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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.

Log ran as per customer request  
Depth referenced to Casing Tally reported Marker Joint at 7020 FT  
Adjusted +2 FT to correlate with Marker Joint  
Gauge Ring/Junk Basket ran to 8006 FT  
Retrievable Bridge Plug set at 7096 FT  
Log ran with 2800 PSI Surface Induced Pressure  
Logging tools were clean and free of debris upon completion of operations

Thank you for choosing Reliance Oilfield Services, LLC!!

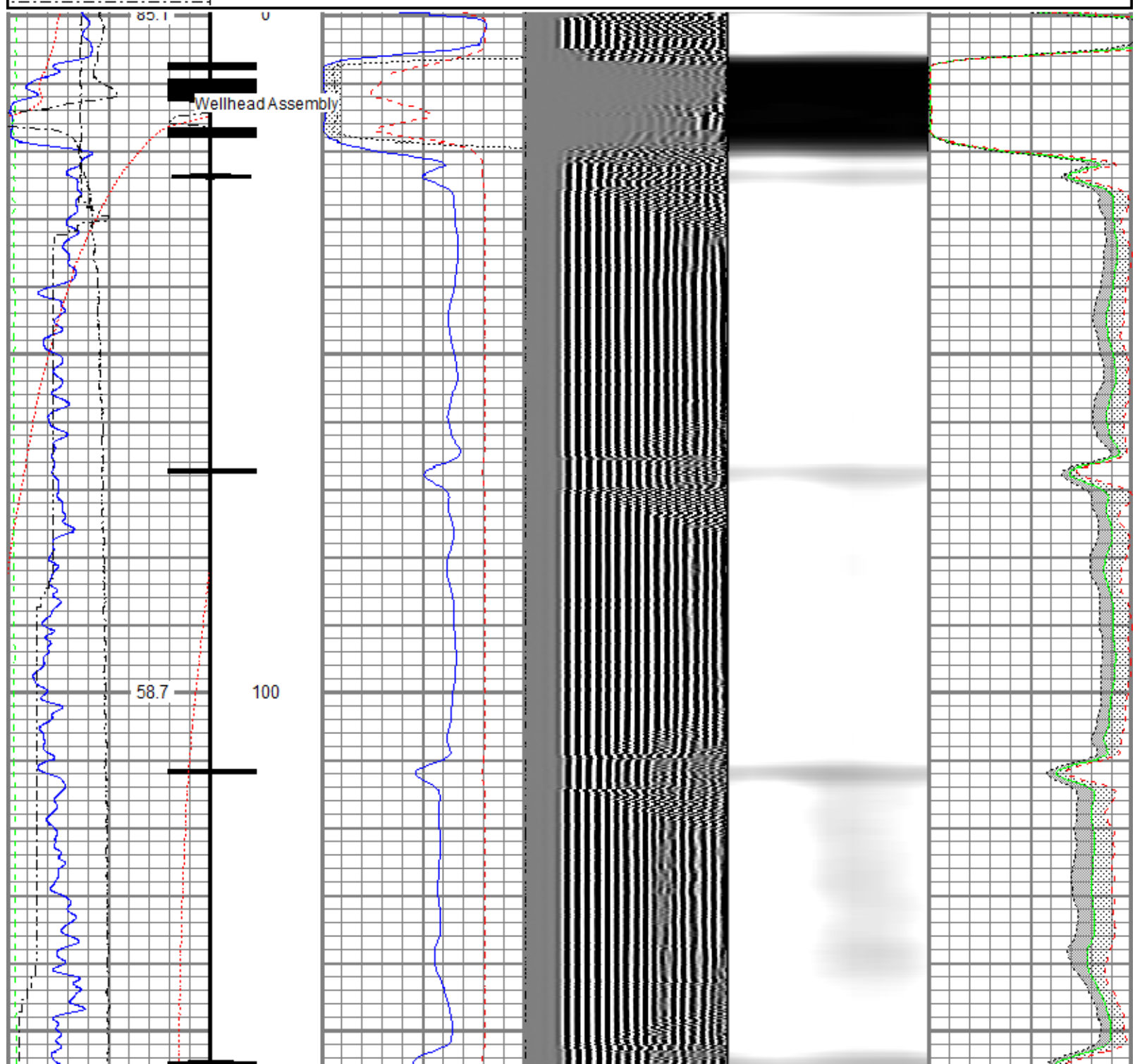
## Main Pass

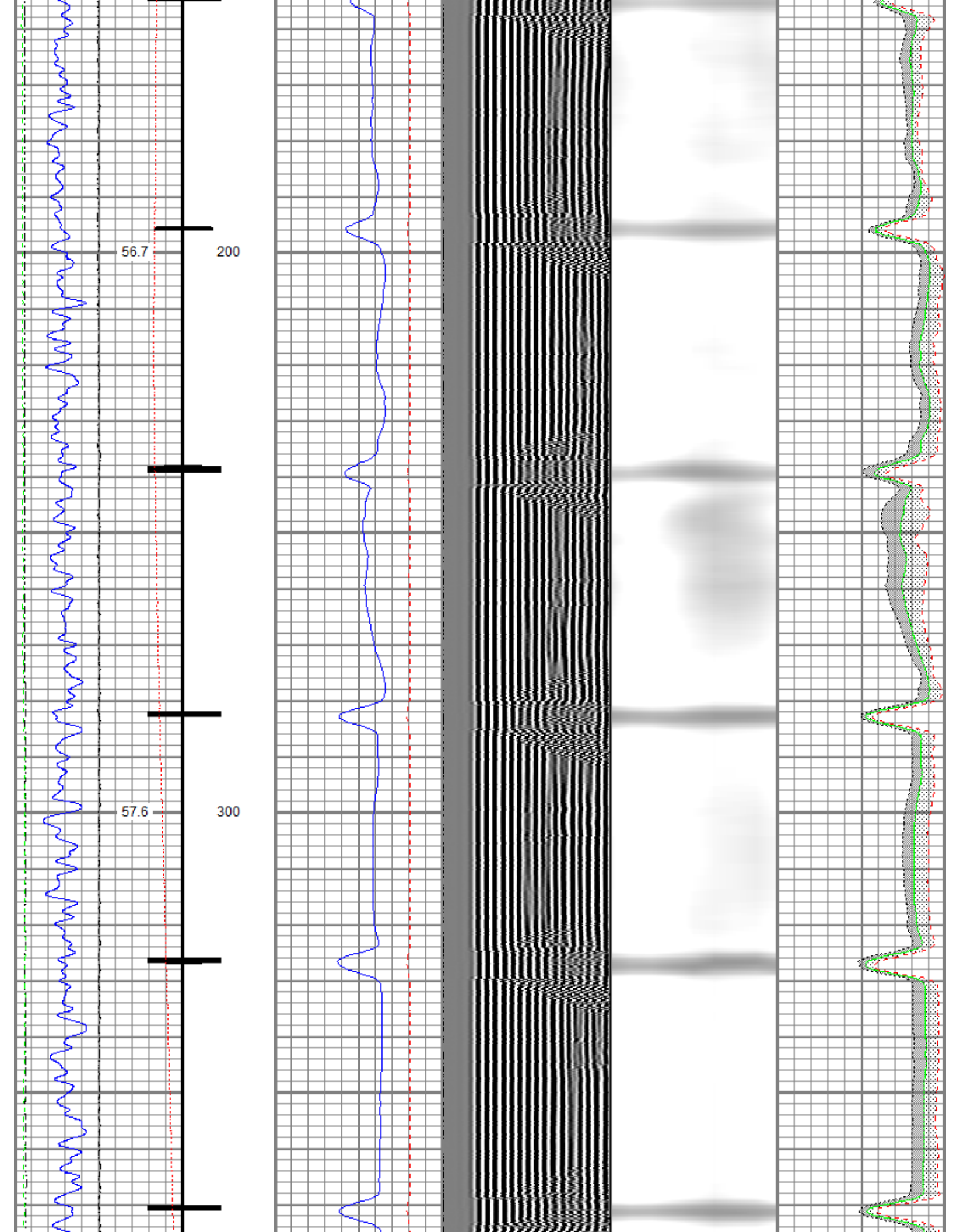


Recorded With 2000 PSI Surface-Induced Pressure

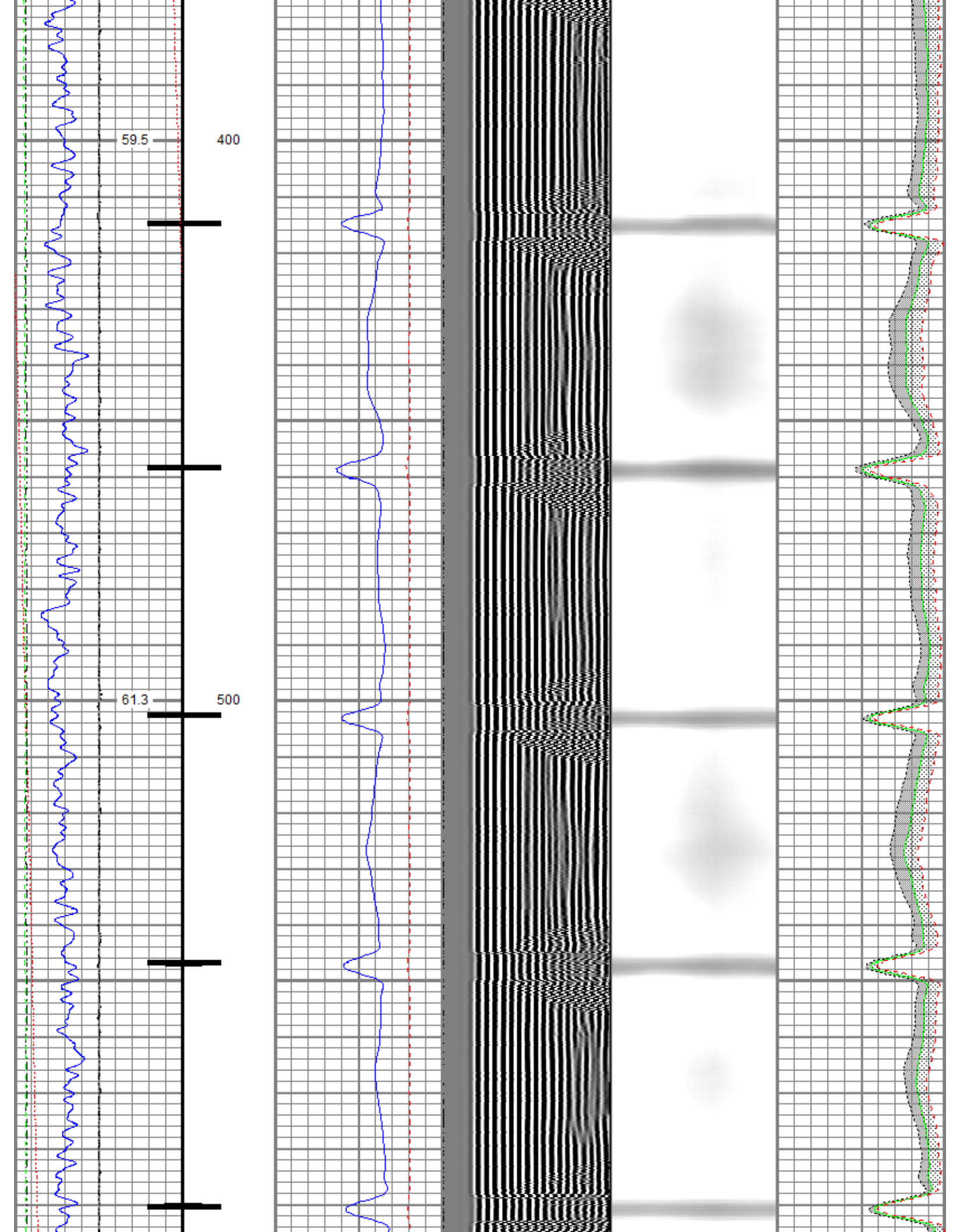
Database File	anadarko\0512348445_anadarko_buddy 7-14hz_rbl_07-21-19\processed_0512348445_anadarko_buddy 7-14hz_rbl_07-21-19
Dataset Pathname	RCBL_2800PSI/Main.5
Presentation Format	ros_radri
Dataset Creation	Tue Jul 23 09:52:57 2019
Charted by	Depth in Feet scaled 1:240

Gamma Ray	0	3' Amplitude (mV) 100	5' Variable Density Log	Sector Map	0	Average Amplitude 100
(GAPI) 120		3' Amplitude x 5	200			Minimum Amplitude
Casing Collar Locator	0	(mV) 20			0	100
Temperature (degF) 20		3' Travel Time				Maximum Amplitude
Line Speed	650	(usec) 150			0	100
(ft/min) 150						
Line Tension (lb) 2000						
Differential Temperature						
(degF) 2						

