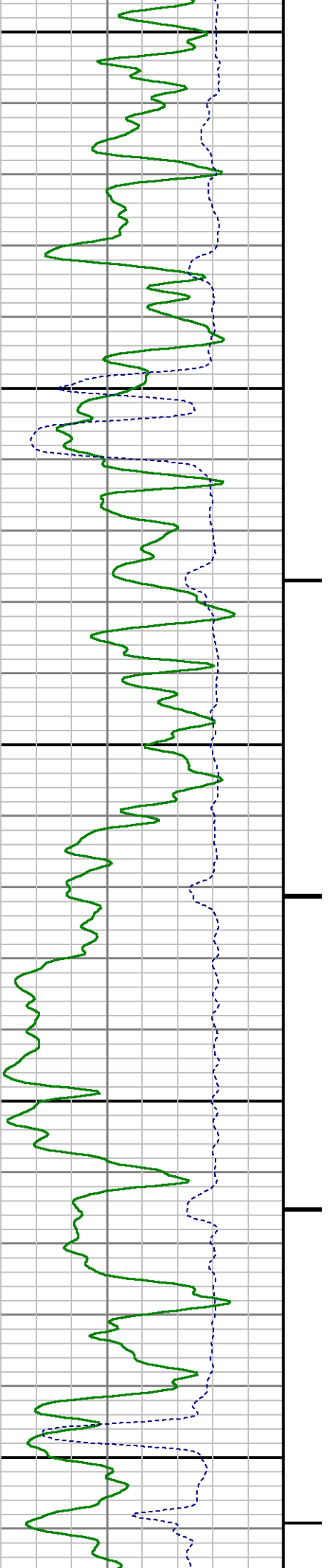


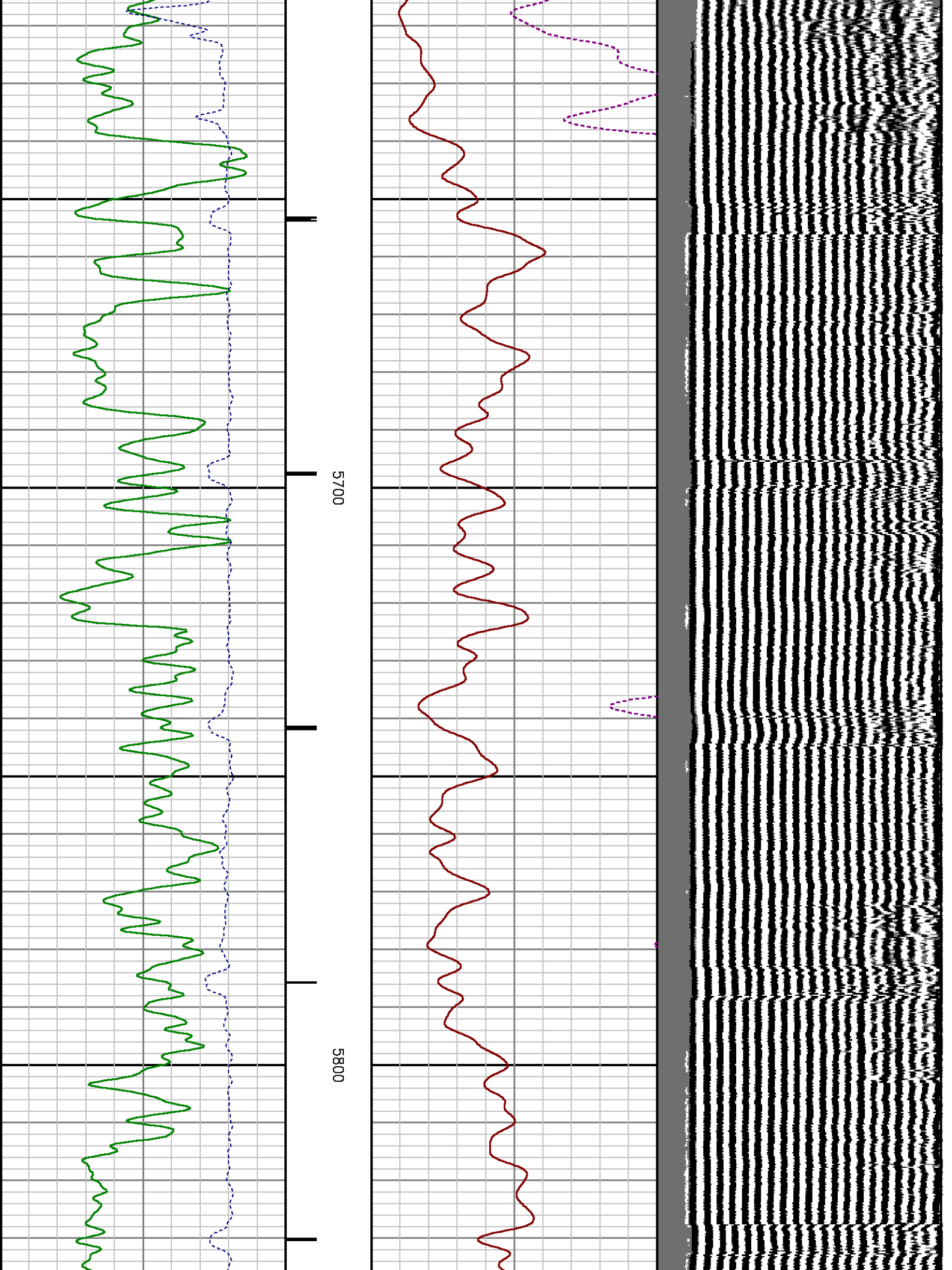


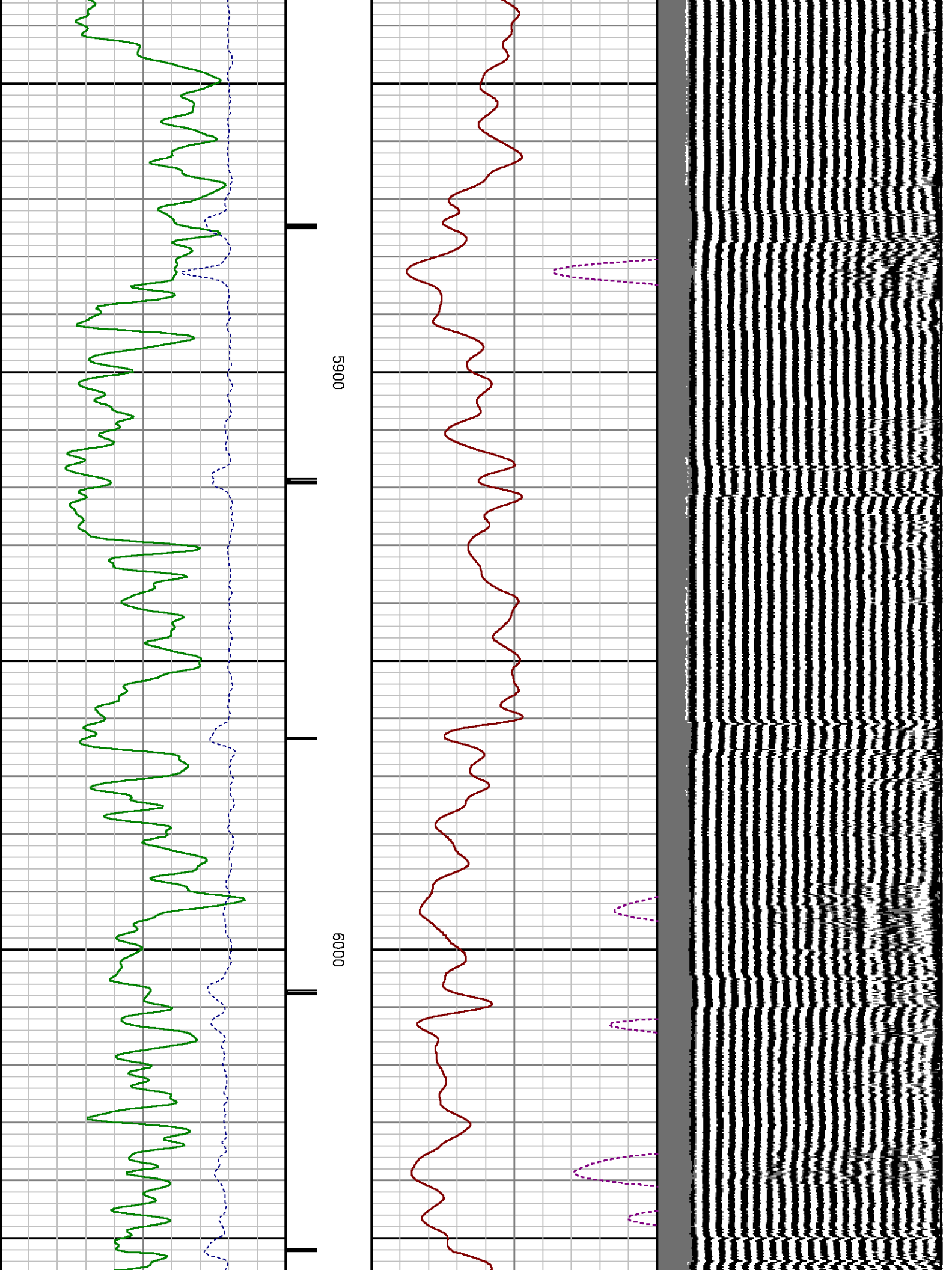
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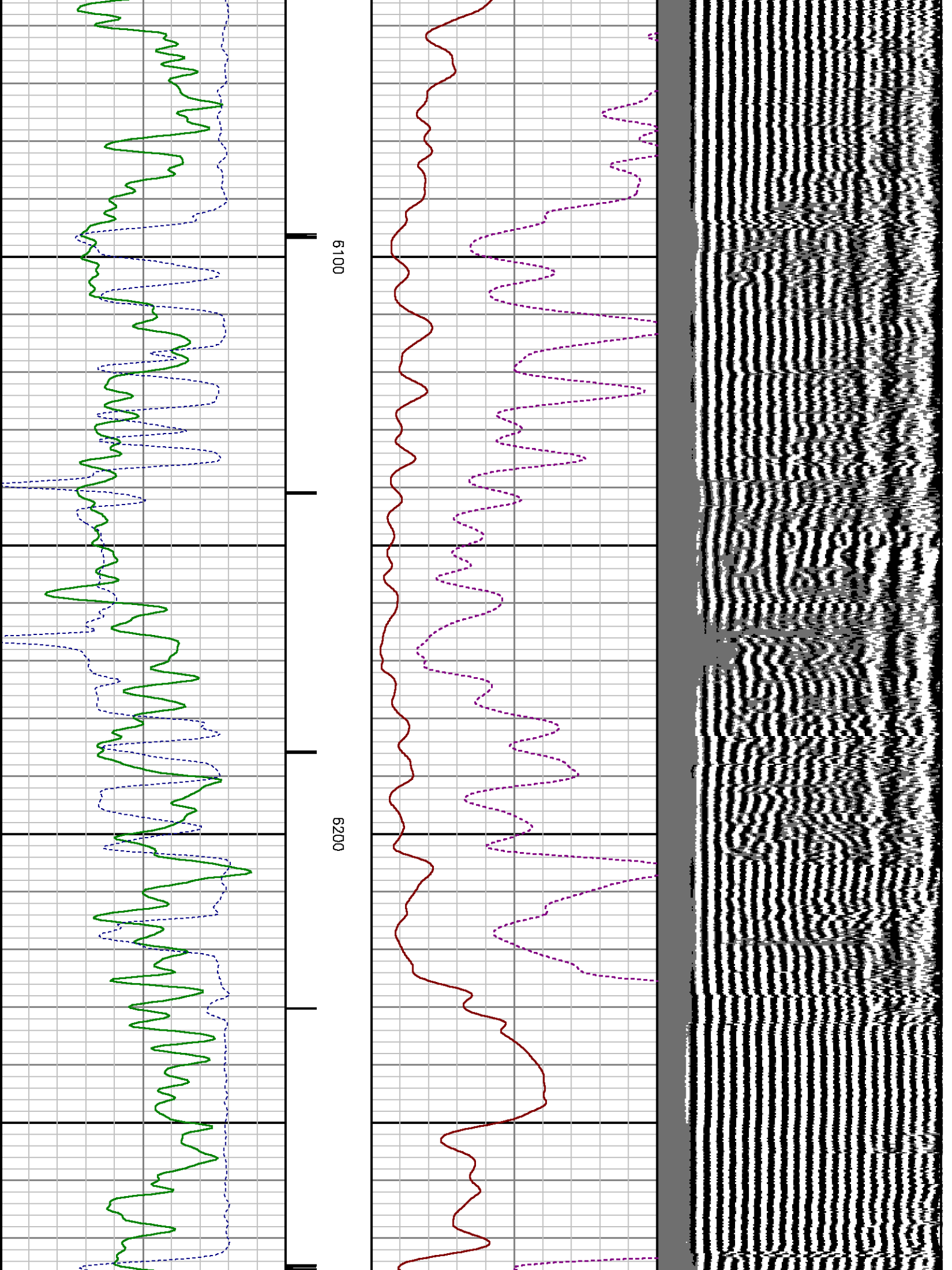
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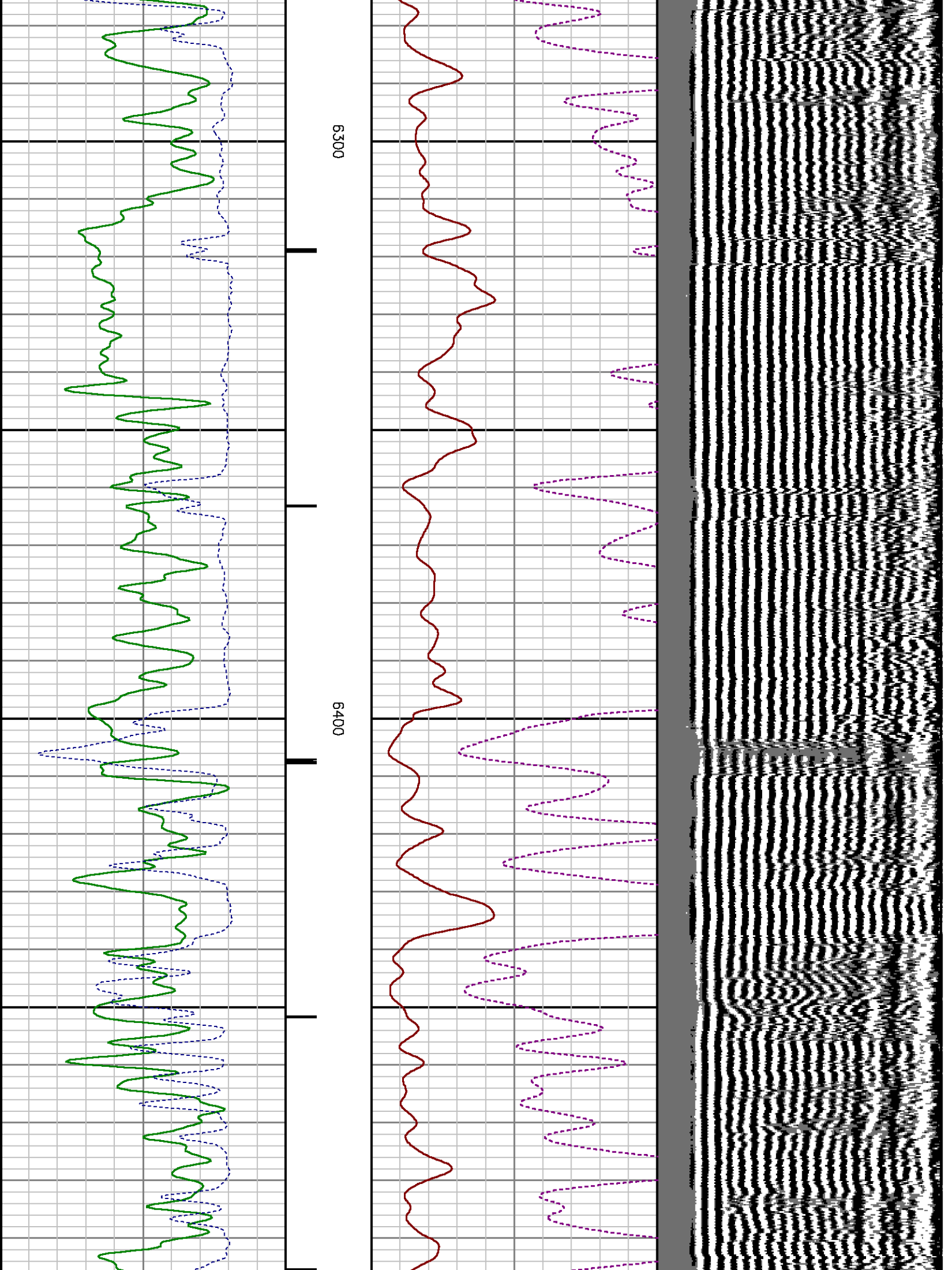
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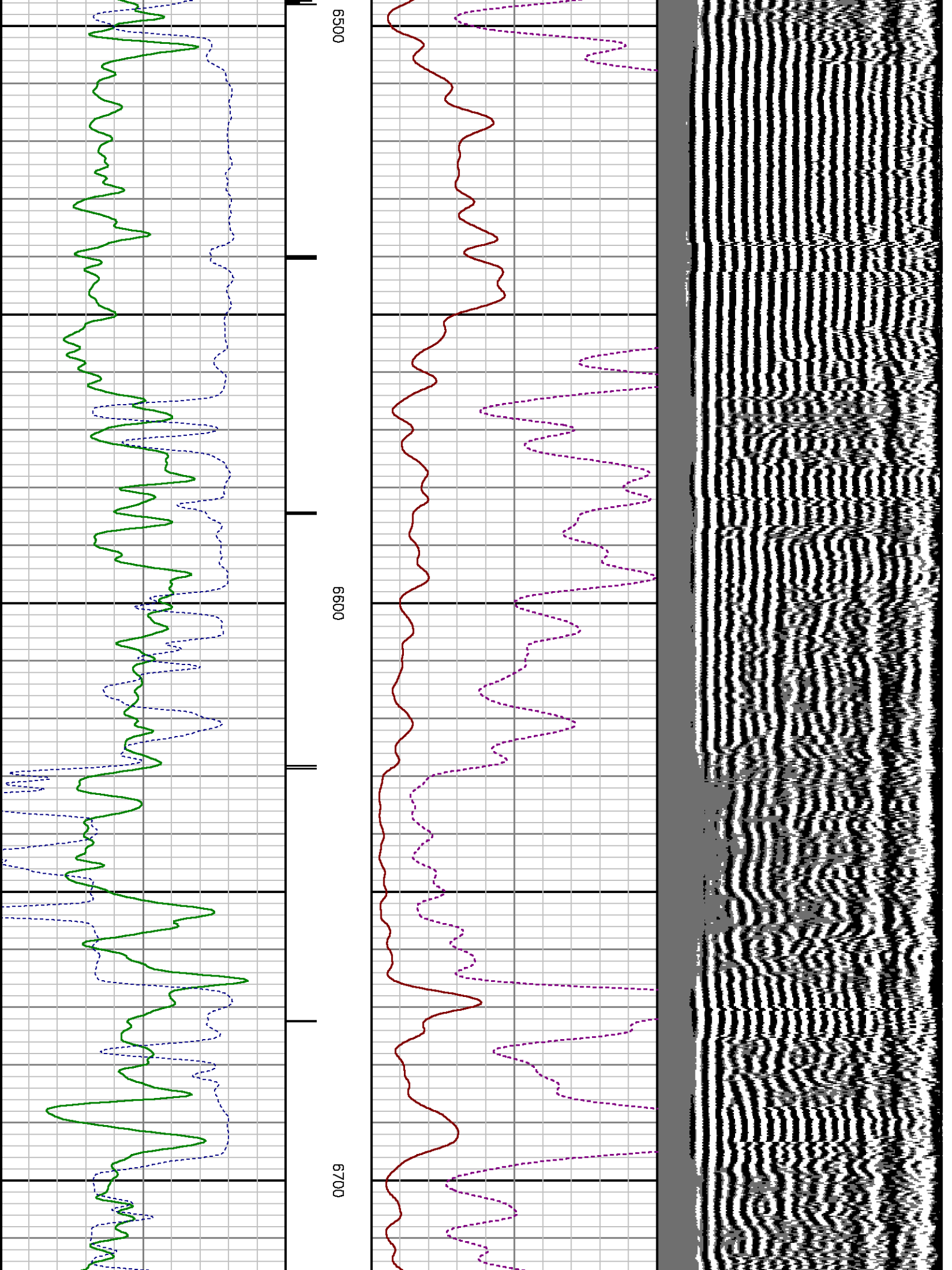


