



# RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: EXXONMOBIL PRODUCTION COMPANY

CHC38003 PCU 296-5A7

Well PICEANCE CREEK

API No. RIO BLANCO State COLORADO

06103112430000

Location:

SHL: 707' PUL & 533' PUL

Other Services

RPM

SEC: 5 TWP: 25 RGE: 98W

G.L. Elevation 7308 ft

K.B. 30.2 ft Above P. D.

KELLY BUSHING

Elevations

KB 7338.2 ft

DF 7338.2 ft

GL 7308 ft

Permanent Datum  
Log Measured From  
Orill Measured From

Date 17-JULY-2011

Run ONE

Service Order 575324

Depth Driller 13688 ft

Depth Logger 13586 ft

Bottom Logged Interval 13586 ft

Top Logged Interval 9880 ft

Time Started 03:00

Time Finished 07:00

Operator Rig Time 4 HRS

Type of Fluid in Hole WATER

Fluid Density N/A

Fluid Salinity N/A

Fluid Level FULL

Logged Cement Top N/A

Wellhead Pressure 0 psi

Maximum Hole Deviation N/A

Nominal Logging Speed 45 rpm

Maximum Recorded Temperature 288 degF

Reference Log N/A

Equipment Location 4271 CRWD JCT, CO

Recorded By TIM KAUFF

Witnessed By MR. JIM PETERSON

- 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		
8.125 in		

## Casing Record

Size	Weight	Grade	From	To
7 in	26 lbm/ft	P-110	SURFACE	9861 ft
4.5 in	15.1 lbm/ft	P-110	SURFACE	13754 ft

## Remarks

Short joints are marked on main log  
The crew of 4271 Thanks You.

## Equipment Data

Run	Trip	Tool	Series Number	Serial Number	Position
1	1	WIRELINE	1000001	1000001	WIRELINE

	1	WANDREL	1426XA	10154957	CENTRALIZED
1	1	GAMMA RAY	2456XA	10417457	CENTRALIZED

## MAIN SECTION

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	314.263	usec	5979.875	13613.000
RAL	Amp Gate Start Near	197.754	usec	5979.875	13613.000
RAL	Amp Gate Start Radial	197.754	usec	5979.875	13613.000
RAL	Amp Gate Width Far	25.000	usec	5979.875	13613.000
RAL	Amp Gate Width Near	25.000	usec	5979.875	13613.000
RAL	Amp Gate Width Radial	25.000	usec	5979.875	13613.000
RAL	casing od	4.500	inches	5979.875	13613.000
RAL	casing wt	15.100	lbm/ft	5979.875	13613.000
RAL	FB Start Far	289.263	usec	5979.875	13613.000
RAL	FB Start Near	172.754	usec	5979.875	13613.000
RAL	FB Start Radial	172.754	usec	5979.875	13613.000
RAL	FB Thresh Far	10.000	mv	5979.875	13613.000
RAL	FB Thresh Near	4.000	mv	5979.875	13613.000
RAL	FB Thresh Radial	4.000	mv	5979.875	13613.000
RAL	Fluid Travel Time	200.000	usec/ft	5979.875	13613.000

## DEPTH OFFSETS (for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-12.360	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	-11.360						
1426XA	-7.250	CCL					
1426XA	-5.390	GR					
1426XA	0.000	NEU					

Created by : RAL, v4.8.D07

Plotted by : PlotMgr, v5.4.5D4

Company : EXXONMOBIL PRODUCTION COMPANY

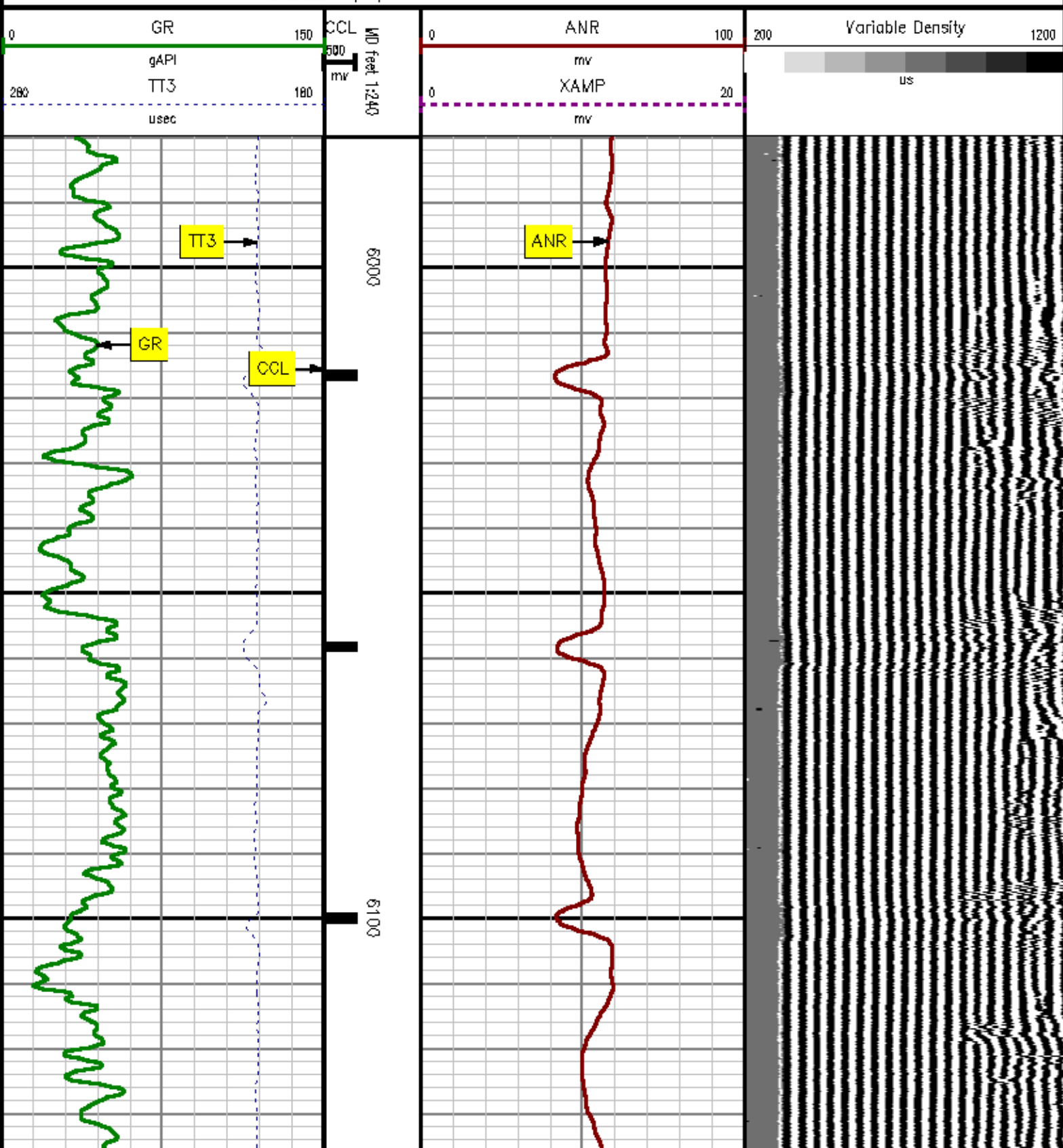
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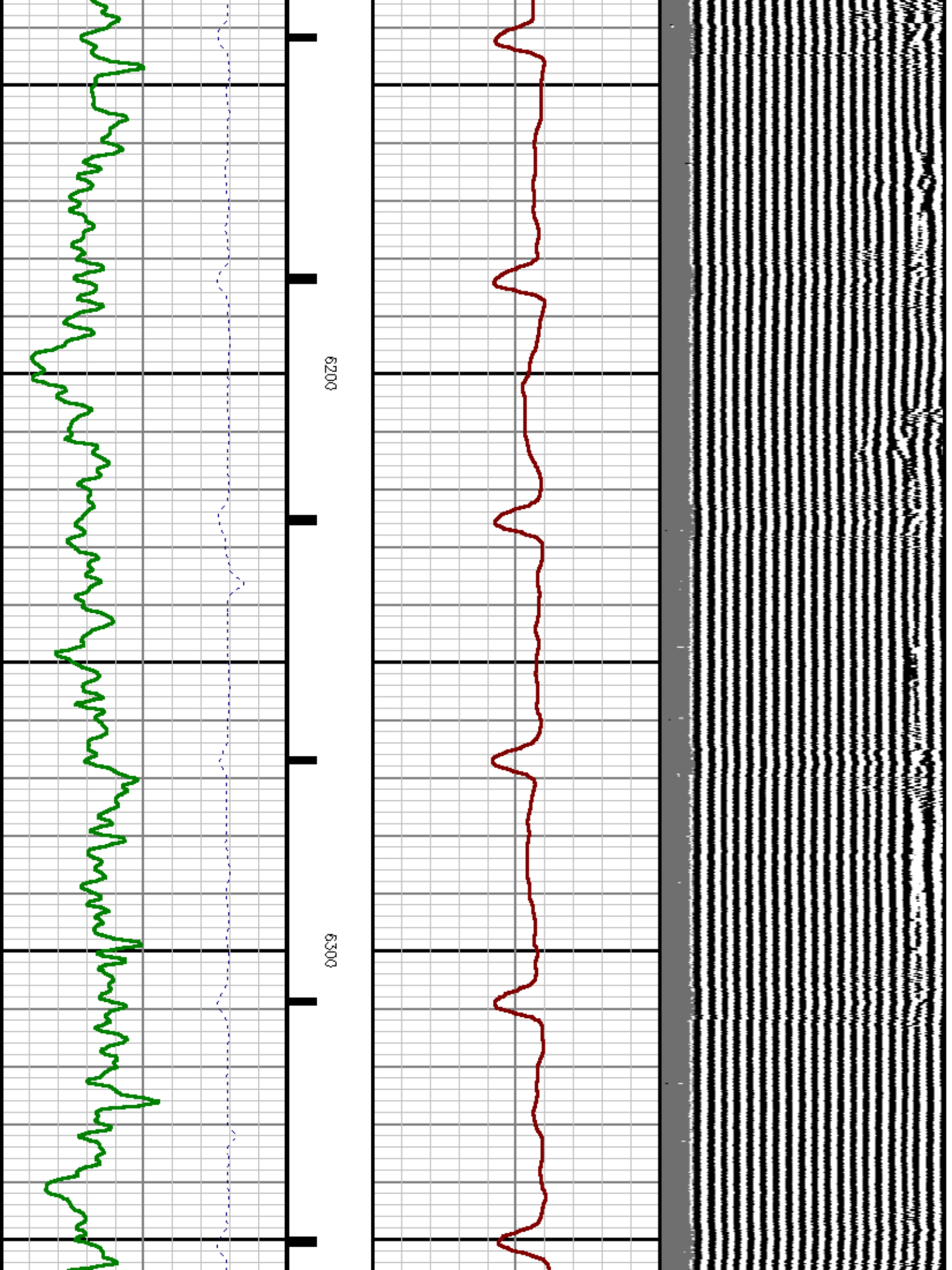
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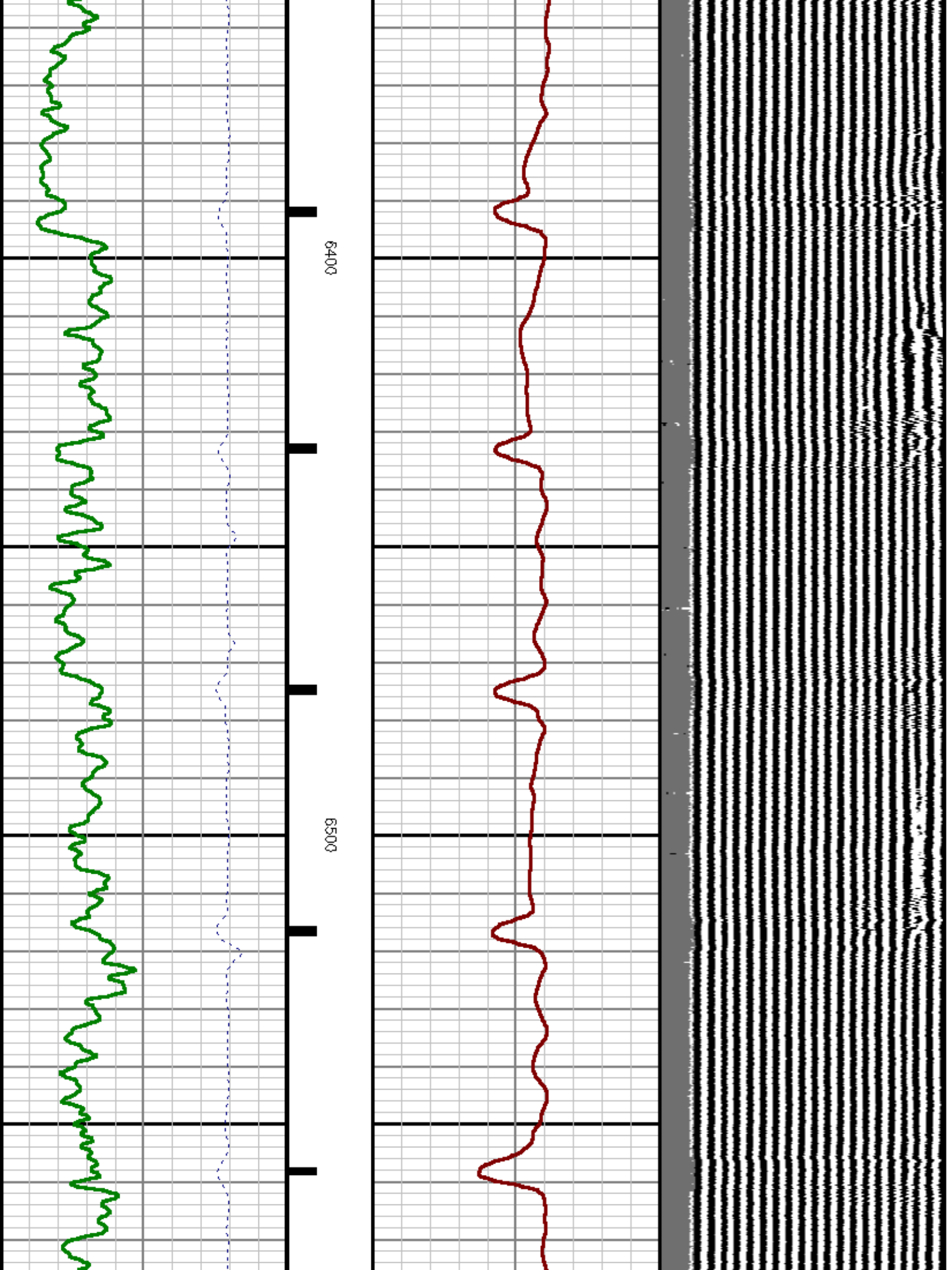
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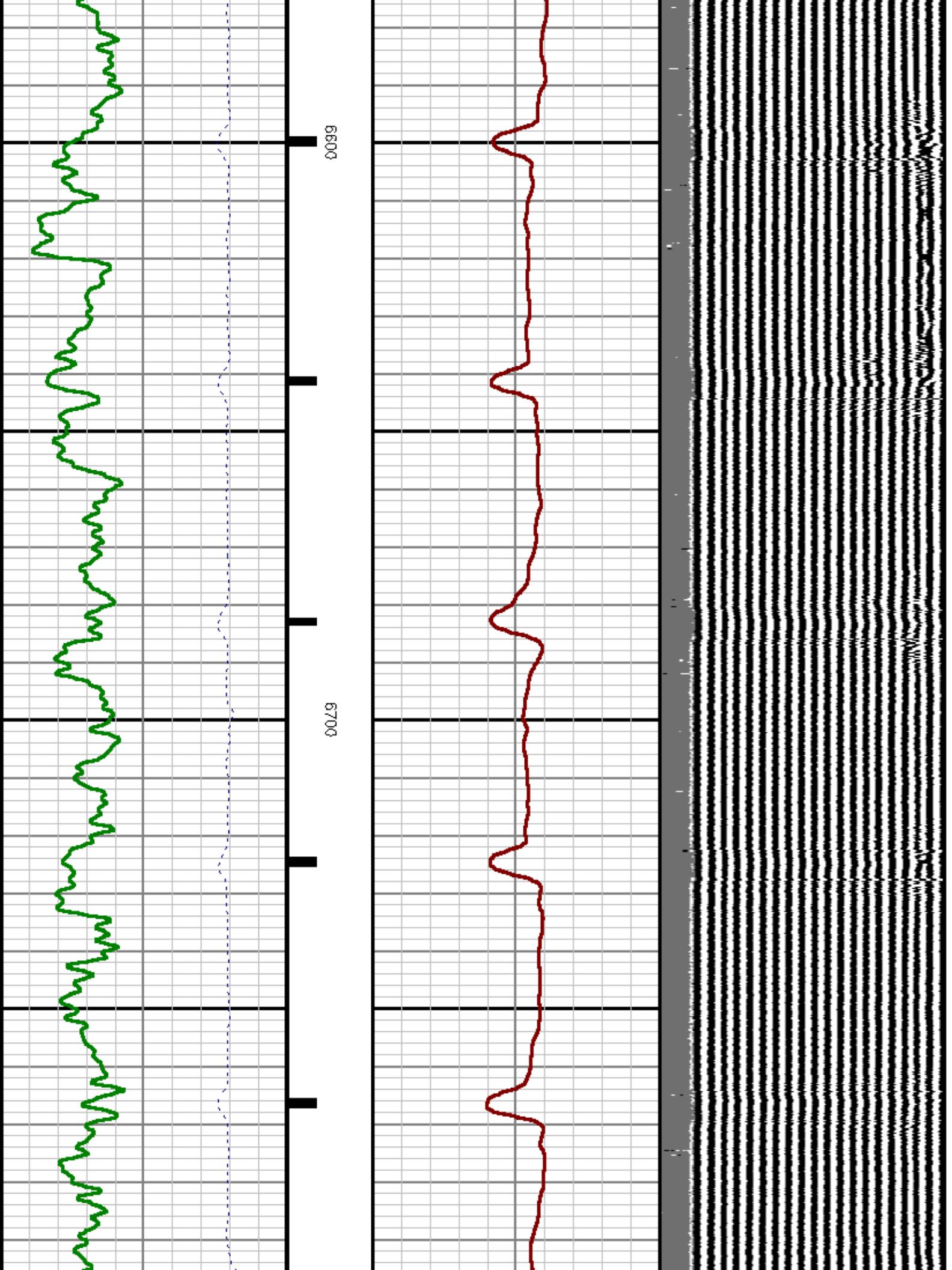
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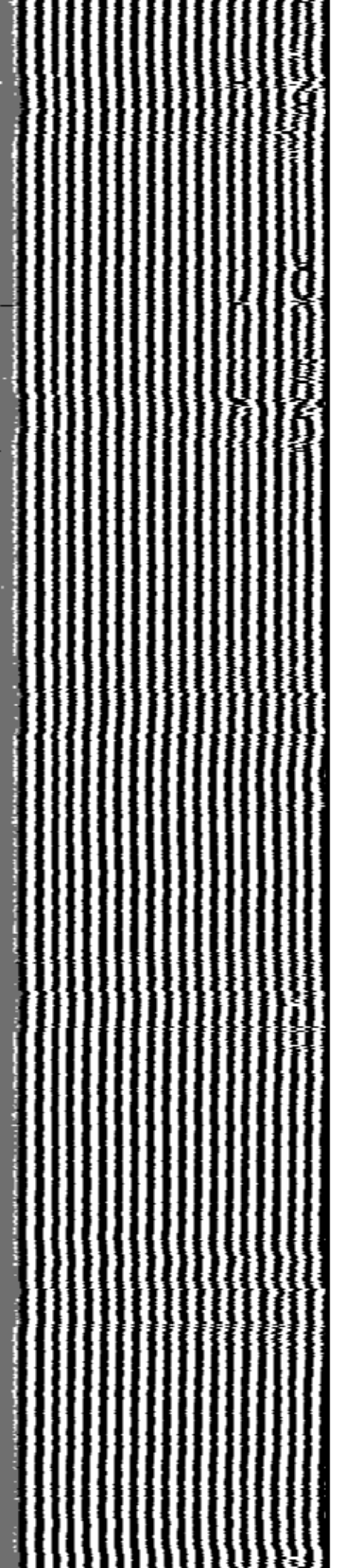
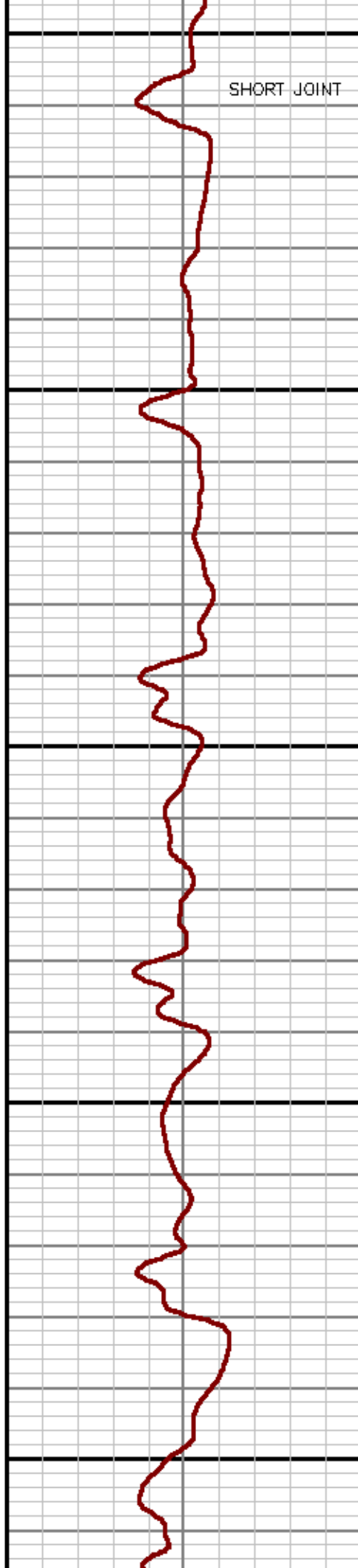
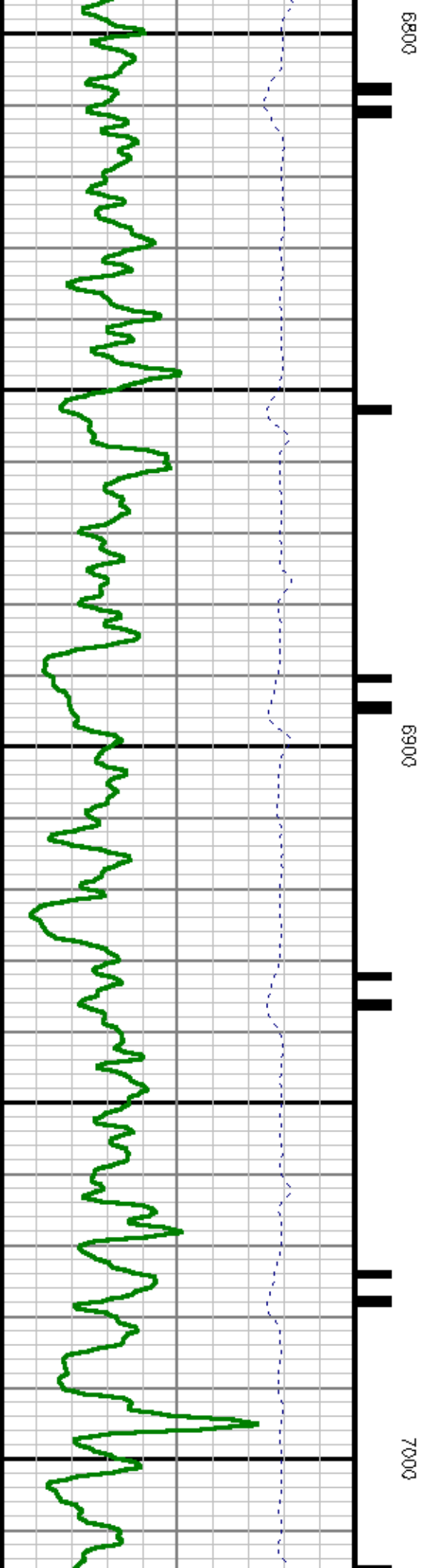


