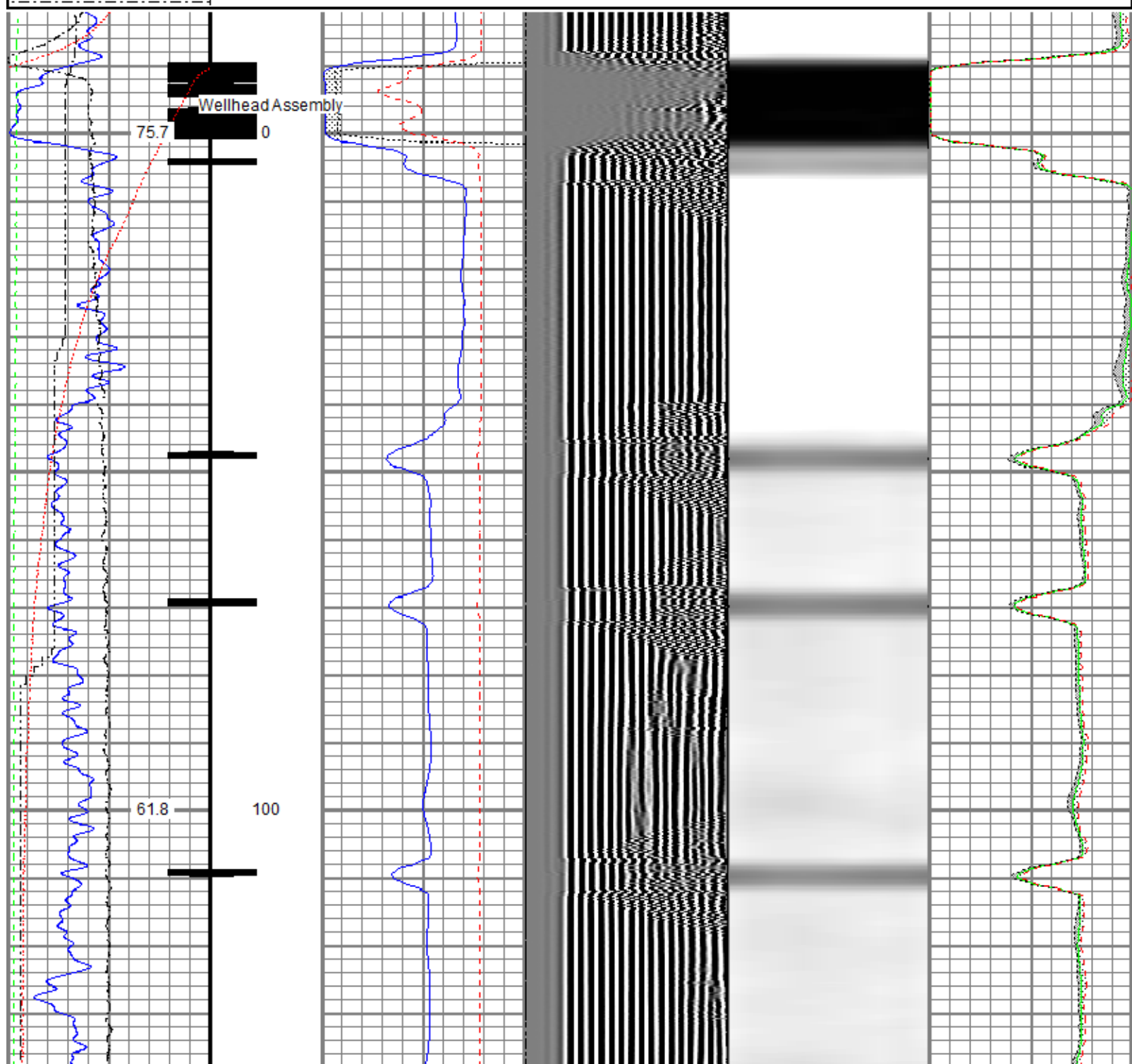
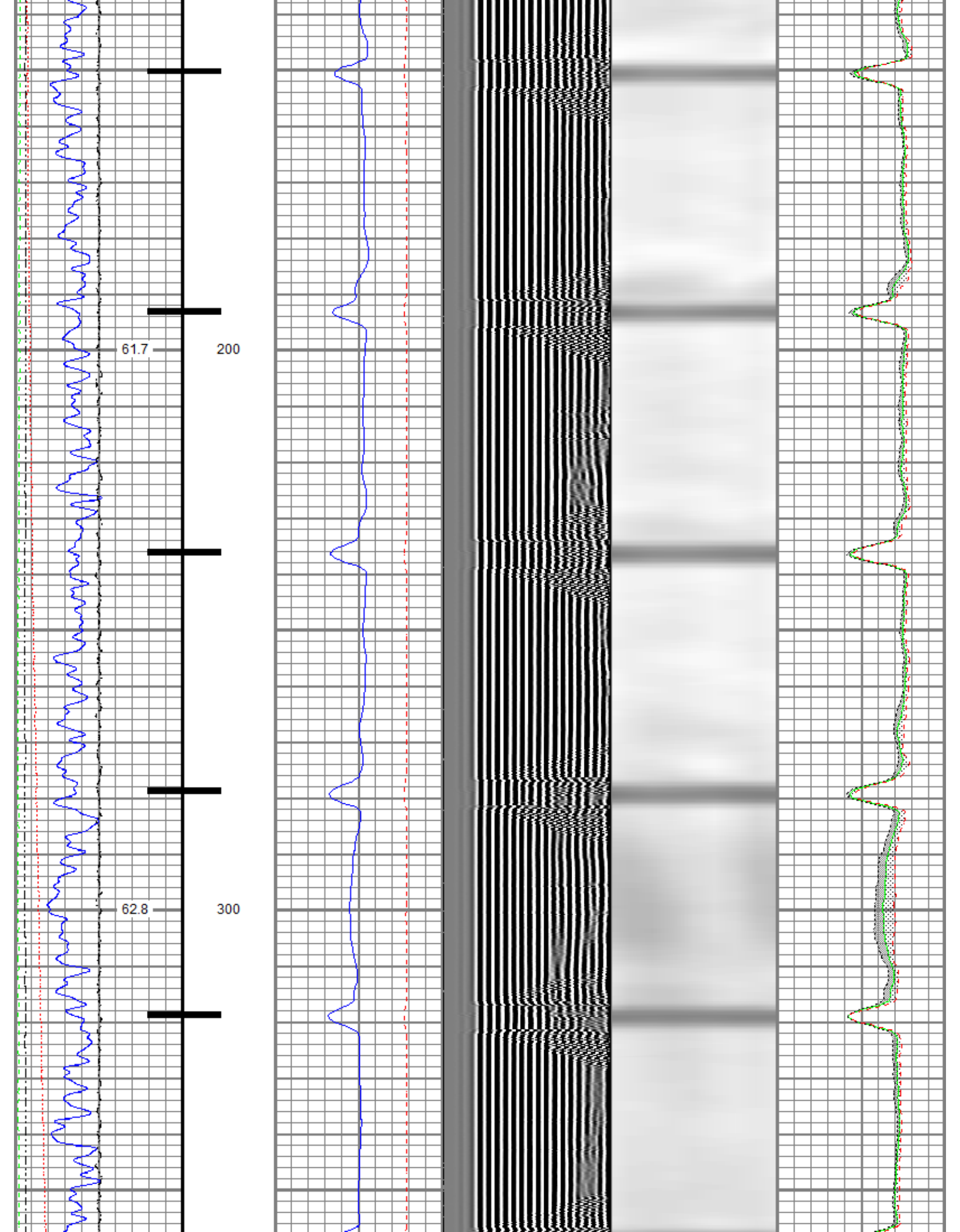


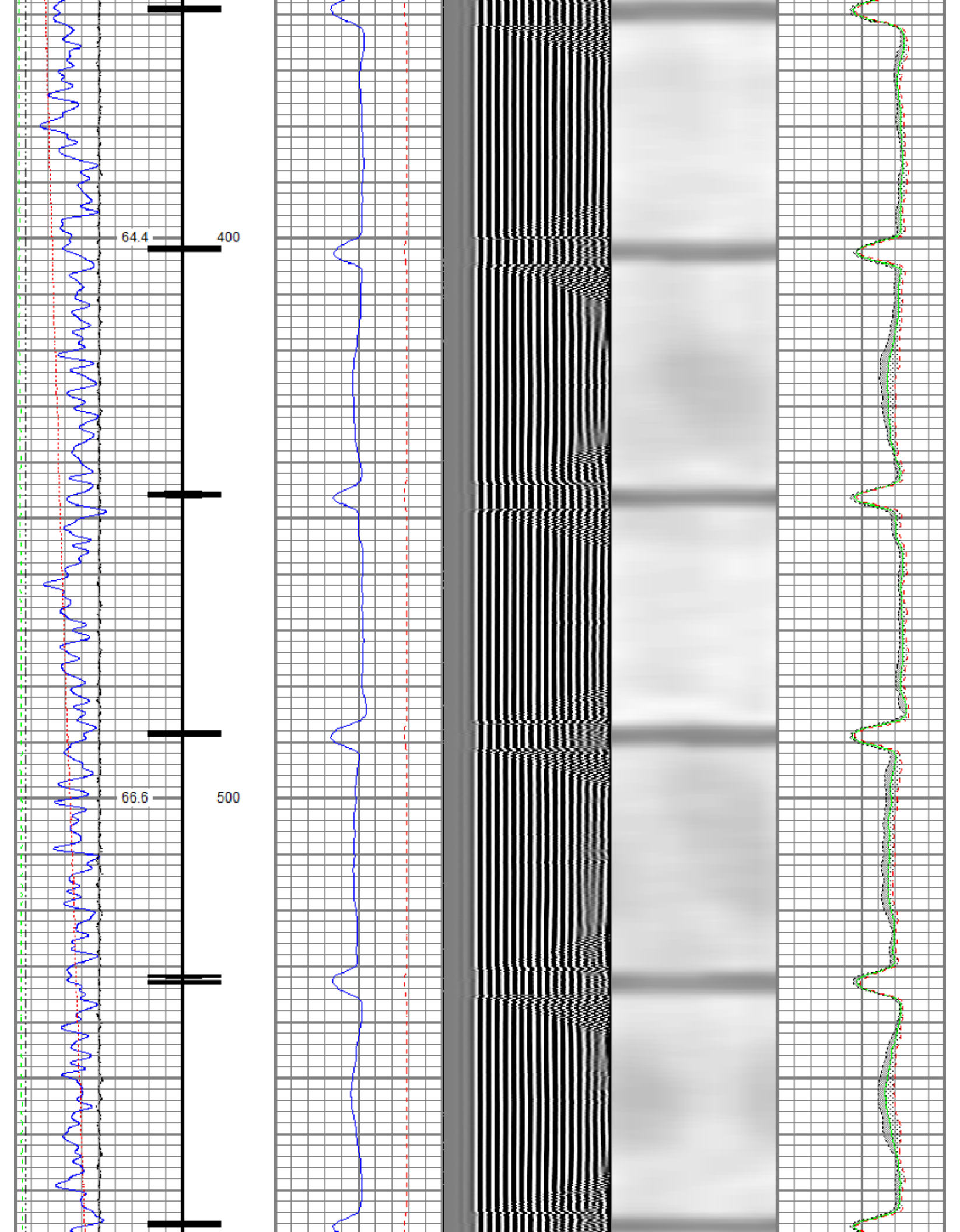
<<< Fold Here >>>
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible 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
<p>Log ran as per customer request Depth referenced to Casing Tally reported Marker Joint Top at 6790 FT Adjusted -18 FT to correlate with Marker Joint Top Gauge Ring/Junk Basket ran to 7817 FT with no debris 5.50" RBP Set @ 6870 FT Log ran from 6860 FT to surface Recorded 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!!</p>

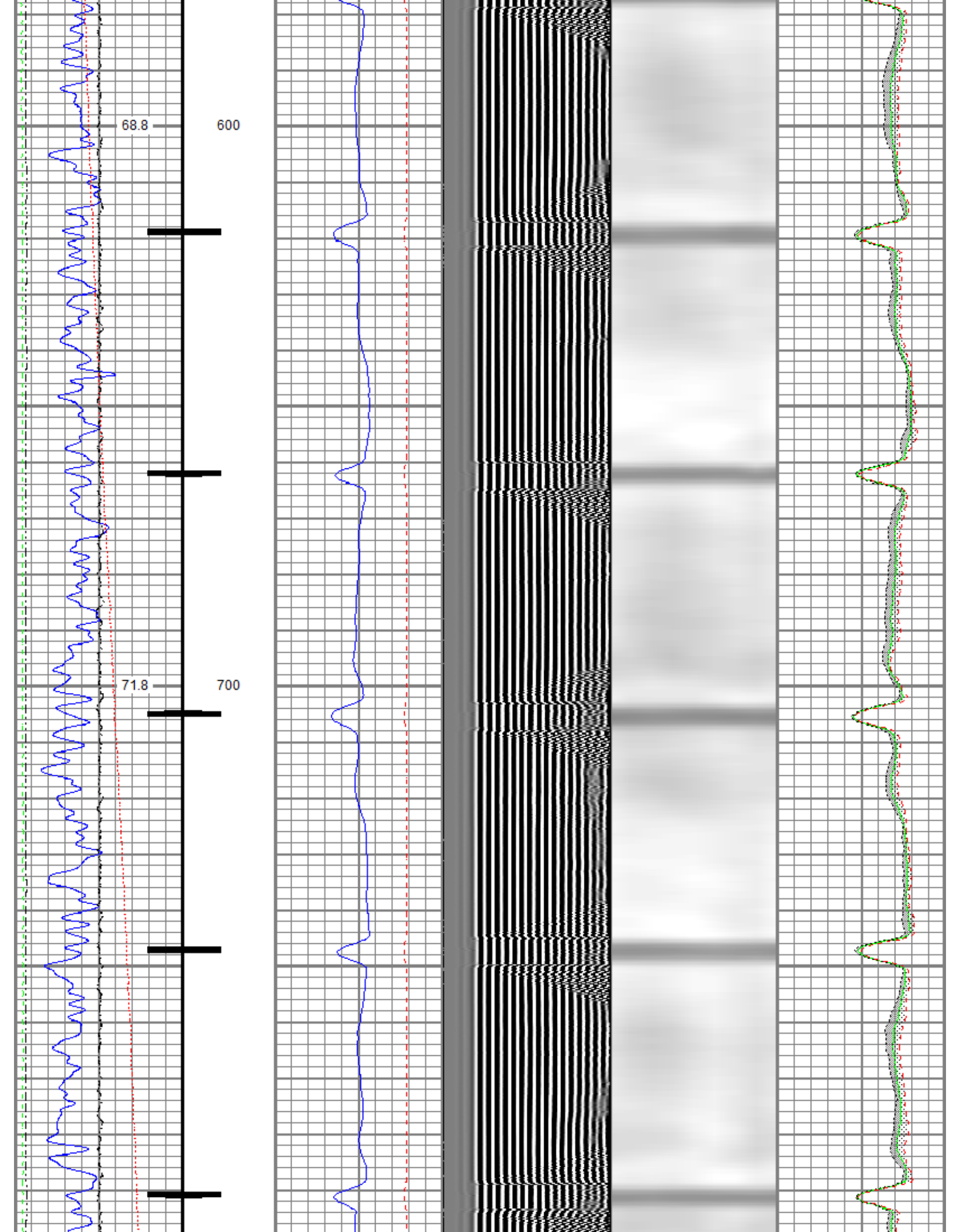
Database File anadarko_azul 13-20hz\processed_0512346104_anadarko_azul 13-20hz_rbl_07-03-18_2800 psi.db
 Dataset Pathname pass4
 Presentation Format ros_radri
 Dataset Creation Tue Jul 03 11:25:28 2018
 Charted by Depth in Feet scaled 1:240

