



# RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: CH072033	Company Well Field County	WPX ENERGY DIAMOND ELK PA 333-2 PARACHUTE GARFIELD	State COLORADO
API No: 05045208830000			
2 7S 9SW GV 84-1 MABORS SSD 574	Location SHL: 2324' FSL & 673' FWL SEC:1 BHL: 1989' FSL & 2124' FEL SEC:2 SEC 2 TWP 7S RGE 9SW	Other Services RPM KB 6053 ft DF GL 6027 ft	
Permanent Datum Log Measured From Drill Measured From	E.L. _____ Elevation 6027 ft K.B. _____ 26 ft Above P. D. KELLY BUSHING		

Date	16/MAY/13	
Run	ONE	
Service Order	575078	
Depth Driller	6554 ft	
Depth Logger	8517 ft	
Bottom Logged Interval	8507 ft	
Top Logged Interval	26 ft	
Time Started	8:00	
Time Finished	12:00	
Operator Rig Time	4 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	N/A	
Salinity	N/A	
Fluid Level	78 ft	
Logged Cement Top	N/A	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	N/A	
Nominal Logging Speed	45 fpm	
Maximum Recorded Temperature	229 degF	
Reference Log	N/A	
Reference Log Date	N/A	
Equipment No.	4271	GRAND JUNCTION
Recorded By	W. KINSEL	9721
Witnessed By	MR. GARY VALLAD	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	1605 ft
7.875 In	0 ft	8618 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 In	N/A	N/A	0 ft	1491 ft
4.5 In	11.6 lbm/ft	1-80	0 ft	8554 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 7 FEET DOWN.
SHORT JOINT: 5344' - 5365'
BHT: 229 degF
LOG DONE WITH 0 PSI ON WELLHEAD

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1426XA	10404539	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	304.887	usec	34.562	8534.500
RAL	Amp Gate Start Near	197.374	usec	34.562	8534.500
RAL	Amp Gate Start Radial	198.140	usec	34.562	8534.500
RAL	Amp Gate Width Far	25.000	usec	34.562	8534.500
RAL	Amp Gate Width Near	25.000	usec	34.562	8534.500
RAL	Amp Gate Width Radial	25.000	usec	34.562	8534.500
RAL	casing od	4.500	inches	34.562	8534.500
RAL	casing wt	11.600	lbm/ft	34.562	8534.500
RAL	FB Start Far	291.900	usec	34.562	8534.500
RAL	FB Start Near	175.391	usec	34.562	8534.500
RAL	FB Start Radial	175.391	usec	34.562	8534.500
RAL	FB Thresh Far	10.000	mv	34.562	8534.500
RAL	FB Thresh Near	4.000	mv	34.562	8534.500
RAL	FB Thresh Radial	4.000	mv	34.562	8534.500
RAL	Fluid Travel Time	200.000	usec/ft	34.562	8534.437

## 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

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

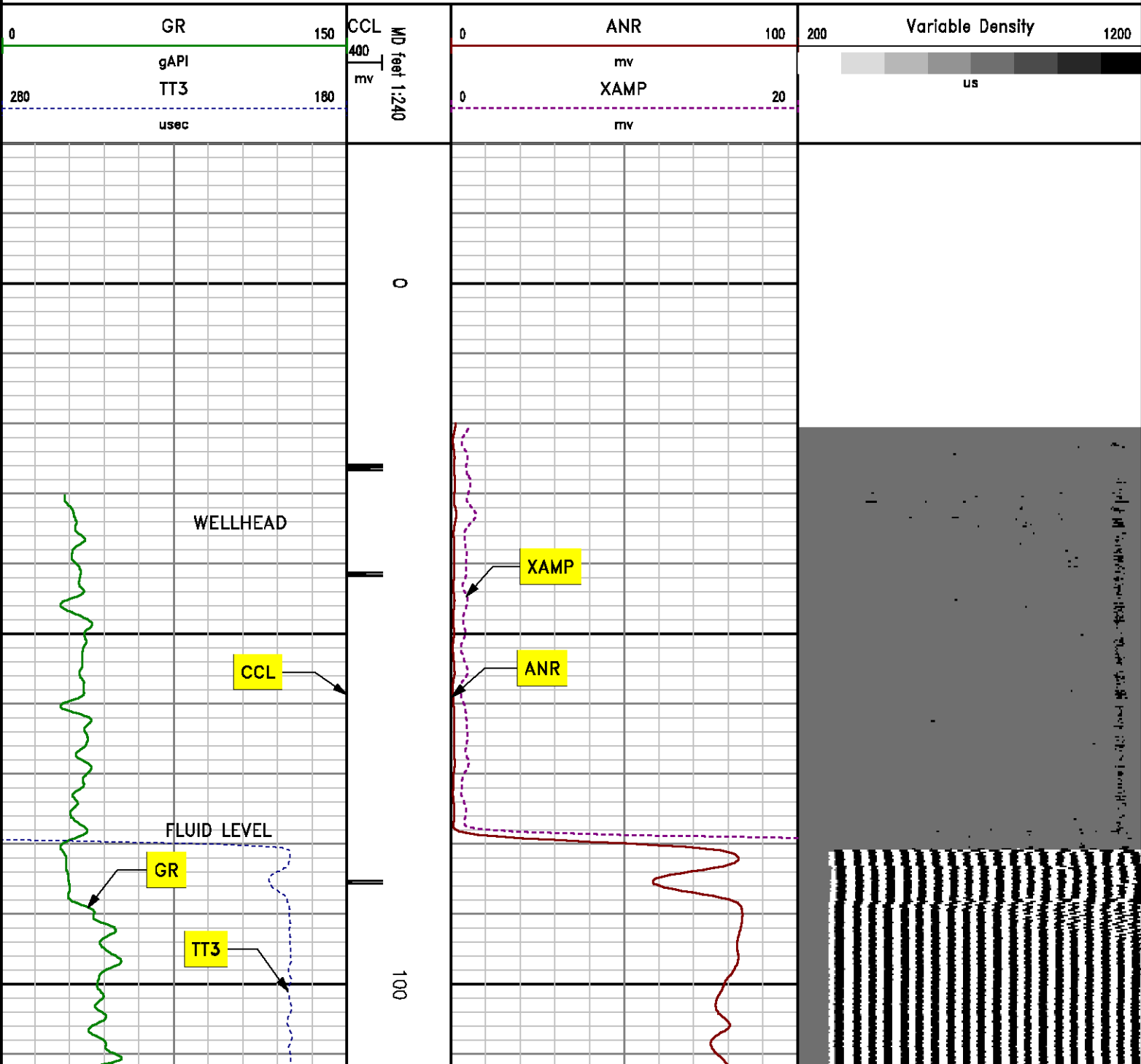
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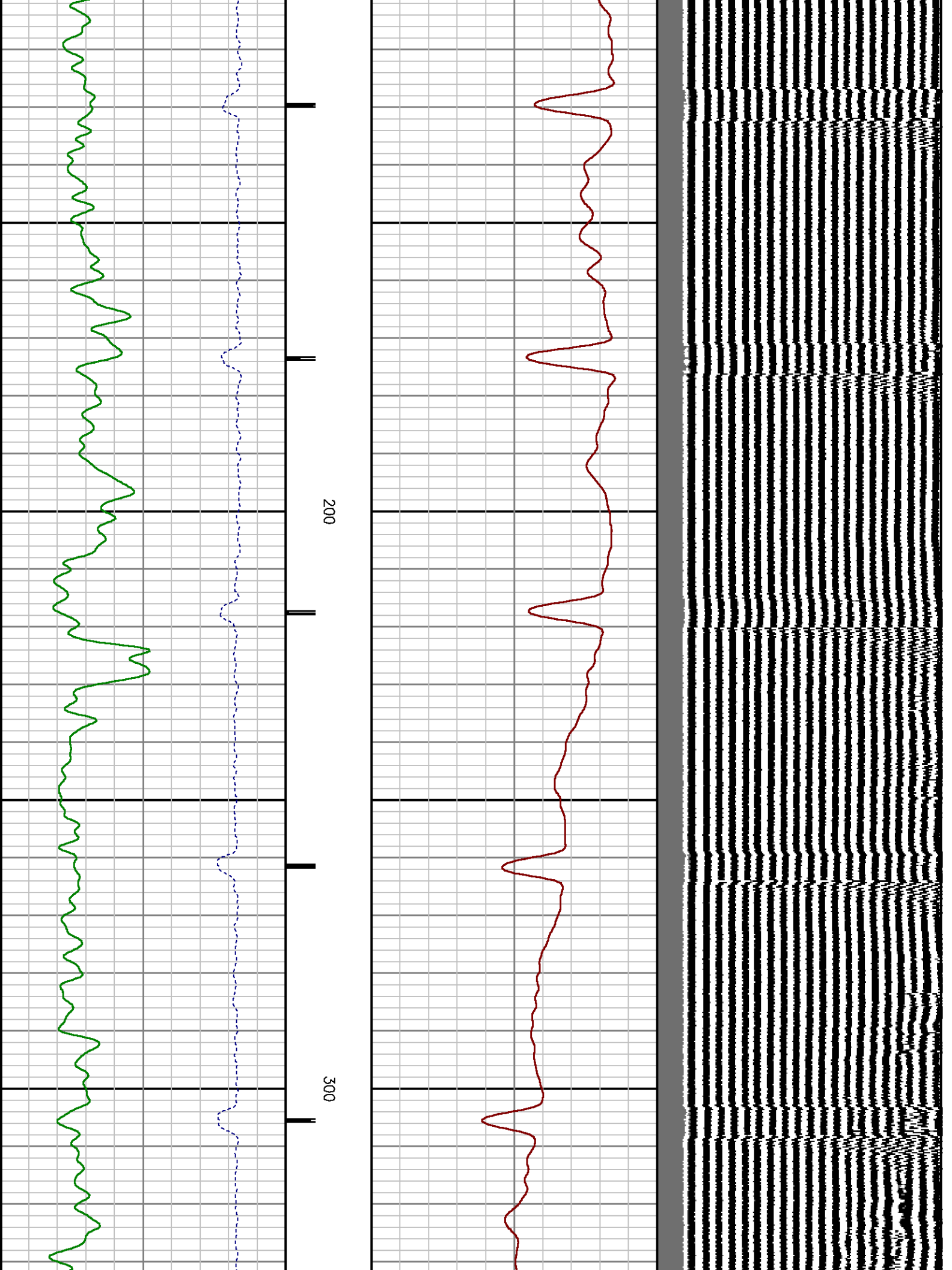
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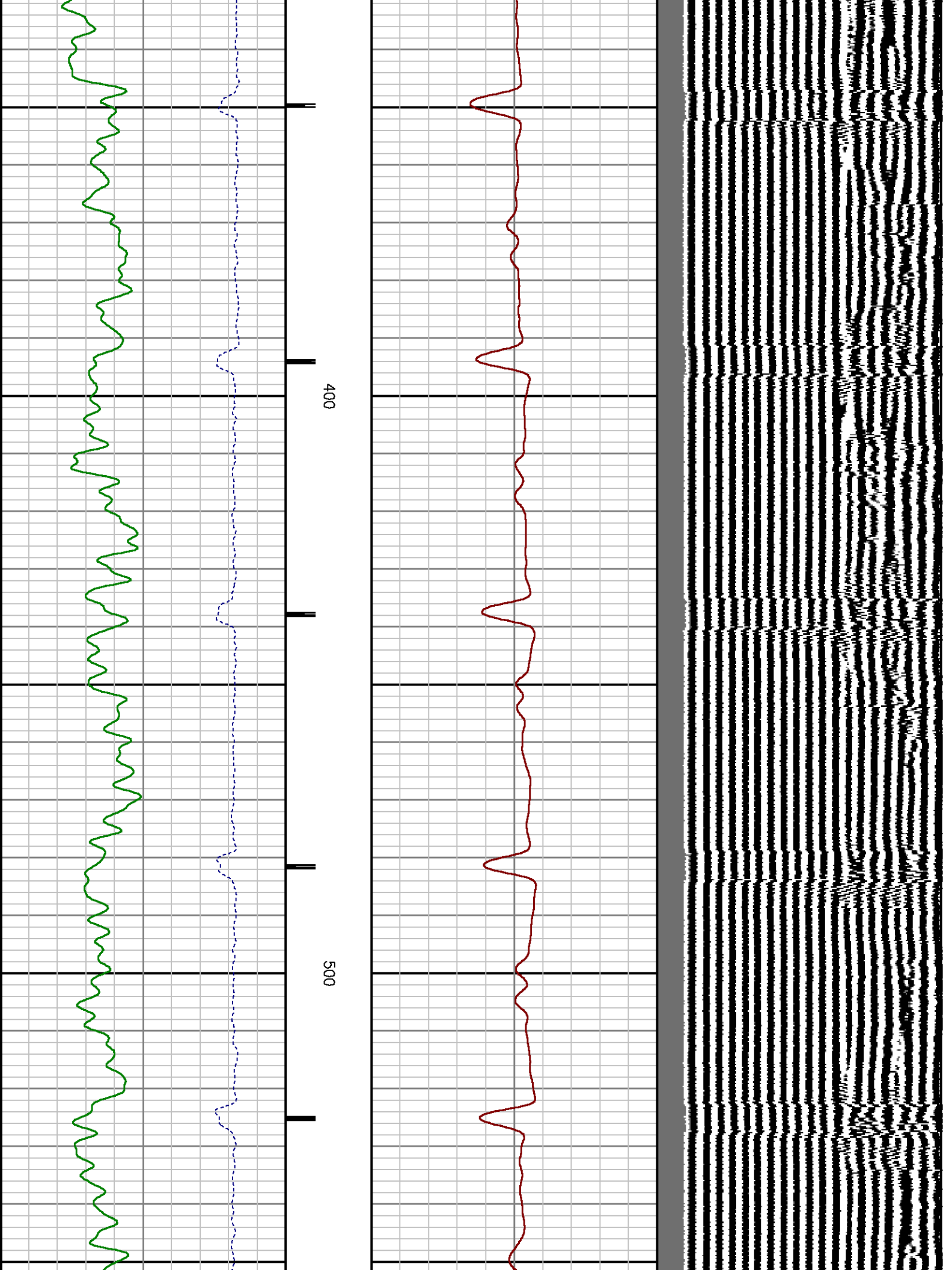
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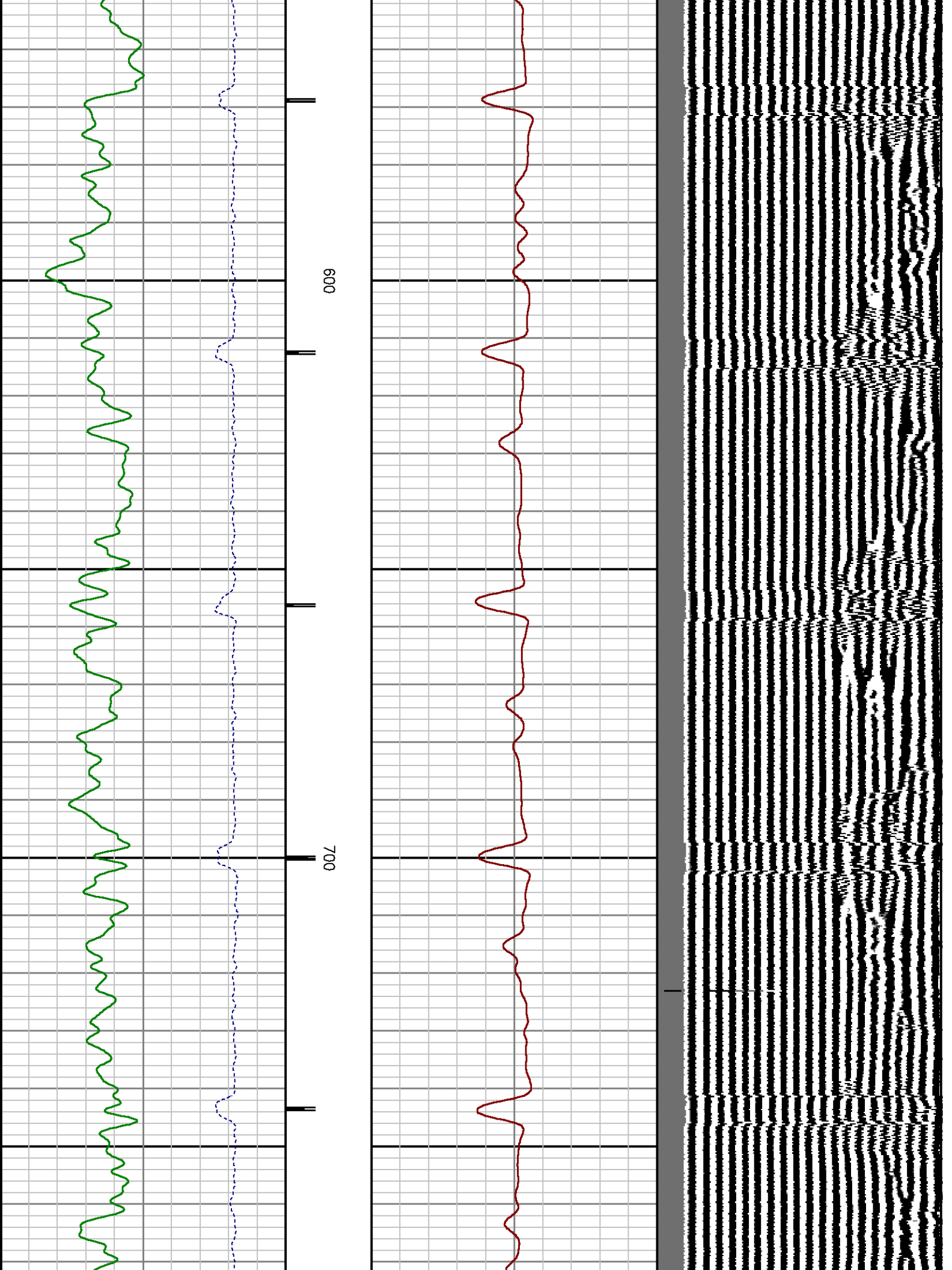
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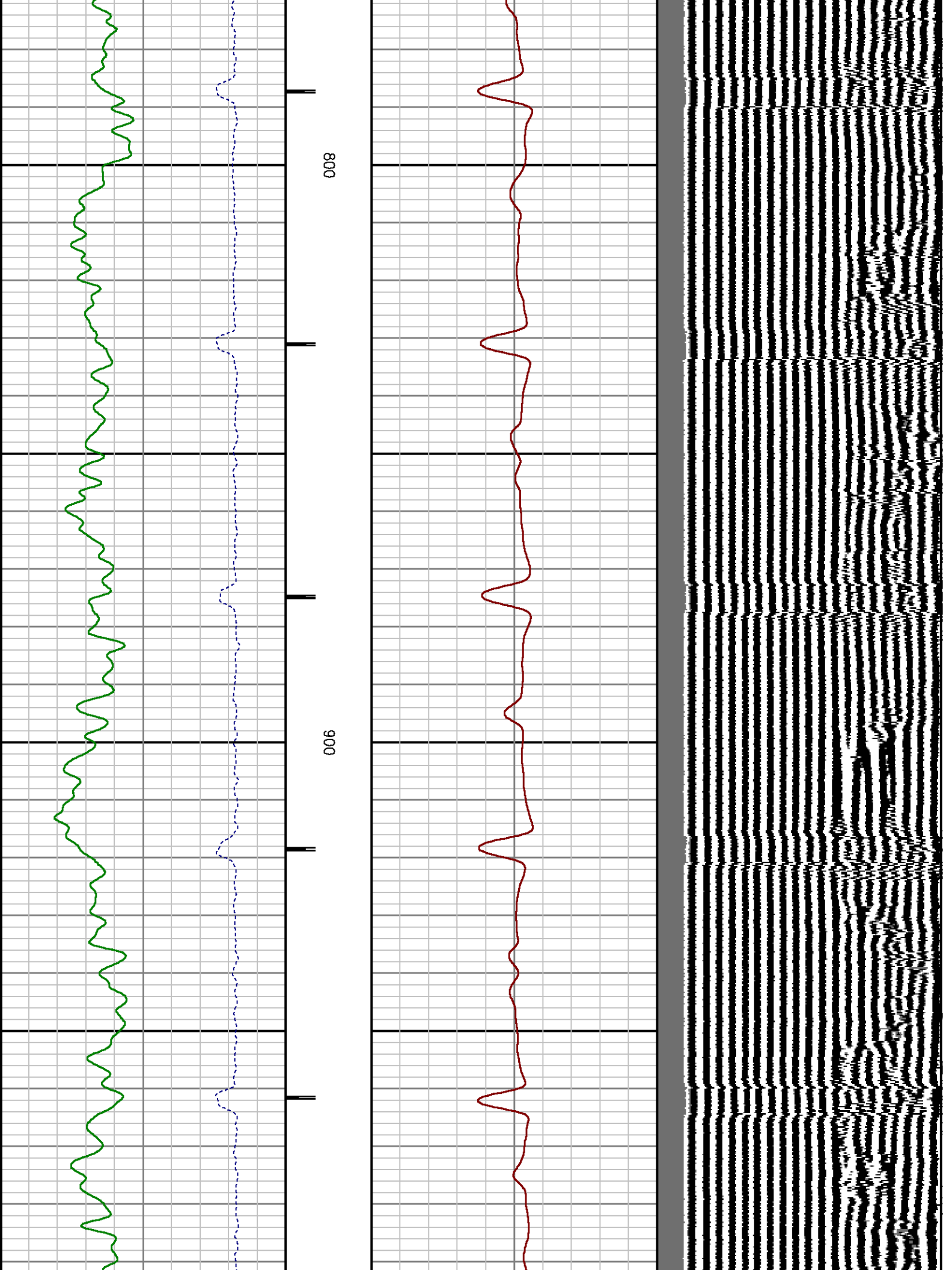
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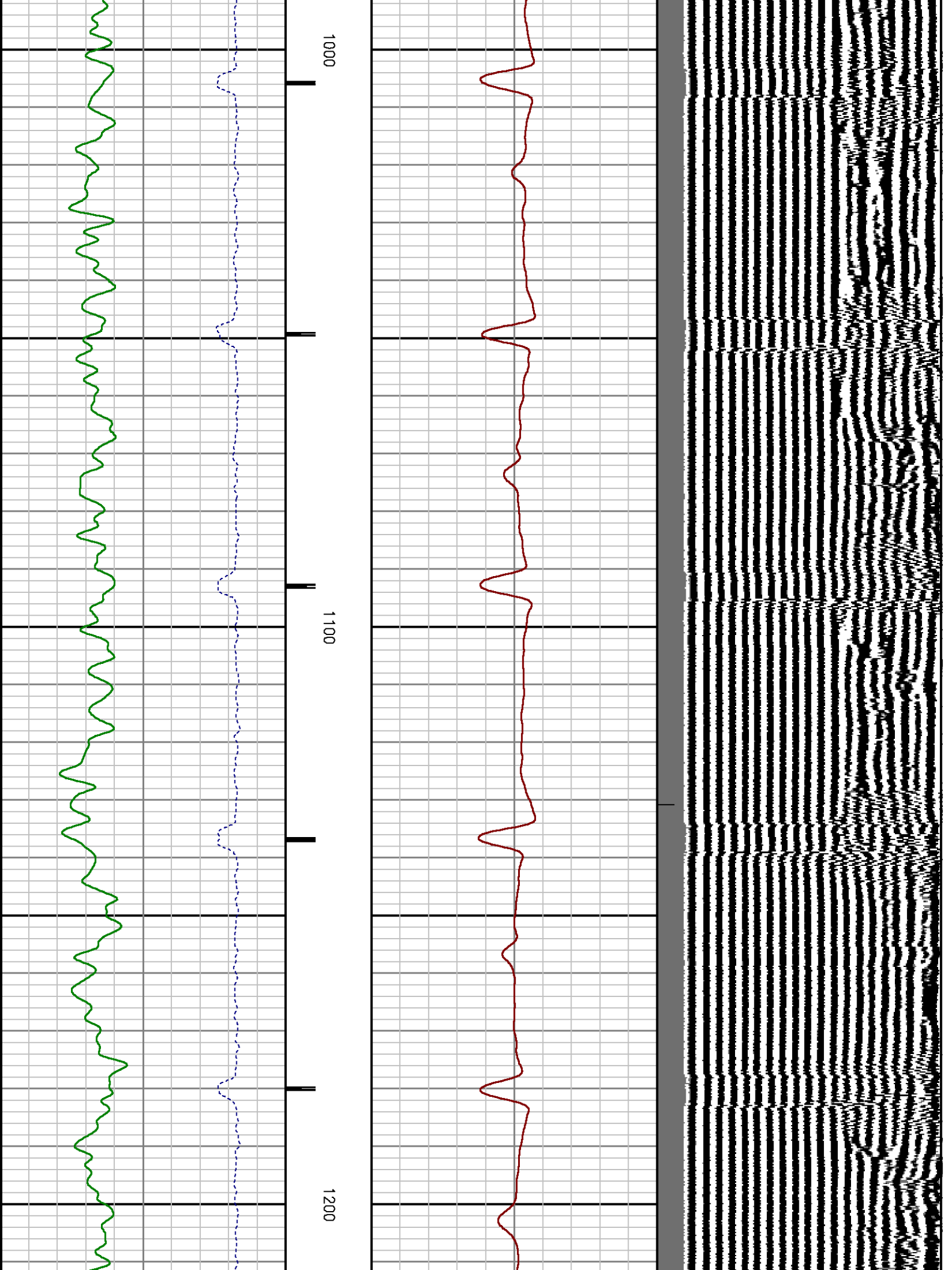