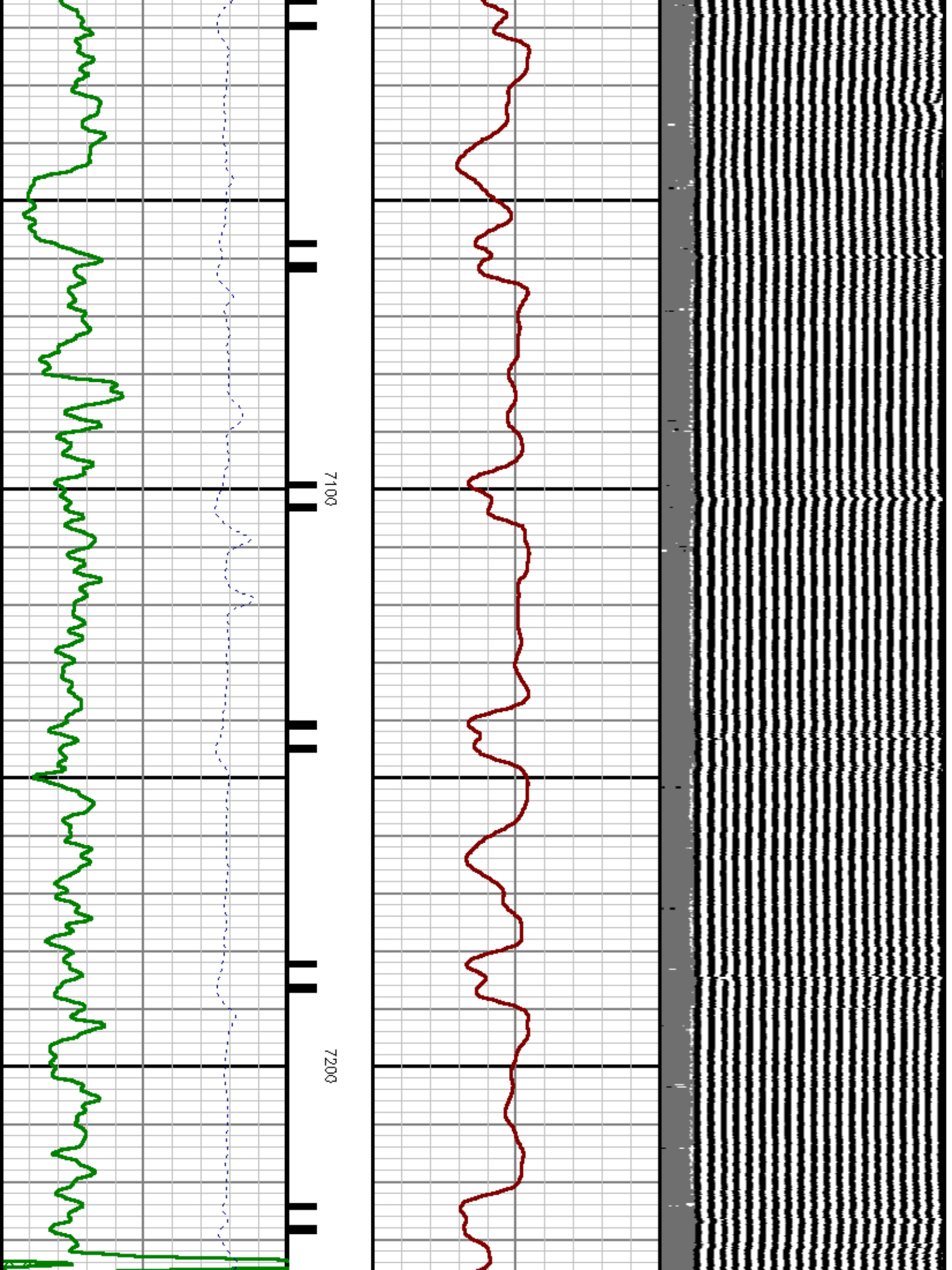




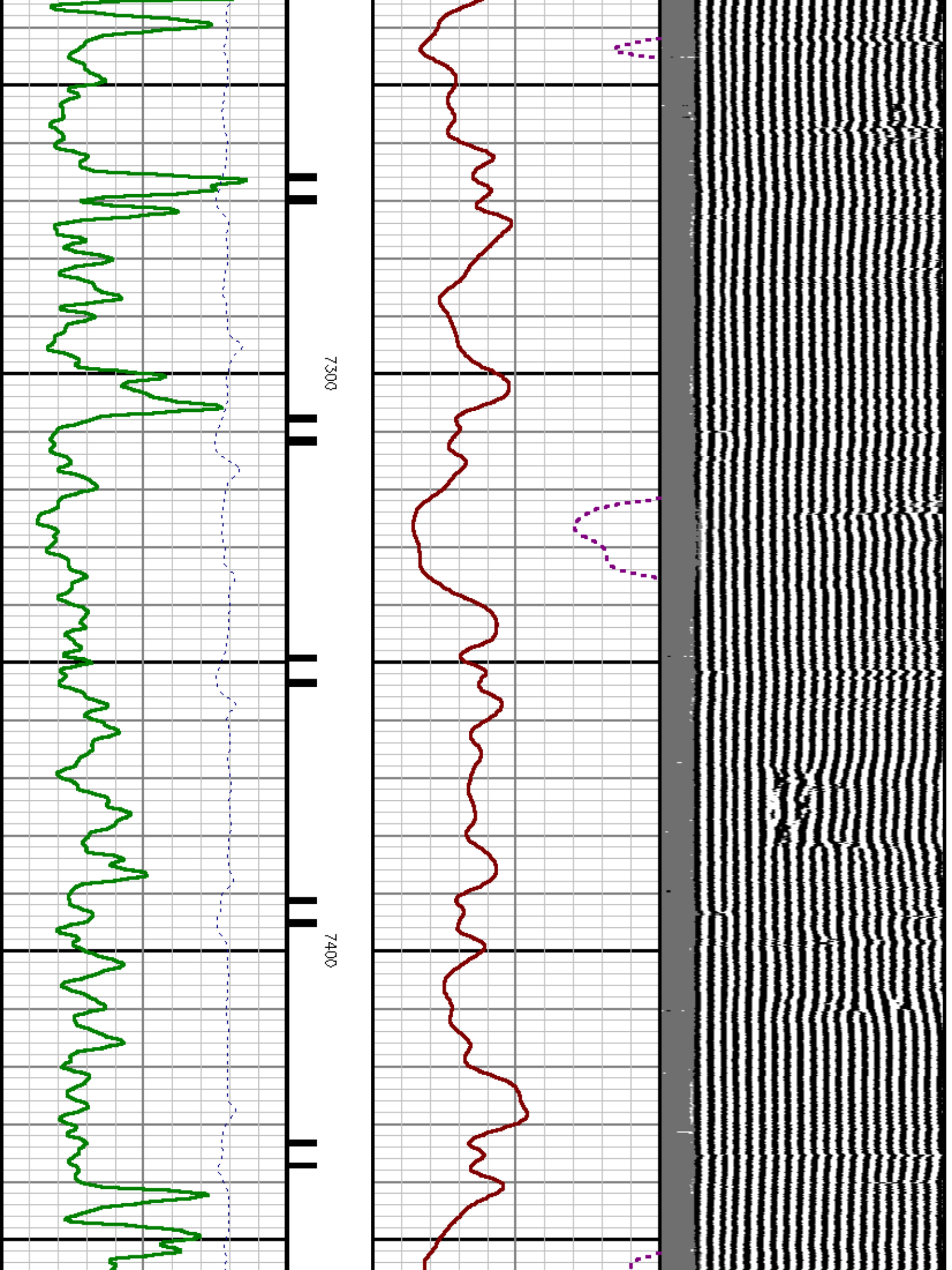


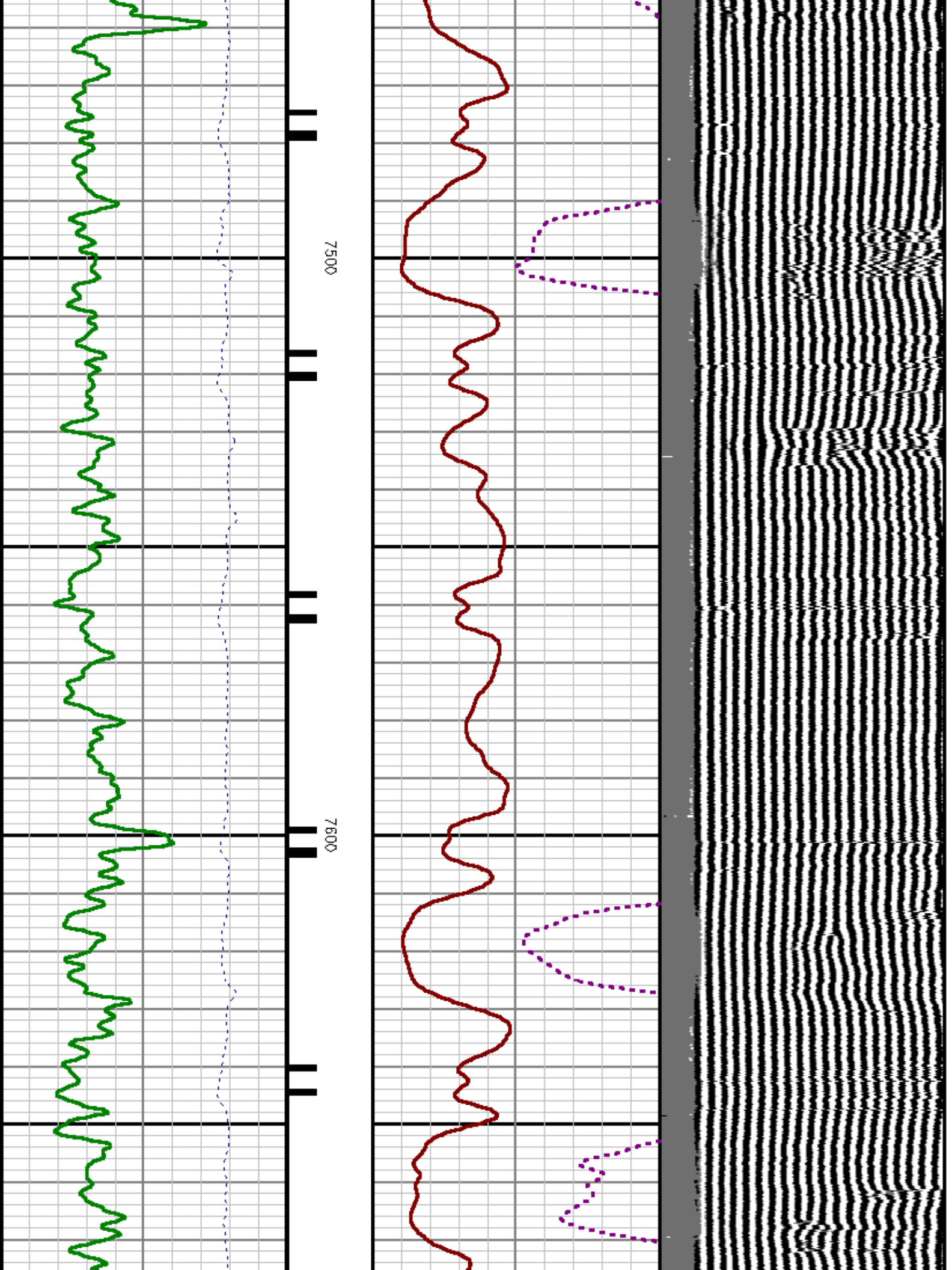


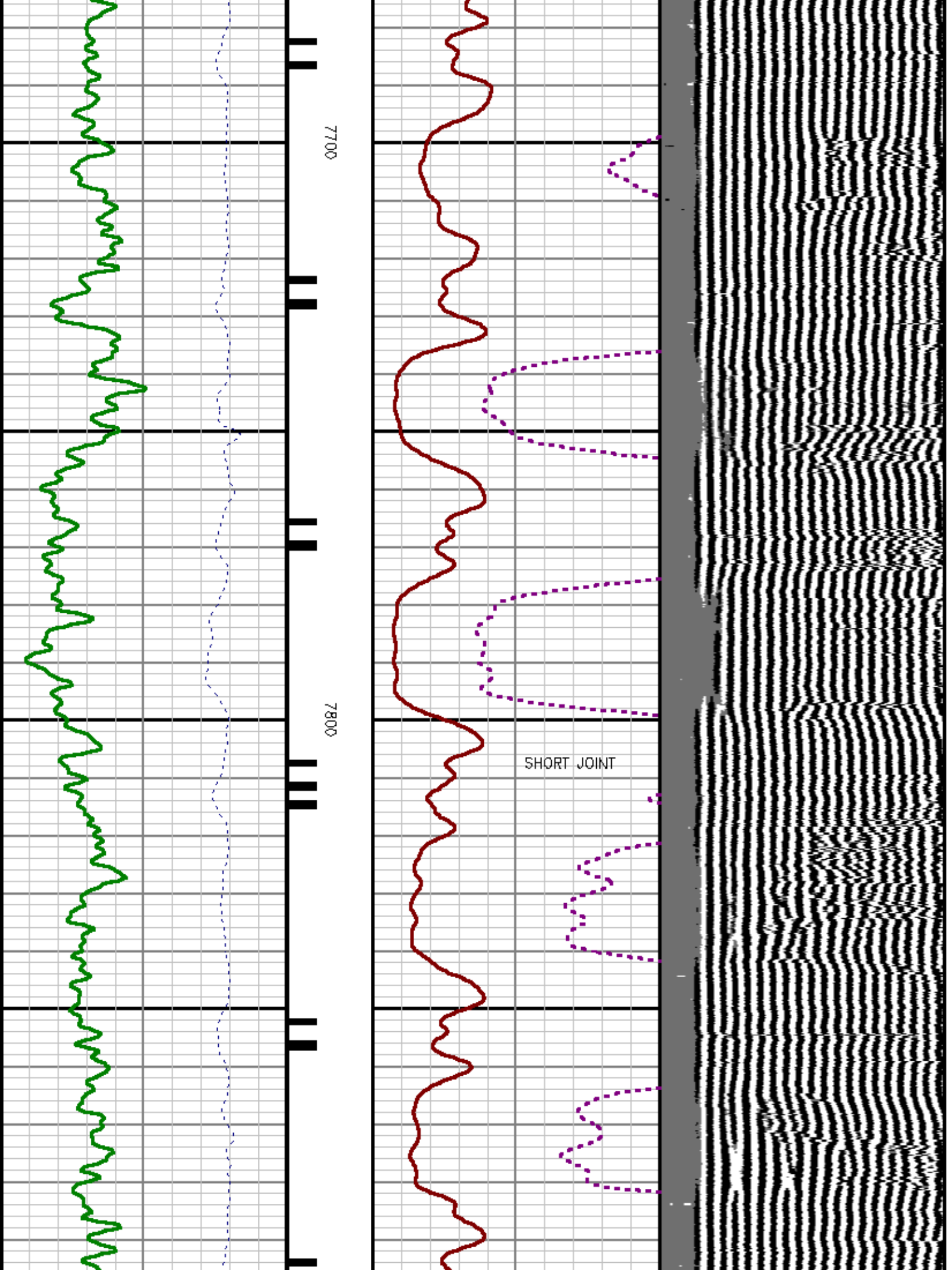




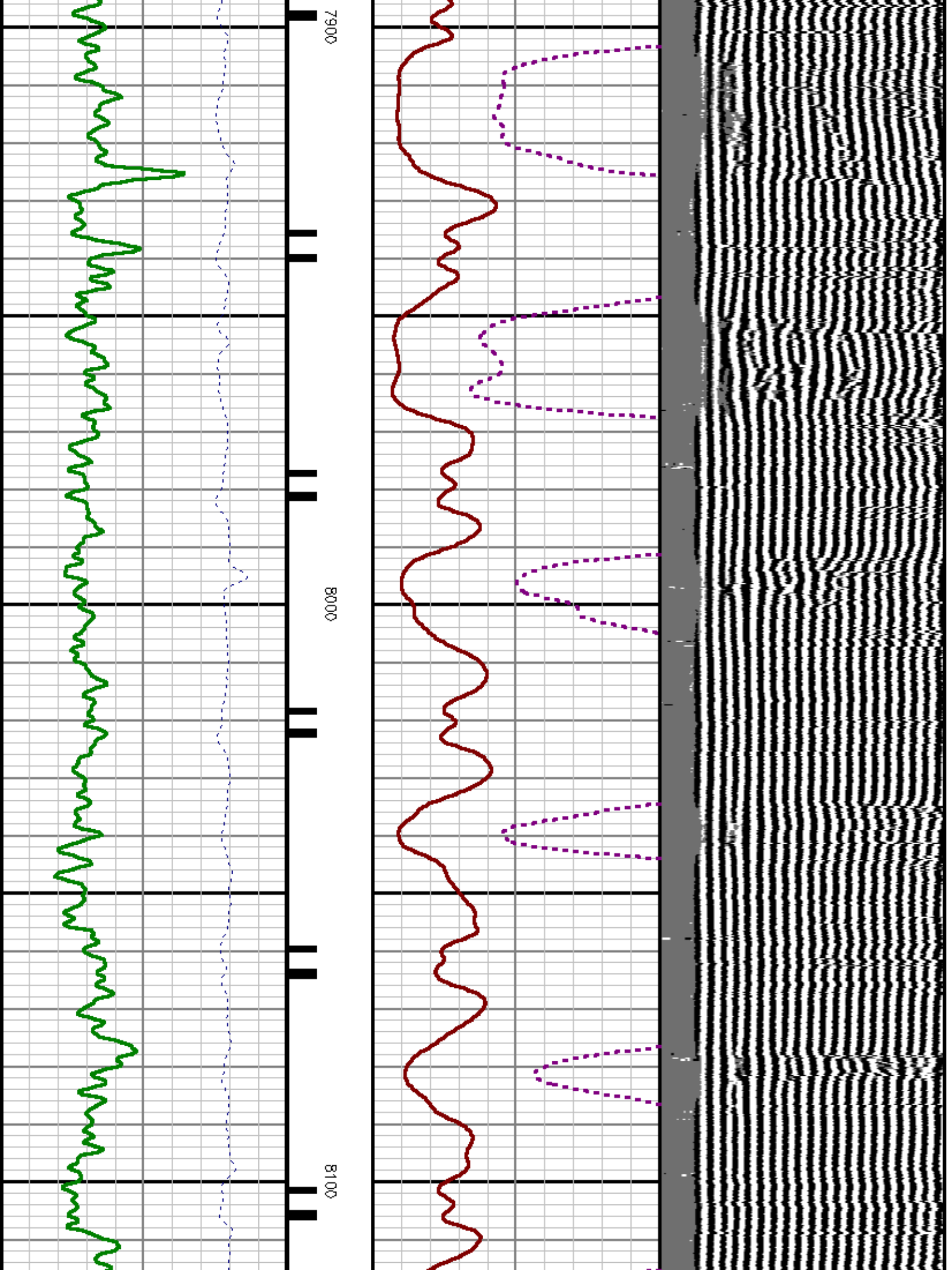


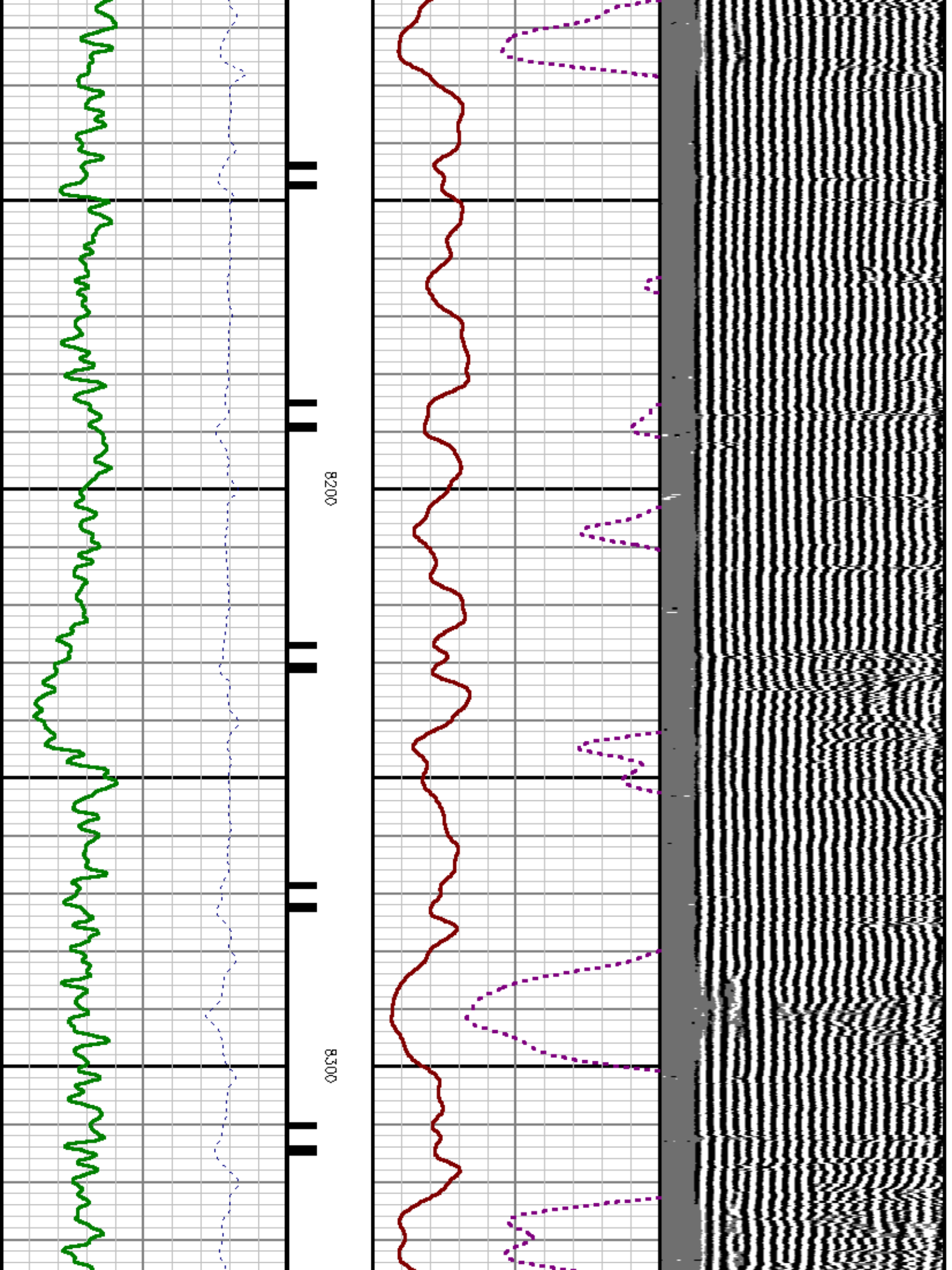




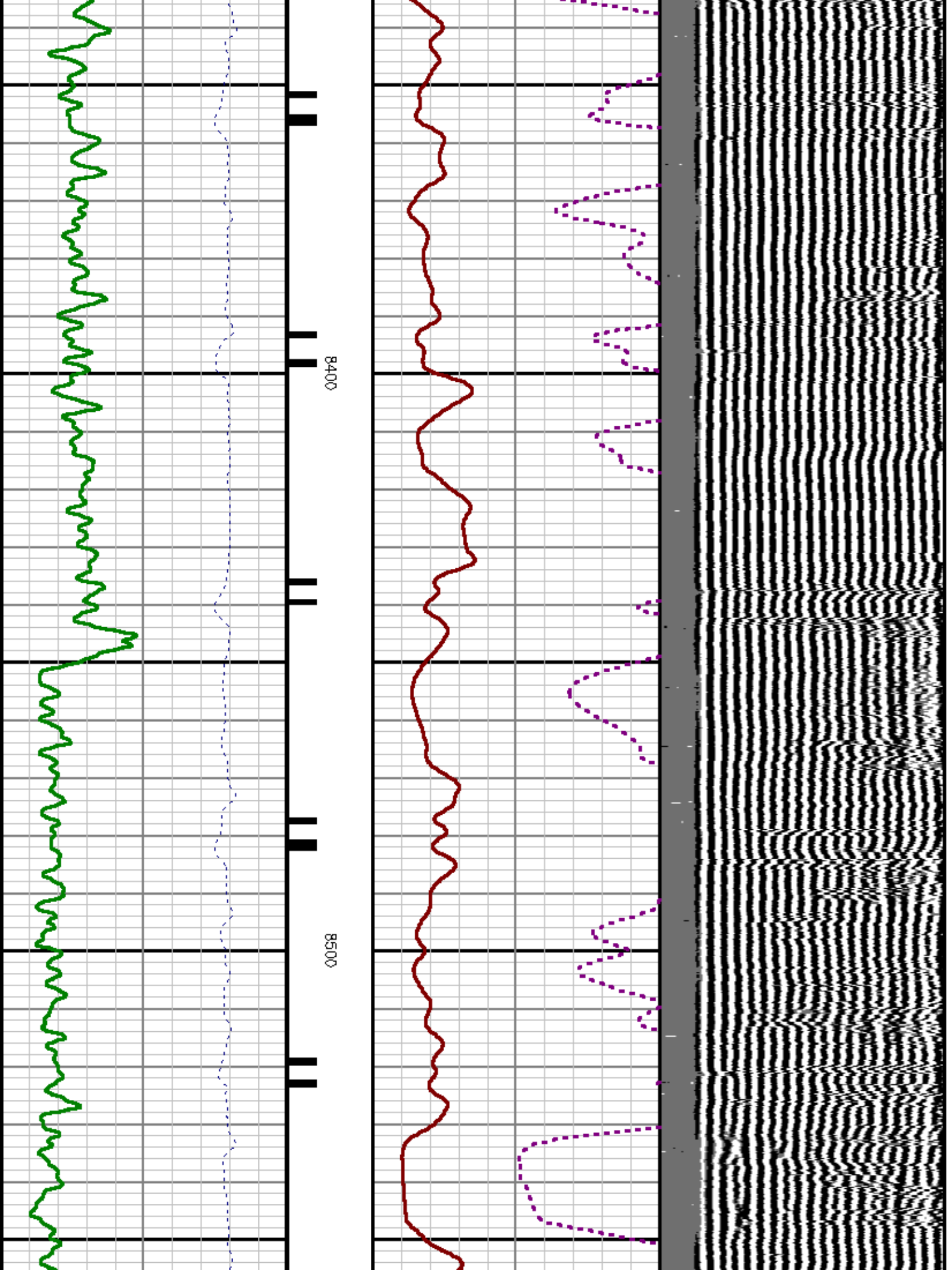