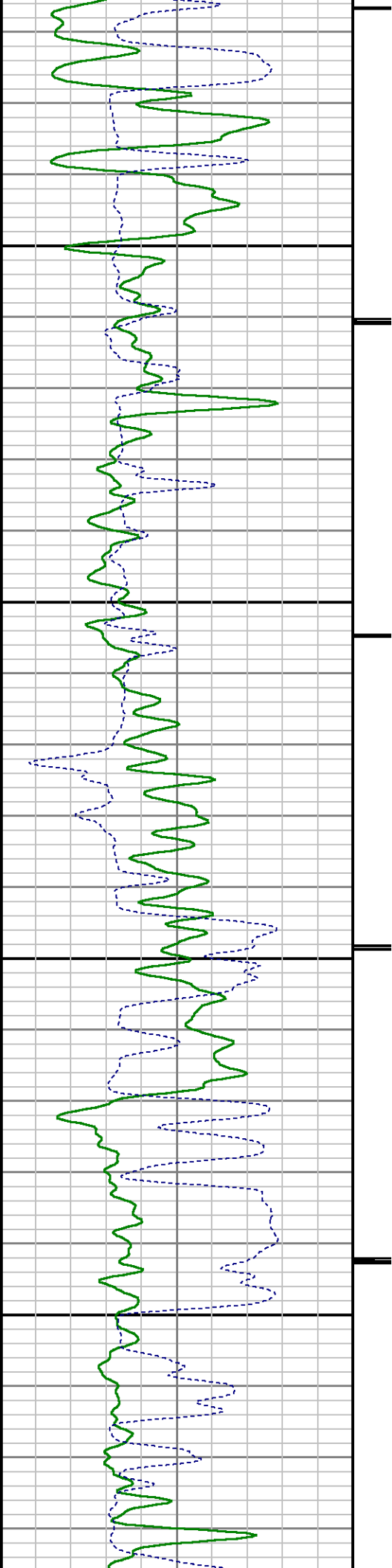






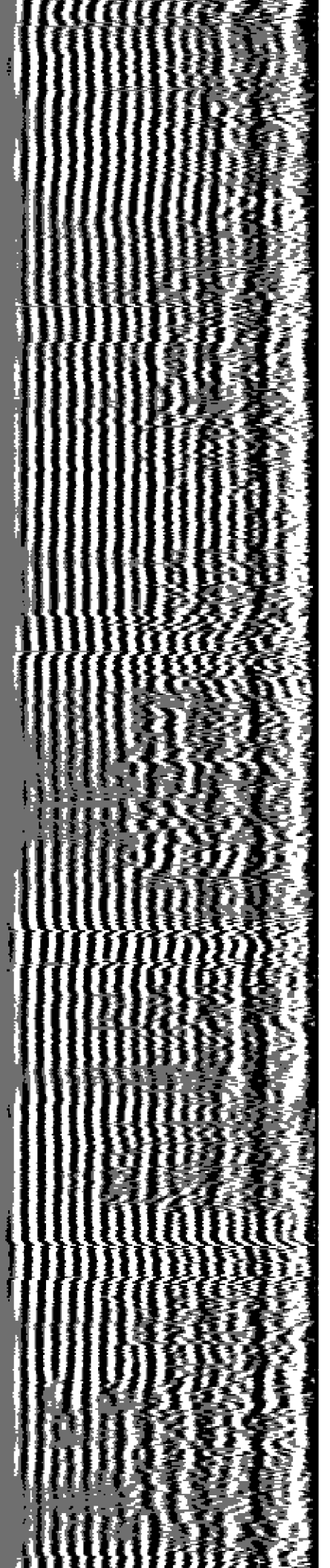
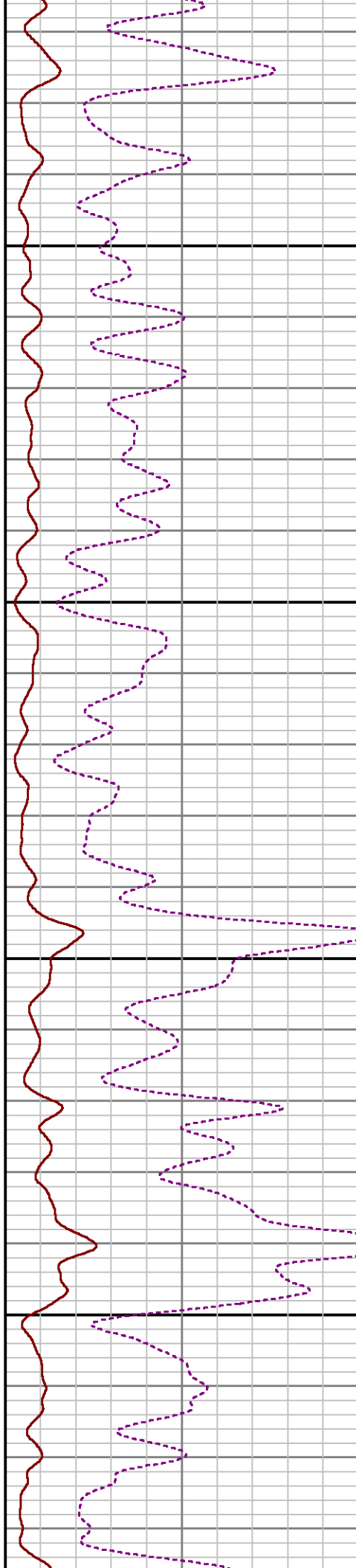


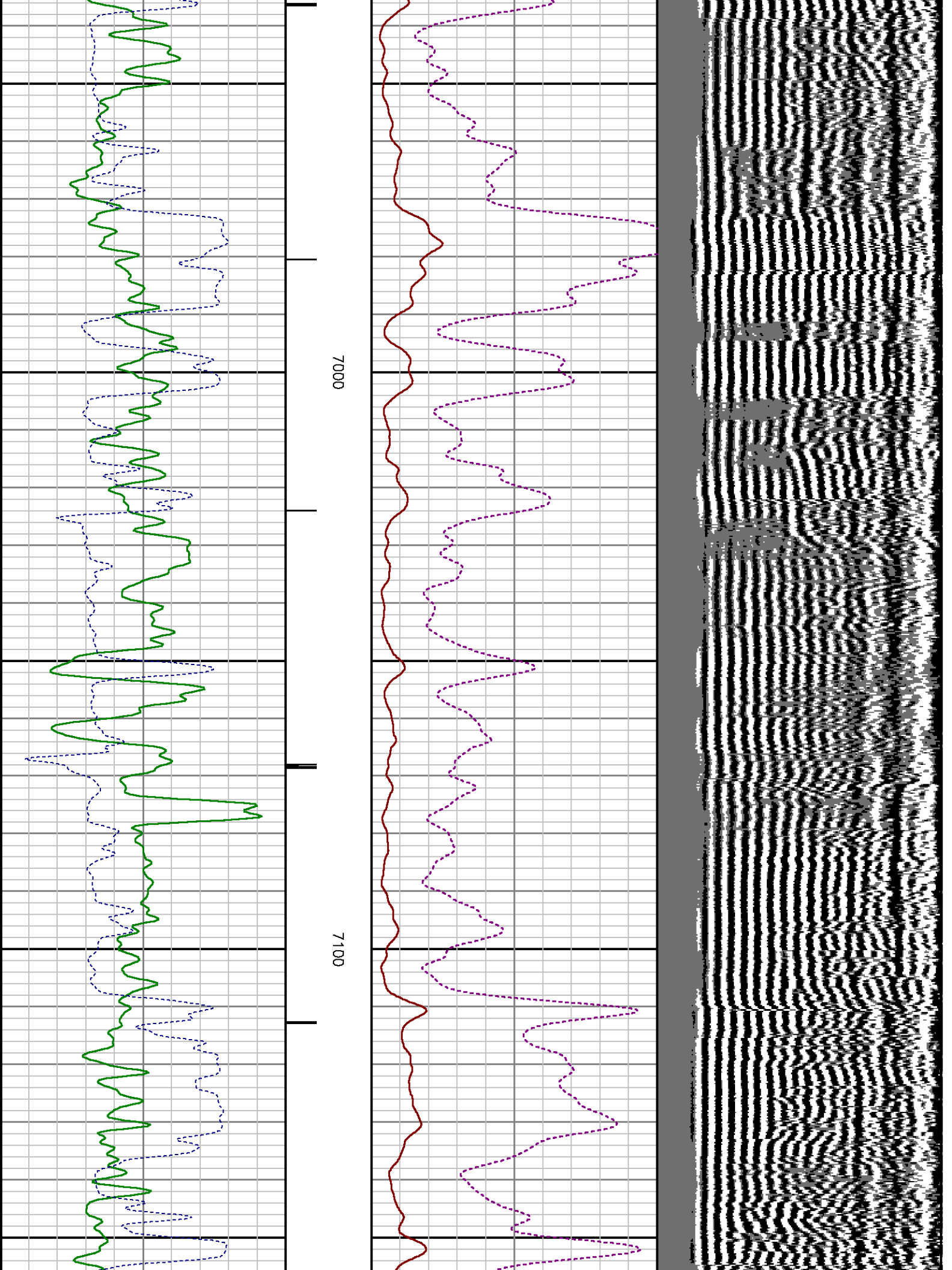


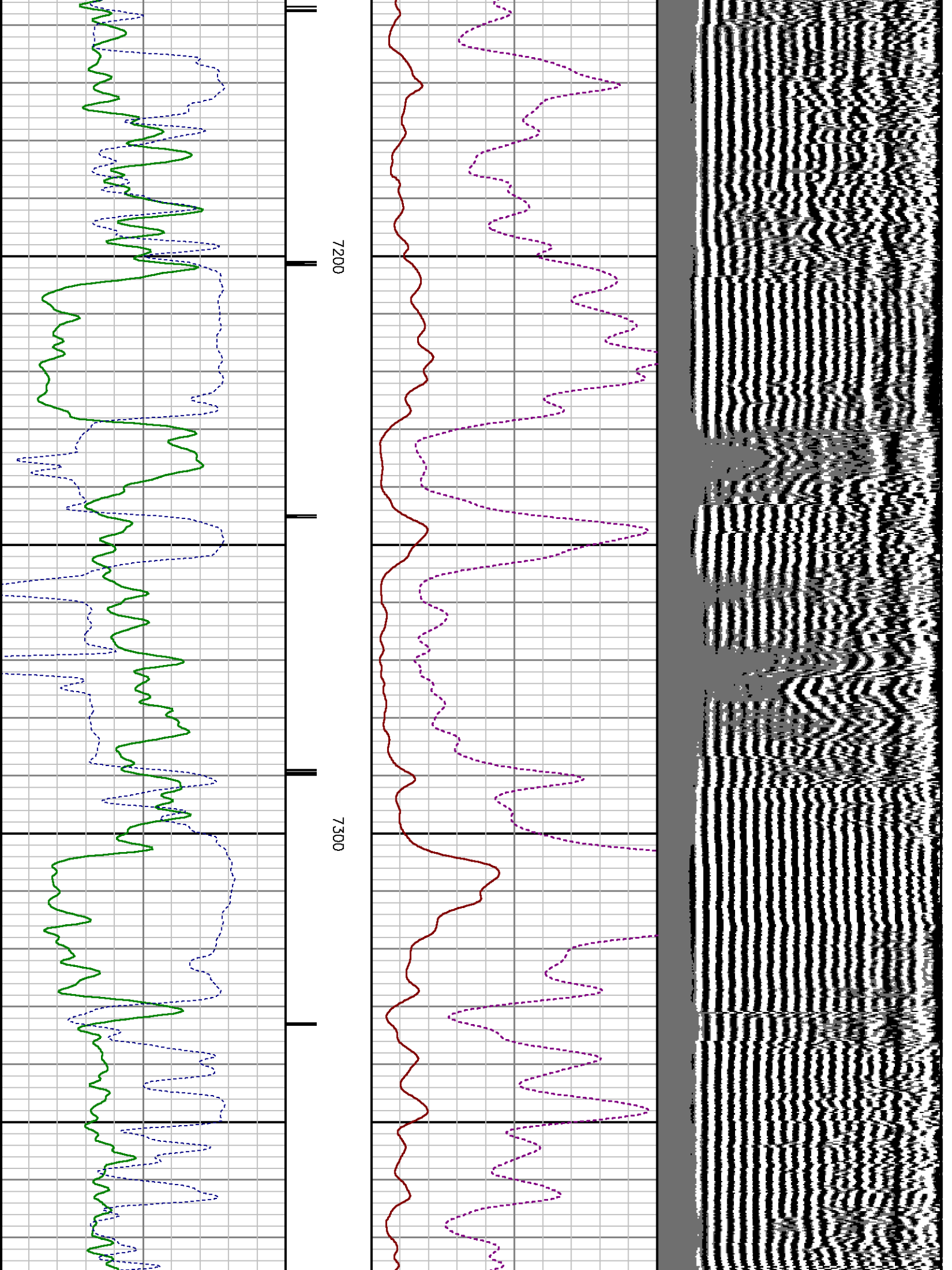


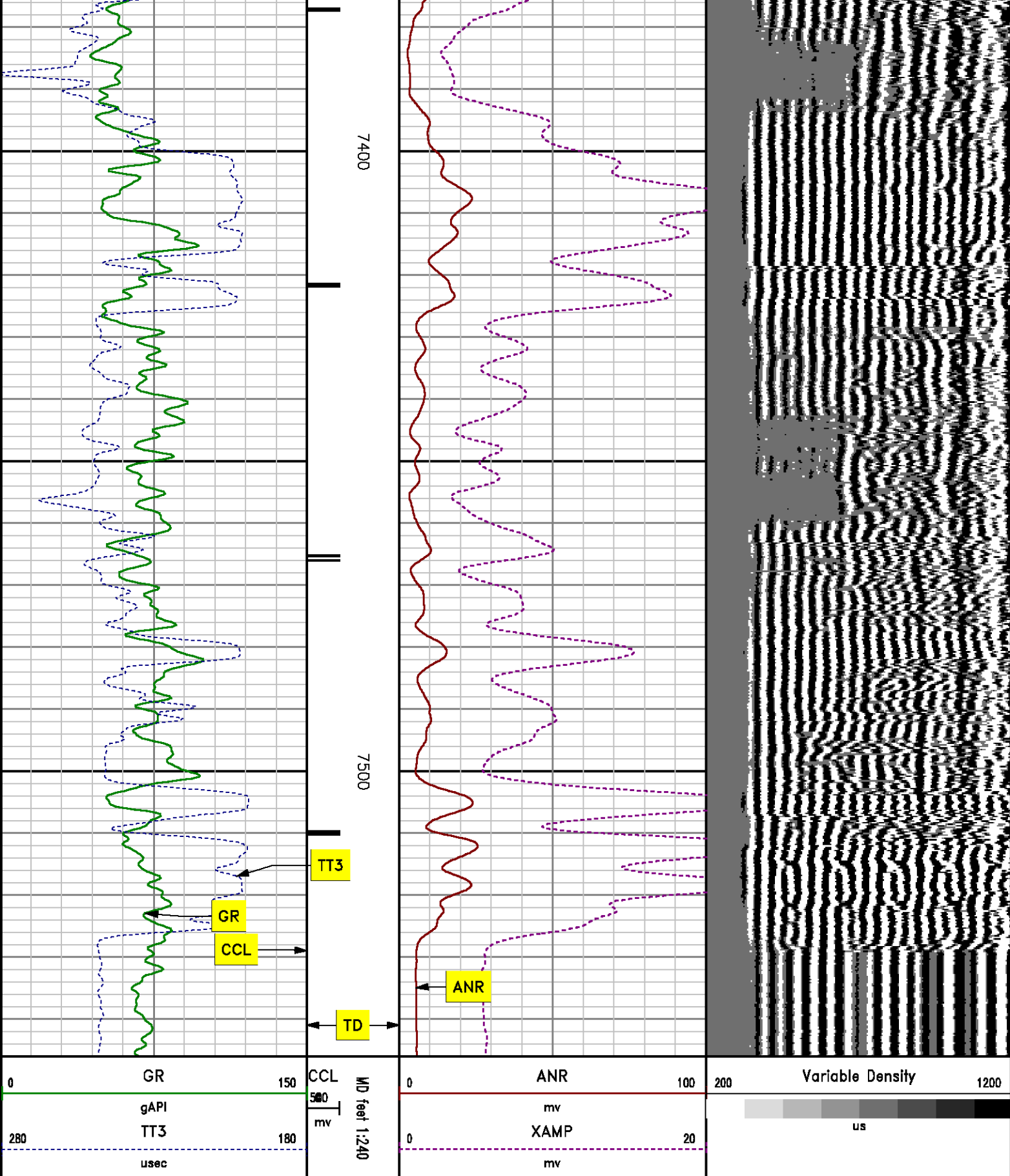
0089

0069









SECONDARY PRESENTATION

0. DSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	35.093	7568.000
RAL	Amp Gate Start Near	195.000	usec	35.093	7568.000
RAL	Amp Gate Start Radial	195.000	usec	35.093	7568.000
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RAL	Fluid Travel Time	200.000	usec/ft	35.093	7568.687

