



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No:	Company	EXXONMOBIL PRODUCTION COMPANY
CHC31614	Well	PCU 296-5A5
API No.	Field	PICEANCE CREEK
05-103-11244-00	Country	RIO BLANCO
	State	COLORADO
Location:		Other Services
N/A		3.70" GAUGE
749' FUL & 551' FUL		RPM
SEC: 5	TWP: 2S	RGE: 88E
Permanent Datum	G.L.	Elevation
Log Measured From	K.B.	30.2 ft
Drill Measured From	KELLY BUSHING	Above P. D.
		Elevations
		K.B. 7306.2 ft
		D.F. 7326.2 ft
		G.L. 7296 ft

Date	17-MAR-2011	
Run	ONE	
Service Order	574189	
Depth Driller	13721 ft	
Depth Logger	13556 ft	
Bottom Logged Interval	13556 ft	
Top Logged Interval	8000 ft	
Time Started	13:00	
Time Finished	17:00	
Operator Rig Time	4 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 fpm	
Maximum Recorded Temperature	N/A	
Reference Log	N/A	
Reference Log Date	N/A	
Equipment	Location	
Recorded By	TIM KAUTT	
Witnessed By	MR. WARC HUDON	
	GRAND JCT, CO	

- 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		
7.875 In		

Casing Record				
Size	Weight	Grade	From	To
7 In	26 lbm/ft	P-110	SURFACE	9954 ft
4.5 In	15.1 lbm/ft	P-110	SURFACE	13721 ft

Remarks
SHORT JOINTS ARE MARKED ON LOG
THE CREW OF 4271 THANKS YOU.

Equipment Data				
Run	Trip	Tool	Series Number	Serial Number

	1	WANDREL	1426XA	10124106	CENTRALIZED
1	1	GAMMA RAY	2459XA	10417458	CENTRALIZED

MAIN SECTION.

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	303.198	usec	4496.750	13583.000
RAL	Amp Gate Start Near	197.754	usec	4496.750	13583.000
RAL	Amp Gate Start Radial	191.821	usec	4496.750	13583.000
RAL	Amp Gate Width Far	22.805	usec	4496.750	13583.000
RAL	Amp Gate Width Near	23.557	usec	4496.750	13583.000
RAL	Amp Gate Width Radial	25.039	usec	4496.750	13583.000
RAL	casing od	4.500	inches	4496.750	13583.000
RAL	casing wt	15.100	lbm/ft	4496.750	13583.000
RAL	FB Start Far	289.283	usec	4496.750	13583.000
RAL	FB Start Near	172.754	usec	4496.750	13583.000
RAL	FB Start Radial	172.754	usec	4496.750	13583.000
RAL	FB Thresh Far	10.000	mv	4496.750	13583.000
RAL	FB Thresh Near	4.000	mv	4496.750	13583.000
RAL	FB Thresh Radial	4.000	mv	4496.750	13583.000
RAL	Fluid Travel Time	200.000	usec/ft	4496.750	13582.979

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						
2459XA	-7.250	CCL					
2459XA	-5.390	GR					
2459XA	0.000	NEU					

Created by : RAL, v4.8.D07

Plotted by : PlotMgr, v5.4.5D4

Company : EXXONMOBIL PRODUCTION COMPANY

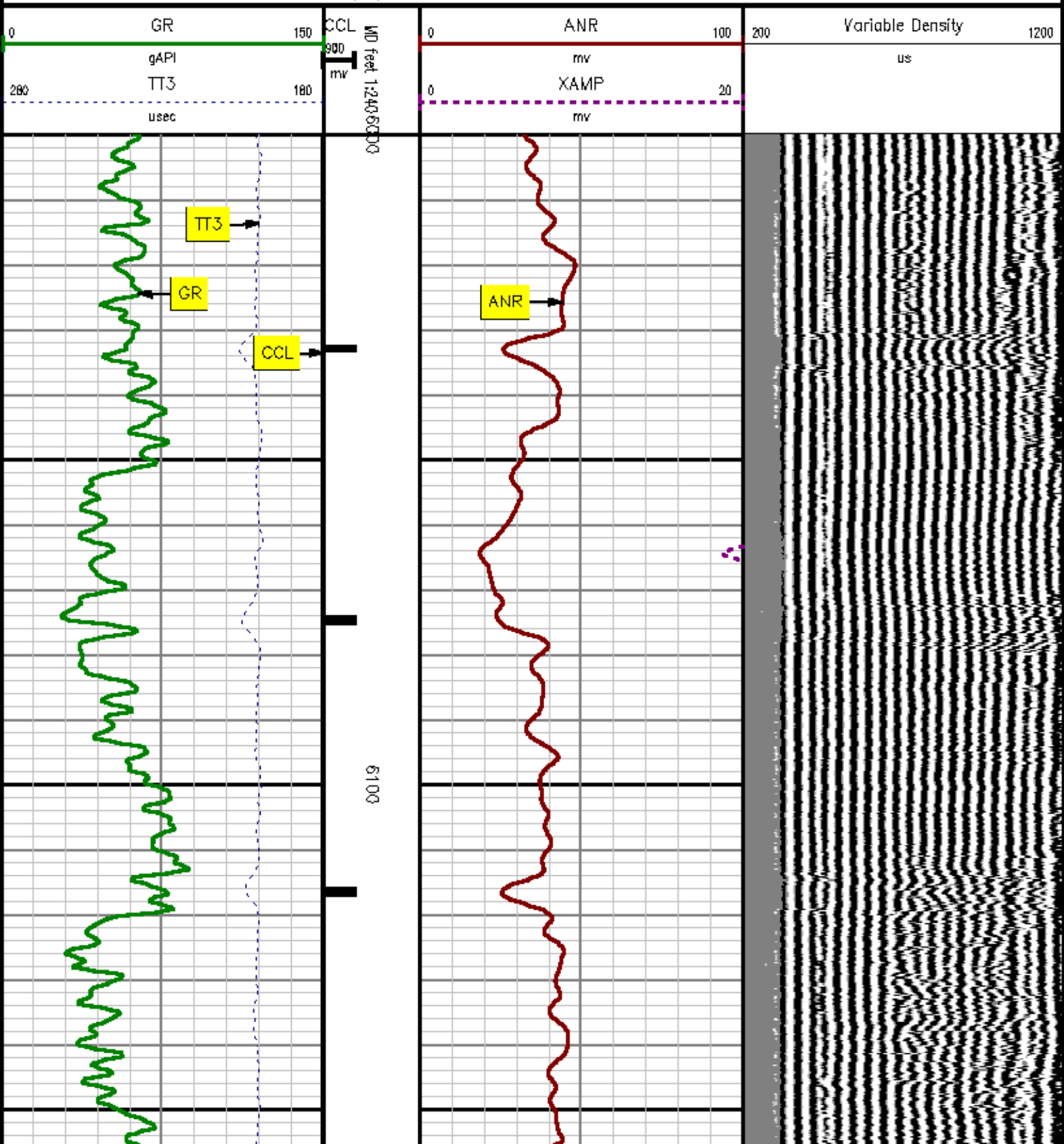
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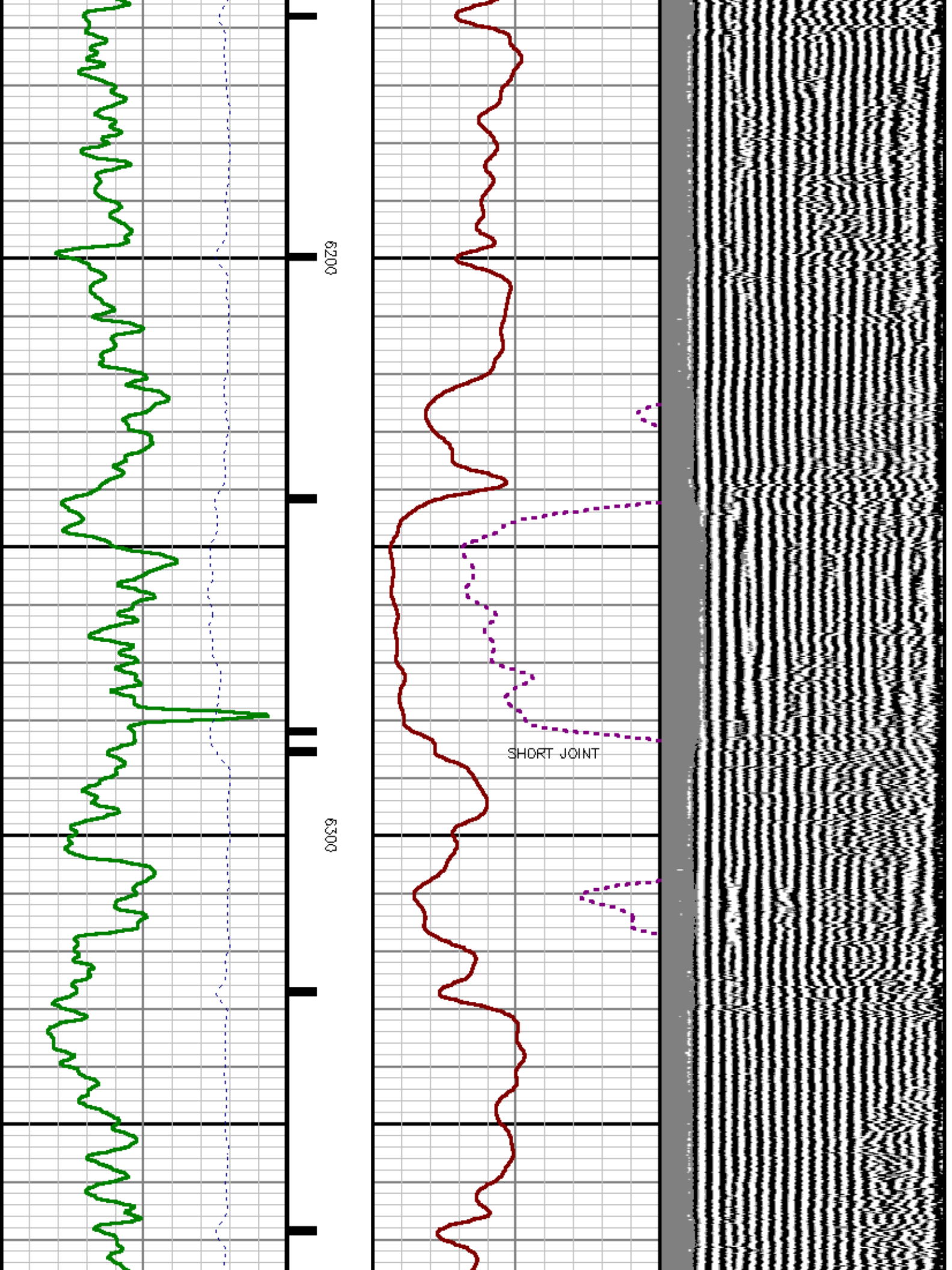
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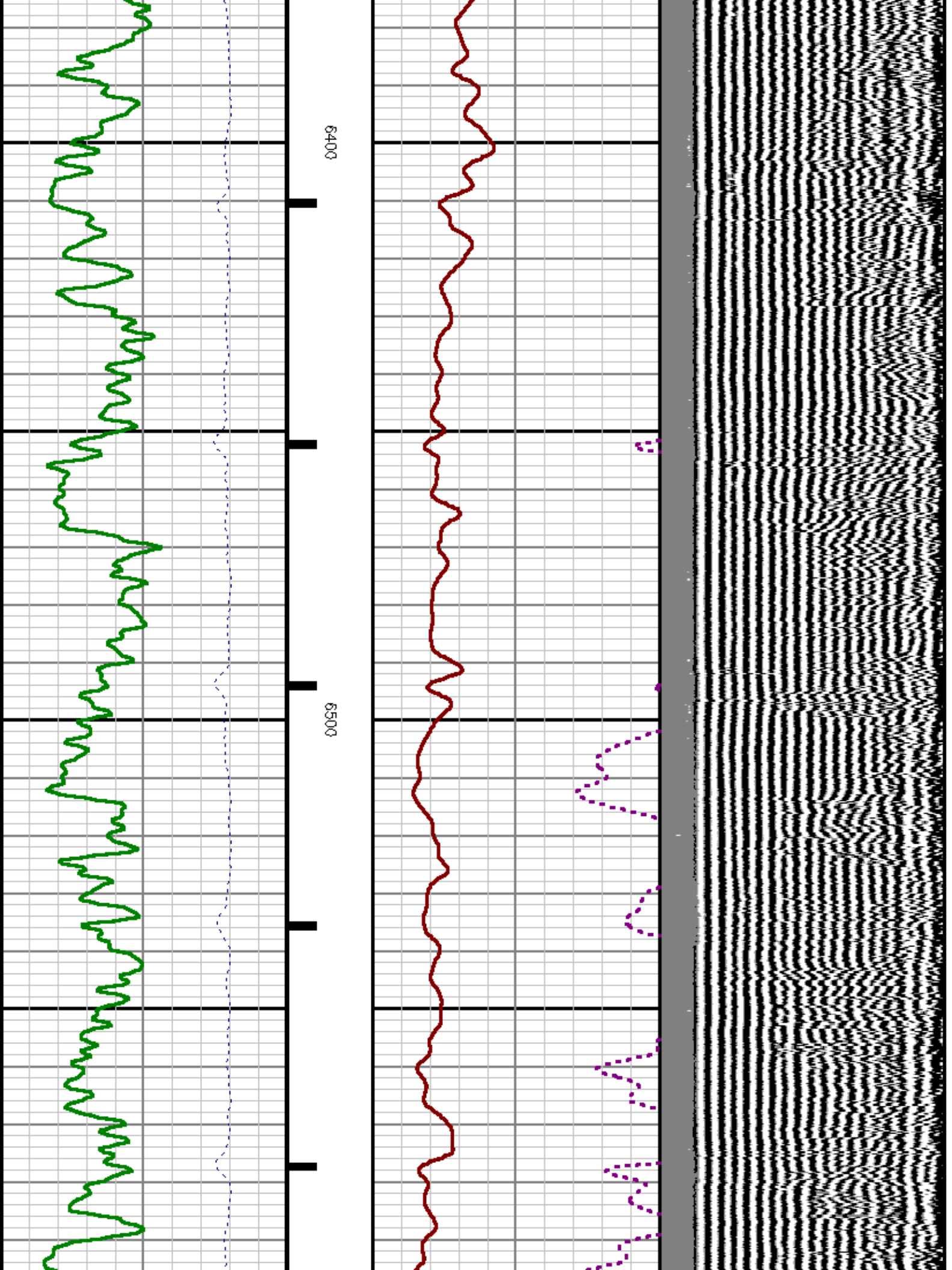
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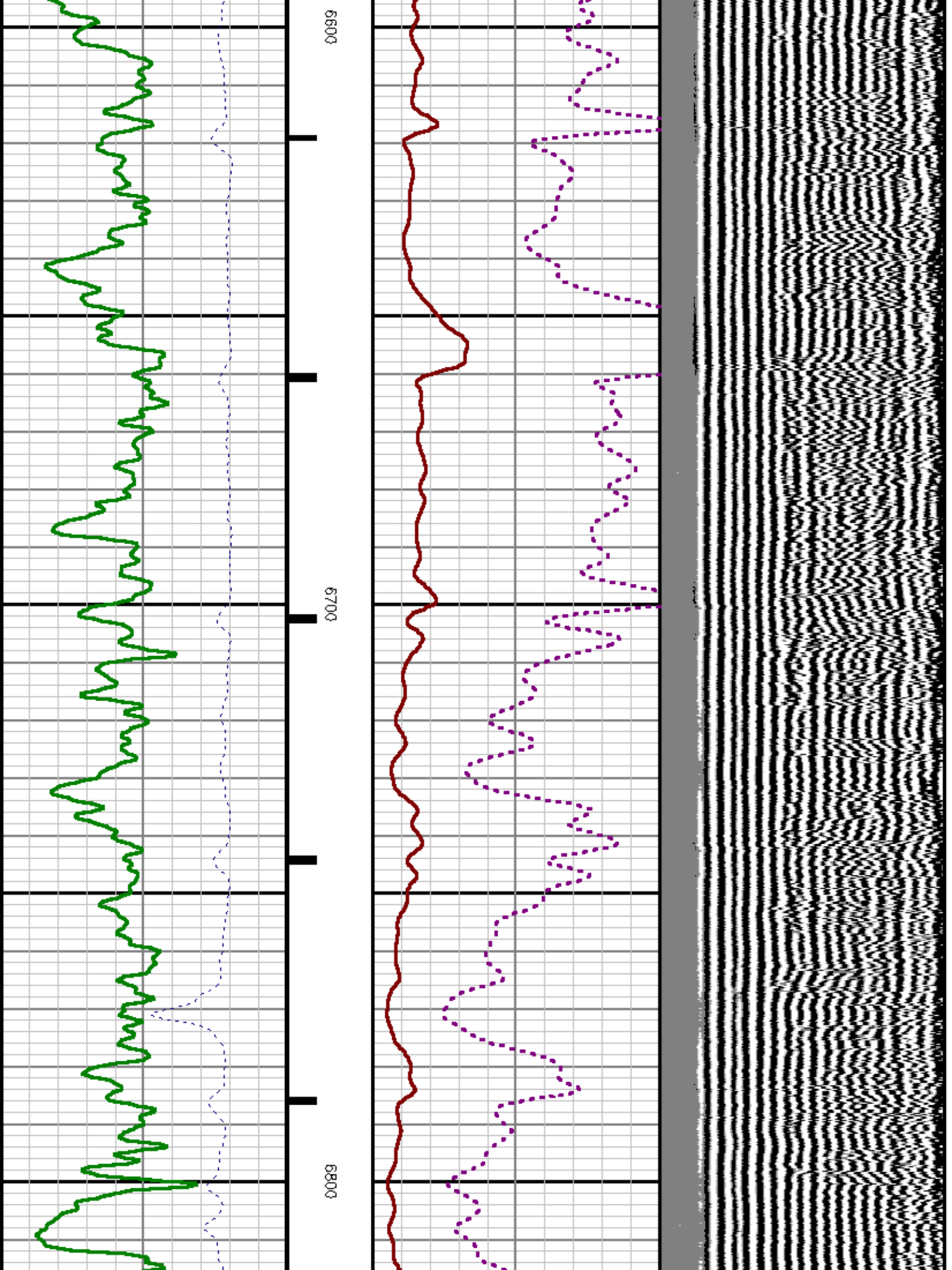
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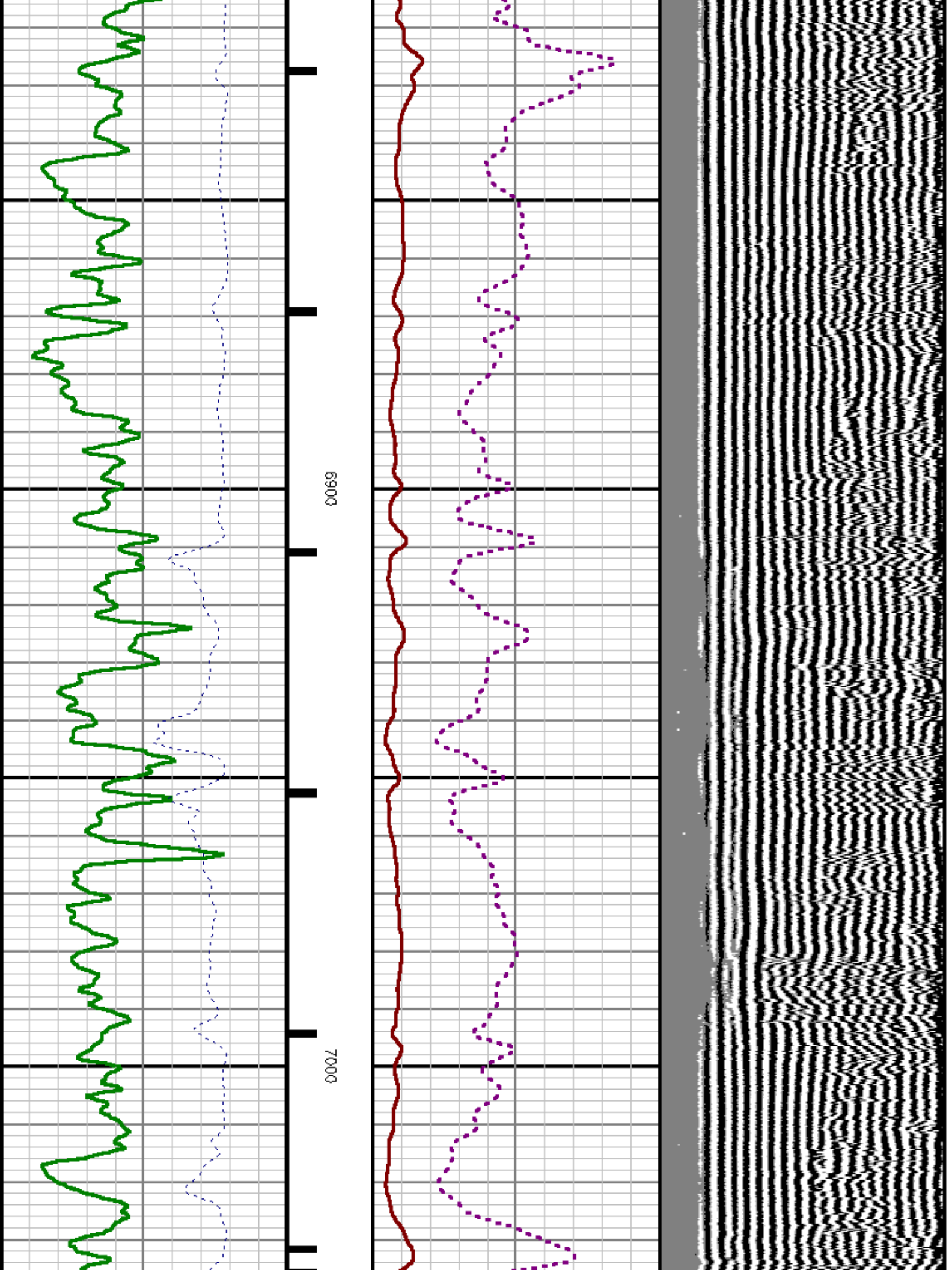
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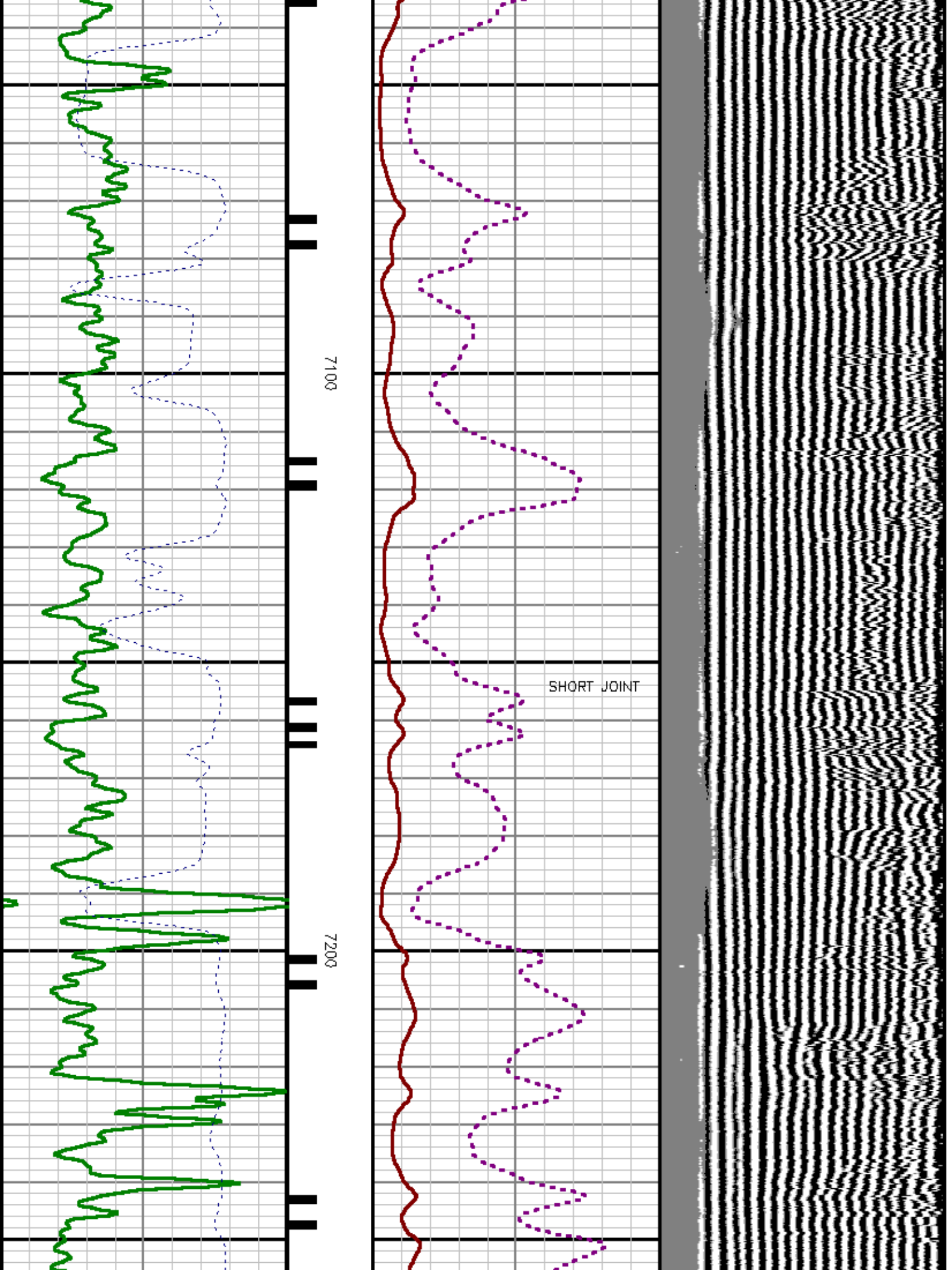