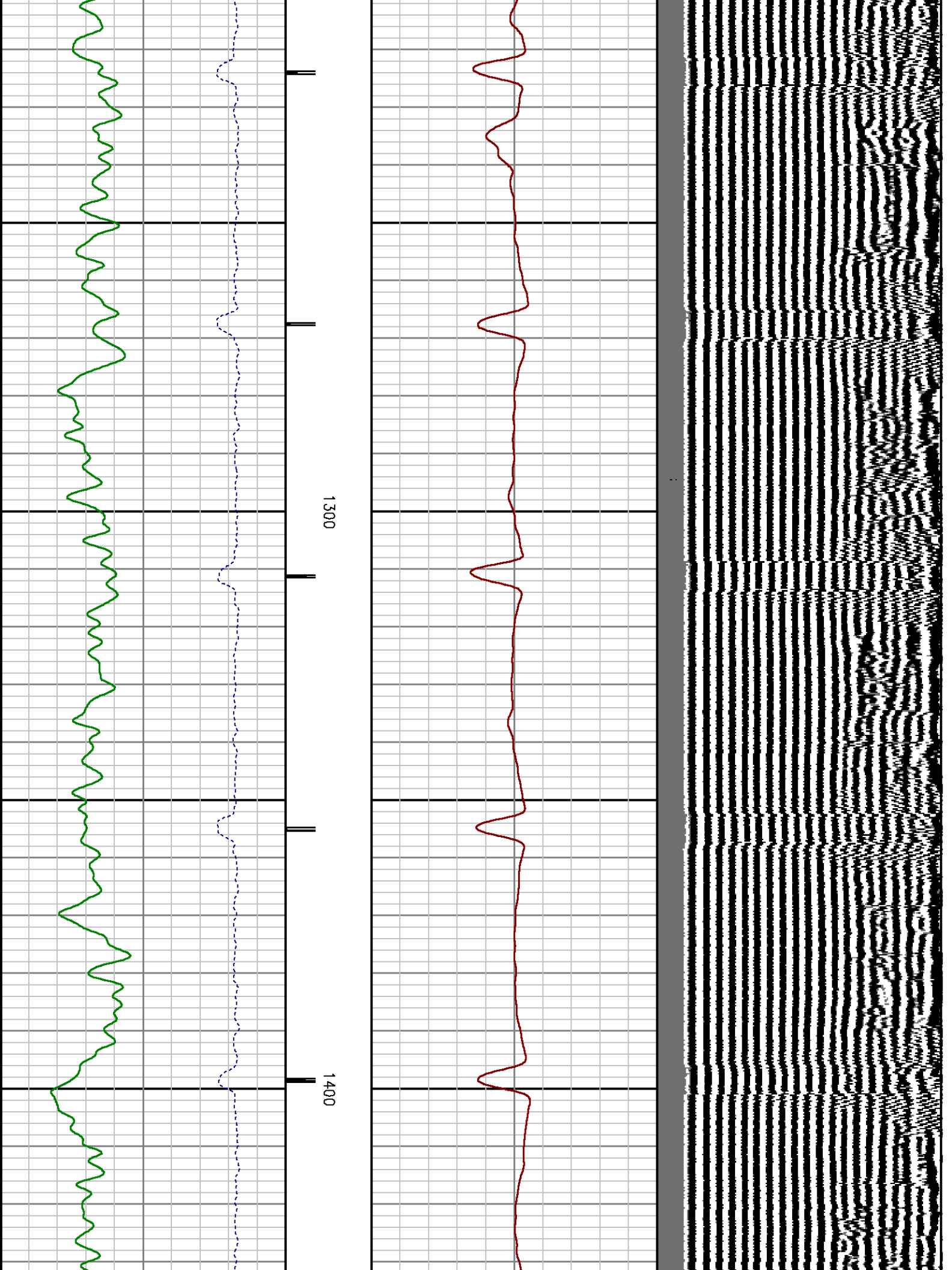


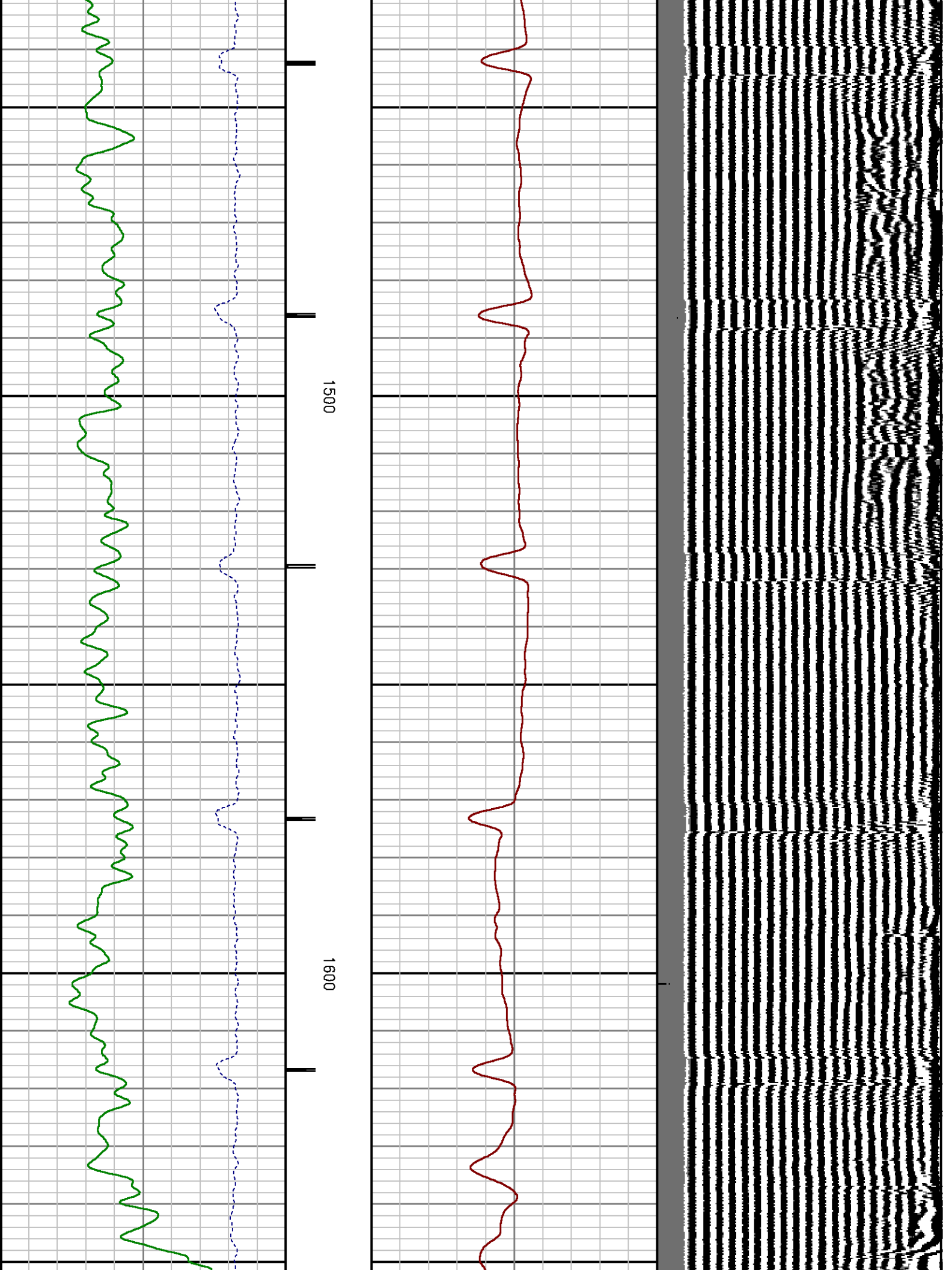


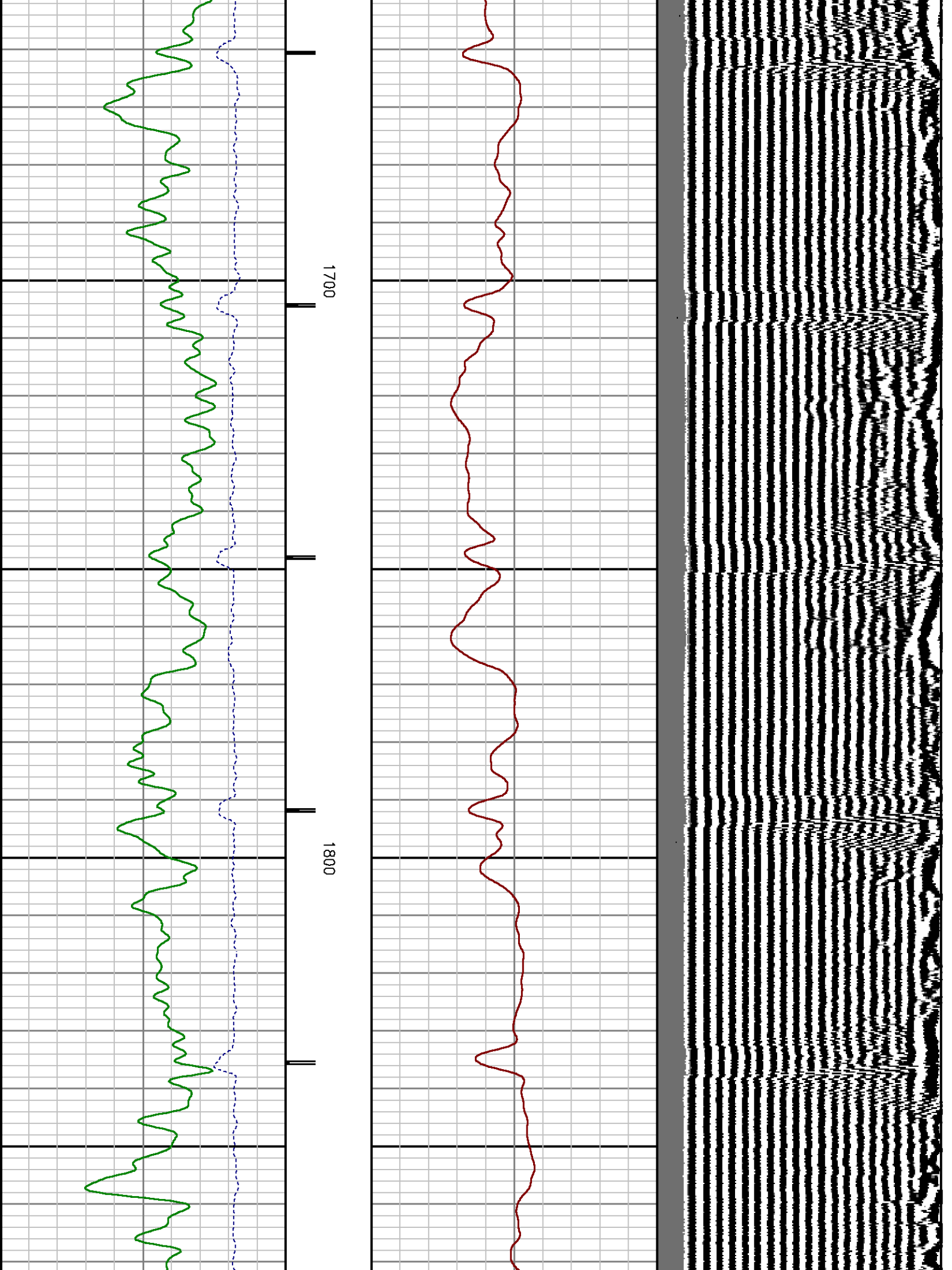


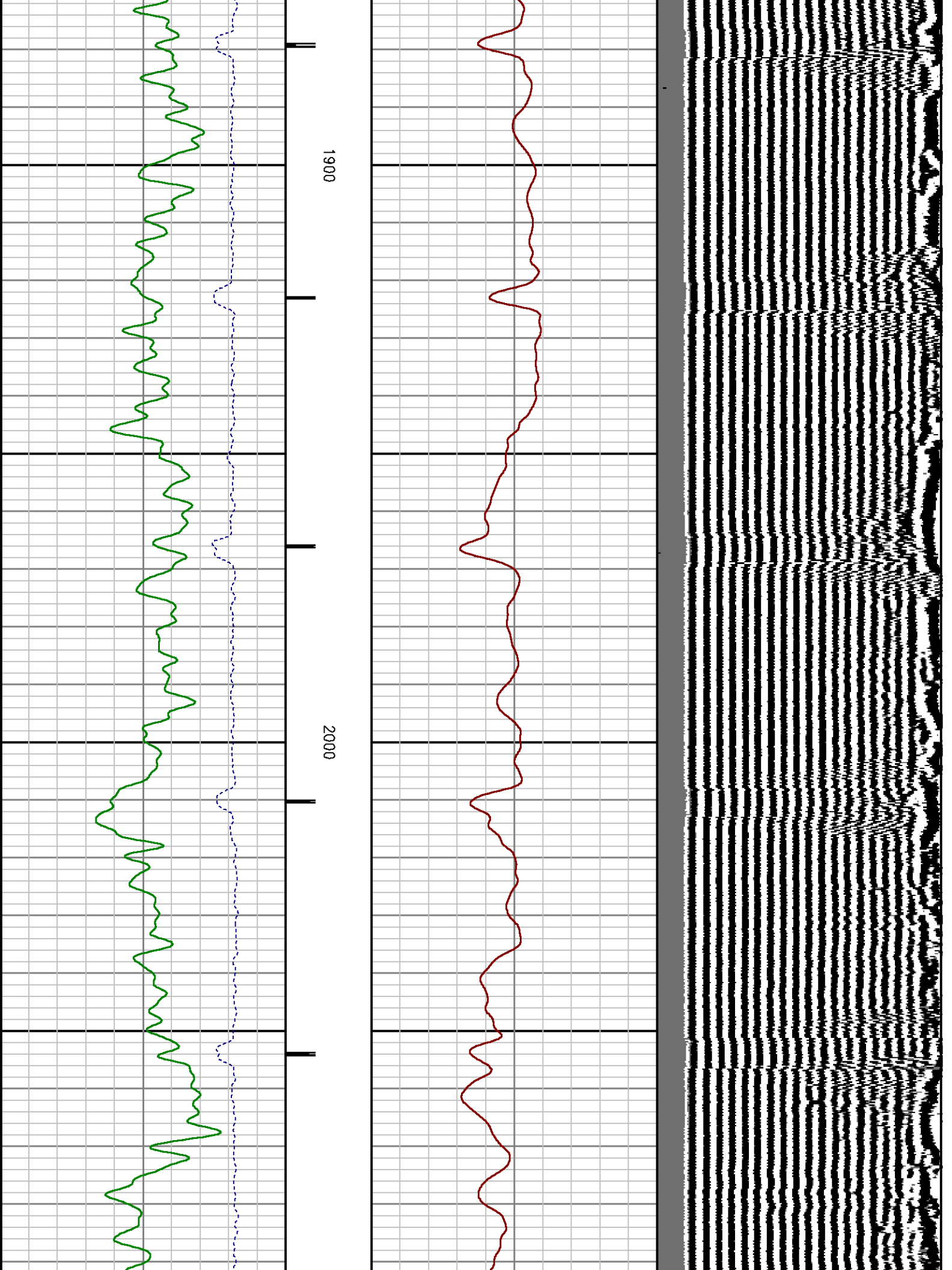


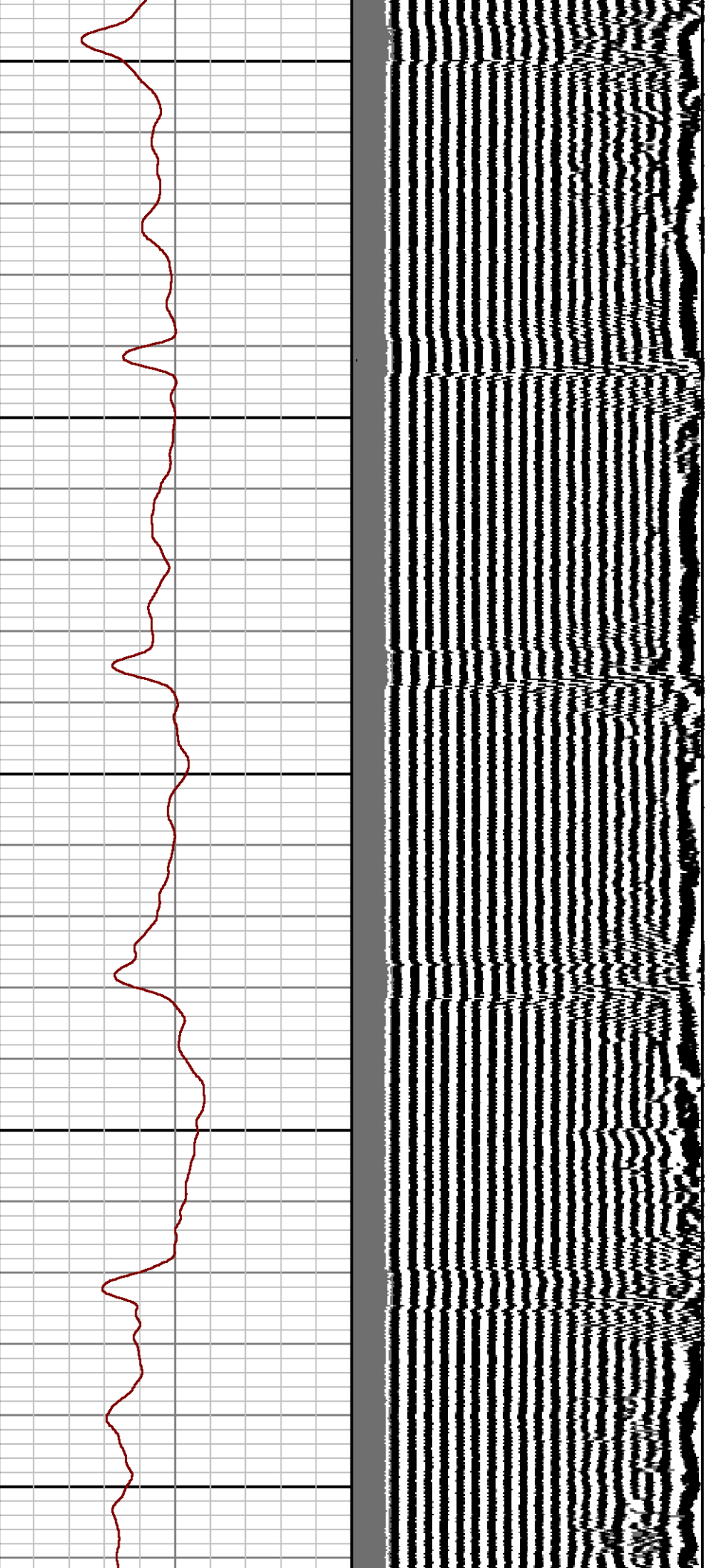








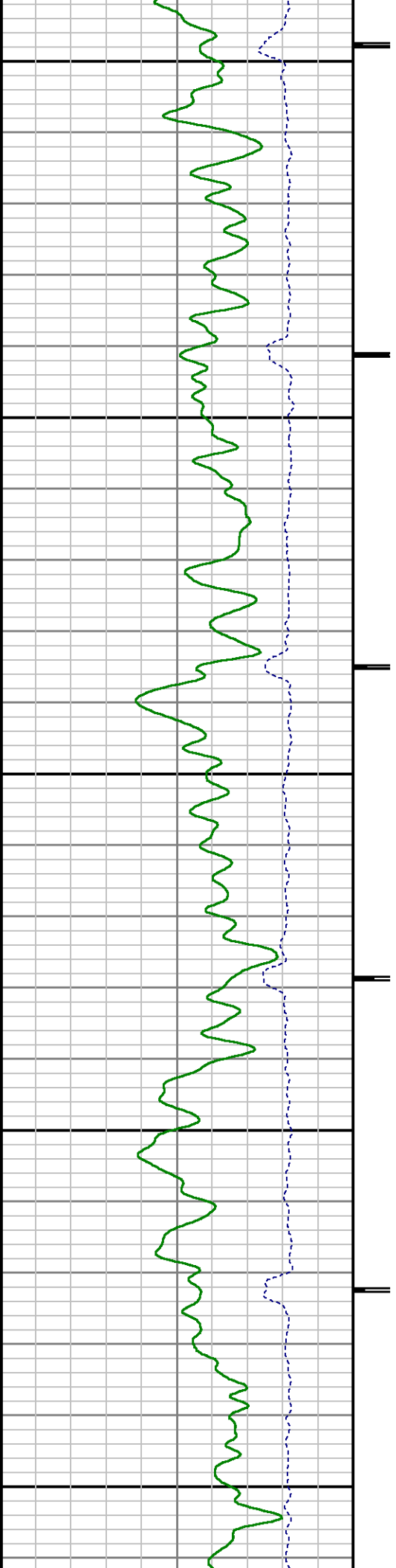


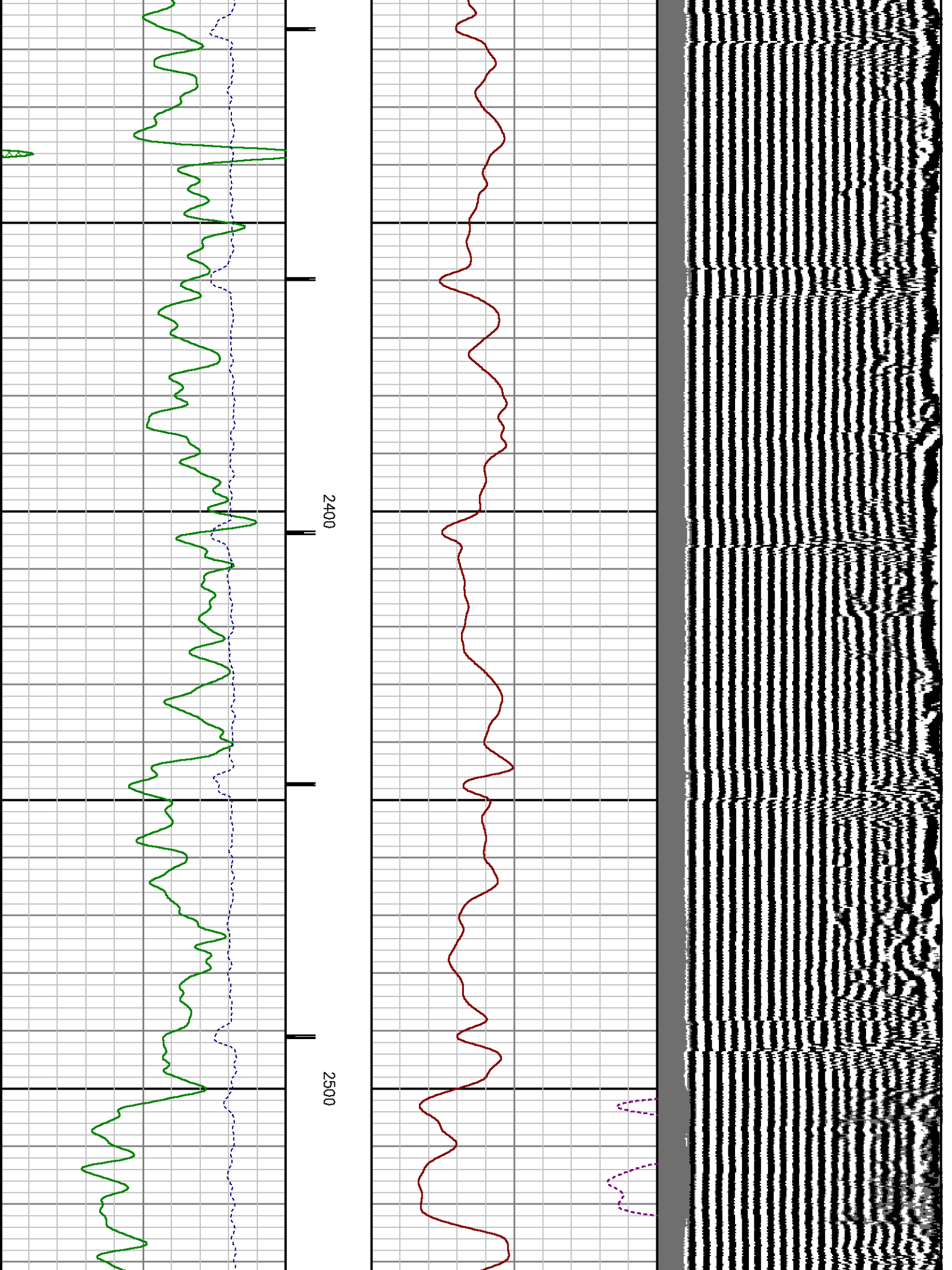


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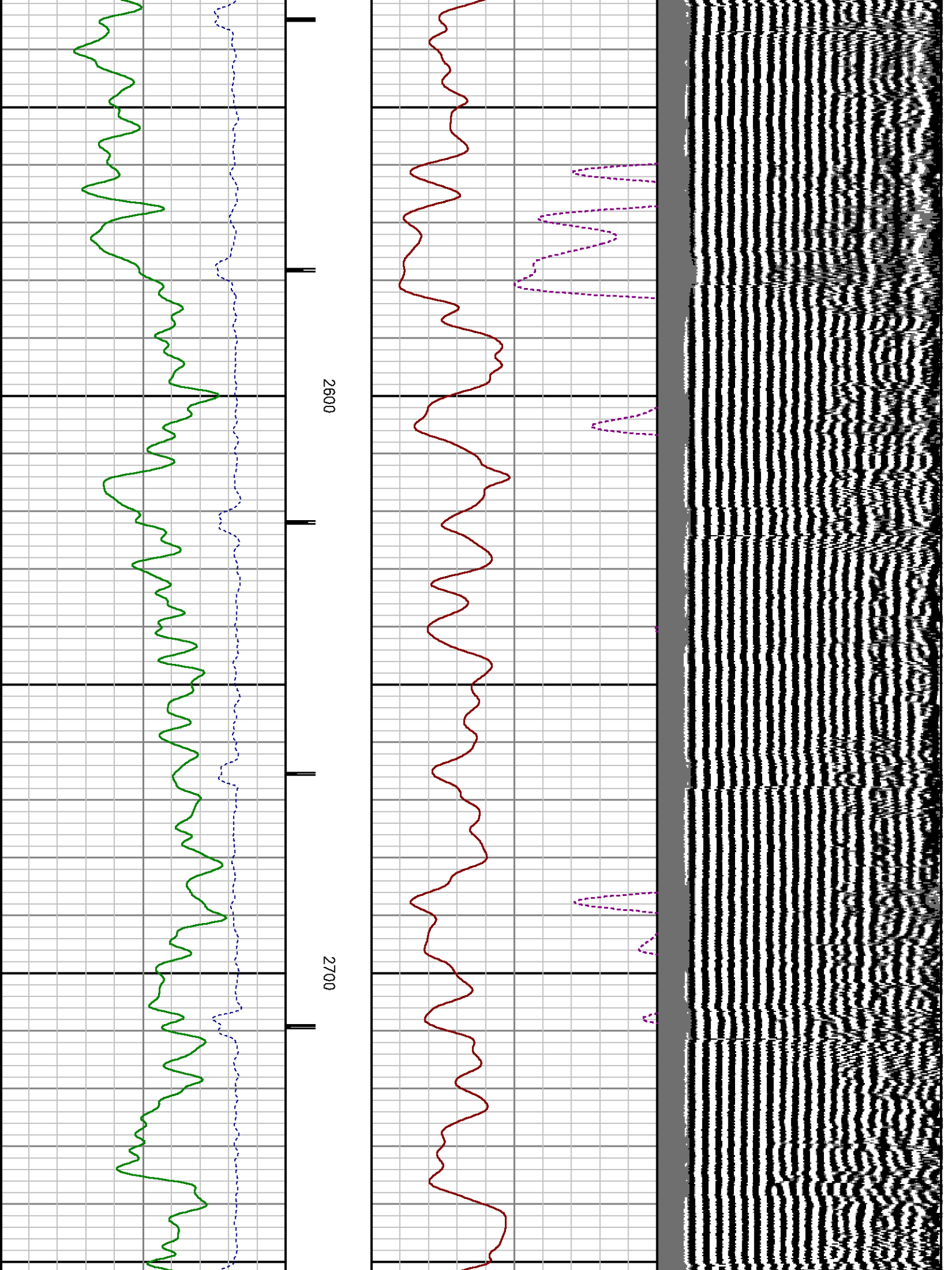
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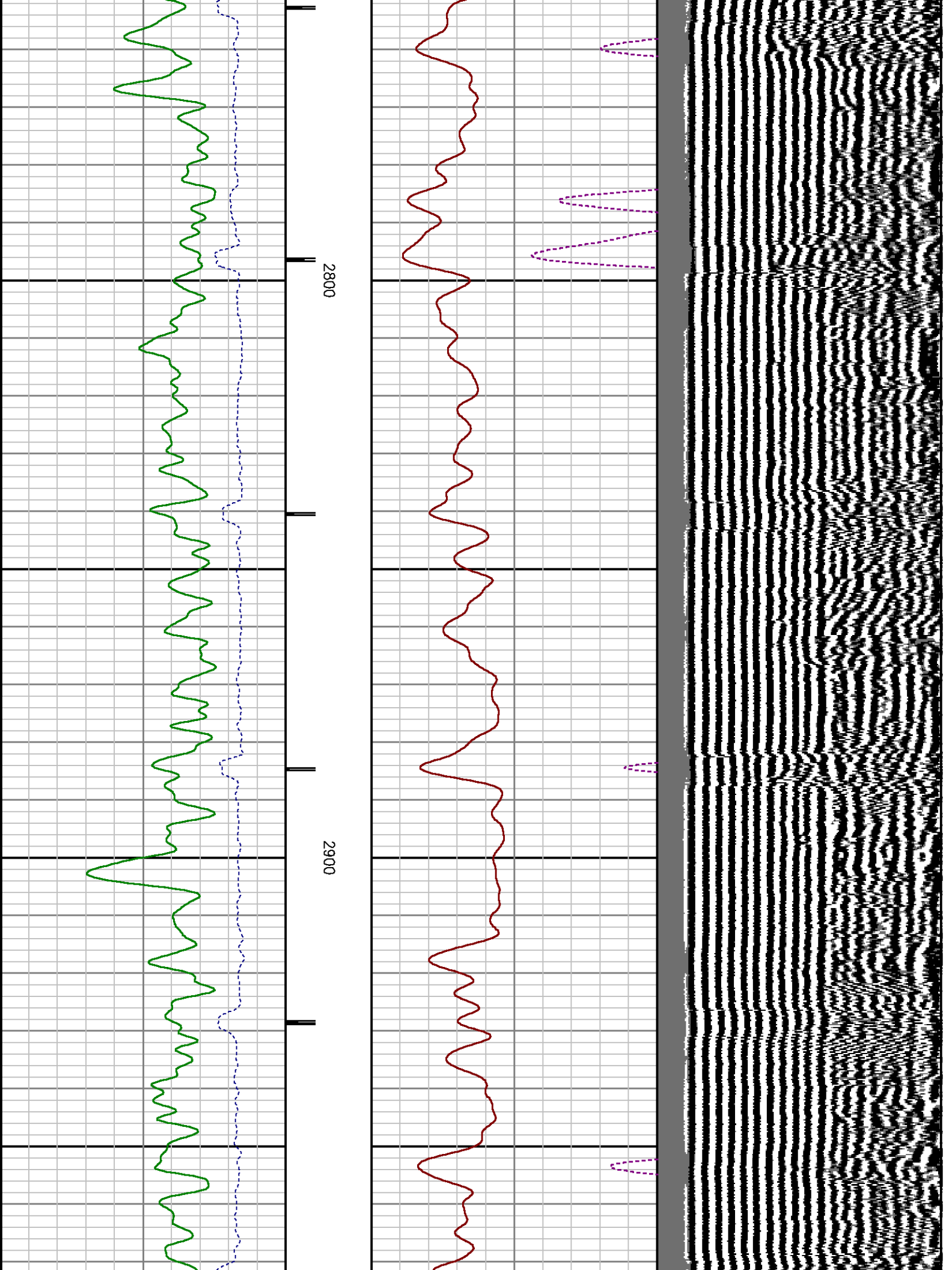
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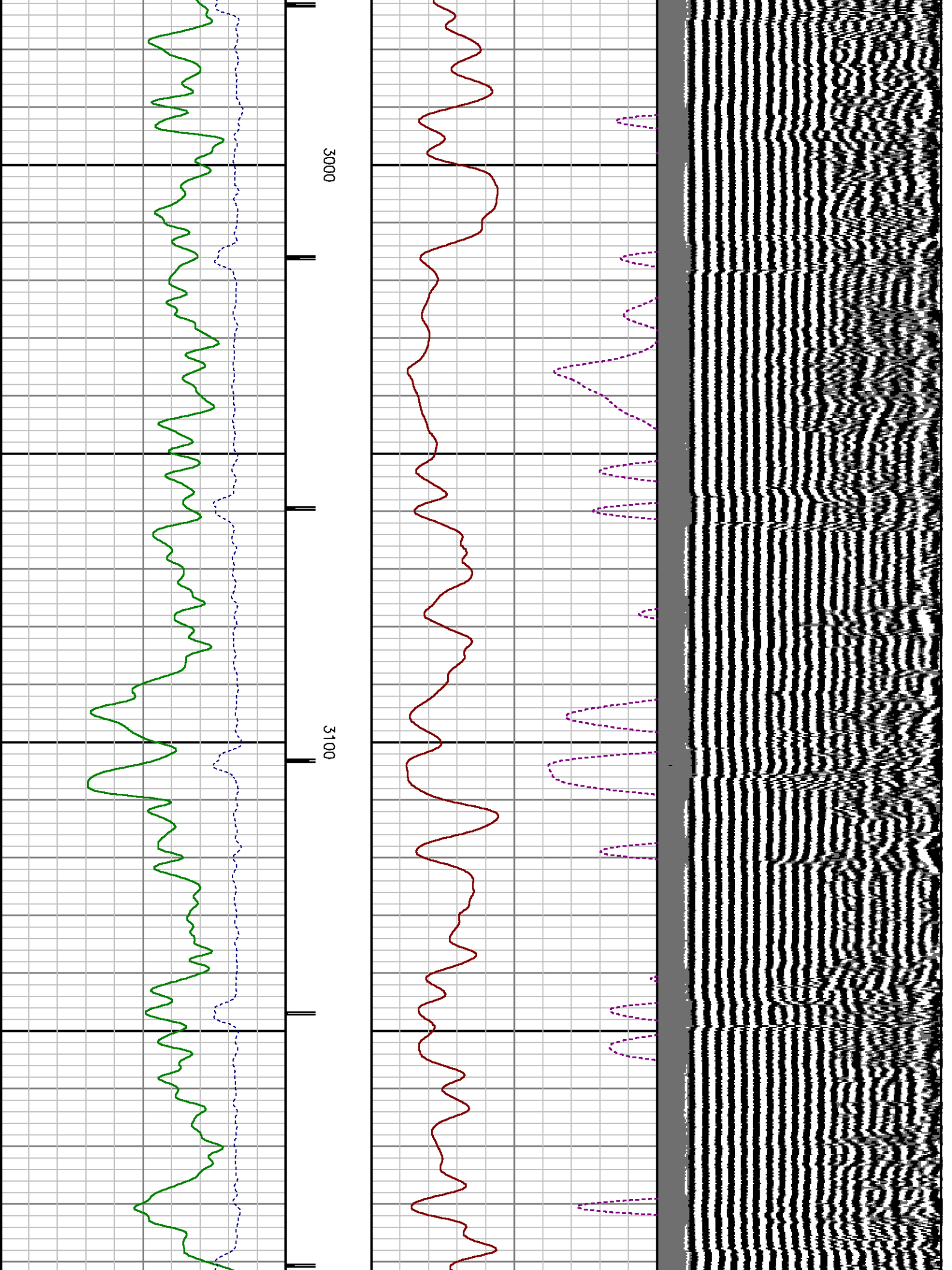


