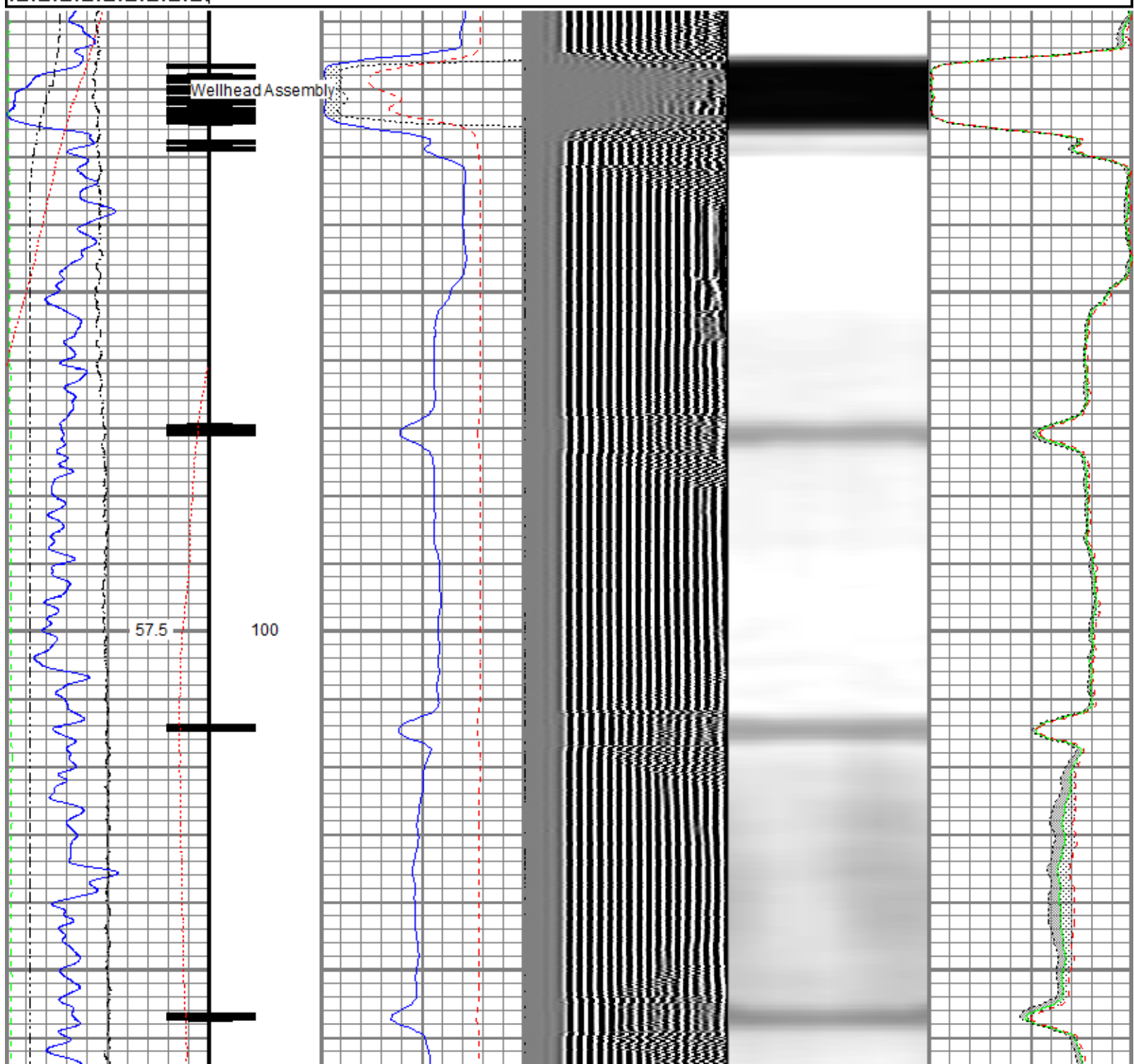


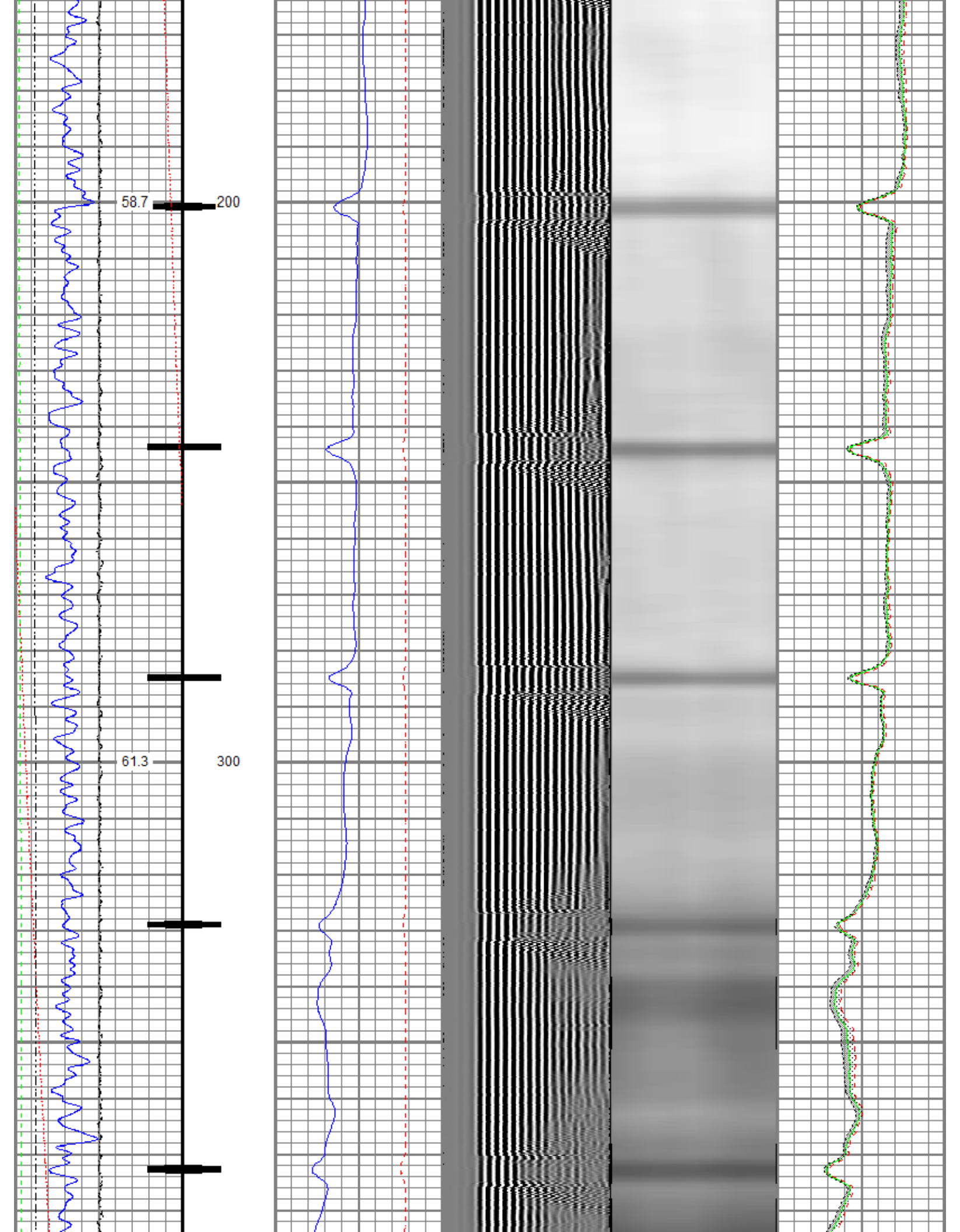


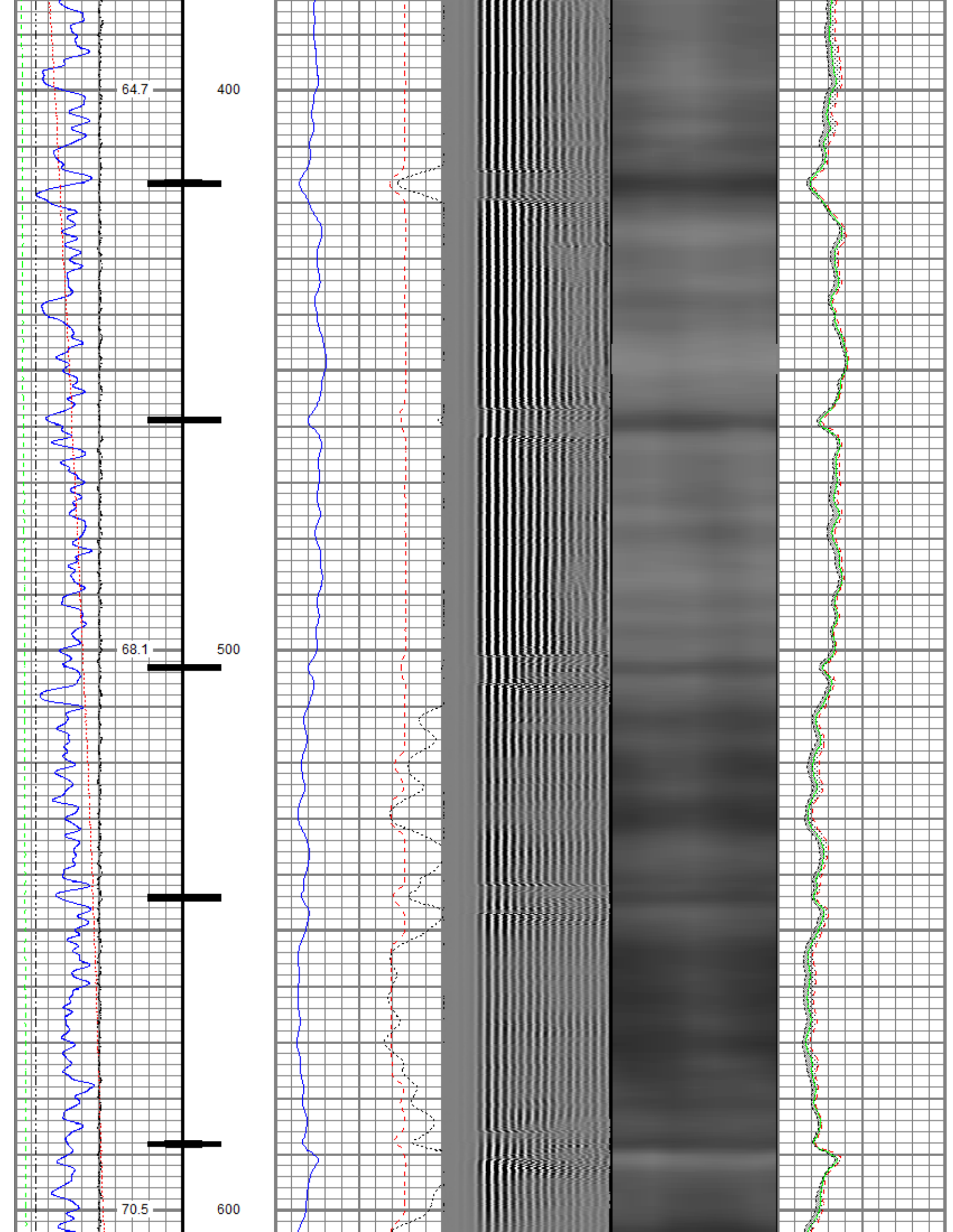
<<< Fold Here >>>
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible 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 Marker Joint at 6684 FT Adjusted +4 FT to correlate with Marker Joint Gauge Ring/Junk Basket ran to 7710 FT with no debris Log ran from 45 FT above RBP Recorded with 2800 PSI Surface Induced Pressure Logging tools were clean and free of debris upon completion of operations</p> <p>Thank you for choosing Reliance Oilfield Services, LLC!!</p>

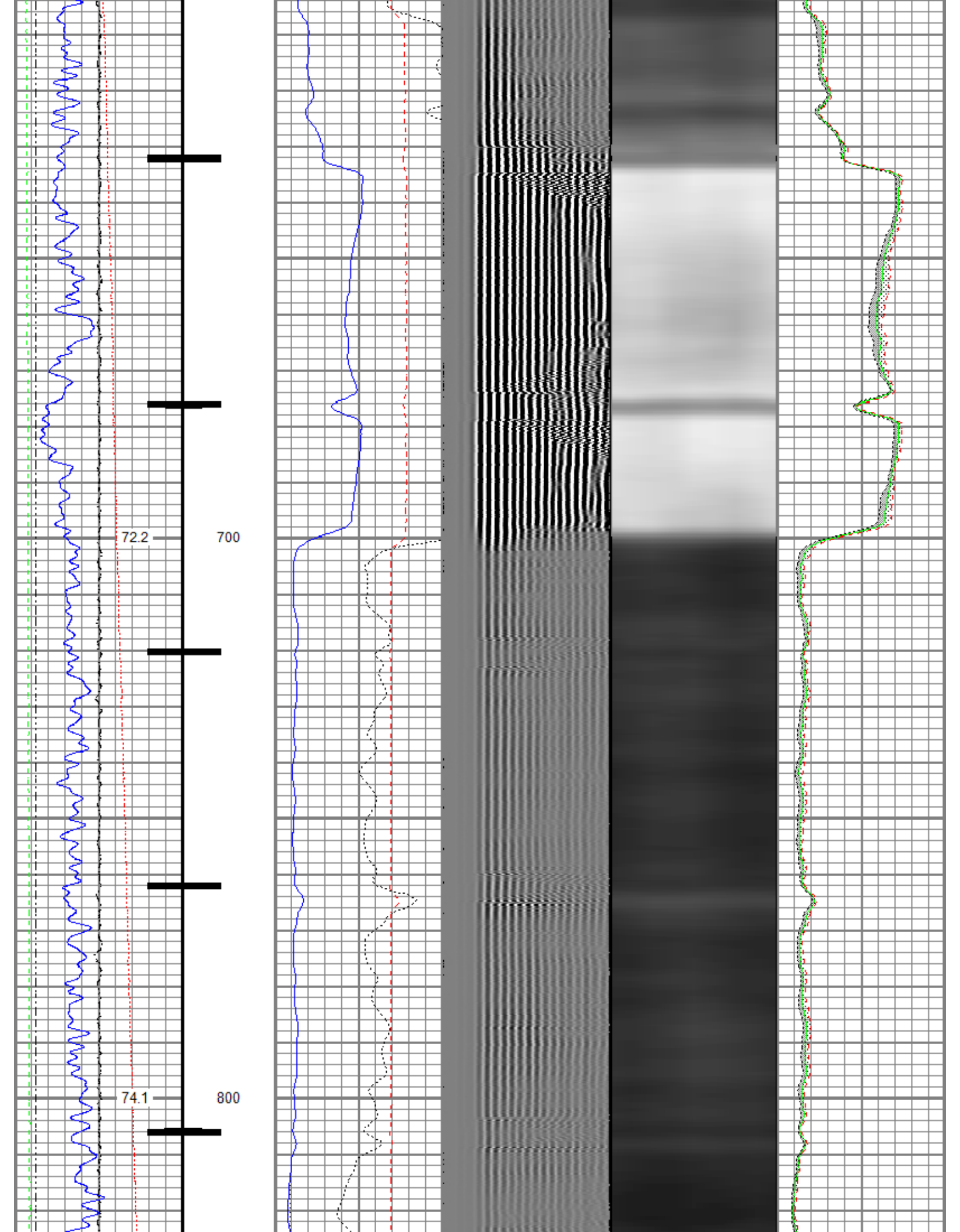
Database File	anadarko\leinweber fed 31n-8hz\0512344206_anadarko_leinweber fed 31n-8hz_rbl_03-07-18.db
Dataset Pathname	pass4.1
Presentation Format	ros_radri
Dataset Creation	Wed Mar 07 16:07:36 2018
Charted by	Depth in Feet scaled 1:240

