



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No:

Company

EXXONMOBIL PRODUCTION COMPANY

1982

Well

PCU 287-11B6

API No:

Field

PICEANCE CREEK

05-103-11371-0000

County

RIO BLANCO

State

COLORADO

Location

392' FSL & 480' FEL

Other Services

RFM

SEC 11 TWP 25 RGE 97W

G.L. Elevation 7131 ft

K.B. 28.5 ft Above P. D.

KELLY BUSHING

Elevations

KB 7157.5 ft

DF 7158.5 ft

GL 7131 ft

Permanent Datum
Log Measured From
Drill Measured From

Date 05-JAN-2010

Run ONE

Service Order 576407

Depth Driller 12882 ft

Depth Logger 12580 ft

Bottom Logged Interval 12560 ft

Top Logged Interval 6012 ft

Time Started 14:00

Time Finished 18:00

Operator Rig Time 4 HRS

Type of Fluid in Hole WATER

Fluid Density N/A

Salinity N/A

Fluid Level FULL

Logged Cement Top N/A

Wellhead Pressure 0 psi

Maximum Hole Deviation N/A

Nominal Logging Speed 45 fpm

Maximum Recorded Temperature N/A

Reference Log Date 05-JAN-10

Equipment No. 4271 Location TLM KAUTT

Recorded By MR. GREG AUTHREMENT

Witnessed By

- 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
9.875 in		
B. 125 in		

Casing Record

Size	Weight	Grade	From	To
7 in	26 lbm/ft	P-110	SURFACE	8809 ft
4.5 in	15.1 lbm/ft	P-110	SURFACE	12882 ft

Remarks

THE CREW OF 4271 THANKS YOU.

Equipment Data

Run	Trip	Tool	Series Number	Serial Number	Position
1	1	WANDREL	1428XA	10404630	CENTRALIZED

MAIN SECTION PRIMARY PRESENTATION

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	314.263	usec	6013.910	12578.000
RAL	Amp Gate Start Near	197.754	usec	6013.910	12578.000
RAL	Amp Gate Start Radial	197.754	usec	6013.910	12578.000
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RAL	casing od	4.500	inches	6013.910	12578.000
RAL	casing wt	15.100	lbm/ft	6013.910	12578.000
RAL	FB Start Far	289.263	usec	6013.910	12578.000
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RAL	FB Thresh Near	10.000	mv	6013.910	12578.000
RAL	FB Thresh Radial	10.000	mv	6013.910	12578.000
RAL	Fluid Travel Time	200.000	usec/ft	6013.910	12578.848

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 : MIXED

Plotted by : PlatMgr, v5.4.504

Company : EXXONMOBIL PRODUCTION COMPANY

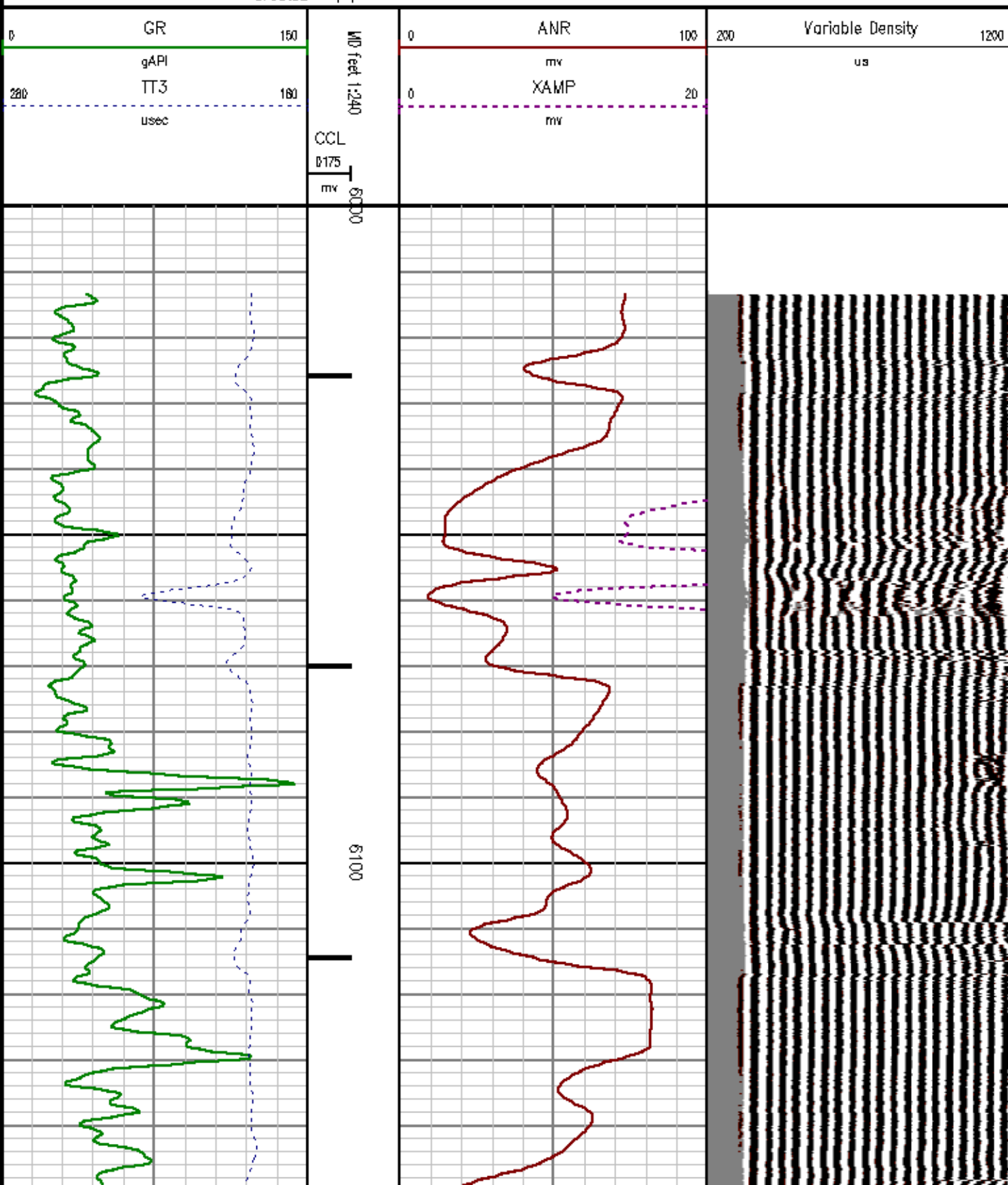
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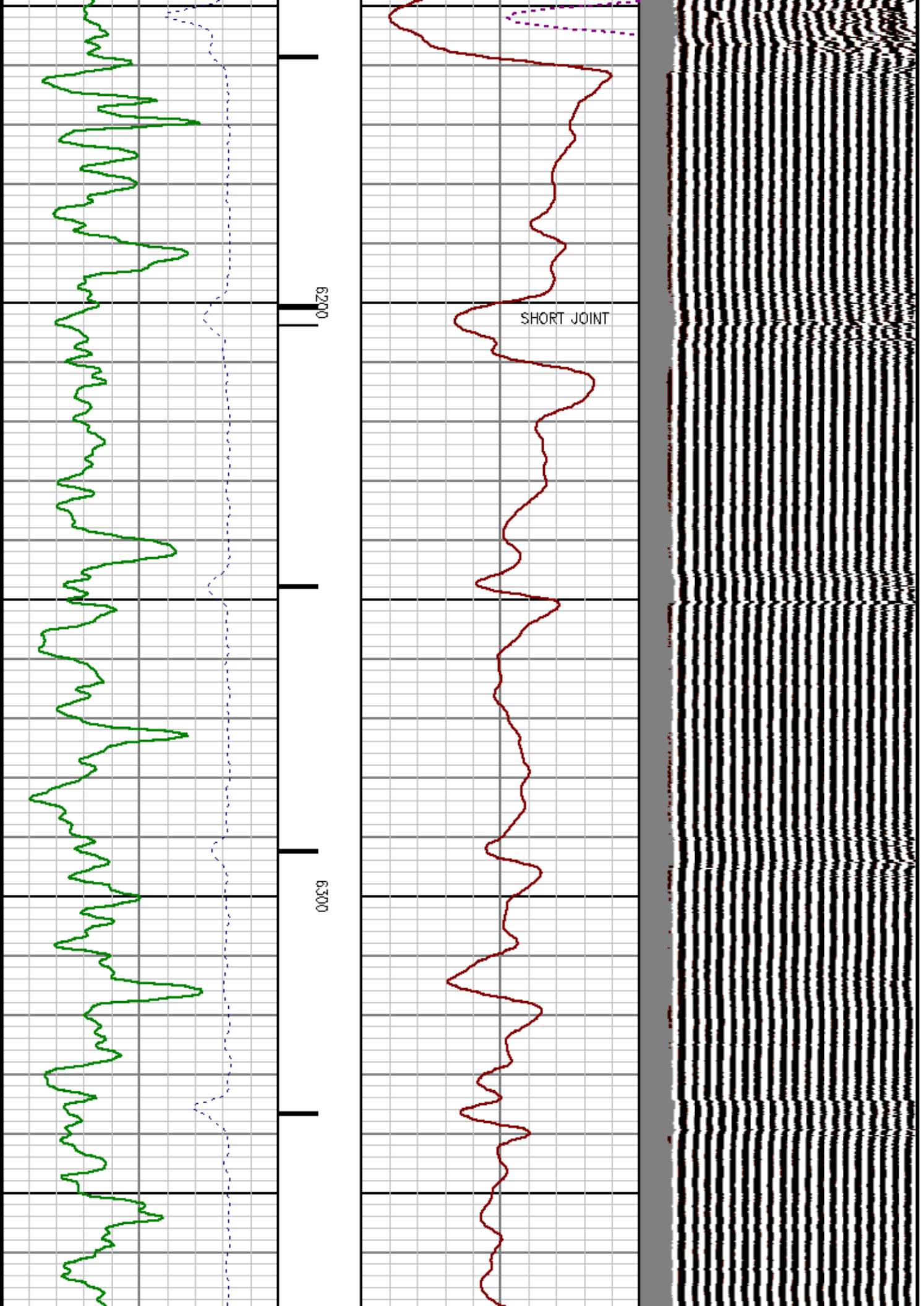
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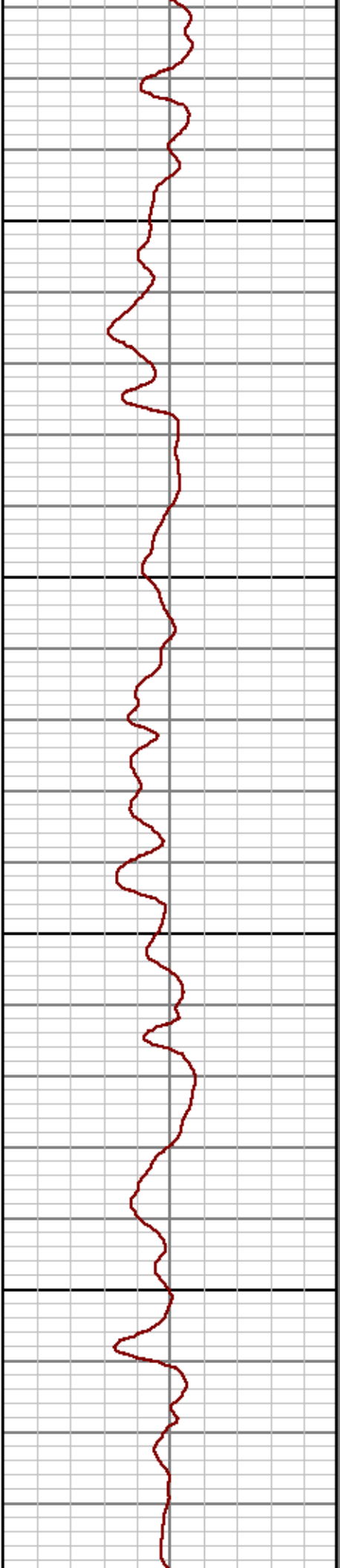
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Created : 1/9/2010 5:23:00 PM

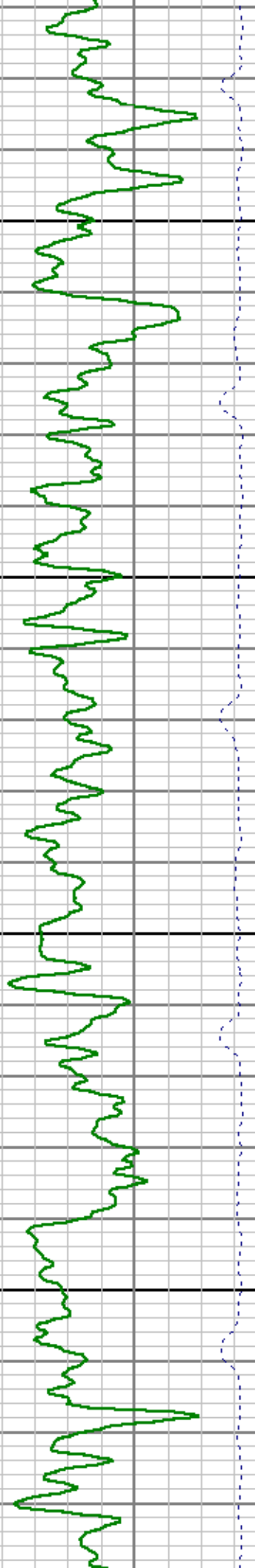
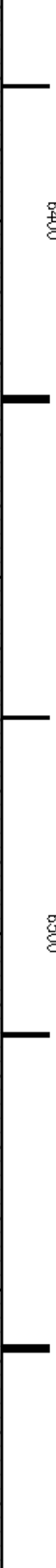


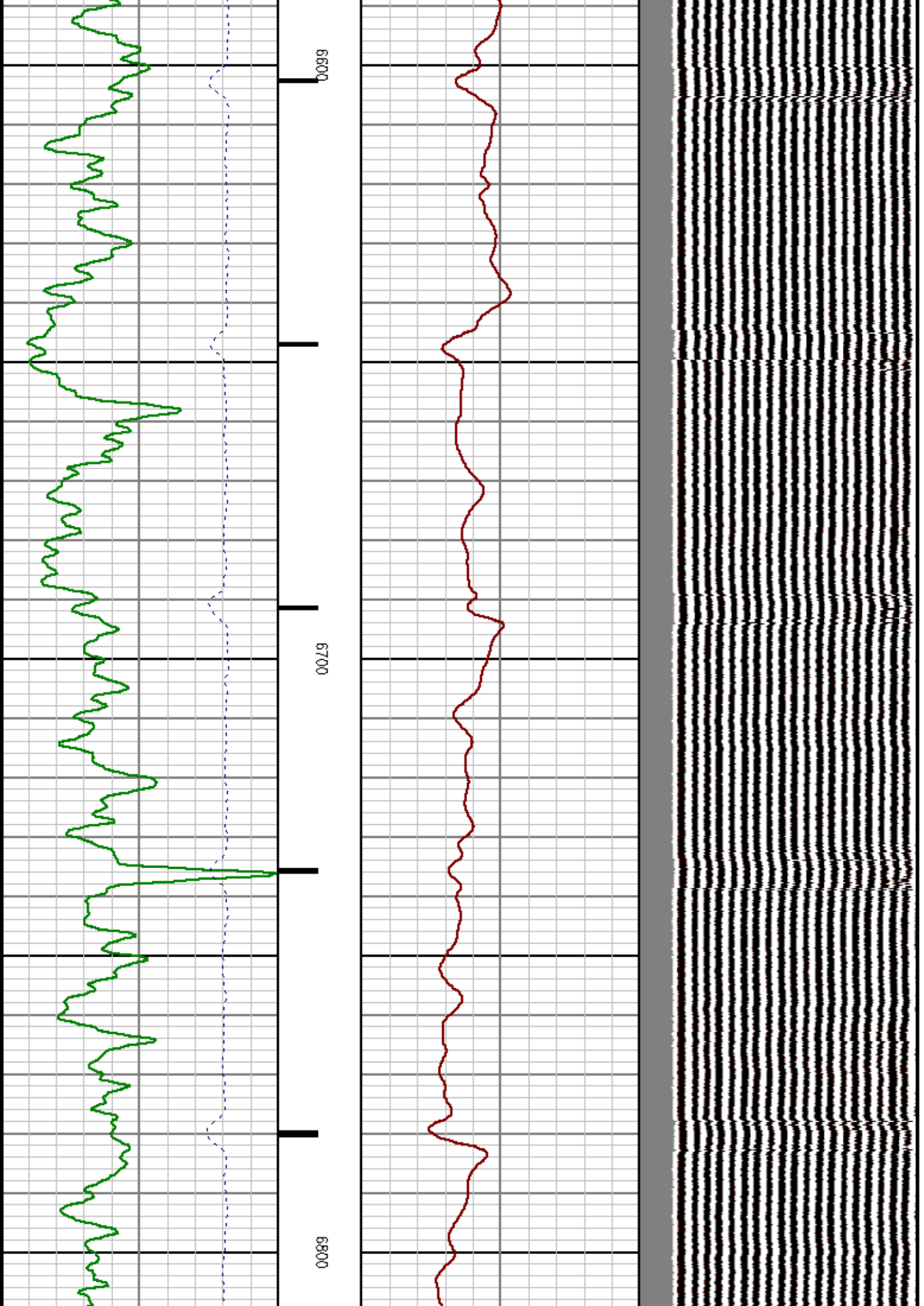


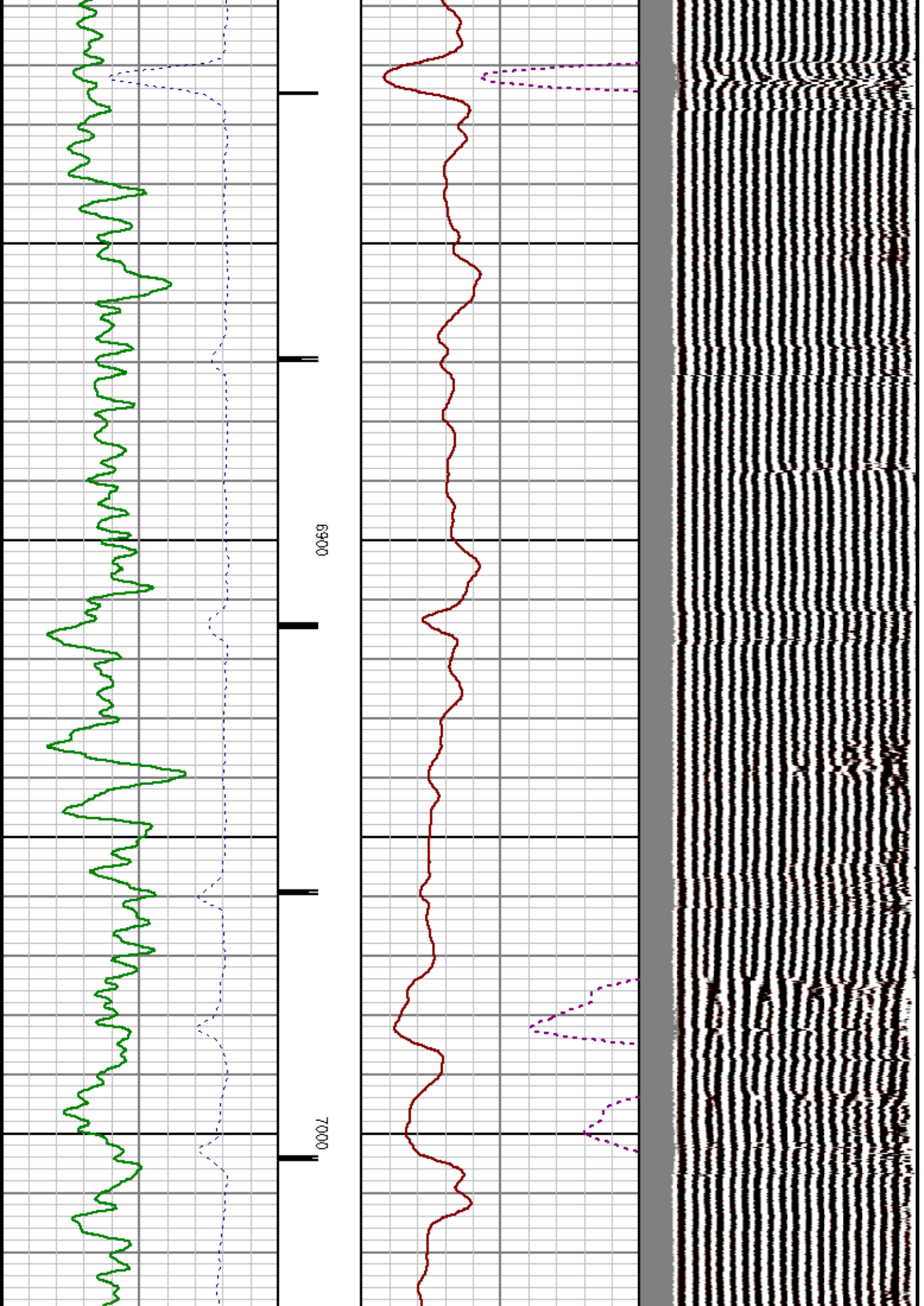


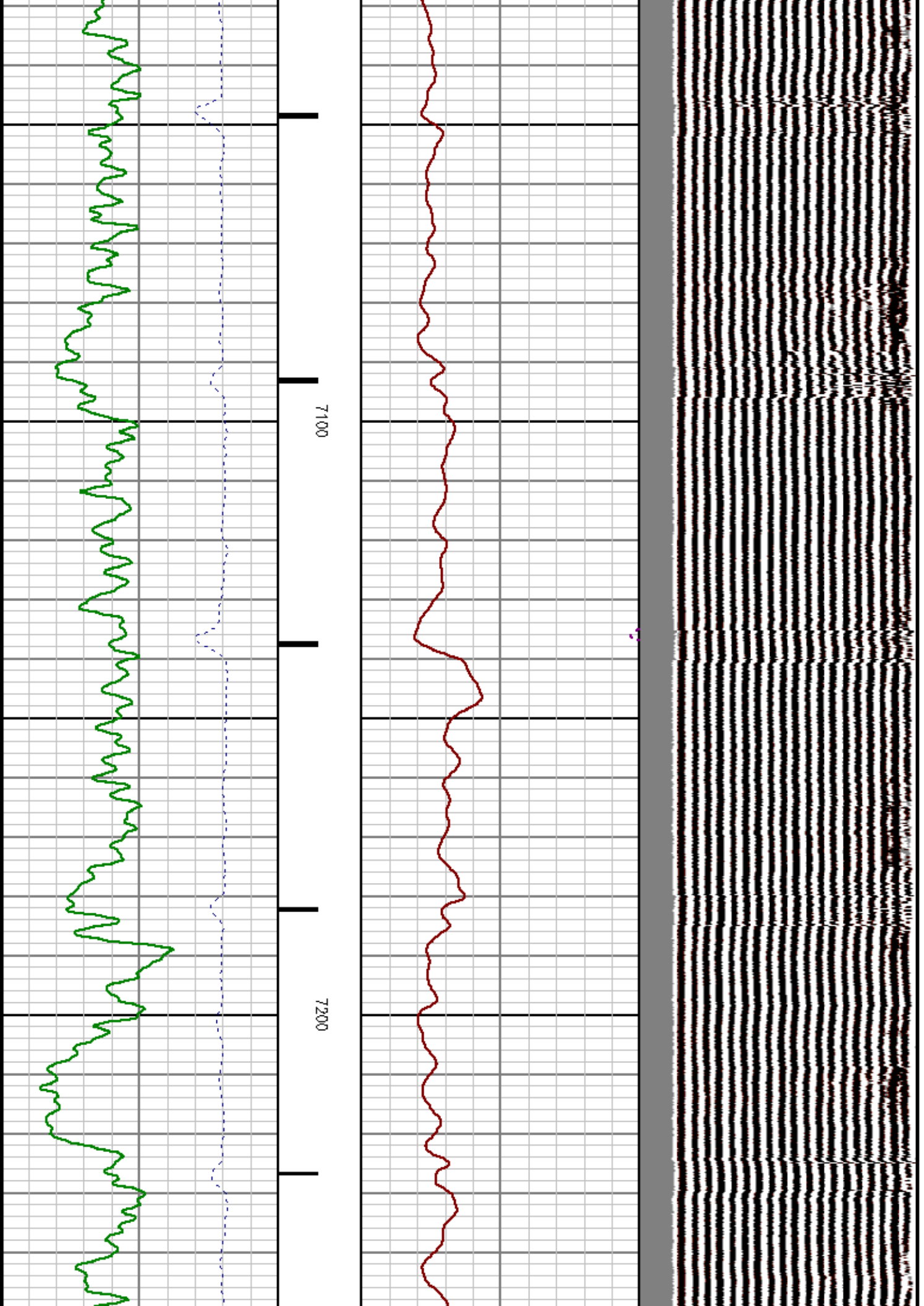
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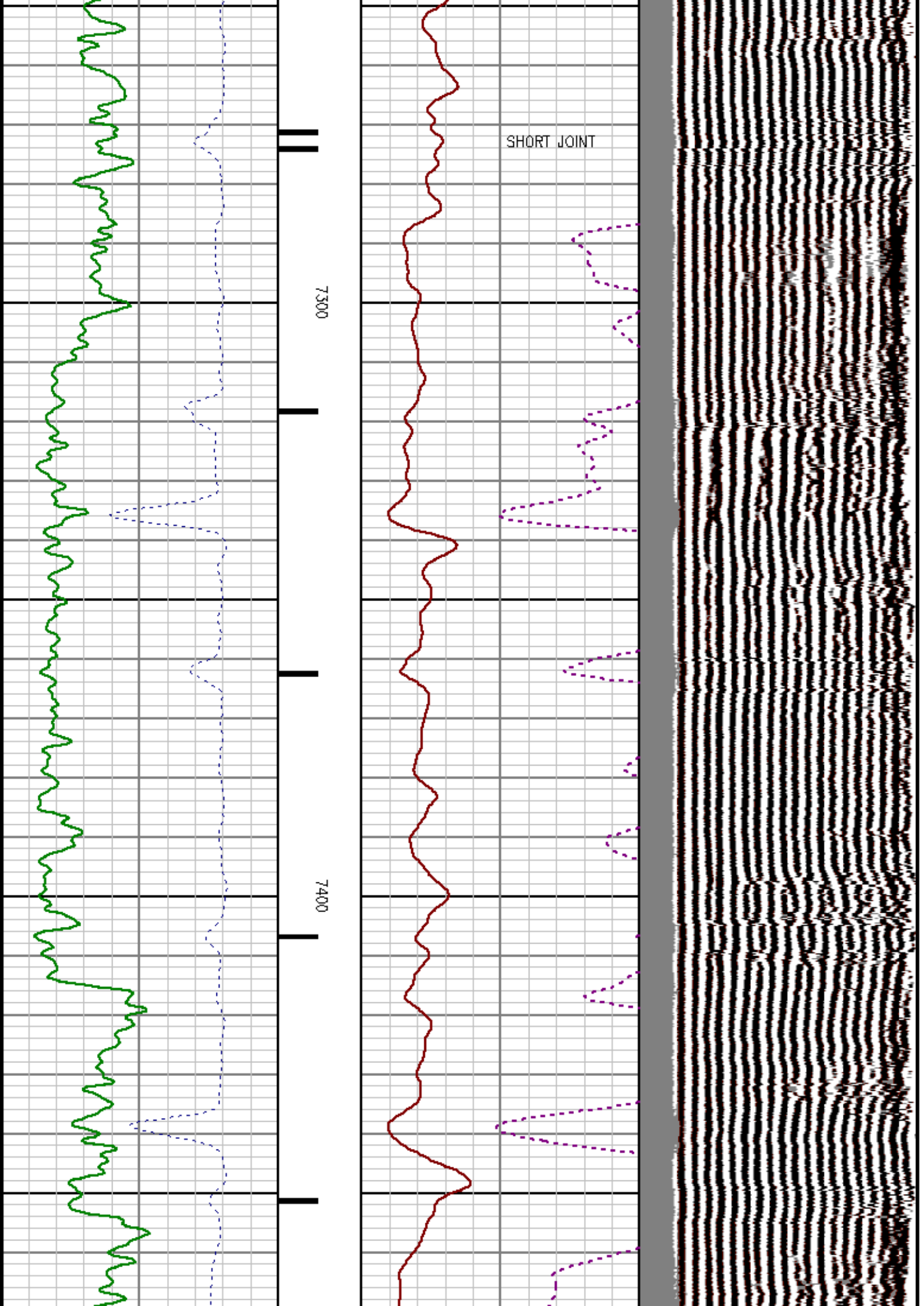
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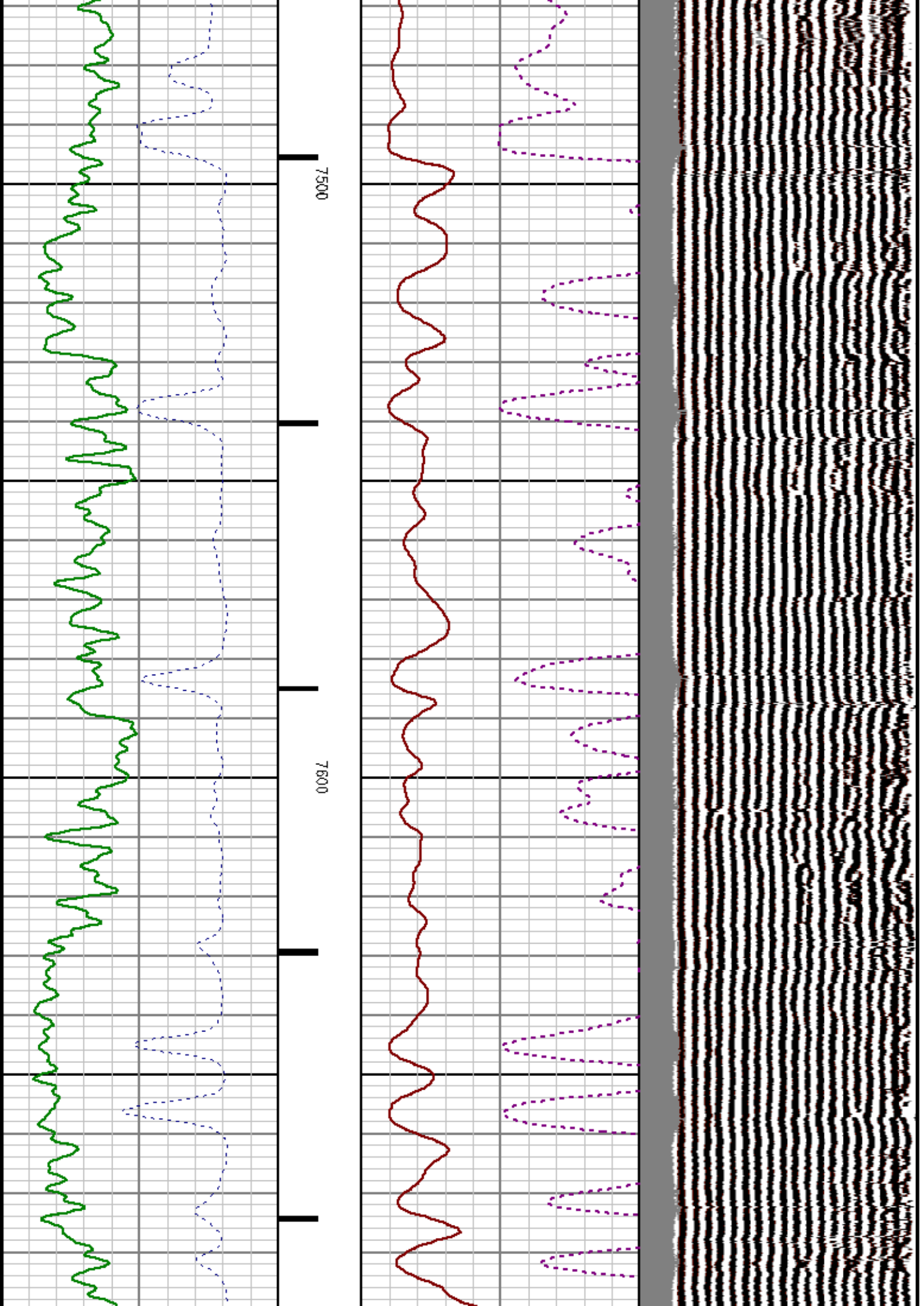


