



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No:

1260

Company

MARATHON OIL COMPANY

Well

696-6A-13

API No:

Field

GRAND VALLEY

06-045-16647-0000

County

GARFIELD

State

COLORADO

Location

693' FSL & 335' FEL

Other Services

3.791" GAUGE
RPM

SEC 6

TWP 6S

RGE 96W

Permanent Datum

G.L.

Elevation

8085 ft

Elevations

Log Measured From

K.B.

24 ft

Above P. D.

KB 8109 ft
DF 8108 ft
GL 8085 ft

Drill Measured From

KELLY BUSHING

GL 8085 ft

Date

24-JUNE-2008

Run

ONE

Service Order

574817

Depth Driller

10358 ft

Depth Logger

10343 ft

Bottom Logged Interval

10343 ft

Top Logged Interval

1100 ft

Time Started

08:00

Time Finished

13:00

Operator Rig Time

5 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

45 fpm

Maximum Recorded Temperature

N/A

Reference Log

N/A

Reference Log Date

N/A

Equipment No.

8711

Location

VERNAL, UT

Recorded By

TIM KAUTT

Witnessed By

MR. DOUG EPPERSON

- 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
14.75 in		
9.75 in		

Casing Record

Size	Weight	Grade	From	To
9.825 in	36 lbm/ft	J-55	SURFACE	2285 ft
4.5 in	11.6 lbm/ft	P-110	SURFACE	10358 ft

Remarks

THE CREW OF 8711 THANKS YOU.

Equipment Data

Run	Trip	Tool	Series Number	Serial Number	Position
1	1	MANDREL	1428XA	457	CENTRALIZED
1	1	GRUMA PXY	2458XA	1041757	CENTRALIZED

MAIN SECTION
PRIMARY PRESENTATION
1000# PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	316.800	usec	795.000	10370.000
RAL	Amp Gate Start Near	200.391	usec	795.000	10370.000
RAL	Amp Gate Start Radial	200.391	usec	795.000	10370.000
RAL	Amp Gate Width Far	25.000	usec	795.000	10370.000
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RAL	casing od	4.500	inches	795.000	10370.000
RAL	casing wt	11.600	lbm/ft	795.000	10370.000
RAL	FB Start Far	291.900	usec	795.000	10370.000
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RAL	FB Thresh Far	15.000	mv	795.000	10370.000
RAL	FB Thresh Near	10.000	mv	795.000	10370.000
RAL	FB Thresh Radial	10.000	mv	795.000	10370.000
RAL	Fluid Travel Time	200.000	usec/ft	795.000	10369.865

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
		AFAR	SIG	TT5			
1426XA	-14.360						

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 : MARATHON OIL COMPANY

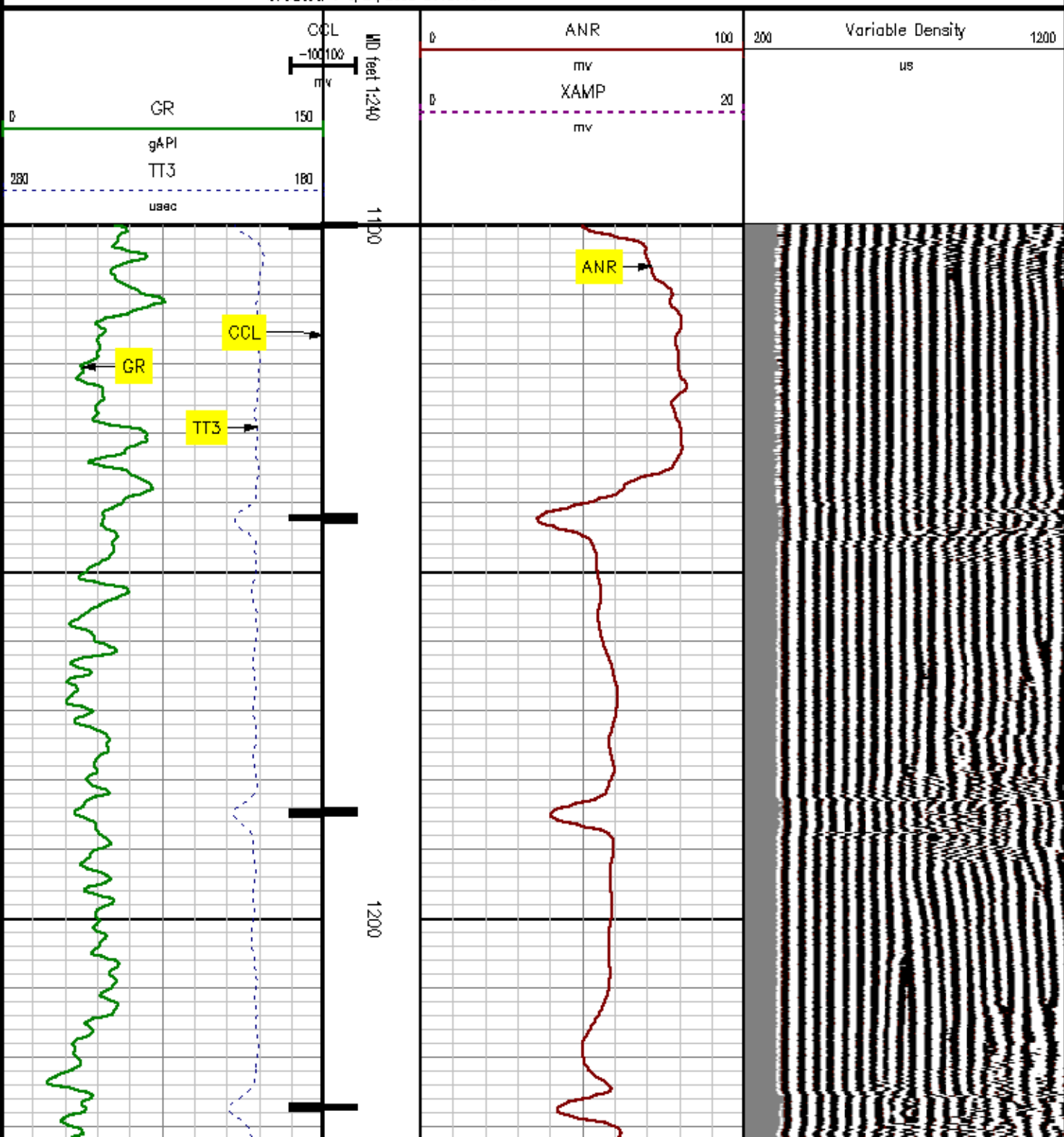
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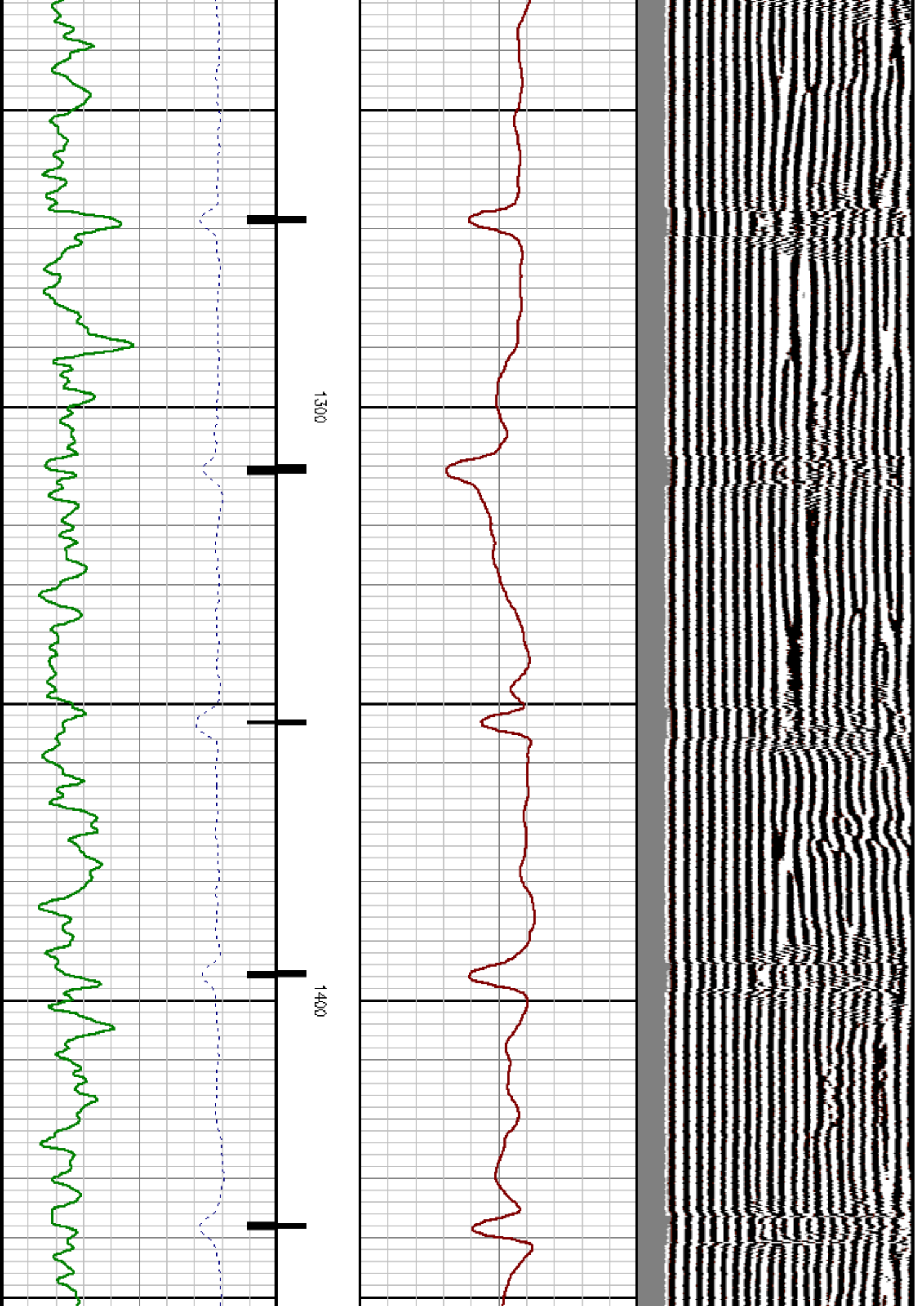
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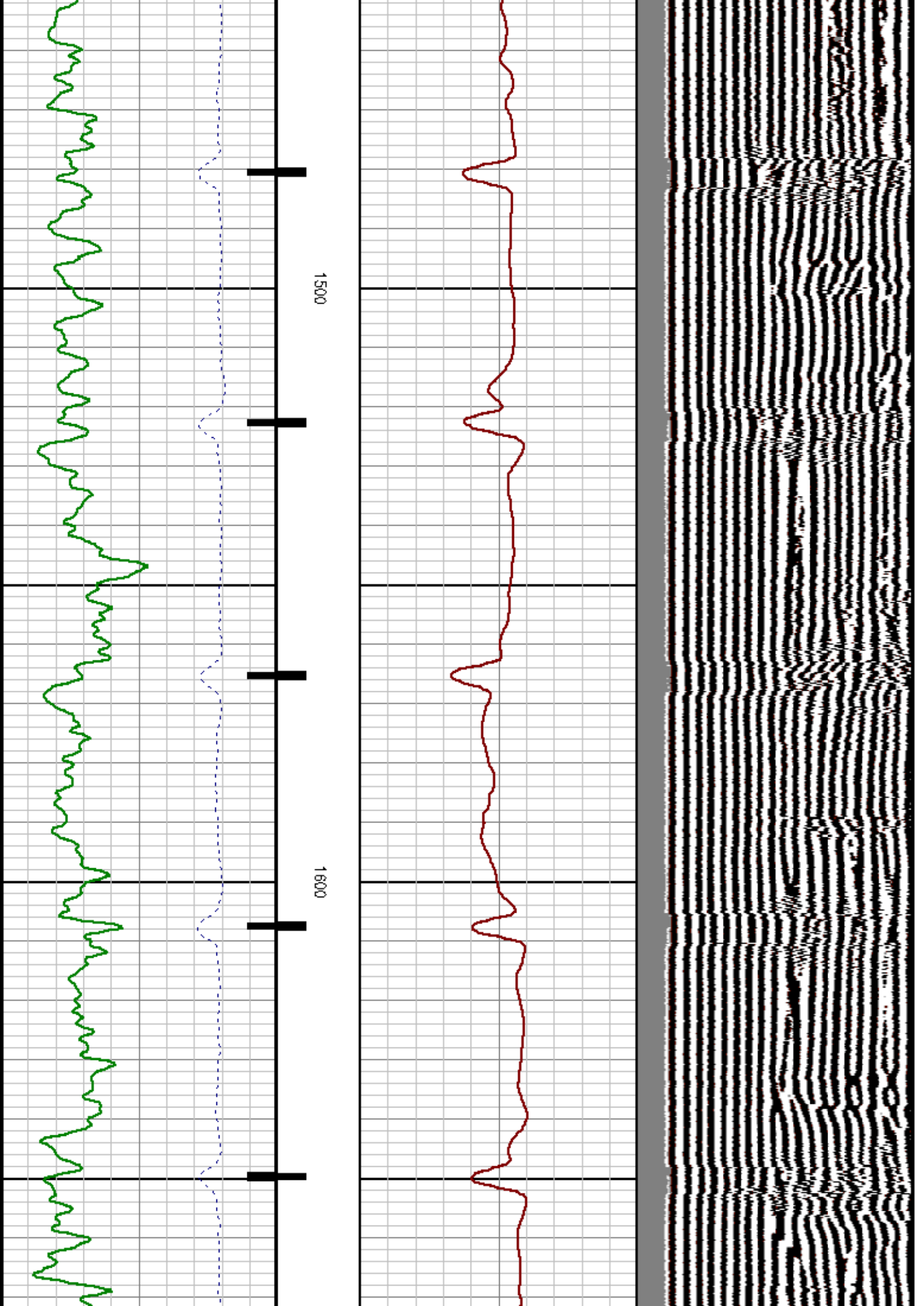
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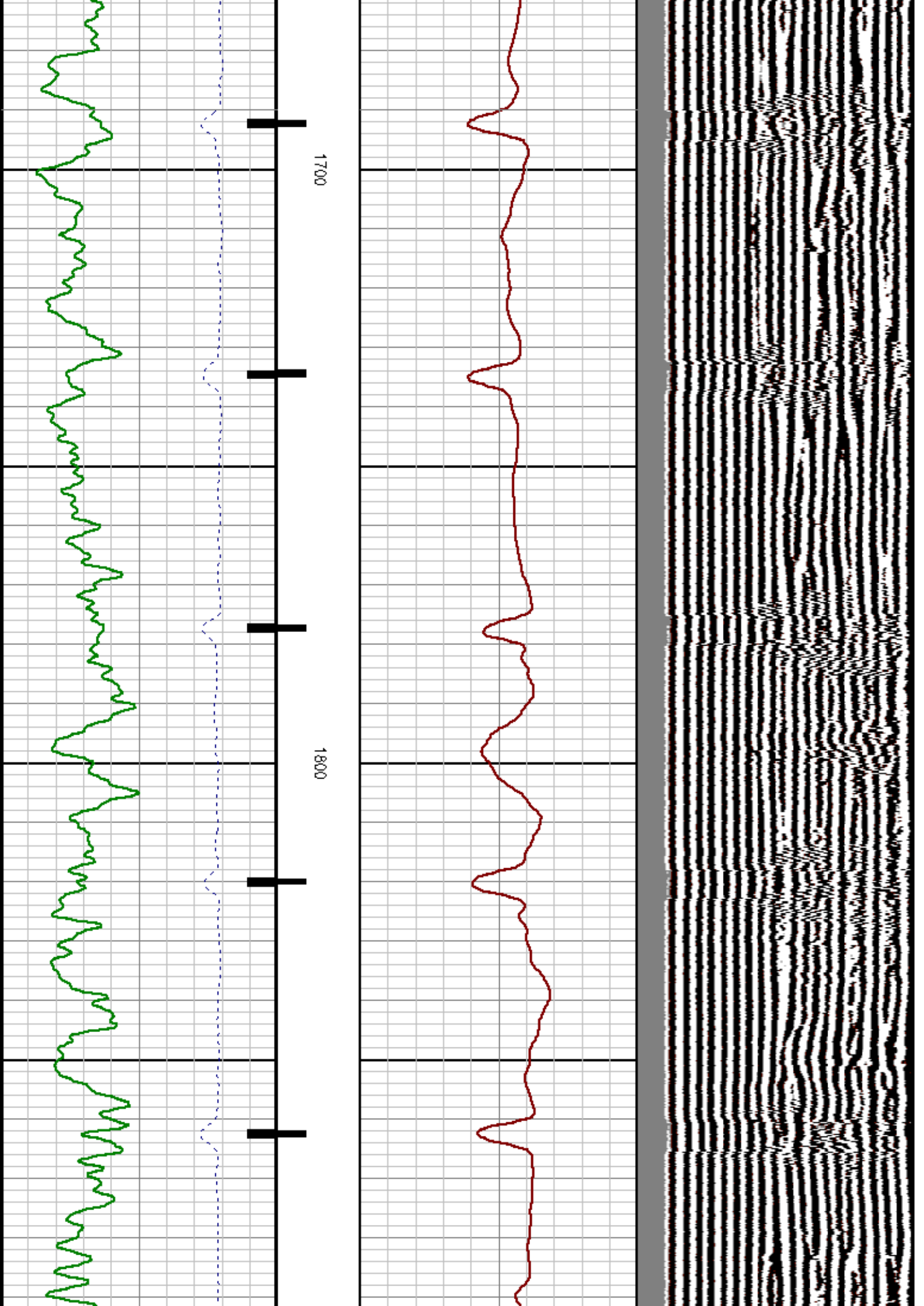
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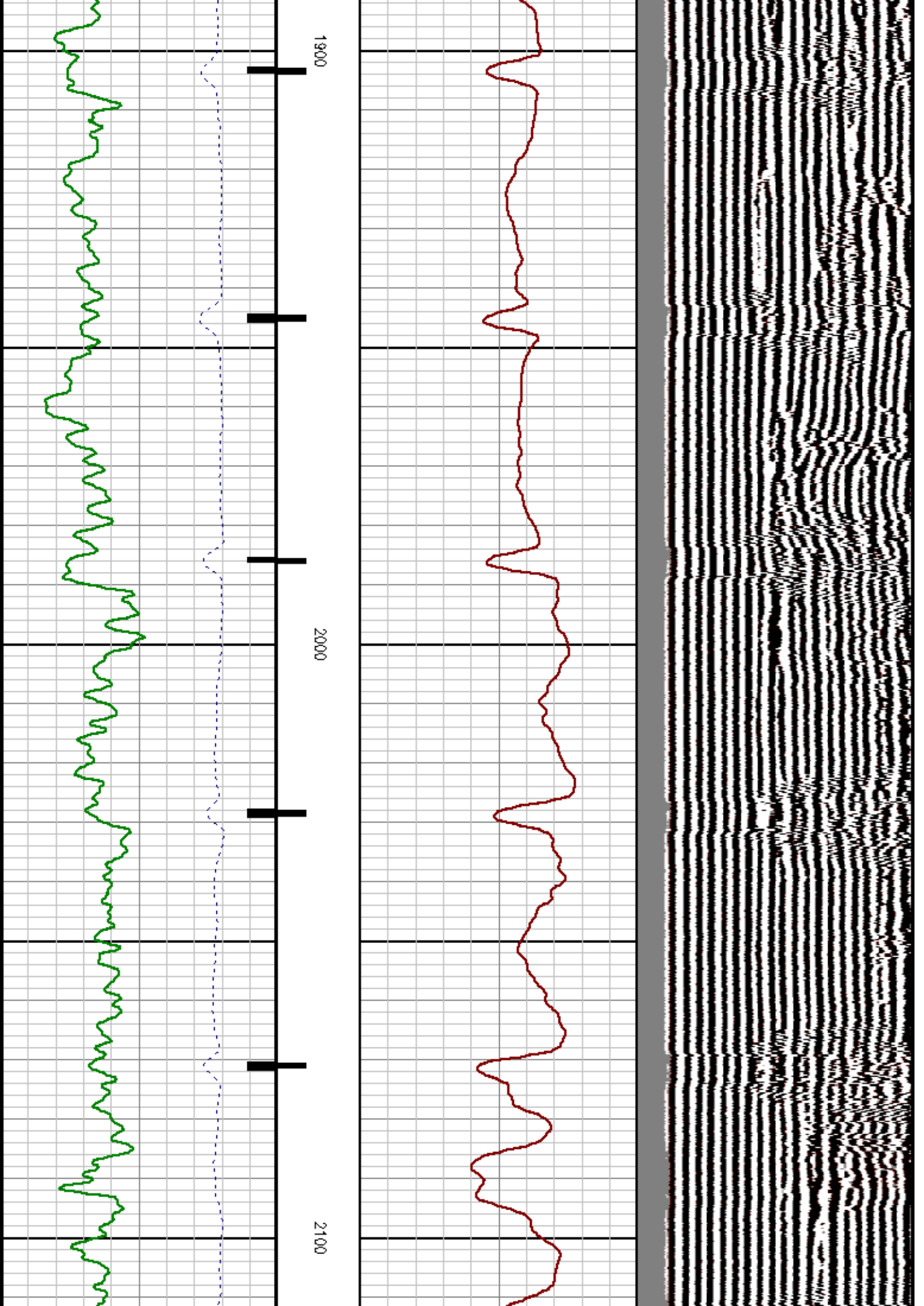
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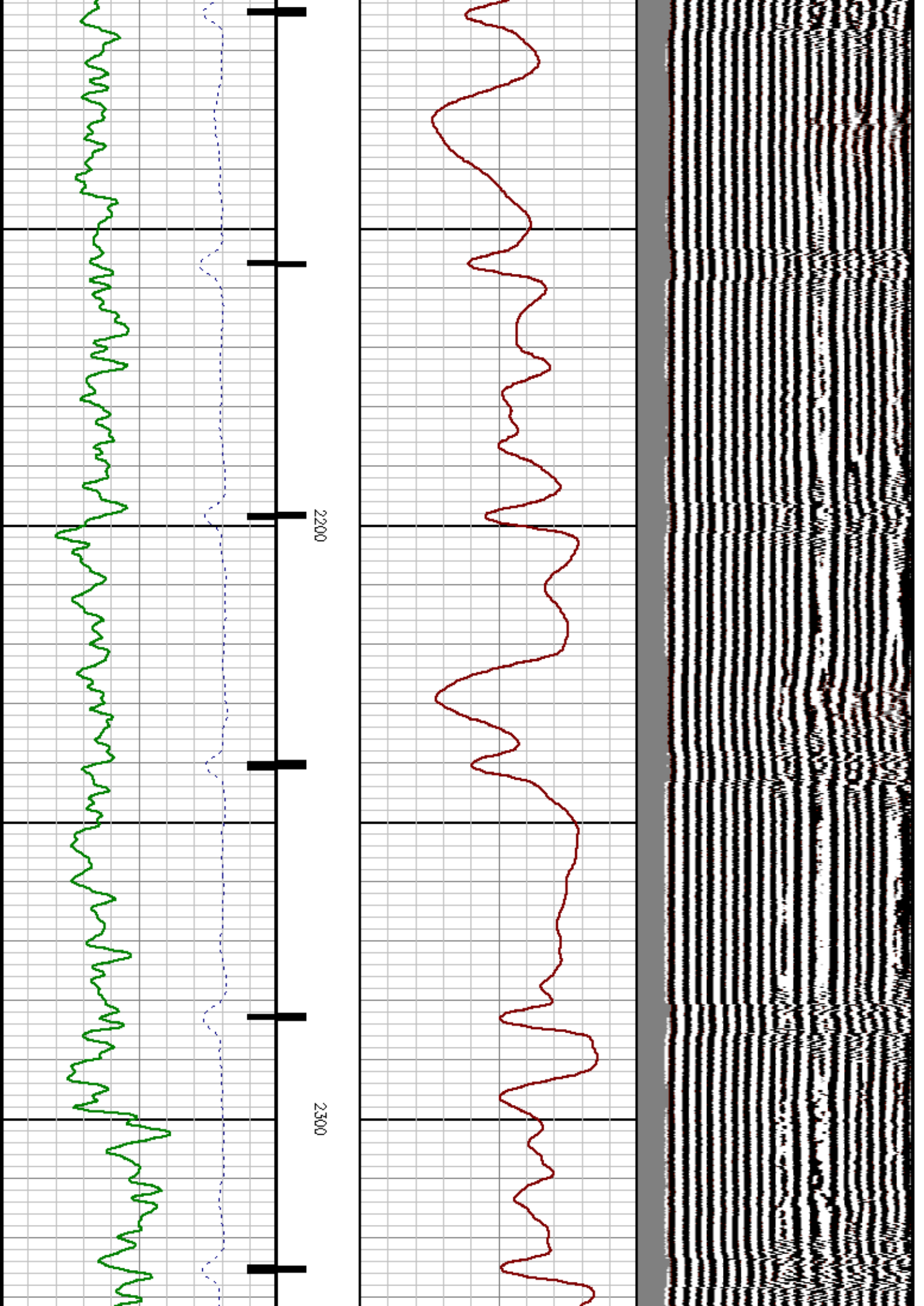


