



Mesa Wireline

# CEMENT BOND LOG

Company	ANTERO RESOURCES CORP.	
Well	OTOOLE A5	
Field	MAMM CREEK	
County	GARFIELD	State
State	COLORADO	
Location:	API #: 05-045-18329-0000	Other Services
	SHL: 2278FSL & 669 FEL	NONE
	SEC: 16 TWP: 6S RGE: 92W	
Permanent Datum	GROUND LEVEL	Elevation
Log Measured From	KELLY BUSHING = 24'	K.B. 5676'
Drilling Measured From	KELLY BUSHING	D.F. 5675'
		G.L. 5652'

Date	20 OCT 2011			
Run Number	ONE			
Depth Driller	7968'			
Depth Logger	7790'			
Bottom Logged Interval	7790'			
Top Log Interval	SURFACE			
Open Hole Size	7.875"			
Type Fluid	WATER			
Density / Viscosity	~8.33#			
Max. Recorded Temp.	N/A			
Estimated Cement Top	1560'			
Time Well Ready	N/A			
Time Logger on Bottom	0800			
Equipment Number	FL0401W			
Location	GRAND JUNCTION			
Recorded By	M. BERNATCHEZ			
Witnessed By	K. POOLE			
Borehole Record		Tubing Record		
Run Number	Bit	From	To	Size
UKN				Weight
				From
				To
Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8.625"	32#	SURFACE	1000'
Prot. String				
Production String	4.5"	11.6#	SURFACE	7958'
Liner				

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

## Comments

NO LOG AVAILABLE FOR CORRELATION.  
SHORT JOINT: 4898' - 4919' & 6135' - 6155' & 7332' - 7353'

WE APPRECIATE YOUR BUSINESS, MESA WIRELINE LLC, GRAND JUNCTION CO. (970) 257-0458



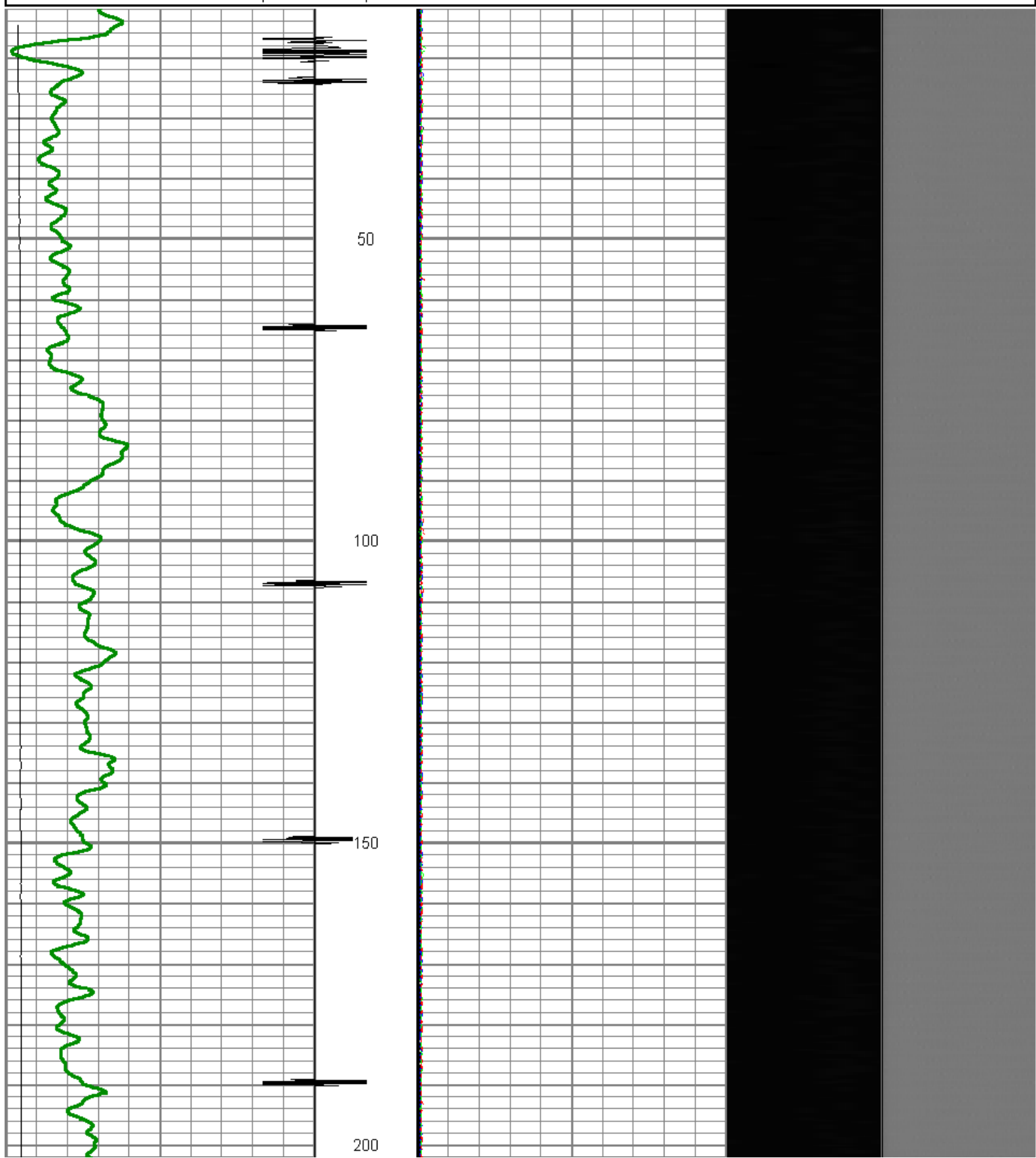
MAIN LOG PASS

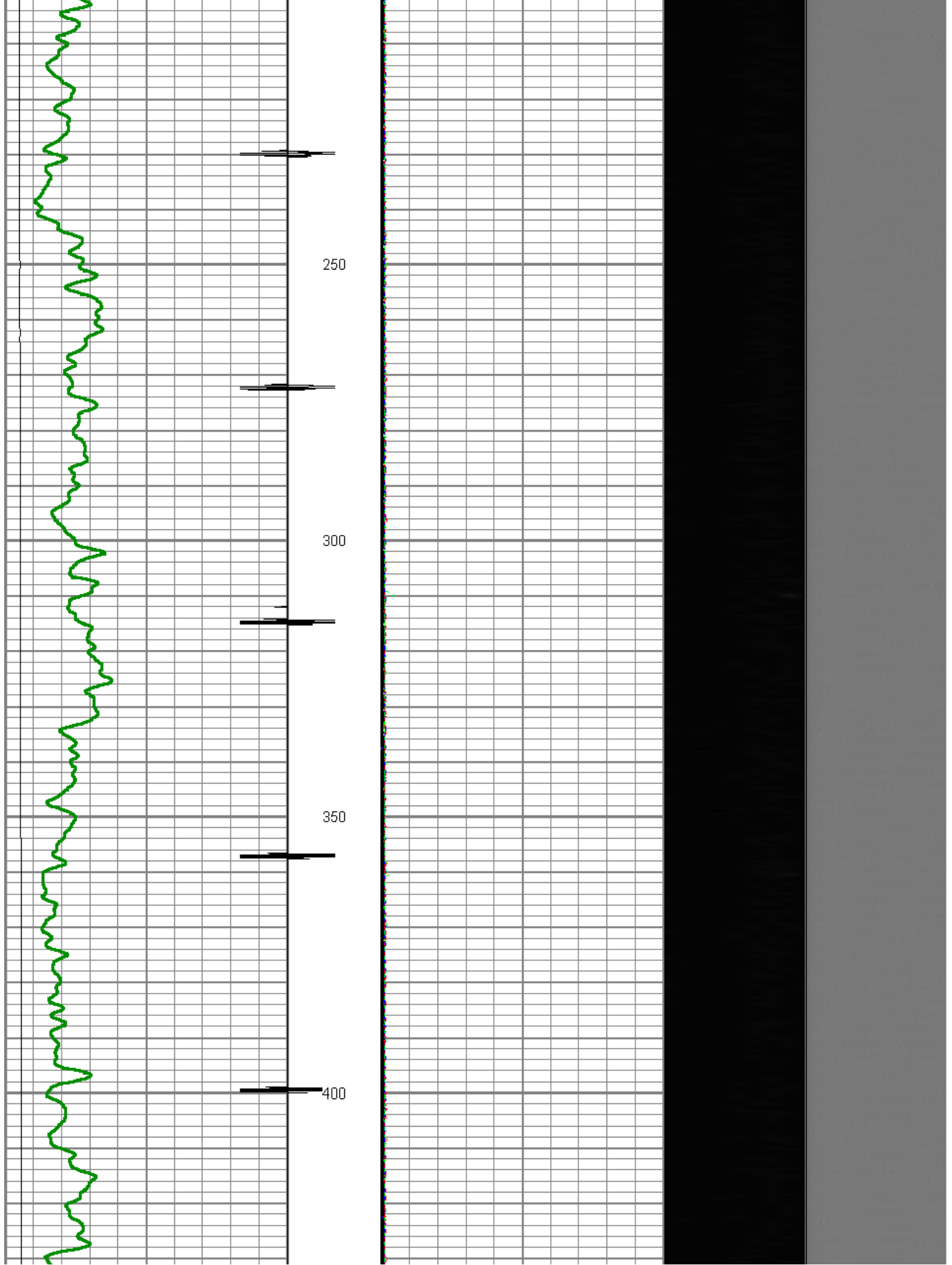
SCALE 5" = 100'

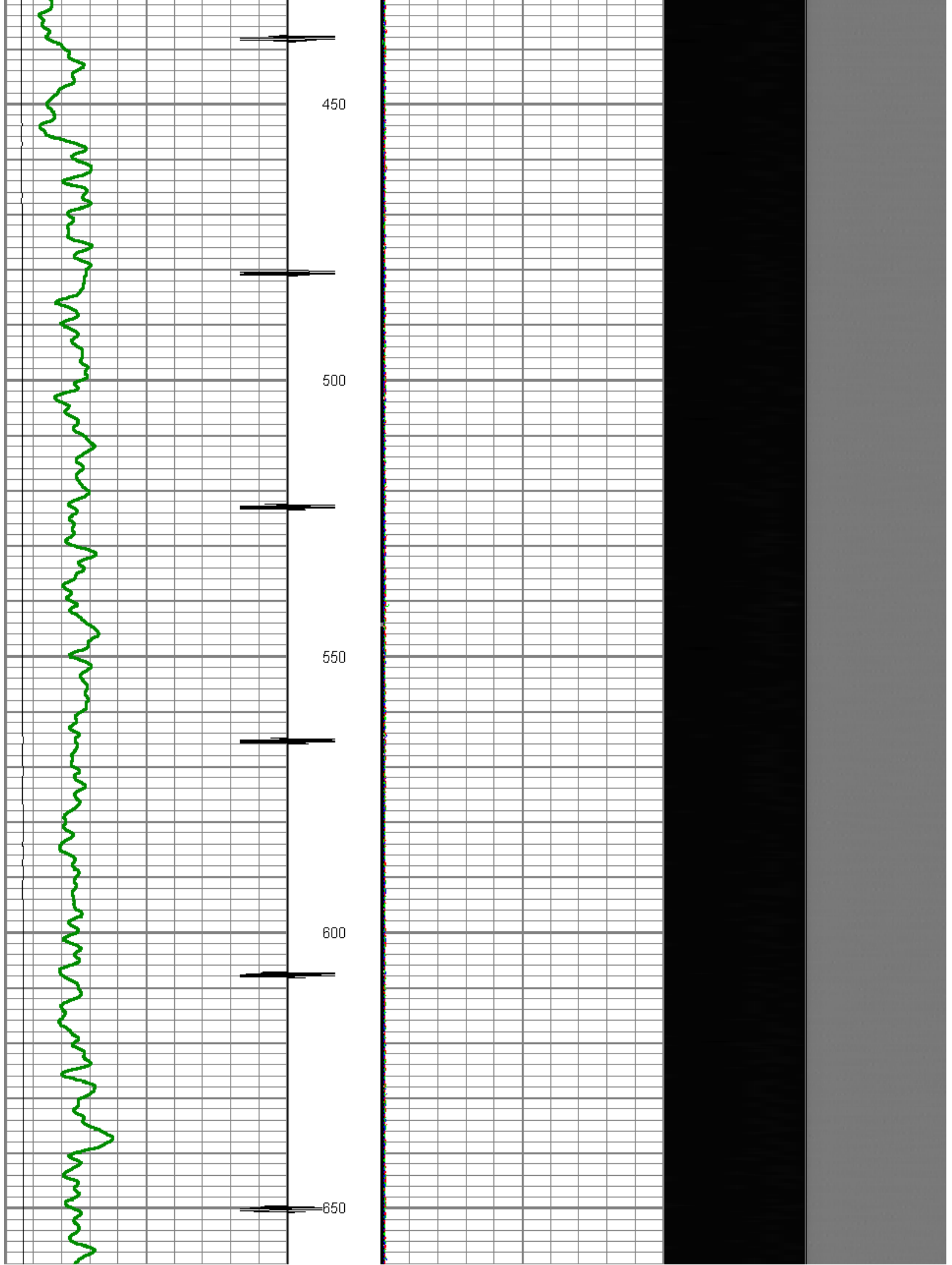
# Mesa Wireline

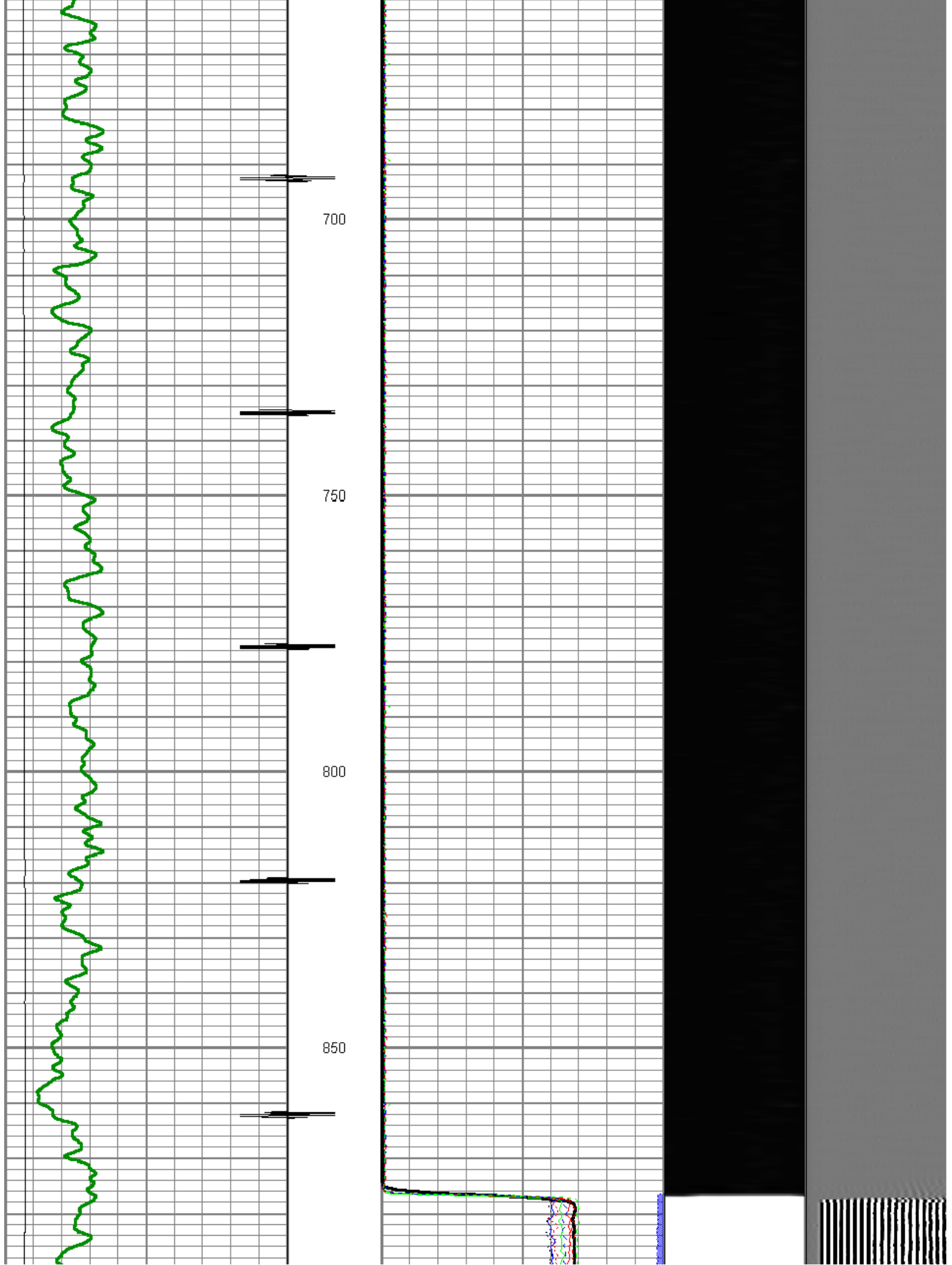
Database File: antero\_otoole\_a5.db  
Dataset Pathname: pass4  
Presentation Format: rbt\_fin  
Dataset Creation: Thu Oct 20 10:29:05 2011 by Calc Std Casedhole 09061  
Charted by: Depth in Feet scaled 1:240

