



Baker Atlas

RADIAL ANALYSIS BOND-LOG

File No:	Company	MARATHON OIL COMPANY
API No:	Well	596-310-24
06-045-160250000	Field	GRAND VALLEY
	County	GARFIELD
	State	COLORADO
	Location	Other Services
	SHL: 2163' FSL & 602' FILL	3.781" GAUGE
	SEC 31 TWP 5S RGE 96W	
Permanent Datum	G.L.	Elevation
Log Measured From	K.B.	24 ft Above P. D.
Drill Measured From	KELLY BUSHING	Elevations
		KB 8544 ft
		DF 8543 ft
		GL 8520 ft

Date	11-AUG-2009	
Run	ONE	
Service Order	578384	
Depth Driller	8581 ft	
Depth Logger	8527 ft	
Bottom Logged Interval	8527 ft	
Top Logged Interval	2134 ft	
Time Started	15:00	
Time Finished	18:00	
Operator Rig Time	3 HRS.	
Type of Fluid in Hole	WATER	
Fluid Density	N/A	
Salinity	N/A	
Fluid Level	FULL	
Logged Cement Top	N/A	
Wellhead Pressure	1000 psi	
Maximum Hole Deviation	N/A	
Nominal Logging Speed	40 fpm	
Maximum Recorded Temperature	N/A	
Reference Log	WEATHERFORD TRIPLE COMBO	
Reference Log Date	28-JAN-2009	
Equipment No.	4271	VERNAL, UT
Recorded By	J. SOEKEN	
Witnessed By	MR. STEVE WADU	

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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
7.875 in	SURFACE	9591 ft

Casing Record				
Size	Weight	Grade	From	To
4.5 in	11.6 lbm/ft	P-110	SURFACE	9591 ft

Remarks
THIS LOG WAS TIED INTO WEATHERFORD TRIPLE COMBO FROM FBTD TO 8325'
WELL WAS LOGGED WITH 1000 PSI

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1428XA	1000	CENTRALIZED
1	1	GR/OCL	2458XA	503	CENTRALIZED

MAIN SECTION

PRIMARY PRESENTATION

WITH 1000 PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	318.900	usec	2145.250	9564.000
RAL	Amp Gate Start Near	200.391	usec	2145.250	9564.000
RAL	Amp Gate Start Radial	200.391	usec	2145.250	9564.000
RAL	Amp Gate Width Far	25.000	usec	2145.250	9564.000
RAL	Amp Gate Width Near	25.000	usec	2145.250	9564.000
RAL	Amp Gate Width Radial	25.000	usec	2145.250	9564.000
RAL	casing od	4.500	inches	2145.250	9564.000
RAL	casing wt	11.600	lbm/ft	2145.250	9564.000
RAL	FB Start Far	291.900	usec	2145.250	9564.000
RAL	FB Start Near	175.391	usec	2145.250	9564.000
RAL	FB Start Radial	175.391	usec	2145.250	9564.000
RAL	FB Thresh Far	10.000	mv	2145.250	9564.000
RAL	FB Thresh Near	4.000	mv	2145.250	9564.000
RAL	FB Thresh Radial	4.000	mv	2145.250	9564.000
RAL	Fluid Travel Time	200.000	usec/ft	2145.250	9563.455

DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-15.360	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	-14.360	AFAR	SIG	TT5			
1426XA	-7.250	GCL					
1426XA	-5.390	GR					
1426XA	0.000	NEU					

Created by : RAL, v4.8.007

Plotted by : PlotMgr, v5.4.504

Company : MARATHON OIL COMPANY

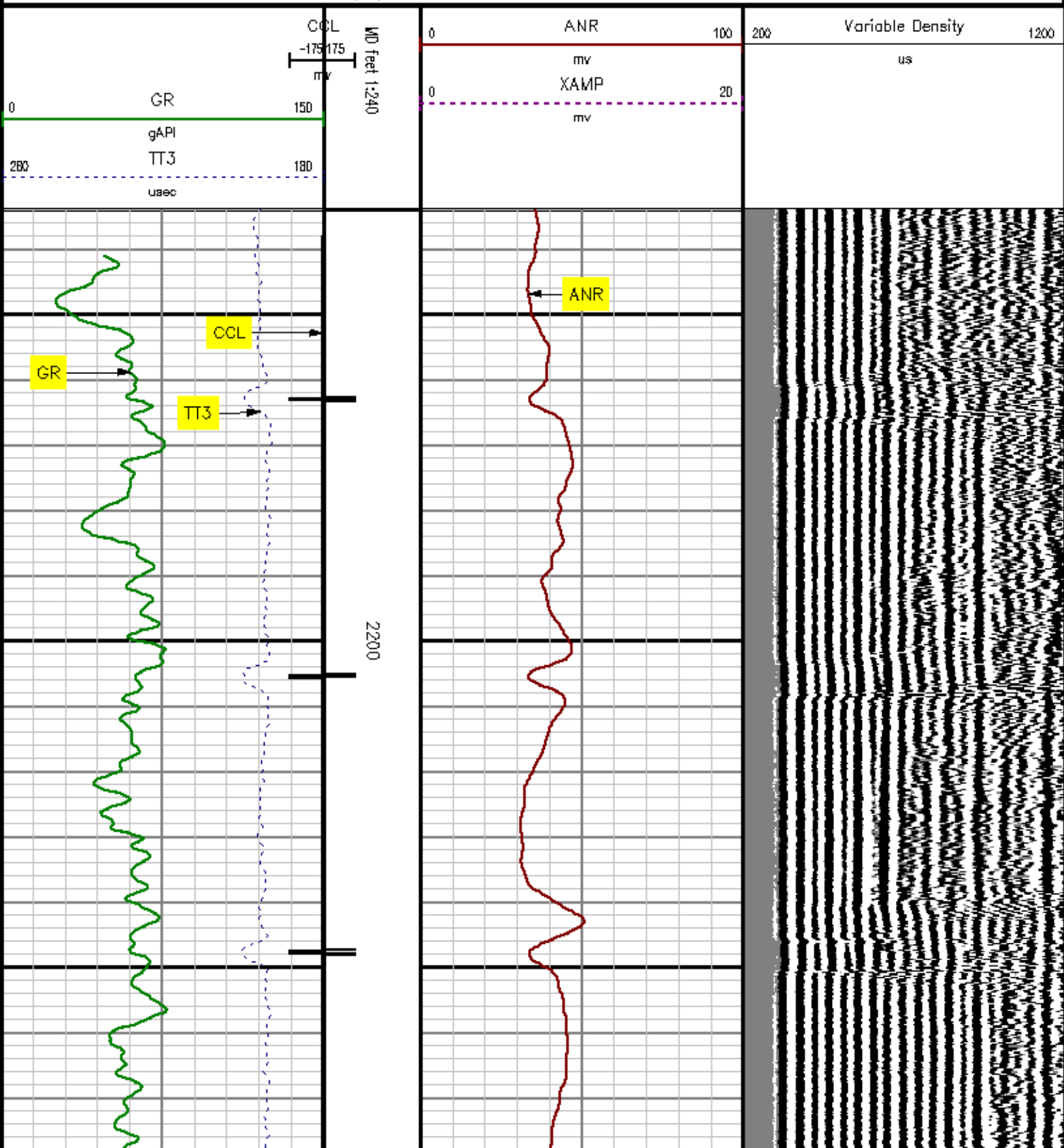
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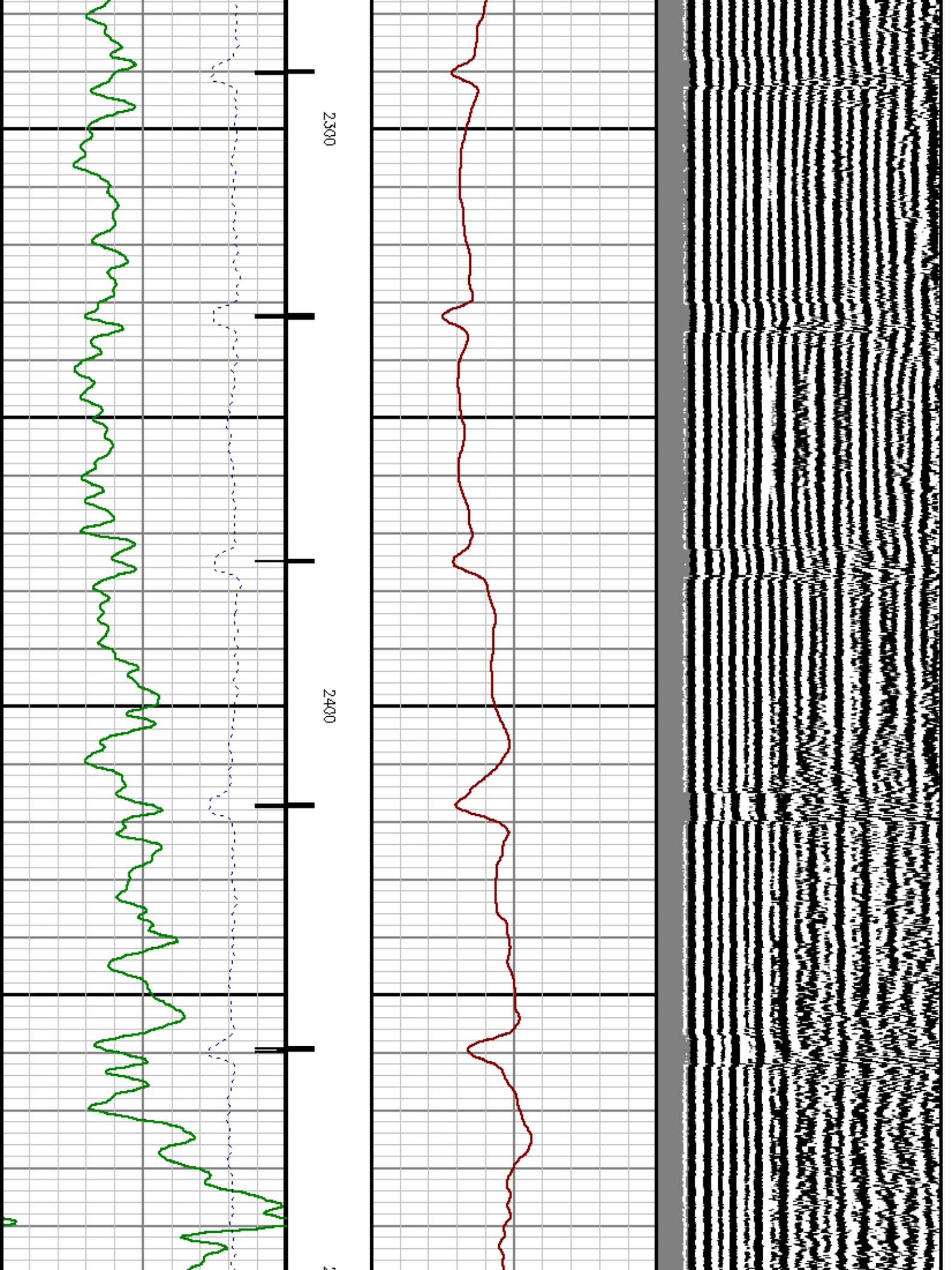
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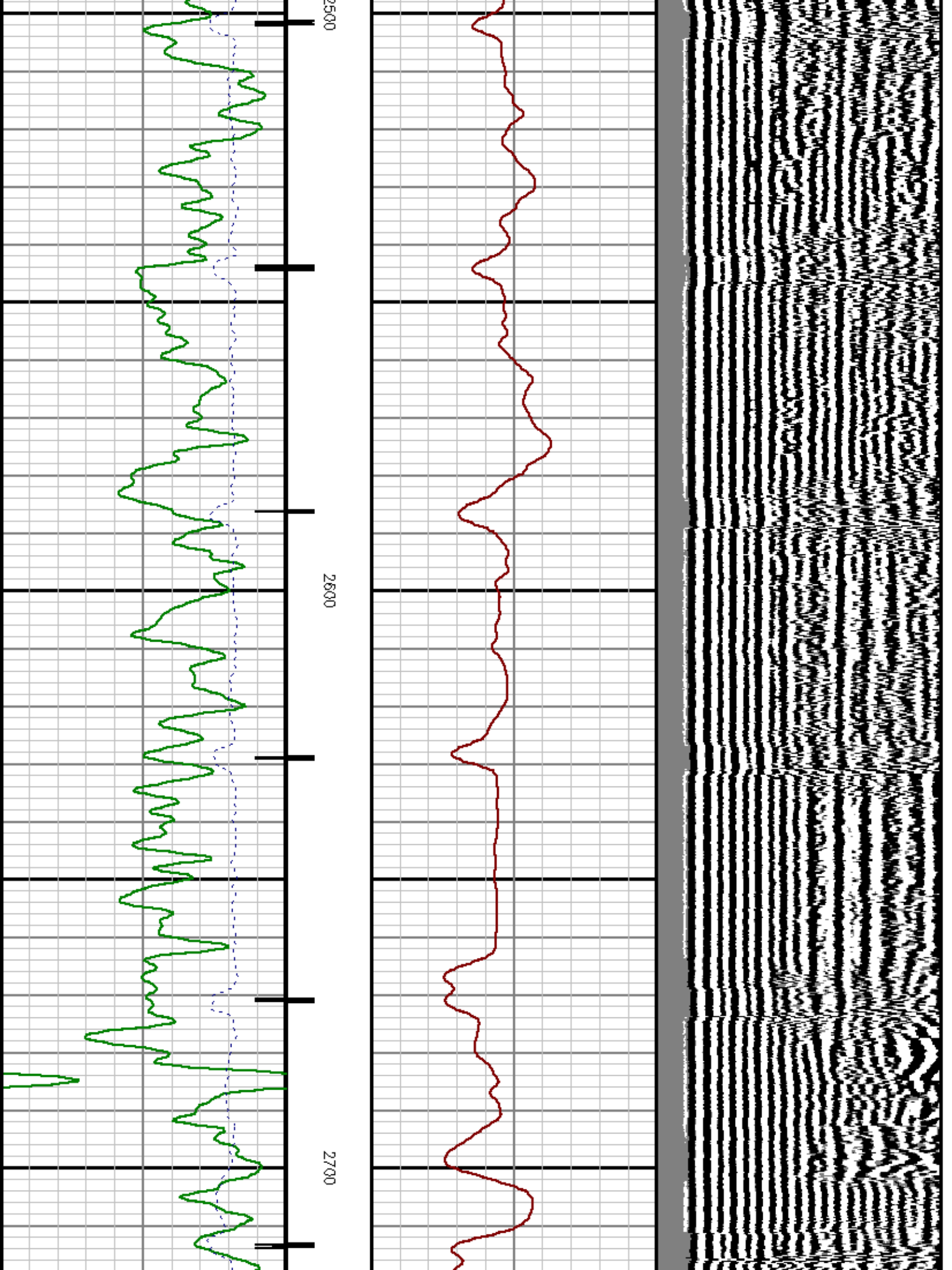
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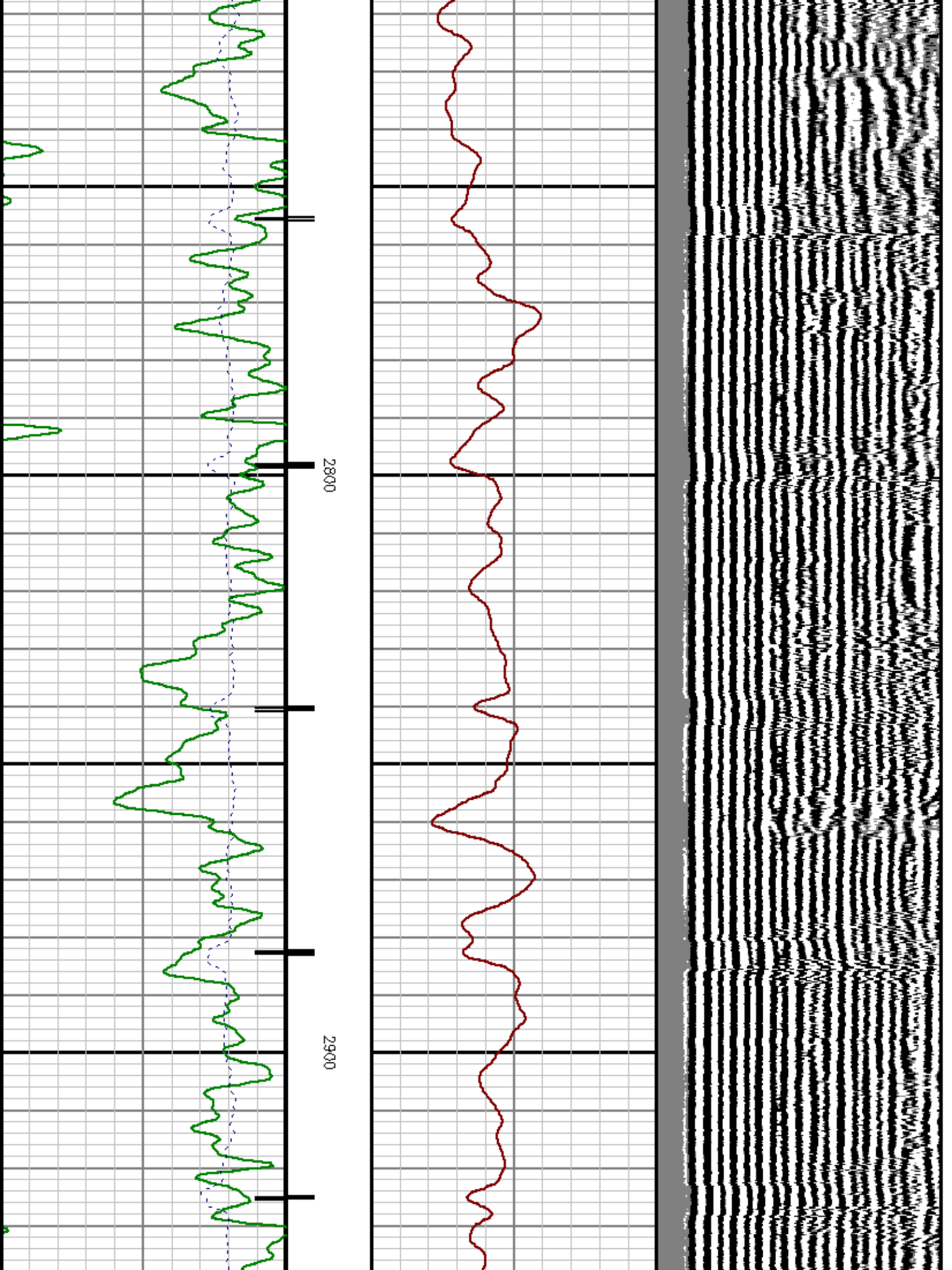
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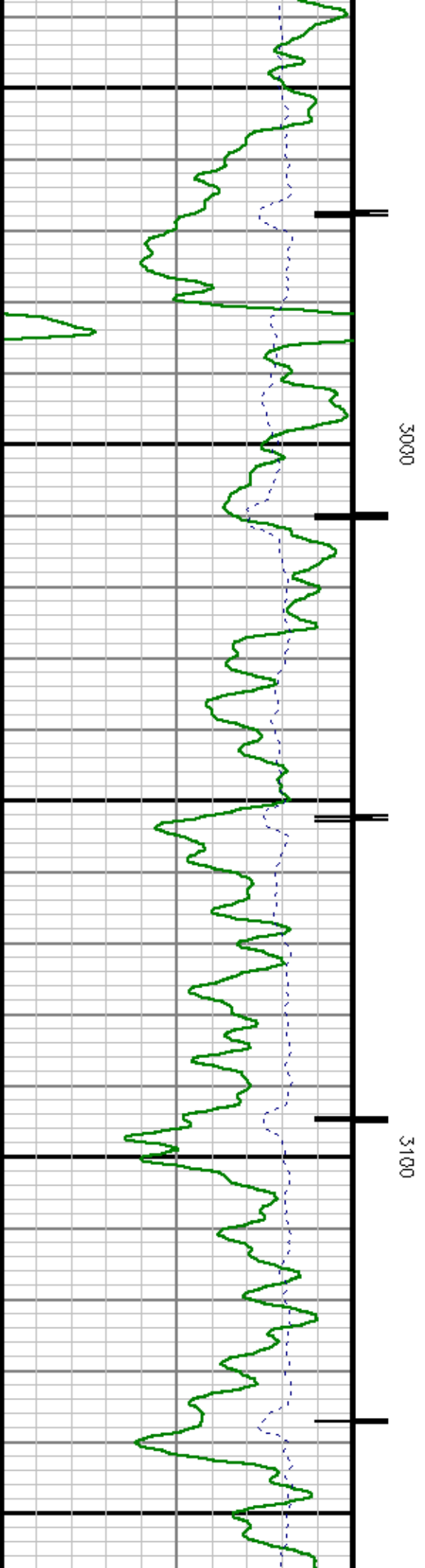
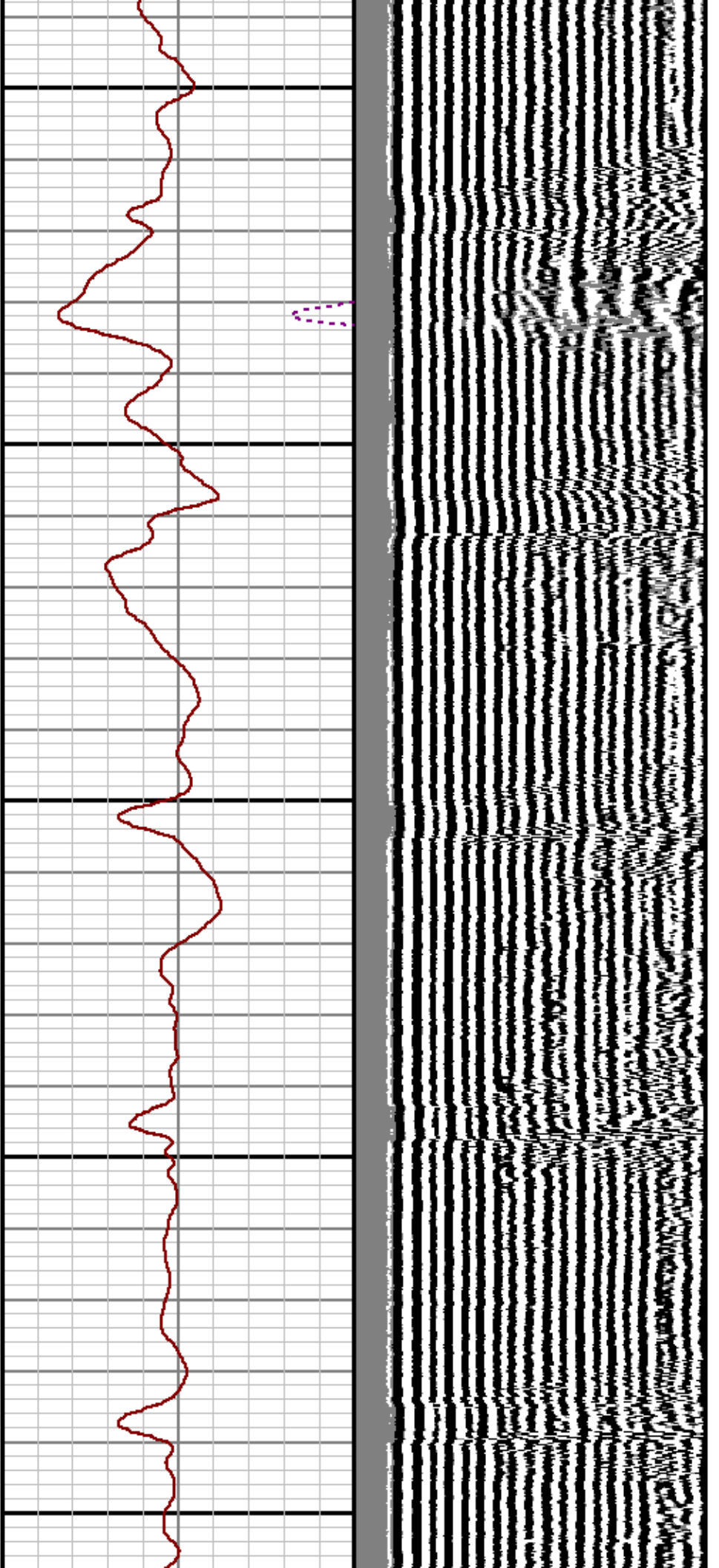
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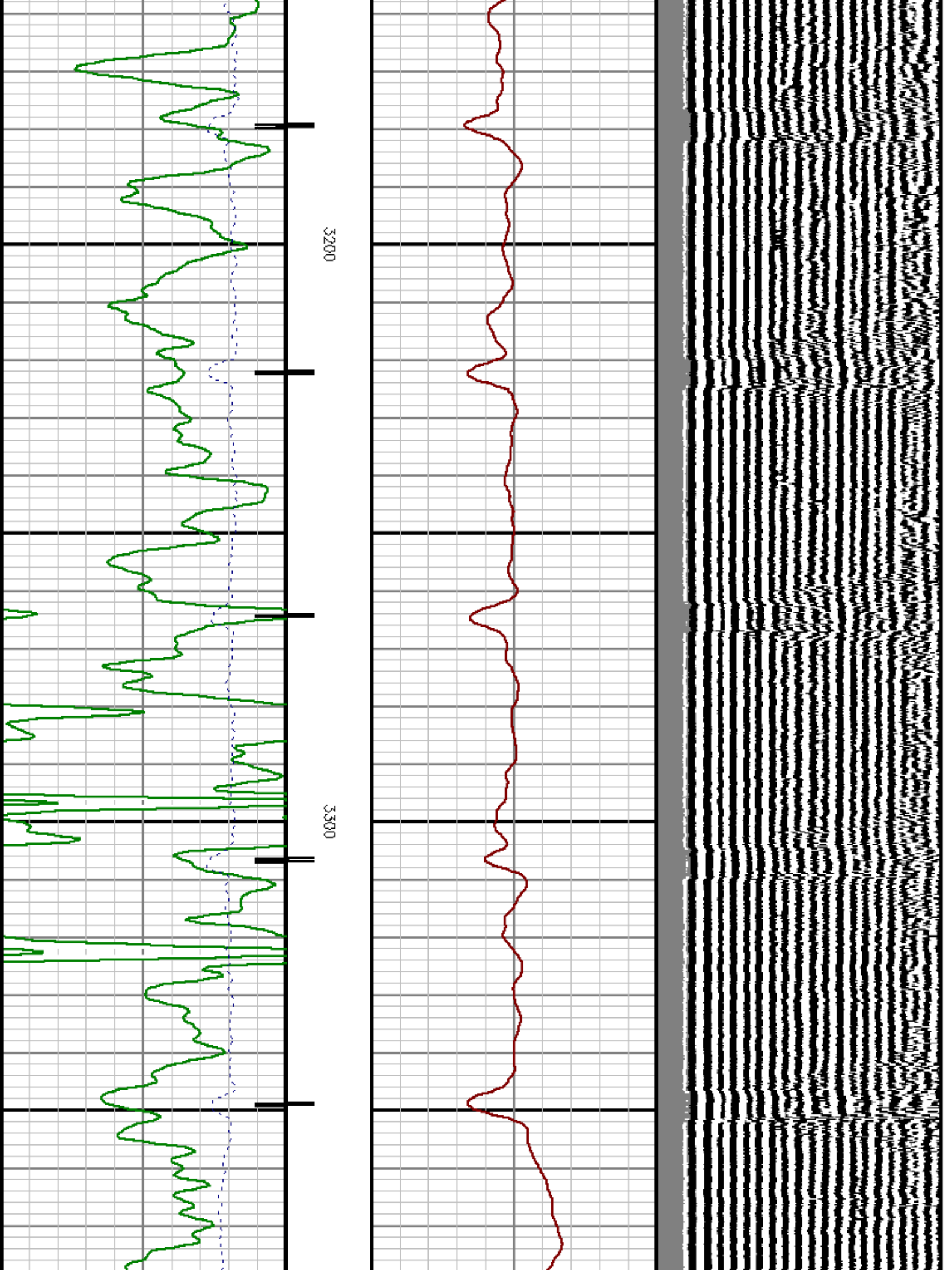