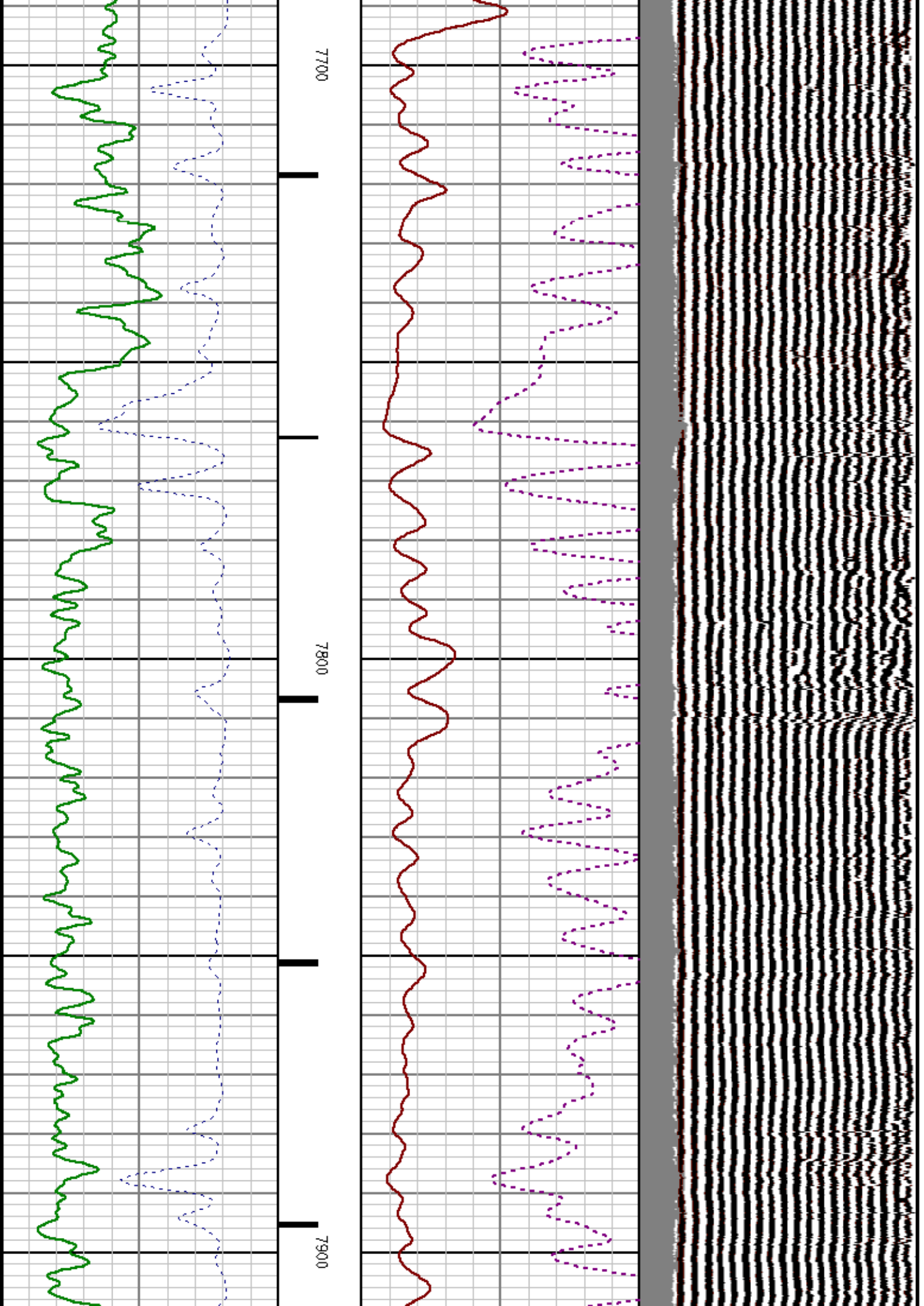


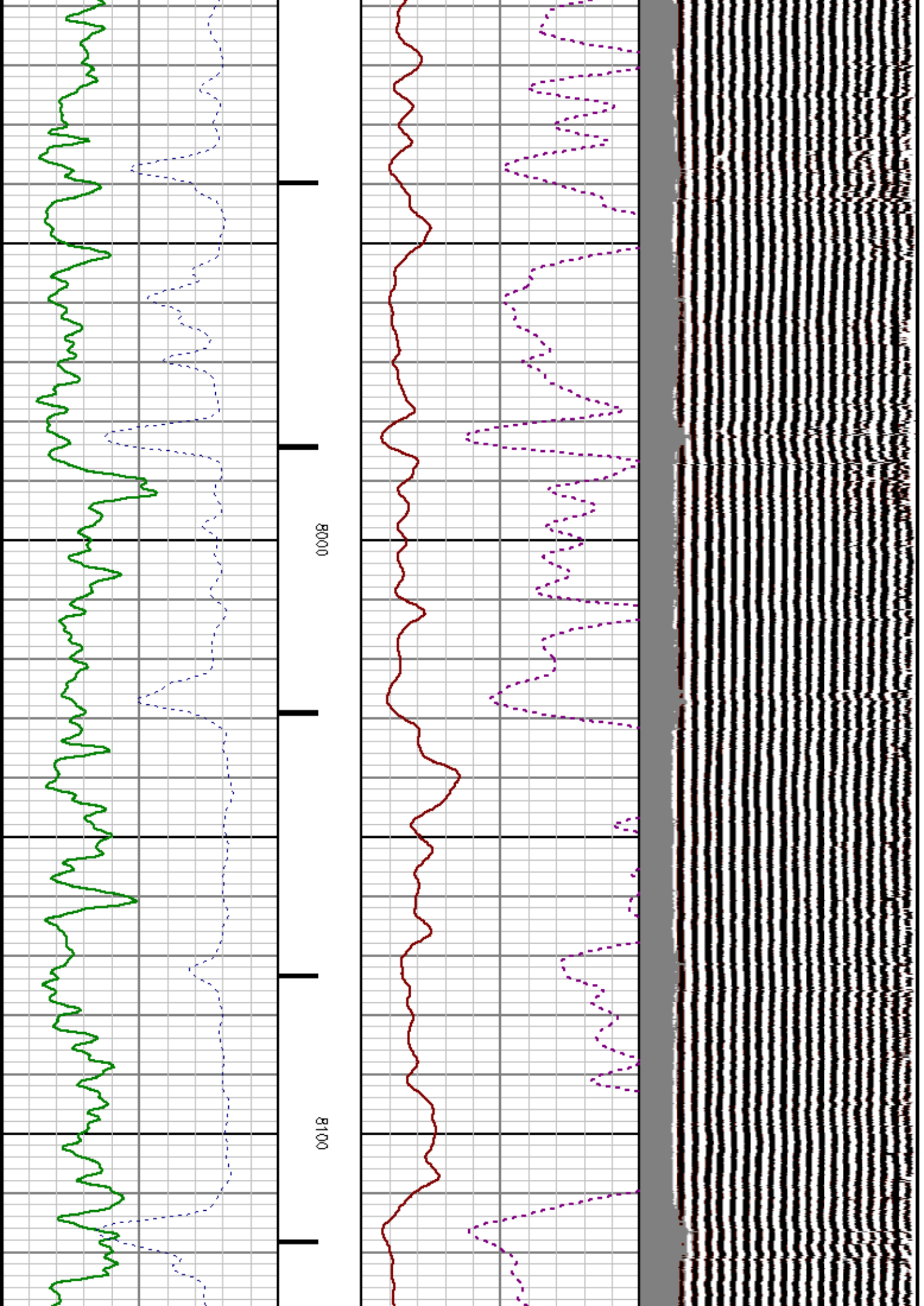


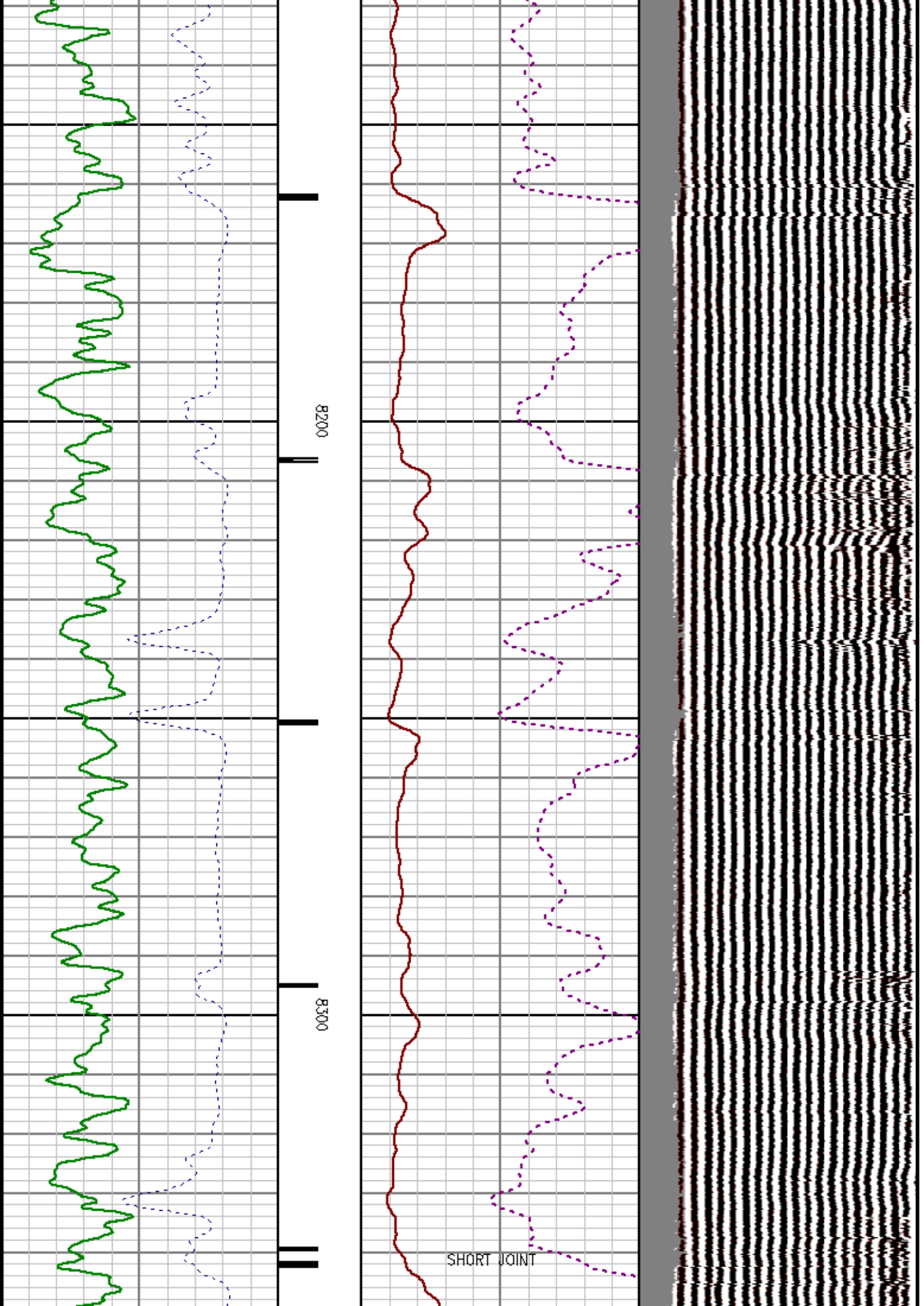


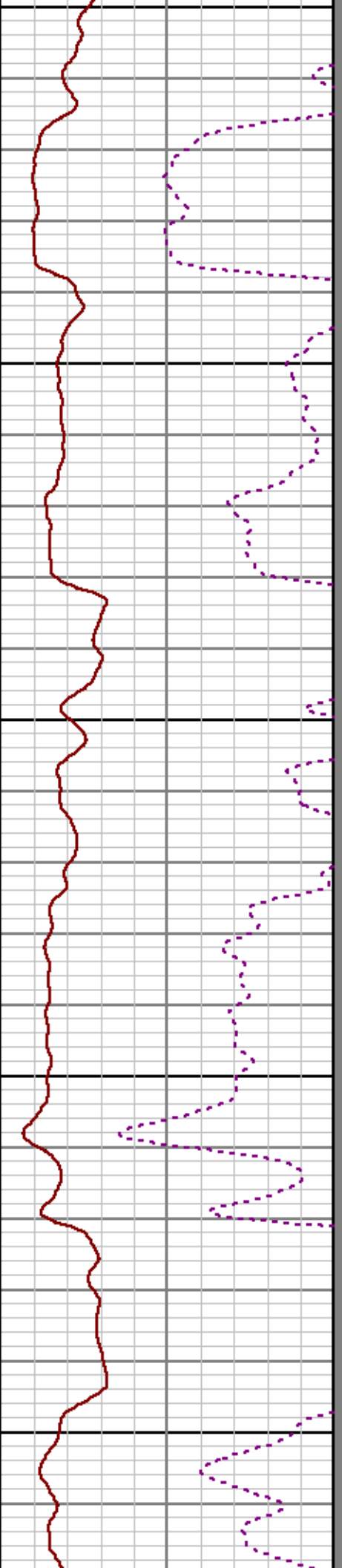
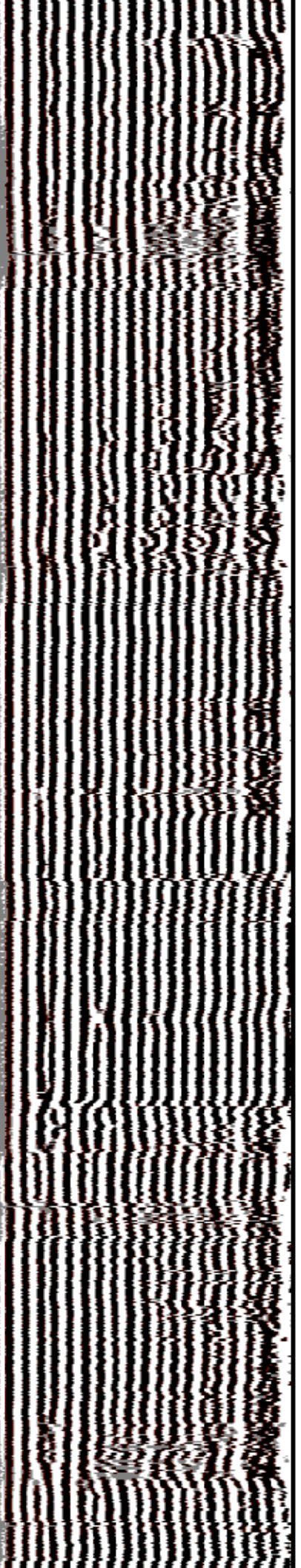






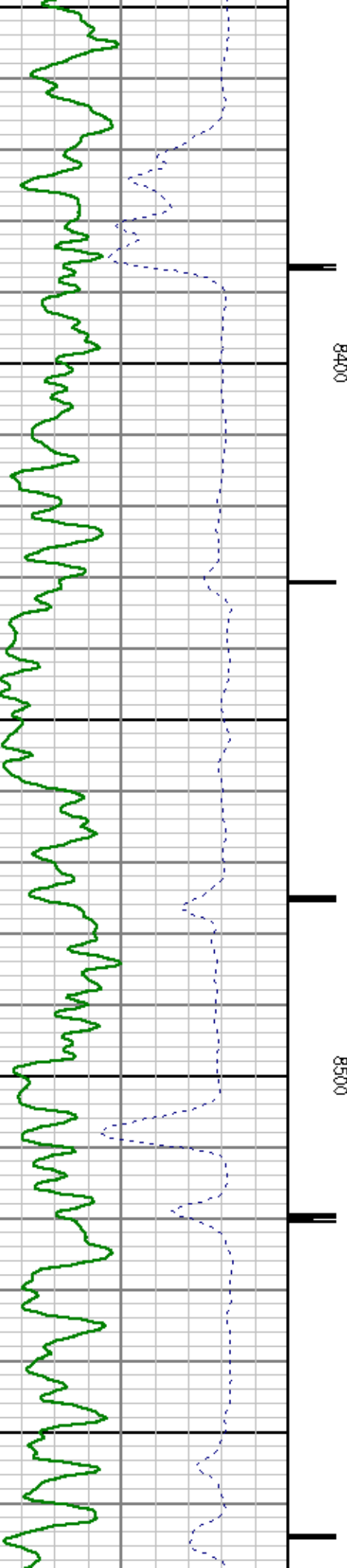


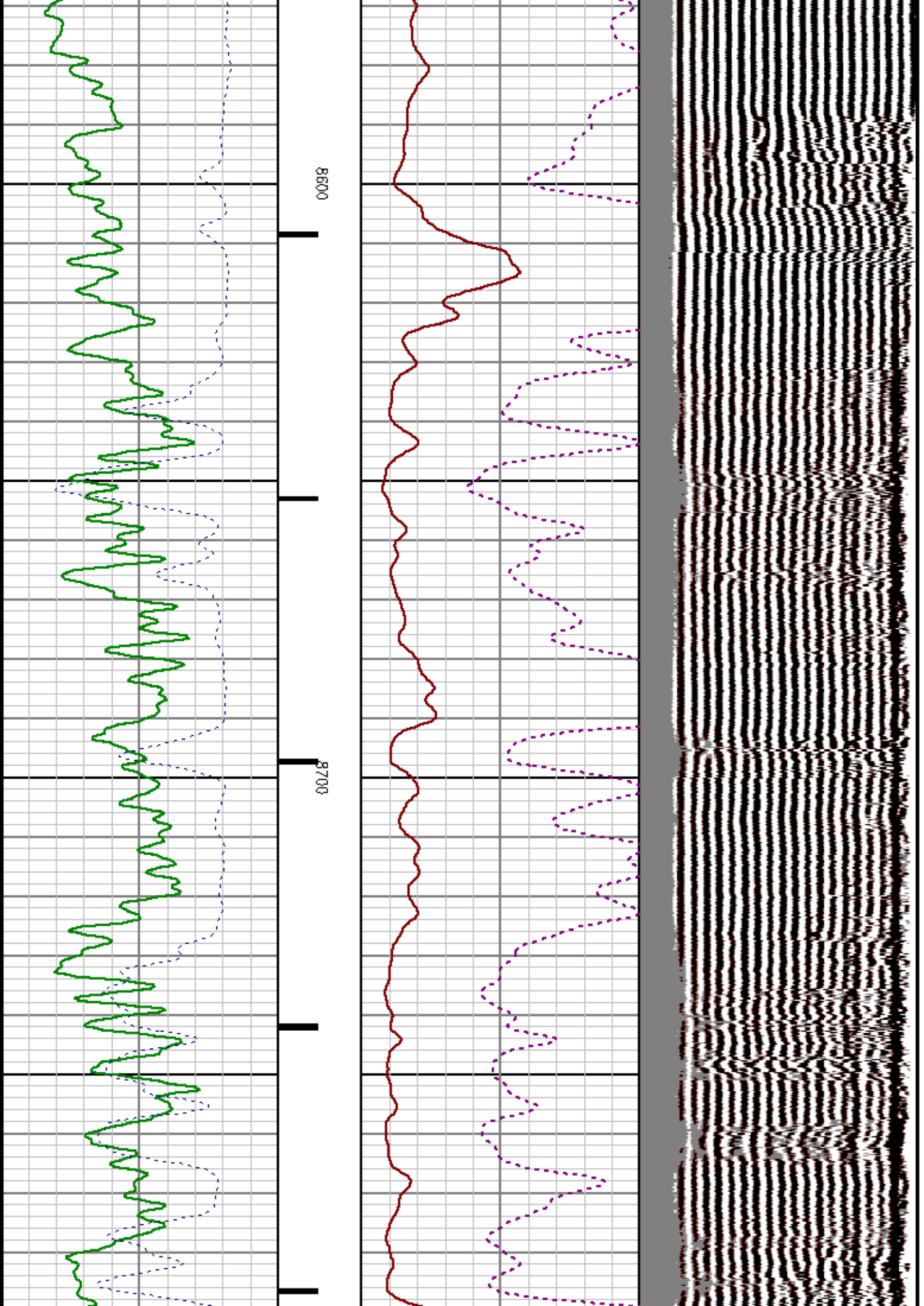


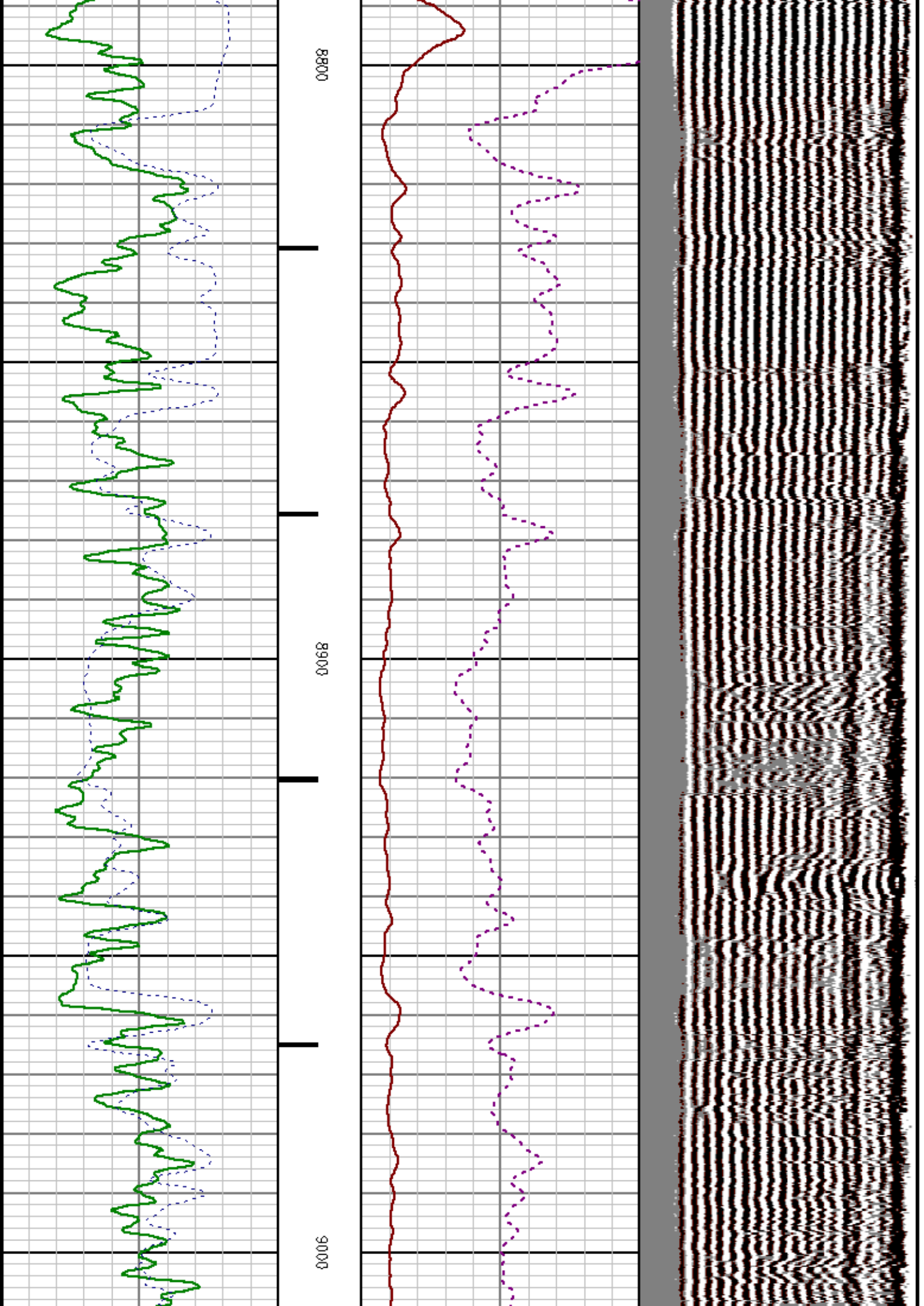


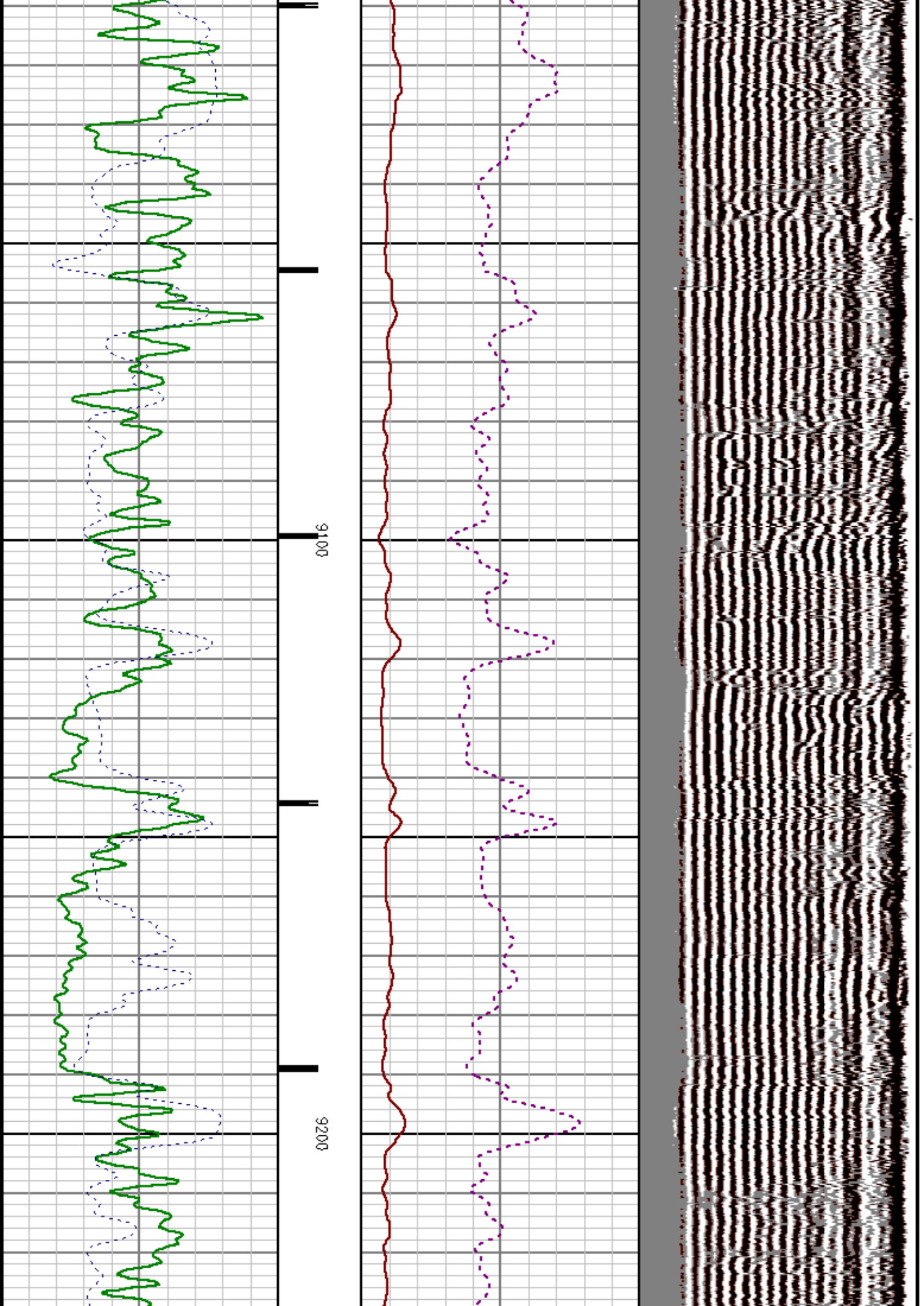
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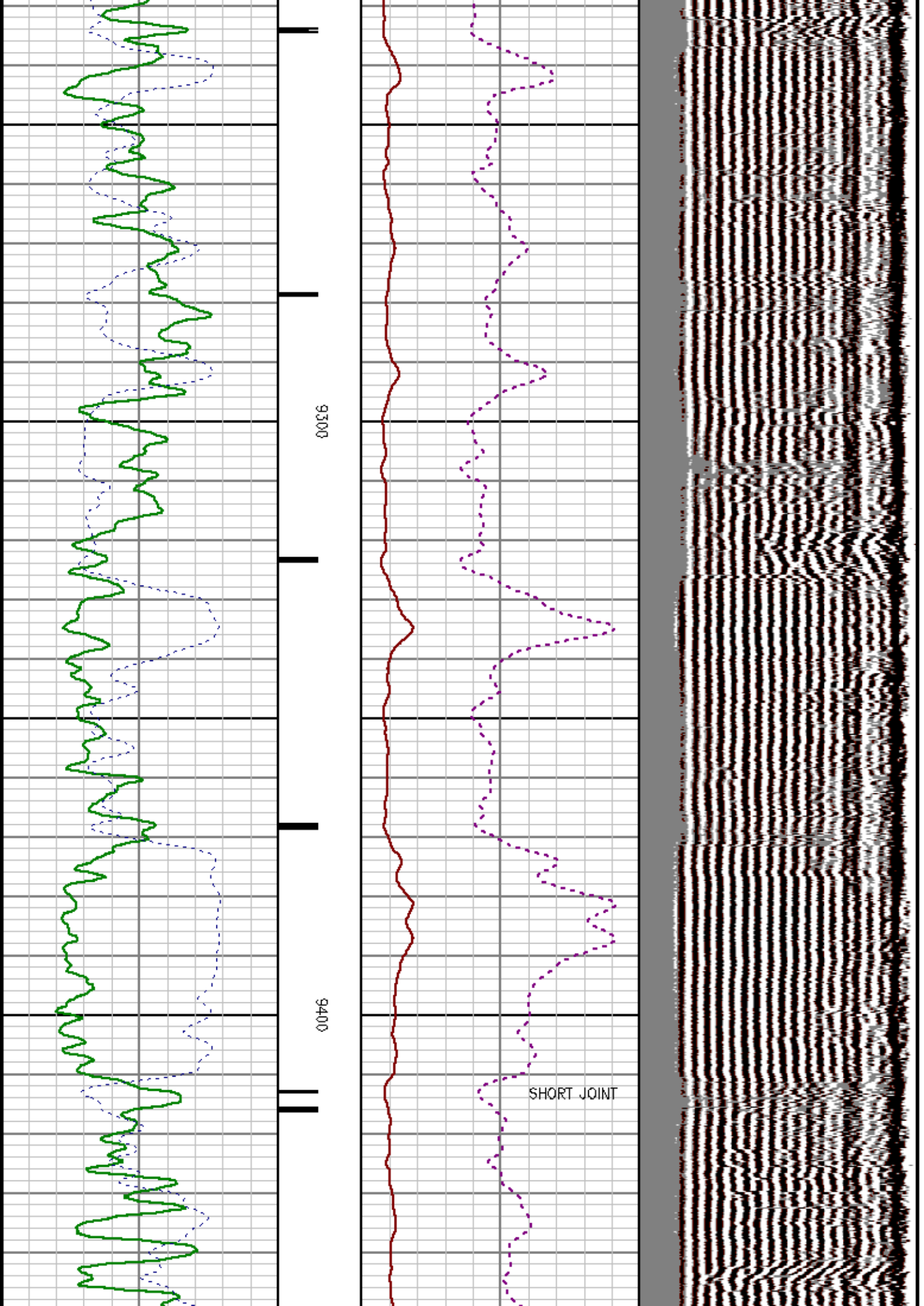
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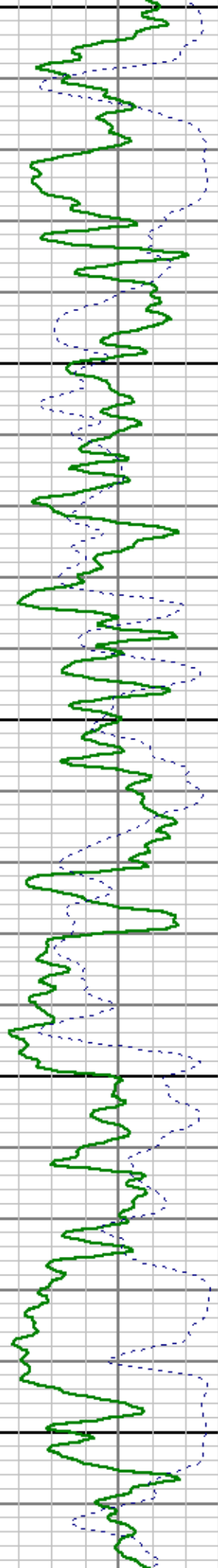
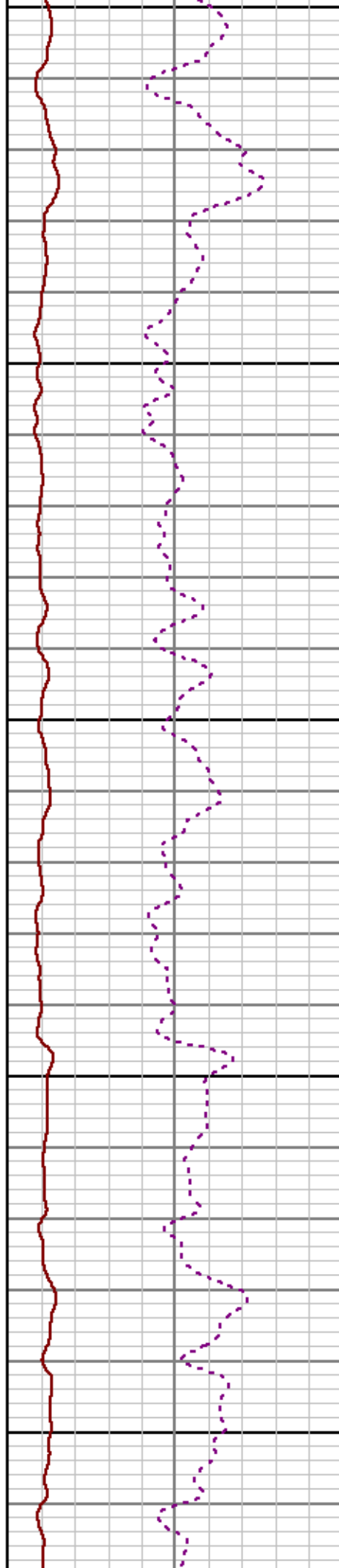
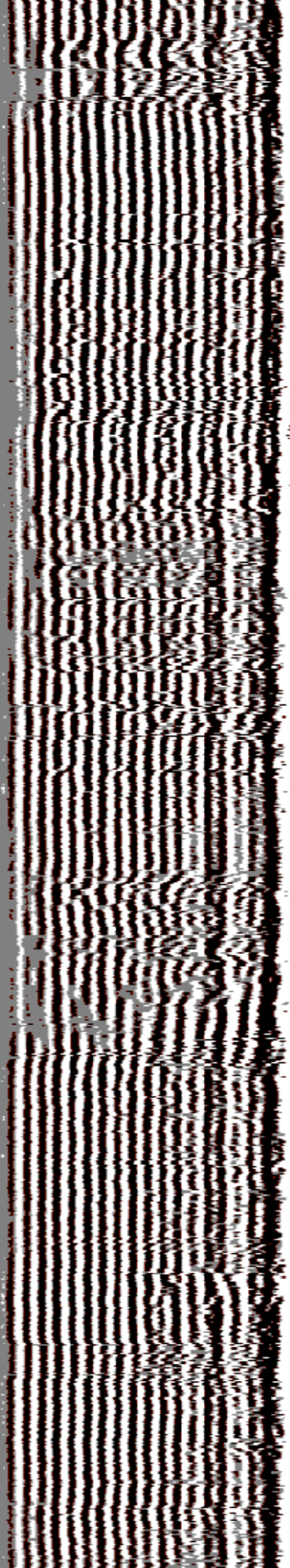


