



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No: EXXONMOBIL PRODUCTION COMPANY

CHC36009 PCU 296-5A9

API No: PICEANCE CREEK

County R10 BLANCO State COLORADO

Location

SHL: 736' PNL & 528' PNL

Other Services

RPM

SEC 5 TWP 25 RGE 98E

G.L. Elevation 7308 ft

K.B. 30.2 ft Above P. D.

Elevations

KB 7338.2 ft

DF 7338.2 ft

GL 7308 ft

Permanent Datum
Log Measured From
Drill Measured From

KELLY BISHING

Date 21-JULY-2011

Run ONE

Service Order 575377

Depth Driller 13675 ft

Depth Logger 13586 ft

Bottom Logged Interval 13586 ft

Top Logged Interval 9650 ft

Time Started 00:00

Time Finished 04:00

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 N/A

Reference Log Date N/A

Equipment No. 4271 Location GRAND COTTON

Recorded By TIM KAUFF

Witnessed By MR. JIM PETERSON

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	10019 ft
4.5 in	15.1 lbm/ft	P-110	SURFACE	13675 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	10417457	CENTRALIZED

MAIN SECTION

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	314.263	usec	5949.899	13617.000
RAL	Amp Gate Start Near	197.754	usec	5949.899	13617.000
RAL	Amp Gate Start Radial	197.754	usec	5949.899	13617.000
RAL	Amp Gate Width Far	25.000	usec	5949.899	13617.000
RAL	Amp Gate Width Near	25.000	usec	5949.899	13617.000
RAL	Amp Gate Width Radial	25.000	usec	5949.899	13617.000
RAL	casing od	4.500	inches	5949.899	13617.000
RAL	casing wt	15.100	lbm/ft	5949.899	13617.000
RAL	FB Start Far	289.263	usec	5949.899	13617.000
RAL	FB Start Near	172.754	usec	5949.899	13617.000
RAL	FB Start Radial	172.754	usec	5949.899	13617.000
RAL	FB Thresh Far	10.000	mv	5949.899	13617.000
RAL	FB Thresh Near	4.000	mv	5949.899	13617.000
RAL	FB Thresh Radial	4.000	mv	5949.899	13617.000
RAL	Fluid Travel Time	200.000	usec/ft	5949.899	13616.962

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

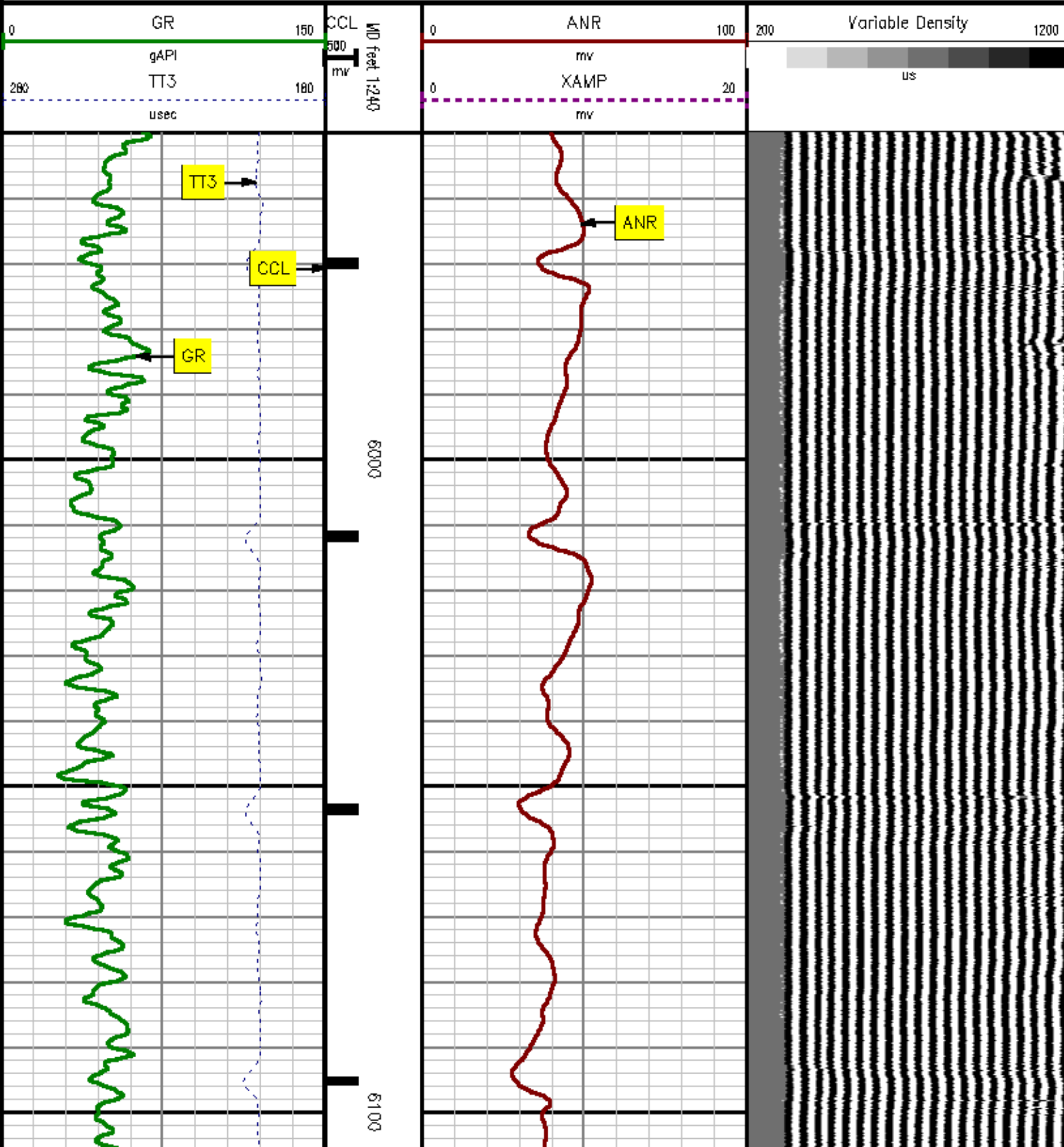
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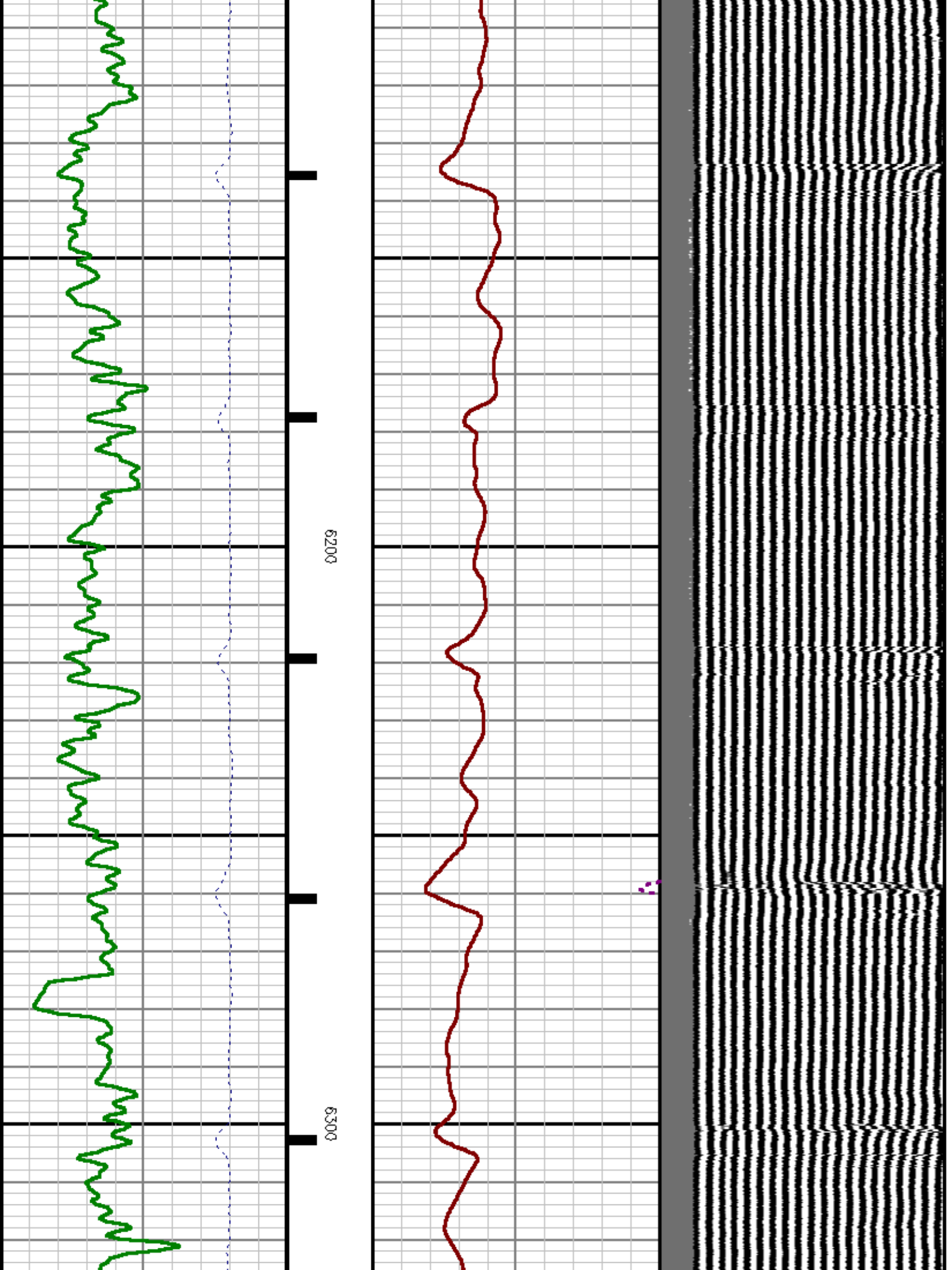
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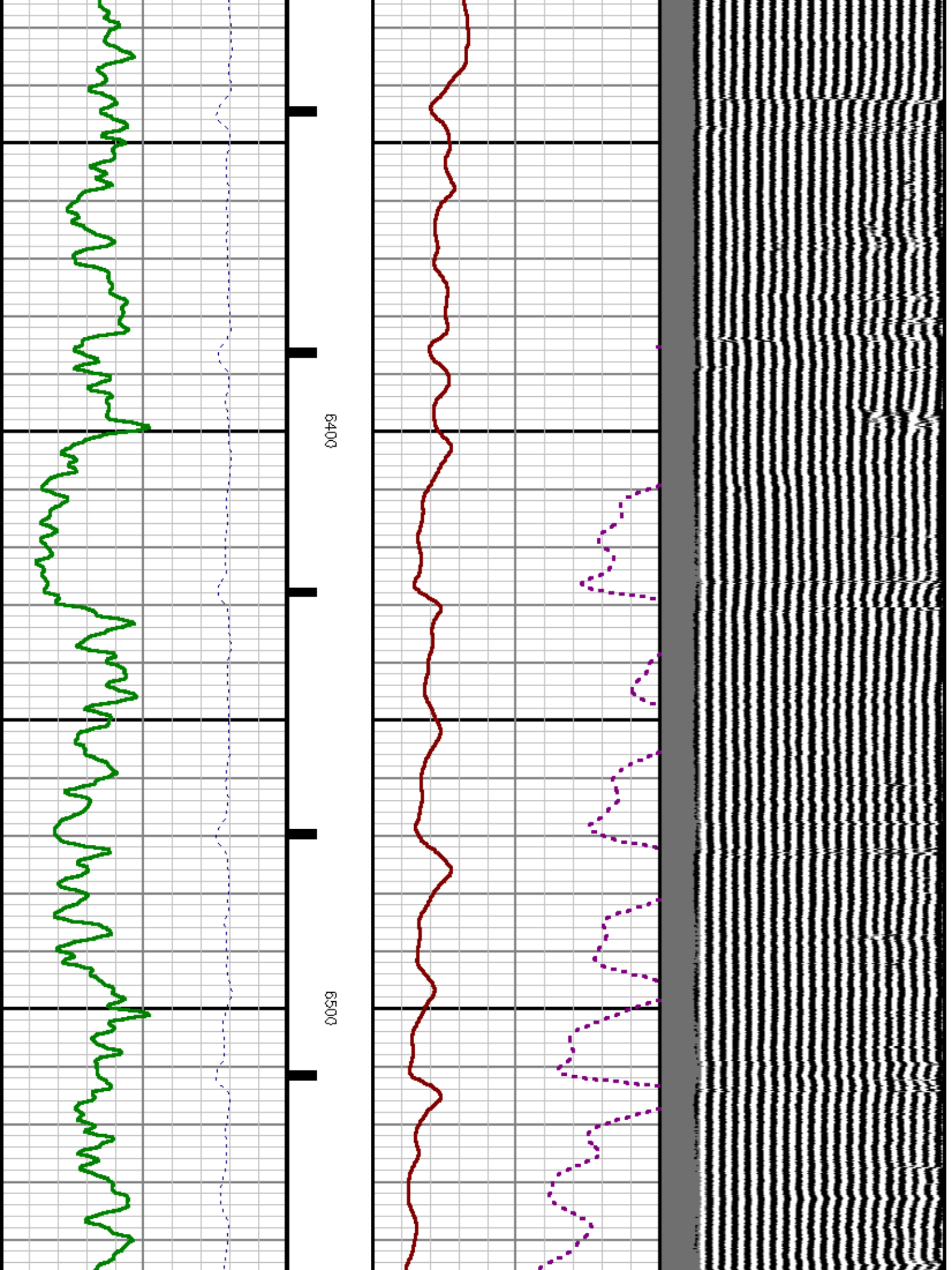
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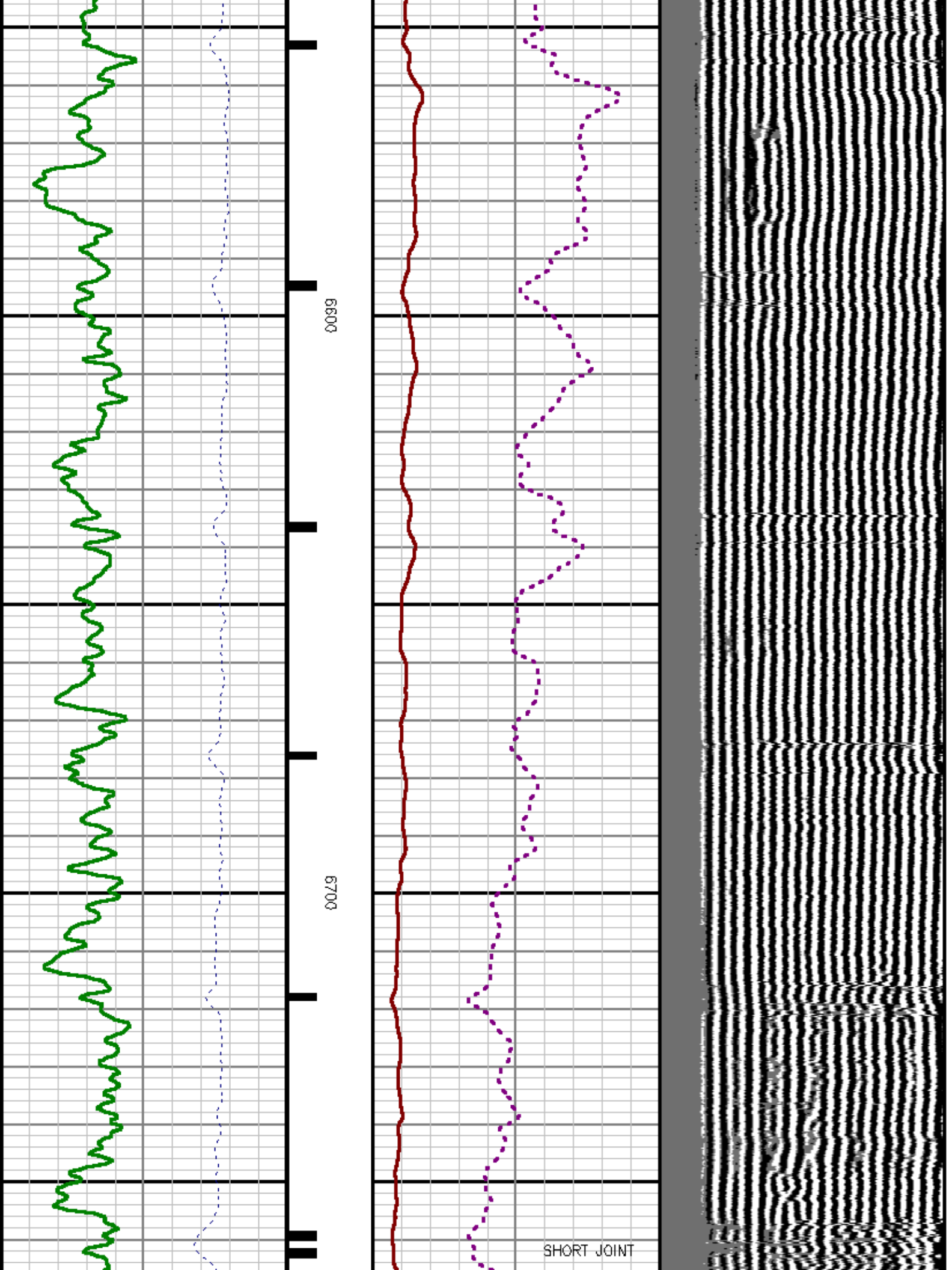
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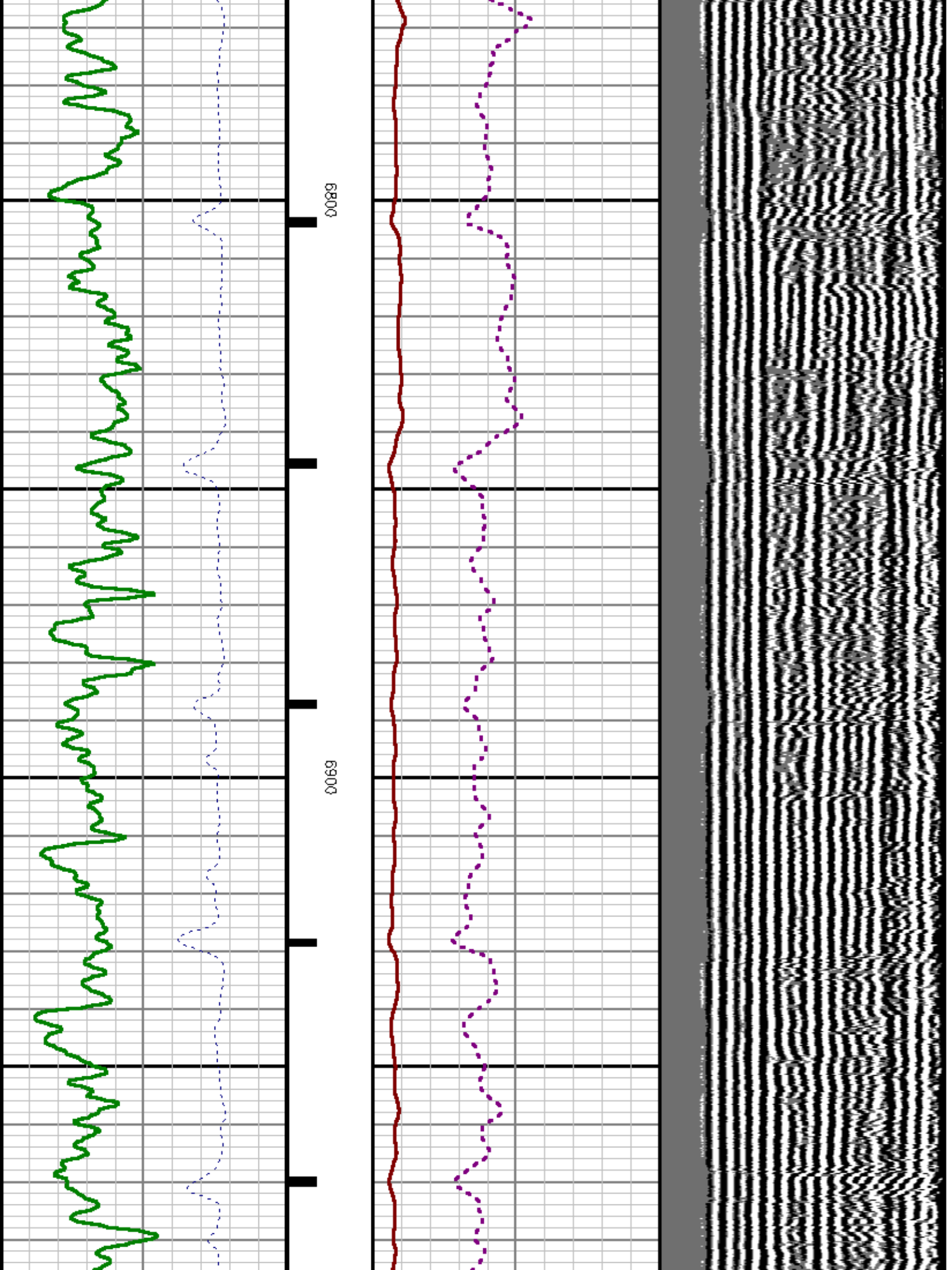
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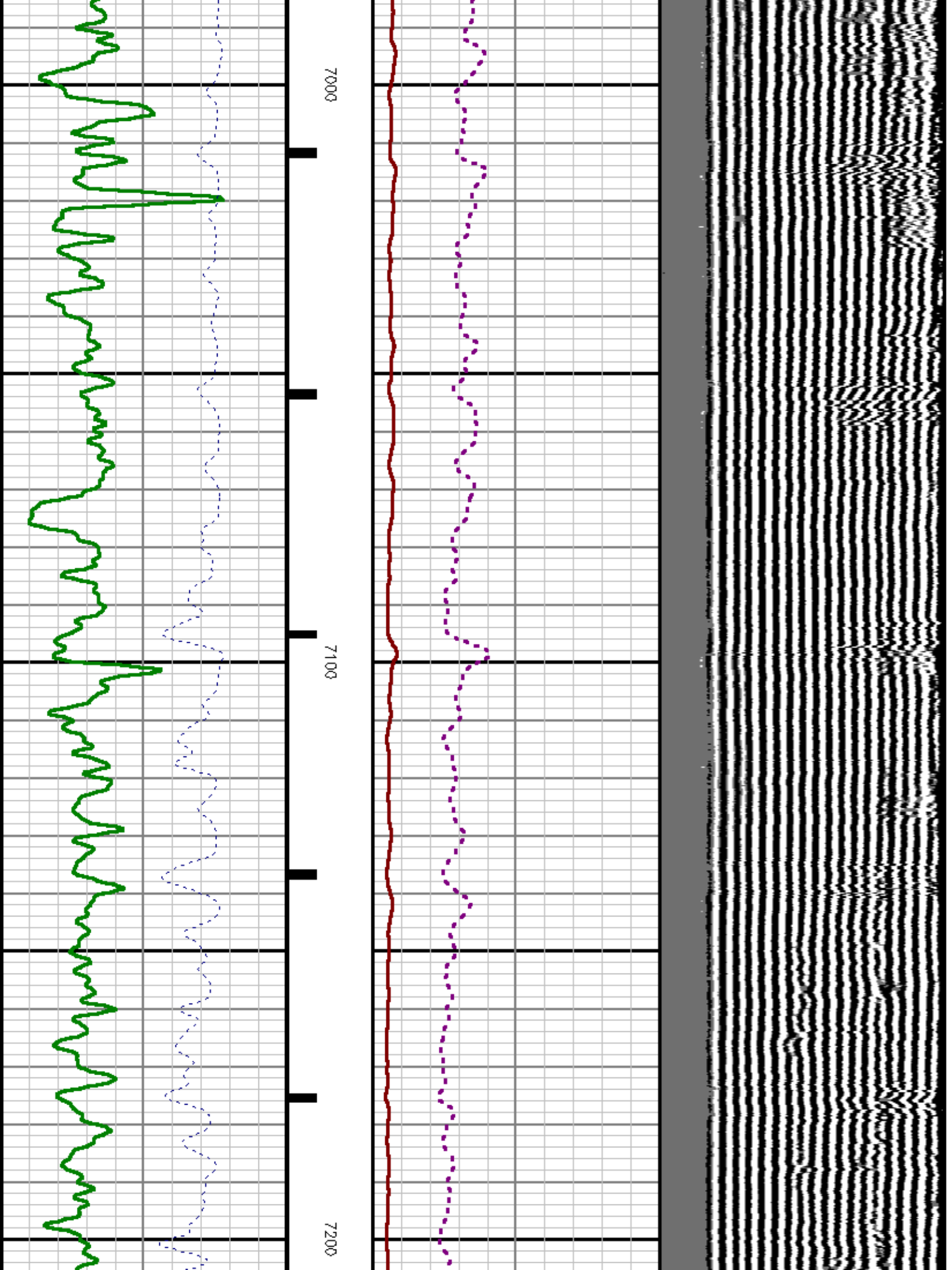