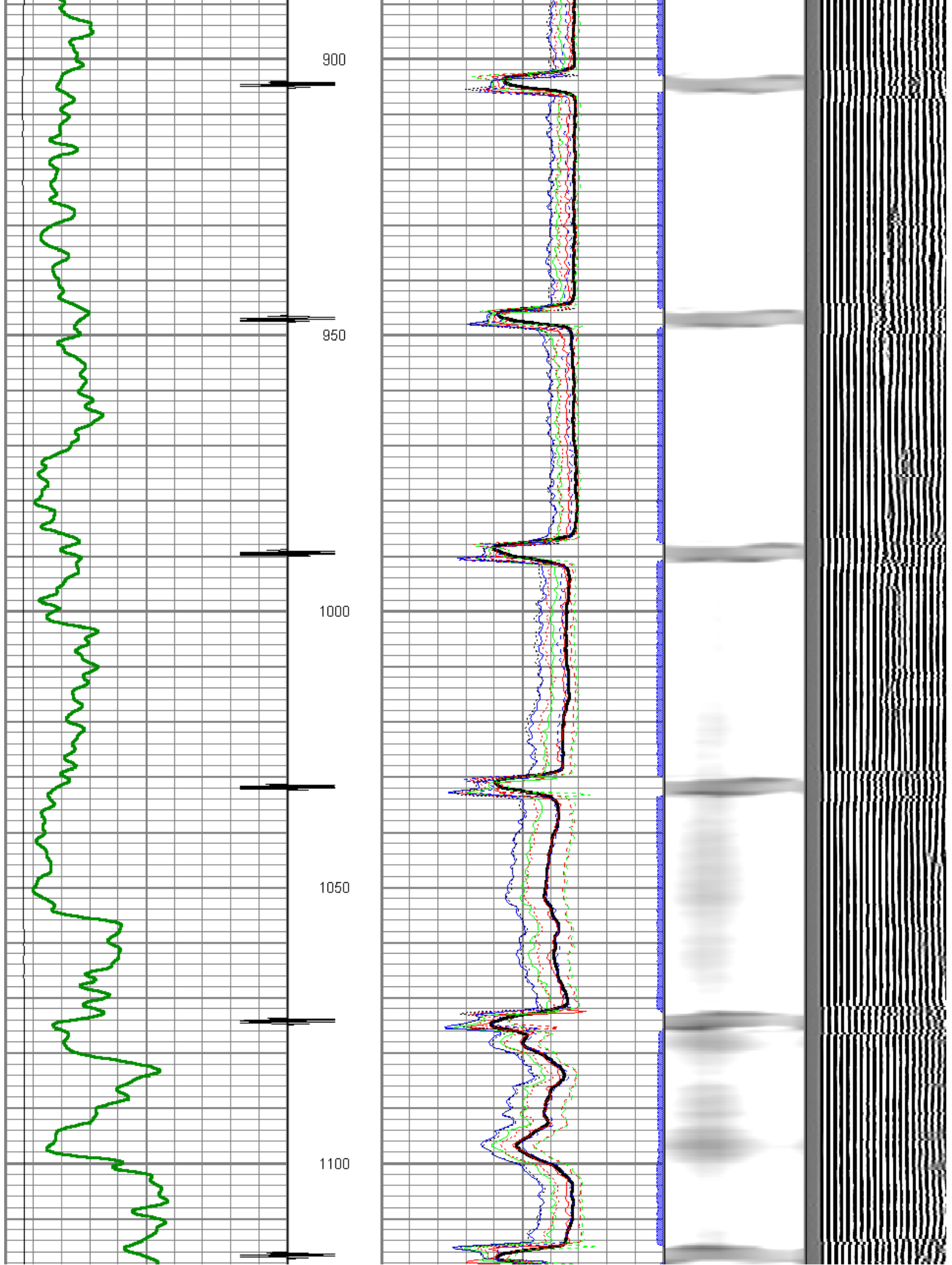
0	LTEN (lb)	4000	0	Amplitude (mV)	100	1	SECTORS	8	Variable Density
0	GR (GAPI)	200	0	TT3FT (usec)	190	0		82	200 1200
CCL									

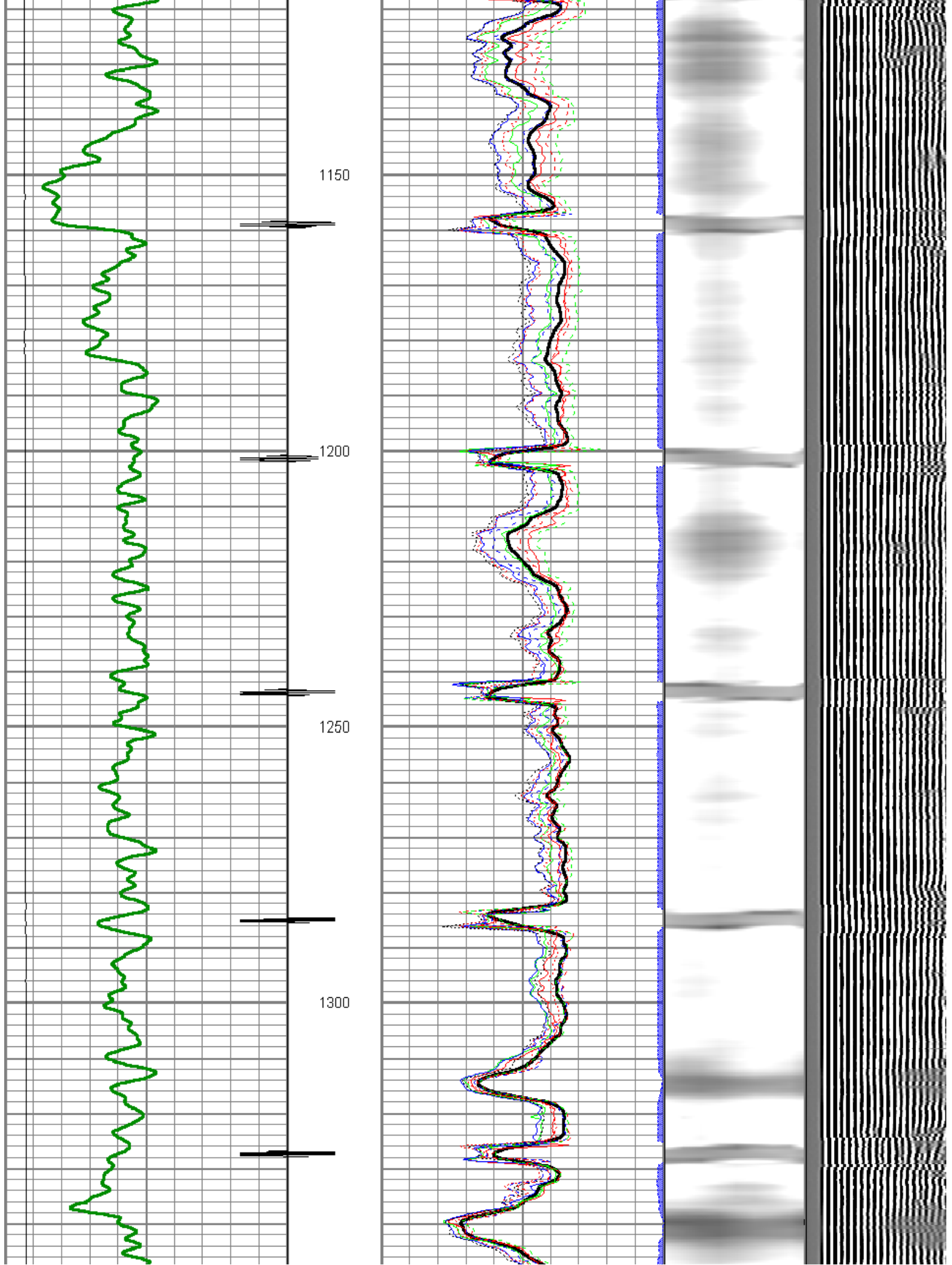


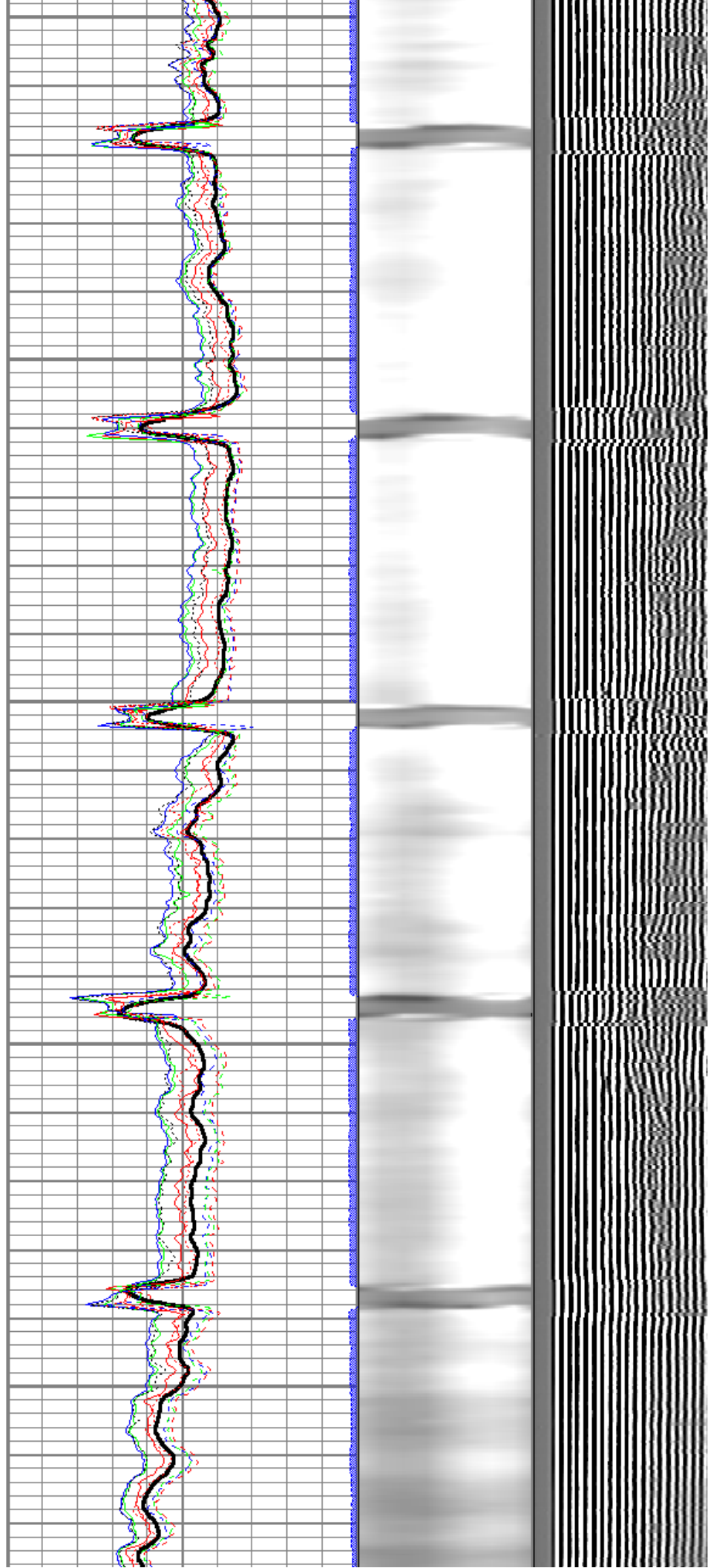
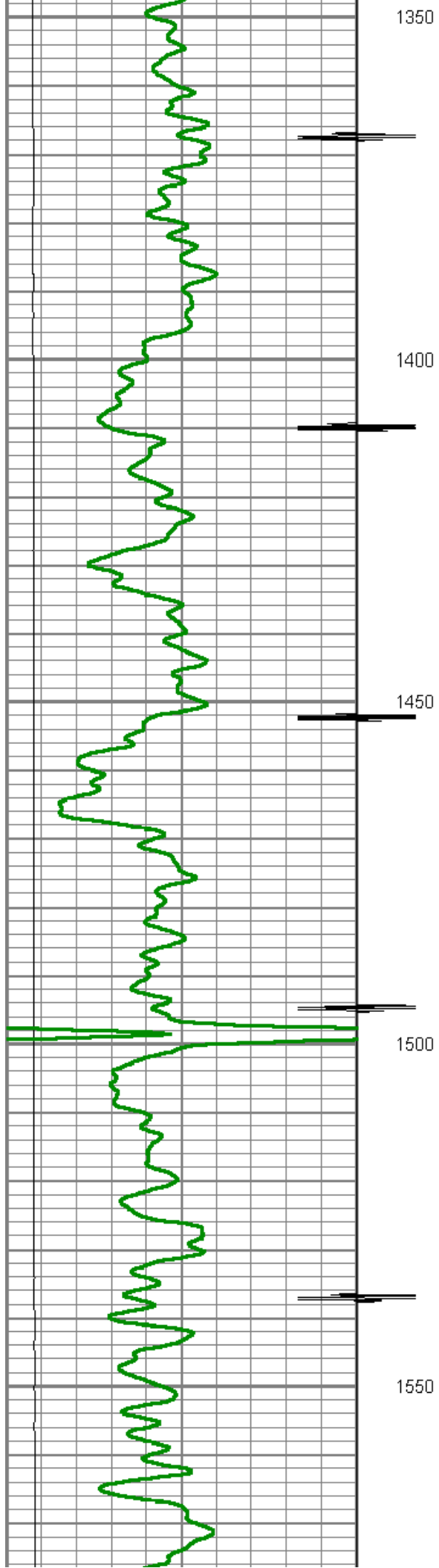