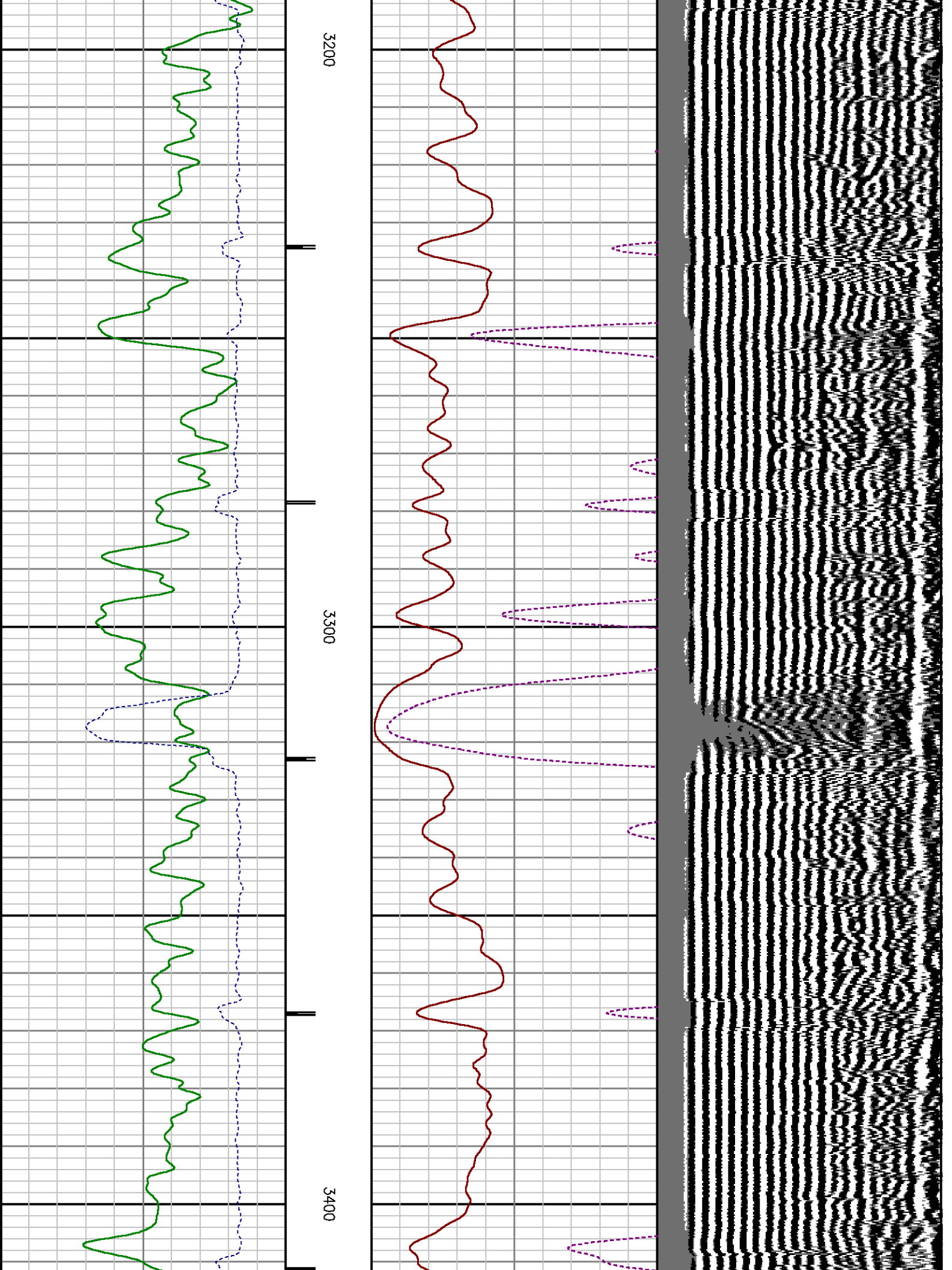


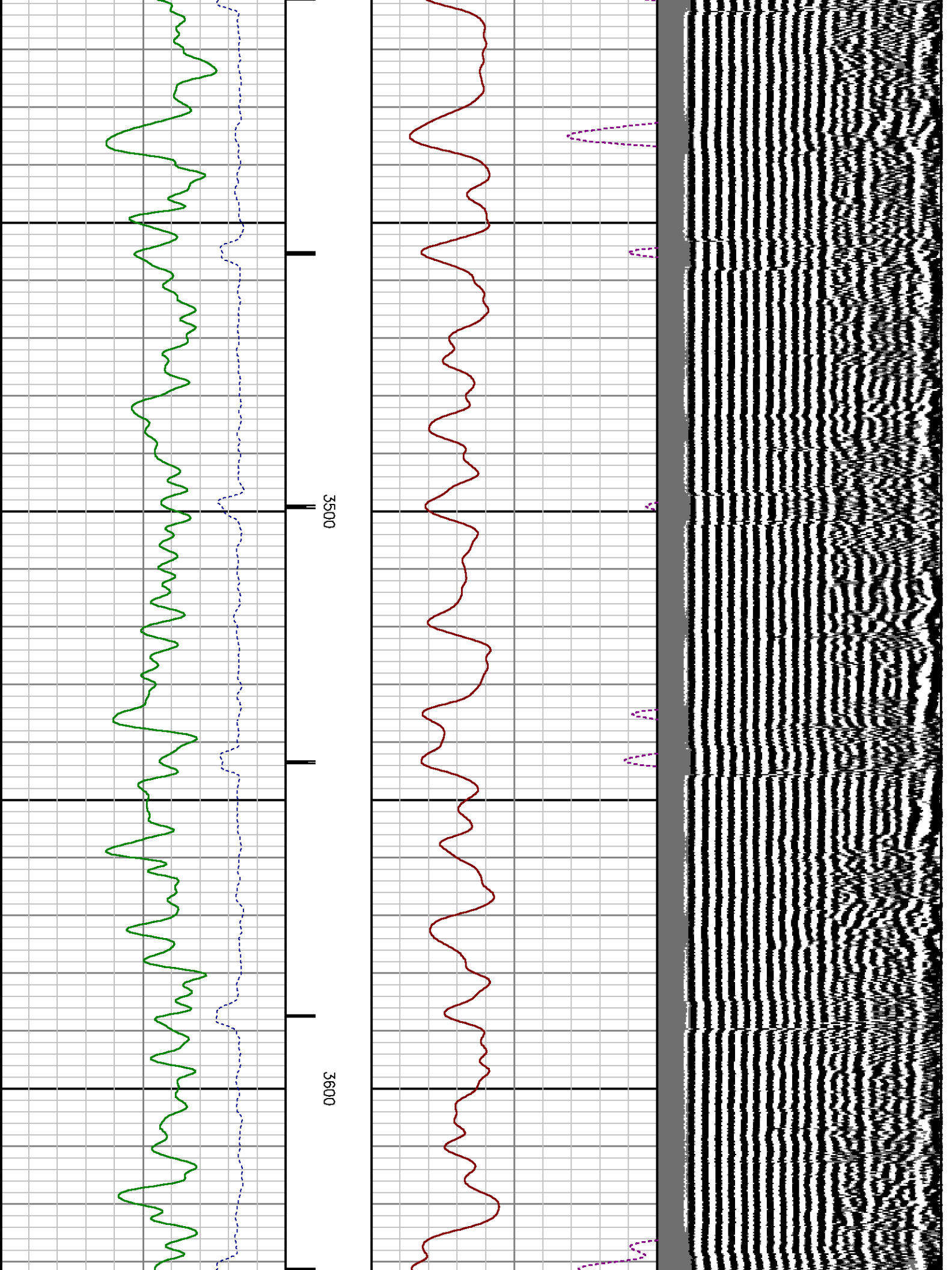


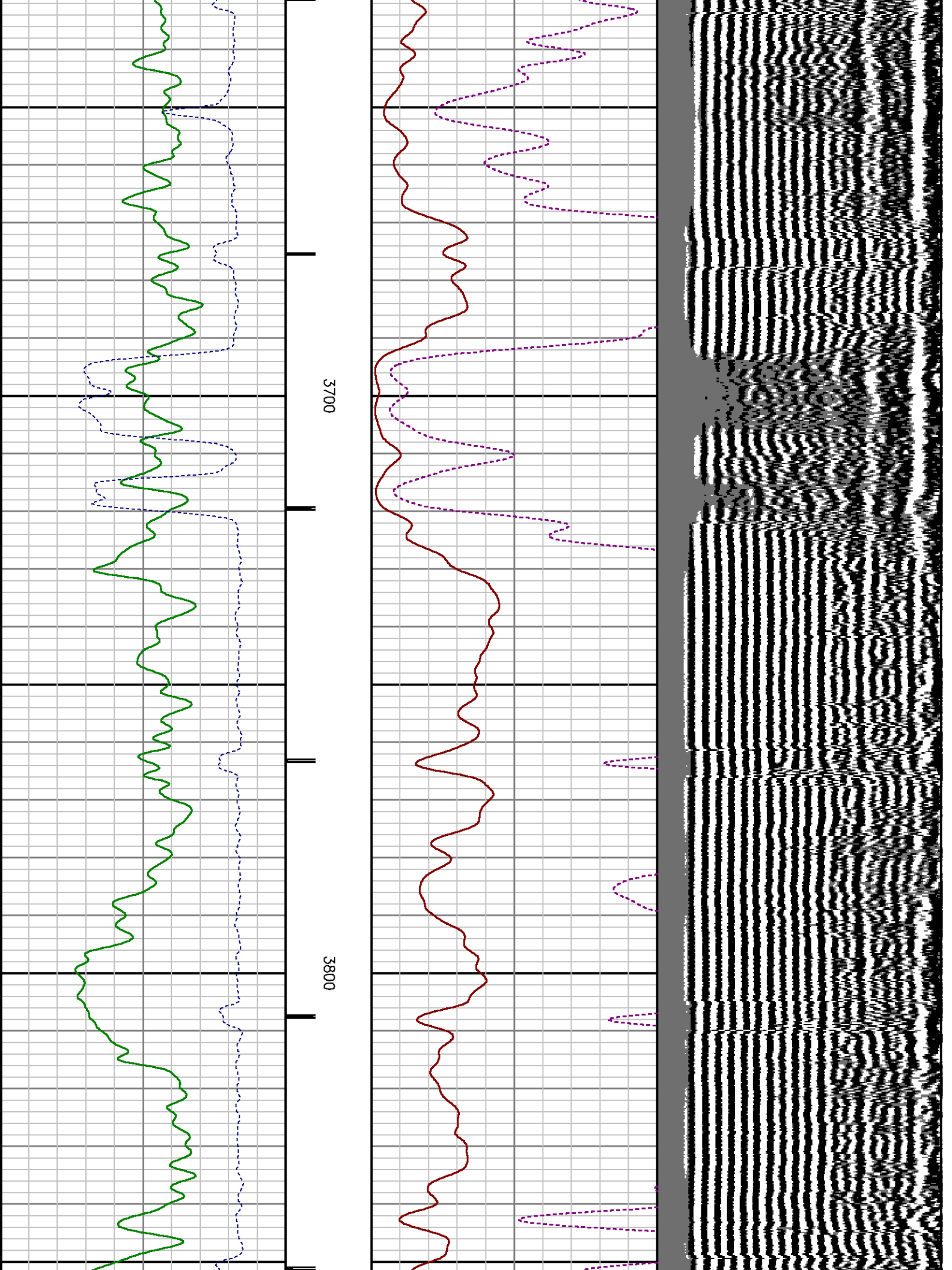


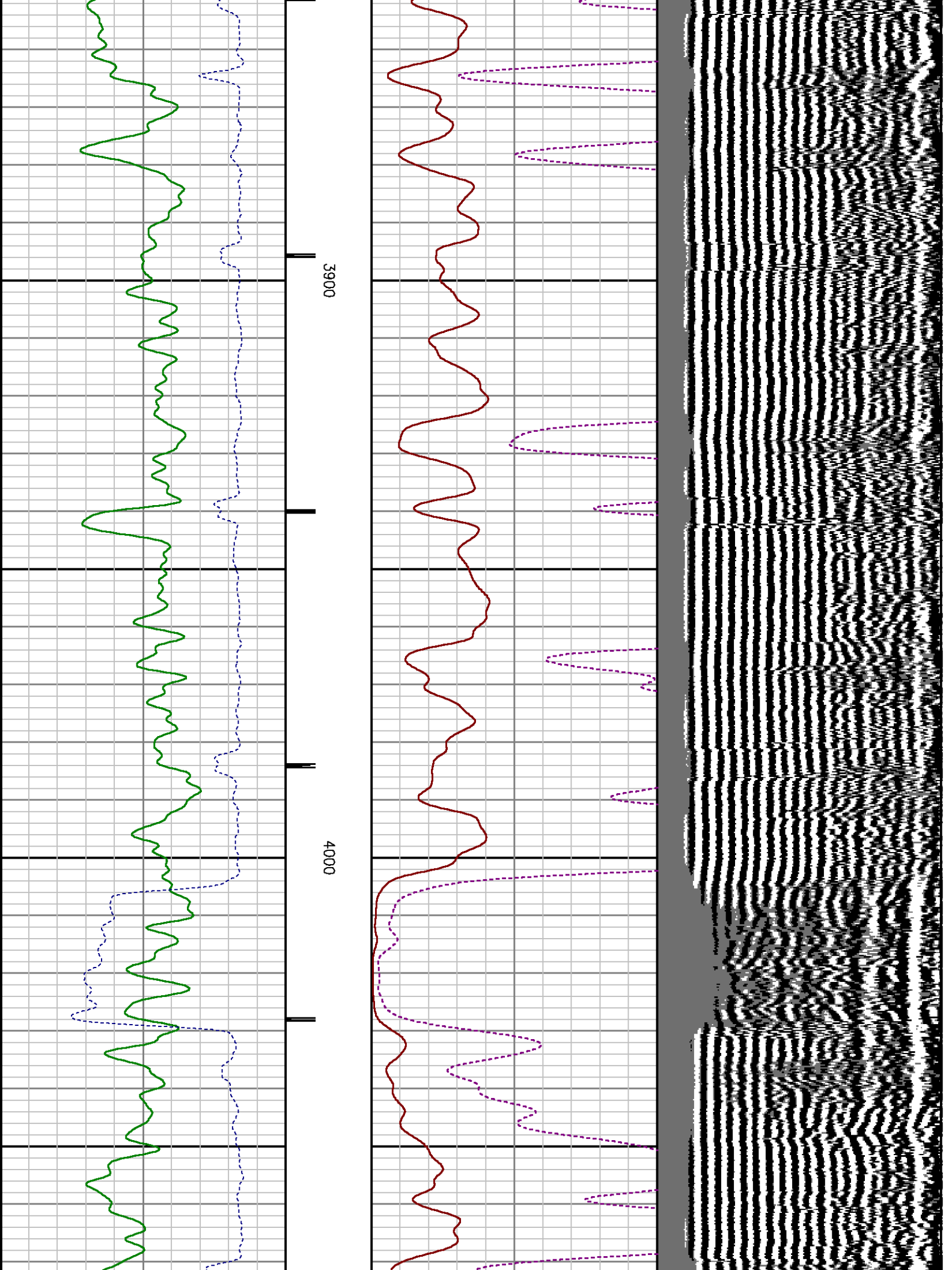




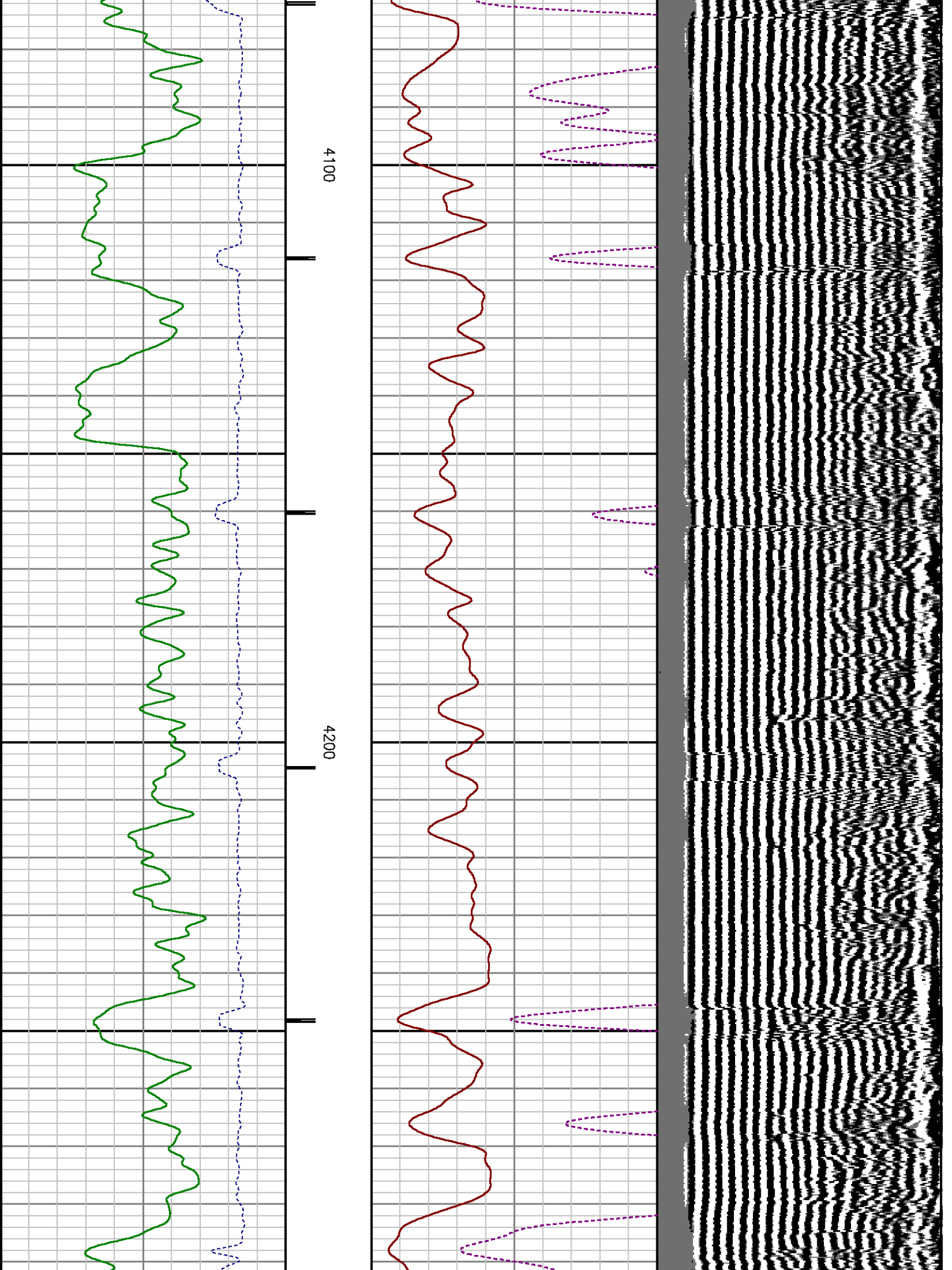


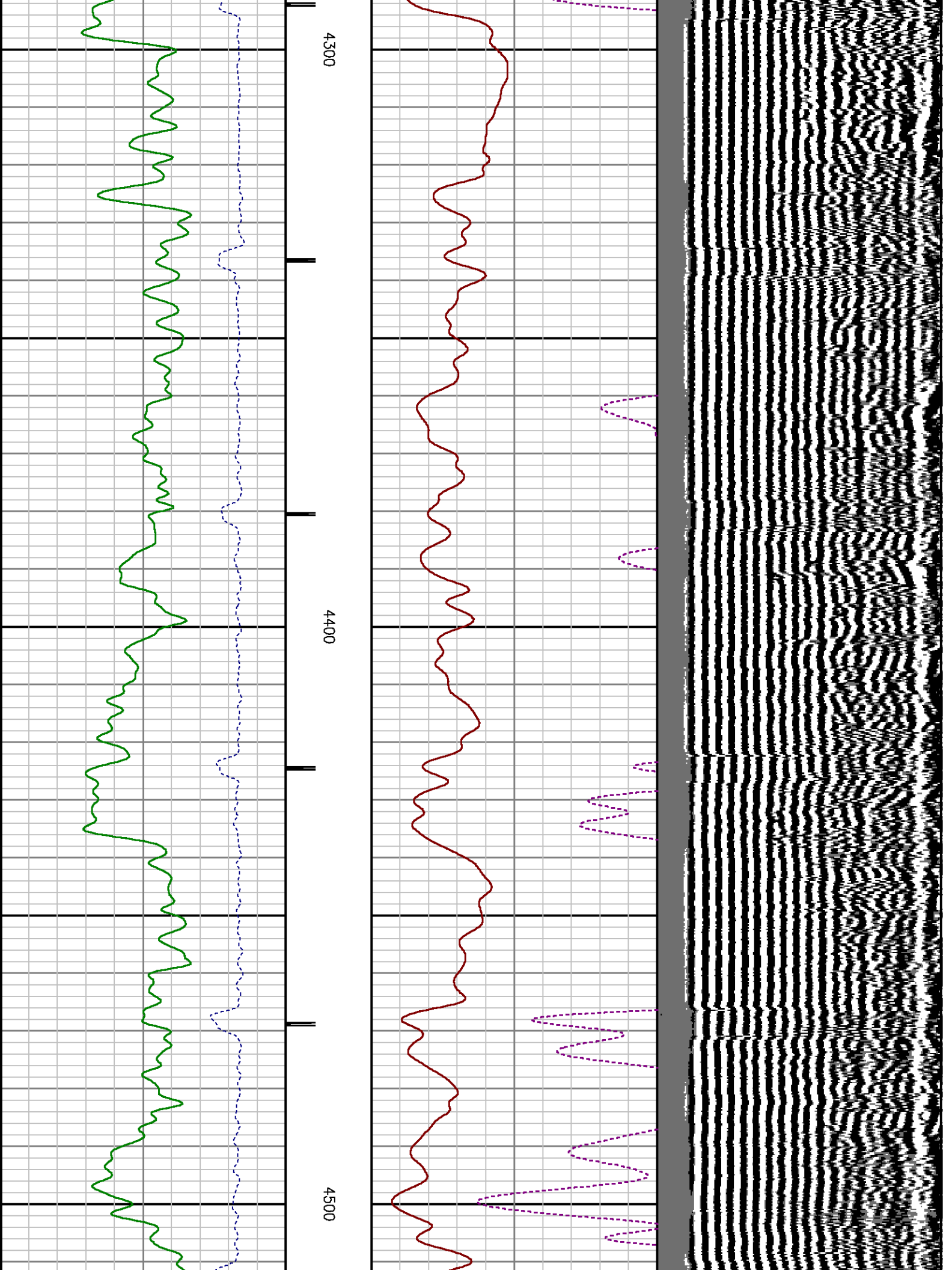


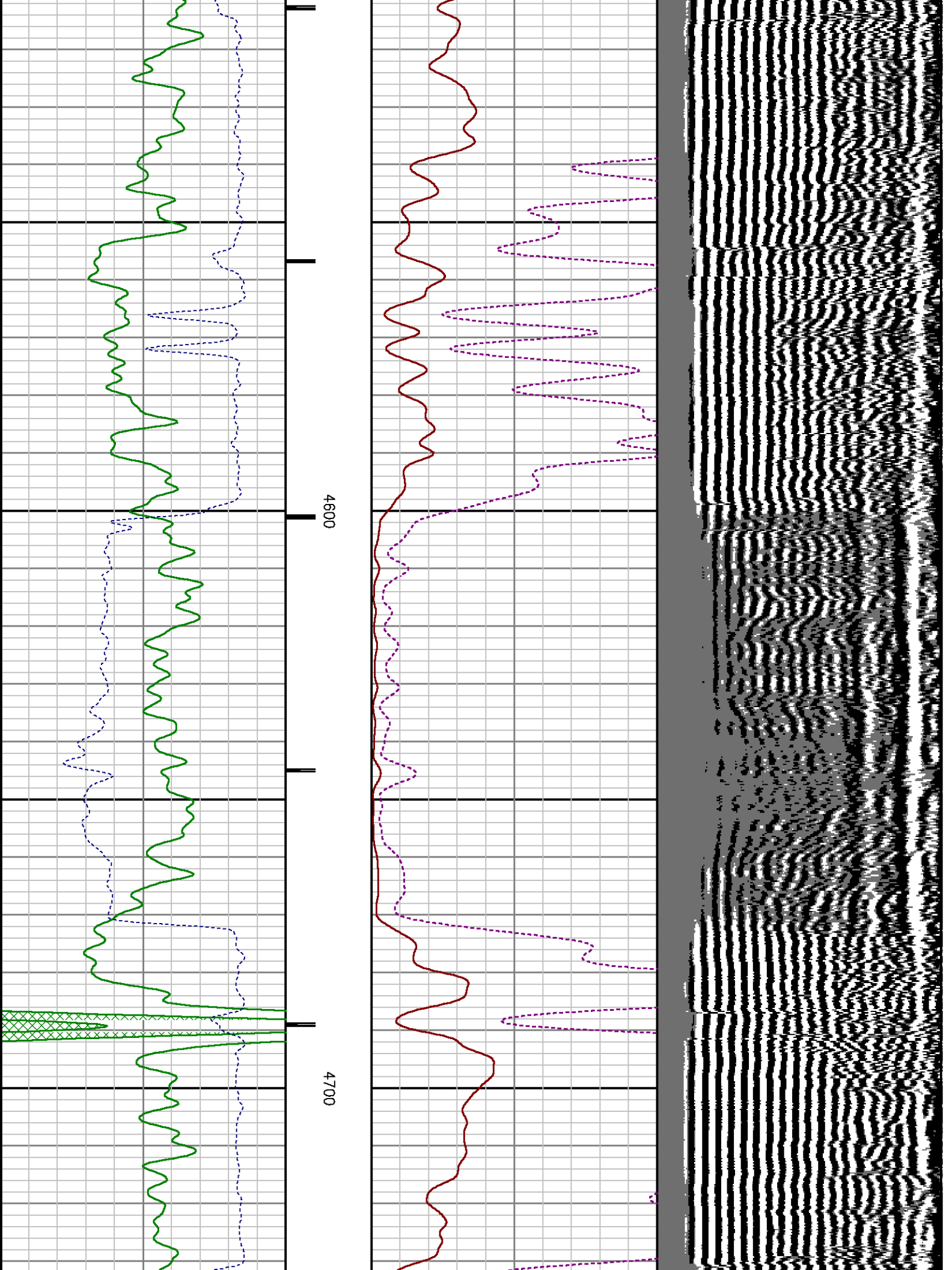




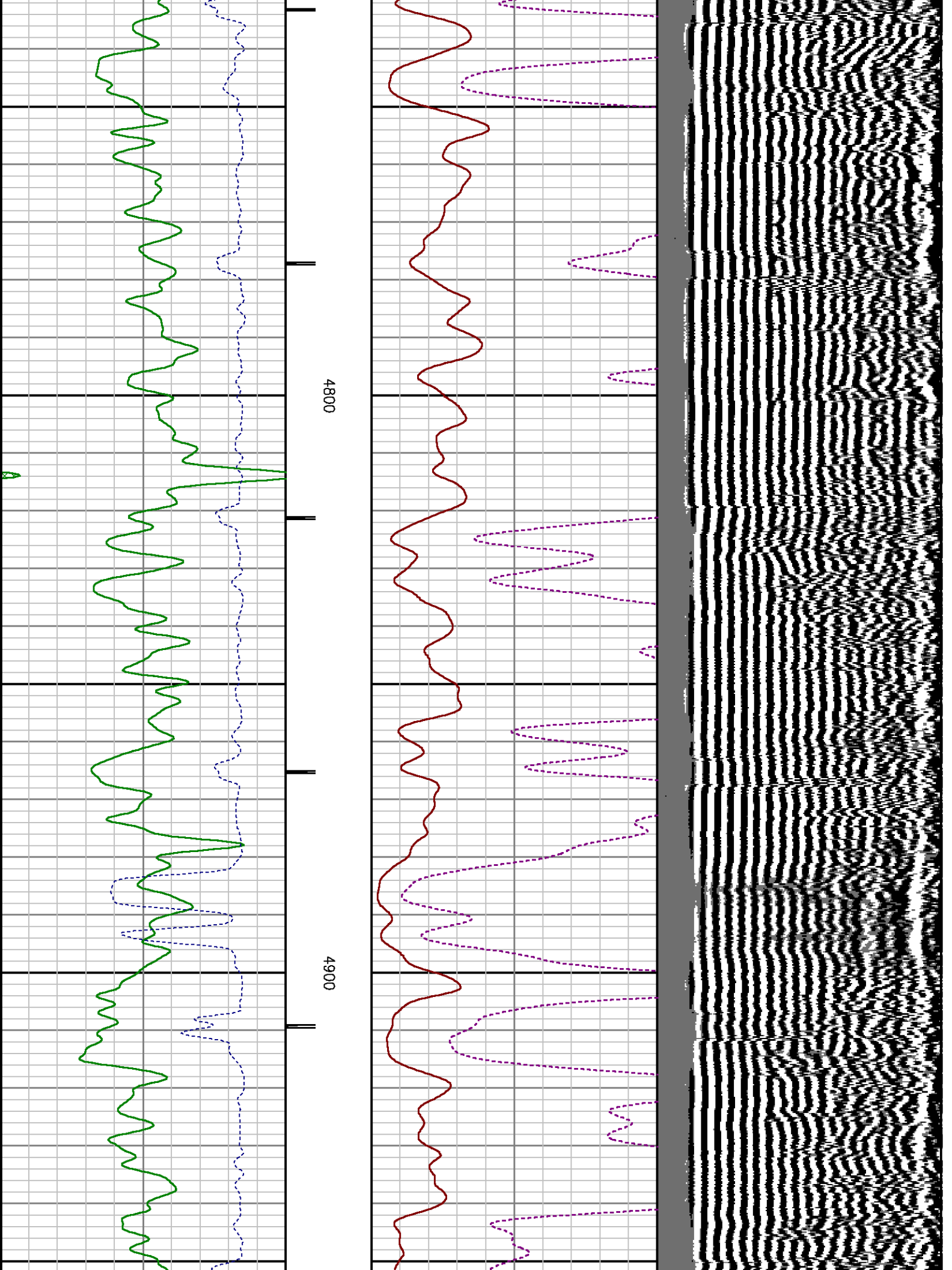


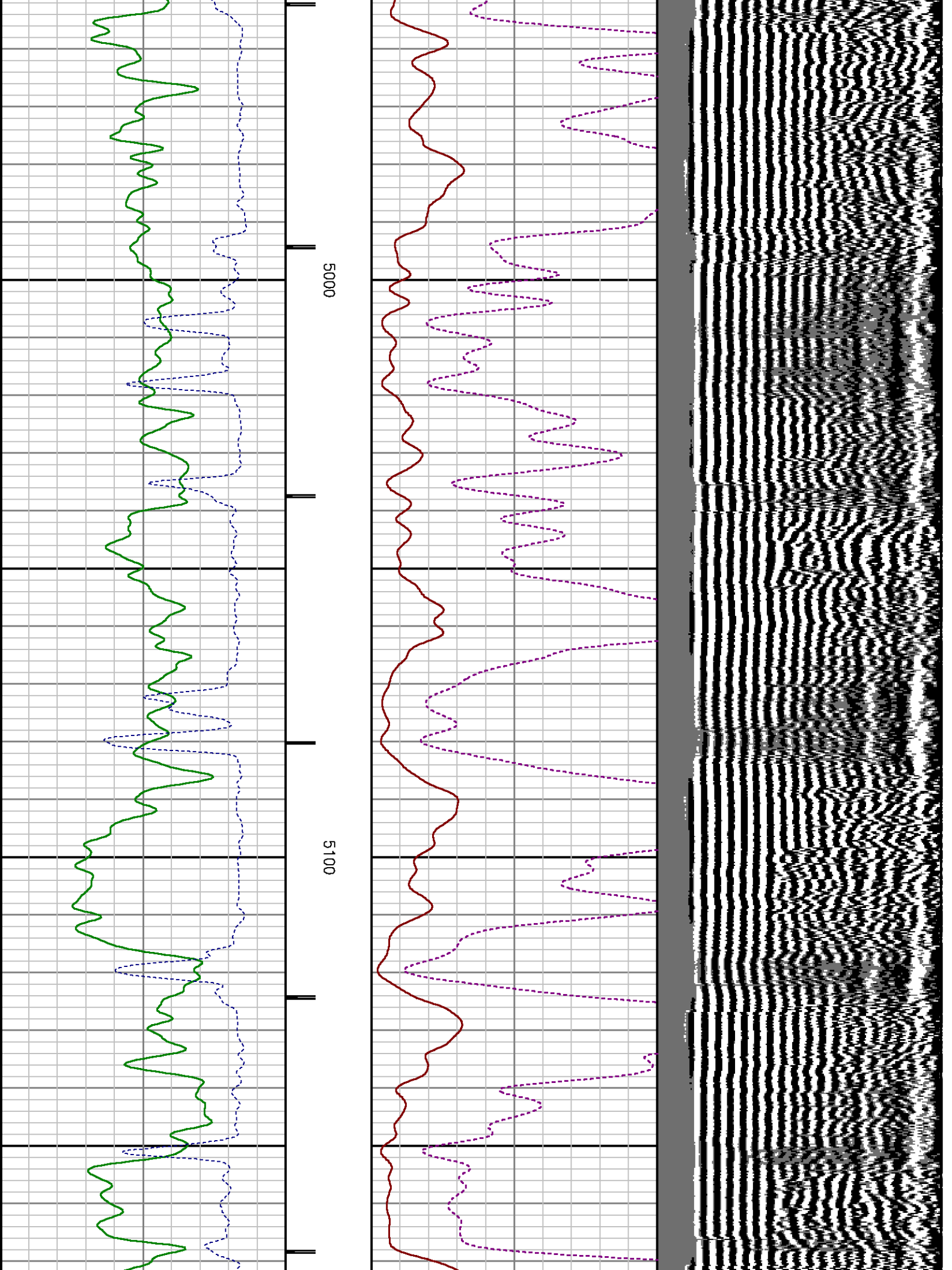