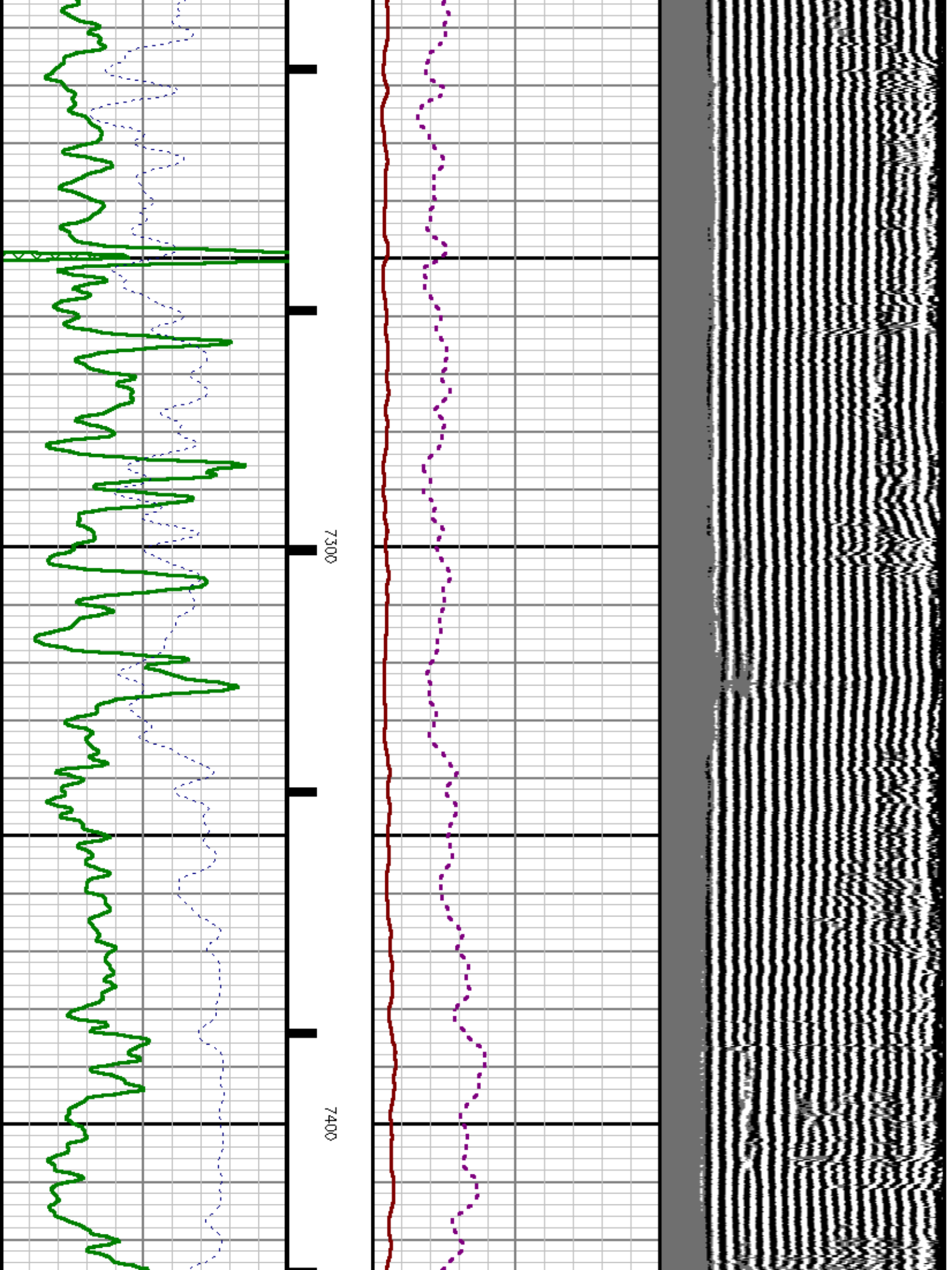


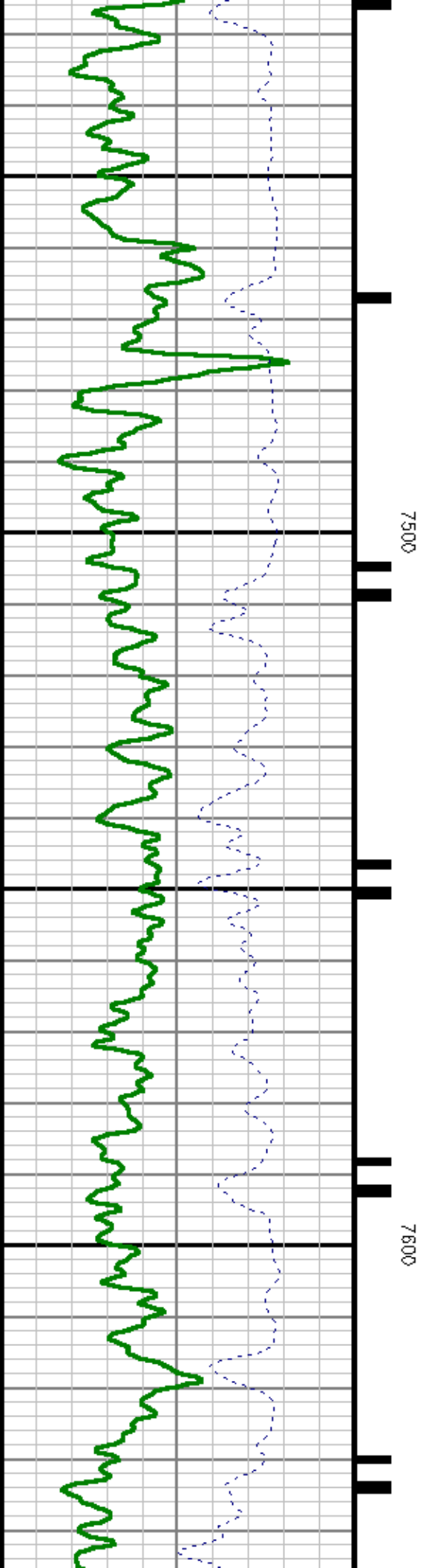
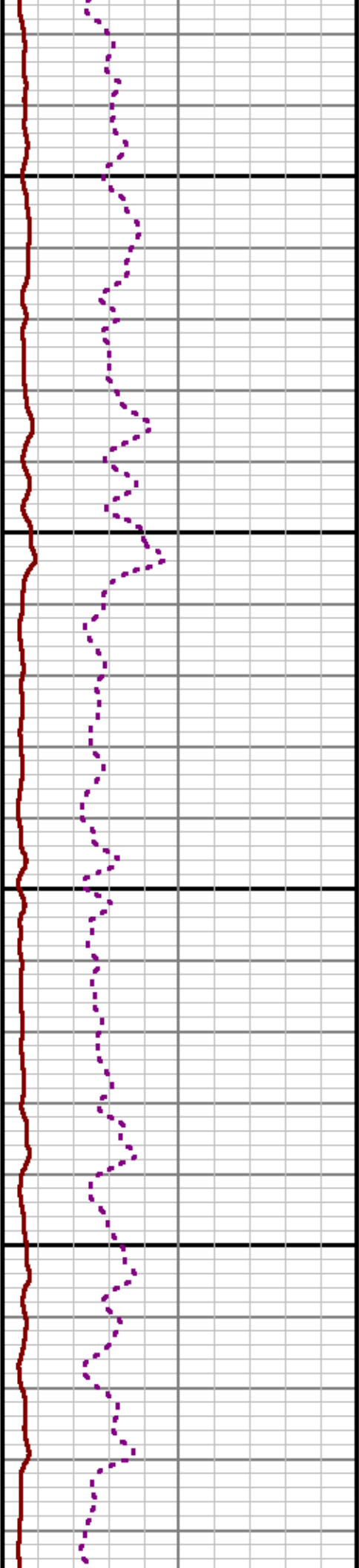
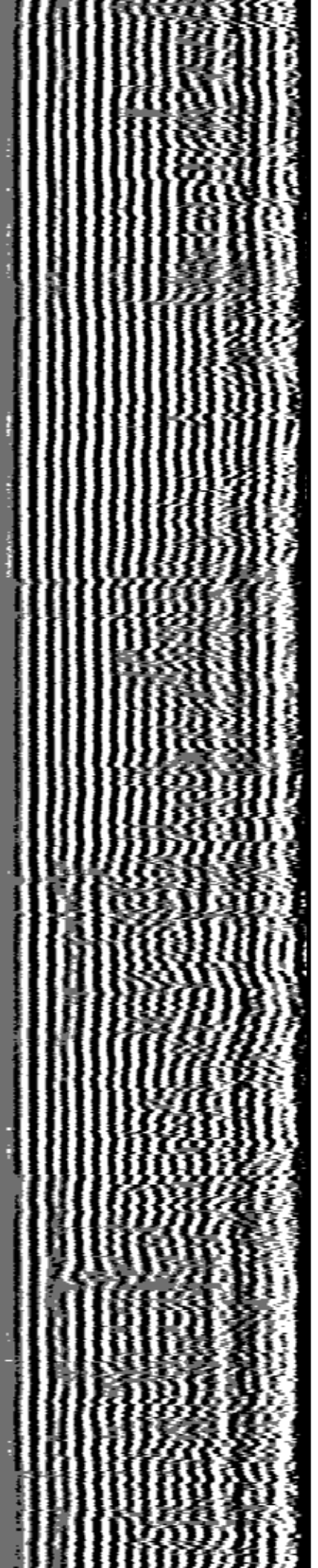


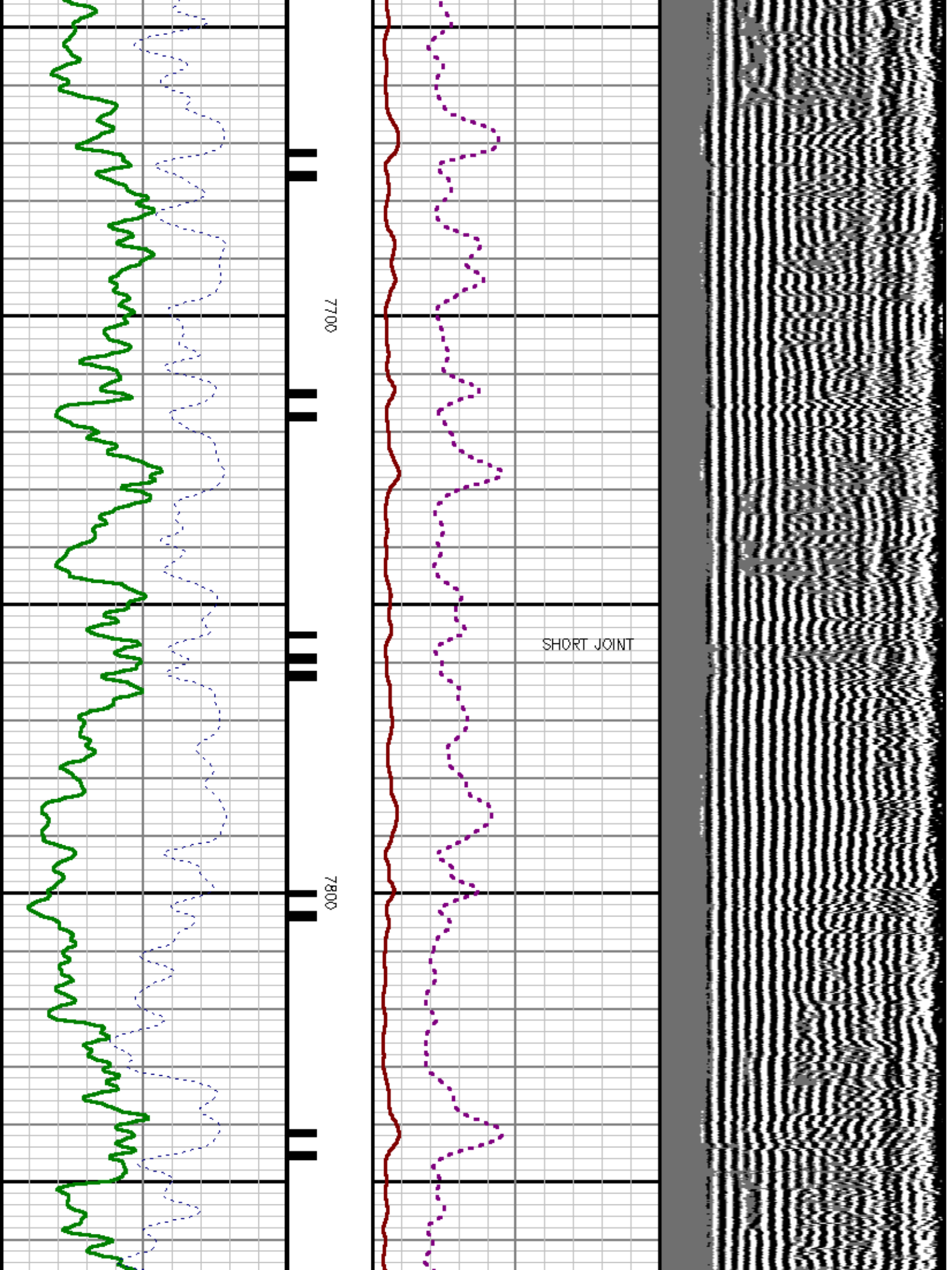


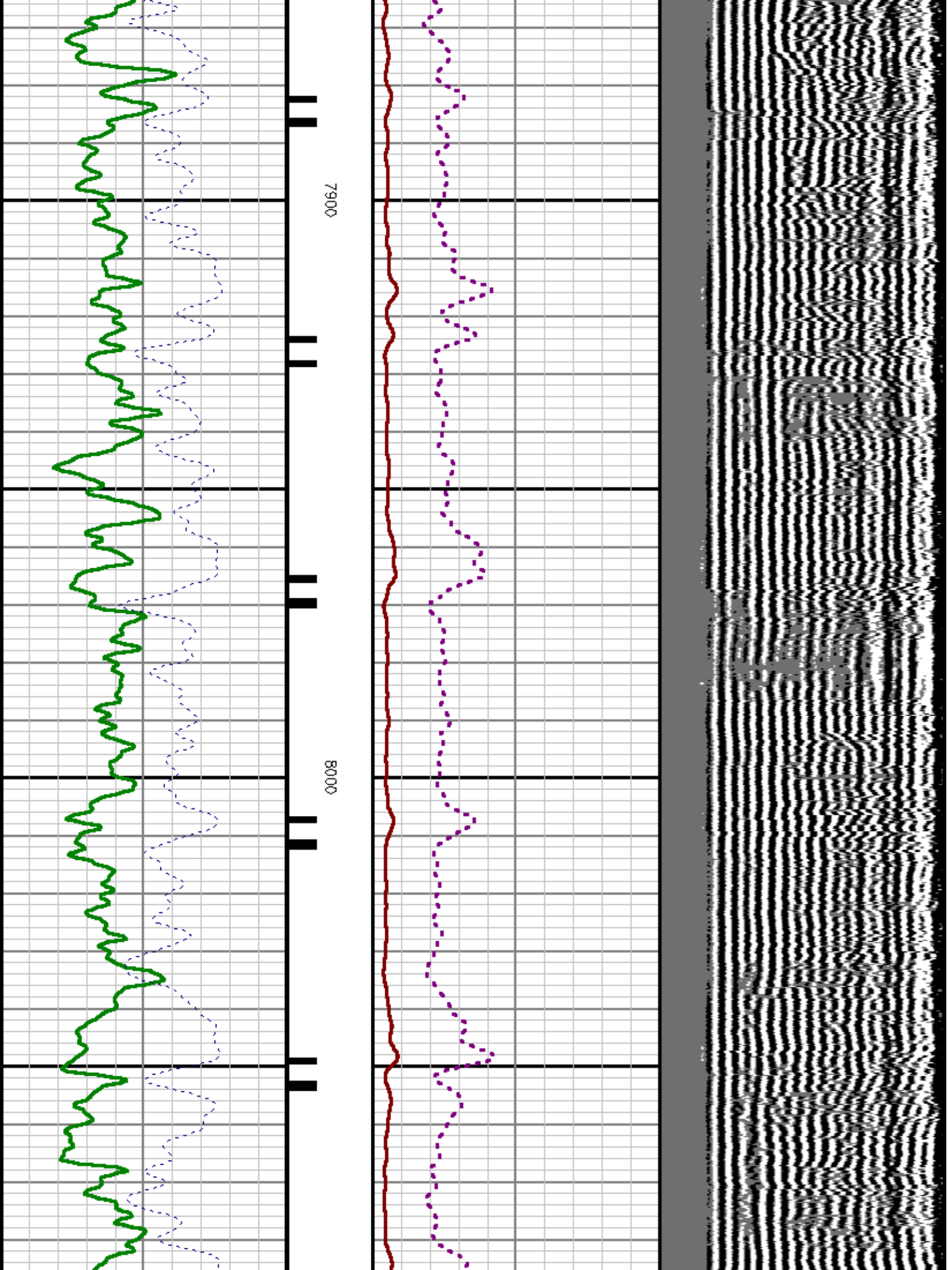


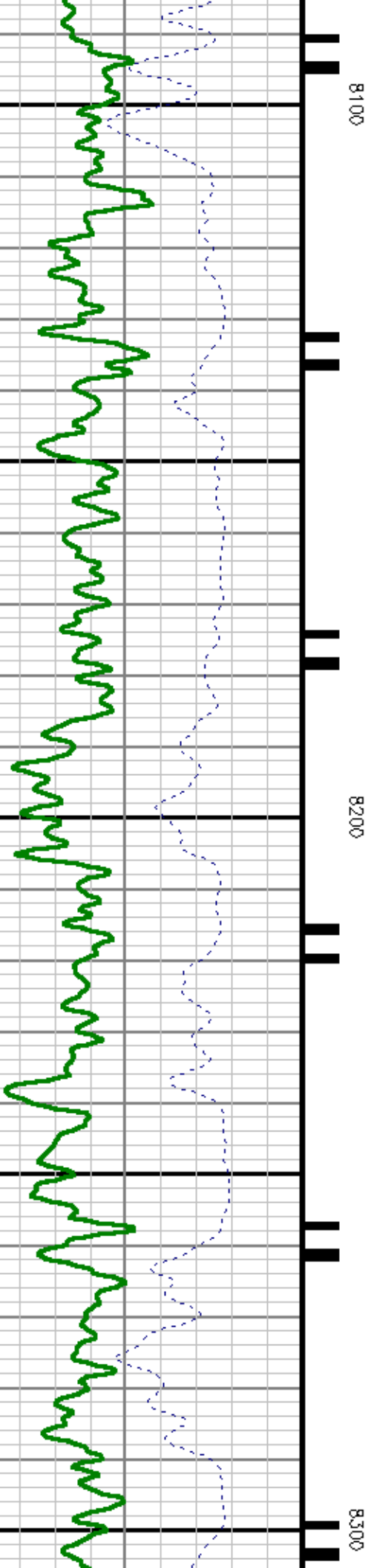
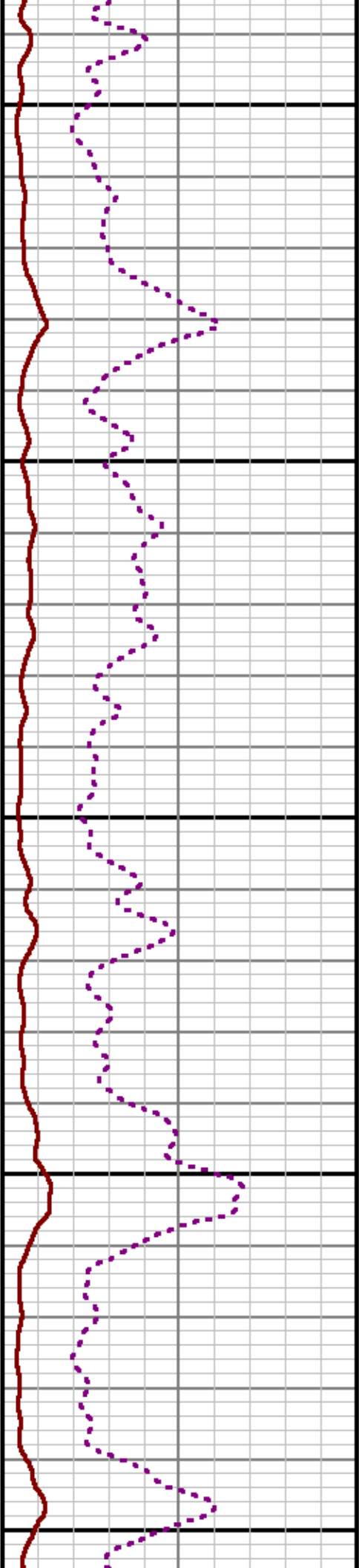
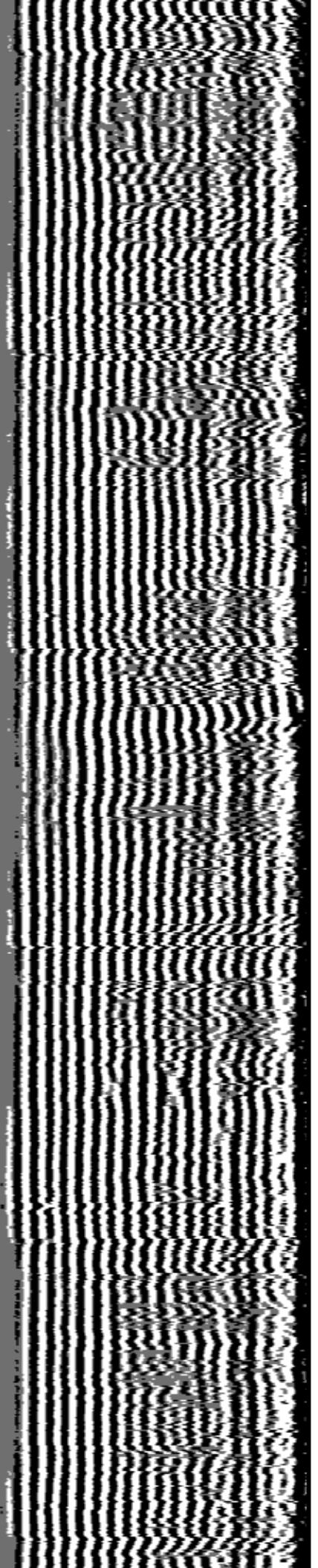


