



Baker Atlas

RADIAL ANALYSIS BOND-LOG

File No: 1396
 Company: WILLIAMS PRODUCTION COMPANY
 Well: RWF 42-27
 Field: RULISON
 County: GARFIELD
 State: COLORADO
 API No: 06-045-12330000

Location
 27, 5S, 94W
 S14: 1744' N14 & 2192' E14
 B14: 1788' N14 & 1174' E14
 SEC 27 TWP 6S RGE 94W
 Other Services: NONE

Permanent Datum: G.L. Elevation: 5218 ft
 Log Measured From: K.B. 23 ft Above P. D.
 Drill Measured From: KELLY BISHING
 Elevations: KB 5242 ft, DF 5241 ft, GL 5218 ft

Date	10-OCT-2009
Run	ONE
Service Order	578528
Depth Driller	7830 ft
Depth Logger	7824 ft
Bottom Logged Interval	7824 ft
Top Logged Interval	12 ft
Time Started	15:00
Time Finished	18:00
Operator Rig Time	3 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	40 fpm
Maximum Recorded Temperature	229 degF
Reference Log Date	BAKER ATLAS TRIPLE COMBO
Equipment No.	23-SEP-2009
Recorded By	4214 U. SOEJEN
Witnessed By	MR. BRIAN O'DELL

- 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.

Bit Size	From	To
7.875 in	SURFACE	7830 ft

Size	Weight	Grade	From	To
4.5 in	11.6 lbm/ft	P-110	SURFACE	7830 ft

Remarks

THIS LOG WAS TIED INTO BAKER ATLAS TRIPLE COMBO
 WELL WAS LOGGED WITH 0 PSI
 SHORT JOINT LOCATED AT: 4128' - 4148'
 BHT: 229 DEGREES/F

Run	Trip	Tool	Series Number	Serial Number	Position
1	1	LOG	1328YA	544	CENTRAL UTED

Created by : RAL, v4.8.007

Plotted by : PlotMgr, v5.4.504

Company : WILLIAMS PRODUCTION COMPANY

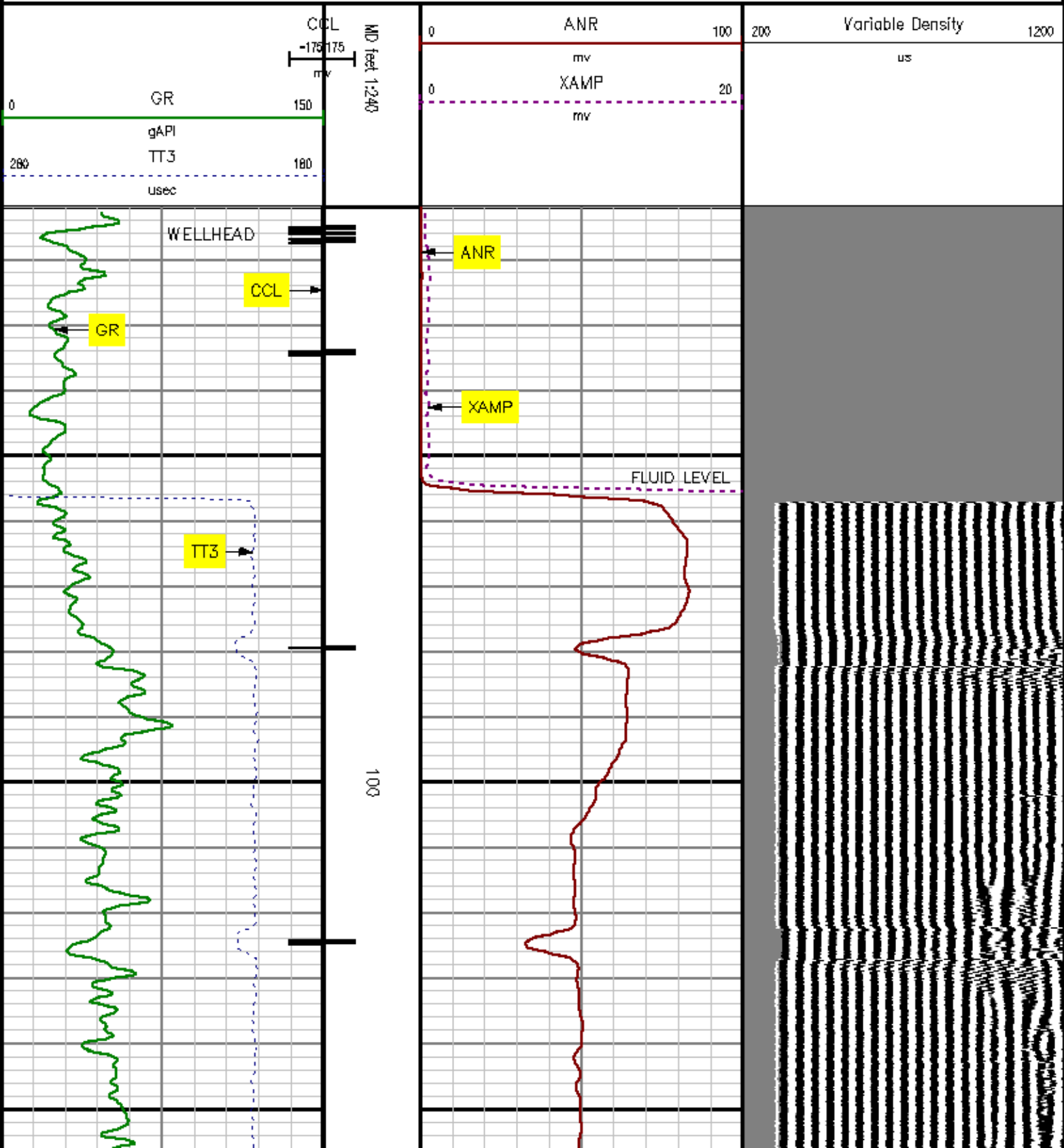
Well : RNF 42-27

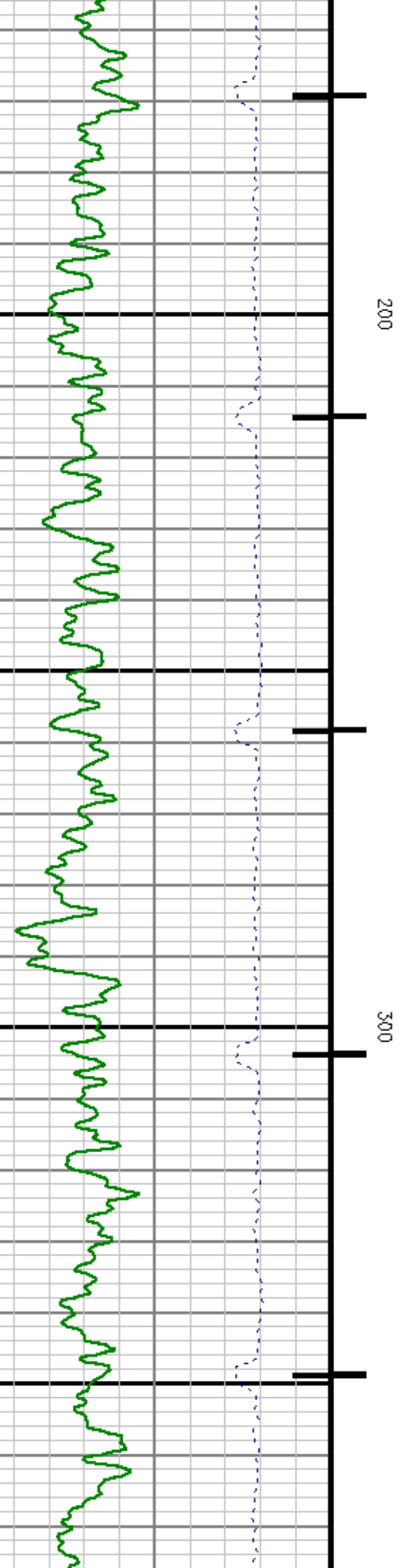
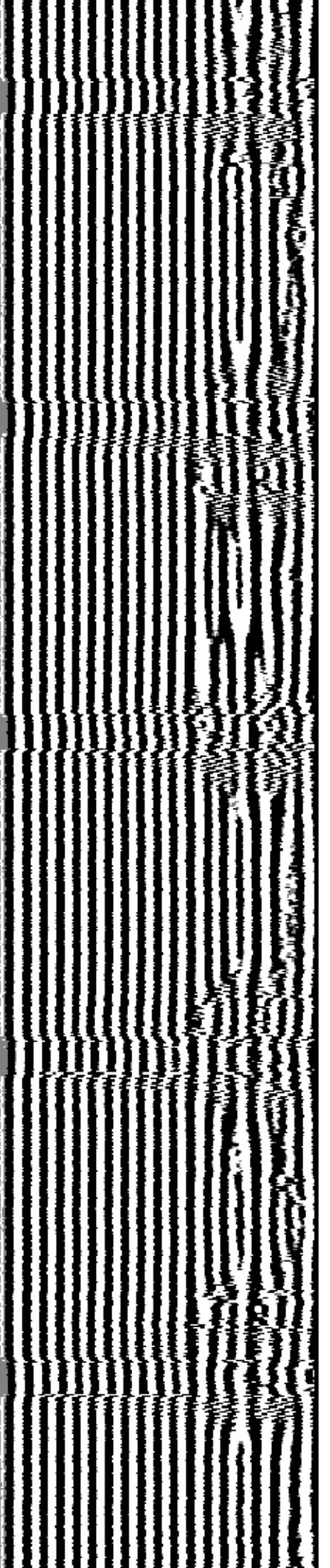
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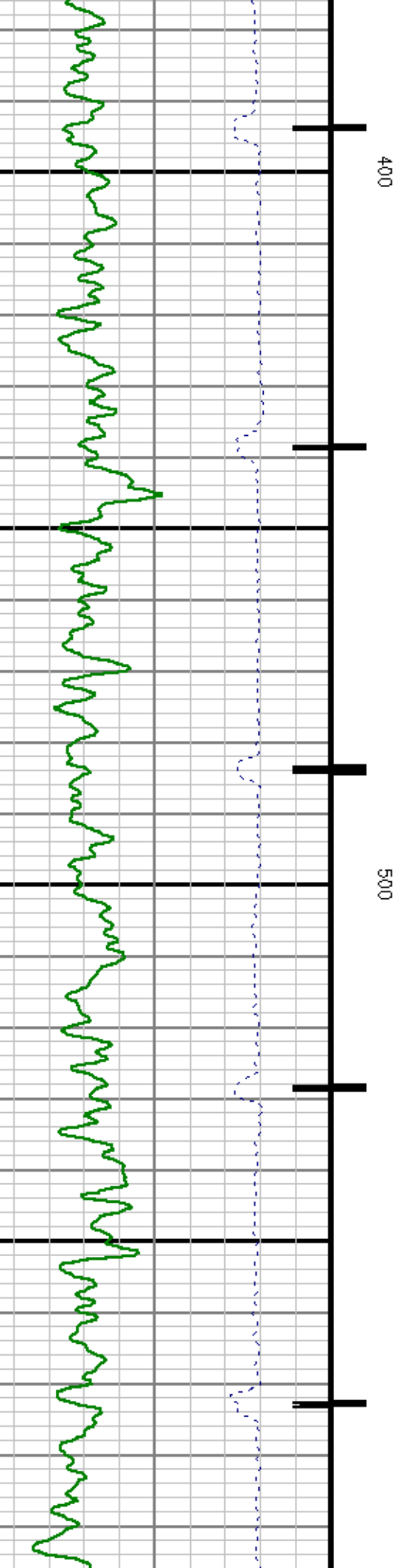
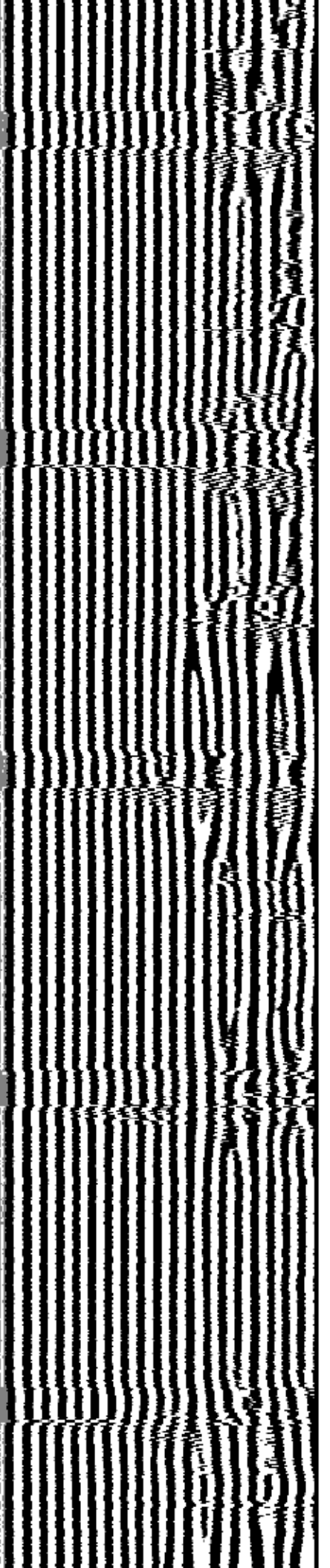
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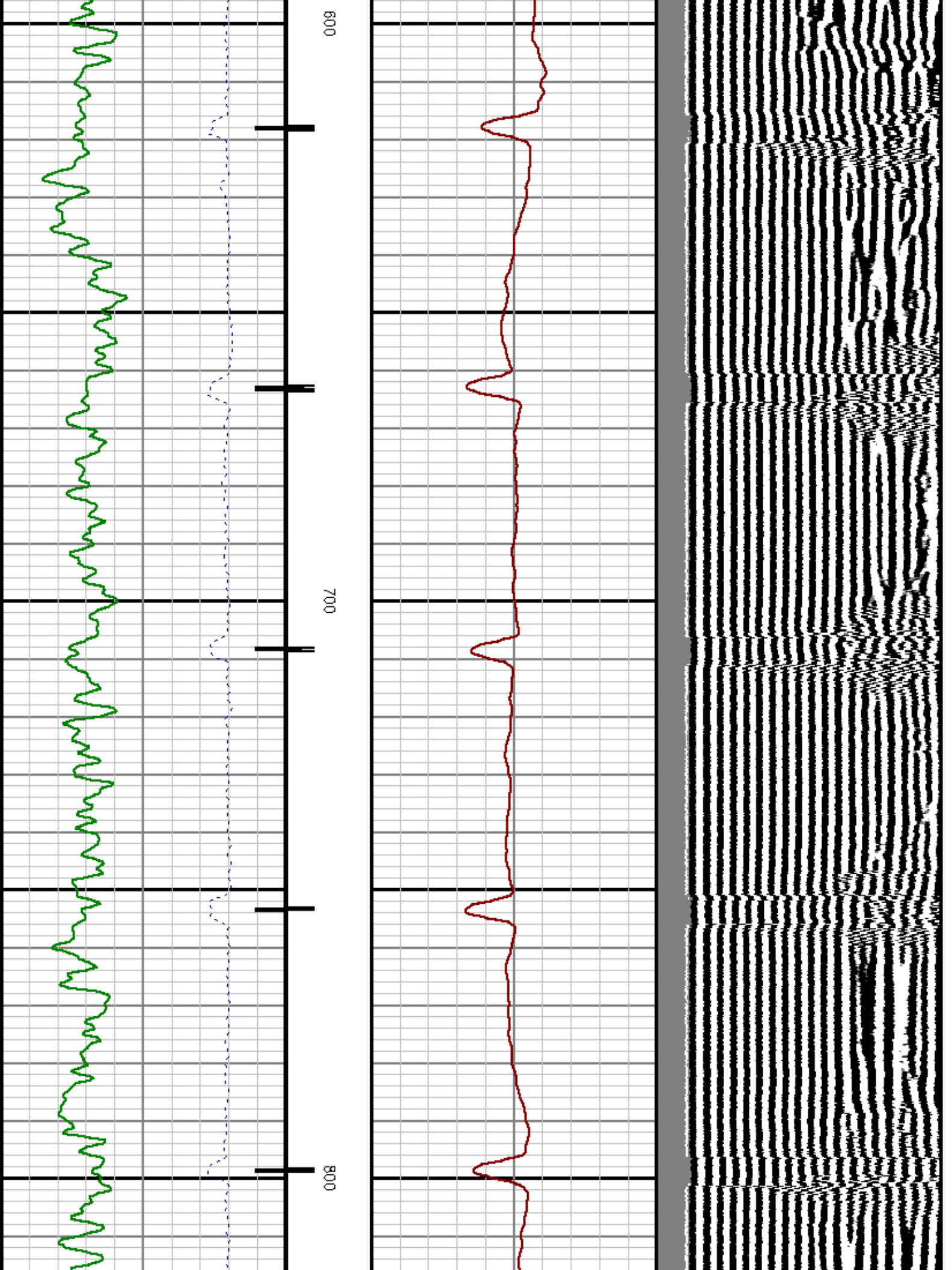
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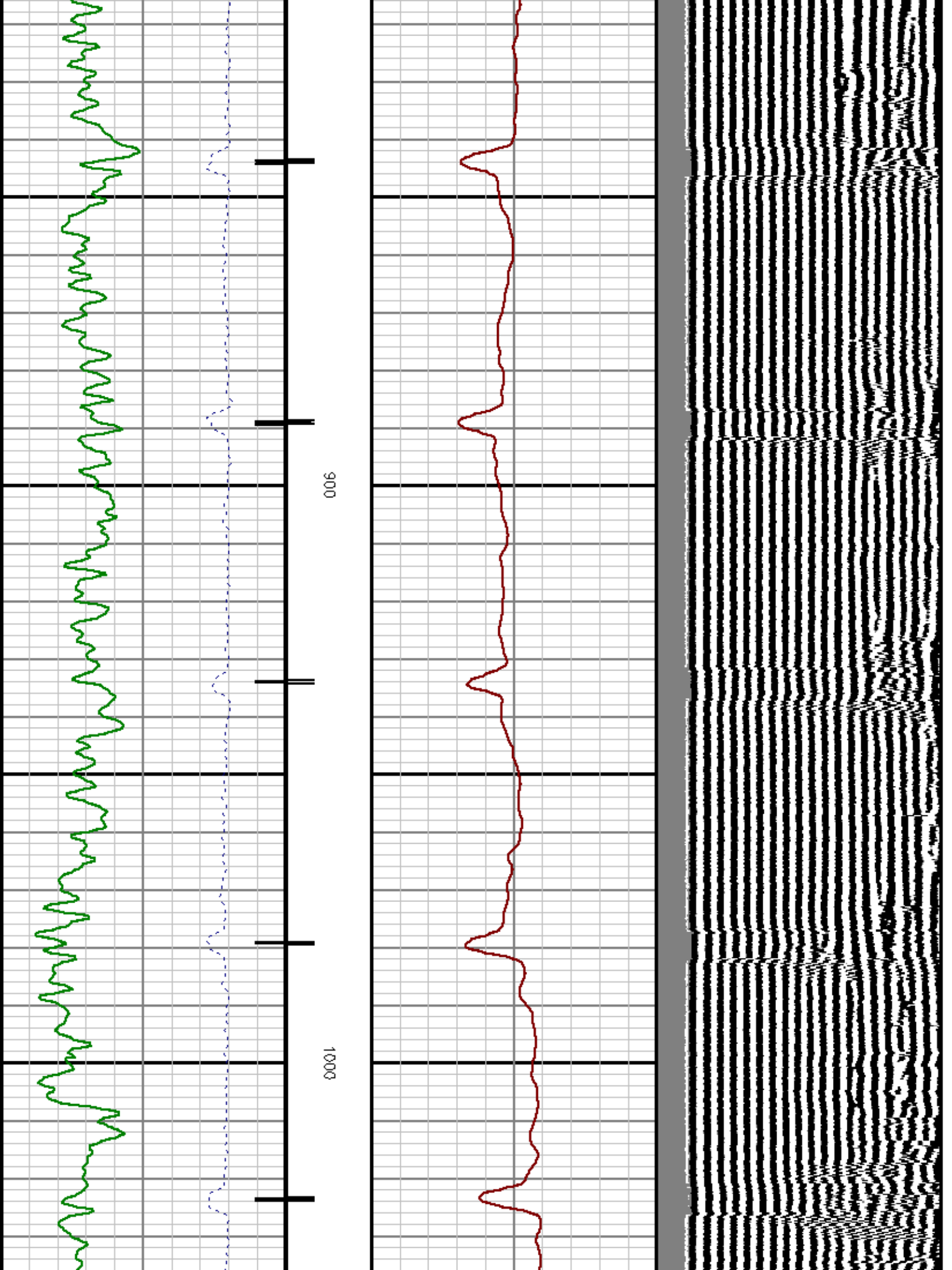
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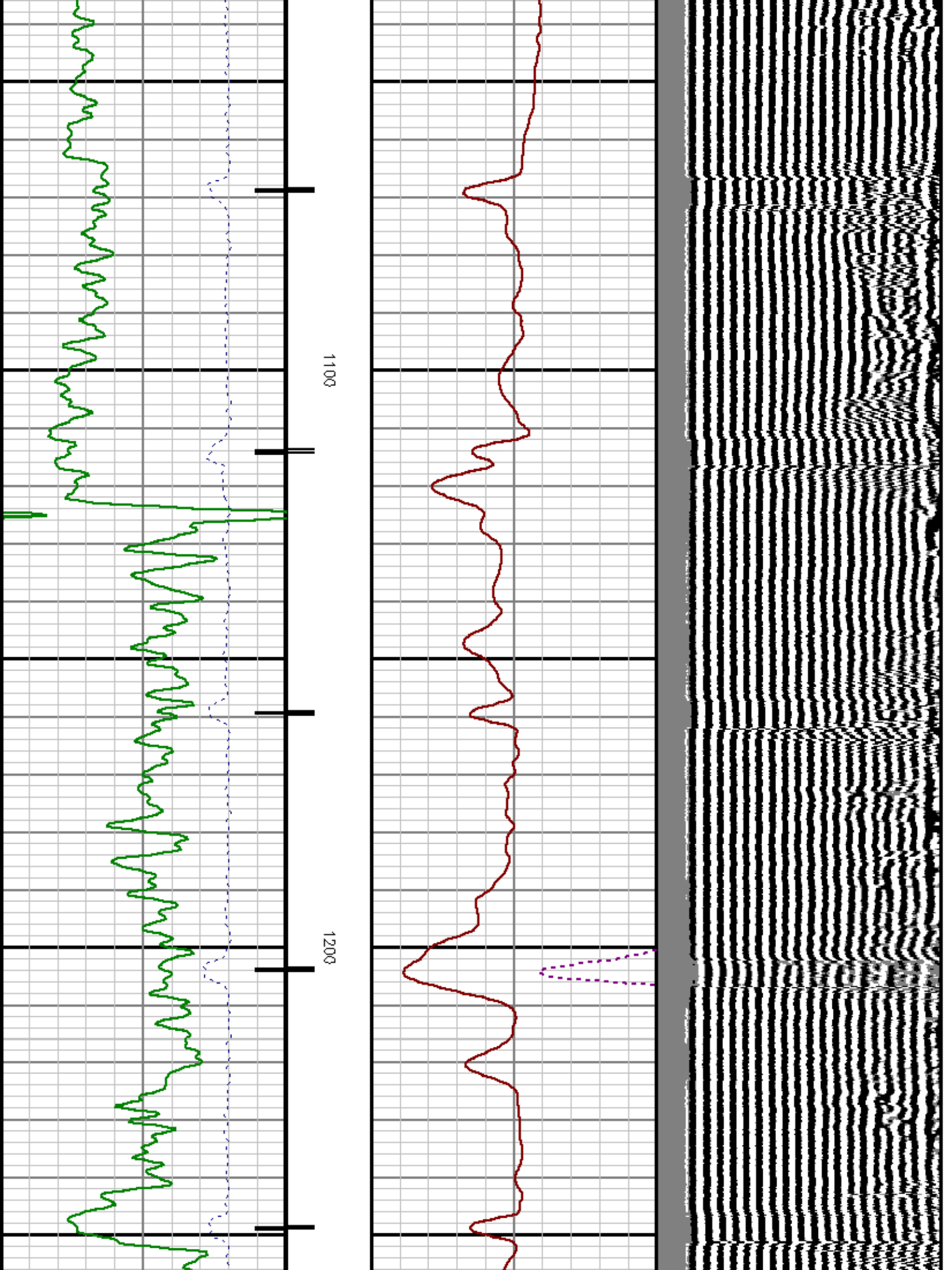


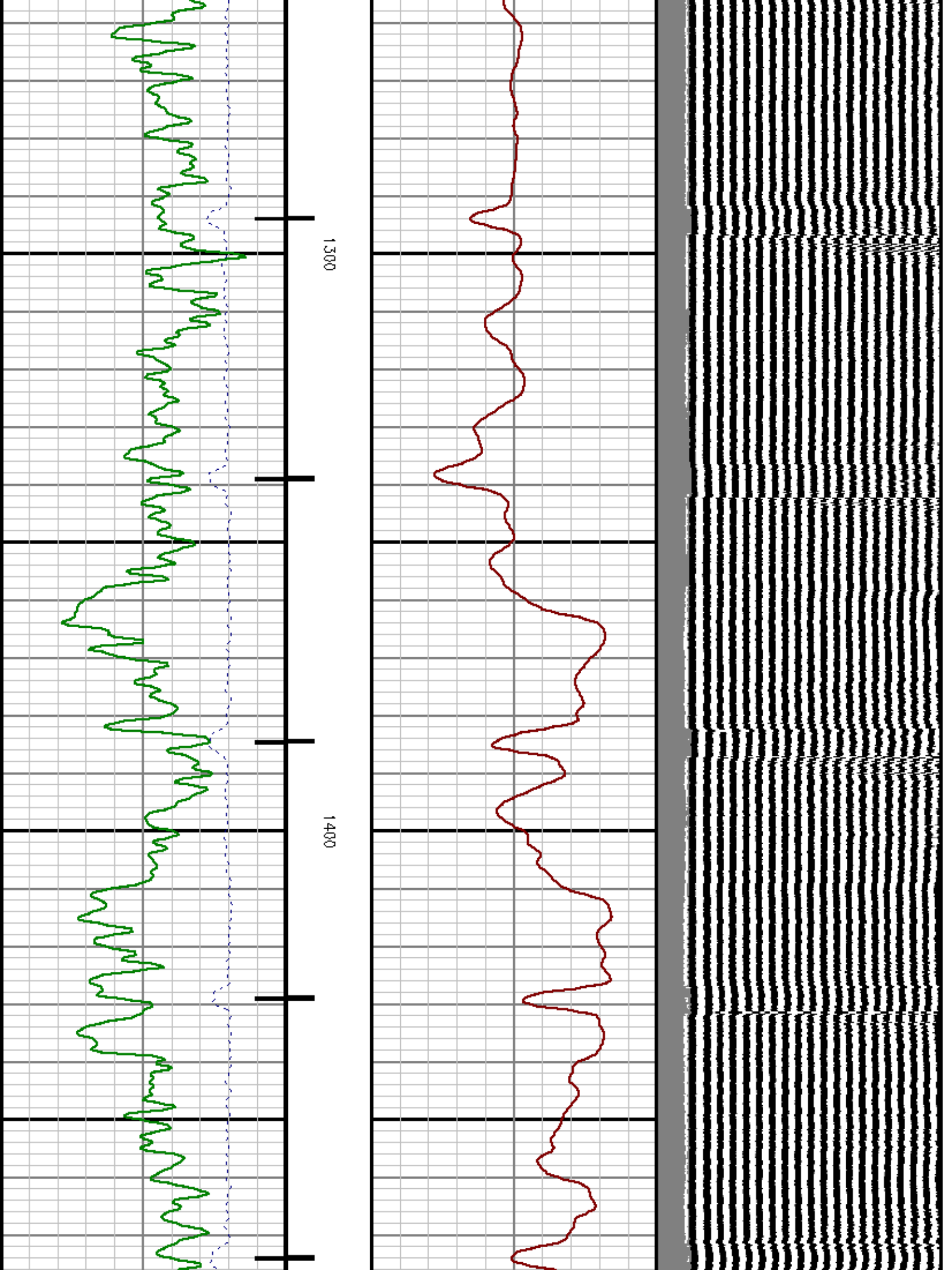


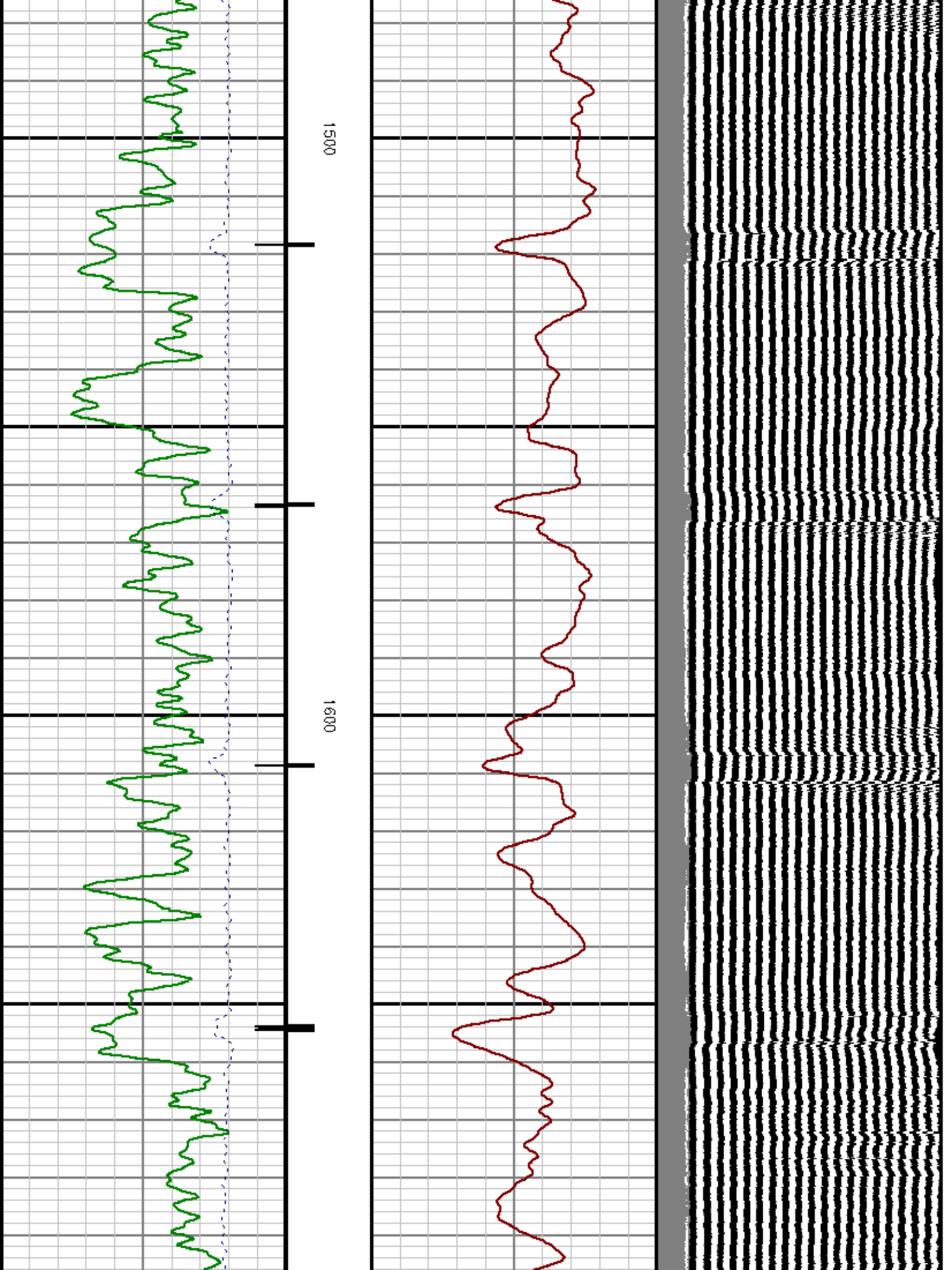


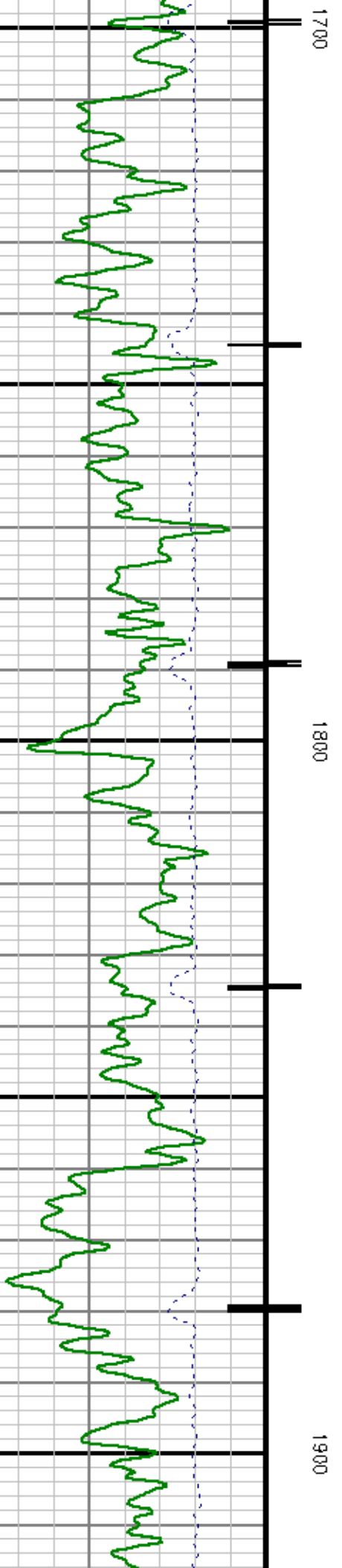
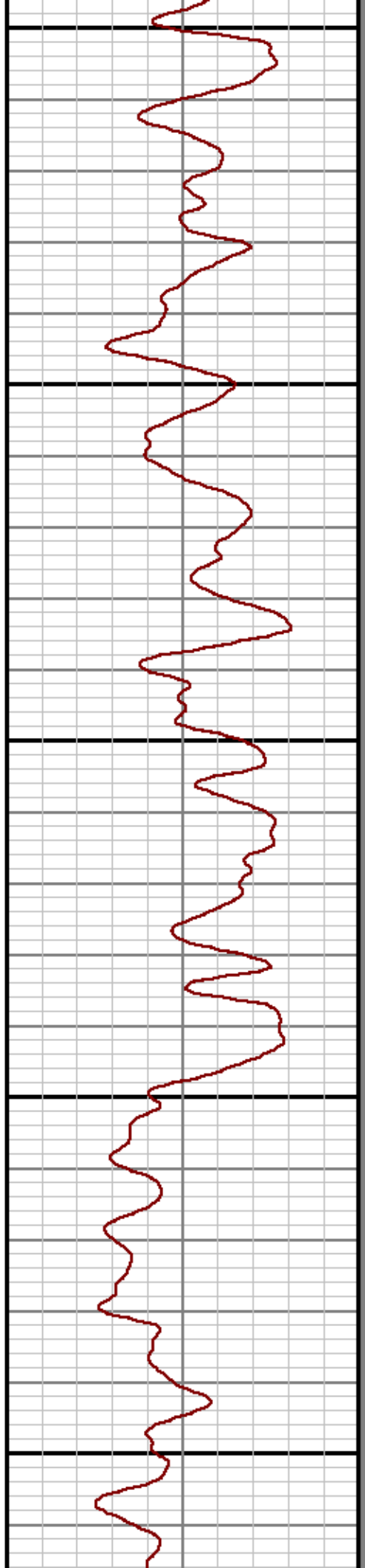
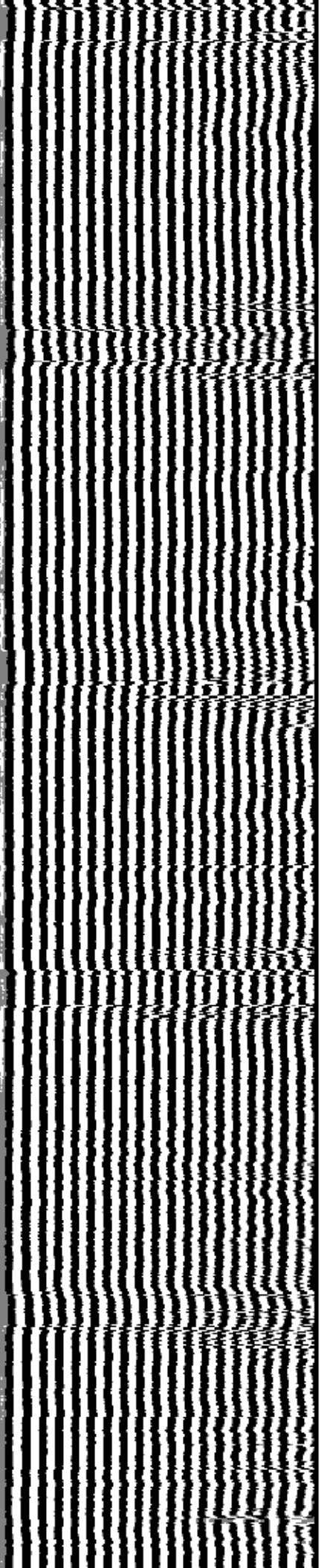