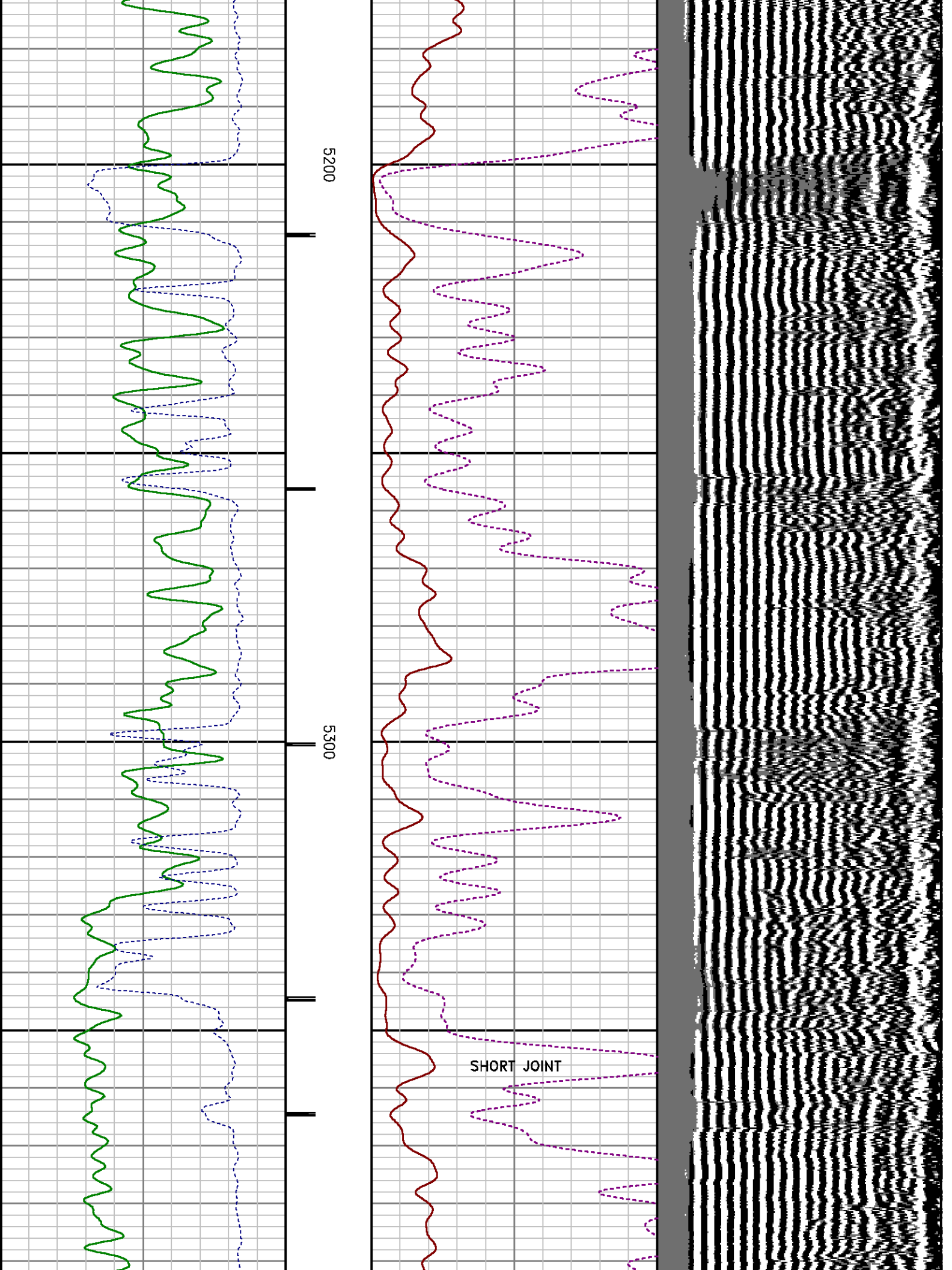


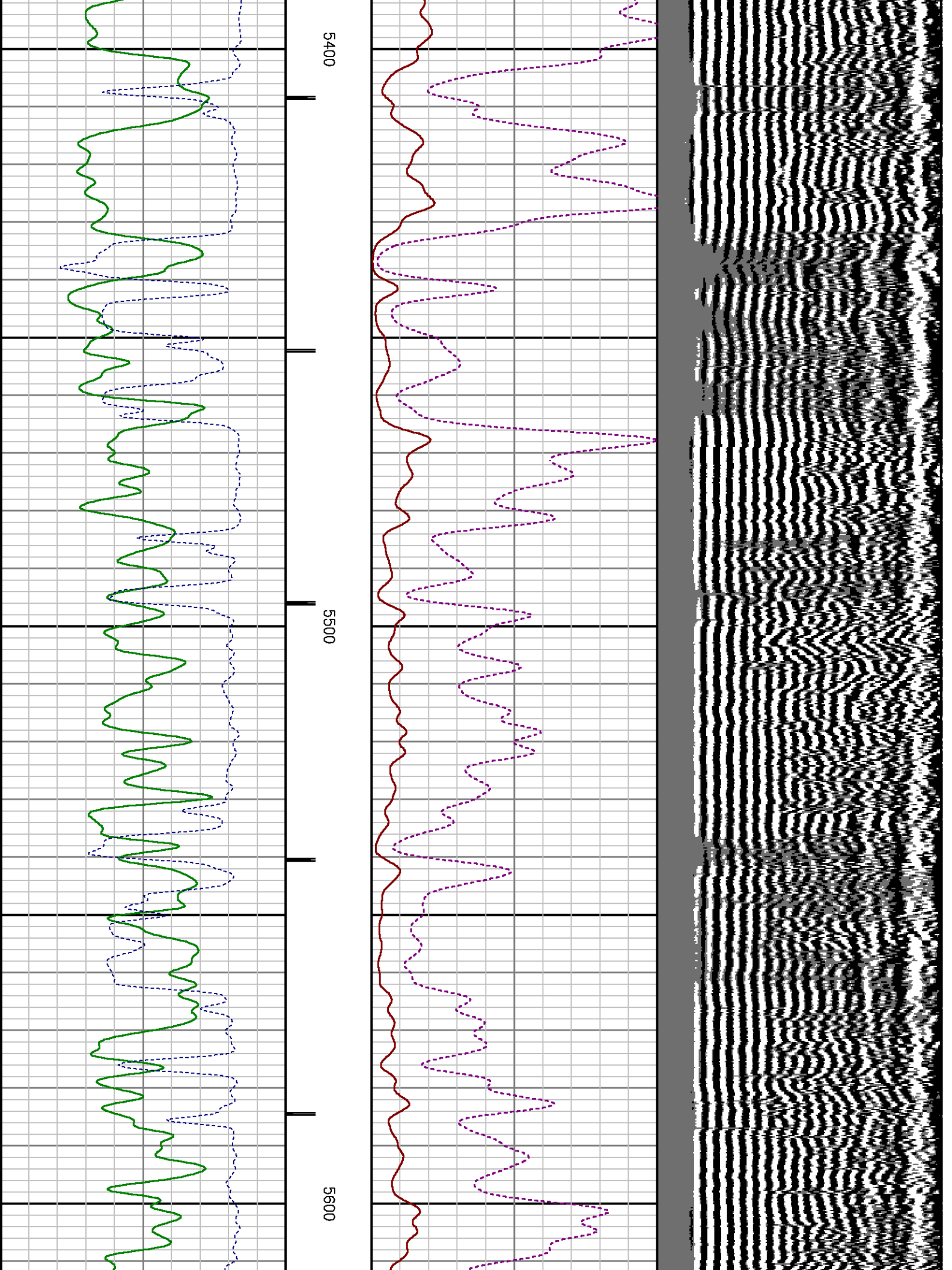




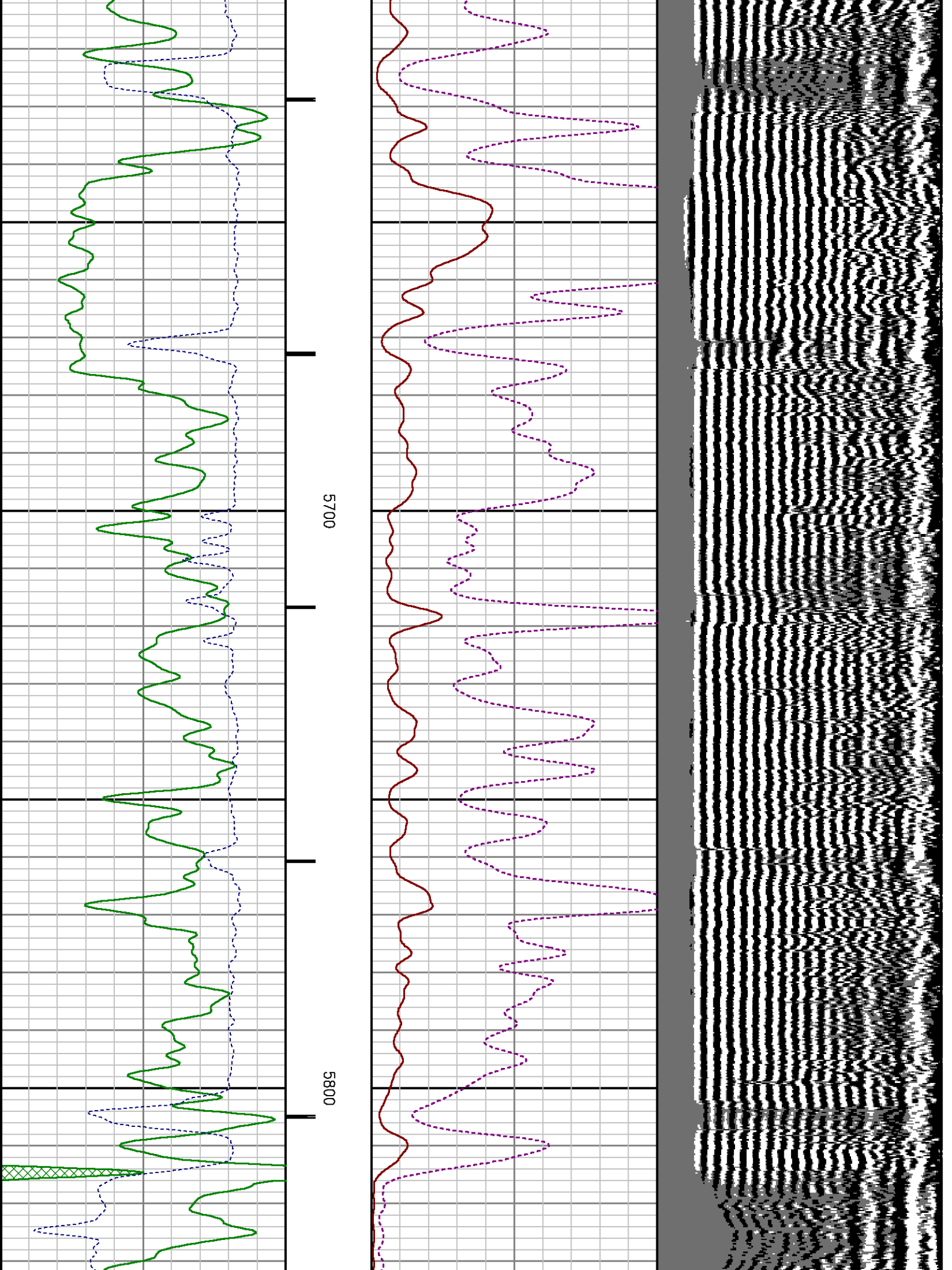


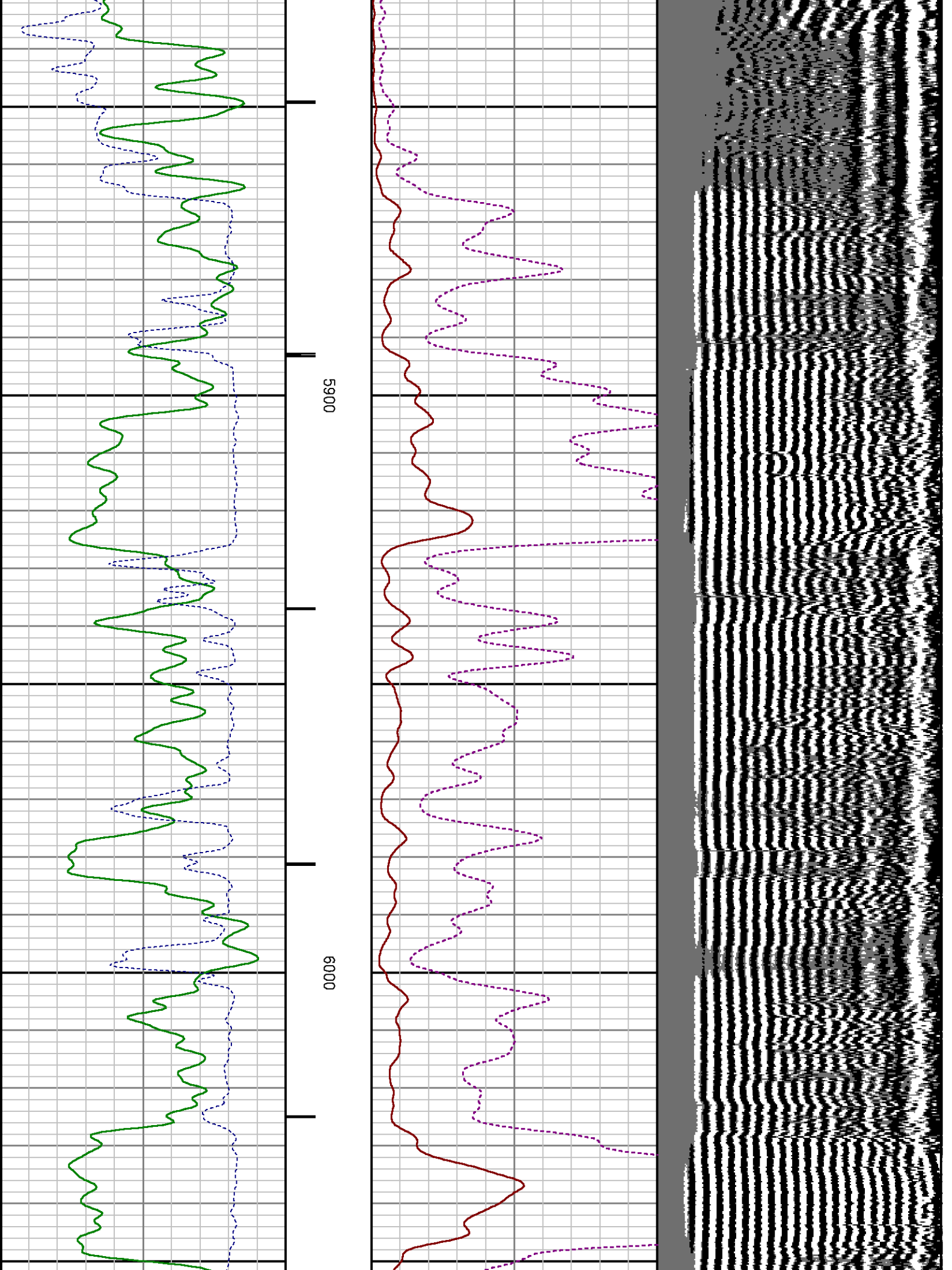


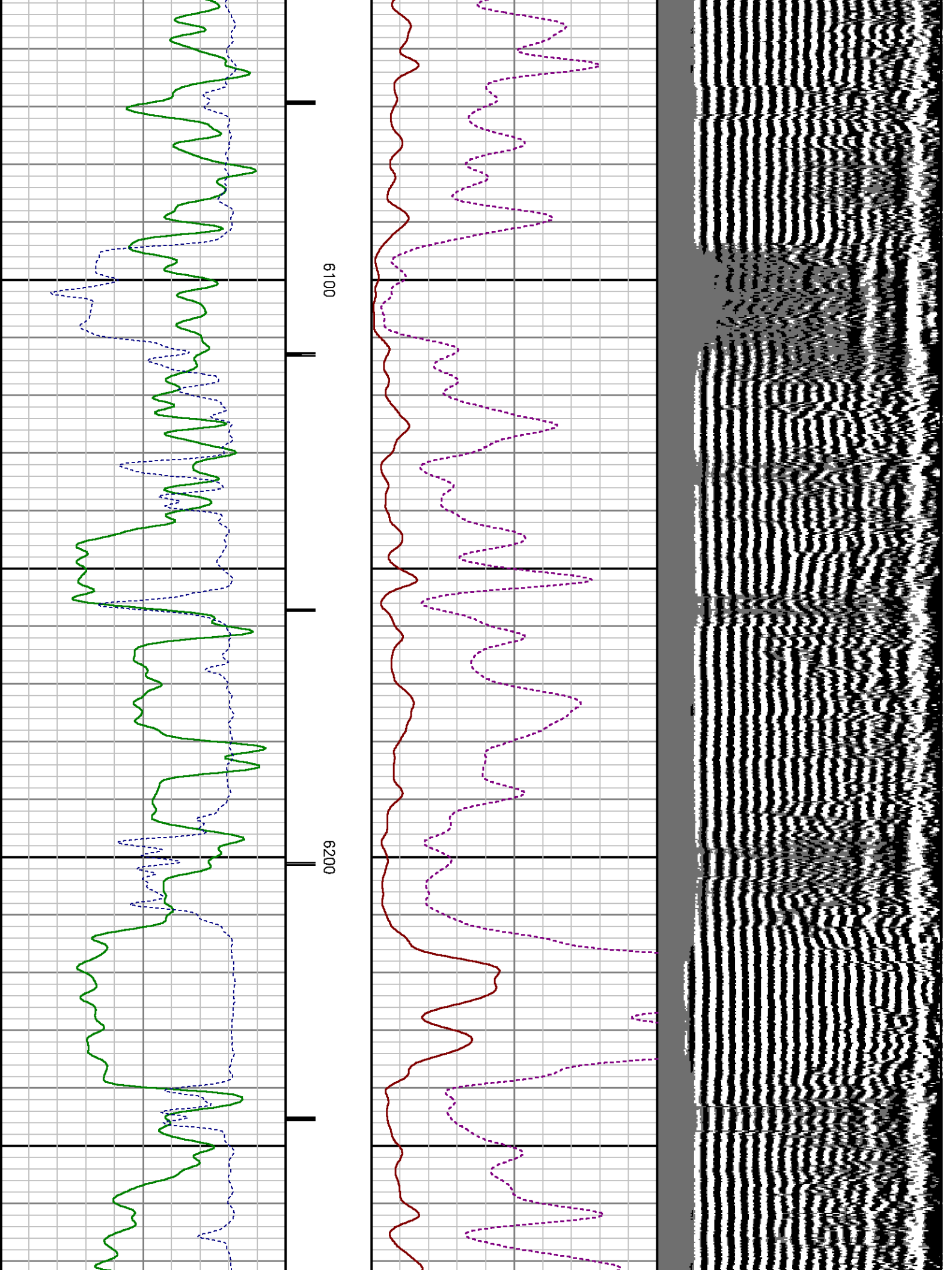


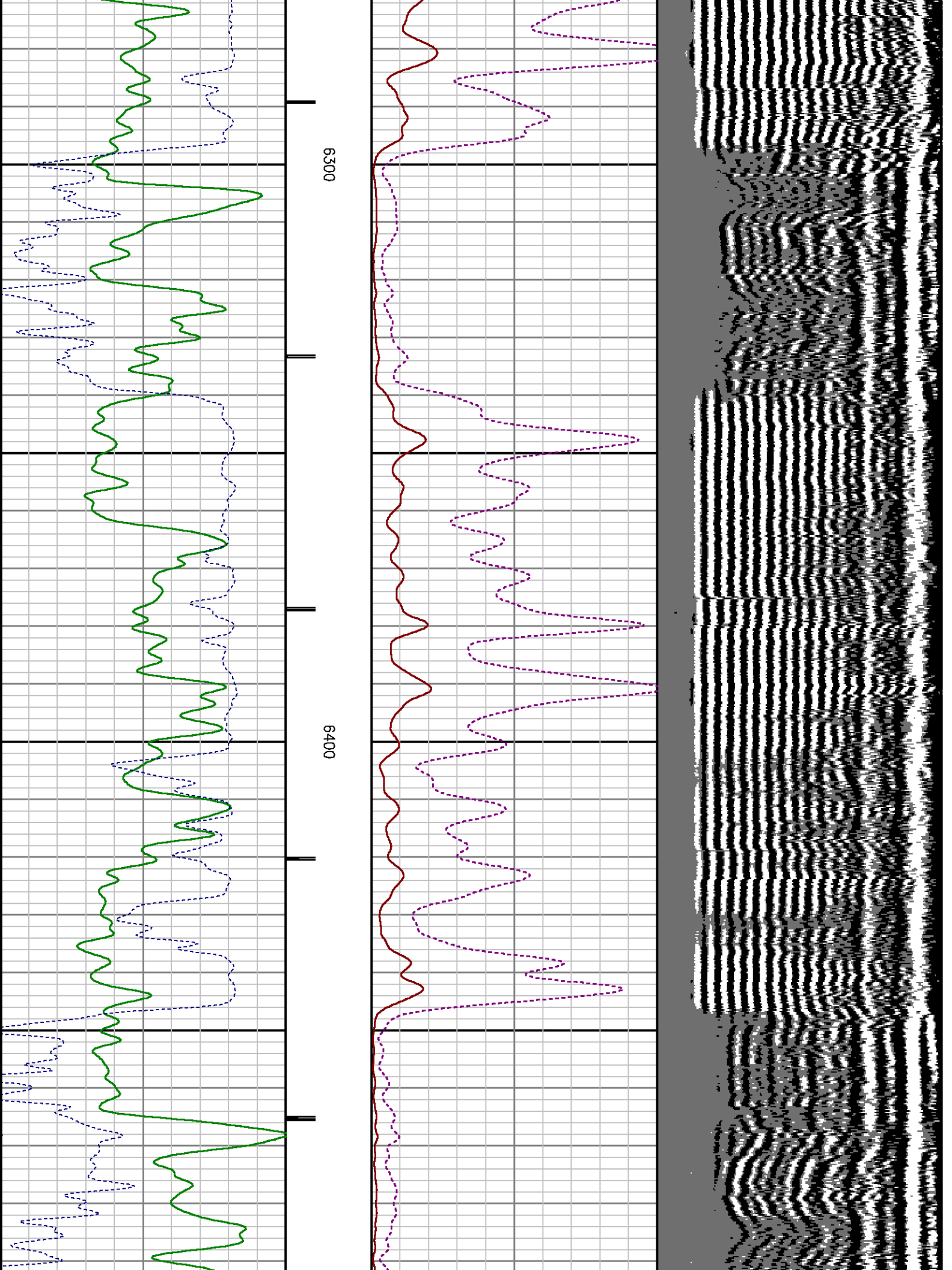




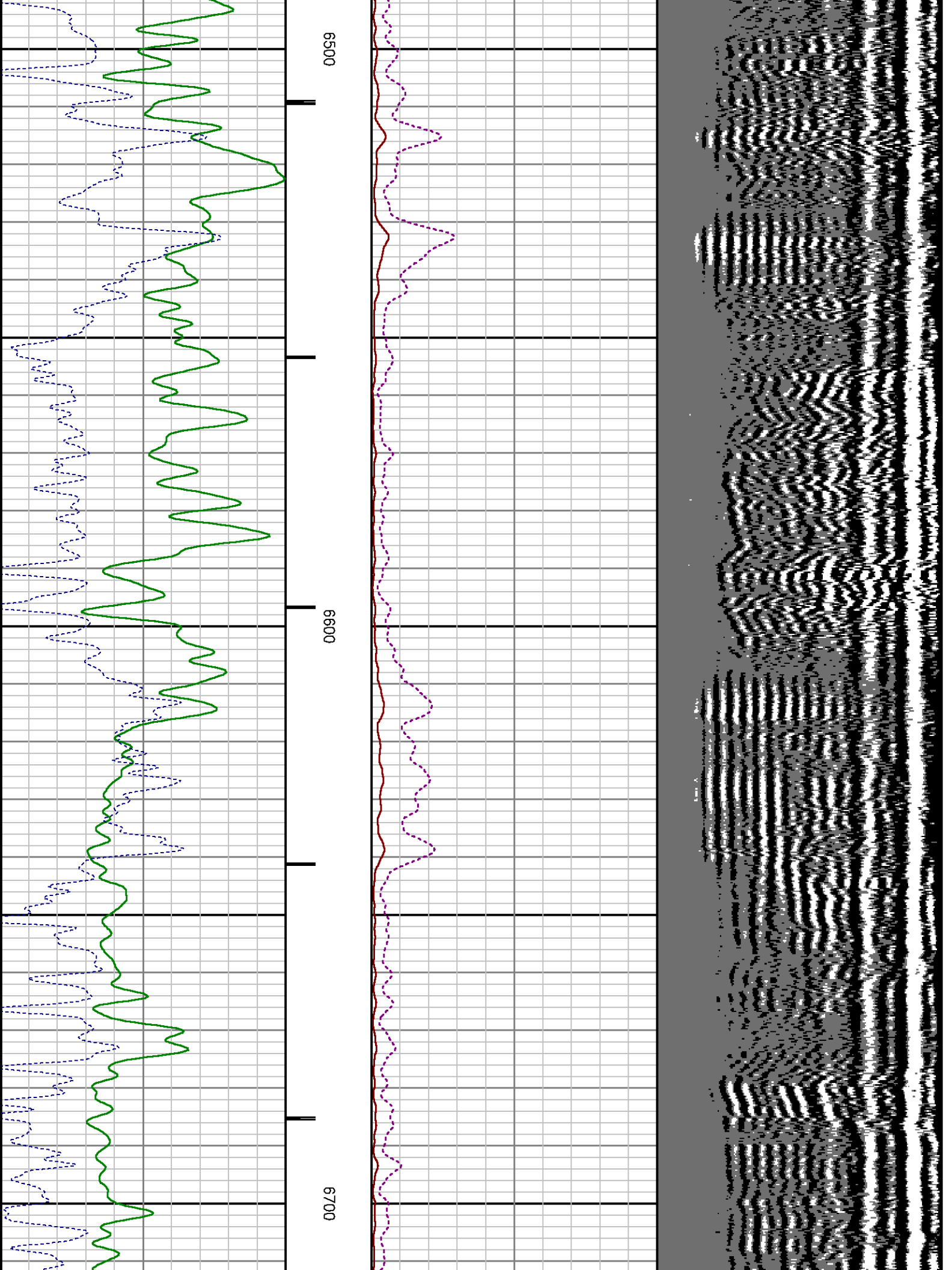


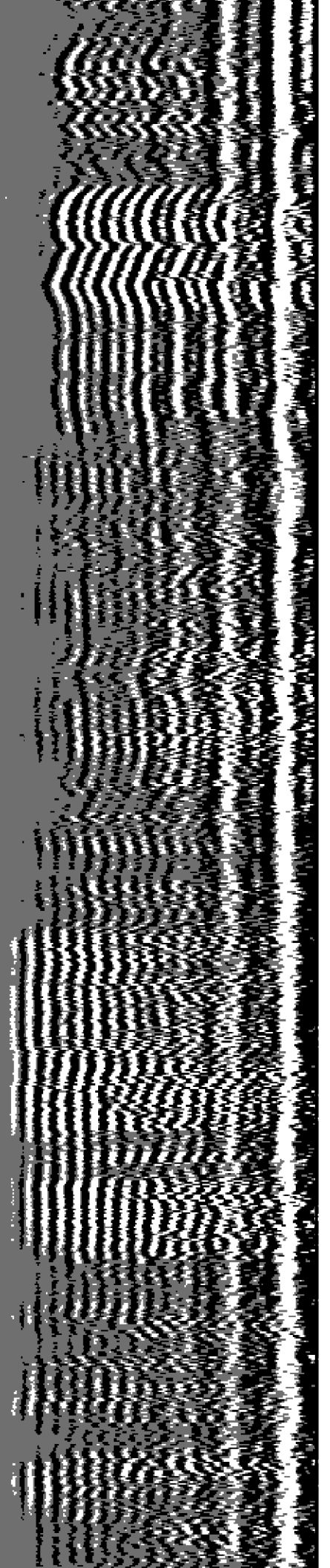
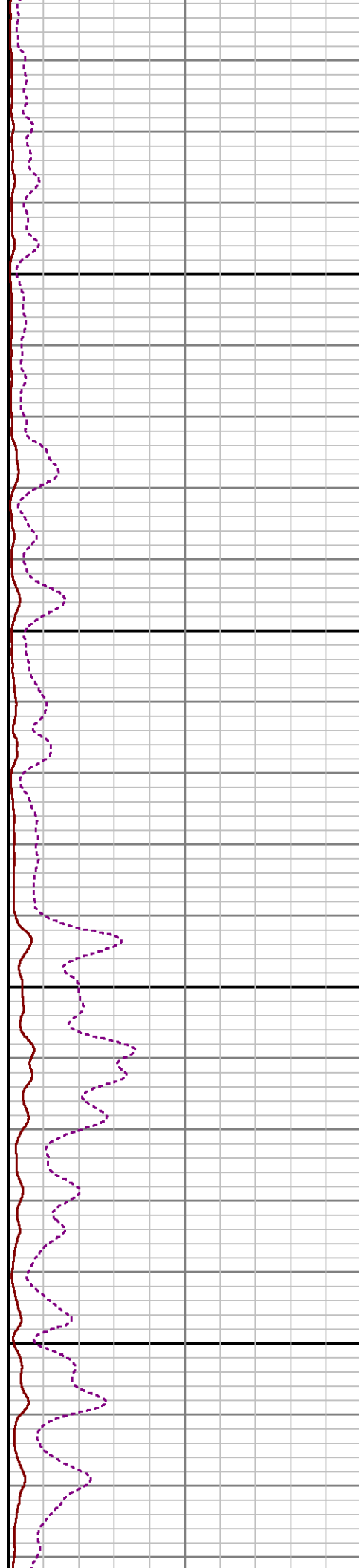
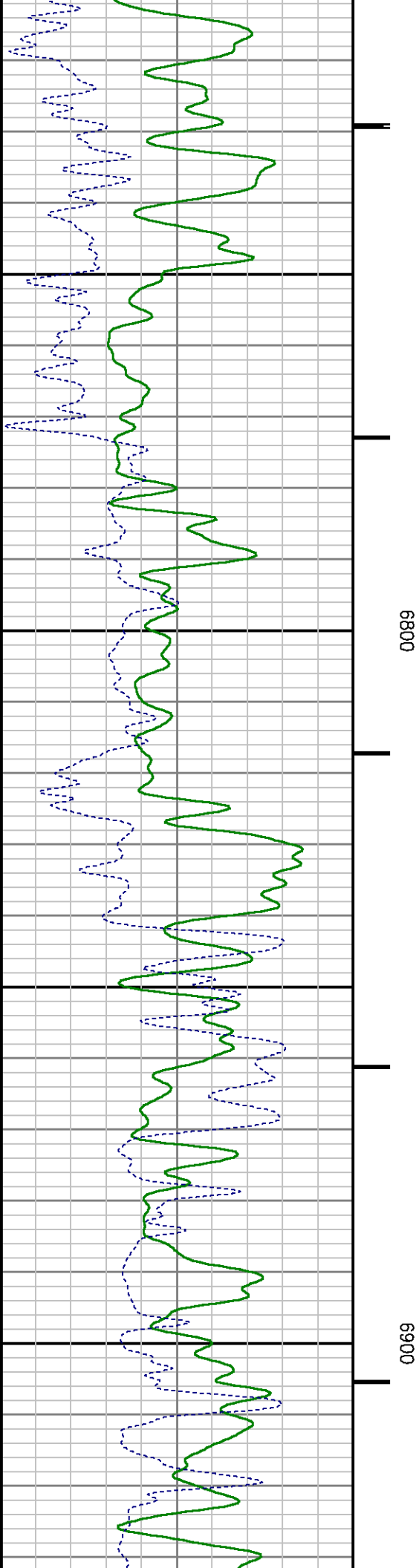