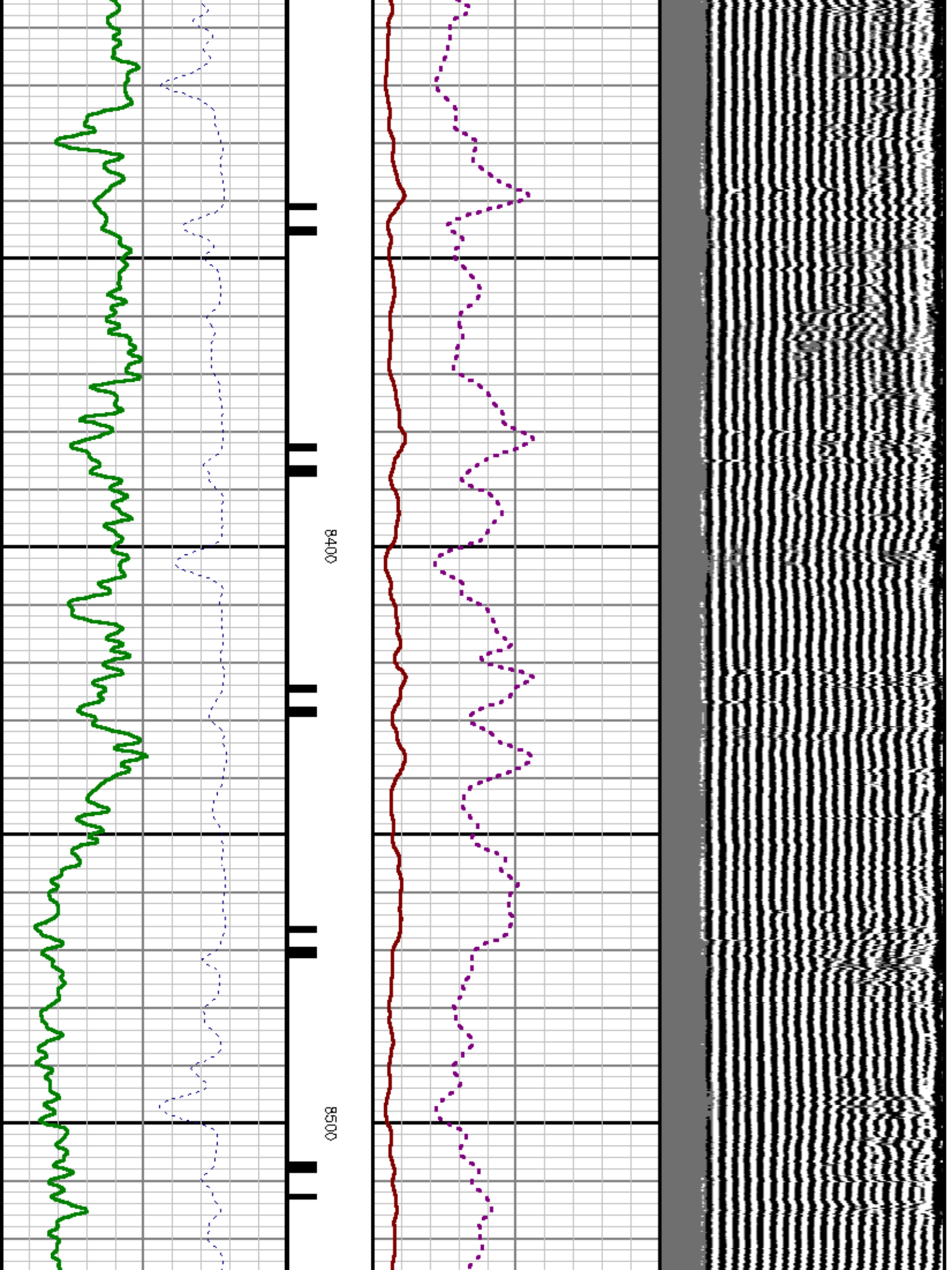


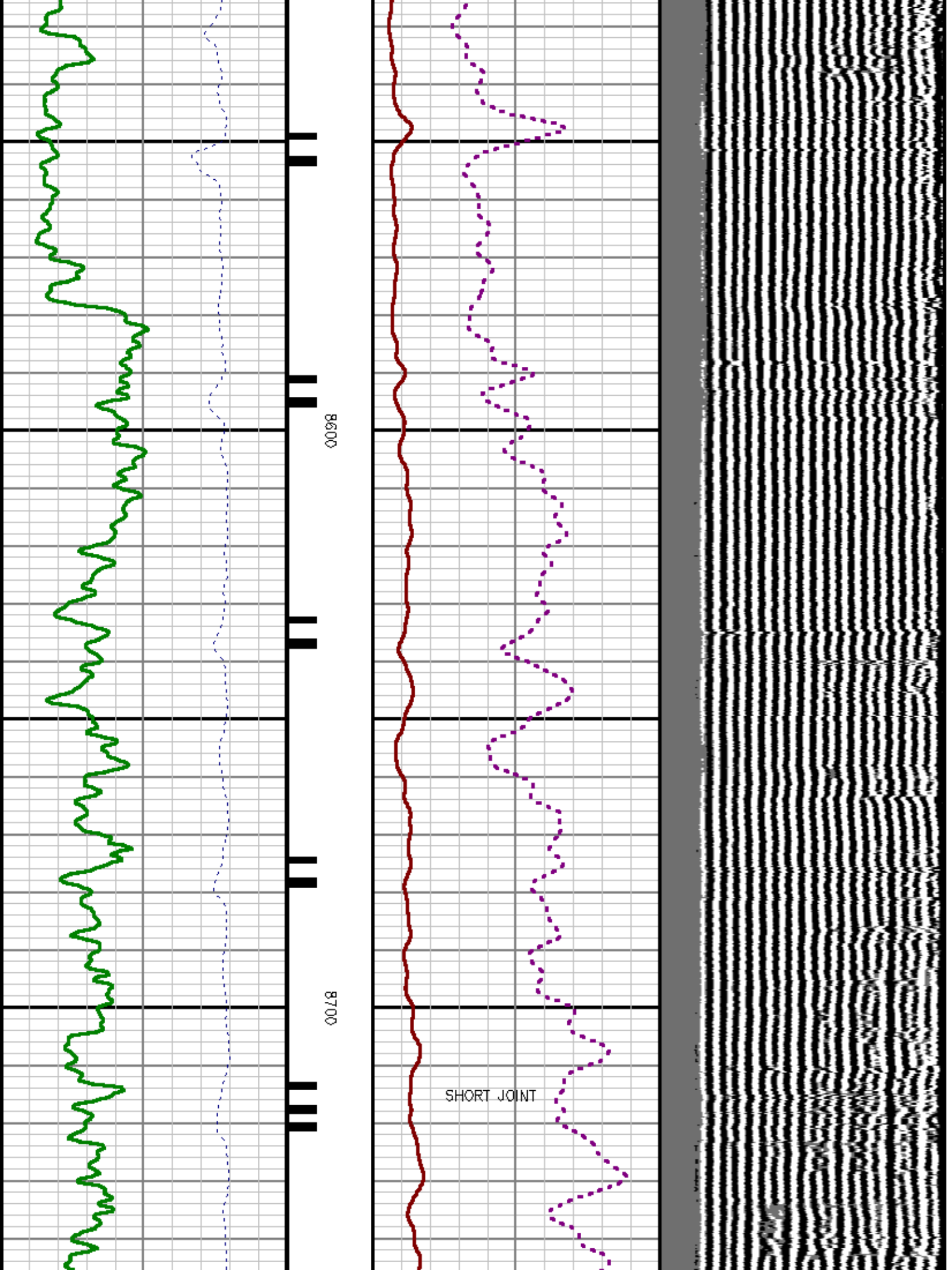


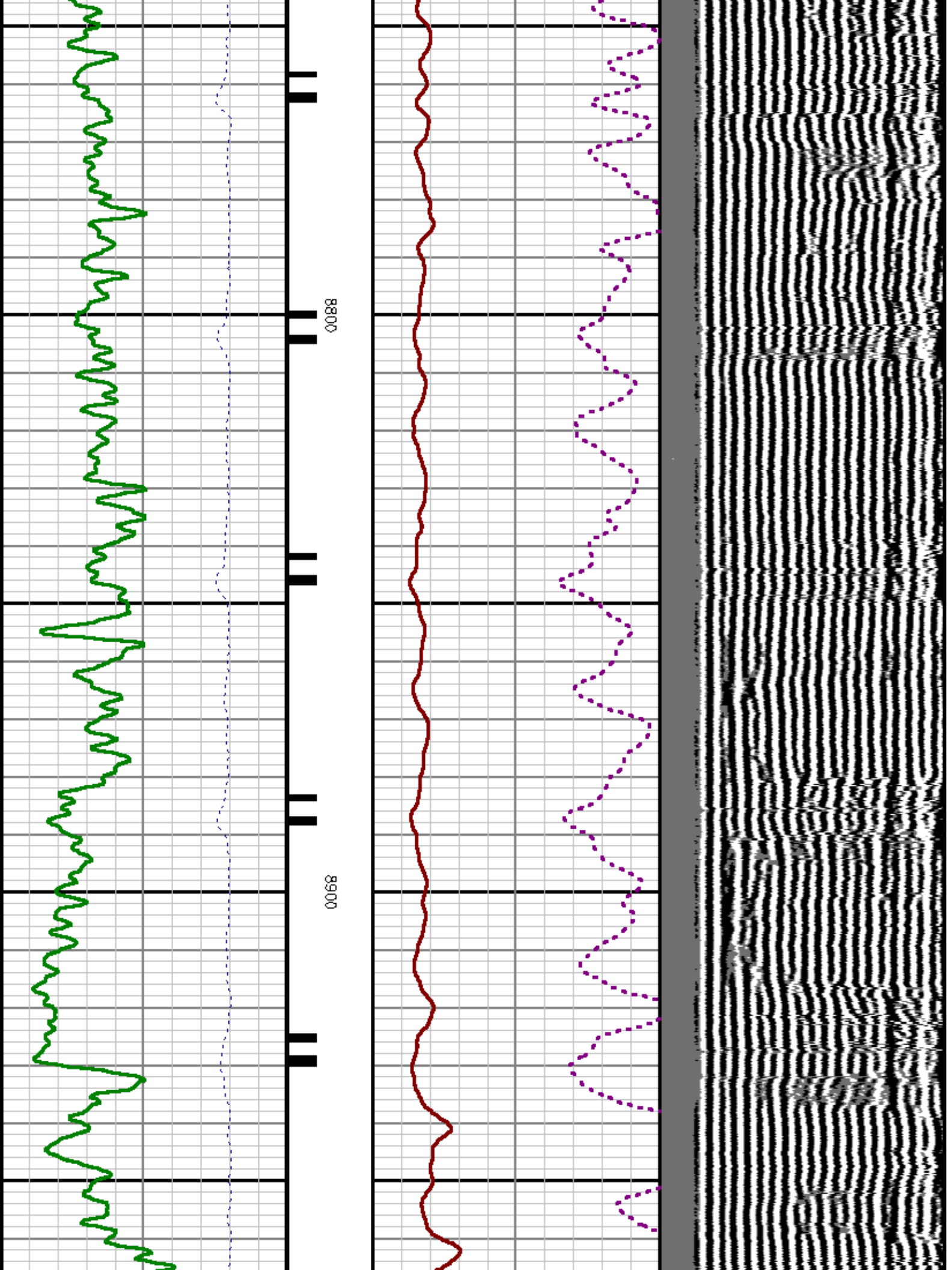


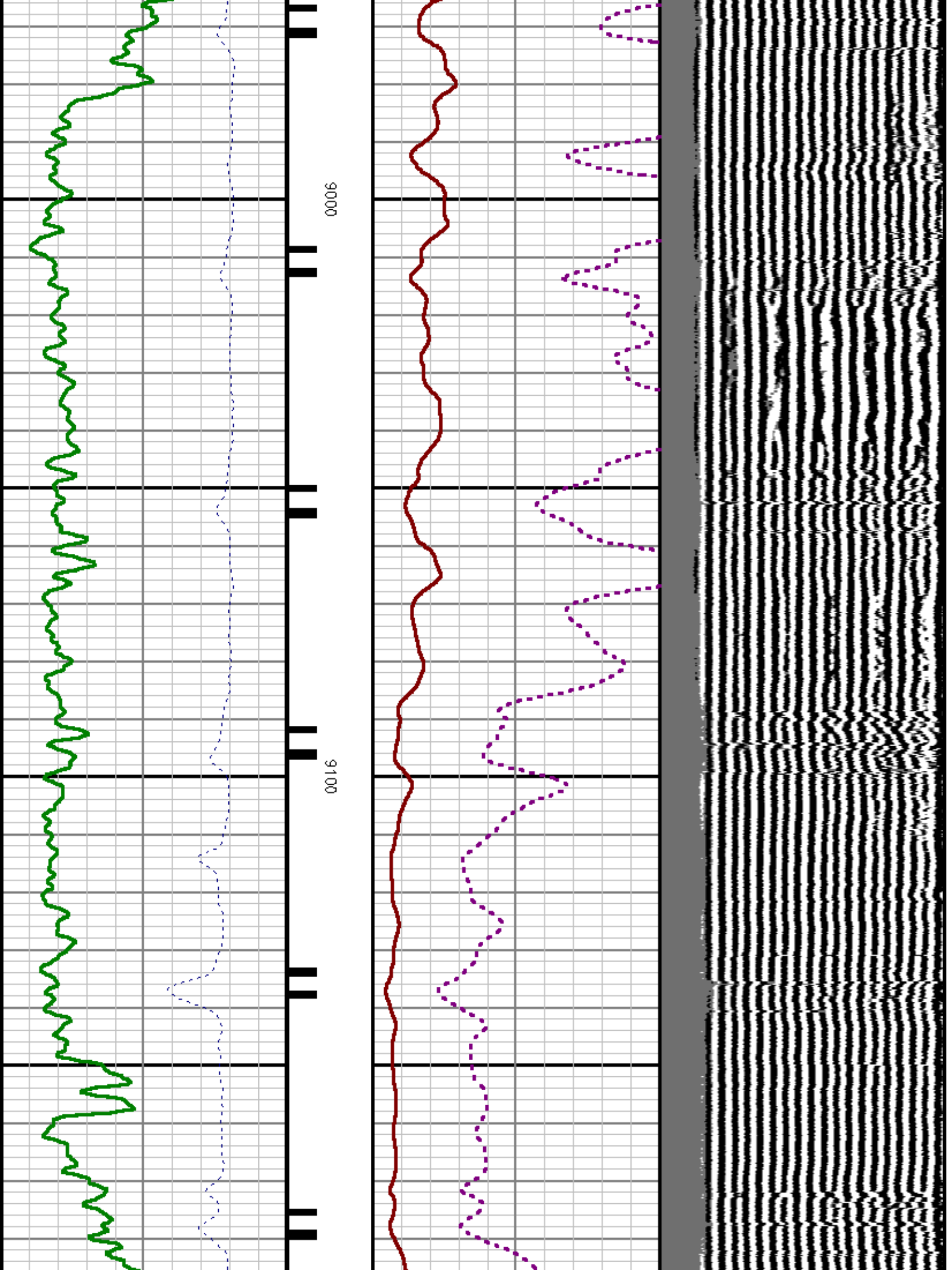


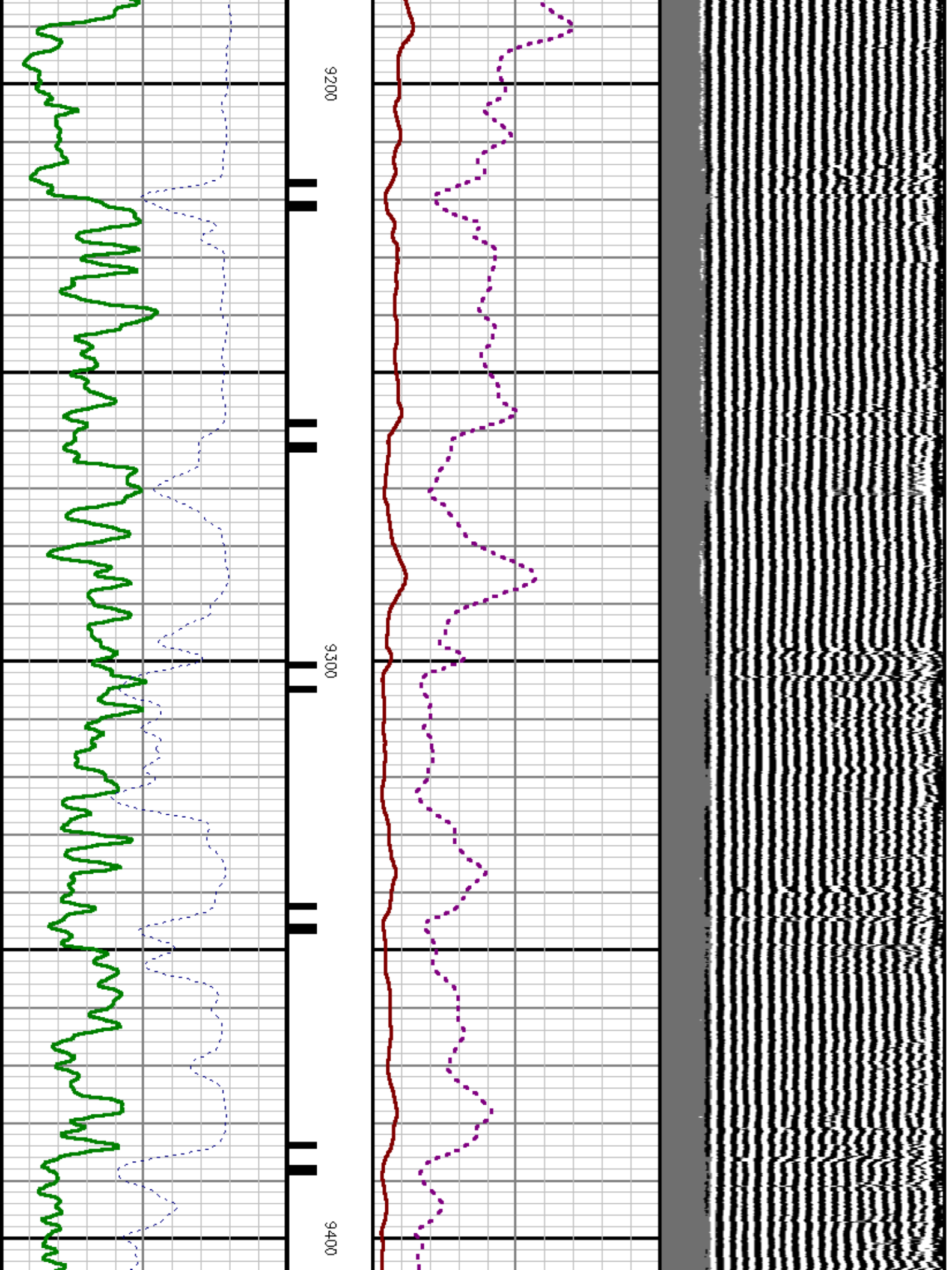


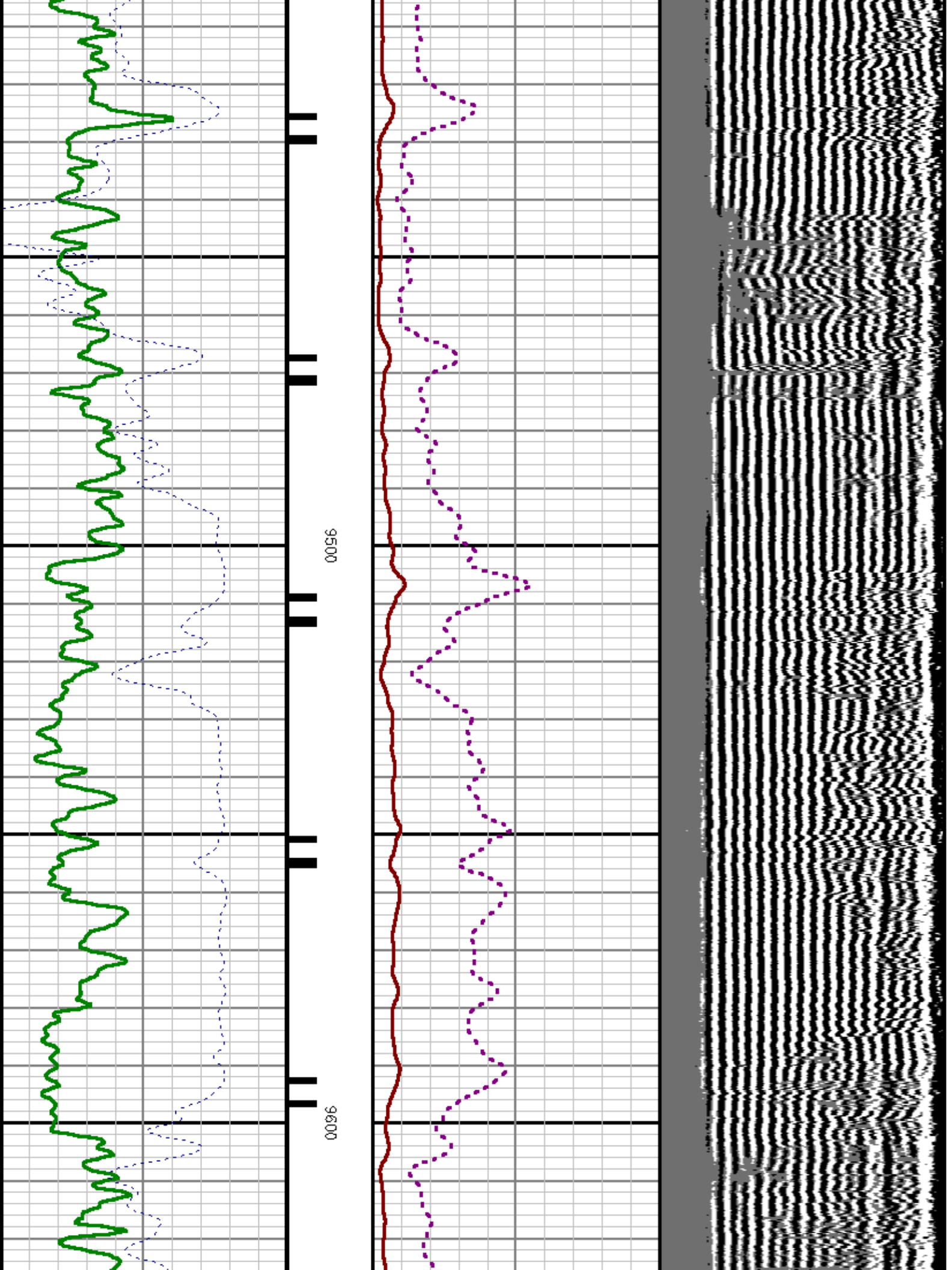


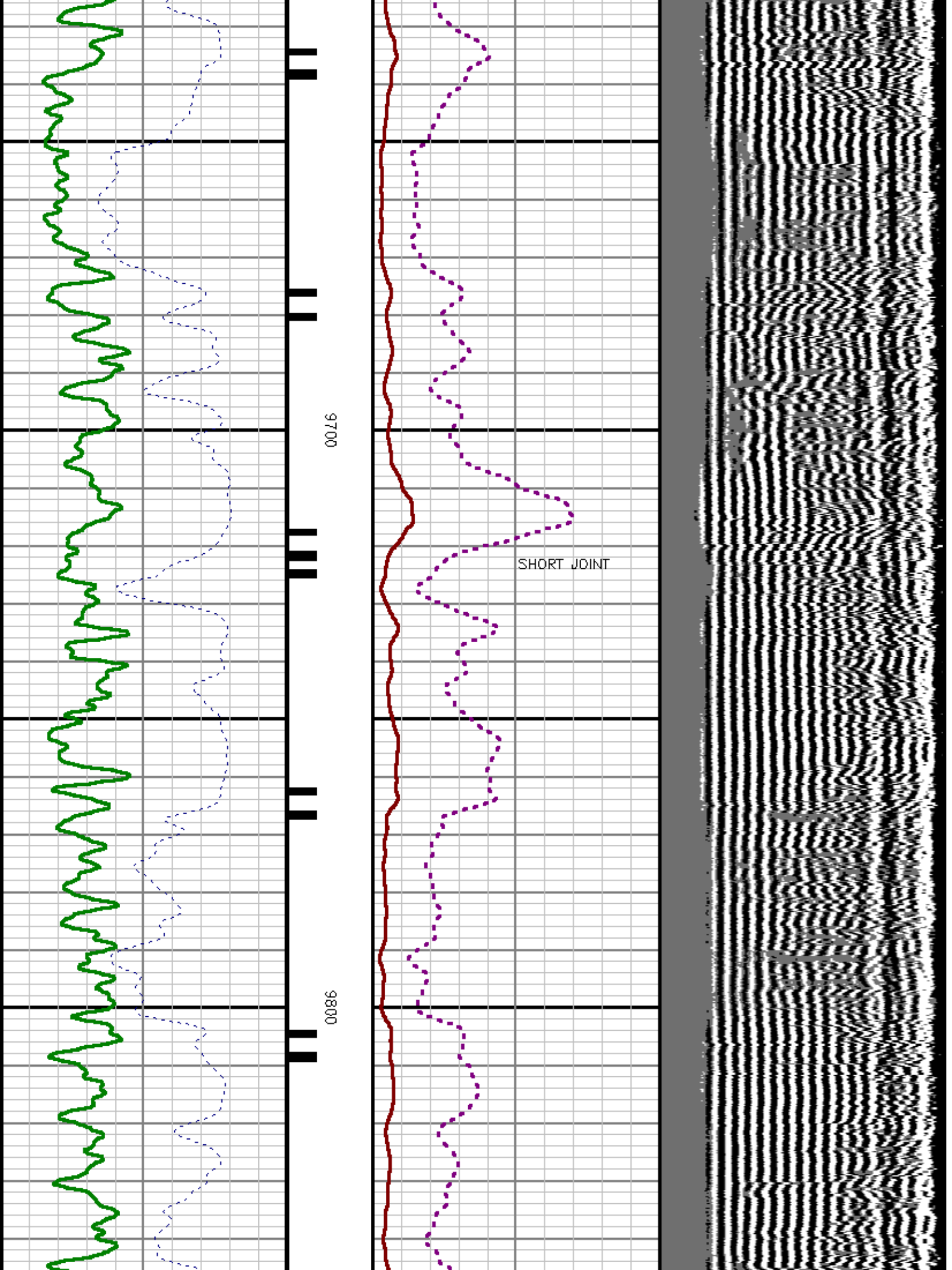


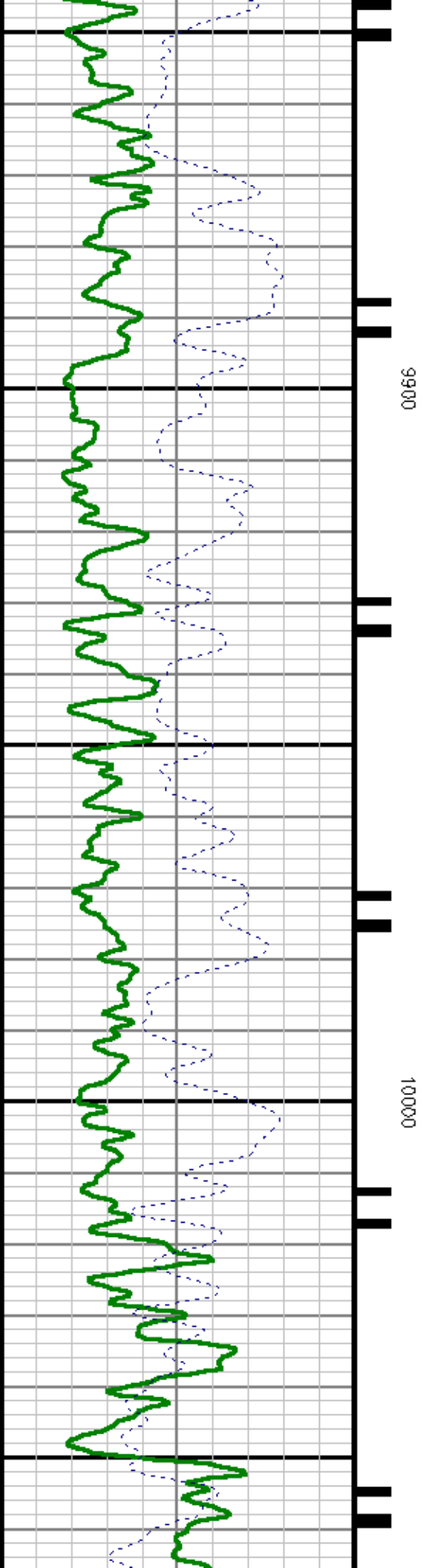
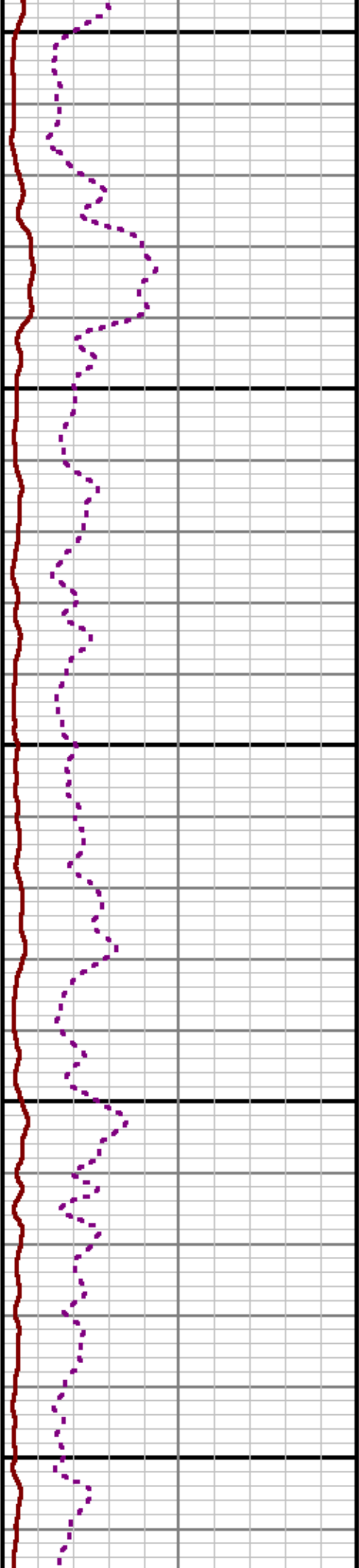