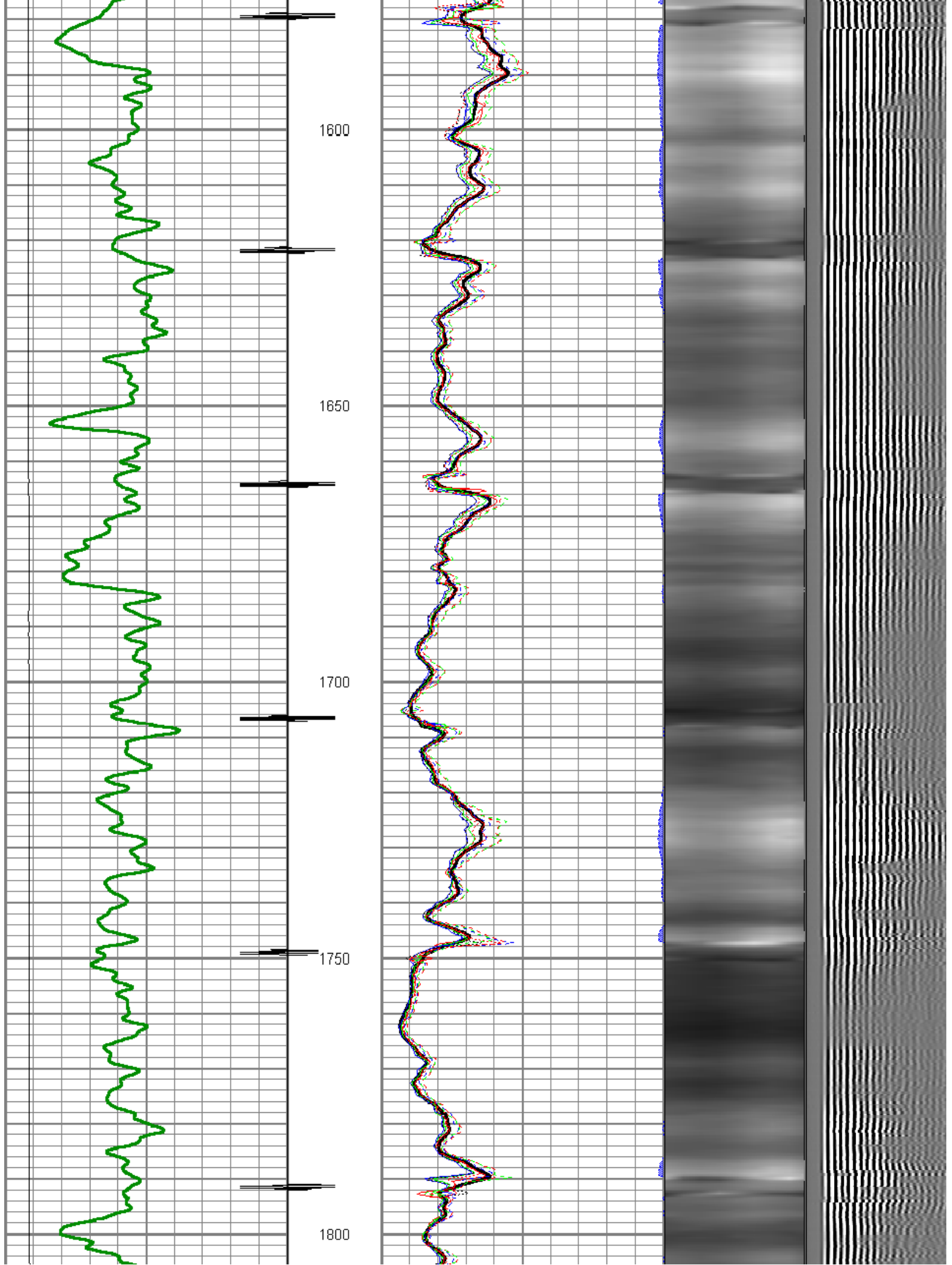


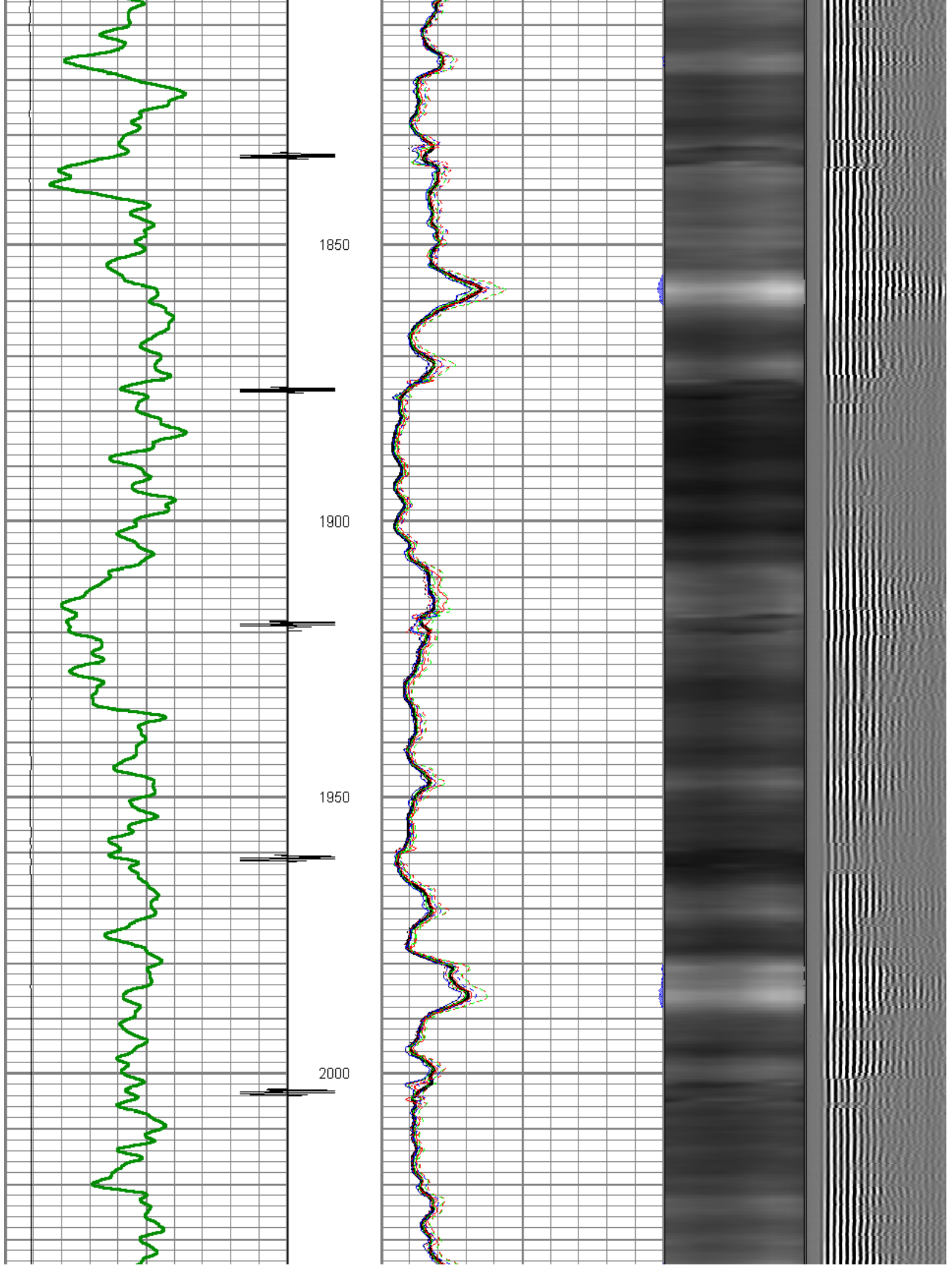


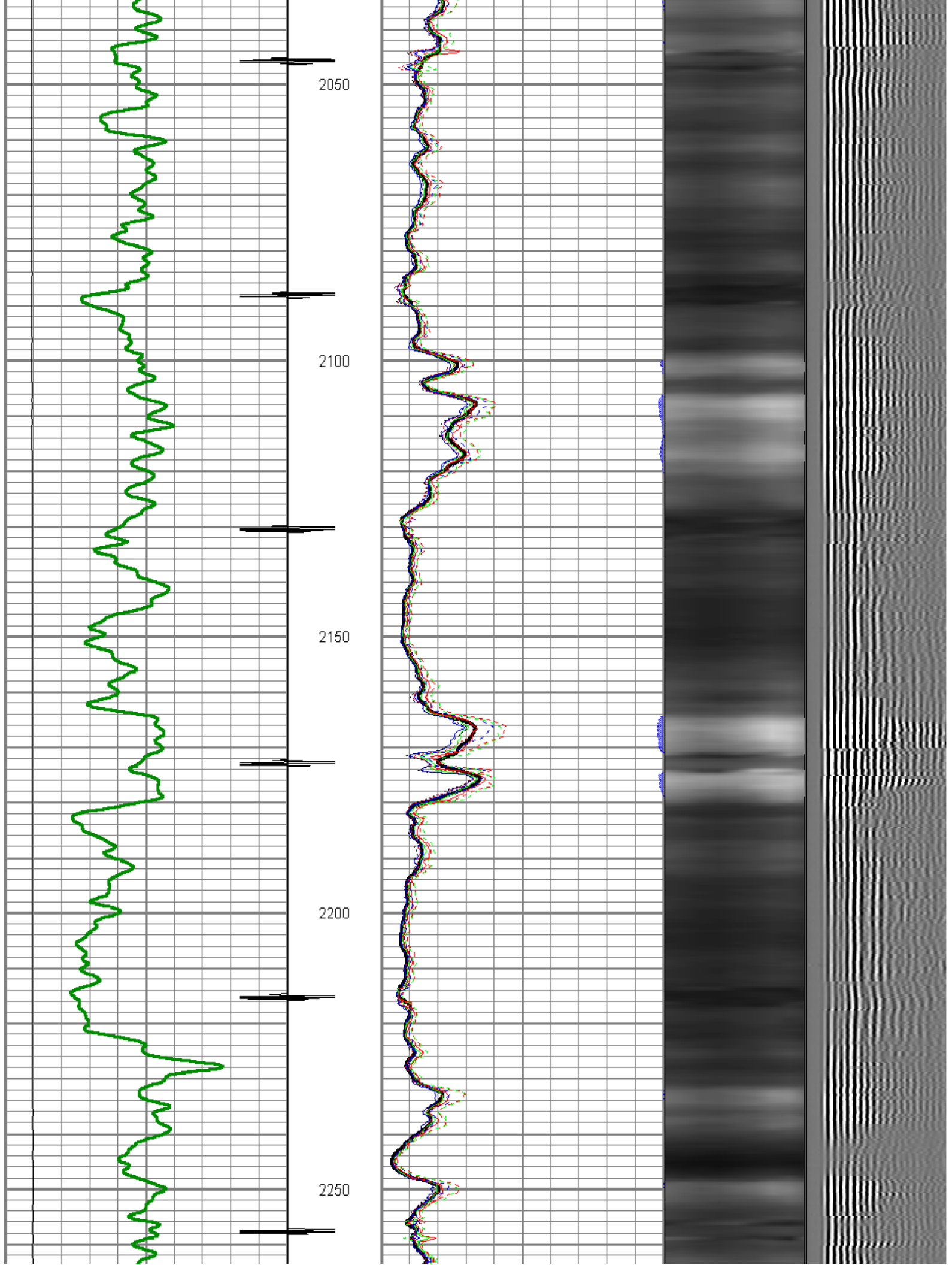


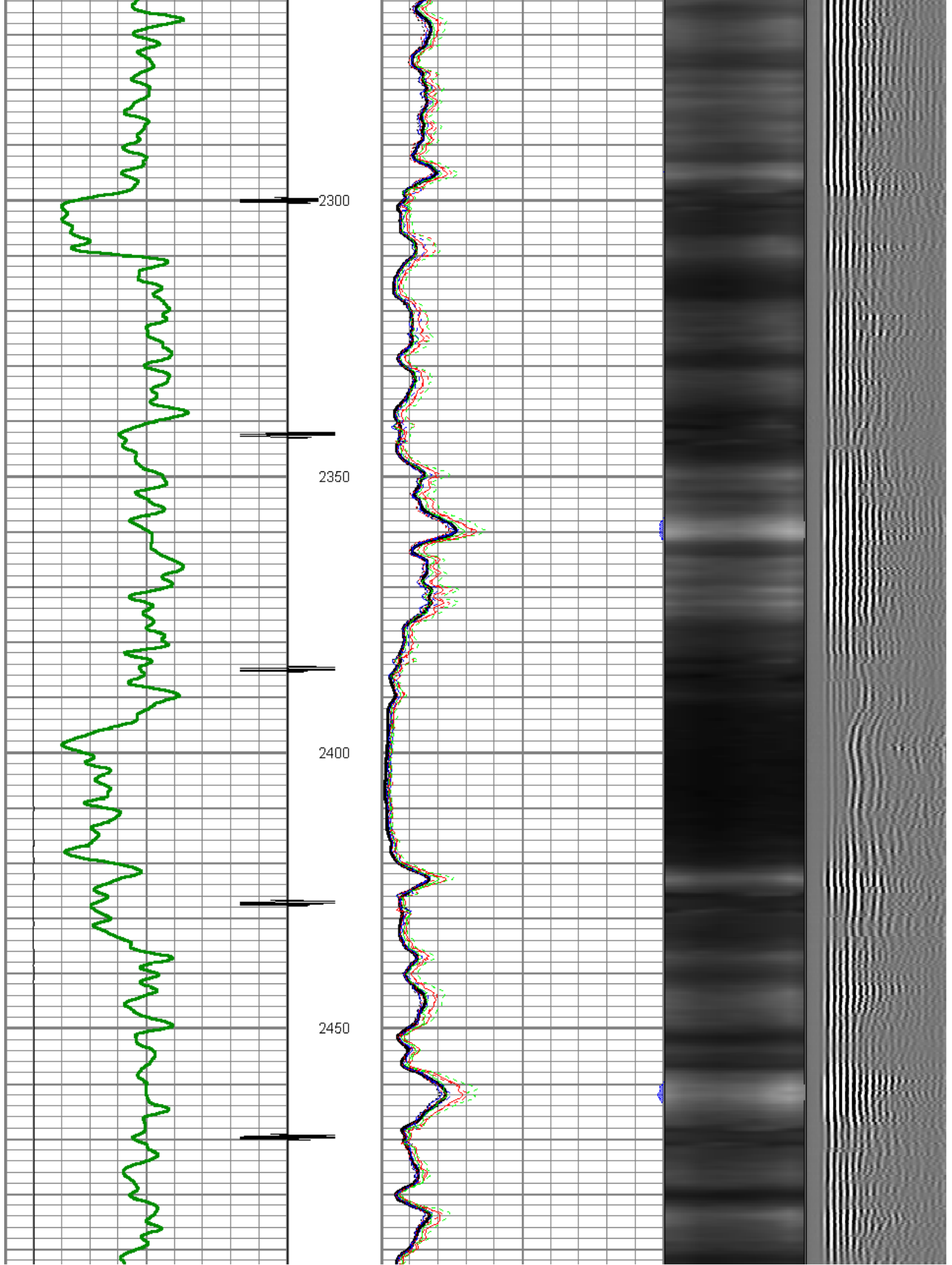


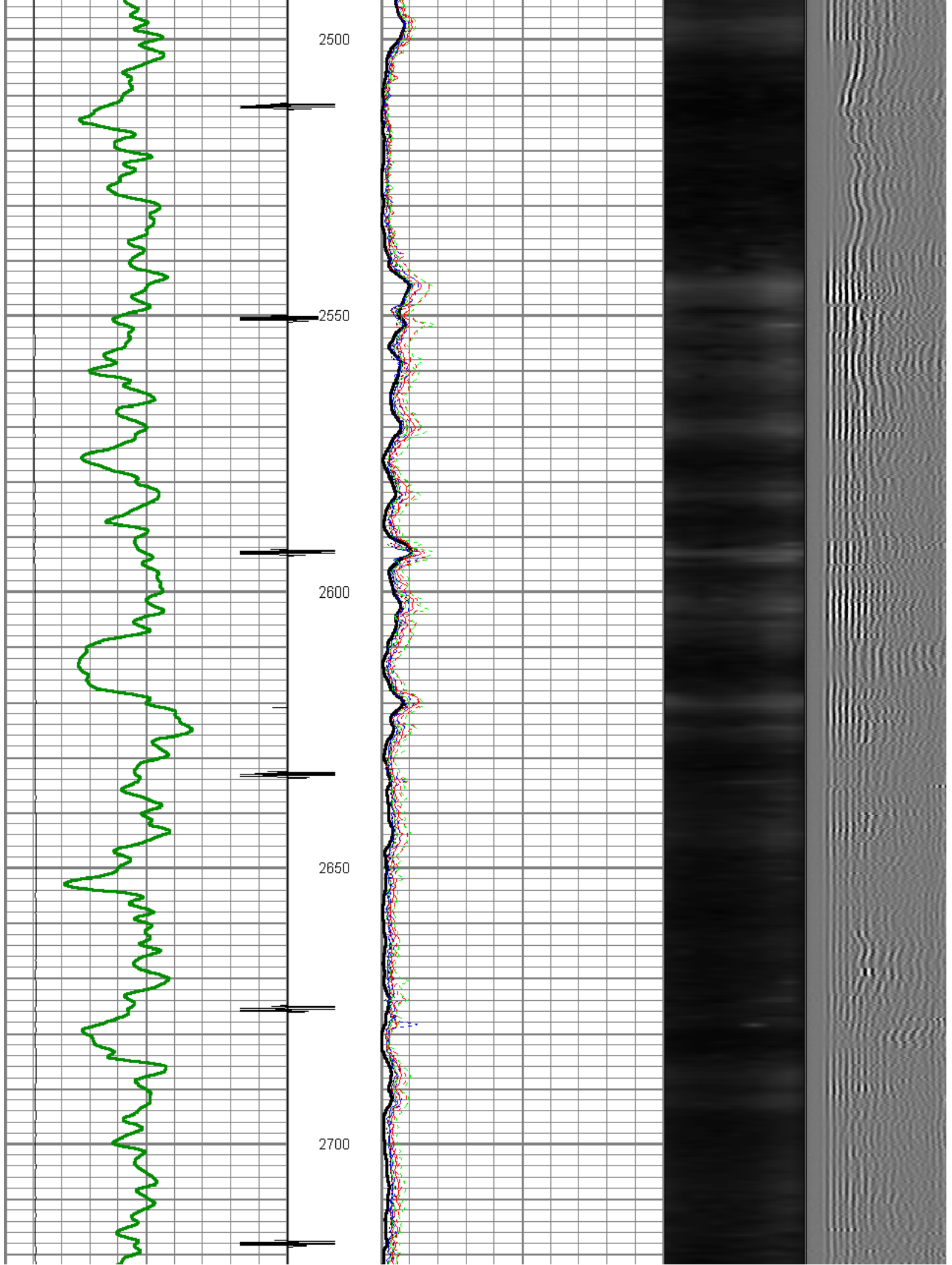


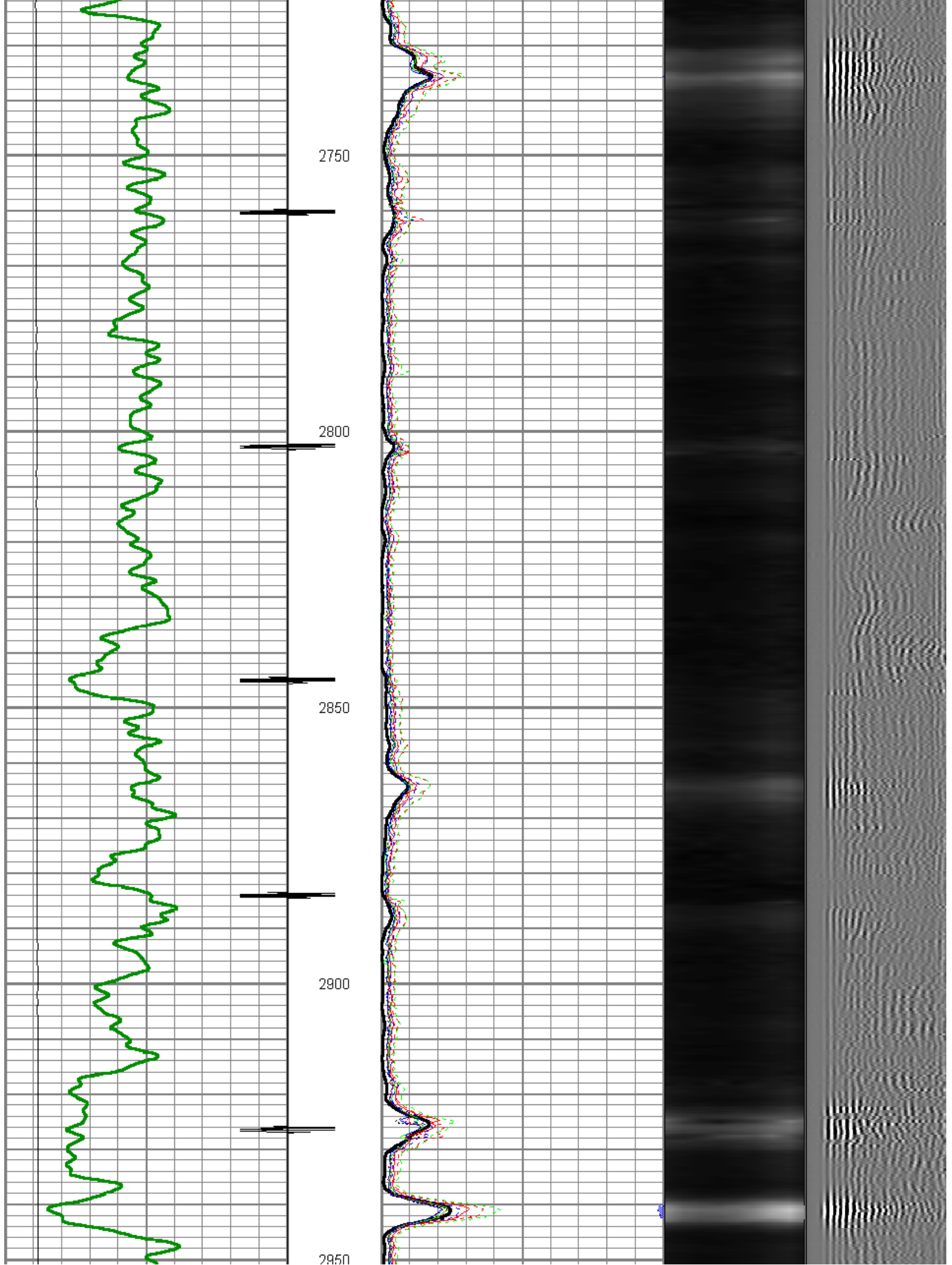


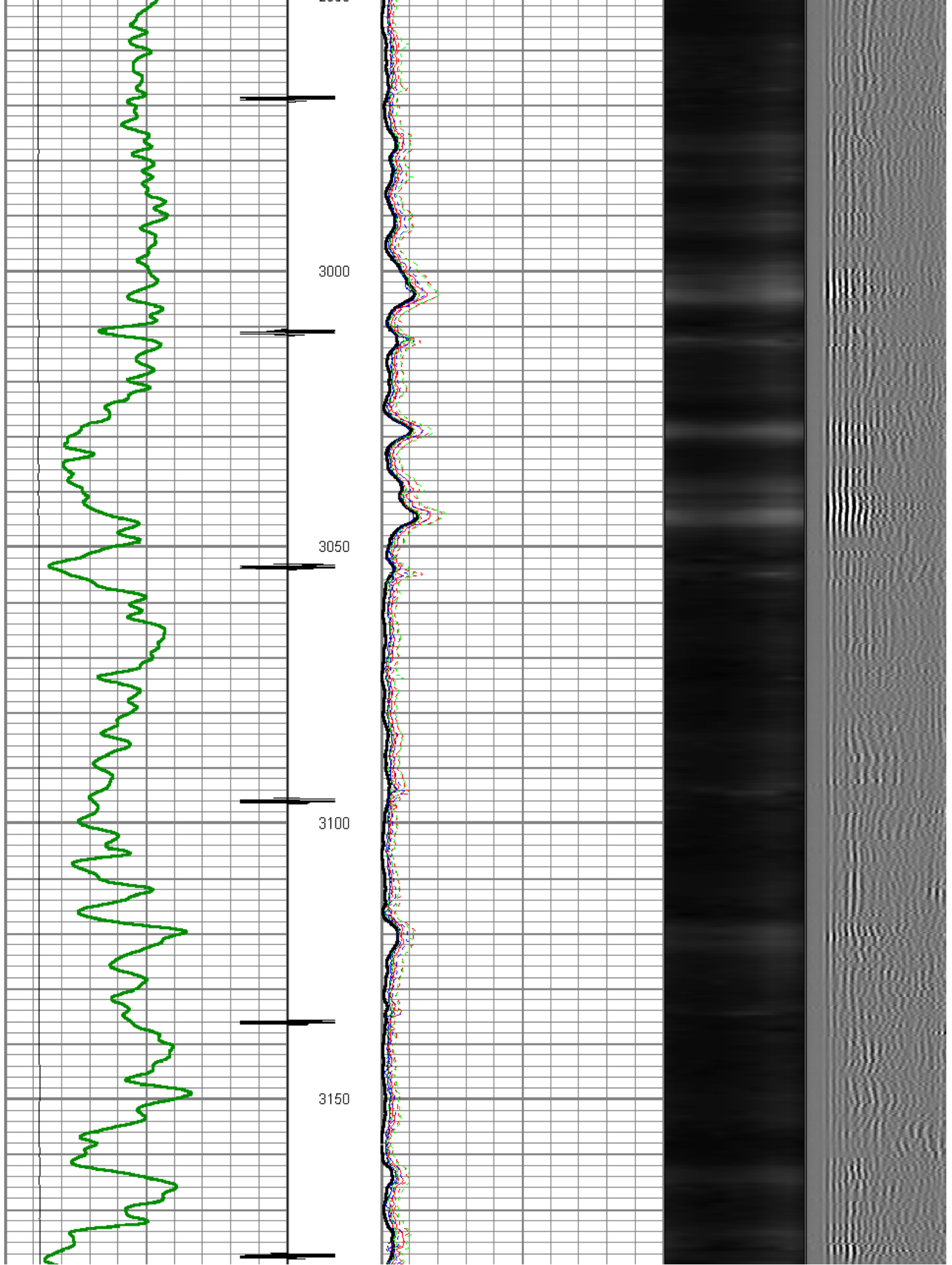


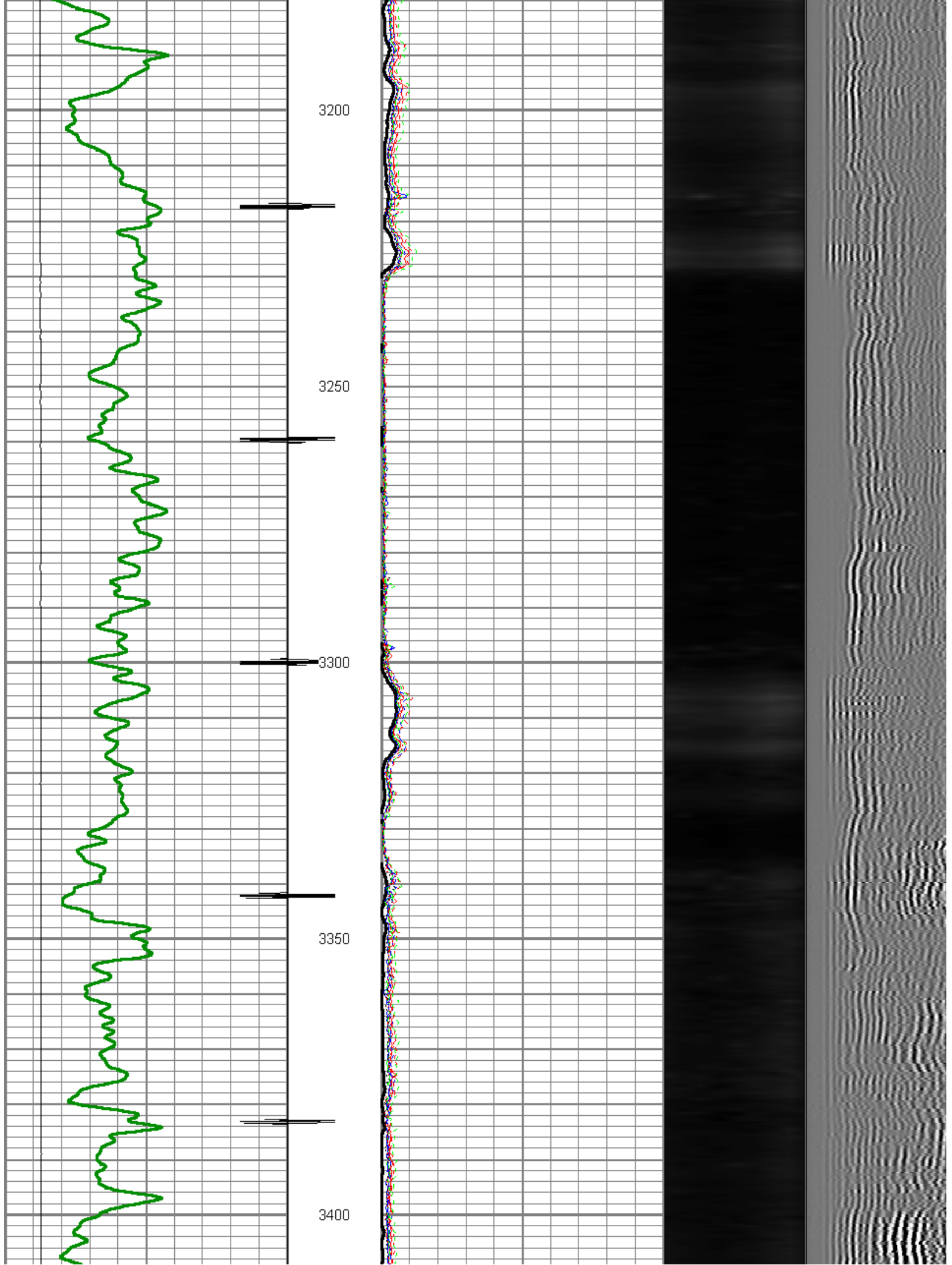