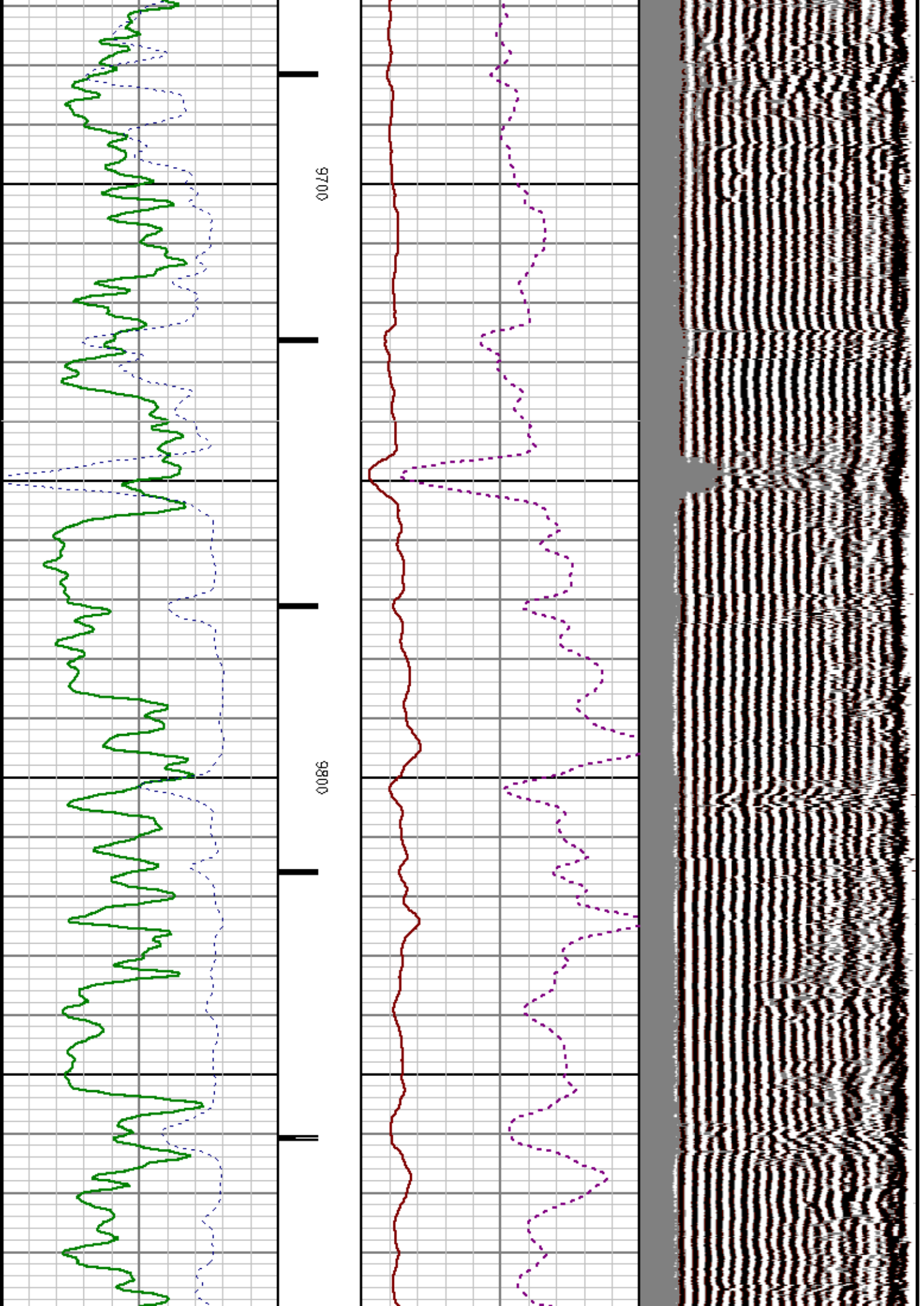


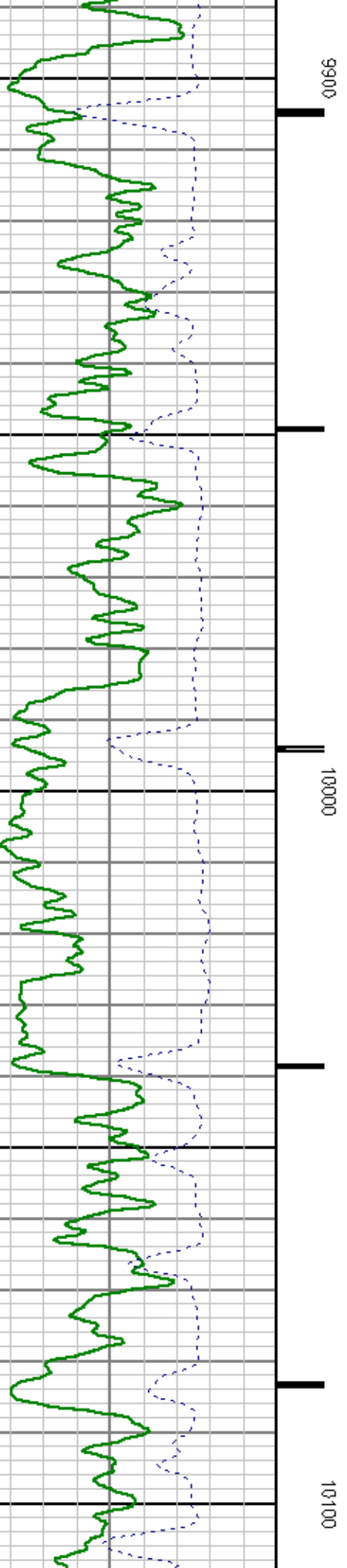
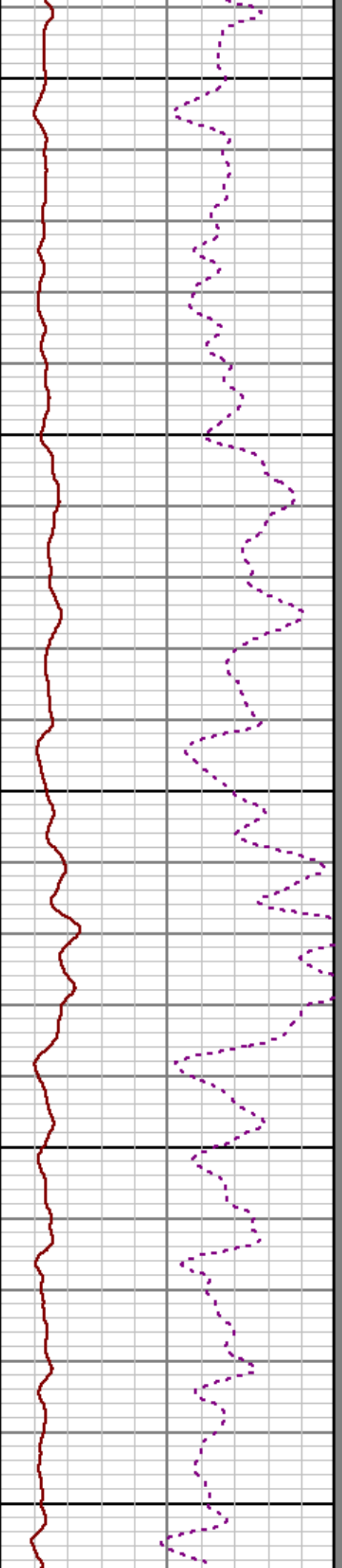
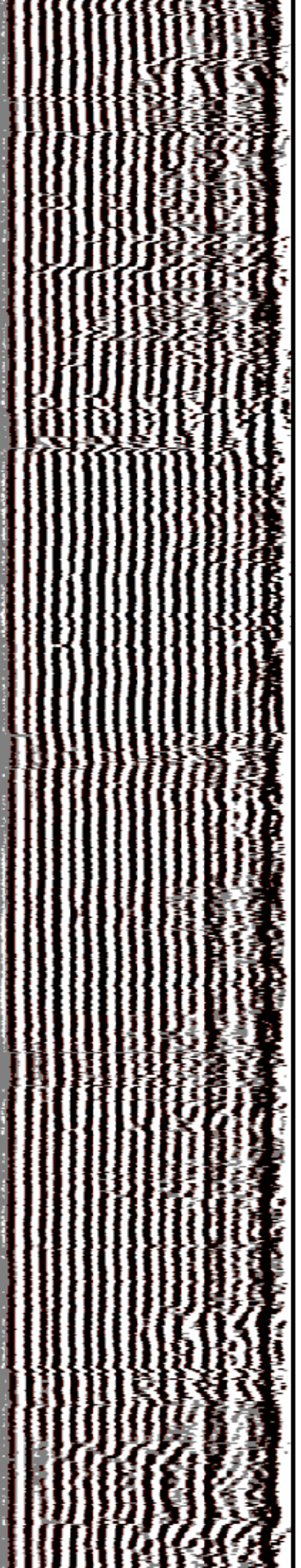