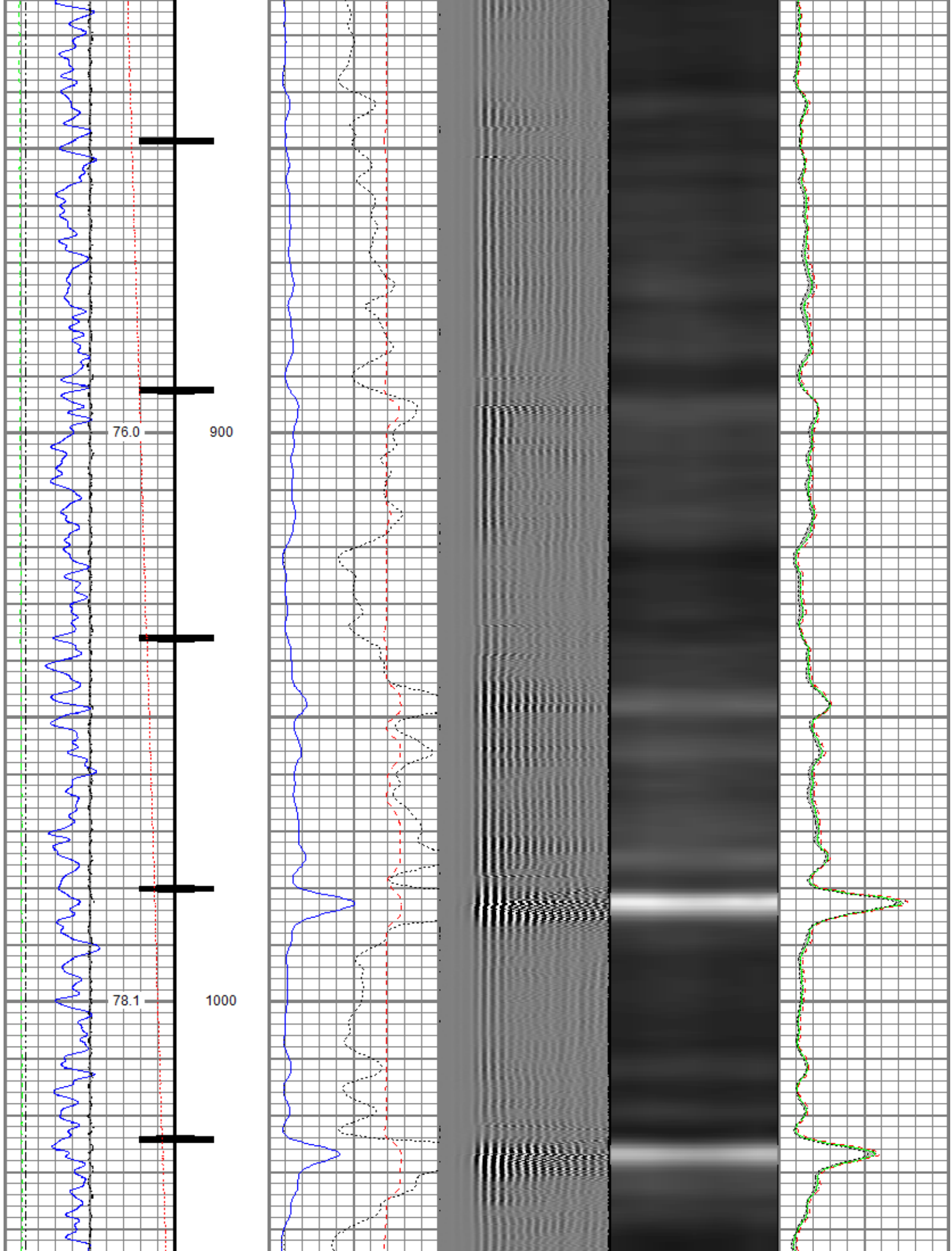
Gamma Ray	0	3' Amplitude (mV) 100	5' Variable Density Log	Sector Map	0	Average Amplitude 100
(GAPI) 120		3' Amplitude x 5	200 (usec) 1200			Minimum Amplitude
Casing Collar Locator	0	(mV) 20			0	100
Temperature (degF) 20		3' Travel Time				Maximum Amplitude
Line Speed	650	(usec) 150			0	100
-150 (ft/min)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

