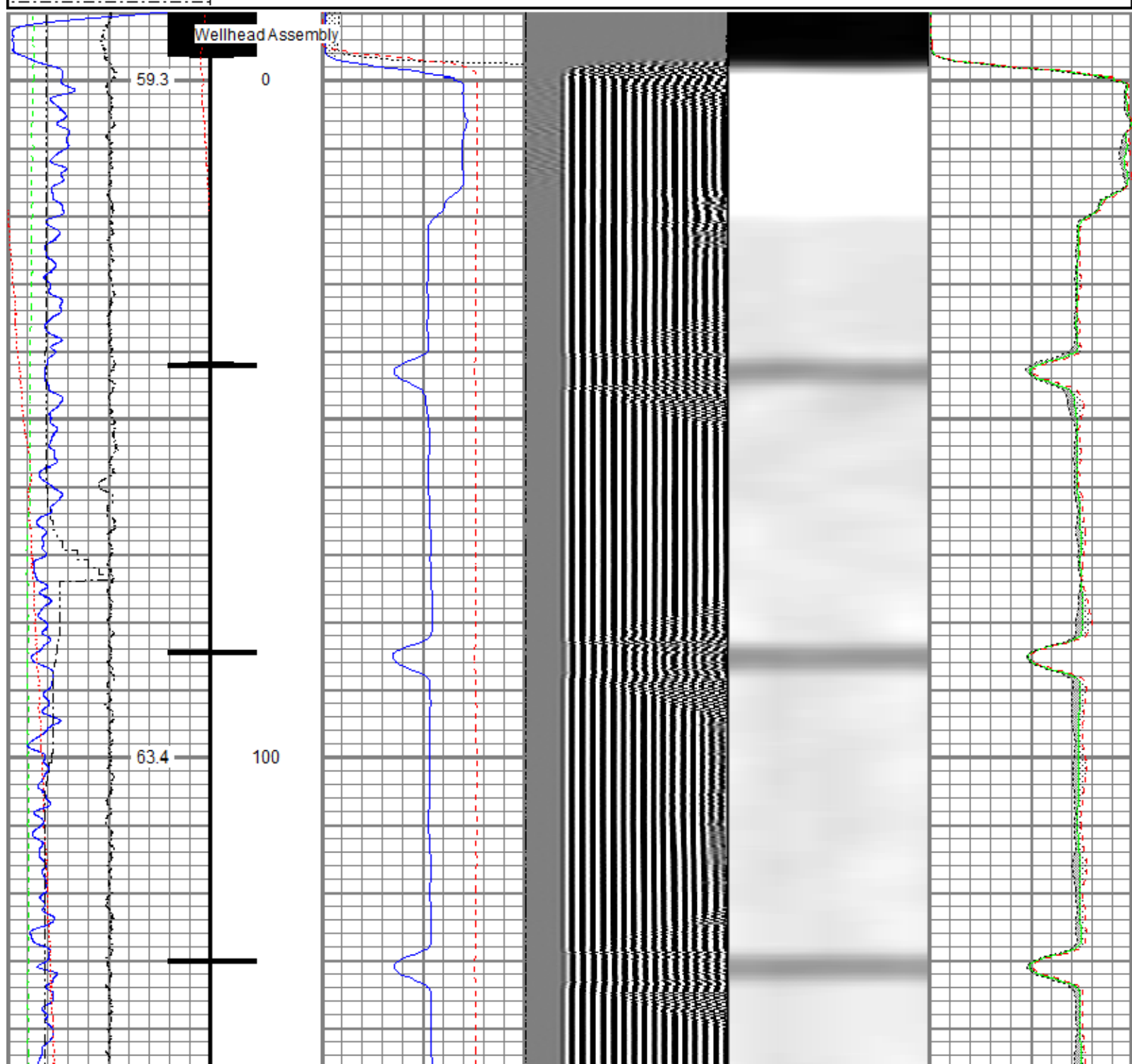
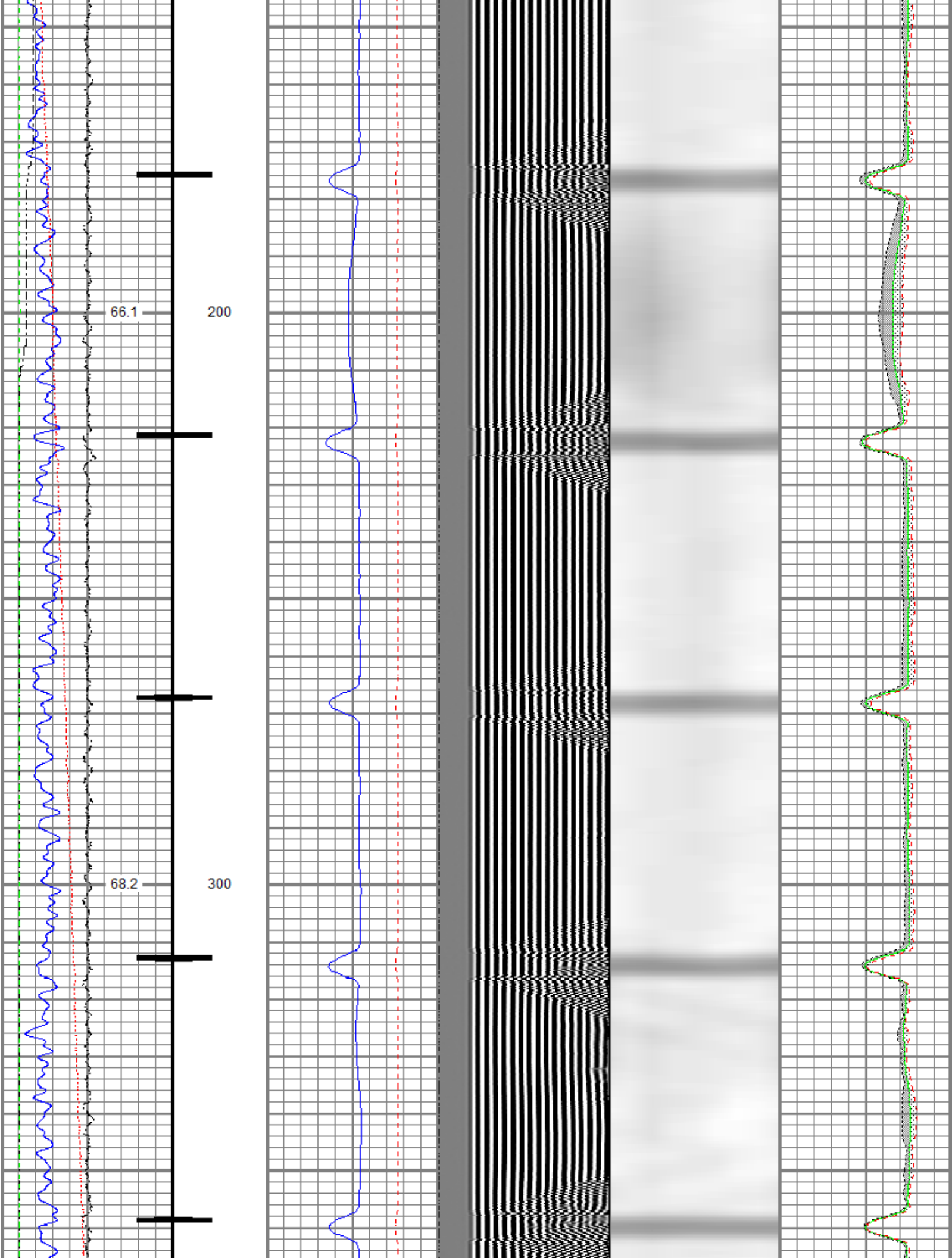


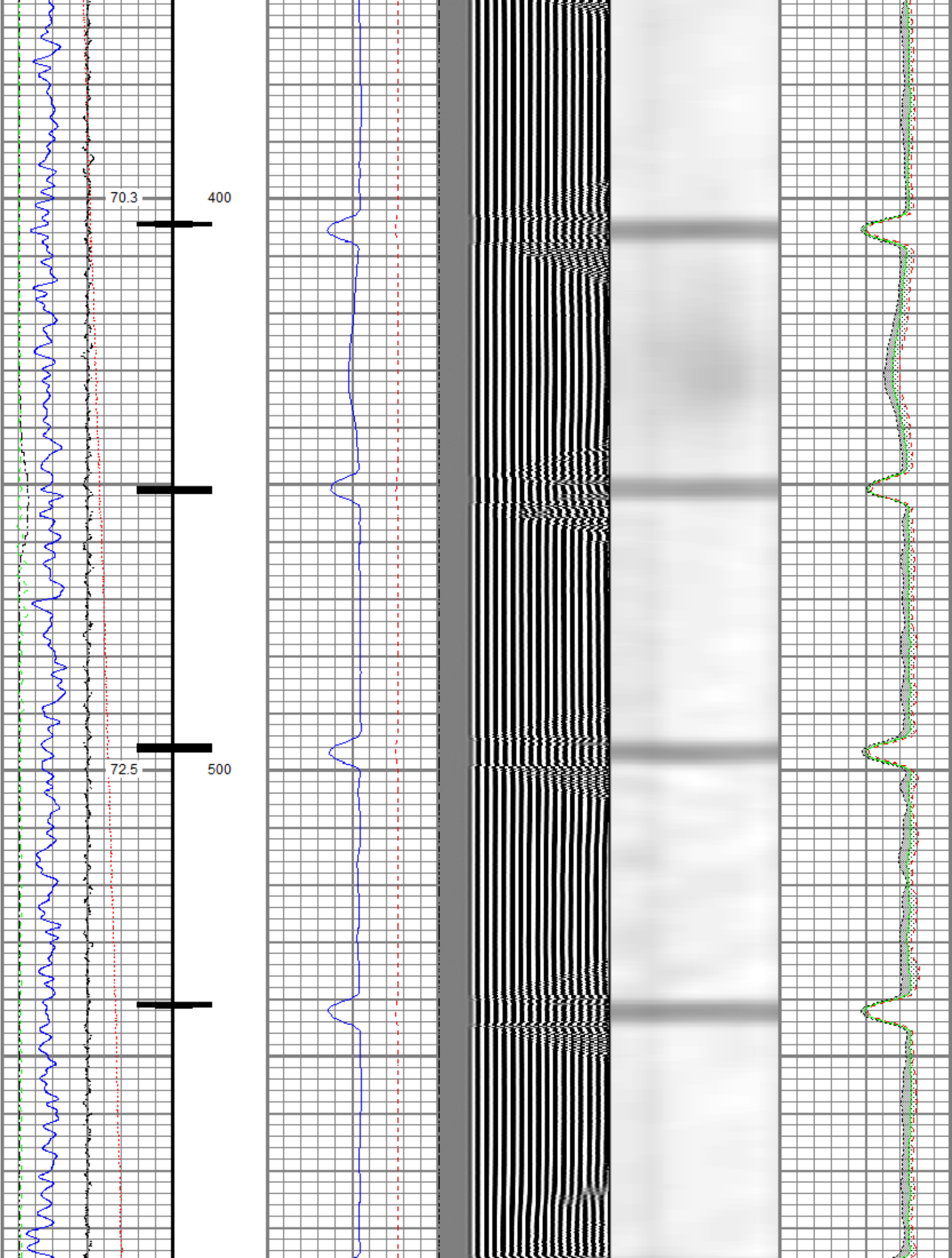
<<< Fold Here >>>
<p>All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible 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.</p>
Comments
<p>Log ran as per customer request Depth referenced to Marker Joint at 6191.2 FT Adjusted -2 FT to correlate with Marker Joint Log ran with 2500 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>

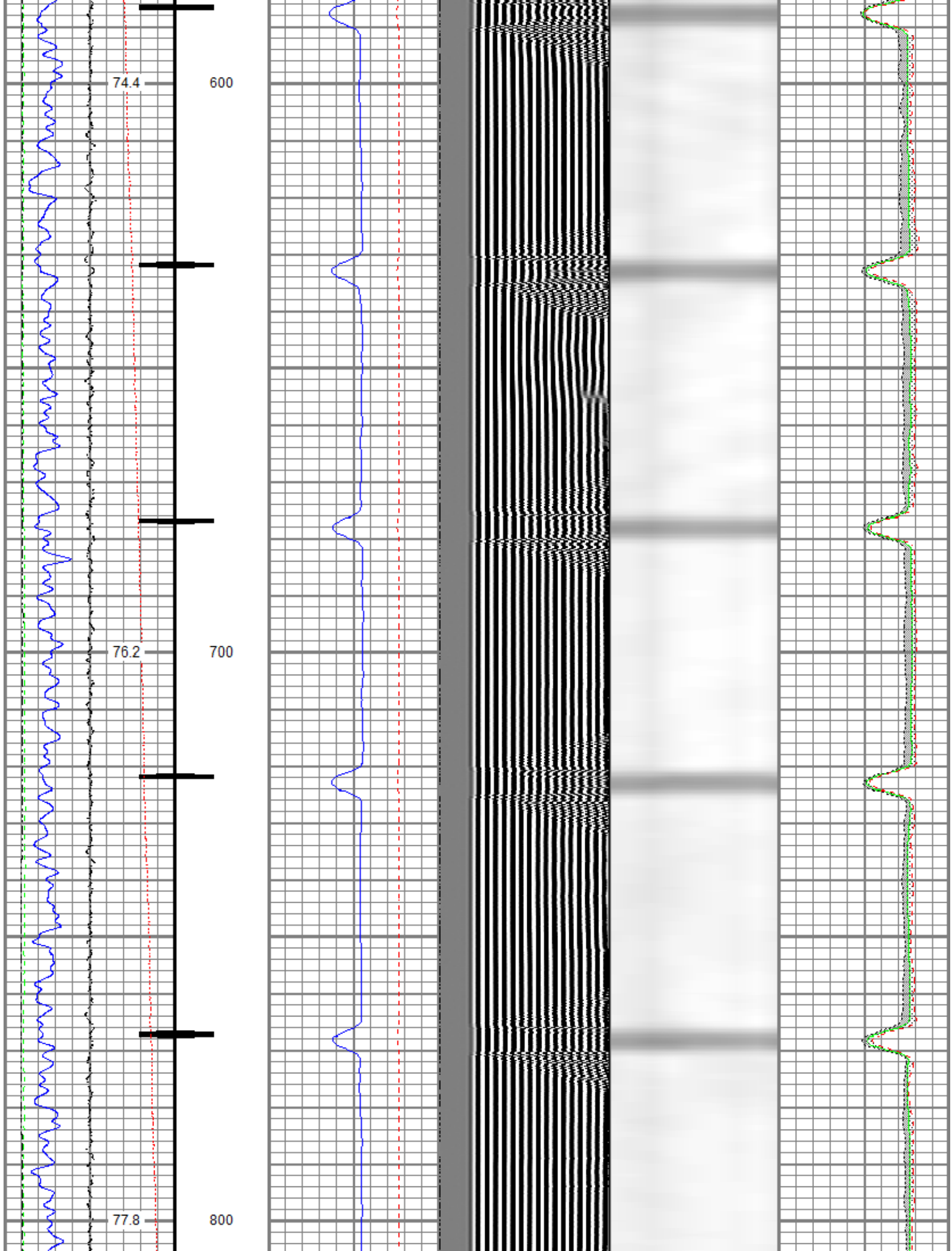
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 Dataset Pathname pass4.1
 Presentation Format ros_radri_noble
 Dataset Creation Sat Dec 19 13:47:46 2020
 Charted by Depth in Feet scaled 1:240