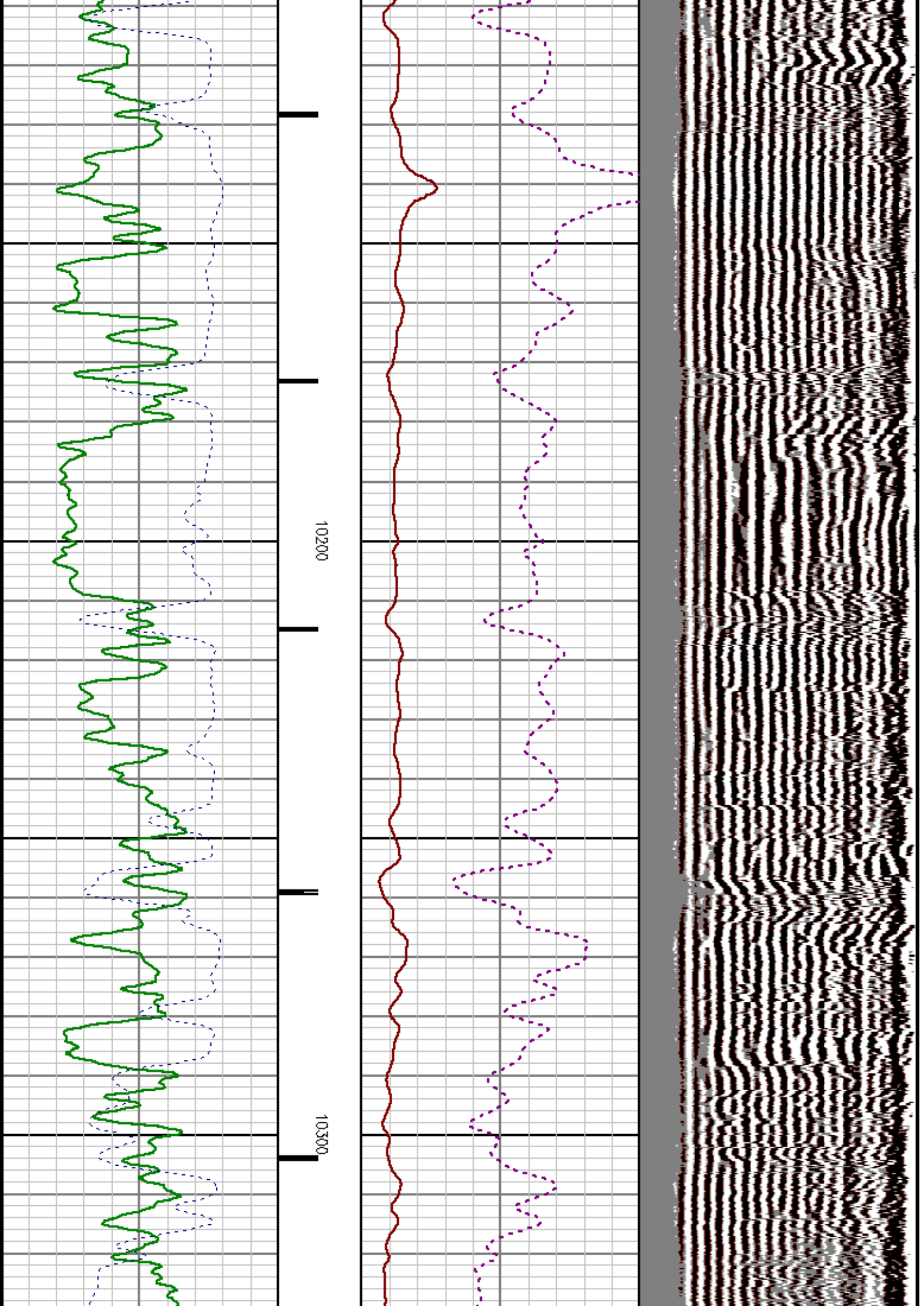


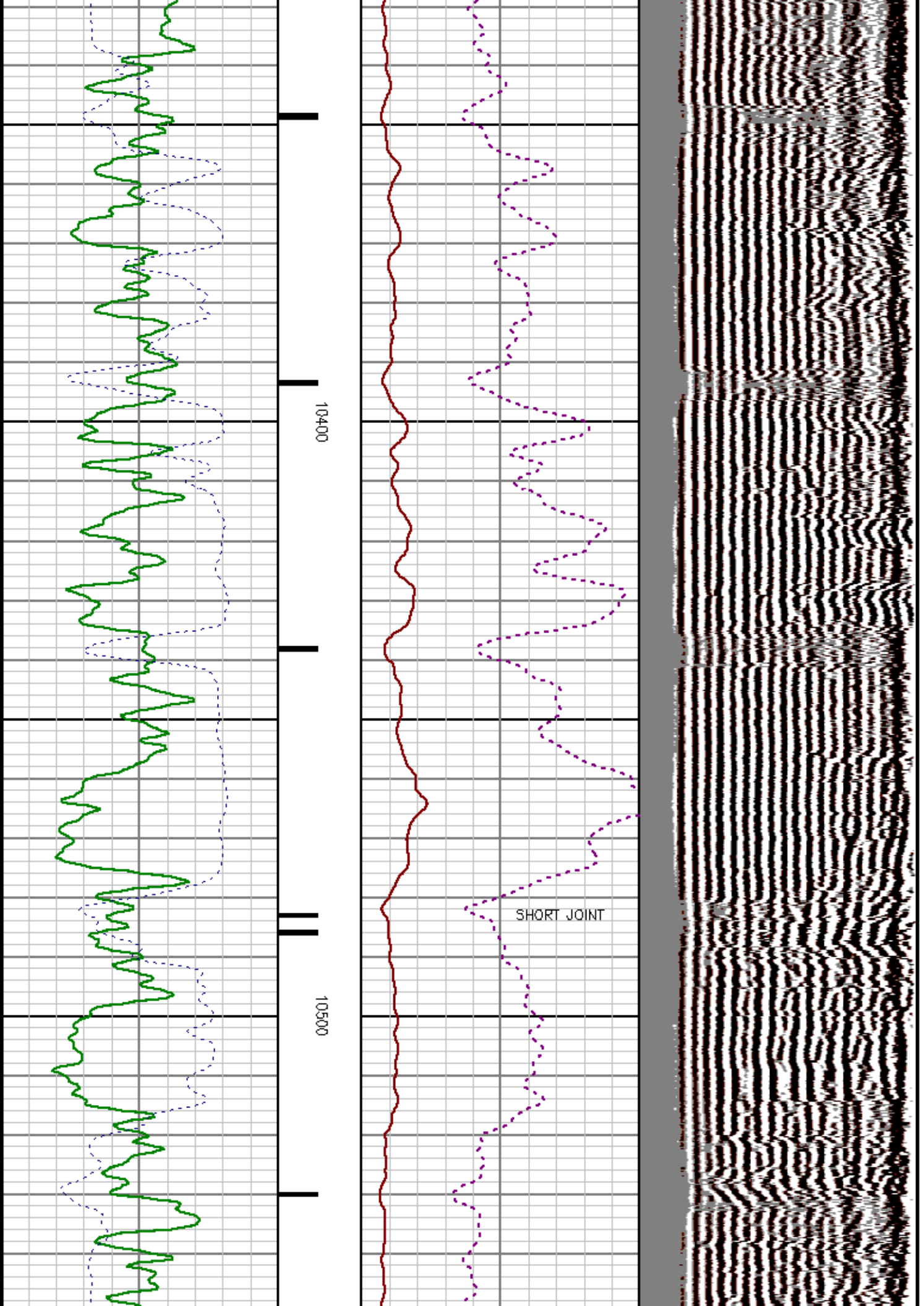


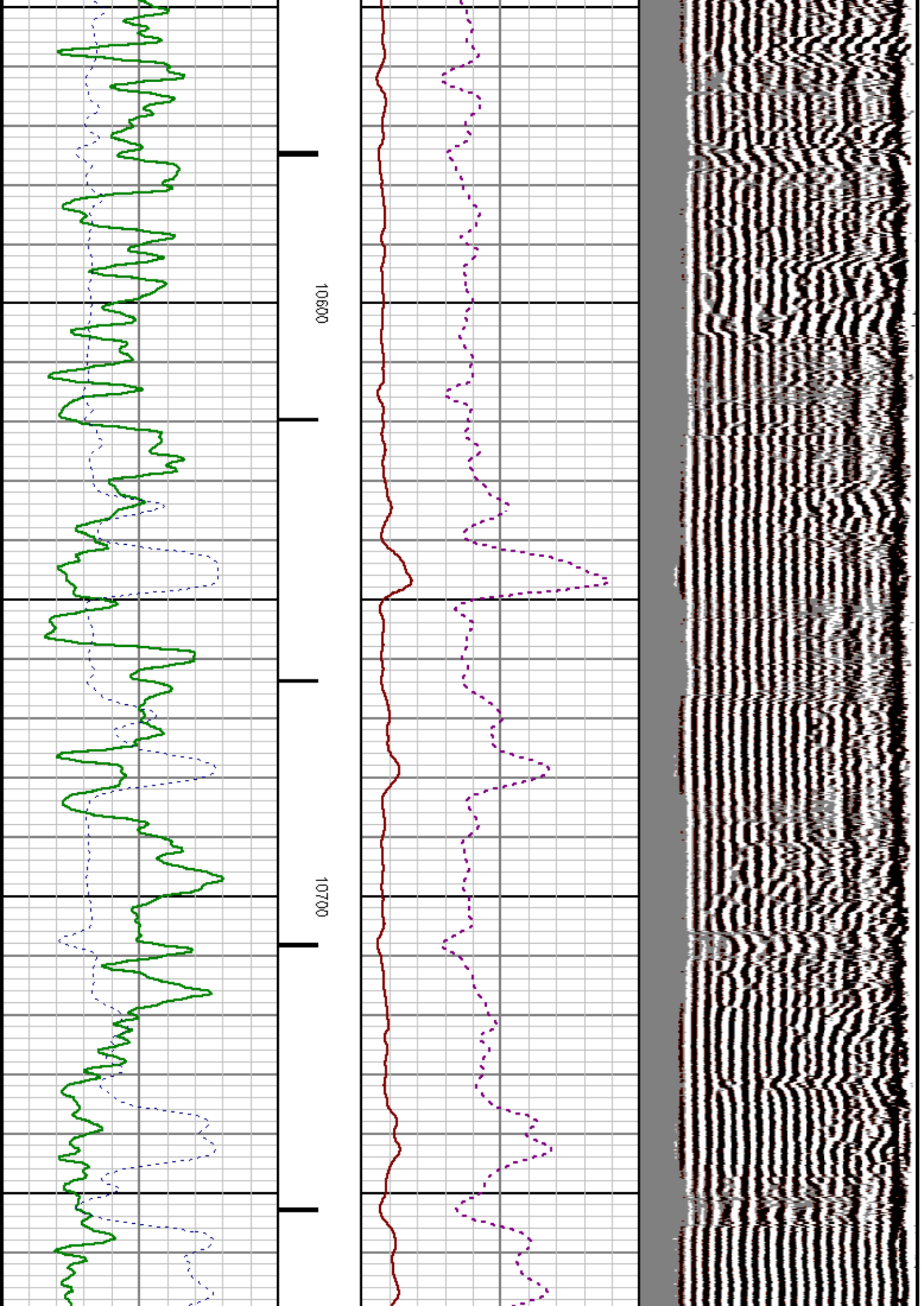


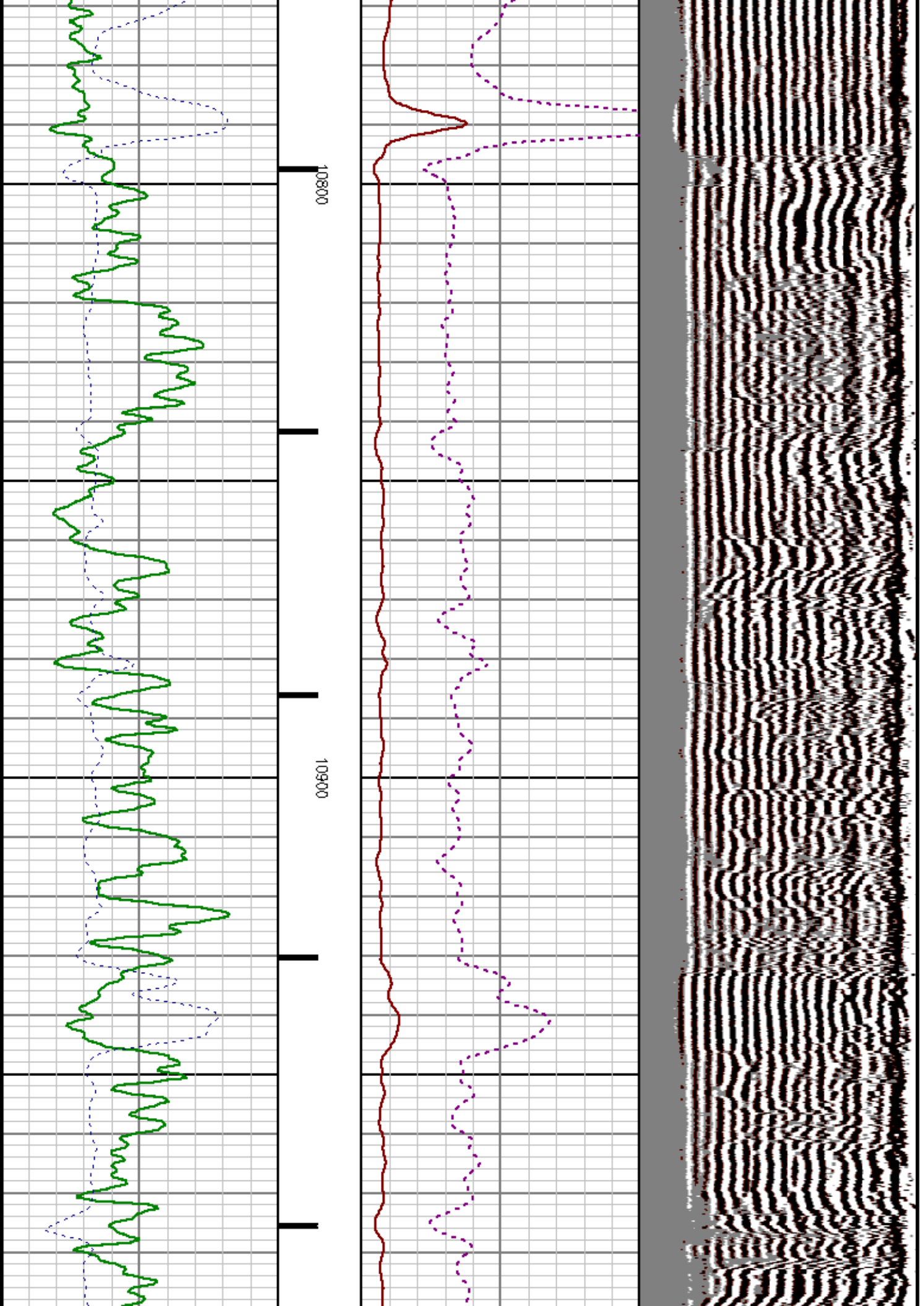


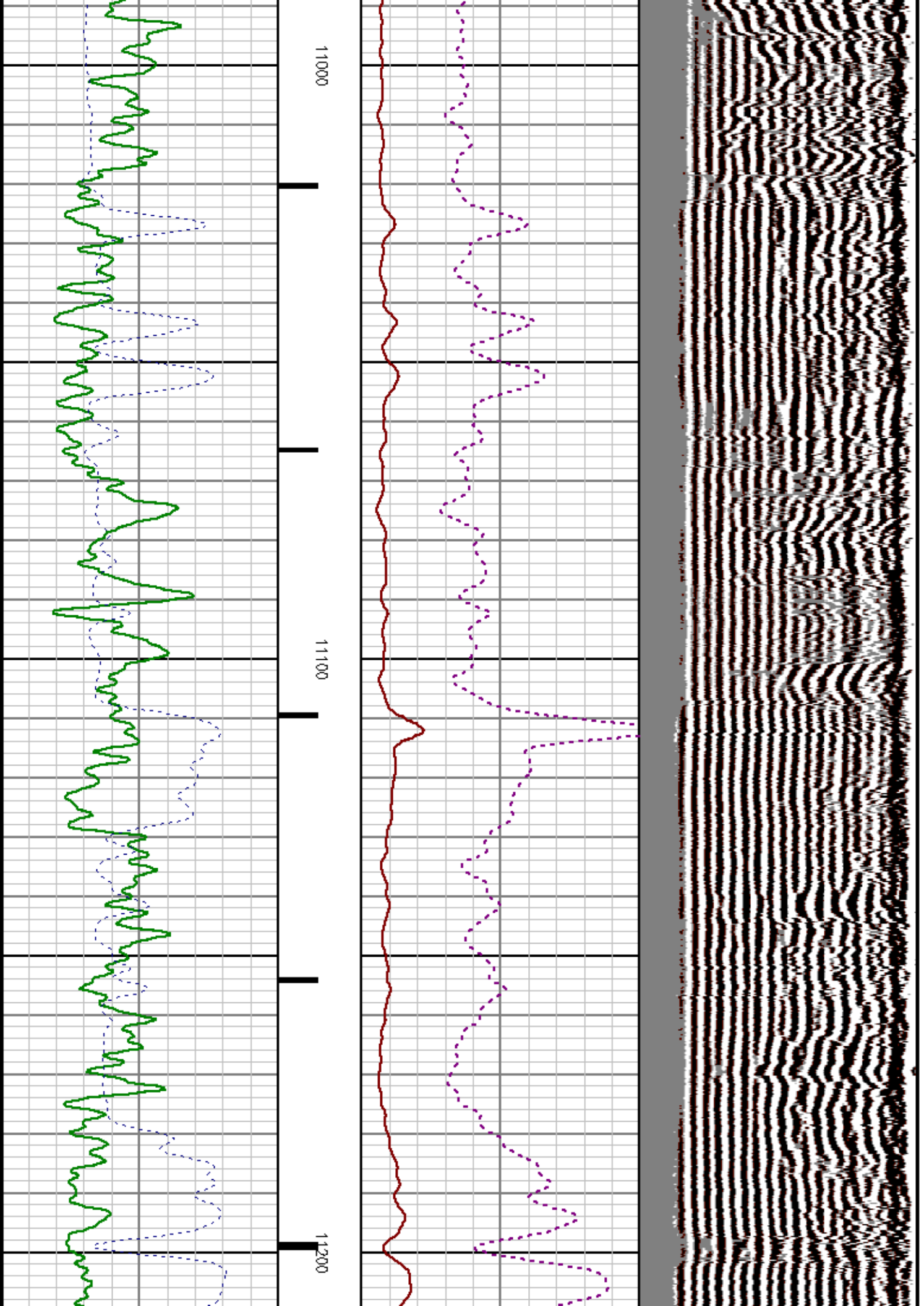


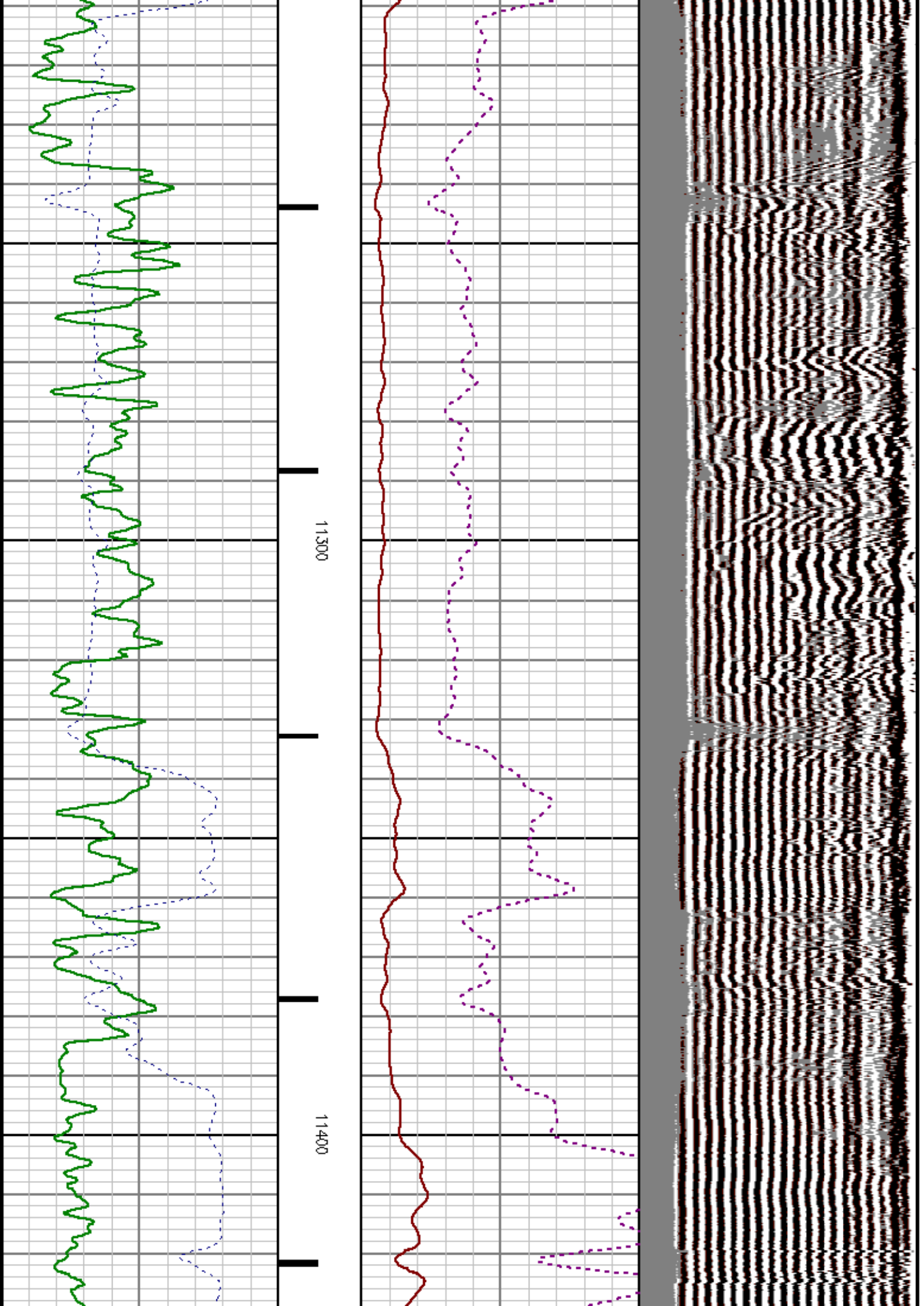


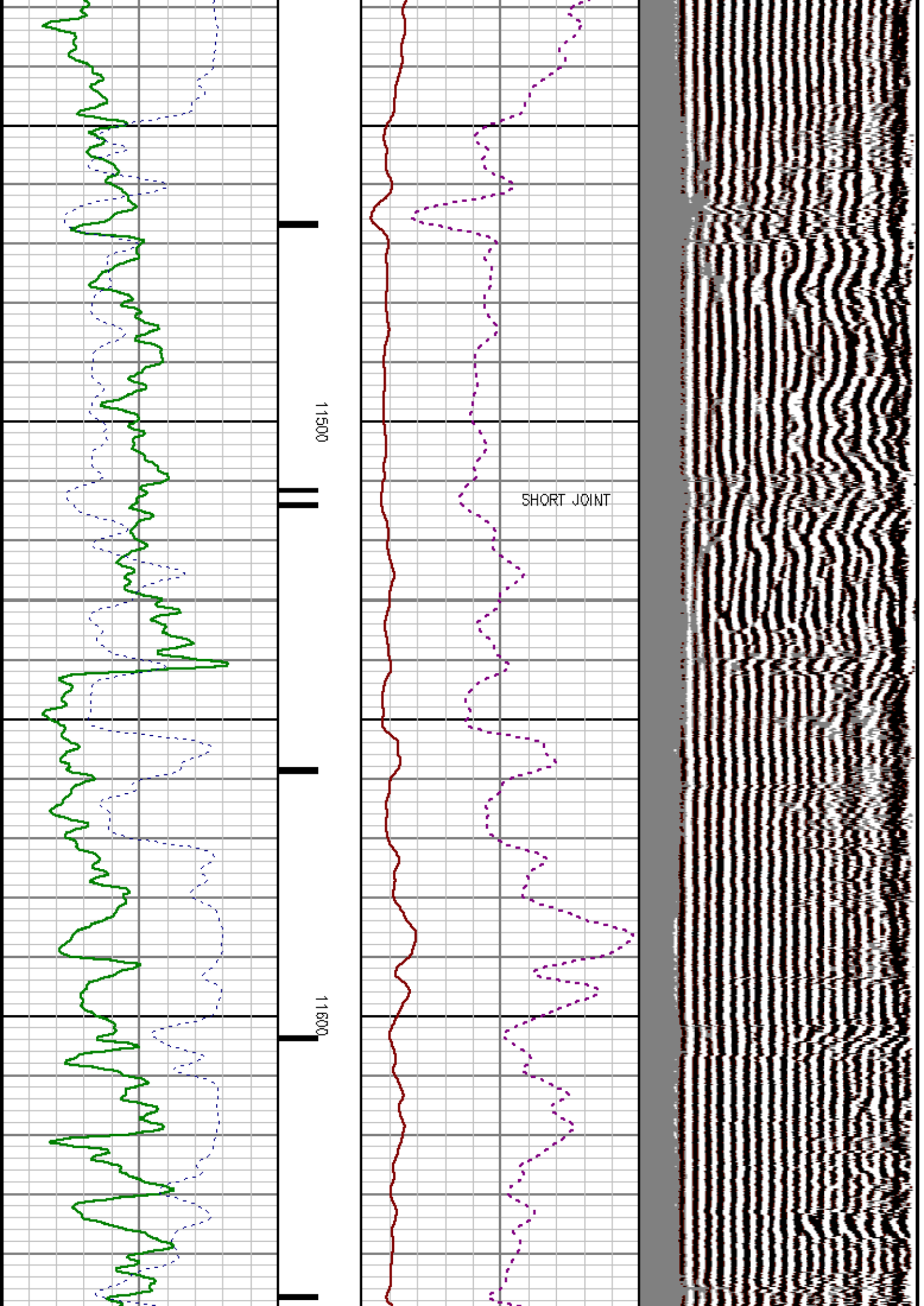


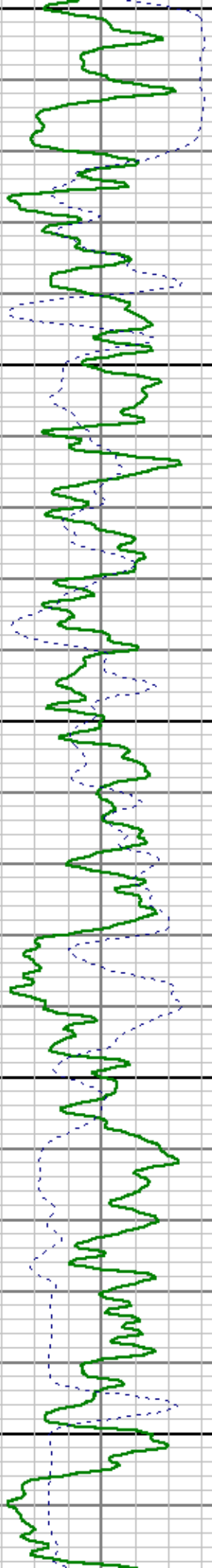
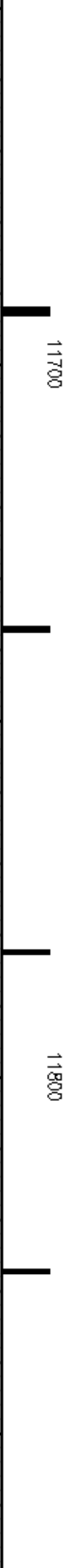
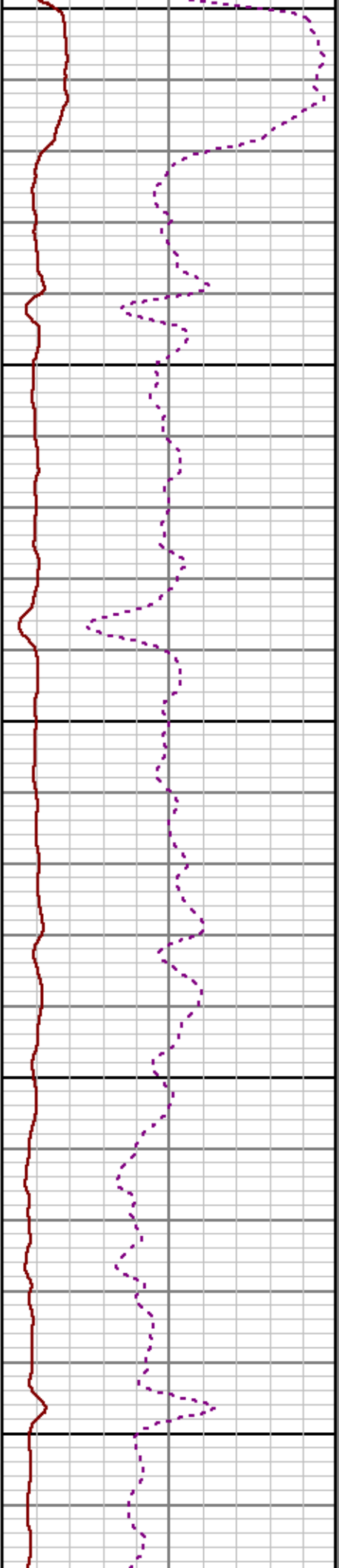
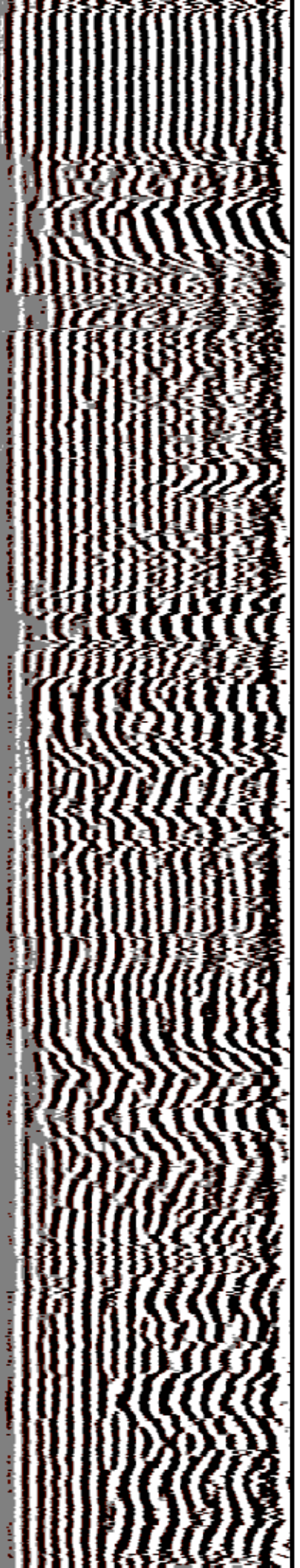


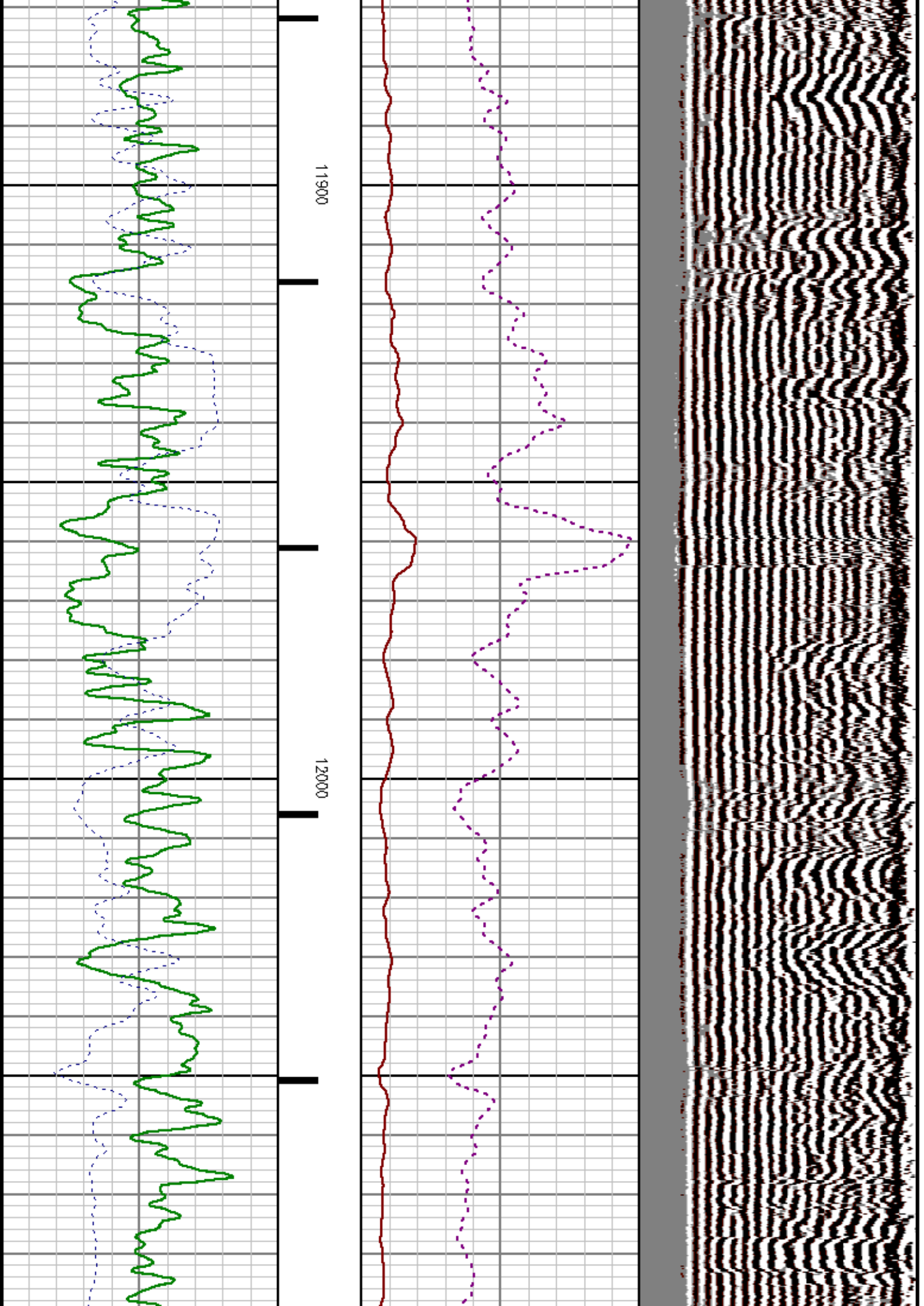


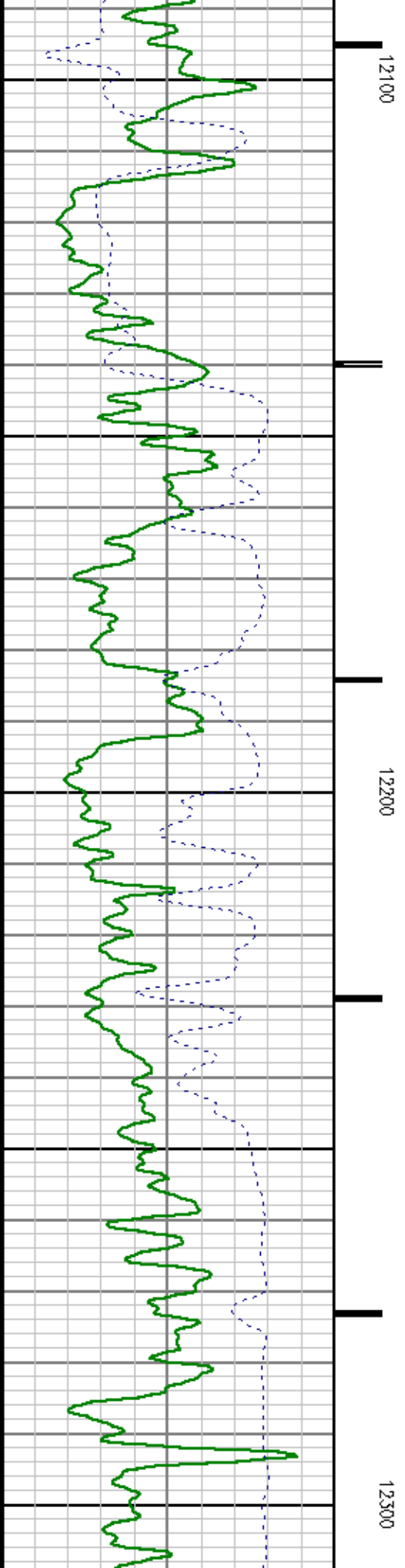
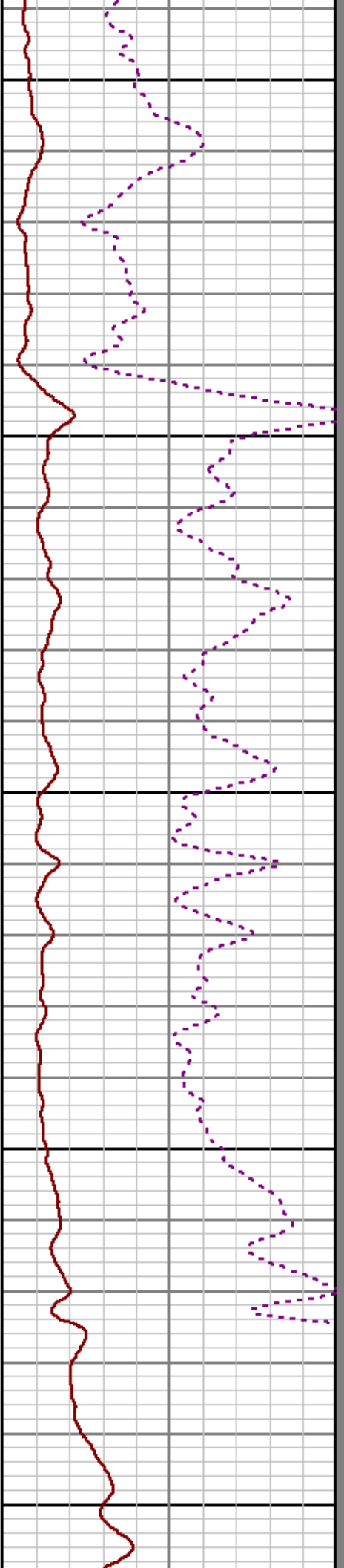
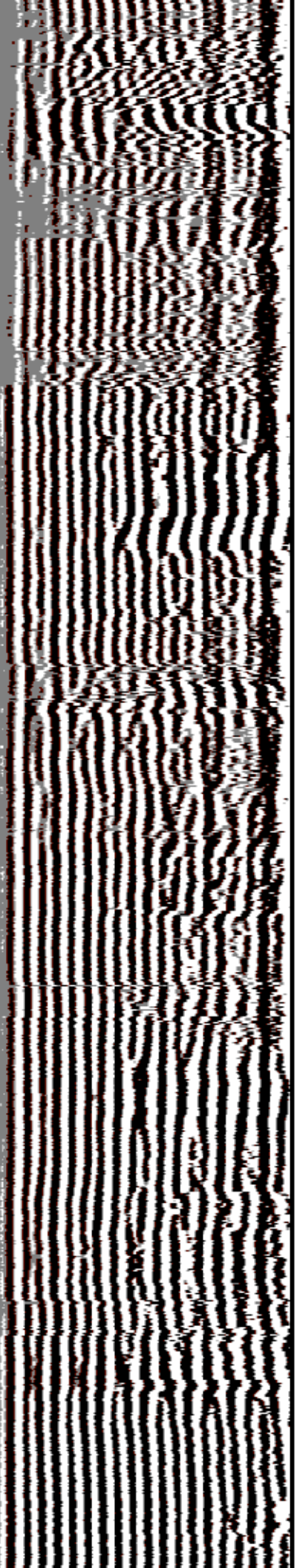


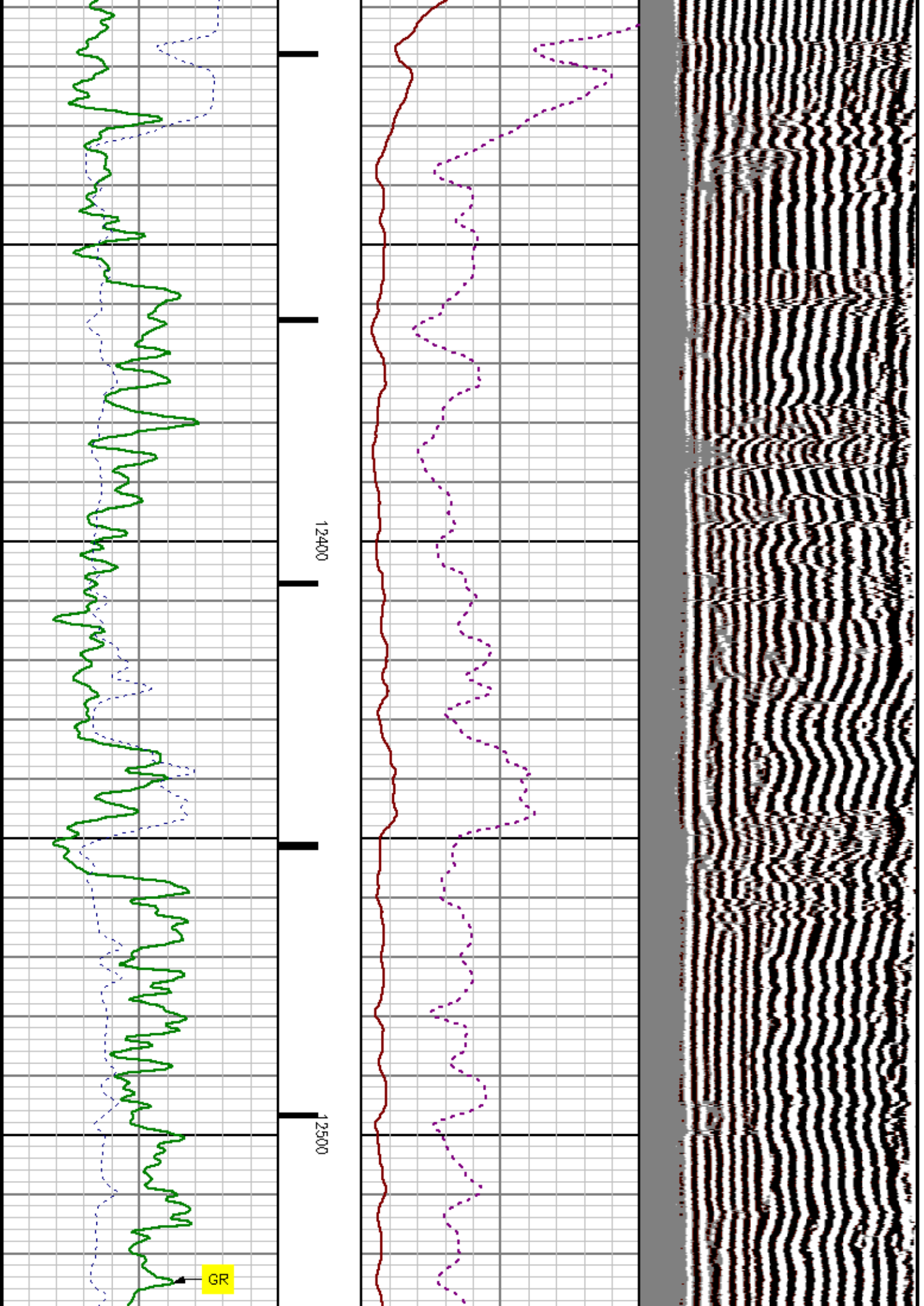


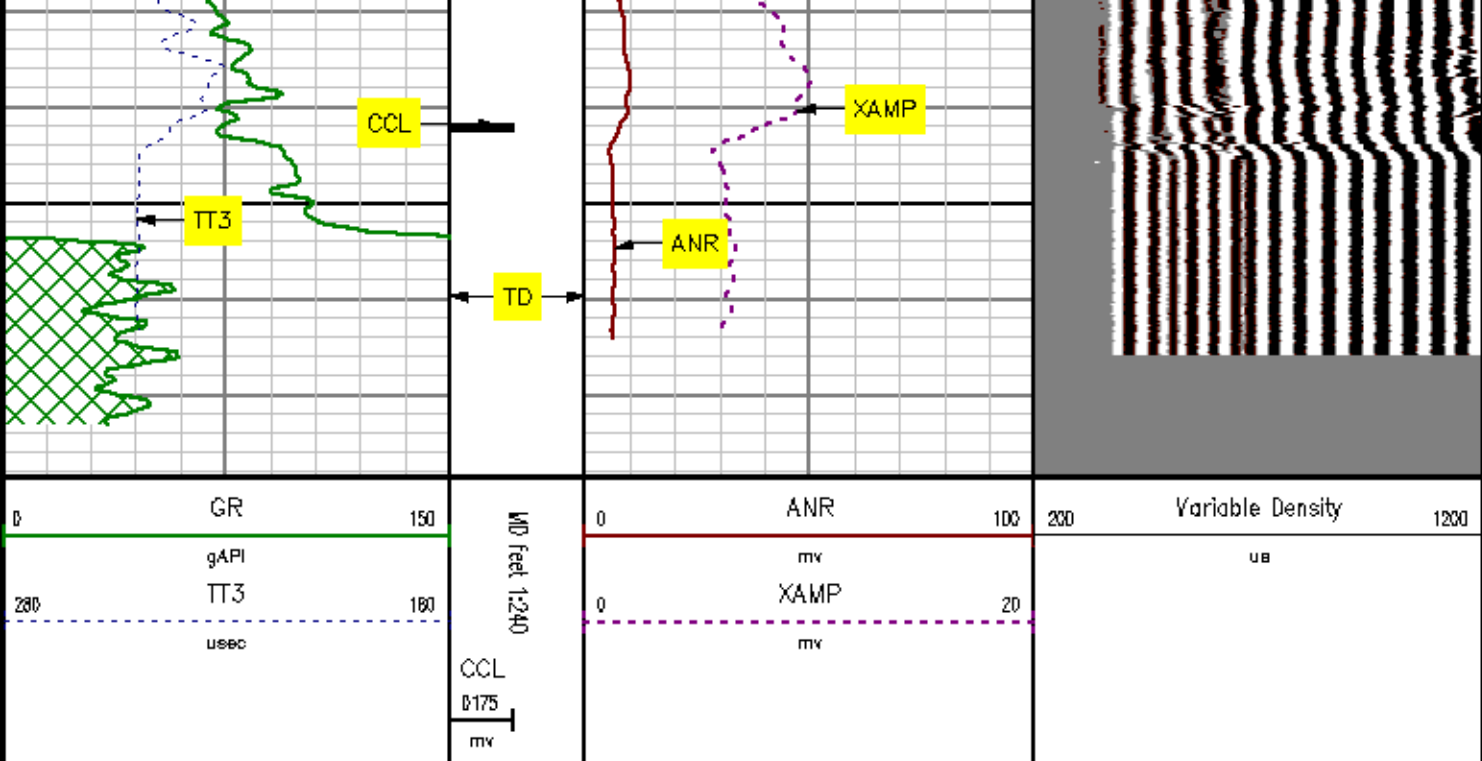












MAIN SECTION SECONDARY PRESENTATION

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	314.263	u sec	6013.910	12578.000
RAL	Amp Gate Start Near	197.754	u sec	6013.910	12578.000
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1426XA	-14.360	AFAR	SIG	TT5			
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1426XA	0.000	NEJ					

Created by : MIXED

Plotted by : PlotMgr, v5.4.504

Company : EXXONMOBIL PRODUCTION COMPANY

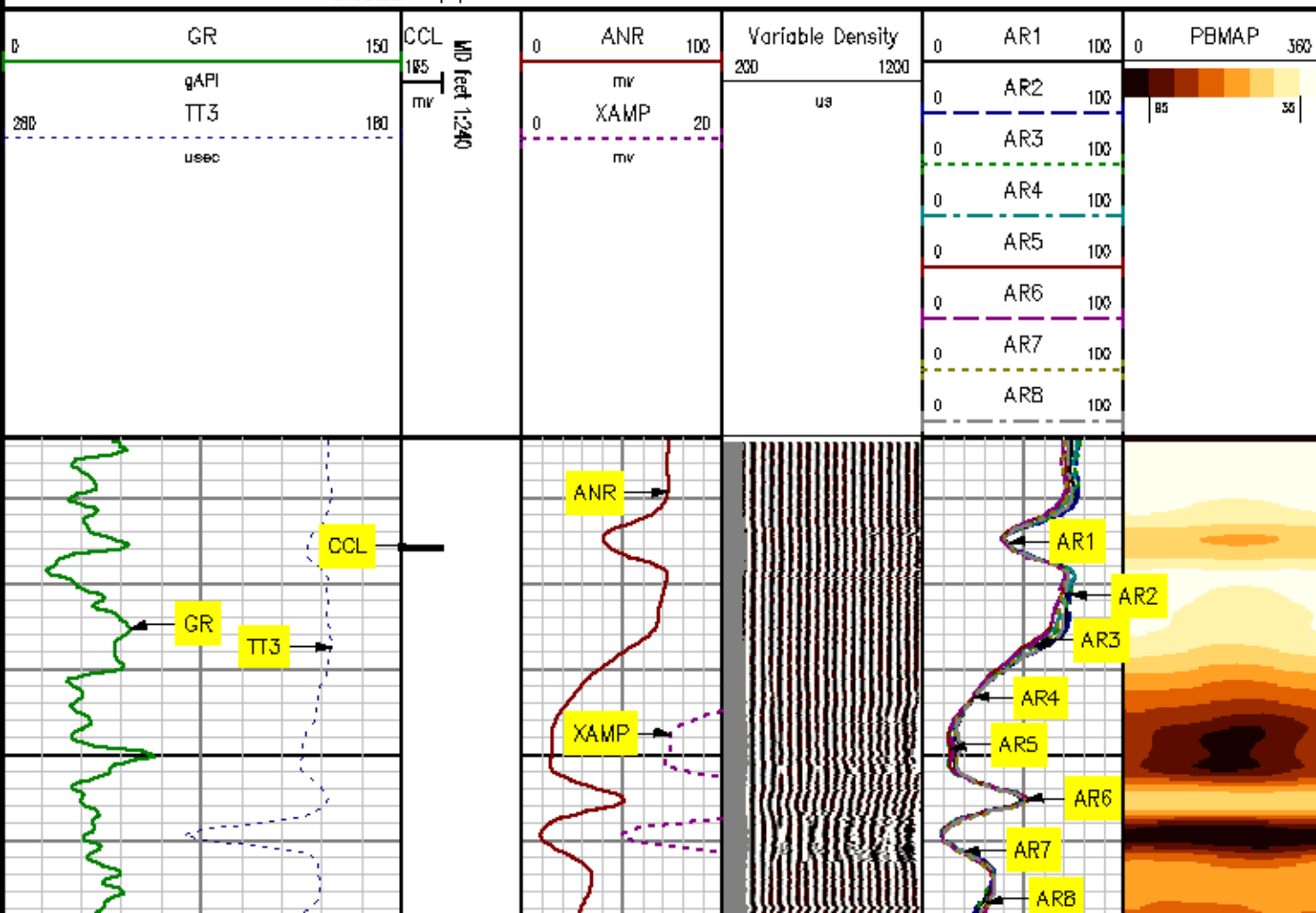
Well : PCU 297-11B8

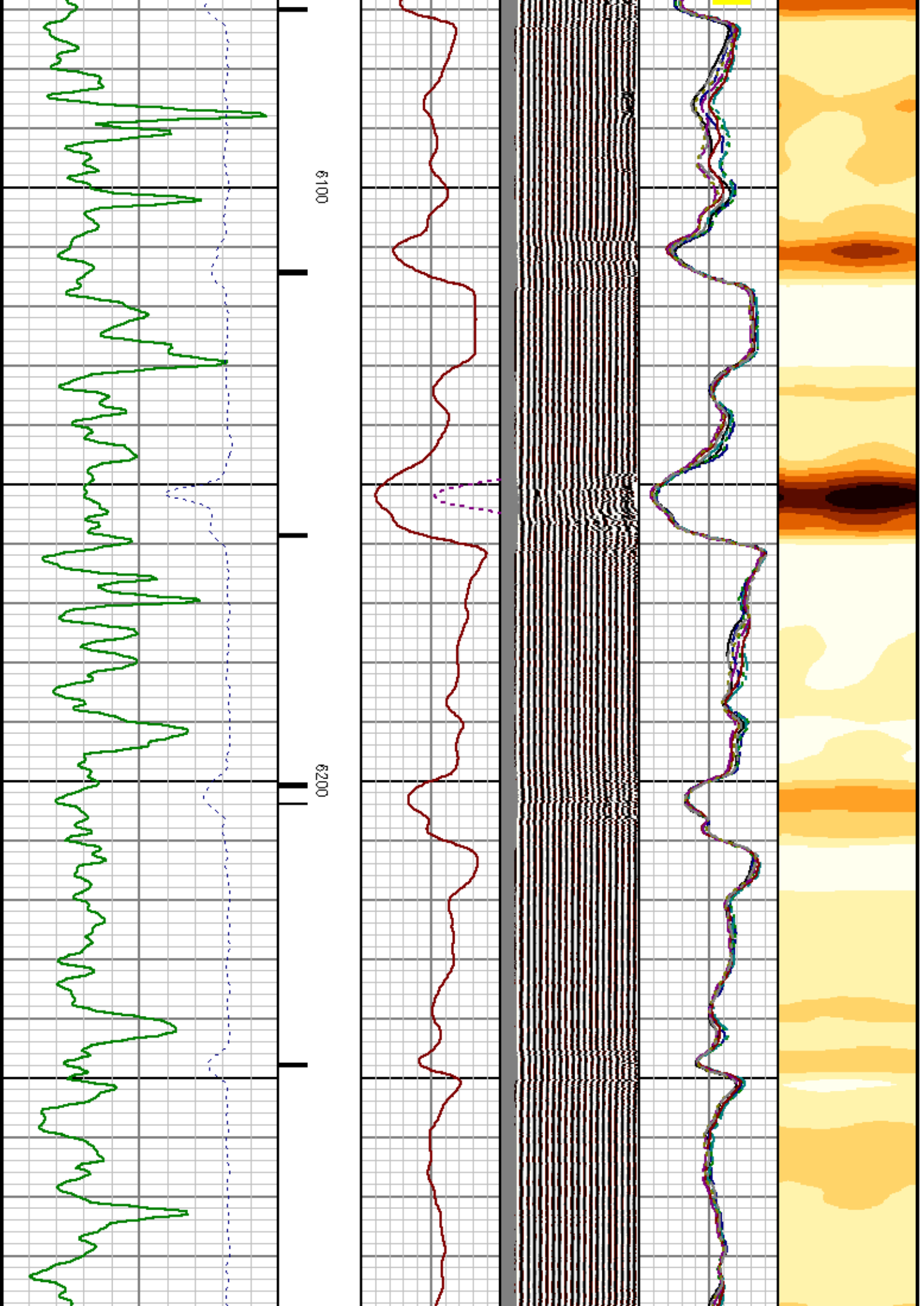
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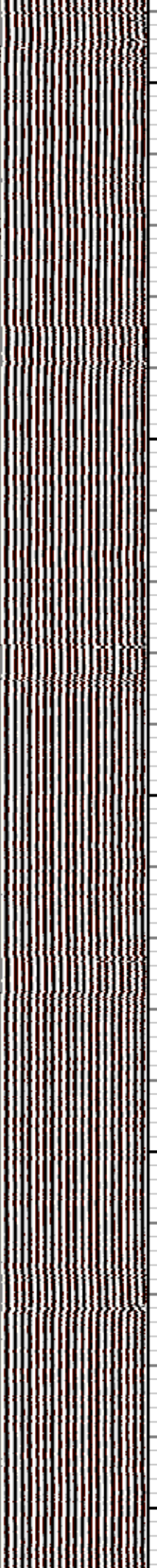
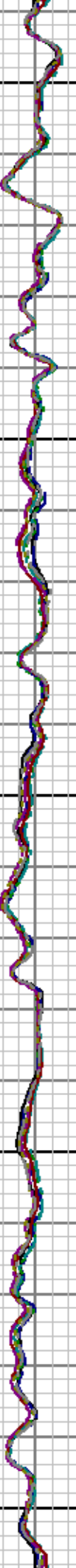
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Interval : 8013.00 - 12579.75 feet UP