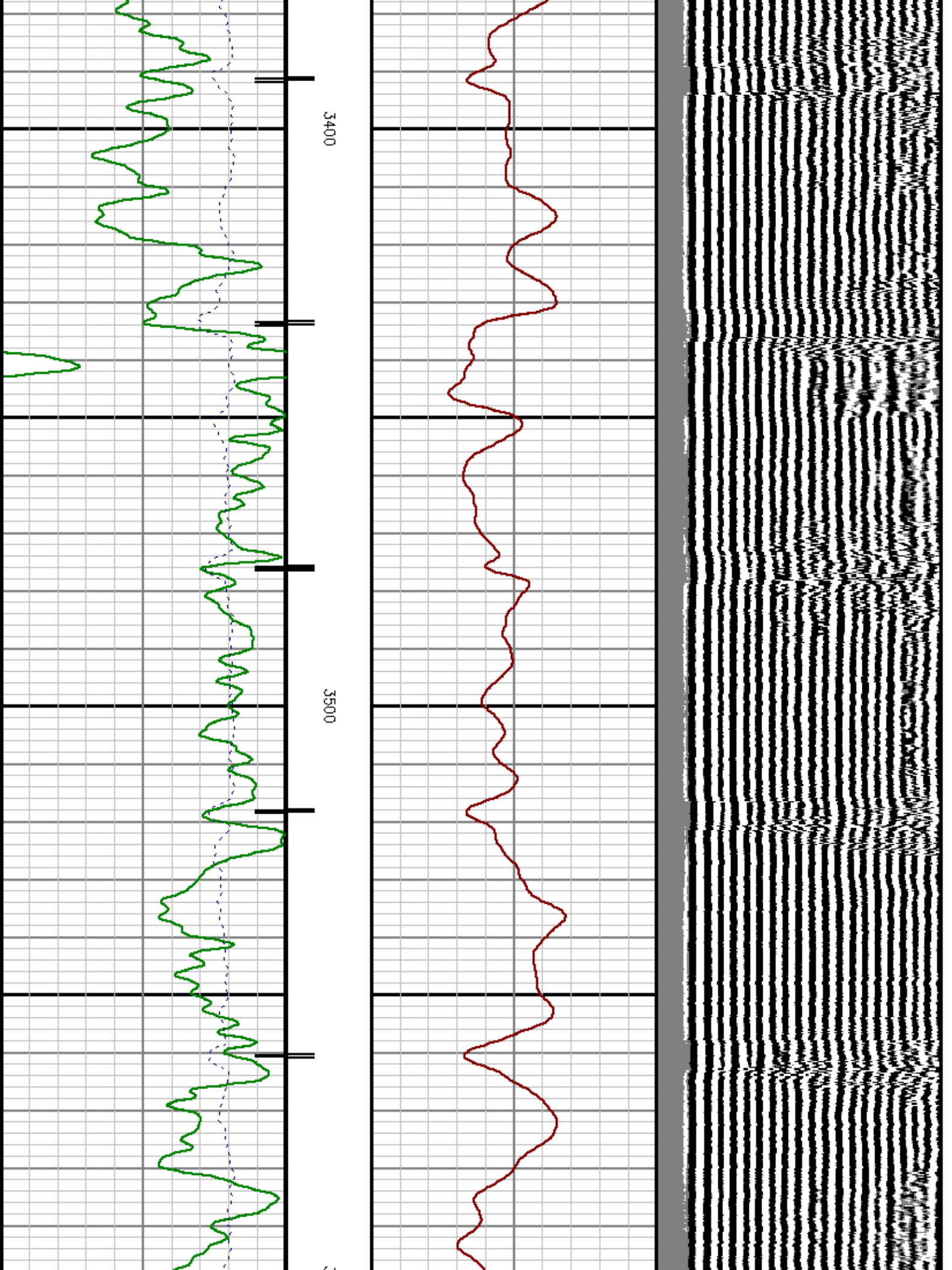


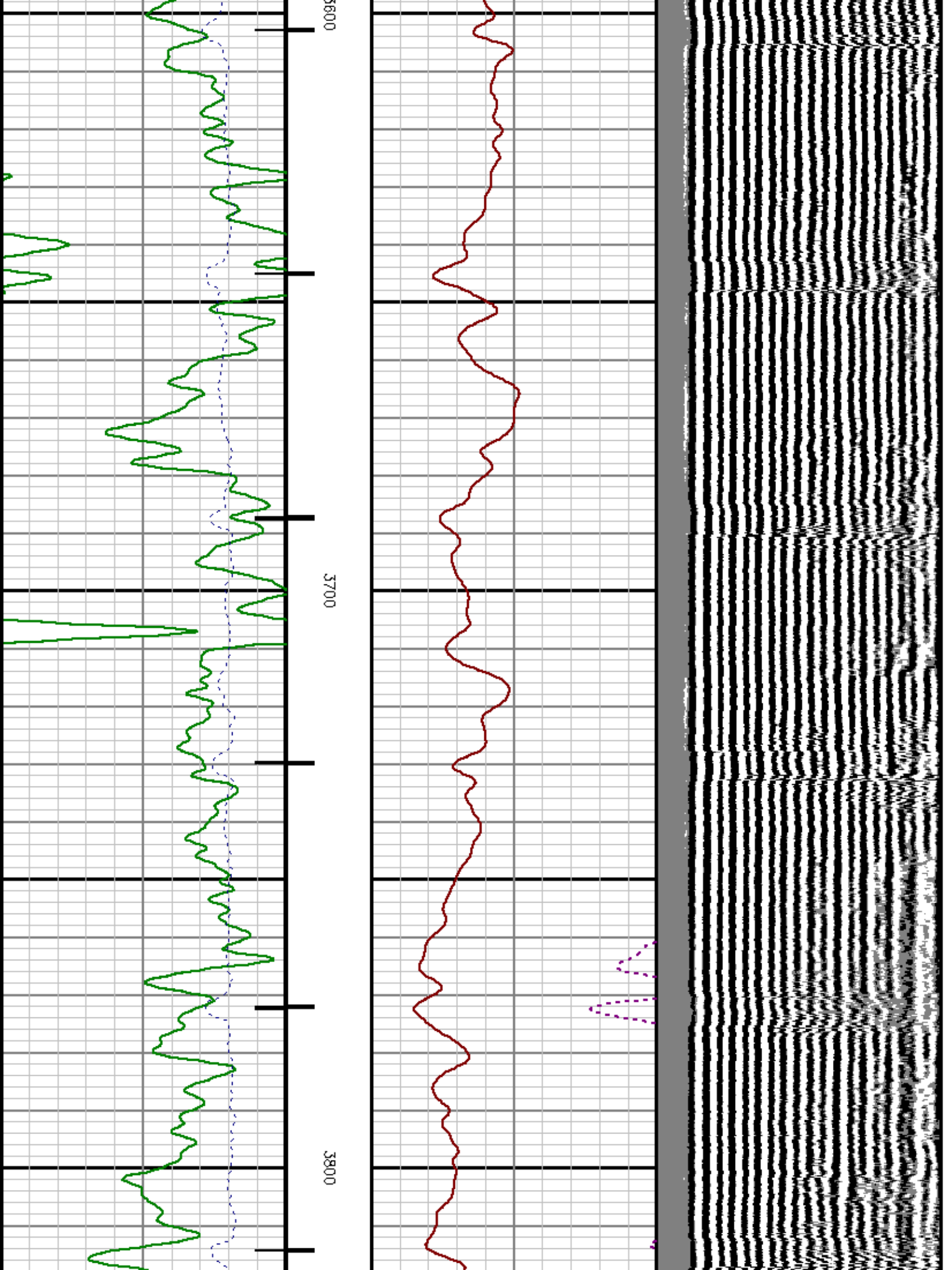


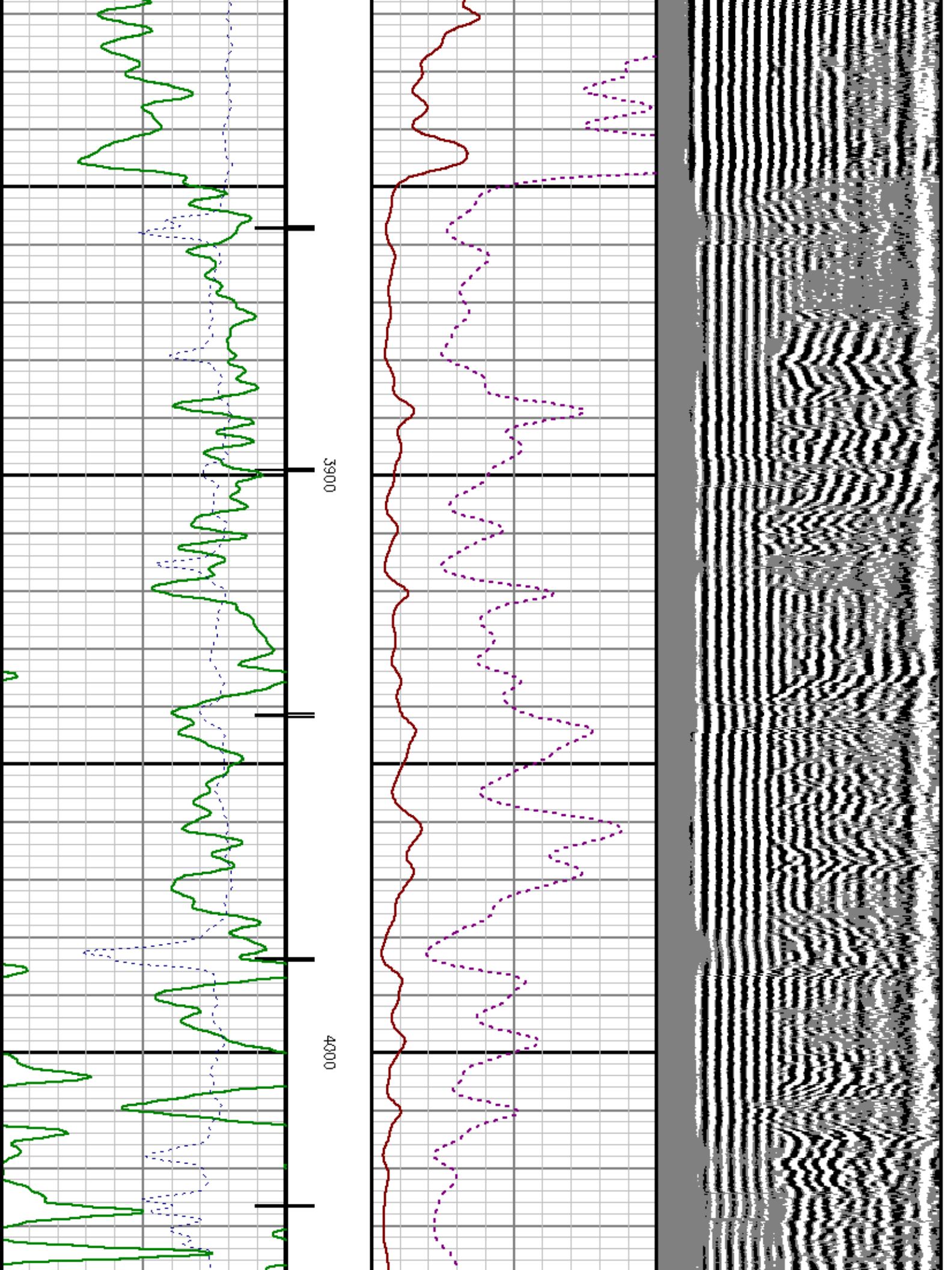


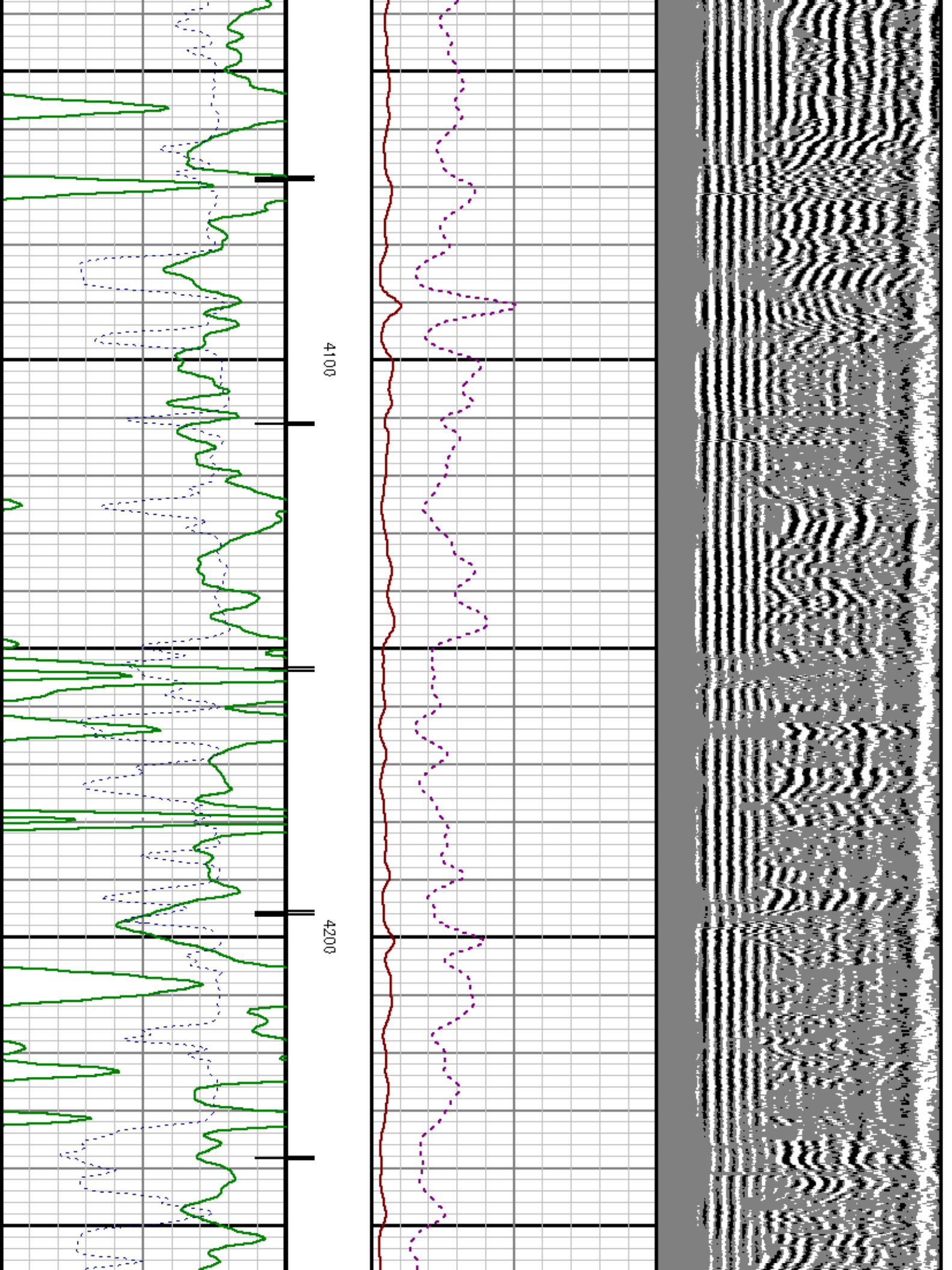


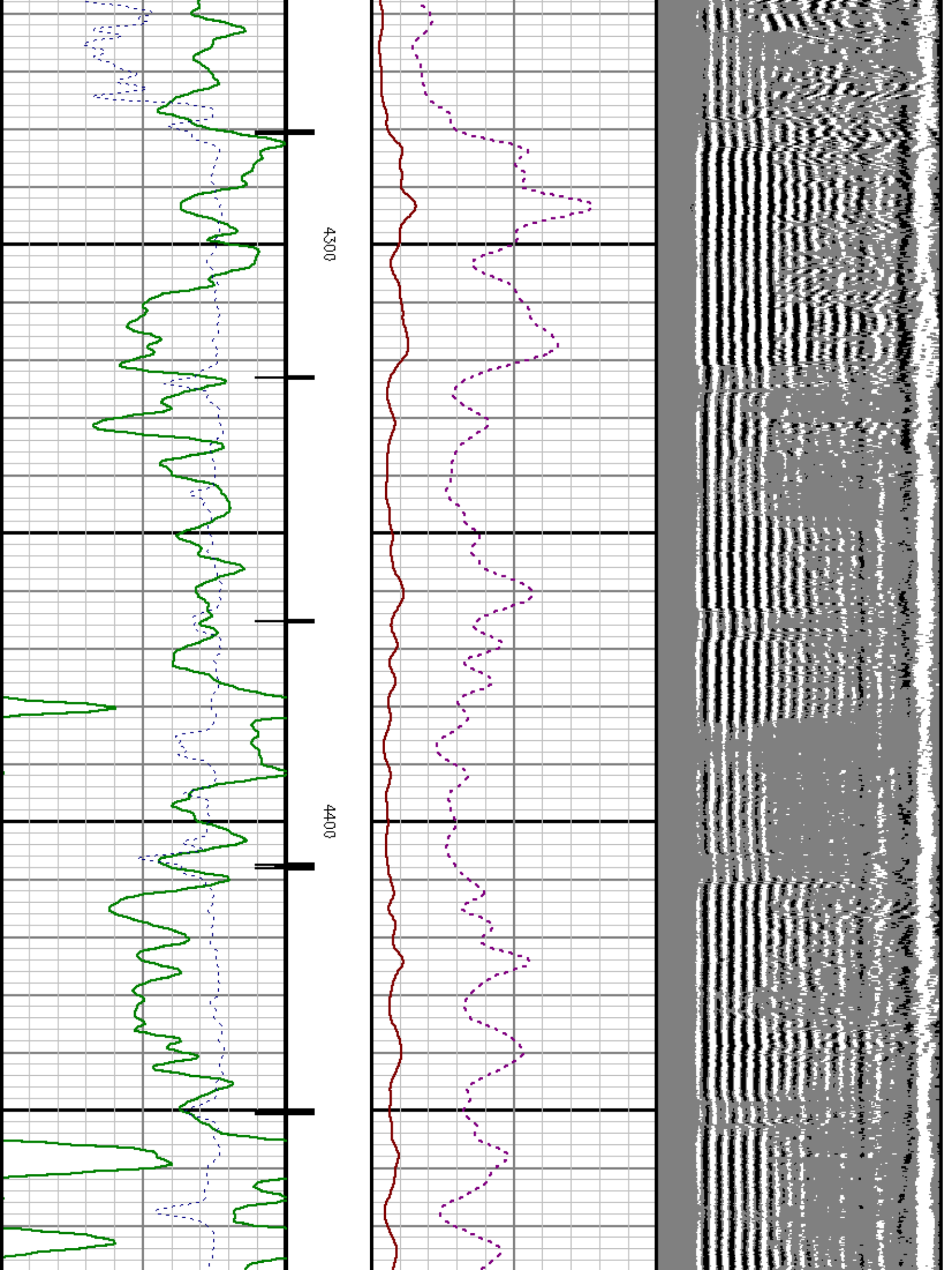


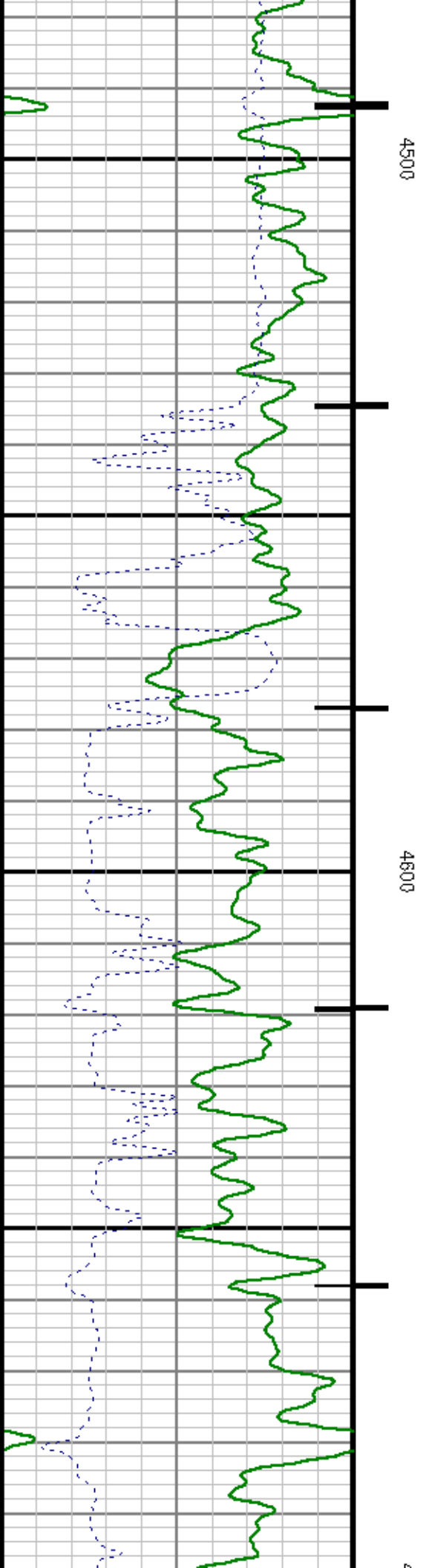
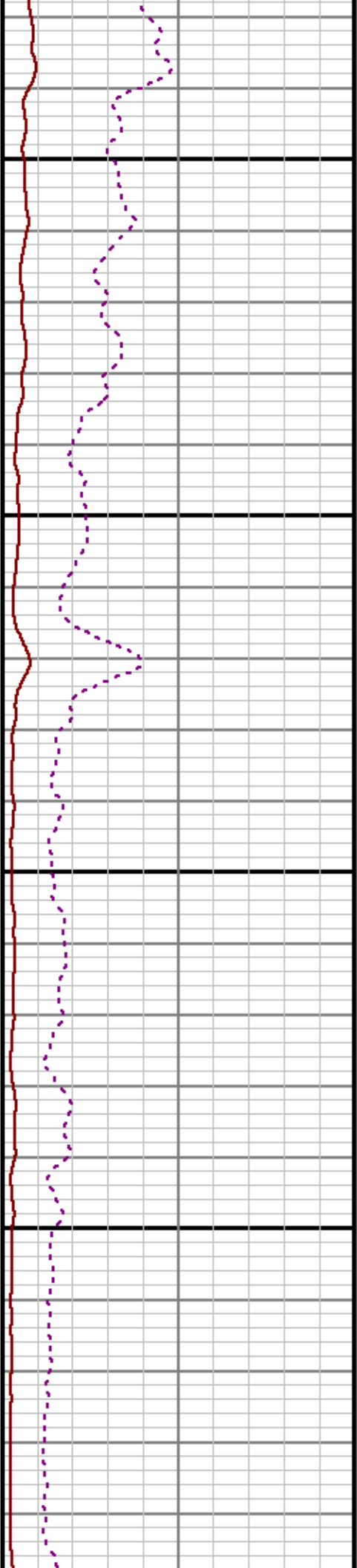
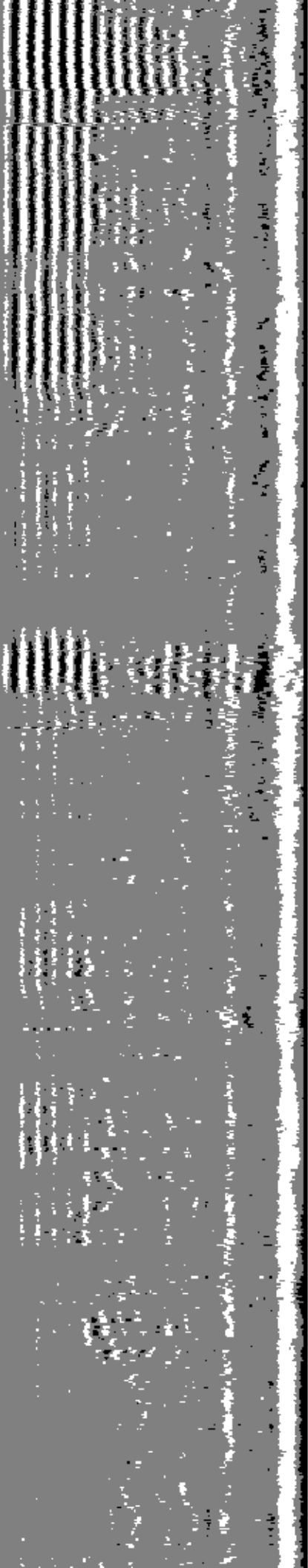


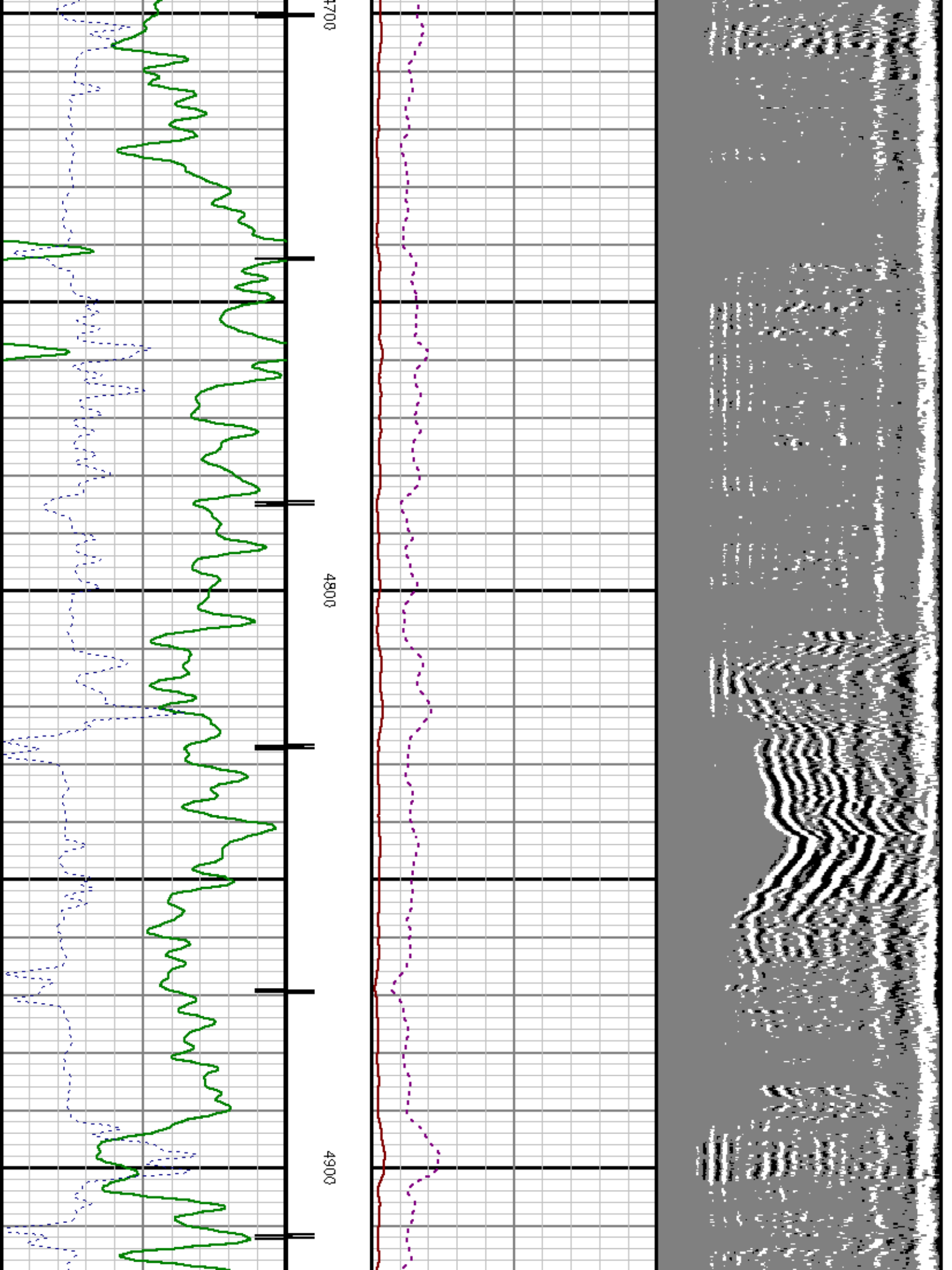


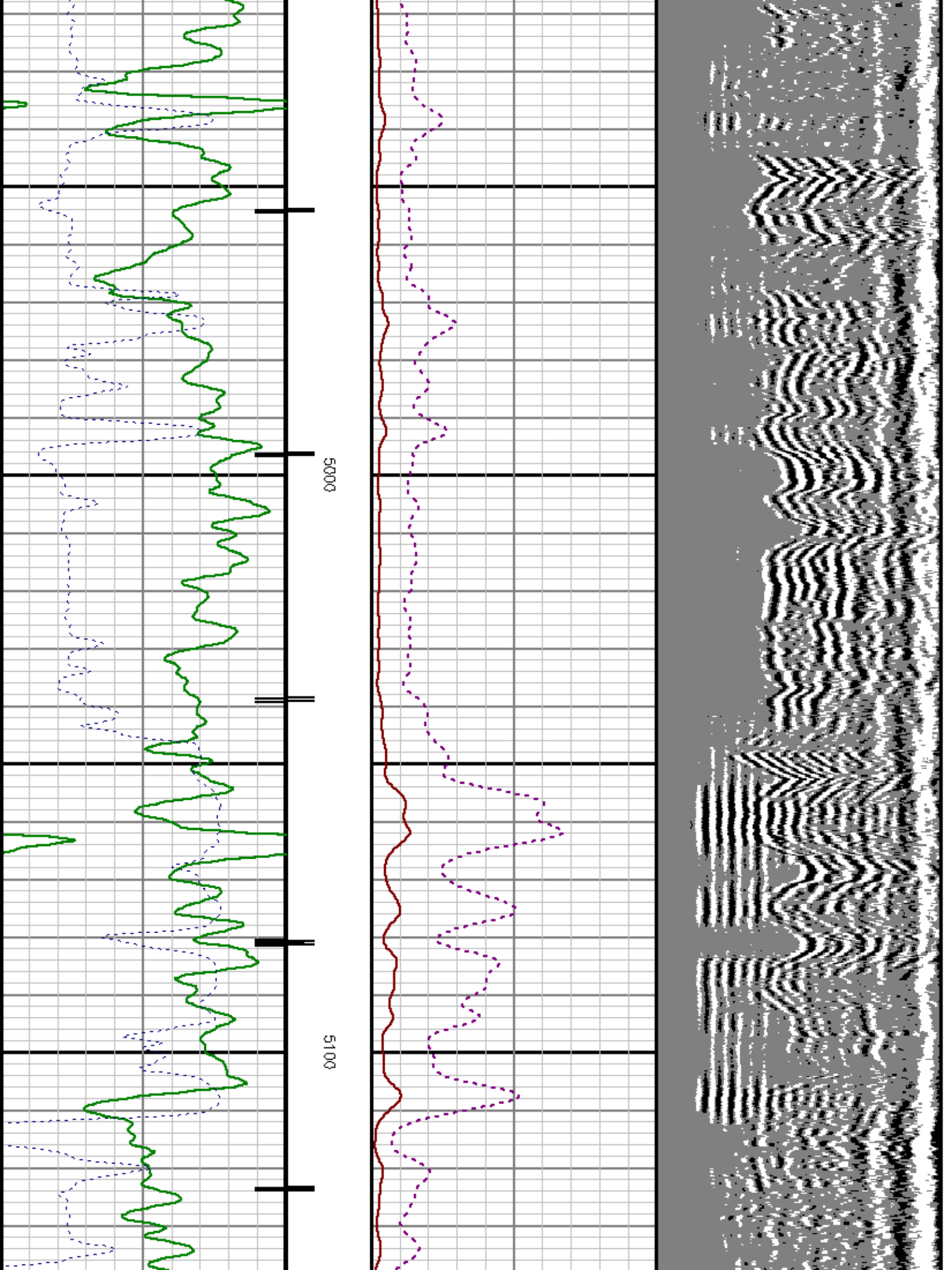


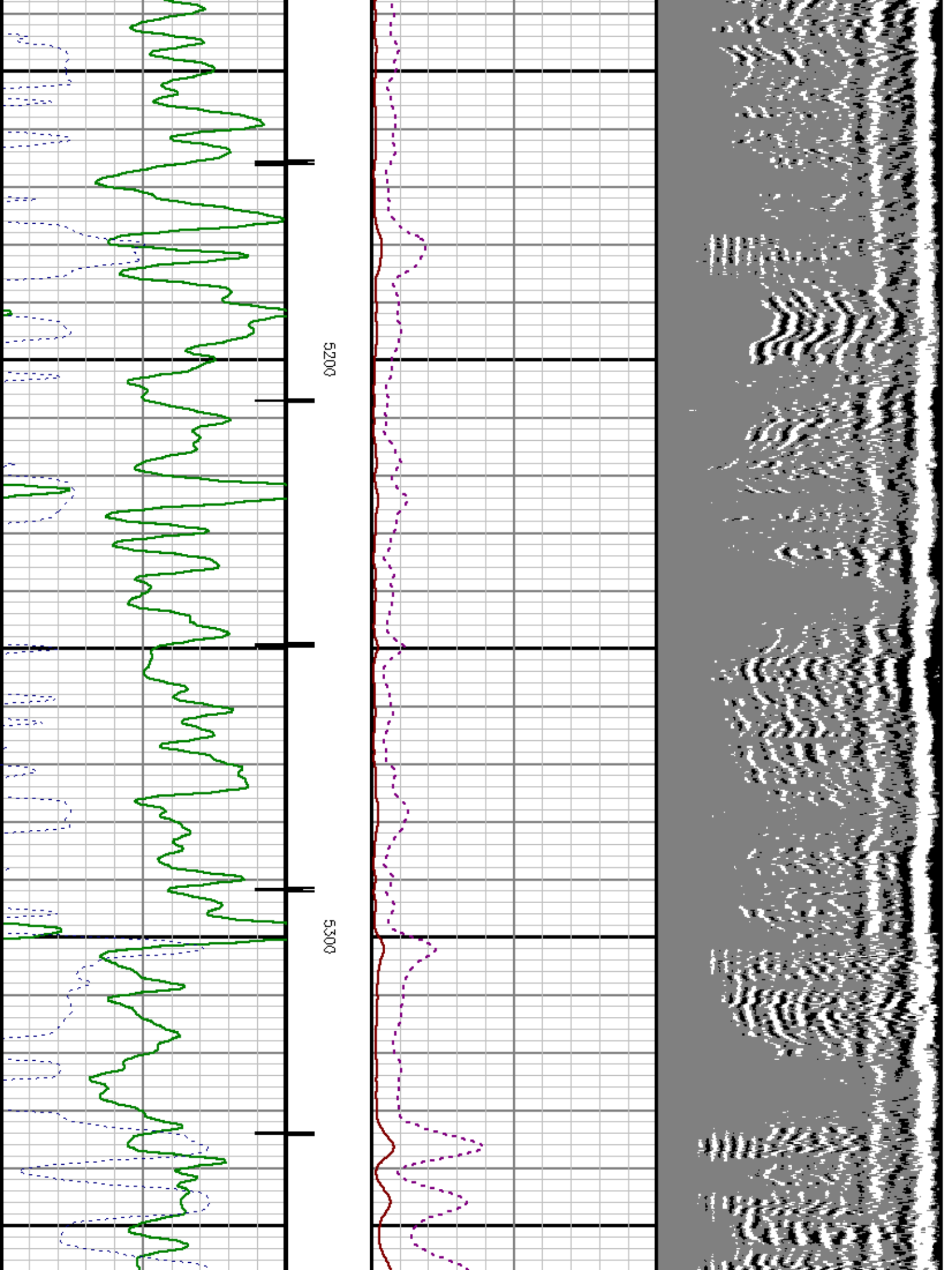


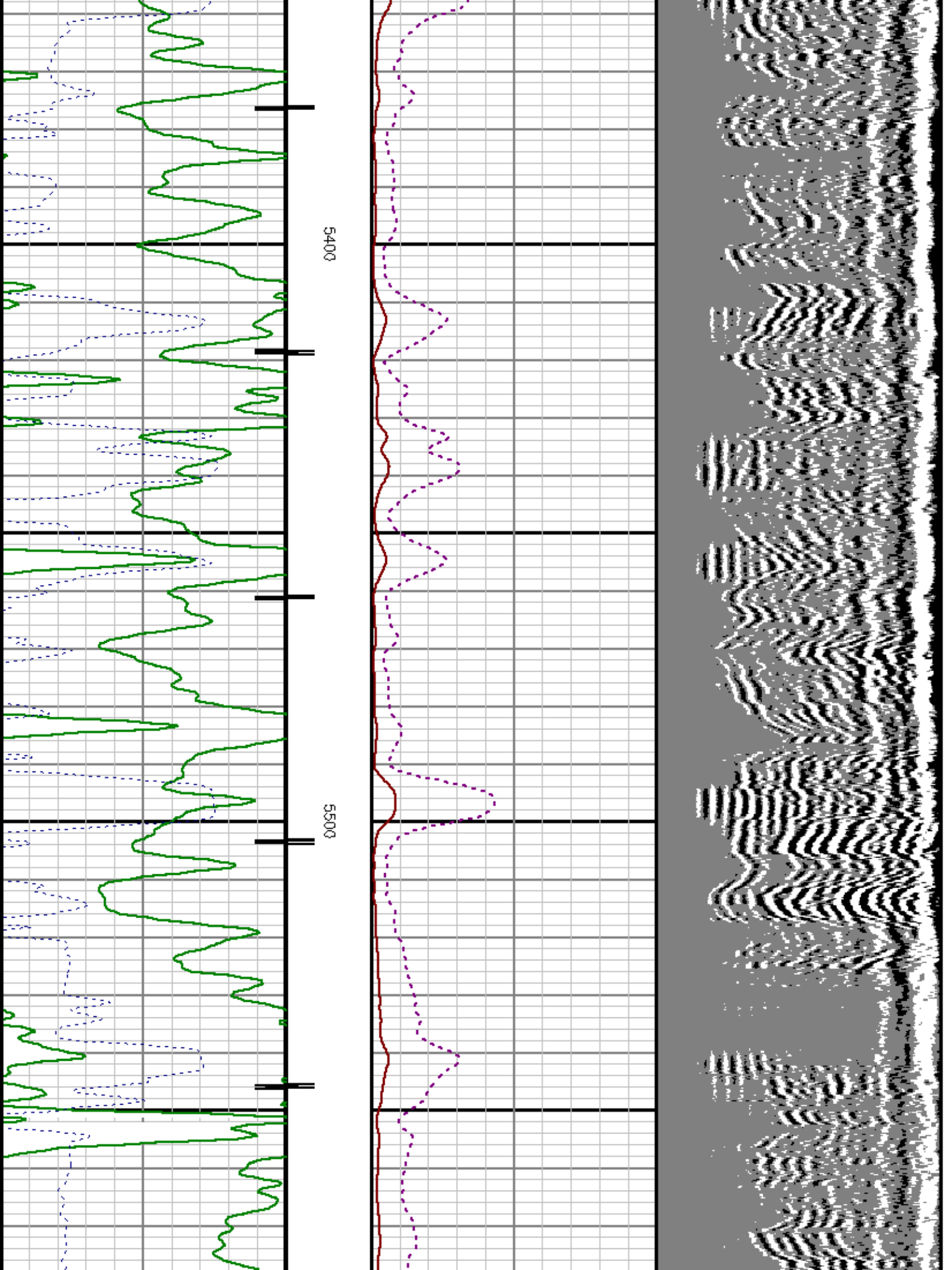


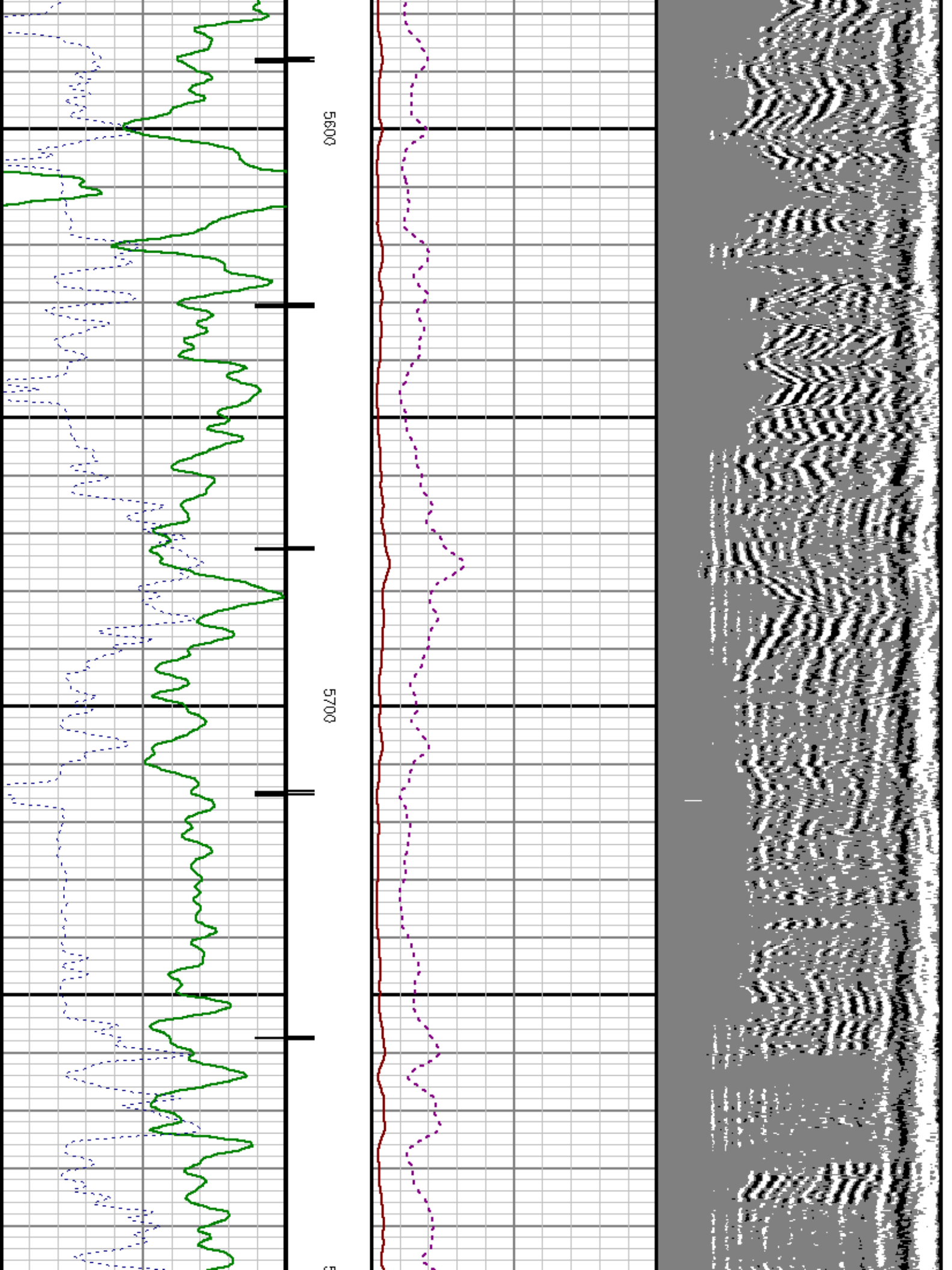


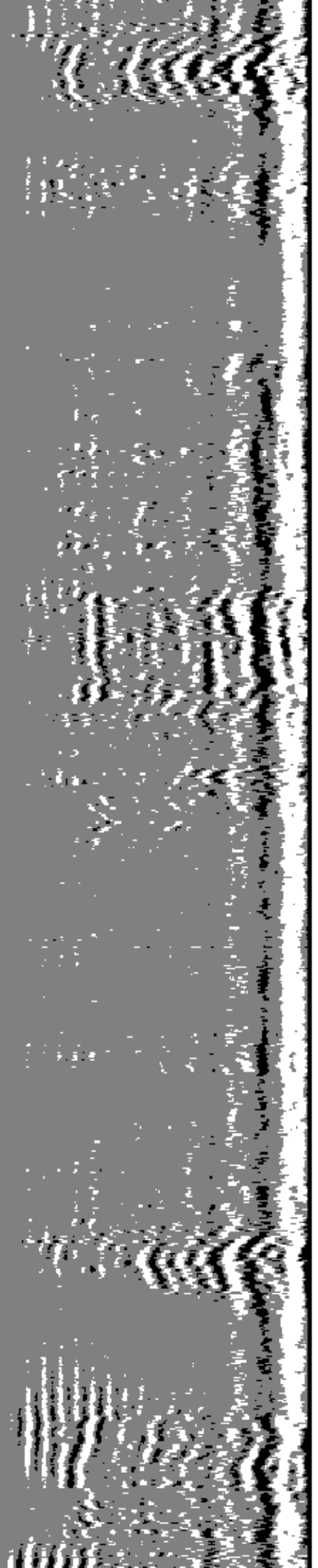
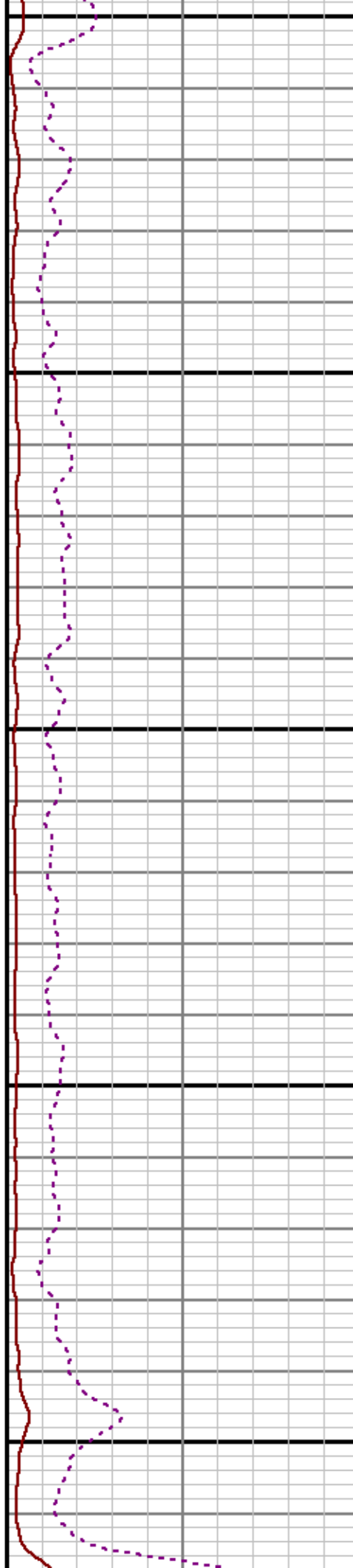
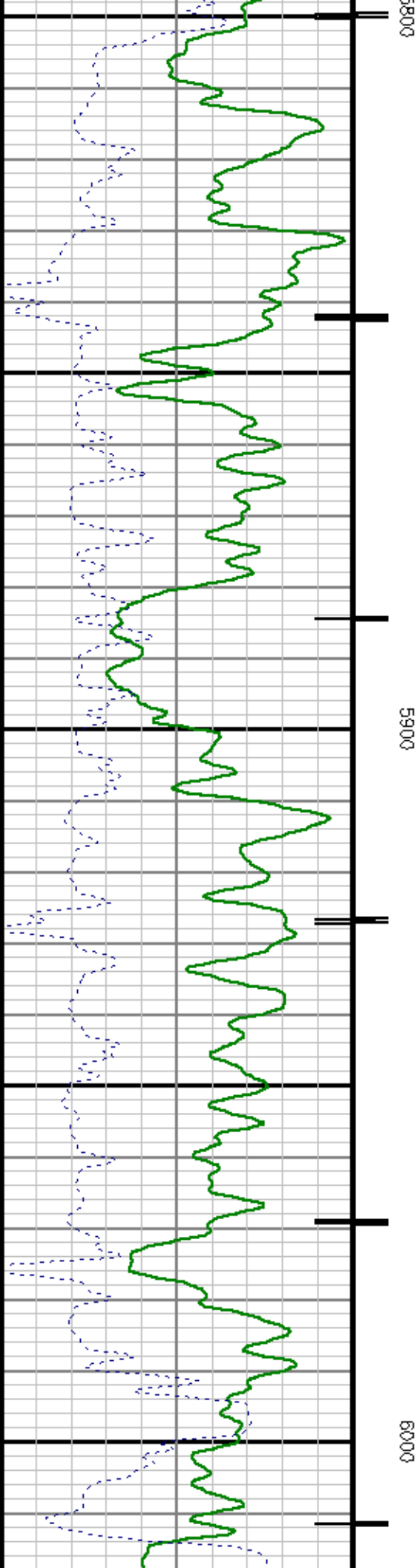


