



RADIAL ANALYSIS BOND LOG

Baker Atlas

File No:	Company	MARATHON OIL COMPANY
1679	Well	696-31A-24
API No:	Field	GRAND VALLEY
06-046-150810000	County	GARFIELD
	State	COLORADO
	Location	Other Services
	609' FUL & 1675' FEL	3.70" GAUGE
		RPM
		MAC
	SEC 31 TWP 5S RGE 98W	
Permanent Datum	G.L.	Elevation
Log Measured From	K.B.	24 ft Above P. D.
Drill Measured From	KELLY BUSHING	KB 8442 ft DF 8441 ft GL 8418 ft

Date	10/DEC/08
Run	ONE
Service Order	547518
Depth Driller	8868 ft
Depth Logger	9800 ft
Bottom Logged Interval	9800 ft
Top Logged Interval	3110 ft
Time Started	21:30
Time Finished	00:30
Operator Rig Time	3 HRS
Type of Fluid in Hole	WATER
Fluid Density	N/A
Salinity	N/A
Fluid Level	FULL
Logged Cement Top	3330 ft
Wellhead Pressure	1000 psi
Maximum Hole Deviation	N/A
Nominal Logging Speed	60 fpm
Maximum Recorded Temperature	N/A
Reference Log	BAKER ATLAS RPM
Reference Log Date	10/DEC/08
Equipment No.	6741
Location	GRAND JUNCTION, CO
Recorded By	J. SPODEN
Witnessed By	MR. TIM WEDD

- 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
8.75 in	2823 ft	7770 ft
7.875 in	7770	9869 ft

Casing Record				
Size	Weight	Grade	From	To
4.5 in	11.8 lbm/ft	P-110	SURFACE	9869 ft

Remarks
MAIN PASS WAS LOGGED WITH 1000 psi ON WELL
REPEAT PASS WAS LOGGED WITH 0 psi ON WELL

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	VDL	1428XA	1000	CENTRALIZED
1	1	GS/CCL/TEU	2458XA	118	CENTRALIZED

MAIN SECTION
PRIMARY PRESENTATION
1000# PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	316.900	usec	3111.350	9827.850
RAL	Amp Gate Start Near	200.391	usec	3111.350	9827.850
RAL	Amp Gate Start Radial	200.391	usec	3111.350	9827.850
RAL	Amp Gate Width Far	25.000	usec	3111.350	9827.850
RAL	Amp Gate Width Near	25.000	usec	3111.350	9827.850
RAL	Amp Gate Width Radial	25.000	usec	3111.350	9827.850
RAL	casing od	4.500	inches	3111.350	9827.850
RAL	casing wt	11.600	lbm/ft	3111.350	9827.850
RAL	FB Start Far	291.900	usec	3111.350	9827.850
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RAL	FB Thresh Radial	4.000	mv	3111.350	9827.850
RAL	Fluid Travel Time	200.000	usec/ft	3111.350	9828.459

DEPTH OFFSETS
(for Acquired Curves)

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

Created by : RAL, v4.8.007

Plotted by : PlotMgr, v5.4.504

Company : MARATHON OIL COMPANY

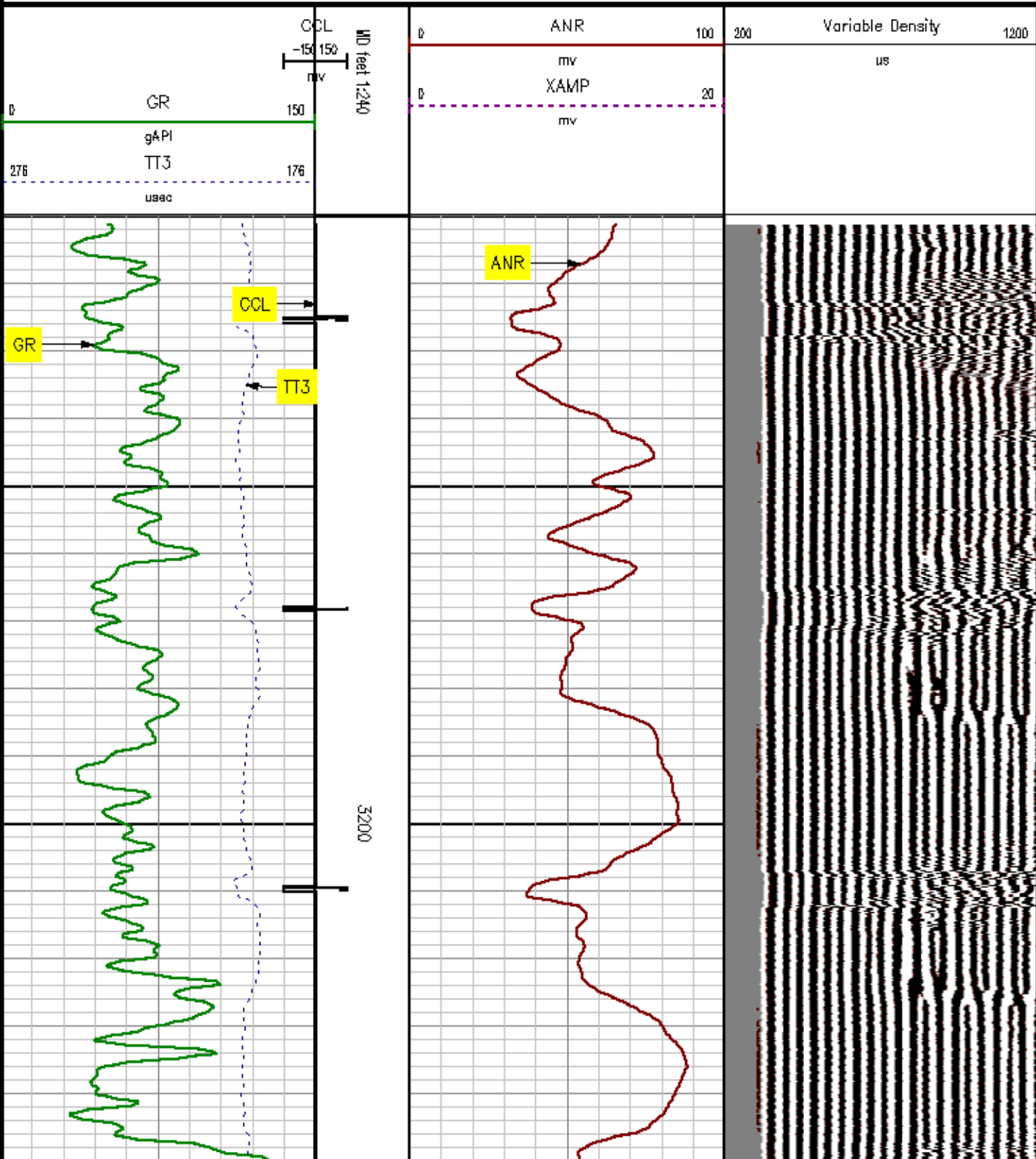
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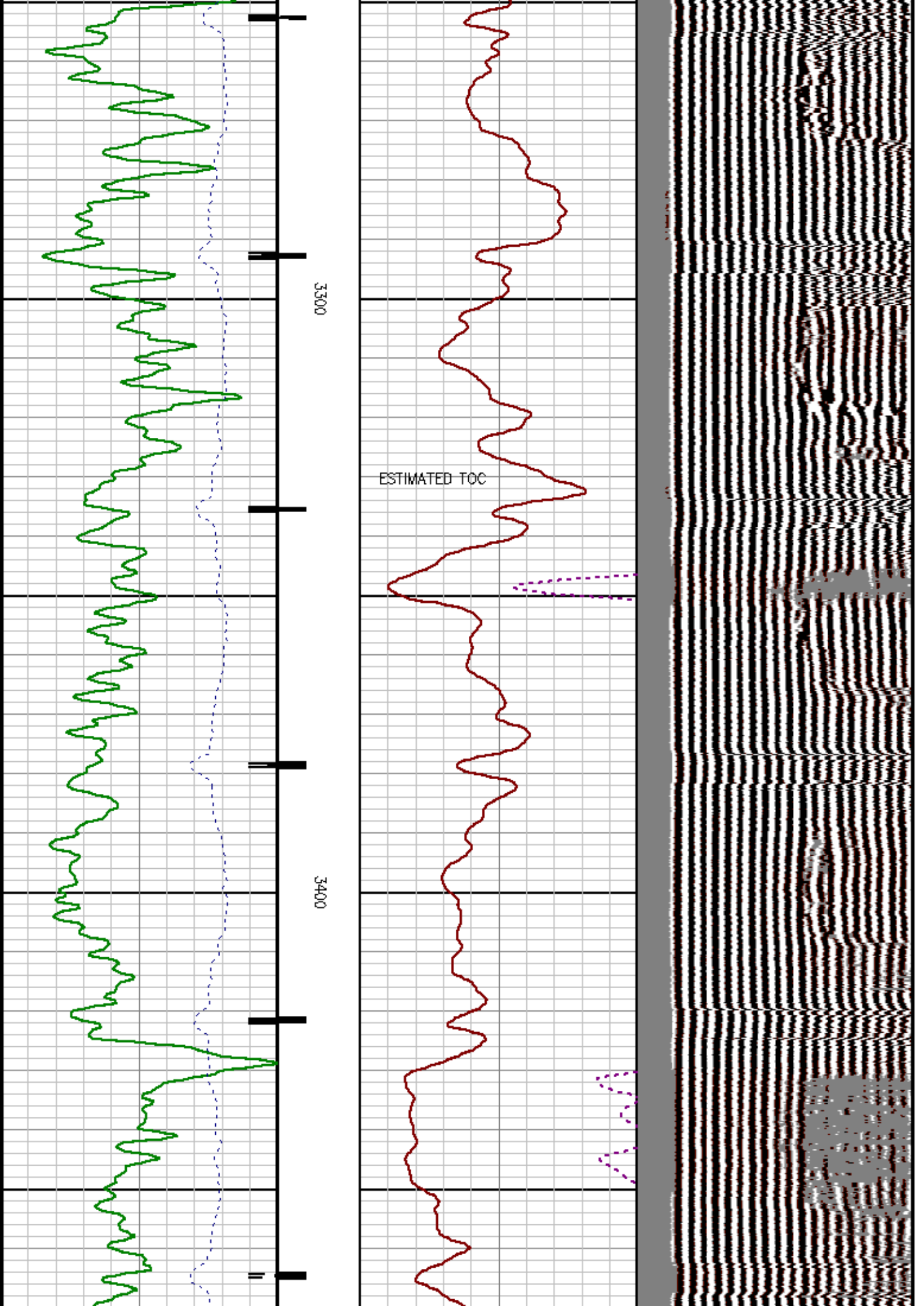
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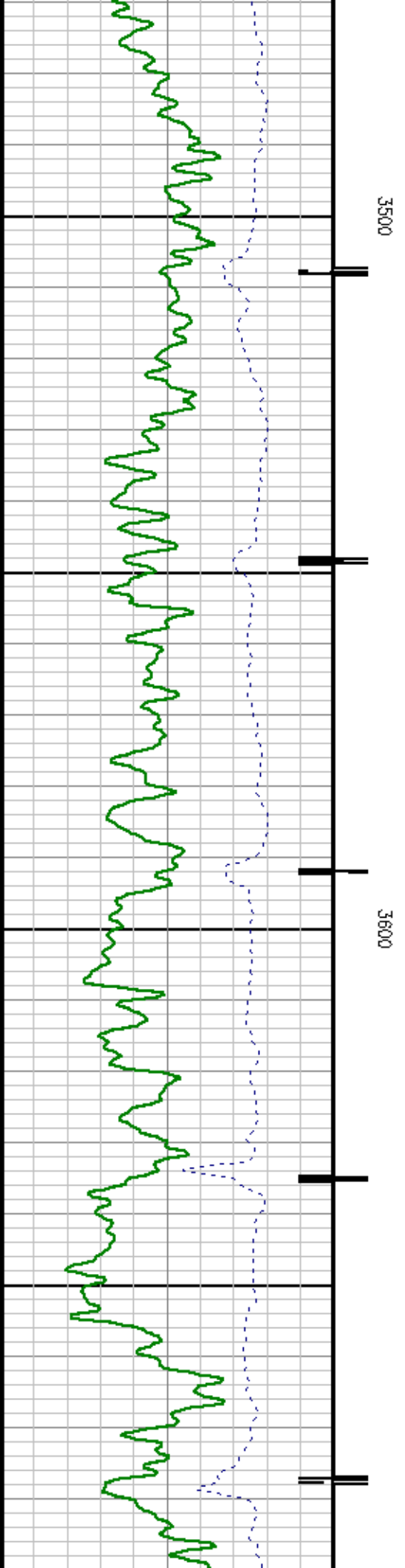
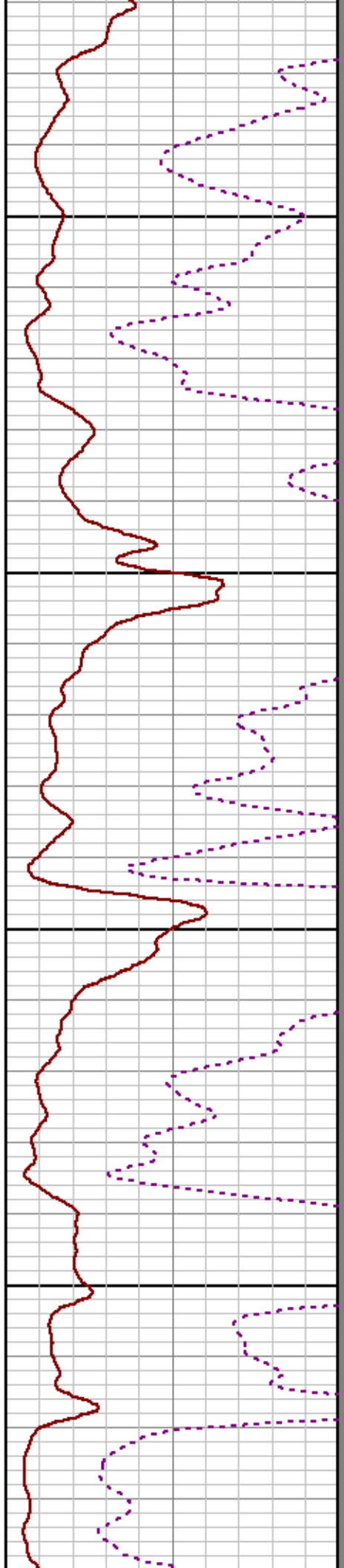
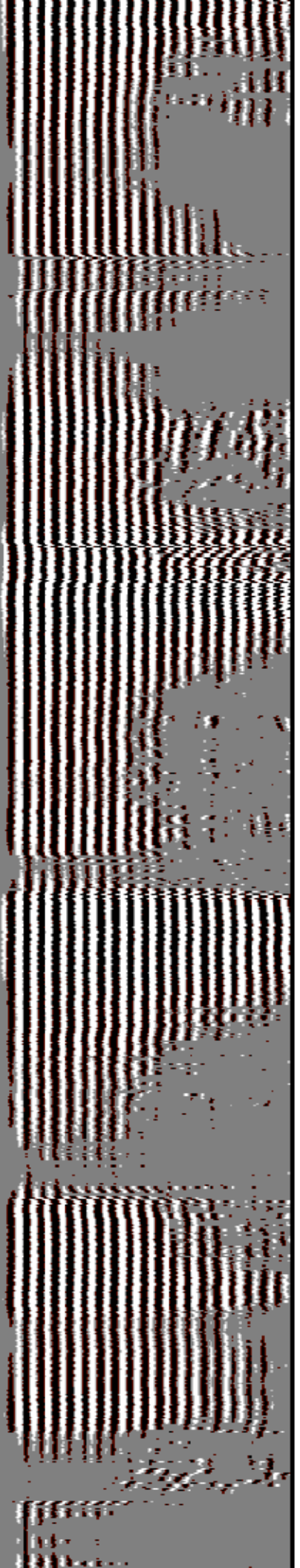
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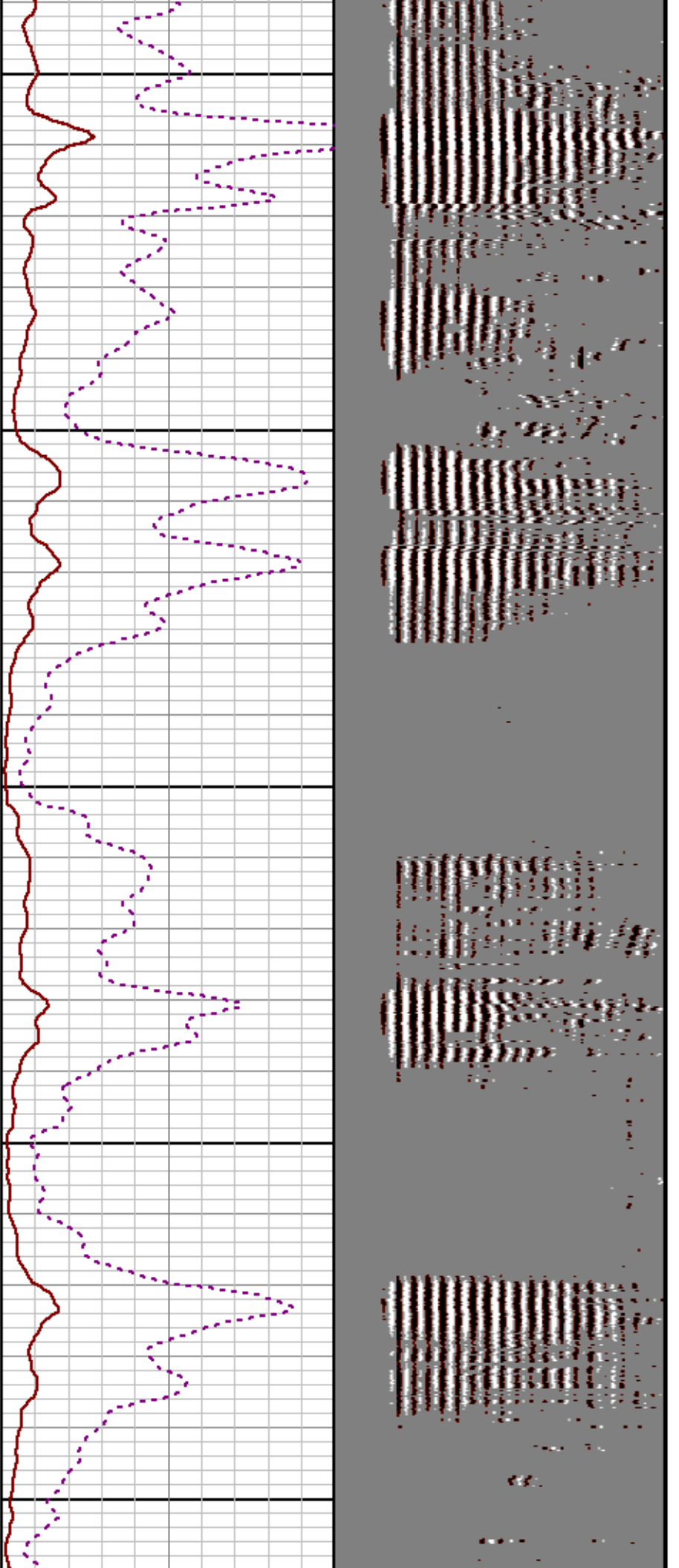
Interval : 3110.00 - 9830.00 feet UP

Created : 12/11/2008 12:08:09 AM





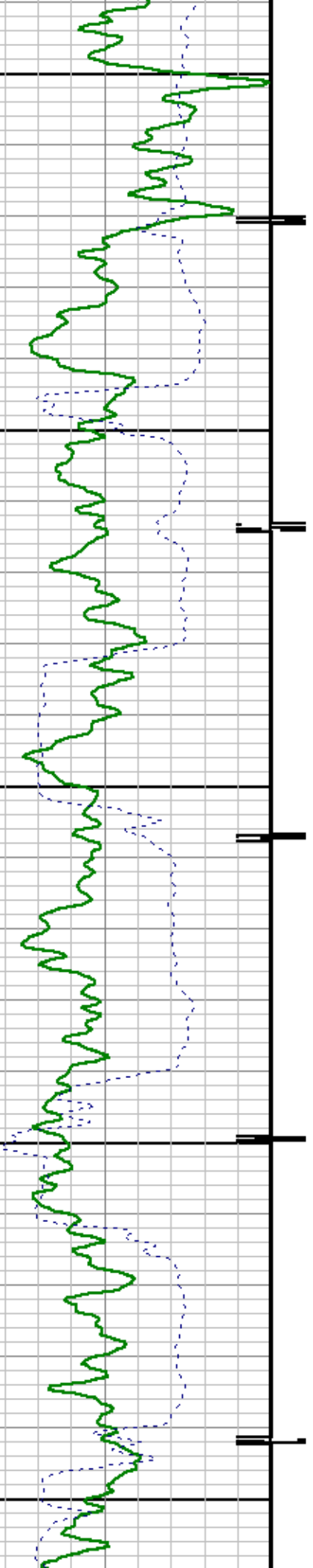


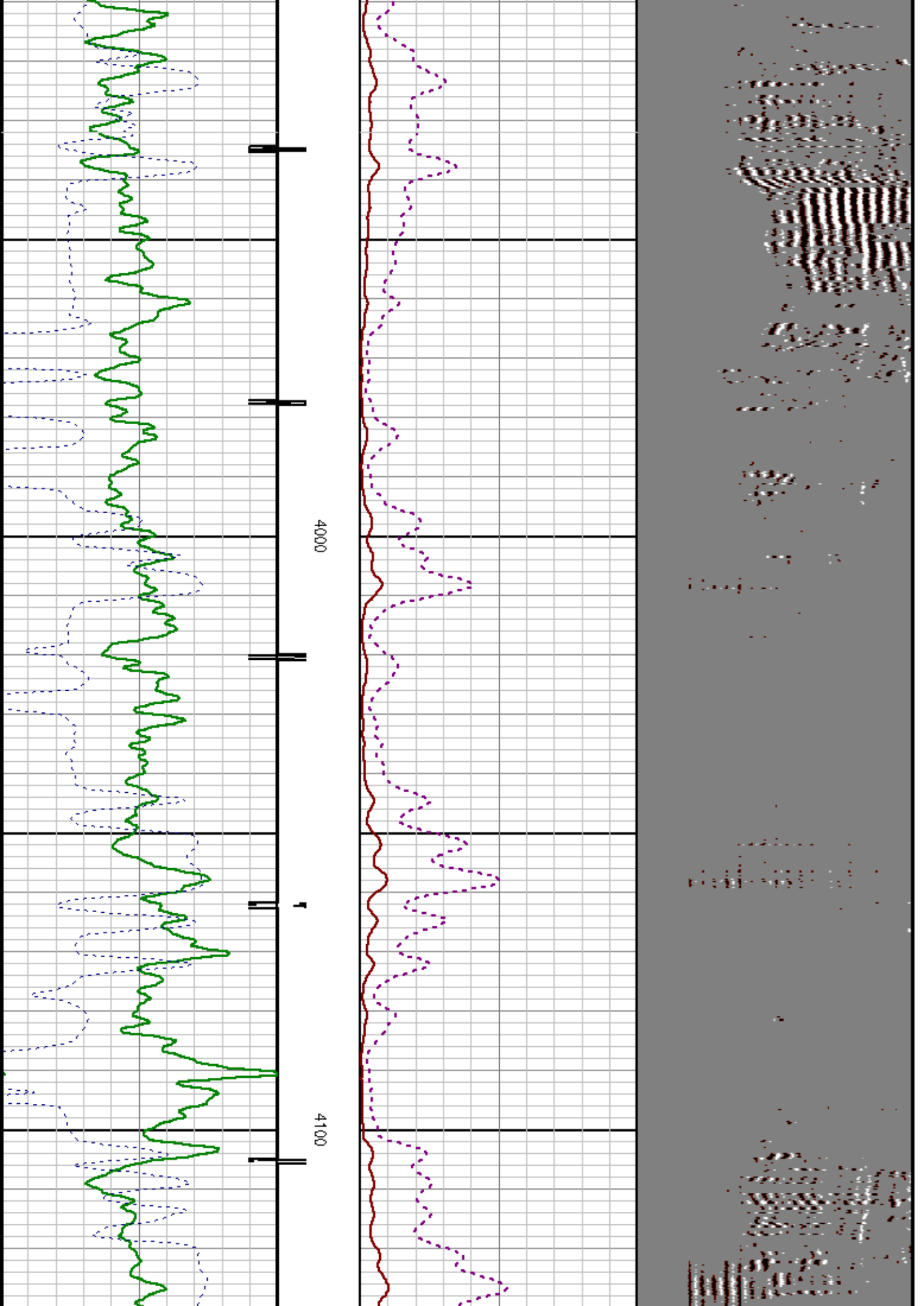


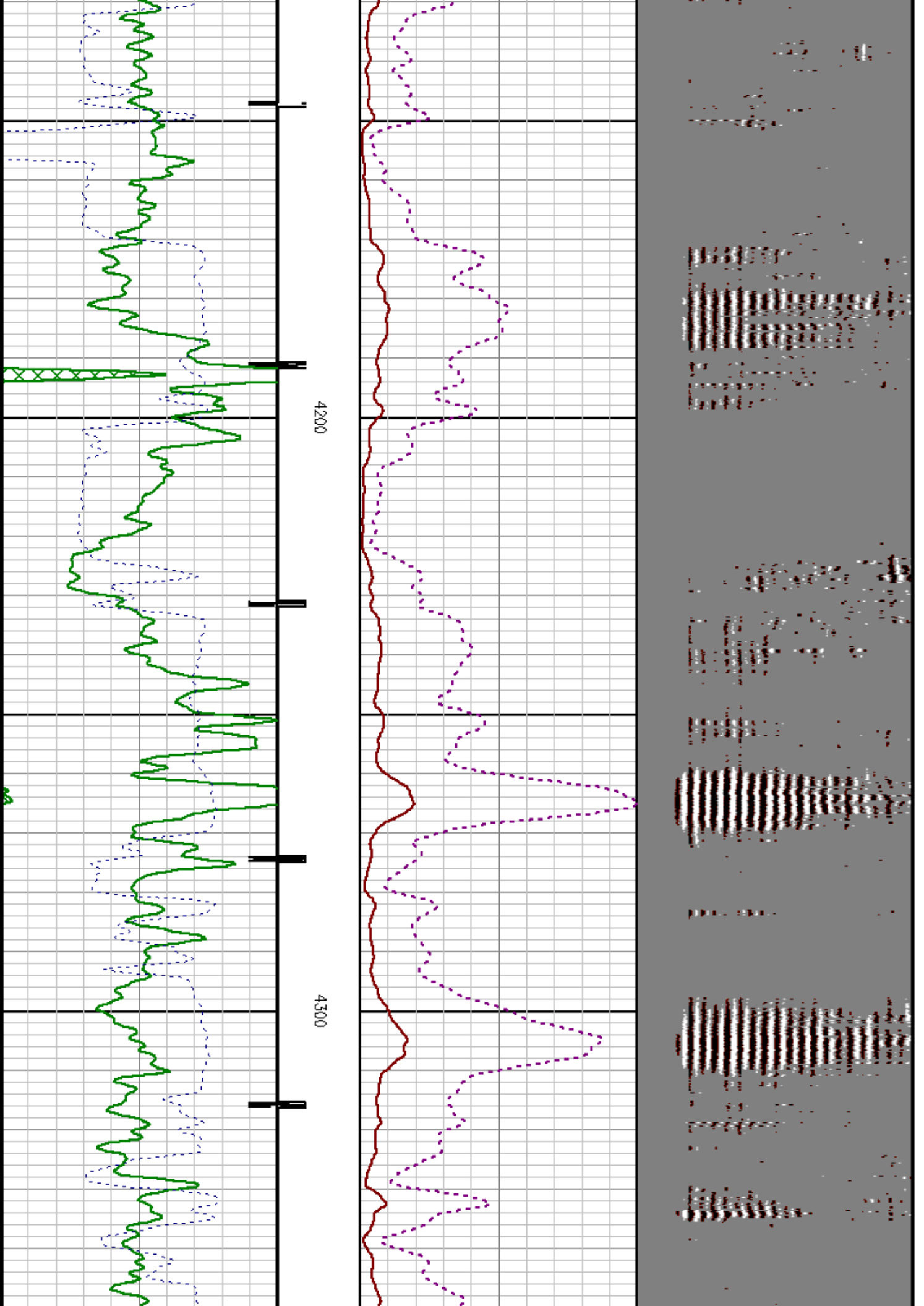
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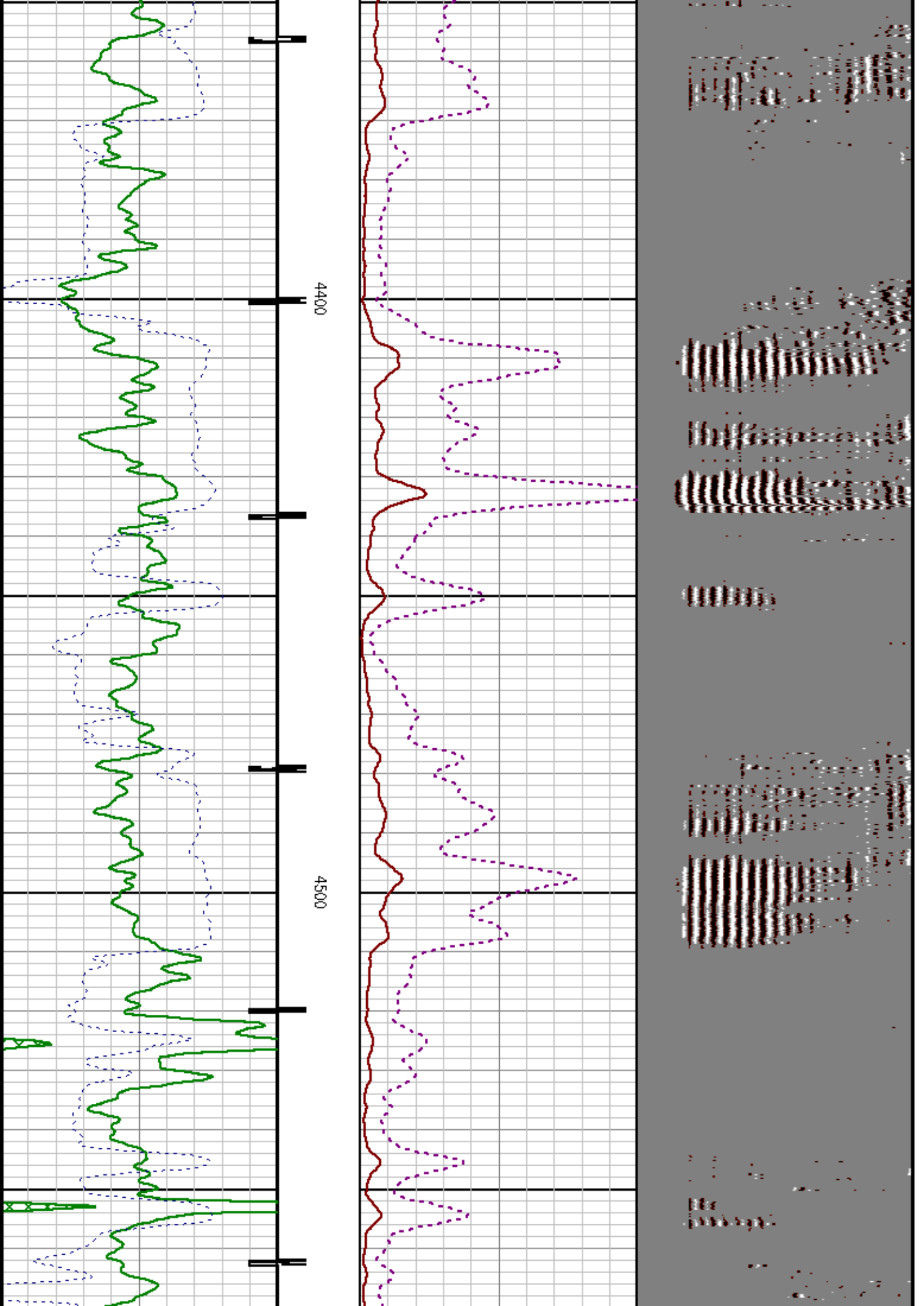
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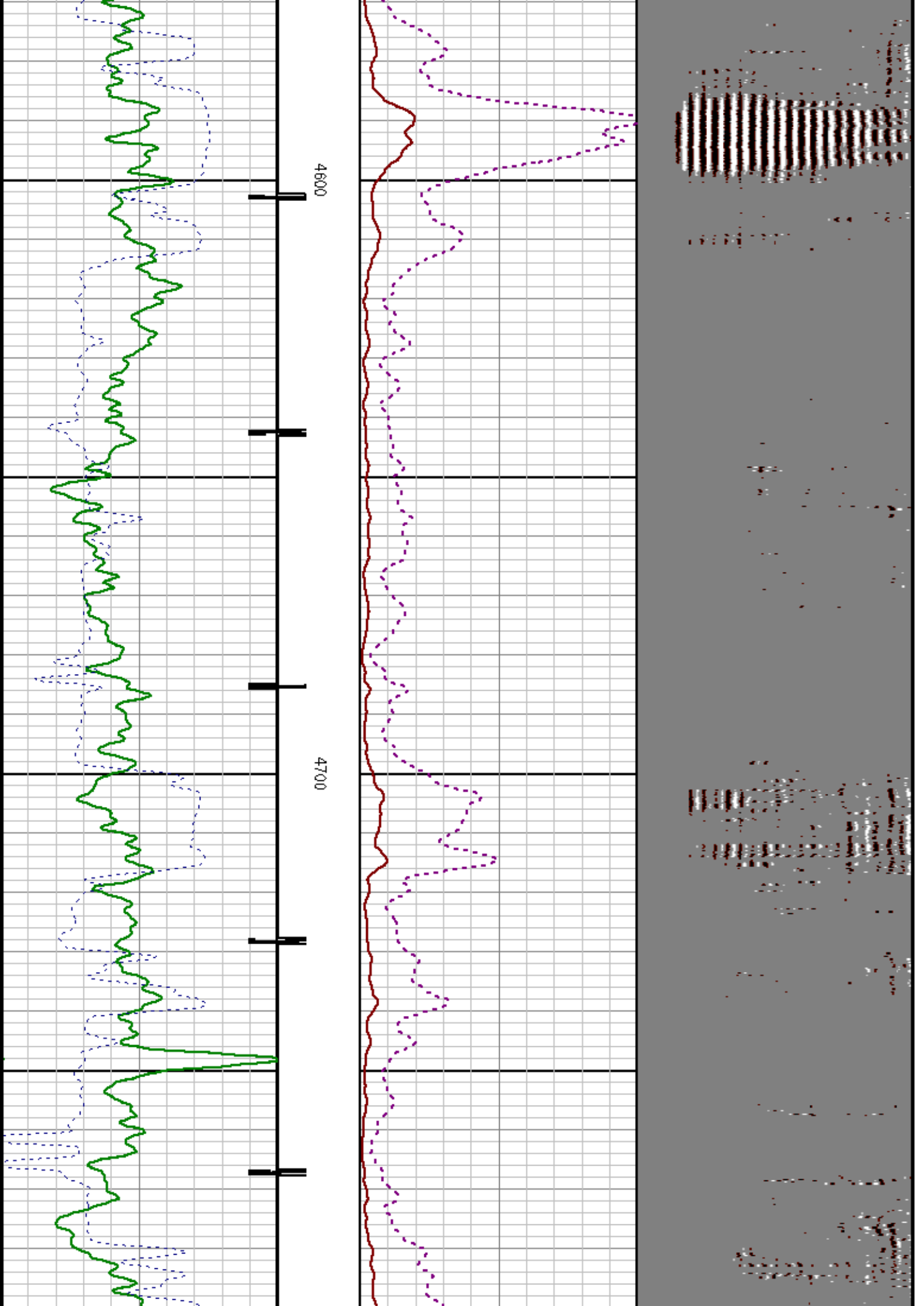
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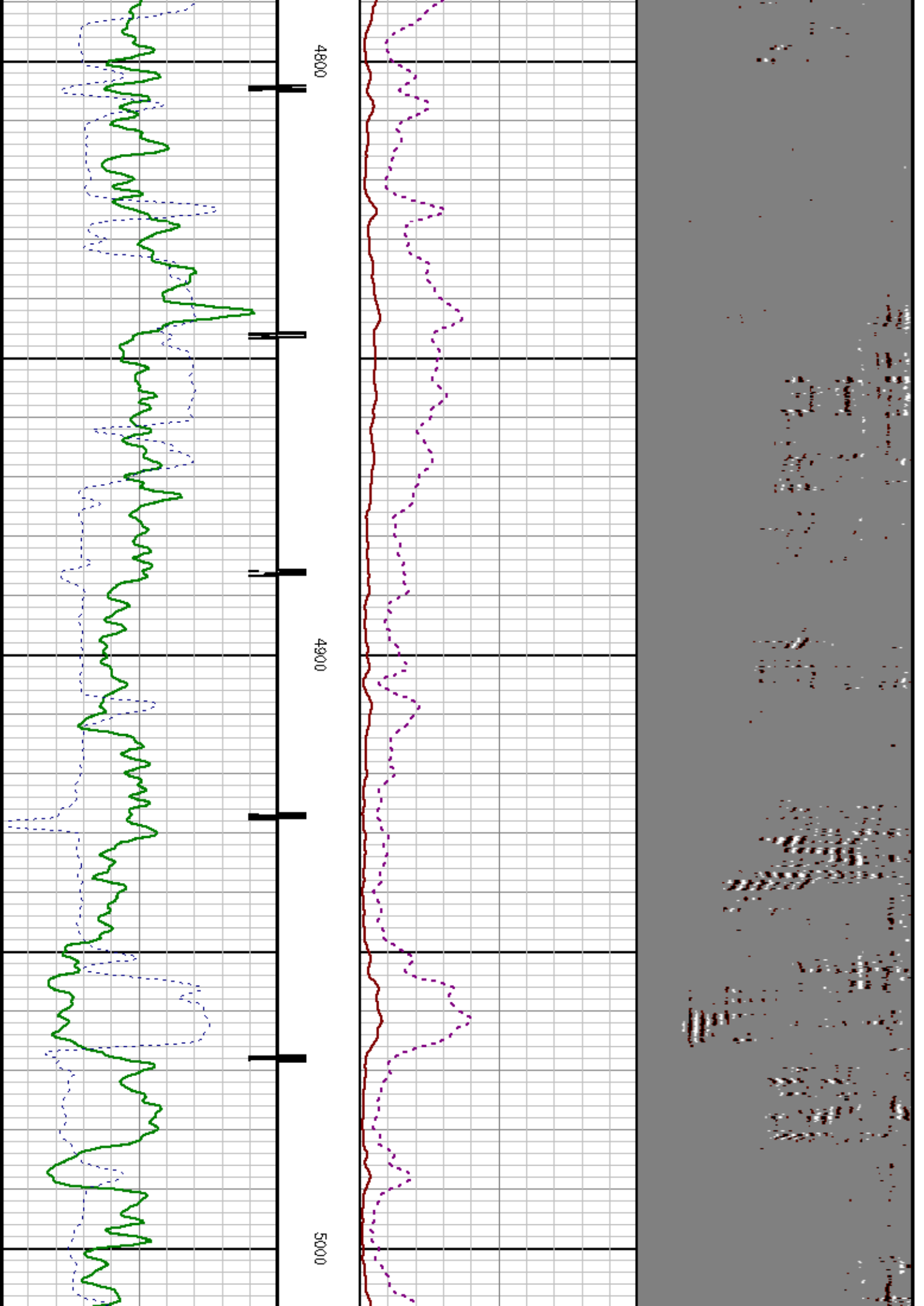