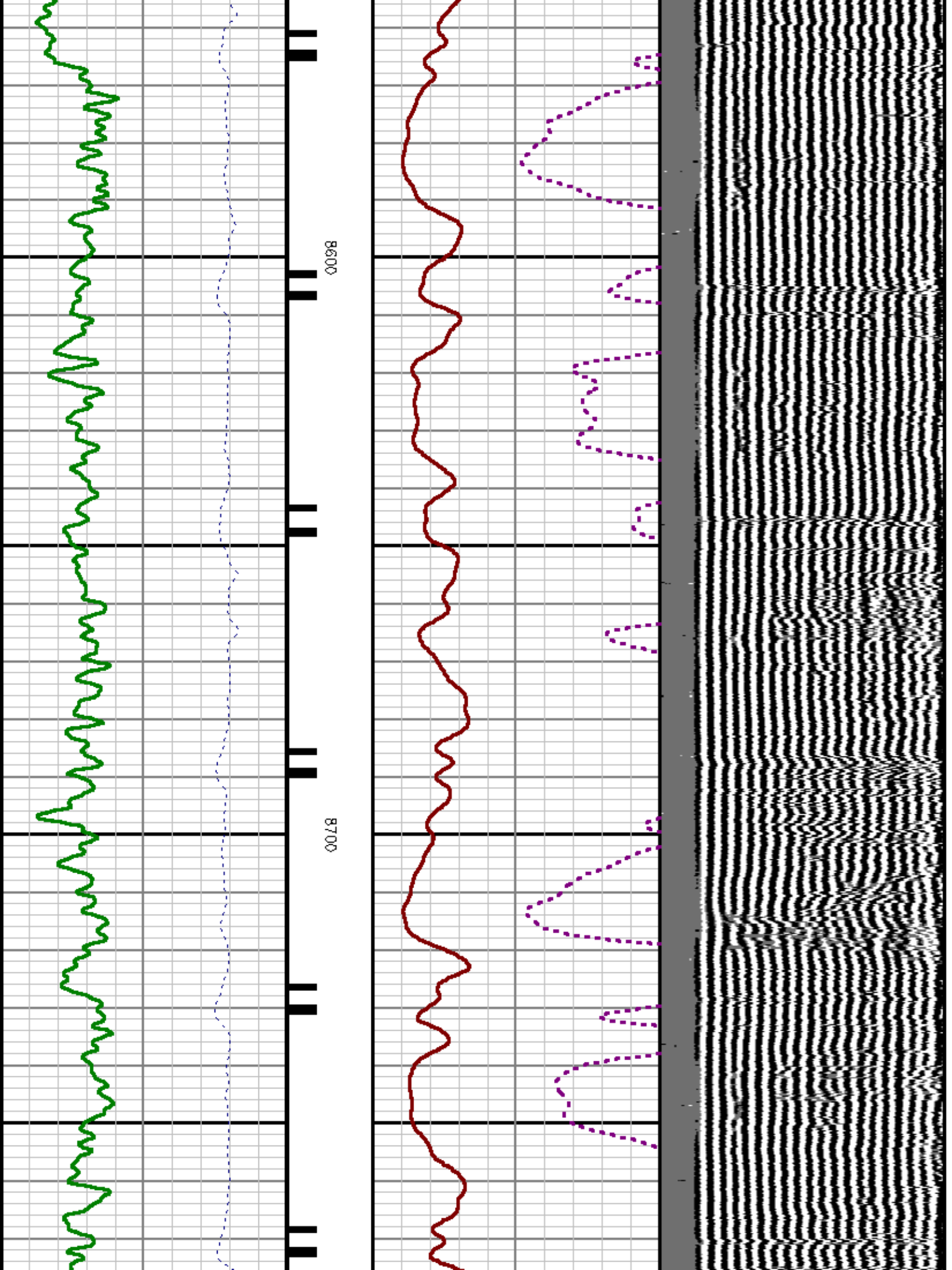


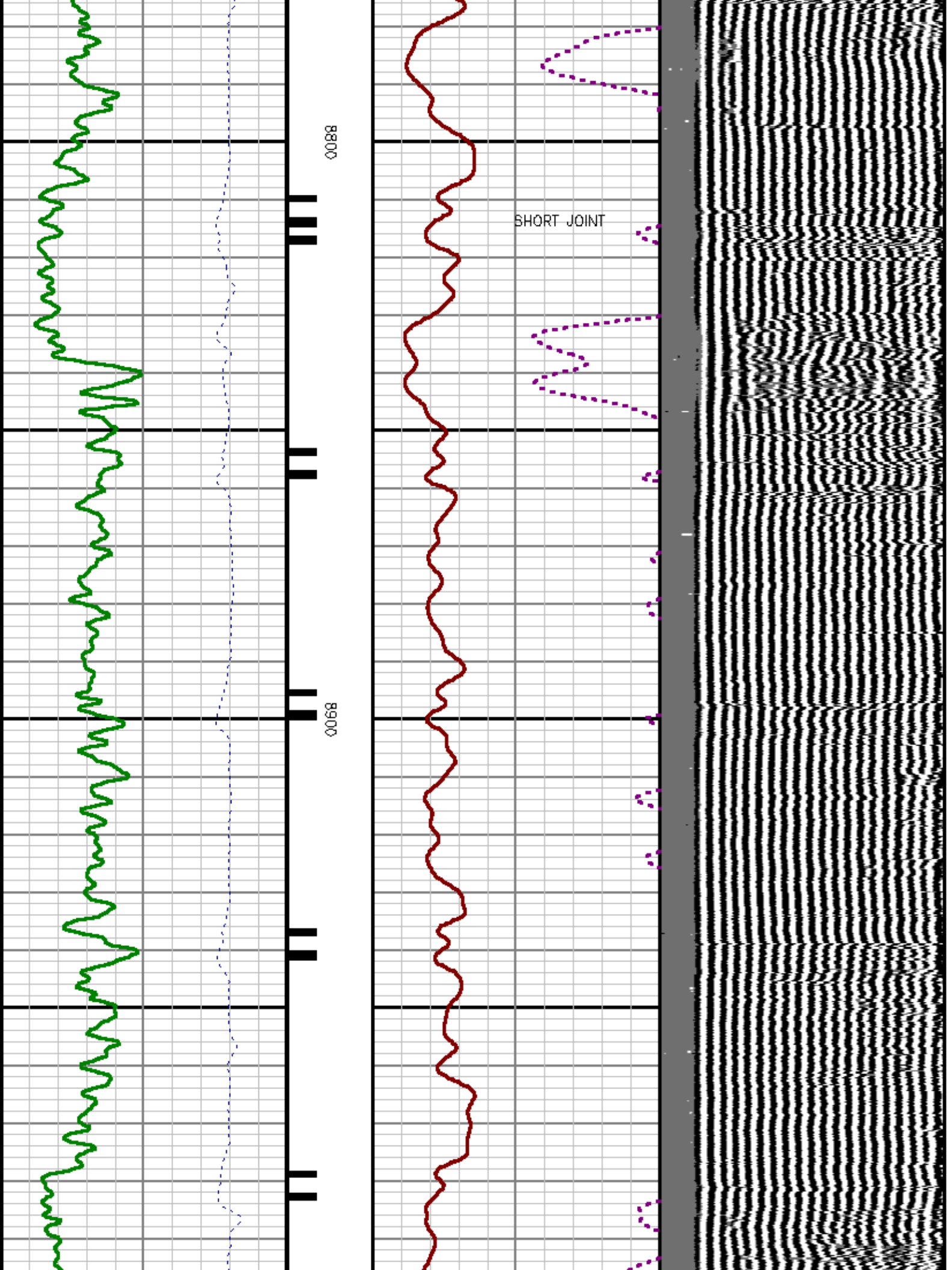




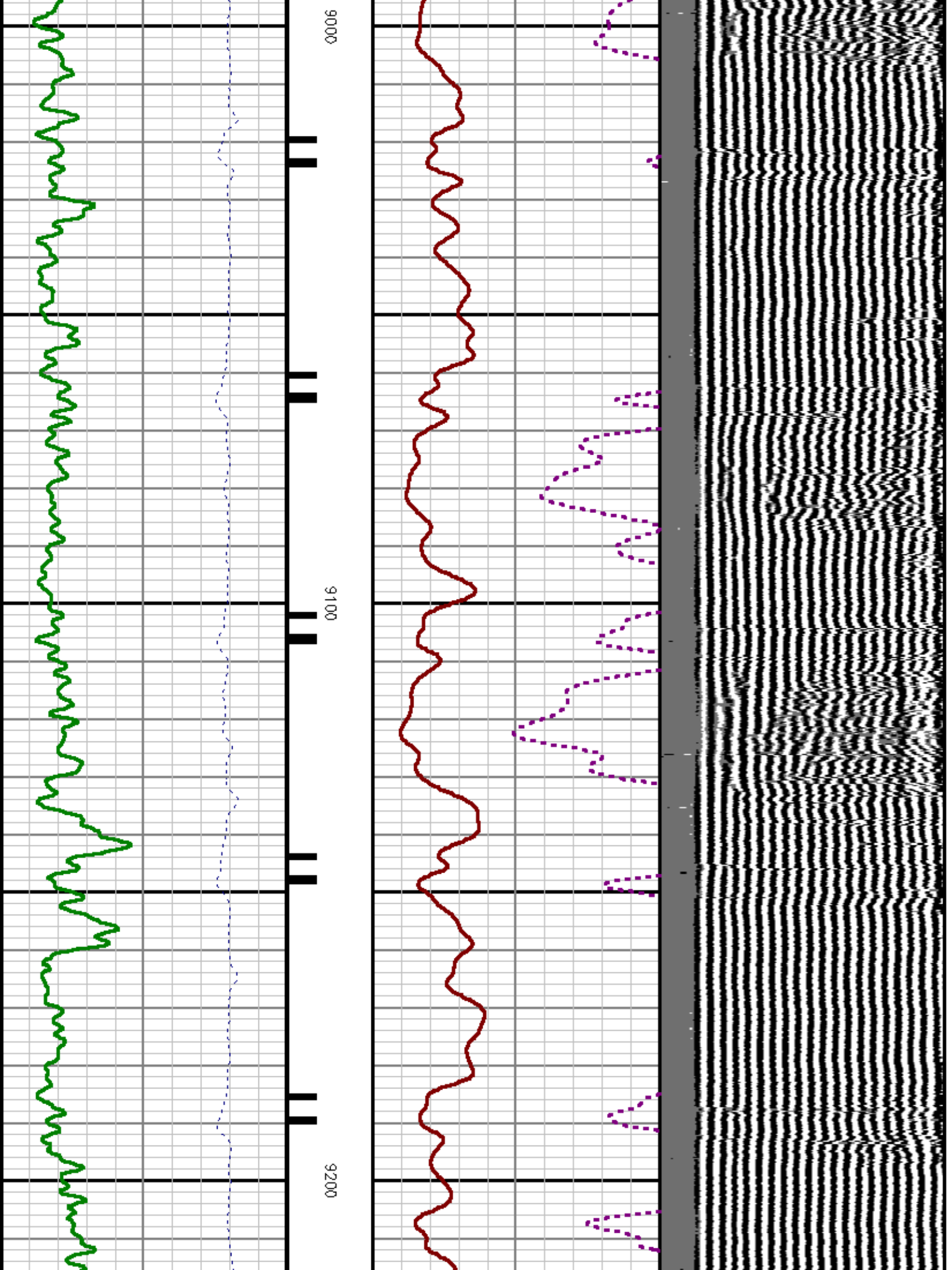


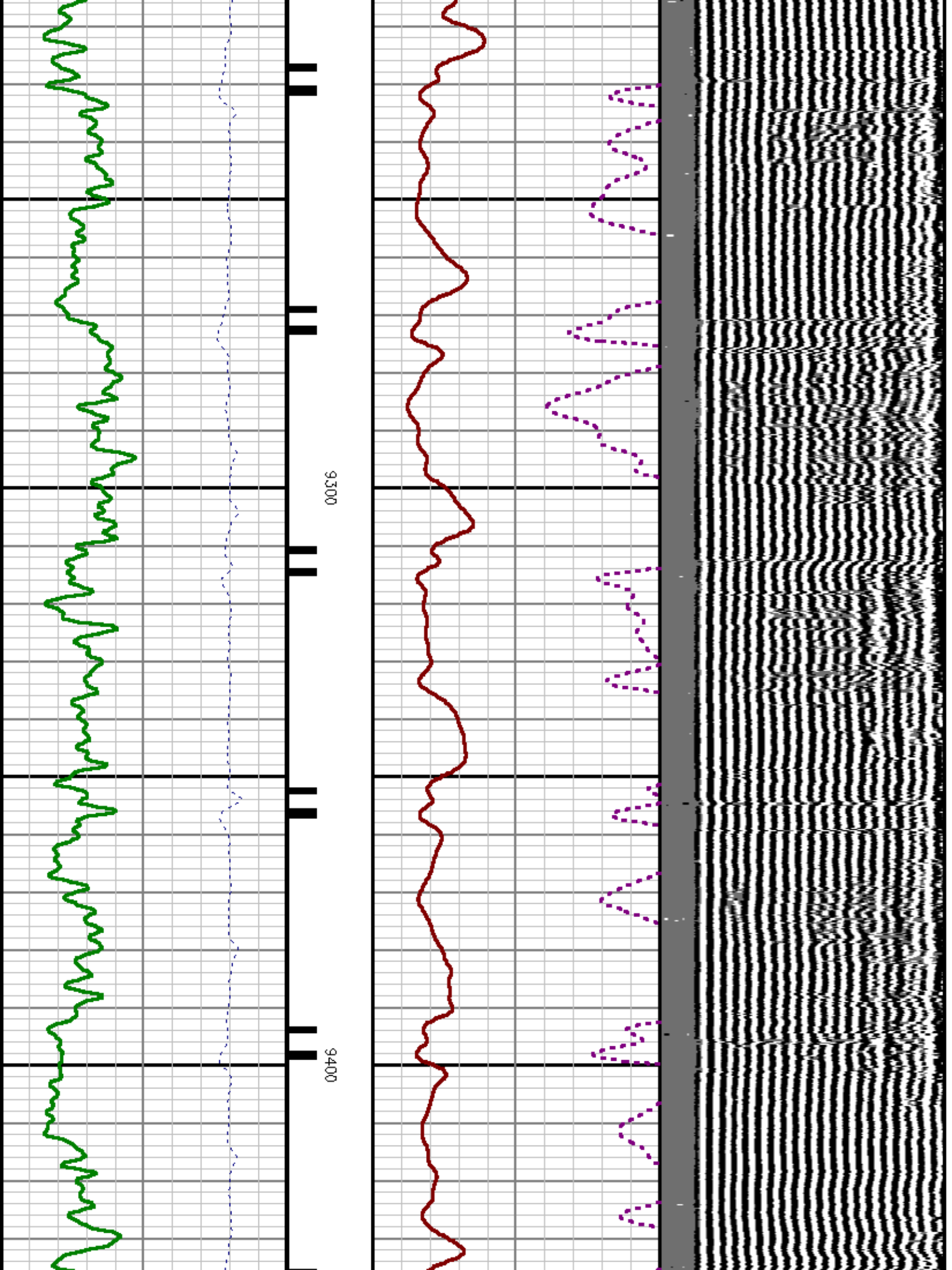




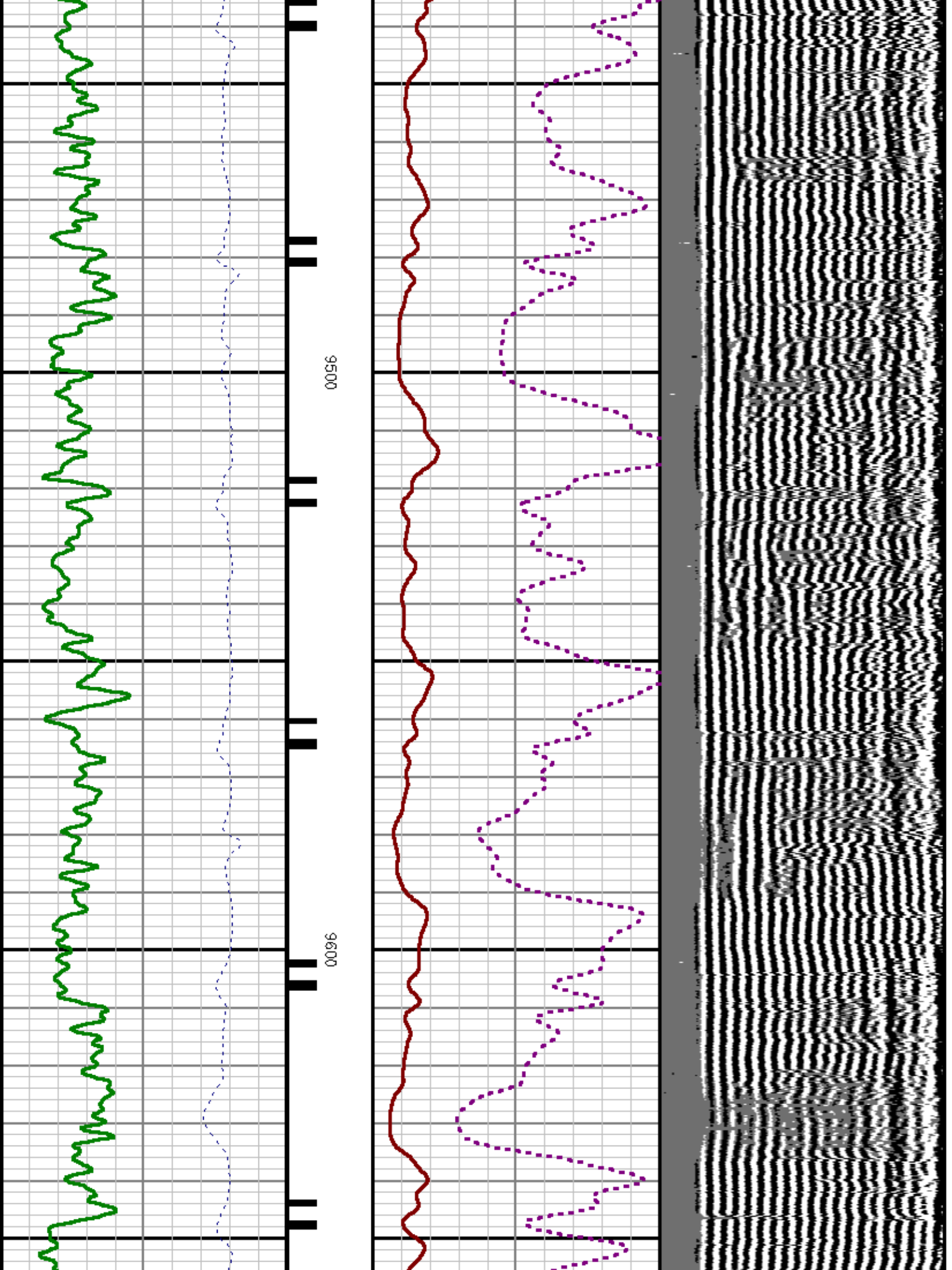


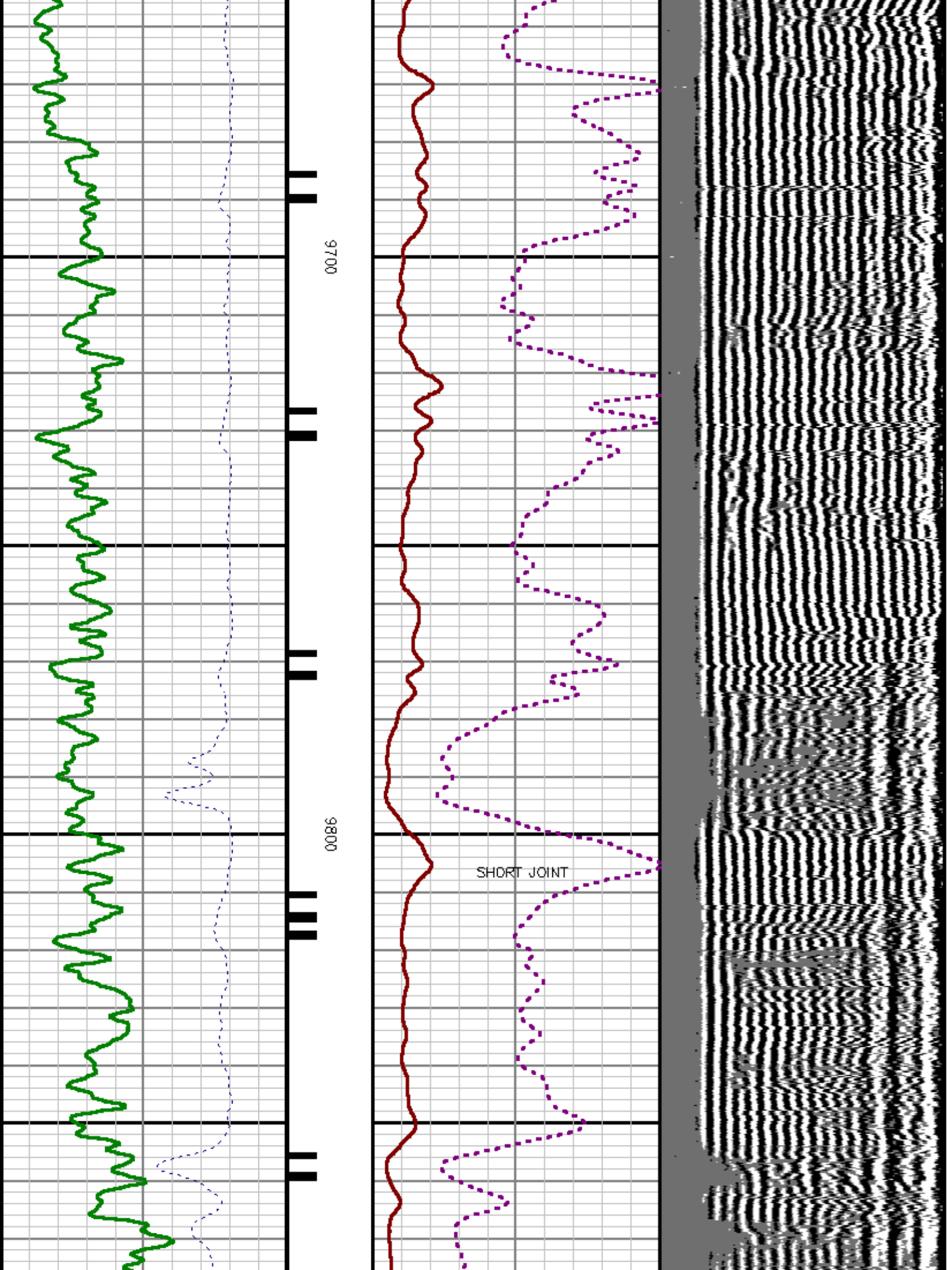


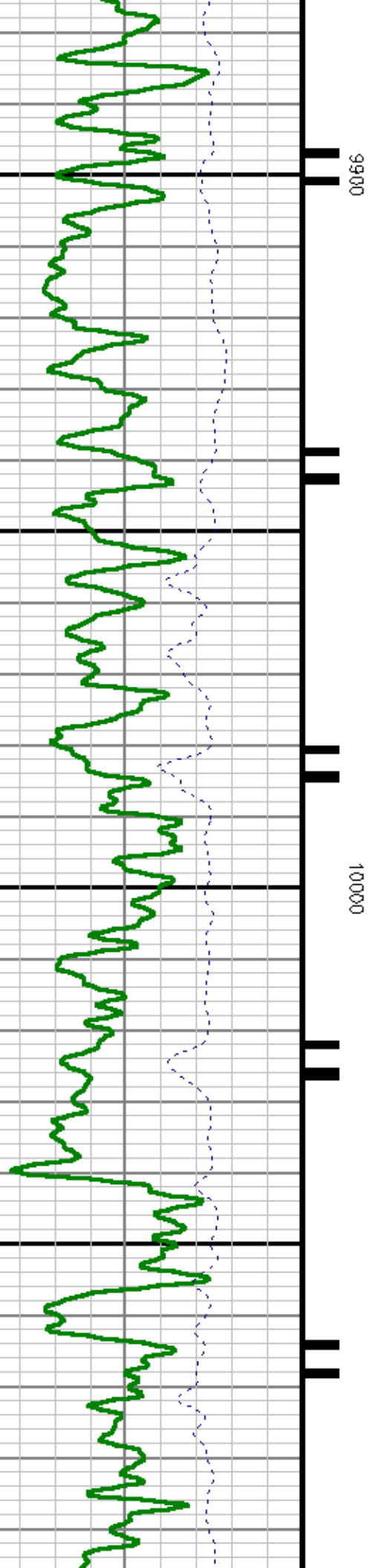
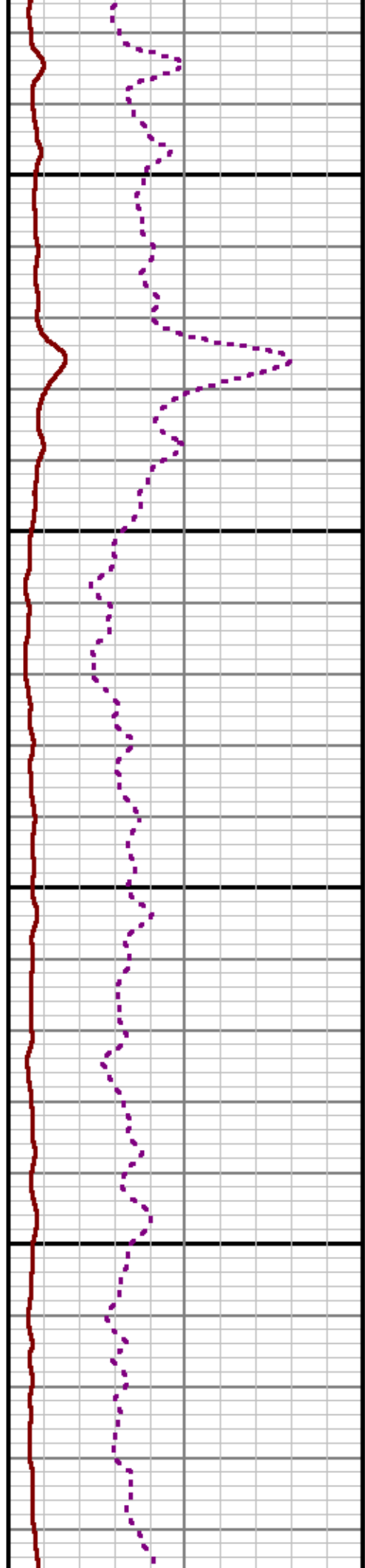