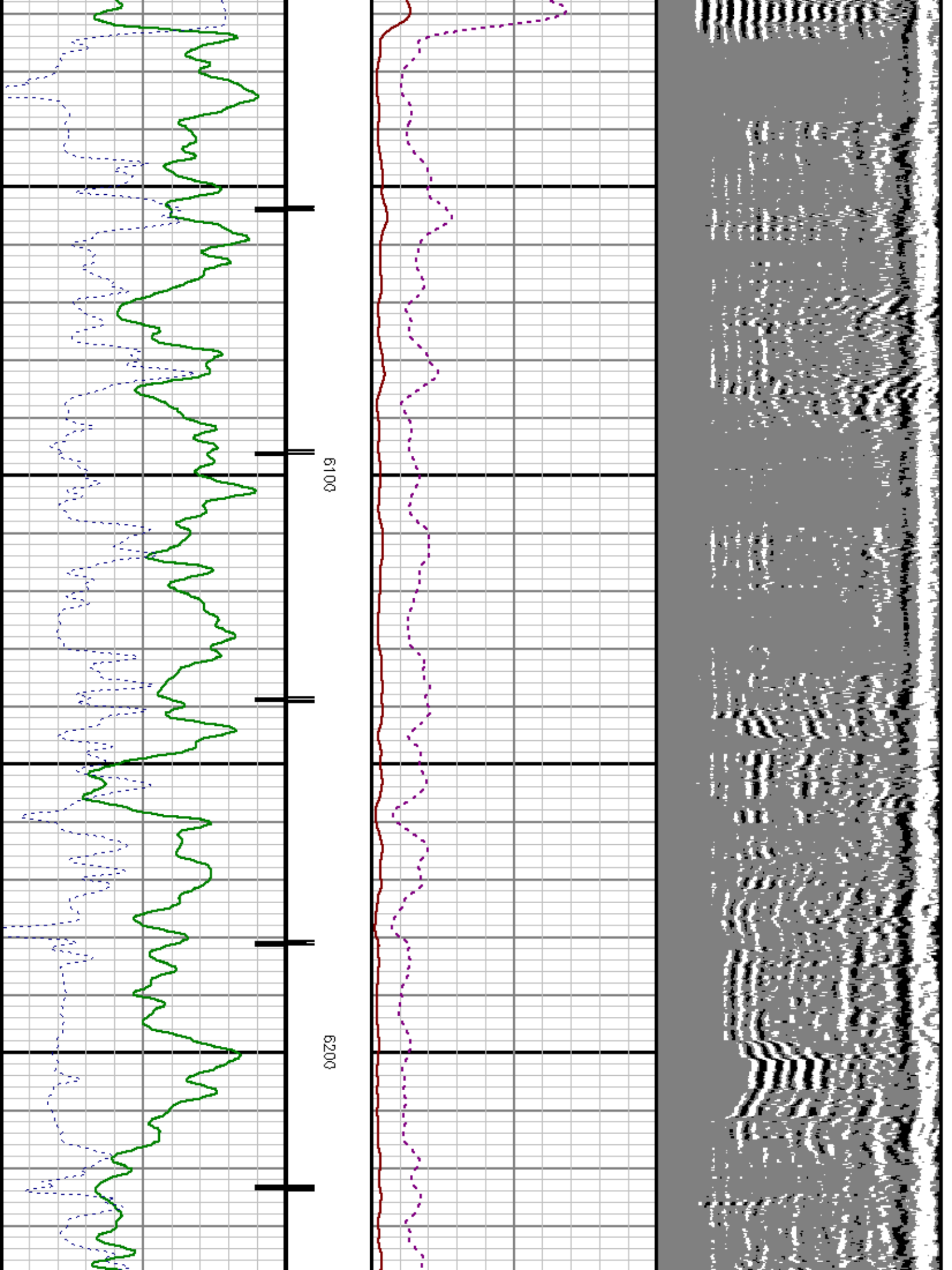


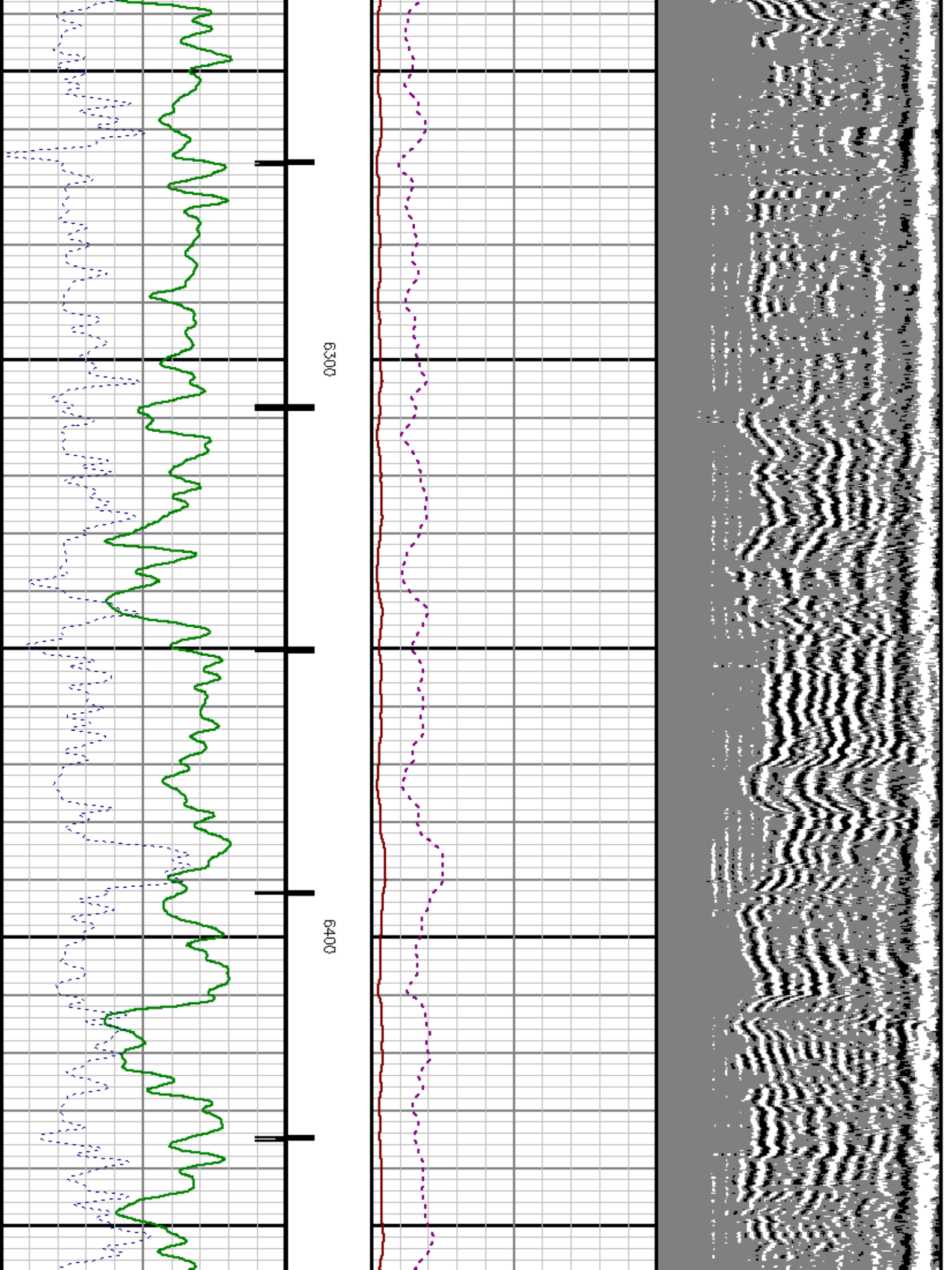


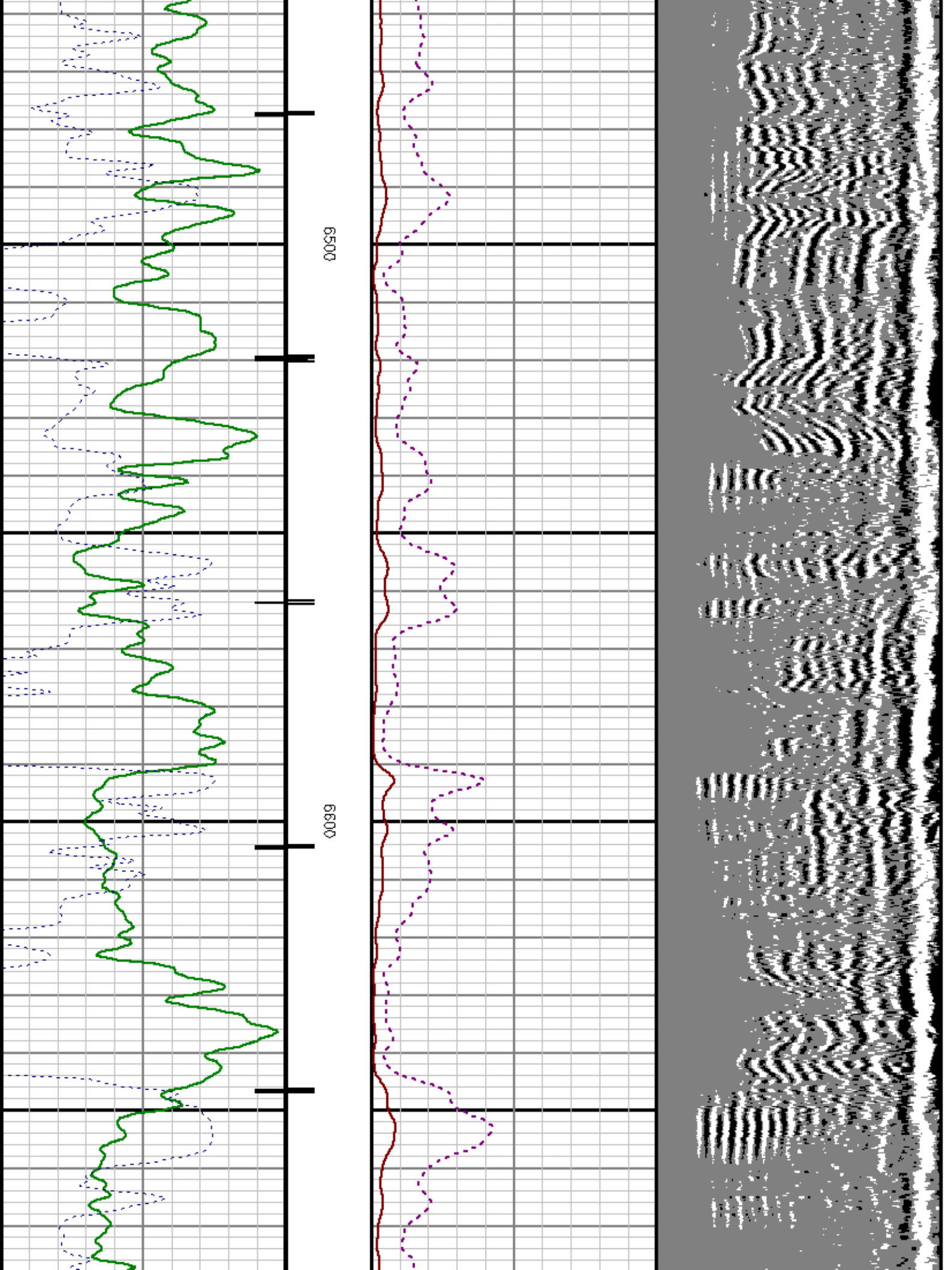


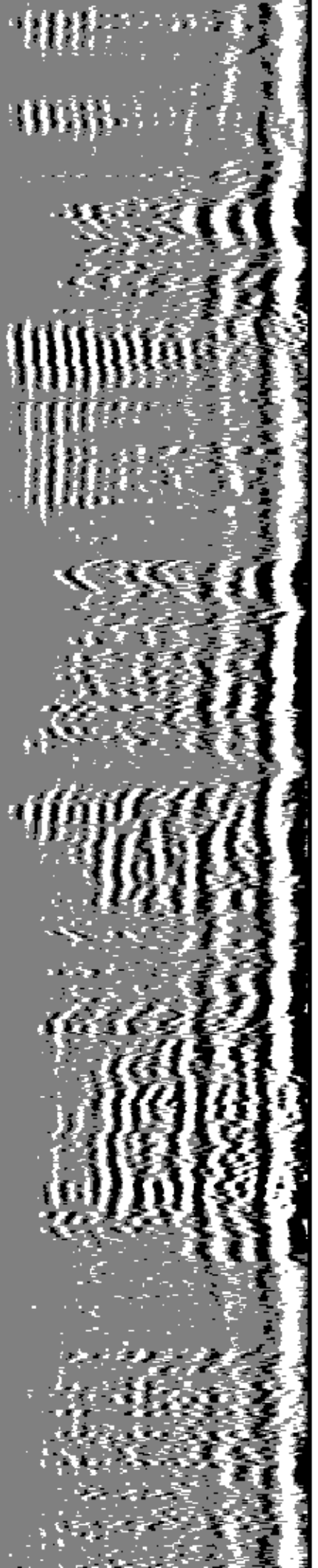
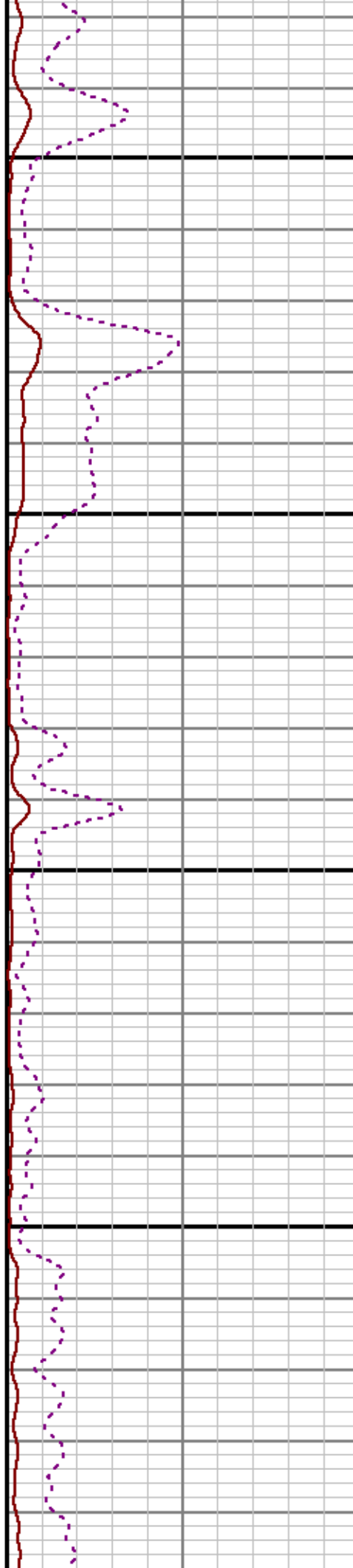
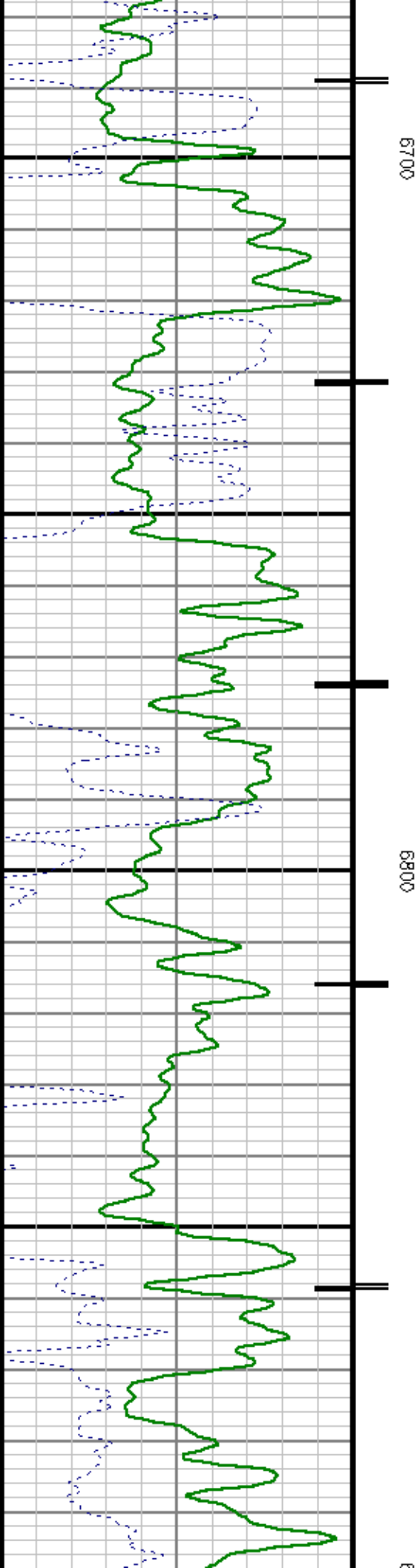