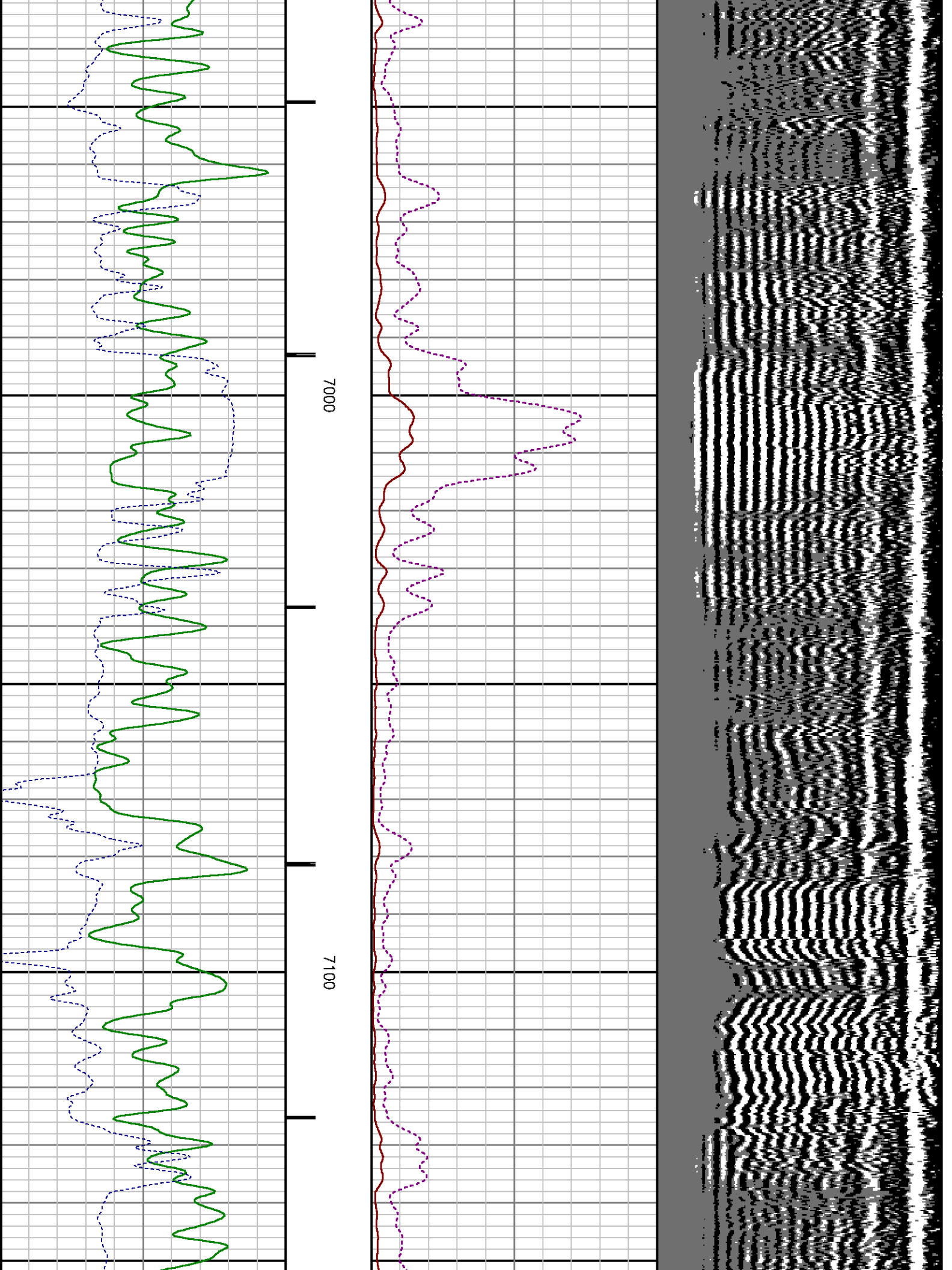


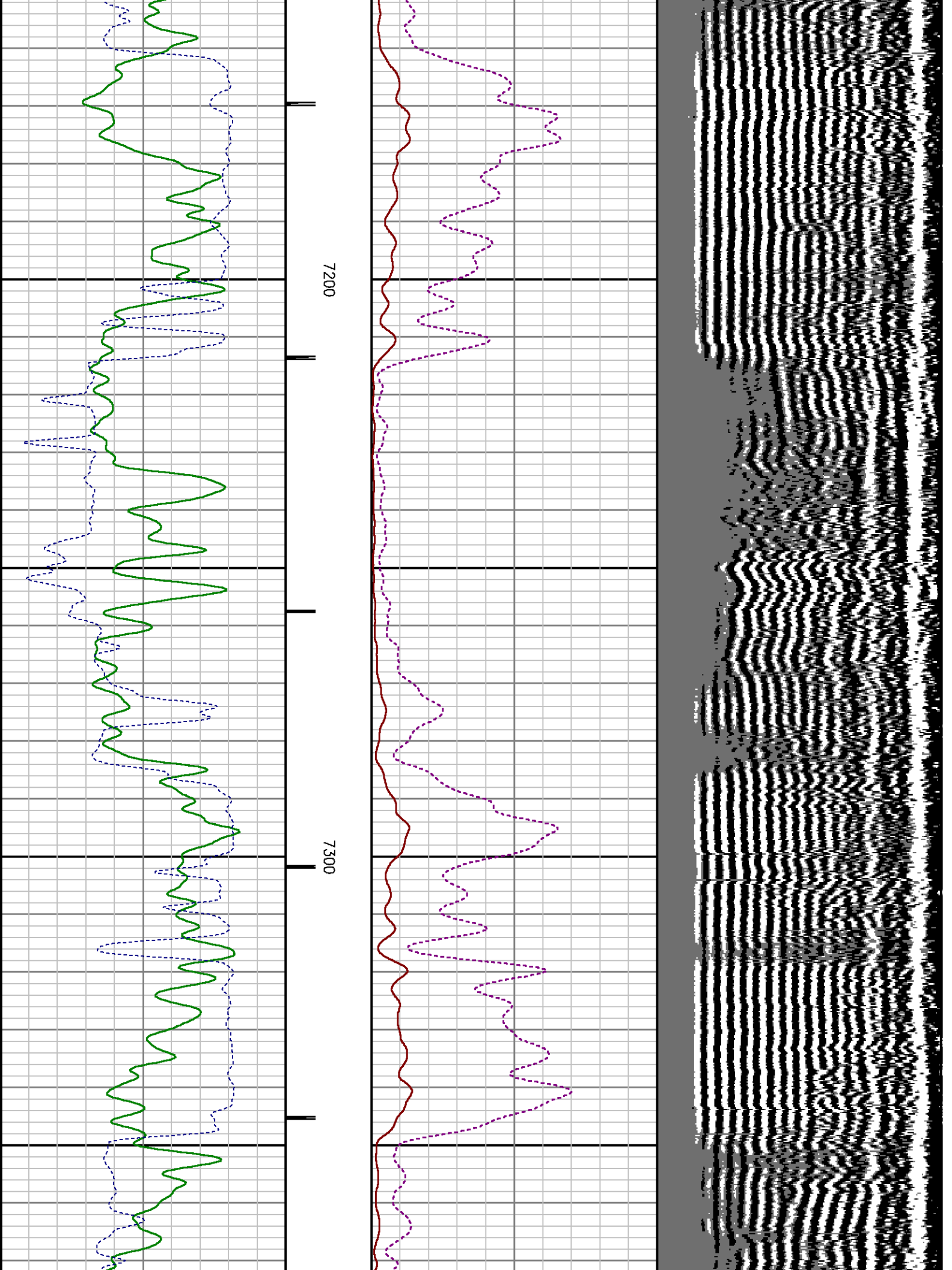


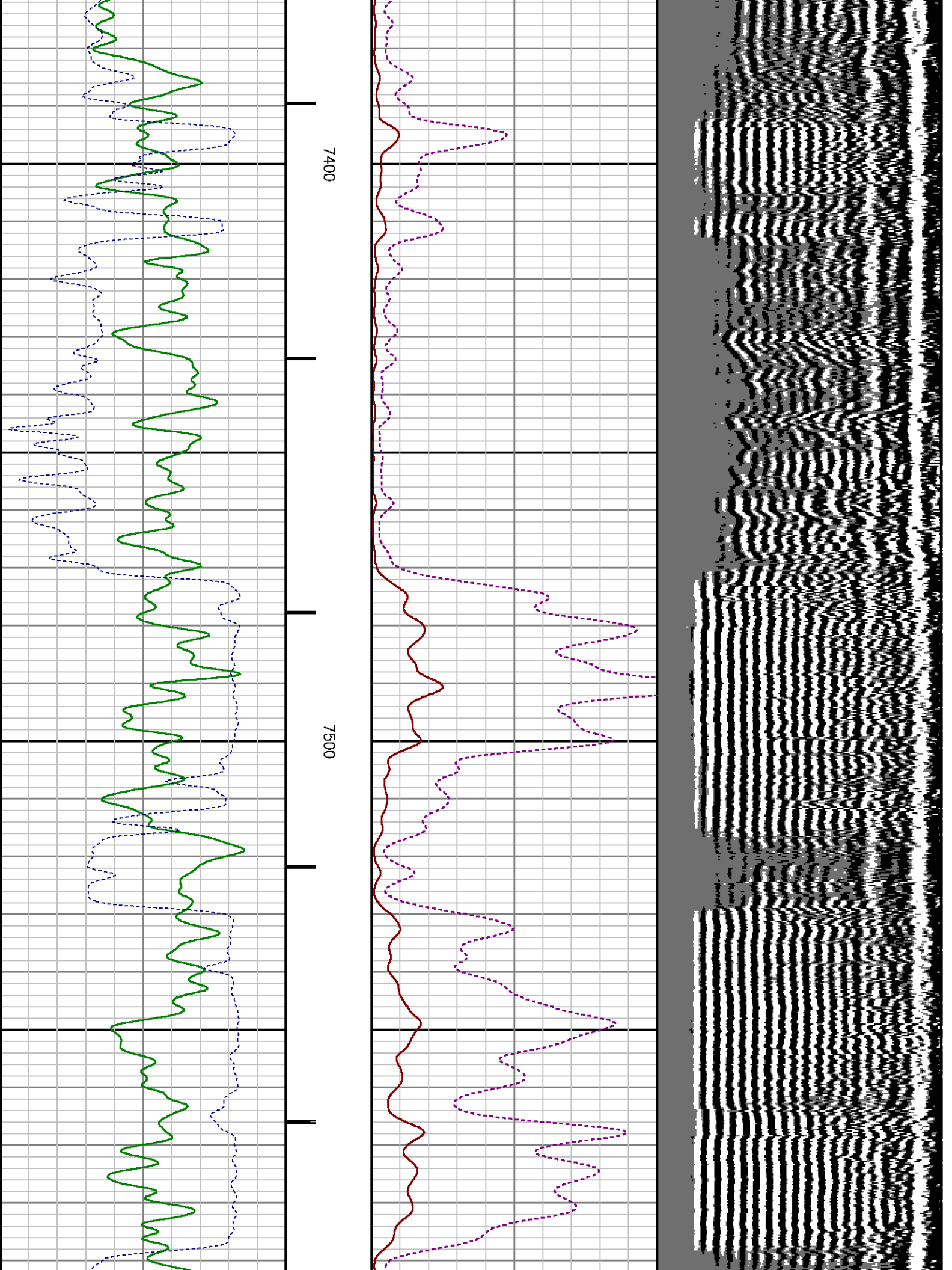




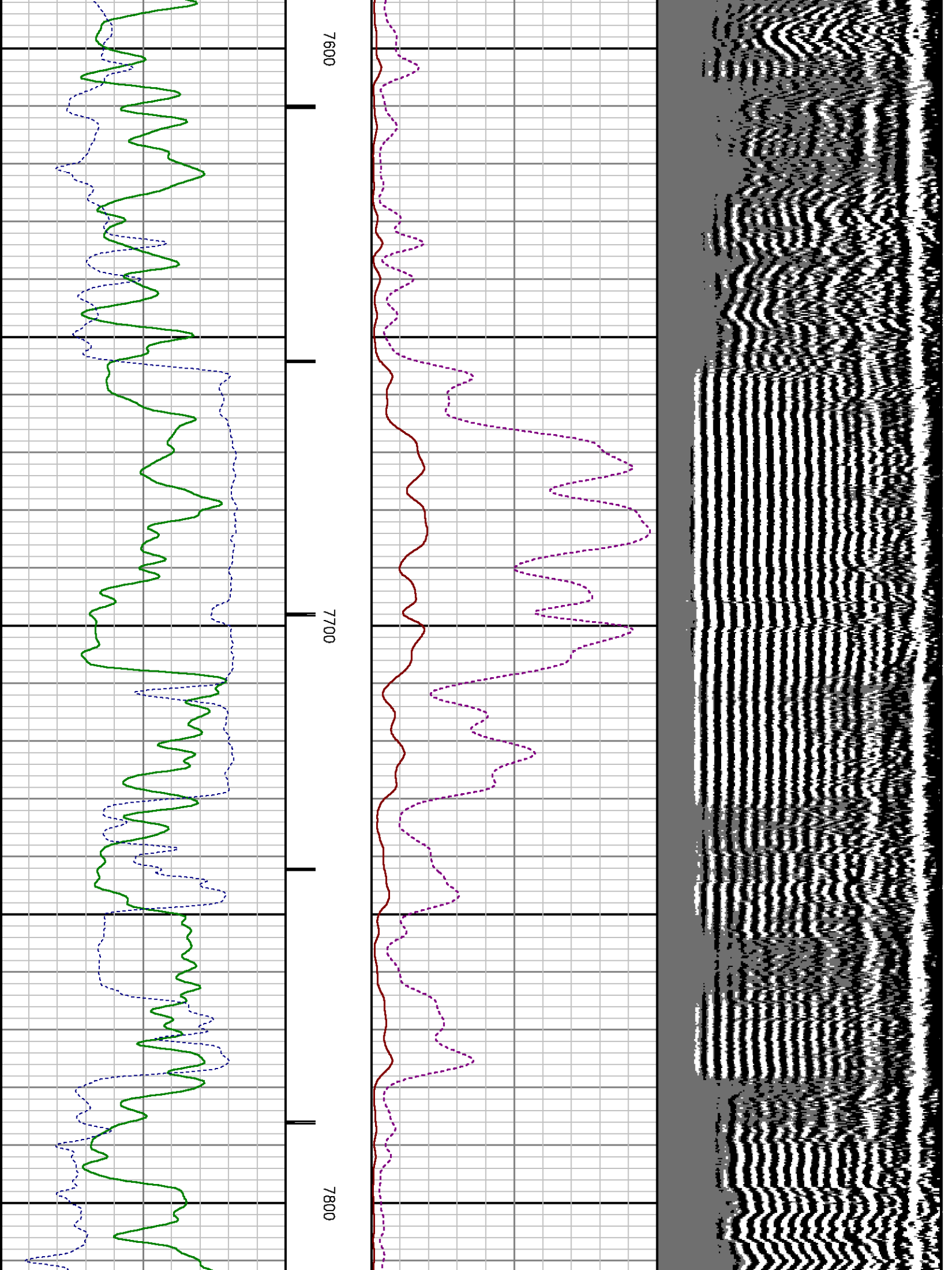


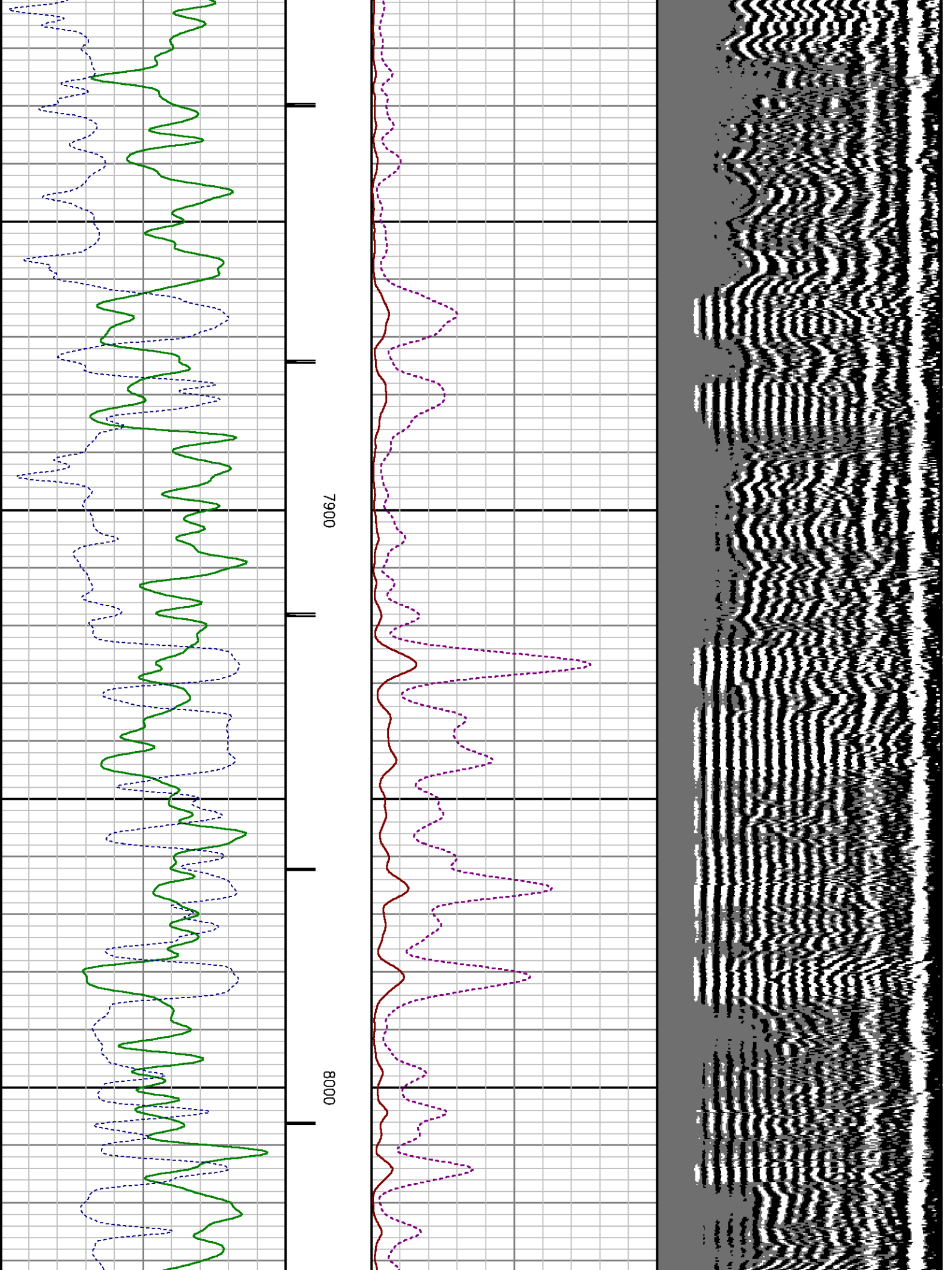


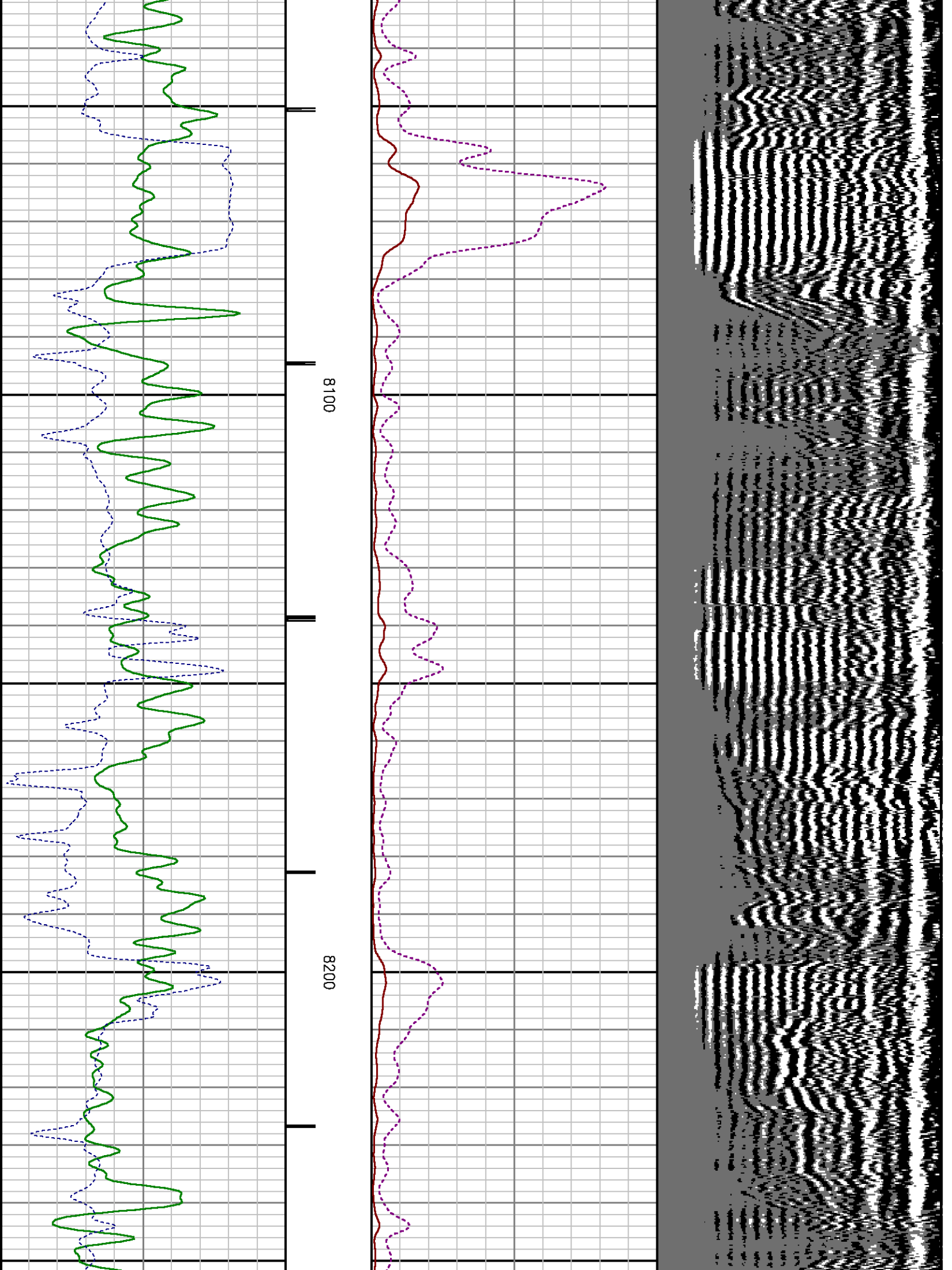




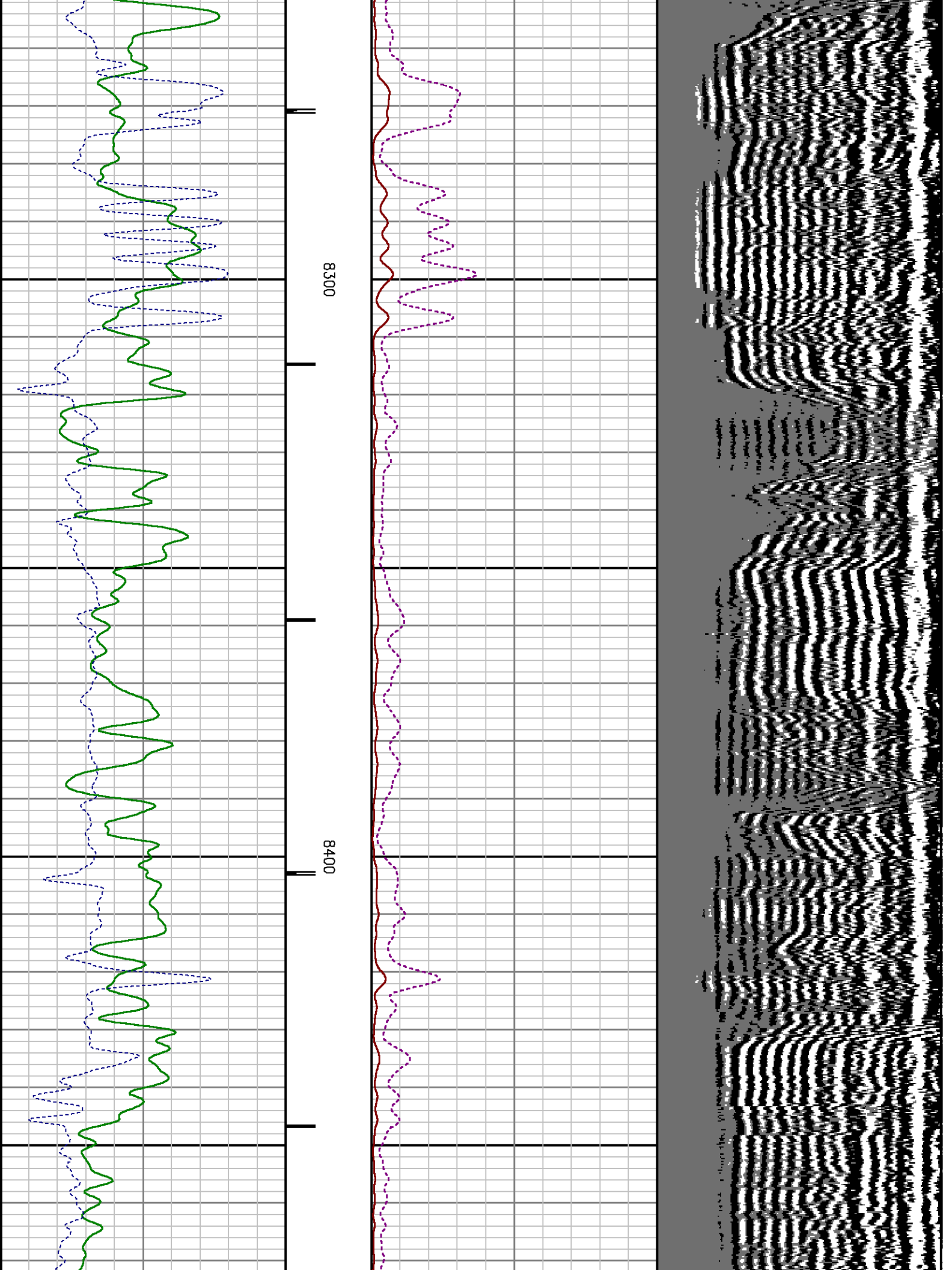














# DEPTH OFFSETS

(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

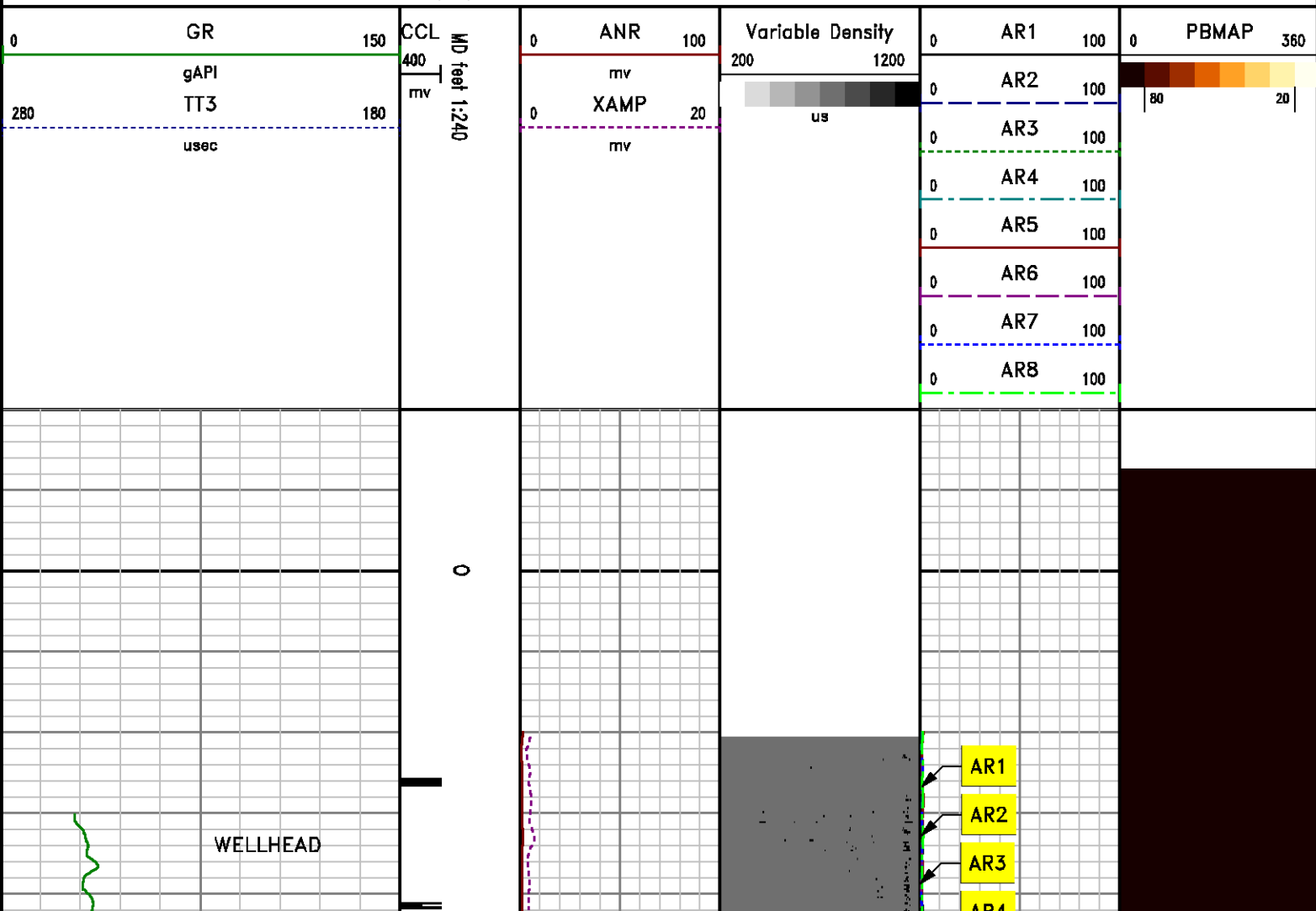
Well : DIAMOND ELK PA 333-2

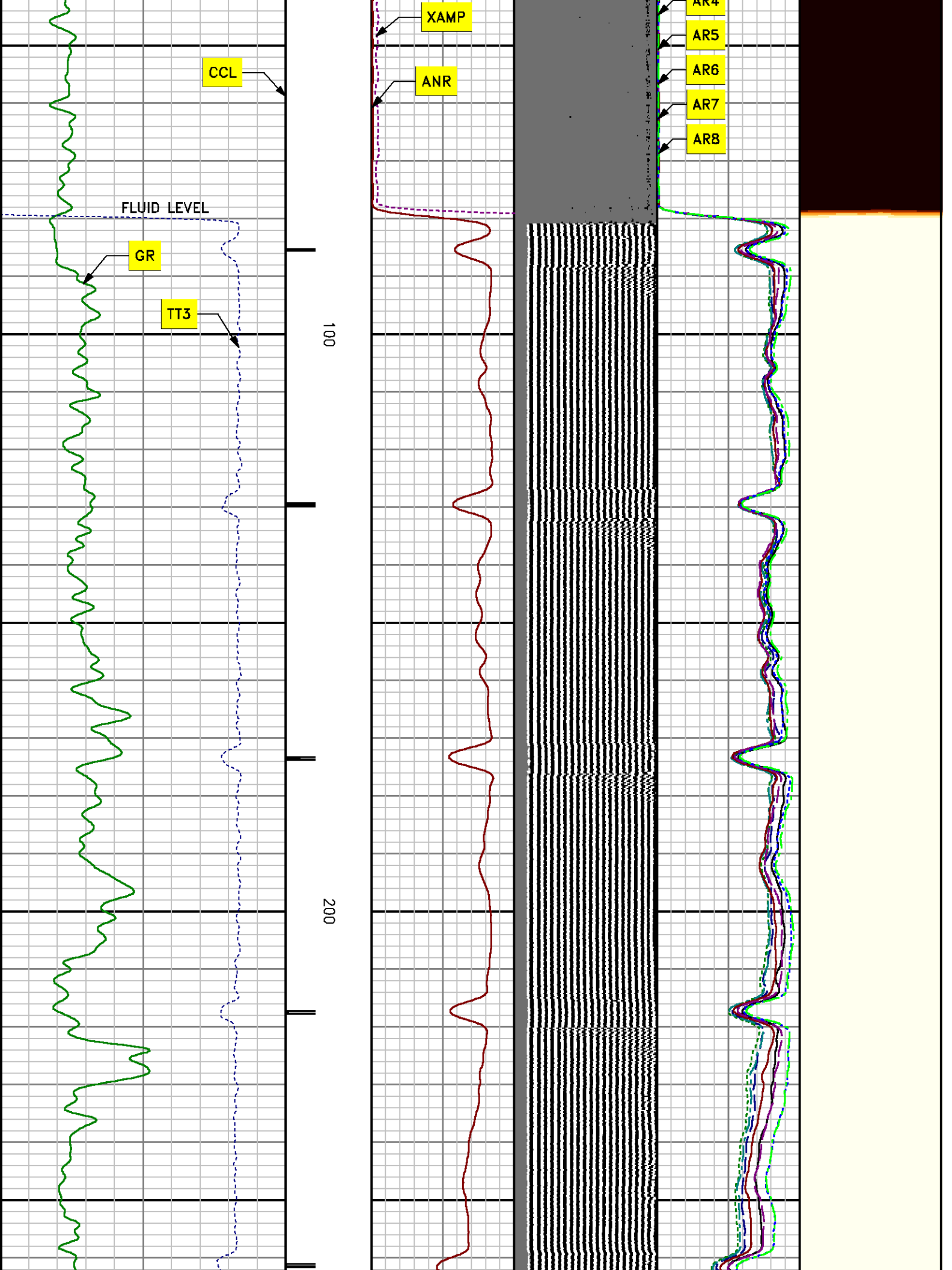
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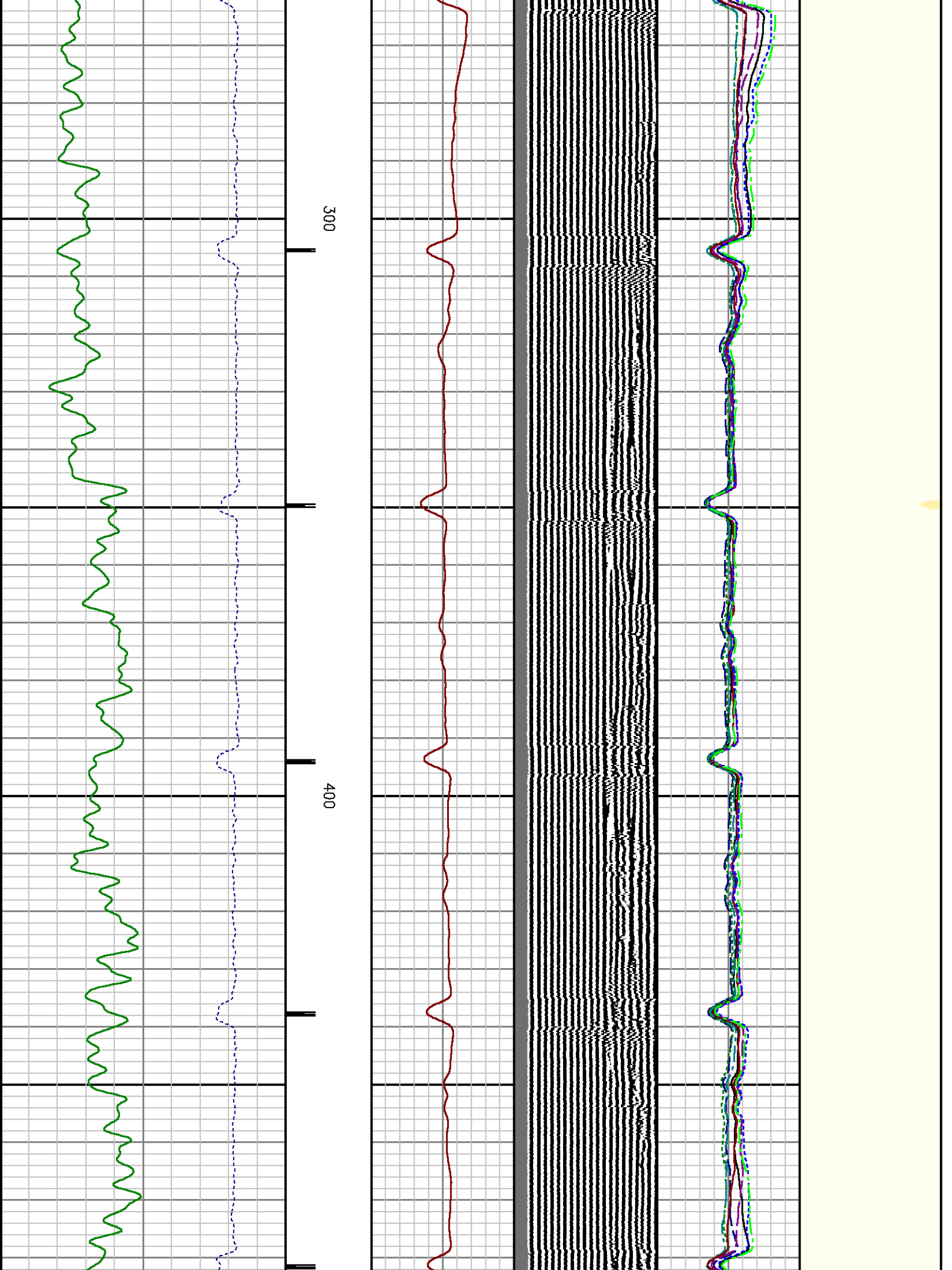
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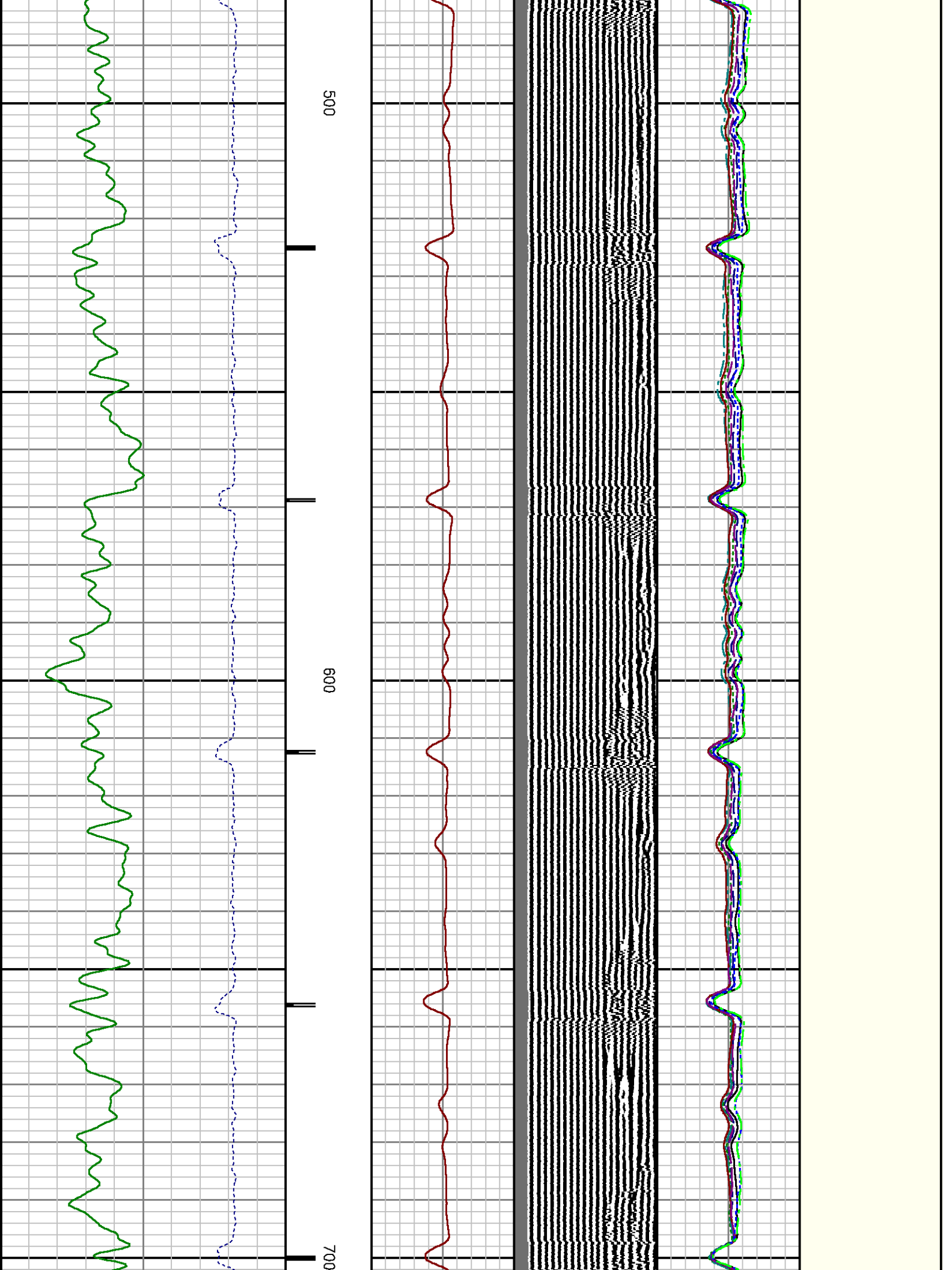
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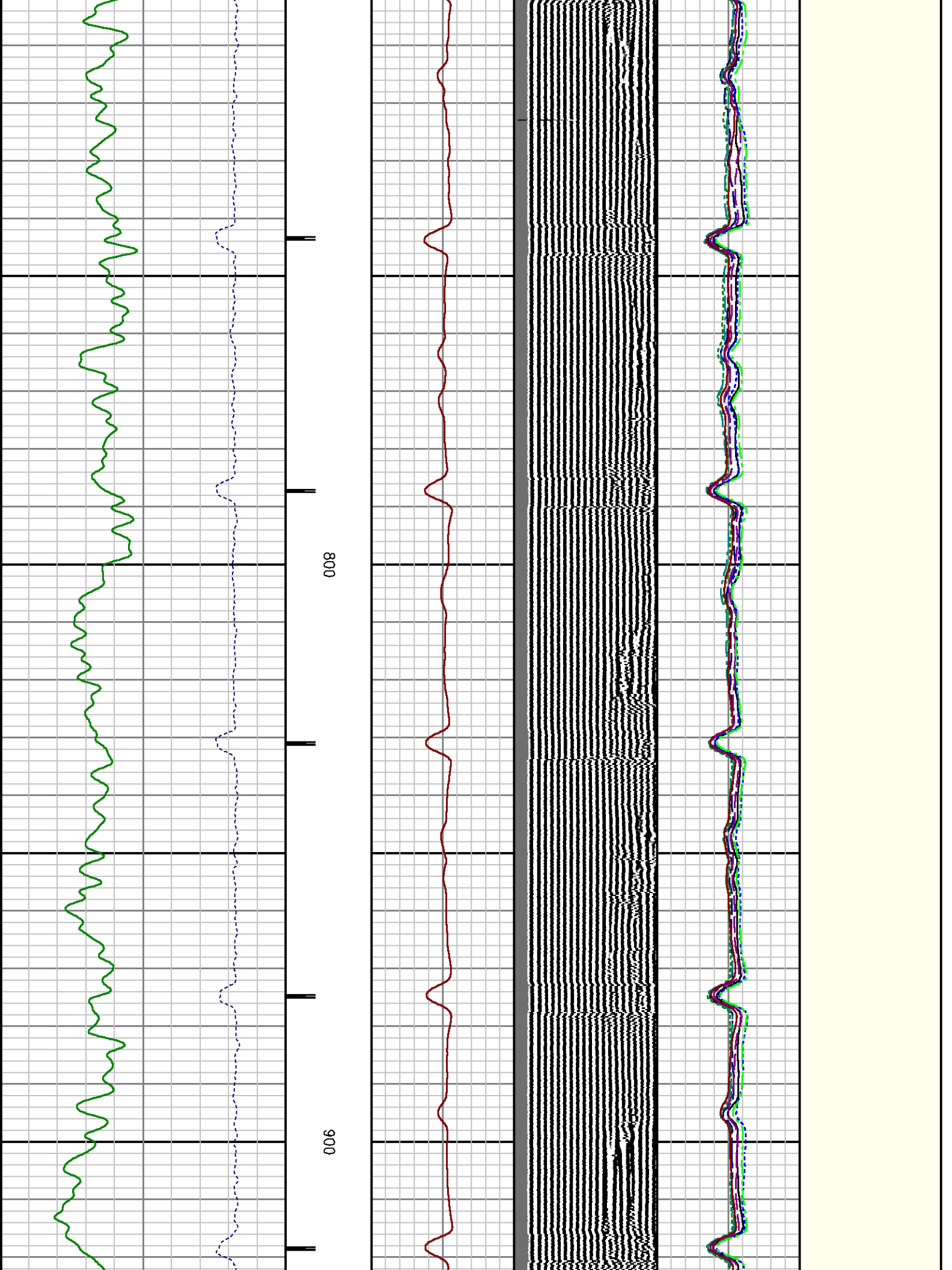