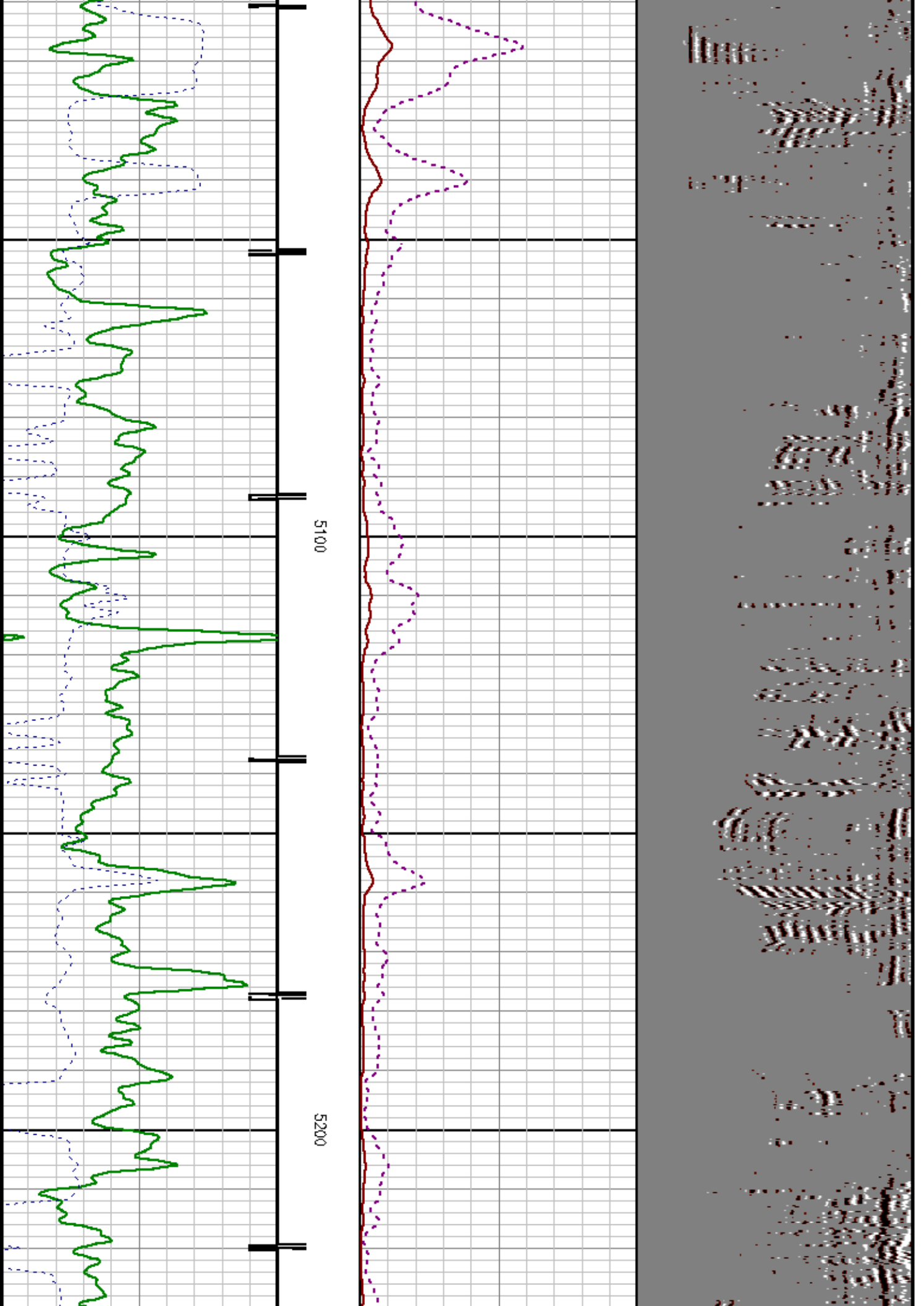


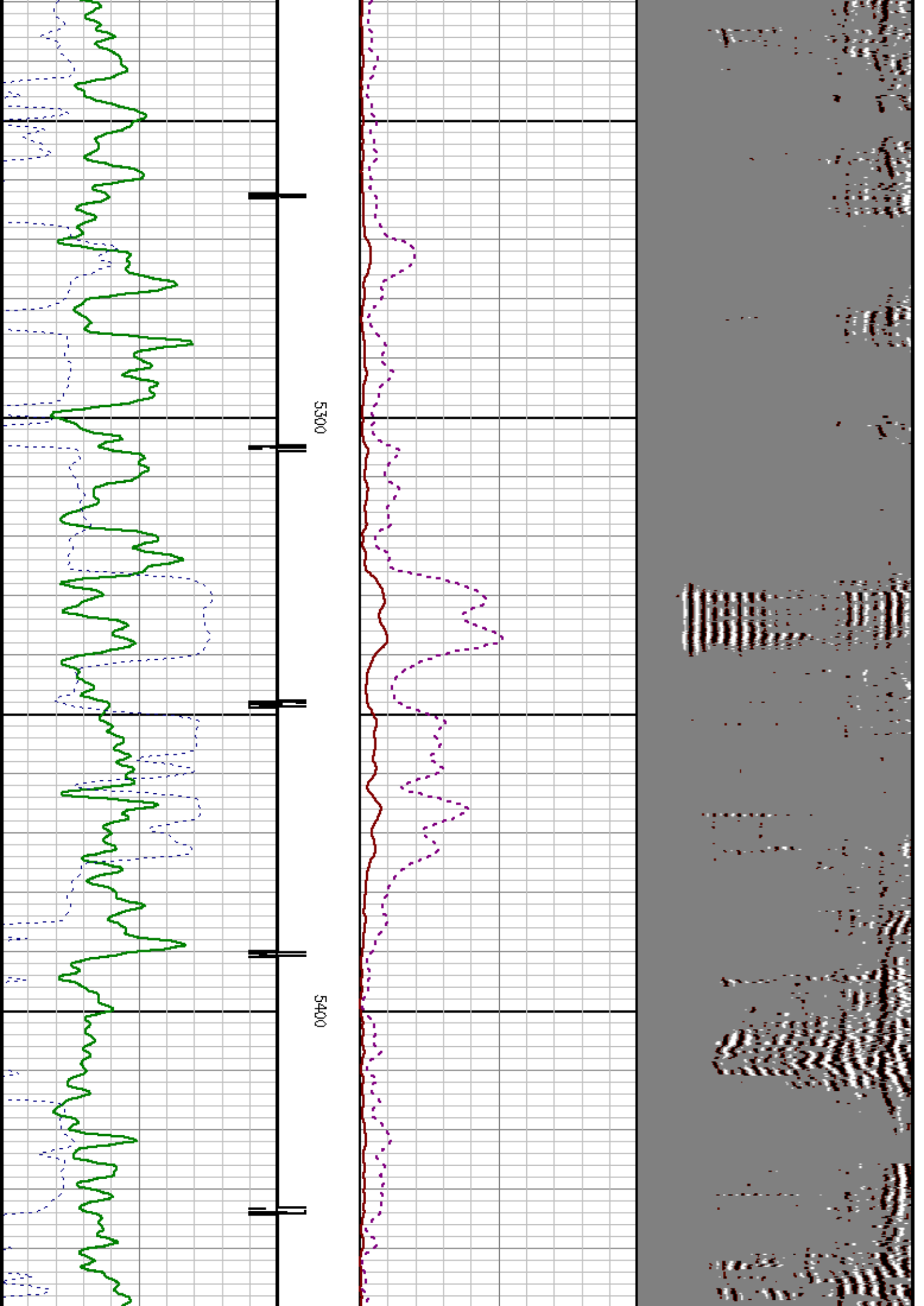


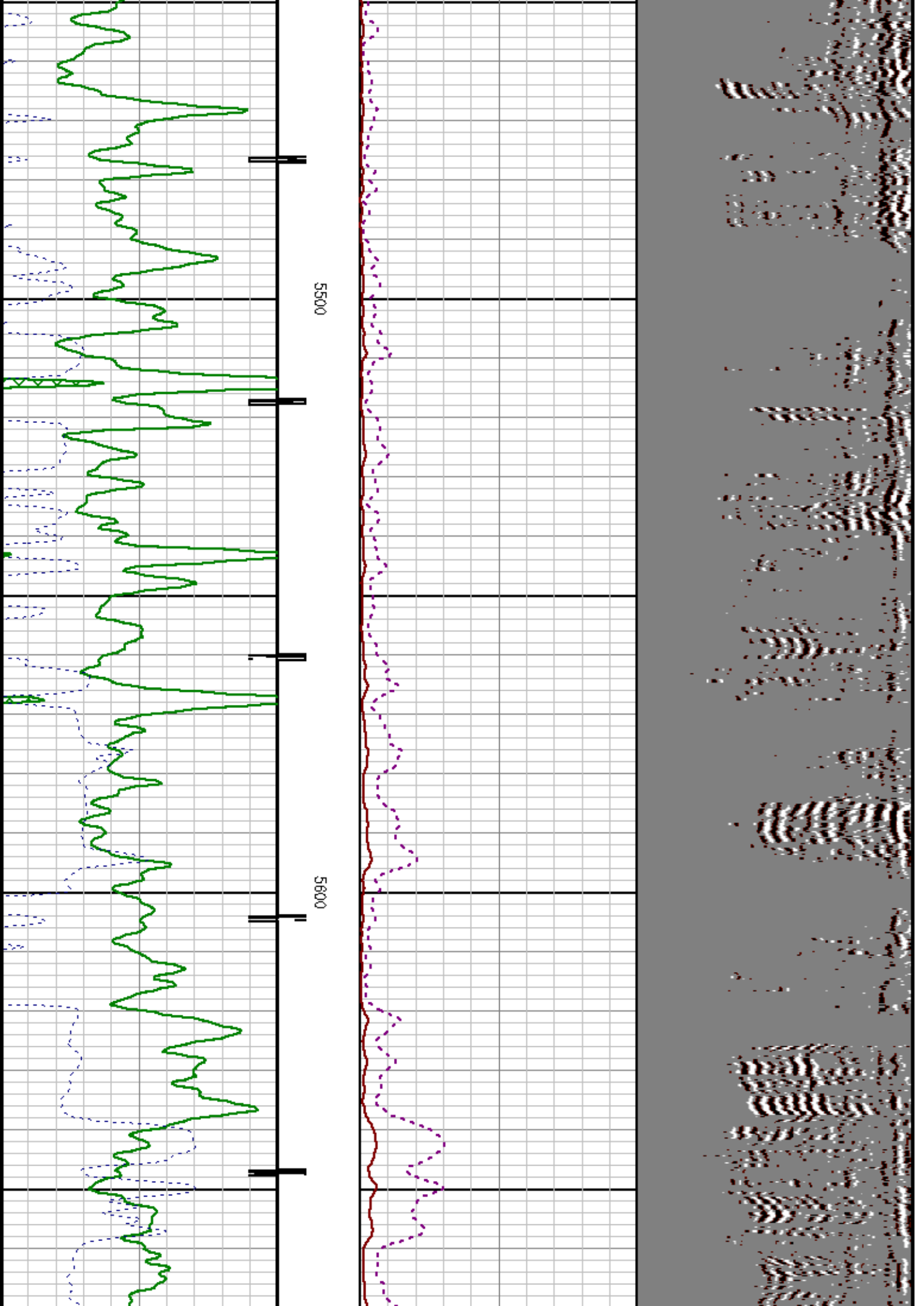


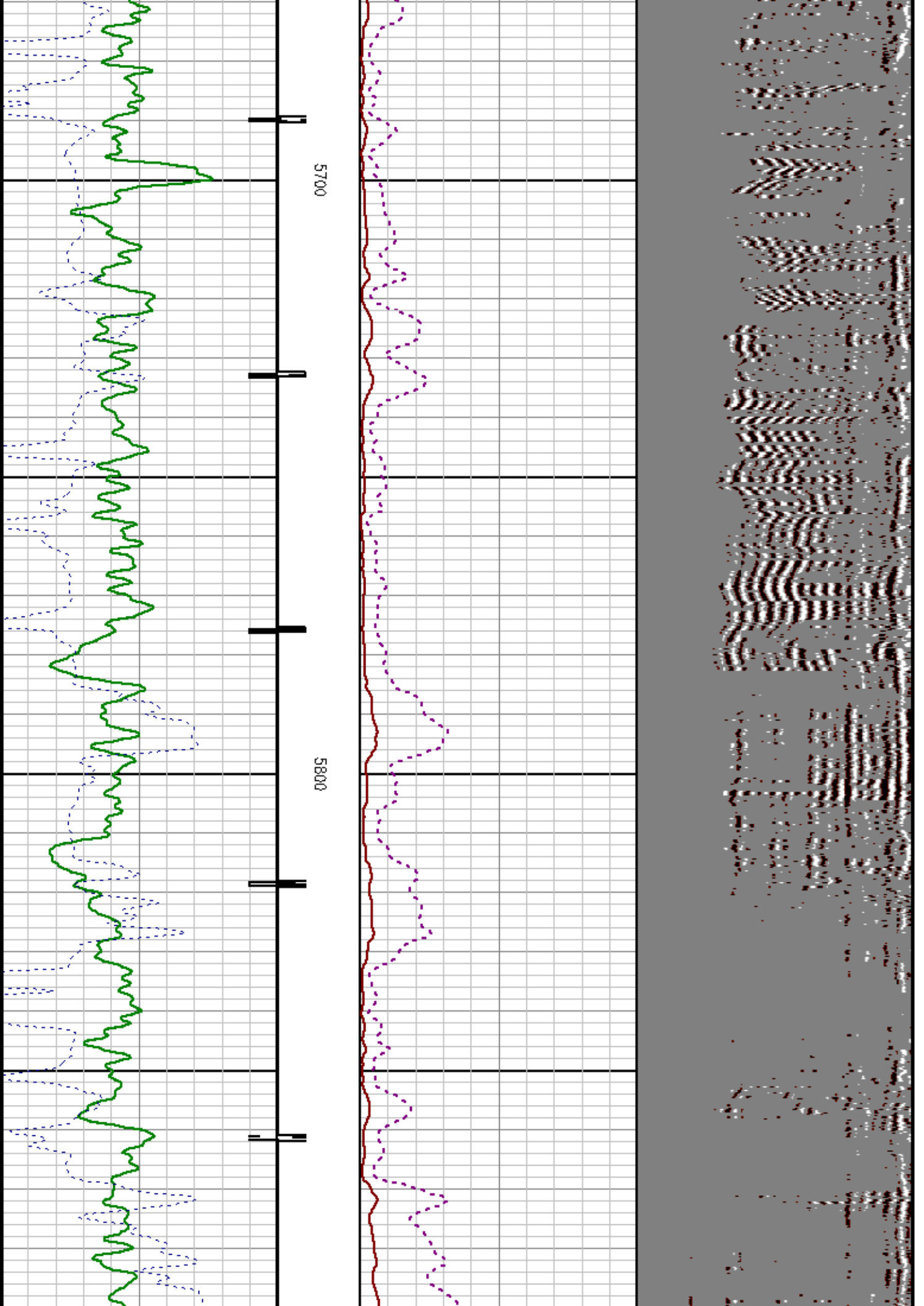


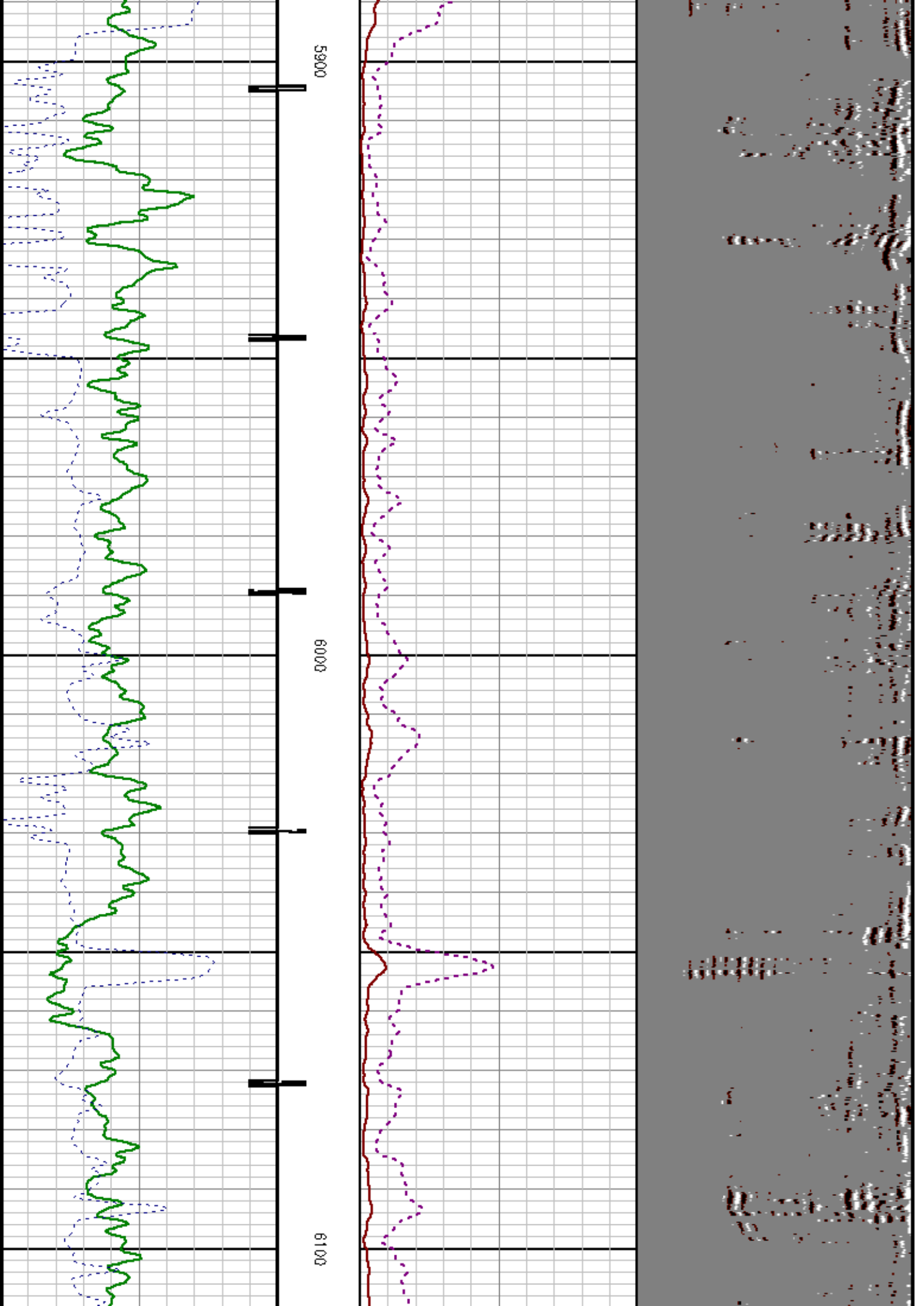


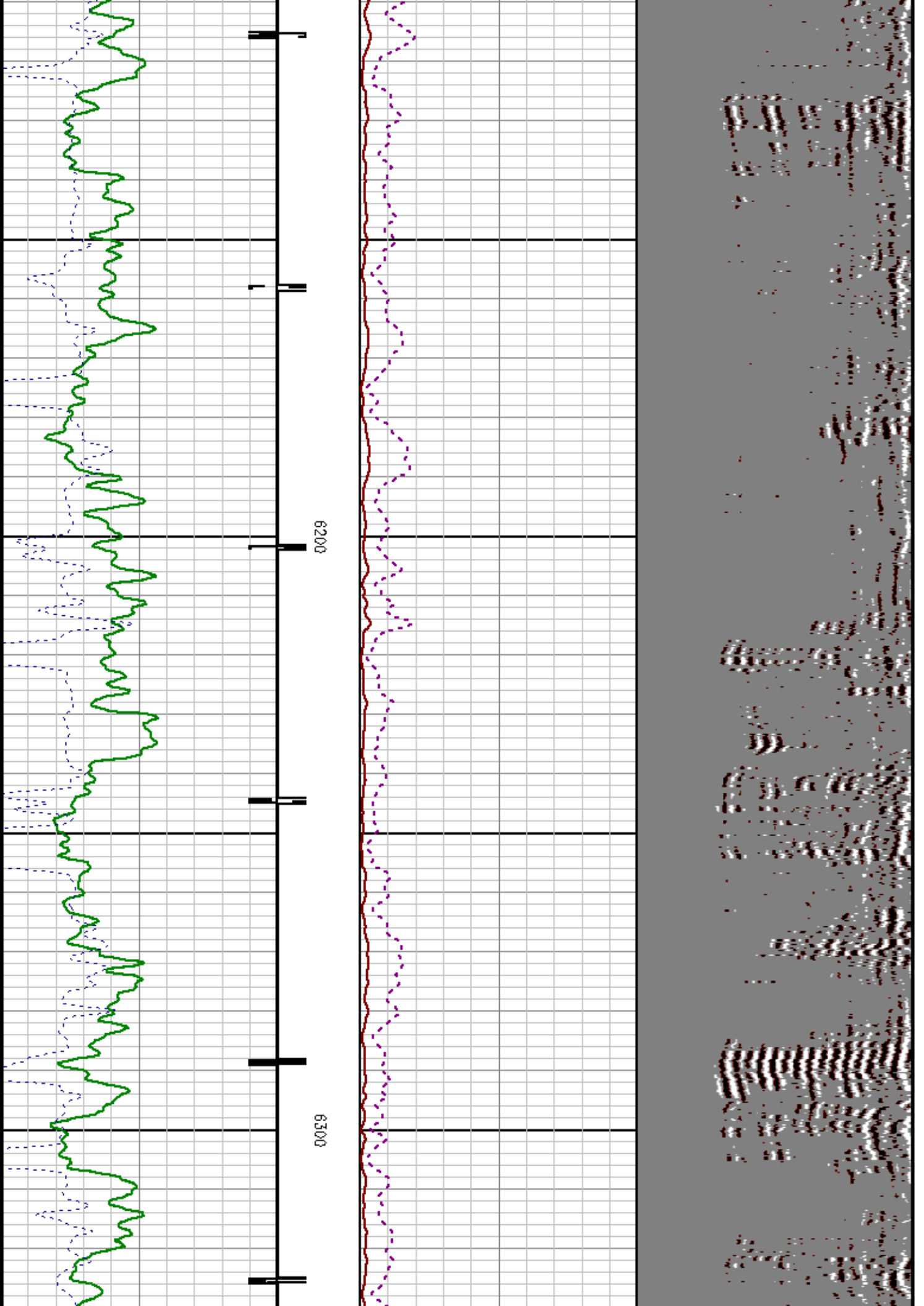


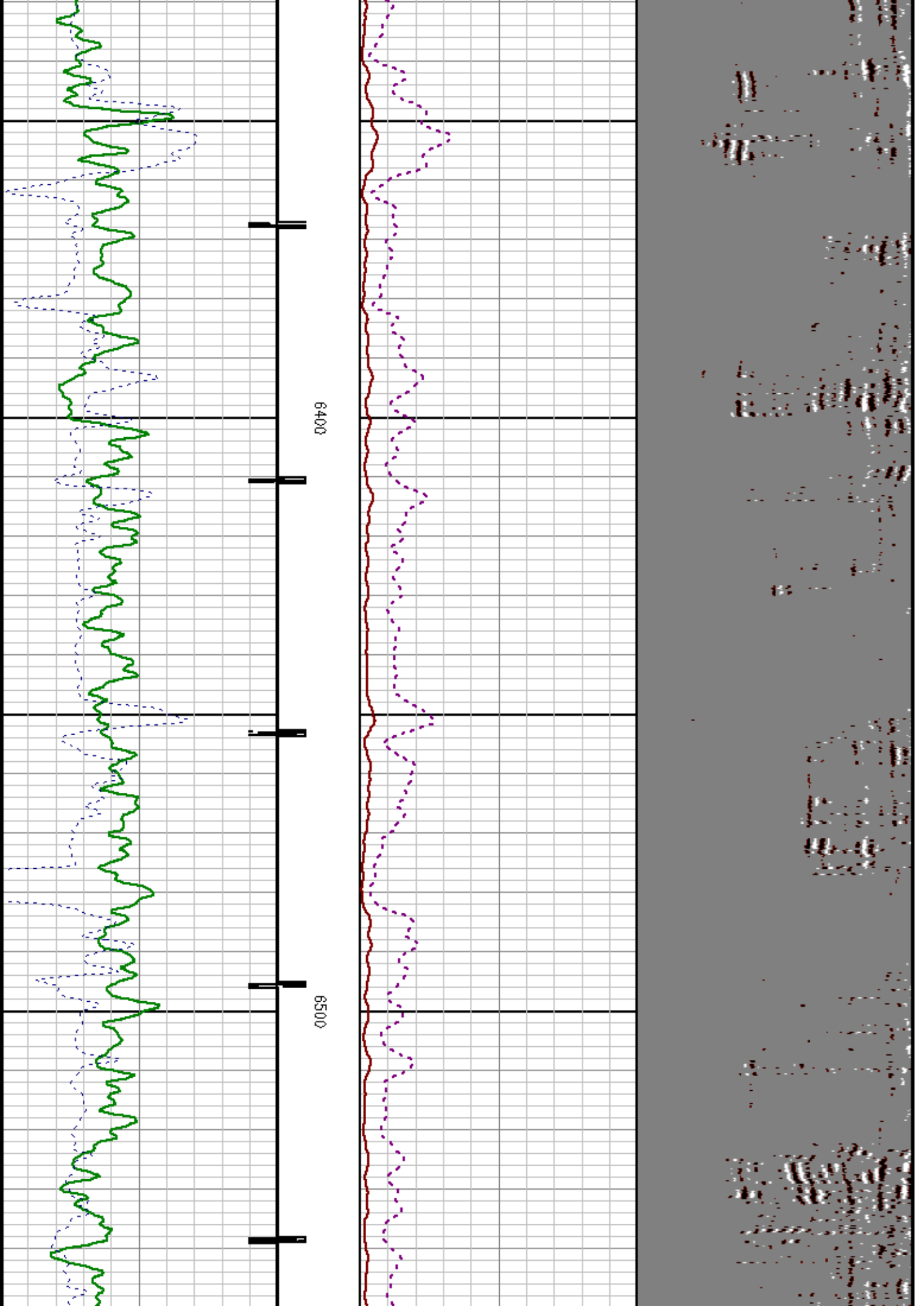


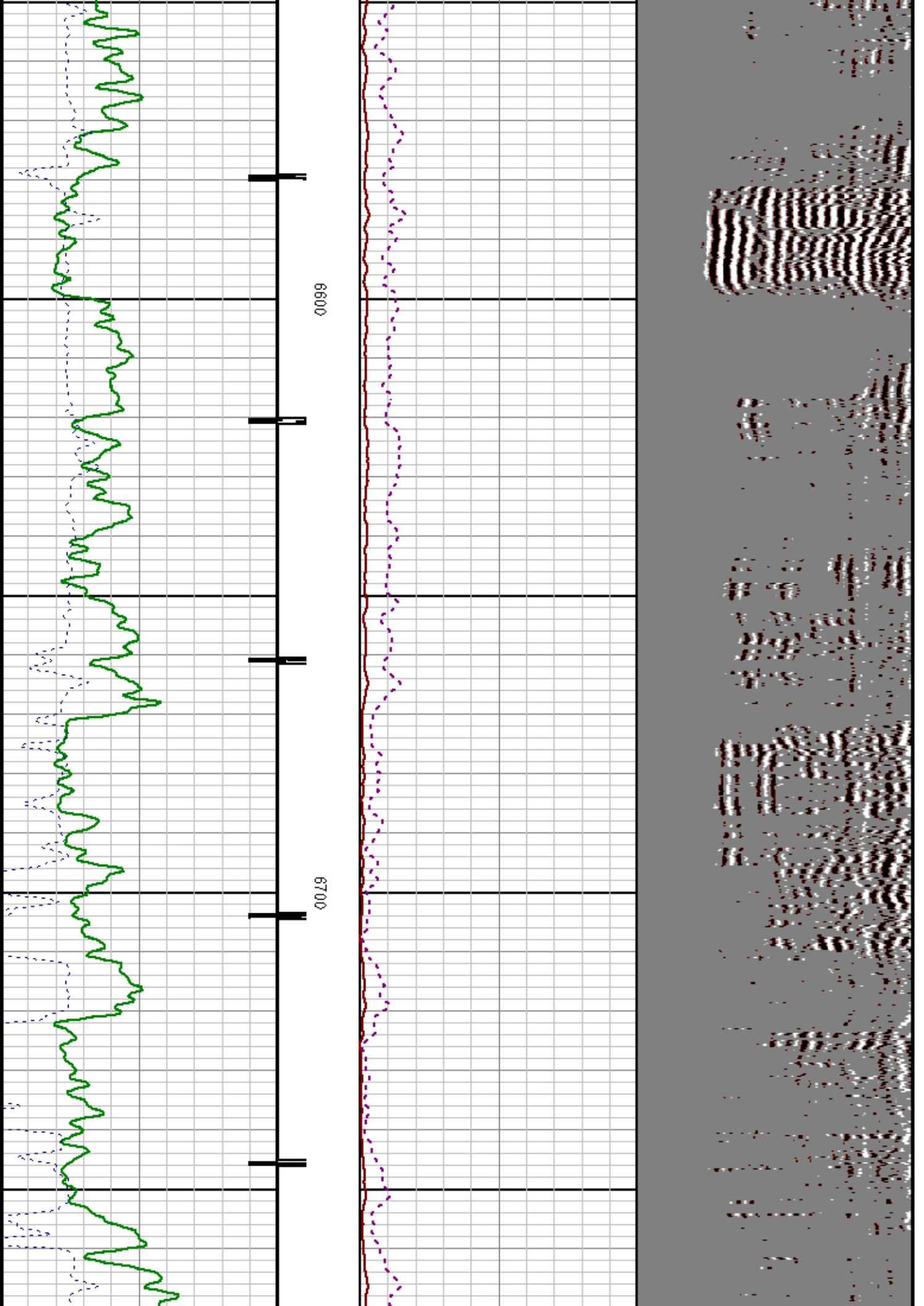


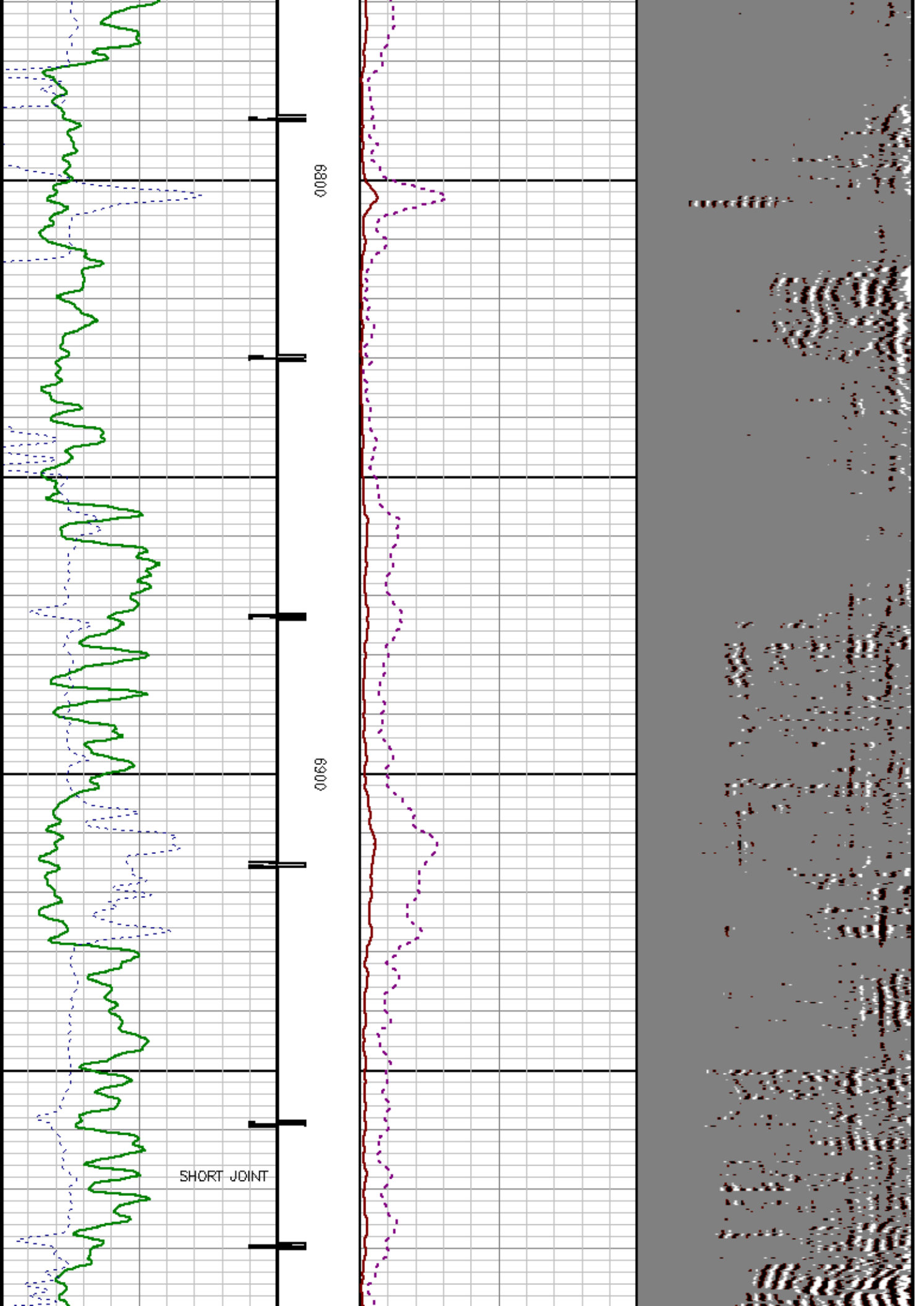