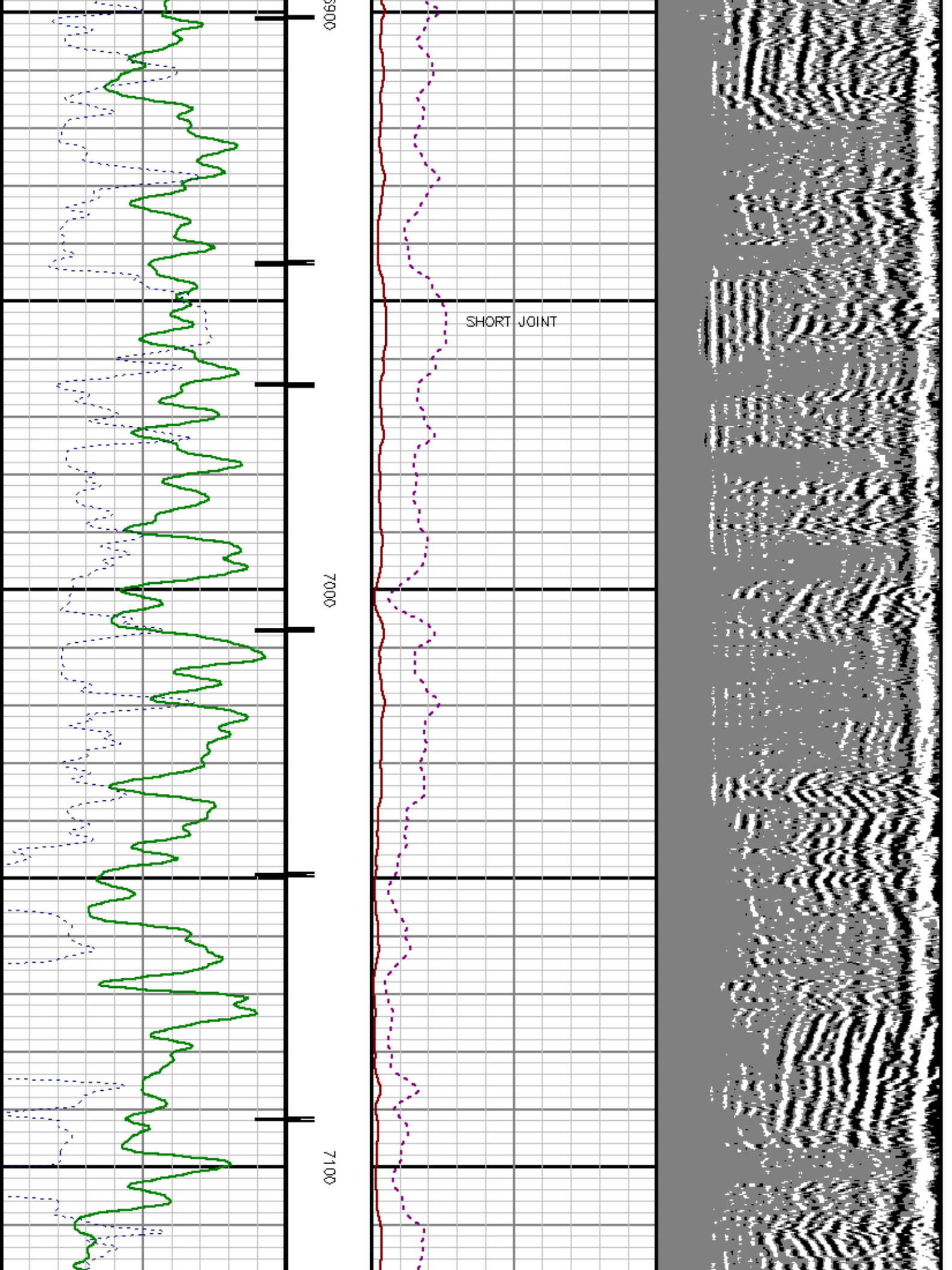


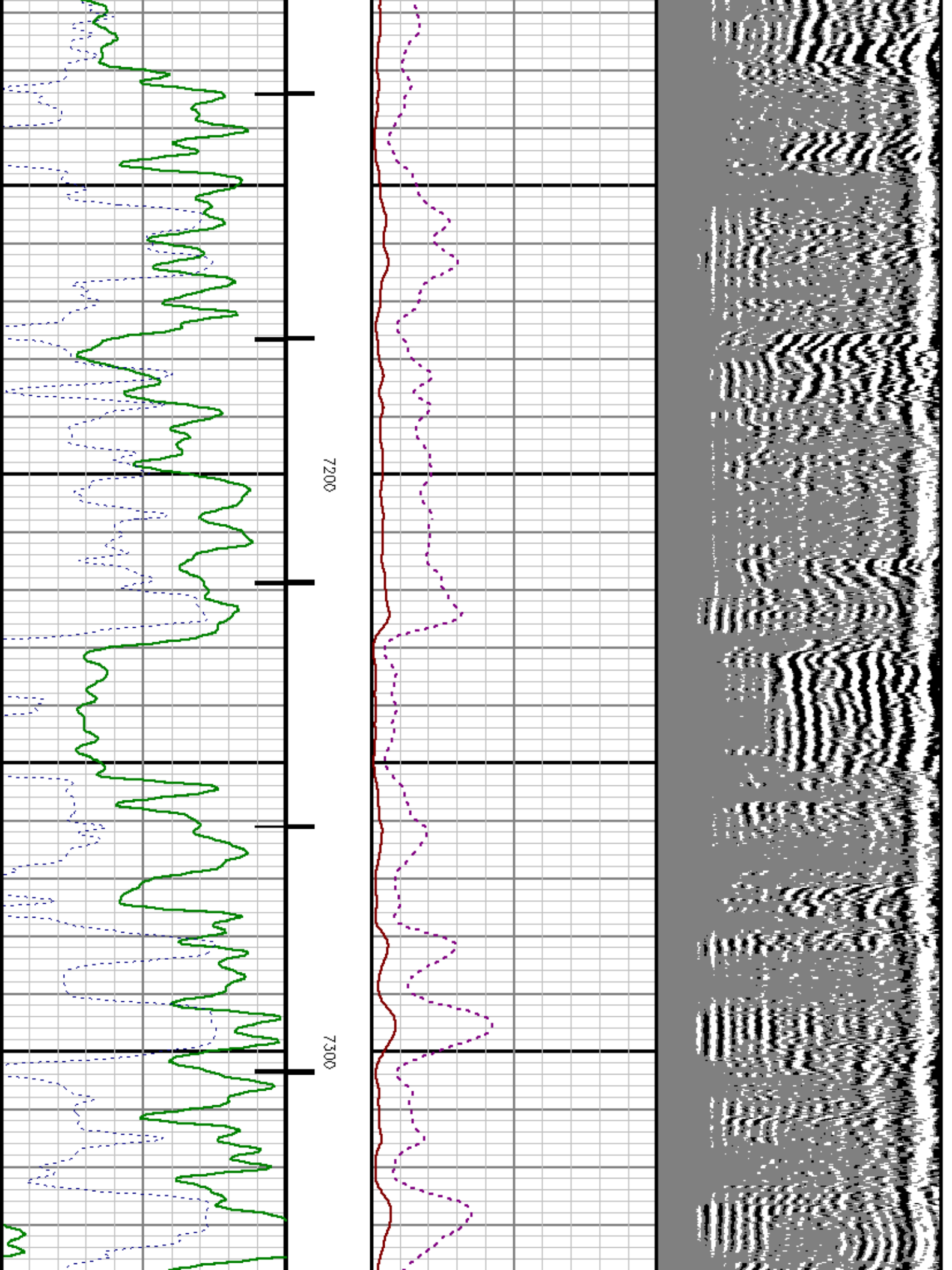


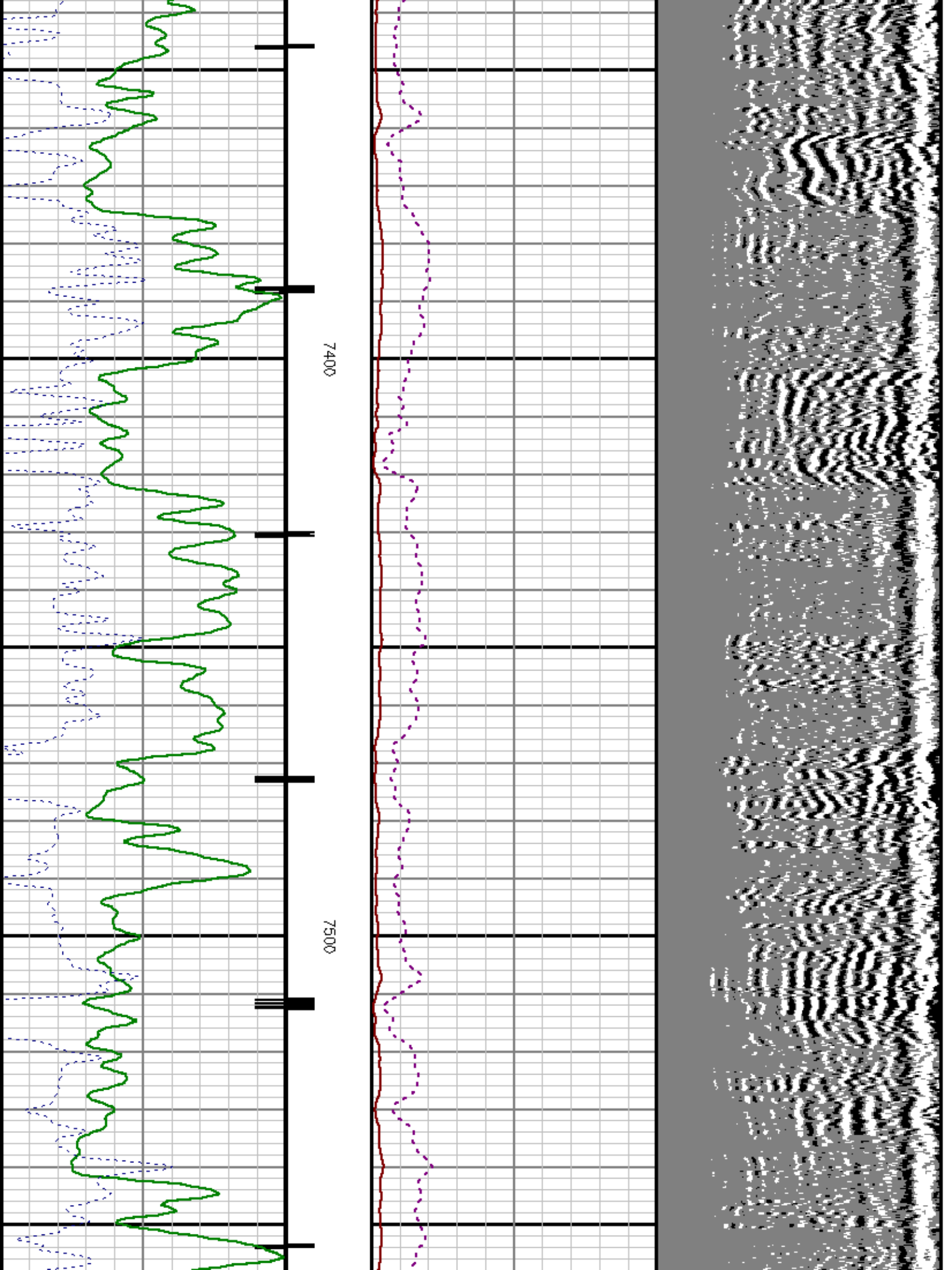


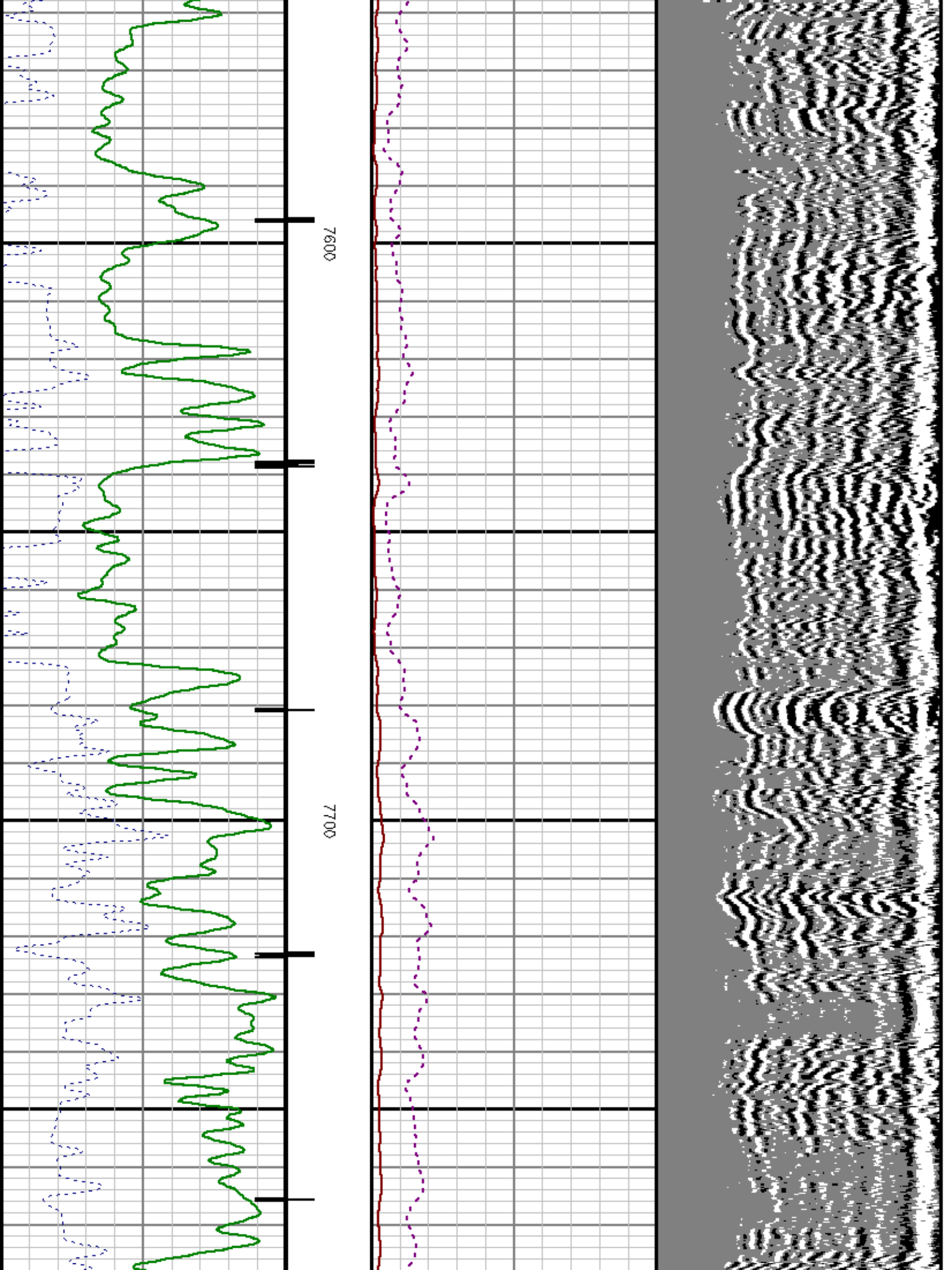


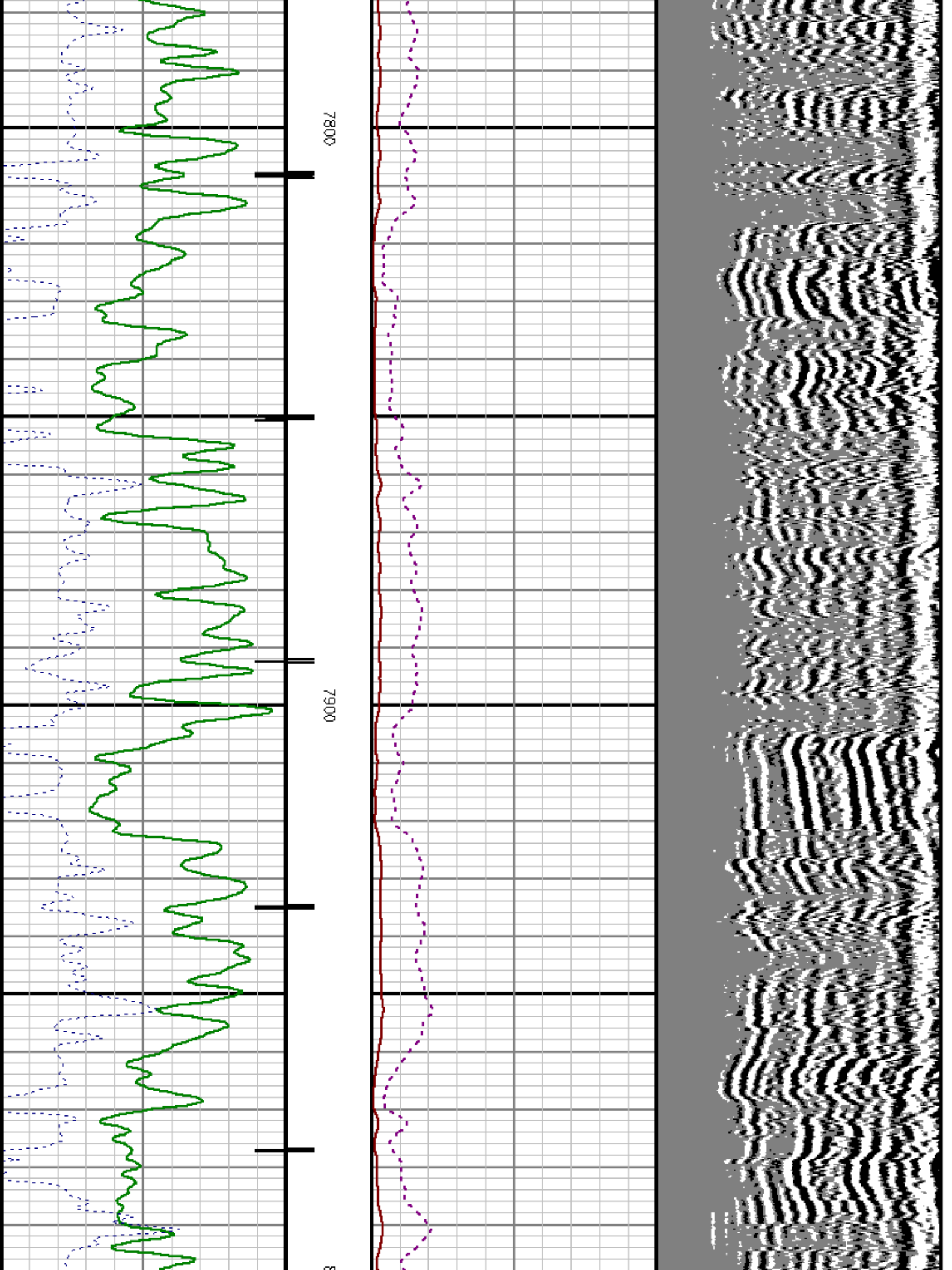


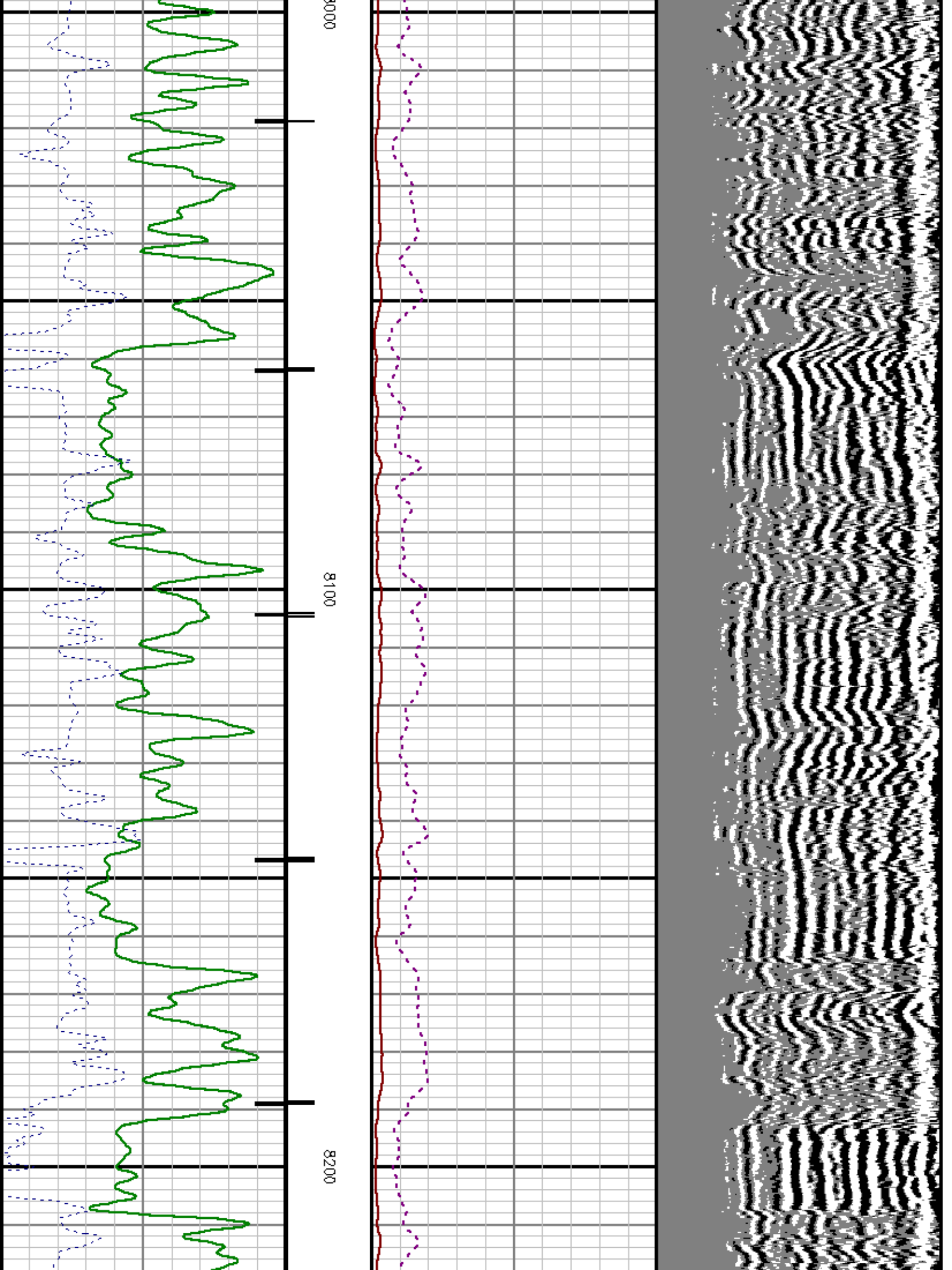


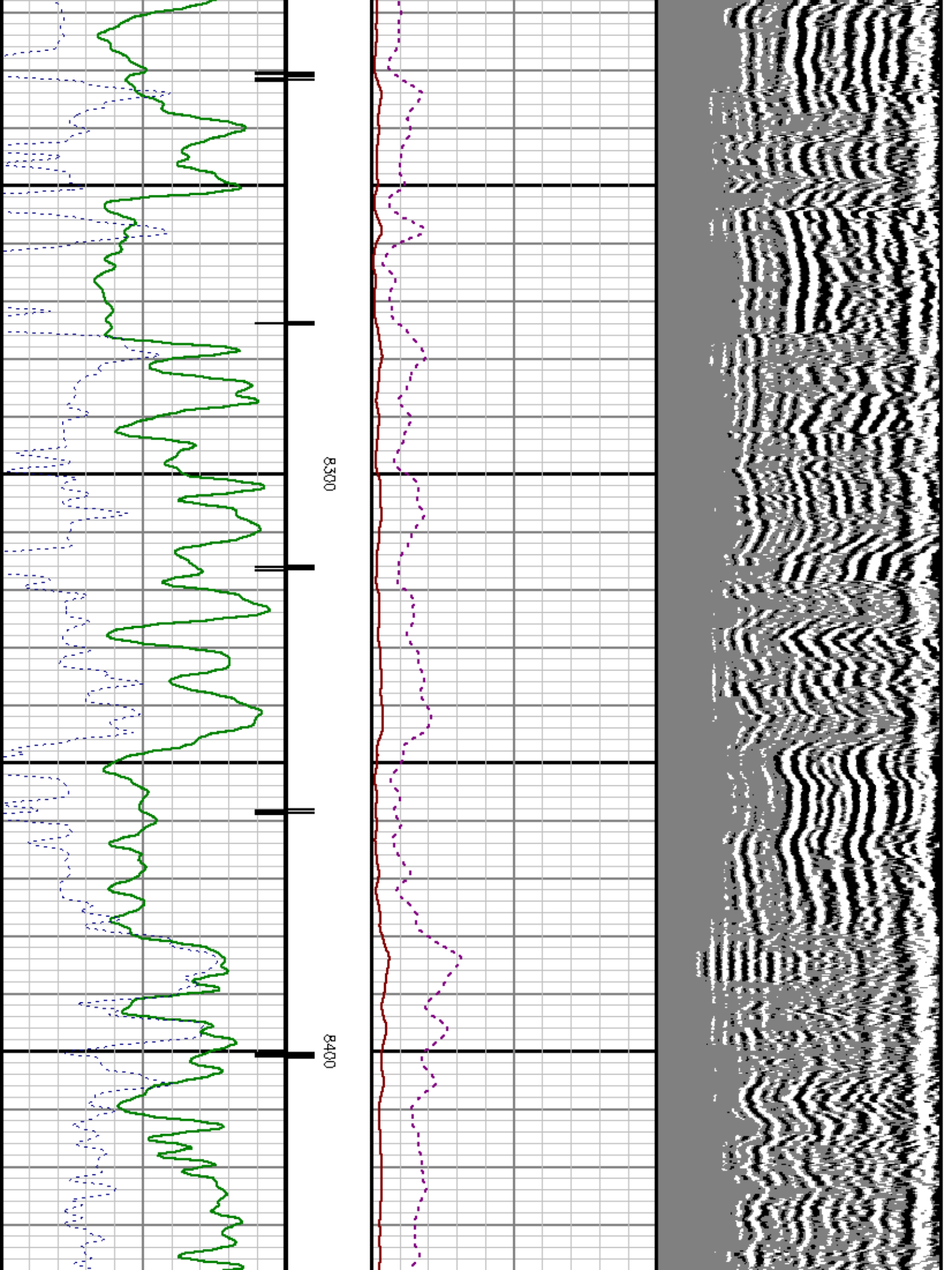


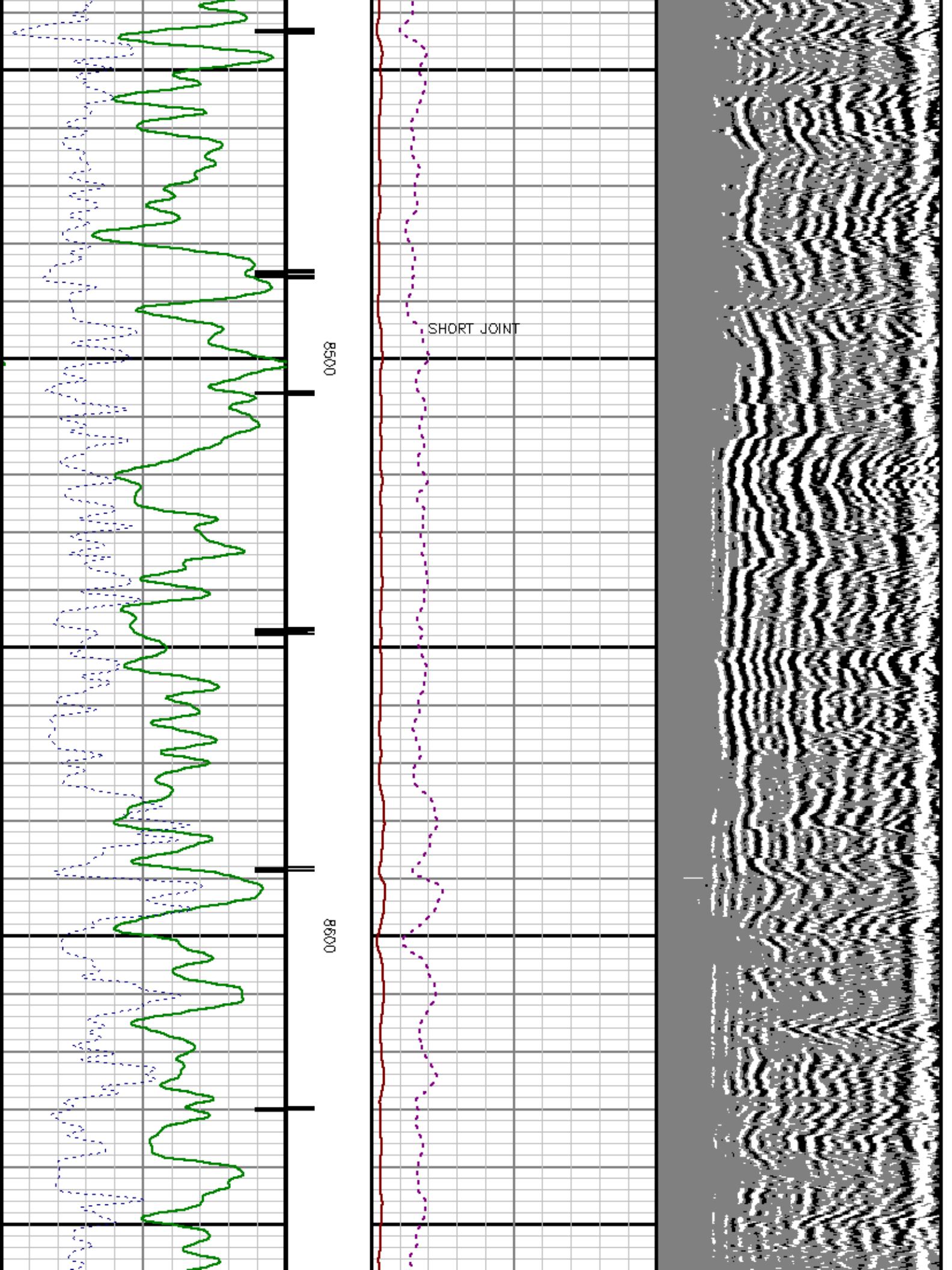


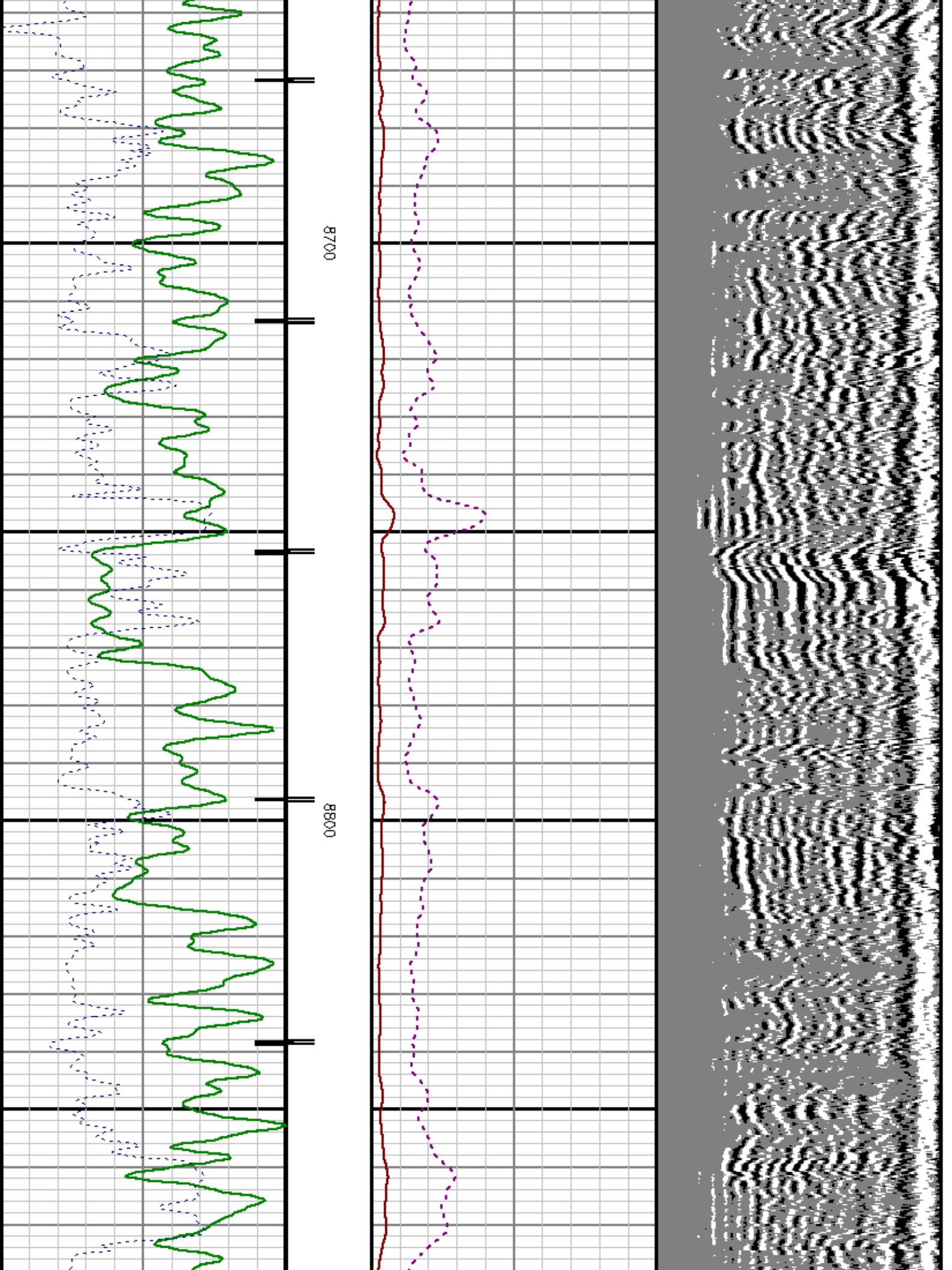


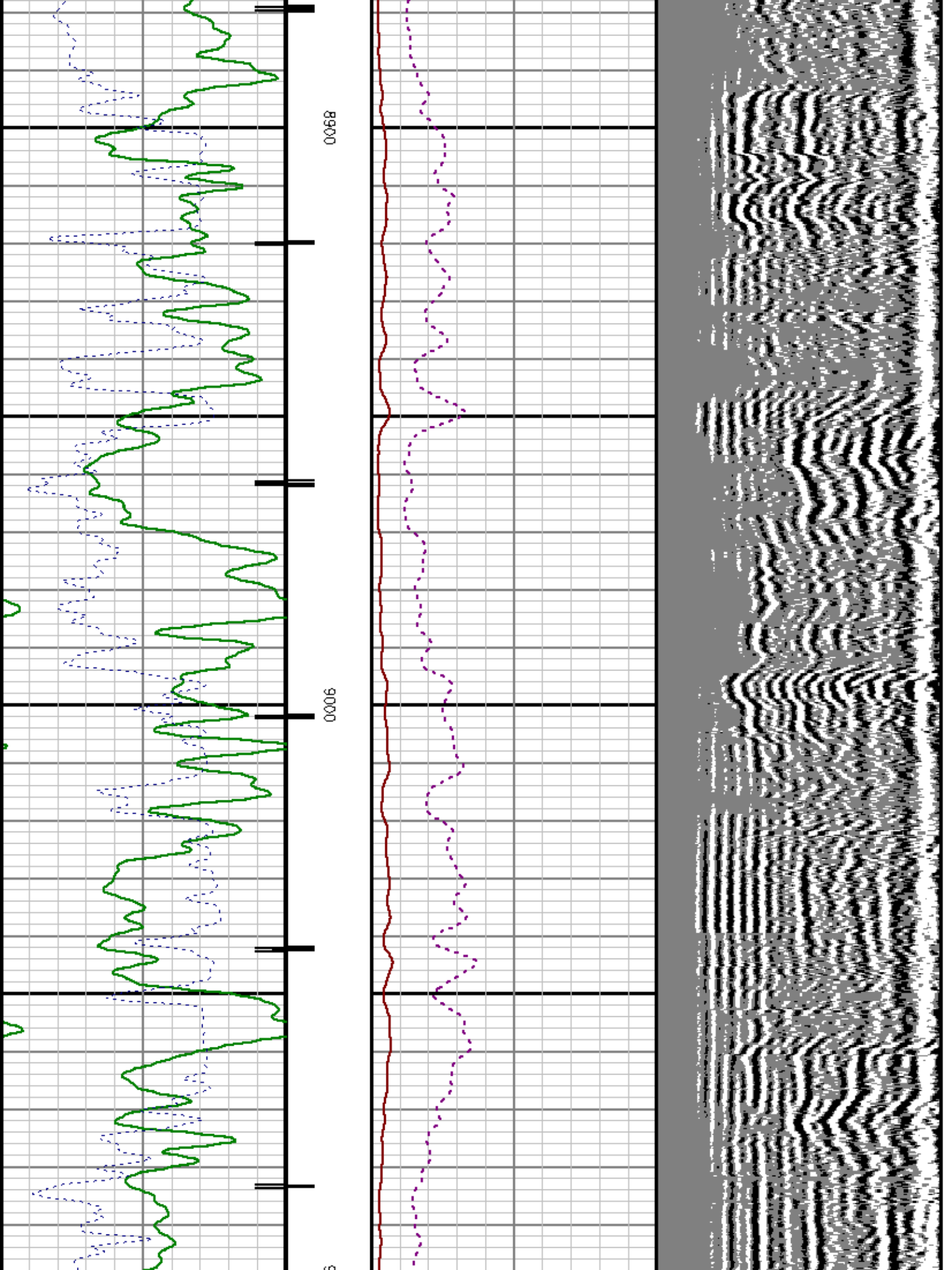


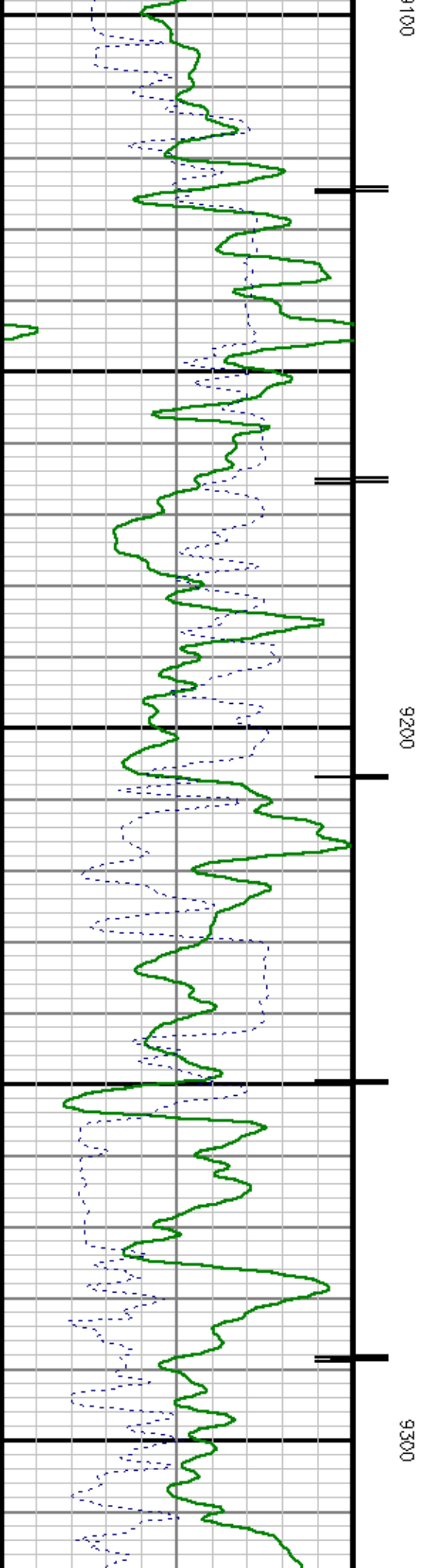
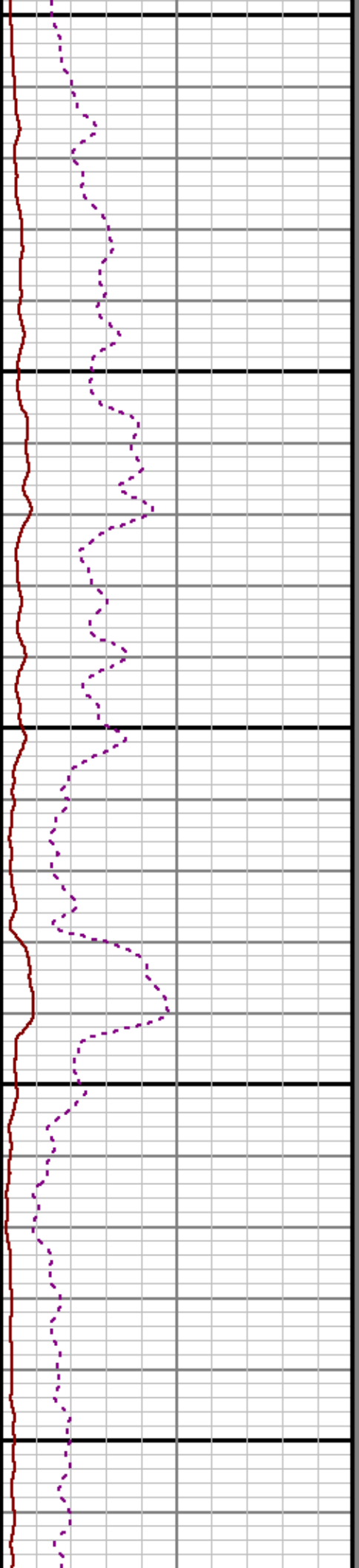
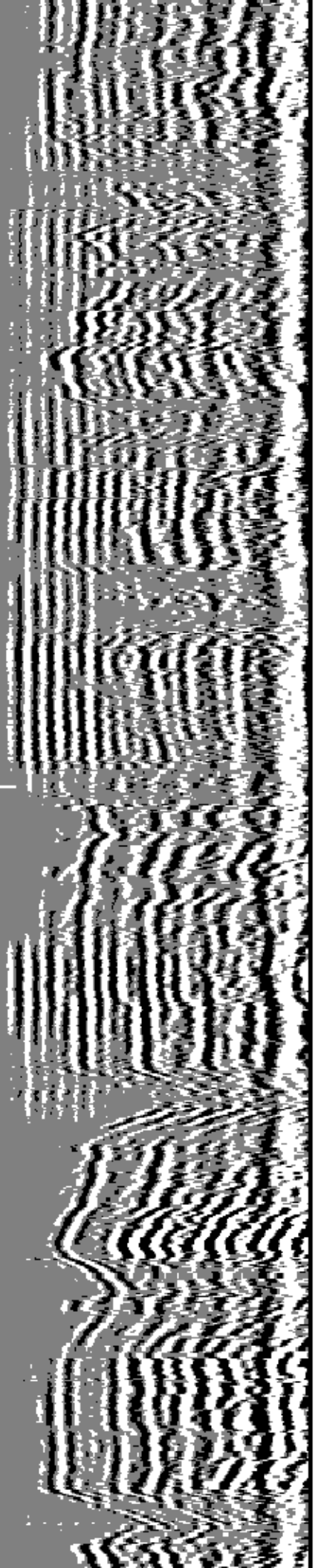


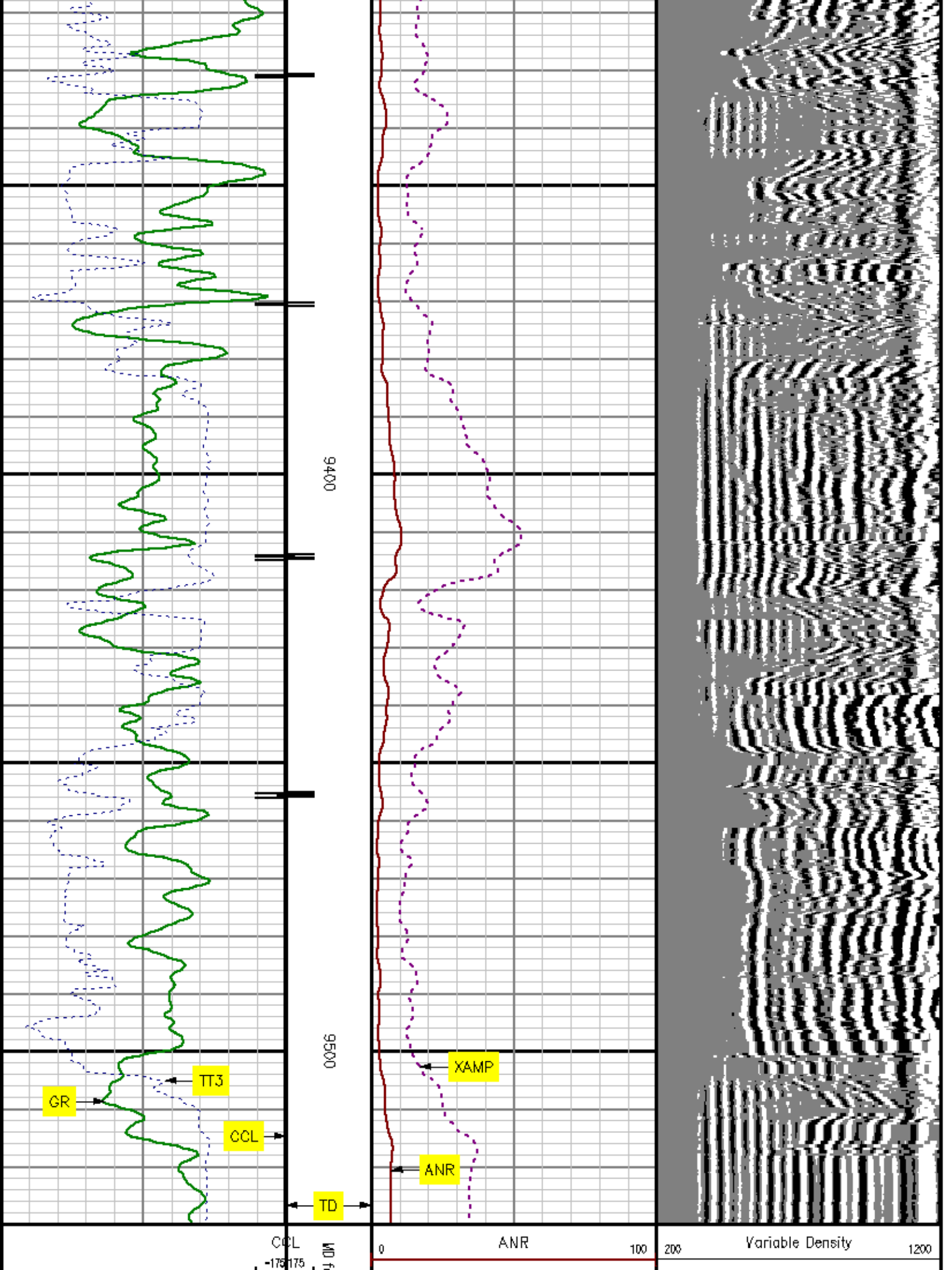














*MAIN SECTION
SECONDARY PRESENTATION
WITH 1000 PSI*

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	316.900	u sec	2145.250	9564.000
RAL	Amp Gate Start Near	200.391	u sec	2145.250	9564.000
RAL	Amp Gate Start Radial	200.391	u sec	2145.250	9564.000
RAL	Amp Gate Width Far	25.000	u sec	2145.250	9564.000
RAL	Amp Gate Width Near	25.000	u sec	2145.250	9564.000
RAL	Amp Gate Width Radial	25.000	u sec	2145.250	9564.000
RAL	casing od	4.500	inches	2145.250	9564.000
RAL	casing wt	11.600	lbm/ft	2145.250	9564.000
RAL	FB Start Far	291.900	u sec	2145.250	9564.000
RAL	FB Start Near	175.391	u sec	2145.250	9564.000
RAL	FB Start Radial	175.391	u sec	2145.250	9564.000
RAL	FB Thresh Far	10.000	mv	2145.250	9564.000
RAL	FB Thresh Near	4.000	mv	2145.250	9564.000
RAL	FB Thresh Radial	4.000	mv	2145.250	9564.000
RAL	Fluid Travel Time	200.000	u sec/ft	2145.250	9563.455

DEPTH OFFSETS
(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-15.360	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	CHV	FPR2
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3