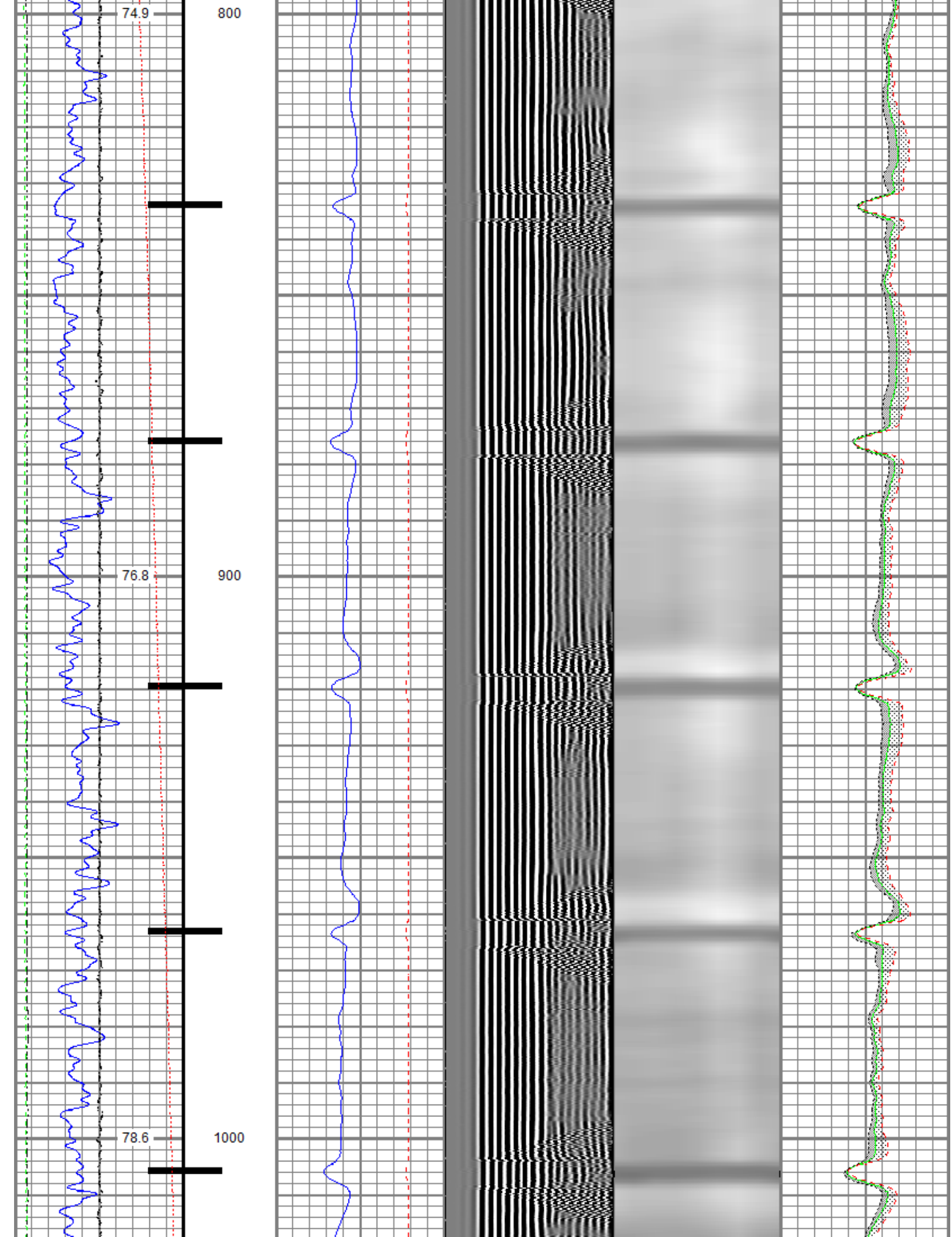
Gamma Ray	0	3' Amplitude (mV) 100	5' Variable Density Log	Sector Map	0	Average Amplitude 100
(GAPI) 120		3' Amplitude x 5	200			Minimum Amplitude
Casing Collar Locator	0	(mV) 20			0	100
Temperature (degF) 20		3' Travel Time				Maximum Amplitude
Line Speed	650	(usec) 150			0	100
(ft/min) 150						
Line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