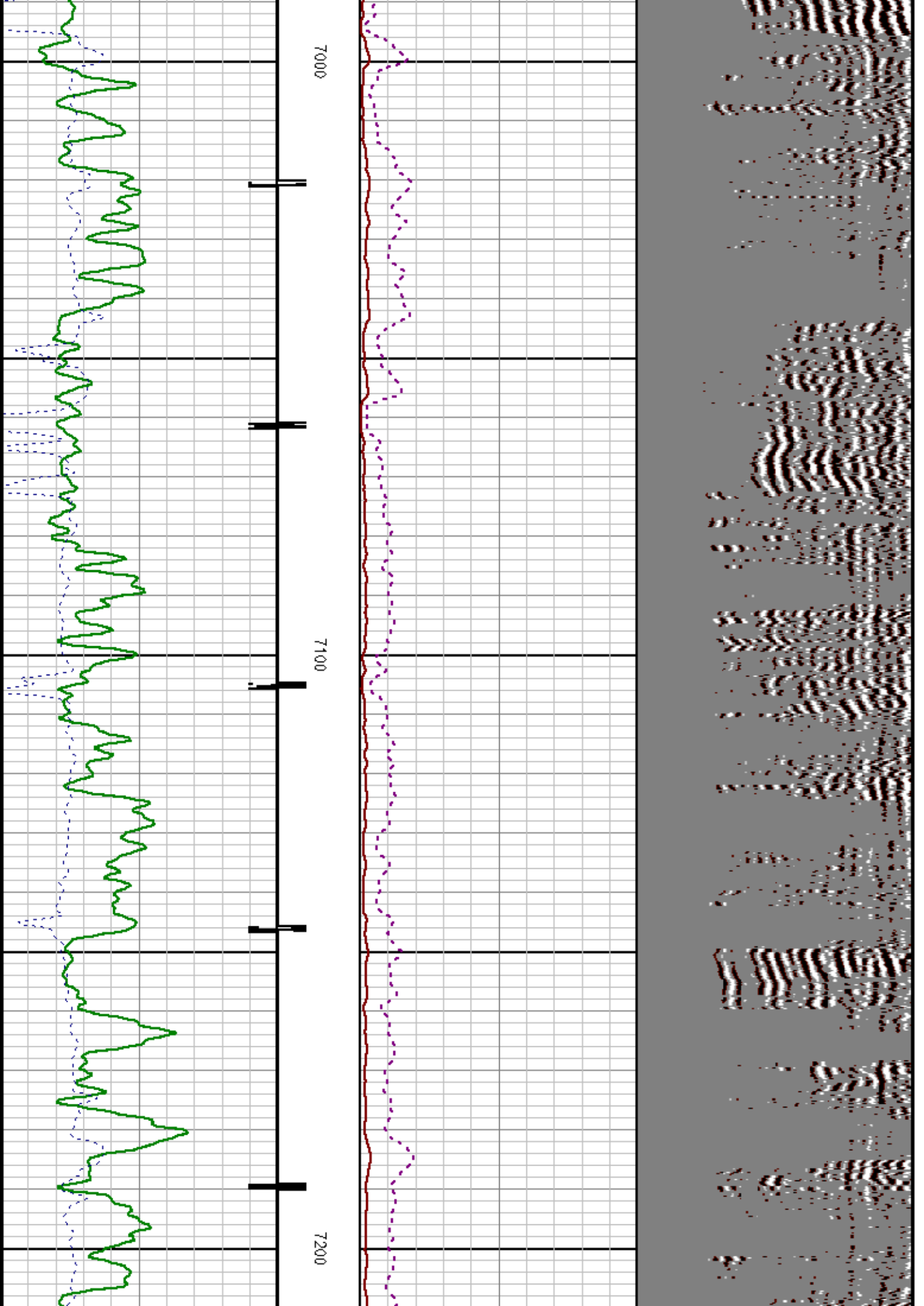


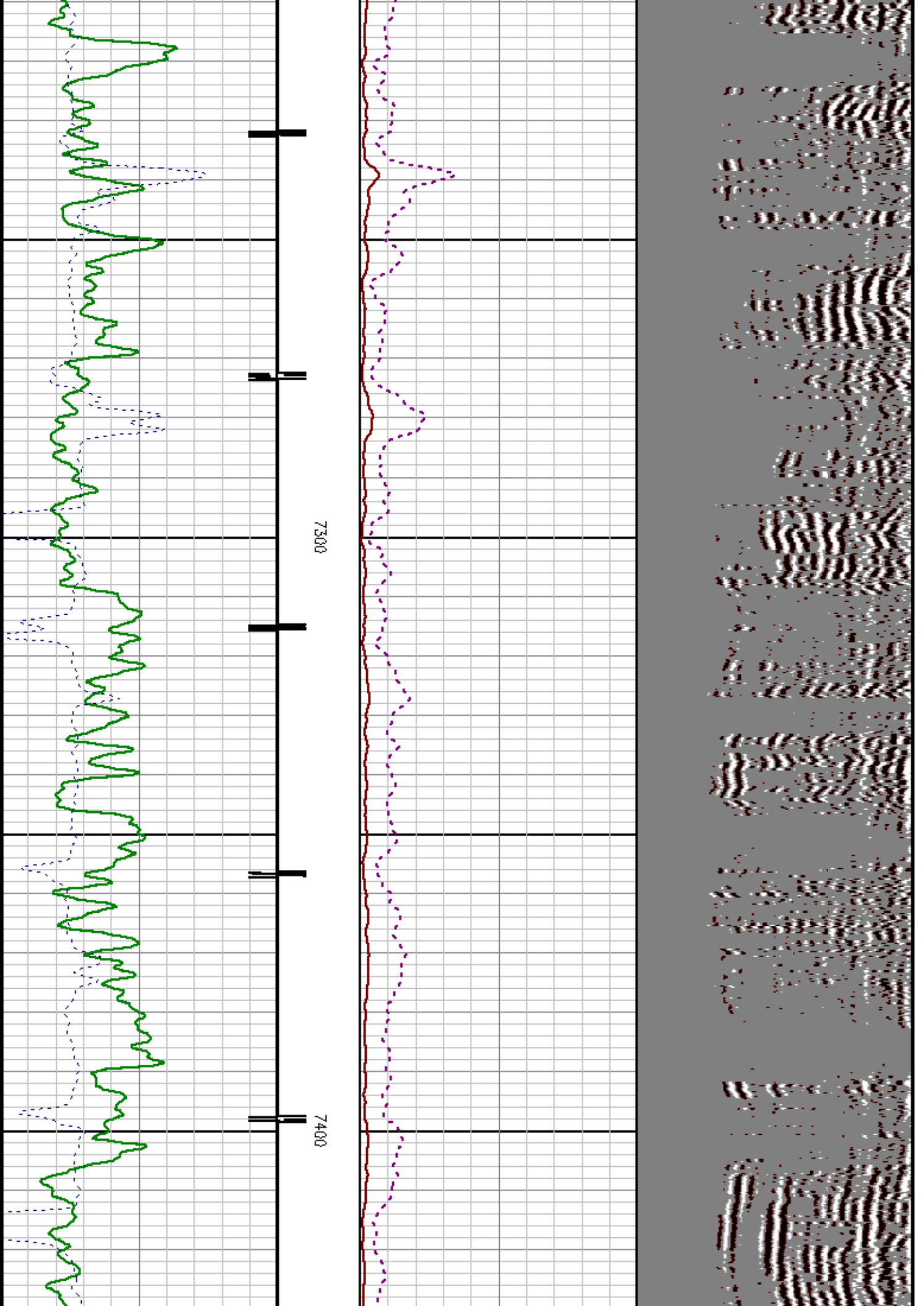


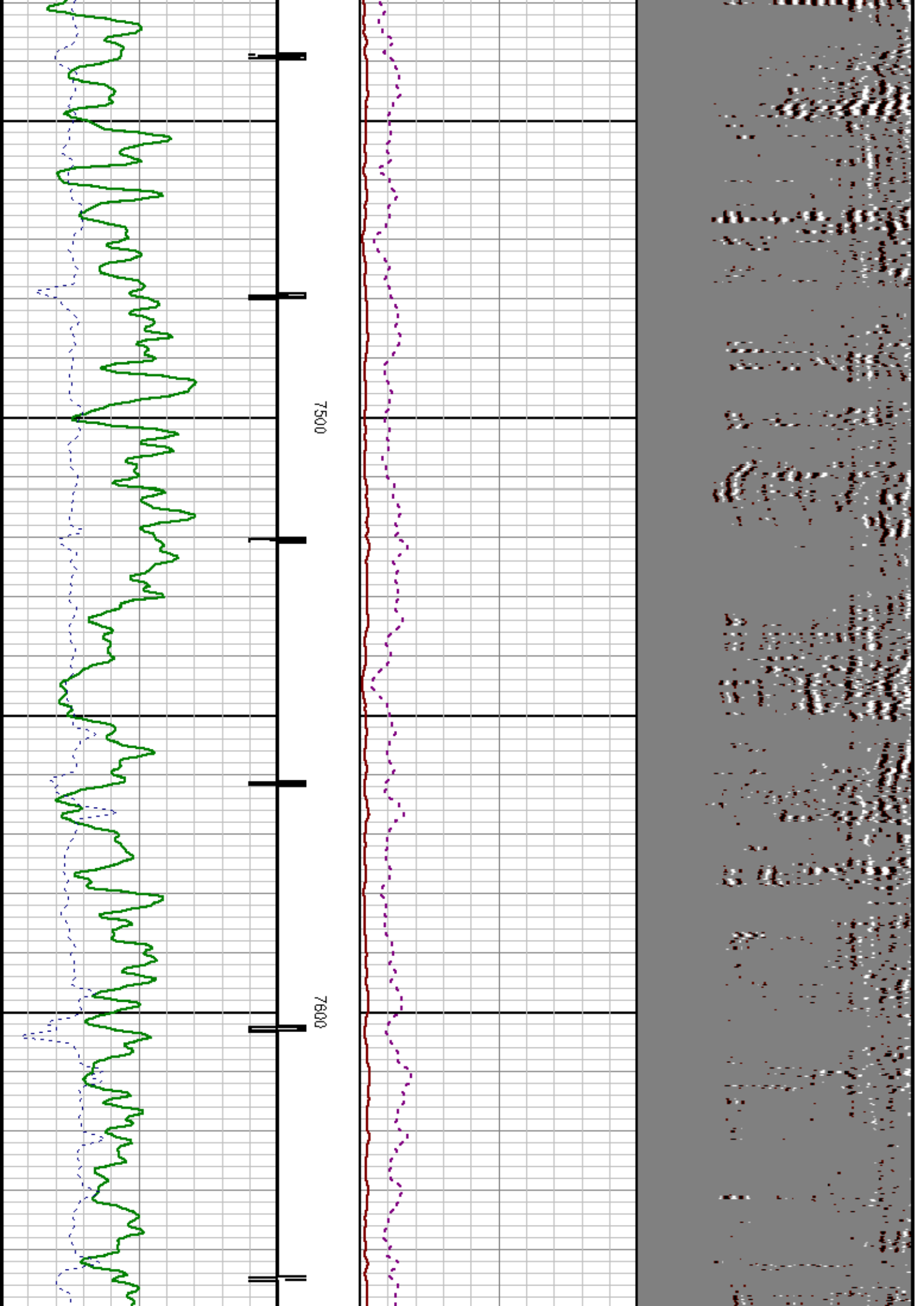


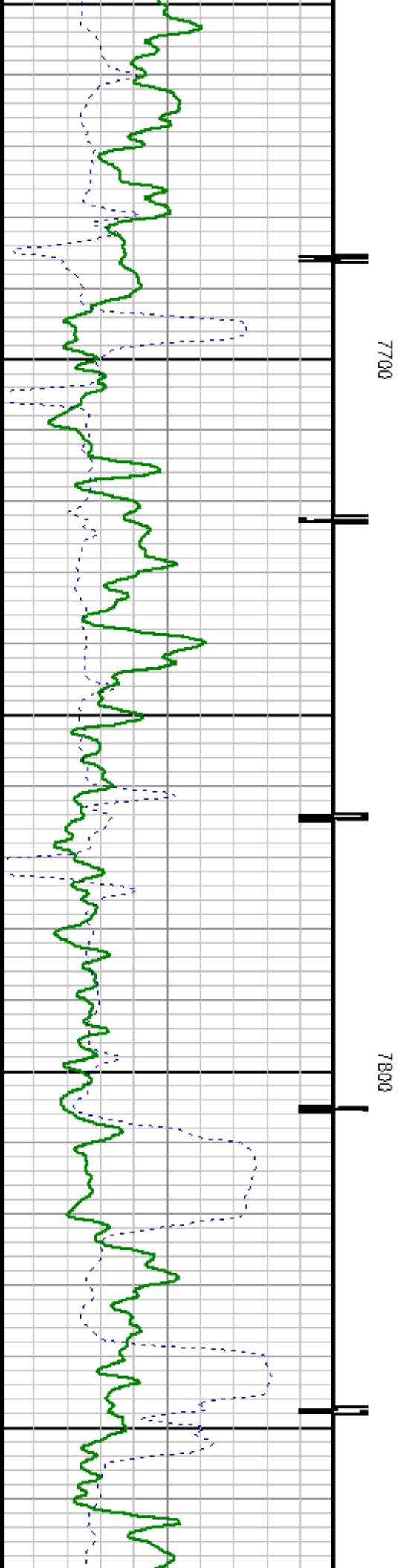
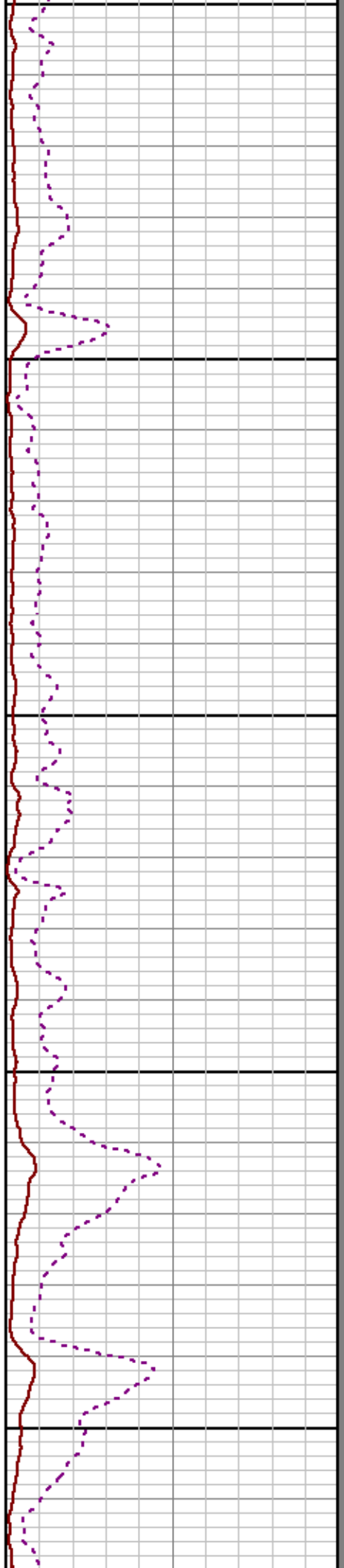
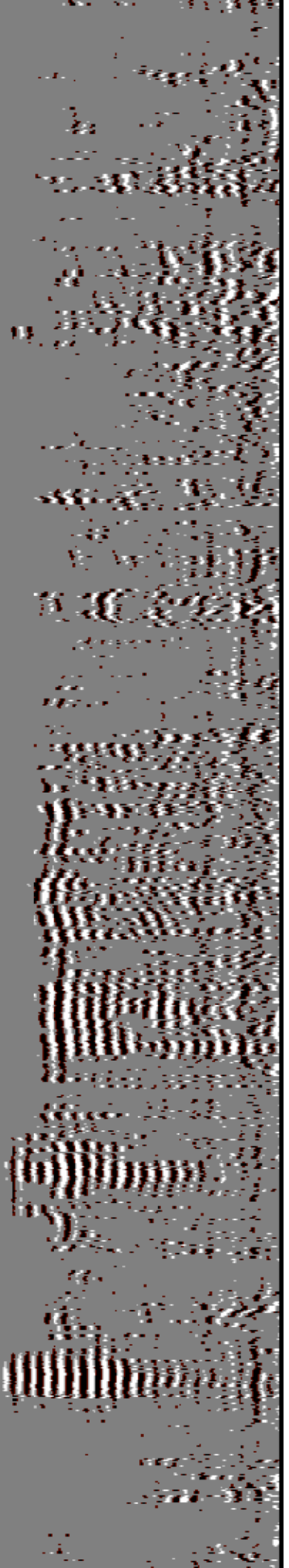


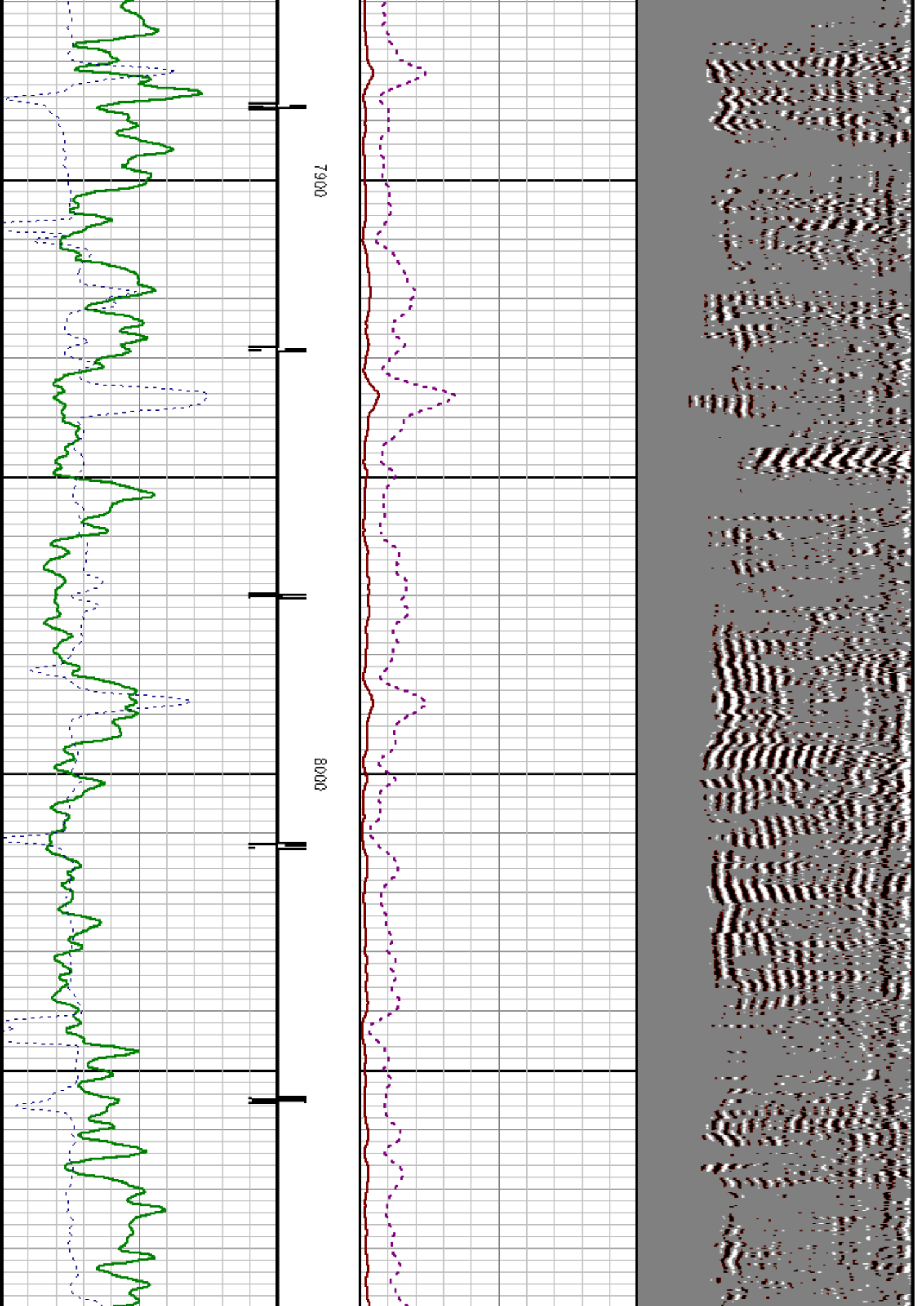


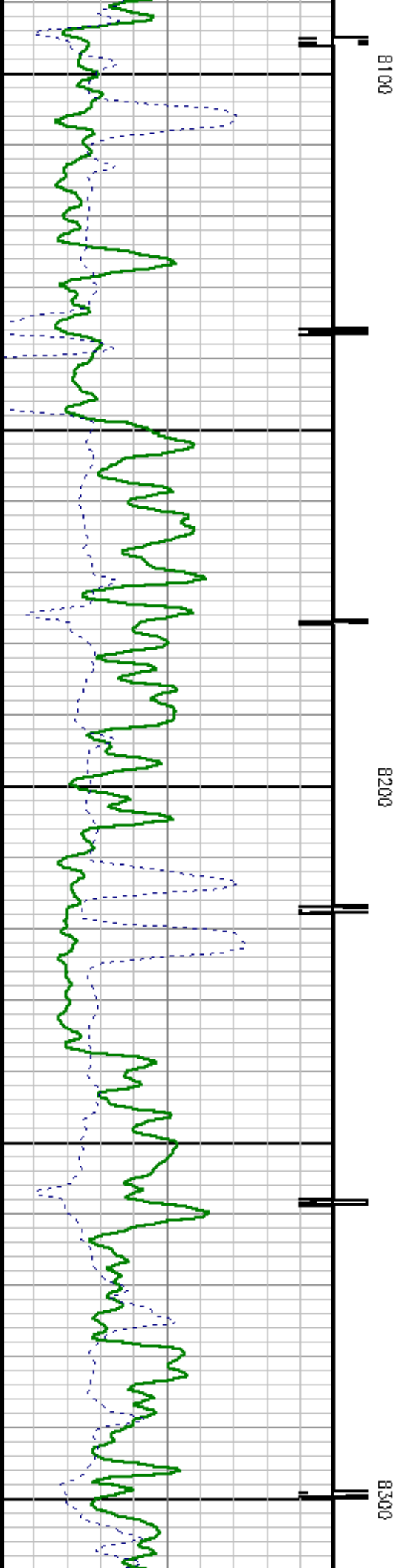
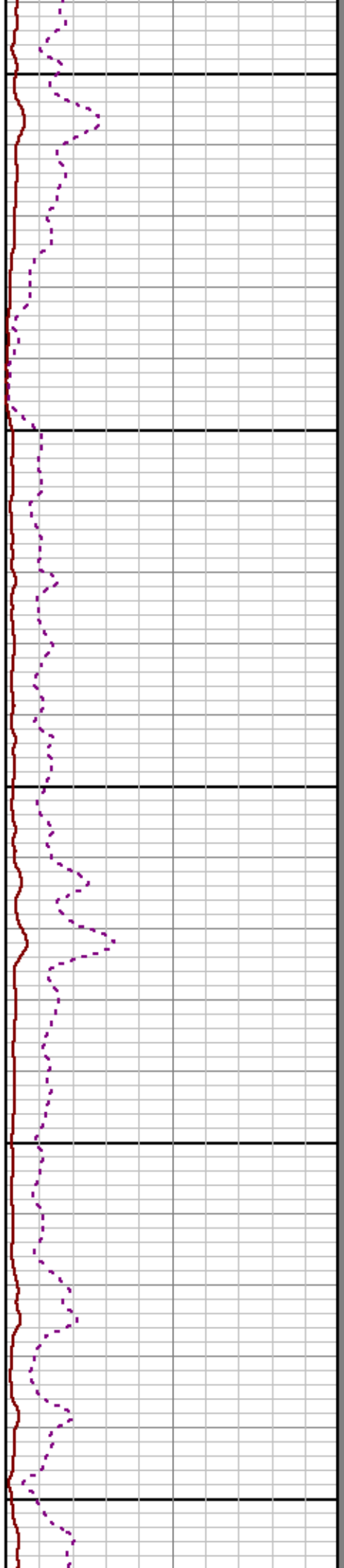
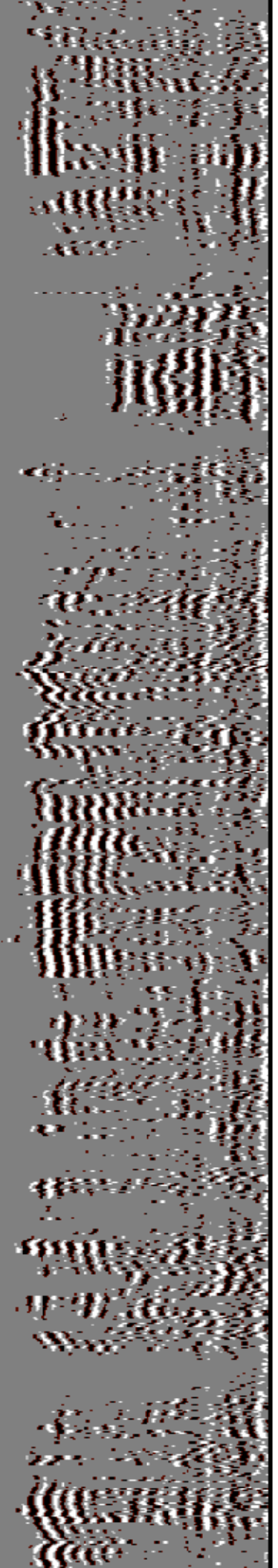