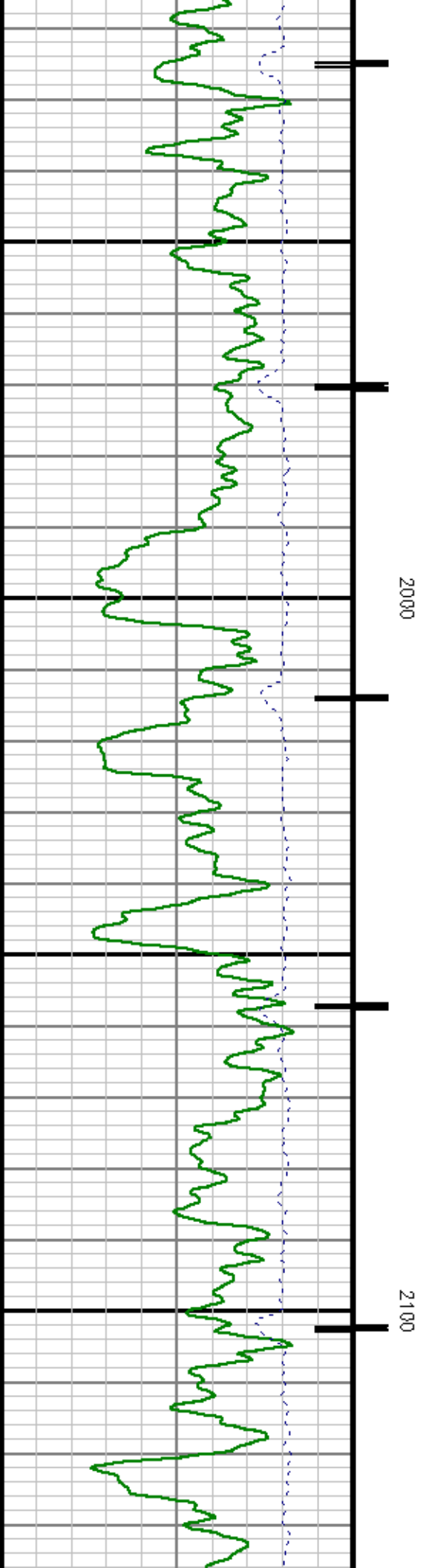
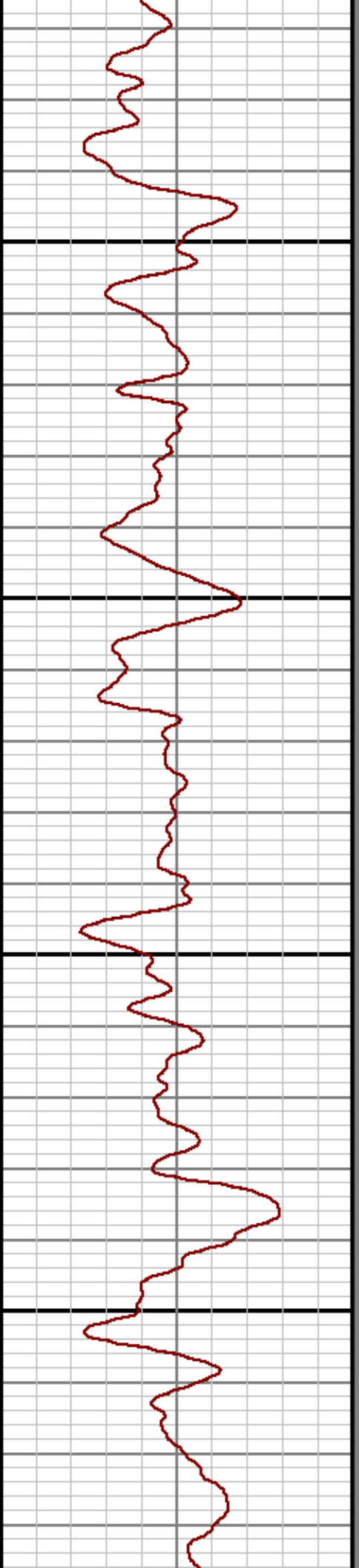
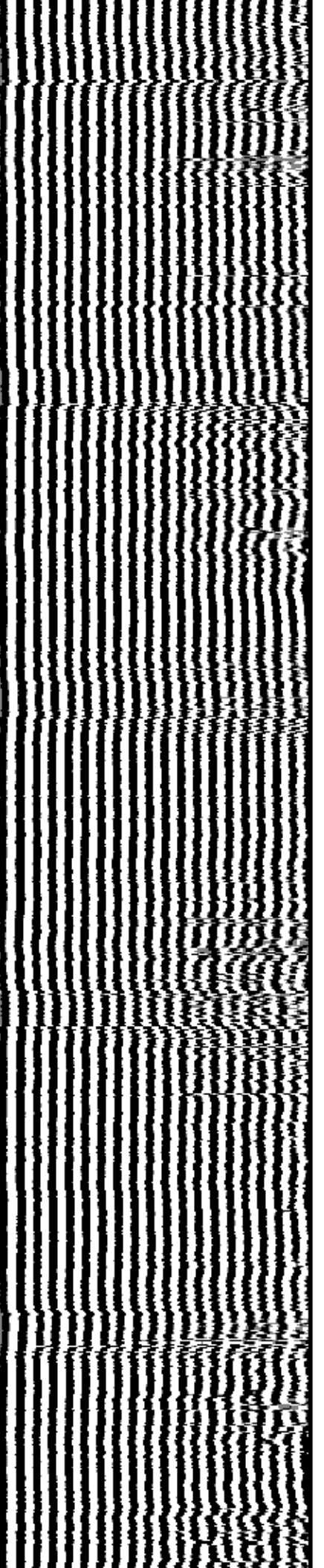


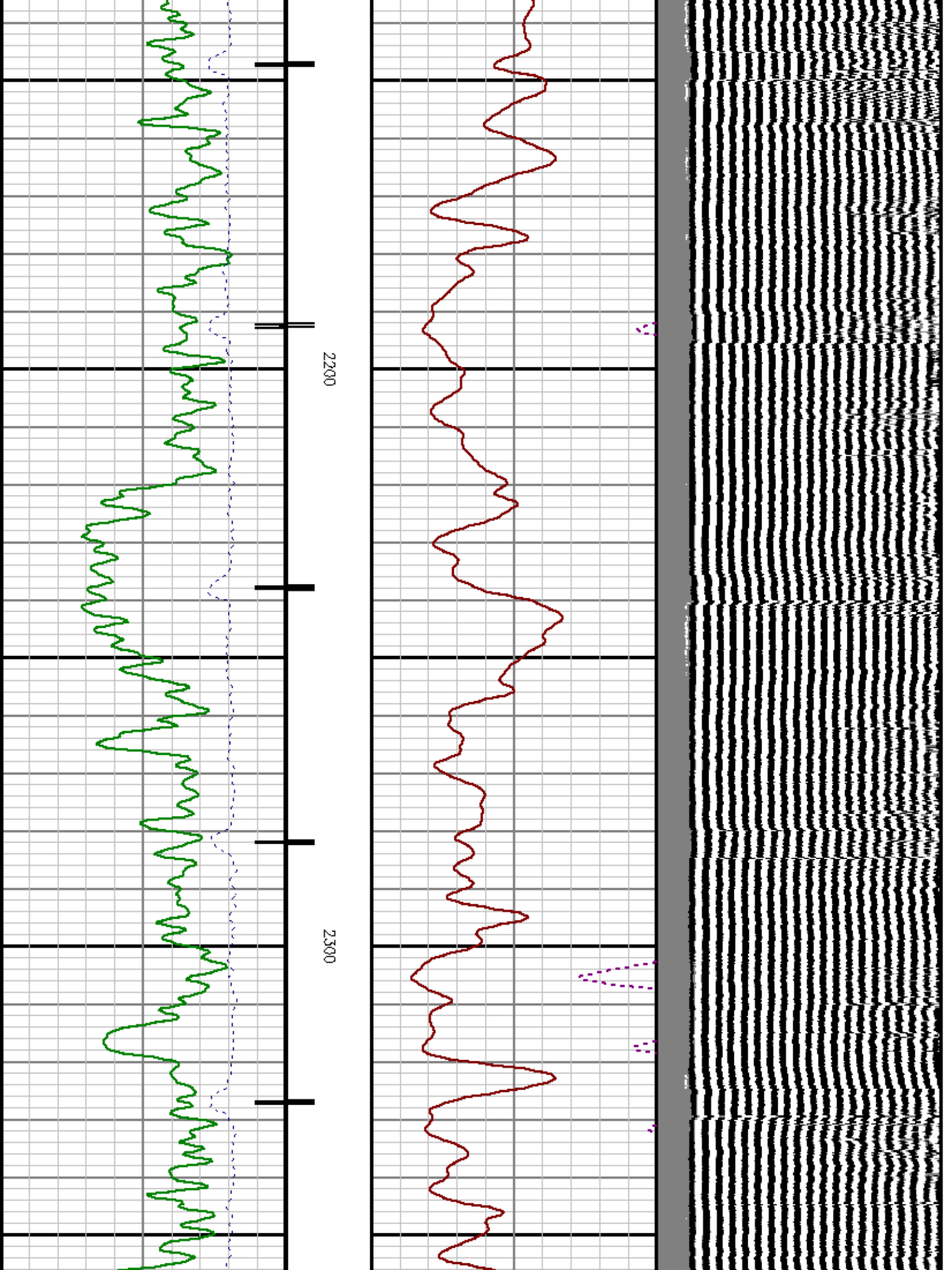


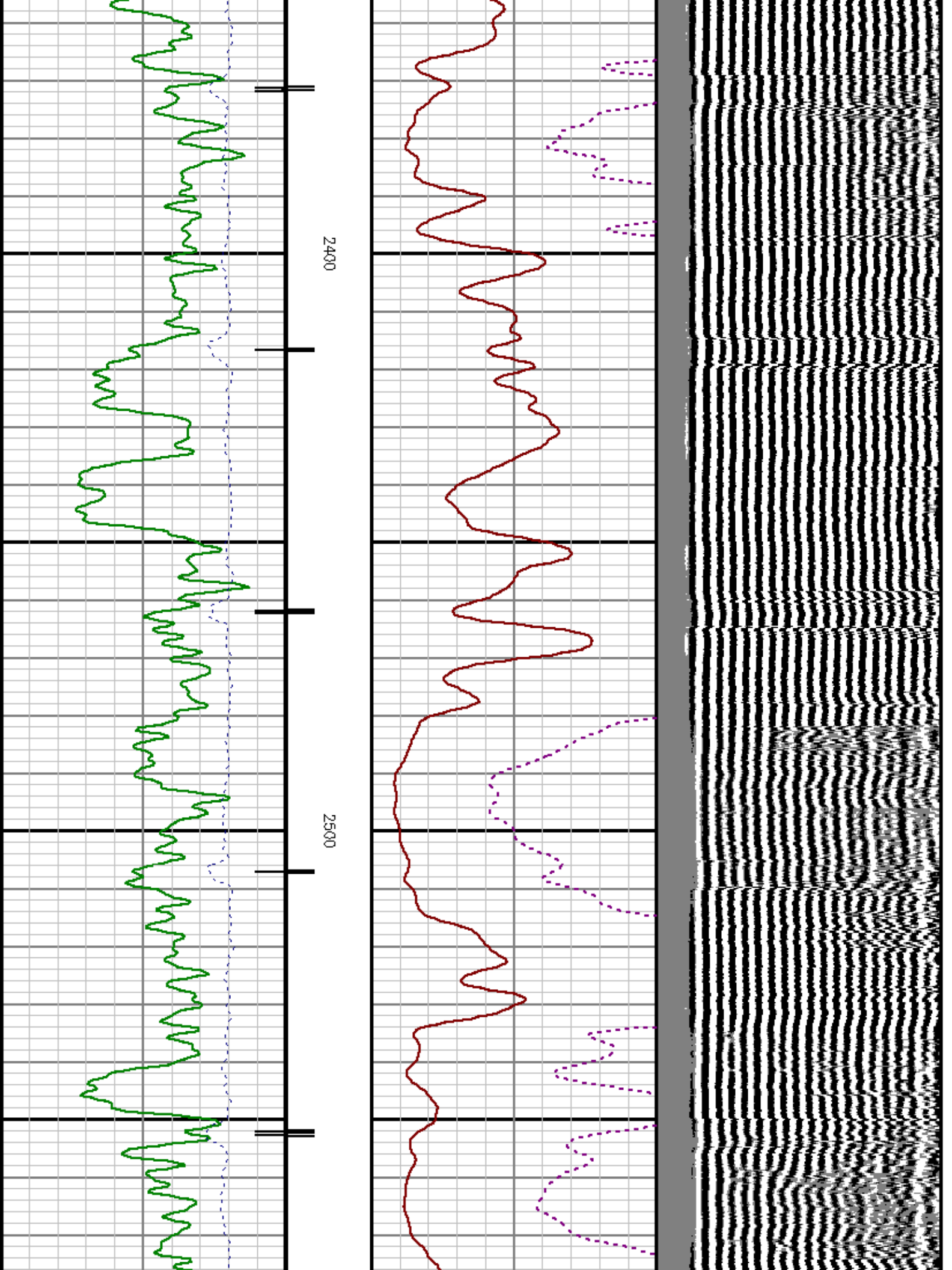


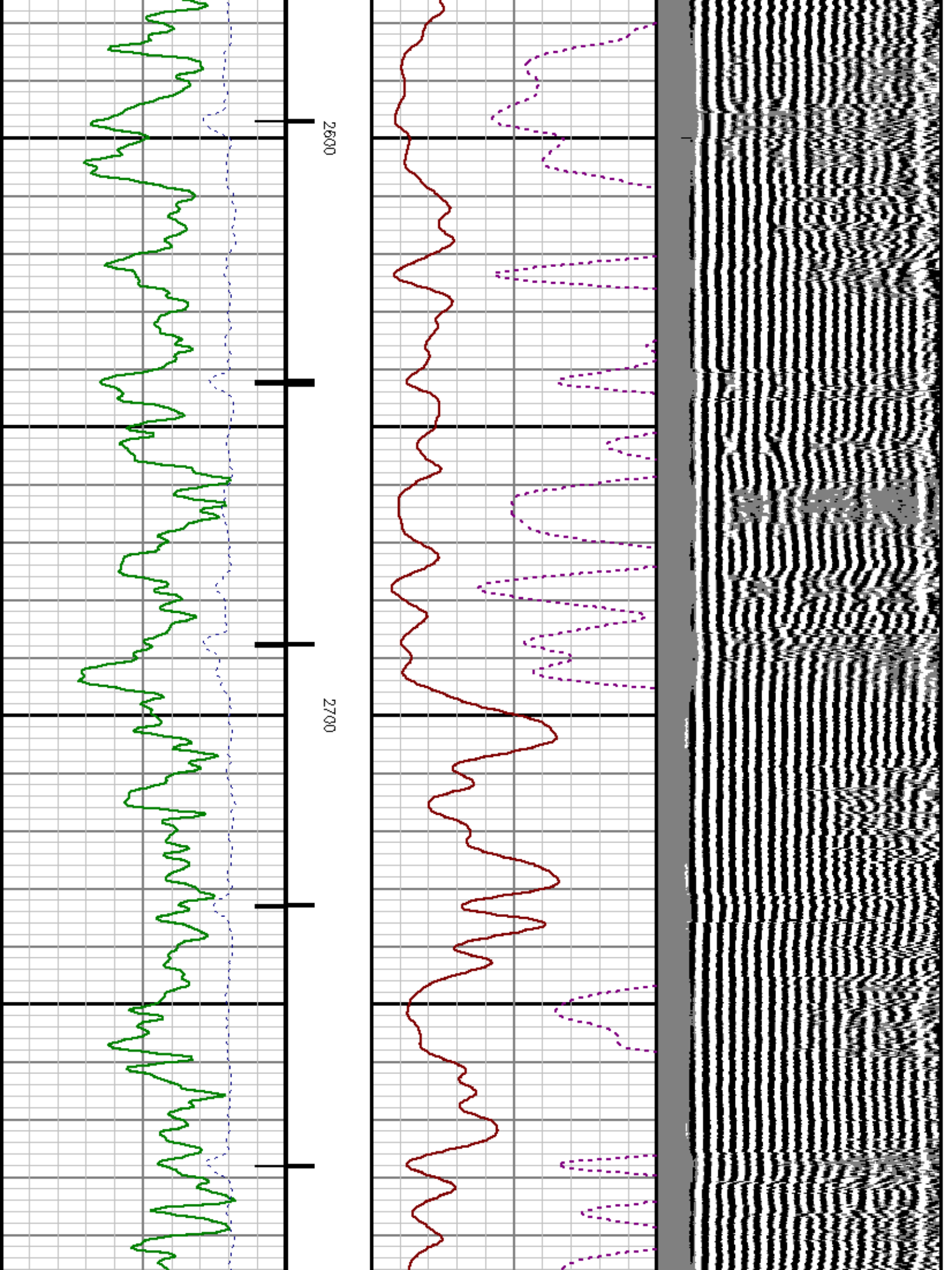


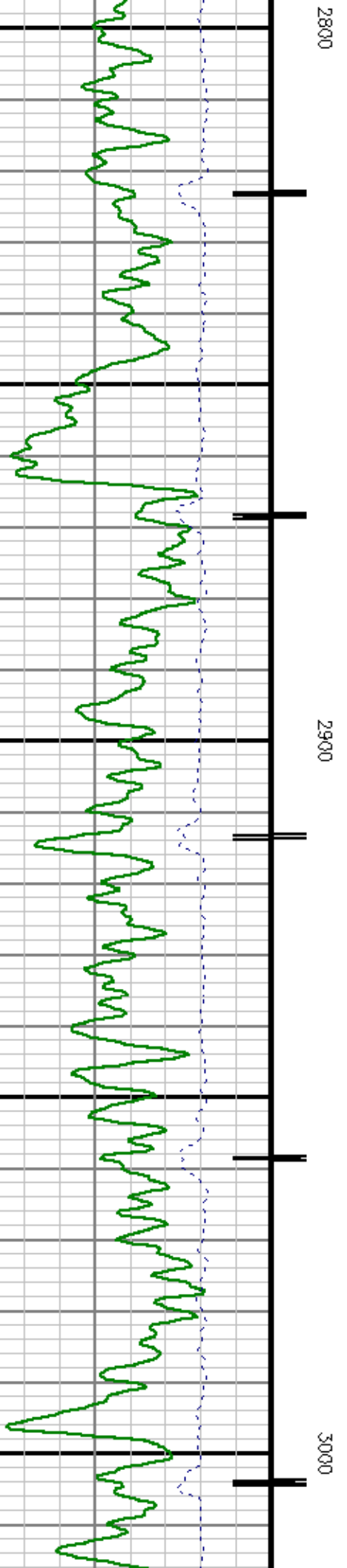
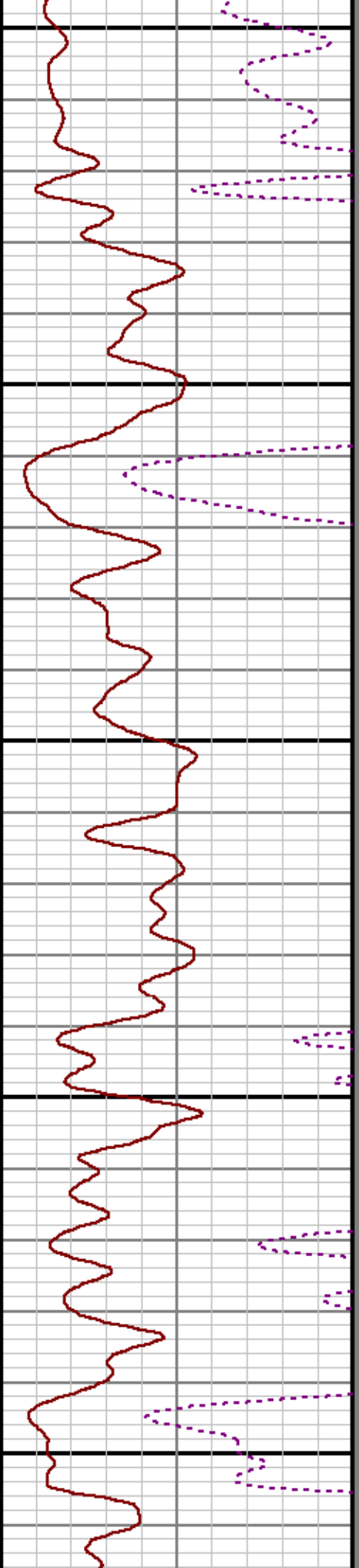
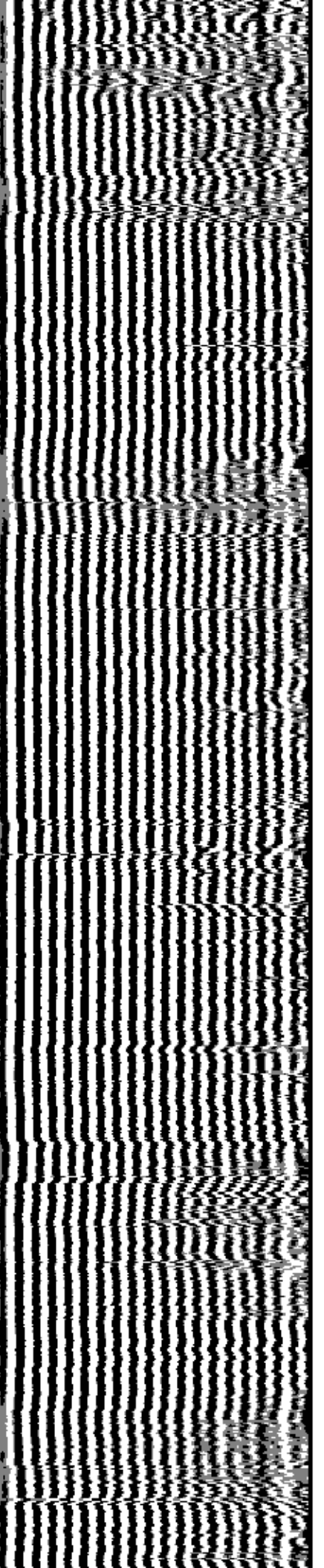


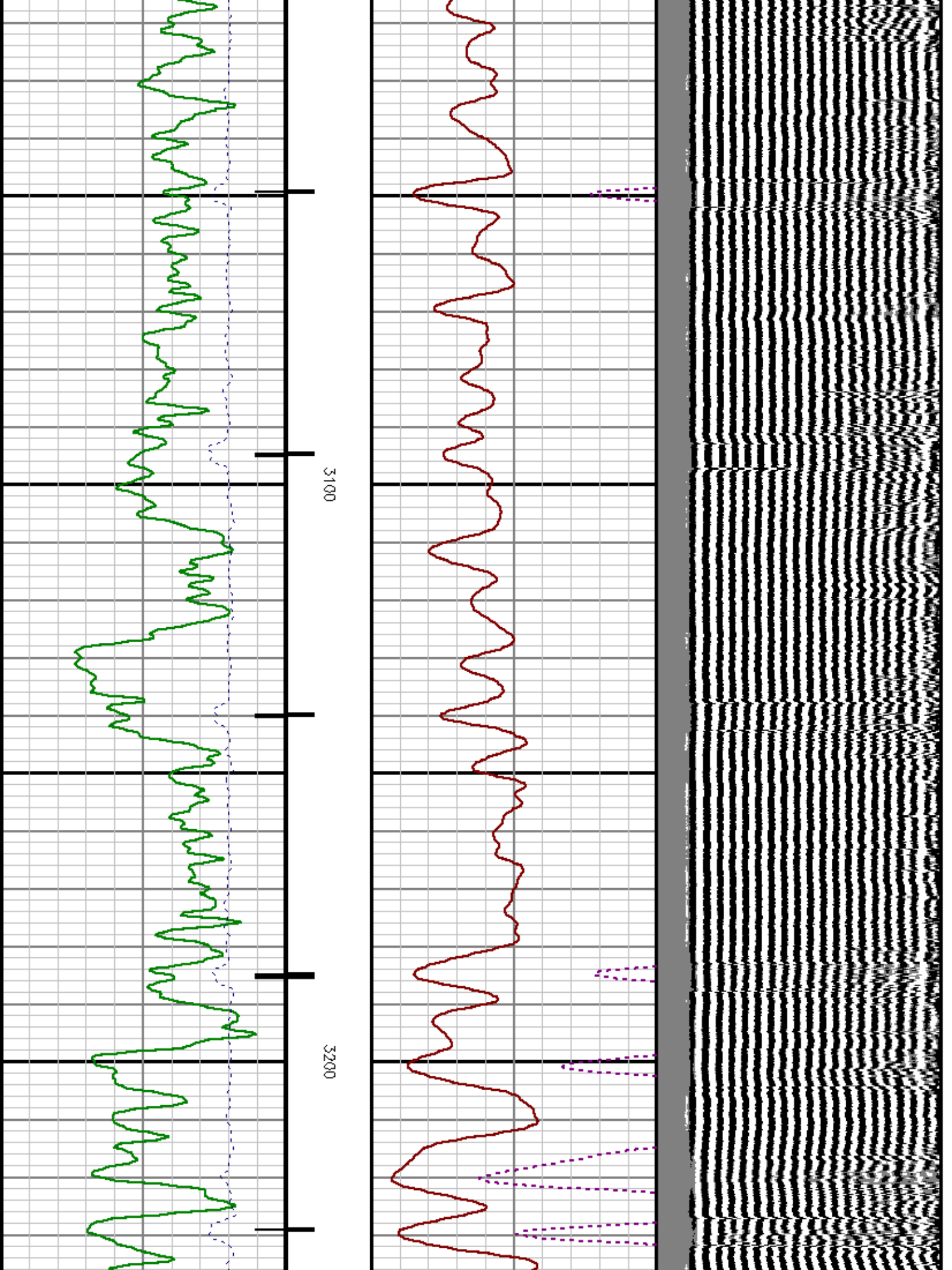


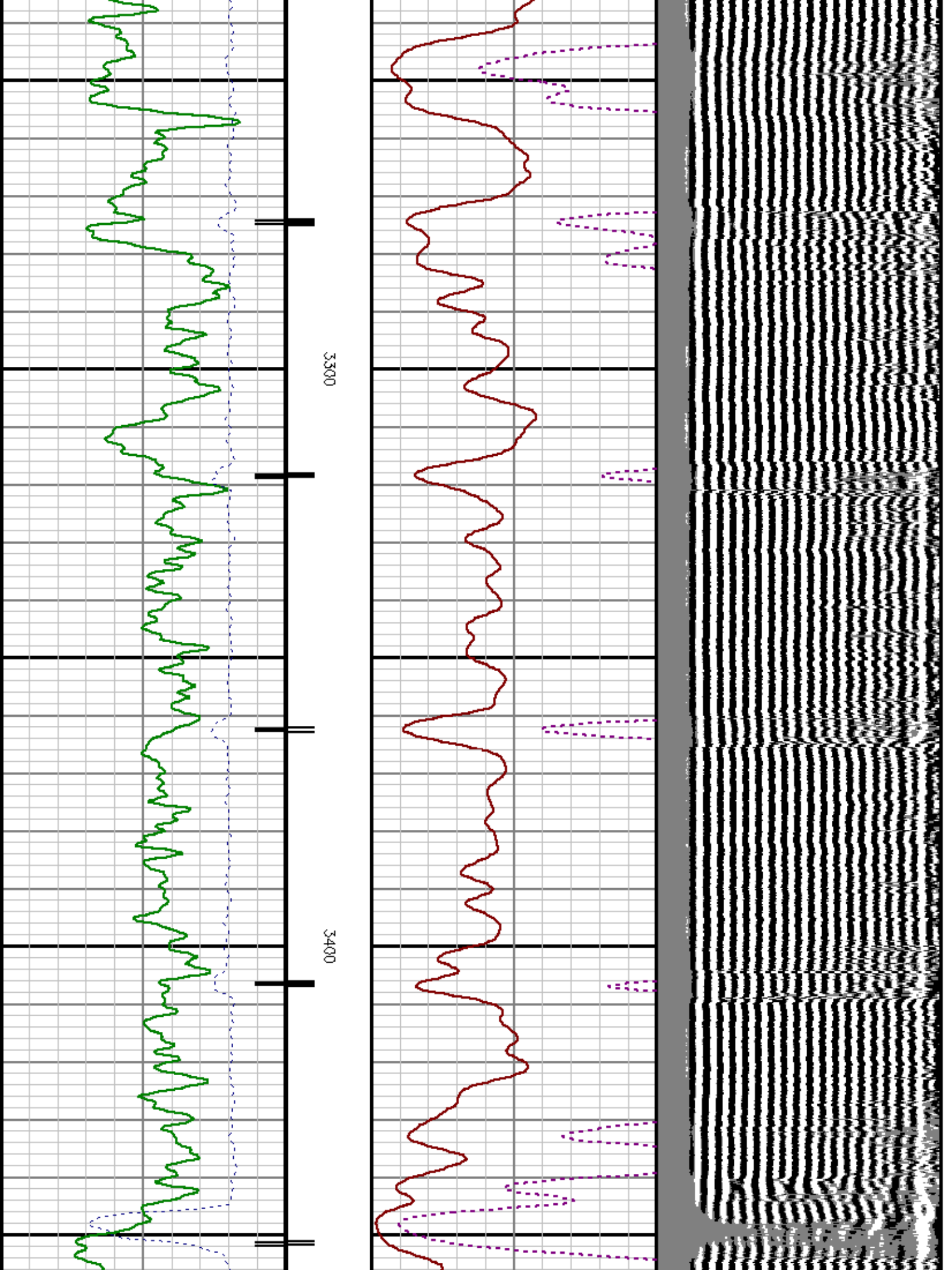


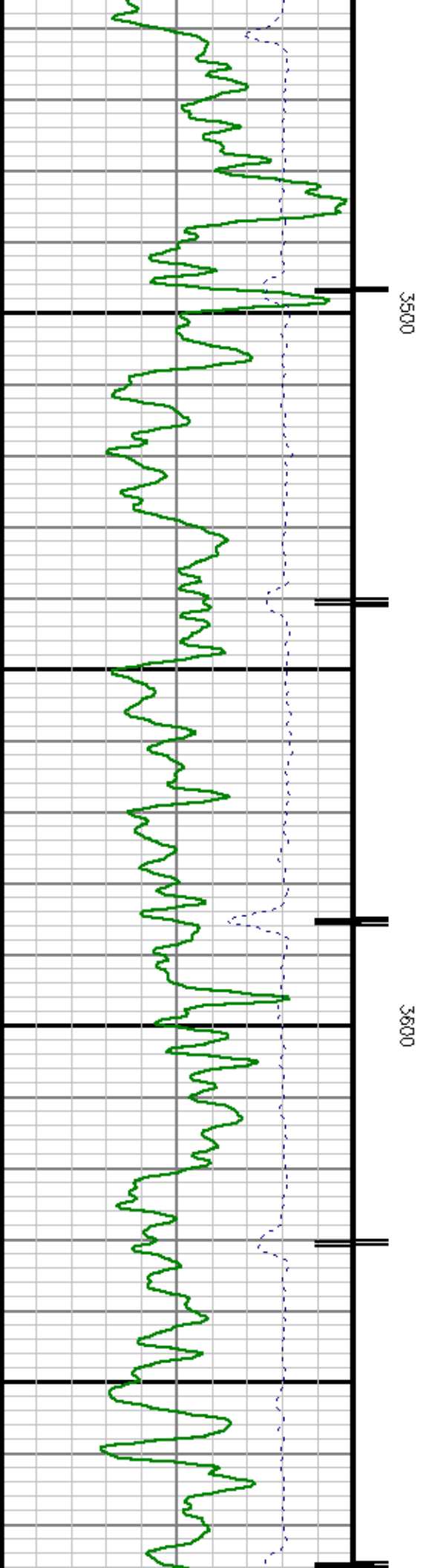
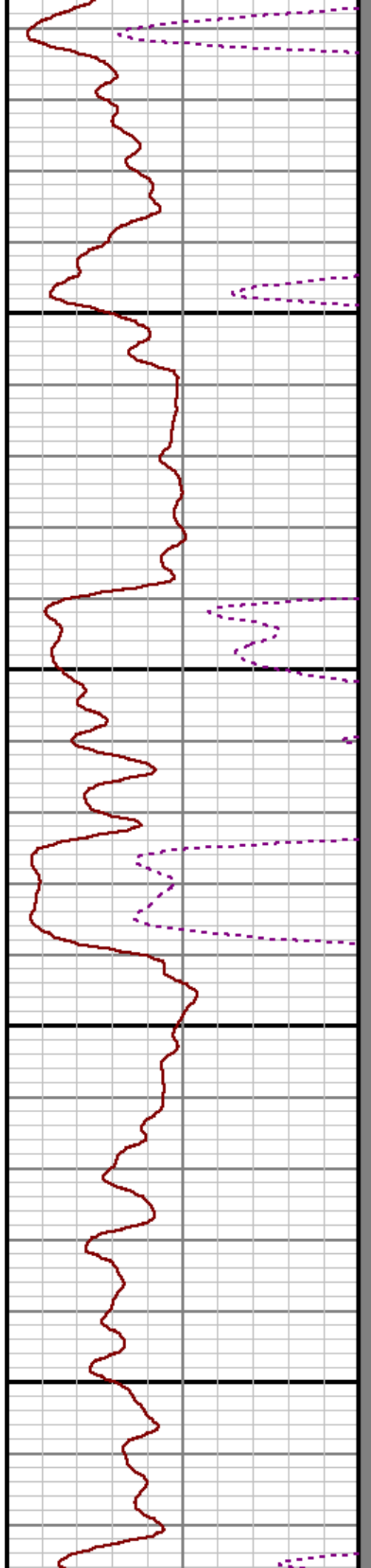
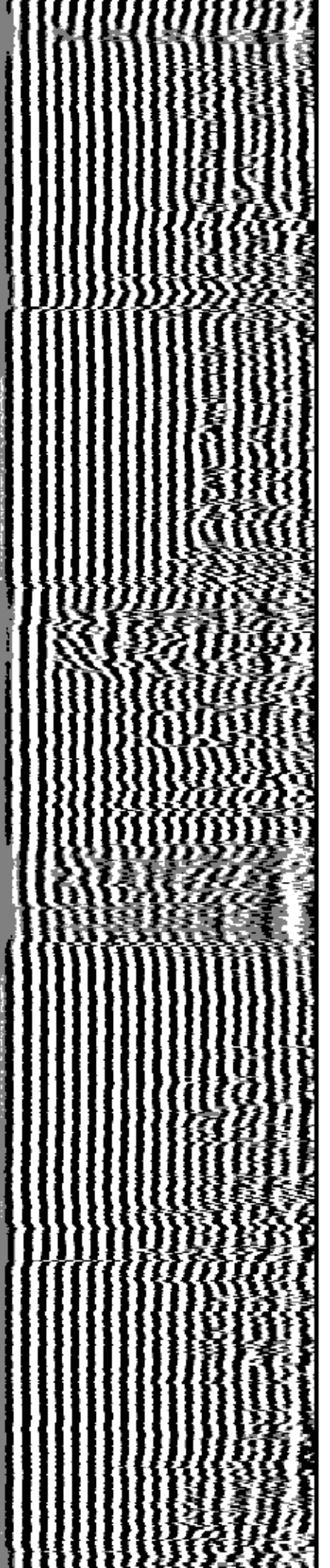