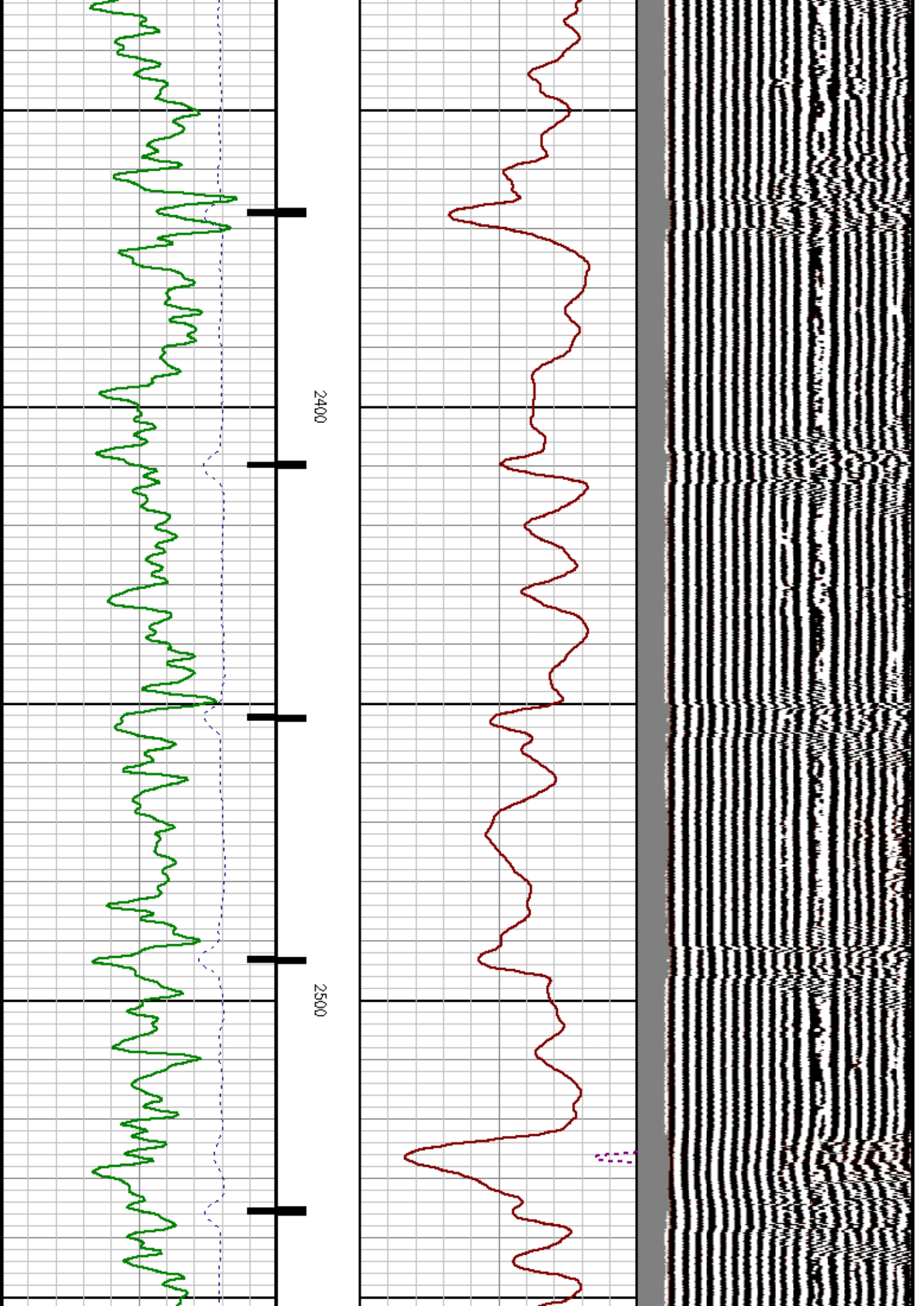


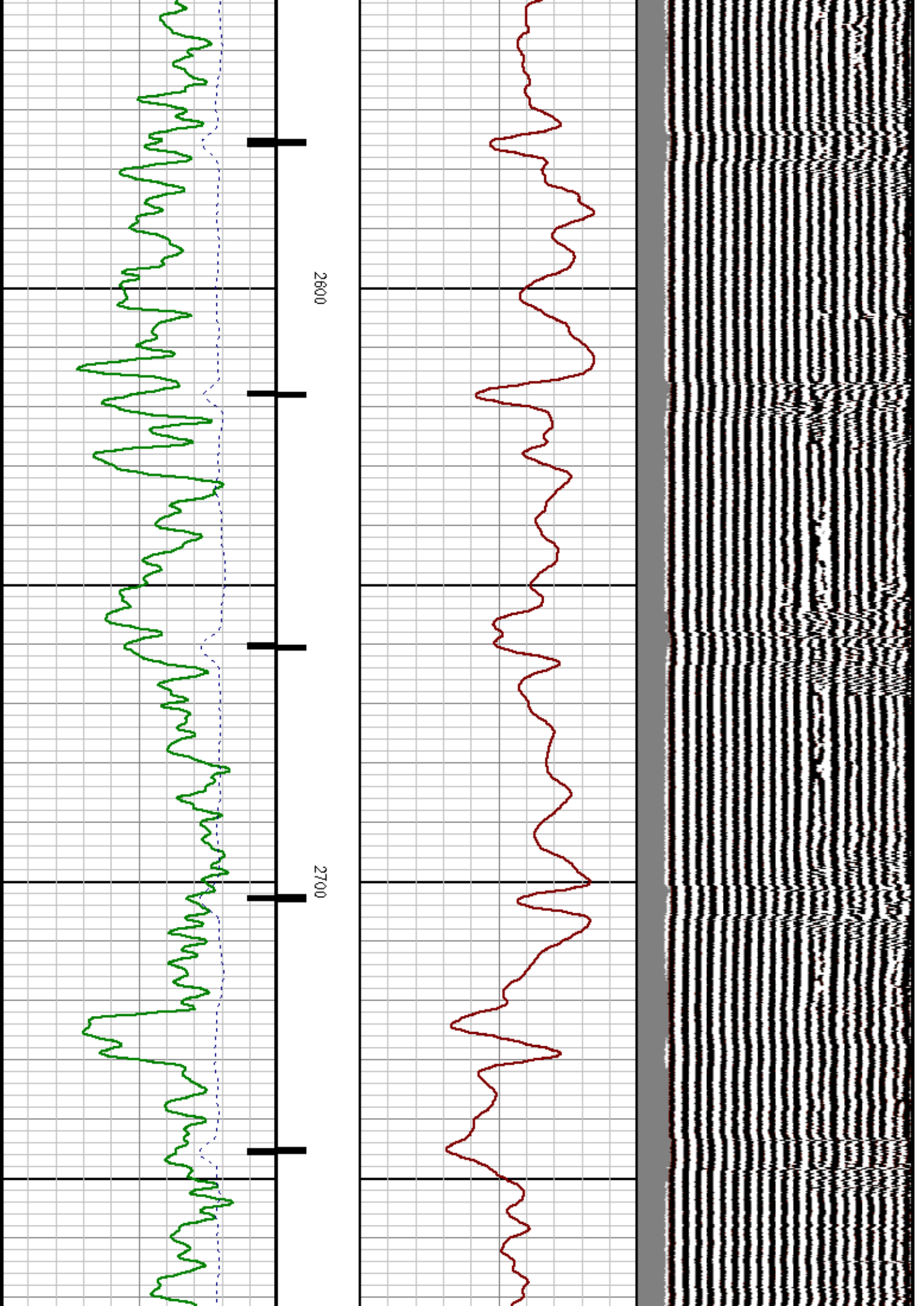


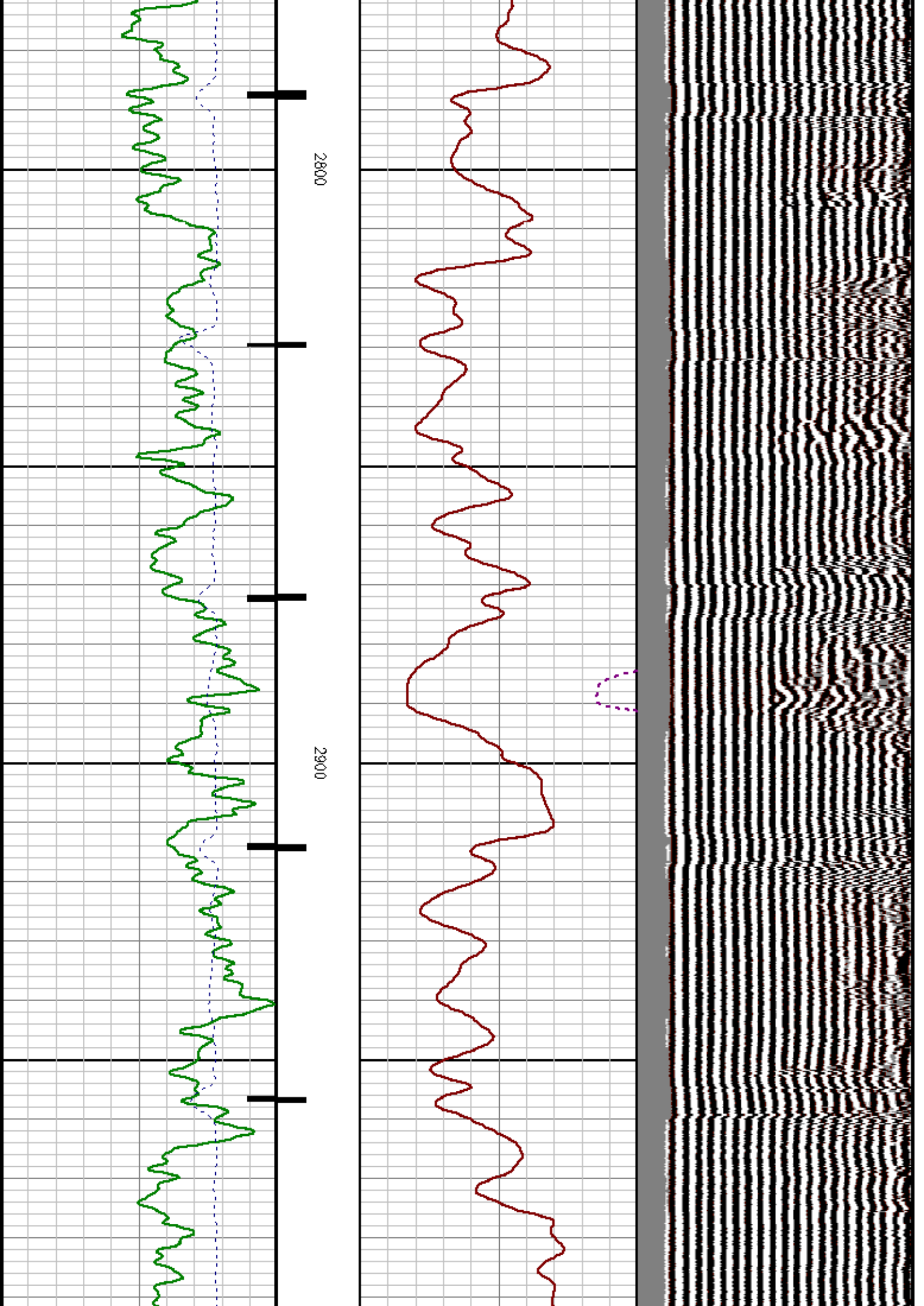


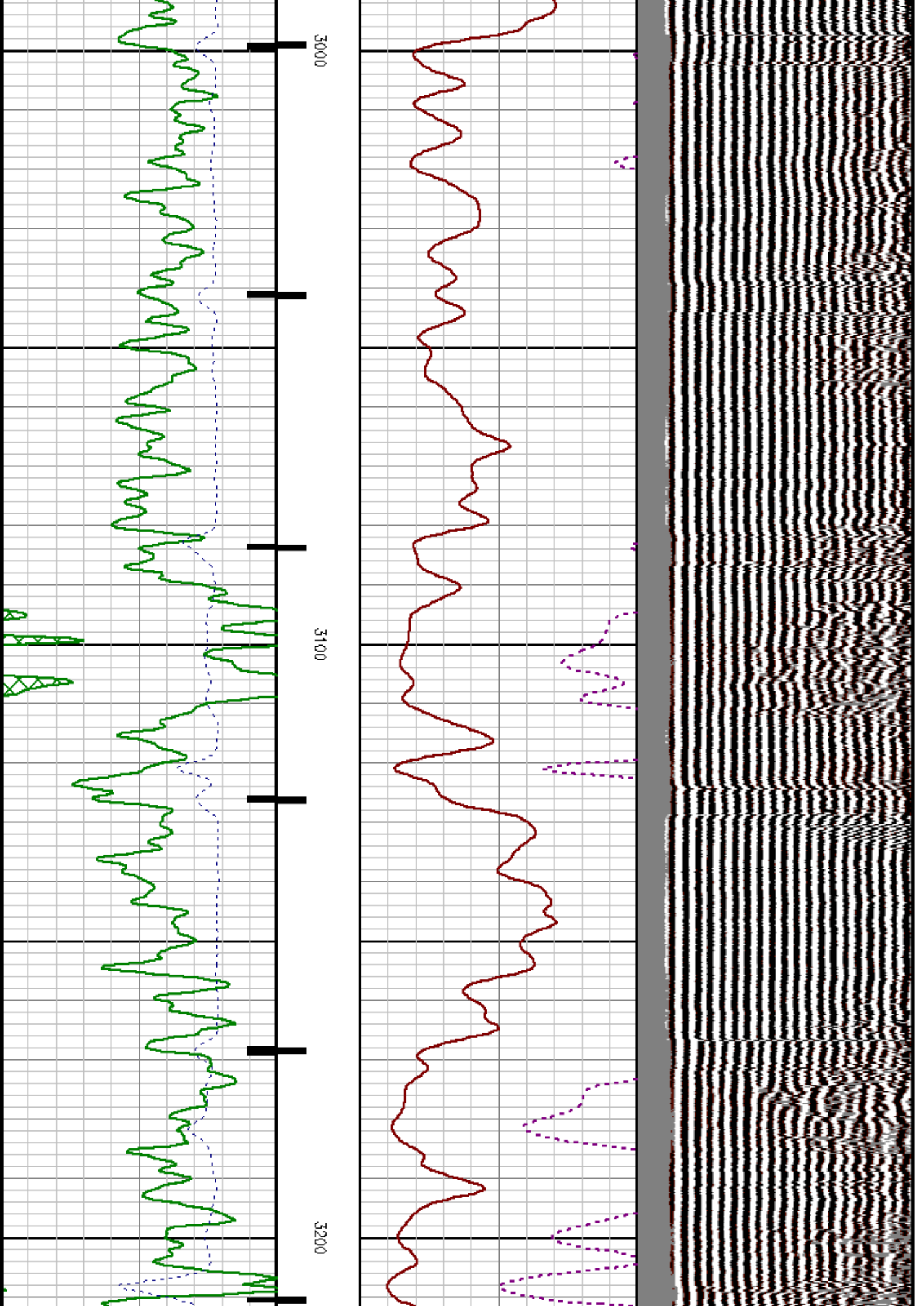


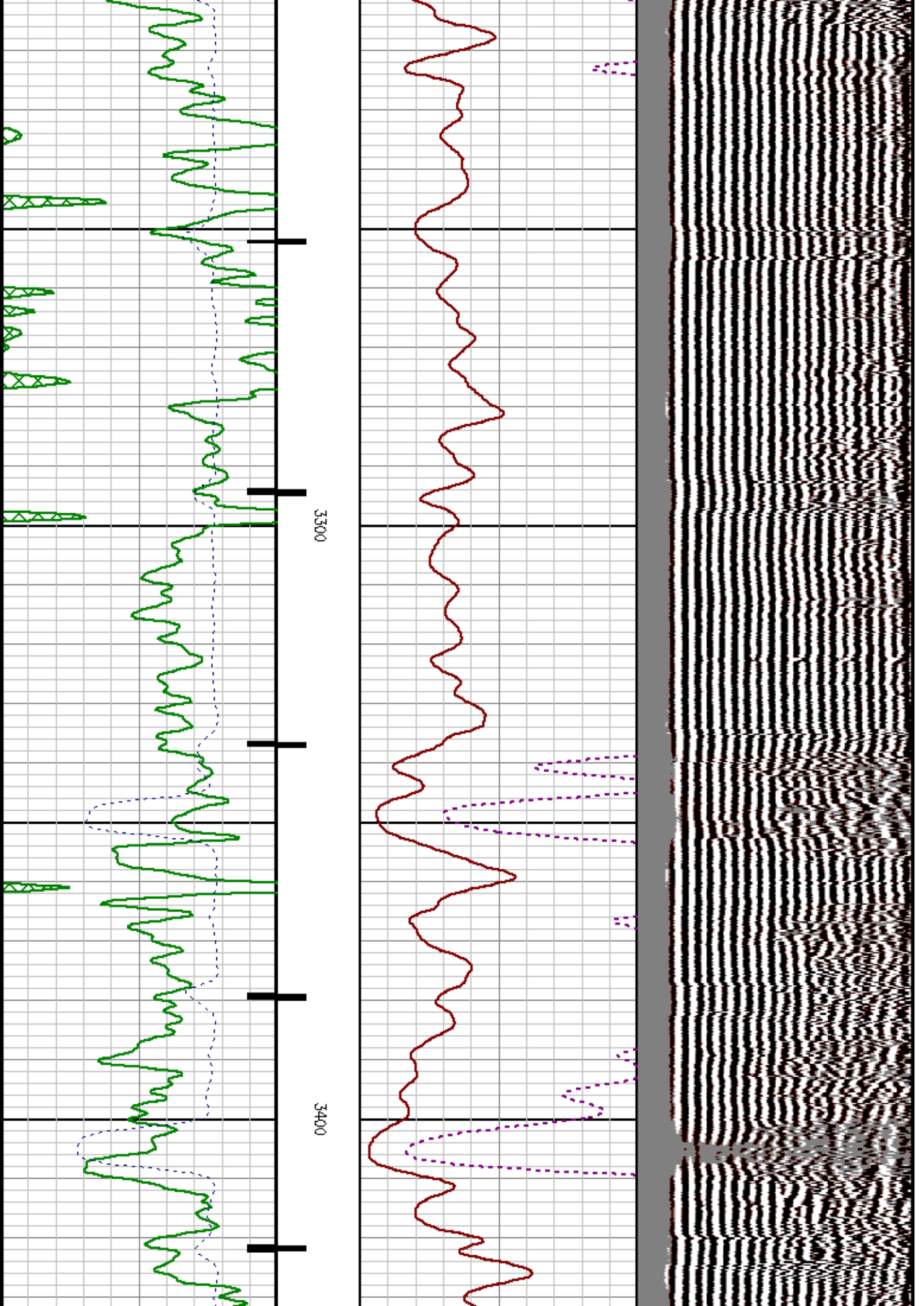


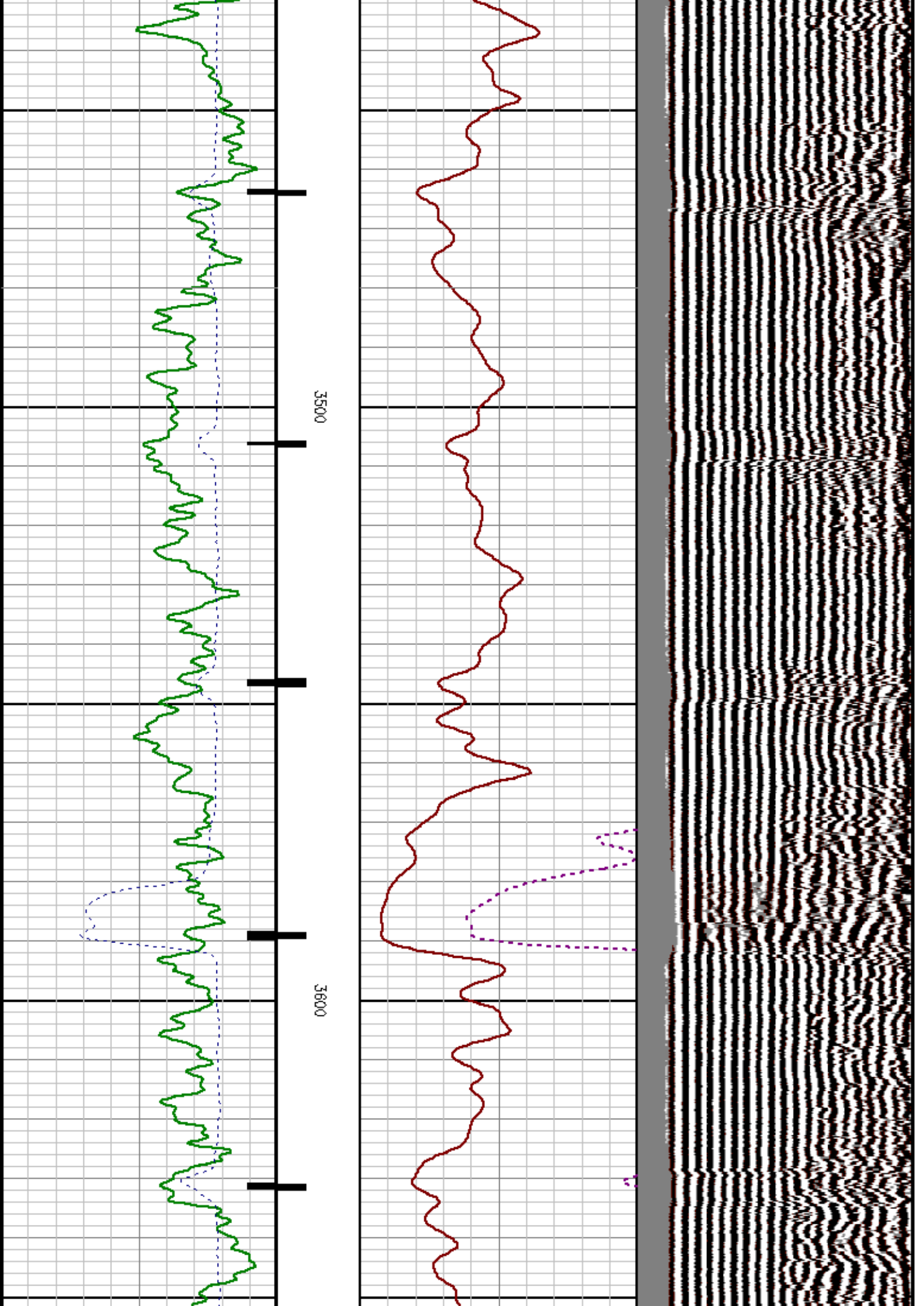


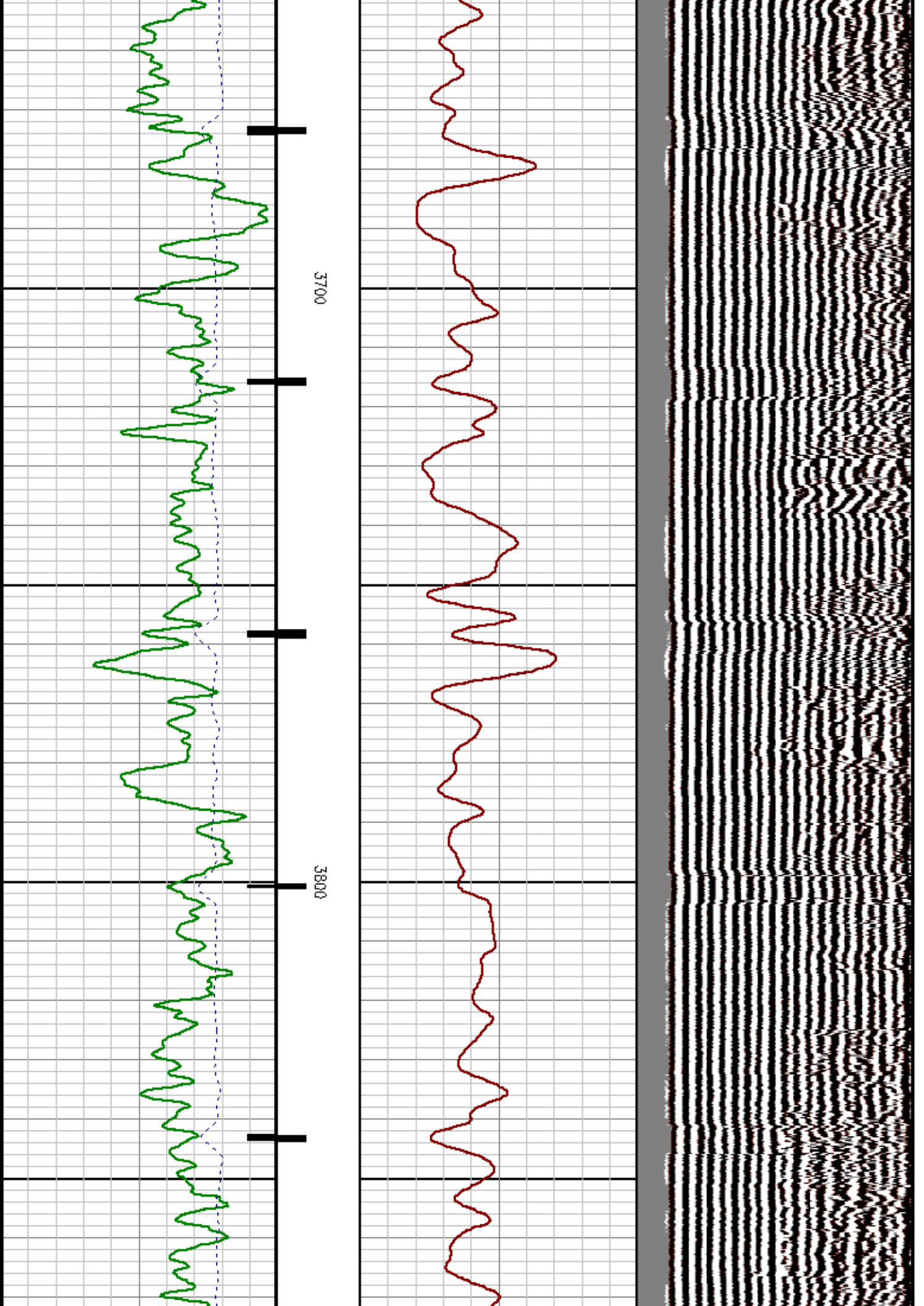


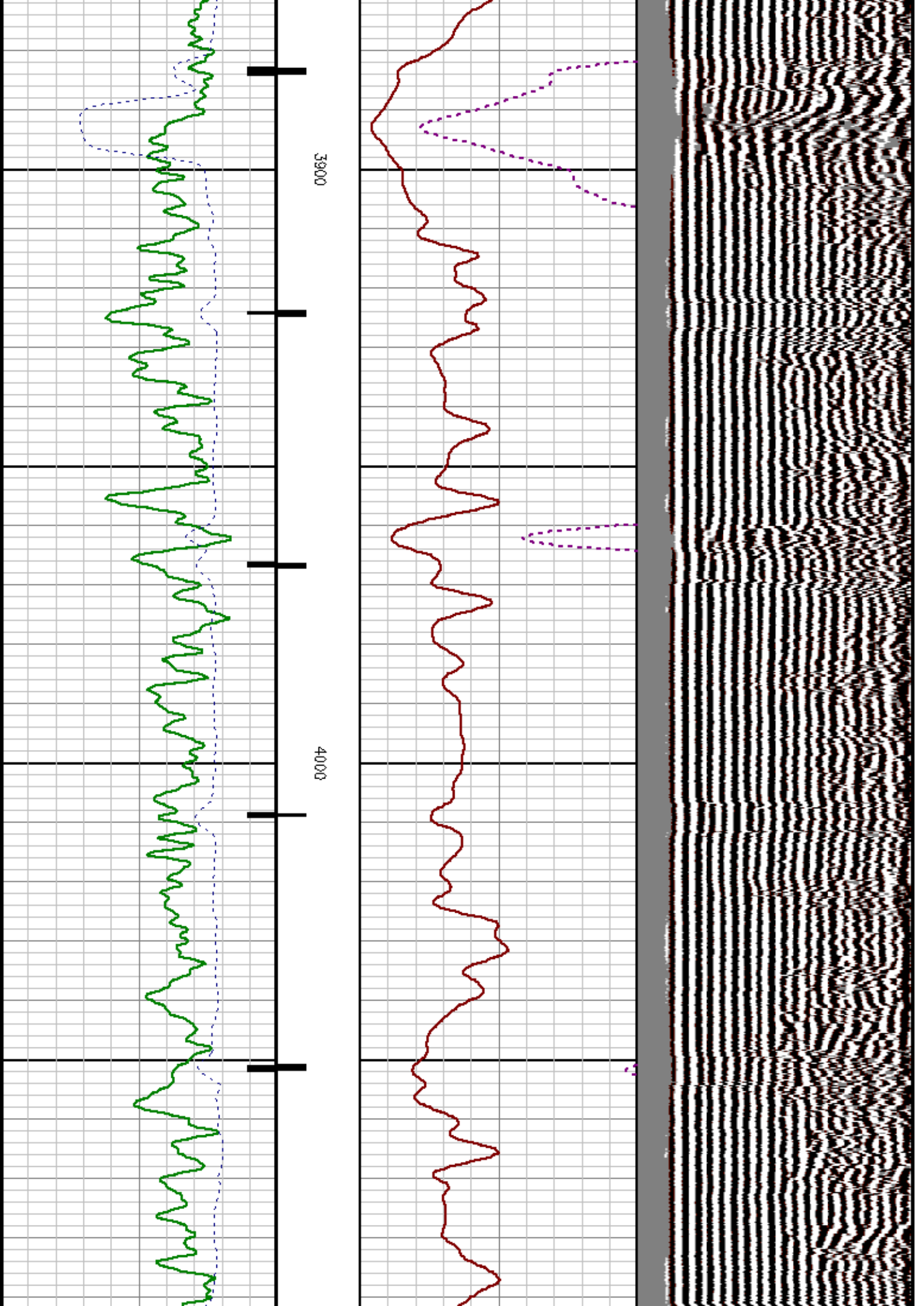


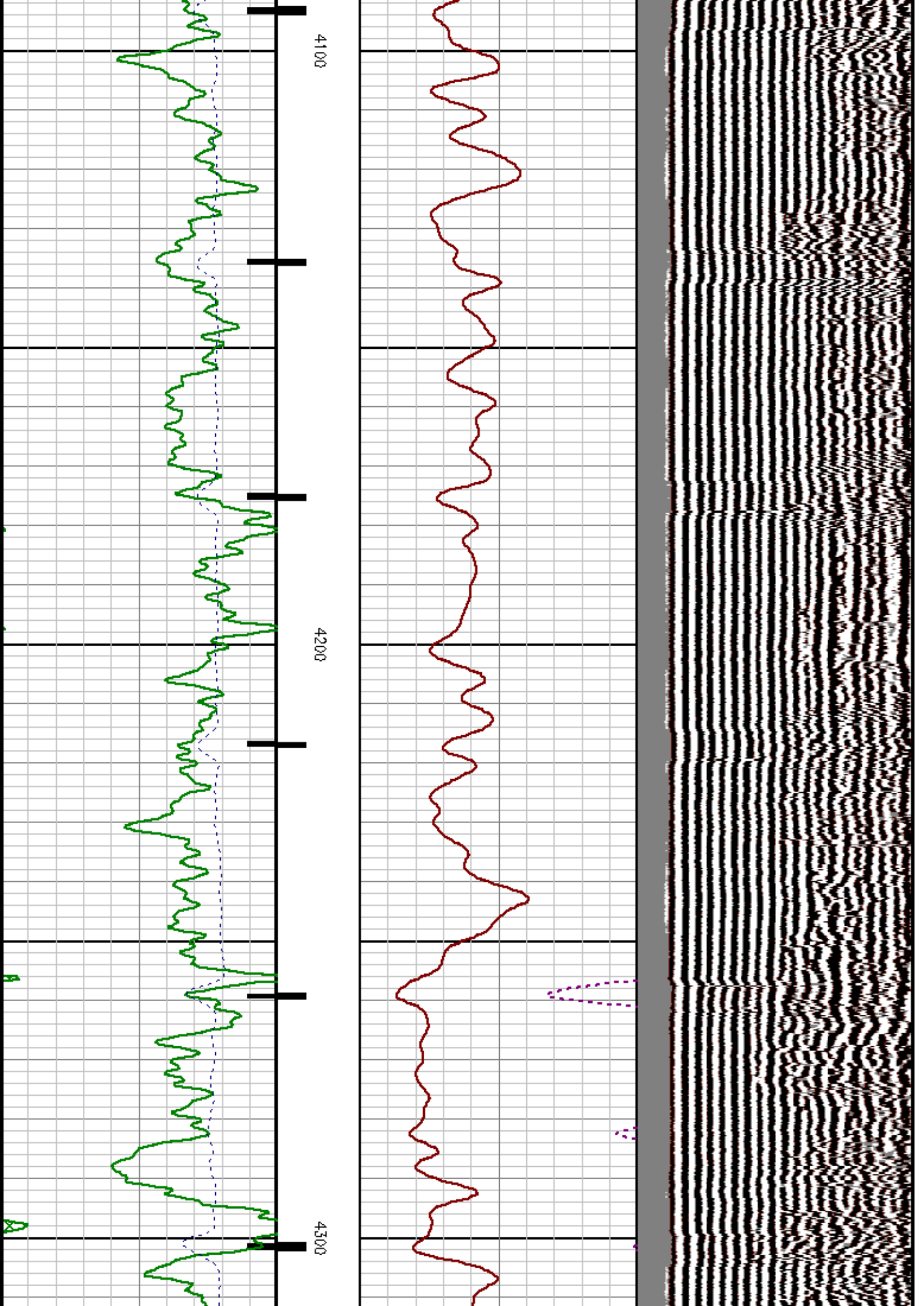


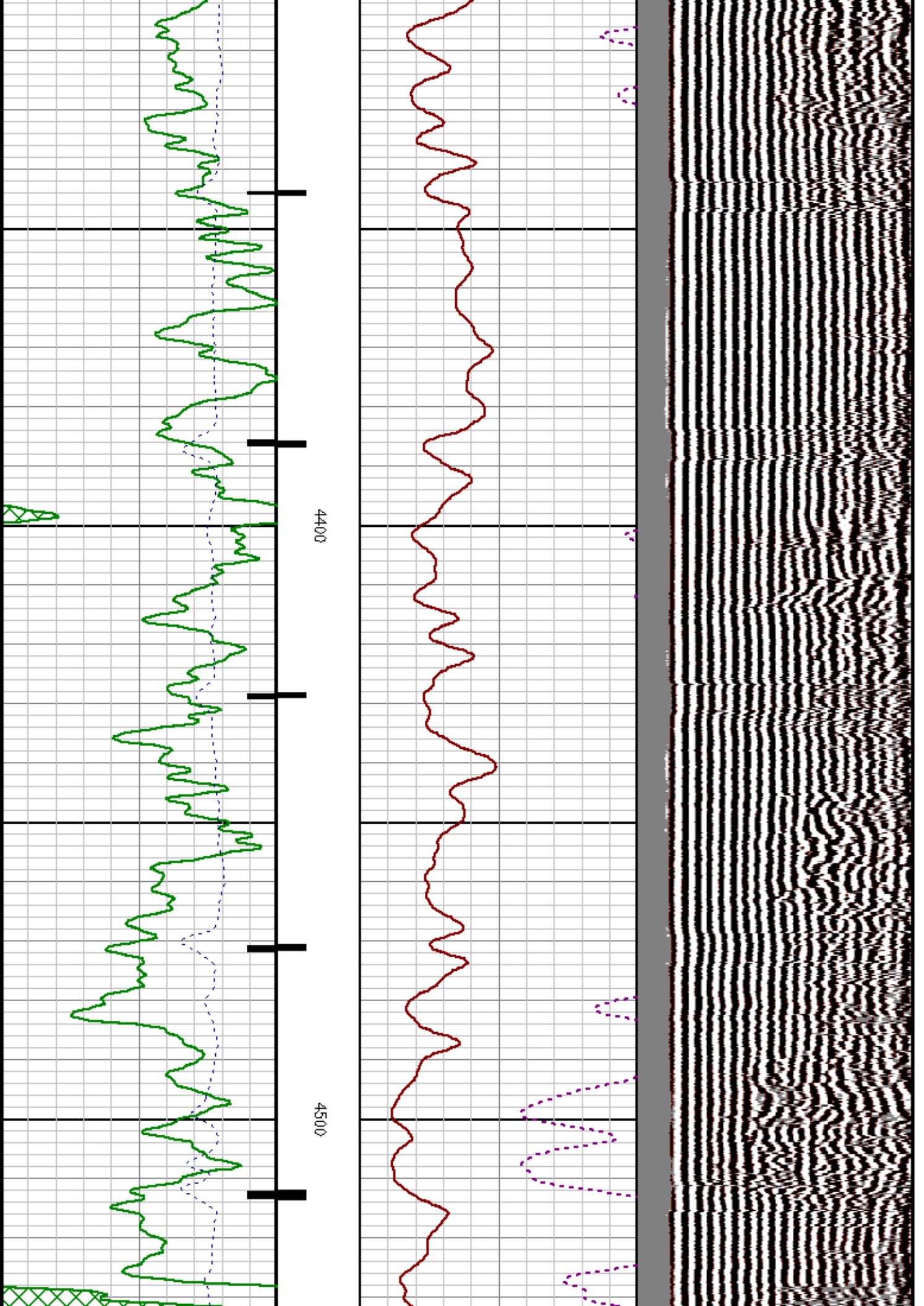


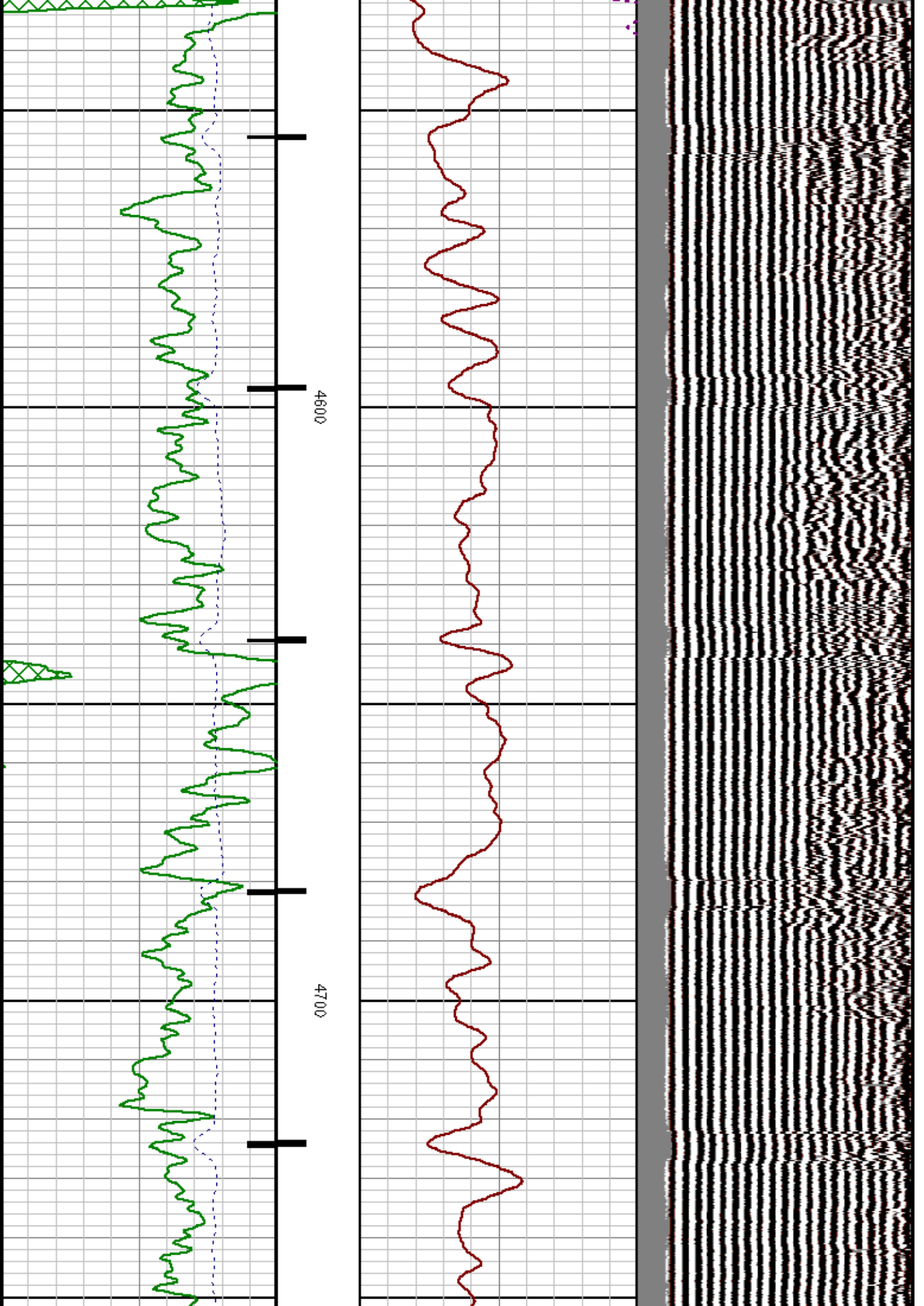


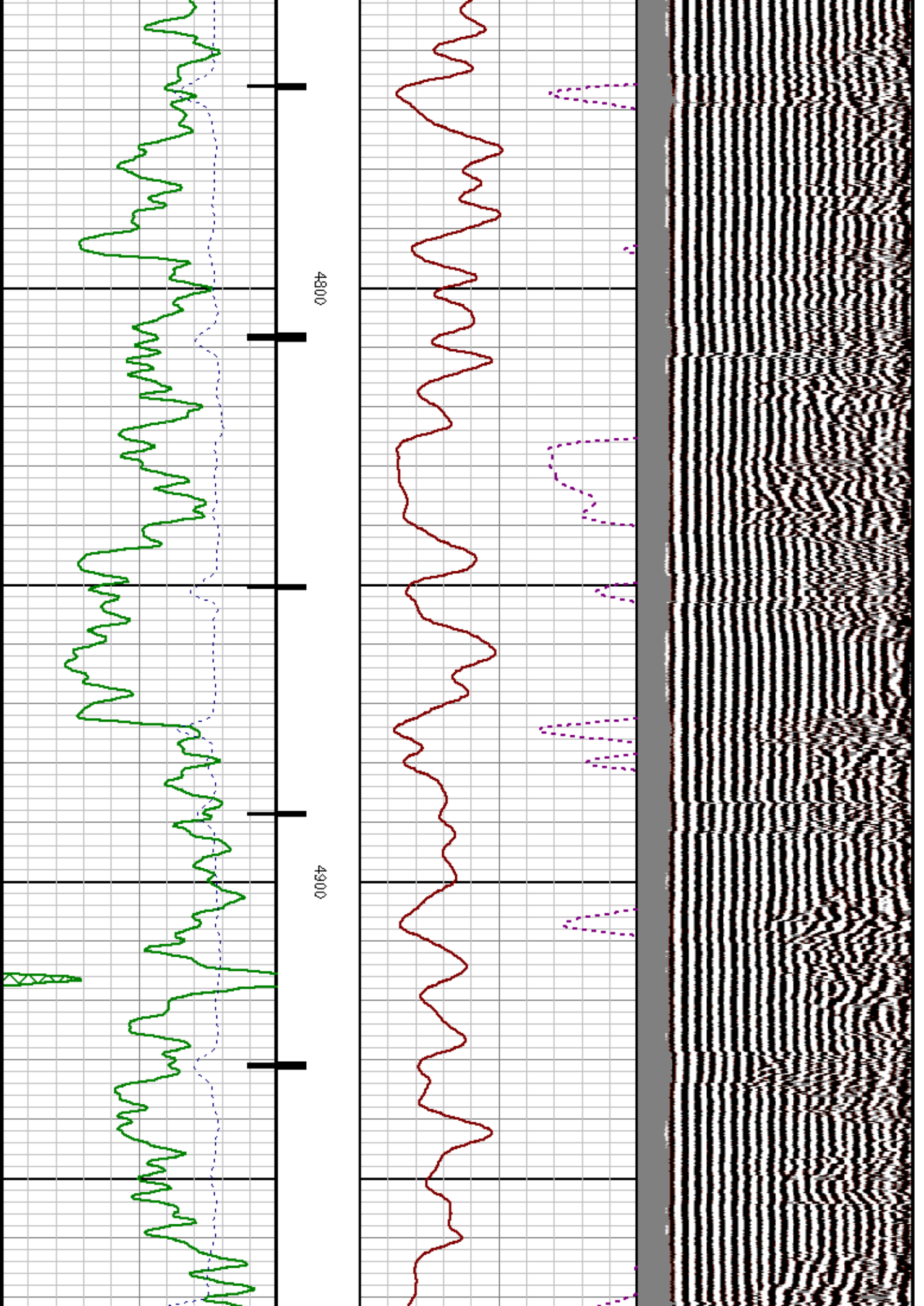


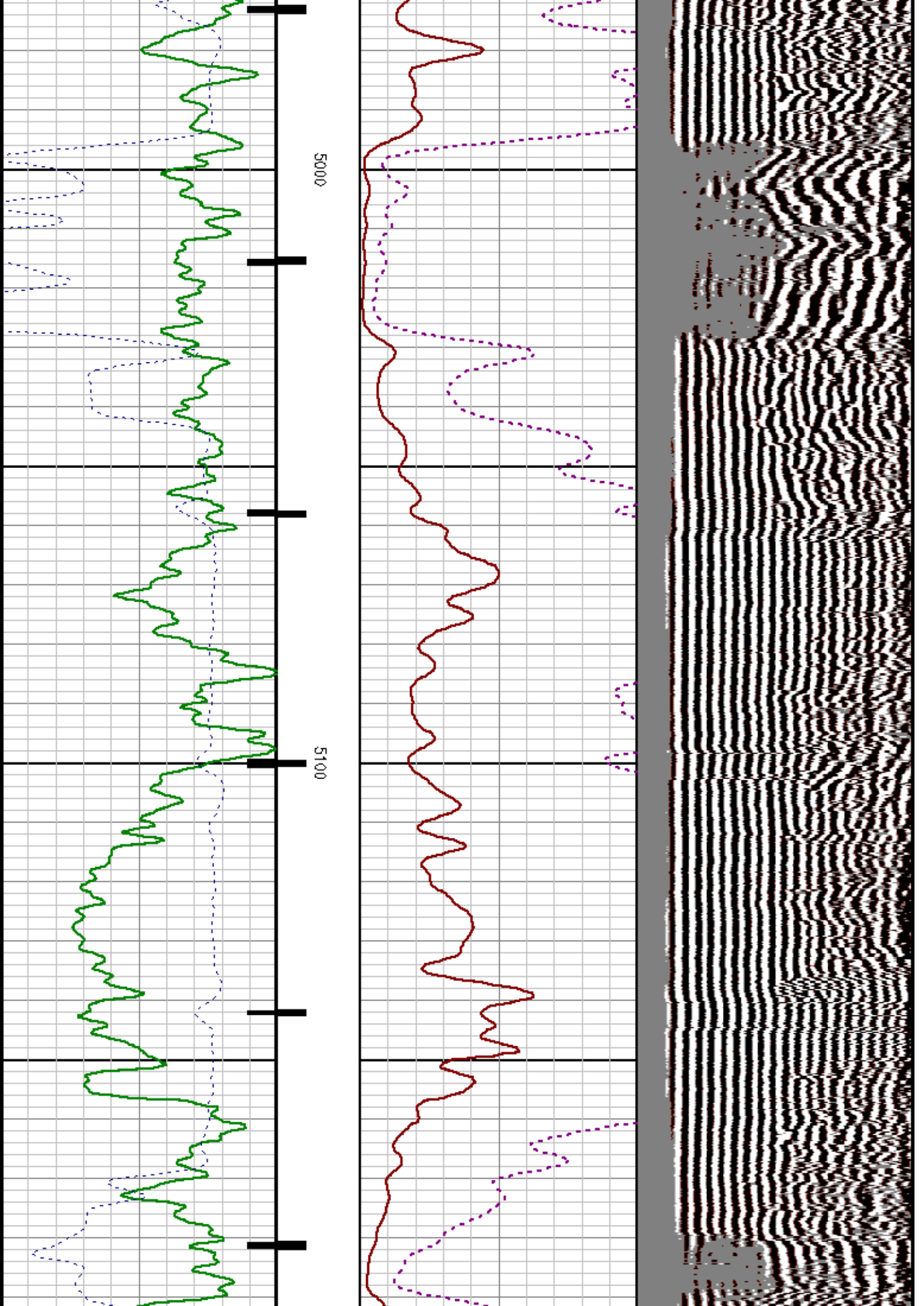


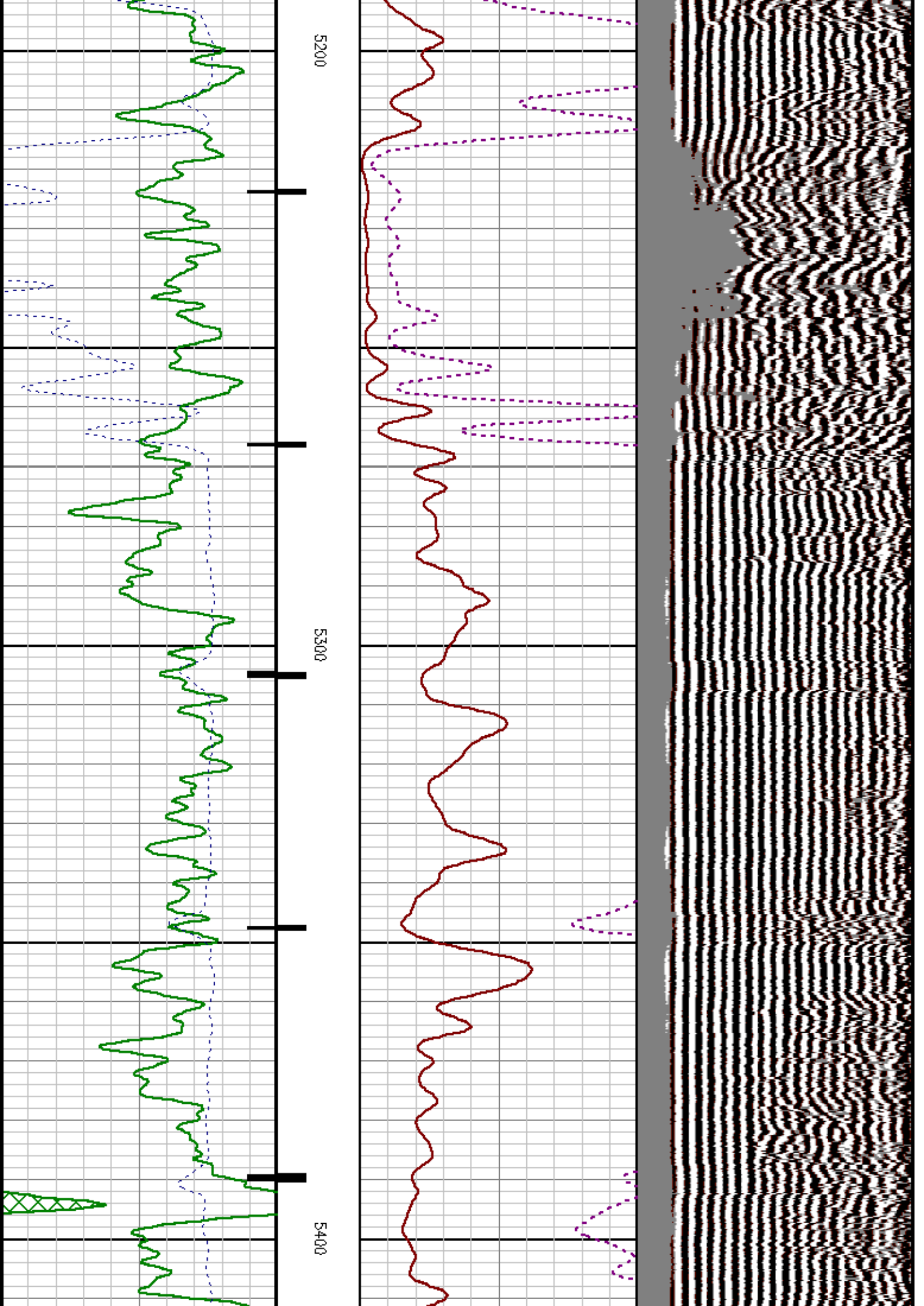


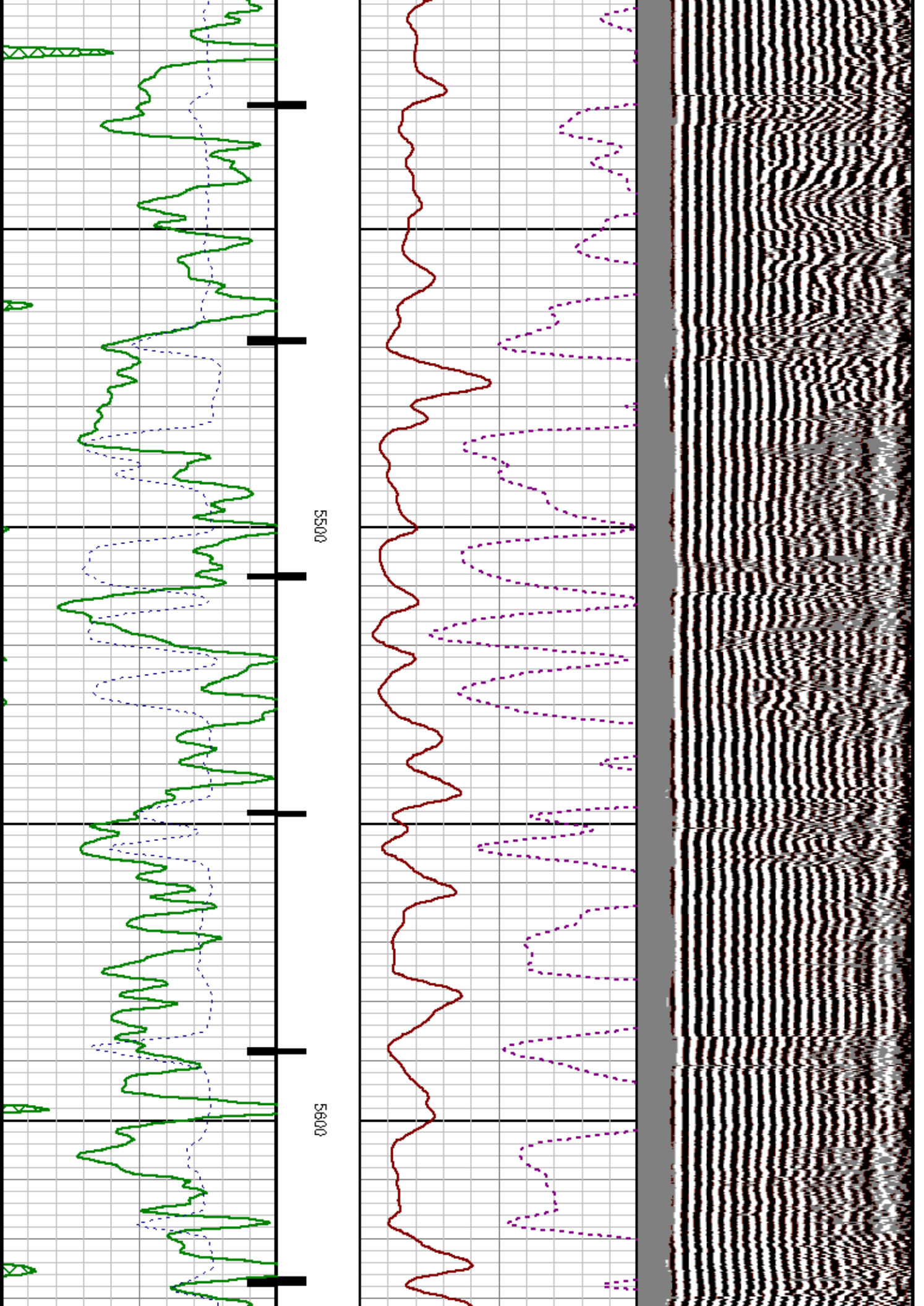