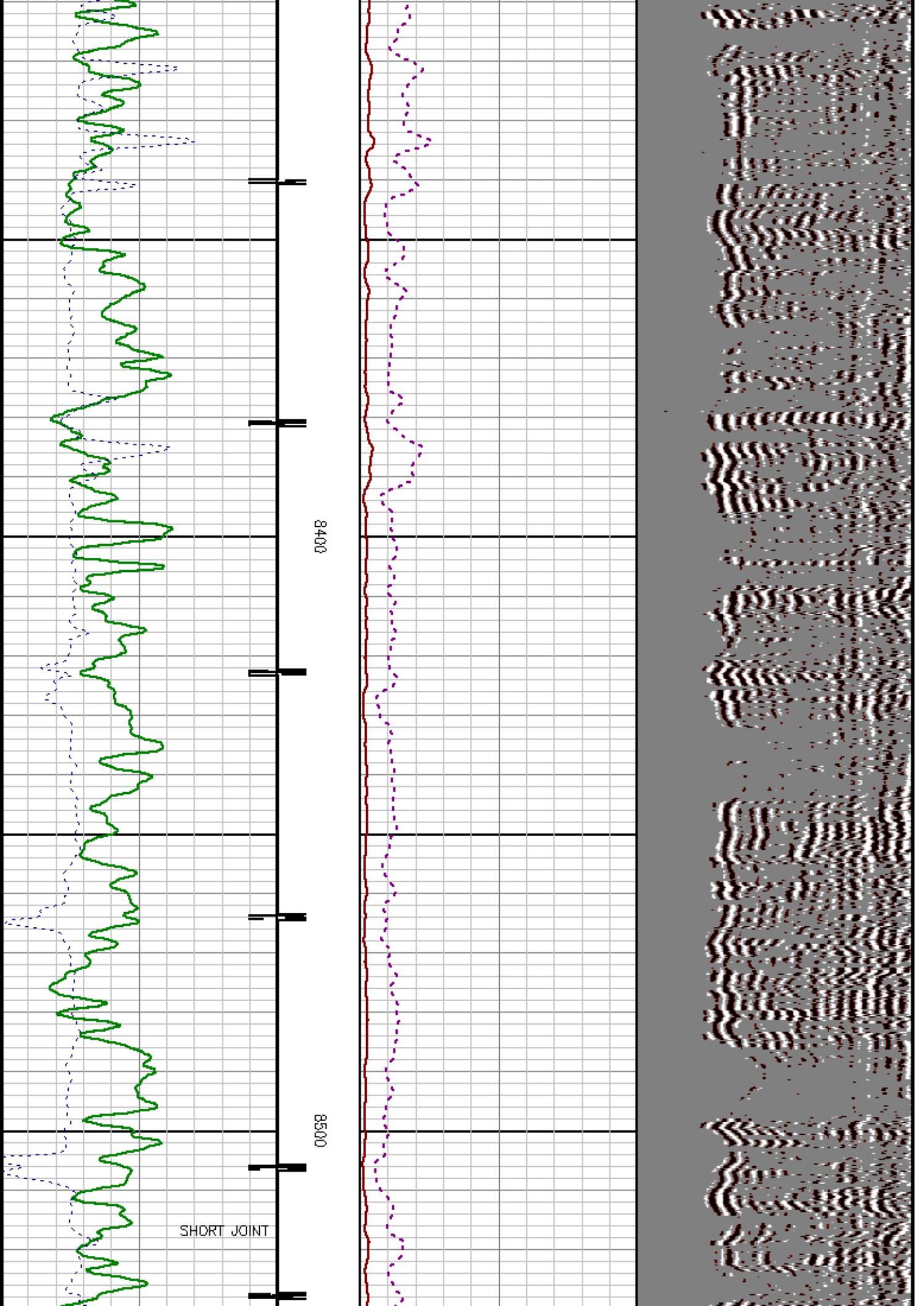


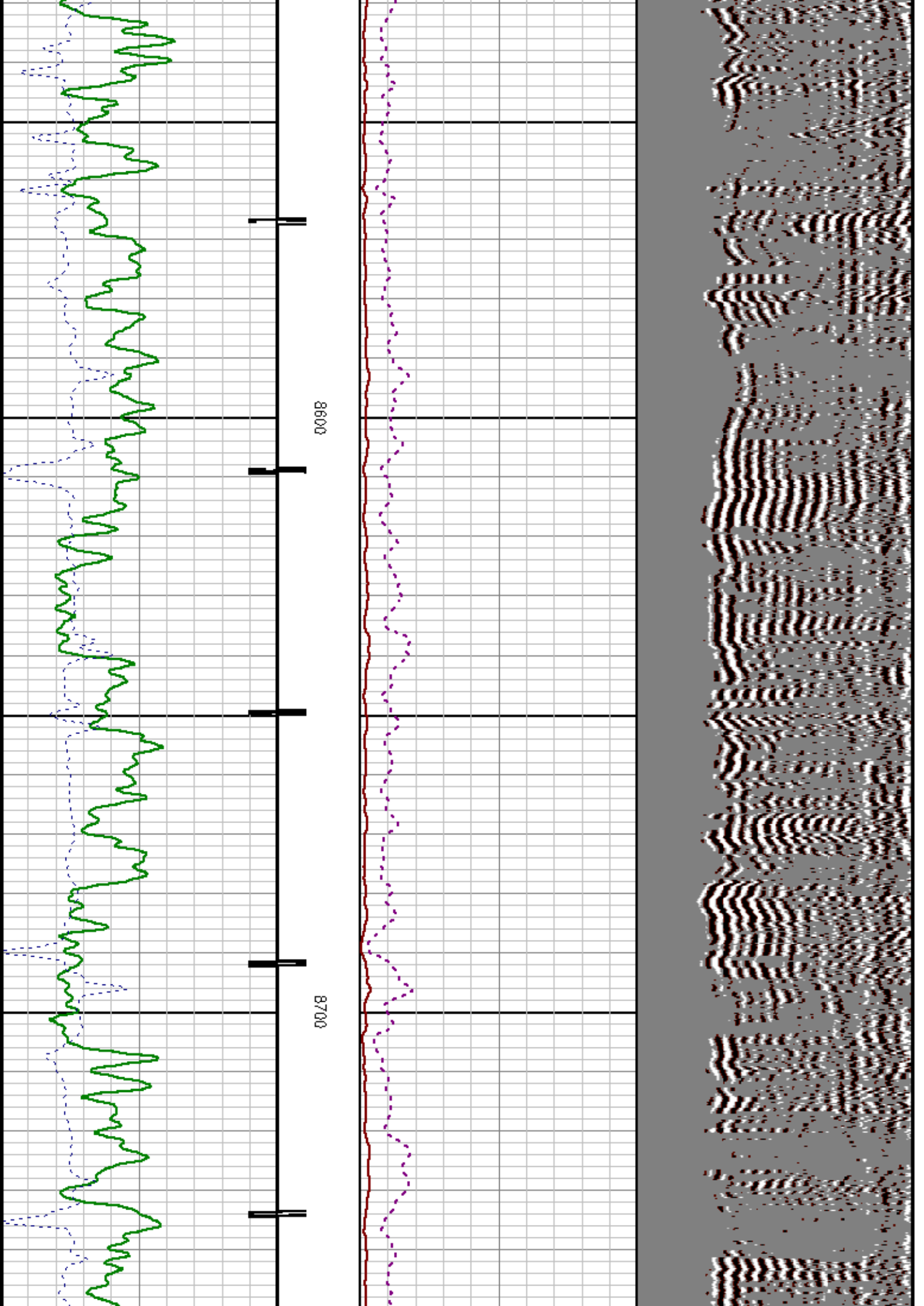


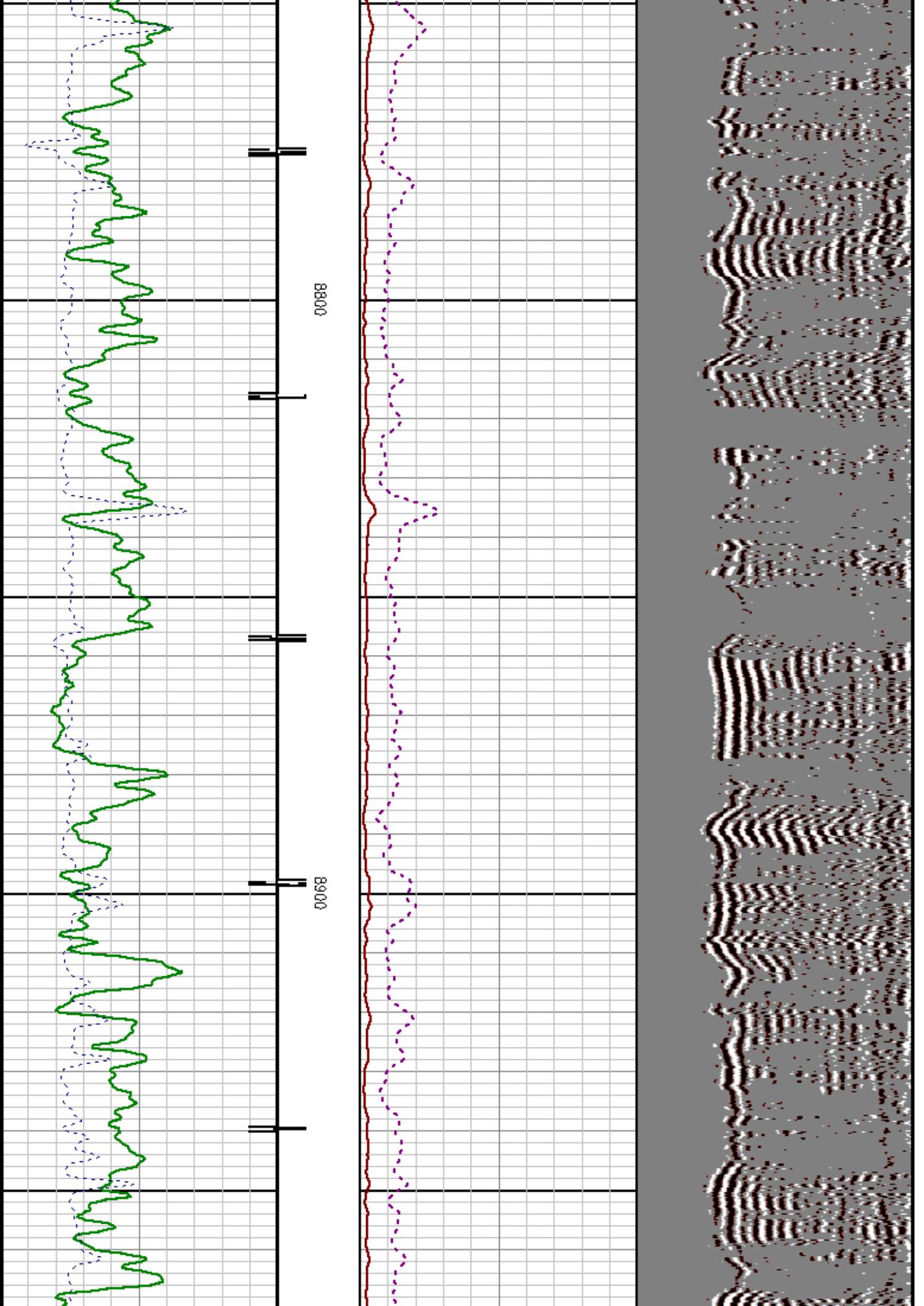


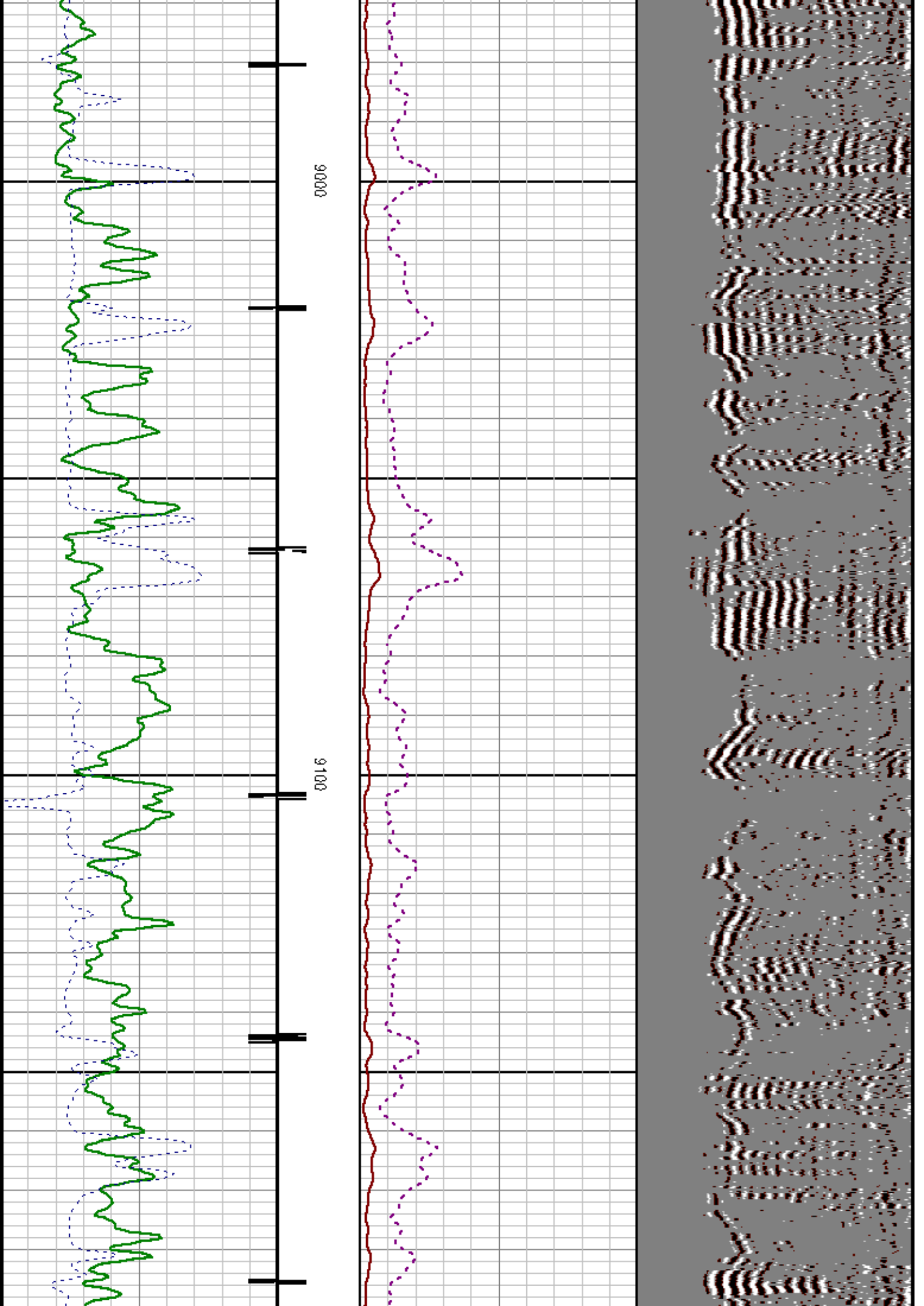


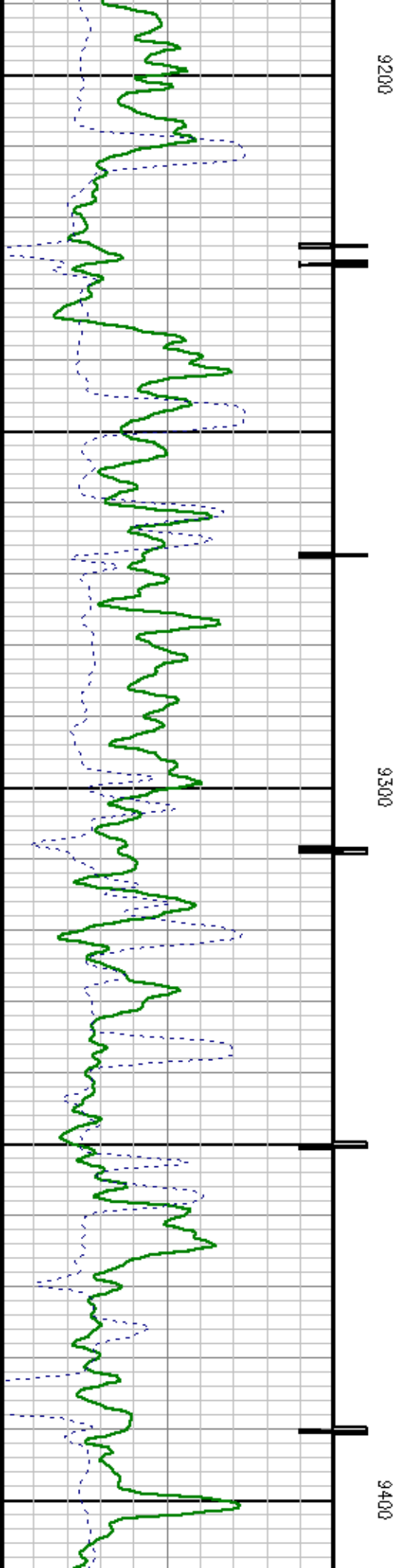
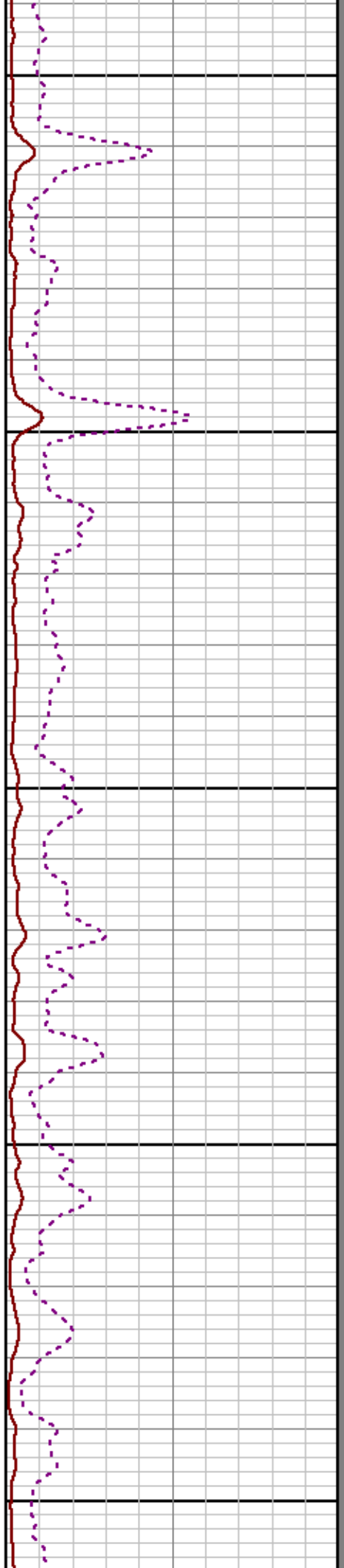
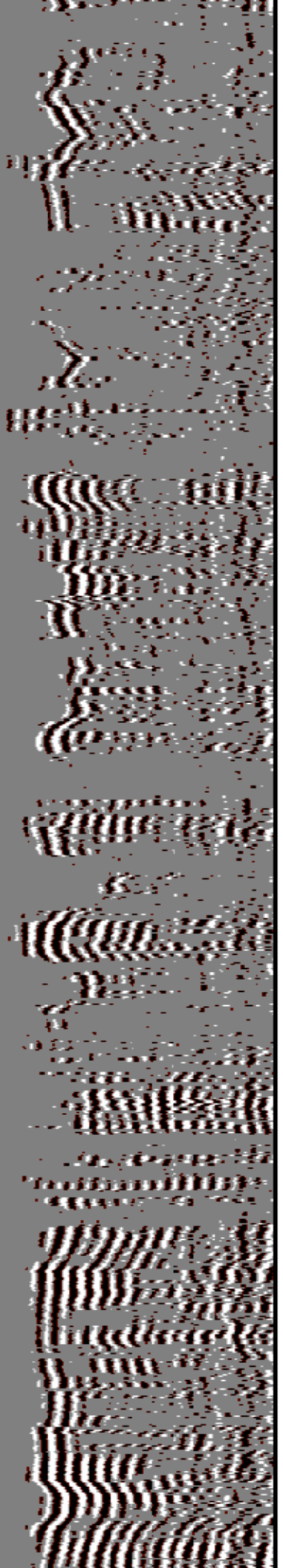


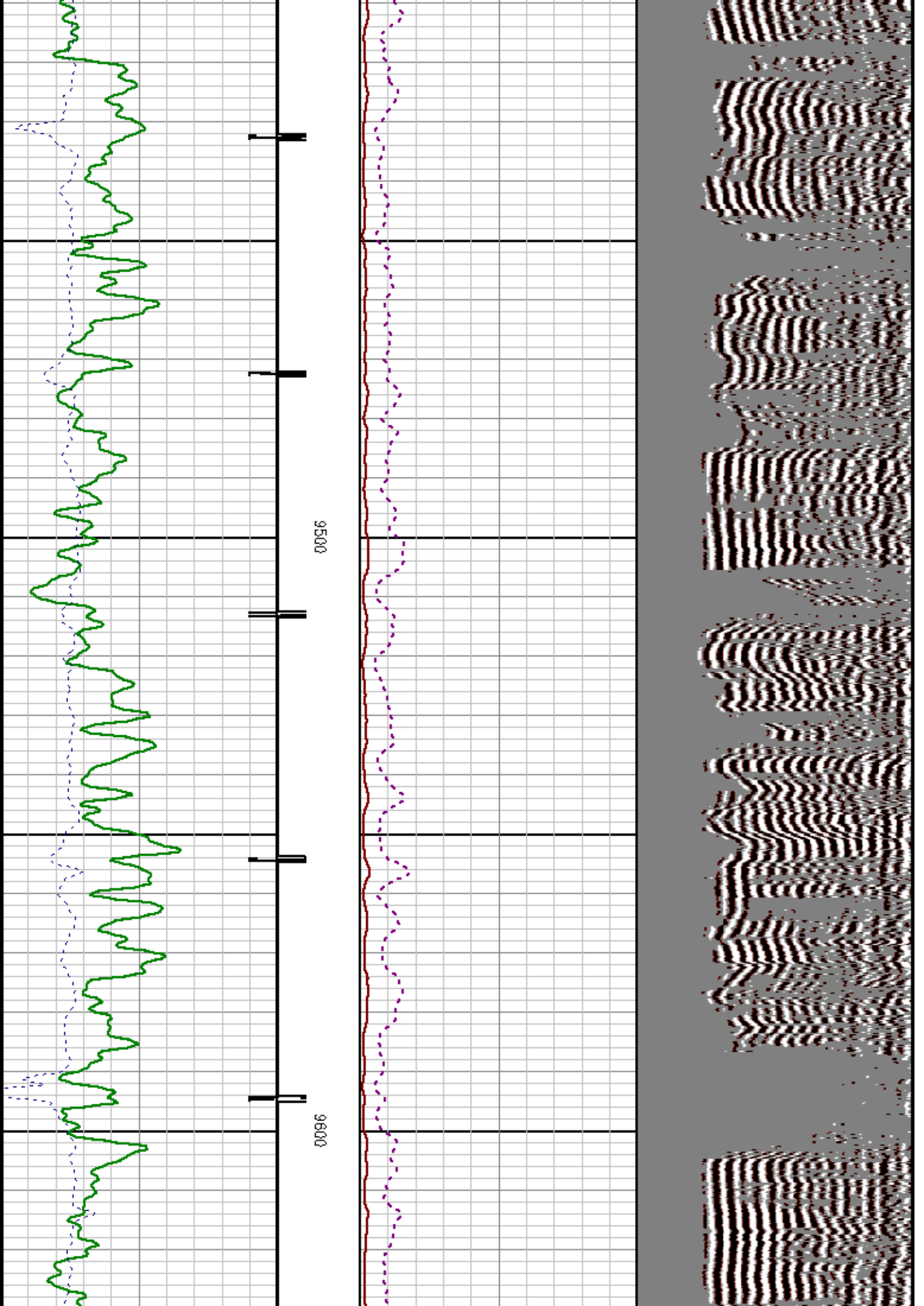


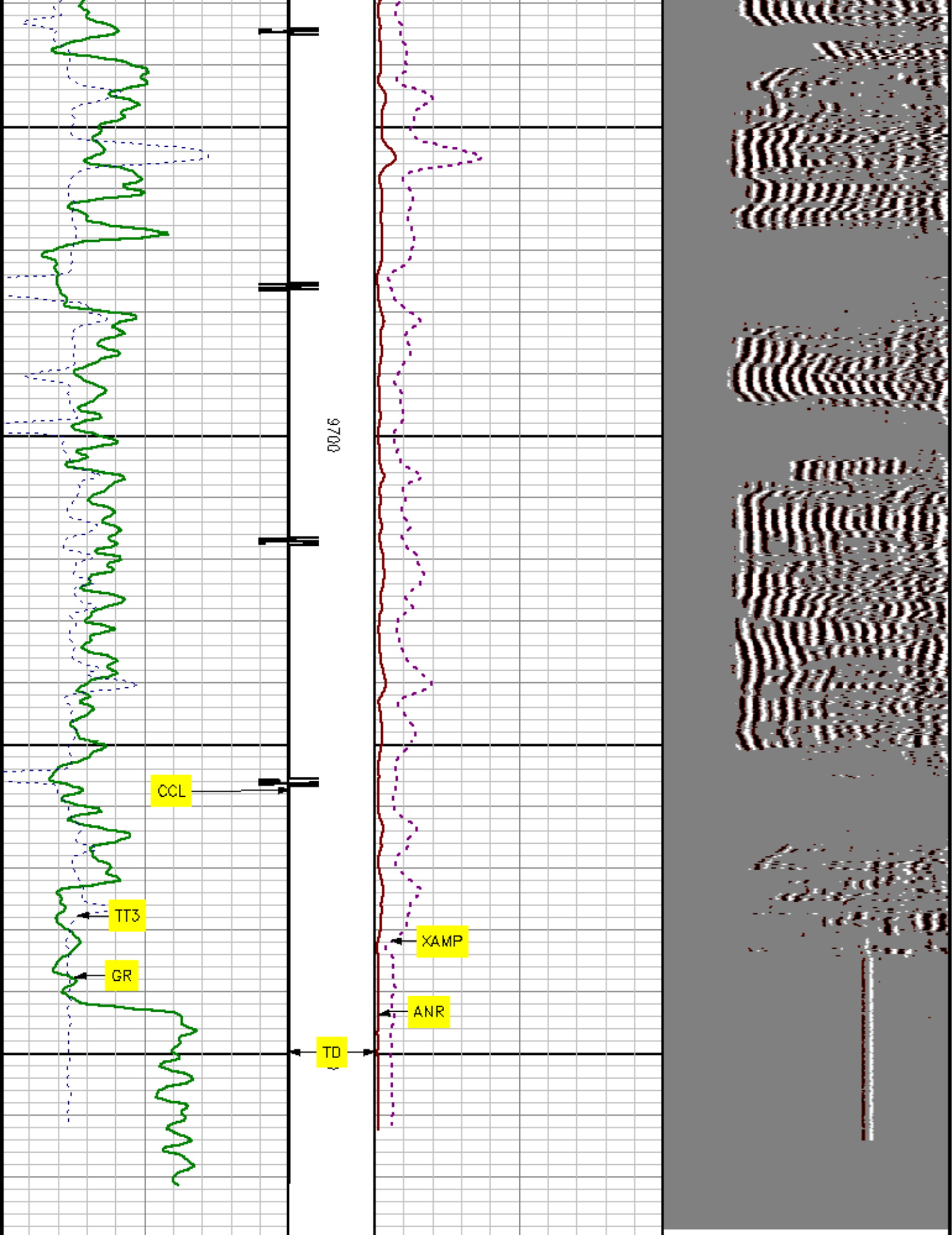












276	TT3 usec	176			
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MAIN SECTION SECONDARY PRESENTATION

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	316.900	usec	3111.350	9827.850
RAL	Amp Gate Start Near	200.391	usec	3111.350	9827.850
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DEPTH OFFSETS (for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
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		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	OCL					
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1426XA	0.000	NEU					

Created by : RAL, v4.8.007

Plotted by : PlotMgr, v5.4.504

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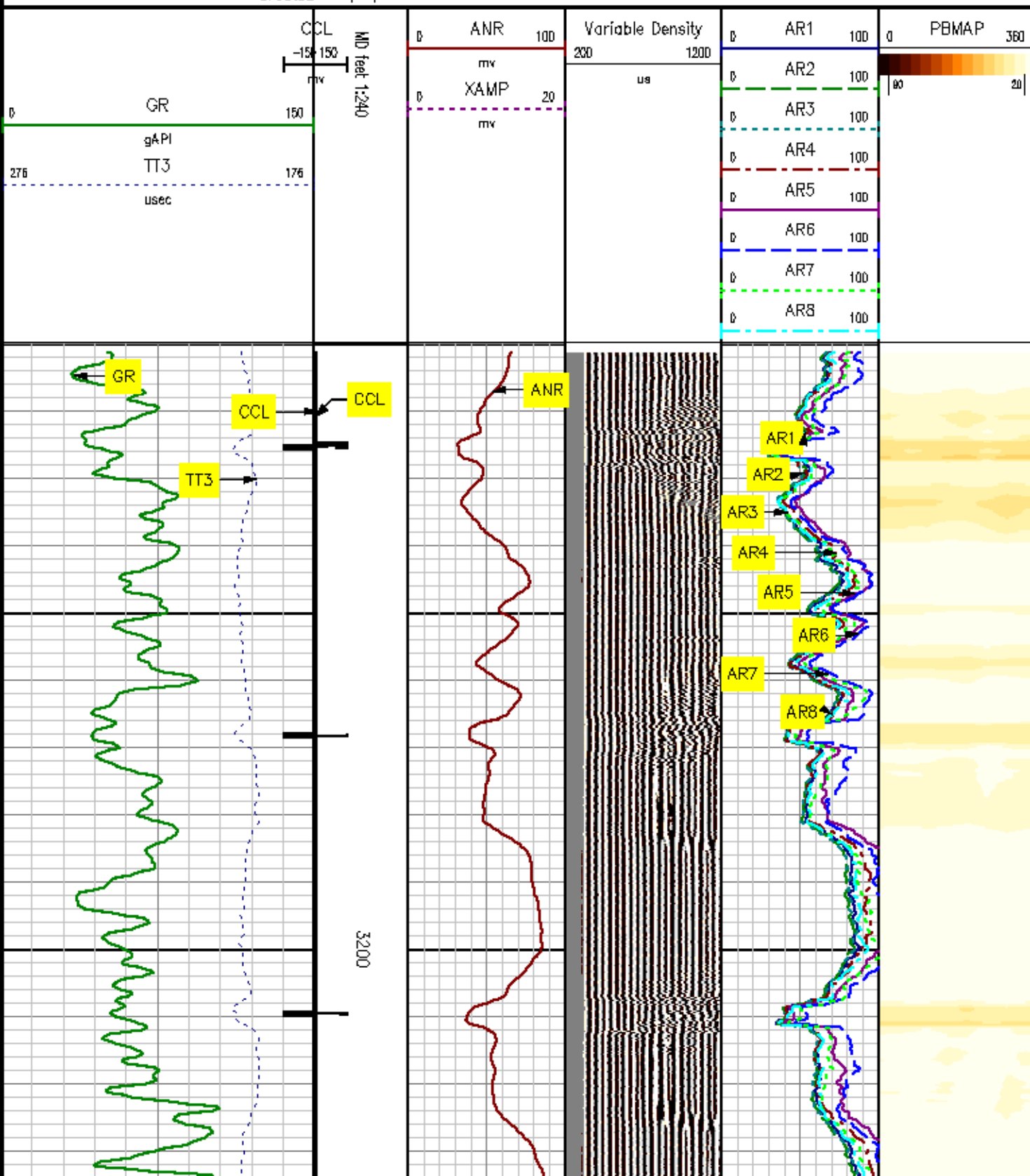
Well : 596-31A-24