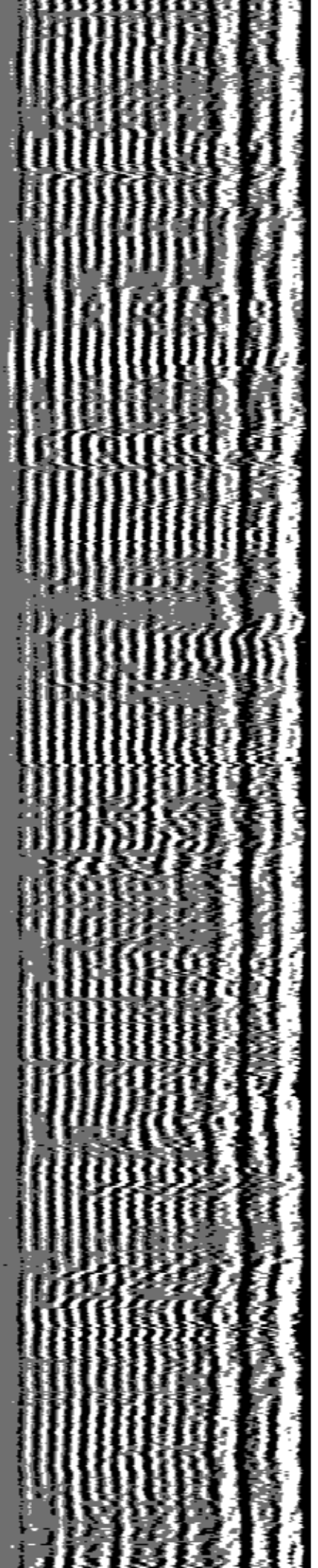




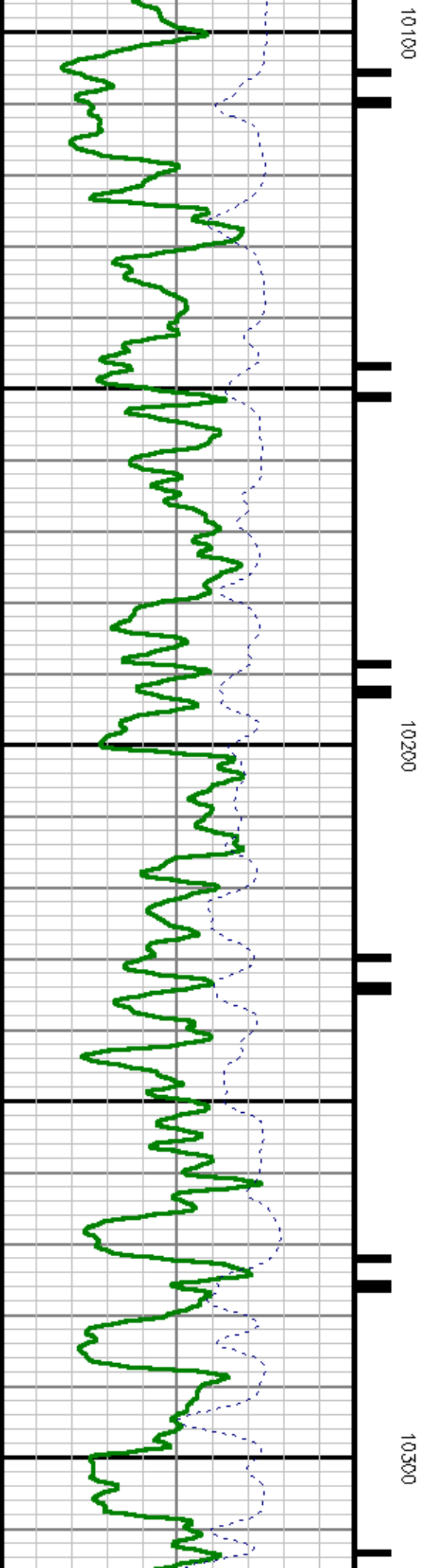
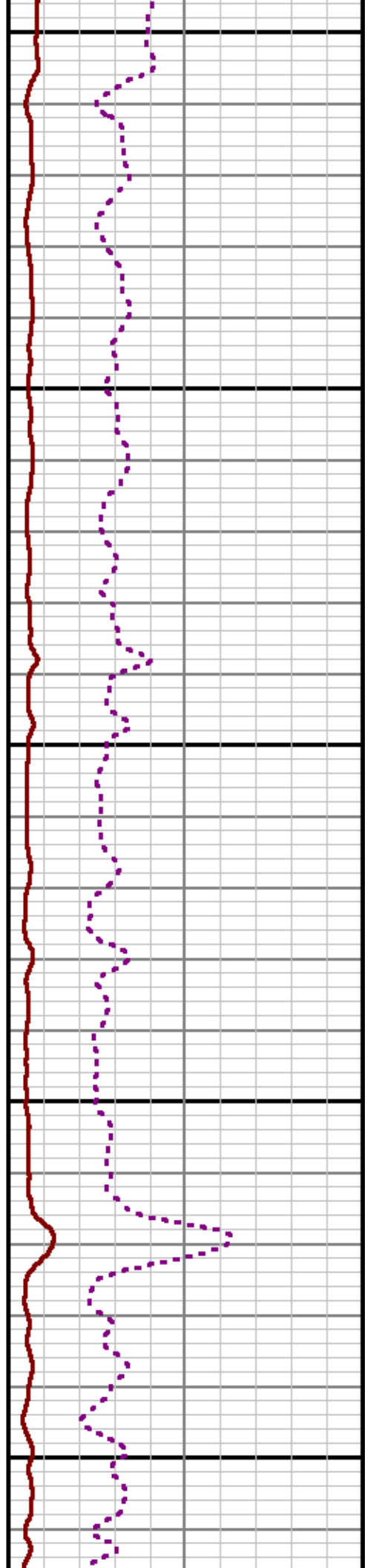
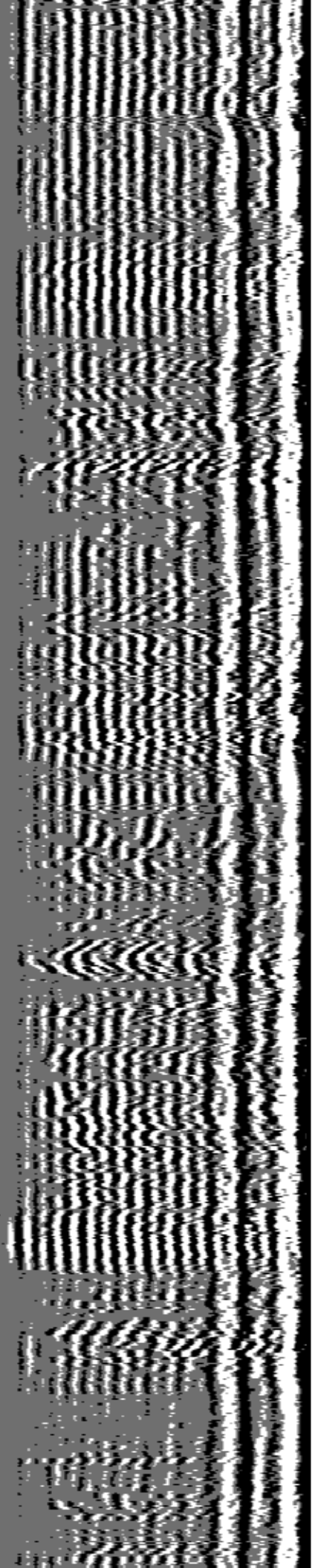


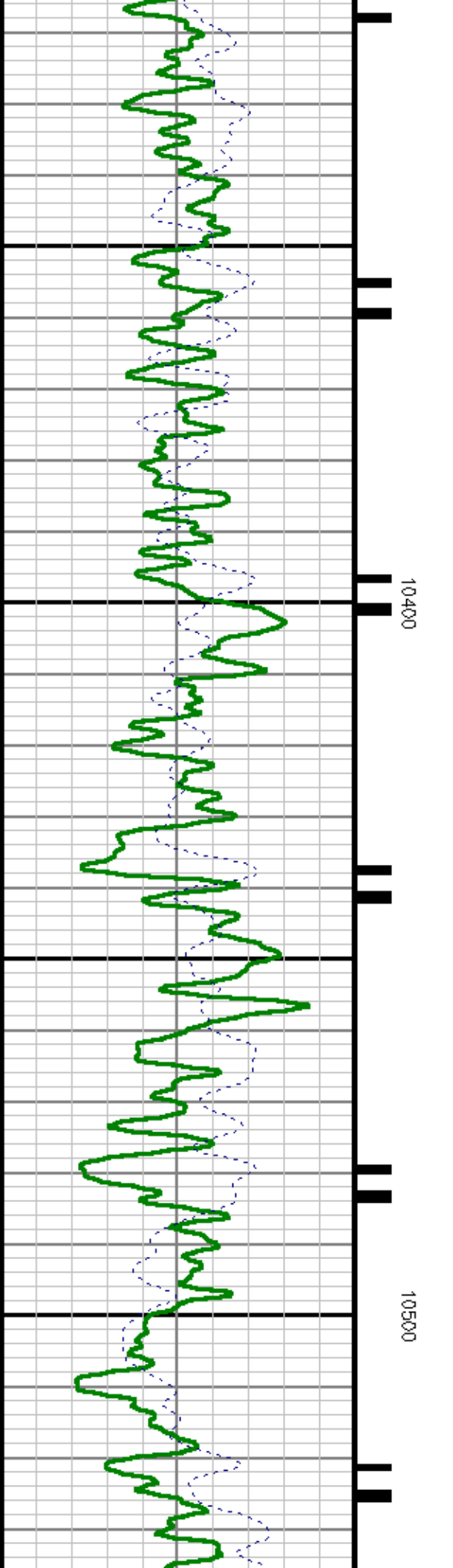
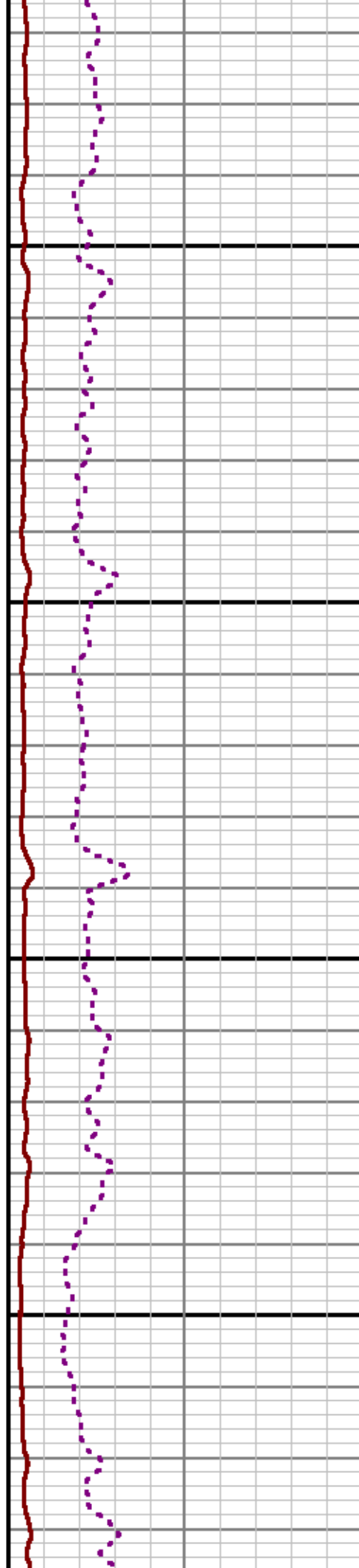
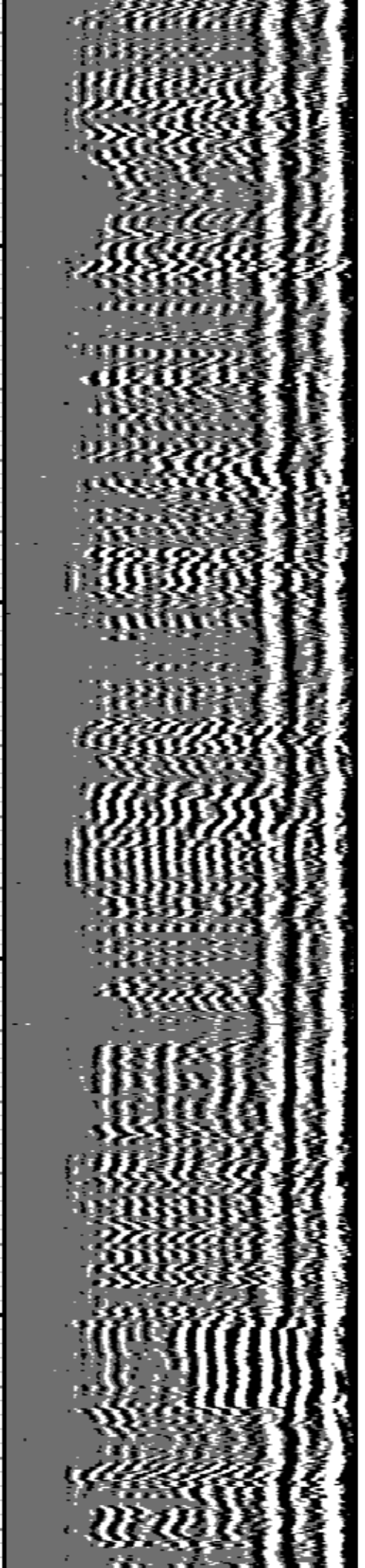