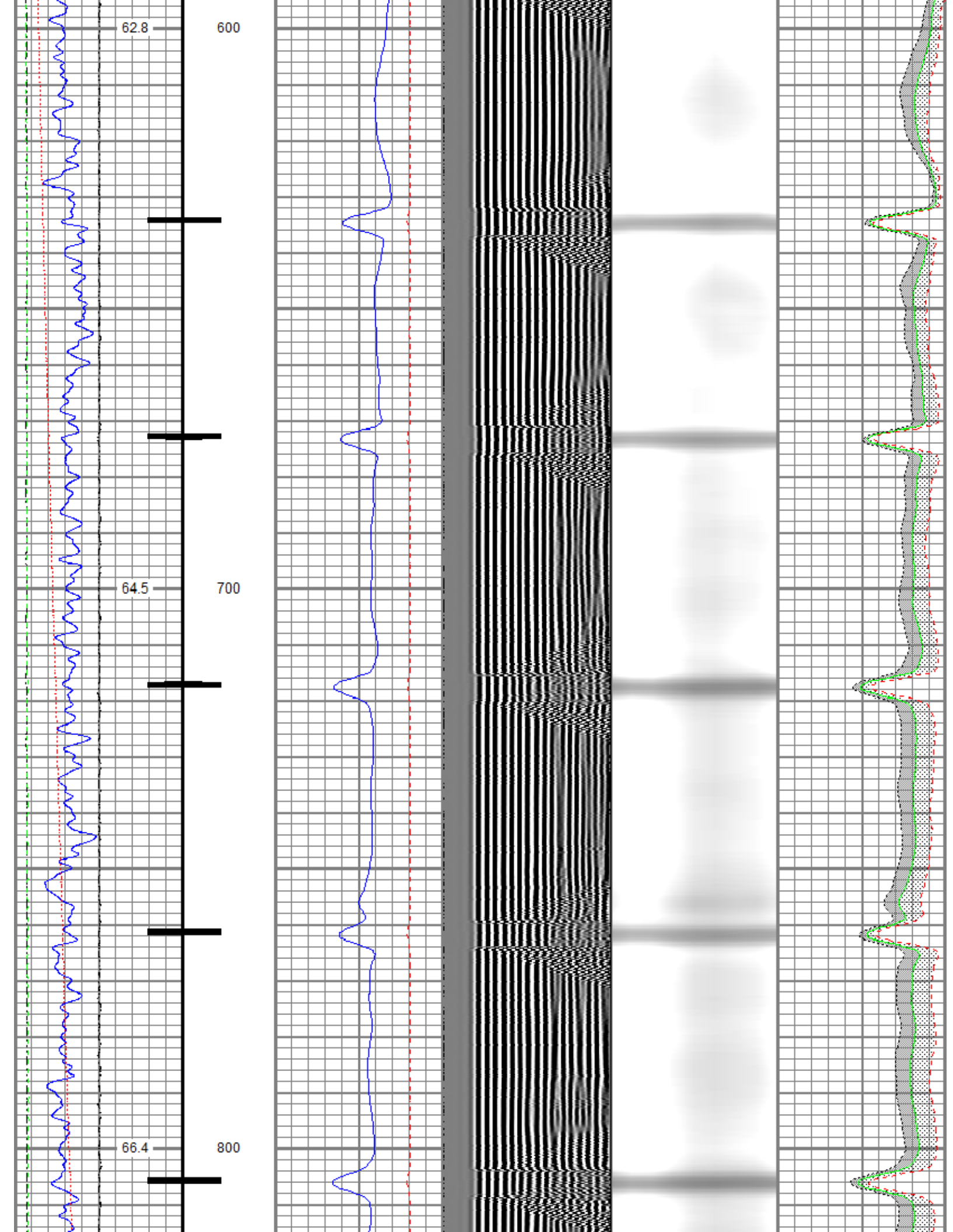


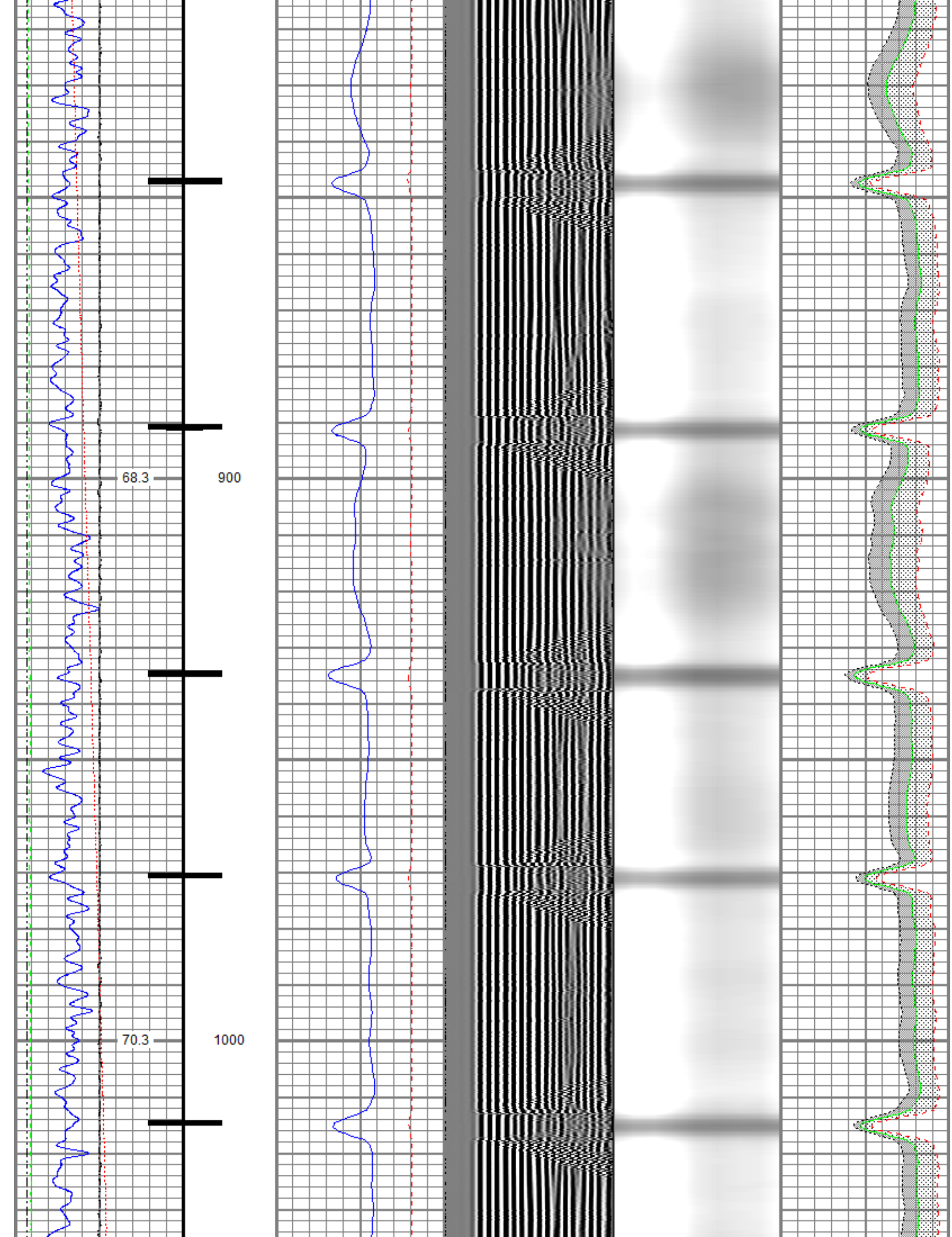


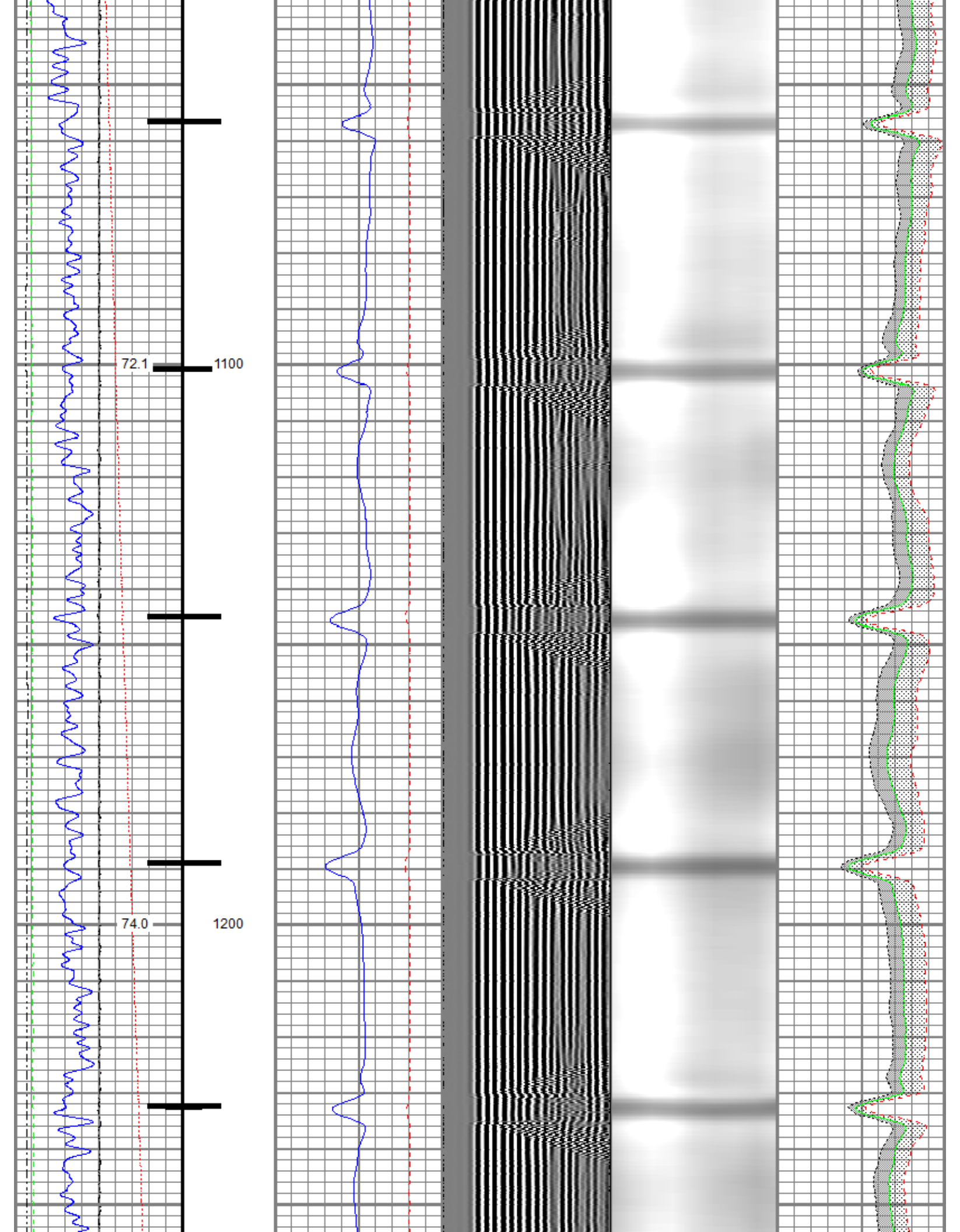




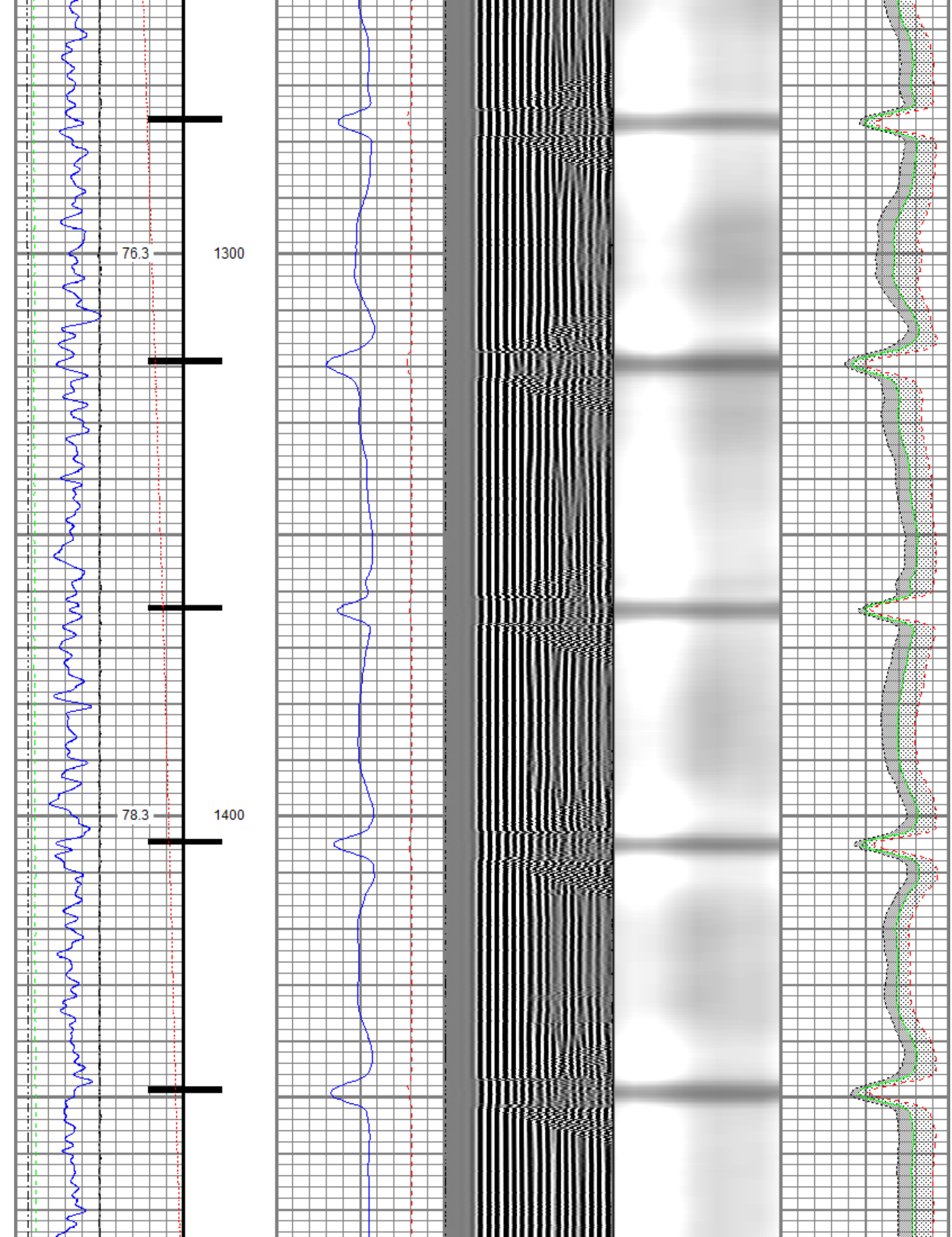


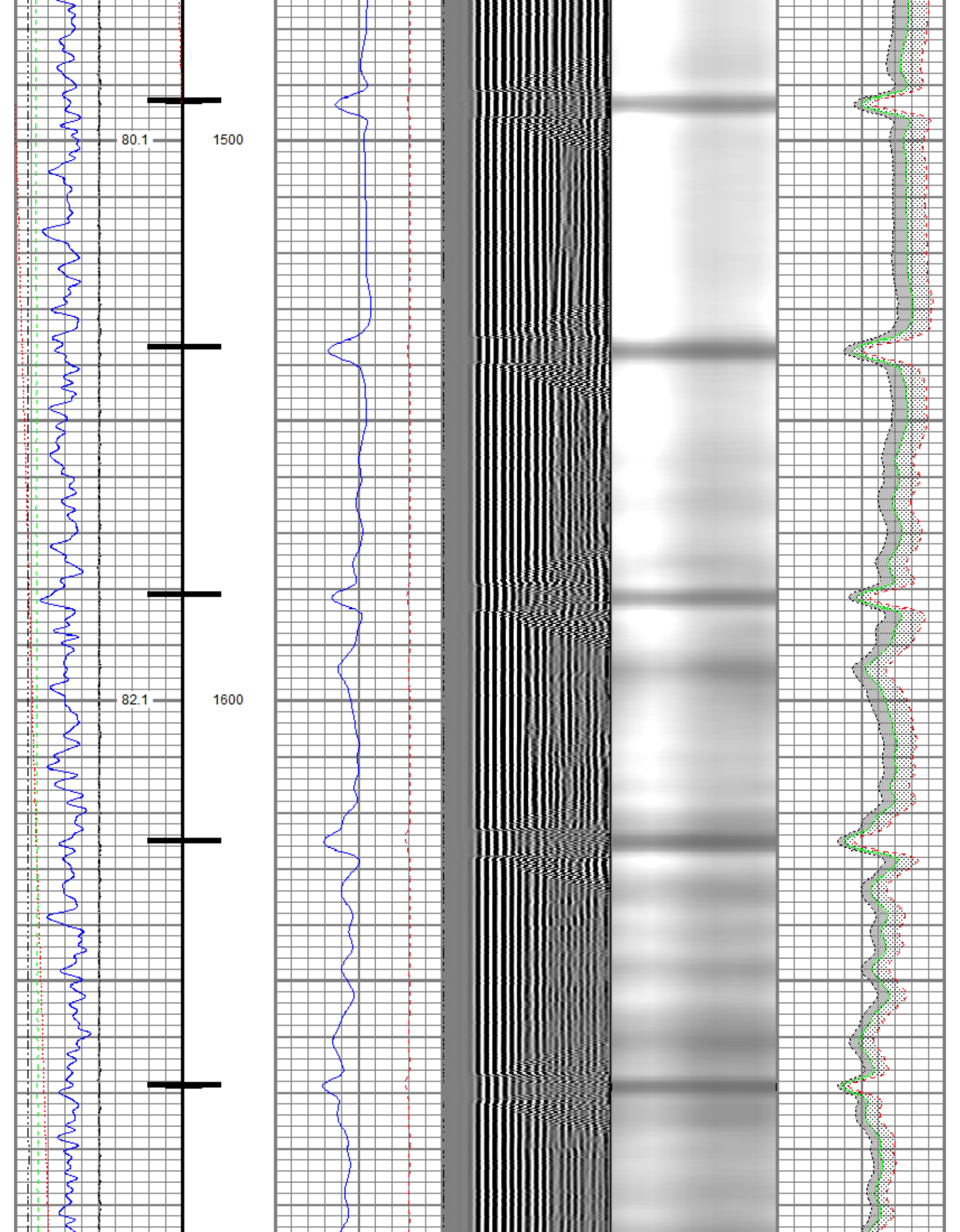


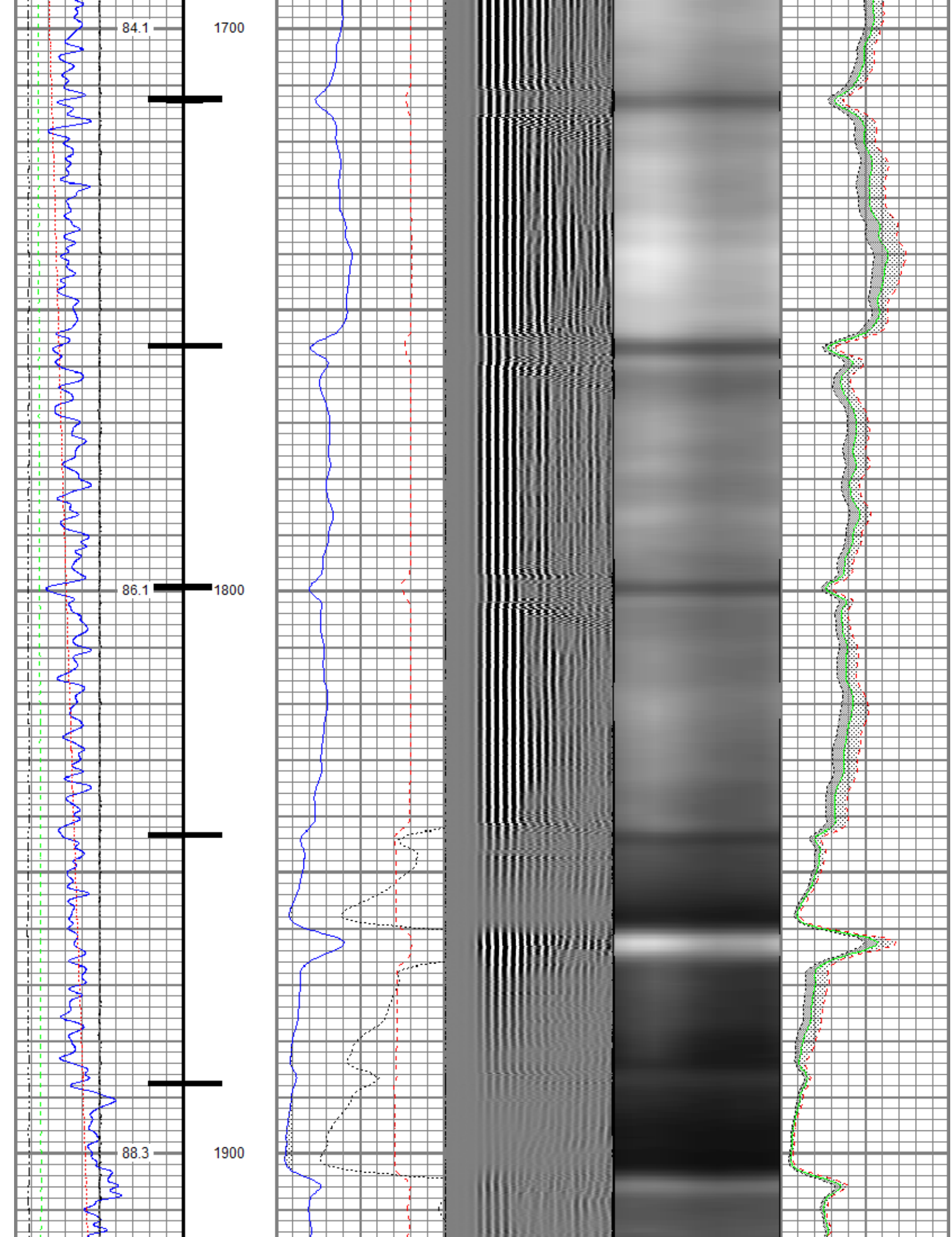




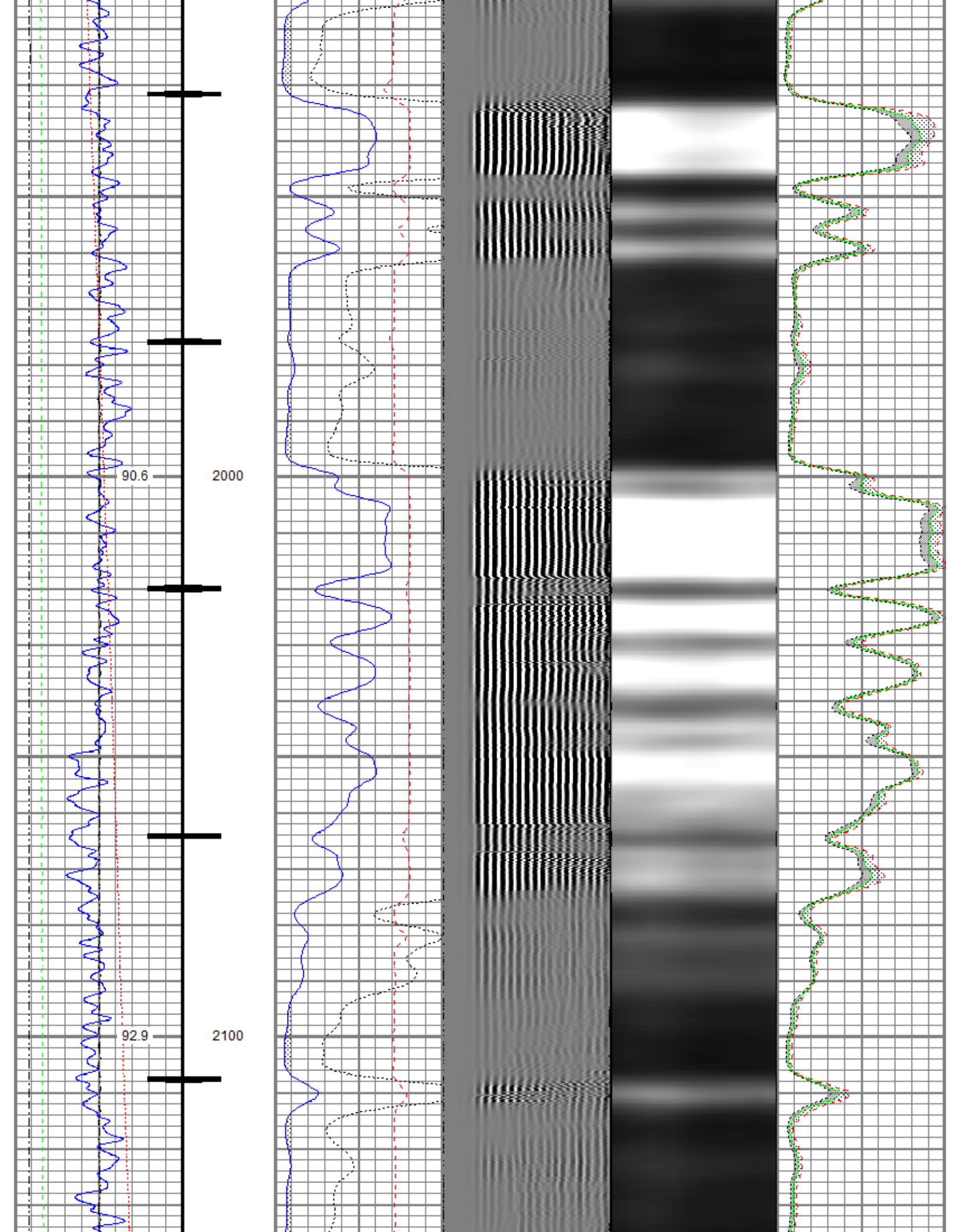


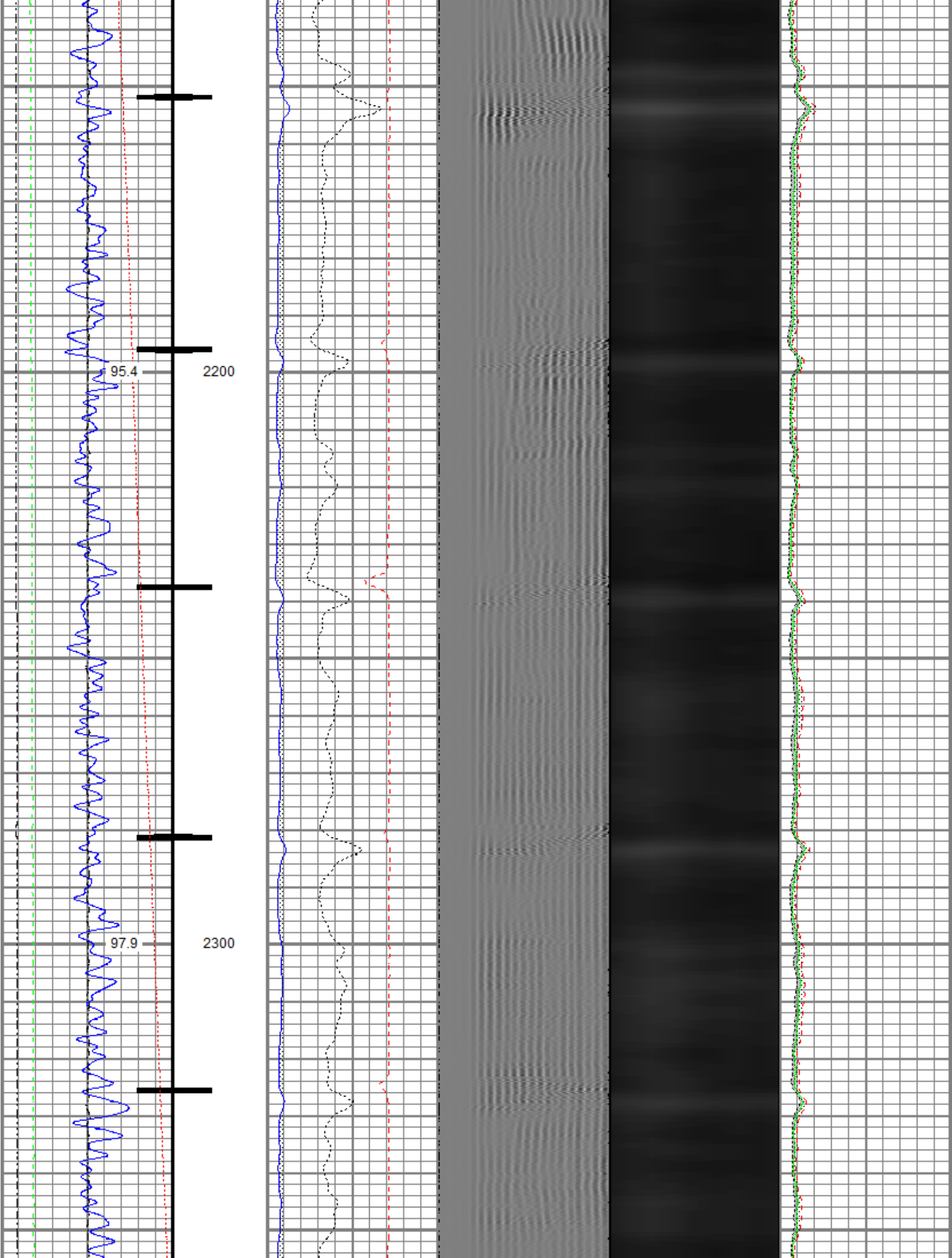


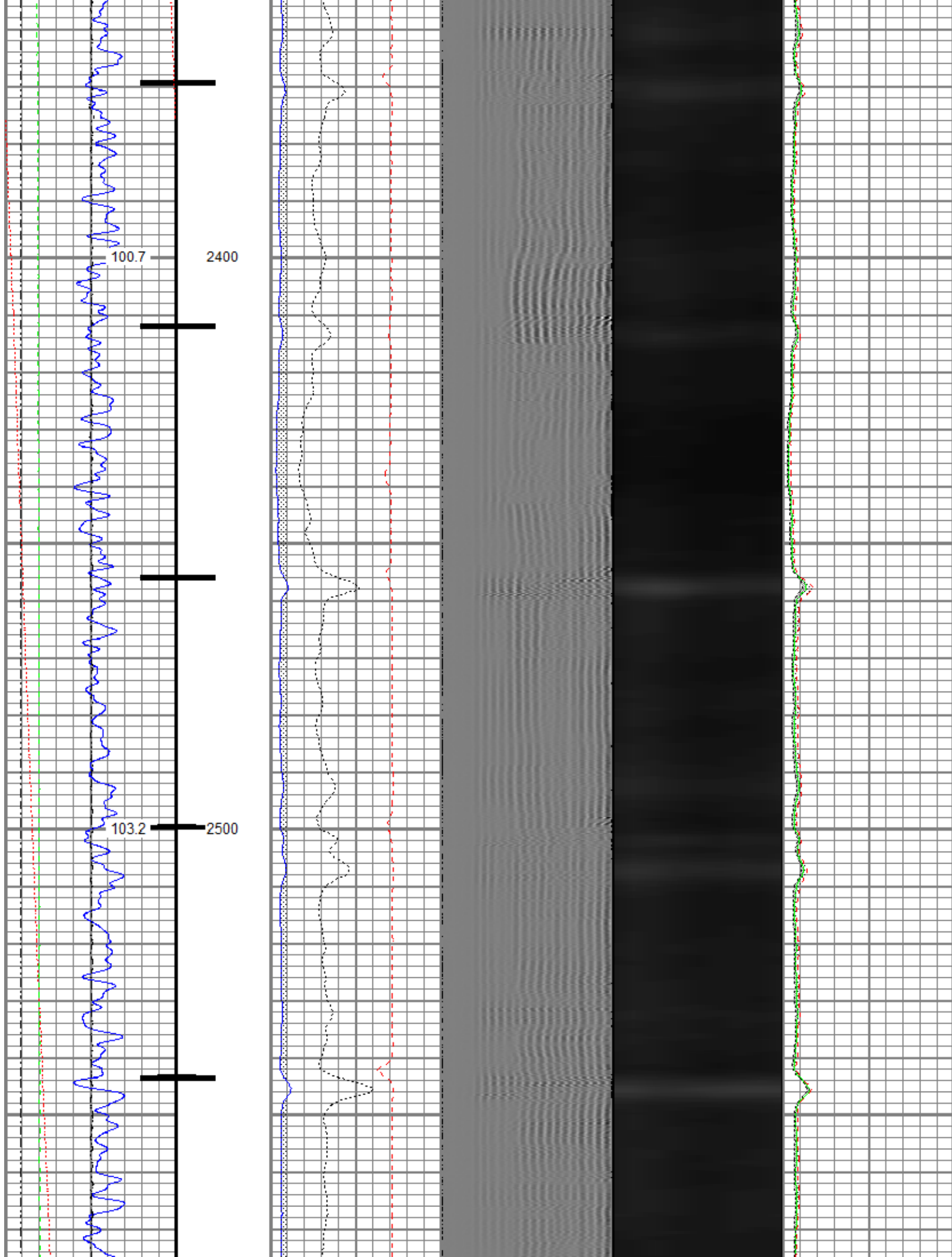




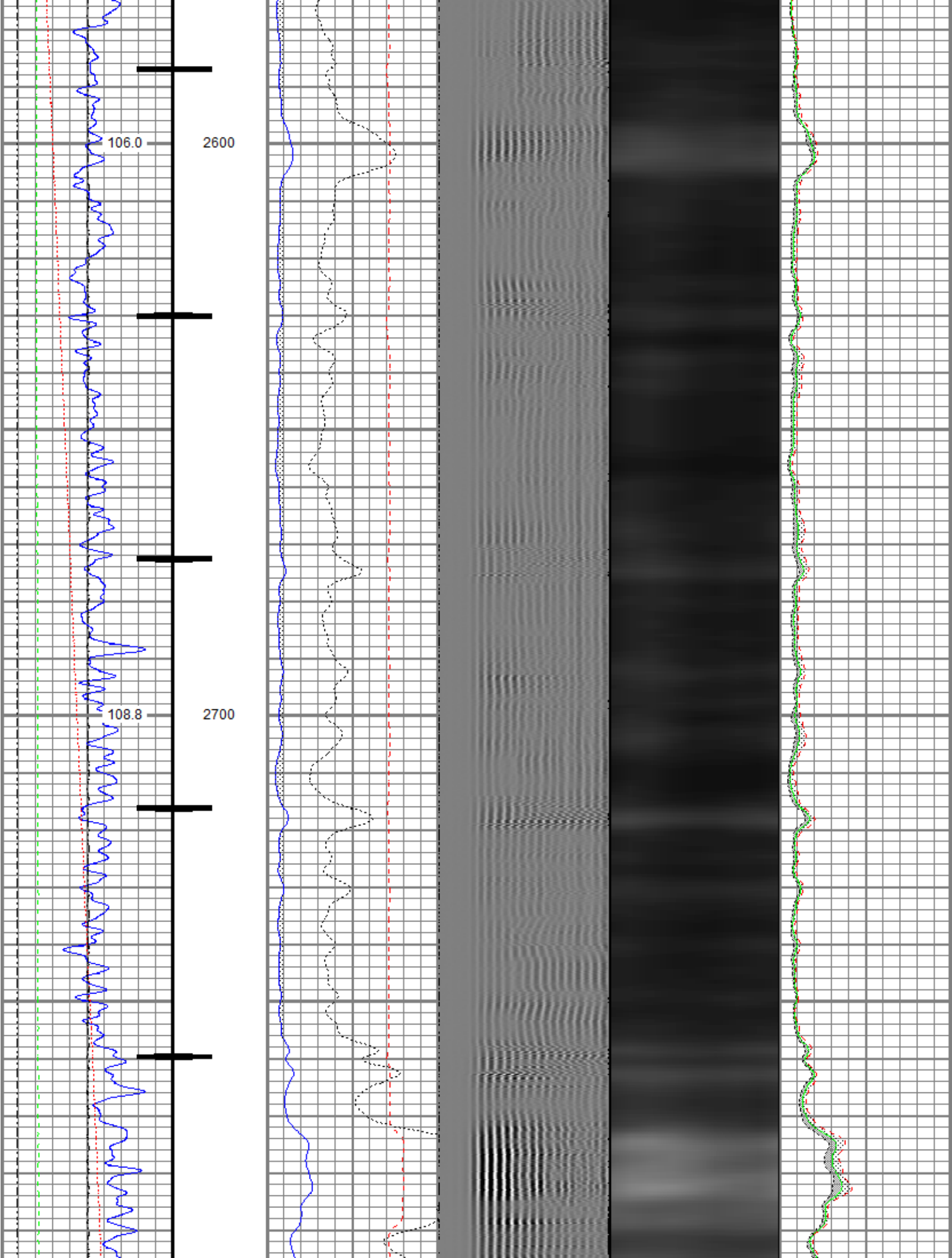


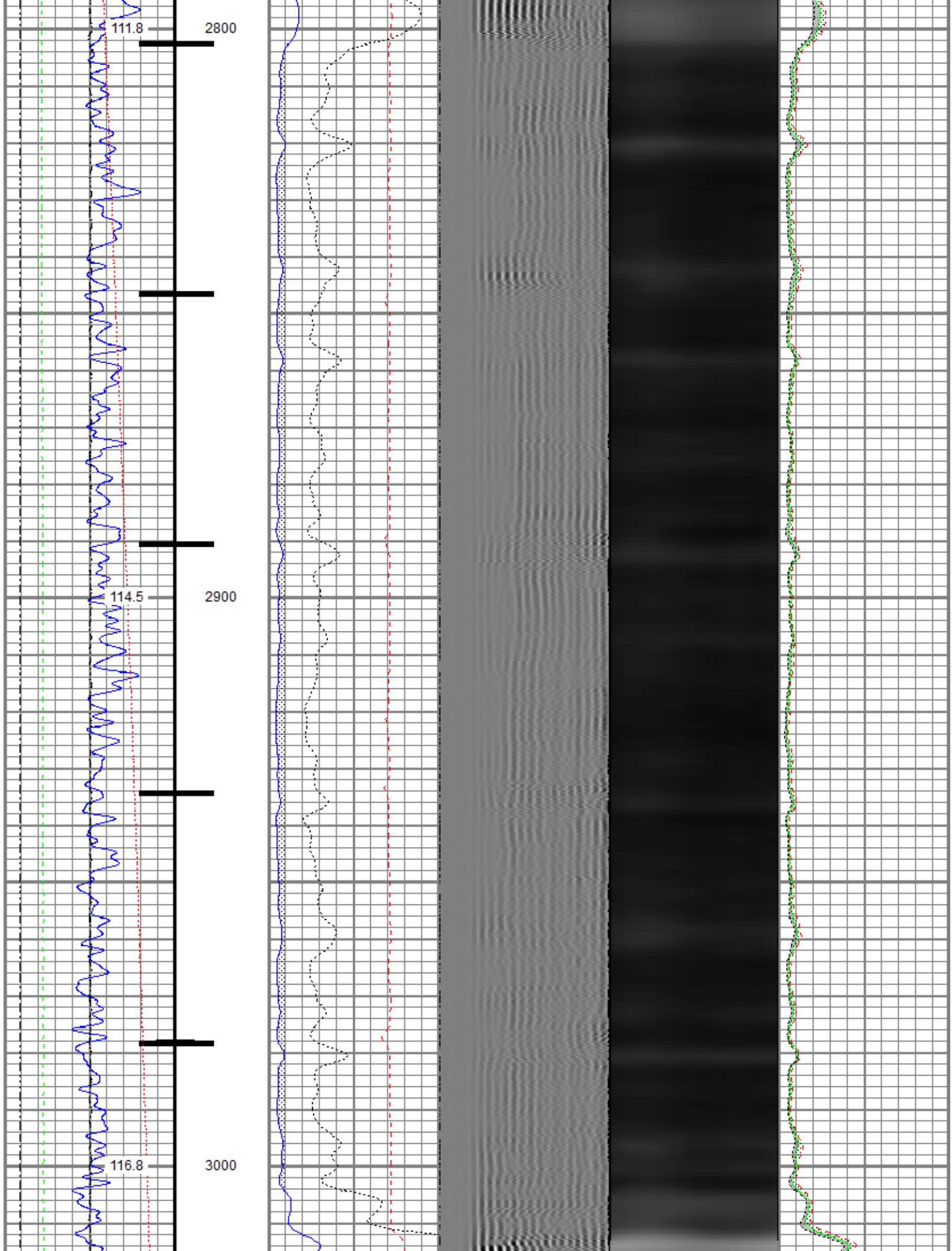


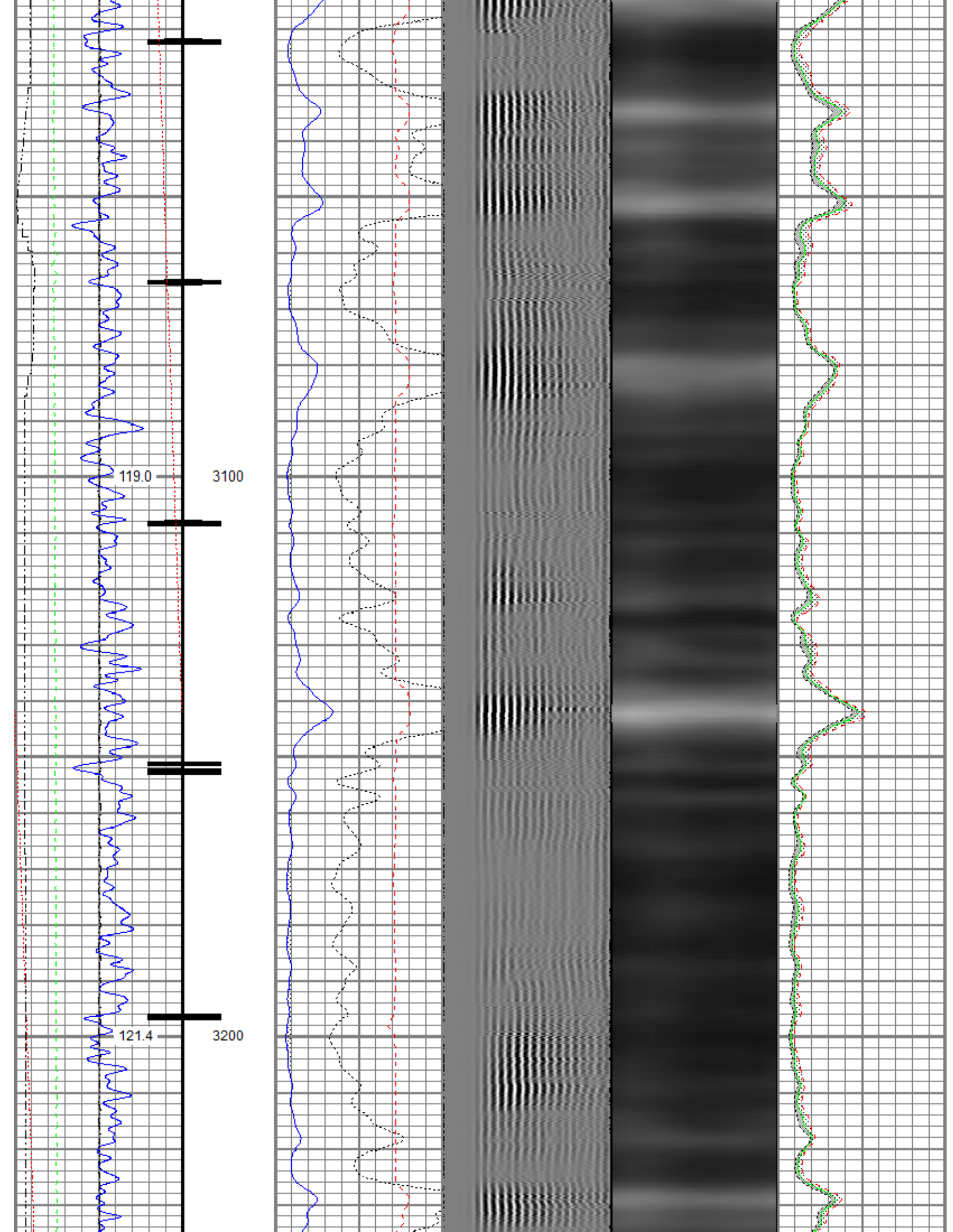




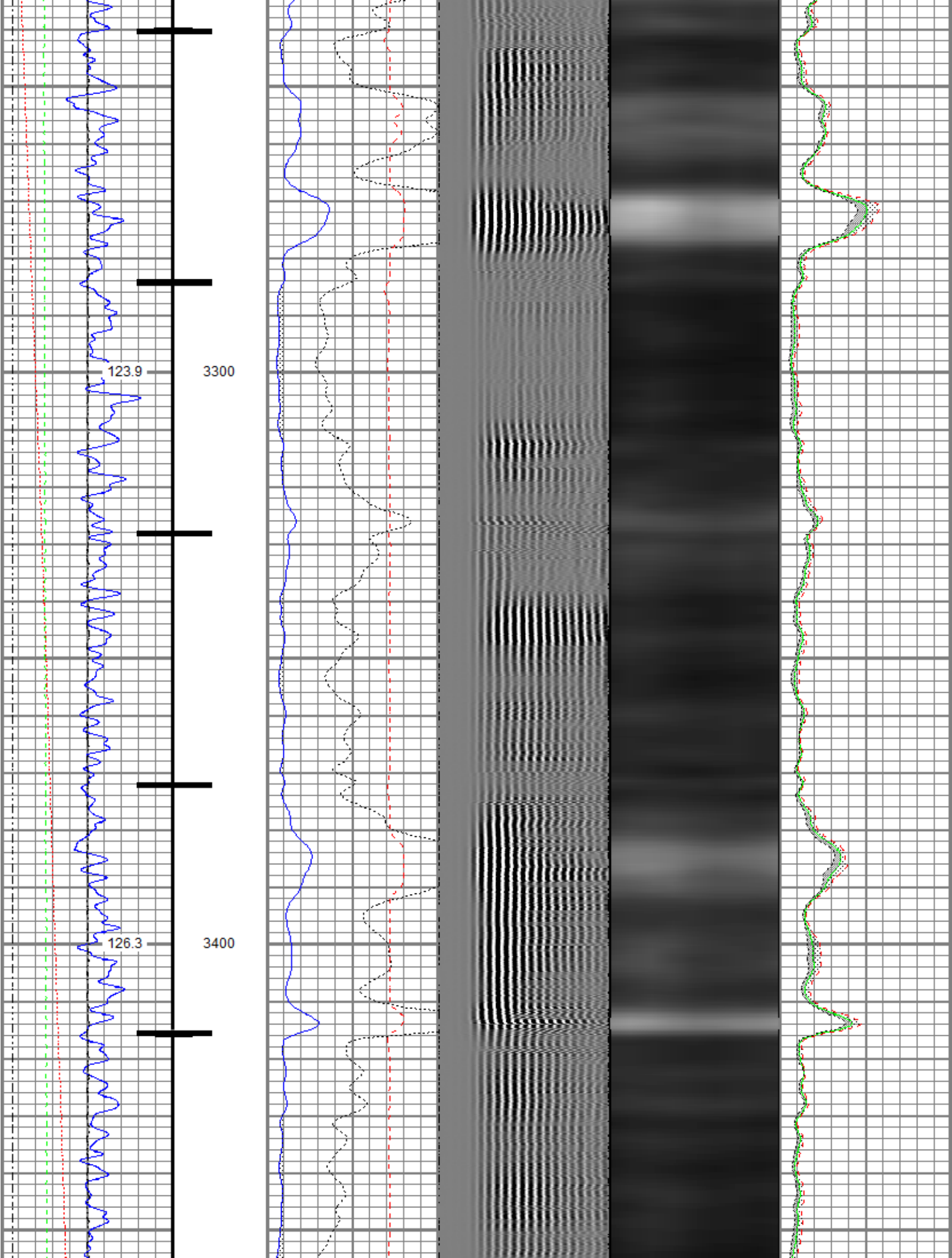


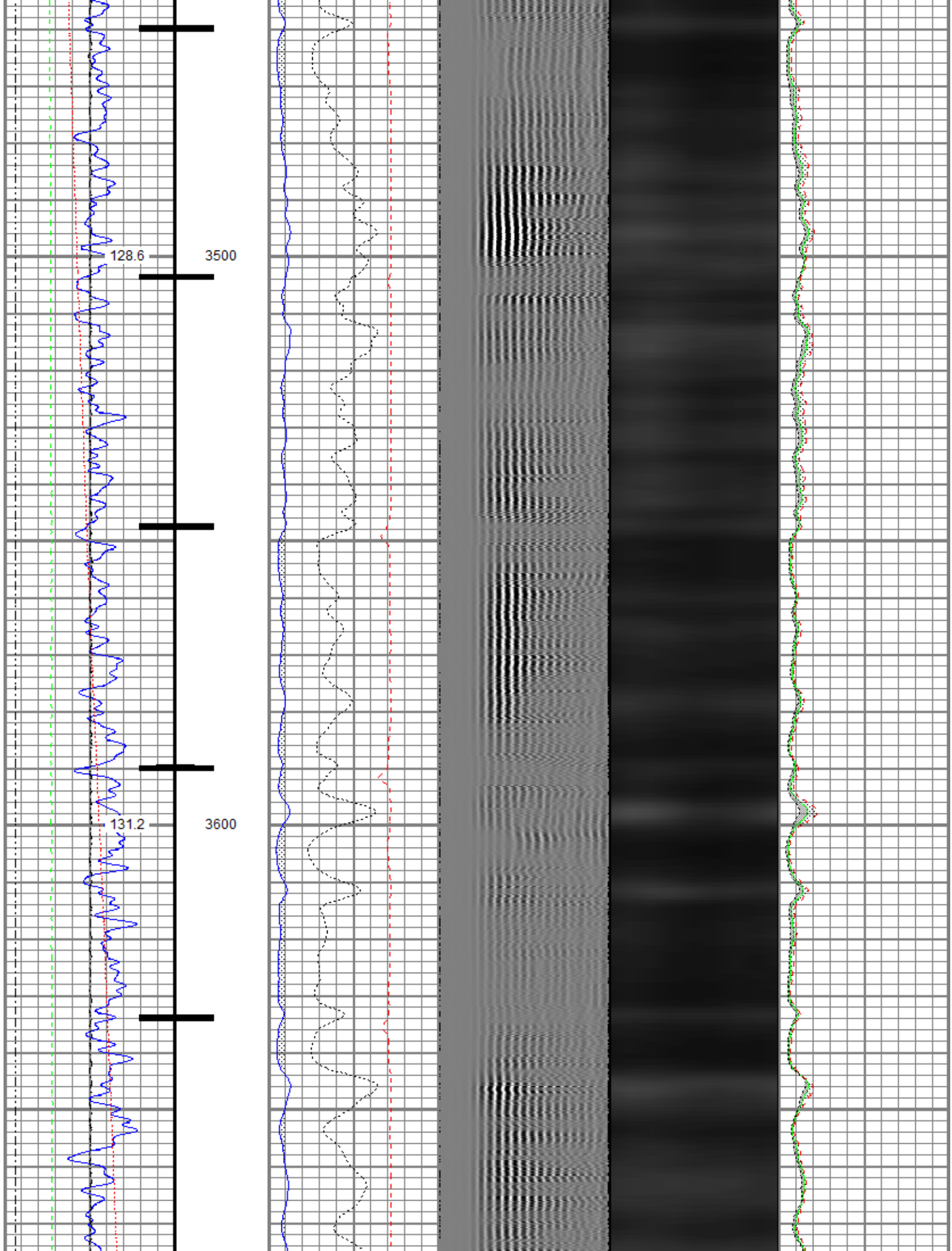


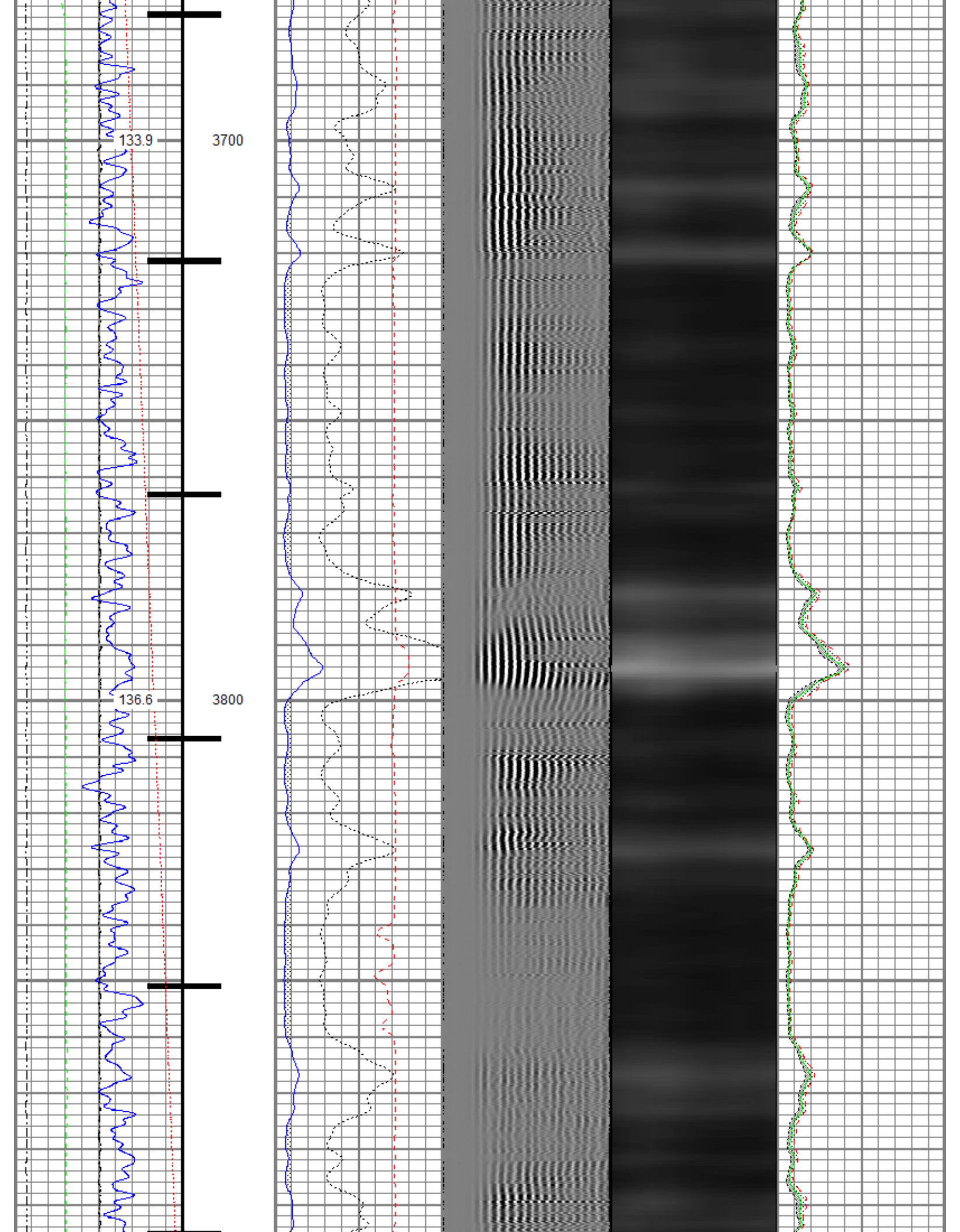




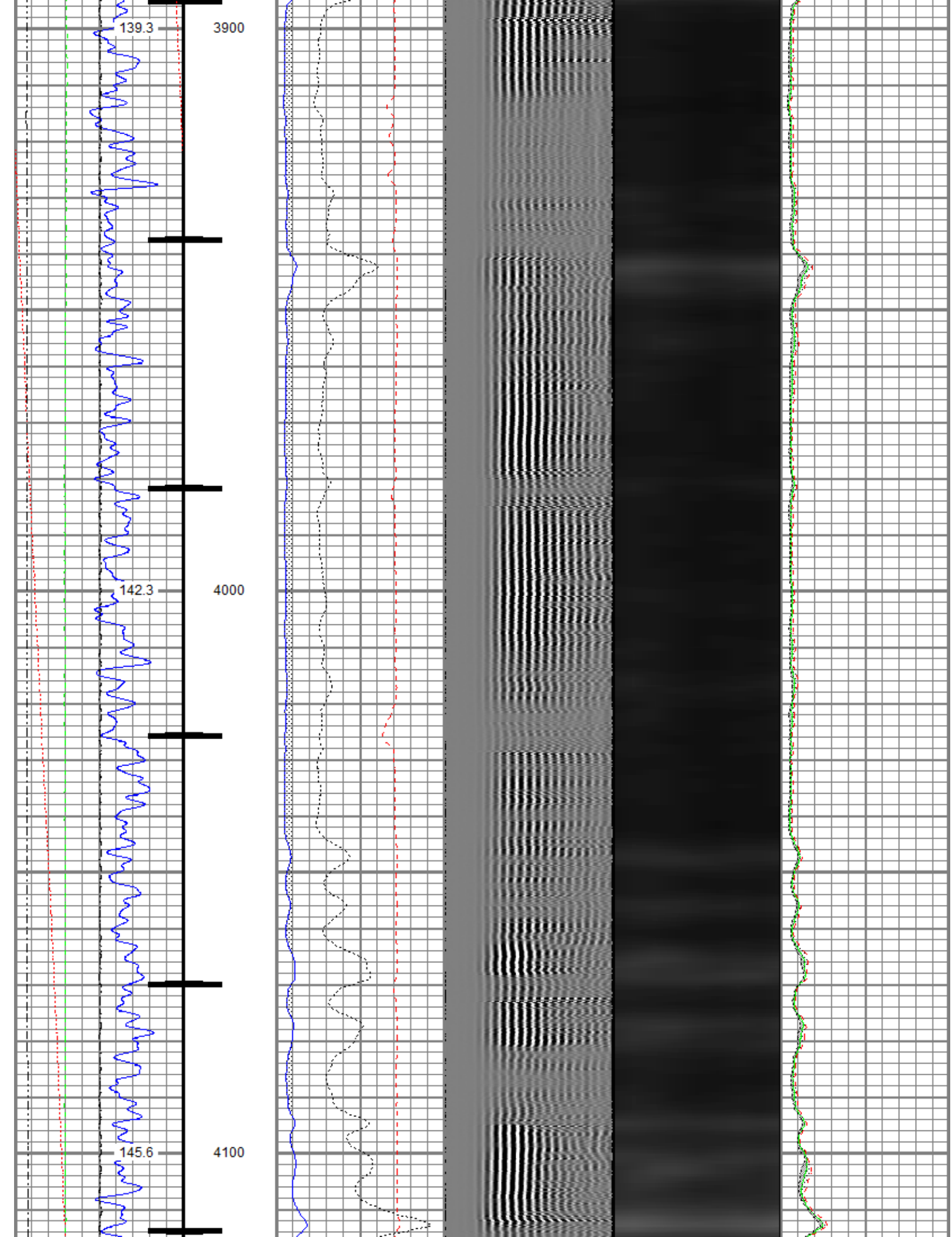