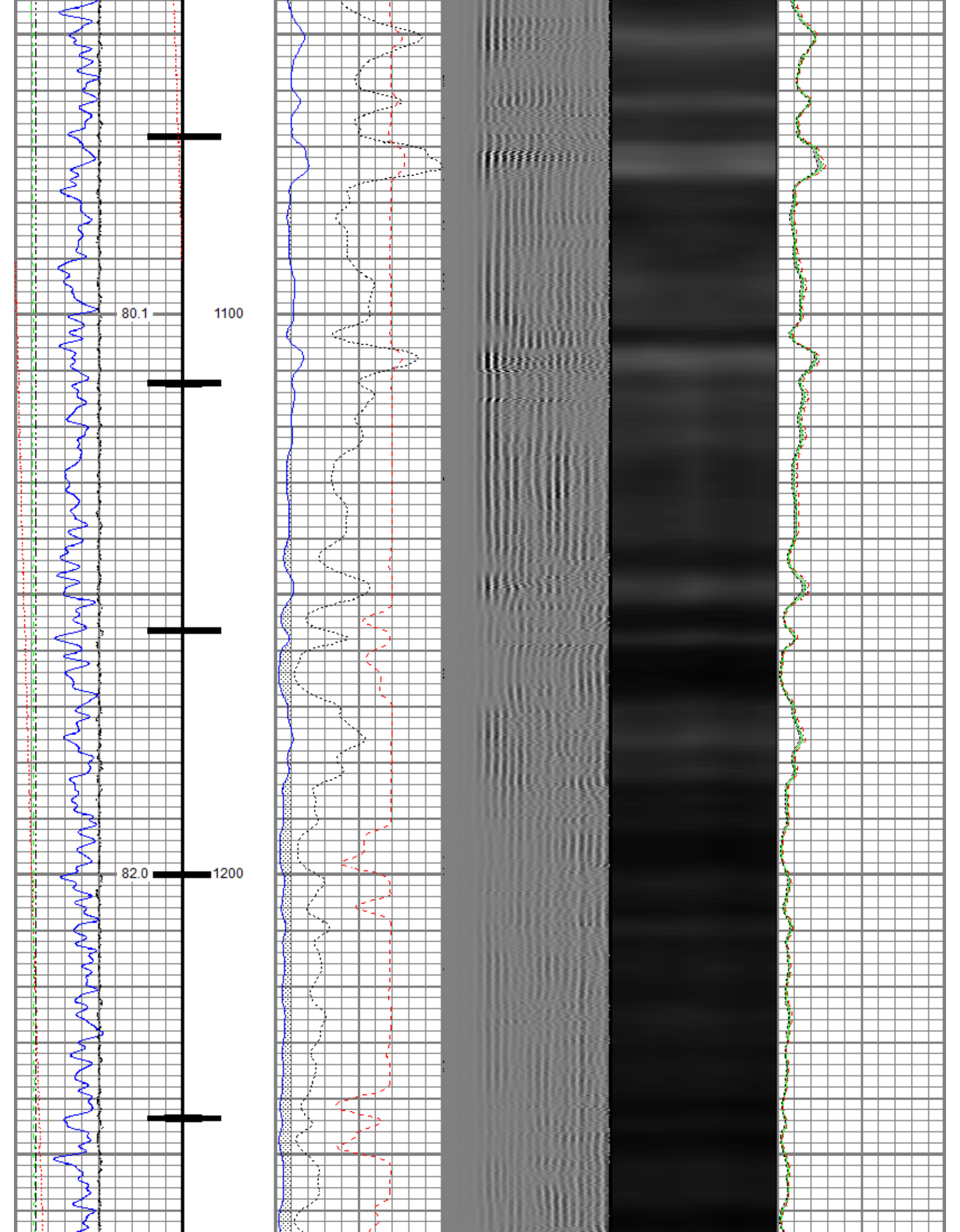


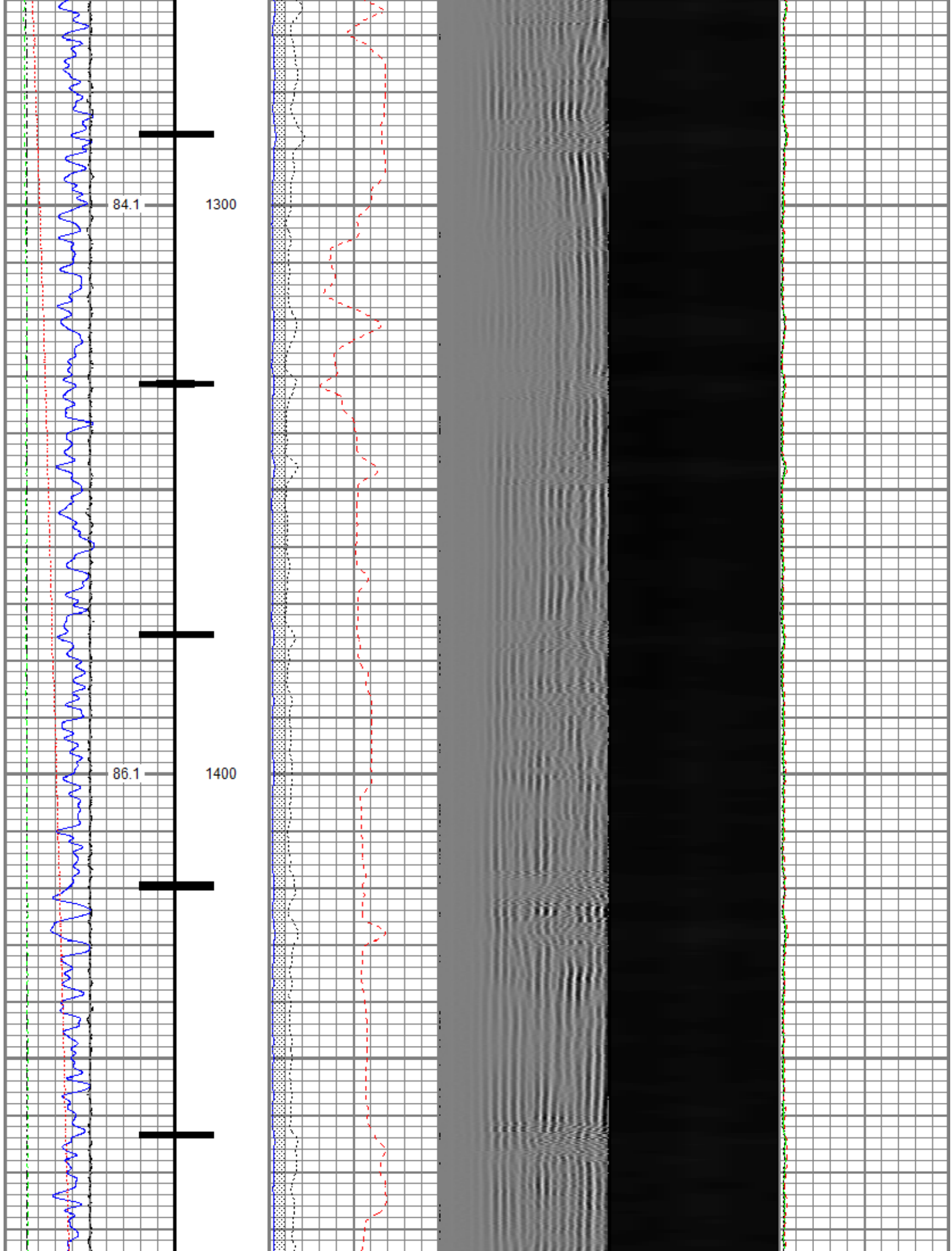


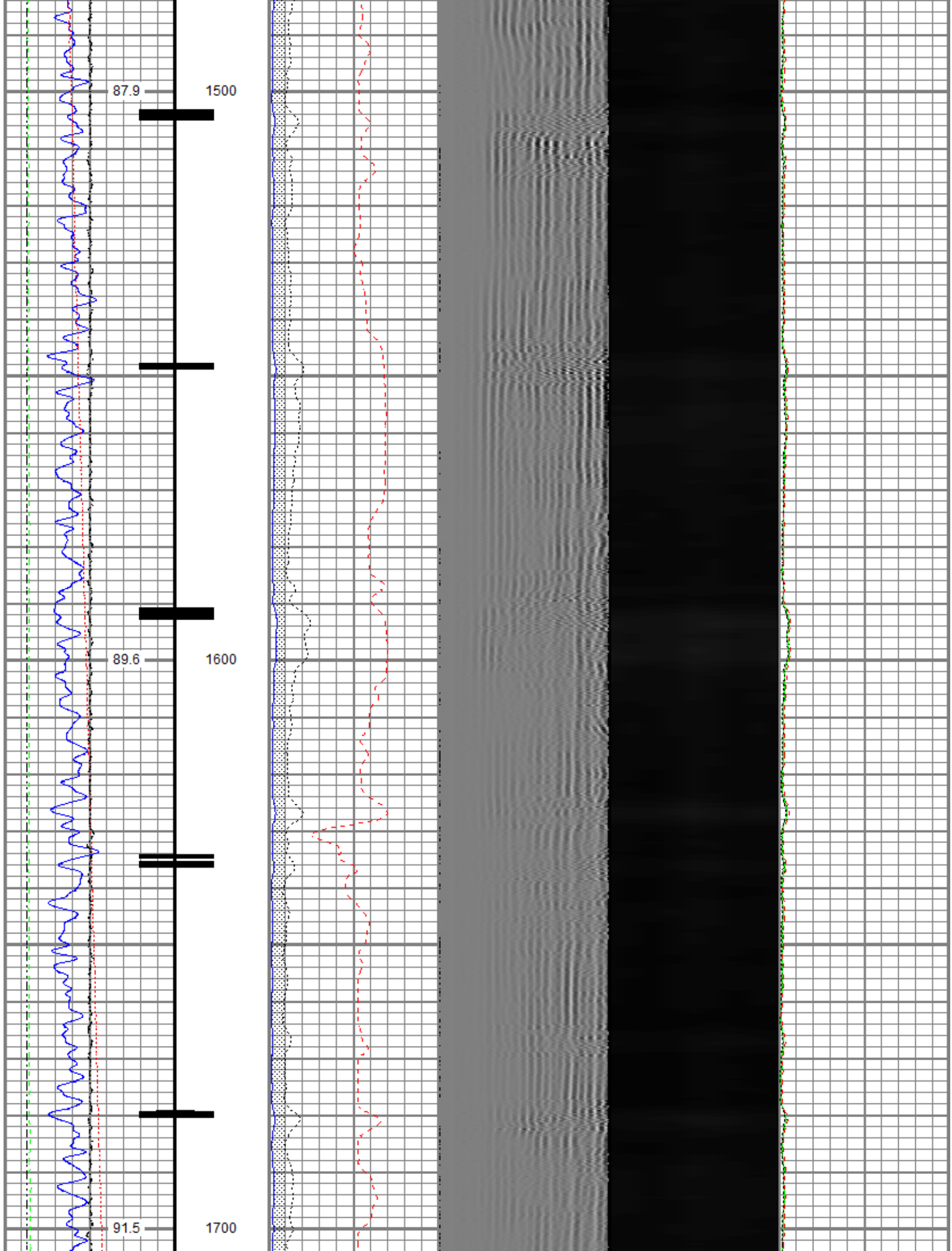


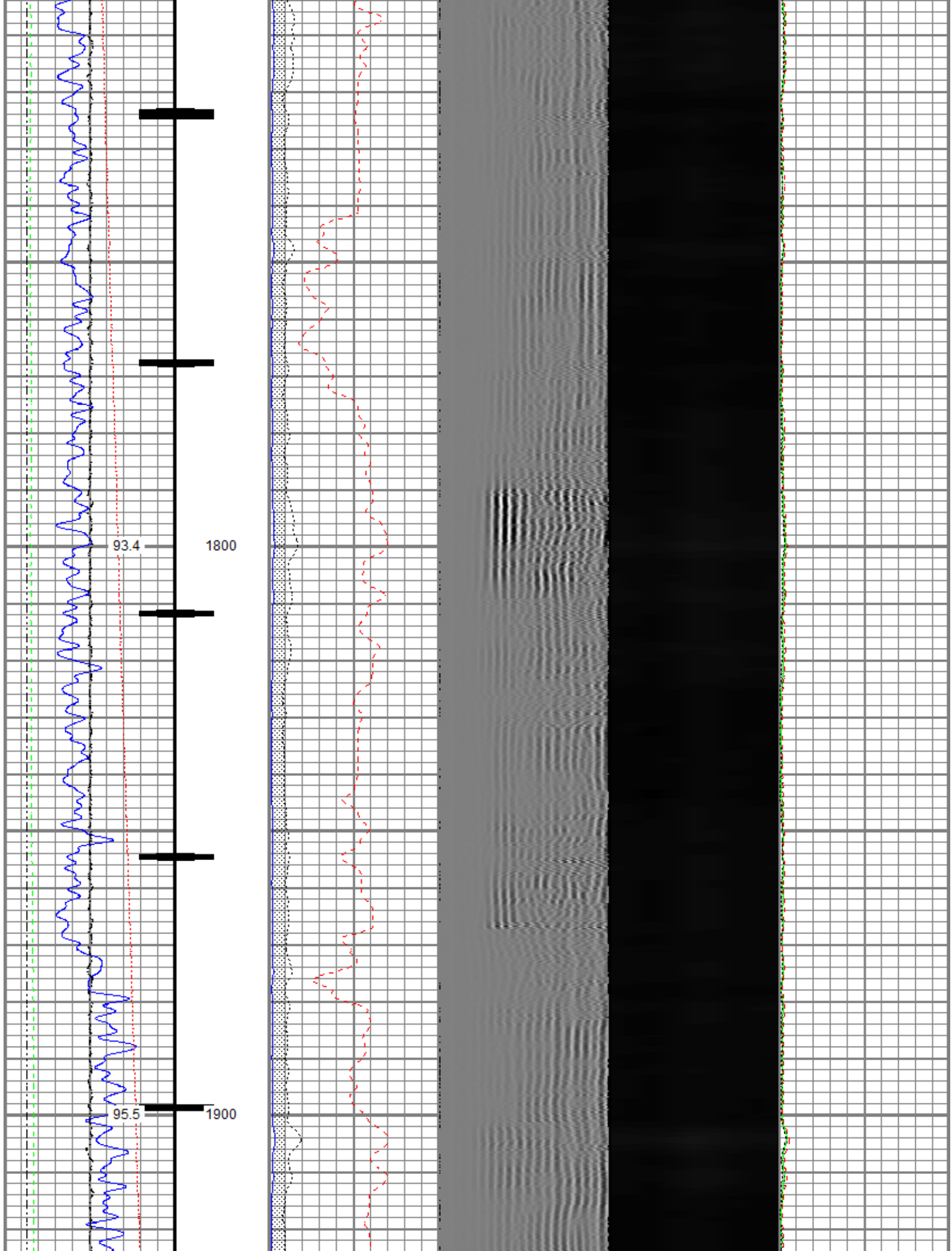


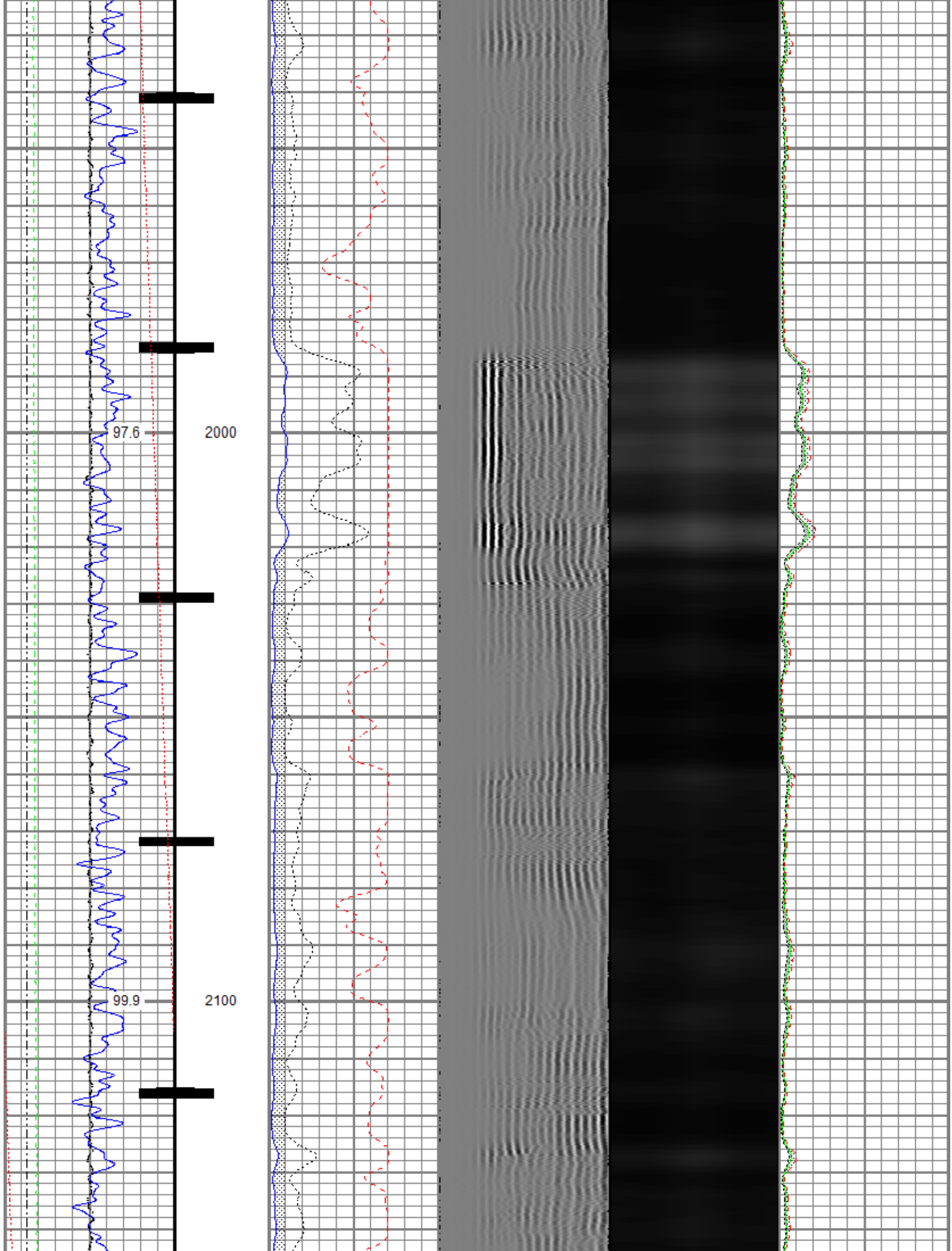


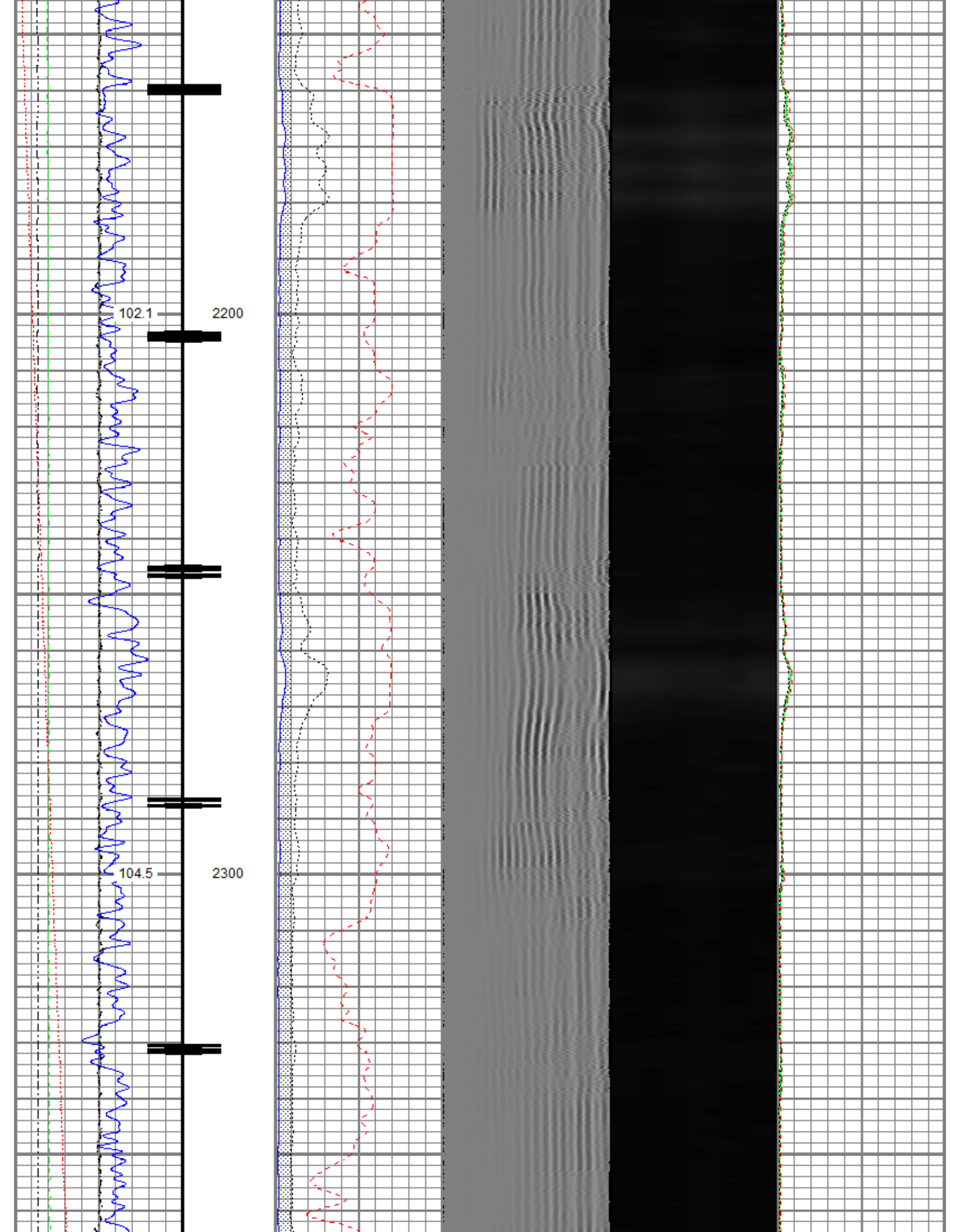


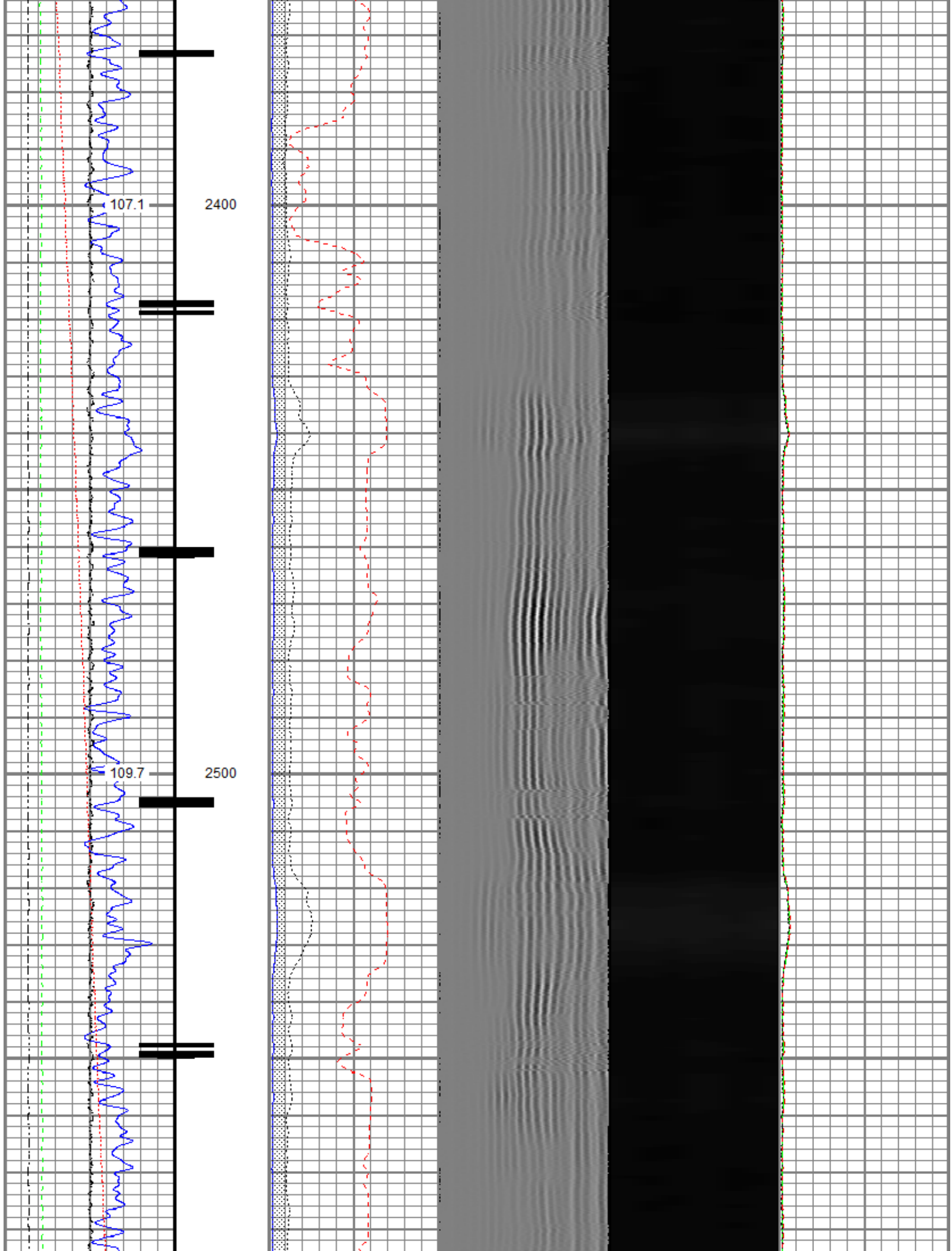


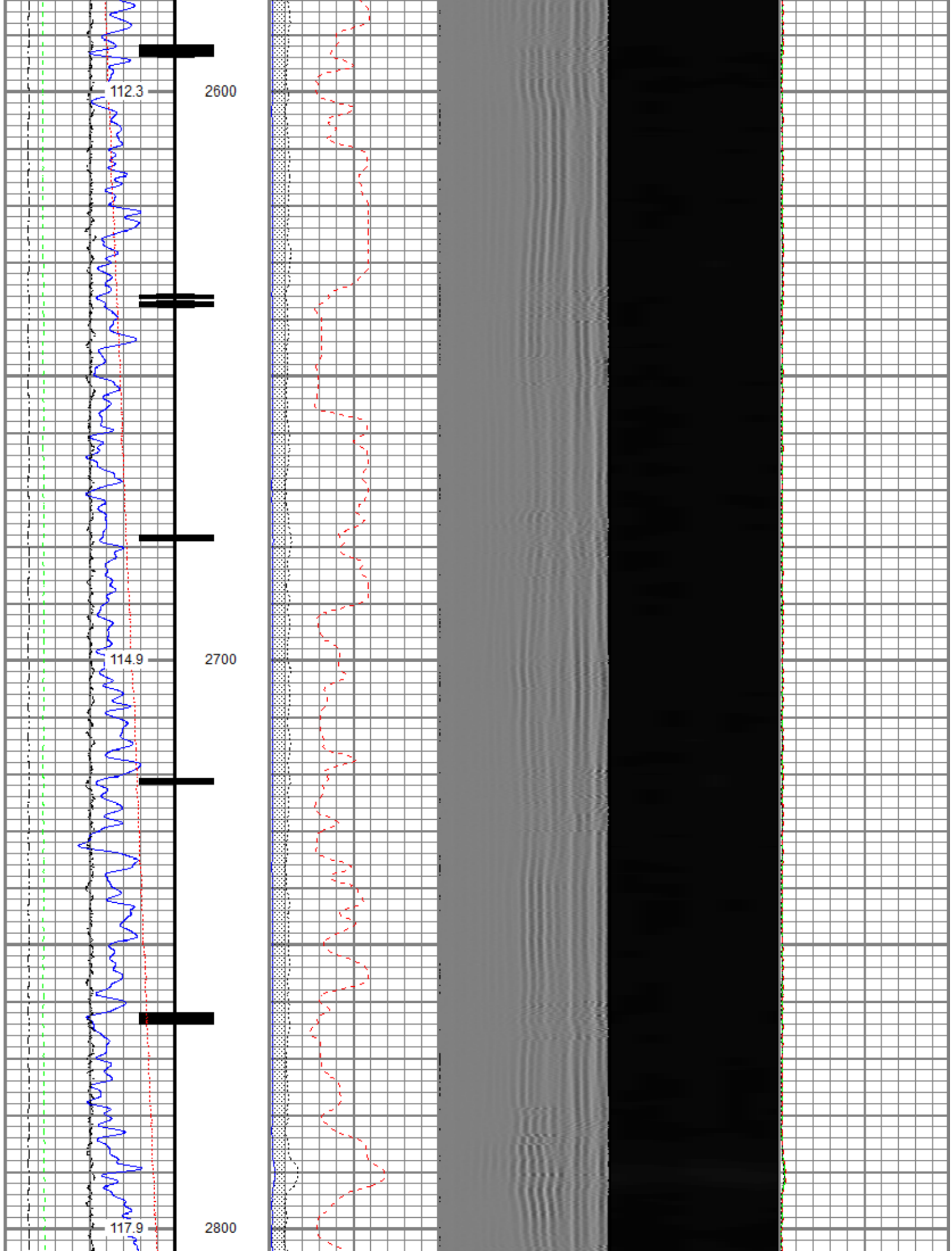


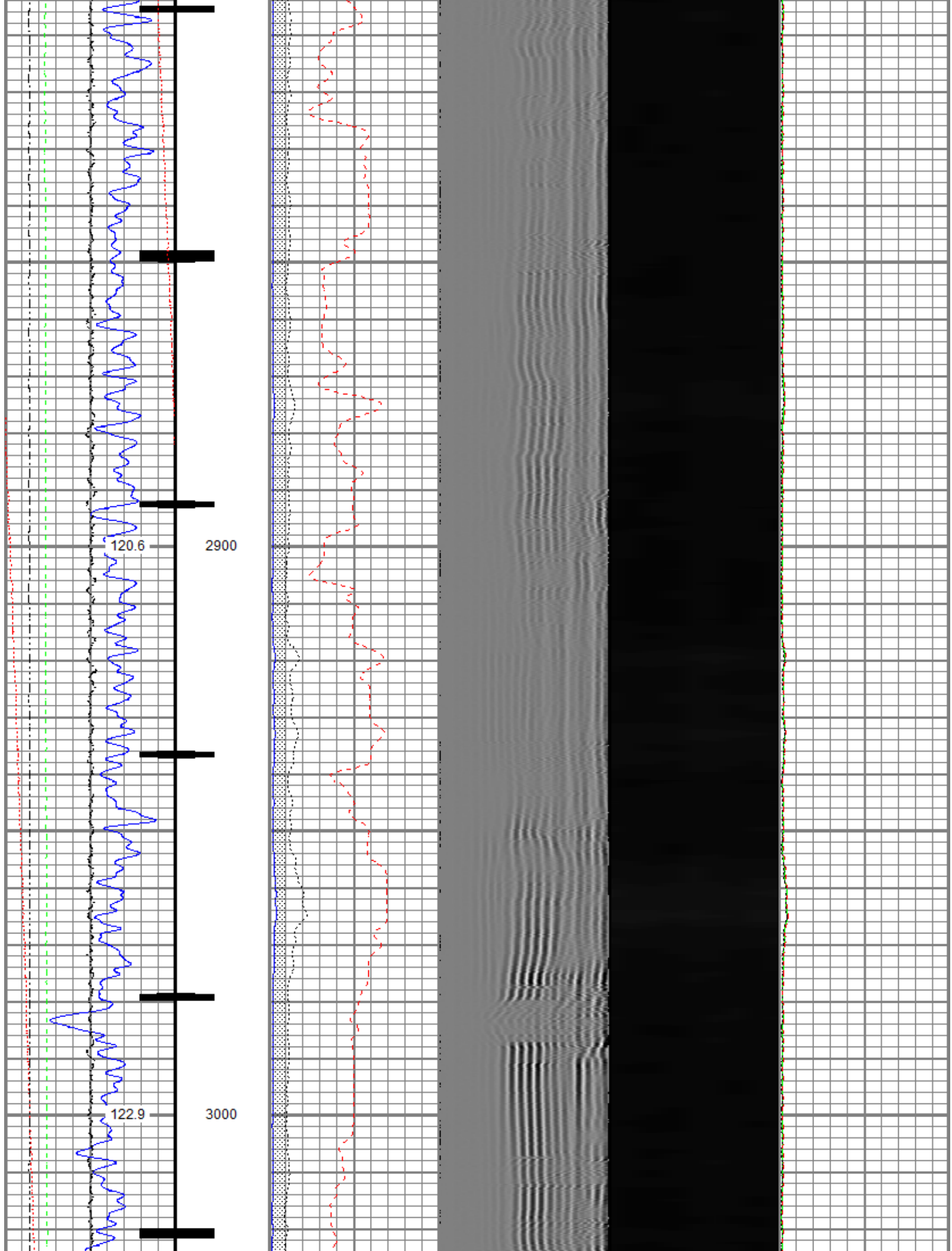


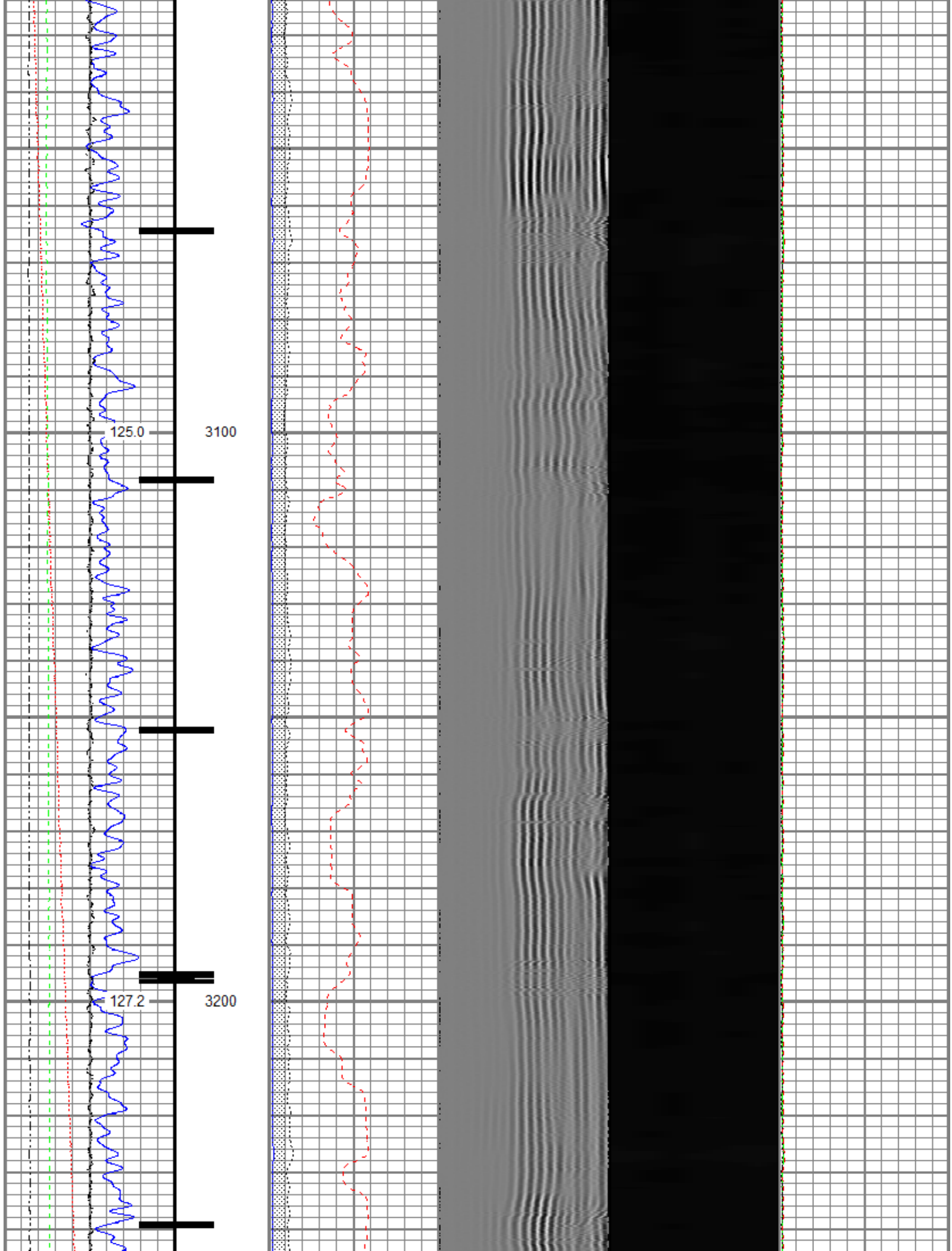


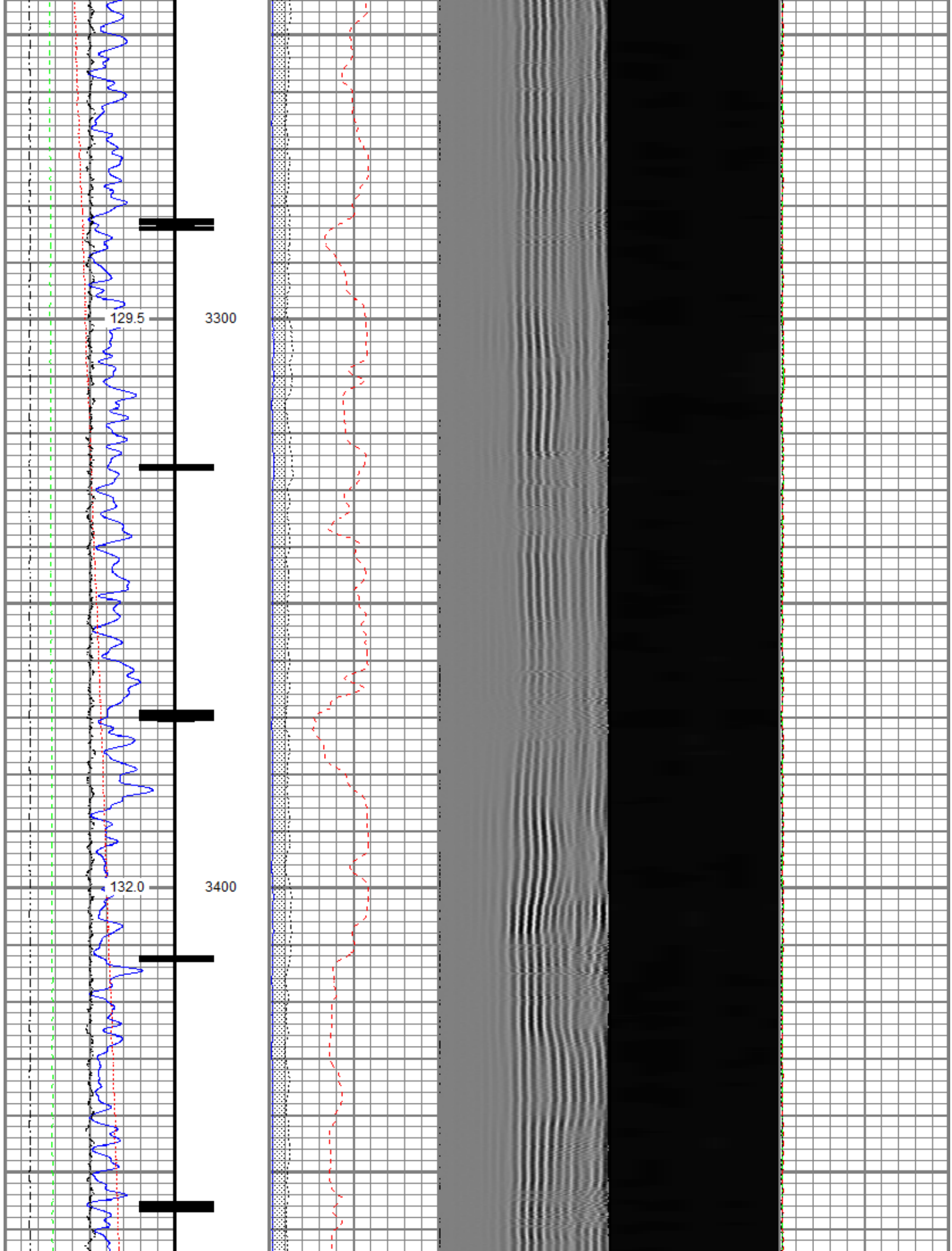


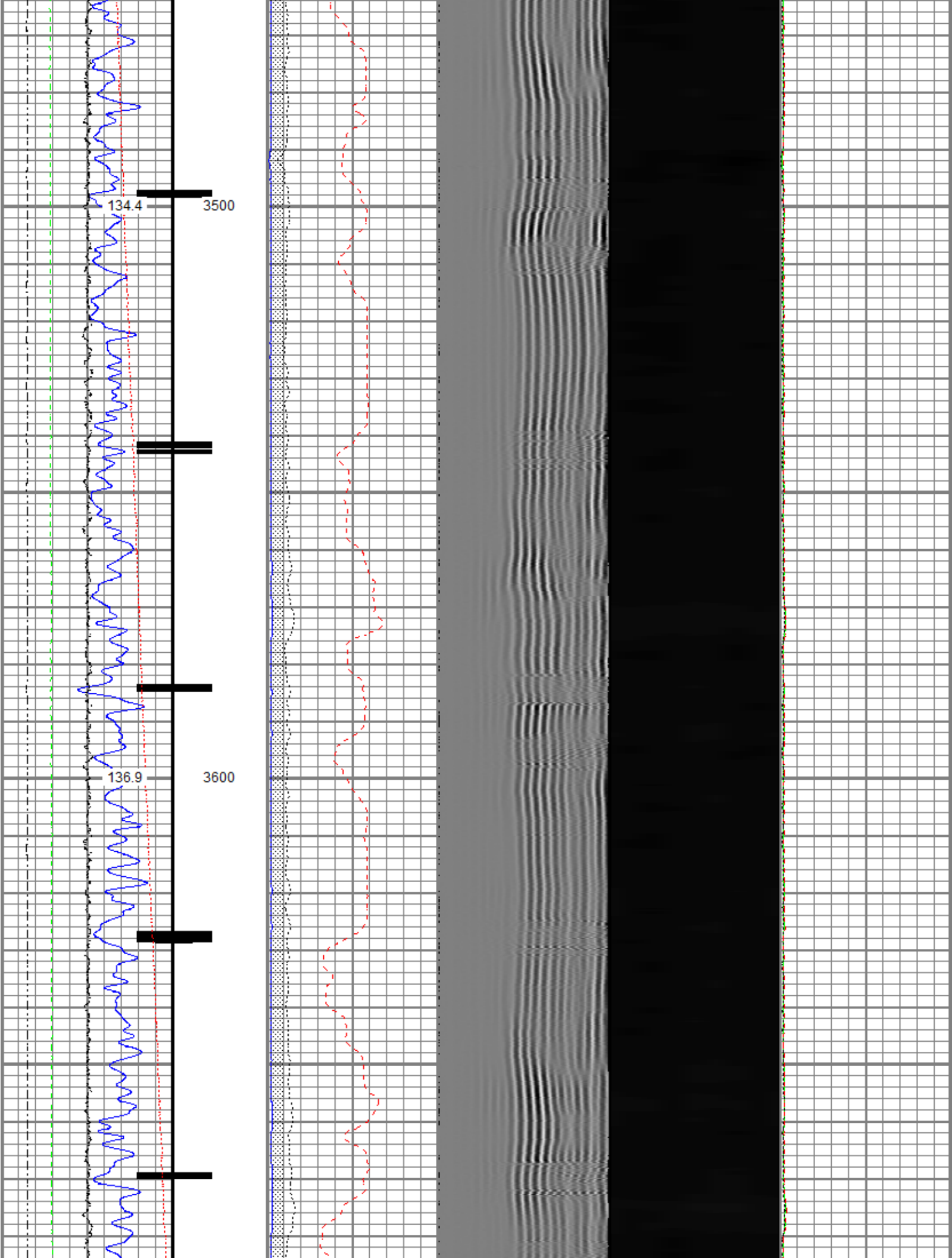


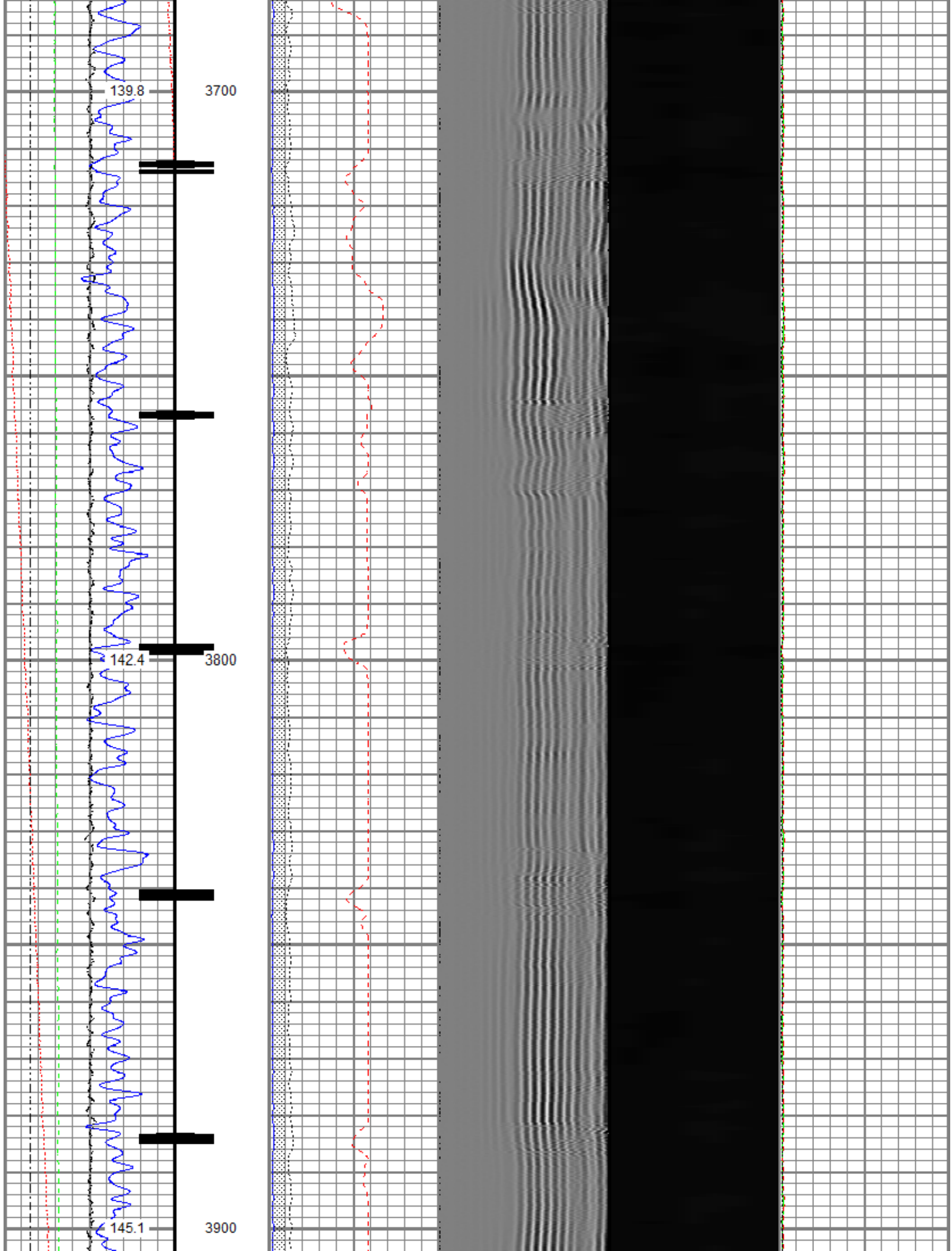


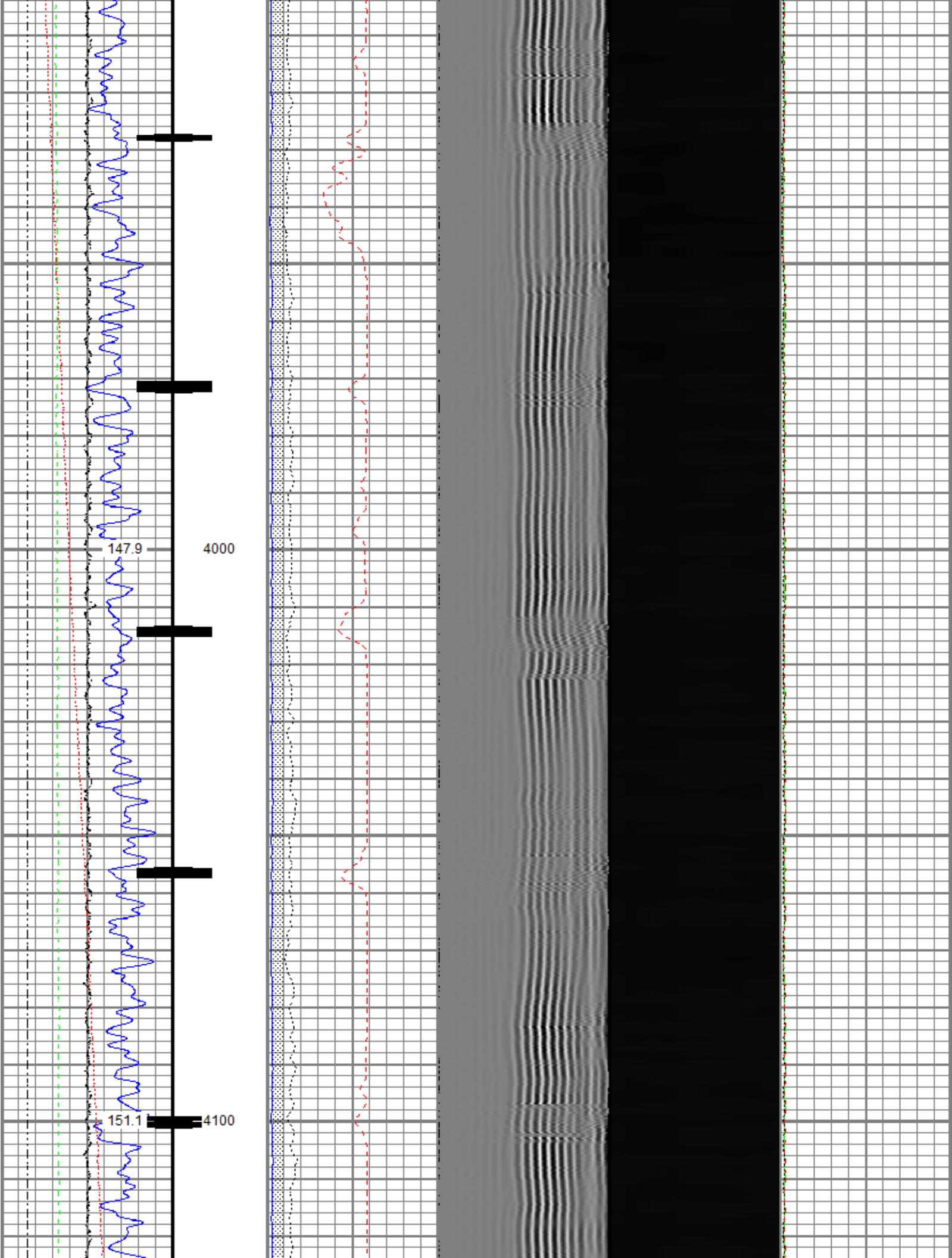


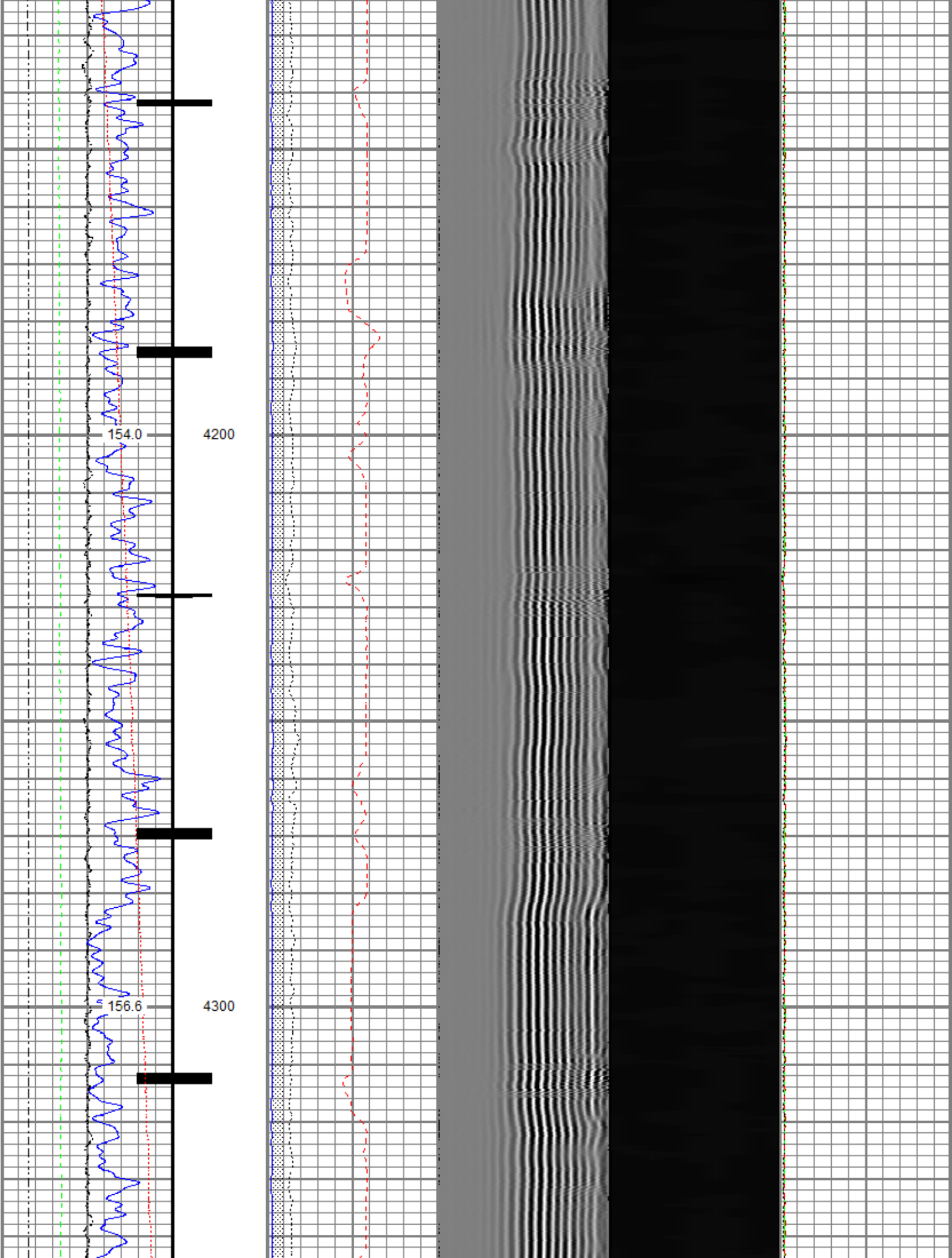


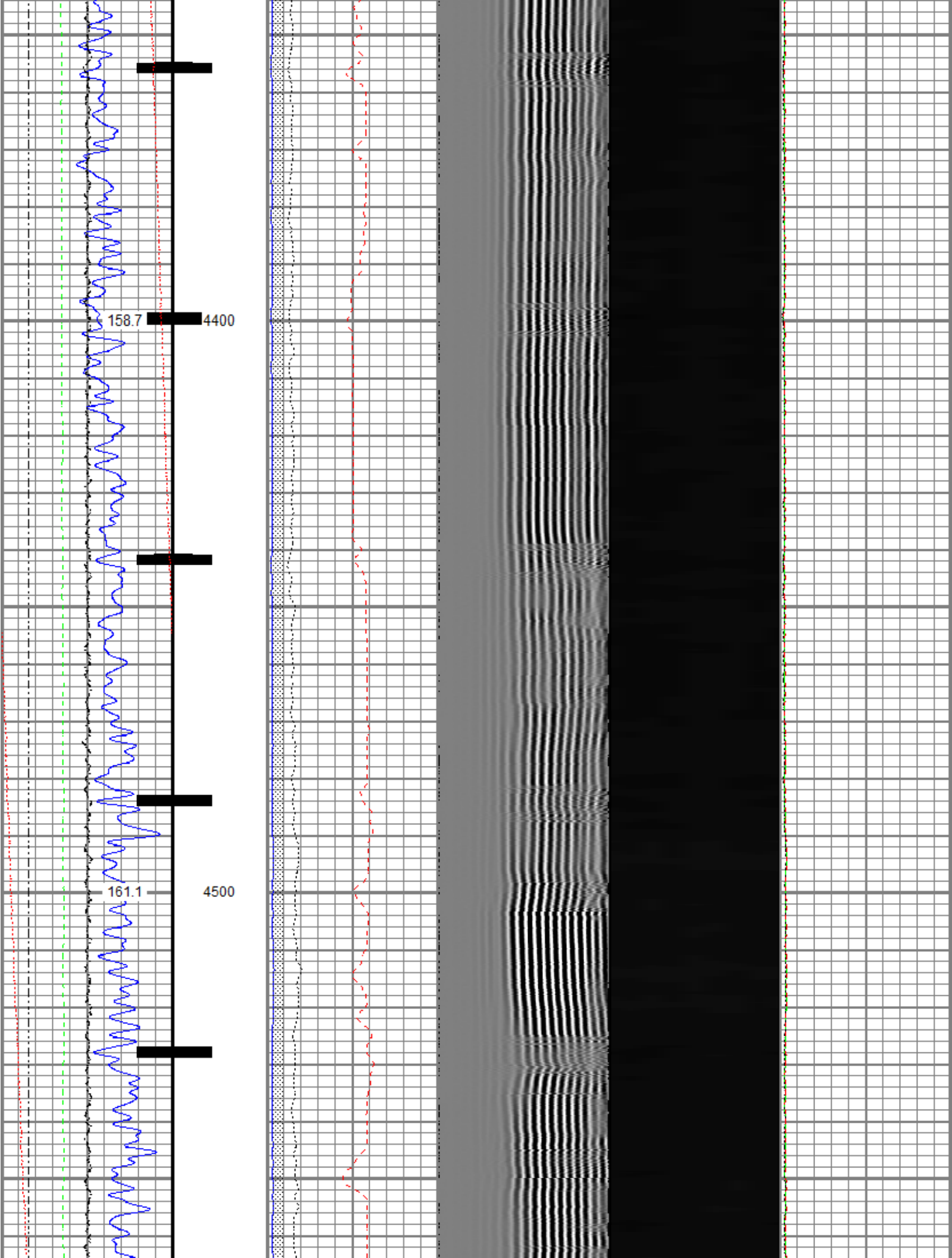


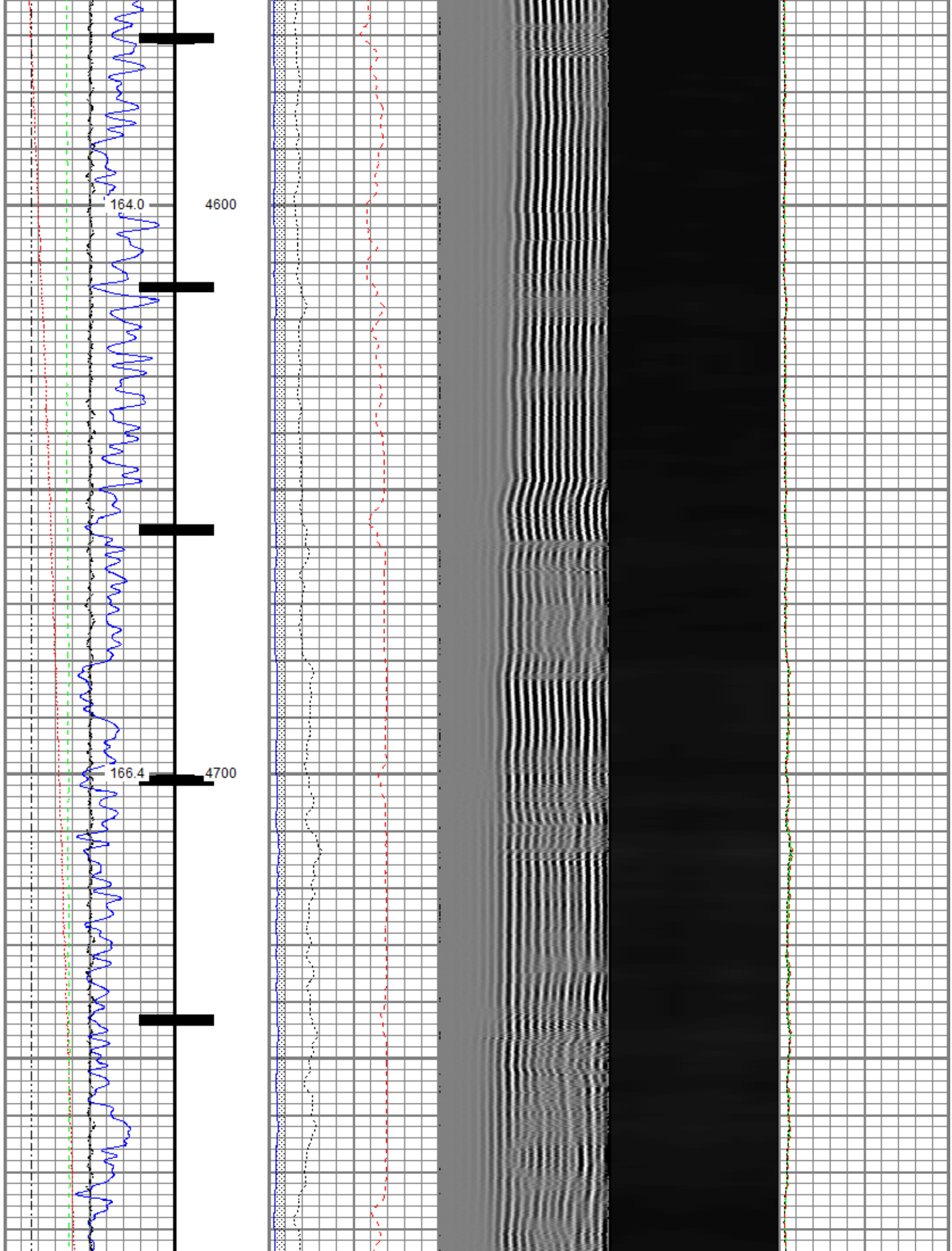


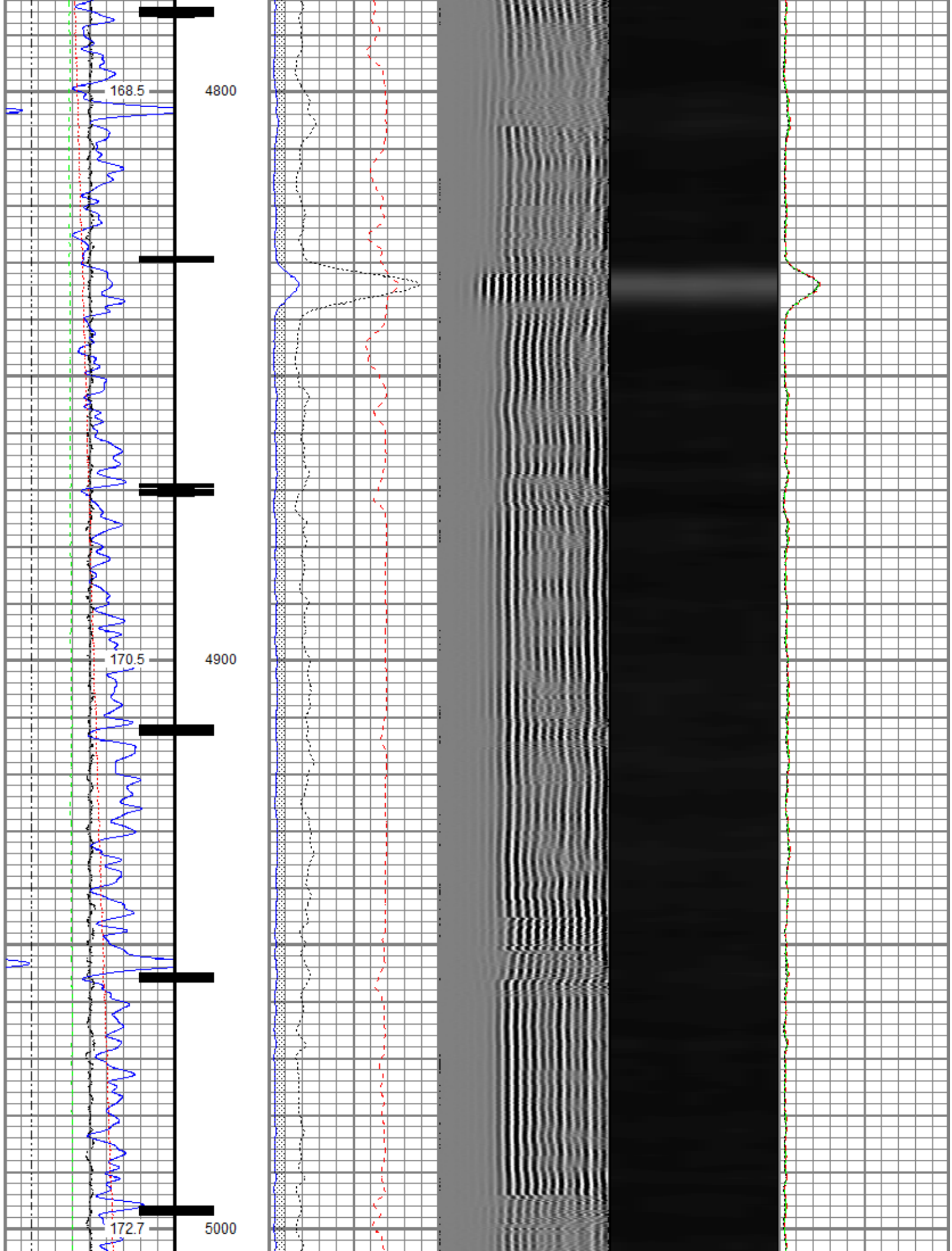


