



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No:

Company

CHC38001

Well

PCU 296-5A4

API No.

Field

PICEANCE CREEK

06103112450000

County

RIO BLANCO

State

COLORADO

Location:

SHL: 734' PUL & 554' PUL

Other Services

RPM

SEC: 5

TWP: 25

RGE: 98W

G.L.

Elevation

7308 ft

Elevations

G.L.

30.2 ft

Above P. D.

KB 7338.2 ft

KELLY BUSHING

DF 7338.2 ft

GL 7308 ft

Permanent Datum
Log Measured From
Orill Measured From

Date 23-JULY-2011

Run

CWE

Service Order

575379

Depth Driller

13635 ft

Depth Logger

13568 ft

Bottom Logged Interval

13568 ft

Top Logged Interval

9650 ft

Time Started

0:00

Time Finished

04:30

Operator Rig Time

4.5 HRS

Type of Fluid in Hole

WATER

Fluid Density

N/A

Fluid Salinity

N/A

Fluid Level

PULL

Logged Cement Top

N/A

Wellhead Pressure

0 psi

Maximum Hole Deviation

N/A

Nominal Logging Speed

45 rpm

Maximum Recorded Temperature

290 degF

Reference Log

N/A

Reference Log Date

N/A

Equipment

4271

Location

CRWD JCT, CO

Recorded By

TIM KAUTT

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		
6.125 In		

Casing Record

Size	Weight	Grade	From	To
7 In	26 lbm/ft	P-110	SURFACE	9975 ft
4.5 In	15.1 lbm/ft	P-110	SURFACE	13635 ft

Remarks

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

Equipment Data

Run	Trip	Tool	Series Number	Serial Number	Position

	1	WANDREL	1426XA	10154957	CENTRALIZED
1	1	GAMMA RAY	2456KA	10417432	CENTRALIZED

MAIN SECTION

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	316.900	usec	5949.750	13600.000
RAL	Amp Gate Start Near	200.391	usec	5949.750	13600.000
RAL	Amp Gate Start Radial	200.391	usec	5949.750	13600.000
RAL	Amp Gate Width Far	25.000	usec	5949.750	13600.000
RAL	Amp Gate Width Near	25.000	usec	5949.750	13600.000
RAL	Amp Gate Width Radial	25.000	usec	5949.750	13600.000
RAL	casing od	4.500	inches	5949.750	13600.000
RAL	casing wt	11.600	lbm/ft	5949.750	13600.000
RAL	FB Start Far	291.900	usec	5949.750	13600.000
RAL	FB Start Near	175.391	usec	5949.750	13600.000
RAL	FB Start Radial	175.391	usec	5949.750	13600.000
RAL	FB Thresh Far	10.000	mv	5949.750	13600.000
RAL	FB Thresh Near	4.000	mv	5949.750	13600.000
RAL	FB Thresh Radial	4.000	mv	5949.750	13600.000
RAL	Fluid Travel Time	200.000	usec/ft	5949.750	13600.000

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

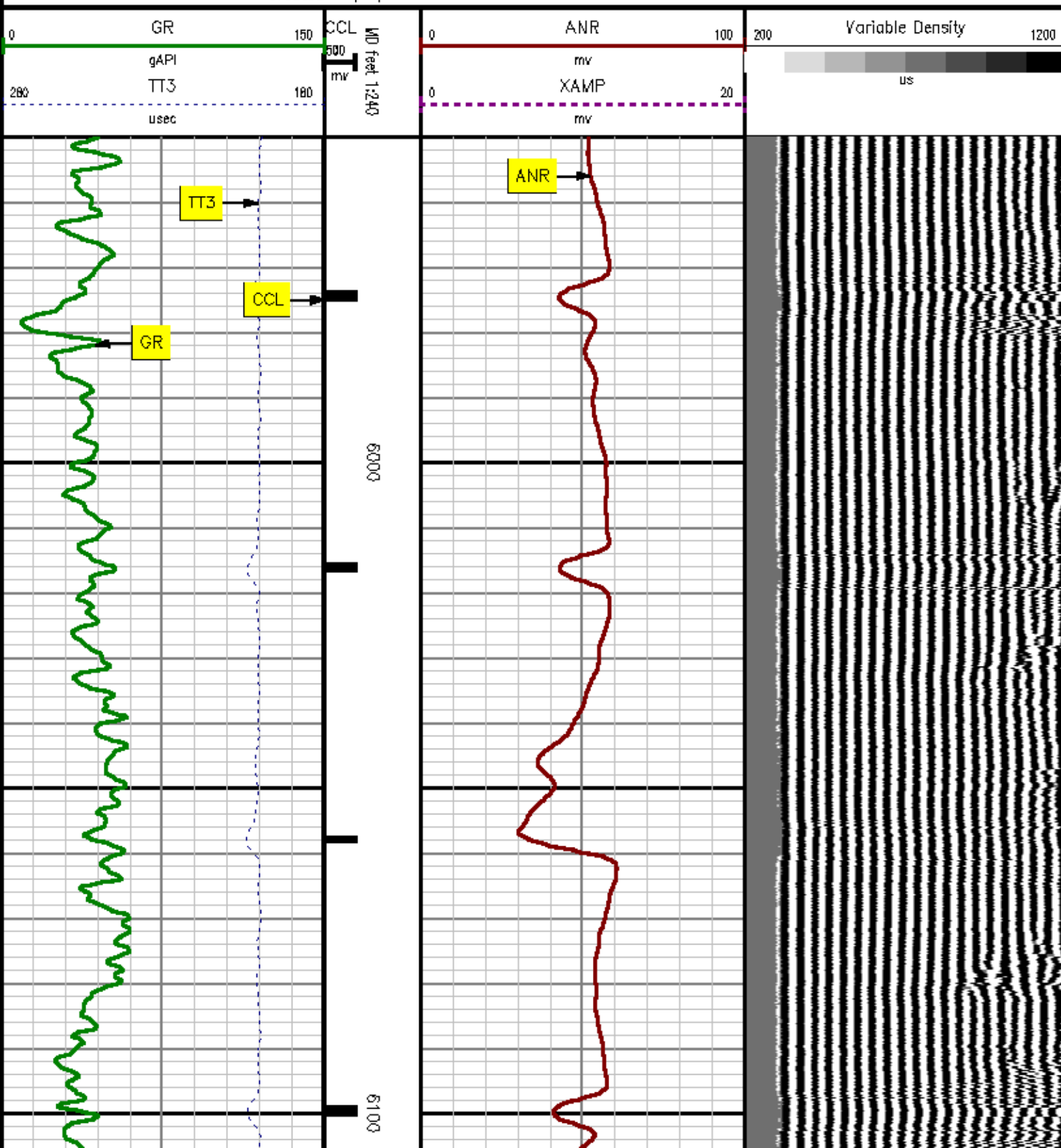
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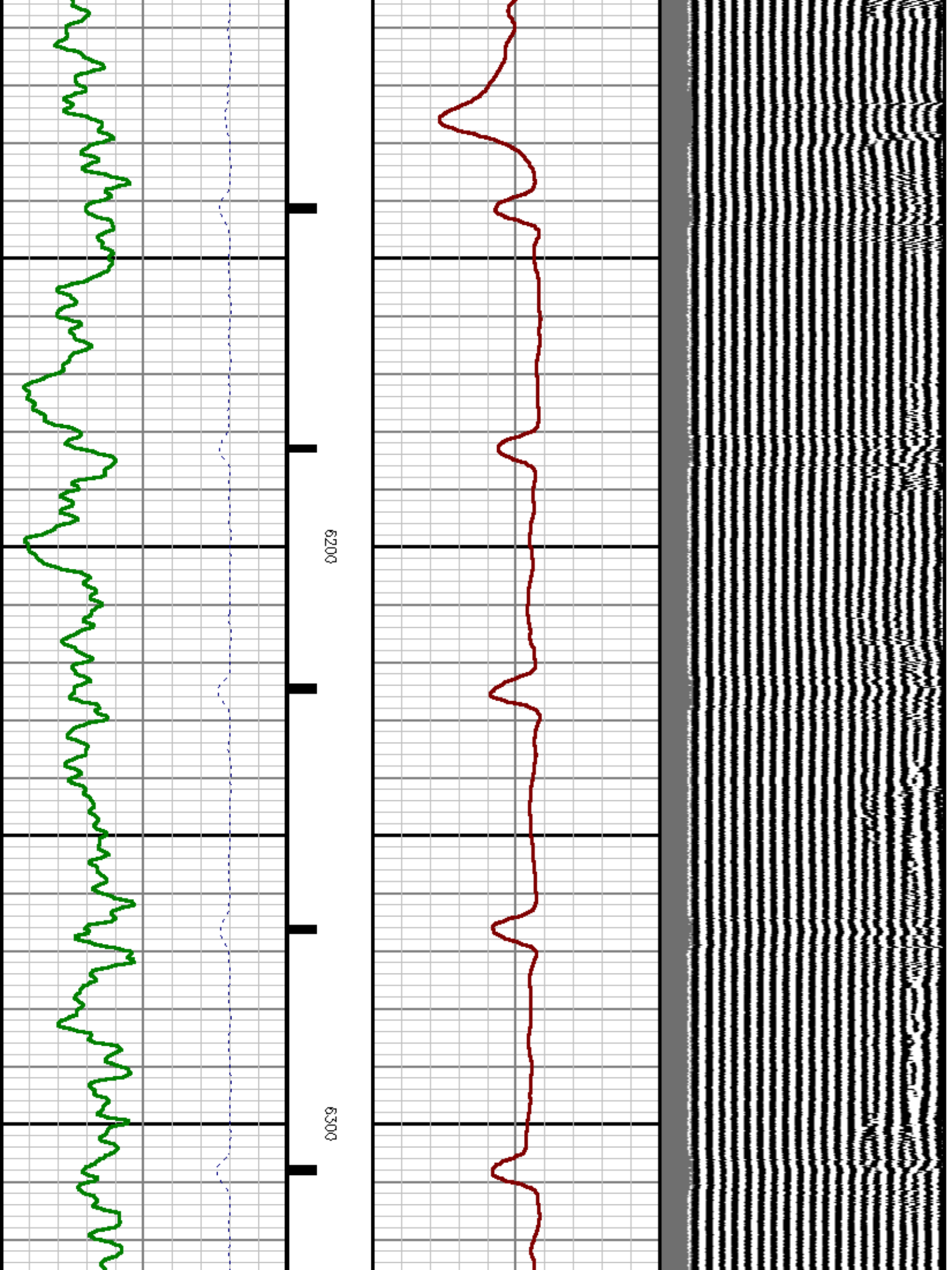
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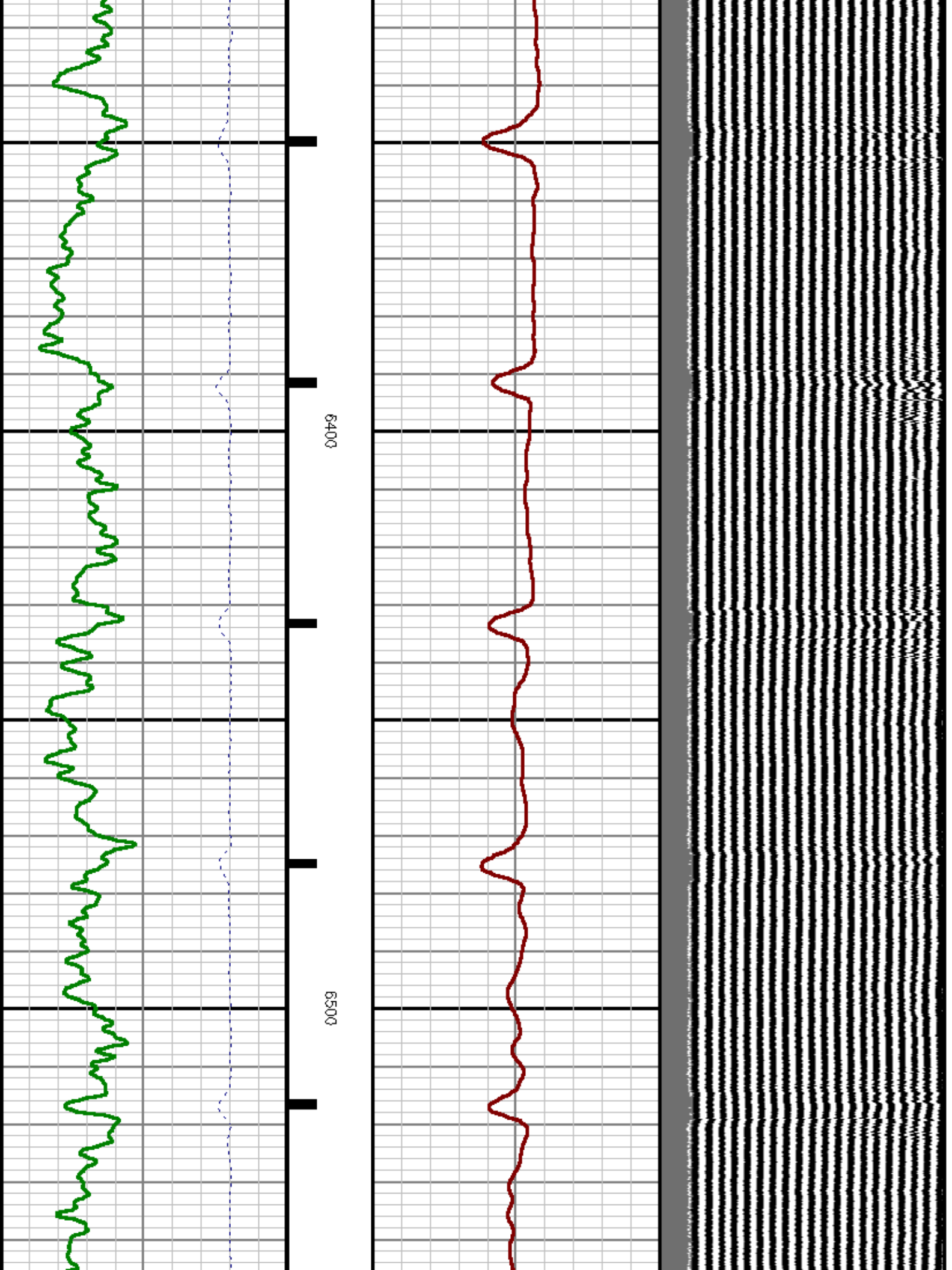
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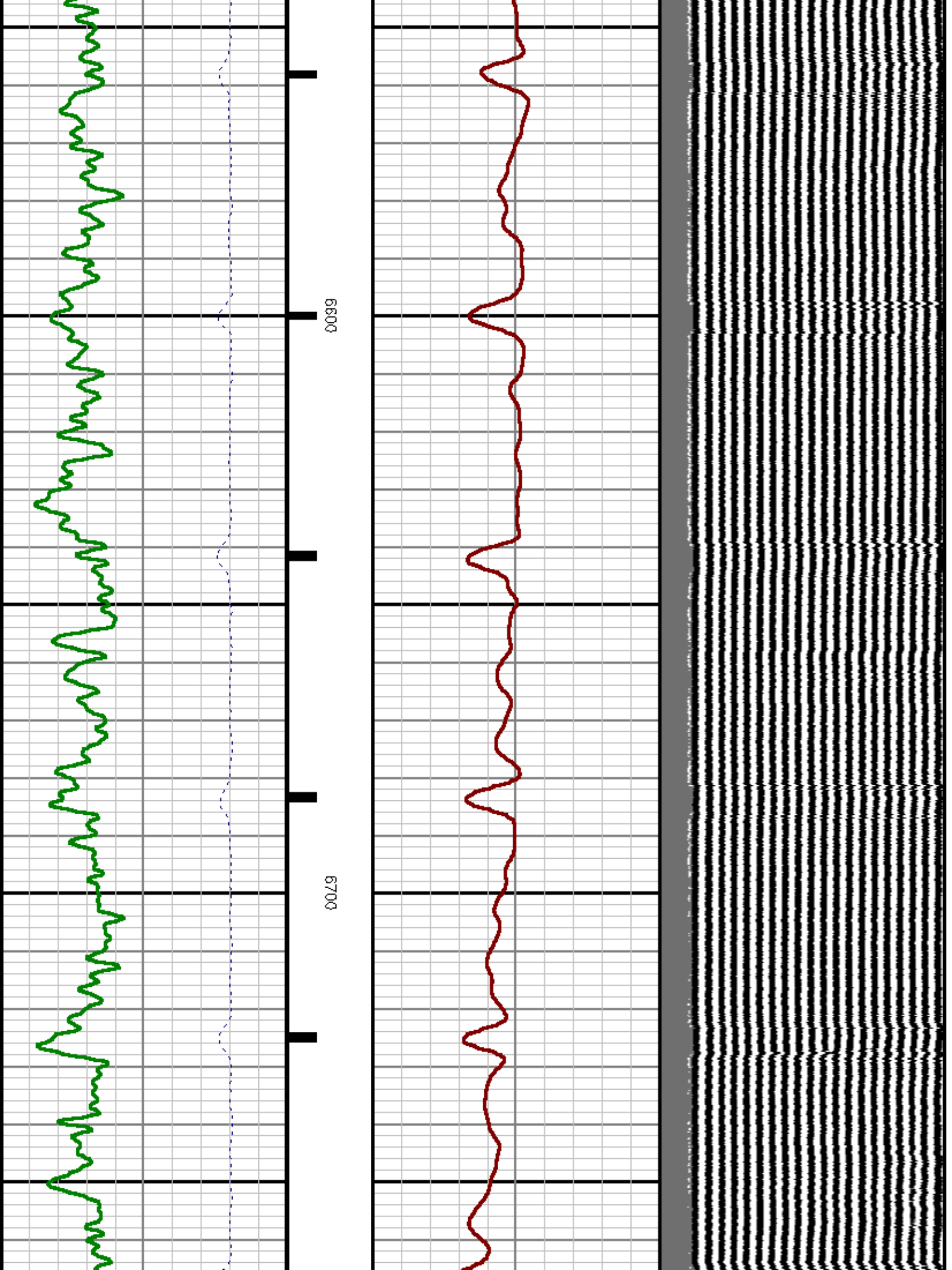
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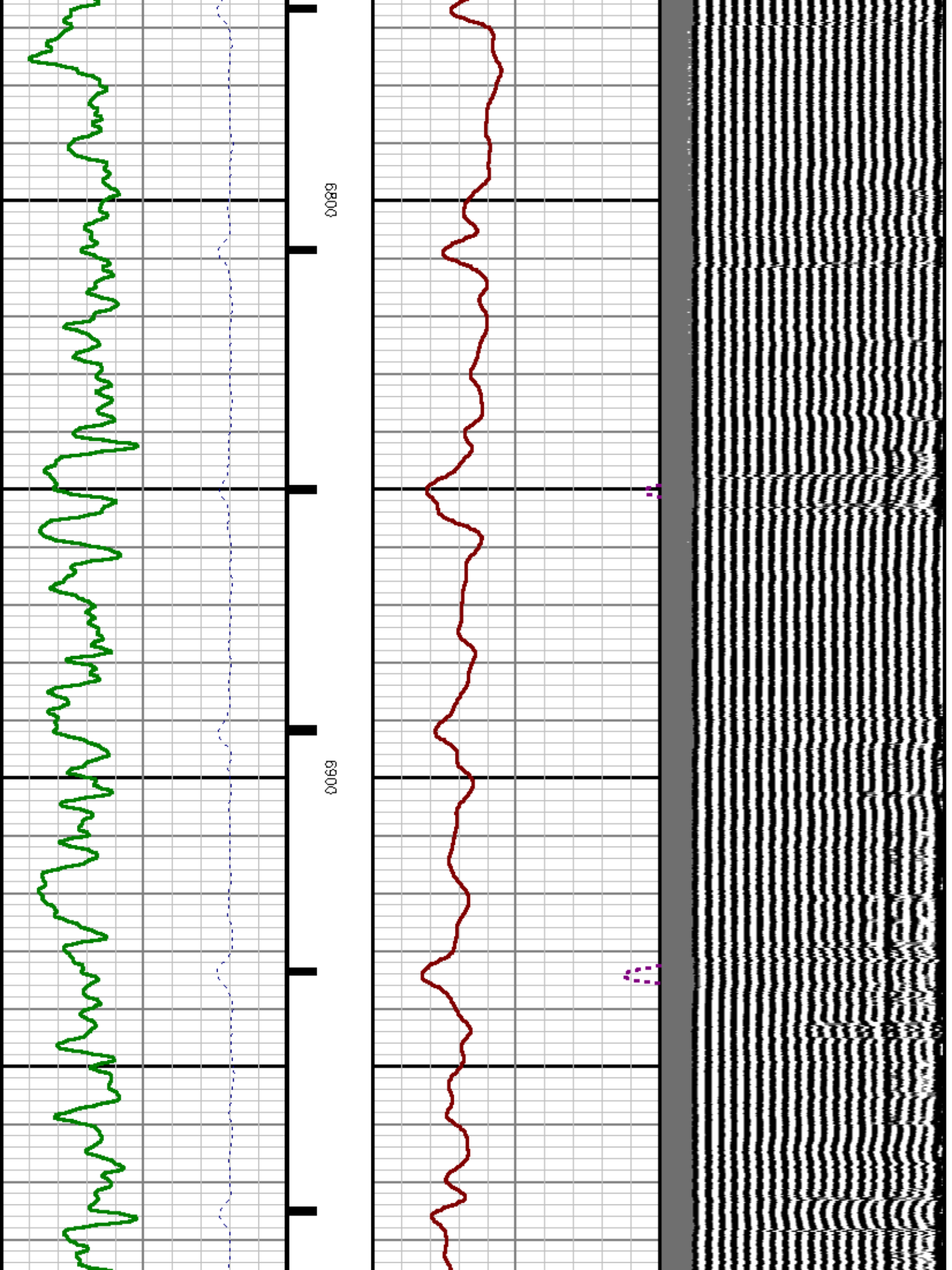
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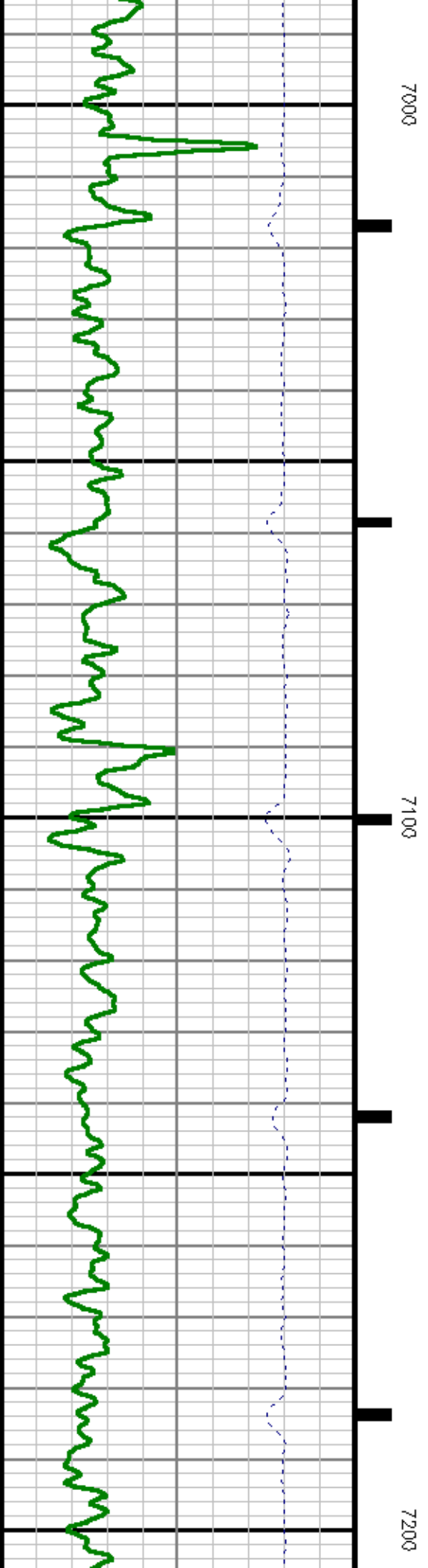
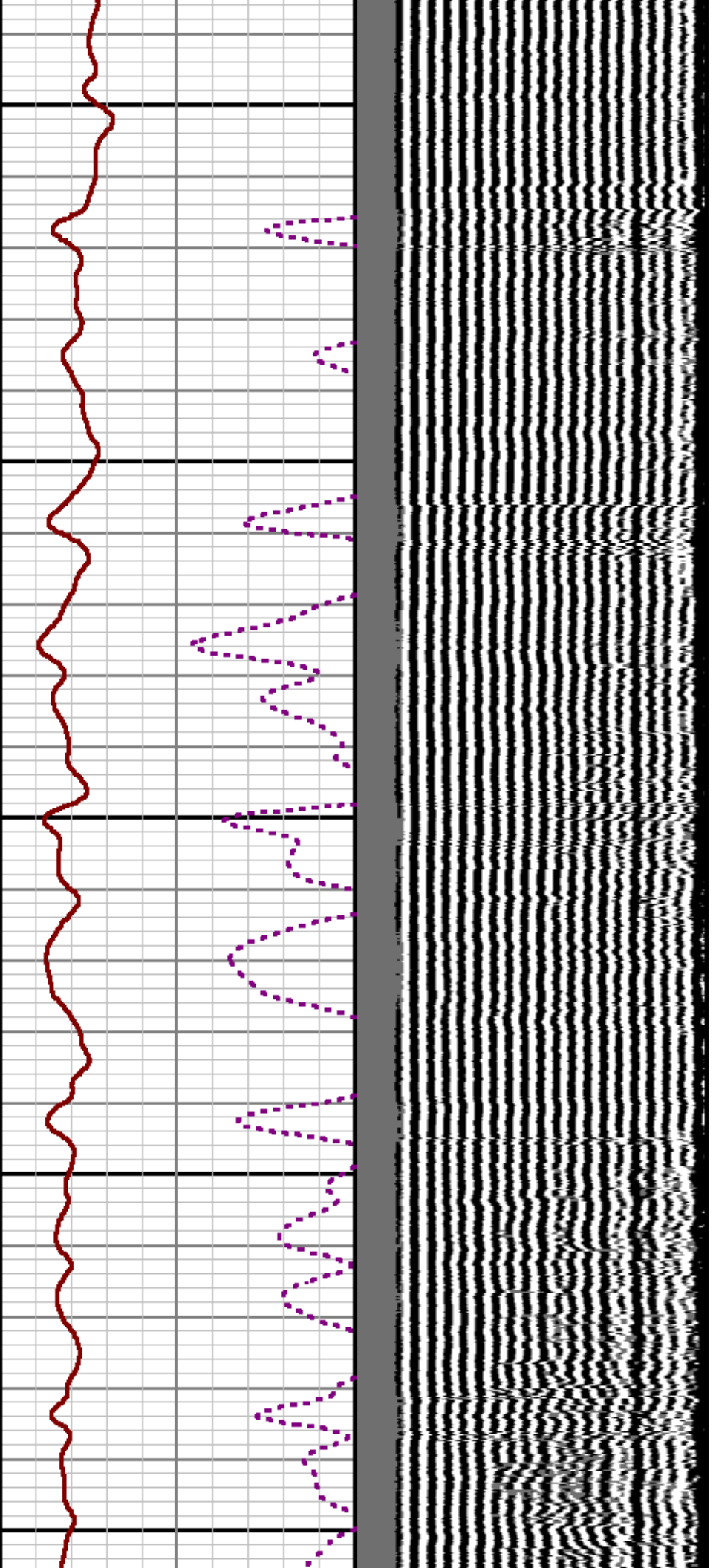