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

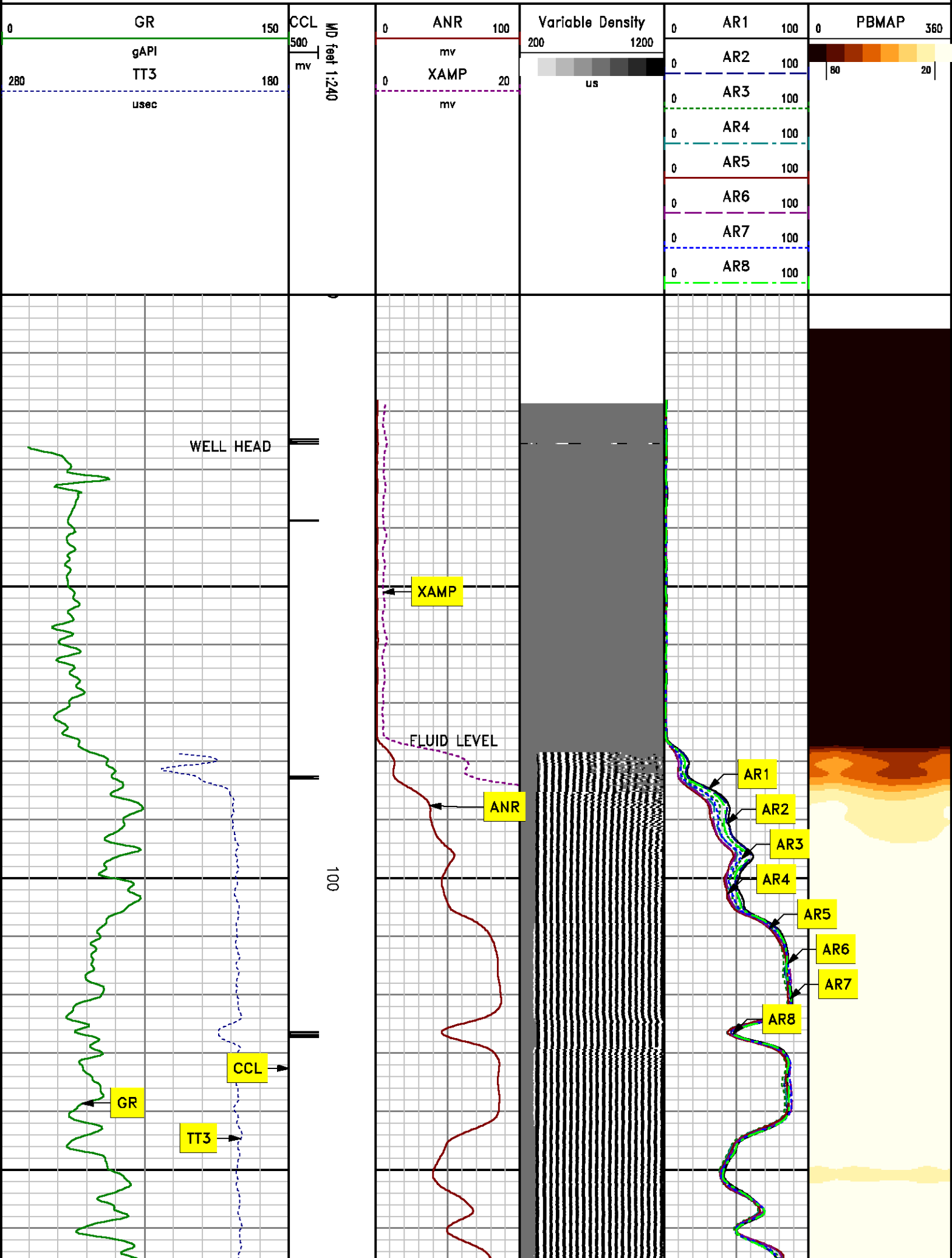
Company : WPX ENERGY

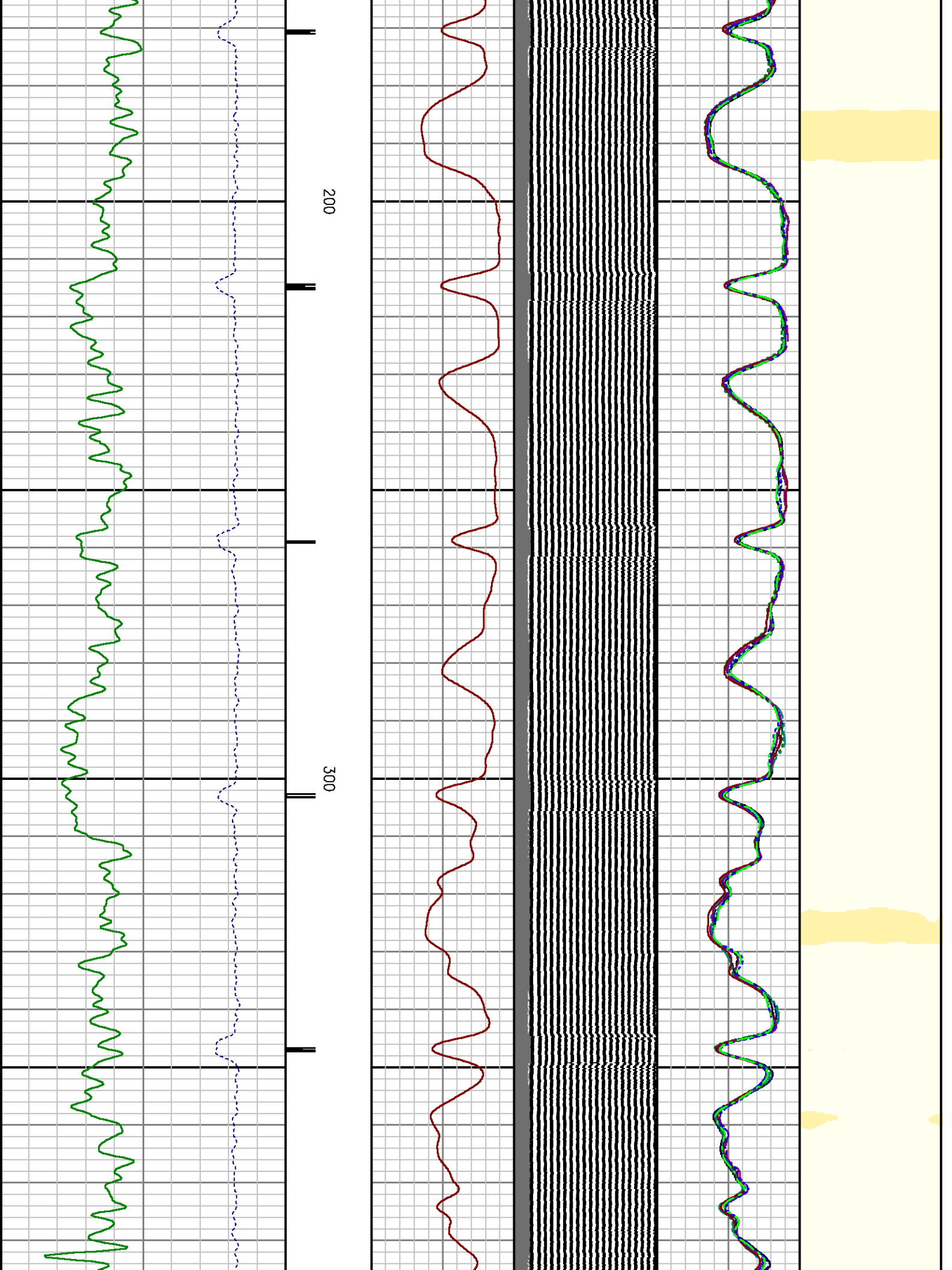
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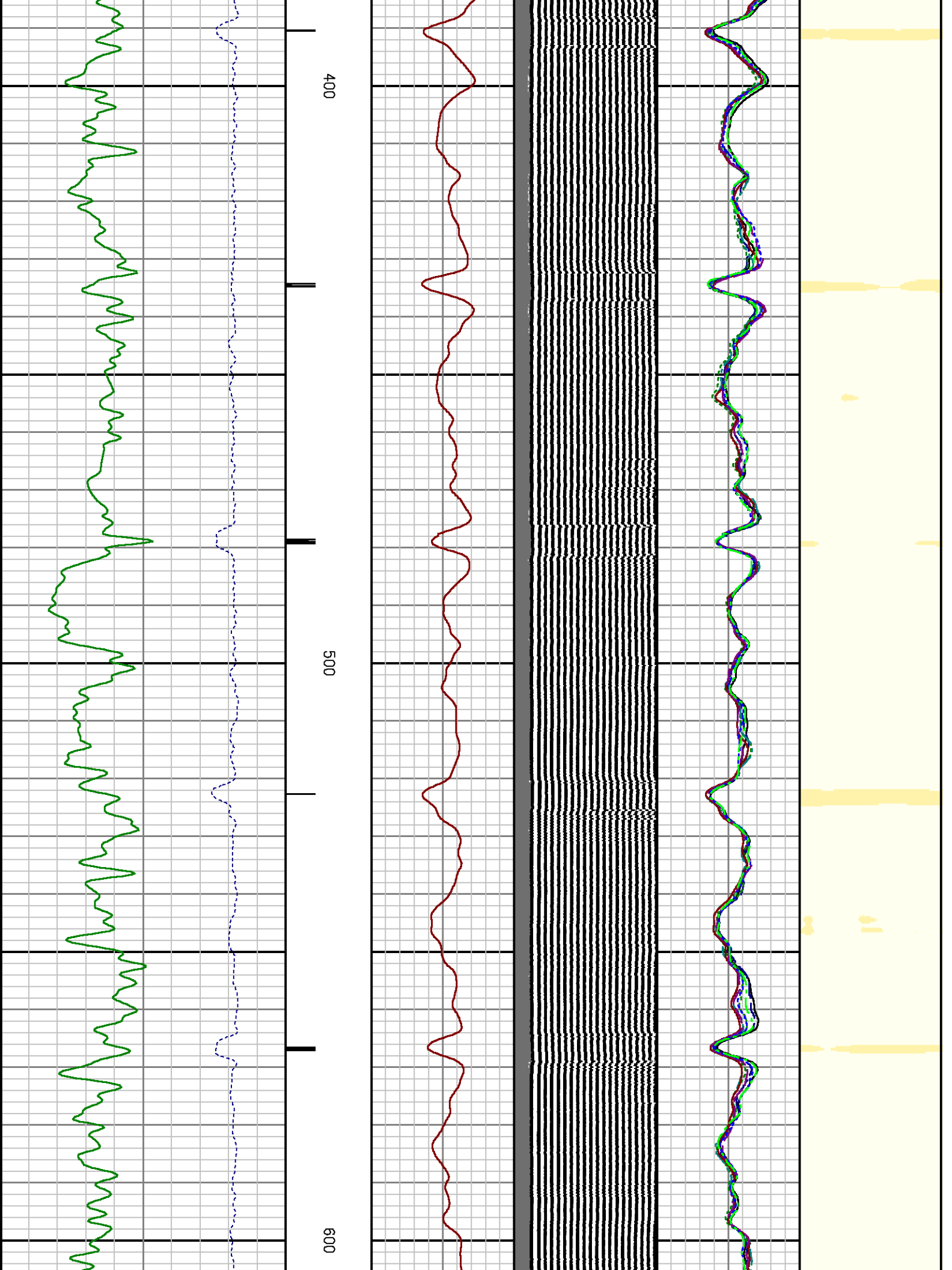
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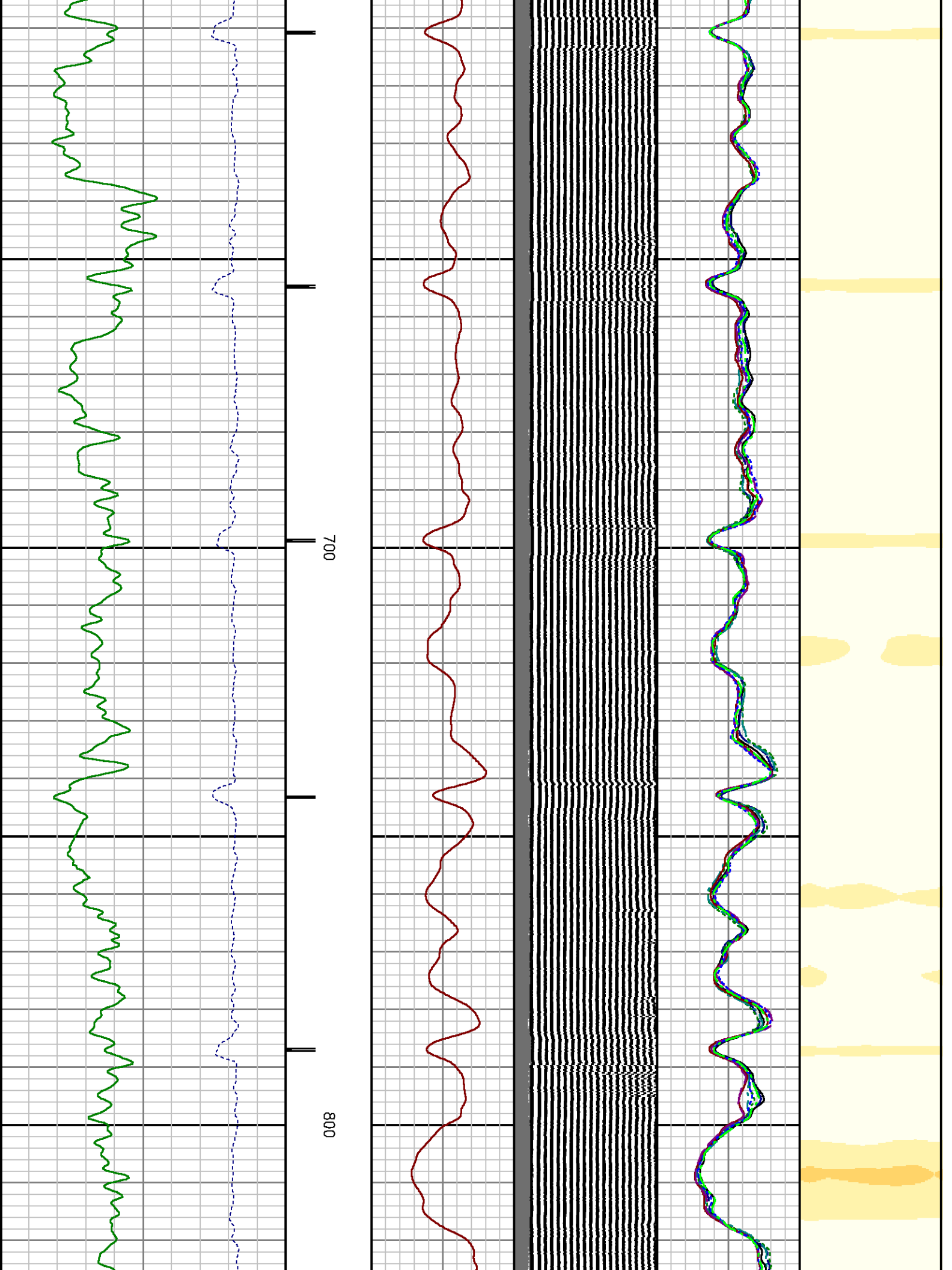
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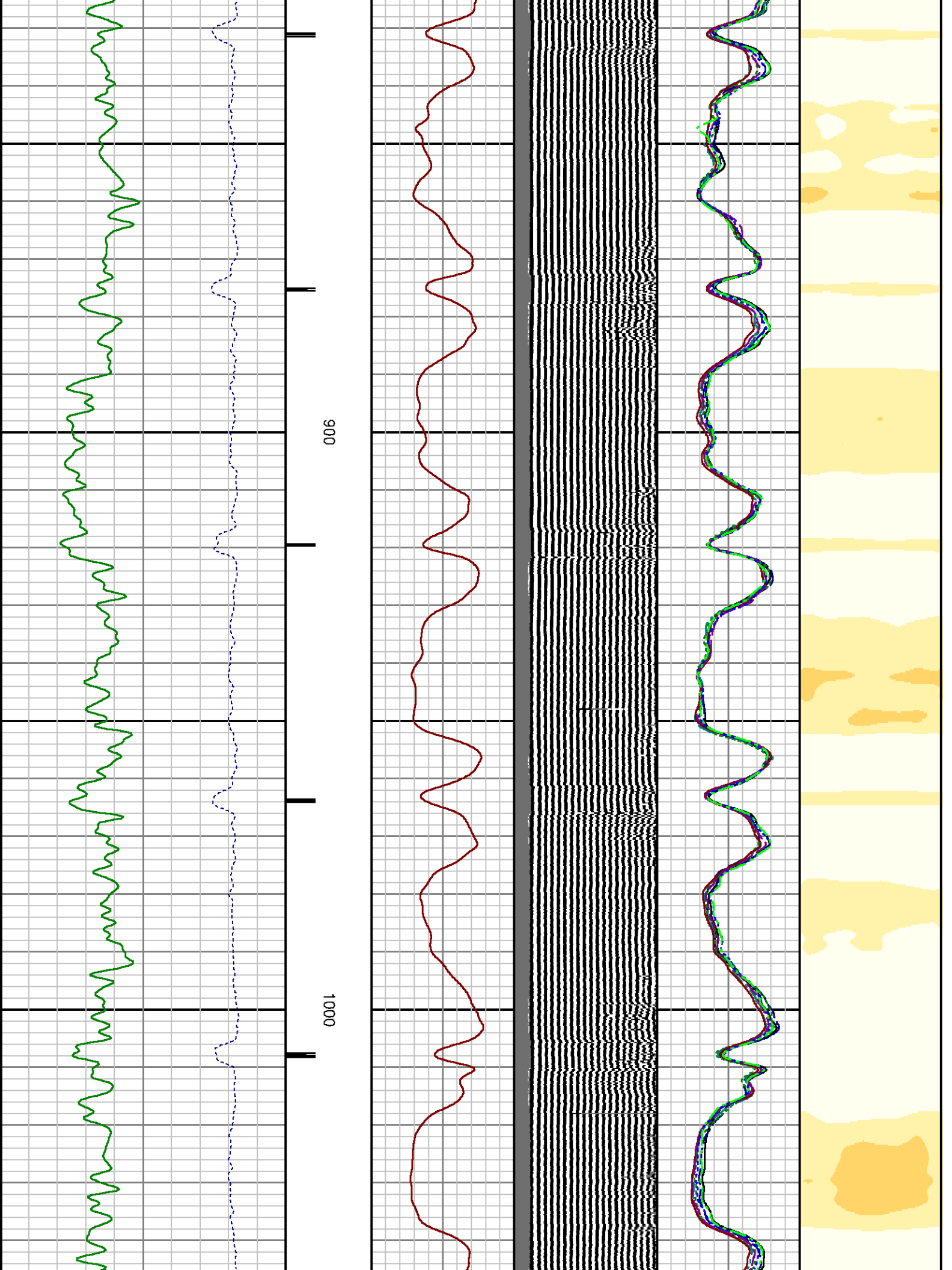
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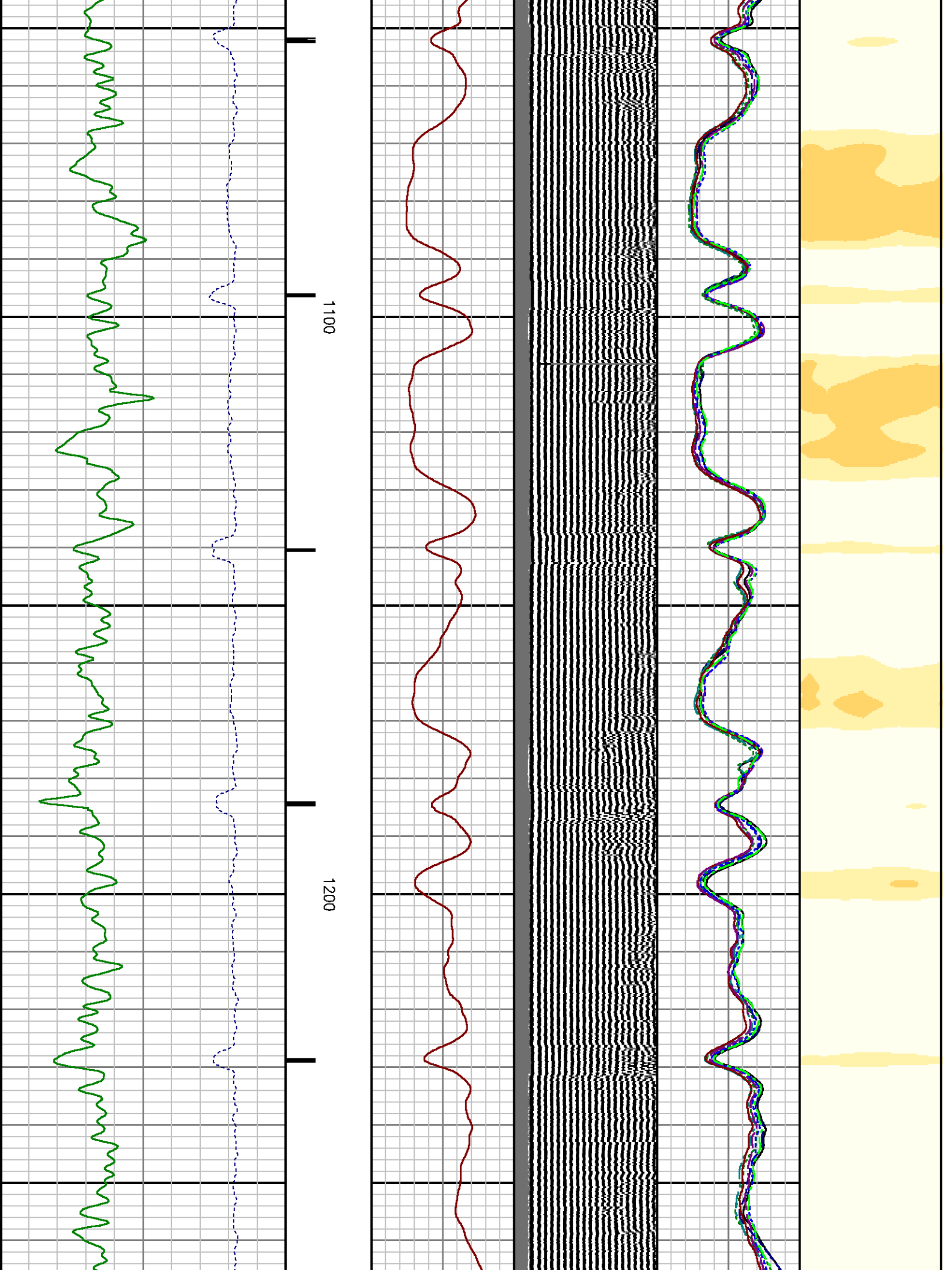