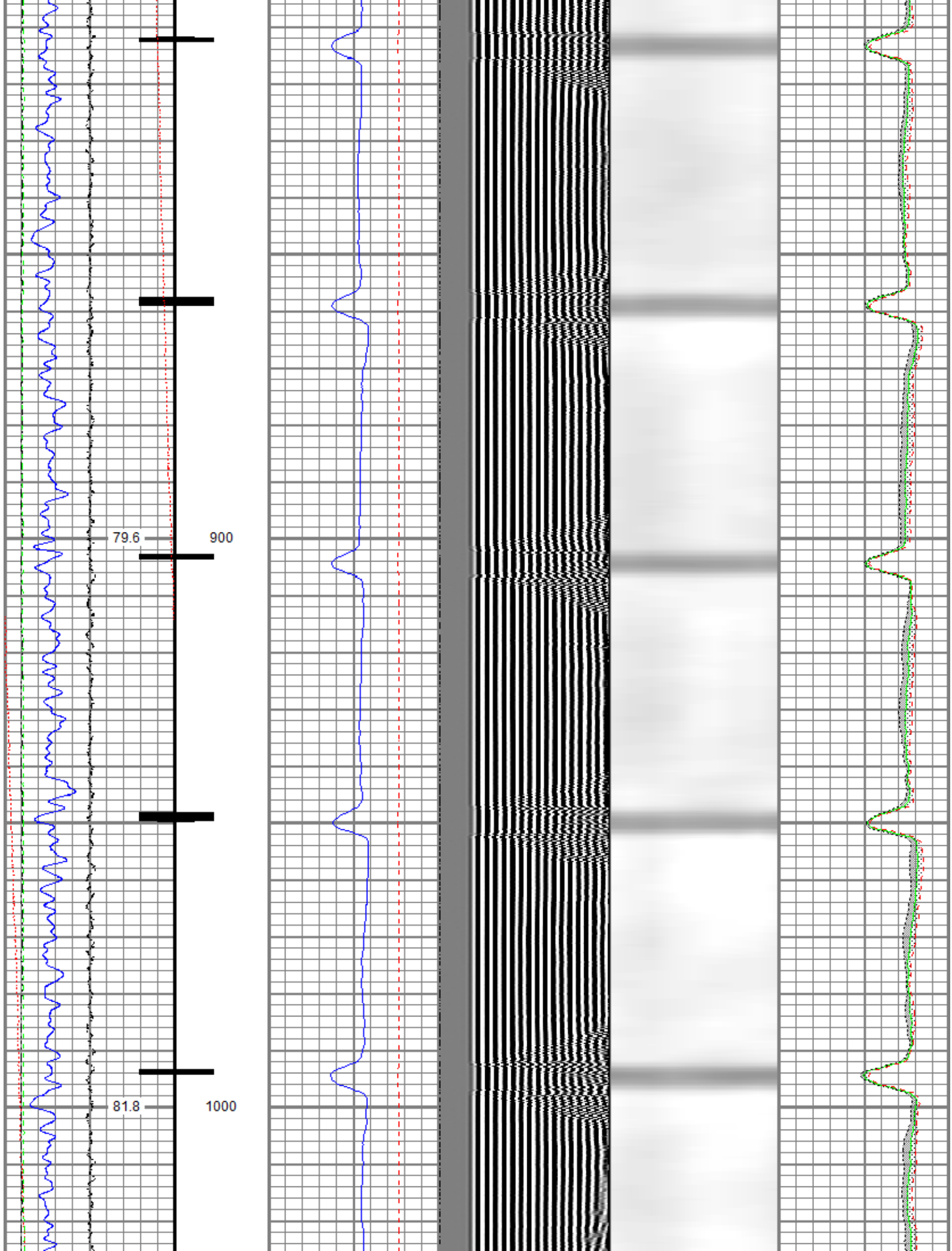
Gamma Ray	0	3' Amplitude (mV) 100	5' Variable Density Log	Sector Map	0	Average Amplitude 100
(GAPI) 120		3' Amplitude x 5	200 (usec) 1200			Minimum Amplitude
Casing Collar Log	0	(mV) 20			0	100
Temperature (degF) 20		3' Travel Time				Maximum Amplitude
Line Speed	650	(usec) 150			0	100
(ft/min) 150	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