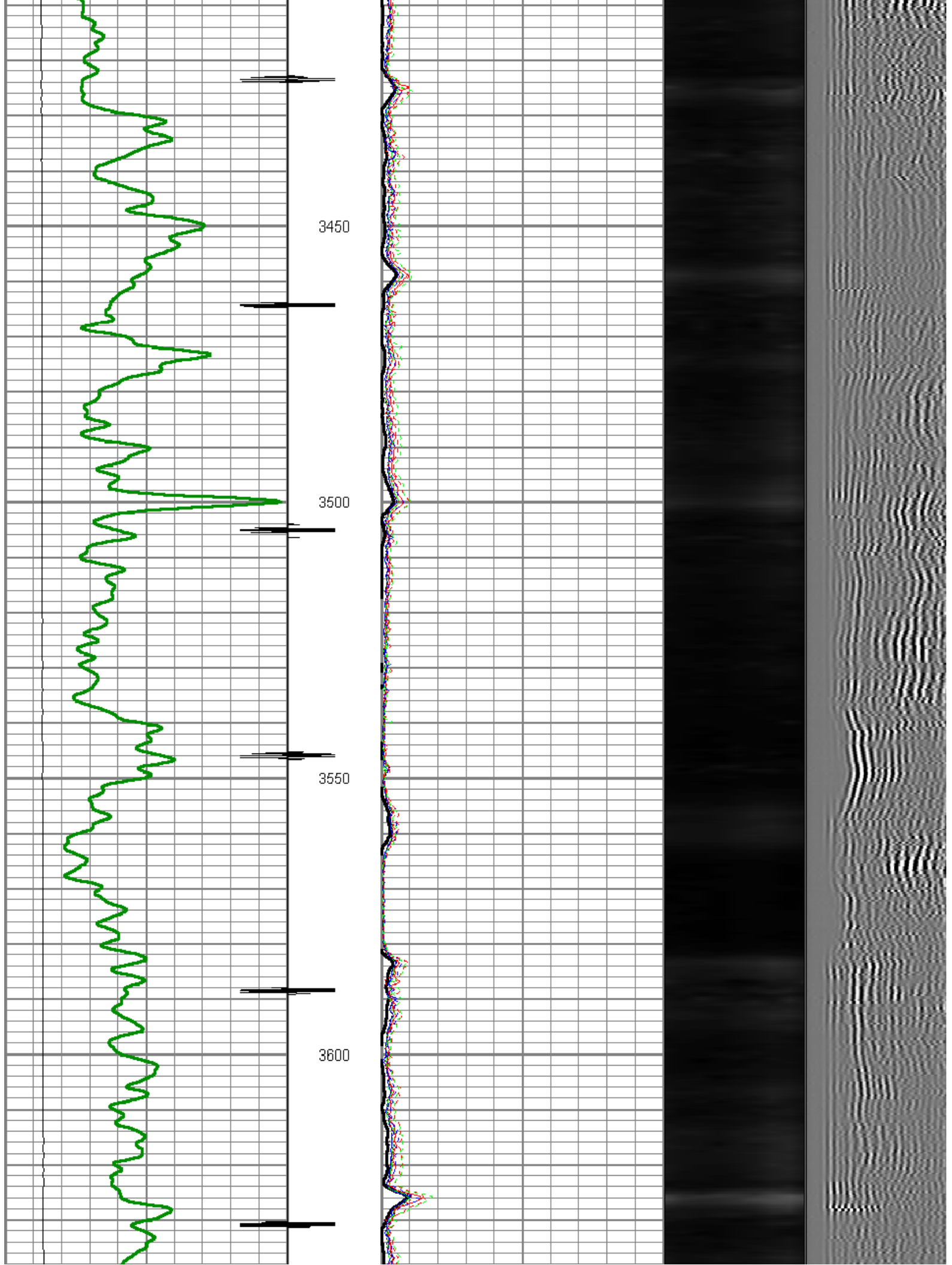


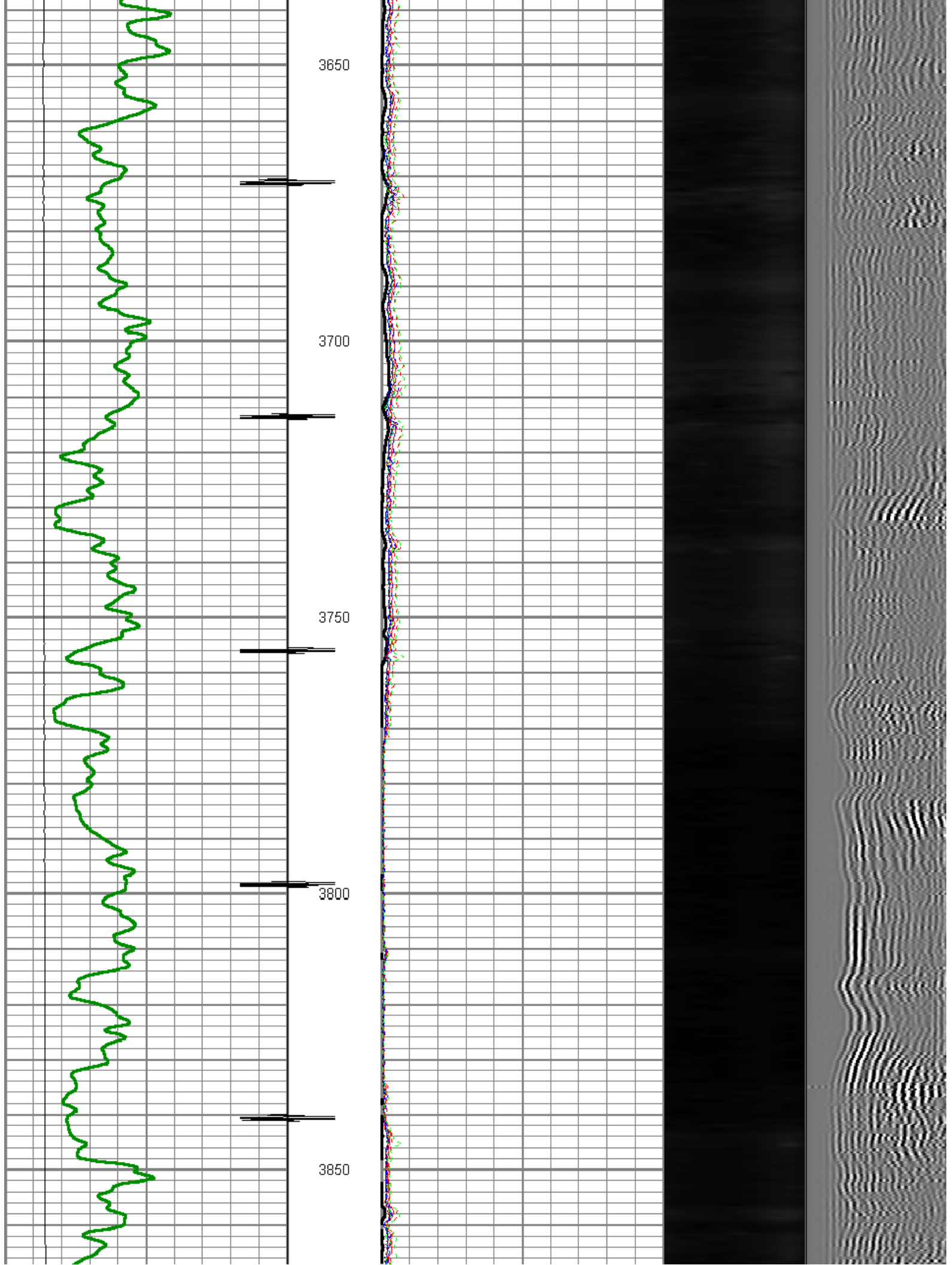


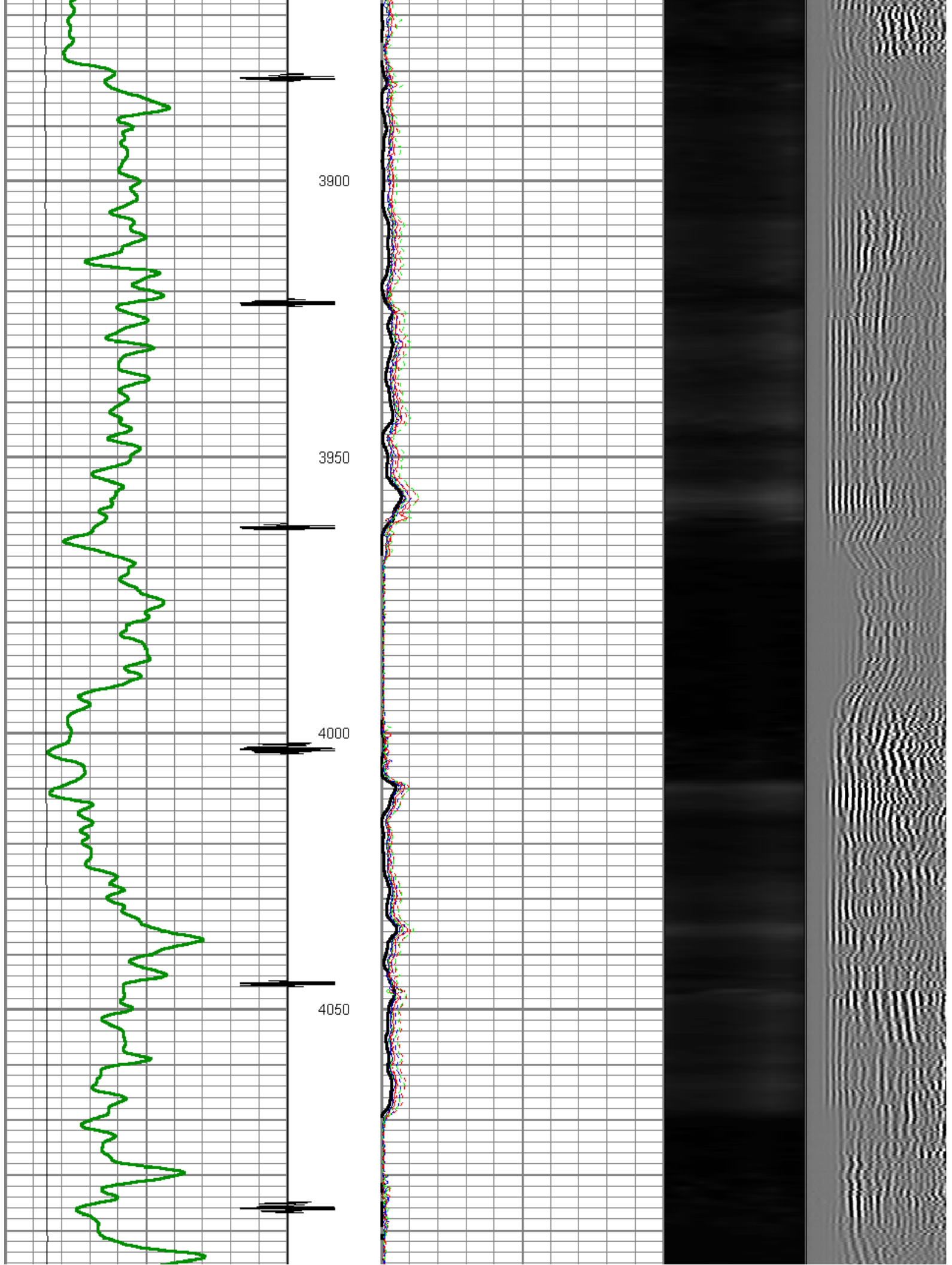


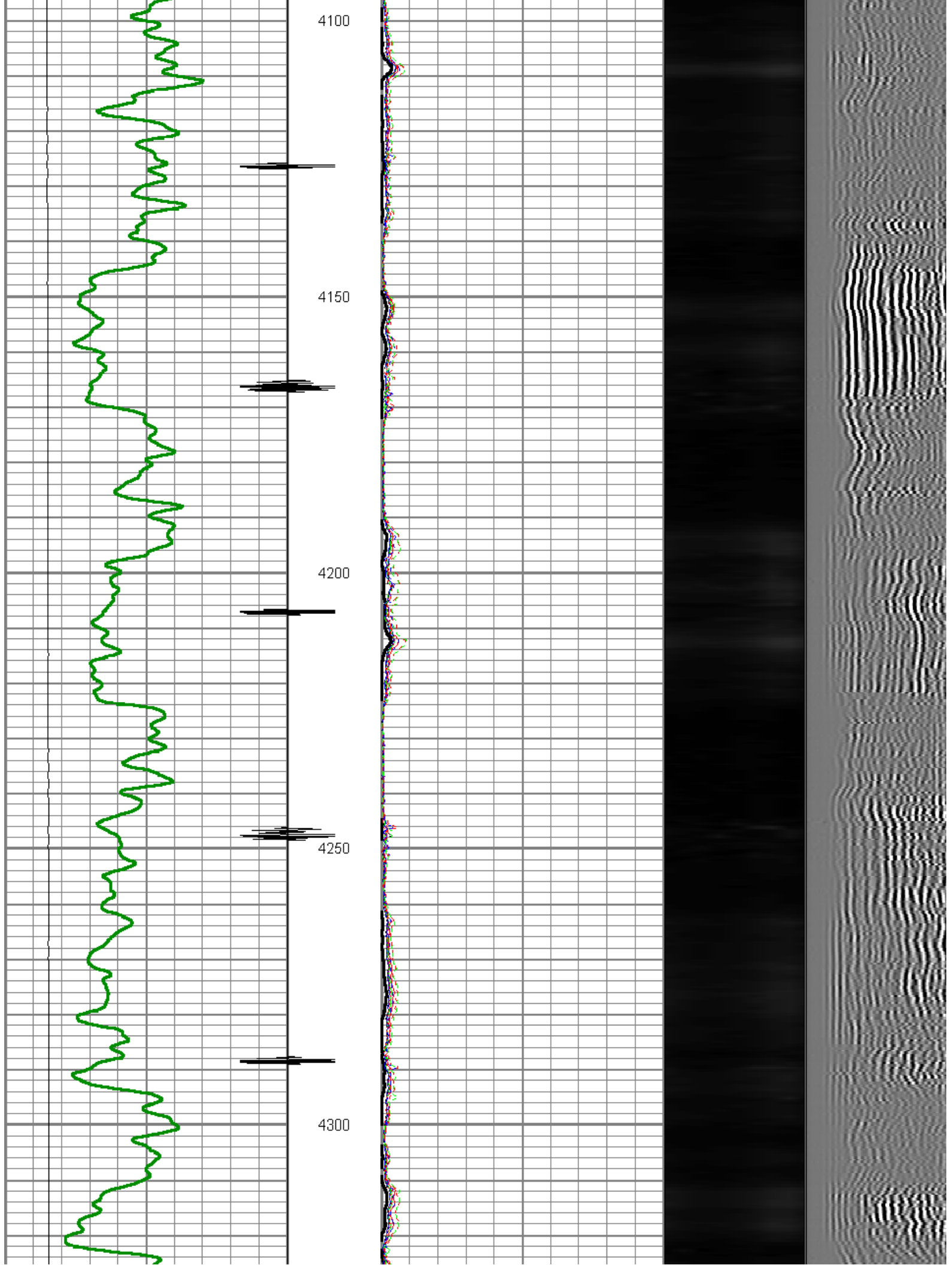


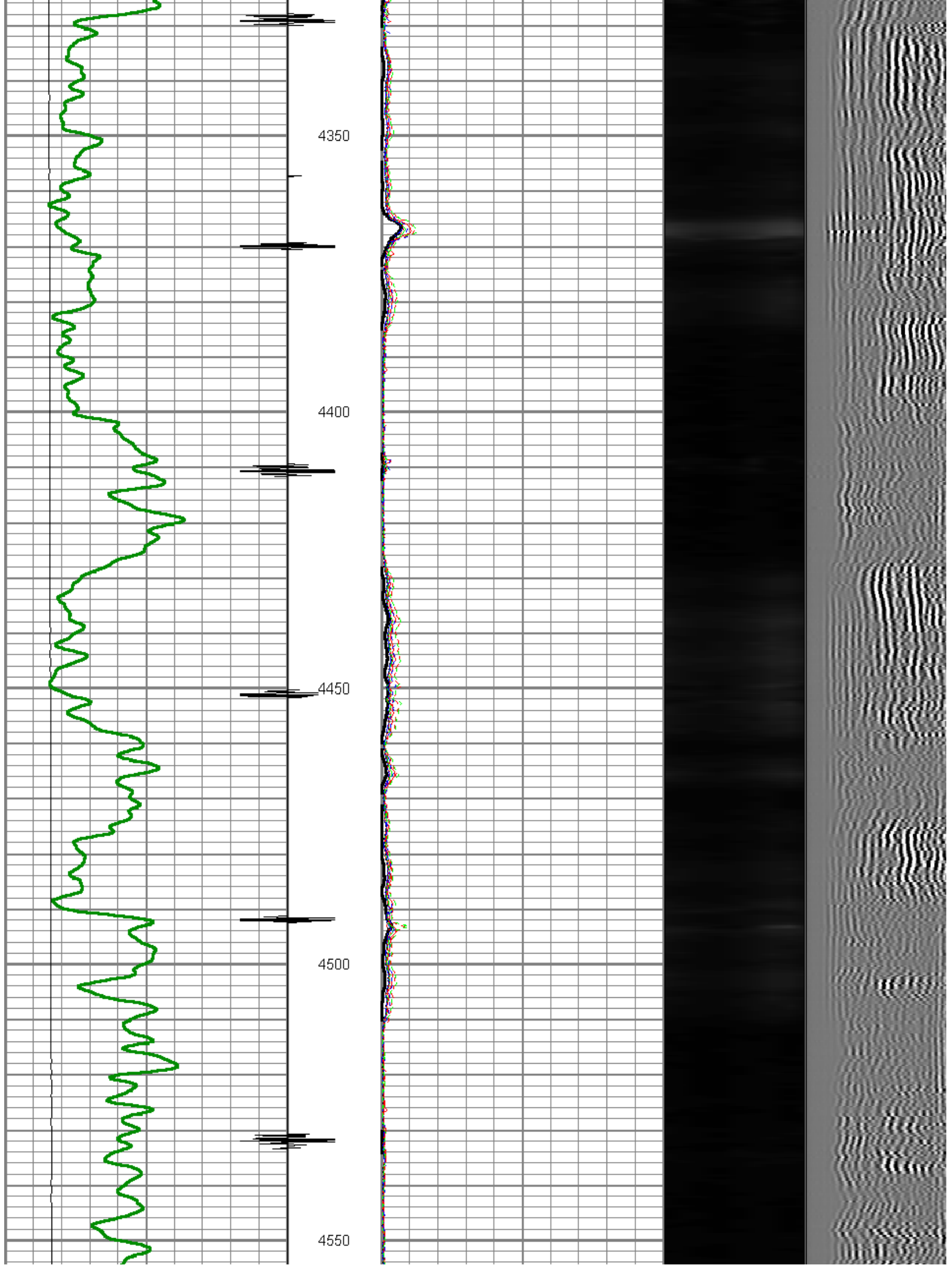


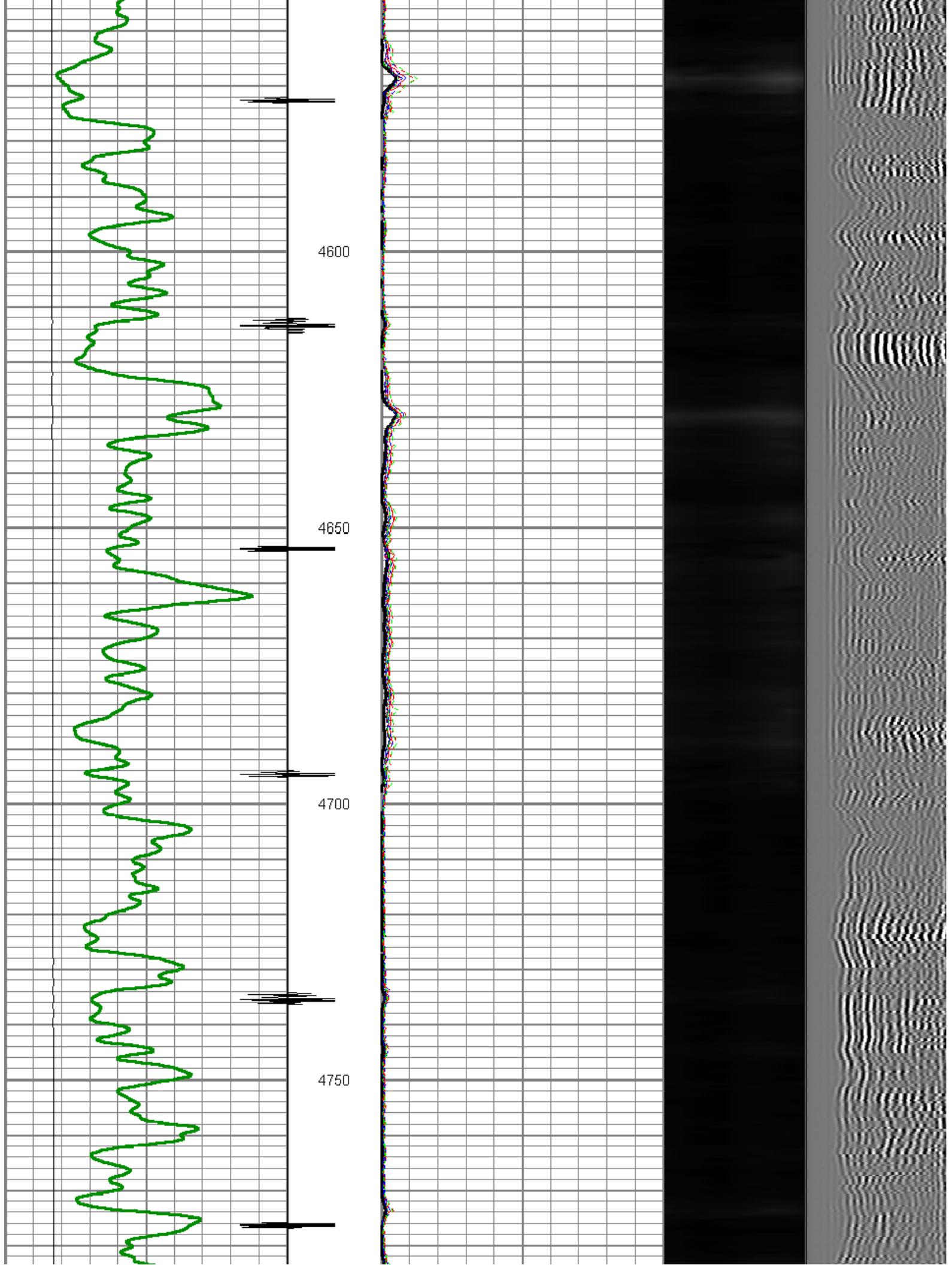


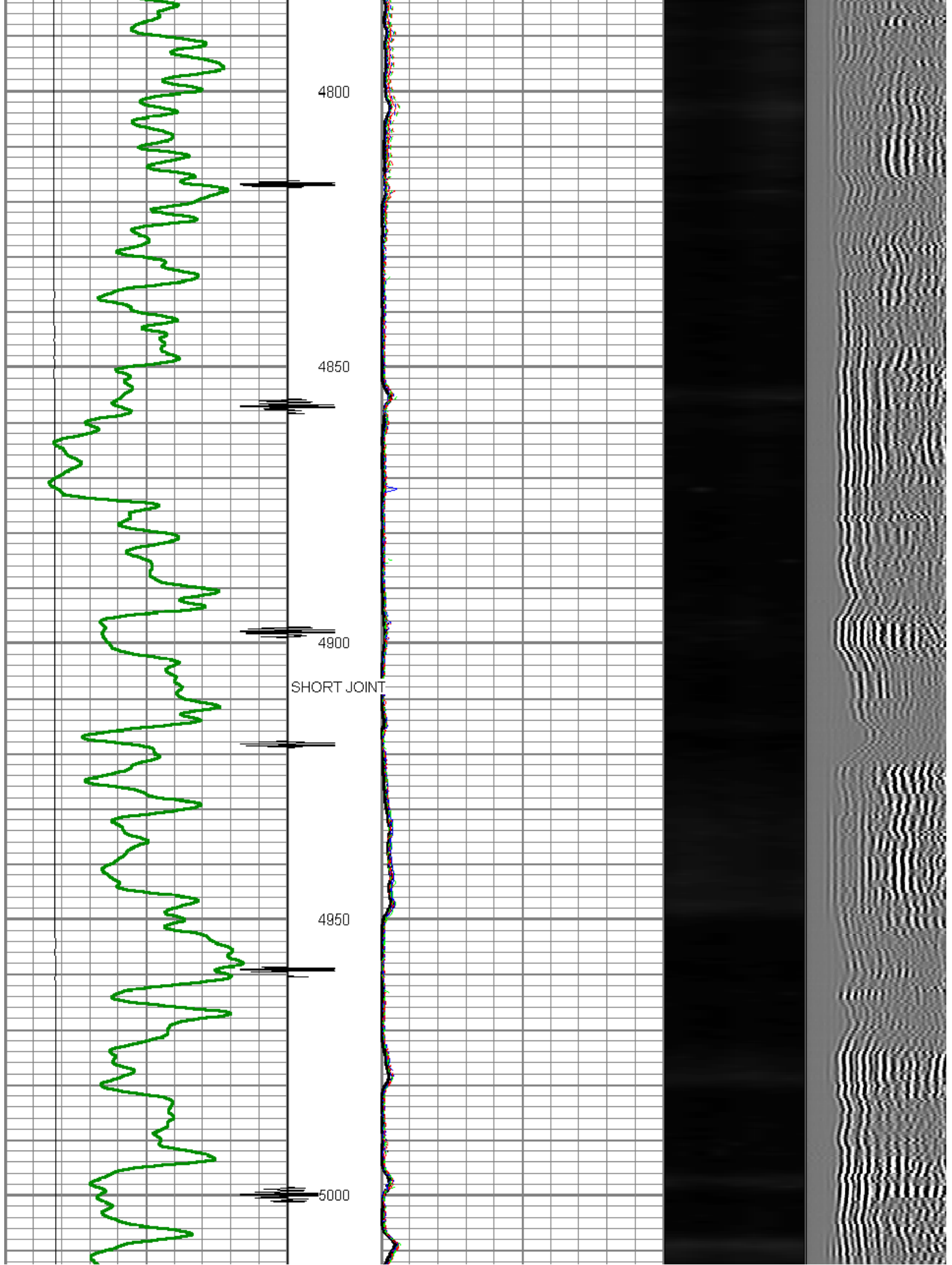


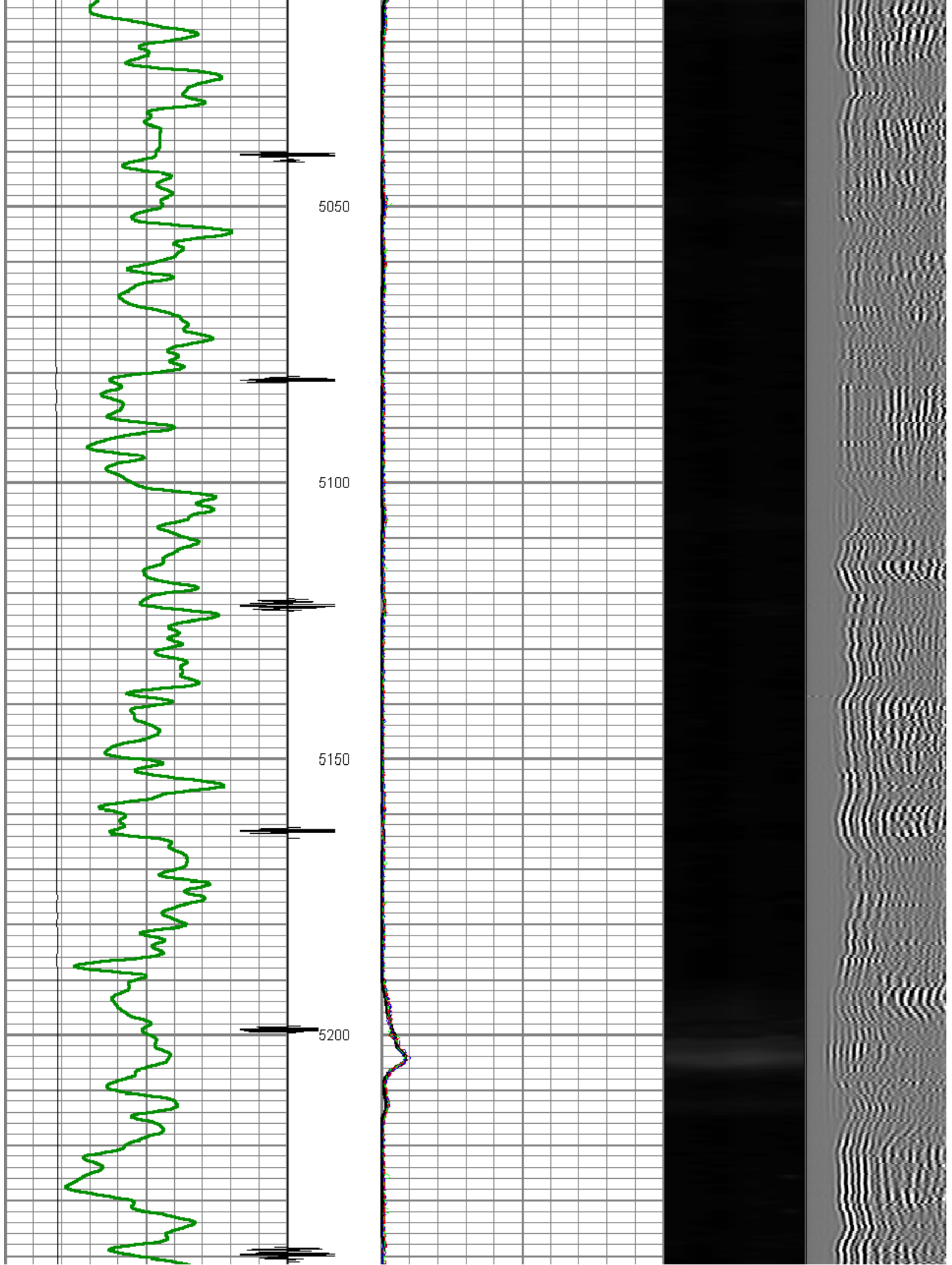