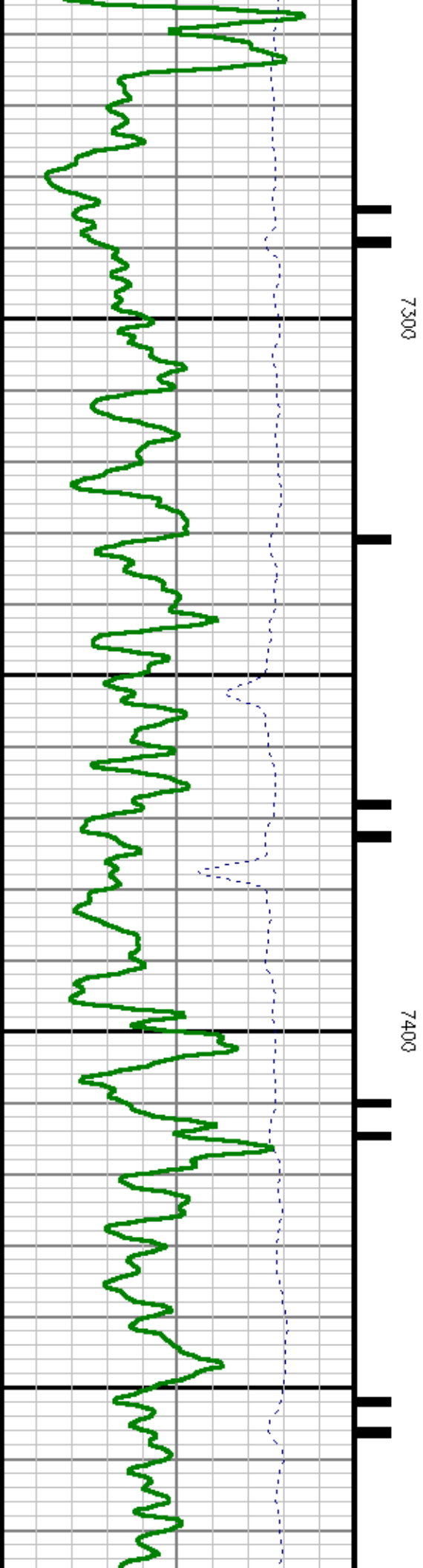
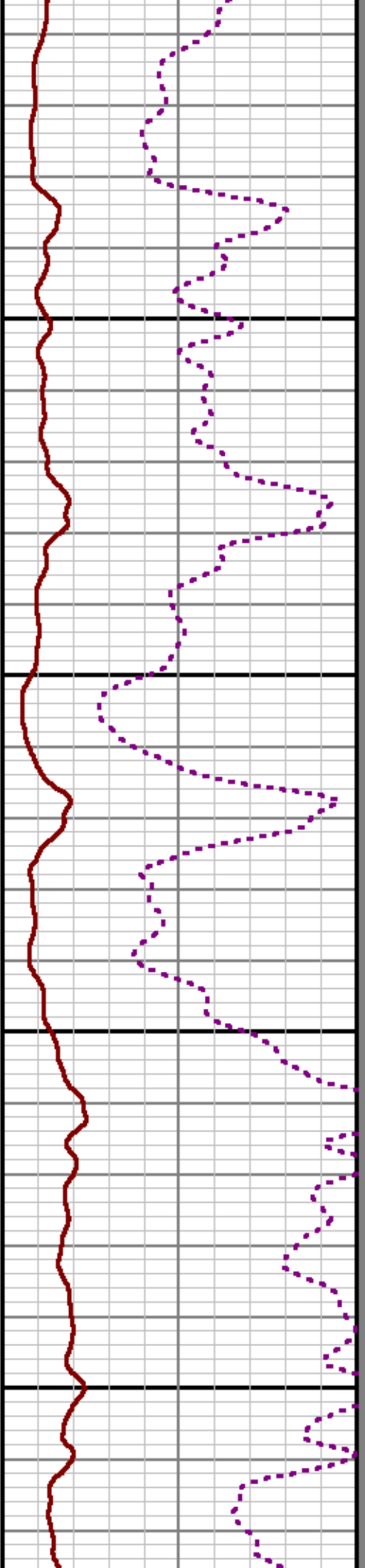
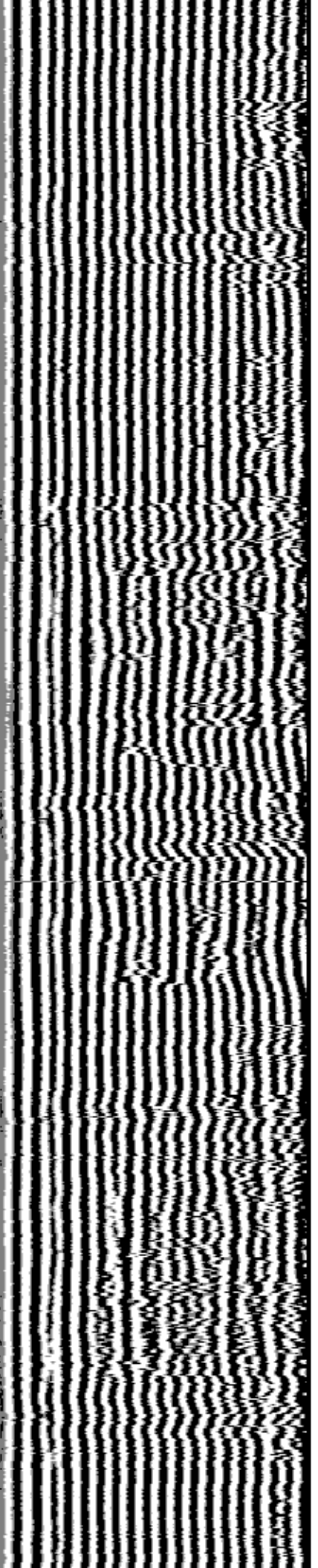


