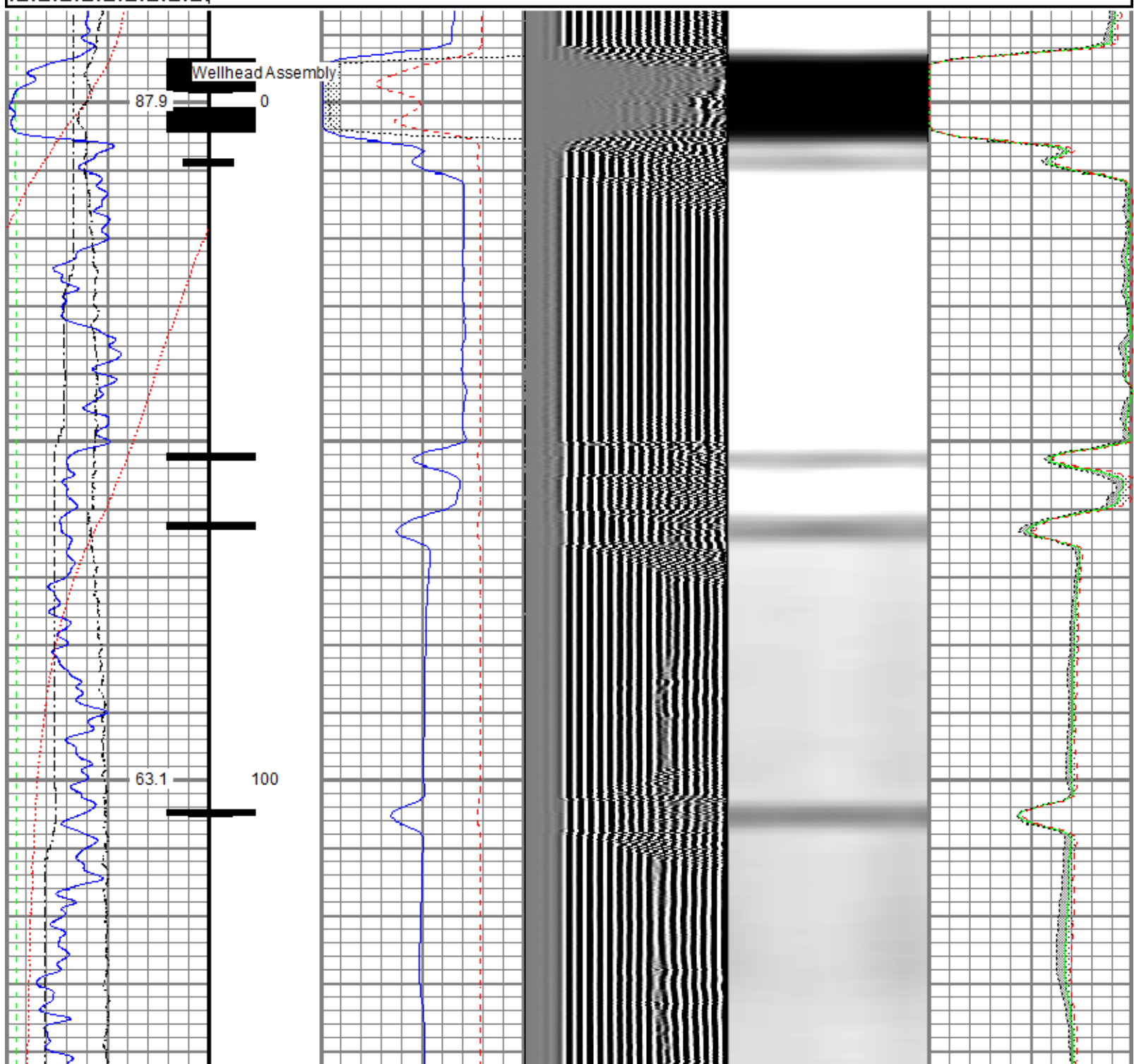
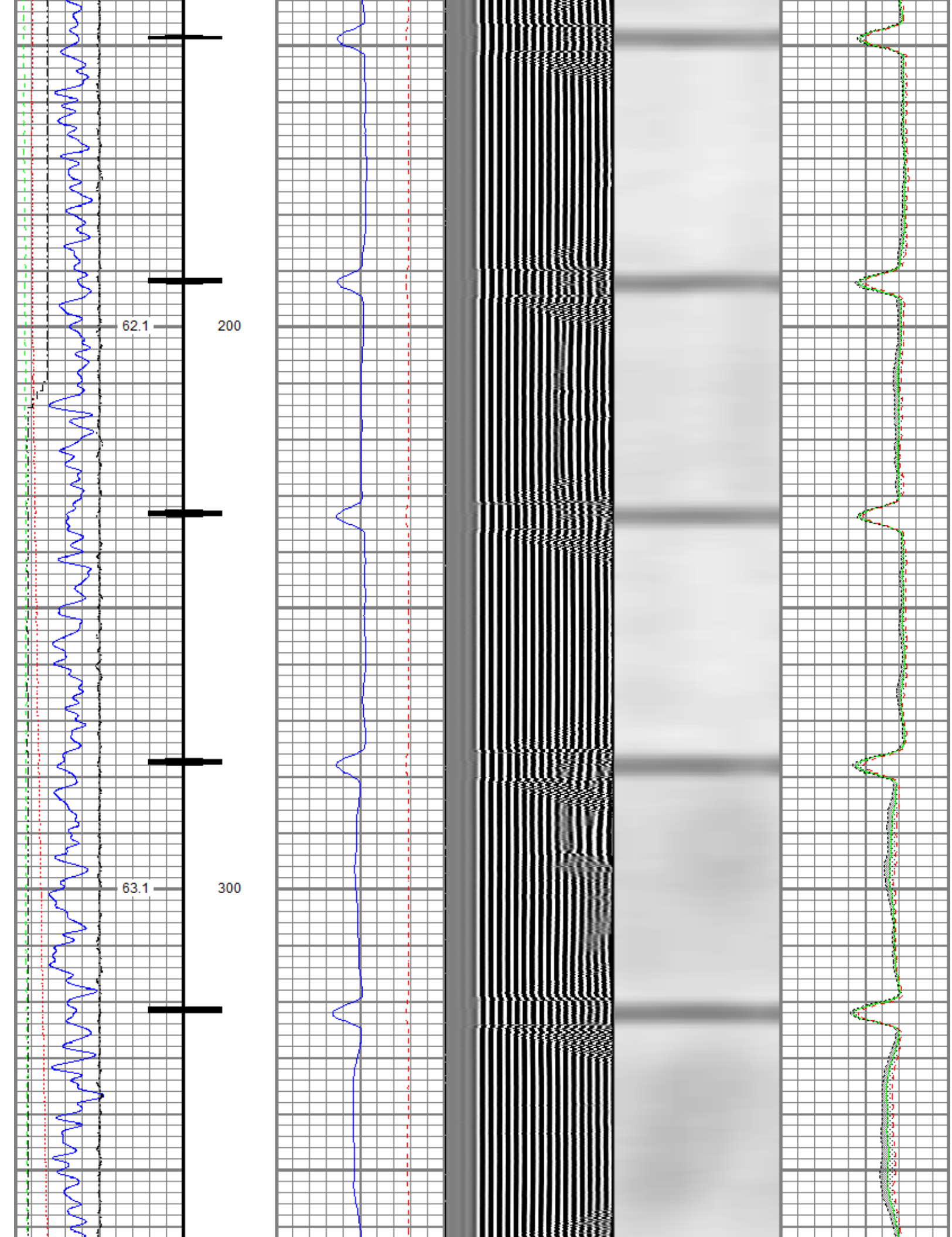


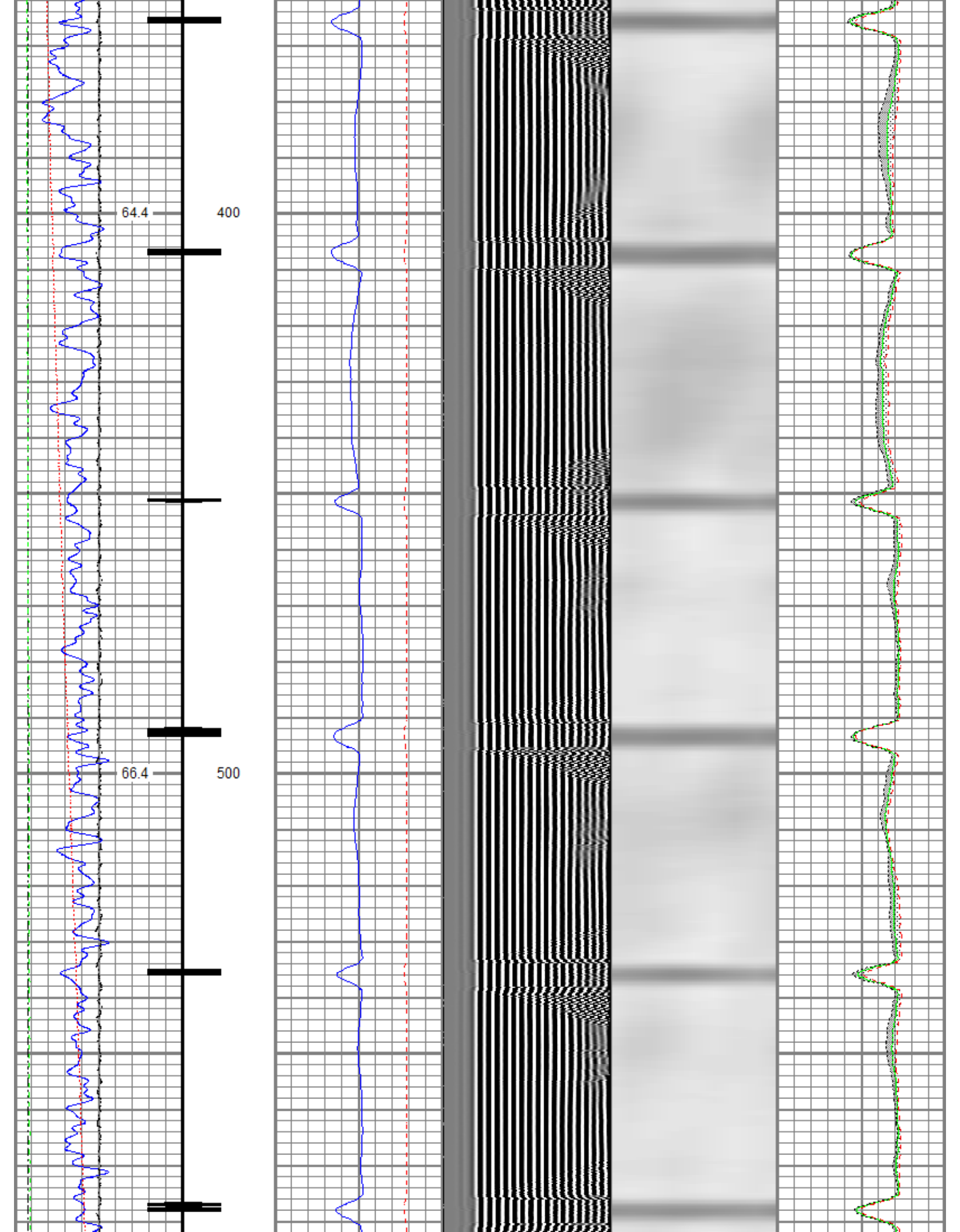
<<< Fold Here >>>
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible 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 6929 FT Adjusted -14 FT to correlate with Marker Joint Top Gauge Ring/Junk Basket ran to 7925 FT with no debris 5.50" RBP Set @ 7007 FT Log ran from 6986 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>

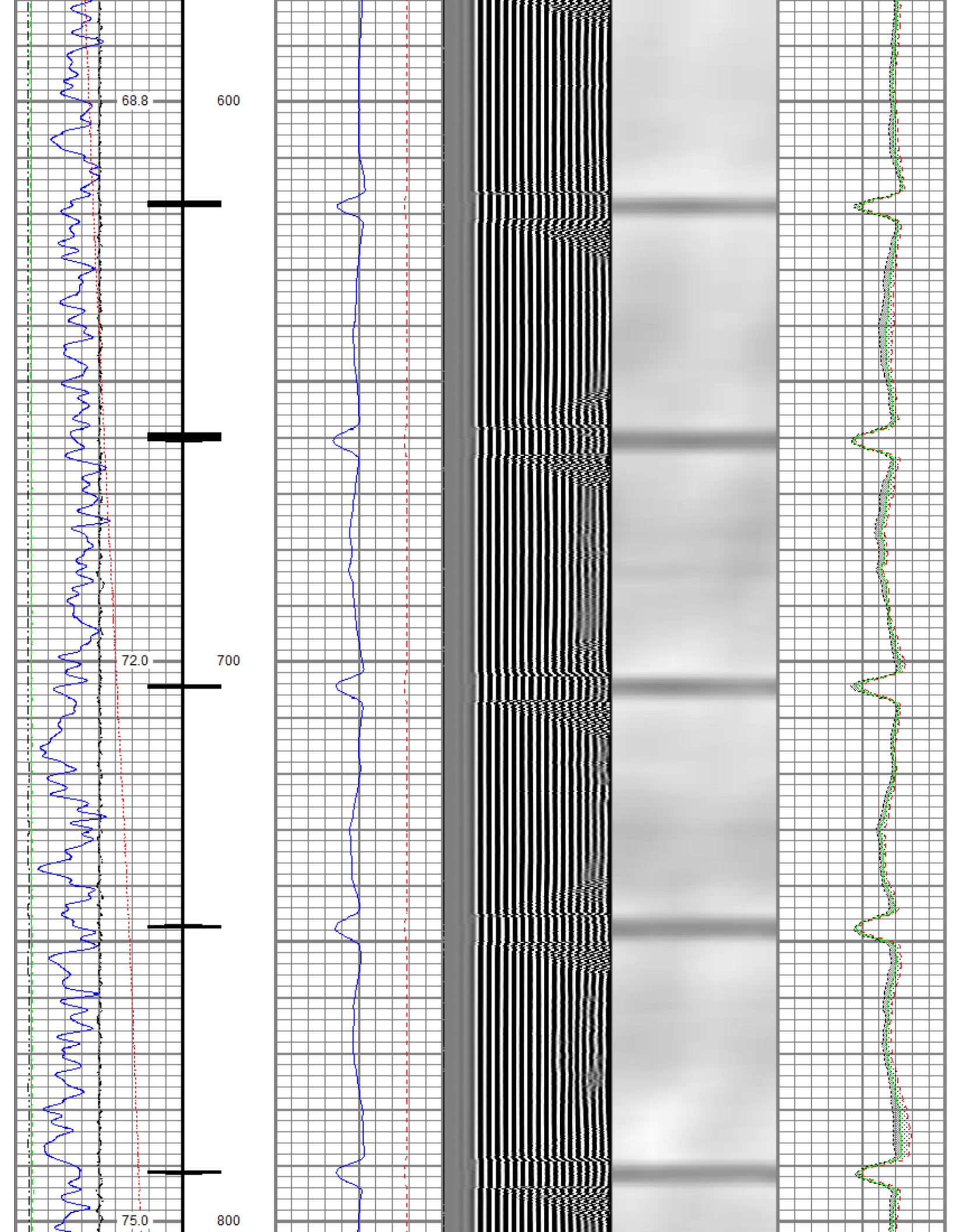
Database File anadarko_azul 13-17hz\0512346111_anadarko_azul 13-17hz_rbl_07-01-18_2800 psi.db
 Dataset Pathname pass9.3
 Presentation Format ros_radri
 Dataset Creation Mon Jul 02 15:12:30 2018
 Charted by Depth in Feet scaled 1:240