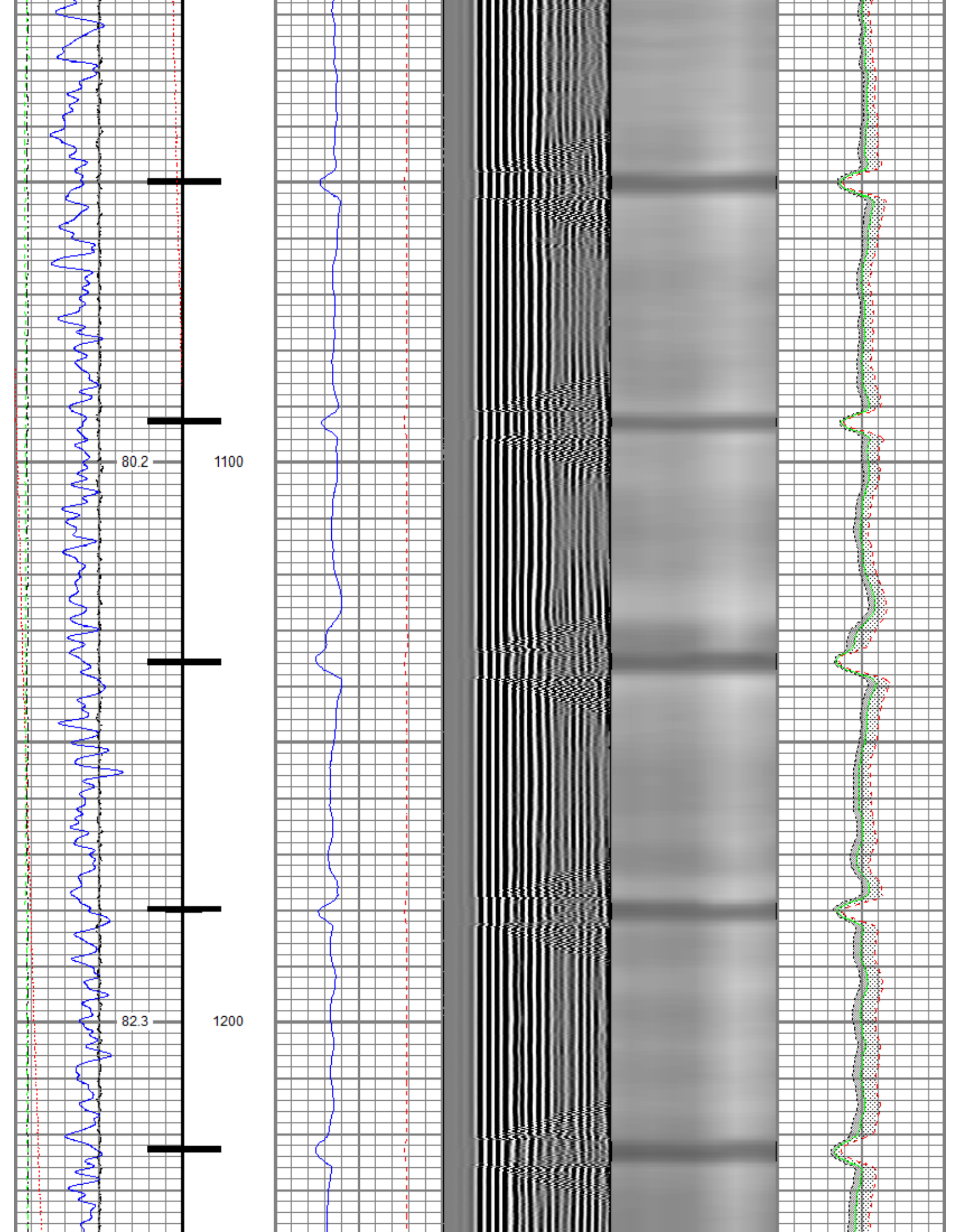


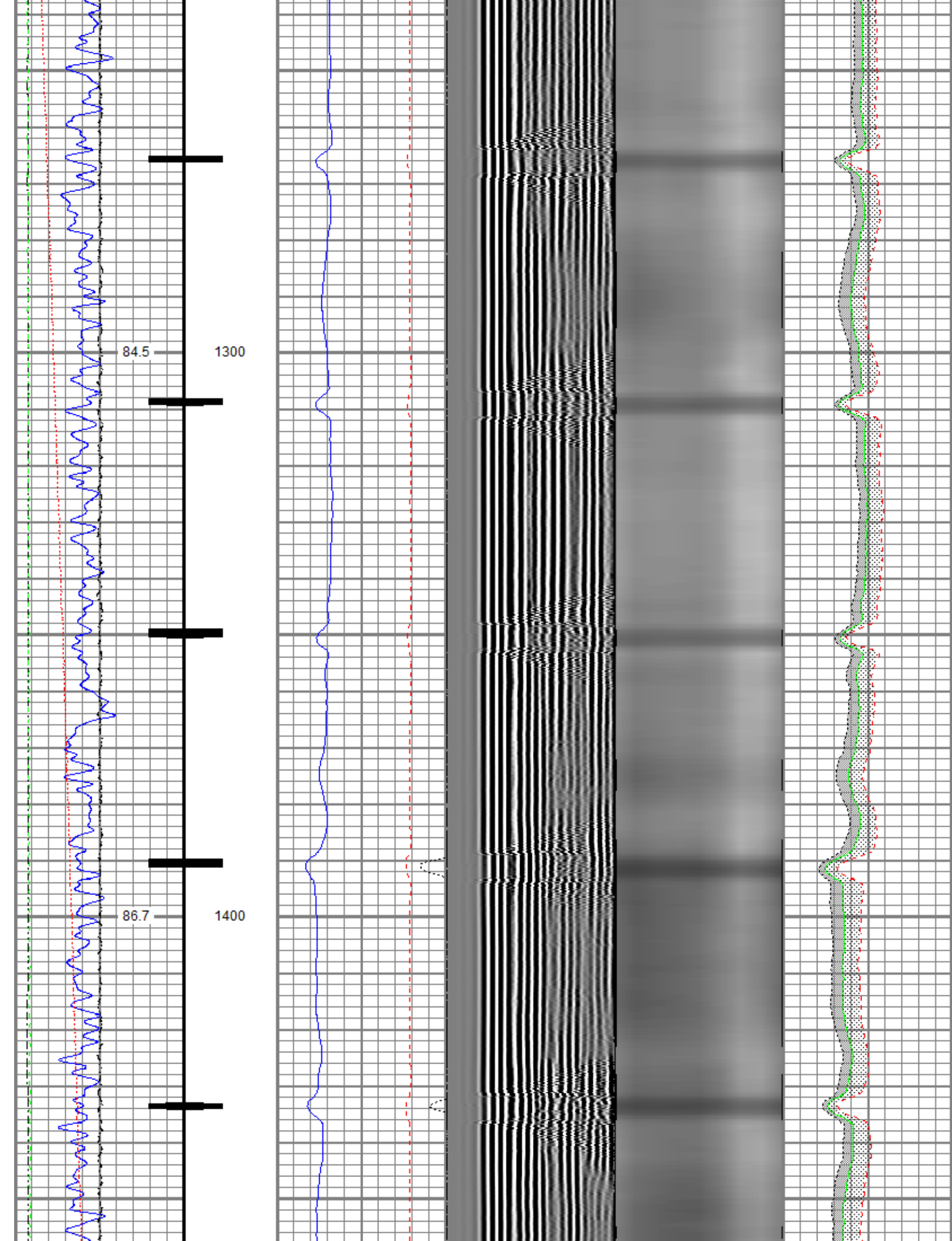


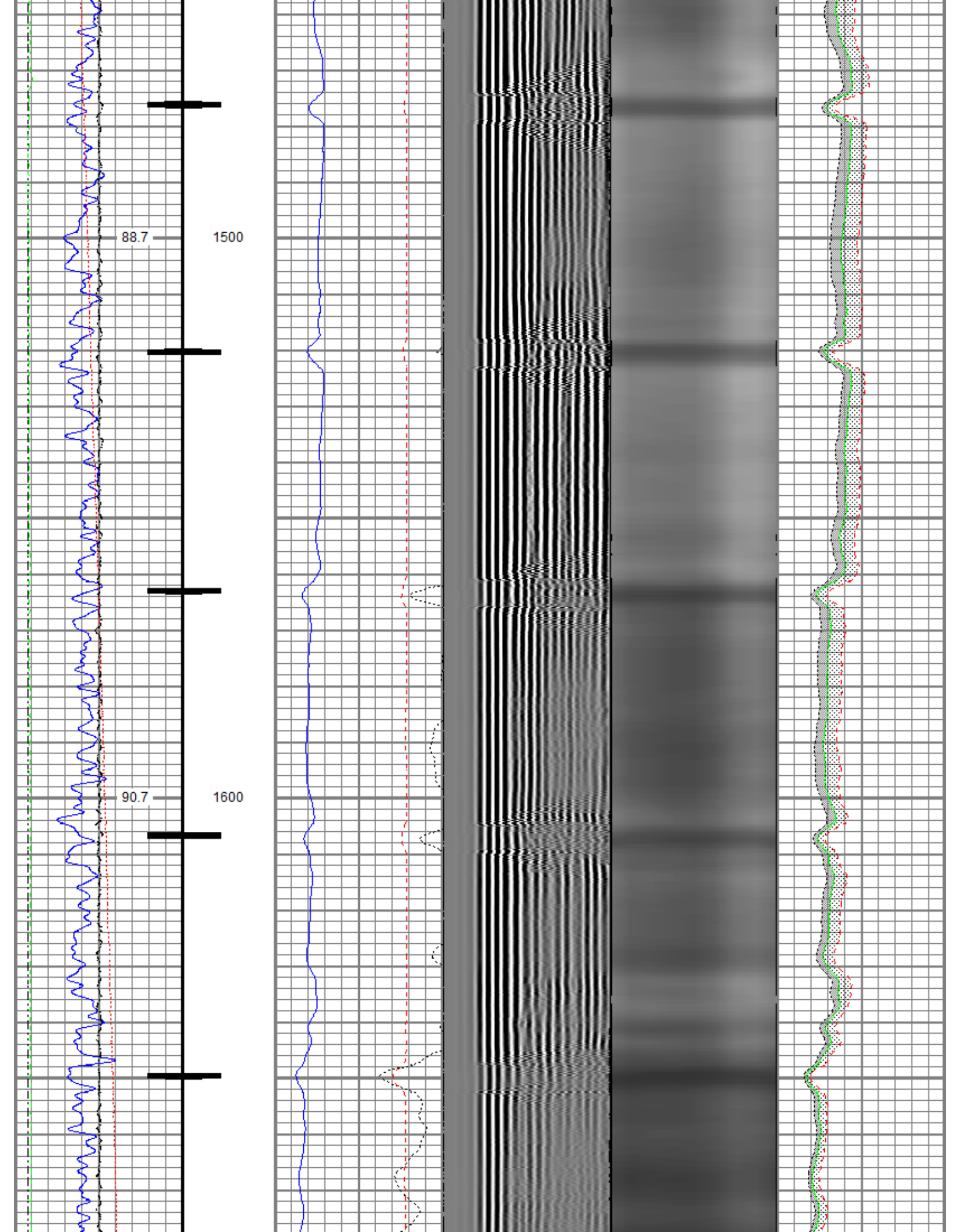


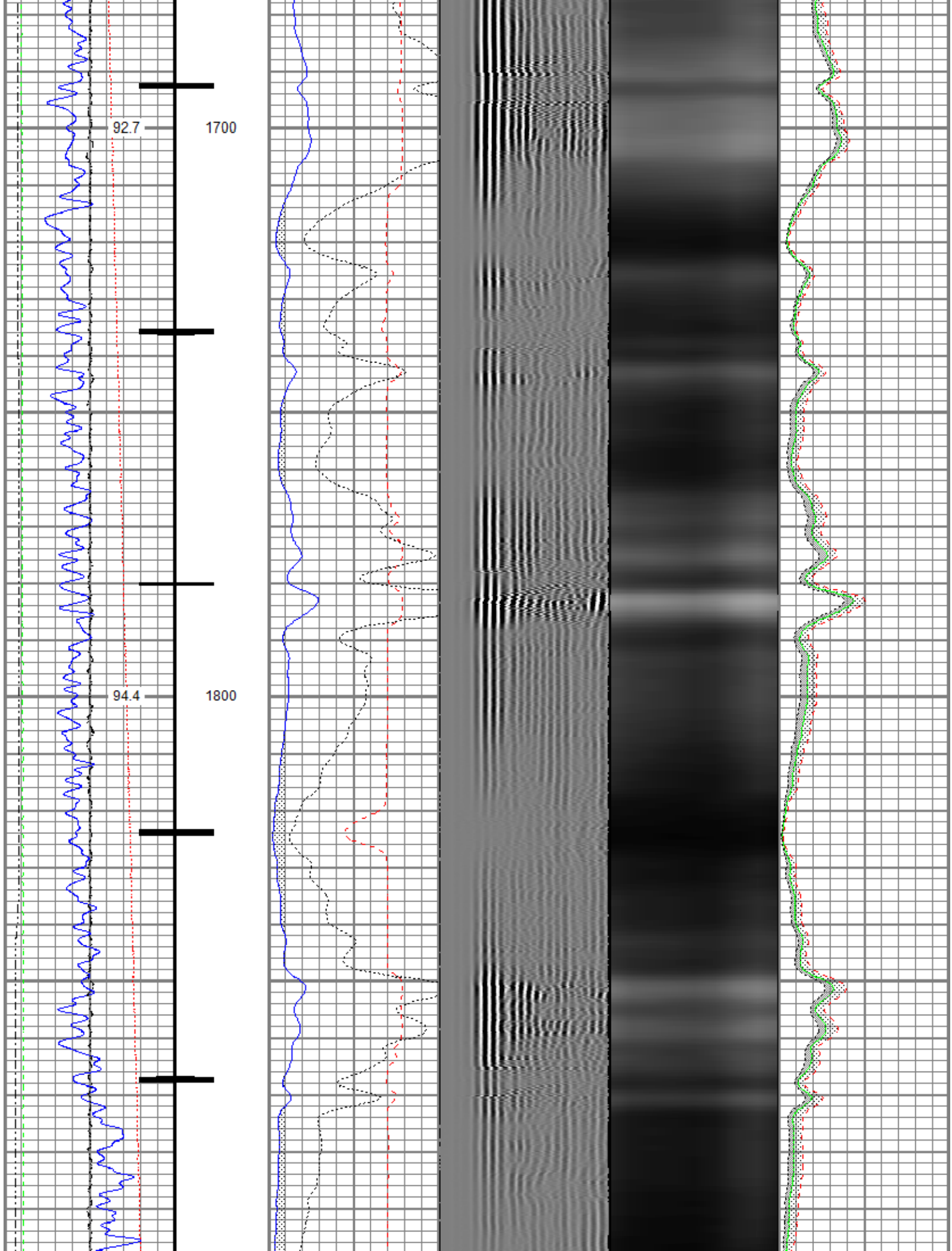


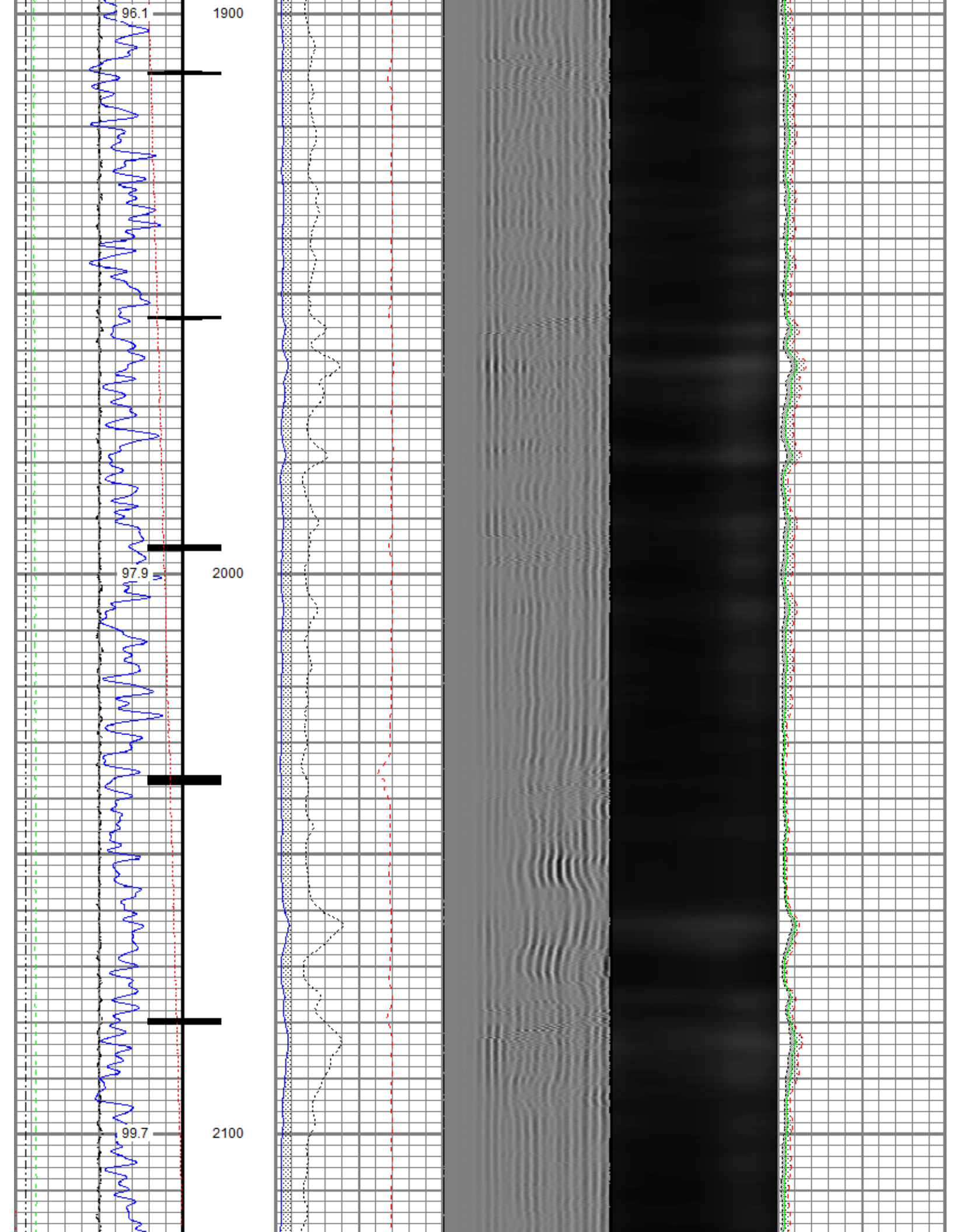


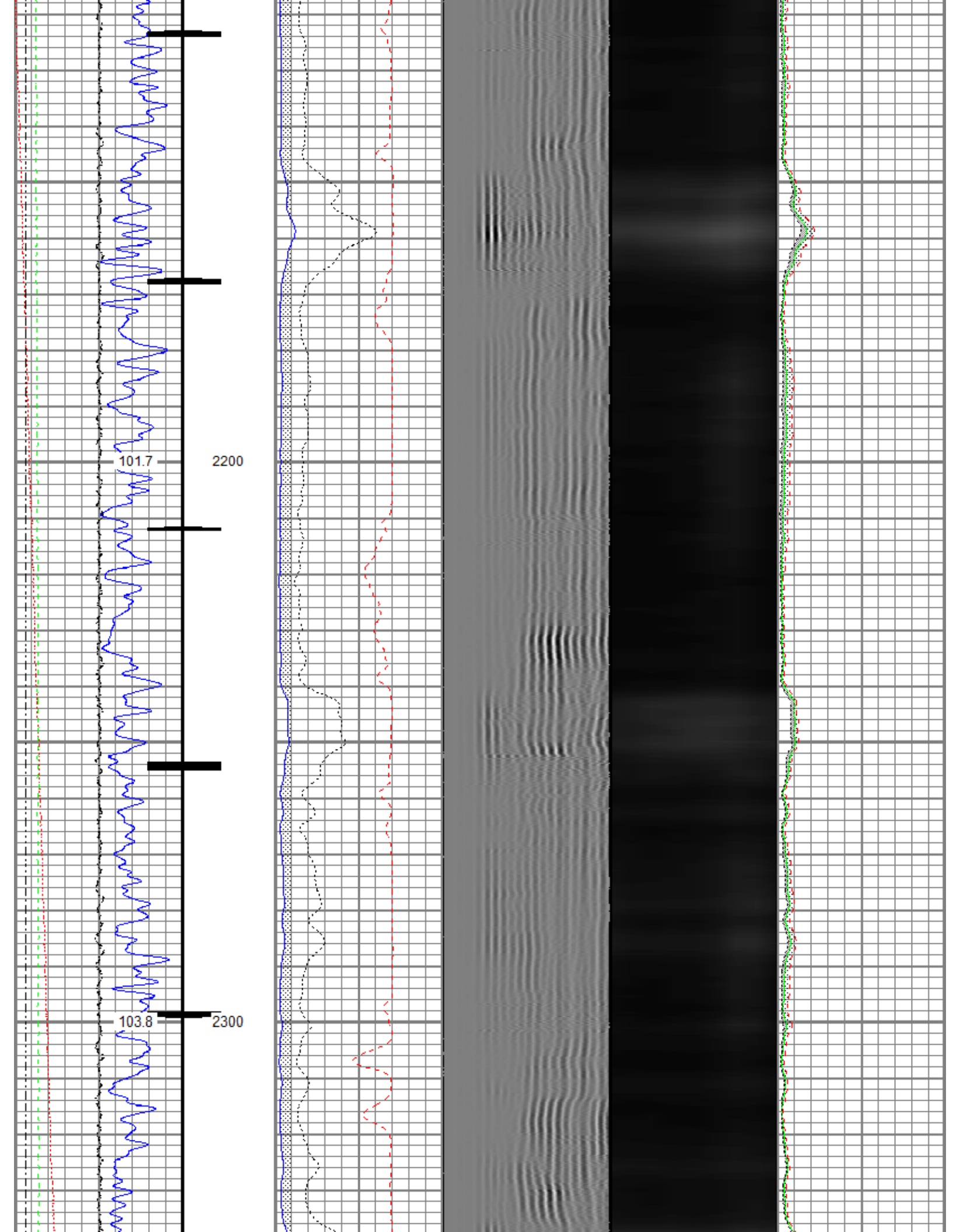