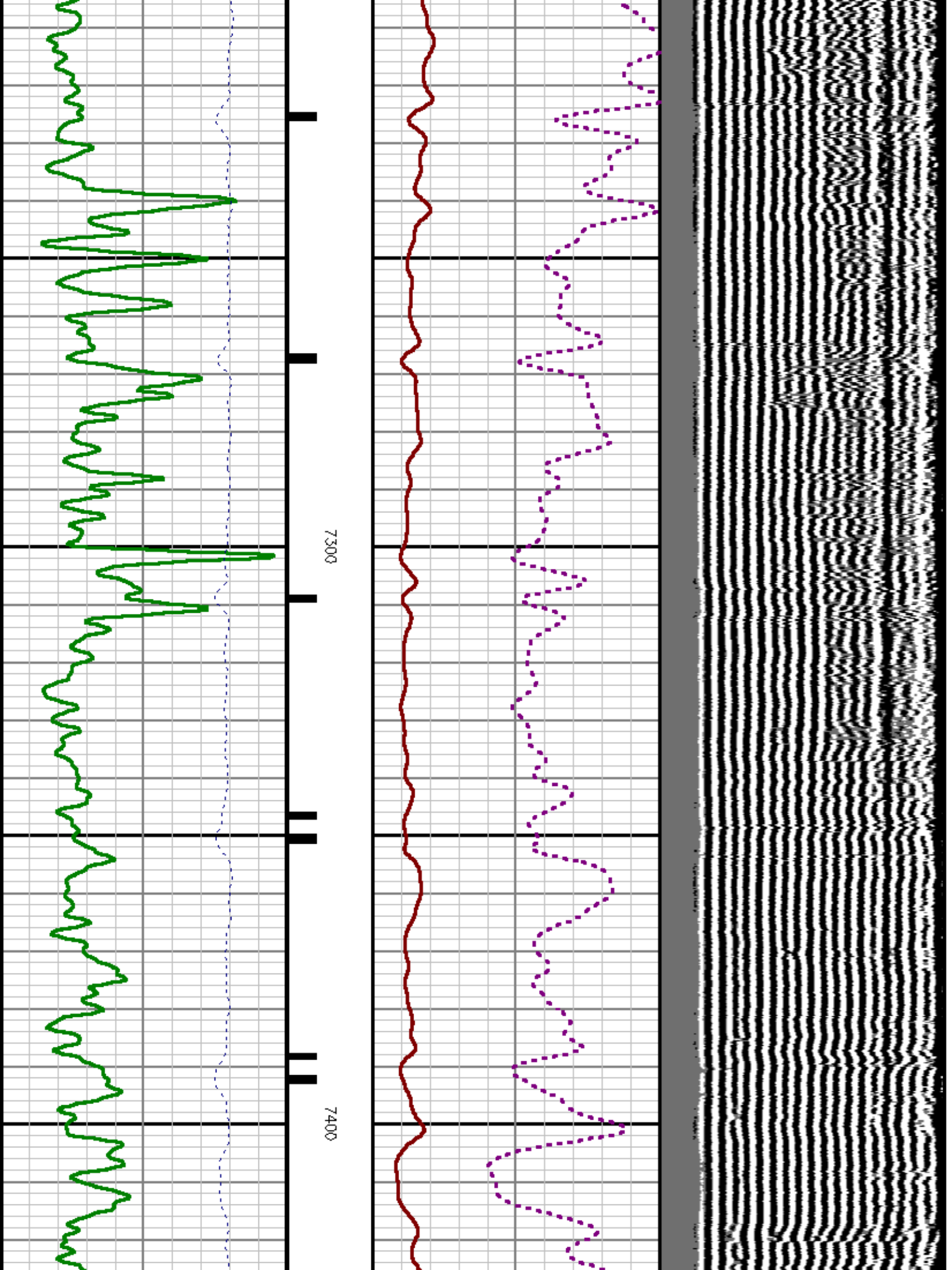


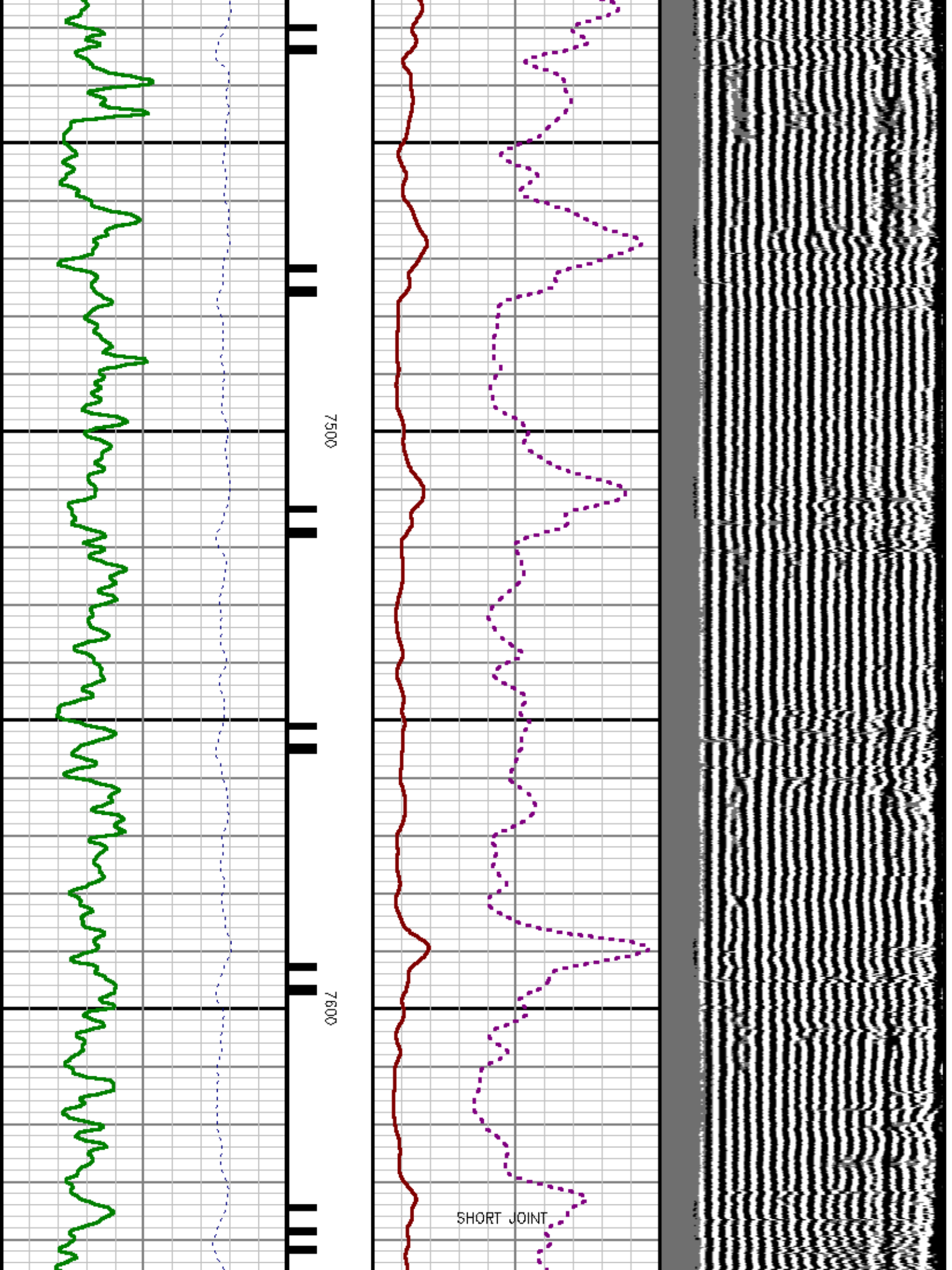


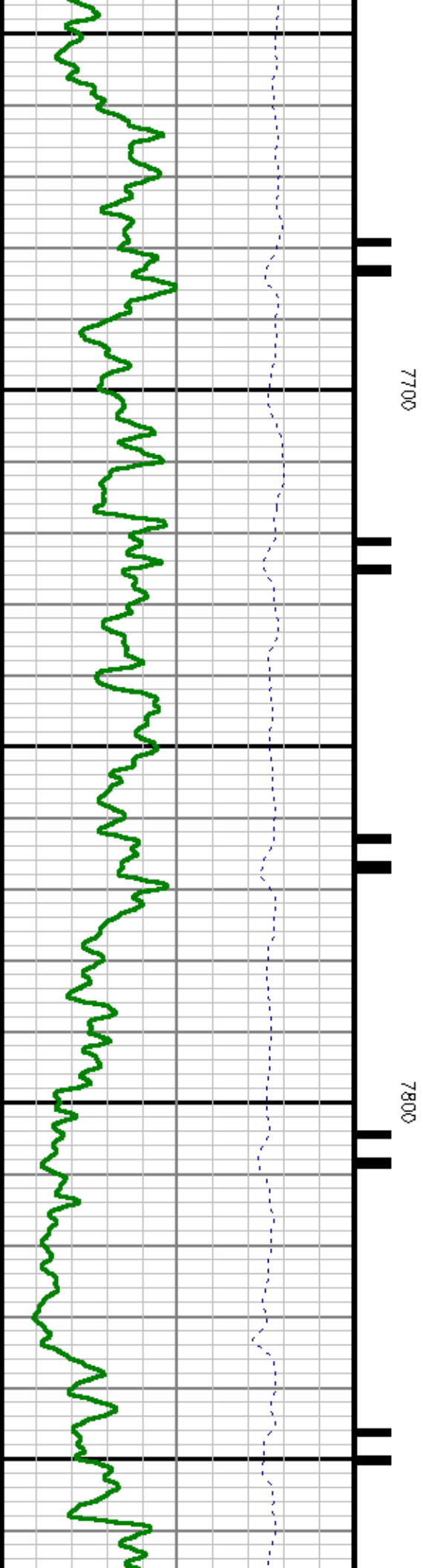
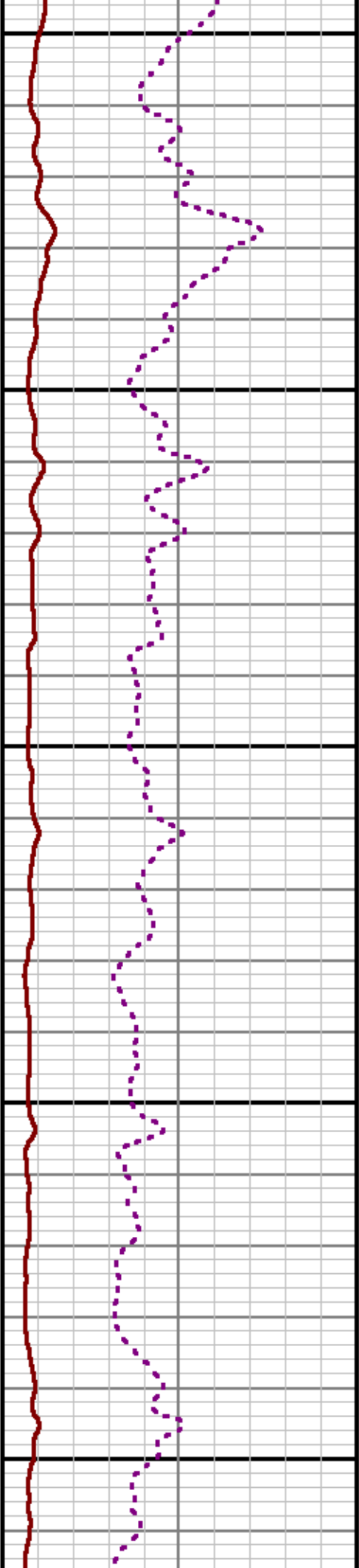
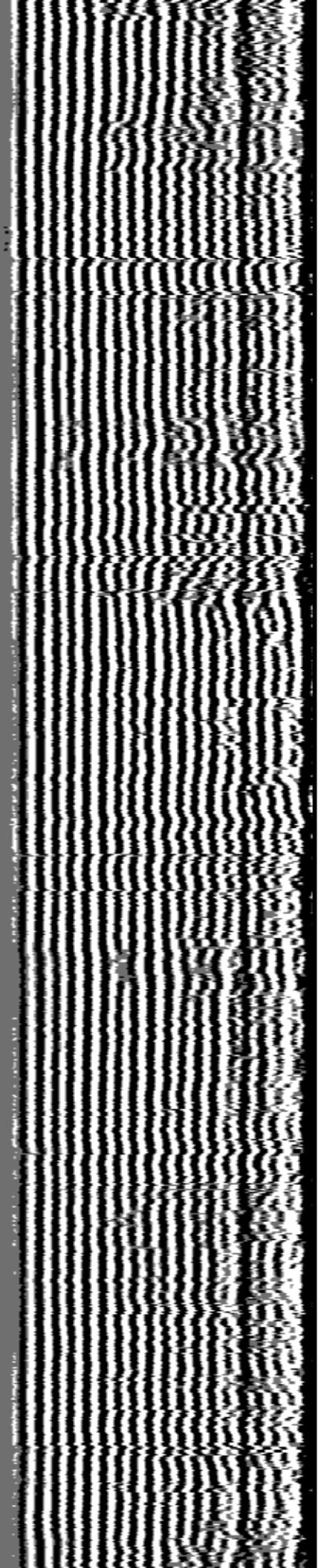


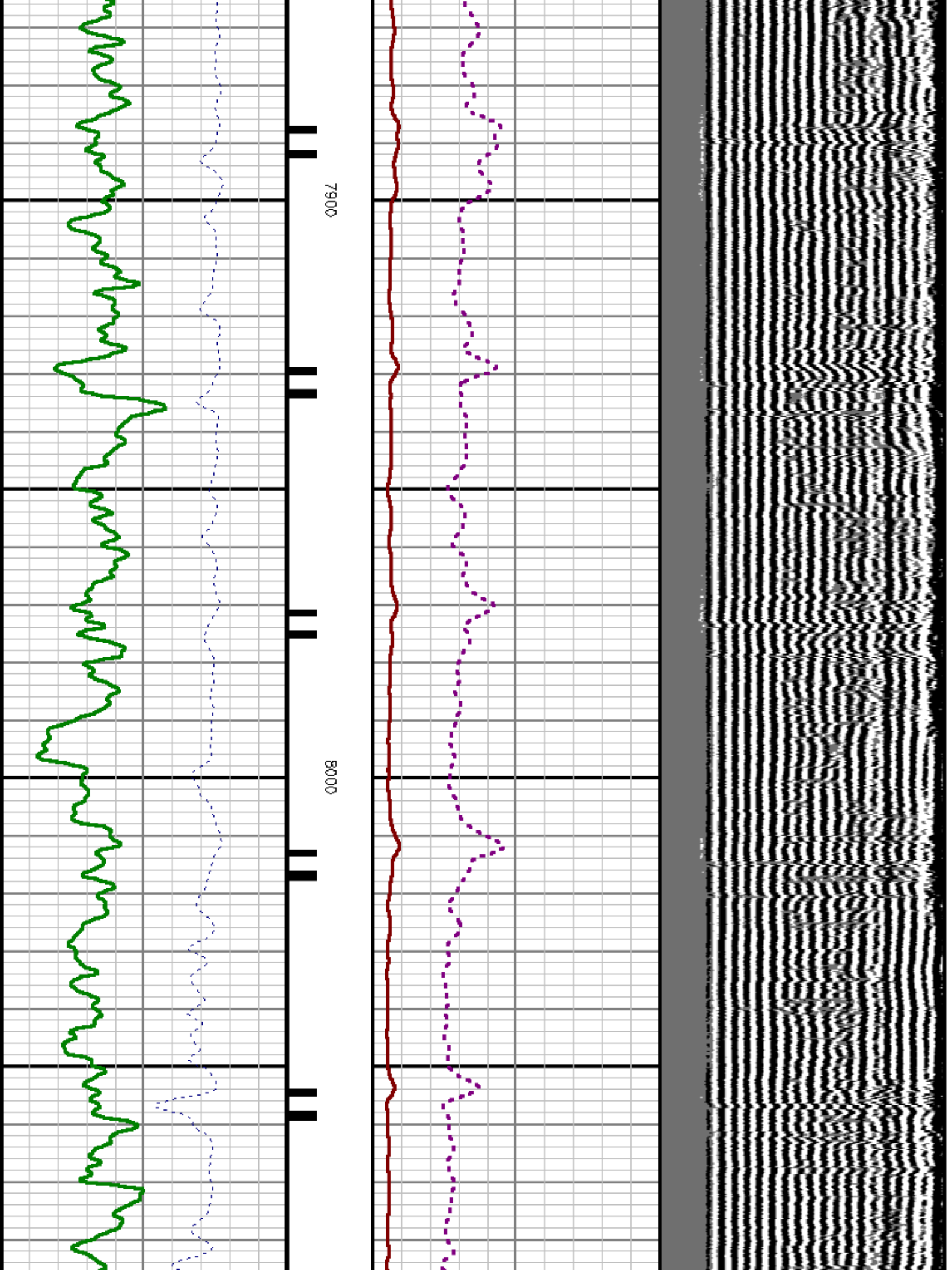


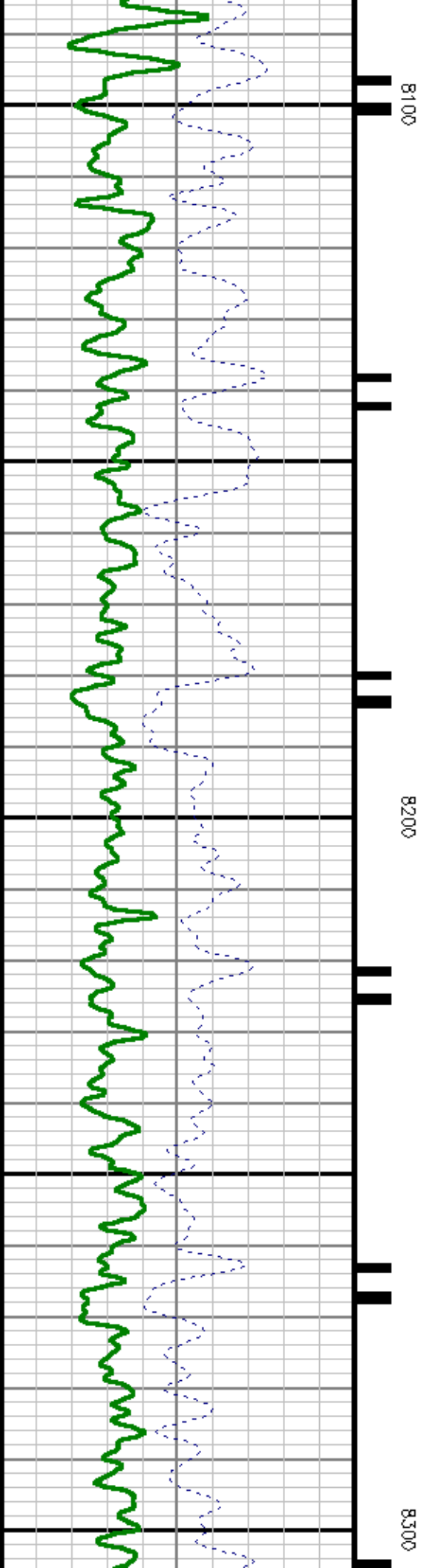
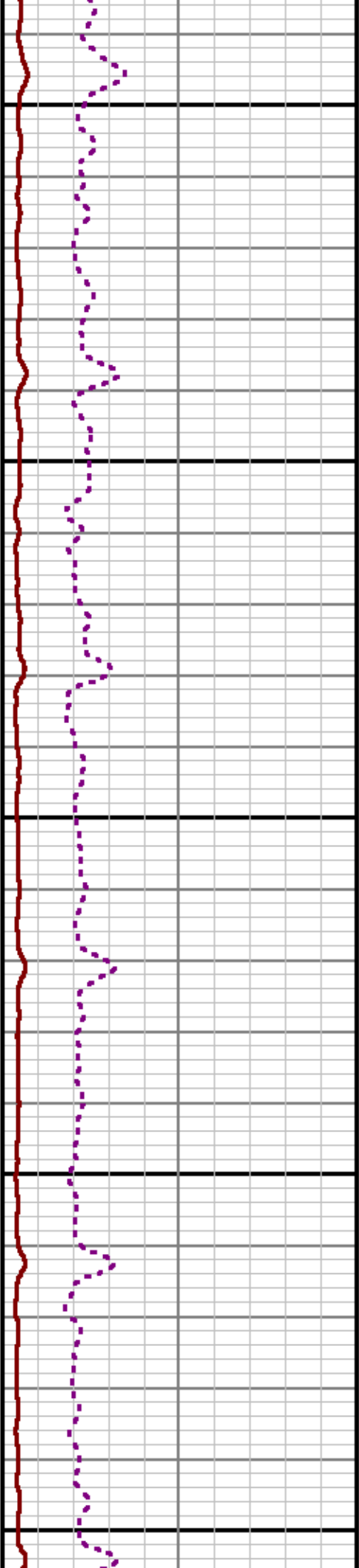
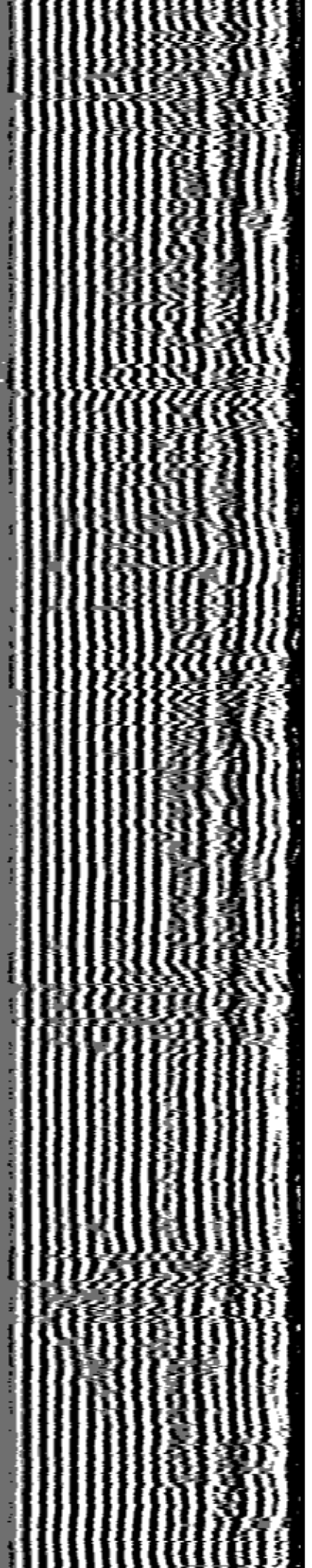