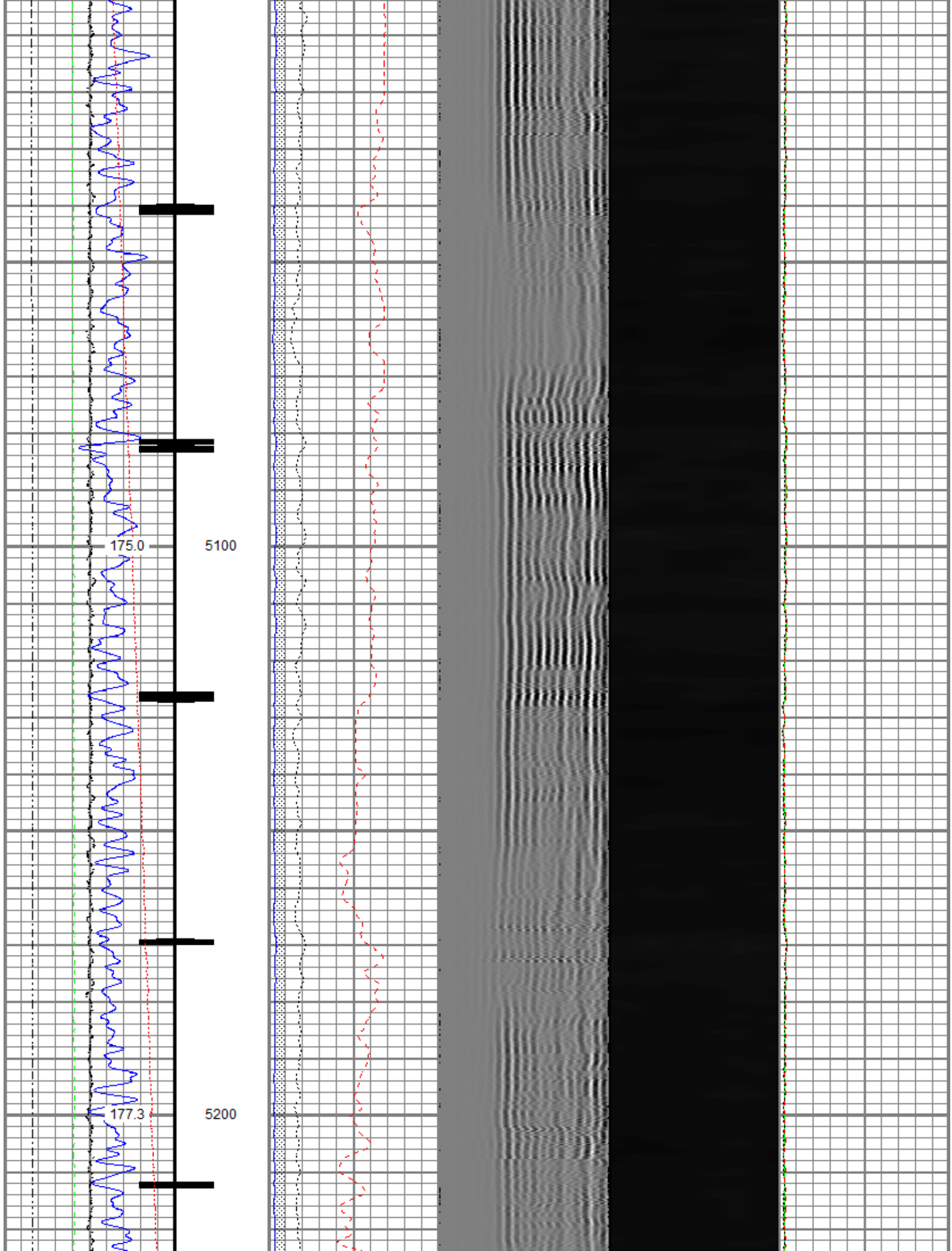


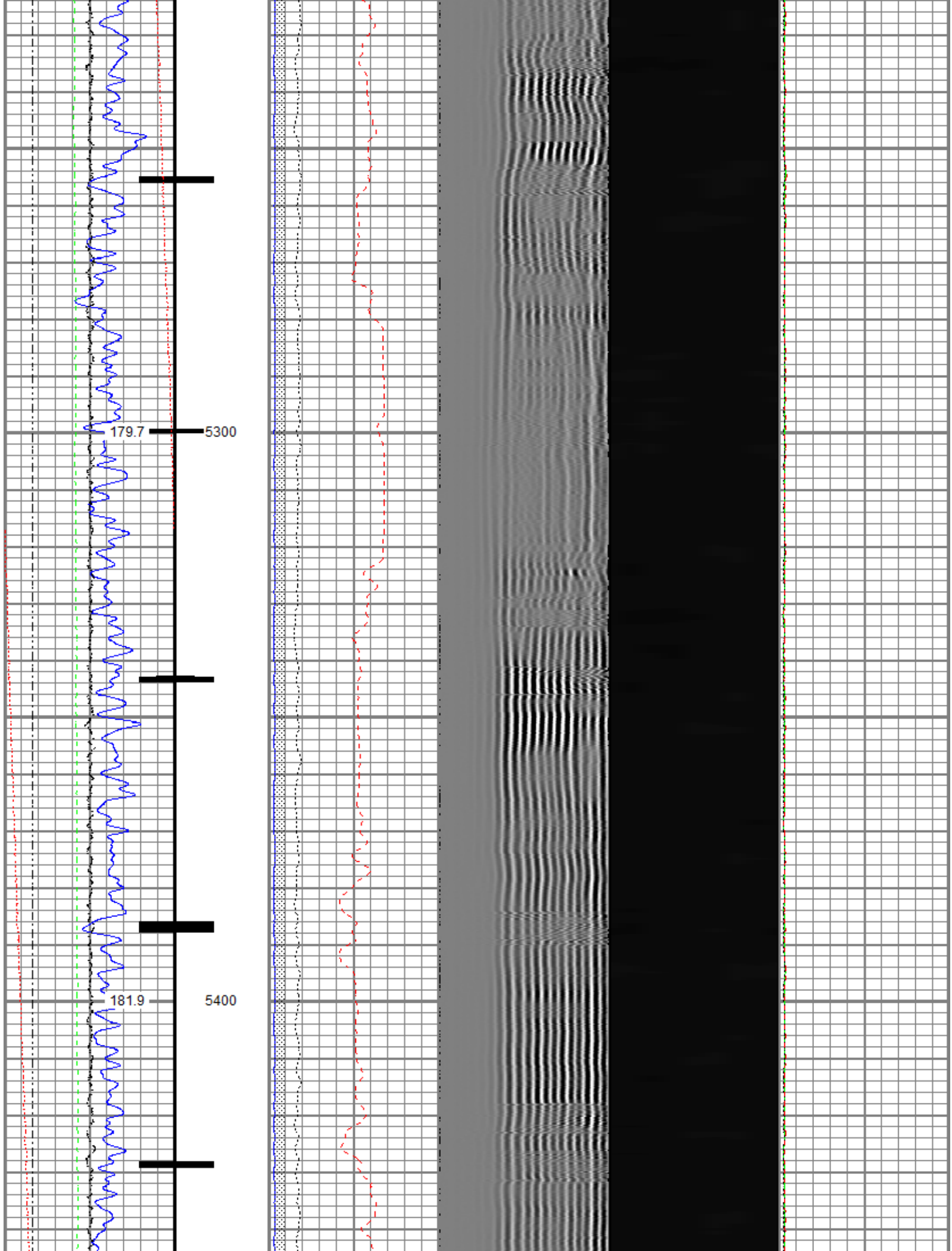


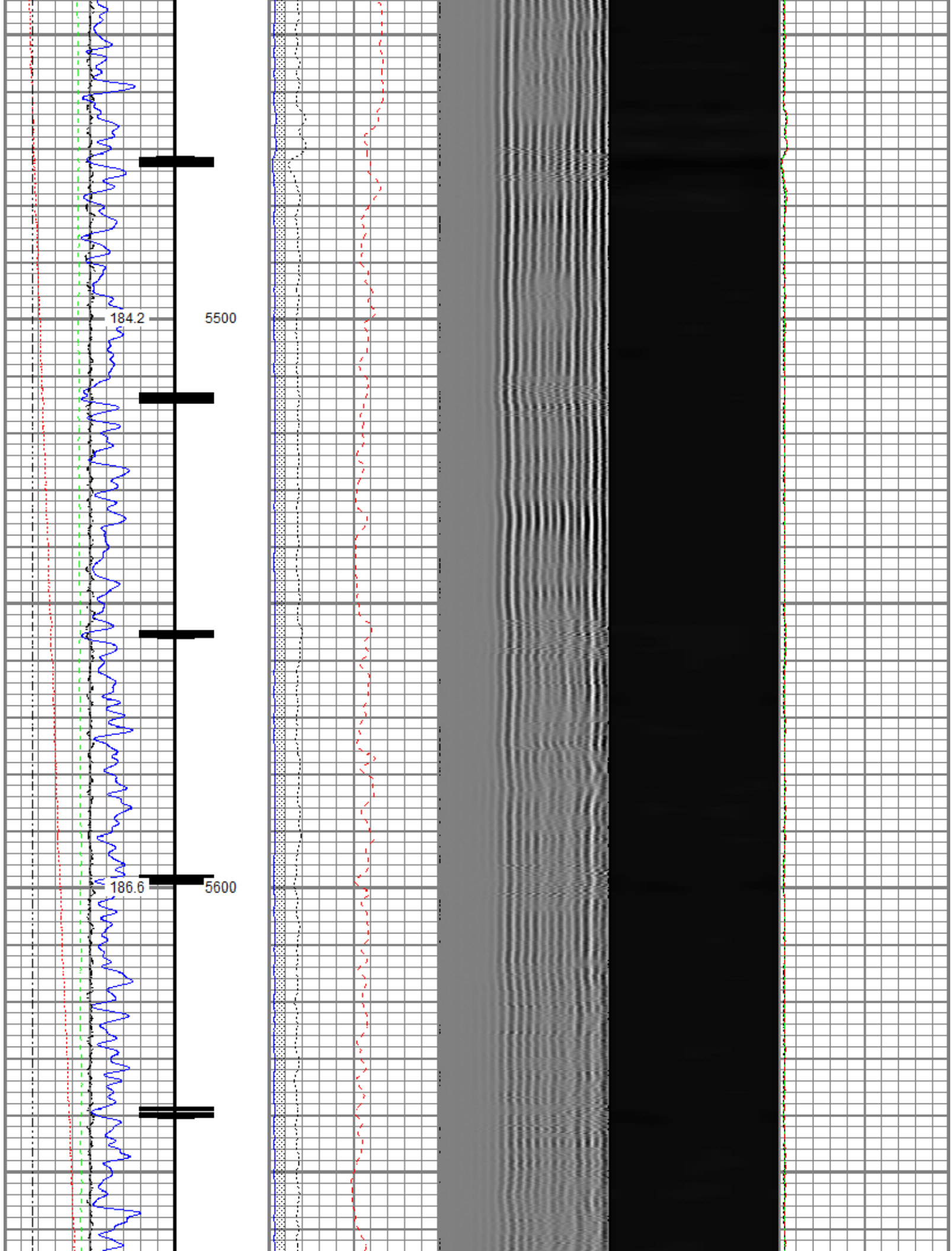


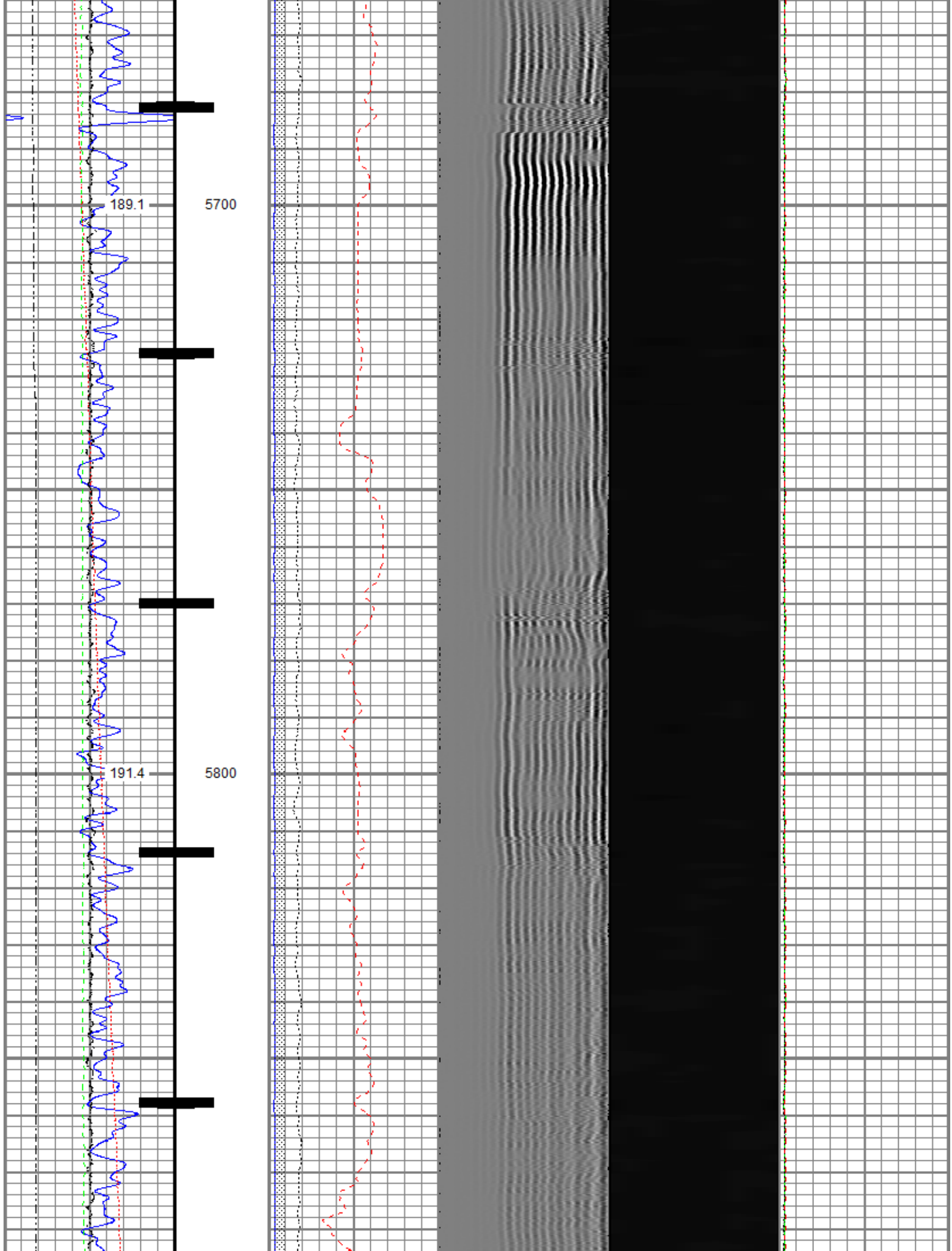


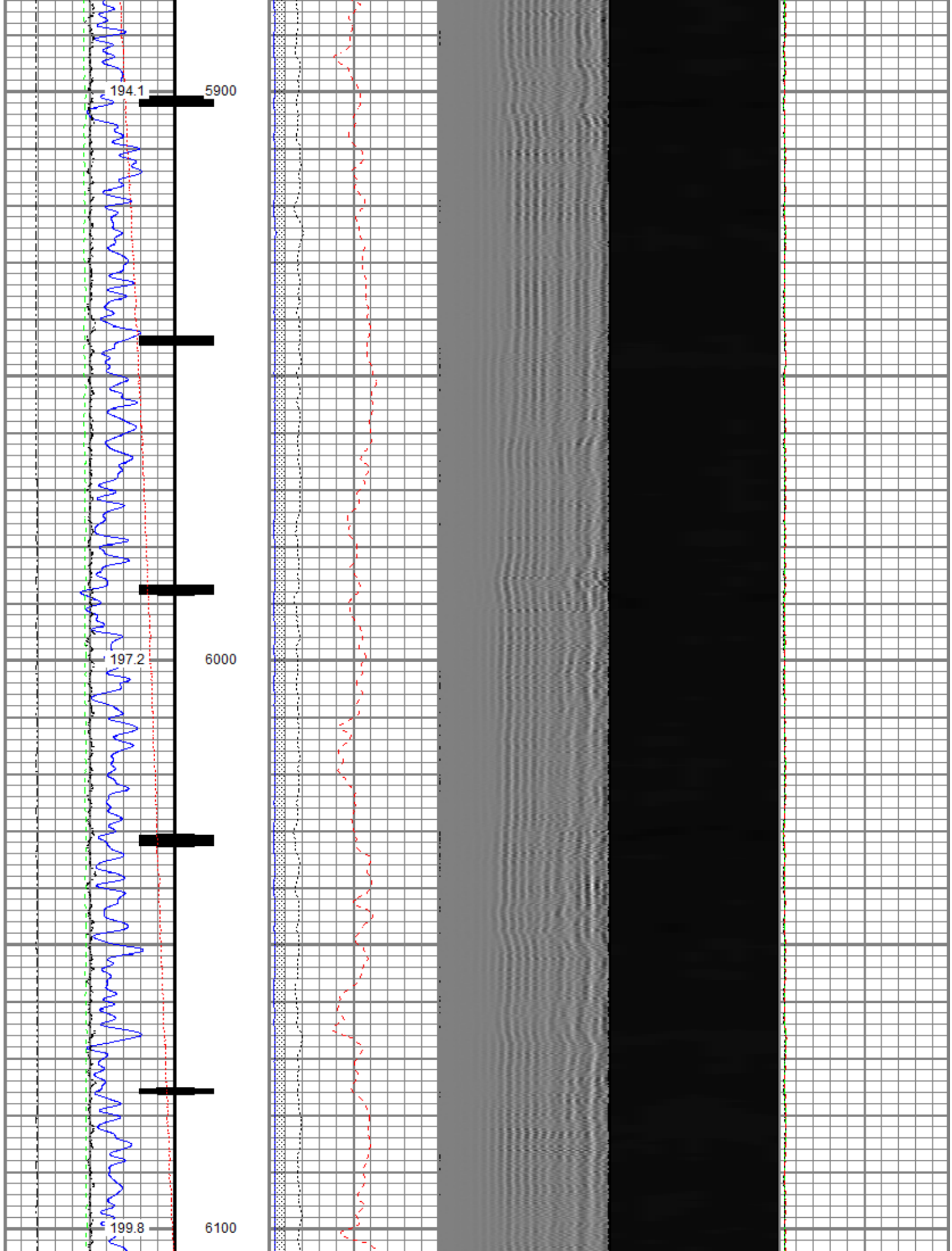


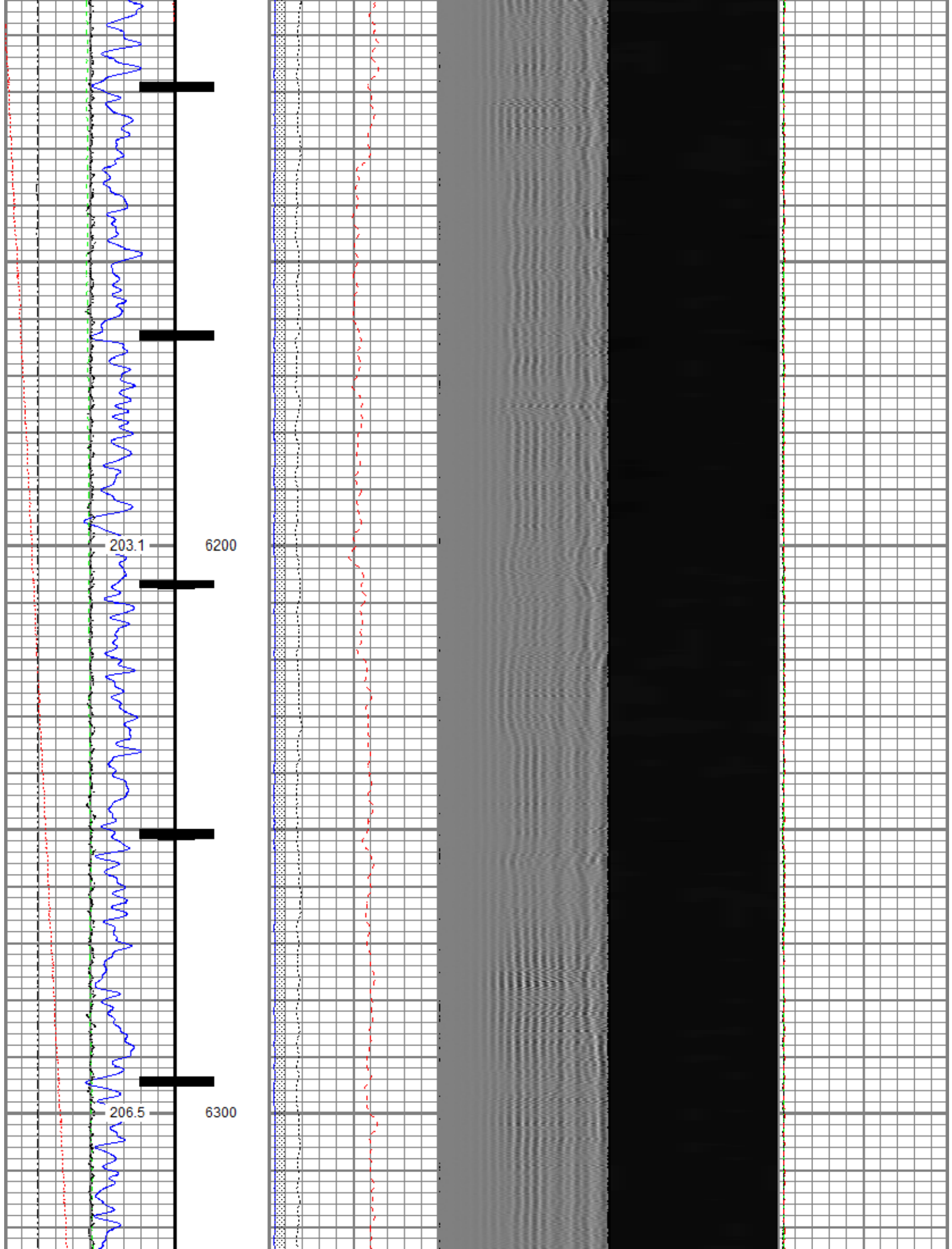


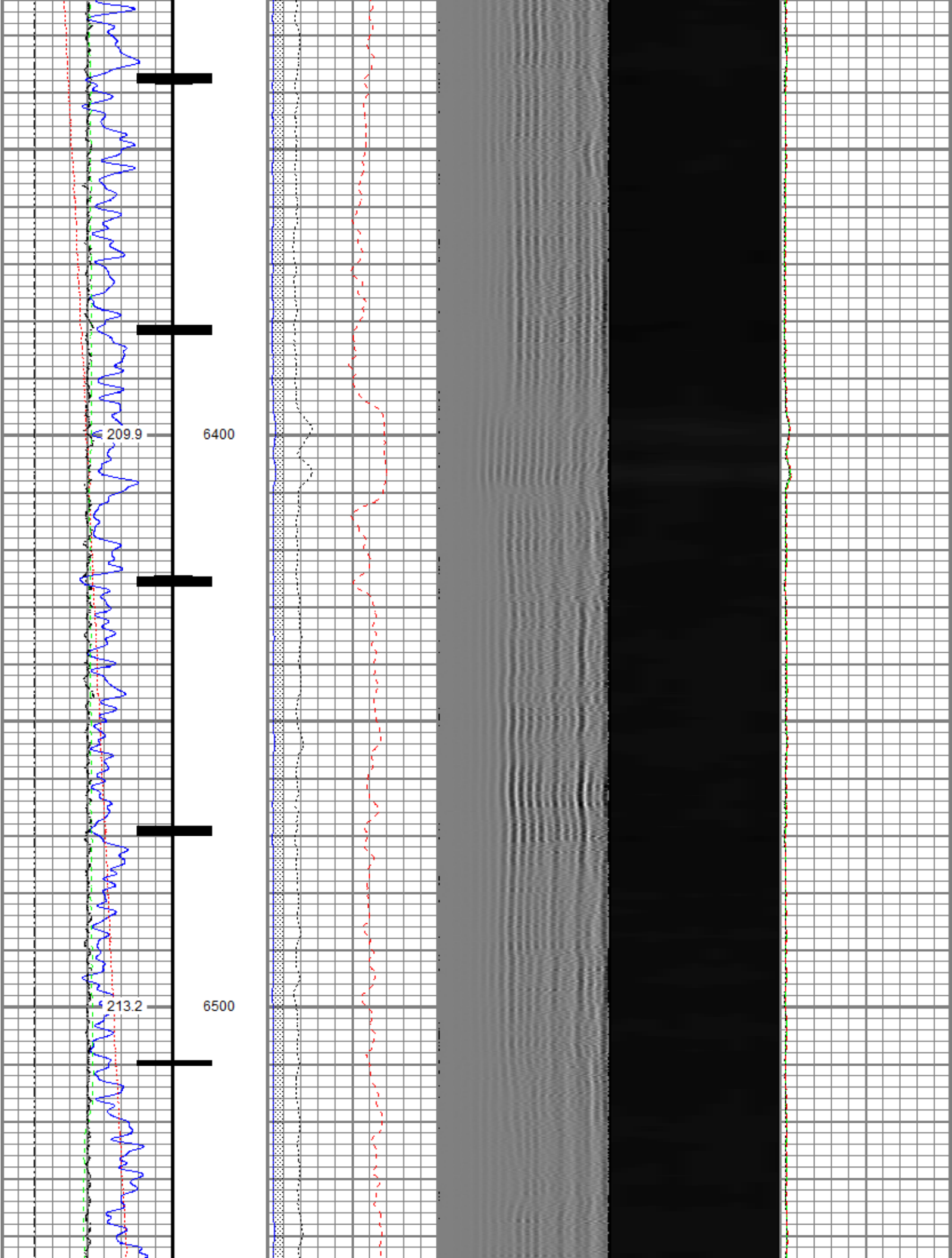


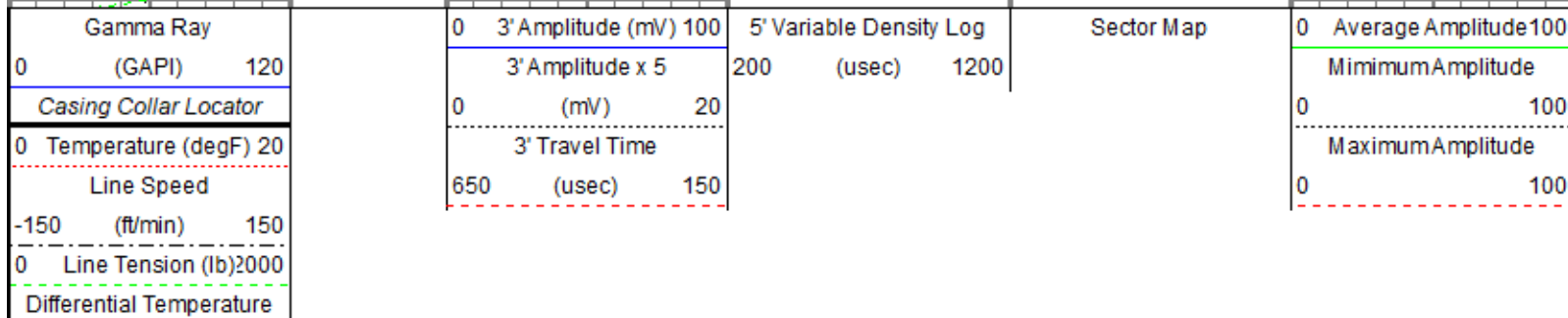












-2 (degF) 2

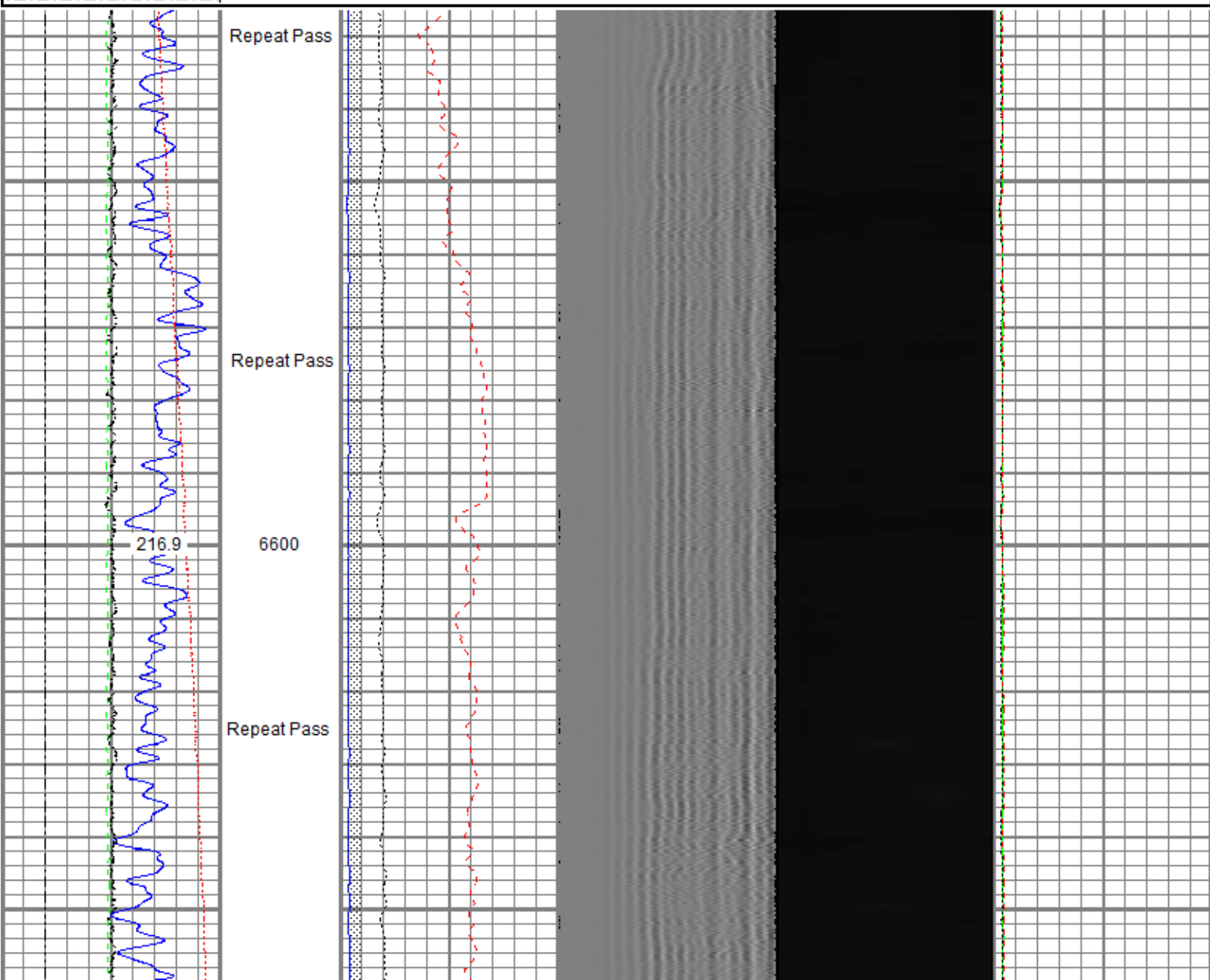


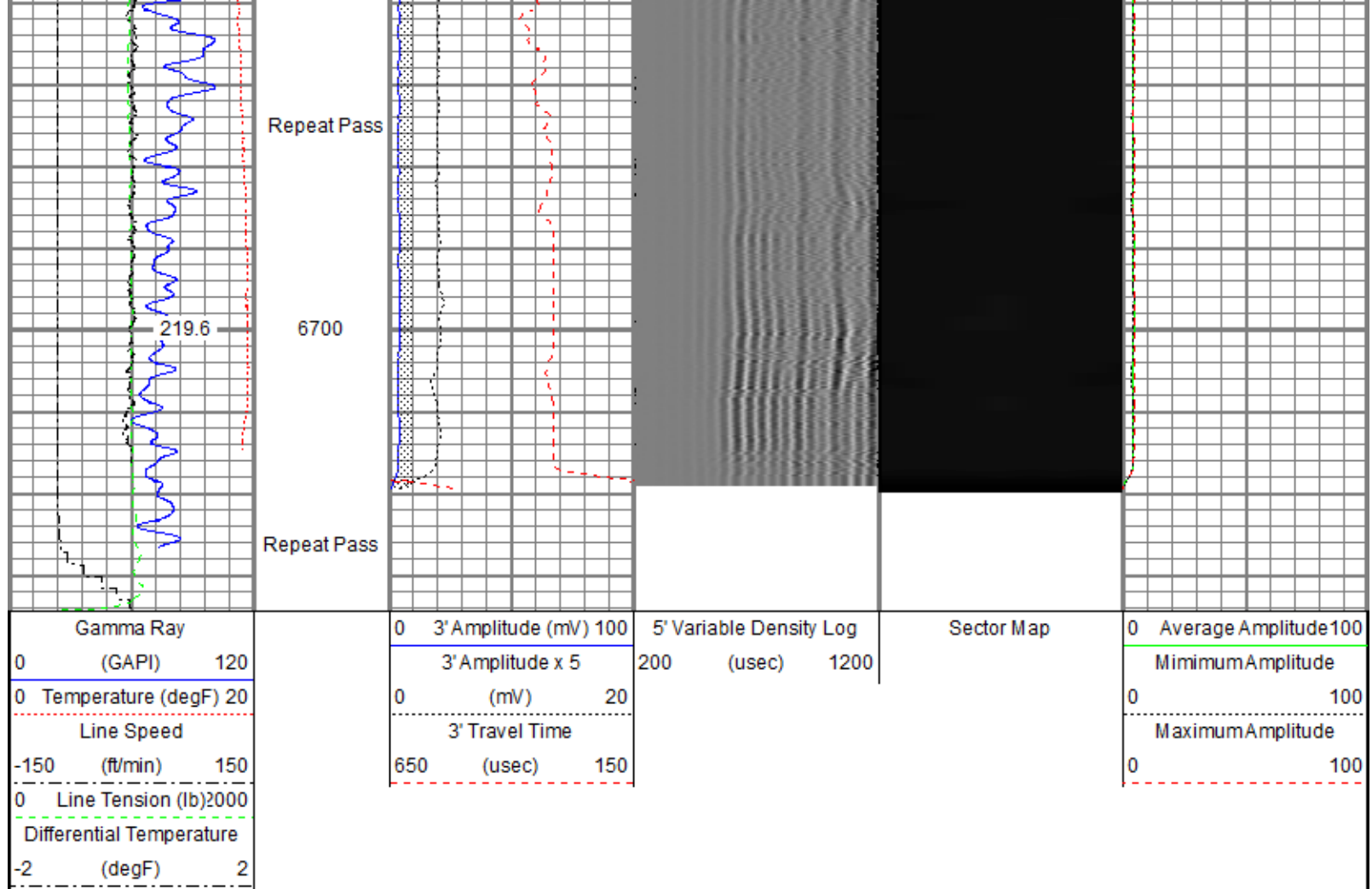
Repeat Pass

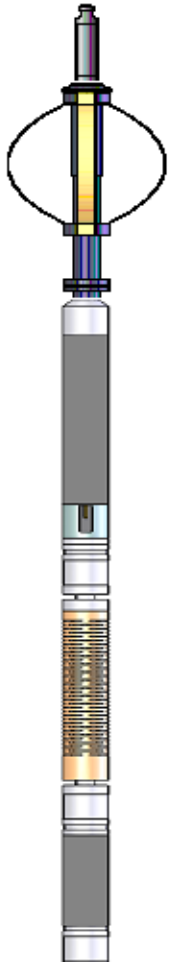
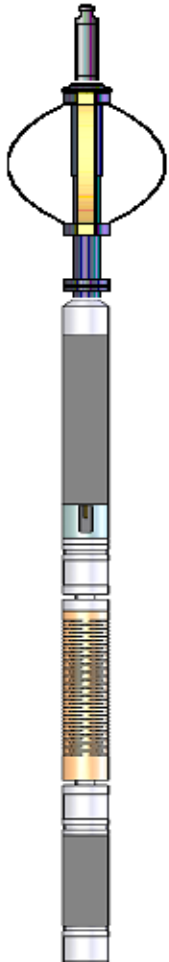
Recorded With 2800 PSI Surface Induced Pressure

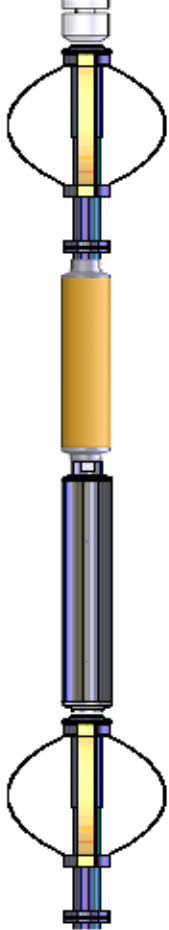
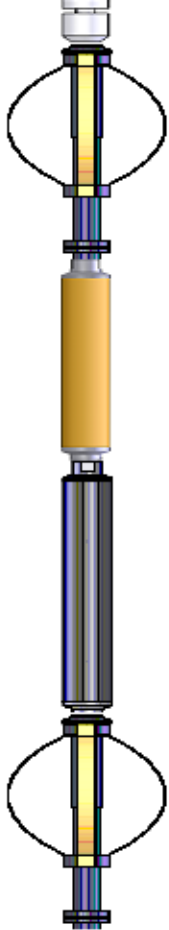
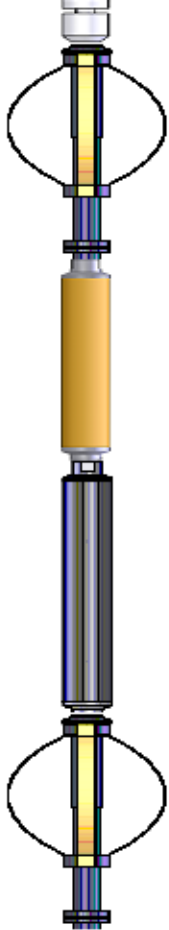
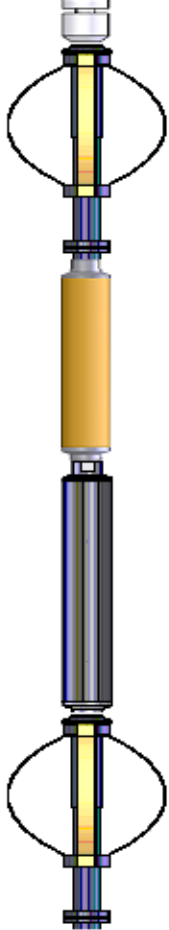
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Dataset Pathname pass2.2