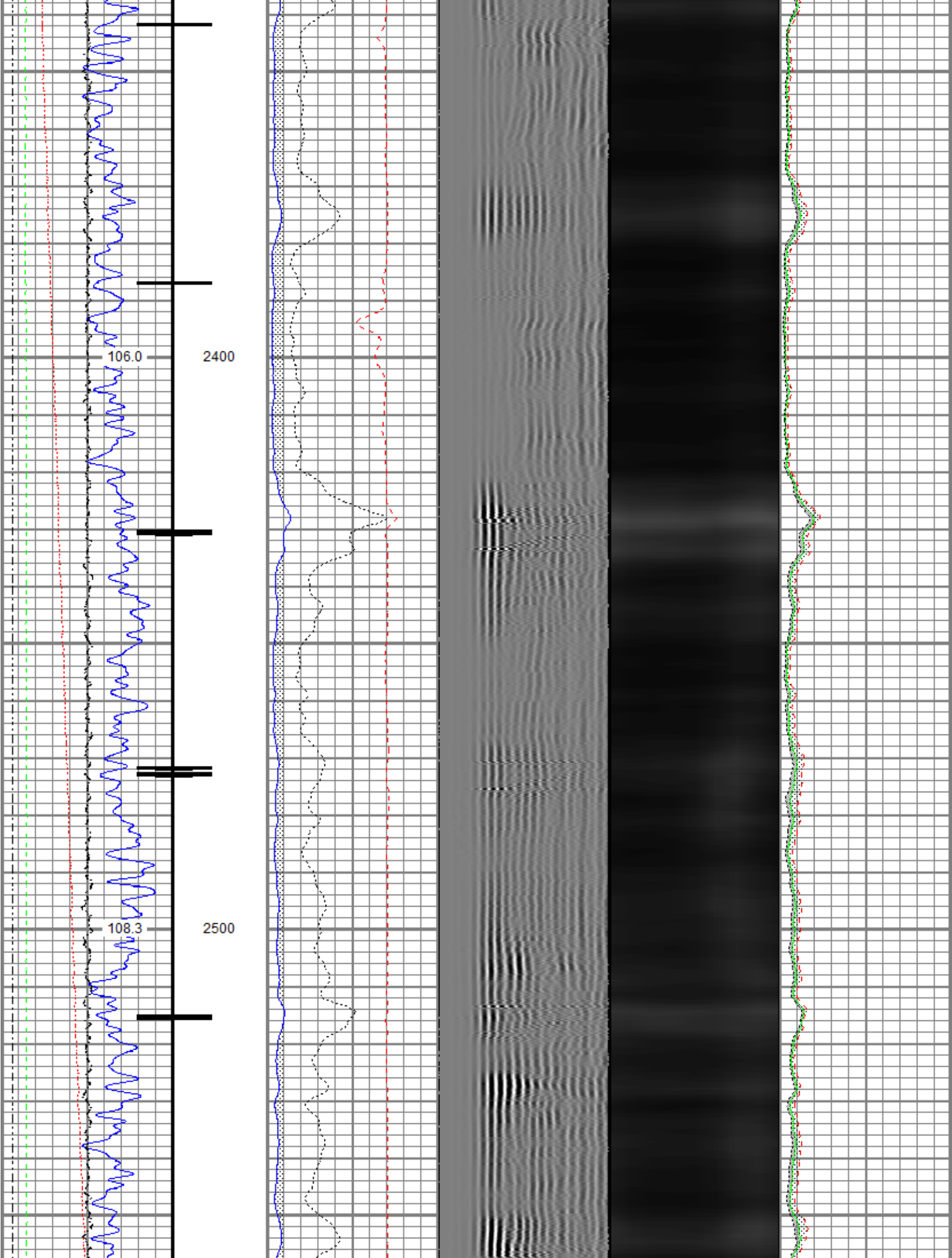


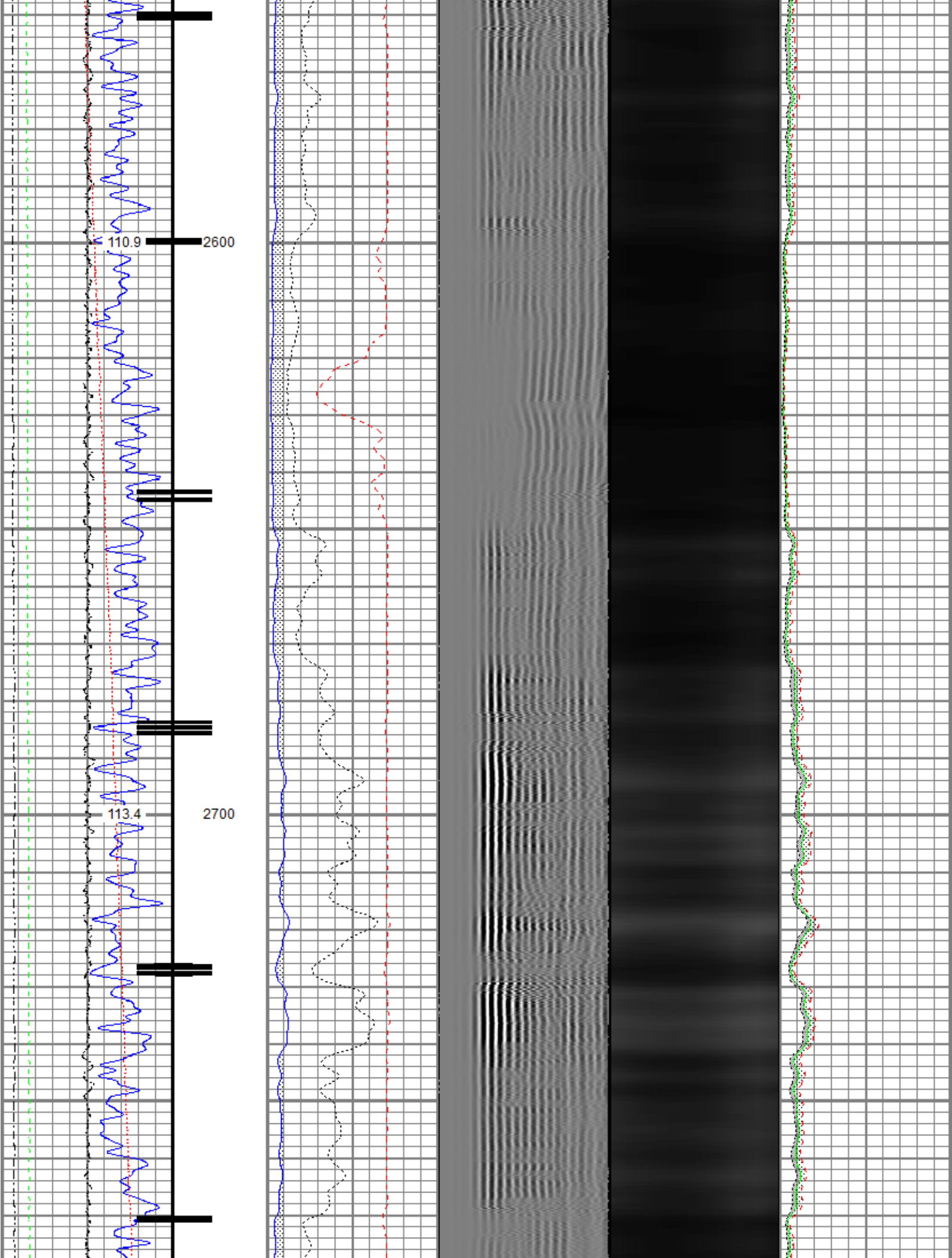


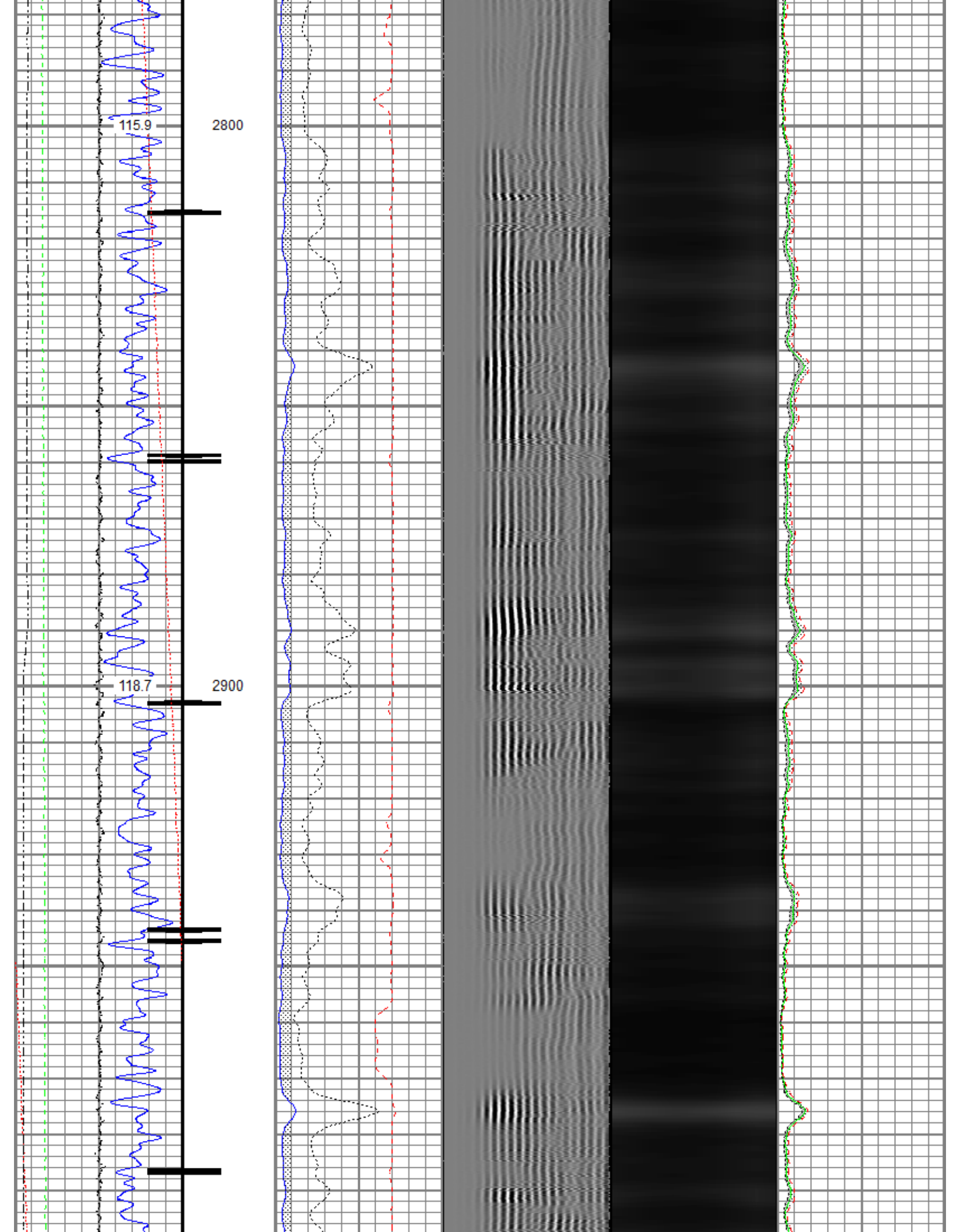


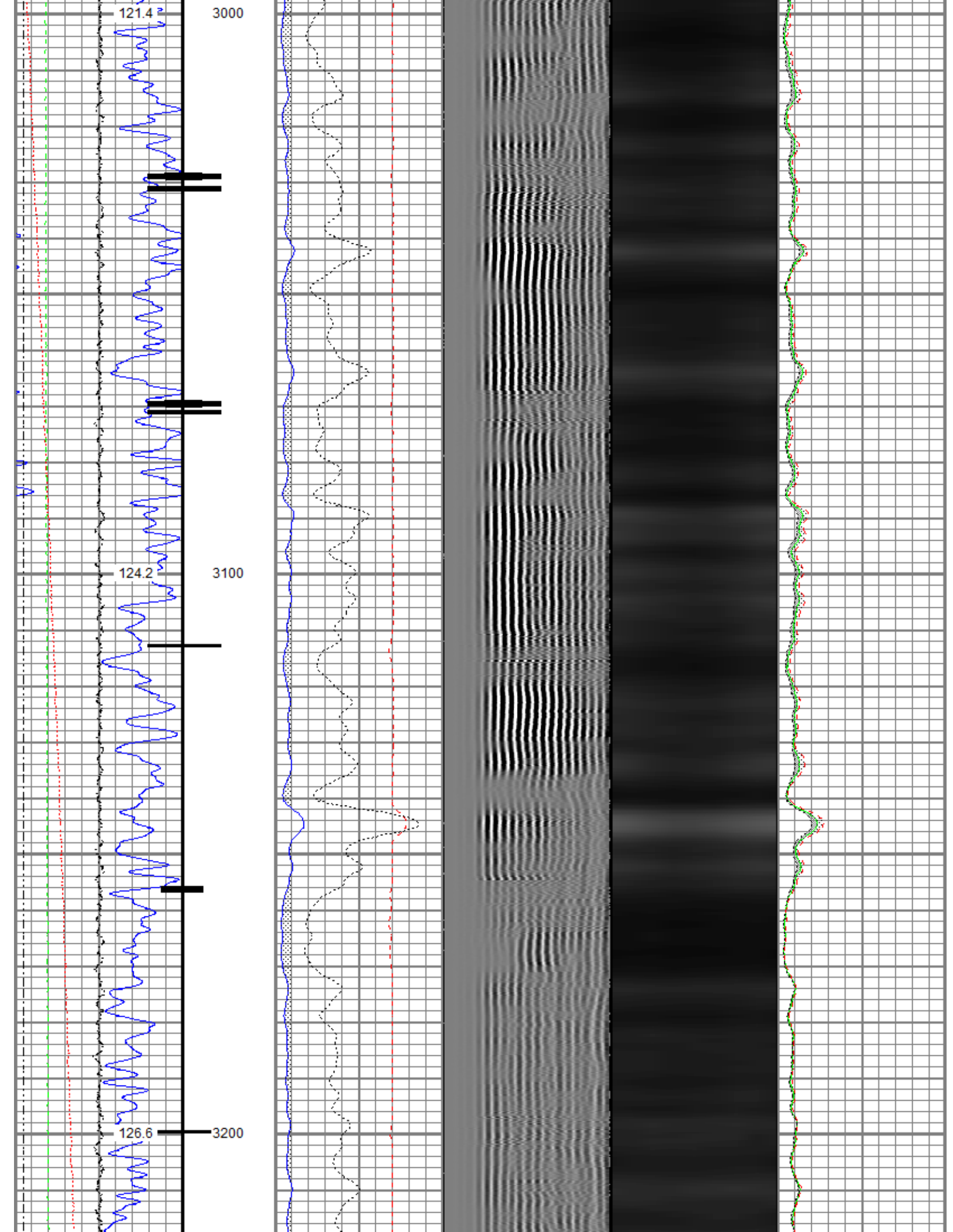


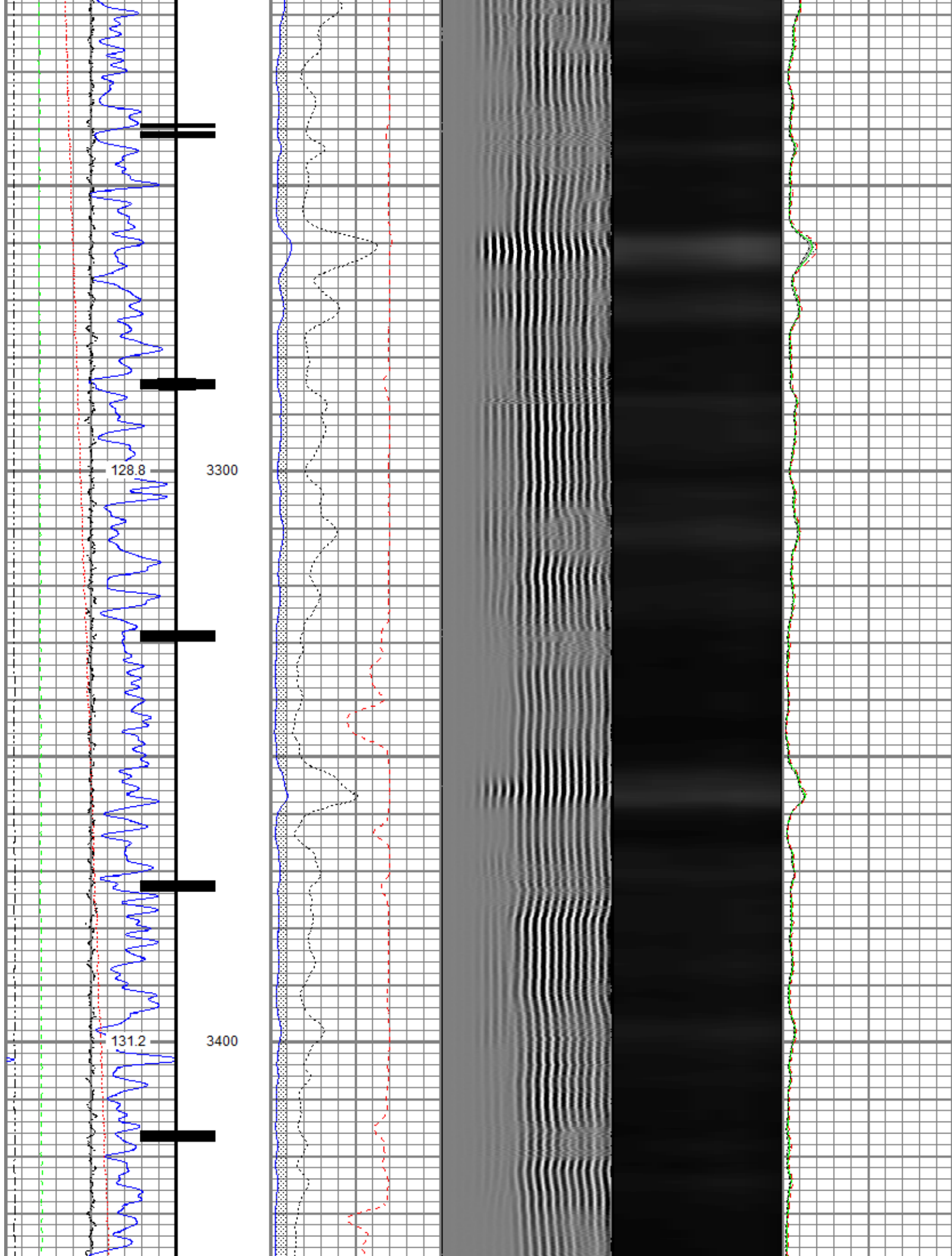


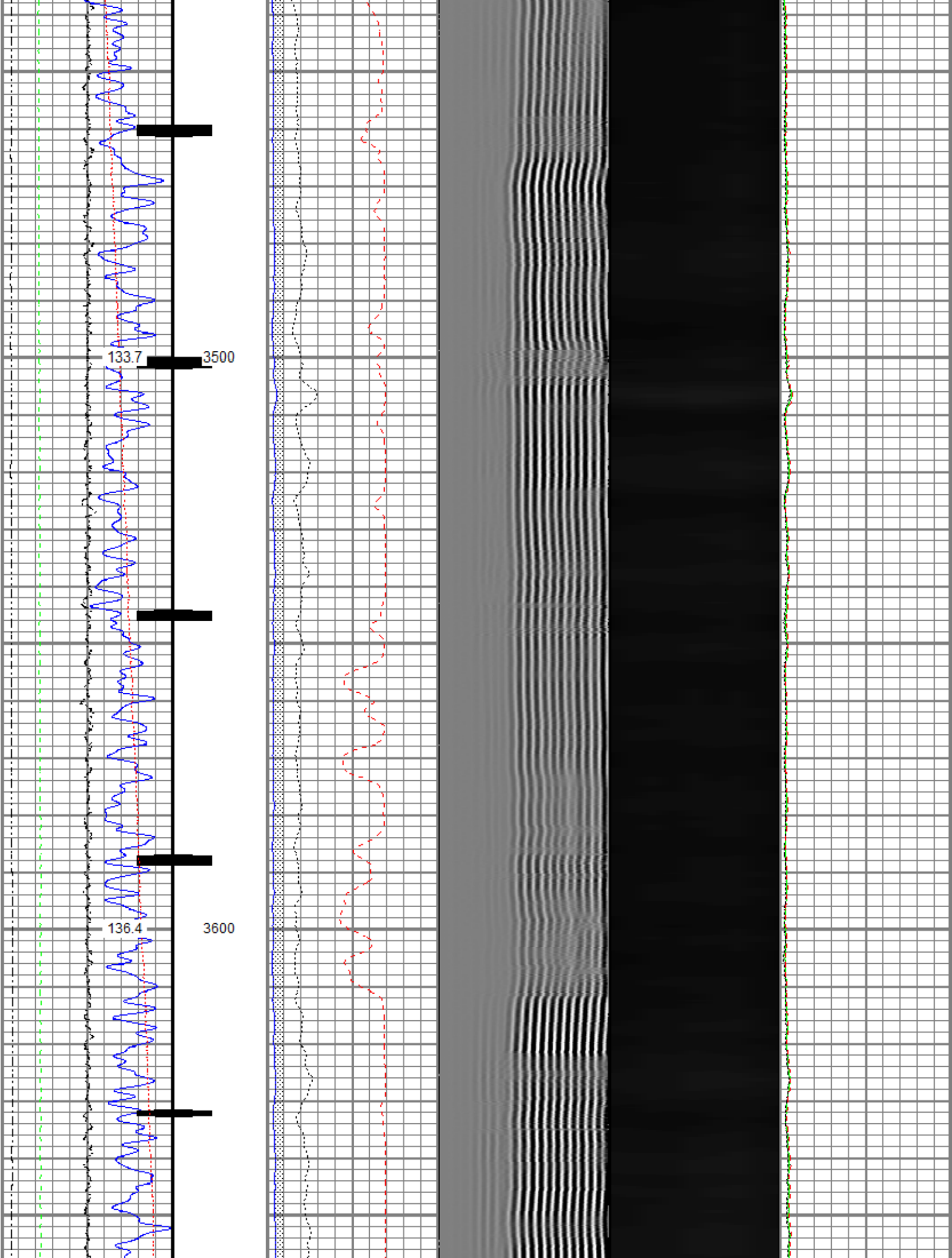