Created : 1/9/2010 5:23:00 PM



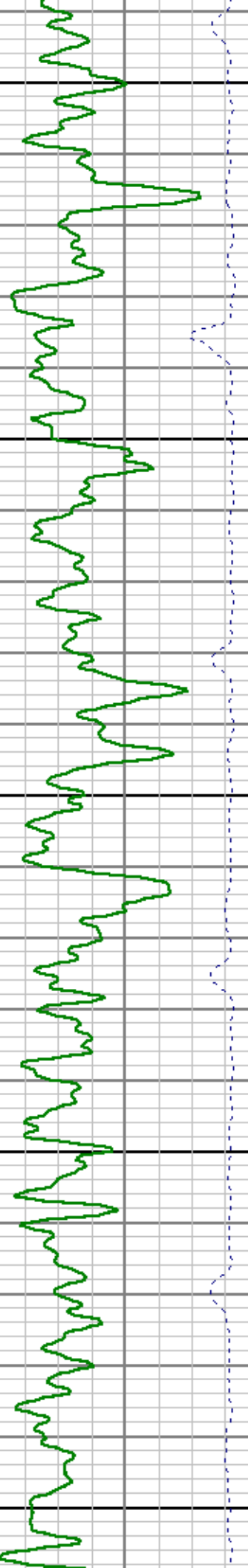


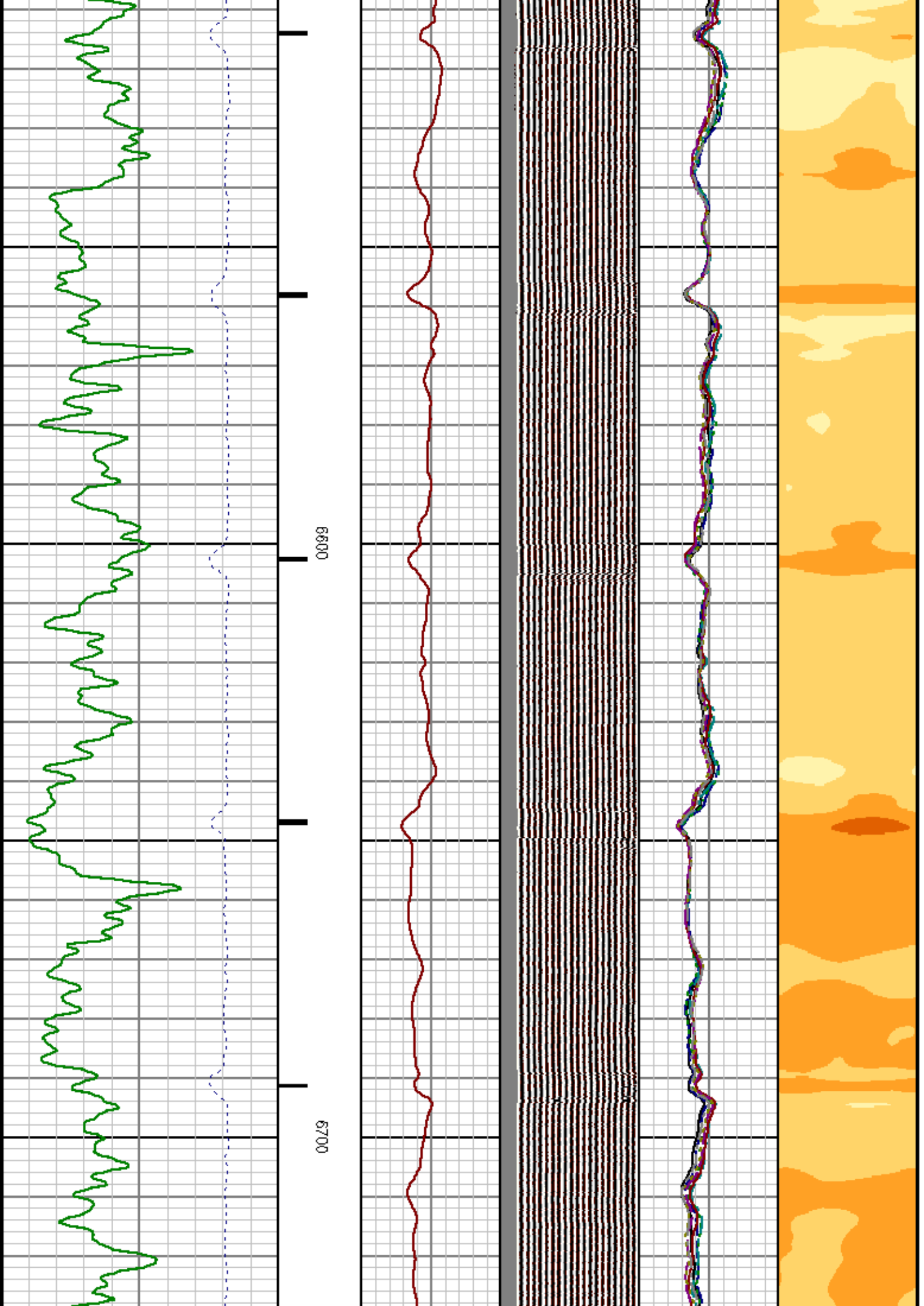


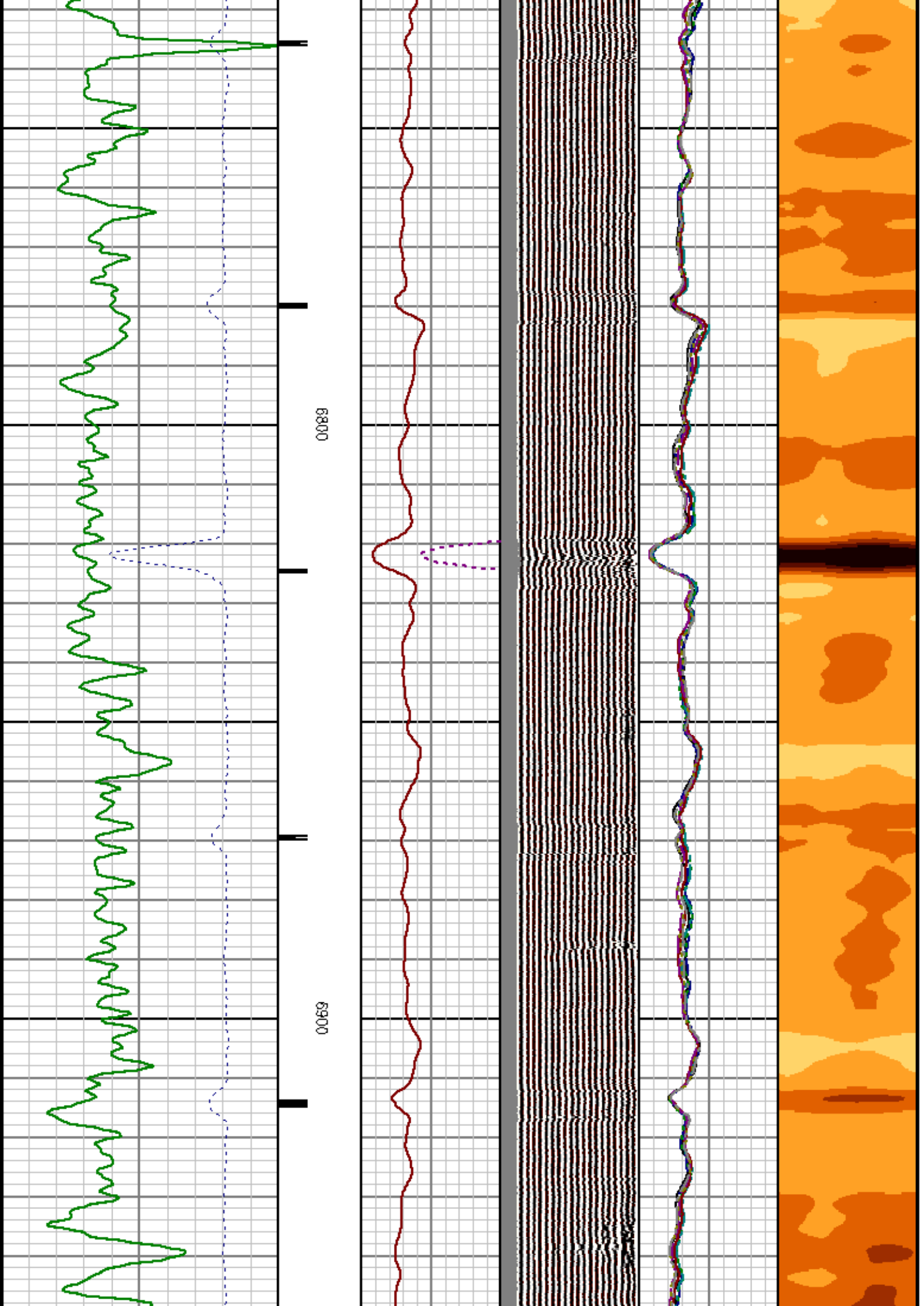
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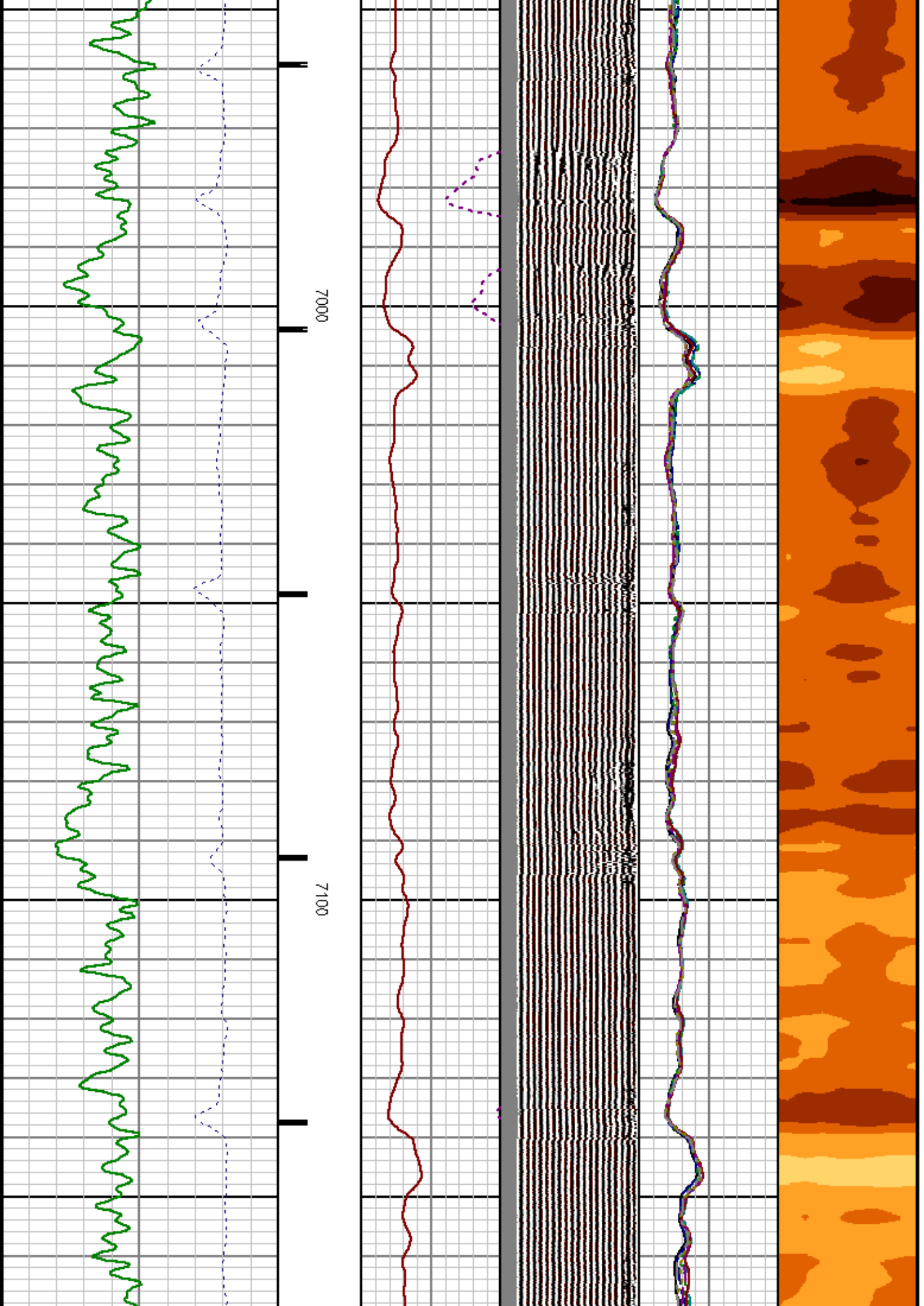
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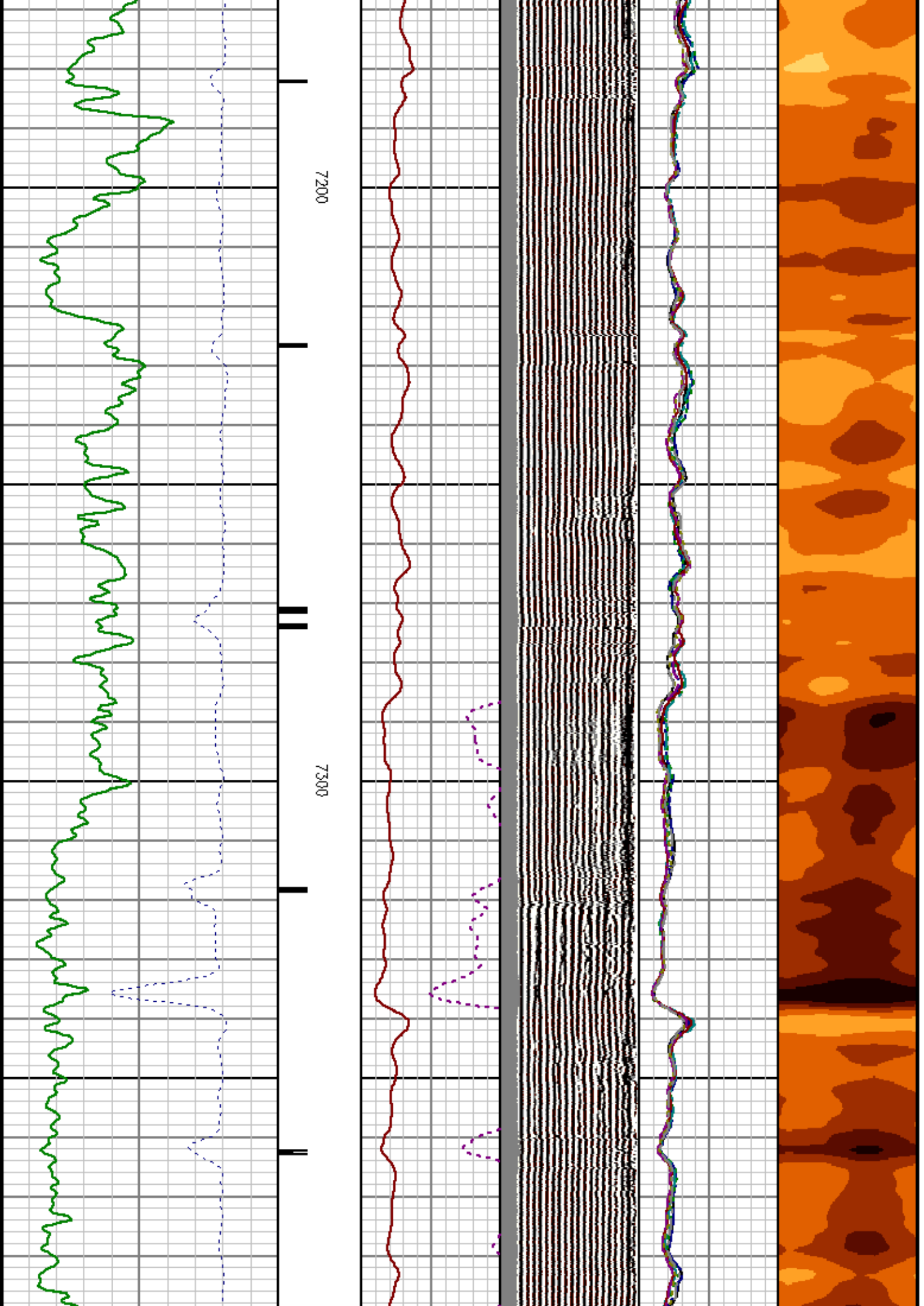
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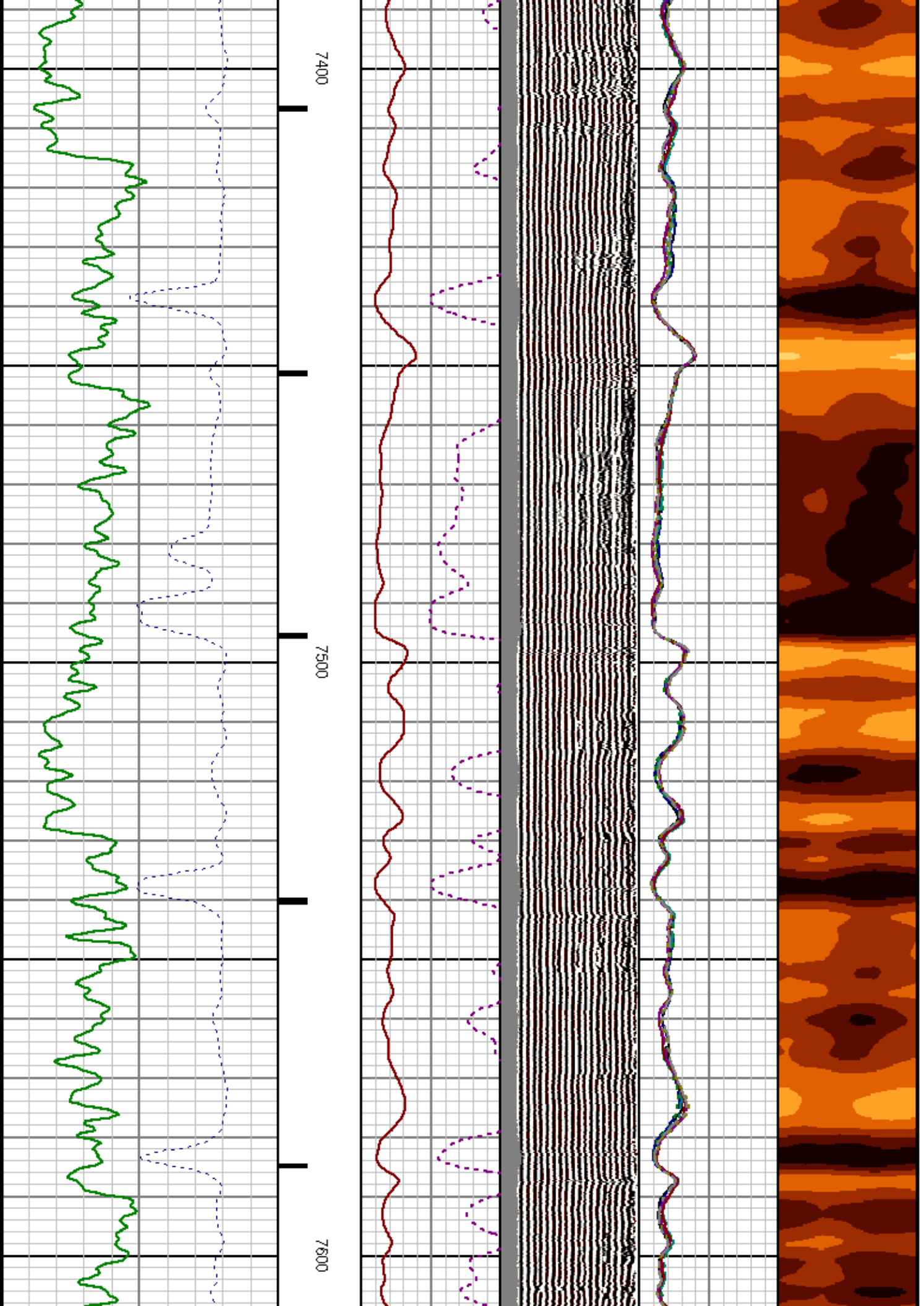


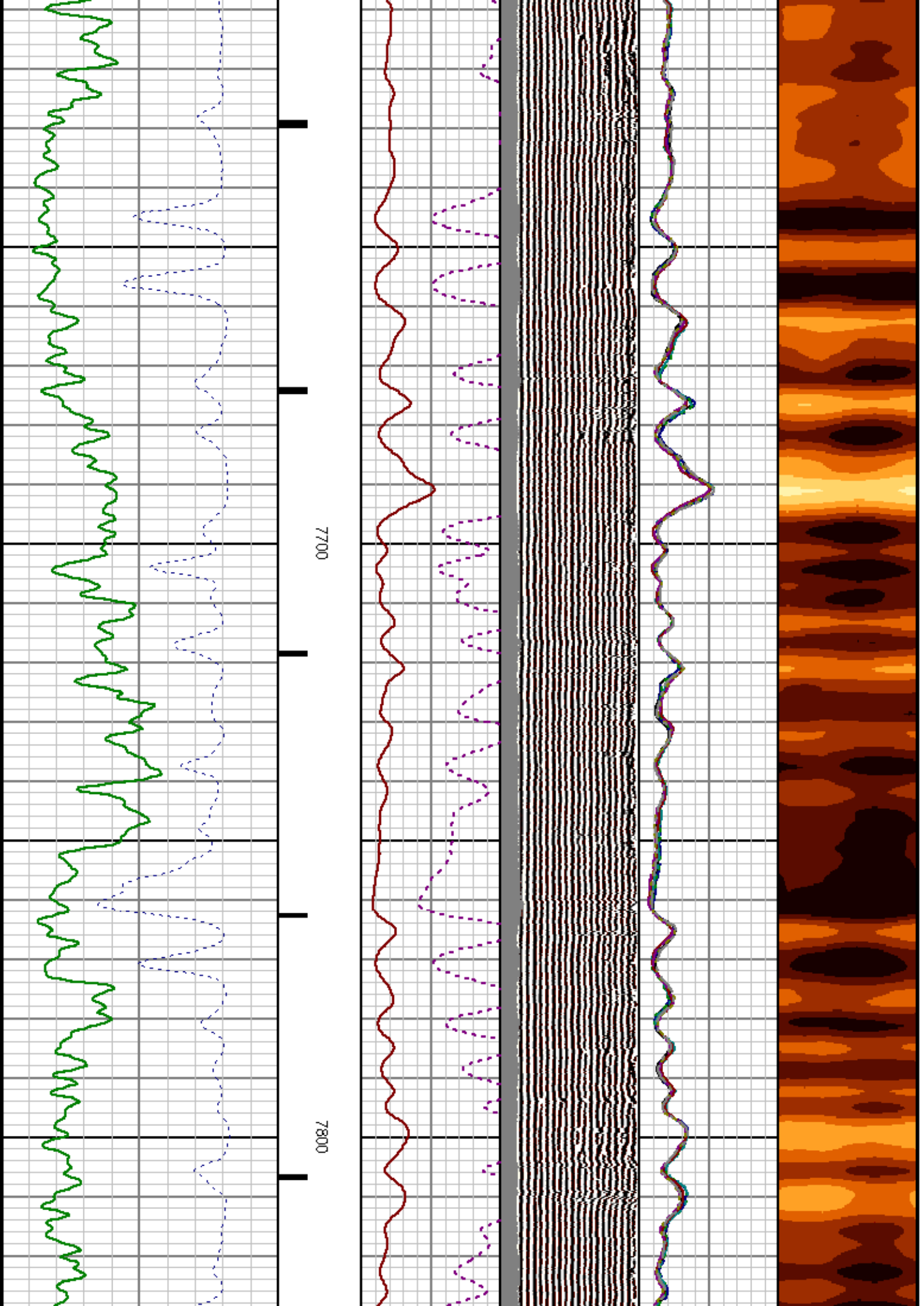


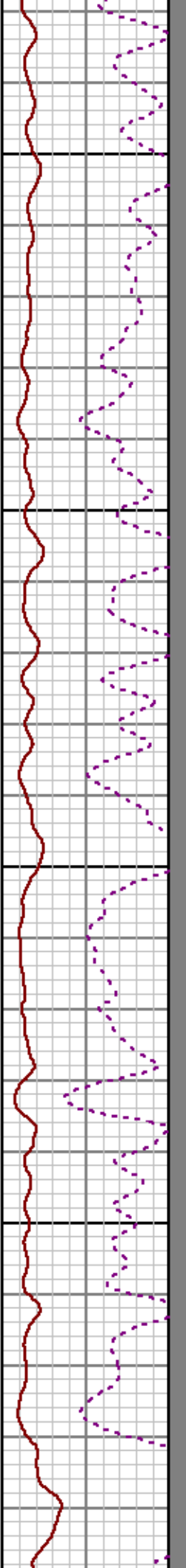
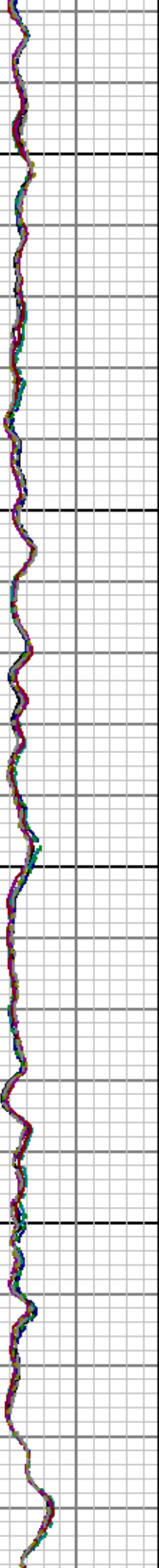






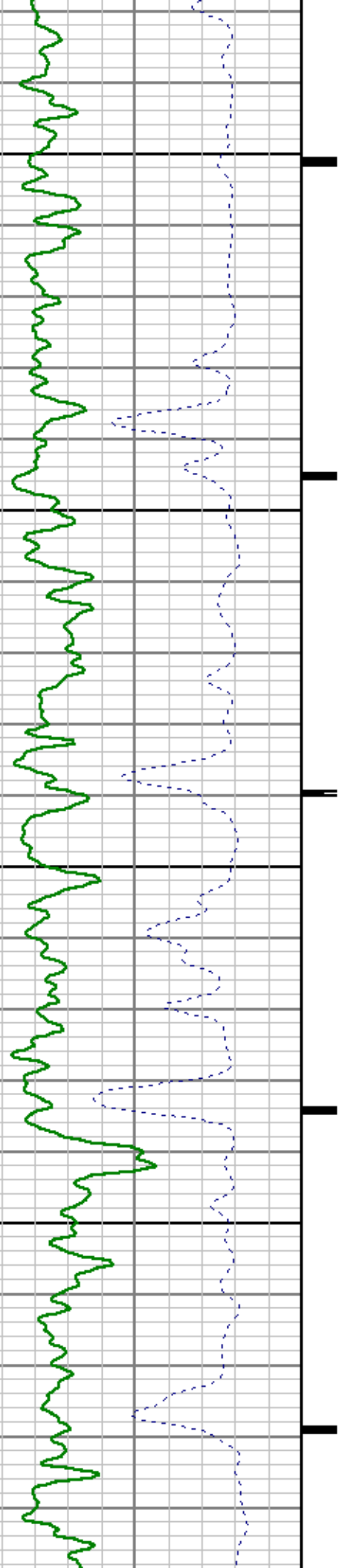


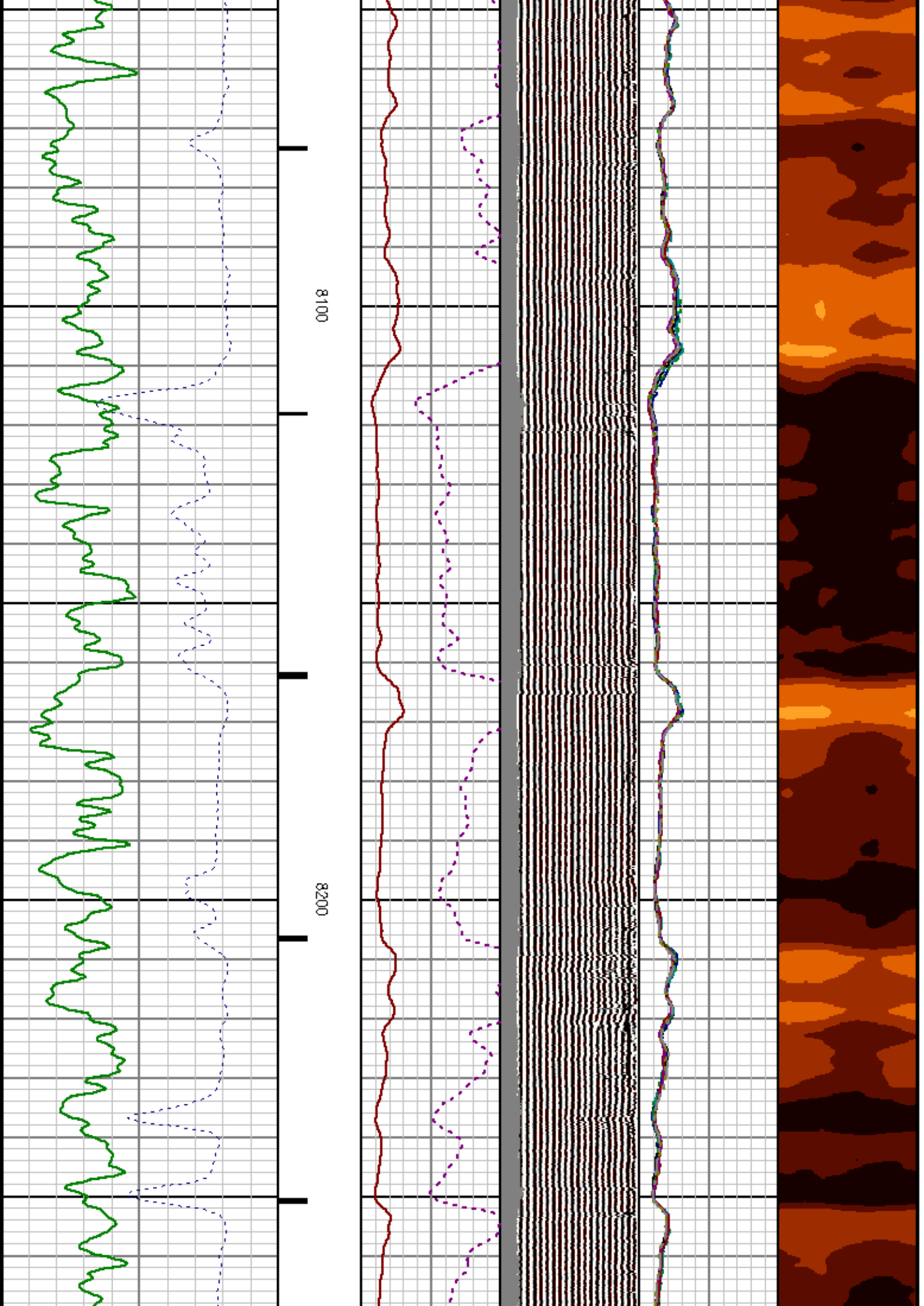


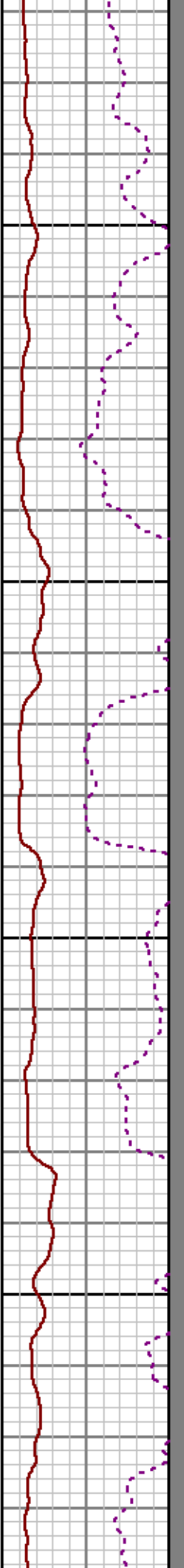
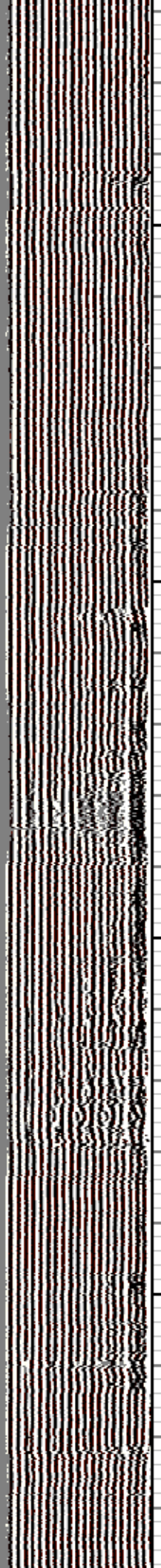
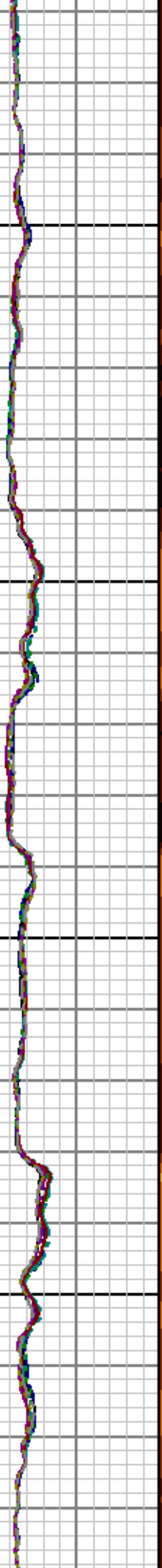


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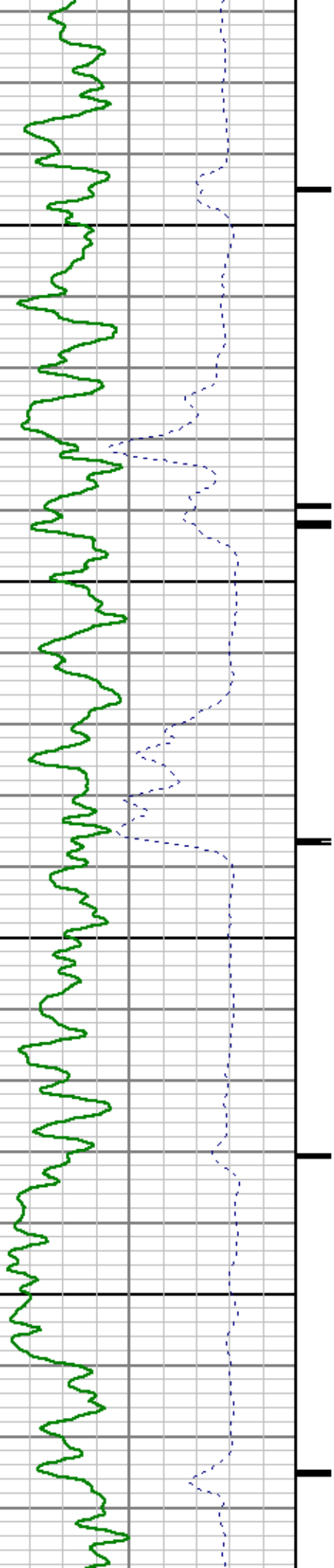