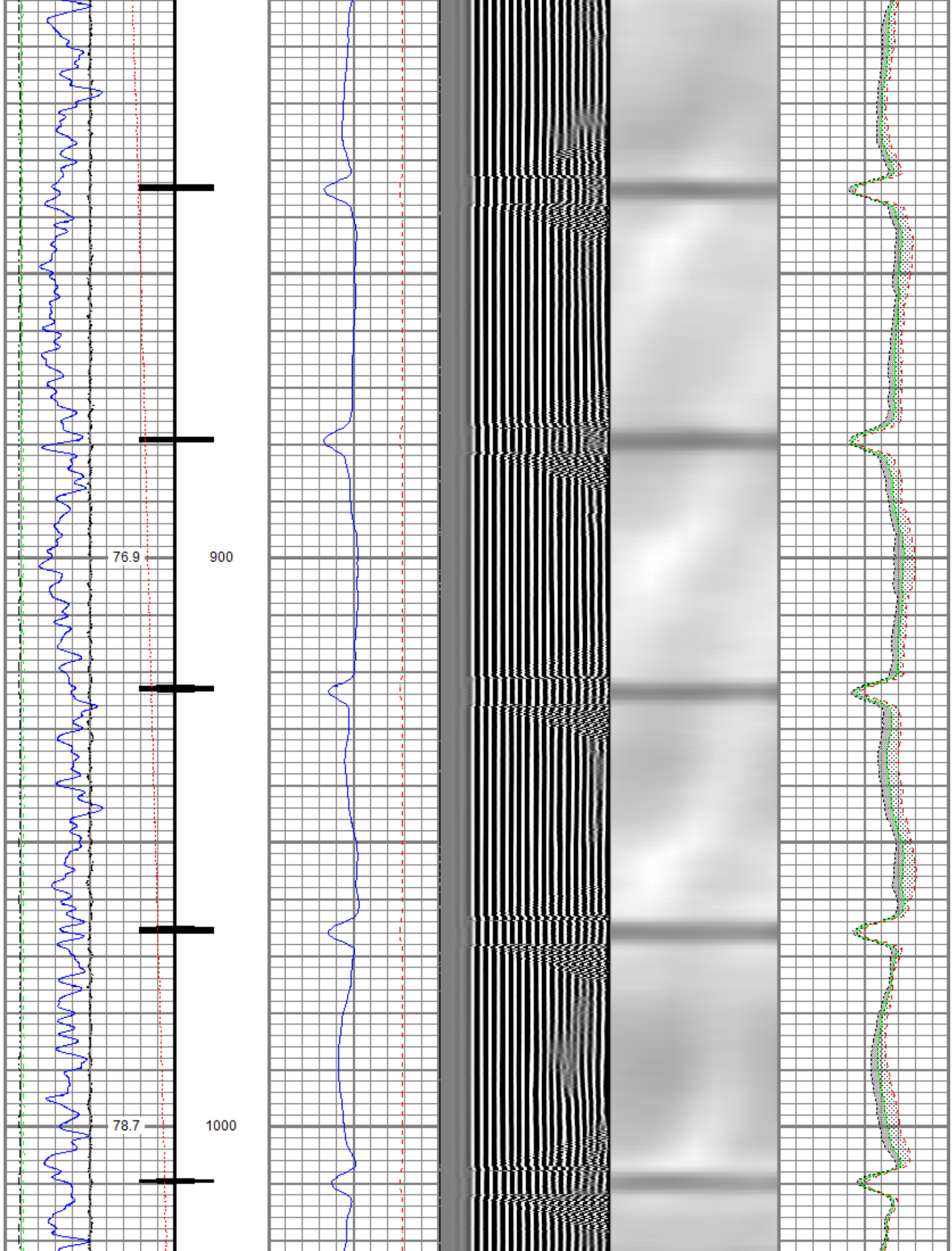
Gamma Ray	0	3' Amplitude (mV)	100	5' Variable Density Log	Sector Map	0	Average Amplitude	100
(GAPI)	120	3' Amplitude x 5	200	1200			Minimum Amplitude	
Casing Collar Locator		0	(mV)	20		0	100	
0 Temperature (degF)	20	3' Travel Time					Maximum Amplitude	
Line Speed		650	(usec)	150		0	100	
-150 (ft/min)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

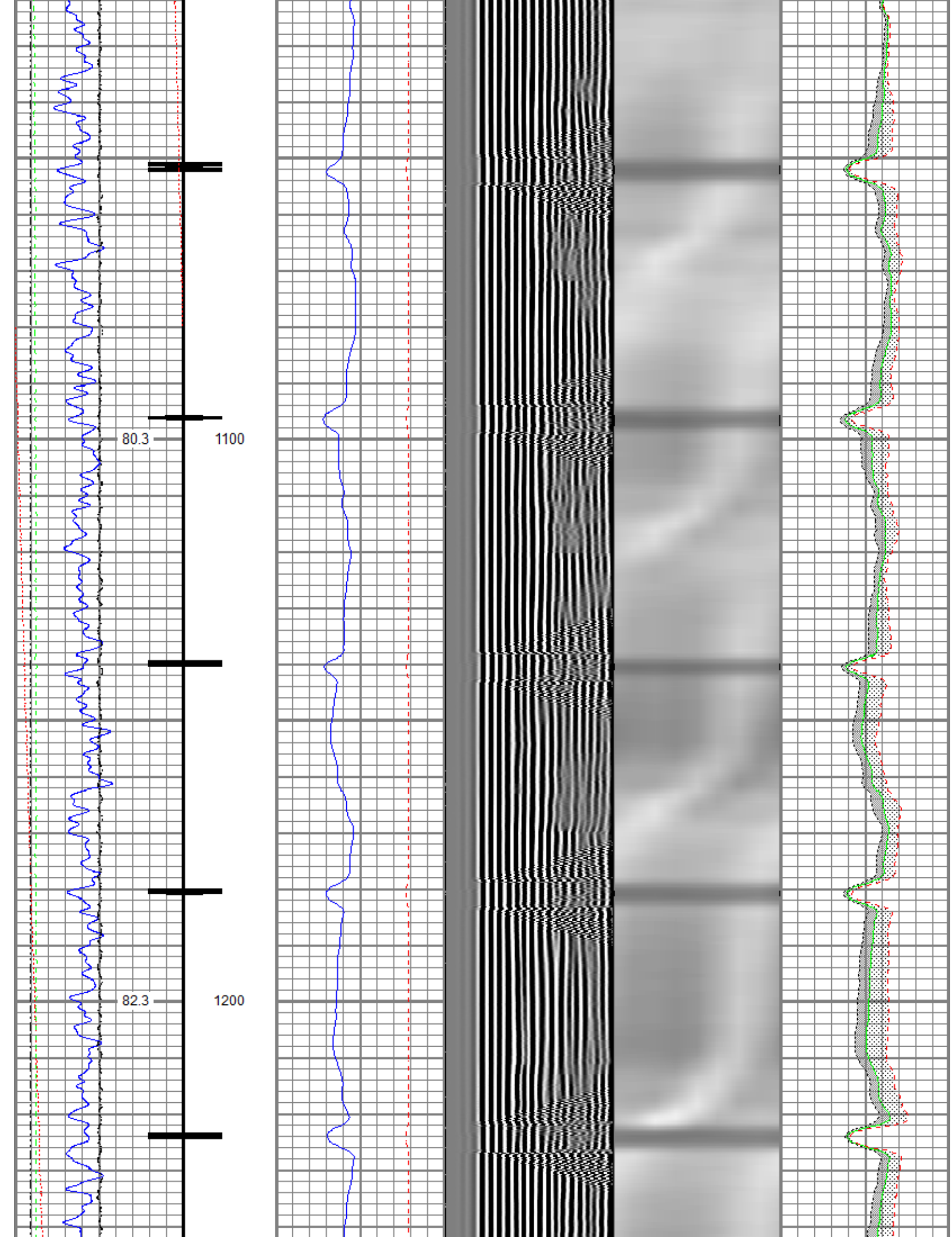


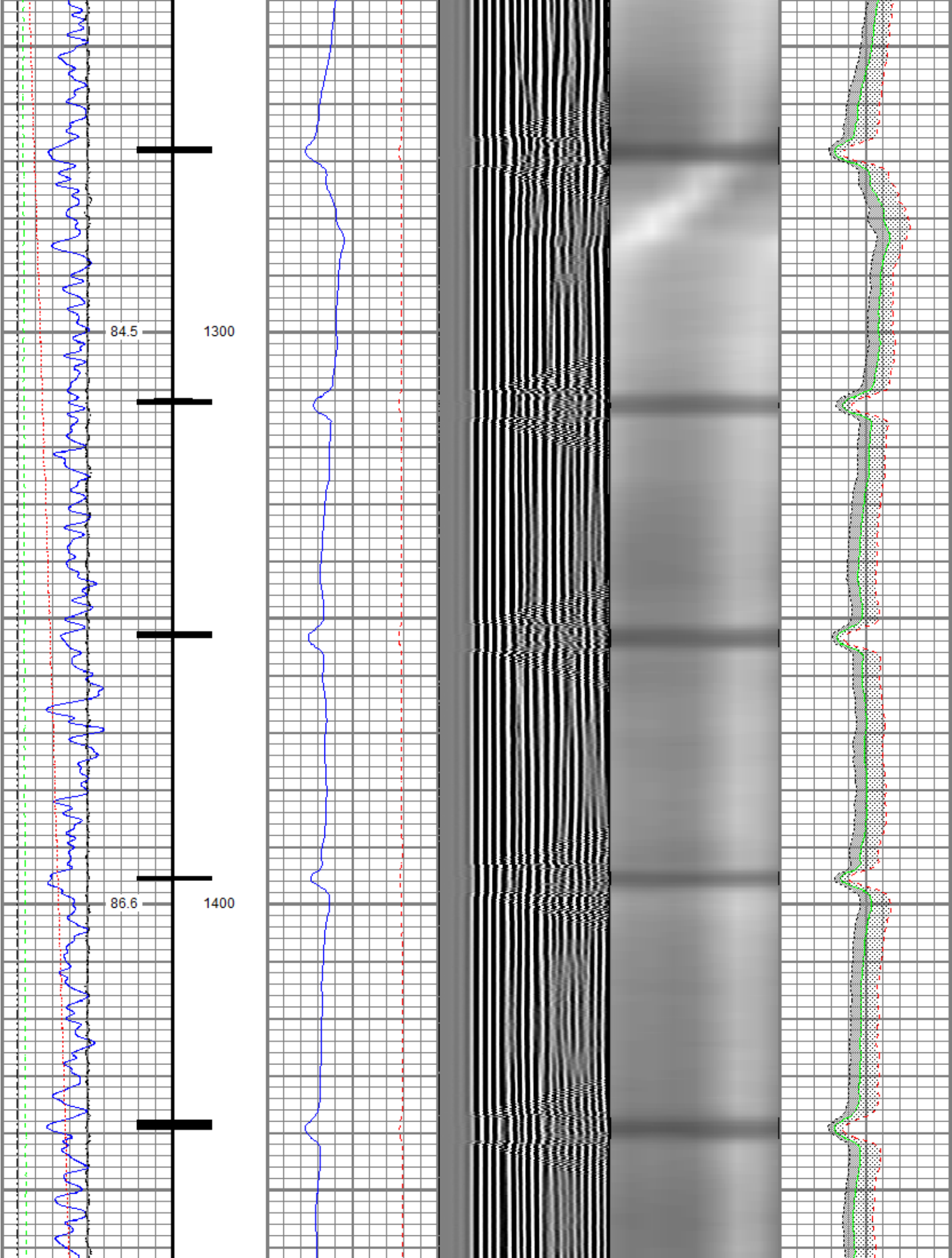


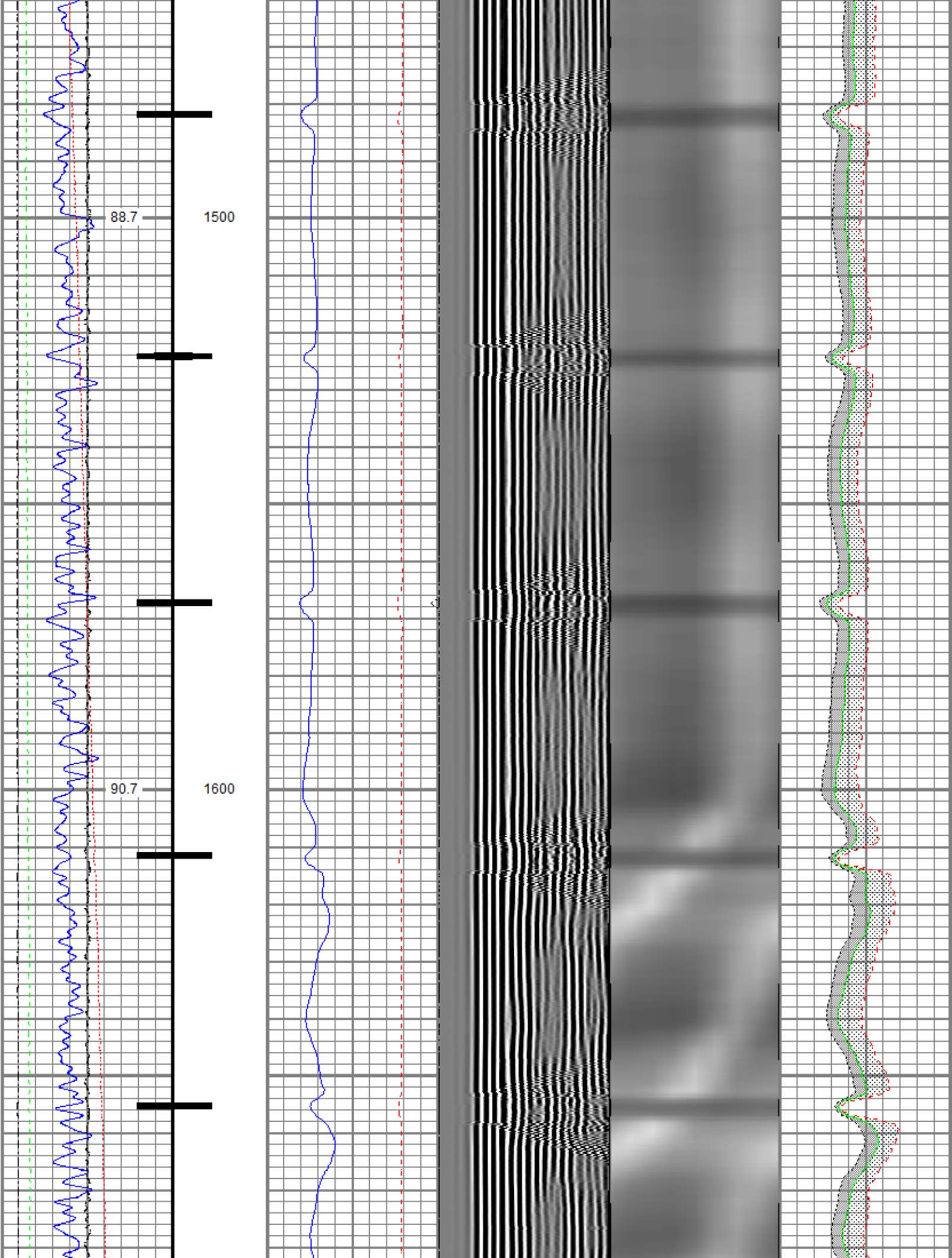


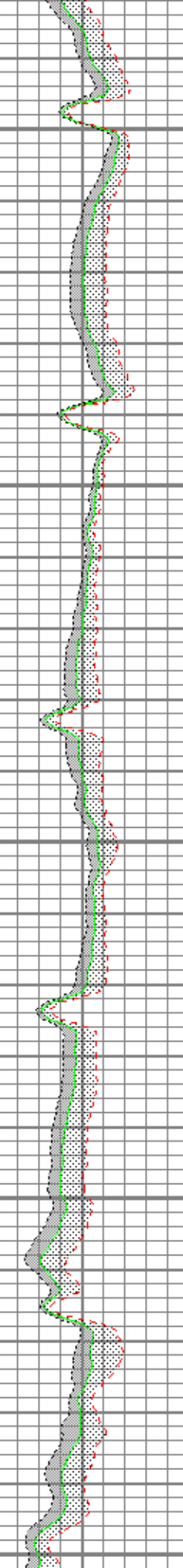
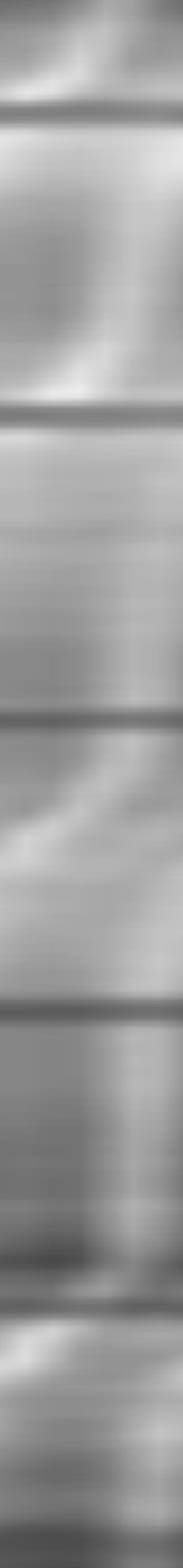
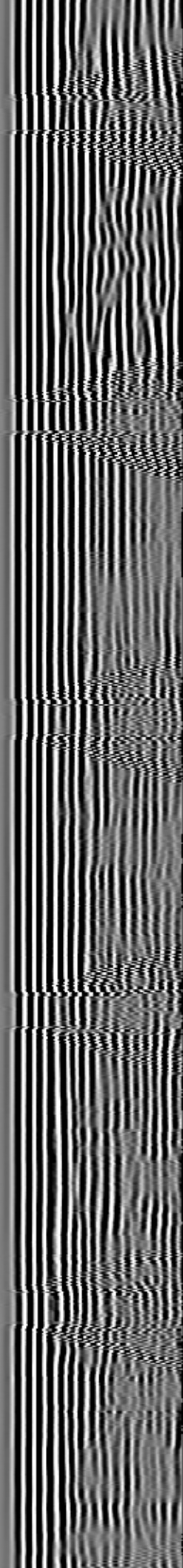
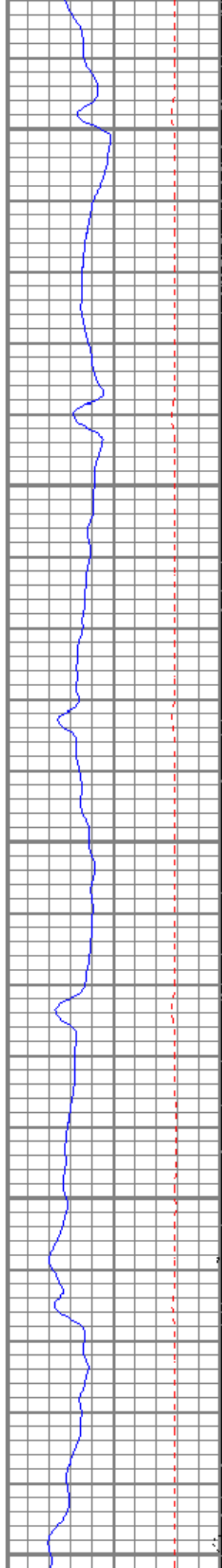
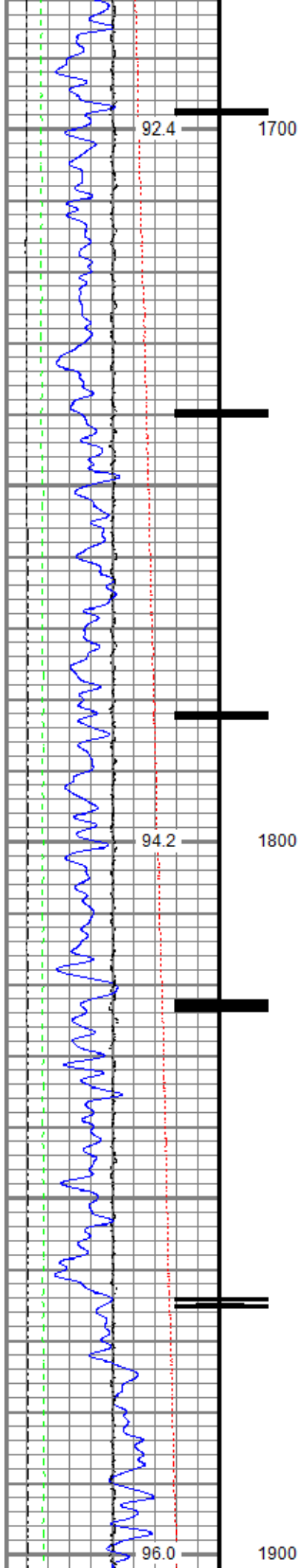