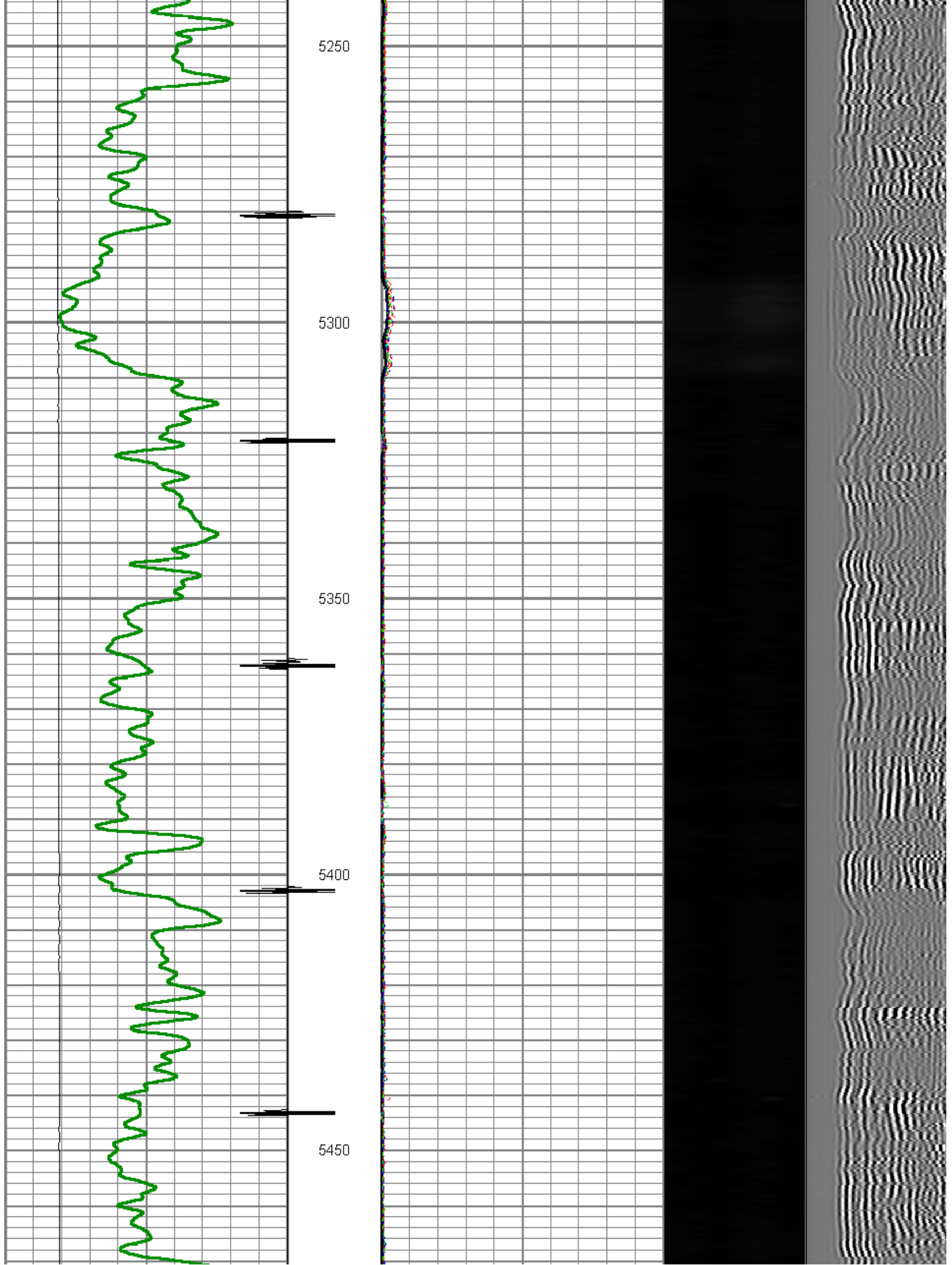


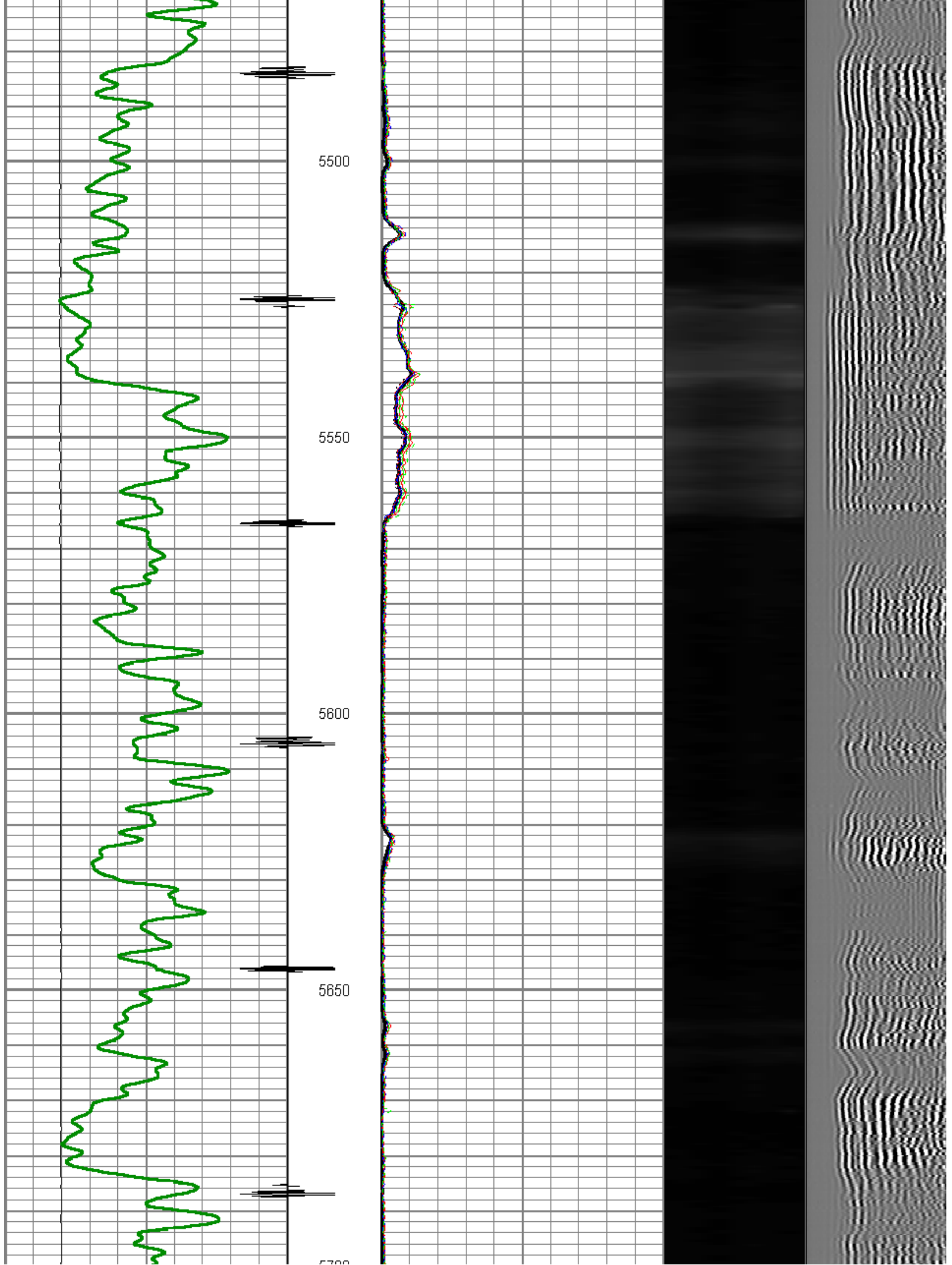


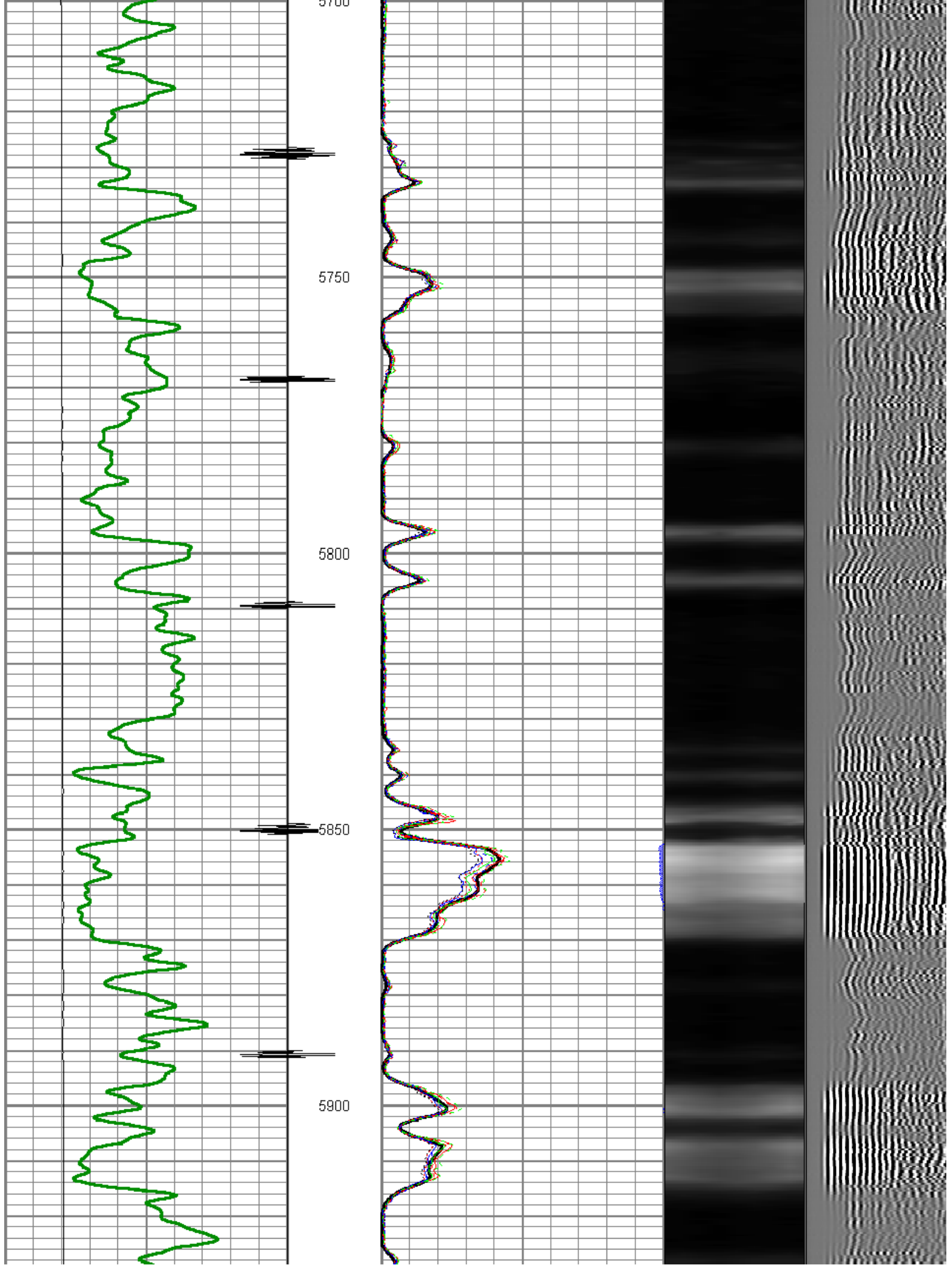


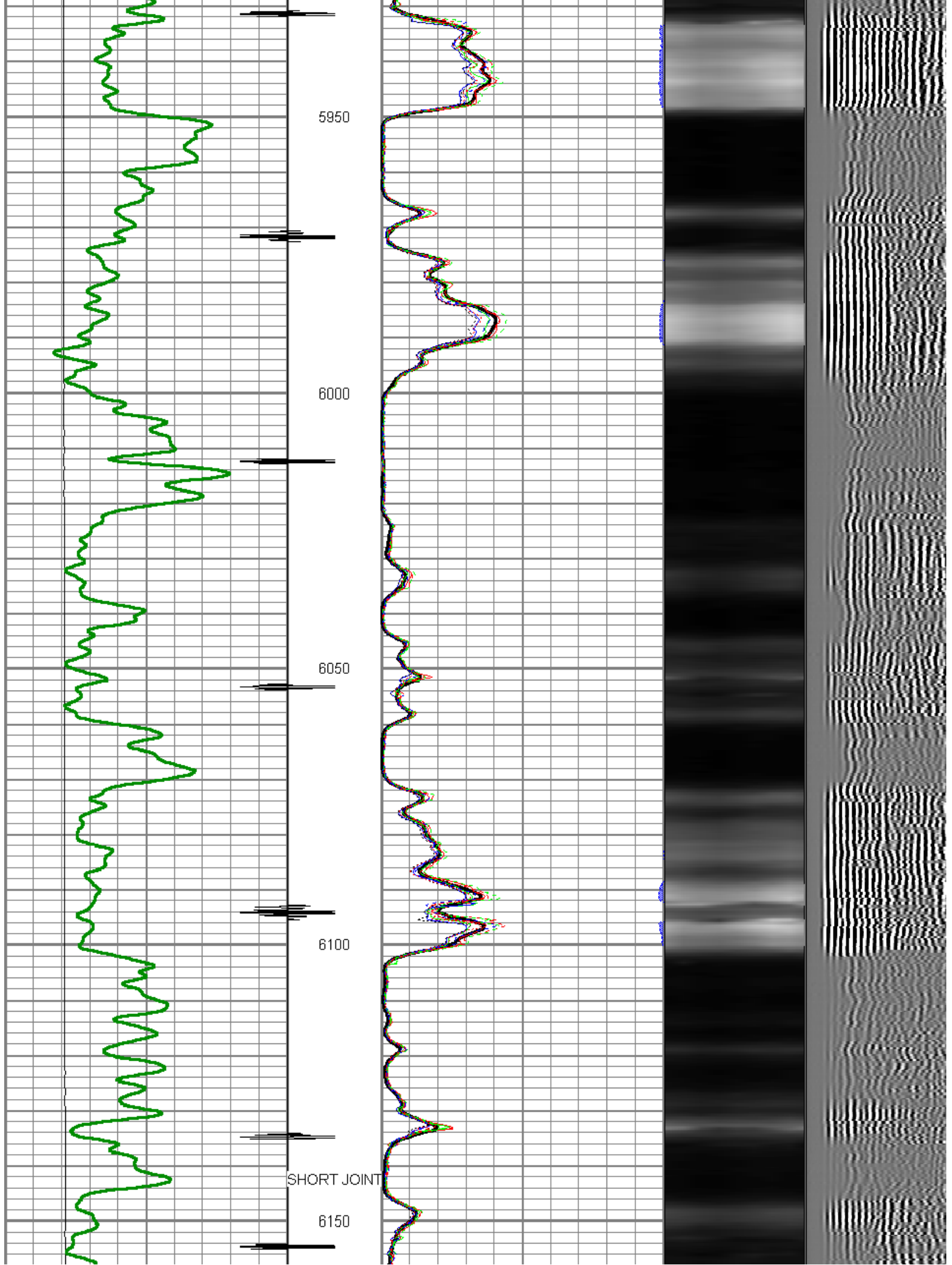


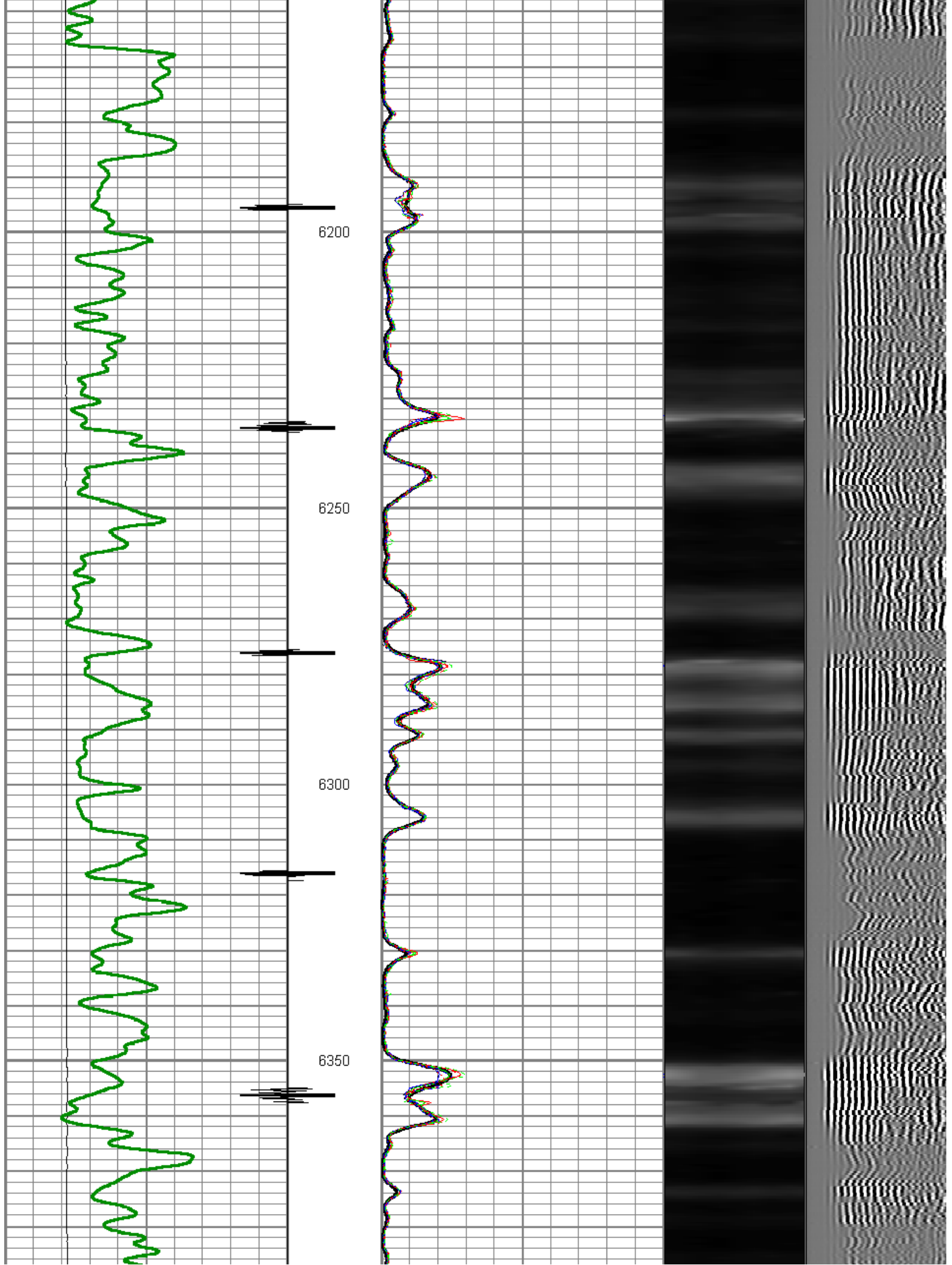


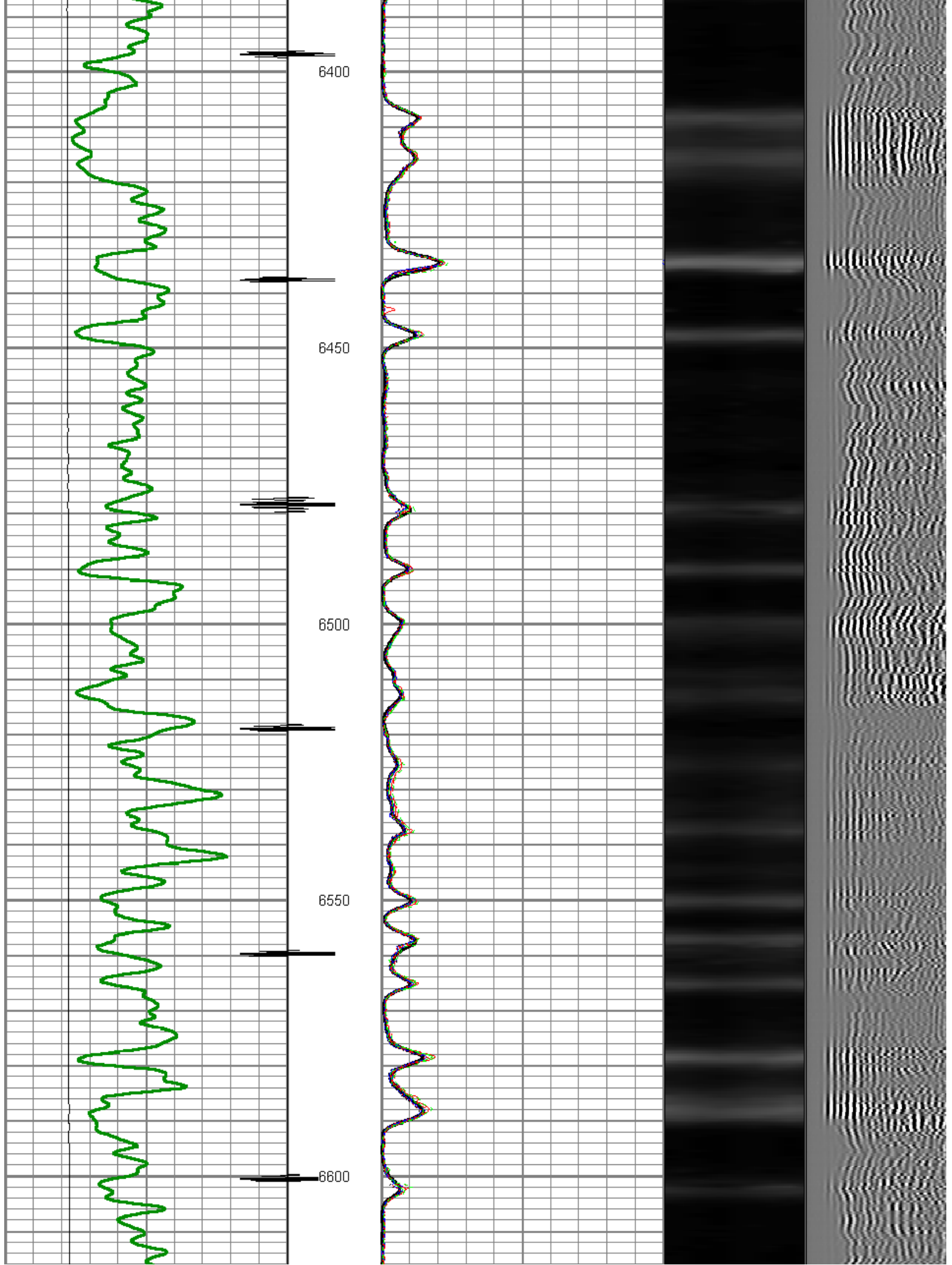


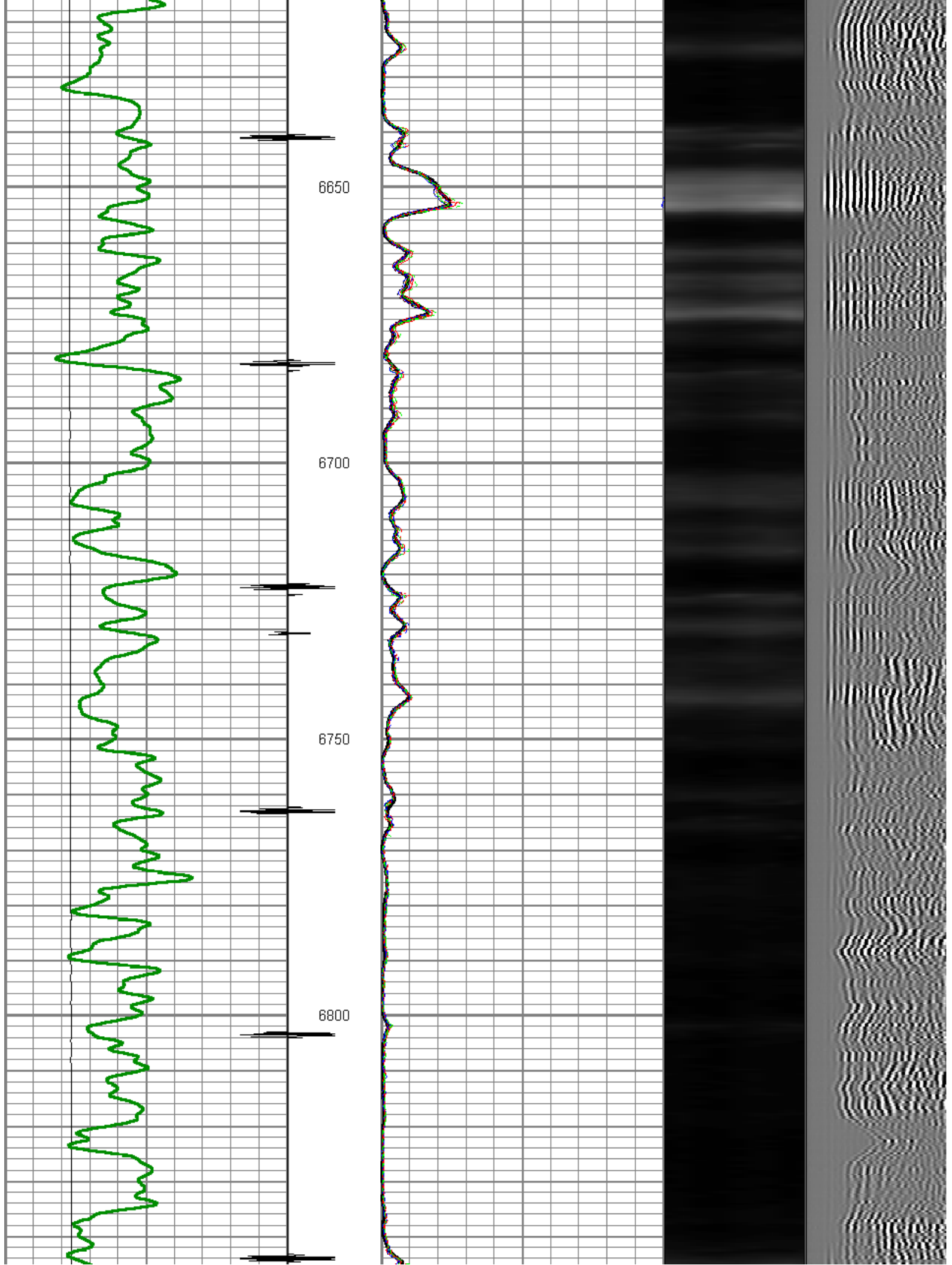


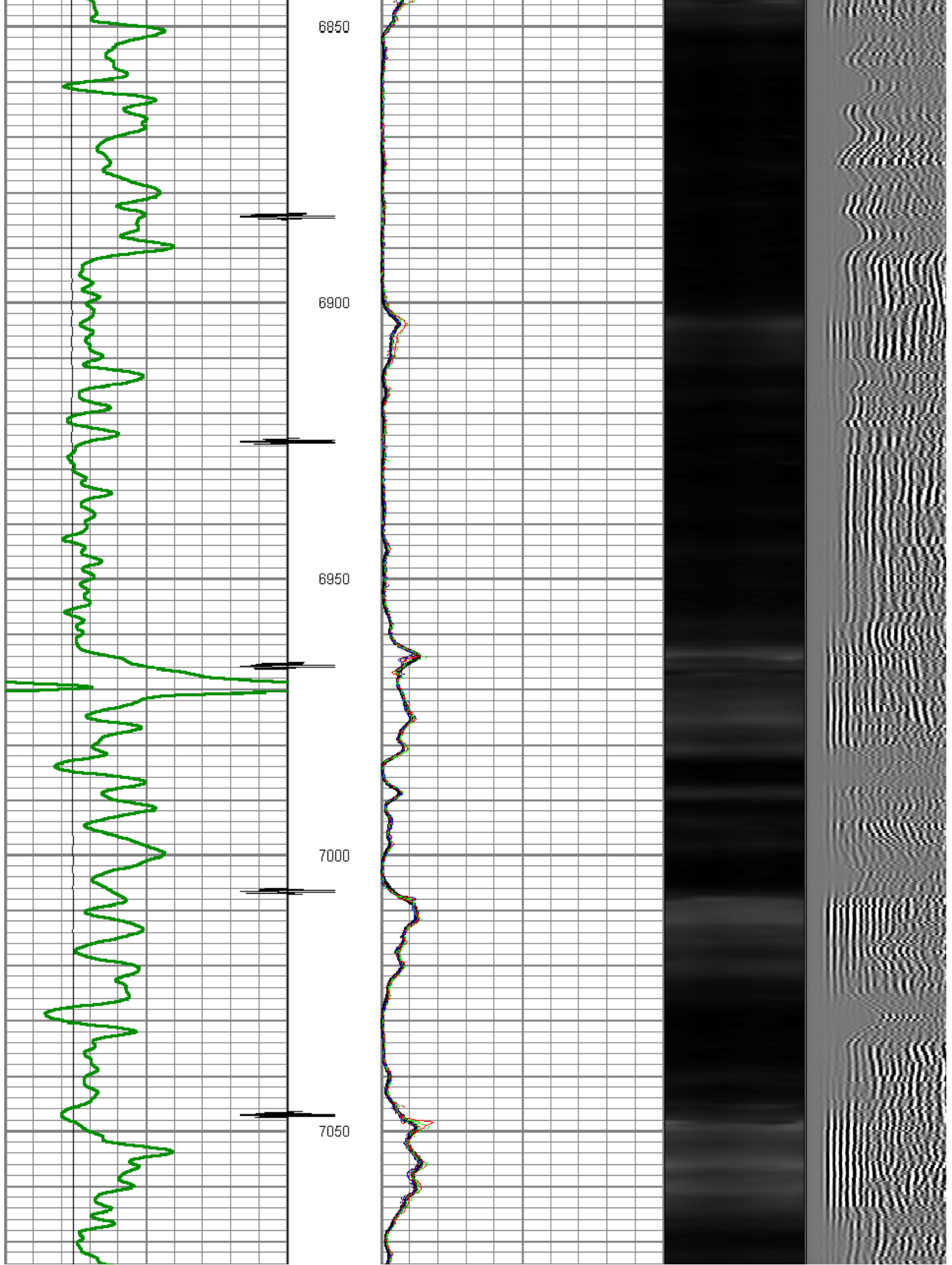