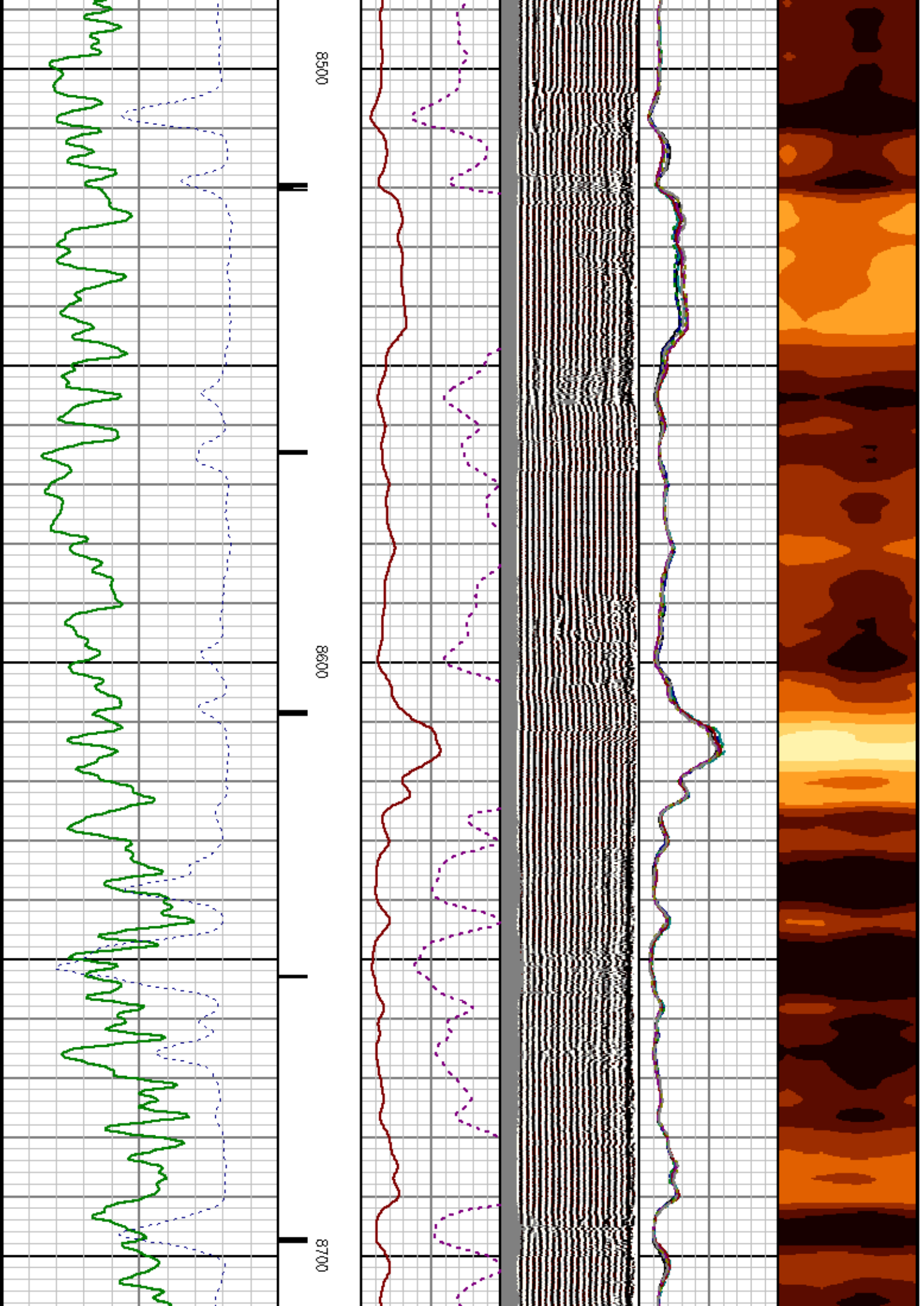


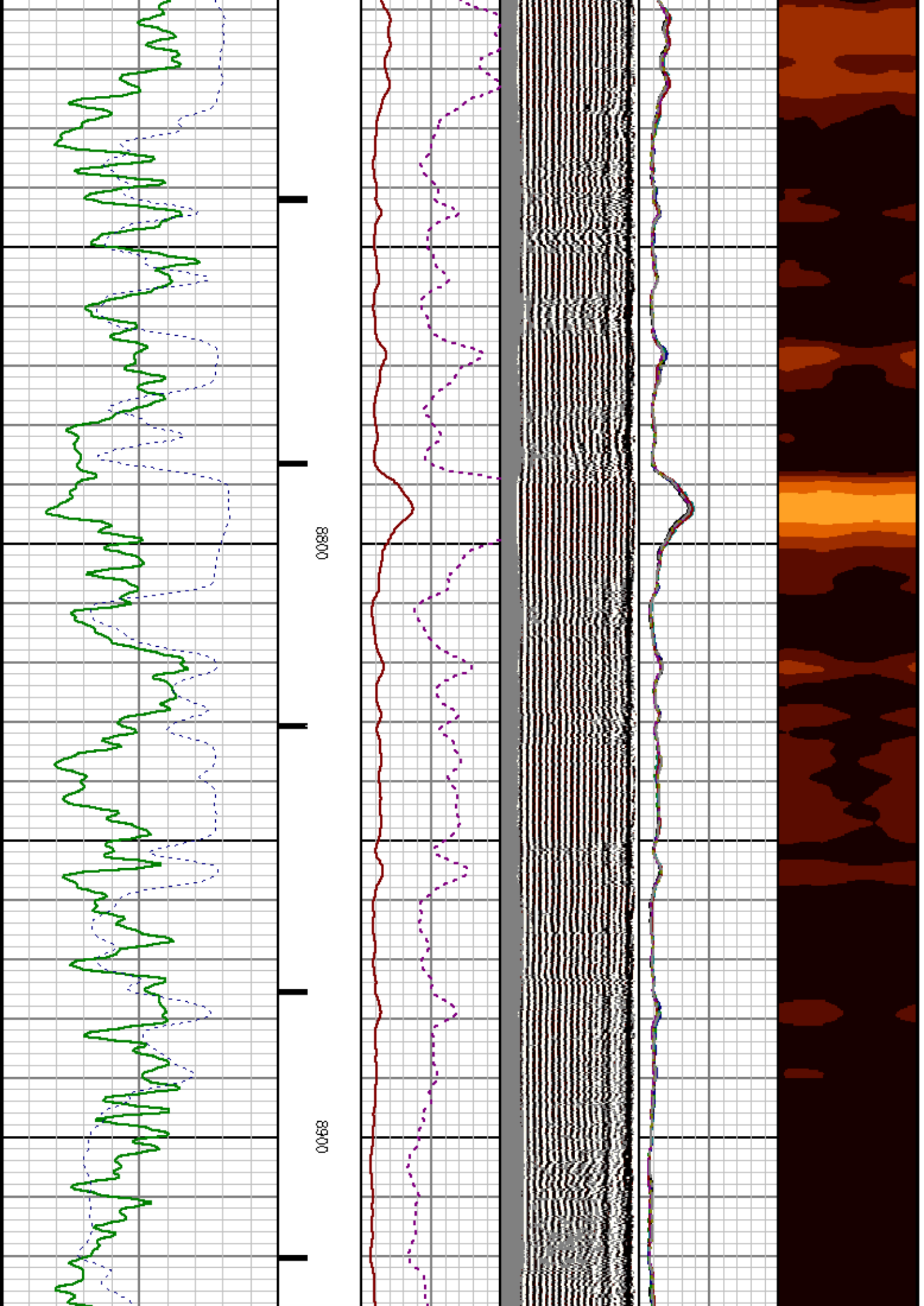


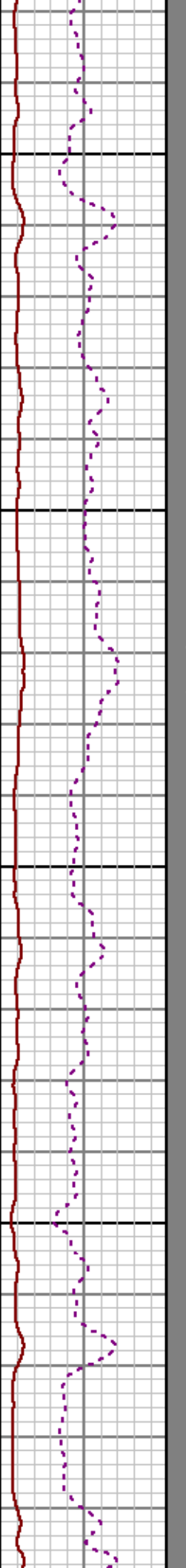
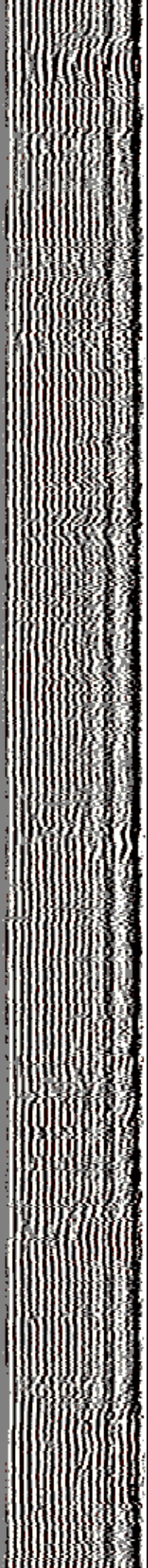
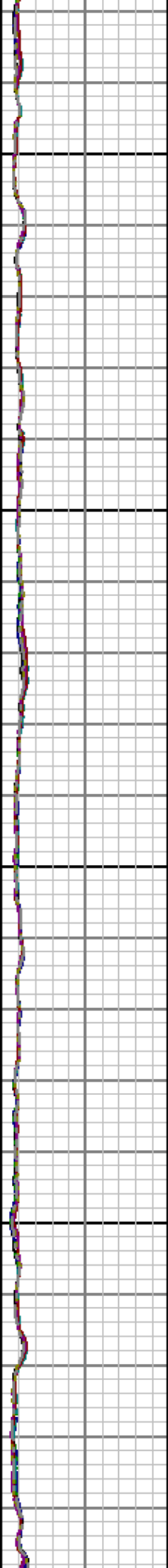
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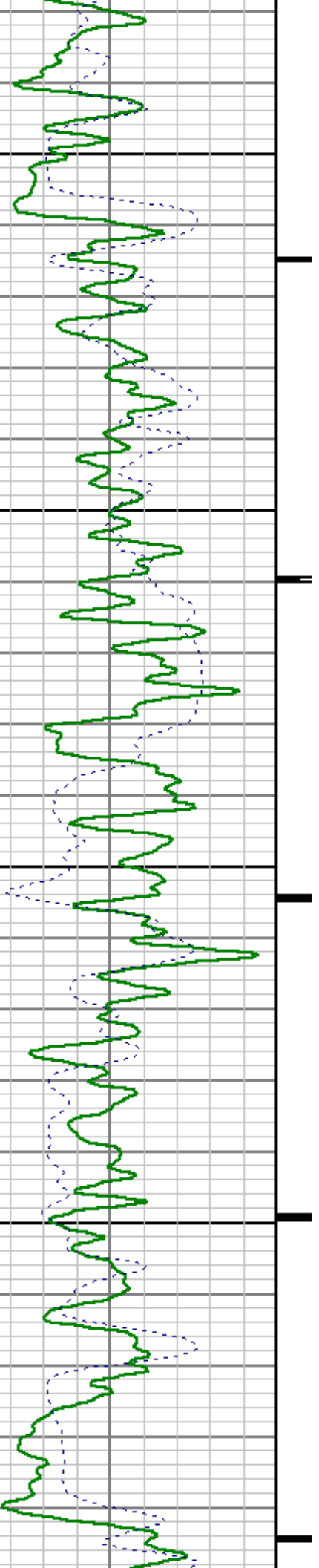


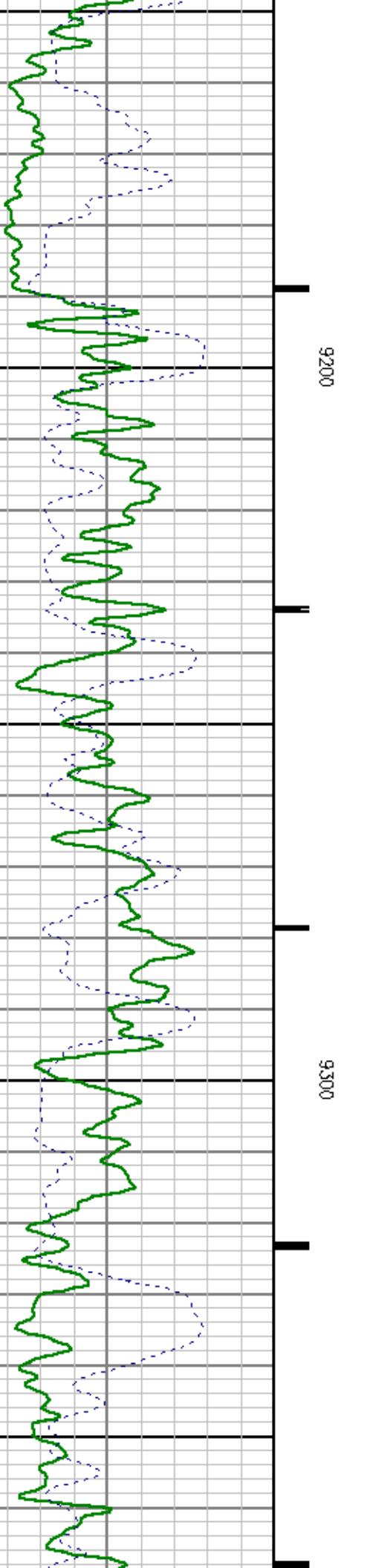
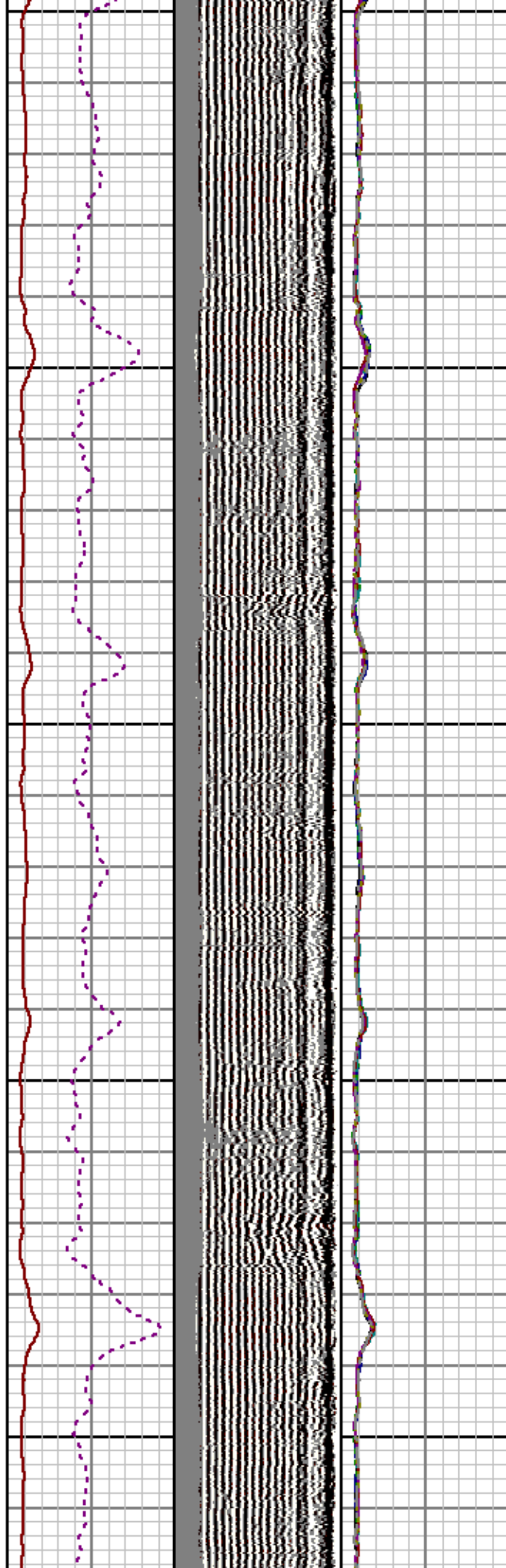


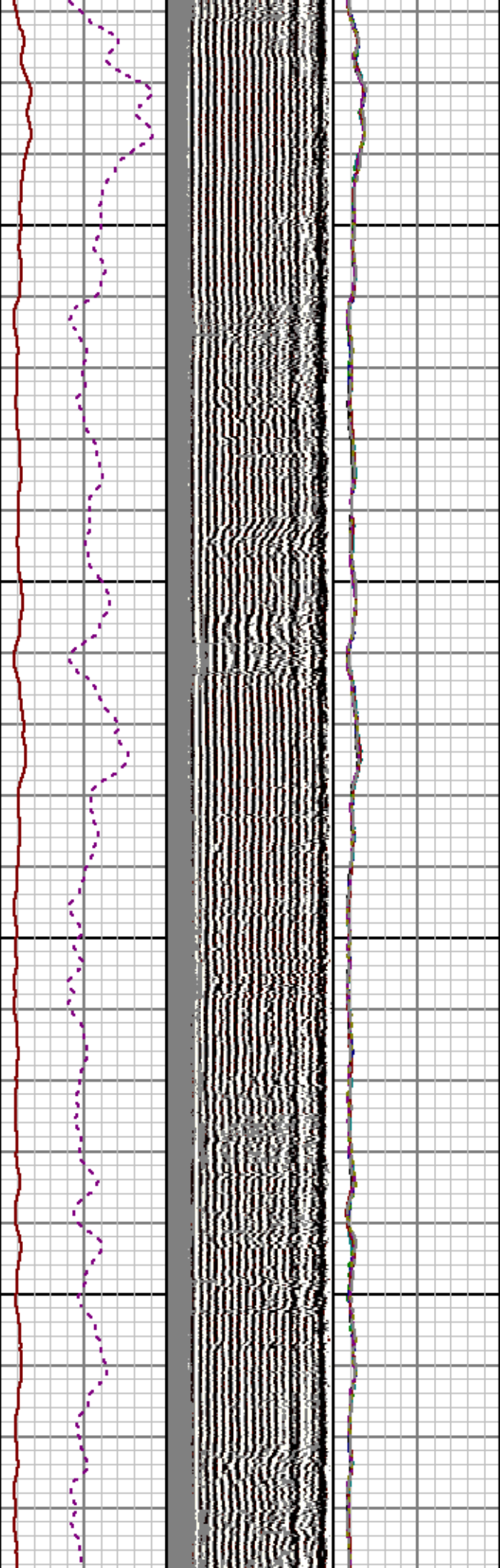


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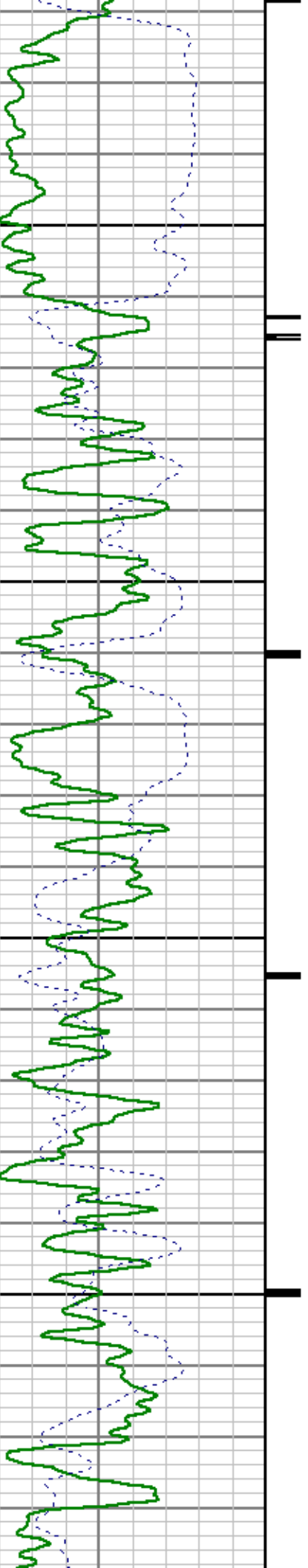


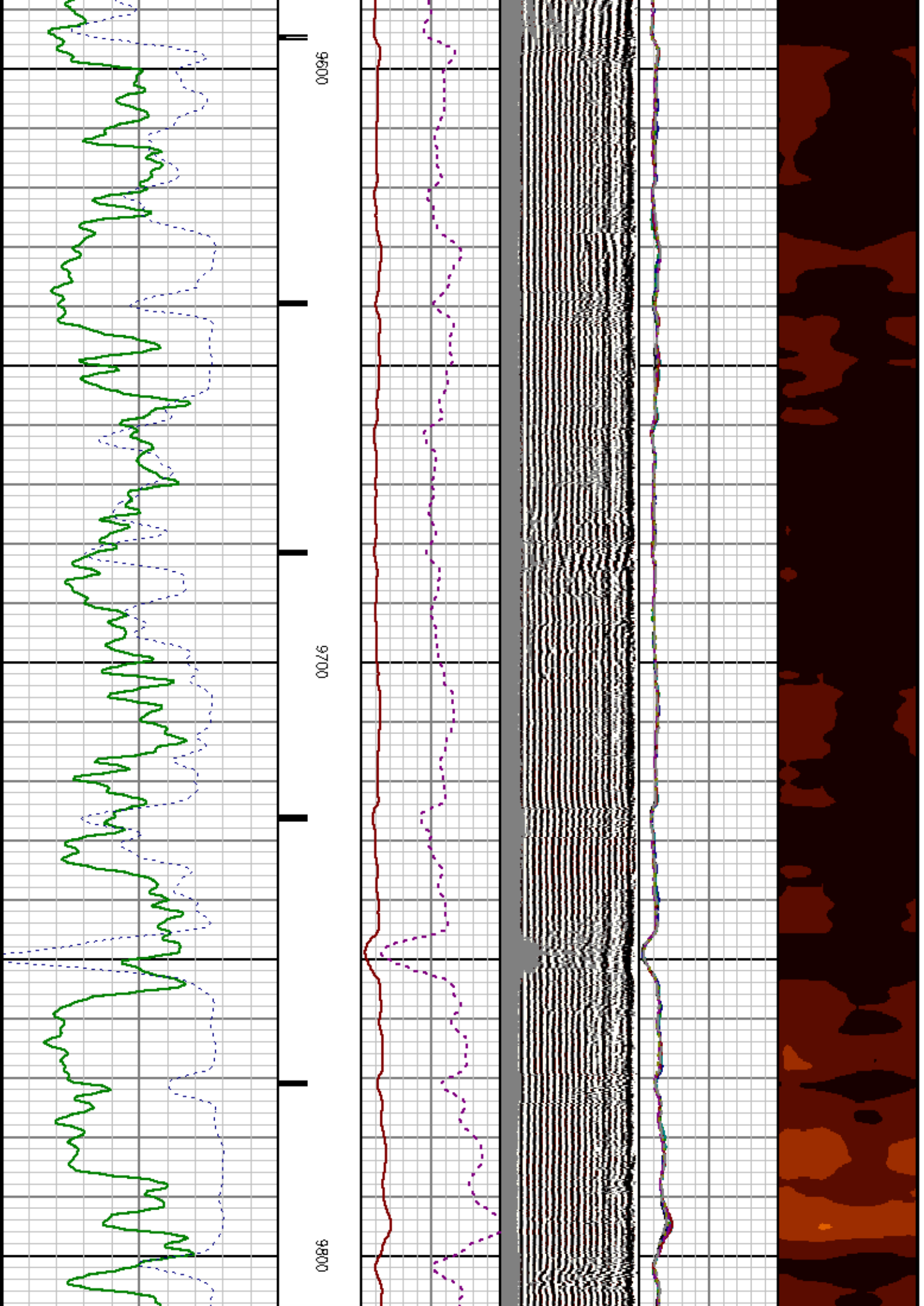


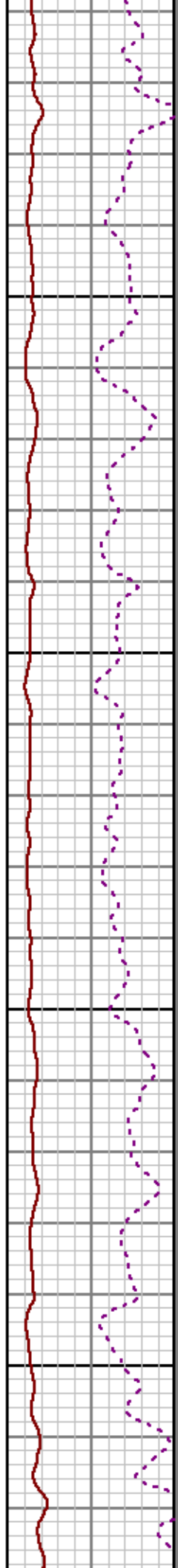
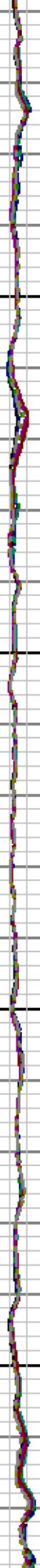


9400

9500

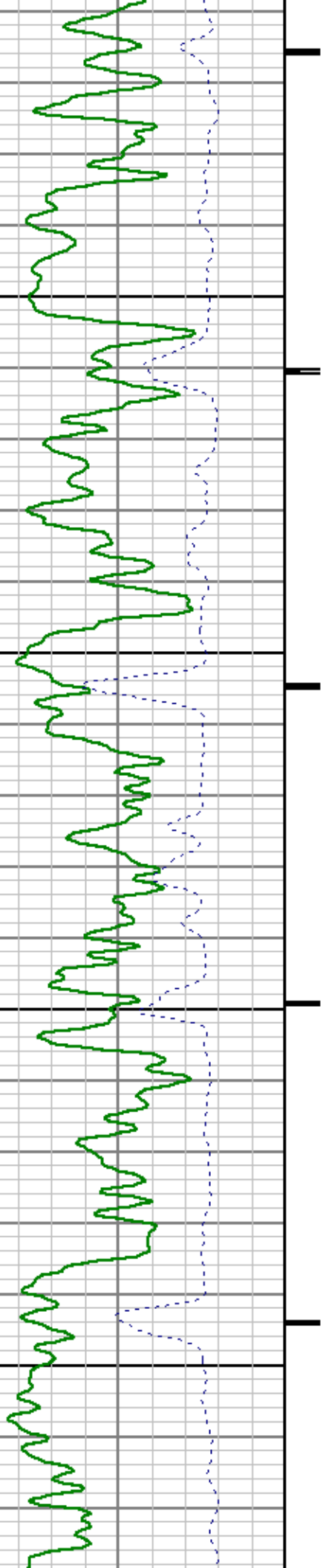


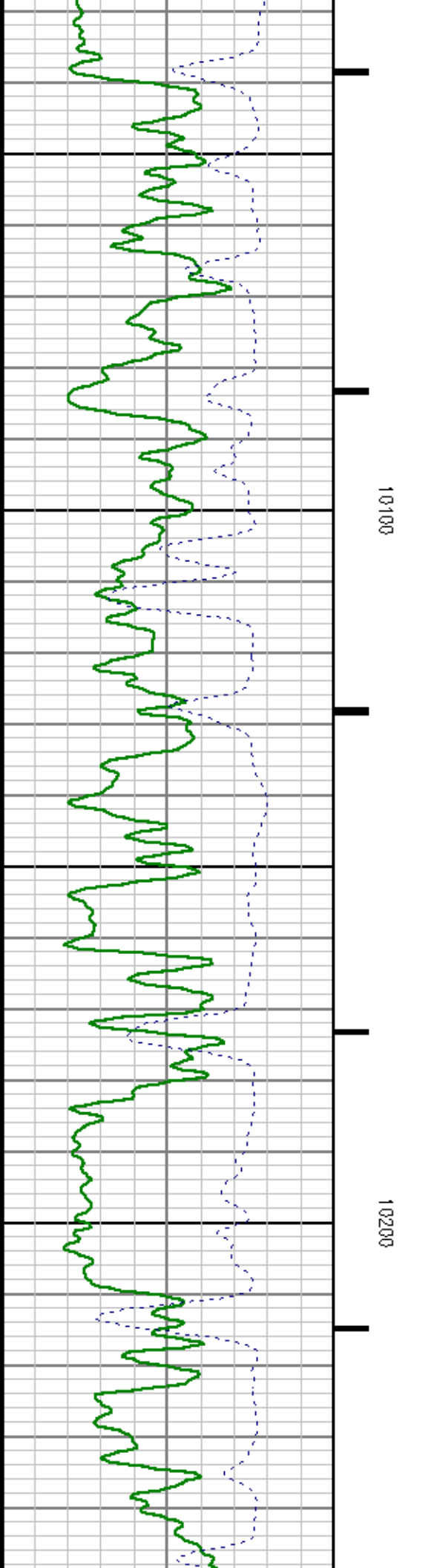
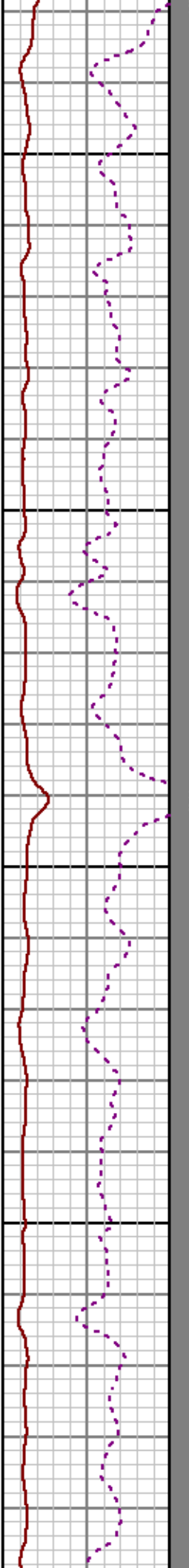
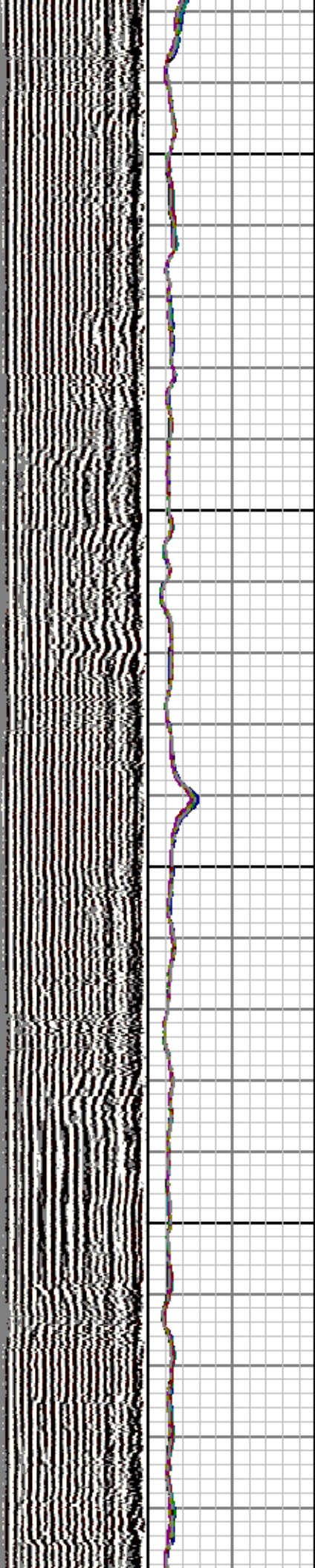
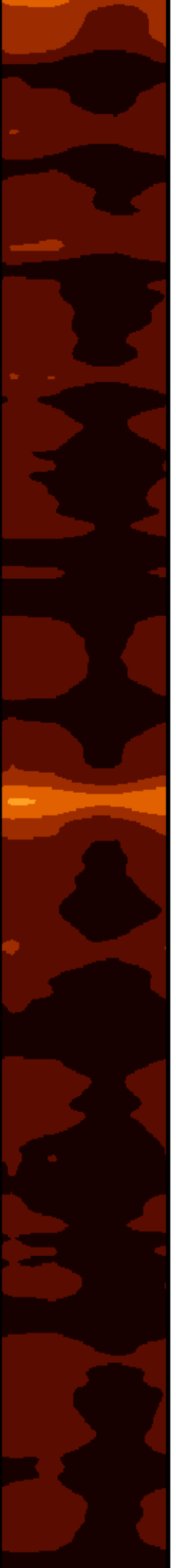


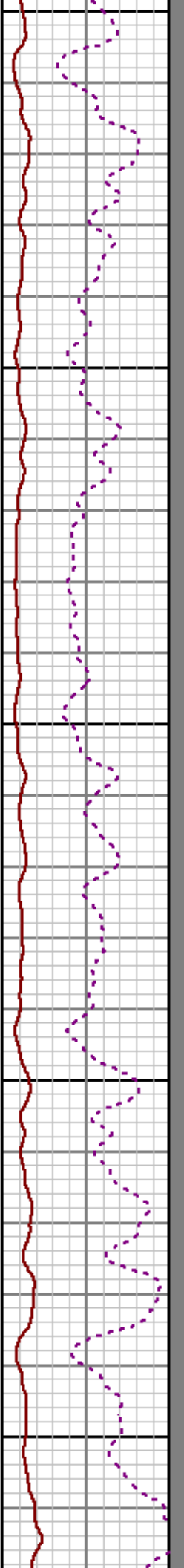
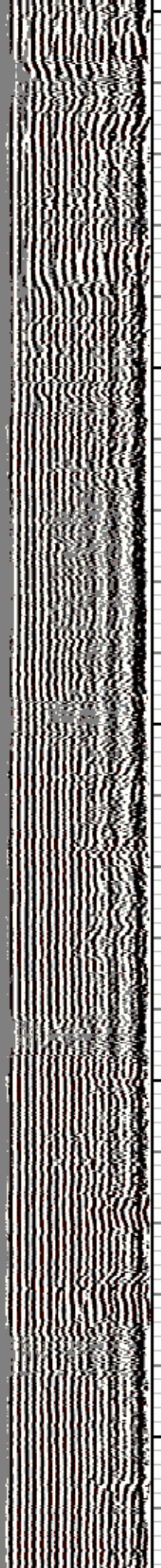
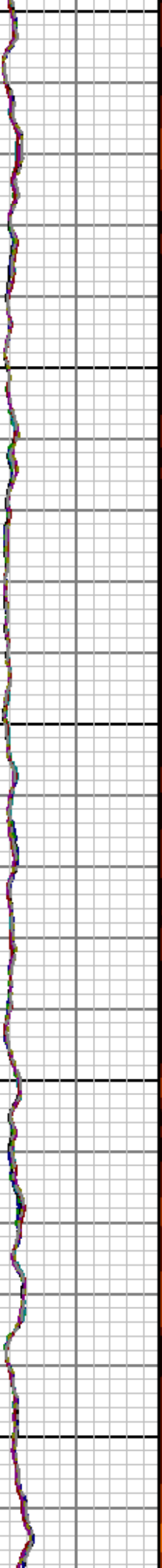