1426XA -14.360
1426XA -7.250
1426XA -5.390
1426XA 0.000

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

Created by : RAL, v4.8.007

Plotted by : PlotMgr, v5.4.504

Company : MARATHON OIL COMPANY

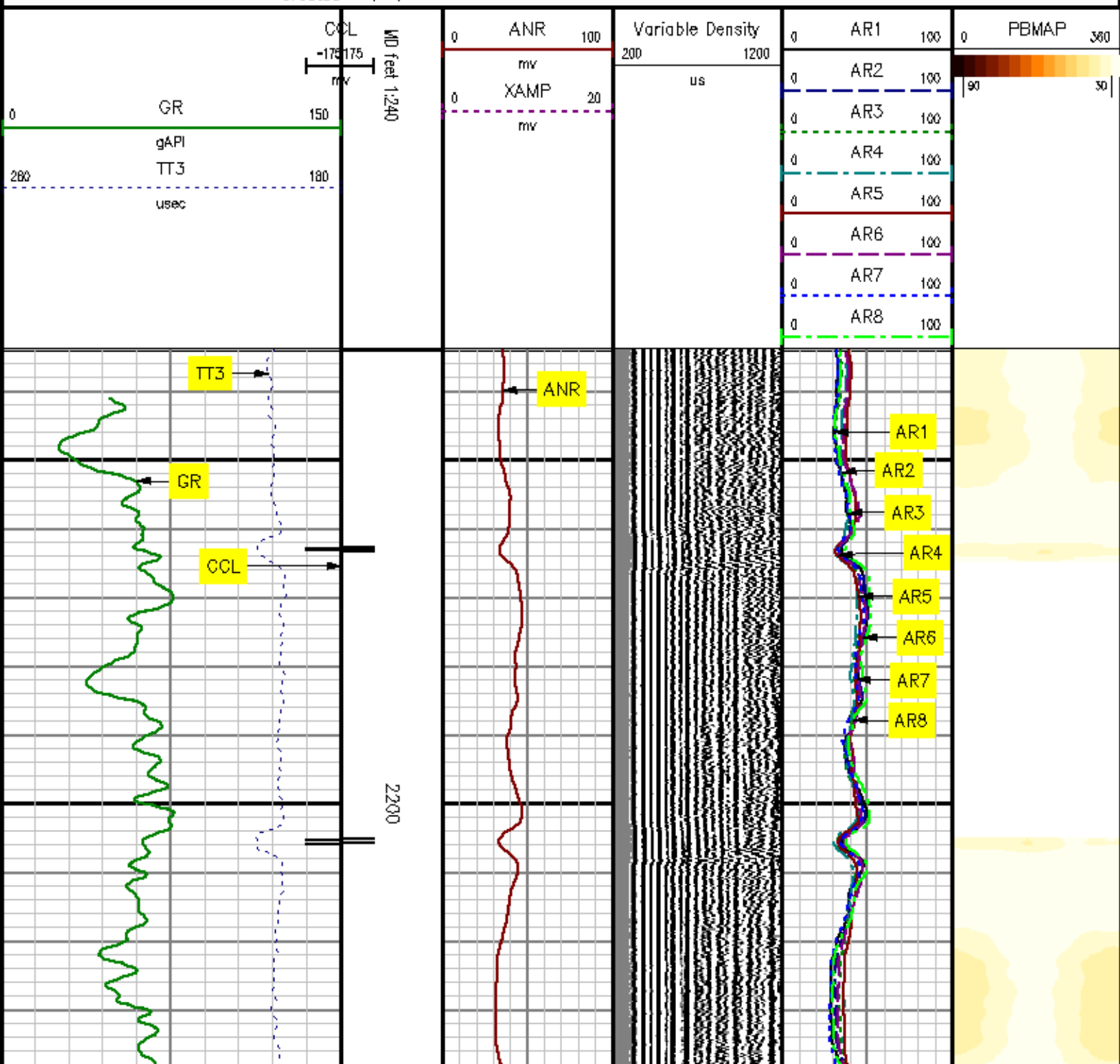
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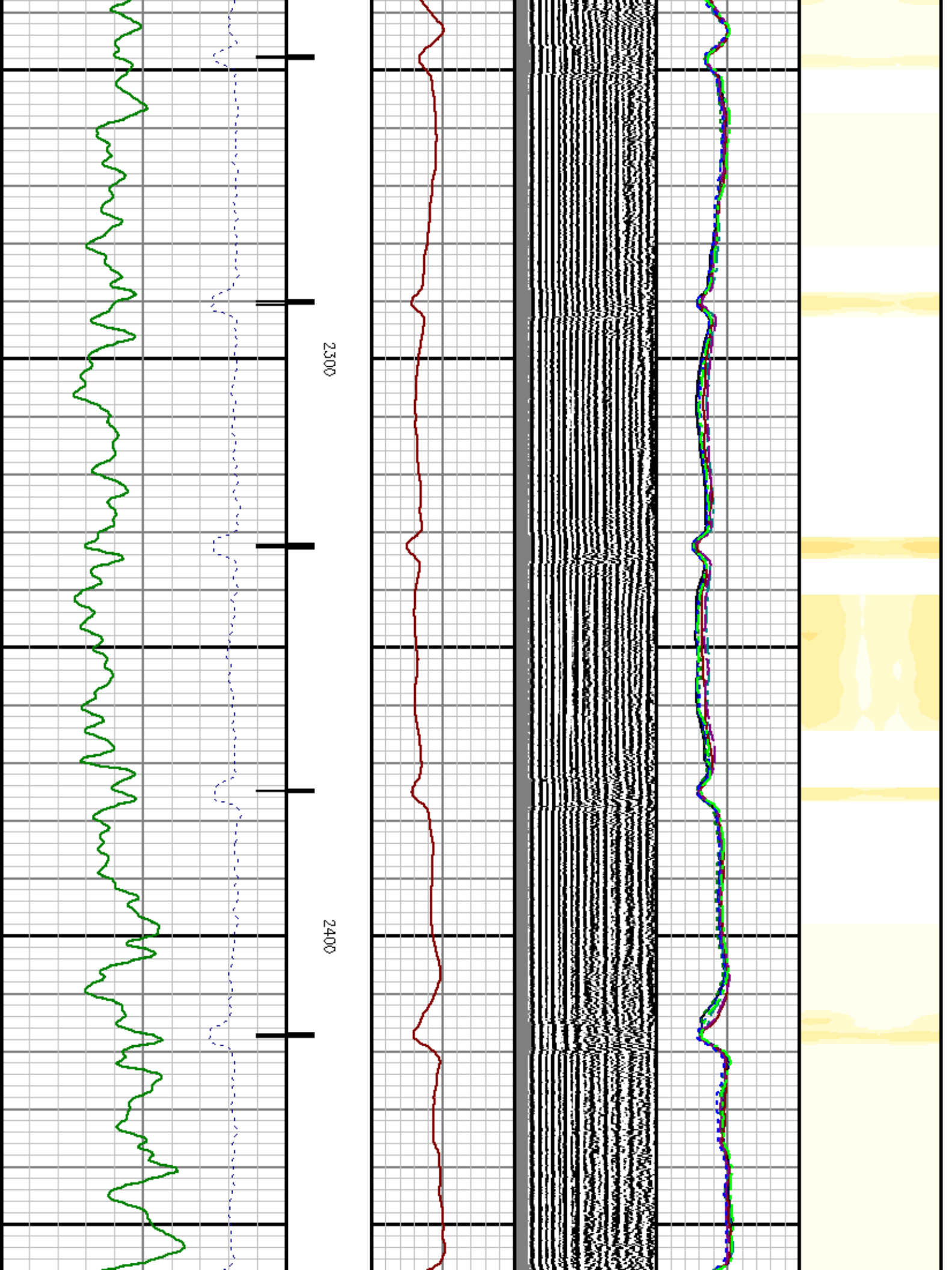
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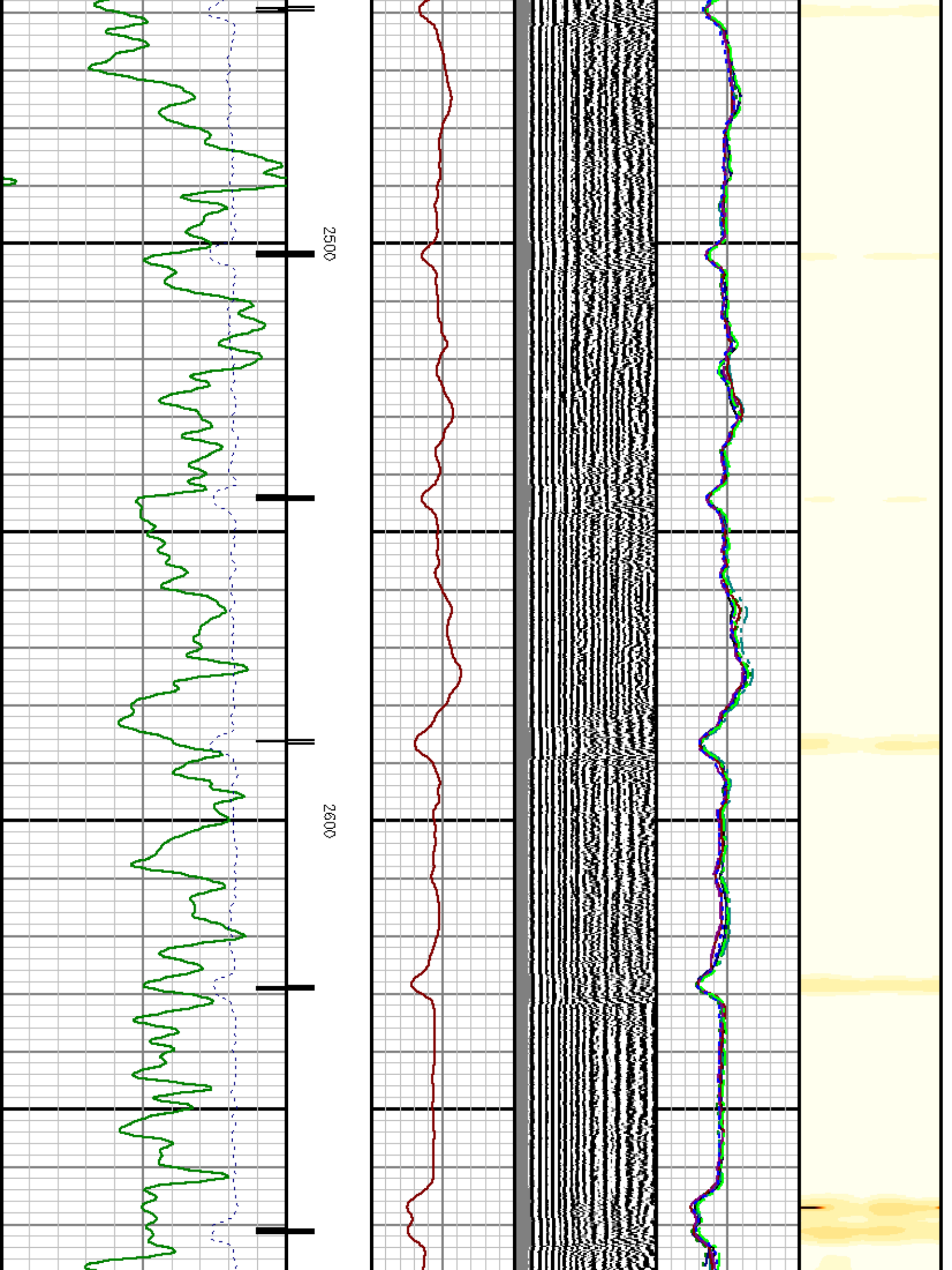
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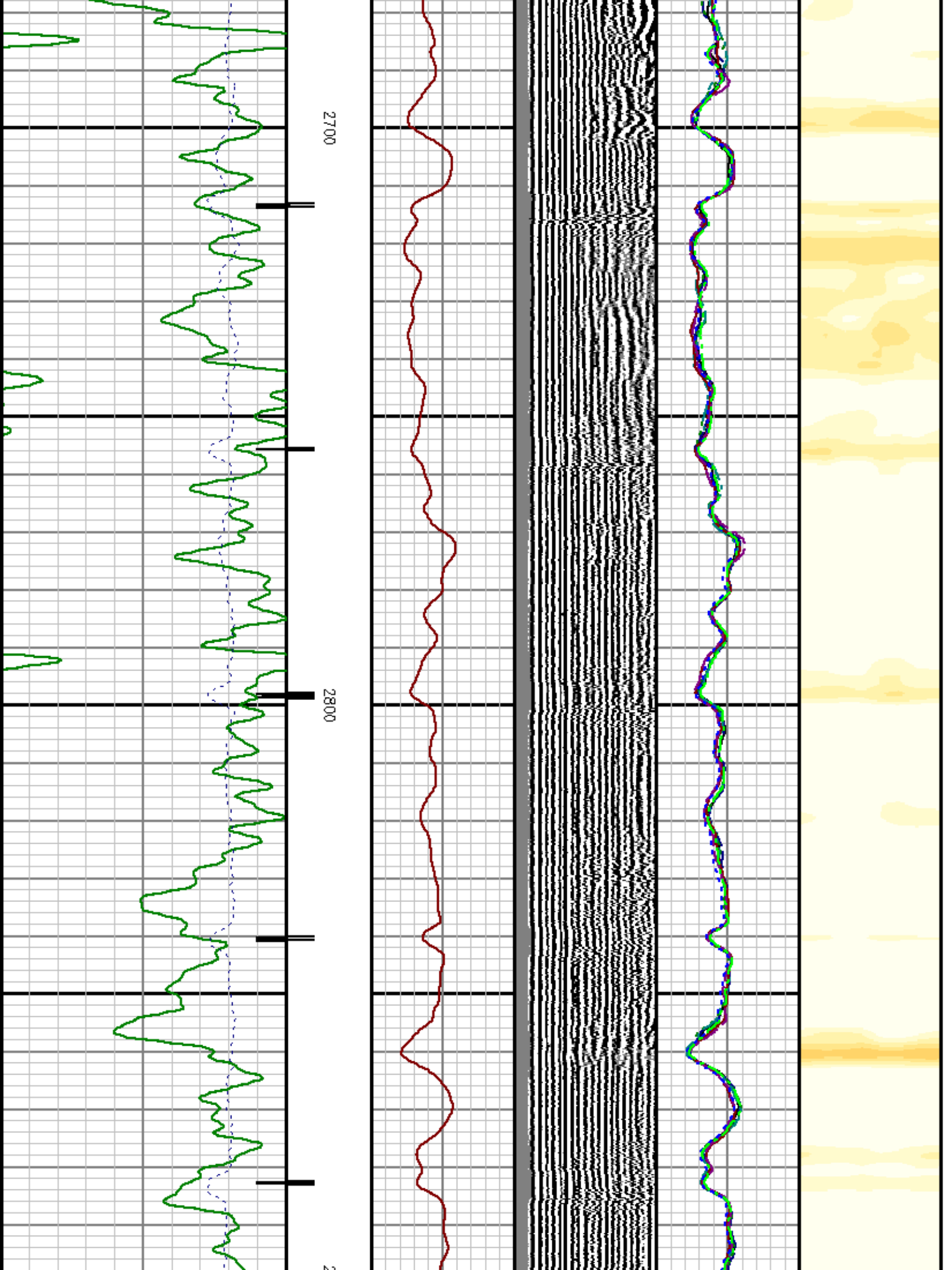
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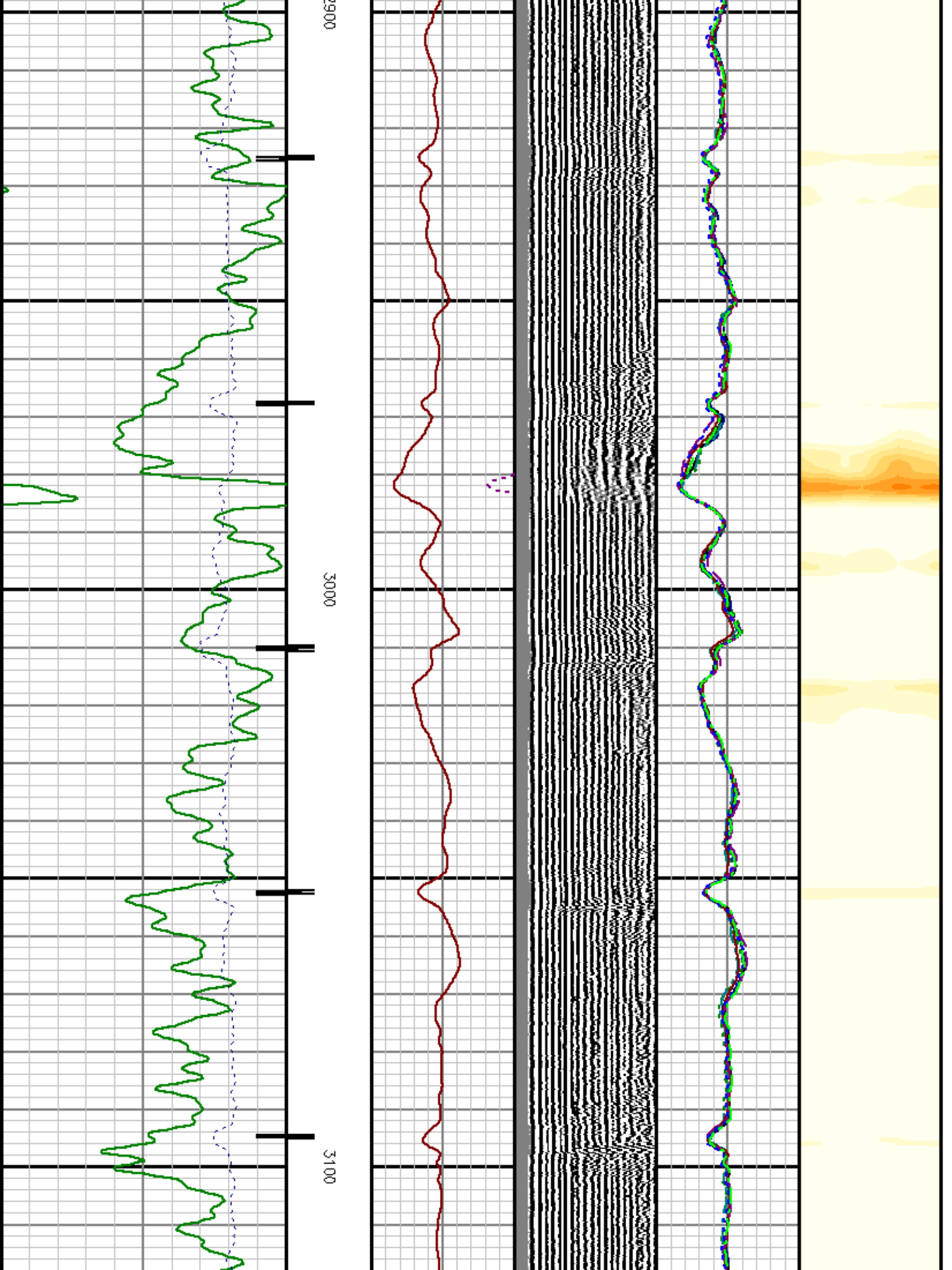
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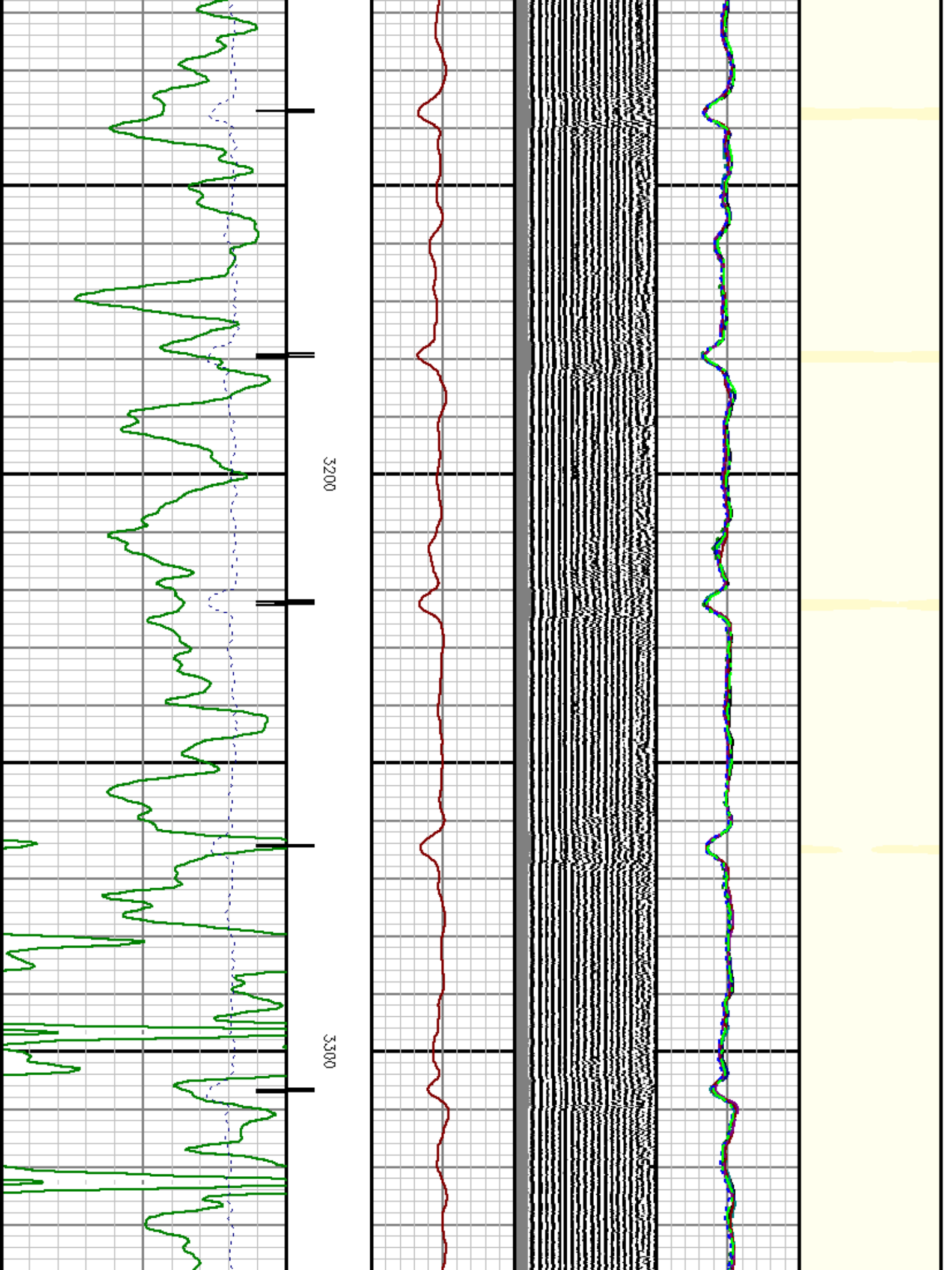


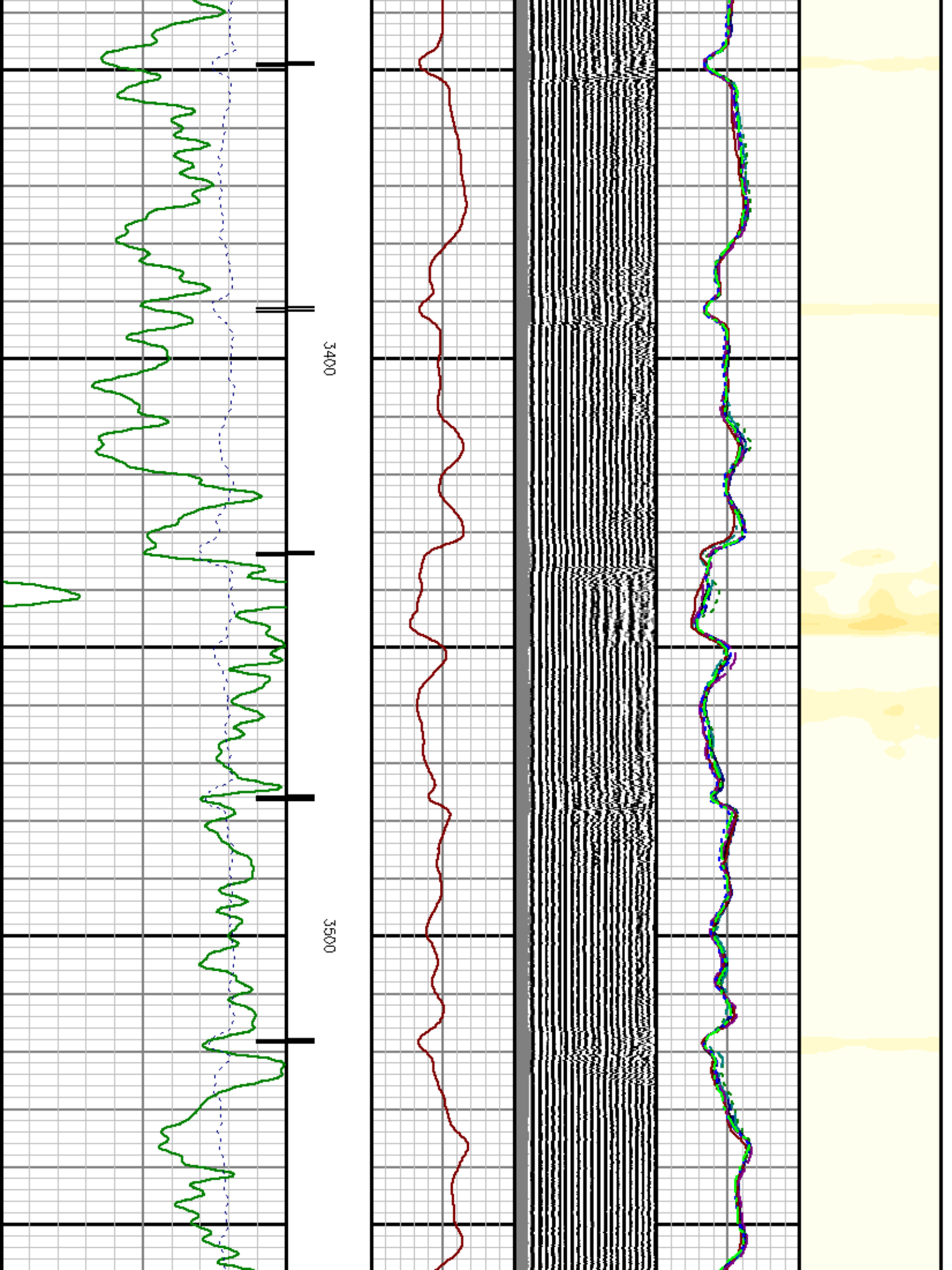


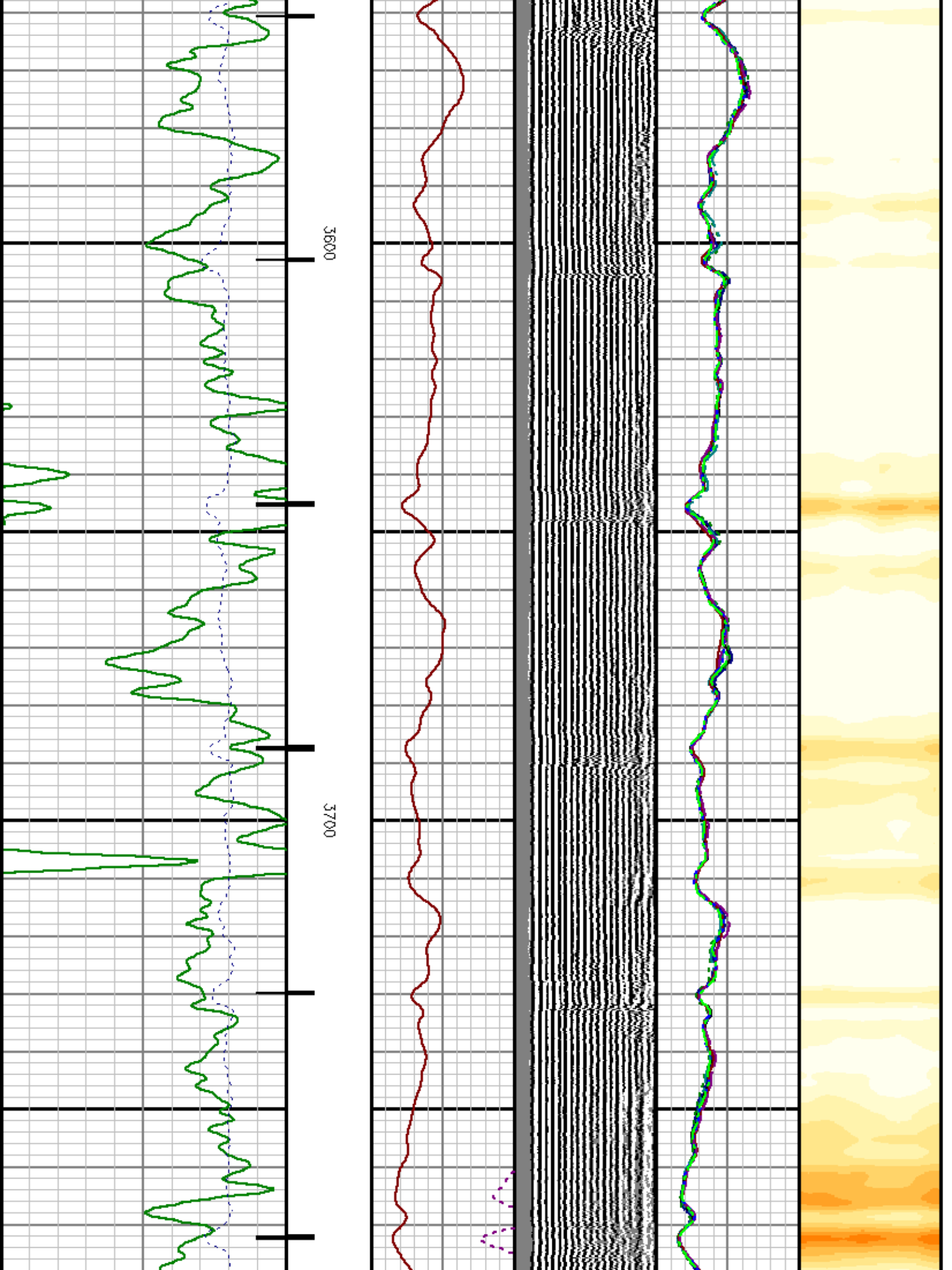


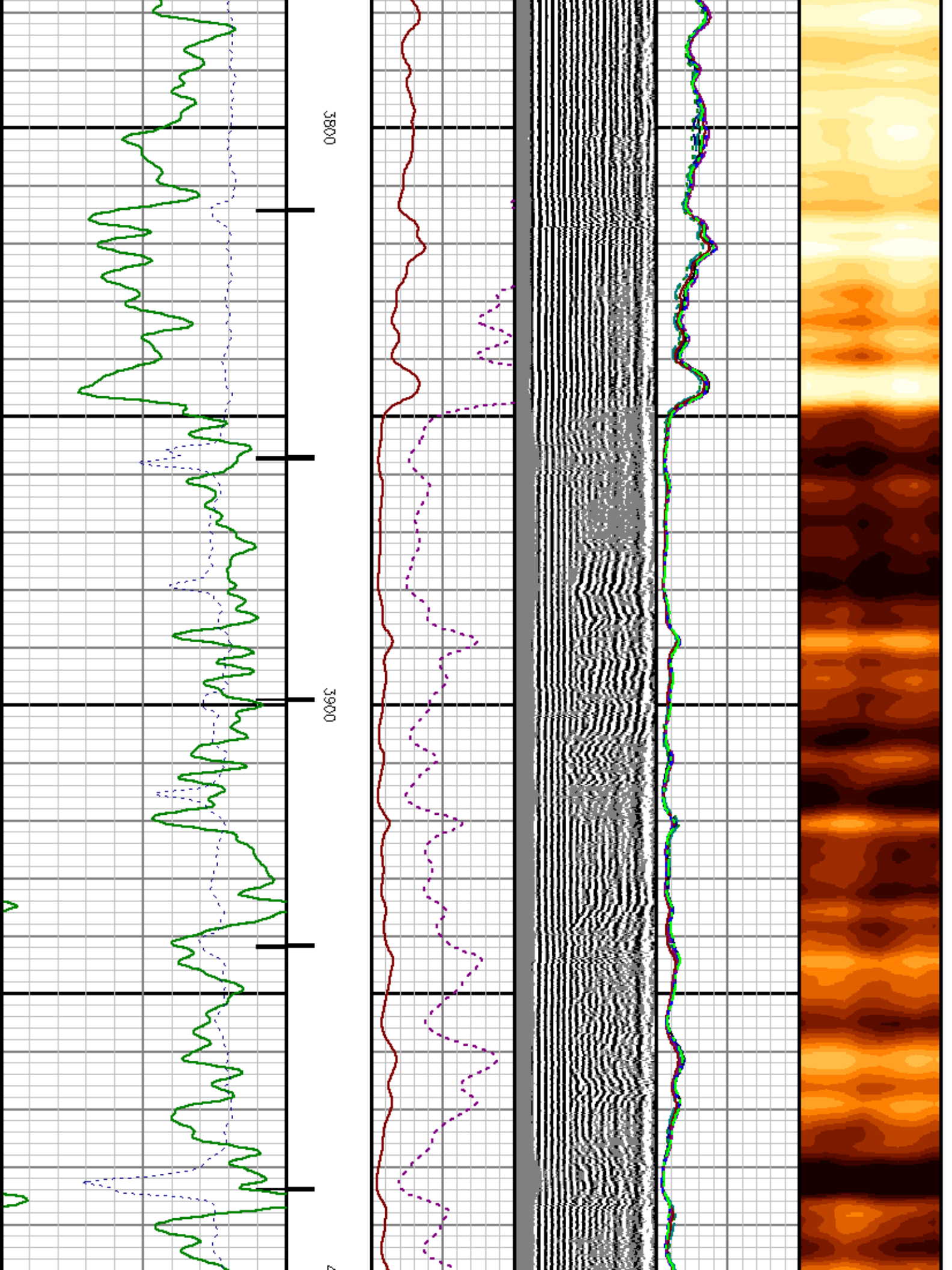


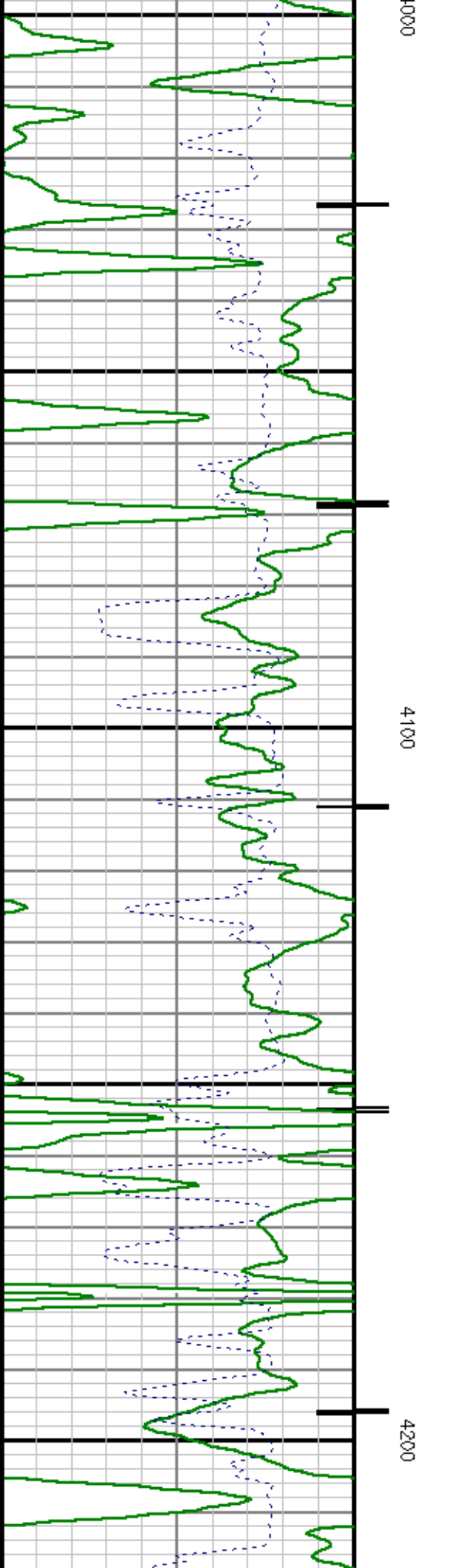
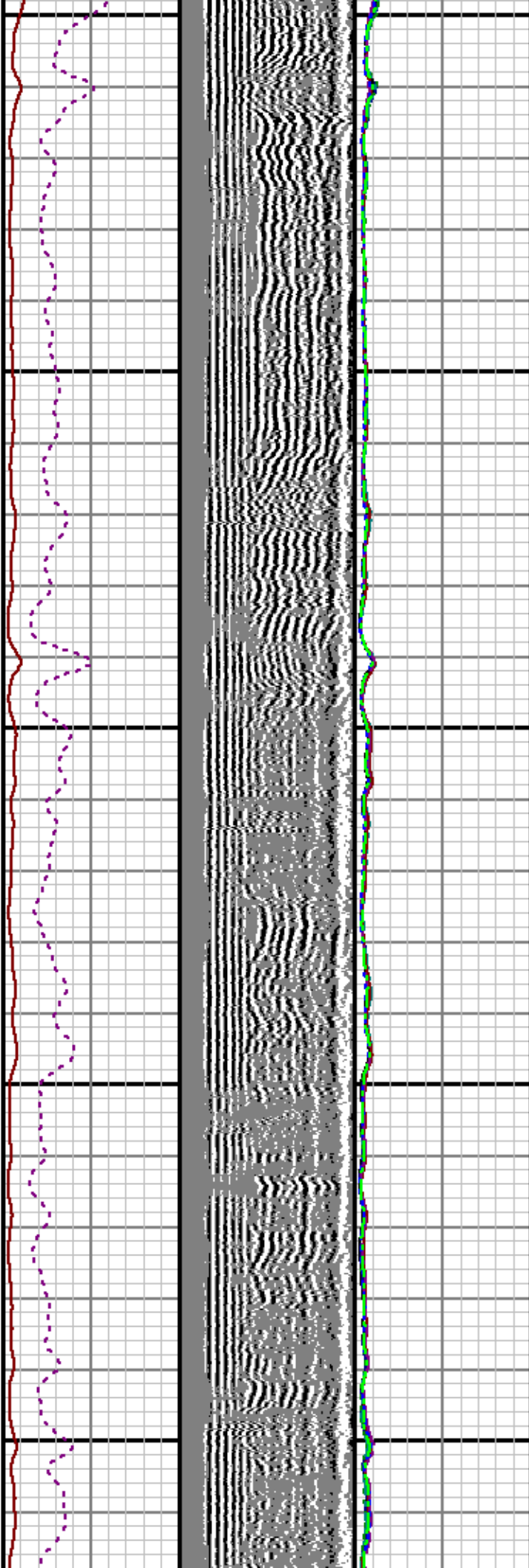
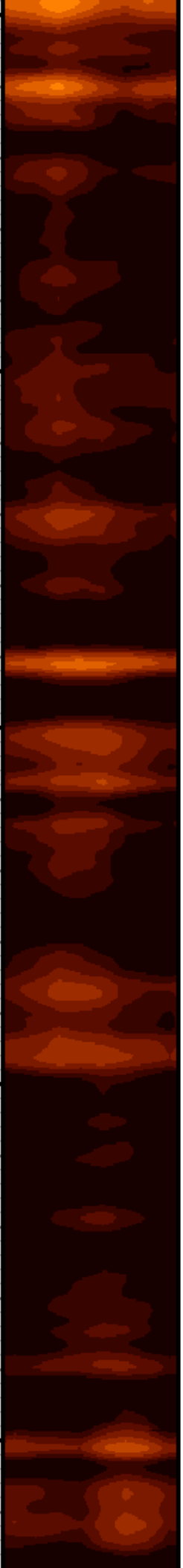