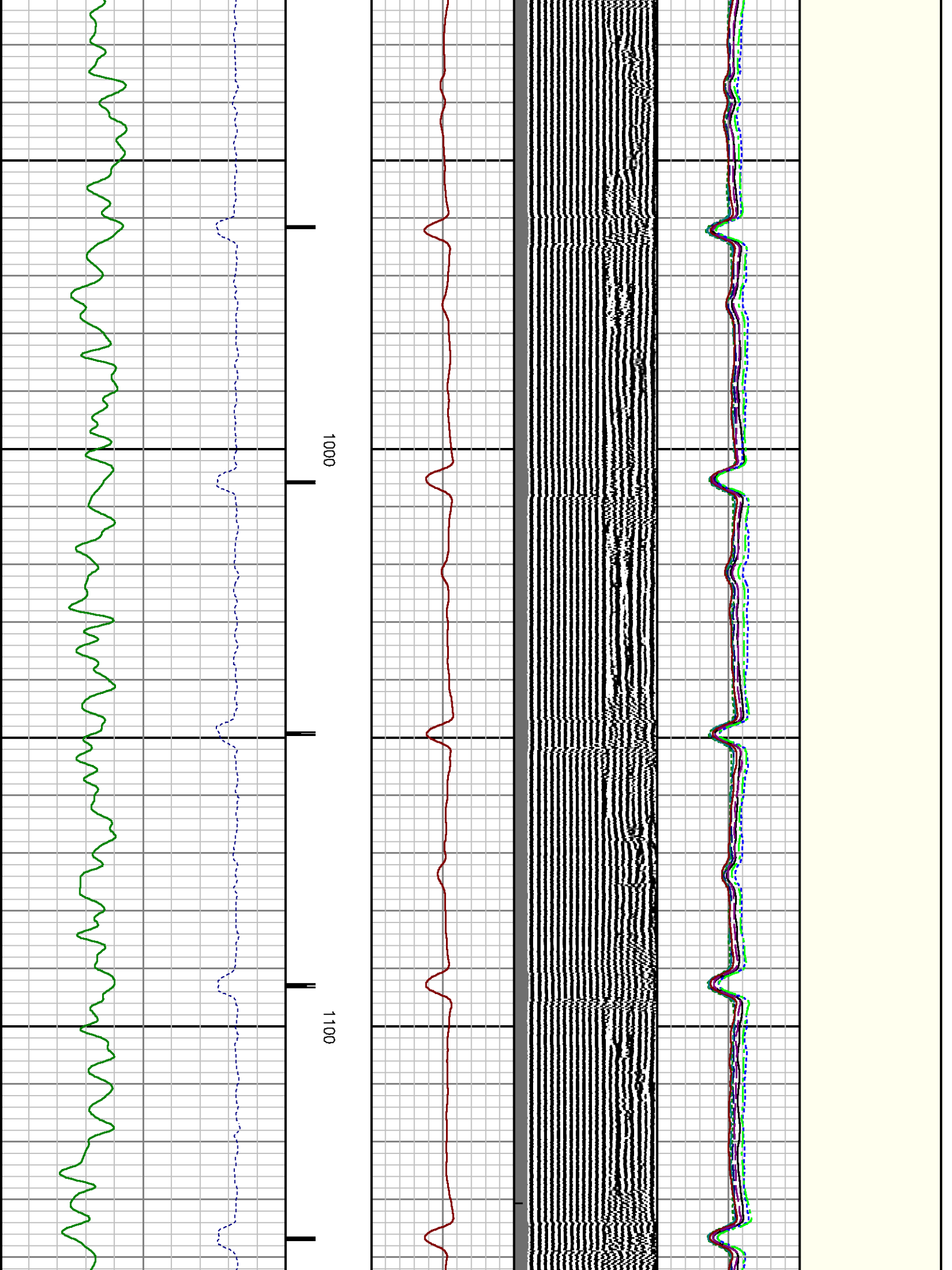


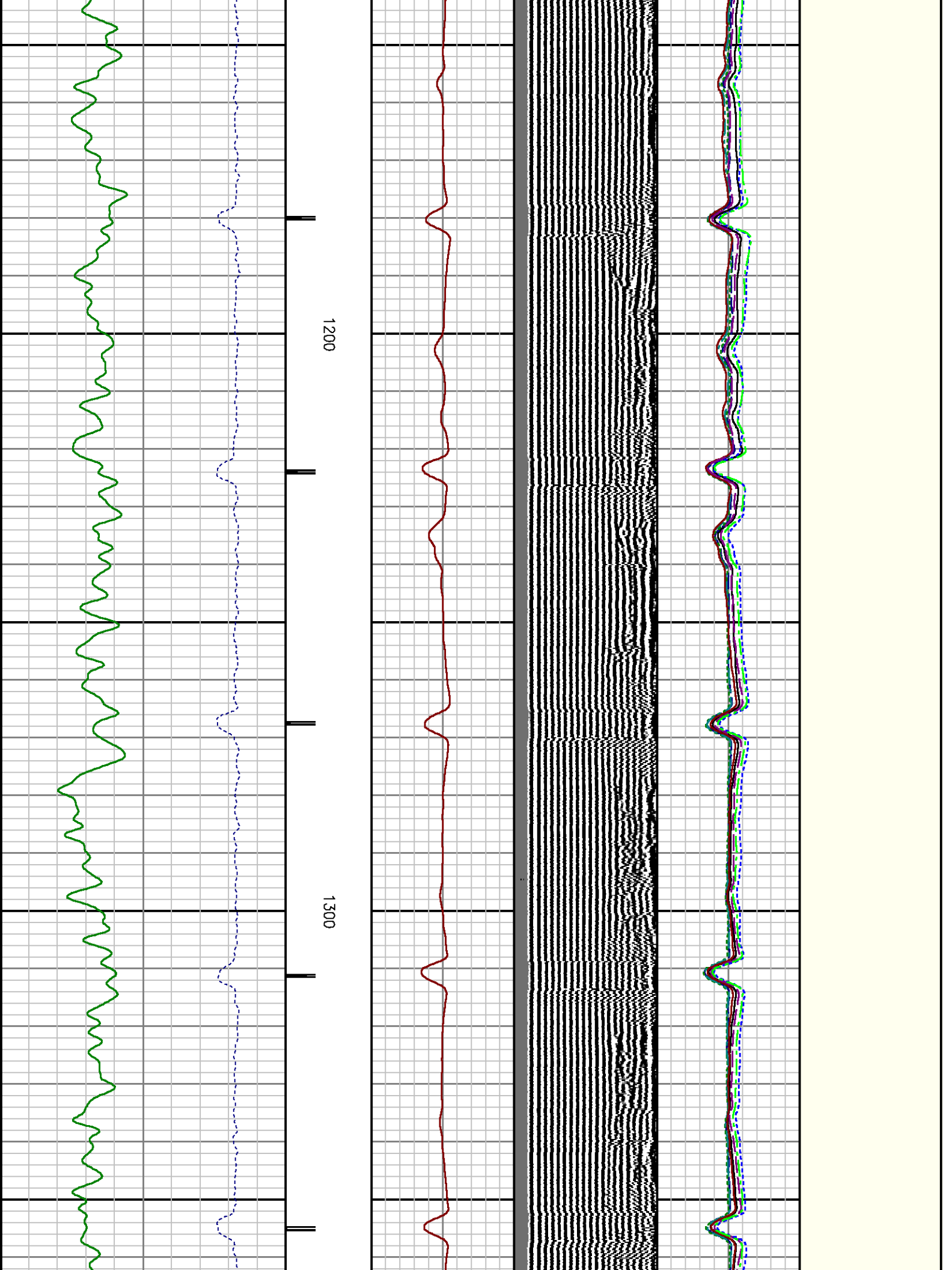


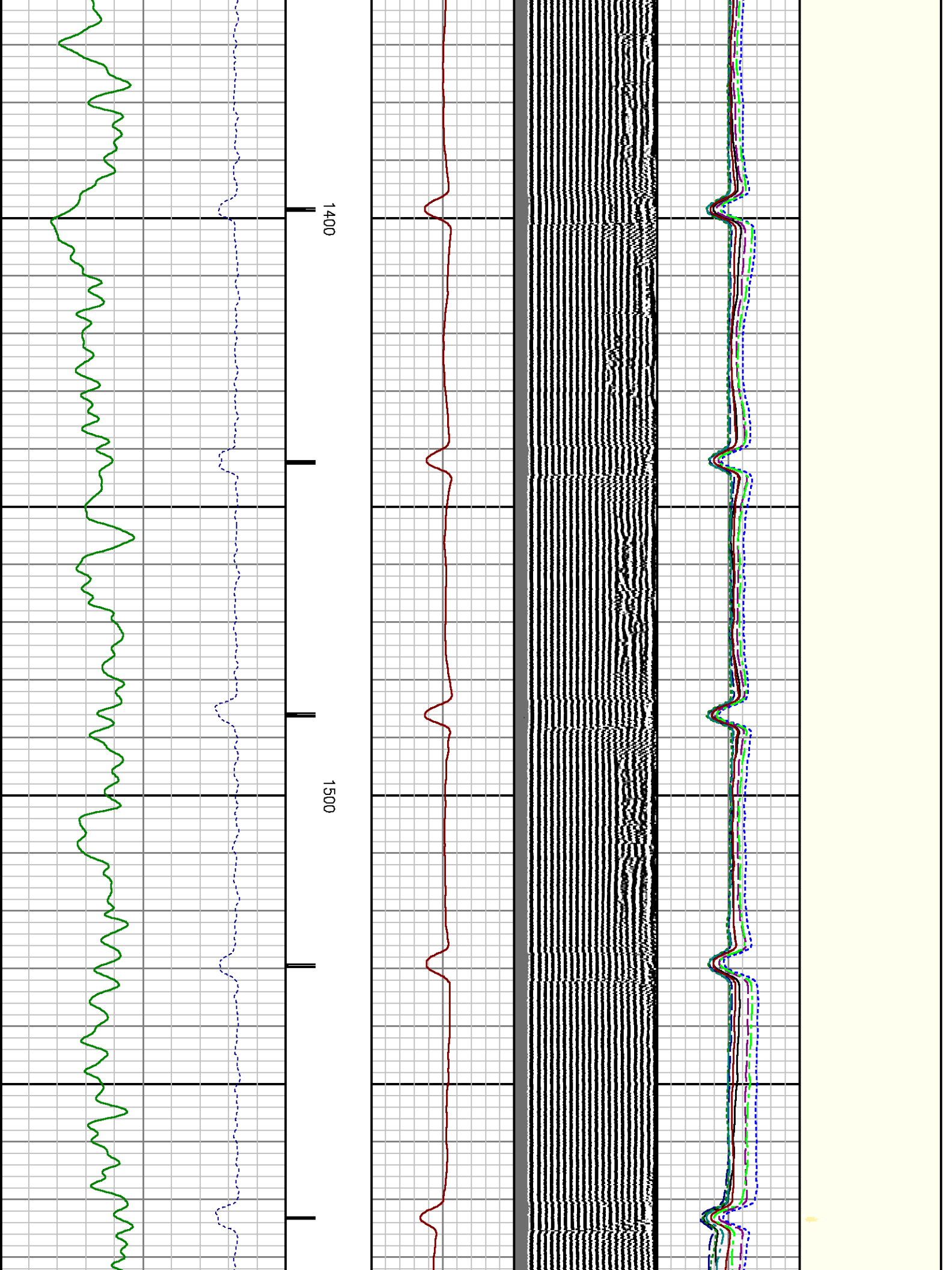




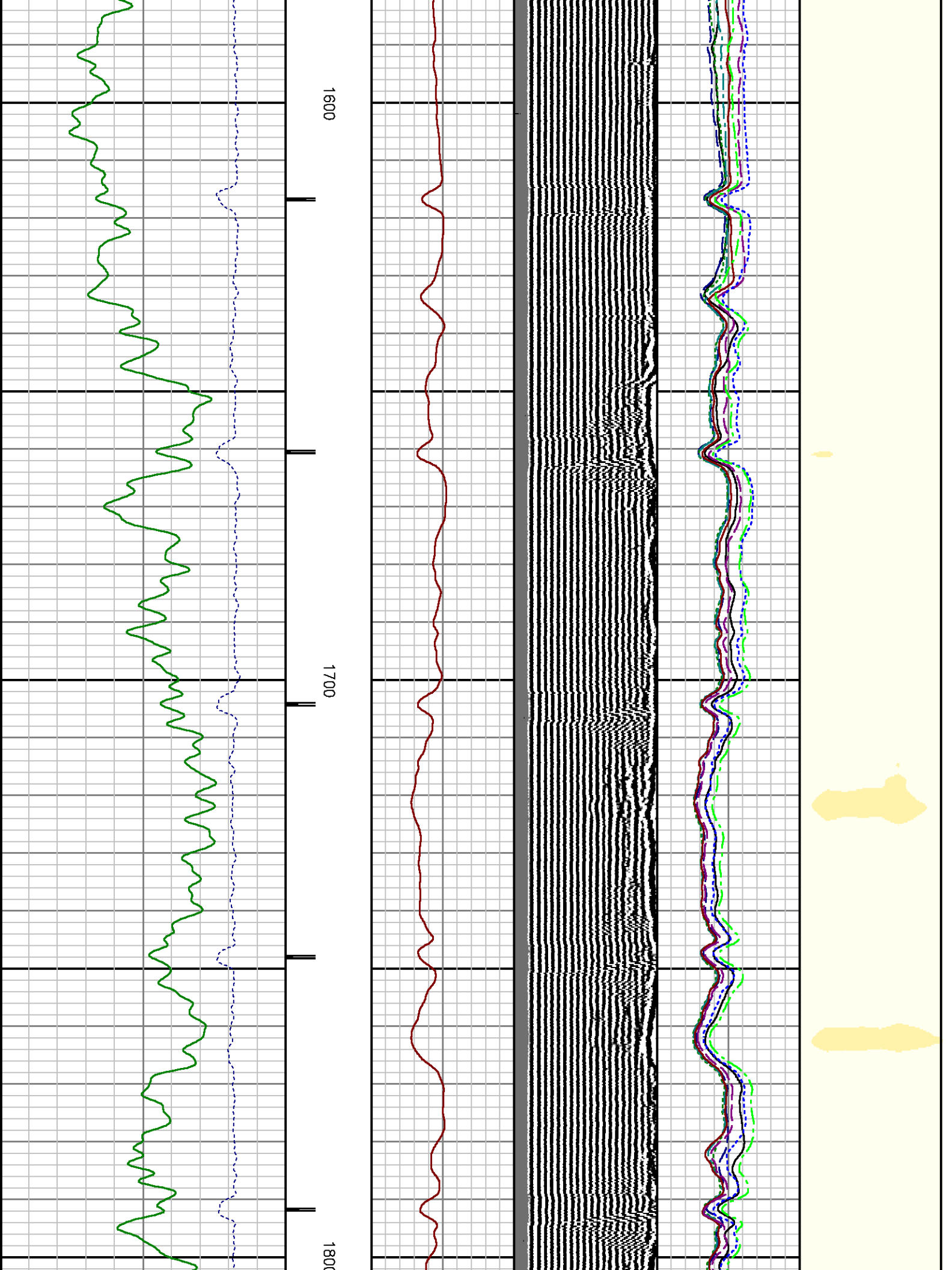


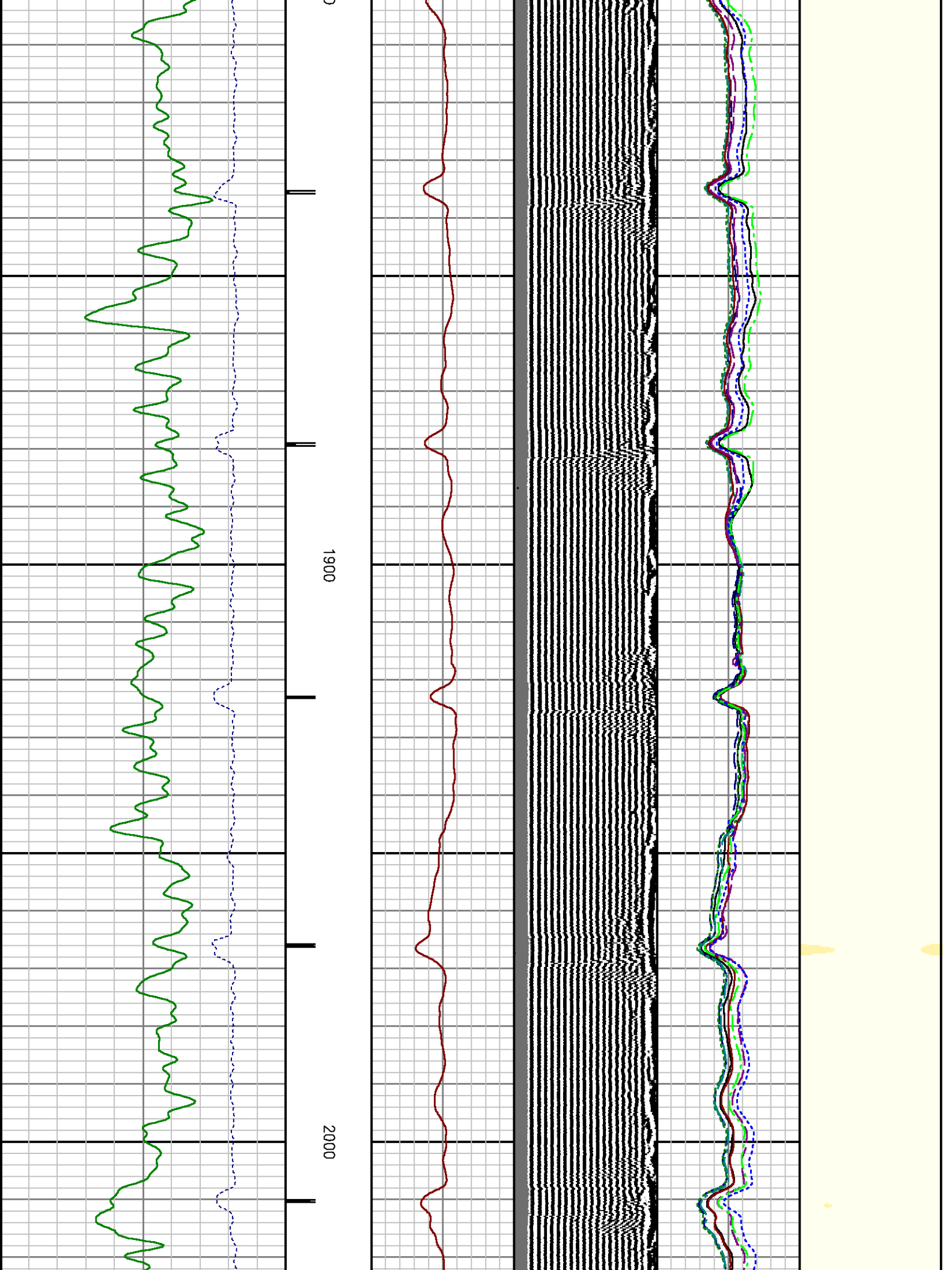


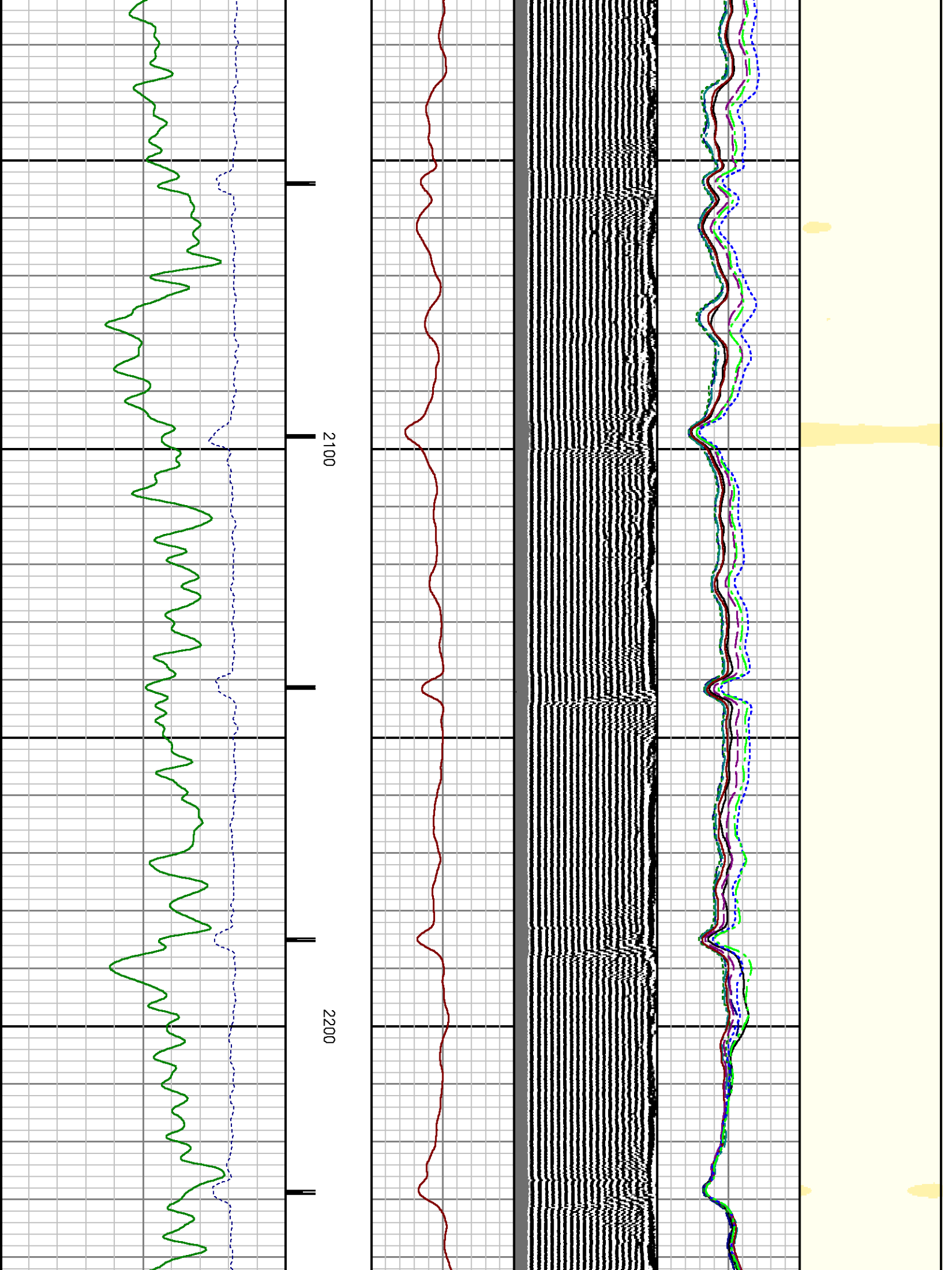


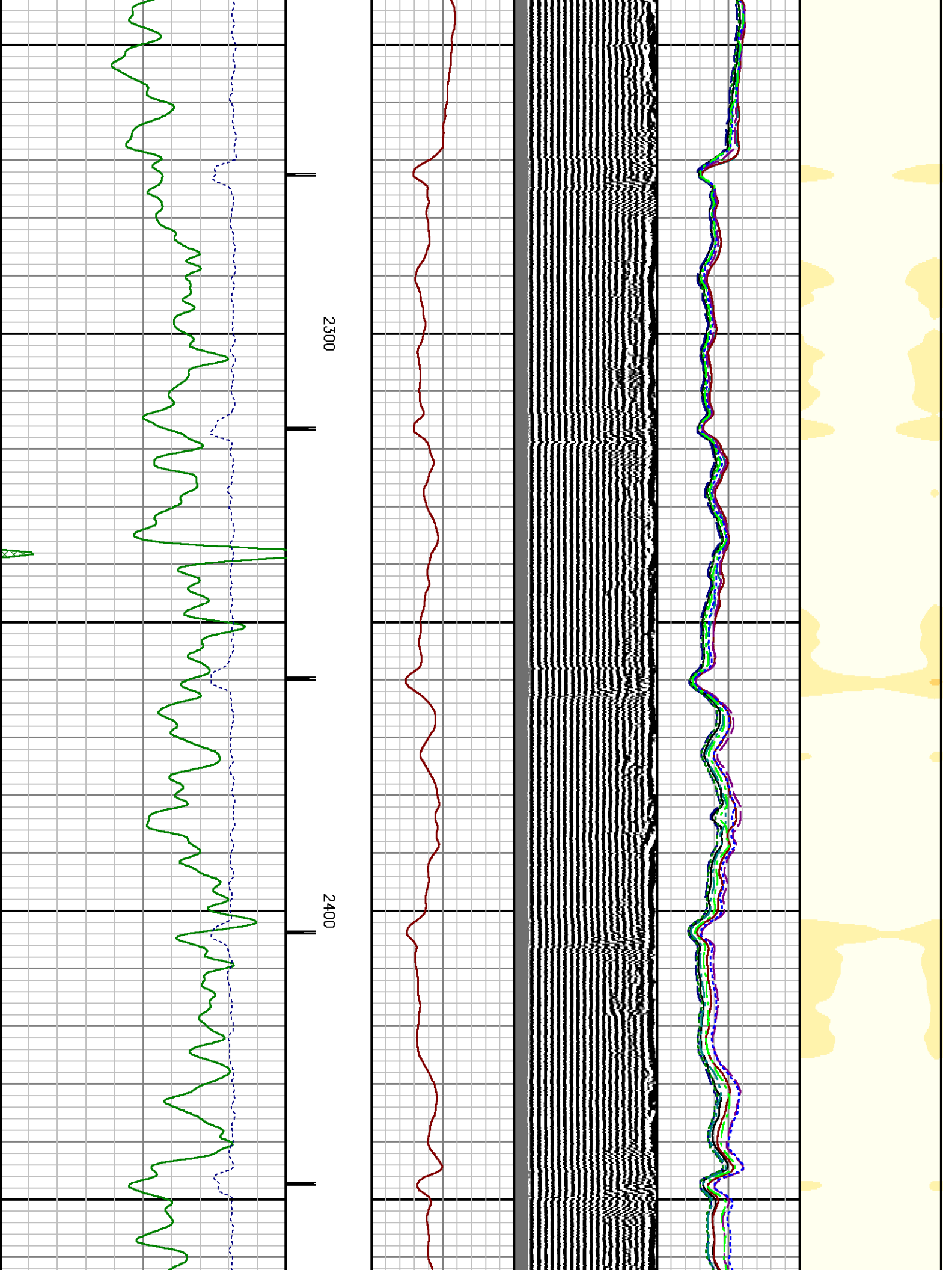


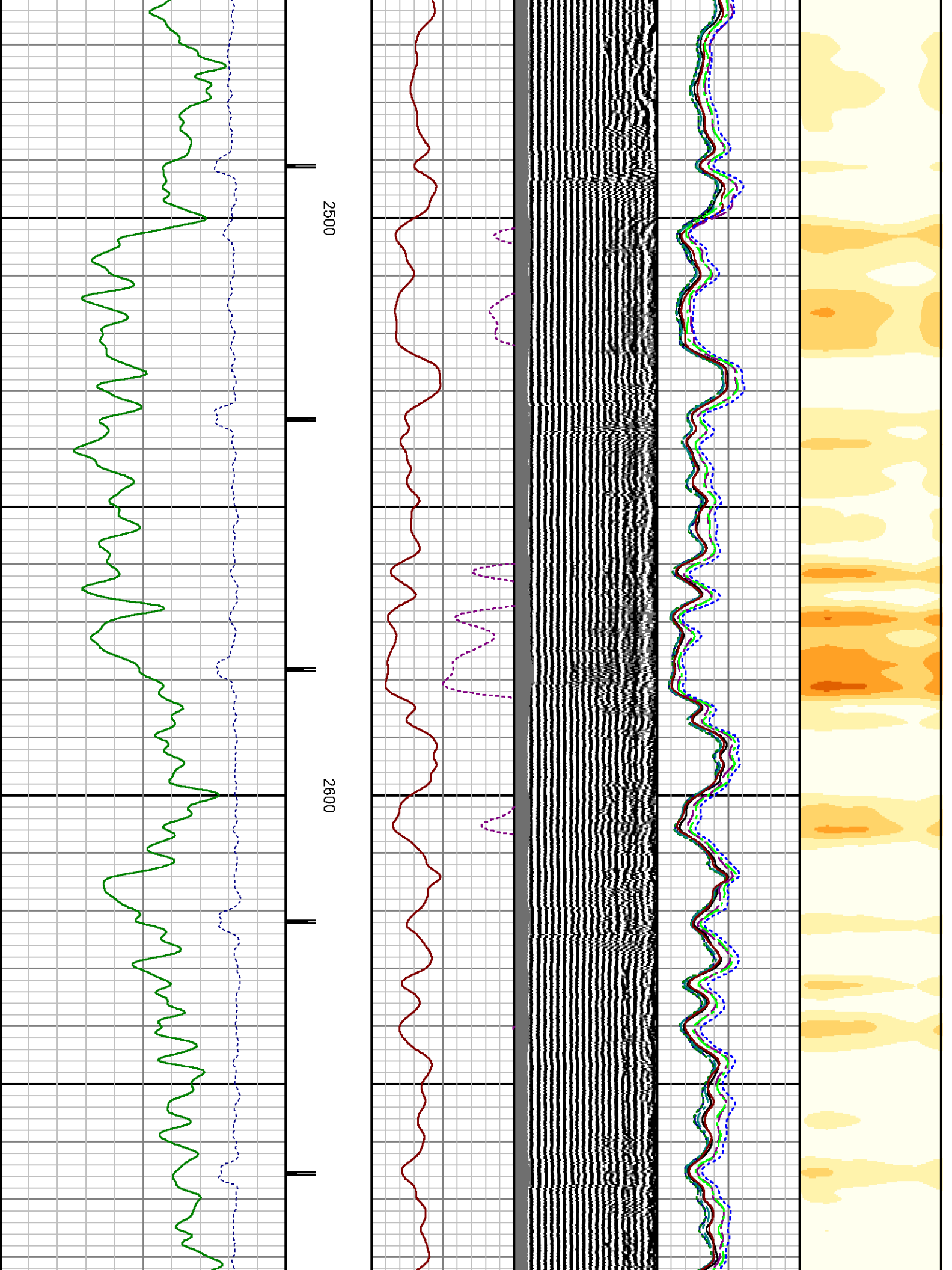




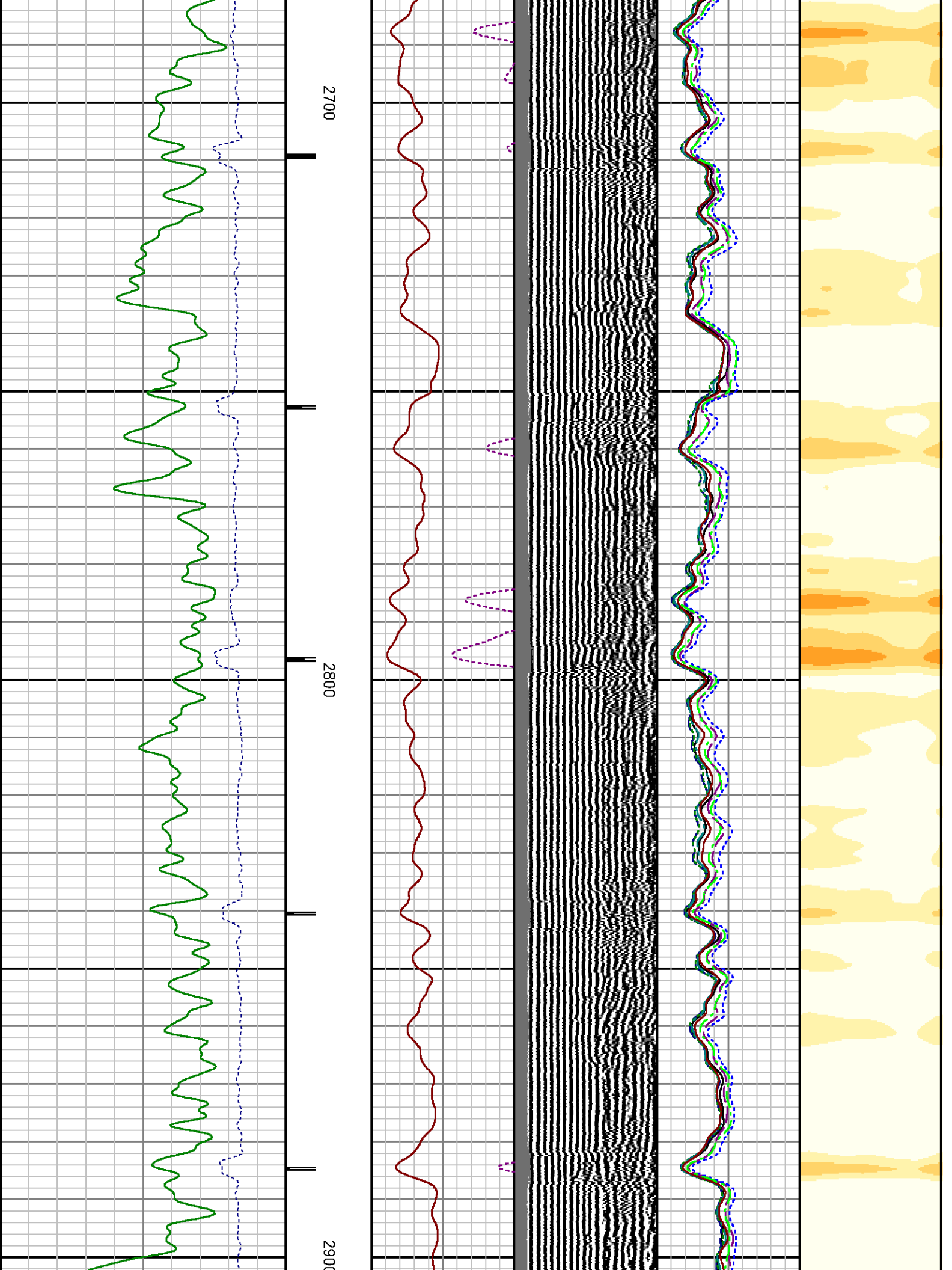


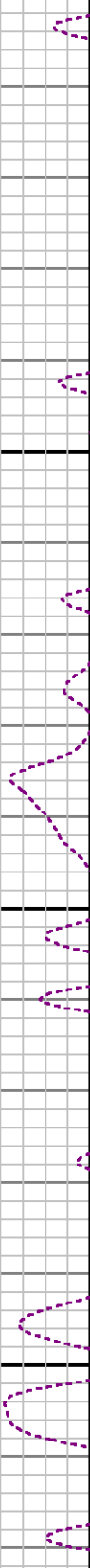
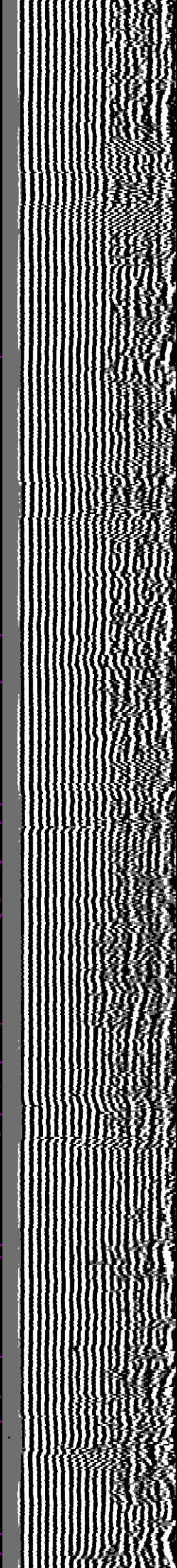
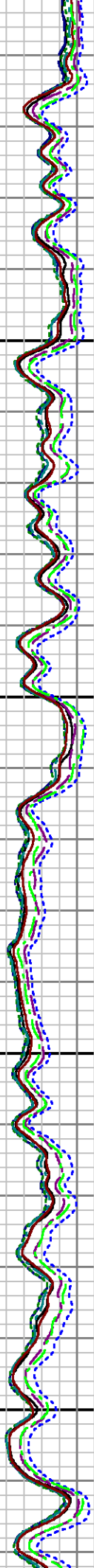
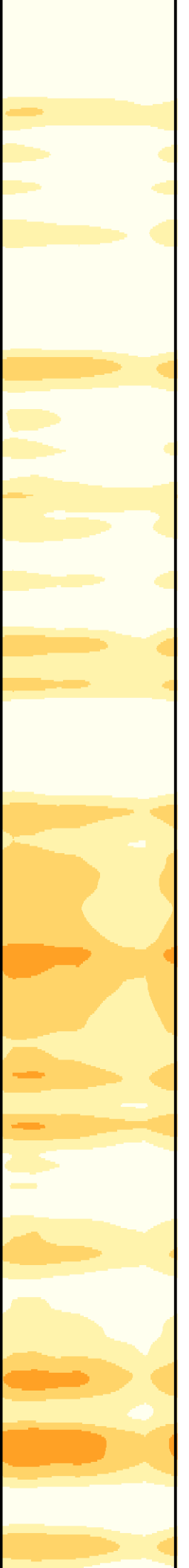






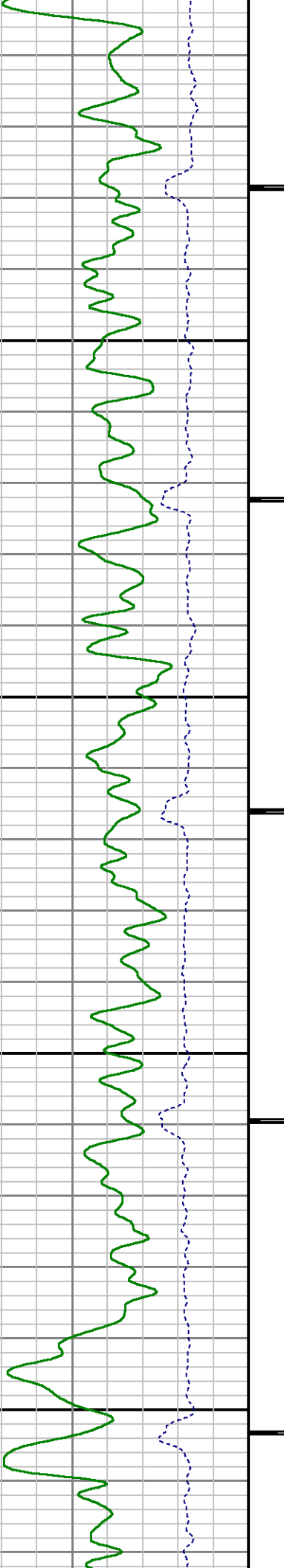


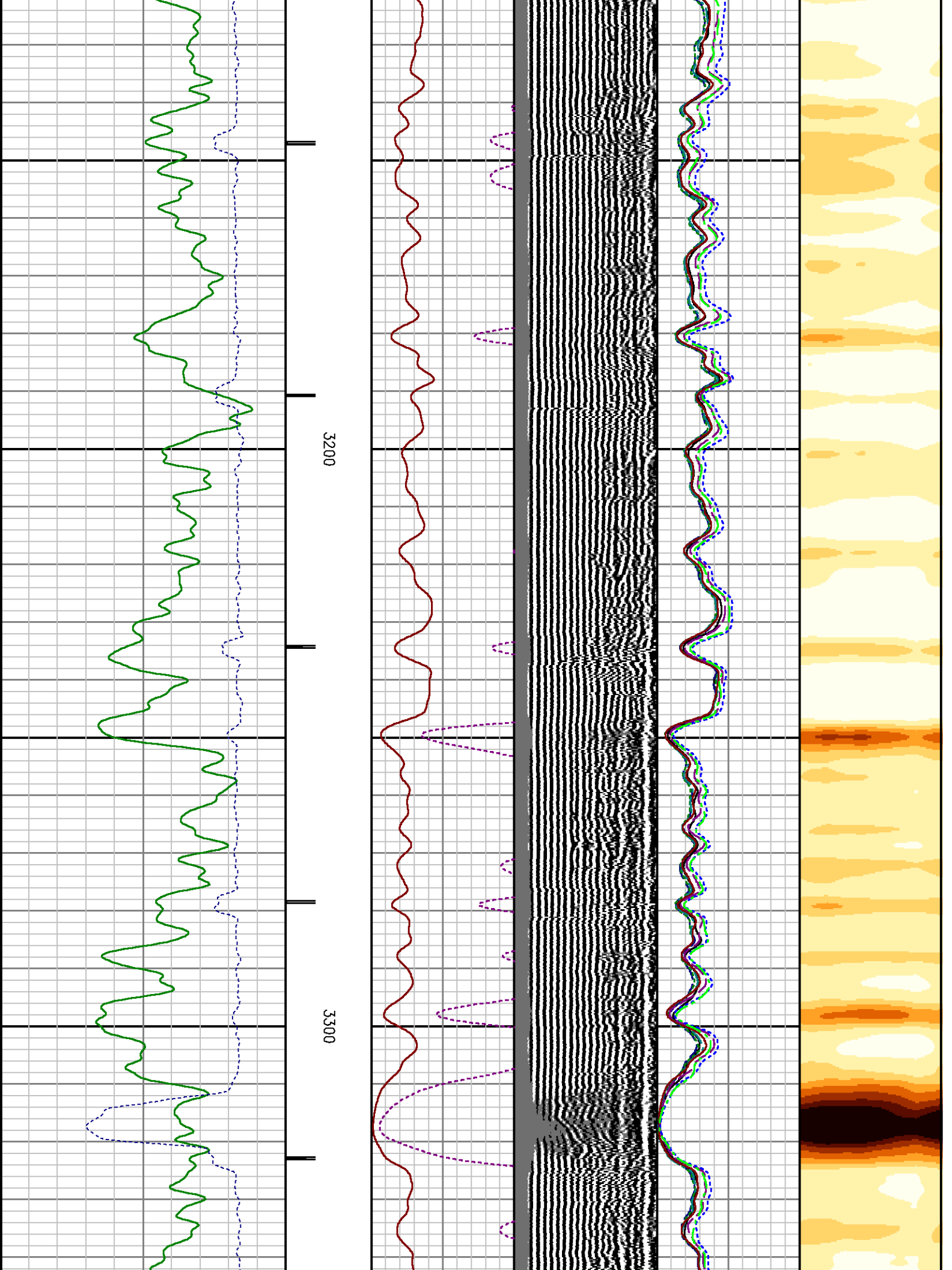


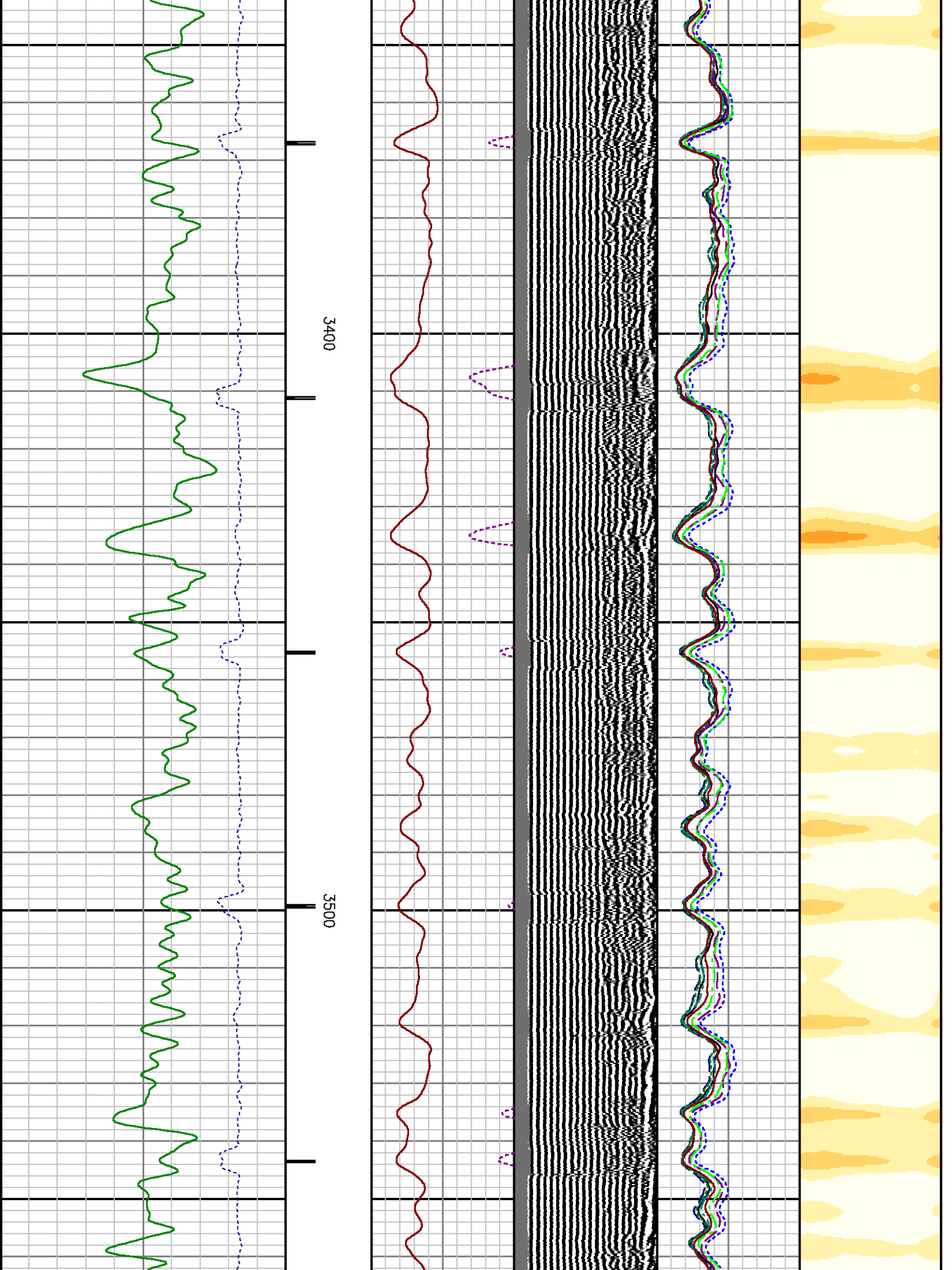


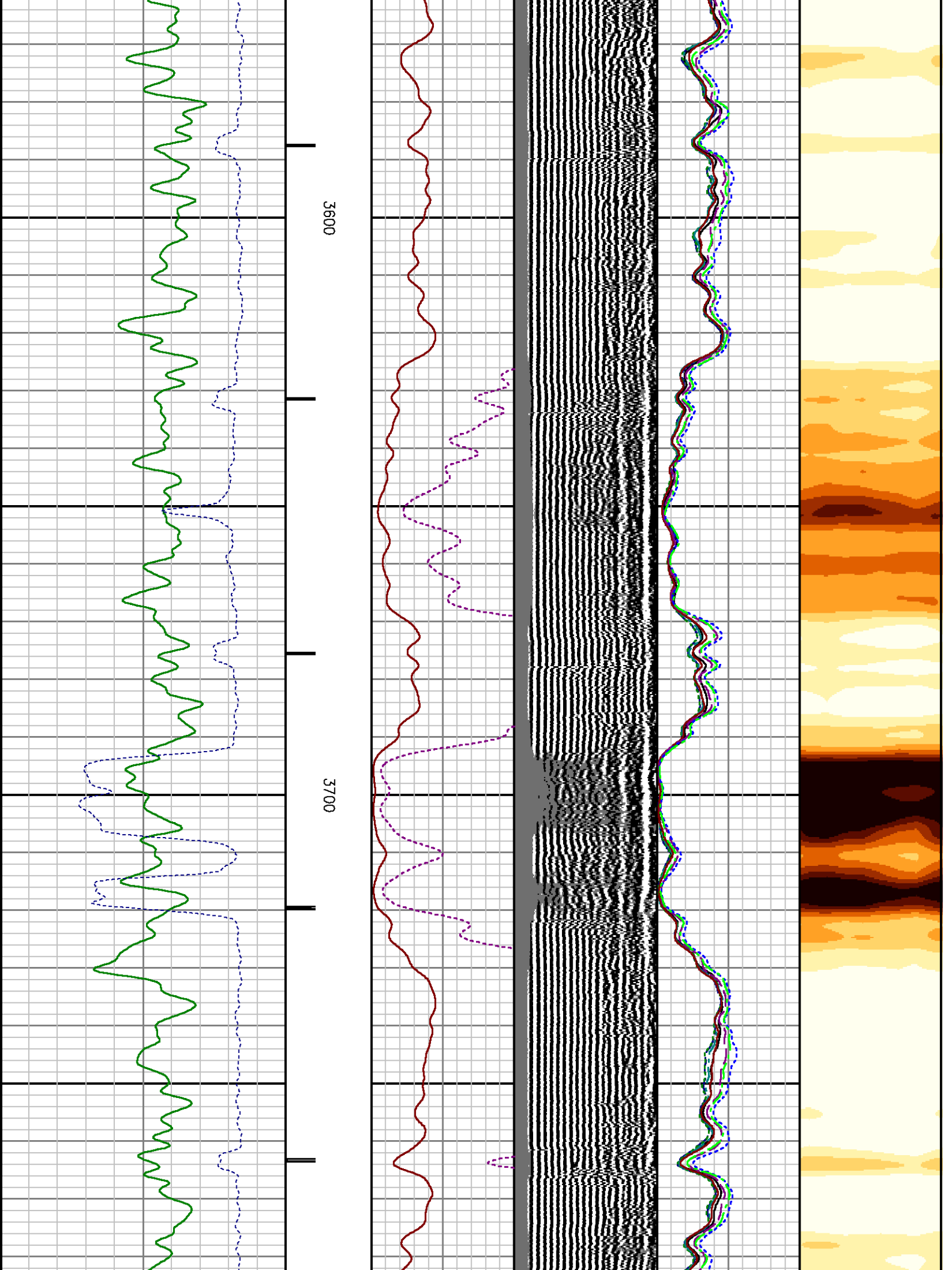
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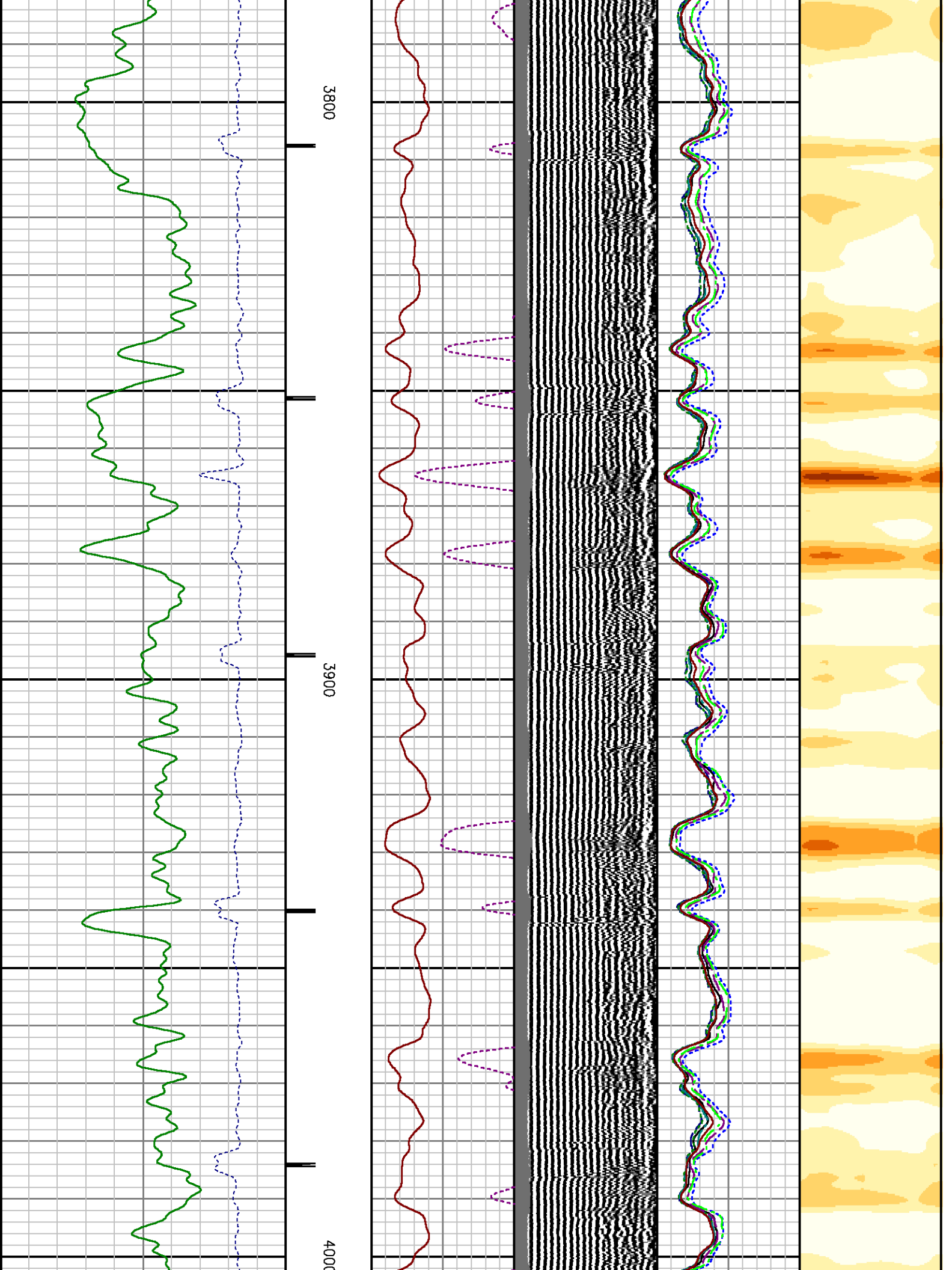