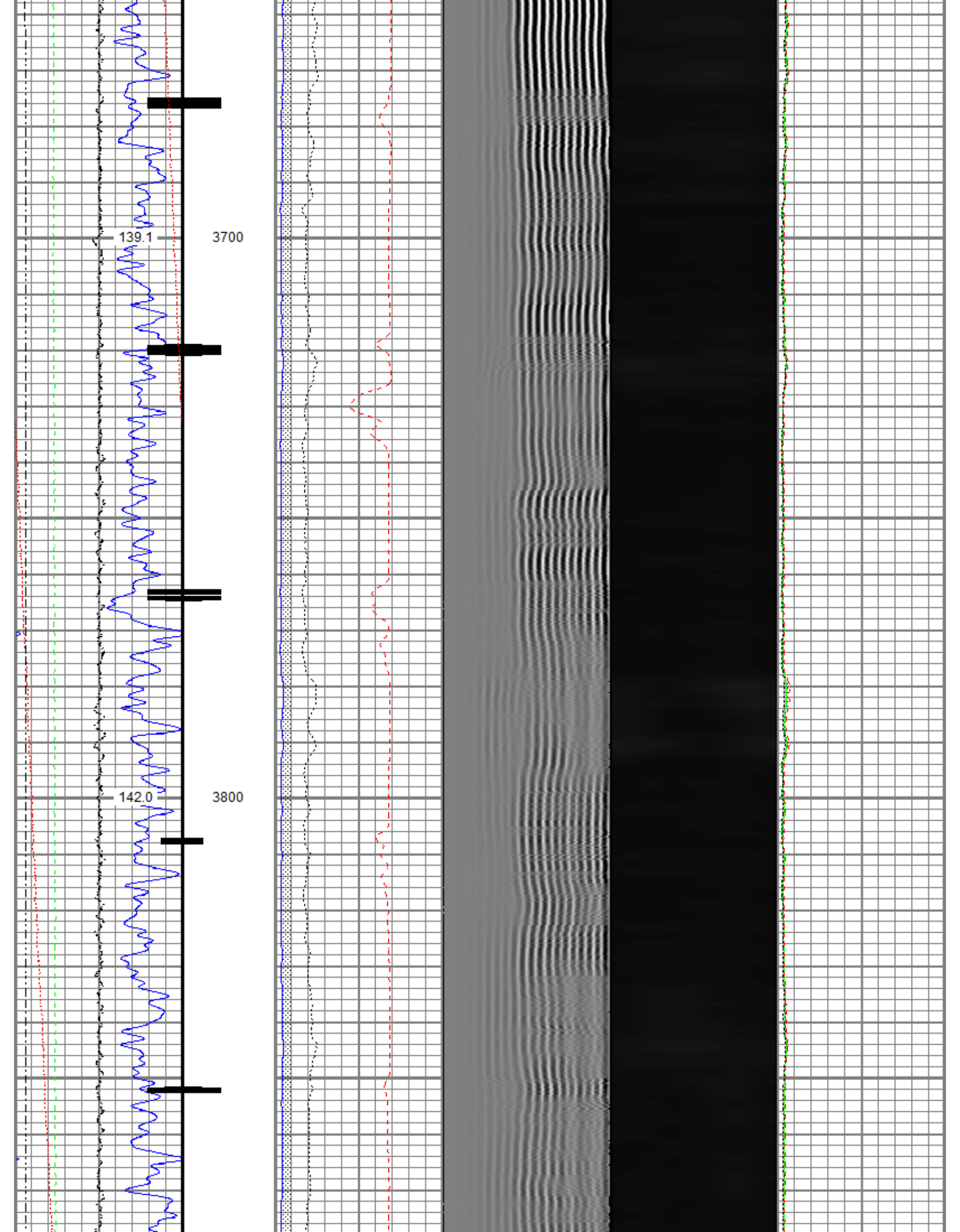


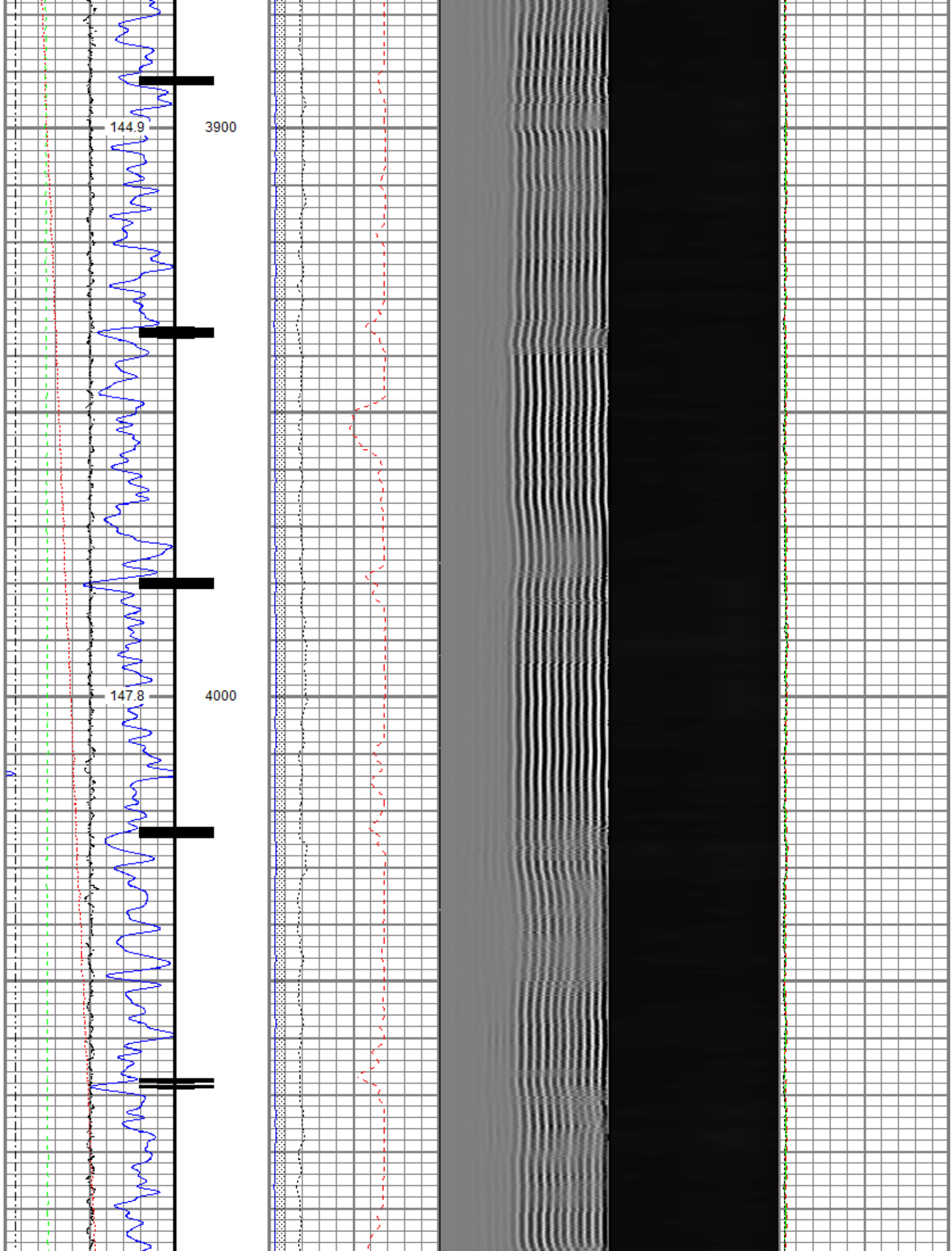


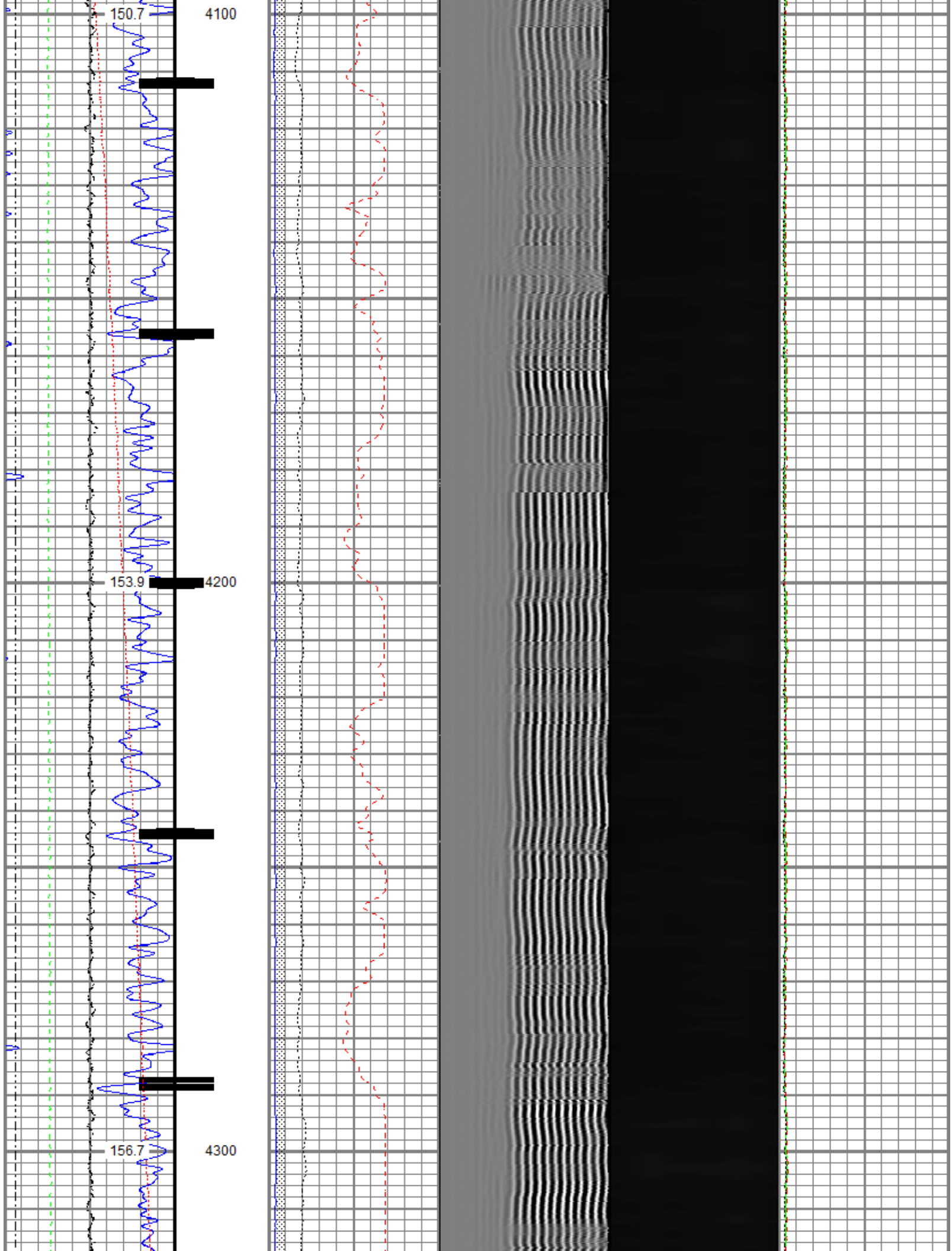


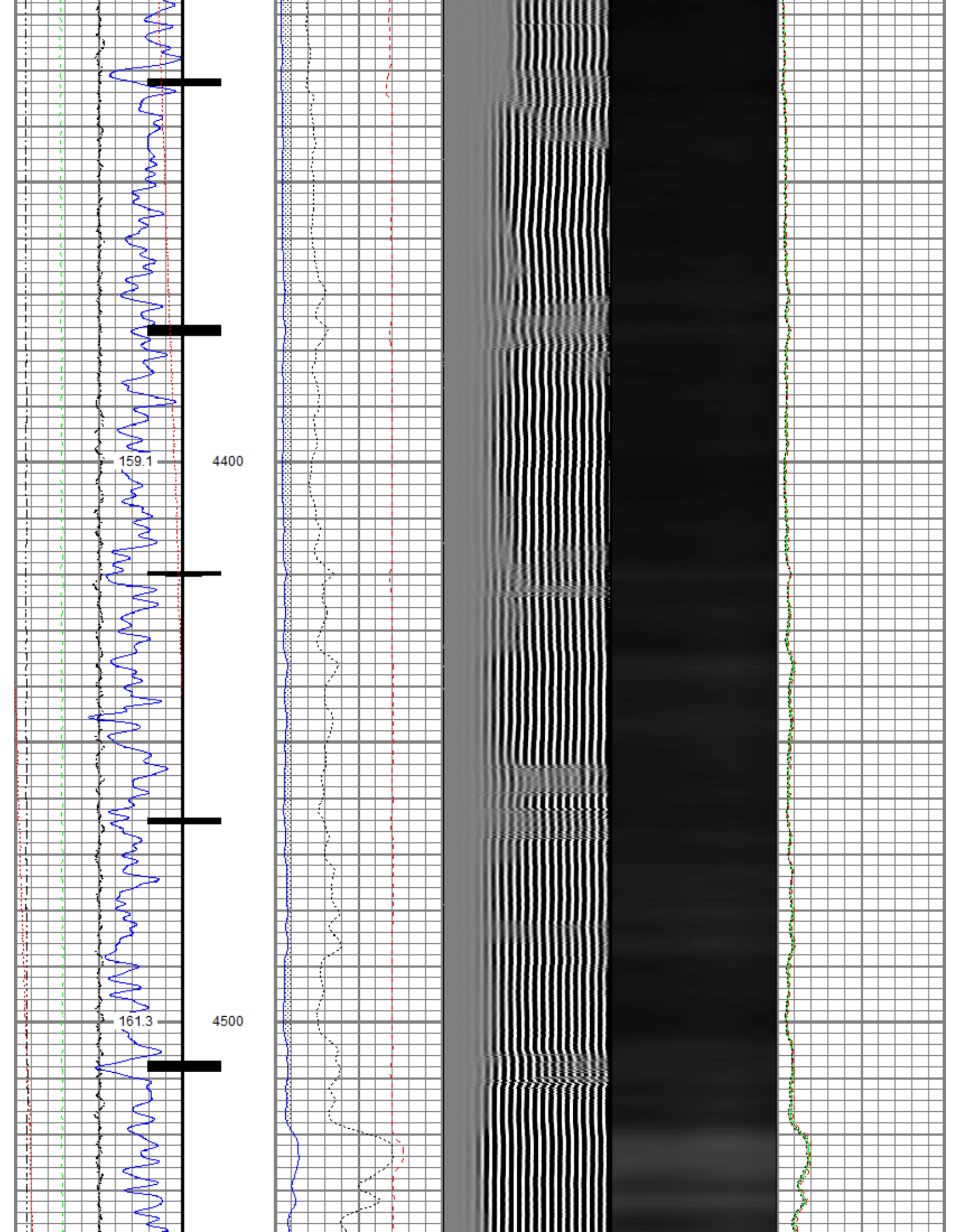


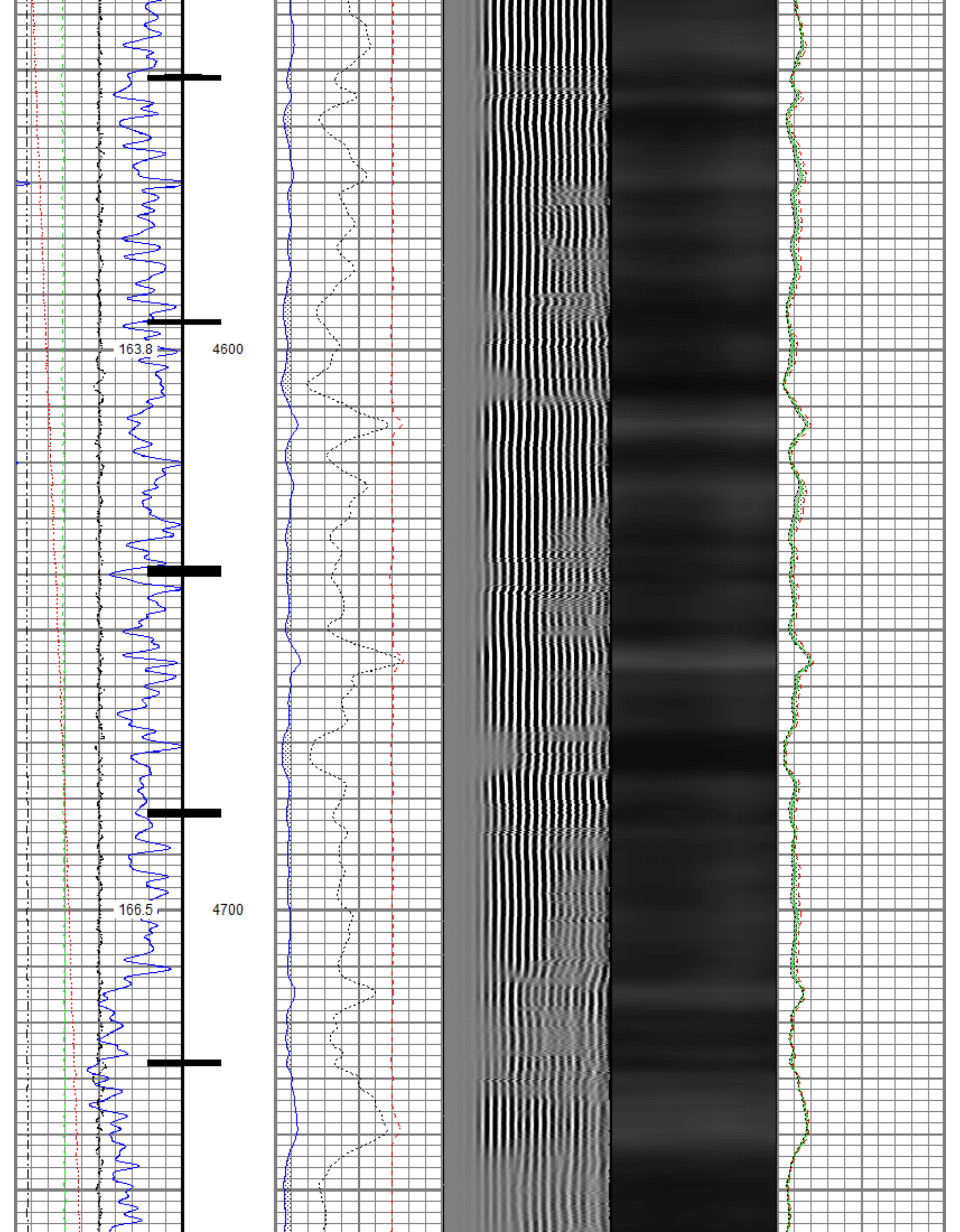


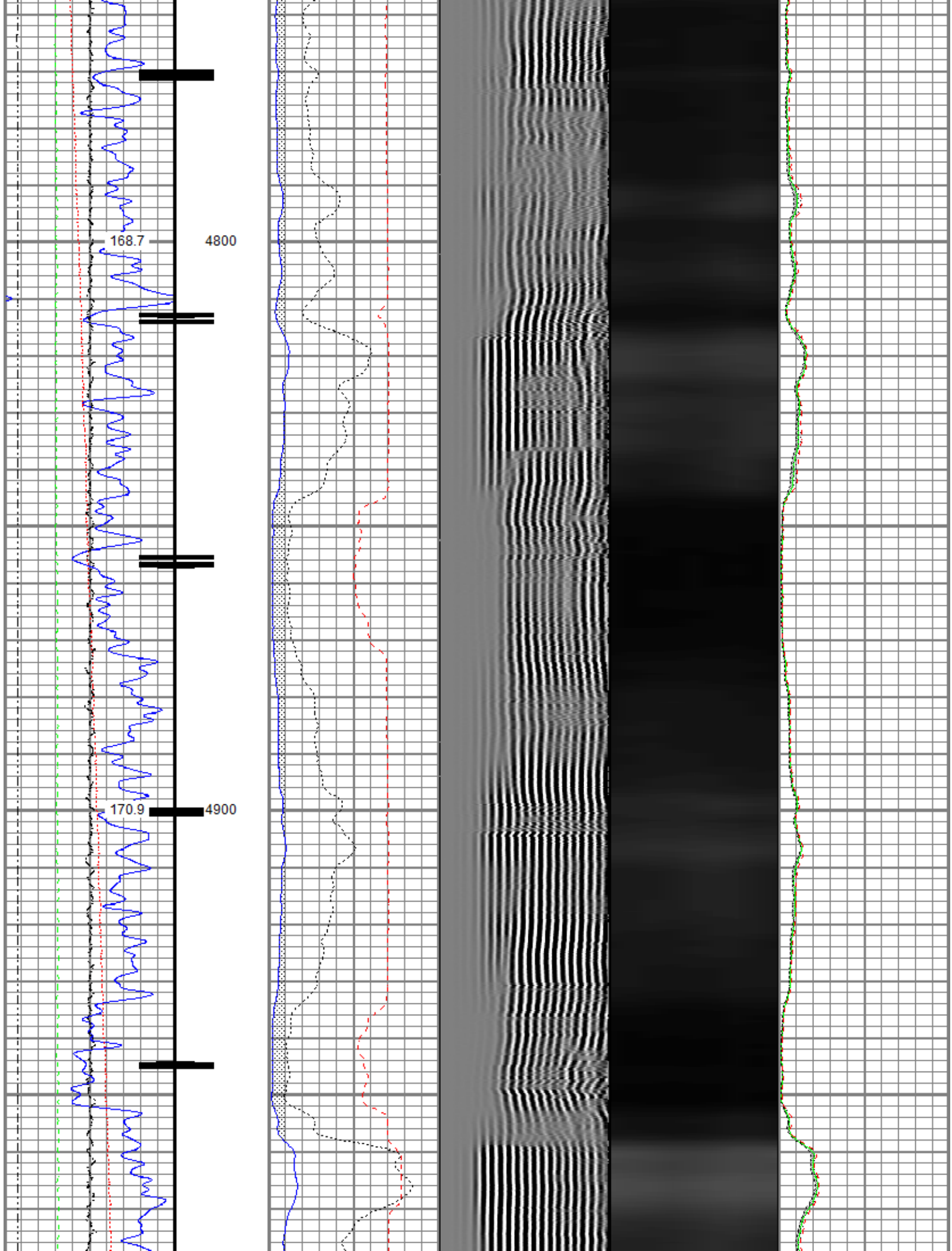


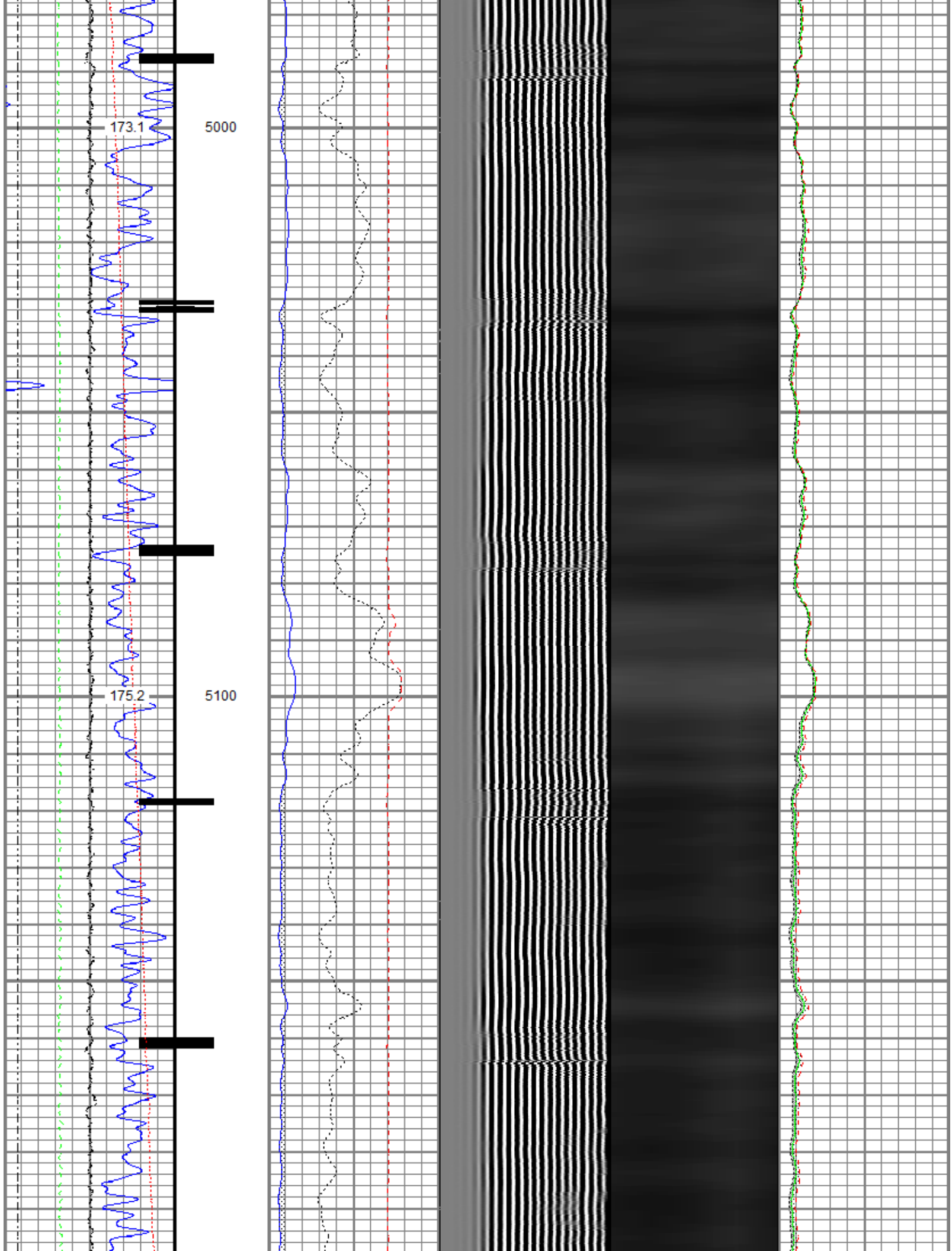