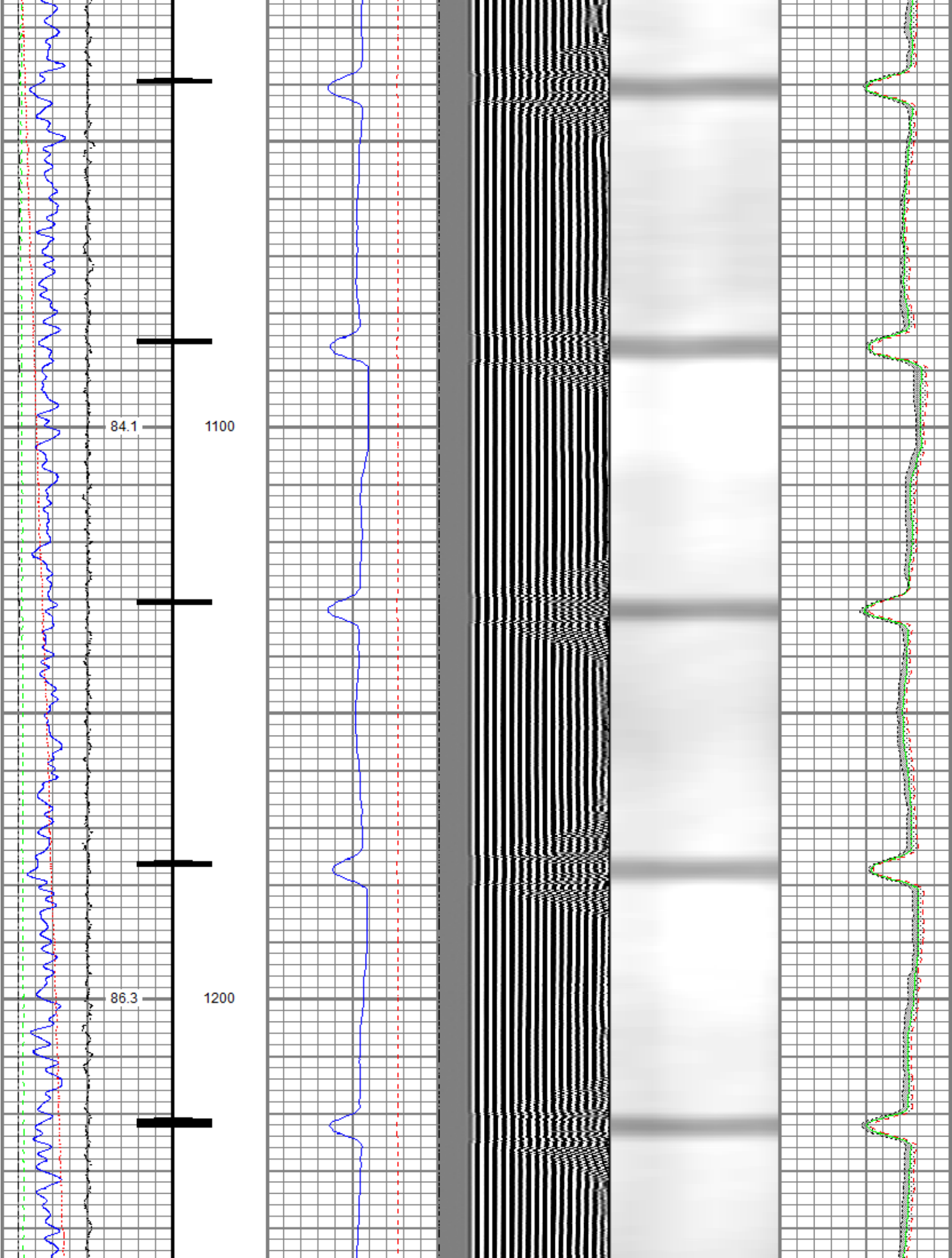


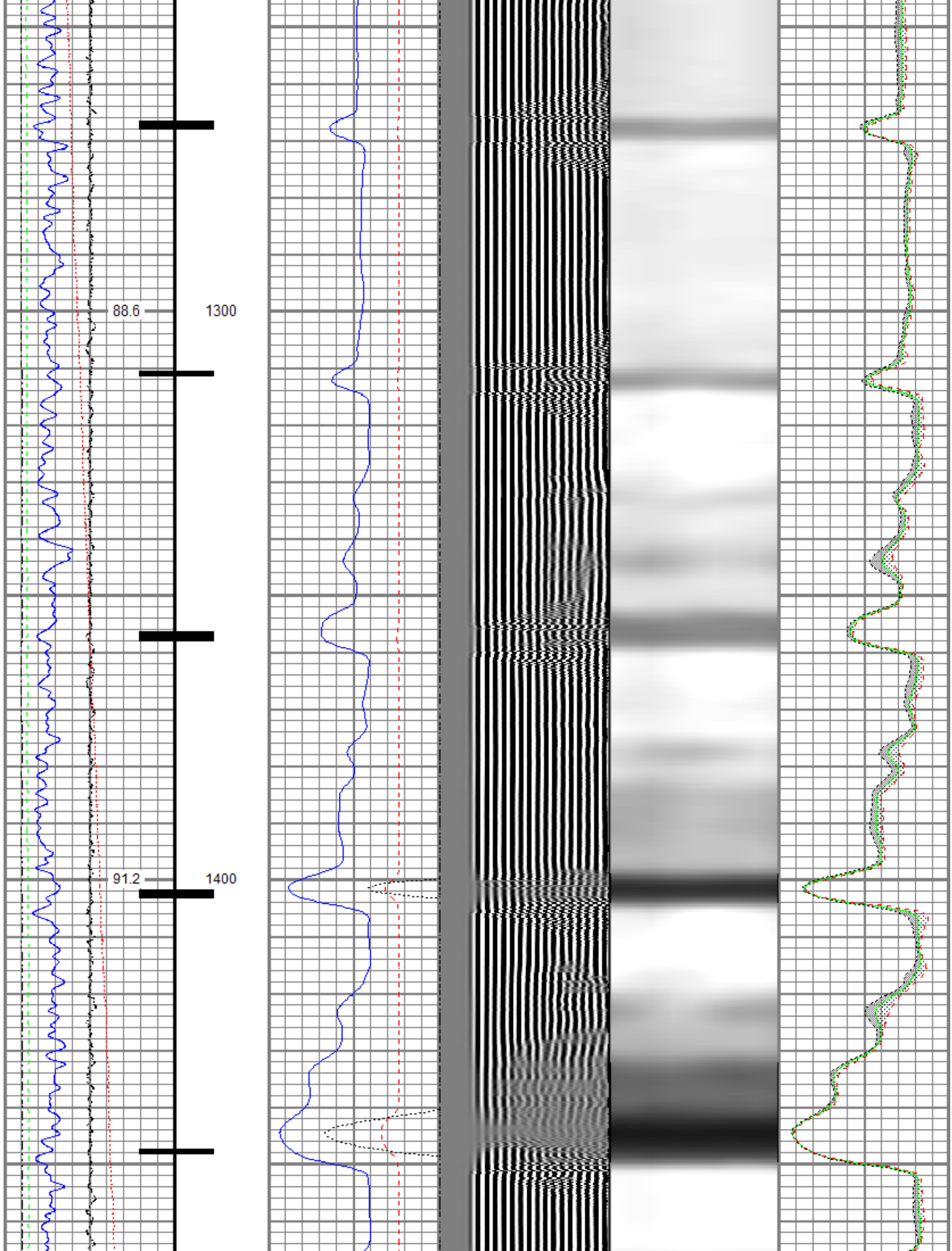


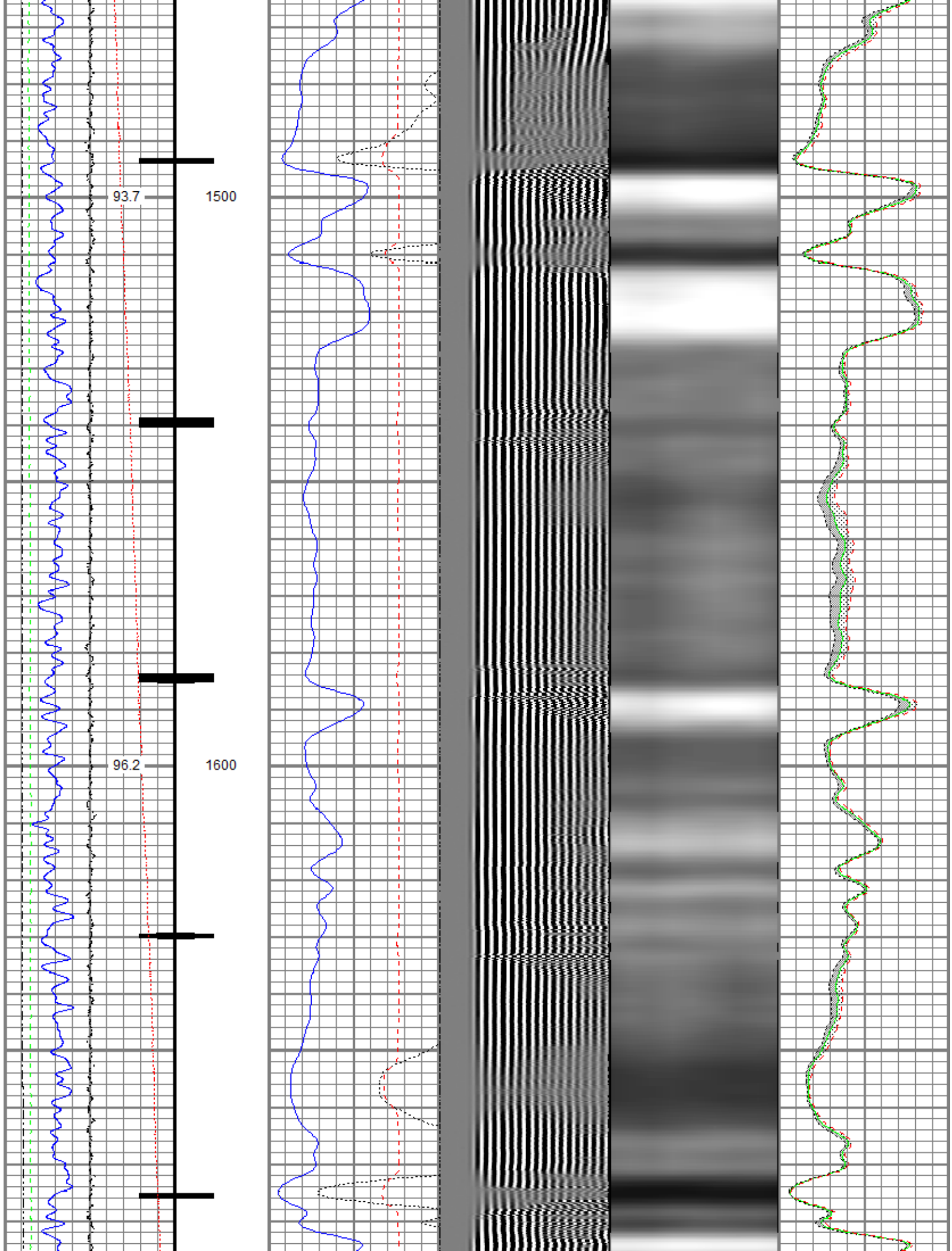


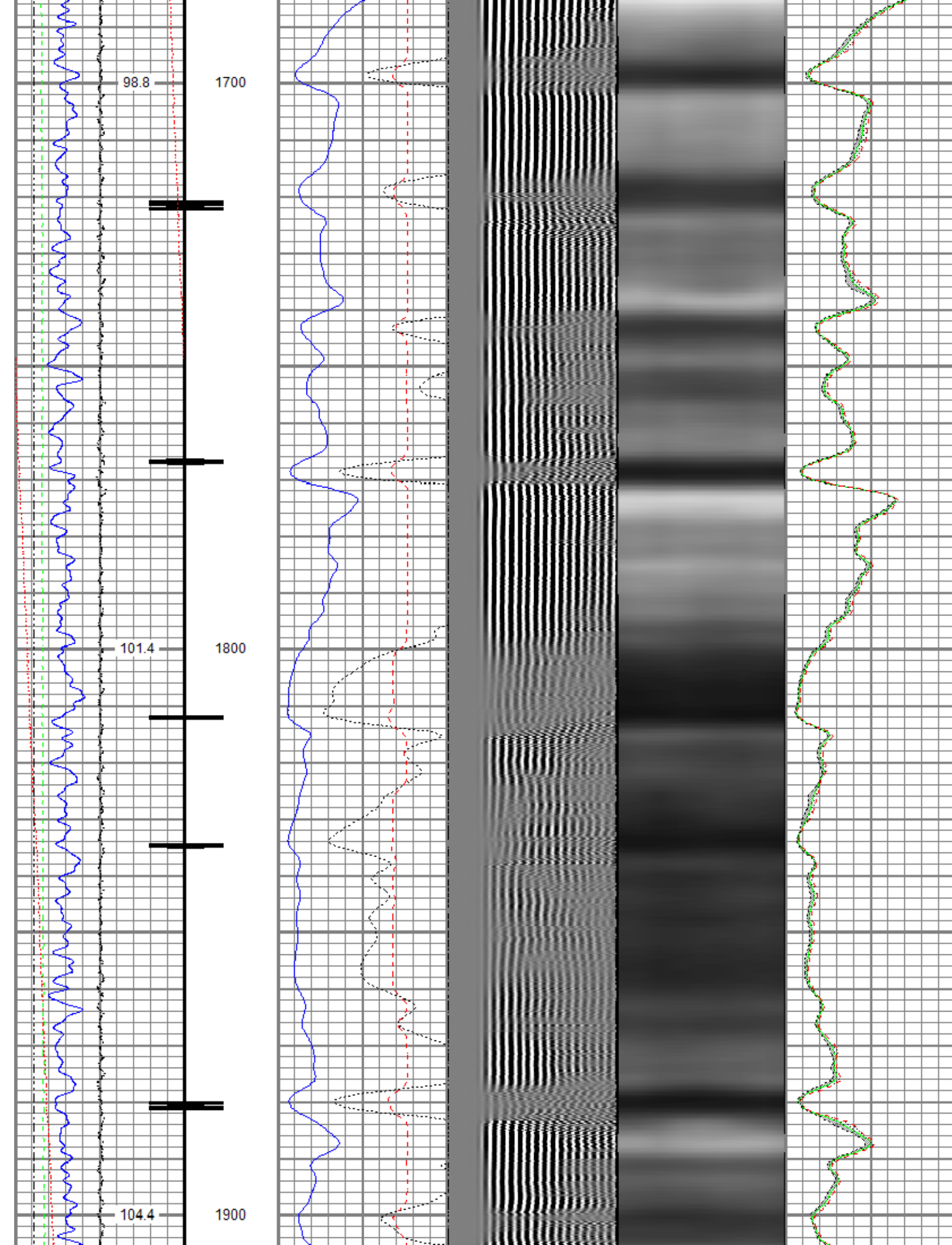