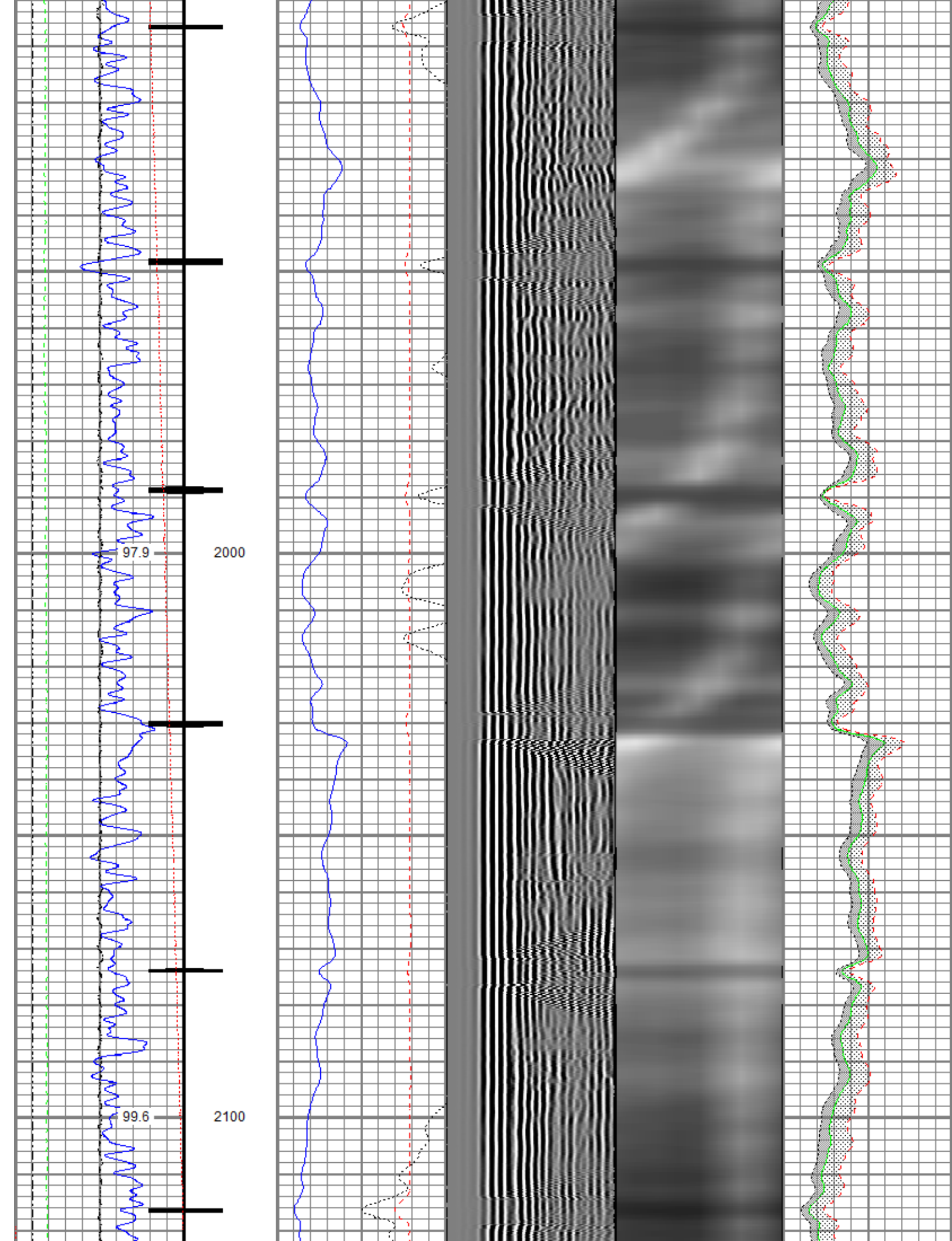


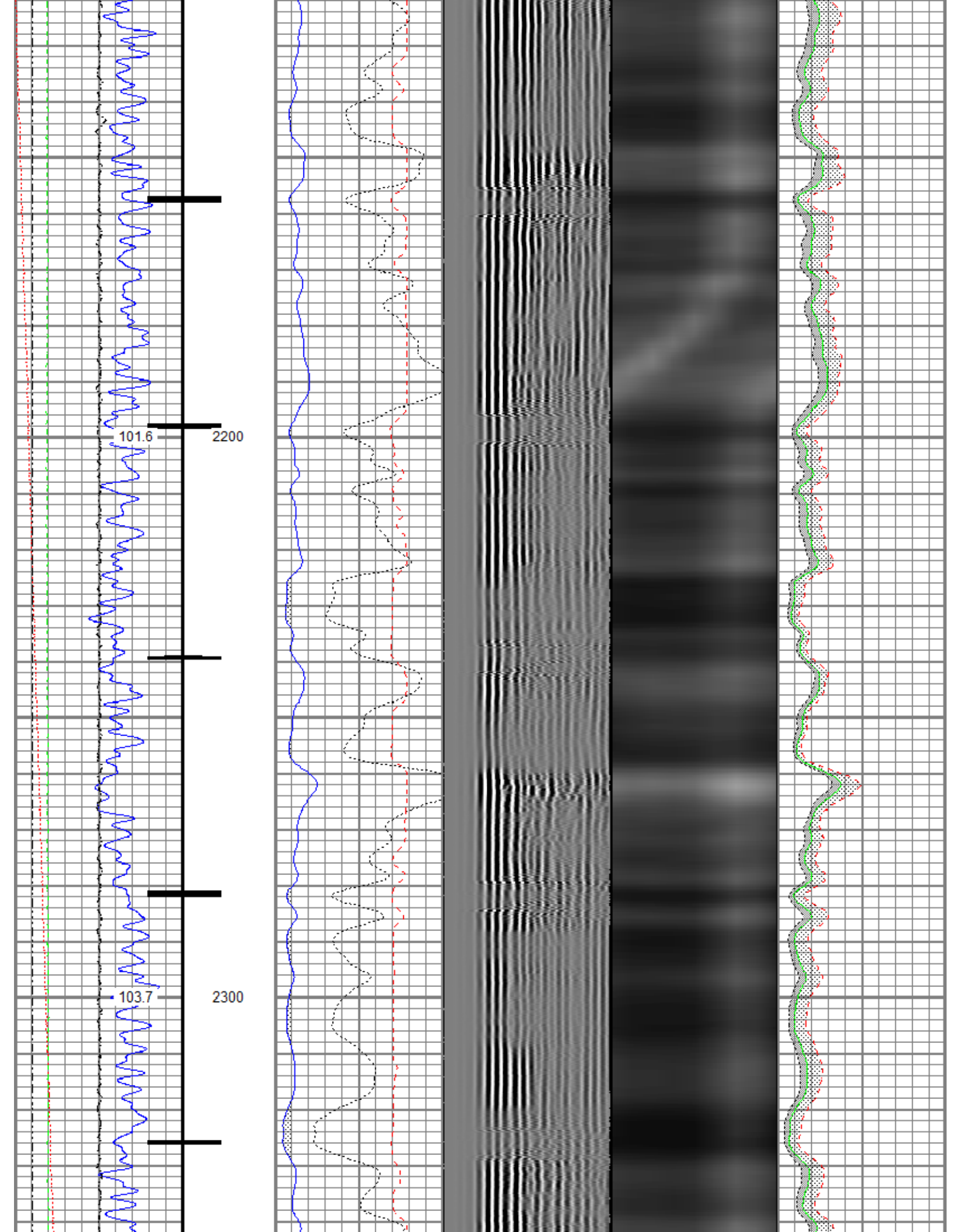


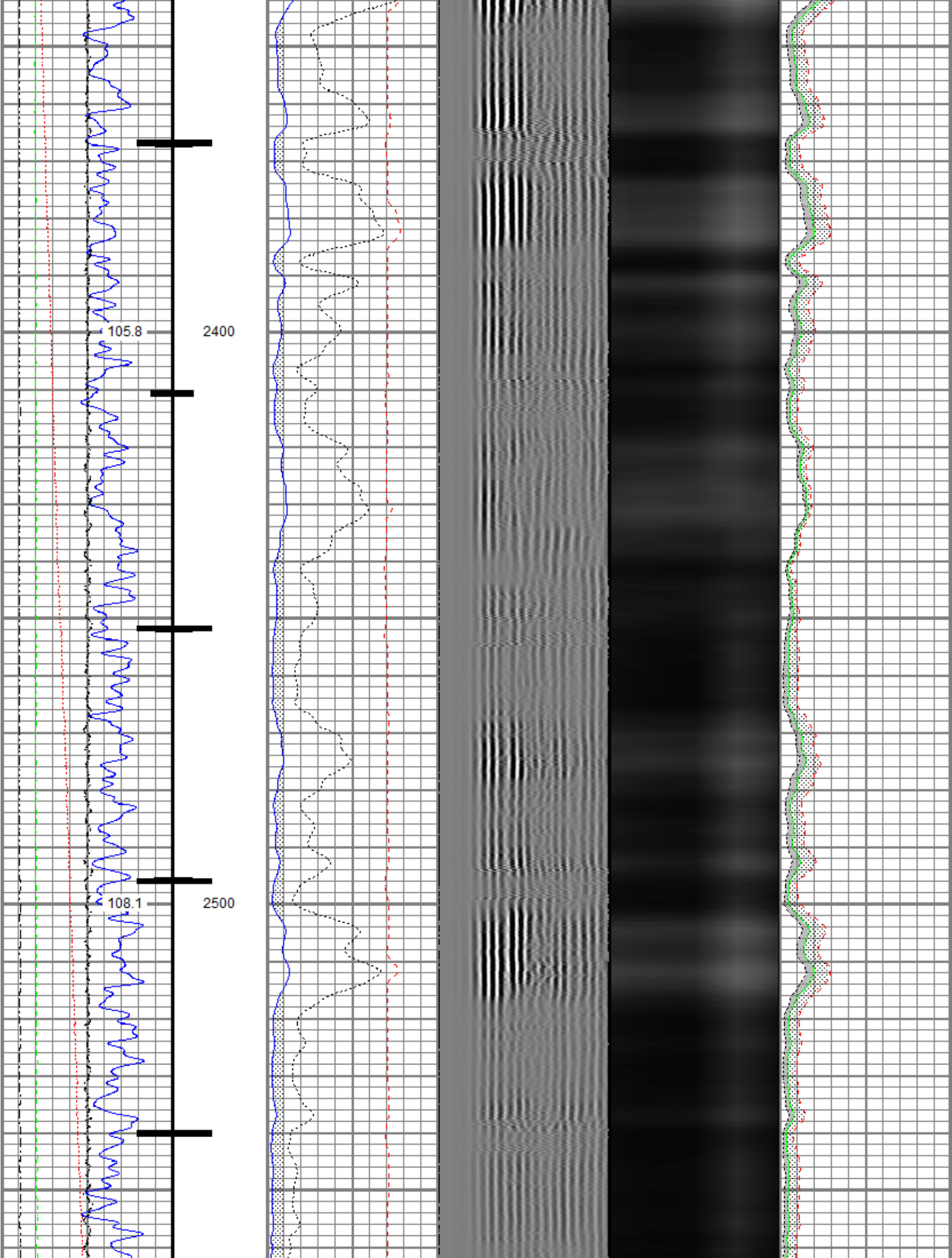


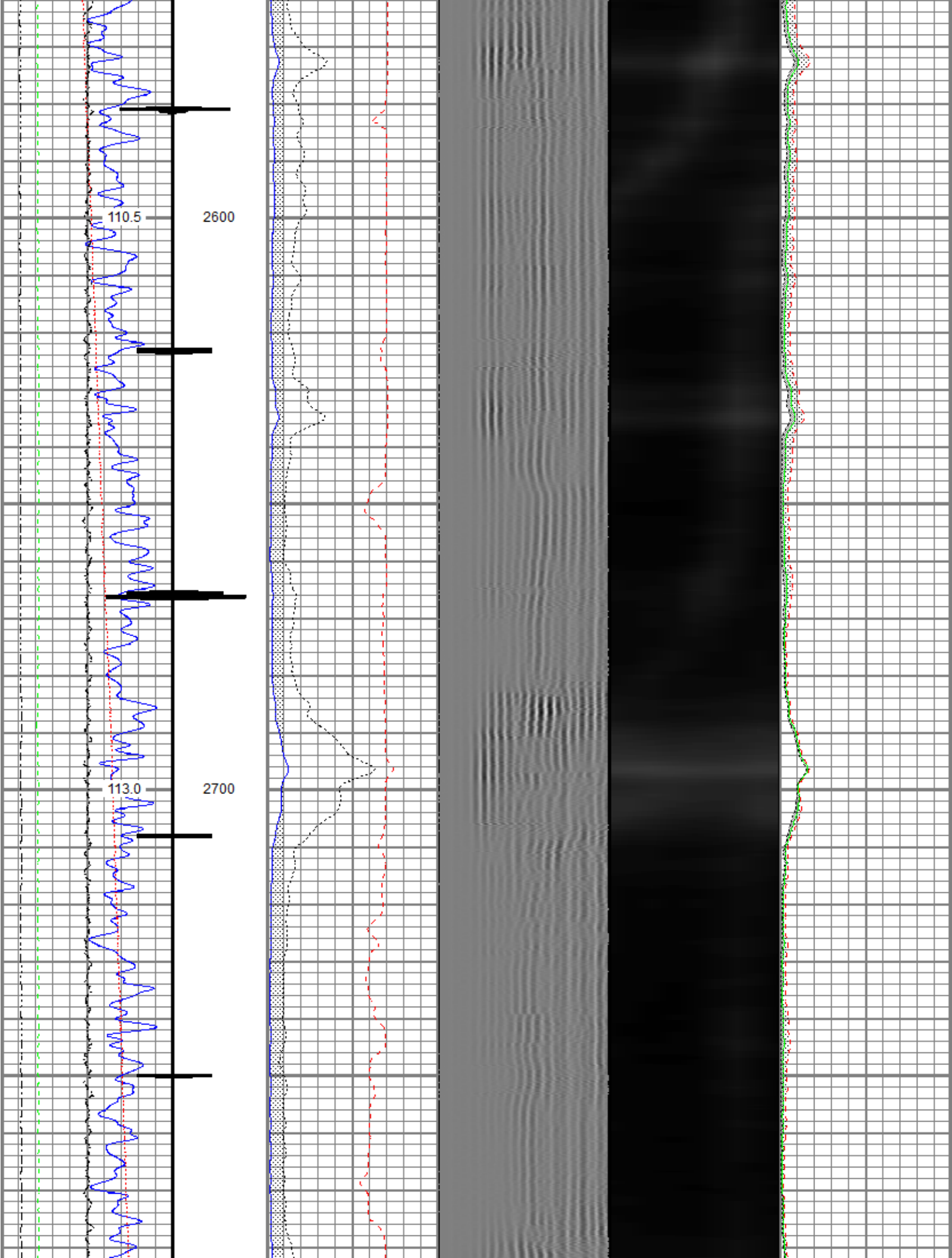


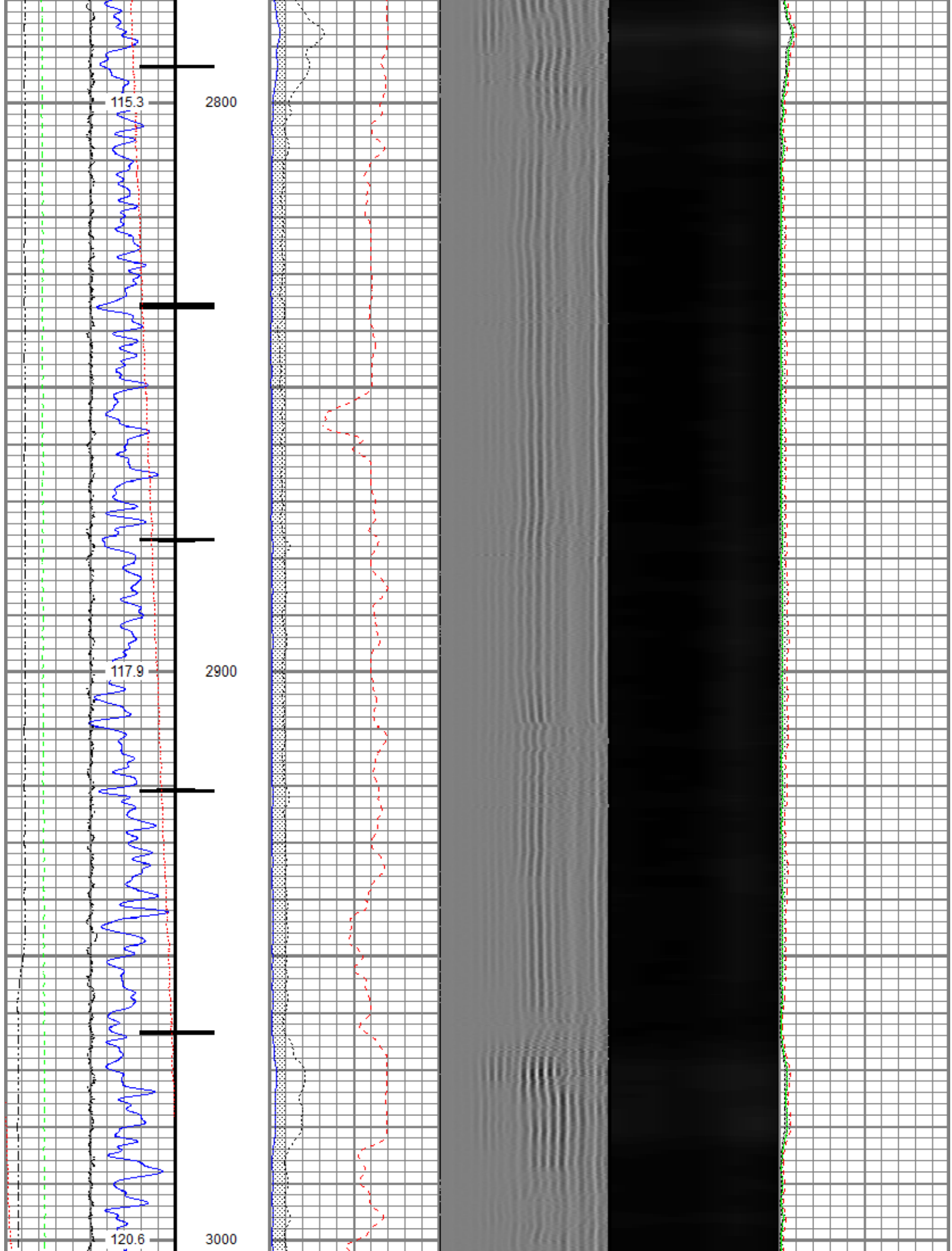


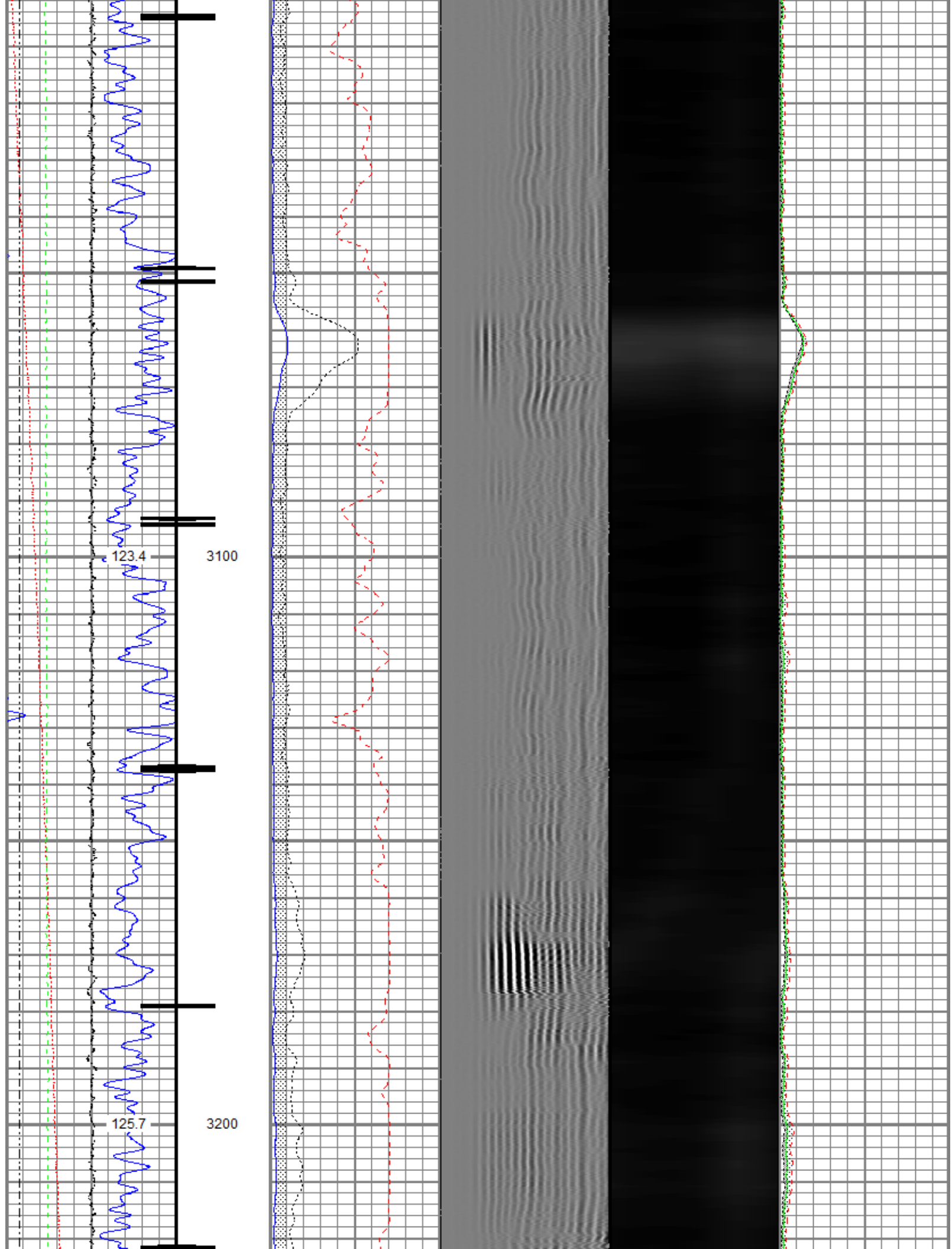


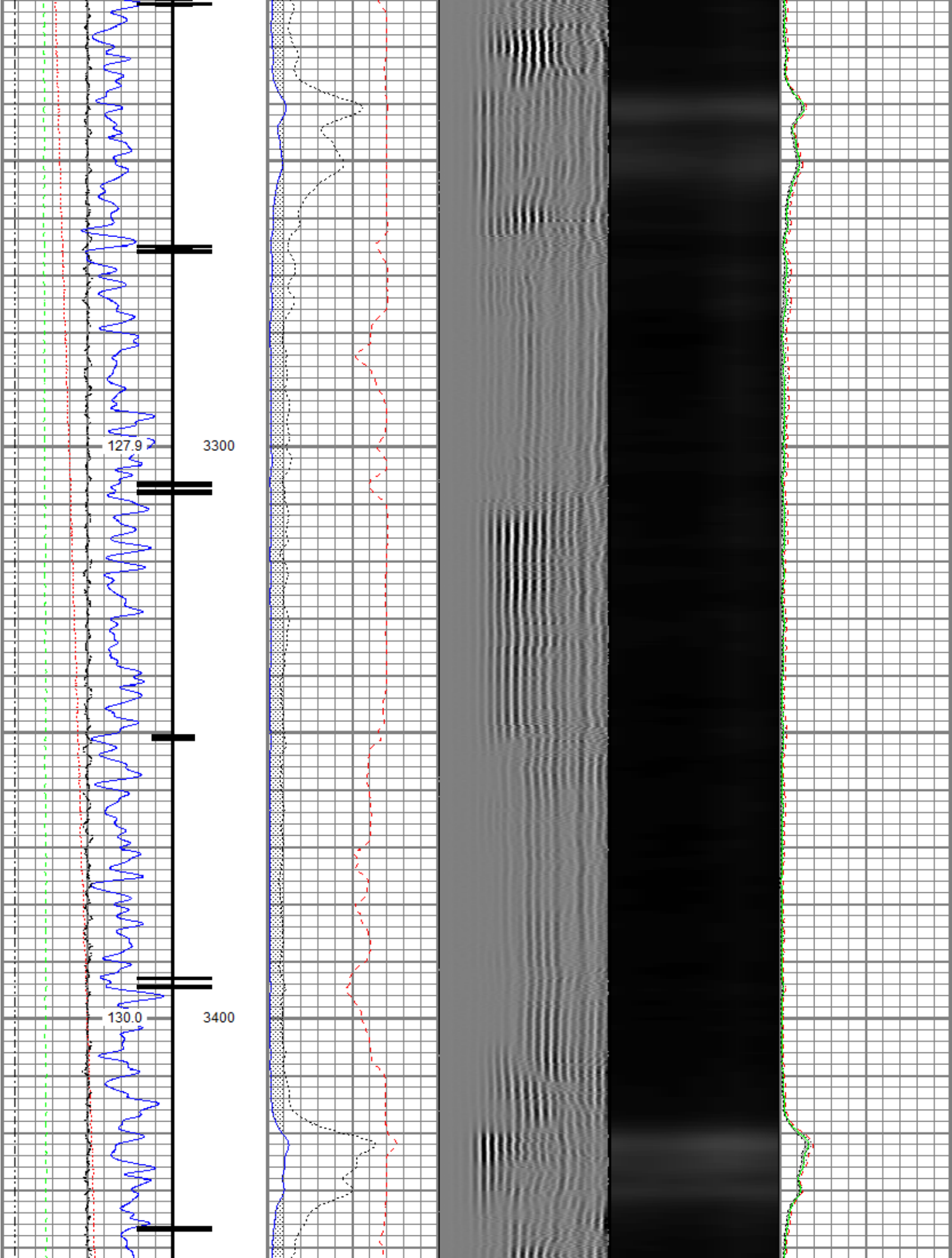


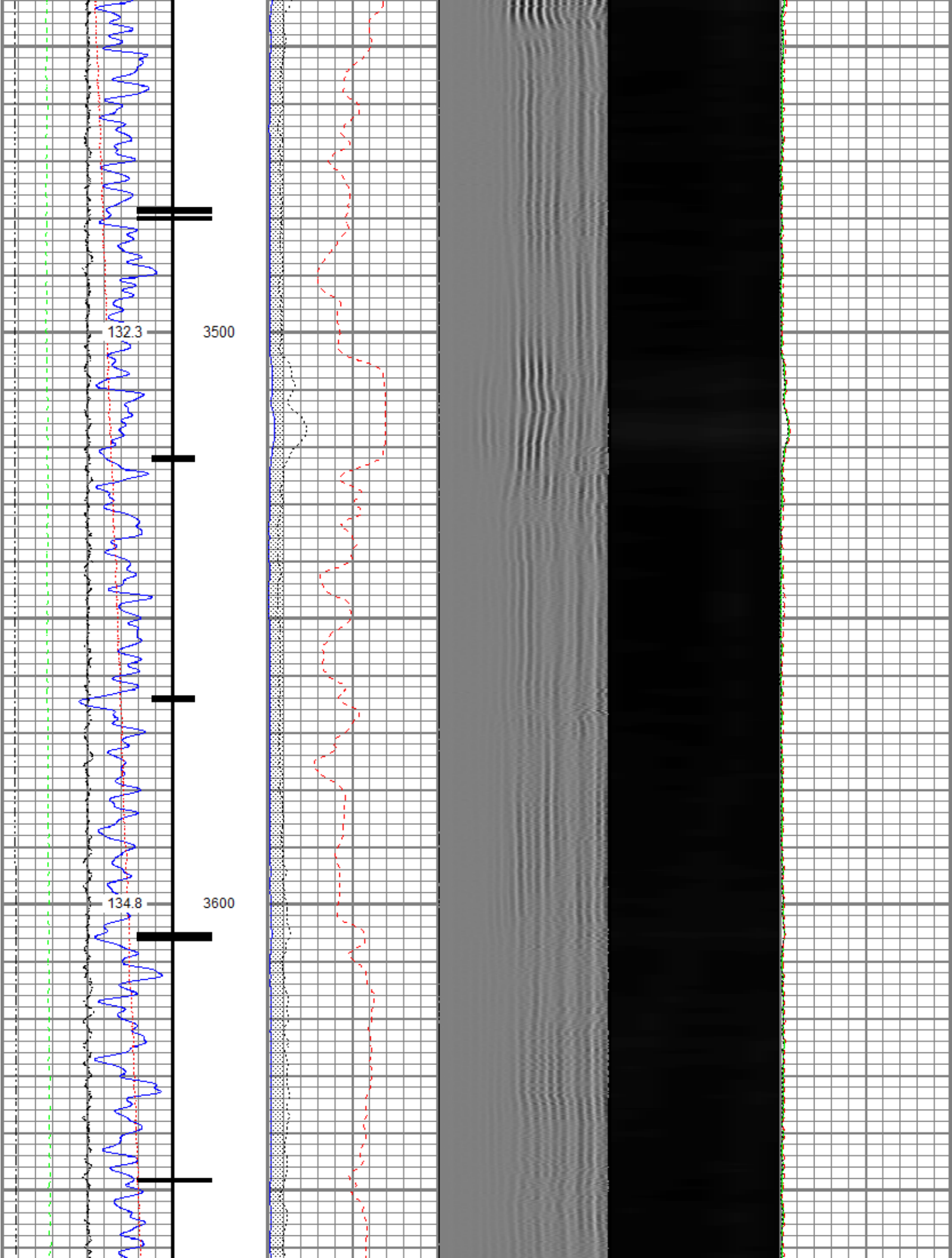


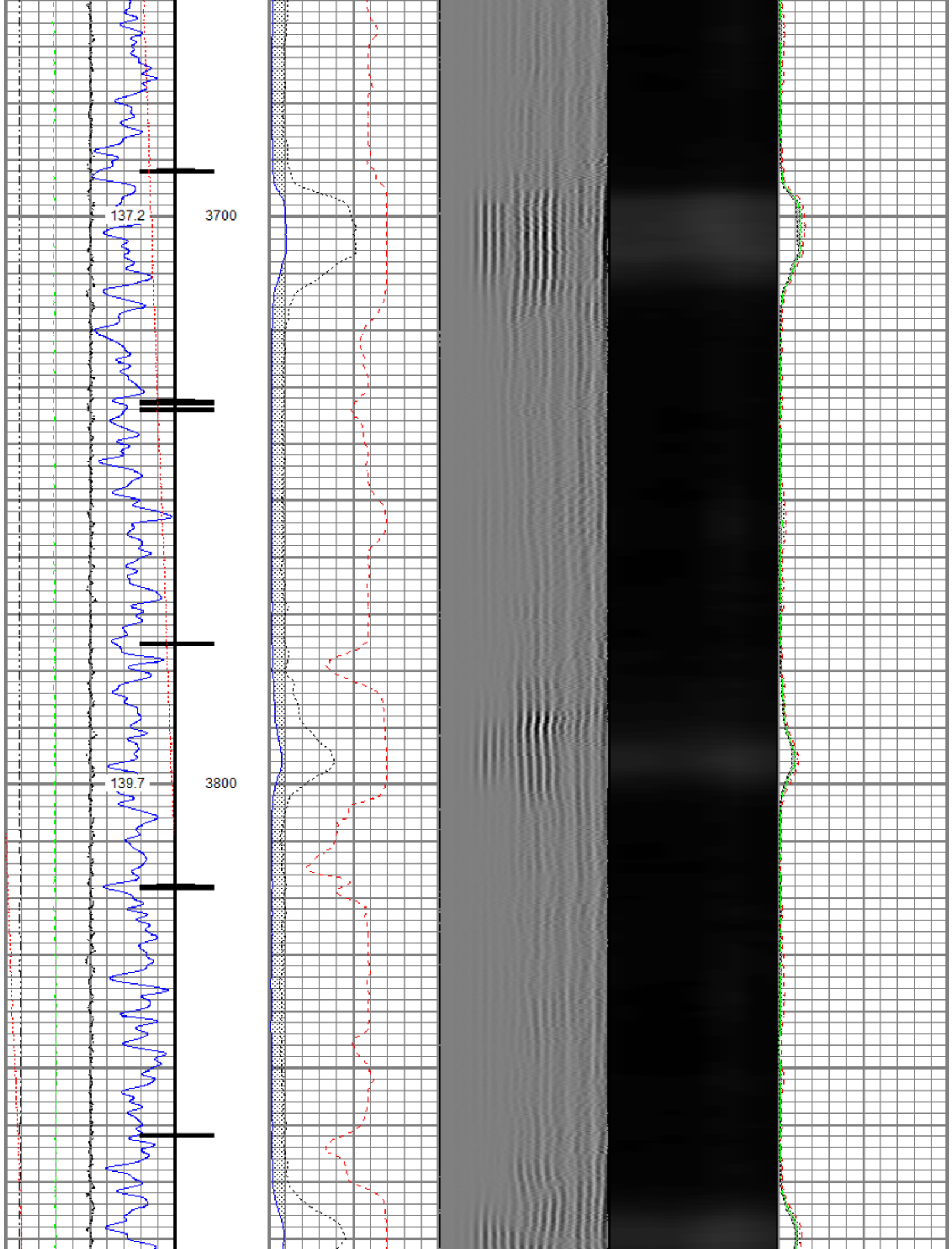


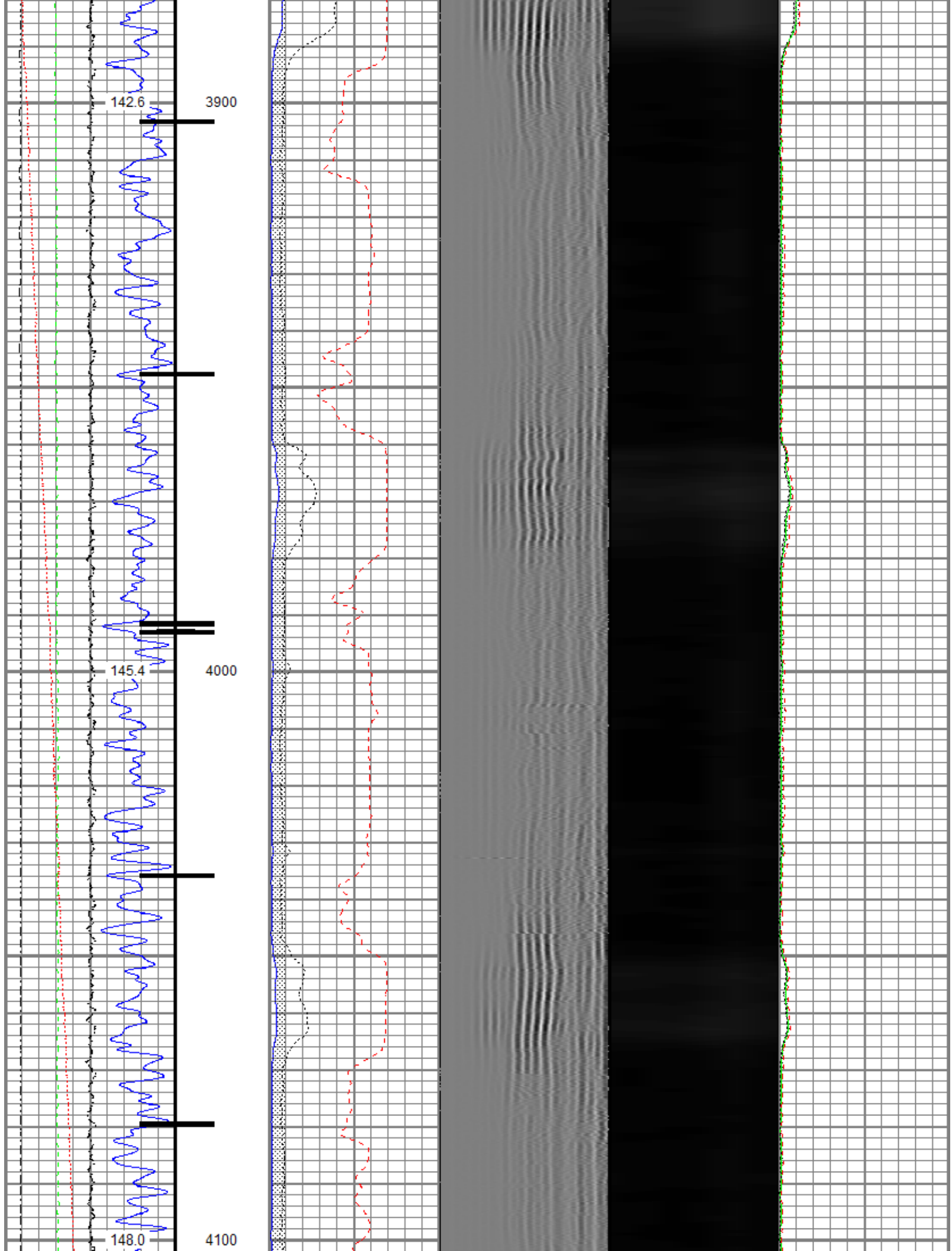


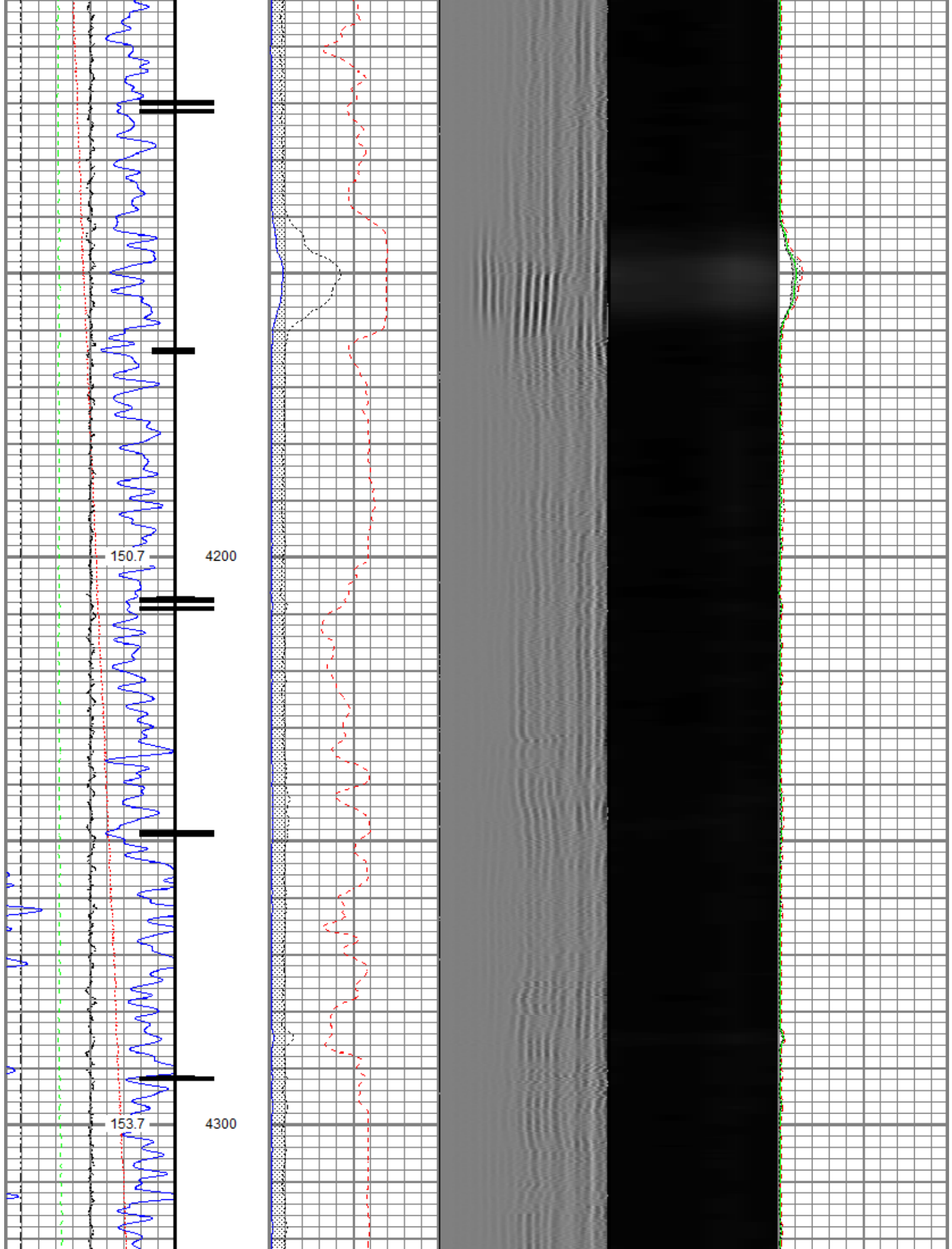