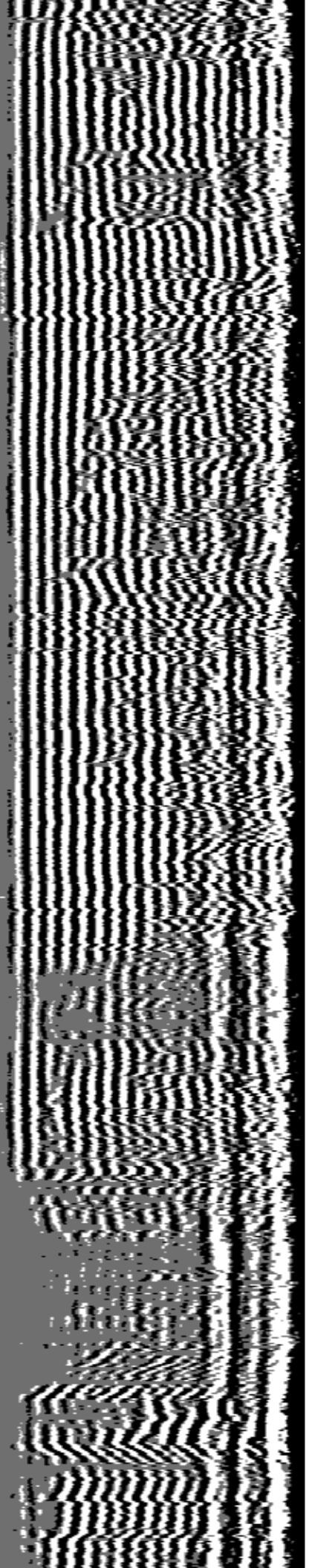


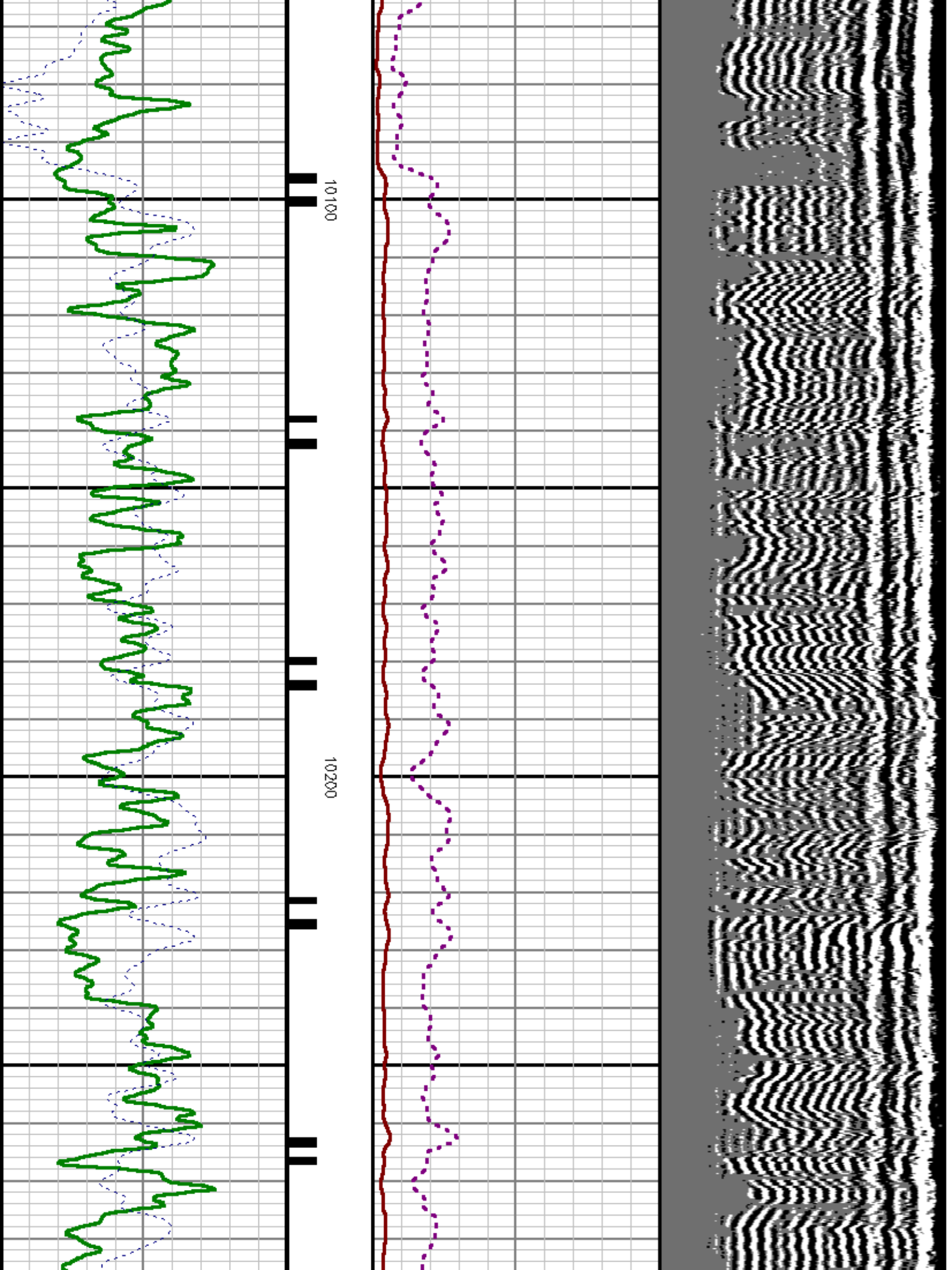


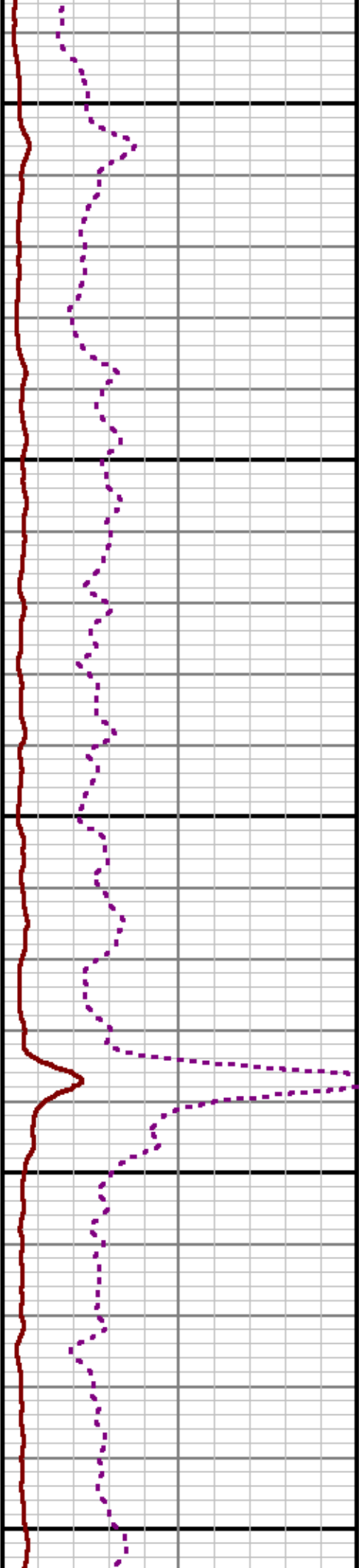
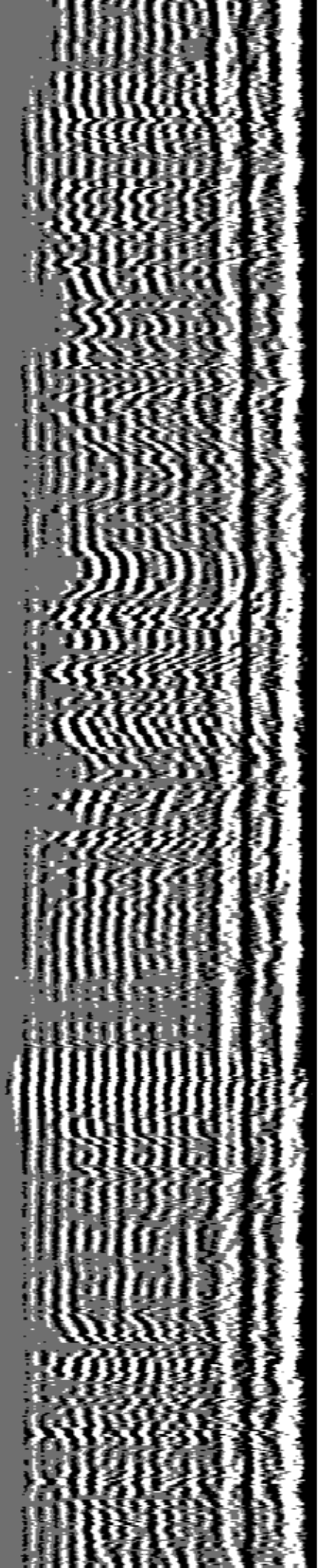








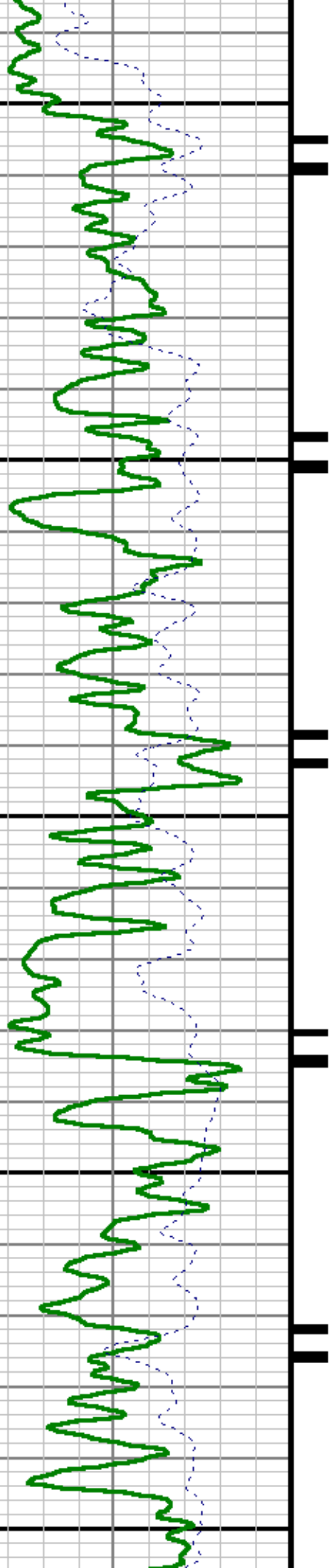


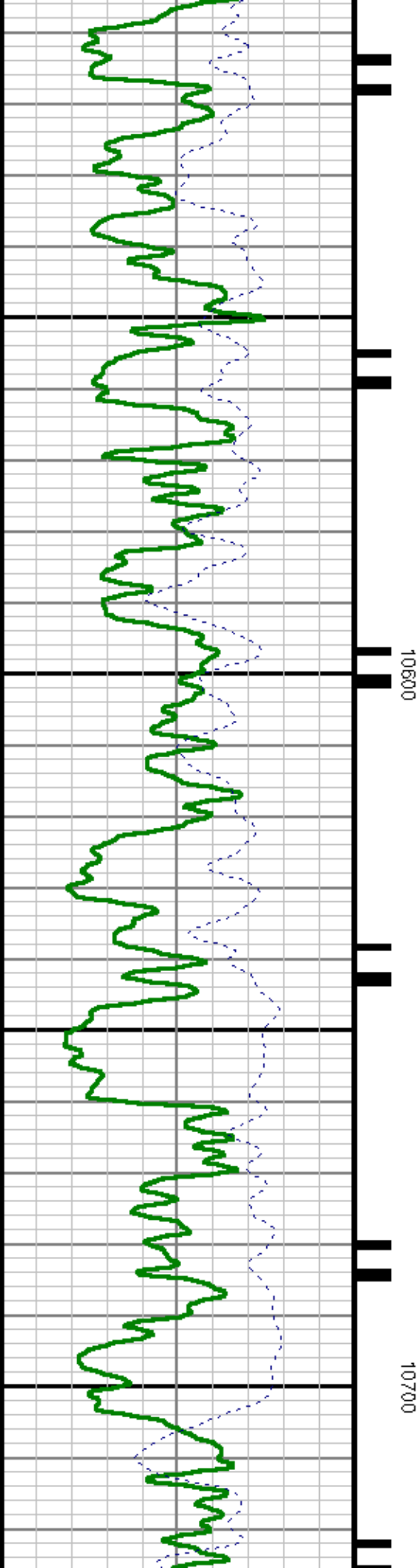
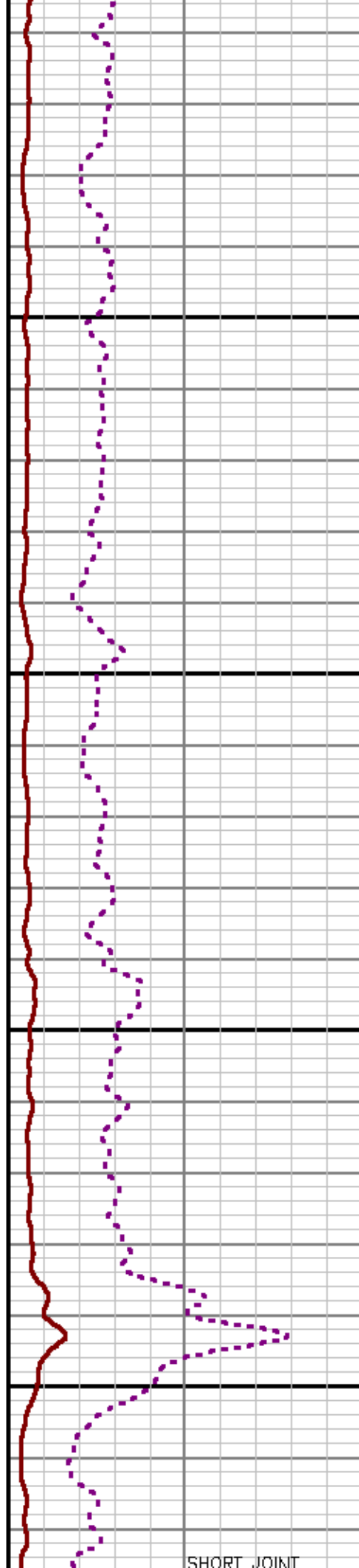
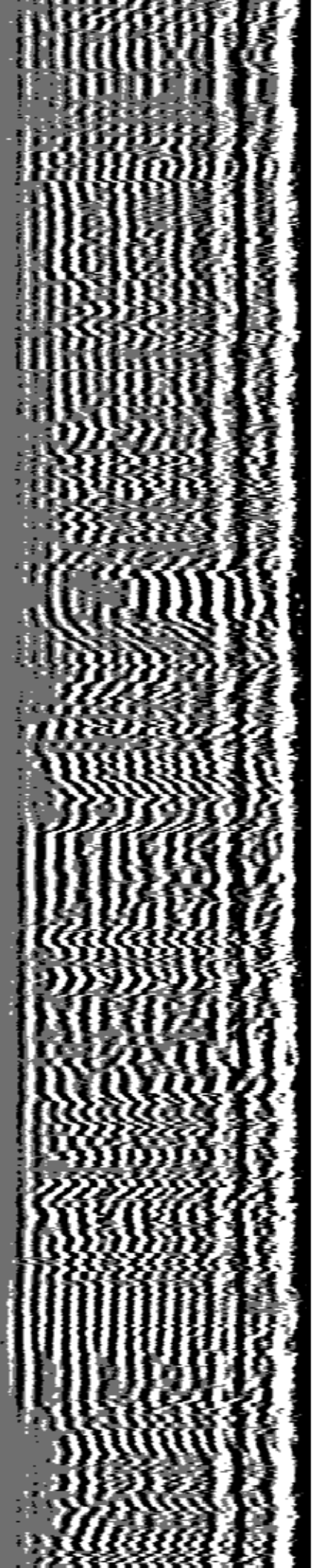