Presentation Format ros_radri
Dataset Creation Thu Mar 08 10:14:09 2018
Charted by Depth in Feet scaled 1:240

Gamma Ray	0	3' Amplitude (mV)	100	5' Variable Density Log	Sector Map	0	Average Amplitude	100
0 (GAPI) 120		3' Amplitude x 5	200 (usec) 1200				Minimum Amplitude	
0 Temperature (degF) 20		0 (mV) 20				0	Maximum Amplitude	100
Line Speed		3' Travel Time						
-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)
			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
			Probe Radii-2750 RBT (FW1308-091) Probe 2-3/4" Radial Cement Bond Tool with Integral Temperature Sub	9.39	2.75	105.00
TEMP	18.23					
WVFS8	16.00					
WVFS7	16.00					
WVFS6	16.00					
WVFS5	16.00					
WVFS4	16.00					
WVFS3	16.00					
WVFS2	16.00					
WVFS1	16.00					

WVFCAL	16.00		Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00
WVF3FT	16.00					
WVF5FT	15.00					
CCL\$2	7.38		Probe CCL-2750 SA (FW1307-076) Probe 2-3/4" Digital Six Magnet Logging CCL	2.66	2.75	35.00
CCL\$1	7.38					
GR	5.24		Probe GR-2750 SA (FW1307-078) Probe 2-3/4" Digital Stand Alone Gamma Ray	3.33	2.75	55.00
			Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00
Dataset: 0512344206_anadarko_leinweber fed 31n-8hz_rbl_03-07-18.db: field/well/run1/pass4.1 Total length: 25.06 ft Total weight: 258.60 lb O.D.: 2.75 in						

Calibration Report						
Database File	c:\programdata\warrior\data\anadarko\leinweber fed 31n-8hz\0512344206_anadarko_leinweber fed 31n-8hz_rbl_03-07-18.db					
Dataset Pathname	pass4.1					
Dataset Creation	Wed Mar 07 16:07:36 2018					