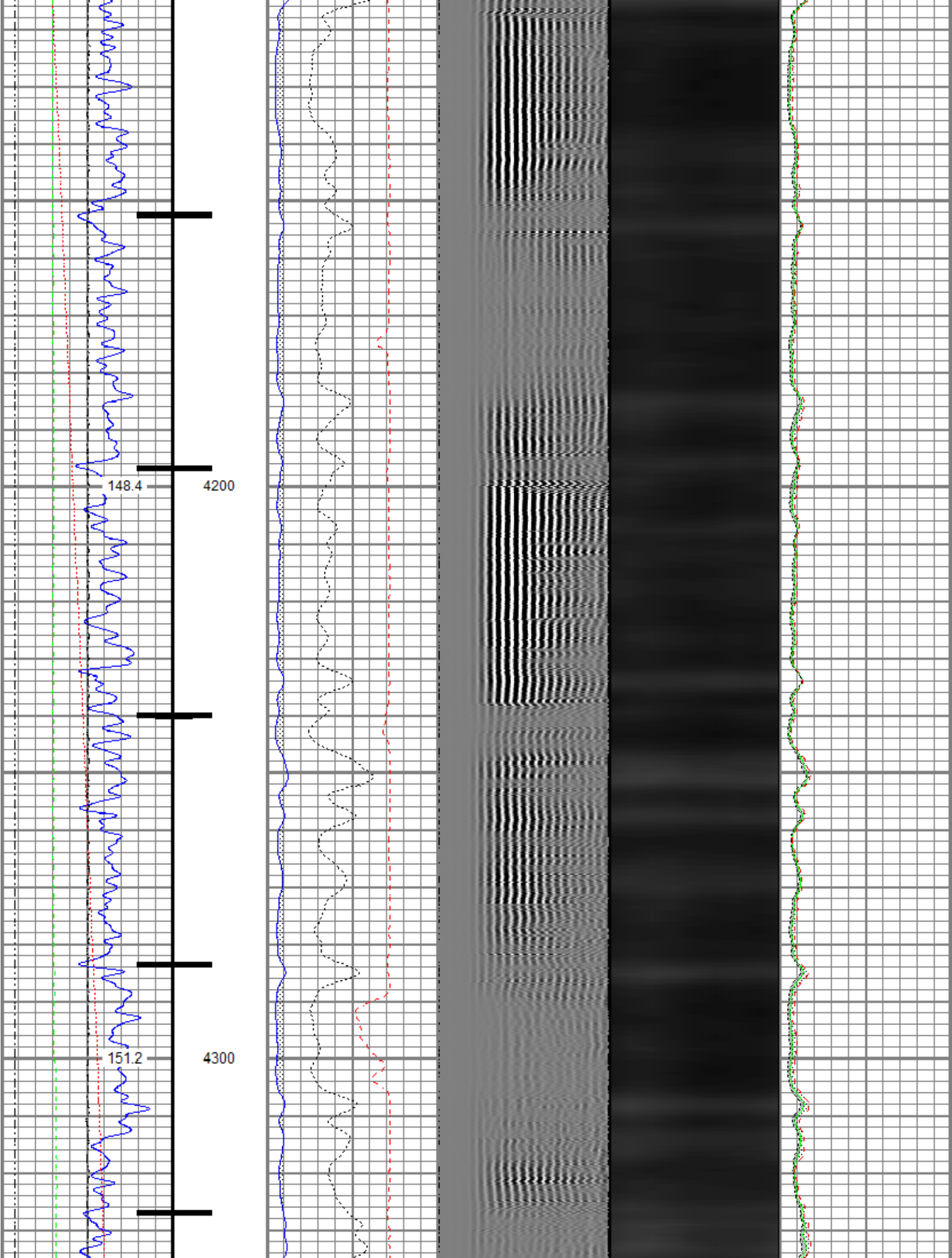


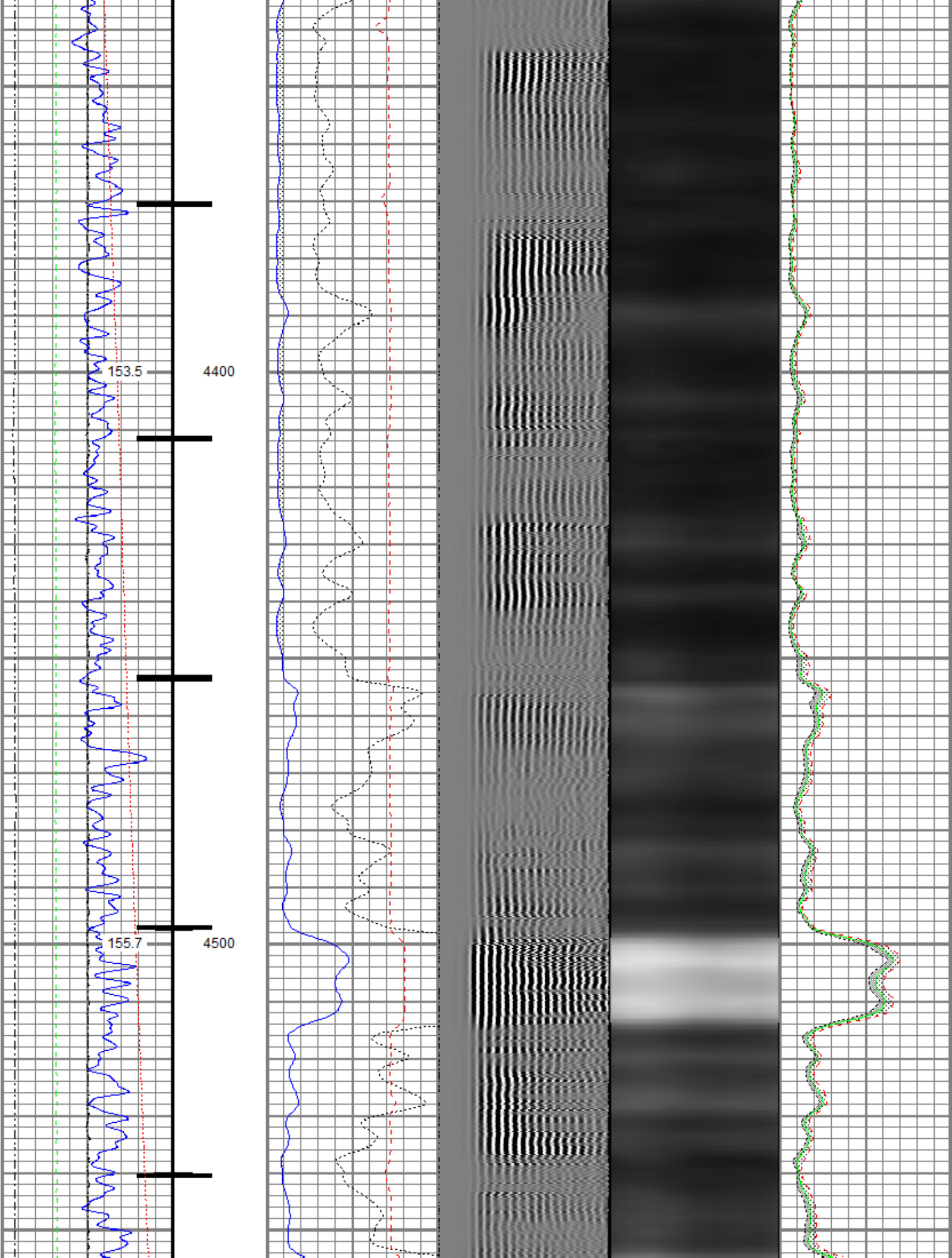




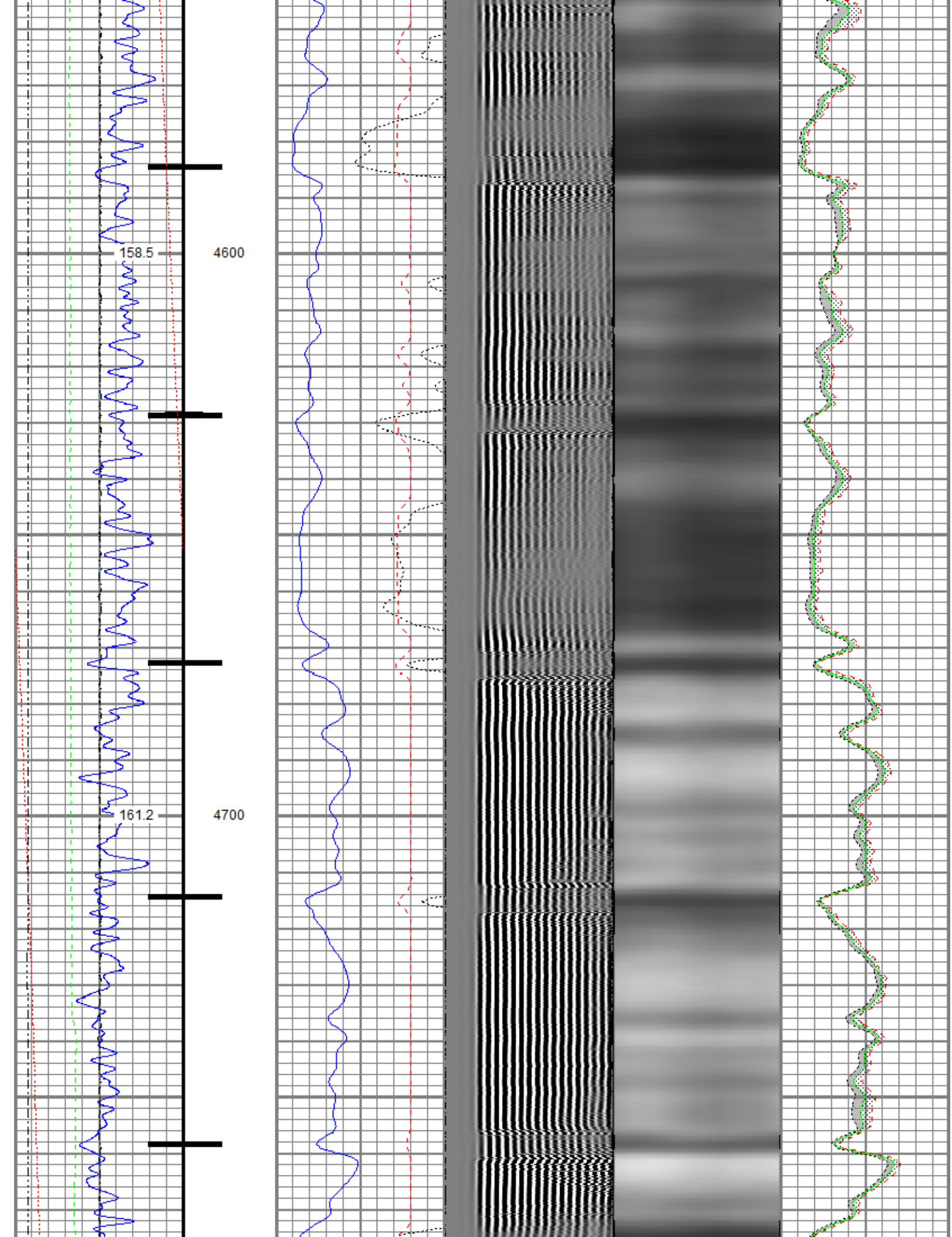


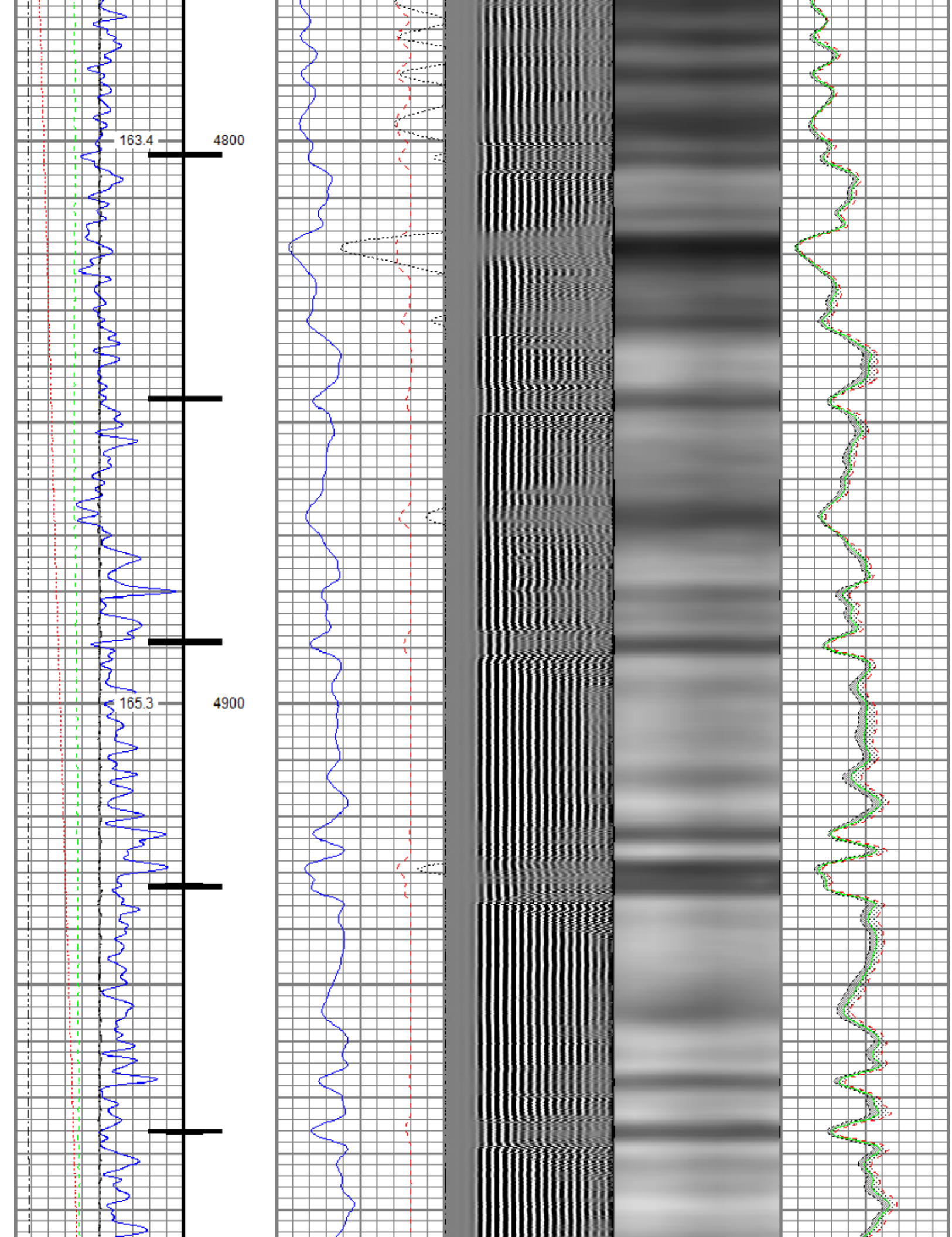


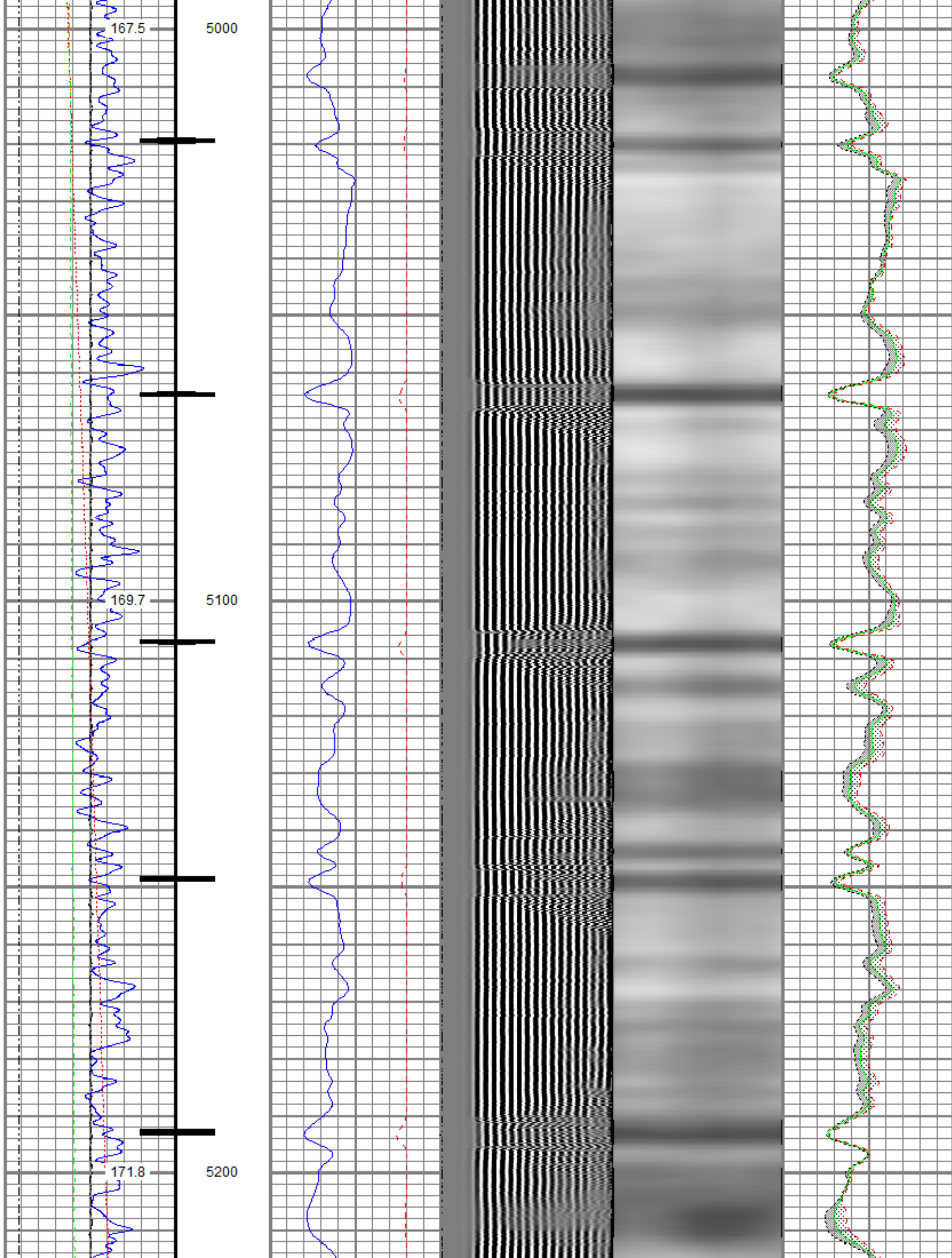




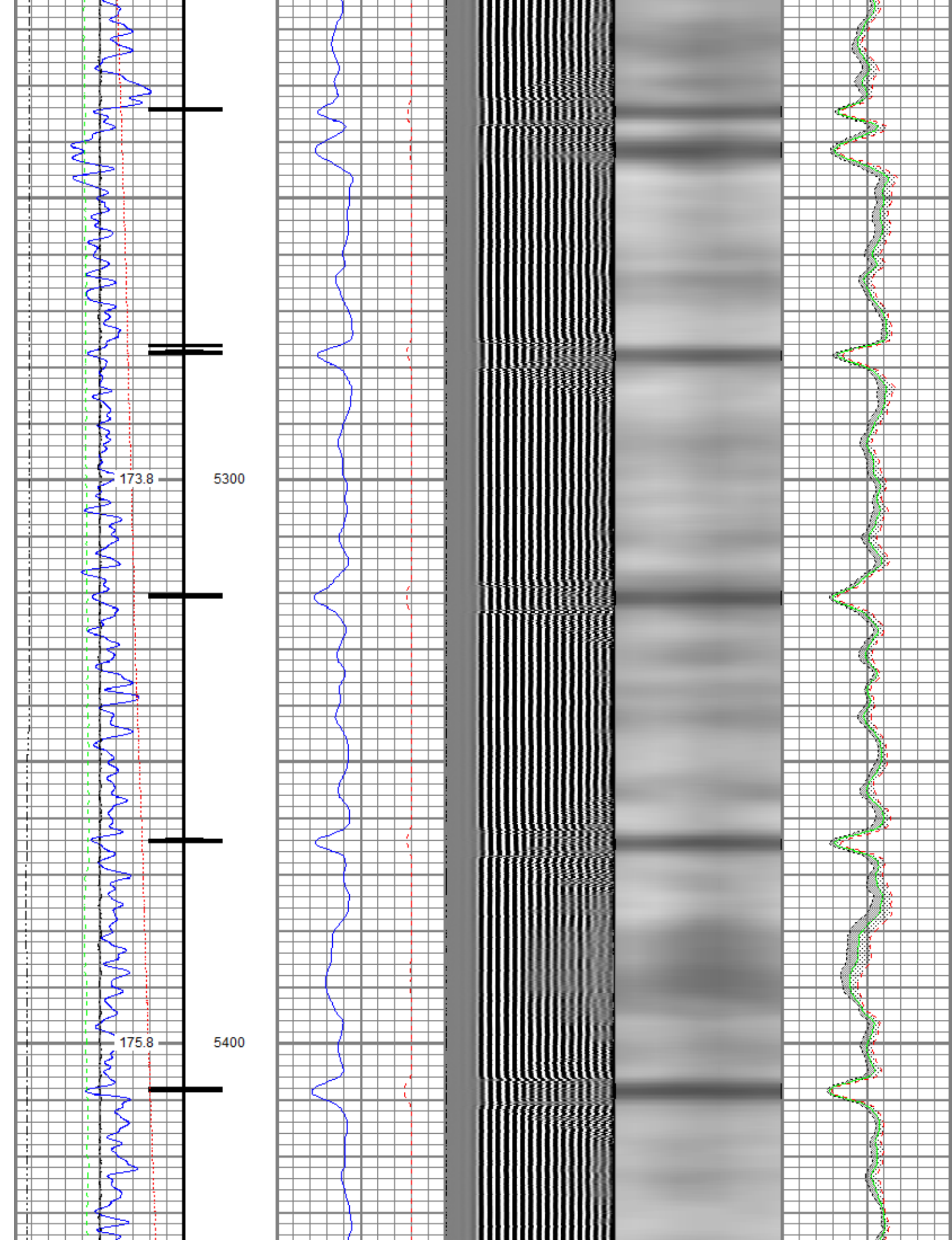


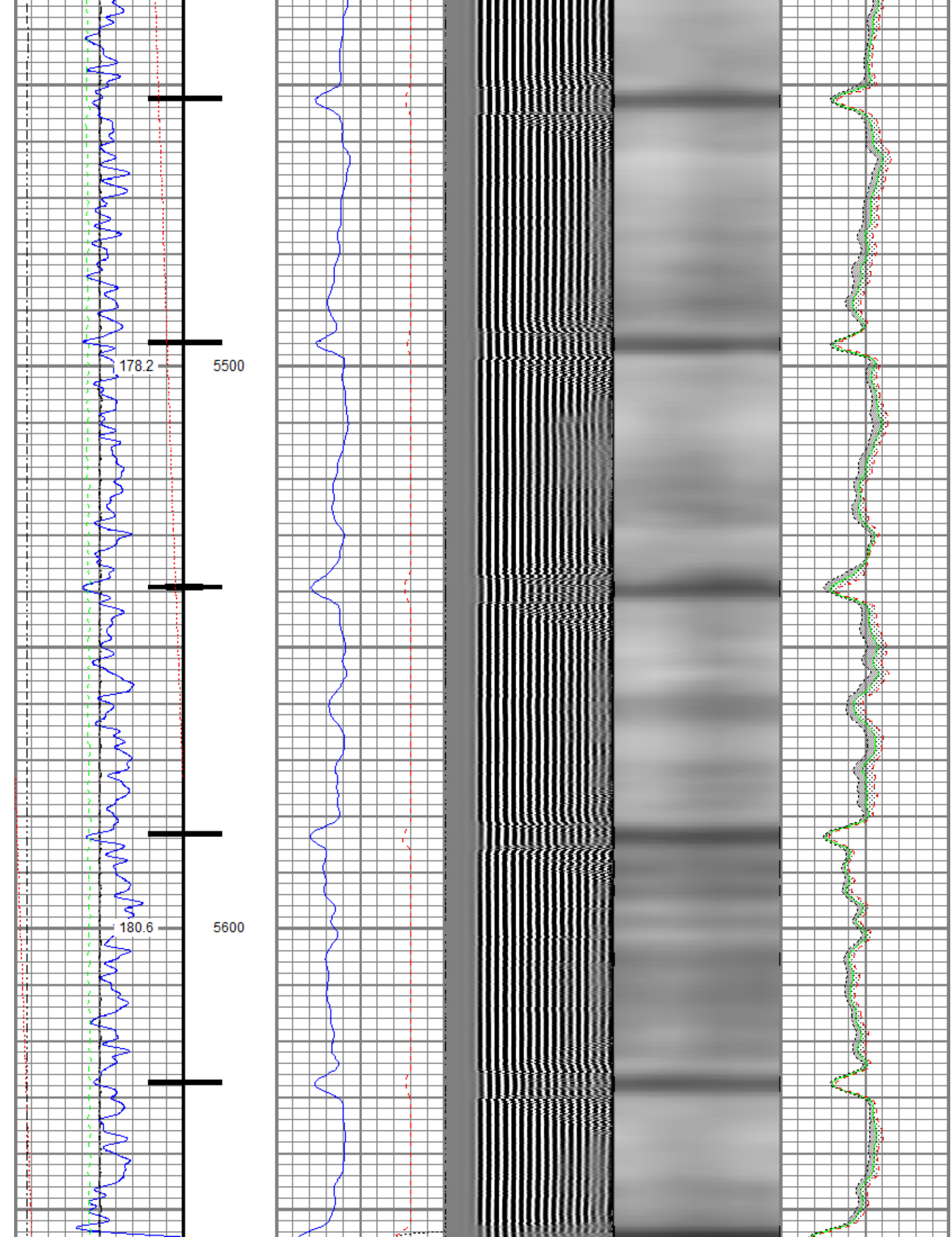


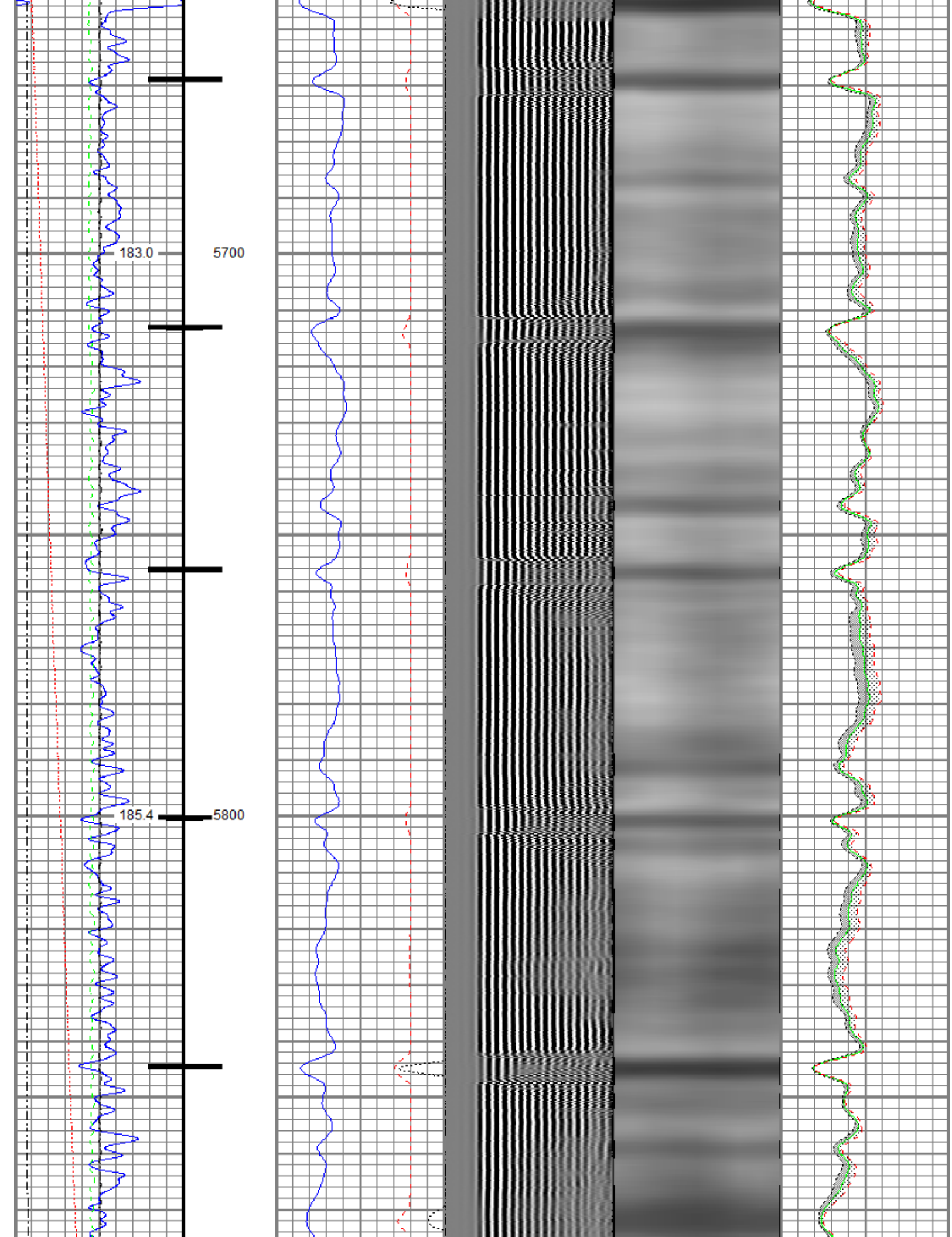




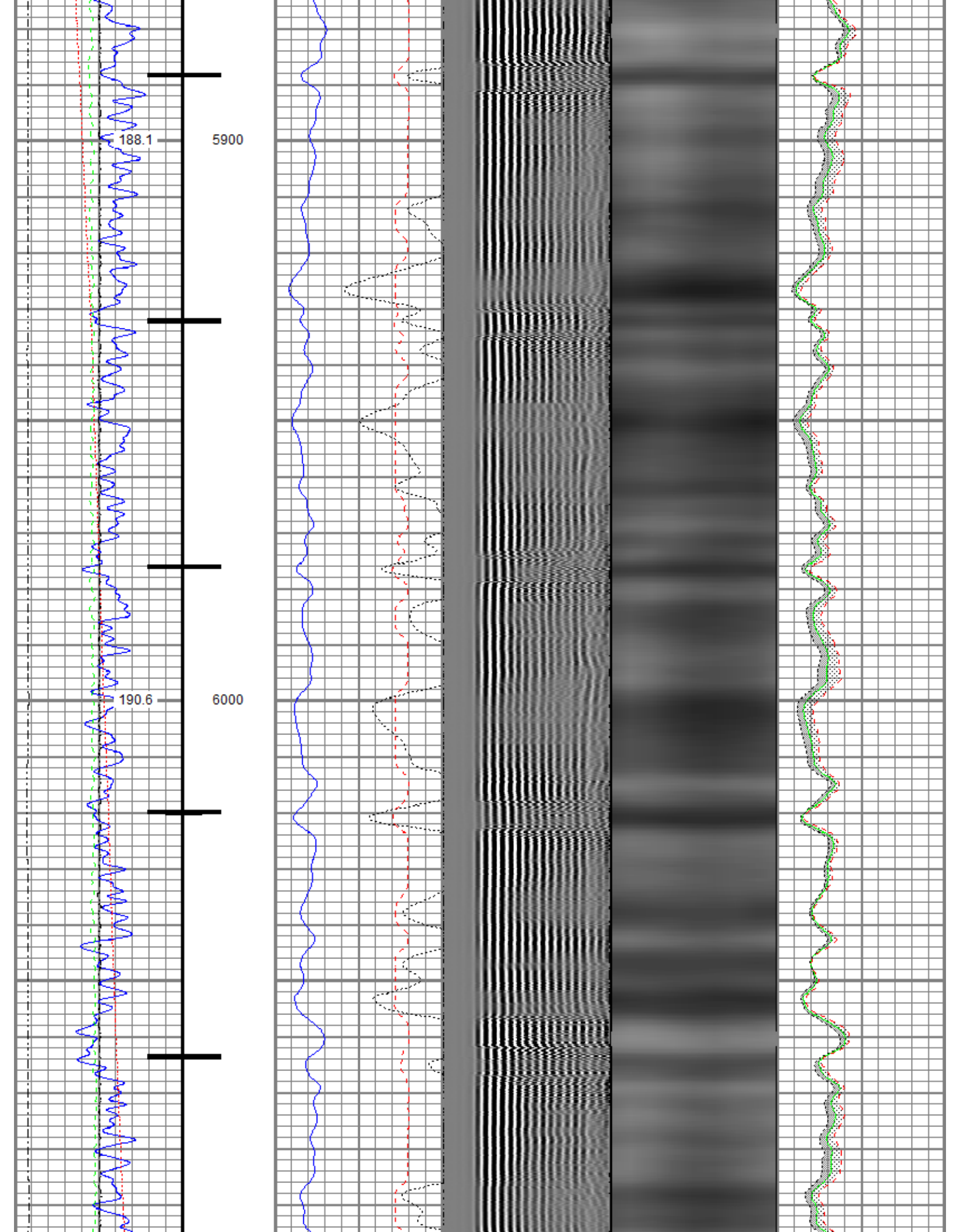


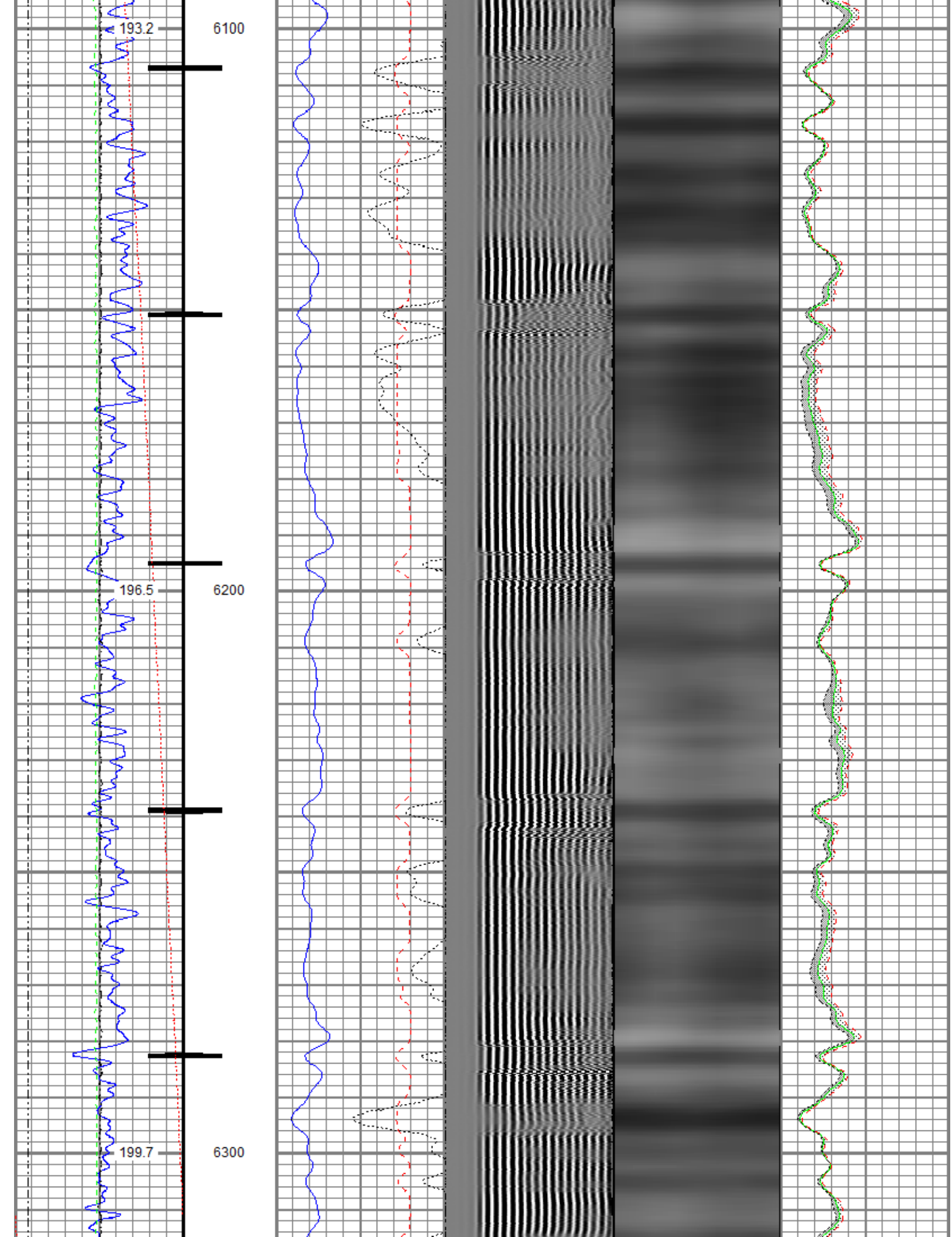


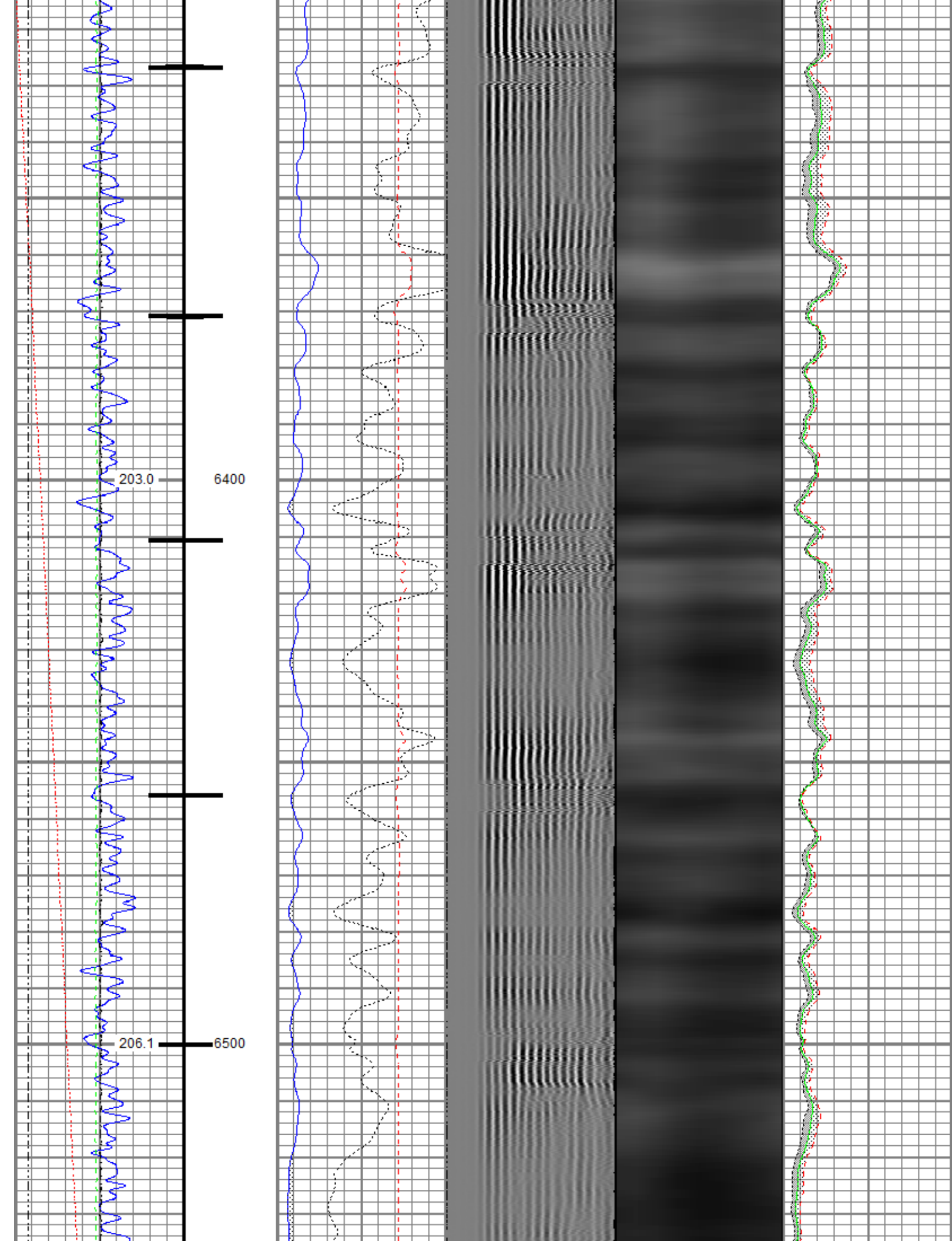




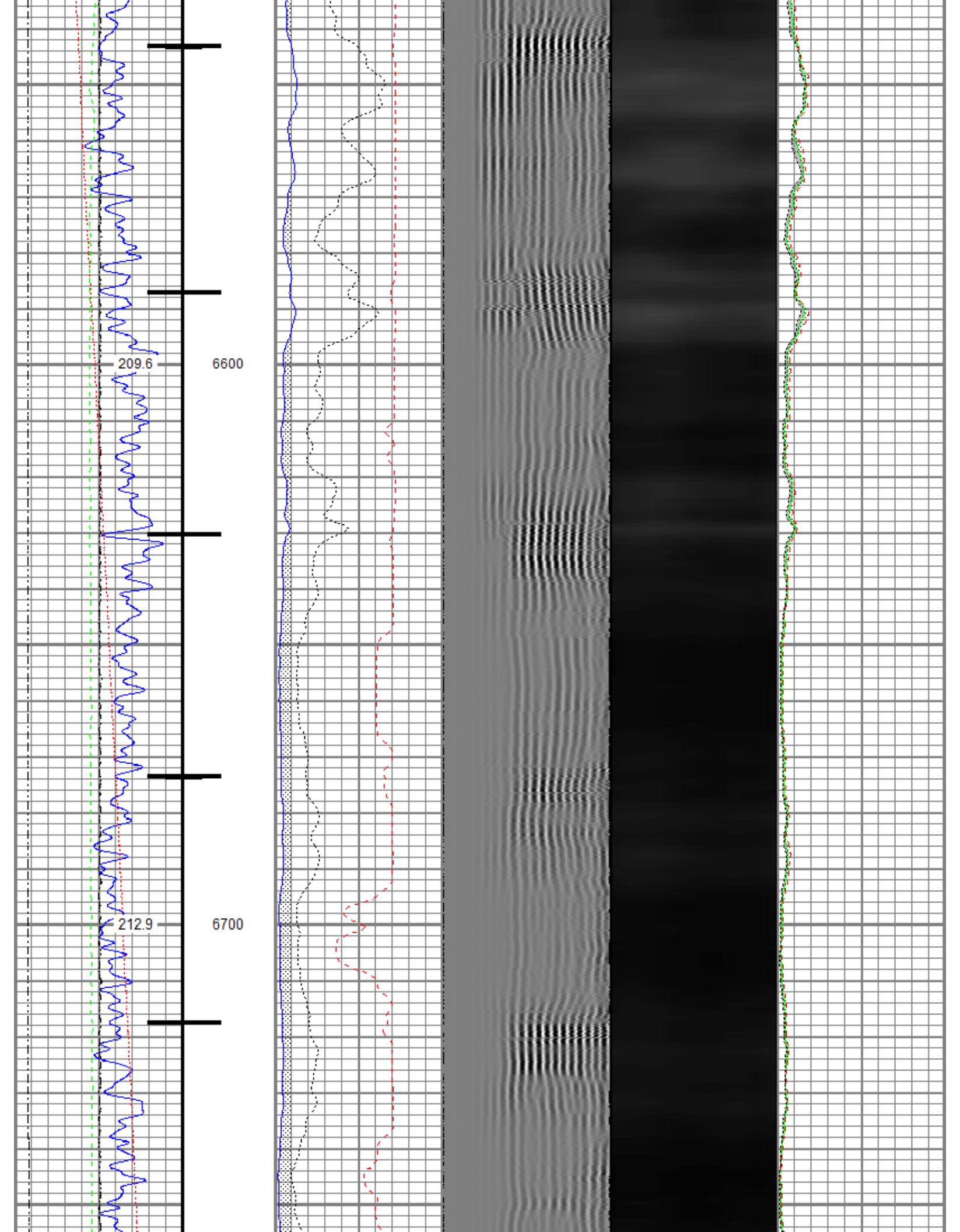


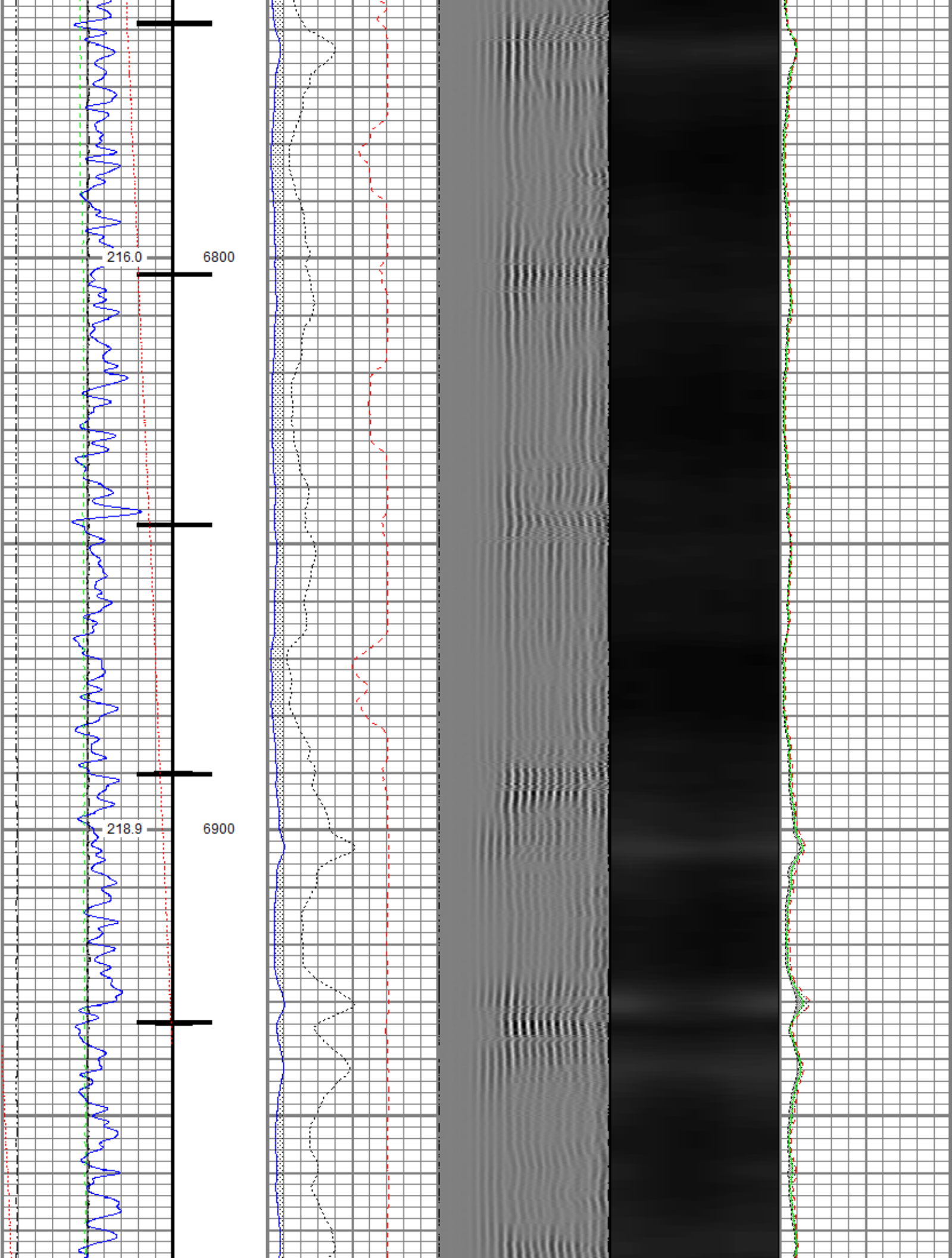






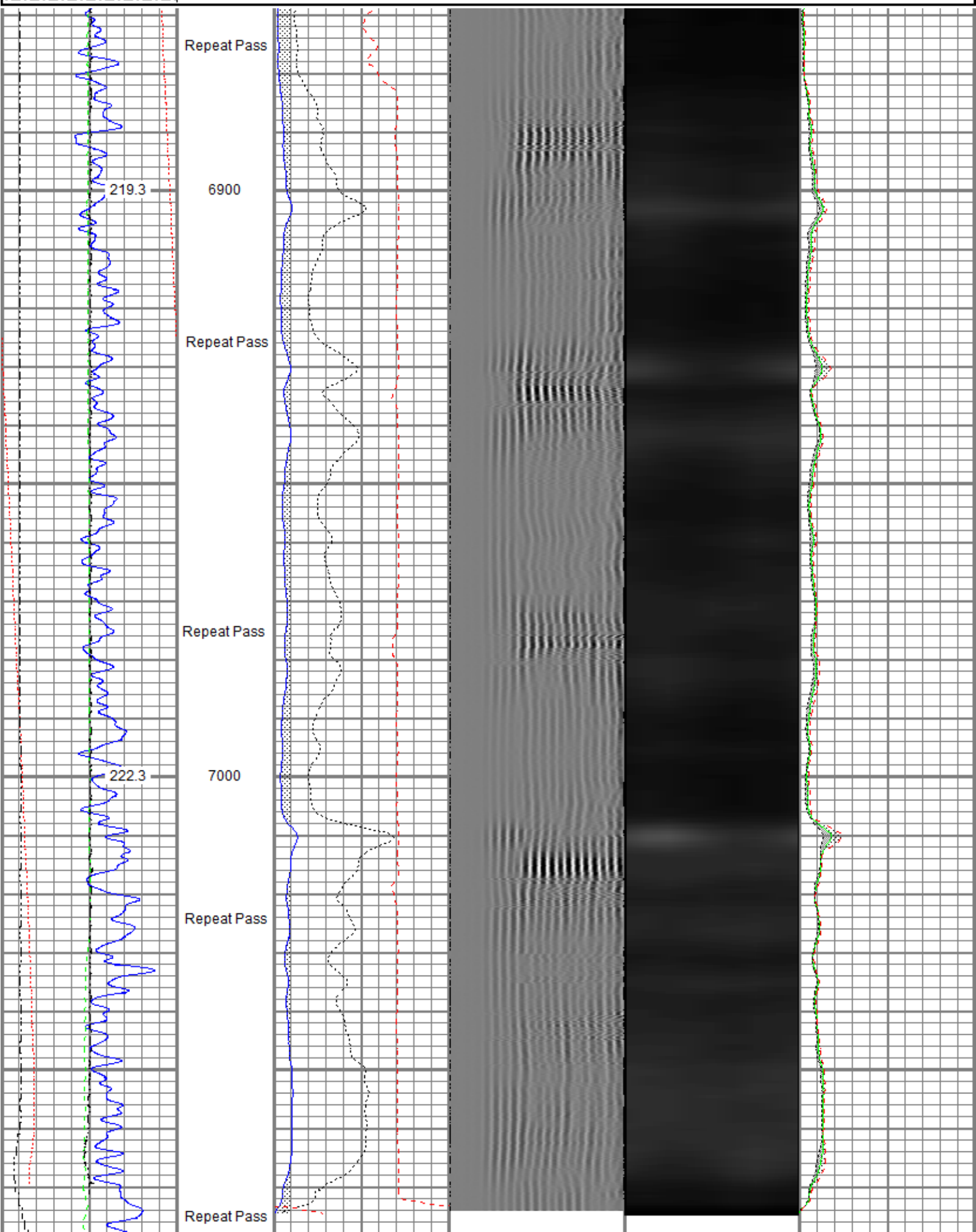


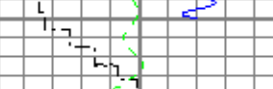










							