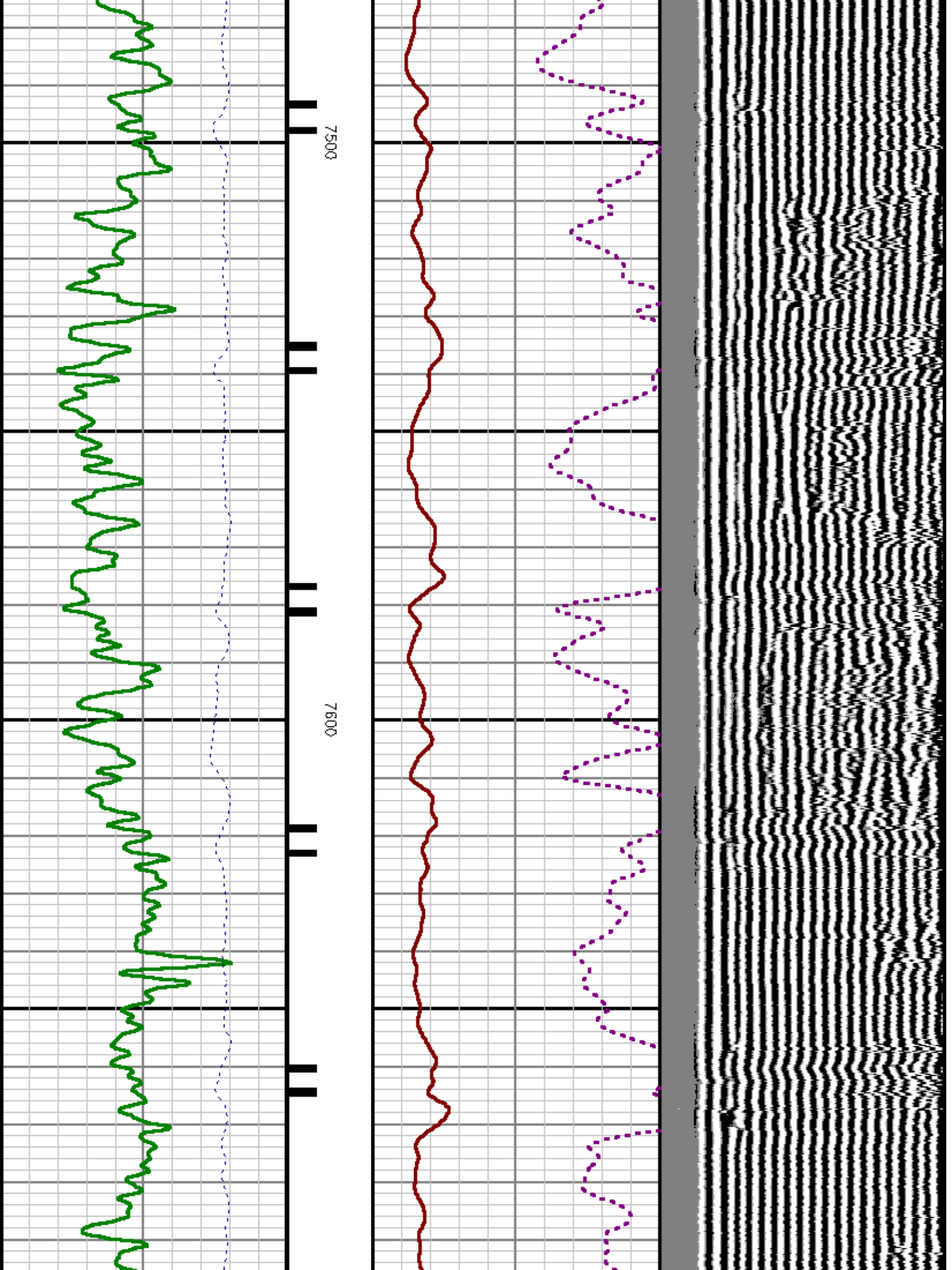


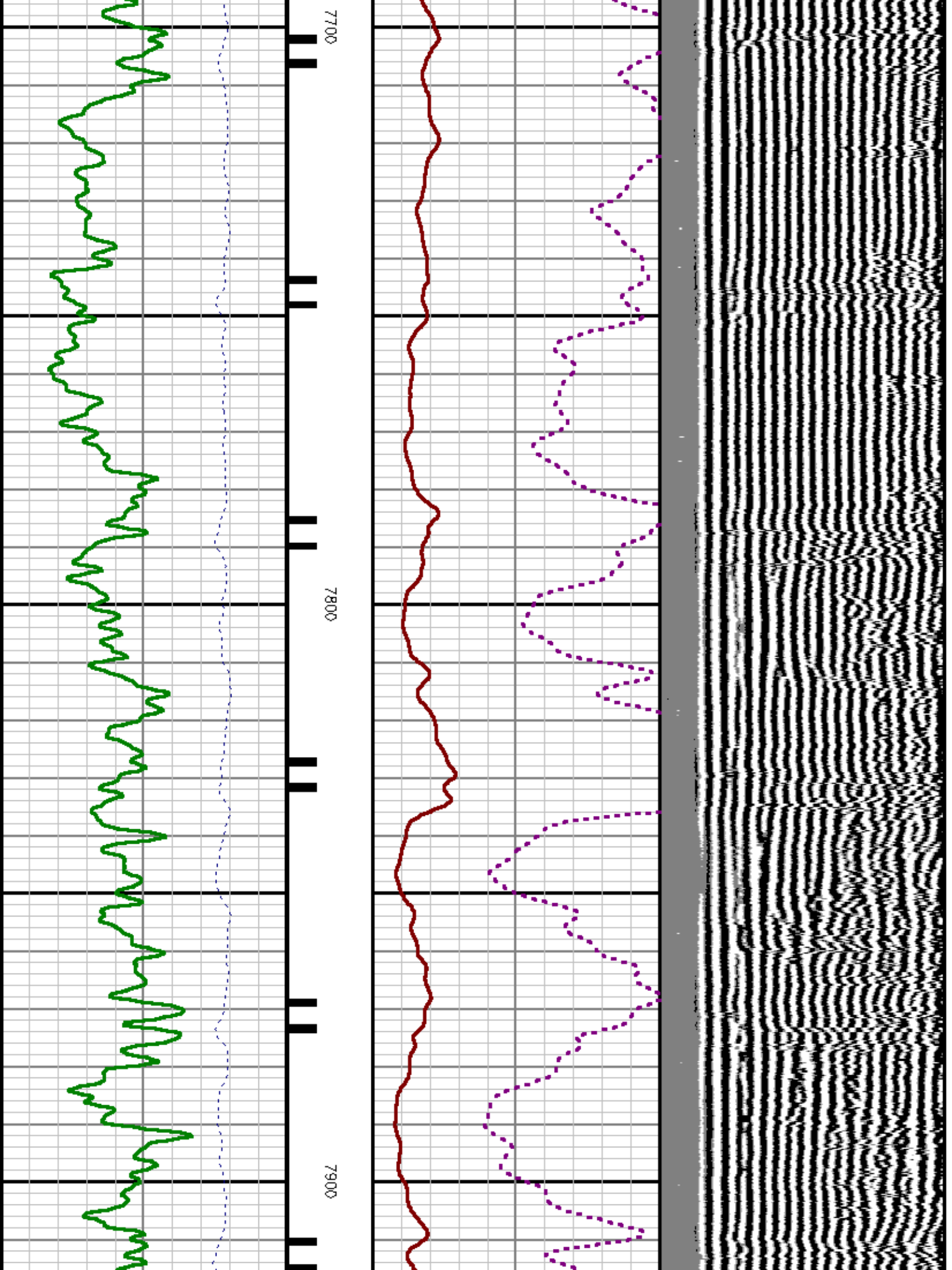


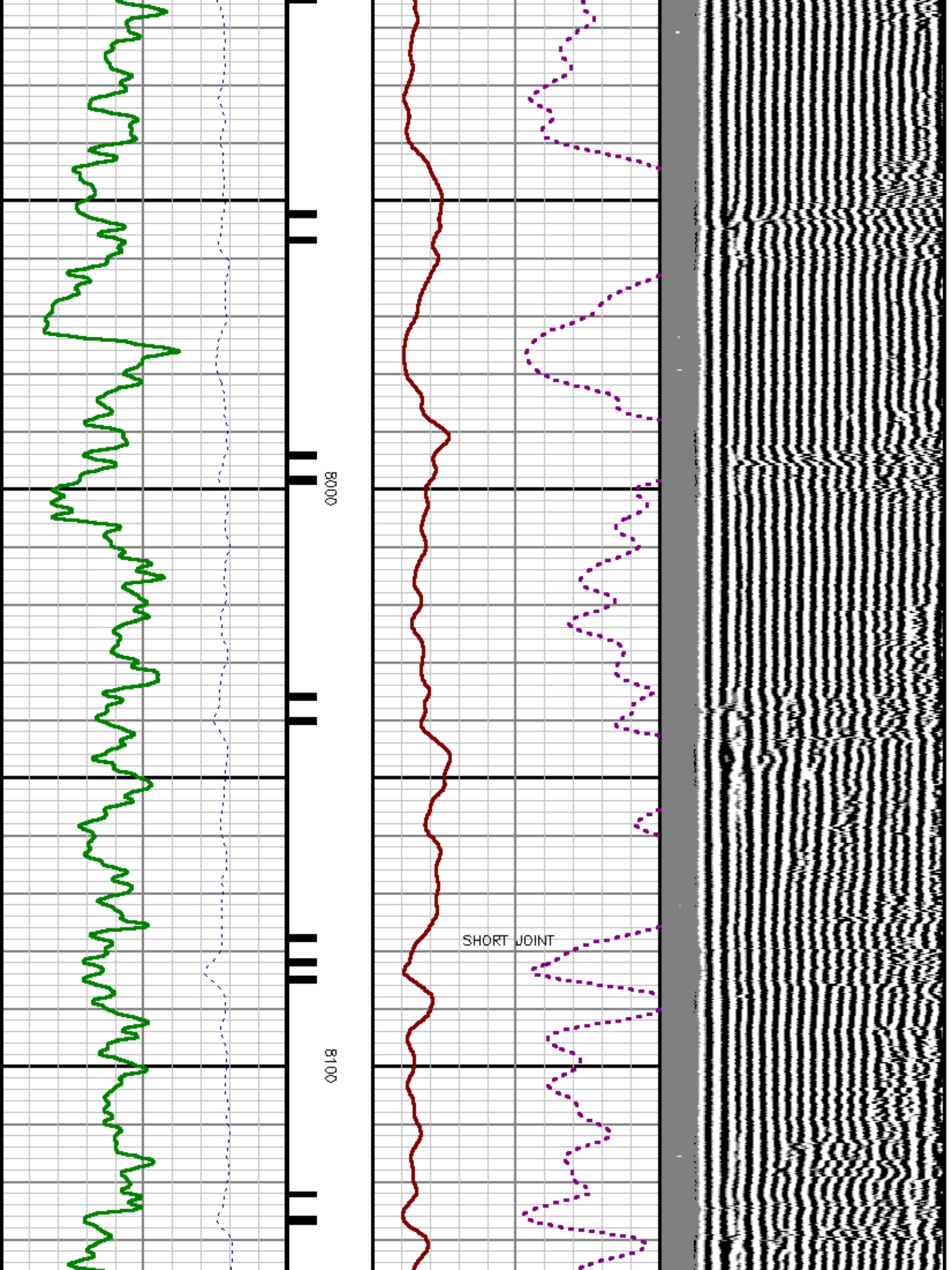


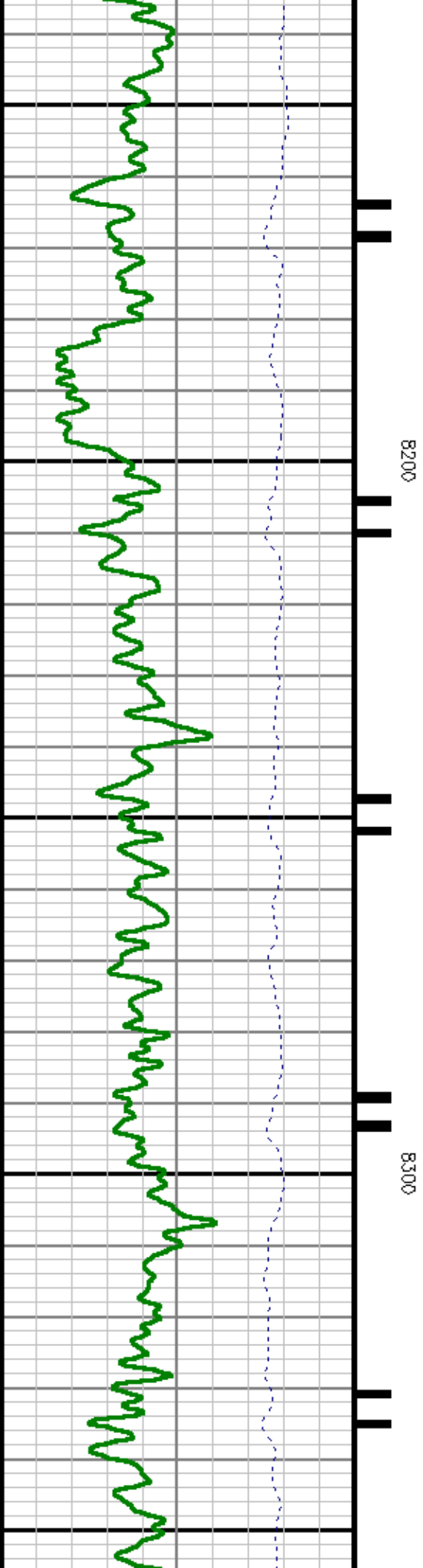
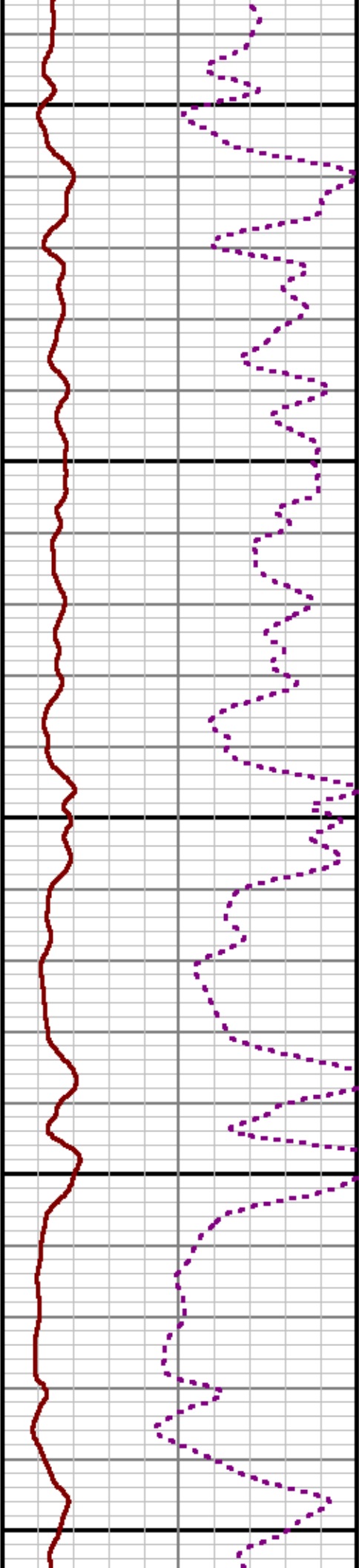
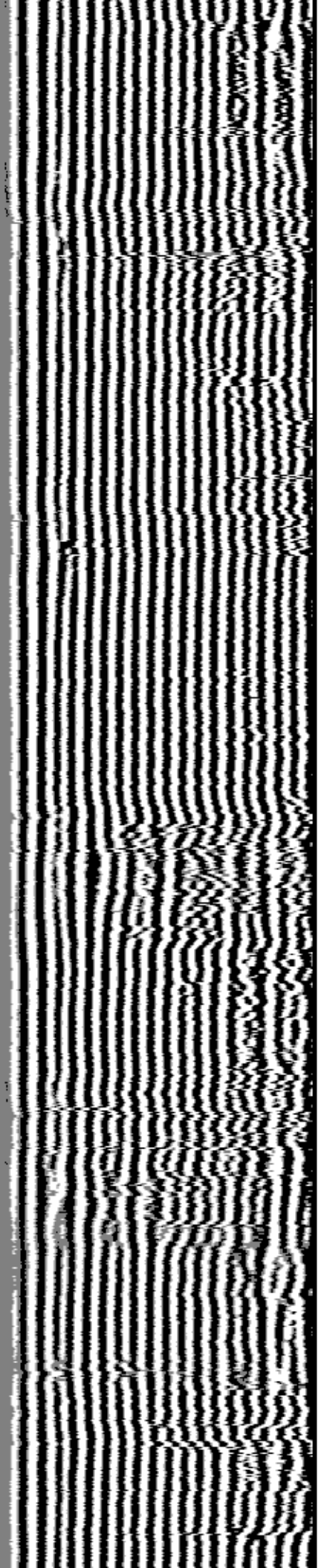