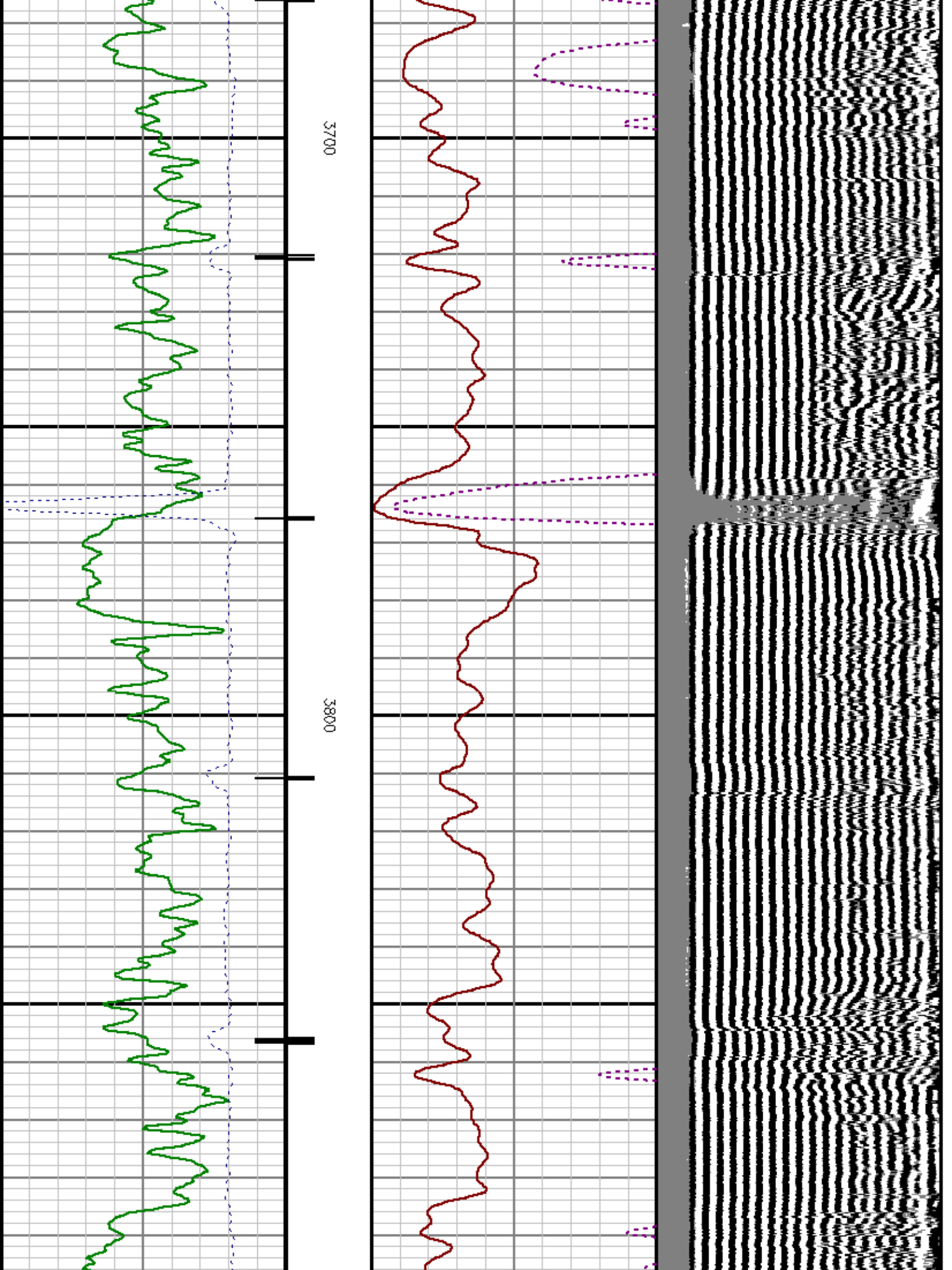


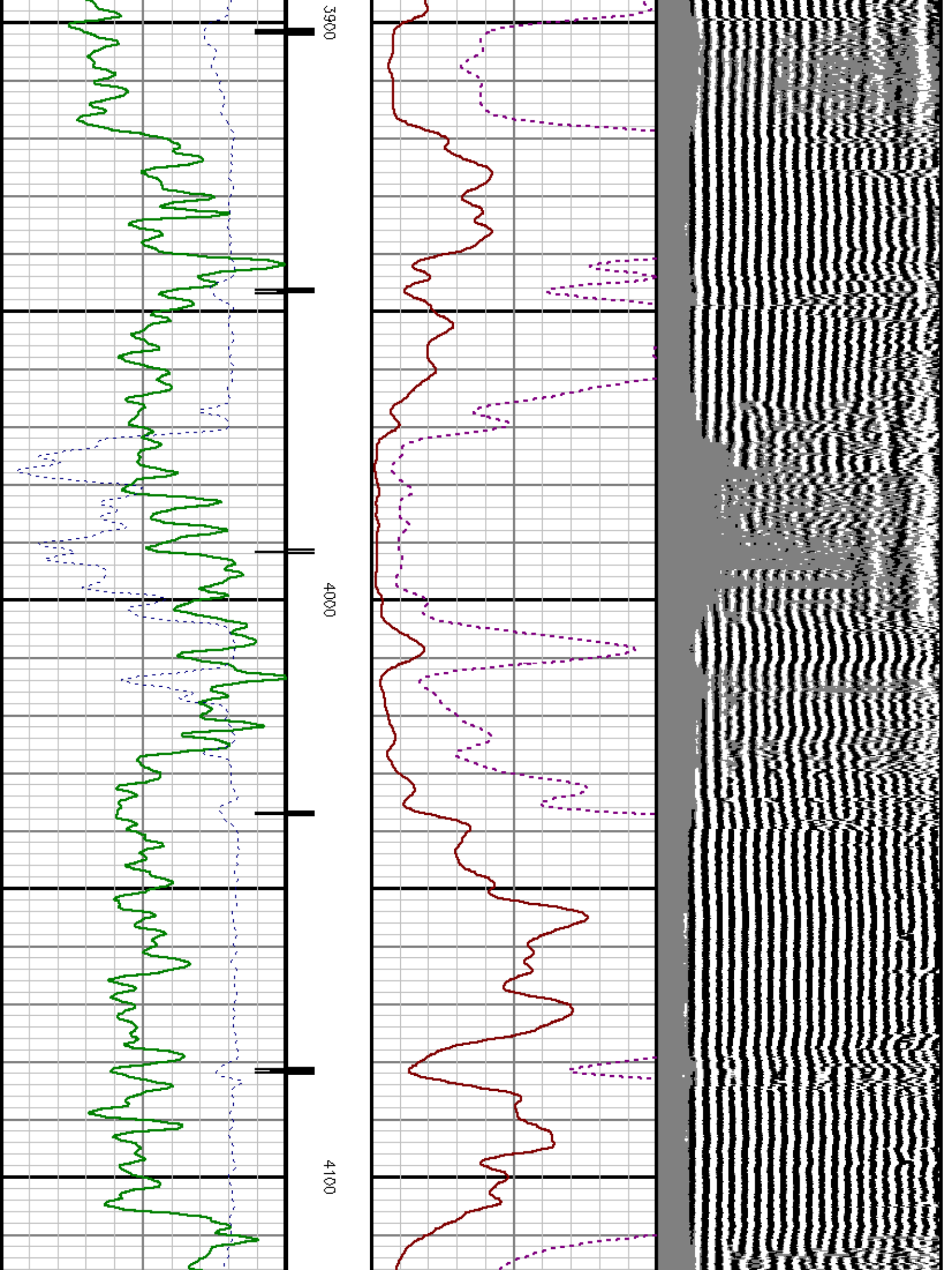


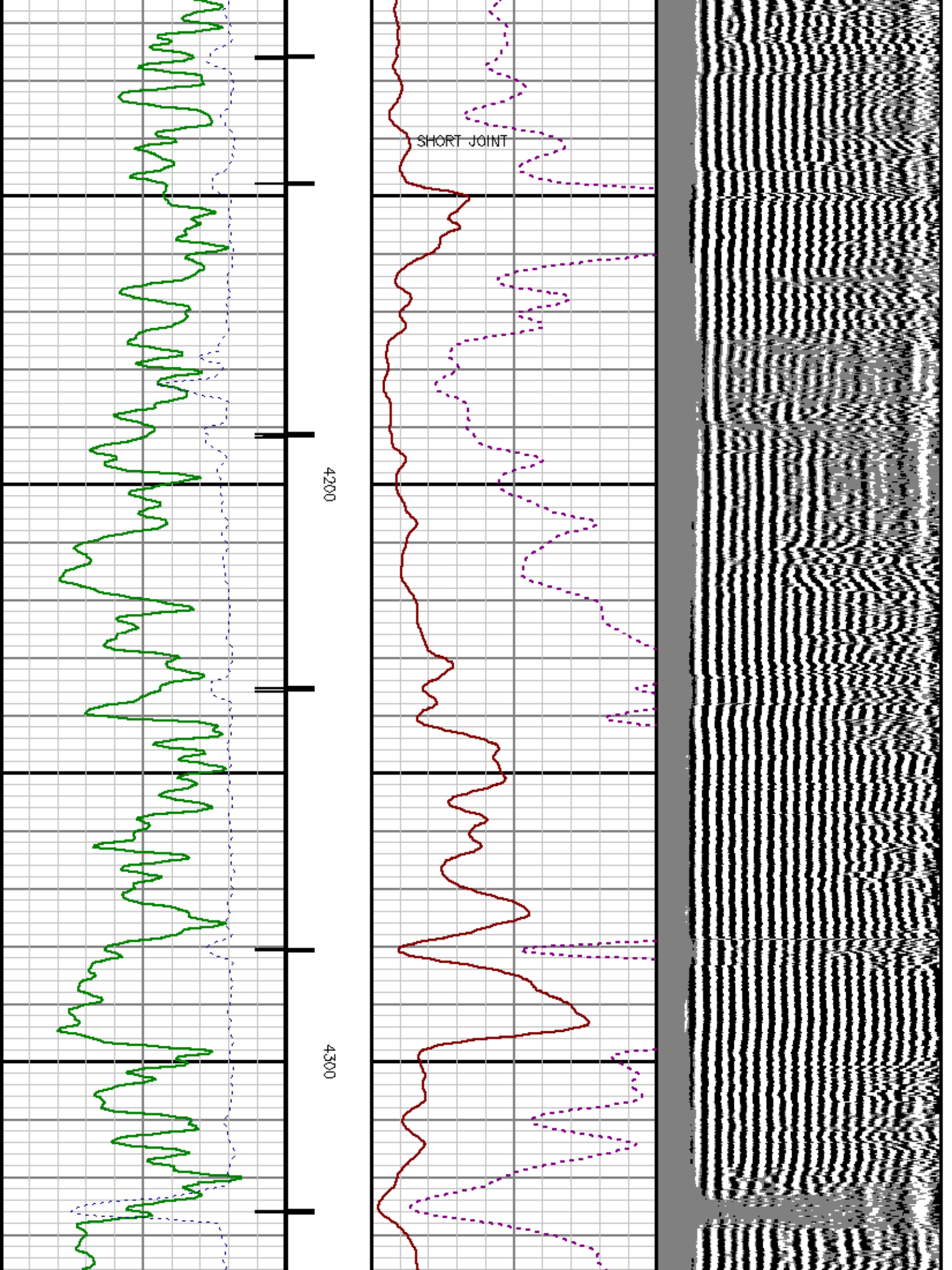


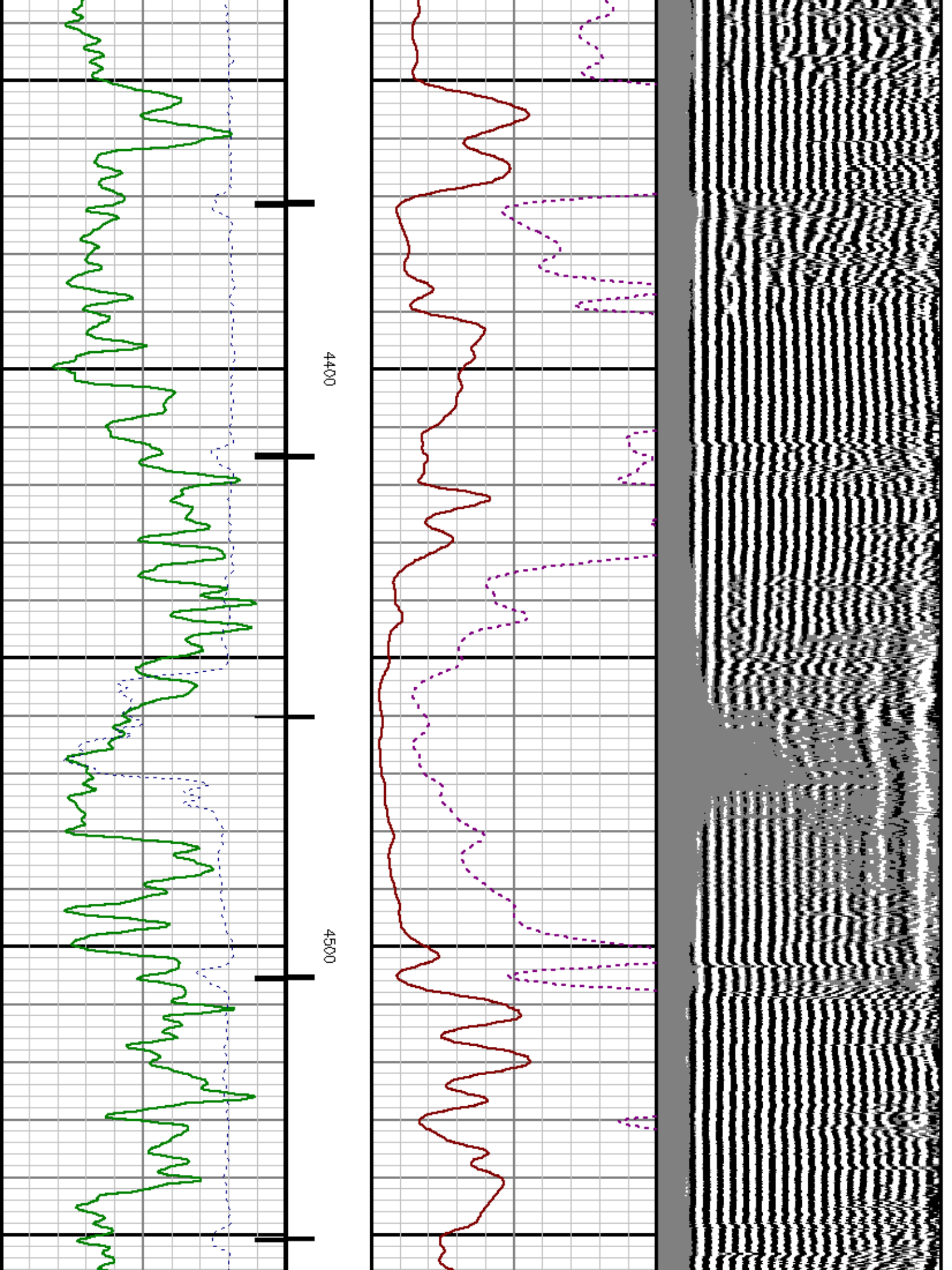


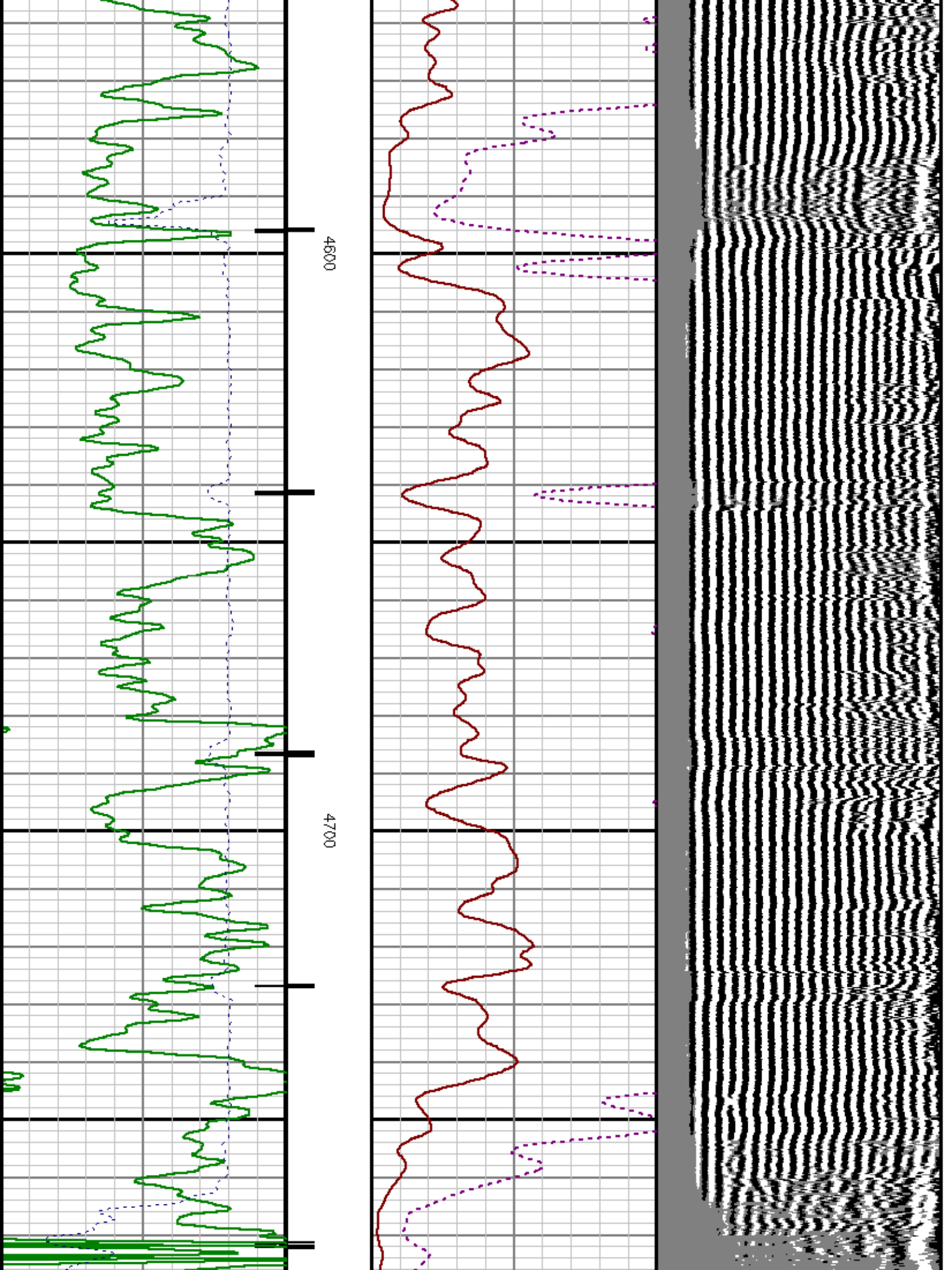


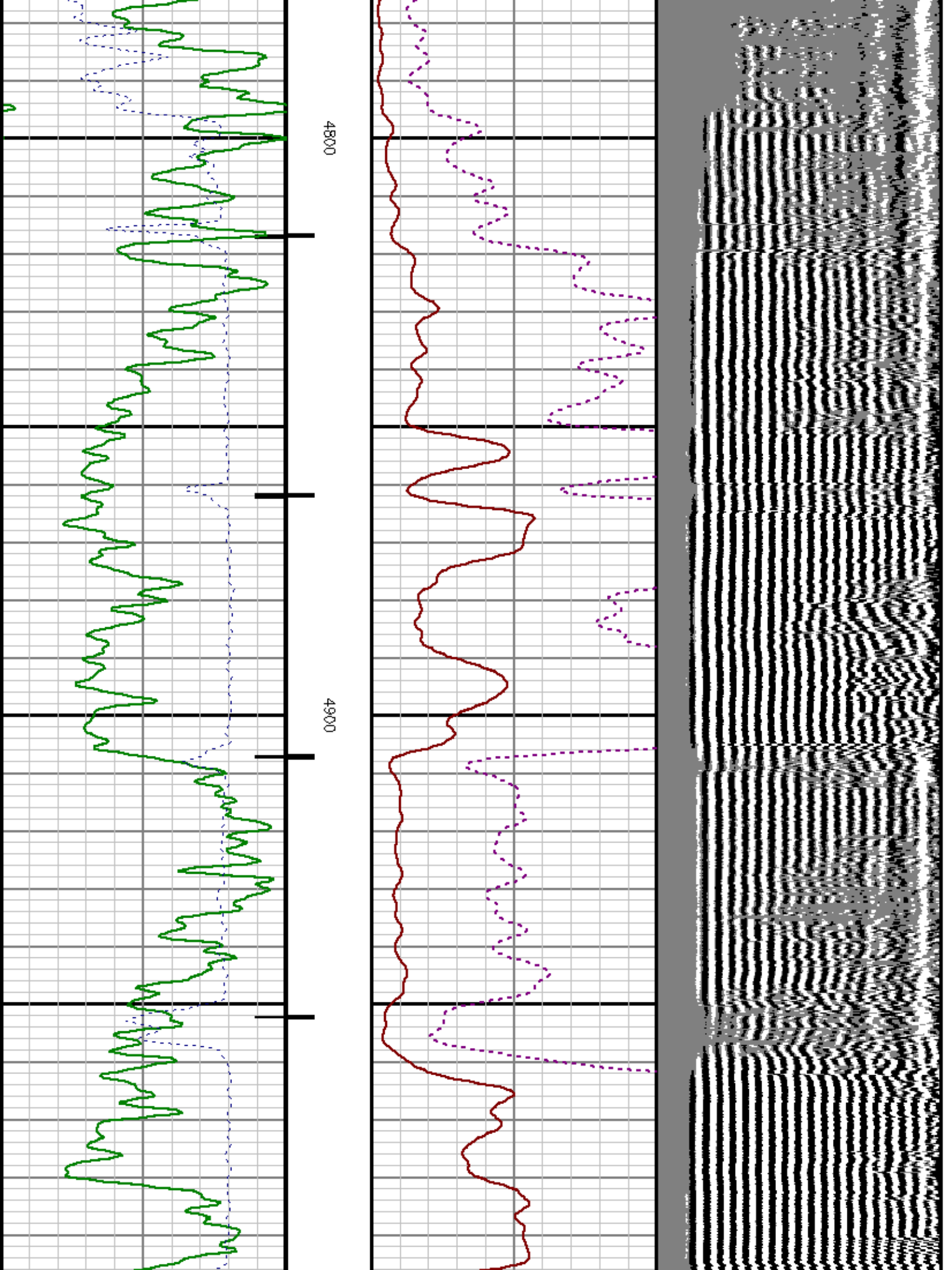


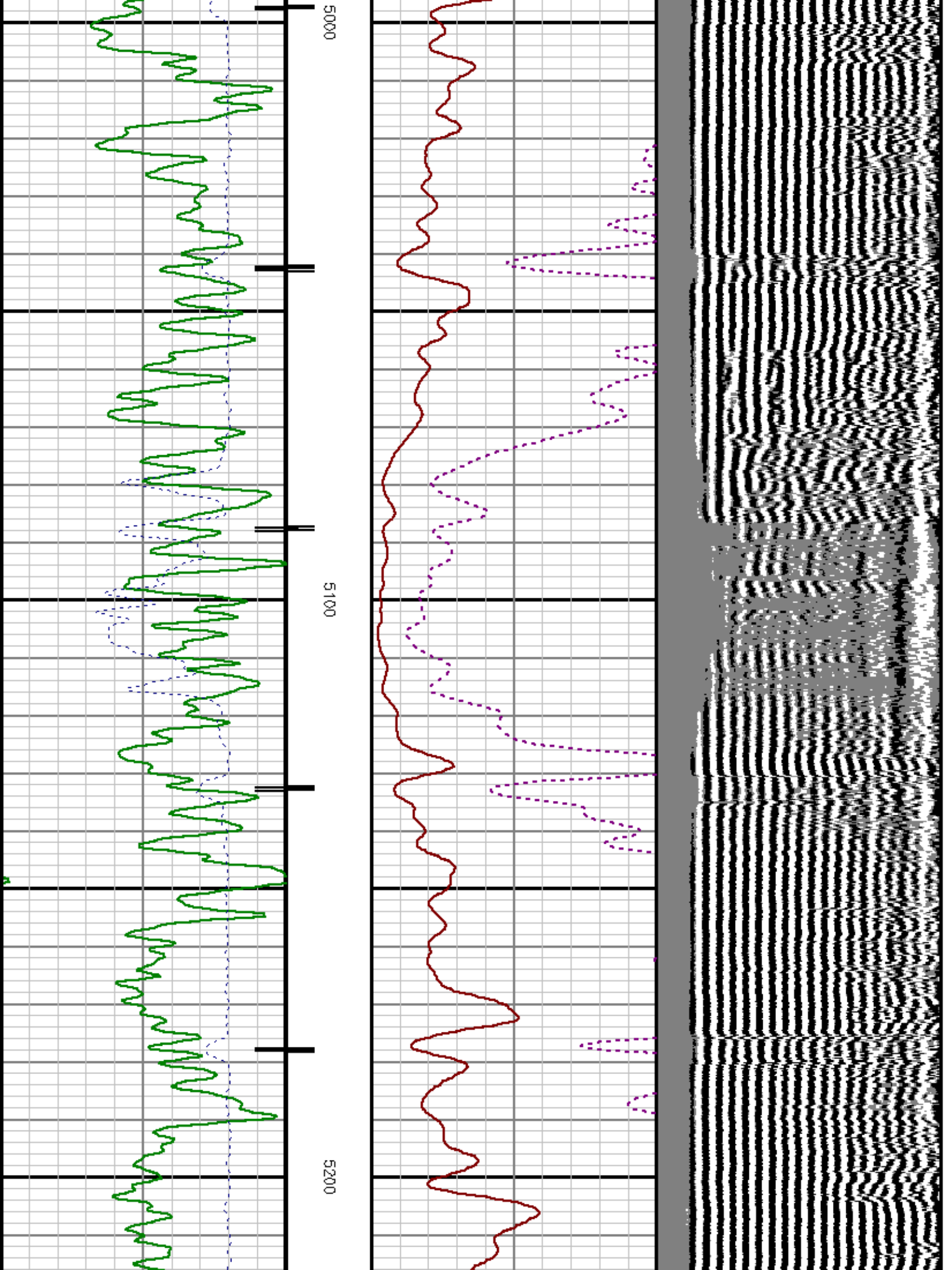


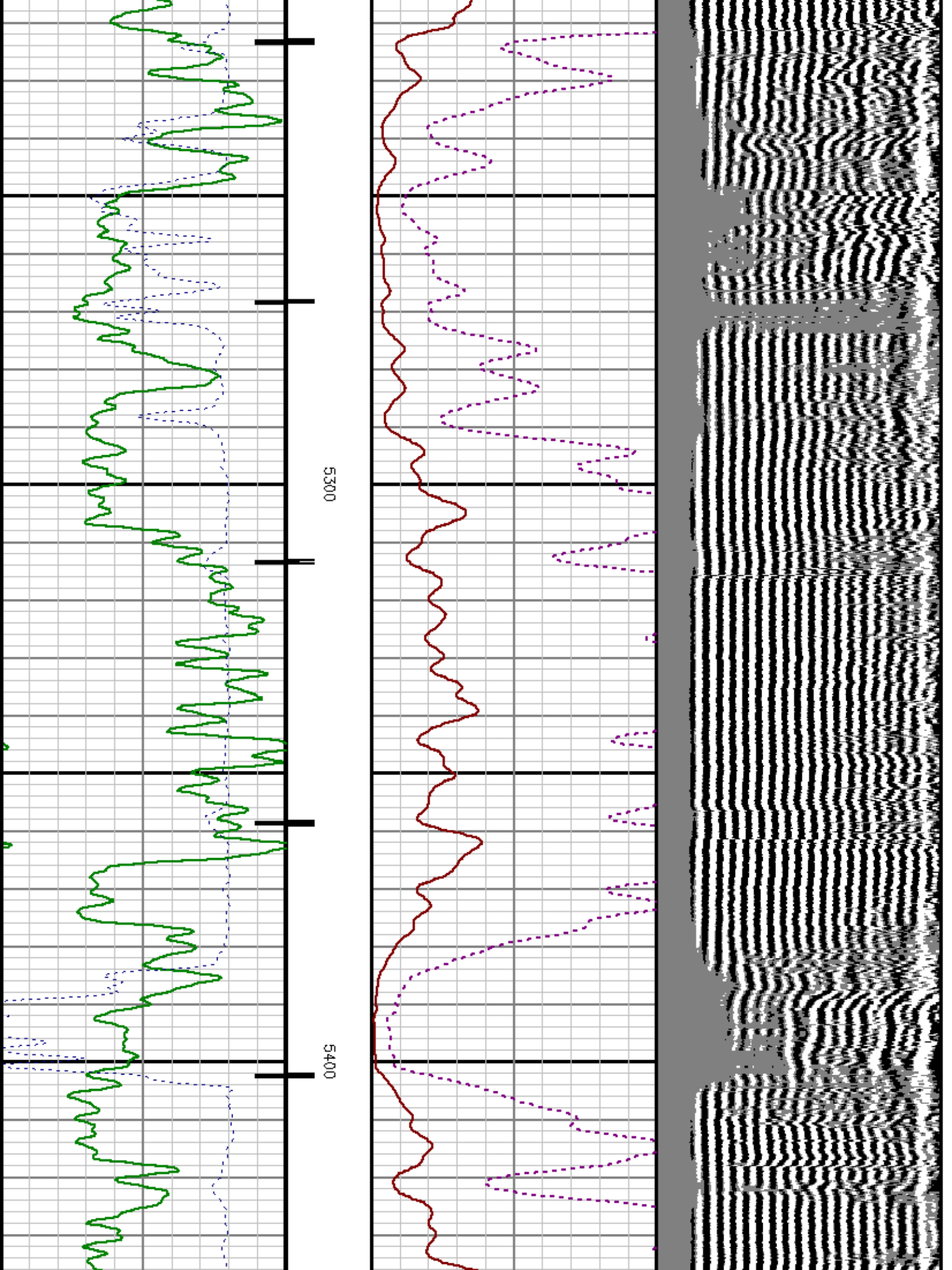


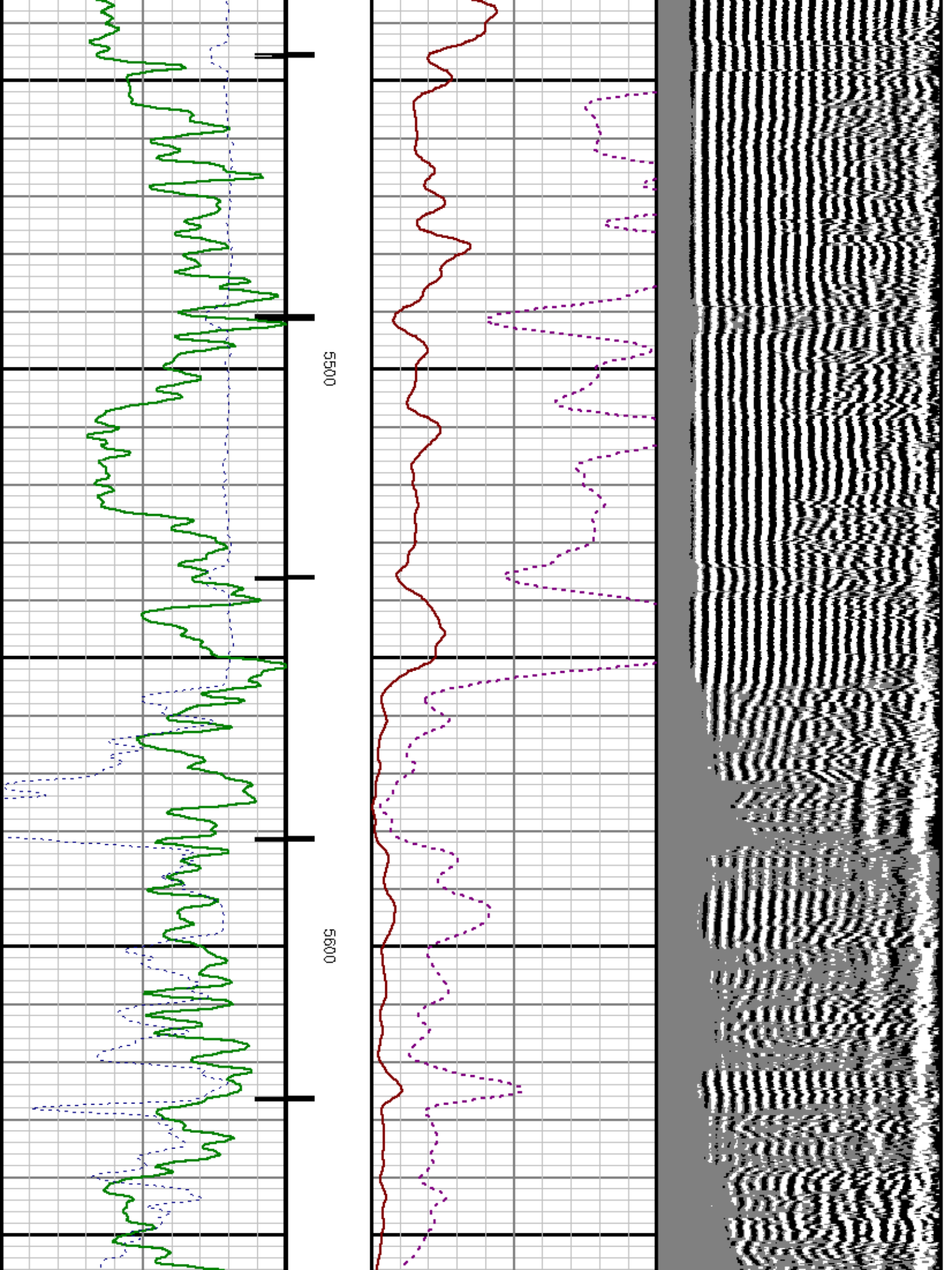


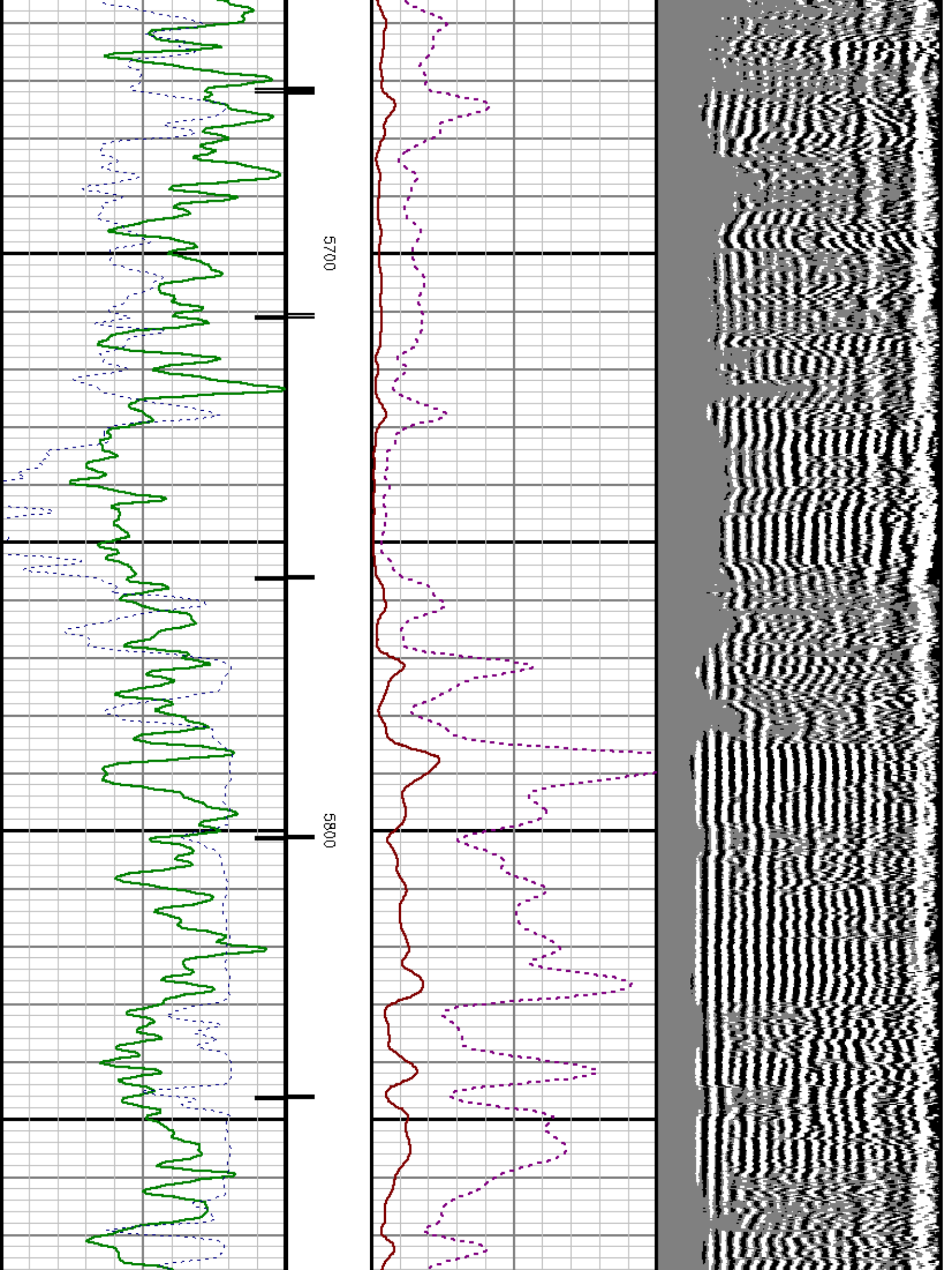


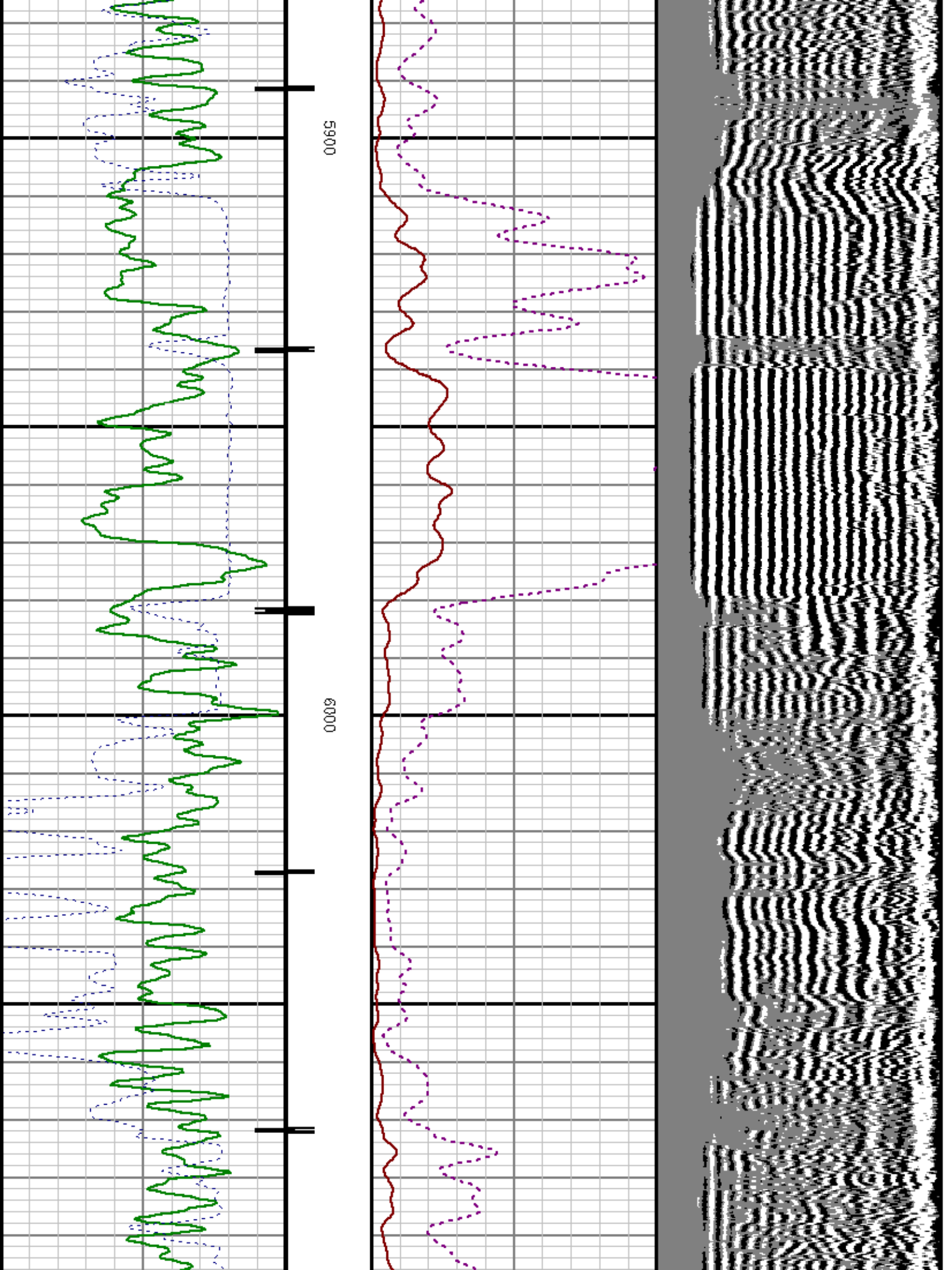


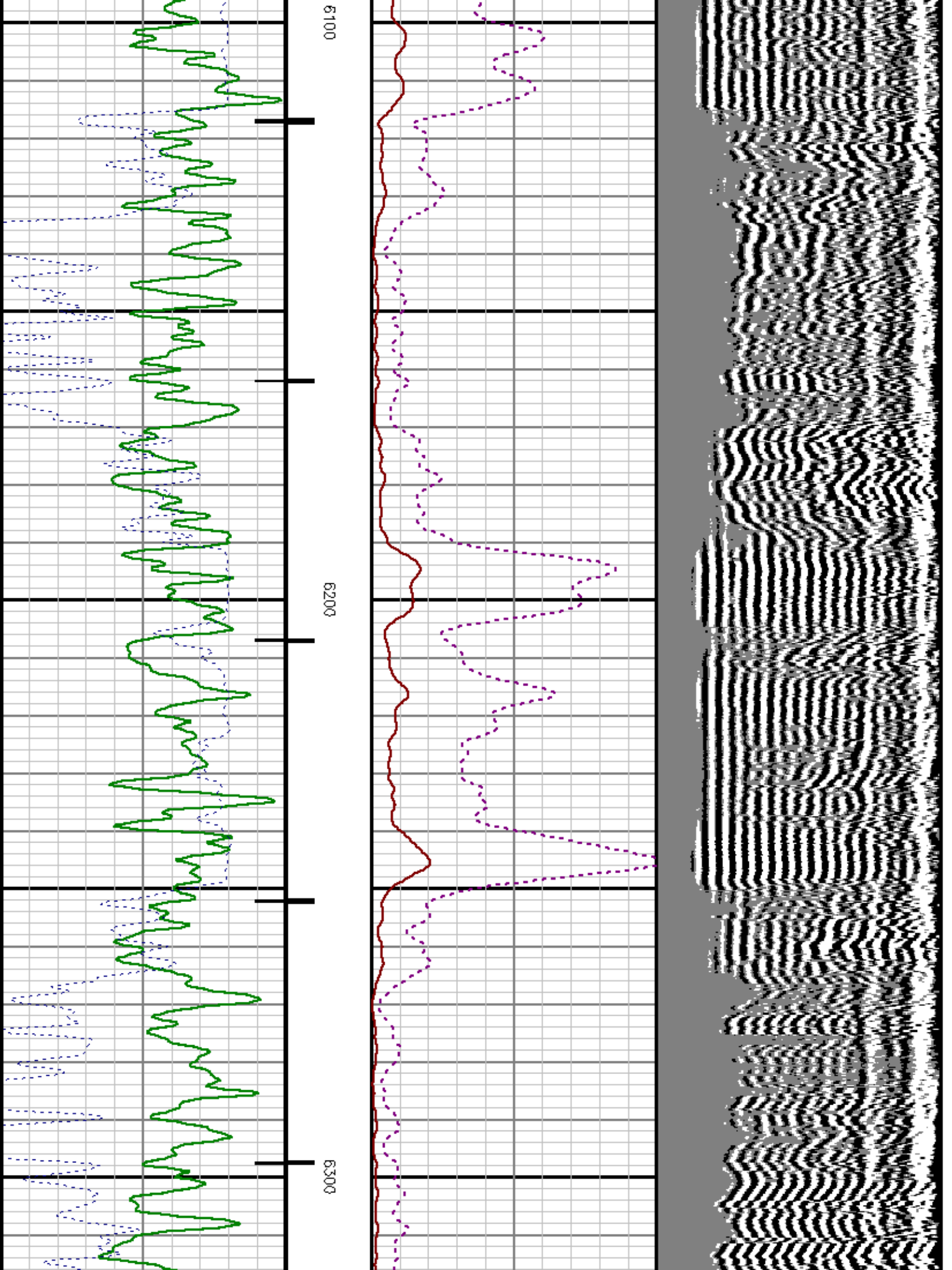


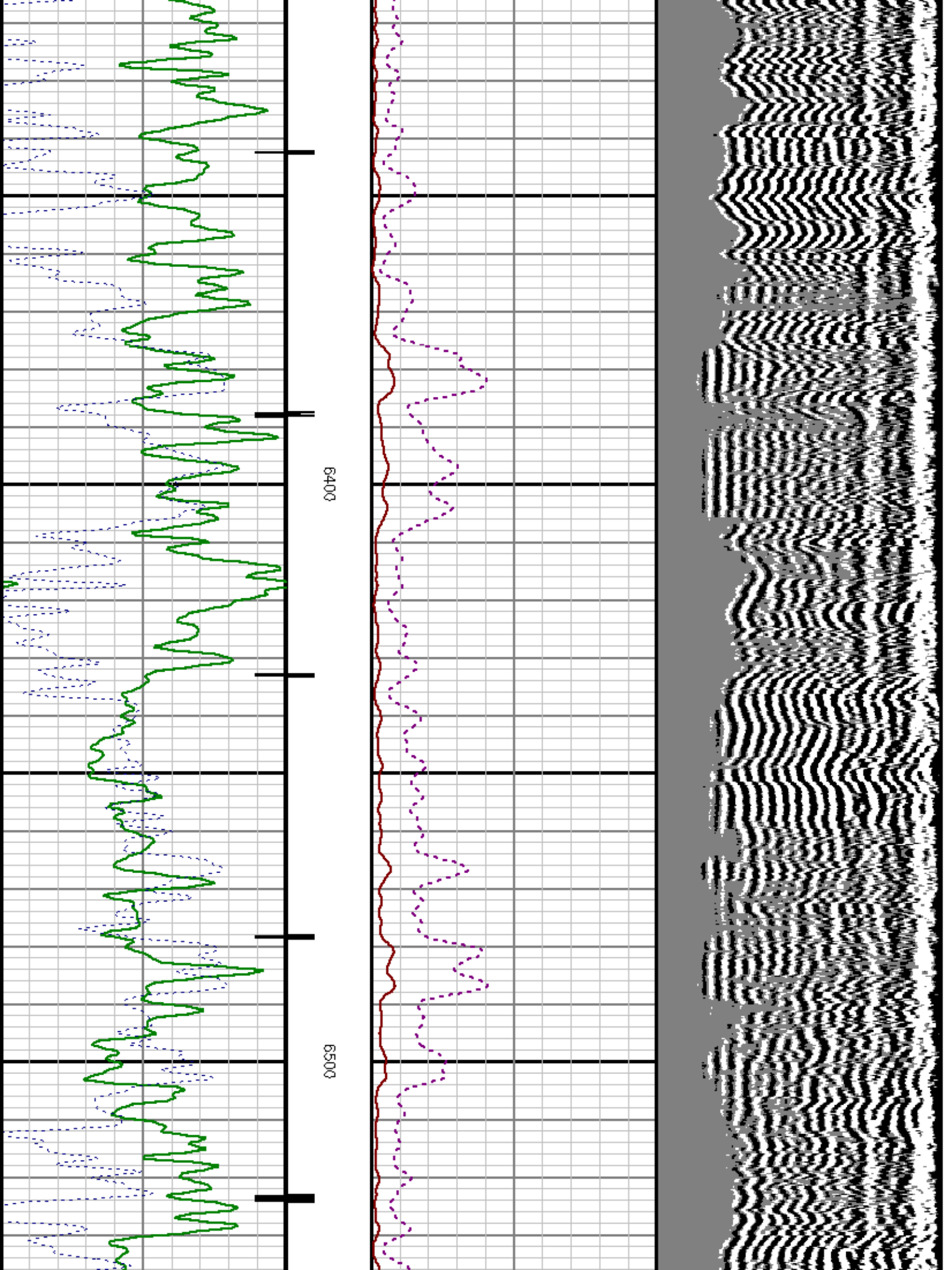


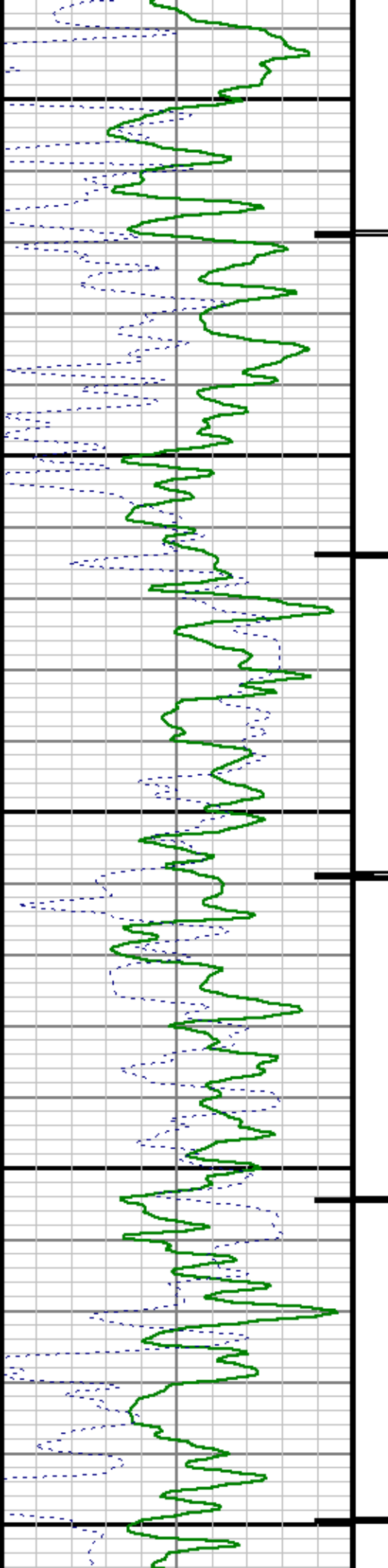






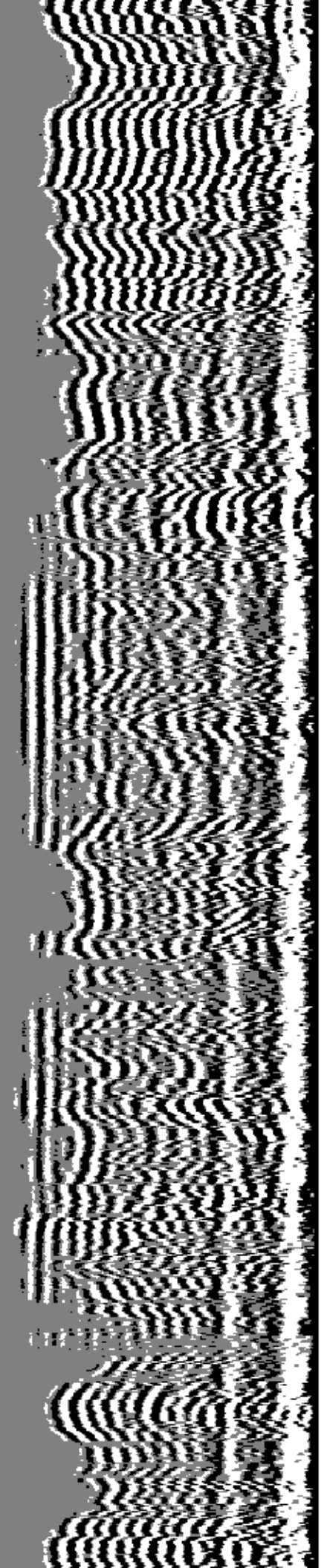
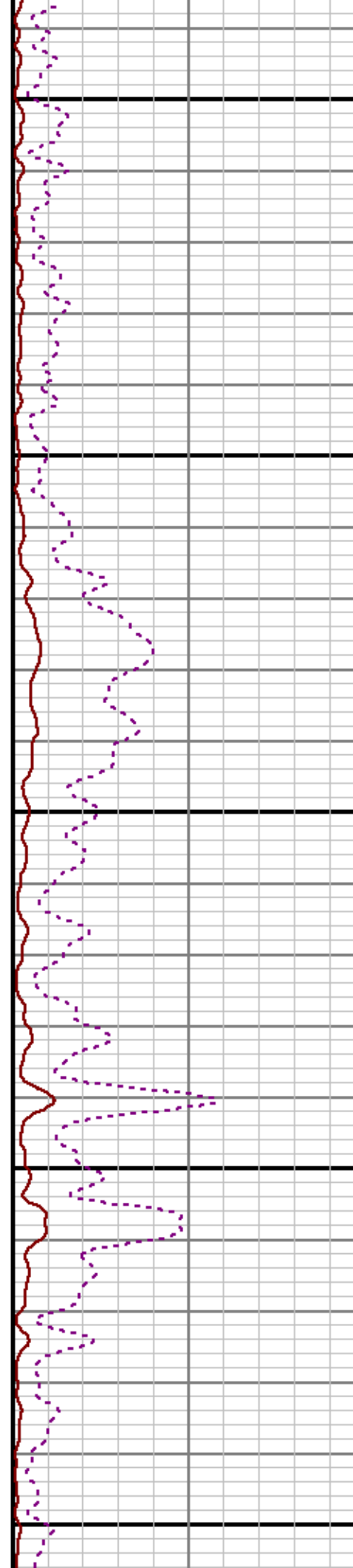


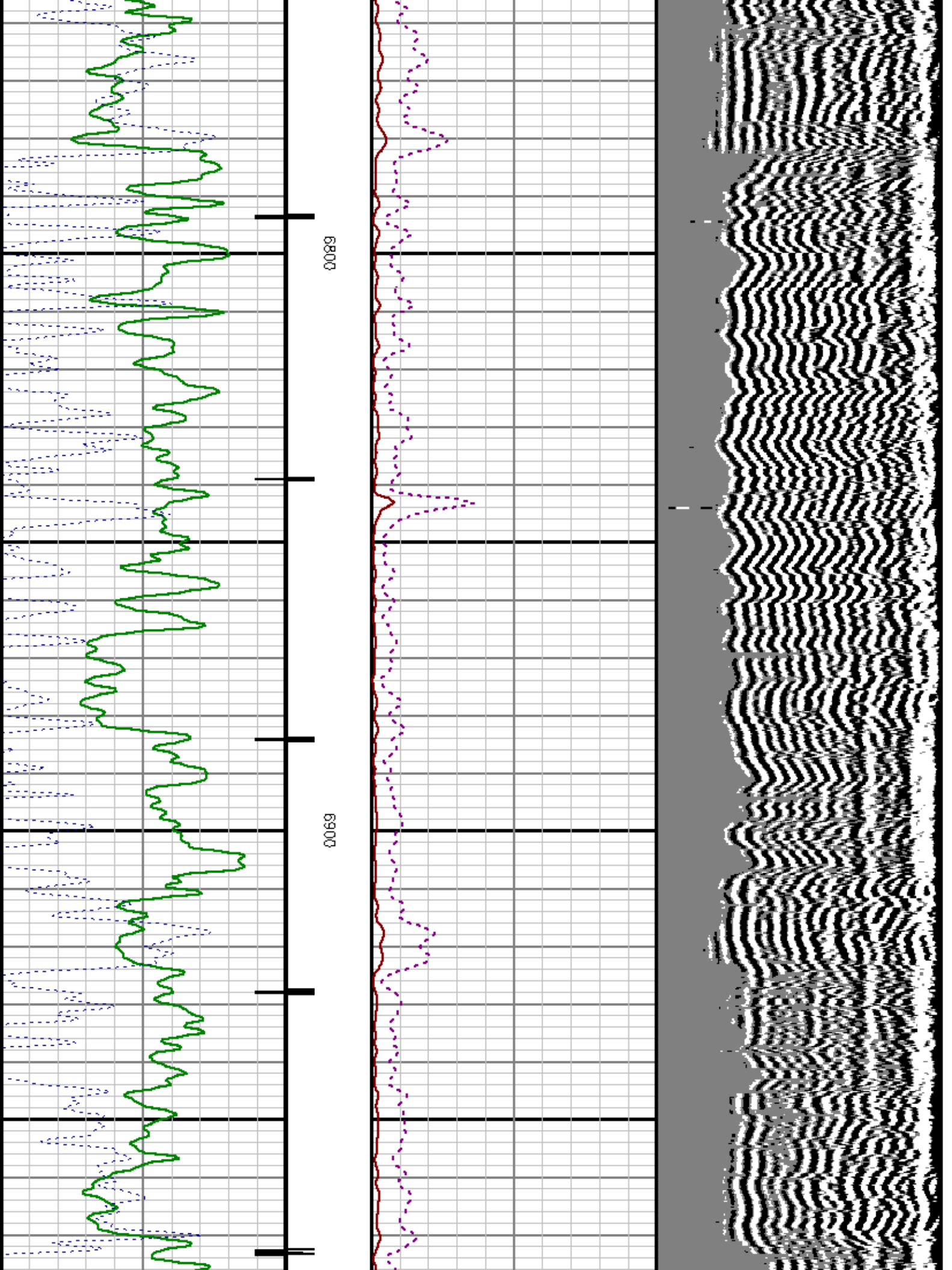


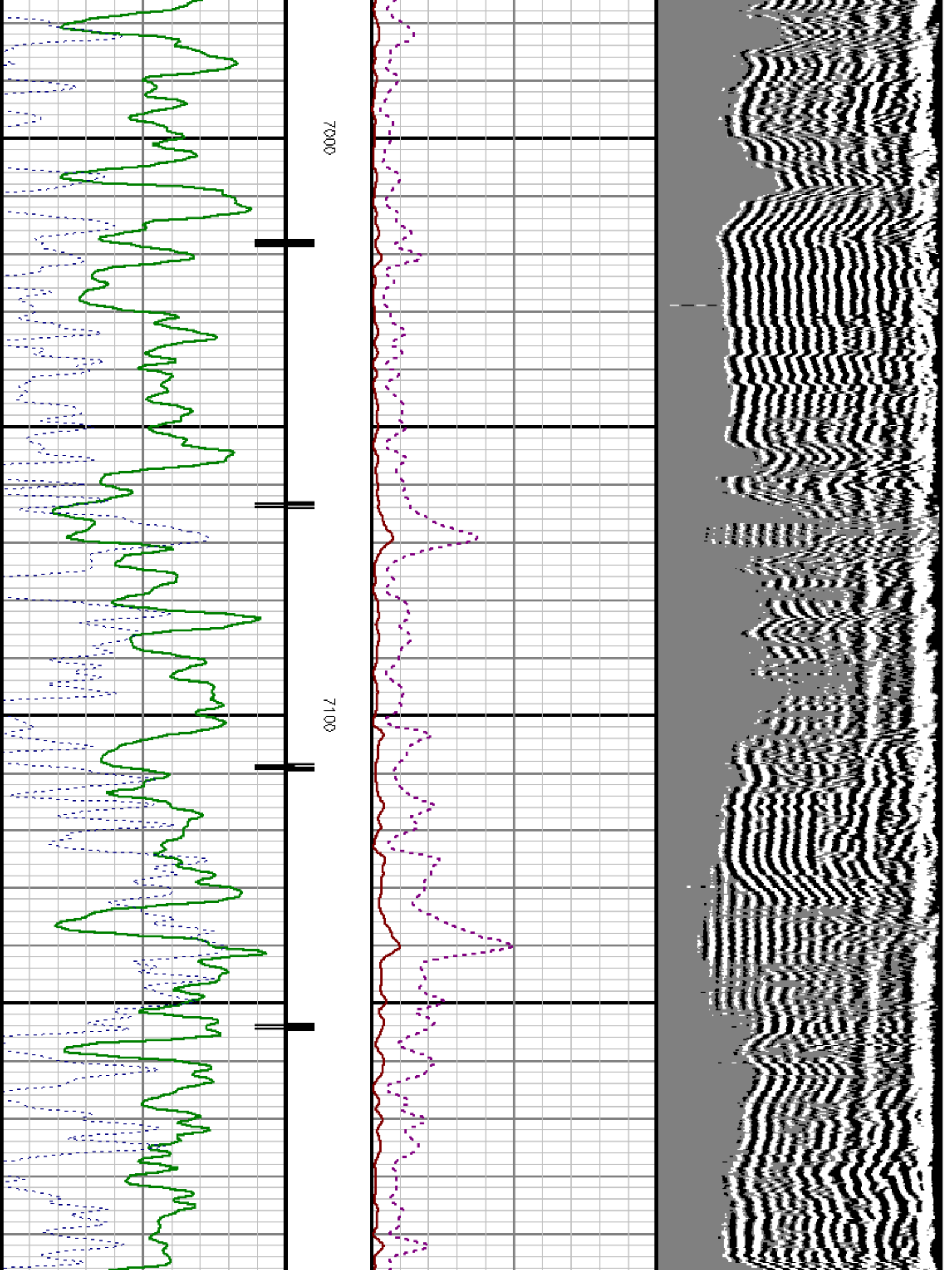


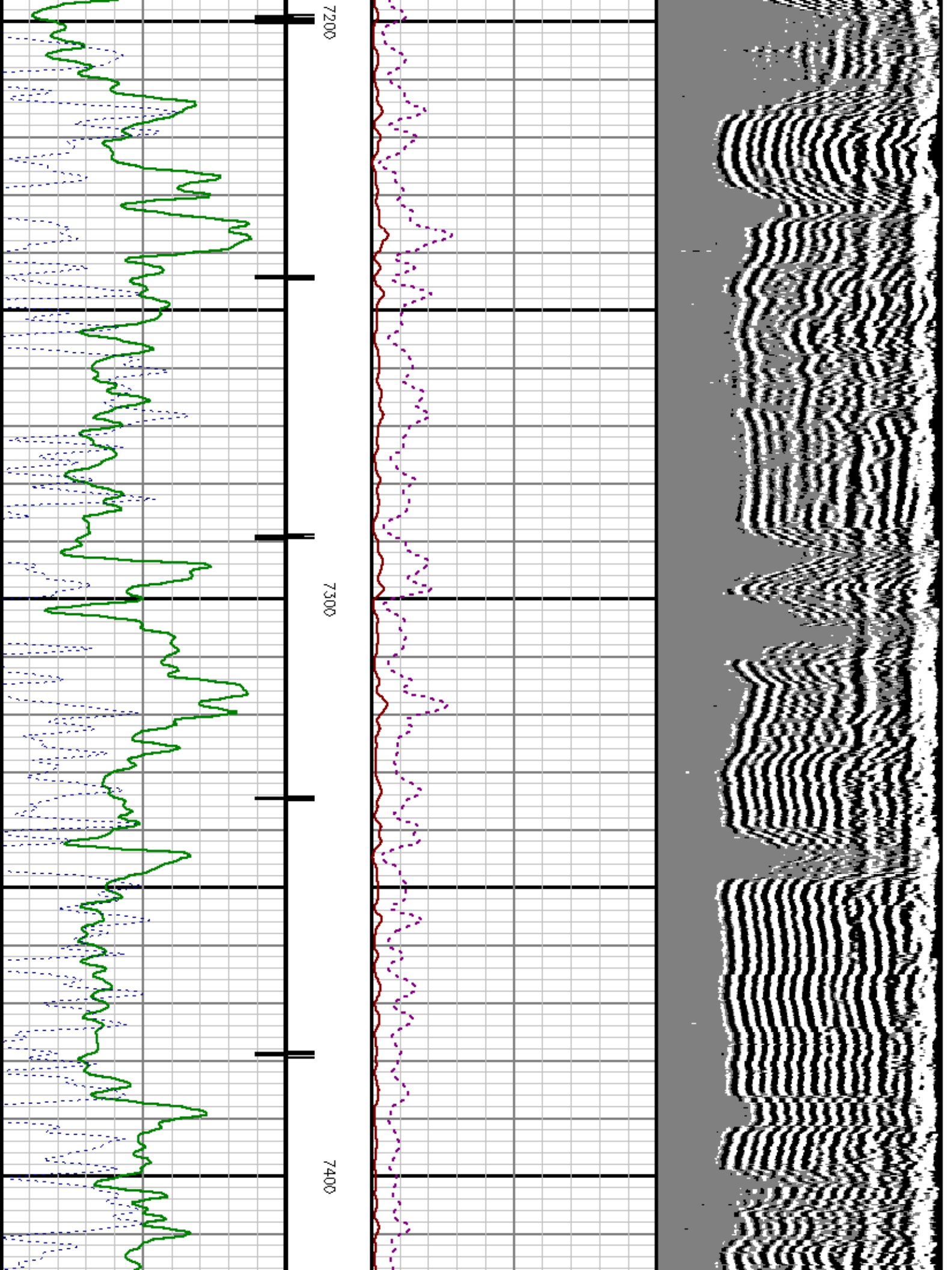
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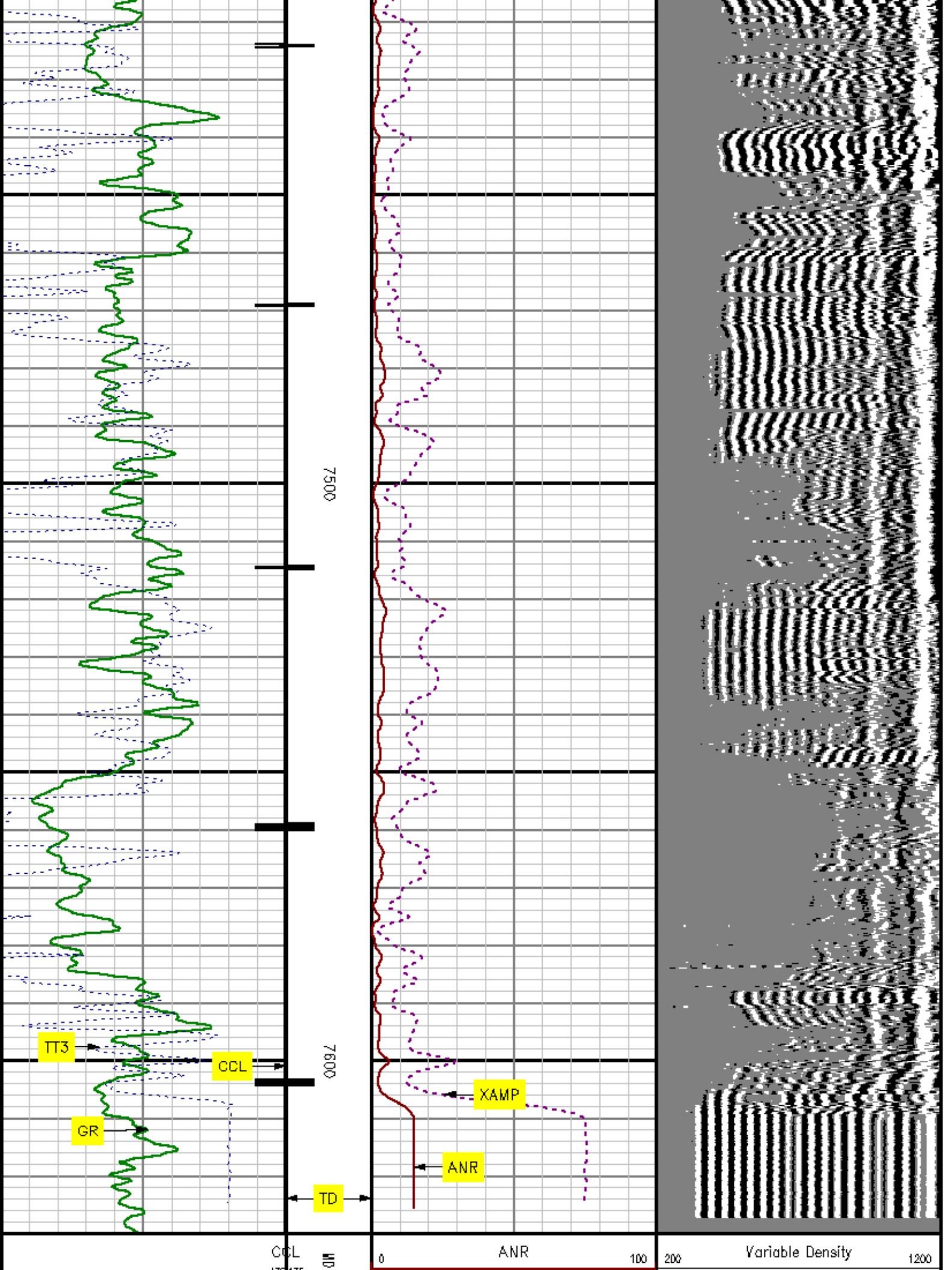