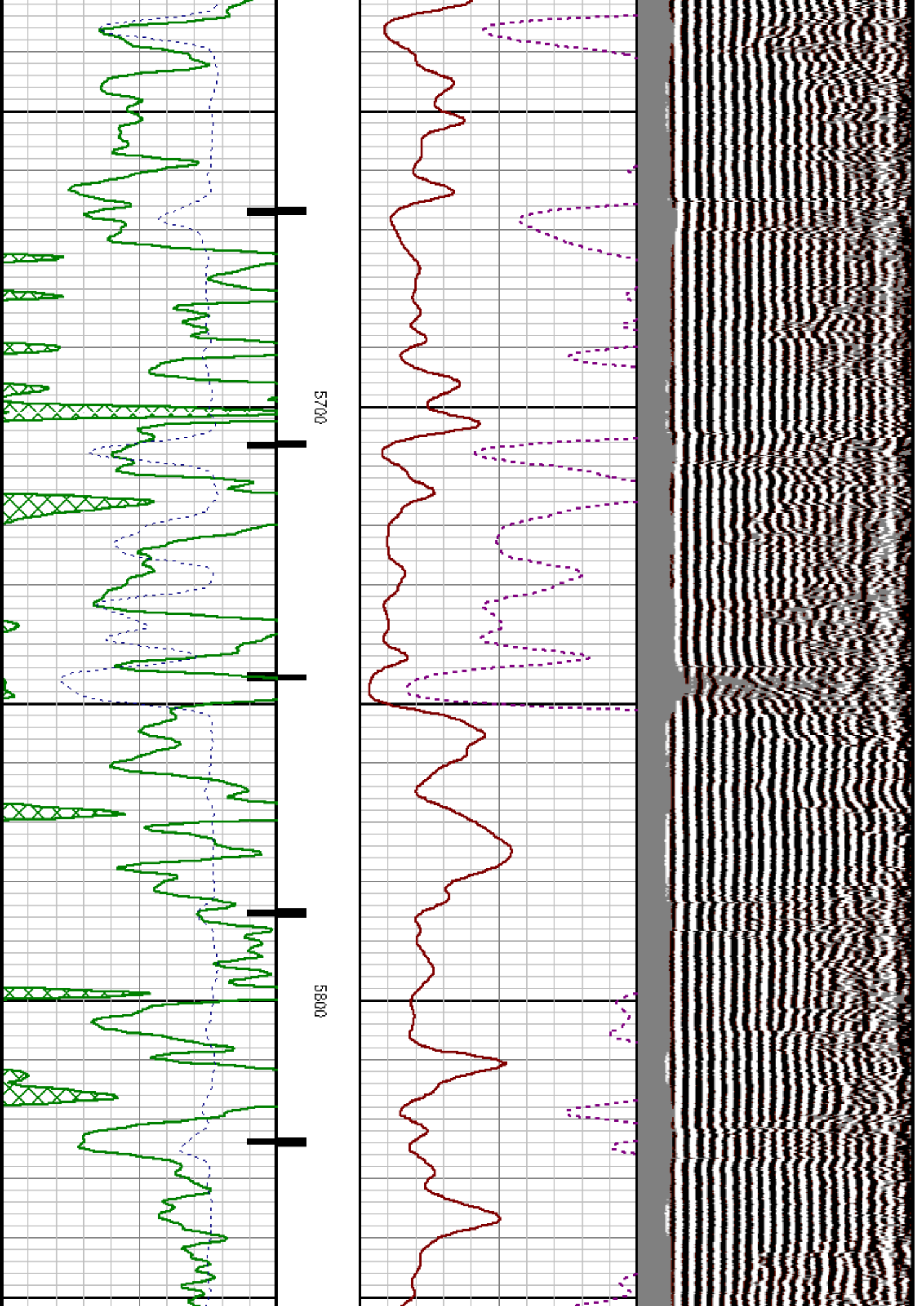


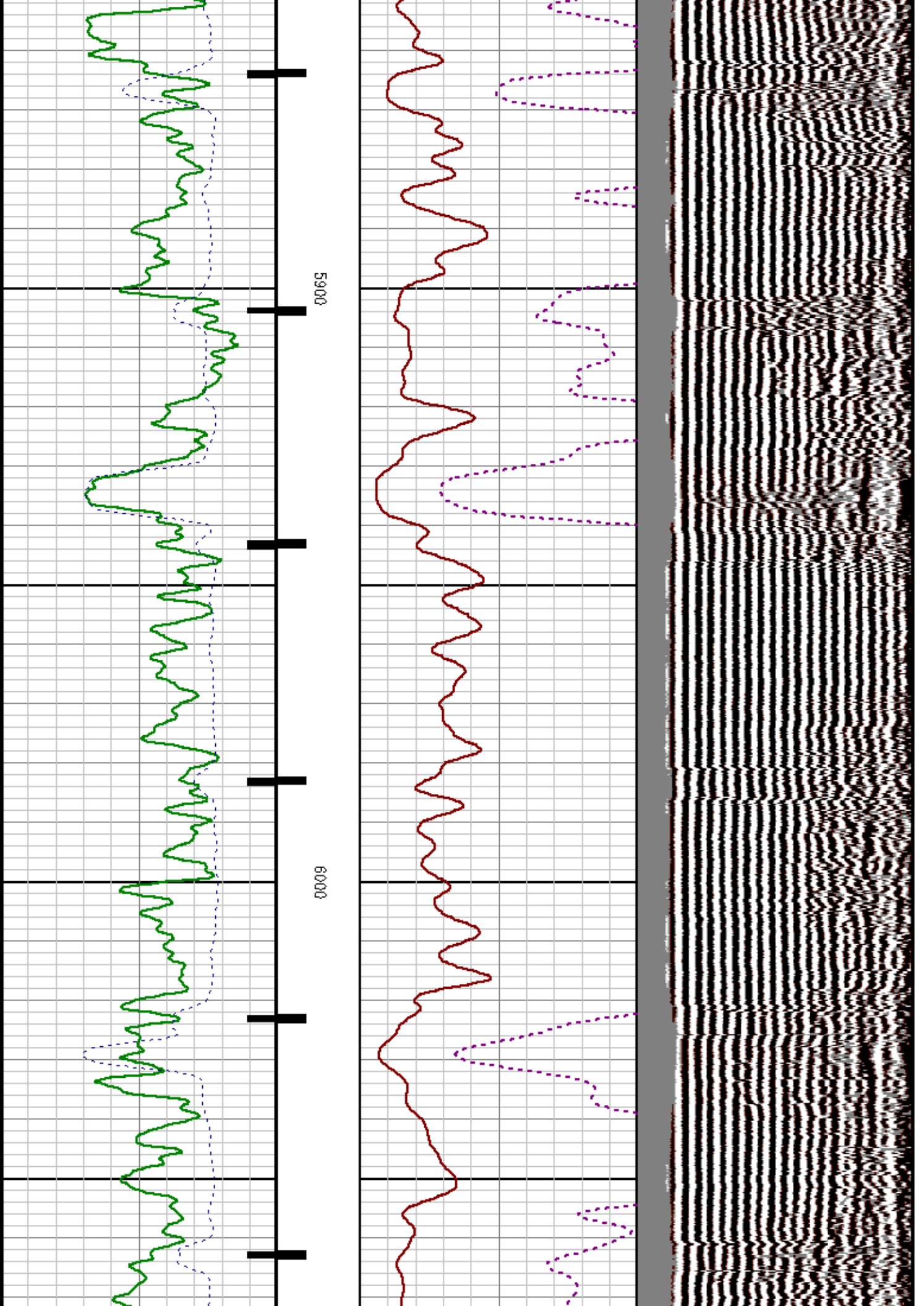


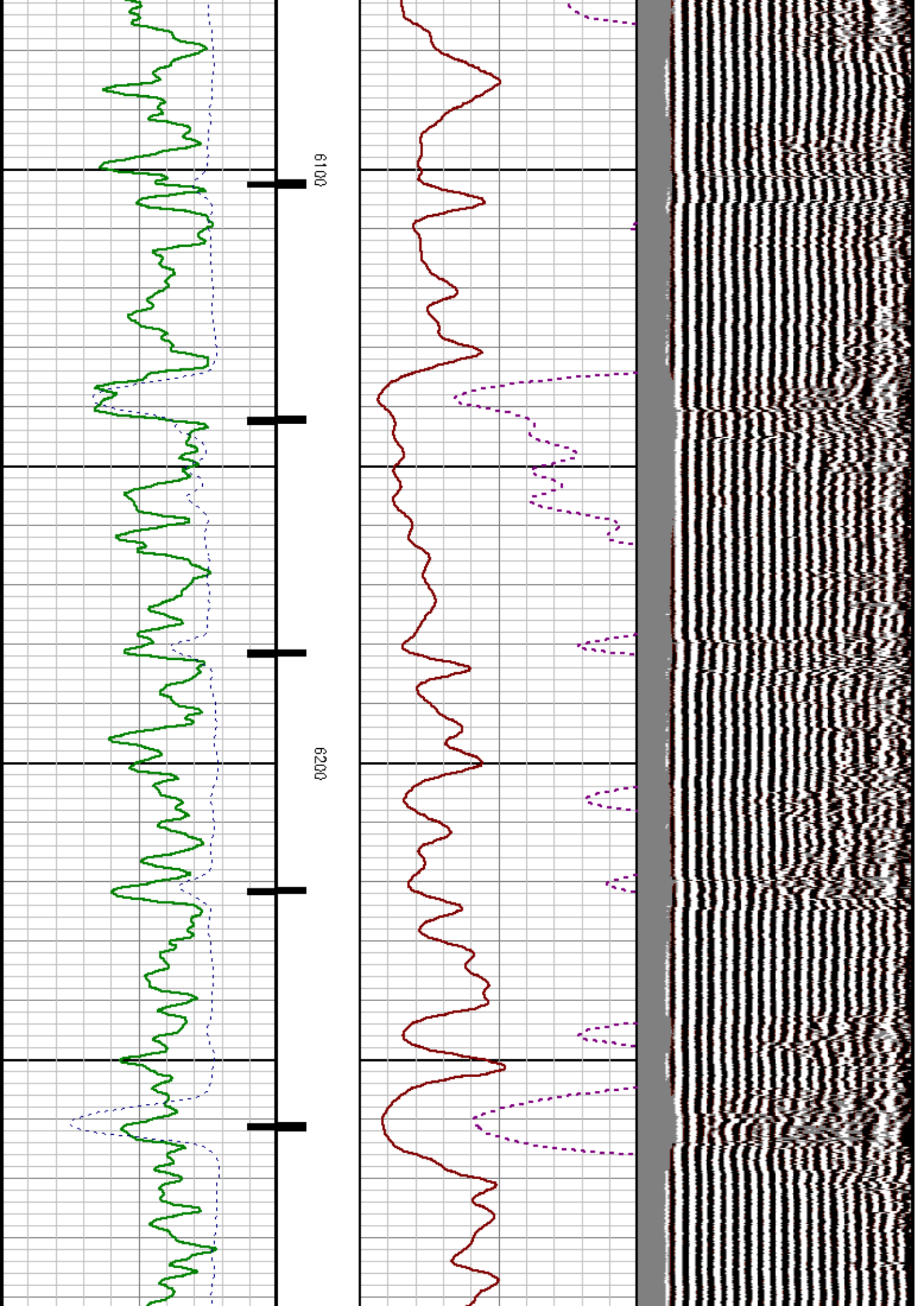


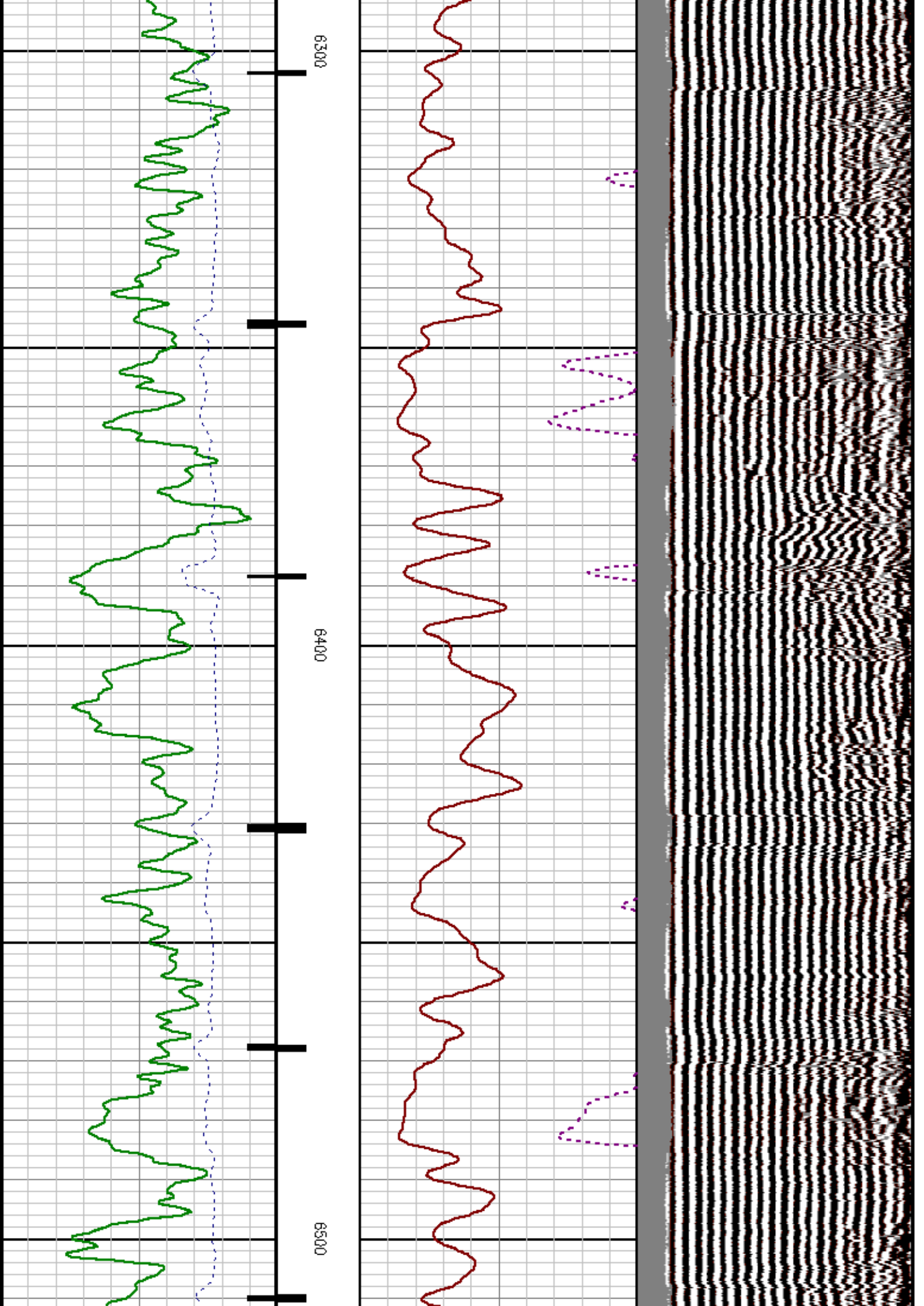


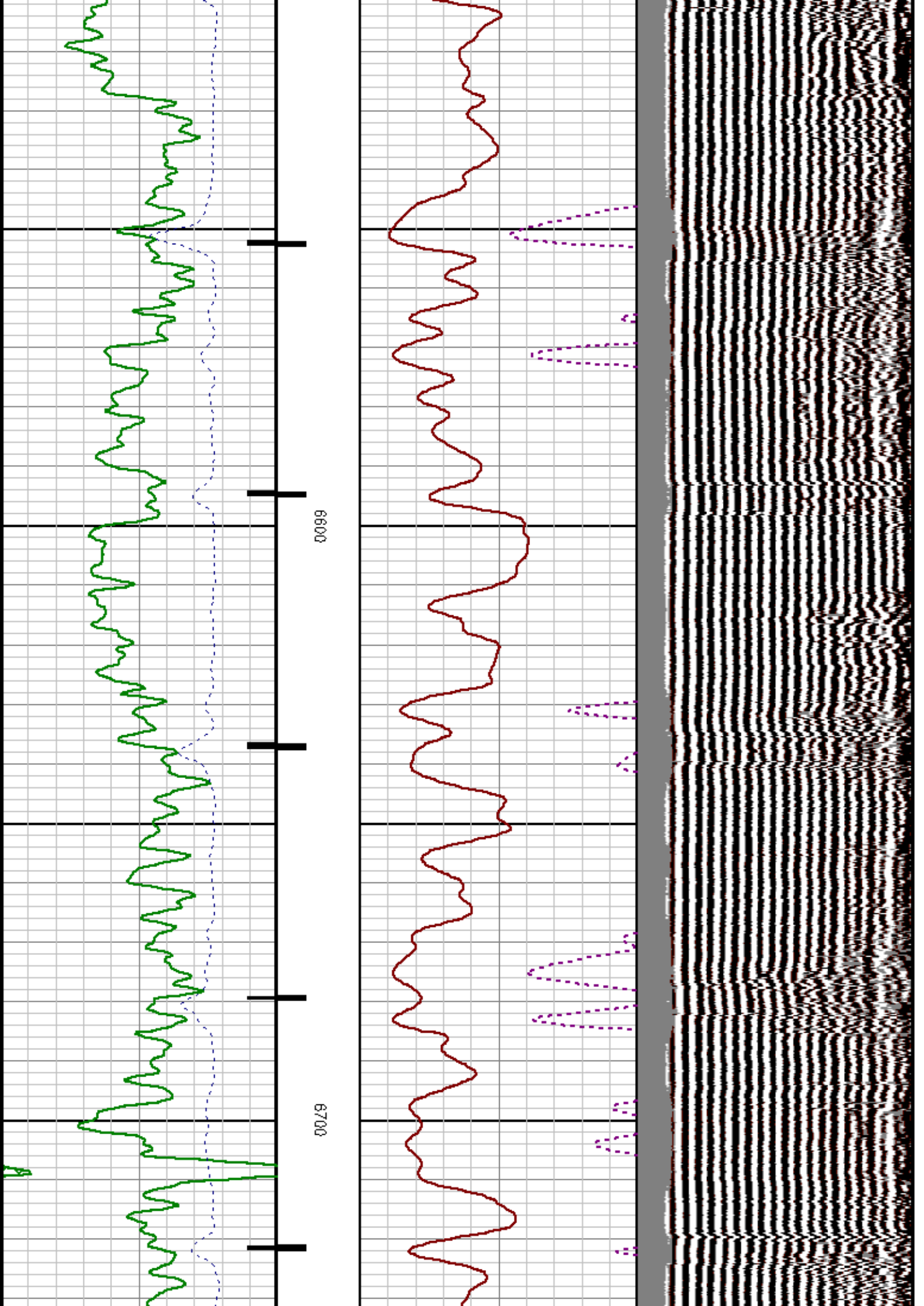


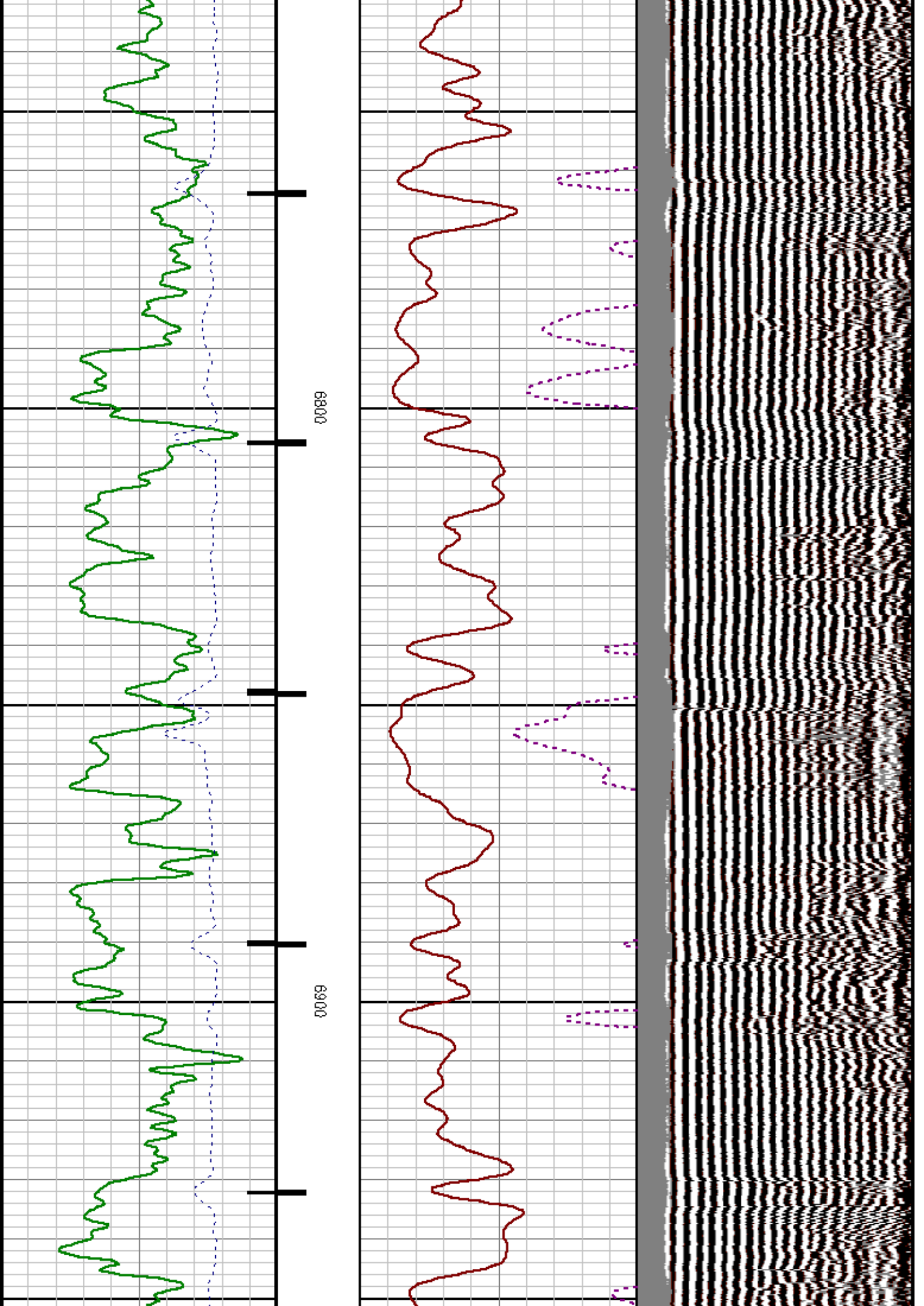


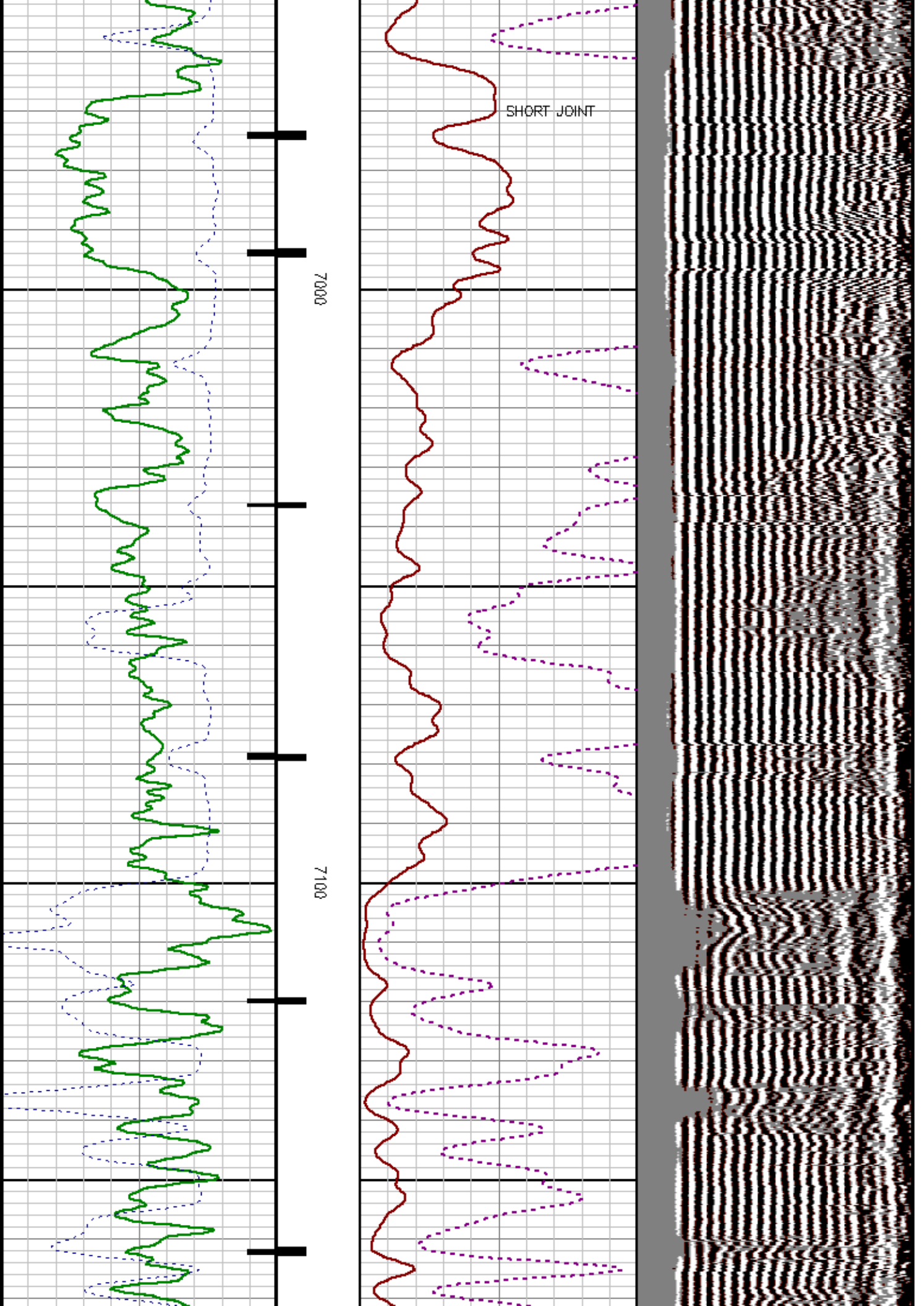


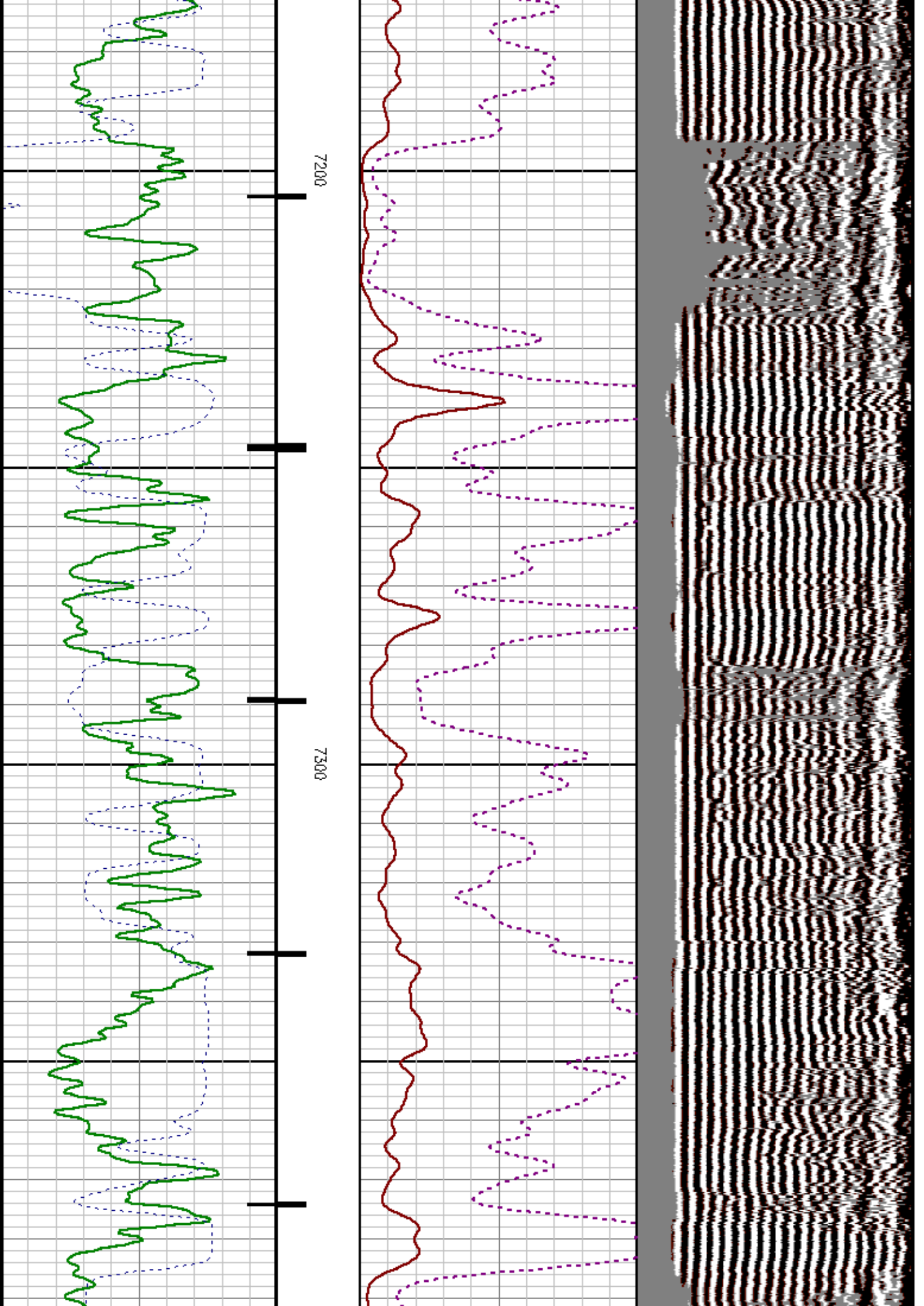


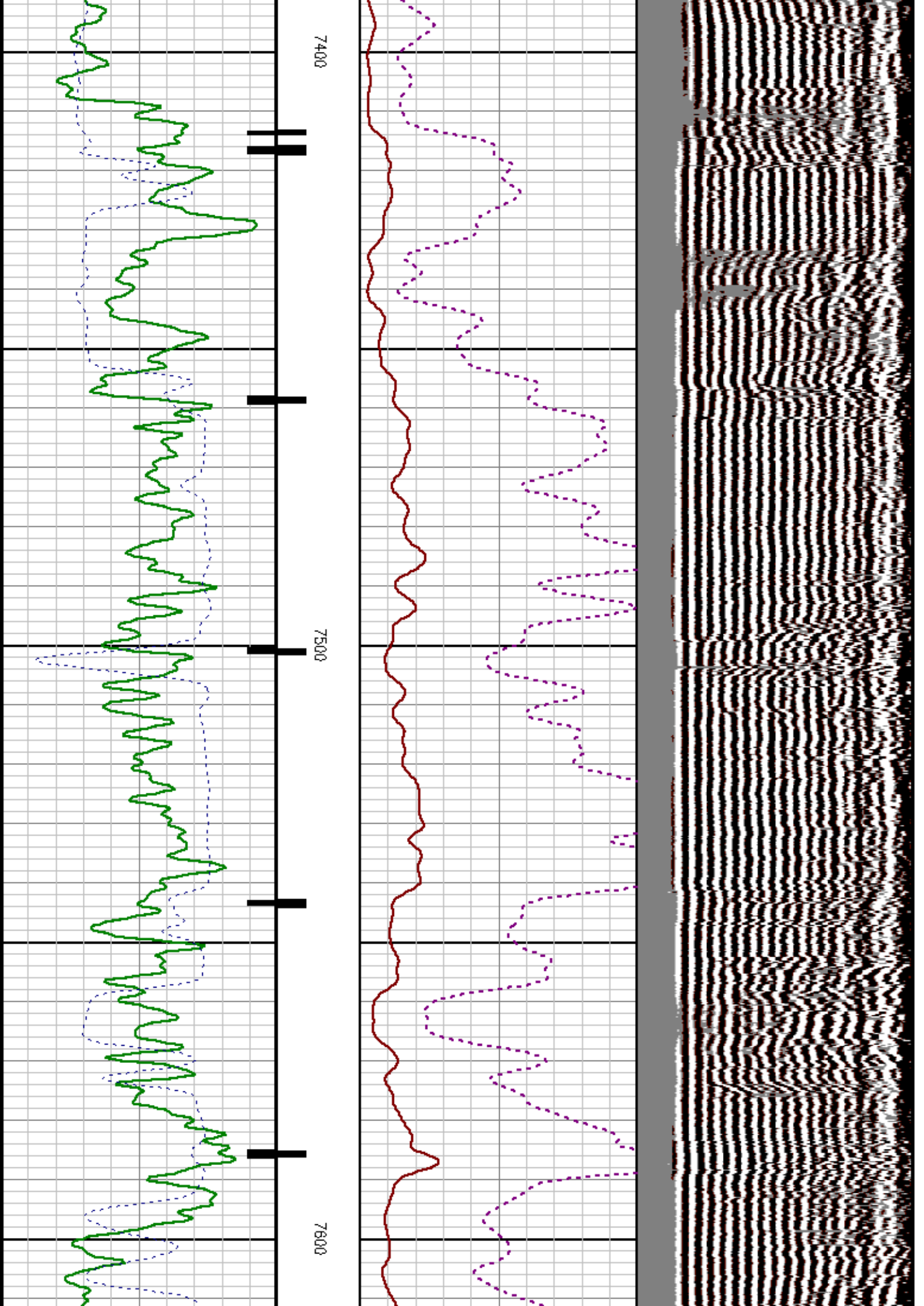


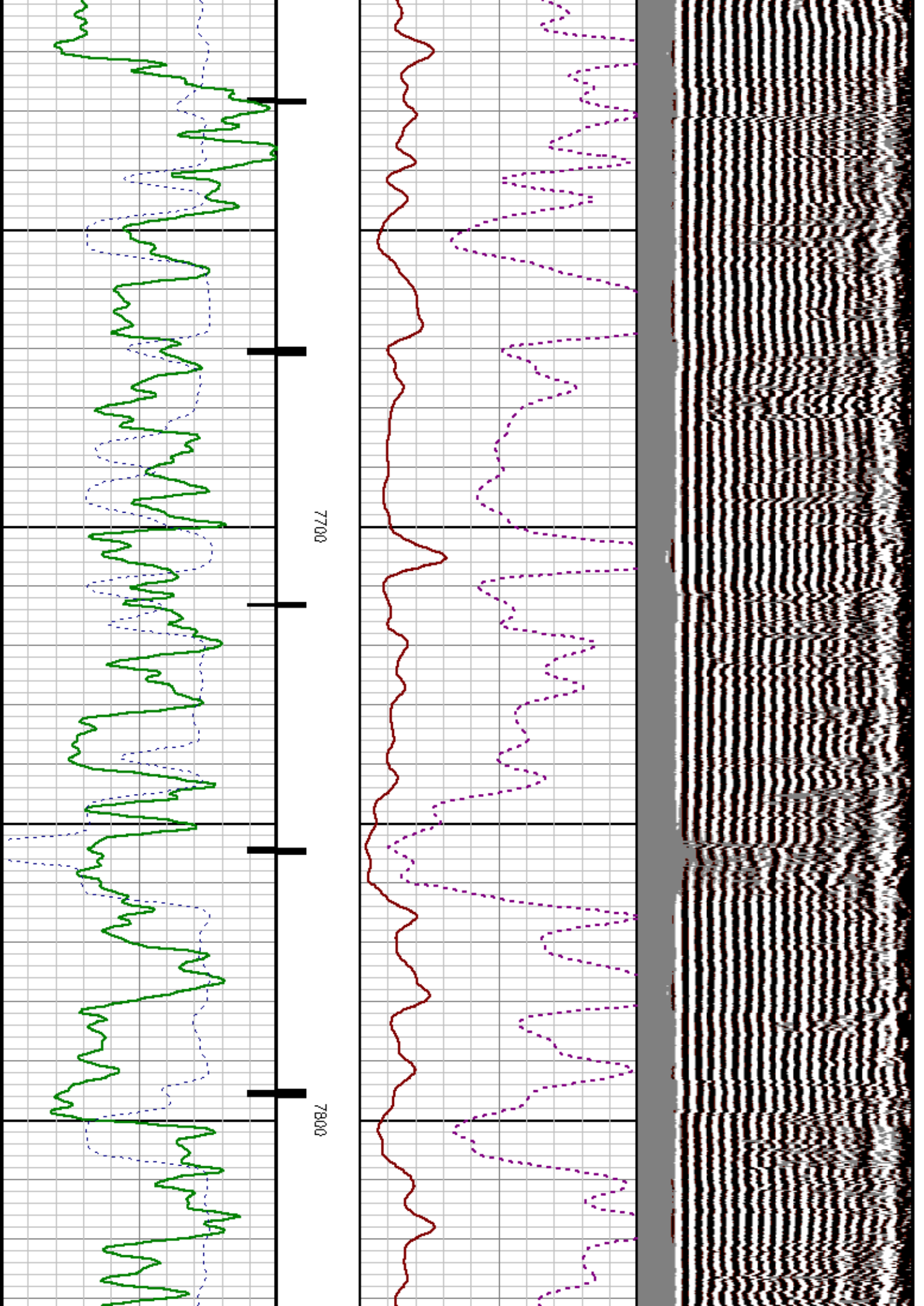


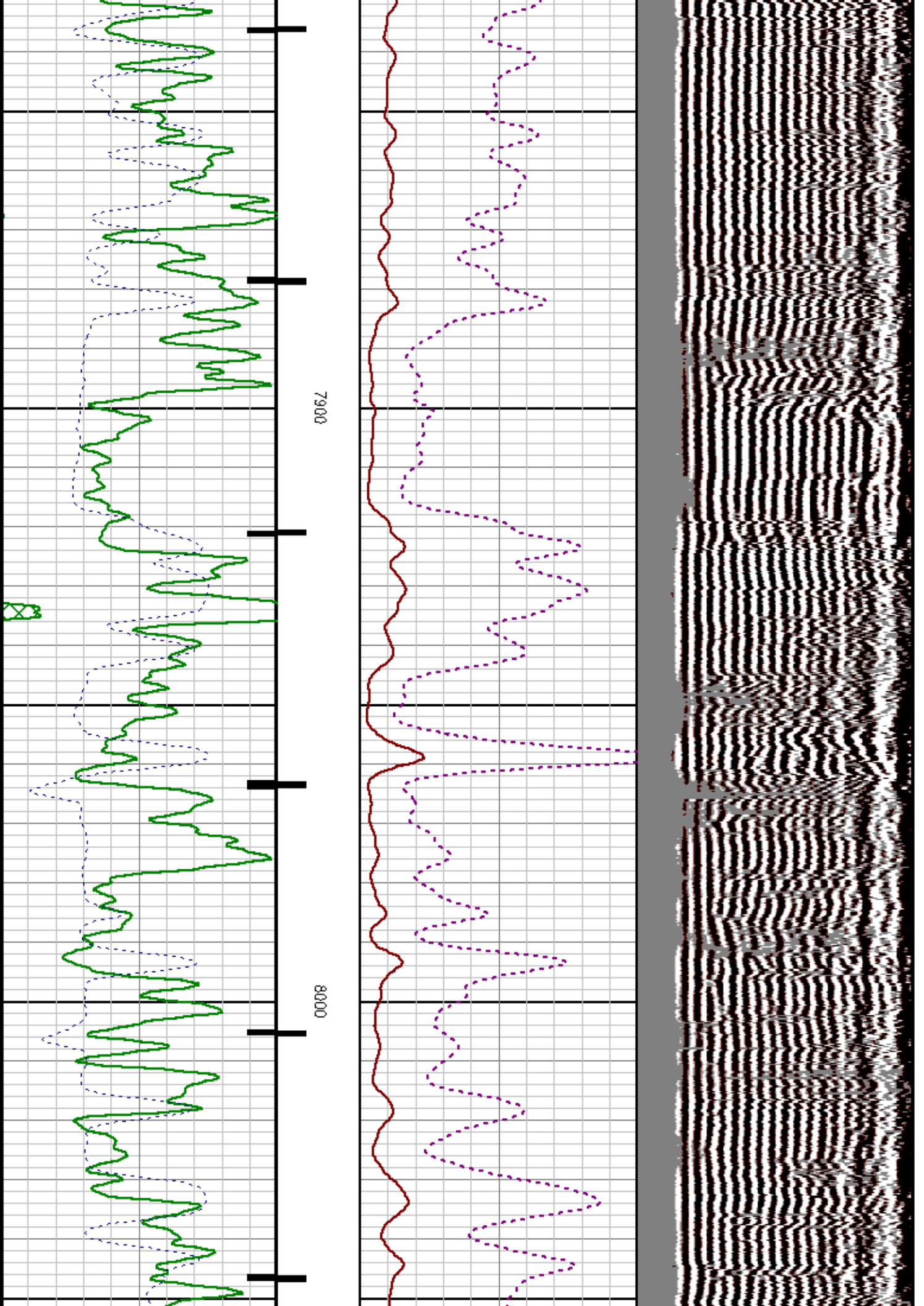


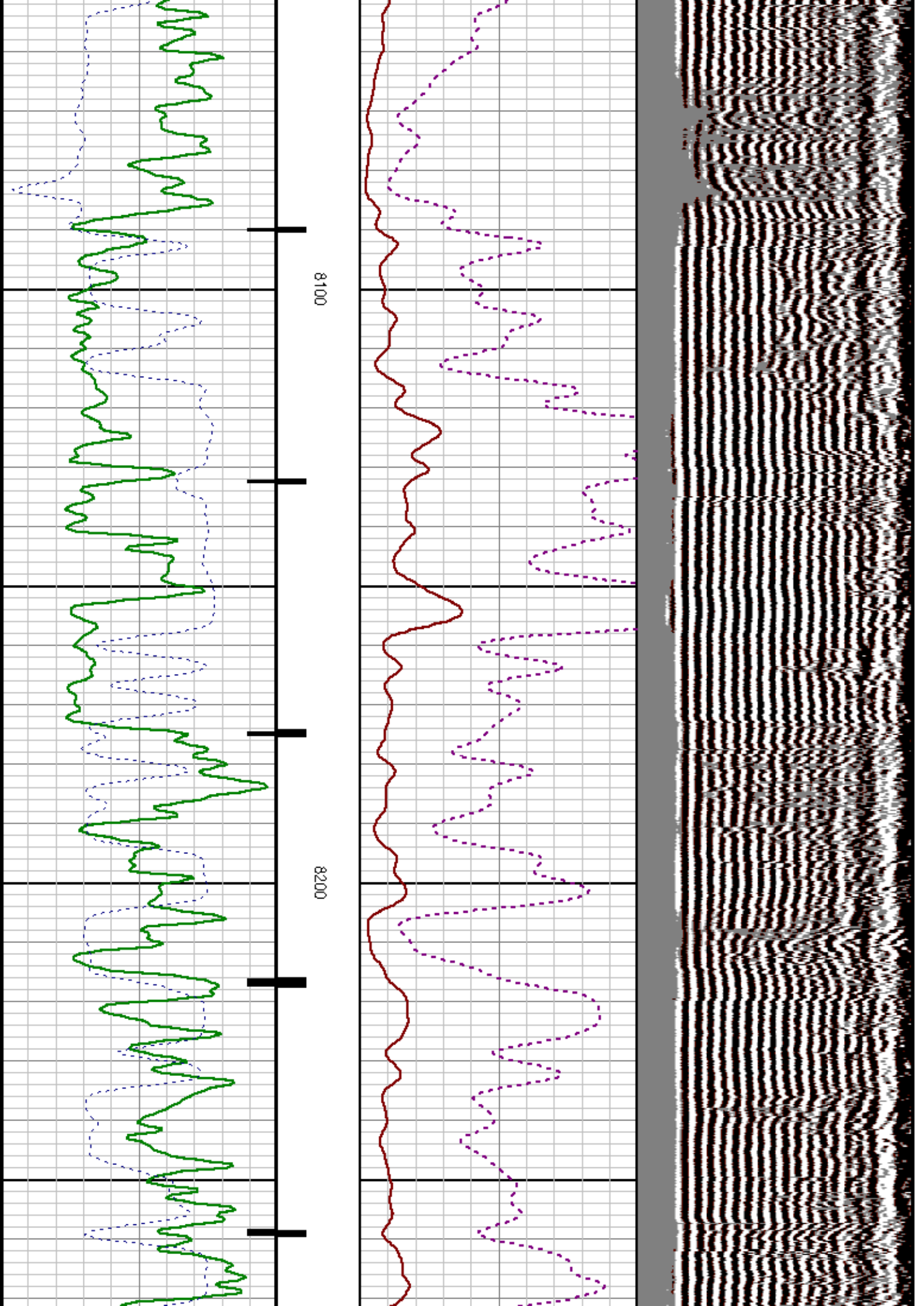


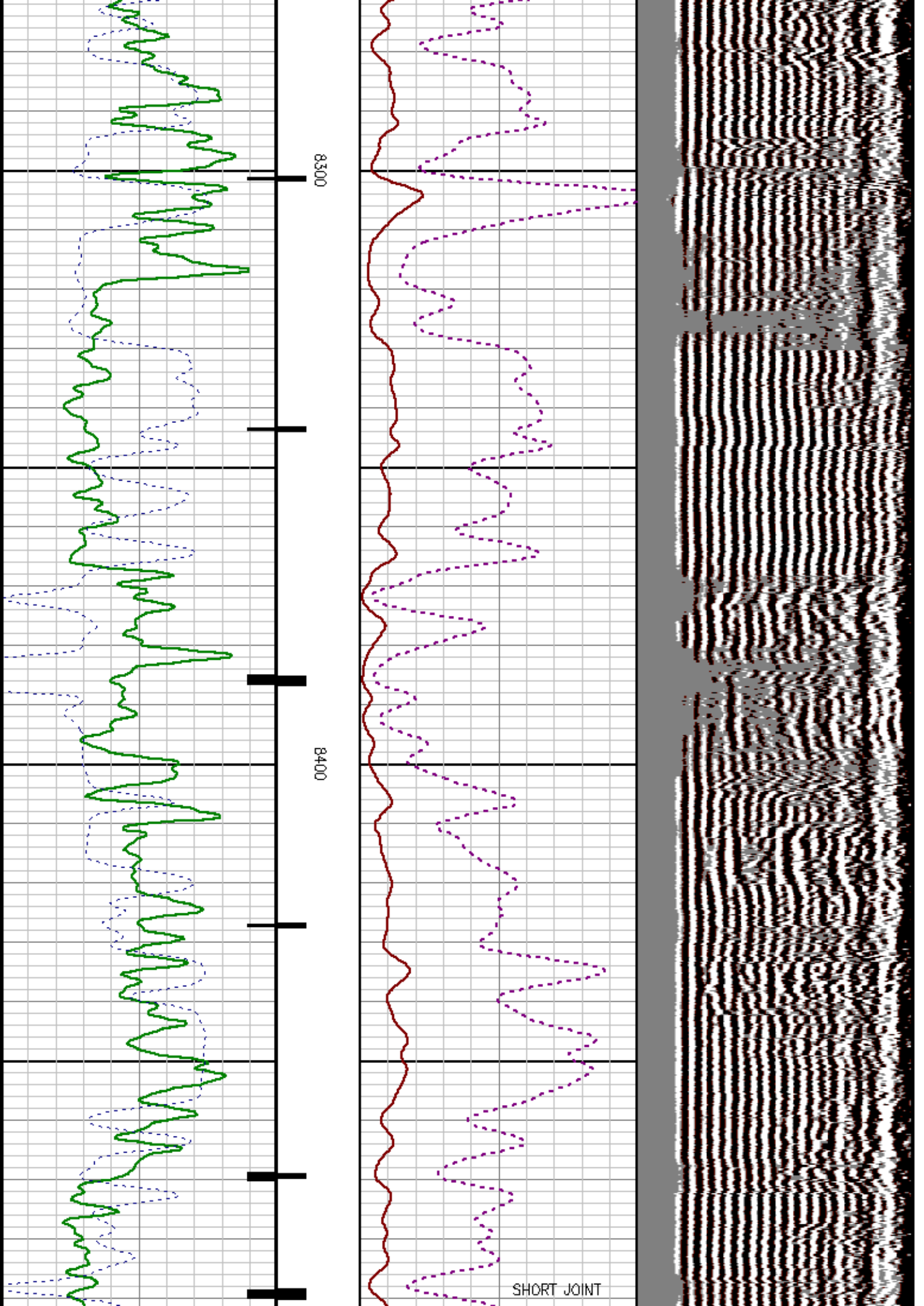


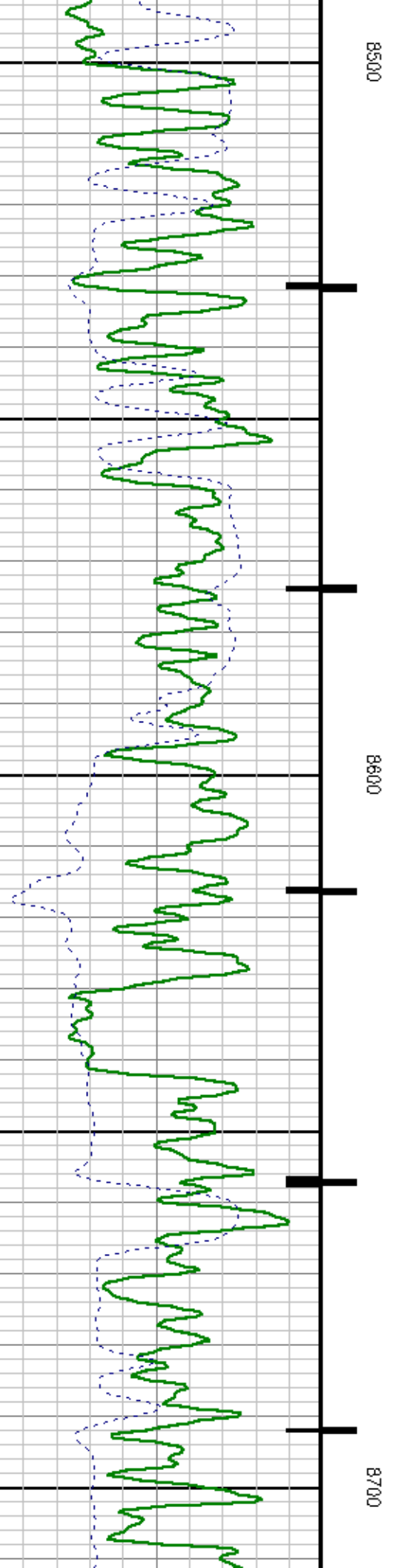
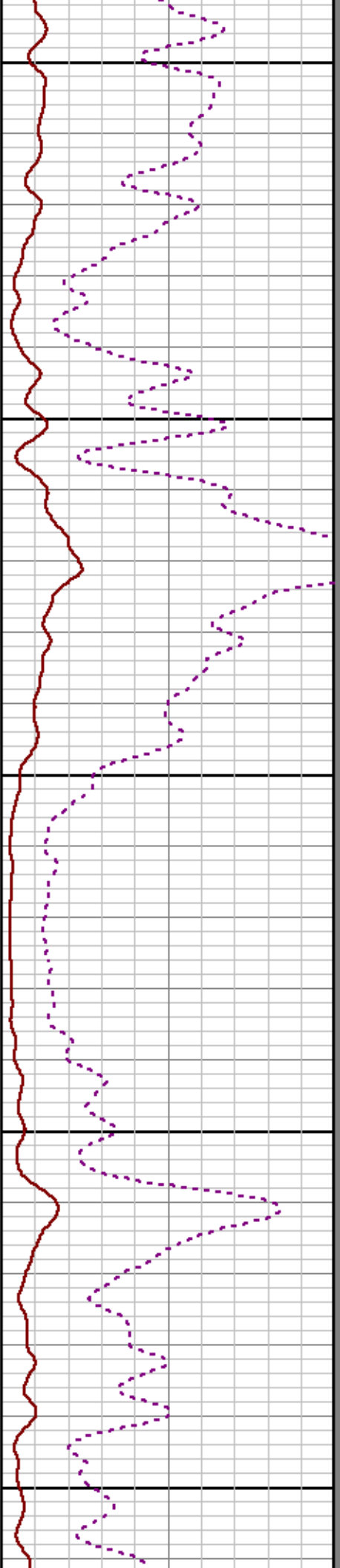
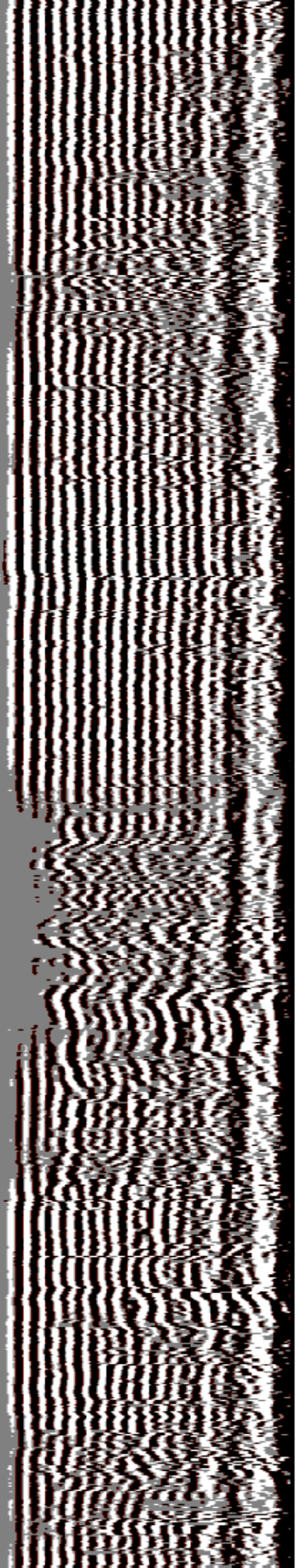