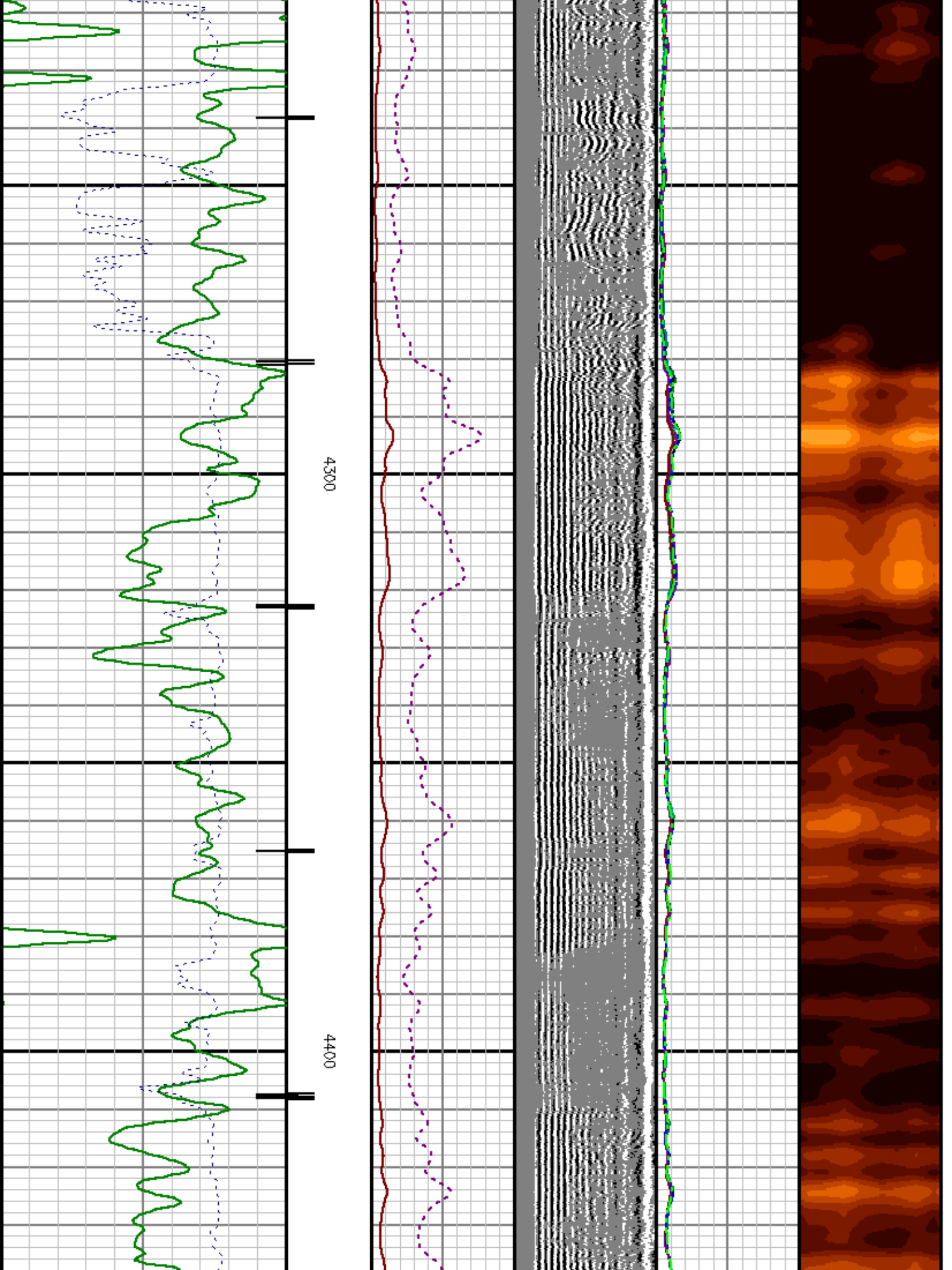


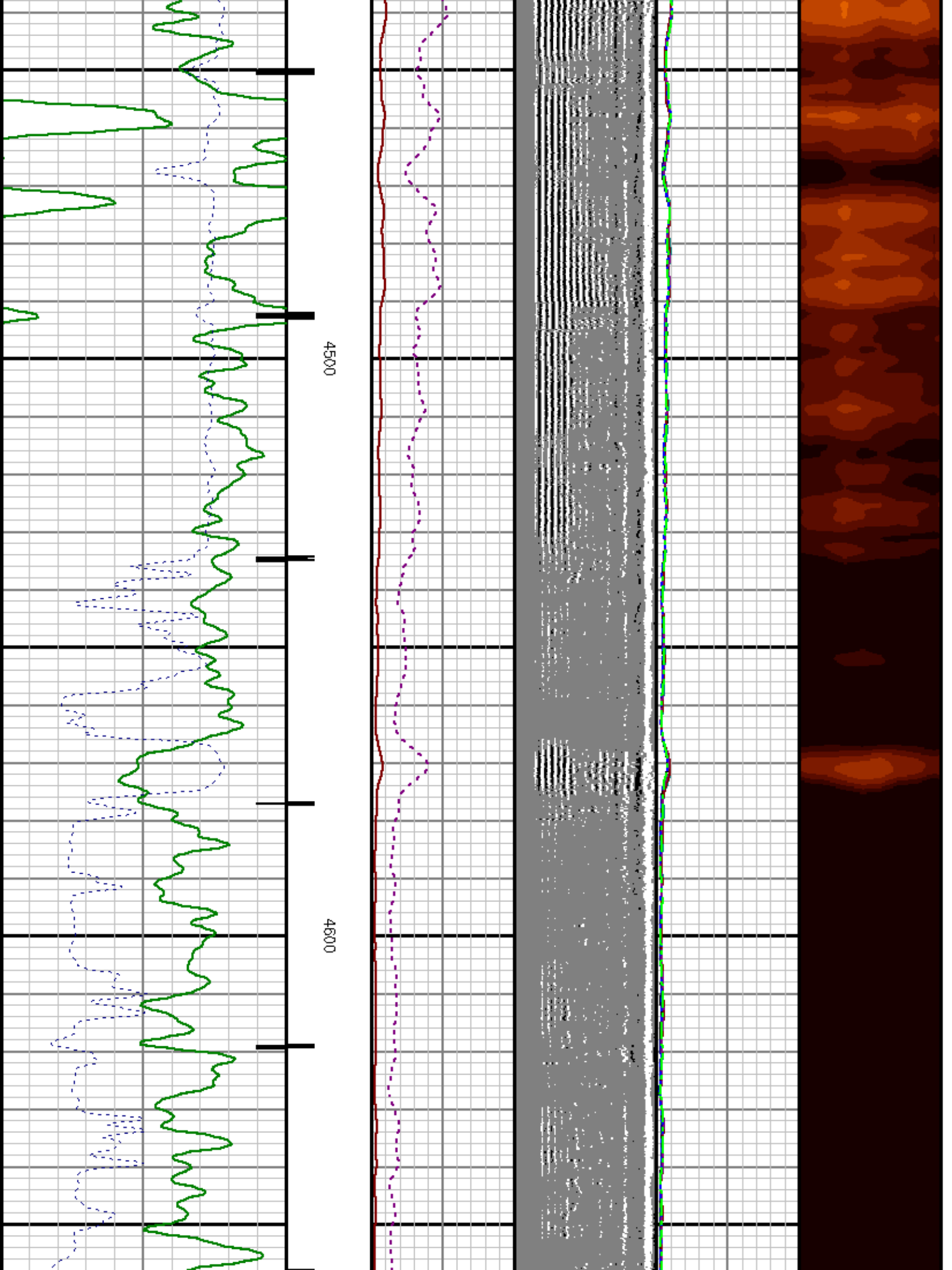


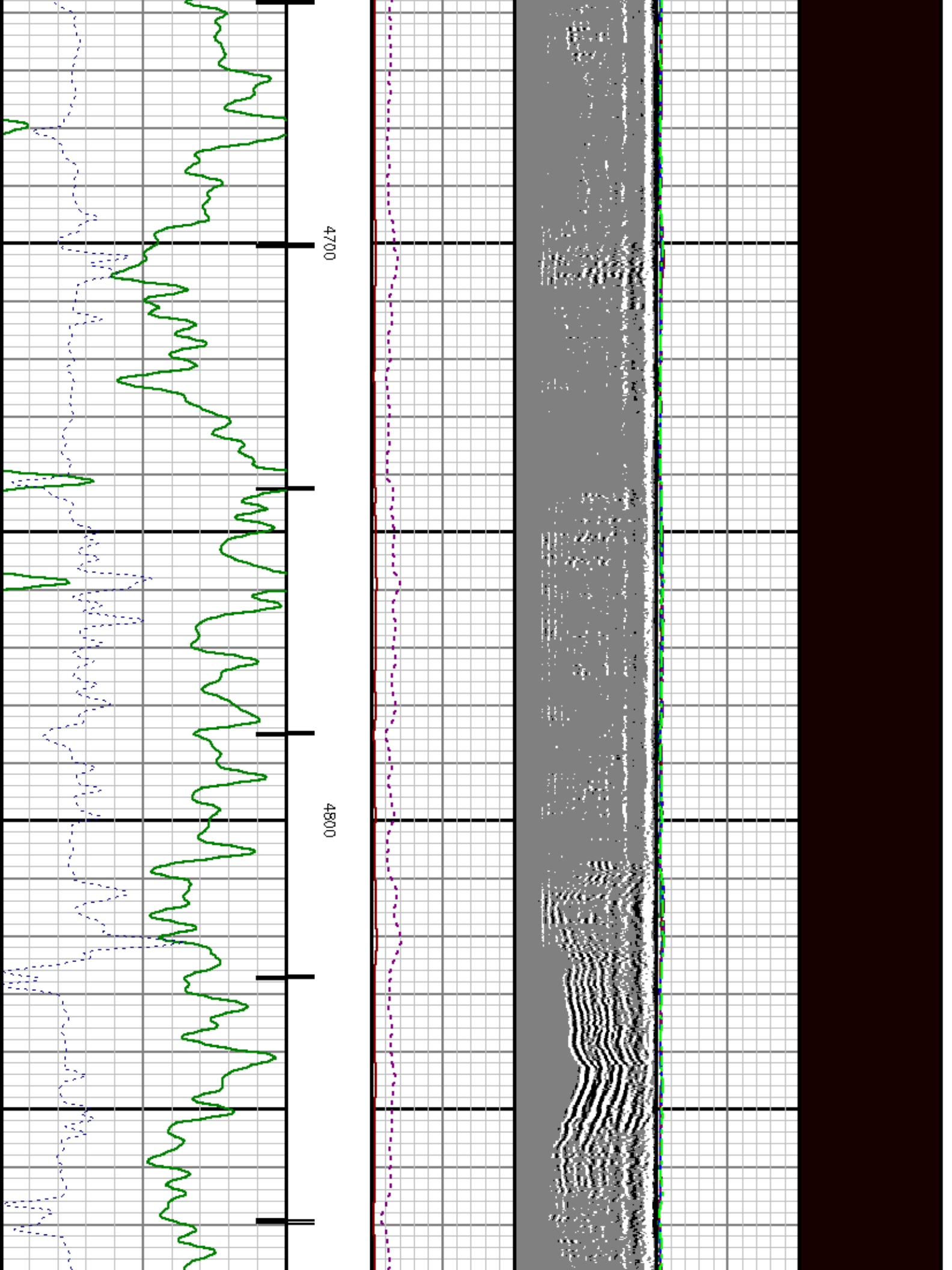


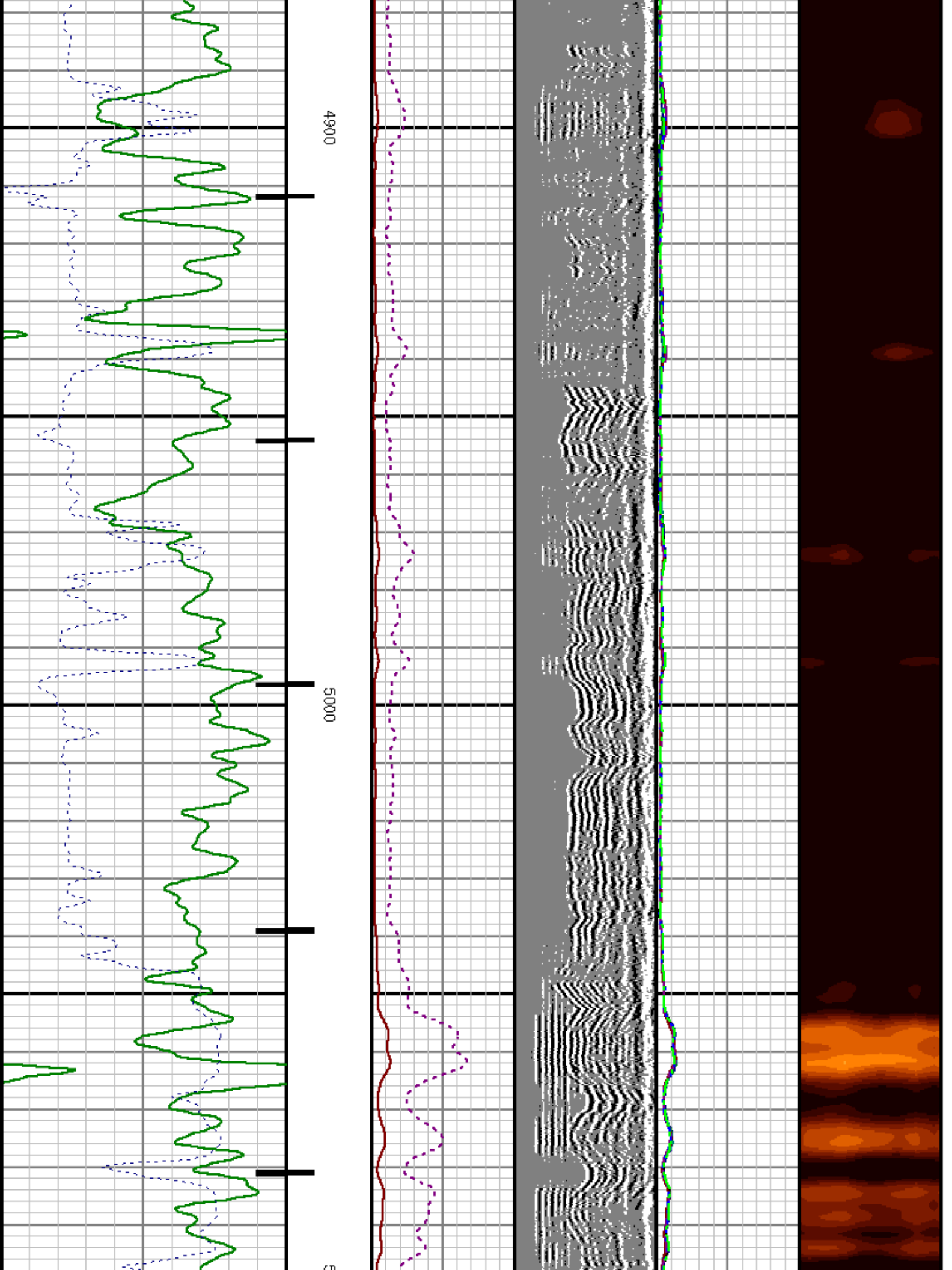


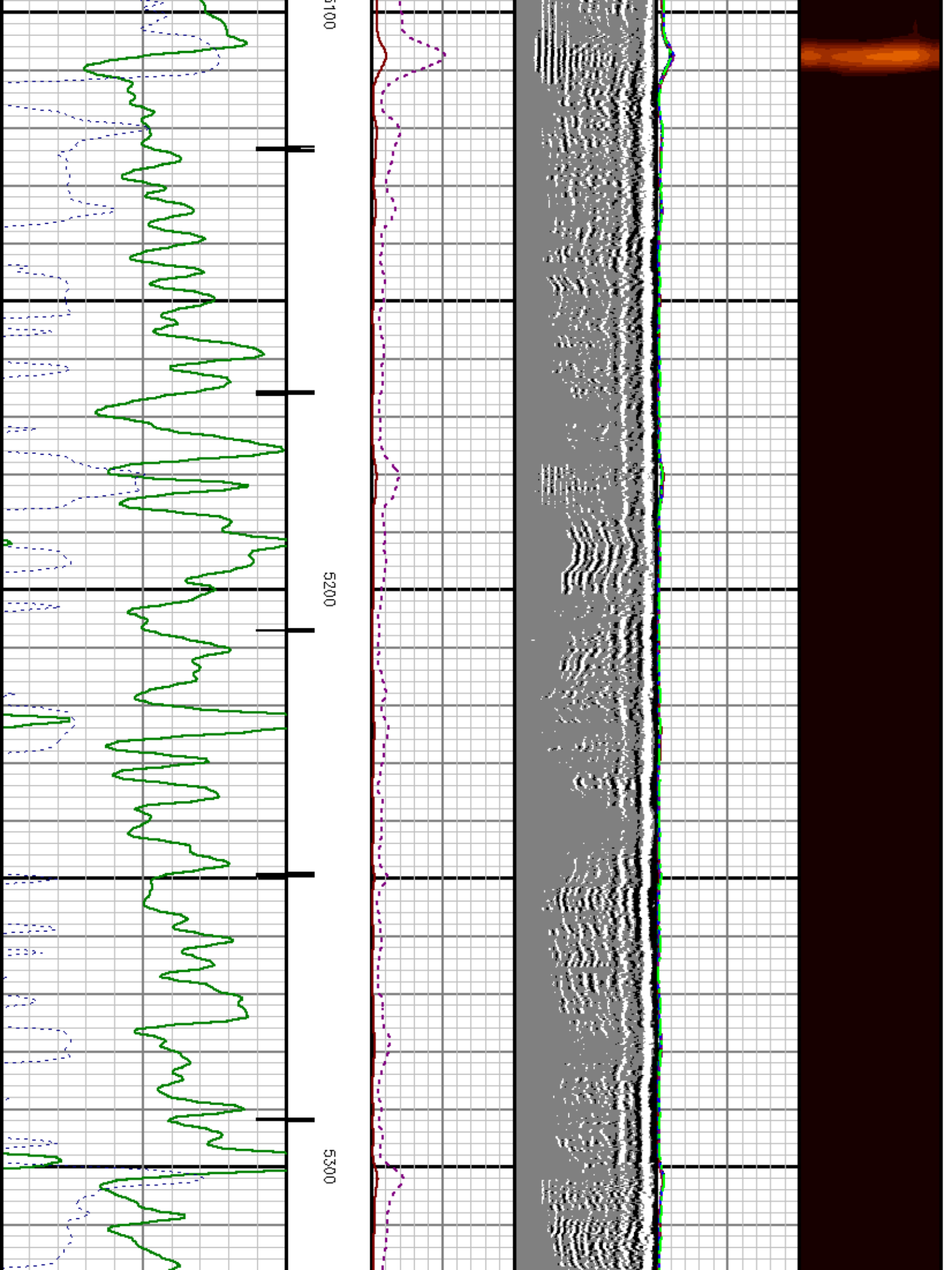


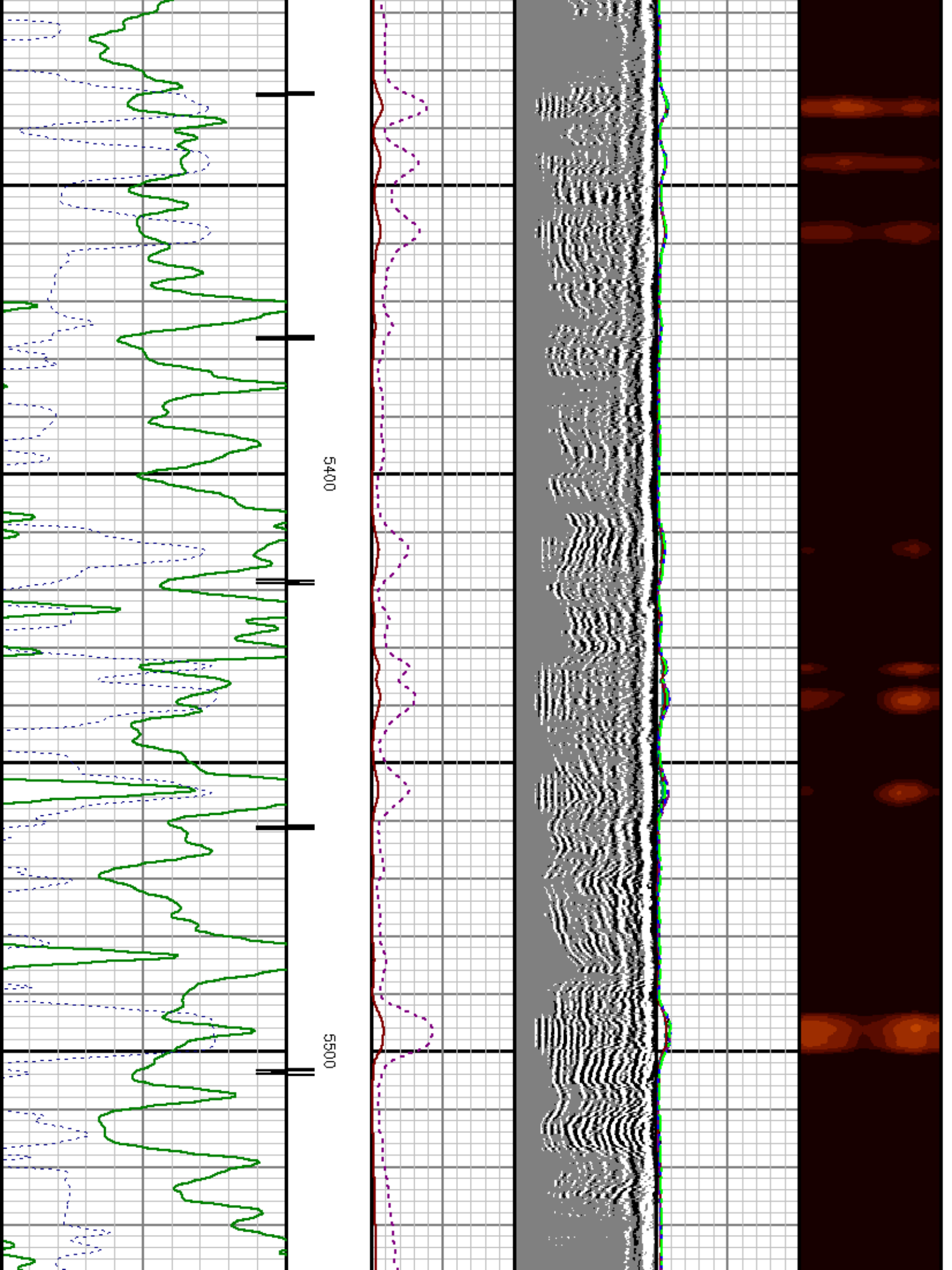


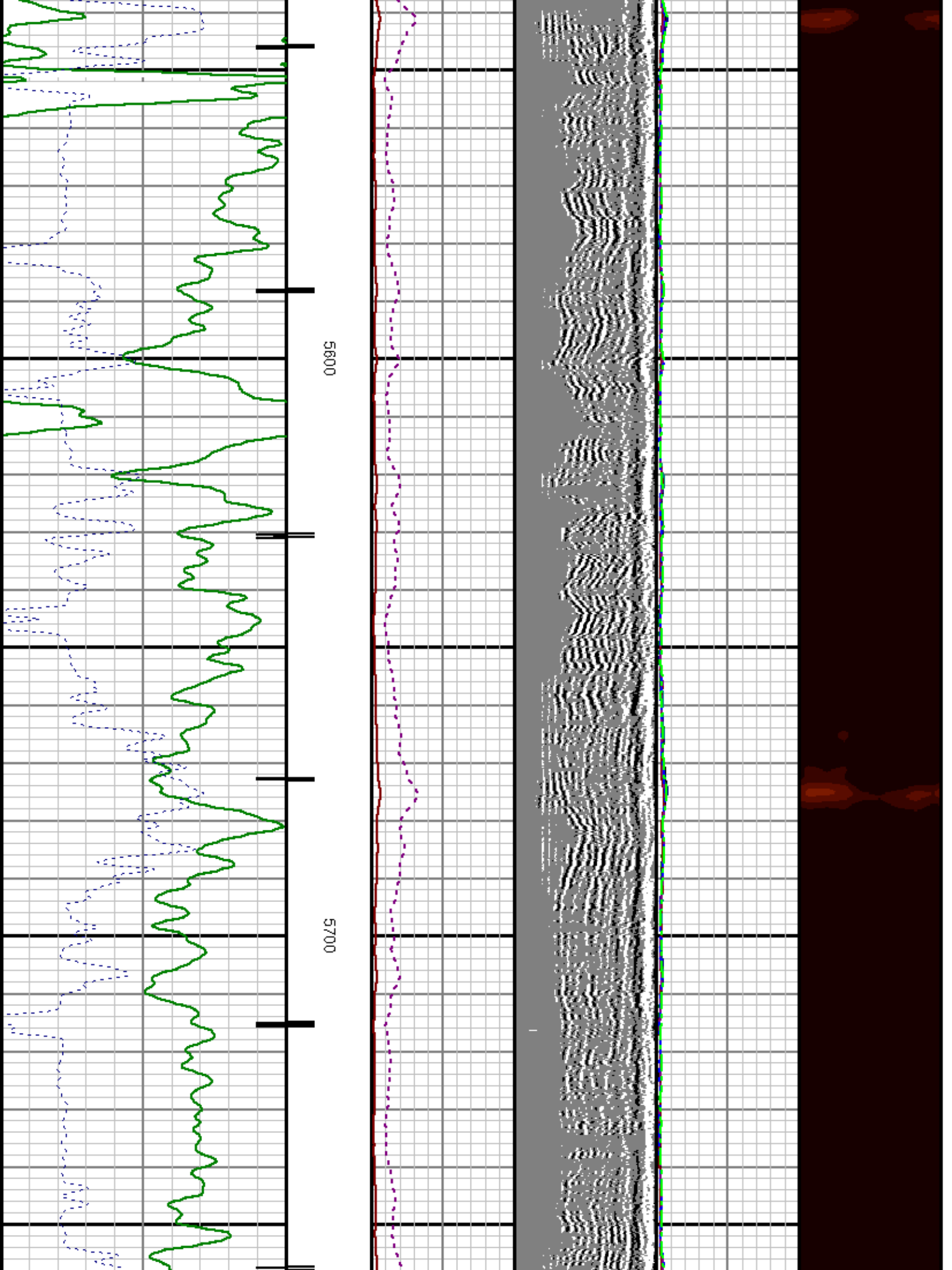


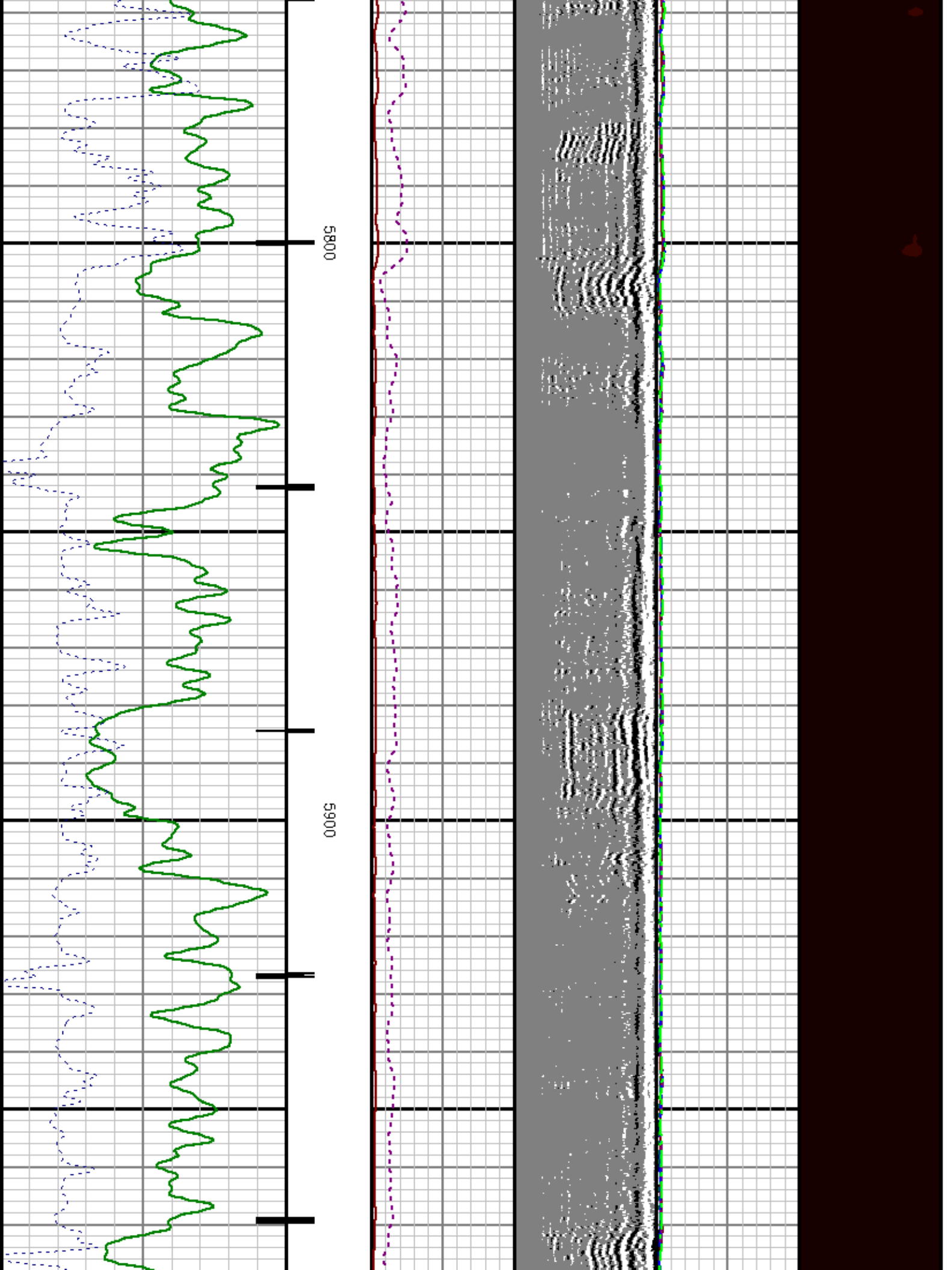


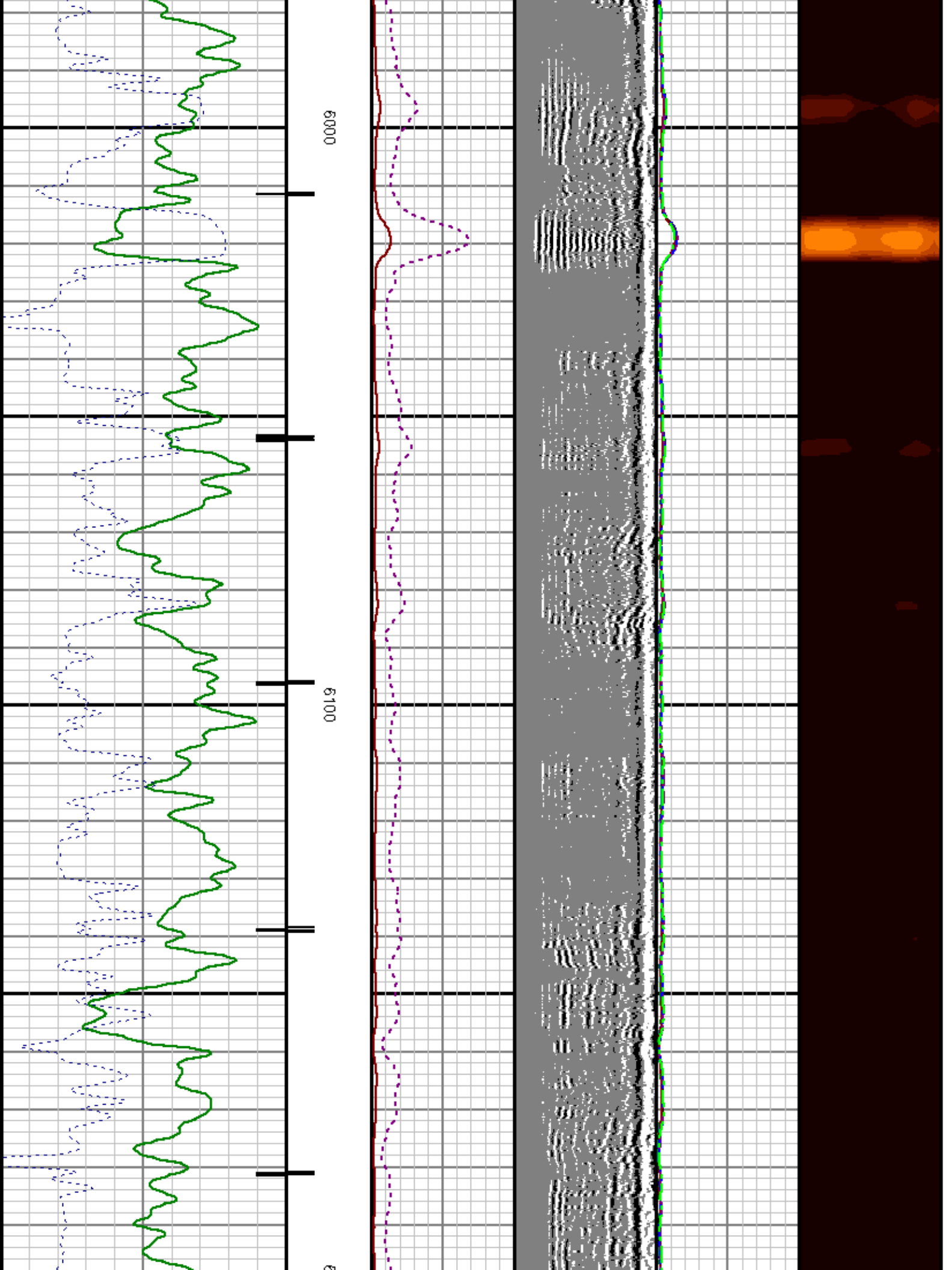


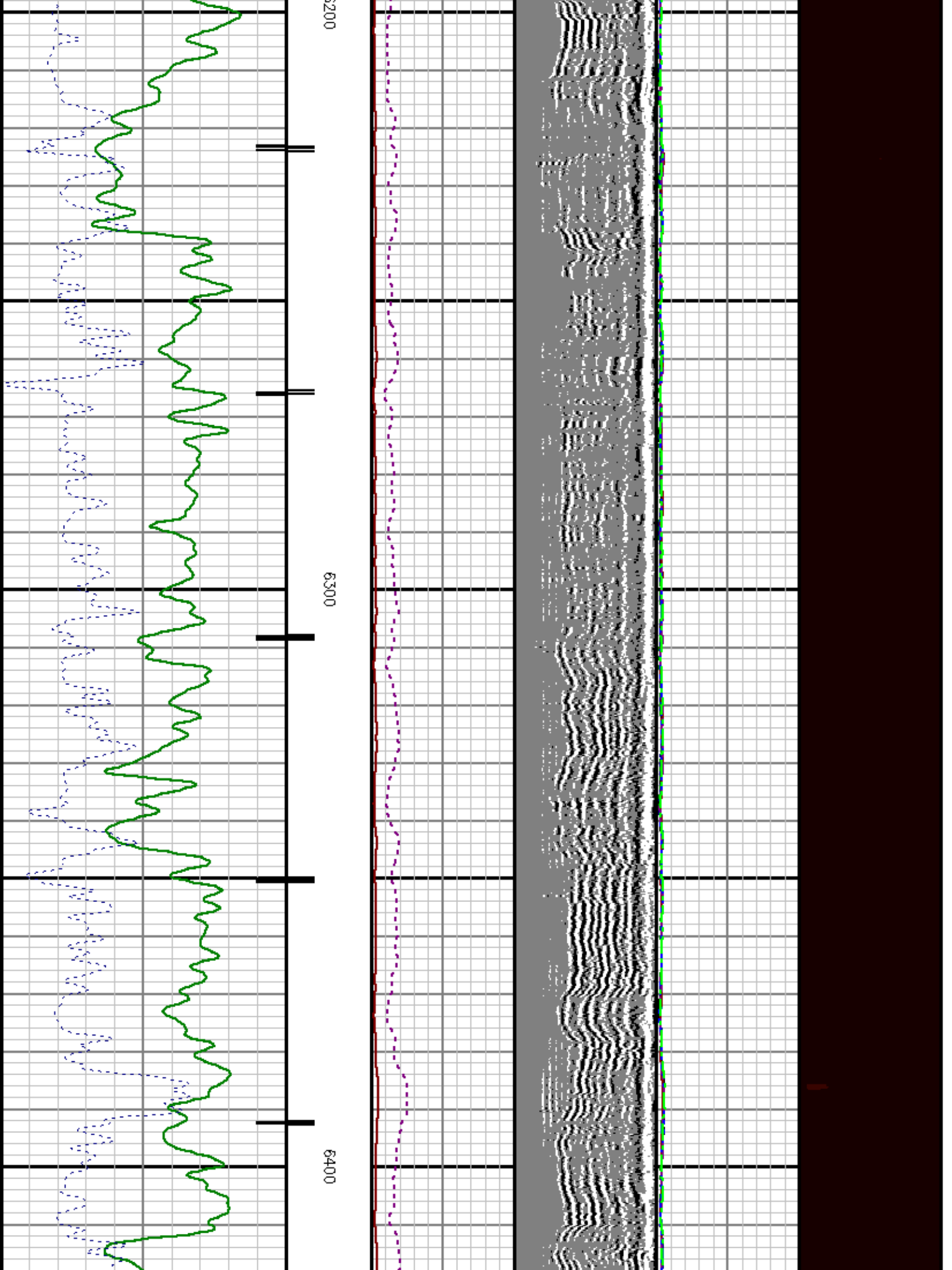


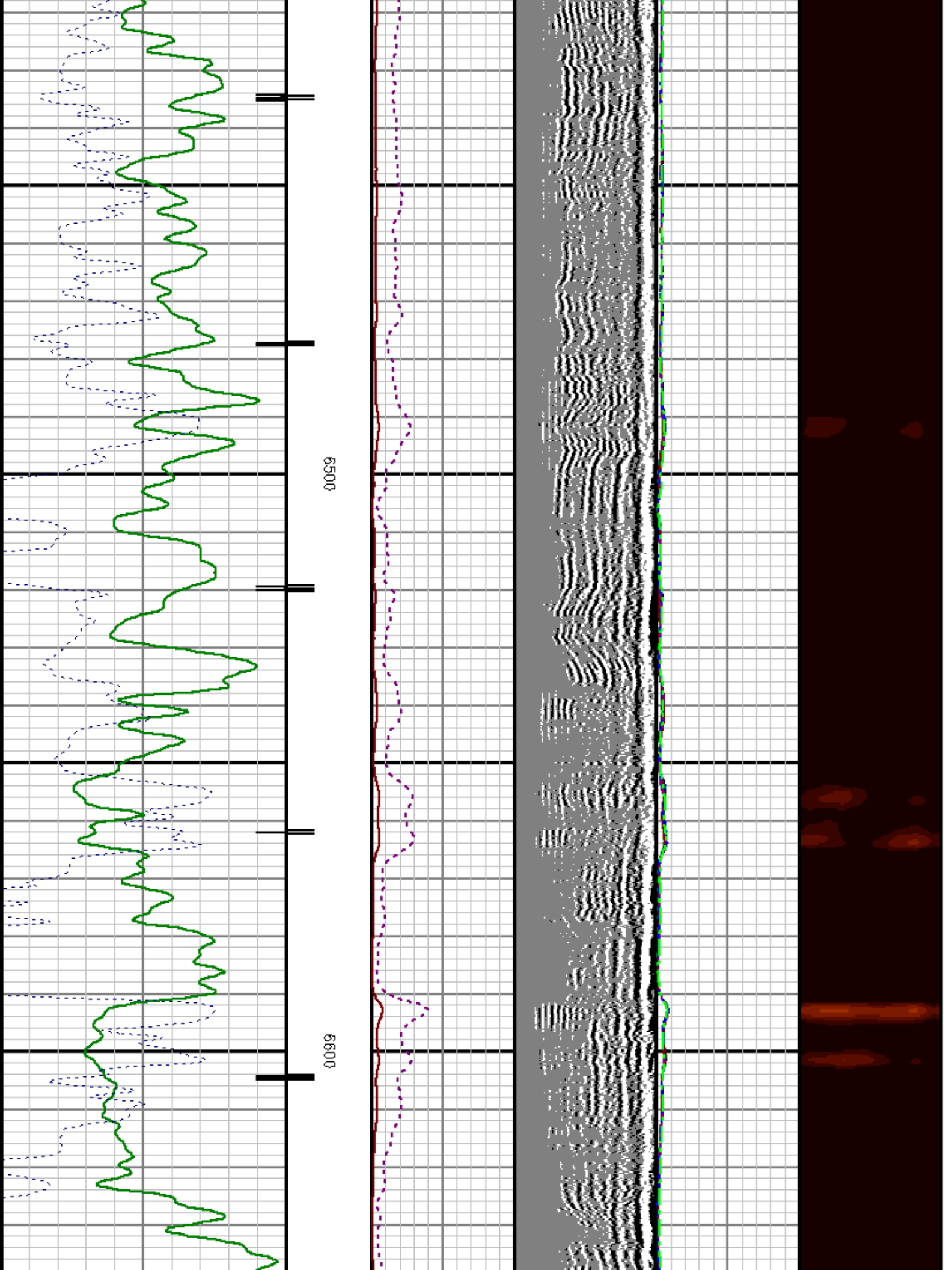


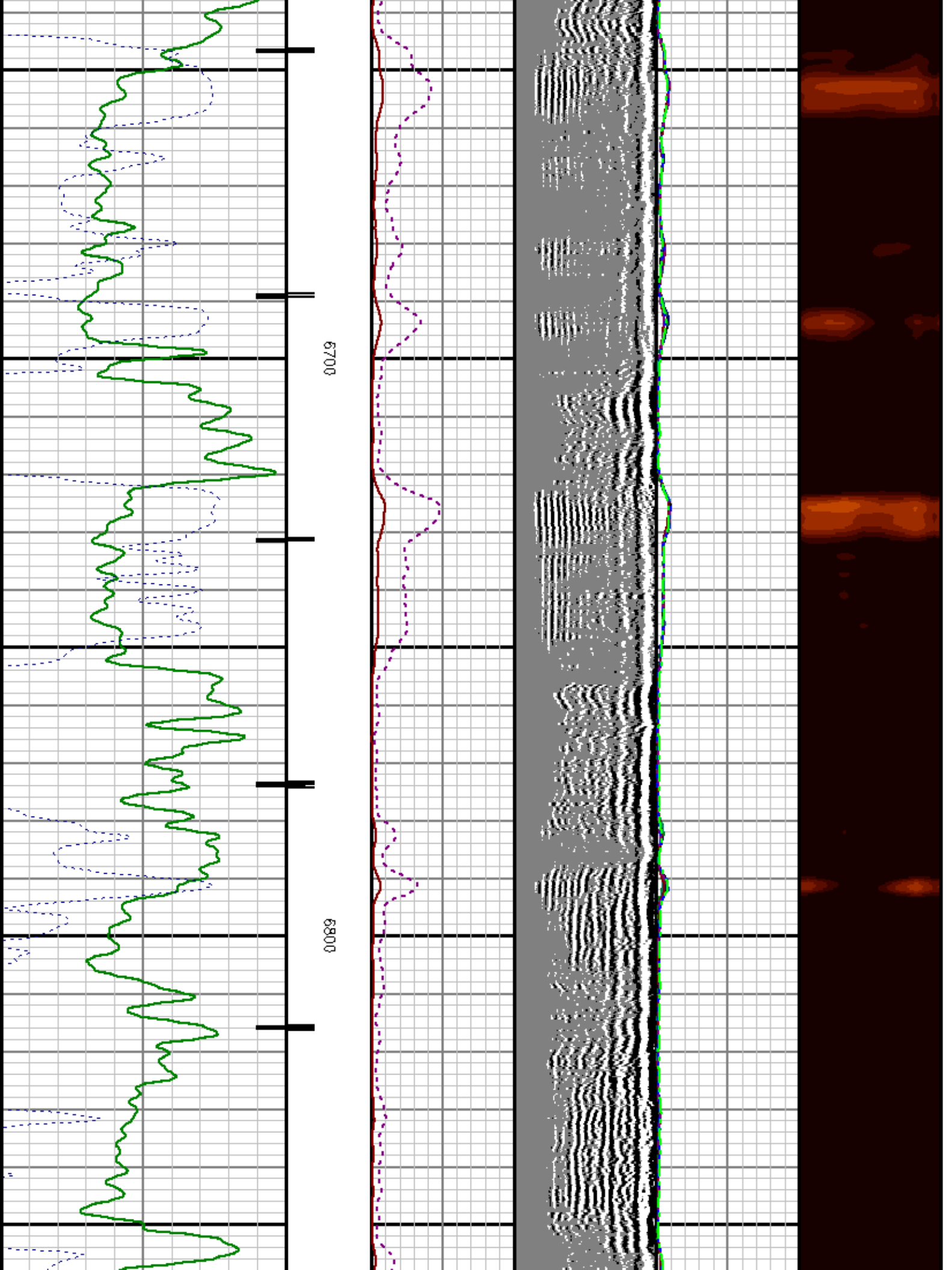


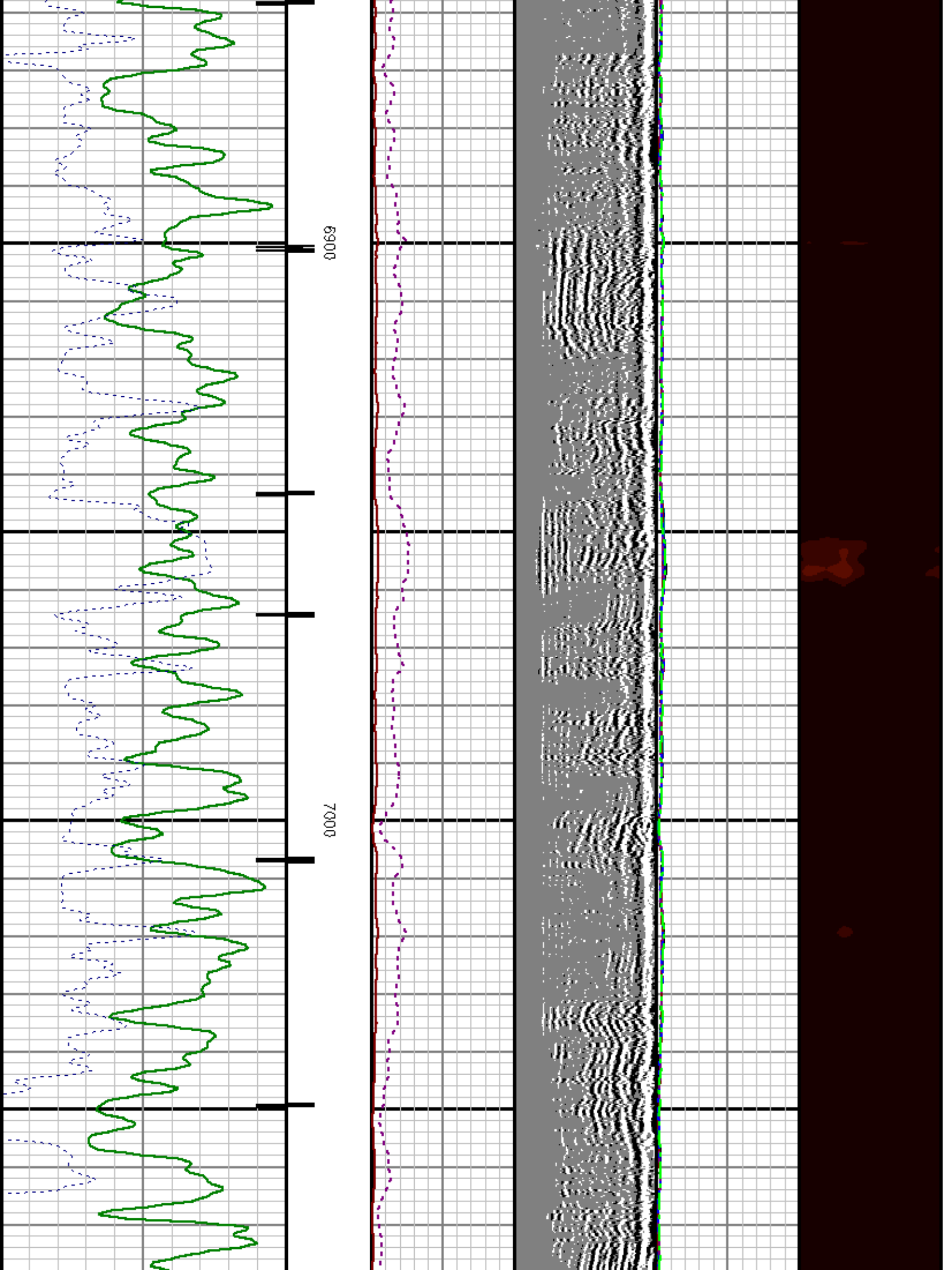


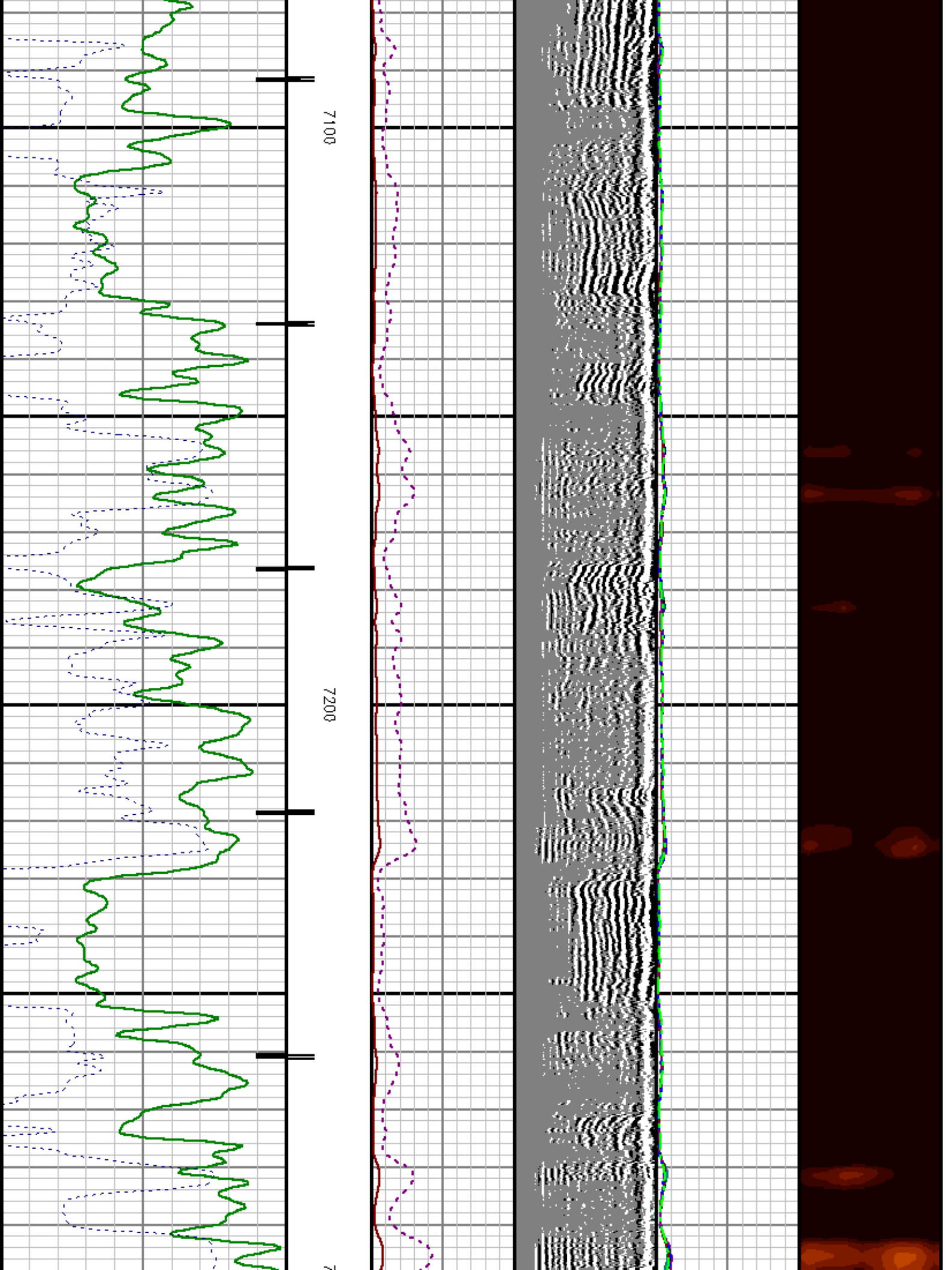


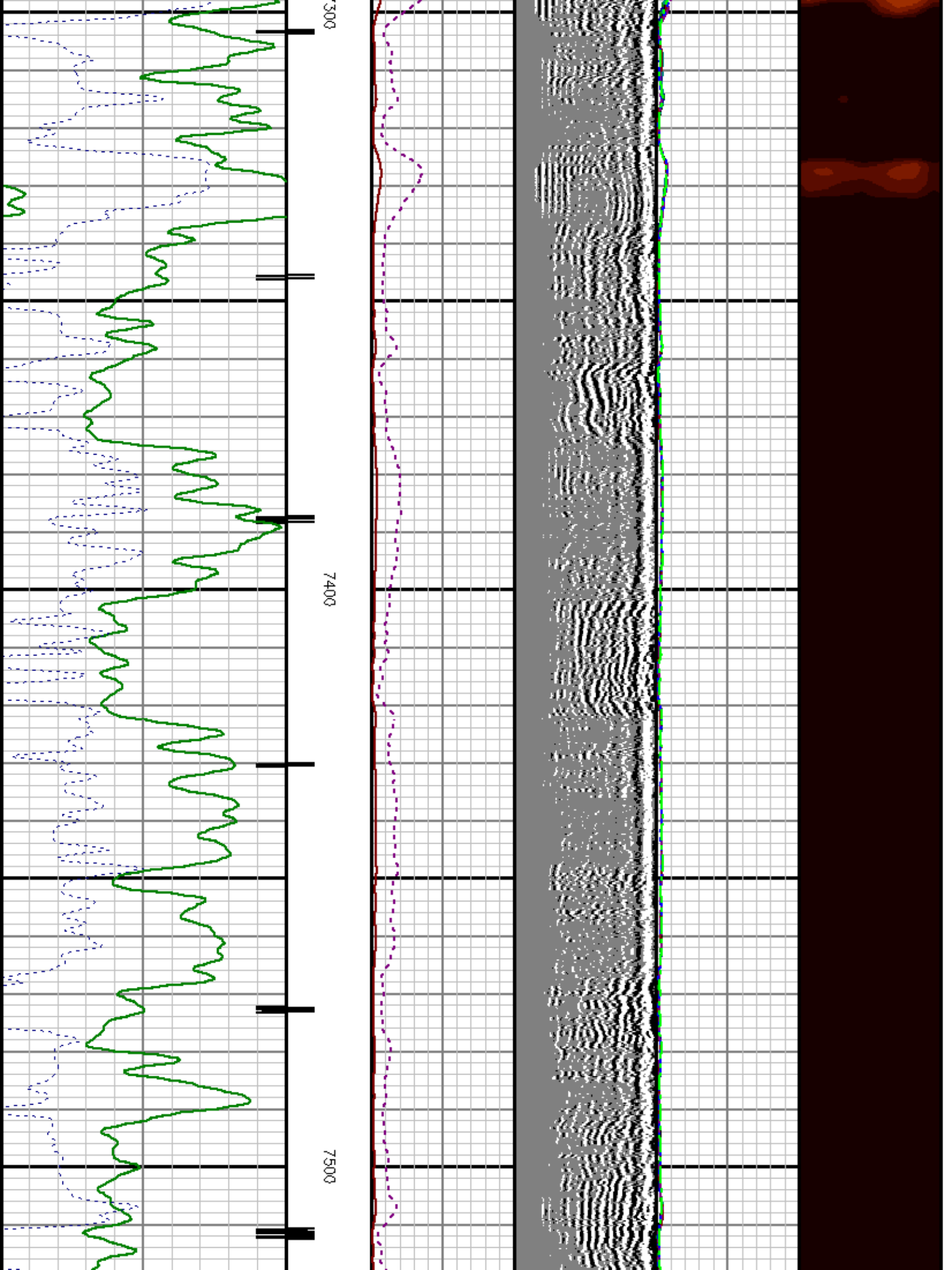


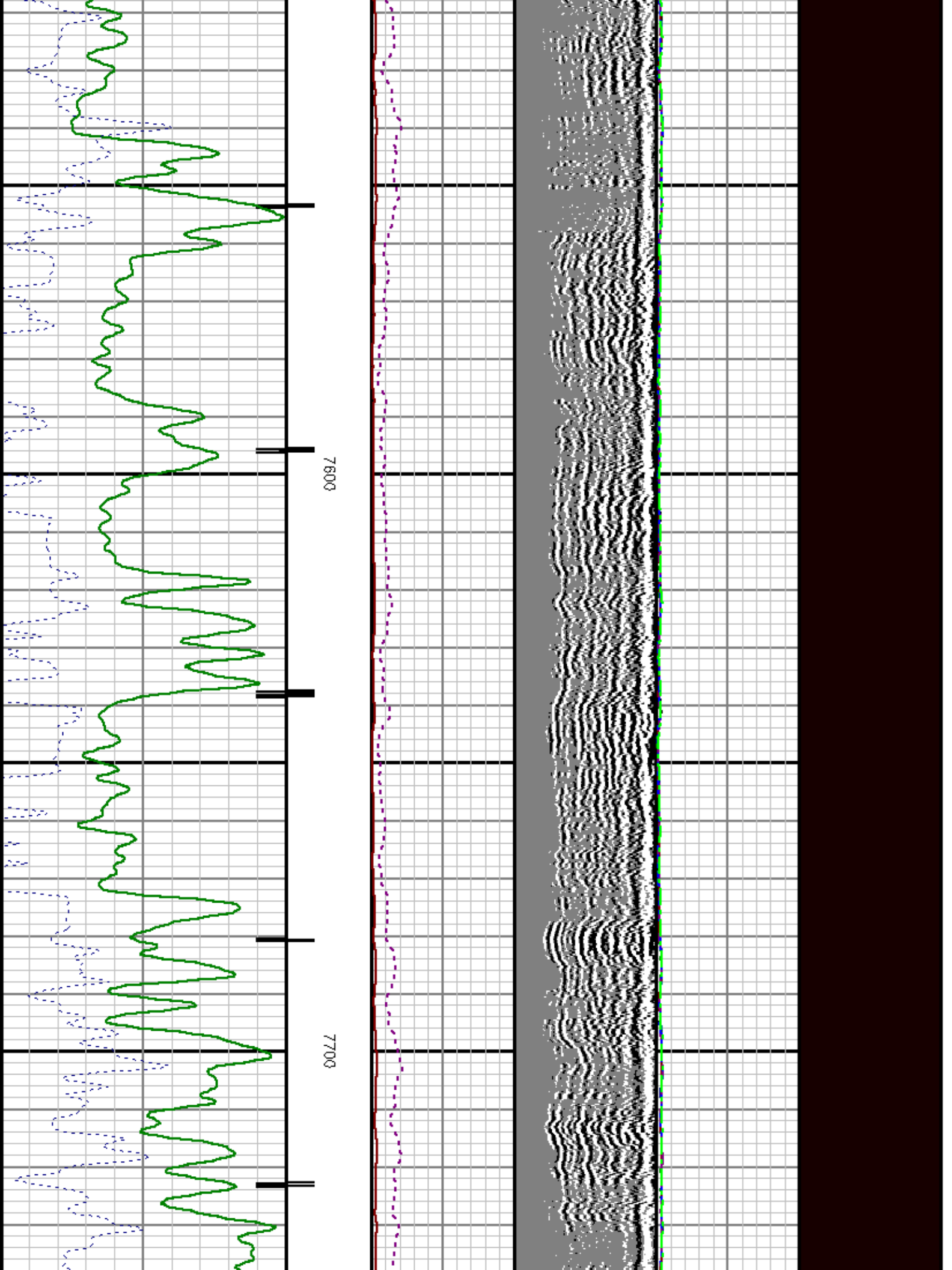


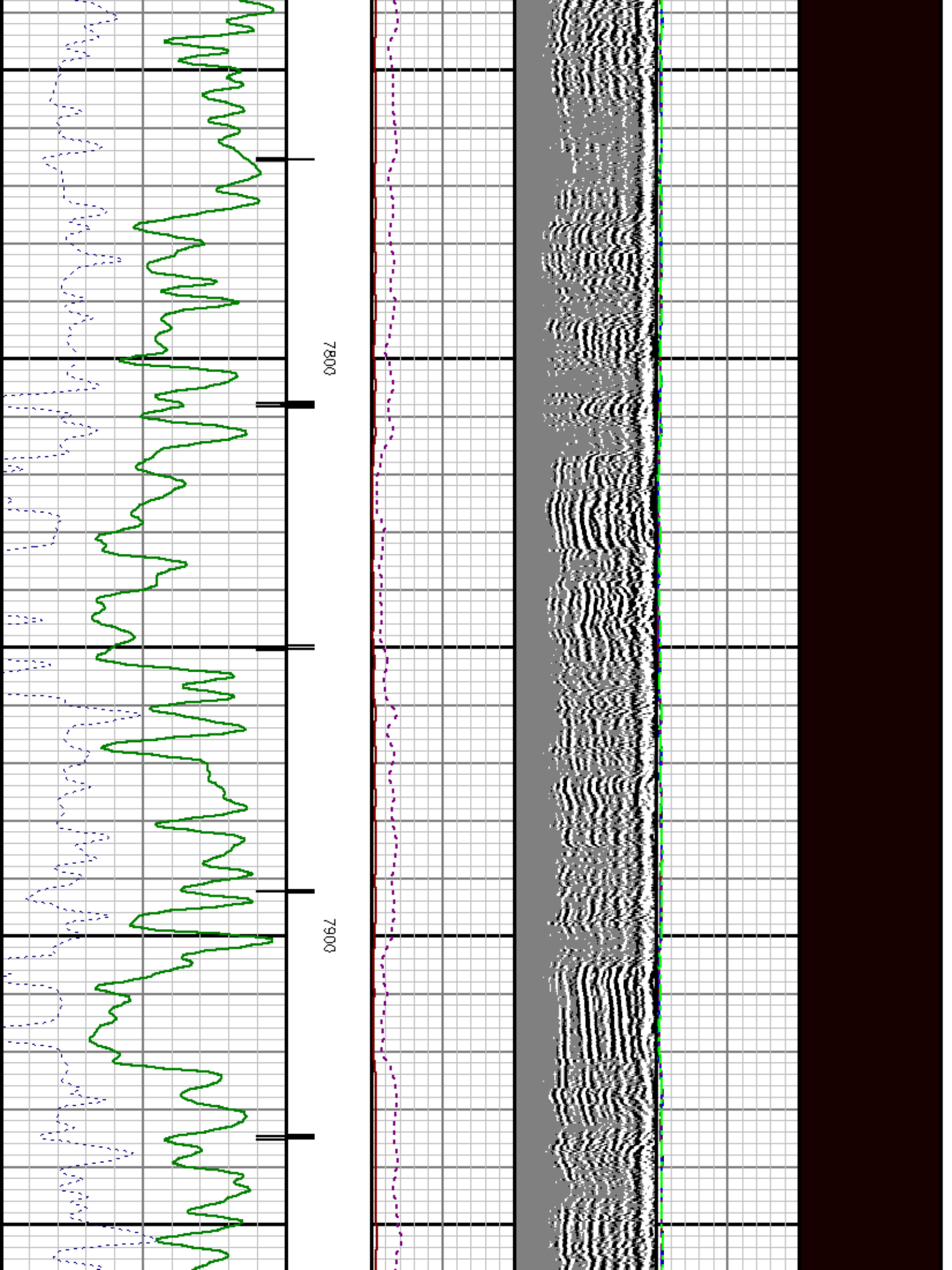


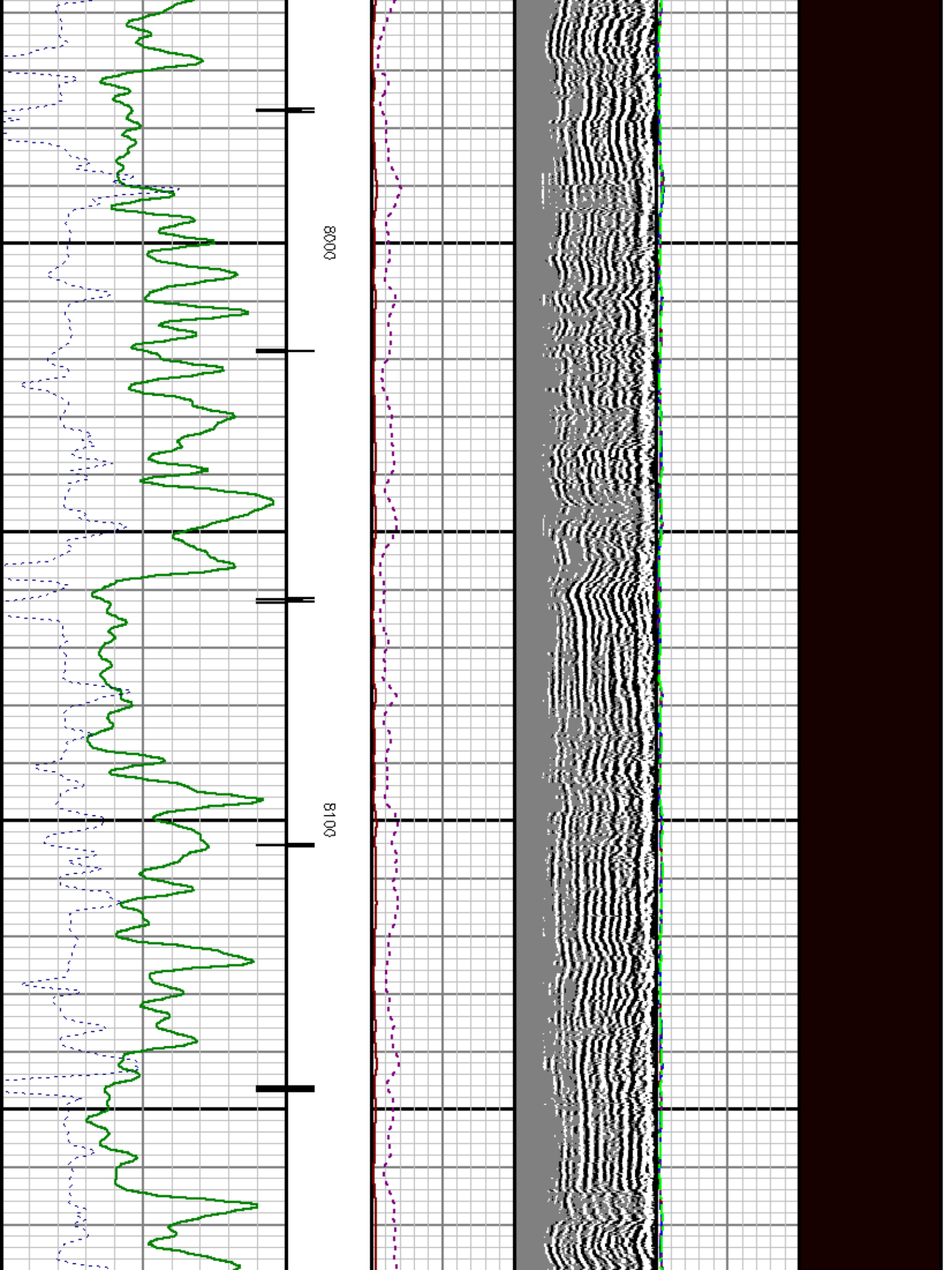


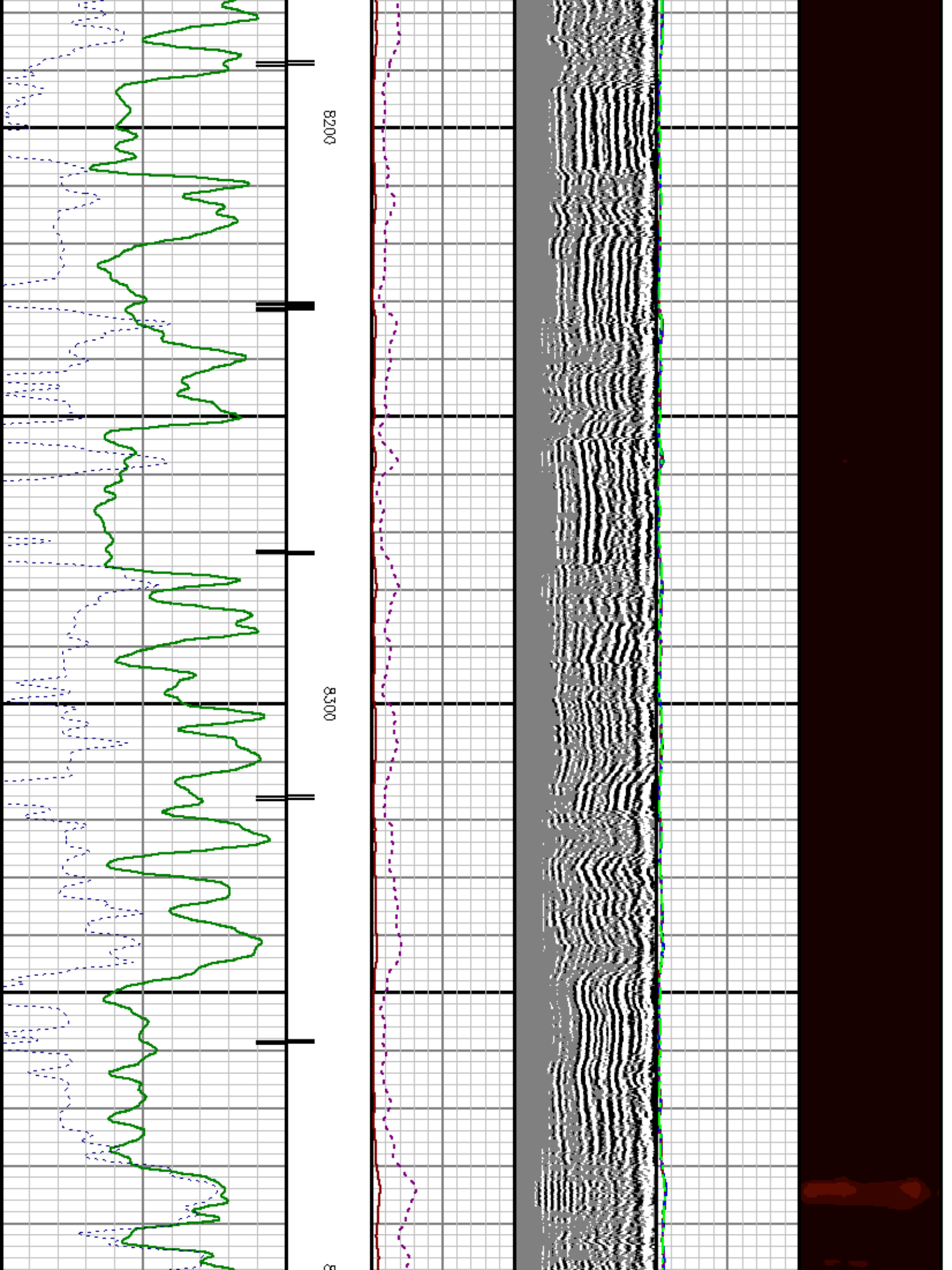


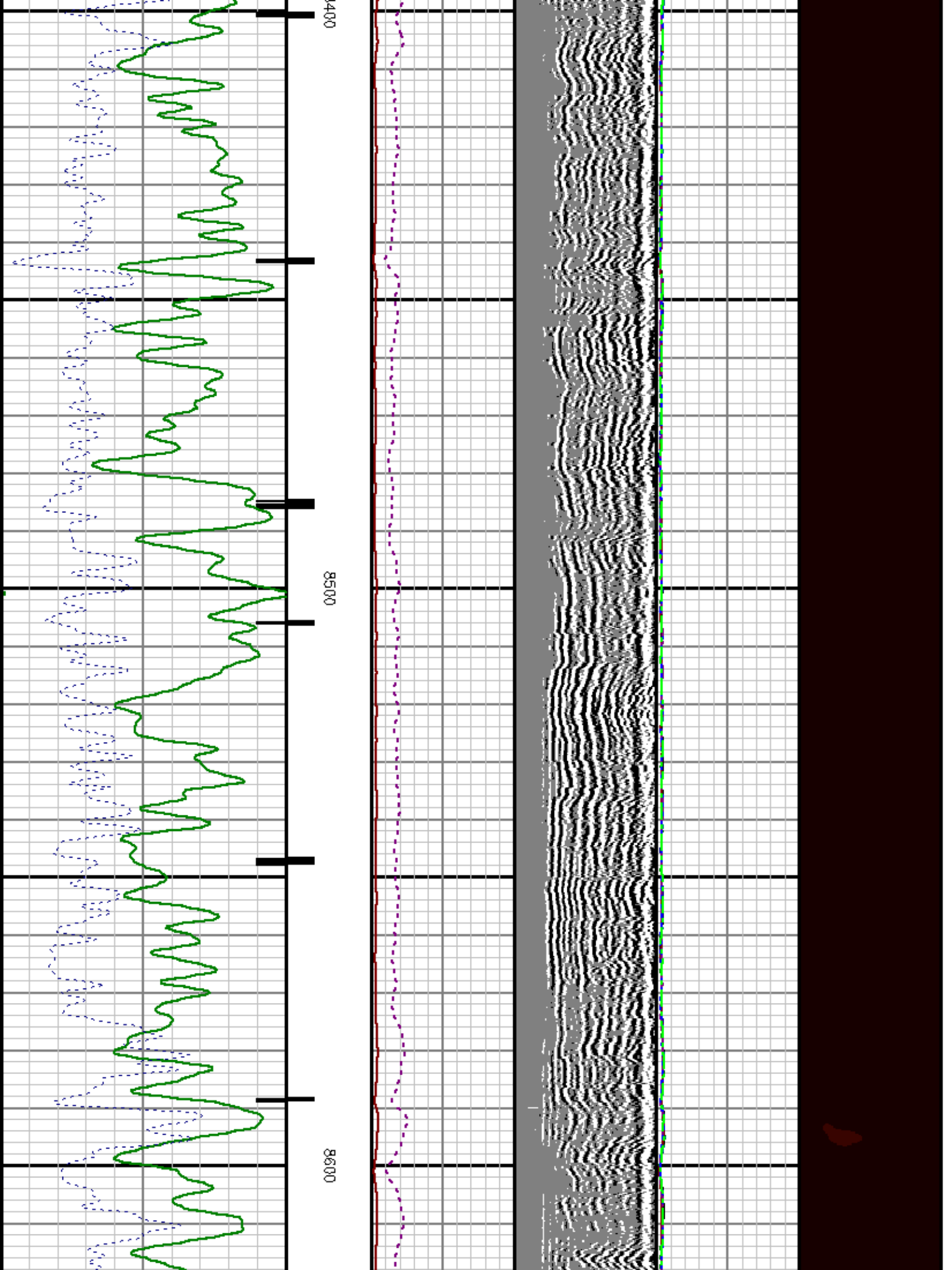


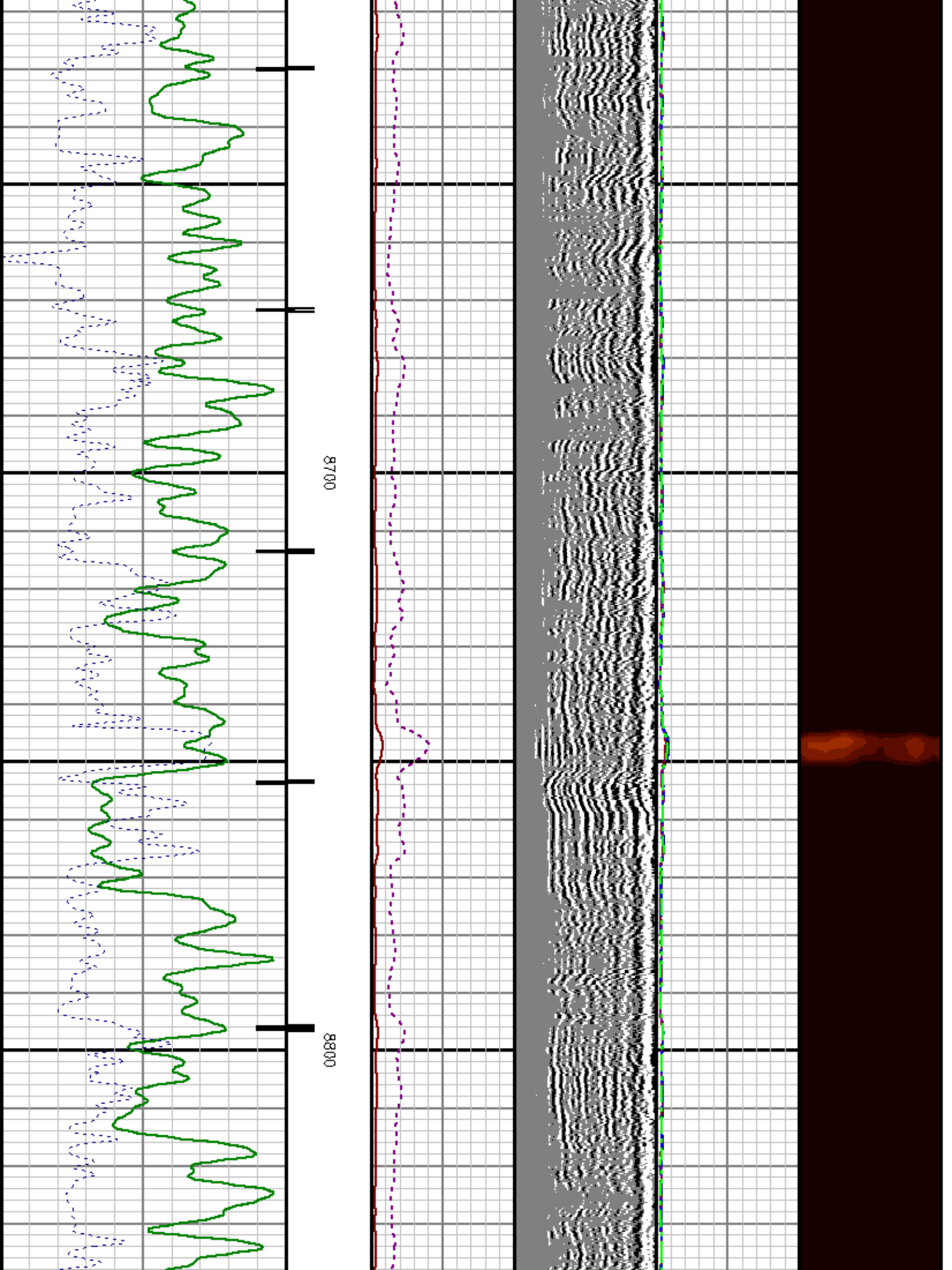


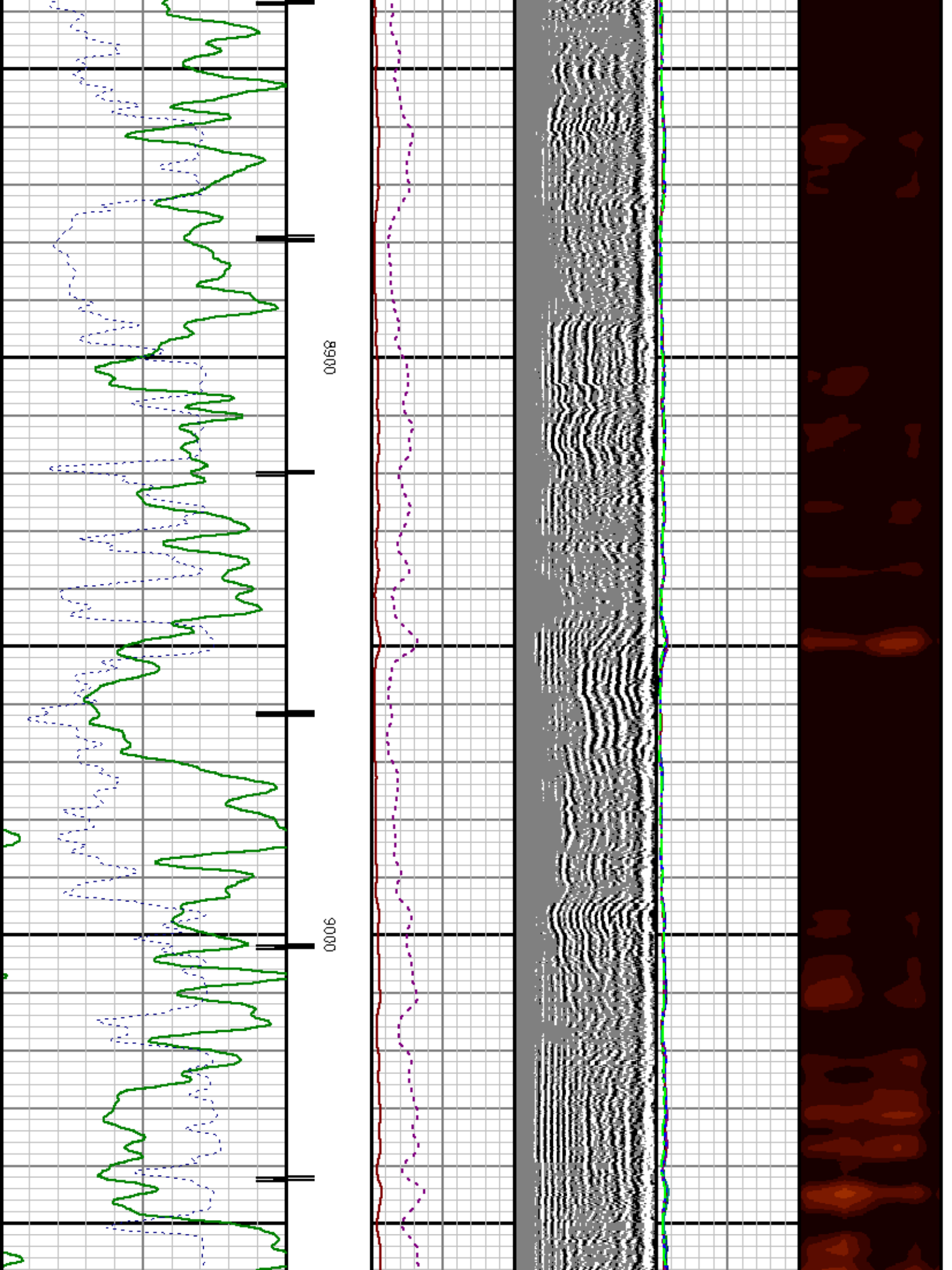


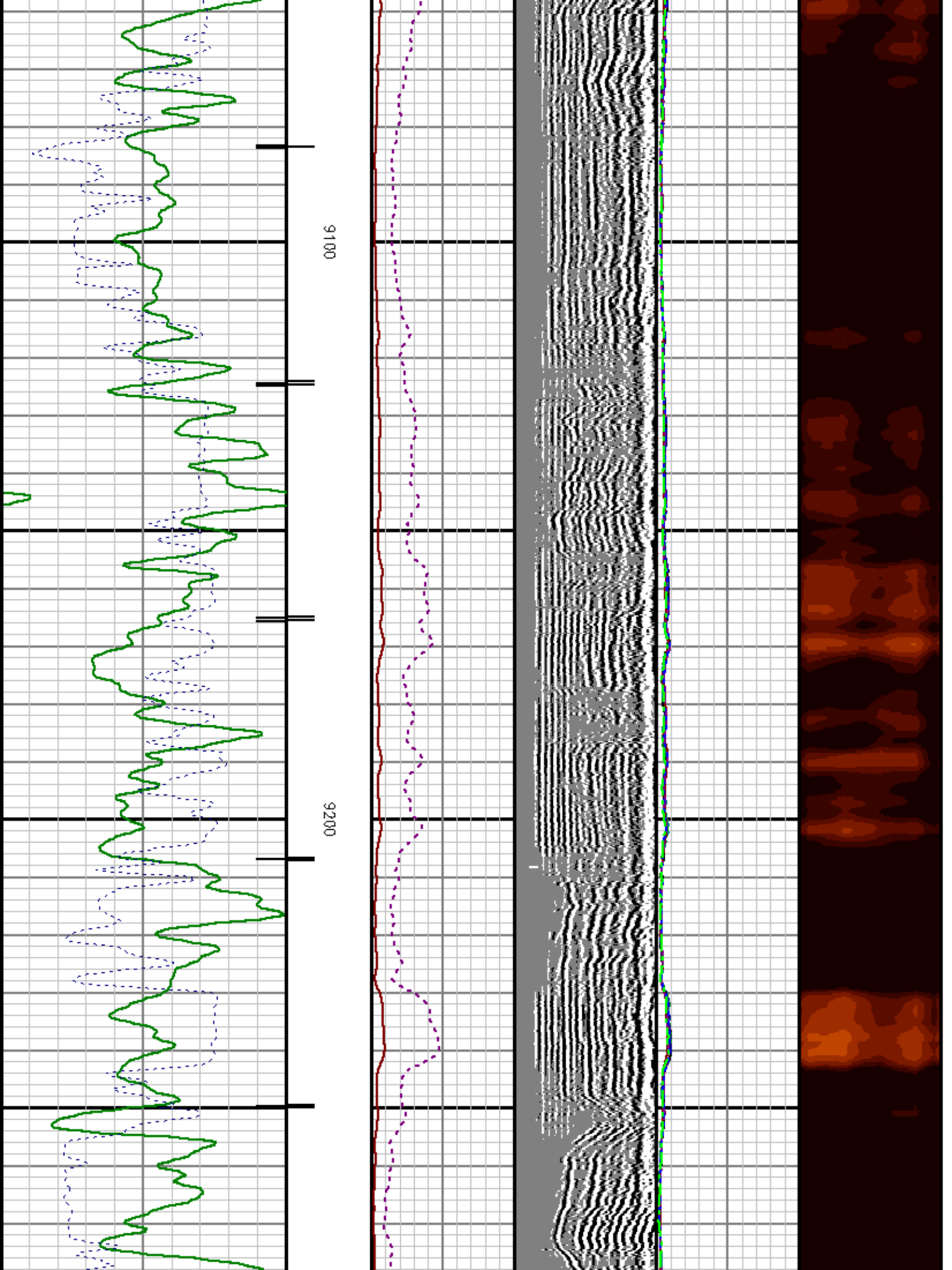


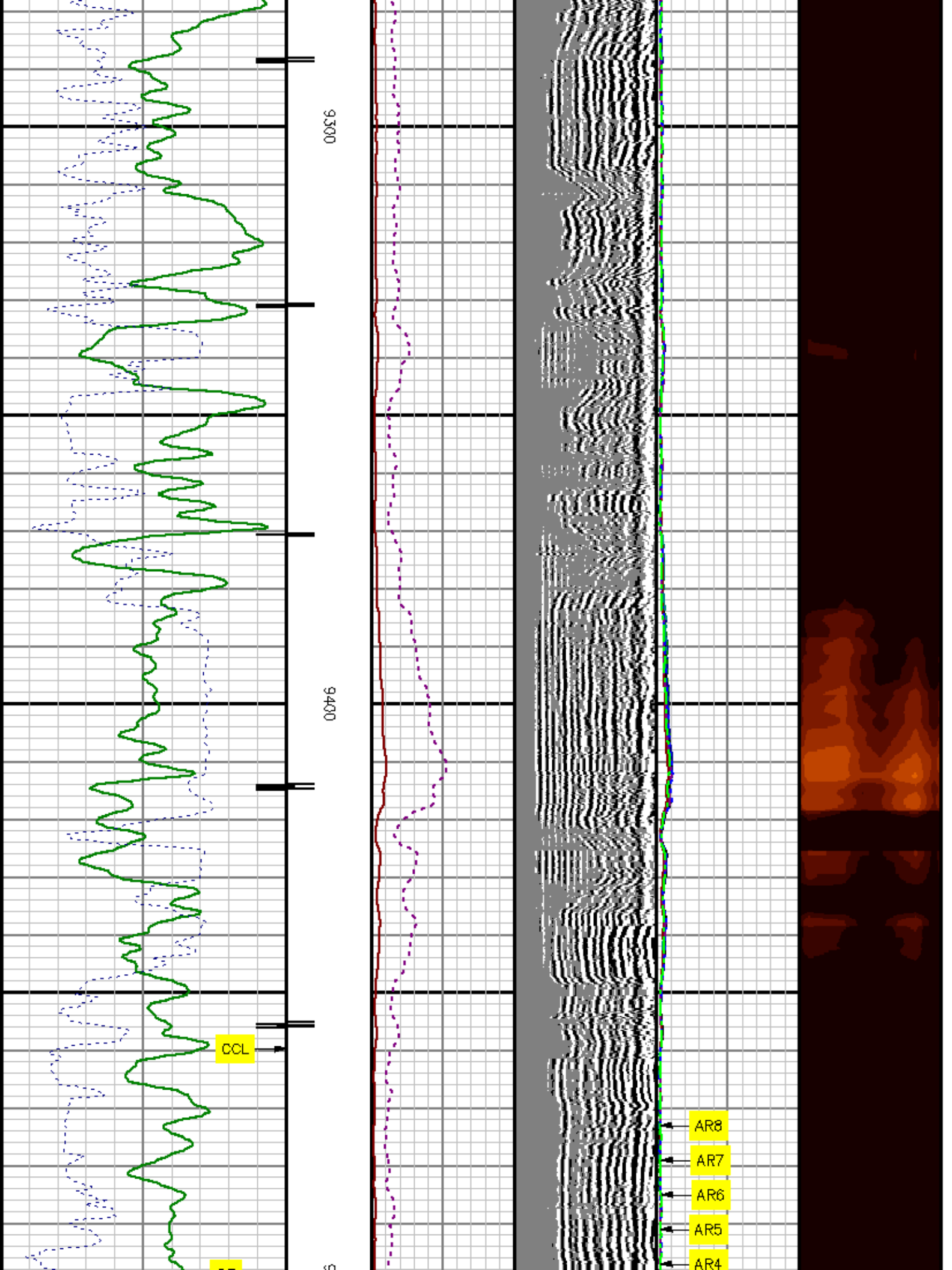


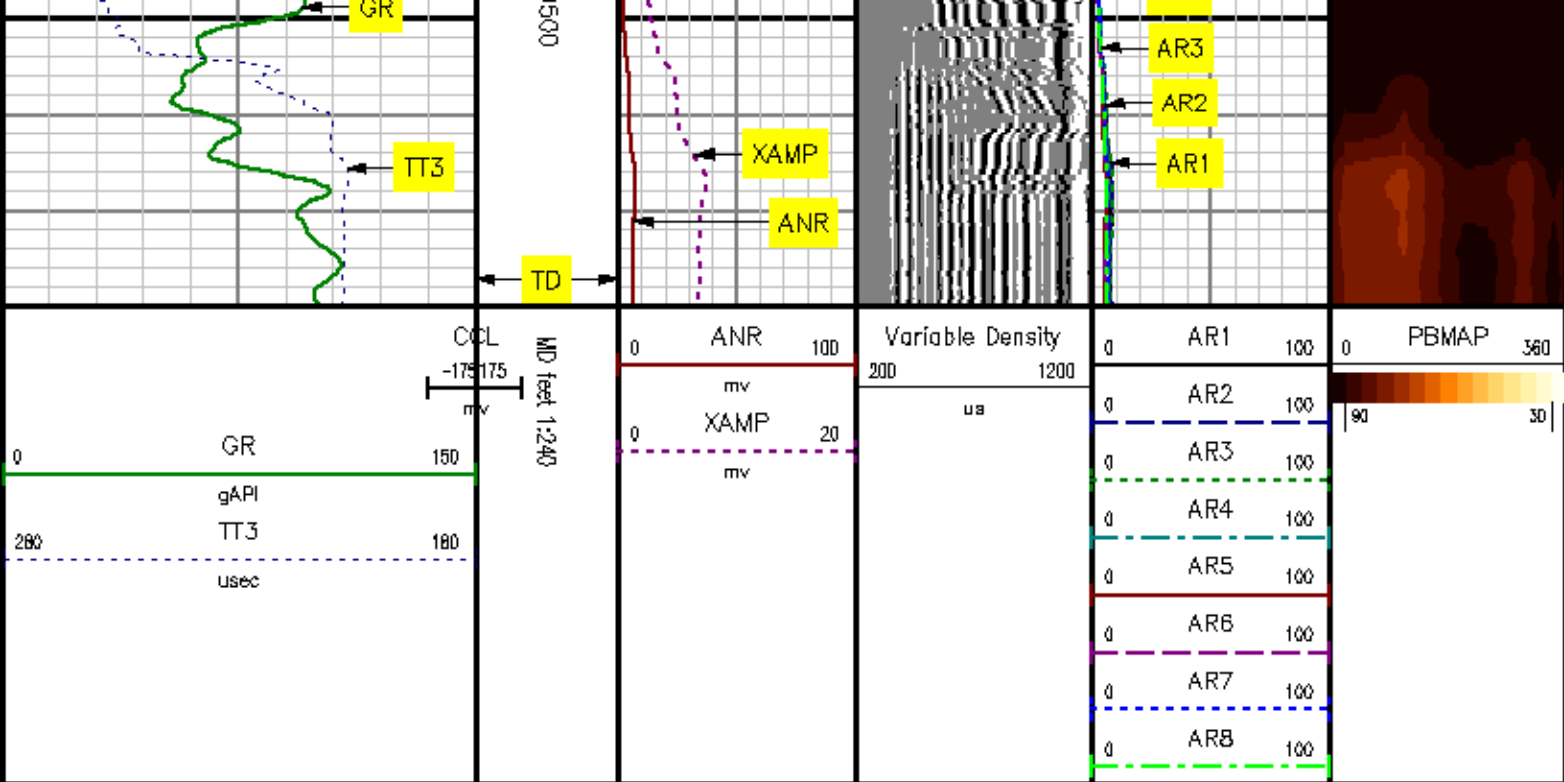












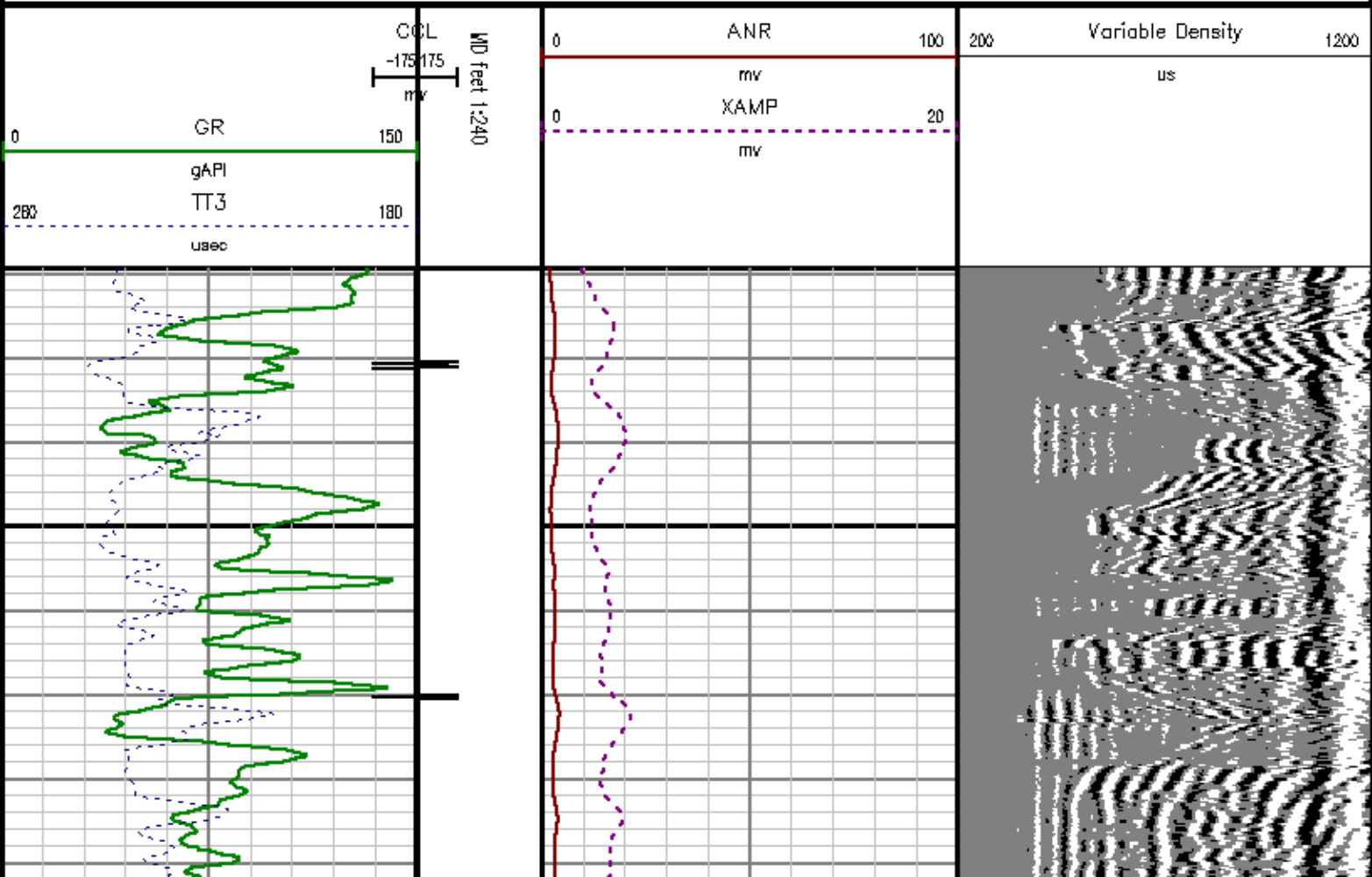
REPEAT SECTION WITH 0 PSI

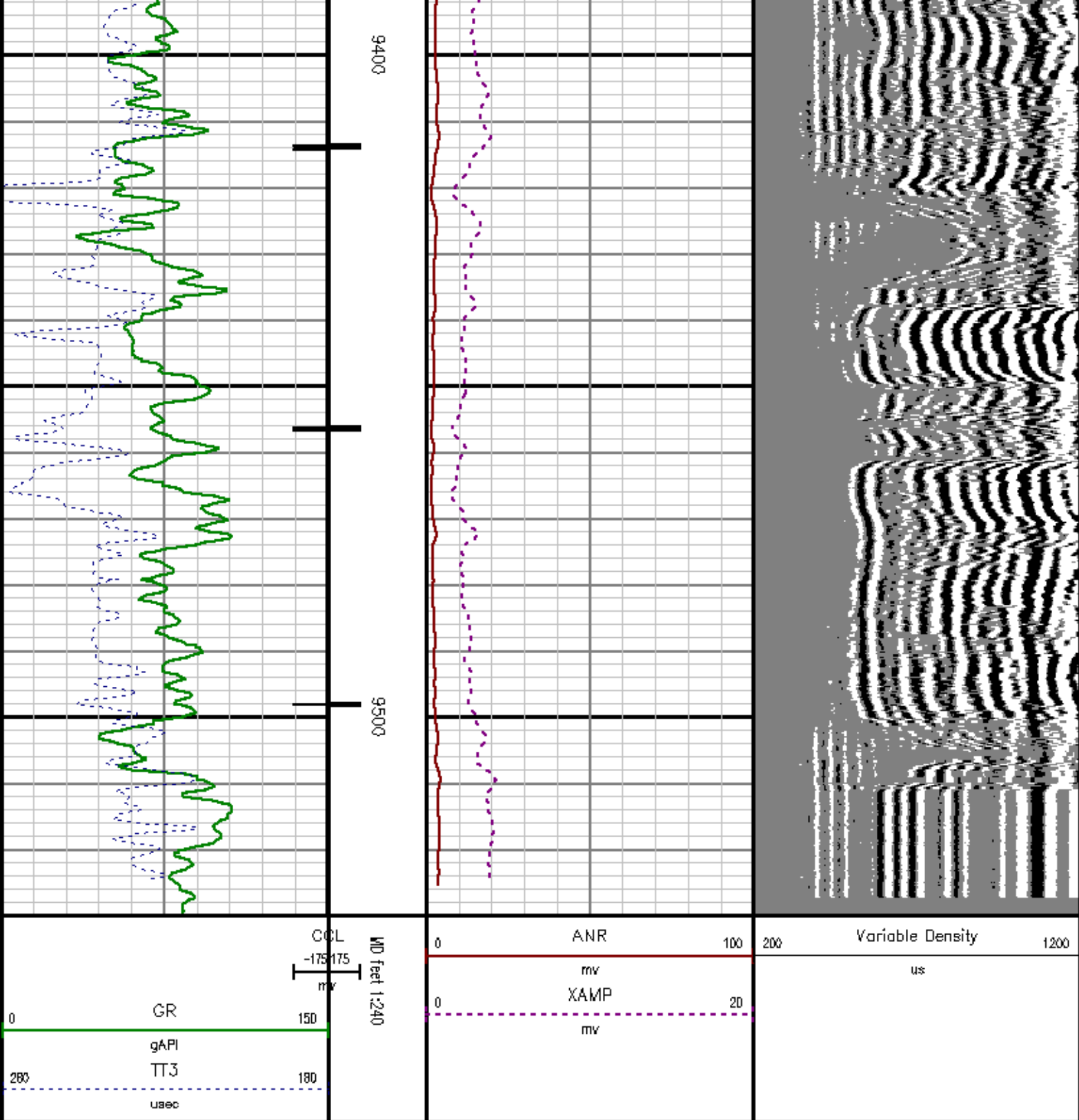
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	316.900	u sec	9299.905	9523.000
RAL	Amp Gate Start Near	200.391	u sec	9299.905	9523.000
RAL	Amp Gate Start Radial	200.391	u sec	9299.905	9523.000
RAL	Amp Gate Width Far	25.000	u sec	9299.905	9523.000
RAL	Amp Gate Width Near	25.000	u sec	9299.905	9523.000
RAL	Amp Gate Width Radial	25.000	u sec	9299.905	9523.000
RAL	casing od	4.500	inches	9299.905	9523.000
RAL	casing wt	11.600	lbm/ft	9299.905	9523.000
RAL	FB Start Far	291.900	u sec	9299.905	9523.000
RAL	FB Start Near	175.391	u sec	9299.905	9523.000