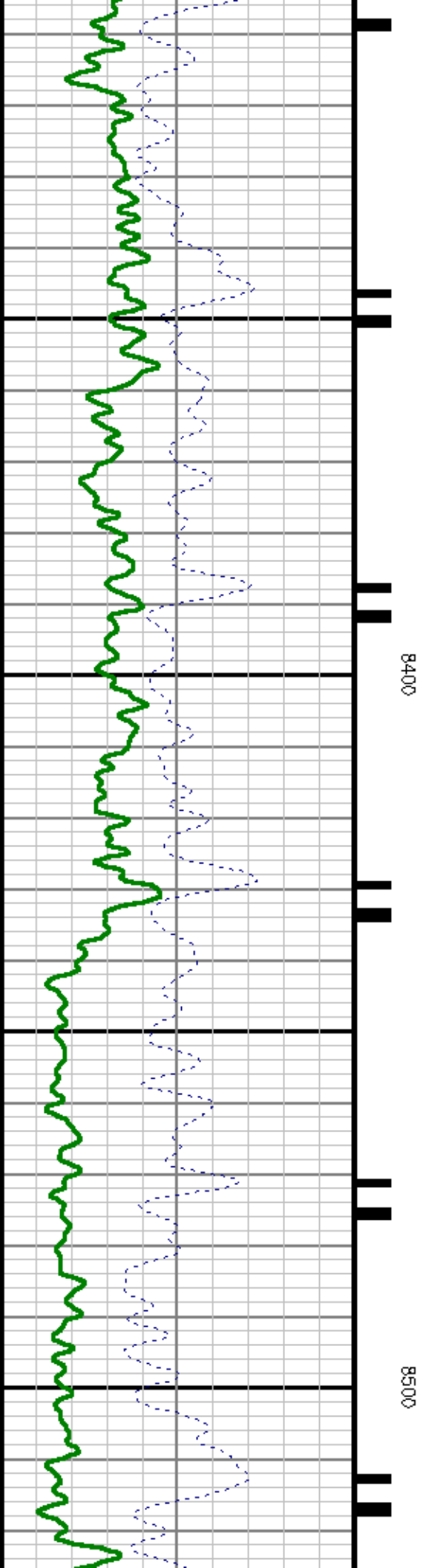
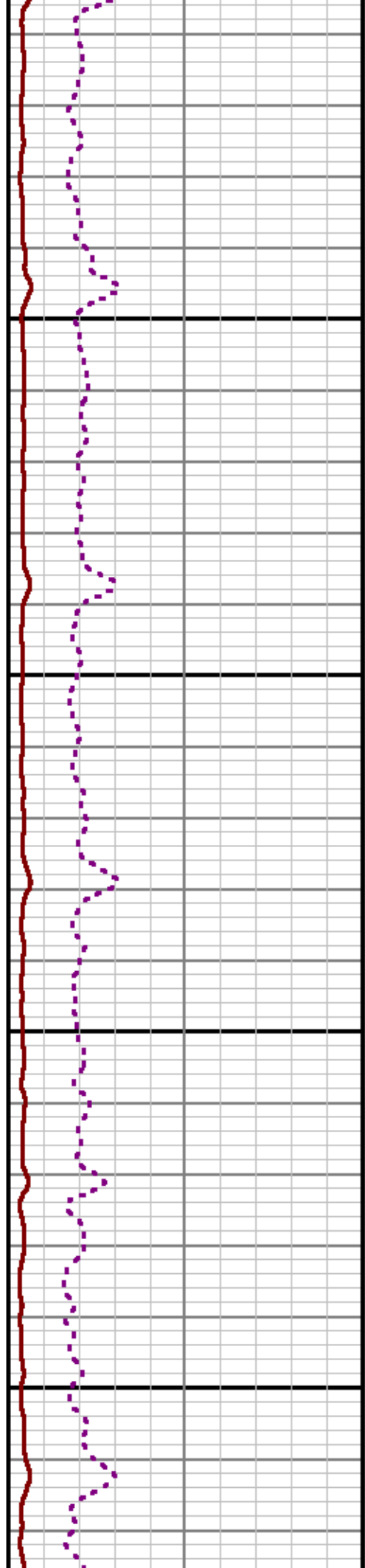
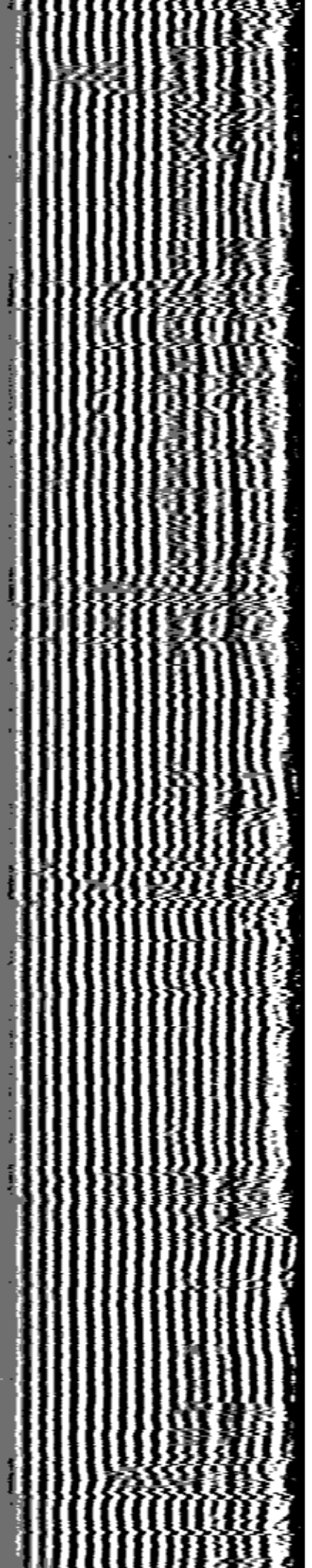


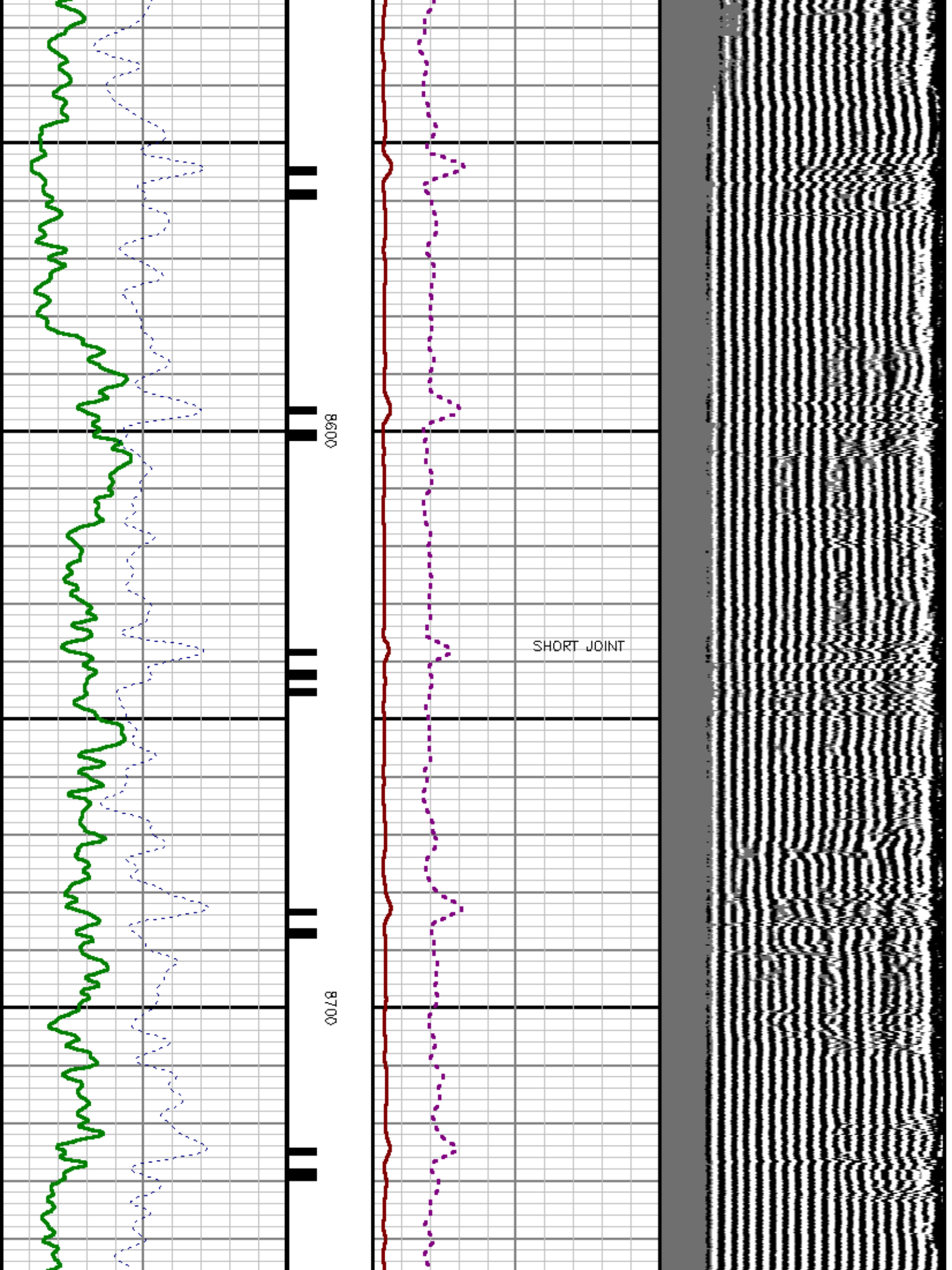


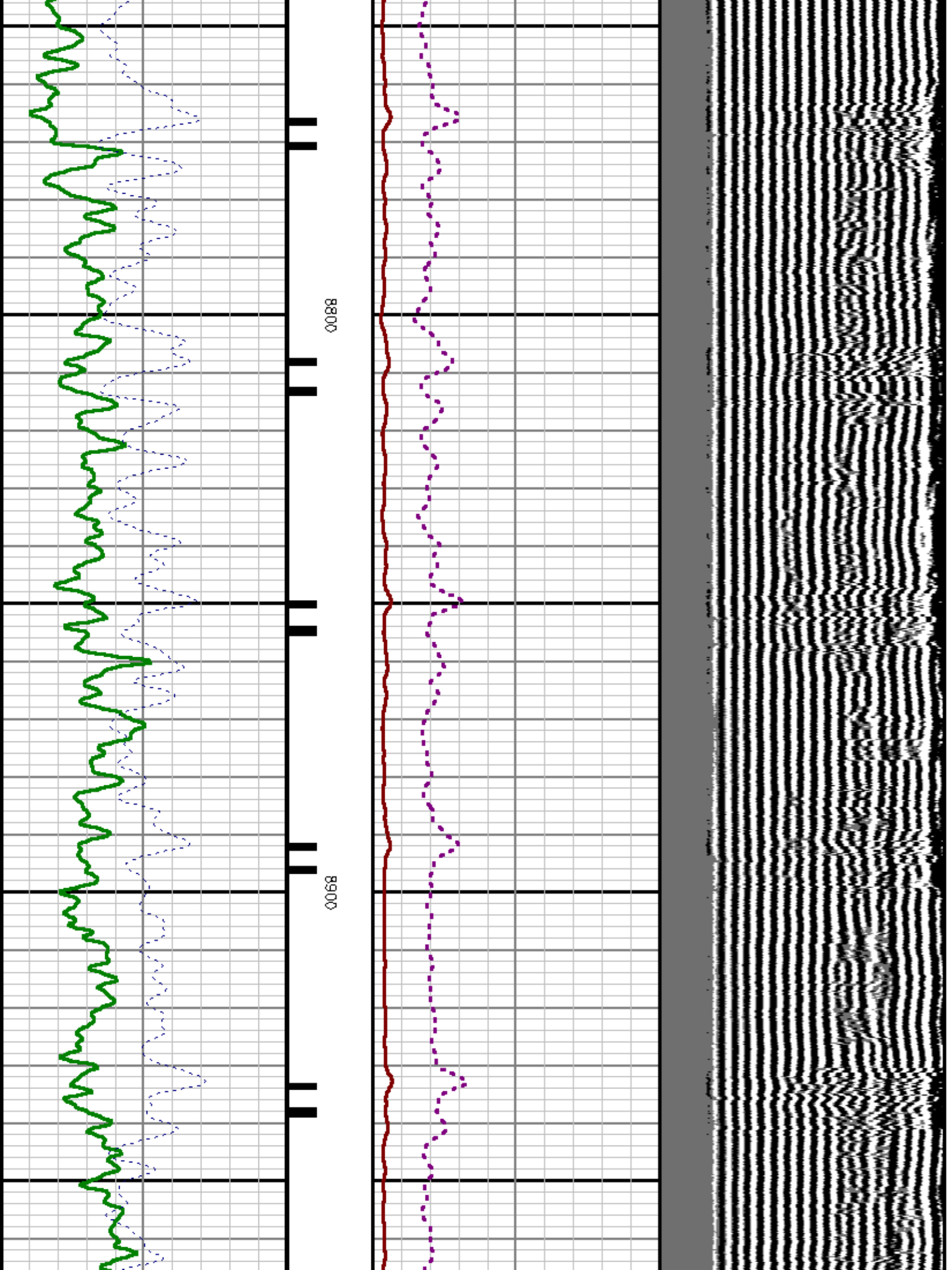


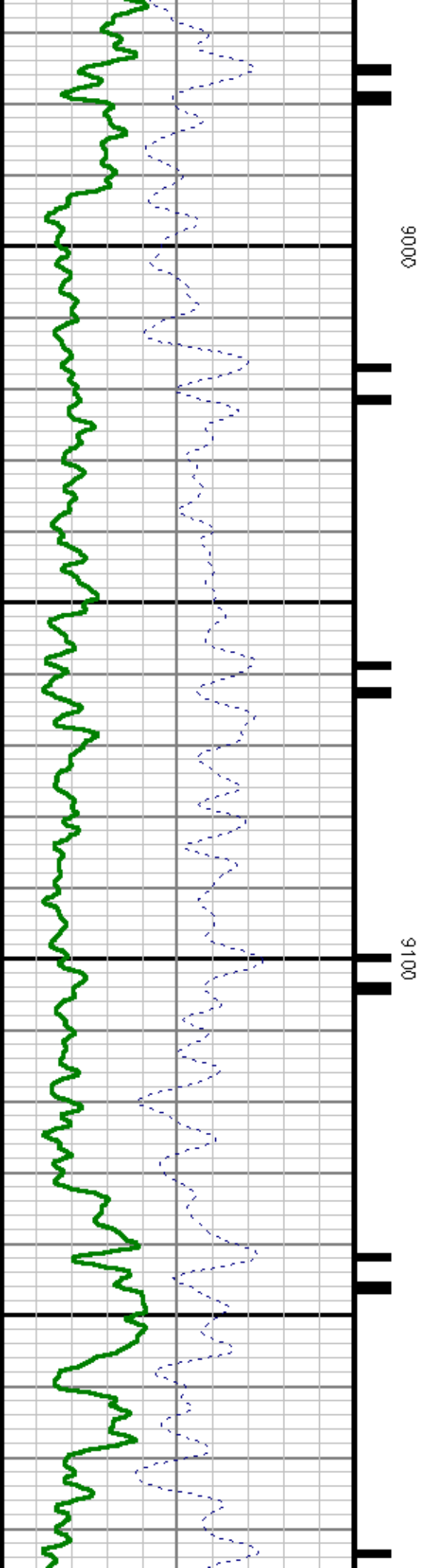
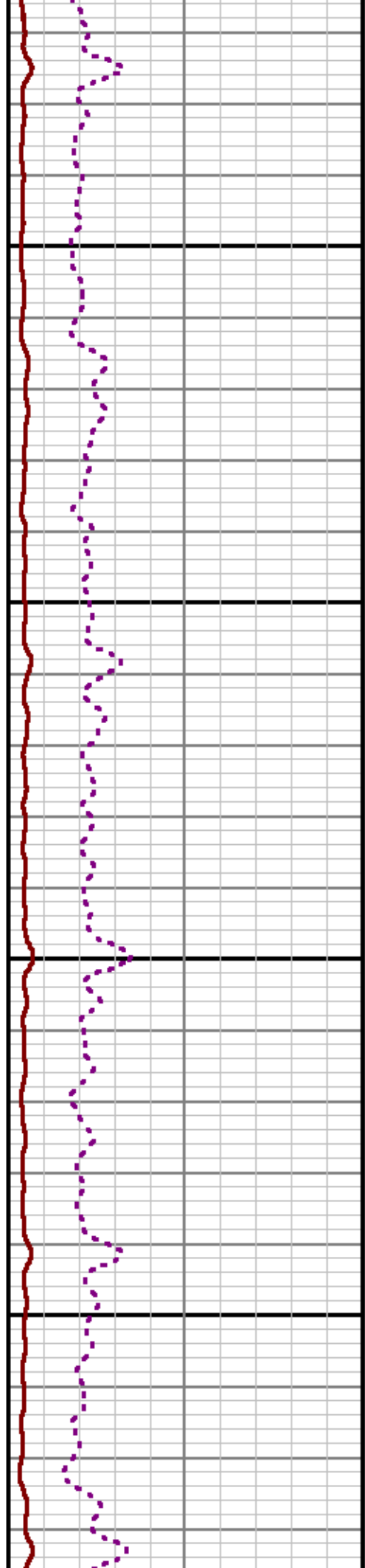
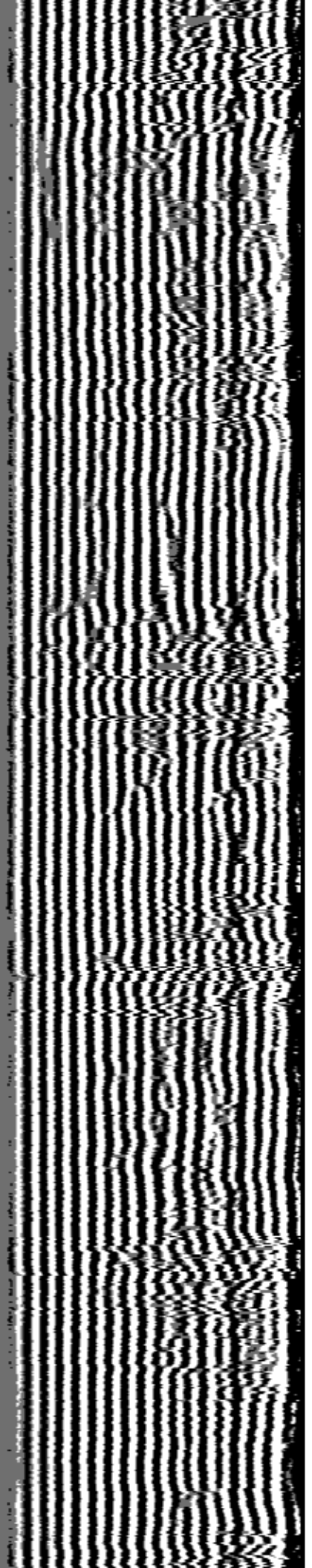