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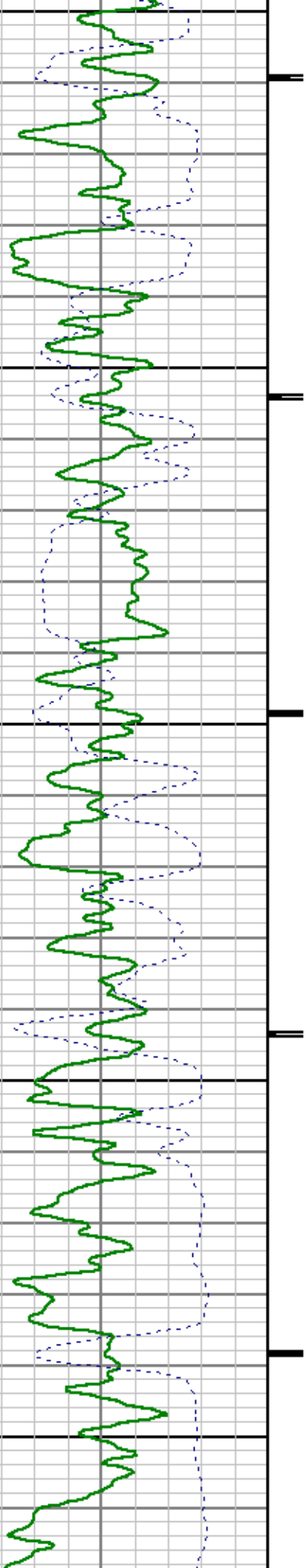


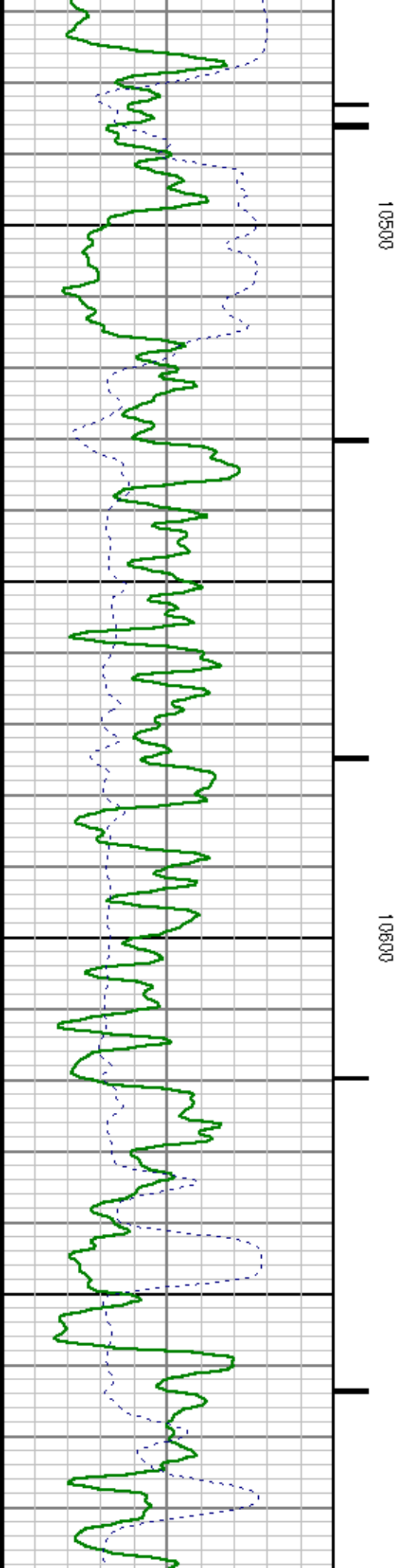
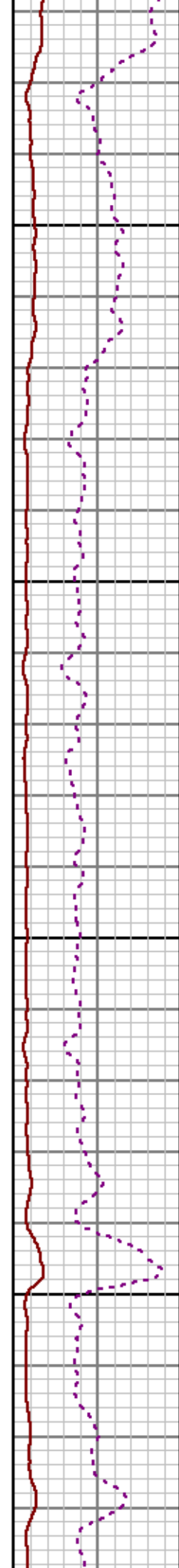
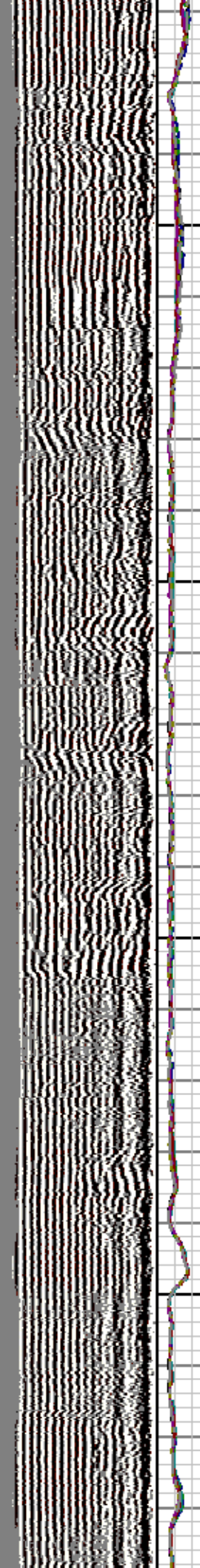


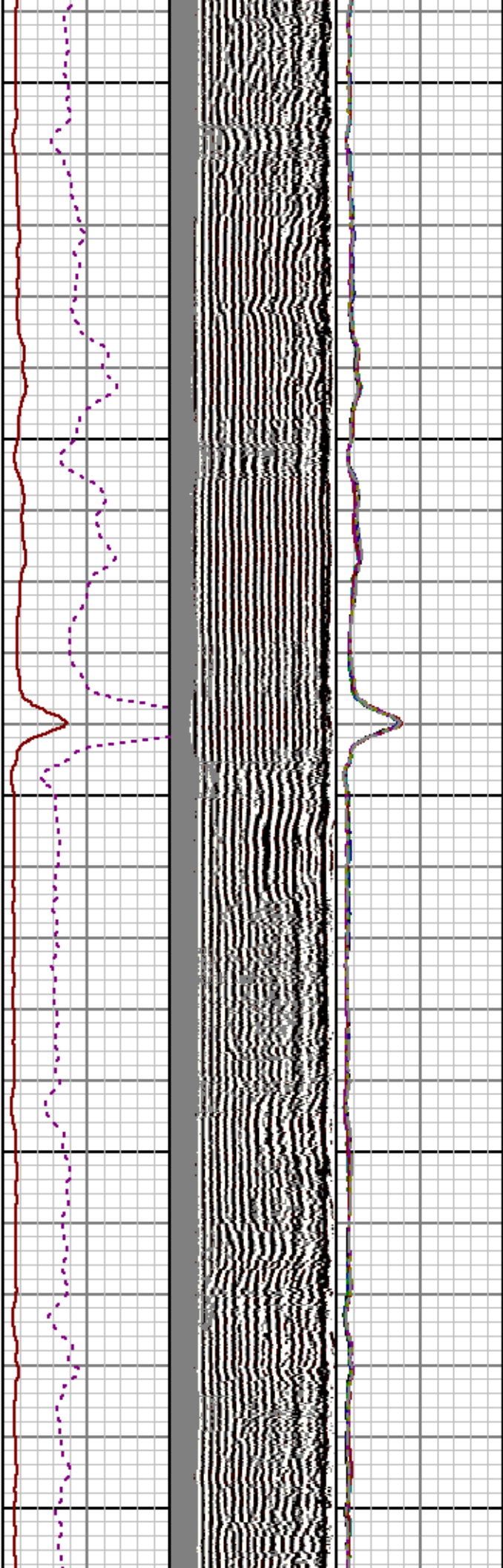


10300

10400



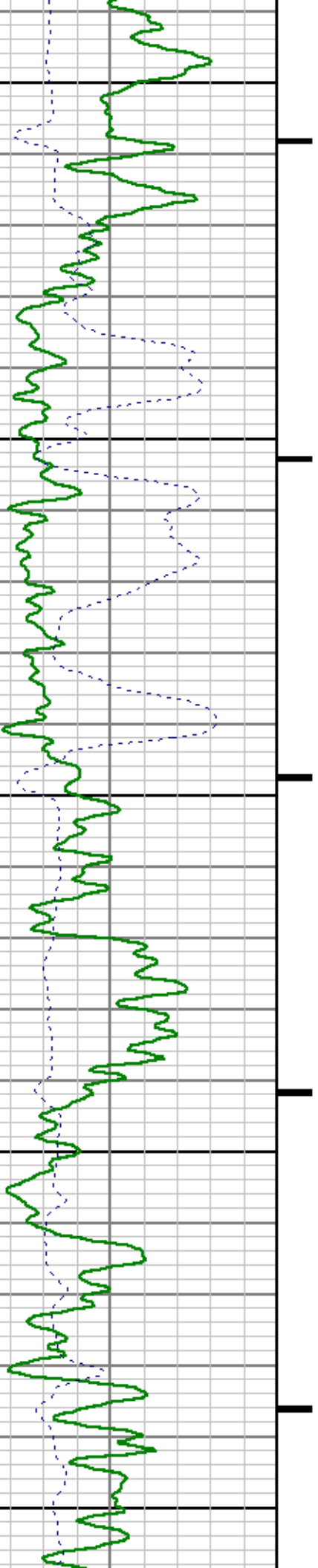


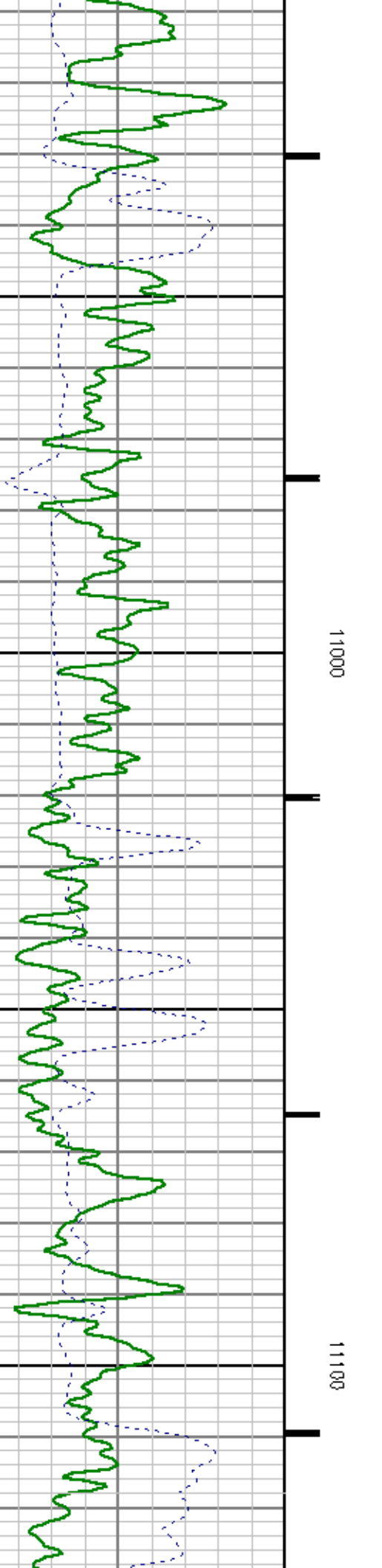
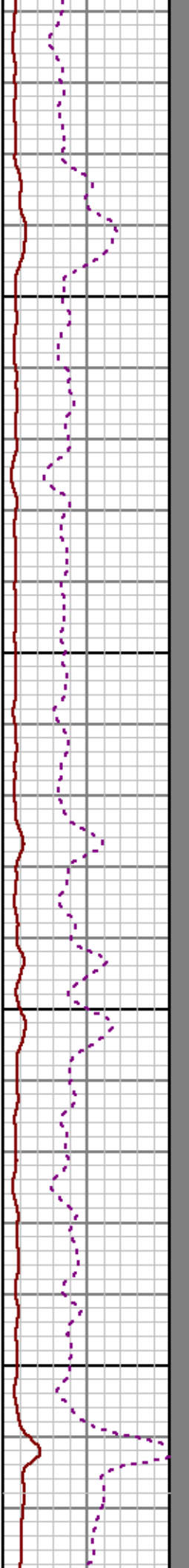
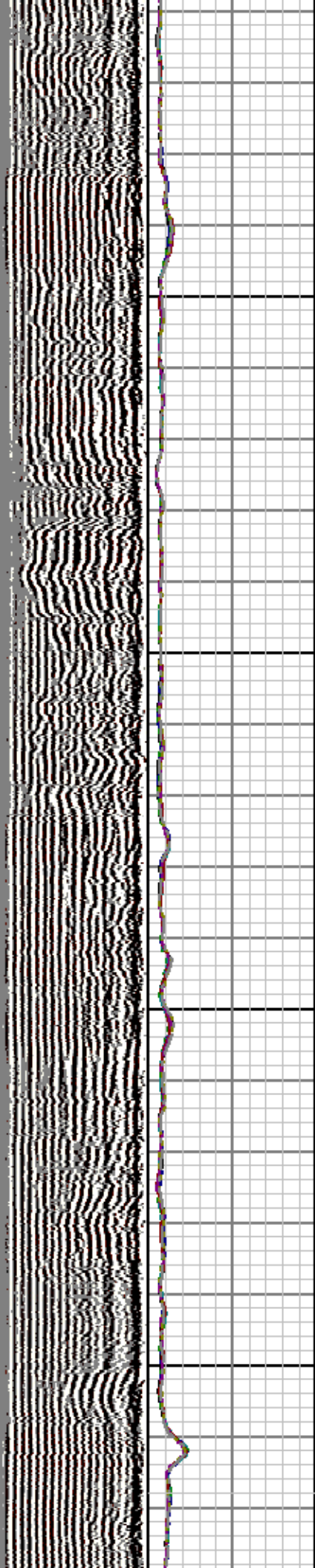


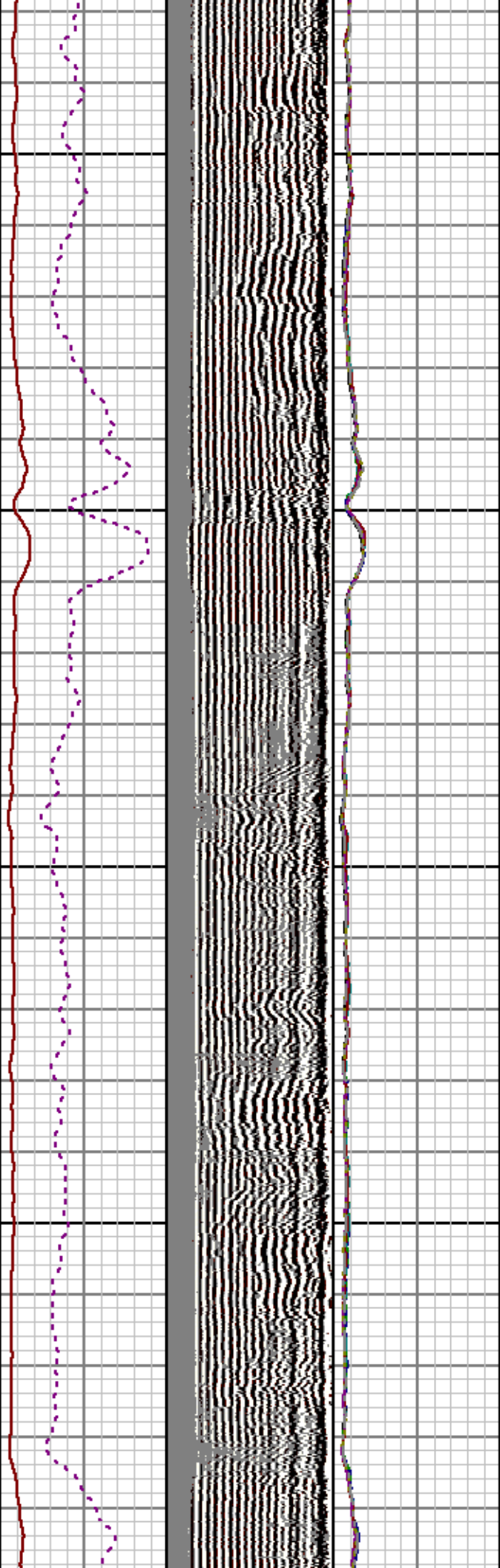
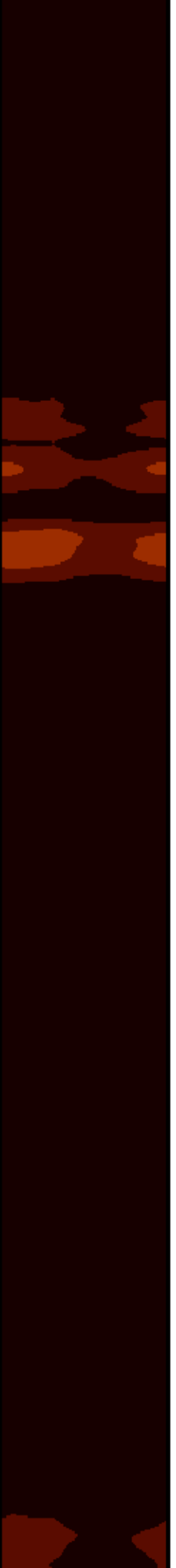
10700

10800

10900

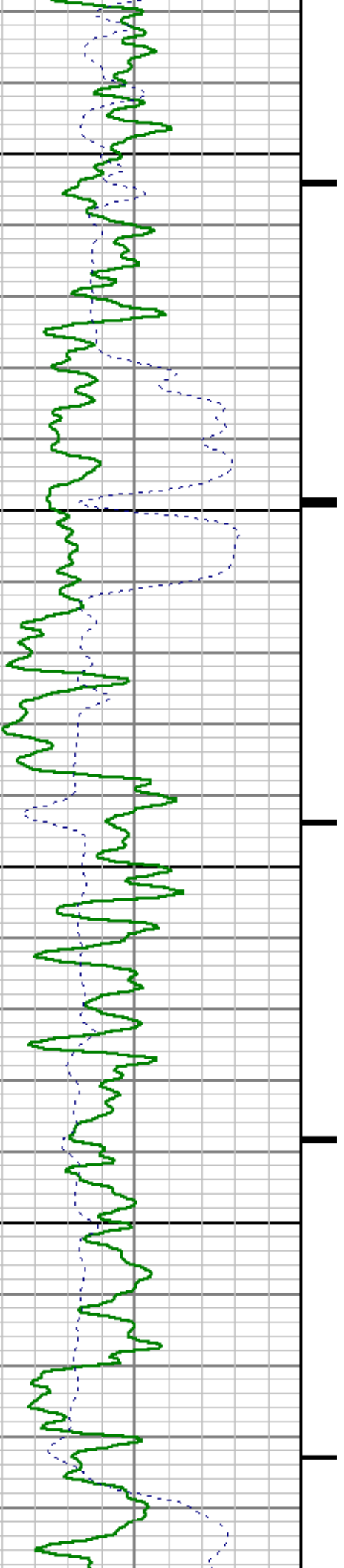


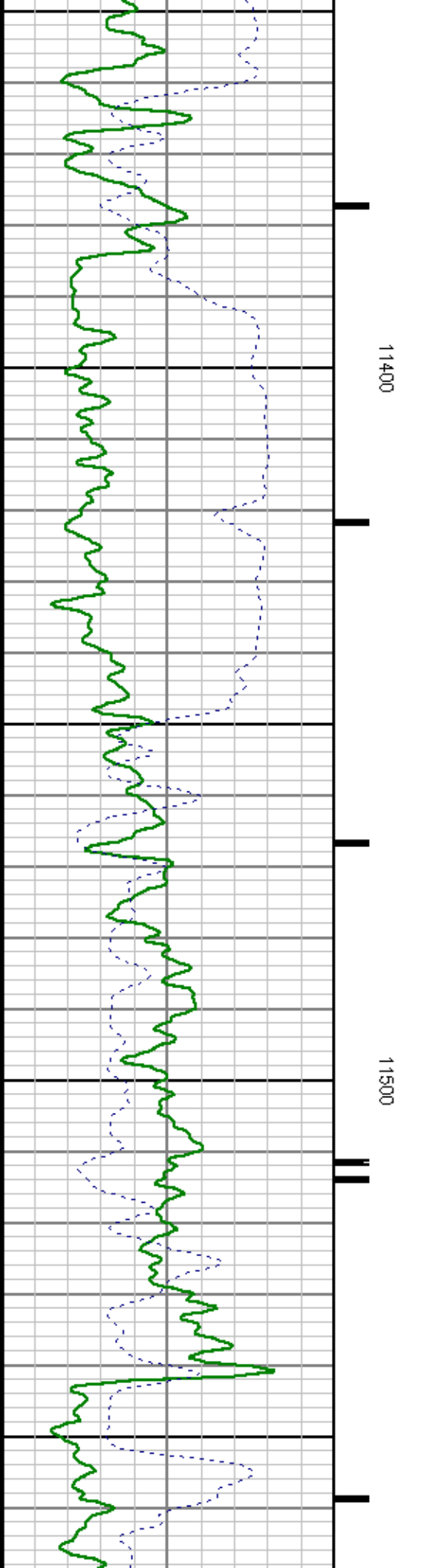
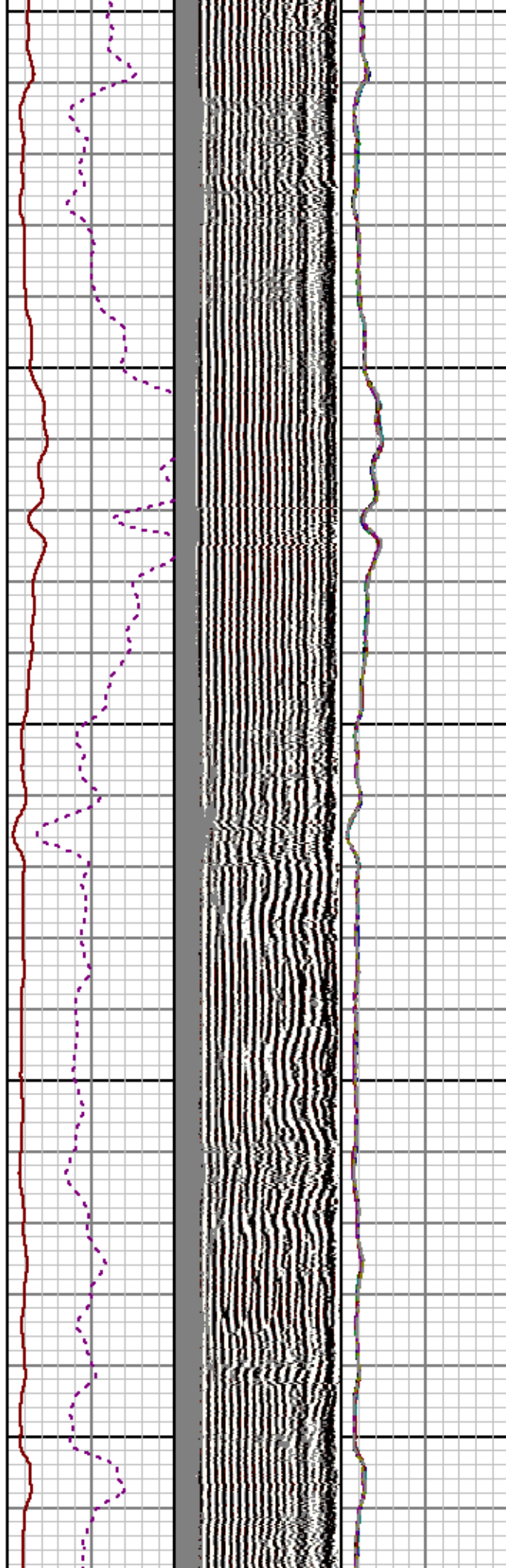


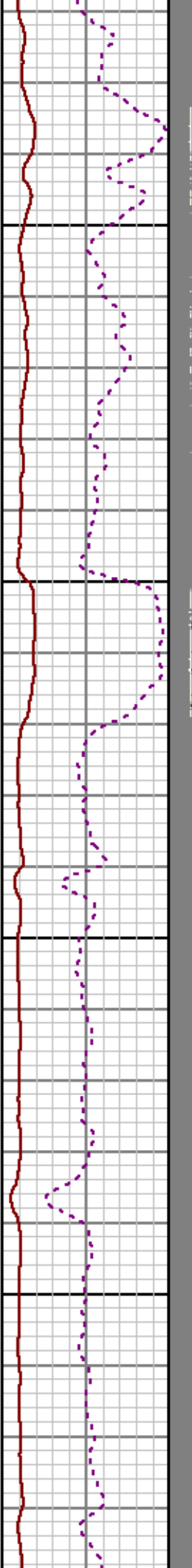
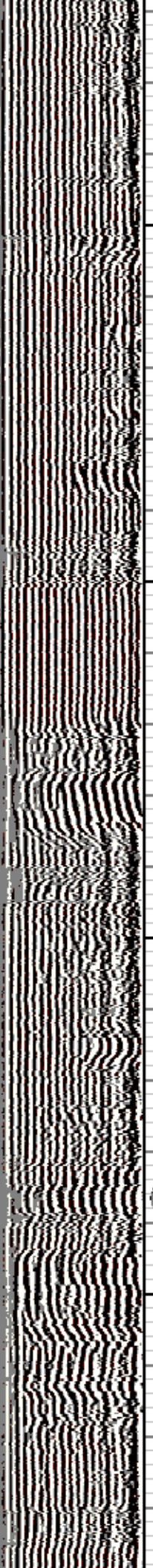
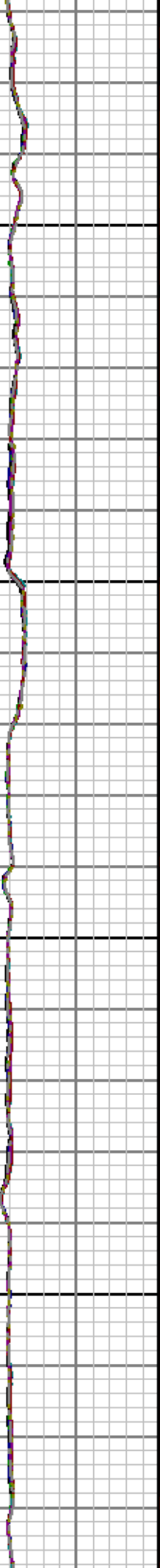


11200

11300

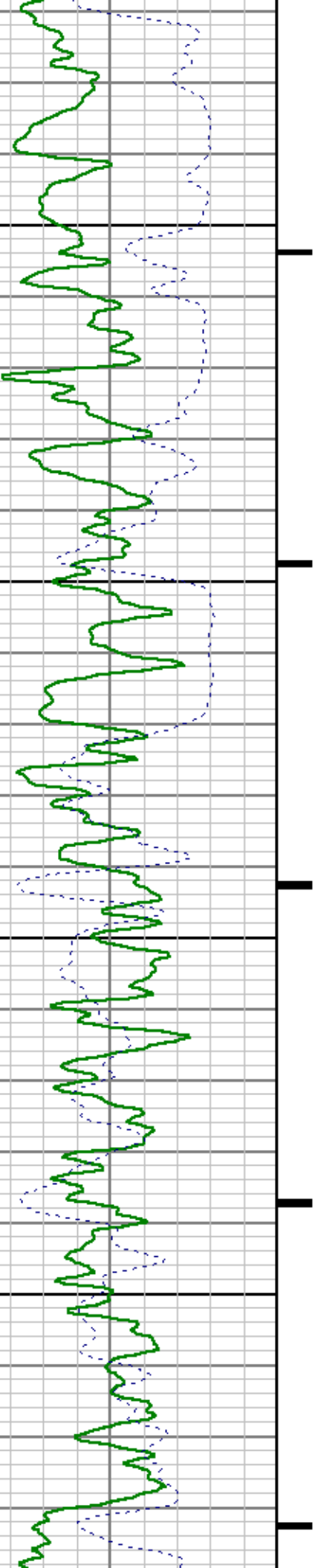


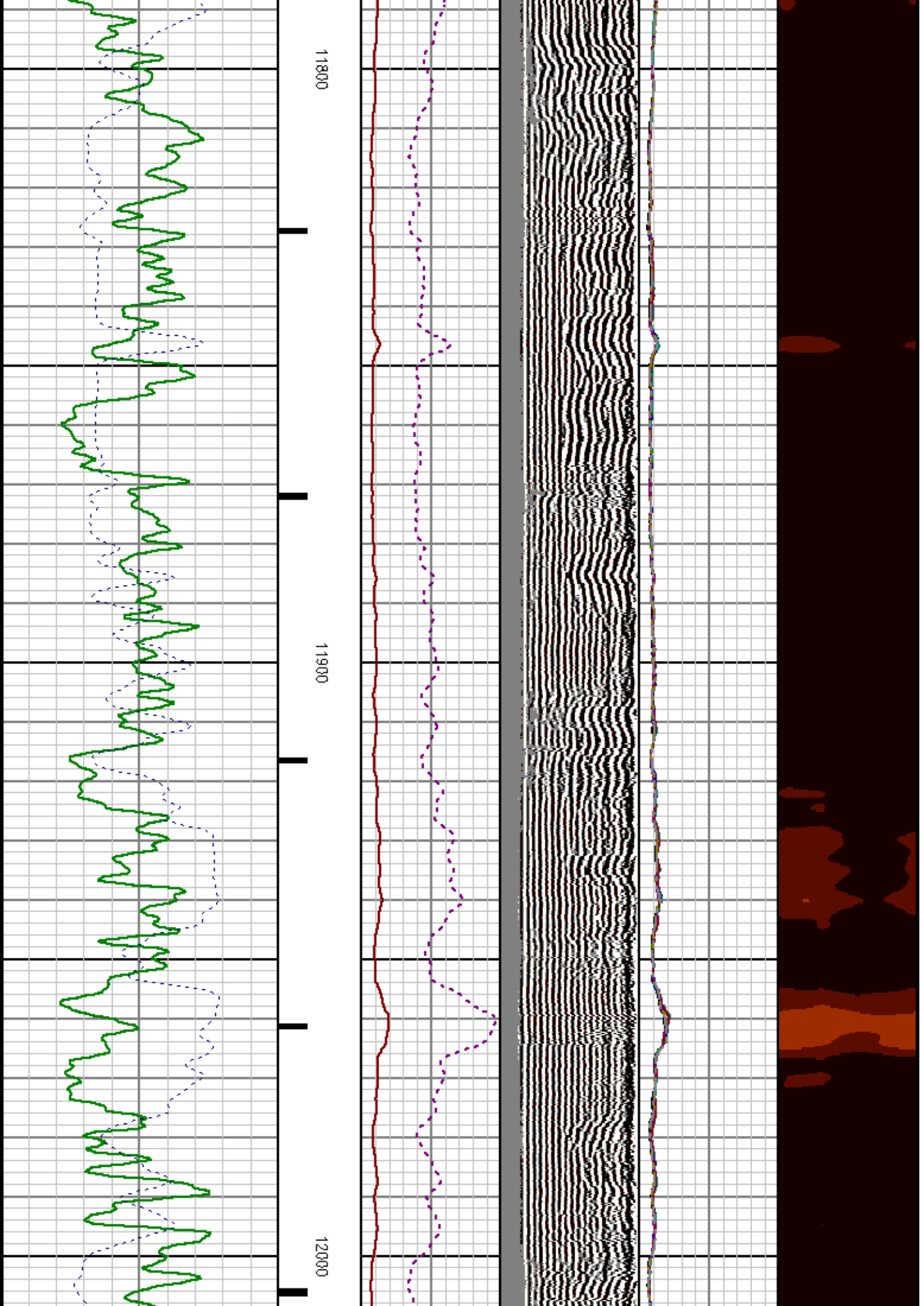


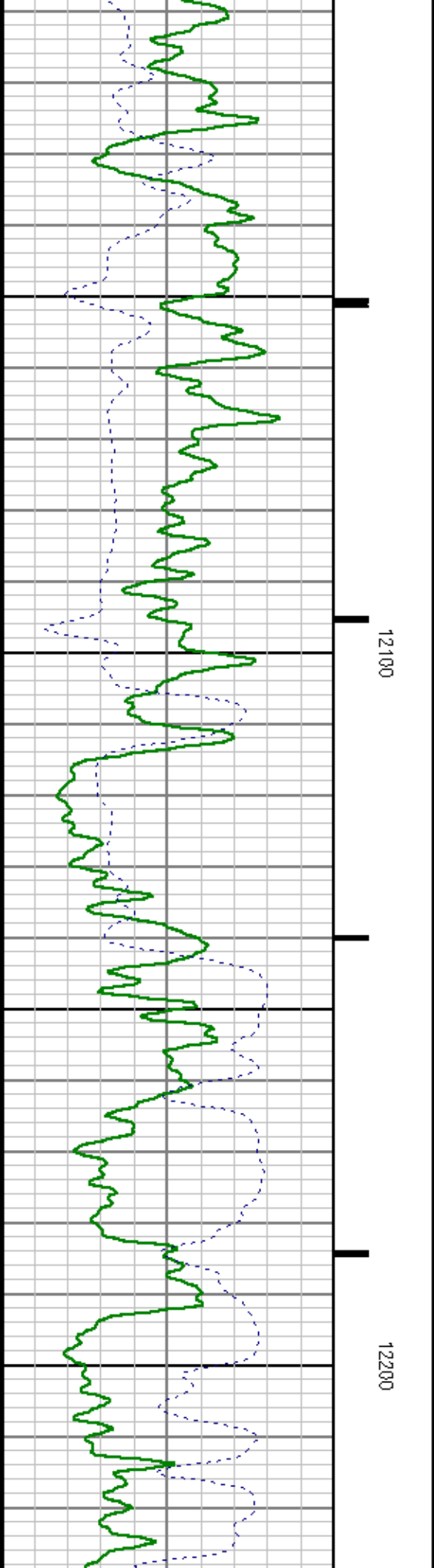
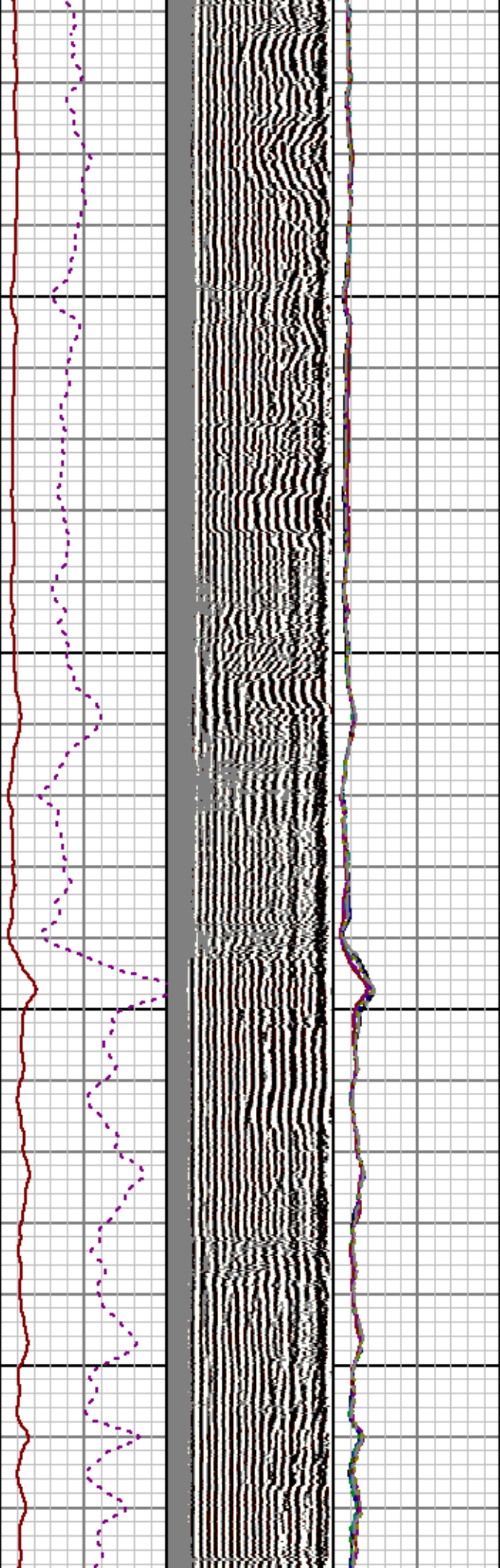