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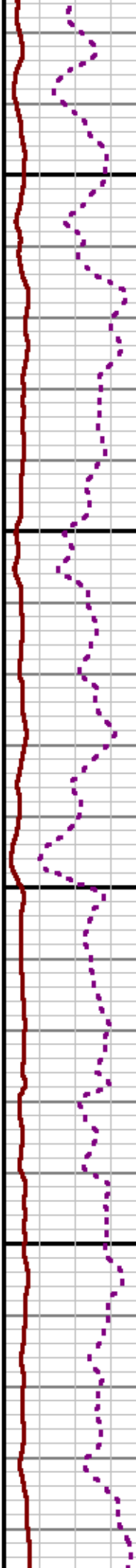
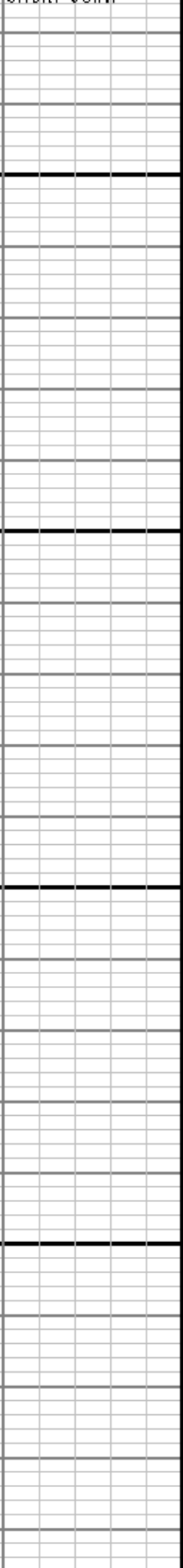
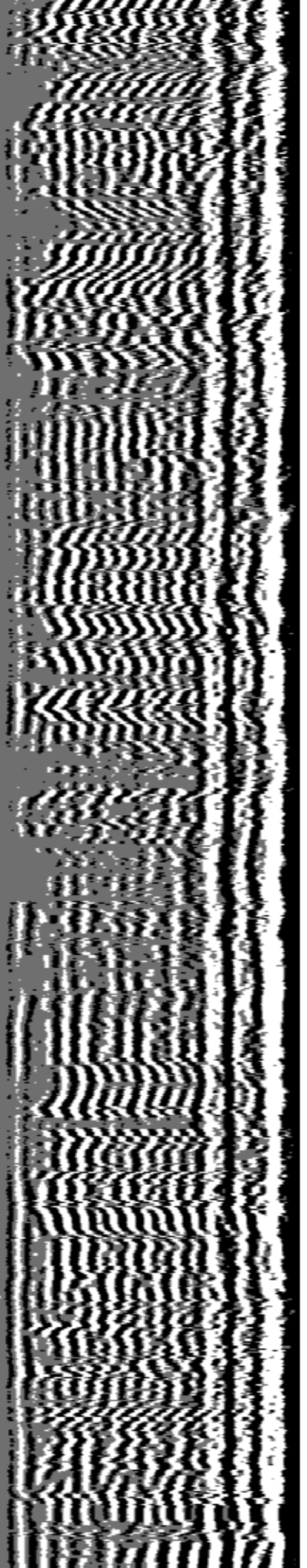
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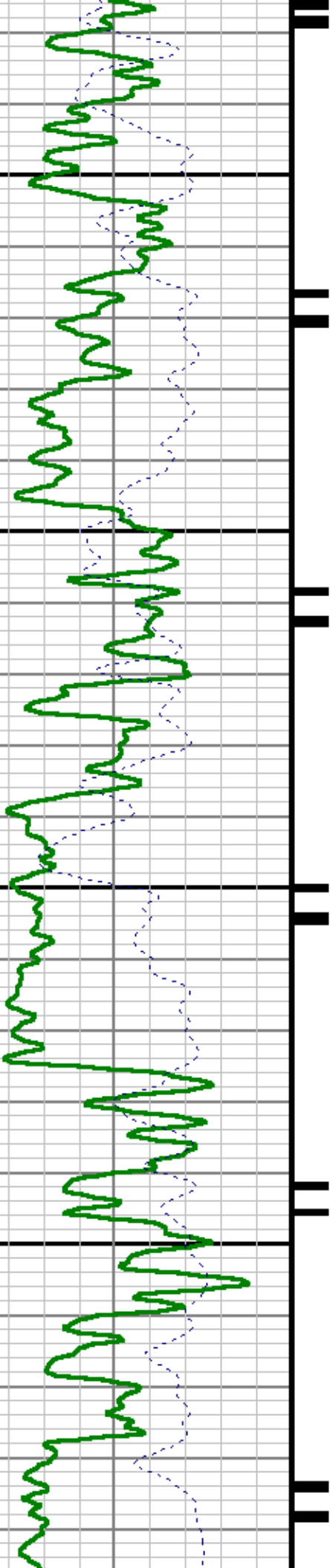


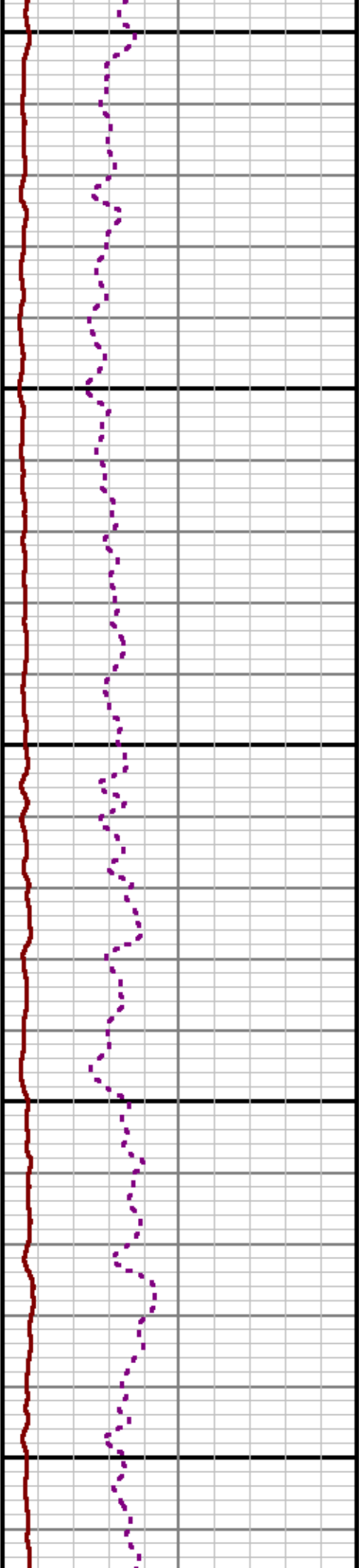
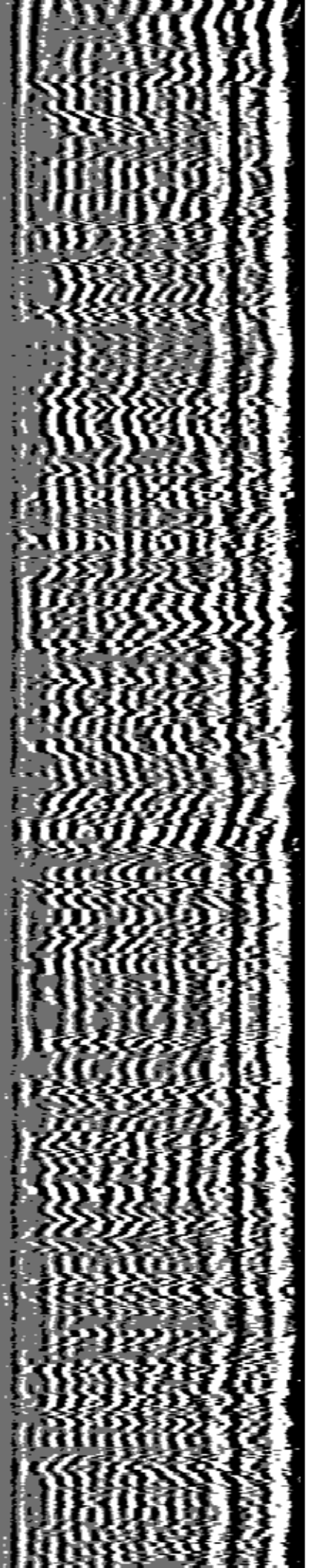
SHORT JOINT



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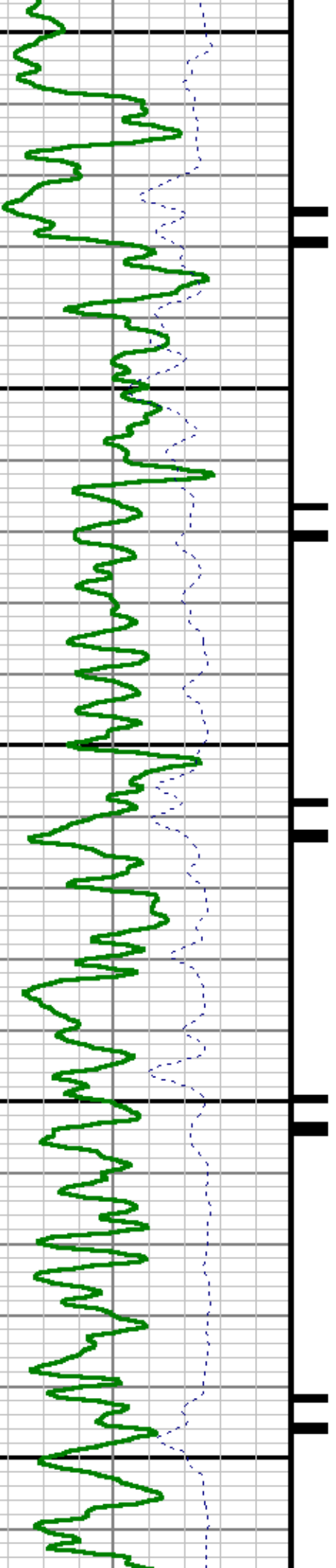
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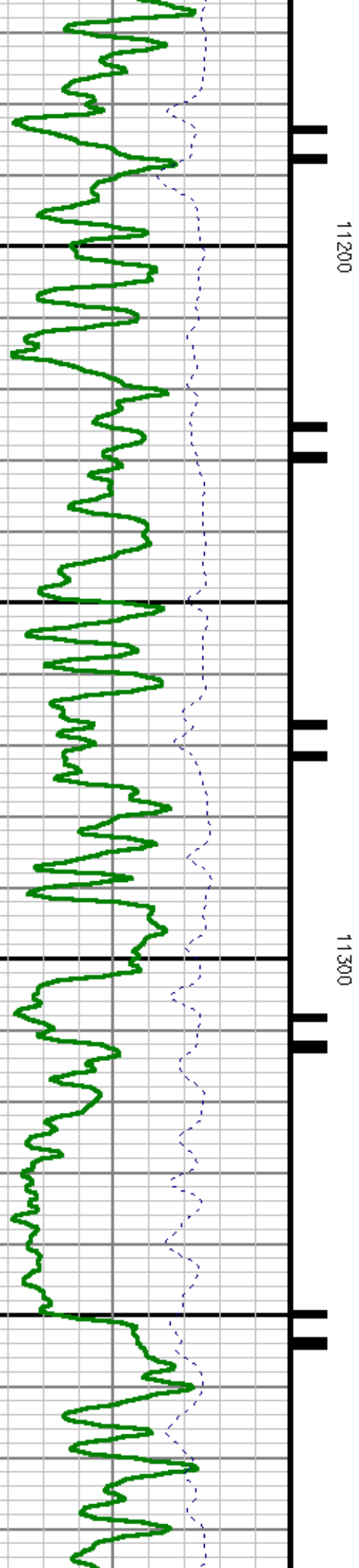
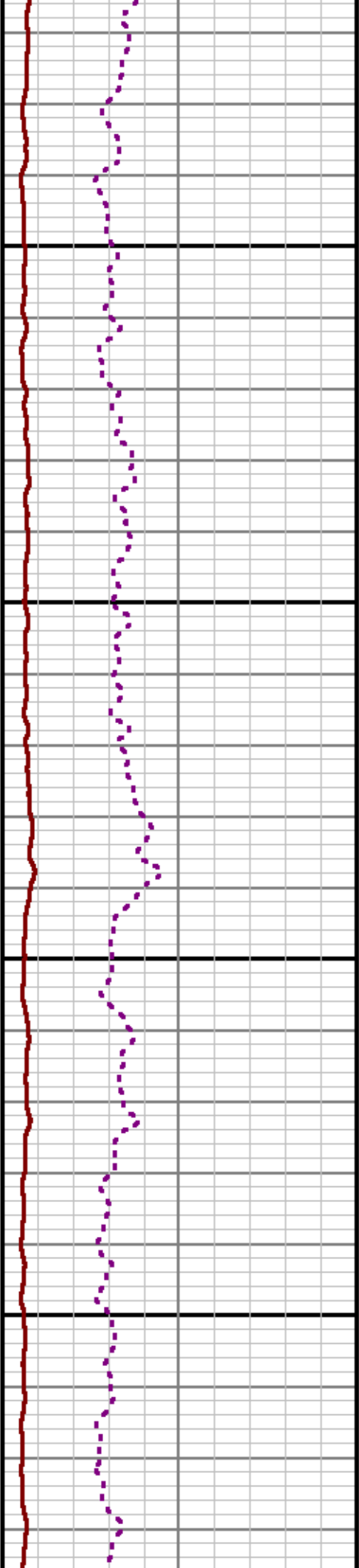
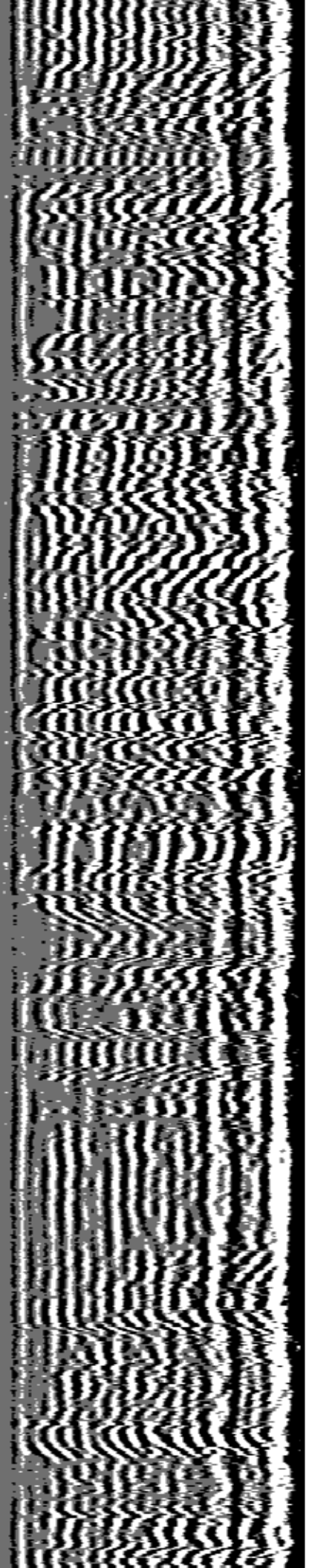