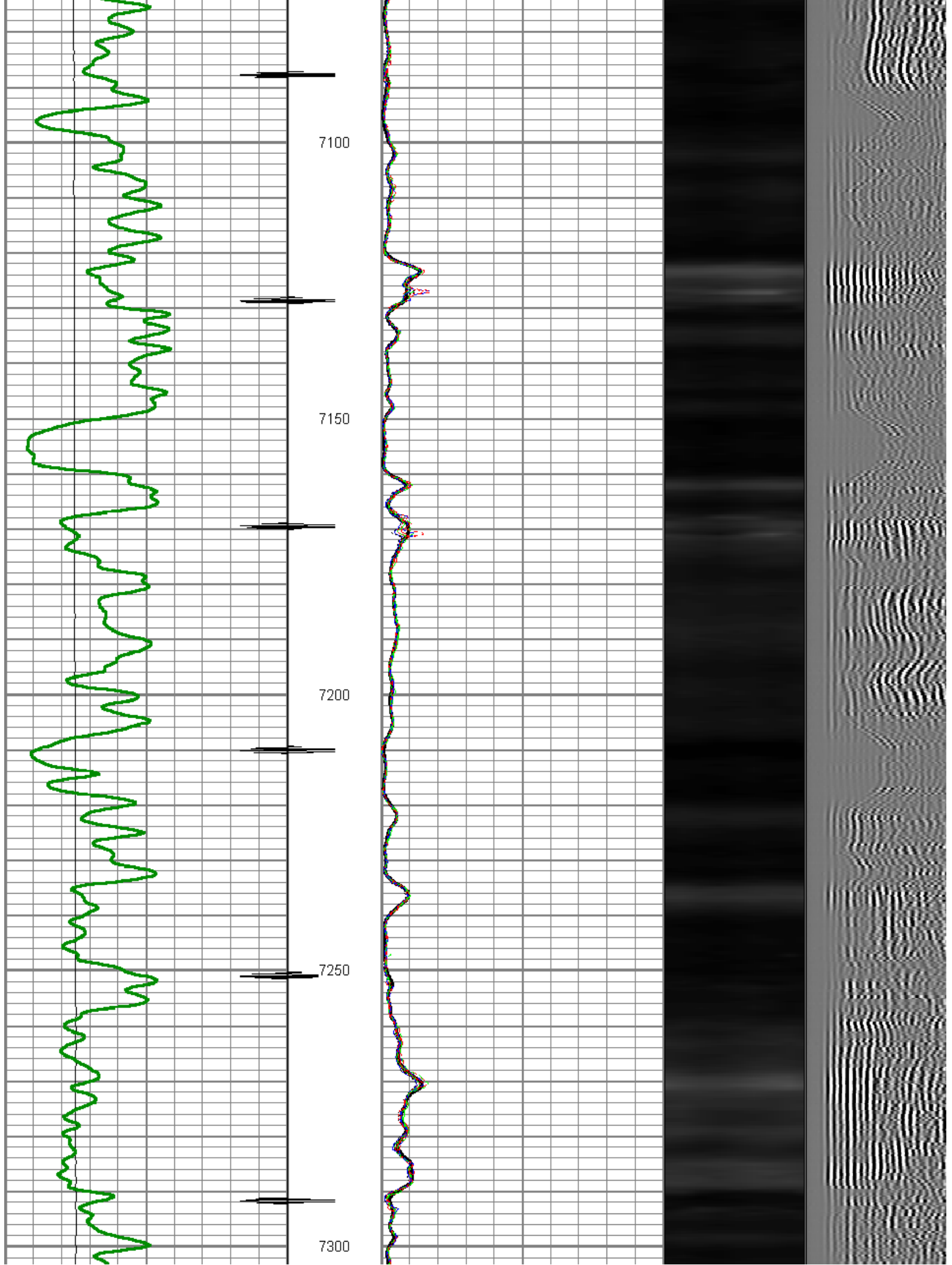


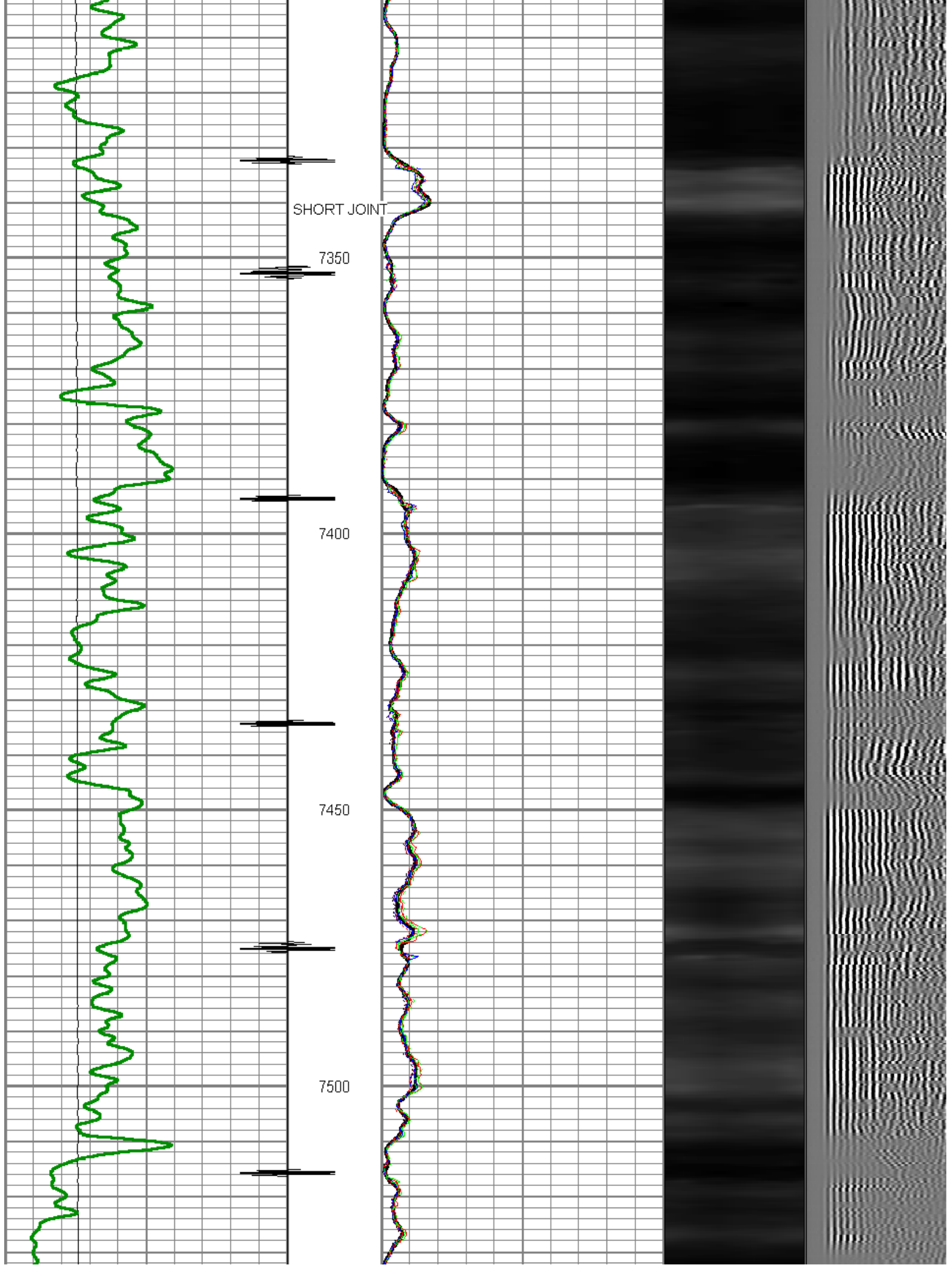


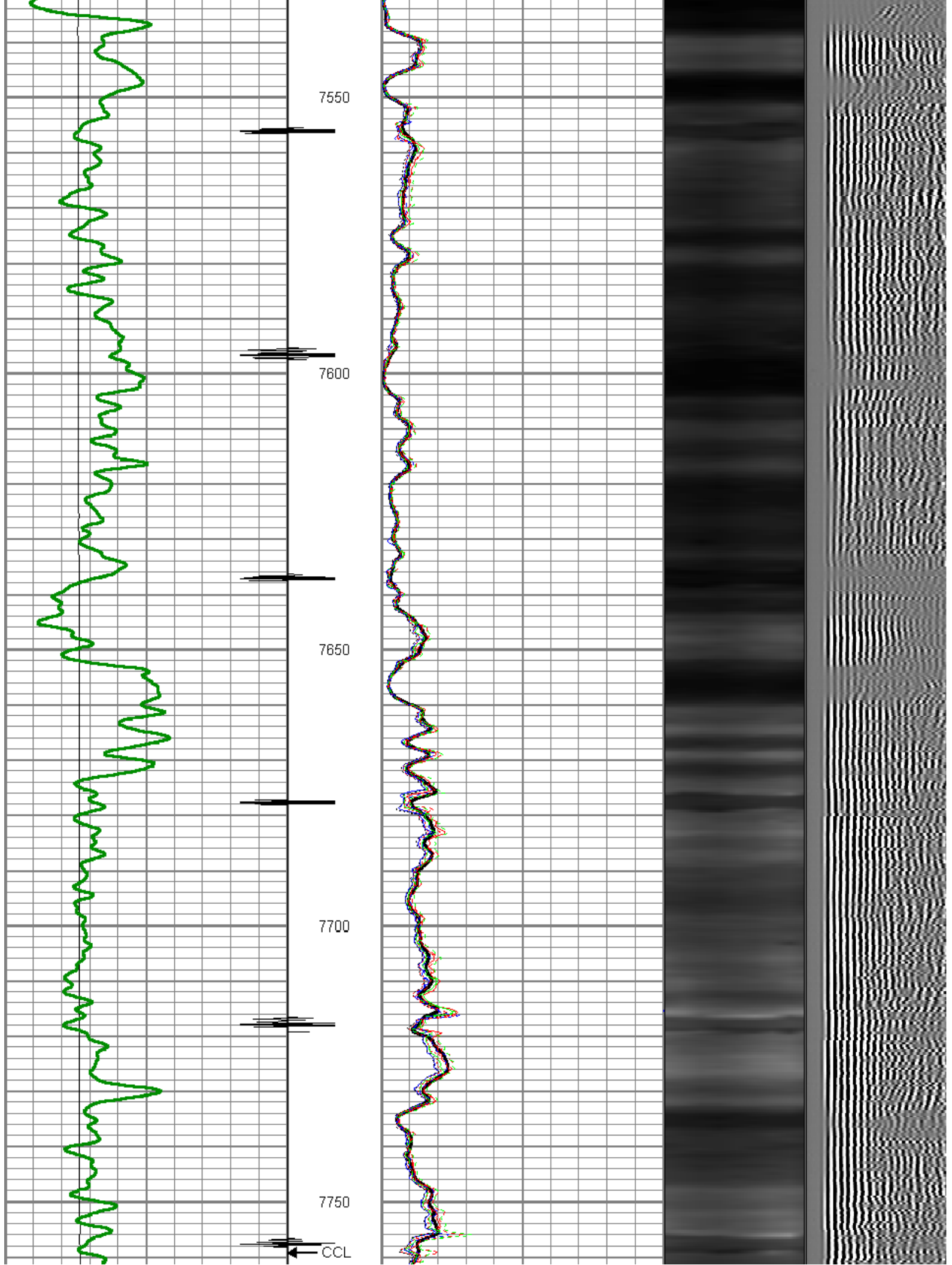


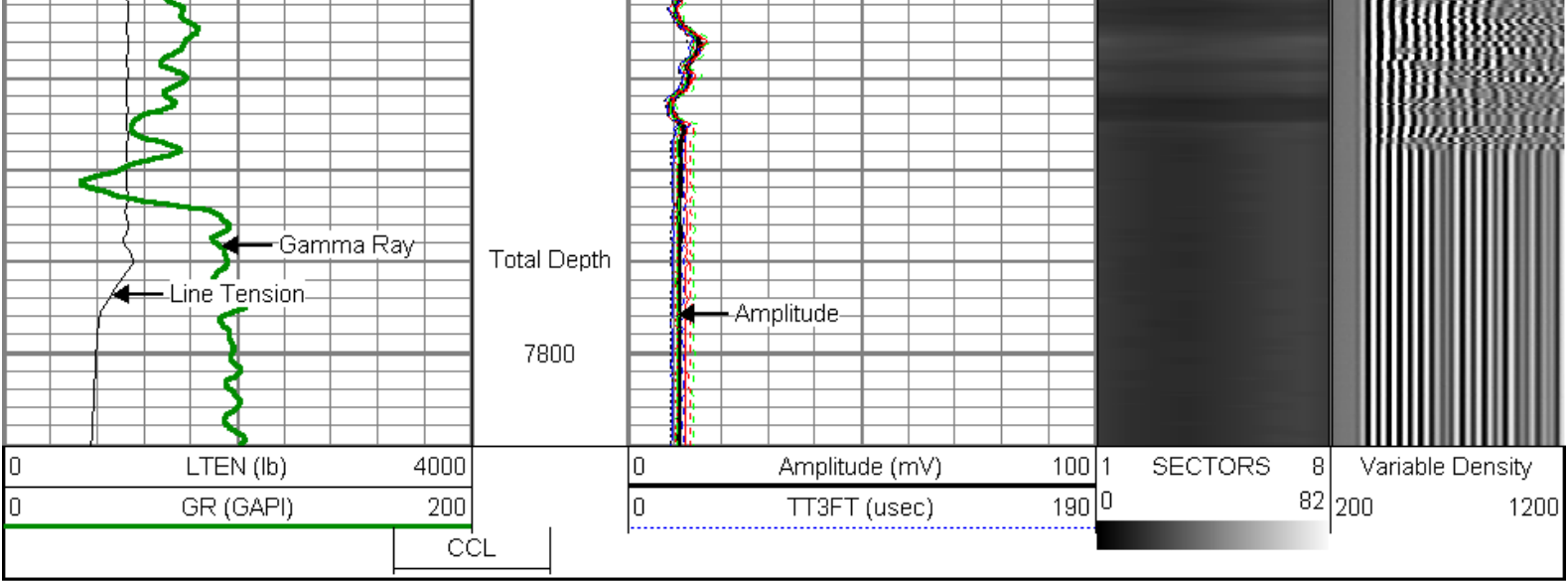













Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
CCL	21.68		TITAN	1.02	1.44	1.00
			SNDX_CCL-SNDX_3_13_CCL (000001) CSS Gamma Ray/CCL (CCL Section)	1.92	3.13	11.02
			SONDEX	2.71	2.75	32.00
WVFS3FT	13.92		SNDX_RBT-007 (000001) Radial Bond Tool - Analog 3 1/8	9.47	3.13	140.00
WVFS1	13.92					
WVFS2	13.92					
WVFS3	13.92					
WVFS4	13.92					
WVFS5	13.92					
WVFS6	13.92					
WVFS7	13.92					
WVFS8	13.92					
WVFS5FT	12.92					
			SONDEX	2.71	2.75	32.00

GR	5.17			SNDX_GR-SNDX_3_13_GR (000001) Sondex Production Gamma Ray	2.94	3.13	22.05
TEMP	0.58			TEMP-SNDX_TEMP (SNDX_TEMP_02) Sondex Production Temperature Tool	3.14	1.63	10.00
Dataset: antero_otoole_a5.db: field/well/run1/pass4 Total Length: 23.90 ft Total Weight: 248.07 lb O.D.: 3.13 in							

	Company	ANTERO RESOURCES CORP.
	Well	O'TOOLE A5
	Field	MAMM CREEK
	County	GARFIELD
	State	COLORADO