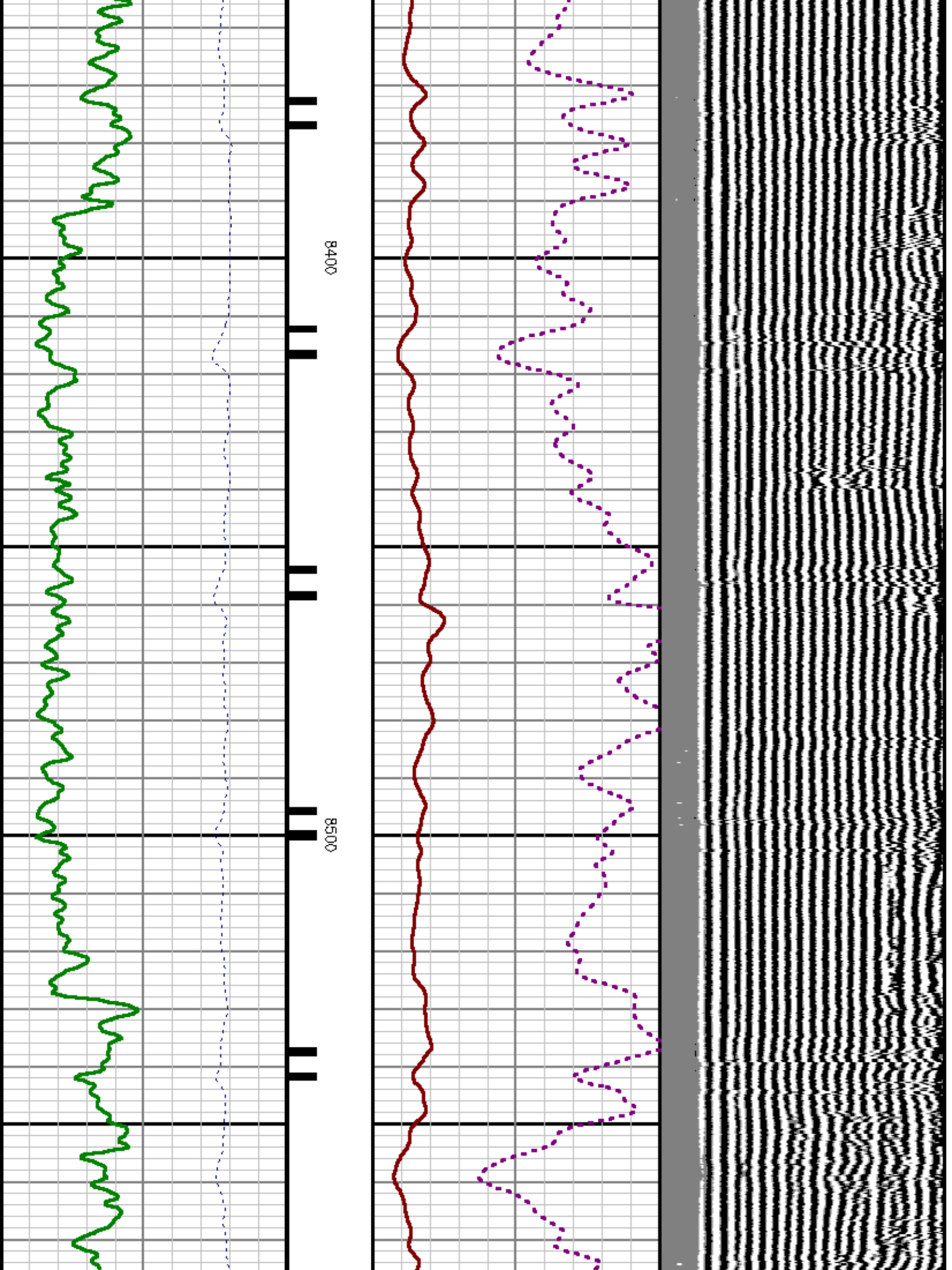


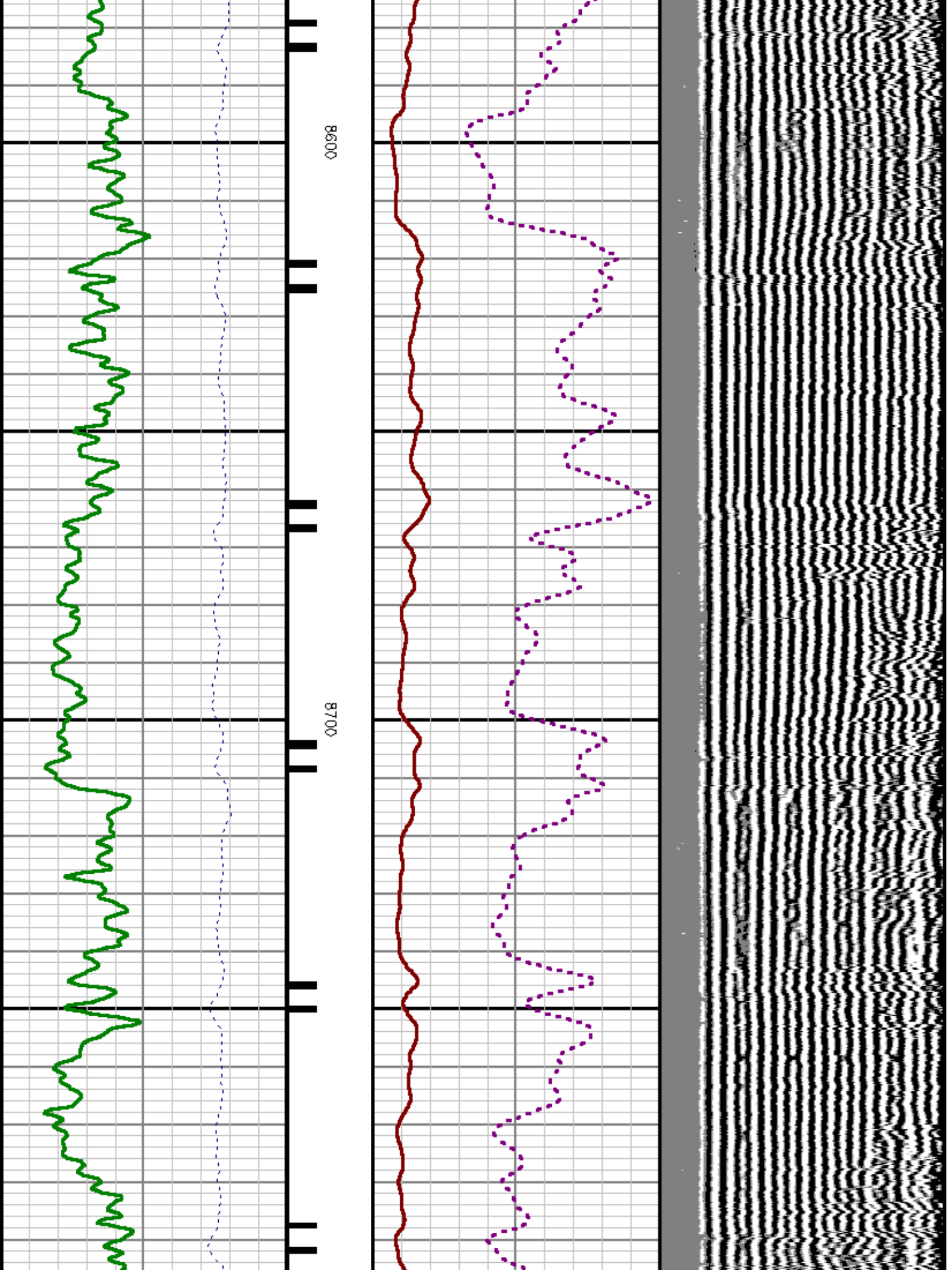


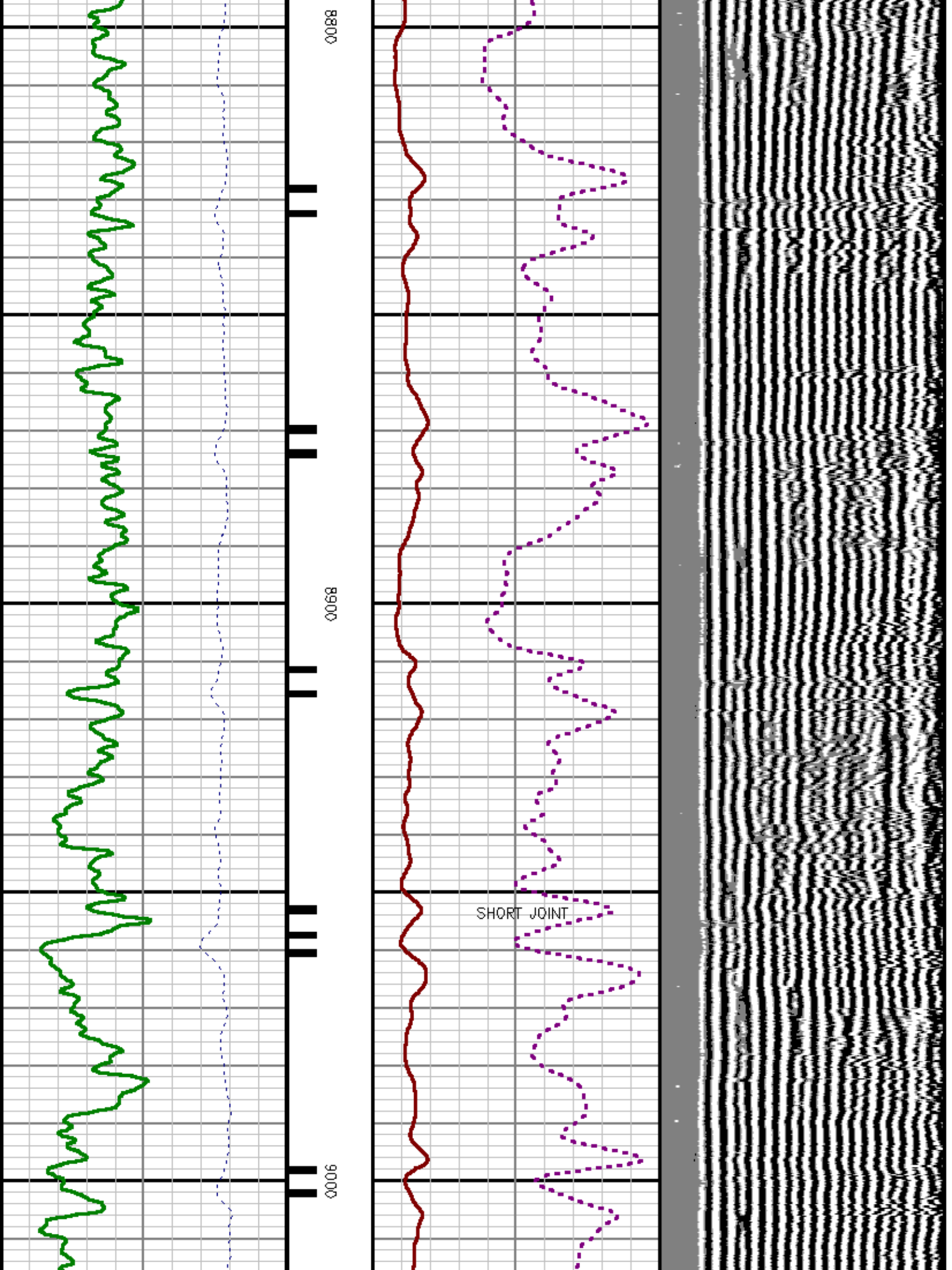


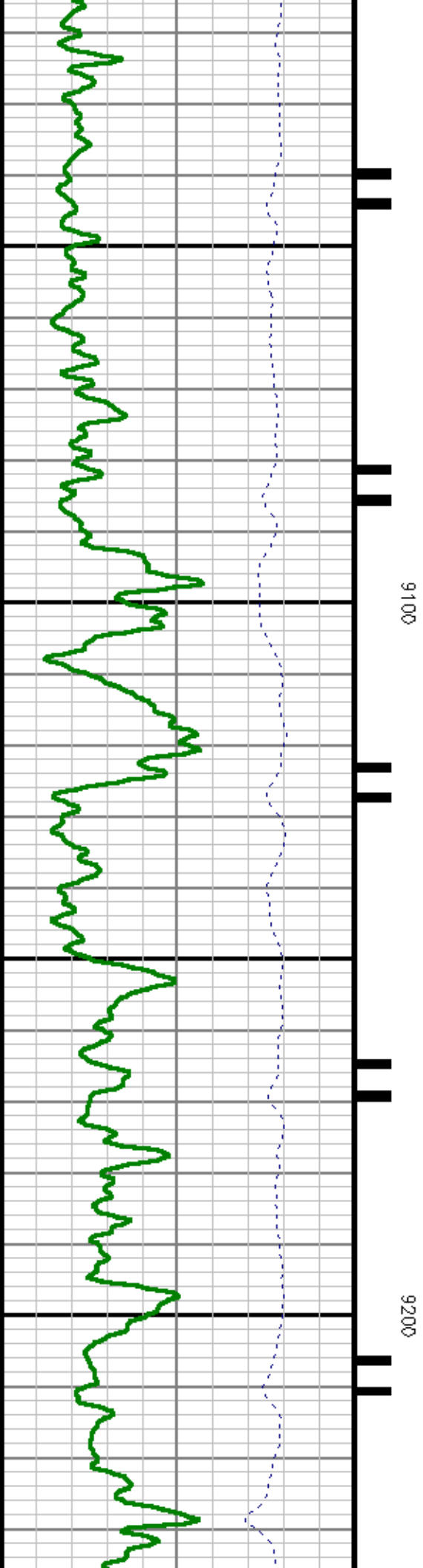
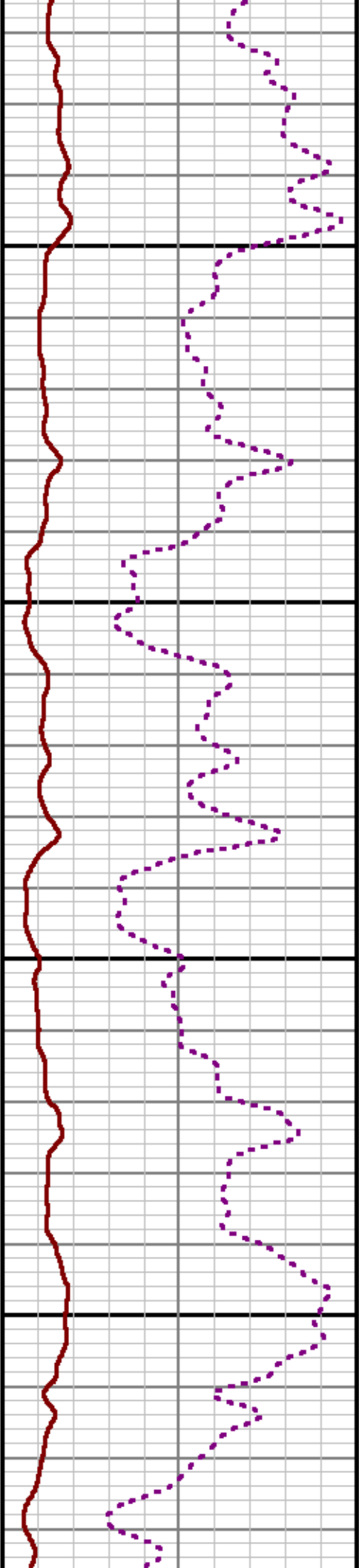
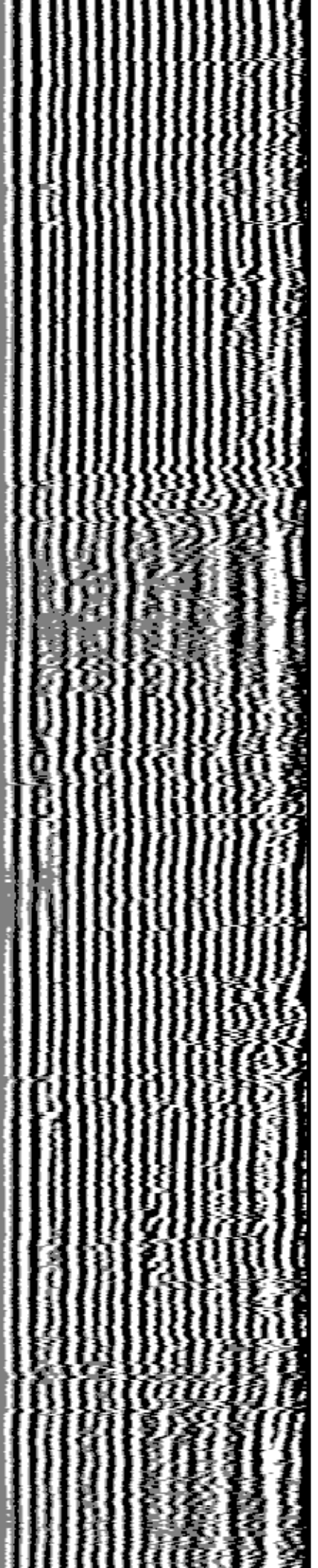