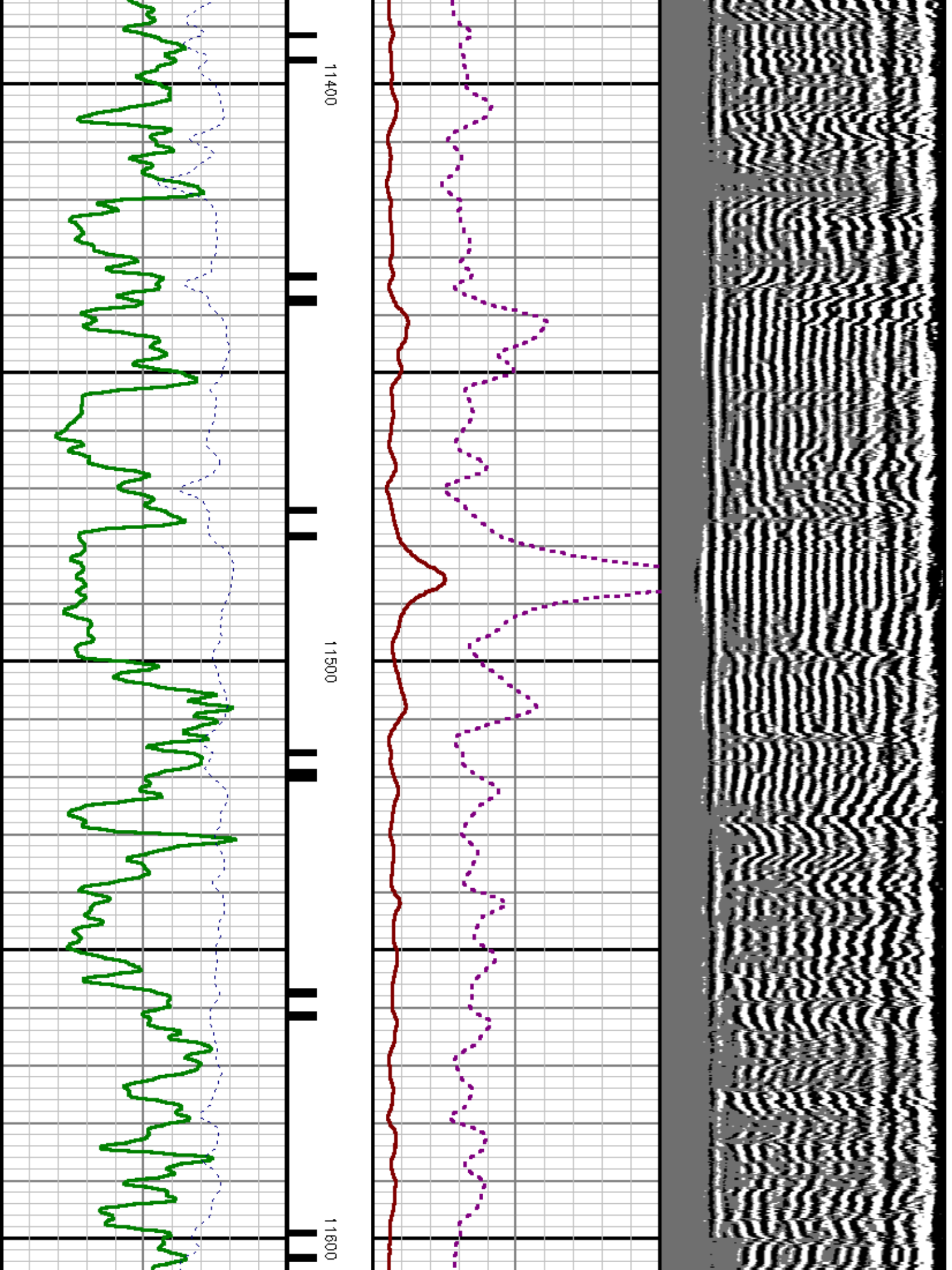


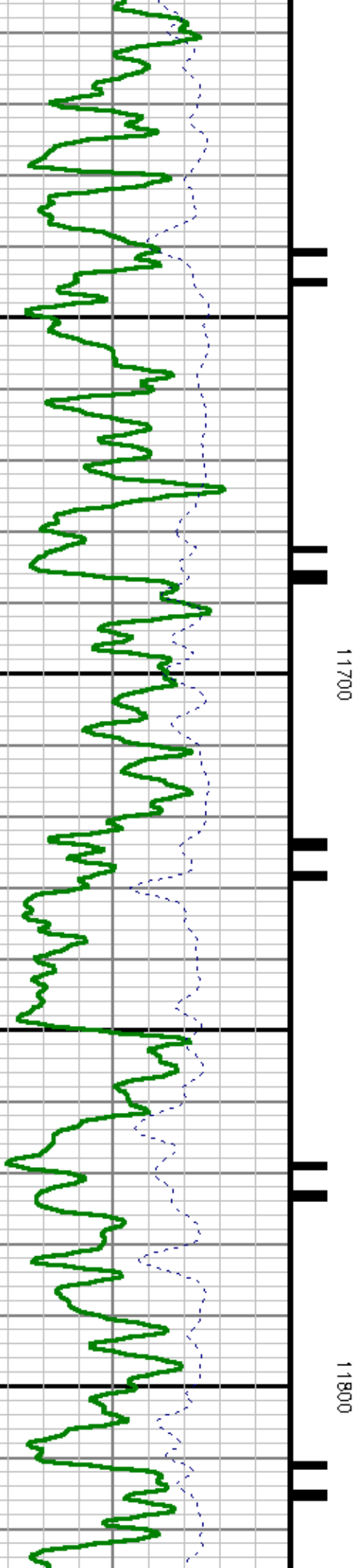
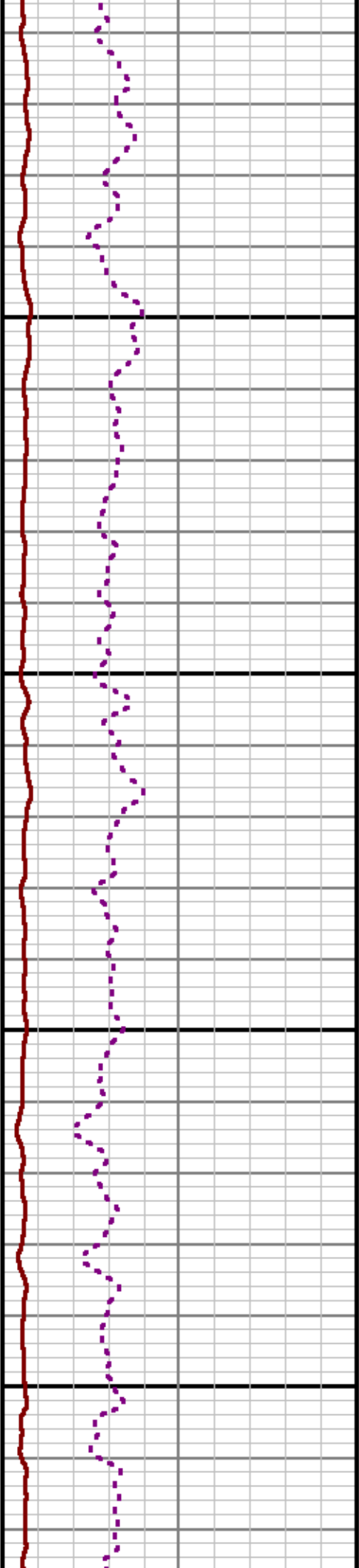
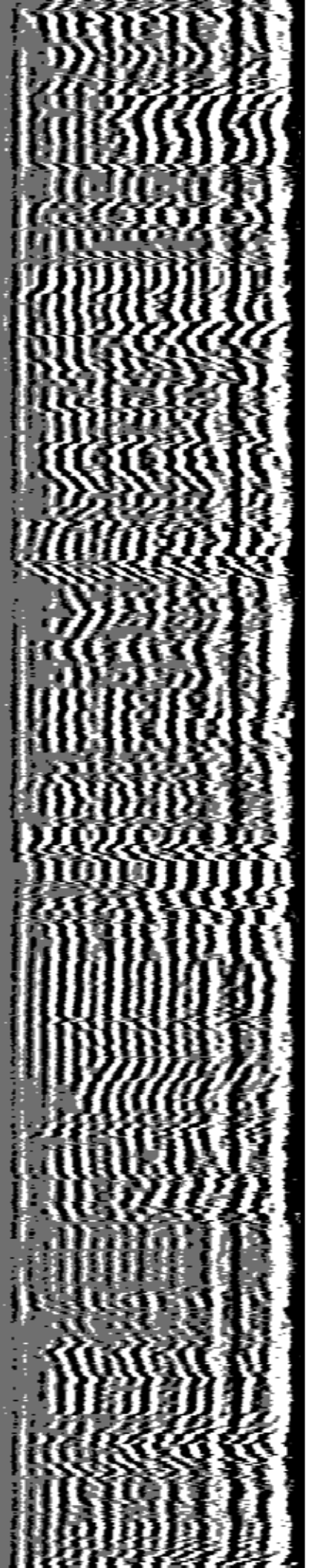
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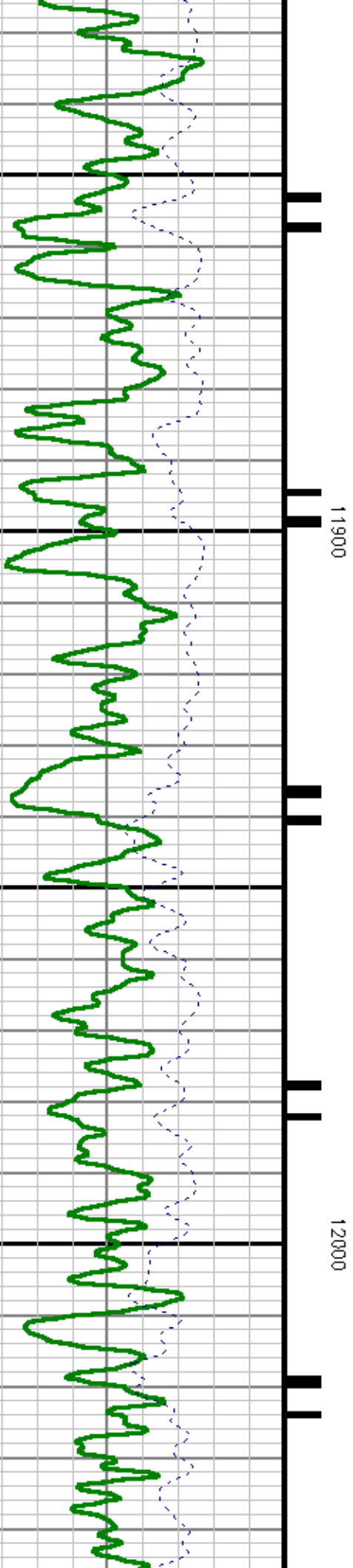
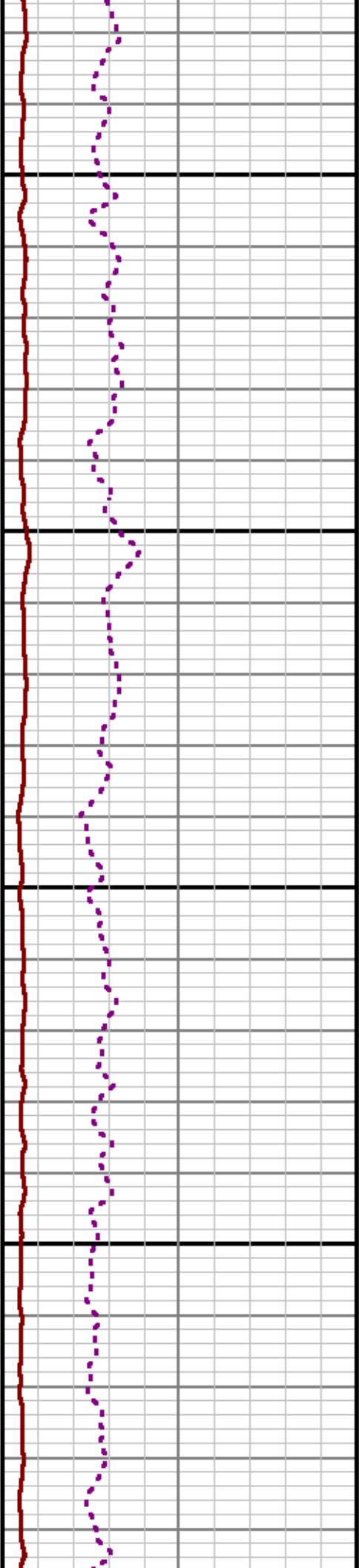
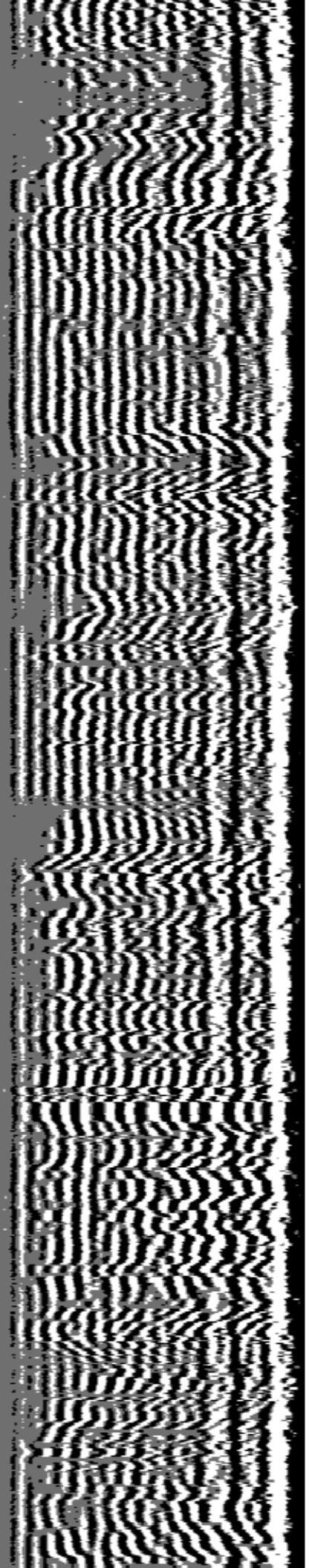
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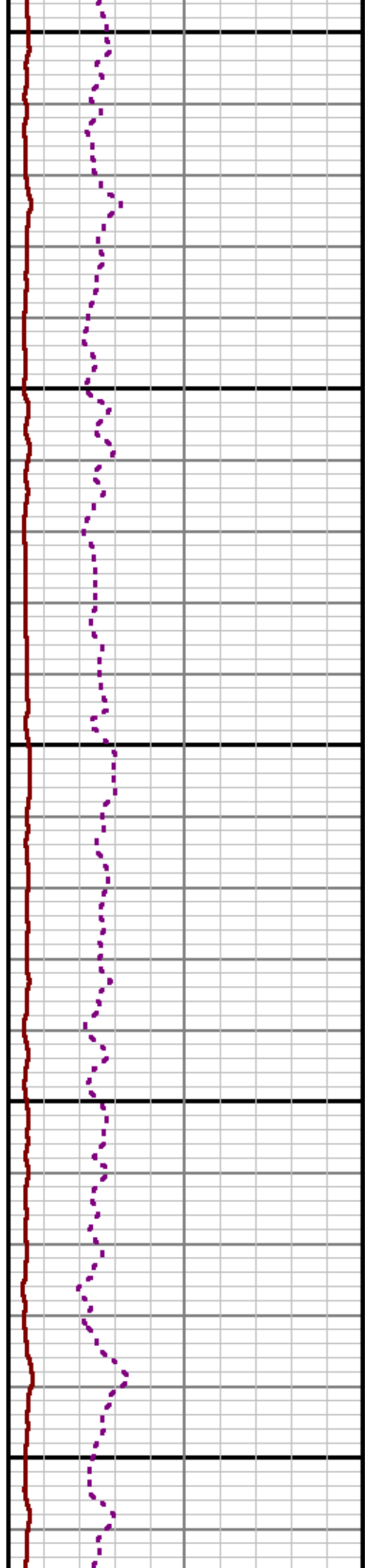
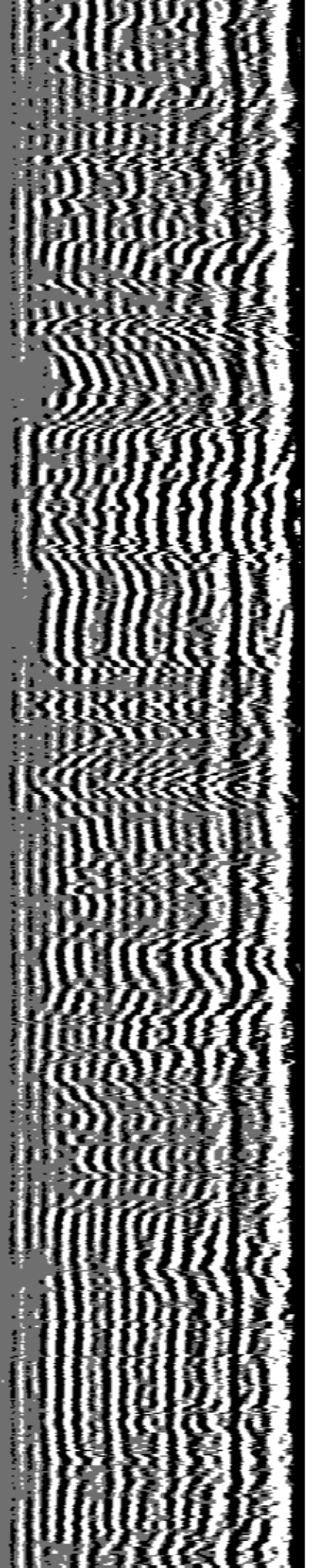






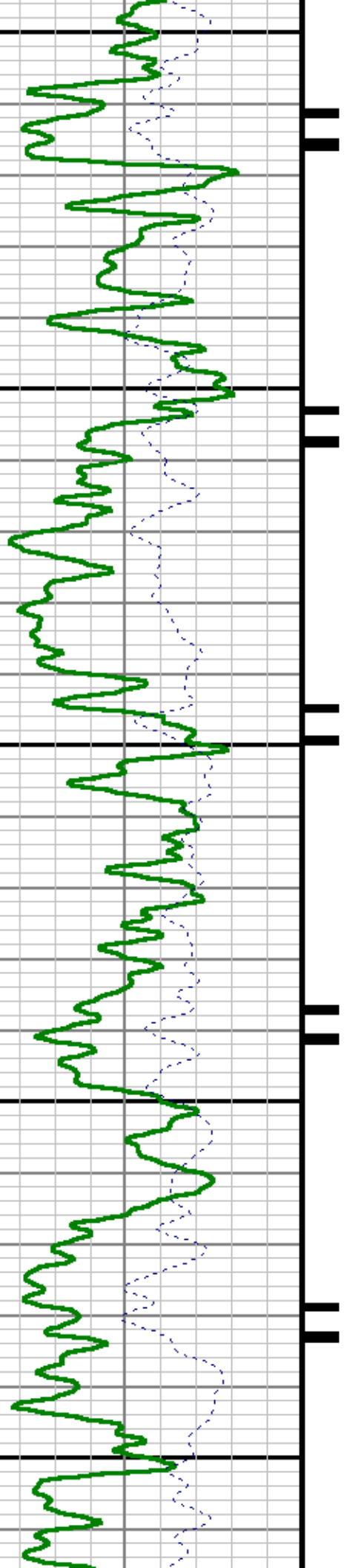


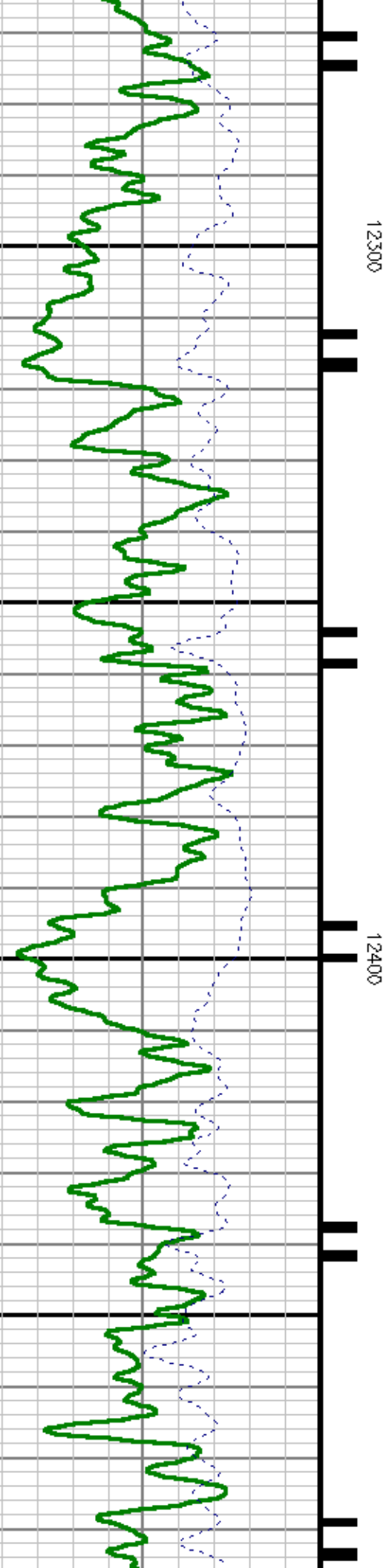
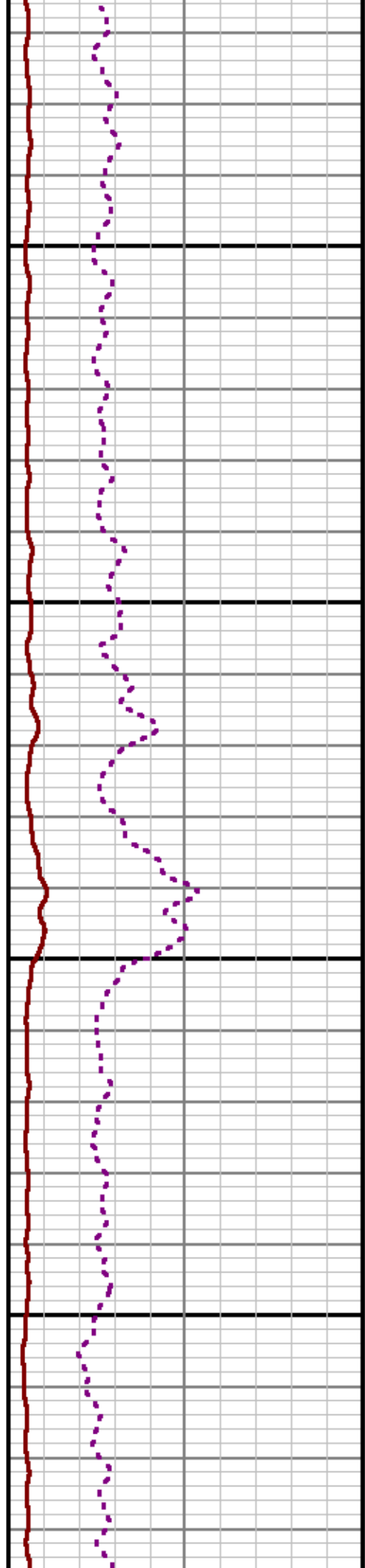
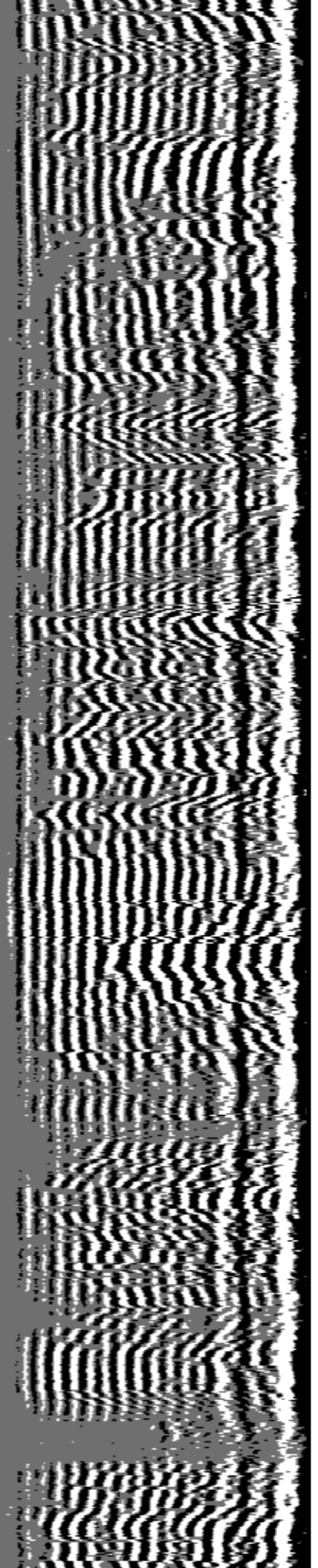


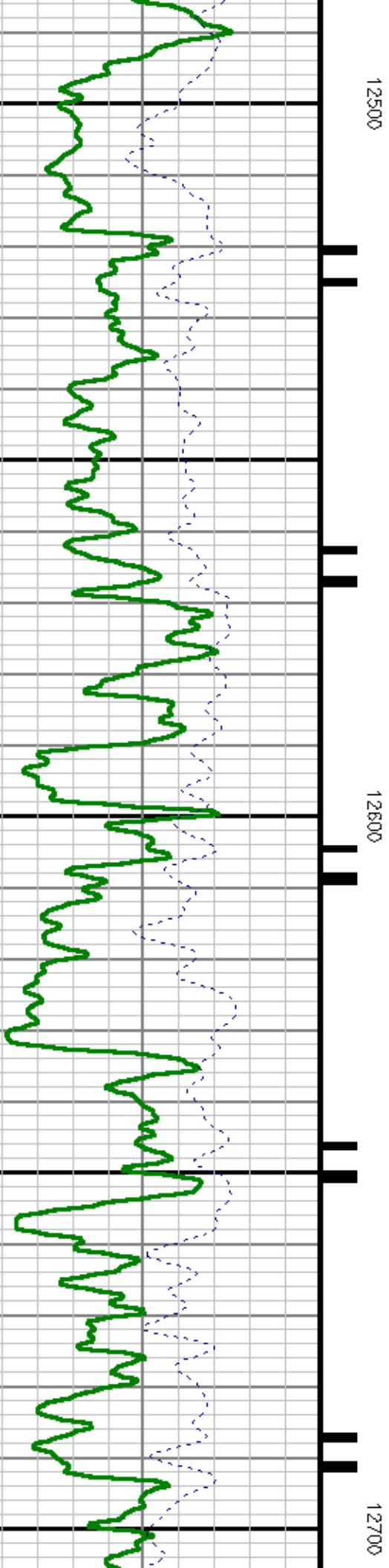
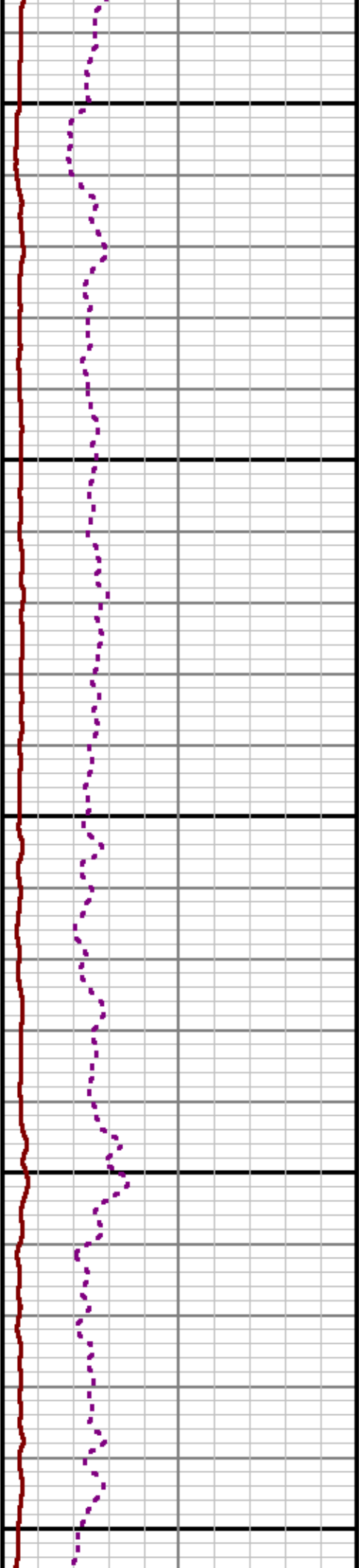
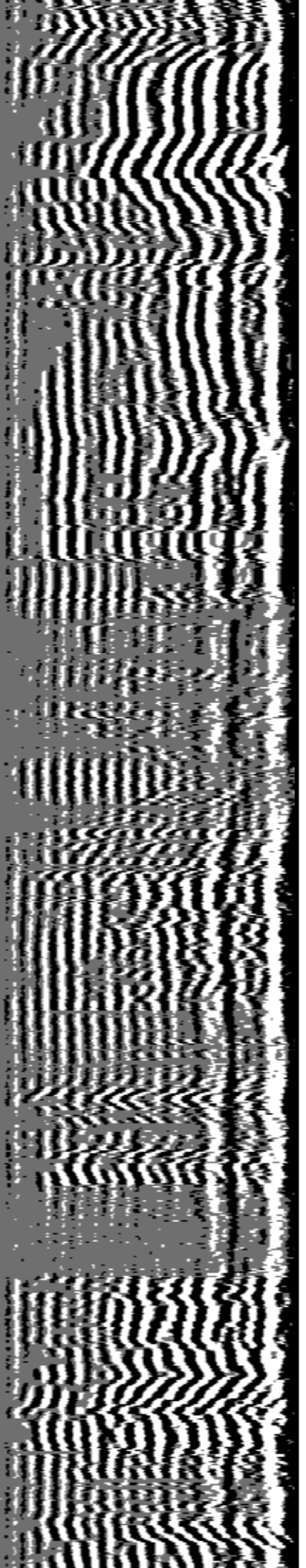