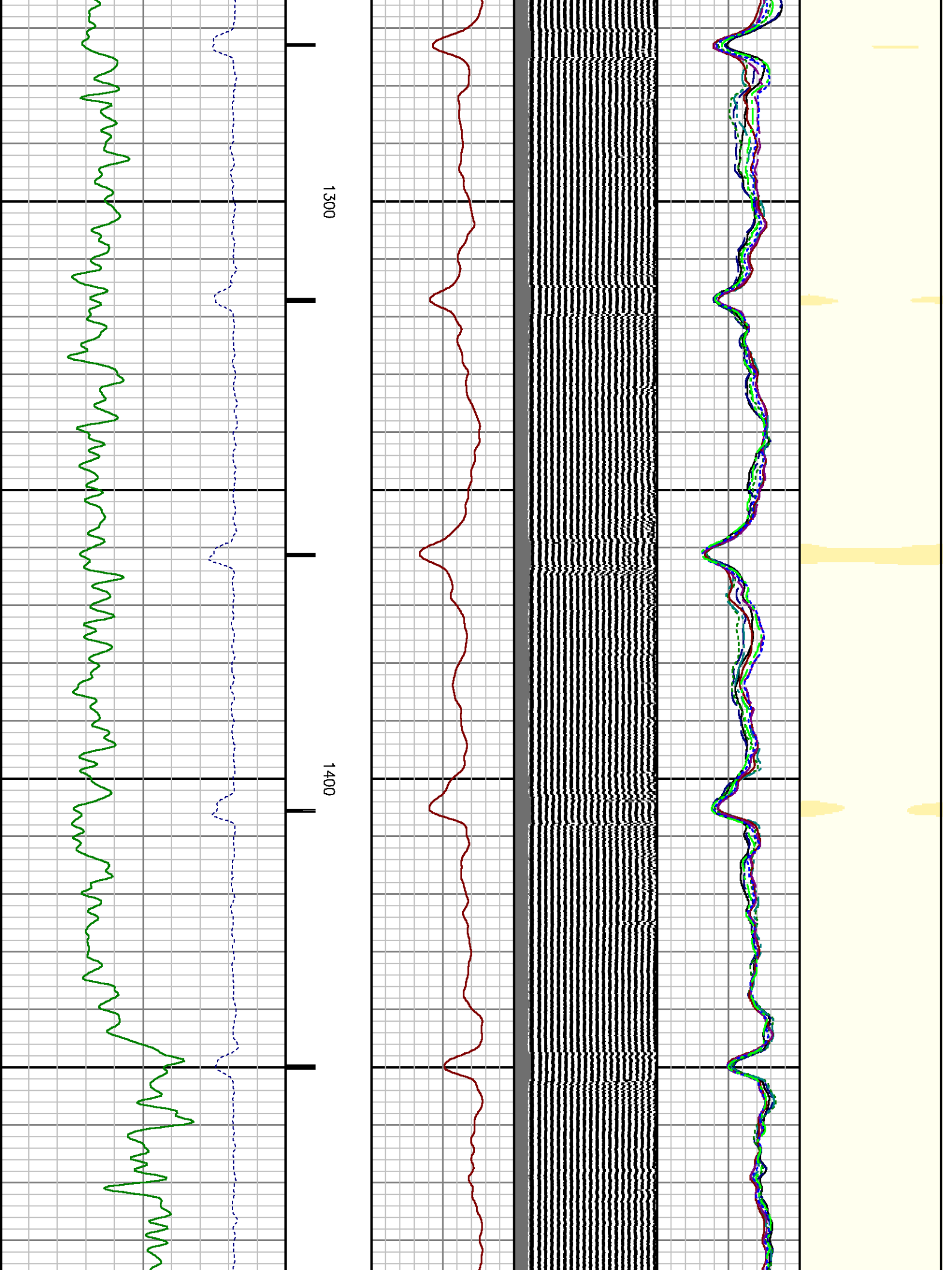


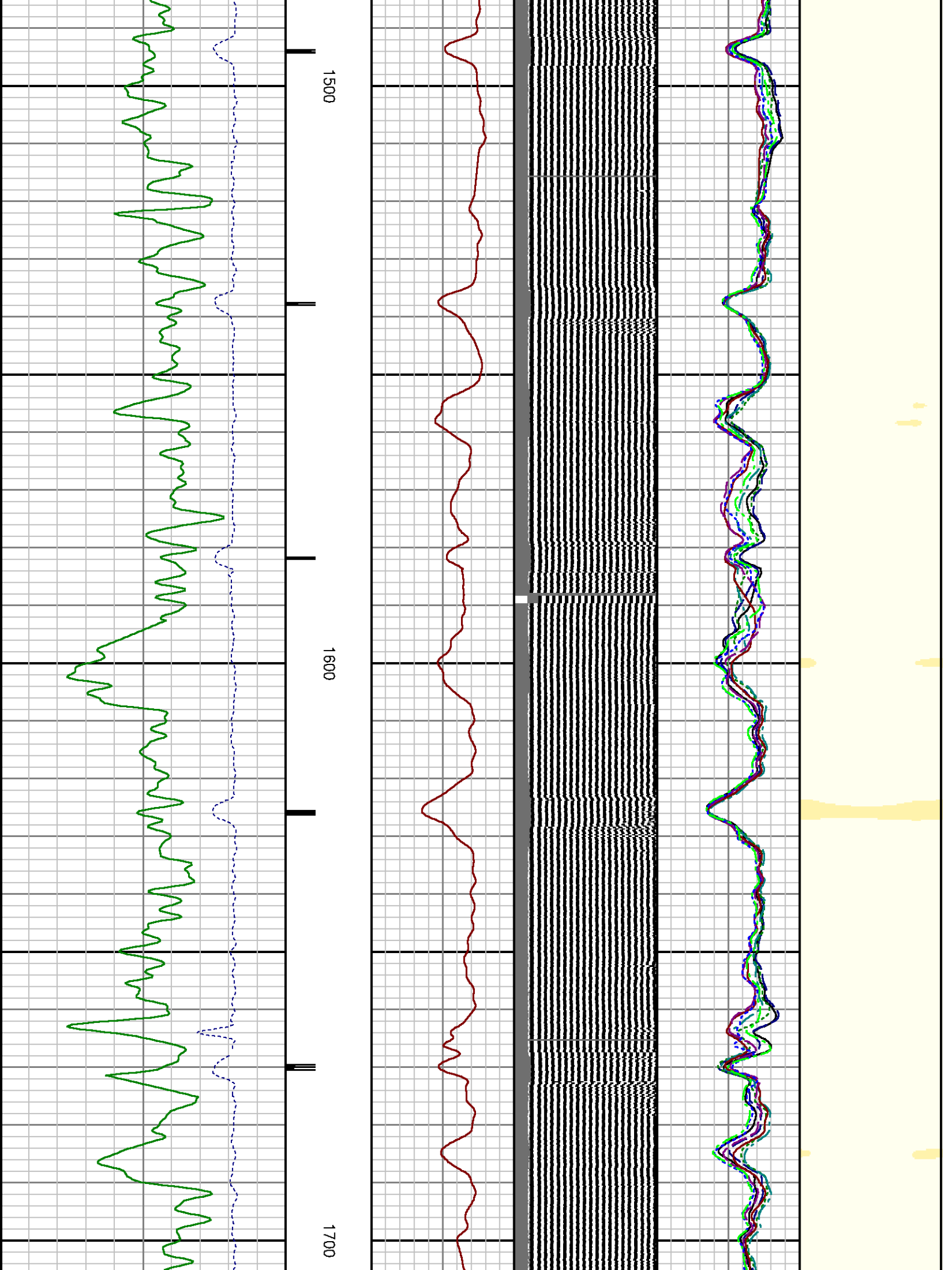


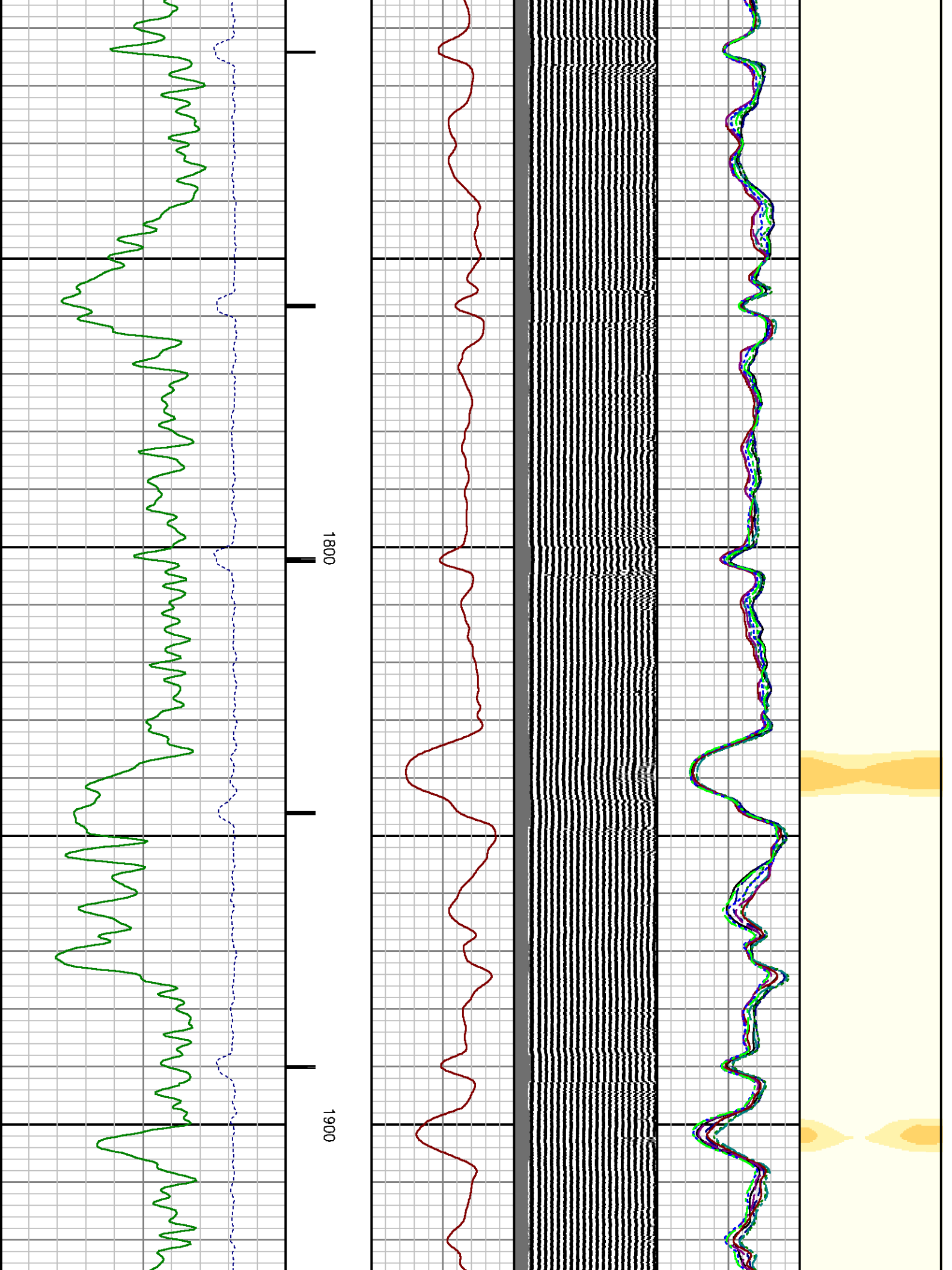


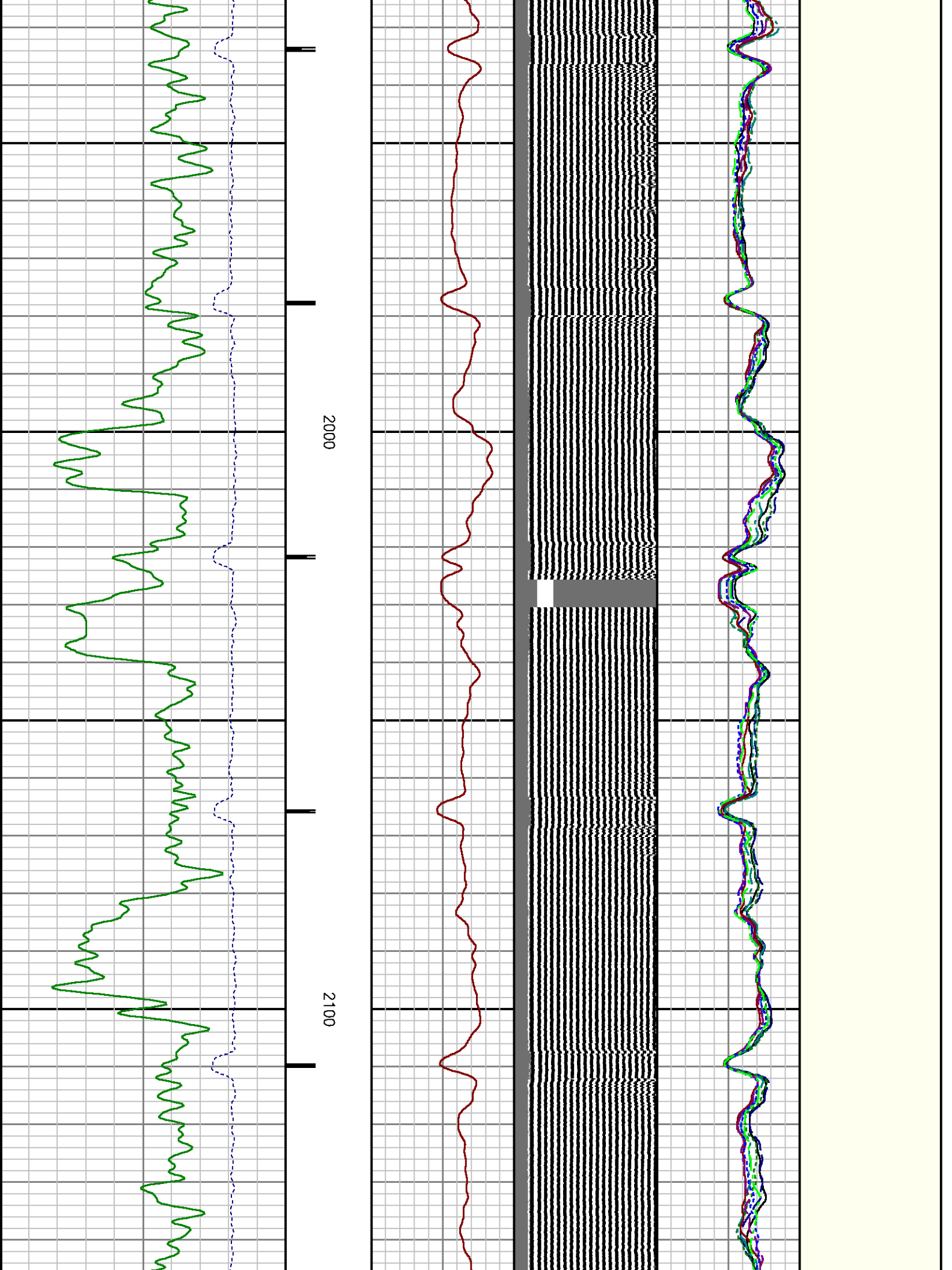


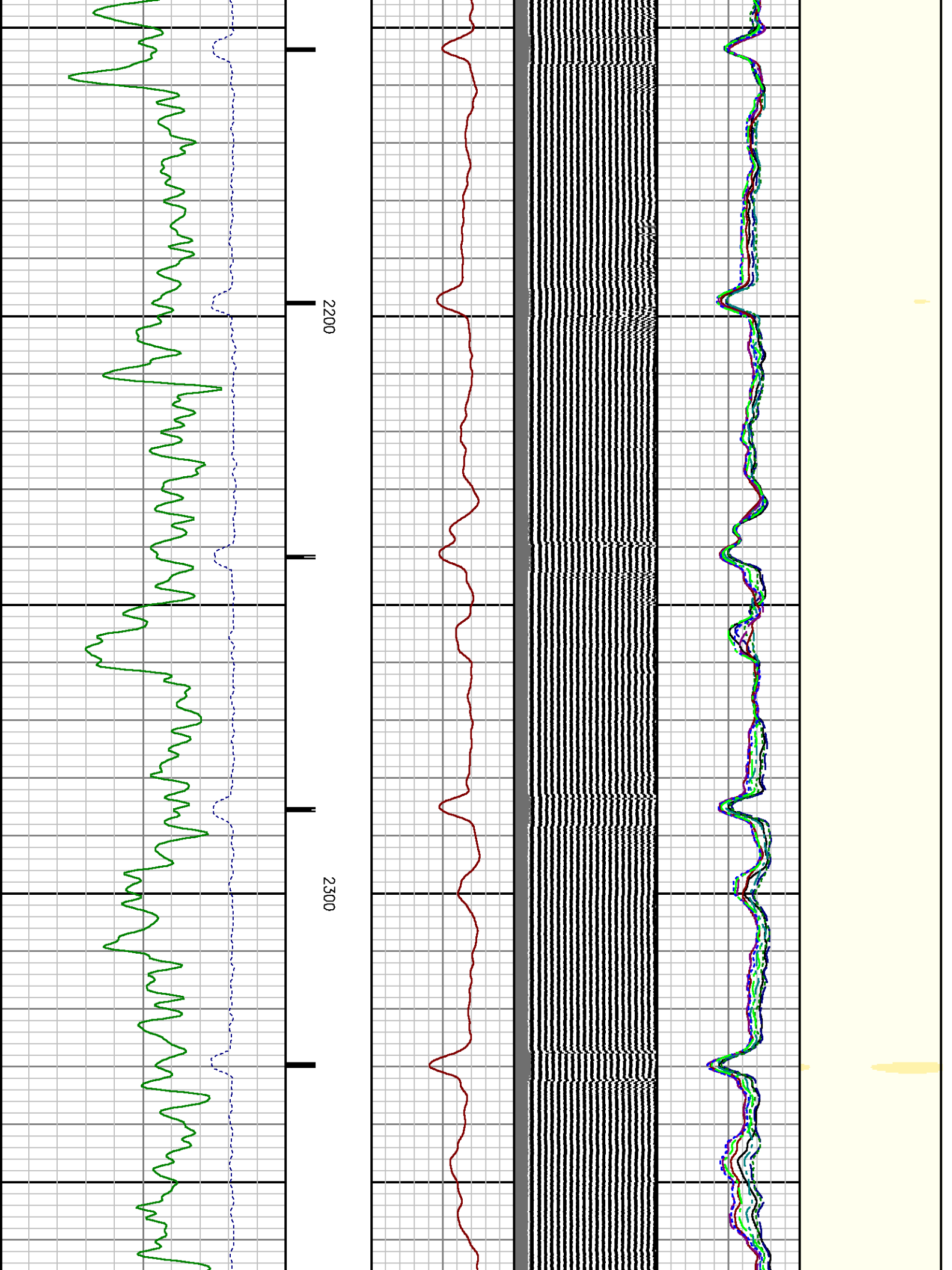


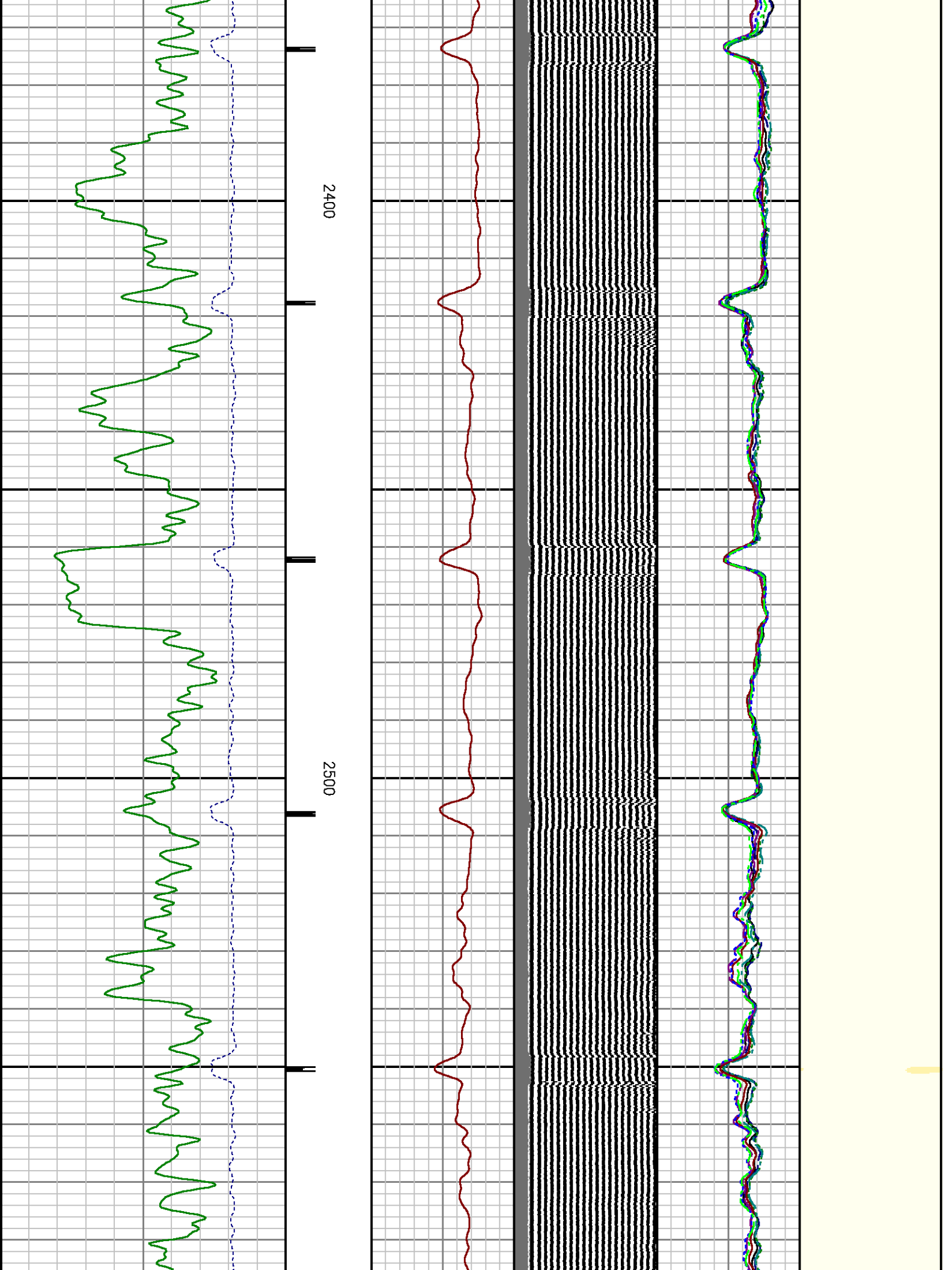


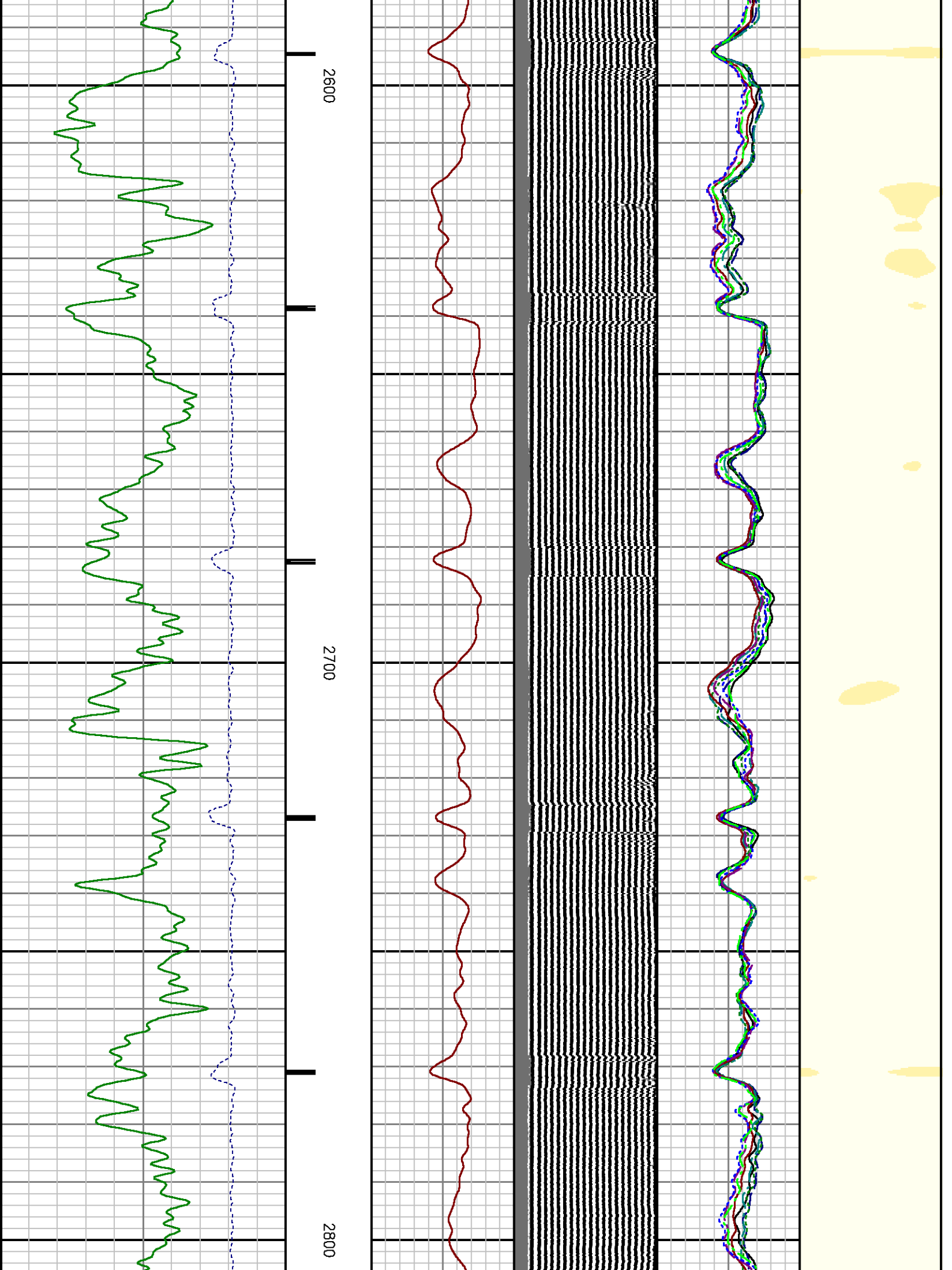


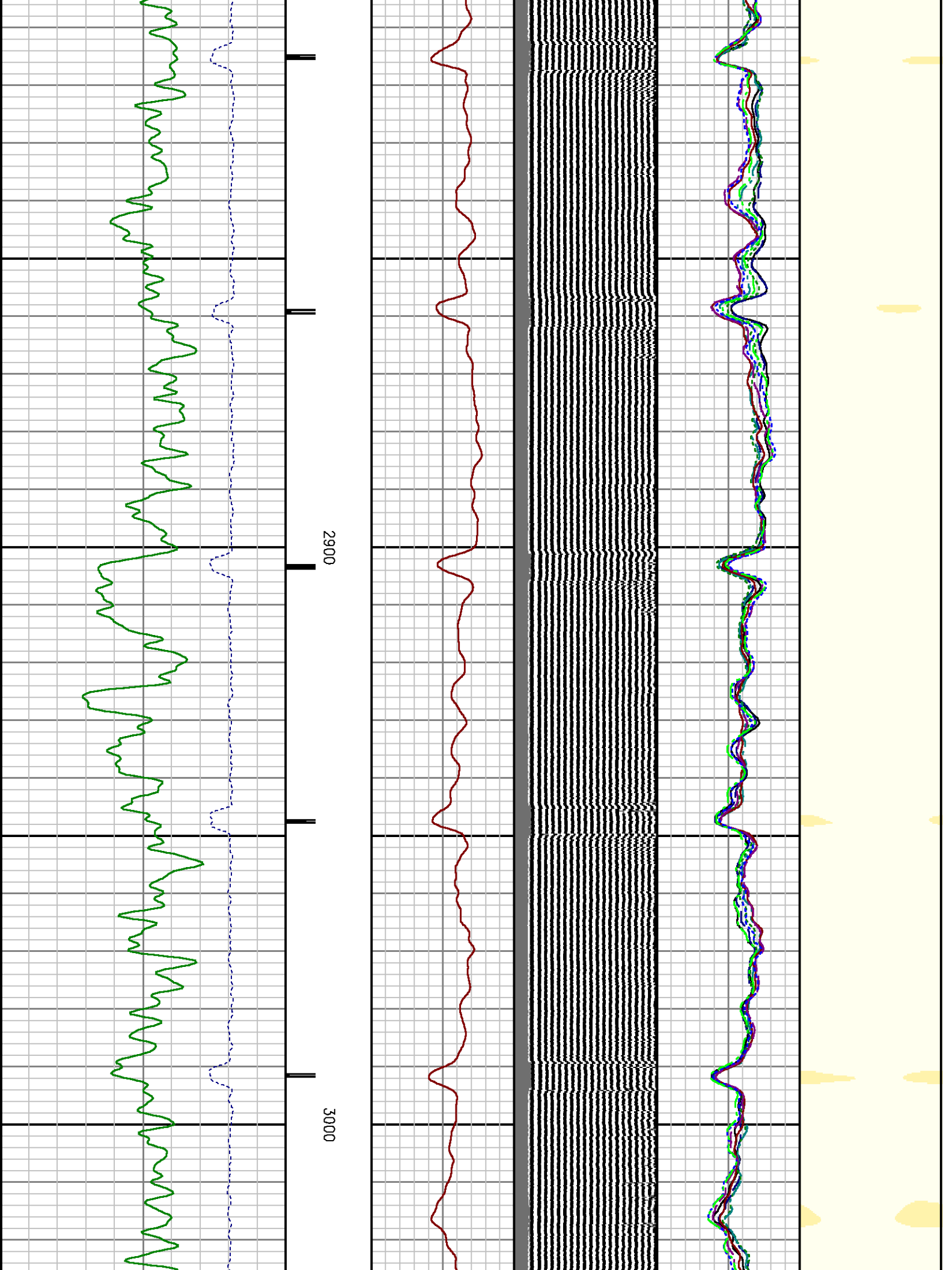


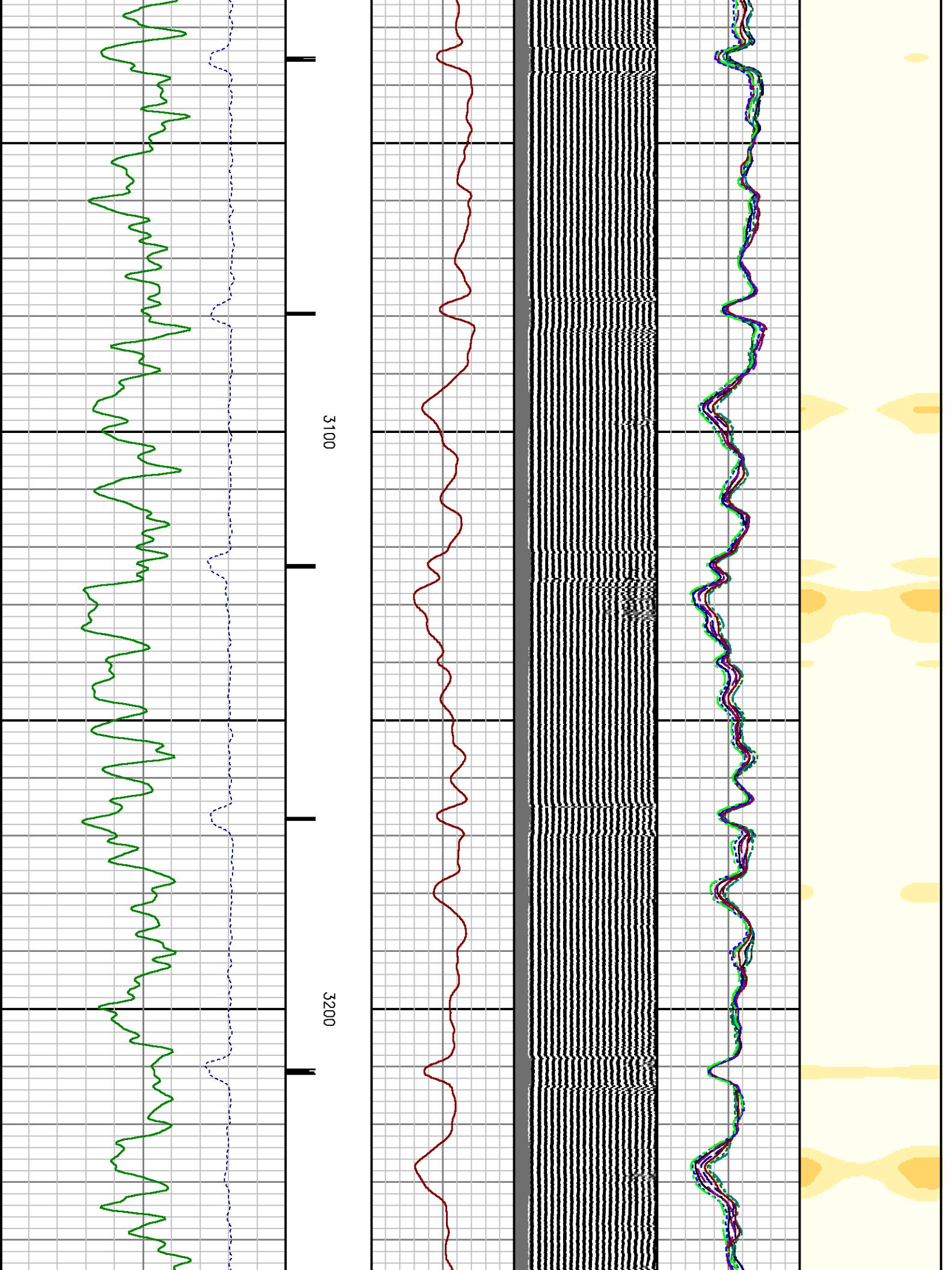


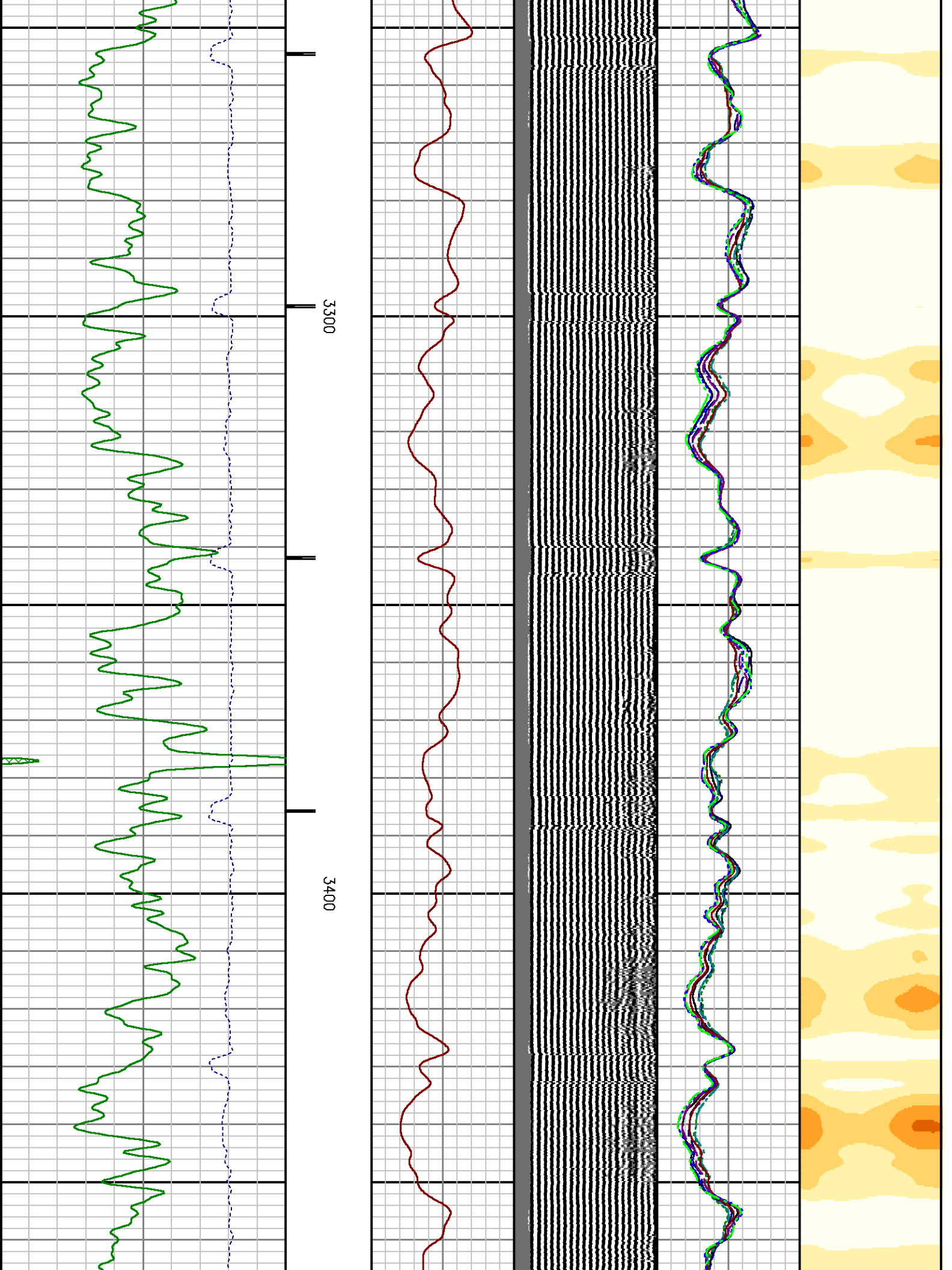


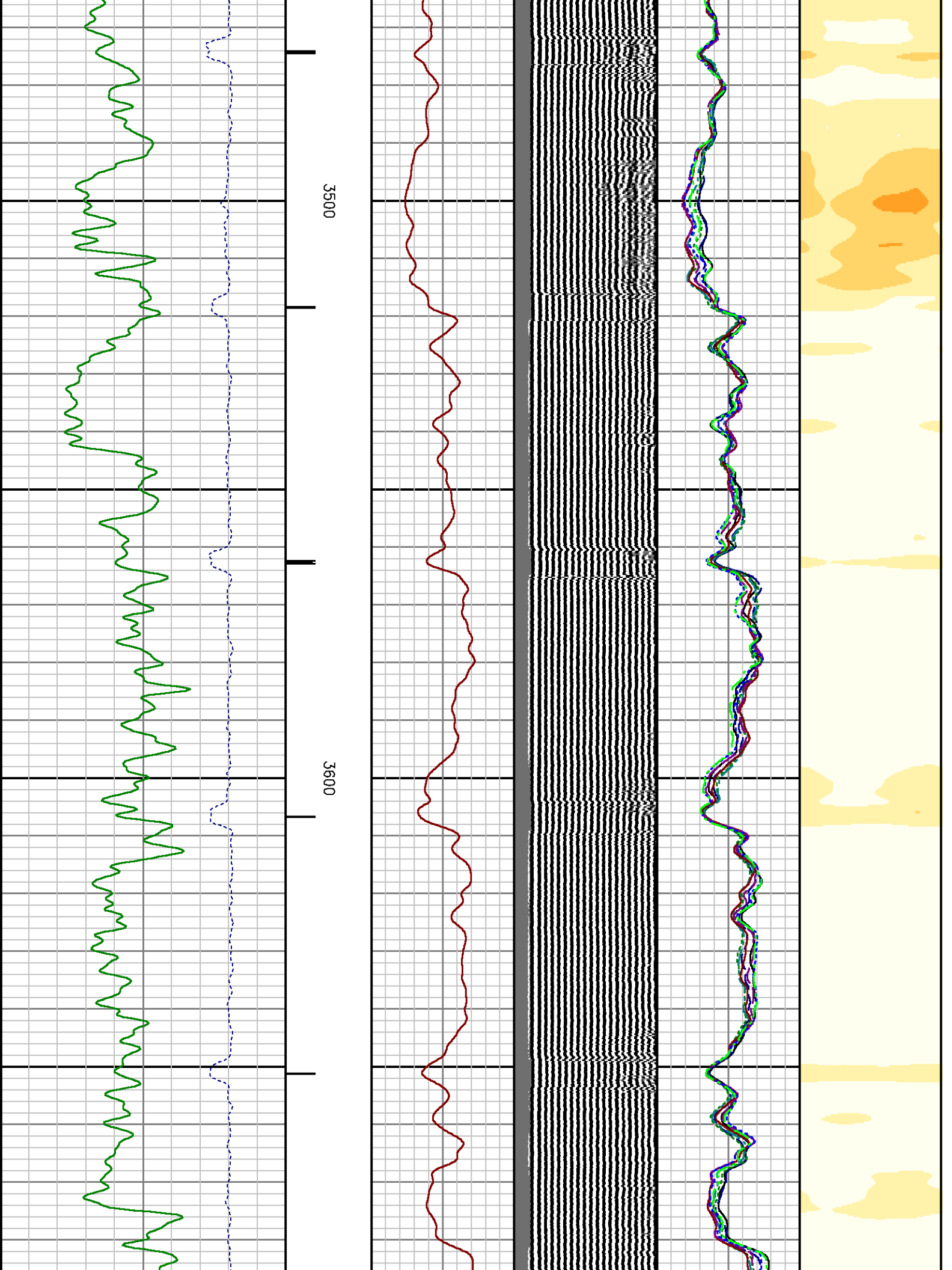


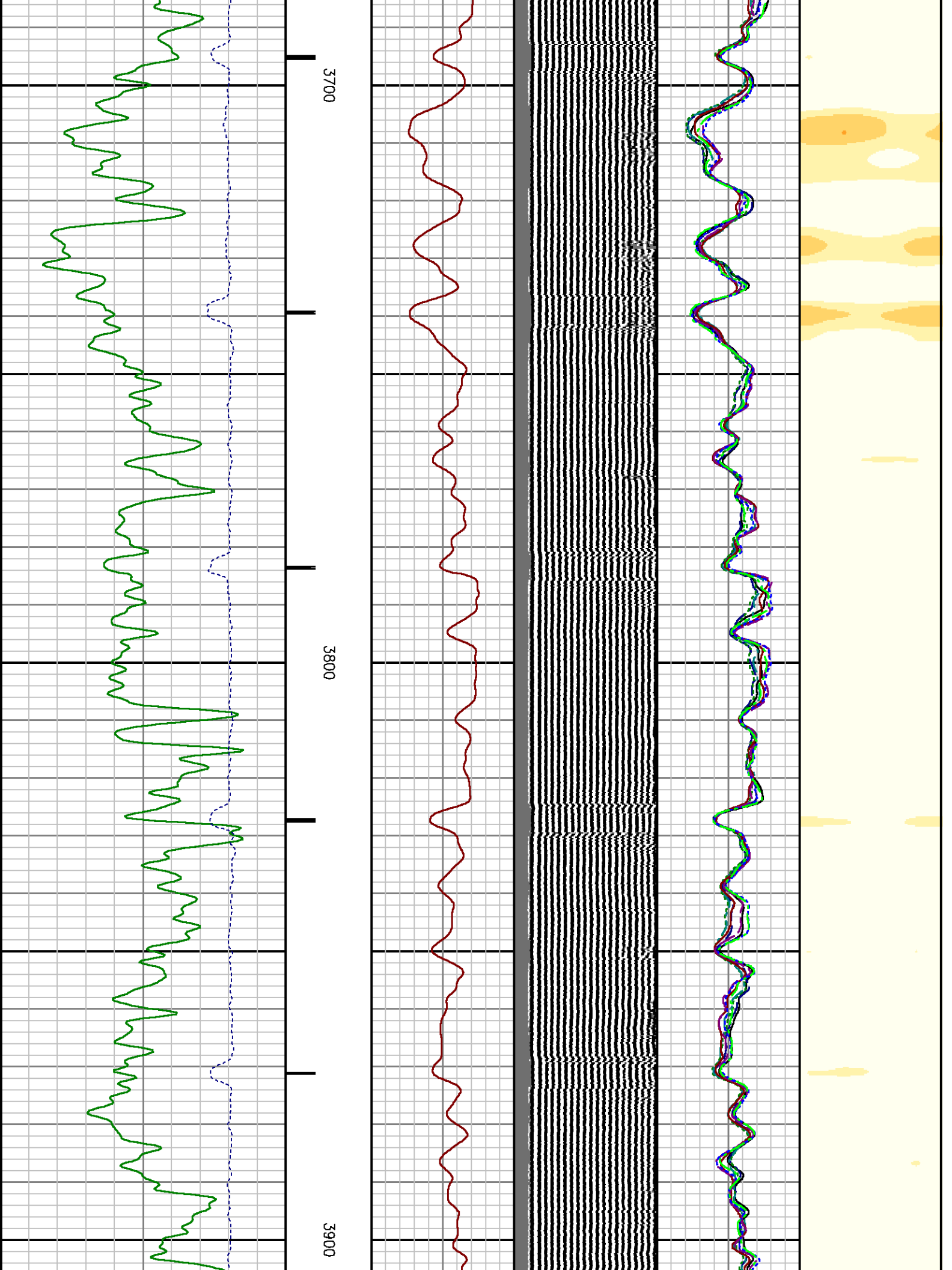


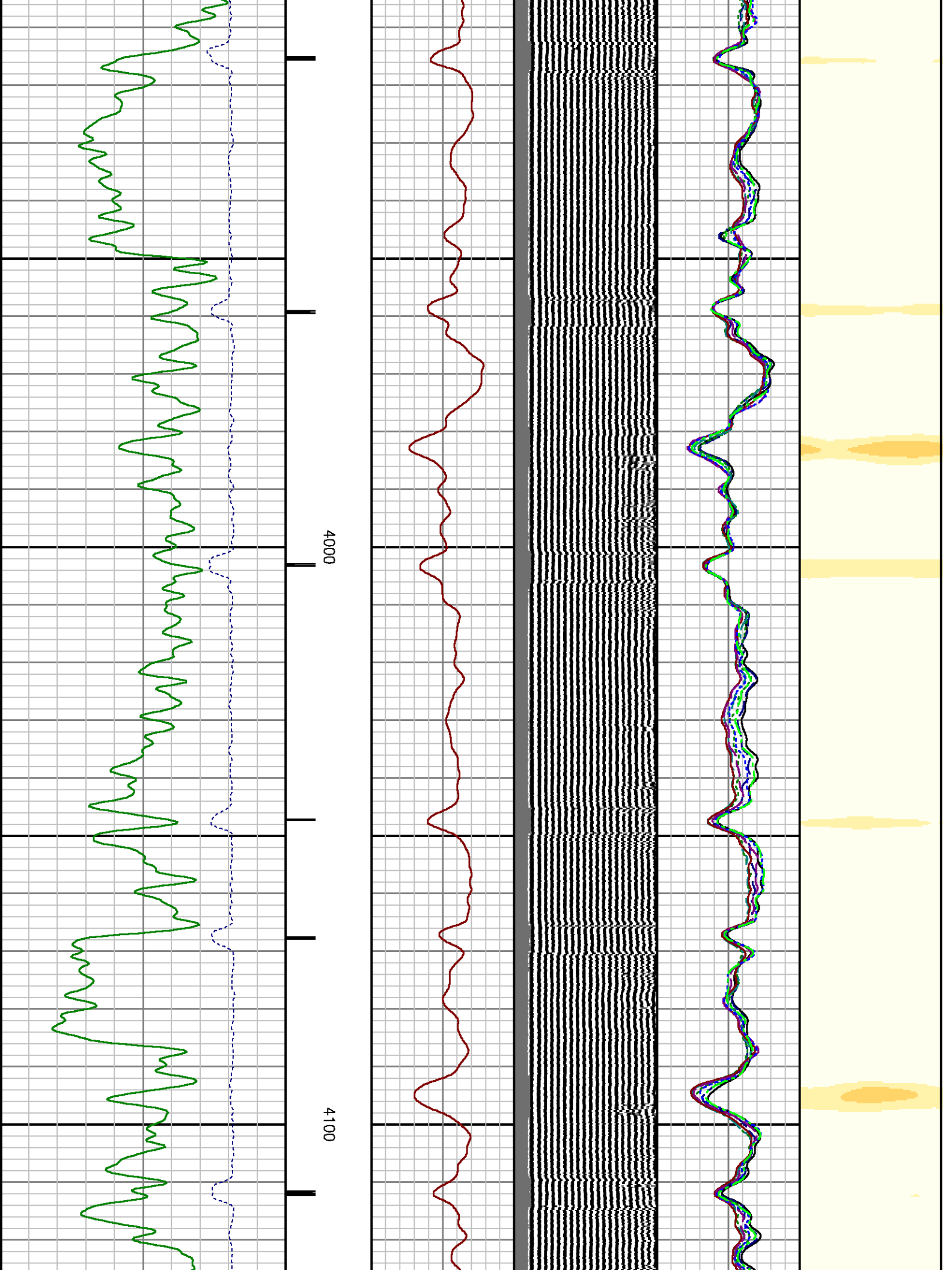


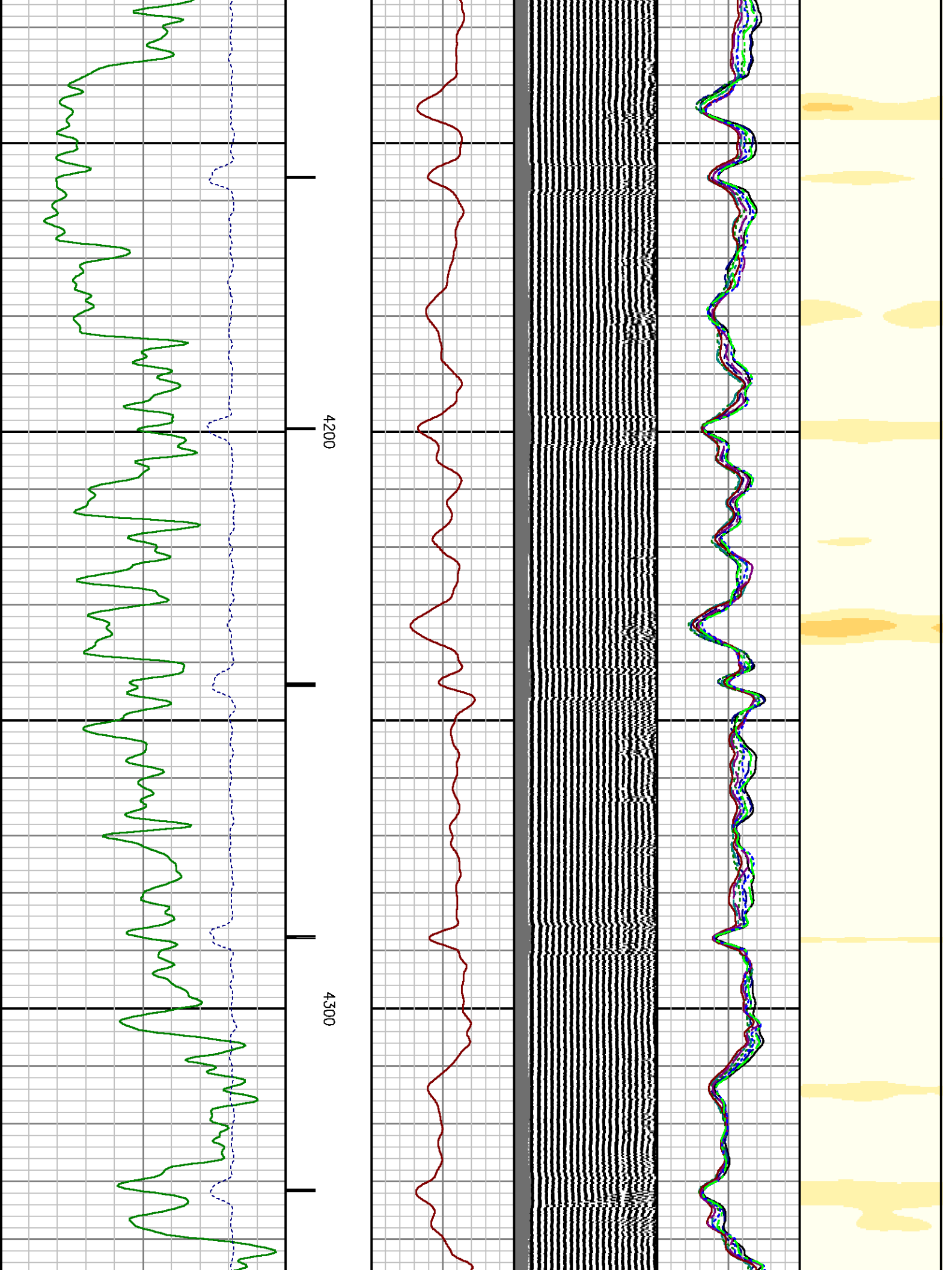


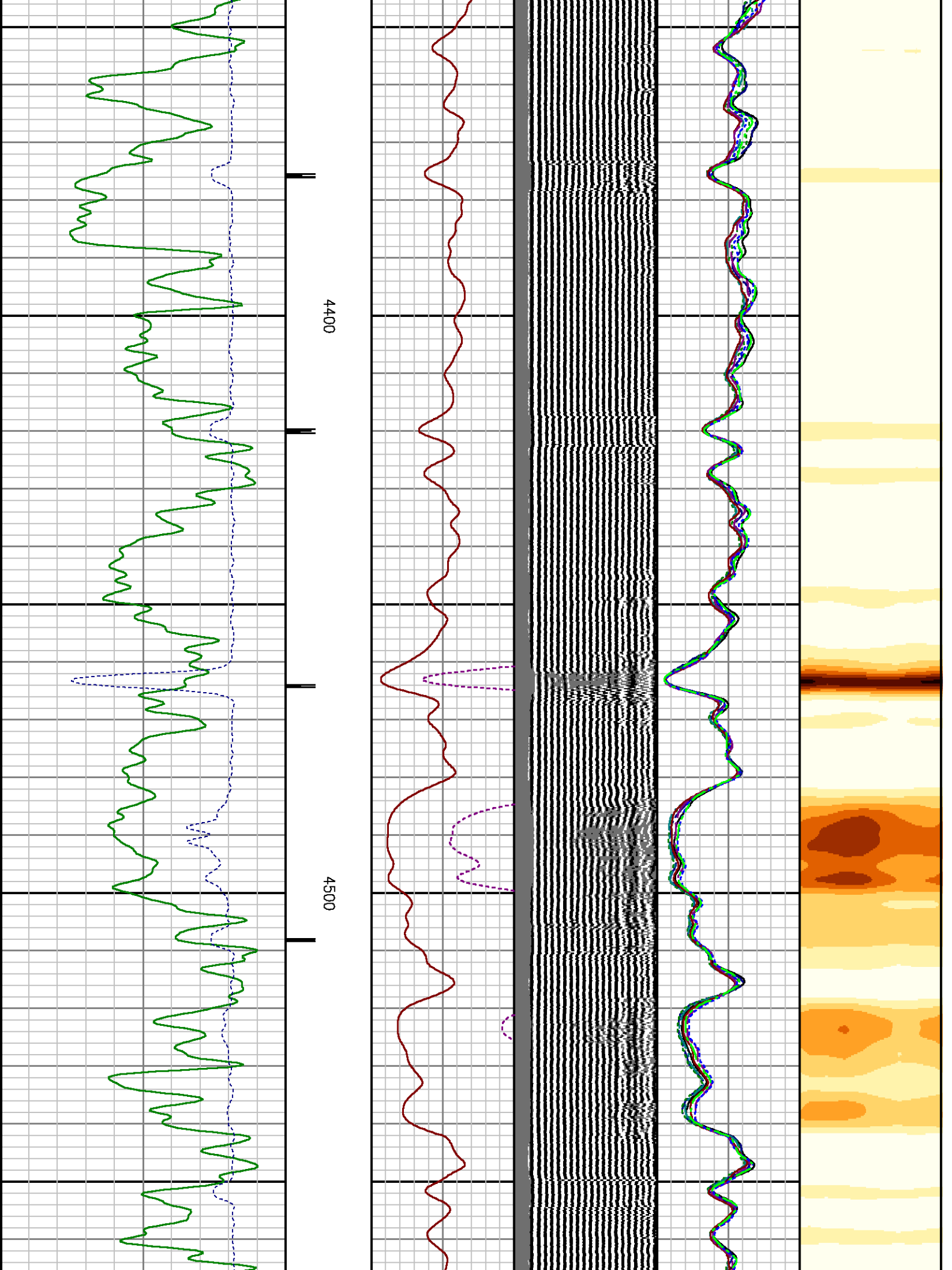


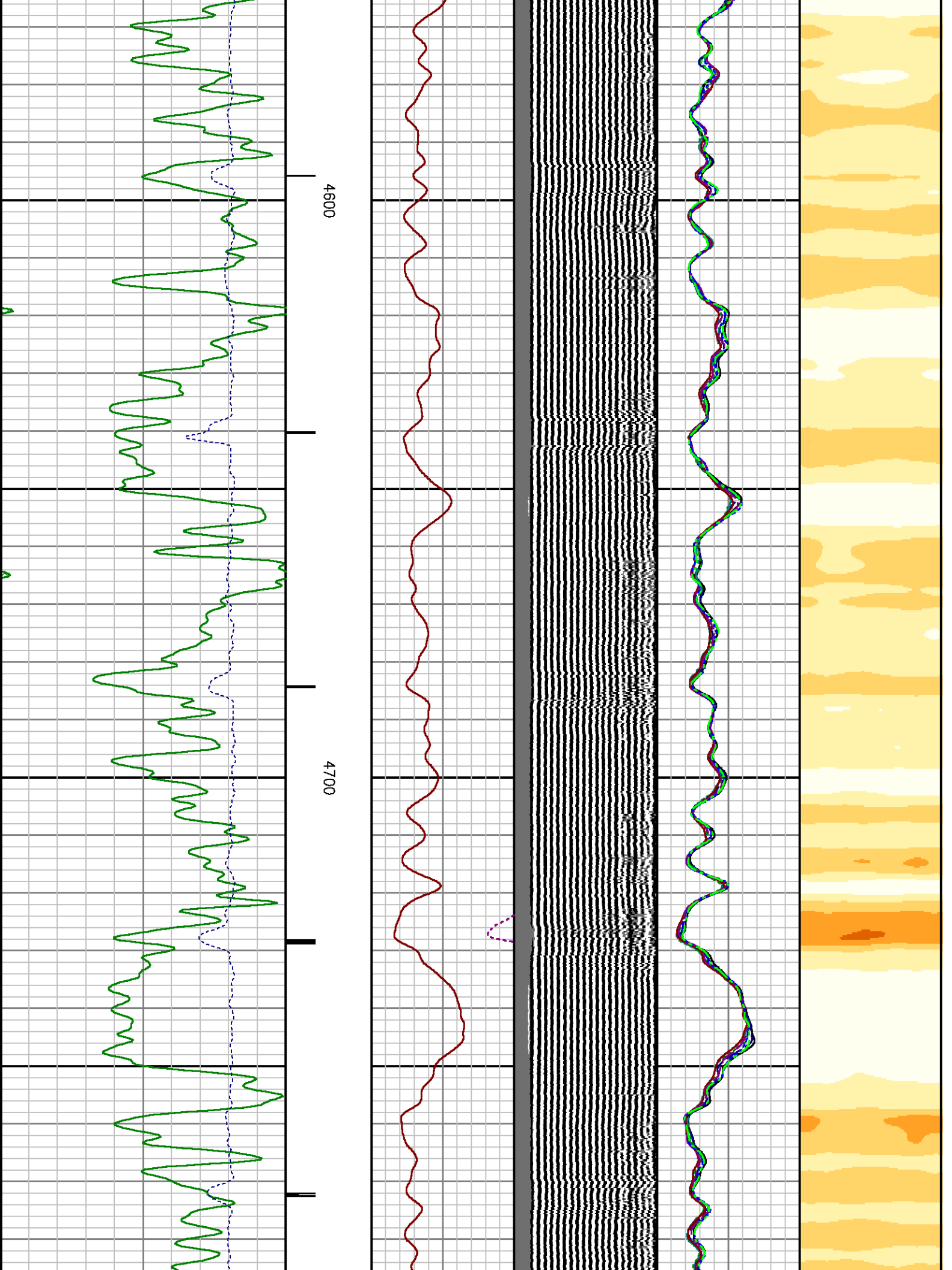


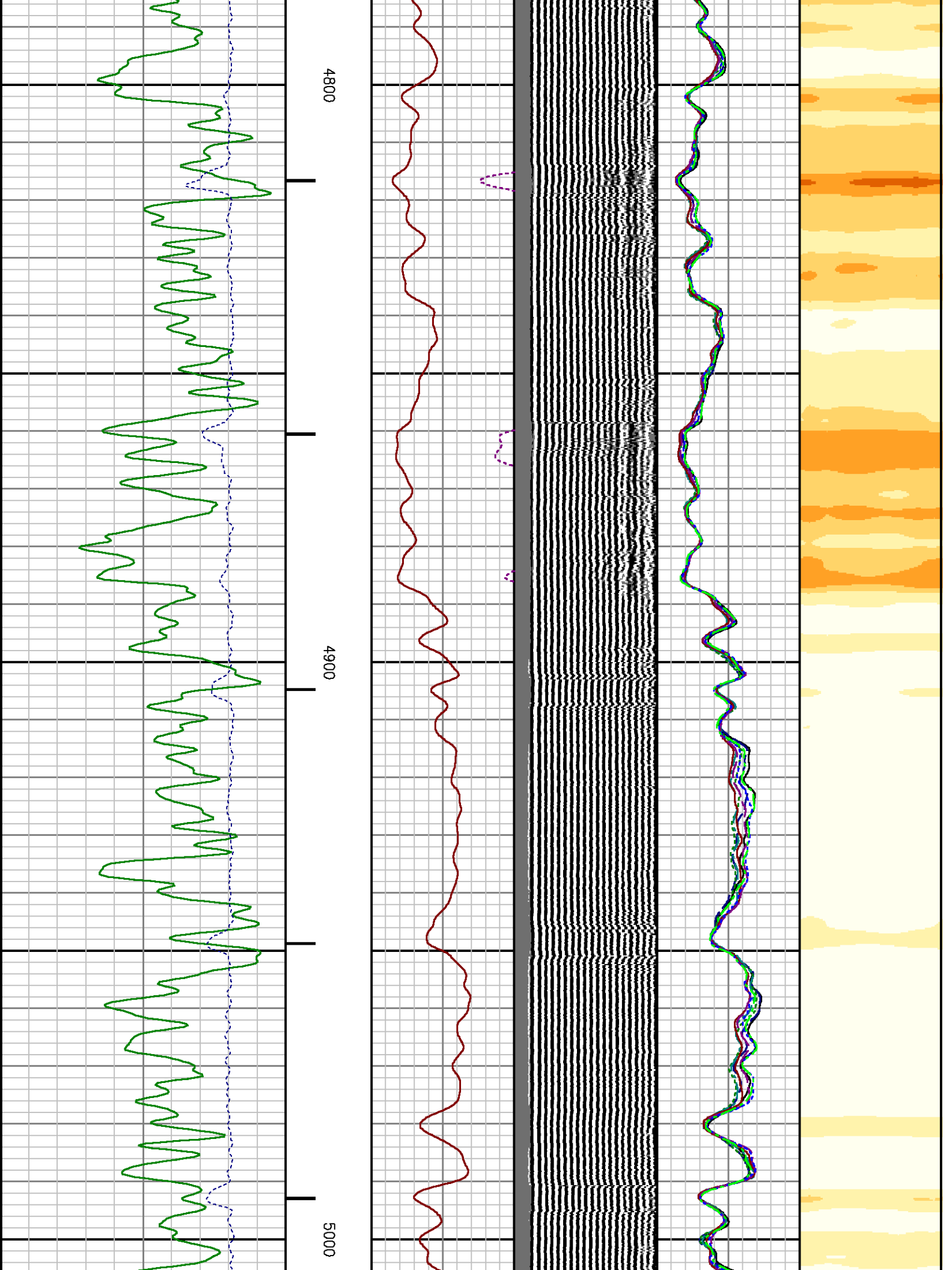


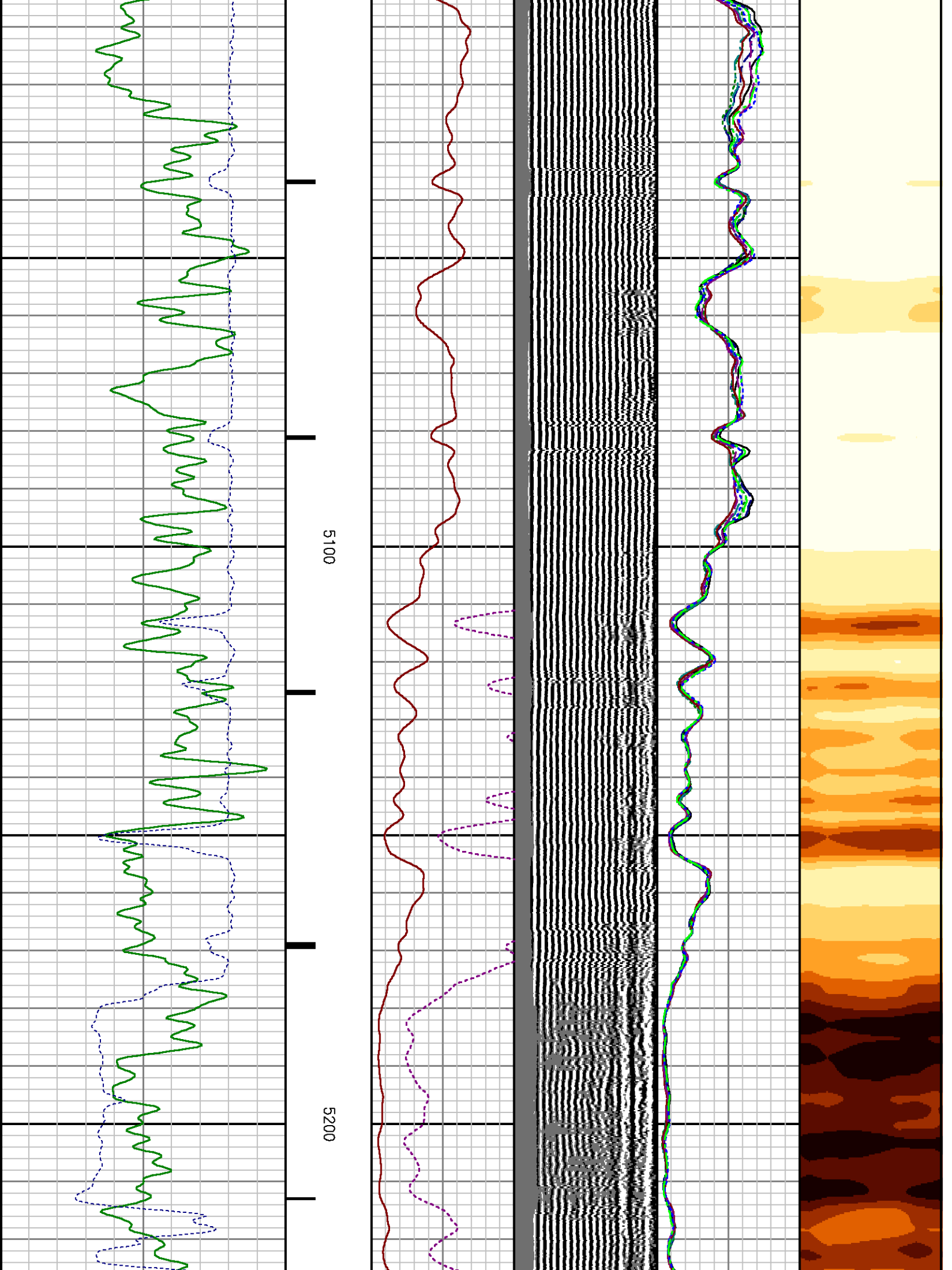


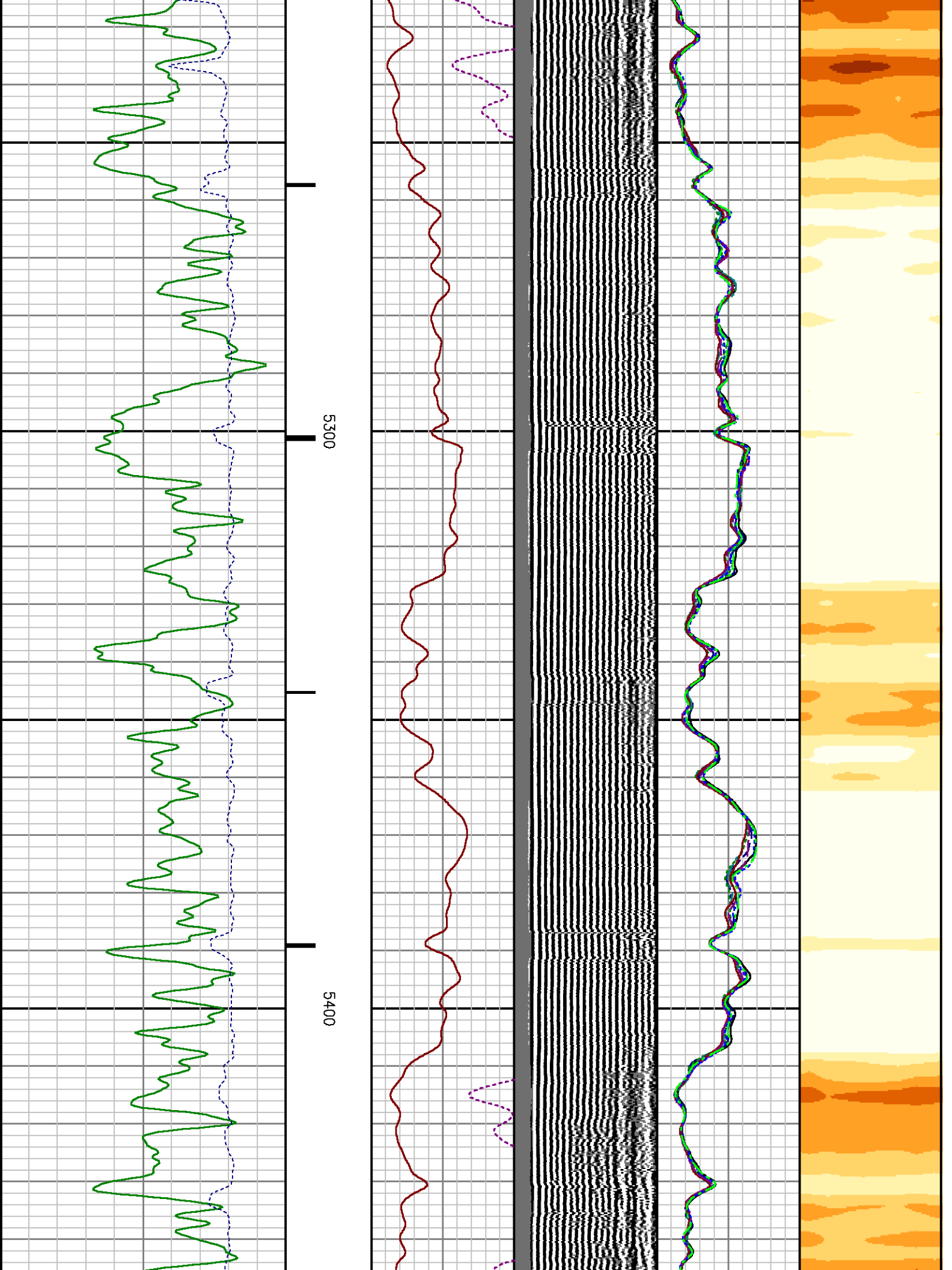


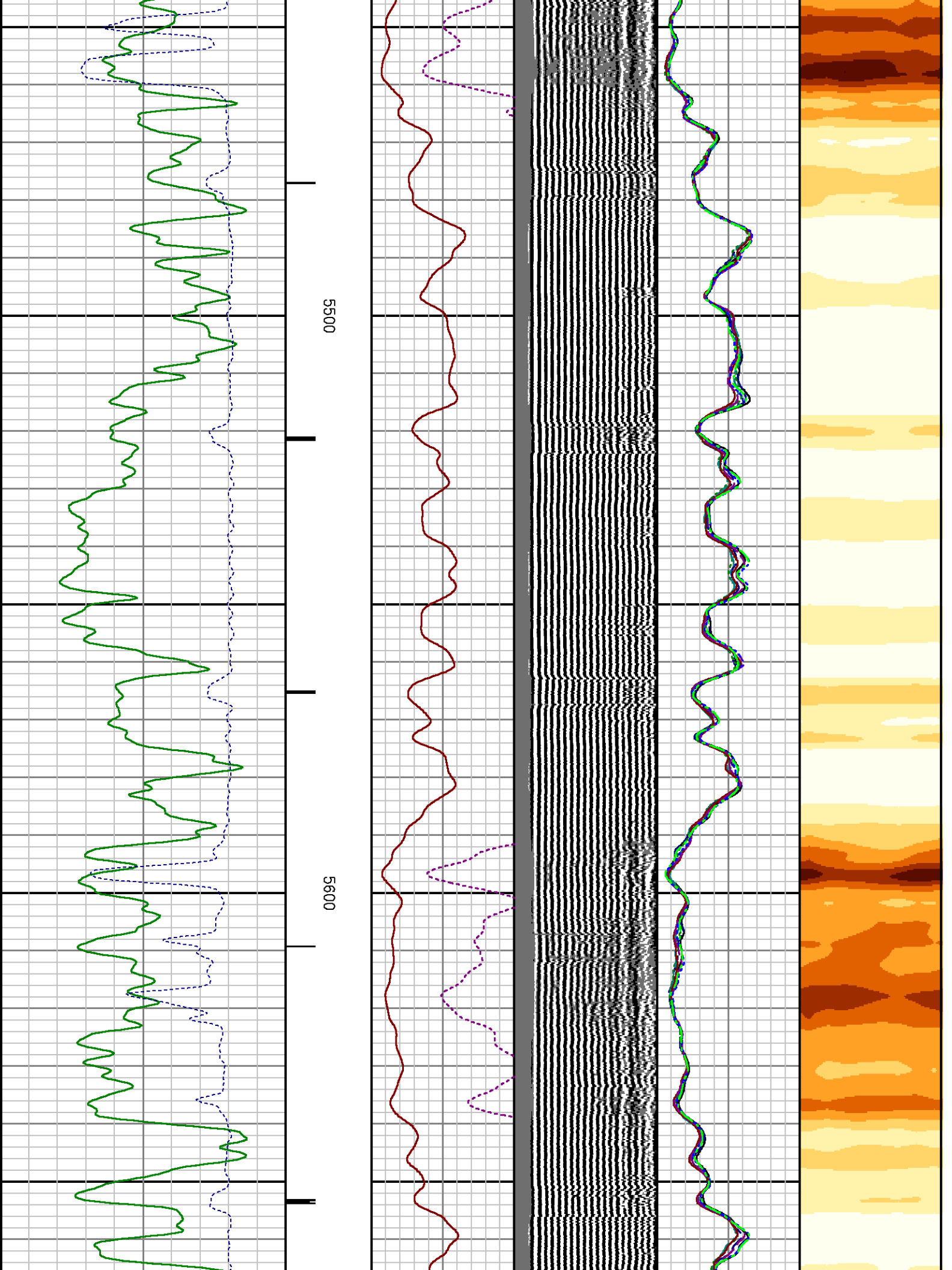


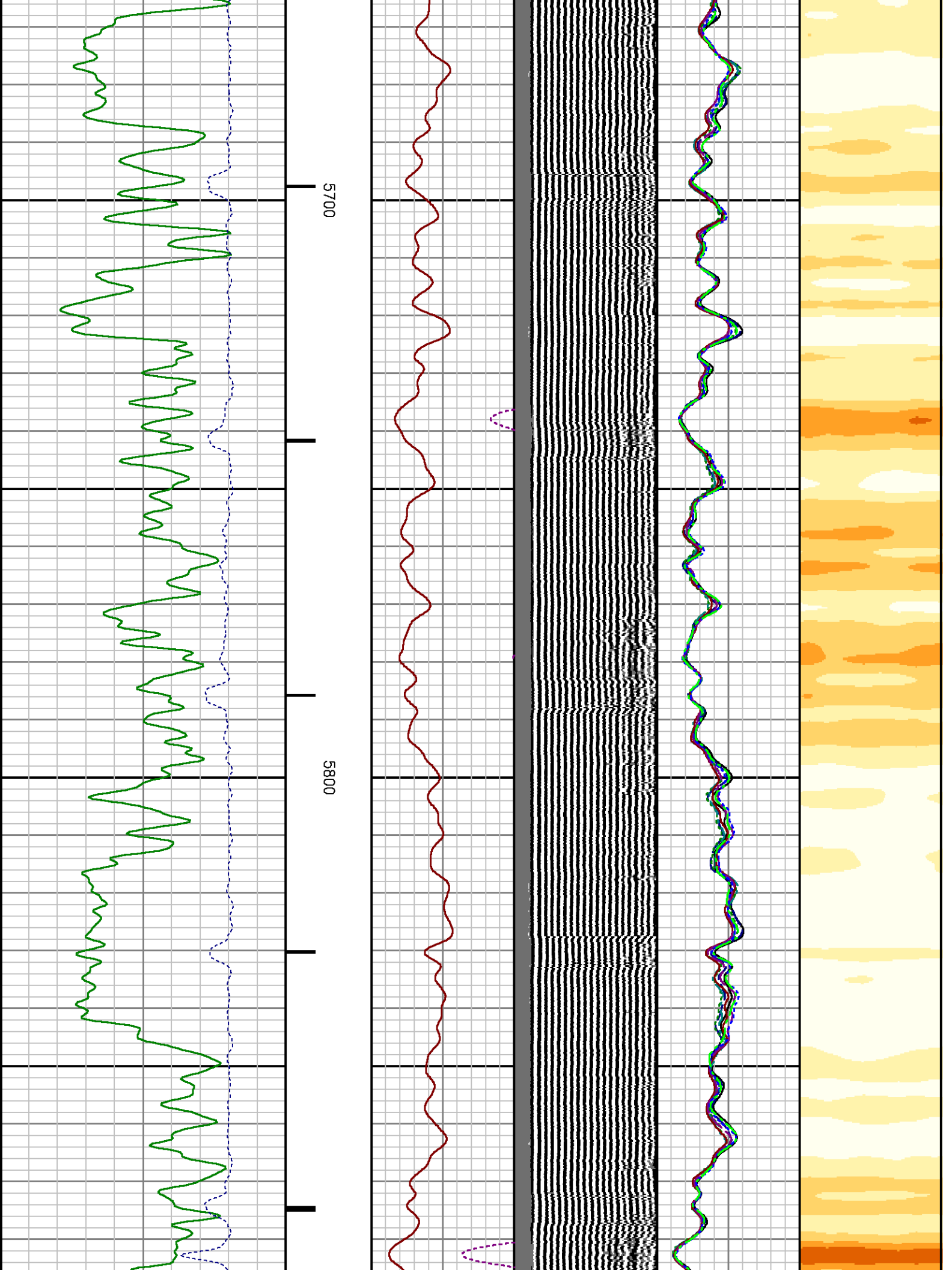


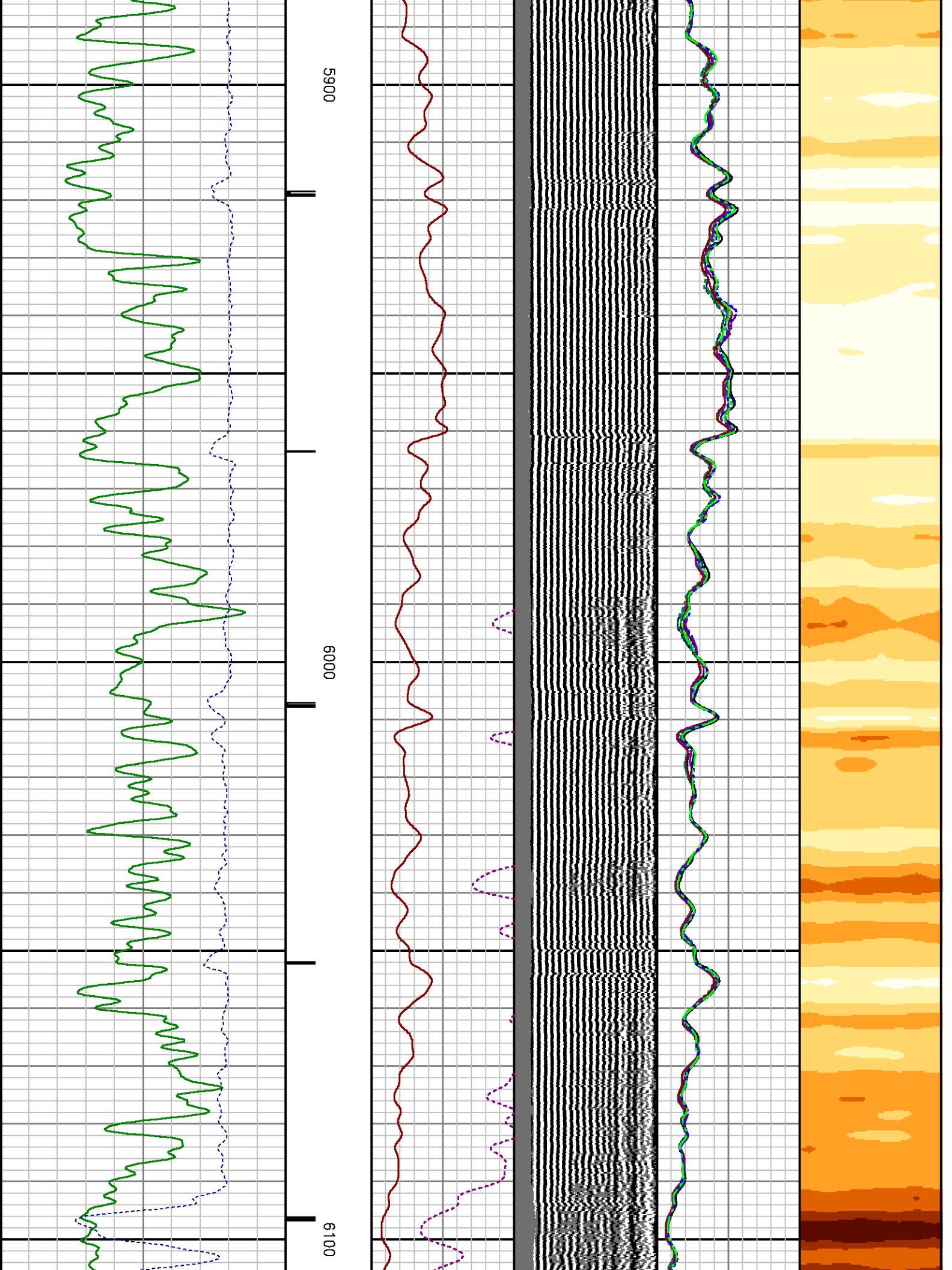