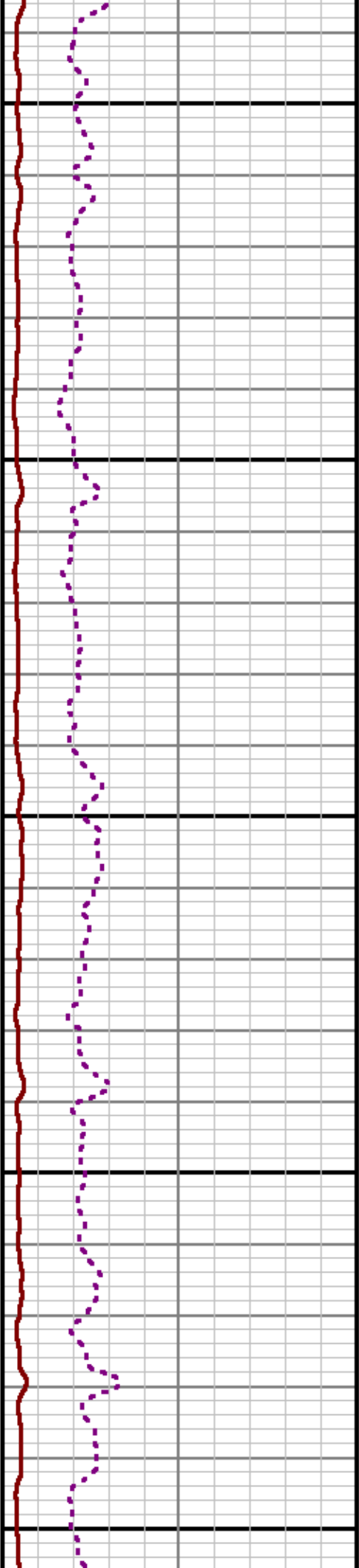
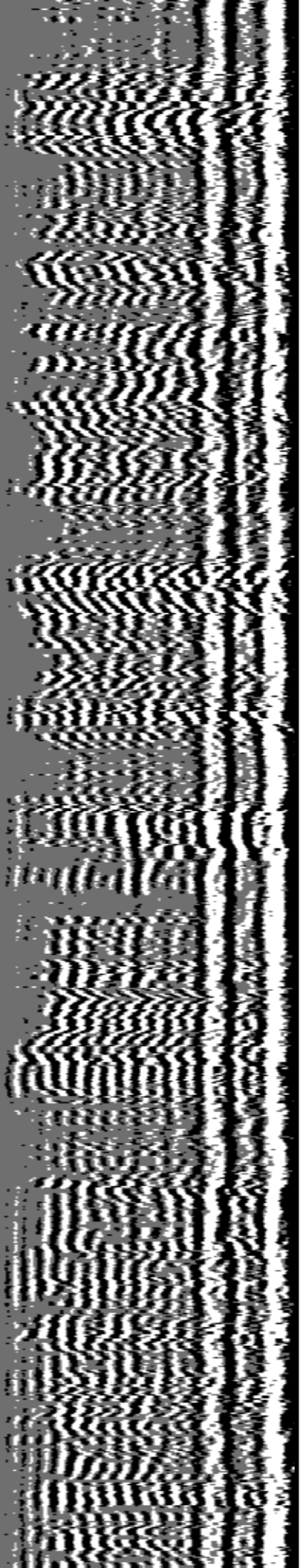


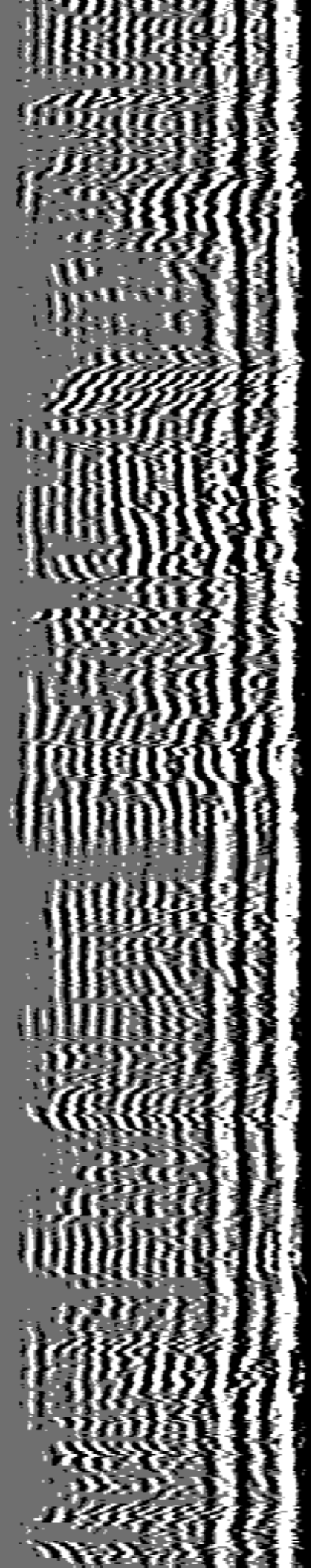








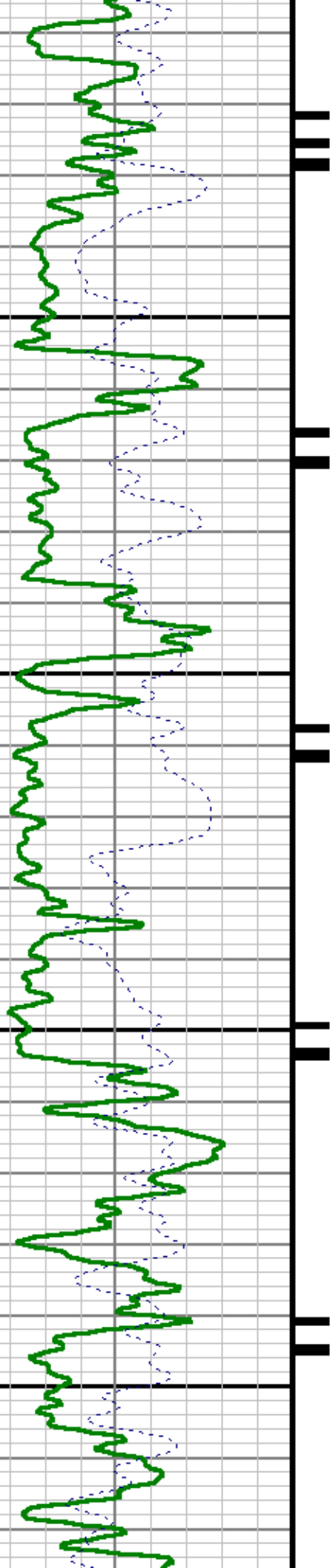


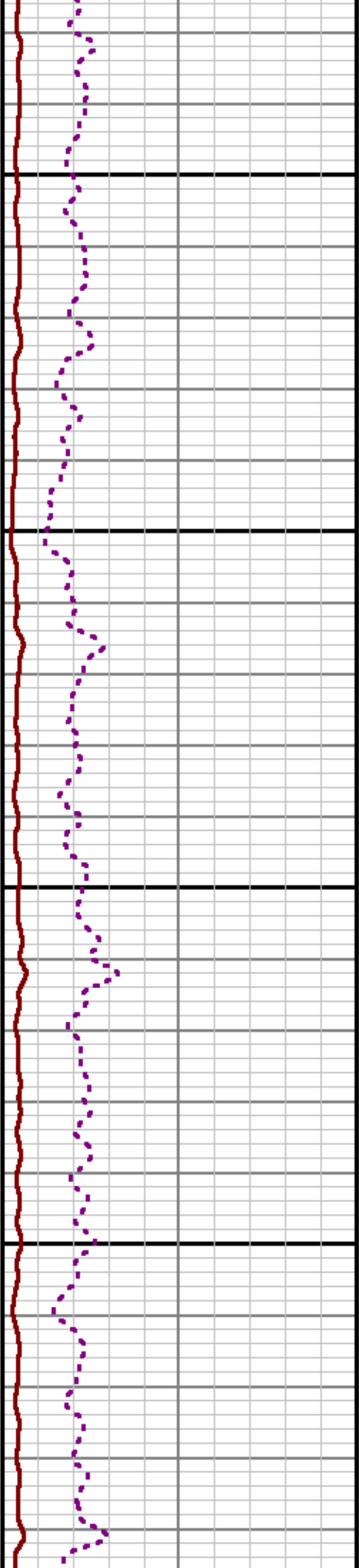
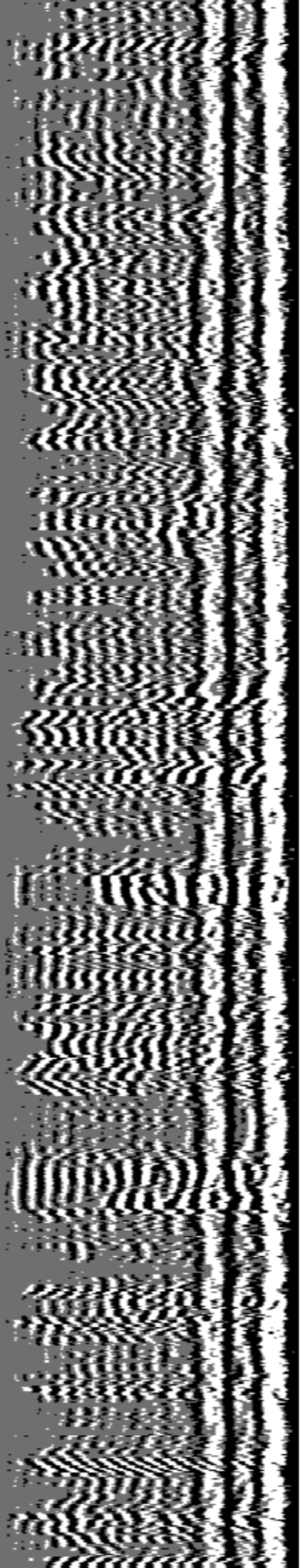


SHORT JOINT

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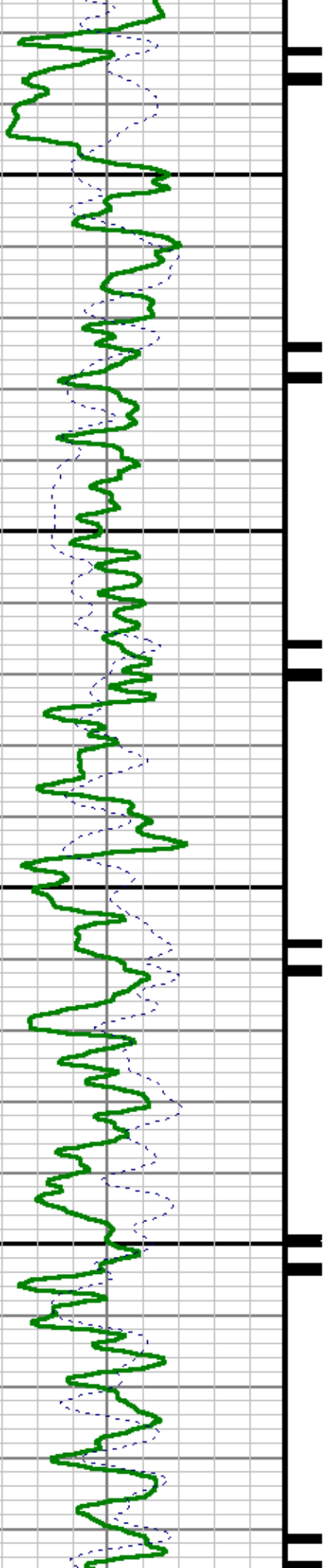
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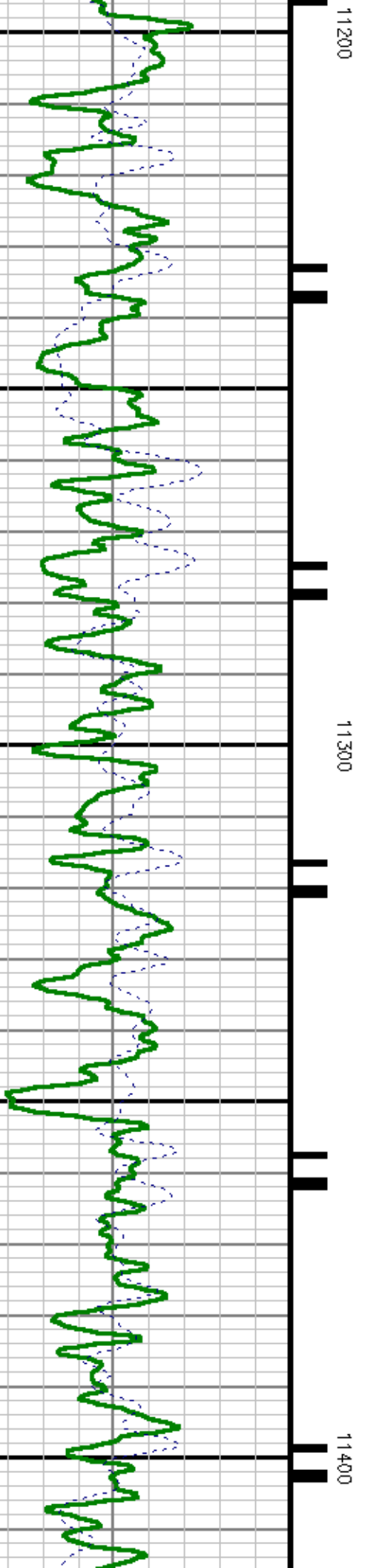
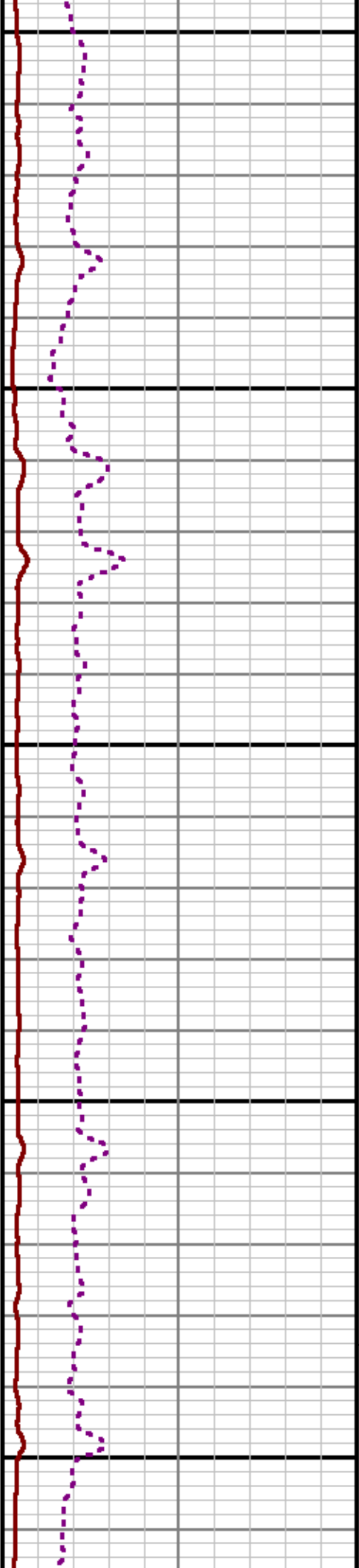
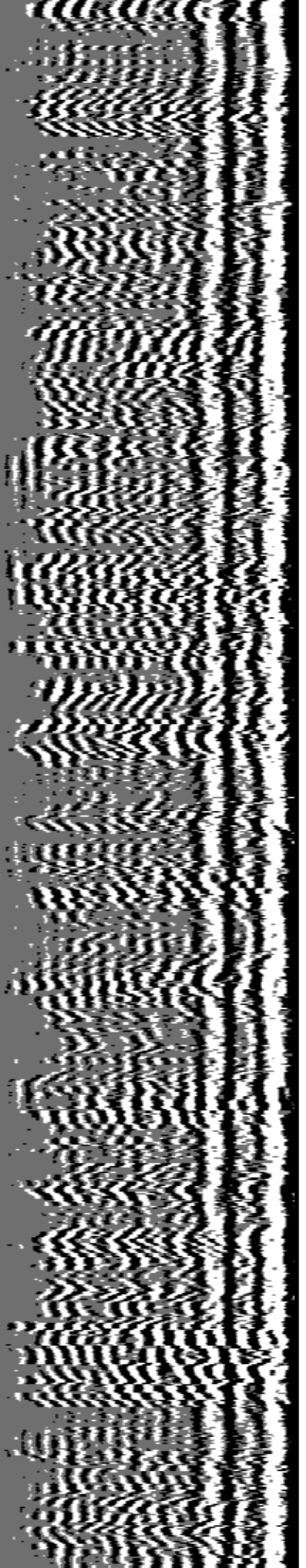


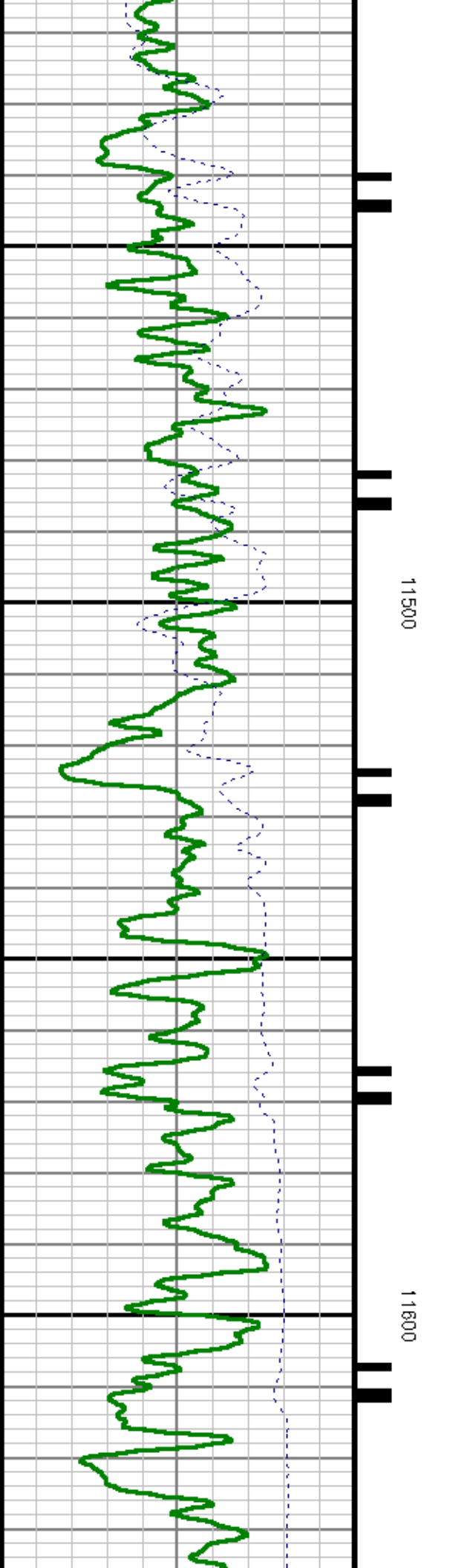
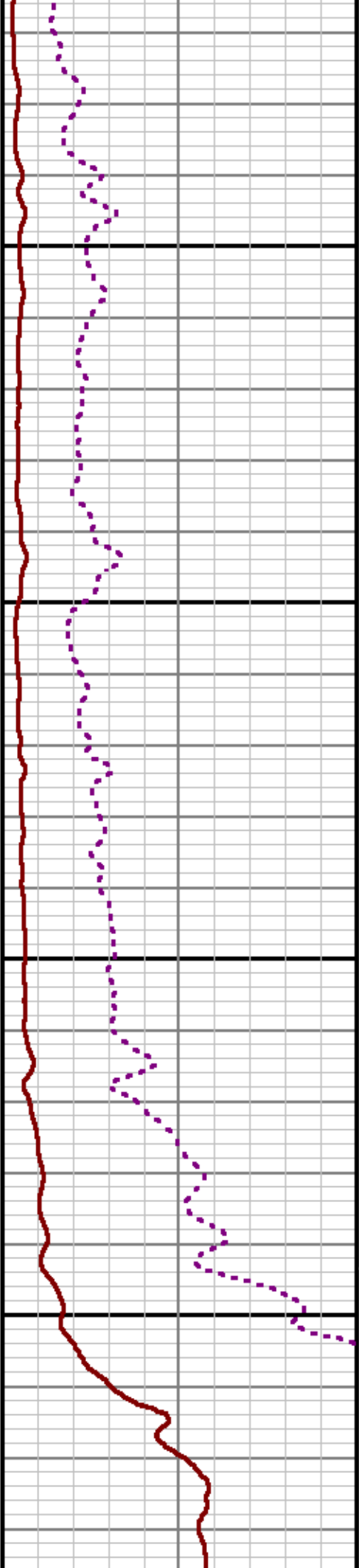
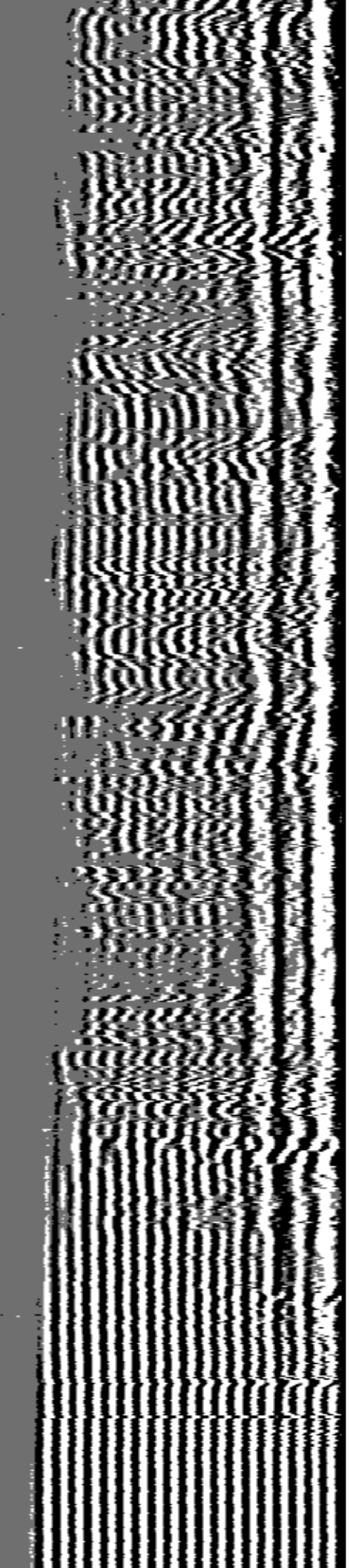
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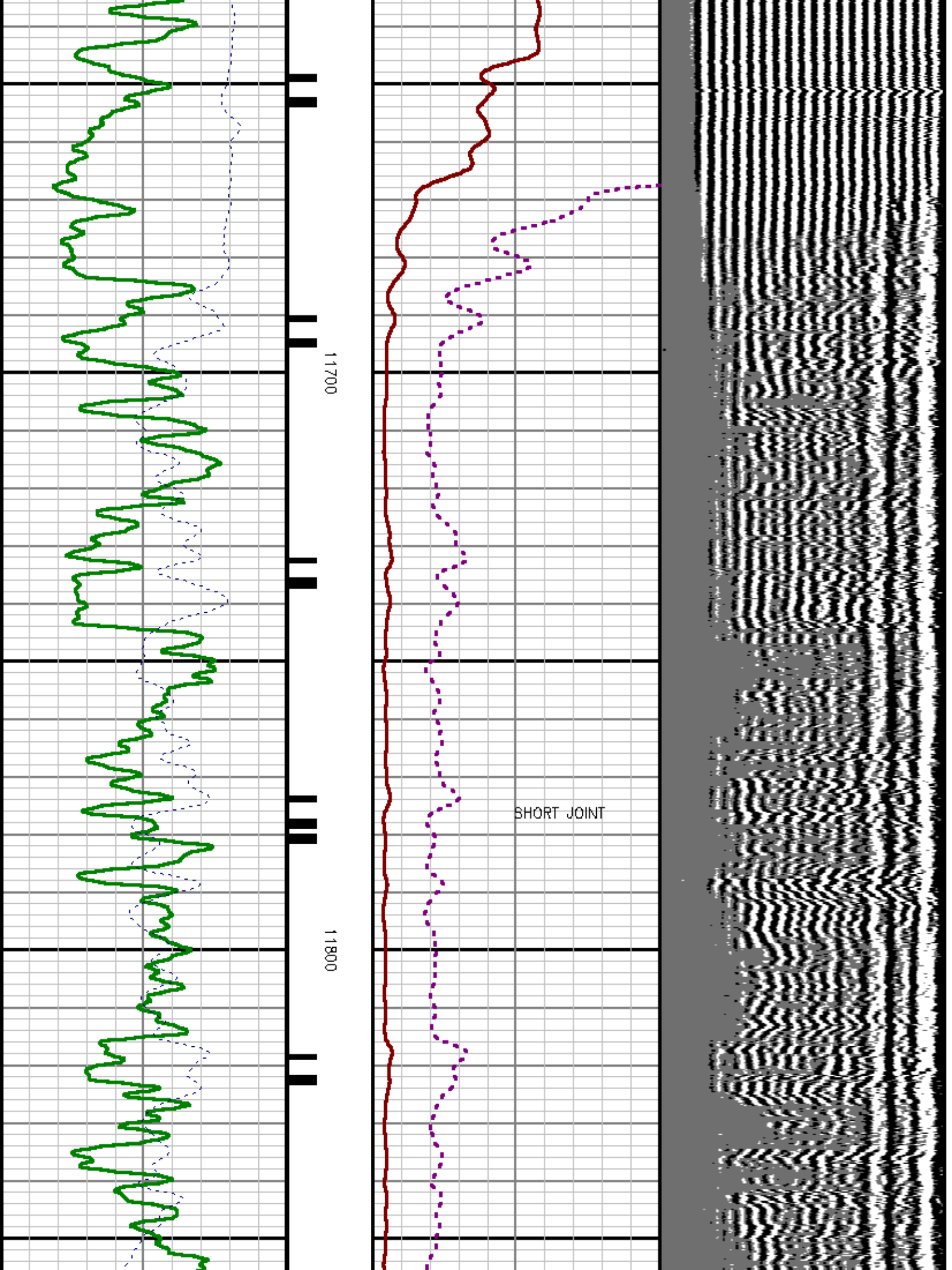