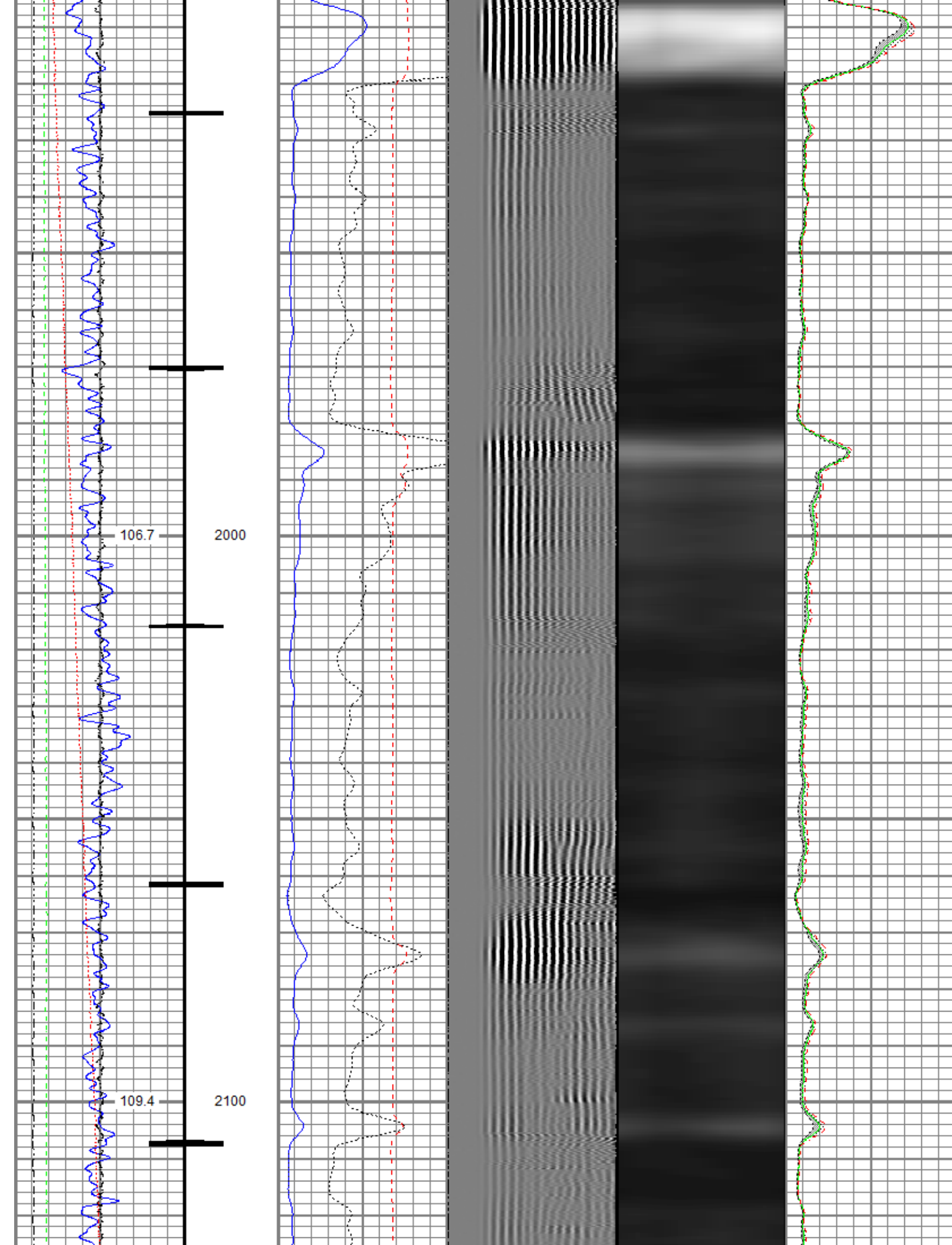


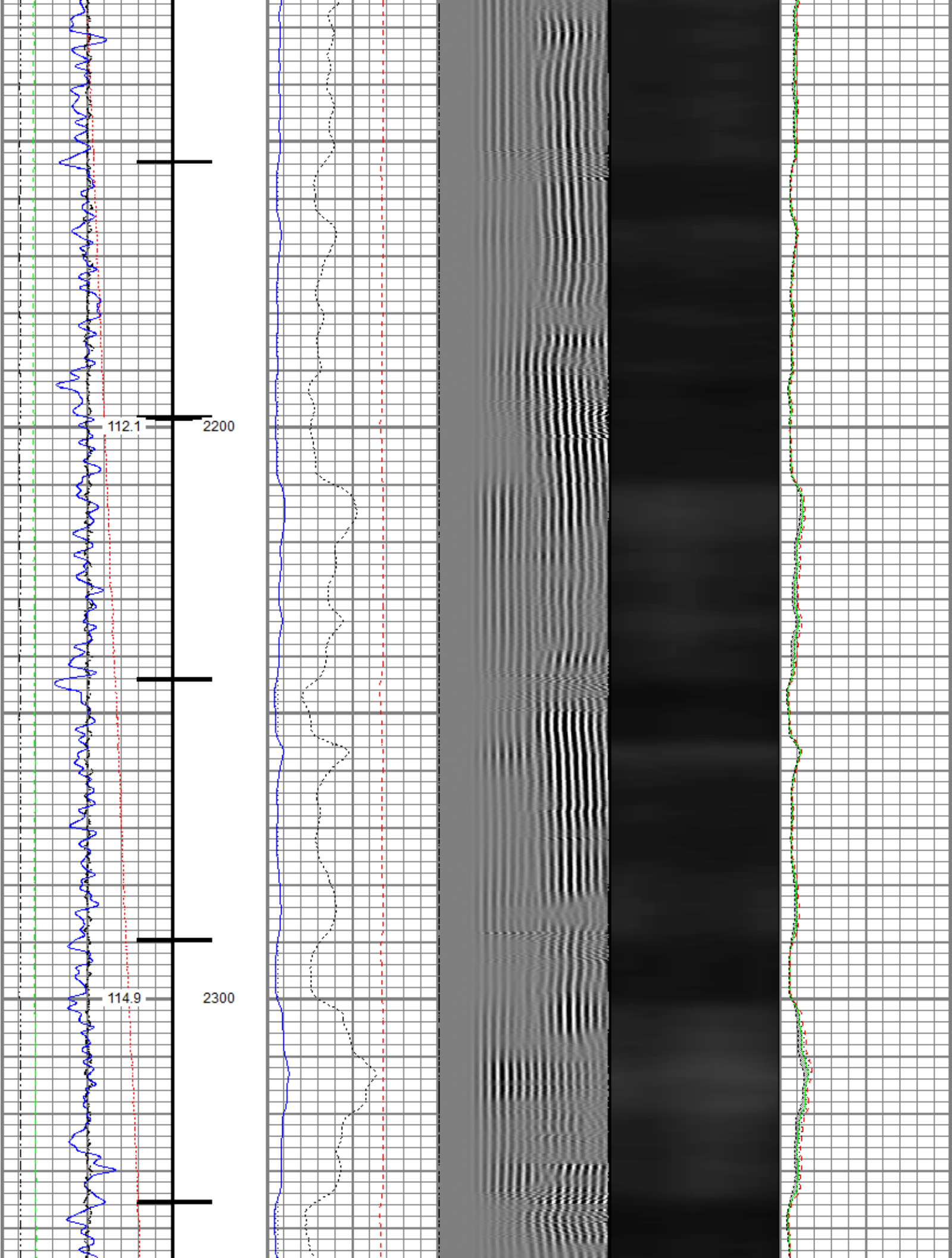


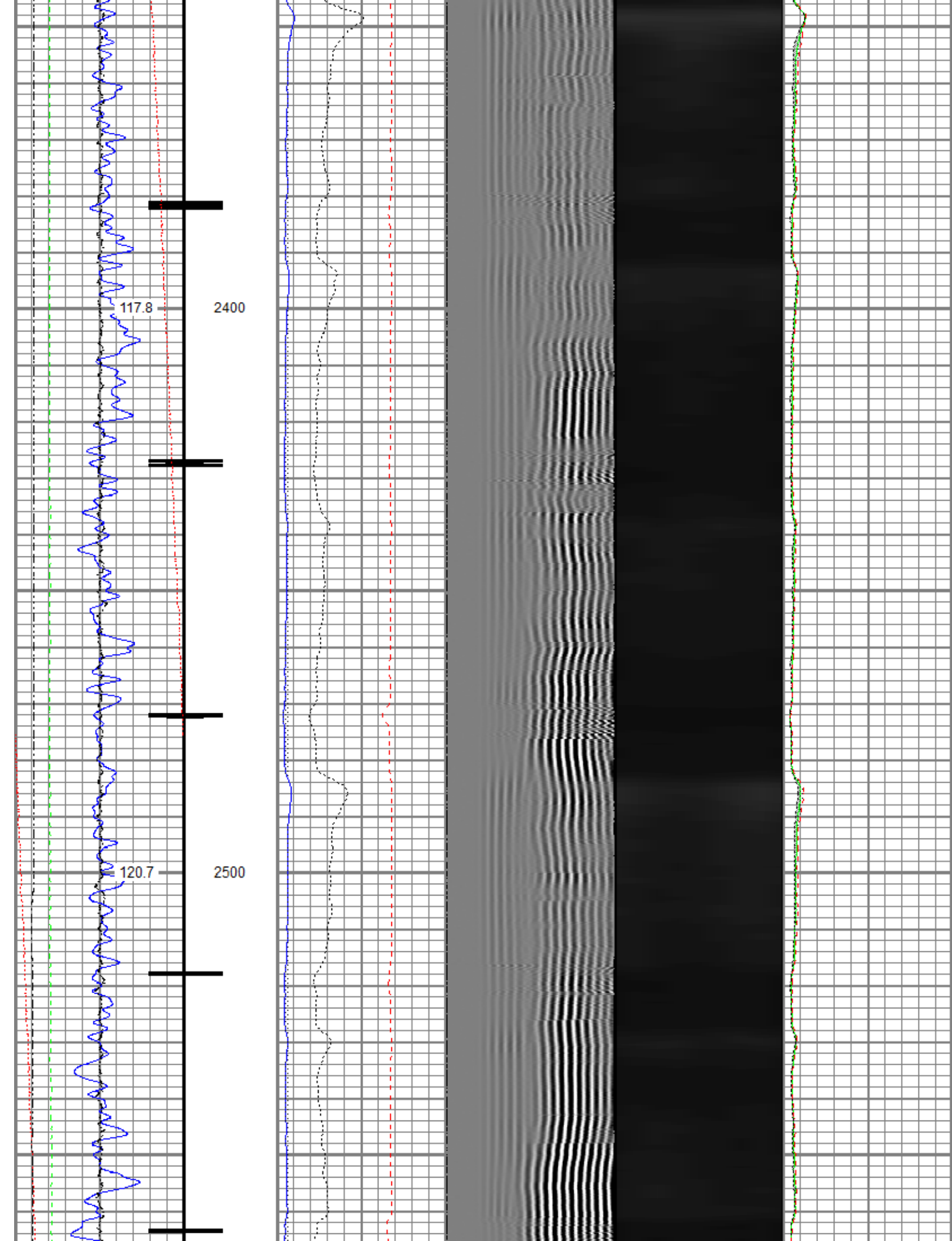


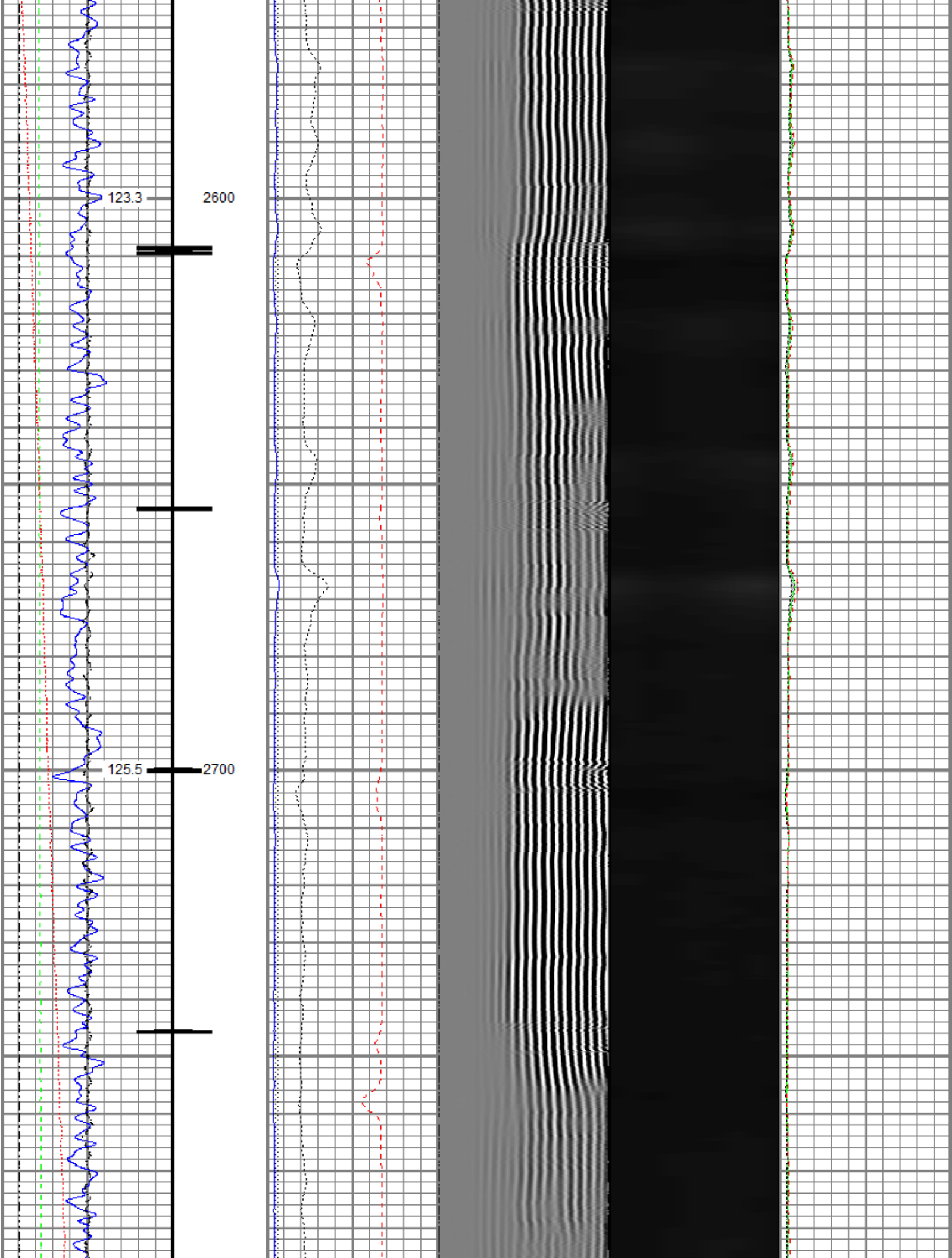


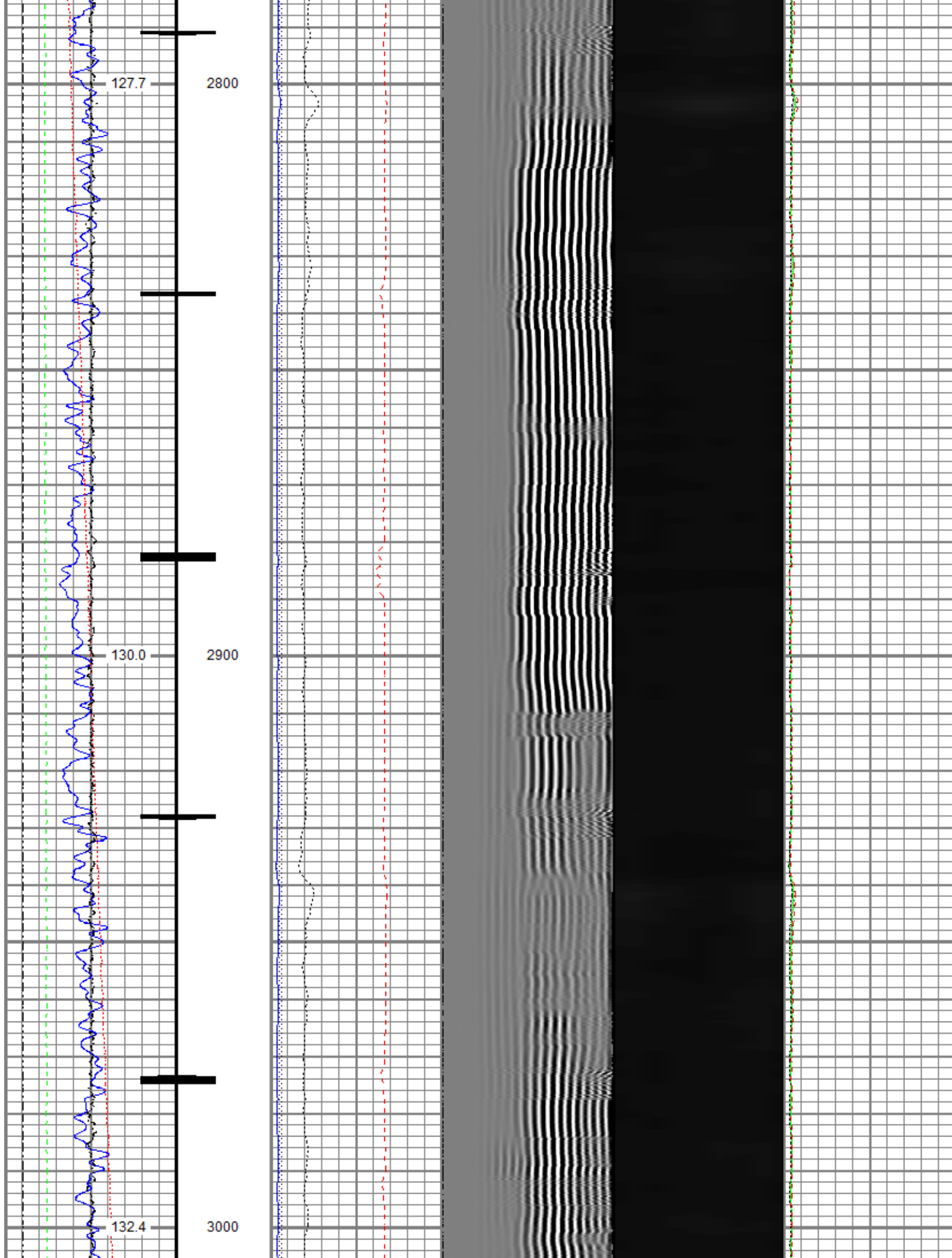