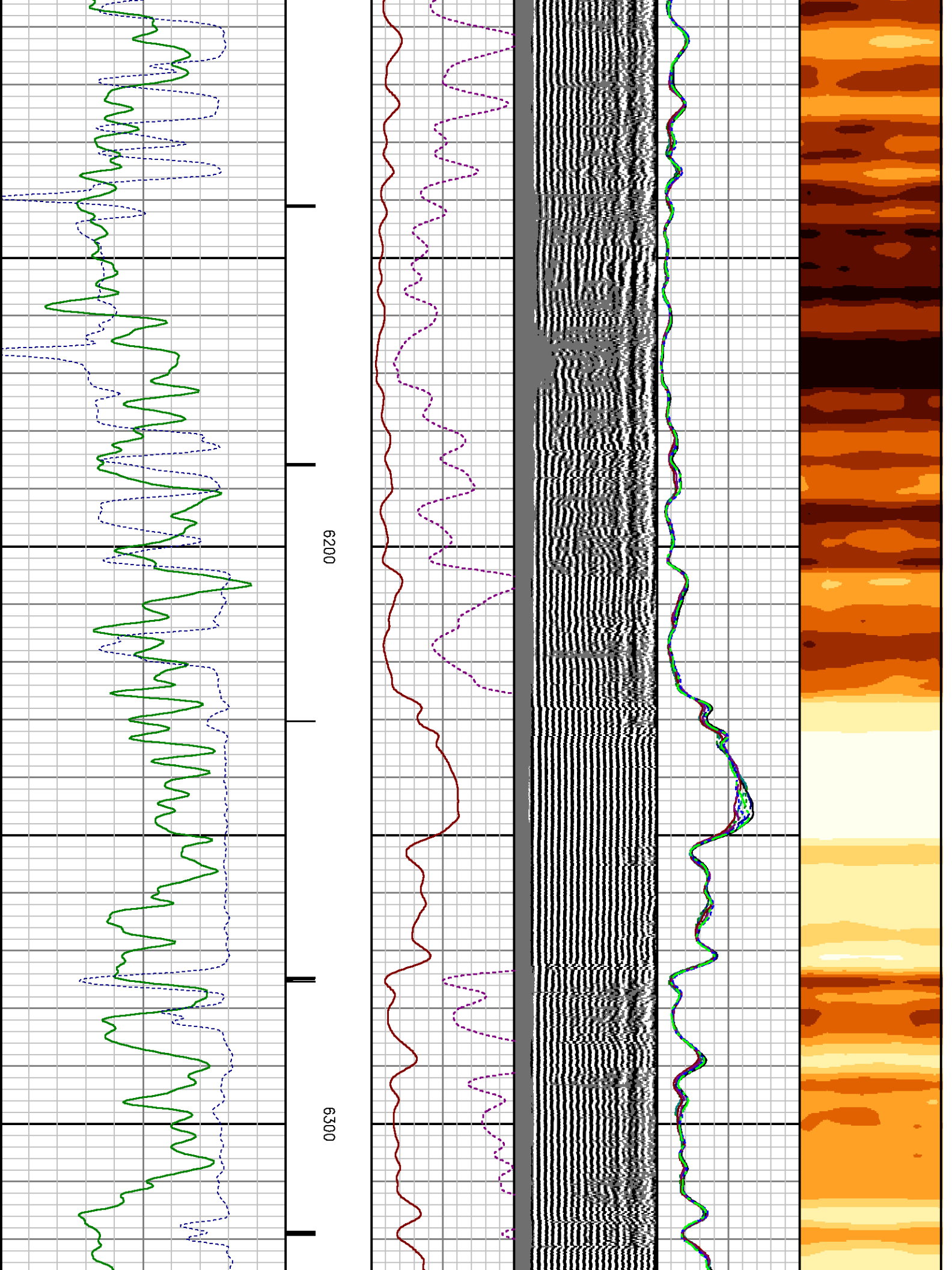


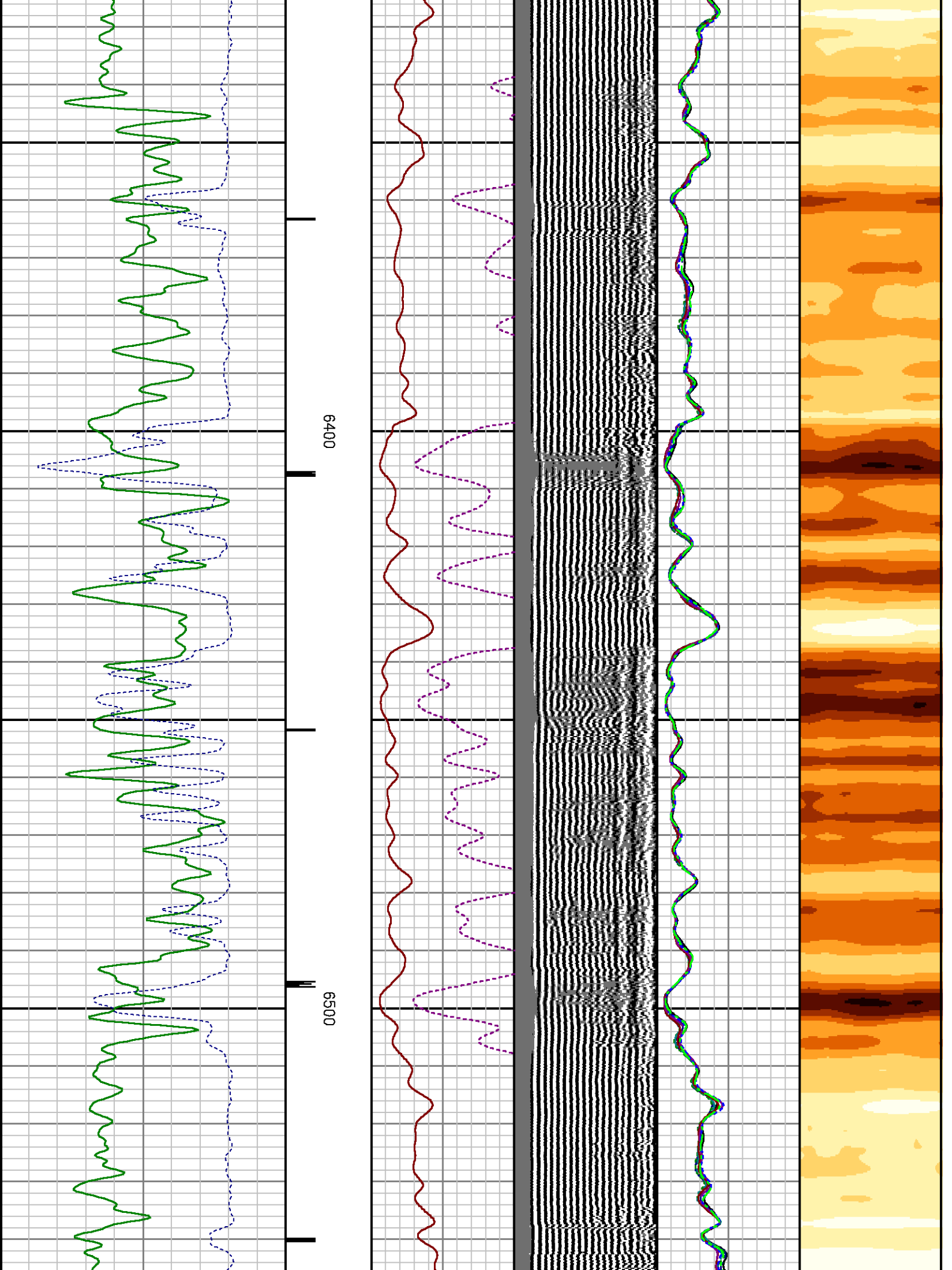


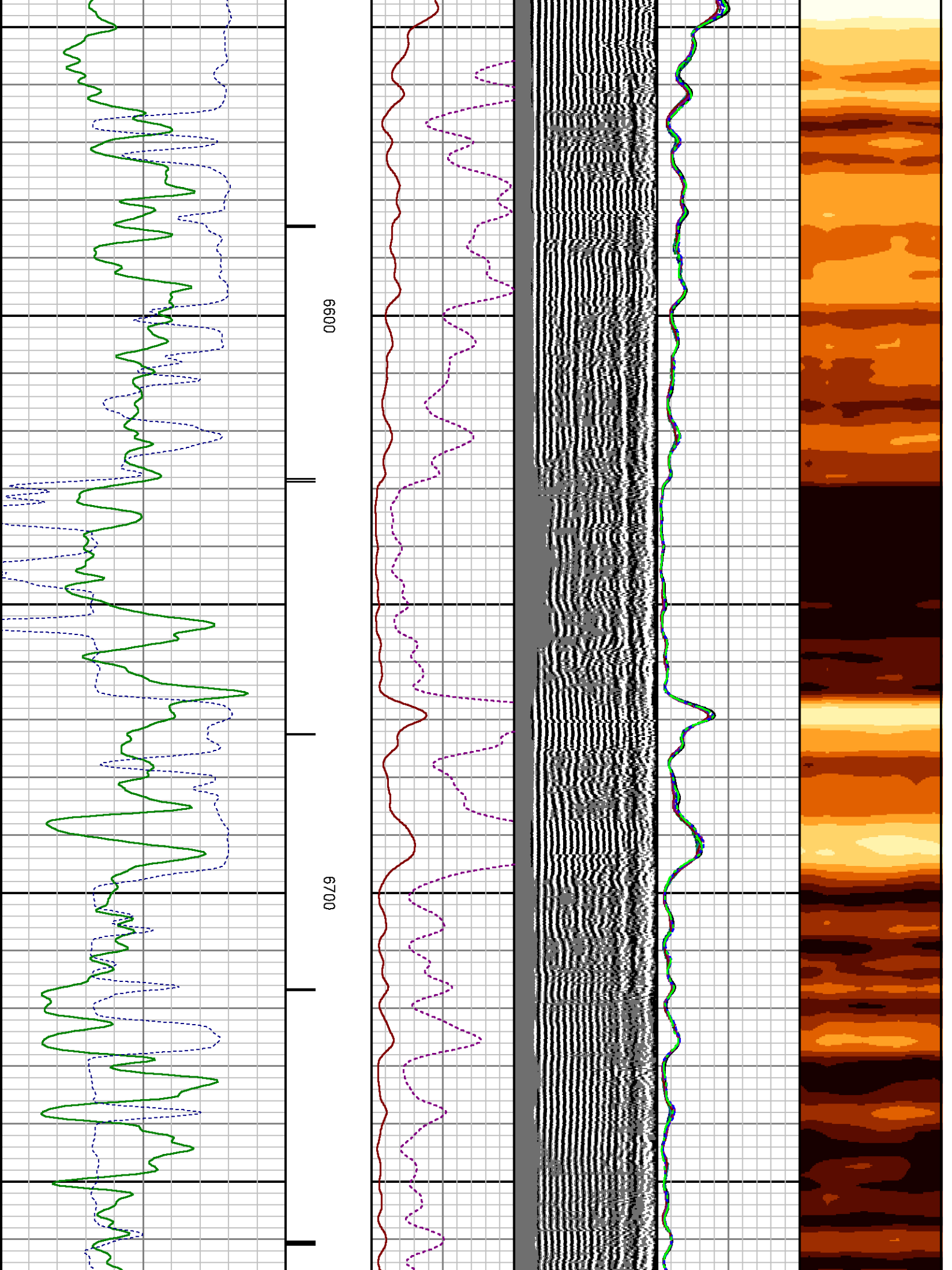


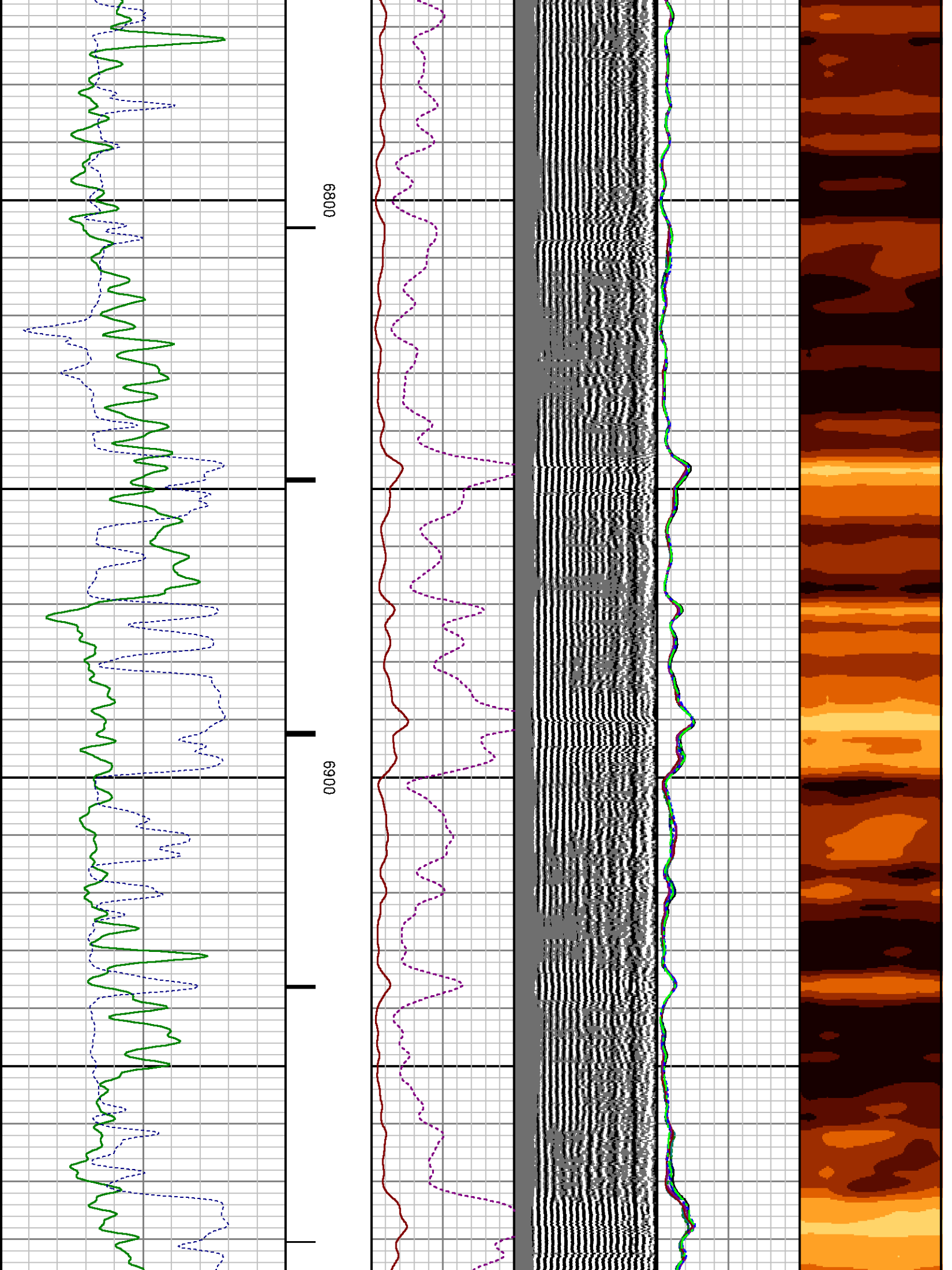


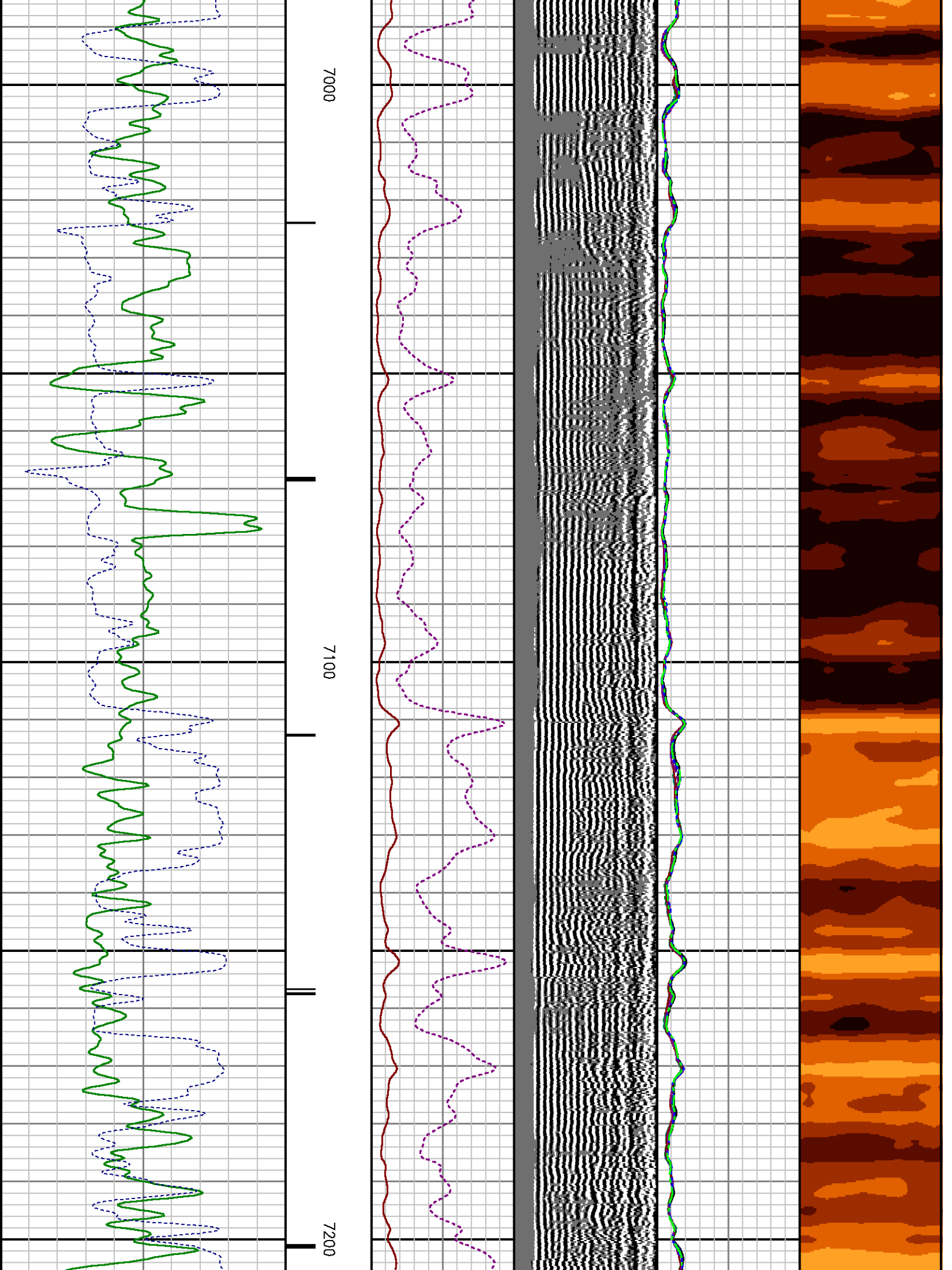


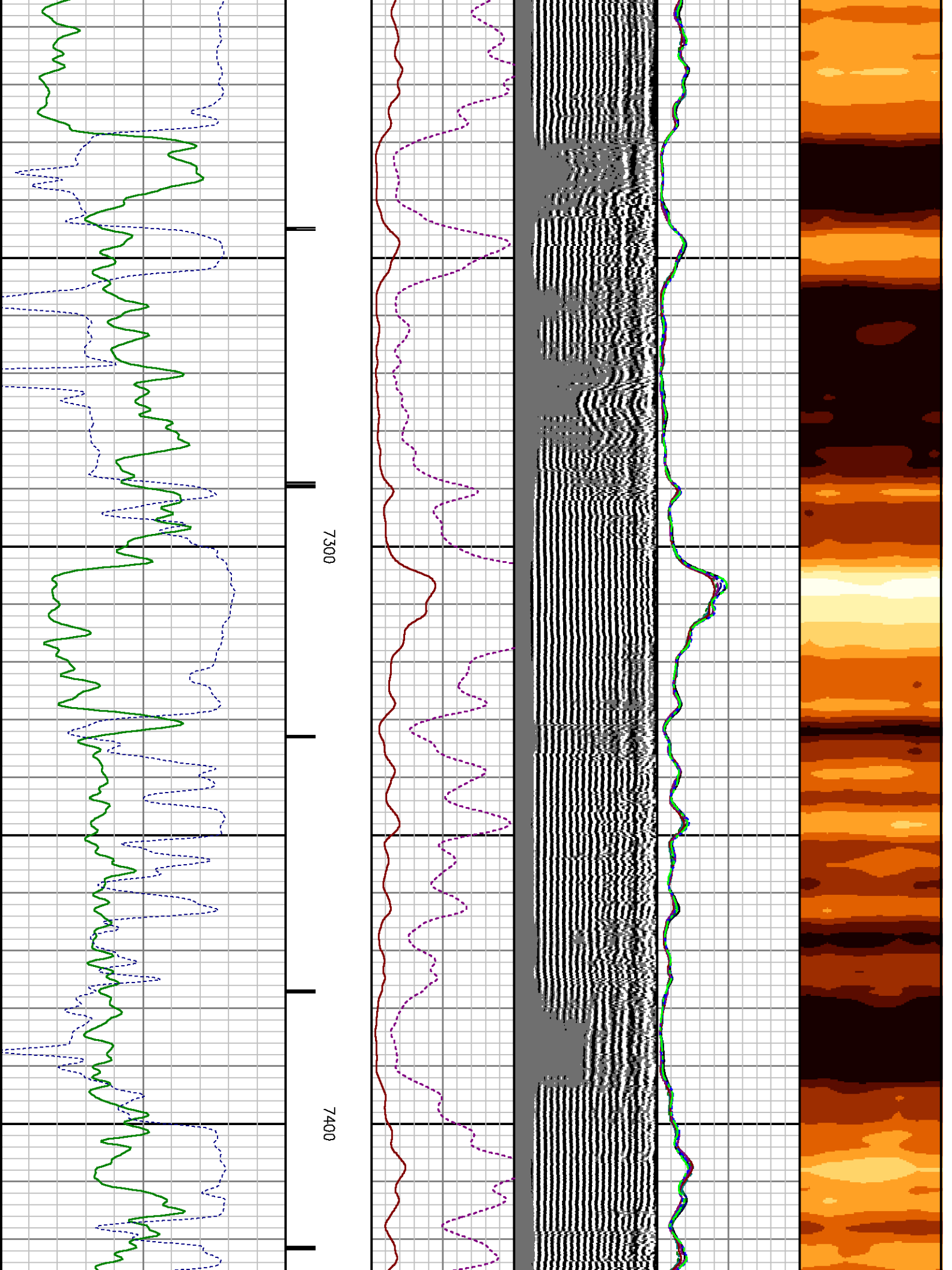


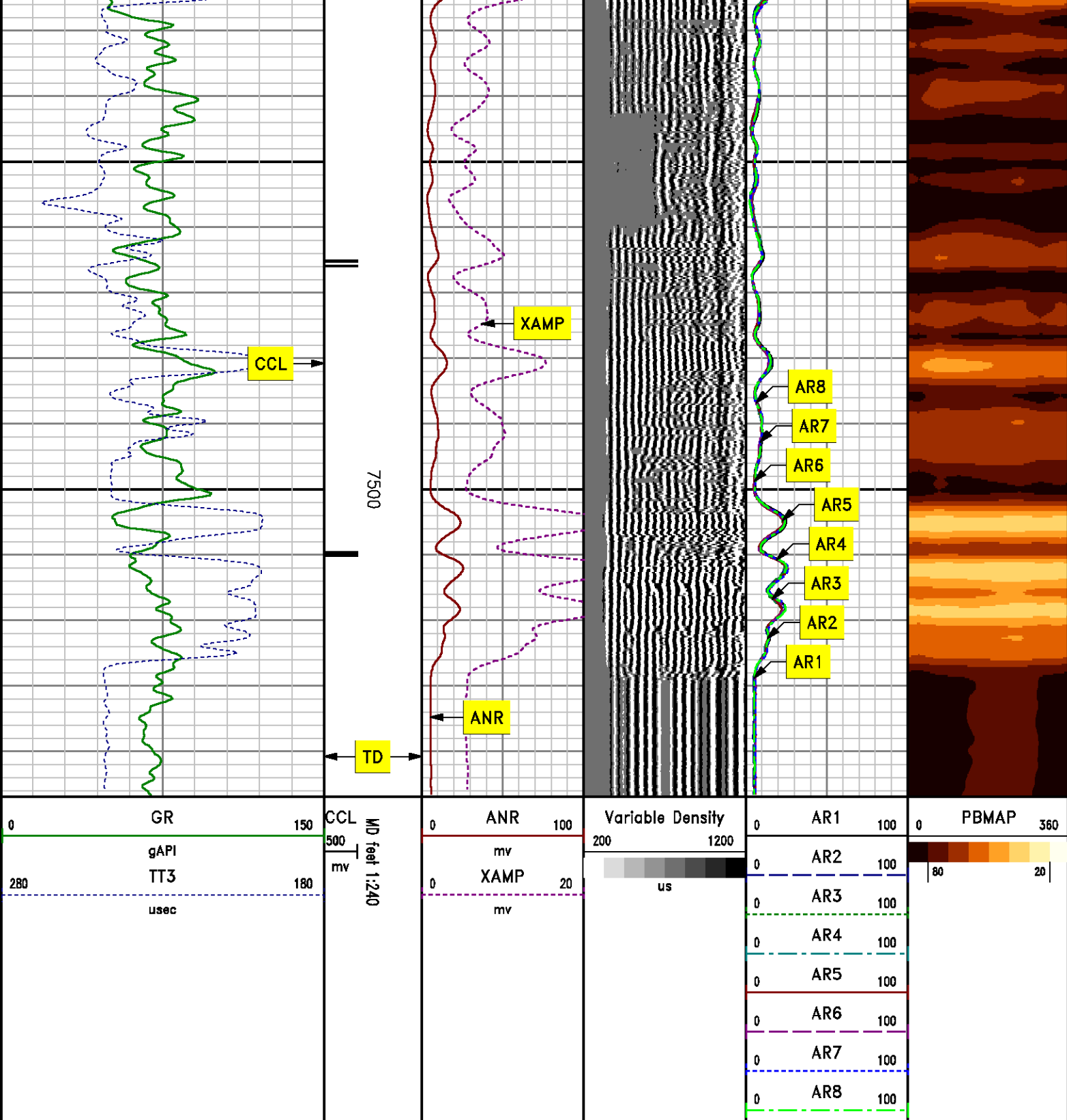












REPEAT SECTION
0 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	305.000	usec	7208.120	7563.120
RAL	Amp Gate Start Near	195.000	usec	7208.120	7563.120
RAL	Amp Gate Start Radial	195.000	usec	7208.120	7563.120
RAL	Amp Gate Width Far	25.000	usec	7208.120	7563.120
RAL	Amp Gate Width Near	25.000	usec	7208.120	7563.120
RAL	Amp Gate Width Radial	25.000	usec	7208.120	7563.120
RAL	casing od	4.500	inches	7208.120	7563.120
RAL	casing wt	11.600	lbm/ft	7208.120	7563.120
RAL	FB Start Far	291.900	usec	7208.120	7563.120
RAL	FB Start Near	180.000	usec	7208.120	7563.120
RAL	FB Start Radial	180.000	usec	7208.120	7563.120
RAL	FB Thresh Far	15.000	mv	7208.120	7563.120