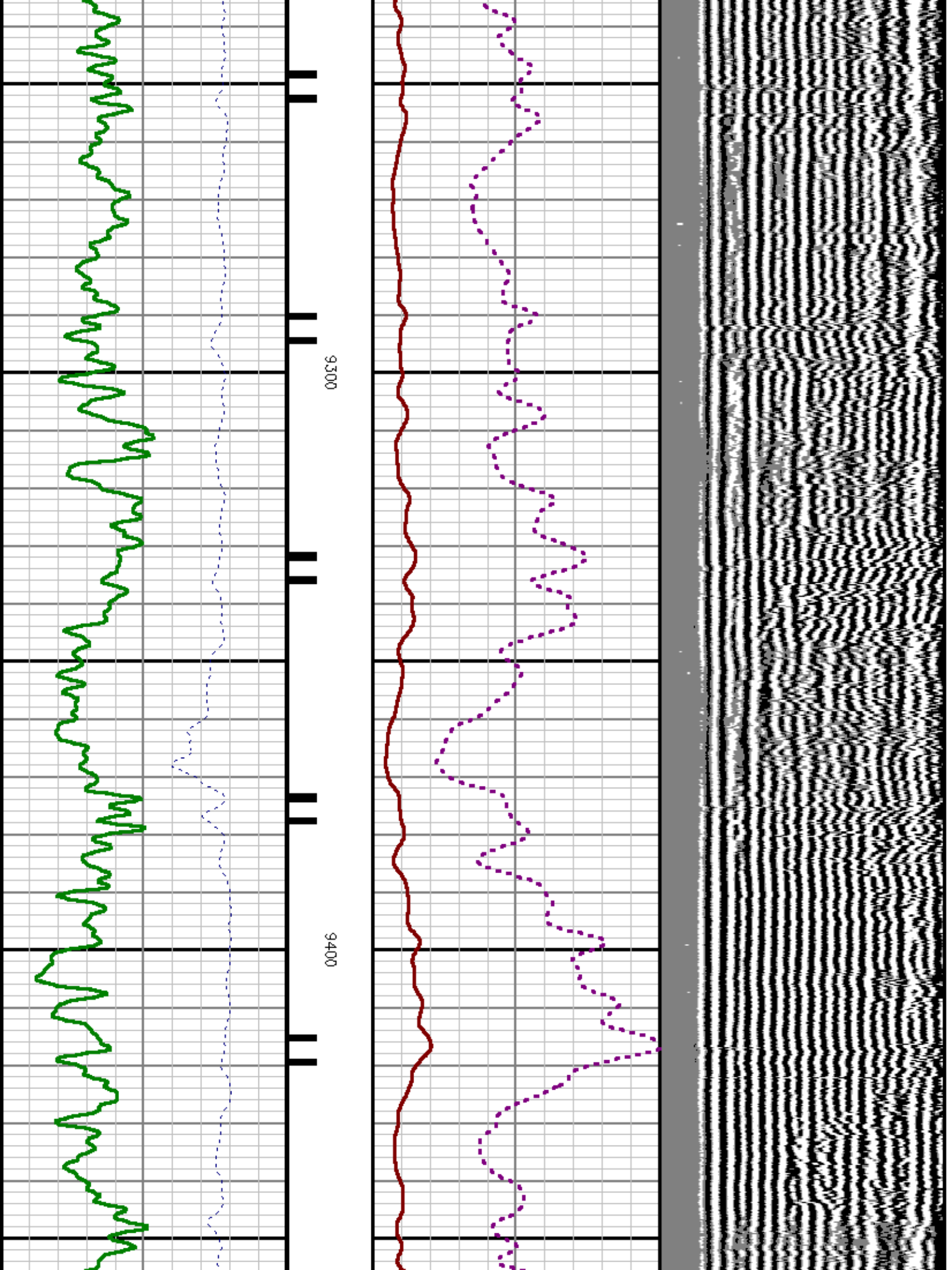


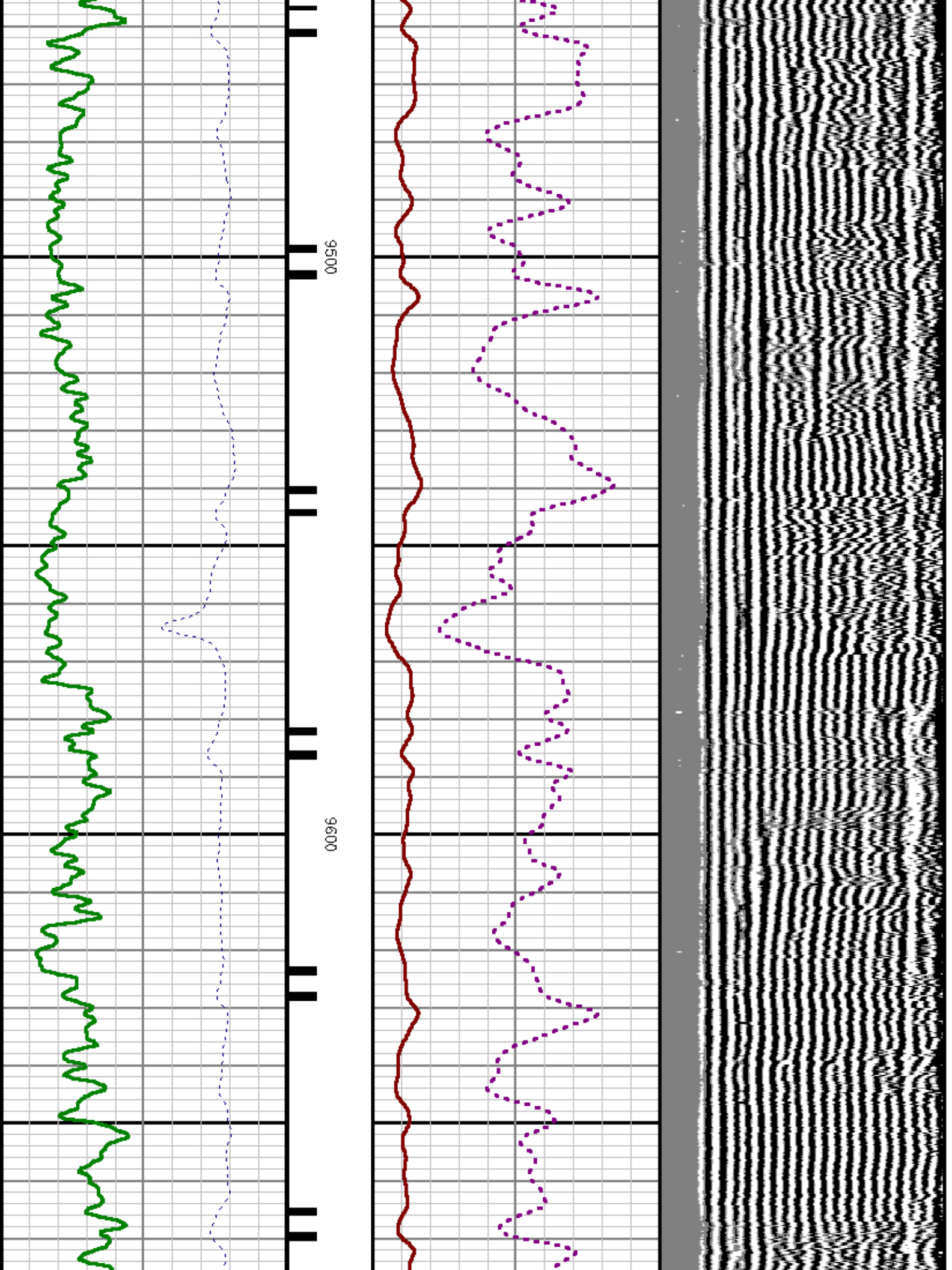


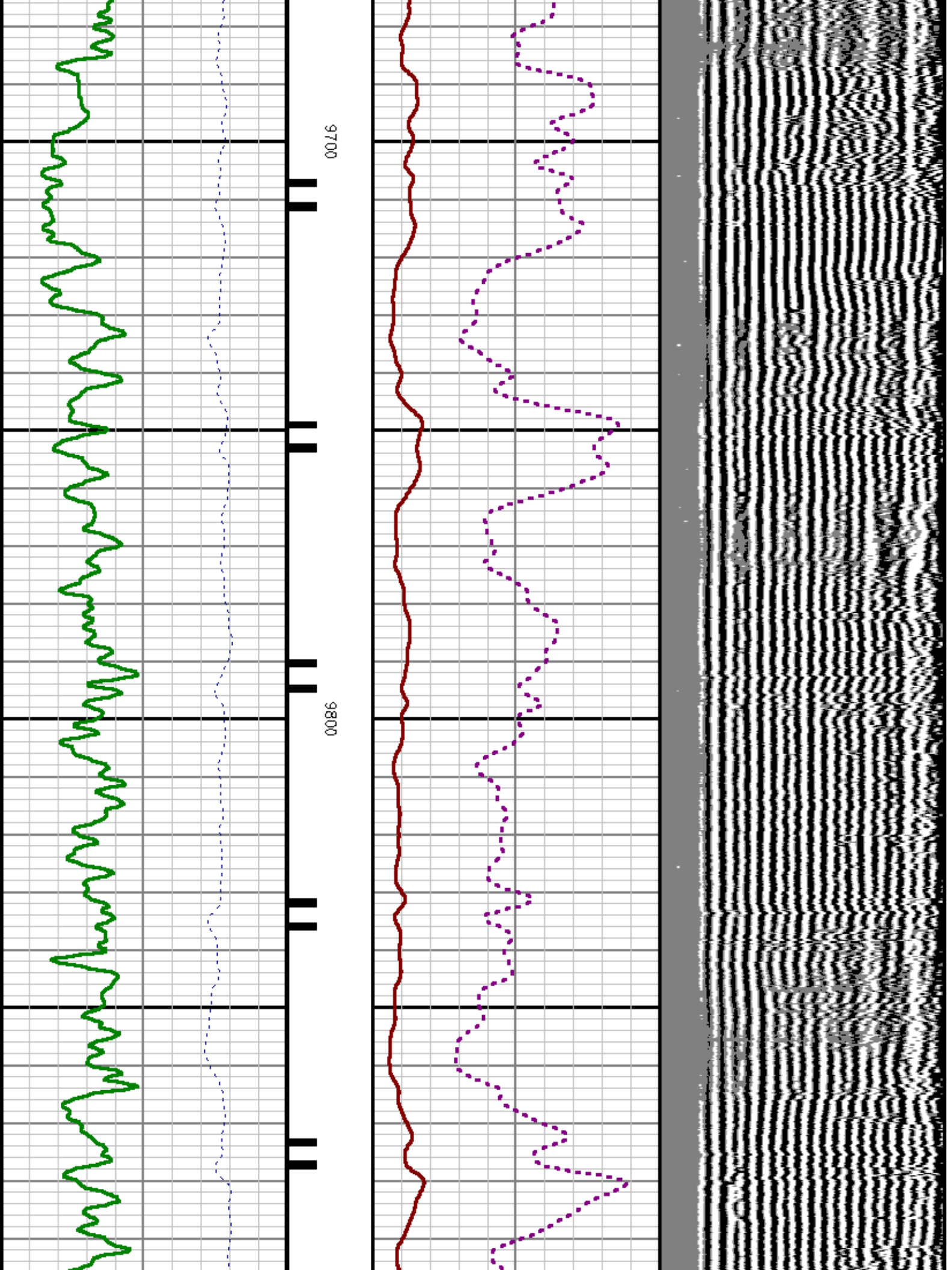


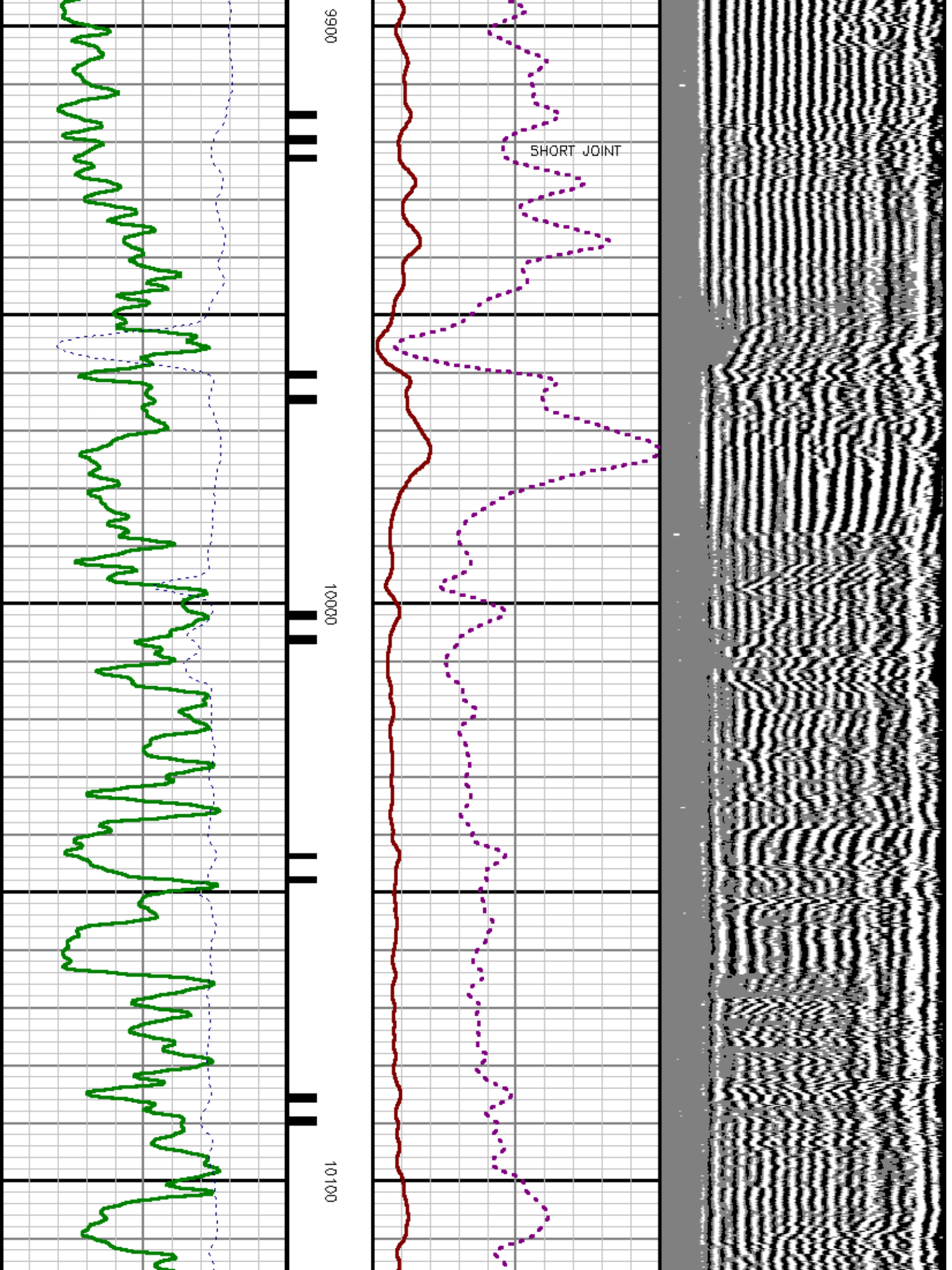


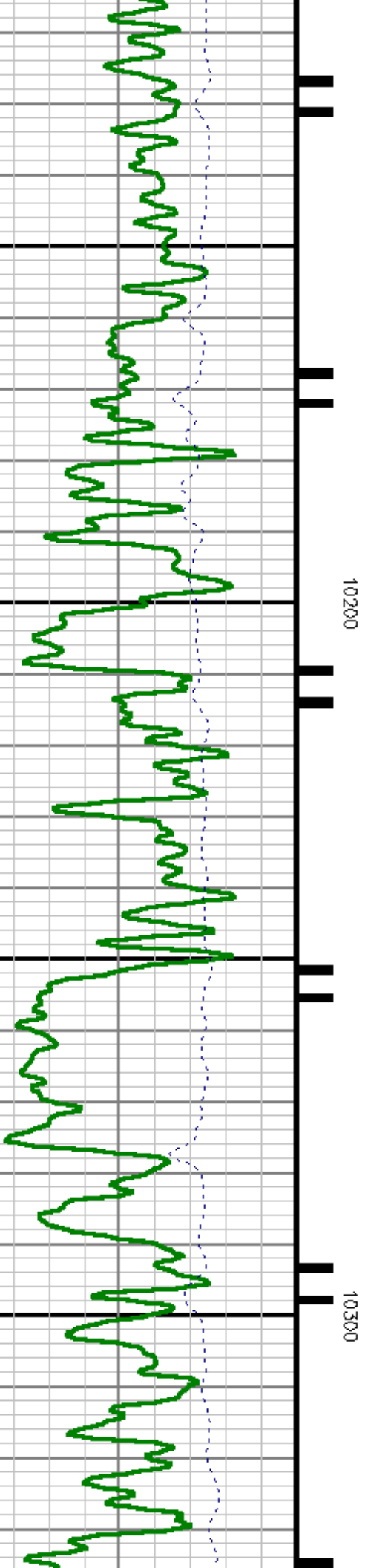
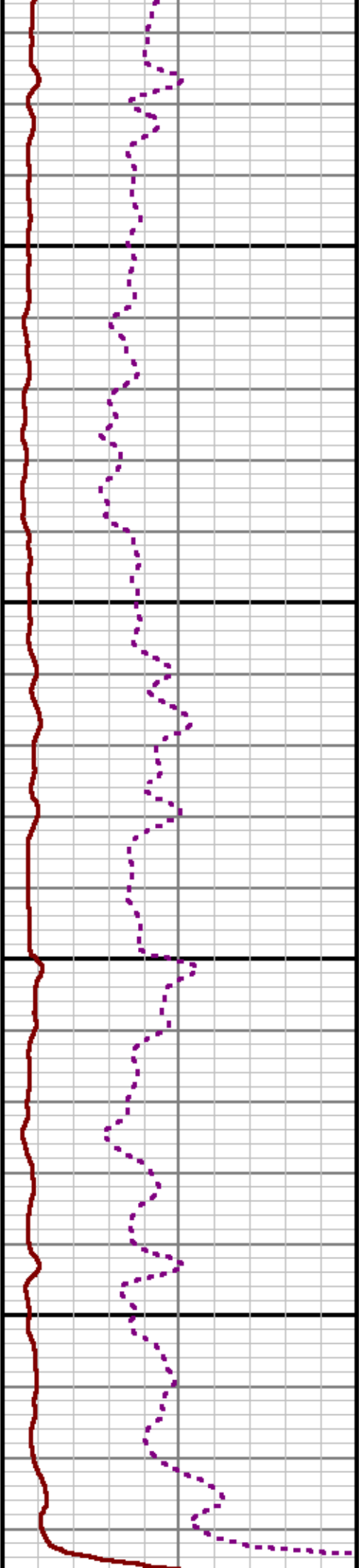
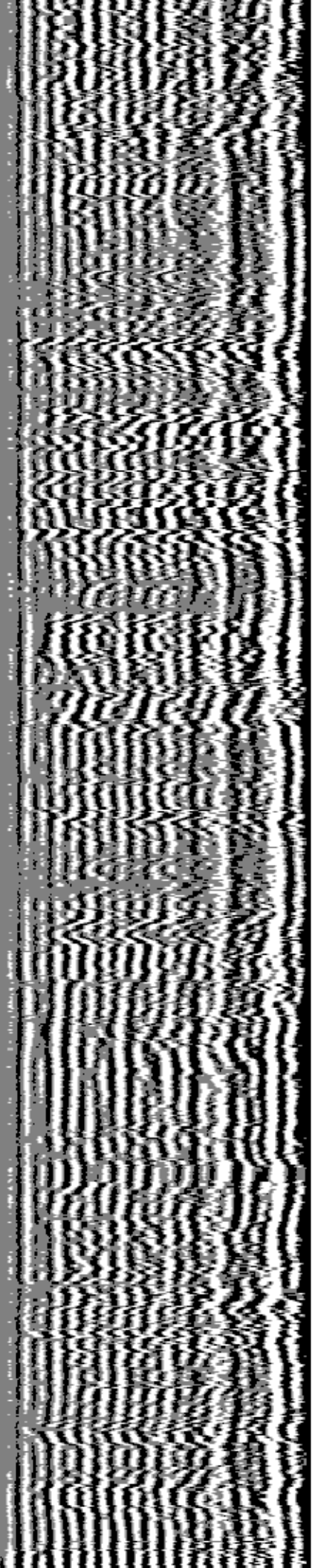