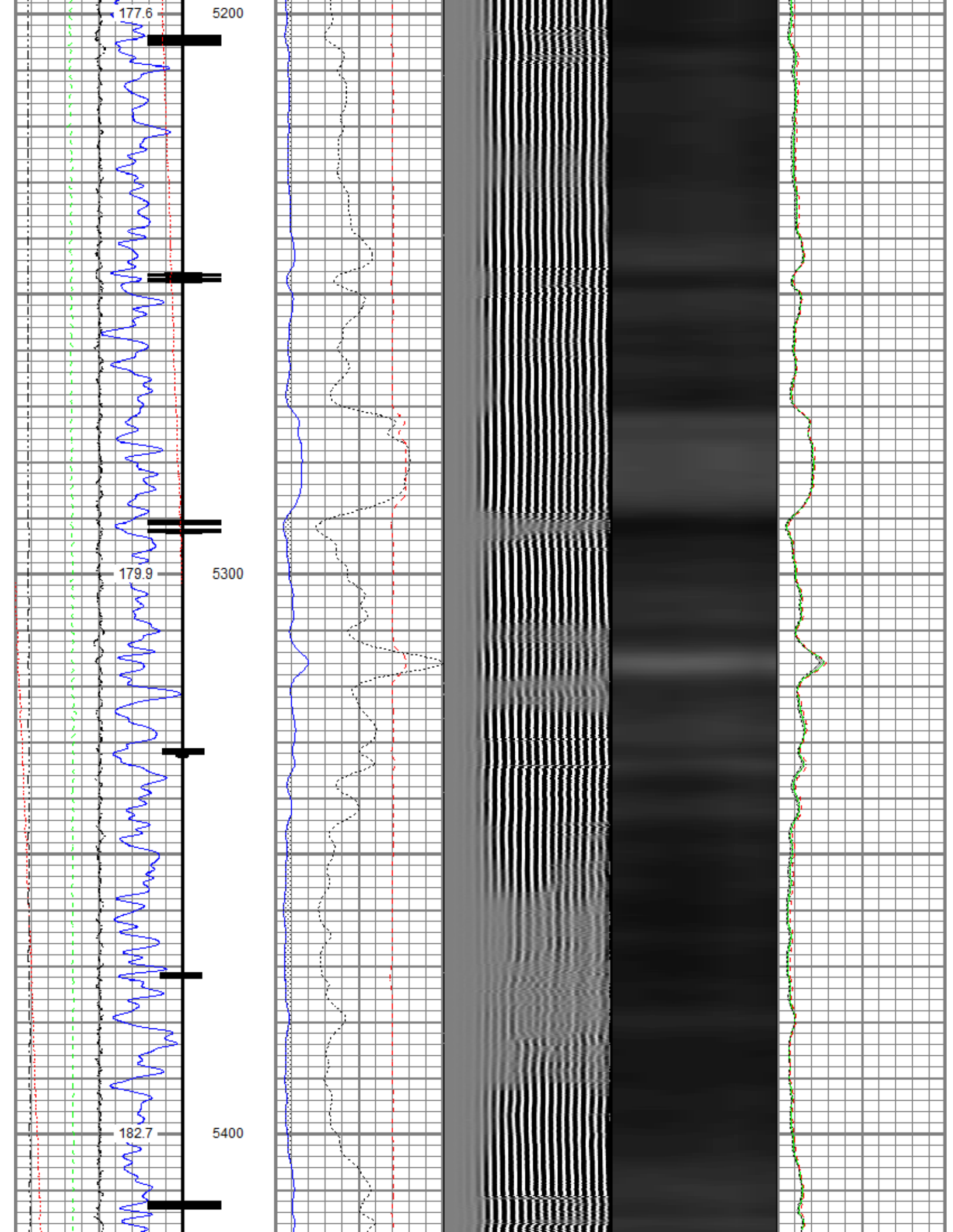


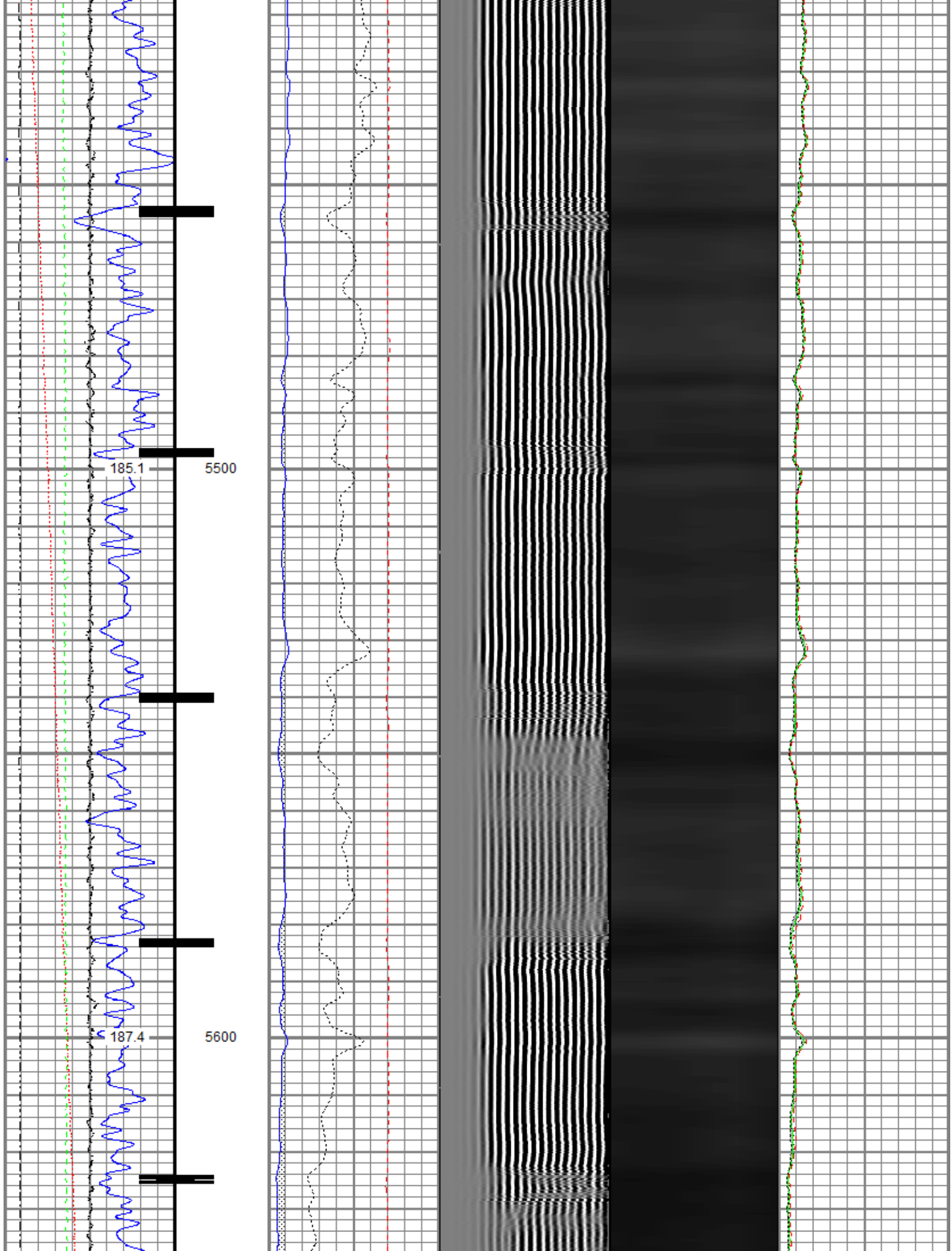


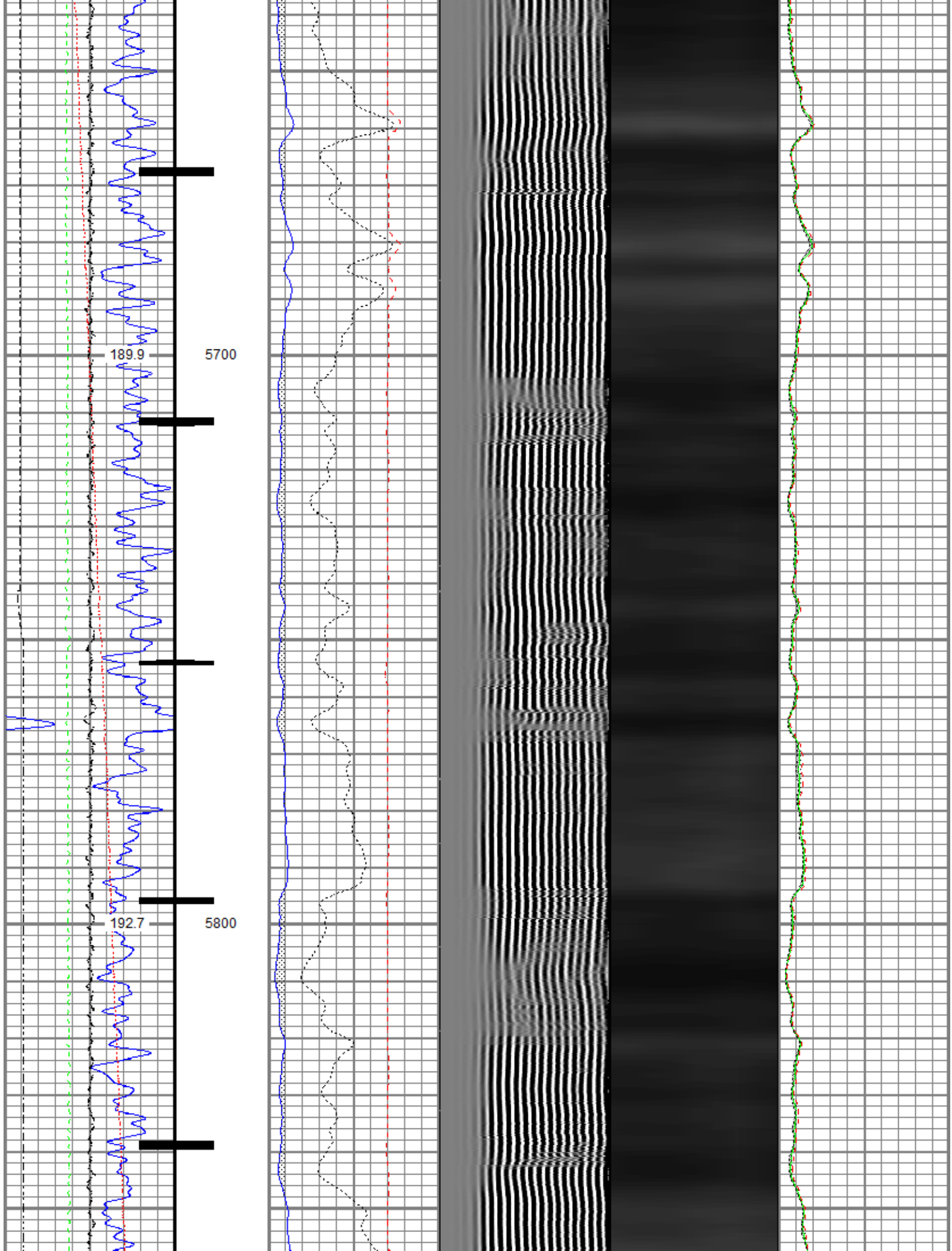


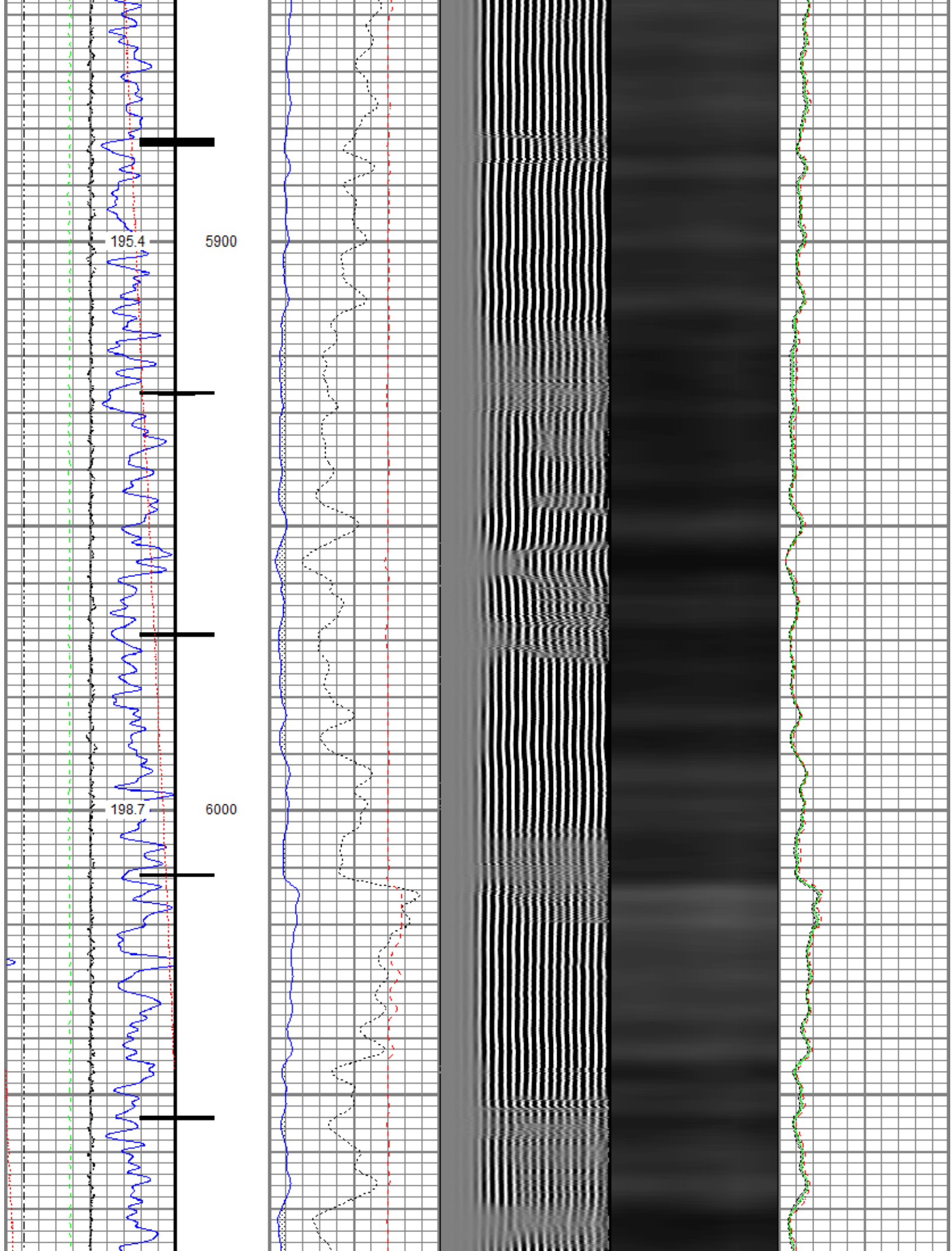


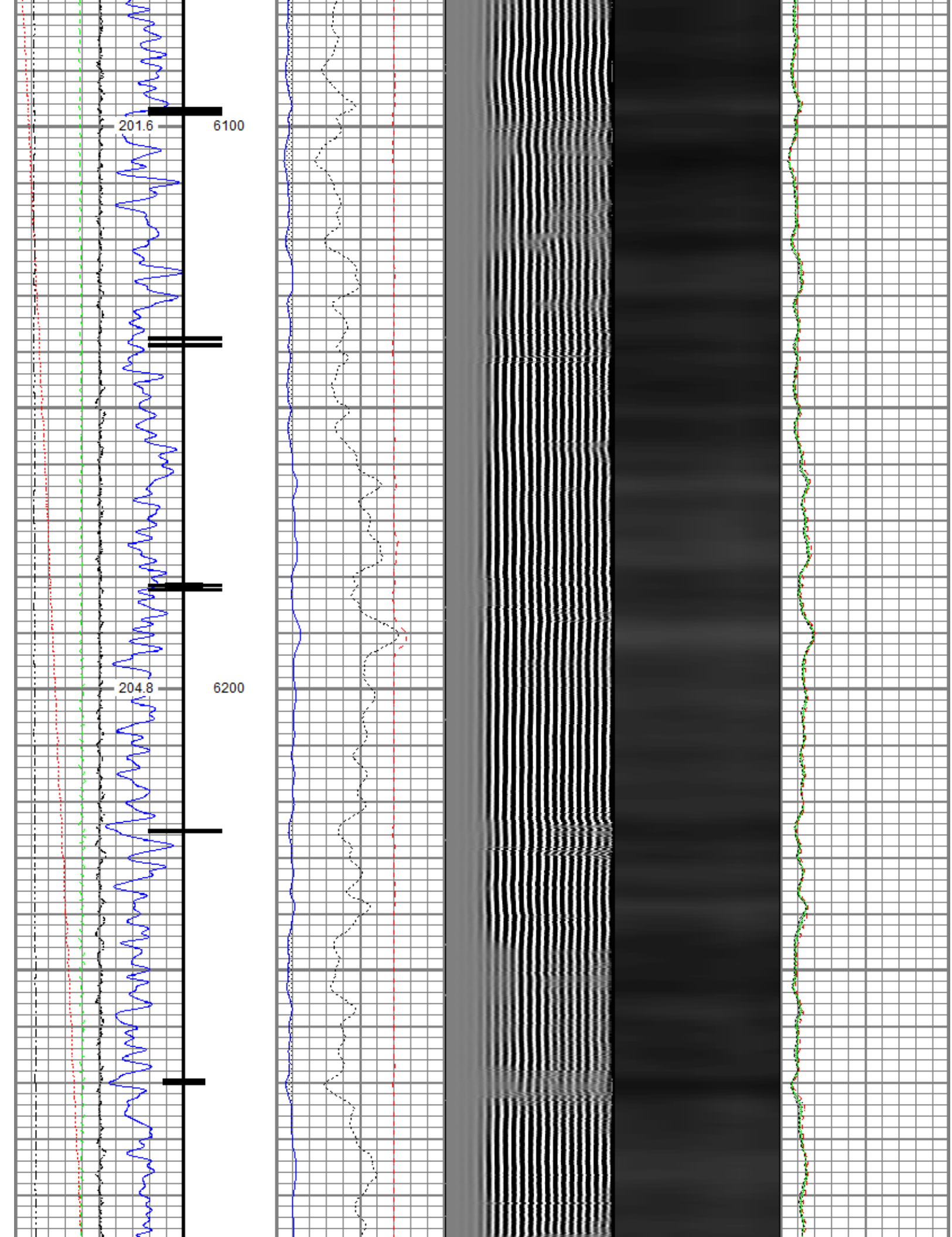












208.0

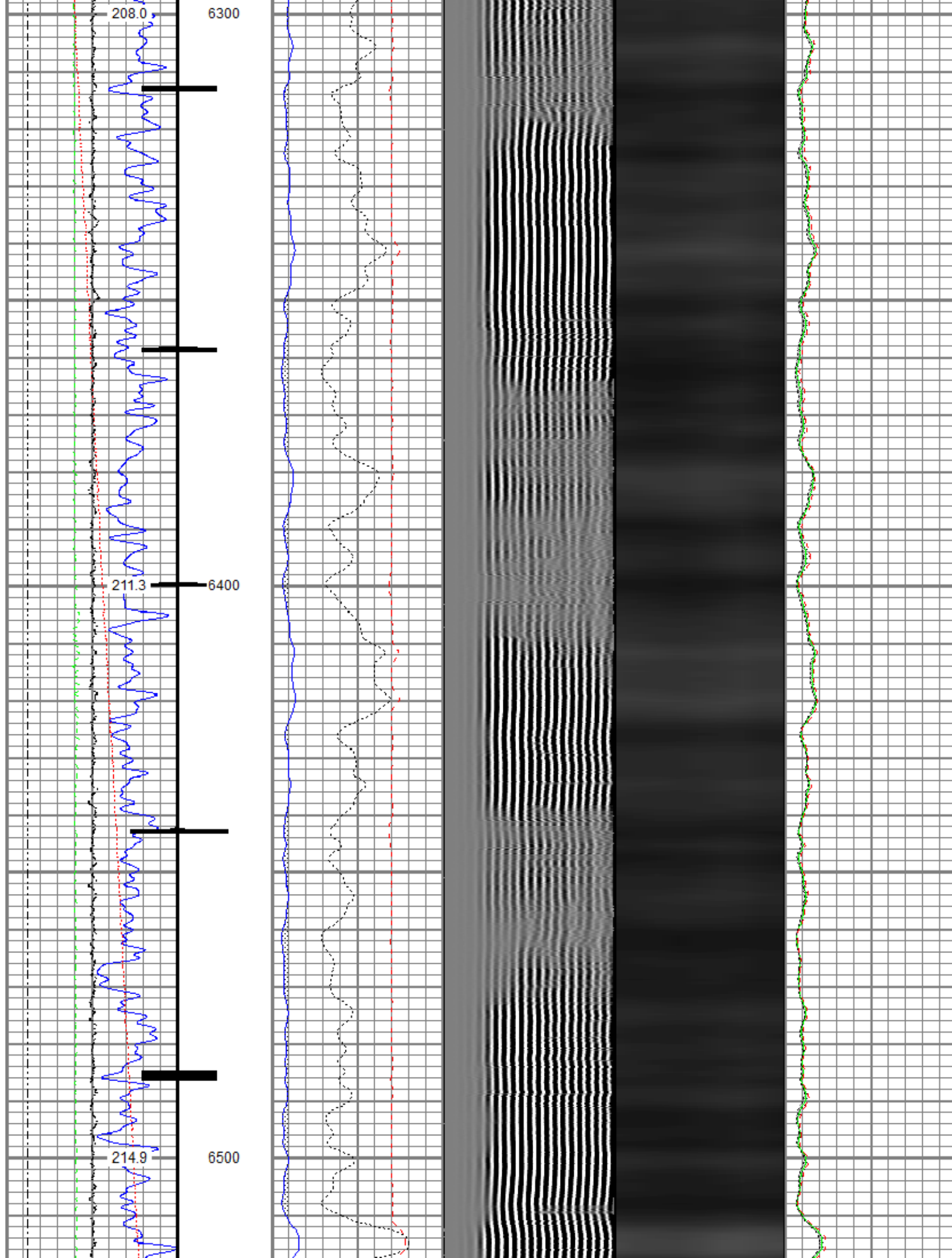