RAL	FB Start Radial	175.391	u sec	9299.905	9523.000
RAL	FB Thresh Far	10.000	mv	9299.905	9523.000
RAL	FB Thresh Near	4.000	mv	9299.905	9523.000
RAL	FB Thresh Radial	4.000	mv	9299.905	9523.000
RAL	Fluid Travel Time	200.000	u sec/ft	9299.905	9522.780

DEPTH OFFSETS
(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES							
1426XA	-15.360	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	-14.360	AFAR	SIG	TT5					
1426XA	-7.250	CCL							
1426XA	-5.390	GR							
1426XA	0.000	NEU							

Created by : RAL, v4.8.007
Plotted by : PlotMgr, v5.4.504
Company : WARATHON OIL COMPANY
Well : 596-31C-24
File Name : d:\well\data\radc24\repeat.xtf
Mode : PlotMgr 5.4.504
Interval : 9319.50 - 9530.00 feet UP
Created : 8/11/2009 3:24:34 PM





CALIBRATION SUMMARY

RAISHP

Shop Calibration: C:\case\calver\RALSHP\1000AUG3_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sun Aug 09 07:41:17 2009 TOOL SERIES: 1426XA ASSET: 1000 SEQ: AUG3

Tool Delay [usec] -53.00 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	216	216	30	152	25	0.125	100.00	0.23
3 Ft. Receiver	218	216	30	148	25	-0.039	100.00	0.22
5 Ft. Receiver	326	327	30	264	25	0.664	150.00	0.25
Radial #1	217	216	30	150	25	0.619	100.00	0.22
Radial #2	217	216	30	150	25	0.239	100.00	0.22
Radial #3	218	216	30	150	25	-0.136	100.00	0.22
Radial #4	219	216	30	150	25	-0.056	100.00	0.22
Radial #5	219	216	30	150	25	-0.133	100.00	0.22
Radial #6	216	216	30	150	25	-0.050	100.00	0.22
Radial #7	217	216	30	150	25	-0.111	100.00	0.23
Radial #8	217	216	30	150	25	0.069	100.00	0.22

RALFLD

Well site Calibration: C:\case\calver\RALFLD\1000AUG3 fld.cal

WELL SITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sun Aug 09 07:42:13 2009 TOOL SERIES: 1426XA ASSET: 1000 SEQ: AUG3