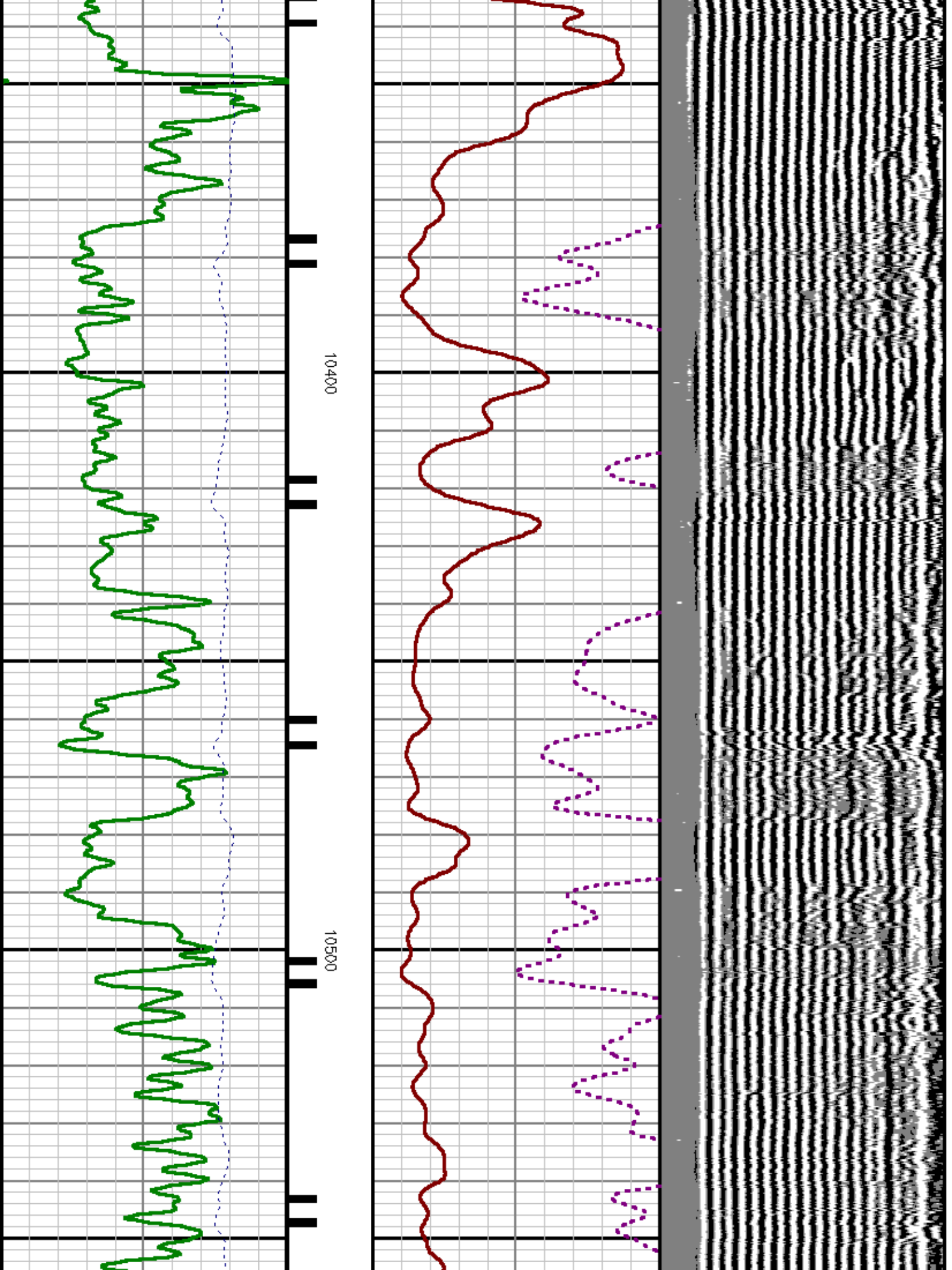


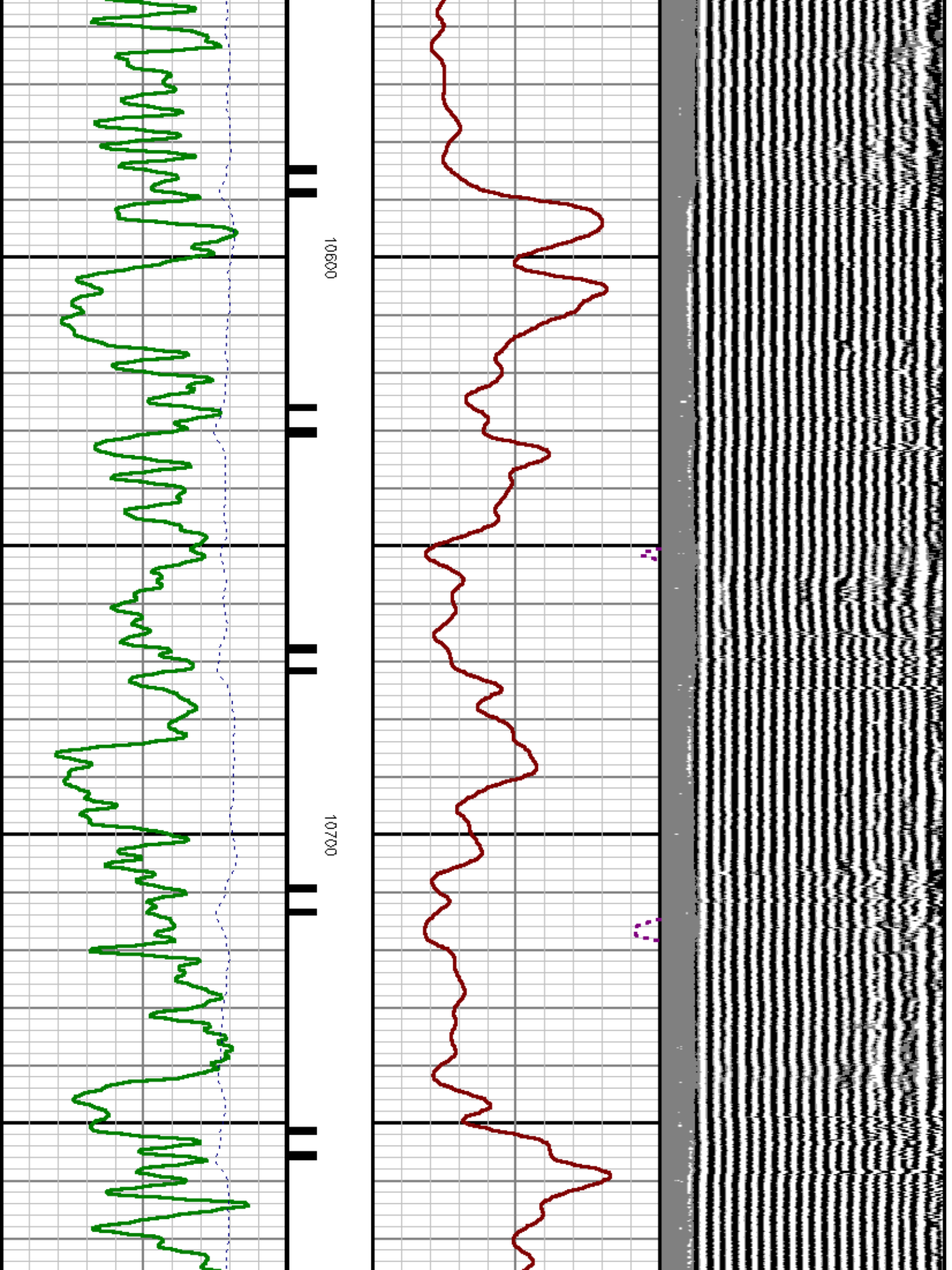


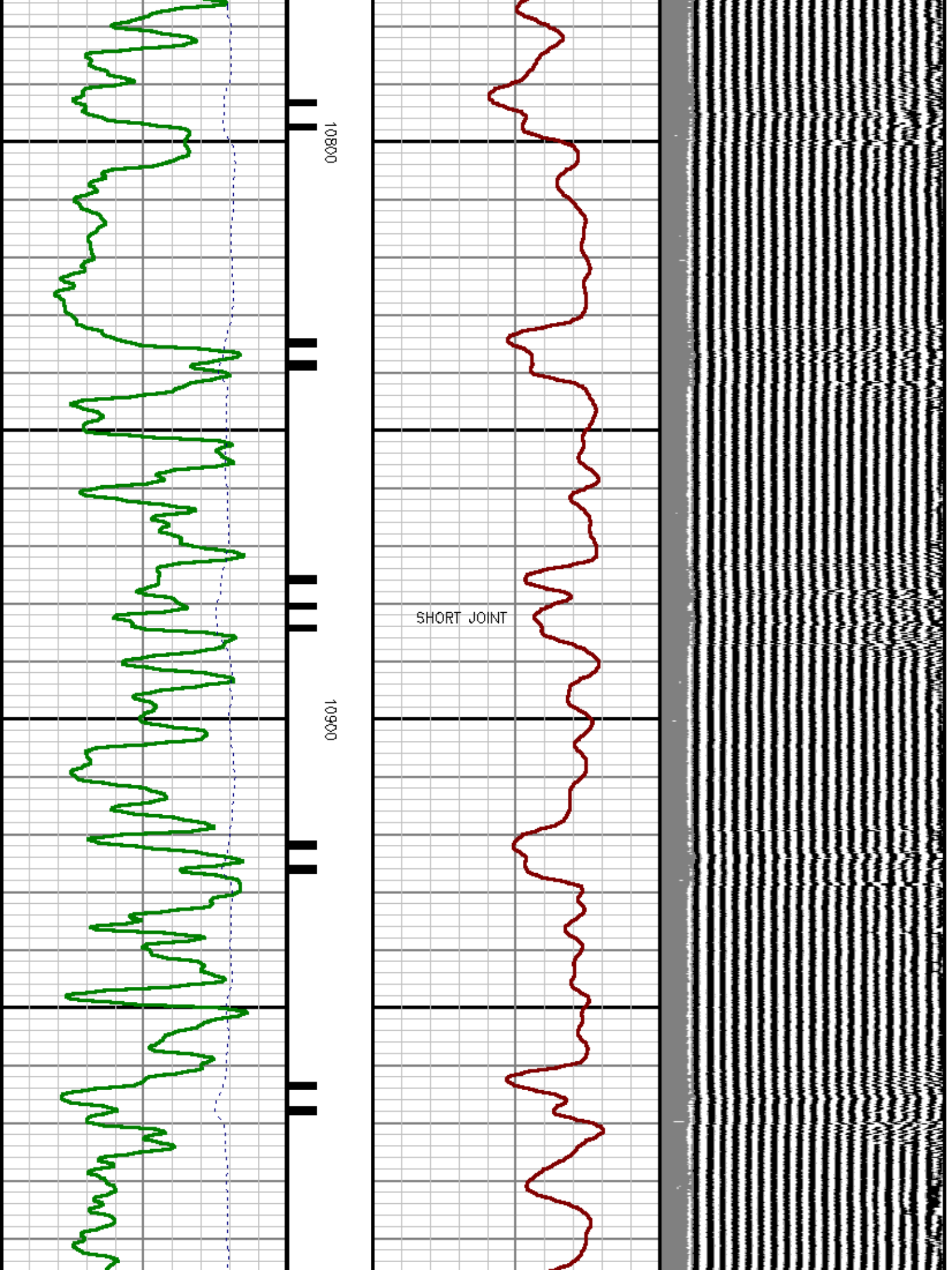


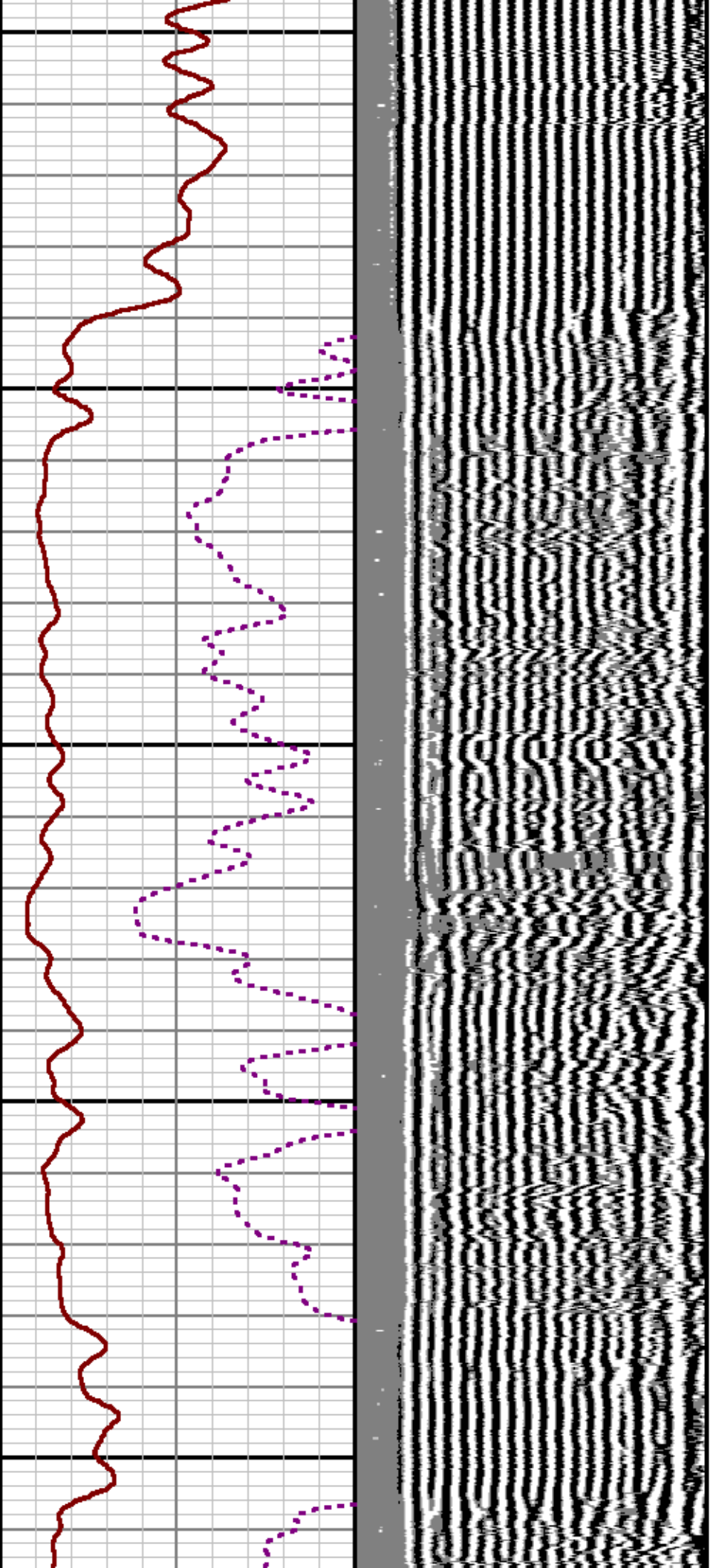








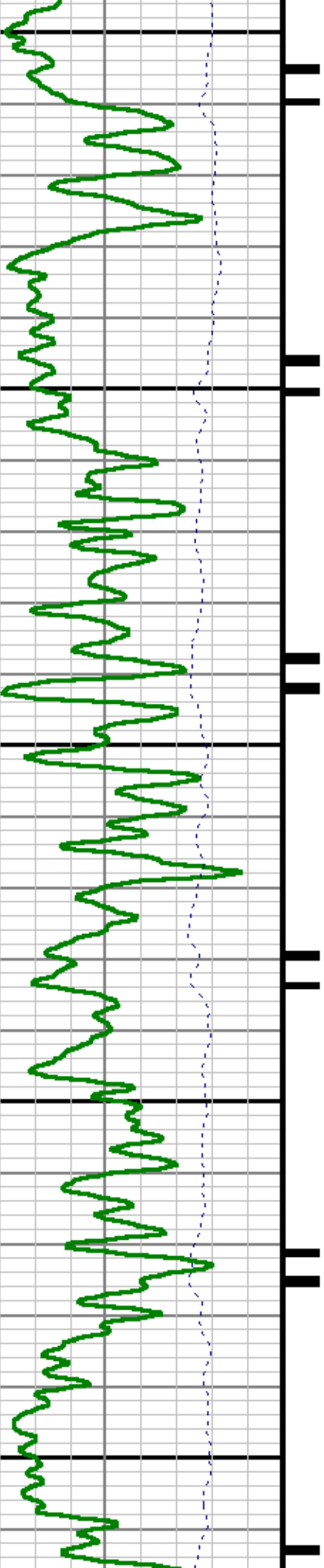


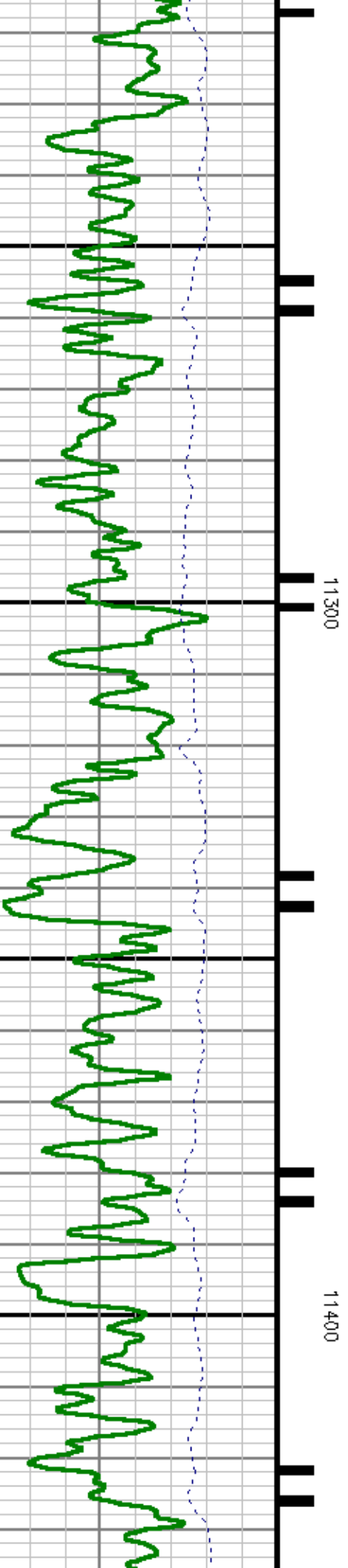
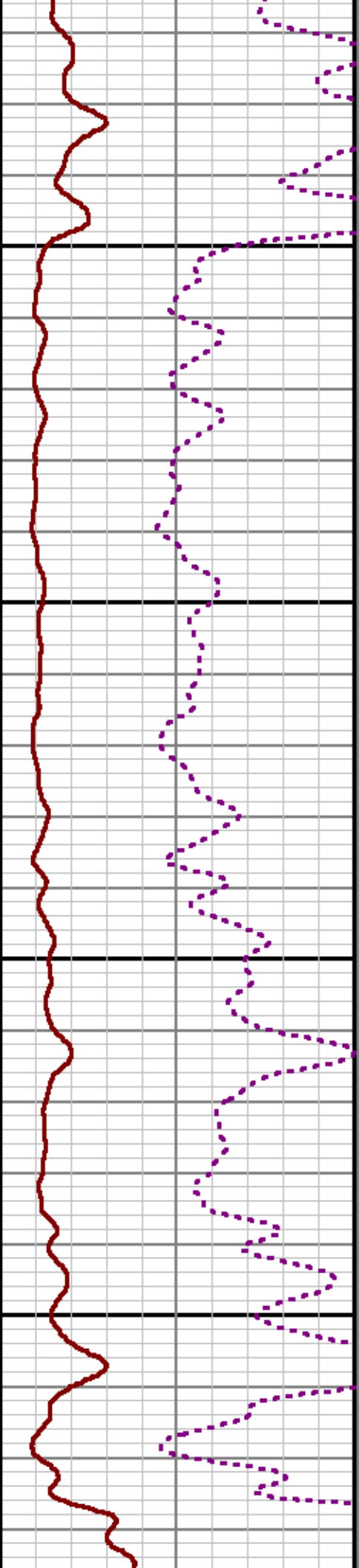
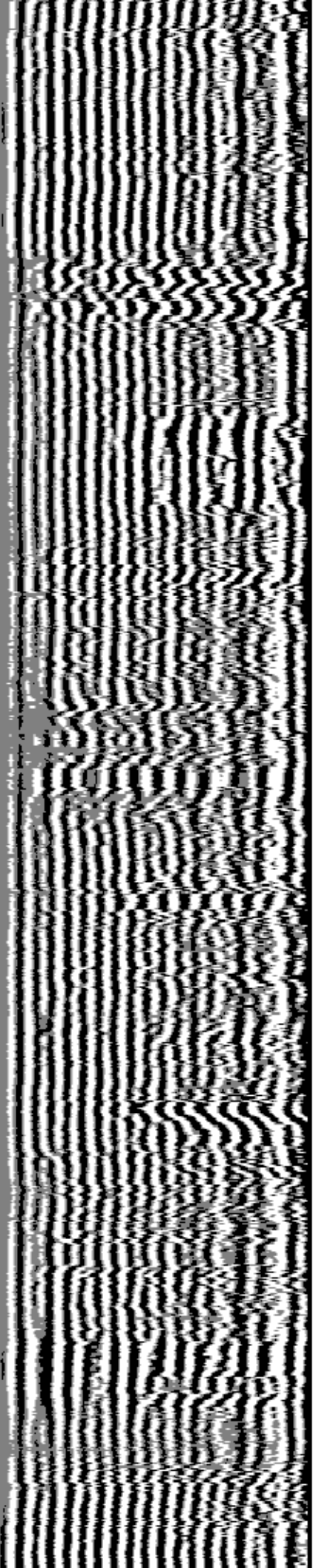


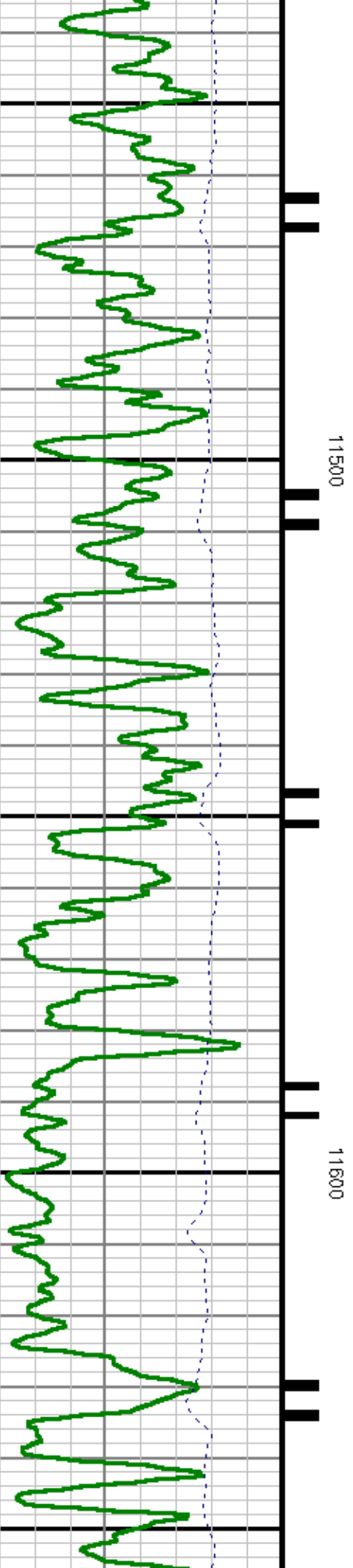
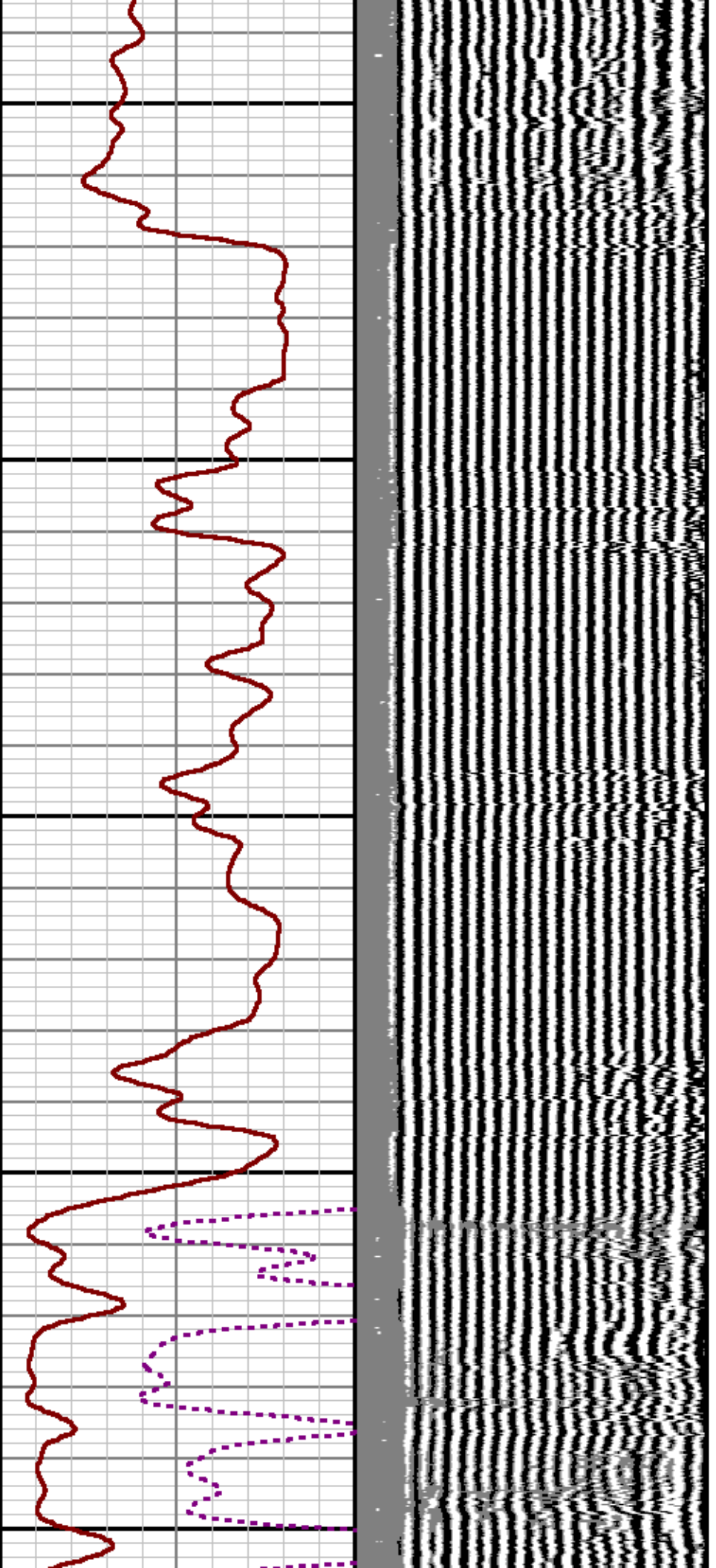
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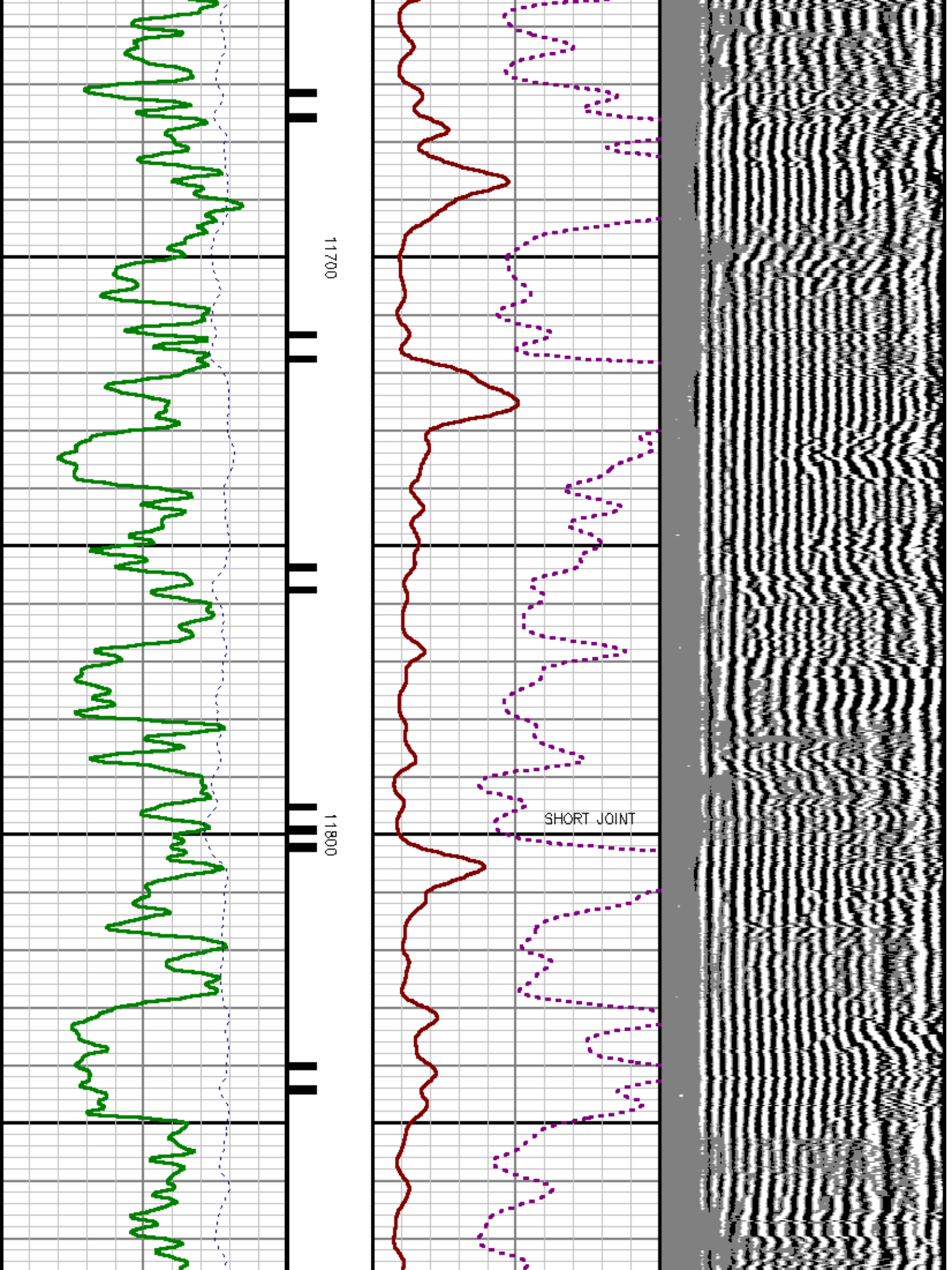
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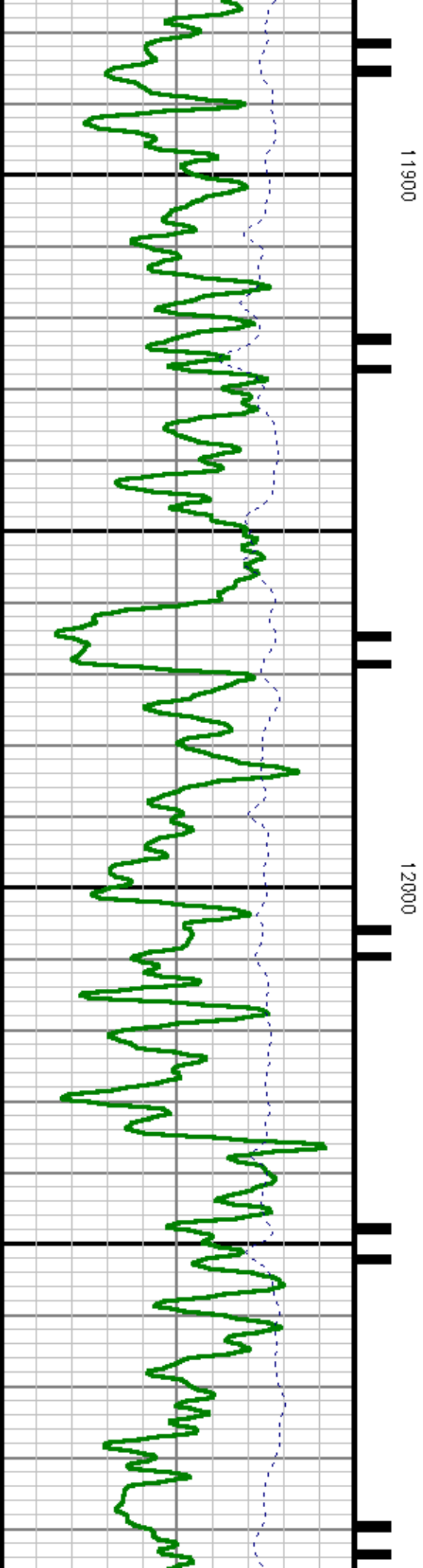
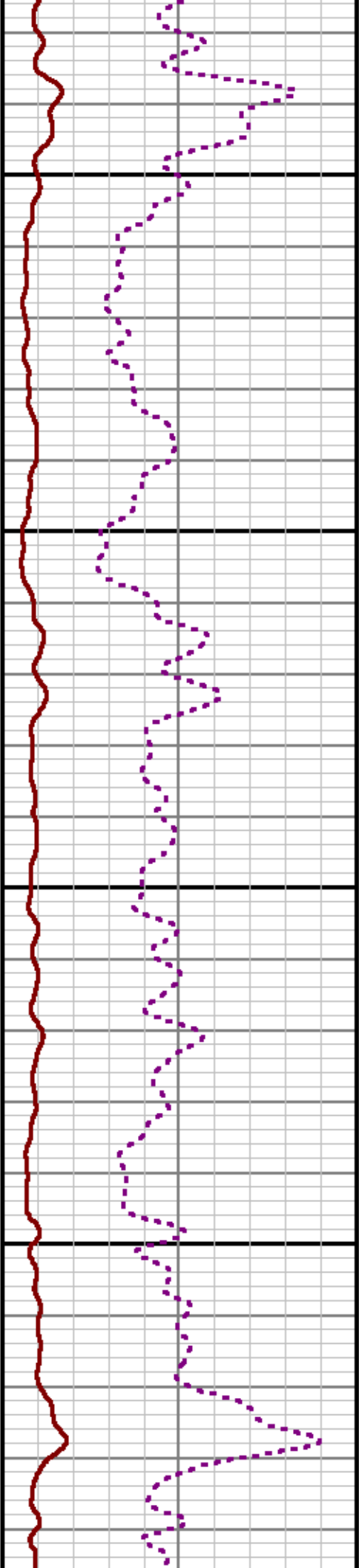
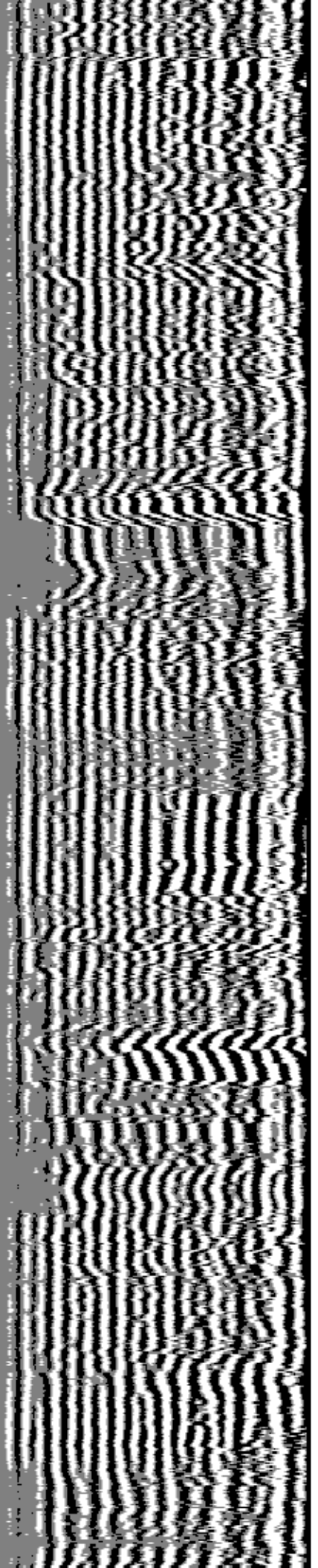
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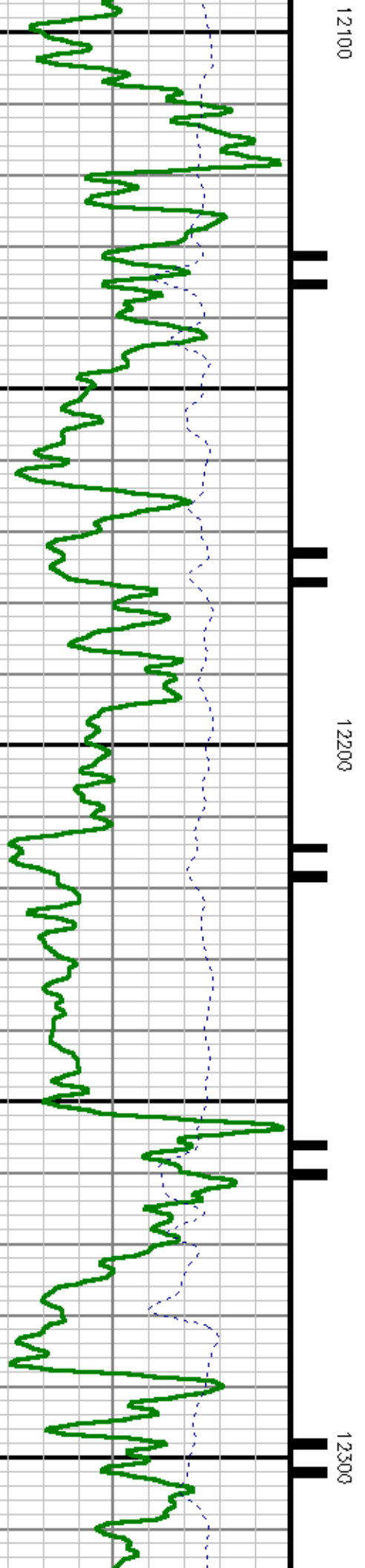
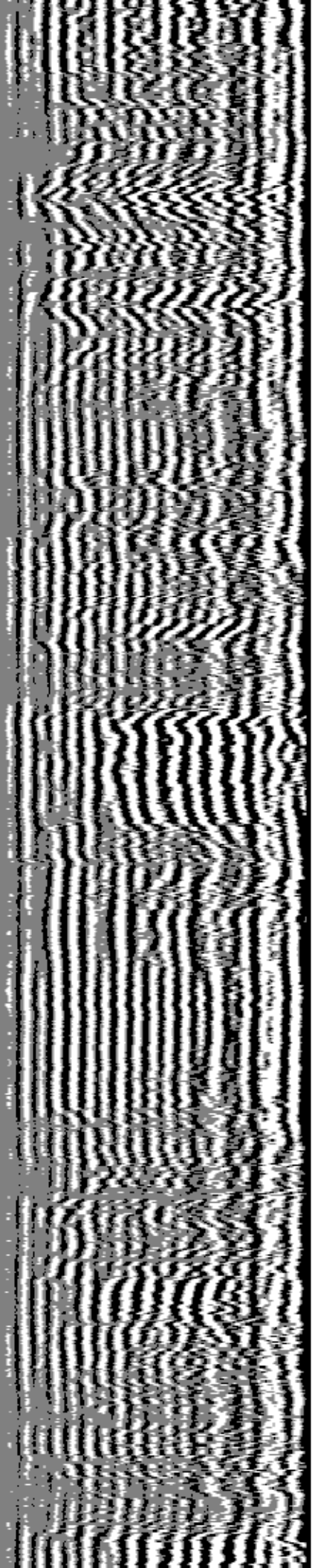