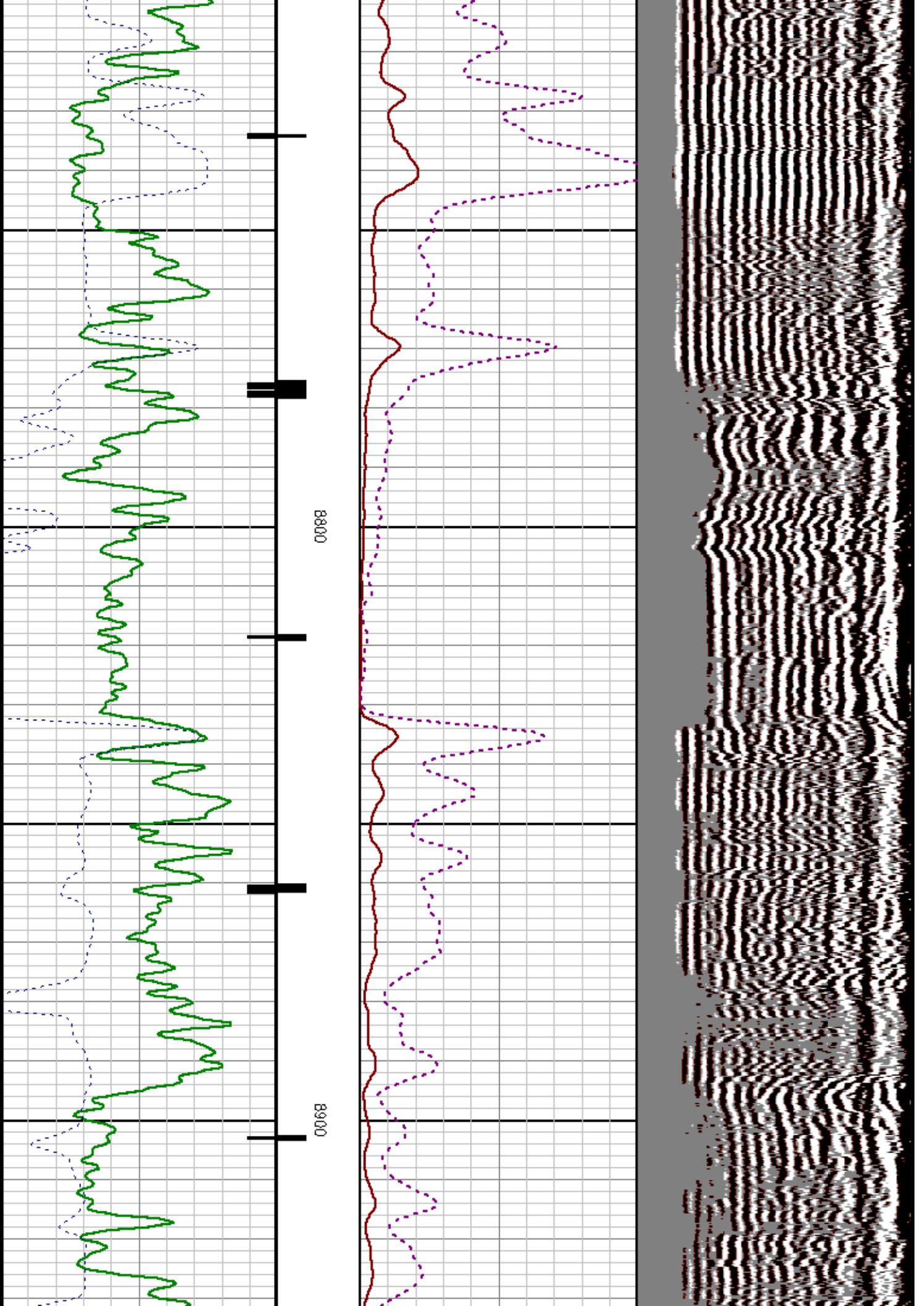


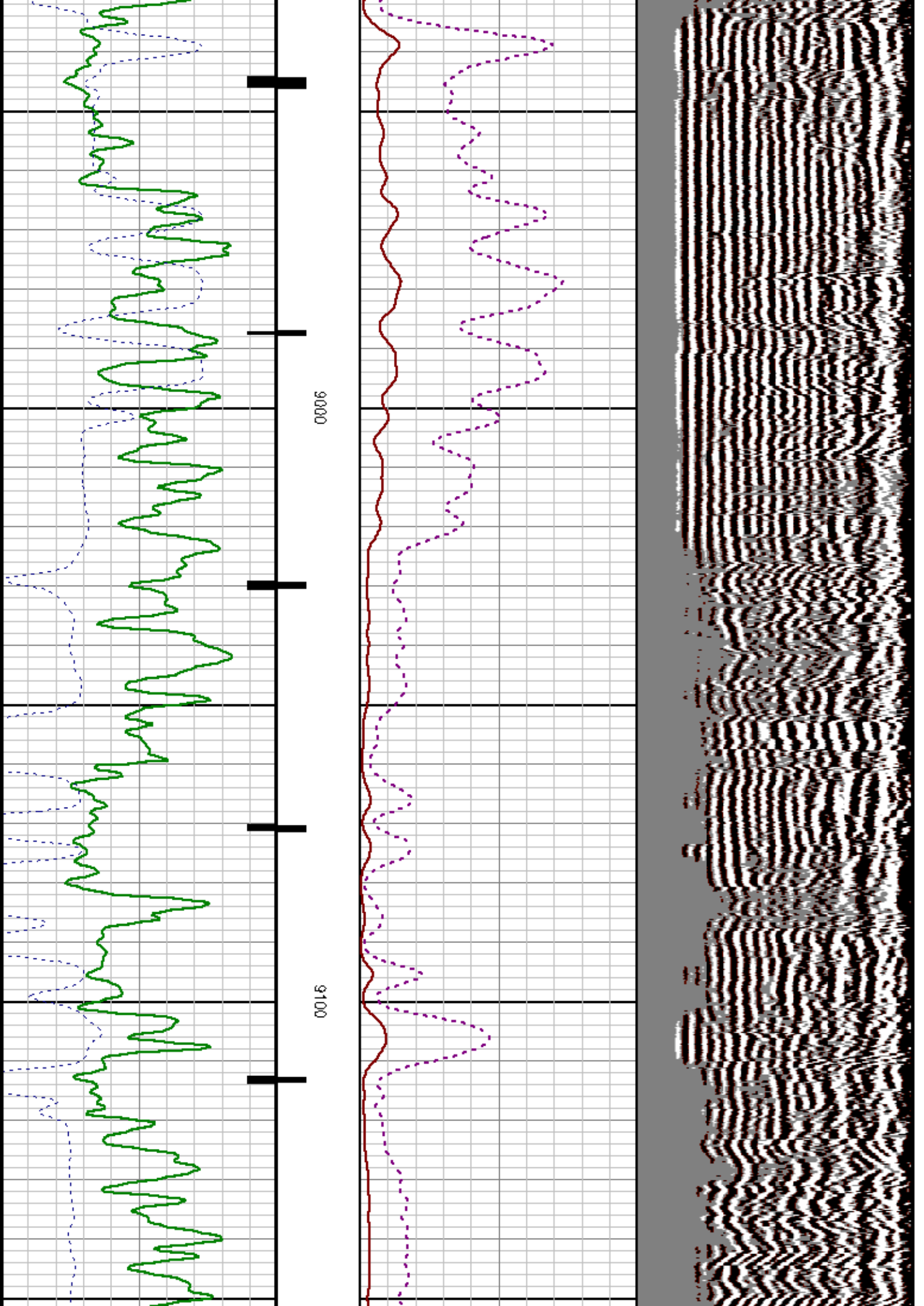


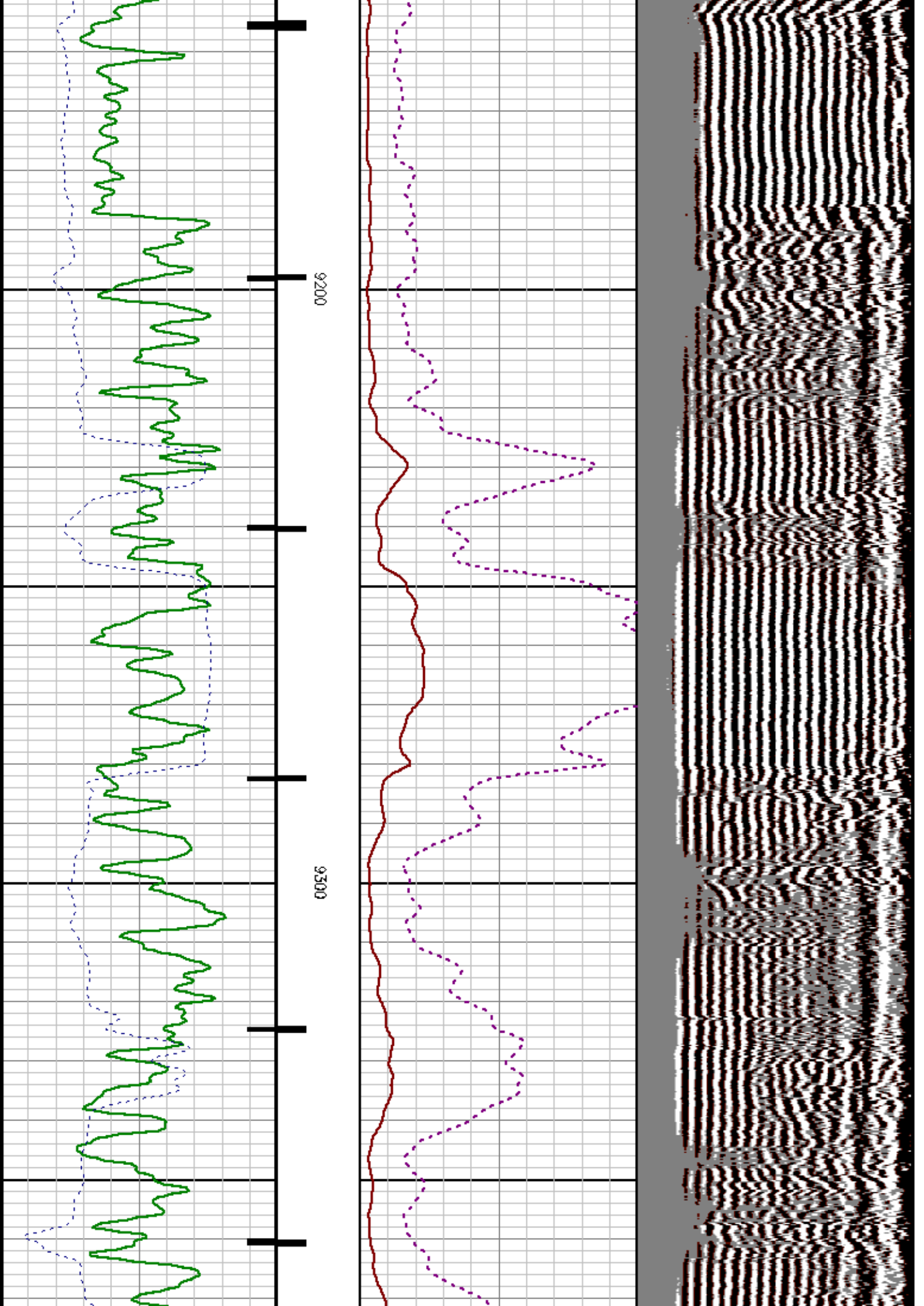


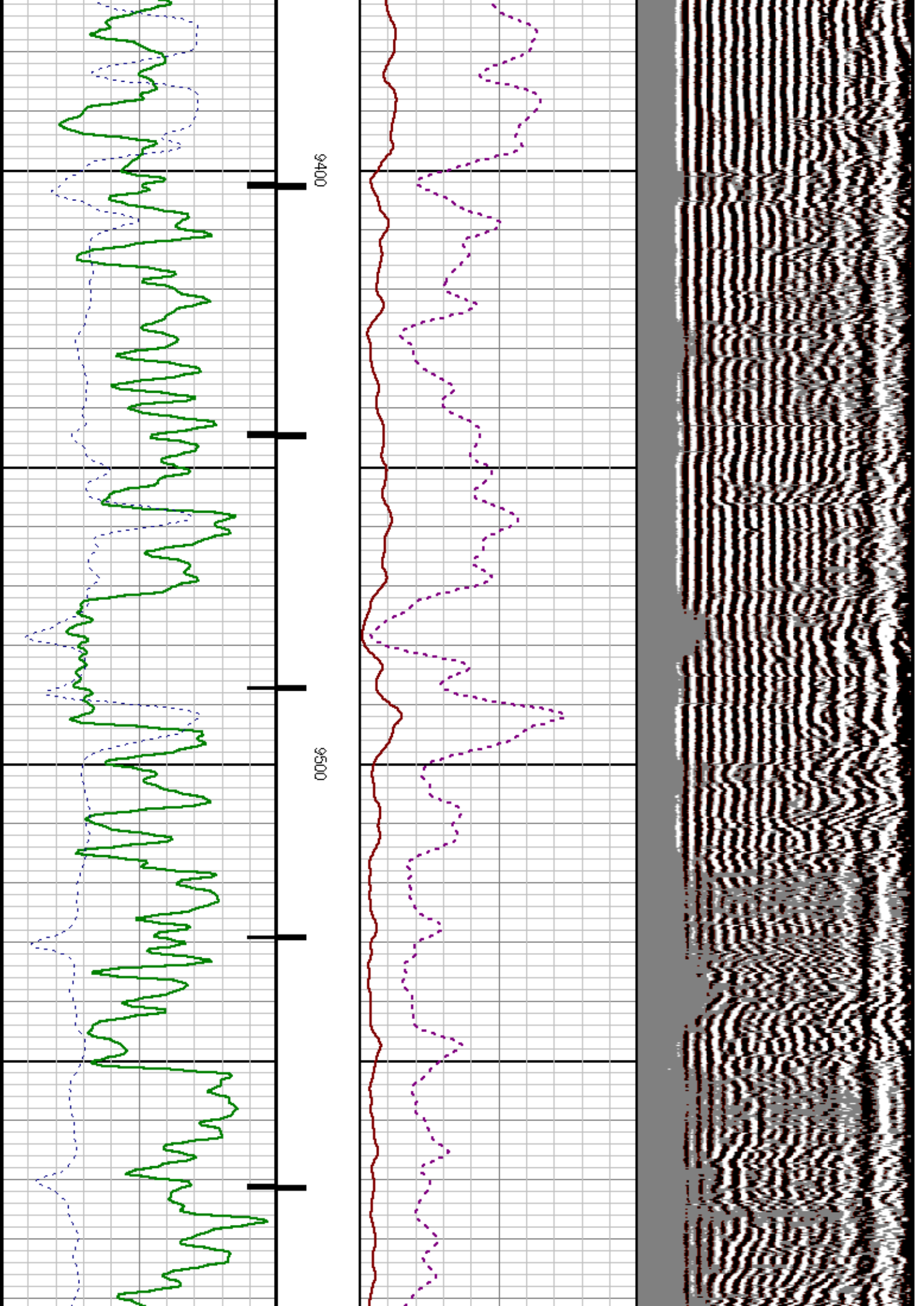


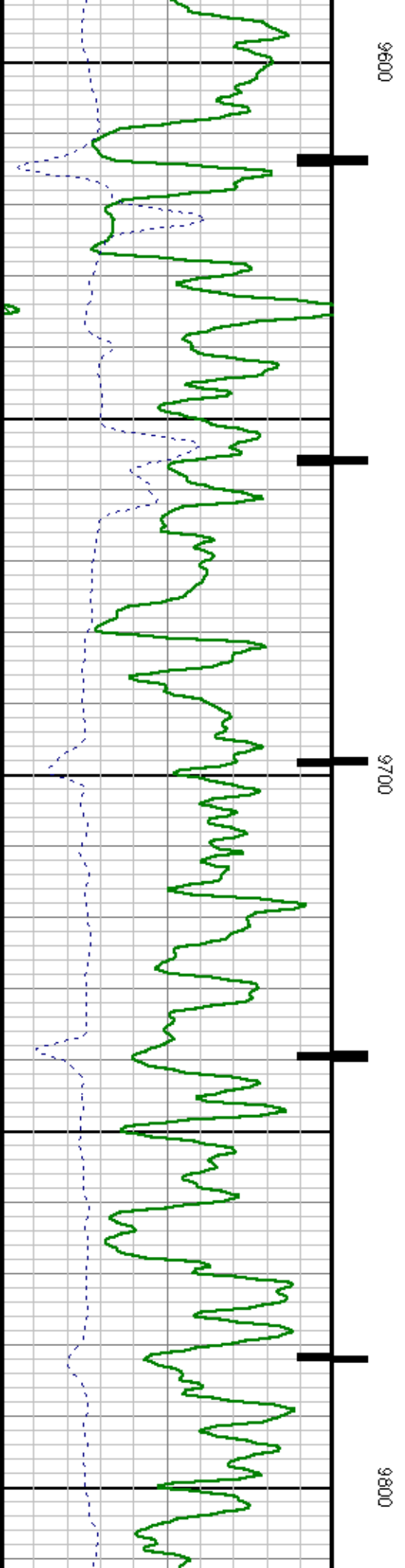
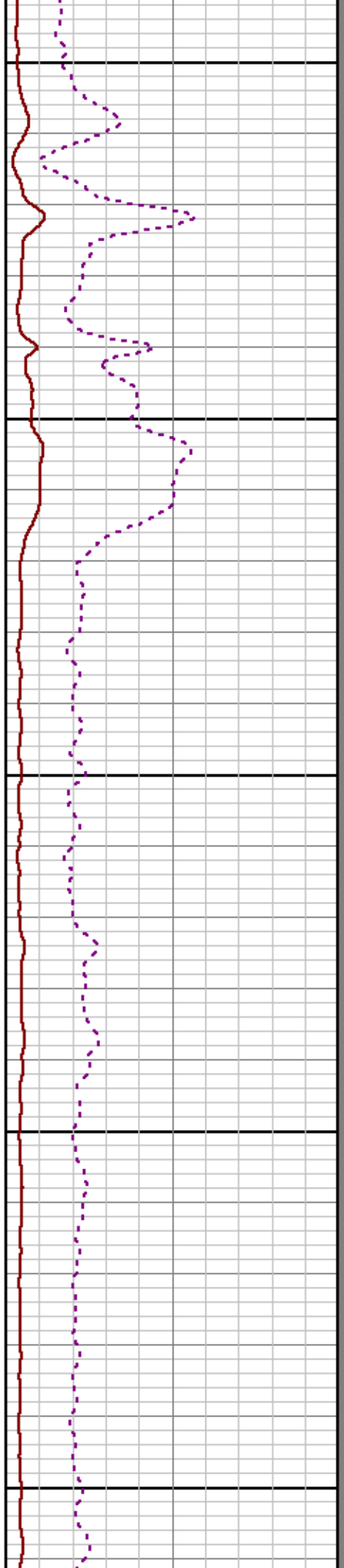
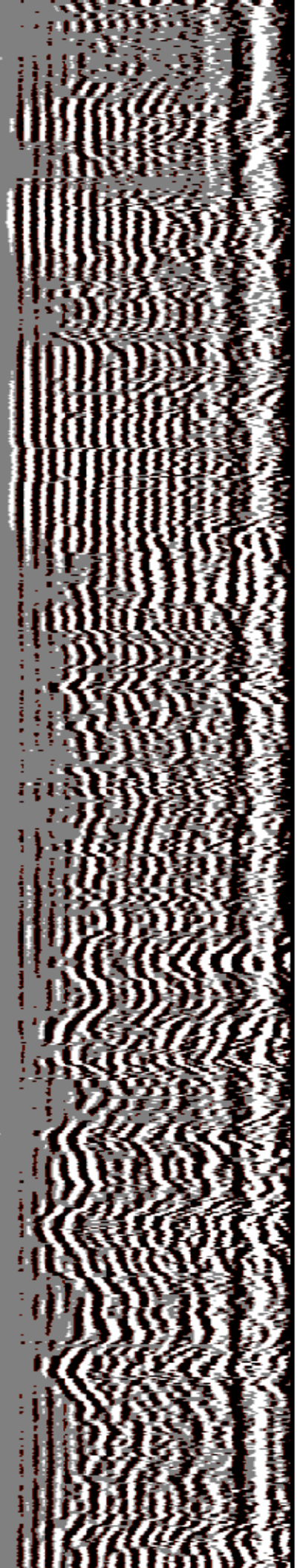


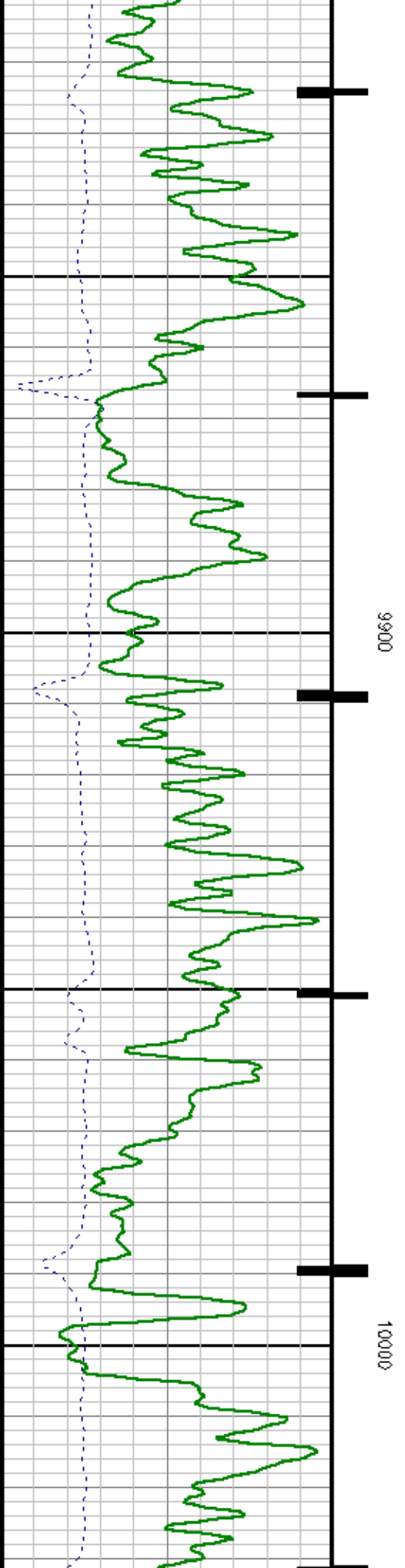
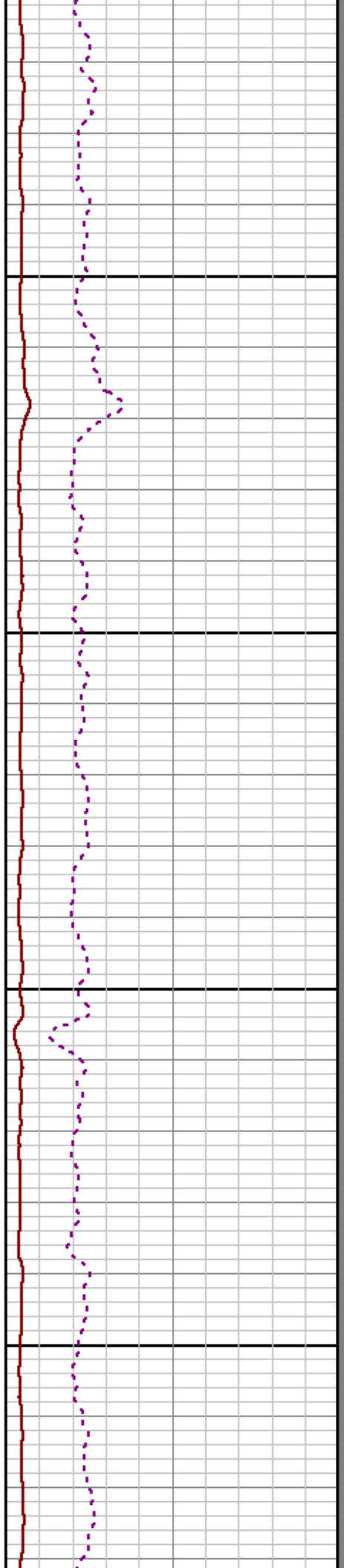
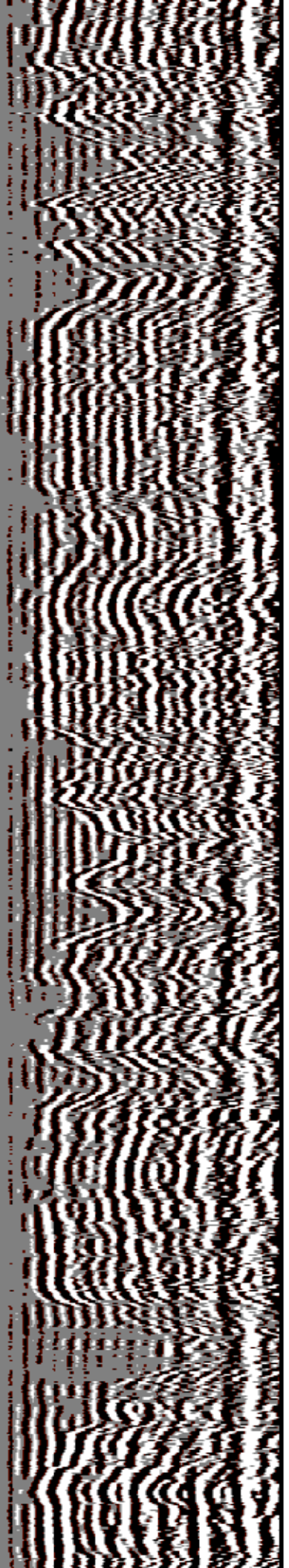


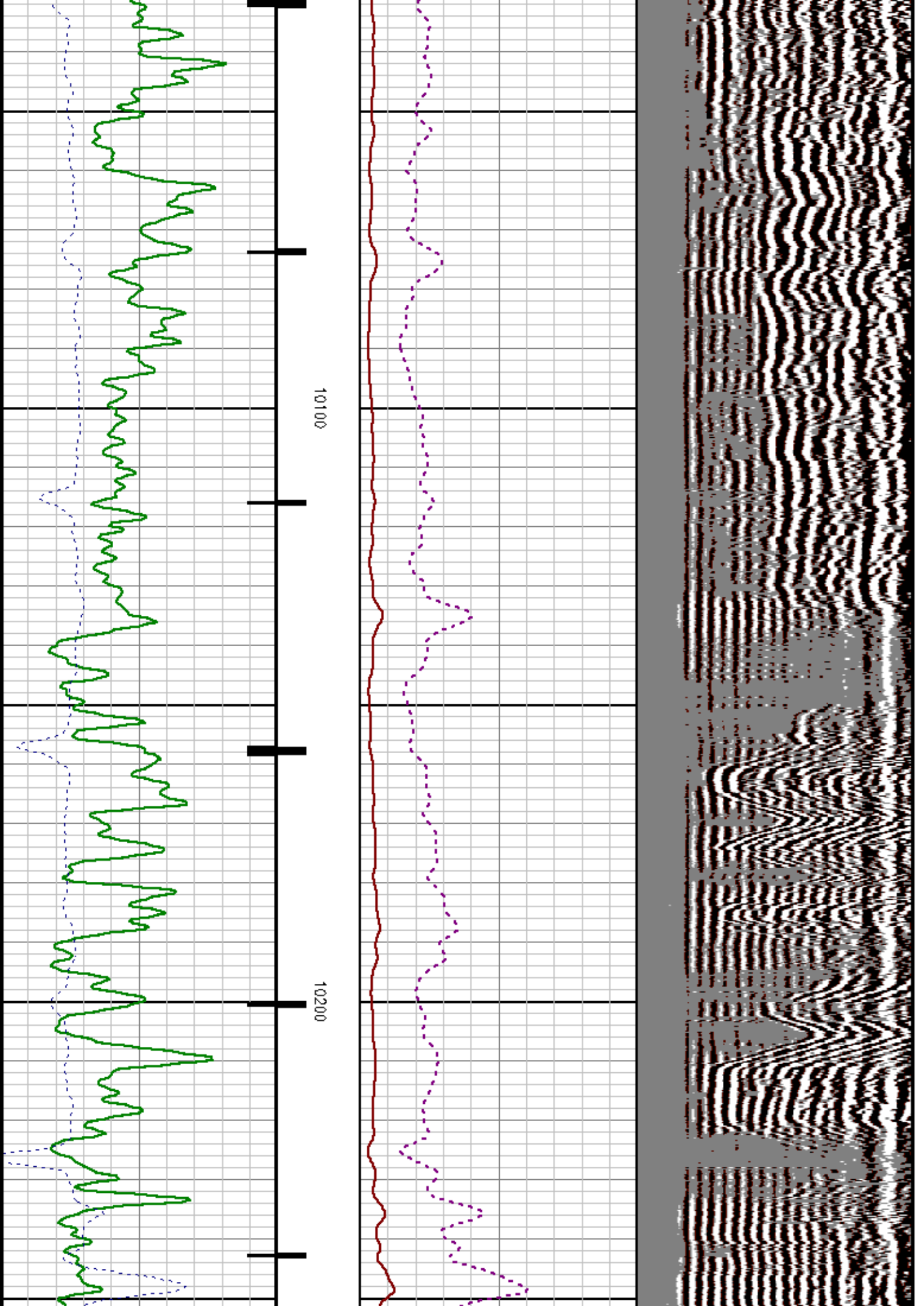


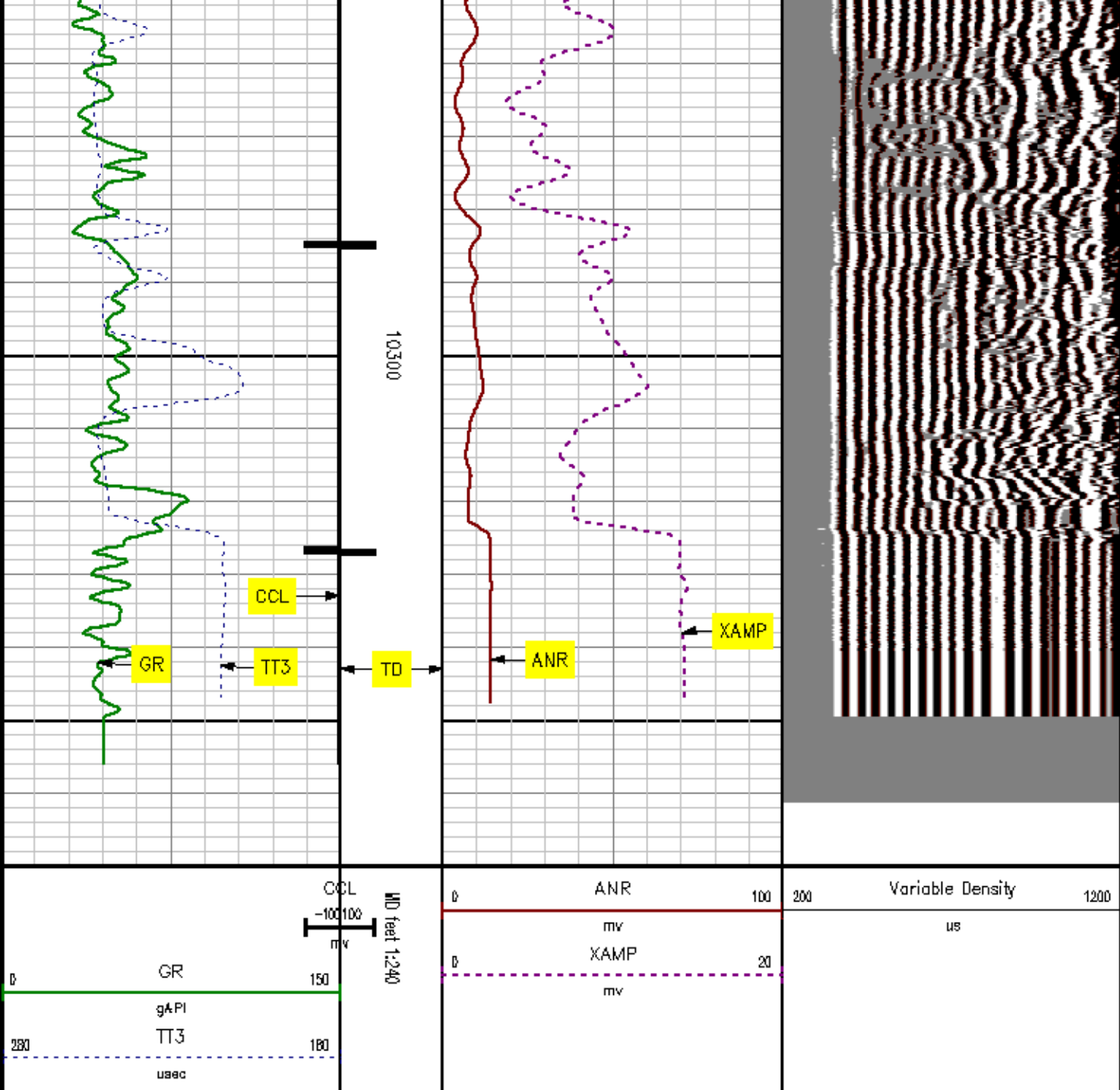












MAIN SECTION
SECONDARY PRESENTATION
1000# PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	316.900	usec	795.000	10370.000
RAL	Amp Gate Start Near	200.391	usec	795.000	10370.000
RAL	Amp Gate Start Radial	200.391	usec	795.000	10370.000
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DEPTH OFFSETS (for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES							
1426XA	-15.380	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	OCL							
1426XA	-5.390	GR							
1426XA	0.000	NEU							

Created by : RAL, v4.8.007

Plotted by : PlotMgr, v5.4.504

Company : MARATHON OIL COMPANY

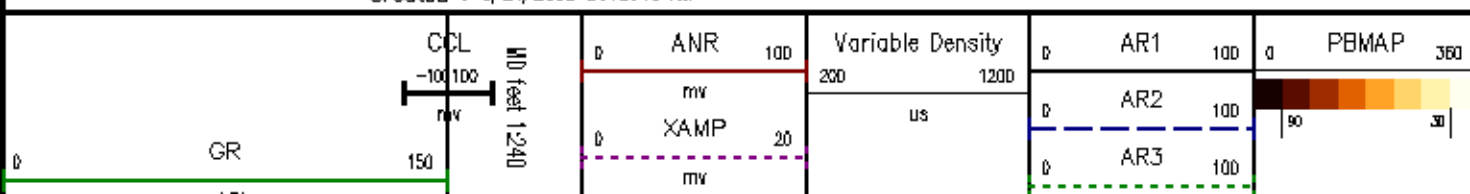
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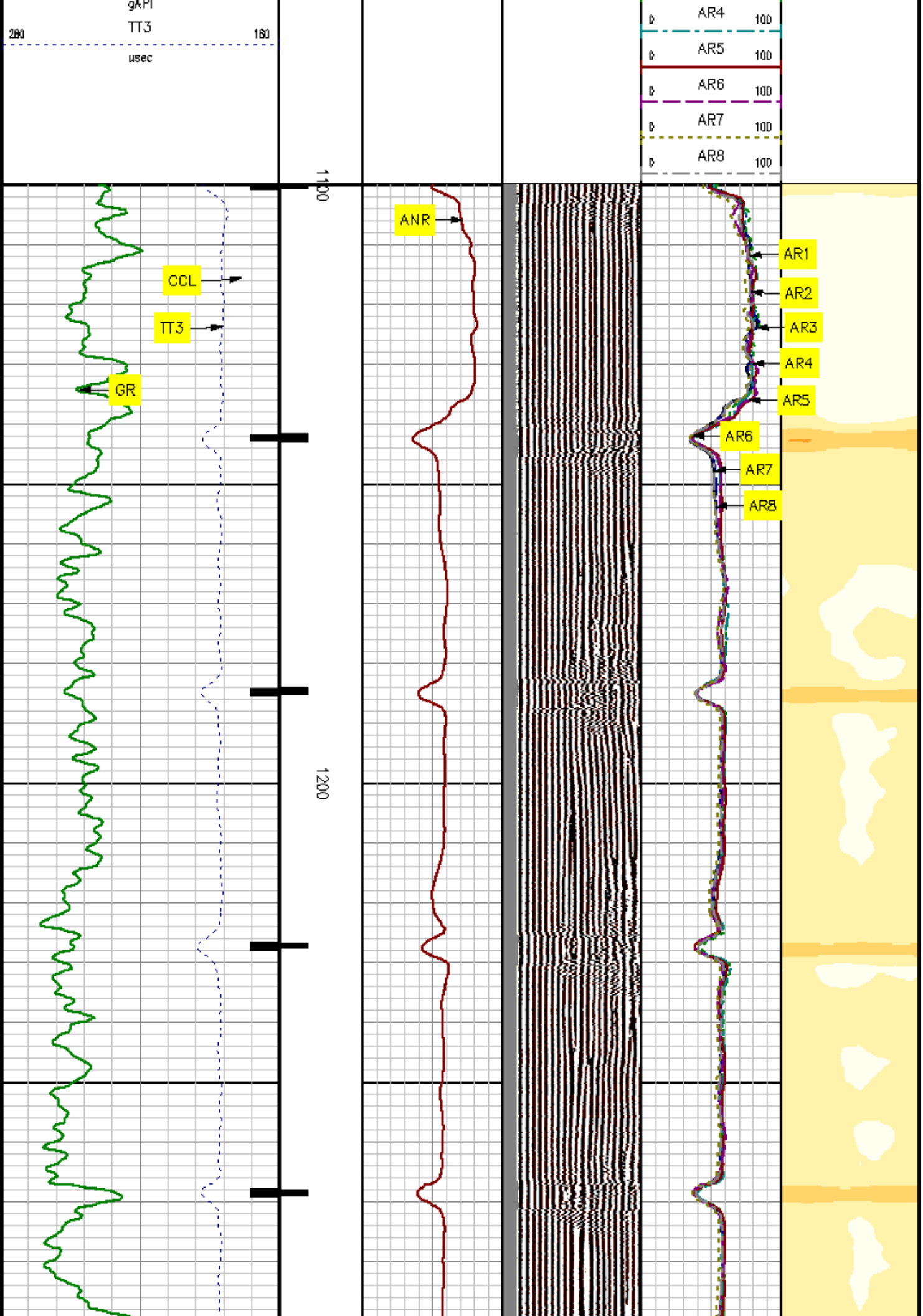
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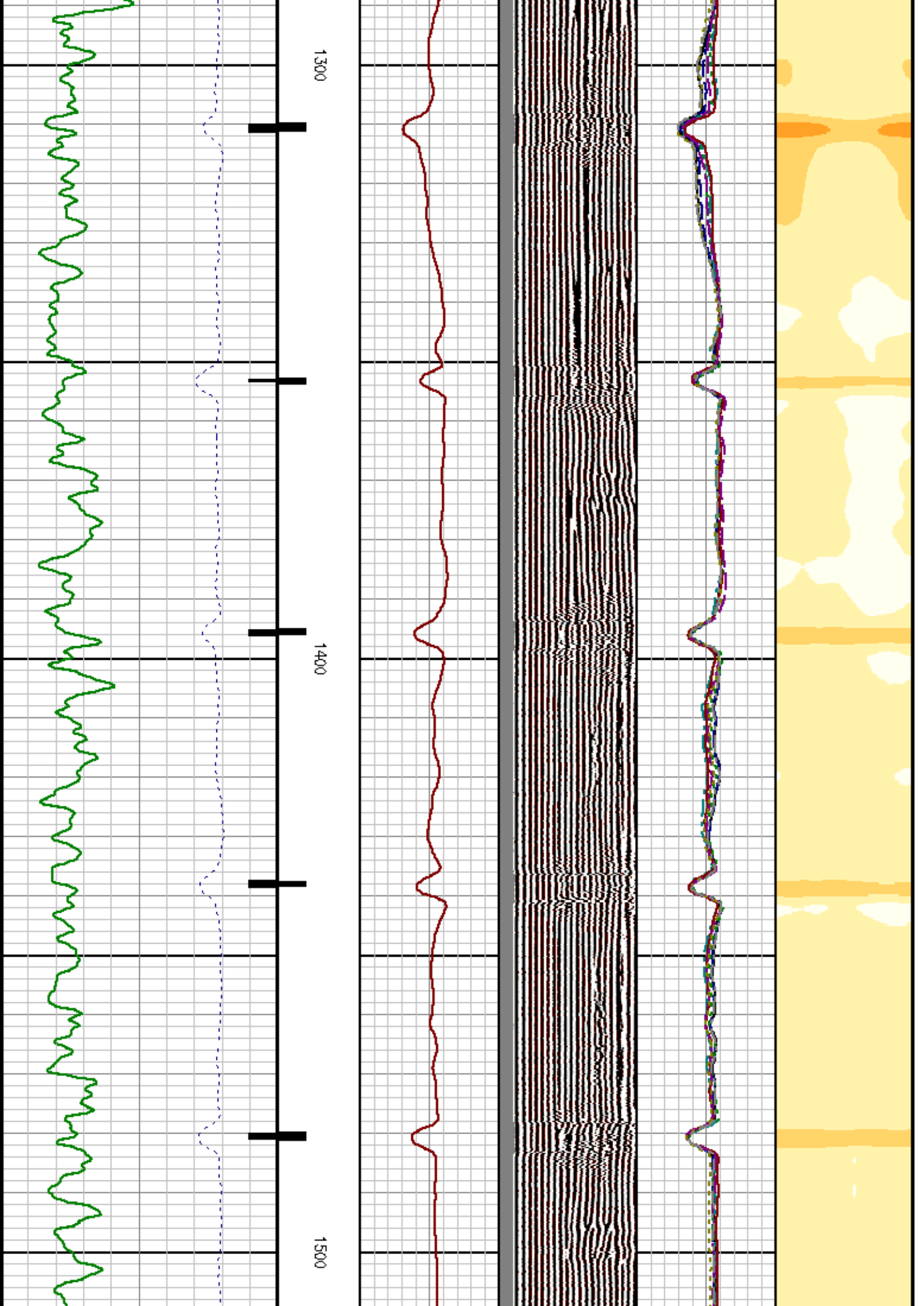
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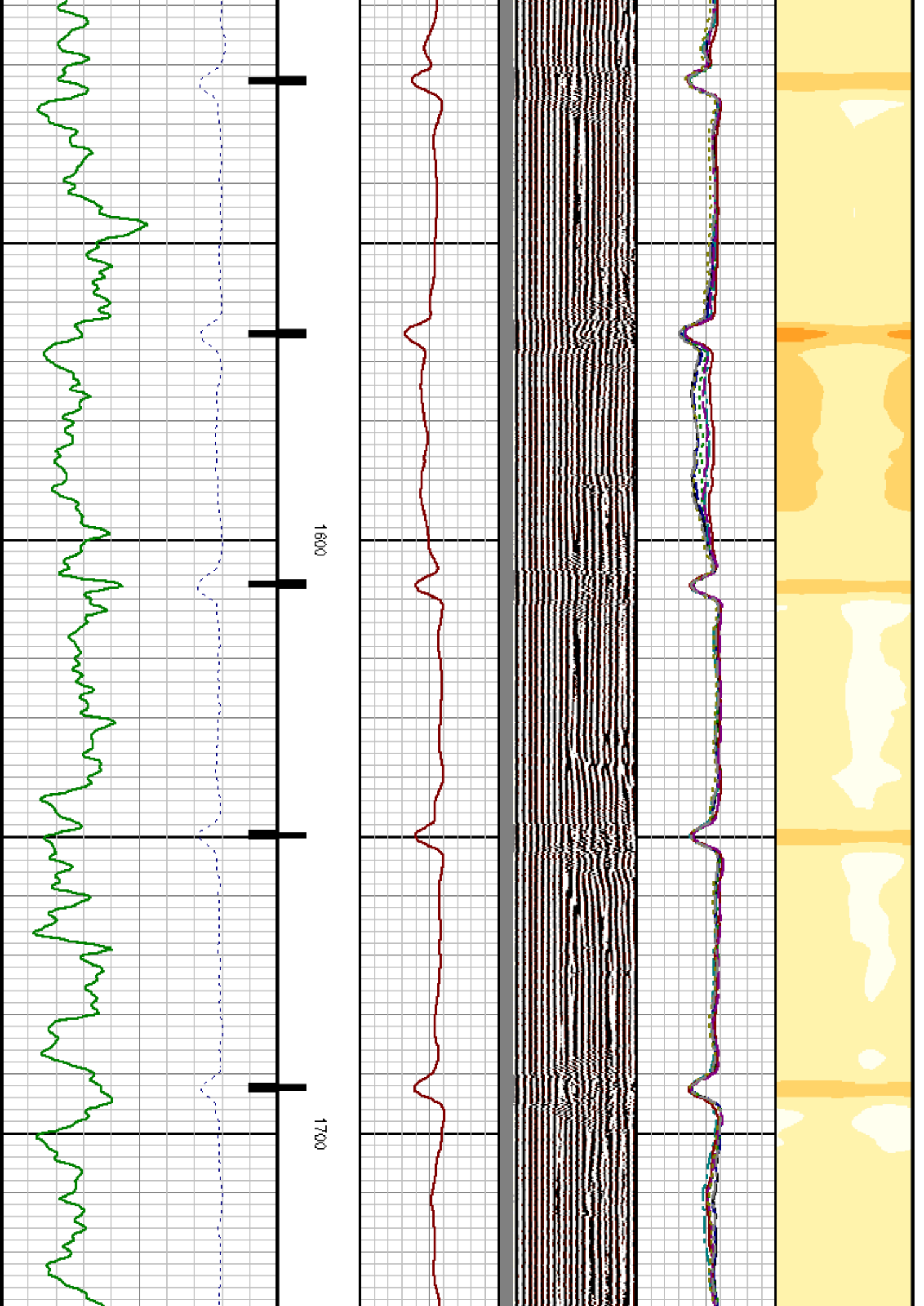
Interval : 1100.00 - 10370.00 feet UP