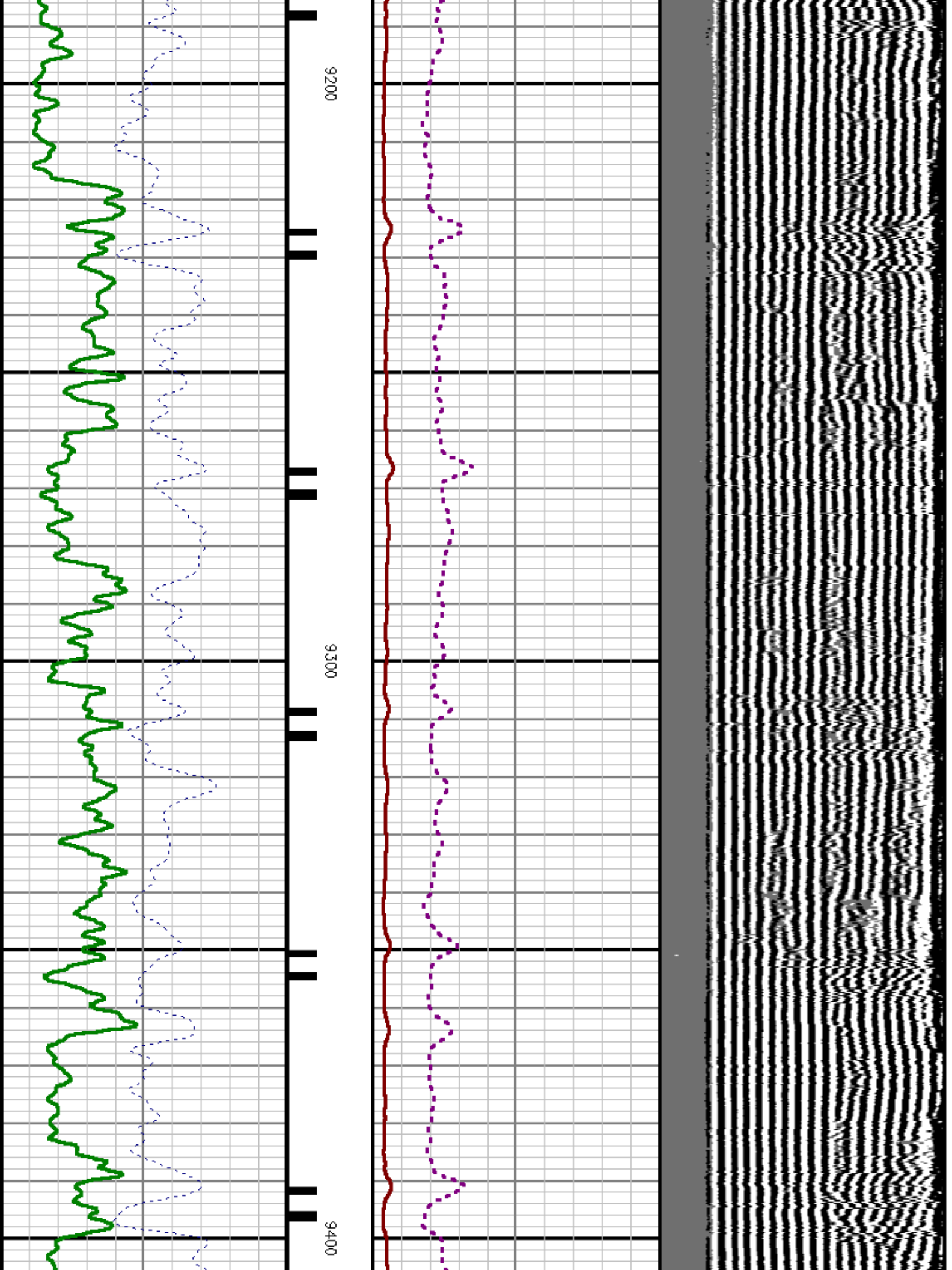


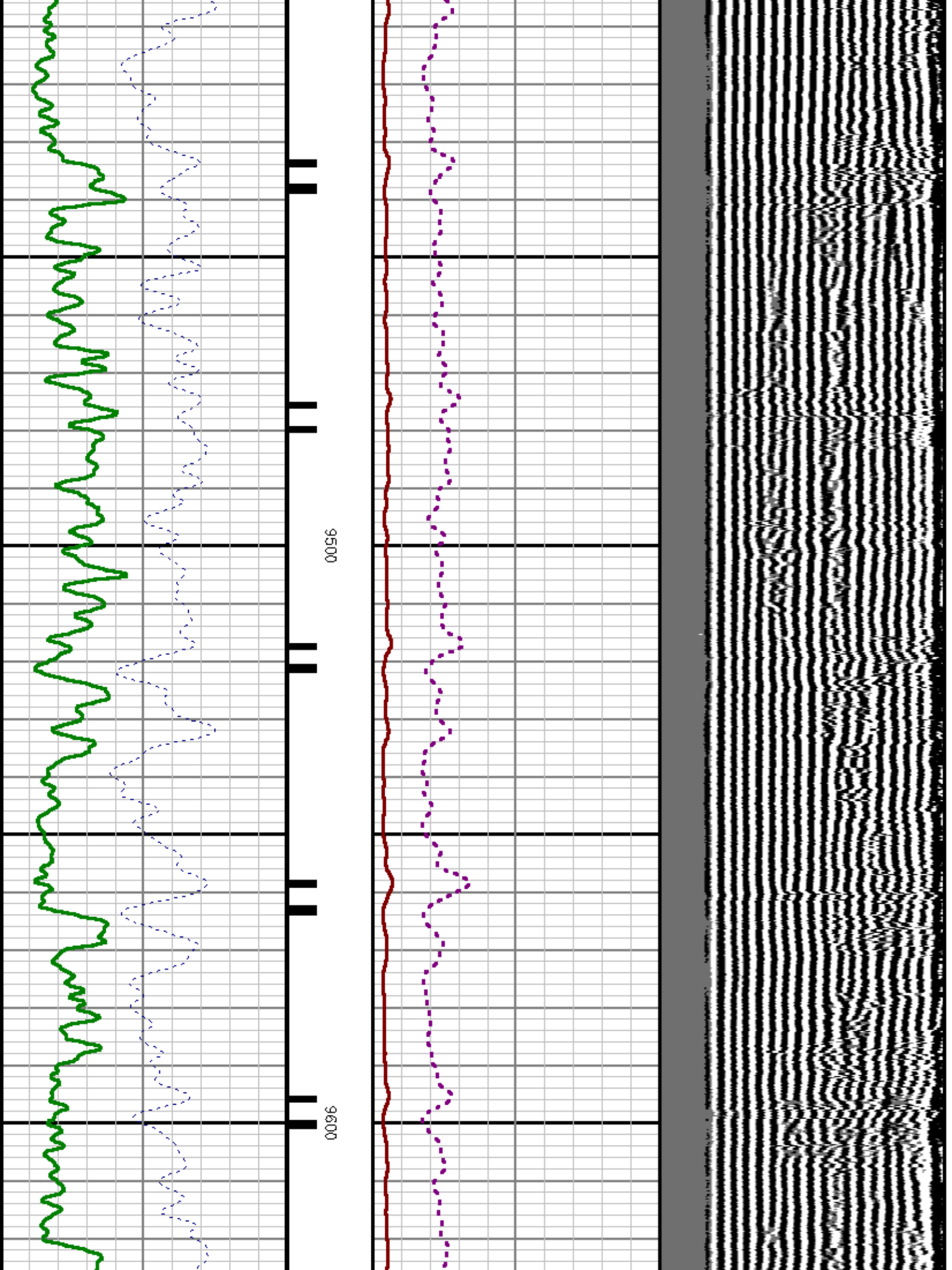


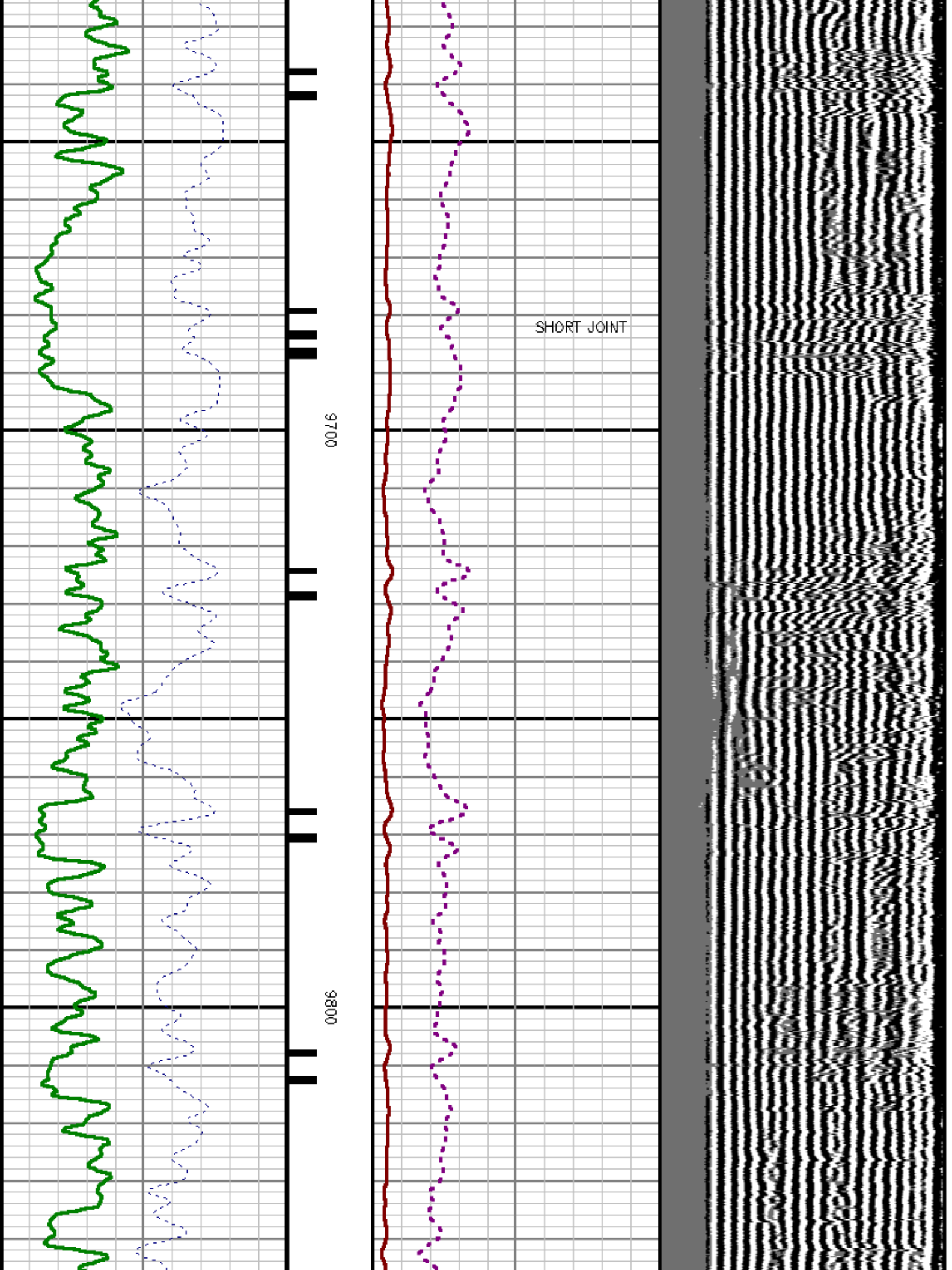


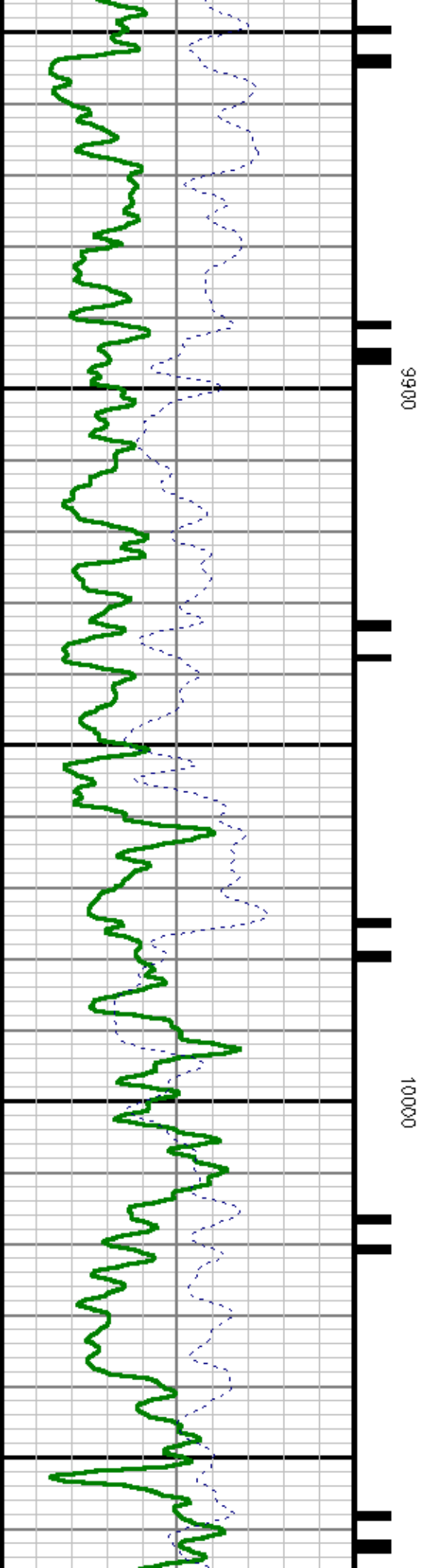
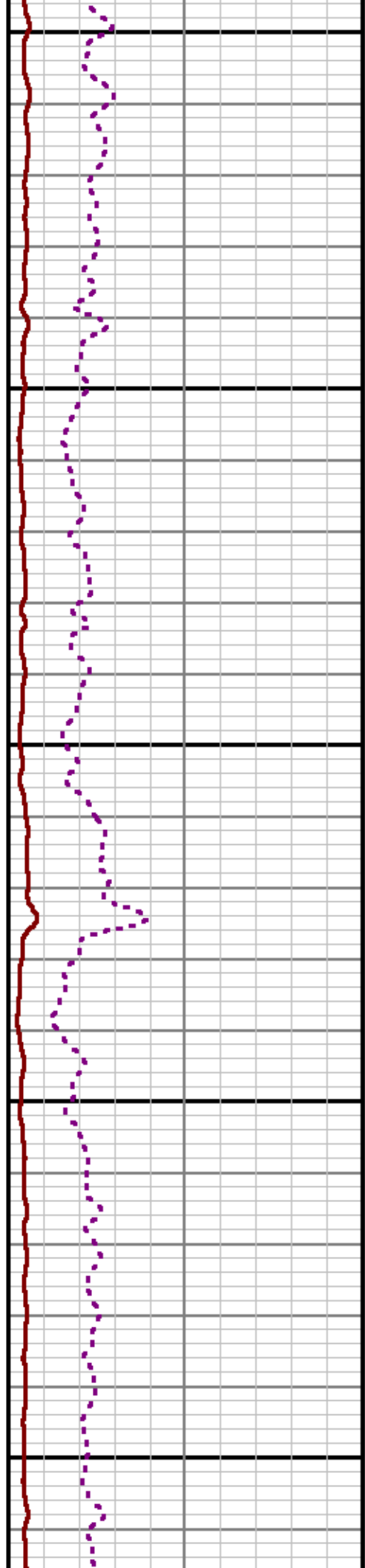
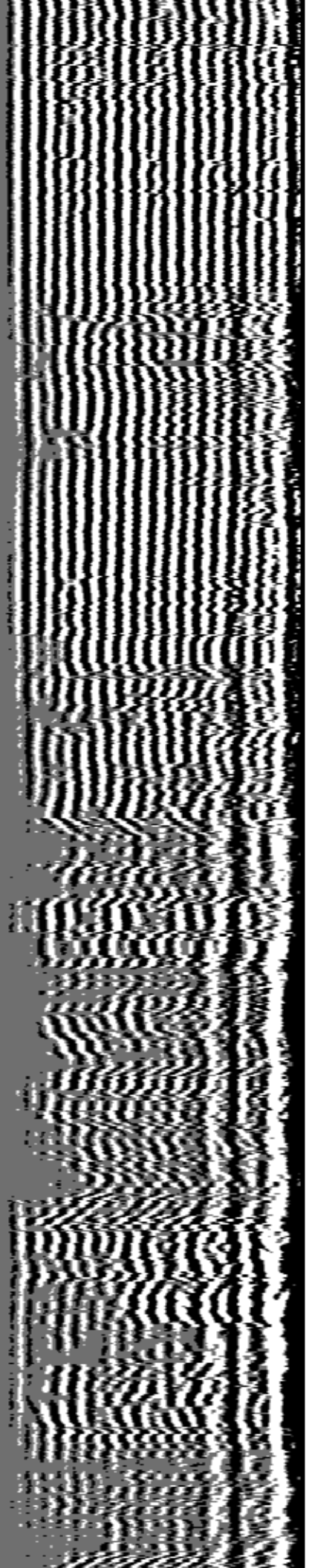


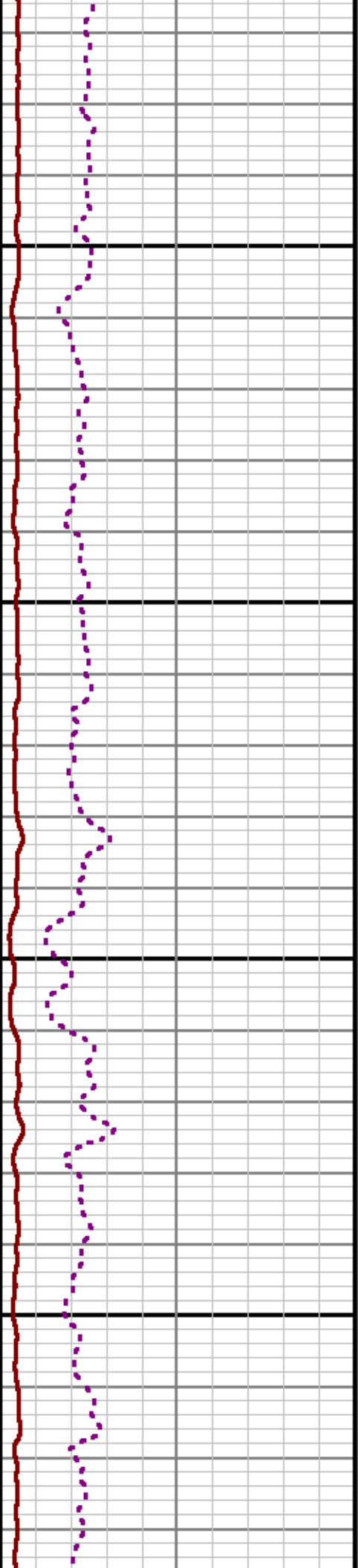
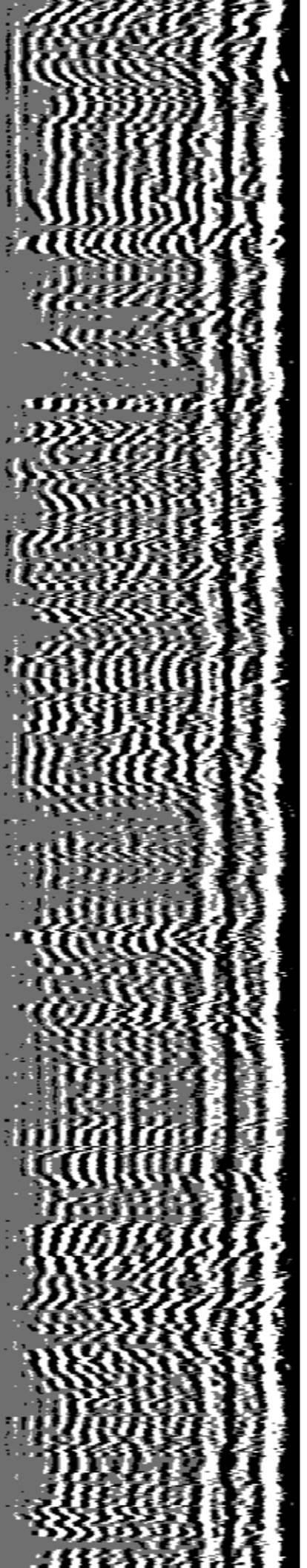






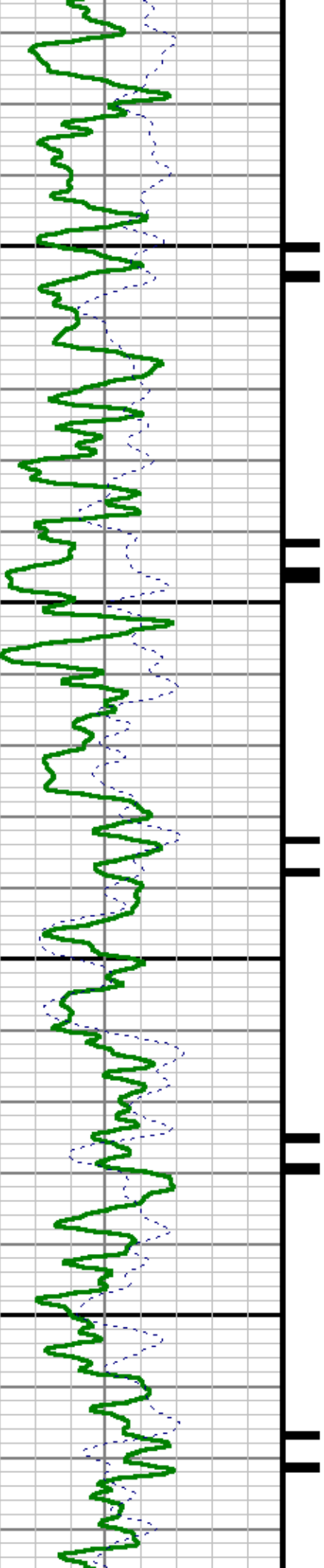


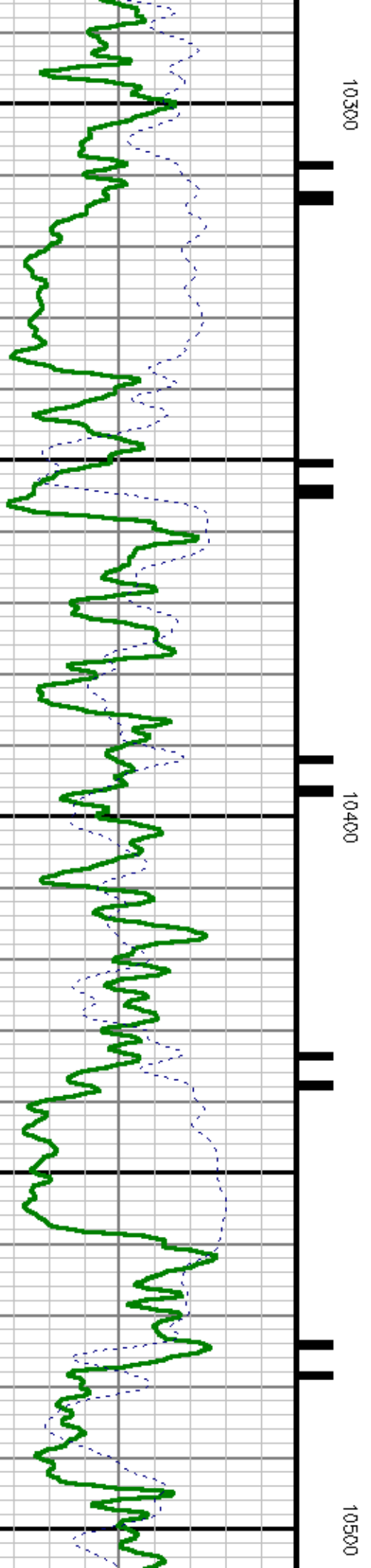
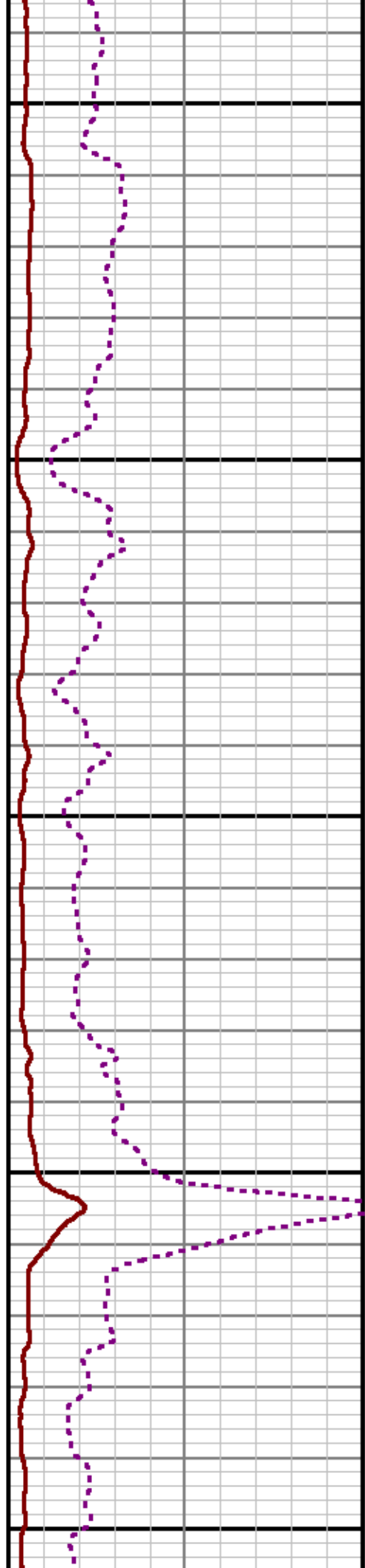
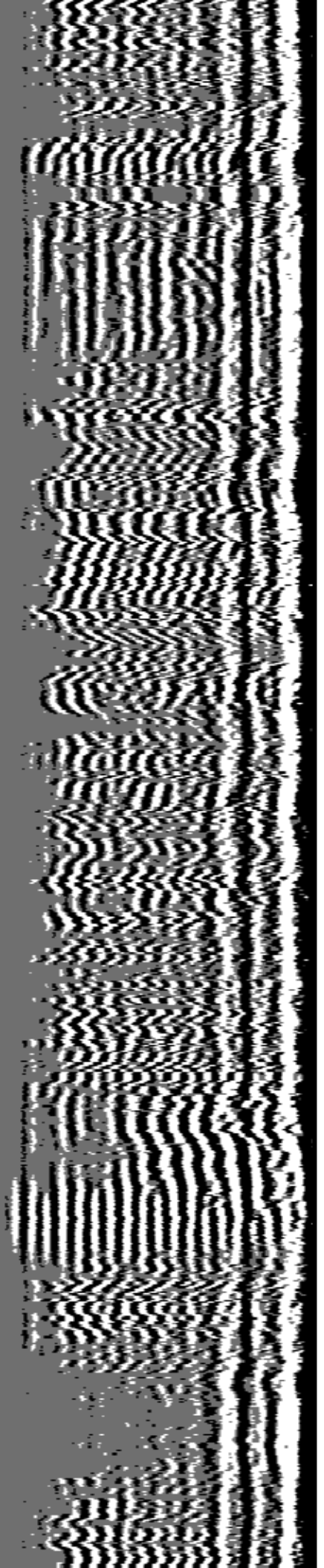