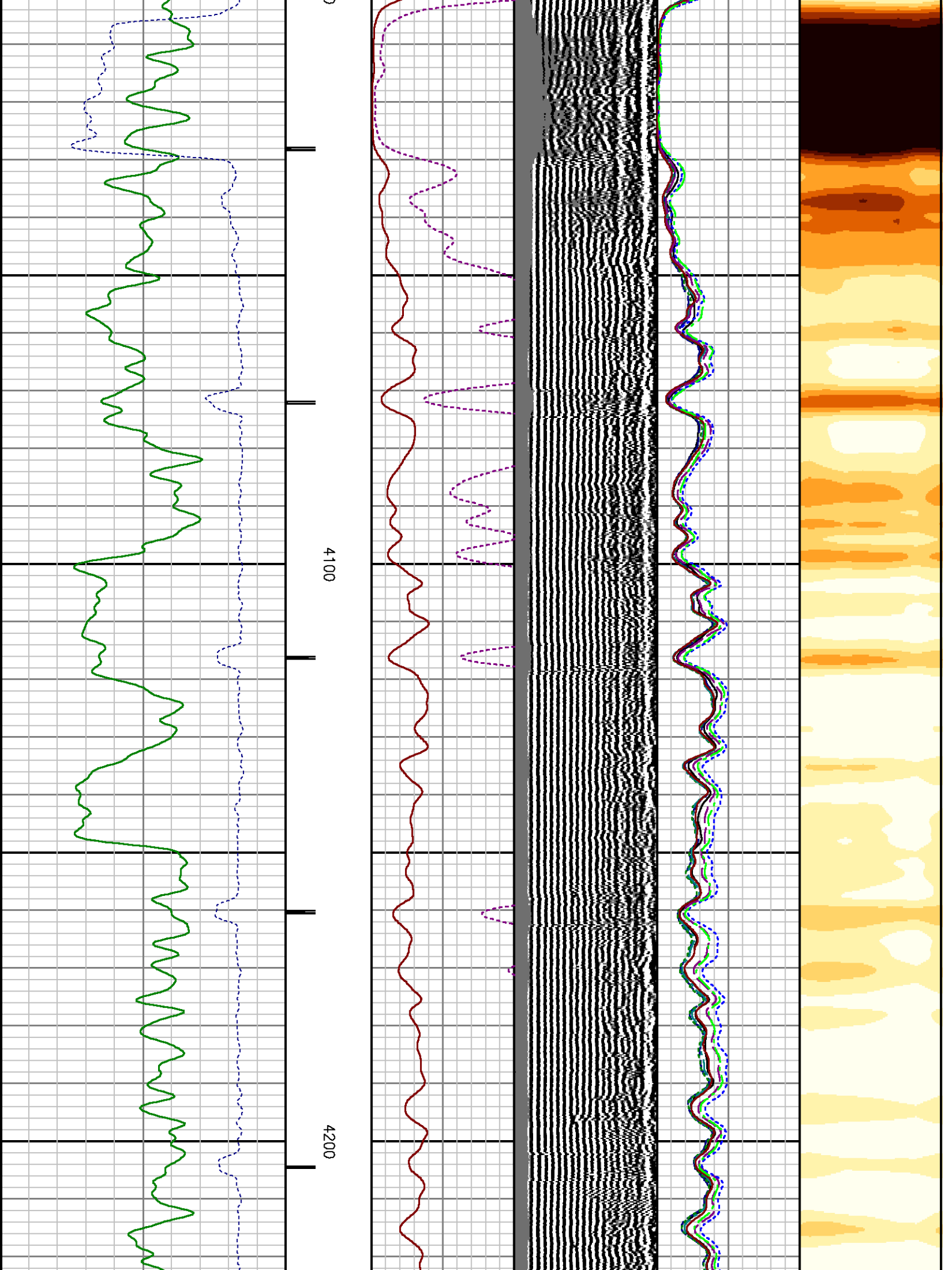


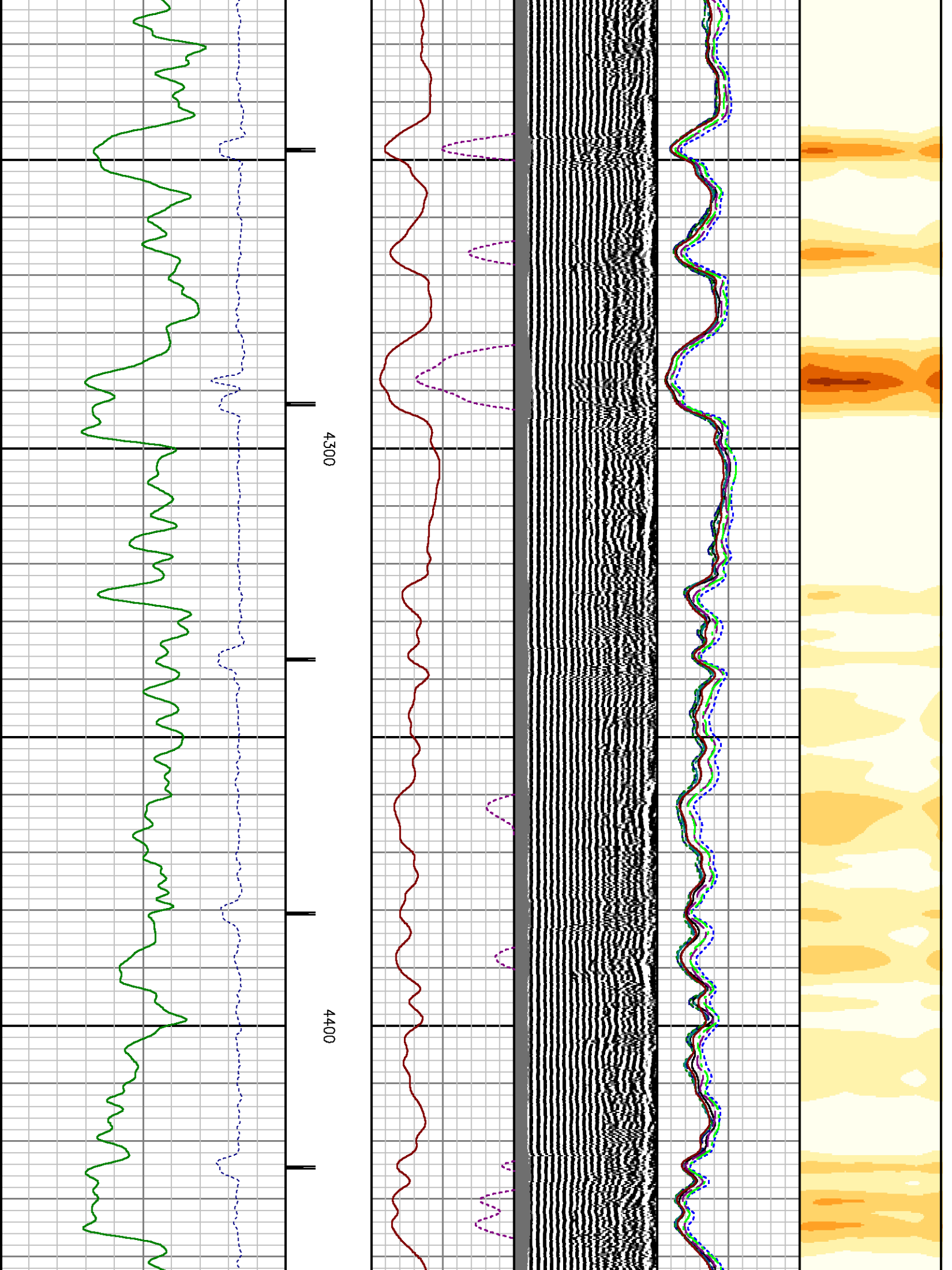


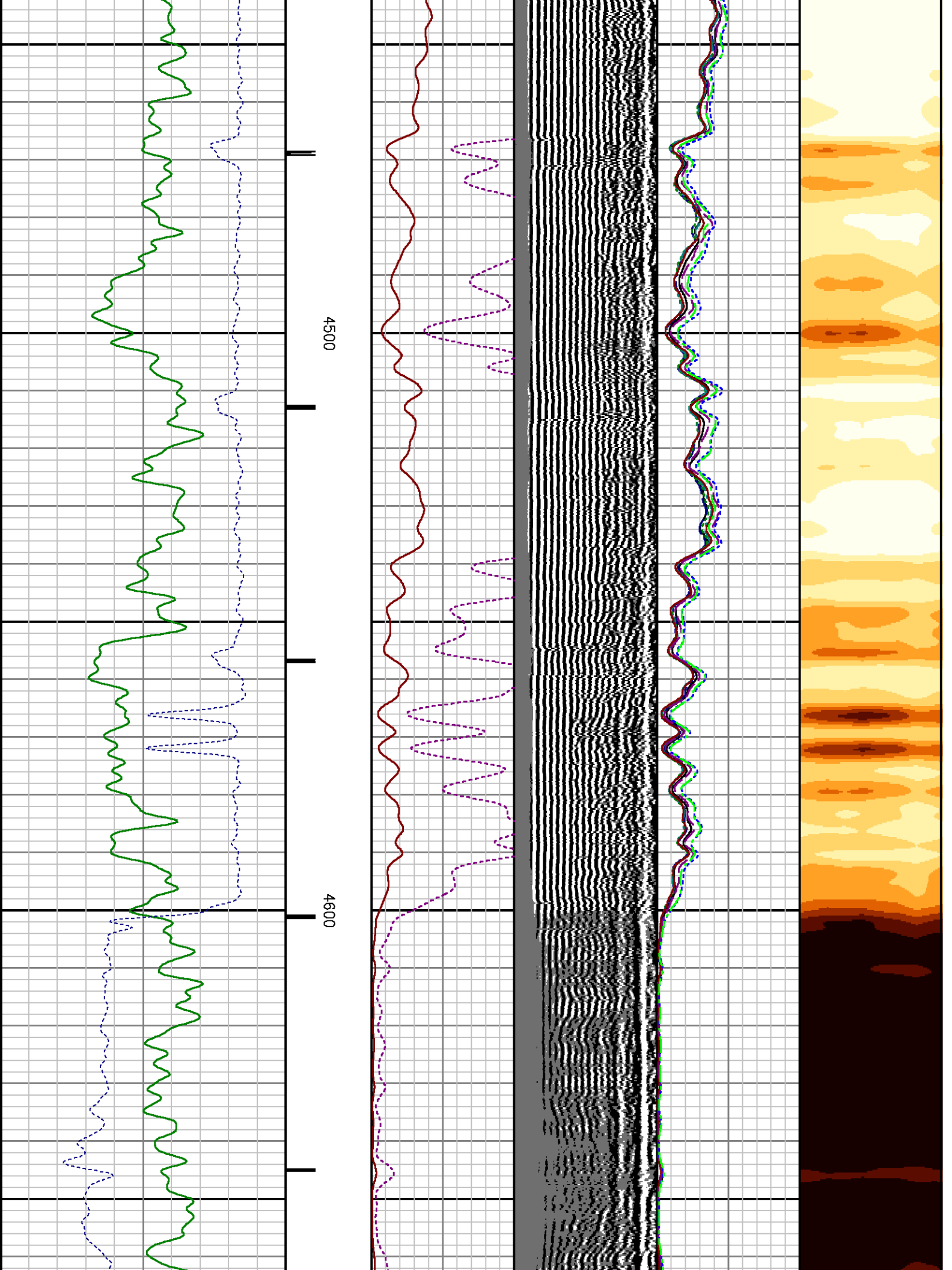


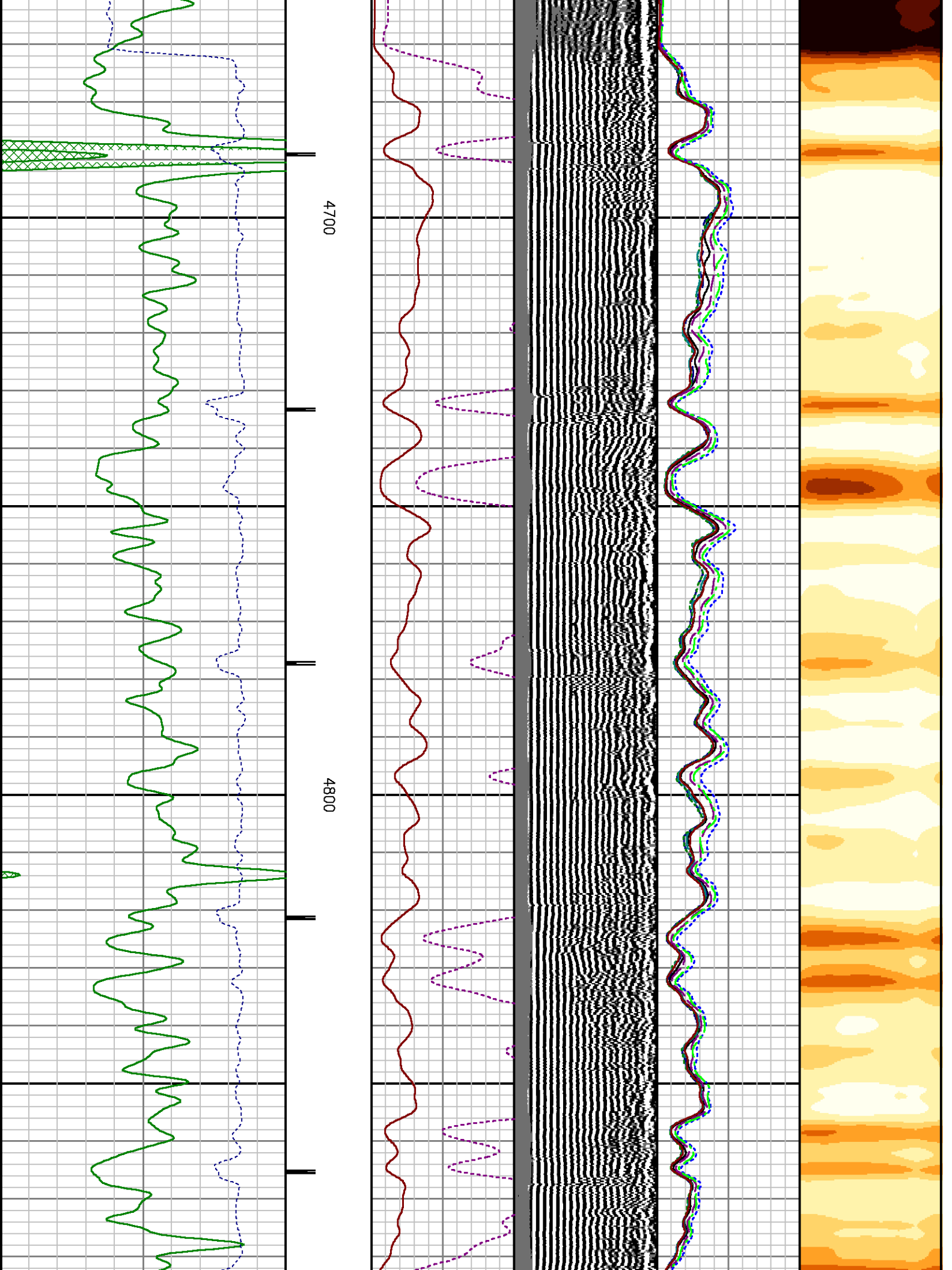




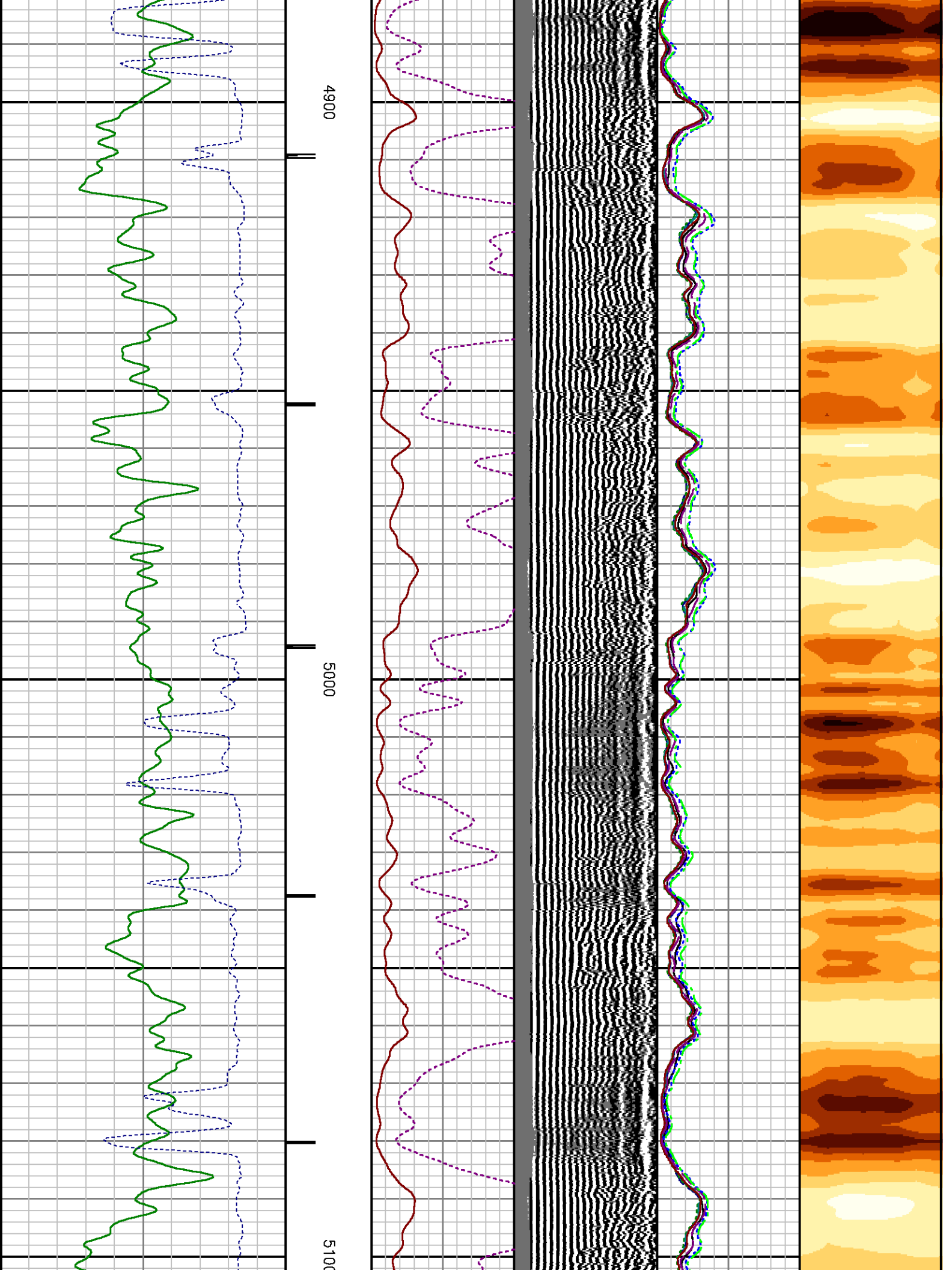


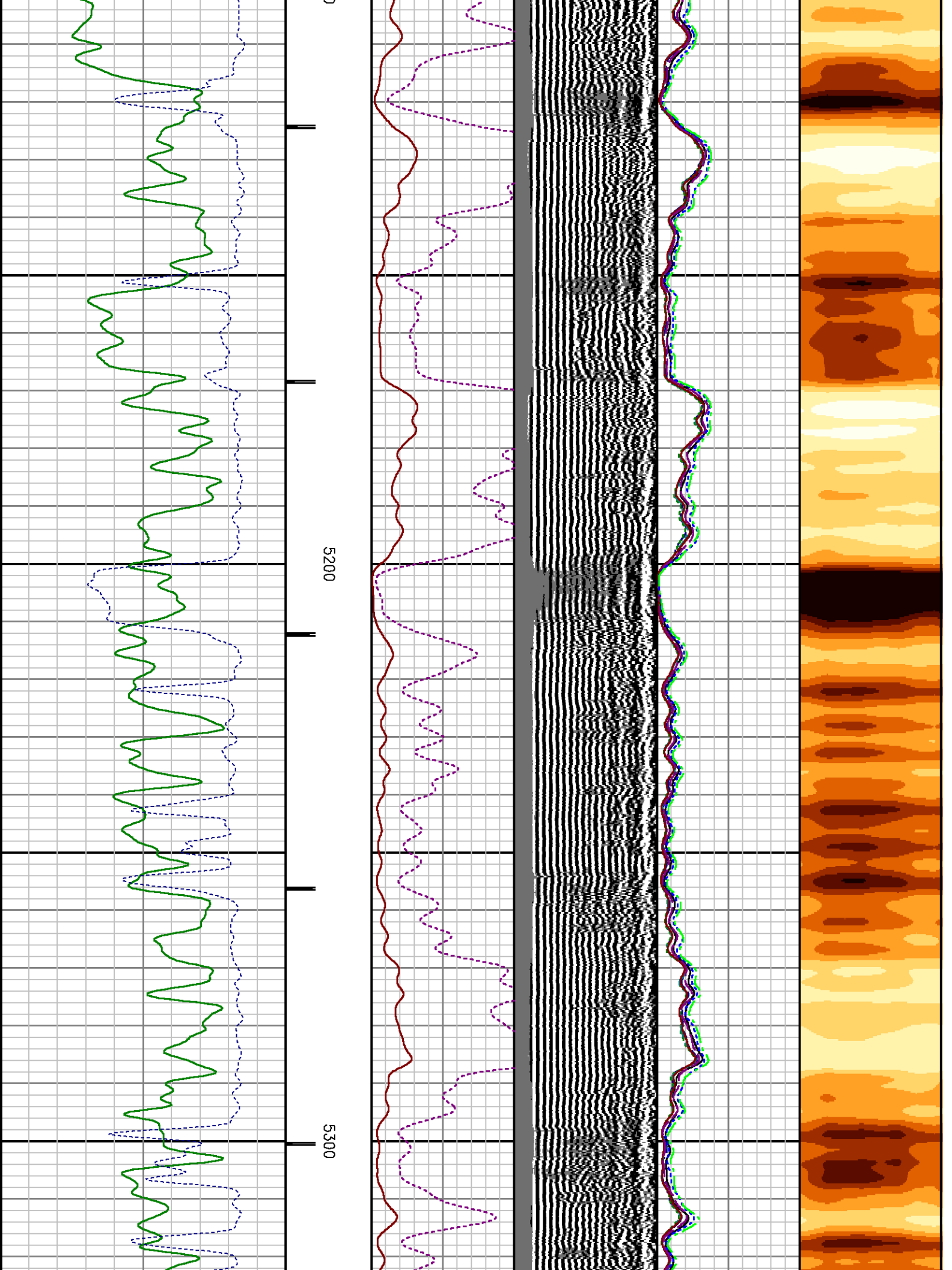


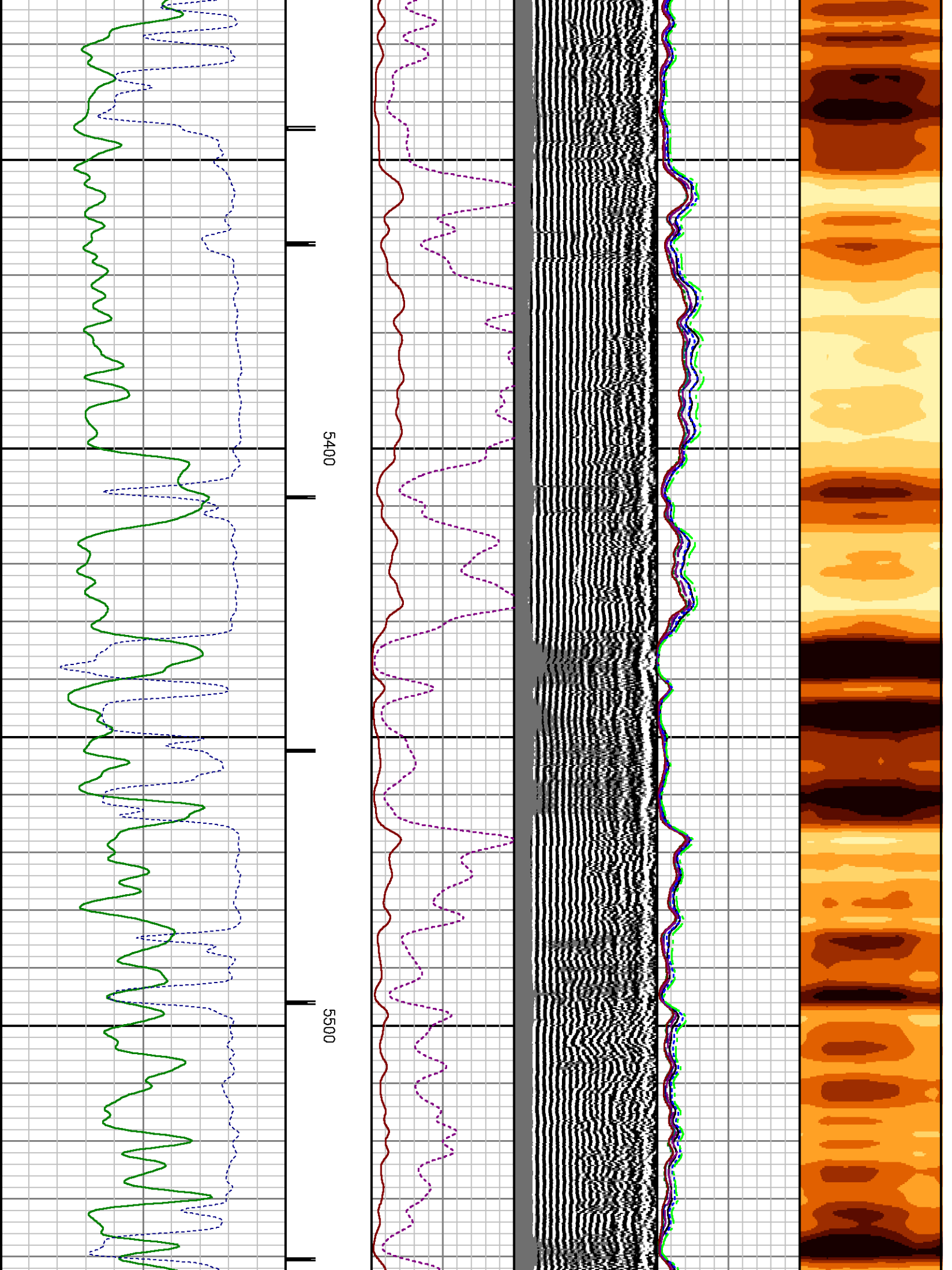


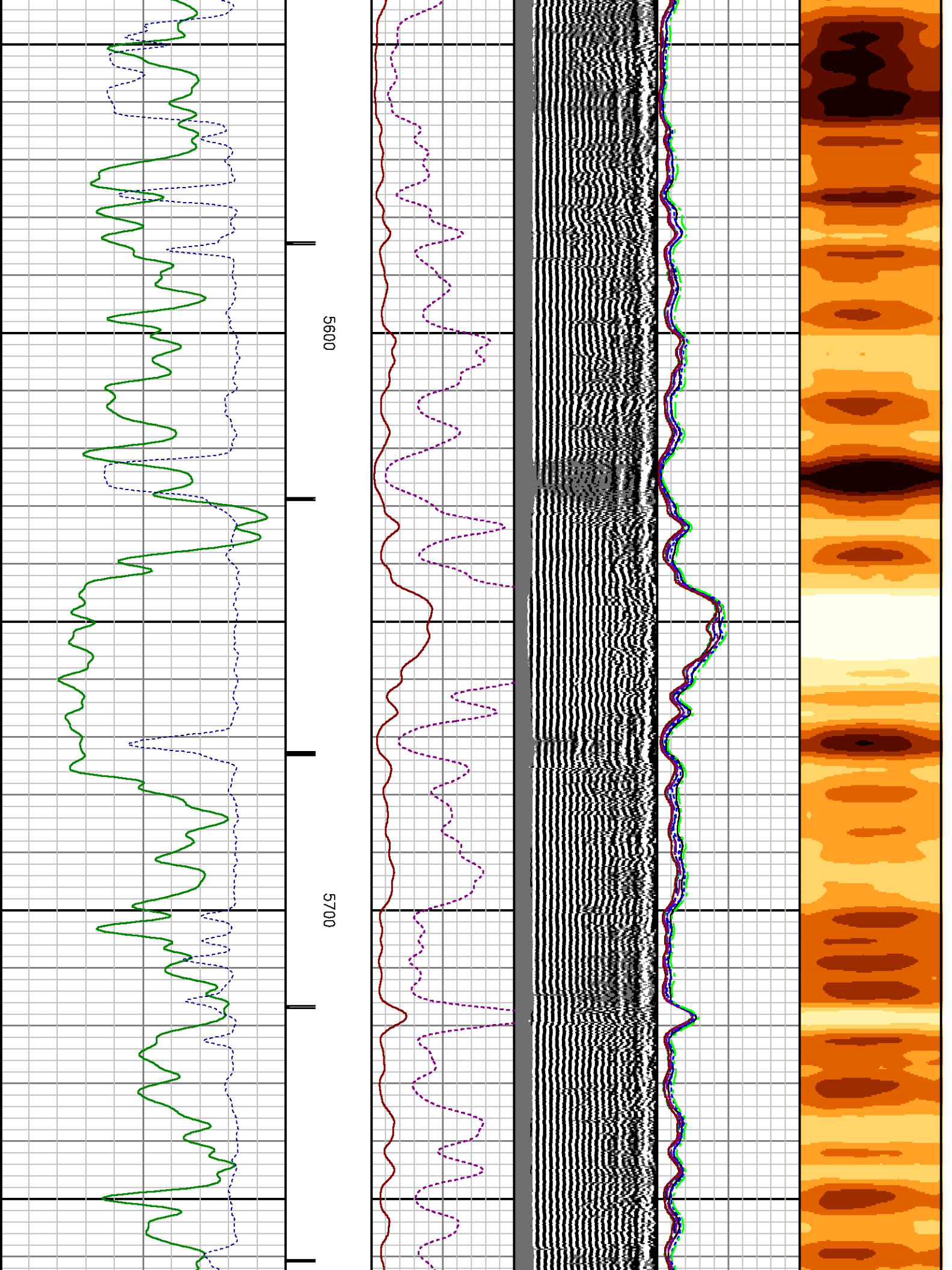




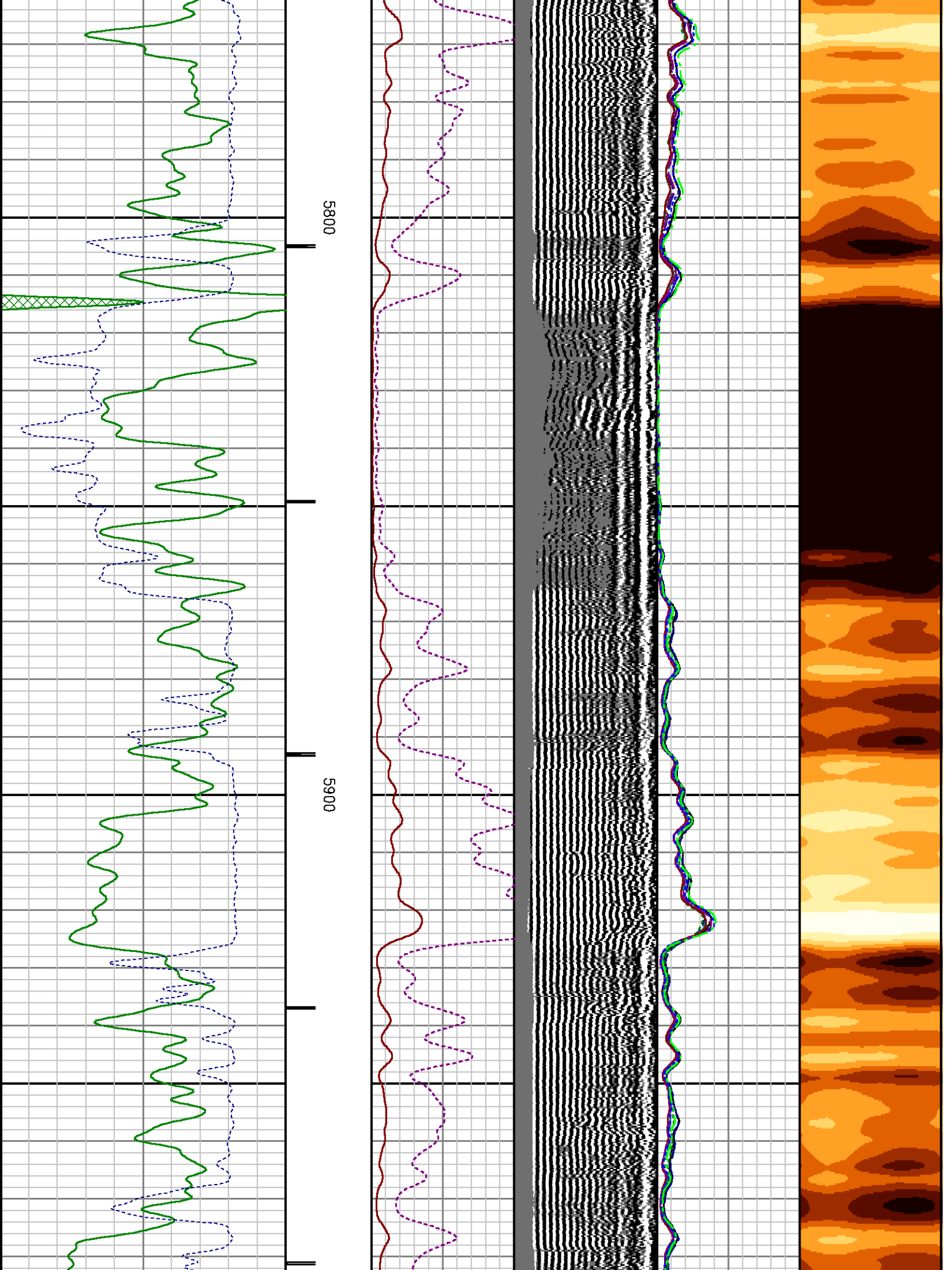




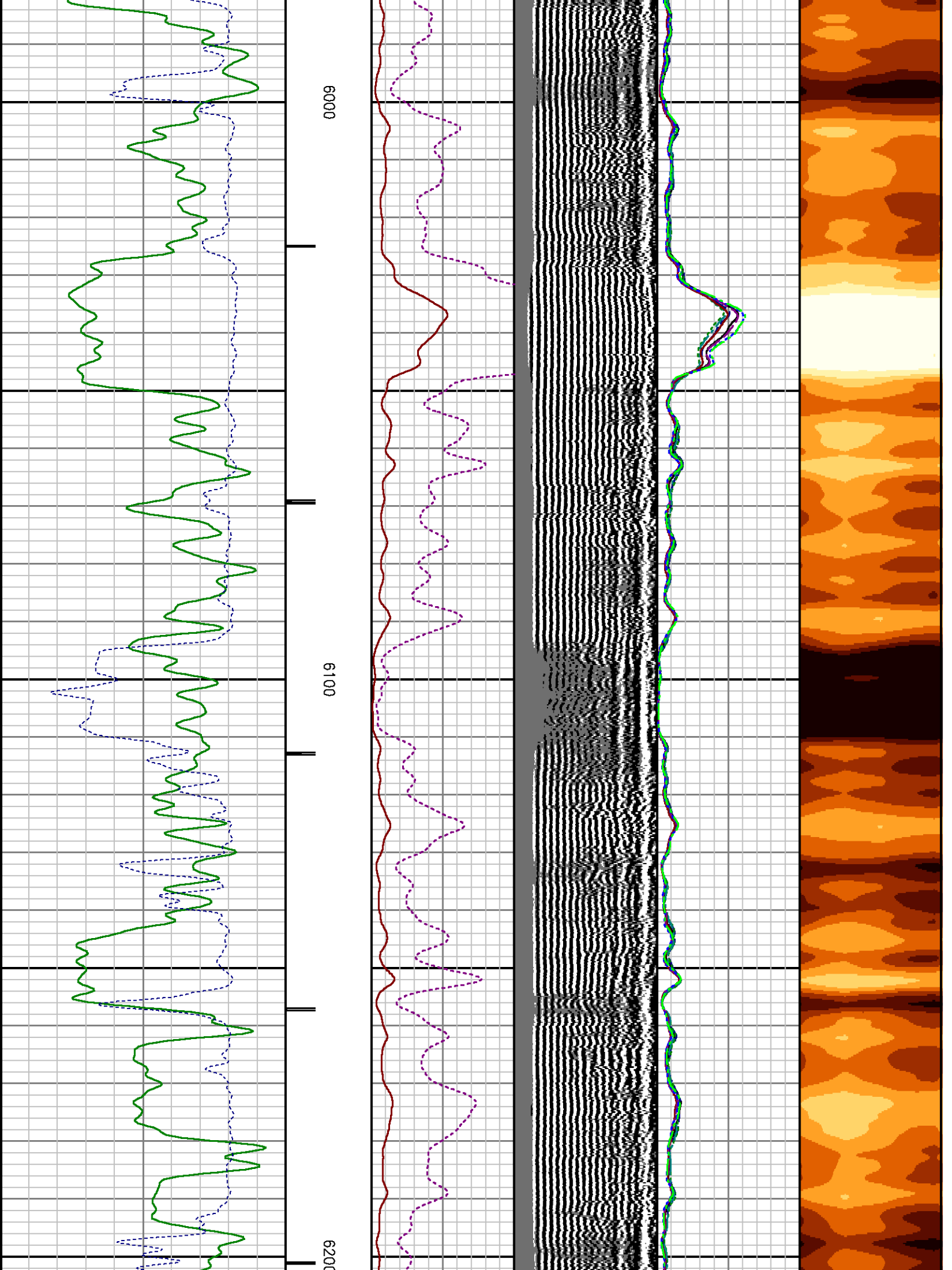


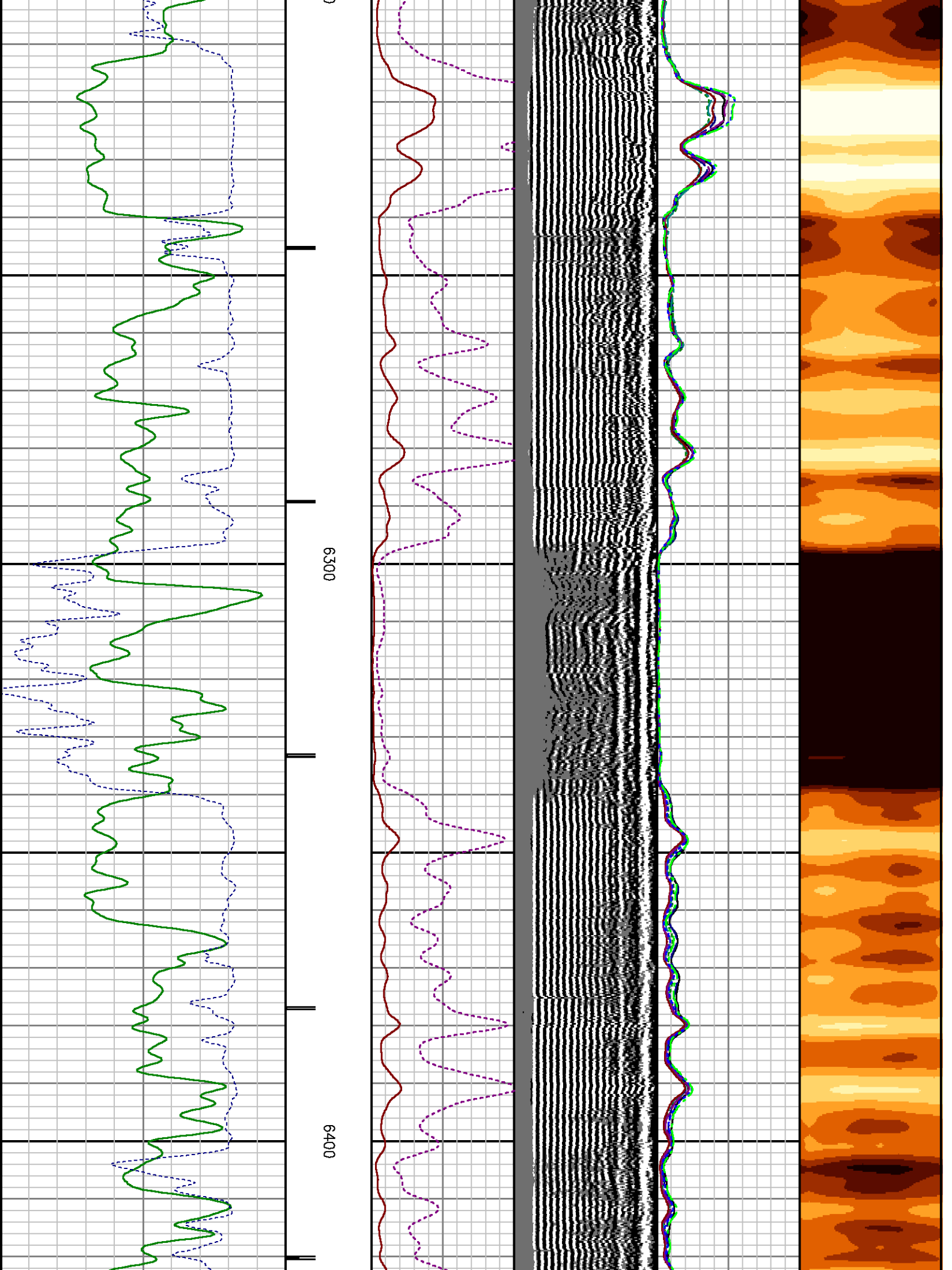


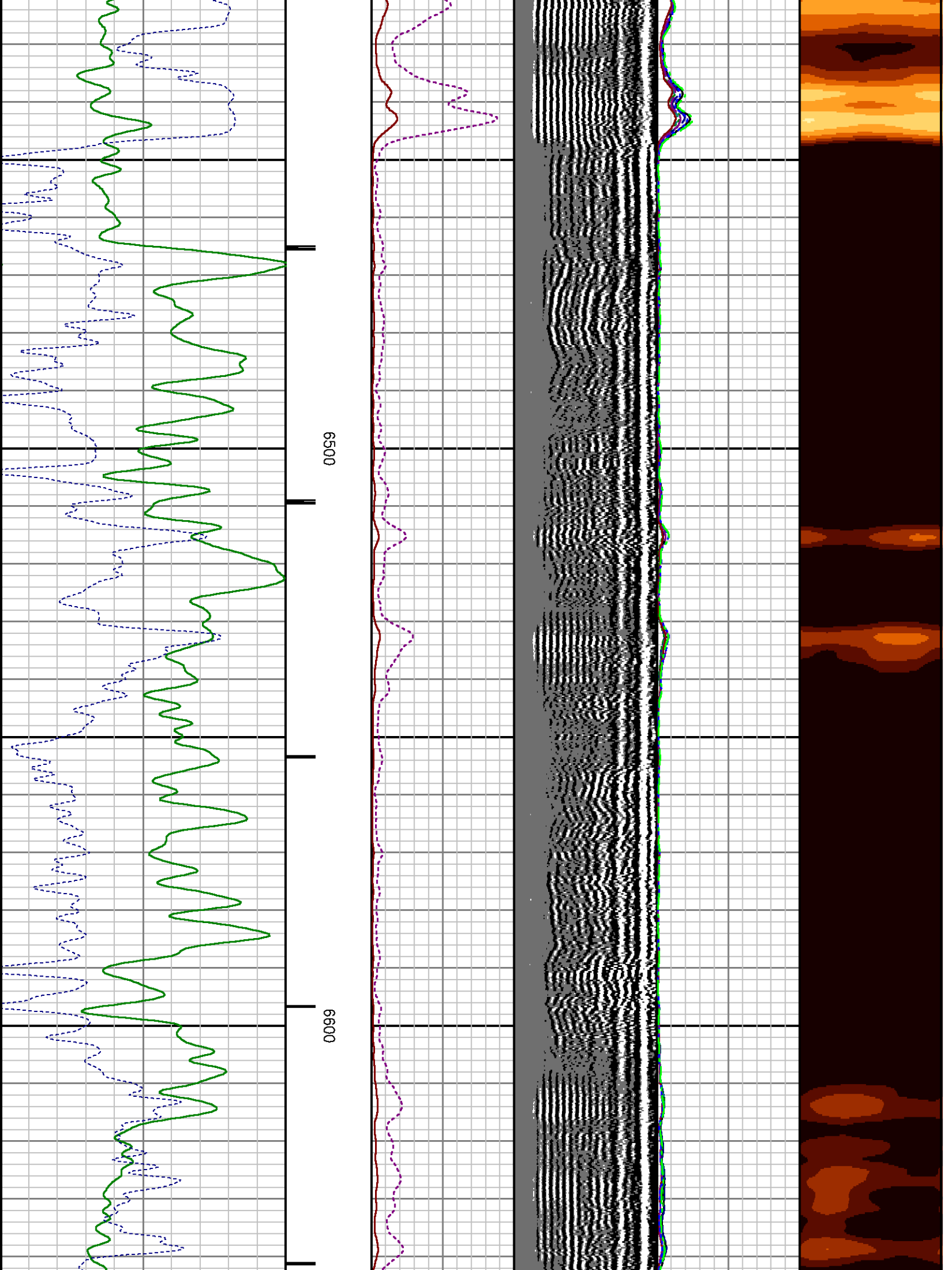


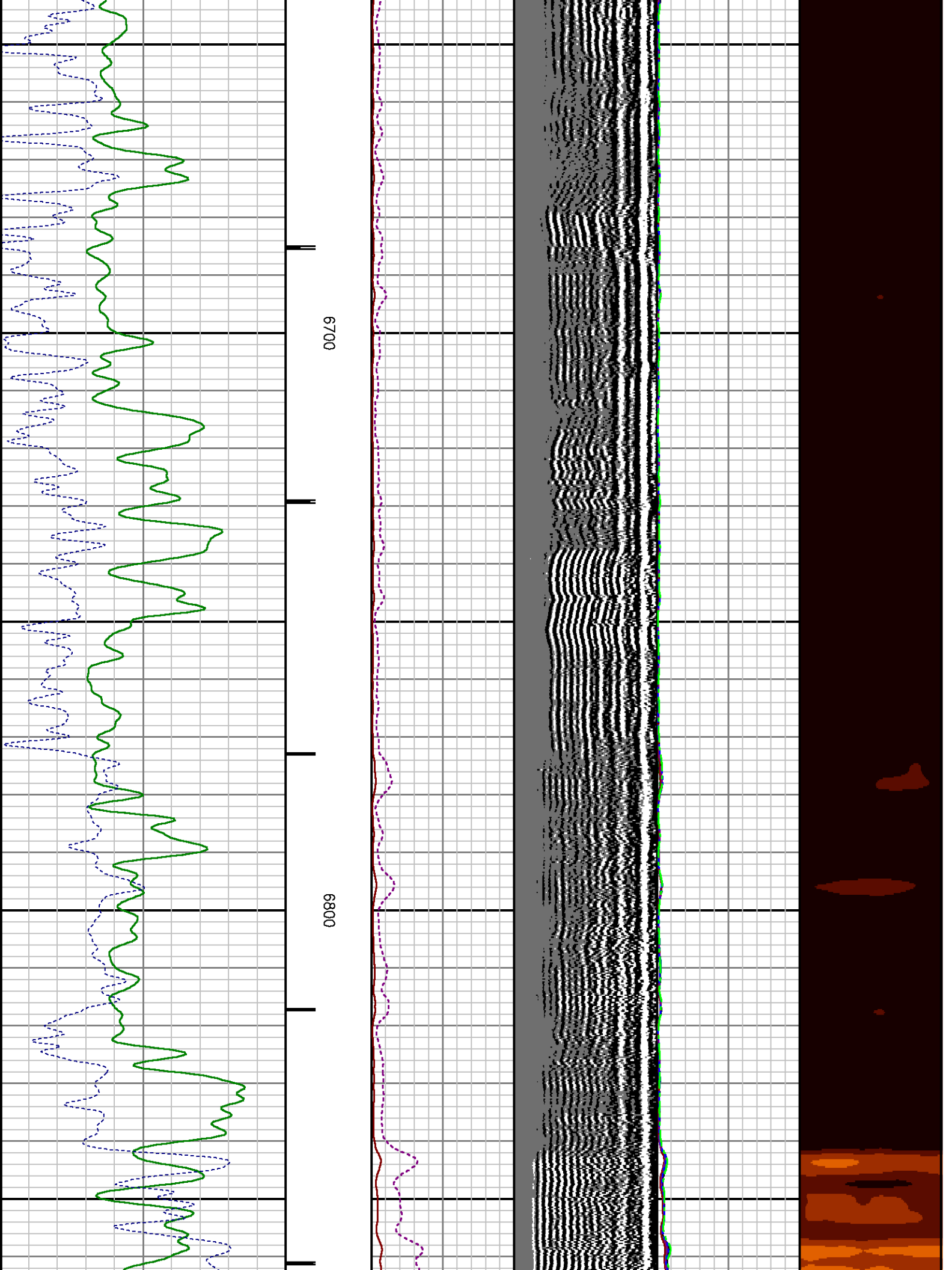


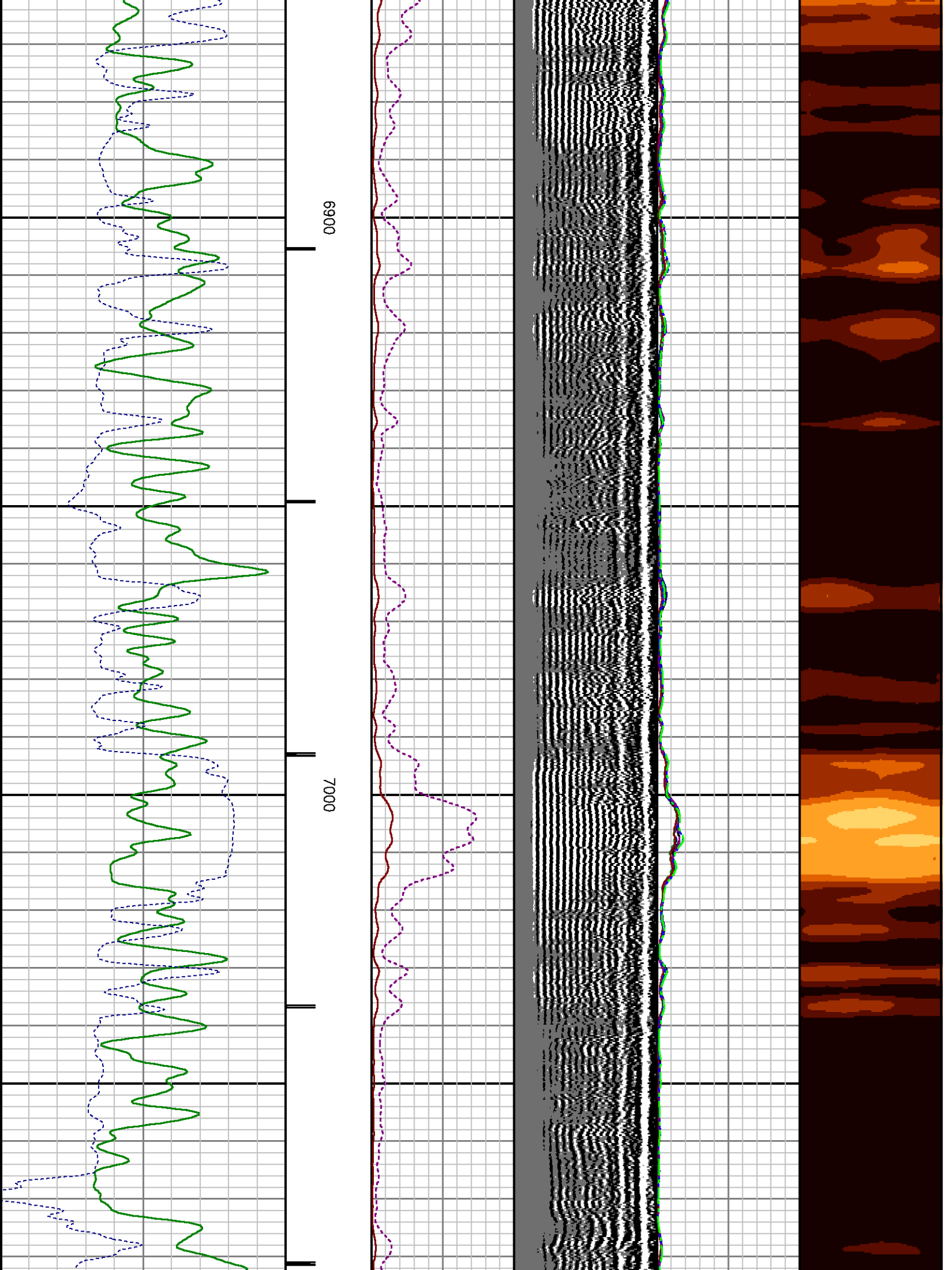




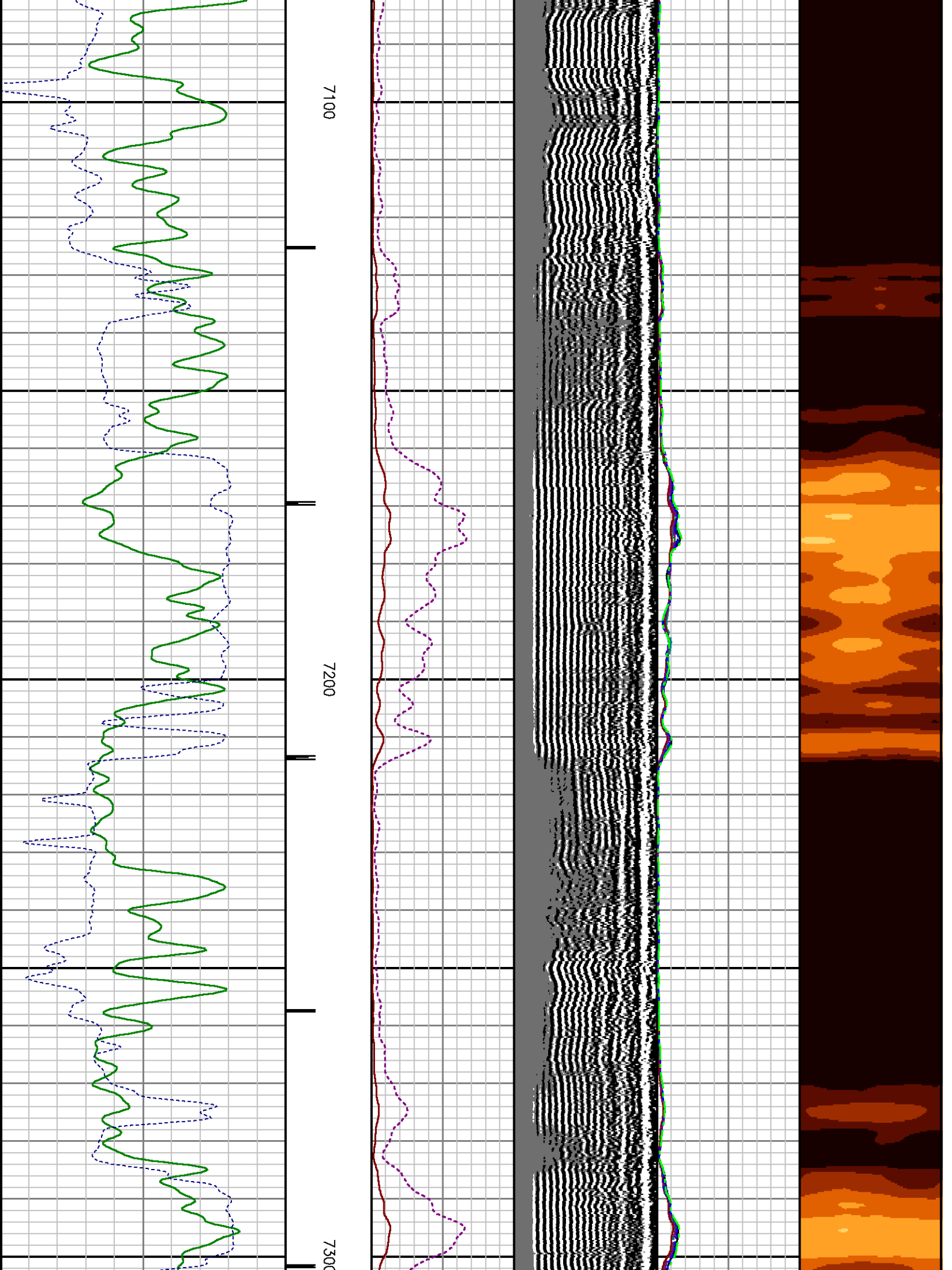


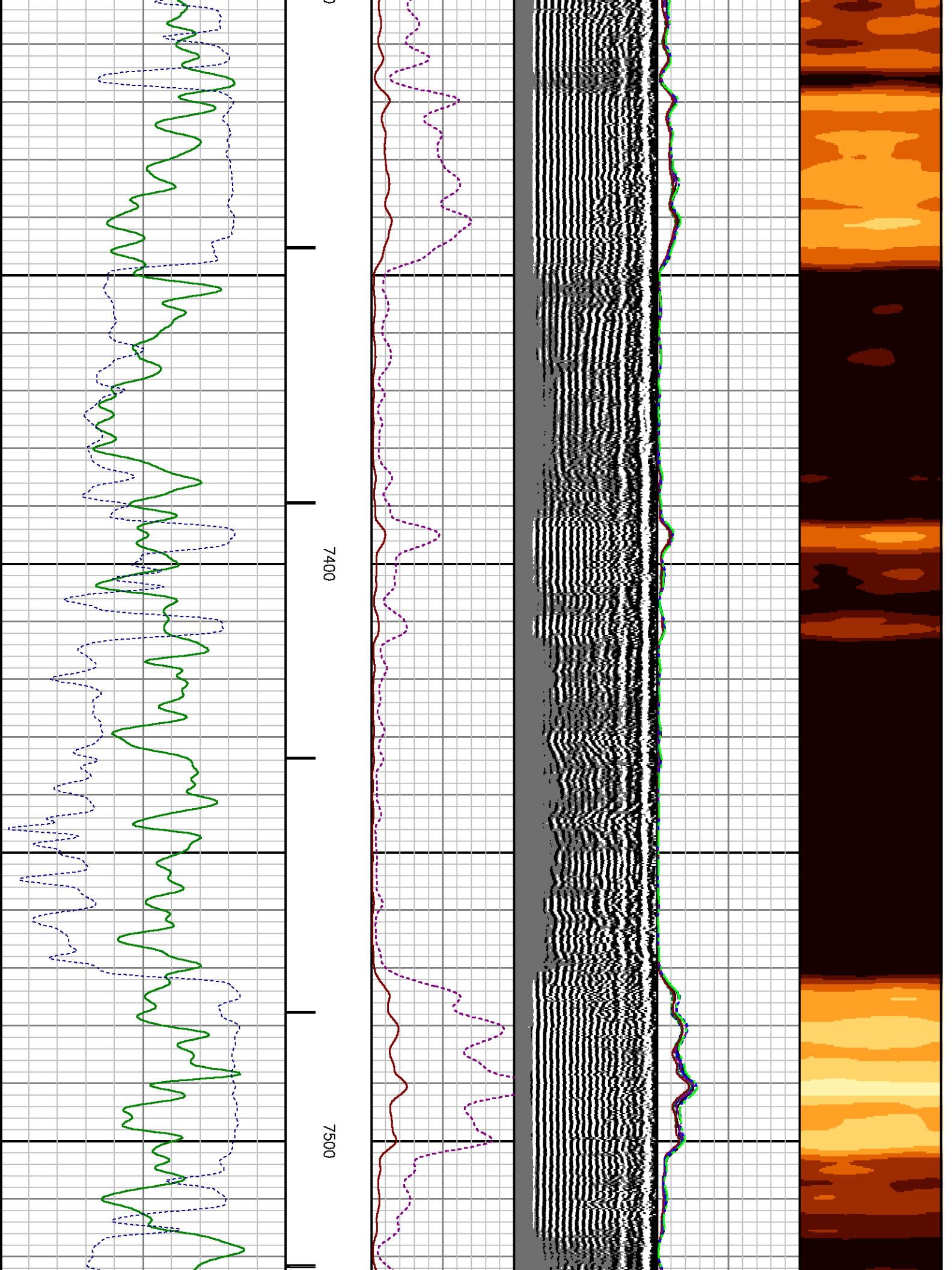


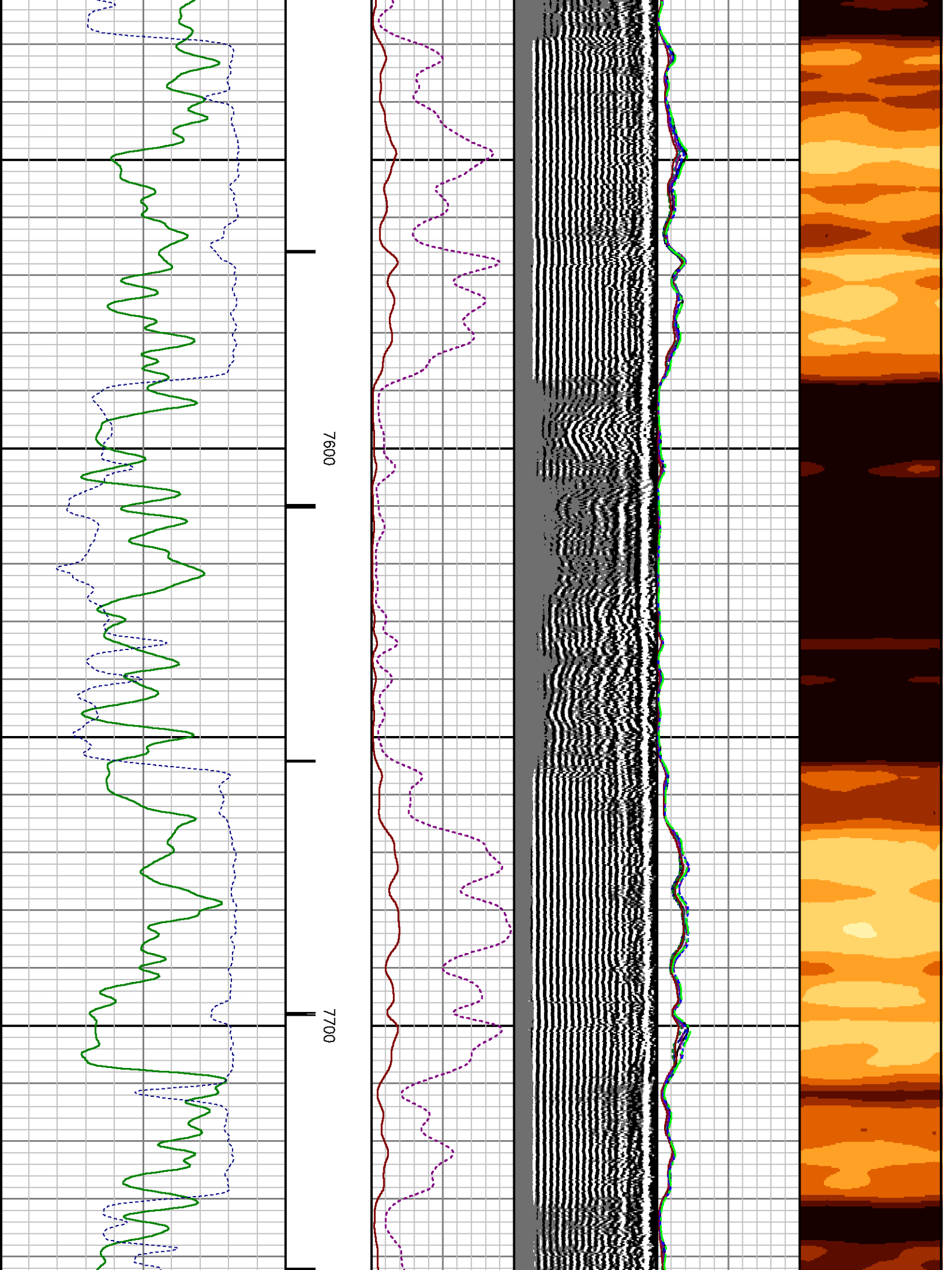


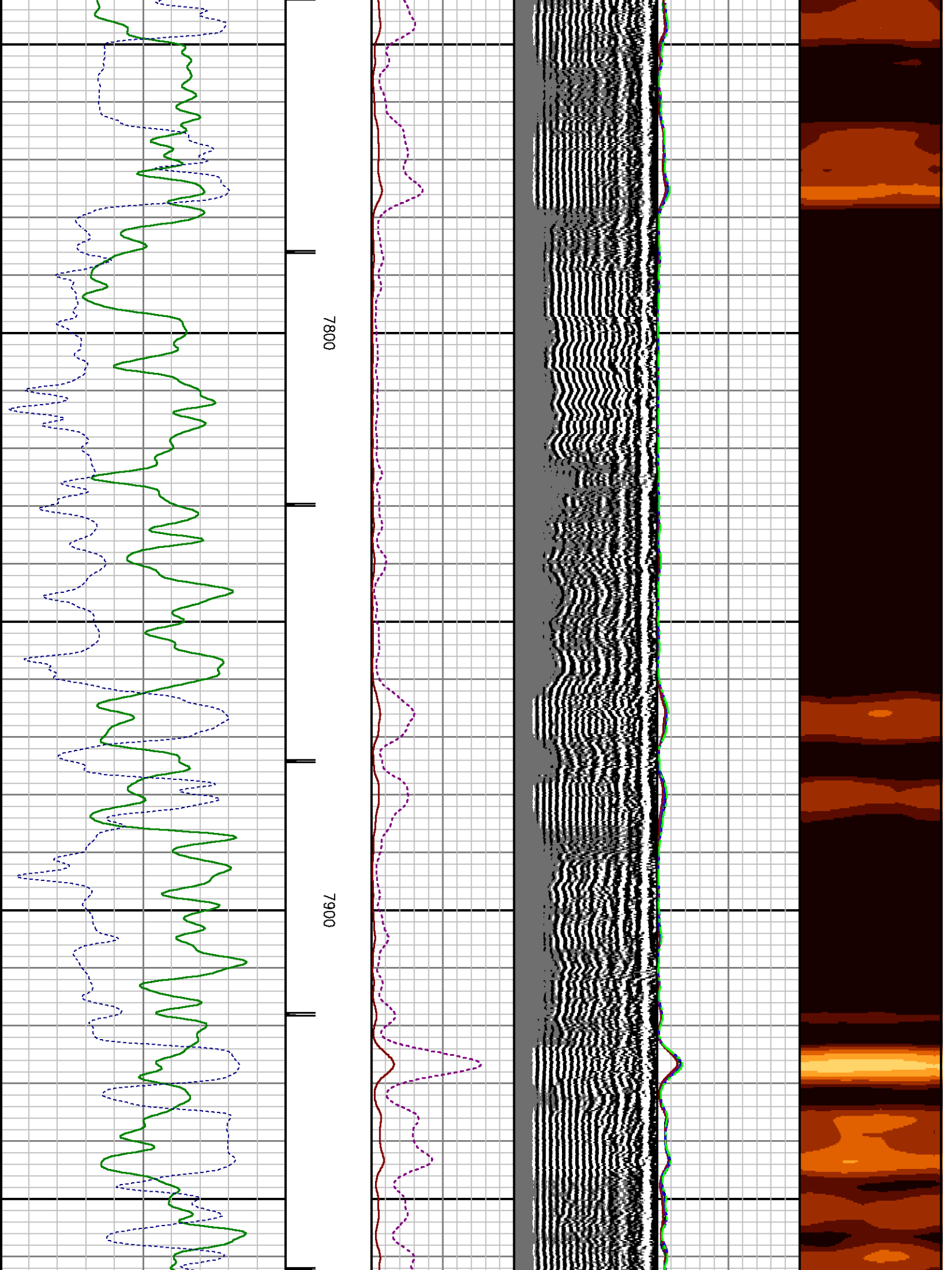


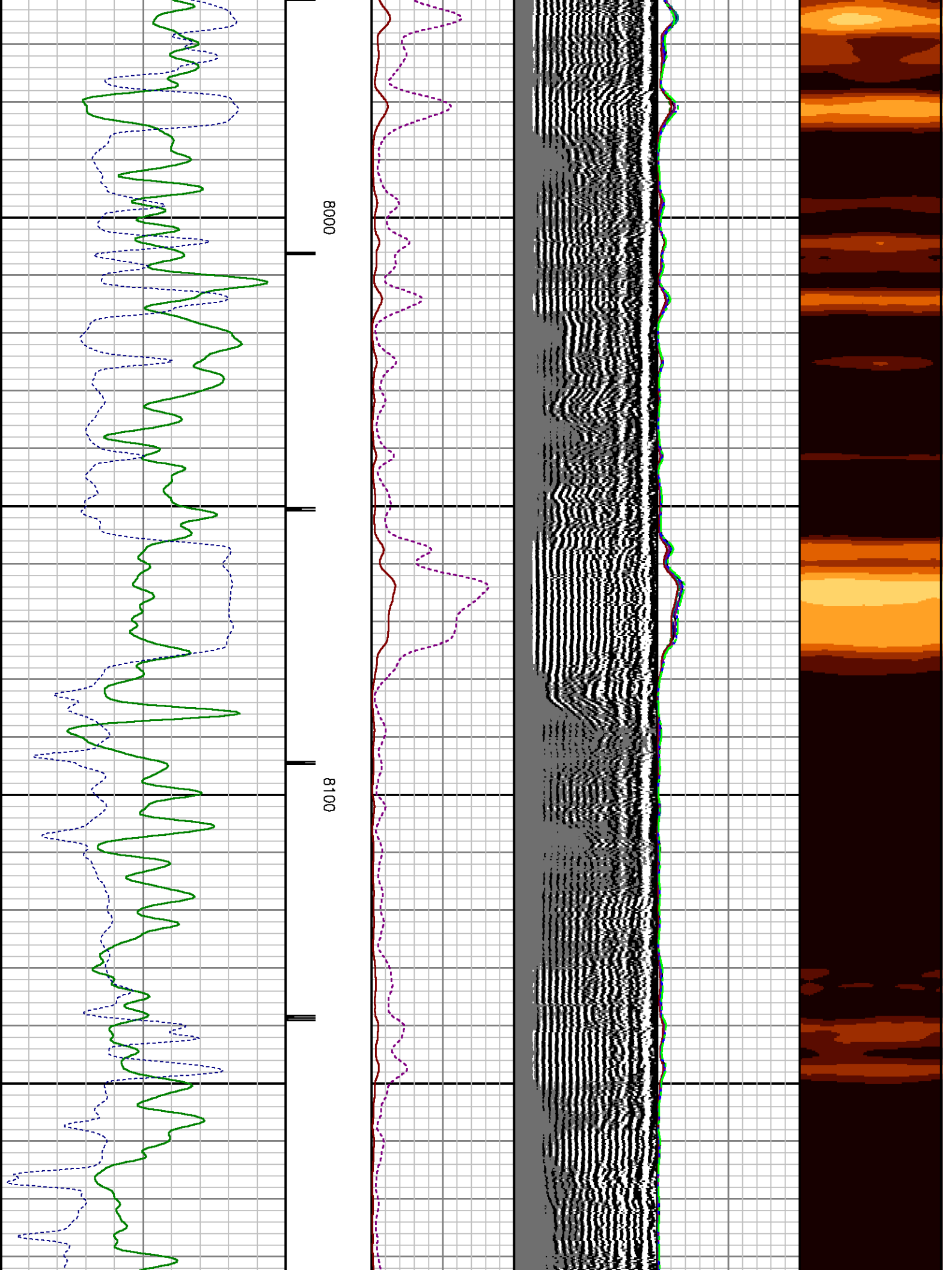




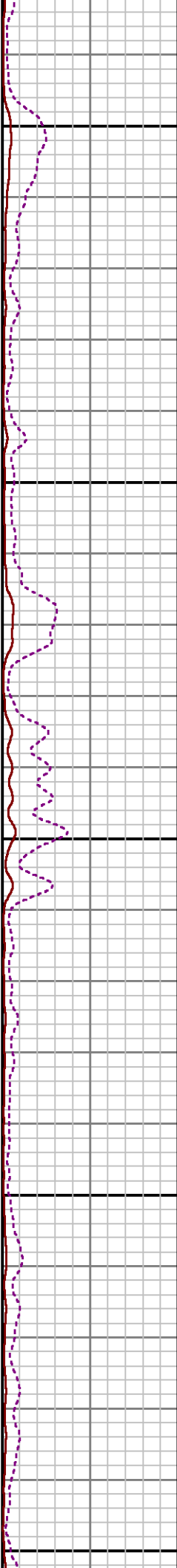
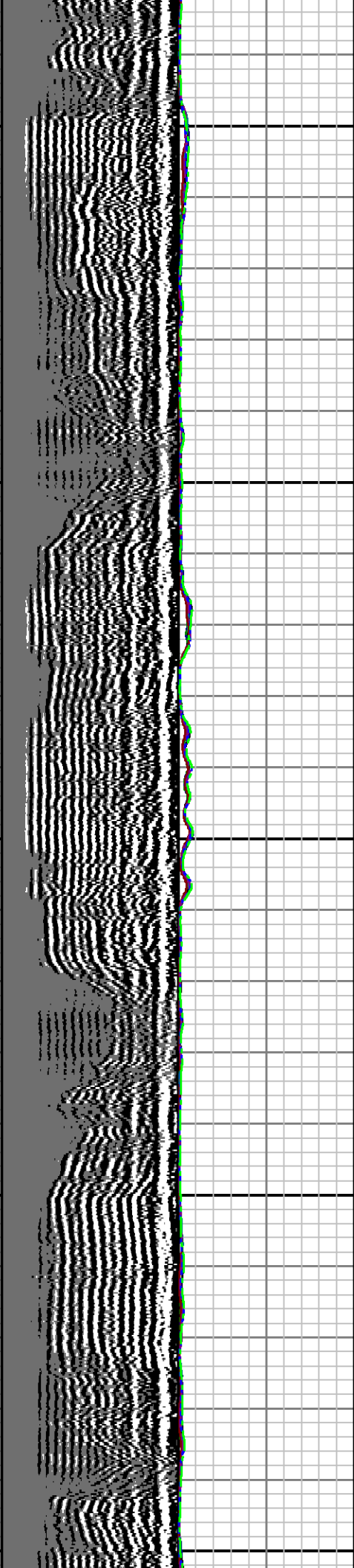








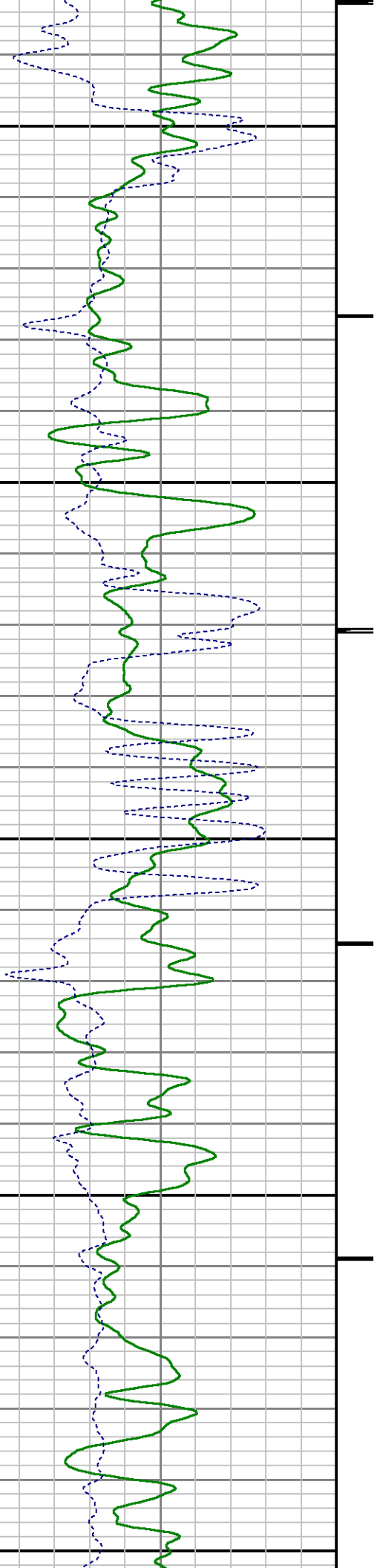


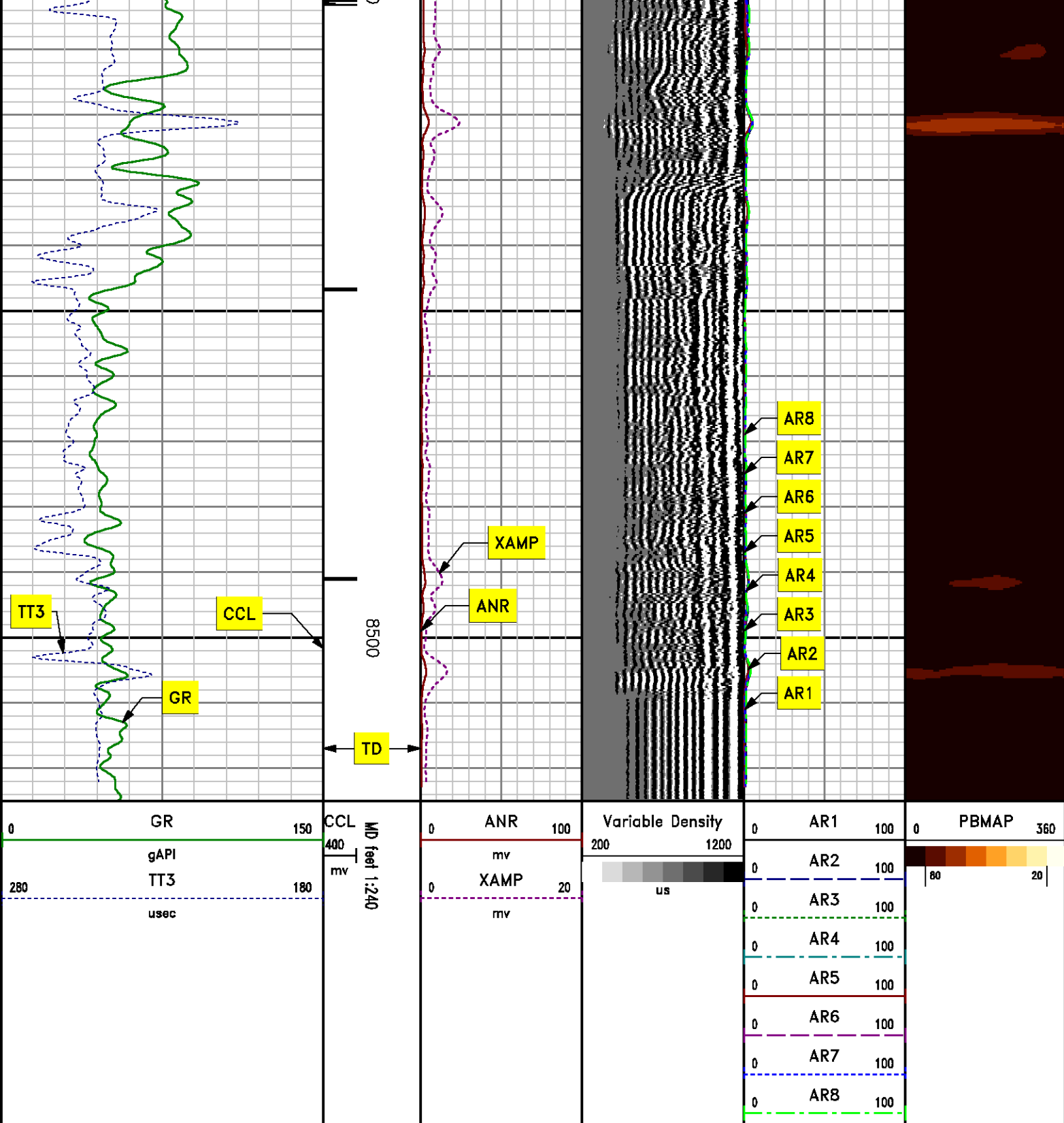


8200

8300

8400





*REPEAT PASS*  
*0 PSI*

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	304.887	usec	8199.750	8533.000
RAL	Amp Gate Start Near	197.374	usec	8199.750	8533.000
RAL	Amp Gate Start Radial	198.140	usec	8199.750	8533.000
RAL	Amp Gate Width Far	25.000	usec	8199.750	8533.000
RAL	Amp Gate Width Near	25.000	usec	8199.750	8533.000
RAL	Amp Gate Width Radial	25.000	usec	8199.750	8533.000
RAL	casing od	4.500	inches	8199.750	8533.000
RAL	casing wt	11.600	lbm/ft	8199.750	8533.000
RAL	FB Start Far	291.900	usec	8199.750	8533.000
RAL	FB Start Near	175.391	usec	8199.750	8533.000
RAL	FB Start Radial	175.391	usec	8199.750	8533.000
RAL	FB Thresh Far	10.000	mv	8199.750	8533.000
RAL	FB Thresh Near	4.000	mv	8199.750	8533.000
RAL	FB Thresh Radial	4.000	mv	8199.750	8533.000
RAL	Fluid Travel Time	200.000	usec/ft	8199.750	8532.780

## 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

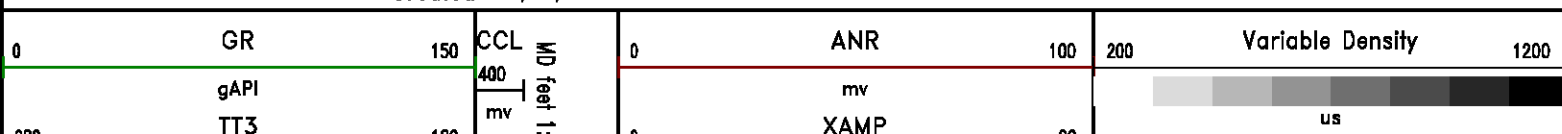
Well : DIAMOND ELK PA 333-2

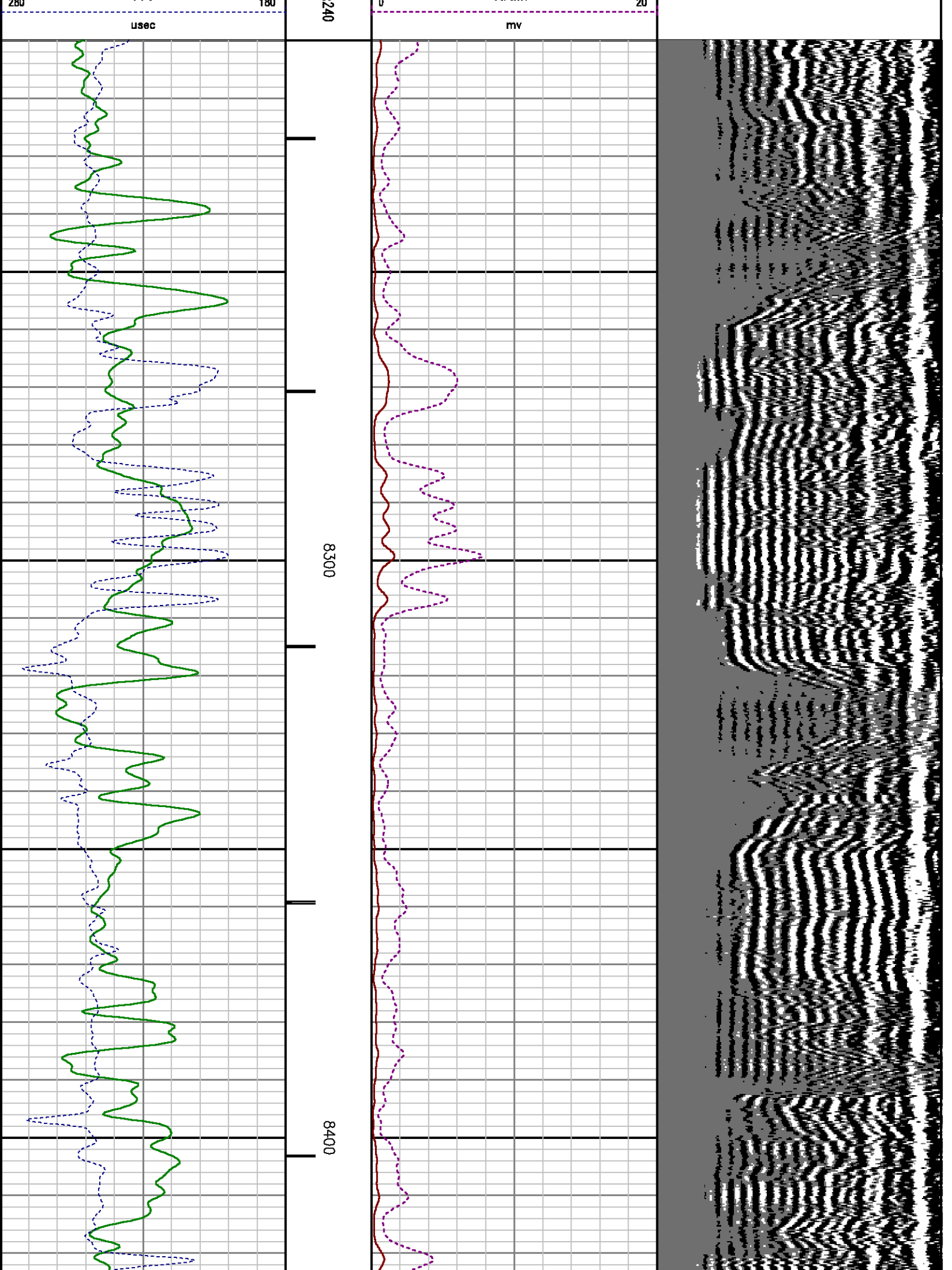
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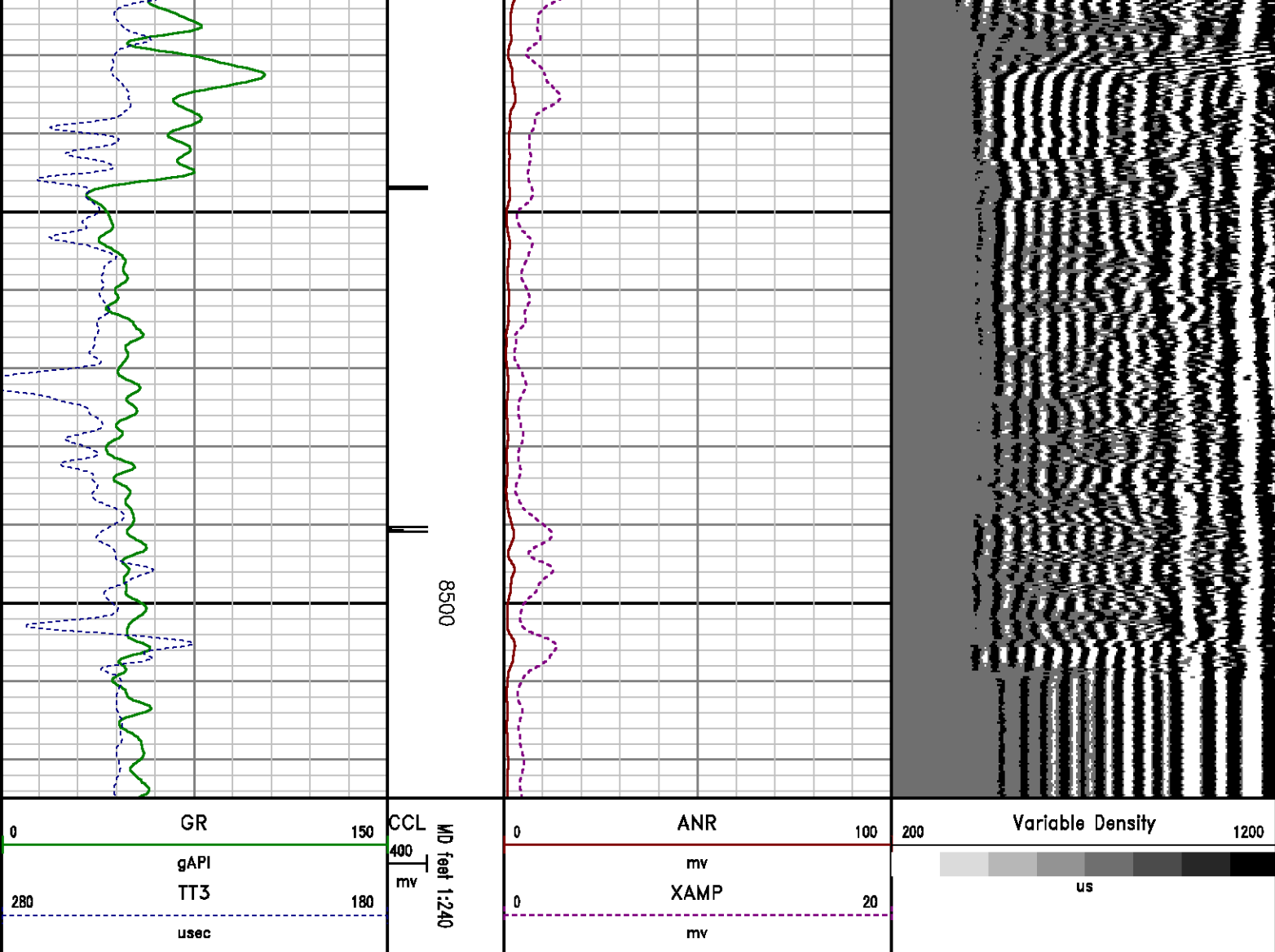
Mode : PlotMgr 5.4.504

Interval : 8210.00 - 8525.00 feet UP

Created : 5/16/2013 9:34:30 AM







## CALIBRATION SUMMARY

## GAMMA RAY

Calibration File: C:\case\calver\GR\209M2.cal

### CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sun May 12 13:40:15 2013

TOOL SERIES: 1355XA ASSET: 209 SEQ: M2