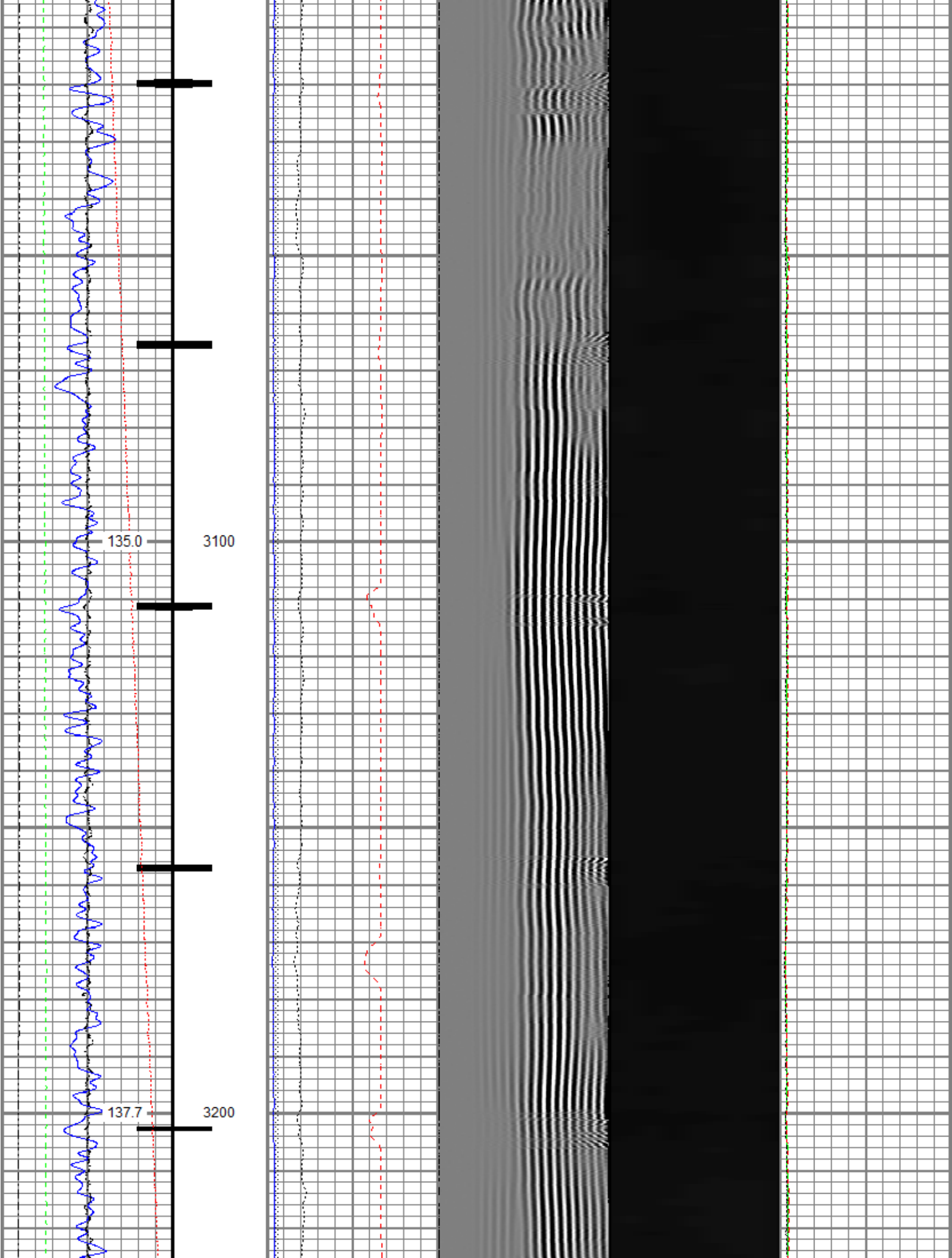


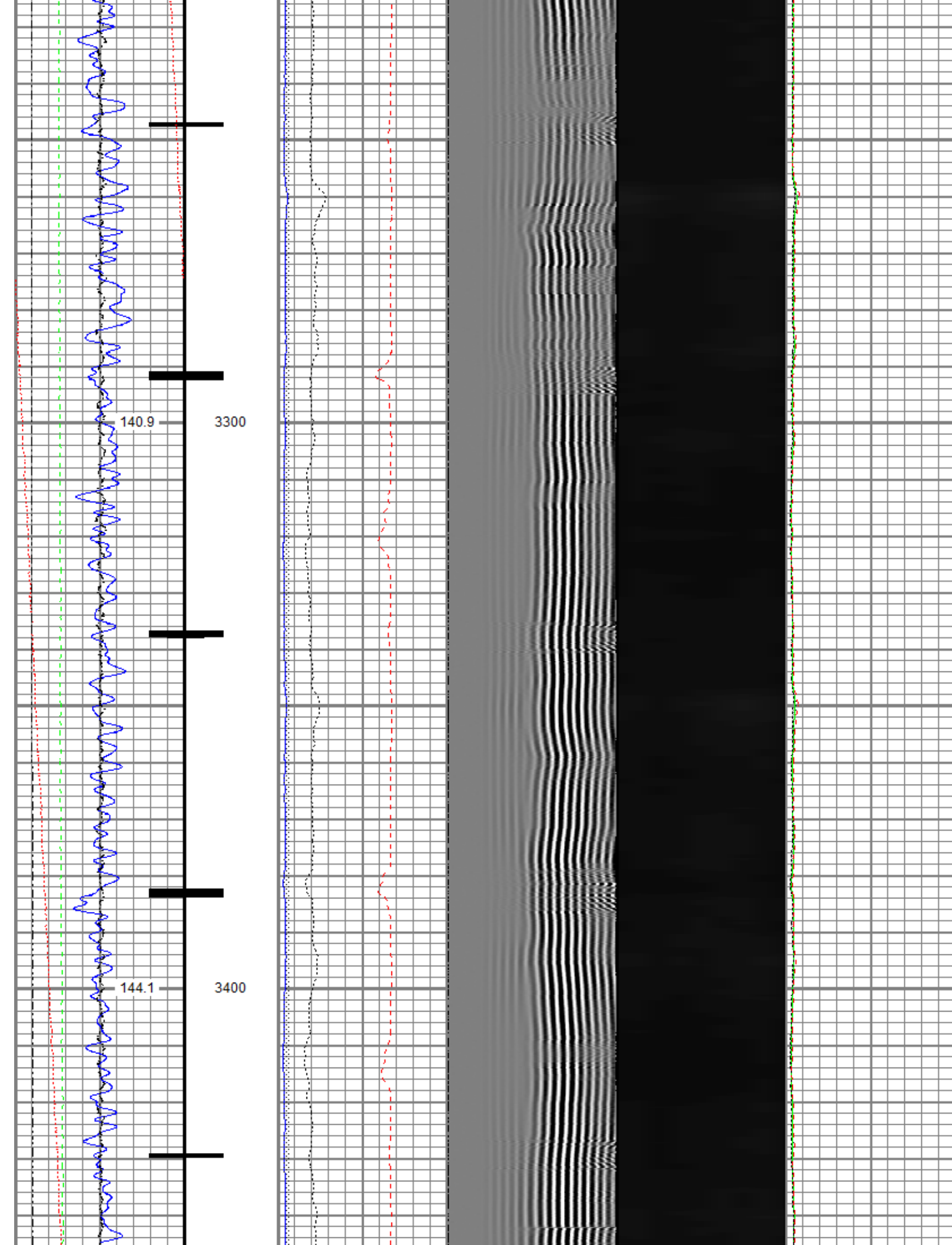


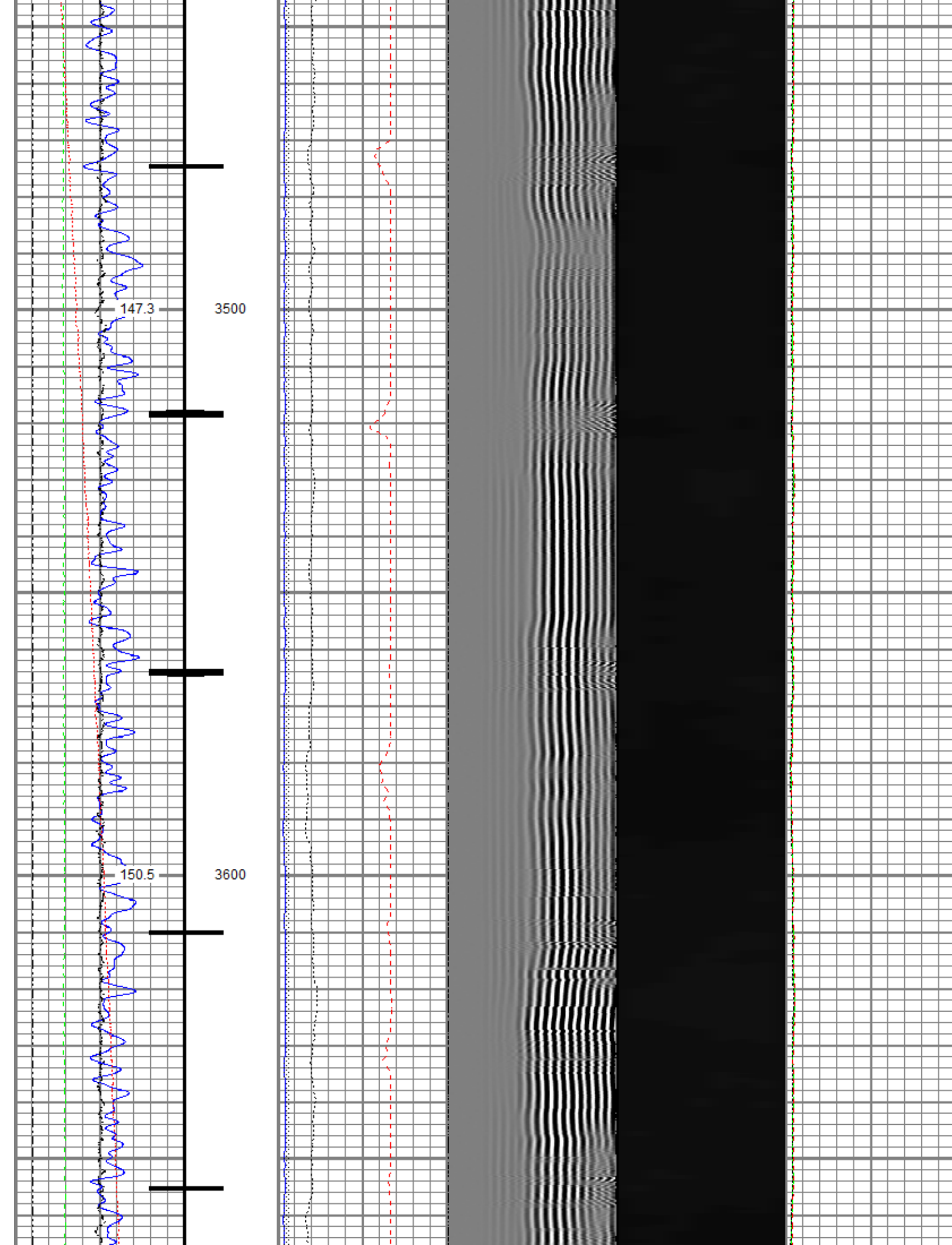


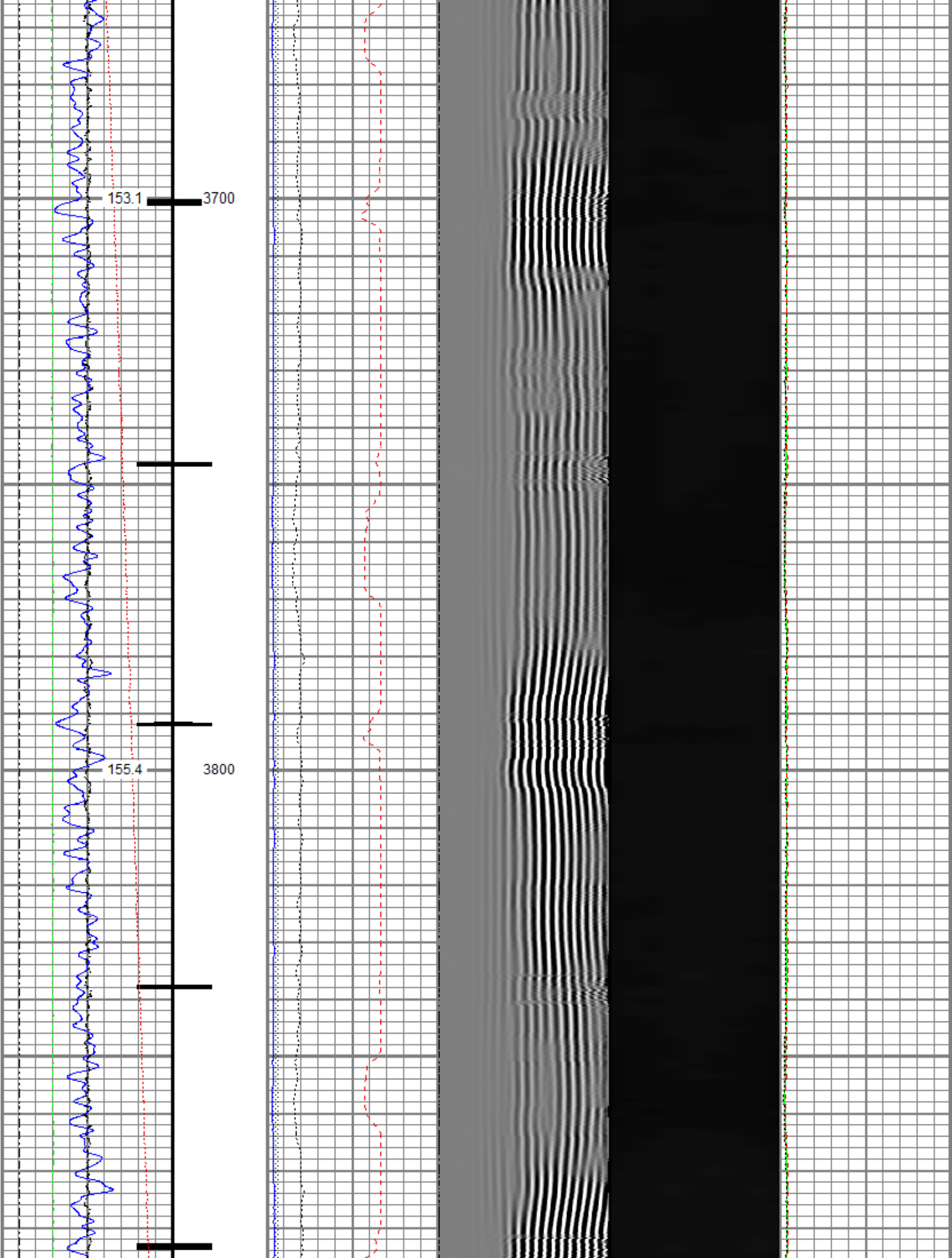