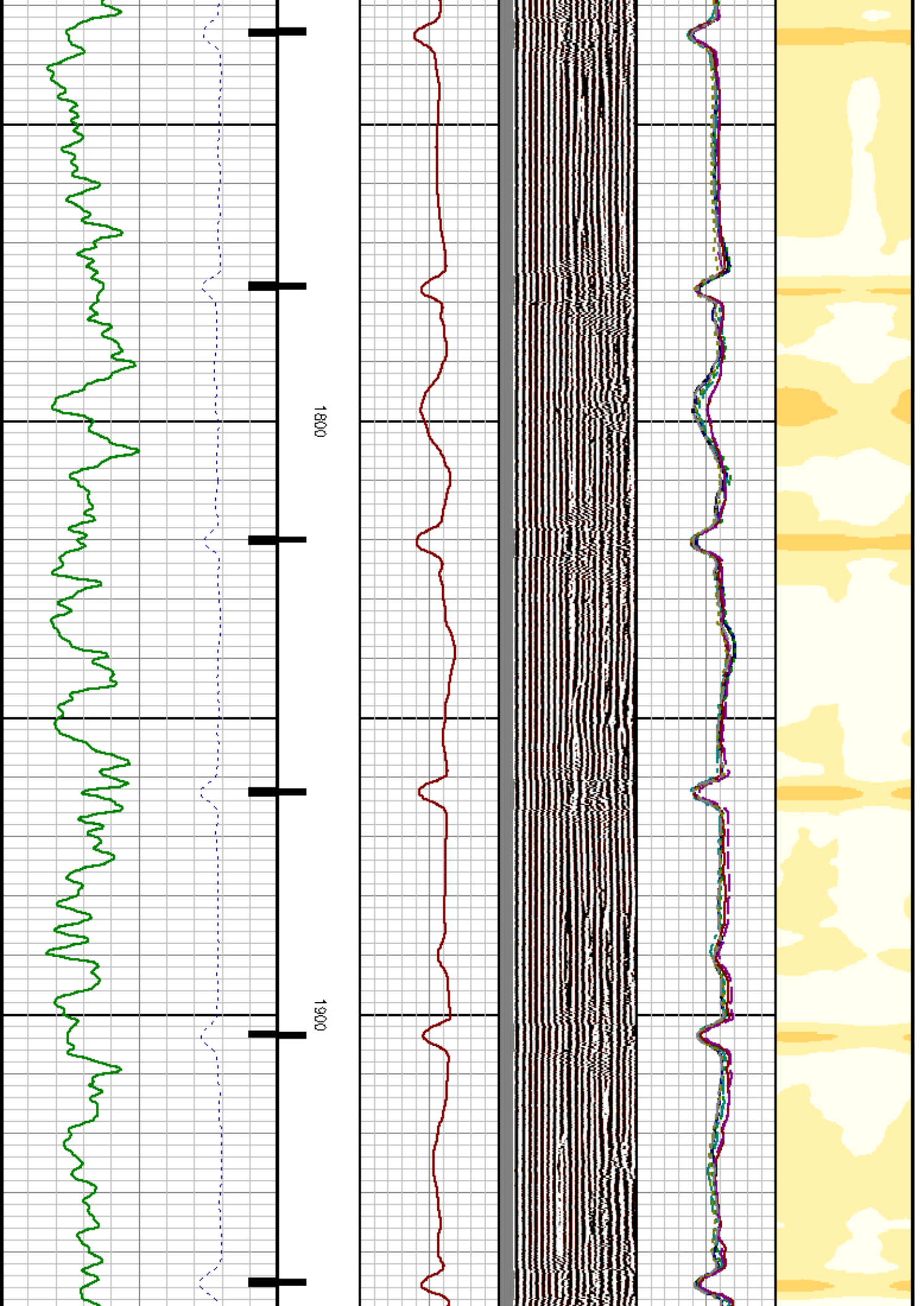
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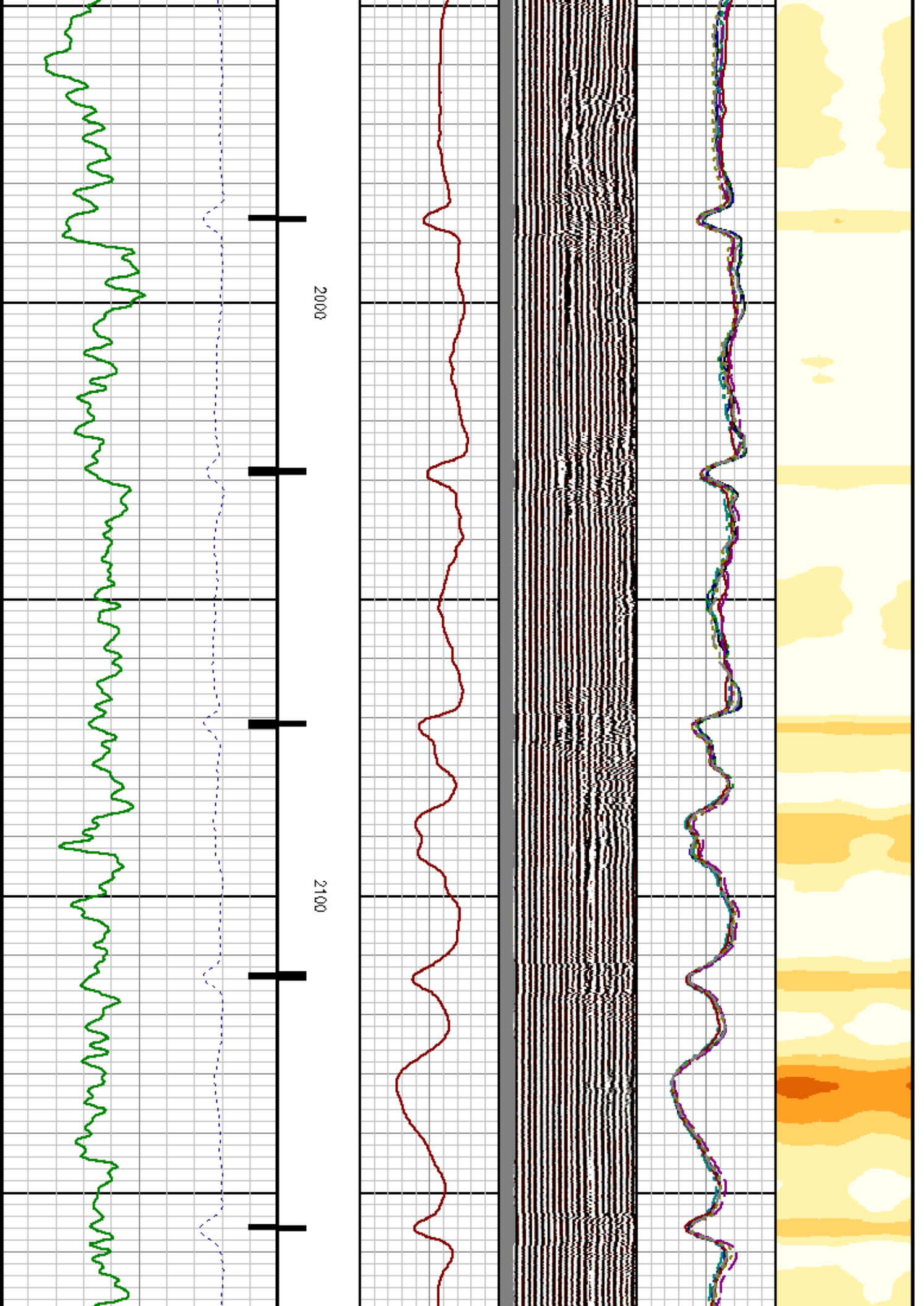


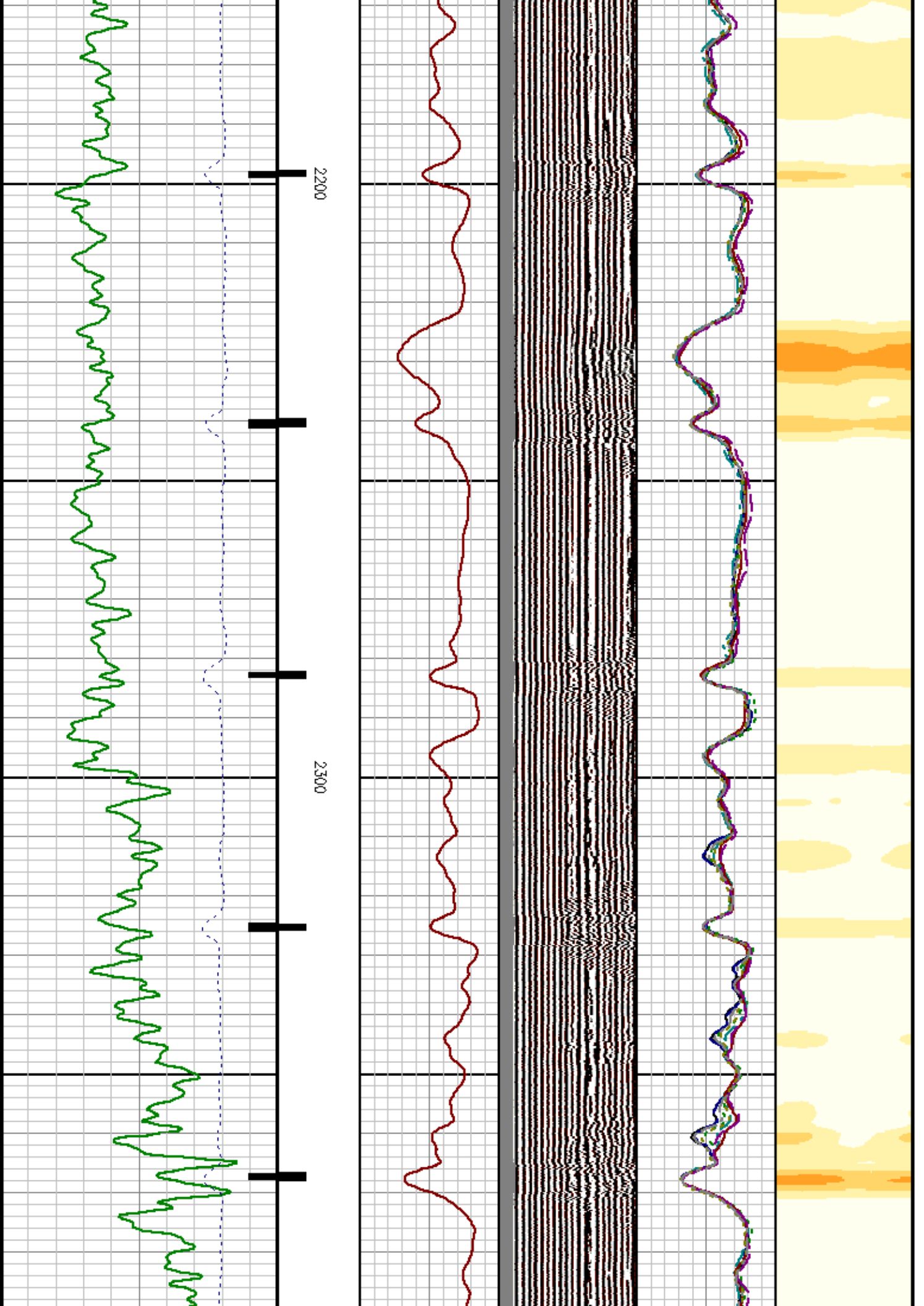


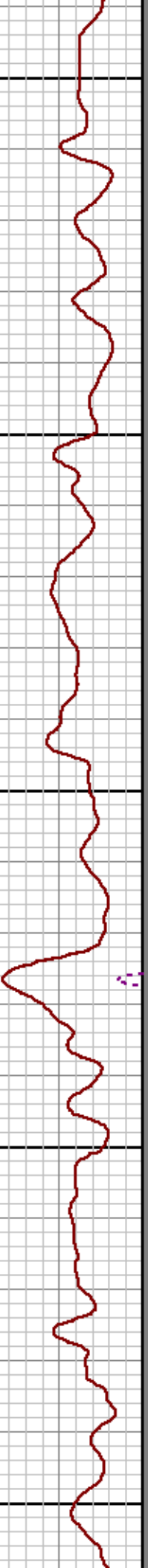
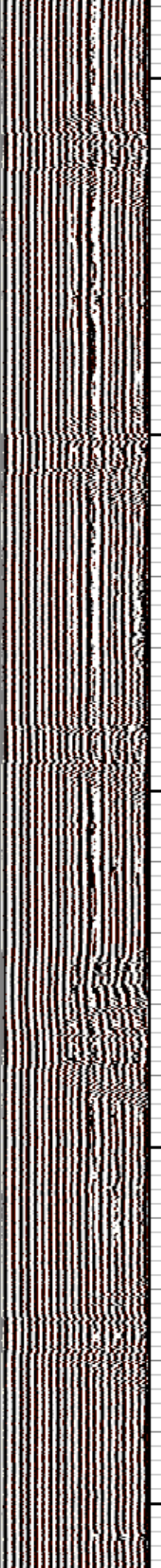
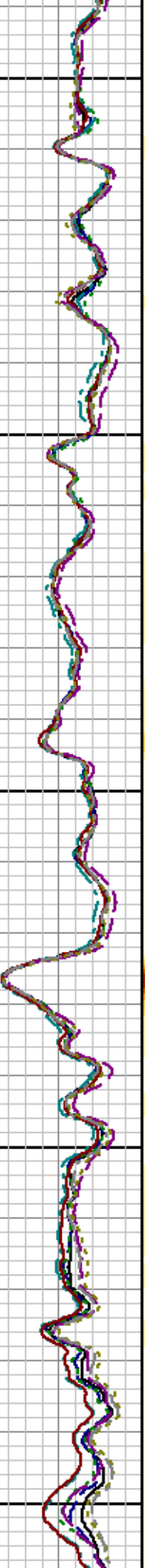








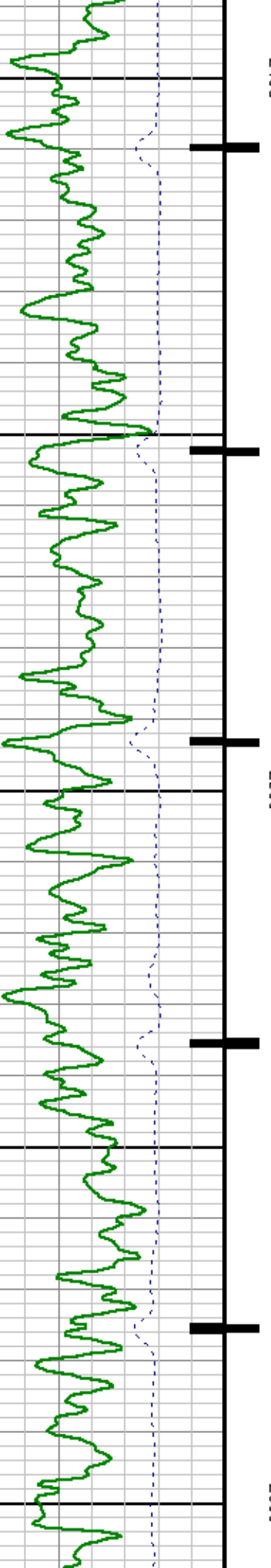


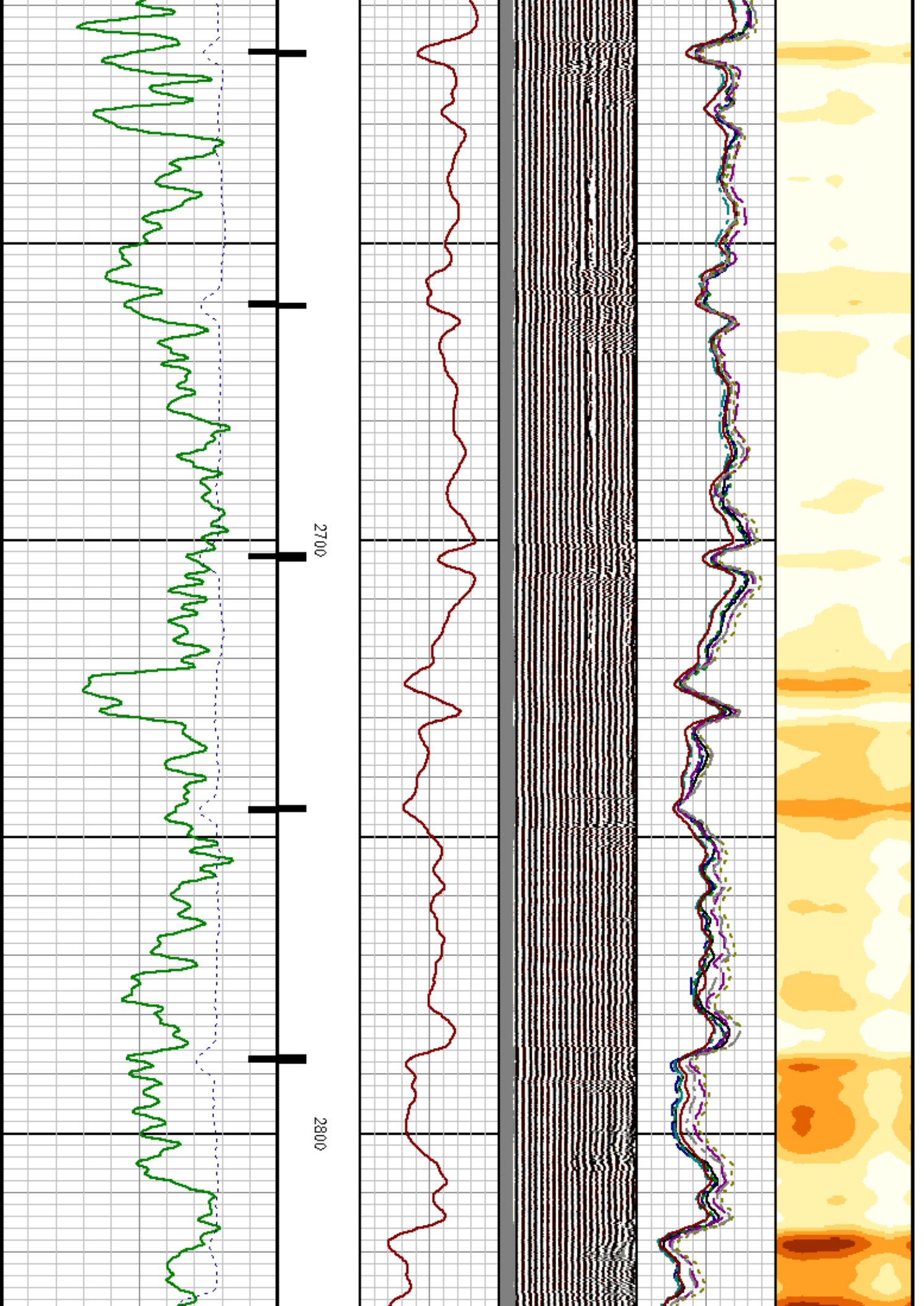


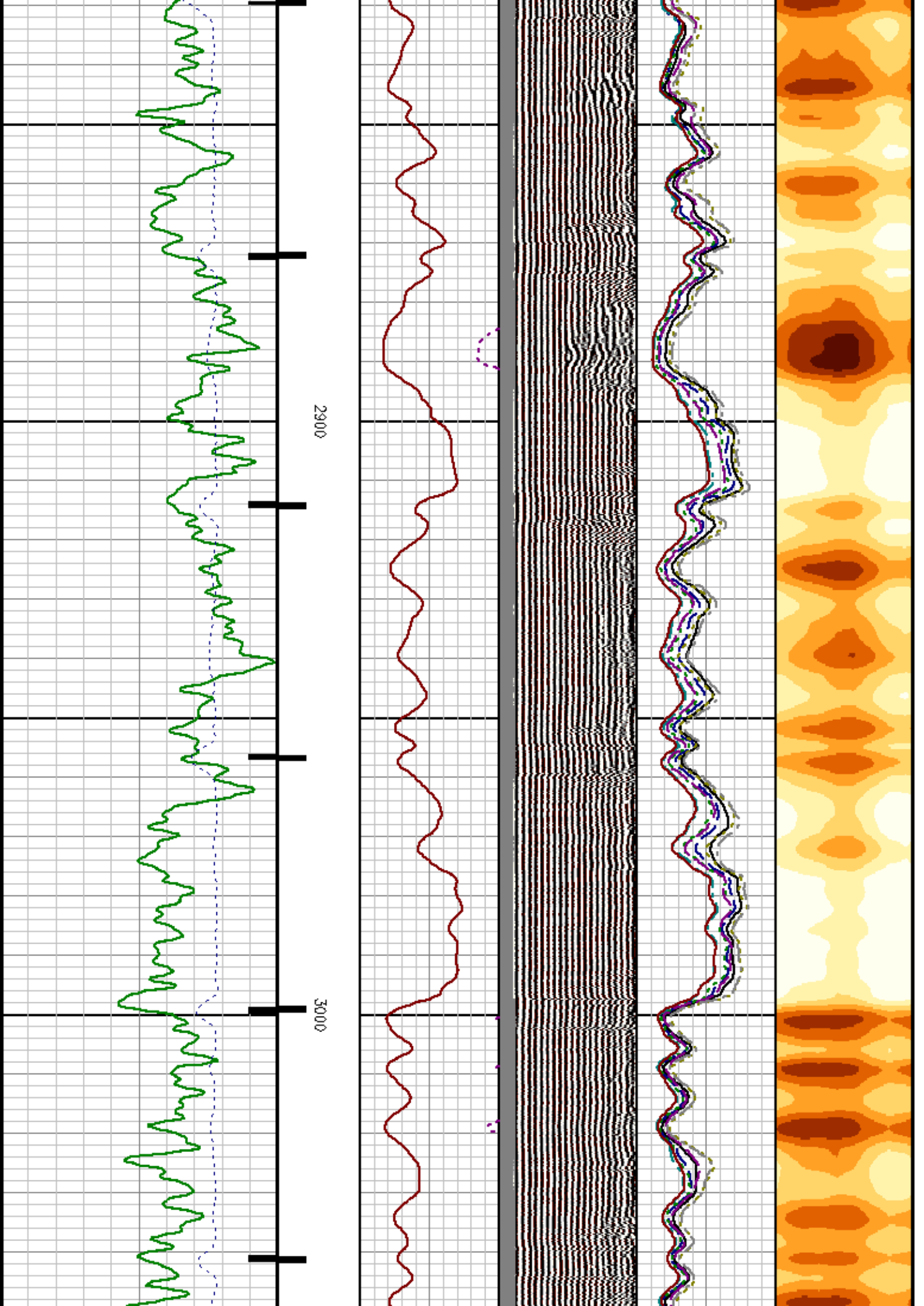
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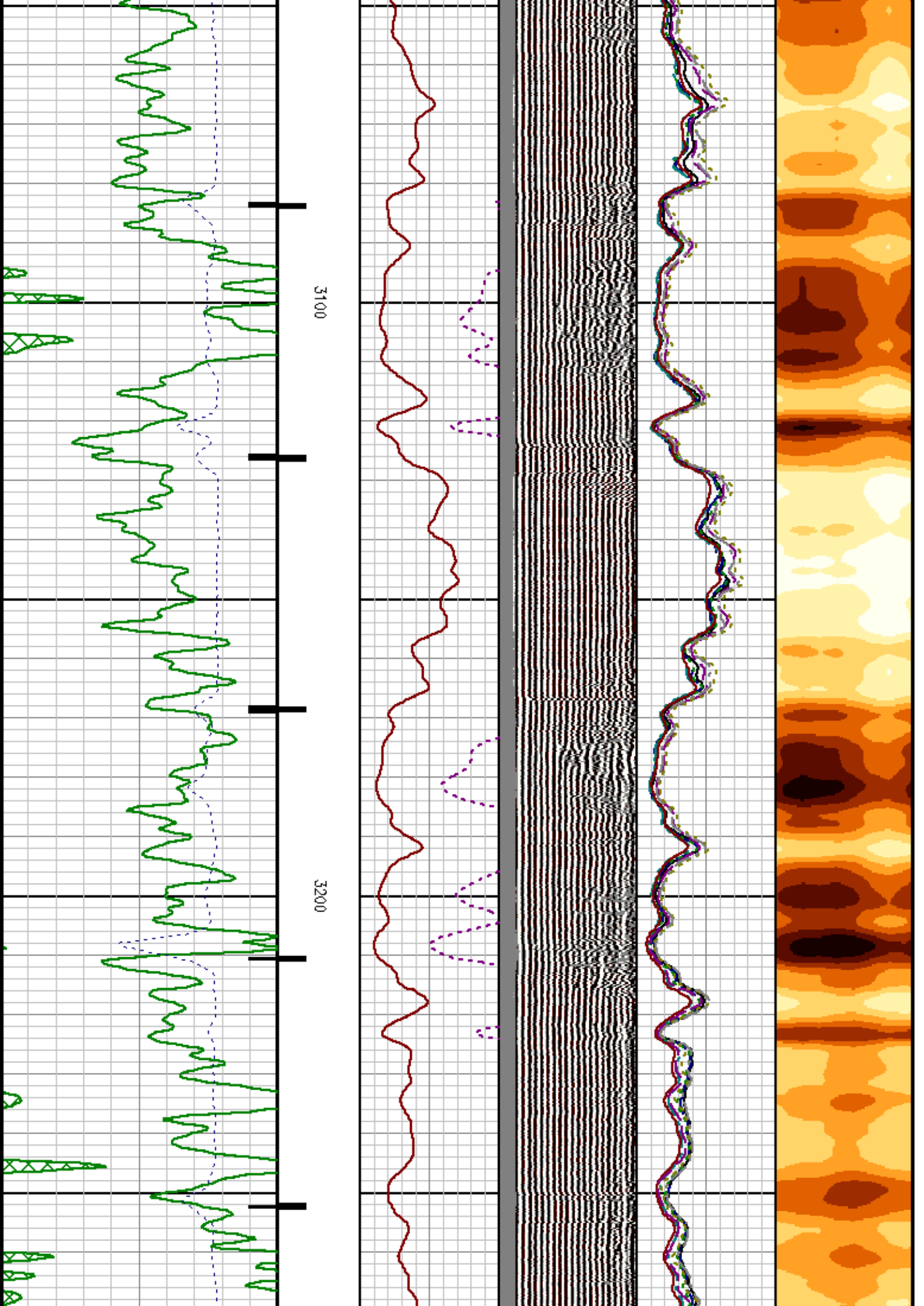
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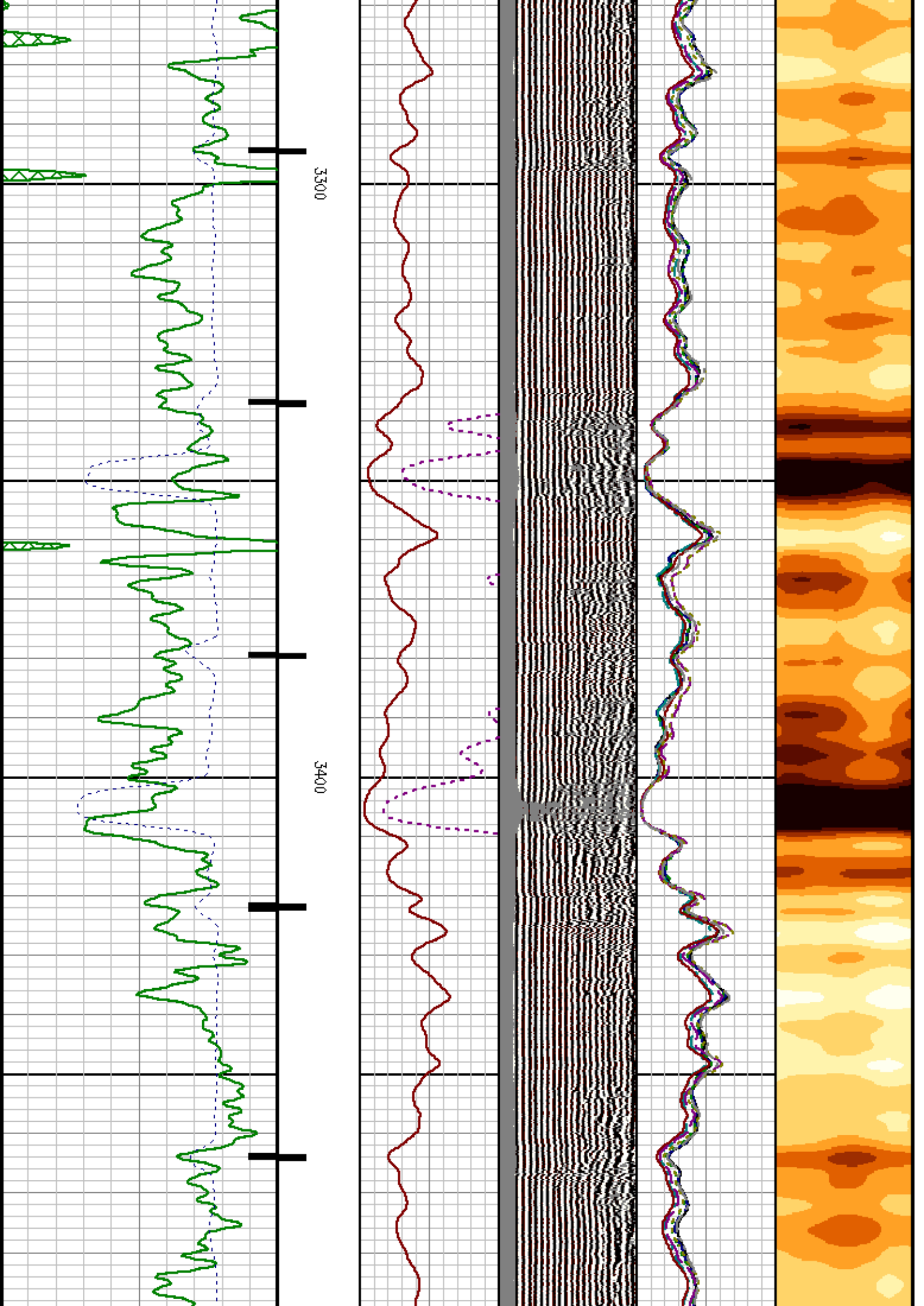
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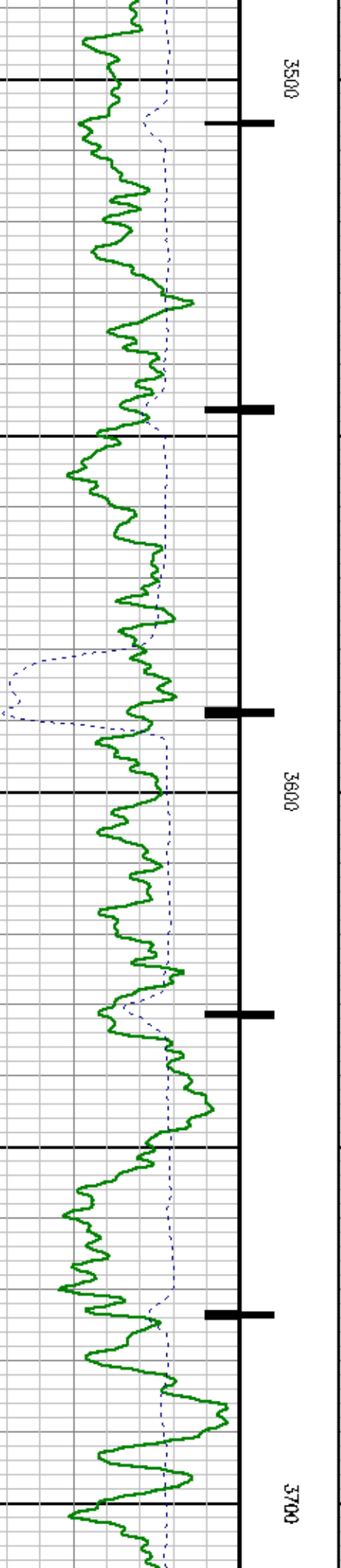
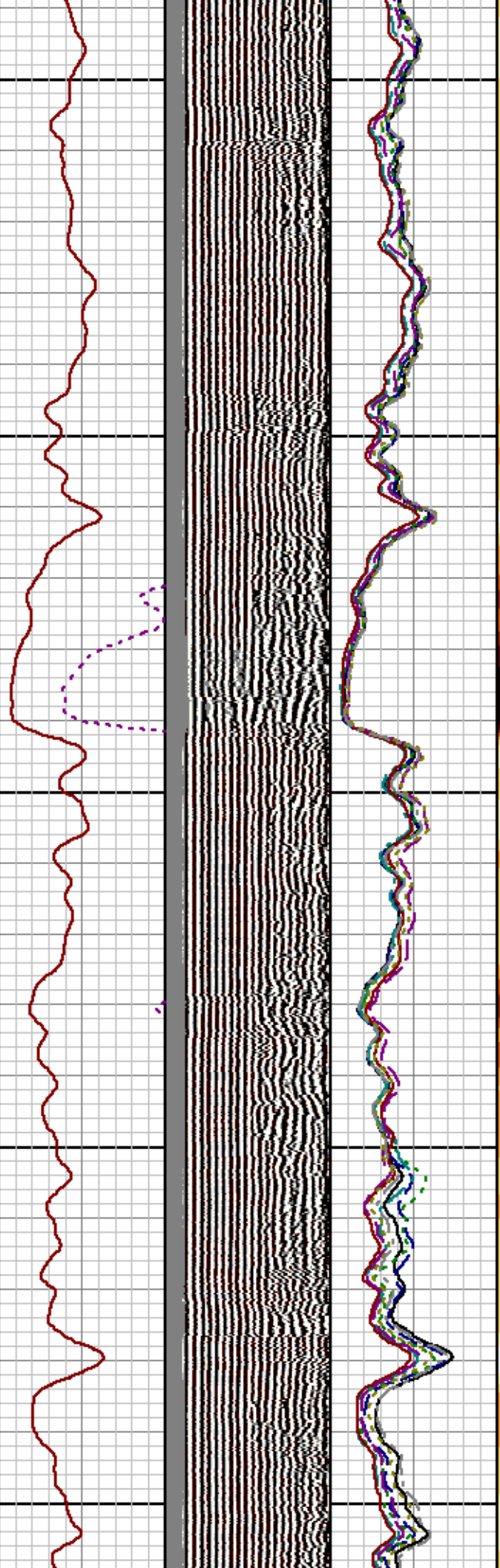