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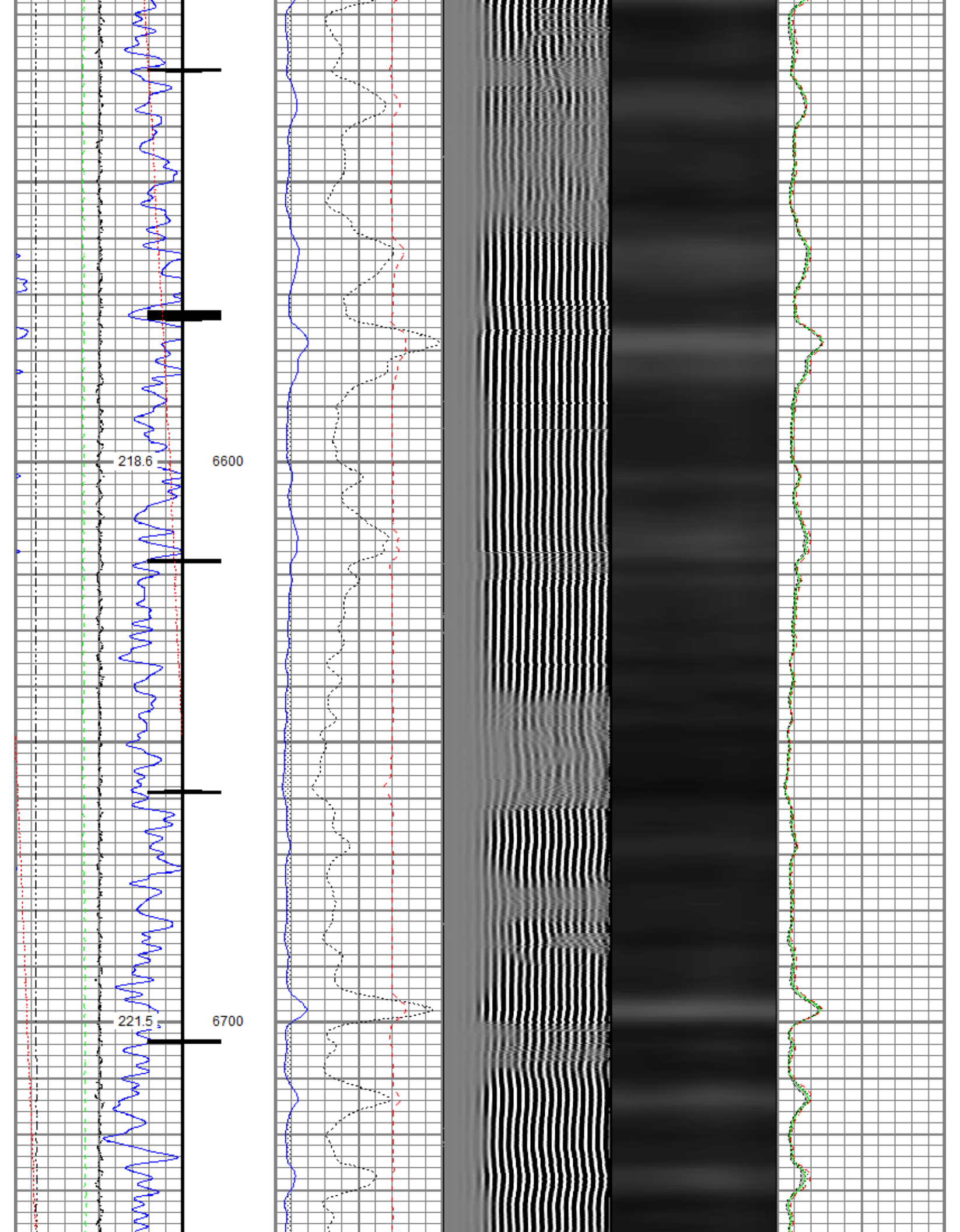
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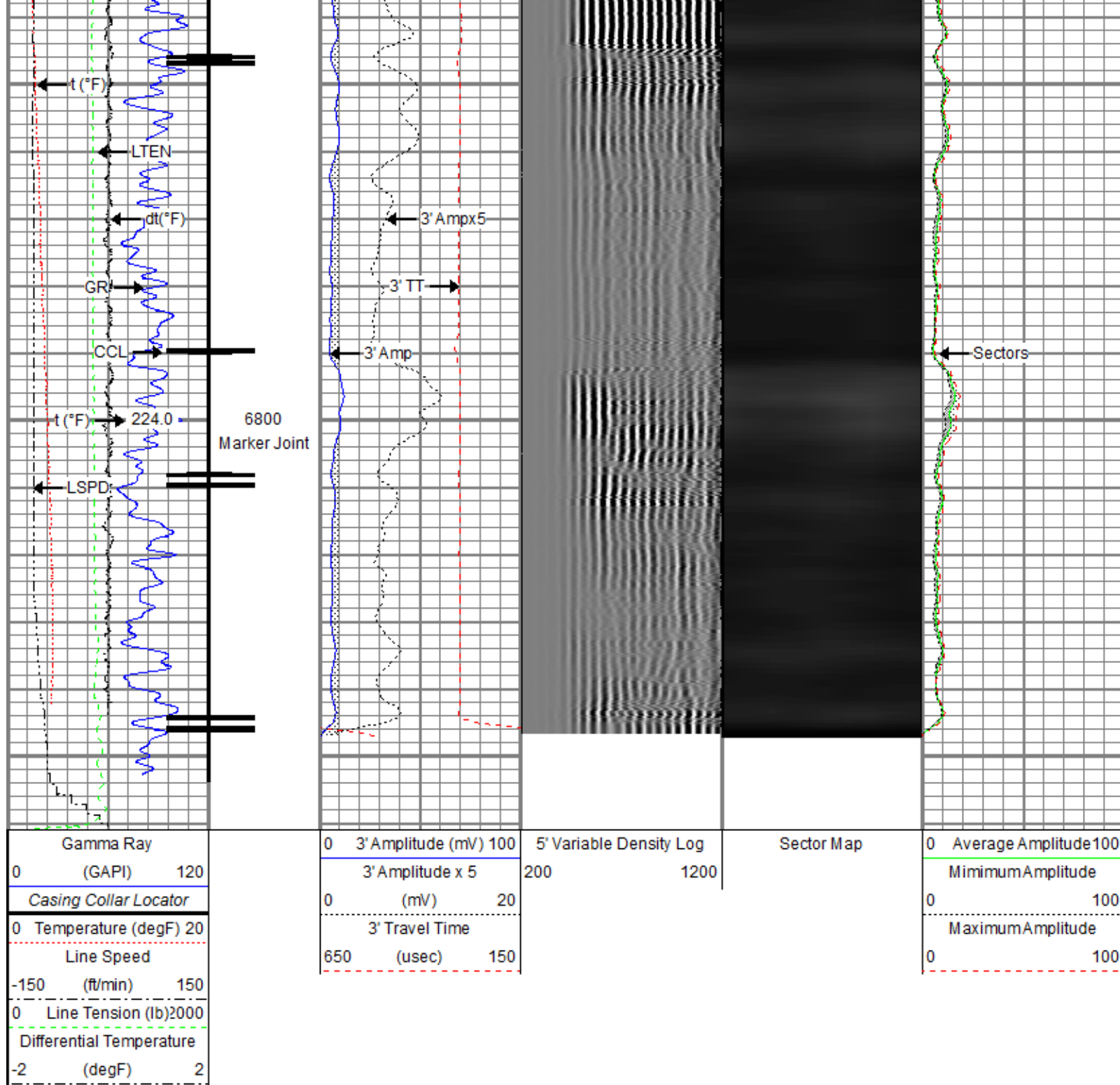
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214.9