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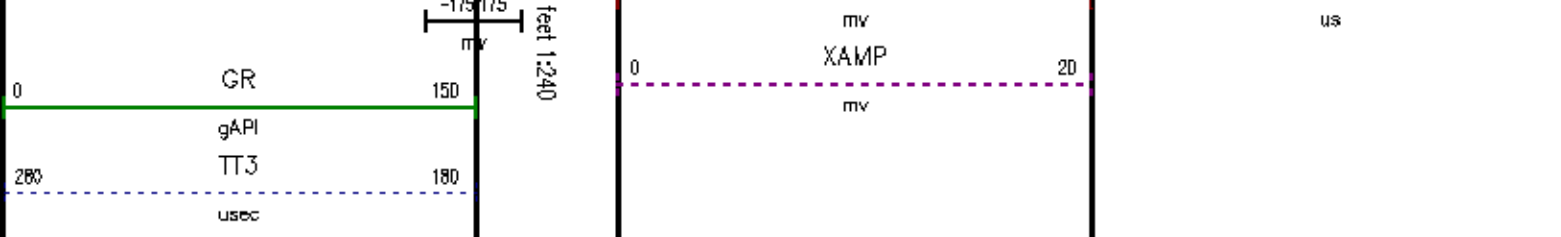












MAIN SECTION SECONDARY PRESENTATION

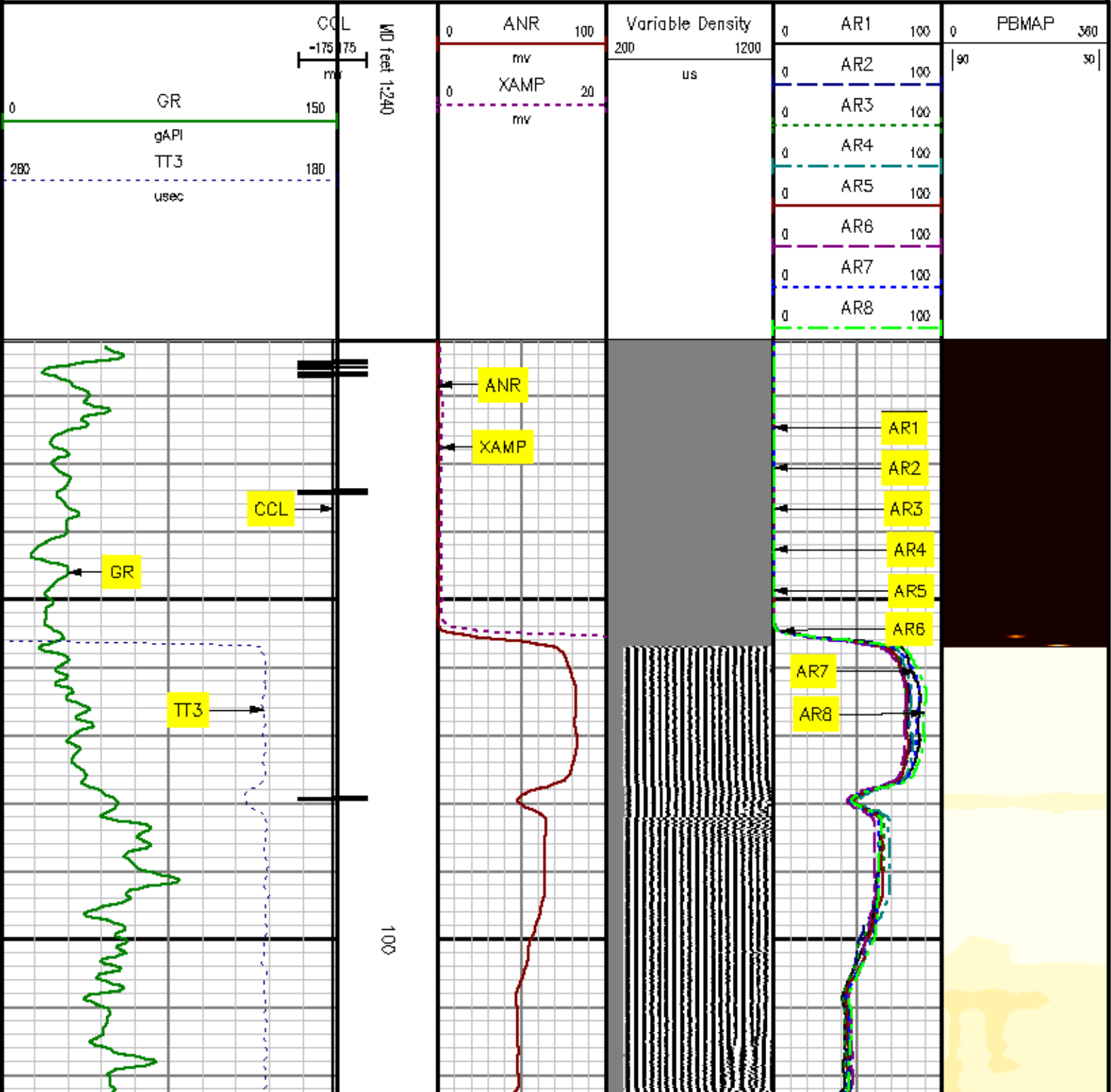
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RAL	Amp Gate Start Far	316.900	usec	16.774	7641.100
RAL	Amp Gate Start Near	200.391	usec	16.774	7641.100
RAL	Amp Gate Start Radial	200.391	usec	16.774	7641.100
RAL	Amp Gate Width Far	25.000	usec	16.774	7641.100
RAL	Amp Gate Width Near	25.000	usec	16.774	7641.100
RAL	Amp Gate Width Radial	25.000	usec	16.774	7641.100
RAL	casing od	4.500	inches	16.774	7641.100
RAL	casing wt	11.600	lbm/ft	16.774	7641.100
RAL	FB Start Far	291.900	usec	16.774	7641.100
RAL	FB Start Near	175.391	usec	16.774	7641.100
RAL	FB Start Radial	175.391	usec	16.774	7641.100
RAL	FB Thresh Far	10.000	mv	16.774	7641.100
RAL	FB Thresh Near	4.000	mv	16.774	7641.100
RAL	FB Thresh Radial	4.000	mv	16.774	7641.100
RAL	Fluid Travel Time	200.000	usec/ft	16.774	7641.100