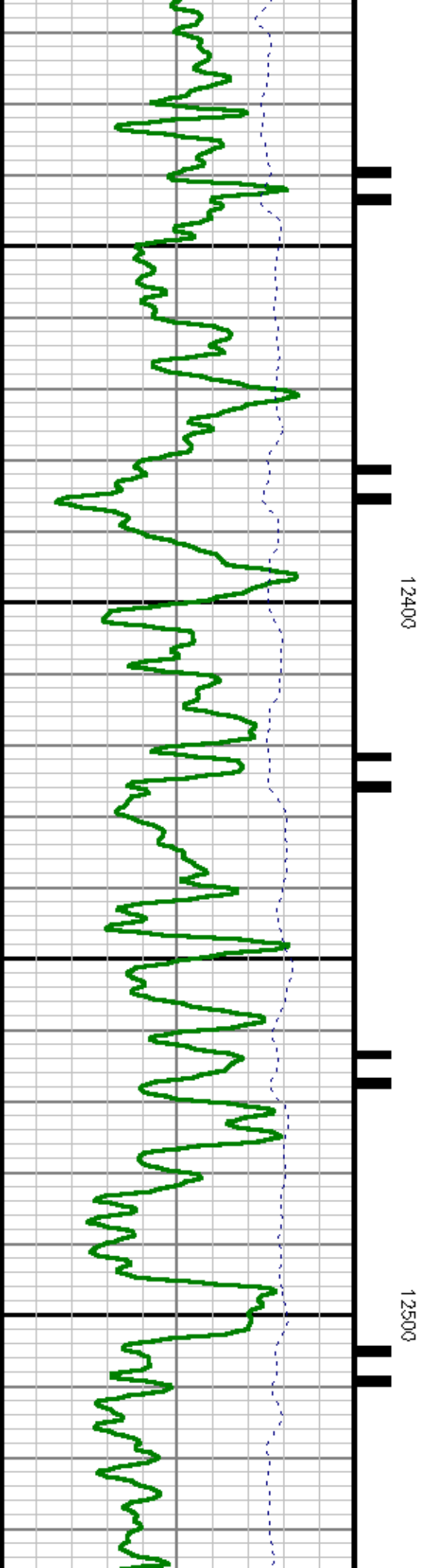
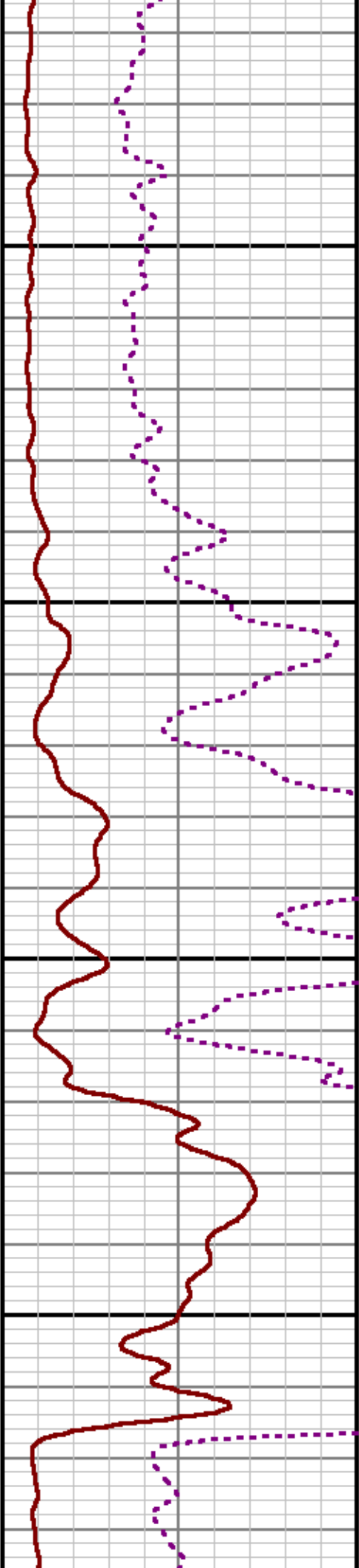
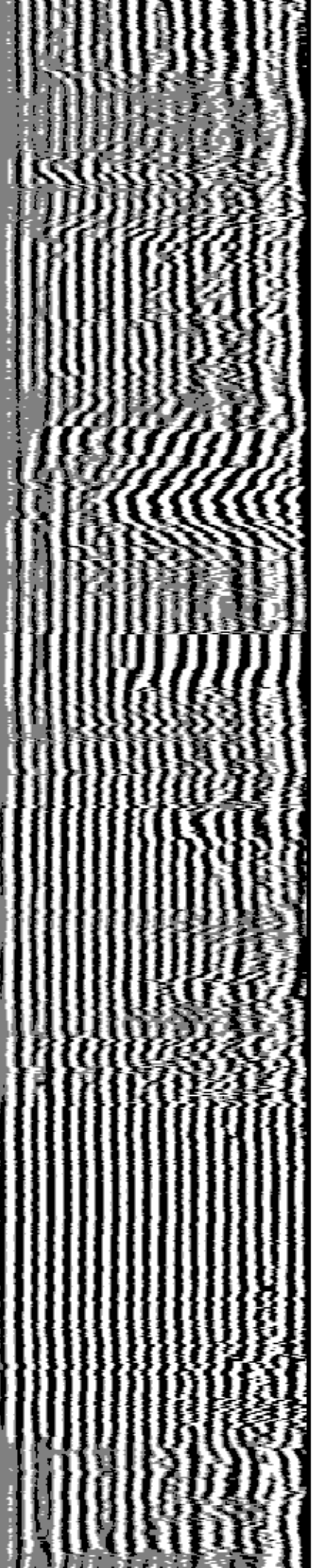


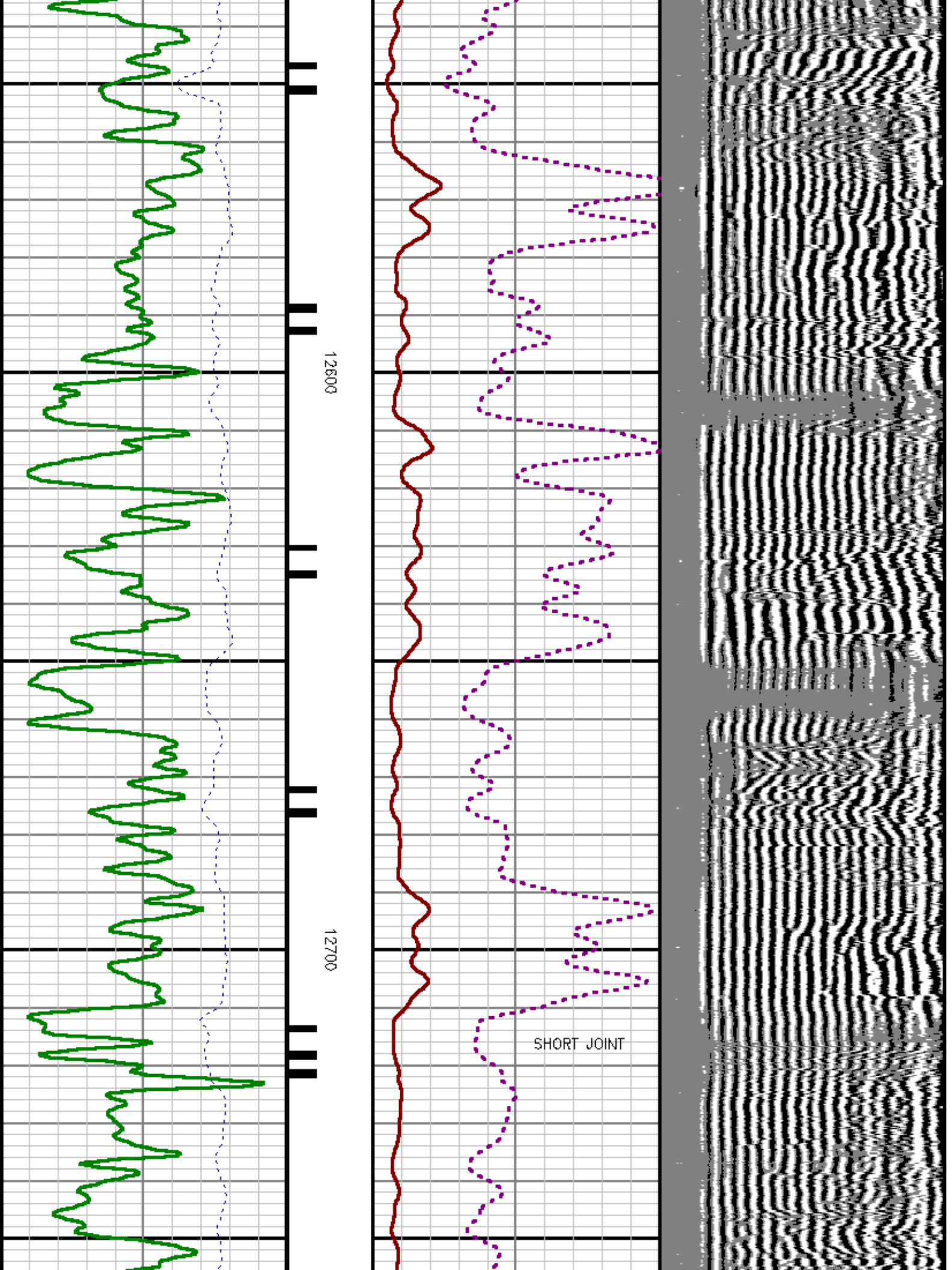


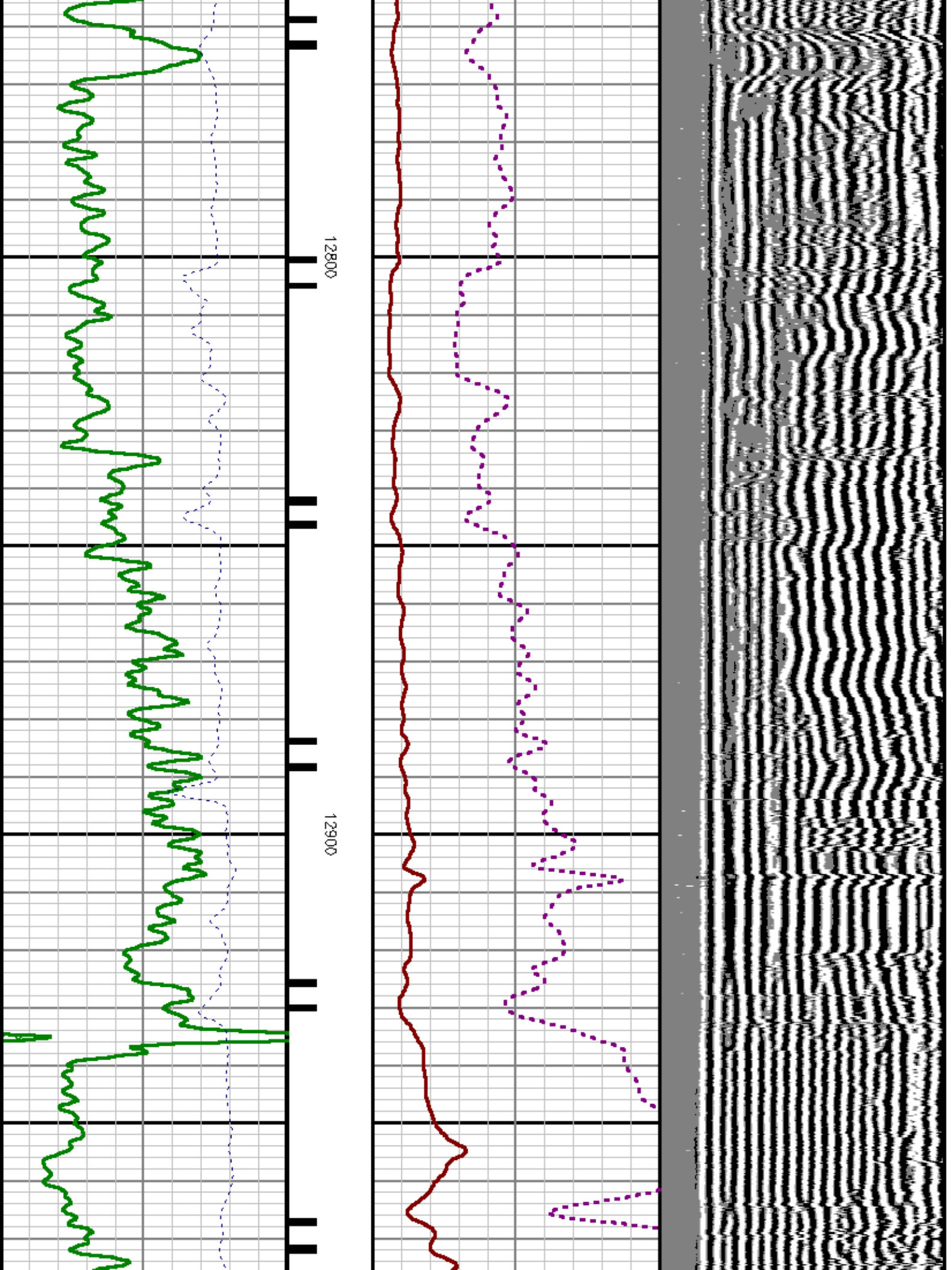


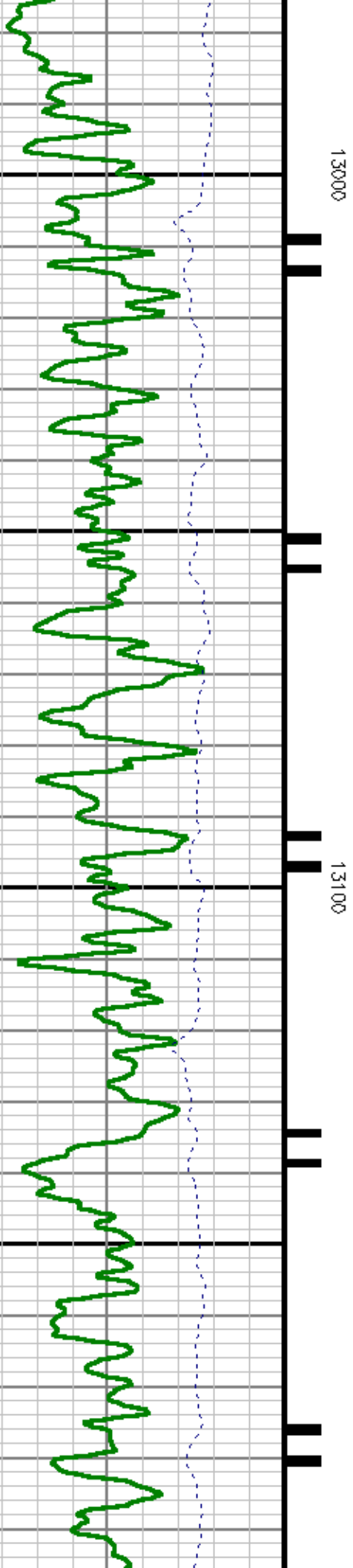
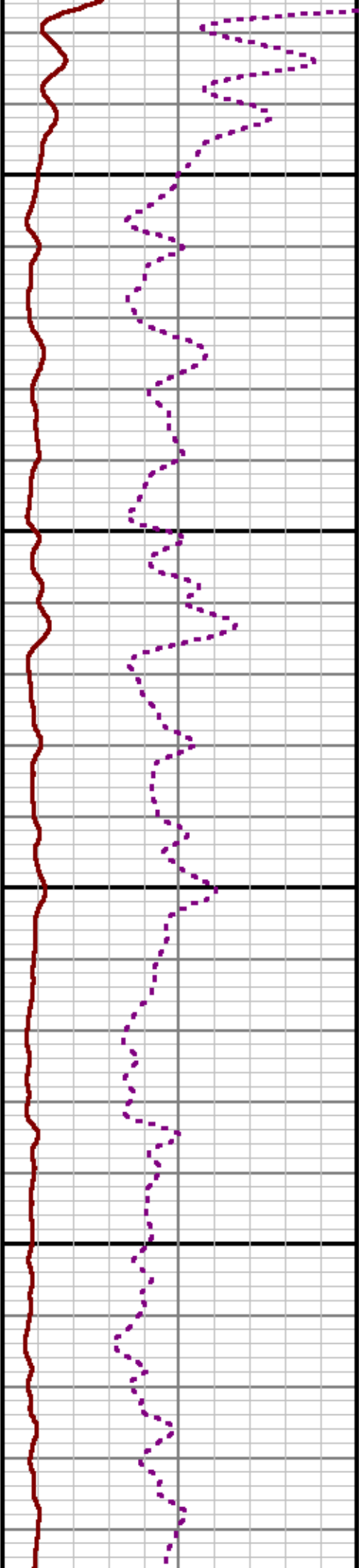
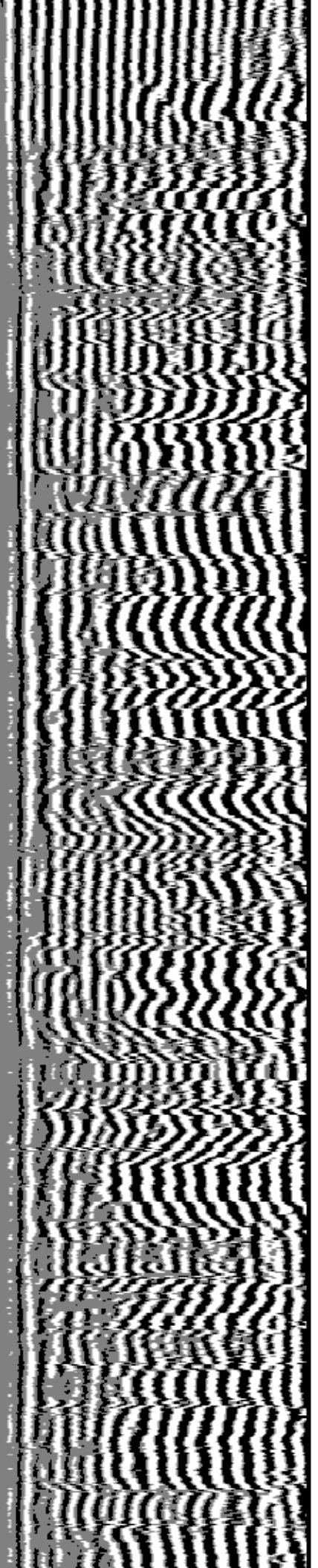