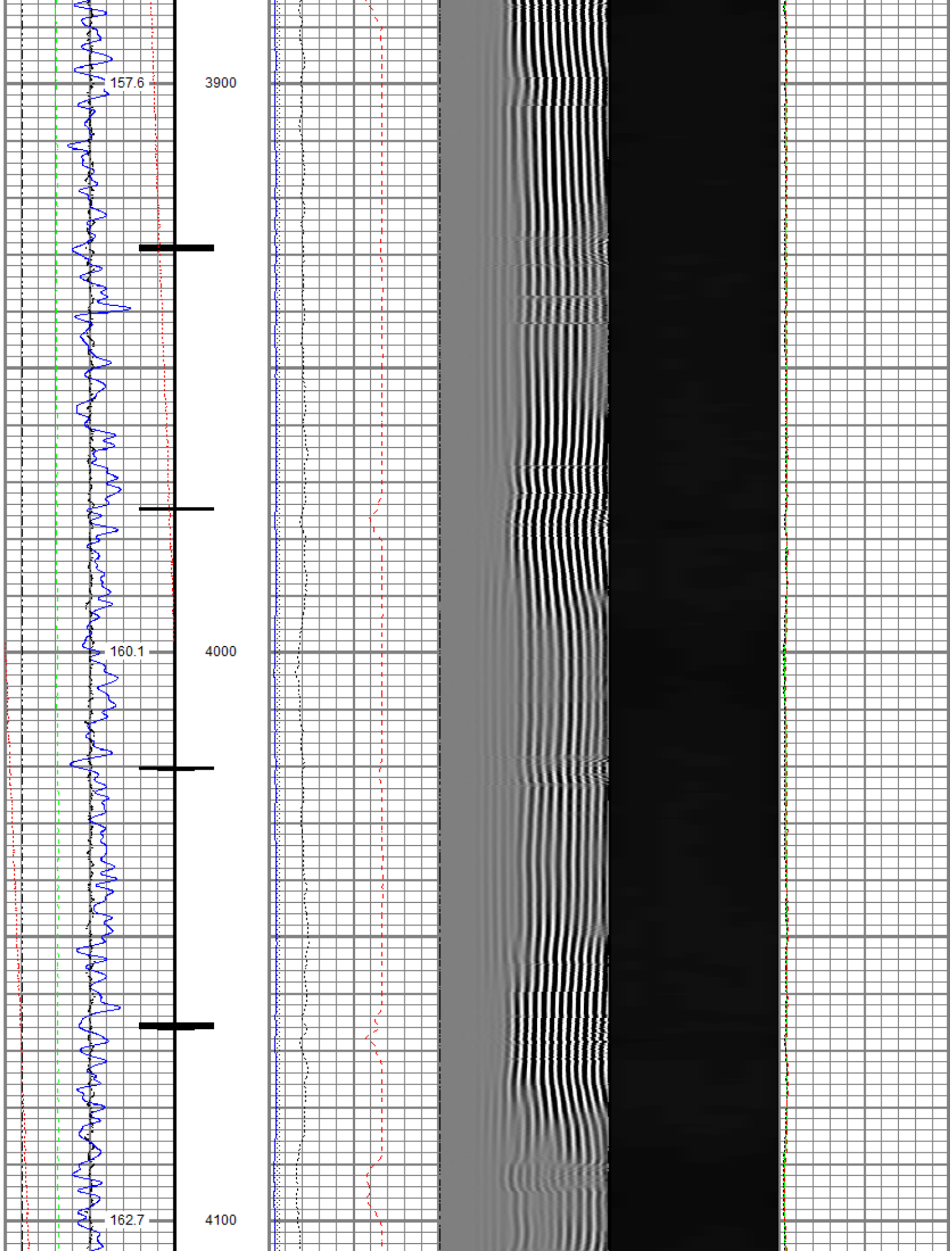


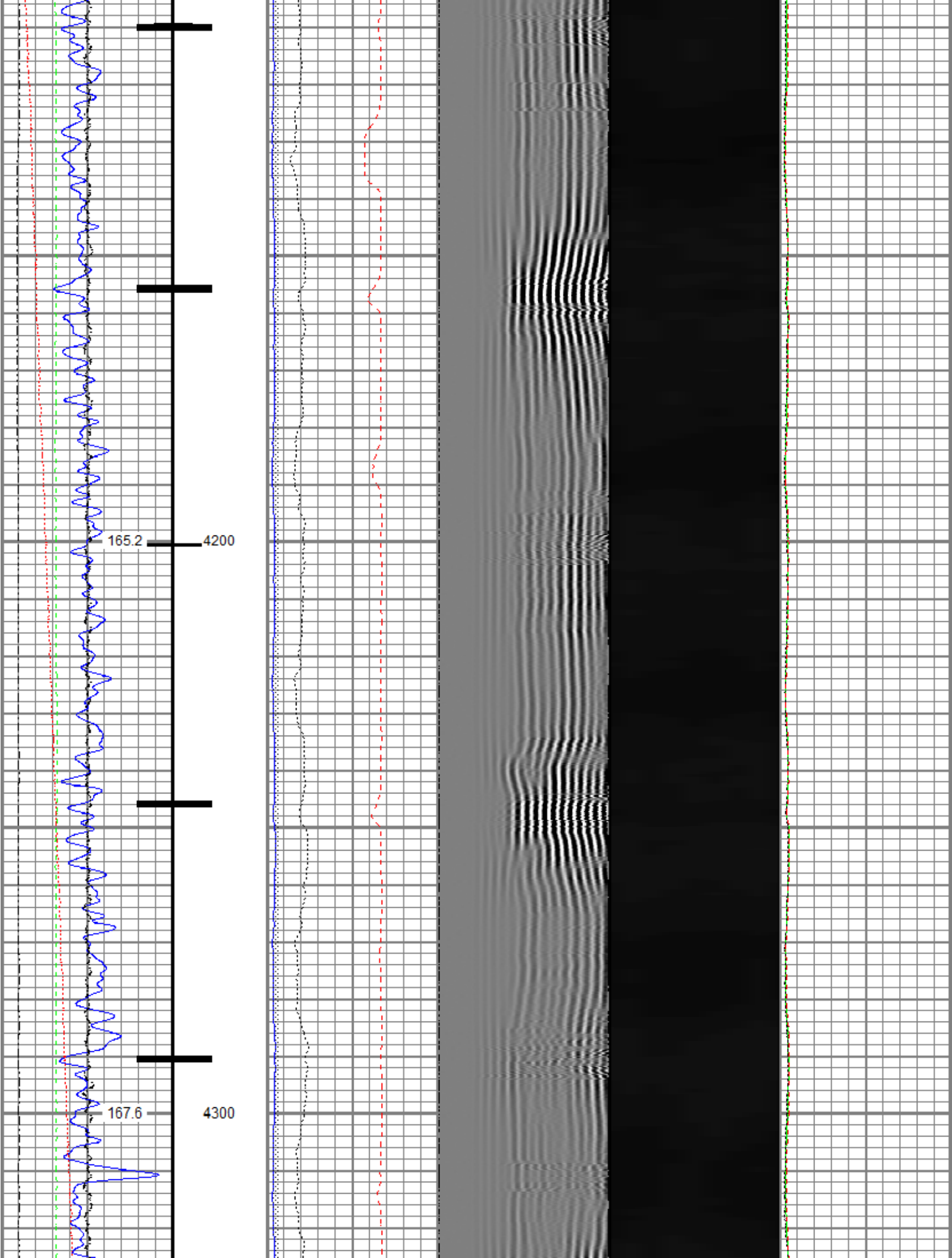


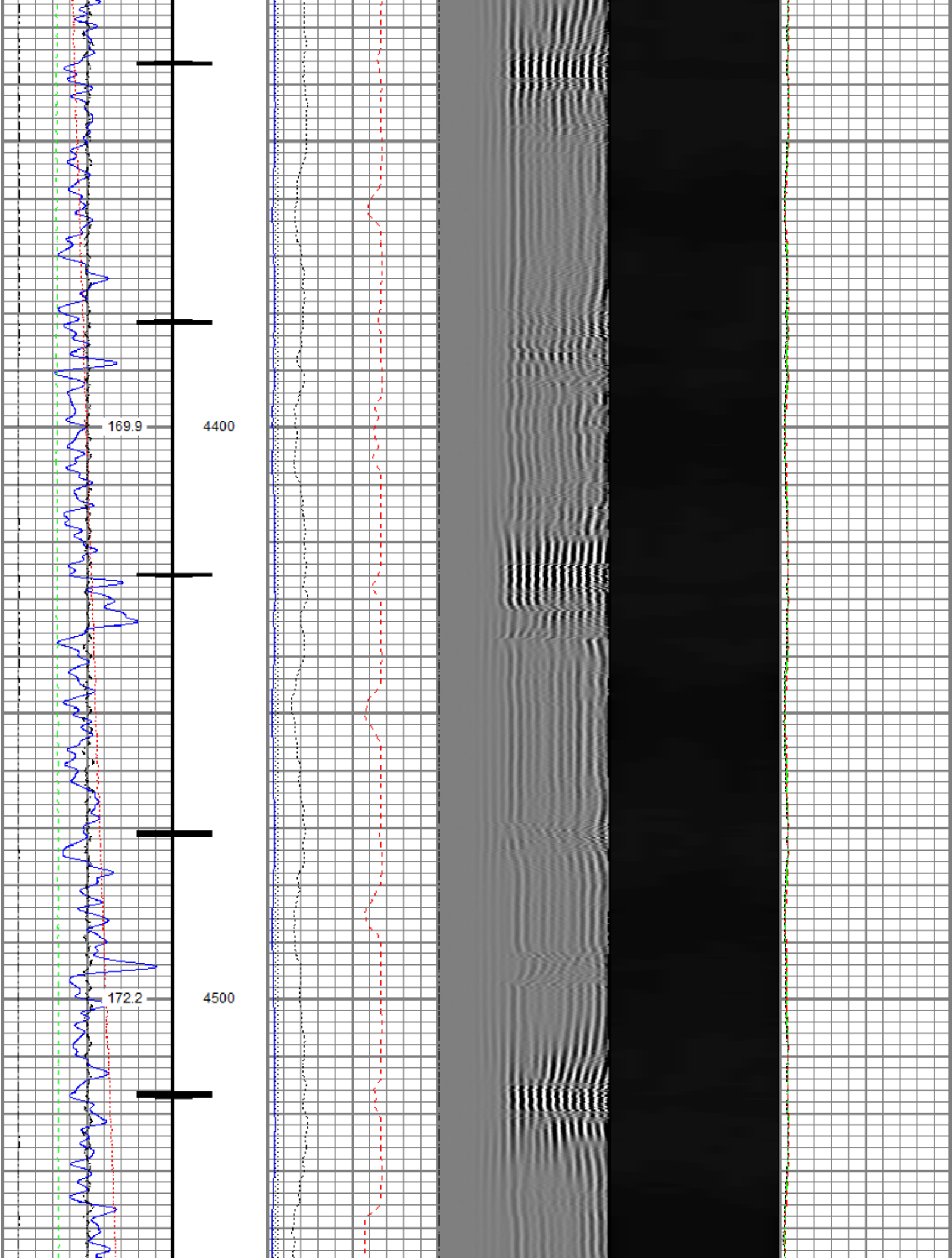


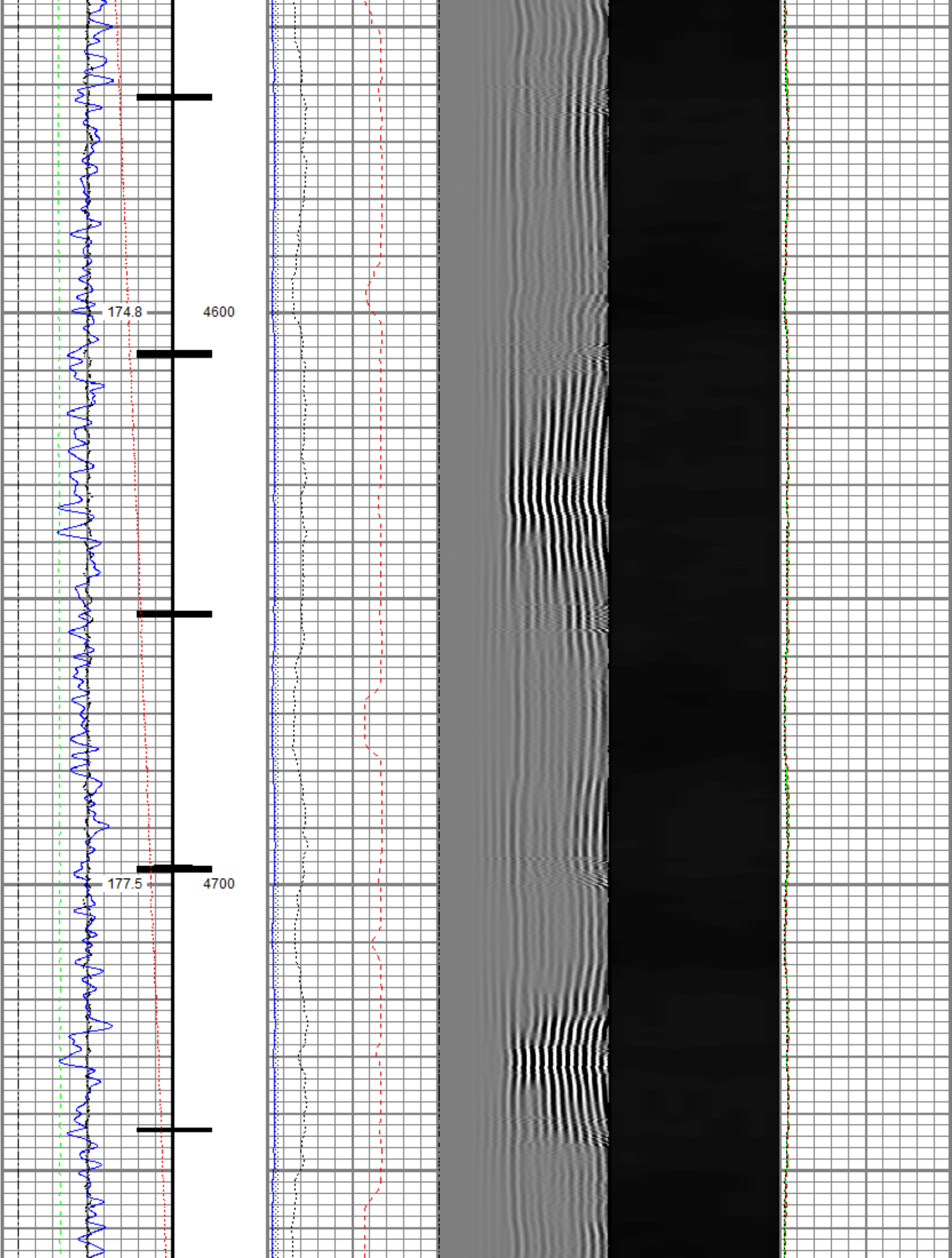