Gamma Ray		0	3' Amplitude (mV)	100	5' Variable Density Log	Sector Map	0
0	(GAPI)	120	3' Amplitude x 5	200	1200		Average Amplitude 100
0 Temperature (degF) 20		0	(mV)	20			Minimum Amplitude
Line Speed			3' Travel Time				Maximum Amplitude
-150	(ft/min)	150	650	(usec)	150		0
0 Line Tension (lb) 2000							100
Differential Temperature							
-2	(degF)	2					

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Titan CHD-14375 GO Titan 1-7/16" Assembled Electric Cable Head w/ 1" Fishing Neck	1.03	1.44	3.60
			Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00
TEMP	17.04					
WVFS8	14.81		Probe Radii-2750 RBT (120855) Probe 2-3/4" Radial Cement Bond Tool with Integral Temperature Sub	9.39	2.75	105.00
WVFS7	14.81					
WVFS6	14.81					
WVFS5	14.81					
WVFS4	14.81					
WVFS3	14.81					
WVFS2	14.81					
WVFS1	14.81					
WVFCAL	14.81					
WVF3FT	14.81					
WVF5FT	13.81					
			Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00
CCL\$2	6.80					
CCL\$1	6.80					
GR	5.46		Probe GR-CCL-2750 6PB (FW1810-044) Probe 2-3/4" rev.1 Digital Scintillation Gamma Ray/CCL Combined with 6 Pin Bottom for CNT	4.80	2.75	55.00



Probe CENT-2750  
Probe 2-3/4" Electric Inline Bowspring Centralizer

2.88

2.75

20.00

Dataset: processed\_0512348445\_anadarko\_buddy 7-14hz\_rbl\_07-21-19.db: field/well/RCBL\_2800PSI/Main.5  
Total length: 23.86 ft  