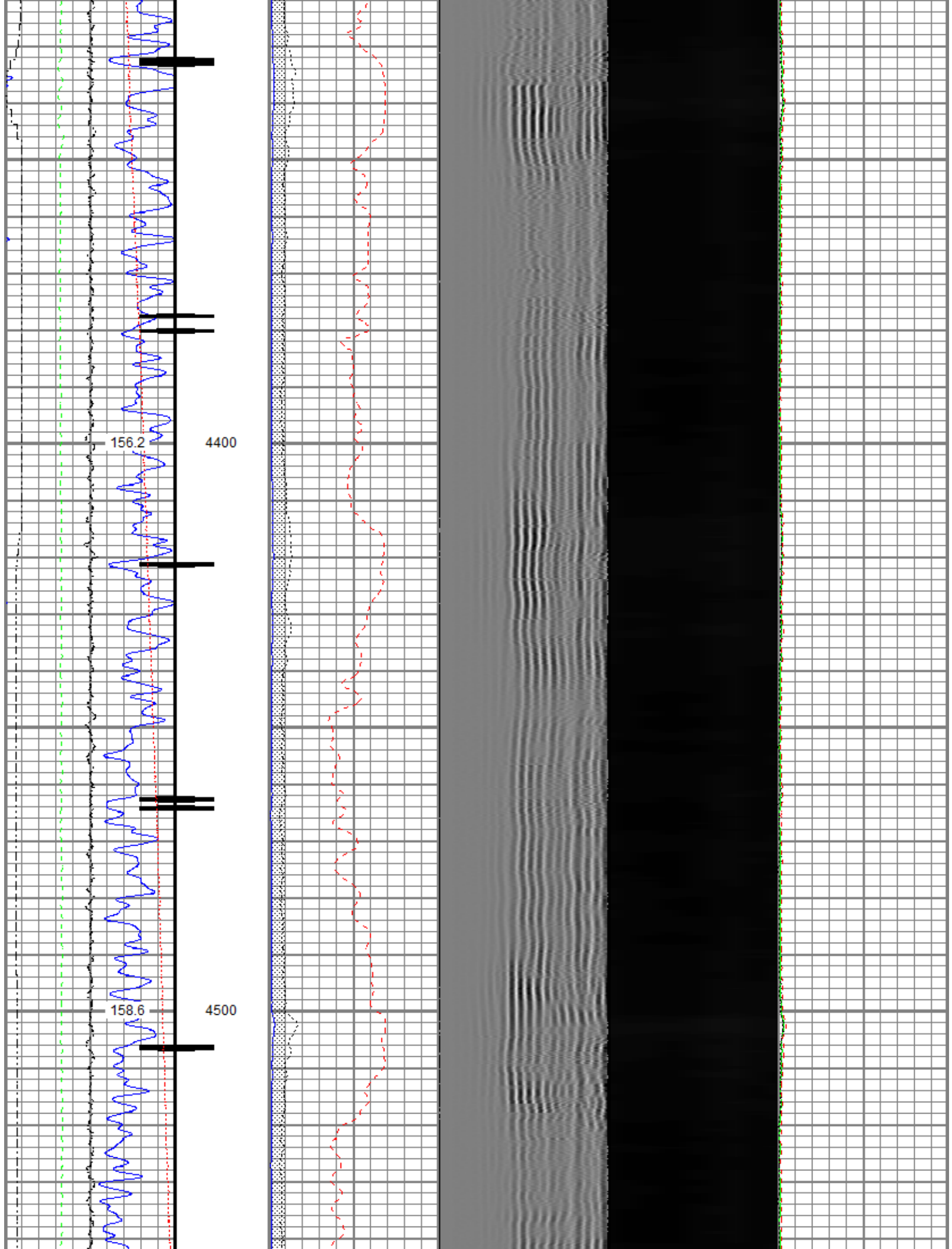


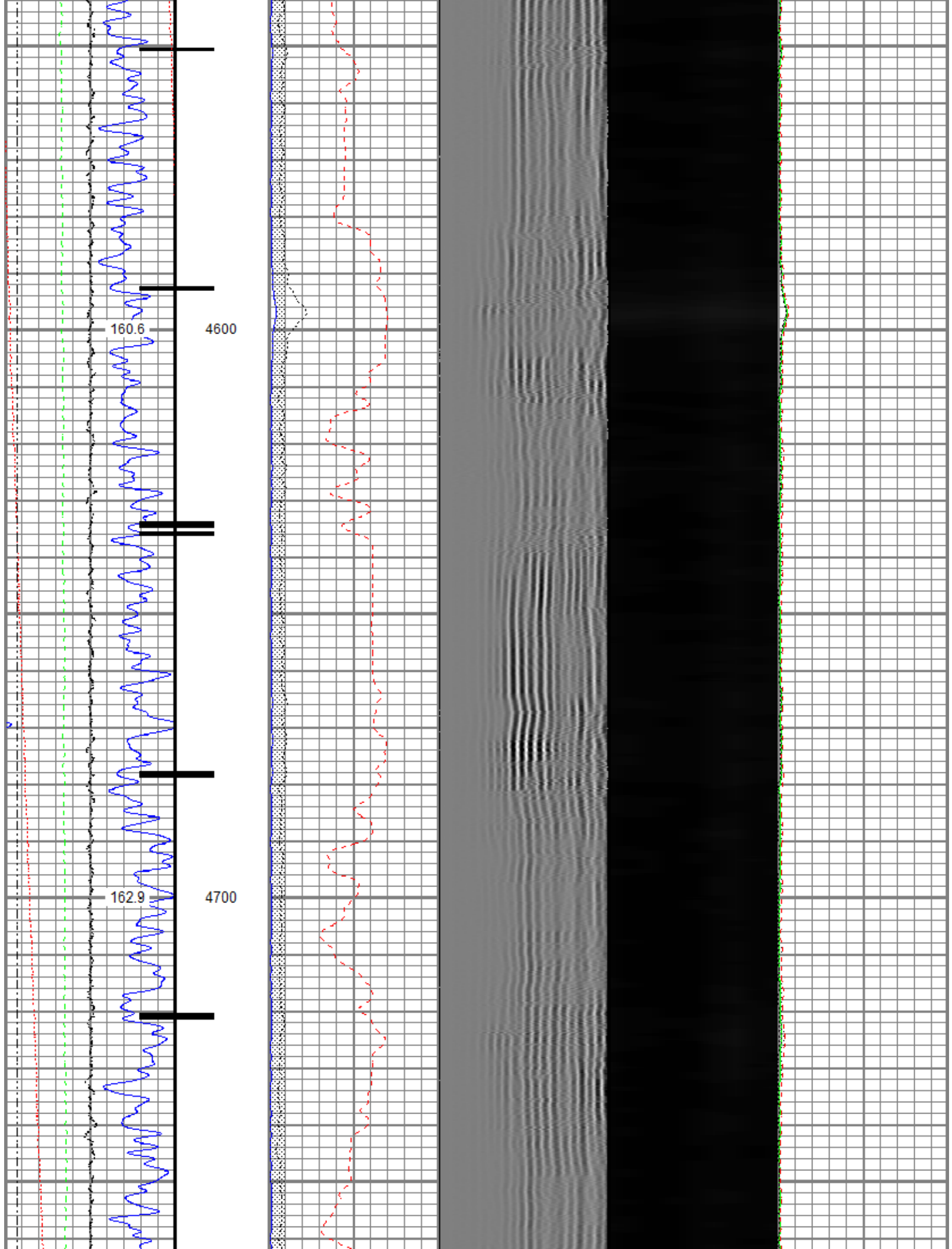


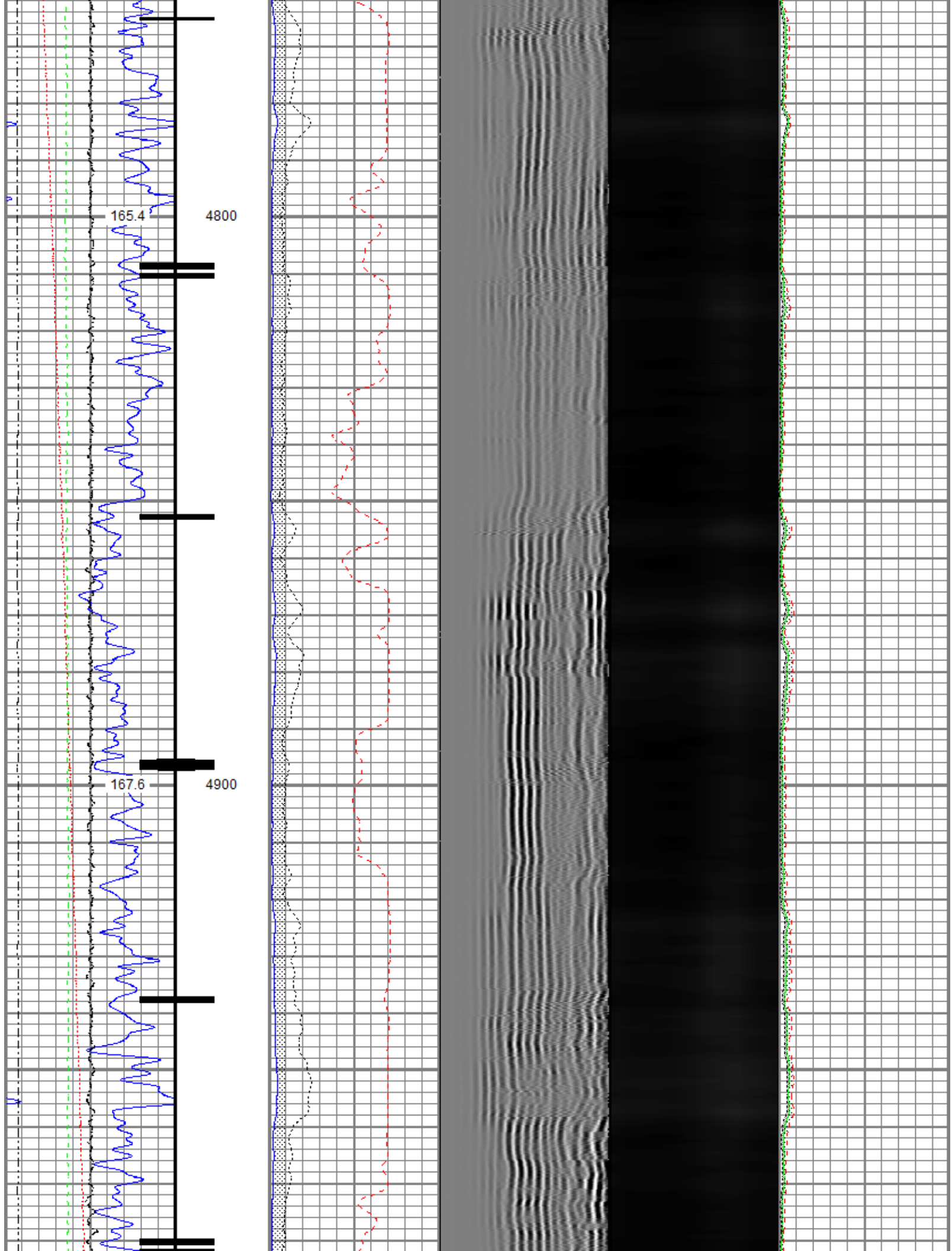


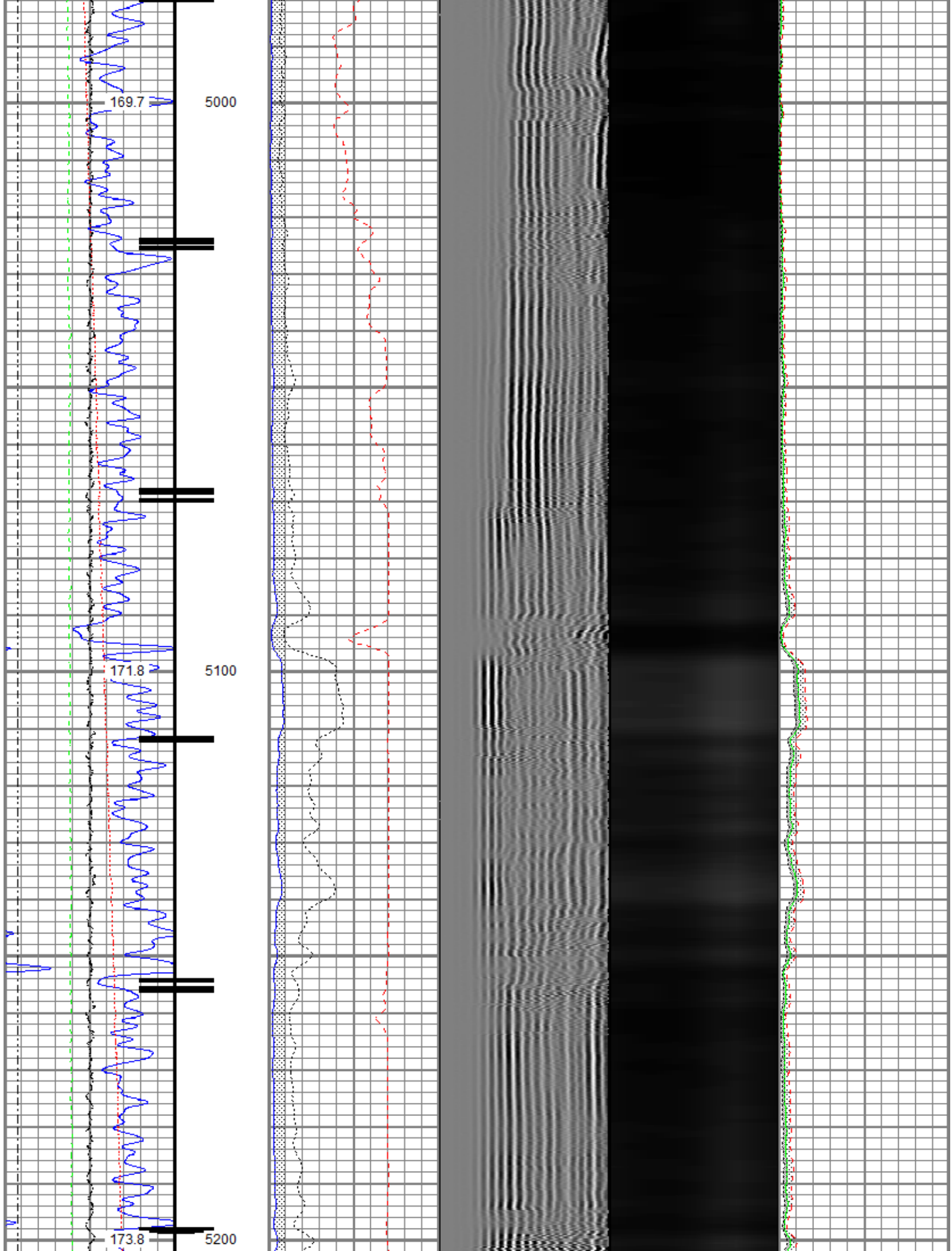


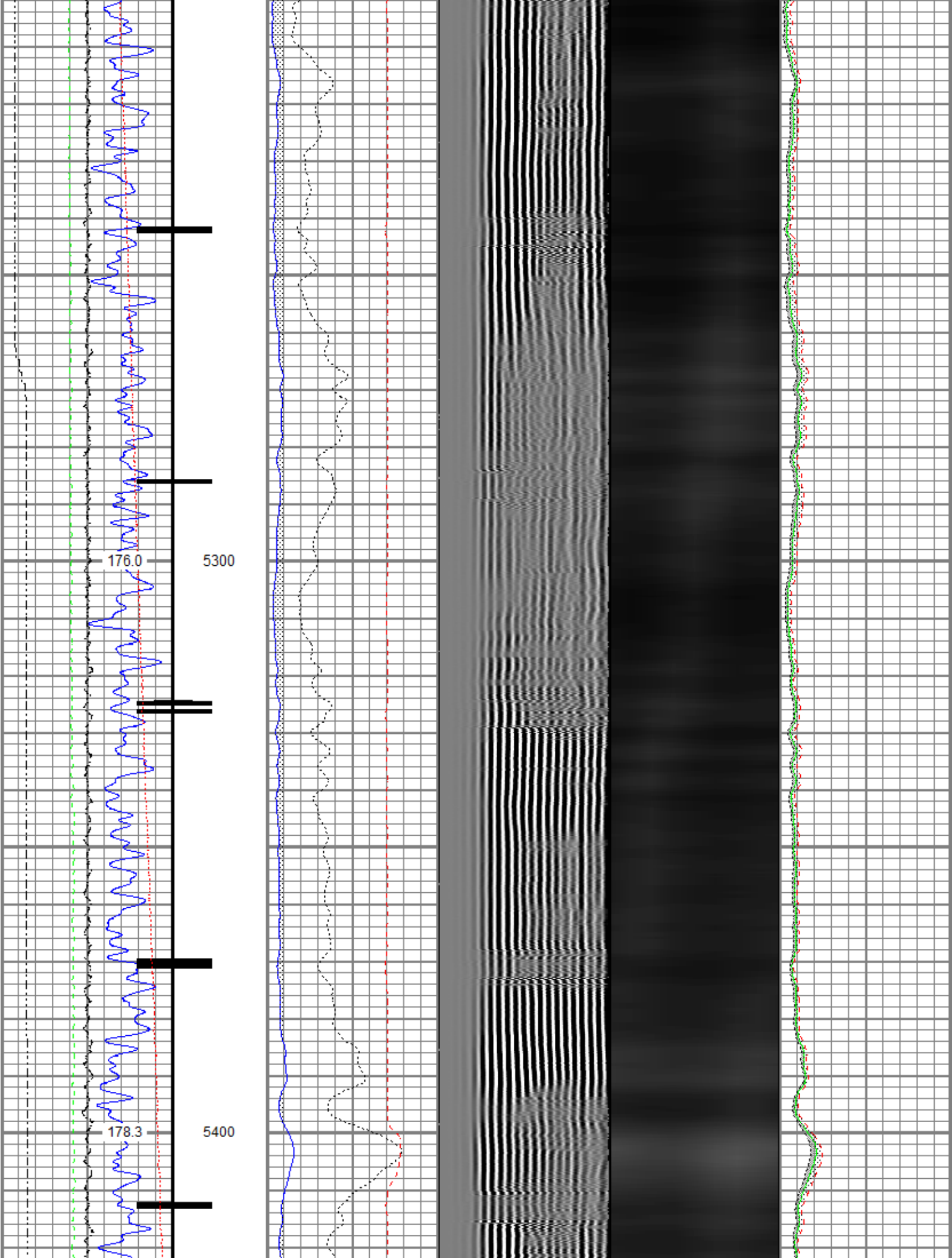


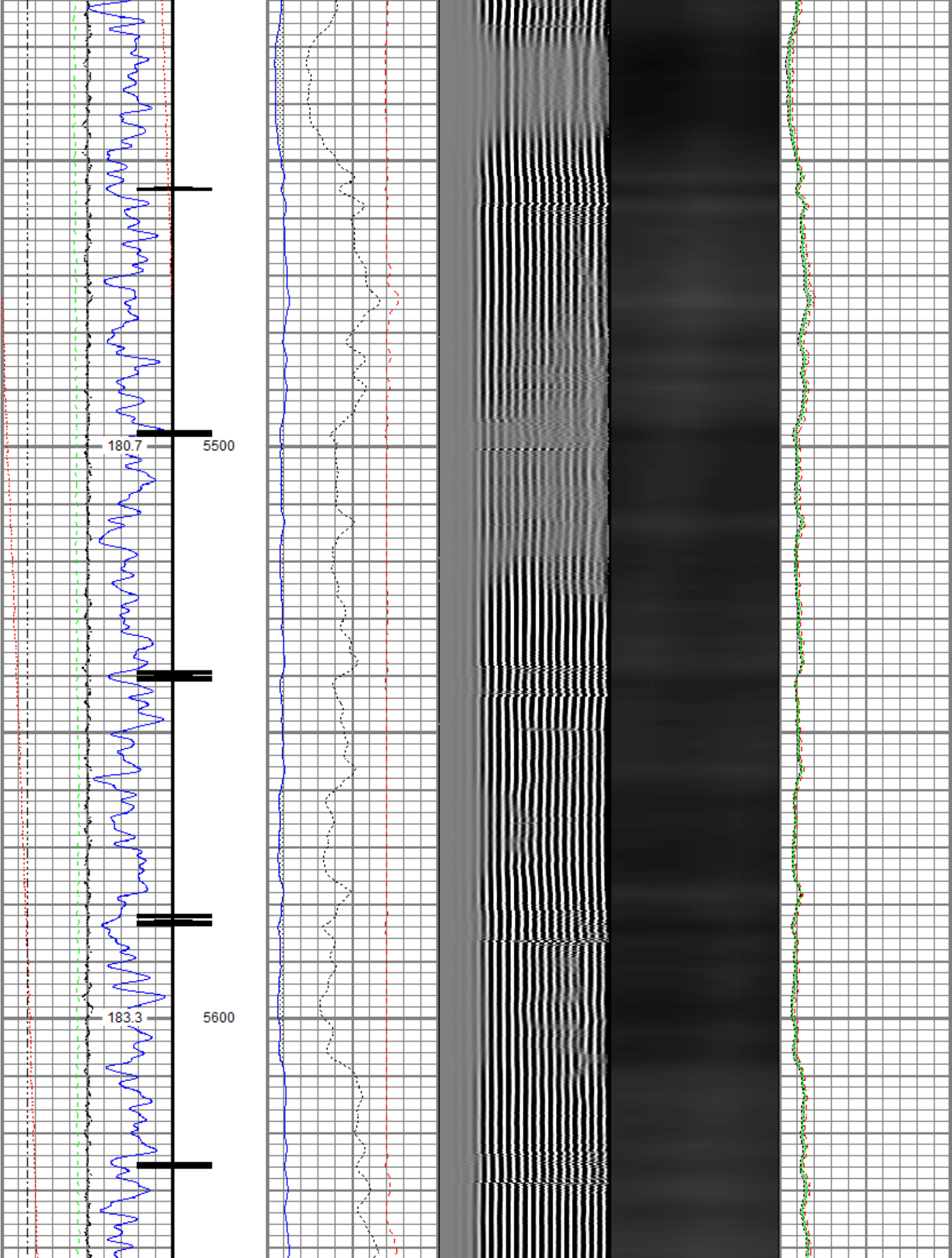


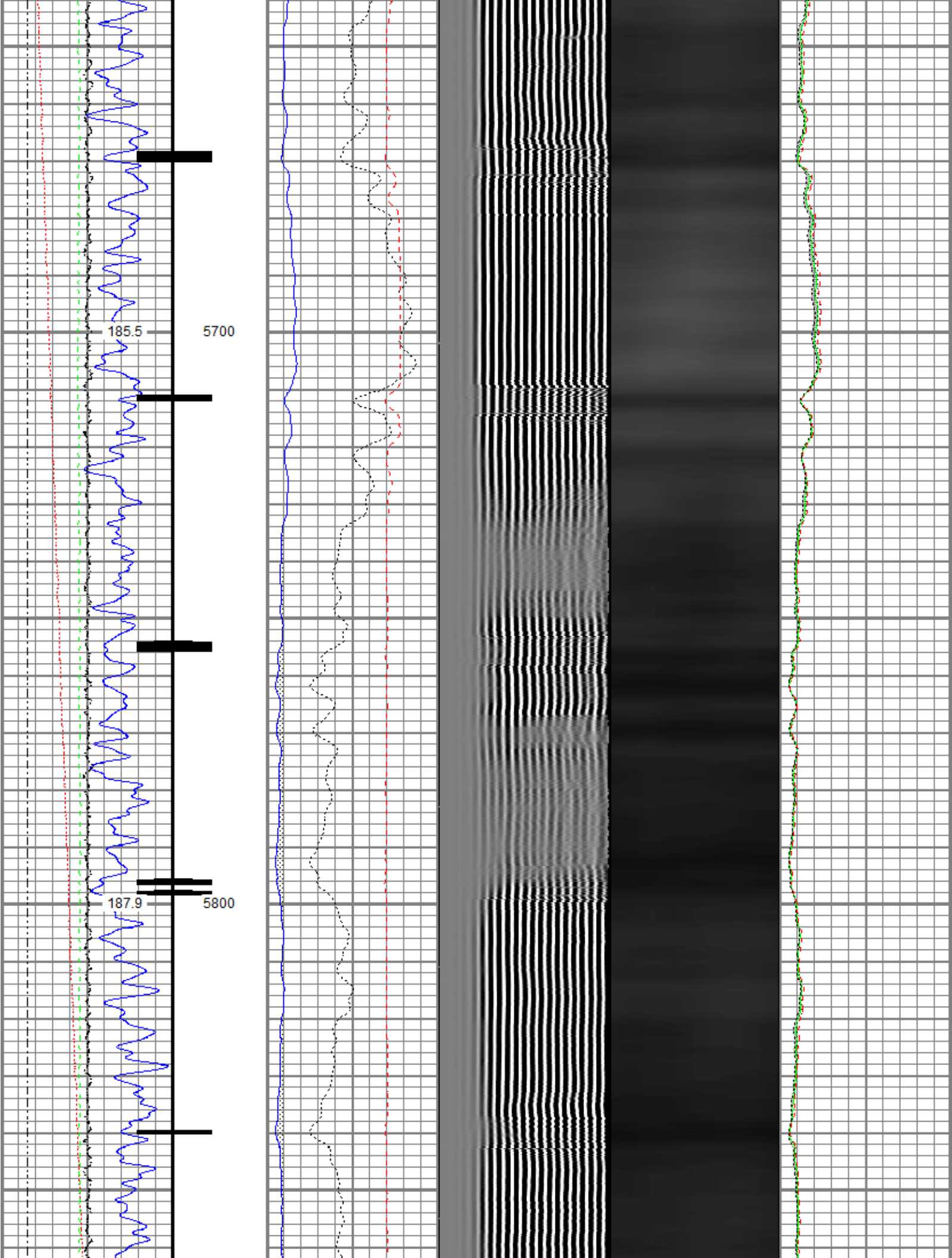


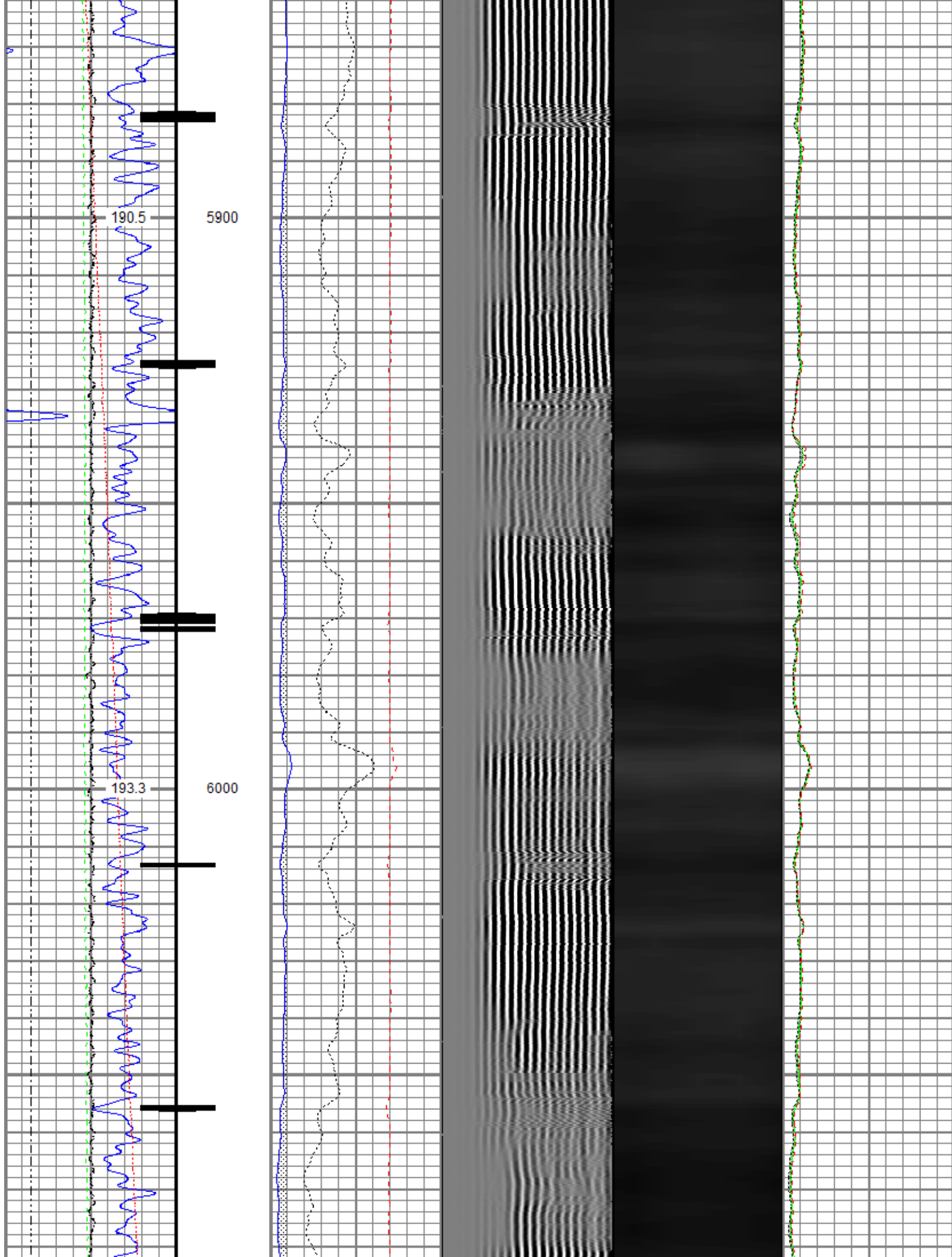


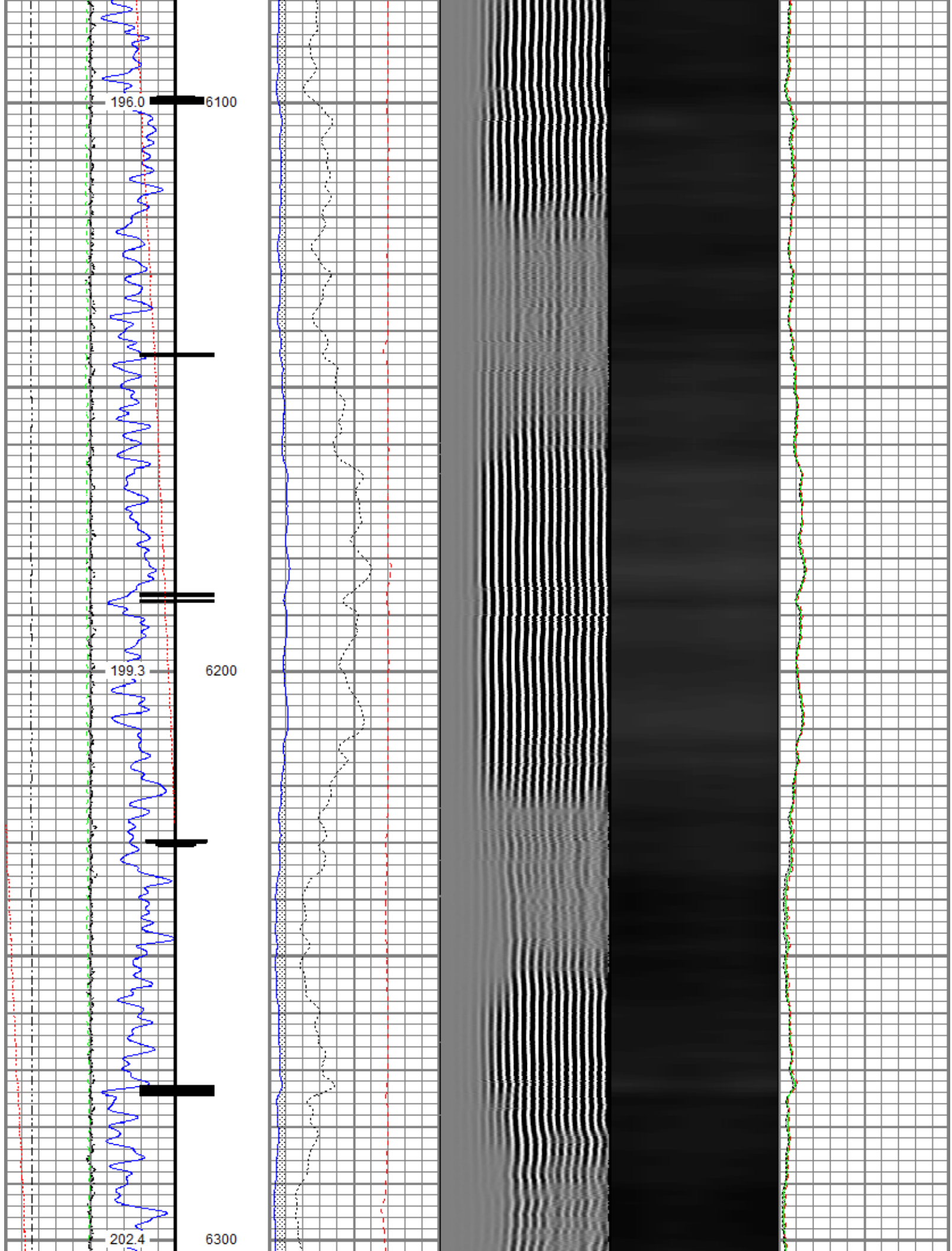


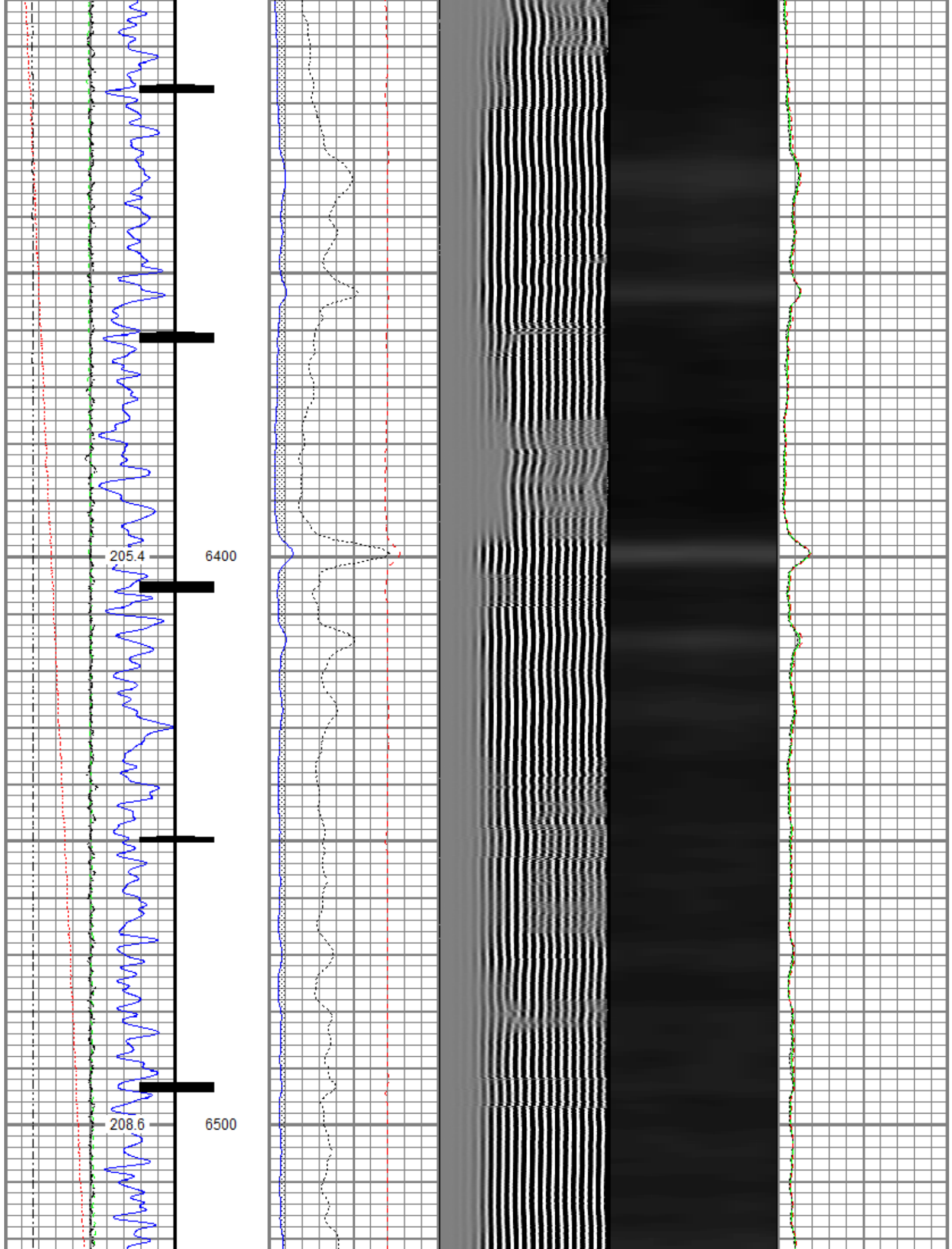


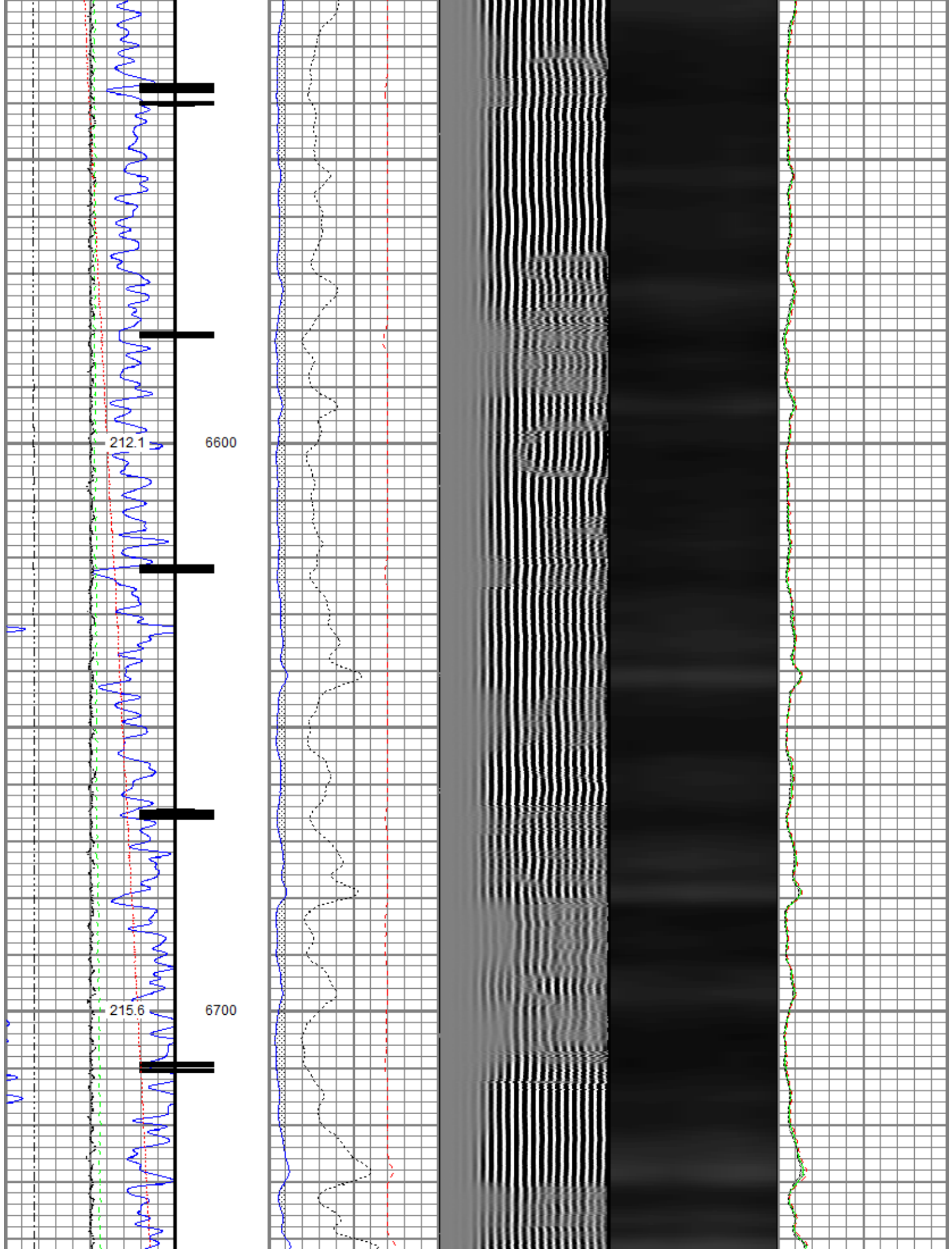


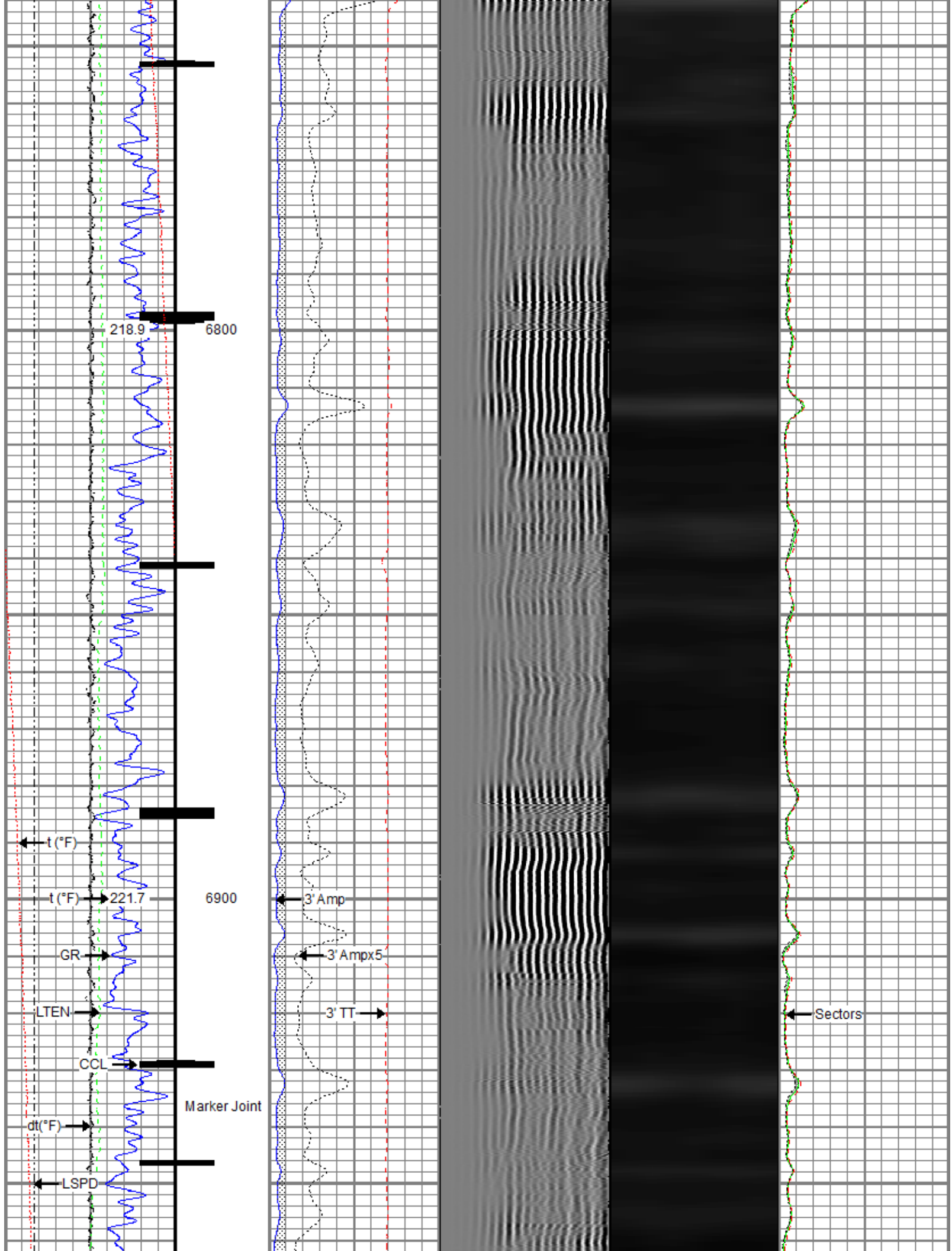