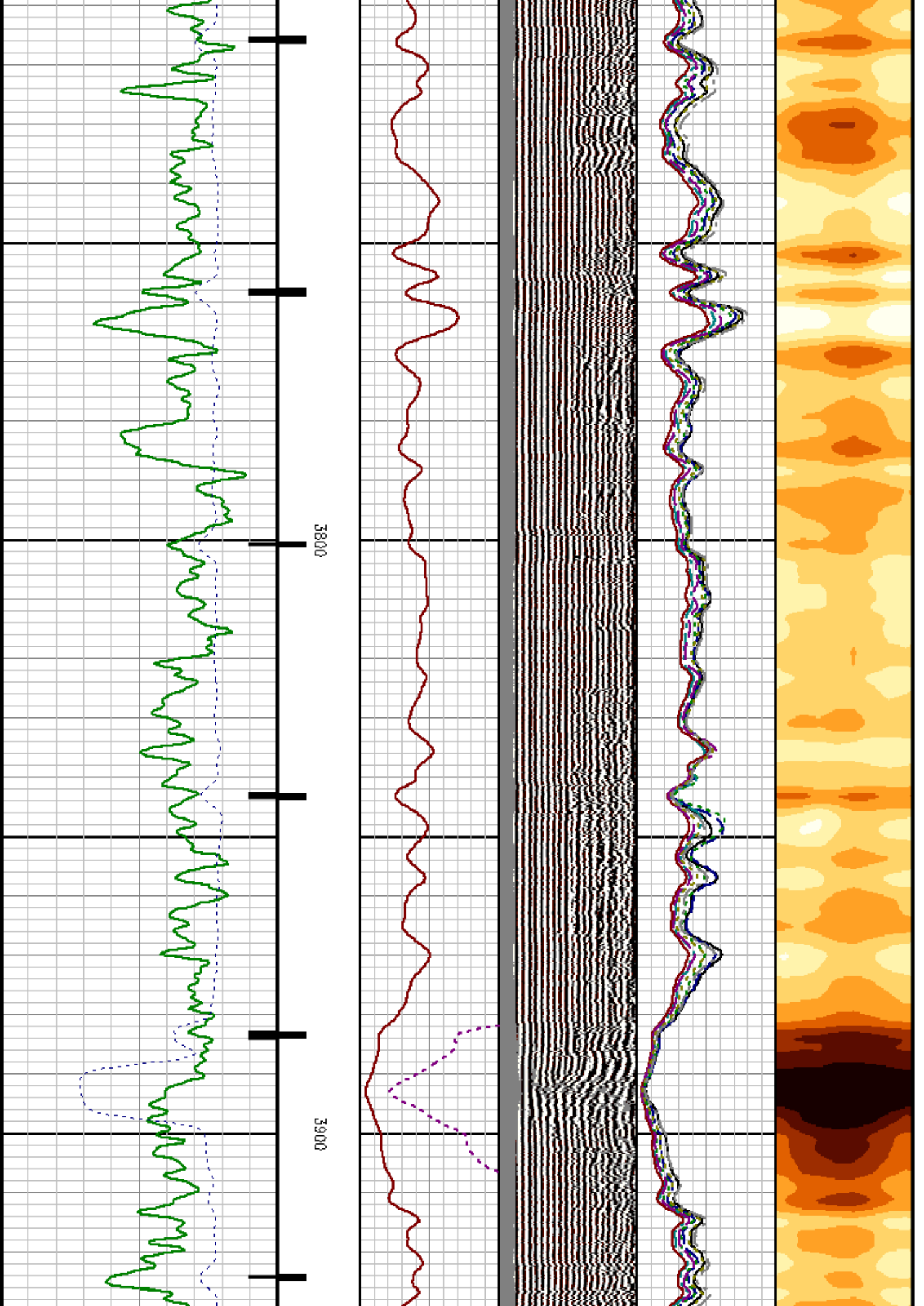


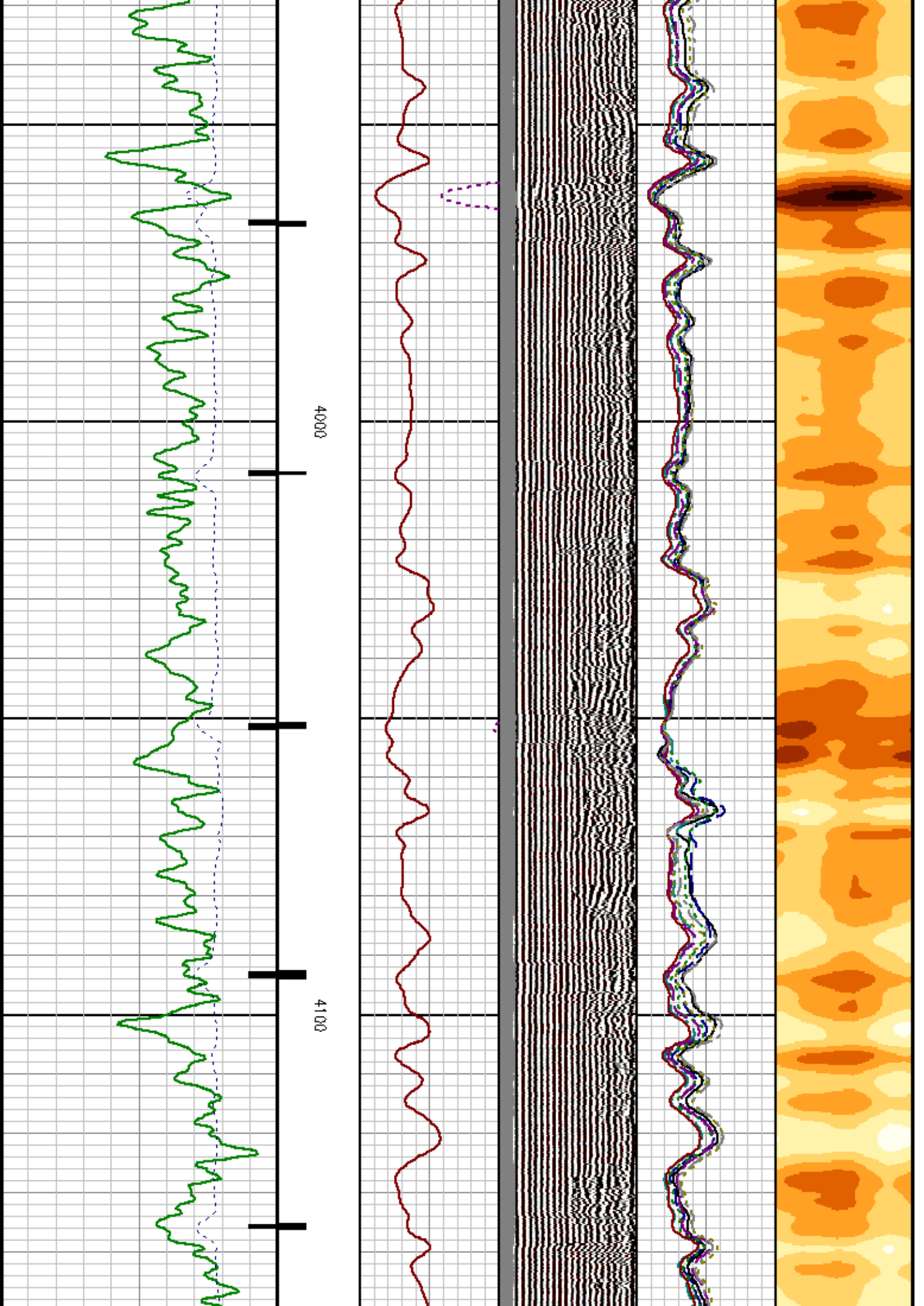


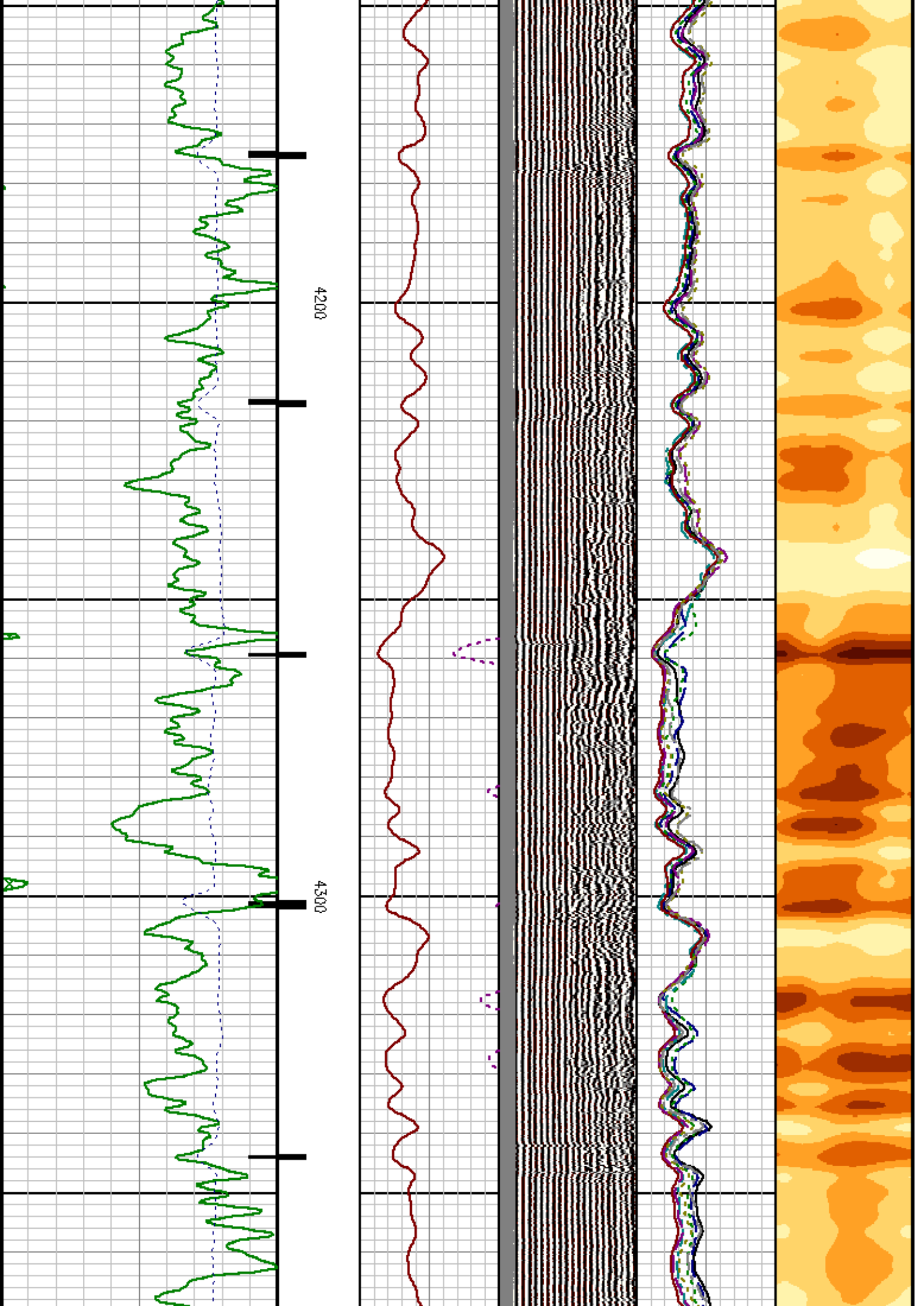


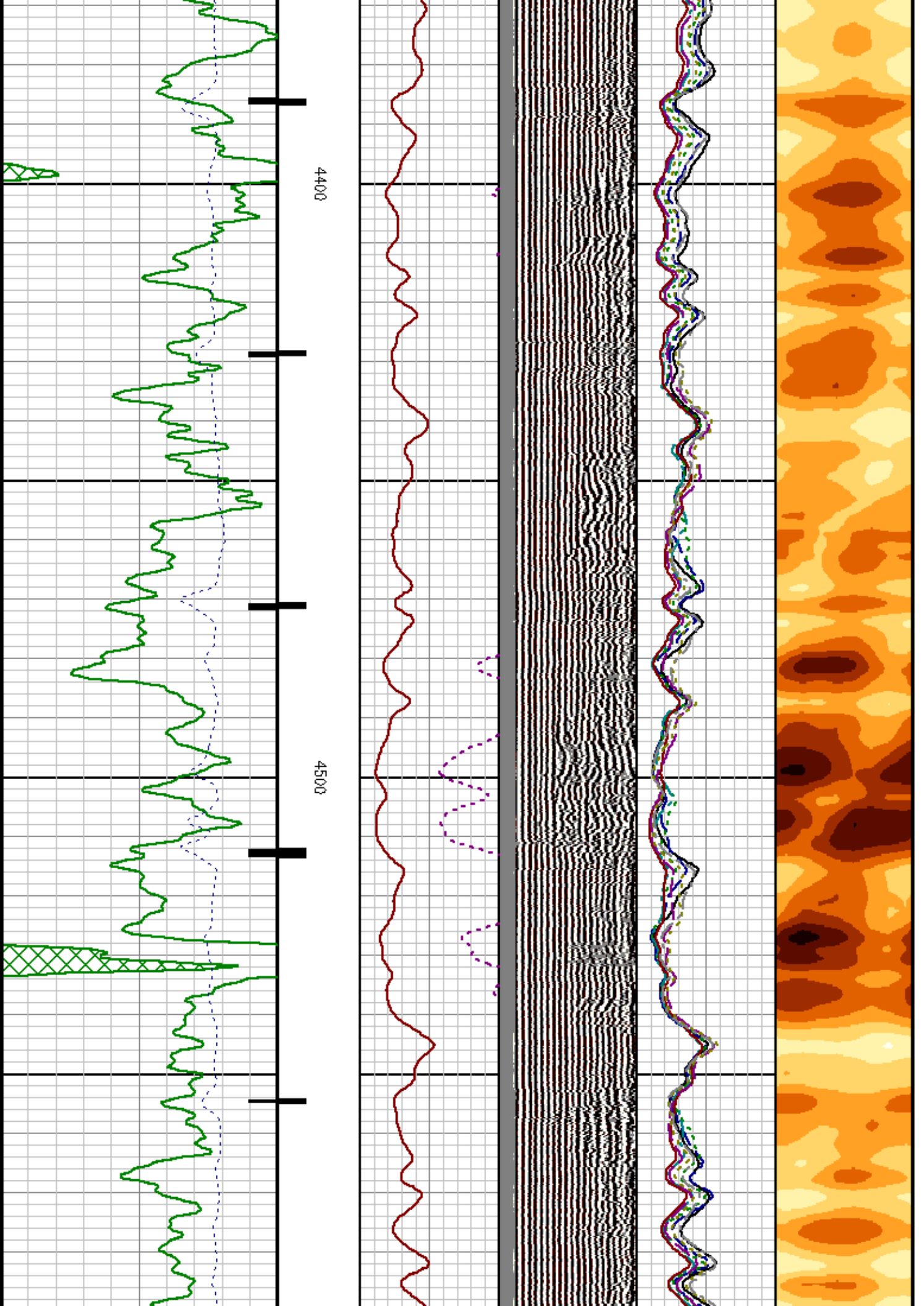


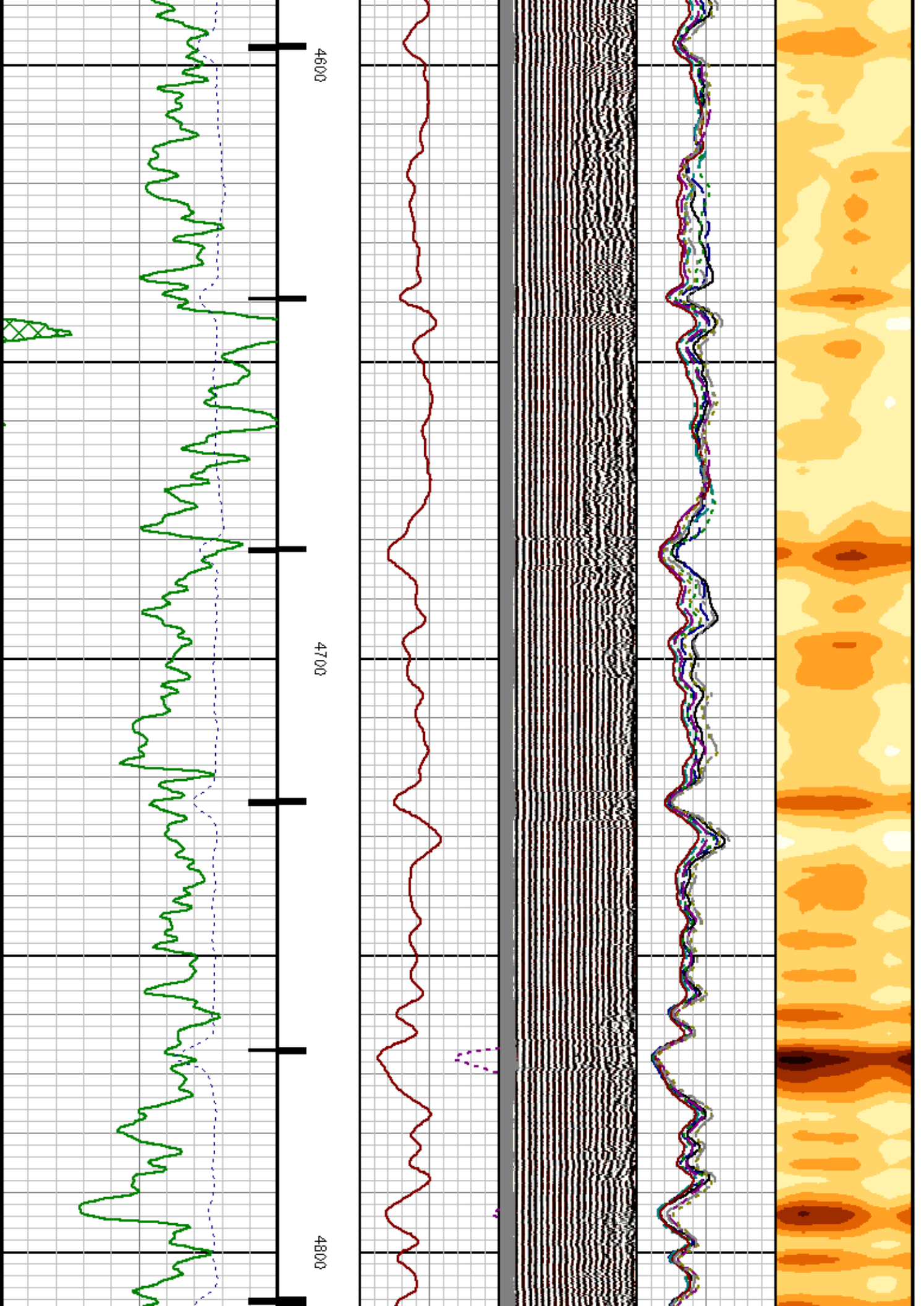


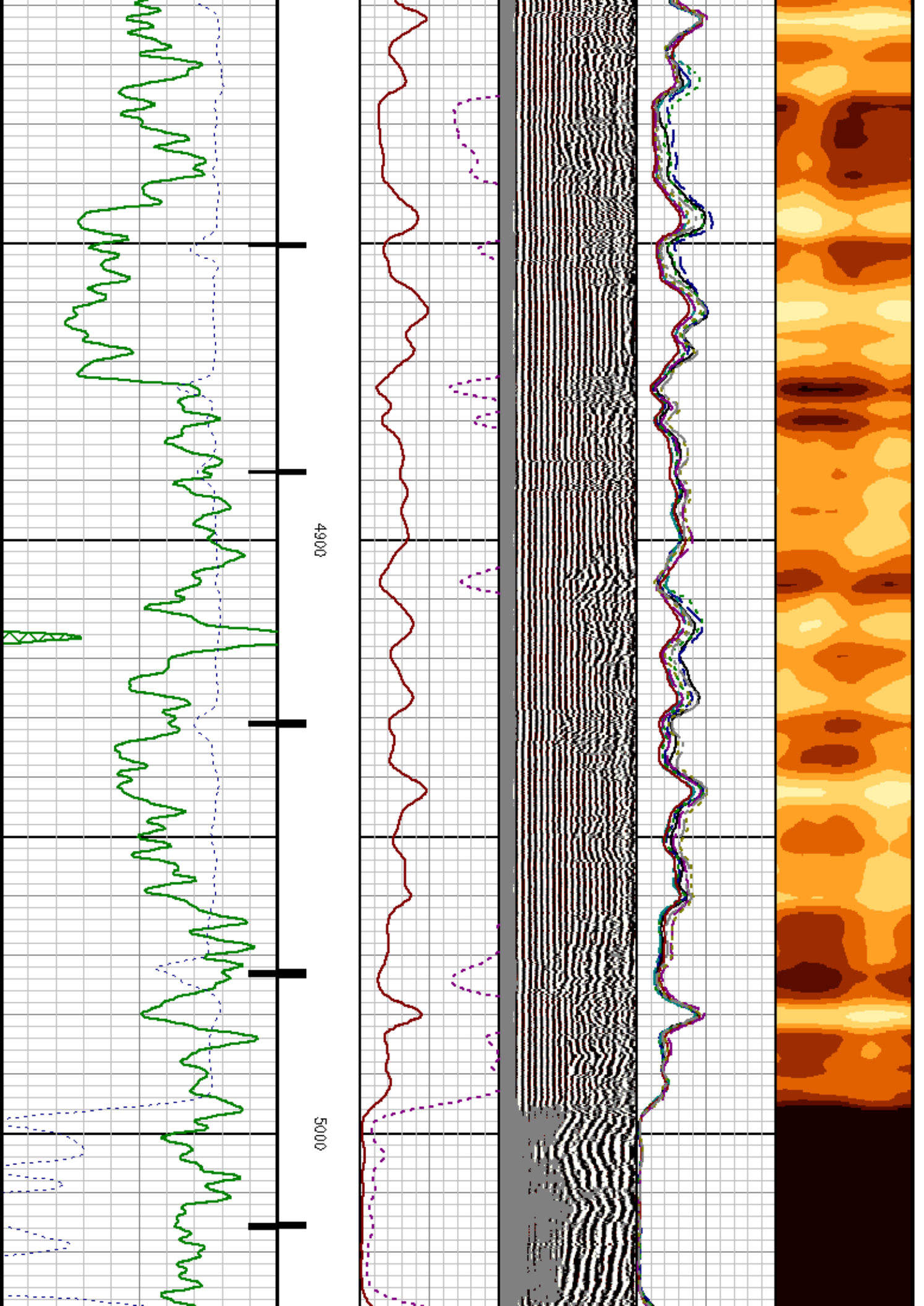


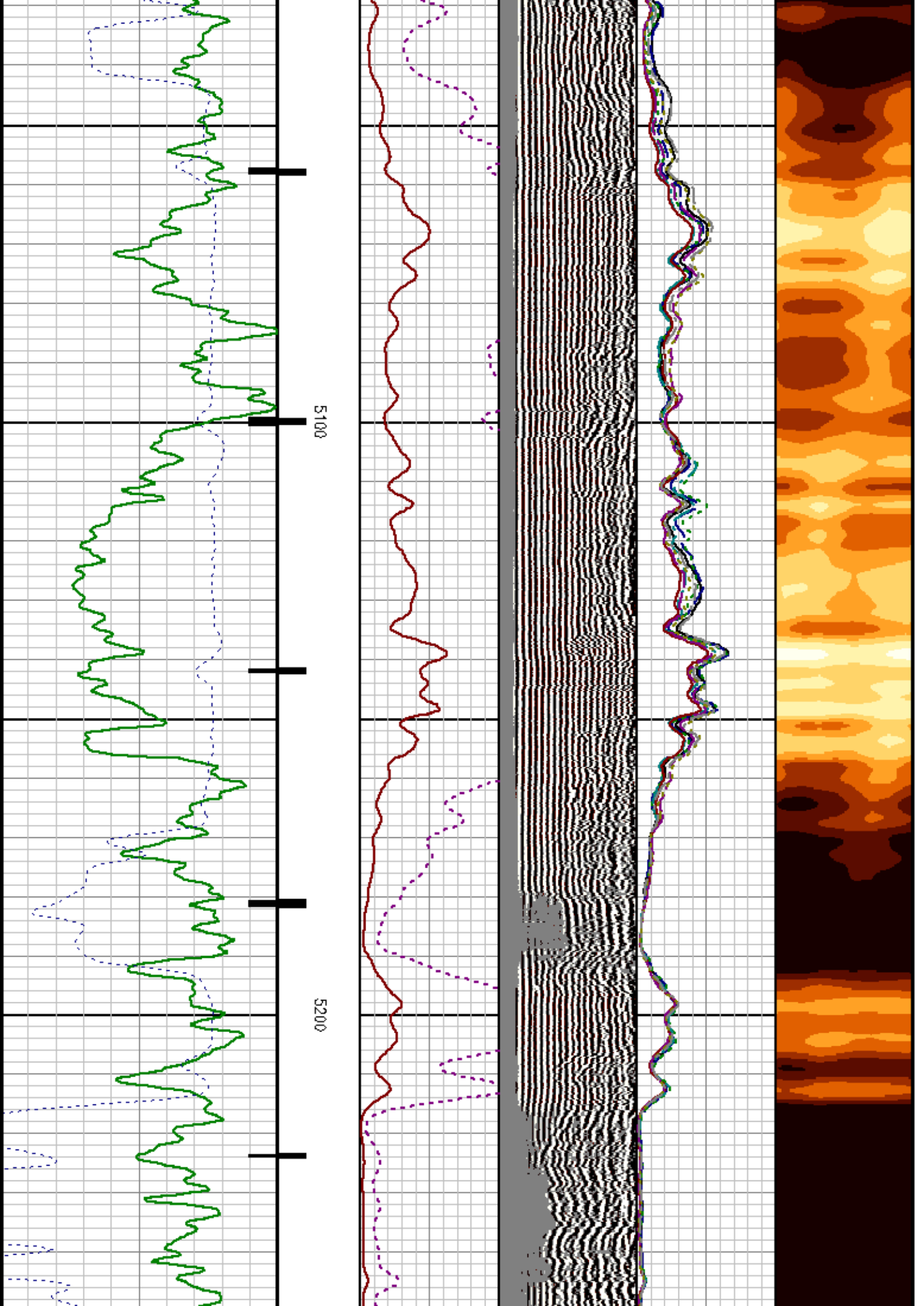


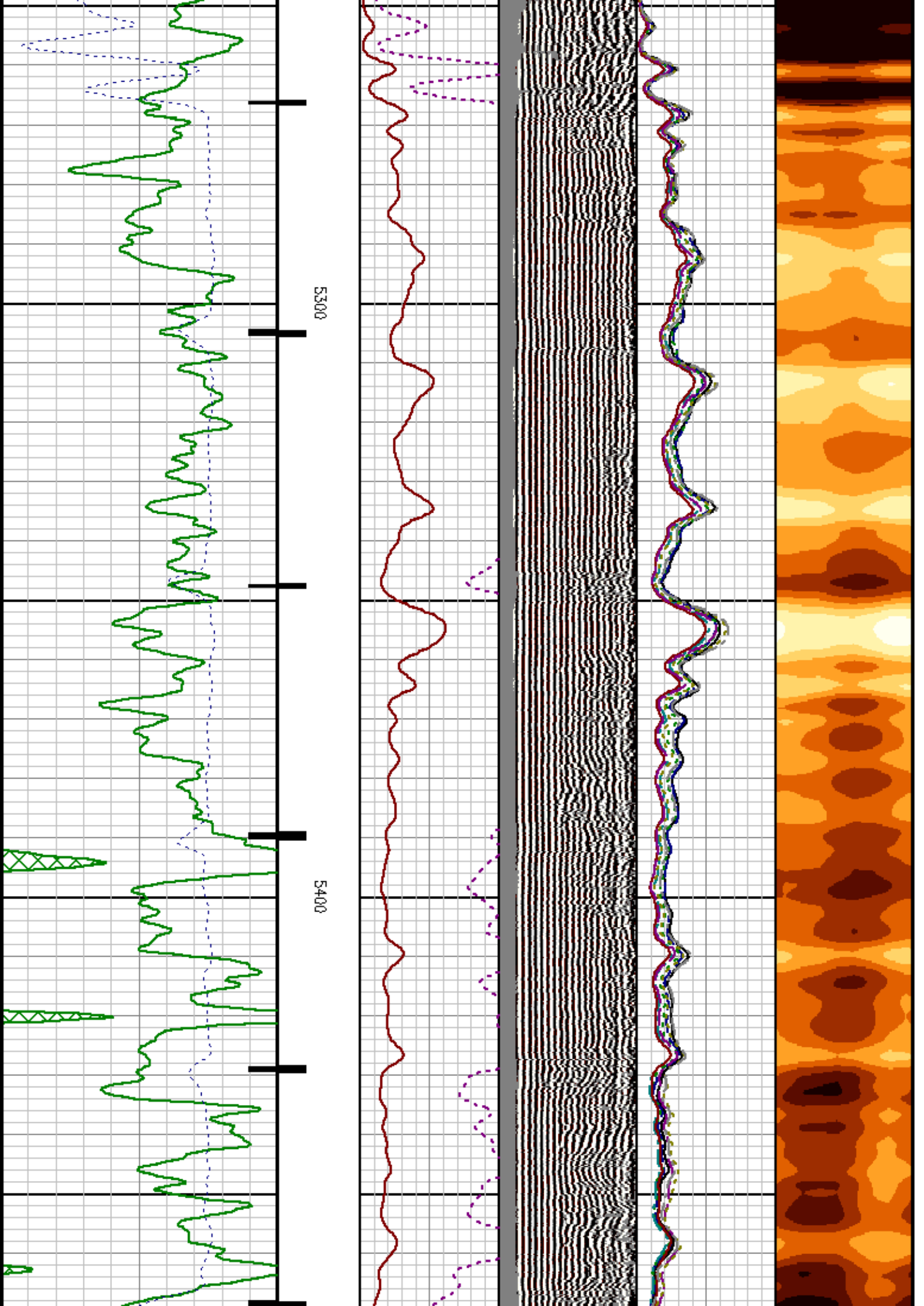


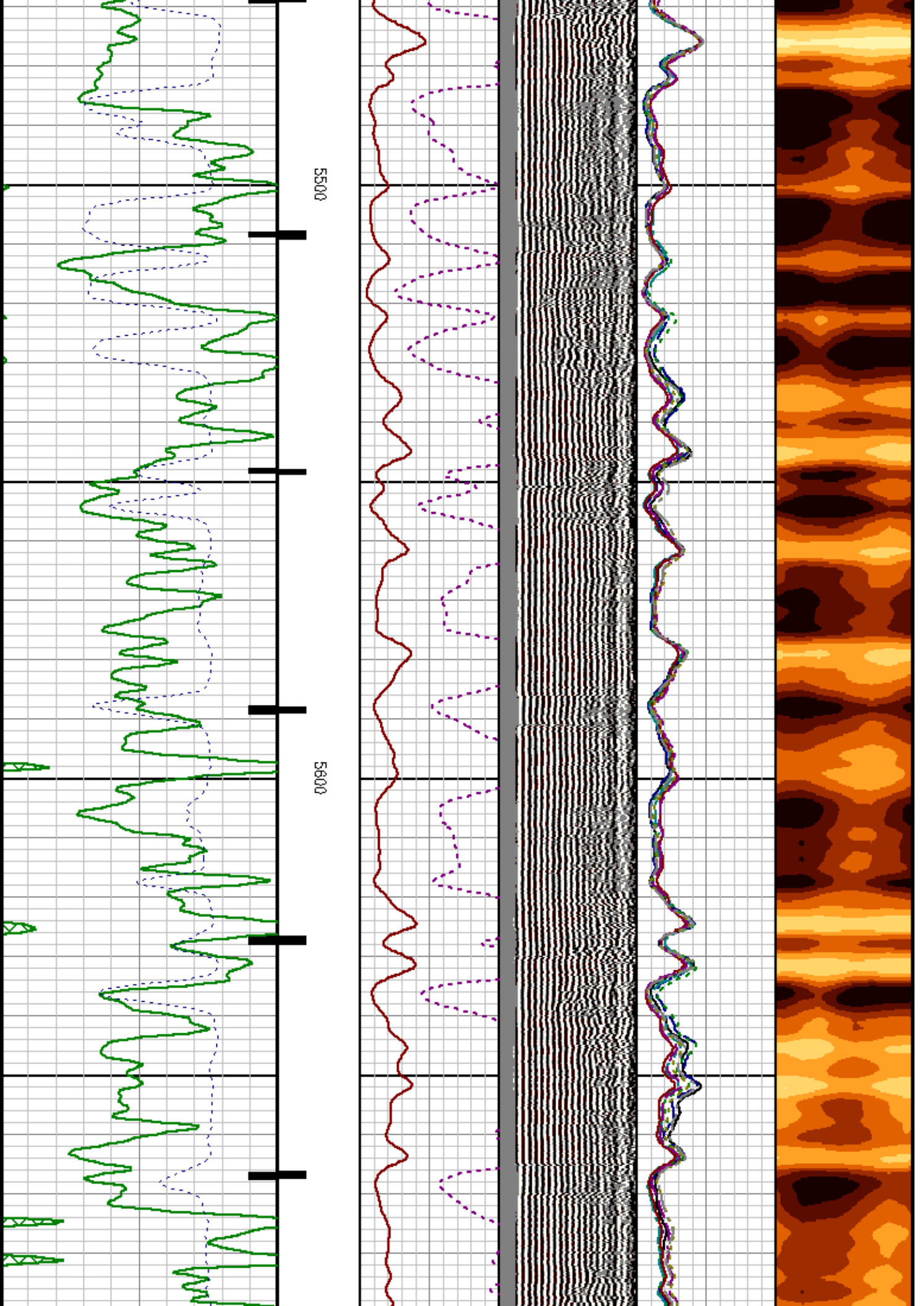


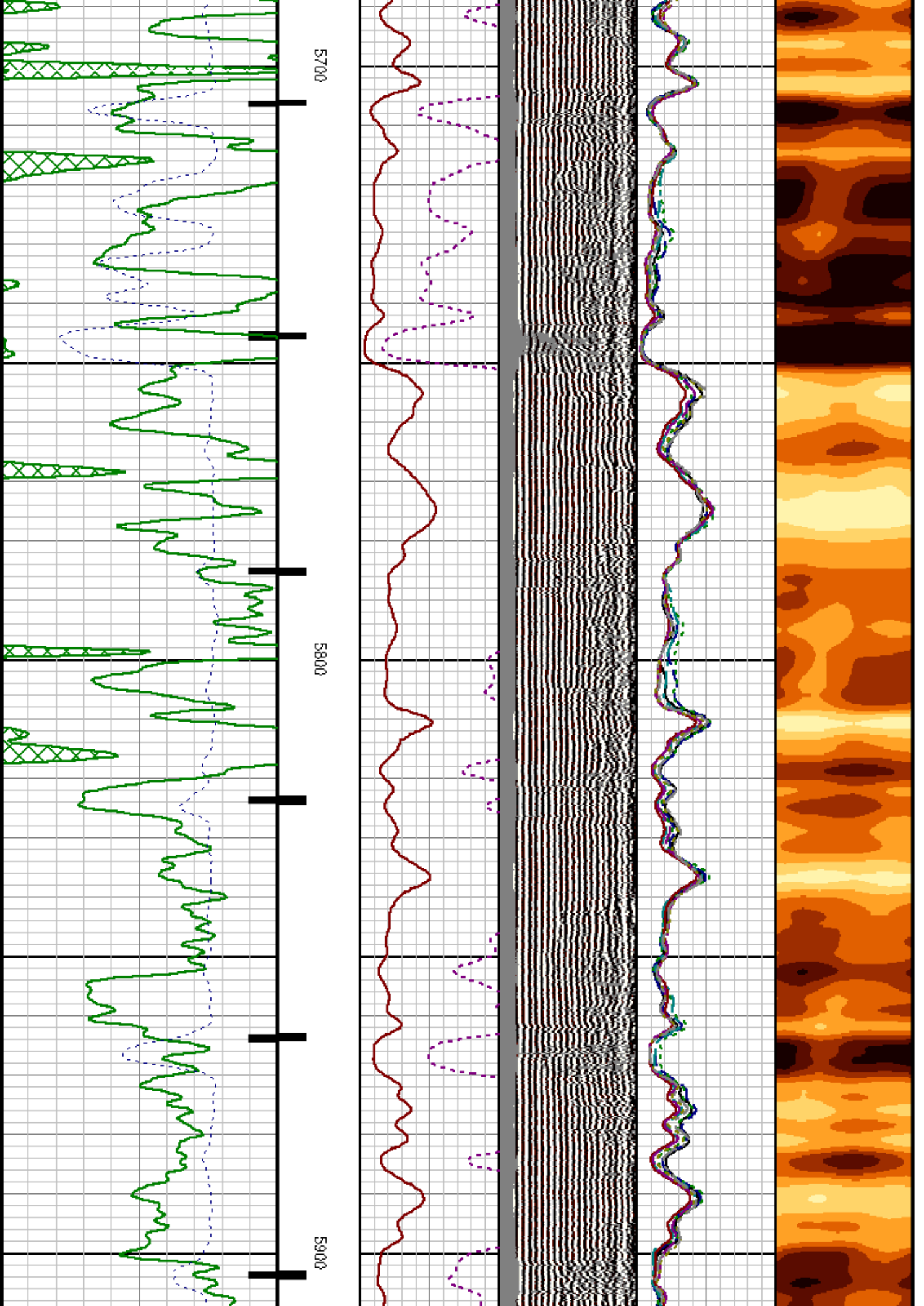


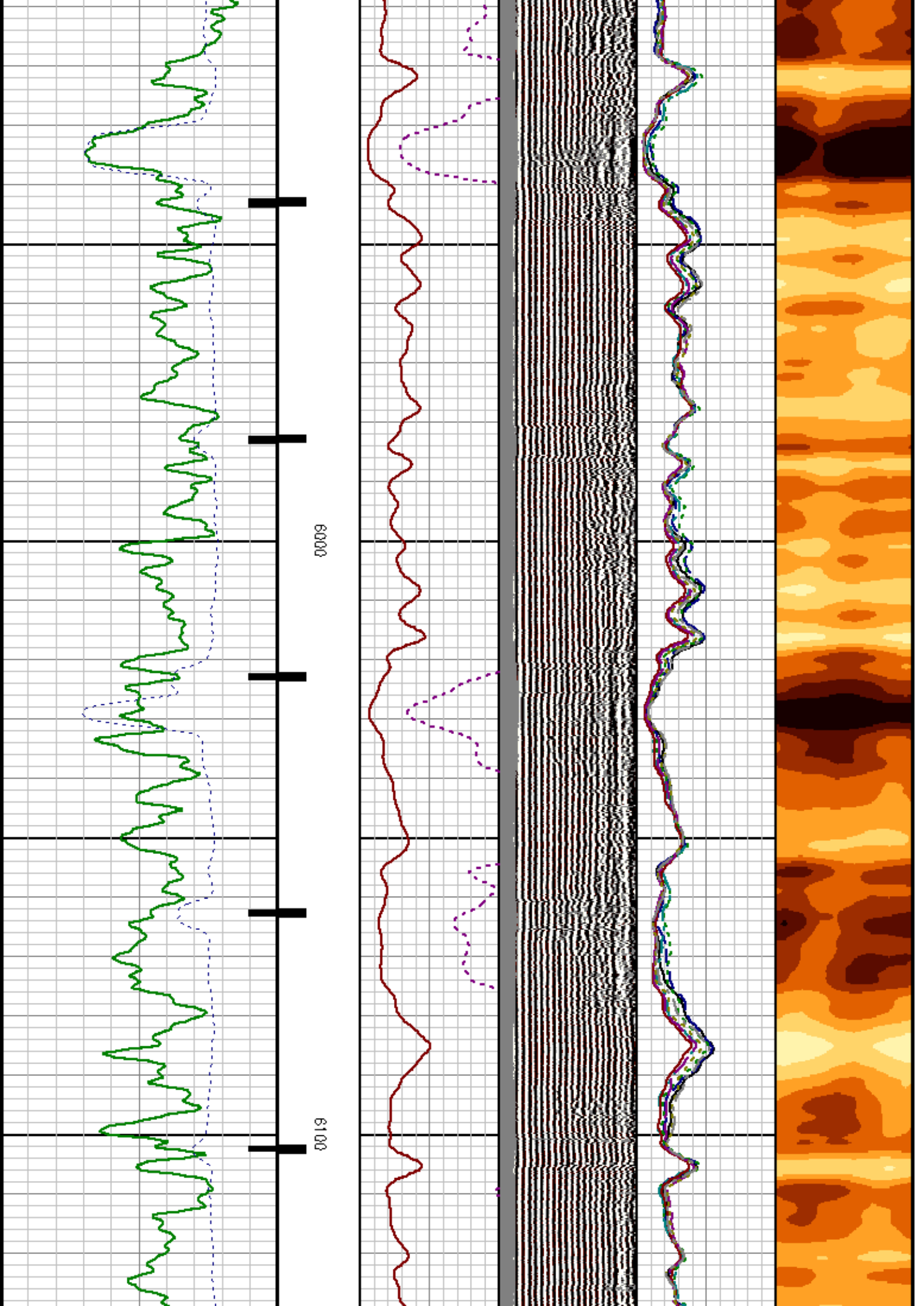


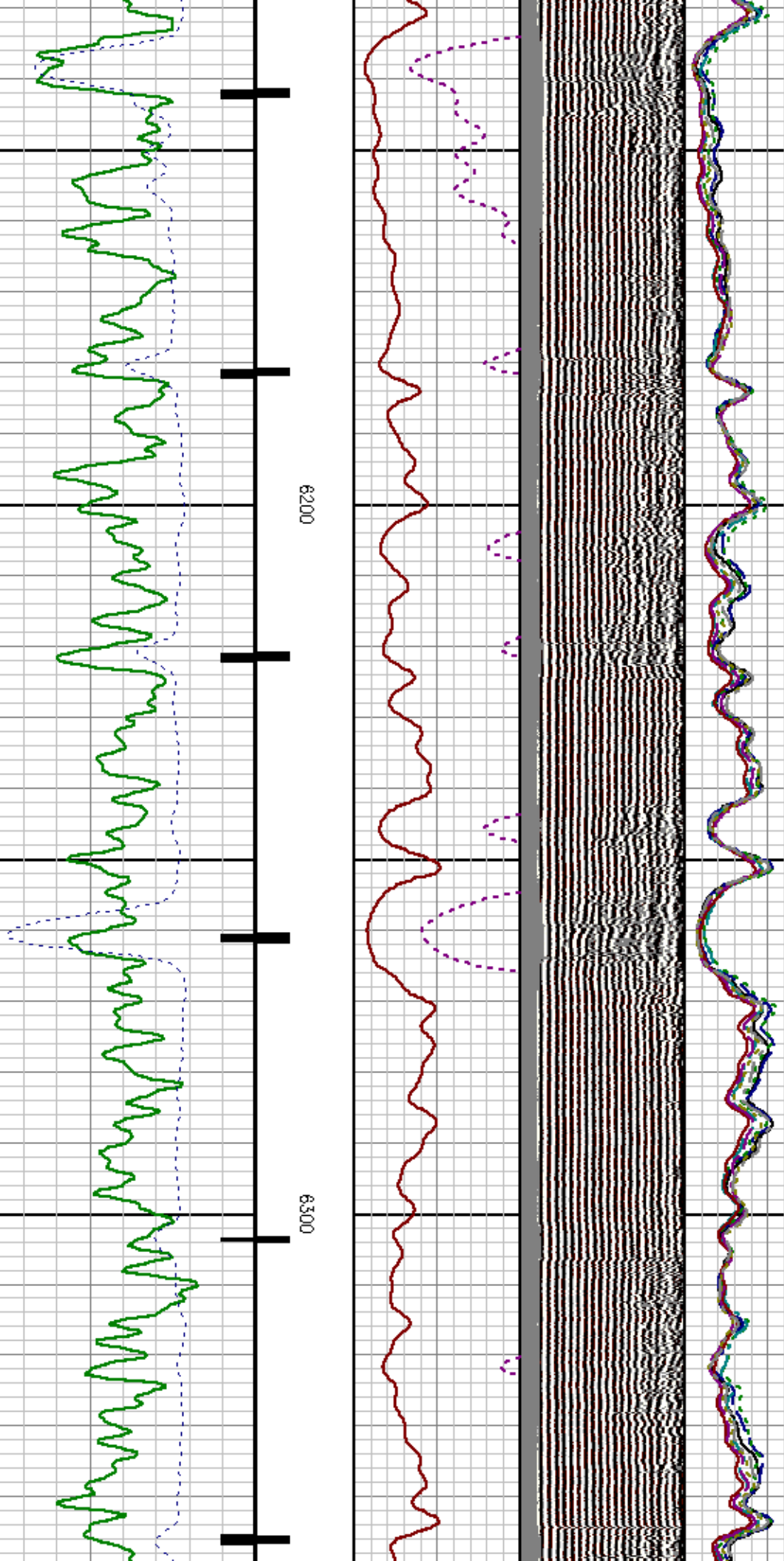