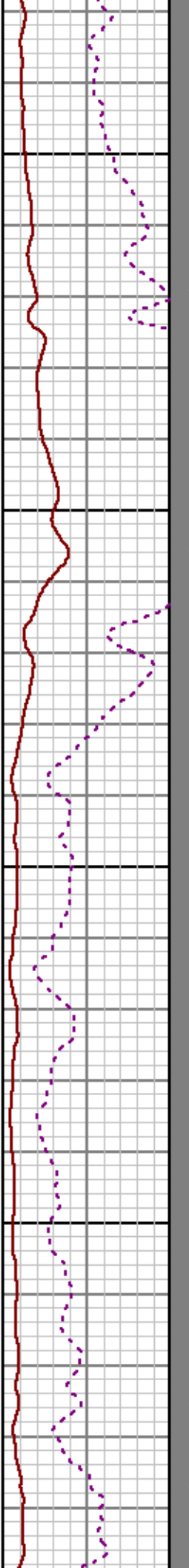
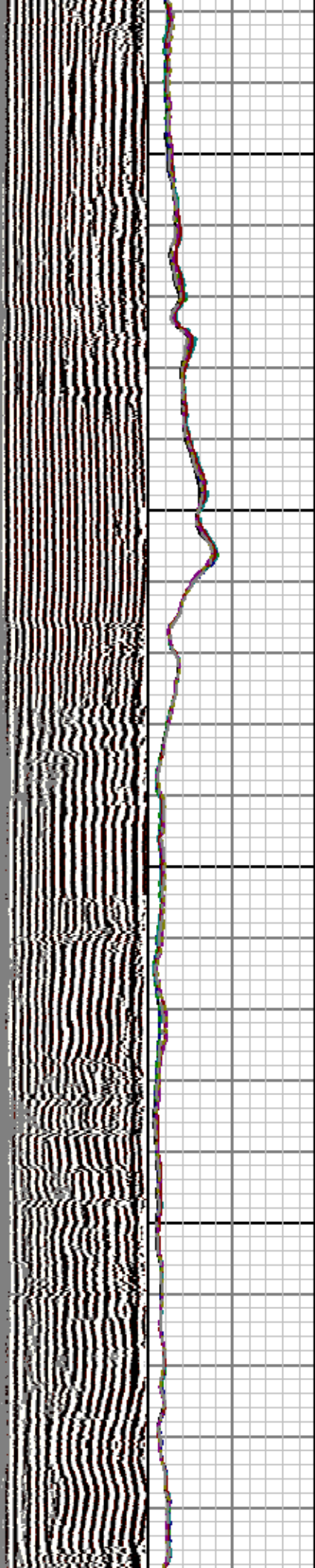
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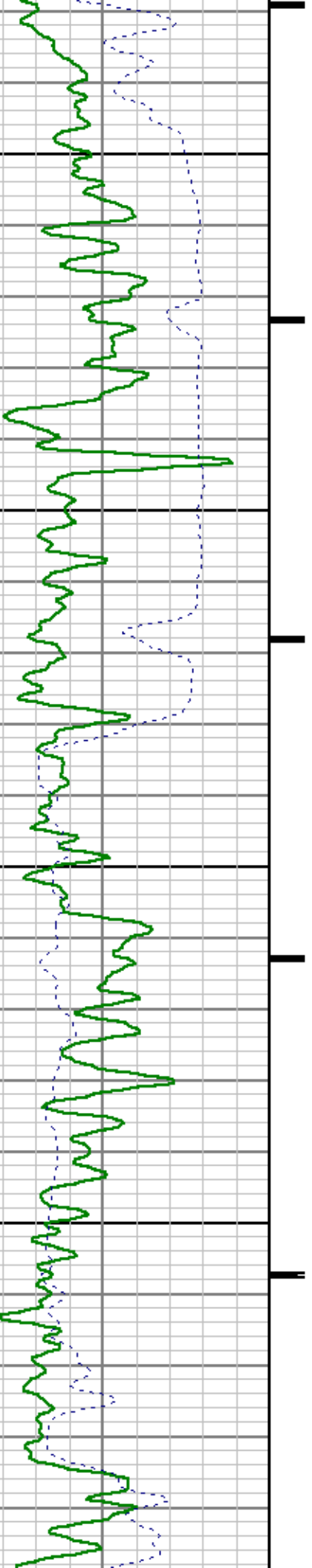


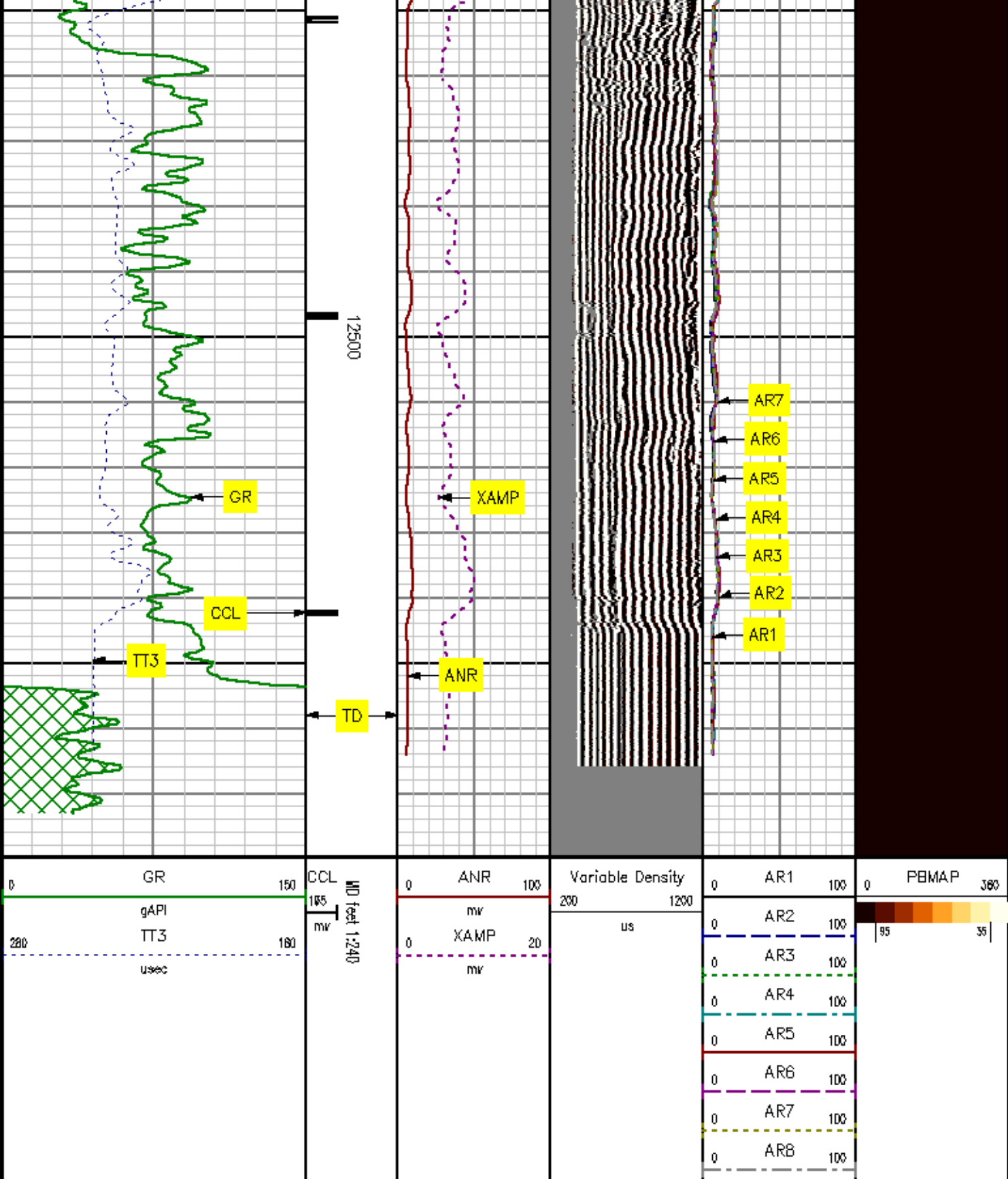




12300

12400





REPEAT SECTION

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	314.263	uasc	12310.535	12576.000
RAL	Amp Gate Start Near	197.754	usec	12310.535	12576.000
RAL	Amp Gate Start Radial	197.754	usec	12310.535	12576.000
RAL	Amp Gate Width Far	30.000	usec	12310.535	12576.000
RAL	Amp Gate Width Near	30.000	usec	12310.535	12576.000
RAL	Amp Gate Width Radial	30.000	usec	12310.535	12576.000
RAL	casing od	4.500	inches	12310.535	12576.000
RAL	casing wt	15.100	lbm/ft	12310.535	12576.000
RAL	FB Start Far	289.263	usec	12310.535	12576.000
RAL	FB Start Near	172.754	usec	12310.535	12576.000
RAL	FB Start Radial	172.754	usec	12310.535	12576.000
RAL	FB Thresh Far	15.000	mv	12310.535	12576.000
RAL	FB Thresh Near	10.000	mv	12310.535	12576.000
RAL	FB Thresh Radial	10.000	mv	12310.535	12576.000
RAL	Fluid Travel Time	200.000	usec/ft	12310.535	12576.000

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	CCL					
1426XA	-5.390	GR					
1426XA	0.000	NEU					

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : EXXONMOBIL PRODUCTION COMPANY

Well : PCU 297-11B6

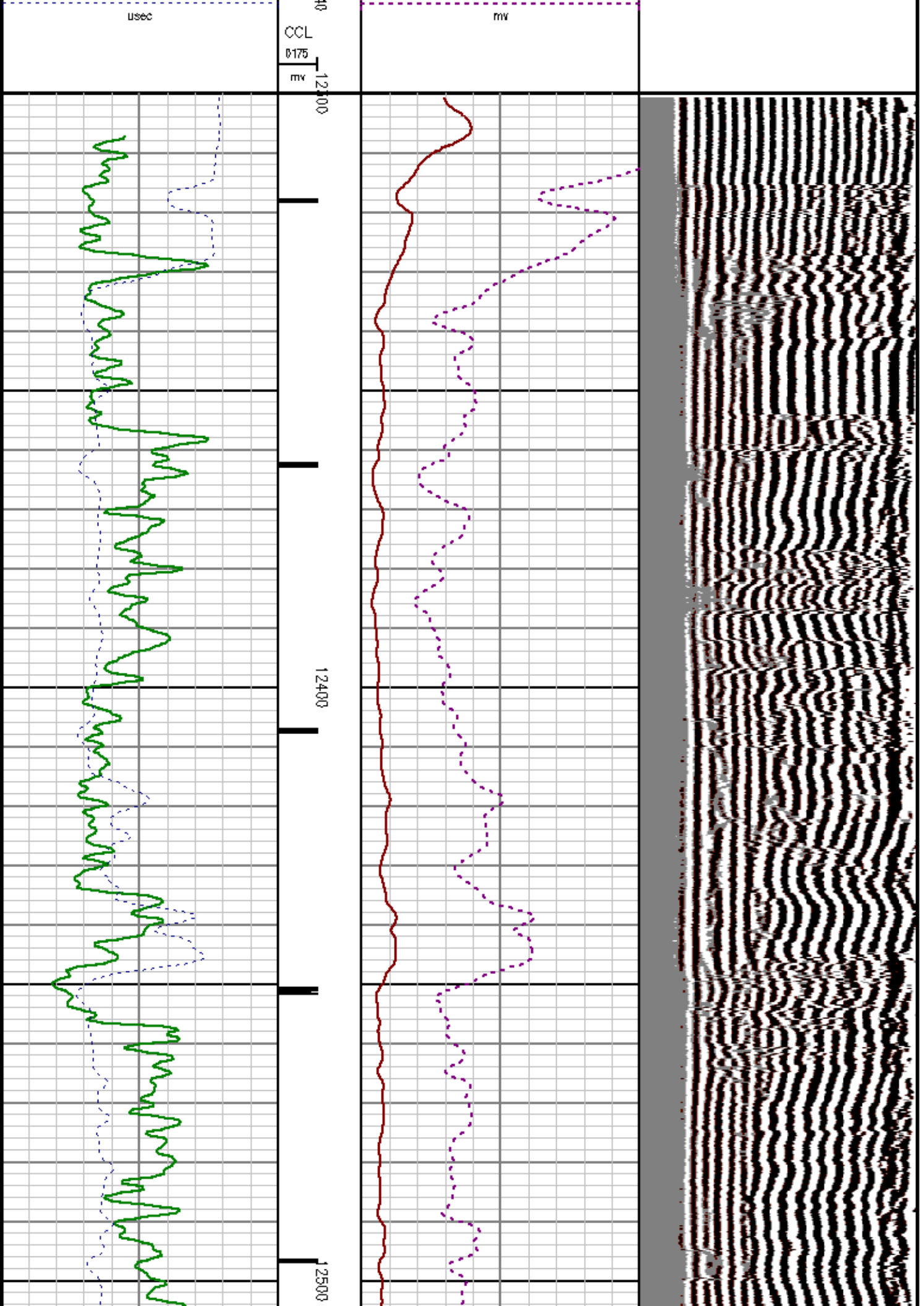
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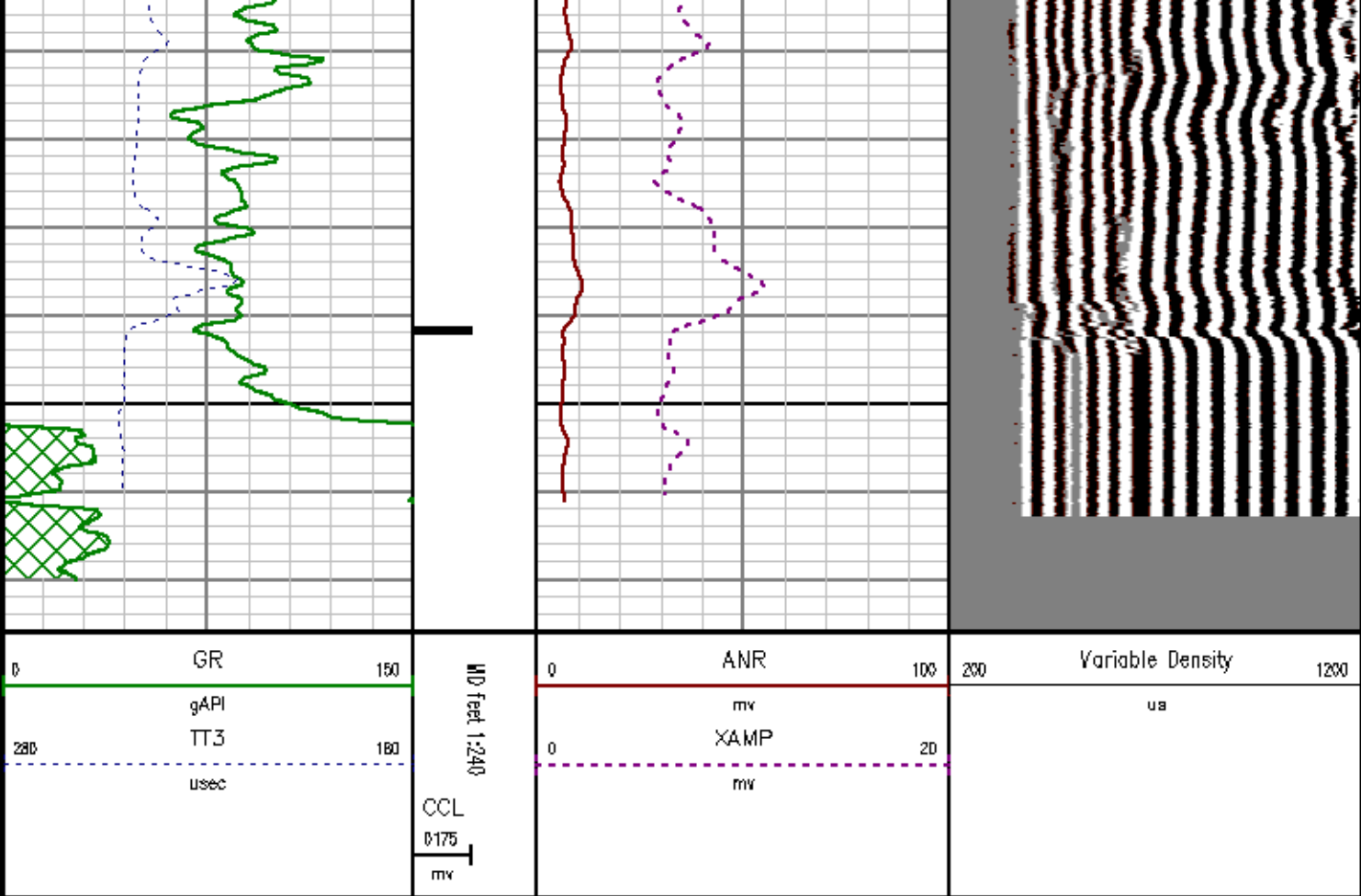
Mode : PlotMgr 5.4.504

Interval : 12300.00 - 12576.00 feet UP

Created : 1/9/2010 3:19:58 PM

0	GR	150	WD feet 1-2	0	ANR	100	200	Variable Density	1200
	gAPI				mv			us	
280	TT3	180		0	XAMP	20			





FREE PIPE SECTION

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	314.263	u sec	4763.000	5000.000
RAL	Amp Gate Start Near	197.754	u sec	4763.000	5000.000
RAL	Amp Gate Start Radial	197.754	u sec	4763.000	5000.000
RAL	Amp Gate Width Far	30.000	u sec	4763.000	5000.000
RAL	Amp Gate Width Near	30.000	u sec	4763.000	5000.000
RAL	Amp Gate Width Radial	30.000	u sec	4763.000	5000.000
RAL	casing od	4.500	inches	4763.000	5000.000
RAL	casing wt	15.100	lbm/ft	4763.000	5000.000
RAL	FB Start Far	289.263	u sec	4763.000	5000.000
RAL	FB Start Near	172.754	u sec	4763.000	5000.000
RAL	FB Start Radial	172.754	u sec	4763.000	5000.000
RAL	FB Thresh Far	15.000	mv	4763.000	5000.000
RAL	FB Thresh Near	10.000	mv	4763.000	5000.000

RAL	FB Thresh Radial	10.000	mv	4763.000	5000.000
RAL	Fluid Travel Time	200.000	usec/ft	4763.000	5000.000

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	CCL							
1426XA	-5.390	GR							
1426XA	0.000	NEU							

Created by : RAL, v4.8.008

Plotted by : PlotMgr, v5.4.504

Company : EXXONMOBIL PRODUCTION COMPANY

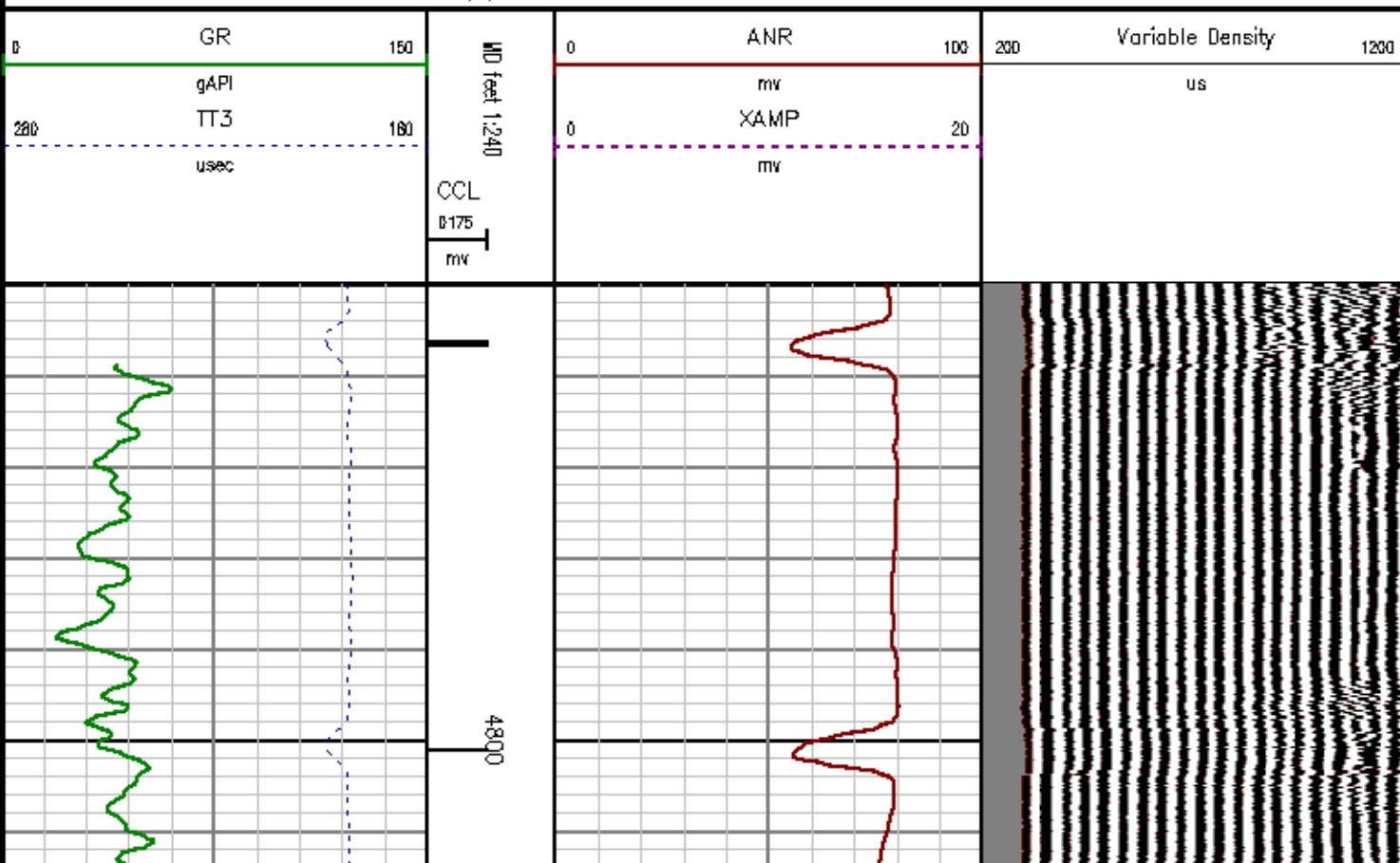
Well : PCU 297-11B8

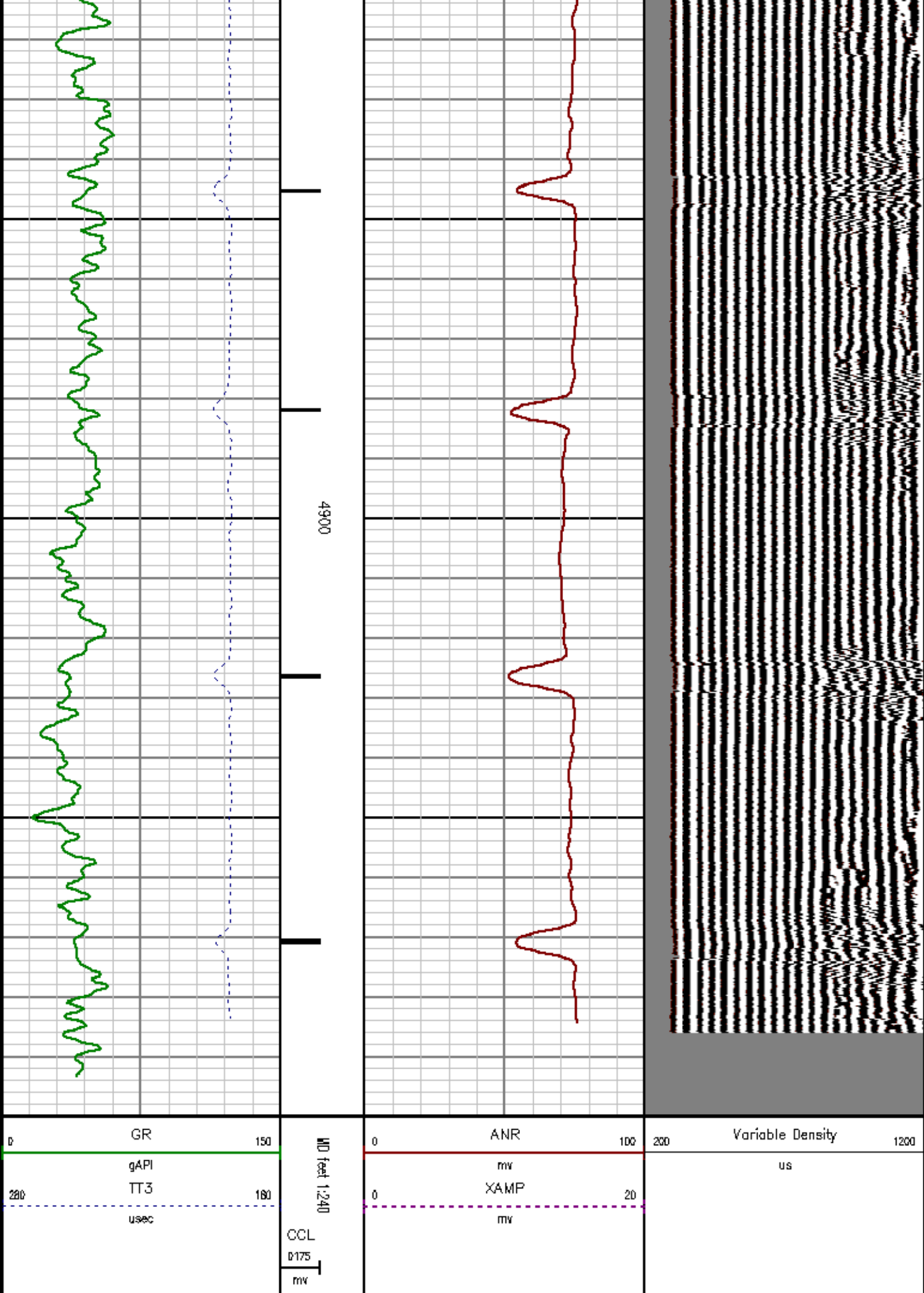
File Name : D:\WELLDATA\8RAD\FREE.XTF

Mode : PlotMgr 5.4.504

Interval : 4750.00 - 5000.00 feet UP

Created : 1/9/2010 2:41:25 PM





CALIBRATION SUMMARY

GAMMA RAY

Calibration File: C:\cass\calver\GR\457J1.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Fri Jan 01 10:54:54 2010 TOOL SERIES: 1426XA ASSET: 457 SEQ: J1

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K DA856	26.13	170.31	1.283	33.53	218.53	185.00

Verification File: C:\cass\calver\GR\457J1.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Wed Jun 03 11:16:29 2009 TOOL SERIES: 1426XA ASSET: 457 SEQ: J1

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K DA857	58.04	262.81	0.912	52.96	239.80	186.84

RALSHP

Shop Calibration: C:\cass\calver\RALSHP\538J1.shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sat Dec 12 10:31:46 2009 TOOL SERIES: 1426XA ASSET: 539 SEQ: J1

Tool Delay [usec]	Tank OD in	Tank Wt lbm/ft	Tank ID in
-58.00	5.50	15.50	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	220	216	25	166	25	0.216	100.00	0.24
3 Ft. Receiver	220	216	25	148	25	0.158	100.00	0.24
5 Ft. Receiver	328	332	25	212	25	0.114	150.00	0.26
Radial #1	220	216	25	83	41	0.033	100.00	0.24
Radial #2	220	216	25	83	41	-0.410	100.00	0.24
Radial #3	220	216	25	83	41	-0.140	100.00	0.24
Radial #4	219	216	25	83	41	0.096	100.00	0.24
Radial #5	220	216	25	83	41	-0.367	100.00	0.24
Radial #6	218	216	25	83	41	0.044	100.00	0.24
Radial #7	217	216	25	83	41	0.144	100.00	0.24

Radial #8	220	216	25	83	41	-0.404	100.00	0.24
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RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\539.11 fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sat Dec 12 10:33:22 2009 TOOL SERIES: 1426XA ASSET: 539 SEQ: J1

Tool Delay [usec] -58.00 Casing OD in 4.50 Casing Wt lbm/ft 15.10 Casing ID in 3.83

RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	188	25	0.052	0.000	1.00	100.000
3 Ft. Receiver	198	25	-0.212			
5 Ft. Receiver	314	25	0.915			
Radial #1	198	25	-0.128			
Radial #2	198	25	-0.221			
Radial #3	198	25	-0.116			
Radial #4	198	25	-0.101			
Radial #5	198	25	-0.202			
Radial #6	198	25	-0.205			
Radial #7	198	25	-0.191			
Radial #8	198	25	-0.176			

TOOL DIAGRAM

OTA SHORT CABLE HEAD

CENTRALIZER

Series RALCENT
Mnemonic CENT
Diameter 3.12"
Weight 20.00 lb



30.00'

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

CENTRALIZER

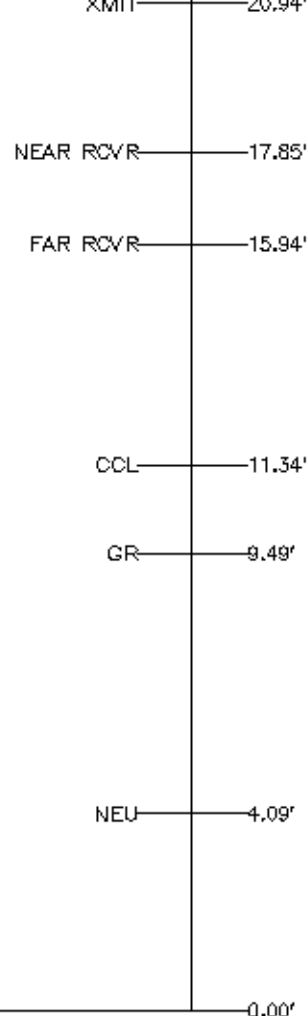
Series RALCENT
Mnemonic CENT
Diameter 3.12"
Weight 20.00 lb

Probe GR/CCL/NEU

Series 2459XA
Mnemonic PROB
Diameter 2.75"
Length 9.42'
Measure Point 1.21' NEU
Measure Point 6.60' GR
Measure Point 8.46' CCL

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

EXXONMOBIL PRODUCTION COMPANY

Well

PCU 297-11B8

Field

PICEANCE CREEK

County

RIO BLANCO

State

COLORADO

File No:

1562

API No:

05-103-11371-0000

Location

392° FSL & 490° FEL

Elevations

KB 7157.5 ft

DF 7156.5 ft

GL 7131 ft

SEC 11

TWP 2S

RGE 97W

CASE

Baker Atlas