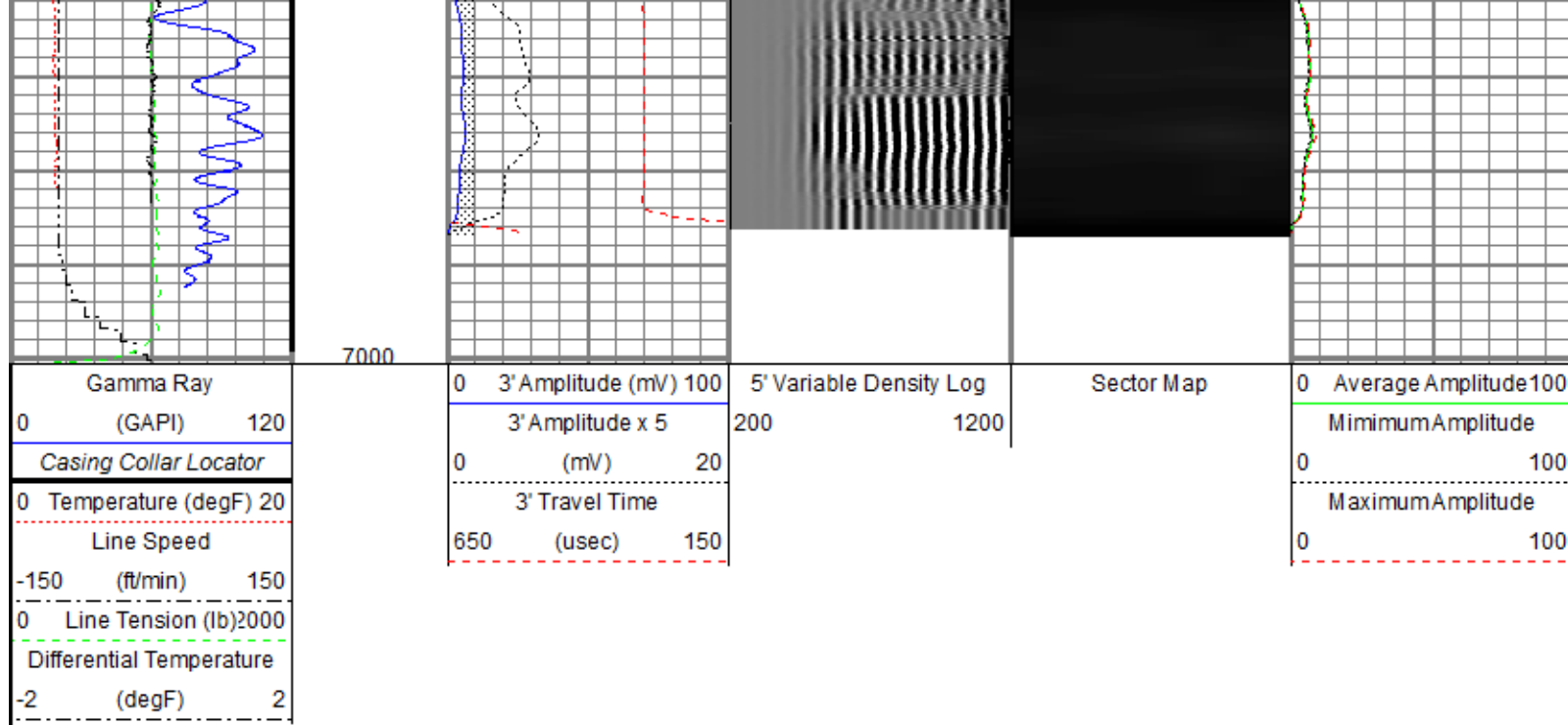








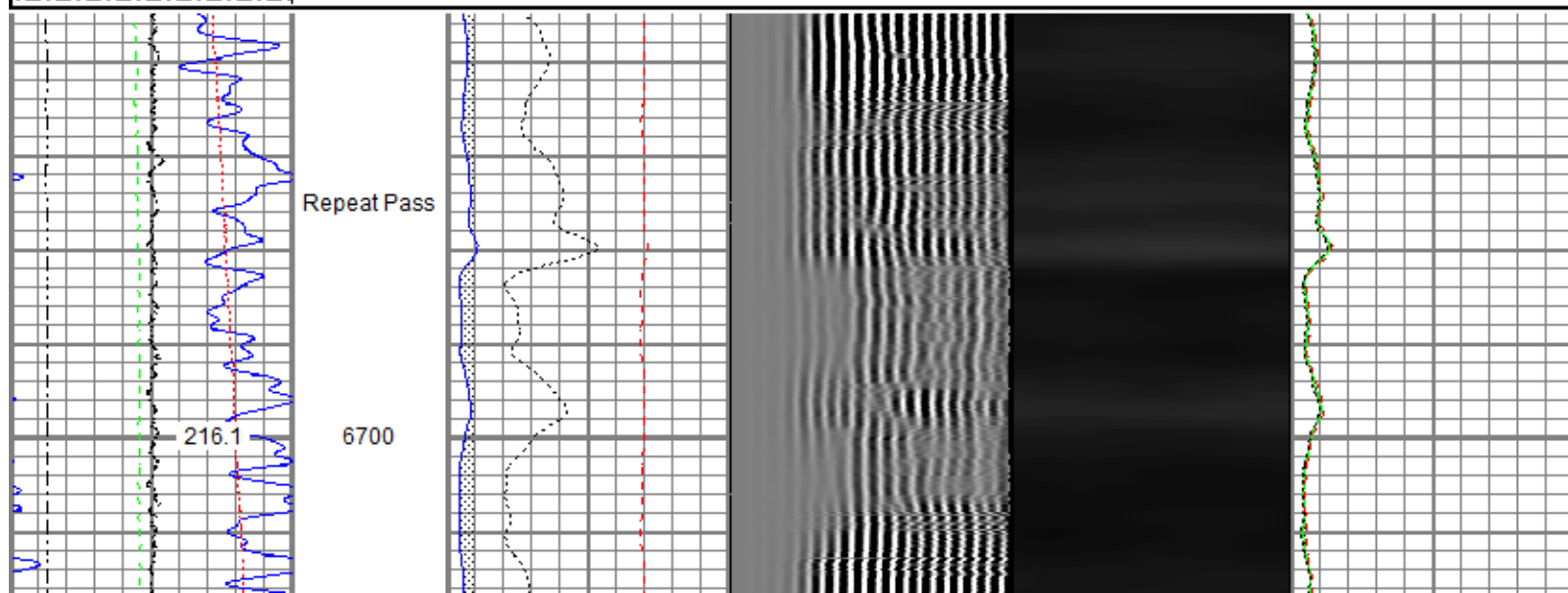
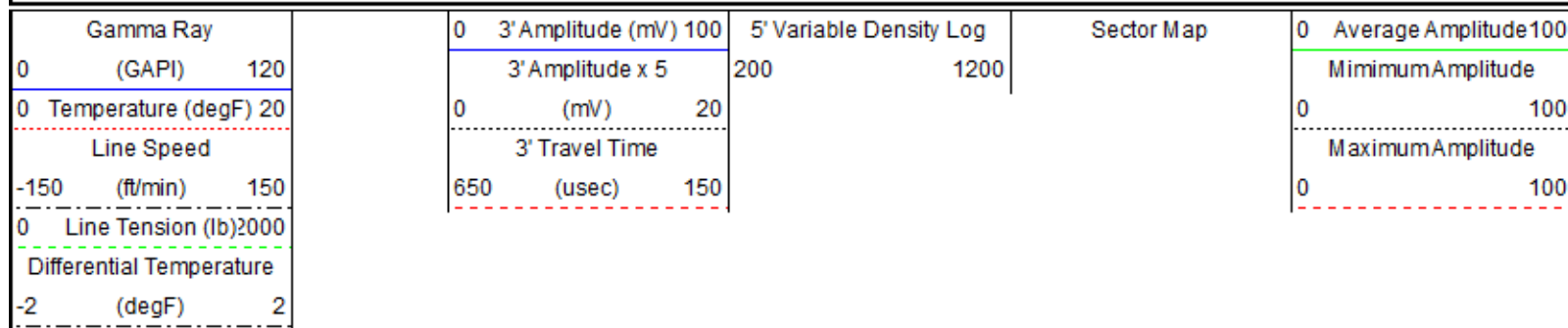




Repeat Pass

Recorded With 2800 PSI Surface Induced Pressure

Database File: anadarko_azul 13-17hz\0512346111_anadarko_azul 13-17hz_rbl_07-01-18_2800 psi.db
 Dataset Pathname: pass7.1
 Presentation Format: ros_radil
 Dataset Creation: Mon Jul 02 15:17:46 2018
 Charted by: Depth in Feet scaled 1:240



Repeat Pass

Repeat Pass