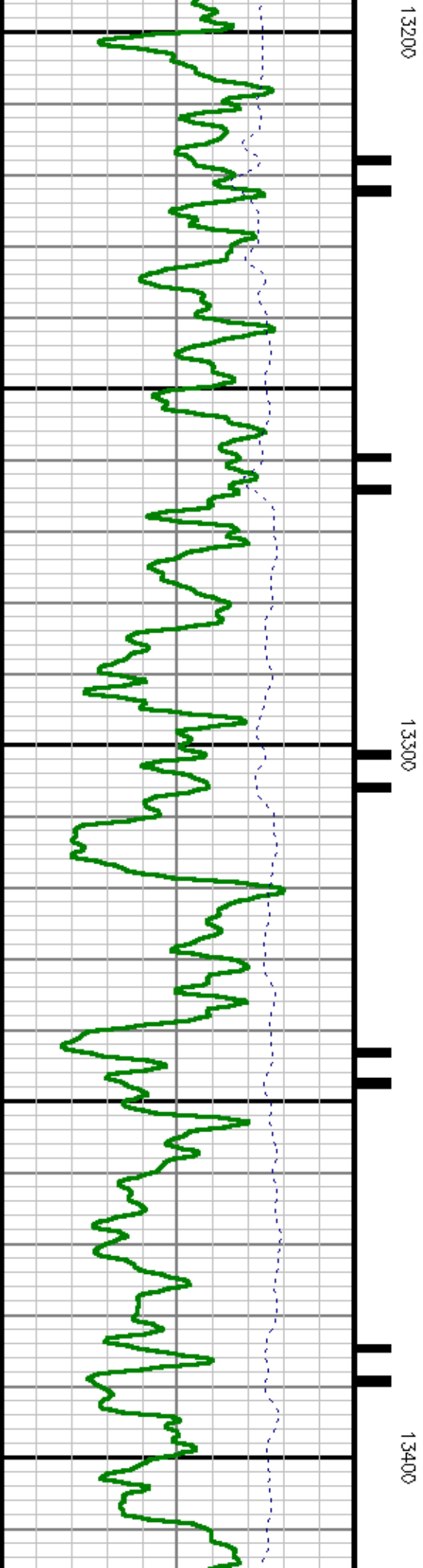
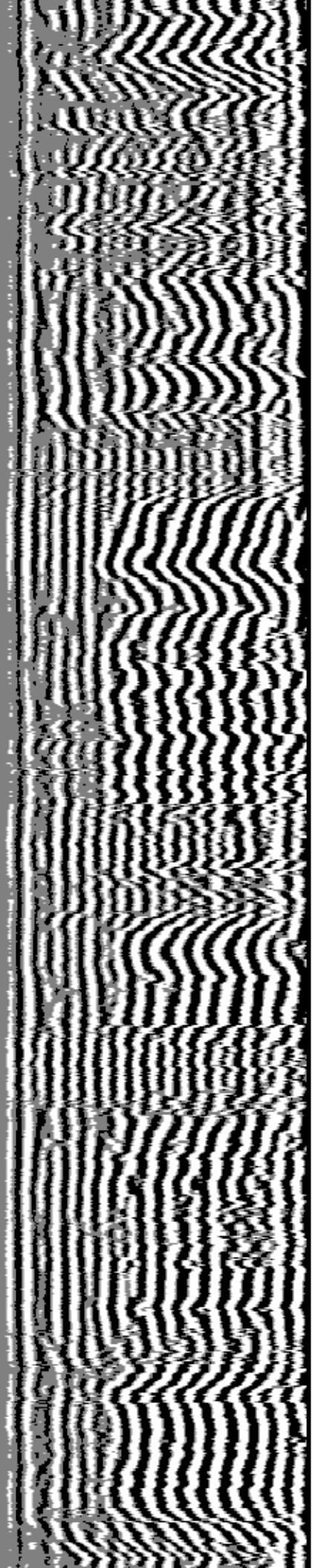


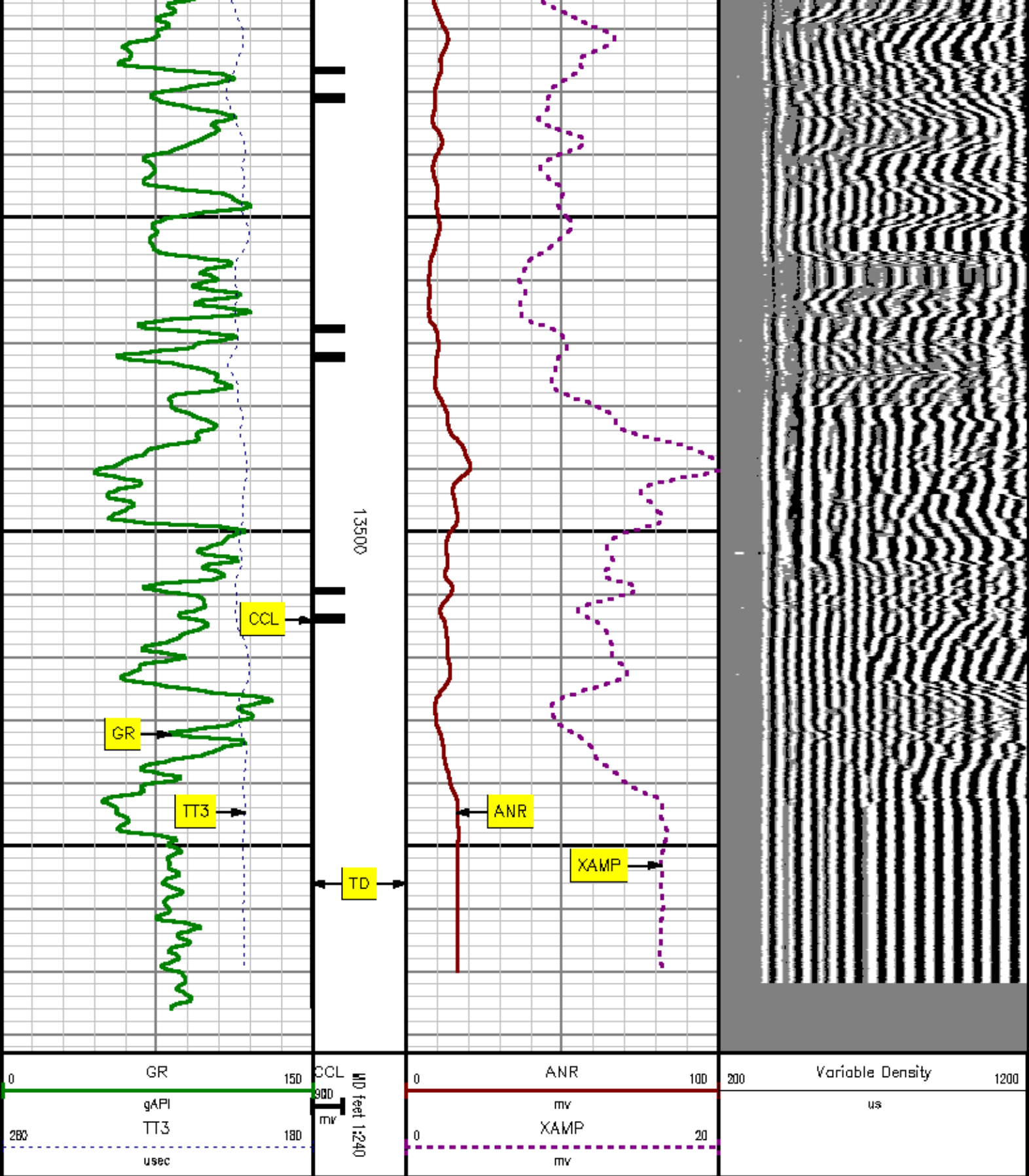












REPEAT SECTION

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	303.198	usec	13321.000	13586.000
RAL	Amp Gate Start Near	197.754	usec	13321.000	13586.000
RAL	Amp Gate Start Radial	191.821	usec	13321.000	13586.000
RAL	Amp Gate Width Far	22.805	usec	13321.000	13586.000
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RAL	casing od	4.500	inches	13321.000	13586.000
RAL	casing wt	15.100	lbm/ft	13321.000	13586.000
RAL	FB Start Far	289.263	usec	13321.000	13586.000
RAL	FB Start Near	172.754	usec	13321.000	13586.000
RAL	FB Start Radial	172.754	usec	13321.000	13586.000
RAL	FB Thresh Far	10.000	mv	13321.000	13586.000
RAL	FB Thresh Near	4.000	mv	13321.000	13586.000
RAL	FB Thresh Radial	4.000	mv	13321.000	13586.000
RAL	Fluid Travel Time	200.000	usec/ft	13321.000	13586.000

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			
2459XA	-7.250	CCL					
2459XA	-5.390	GR					
2459XA	0.000	NEU					

Created by : RAL, v4.6.007

Plotted by : PlotMgr, v5.4.5D4

Company : EXXONMOBIL PRODUCTION COMPANY

Well : PCU 296-5A5

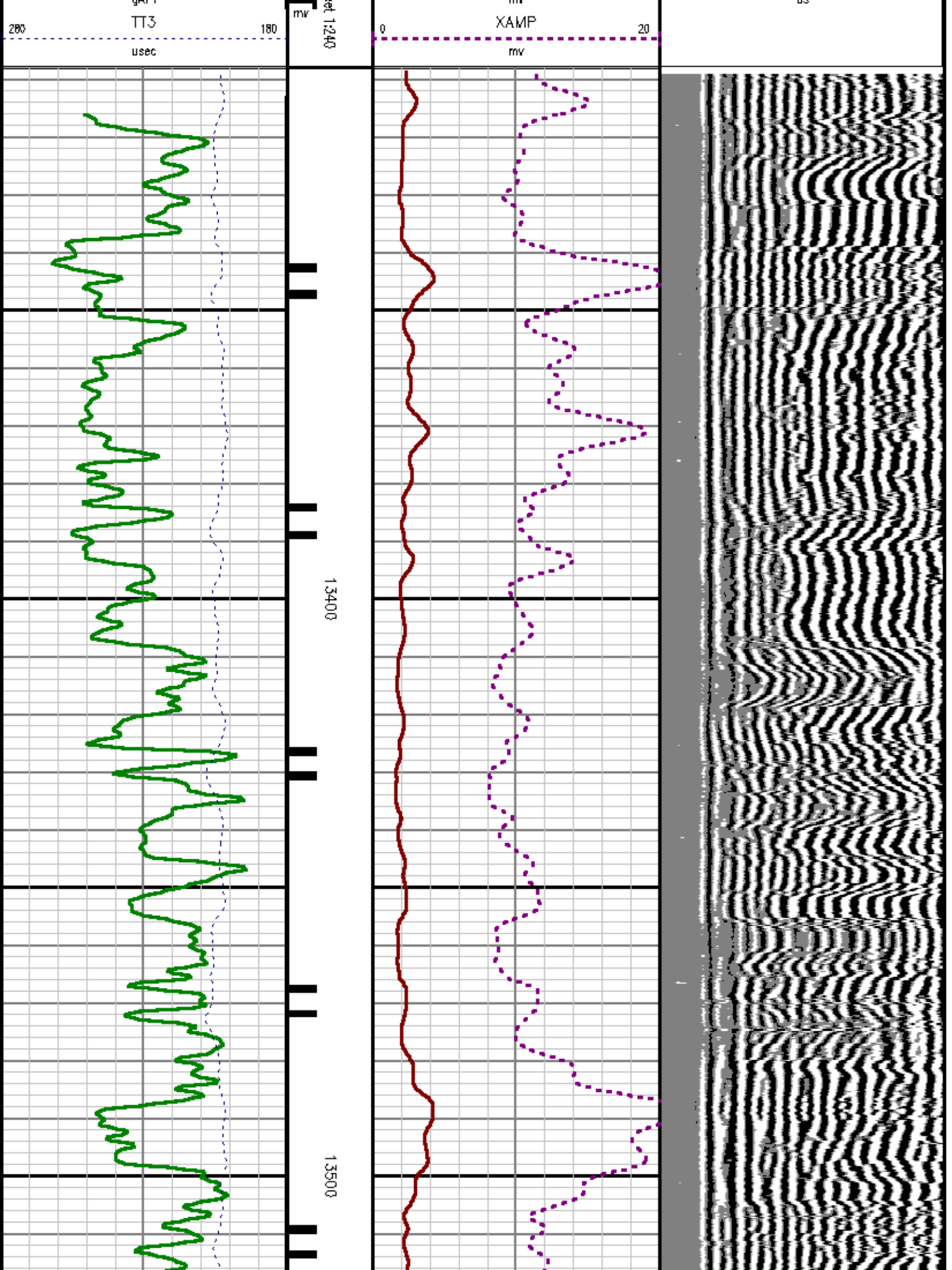
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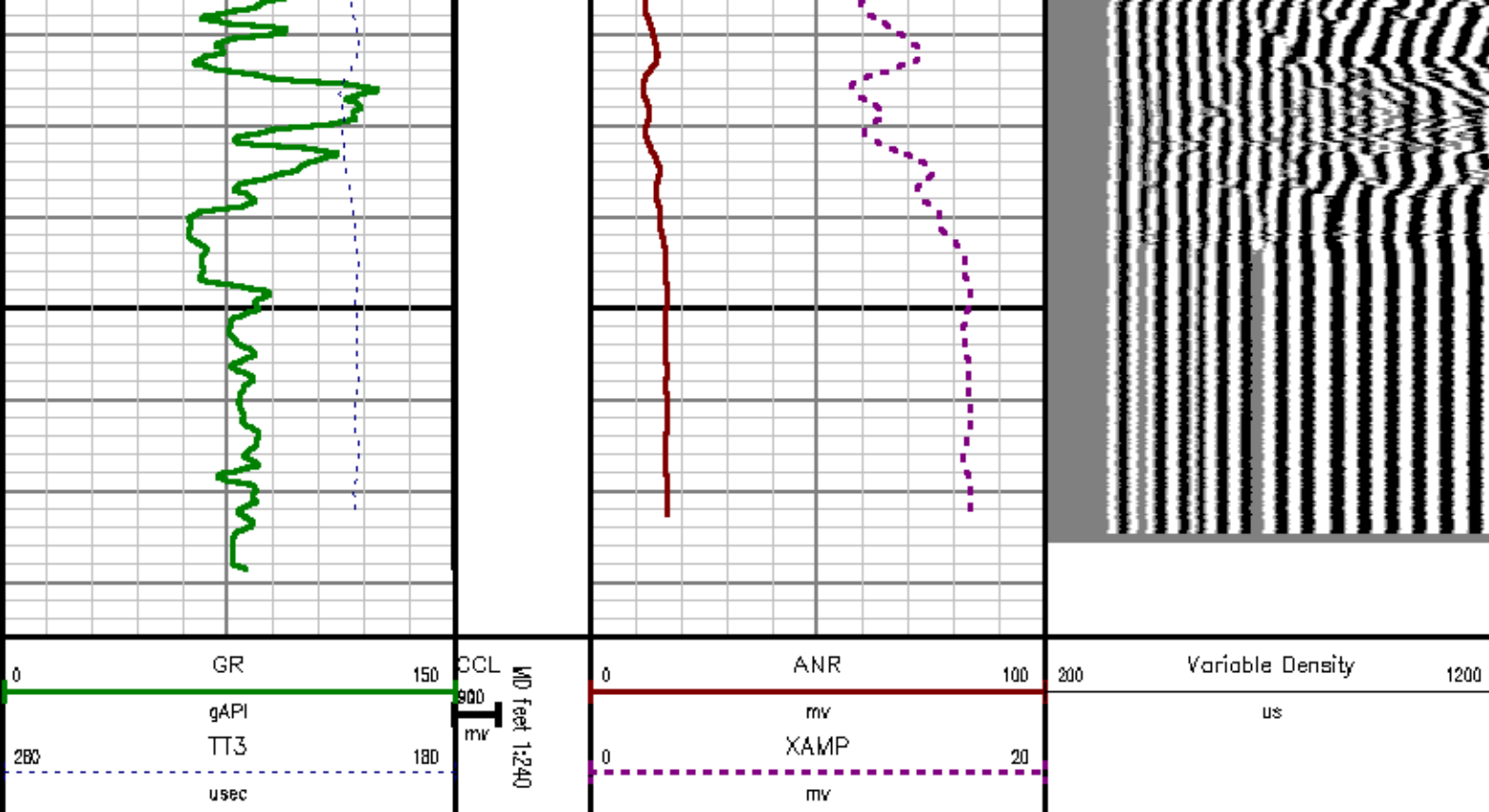
Mode : PlotMgr 5.4.5D4

Interval : 13306.00 - 13586.00 feet UP

Created : 3/18/2011 2:04:27 PM







CALIBRATION SUMMARY

GAMMA RAY #2

Calibration File: C:\cgse\calver\GR\456M1.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Fri Mar 18 12:57:23 2011 TOOL SERIES: 2459XA ASSET: 456 SEQ: M1

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K DA456	23.87	241.02	0.852	20.33	205.33	185.00

Verification File: C:\cgse\calver\GR\456M1.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Fri Mar 18 12:58:23 2011 TOOL SERIES: 2459XA ASSET: 456 SEQ: M1

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K DA456	23.80	244.59	0.852	20.11	208.37	188.27

RALSHP #2

Shop Calibration: C:\case\calver\RALSHP\106M17_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Fri Mar 18 13:04:21 2011 TOOL SERIES: 1426XA ASSET: 106 SEQ: M17

Tool Delay [usec] **-62.00** 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	216	216	25	166	25	-0.017	100.00	0.14
3 Ft. Receiver	216	216	25	92	25	0.000	100.00	0.14
5 Ft. Receiver	324	321	27	194	25	0.620	150.00	0.15
Radial #1	216	216	25	93	28	-0.196	100.00	0.14
Radial #2	216	216	25	93	28	-1.300	100.00	0.14
Radial #3	217	216	25	93	28	-1.292	100.00	0.14
Radial #4	216	216	25	93	28	-1.640	100.00	0.14
Radial #5	216	216	25	93	28	-1.585	100.00	0.14
Radial #6	215	216	25	93	28	-1.281	100.00	0.14
Radial #7	214	216	25	93	28	-0.848	100.00	0.14
Radial #8	216	216	25	93	28	-0.985	100.00	0.14

RALFLD

Wellsite Calibration: C:\case\calver\RALFLD\106M17 fld.cal

WELLSITE CALIBRATION SUMMARY

DATE/TIME PERFORMED: Fri Mar 18 13:06:51 2011 TOOL SERIES: 1426XA ASSET: 106 SEQ: M17

Tool Delay [usec] **-62.00** 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	166	25	-0.267	0.000	1.02	100.000
3 Ft. Receiver	198	25	-0.528			
5 Ft. Receiver	314	25	-0.517			
Radial #1	103	22	-6.290			
Radial #2	103	22	-8.024			
Radial #3	103	22	-0.736			
Radial #4	103	22	-2.818			
Radial #5	103	22	-0.315			
Radial #6	103	22	-0.265			
Radial #7	103	22	-0.257			
Radial #8	103	22	-0.220			

TOOL DIAGRAM

OTA SHORT CABLE HEAD

CENTRALIZER

Series	RALCENT
Mnemonic	CENT
Diameter	3.12"
Weight	20.00 lb

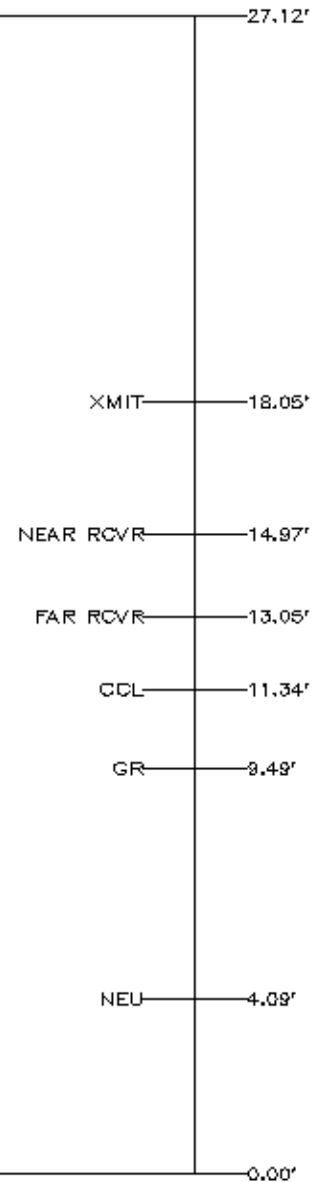
PROBE 2 3/4 DUAL RECEIVER RADII (1426XA)

Probe GR/CCL/NEU

Series	2458XA
Mnemonic	PROB
Diameter	2.75"
Length	9.42'
Measure Point	1.21' NEU
Measure Point	6.60' GR
Measure Point	8.48' CCL

CENTRALIZER

Series	RALCENT
Mnemonic	CENT
Diameter	3.12"
Weight	20.00 lb



Total Length: 27.12'
 Total Weight: Not Available
 Max Diameter: 0' 3.12"



**BAKER
HUGHES**

Well

PCU 296-5A5

CH031814

Field

PICEANCE CREEK

API No:

County

RIO BLANCO

State

COLORADO

05-103-11244-00

Location:

Elevations

NW/NE

KB 7326.2 ft

748' FNL & 551' FNL

DF 7325.2 ft

GL 7296 ft

SEC: 5

TWP: 2S

RGE: 98W

Baker Atlas

CASE