Calibrator #	Background [cps]	Calibrator On [cps]
S2K WA612	129.07	523.51

Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
0.469	60.53	245.53	185.00

Verification File: C:\case\calver\GR\209M2.VP



## PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Sun May 12 13:41:35 2013

TOOL SERIES:

1355XA

ASSET:

209

SEQ: M2

Calibrator #

Background

Calibrator On

Multiplicative

Background

Calibrator On

Differential

[cps]

[cps]

[api]

[api]

[api]

S2K WA612

131.47

531.85

0.469

61.66

249.45

187.79

**RALSHP**

Shop Calibration:

C:\case\calver\RALSHP\539M16\_shp.cal

## SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu May 16 08:57:09 2013

TOOL SERIES:

1426XA

ASSET:

539

SEQ: M16

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	218	216	30	166	25	-0.758	100.00	0.19
3 Ft. Receiver	217	216	30	158	25	-1.767	100.00	0.18
5 Ft. Receiver	324	323	30	257	25	-0.395	150.00	0.20
Radial #1	218	216	30	148	25	1.569	100.00	0.18
Radial #2	218	216	30	148	25	0.569	100.00	0.19
Radial #3	218	216	30	148	25	0.142	100.00	0.19
Radial #4	217	216	30	148	25	-0.032	100.00	0.19
Radial #5	217	216	30	148	25	-0.300	100.00	0.18
Radial #6	216	216	30	148	25	-0.044	100.00	0.18
Radial #7	216	216	30	148	25	-0.346	100.00	0.18
Radial #8	218	216	30	148	25	-0.042	100.00	0.18

**RALFLD**

Wellsite Calibration:

C:\case\calver\RALFLD\539M16 fld.cal

## WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu May 16 08:58:49 2013

TOOL SERIES:

1426XA

ASSET:

539

SEQ: M16

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	-0.196	0.000	1.00	100.000
3 Ft. Receiver	200	30	-2.899			
5 Ft. Receiver	317	30	-3.783			
Radial #1	200	30	-4.112			
Radial #2	200	30	-3.575			
Radial #3	200	30	-3.454			

Radial #3	200	30	-3.702
Radial #4	200	30	-5.067
Radial #5	200	30	-3.945
Radial #6	200	30	-4.048
Radial #7	200	30	-4.202
Radial #8	200	30	

## TOOL DIAGRAM

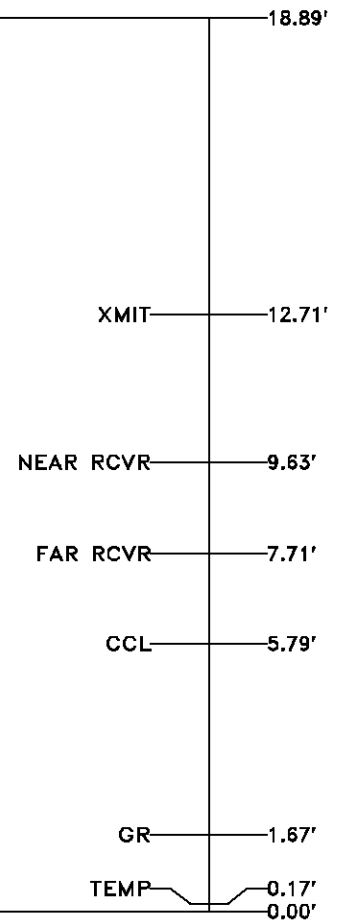
### OTA SHORT CABLE HEAD

### 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"



Company

Well

Field

County

WPX ENERGY

DIAMOND ELK PA 333-2

PARACHUTE

CARLEIGH

State

COLORADO

File No:

CH072033

API No:

0504500000000000



County	GARFIELD			State	COLORADO	03045206850000
Location				Elevations		
SHL: 2324' FSL & 673' FWL SEC:1				KB	6053 ft	2 7S 95W
BHL: 1989' FSL & 2124' FEL SEC:2				DF		GV 84-1
				GL	6027 ft	NABORS SSD 574
SEC	2	TWP	7S	RGE	95W	