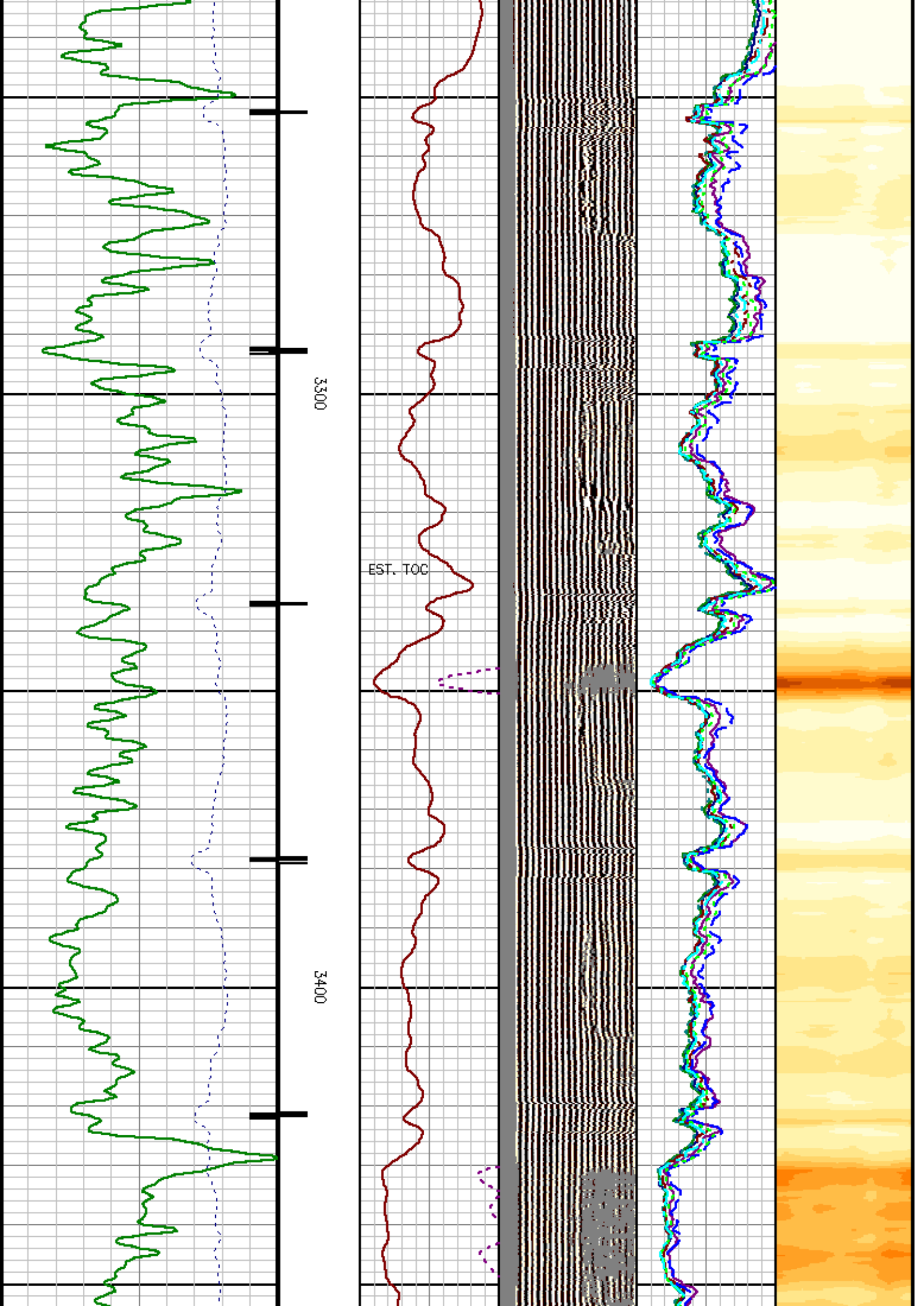
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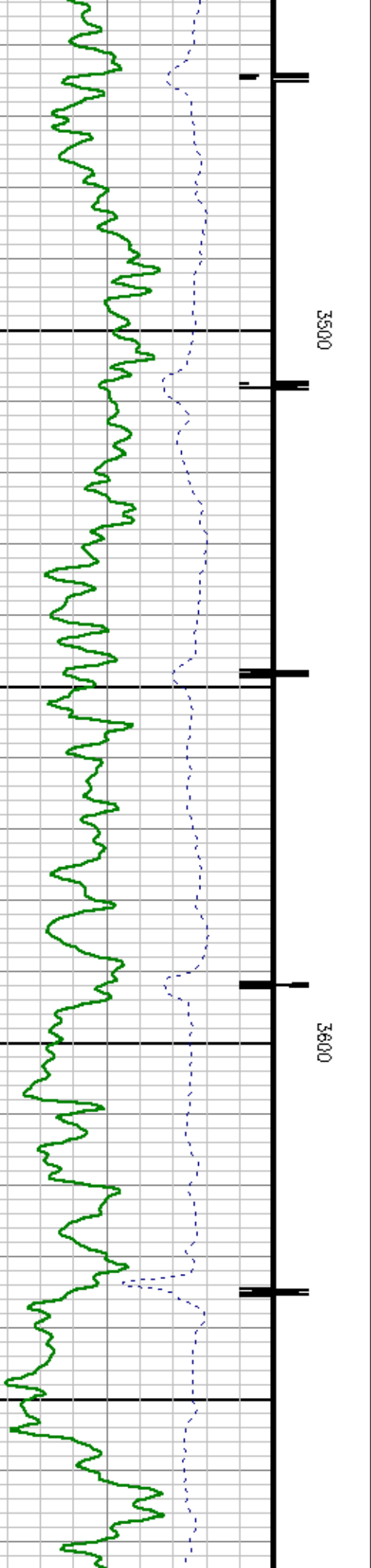
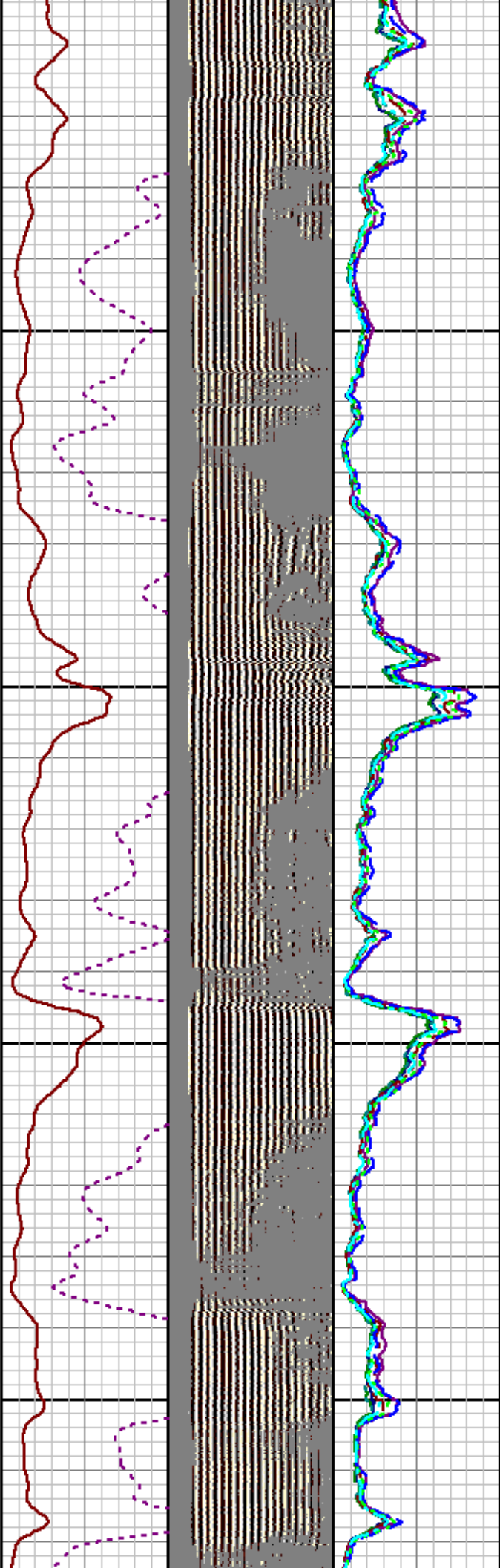
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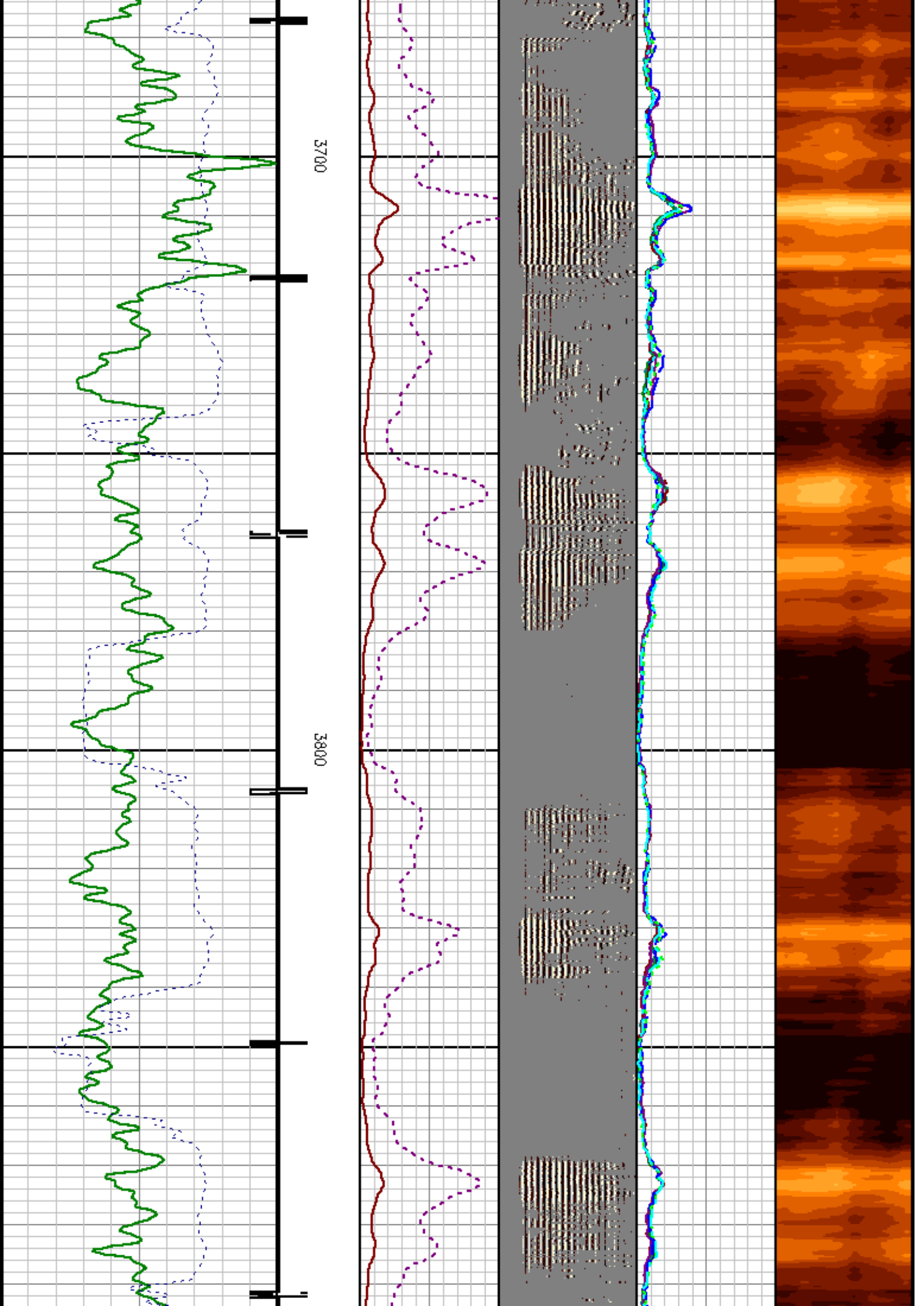
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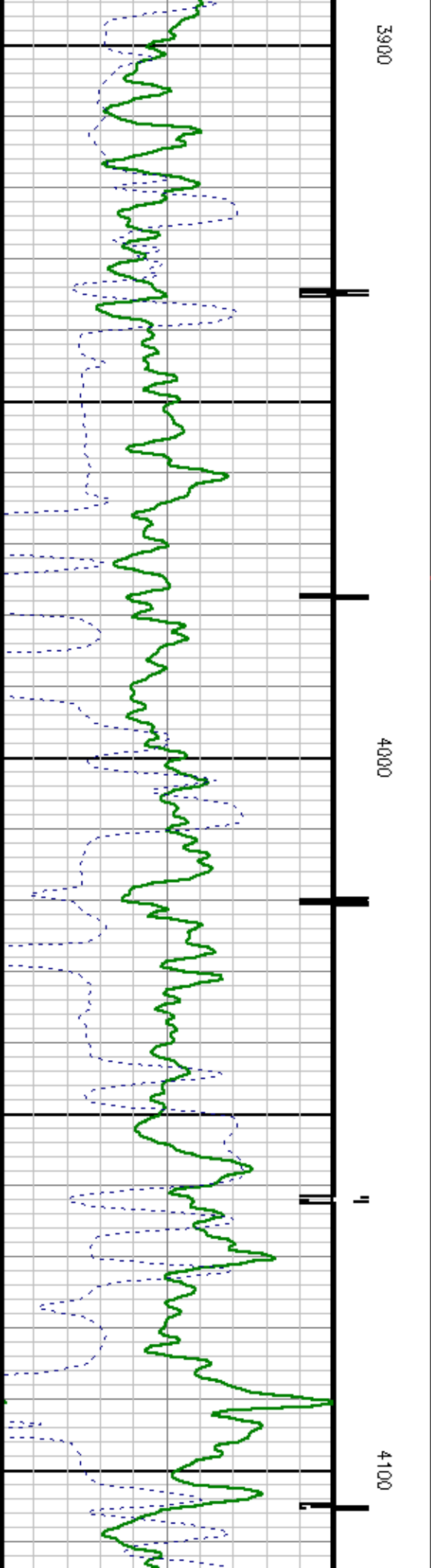
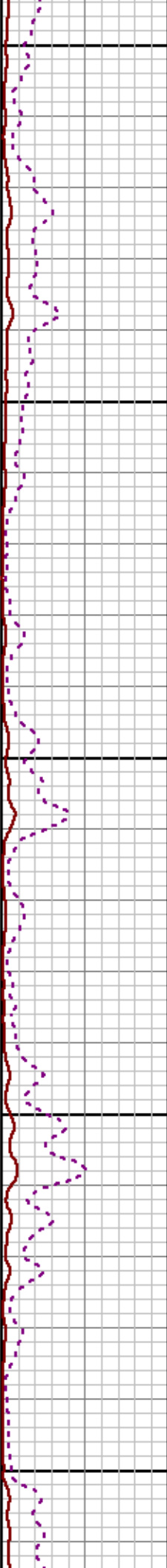
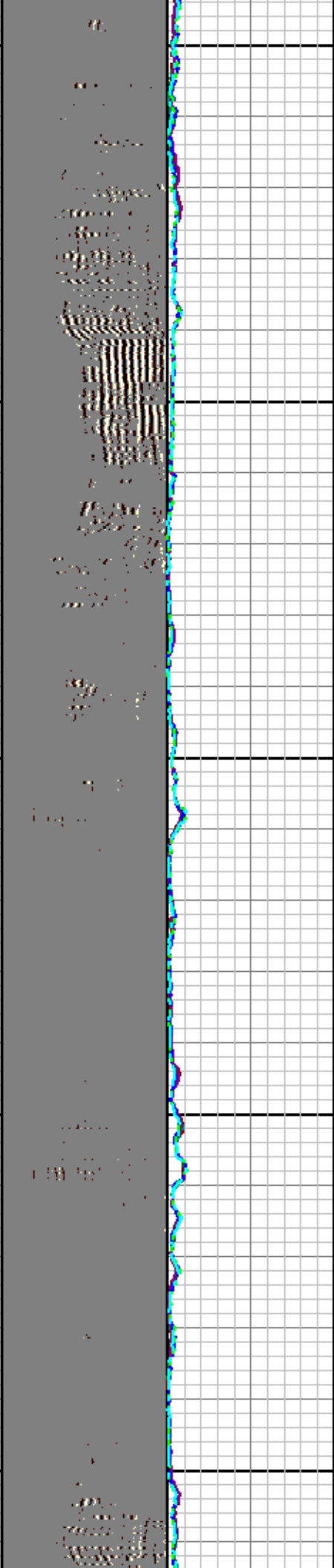
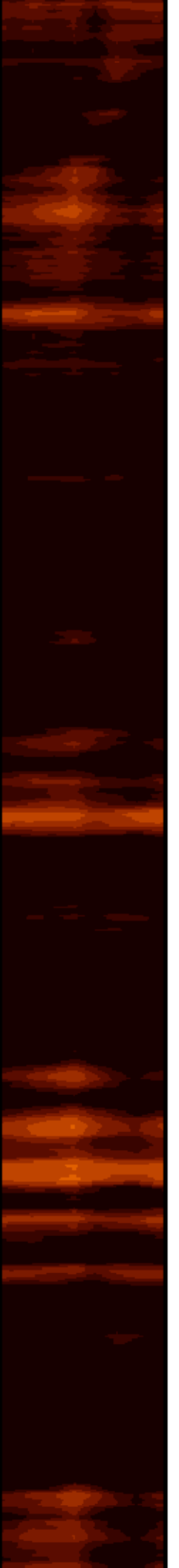
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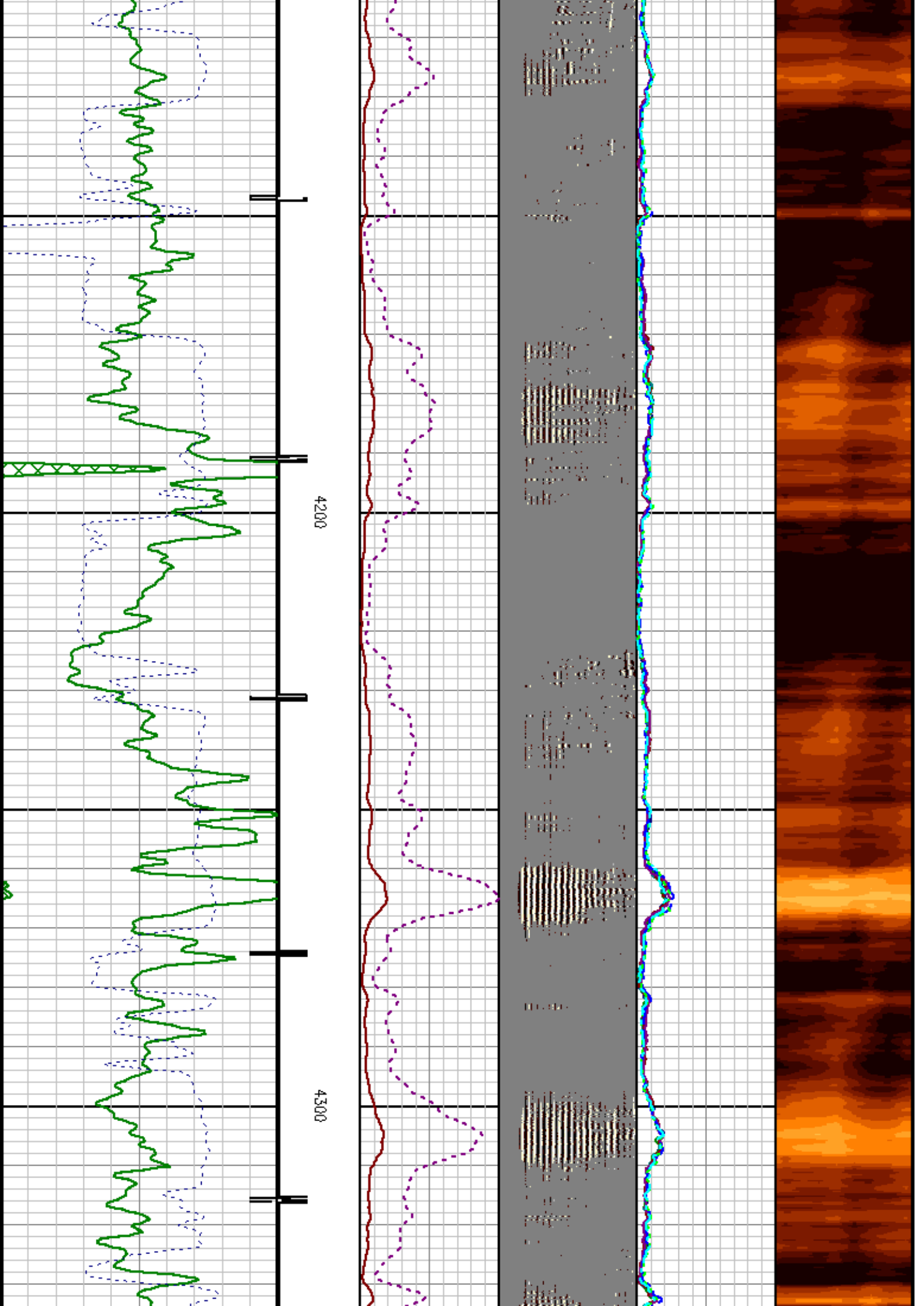


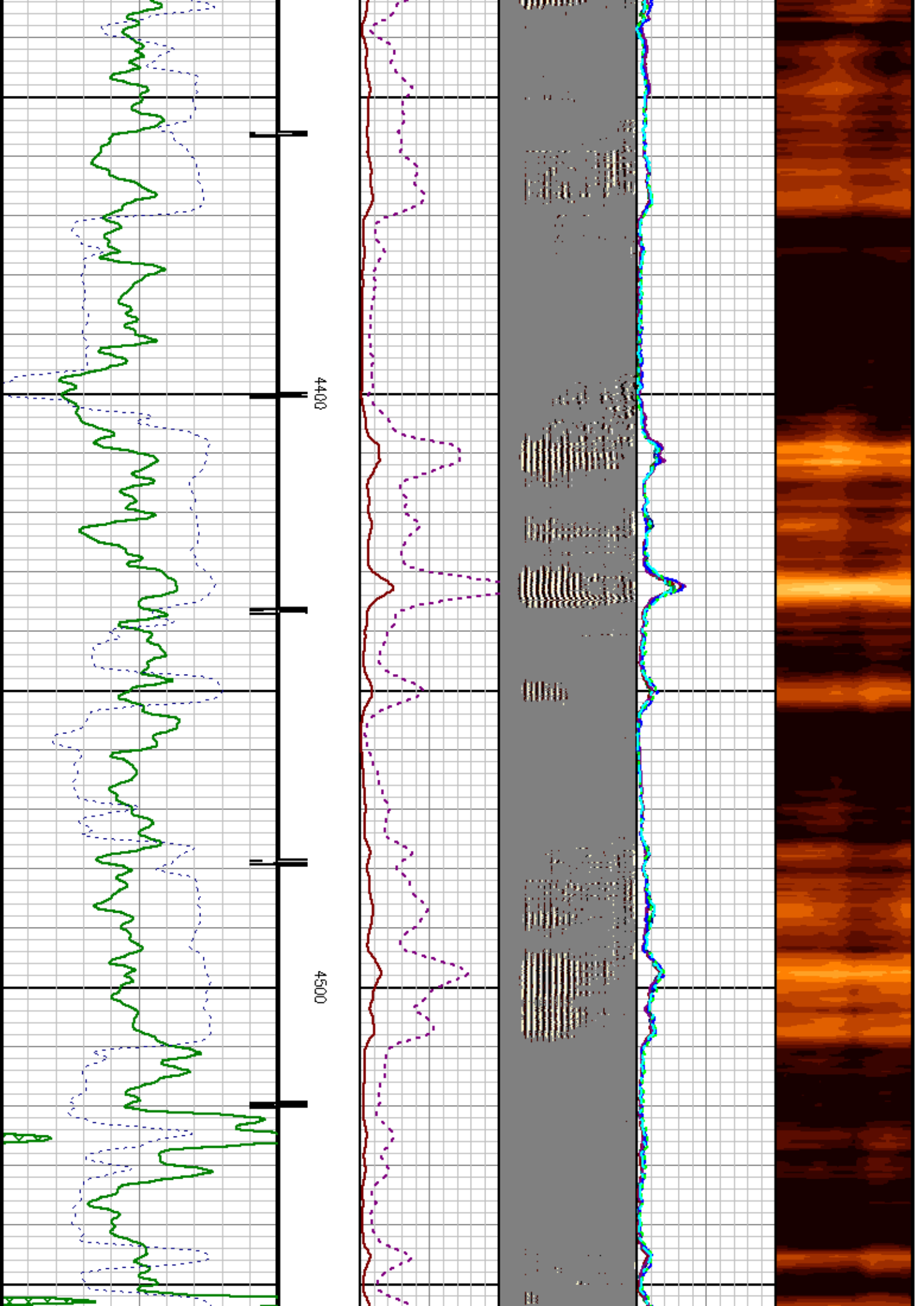


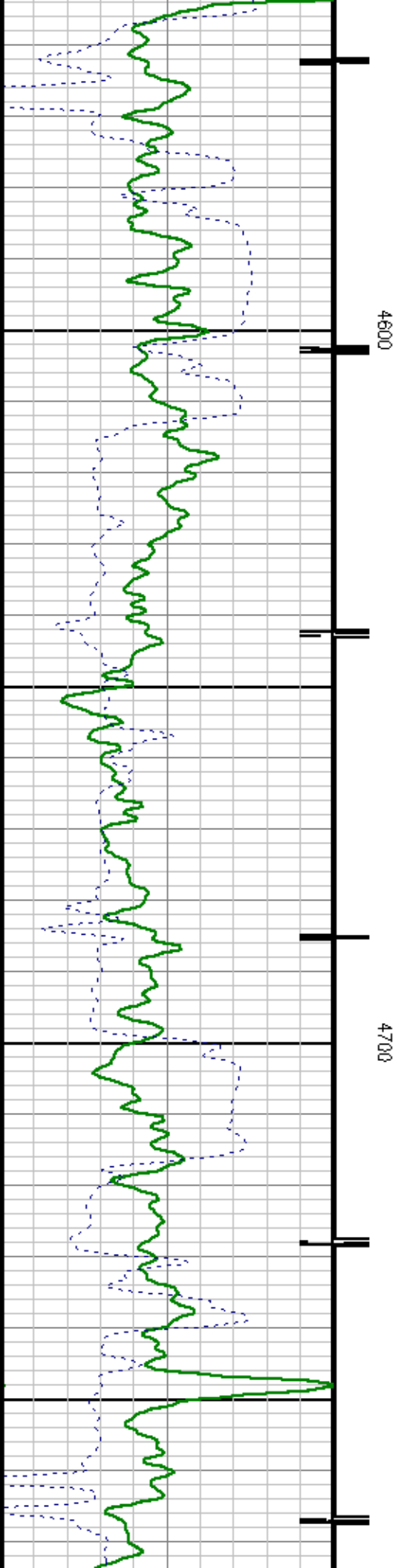
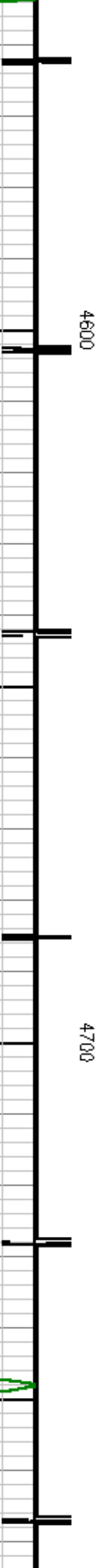
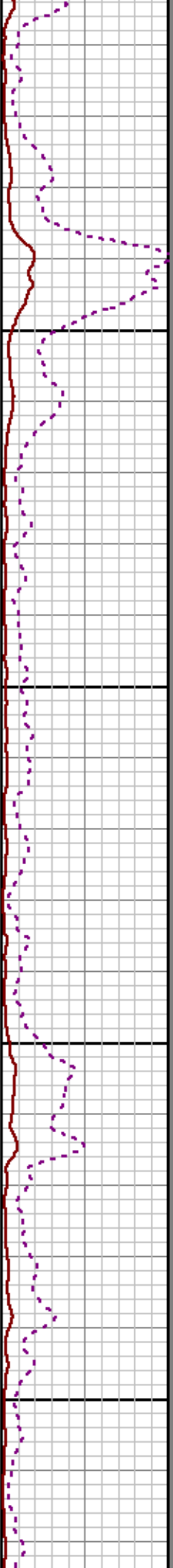
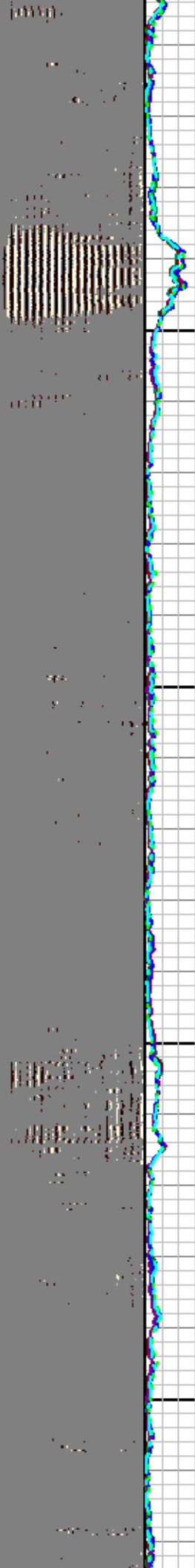