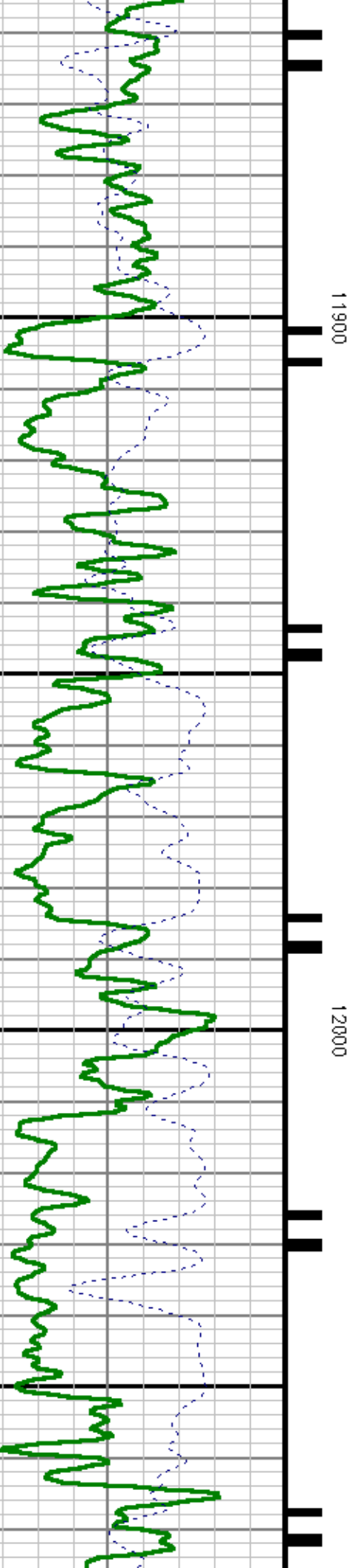
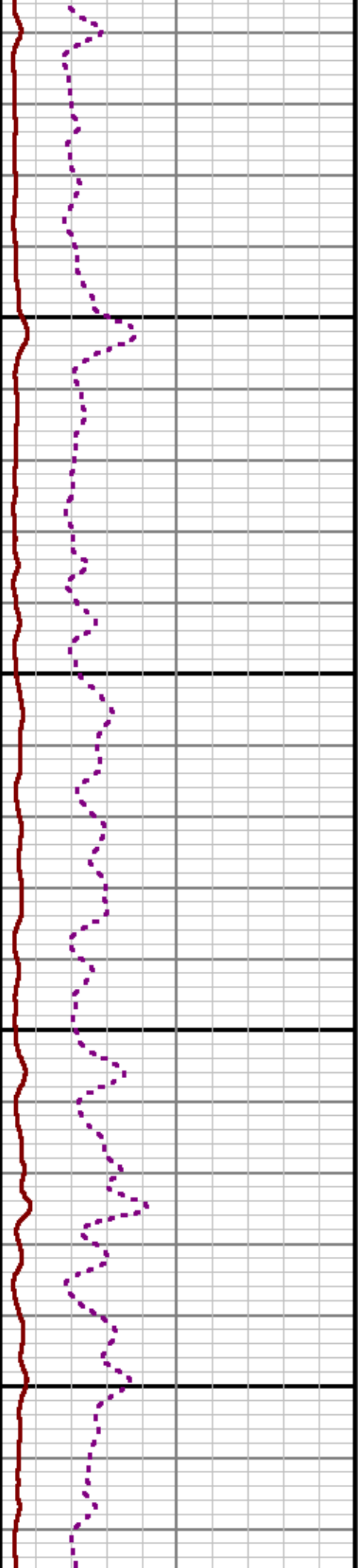
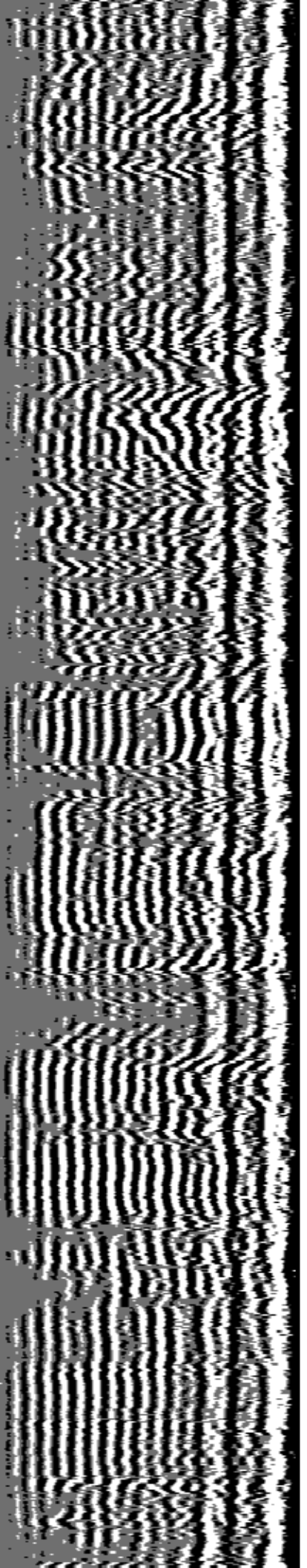


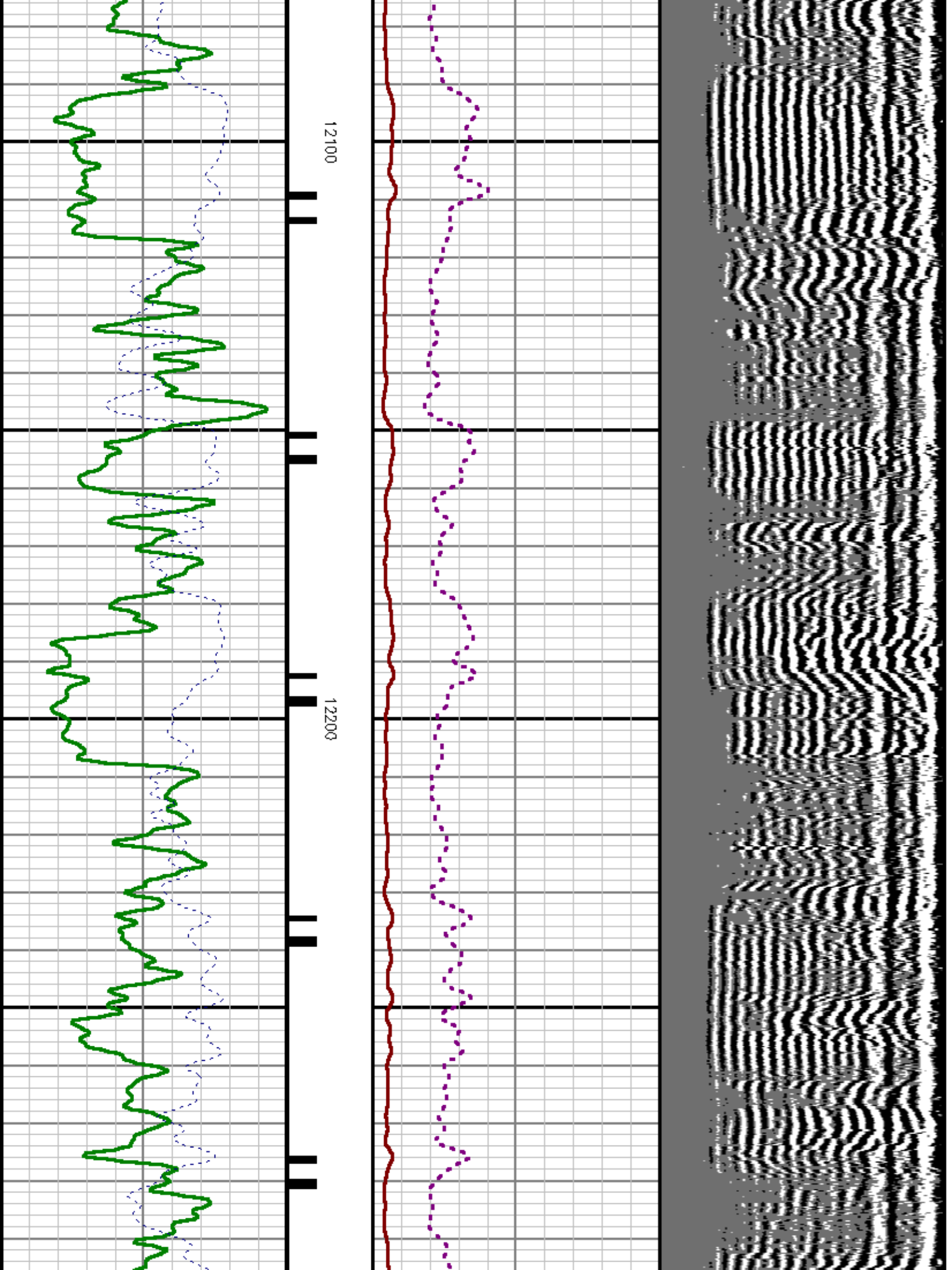




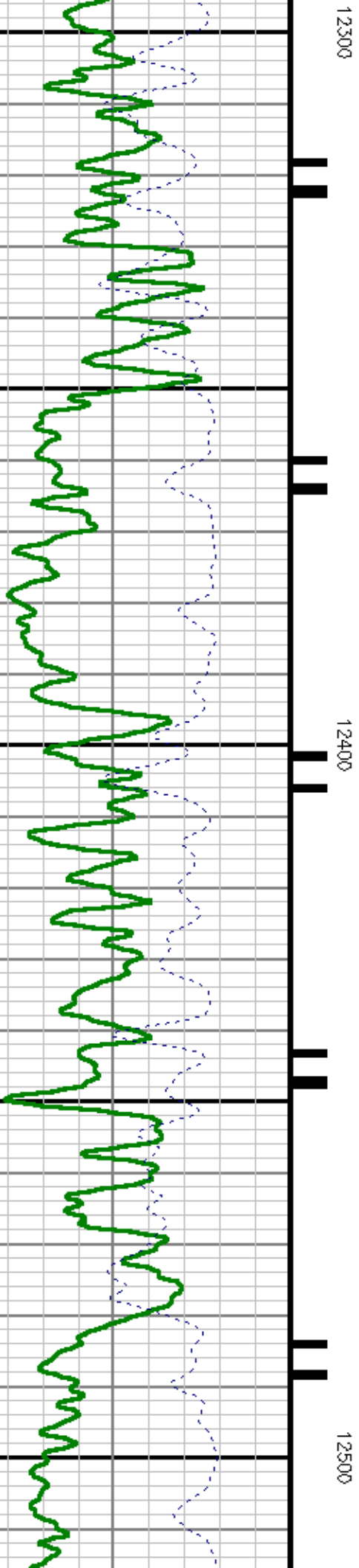
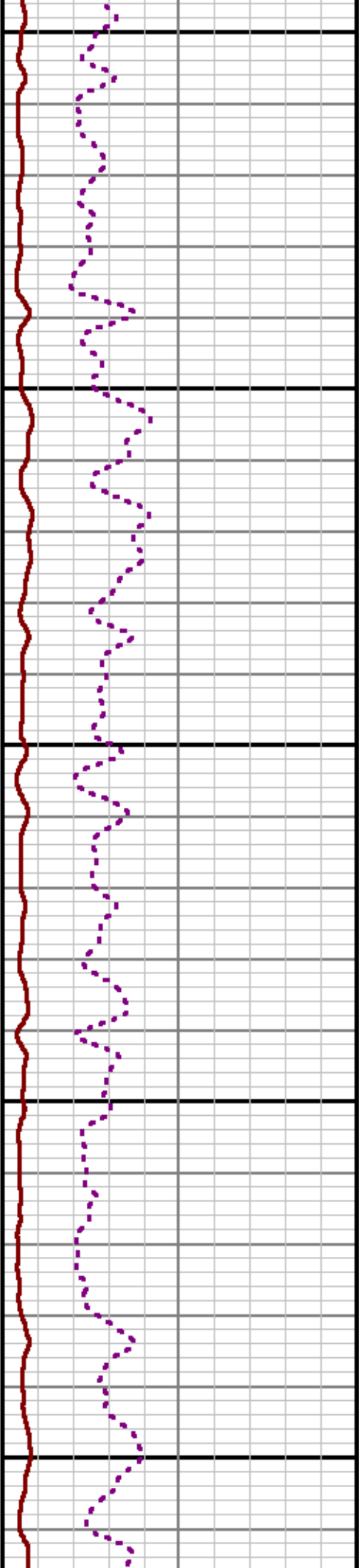
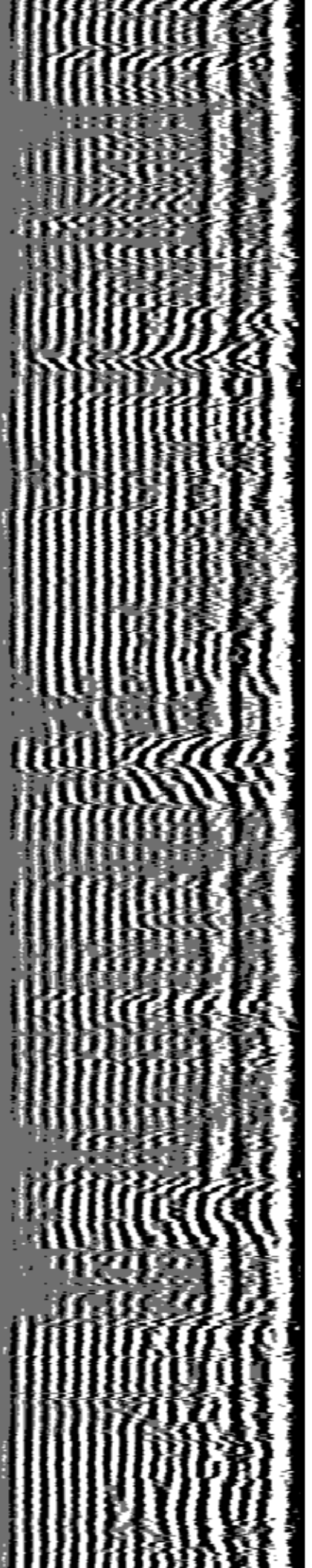




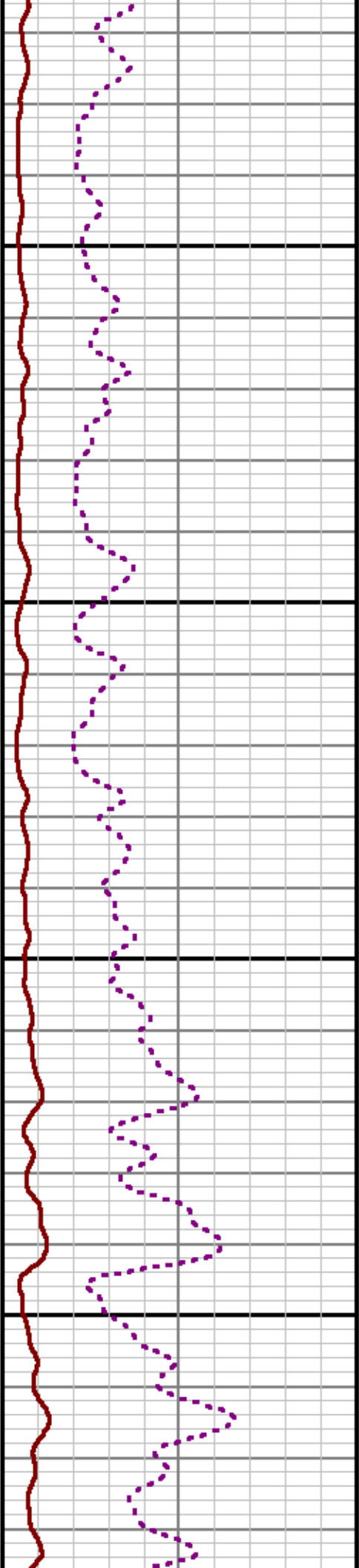
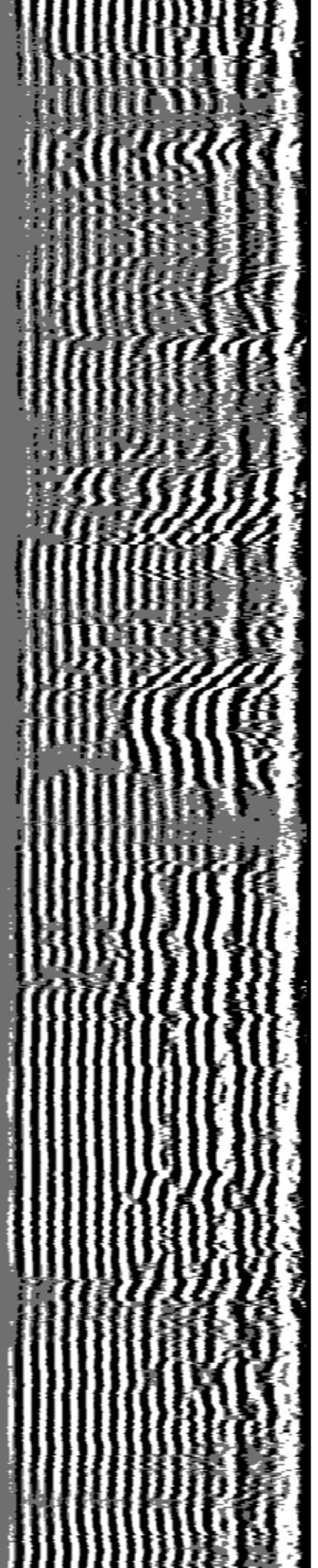