6500



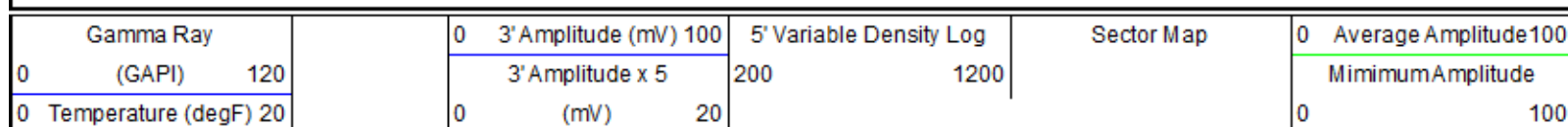




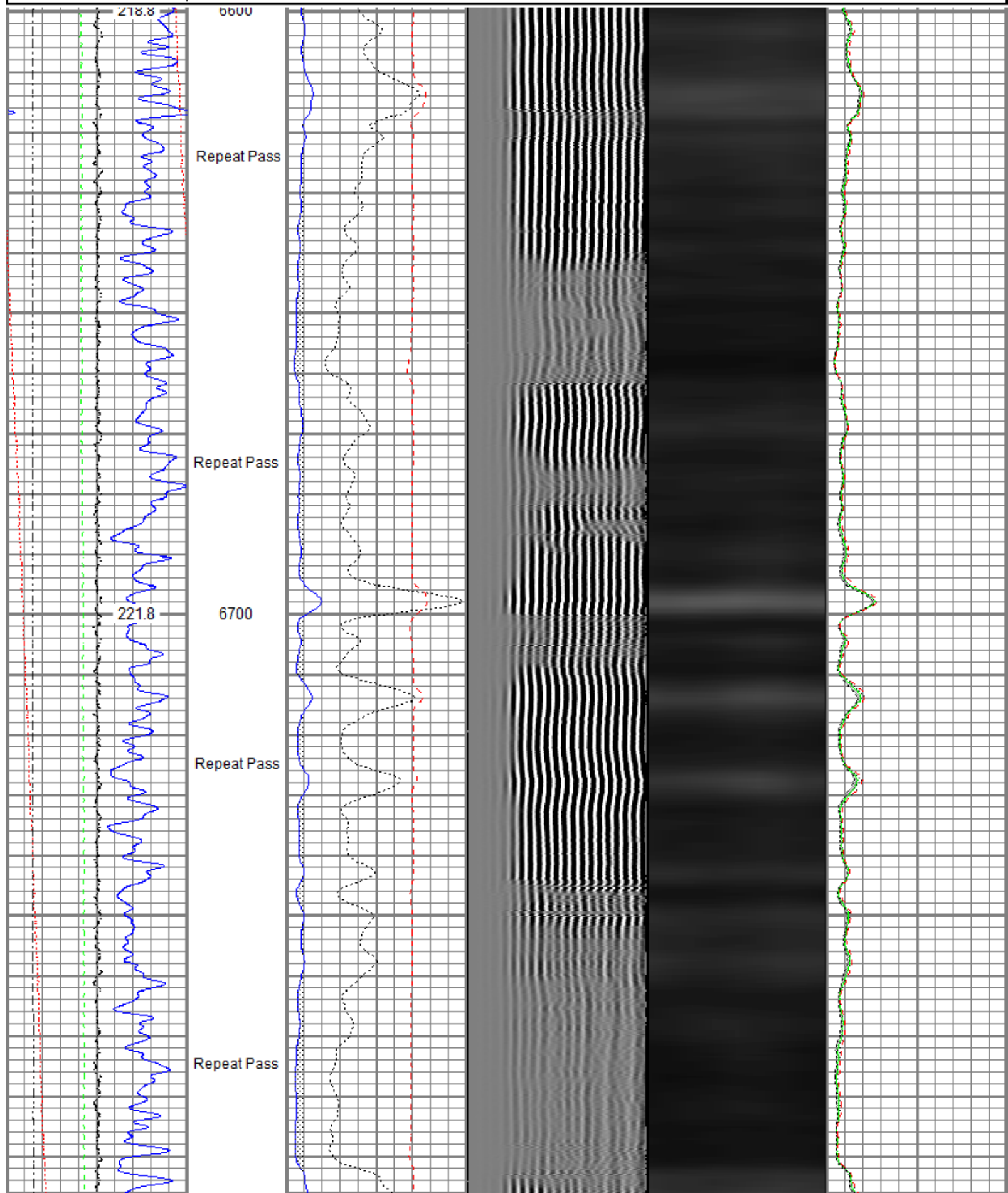
Repeat Pass

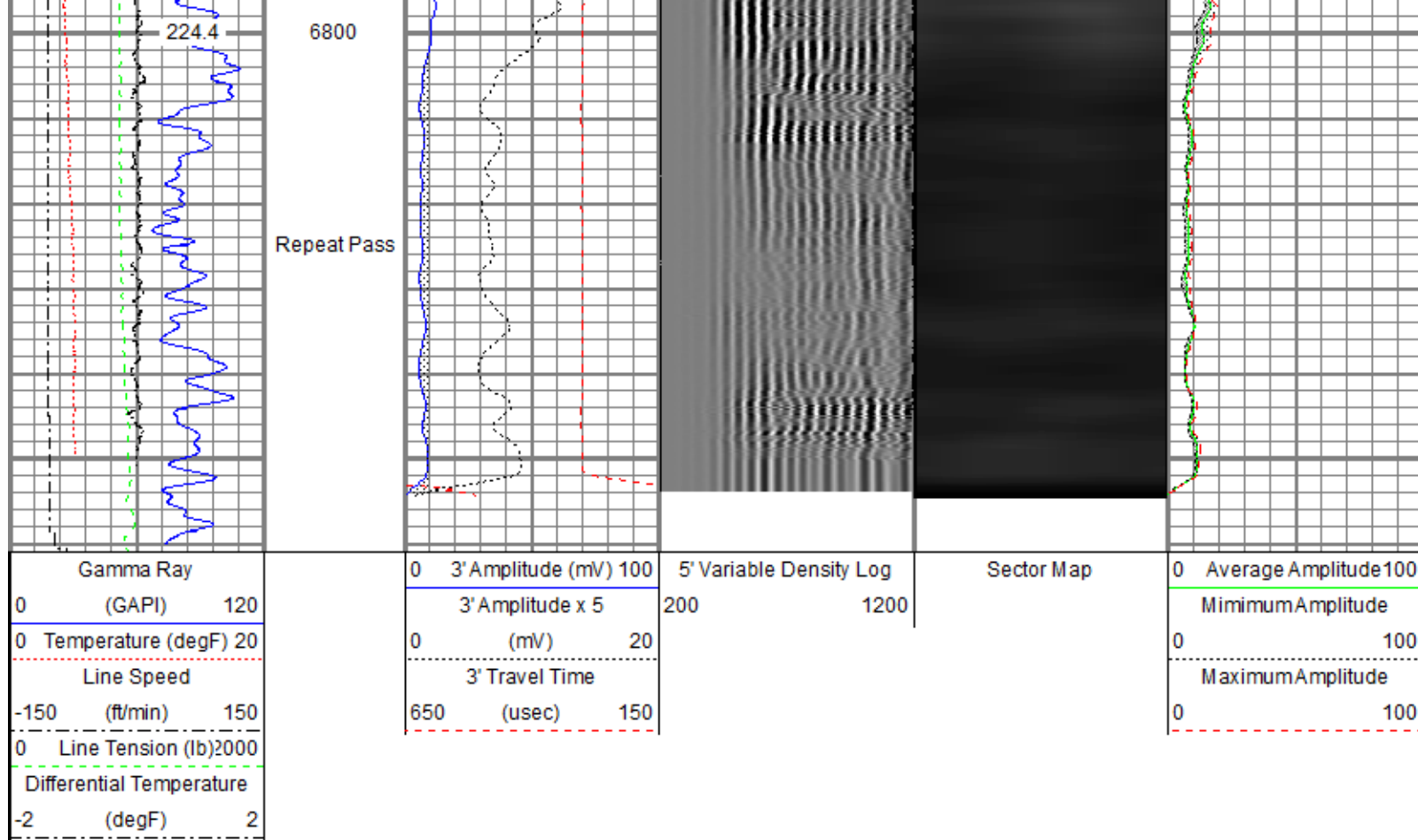
Recorded With 2800 PSI Surface Induced Pressure

Database File: anadarko_azul 13-20hz\processed_0512346104_anadarko_azul 13-20hz_rbl_07-03-18_2800 psi.db
 Dataset Pathname: pass2
 Presentation Format: ros_radrii
 Dataset Creation: Tue Jul 03 11:20:50 2018
 Charted by: Depth in Feet scaled 1:240



Line Speed			3' Travel Time			Maximum Amplitude		
-150	(ft/min)	150	650	(usec)	150	0		100
0 Line Tension (lb) 2000								
Differential Temperature								
-2	(degF)	2						





Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
TEMP	17.33		Titan CHD-14375 GO	1.03	1.44	3.60
			Titan 1-7/16" Assembled Electric Cable Head w/ 1" Fishing Neck			
			Probe CENT-2750	2.88	2.75	20.00
			Probe 2-3/4" Electric Inline Bowspring Centralizer			
			Probe Radii-2750 RBT (FW1308-091)	9.39	2.75	105.00
			Probe 2-3/4" Radial Cement Bond Tool with Integral Temperature Sub			
WVFS8	15.09					
WVFS7	15.09					
WVFS6	15.09					
WVFS5	15.09					
WVFS4	15.09					
WVFS3	15.09					
WVFS2	15.09					
WVFS1	15.09					
WVFCAL	15.09					
WVFS2ET	15.09					

WVF5FT HEADVOLT	13.09 14.09 10.84					
			Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00
CCL\$2 CCL\$1	7.08 7.08					
GR	5.75		Probe GR-CCL-2750 6PB (101001) 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 ADPT-6P-GO Probe 2-3/4" 6-Pin Top to GO Bottom Adaptor Sub	0.28	2.75	2.00
			Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00
Dataset: PROCESSED_0512346104_Anadarko_Azul 13-20HZ_RBL_07-03-18_2800 PSI.db: field/well/run1/pass4 Total length: 24.15 ft Total weight: 225.60 lb O.D.: 2.75 in						

Calibration Report						
Database File	C:\ProgramData\Warrior\Data\Anadarko_Azul 13-20HZ\PROCESSED_0512346104_Anadarko_Azul 13-20HZ_RBL_07-03-18_2800 PSI.db: field/well/run1/pass4					
Dataset Pathname	pass4					
Dataset Creation	Tue Jul 03 11:25:28 2018					
Gamma Ray Calibration Report						
Serial Number:	101001					
Tool Model:	2750 6PB					
Performed:	Sun Nov 12 11:25:32 2017					
Calibrator Value:	637.0	GAPI				
Background Reading:	100.6	cps				
Calibrator Reading:	981.1	cps				
Sensitivity:	0.7235	GAPI/cps				
Segmented Cement Bond Log Calibration Report						
Serial Number:	FW1308-091					
Tool Model:	2750 RBT					
Calibration Casing Diameter:	5.500	in				
Calibration Depth:	743.615	ft				
Master Calibration, performed (Derived):						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.002	0.695	0.800	71.921	102.704	0.560
CAL	0.006	0.659				
5'	0.001	0.666	0.800	71.921	106.935	0.650

SUM						
S1	0.002	0.667	0.000	100.000	150.504	-0.339
S2	0.003	0.691	0.000	100.000	145.338	-0.372
S3	0.002	0.698	0.000	100.000	143.750	-0.352
S4	0.002	0.694	0.000	100.000	144.605	-0.322
S5	0.002	0.696	0.000	100.000	144.158	-0.297
S6	0.002	0.688	0.000	100.000	145.770	-0.298
S7	0.002	0.681	0.000	100.000	147.171	-0.281
S8	0.002	0.698	0.000	100.000	143.616	-0.272

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.006	0.659	1.000	0.000

Air Zero Calibration, performed Sun Jul 01 13:32:00 2018:

	Raw (v)		Calibrated (v)		Results
	Zero		Zero		Offset
3'	0.006		0.000		0.000
5'	0.006		0.000		0.000
SUM					
S1	0.006		0.000		0.000
S2	0.006		0.000		0.000
S3	0.006		0.000		0.000
S4	0.006		0.000		0.000
S5	0.006		0.000		-0.000
S6	0.006		0.000		-0.000
S7	0.006		0.000		-0.000
S8	0.006		0.000		-0.000

Temperature Calibration Report

Serial Number: FW1308-091
Tool Model: 2750 RBT
Performed: Sun Nov 12 13:50:54 2017

	Reference	Reading
Low Reference:	100.00 degF	104.72 degF
High Reference:	350.00 degF	392.24 degF

Gain: 0.87
Offset: 8.94
Delta Spacing: 1



Company Kerr-McGee Oil & Gas Onshore, L.P.
Well Azul 13-20HZ
Field Wattenberg
County Weld
State Colorado