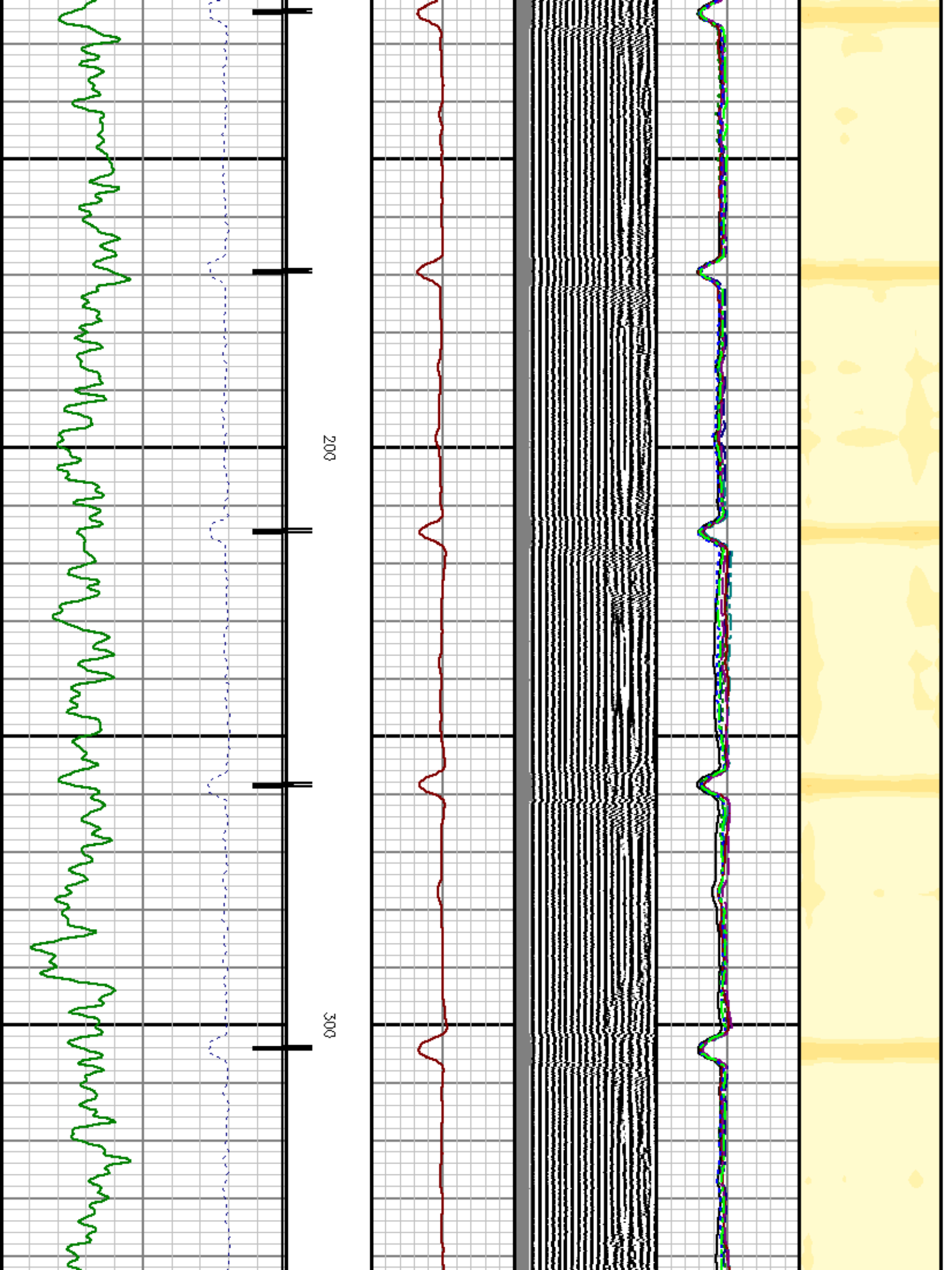
DEPTH OFFSETS (for Acquired Curves)

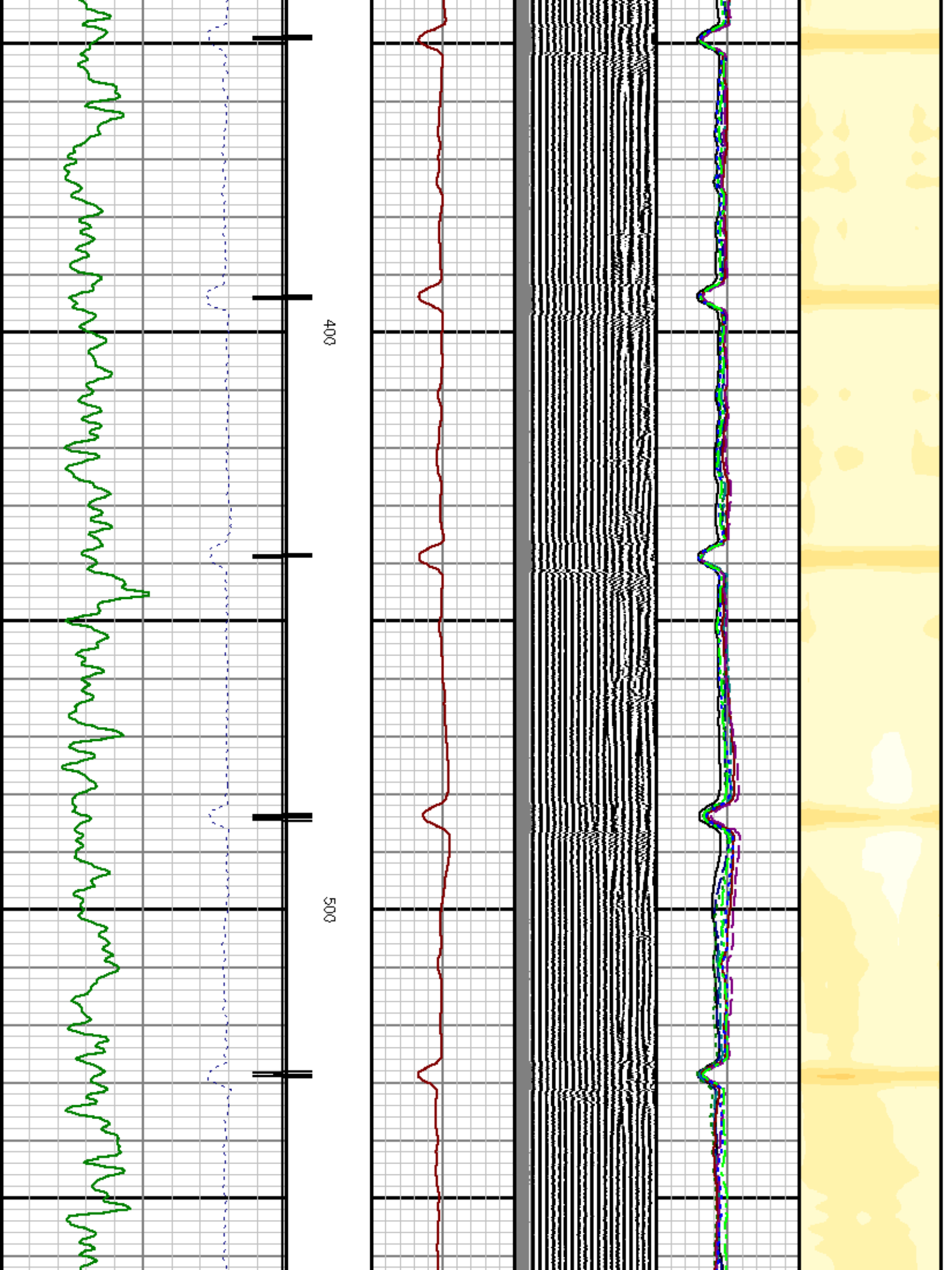
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		FPR3	FPR6	TT3	TTR1	TTR2	TTR3		
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP		
1426XA	-14.360	AFAR	SIG	TT5					

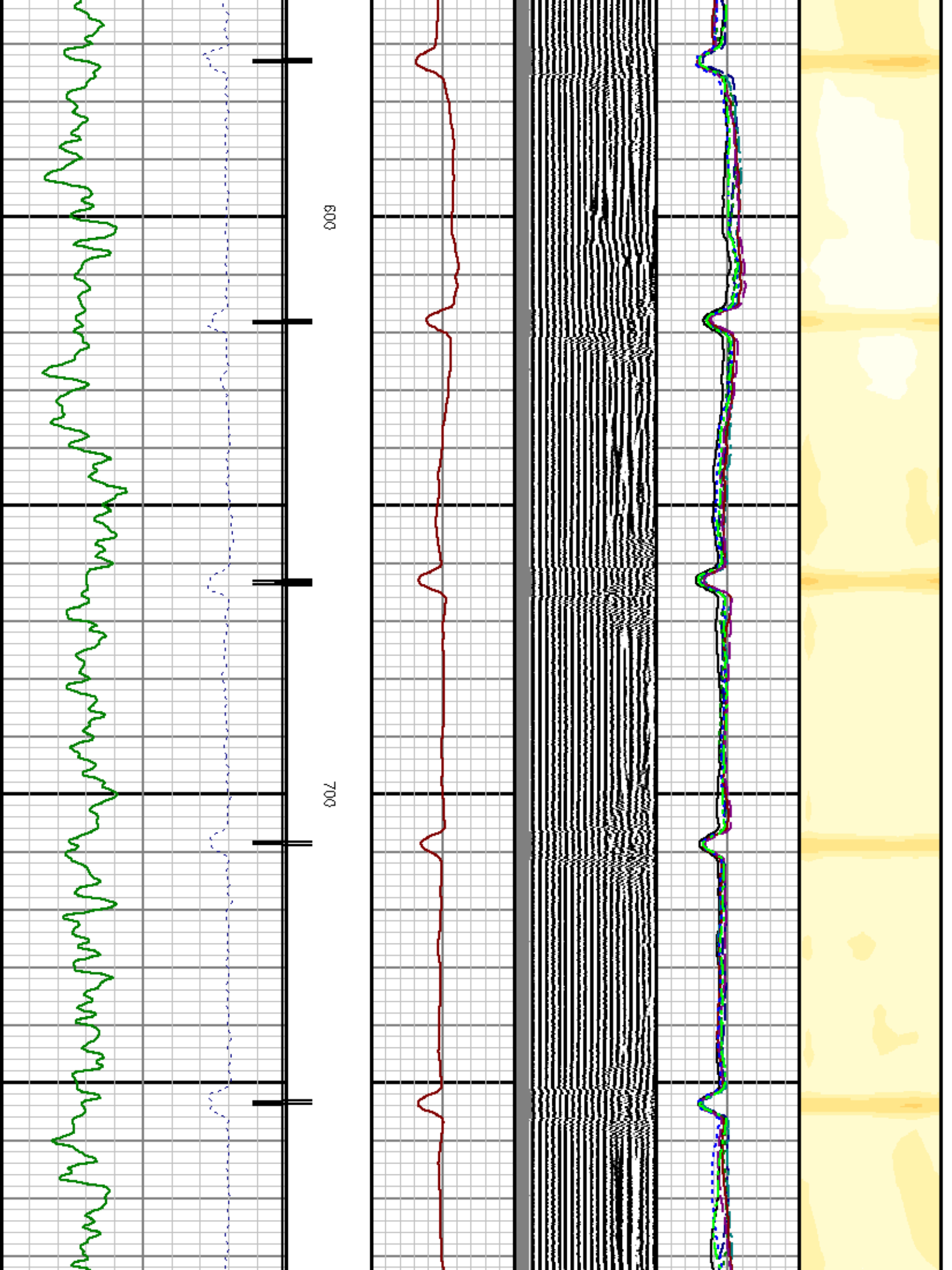
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1426XA	-5.390	GR
1426XA	0.000	NEU

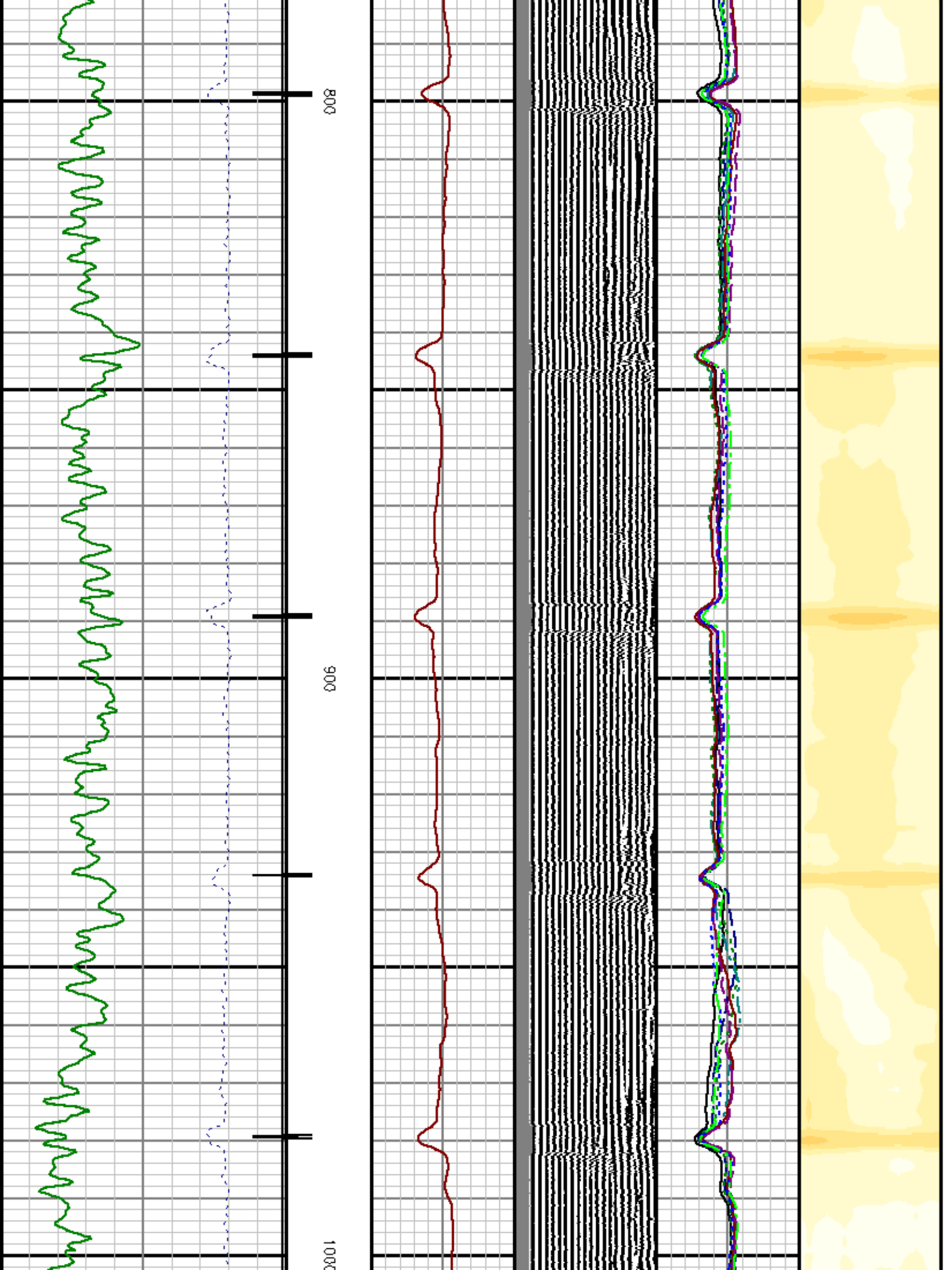
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 Plotted by : PlotMgr, v5.4.5D4
 Company : WILLIAMS PRODUCTION COMPANY
 Well : RNF 42-27
 File Name : d:\well\data\rad42\main.xtf
 Mode : PlotMgr 5.4.5D4
 Interval : 12.00 - 7630.00 feet UP
 Created : 10/10/2009 3:53:40 PM

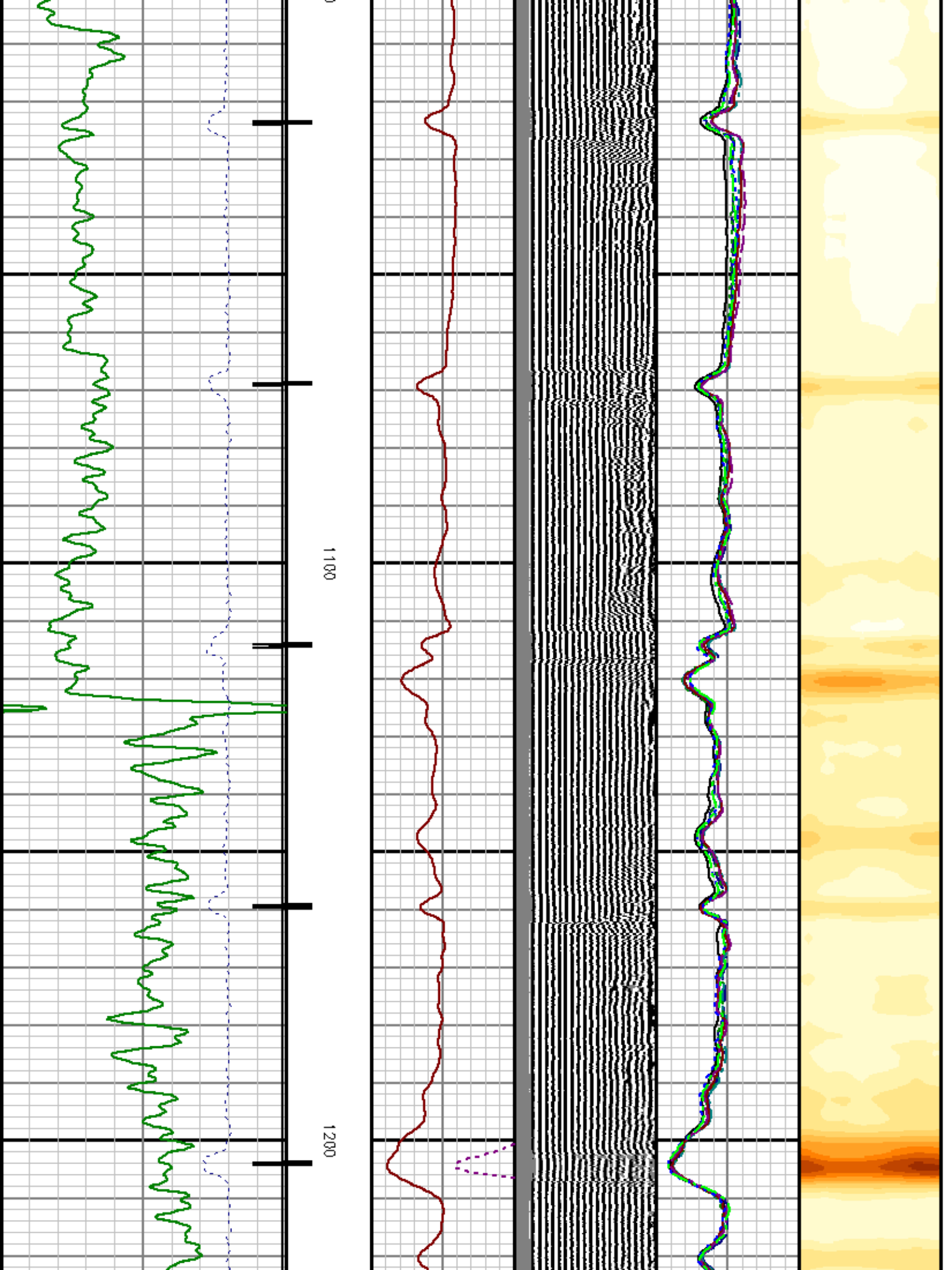


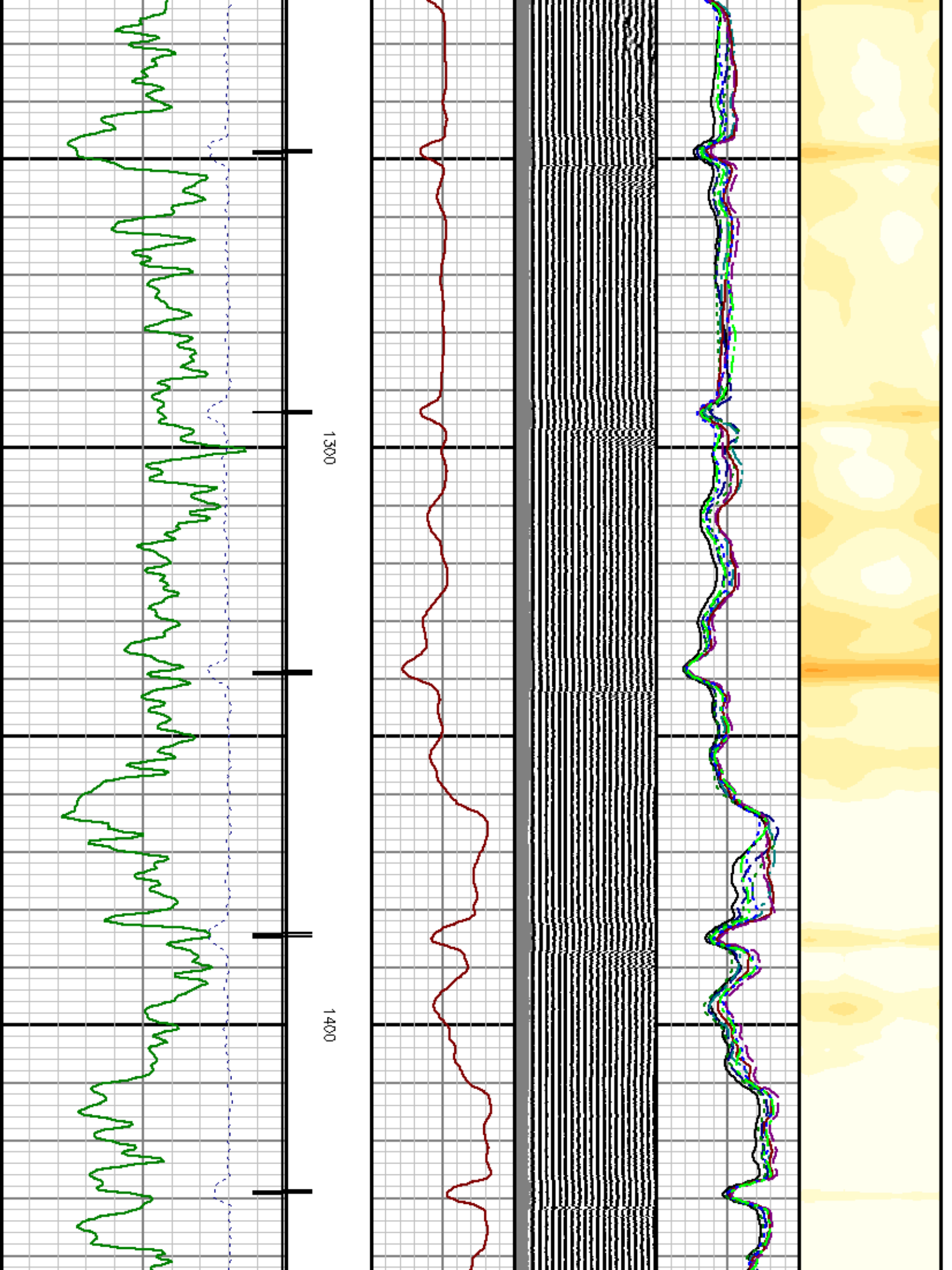


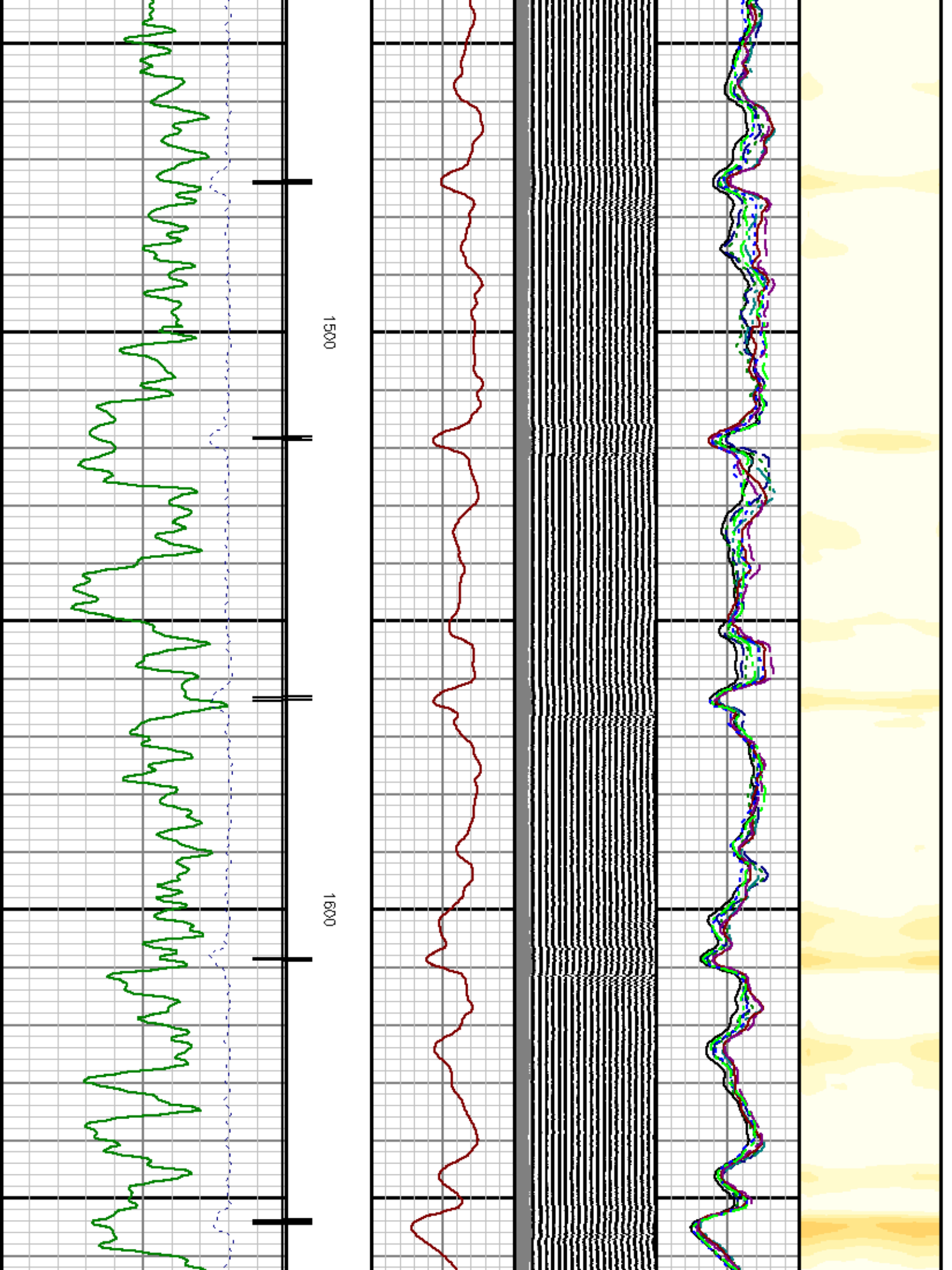


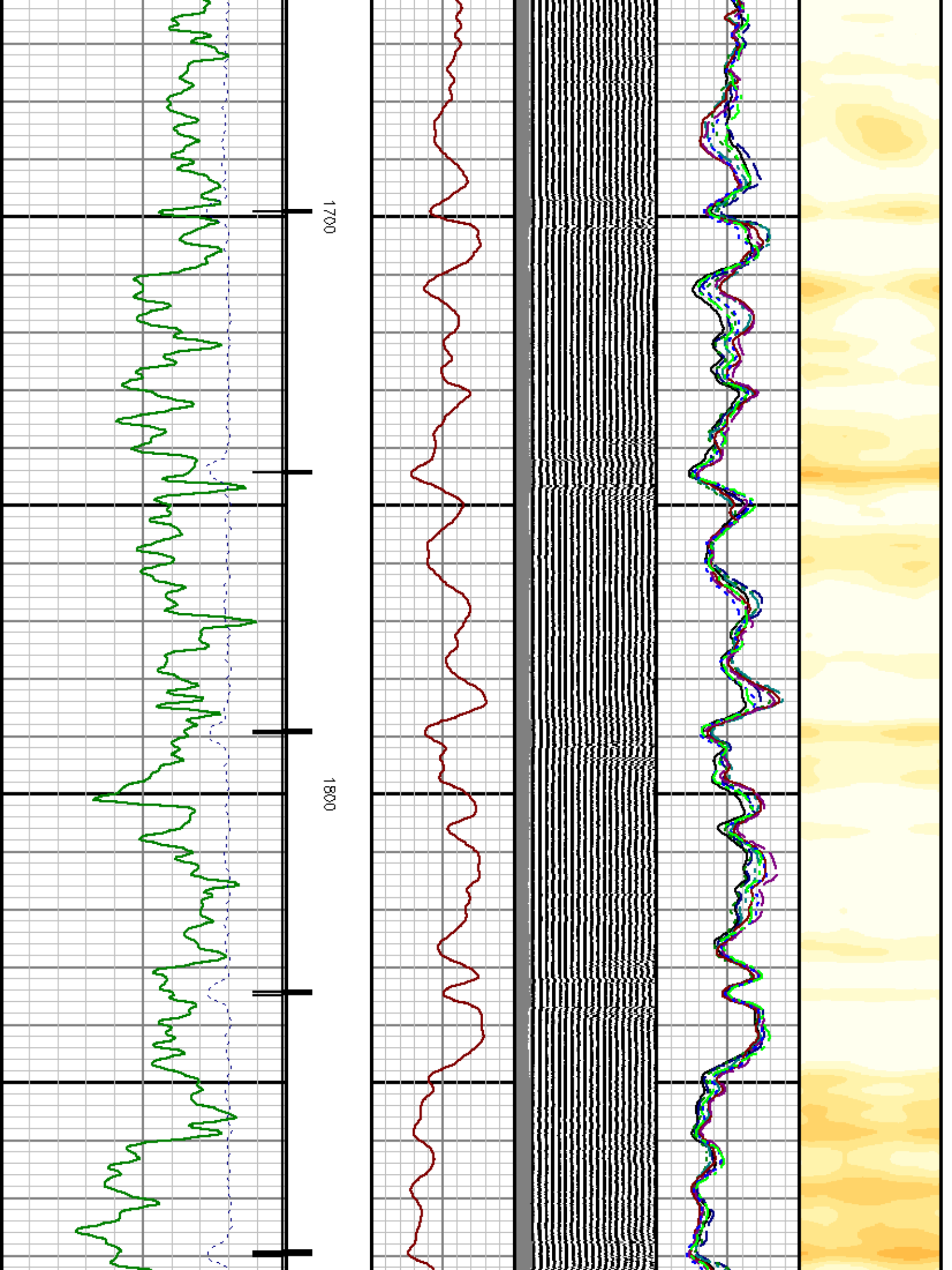


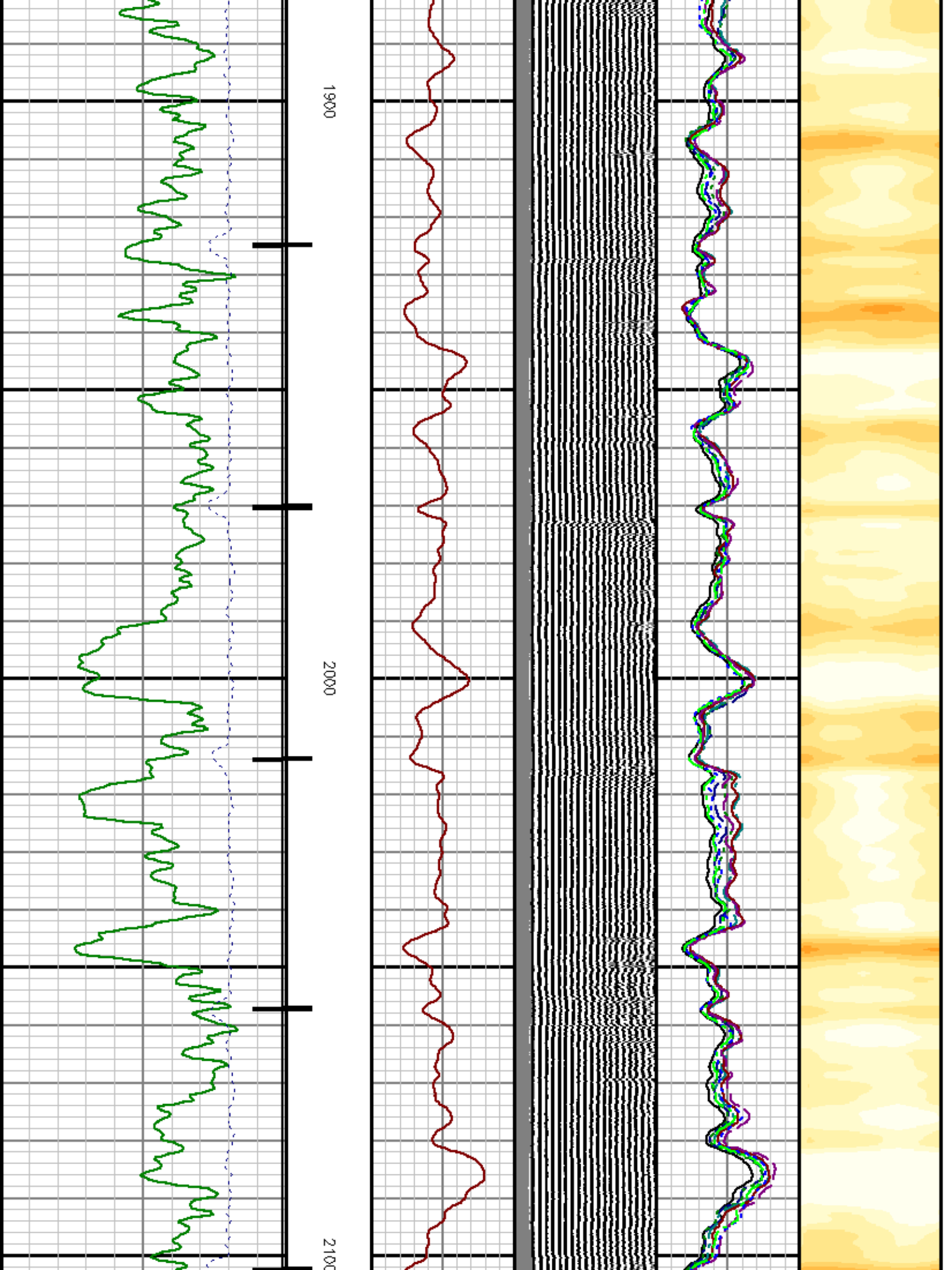


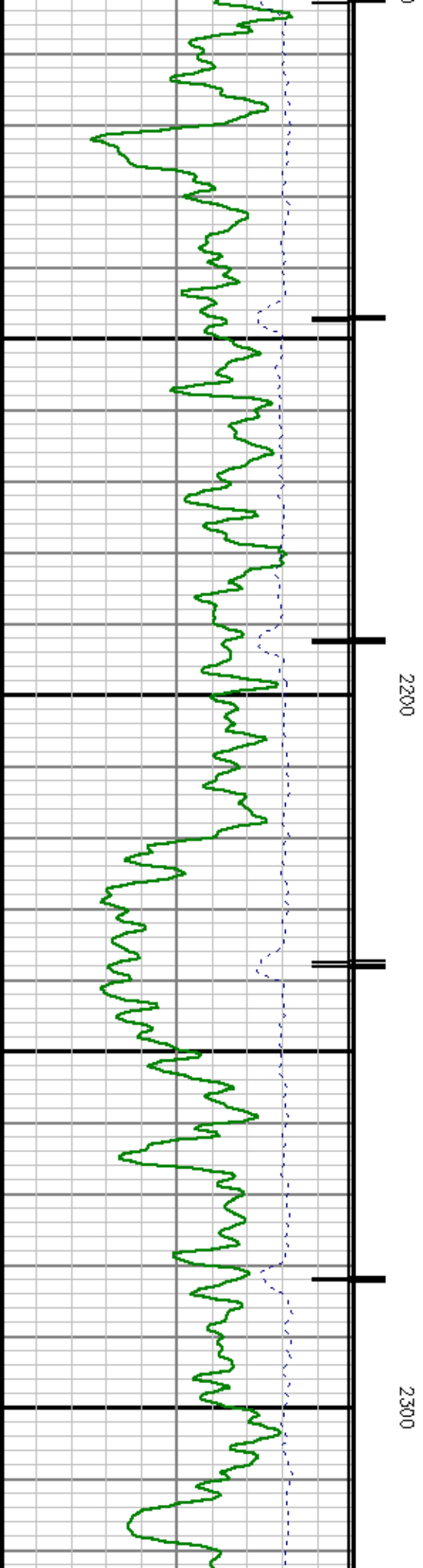
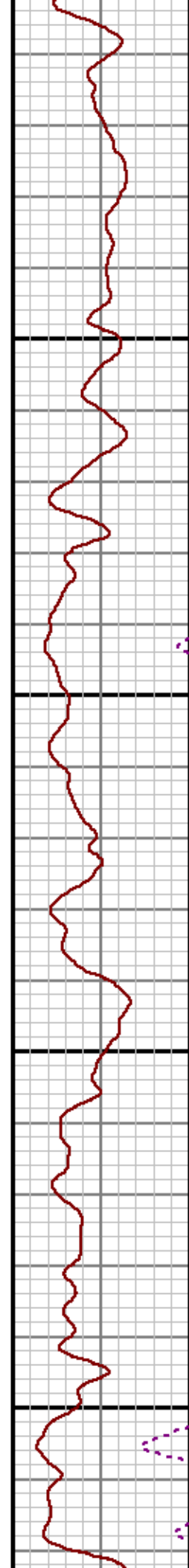
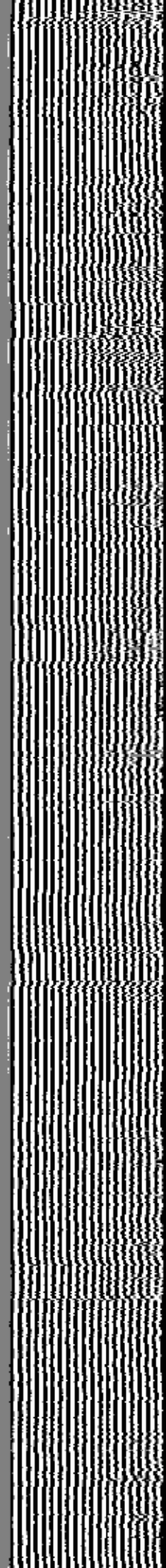
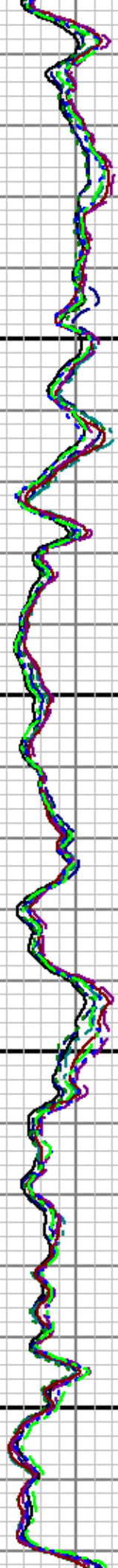
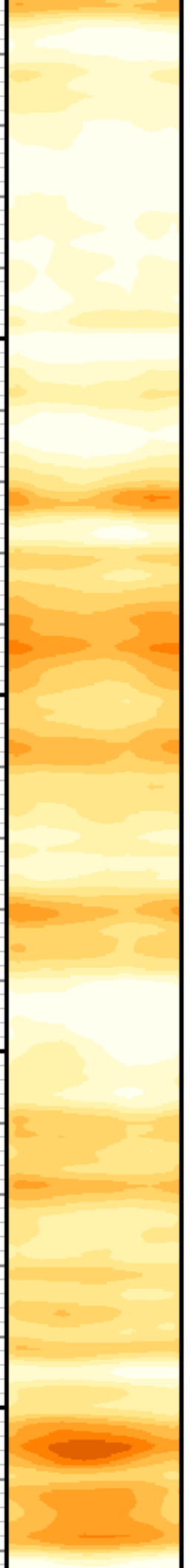