219.4

6800

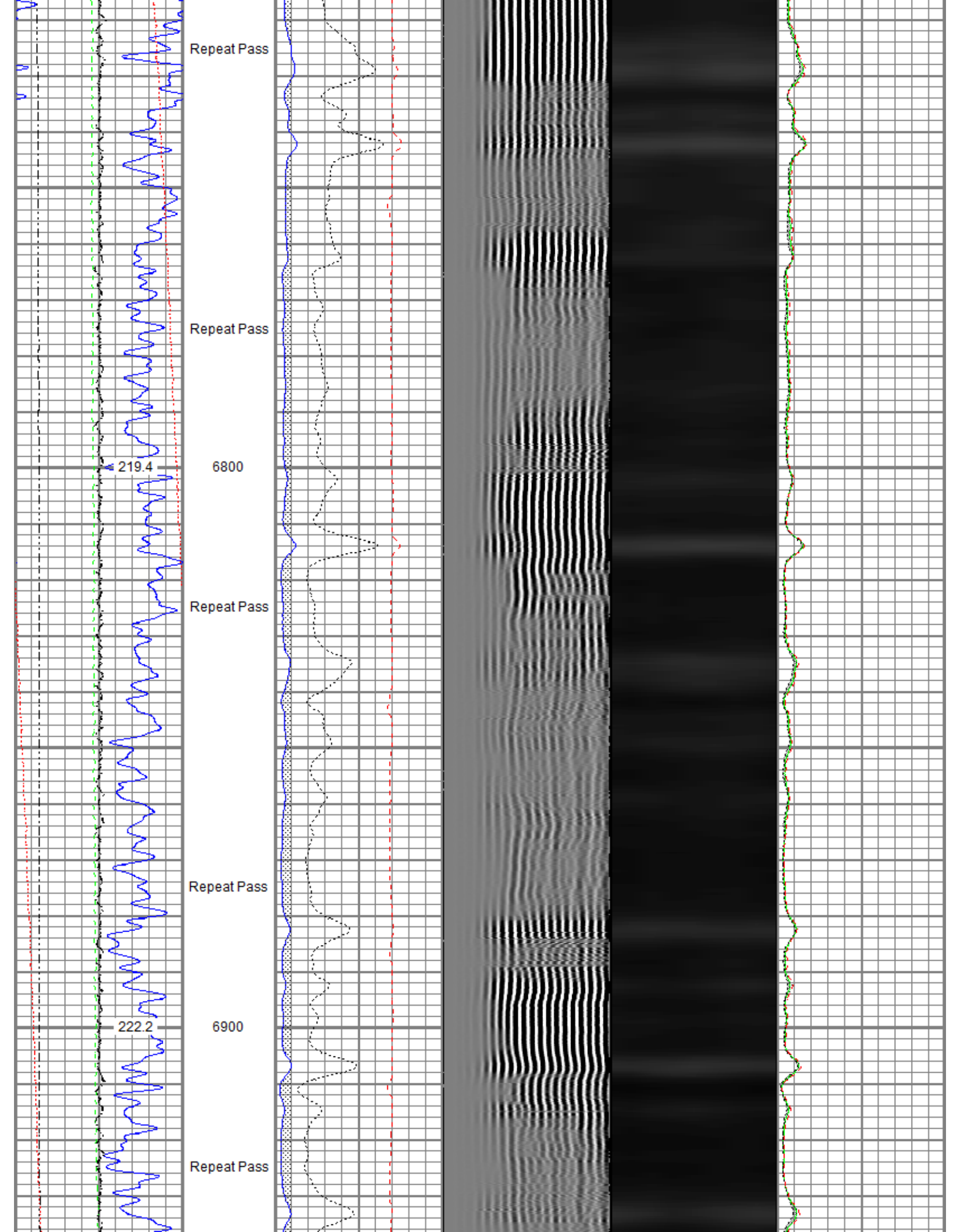
Repeat Pass

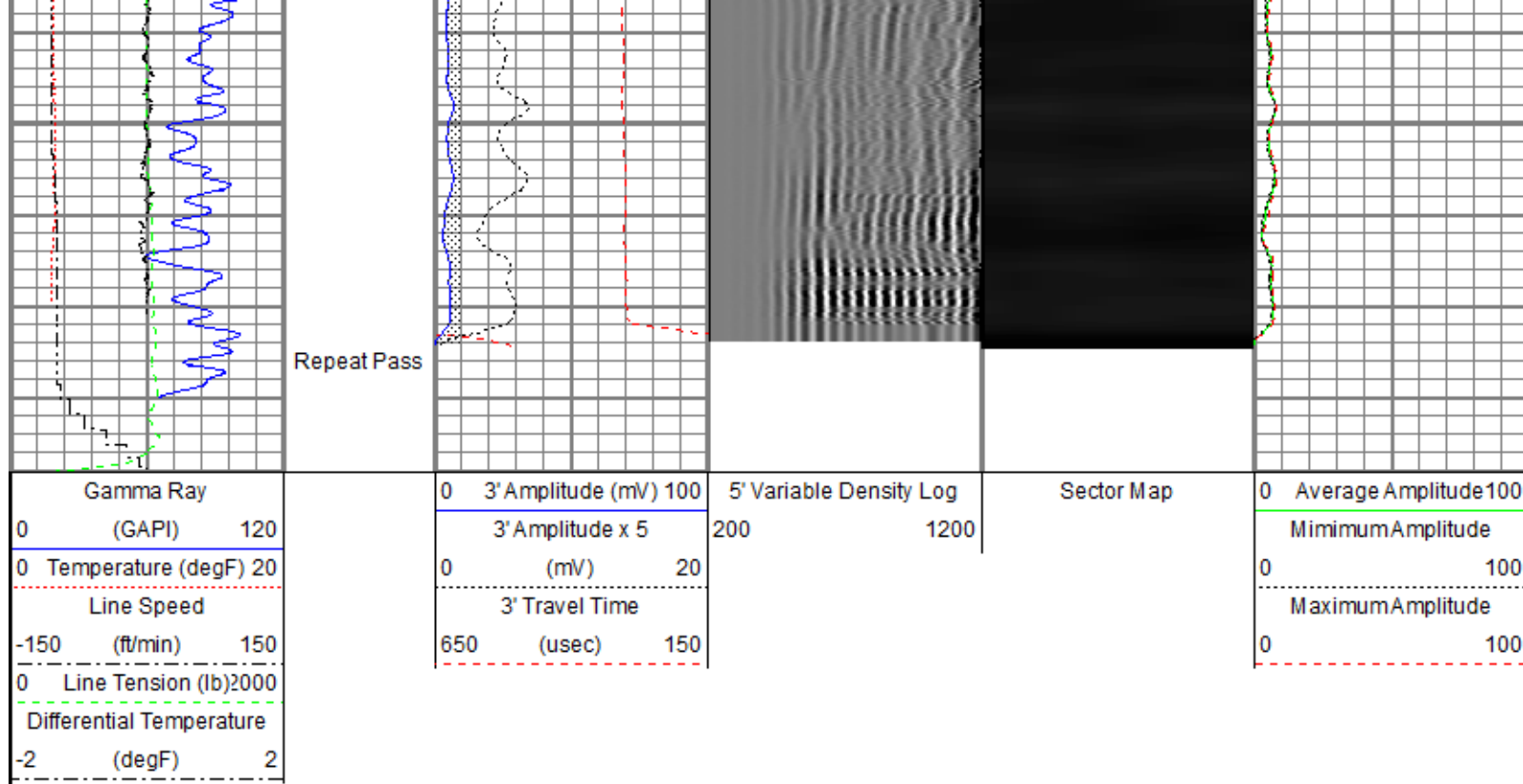
Repeat Pass

222.2

6900

Repeat Pass





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	17.33					
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					
WVF3FT	15.09					
WVF5FT	14.09					
			Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00

CCL\$2 CCL\$1 GR	7.08		Probe 2-3/4" Electric Inline Bowspring Centralizer			
	7.08					
	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: 0512346111_anadarko_azul 13-17hz_rbl_07-01-18_2800 psi.db: field/well/run1/pass9.3 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 13-17hz\0512346111_anadarko_azul 13-17hz_rbl_07-01-18_2800 psi.db					
Dataset Pathname	pass9.3					
Dataset Creation	Mon Jul 02 15:12:30 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'	0.008	0.724	0.800	71.921	99.358	-0.029
CAL	0.006	0.659				
5'	0.017	0.609	0.800	71.921	120.027	-1.202
SUM						
S1	0.006	0.694	0.000	100.000	145.474	-0.944
S2	0.009	0.729	0.000	100.000	138.885	-1.265
S3	0.009	0.759	0.000	100.000	133.292	-1.144
S4	0.008	0.754	0.000	100.000	133.292	-1.144

S4	0.009	0.771	0.000	100.000	131.230	-1.146
S5	0.009	0.772	0.000	100.000	131.166	-1.198
S6	0.008	0.745	0.000	100.000	135.707	-1.116
S7	0.008	0.706	0.000	100.000	143.212	-1.083
S8	0.007	0.697	0.000	100.000	144.913	-1.026

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 13-17HZ
Field Wattenberg
County Weld
State Colorado