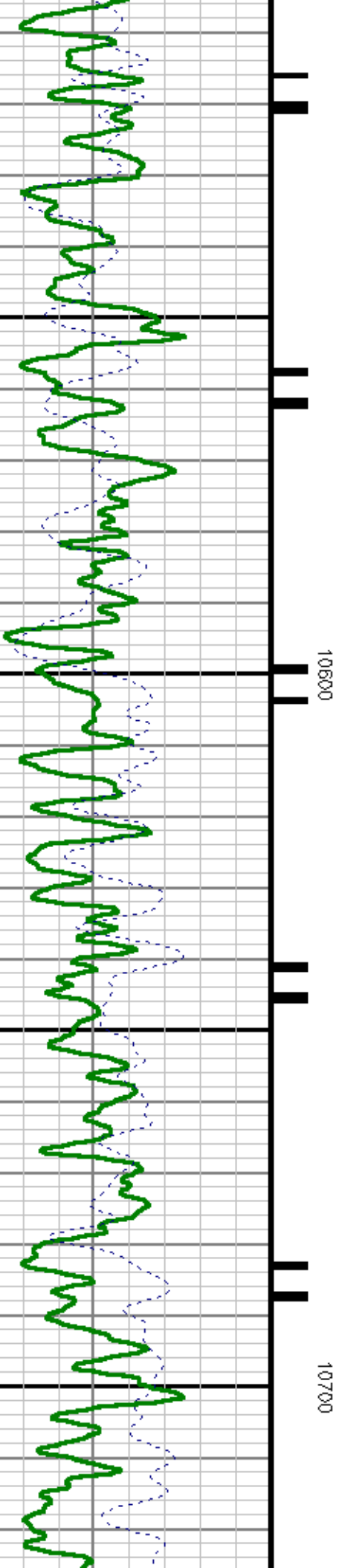
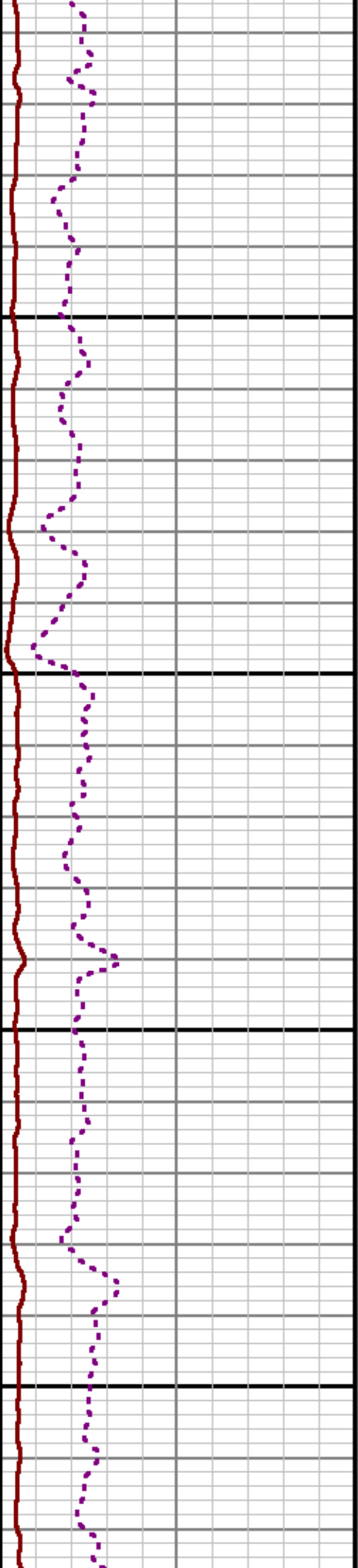
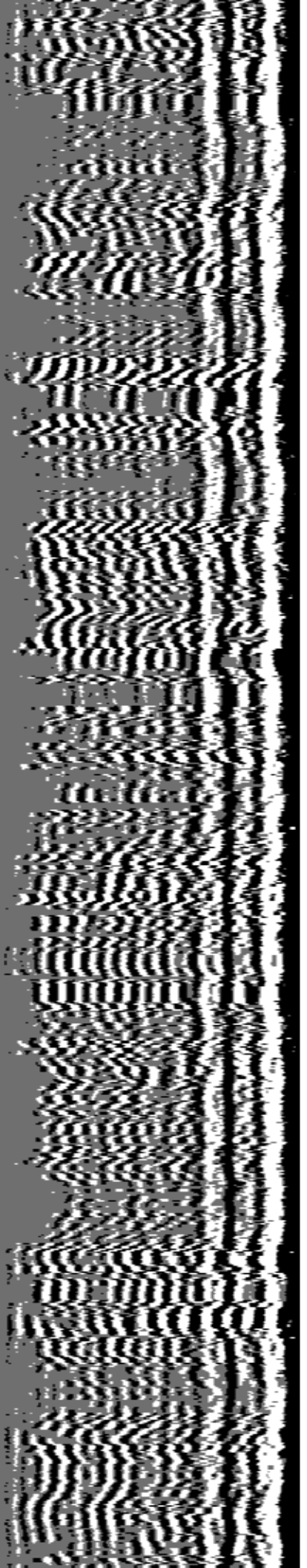


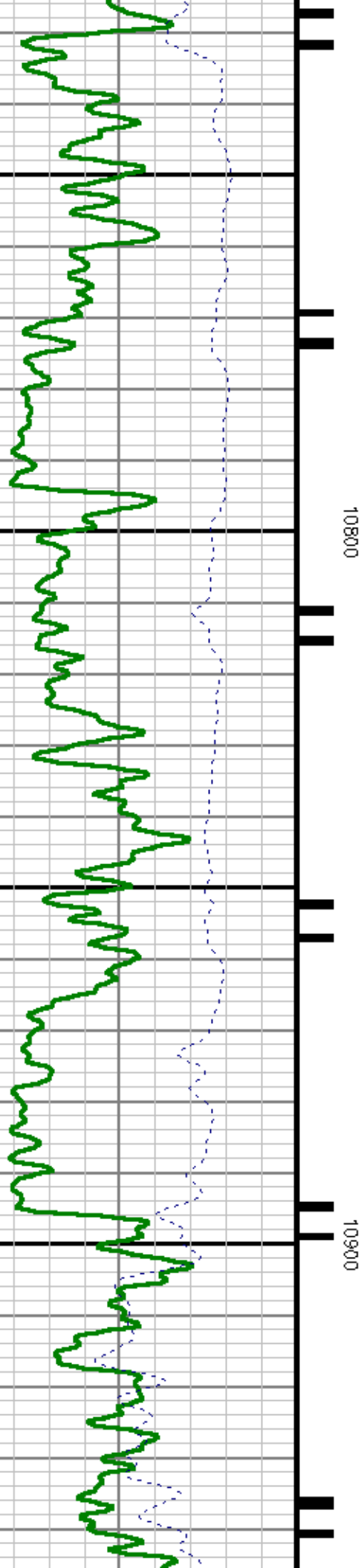
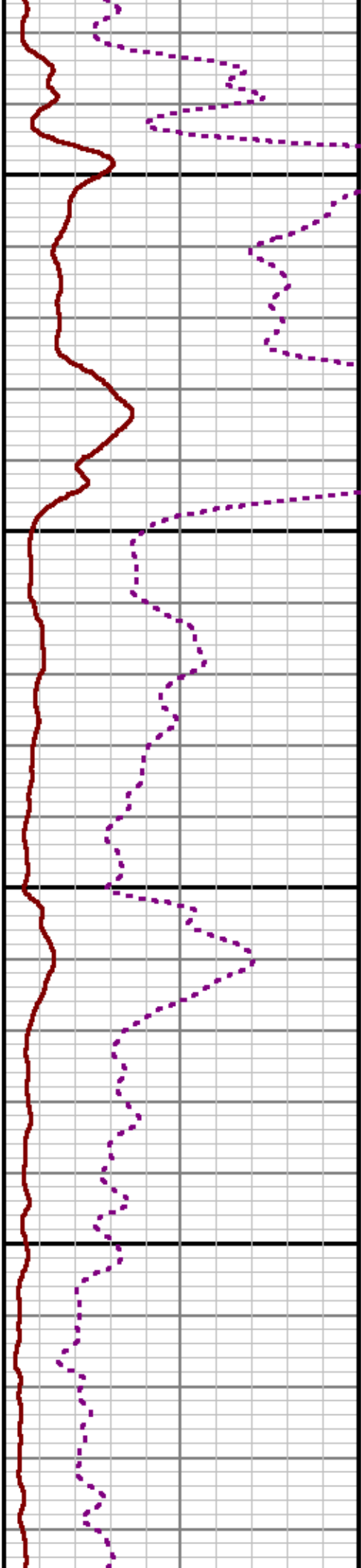
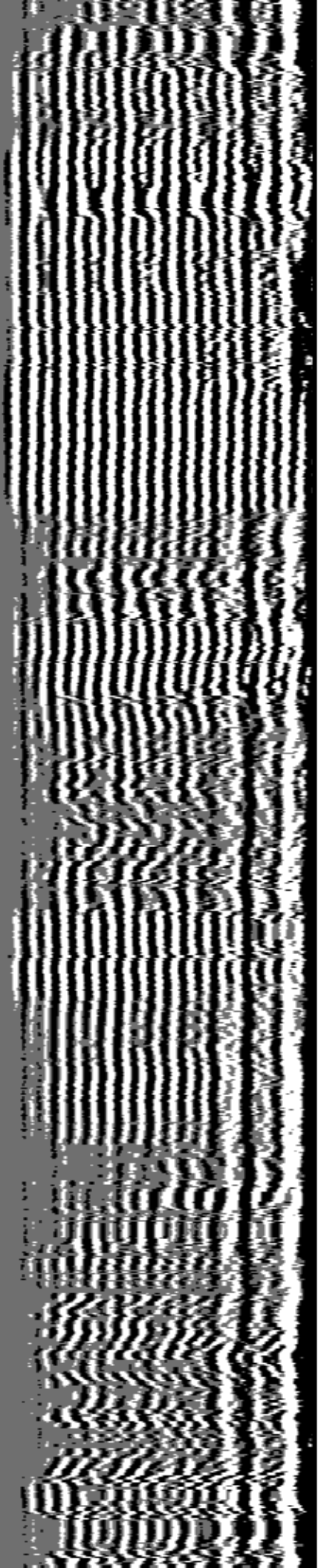
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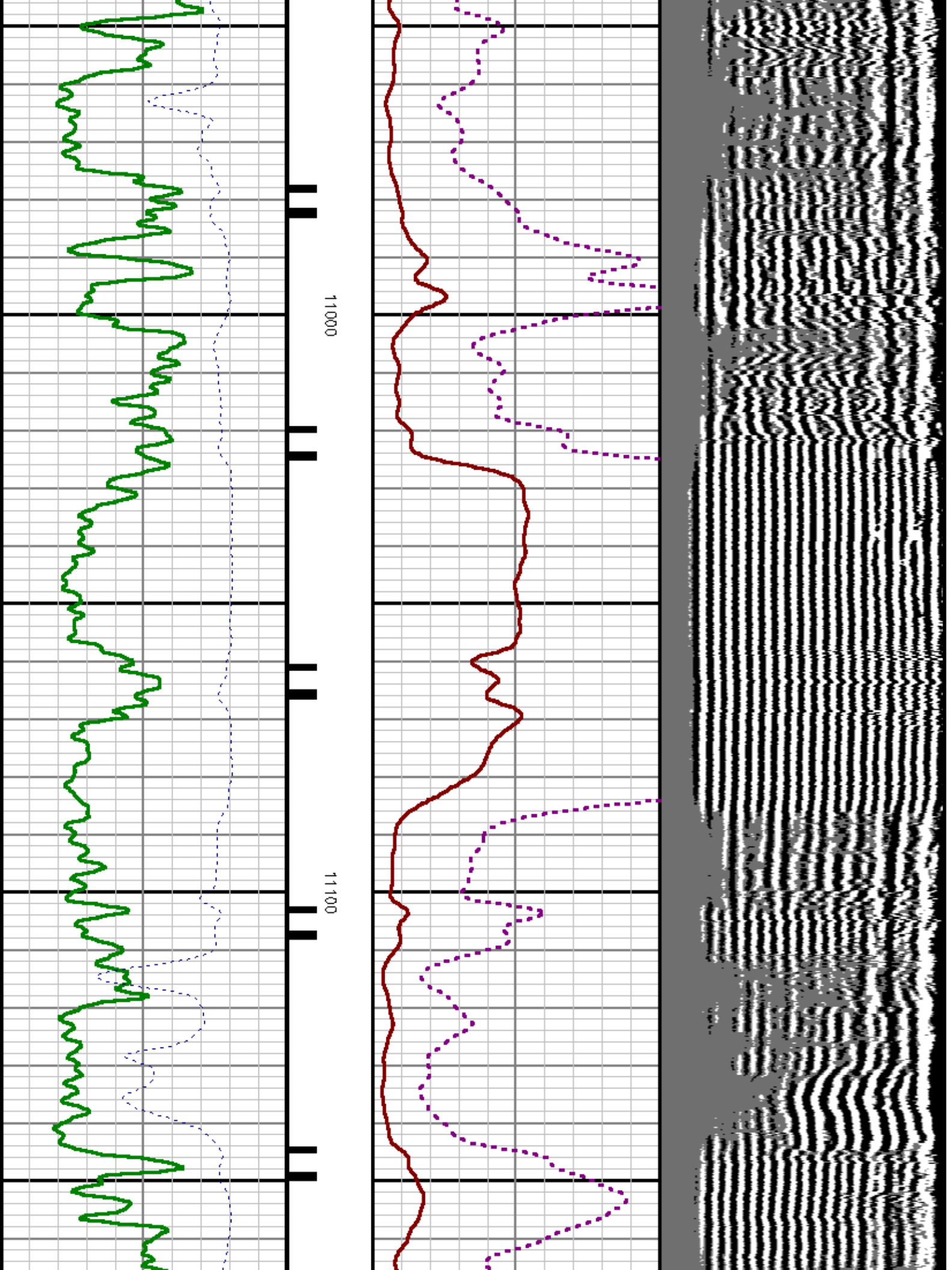
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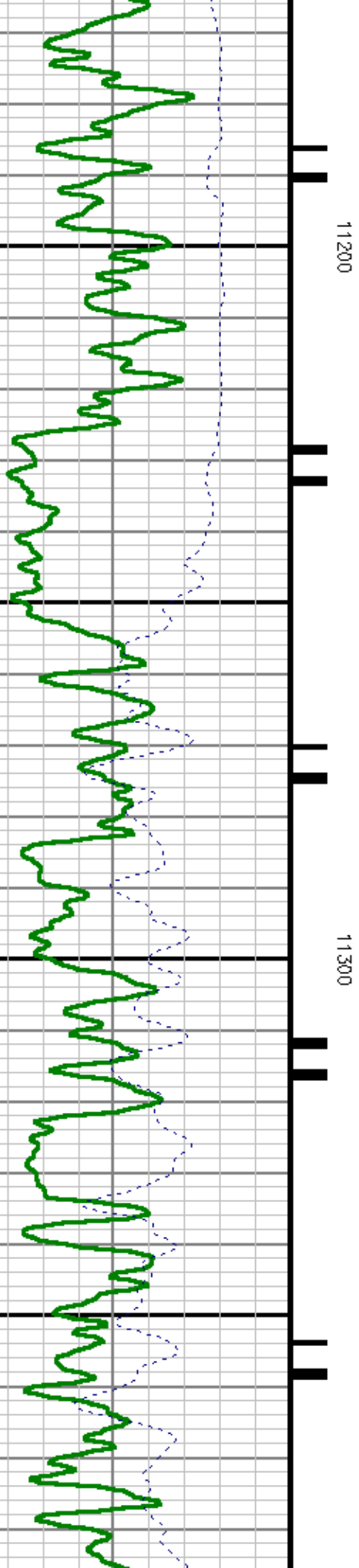
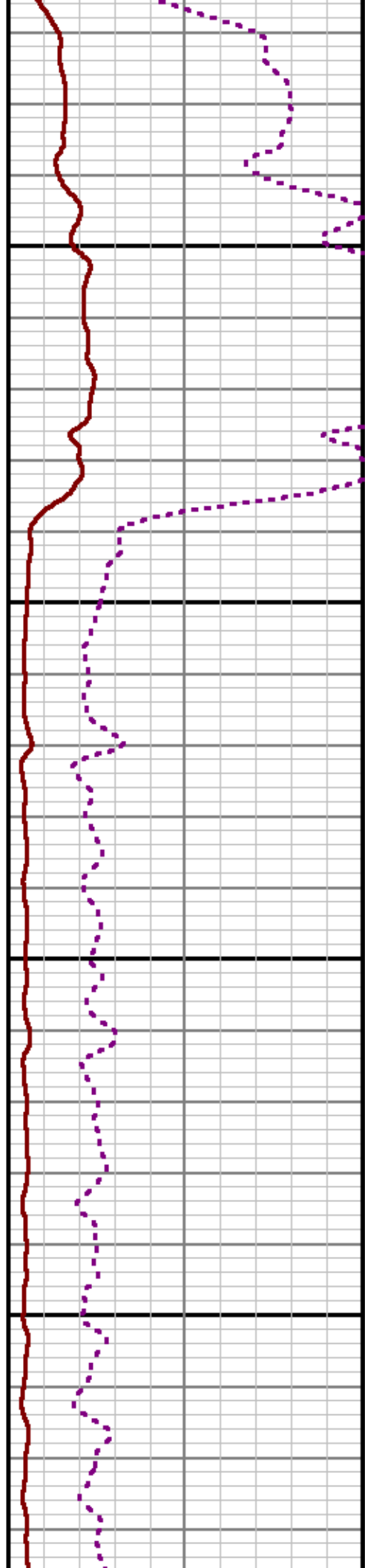
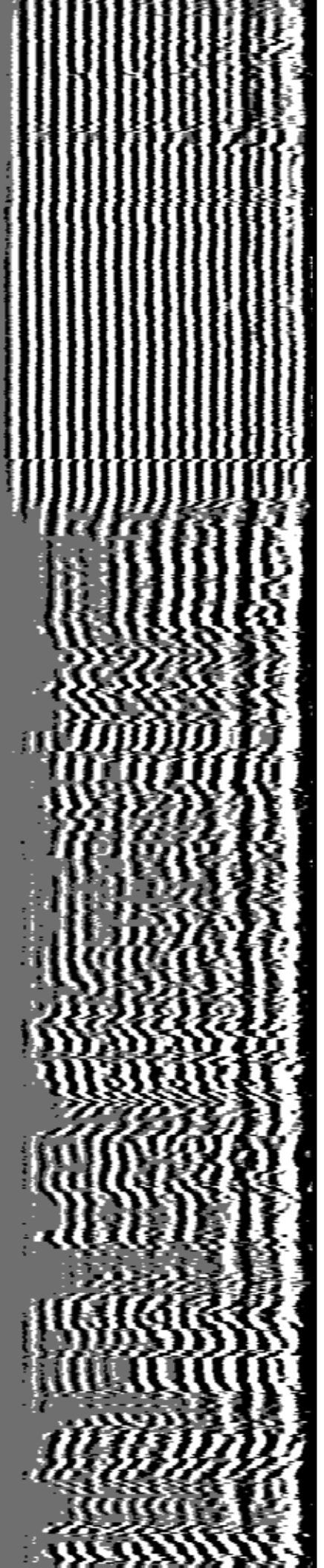


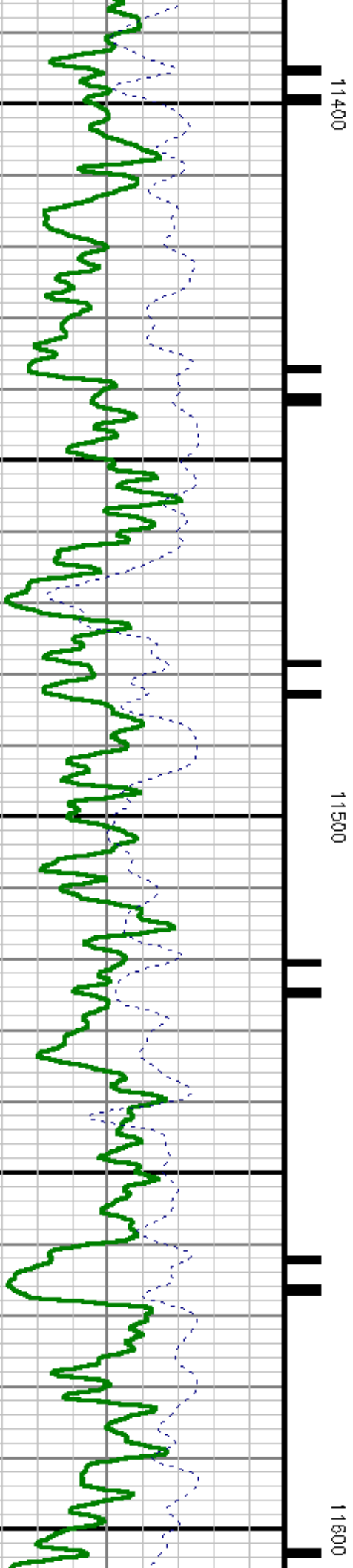
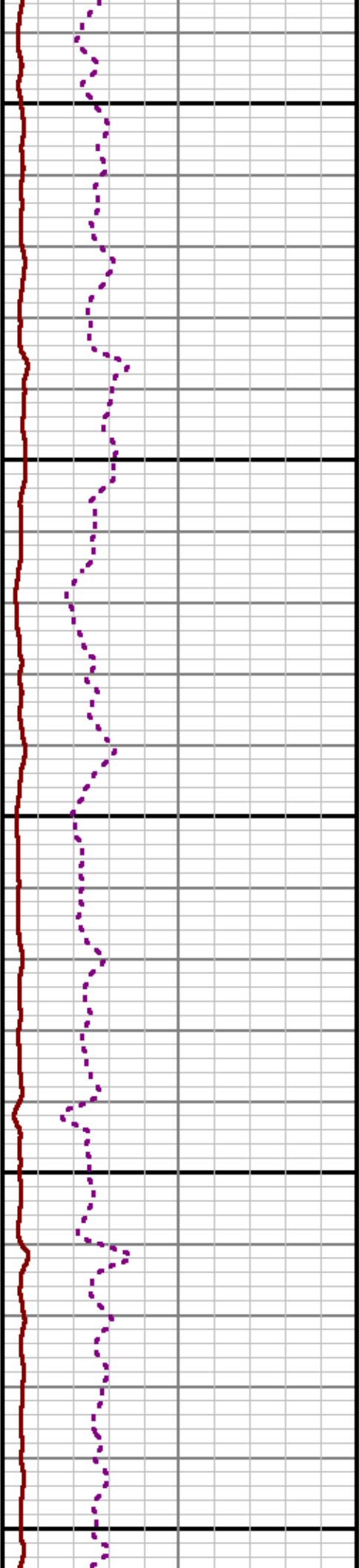
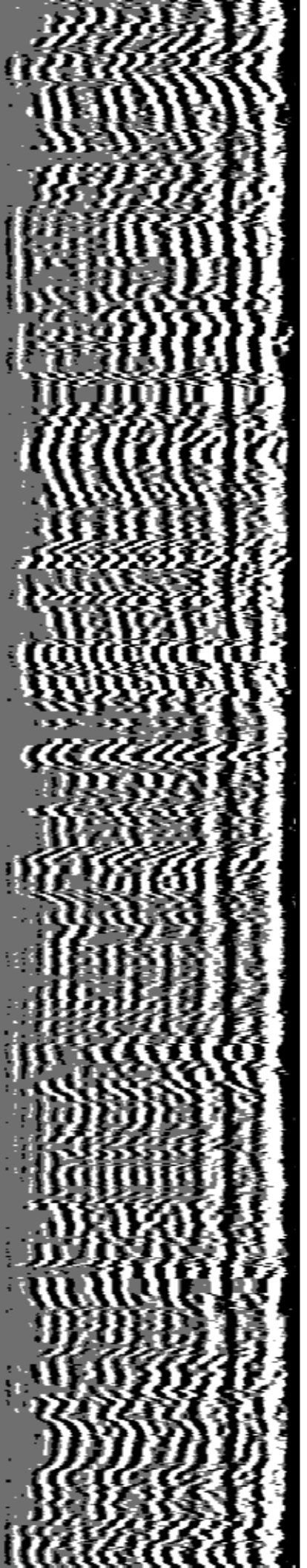