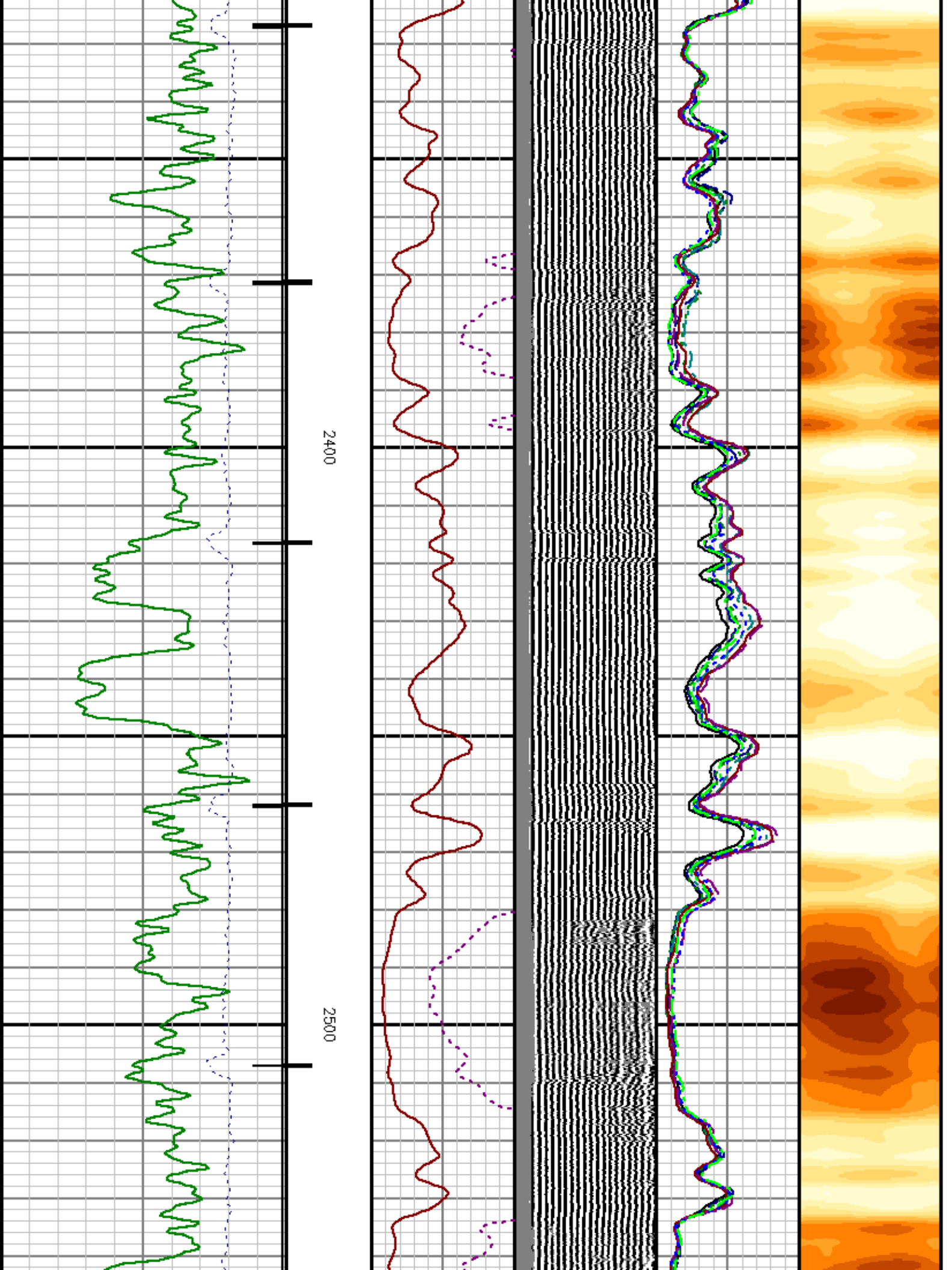


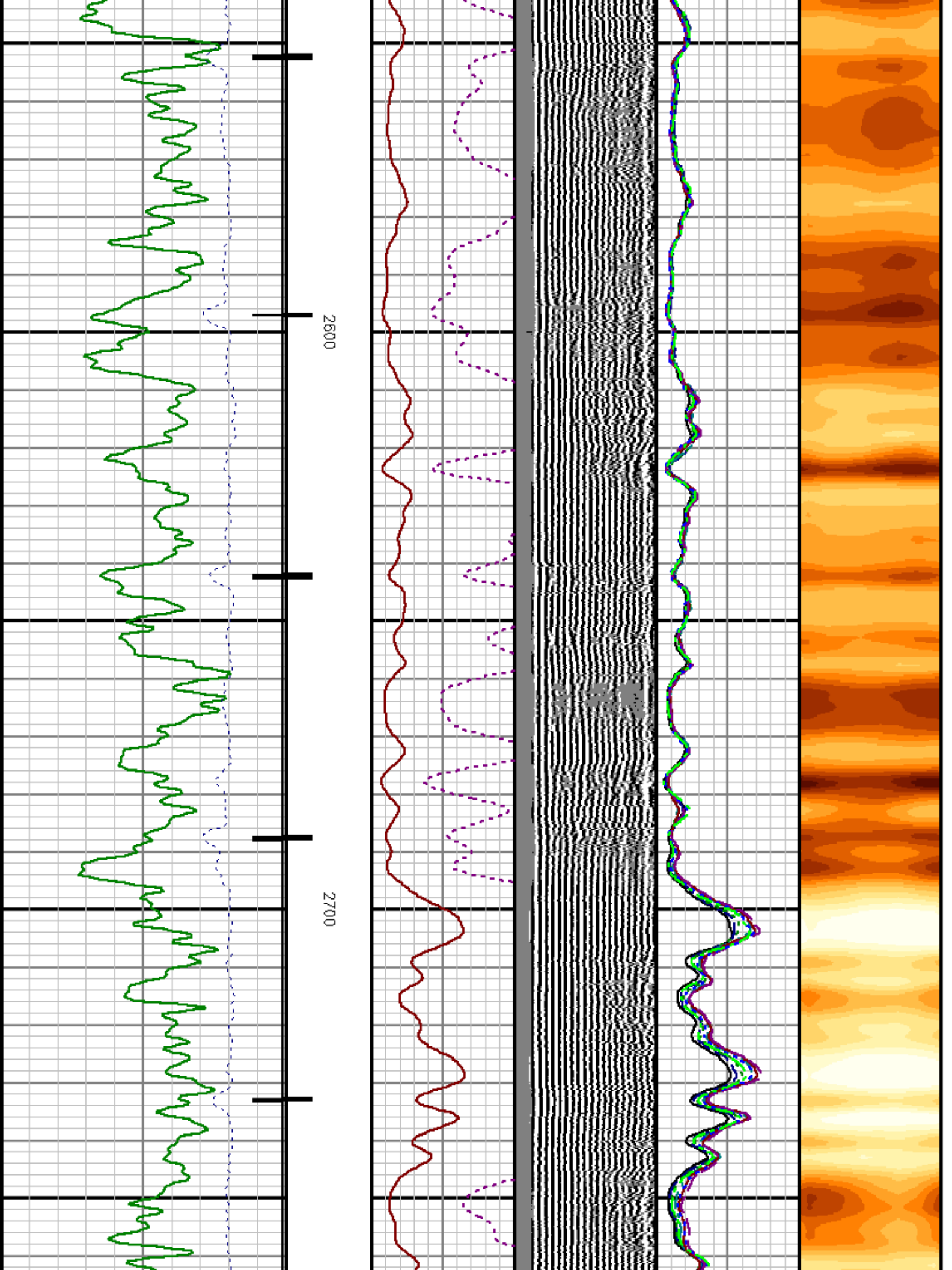


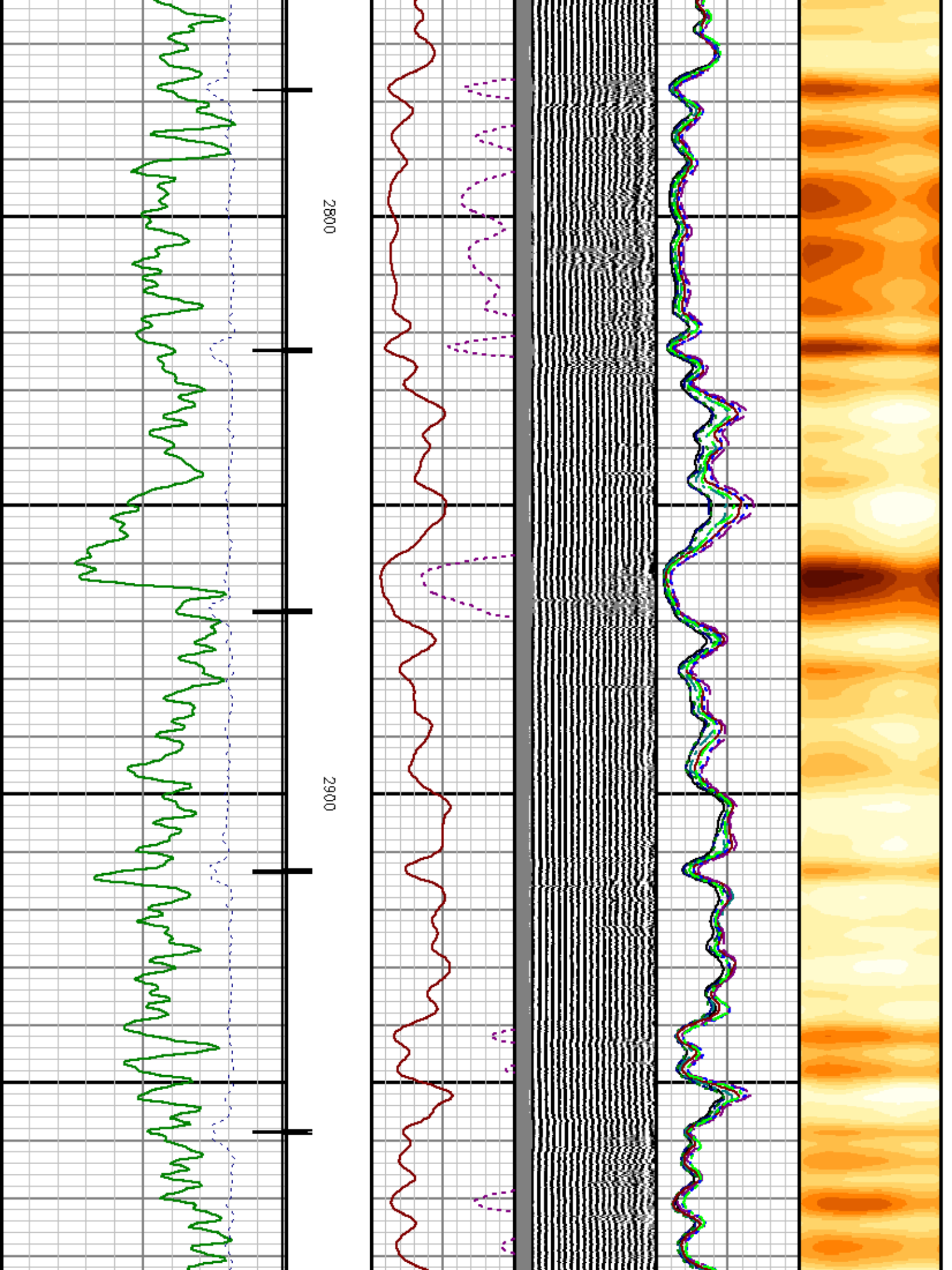


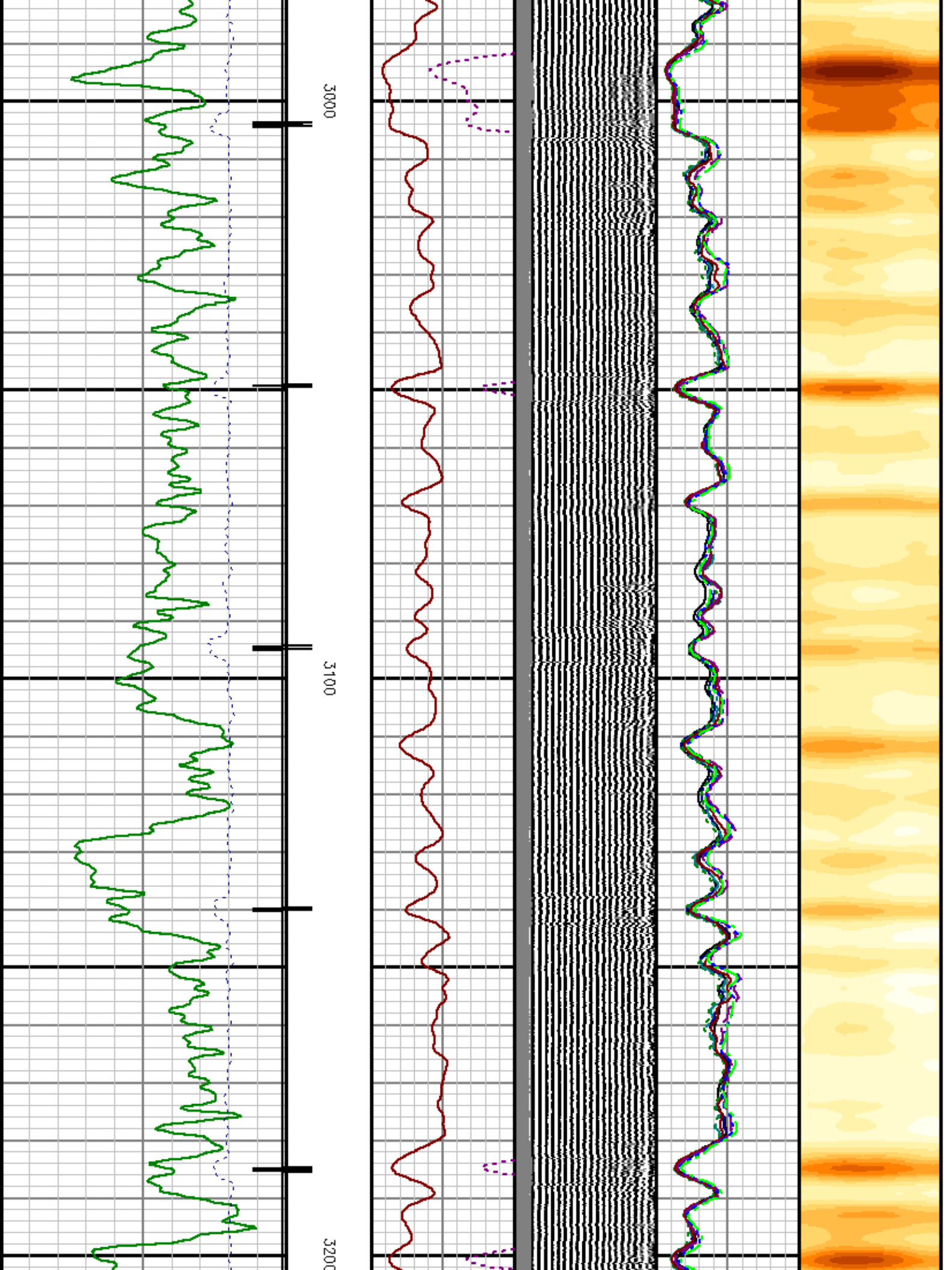


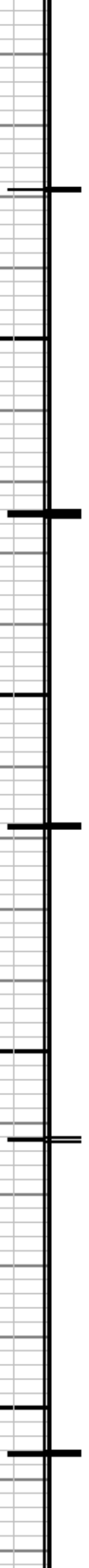
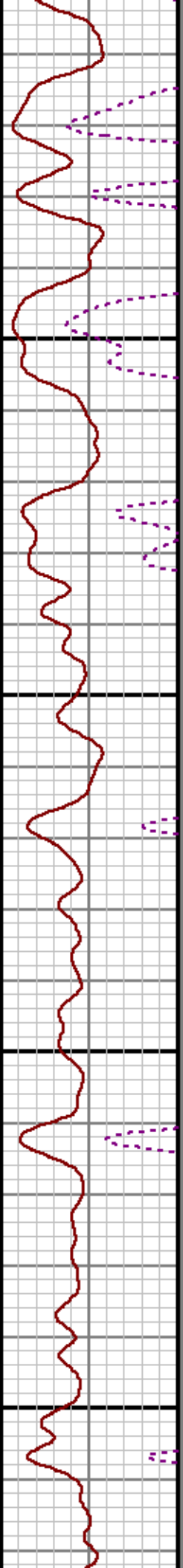
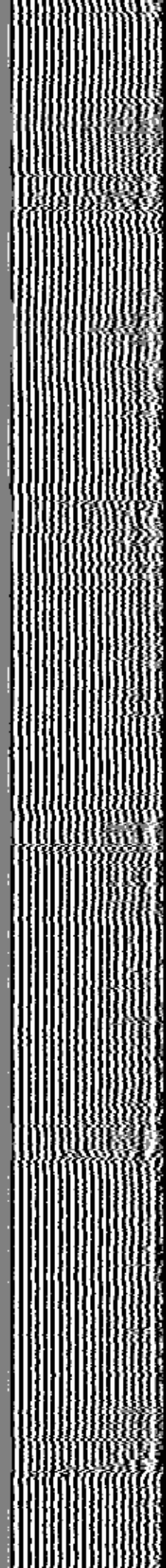
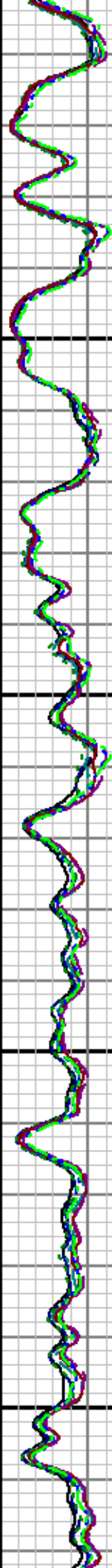
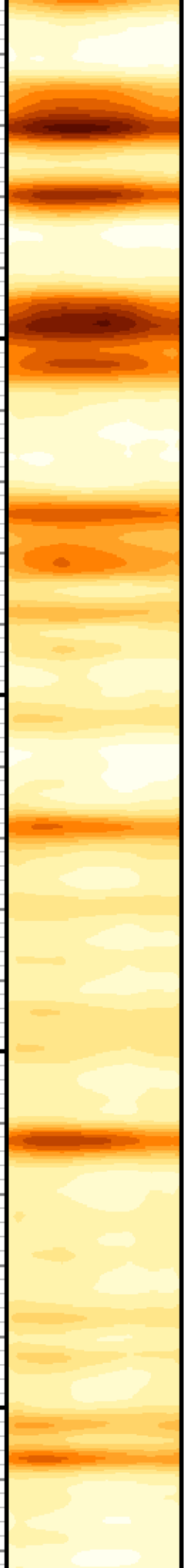