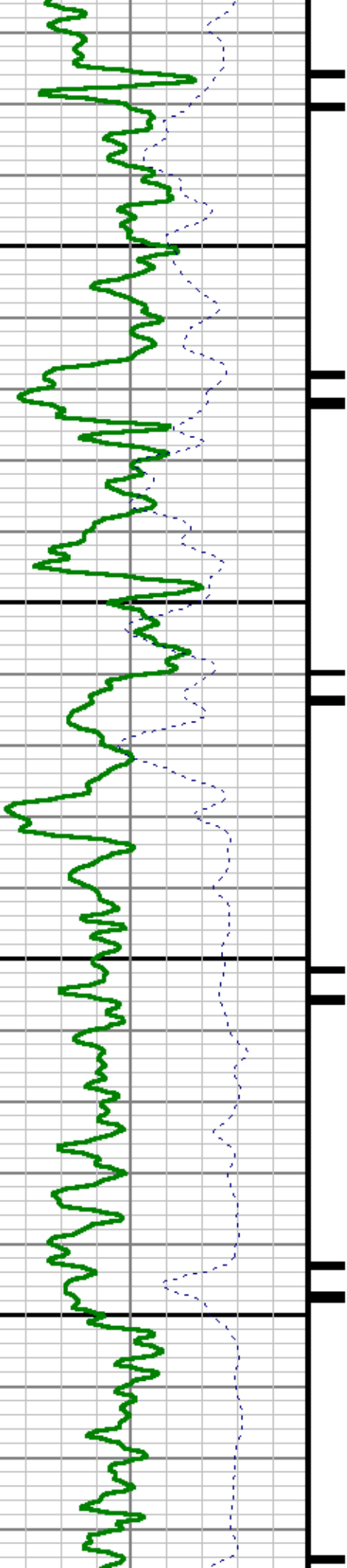


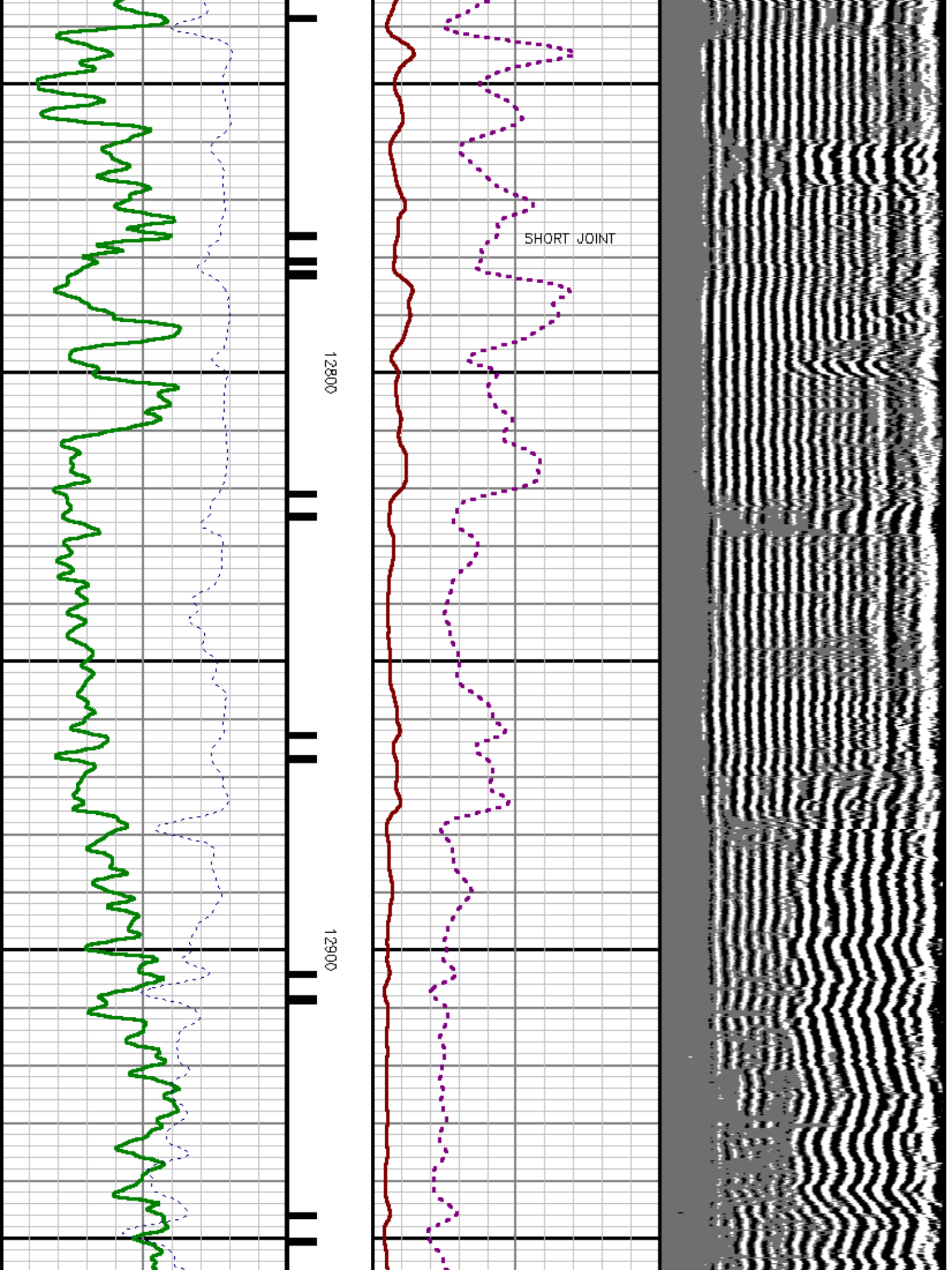


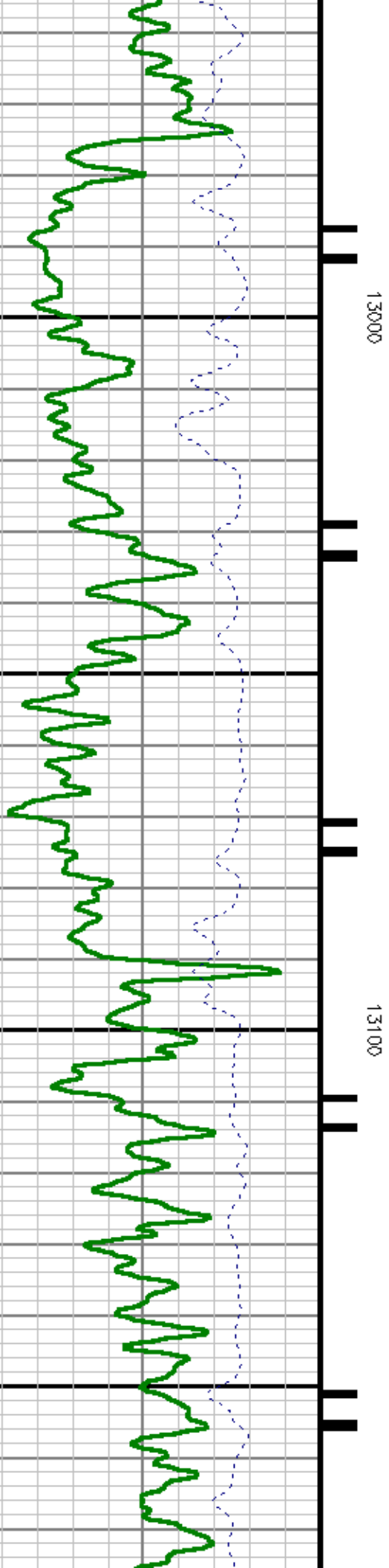
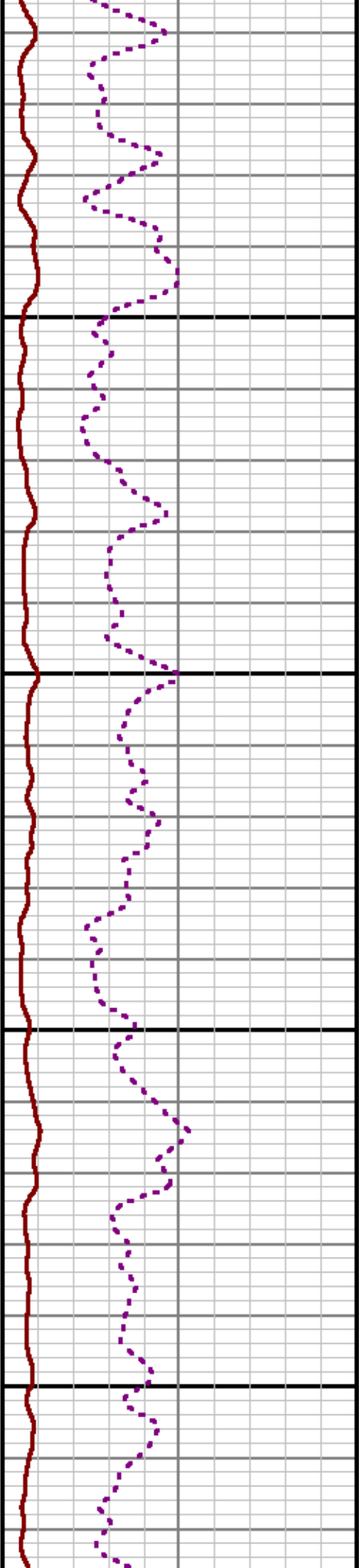
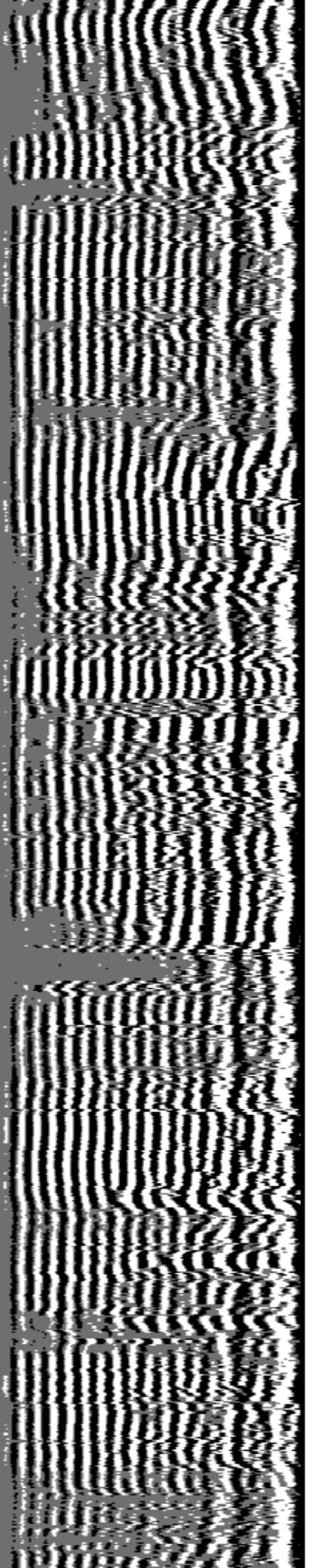


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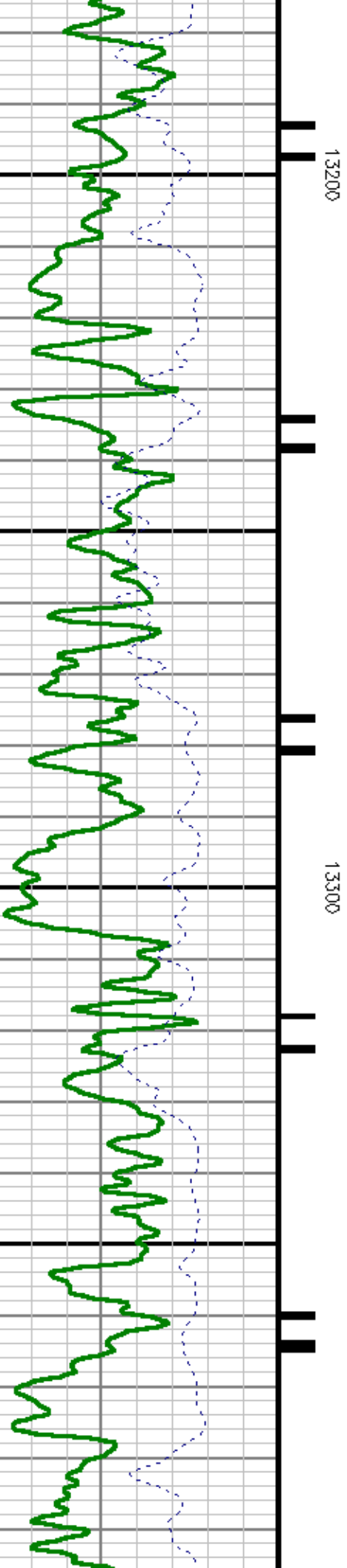
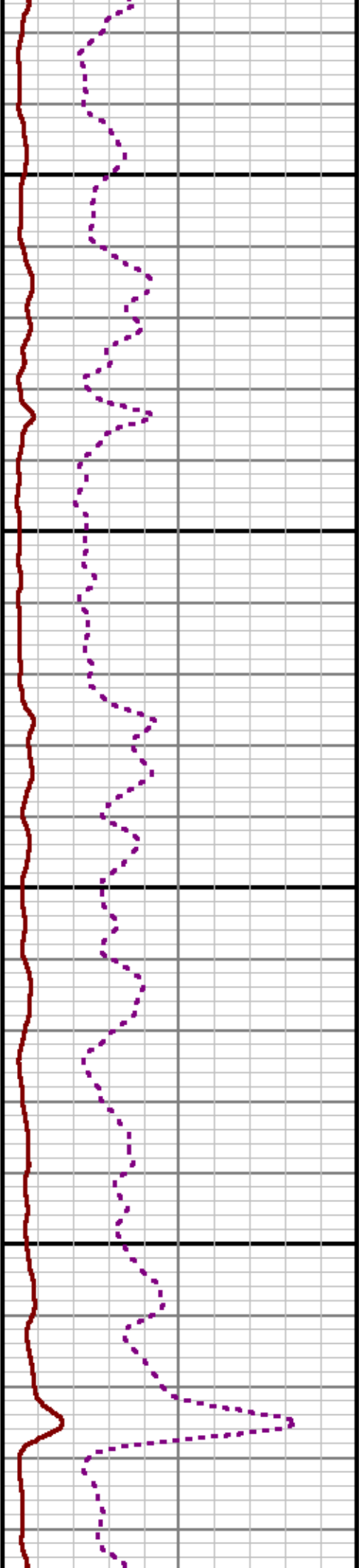
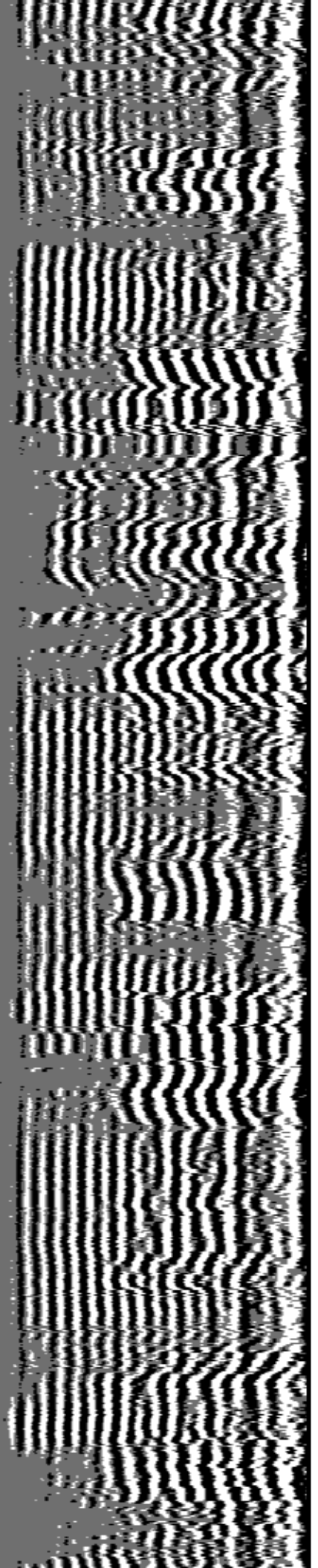
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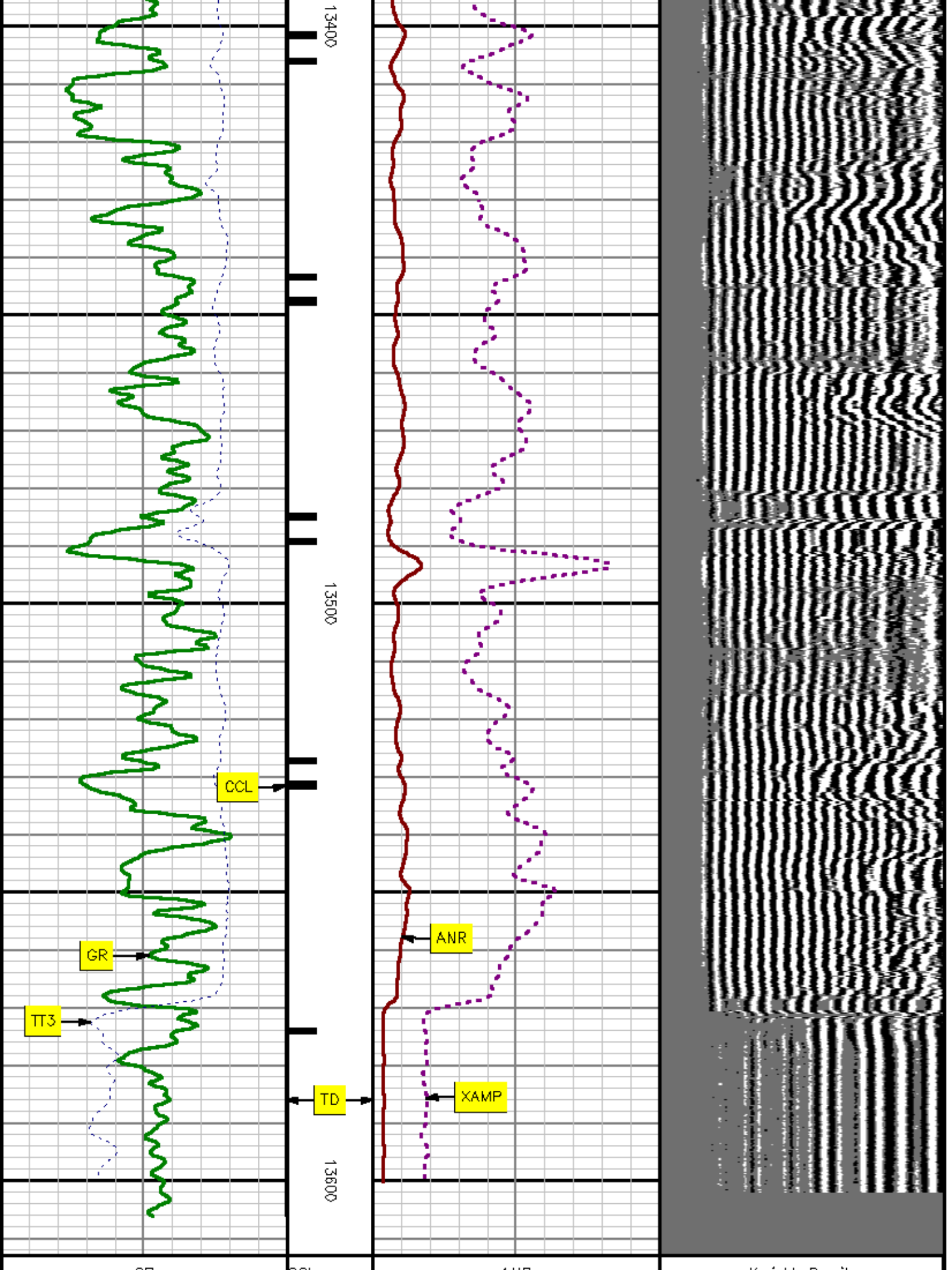


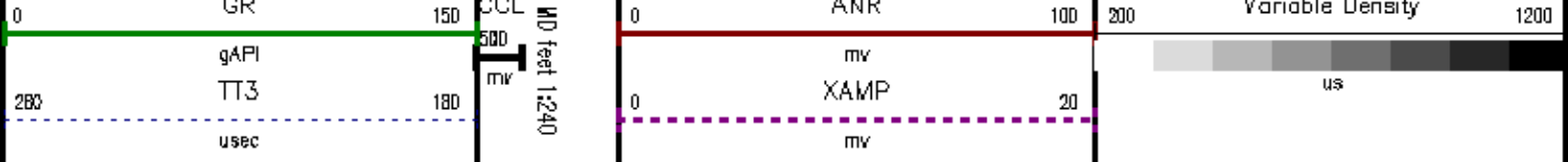












## REPEAT SECTION

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	314.263	usec	13341.500	13613.000
RAL	Amp Gate Start Near	197.754	usec	13341.500	13613.000
RAL	Amp Gate Start Radial	197.754	usec	13341.500	13613.000
RAL	Amp Gate Width Far	25.000	usec	13341.500	13613.000
RAL	Amp Gate Width Near	25.000	usec	13341.500	13613.000
RAL	Amp Gate Width Radial	25.000	usec	13341.500	13613.000
RAL	casing od	4.500	inches	13341.500	13613.000
RAL	casing wt	15.100	lbm/ft	13341.500	13613.000
RAL	FB Start Far	289.263	usec	13341.500	13613.000
RAL	FB Start Near	172.754	usec	13341.500	13613.000
RAL	FB Start Radial	172.754	usec	13341.500	13613.000
RAL	FB Thresh Far	10.000	mv	13341.500	13613.000
RAL	FB Thresh Near	4.000	mv	13341.500	13613.000
RAL	FB Thresh Radial	4.000	mv	13341.500	13613.000
RAL	Fluid Travel Time	200.000	usec/ft	13341.500	13613.000

## DEPTH OFFSETS (for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
		ACAL	ANR	AR1	AR2	AR3	AR4
1426XA	-12.360	AR5	AR6	AR7	ARB	CHV	FPR2
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
		AFAR	SIG	TT5			
1426XA	-11.360	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 : EXXONMOBIL PRODUCTION COMPANY