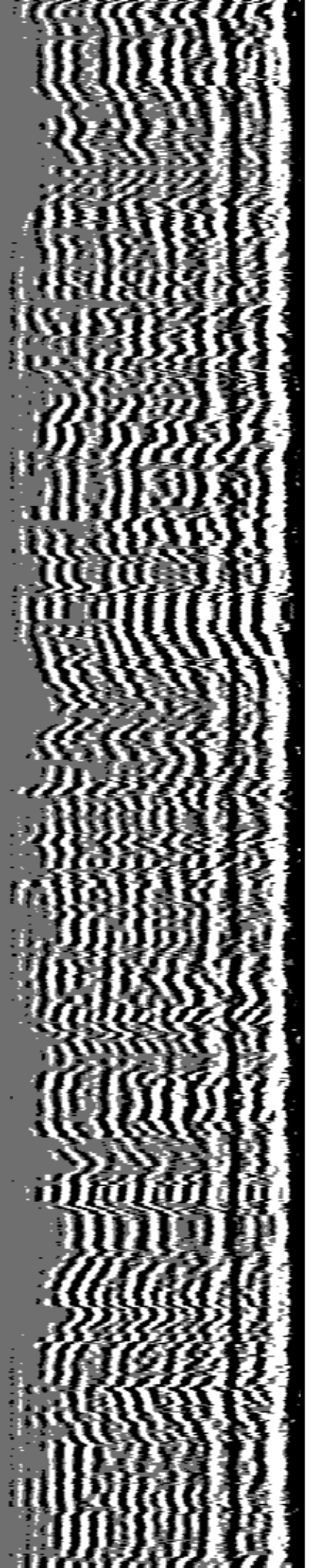








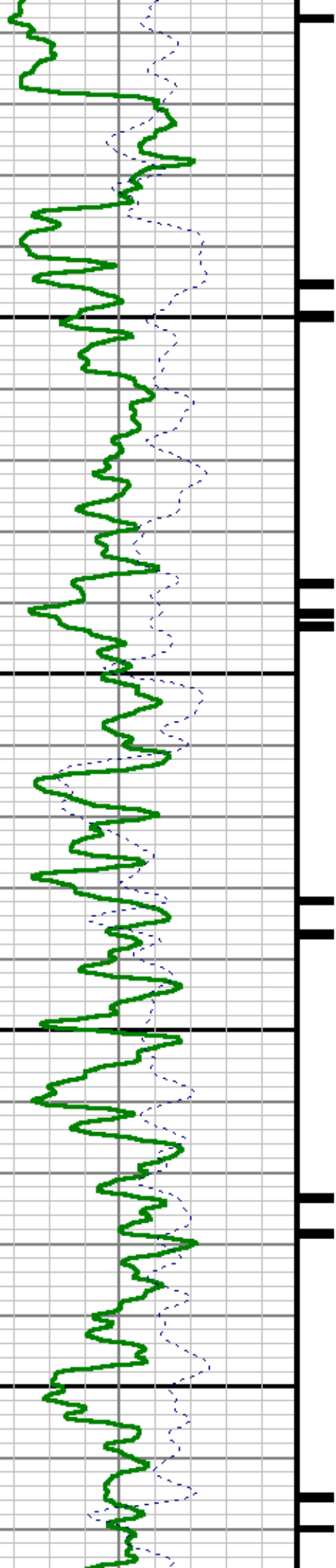


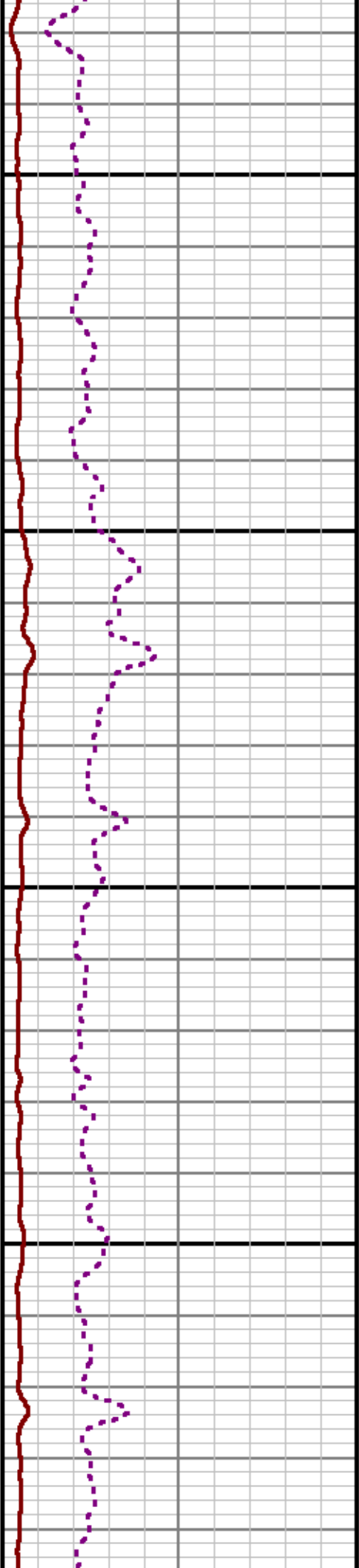
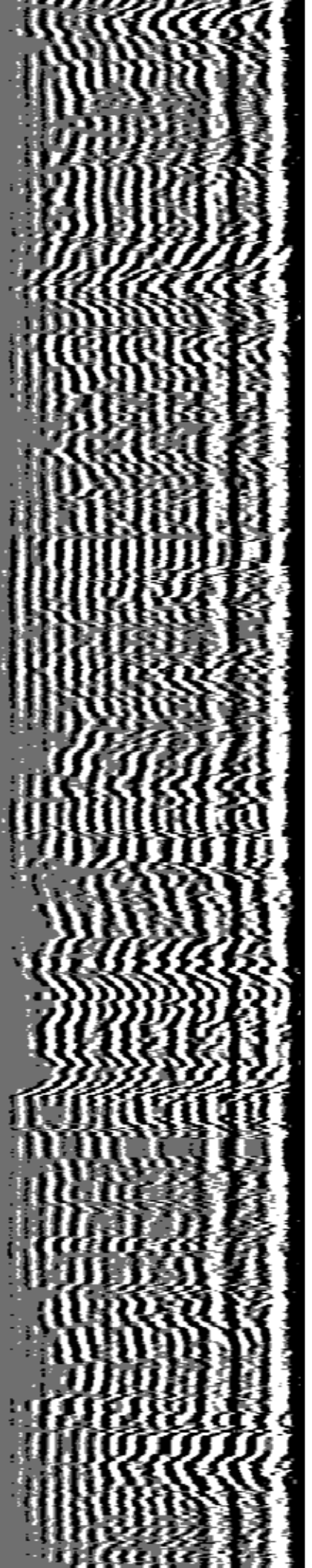


SHORT JOINT

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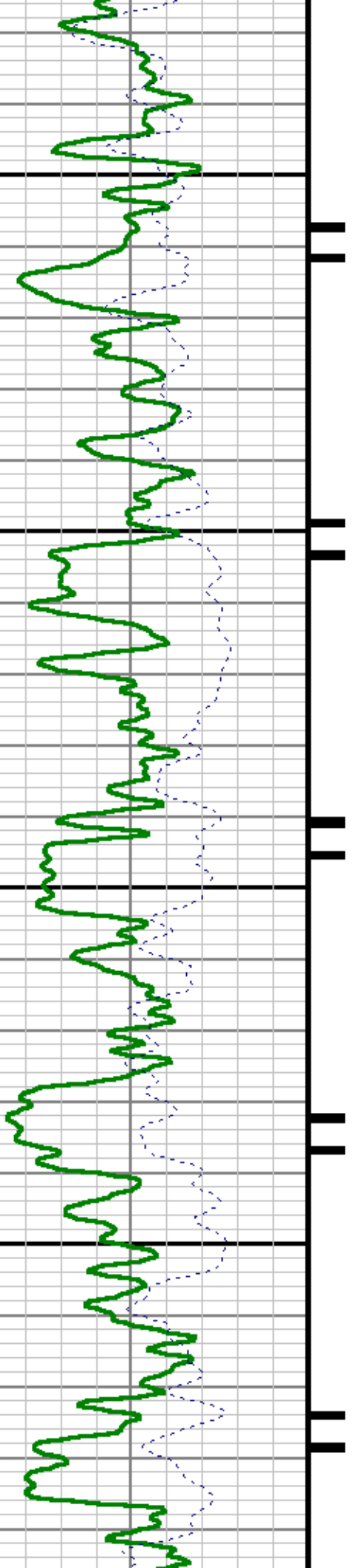
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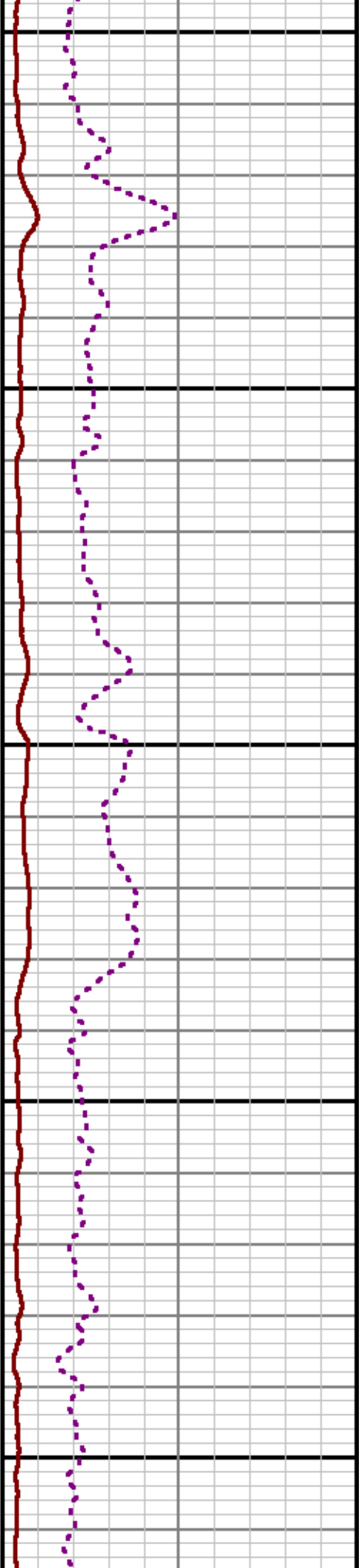
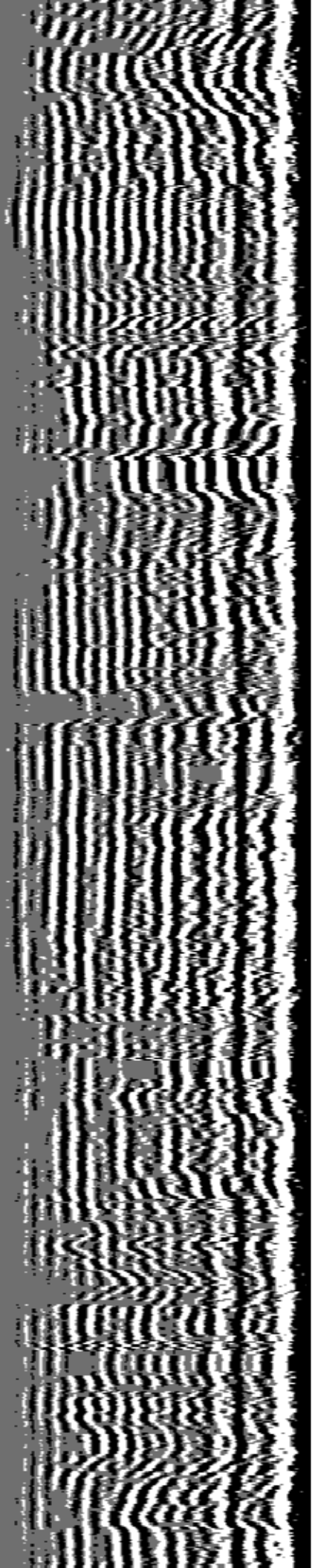




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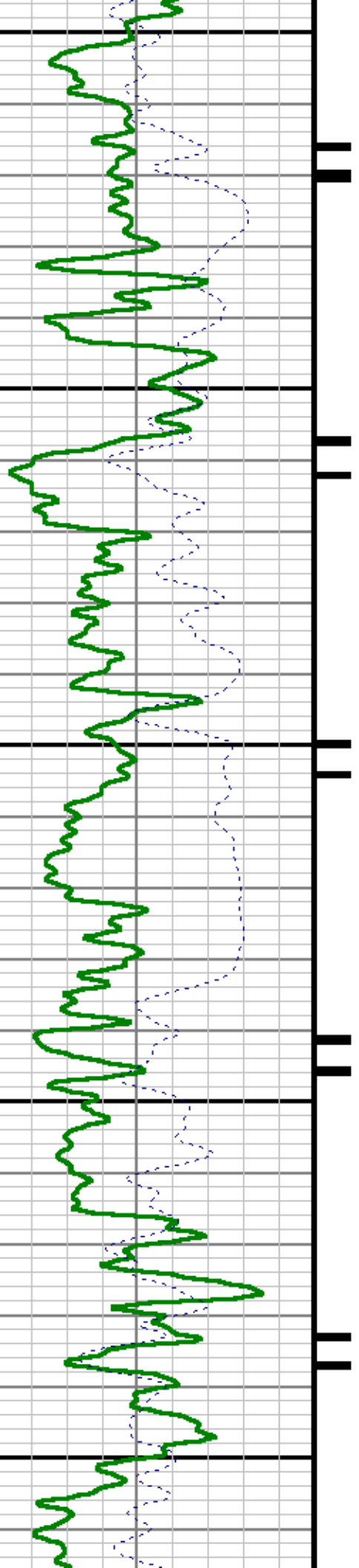
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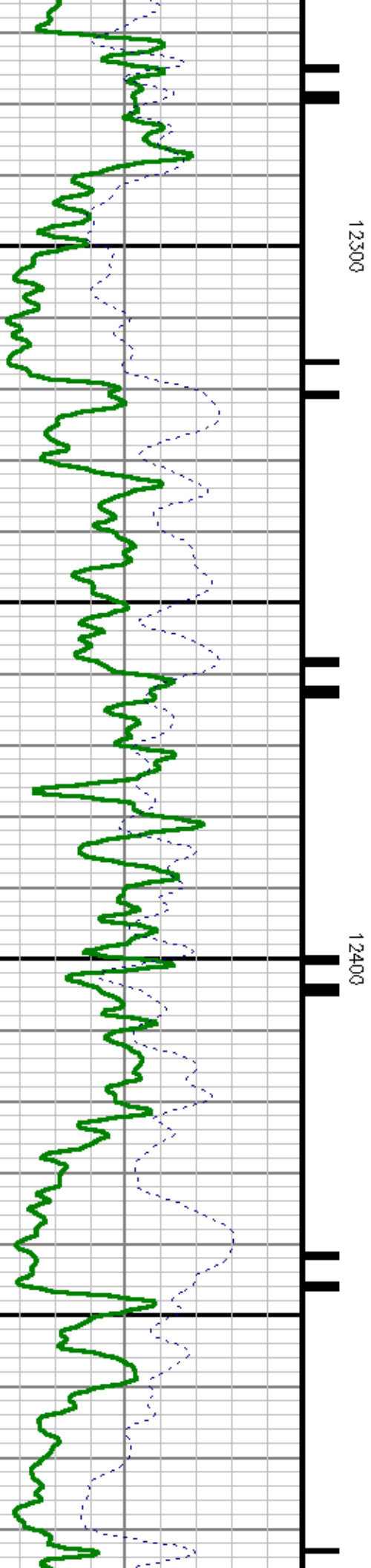
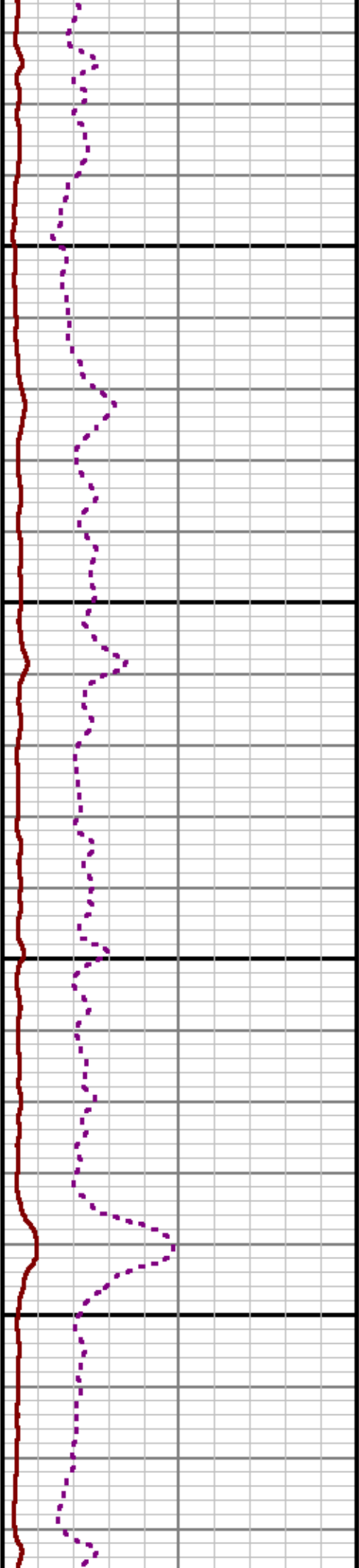
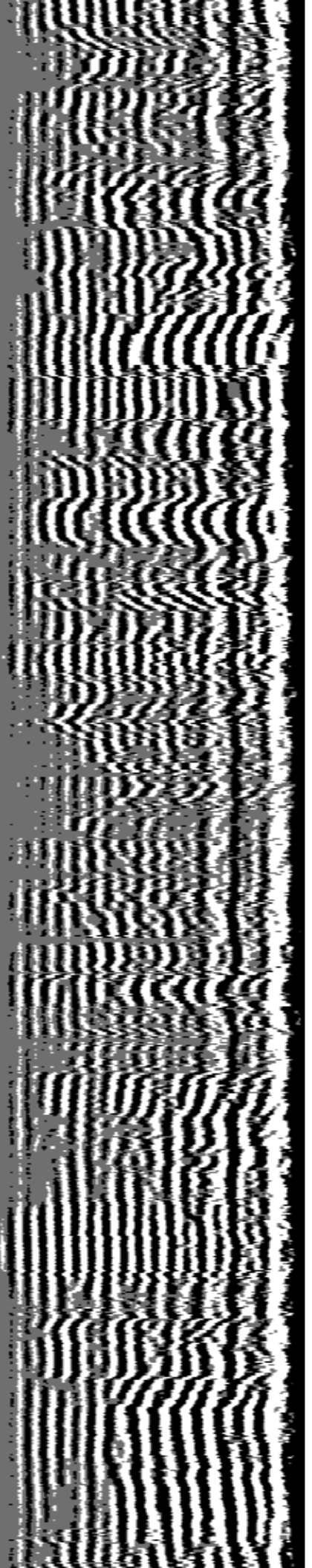