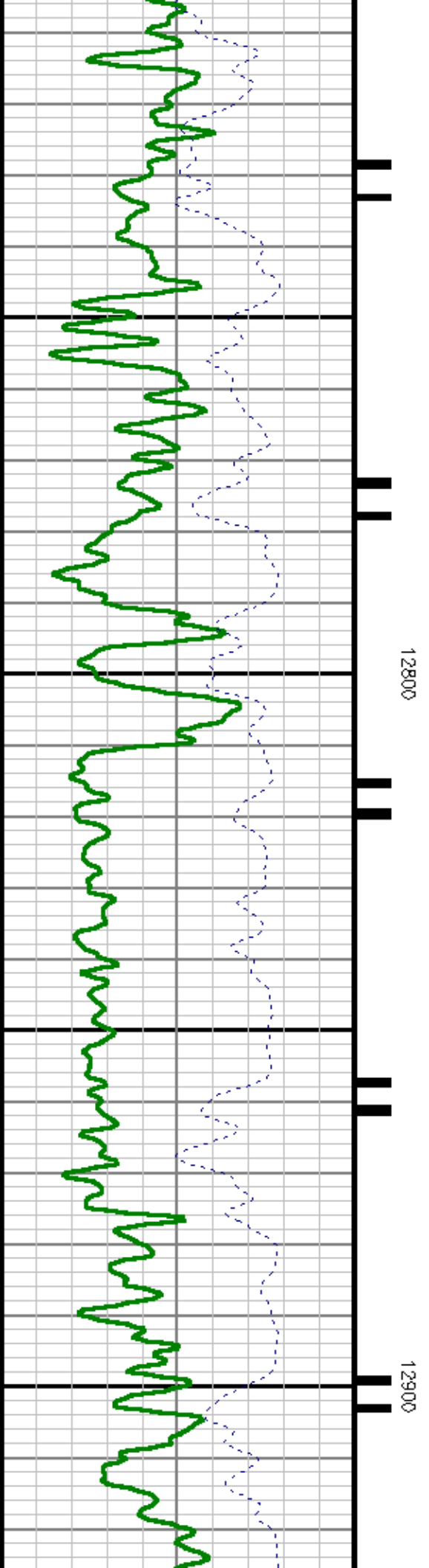
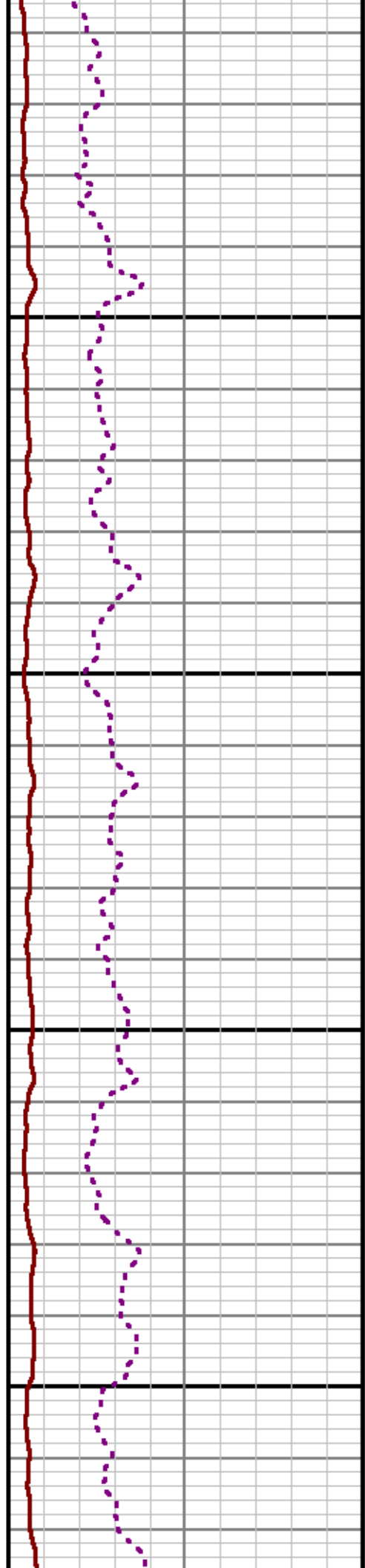
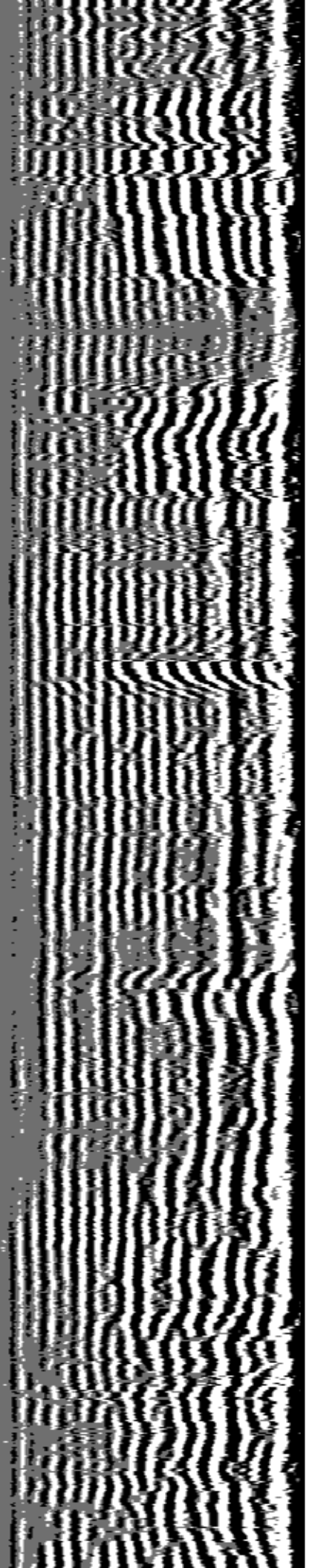
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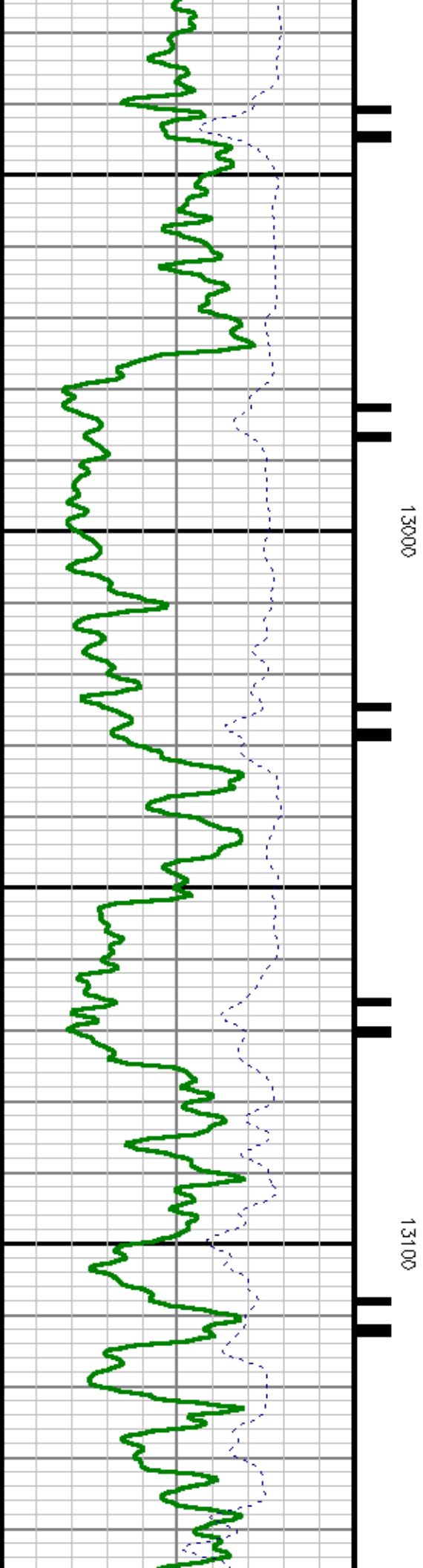
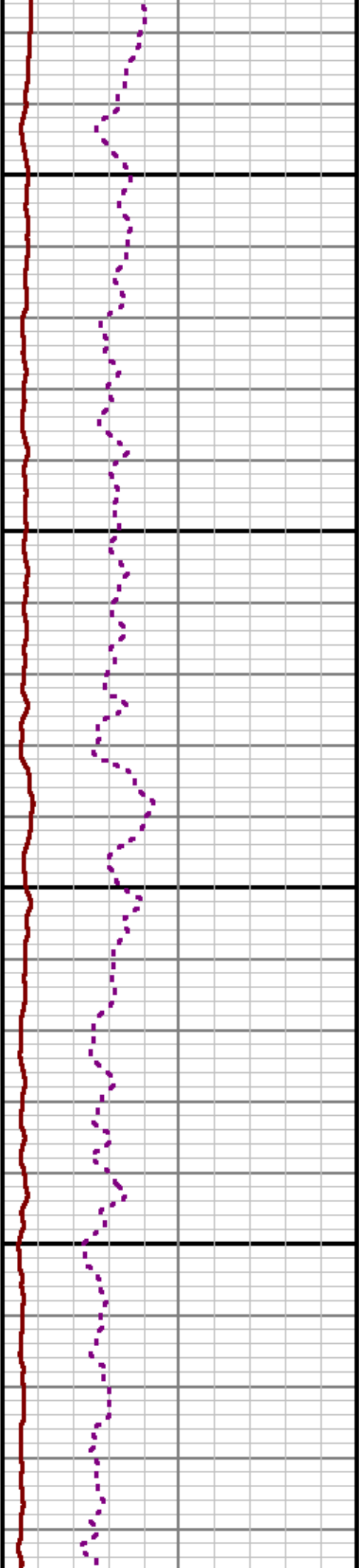
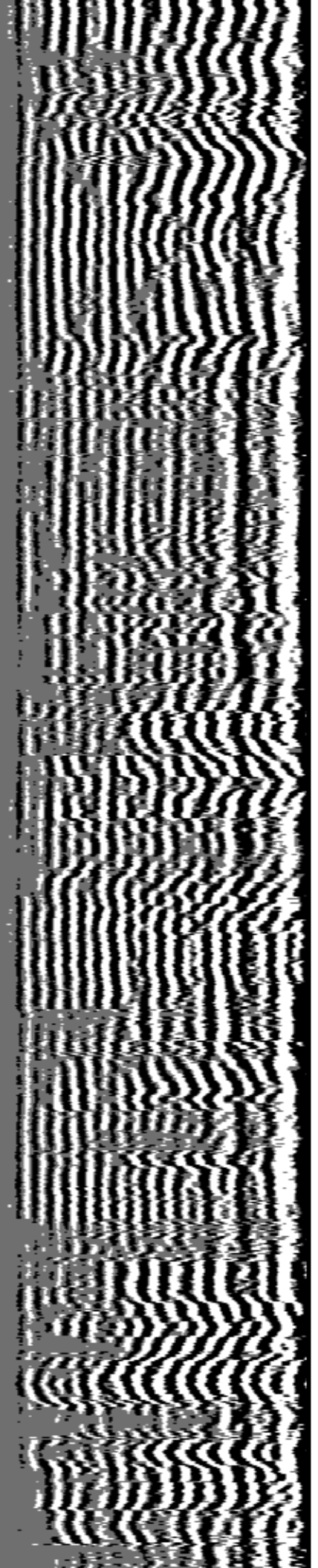
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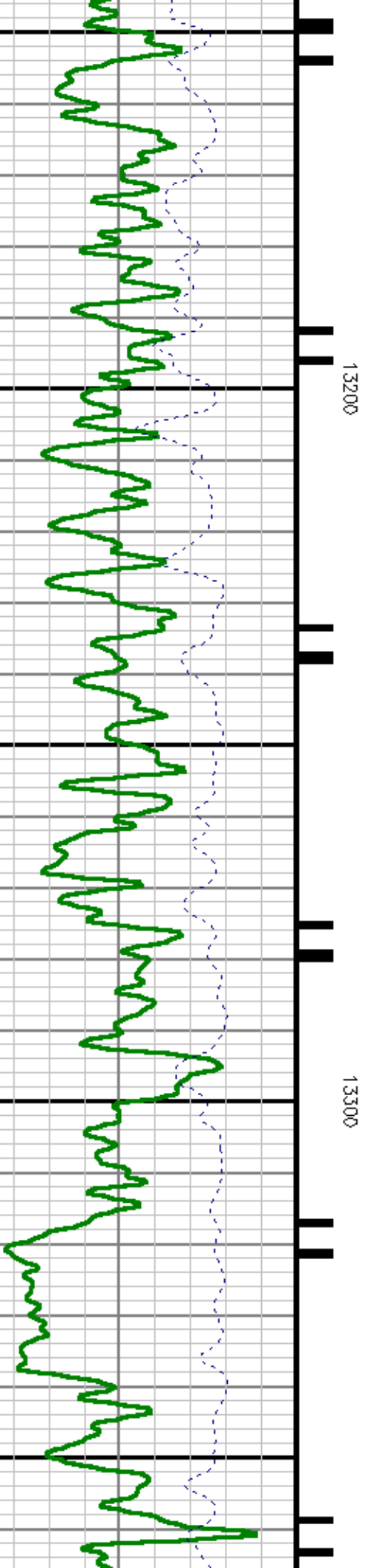
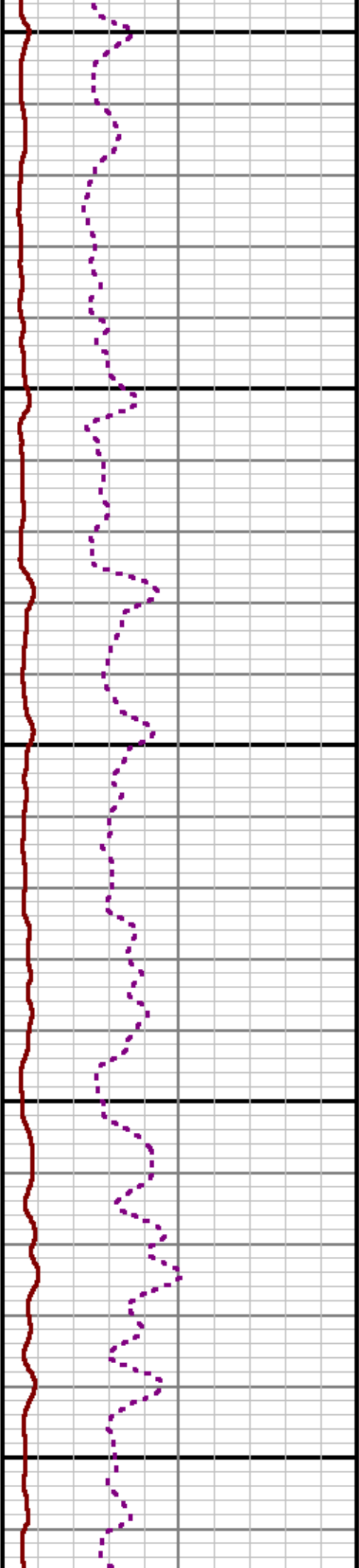
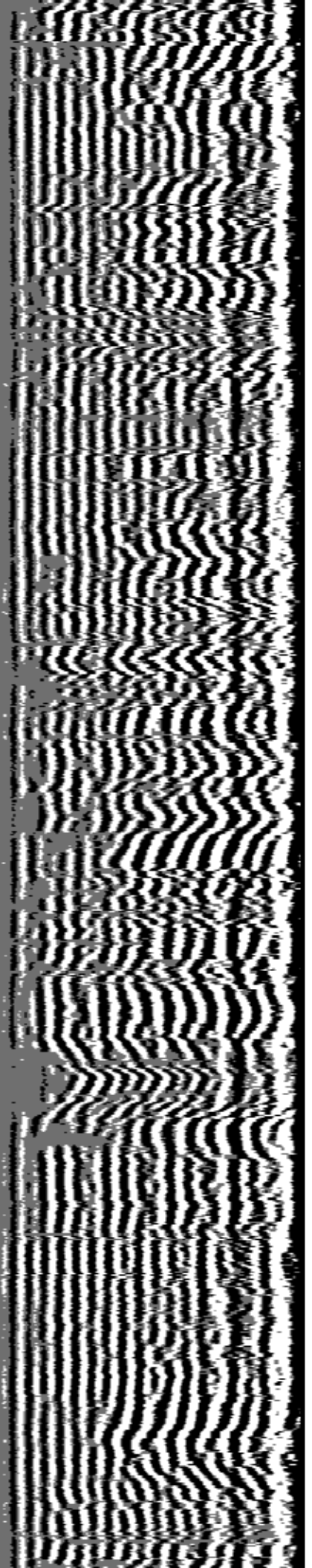


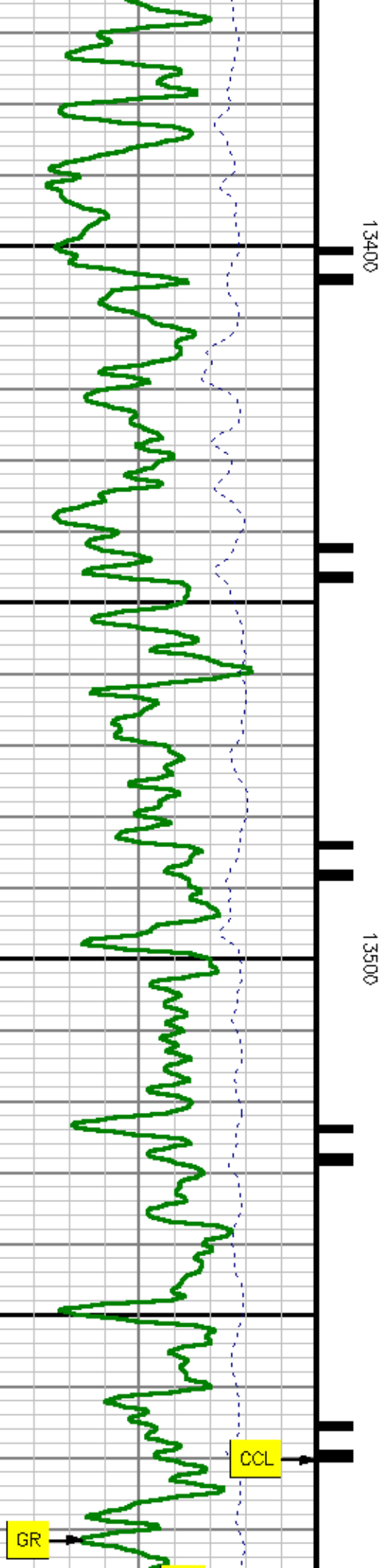
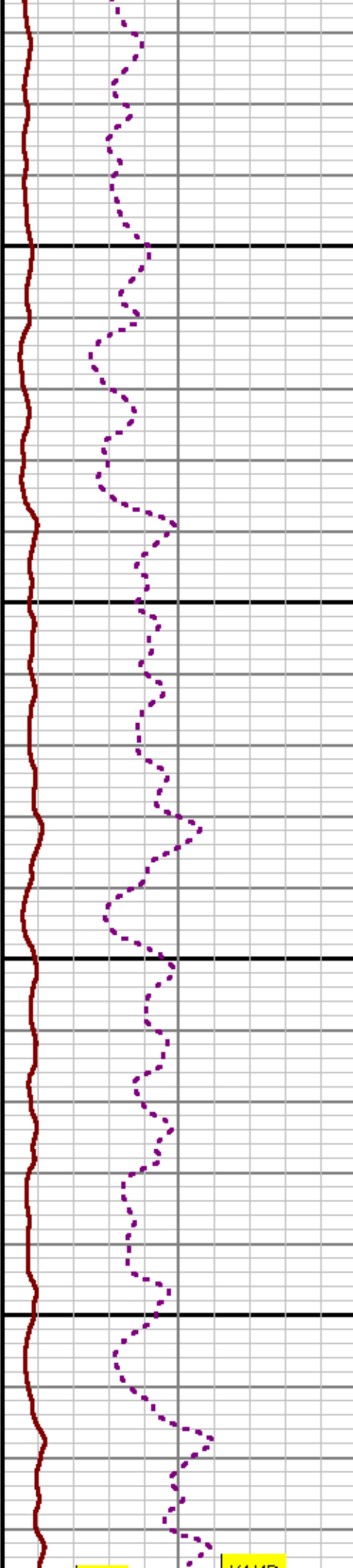
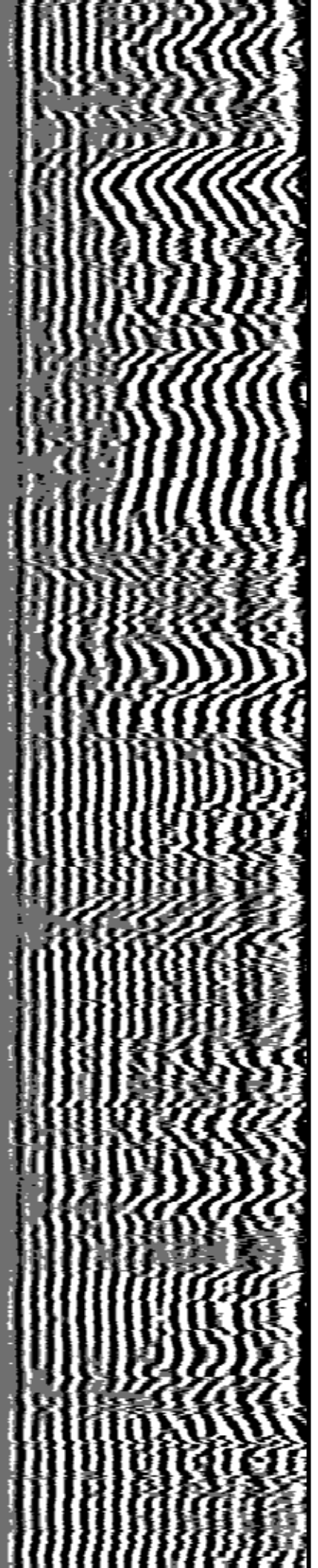