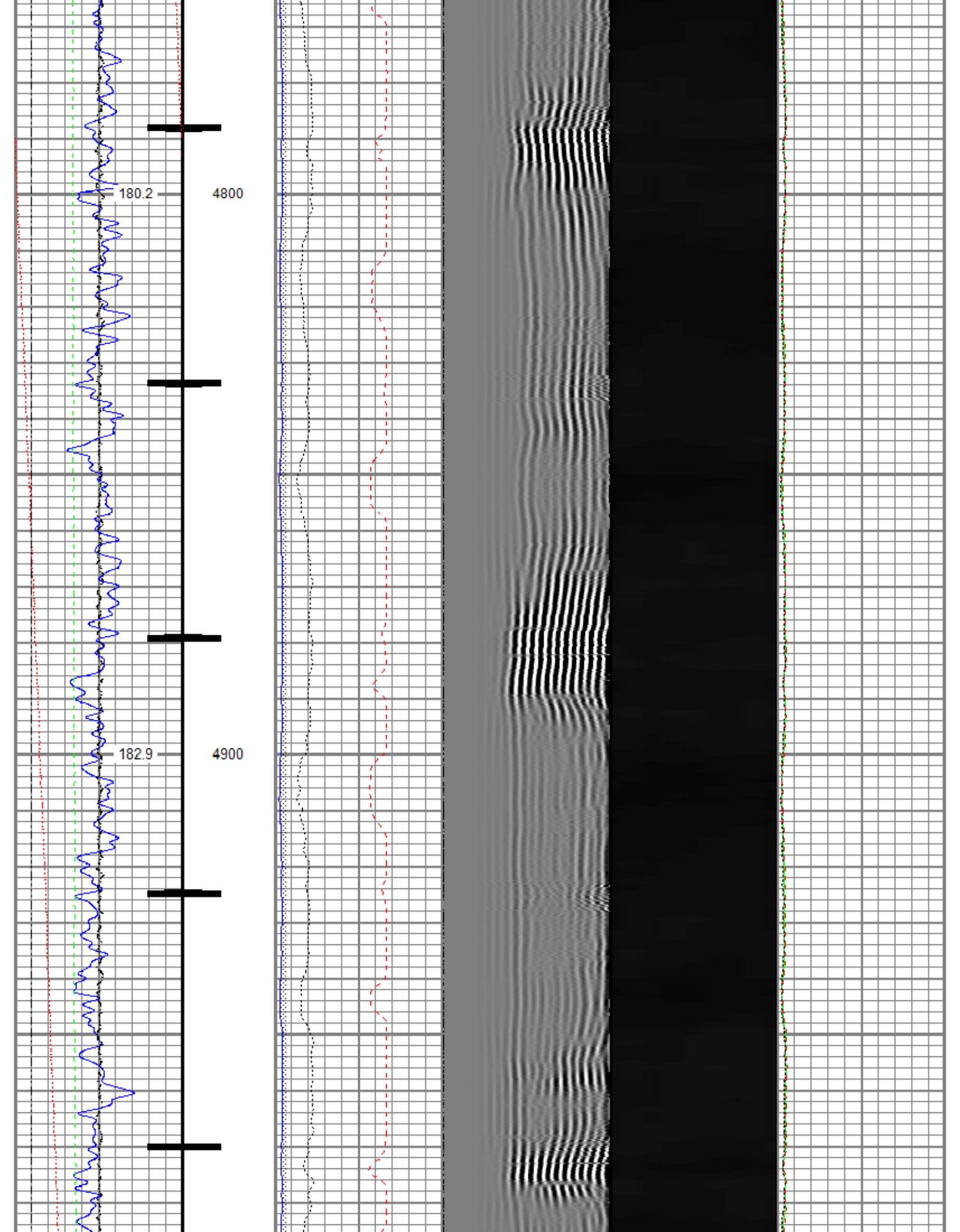


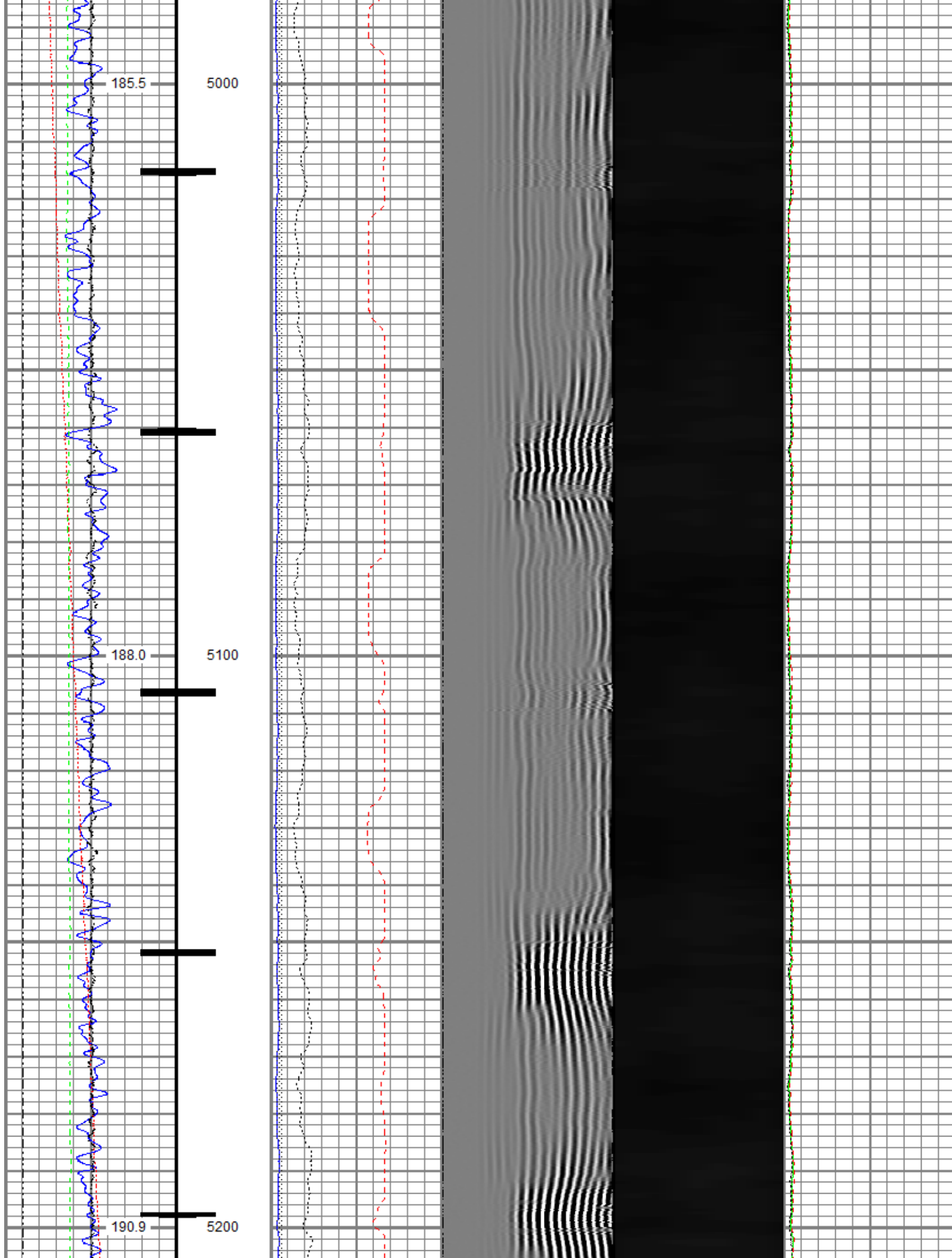


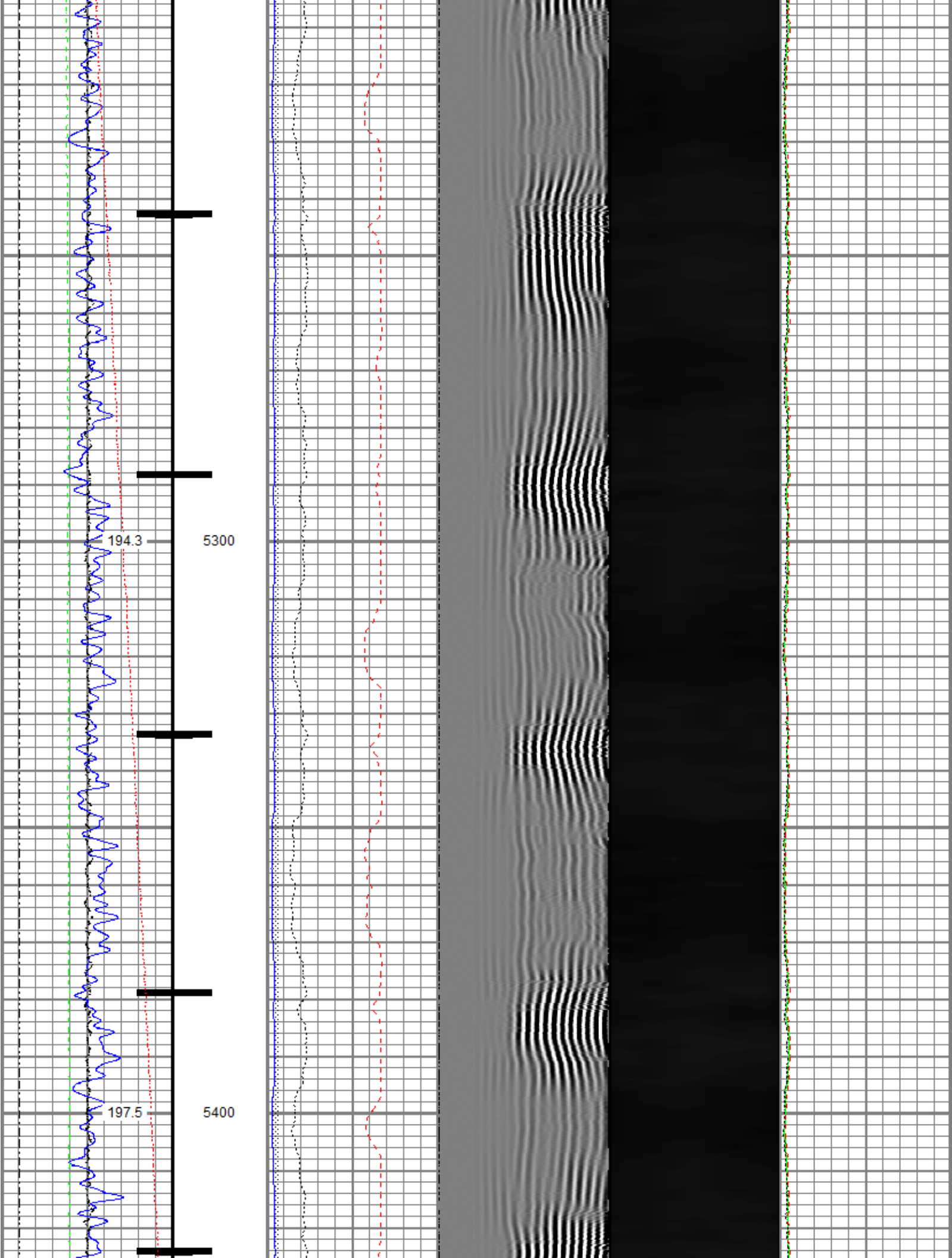


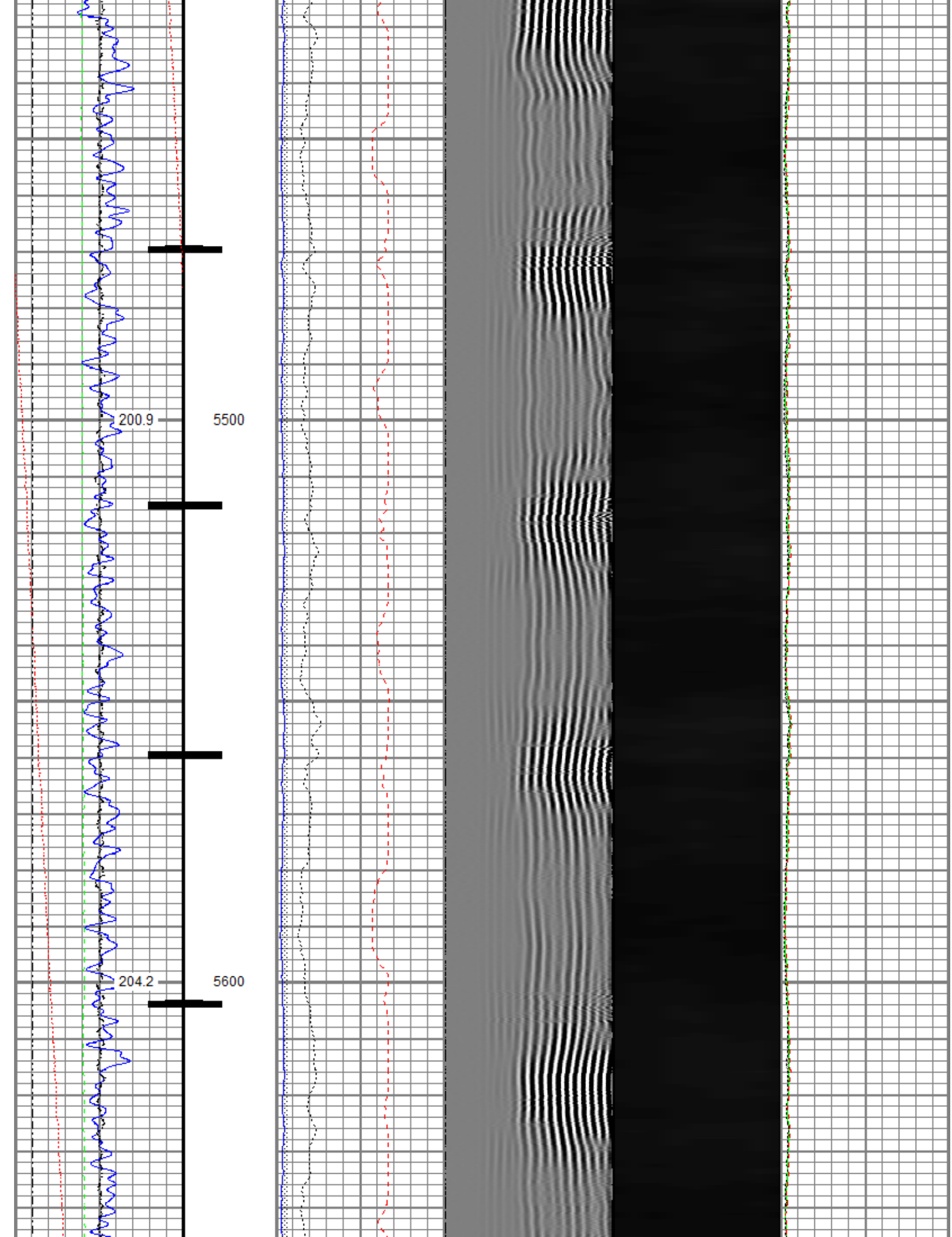


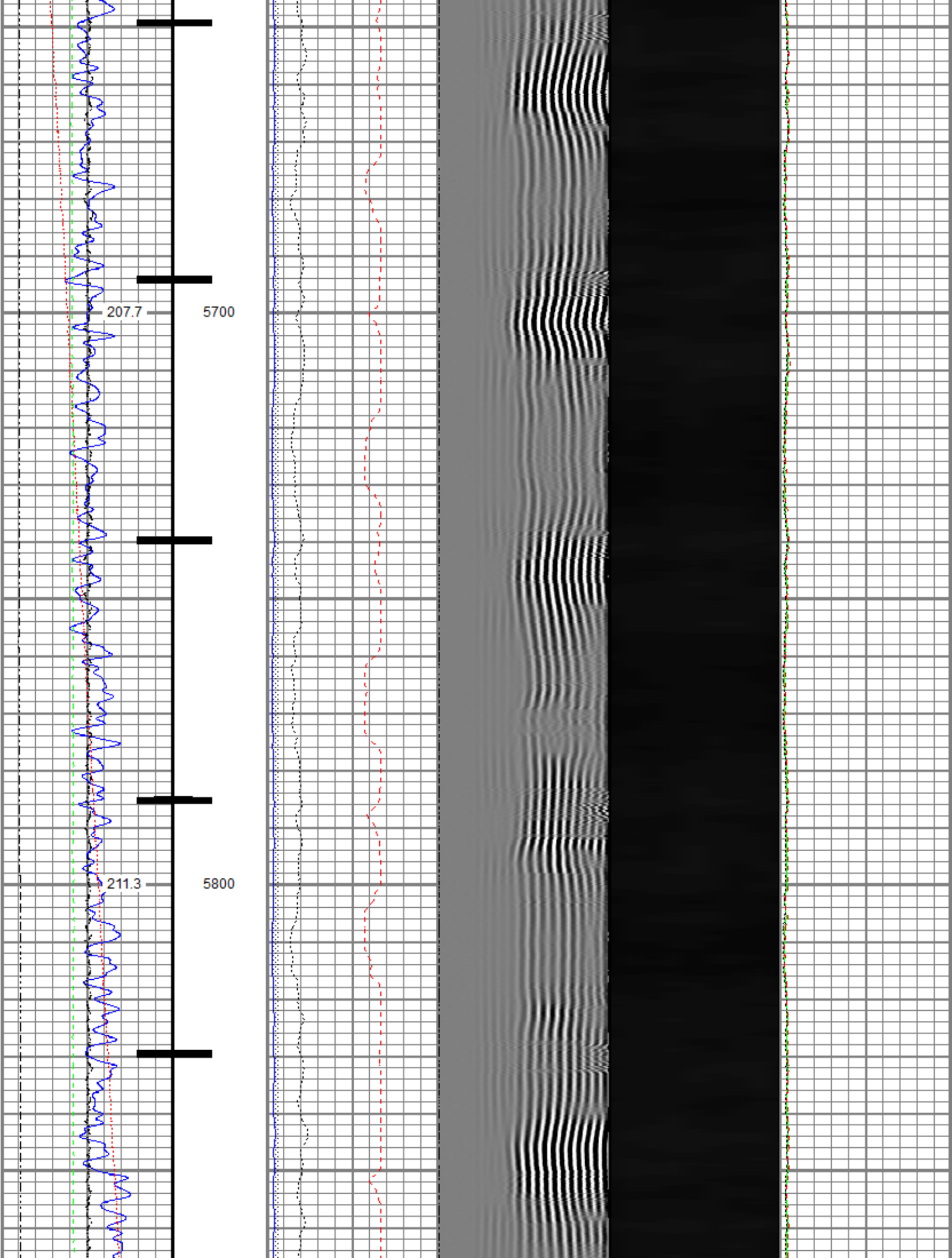