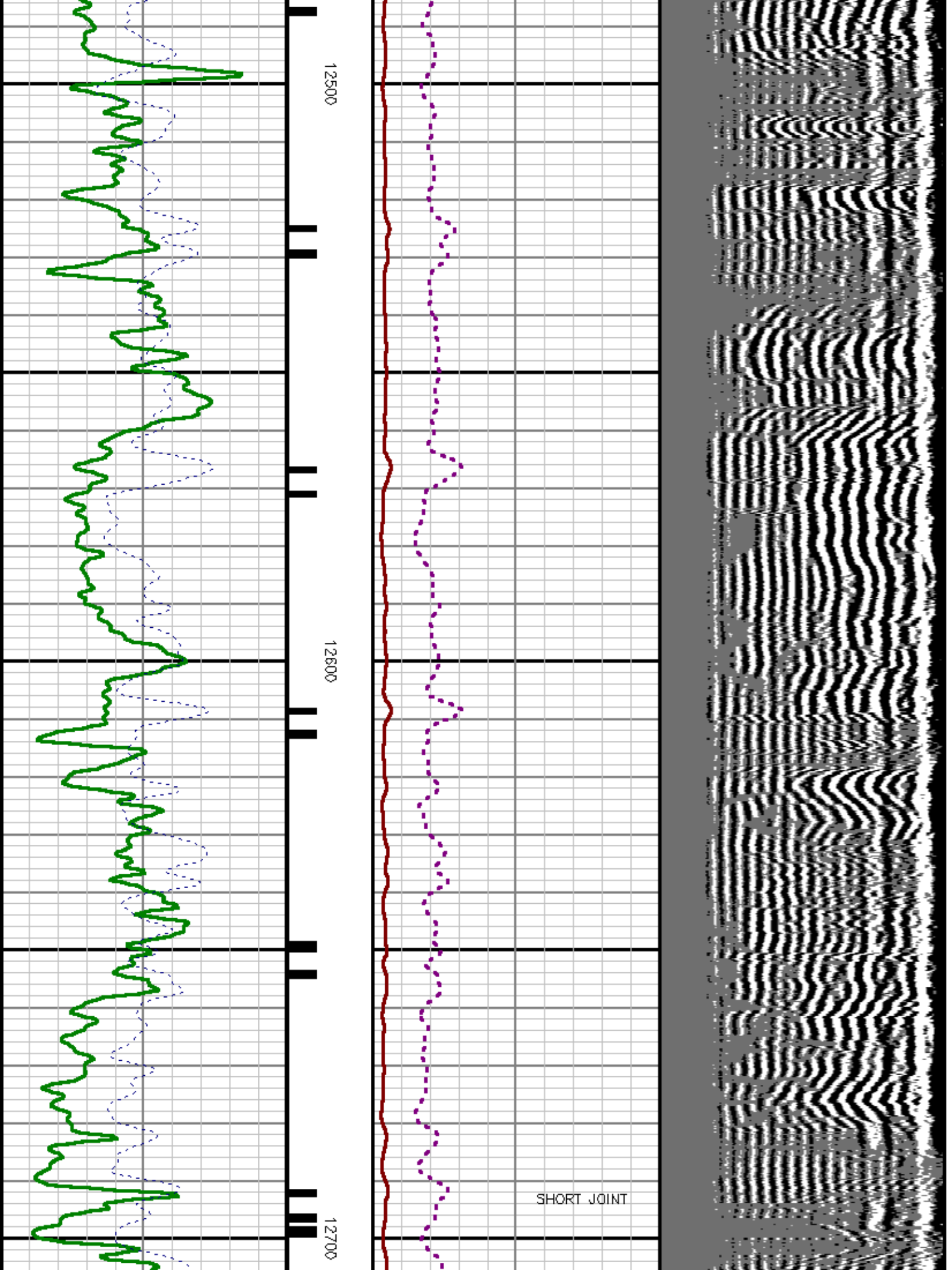


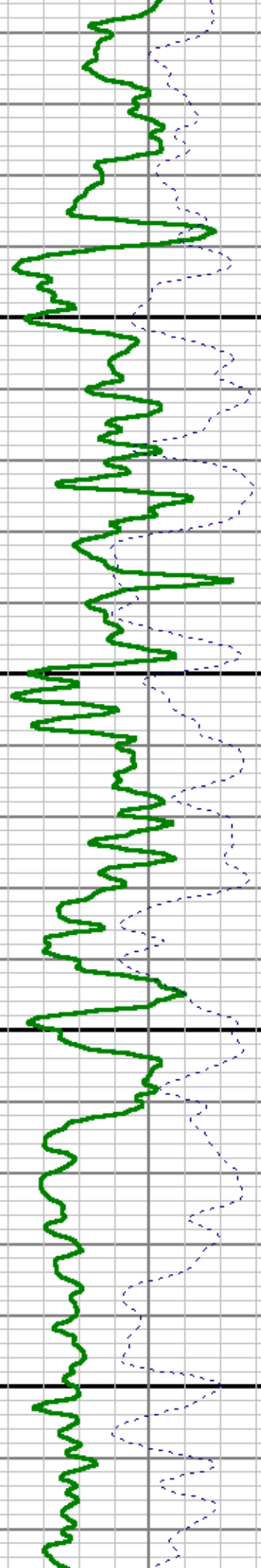
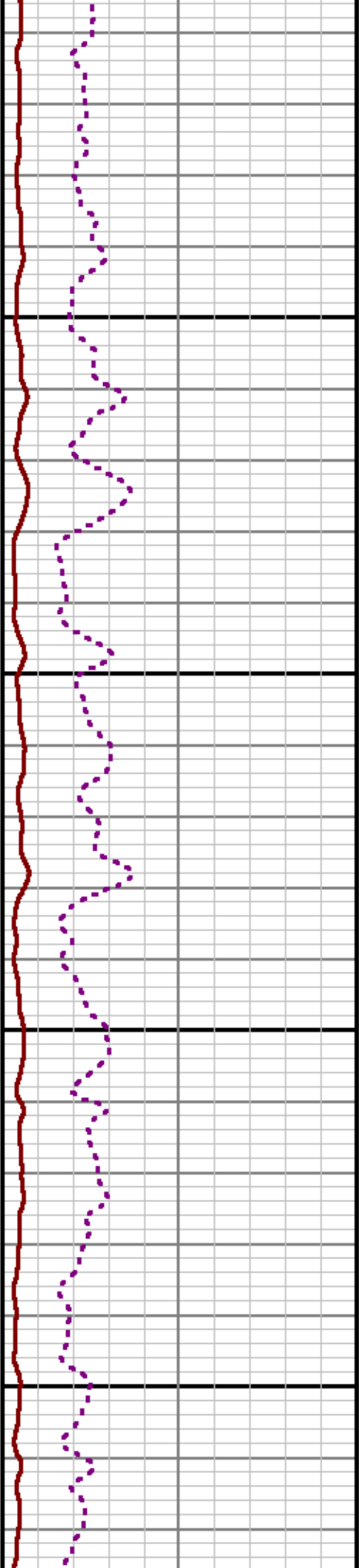
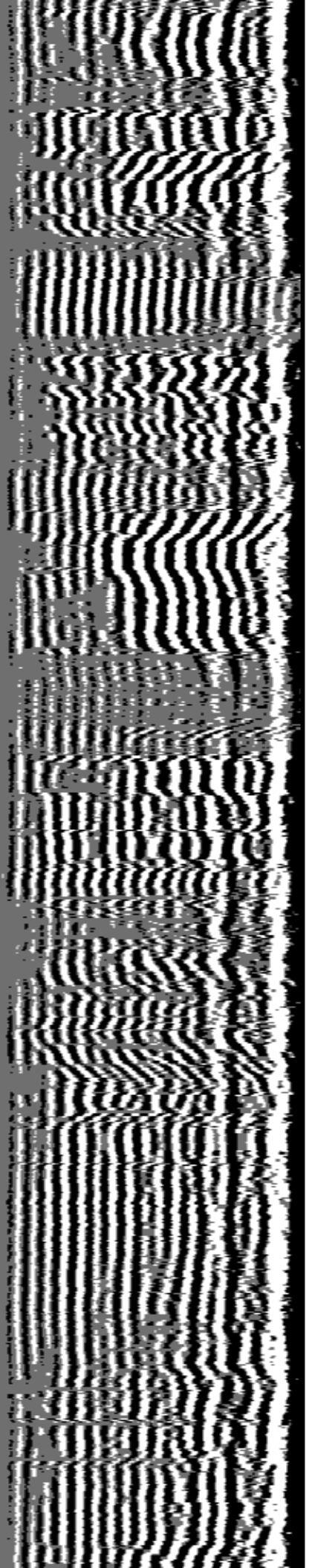
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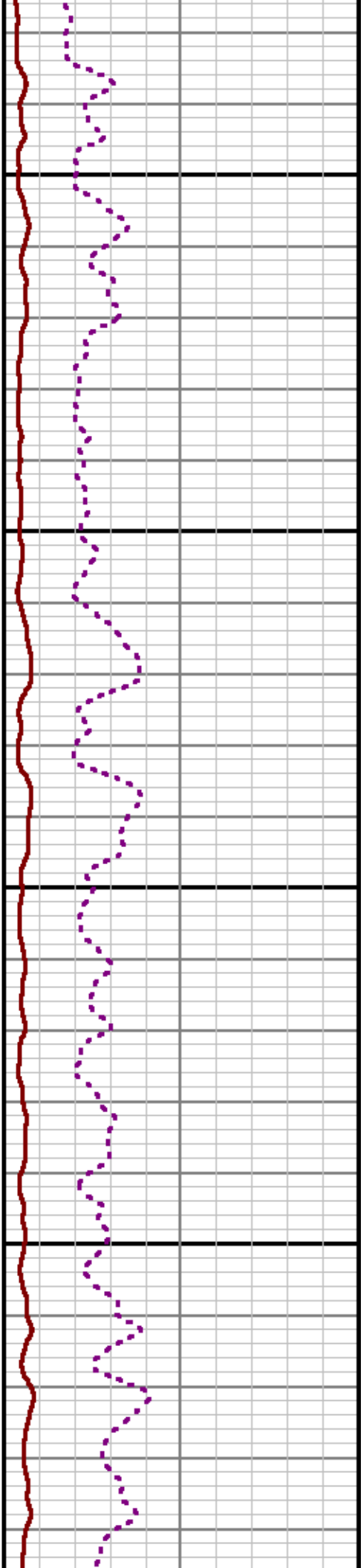
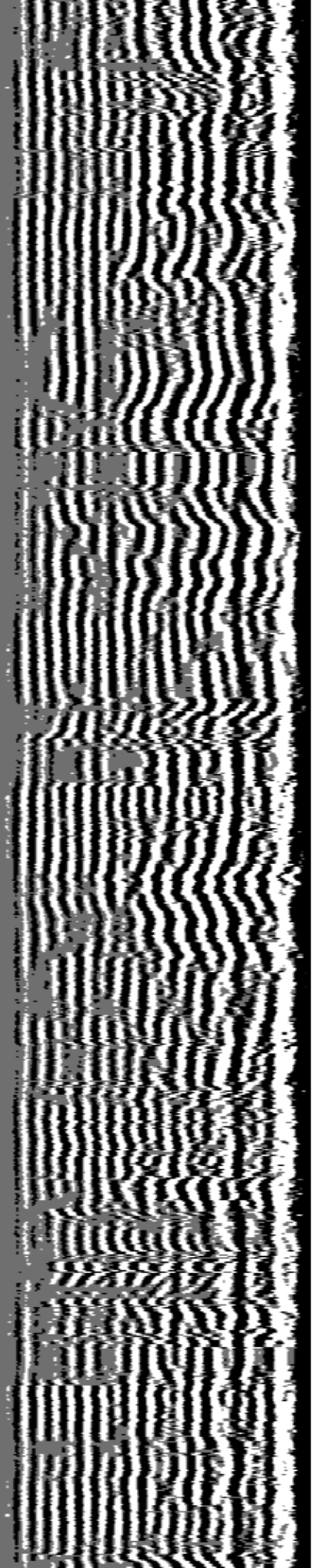
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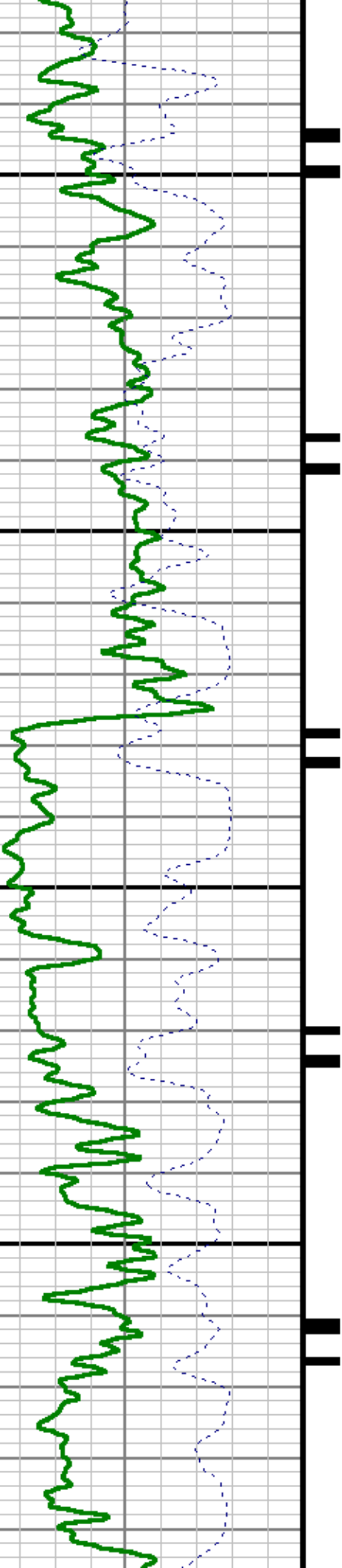


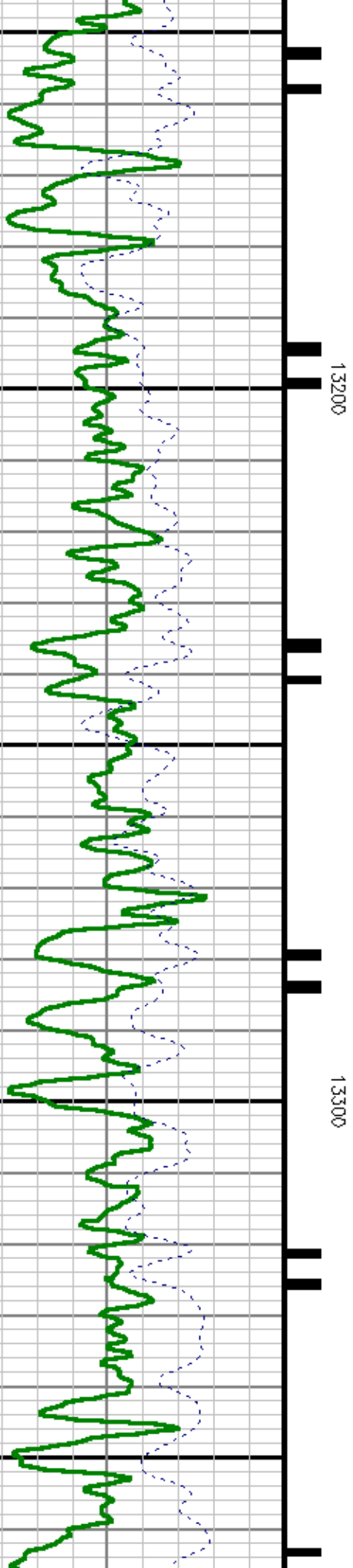
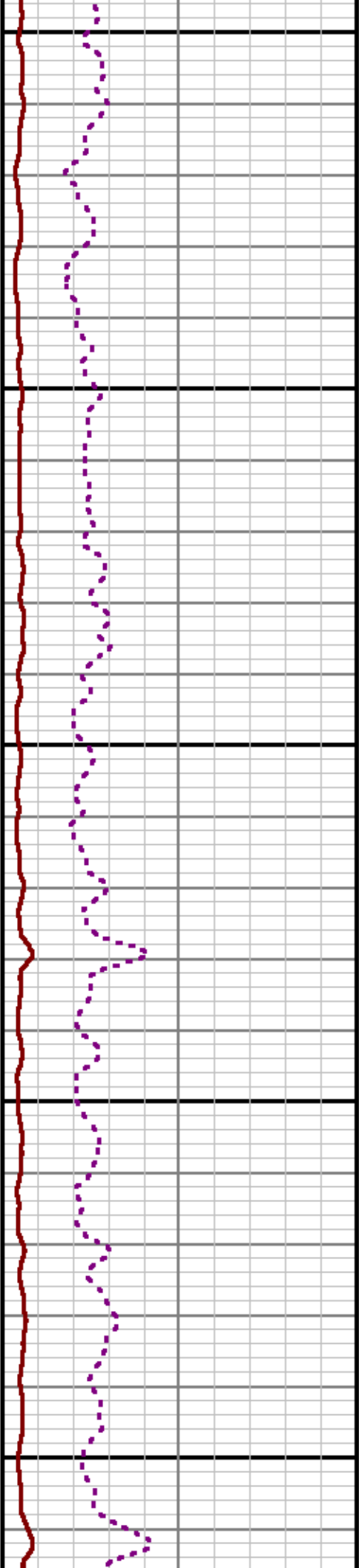
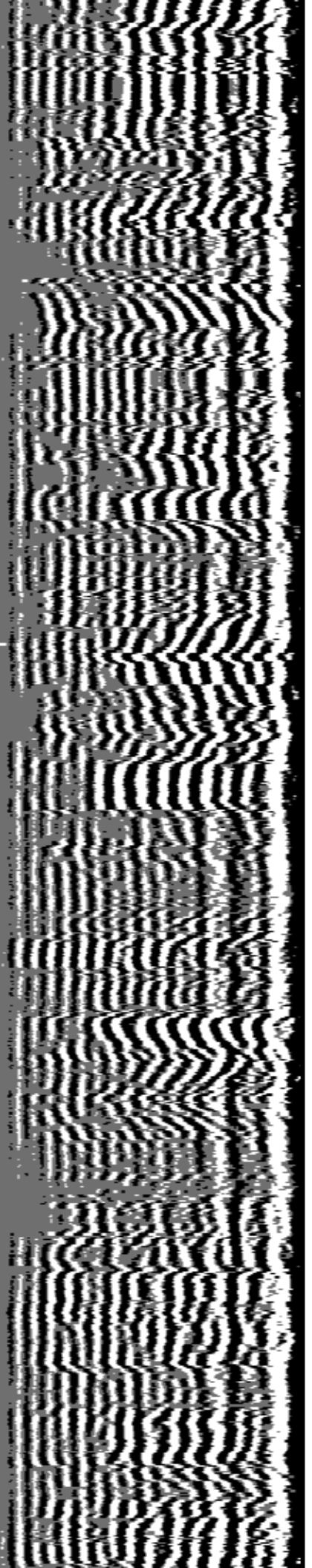


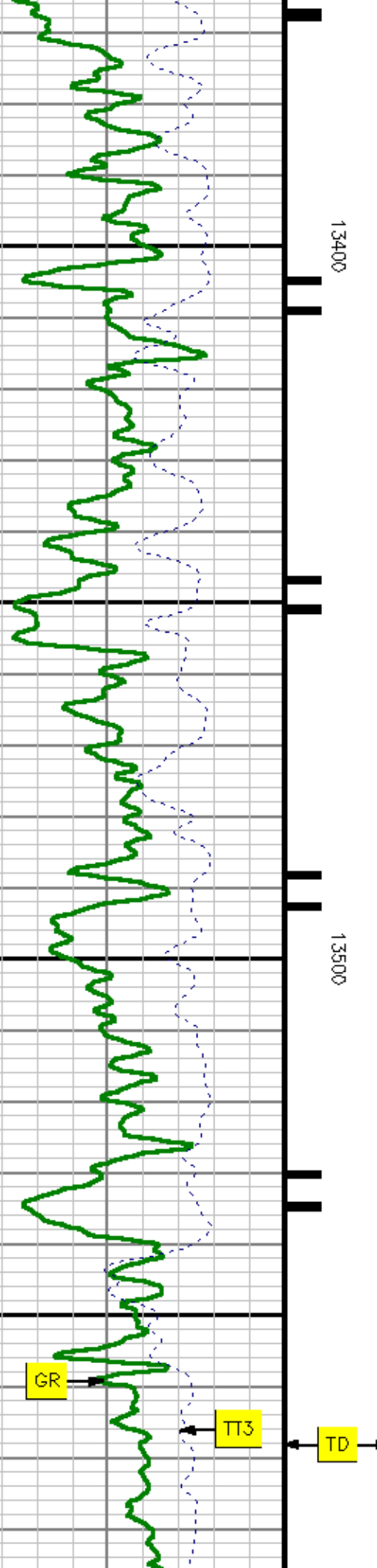
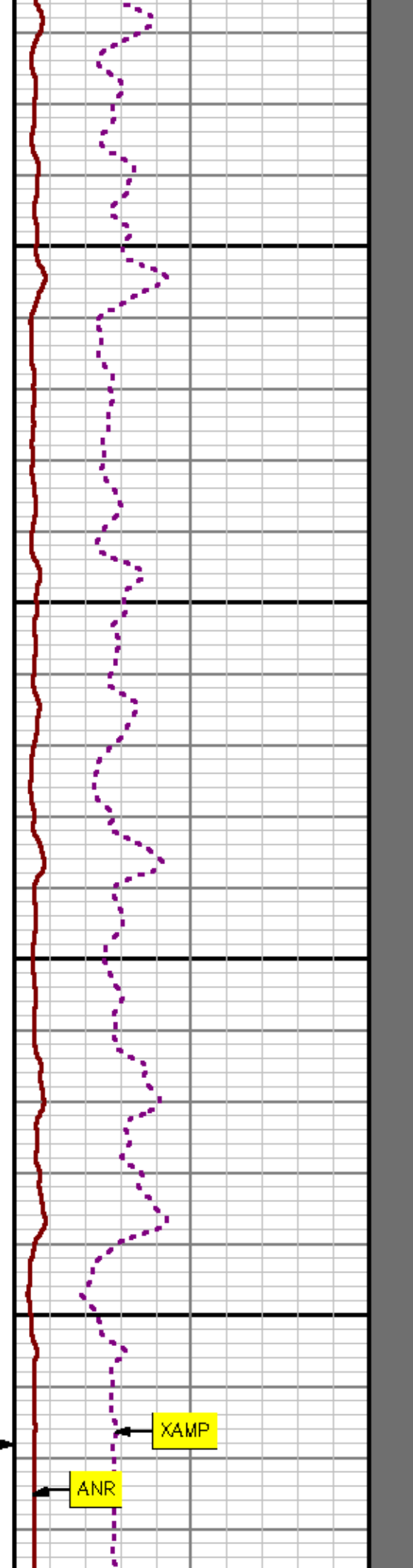
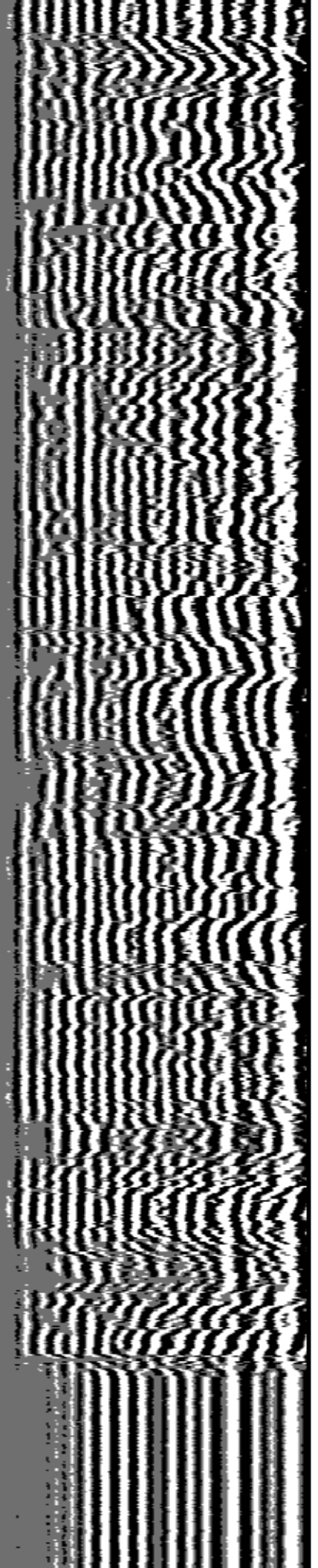


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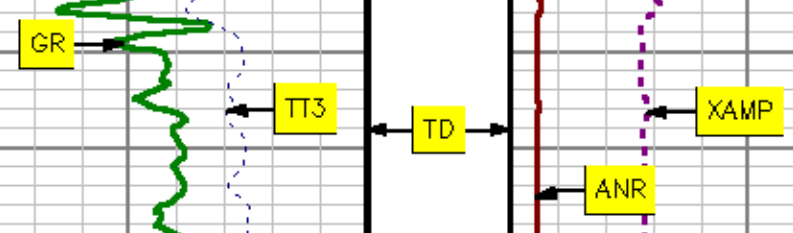


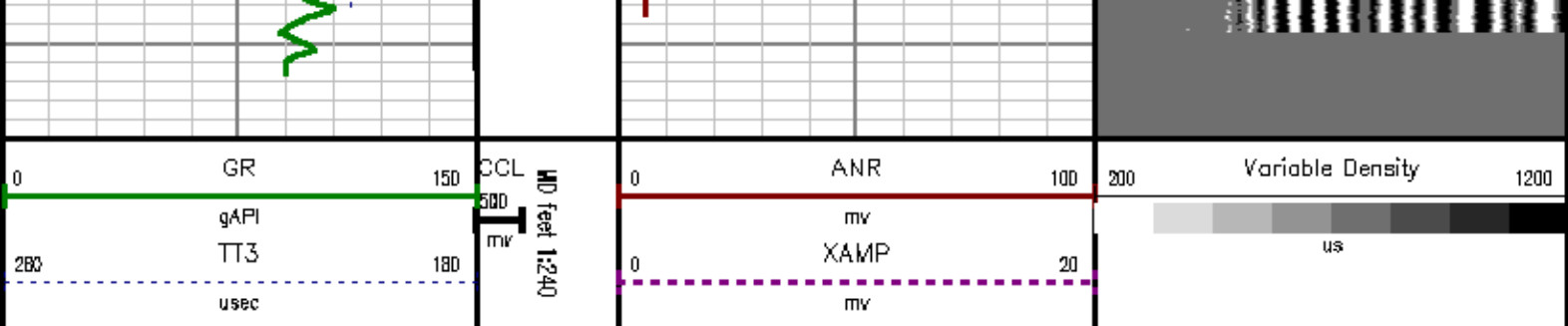




13400

13500





REPEAT SECTION

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	316.900	uSec	13312.030	13599.000
RAL	Amp Gate Start Near	200.391	uSec	13312.030	13599.000
RAL	Amp Gate Start Radial	200.391	uSec	13312.030	13599.000
RAL	Amp Gate Width Far	25.000	uSec	13312.030	13599.000
RAL	Amp Gate Width Near	25.000	uSec	13312.030	13599.000
RAL	Amp Gate Width Radial	25.000	uSec	13312.030	13599.000
RAL	casing od	4.500	inches	13312.030	13599.000
RAL	casing wt	11.600	lbm/ft	13312.030	13599.000
RAL	FB Start Far	291.900	uSec	13312.030	13599.000
RAL	FB Start Near	175.391	uSec	13312.030	13599.000
RAL	FB Start Radial	175.391	uSec	13312.030	13599.000
RAL	FB Thresh Far	10.000	mv	13312.030	13599.000
RAL	FB Thresh Near	4.000	mv	13312.030	13599.000
RAL	FB Thresh Radial	4.000	mv	13312.030	13599.000
RAL	Fluid Travel Time	200.000	uSec/ft	13312.030	13598.874