Gamma Ray Calibration Report						
Serial Number:	FW1307-078					
Tool Model:	2750 SA					
Performed:	Sun Nov 12 06:08:32 2017					
Calibrator Value:	637.0	GAPI				
Background Reading:	108.2	cps				
Calibrator Reading:	1134.5	cps				
Sensitivity:	0.6207	GAPI/cps				
Segmented Cement Bond Log Calibration Report						
Serial Number:	FW1308-091					
Tool Model:	2750 RBT					
Calibration Casing Diameter:	5.500	in				
Calibration Depth:	69.045	ft				
Master Calibration, performed (Derived):						
Raw (v)		Calibrated (mv)		Results		
Zero	Cal	Zero	Cal	Gain	Offset	

3'	0.001	0.573	0.800	71.921	124.189	0.735
CAL	0.722	0.723				
5'	0.000	0.531	0.800	71.921	133.937	0.767
SUM						
S1	0.001	0.542	0.000	100.000	184.623	-0.097
S2	0.000	0.561	0.000	100.000	178.555	-0.085
S3	0.001	0.585	0.000	100.000	171.227	-0.090
S4	0.001	0.622	0.000	100.000	160.937	-0.100
S5	0.001	0.651	0.000	100.000	153.778	-0.111
S6	0.001	0.635	0.000	100.000	157.755	-0.106
S7	0.001	0.576	0.000	100.000	173.852	-0.095
S8	0.000	0.547	0.000	100.000	182.941	-0.091

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.722	0.723	1.000	0.000

Air Zero Calibration, performed Wed Mar 07 12:33:30 2018:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.000		0.000		0.000	
5'	0.000		0.000		0.000	
SUM						
S1	0.000		0.000		0.000	
S2	0.000		0.000		0.000	
S3	0.000		0.000		0.000	
S4	0.000		0.000		0.000	
S5	0.000		0.000		0.000	
S6	0.000		0.000		0.000	
S7	0.000		0.000		0.000	
S8	0.000		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 Leinweber Fed 31N-8HZ
Field Wattenberg
County Weld
State Colorado