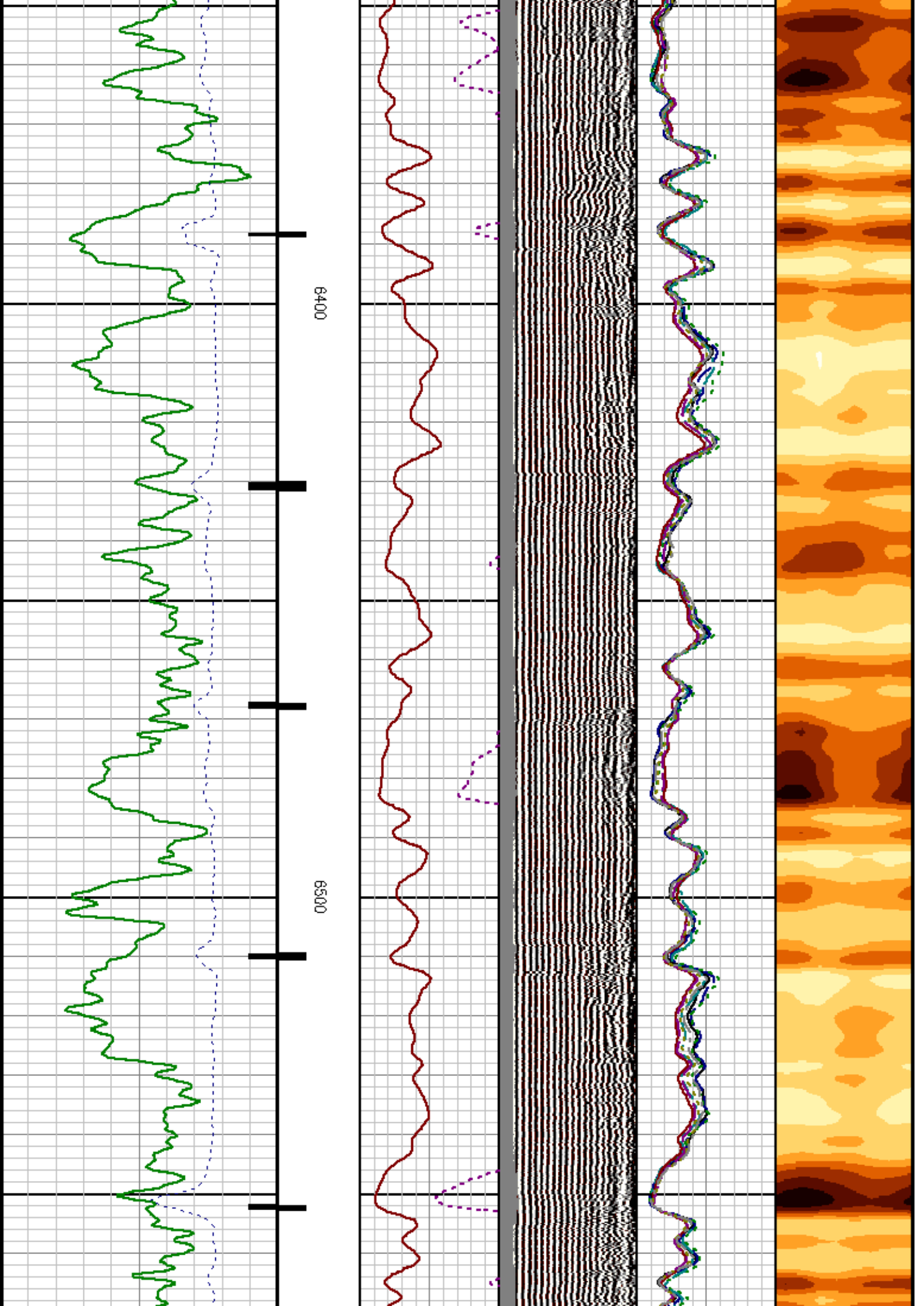


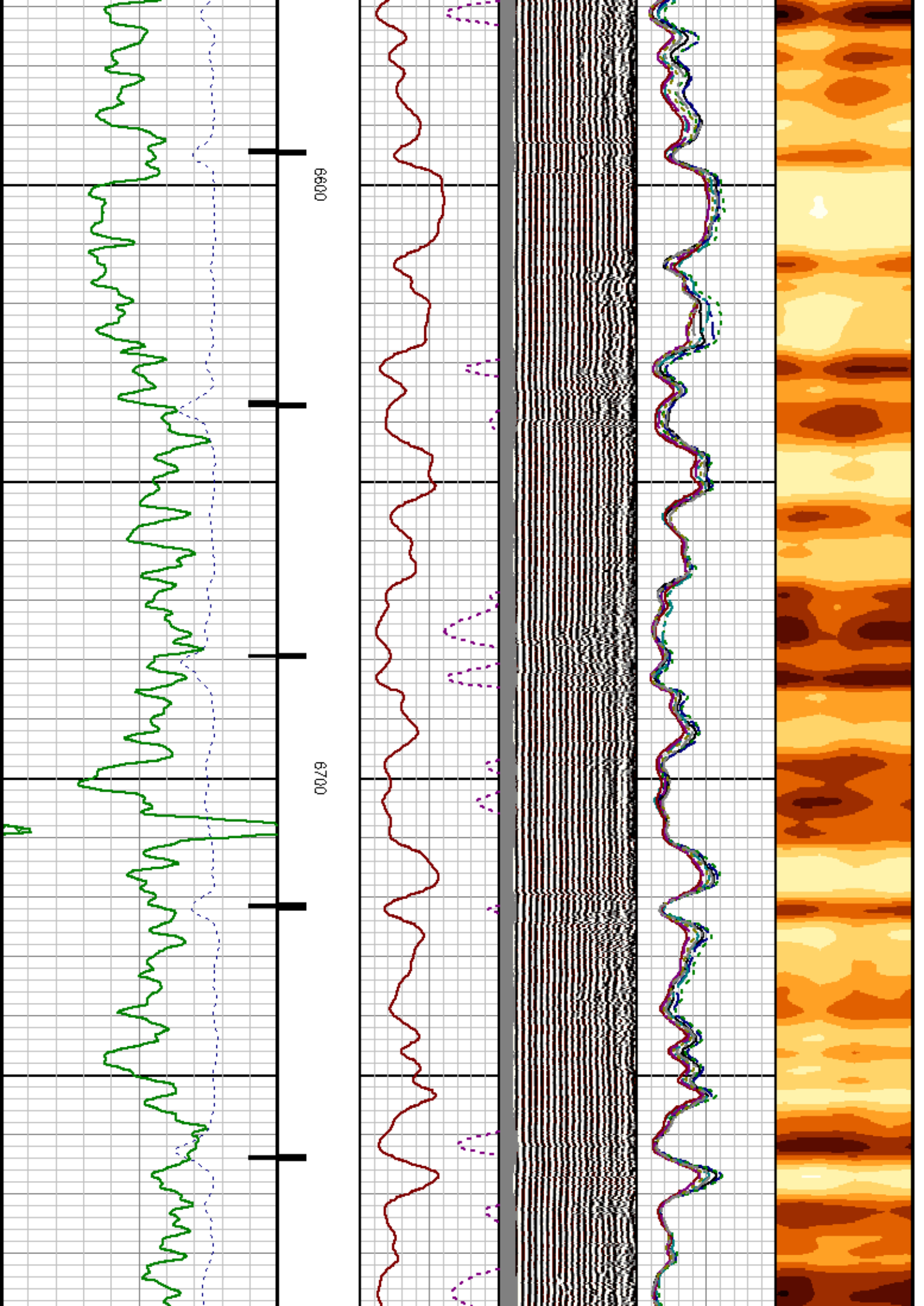


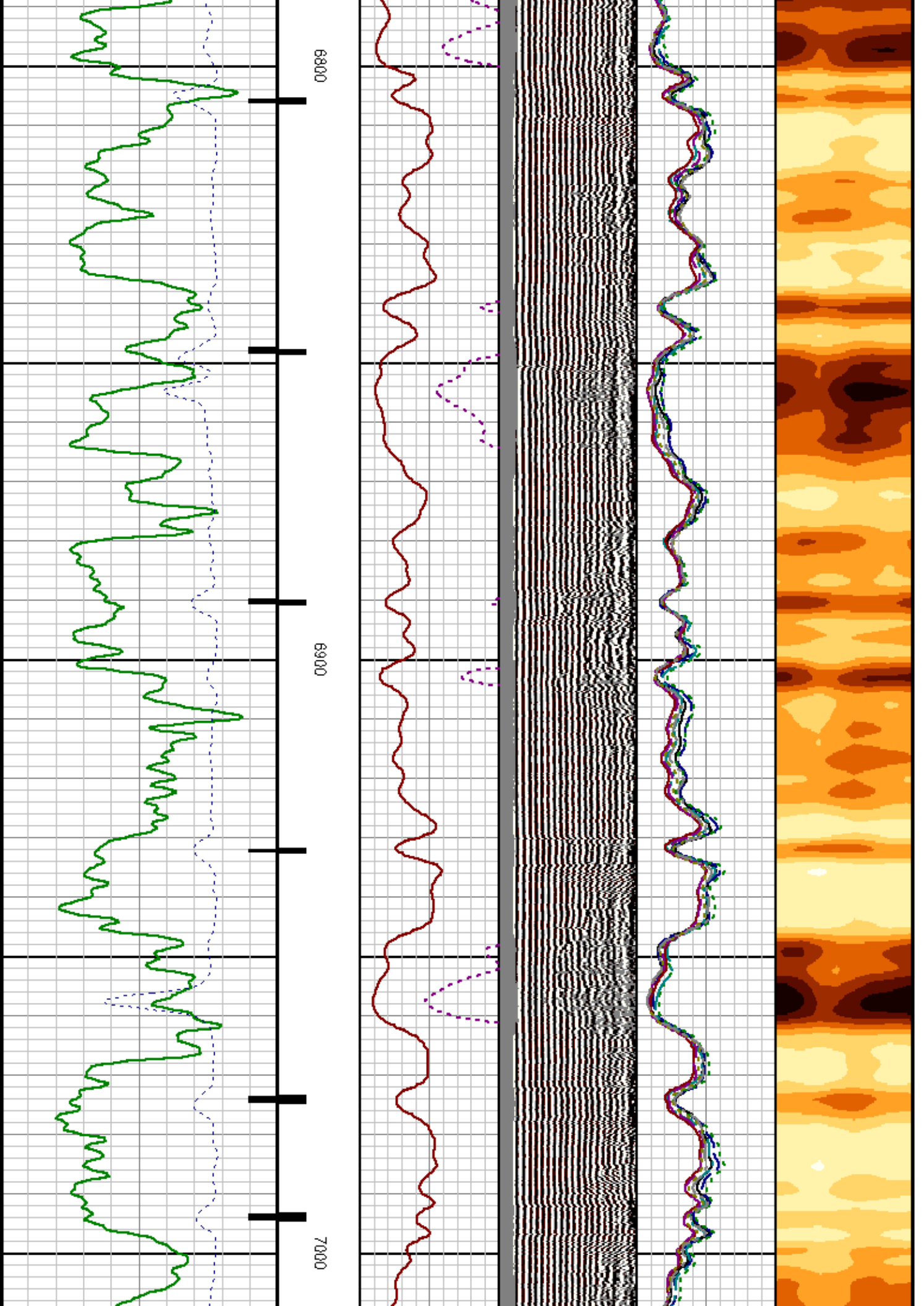


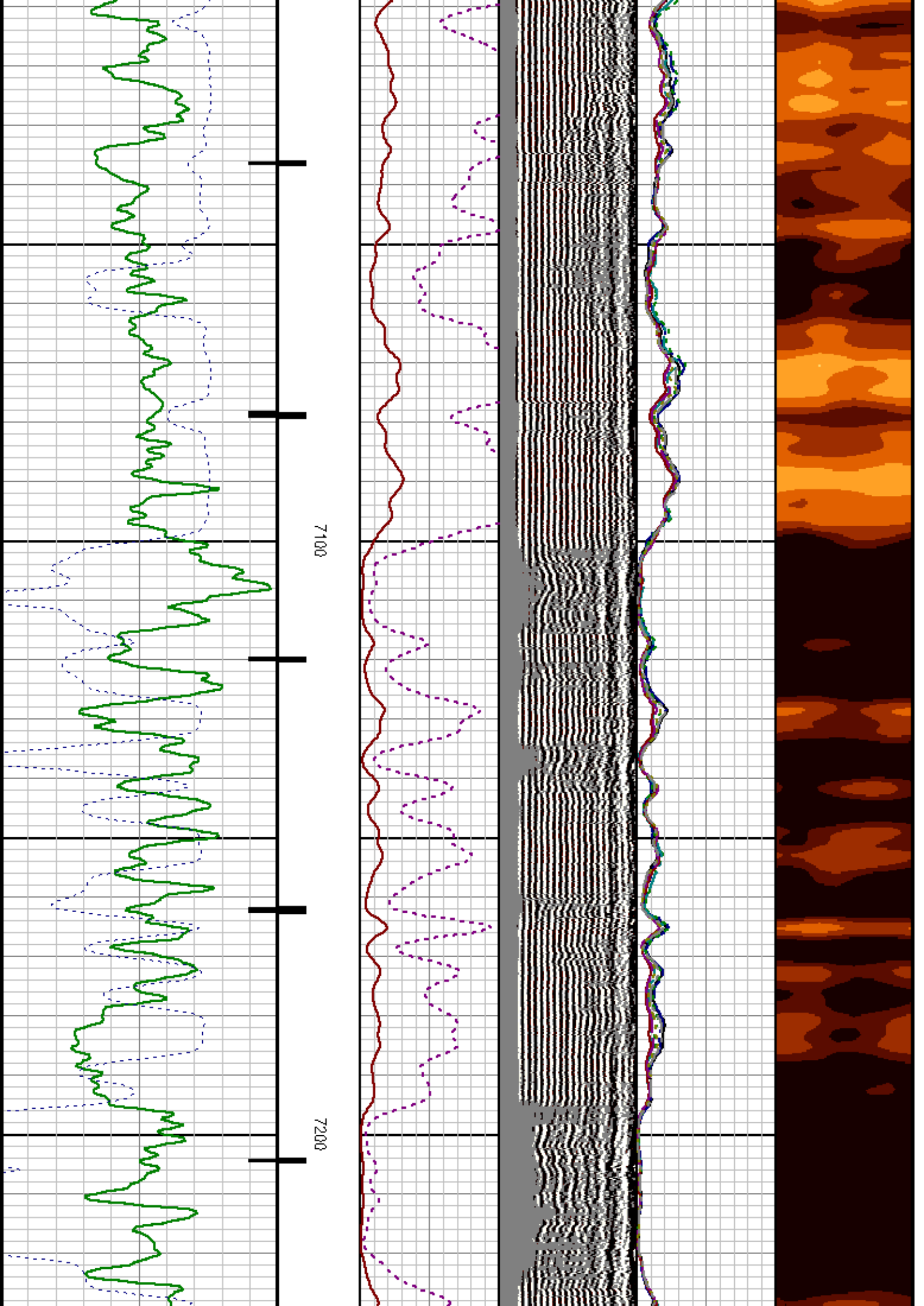


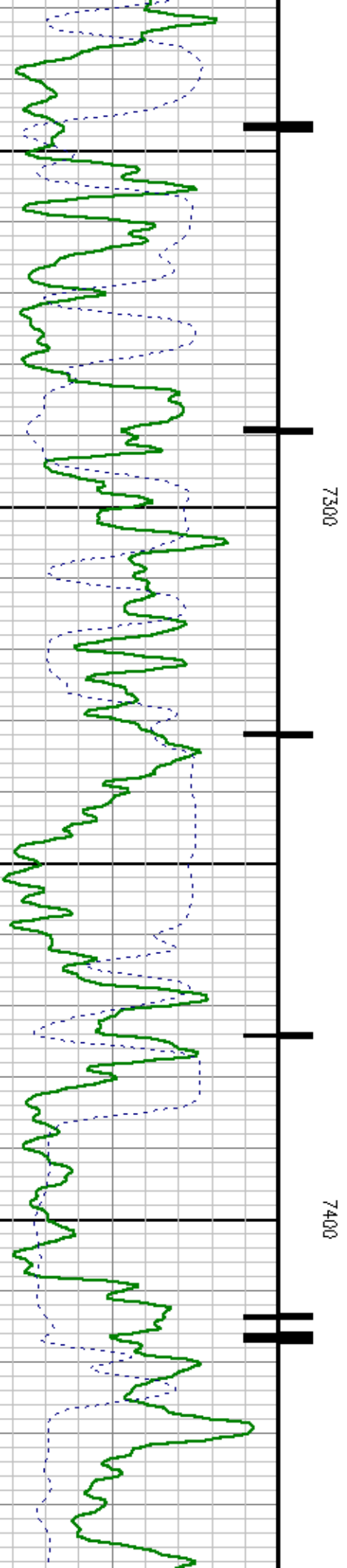
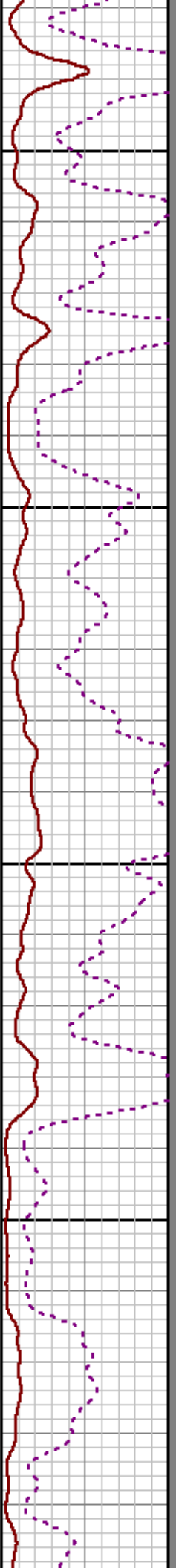
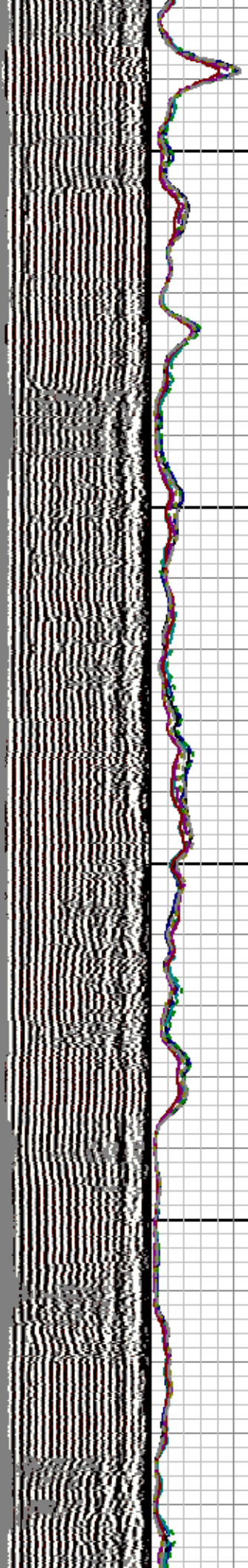


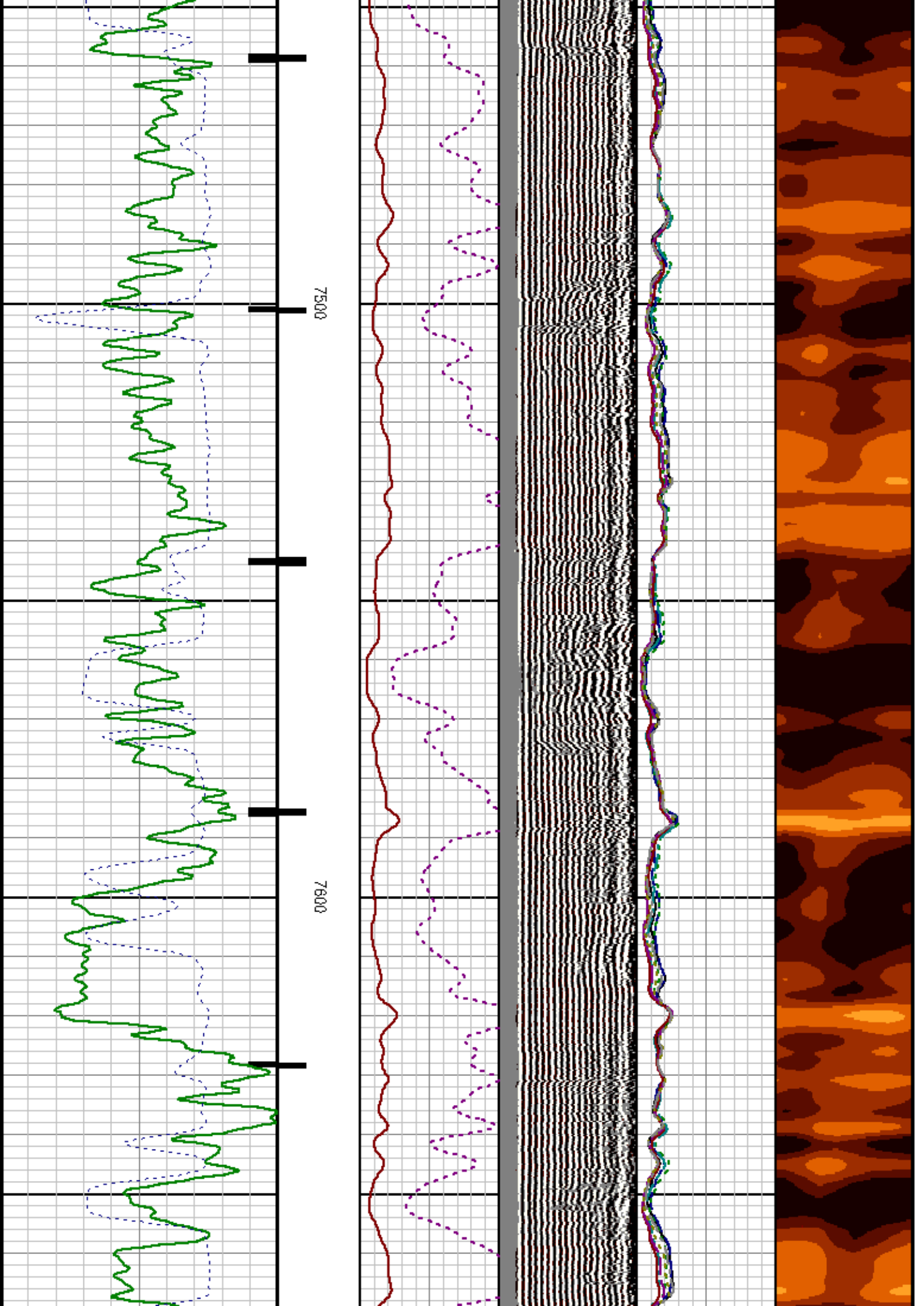


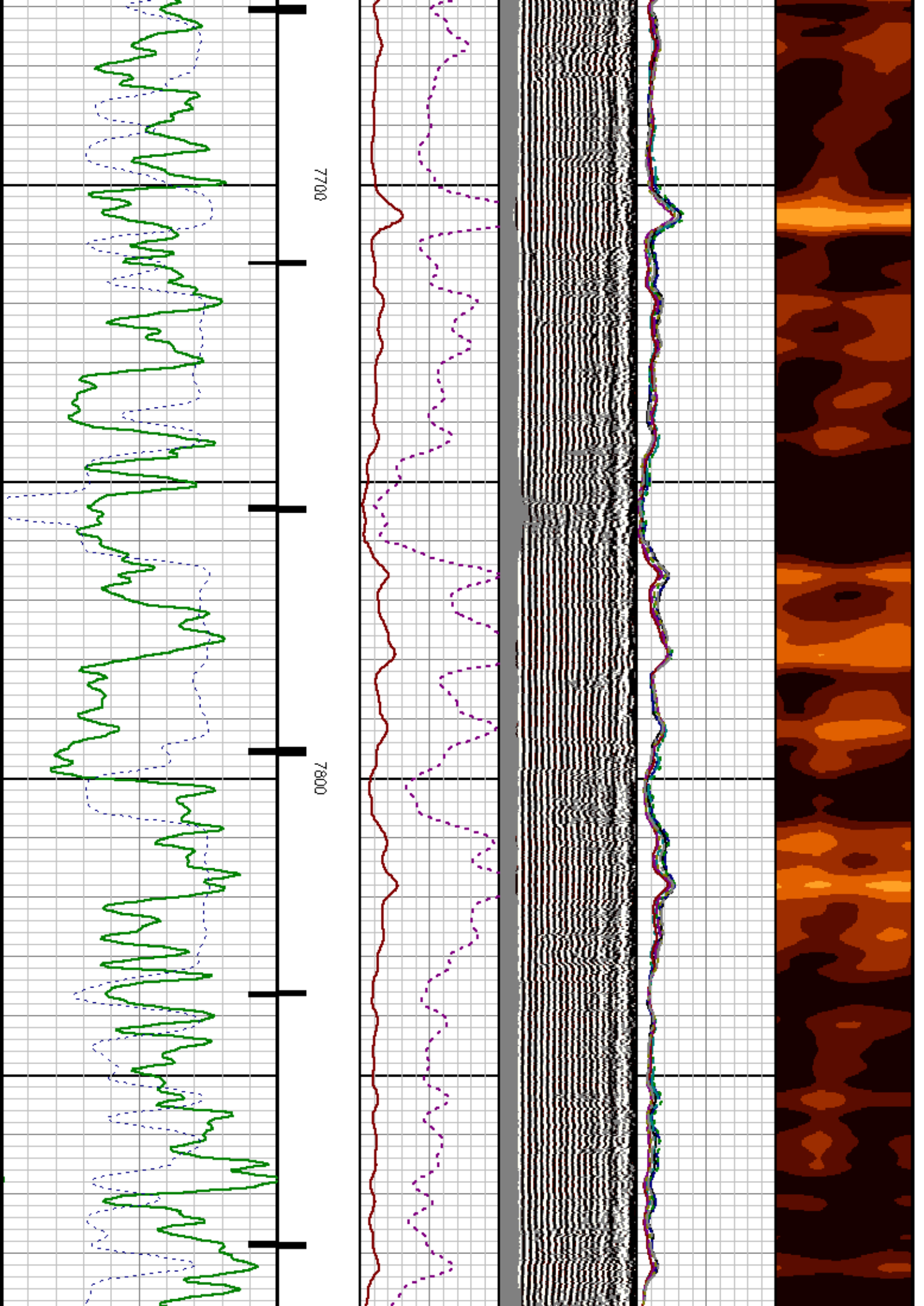


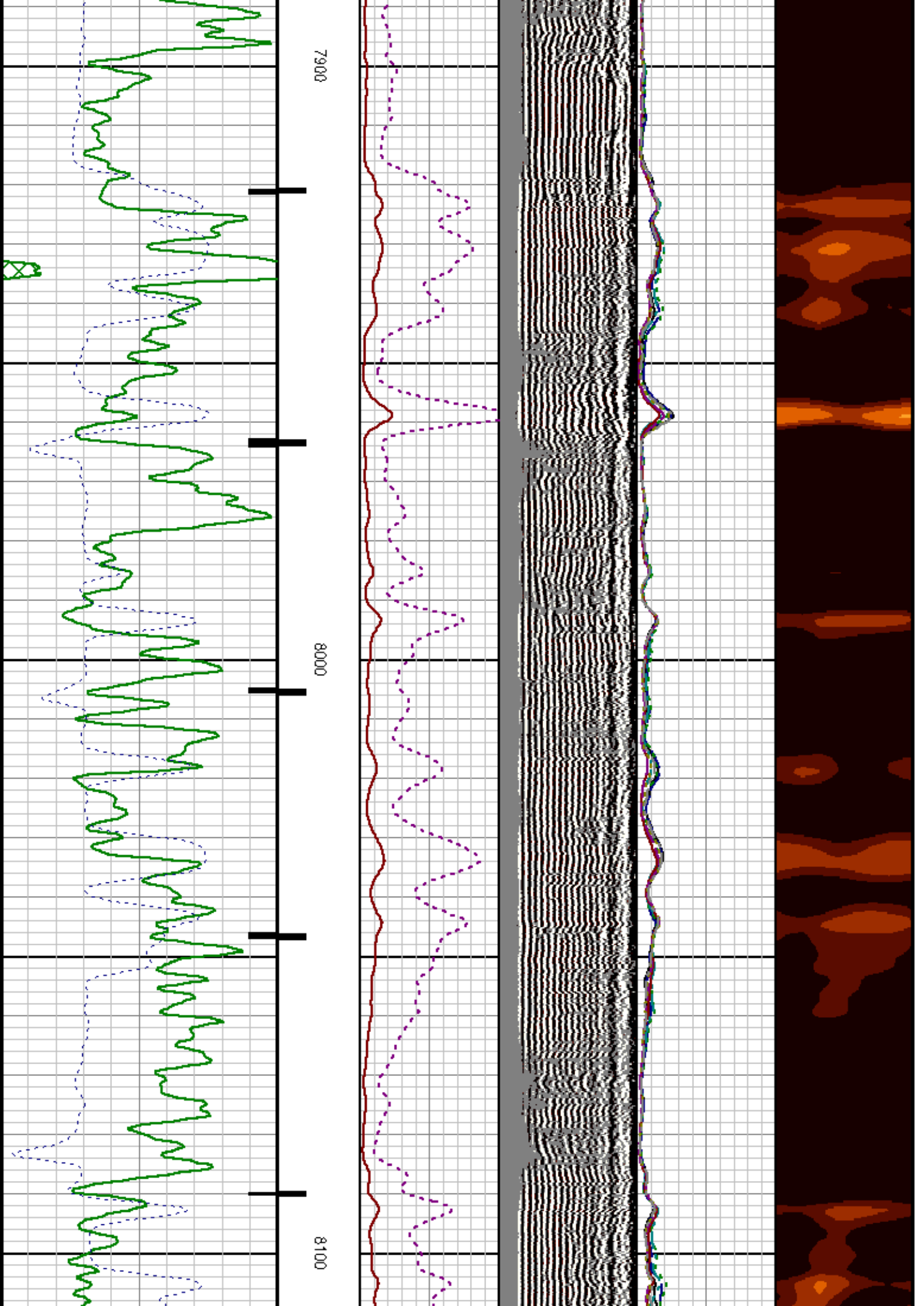


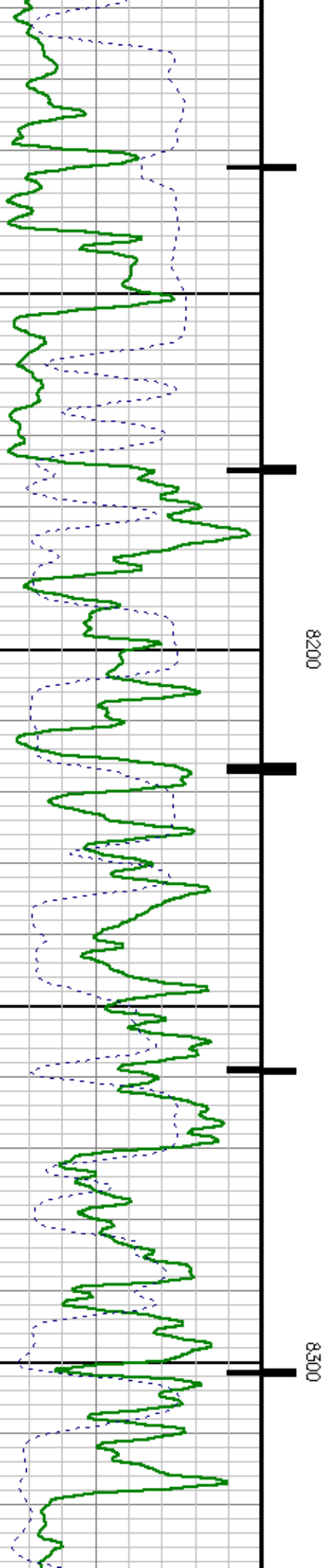
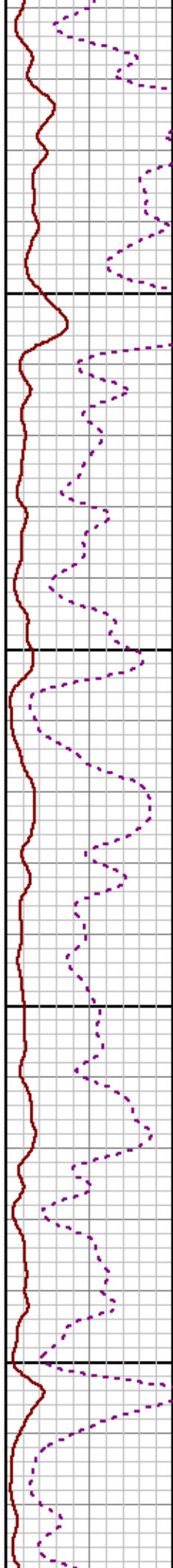
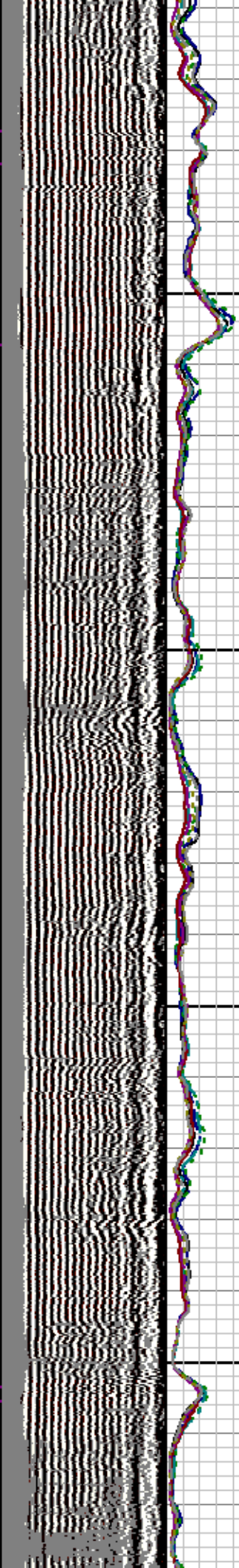