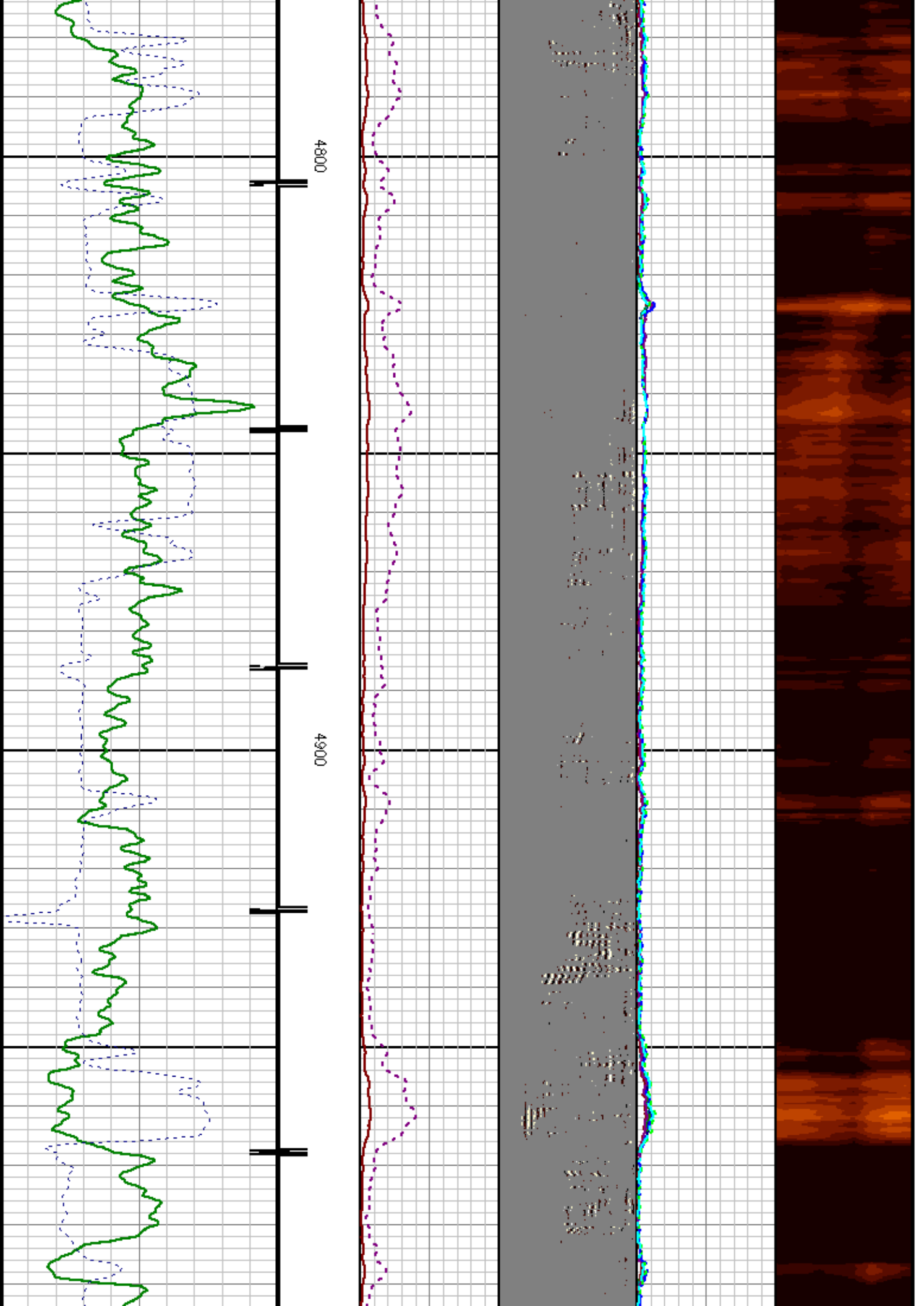


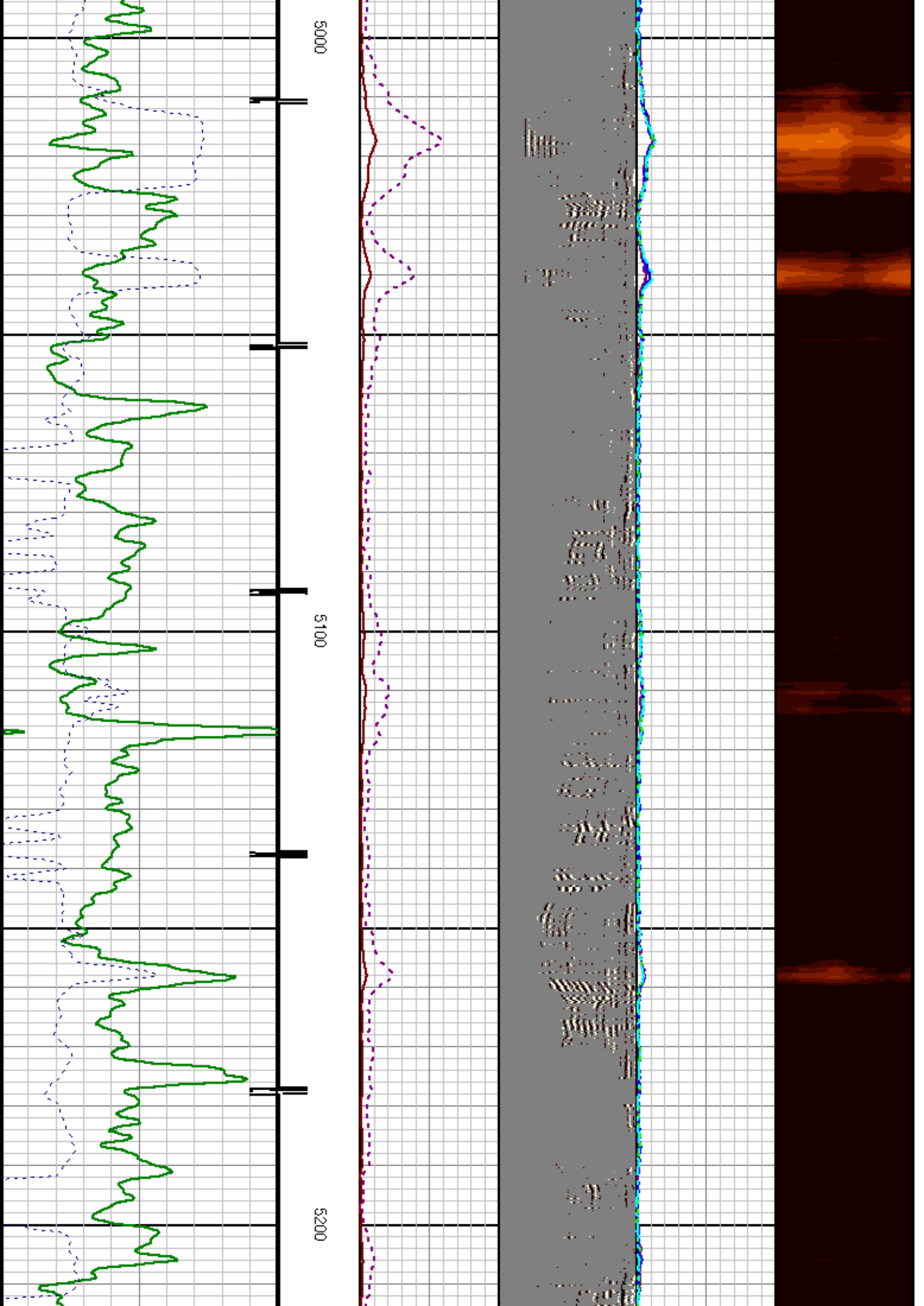


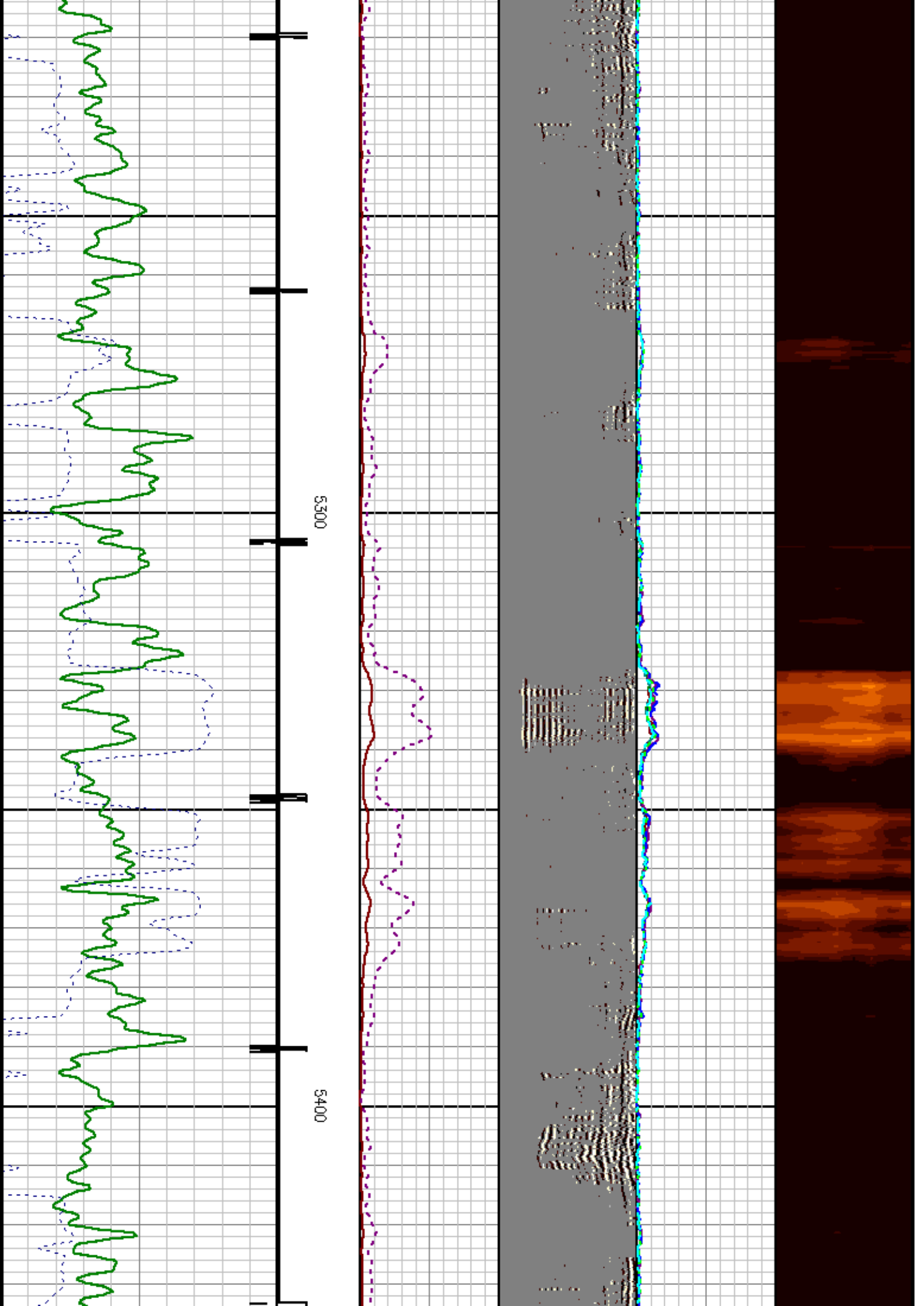


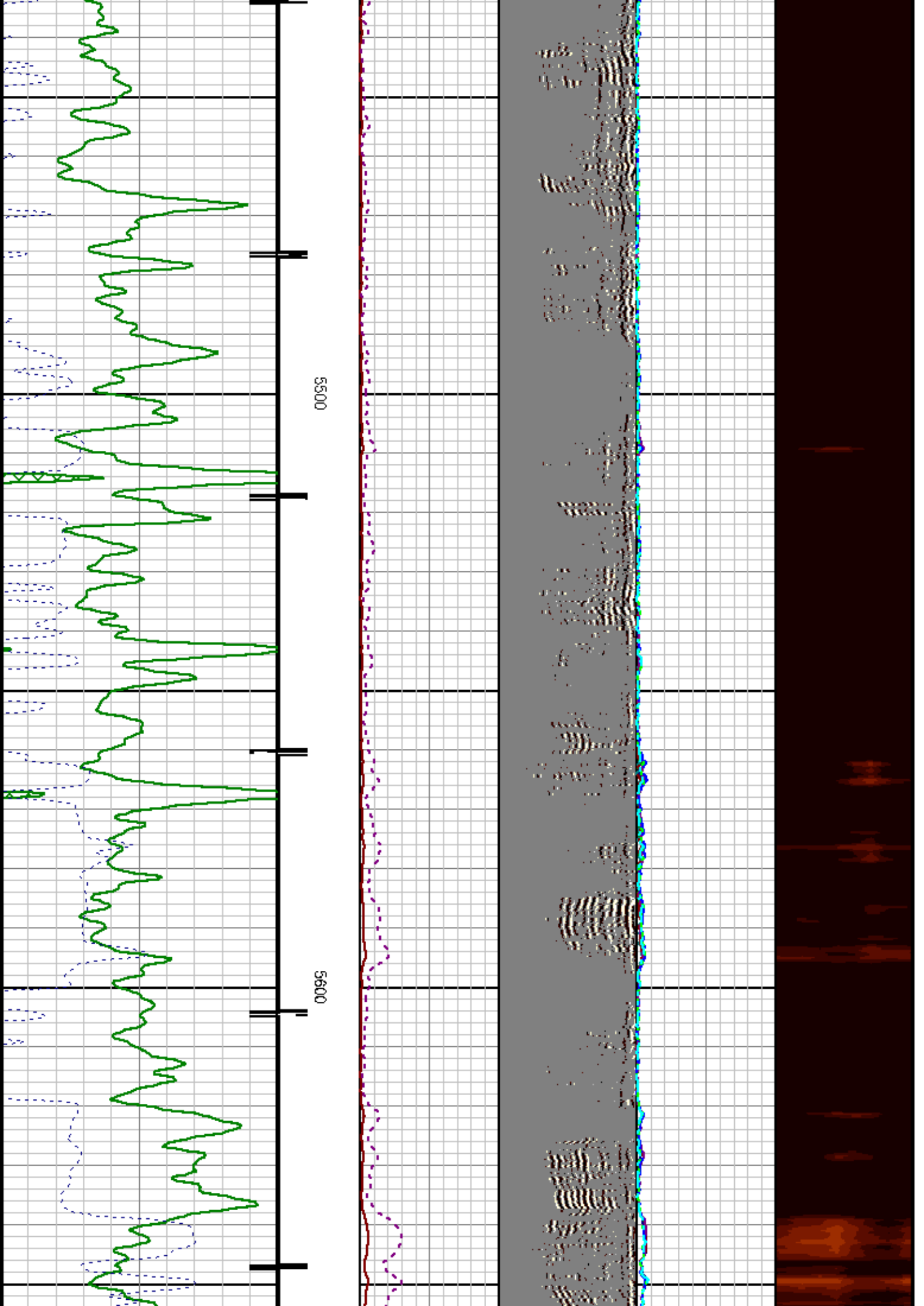


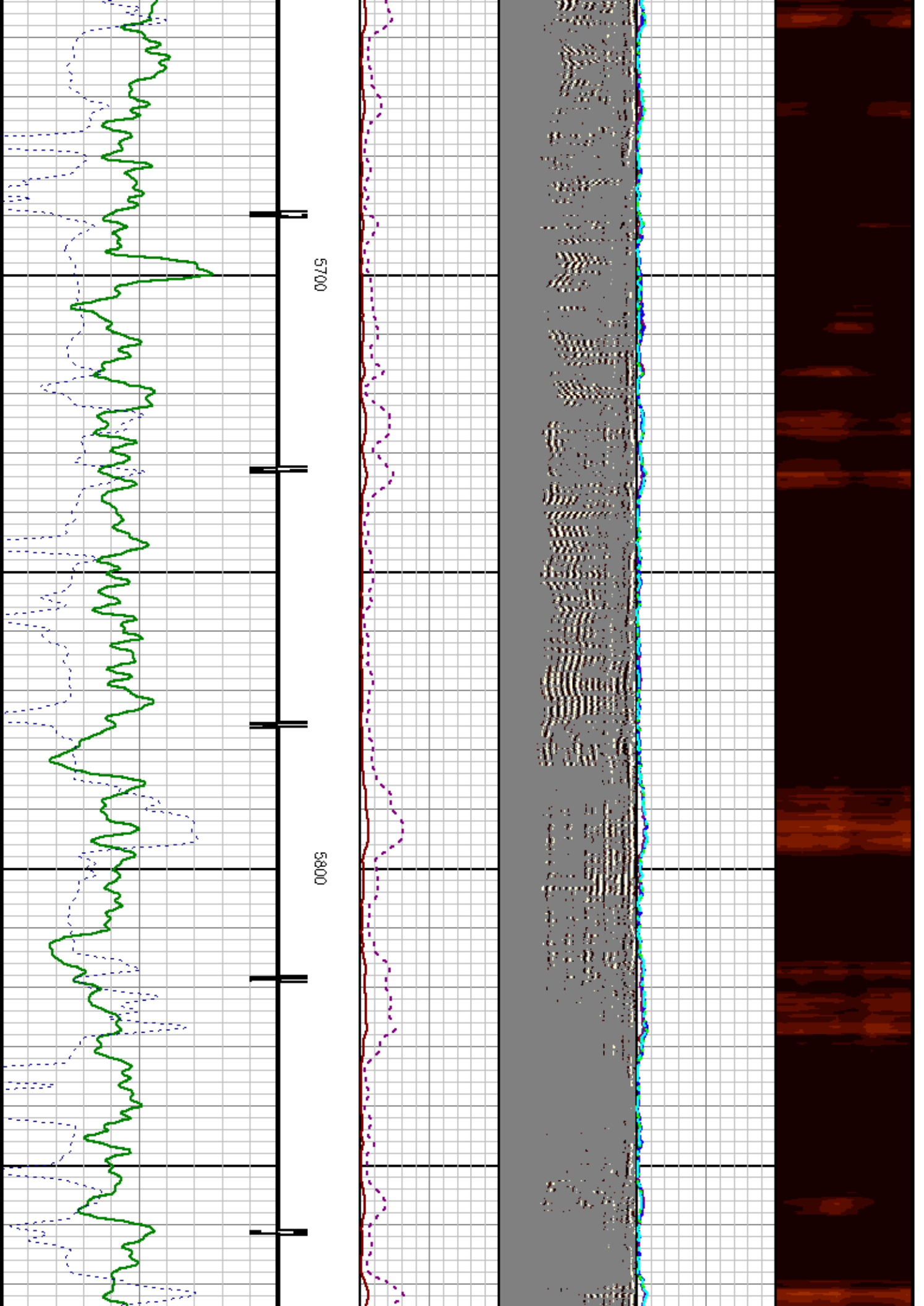


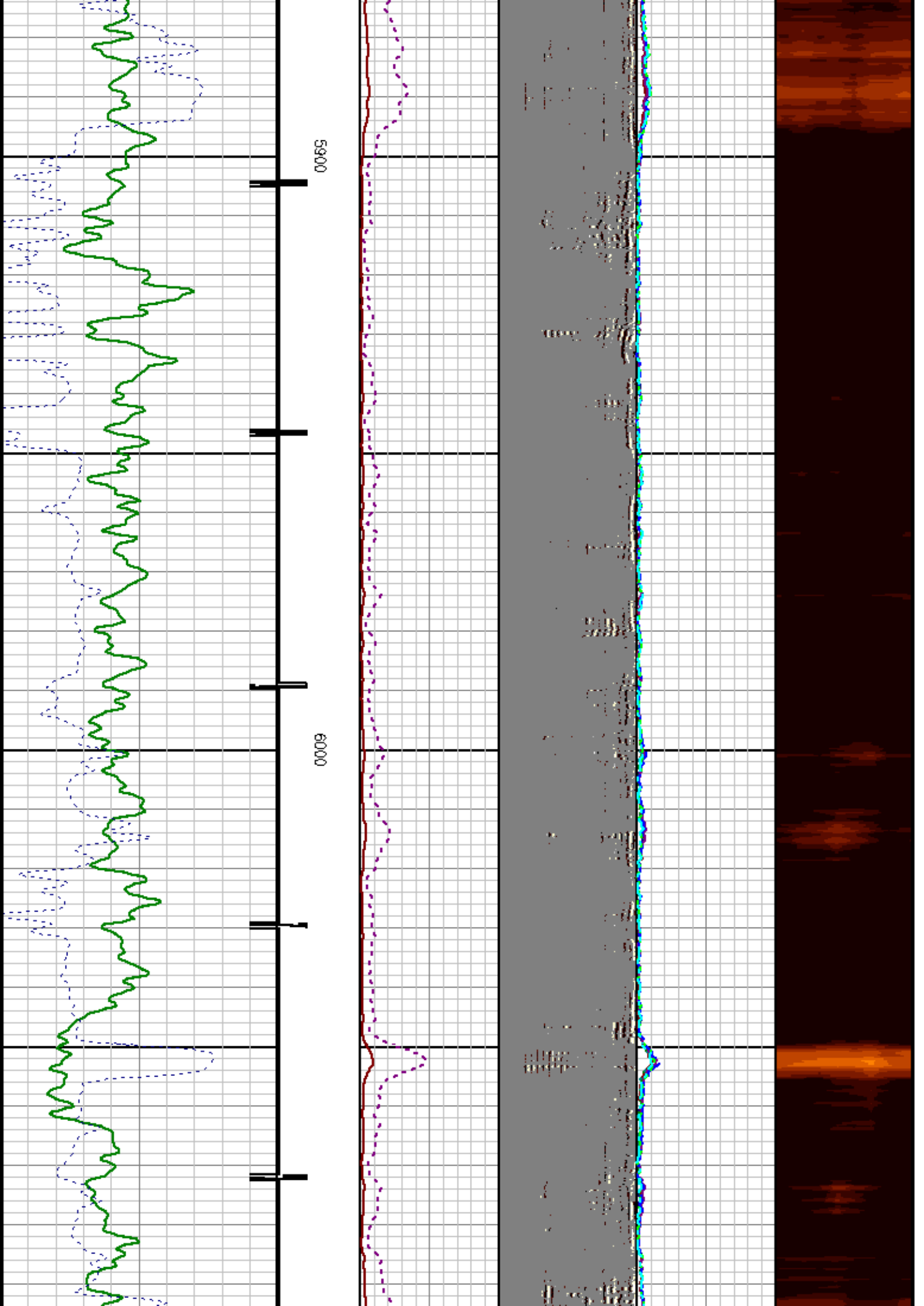


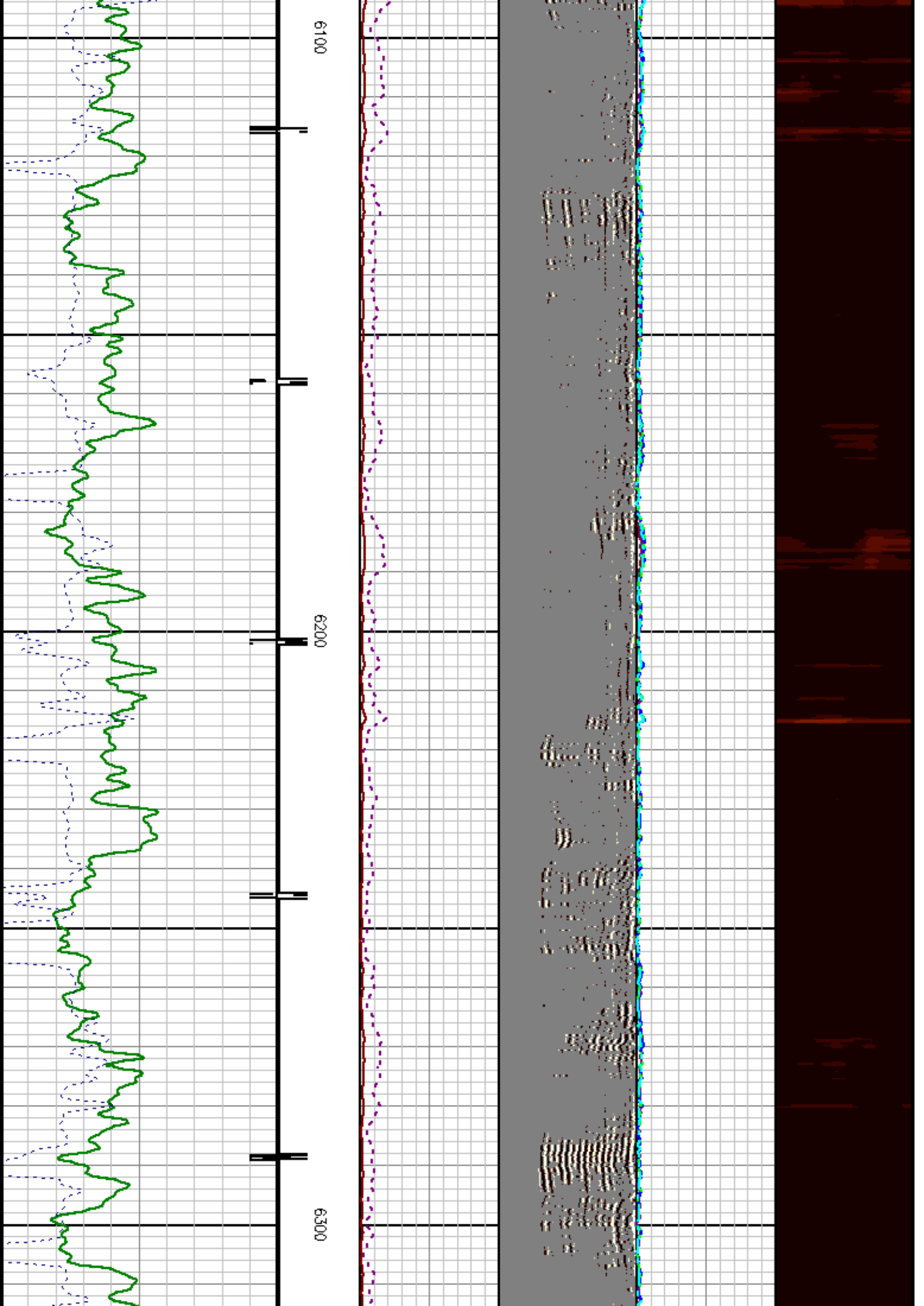


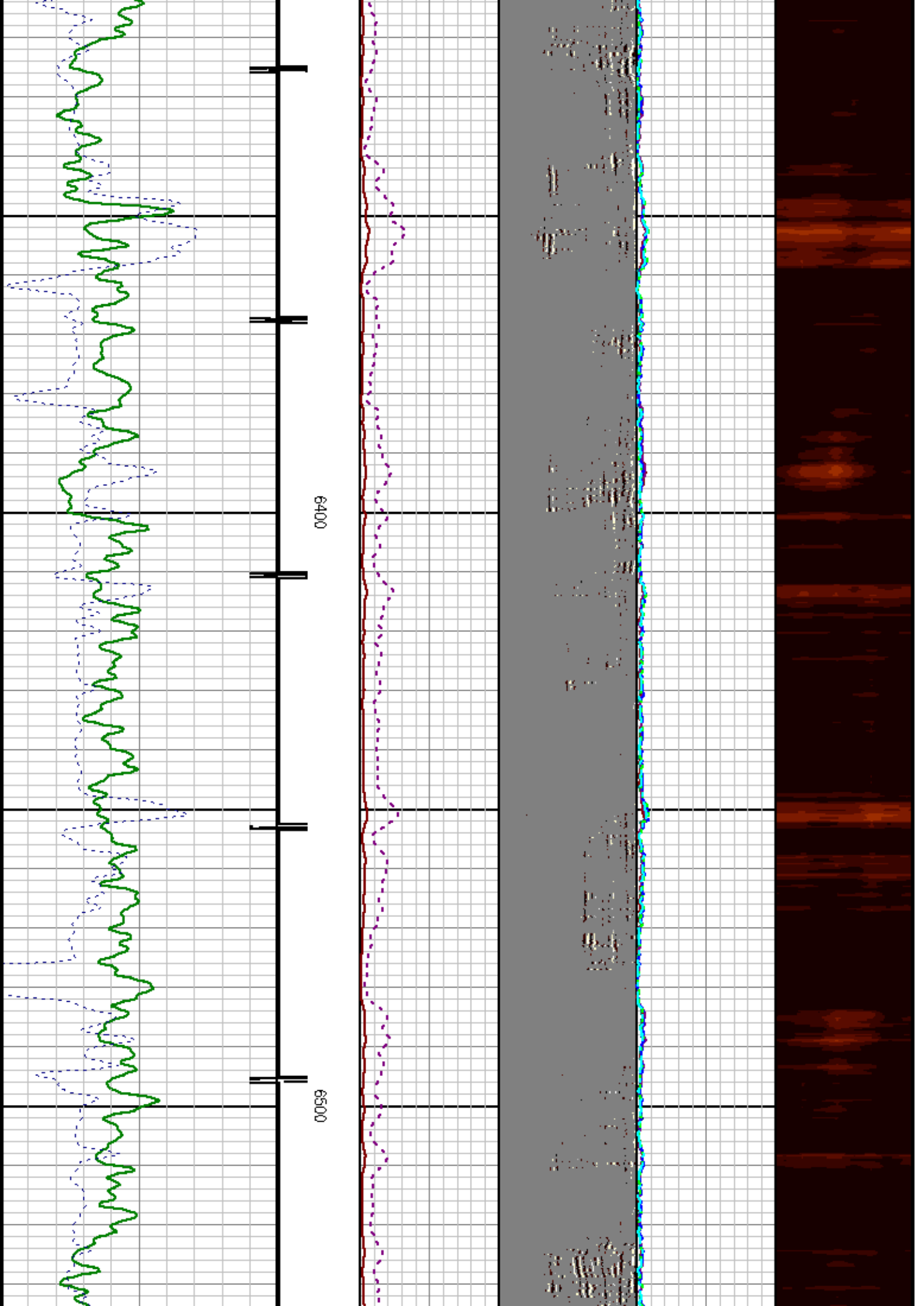


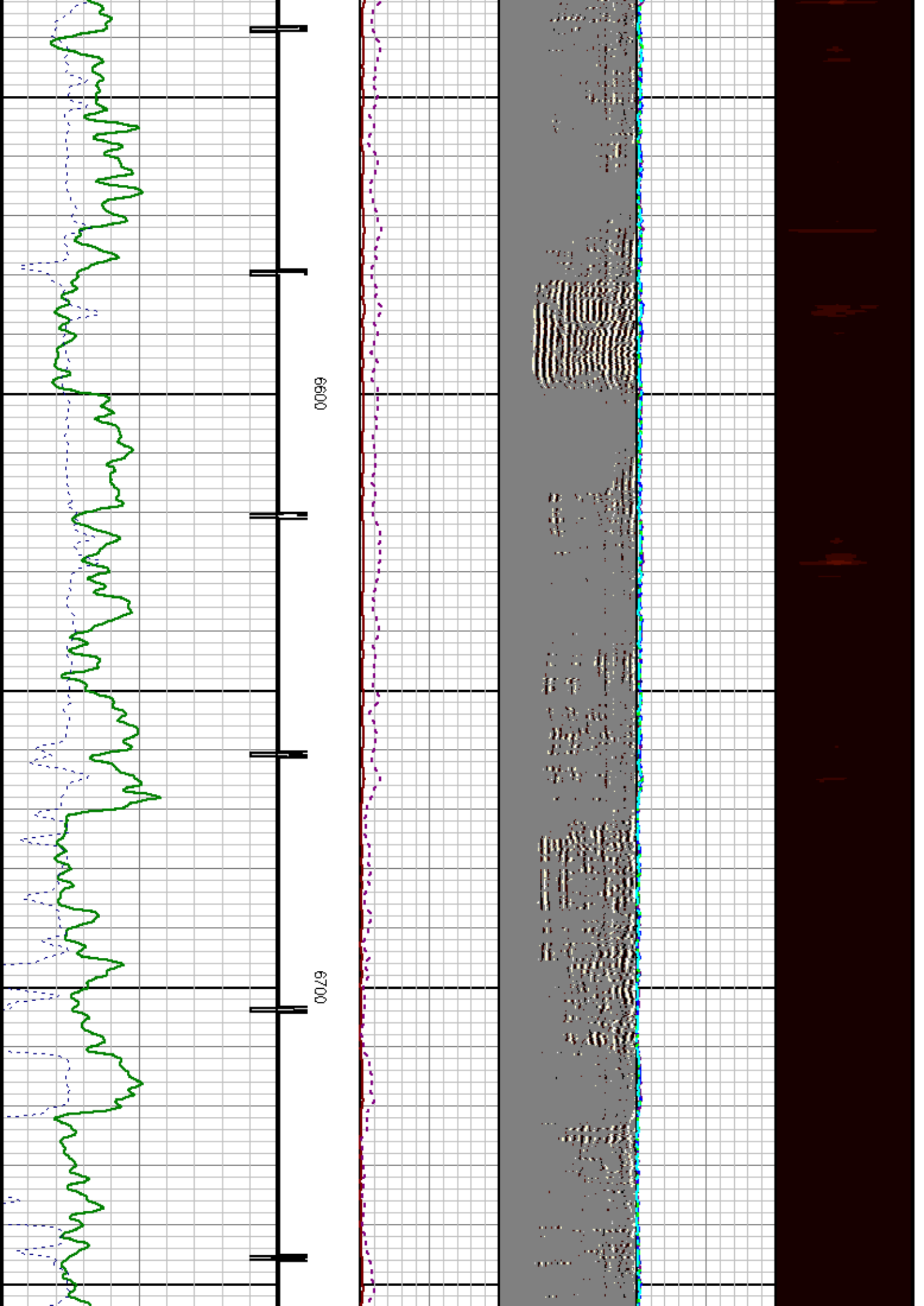


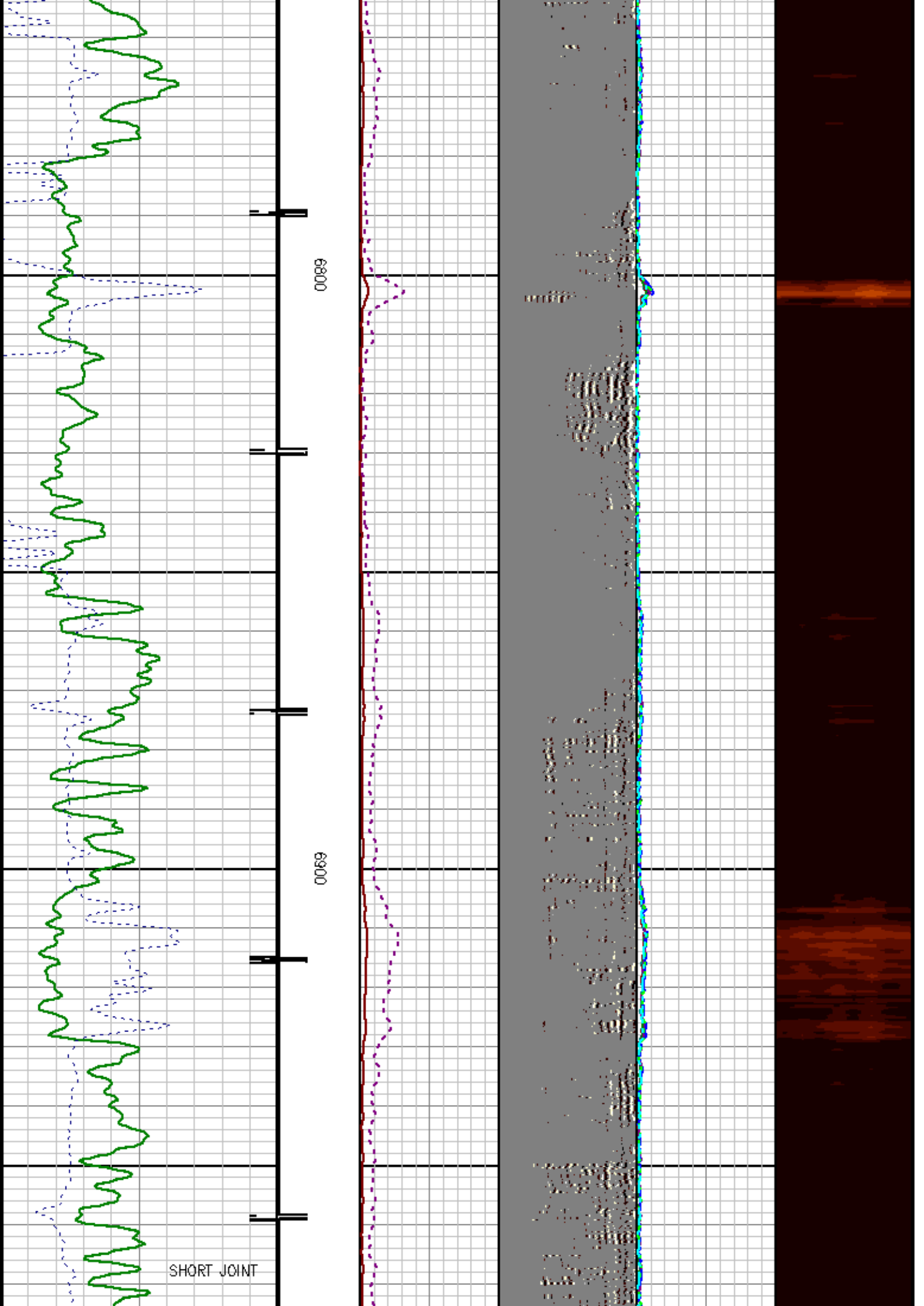


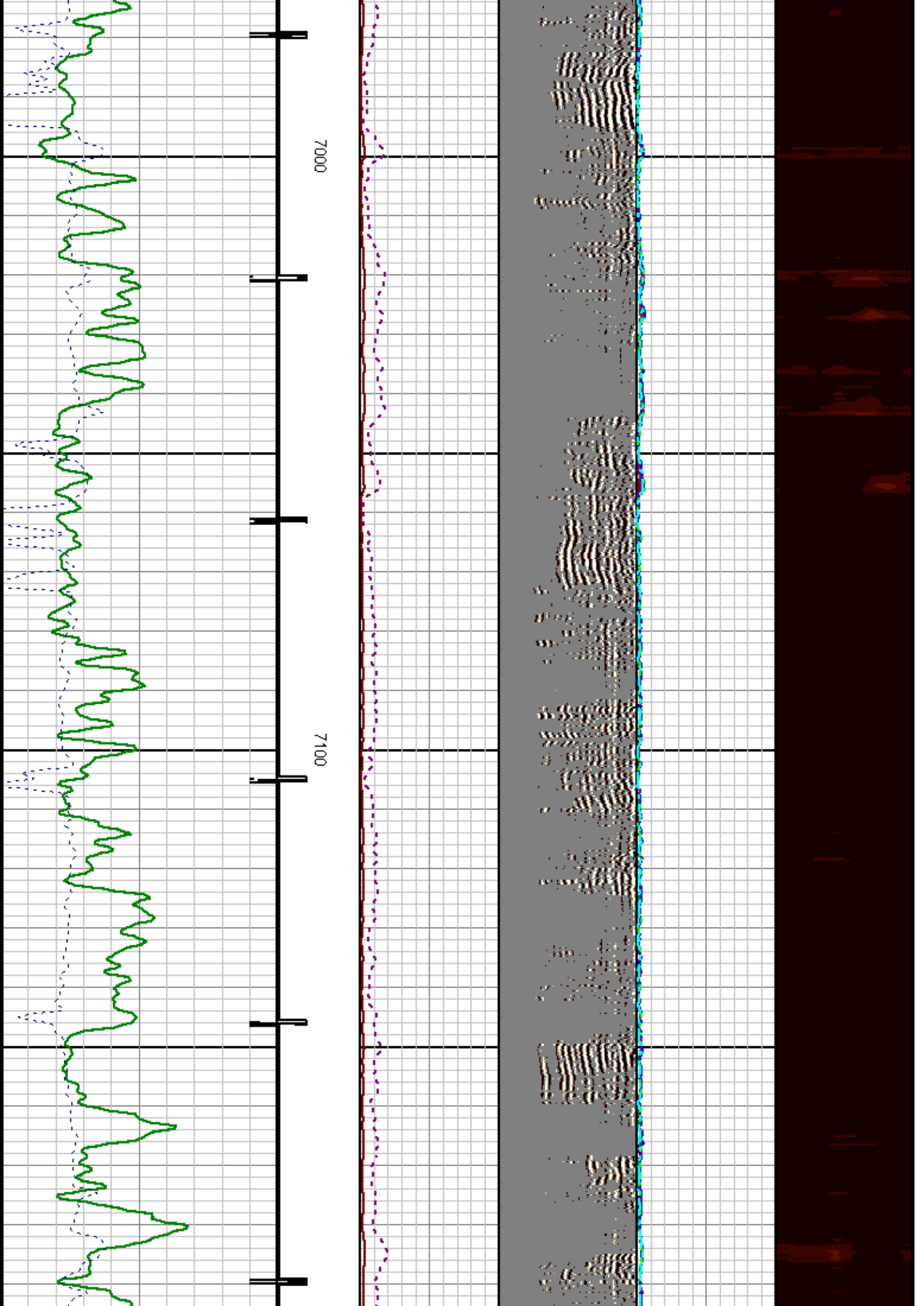


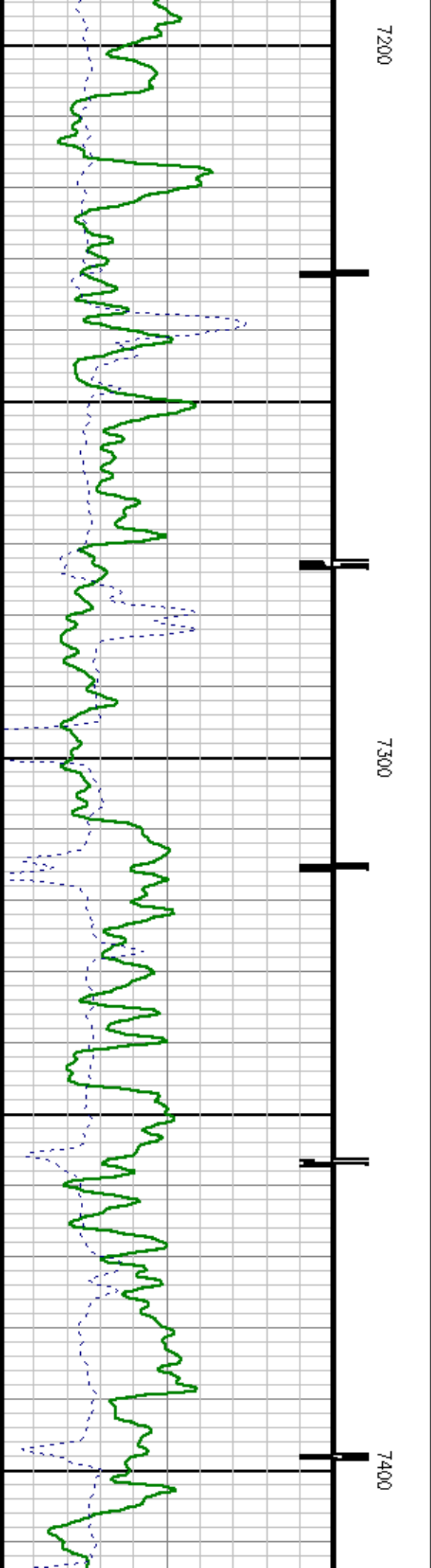
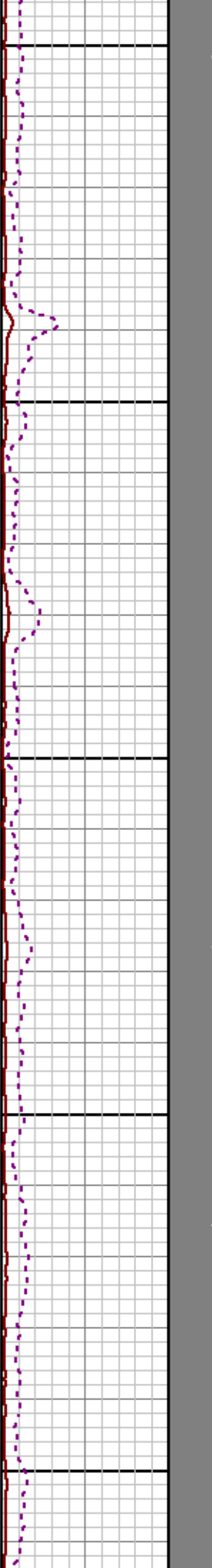
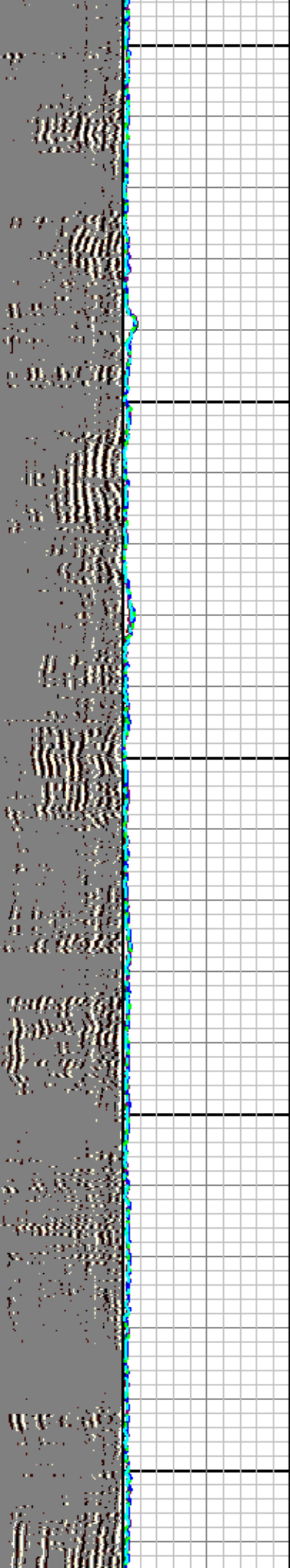