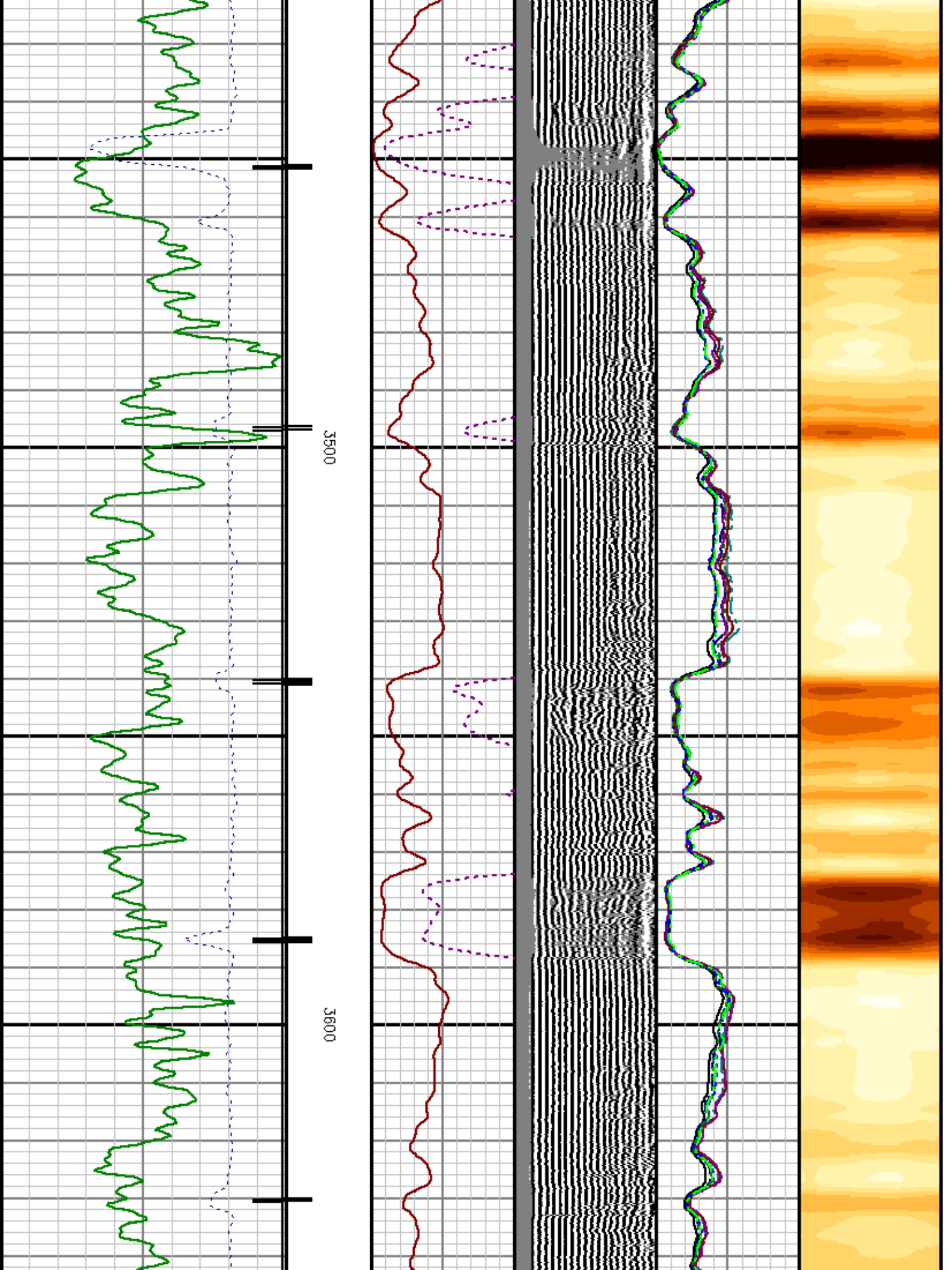


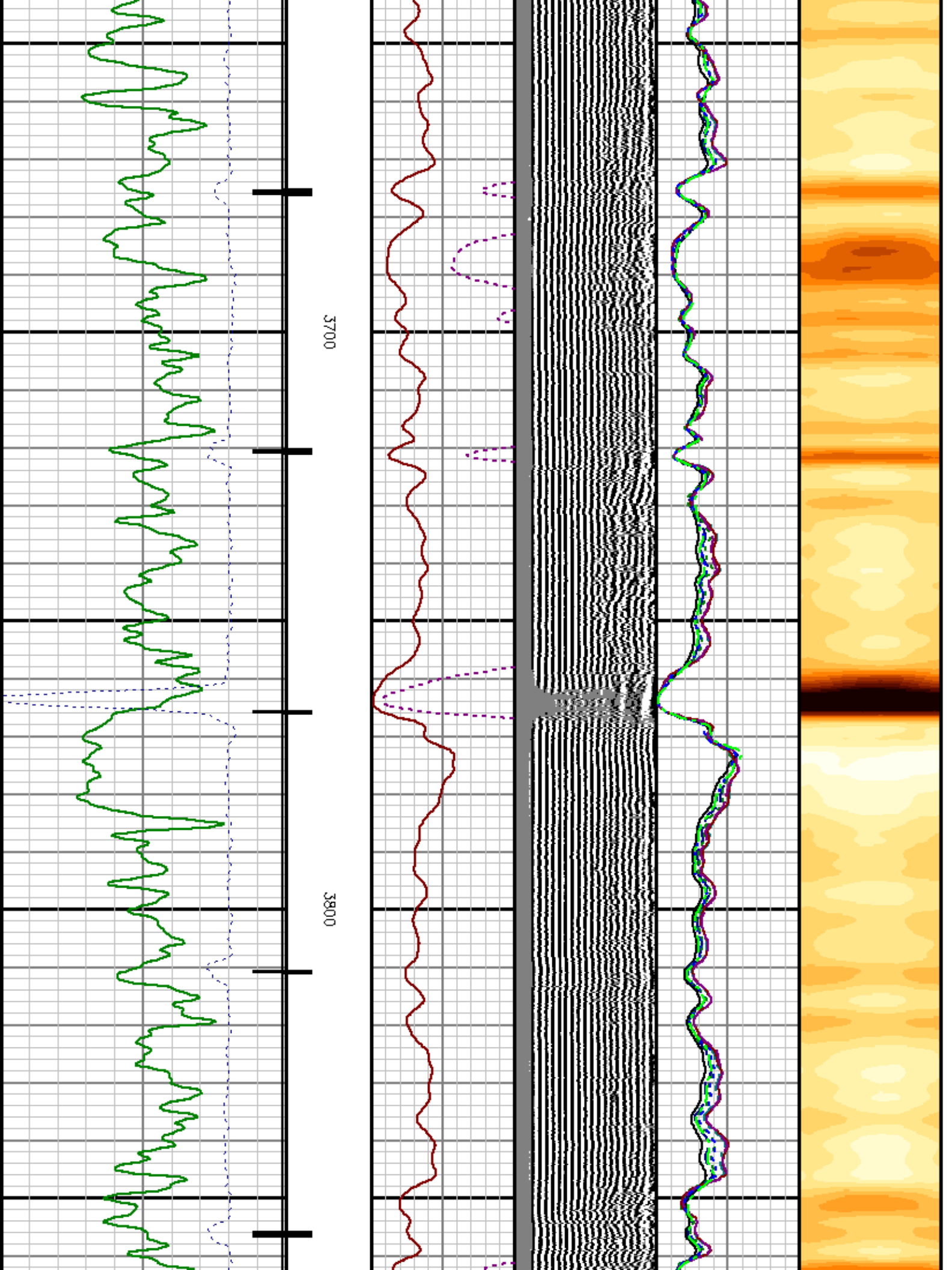


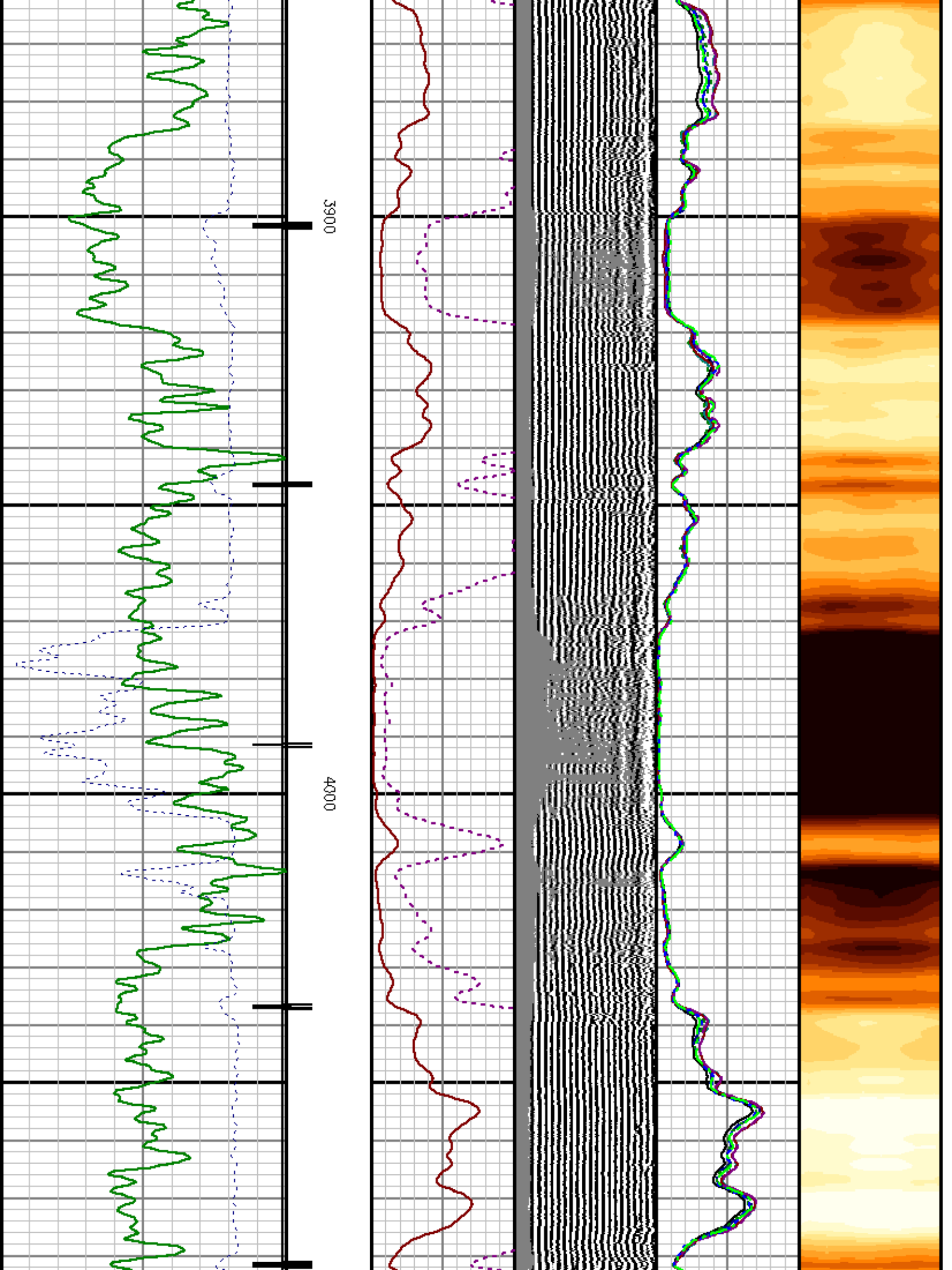


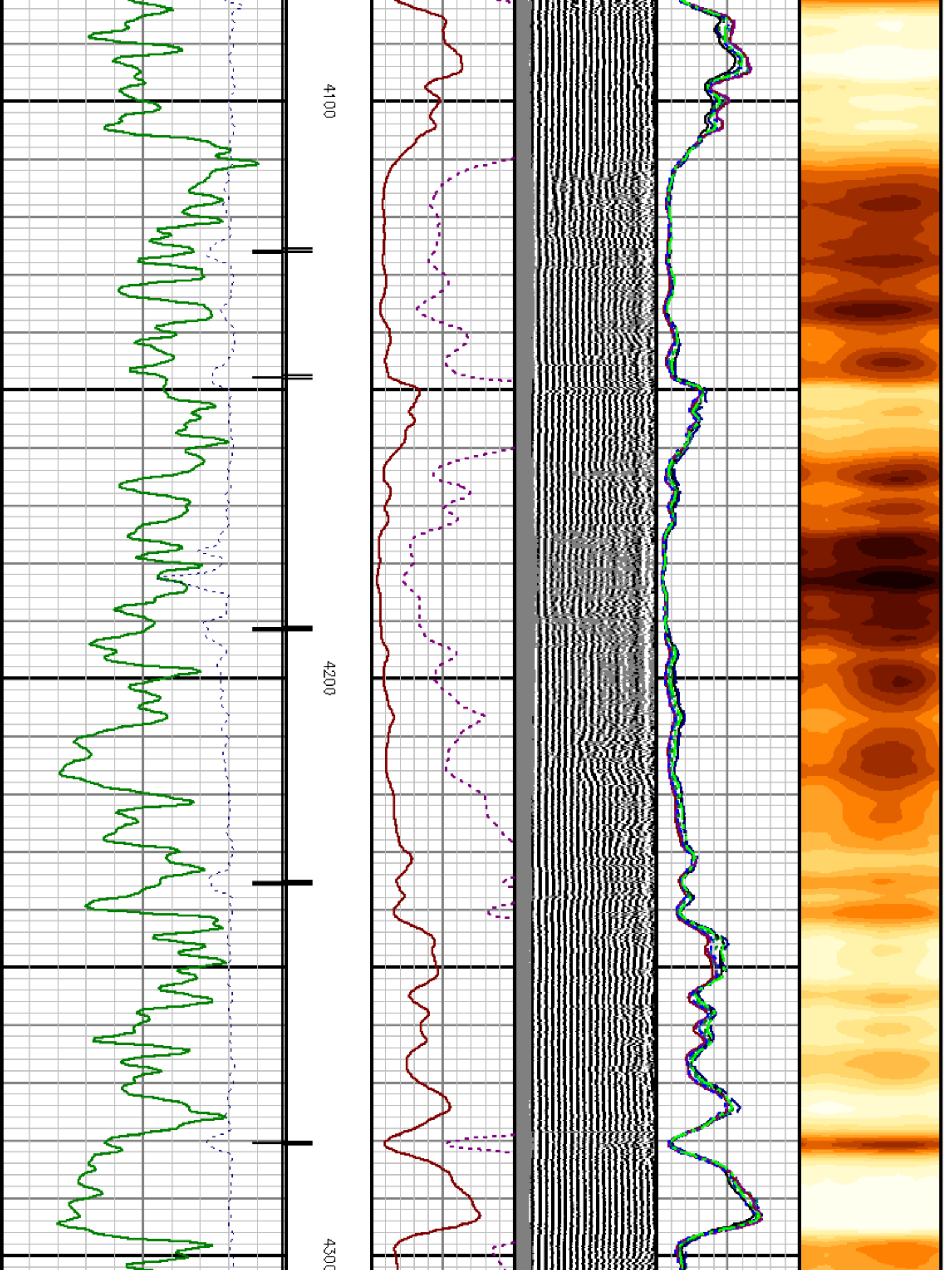


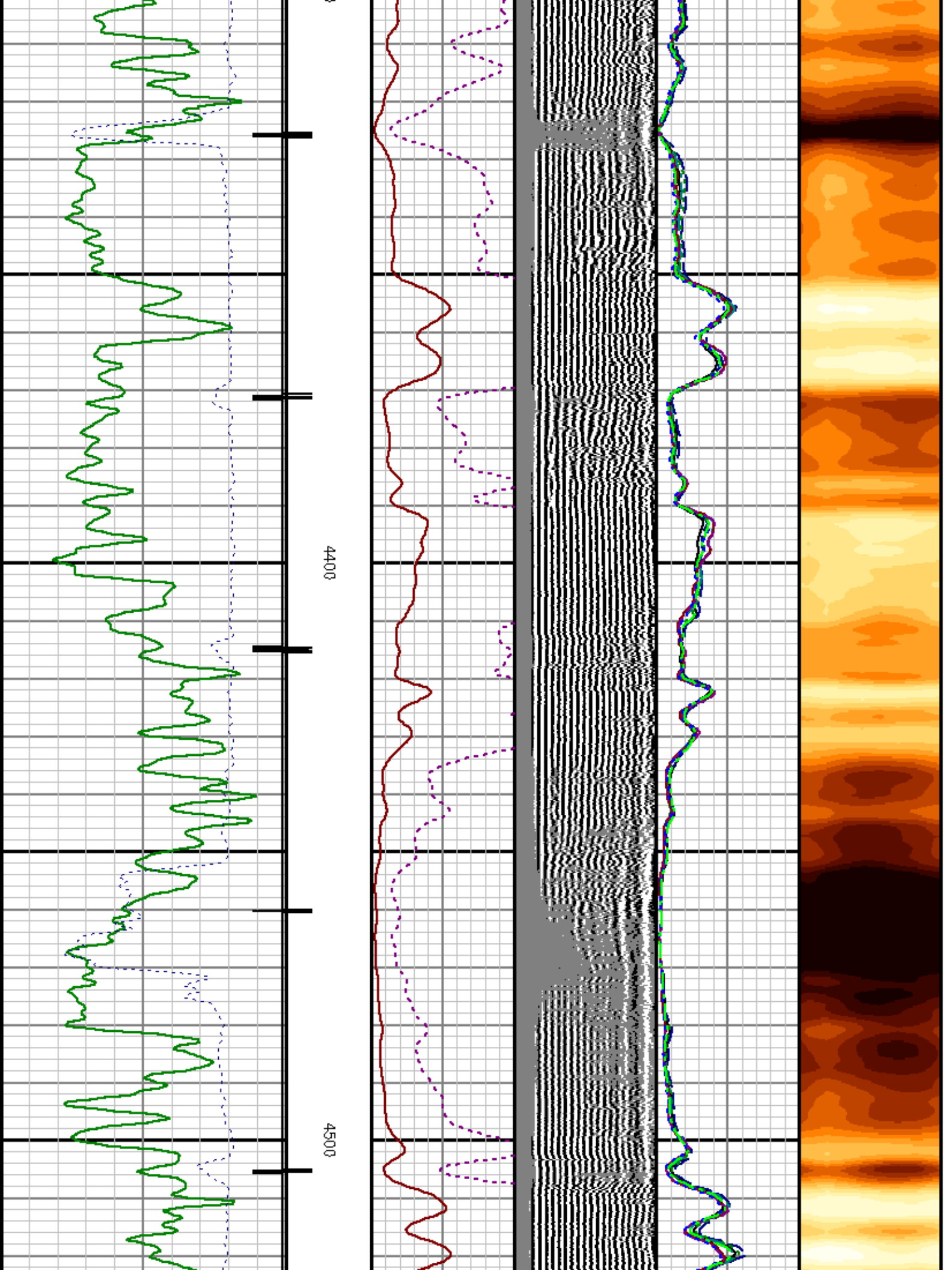


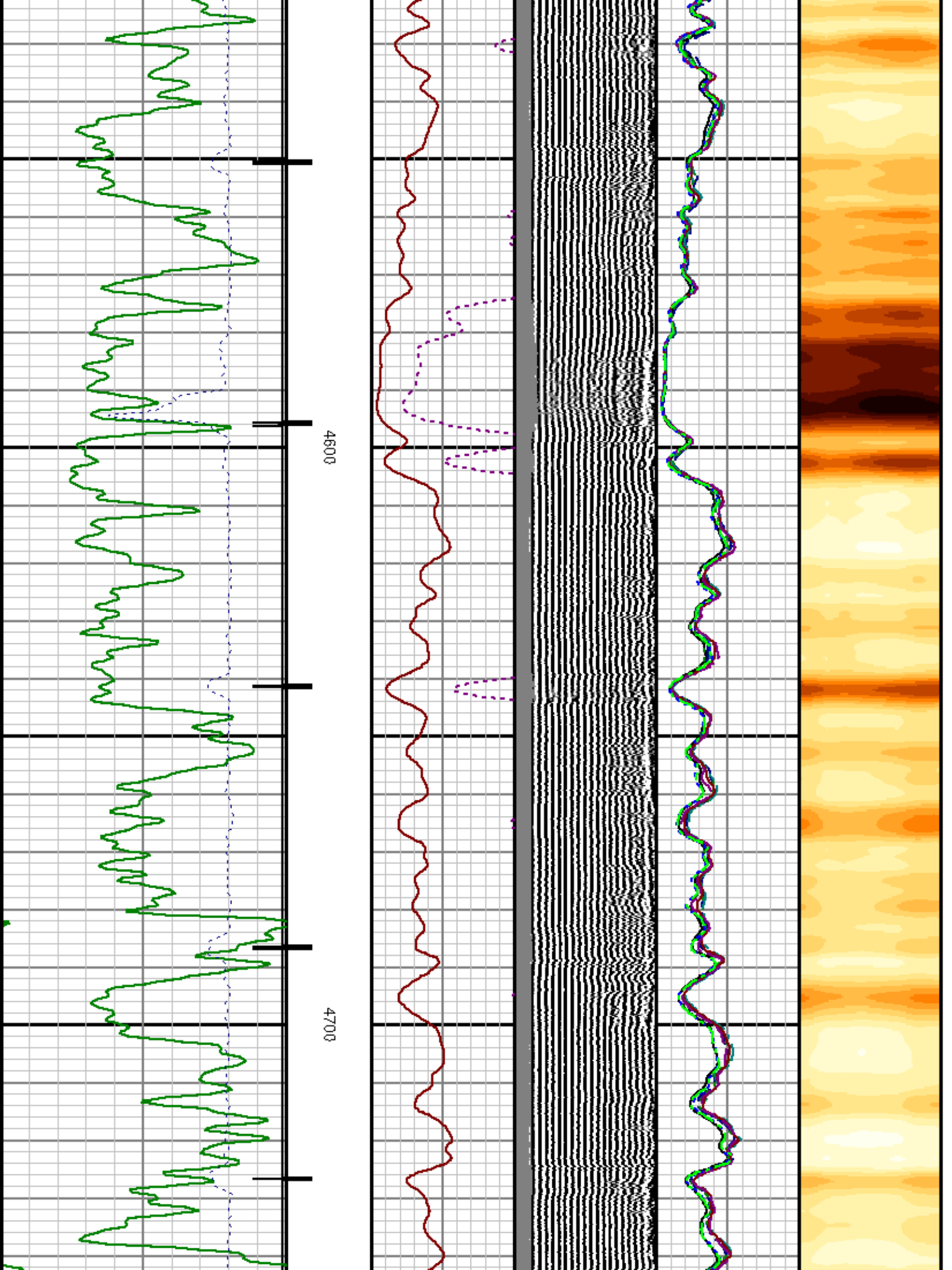


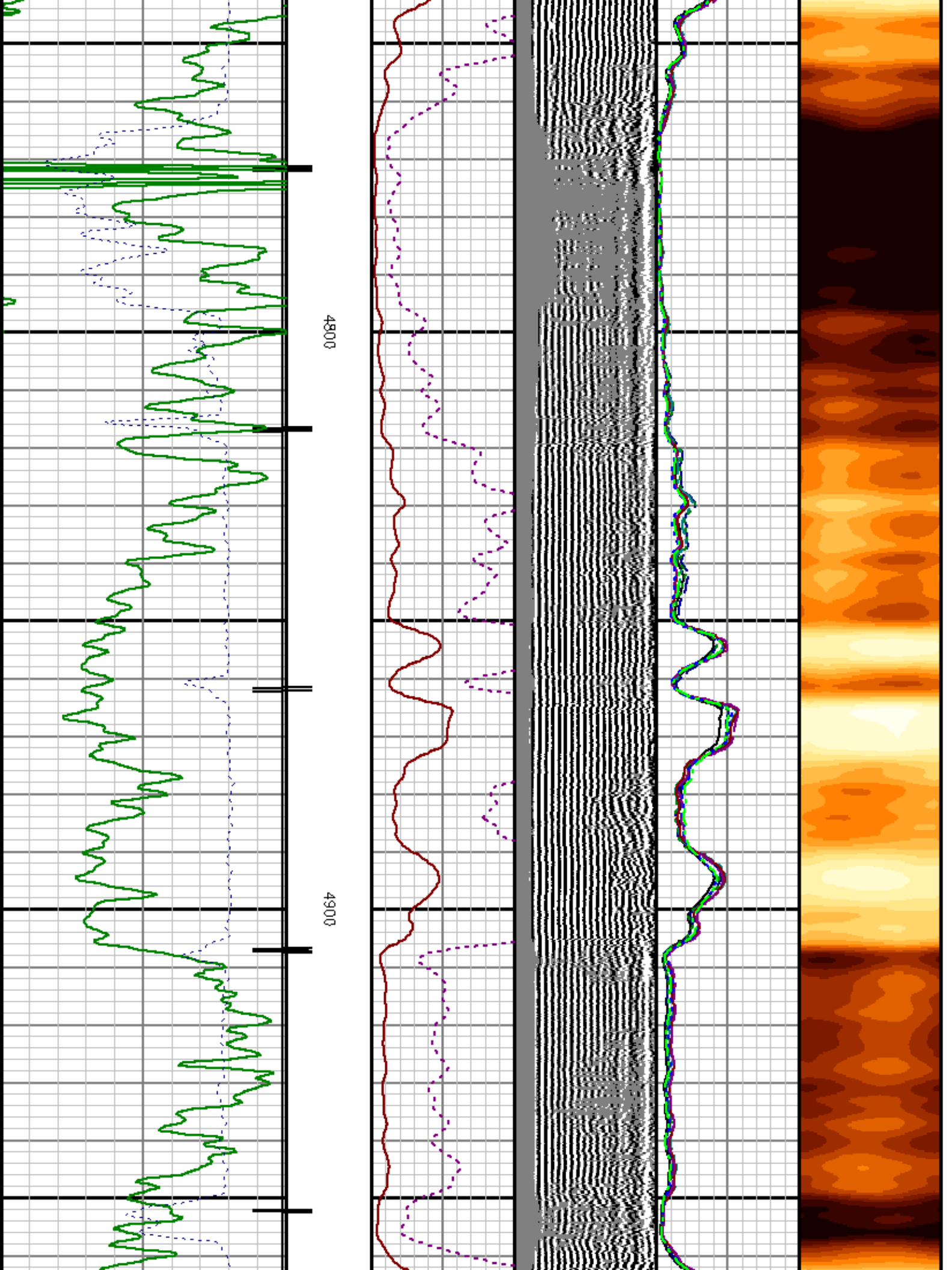


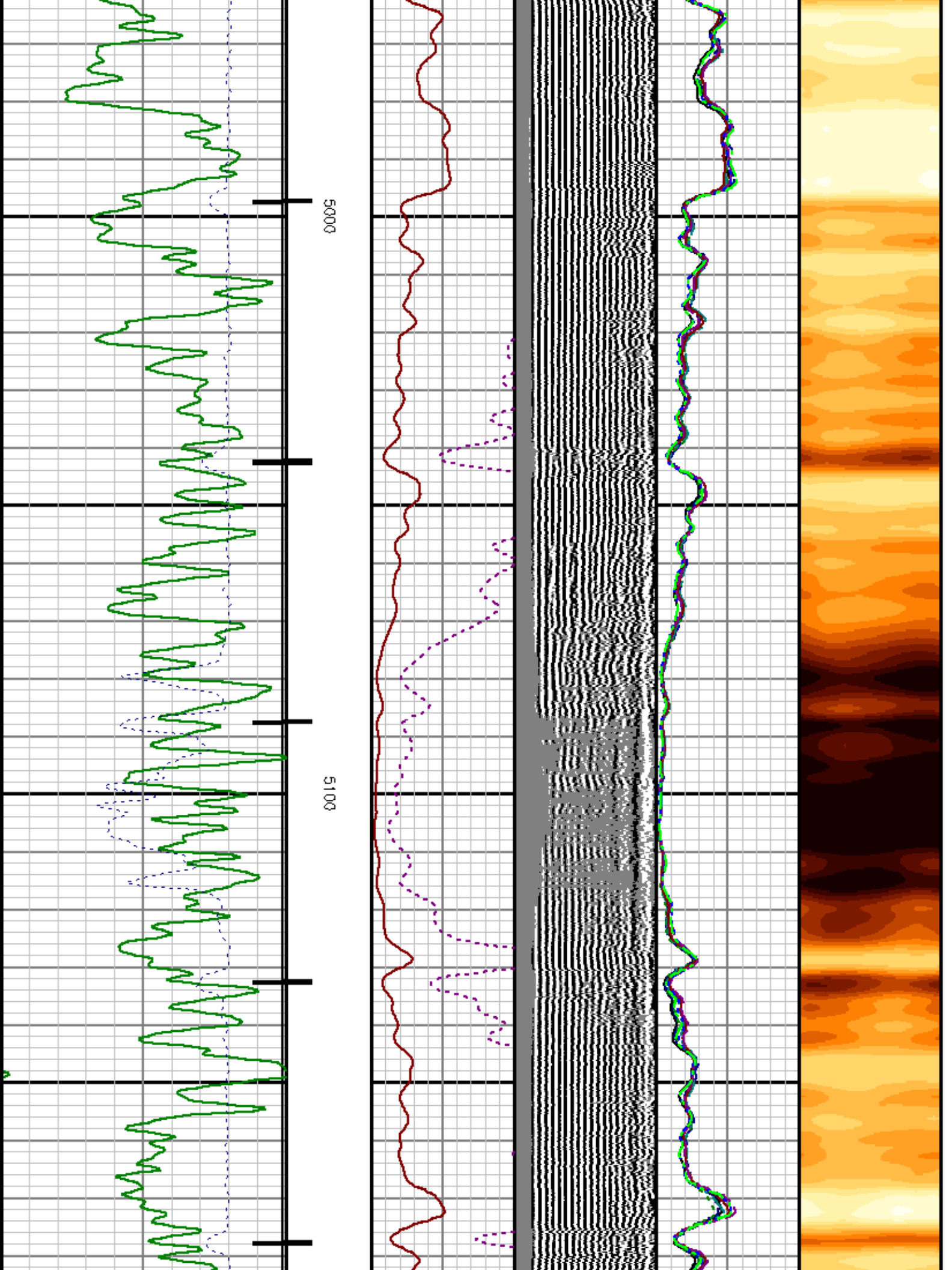


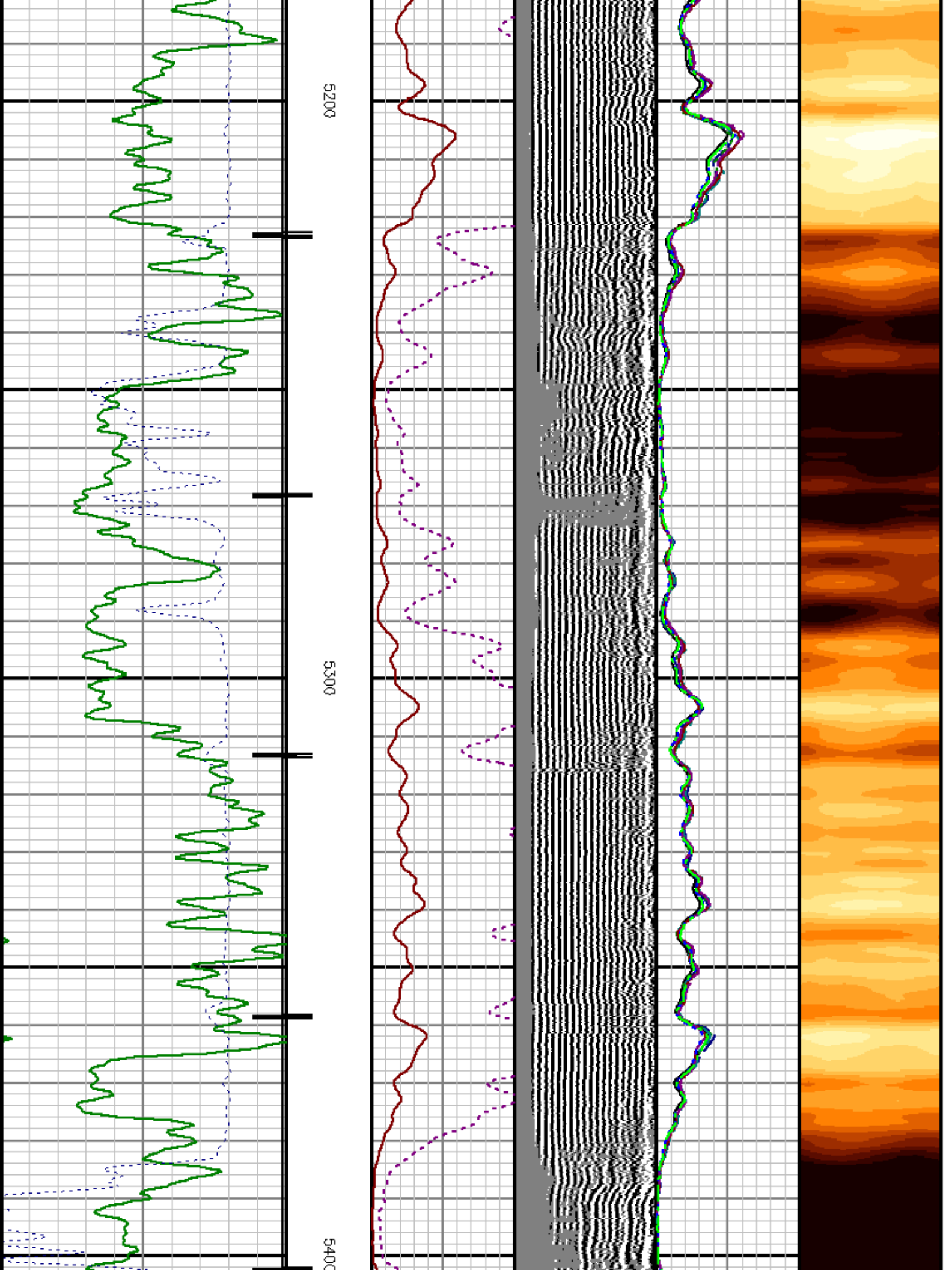


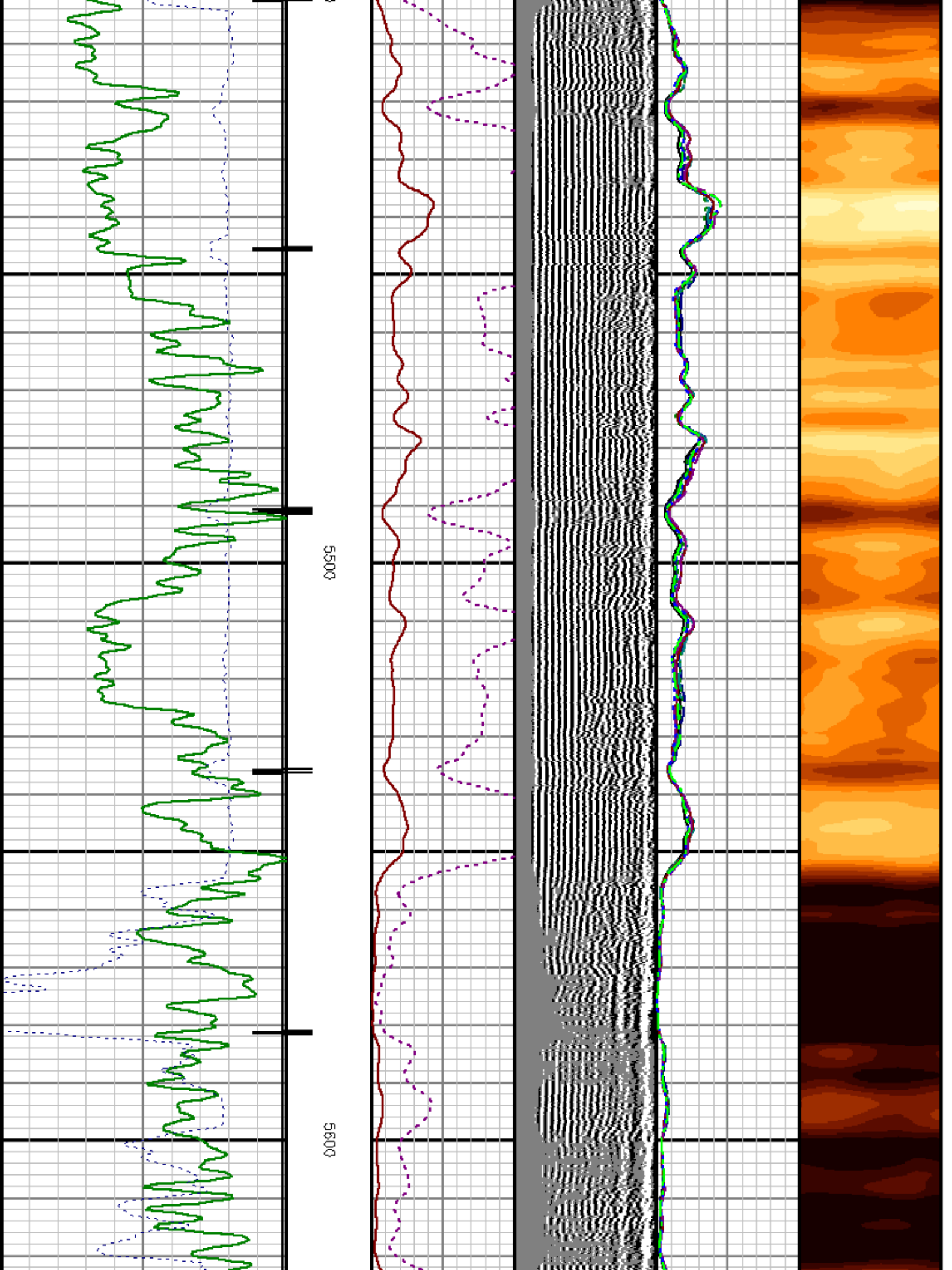


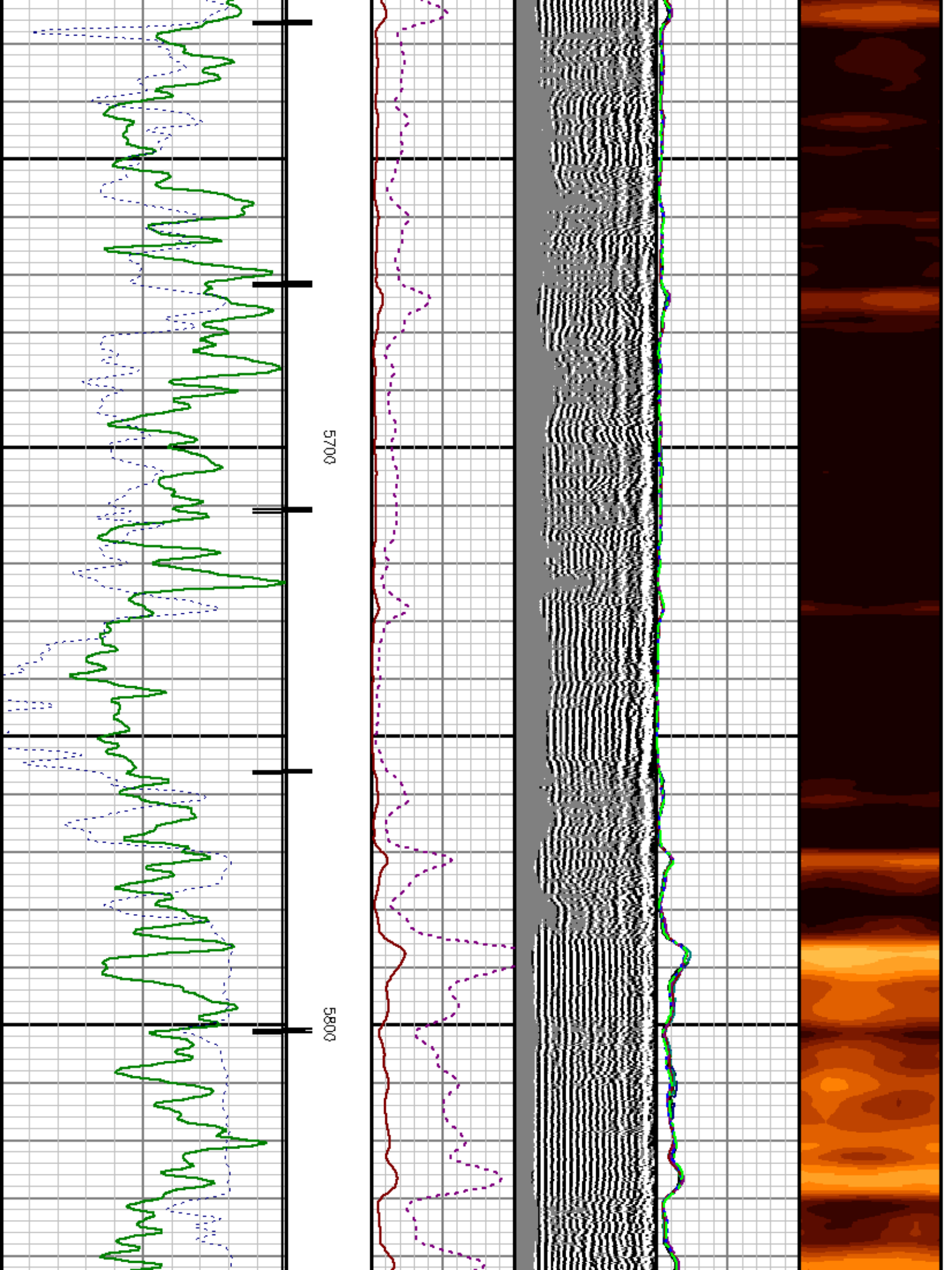


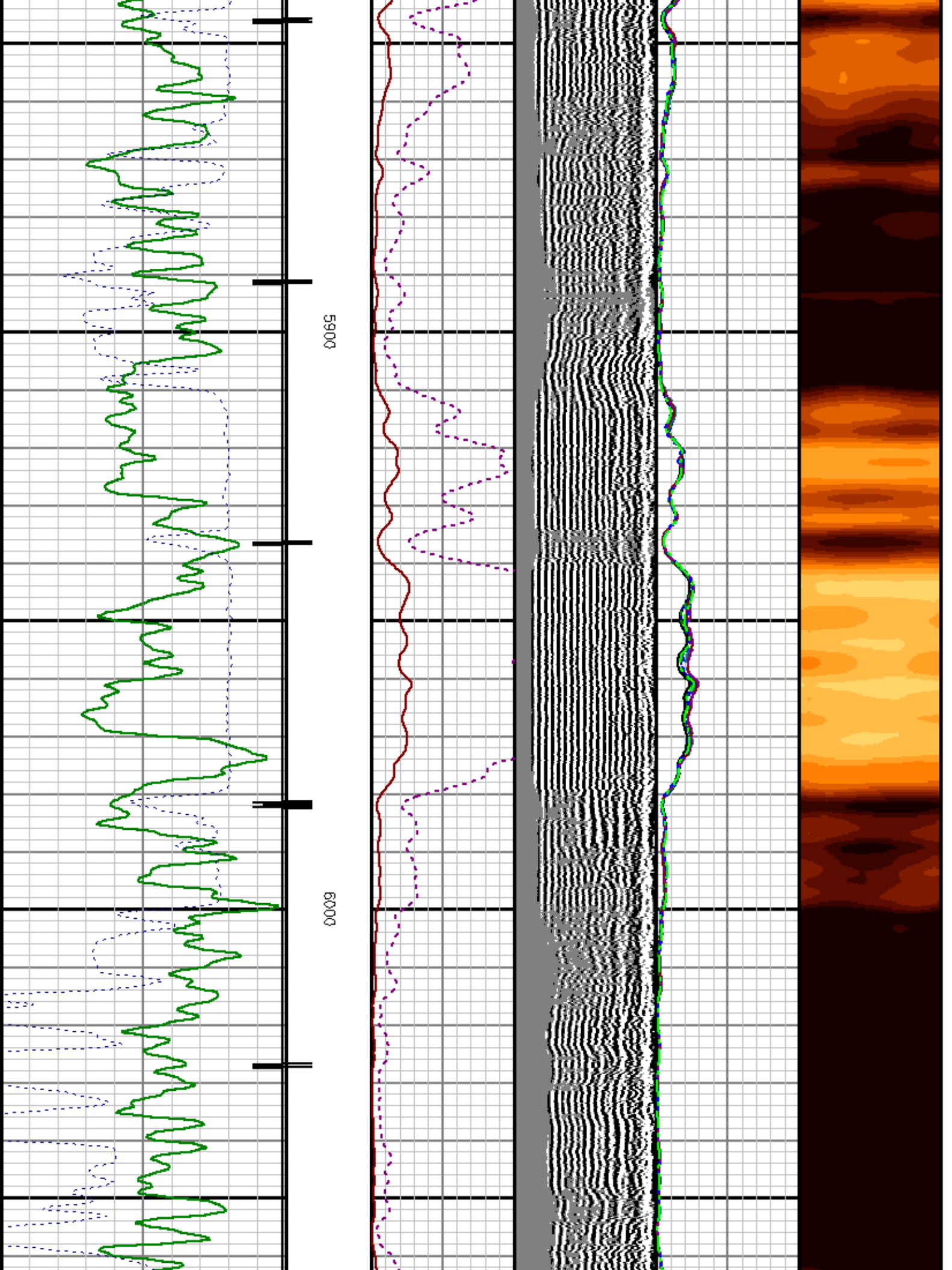


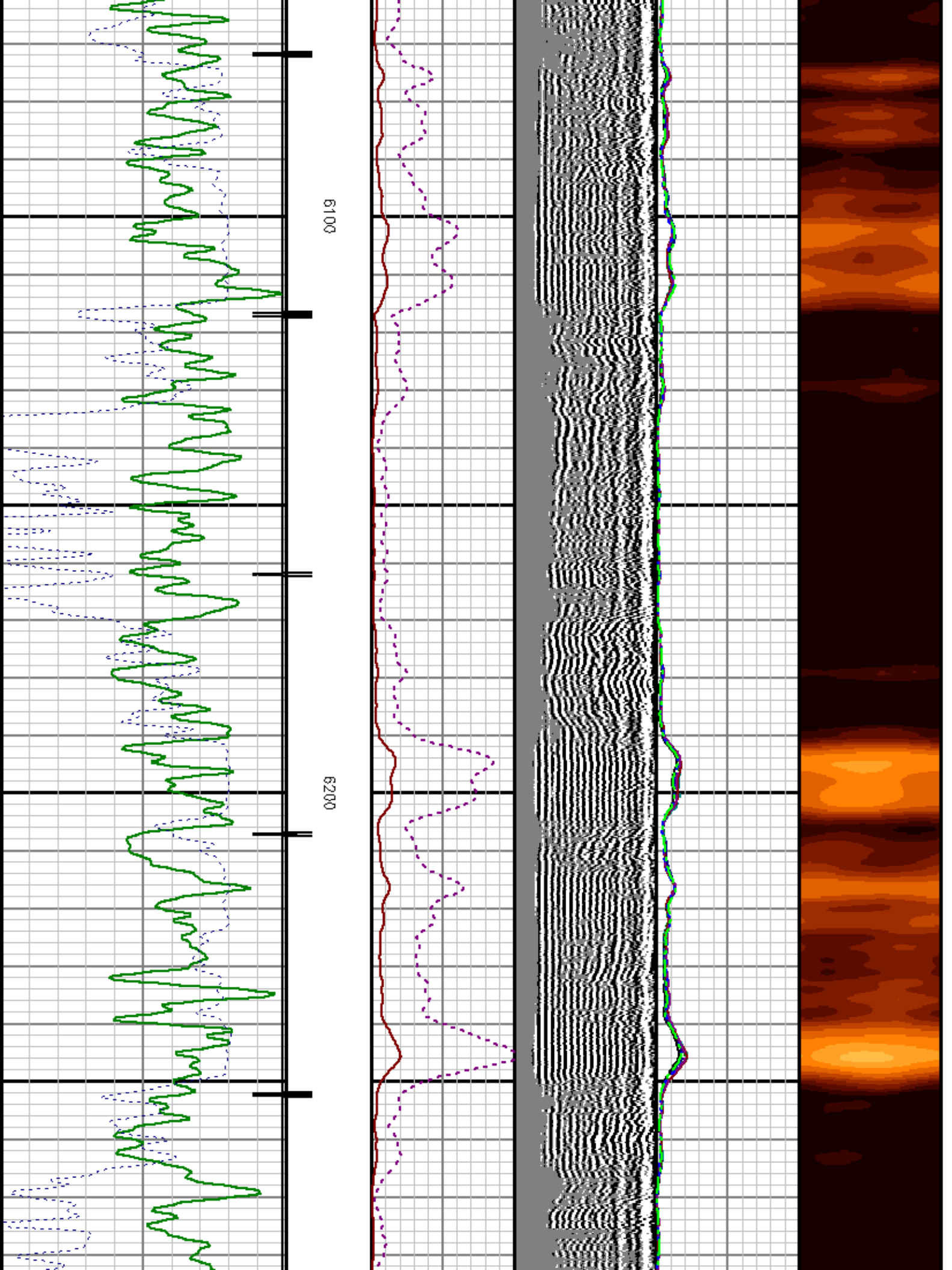


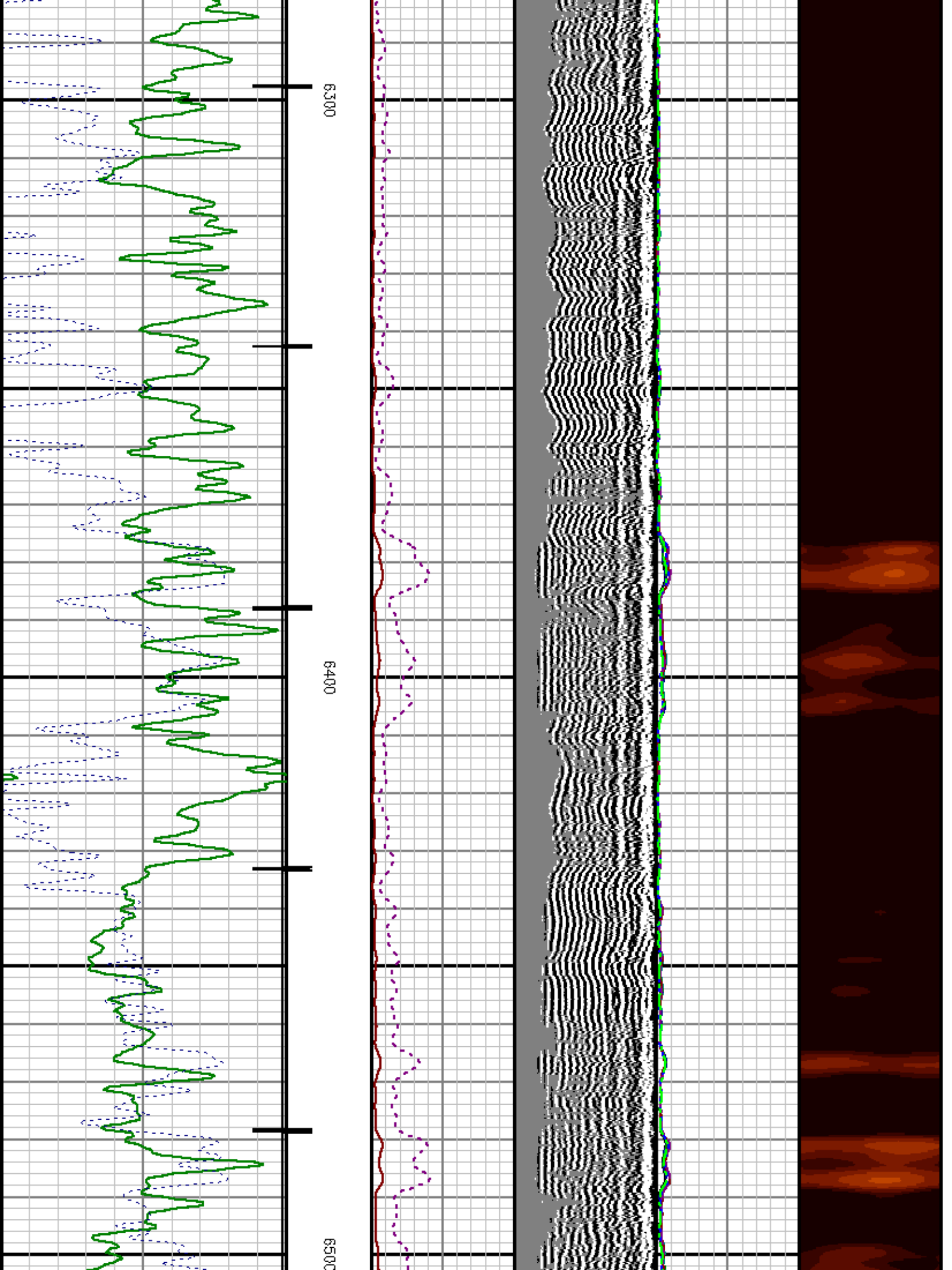


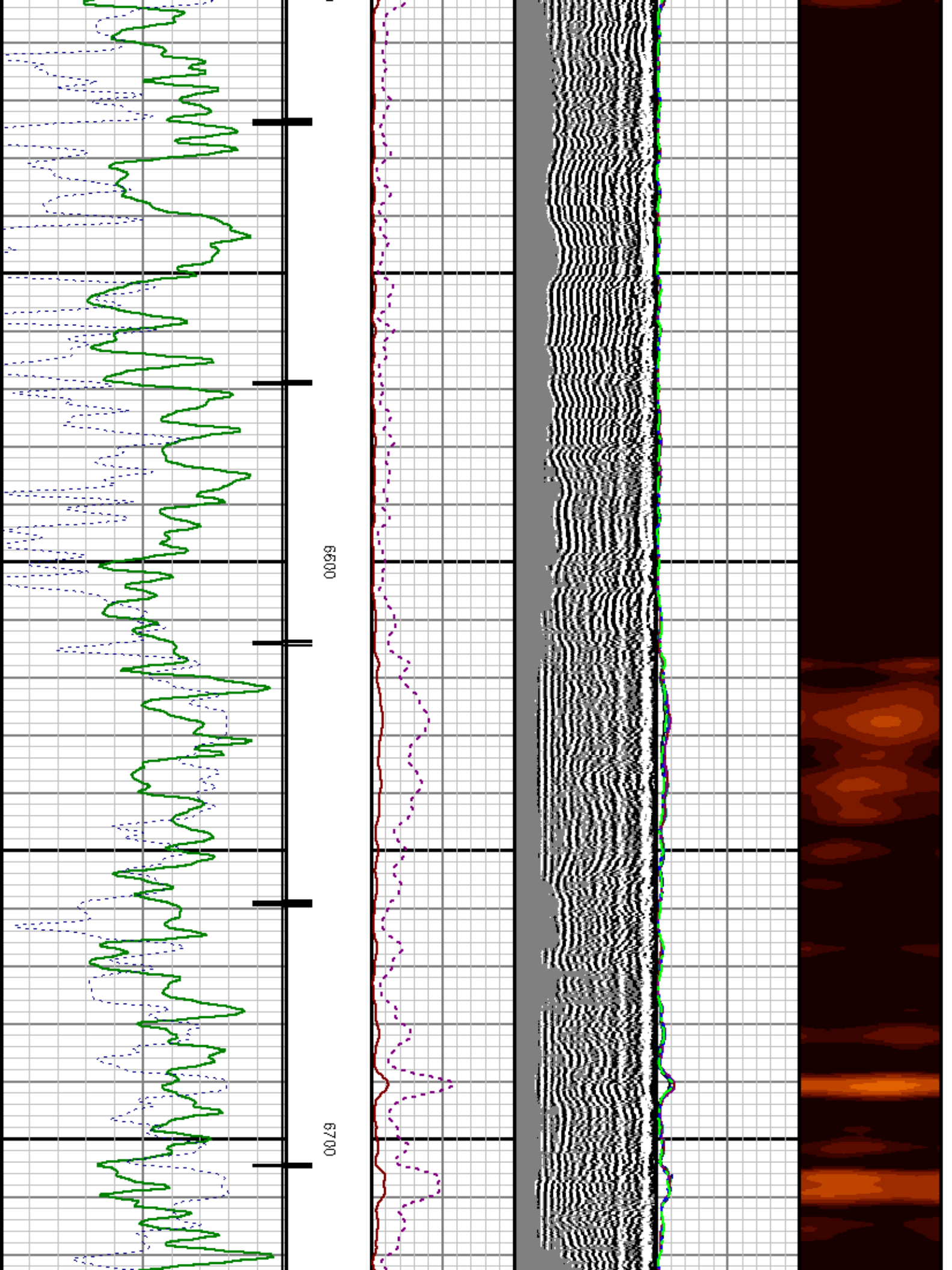


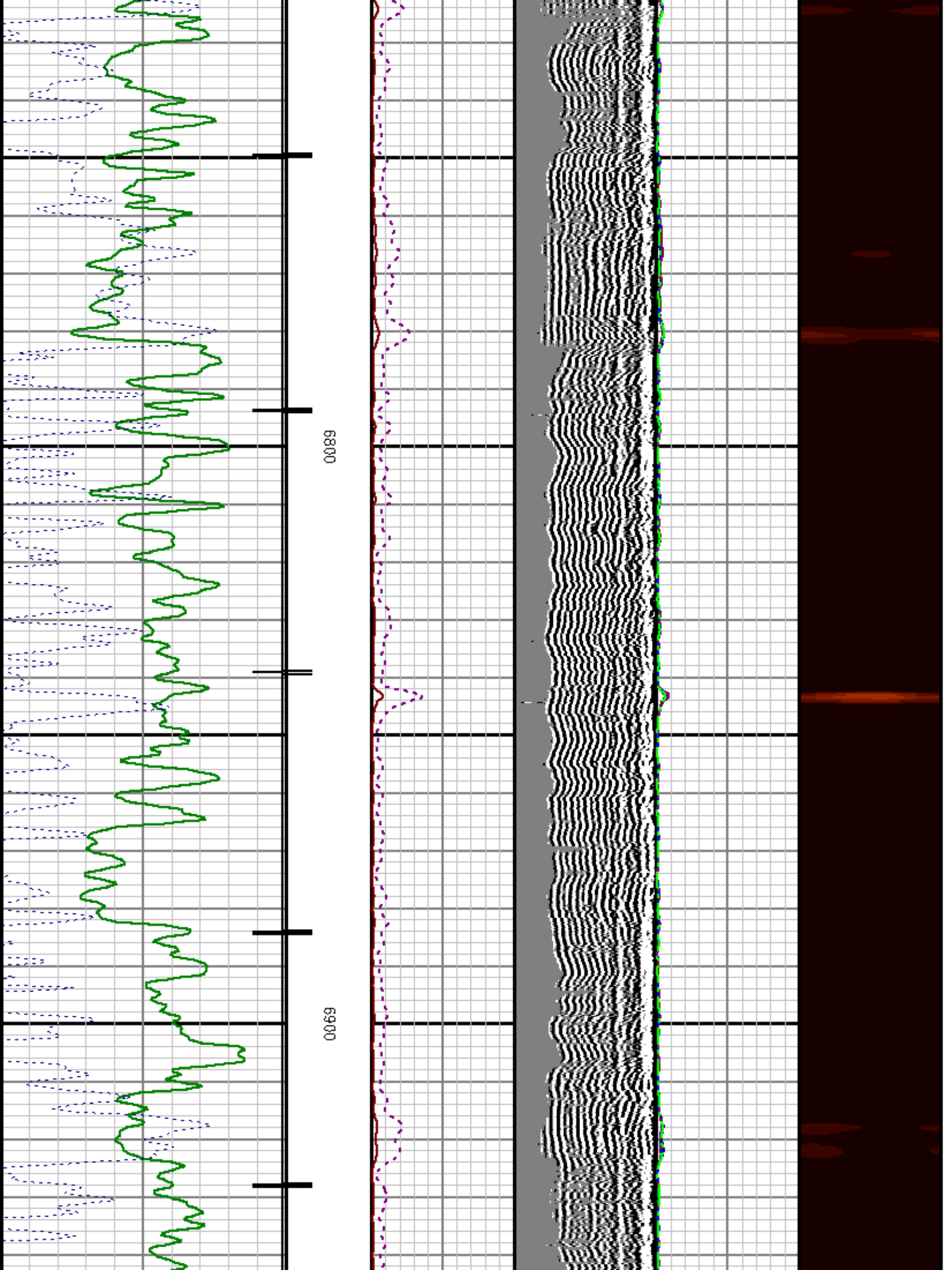


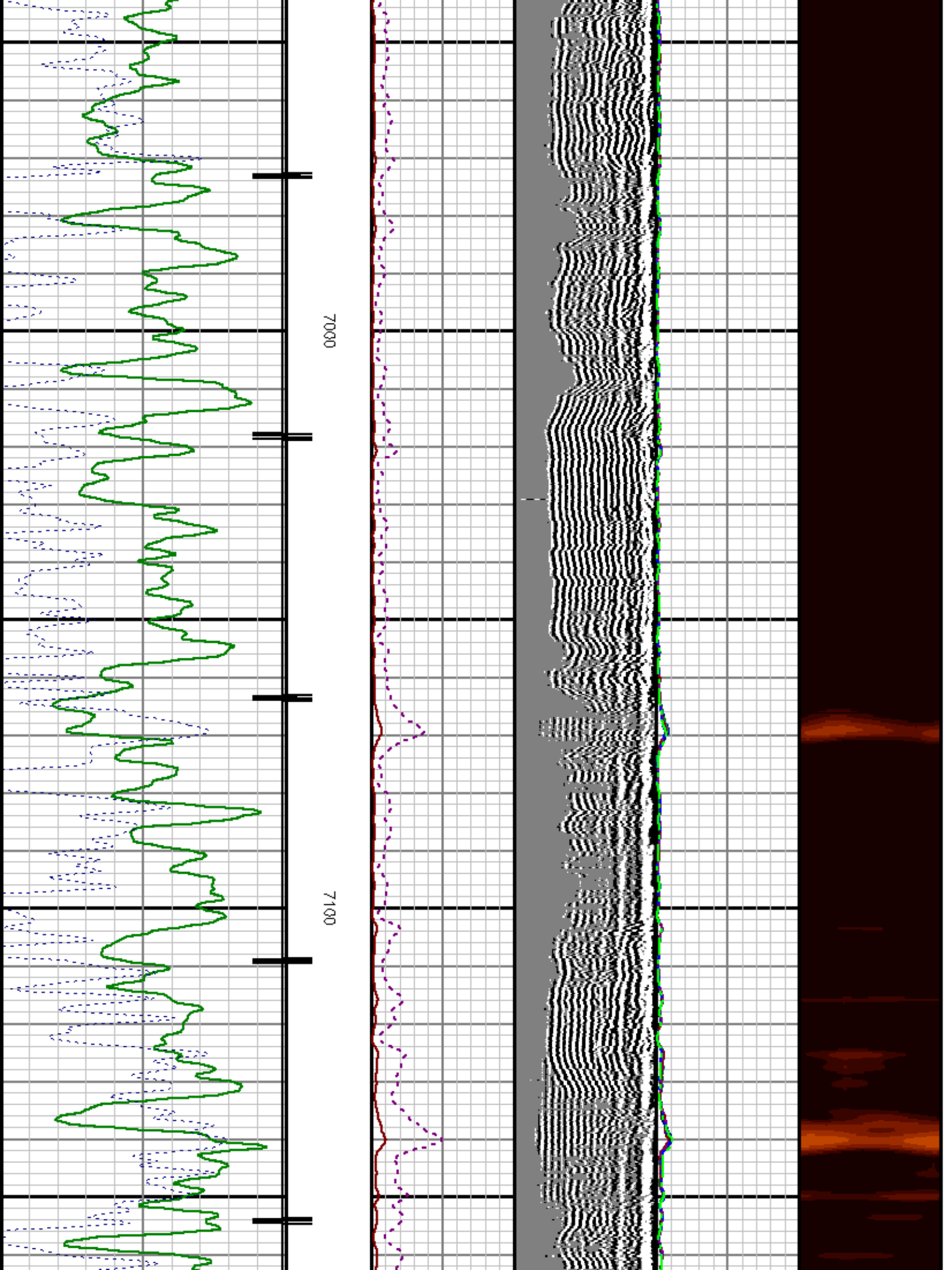


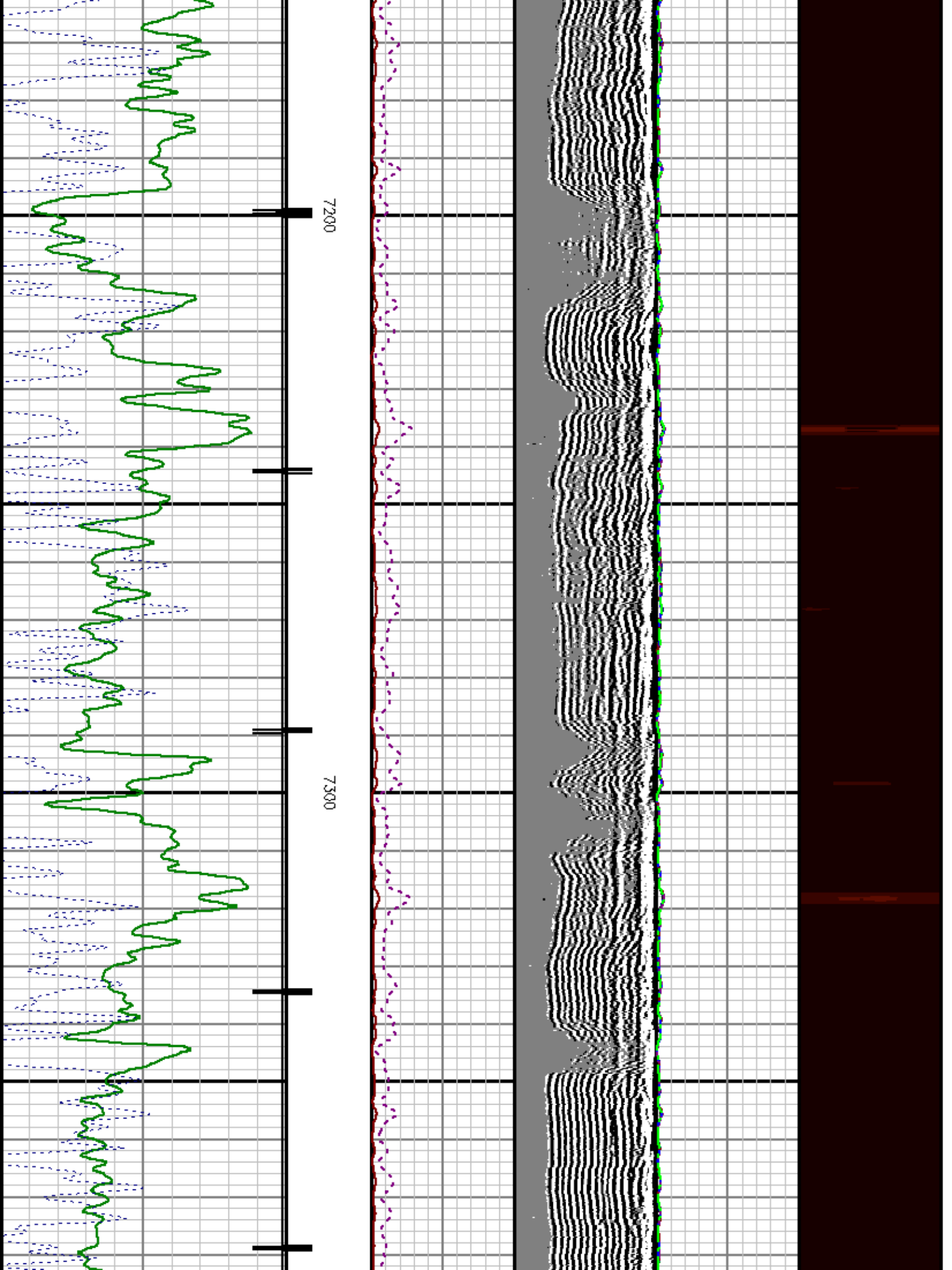


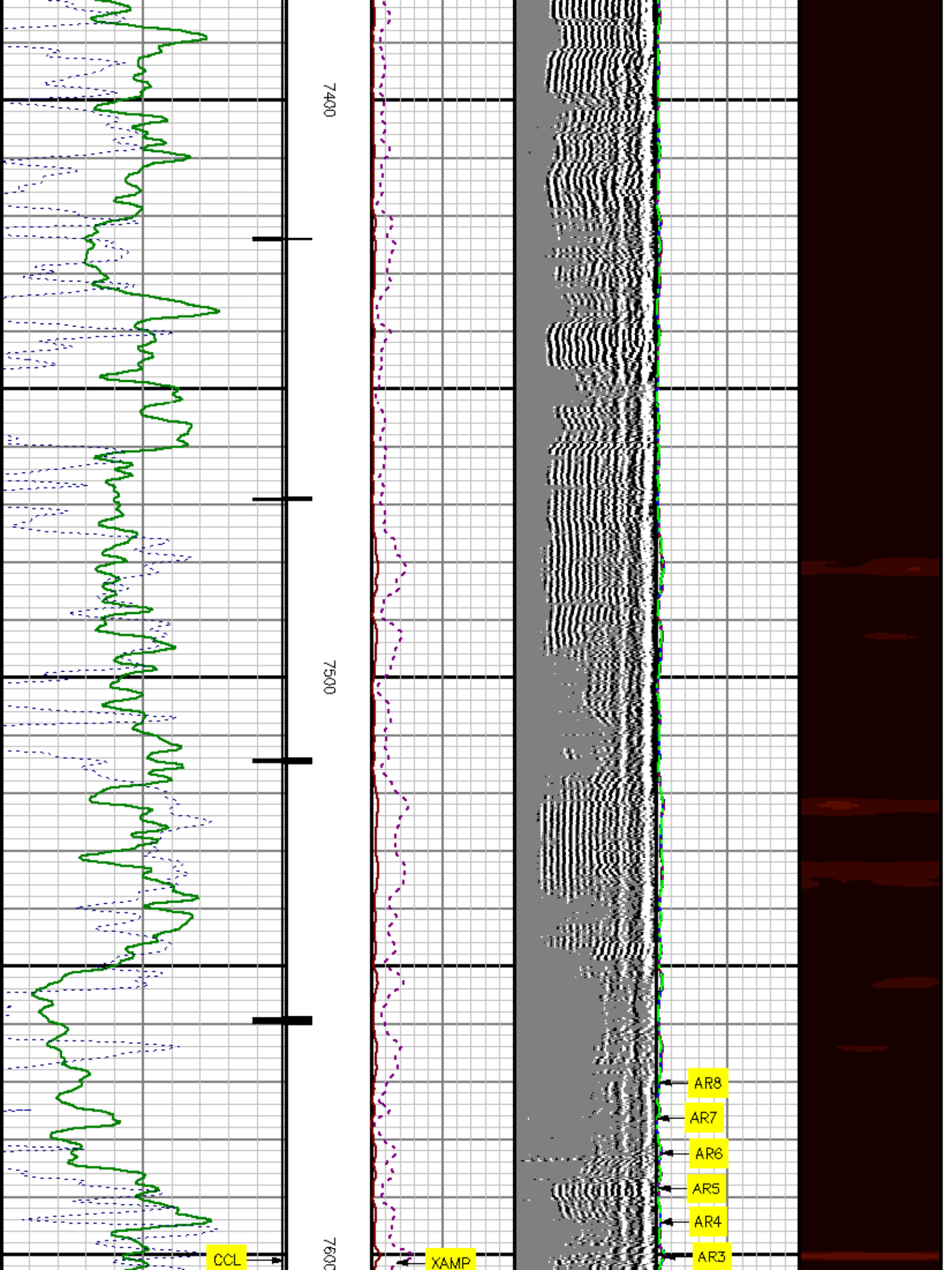


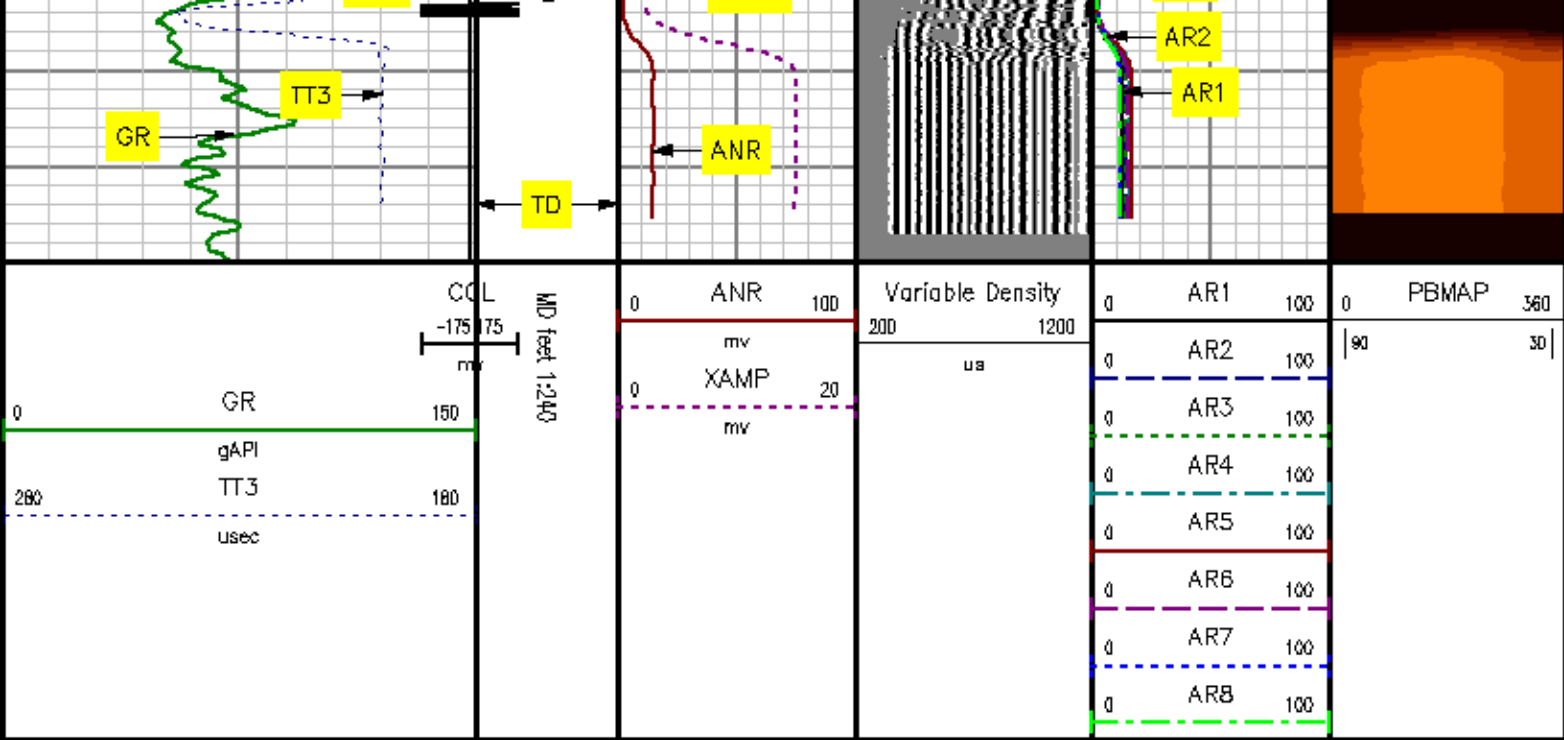












REPEAT SECTION

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	316.900	u sec	7399.750	7685.000
RAL	Amp Gate Start Near	200.391	u sec	7399.750	7685.000
RAL	Amp Gate Start Radial	200.391	u sec	7399.750	7685.000
RAL	Amp Gate Width Far	25.000	u sec	7399.750	7685.000
RAL	Amp Gate Width Near	25.000	u sec	7399.750	7685.000
RAL	Amp Gate Width Radial	25.000	u sec	7399.750	7685.000
RAL	casing od	4.500	inches	7399.750	7685.000
RAL	casing wt	11.600	lbm/ft	7399.750	7685.000
RAL	FB Start Far	291.900	u sec	7399.750	7685.000
RAL	FB Start Near	175.391	u sec	7399.750	7685.000
RAL	FB Start Radial	175.391	u sec	7399.750	7685.000
RAL	FB Thresh Far	10.000	mv	7399.750	7685.000
RAL	FB Thresh Near	4.000	mv	7399.750	7685.000
RAL	FB Thresh Radial	4.000	mv	7399.750	7685.000
RAL	Fluid Travel Time	200.000	u sec/ft	7399.750	7684.531

DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
1426XA	-15.360	ACAL	ANR	AR1	AR2	AR3	AR4
		AR5	AR6	AR7	AR8	CHV	FPR2
		FPR3	FPR5	TT3	TTR1	TTR2	TTR3
		TTR4	TTR5	TTR6	TTR7	TTR8	XAMP
1426XA	-14.360	AFAR	SIG	TT5			
1426XA	-7.250	CCL					
1426XA	-5.390	GR					
1426XA	0.000	NEU					

Created by : RAL, v4.8.007

Plotted by : PlotMgr, v5.4.504

Company : WILLIAMS PRODUCTION COMPANY

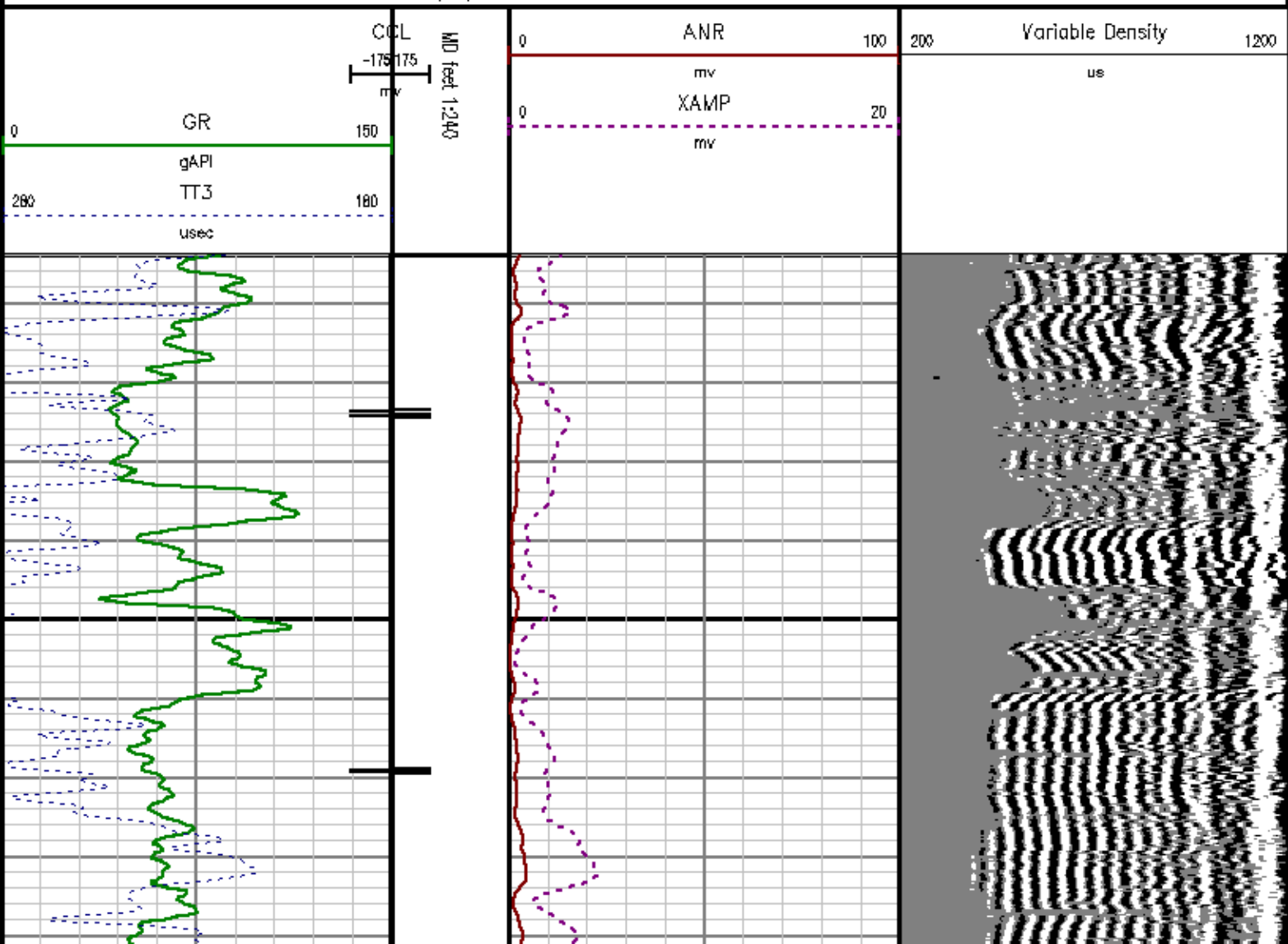
Well : RMF 42-27

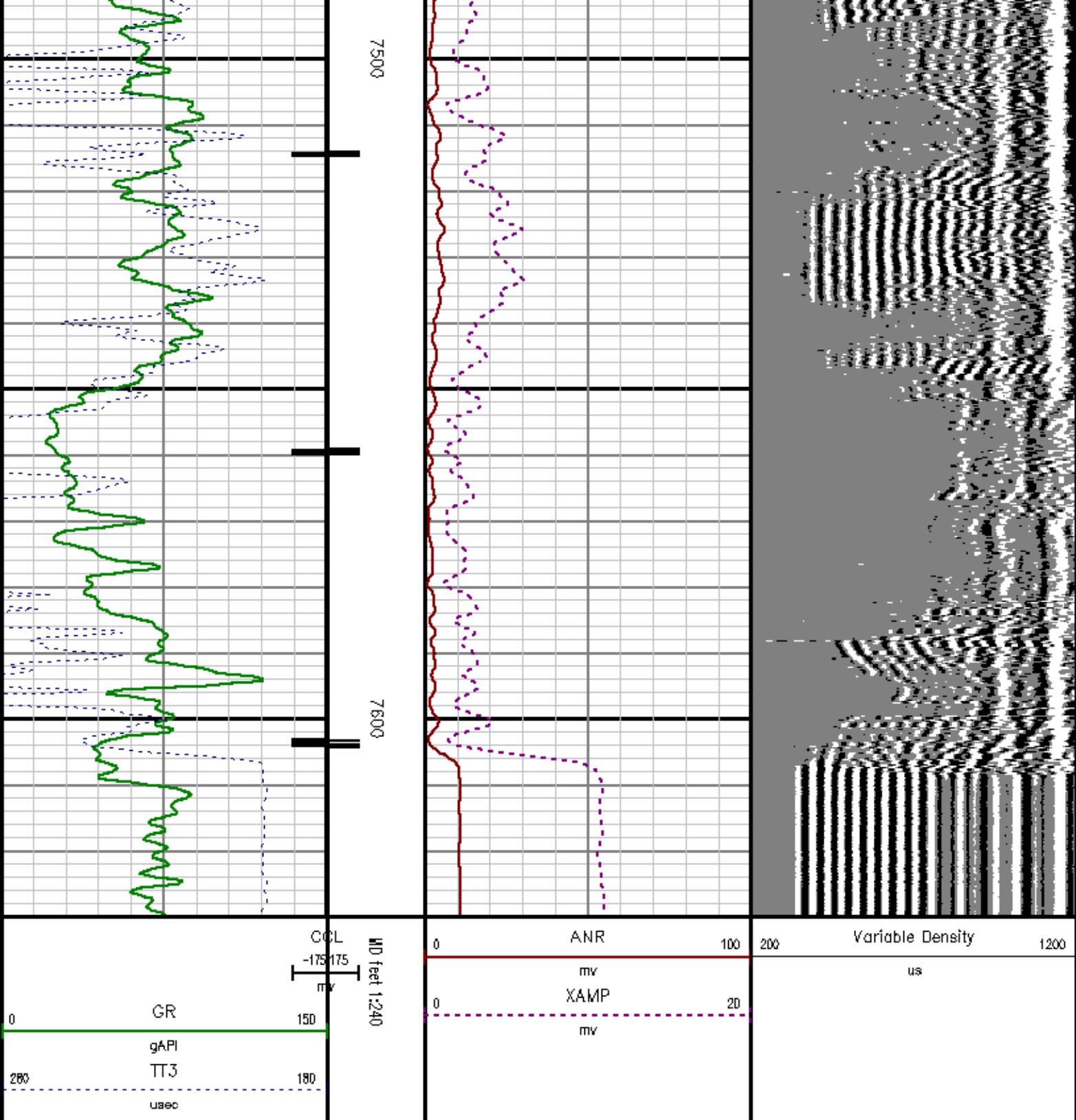
File Name : D:\WELLDATA\RAD42\REPEAT.XTF

Mode : PlotMgr 5.4.504

Interval : 7404.00 - 7630.00 feet UP

Created : 10/10/2009 3:45:48 PM





CALIBRATION SUMMARY

GAMMA RAY

CALIBRATION SUMMARY

Calibration Files: C:\case\calver\GR\5030G.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Wed Oct 07 09:02:18 2009 TOOL SERIES: 2459XA ASSET: 503 SEQ: 0C

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
BA 905	78.04	238.04	1.142	86.64	271.84	185.00

Verification Files: C:\case\calver\GR\5030G.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Wed Oct 07 09:03:56 2009 TOOL SERIES: 2459XA ASSET: 503 SEQ: 0C

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
BA 905	77.51	243.91	1.142	88.52	278.54	190.02

RALSHP

Shop Calibration: C:\case\calver\RALSHP\5440CTD_shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sat Oct 10 15:06:57 2009 TOOL SERIES: 1428XA ASSET: 544 SEQ: 0CTO