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.B.007

Plotted by : PlotMgr, v5.4.5D4

Company : EXXONMOBIL PRODUCTION COMPANY

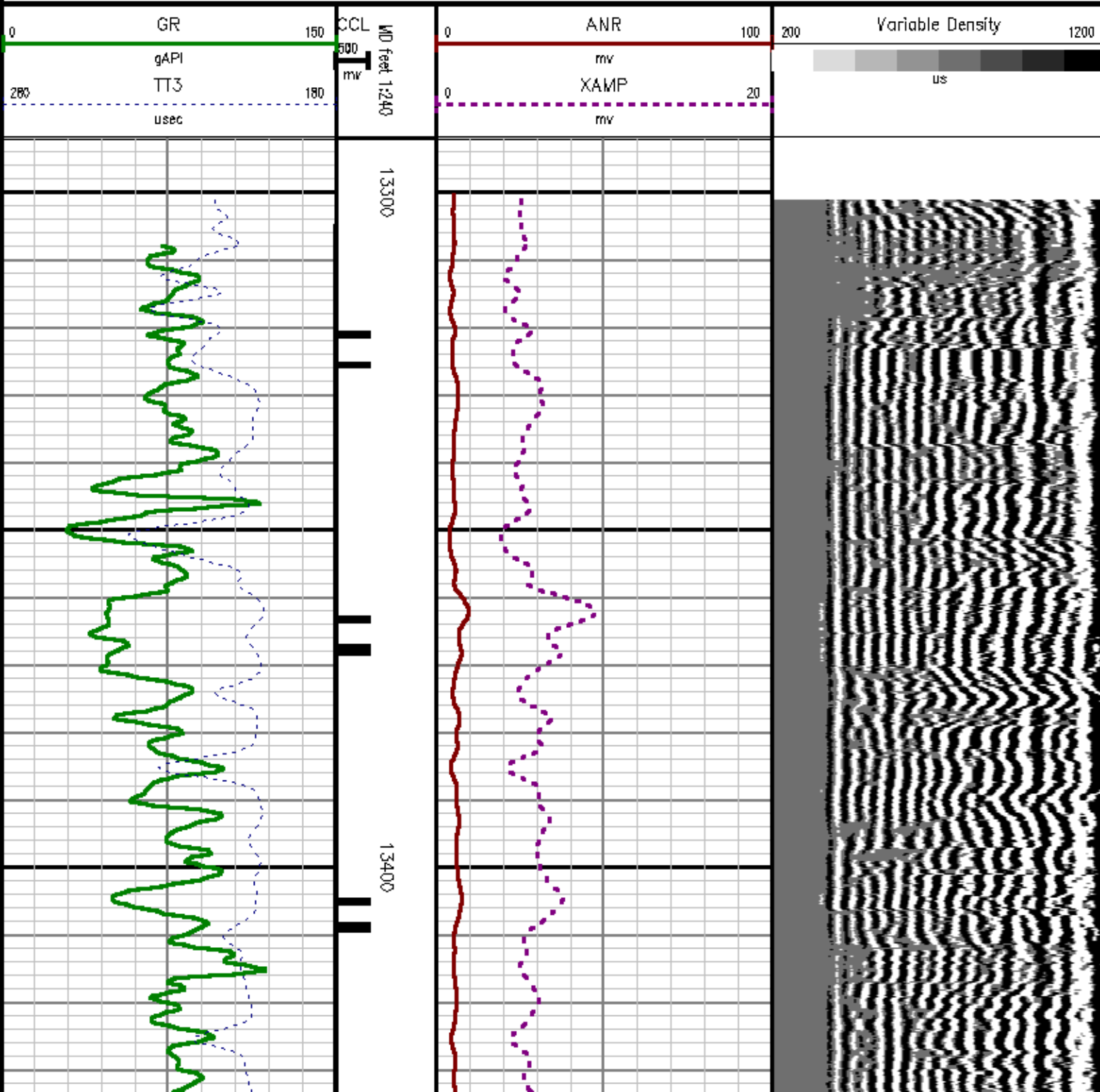
Well : PCU 286-544

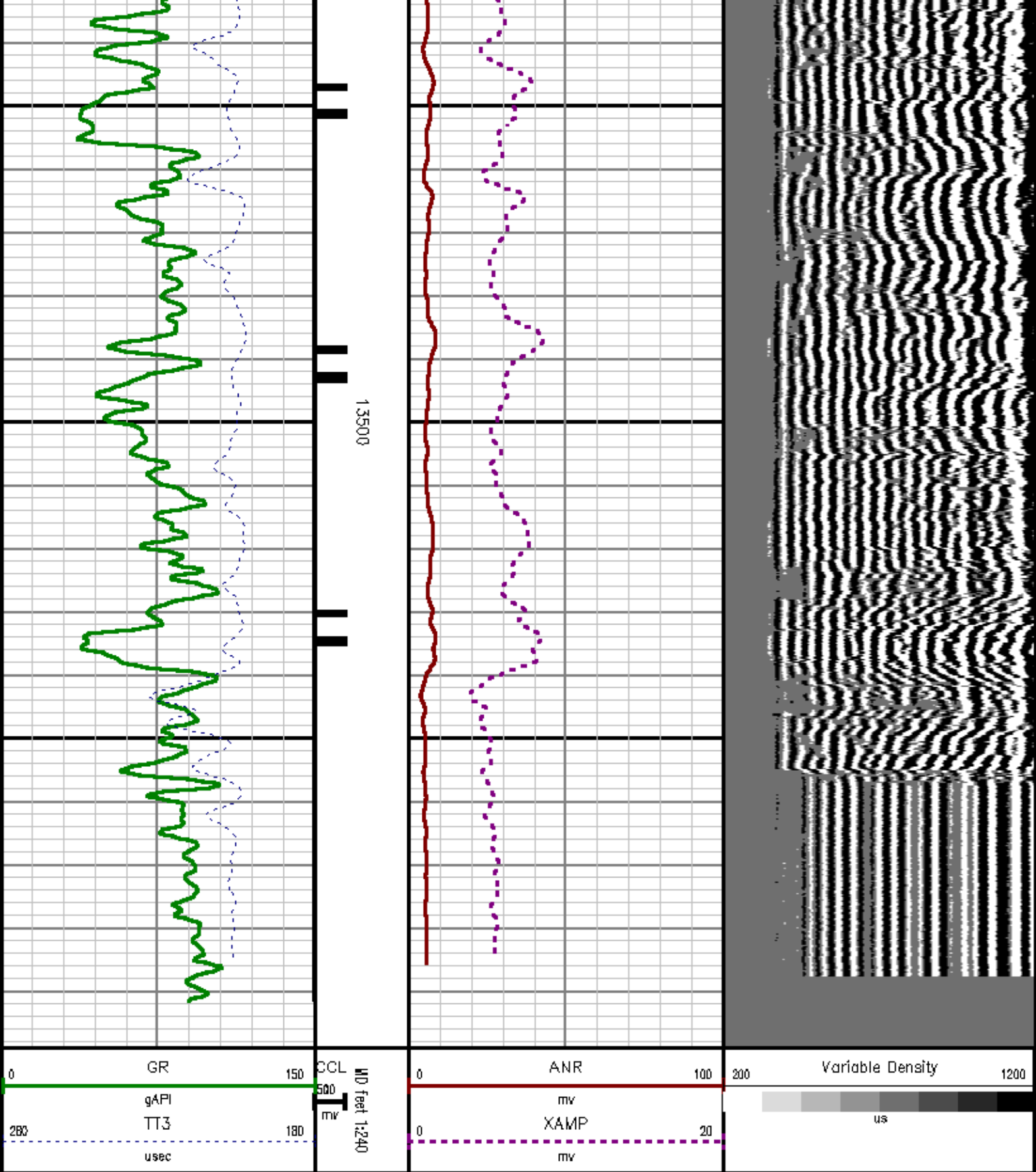
File Name : d:\welldata\g4rad\repeat.xtf

Mode : PlotMgr 5.4.5D4

Interval : 13292.00 - 13589.00 feet UP

Created : 7/23/2011 1:14:33 AM





FREE PIPE SECTION

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	316.900	usec	3499.750	3795.000
RAL	Amp Gate Start Near	200.391	usec	3499.750	3795.000
RAL	Amp Gate Start Radial	200.391	usec	3499.750	3795.000
RAL	Amp Gate Width Far	25.000	usec	3499.750	3795.000
RAL	Amp Gate Width Near	25.000	usec	3499.750	3795.000
RAL	Amp Gate Width Radial	25.000	usec	3499.750	3795.000
RAL	casing od	4.500	inches	3499.750	3795.000
RAL	casing wt	11.600	lbm/ft	3499.750	3795.000
RAL	FB Start Far	291.900	usec	3499.750	3795.000
RAL	FB Start Near	175.391	usec	3499.750	3795.000
RAL	FB Start Radial	175.391	usec	3499.750	3795.000
RAL	FB Thresh Far	10.000	mv	3499.750	3795.000
RAL	FB Thresh Near	4.000	mv	3499.750	3795.000
RAL	FB Thresh Radial	4.000	mv	3499.750	3795.000
RAL	Fluid Travel Time	200.000	usec/ft	3499.750	3794.687

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.DD7

Plotted by : PlotMgr, v5.4.5D4

Company : EXXONMOBIL PRODUCTION COMPANY

Well : PCU 296-5A4

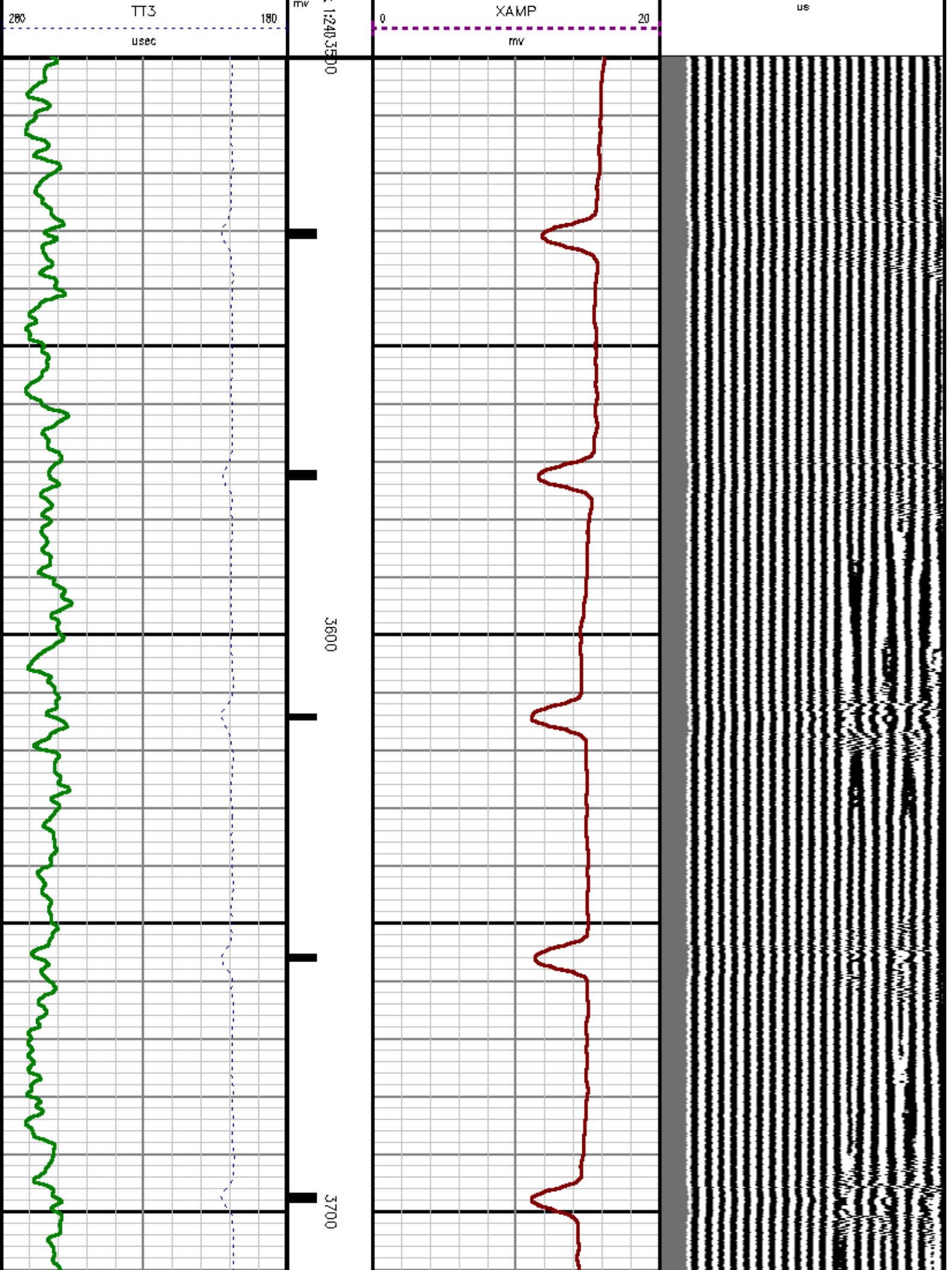
File Name : D:\WELLDATA\A4RAD\FREE.XTF

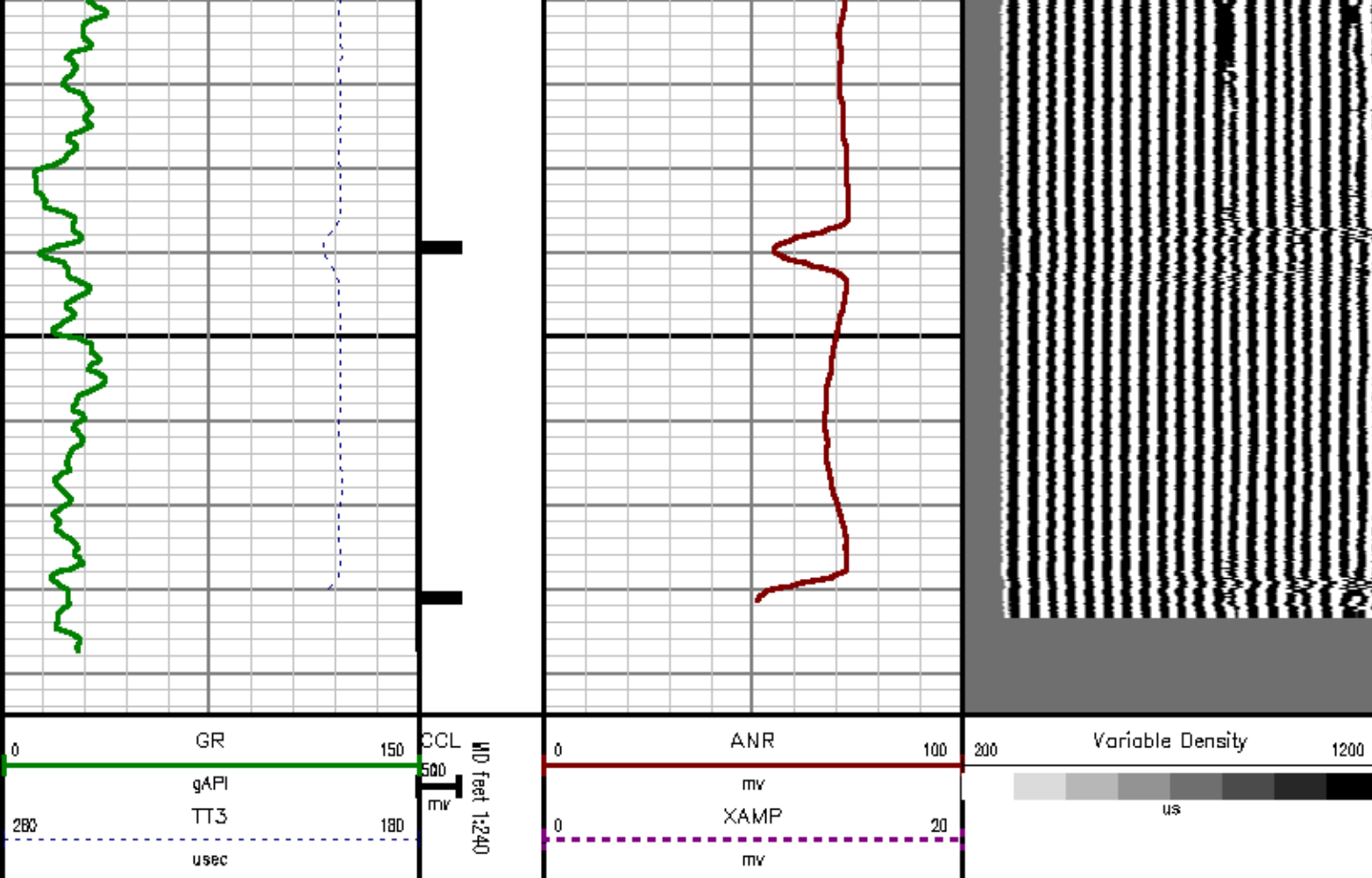
Mode : PlotMgr 5.4.5D4

Interval : 3500.00 - 3795.00 feet UP

Created : 7/23/2011 12:29:33 AM







CALIBRATION SUMMARY

RALSHP

Shop Calibration: C:\cgas\calver\RALSHP\957J17_ahp.cgl

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

Wellsite Calibration: C:\cgss\calver\RALFLD\957J17 fld.cal

WELLSITE CALIBRATION SUMMARY

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

Tool Delay [usec] Casing OD Casing Wt Casing ID

RECEIVER	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Full Amp. [mV]	Wellsite Factor	Amp. Ref [mV]
CAL Pulse	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="0.003"/>	<input type="text" value="0.000"/>	<input type="text" value="1.00"/>	<input type="text" value="100.000"/>
3 Ft. Receiver	<input type="text" value="198"/>	<input type="text" value="25"/>	<input type="text" value="0.216"/>			
5 Ft. Receiver	<input type="text" value="314"/>	<input type="text" value="25"/>	<input type="text" value="0.097"/>			
Radial #1	<input type="text" value="198"/>	<input type="text" value="25"/>	<input type="text" value="0.182"/>			
Radial #2	<input type="text" value="198"/>	<input type="text" value="25"/>	<input type="text" value="0.220"/>			
Radial #3	<input type="text" value="198"/>	<input type="text" value="25"/>	<input type="text" value="0.192"/>			
Radial #4	<input type="text" value="198"/>	<input type="text" value="25"/>	<input type="text" value="0.166"/>			
Radial #5	<input type="text" value="198"/>	<input type="text" value="25"/>	<input type="text" value="0.243"/>			
Radial #6	<input type="text" value="198"/>	<input type="text" value="25"/>	<input type="text" value="0.285"/>			
Radial #7	<input type="text" value="198"/>	<input type="text" value="25"/>	<input type="text" value="0.160"/>			
Radial #8	<input type="text" value="198"/>	<input type="text" value="25"/>	<input type="text" value="0.237"/>			

GAMMA RAY

Calibration File: C:\cgss\calver\GR\457J12.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sat Jun 11 11:43:50 2011 TOOL SERIES: 1426XA ASSET: 457 SEQ: J2

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
52K DA612	<input type="text" value="82.04"/>	<input type="text" value="343.78"/>	<input type="text" value="0.707"/>	<input type="text" value="57.99"/>	<input type="text" value="242.99"/>	<input type="text" value="185.00"/>

Verification File: C:\cgss\calver\GR\457J12.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Sat Jun 11 11:44:57 2011 TOOL SERIES: 1426XA ASSET: 457 SEQ: J2

Calibrator #

Background

Calibrator On

Multiplicative

Background

Calibrator On

Differential

[cps]

[cps]

[api]

[api]

[api]

52K DA612

83.64

339.13

0.707

59.12

239.70

180.58

TOOL DIAGRAM

OTA SHORT CABLE HEAD

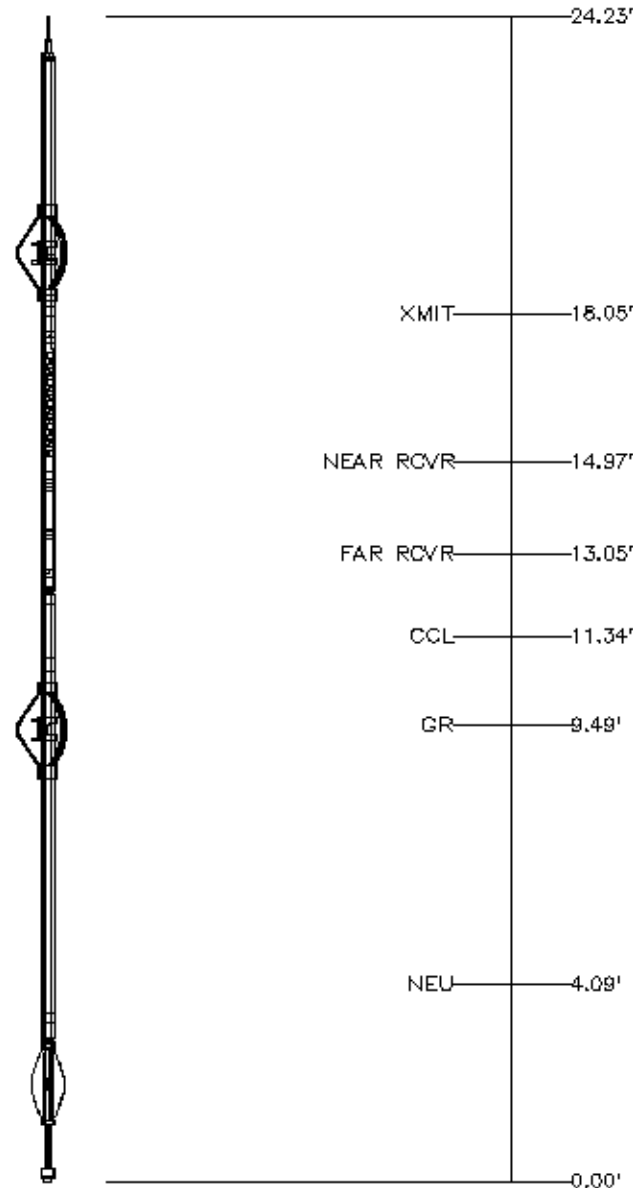
PROBE 2 3/4 DUAL RECEIVER RADII (1426XA)

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



Total Length: 24.23'

Total Weight: Not Available

Max Diameter: 0' 3.12"

BAKER
HUGHES

Company

Well

PCU 296-5A4

Field

PICEANCE CREEK

County

RIO BLANCO

State

COLORADO

CH039001

API No:

05103112450000

Baker Atlas

CASE

Location:

SHL: 734' FNL & 564' FNL

Elevations

KB 7339.2 ft

DF 7338.2 ft

GL 7308 ft

SEC: 5

TWP: 25

RGE: 96W