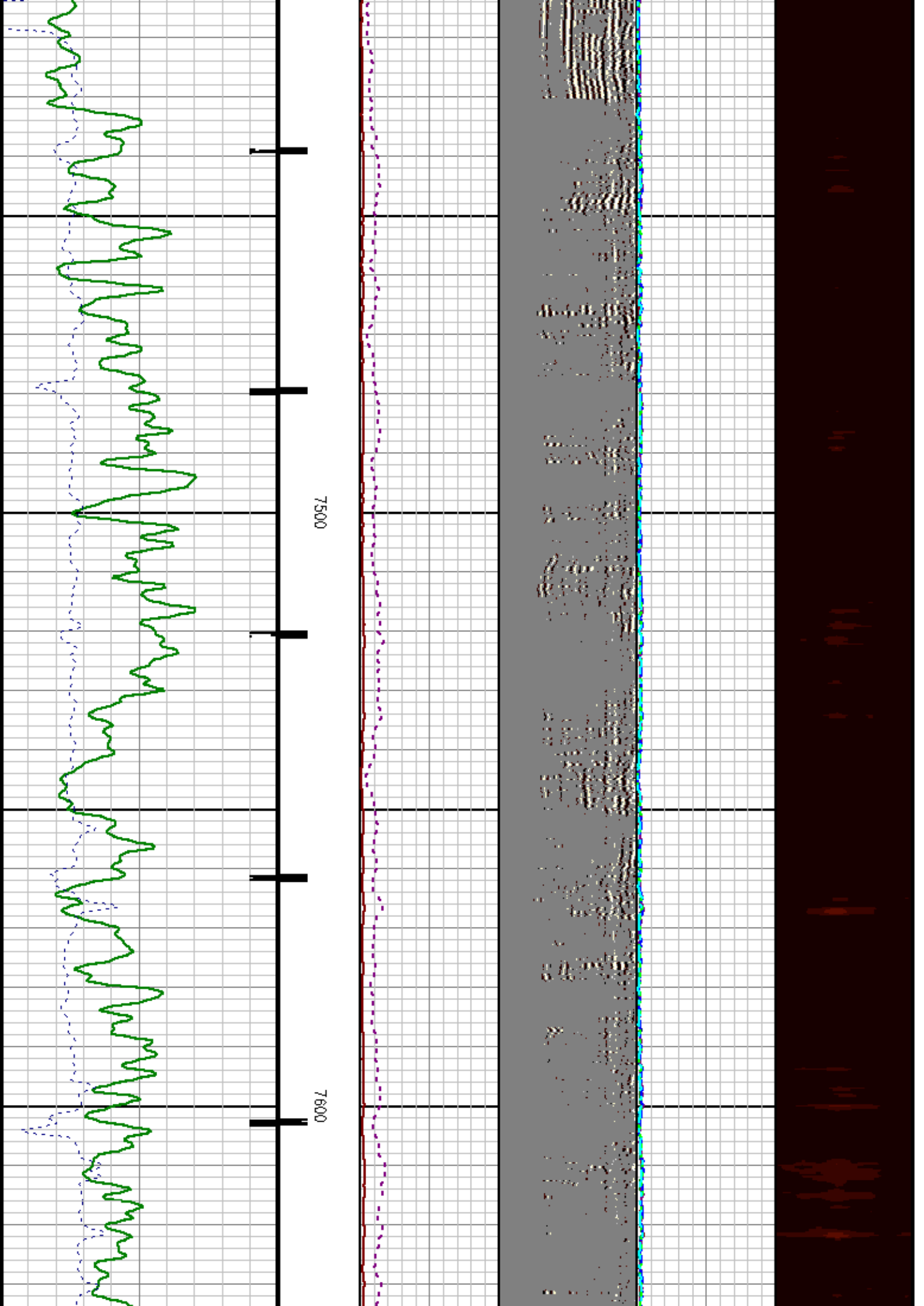


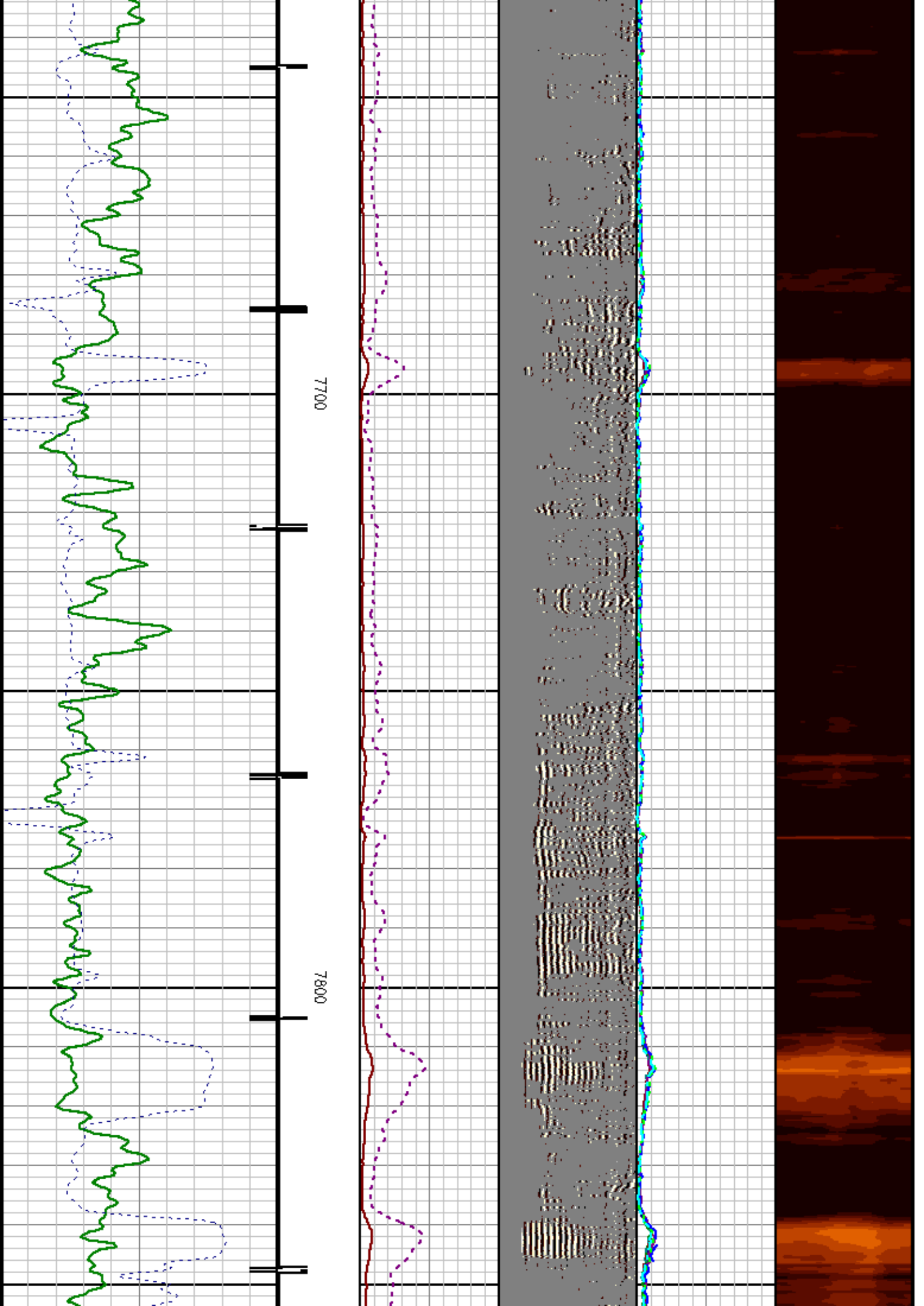


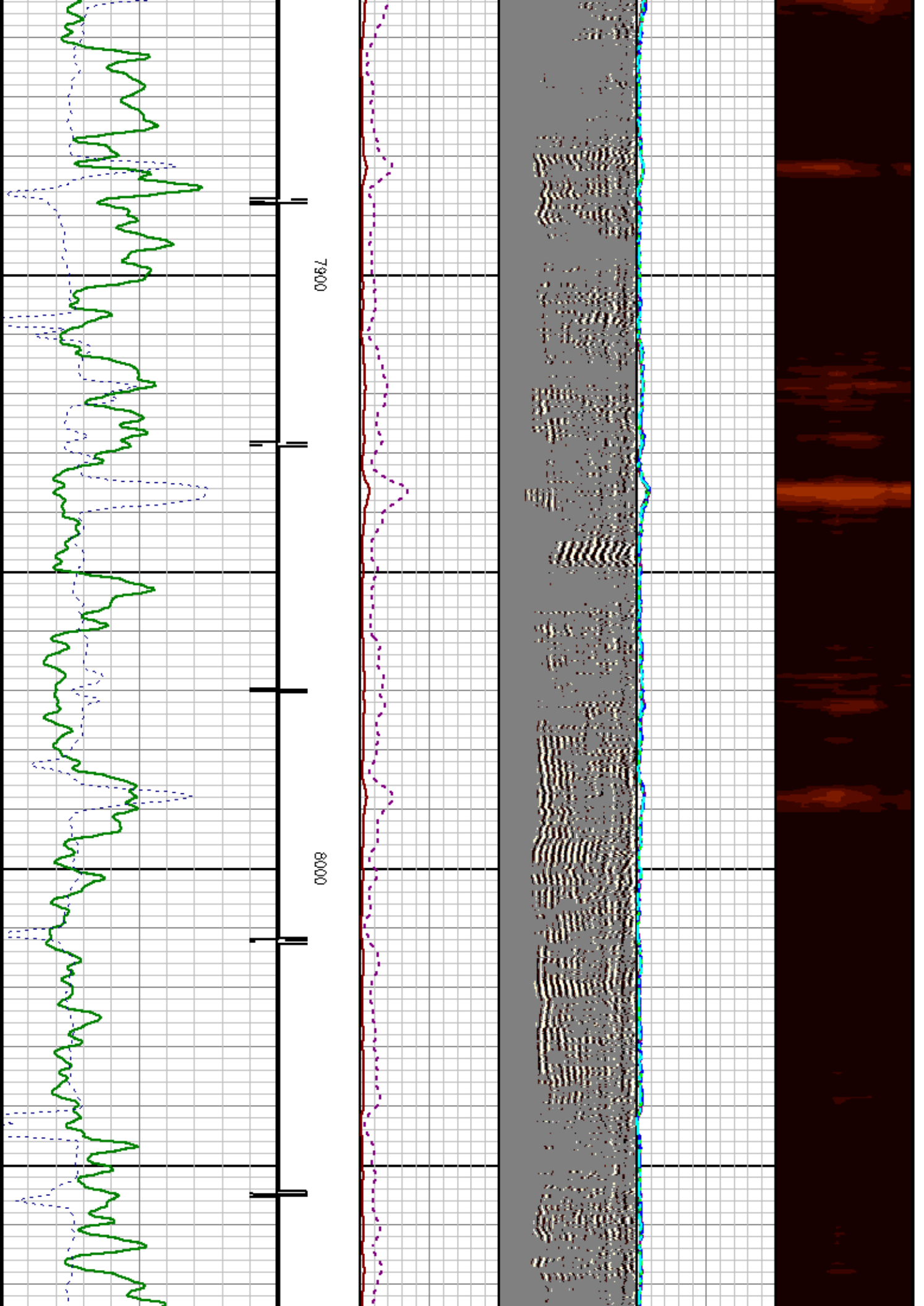


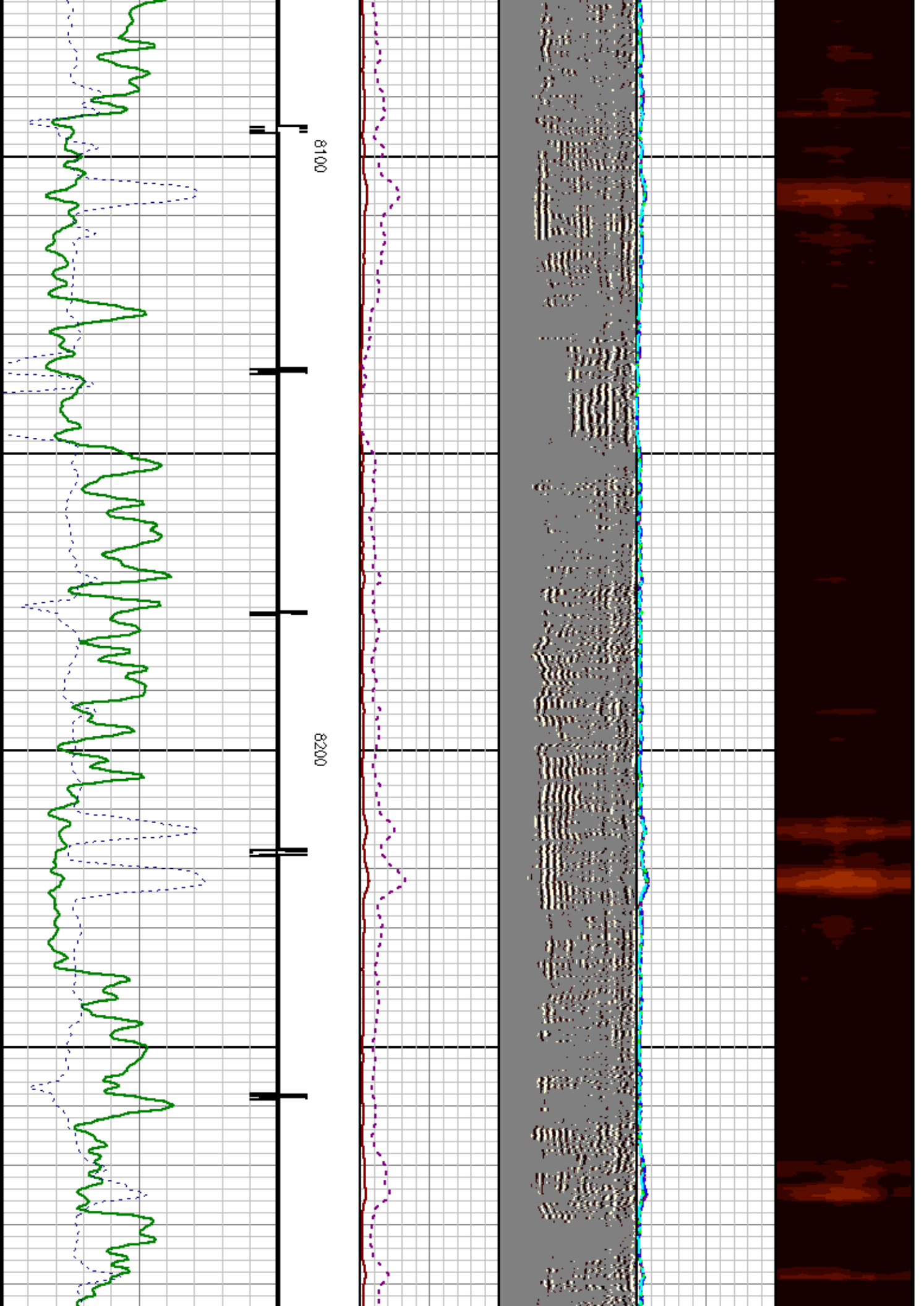


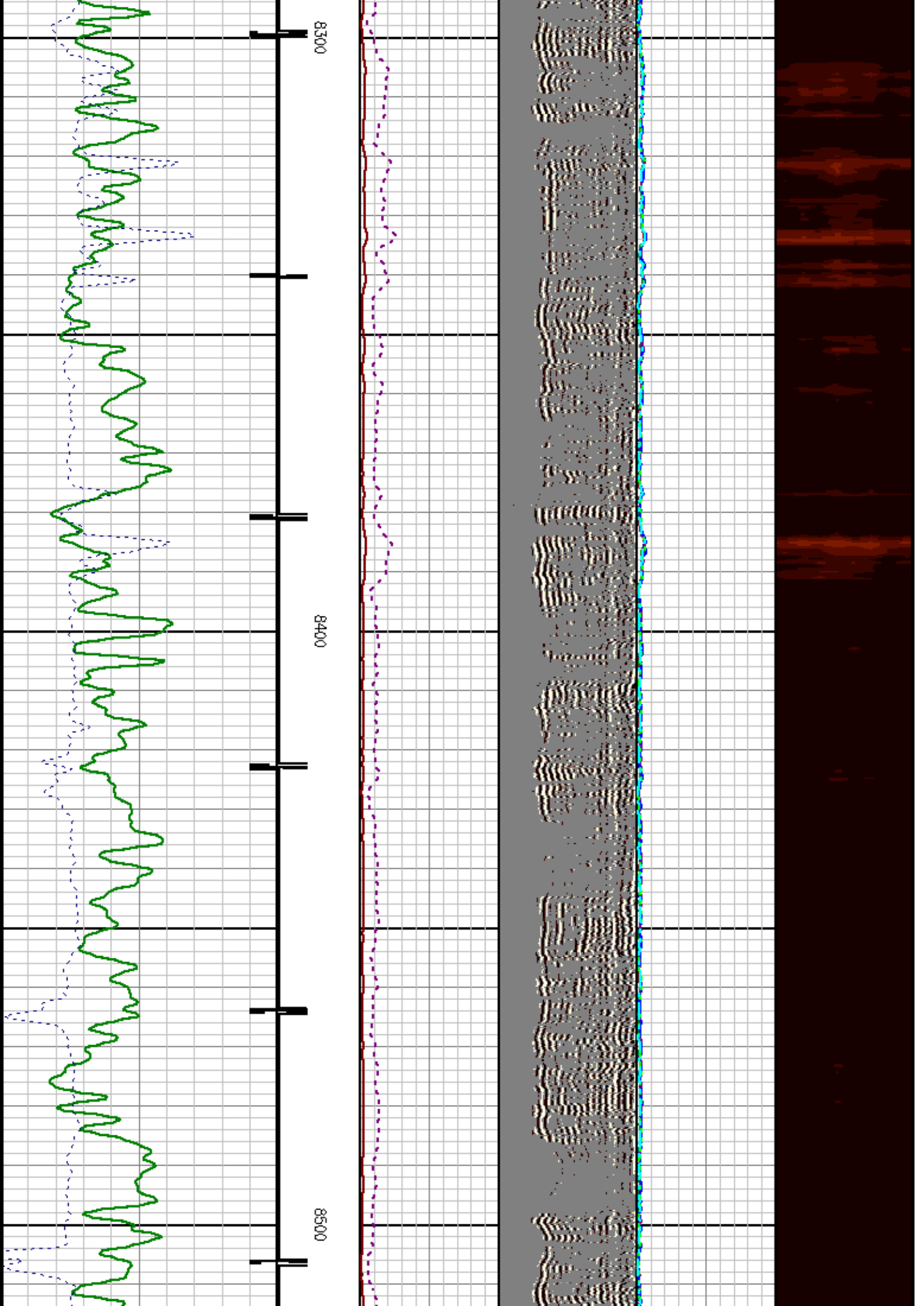


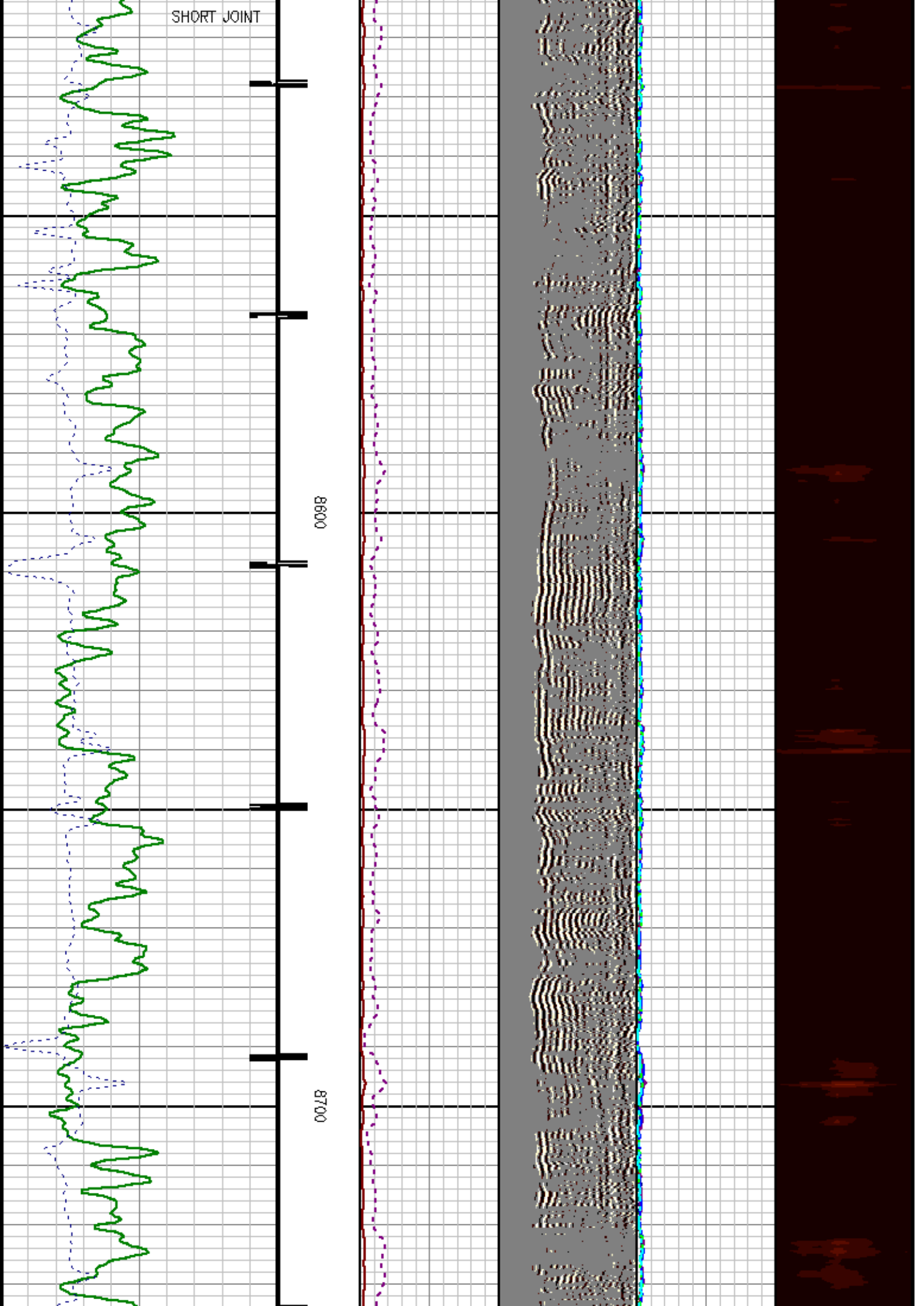


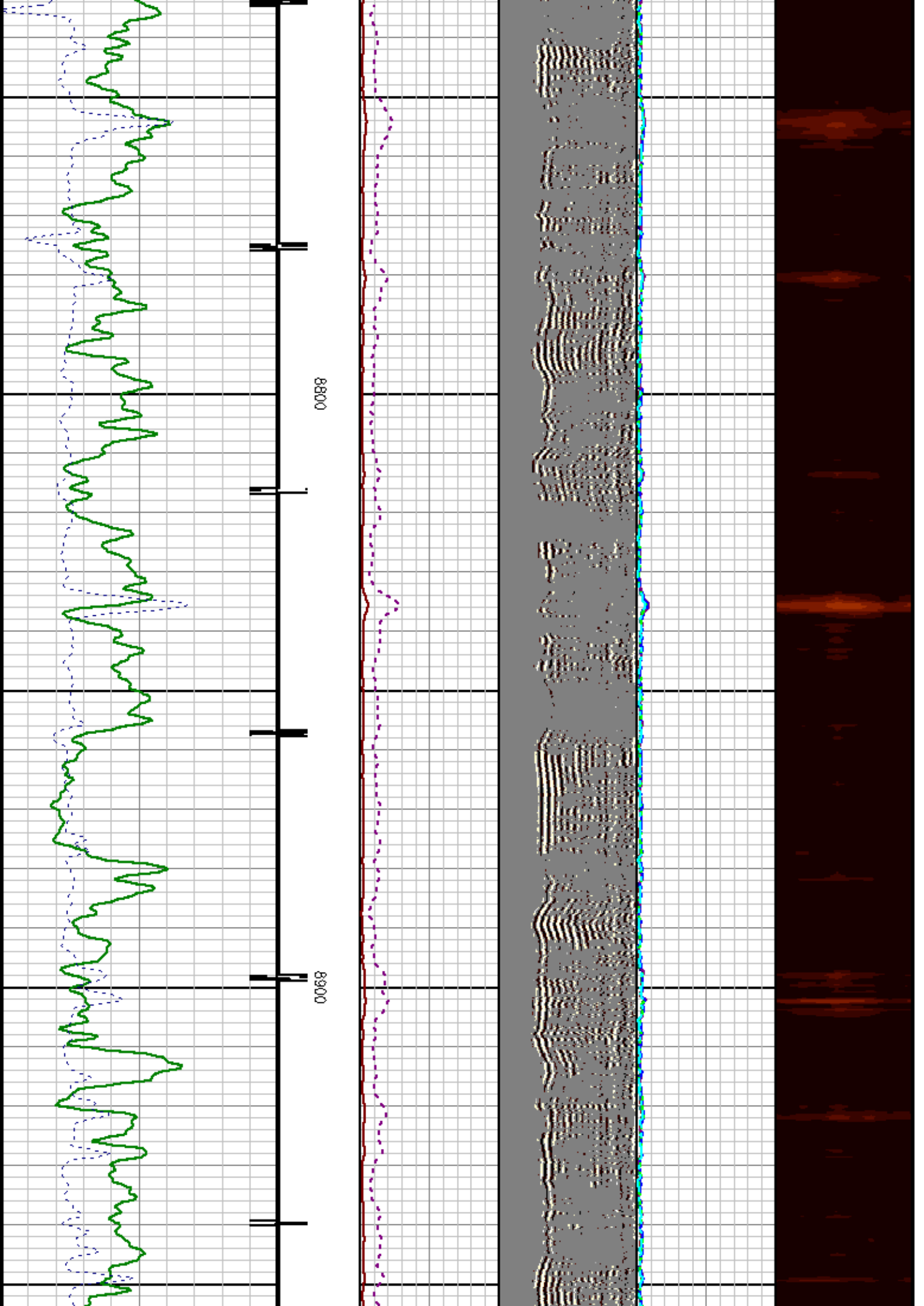


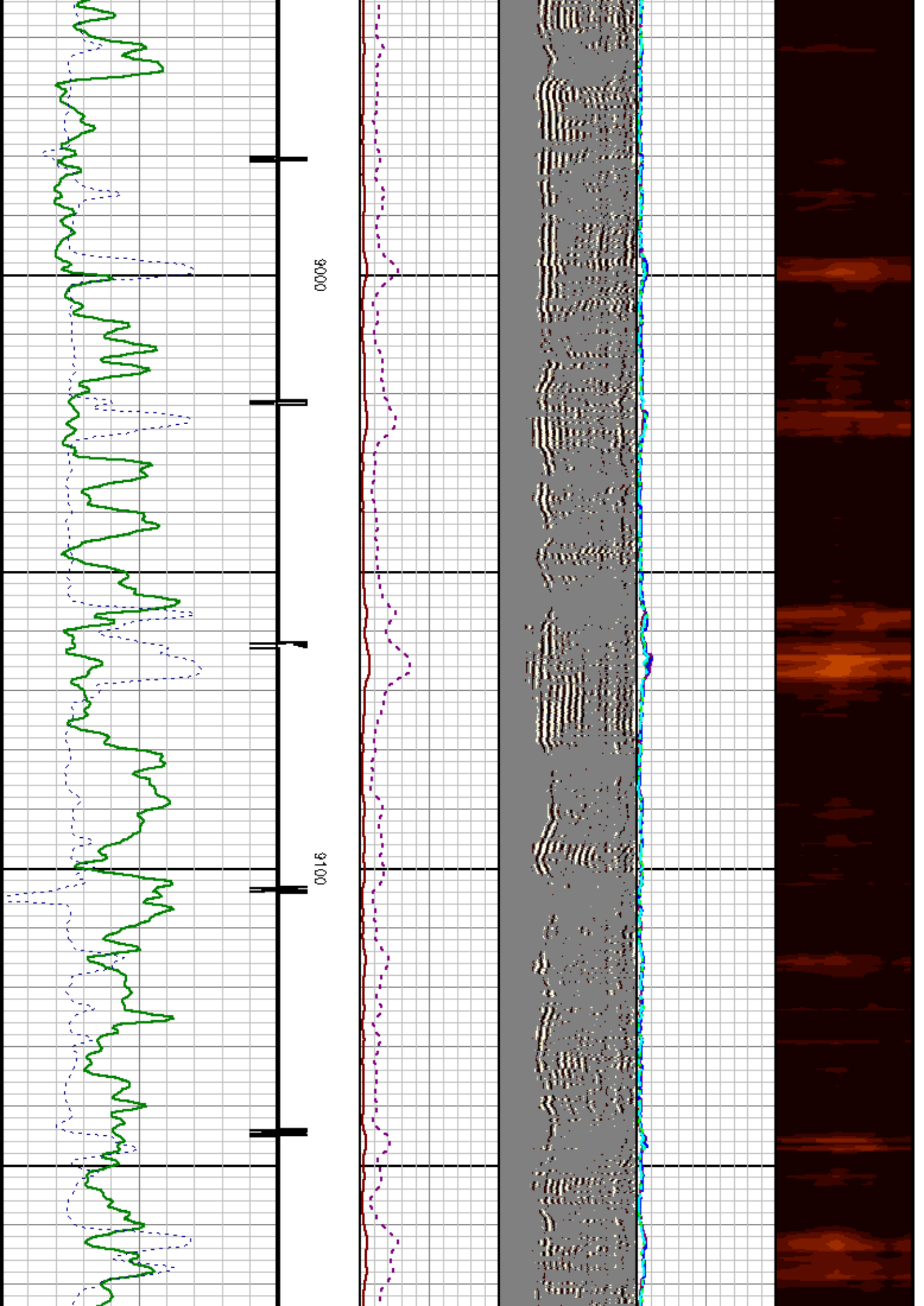


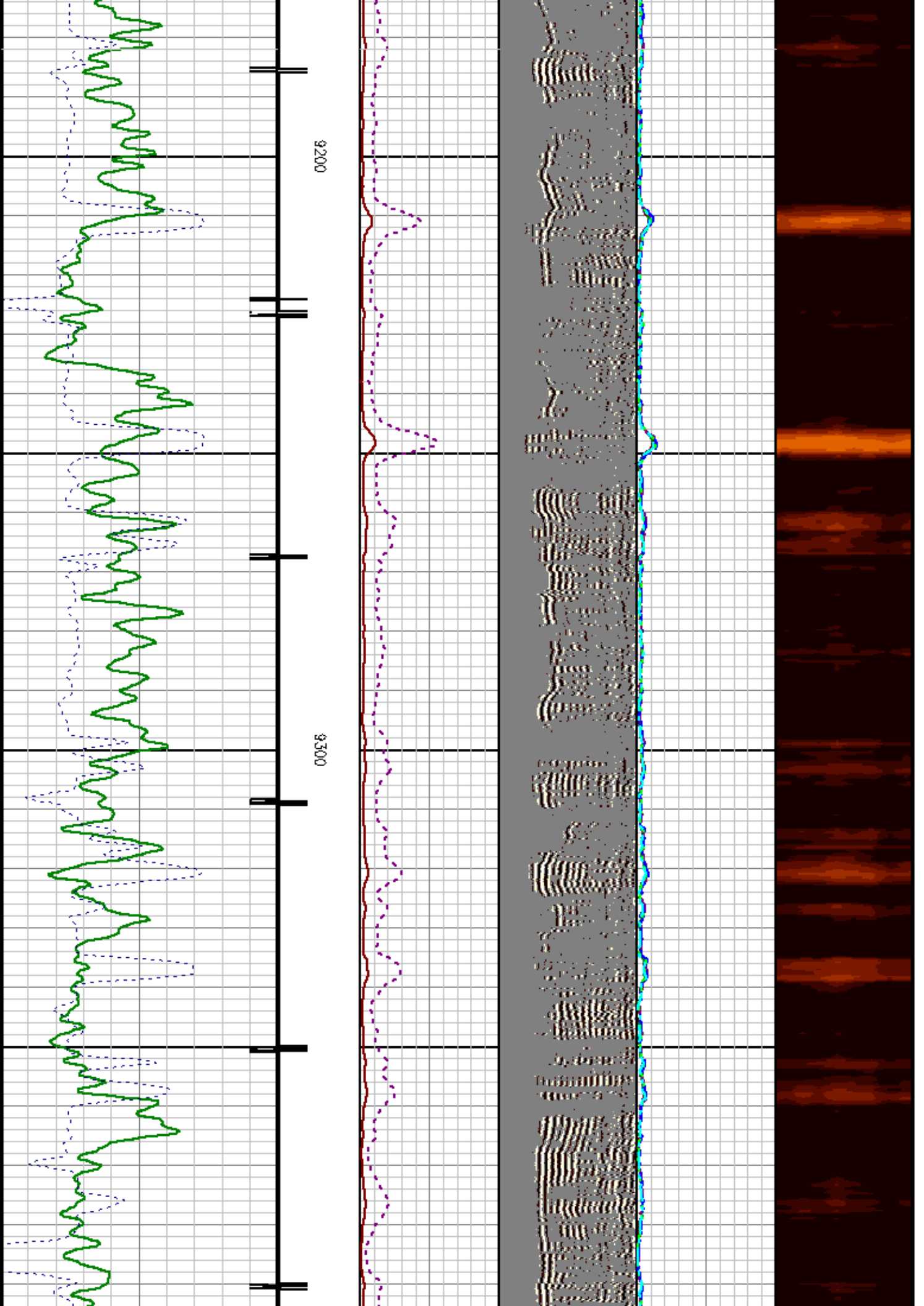


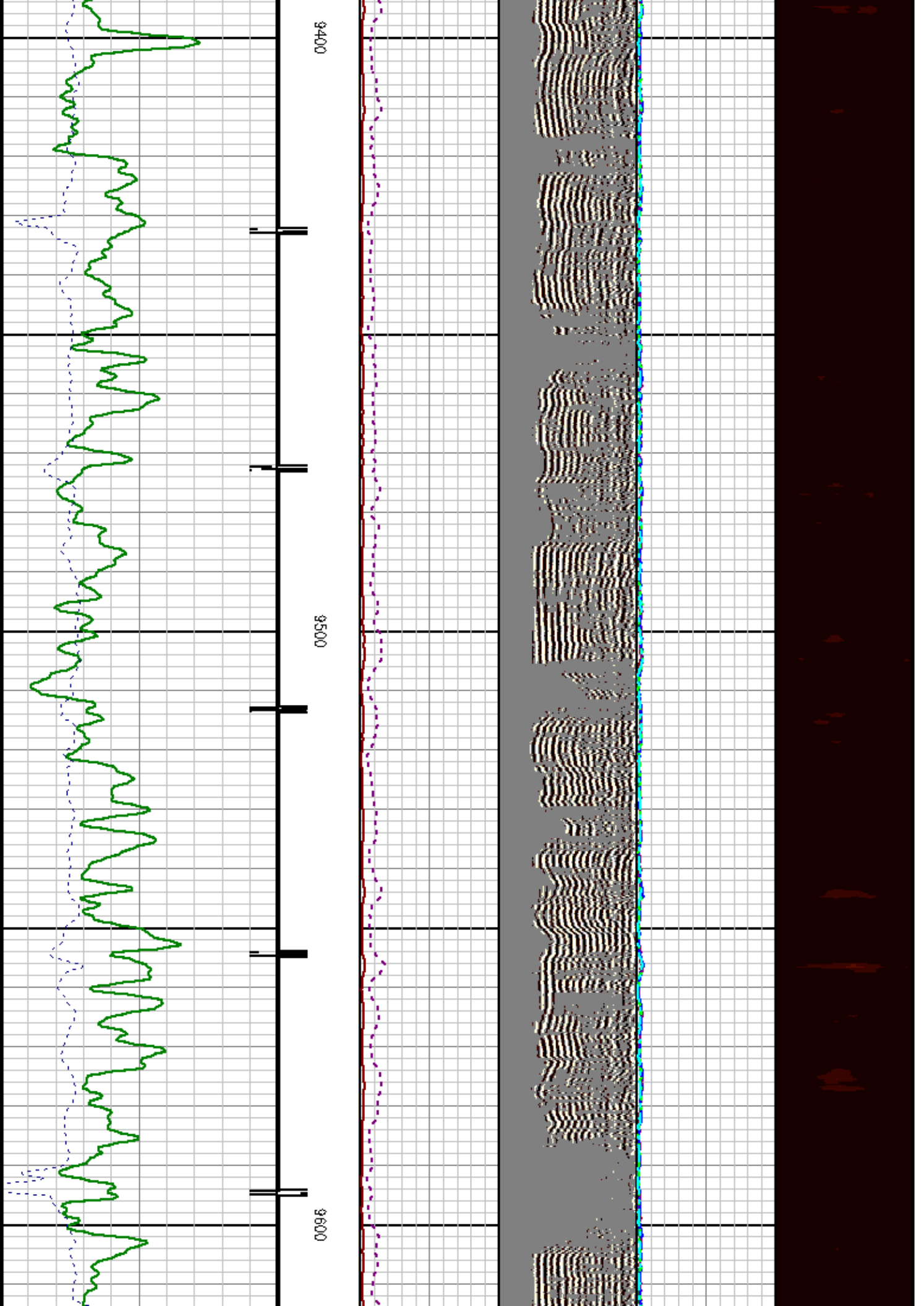


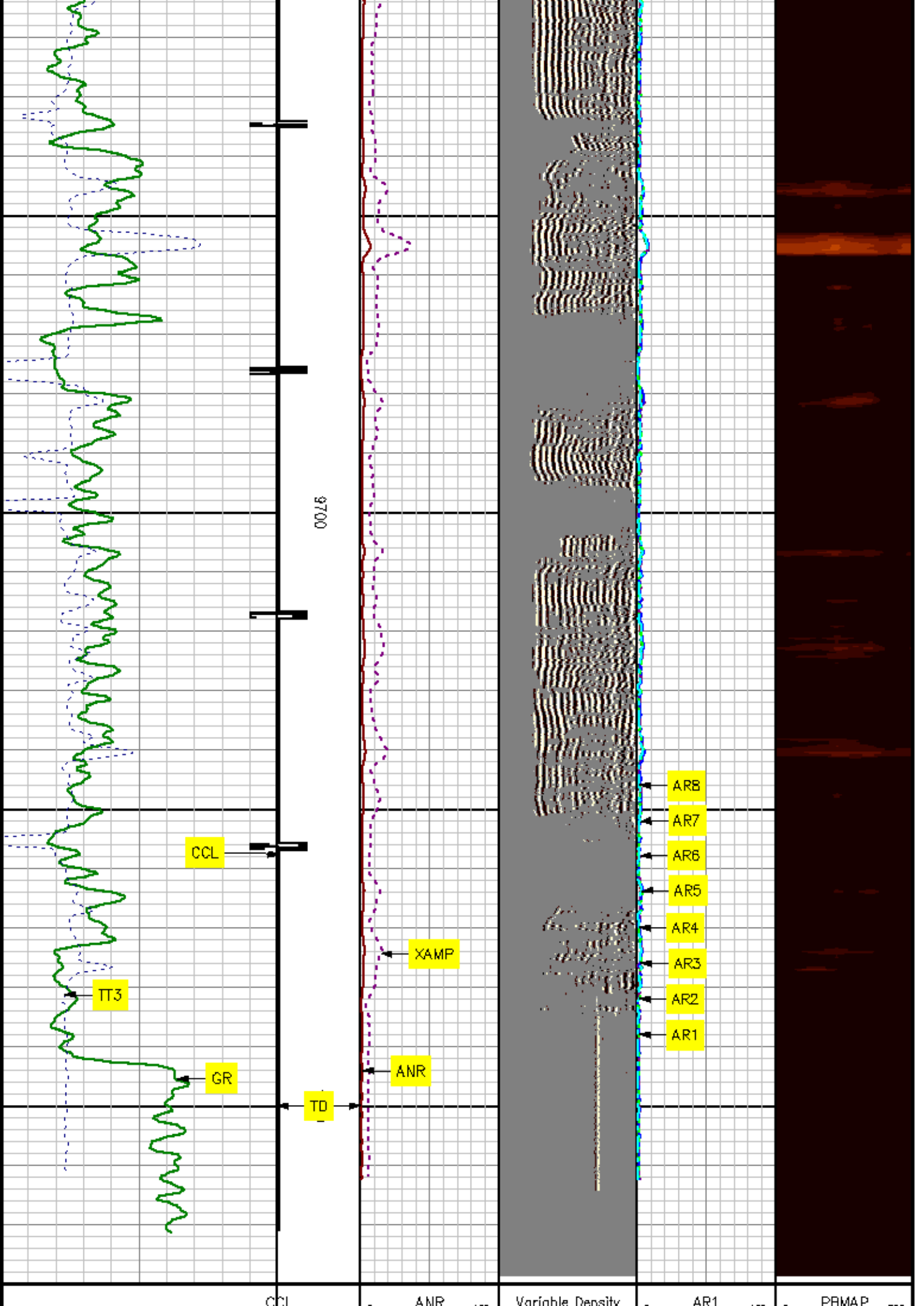


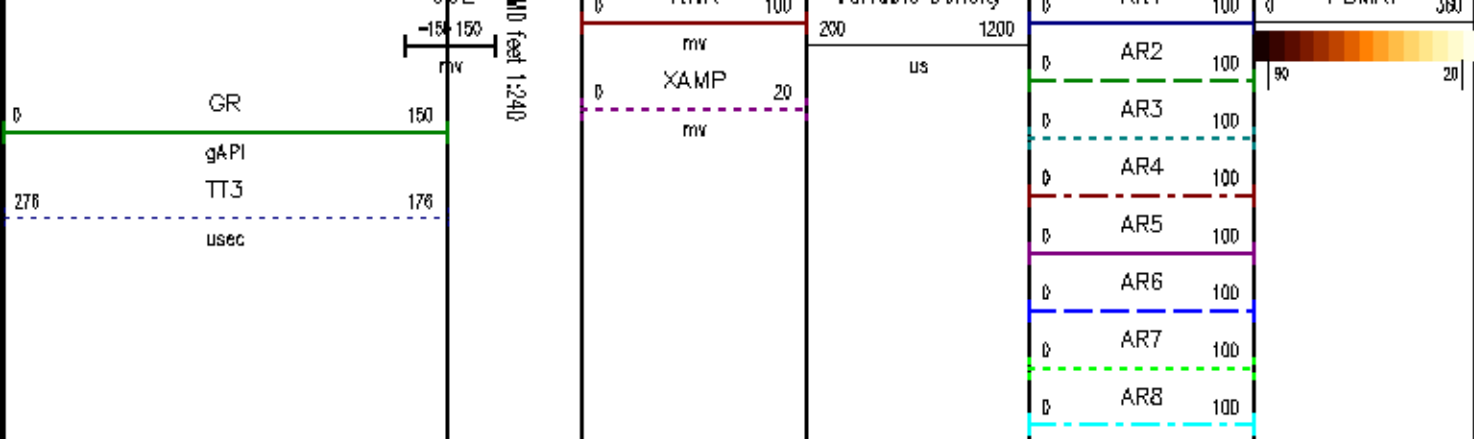












REPEAT SECTION
0# PSI

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
RAL	Amp Gate Start Far	316.900	usec	9561.000	9826.000
RAL	Amp Gate Start Near	200.391	usec	9561.000	9826.000
RAL	Amp Gate Start Radial	200.391	usec	9561.000	9826.000
RAL	Amp Gate Width Far	25.000	usec	9561.000	9826.000
RAL	Amp Gate Width Near	25.000	usec	9561.000	9826.000
RAL	Amp Gate Width Radial	25.000	usec	9561.000	9826.000
RAL	casing od	4.500	inches	9561.000	9826.000
RAL	casing wt	11.600	lbm/ft	9561.000	9826.000
RAL	FB Start Far	291.900	usec	9561.000	9826.000
RAL	FB Start Near	175.391	usec	9561.000	9826.000
RAL	FB Start Radial	175.391	usec	9561.000	9826.000
RAL	FB Thresh Far	15.000	mv	9561.000	9826.000
RAL	FB Thresh Near	4.000	mv	9561.000	9826.000
RAL	FB Thresh Radial	4.000	mv	9561.000	9826.000
RAL	Fluid Travel Time	200.000	usec/ft	9561.000	9826.844

DEPTH OFFSETS
(for Acquired Curves)

SERIES DEPTH OFFSET ACQUIRED CURVES

SERIES

DEPTH OFFSET

ACQUIRED CURVES

1426XA

-15.380

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

-14.380

AFAR

SIG

TT5

1426XA

-7.250

OCL

1426XA

-5.390

GR

1426XA

0.000

NEU

Created by : RAL, v4.8.007

Plotted by : PlotMgr, v5.4.504

Company : MARATHON OIL COMPANY

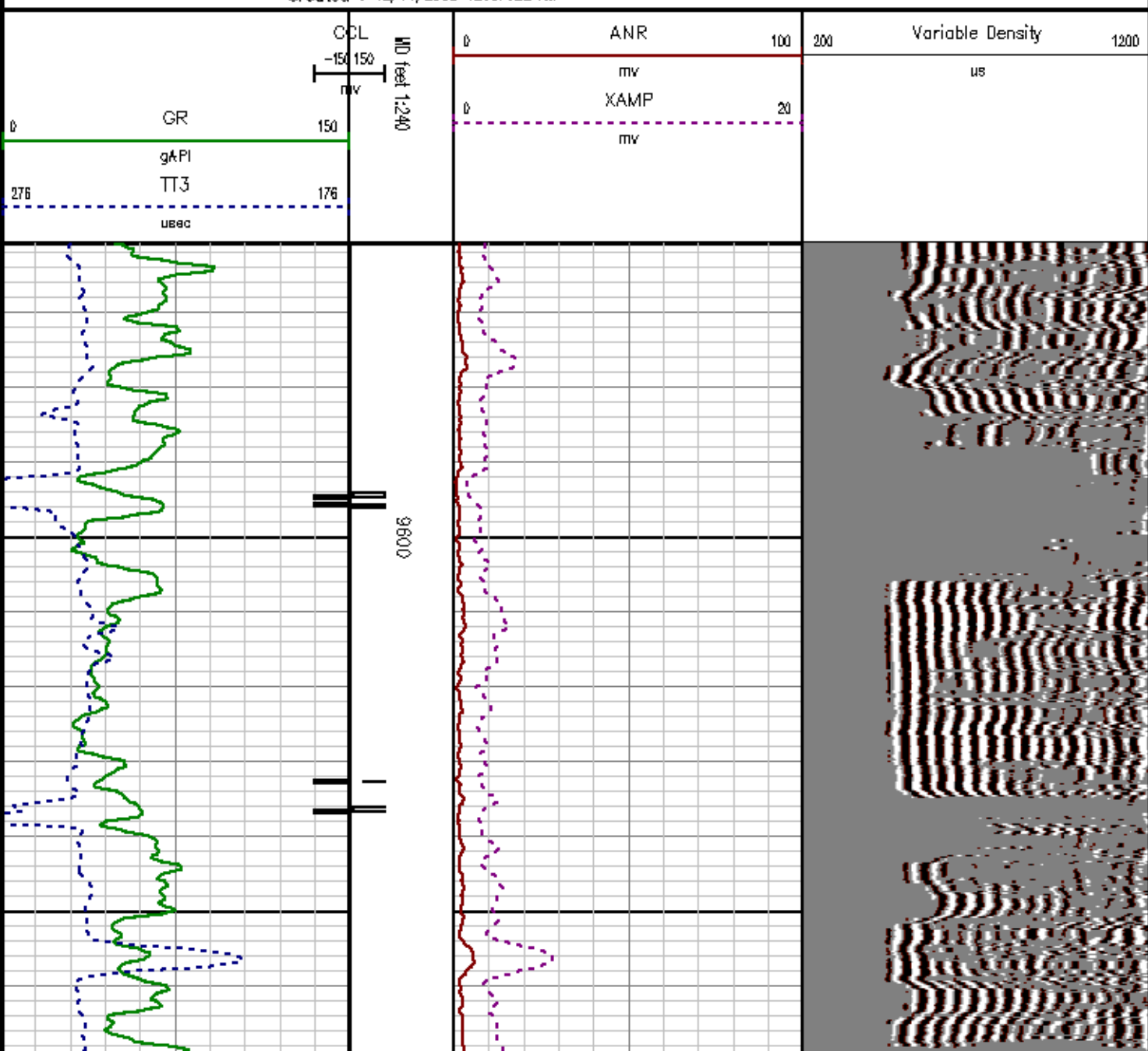
Well : 596-31A-24

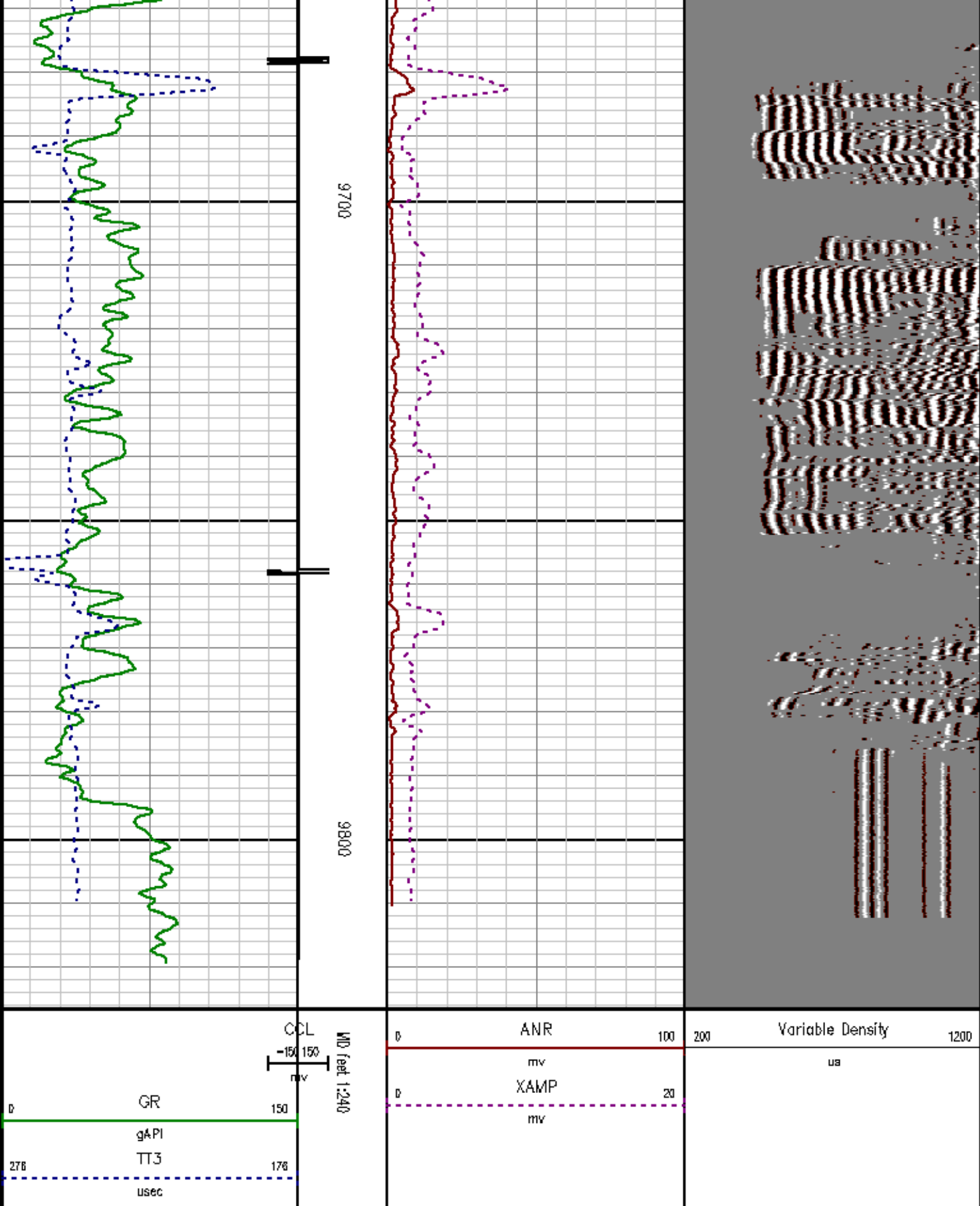
File Name : d:\well\data\24rad\rdreap.ktf

Mode : PlotMgr 5.4.504