RAL	FB Thresh Near	10.000	mv	7208.120	7563.120
RAL	FB Thresh Radial	10.000	mv	7208.120	7563.120
RAL	Fluid Travel Time	200.000	usec/ft	7208.120	7563.120

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

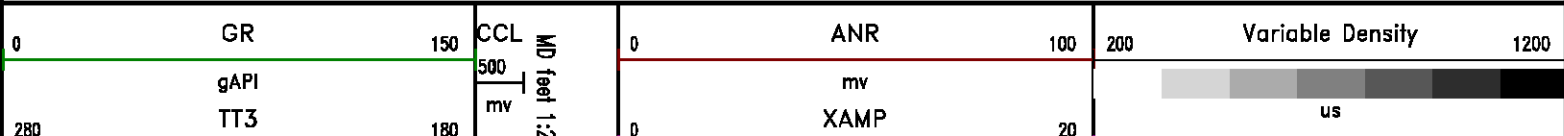
Well : FEDERAL KP 524-18

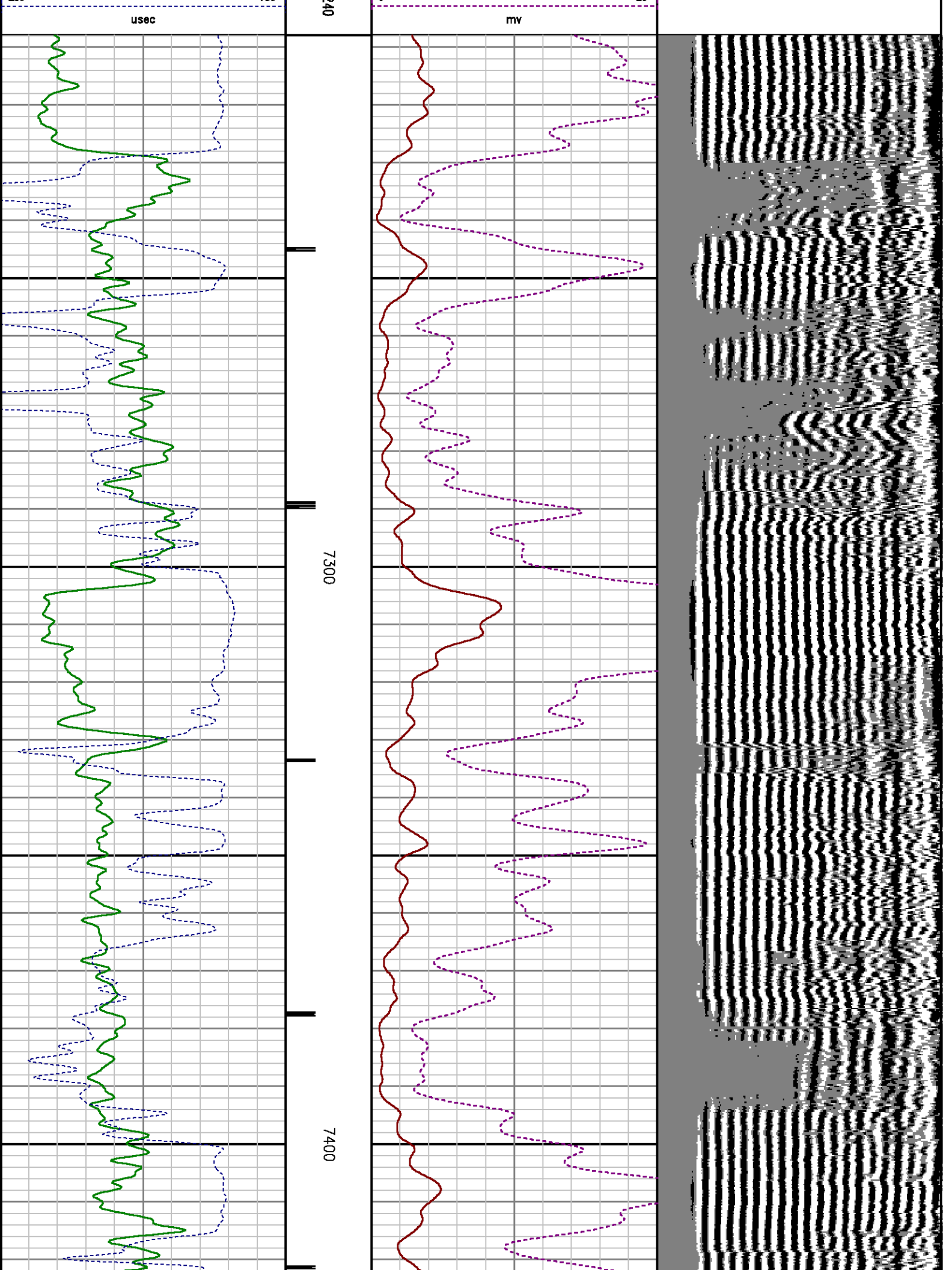
File Name : d:\welldata\wpx energy\kp 524-18\524ral\repeat.xtf

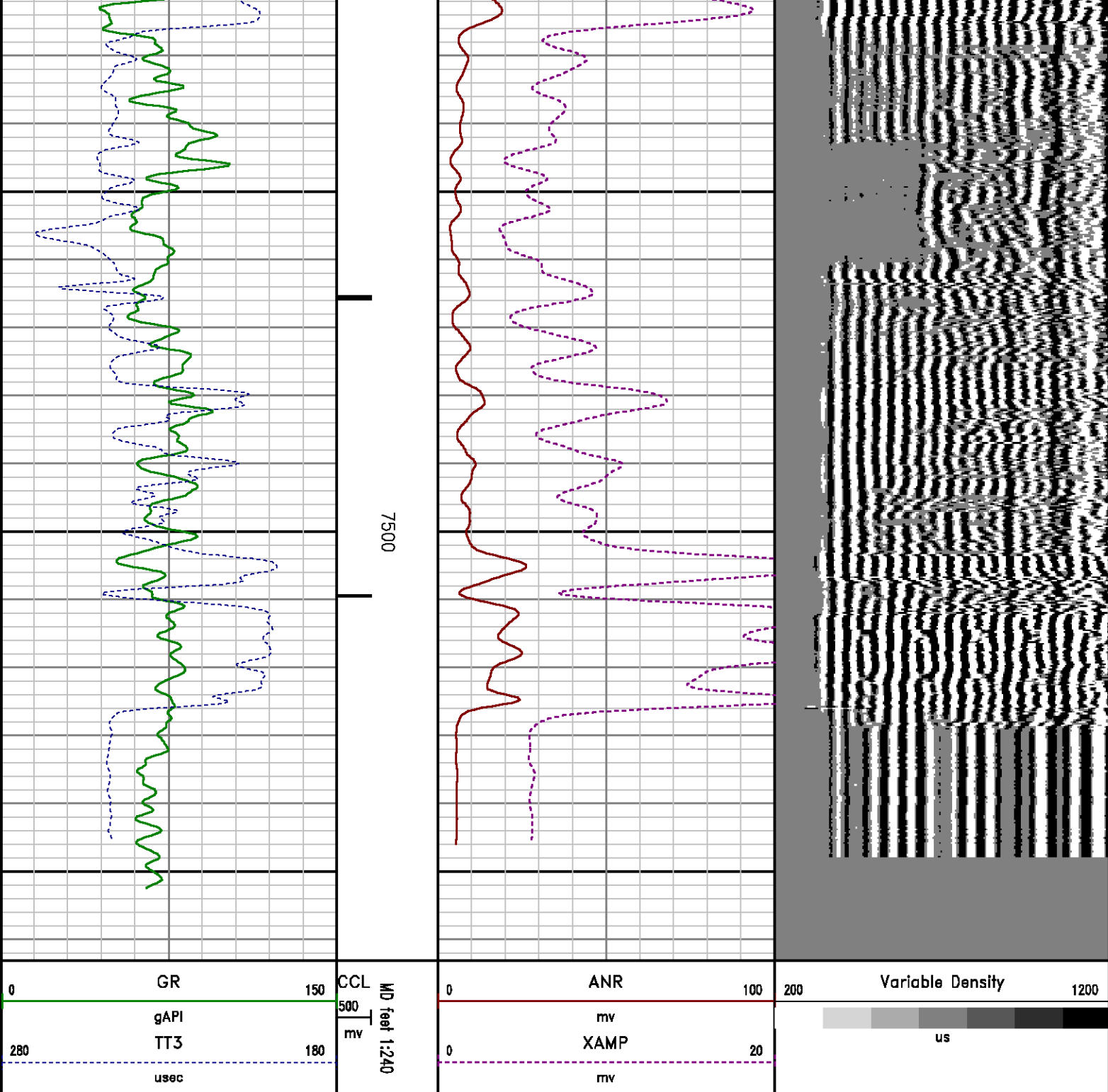
Mode : PlotMgr 5.4.504

Interval : 7207.87 - 7563.12 feet UP

Created : 8/9/2012 11:17:23 AM







CALIBRATION SUMMARY

RALSHP #2

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Aug 09 11:07:50 2012

TOOL SERIES:

1426XA

ASSET:

106

SEQ:

A9

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	217	216	30	166	25	-0.460	100.00	0.16
3 Ft. Receiver	217	216	30	157	25	-0.297	100.00	0.16
5 Ft. Receiver	325	332	30	236	25	0.528	150.00	0.17
Radial #1	216	216	30	142	25	1.174	100.00	0.16
Radial #2	216	216	30	142	25	0.443	100.00	0.16