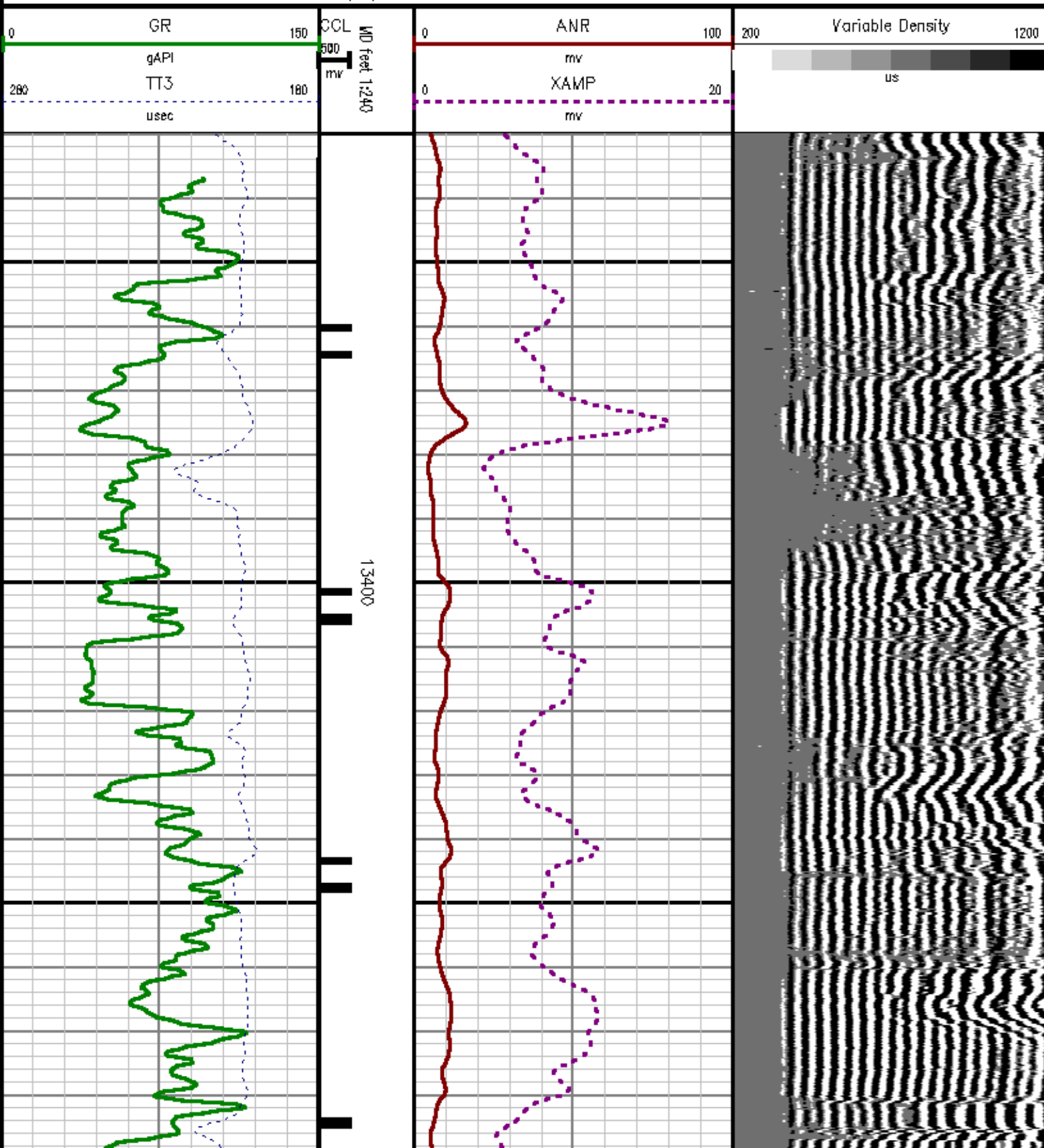
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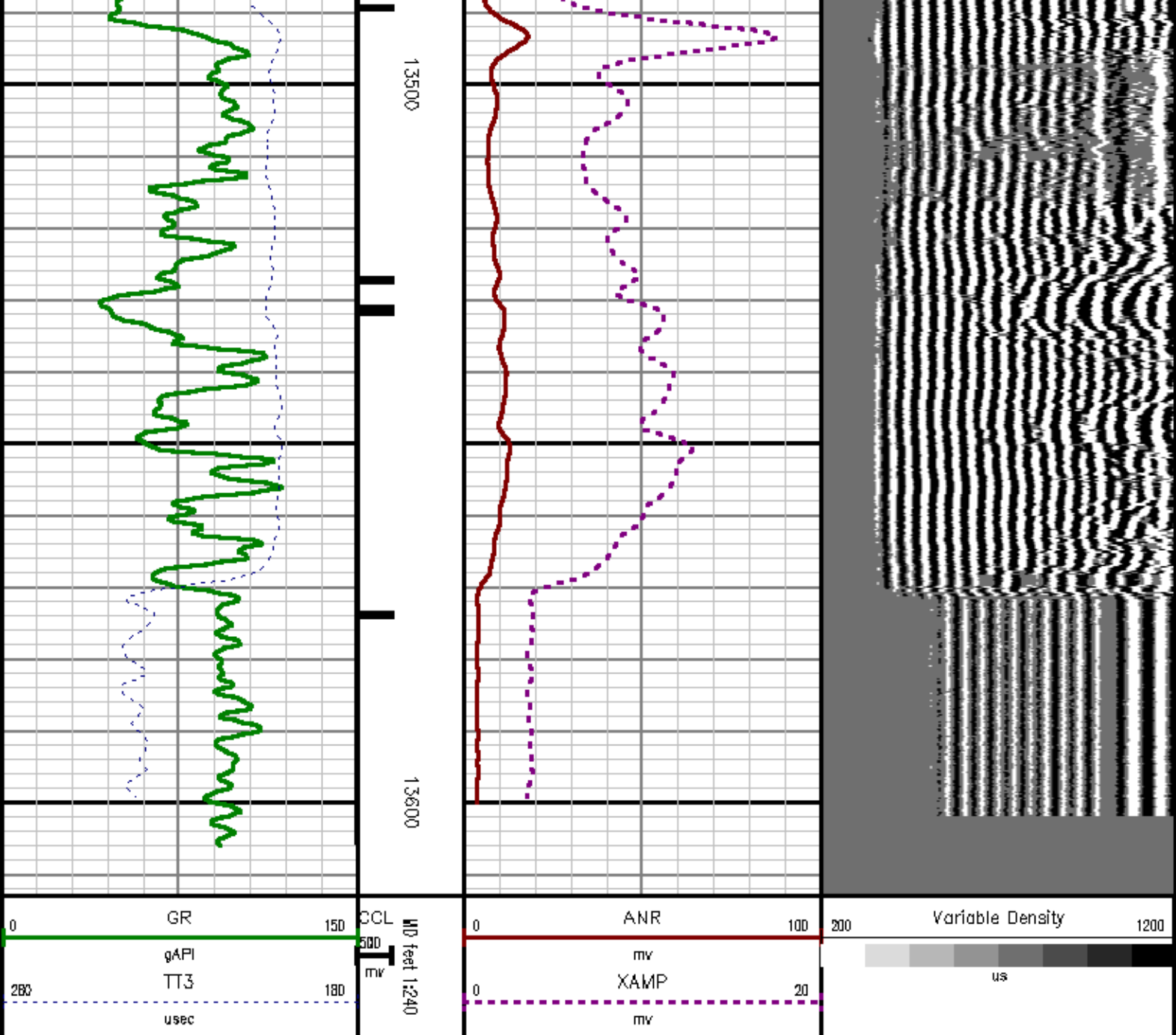
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Mode : PlotMgr 5.4.504

Interval : 13330.00 - 13613.00 feet UP

Created : 7/20/2011 3:54:12 AM





## FREE PIPE SECTION

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	314.263	usec	4196.156	4403.000
RAL	Amp Gate Start Near	197.754	usec	4196.156	4403.000



RAL	Amp Gate Start Radial	197.754	usec	4196.156	4403.000
RAL	Amp Gate Width Far	25.000	usec	4196.156	4403.000
RAL	Amp Gate Width Near	25.000	usec	4196.156	4403.000
RAL	Amp Gate Width Radial	25.000	usec	4196.156	4403.000
RAL	casing od	4.500	inches	4196.156	4403.000
RAL	casing wt	15.100	lbm/ft	4196.156	4403.000
RAL	FB Start Far	289.263	usec	4196.156	4403.000
RAL	FB Start Near	172.754	usec	4196.156	4403.000
RAL	FB Start Radial	172.754	usec	4196.156	4403.000
RAL	FB Thresh Far	10.000	mv	4196.156	4403.000
RAL	FB Thresh Near	4.000	mv	4196.156	4403.000
RAL	FB Thresh Radial	4.000	mv	4196.156	4403.000
RAL	Fluid Travel Time	200.000	usec/ft	4196.156	4402.938

### DEPTH OFFSETS (for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-12.360	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	-11.360	AFAR	SIG	TT5			
1426XA	-7.250	CCL					
1426XA	-5.390	GR					
1426XA	0.000	NEU					

Created by : RAL, v4.6.007

Plotted by : PlotMgr, v5.4.5D4

Company : EXXONMOBIL PRODUCTION COMPANY

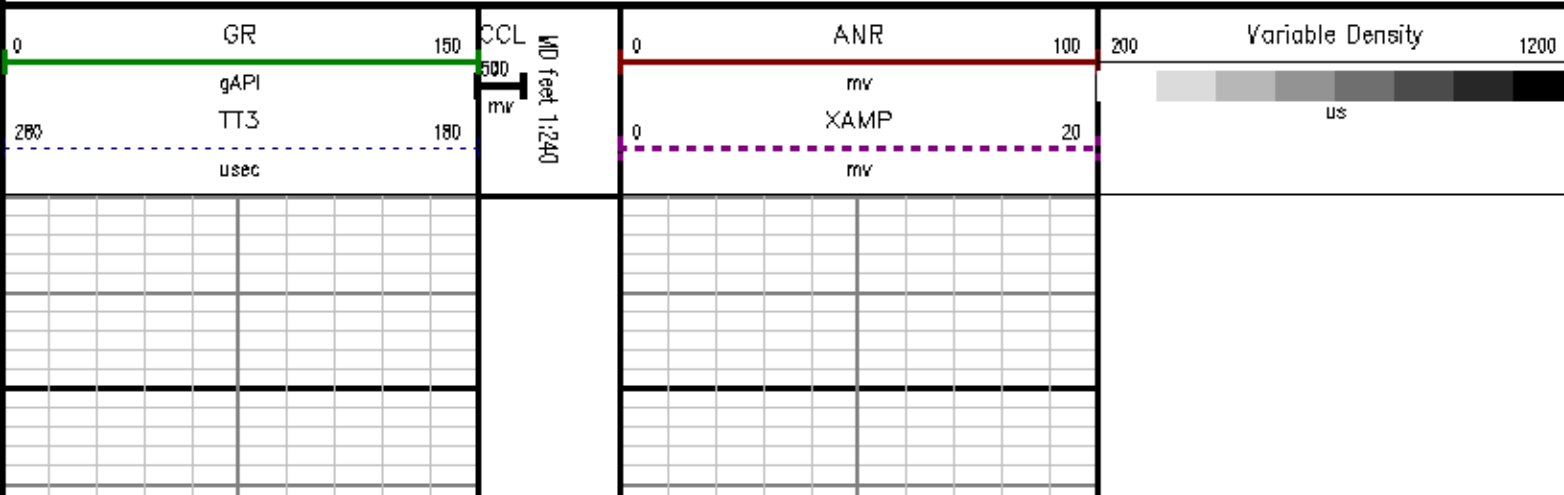
Well : PCU 296-5A7

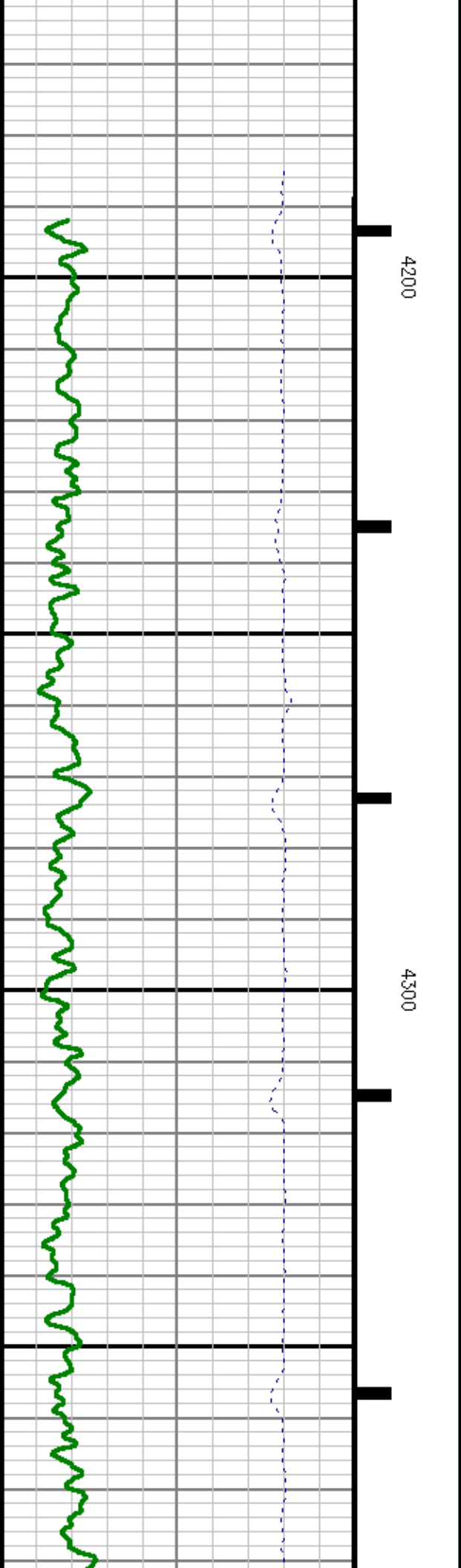
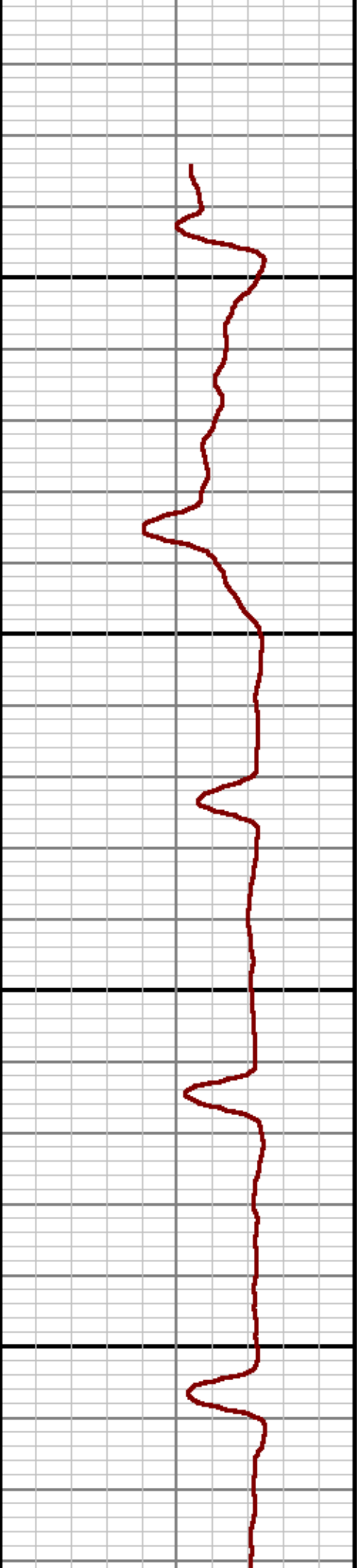
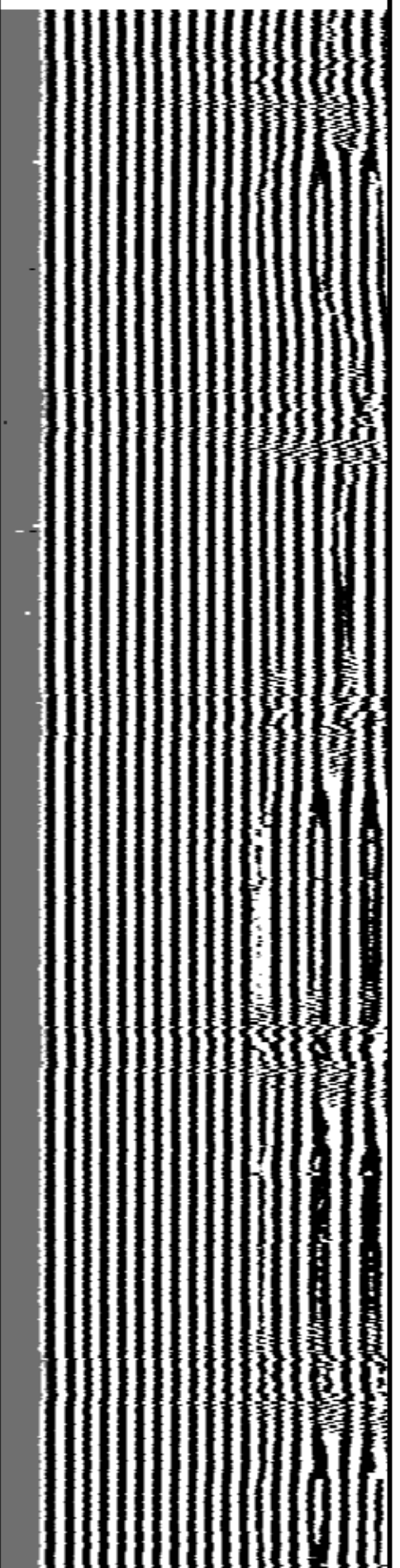
File Name : D:\WELLDATA\A7RAD\FREE.XTF

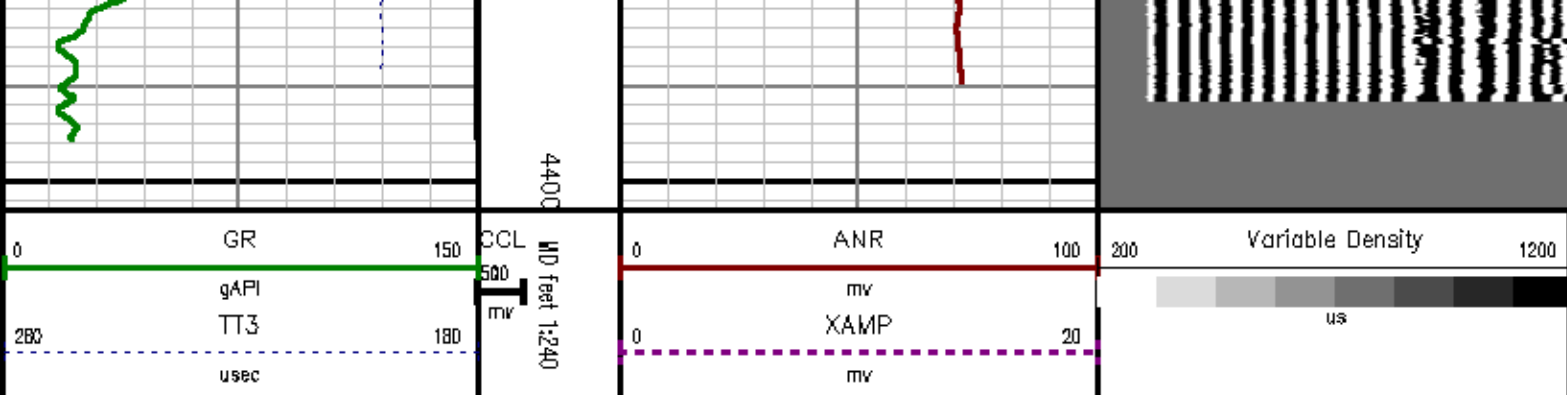
Mode : PlotMgr 5.4.5D4

Interval : 4130.00 - 4403.00 feet UP

Created : 7/20/2011 3:12:22 AM







## CALIBRATION SUMMARY

*RALSHP*

Shop Calibration: C:\case\calver\RALSHP\957J17\_shp.cal

### SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sun Jul 17 11:31:22 2011 TOOL SERIES: 1426XA ASSET: 957 SEQ: J17

Tool Delay [usec] -54.00 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	219	216	30	166	25	0.220	100.00	0.23
3 Ft. Receiver	219	216	30	166	25	-0.322	100.00	0.22
5 Ft. Receiver	327	332	30	282	25	0.835	150.00	0.24
Radial #1	219	216	30	105	25	-0.588	100.00	0.23
Radial #2	219	216	30	105	25	-0.500	100.00	0.23
Radial #3	219	216	30	105	25	-0.196	100.00	0.23
Radial #4	218	216	30	105	25	-0.162	100.00	0.23
Radial #5	218	216	30	105	25	-0.396	100.00	0.22
Radial #6	216	216	30	105	25	-0.788	100.00	0.22
Radial #7	216	216	30	105	25	-0.204	100.00	0.22
Radial #8	219	216	30	105	25	-0.371	100.00	0.23

*RALFLD*

Wellbore Calibration: C:\case\calver\RALFLD\957J17 fld.cal

DATE/TIME PERFORMED: Sun Jul 17 11:32:06 2011 TOOL SERIES: 1426XA ASSET: 957 SEQ: J17

Tool Delay [usec]	-54.00	Casing OD in	4.50	Casing Wt lbm/ft	15.10	Casing ID in	3.83
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RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	166	25	0.003	0.000	1.00	100.000
3 Ft. Receiver	198	25	0.218			
5 Ft. Receiver	314	25	0.097			
Radial #1	198	25	0.182			
Radial #2	198	25	0.220			
Radial #3	198	25	0.192			
Radial #4	198	25	0.168			
Radial #5	198	25	0.243			
Radial #6	198	25	0.285			
Radial #7	198	25	0.160			
Radial #8	198	25	0.237			

## GAMMA RAY

Calibration File: C:\case\calver\GR\457JY.cal

## CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sat Jul 16 07:39:07 2011 TOOL SERIES: 1426XA ASSET: 457 SEQ: JY

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K DA612	67.24	309.61	0.784	51.35	236.35	185.00

Verification File: C:\case\calver\GR\457JY.VP

## PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Sat Jul 16 07:40:27 2011 TOOL SERIES: 1426XA ASSET: 457 SEQ: JY

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K DA612	67.82	317.64	0.784	51.79	242.66	190.77

## TOOL DIAGRAM



OTA SHORT CABLE HEAD

24.23

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

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

XMIT 18.05'  
NEAR RCVR 14.97'  
FAR RCVR 13.05'  
CCL 11.34'  
GR 9.49'  
NEU 4.09'  
0.00'

Total Length: 24.23'  
Total Weight: Not Available  
Max Diameter: 0' 3.12"

**BAKER  
HUGHES**

**Baker Atlas**

**CASE**

Company EXXONMOBIL PRODUCTION COMPANY

Well PCU 298-5A7

Field PICEANCE CREEK

County RIO BLANCO State COLORADO

Location:

SHL: 707' FNL & 533' FNL

Elevations

KB 7338.2 ft

DF 7338.2 ft

GL 7309 ft

SEC: 5 TWP: 2S RGE: 98W

File No:

CH039003

API No:

06103112430000