Interval : 9560.75 - 9826.75 feet UP

Created : 12/11/2008 12:07:22 AM





CALIBRATION SUMMARY

GAMMA RAY

Calibration File: C:\case\calver\GR\10124119D1.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sun Dec 07 10:07:38 2008			TOOL SERIES: 1426XA		ASSET: 10124119		SEQ: 01	
Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]		
S2K DAB57	73.47	233.64	0.624	45.87	145.87	100.00		

Verification File: C:\case\calver\GR\10124119D1.VP

PRIMARY LOG VERIFICATION

DATE/TIME PERFORMED: Sun Dec 07 10:10:12 2008			TOOL SERIES: 1426XA		ASSET: 10124119		SEQ: 01	
Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]		
S2K DAB57	73.51	227.64	0.624	45.89	142.12	96.23		

RALSHP #2

Shop Calibration: C:\case\calver\RALSHP\1000K4.shp.cal

SHOP CALIBRATION SUMMARY

DATE/TIME PERFORMED: Wed Dec 10 21:23:03 2008			TOOL SERIES: 1426XA		ASSET: 1000		SEQ: X4	
Tool Delay [usec]	-58.00	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	220	216	30	166	25	-0.022	100.00	0.60
3 Ft. Receiver	220	216	30	166	25	0.494	100.00	0.59
5 Ft. Receiver	352	349	30	282	25	-0.844	150.00	0.52
Radial #1	220	216	30	166	25	0.194	100.00	0.59
Radial #2	220	216	30	166	25	0.017	100.00	0.80
Radial #3	220	216	30	166	25	0.778	100.00	0.60
Radial #4	220	216	30	166	25	0.972	100.00	0.60
Radial #5	219	216	30	166	25	1.006	100.00	0.60
Radial #6	219	216	30	166	25	1.033	100.00	0.80
Radial #7	218	216	30	166	25	0.903	100.00	0.80
Radial #8	220	216	30	166	25	0.956	100.00	0.80

TOOL DIAGRAM

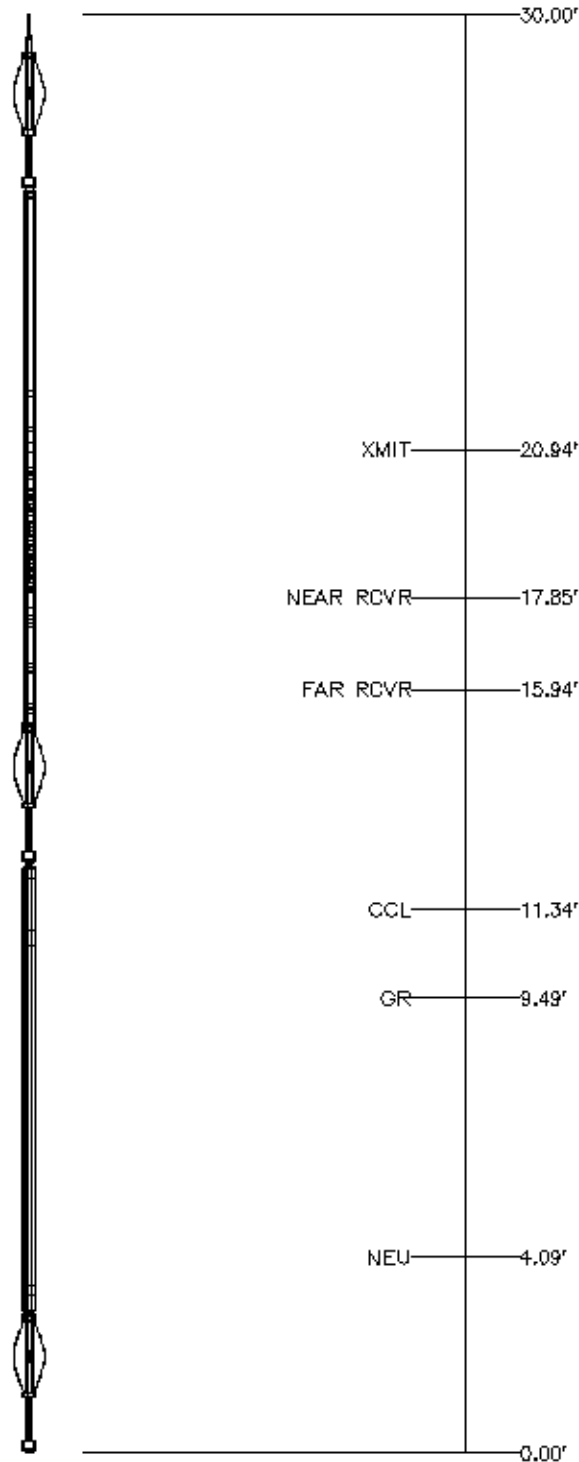
OTA SHORT CABLE HEAD	
CENTRALIZER	
Series	RALCENT
Mnemonic	CENT
Diameter	3.12"
Weight	20.00 lb

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: 0' 3.12"



Baker Atlas



Company	MARATHON OIL COMPANY		File No:	1679
Well	598-31A-24		API No:	CG-045-150810000
Field	GRAND VALLEY			
County	GARFIELD	State	COLORADO	
Location		Elevations		
809' FNL & 1875' FEL		KB 2442 ft		
		DF 2441 ft		
		GL 2418 ft		
SEC	31	TWP	SS	RGE 99W