Total weight: 223.60 lb  
O.D.: 2.75 in

#### Calibration Report

Database File c:\programdata\warrior\data\anadarko\0512348445\_anadarko\_buddy 7-14hz\_rbl\_07-21-19\processed\_0512348445\_anadarko\_5  
Dataset Pathname RCBL\_2800PSI/Main.5  
Dataset Creation Tue Jul 23 09:52:57 2019

#### Gamma Ray Calibration Report

Serial Number: FW1810-044  
Tool Model: 2750 6PB  
Performed: Sat Nov 10 12:23:27 2018  
  
Calibrator Value: 637.0 GAPI  
  
Background Reading: 105.3 cps  
Calibrator Reading: 1221.0 cps  
  
Sensitivity: 0.5709 GAPI/cps

#### Segmented Cement Bond Log Calibration Report

Serial Number: 120855  
Tool Model: 2750 RBT  
  
Calibration Casing Diameter: 5.500 in  
Calibration Depth: 37.871 ft

#### Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.001	0.483	0.800	71.921	147.598	0.591
CAL	0.668	0.668				
5'	0.001	0.449	0.800	71.921	158.974	0.608
SUM						
S1	0.002	0.478	0.000	100.000	210.128	-0.502
S2	0.002	0.489	0.000	100.000	205.251	-0.317
S3	0.002	0.504	0.000	100.000	199.052	-0.325
S4	0.001	0.509	0.000	100.000	196.885	-0.256
S5	0.002	0.514	0.000	100.000	195.276	-0.355
S6	0.002	0.504	0.000	100.000	199.220	-0.314
S7	0.002	0.483	0.000	100.000	207.746	-0.351
S8	0.002	0.477	0.000	100.000	210.415	-0.457

#### Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.668	0.668	1.000	0.000



Air Zero Calibration, performed Sun Jul 21 06:28:28 2019:

	Raw (v)	Calibrated (v)	Results
	<u>Zero</u>	<u>Zero</u>	<u>Offset</u>
3'	0.005	0.000	-0.000
5'	0.005	0.000	0.001
SUM			
S1	0.003	0.000	0.001
S2	0.005	0.000	-0.000
S3	0.005	0.000	0.000
S4	0.006	0.000	-0.000
S5	0.005	0.000	0.000
S6	0.006	0.000	-0.000
S7	0.006	0.000	-0.000
S8	0.005	0.000	0.000

#### Temperature Calibration Report

Serial Number: 120855  
Tool Model: 2750 RBT  
Performed: Mon Oct 01 11:32:15 2018

	Reference	Reading
Low Reference:	100.00 degF	112.30 degF
High Reference:	350.00 degF	394.75 degF
Gain:	0.89	
Offset:	0.60	
Delta Spacing	1	



Company	Kerr-McGee Oil & Gas Onshore, L.P.
Well	Buddy 7-14HZ
Field	Wattenberg
County	Weld
State	Colorado