Tool Delay [usec] -53.00 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	152	25	-0.010	0.000	1.00	100.000
3 Ft. Receiver	200	25	0.275			
5 Ft. Receiver	317	25	1.624			
Radial #1	200	25	-0.383			
Radial #2	200	25	-0.173			
Radial #3	200	25	-0.102			
Radial #4	200	25	-0.401			
Radial #5	200	25	-0.434			
Radial #6	200	25	-0.251			
Radial #7	200	25	-0.380			
Radial #8	200	25	-0.292			

CAMMA RAY

Calibration File: C:\case\calver\GR\503AU.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sat Aug 01 08:04:35 2009		TOOL SERIES: 1426XA		ASSET: 503		SEQ: AU	
Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]	
S2K BAKER	71.36	247.38	1.051	75.03	260.03	185.00	

Verification File: C:\case\calver\GR\503AU.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Sat Aug 01 08:06:02 2009		TOOL SERIES: 1426XA		ASSET: 503		SEQ: AU	
Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]	
S2K BAKER	69.33	251.29	1.051	72.68	264.14	191.26	

TOOL DIAGRAM

OTA SHORT CABLE HEAD

CENTRALIZER

Series	RALCENT
Mnemonic	CENT
Diameter	3.12"
Weight	20.00 lb

PROBE 2 3/4 DUAL RECEIVER RADII (1426XA)

CENTRALIZER

Series	RALCENT
Mnemonic	CENT
Diameter	3.12"
Weight	20.00 lb



30.00'

XMIT 20.94'

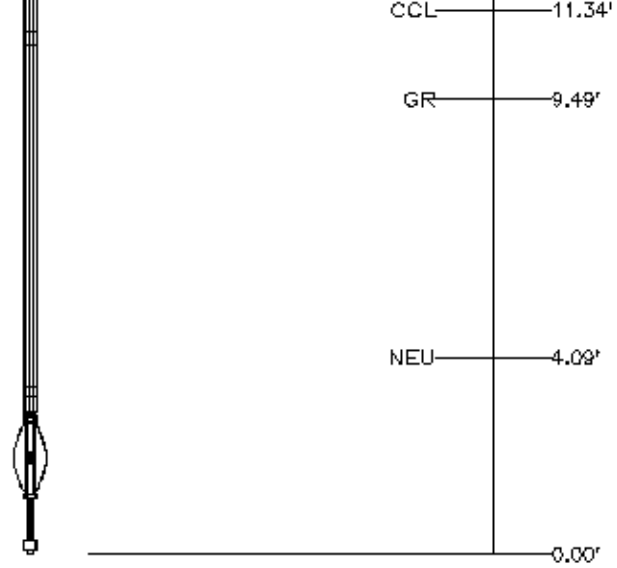
NEAR RCVR 17.85'

FAR RCVR 15.94'

Probe GR/CCL/NEU (2459XA)

CENTRALIZER	
Series	RALCENT
Mnemonic	CENT
Diameter	3.12"
Weight	20.00 lb

Total Length: 30.00'
Total Weight: Not Available
Max Diameter: 0" 3.12"



Baker Atlas



Company	MARATHON OIL COMPANY		
Well	596-31C-24		
Field	GRAND VALLEY		
County	GARFIELD	State	COLORADO

File No:	
API No:	05-045-160250000

Location			
SHL: 2163' FSL & 602' FWL			
SEC	31	TWP	5S
RGE	96W		

Elevations	
KB	8544 ft
DF	8543 ft
GL	8520 ft

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