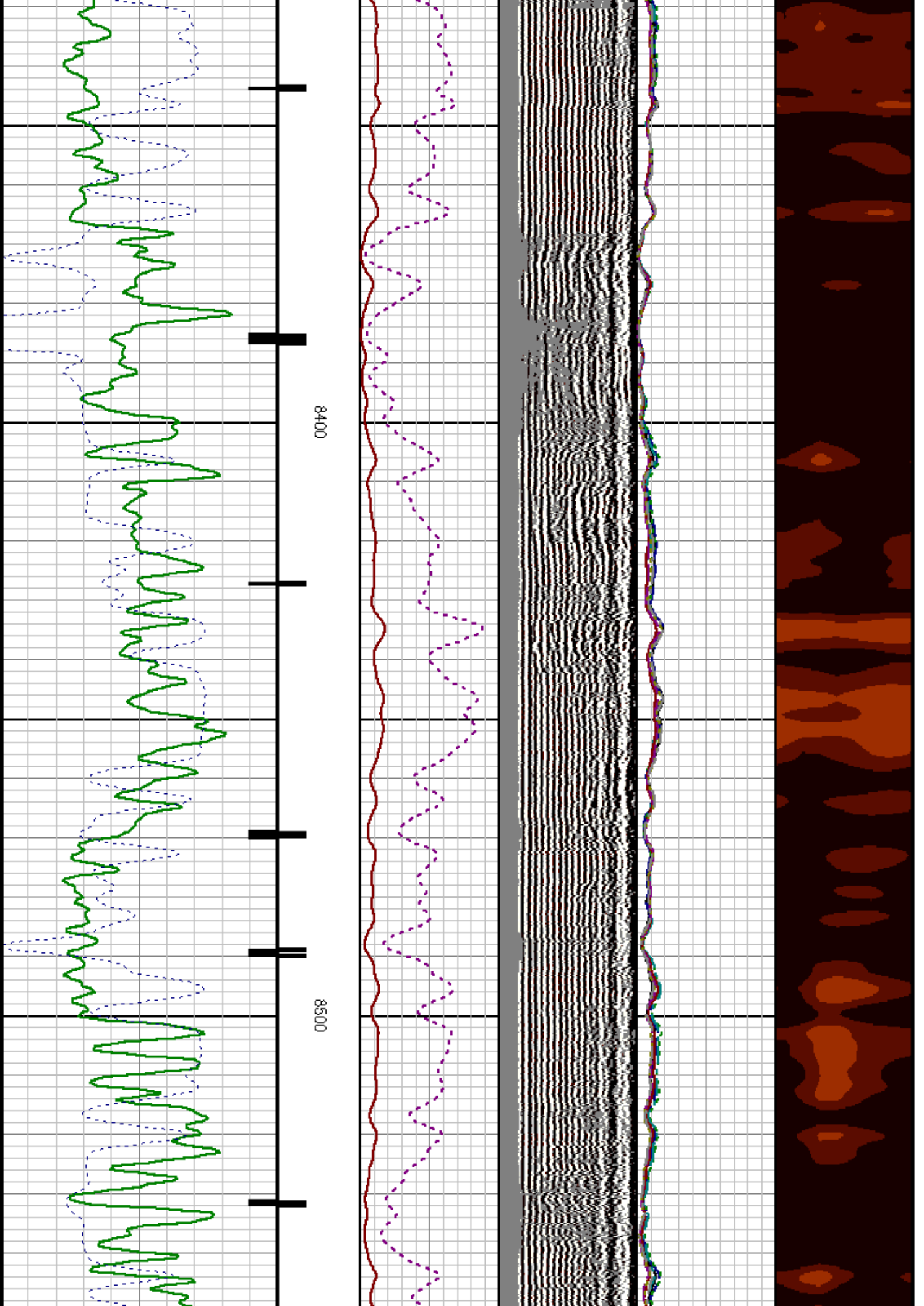


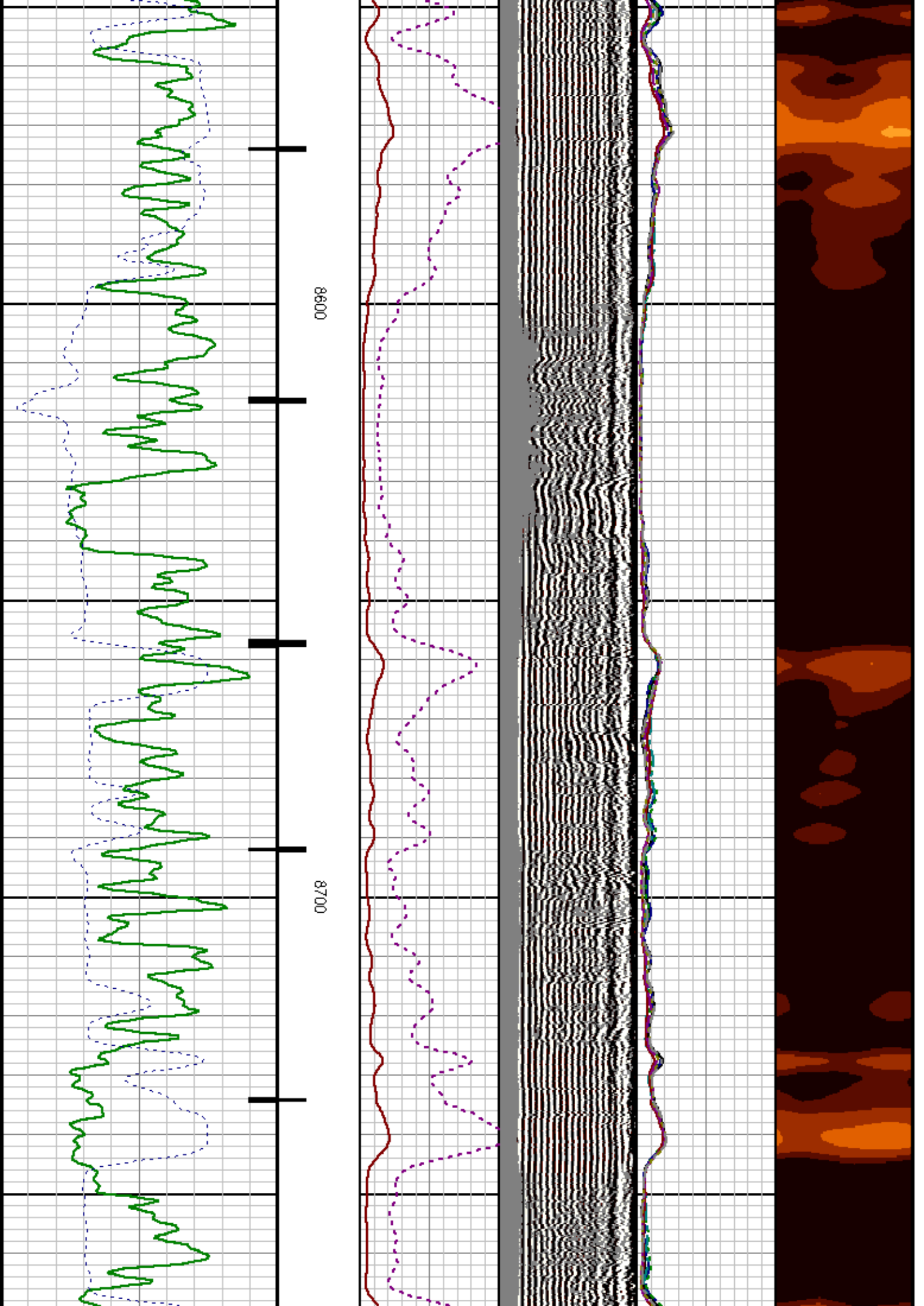


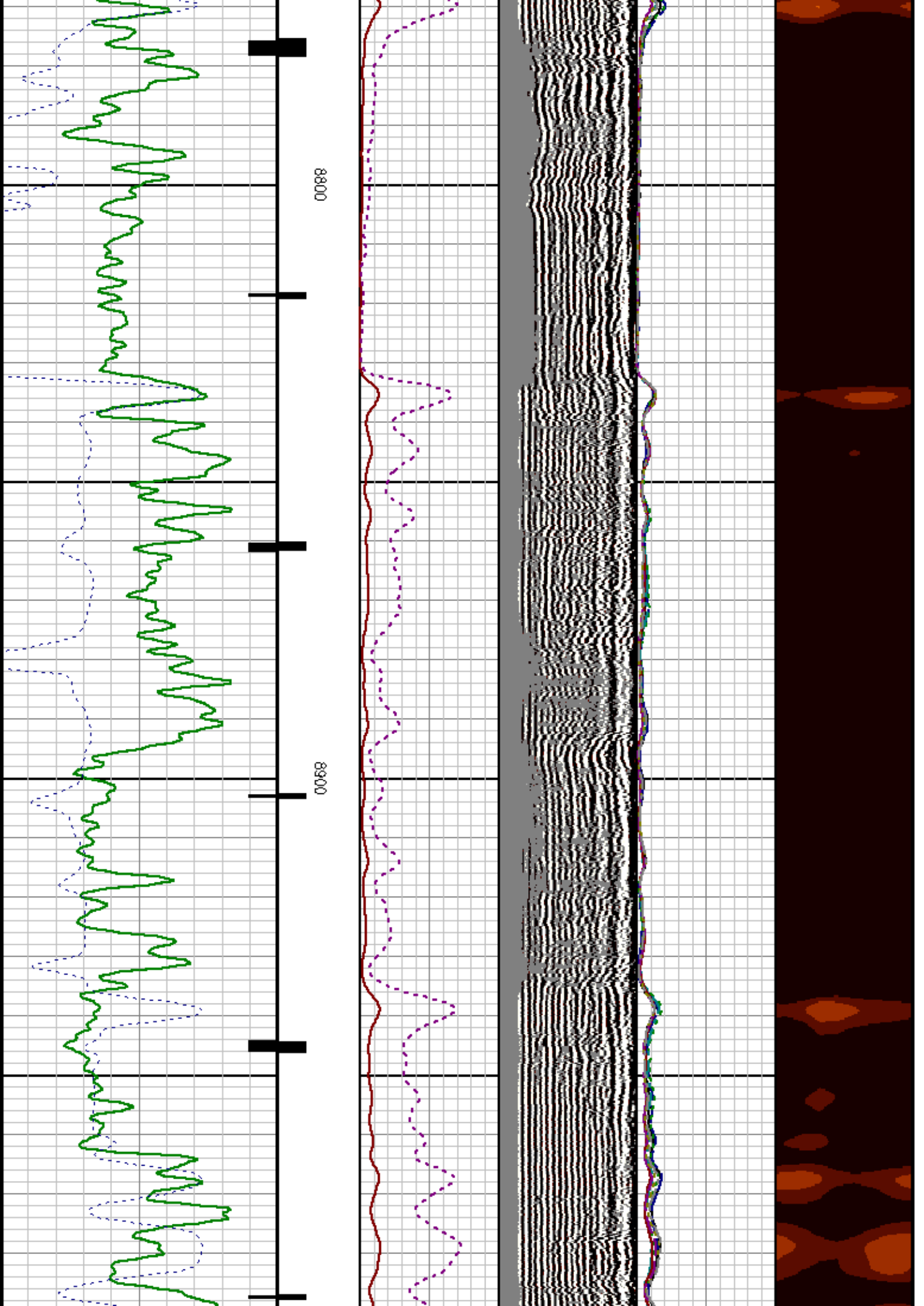


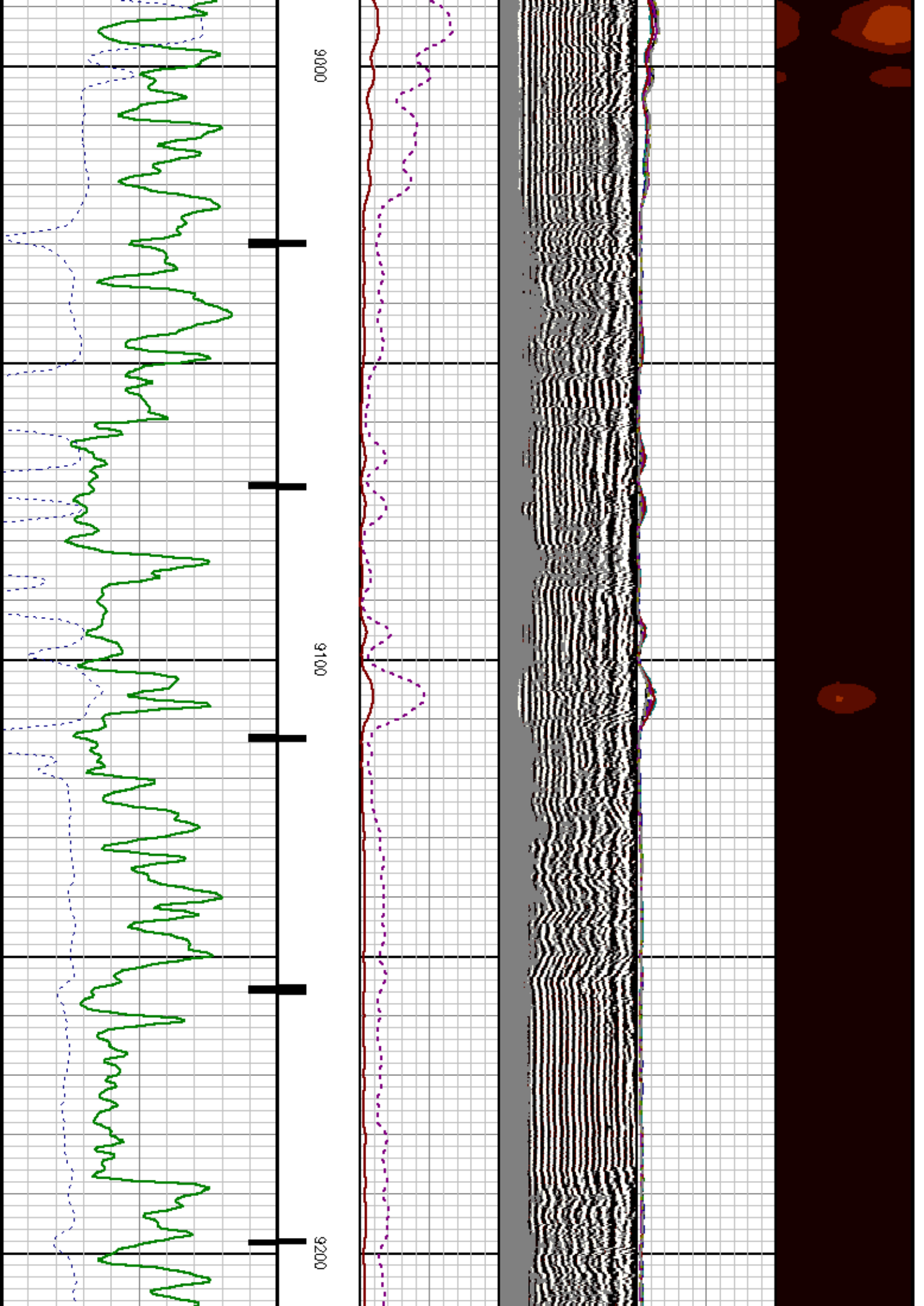


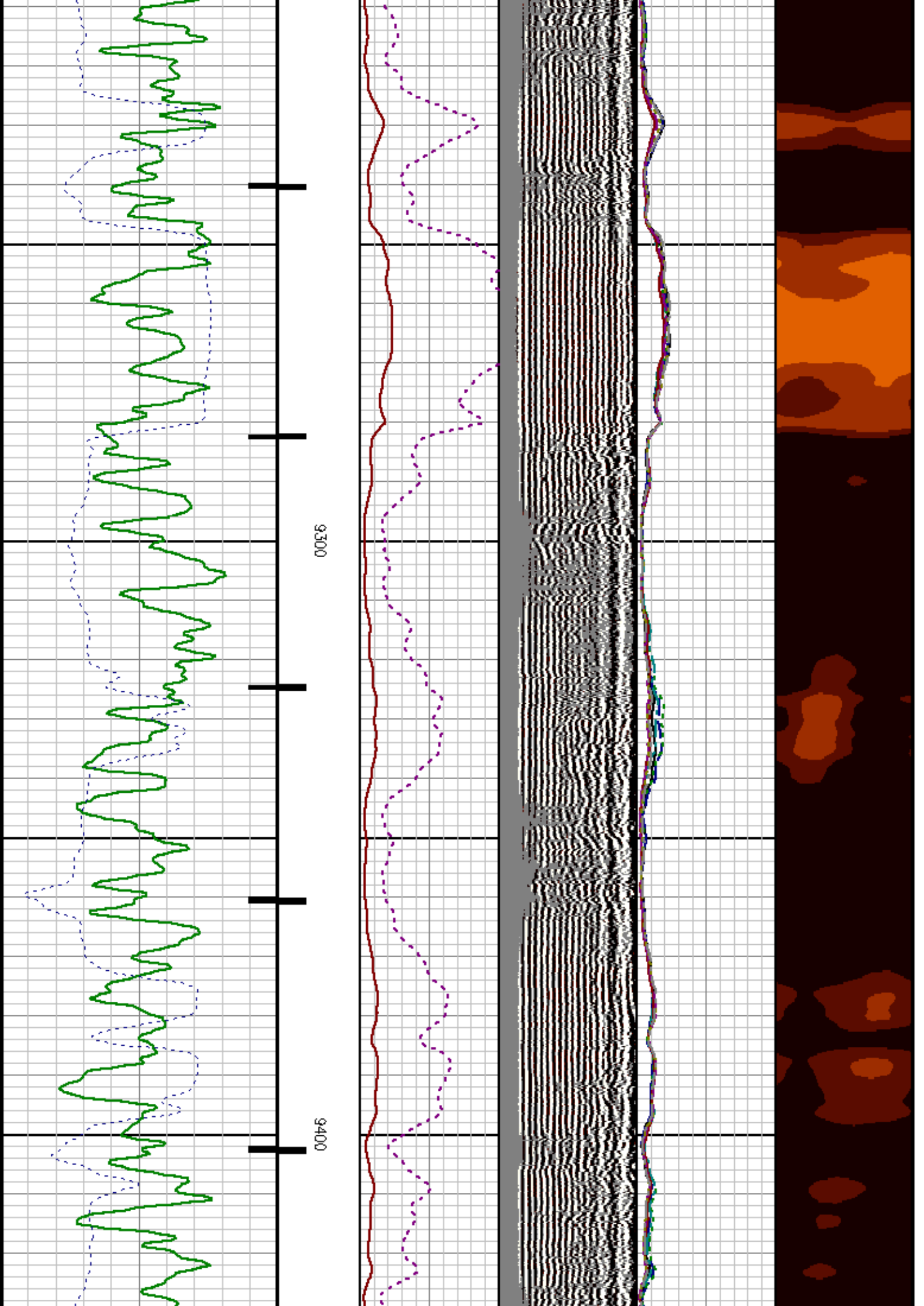


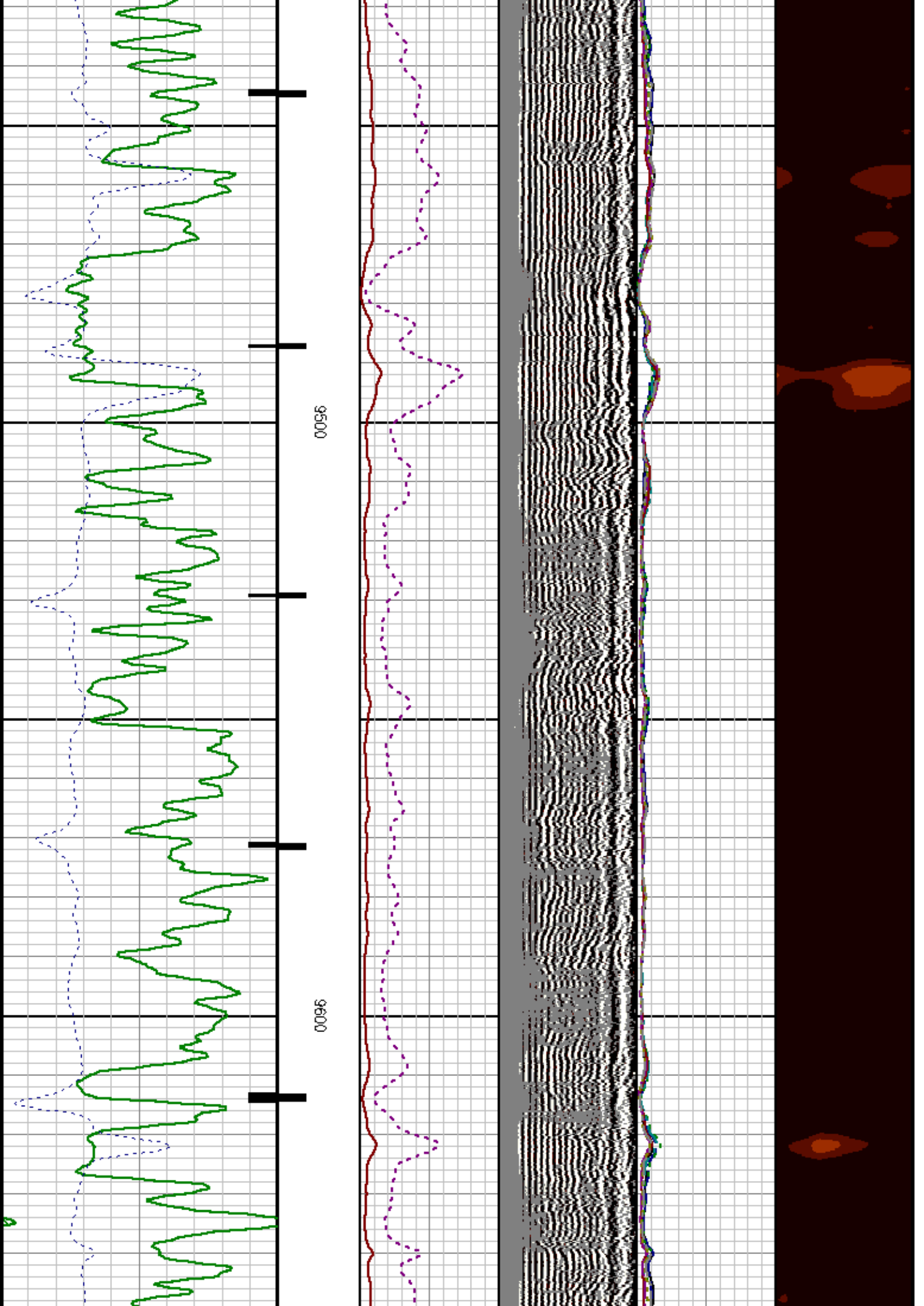


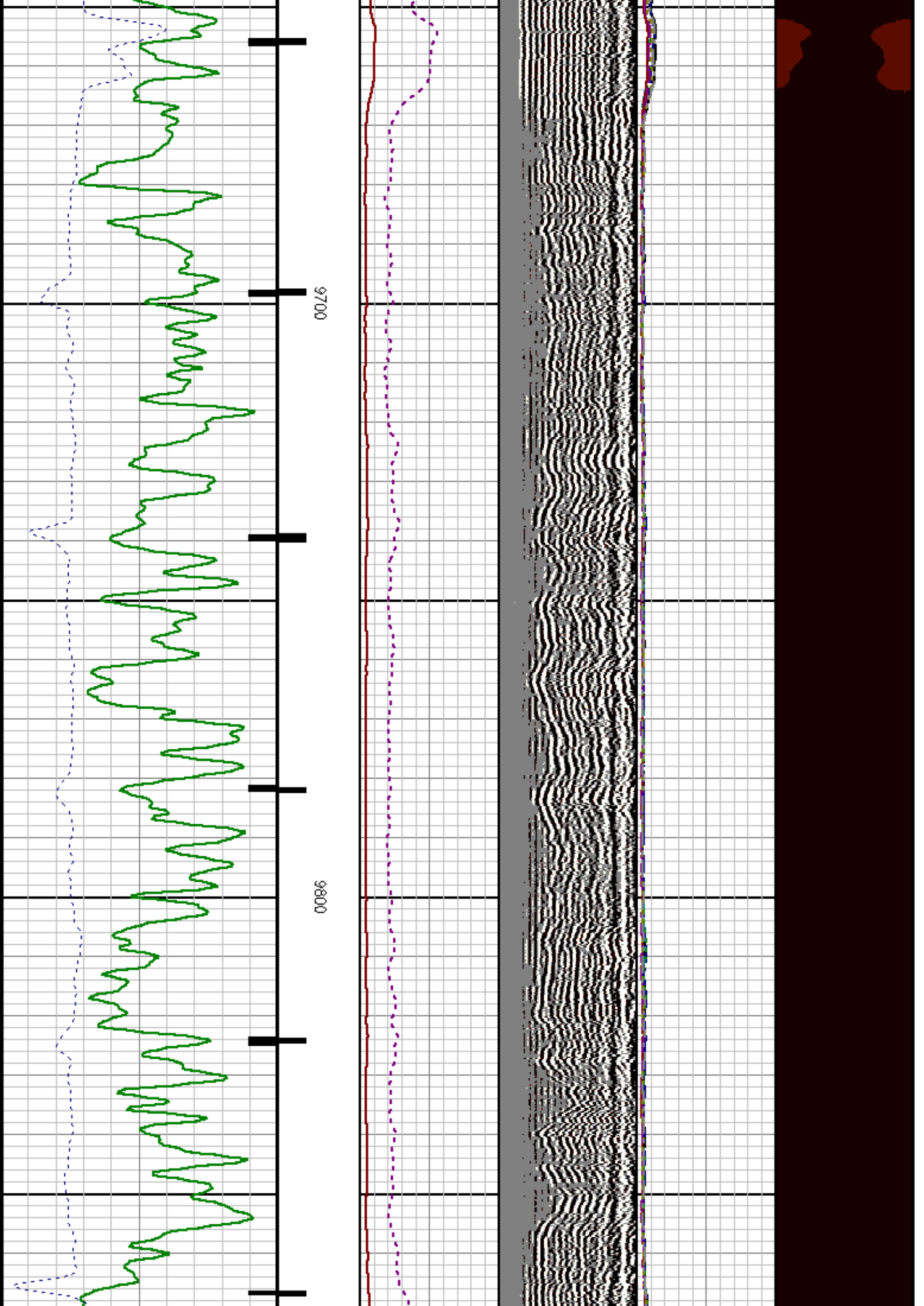


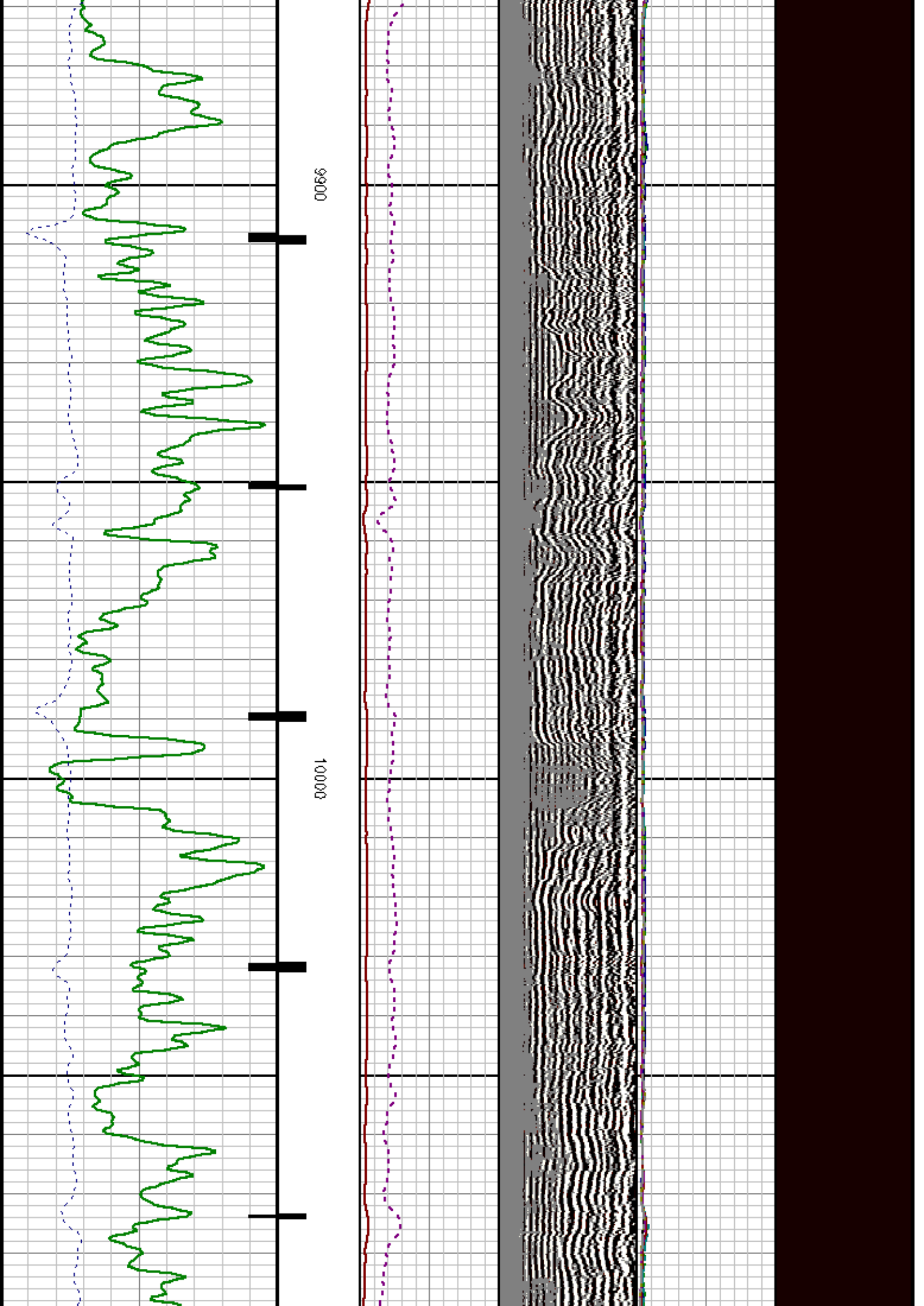


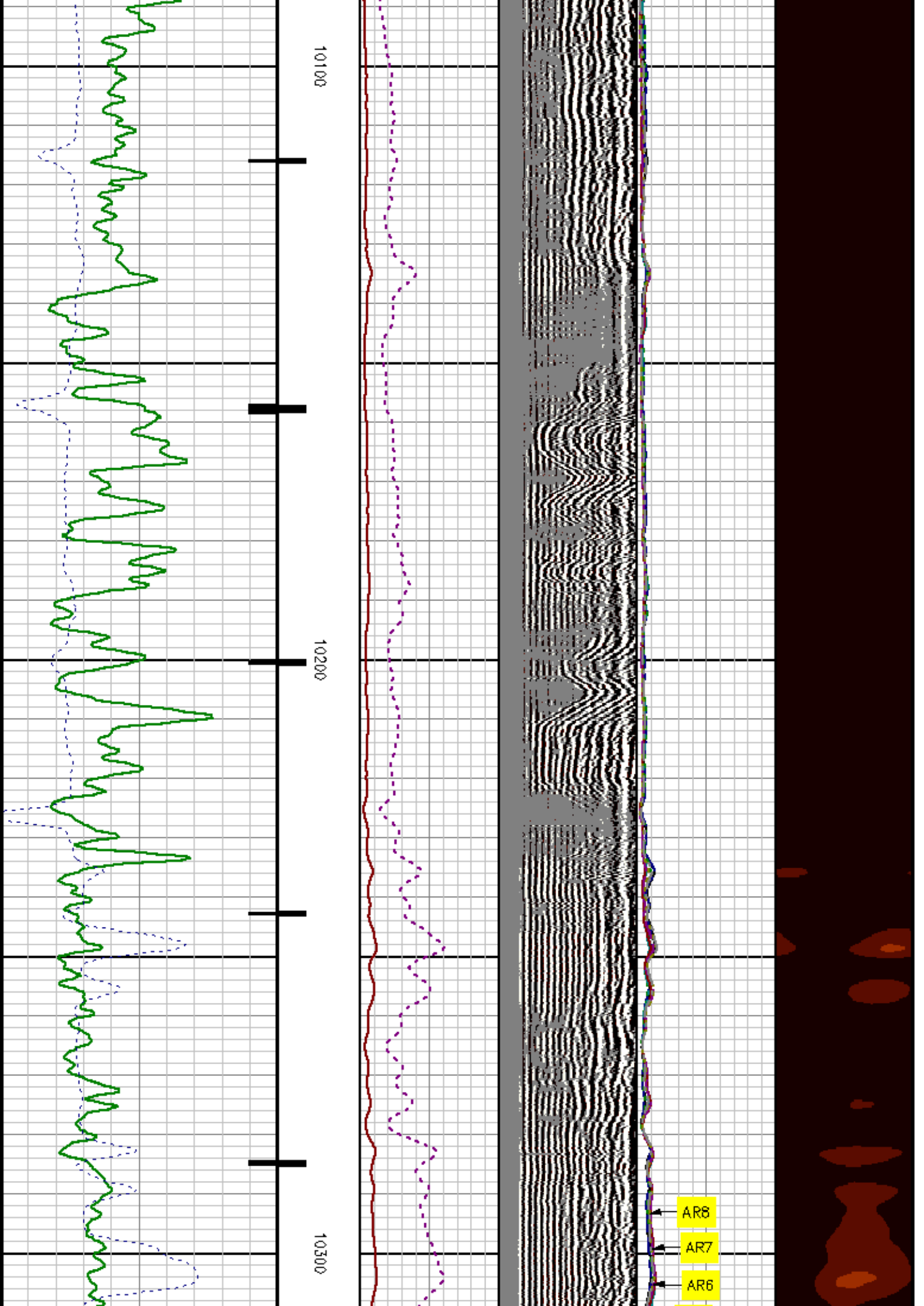


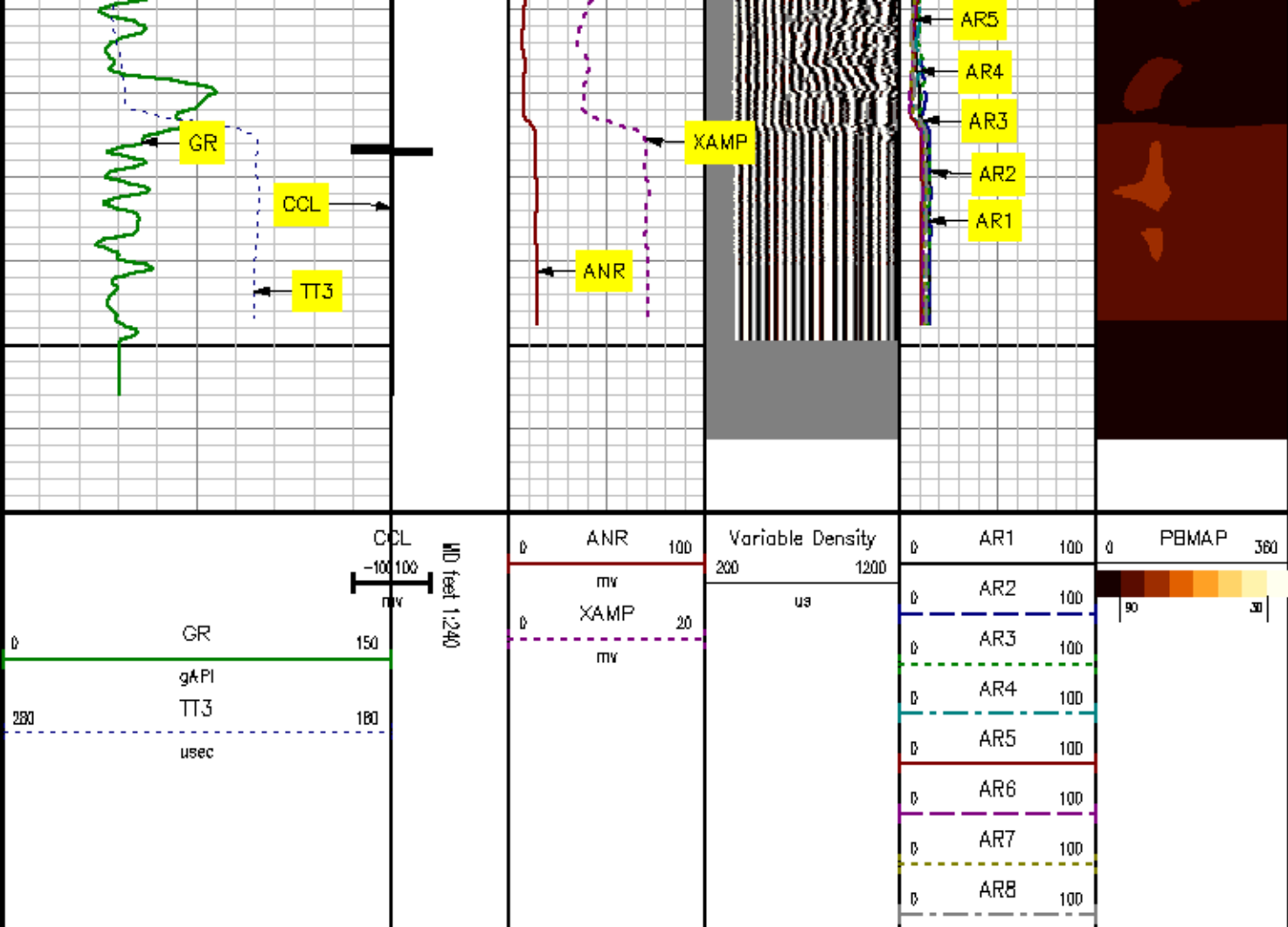












FREE PIPE

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	316.900	usec	532.000	626.000
RAL	Amp Gate Start Near	200.391	usec	532.000	626.000
RAL	Amp Gate Start Radial	200.391	usec	532.000	626.000
RAL	Amp Gate Width Far	25.000	usec	532.000	626.000
RAL	Amp Gate Width Near	25.000	usec	532.000	626.000
RAL	Amp Gate Width Radial	25.000	usec	532.000	626.000
RAL	casing od	4.500	inches	532.000	626.000
RAL	casing wt	11.600	lbm/ft	532.000	626.000
RAL	FB Start Far	291.900	usec	532.000	626.000
RAL	FB Start Near	175.391	usec	532.000	626.000
RAL	FB Start Radial	175.391	usec	532.000	626.000

RAL	FB Thresh Far	15.000	mv	532.000	628.000
RAL	FB Thresh Near	10.000	mv	532.000	628.000
RAL	FB Thresh Radial	10.000	mv	532.000	628.000
RAL	Fluid Travel Time	200.000	usec/ft	532.000	628.000

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	OCL							
1426XA	-5.390	GR							
1426XA	0.000	NEU							

Created by : RAL, v4.8.007

Plotted by : PlotMgr, v5.4.504

Company : MARATHON OIL COMPANY

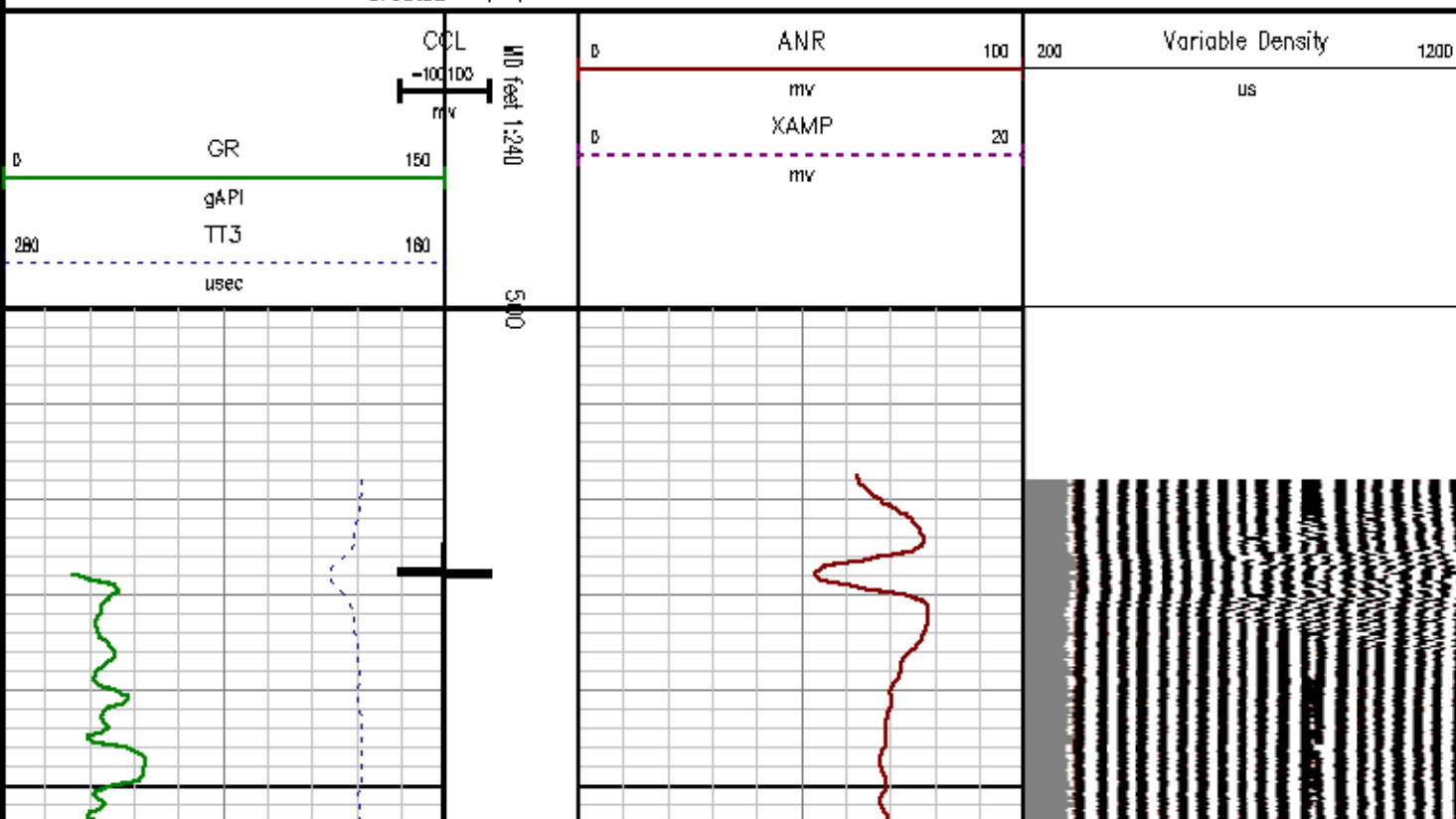
Well : 598-34D-13

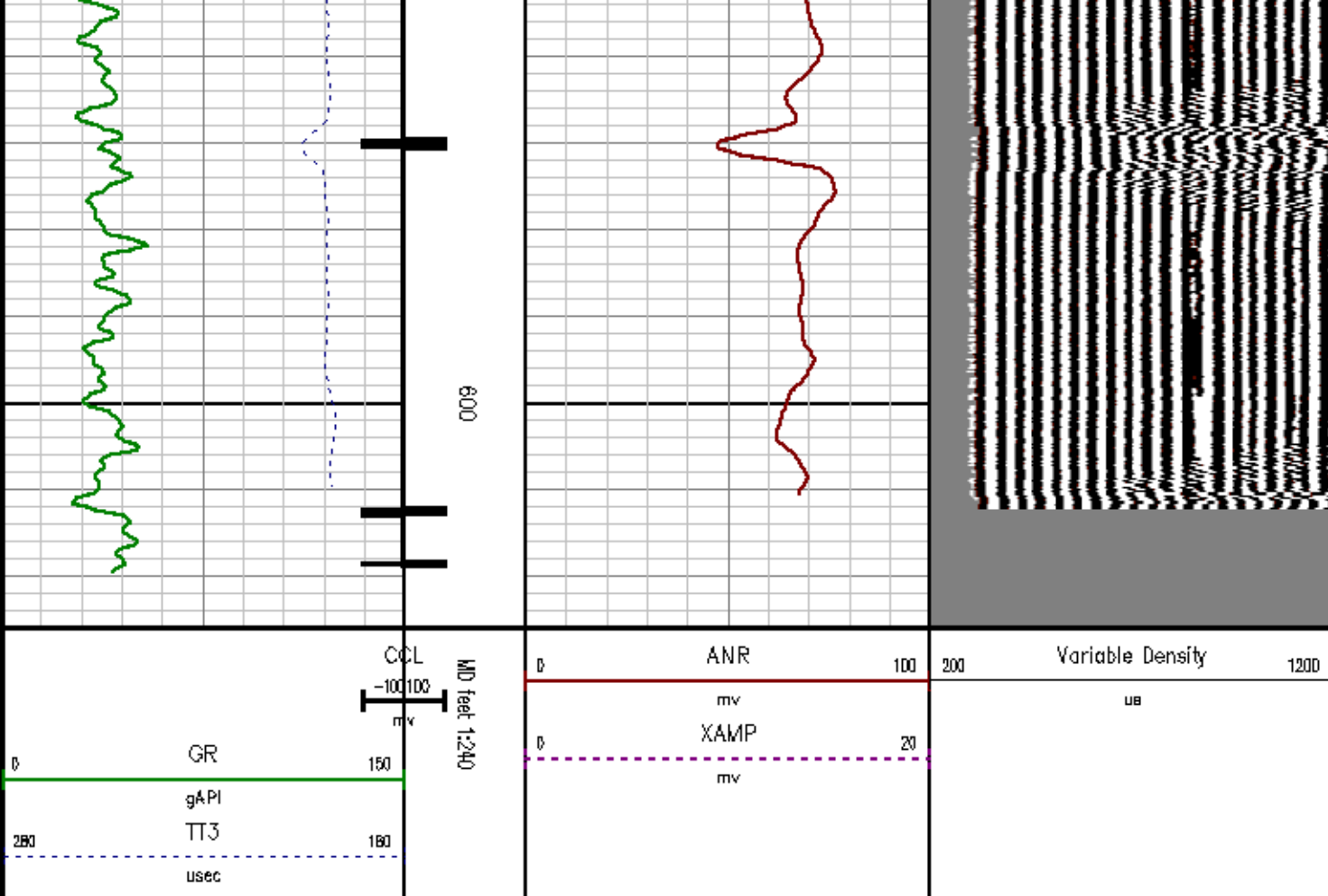
File Name : D:\WELLDATA\13RAD\FREE.XTF

Mode : PlotMgr 5.4.504

Interval : 500.00 - 628.00 feet UP

Created : 8/24/2008 8:08:29 AM





REPEAT SECTION
O# PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	316.900	uSec	9951.093	10362.000
RAL	Amp Gate Start Near	200.391	uSec	9951.093	10362.000
RAL	Amp Gate Start Radial	200.391	uSec	9951.093	10362.000
RAL	Amp Gate Width Far	25.000	uSec	9951.093	10362.000
RAL	Amp Gate Width Near	25.000	uSec	9951.093	10362.000
RAL	Amp Gate Width Radial	25.000	uSec	9951.093	10362.000
RAL	casing od	4.500	inches	9951.093	10362.000
RAL	casing wt	11.600	lbm/ft	9951.093	10362.000

RAL	FB Start Far	291.900	usec	9951.093	10362.000
RAL	FB Start Near	175.391	usec	9951.093	10362.000
RAL	FB Start Radial	175.391	usec	9951.093	10362.000
RAL	FB Thresh Far	15.000	mv	9951.093	10362.000
RAL	FB Thresh Near	10.000	mv	9951.093	10362.000
RAL	FB Thresh Radial	10.000	mv	9951.093	10362.000
RAL	Fluid Travel Time	200.000	usec/ft	9951.093	10361.813

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	OCL							
1426XA	-5.390	GR							
1426XA	0.000	NEU							

Created by : RAL, v4.8.007

Plotted by : PlotMgr, v5.4.504

Company : WARATHON OIL COMPANY

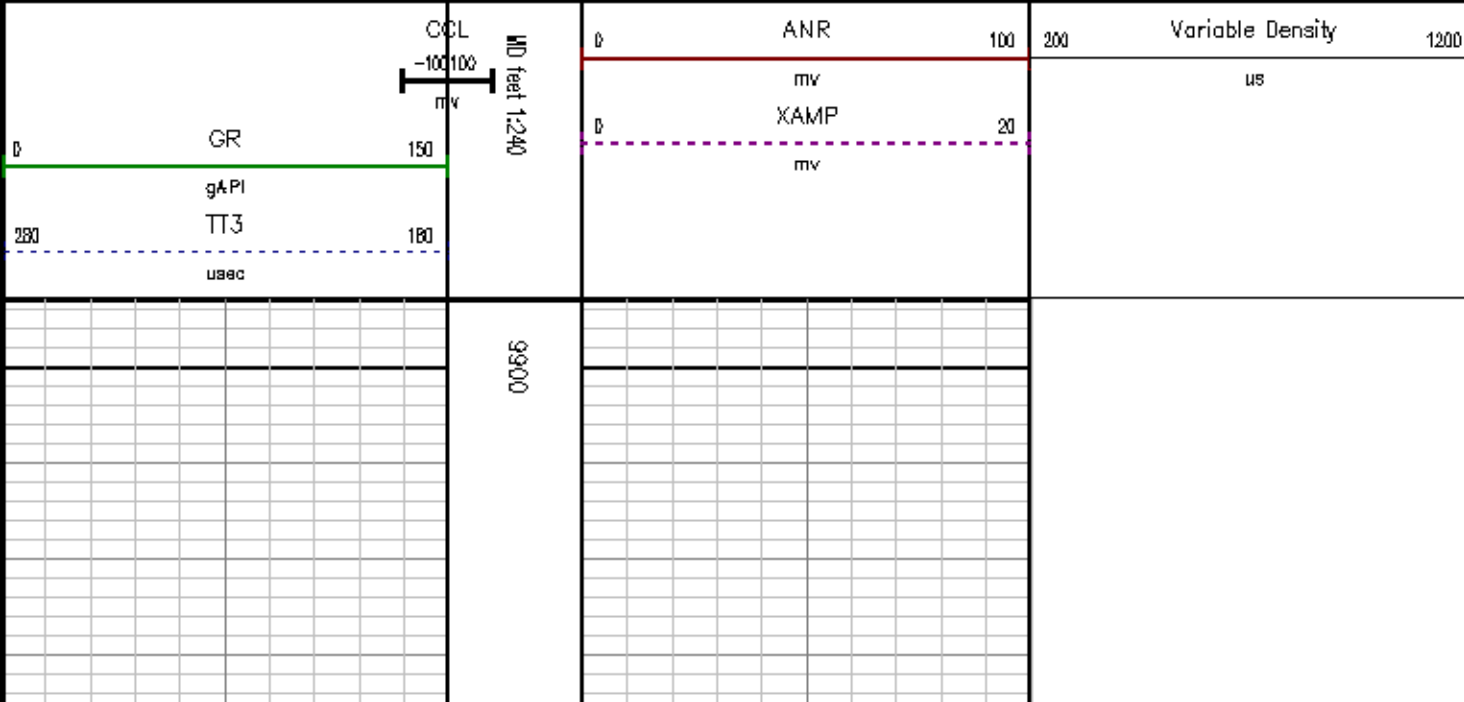
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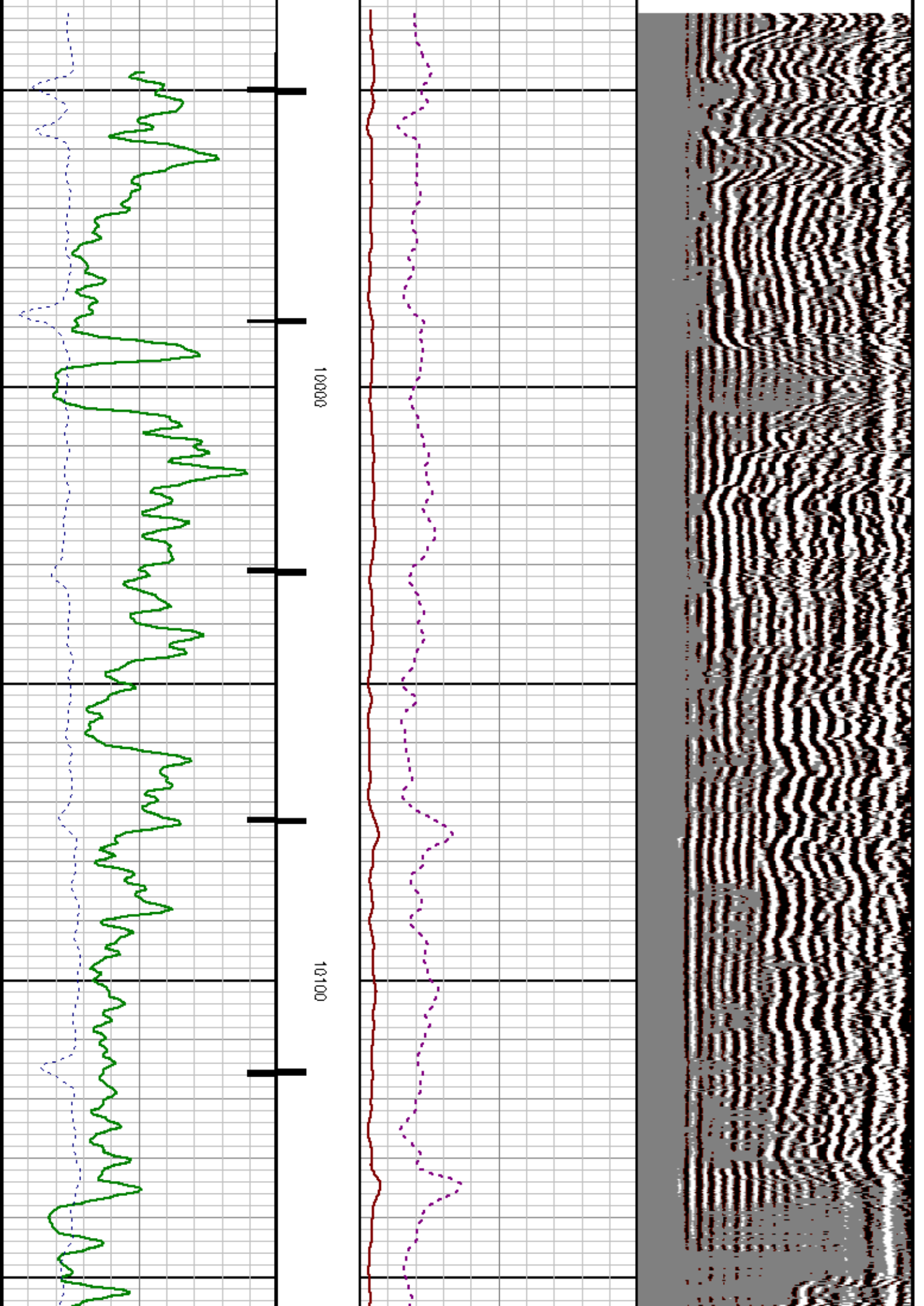
File Name : d:\well\data\13rad\repeat.xtf

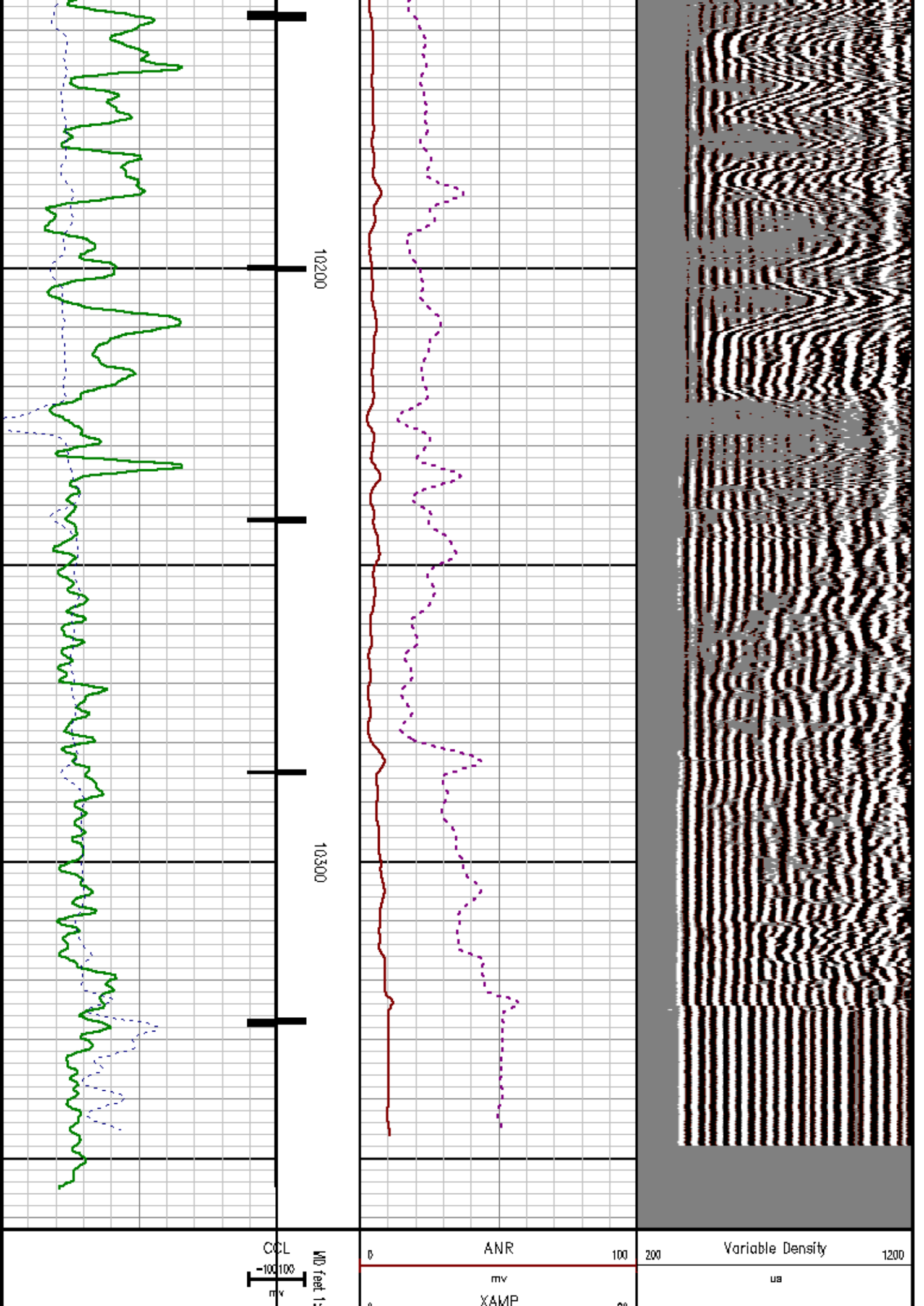
Mode : PlotMgr 5.4.504

Interval : 9893.00 - 10362.00 feet UP

Created : 6/24/2009 9:04:57 AM







0	GR	150	240	20
	gAPI			mv
280	TT3	180		
	usec			

CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\case\calver\RALSHP\457J1_ehp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Wed Jun 24 07:58:56 2009 TOOL SERIES: 1426XA ASSET: 457 SEQ: J1

Tool Delay [usec] Tank OD Tank Wt Tank ID

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	<input type="text" value="221"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="0.178"/>	<input type="text" value="100.00"/>	<input type="text" value="0.10"/>
3 Ft. Receiver	<input type="text" value="221"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.994"/>	<input type="text" value="100.00"/>	<input type="text" value="0.10"/>
5 Ft. Receiver	<input type="text" value="329"/>	<input type="text" value="332"/>	<input type="text" value="30"/>	<input type="text" value="133"/>	<input type="text" value="48"/>	<input type="text" value="1.995"/>	<input type="text" value="150.00"/>	<input type="text" value="0.11"/>
Radial #1	<input type="text" value="222"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="146"/>	<input type="text" value="25"/>	<input type="text" value="0.333"/>	<input type="text" value="100.00"/>	<input type="text" value="0.10"/>
Radial #2	<input type="text" value="222"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="146"/>	<input type="text" value="25"/>	<input type="text" value="-0.042"/>	<input type="text" value="100.00"/>	<input type="text" value="0.10"/>
Radial #3	<input type="text" value="221"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="145"/>	<input type="text" value="25"/>	<input type="text" value="0.914"/>	<input type="text" value="100.00"/>	<input type="text" value="0.10"/>
Radial #4	<input type="text" value="220"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="145"/>	<input type="text" value="25"/>	<input type="text" value="-0.100"/>	<input type="text" value="100.00"/>	<input type="text" value="0.10"/>
Radial #5	<input type="text" value="220"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="145"/>	<input type="text" value="25"/>	<input type="text" value="-0.033"/>	<input type="text" value="100.00"/>	<input type="text" value="0.10"/>
Radial #6	<input type="text" value="221"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="146"/>	<input type="text" value="25"/>	<input type="text" value="0.842"/>	<input type="text" value="100.00"/>	<input type="text" value="0.10"/>
Radial #7	<input type="text" value="221"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="146"/>	<input type="text" value="25"/>	<input type="text" value="0.822"/>	<input type="text" value="100.00"/>	<input type="text" value="0.10"/>
Radial #8	<input type="text" value="222"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="146"/>	<input type="text" value="25"/>	<input type="text" value="0.325"/>	<input type="text" value="100.00"/>	<input type="text" value="0.10"/>

RALFLD

Wellbore Calibration: C:\case\calver\RALFLD\457J1 fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Wed Jun 24 07:59:59 2009 TOOL SERIES: 1426XA ASSET: 457 SEQ: J1

Tool Delay [usec] Casing OD Casing Wt Casing ID

RECEIVER Zero Gate Zero Gate Zero Gate Zero Gate Zero Gate Zero Gate Zero Gate Zero Gate

RECEIVER	Start [usec]	Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	166	25	-0.068	0.000	1.00	100.000
3 Ft. Receiver	200	25	-0.916			
5 Ft. Receiver	317	25	-0.611			
Radial #1	200	25	-2.312			
Radial #2	200	25	-2.478			
Radial #3	200	25	-0.936			
Radial #4	200	25	-1.247			
Radial #5	200	25	-0.998			
Radial #6	200	25	-1.010			
Radial #7	200	25	-1.227			
Radial #8	200	25	-1.066			

GAMMA RAY

Calibration File: C:\gase\calver\GE\457J1.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED:	Wed Jun 03 11:13:55 2009	TOOL SERIES:	1426XA	ASSET:	457	SEQ:	J1
Calibrator #	Background	Calibrator On	Multiplicative	Background	Calibrator On	Differential	
	[cps]	[cps]		[api]	[api]	[api]	
S2K DA857	55.60	258.36	0.912	50.73	235.73	185.00	

Verification File: C:\gase\calver\GE\457J1.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED:	Wed Jun 03 11:16:29 2009	TOOL SERIES:	1426XA	ASSET:	457	SEQ:	J1
Calibrator #	Background	Calibrator On	Multiplicative	Background	Calibrator On	Differential	
	[cps]	[cps]		[api]	[api]	[api]	
S2K DA857	58.04	262.81	0.912	52.96	239.80	186.84	

OTA SHORT CABLE HEAD

CENTRALIZER

Series	RALCENT
Mnemonic	CENT
Diameter	3.12"
Weight	20.00 lb

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



30.00'

XMIT 20.94'

NEAR RCVR 17.85'

FAR RCVR 15.94'

CCL 11.34'

GR 9.49'

NEU 4.09'

0.00'

CENTRALIZER

Series	RALCENT
Mnemonic	CENT
Diameter	3.12"
Weight	20.00 lb

Probe GR/CCL/NEU

Series	2458XA
Mnemonic	PROB
Diameter	2.75"
Length	9.42'
Measure Point	1.21' NEU
Measure Point	6.60' GR
Measure Point	8.46' CCL

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"



Company MARATHON OIL COMPANY

Well 696-8A-13

Field GRAND VALLEY

County GARFIELD State COLORADO

File No:

1260

API No:

06-045-18847-0000

Location

993' FSL & 335' FEL

Elevations

KB 8108 ft

DF 8108 ft

GL 8095 ft

SEC 8 TWP 6S RGE 98W

CASE

Baker Atlas