Radial #3	217	216	30	142	25	0.005	100.00	0.16
Radial #4	217	216	30	142	25	0.013	100.00	0.16
Radial #5	216	216	30	142	25	-0.147	100.00	0.16
Radial #6	216	216	30	142	25	-0.176	100.00	0.16
Radial #7	215	216	30	142	25	-0.385	100.00	0.16
Radial #8	217	216	30	142	25	-0.032	100.00	0.16

RALFLD #2

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu Aug 09 11:10:42 2012

TOOL SERIES:

1426XA

ASSET:

106

SEQ:

A9

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	-0.106	0.000	1.00	100.000
3 Ft. Receiver	195	25	-0.808			
5 Ft. Receiver	305	25	-0.827			
Radial #1	195	25	-1.970			
Radial #2	195	25	-1.168			
Radial #3	195	25	-0.828			
Radial #4	195	25	-1.041			
Radial #5	195	25	-0.859			
Radial #6	195	25	-0.818			
Radial #7	195	25	-0.631			
Radial #8	195	25	-0.719			

GAMMA RAY

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Tue Jul 17 09:43:56 2012 TOOL SERIES: 2459XA ASSET: 544 SEQ: J7

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
SHOP JIG	79.29	341.56	0.705	55.93	240.93	185.00

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Tue Jul 17 09:46:29 2012 TOOL SERIES: 2459XA ASSET: 544 SEQ: J7

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
SHOP JIG	80.09	347.96	0.705	56.49	245.44	188.95

TOOL DIAGRAM

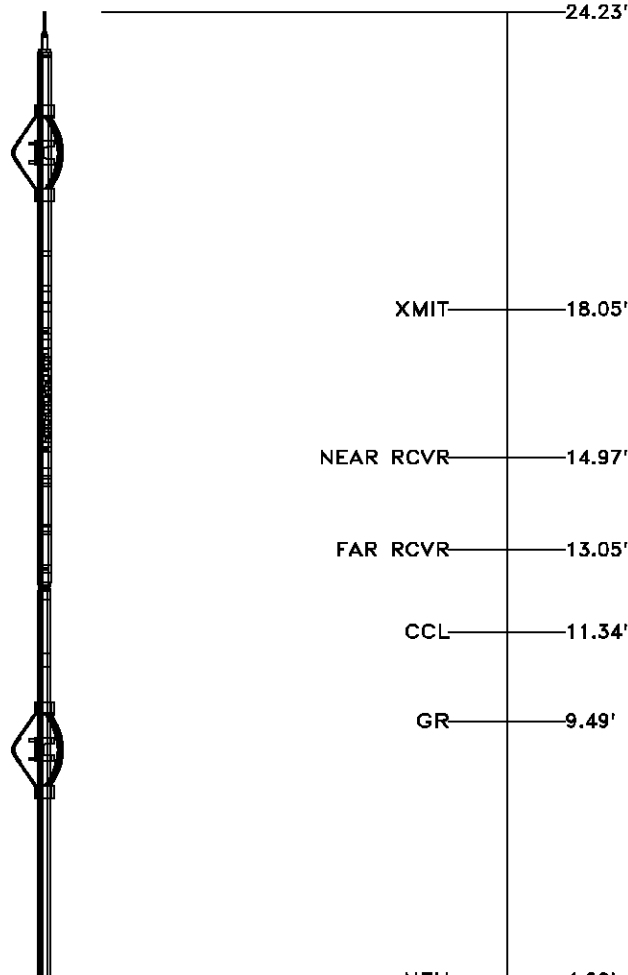
OTA SHORT CABLE HEAD

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



NEU 4.09'

0.00'


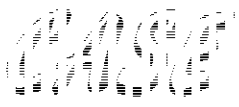
CENTRALIZER	
Series	RALCENT
Mnemonic	CENT
Diameter	3.12"
Weight	20.00 lb



Total Length: 24.23'

Total Weight: Not Available

Max Diameter: 0' 3.12"

 Baker Atlas 	Company WPX ENERGY		File No: CH059092	
	Well FEDERAL KP 524-18		API No: 05045206330000	
	Field KOKOPELLI			
	County GARFIELD	State COLORADO		
Location SHL: 699' FSL, 1948 FEL BHL: 221' FSL, 1960' FWL		Elevations KB 5944 ft DF GL 5918 ft		18 6S 91W KP 34-18 PAD NABORS 574
SEC 18		TWP 6S	RGE 91W	