Tool Delay [usec]	Tank OD in	Tank Wt lbm/ft	Tank ID in					
-58.00	5.50	15.50	4.95					
RECEIVER	Travel Time [usec]	Amp. Gate Start [usec]	Amp. Gate Width [usec]	Zero Gate Start [usec]	Zero Gate Width [usec]	Zero Amp. [mV]	Amp Ref. [mV]	Shop Factor
CAL Pulse	220	216	30	143	25	-0.087	100.00	0.13
3 Ft. Receiver	220	216	30	90	25	0.000	100.00	0.13
5 Ft. Receiver	325	325	30	191	25	0.617	150.00	0.14
Radial #1	221	216	30	93	25	0.000	100.00	0.13
Radial #2	220	216	30	93	25	0.000	100.00	0.13
Radial #3	220	216	30	93	25	0.000	100.00	0.13
Radial #4	220	216	30	93	25	0.000	100.00	0.13
Radial #5	220	216	30	93	25	0.000	100.00	0.13
Radial #6	220	216	30	93	25	0.000	100.00	0.13
Radial #7	220	216	30	93	25	0.000	100.00	0.13
Radial #8	221	216	30	93	25	0.000	100.00	0.13

RALFLD

Well Site Calibration: C:\case\calver\RALFLD\5440CT10 fld.cal

WELLSITE CALIBRATION SUMMARY

Tool Delay [usec] Casing OD in Casing Wt lbm/ft Casing ID 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="143"/>	<input type="text" value="25"/>	<input type="text" value="0.021"/>	<input type="text" value="0.000"/>	<input type="text" value="1.01"/>	<input type="text" value="100.000"/>
3 Ft. Receiver	<input type="text" value="200"/>	<input type="text" value="25"/>	<input type="text" value="0.022"/>			
5 Ft. Receiver	<input type="text" value="317"/>	<input type="text" value="25"/>	<input type="text" value="0.419"/>			
Radial #1	<input type="text" value="200"/>	<input type="text" value="25"/>	<input type="text" value="0.070"/>			
Radial #2	<input type="text" value="200"/>	<input type="text" value="25"/>	<input type="text" value="0.075"/>			
Radial #3	<input type="text" value="200"/>	<input type="text" value="25"/>	<input type="text" value="0.180"/>			
Radial #4	<input type="text" value="200"/>	<input type="text" value="25"/>	<input type="text" value="0.090"/>			
Radial #5	<input type="text" value="200"/>	<input type="text" value="25"/>	<input type="text" value="0.039"/>			
Radial #6	<input type="text" value="200"/>	<input type="text" value="25"/>	<input type="text" value="-0.019"/>			
Radial #7	<input type="text" value="200"/>	<input type="text" value="25"/>	<input type="text" value="0.090"/>			
Radial #8	<input type="text" value="200"/>	<input type="text" value="25"/>	<input type="text" value="0.081"/>			

TOOL DIAGRAM

OTA SHORT CABLE HEAD

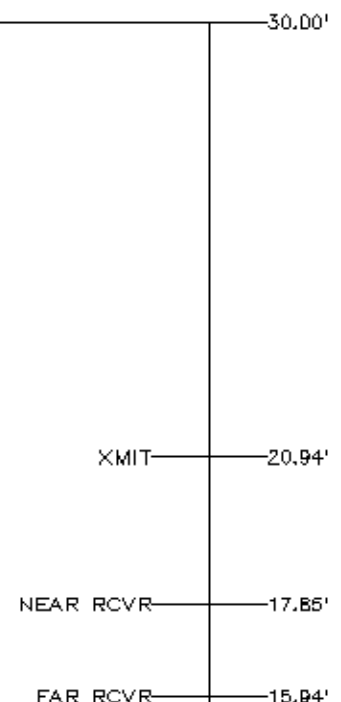
CENTRALIZER

Series	RALCENT
Mnemonic	CENT
Diameter	3.12"
Weight	20.00 lb

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

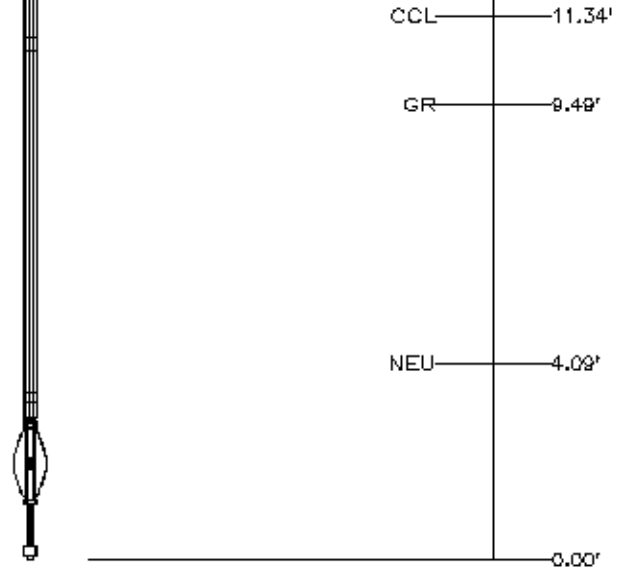
CENTRALIZER

Series	RALCENT
Mnemonic	CENT
Diameter	3.12"
Weight	20.00 lb



Probe GR/CCL/NEU (2459XA)

CENTRALIZER	
Series	RALCENT
Mnemonic	CENT
Diameter	3.12"
Weight	20.00 lb



Total Length: 30.00'
 Total Weight: Not Available
 Max Diameter: Ø 3.12"



Baker Atlas



Company	WILLIAMS PRODUCTION COMPANY		File No:	1385
Well	RWF 42-27		API No:	05-045-162320000
Field	RULISON			
County	GARFIELD	State	COLORADO	
Location	SHL: 1745' FNL & 2192' FEL BHL: 1766' FNL & 1174' FEL		Elevations	27, 6S, 94W
	SEC 27	TWP 6S	RGE 94W	KB 5242 ft DF 5241 ft GL 5218 ft