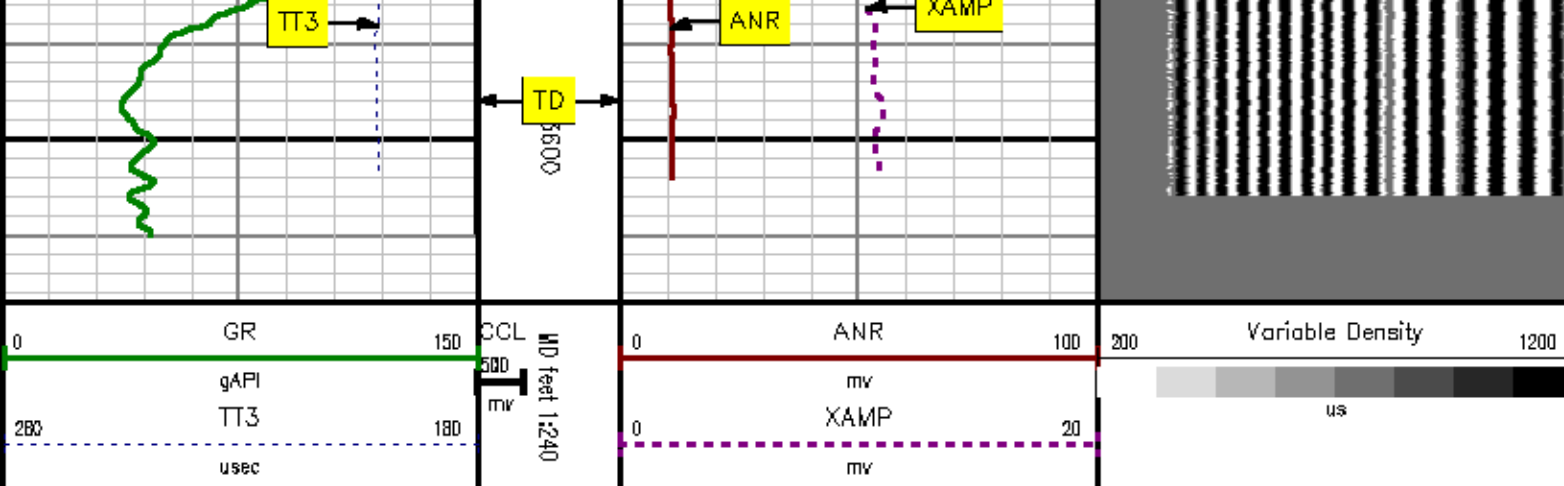












REPEAT SECTION

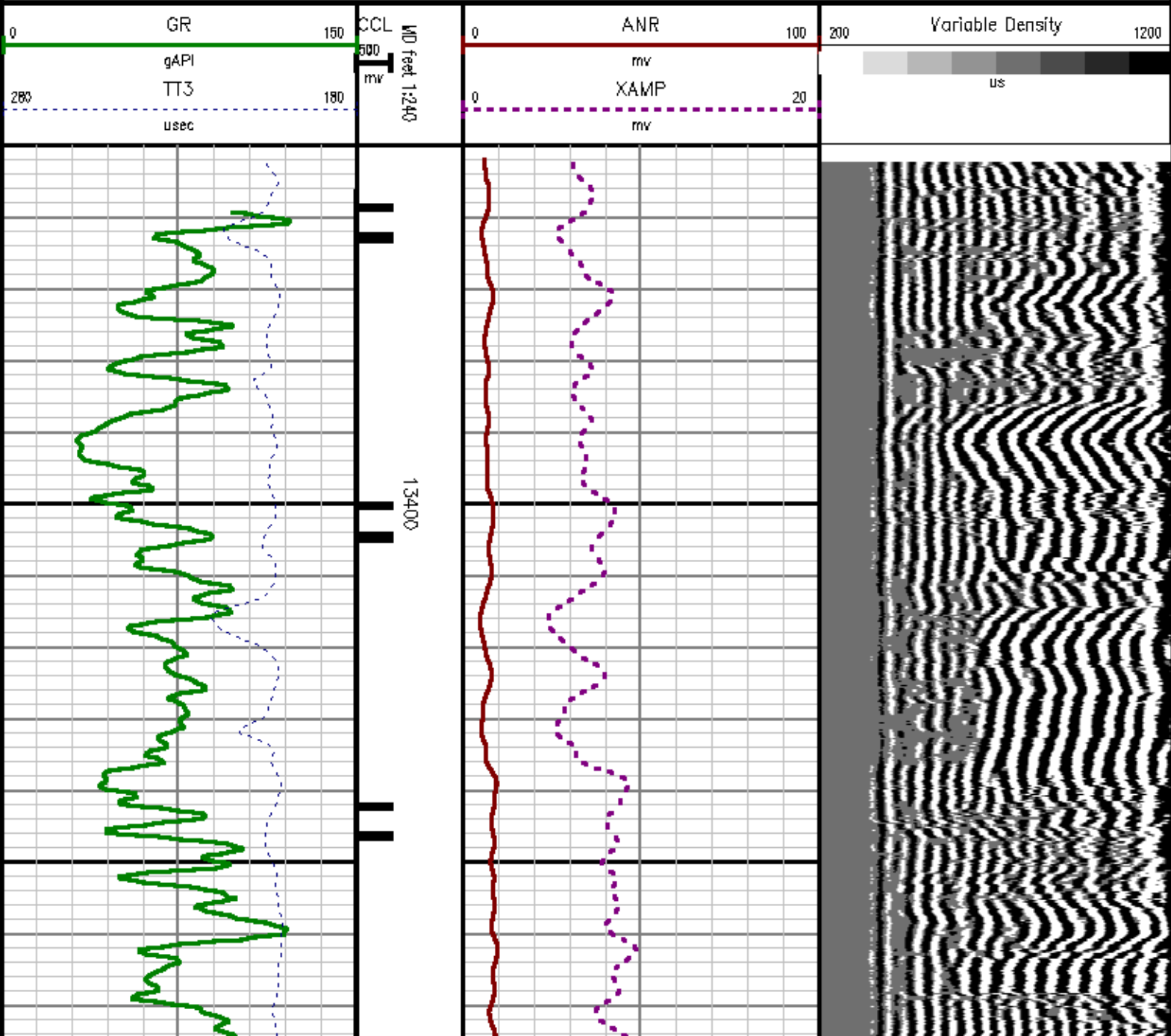
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	314.263	usec	13363.774	13617.000
RAL	Amp Gate Start Near	197.754	usec	13363.774	13617.000
RAL	Amp Gate Start Radial	197.754	usec	13363.774	13617.000
RAL	Amp Gate Width Far	25.000	usec	13363.774	13617.000
RAL	Amp Gate Width Near	25.000	usec	13363.774	13617.000
RAL	Amp Gate Width Radial	25.000	usec	13363.774	13617.000
RAL	casing od	4.500	inches	13363.774	13617.000
RAL	casing wt	15.100	lbm/ft	13363.774	13617.000
RAL	FB Start Far	289.263	usec	13363.774	13617.000
RAL	FB Start Near	172.754	usec	13363.774	13617.000
RAL	FB Start Radial	172.754	usec	13363.774	13617.000
RAL	FB Thresh Far	10.000	mv	13363.774	13617.000
RAL	FB Thresh Near	4.000	mv	13363.774	13617.000
RAL	FB Thresh Radial	4.000	mv	13363.774	13617.000
RAL	Fluid Travel Time	200.000	usec/ft	13363.774	13616.743

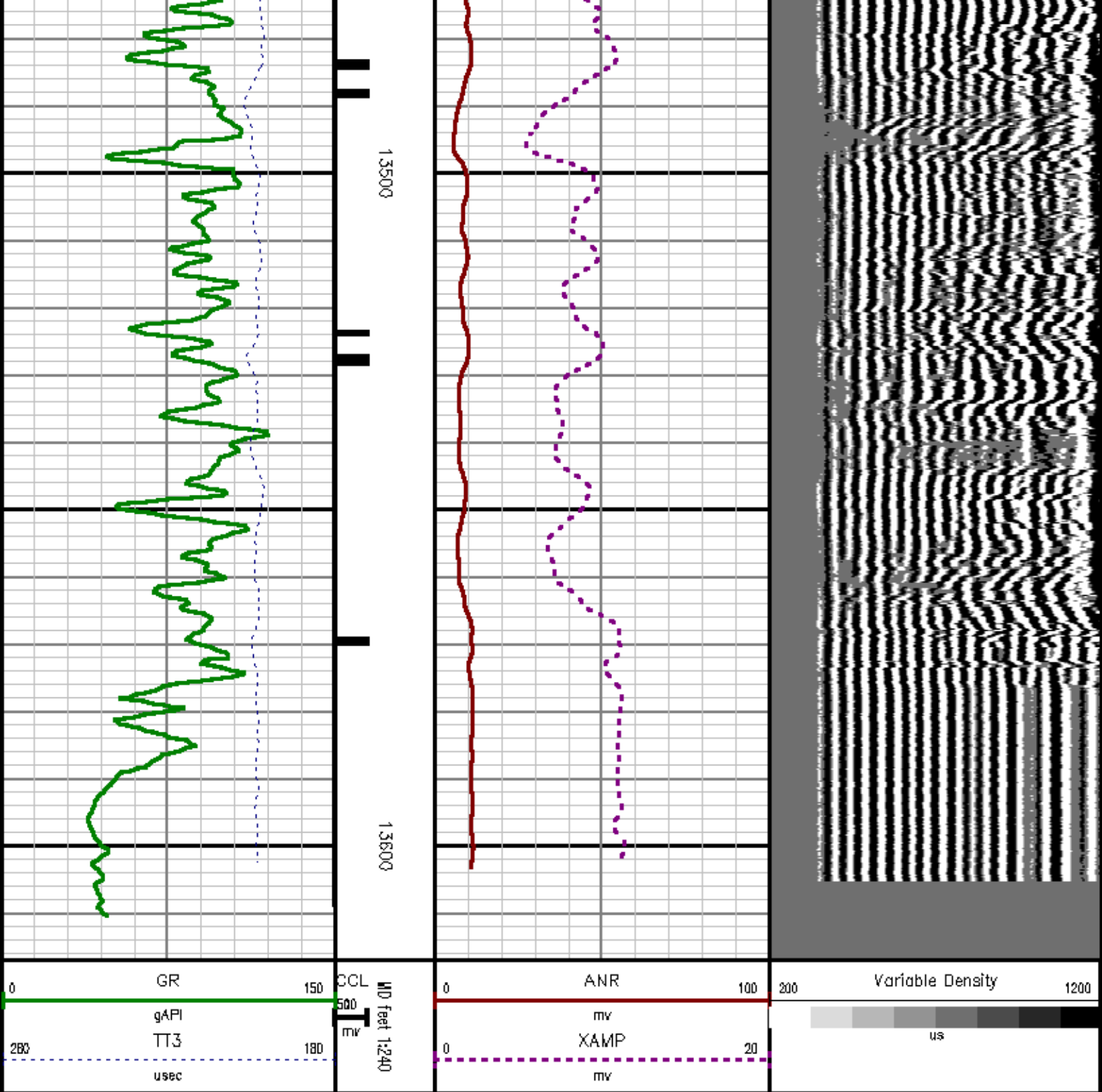
DEPTH OFFSETS (for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426YA	-12.360	ACAL	ANR	AR1	AR2	AR3	AR4

1426XA	-11.360	AR5	AR6	AR7	AR8	CHV	FPR2
1426XA	-7.250	FPR3	FPR5	TT3	TTR1	TTR2	TTR3
1426XA	-5.390	TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	0.000	AFAR	SIG	TT5			
		CCL					
		GR					
		NEU					

Created by : RAL, v4.6.007
Plotted by : PlotMgr, v5.4.5D4
Company : EXXONMOBIL PRODUCTION COMPANY
Well : PCU 296-5A9
File Name : d:\well\data\agrad\repeat.xtf
Mode : PlotMgr 5.4.5D4
Interval : 13350.00 - 13617.00 feet UP
Created : 7/21/2011 1:37:56 AM





FREE PIPE SECTION

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	314.263	usec	1567.500	1706.000
RAL	Amp Gate Start Near	197.754	usec	1567.500	1706.000
RAL	Amp Gate Start Radial	197.754	usec	1567.500	1706.000
RAL	Amp Gate Width Far	25.000	usec	1567.500	1706.000
RAL	Amp Gate Width Near	25.000	usec	1567.500	1706.000
RAL	Amp Gate Width Radial	25.000	usec	1567.500	1706.000
RAL	casing od	4.500	inches	1567.500	1706.000
RAL	casing wt	15.100	lbm/ft	1567.500	1706.000
RAL	FB Start Far	289.263	usec	1567.500	1706.000
RAL	FB Start Near	172.754	usec	1567.500	1706.000
RAL	FB Start Radial	172.754	usec	1567.500	1706.000
RAL	FB Thresh Far	10.000	mv	1567.500	1706.000
RAL	FB Thresh Near	4.000	mv	1567.500	1706.000
RAL	FB Thresh Radial	4.000	mv	1567.500	1706.000
RAL	Fluid Travel Time	200.000	usec/ft	1567.500	1706.000

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
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

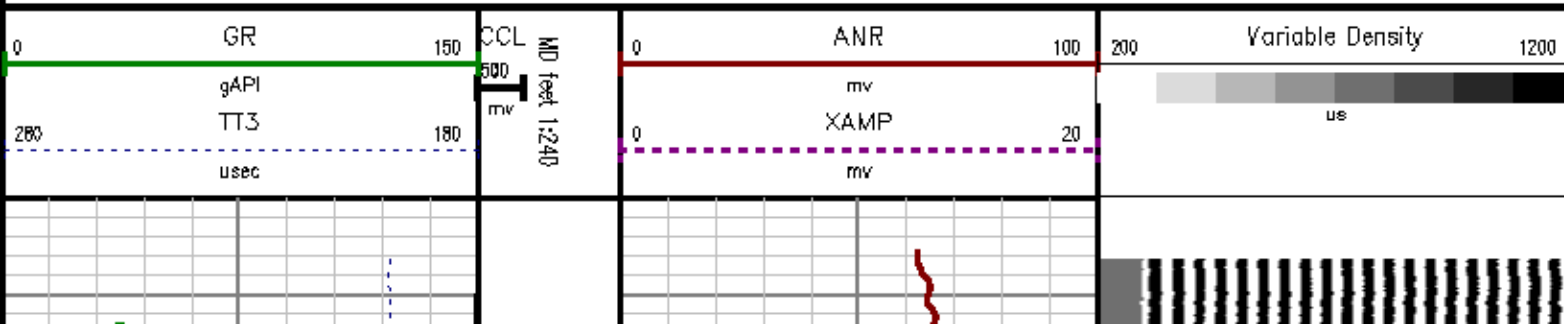
Well : PCU 286-549

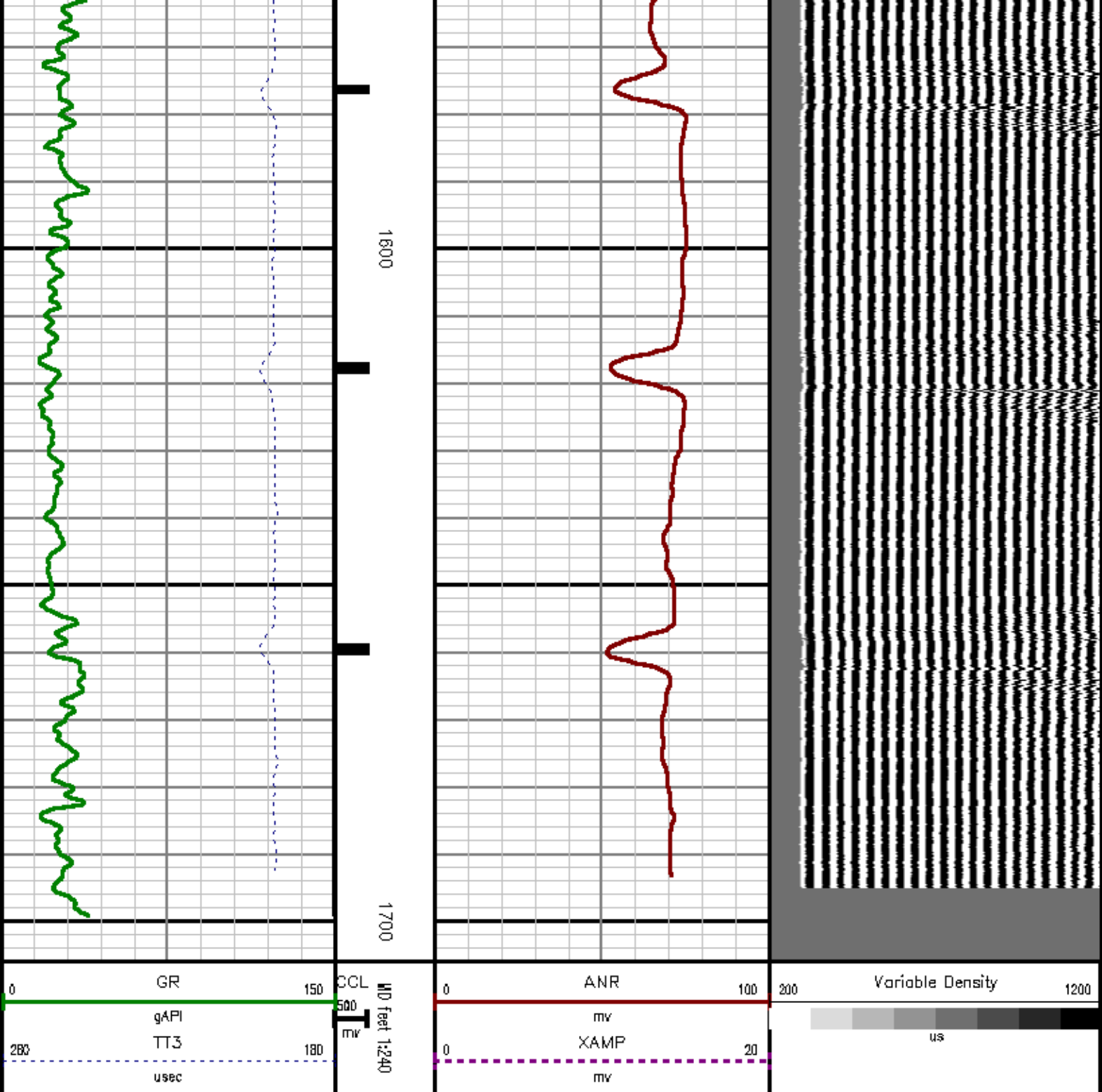
File Name : D:\WELLDATA\A9RAD\FREE.XTF

Mode : PlotMgr 5.4.5D4

Interval : 1550.00 - 1706.00 feet UP

Created : 7/21/2011 12:43:32 AM





CALIBRATION SUMMARY

RALSHP

SHOP CALIBRATION SUMMARY

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

Tool Delay [usec] Tank OD Tank Wt Tank ID
 In In lbm/ft In

RECEIVER	Travel Time [usec]	Amp. Gate Start [usec]	Amp. Gate Width [usec]	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Amp Ref. [mV]	Shop Factor
CAL Pulse	<input type="text" value="219"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="0.220"/>	<input type="text" value="100.00"/>	<input type="text" value="0.23"/>
3 Ft. Receiver	<input type="text" value="219"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="166"/>	<input type="text" value="25"/>	<input type="text" value="-0.322"/>	<input type="text" value="100.00"/>	<input type="text" value="0.22"/>
5 Ft. Receiver	<input type="text" value="327"/>	<input type="text" value="332"/>	<input type="text" value="30"/>	<input type="text" value="282"/>	<input type="text" value="25"/>	<input type="text" value="0.835"/>	<input type="text" value="150.00"/>	<input type="text" value="0.24"/>
Radial #1	<input type="text" value="219"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="105"/>	<input type="text" value="25"/>	<input type="text" value="-0.588"/>	<input type="text" value="100.00"/>	<input type="text" value="0.23"/>
Radial #2	<input type="text" value="219"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="105"/>	<input type="text" value="25"/>	<input type="text" value="-0.500"/>	<input type="text" value="100.00"/>	<input type="text" value="0.23"/>
Radial #3	<input type="text" value="219"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="105"/>	<input type="text" value="25"/>	<input type="text" value="-0.196"/>	<input type="text" value="100.00"/>	<input type="text" value="0.23"/>
Radial #4	<input type="text" value="218"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="105"/>	<input type="text" value="25"/>	<input type="text" value="-0.162"/>	<input type="text" value="100.00"/>	<input type="text" value="0.23"/>
Radial #5	<input type="text" value="218"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="105"/>	<input type="text" value="25"/>	<input type="text" value="-0.398"/>	<input type="text" value="100.00"/>	<input type="text" value="0.22"/>
Radial #6	<input type="text" value="216"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="105"/>	<input type="text" value="25"/>	<input type="text" value="-0.788"/>	<input type="text" value="100.00"/>	<input type="text" value="0.22"/>
Radial #7	<input type="text" value="216"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="105"/>	<input type="text" value="25"/>	<input type="text" value="-0.204"/>	<input type="text" value="100.00"/>	<input type="text" value="0.22"/>
Radial #8	<input type="text" value="219"/>	<input type="text" value="216"/>	<input type="text" value="30"/>	<input type="text" value="105"/>	<input type="text" value="25"/>	<input type="text" value="-0.371"/>	<input type="text" value="100.00"/>	<input type="text" value="0.23"/>

RALFLD

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
 In In lbm/ft In

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:\cgsa\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	0.764	51.36	236.35	185.00

Verification File: C:\cgsa\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	0.764	51.79	242.66	190.77

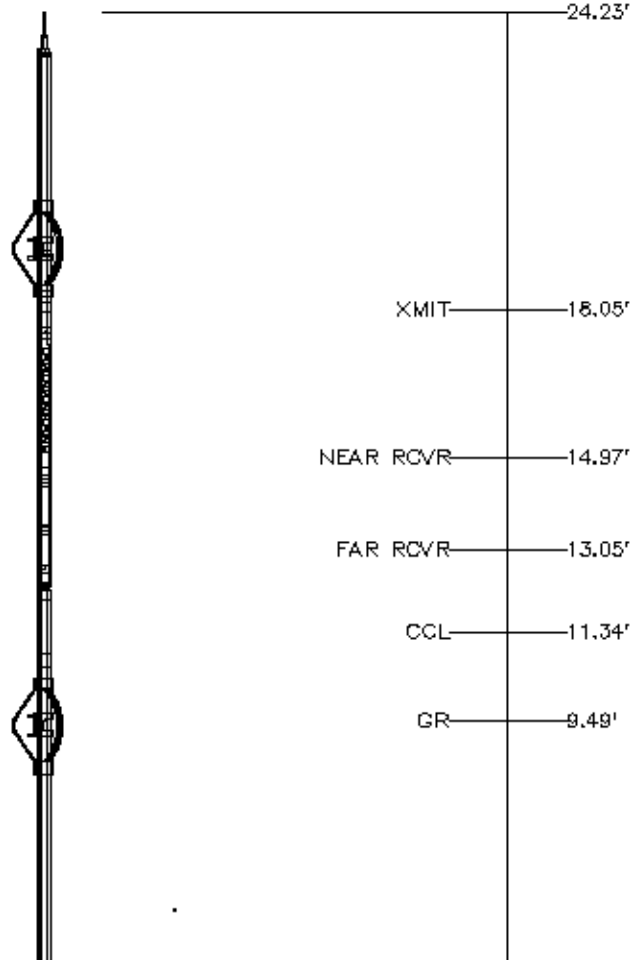
TOOL DIAGRAM

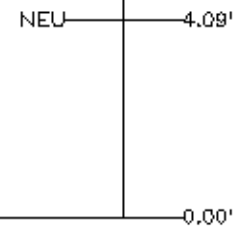
OTA SHORT CABLE HEAD

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 Atlas 	Company	EXXONMOBIL PRODUCTION COMPANY		File No:	CH039009
	Well	PCU 296-5A9		API No:	05103112410000
	Field	PICEANCE CREEK			
	County	RIO BLANCO	State	COLORADO	
Location		Elevations			
SHL: 736' FNL & 528' FNL		KB 7339.2 ft			
		DF 7338.2 ft			
		GL 7309 ft			
SEC 5		TWP 25	RGE 96W		