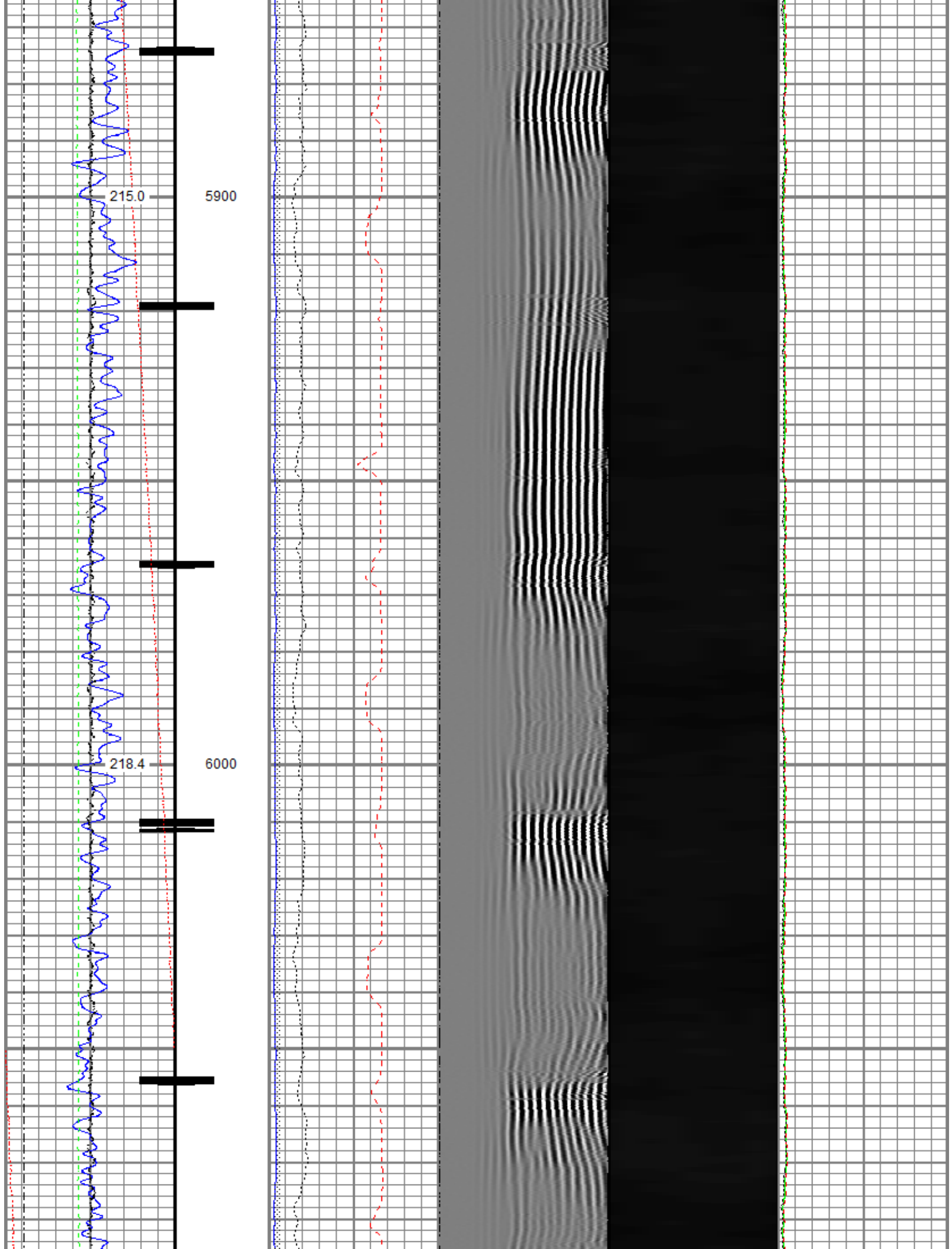


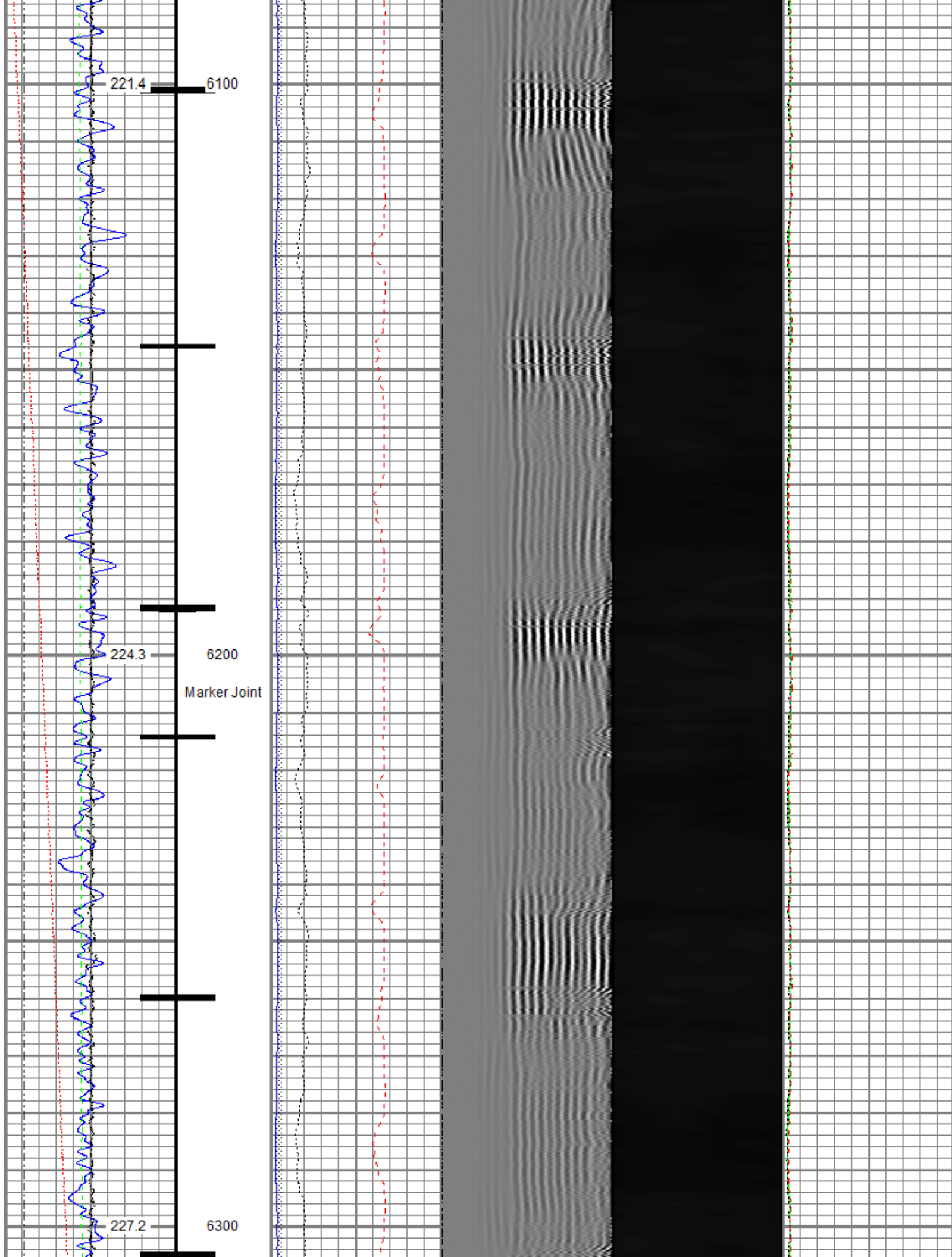


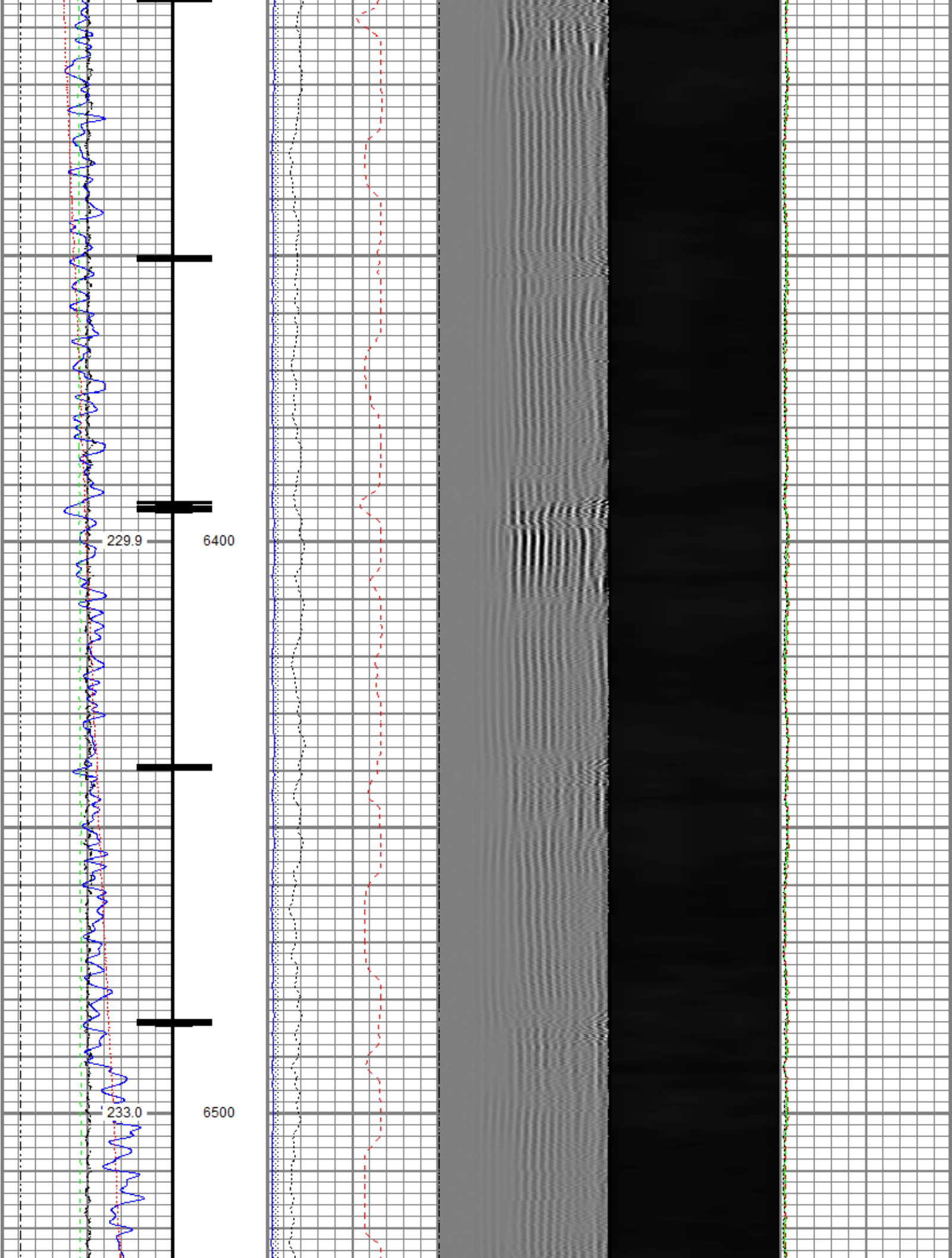


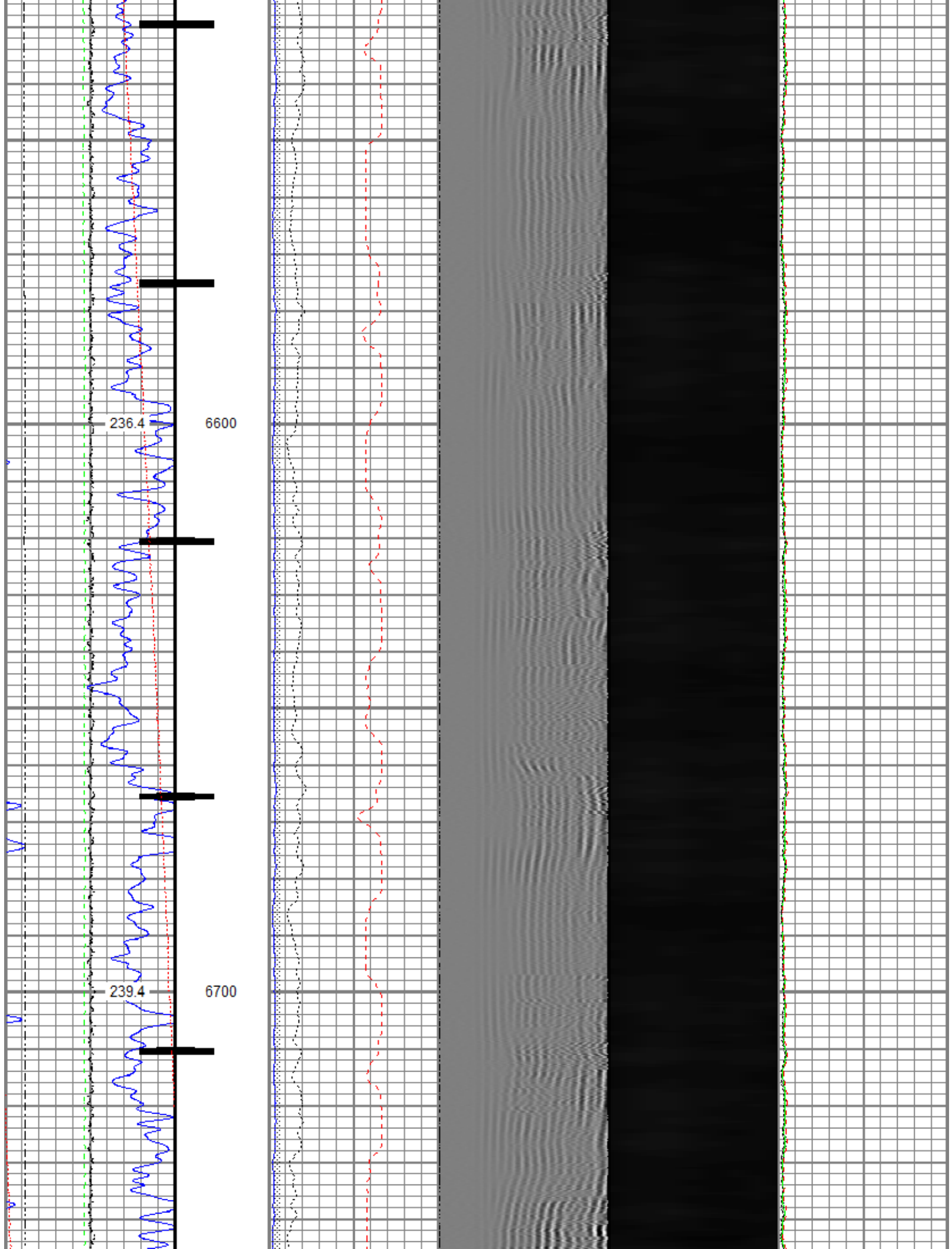


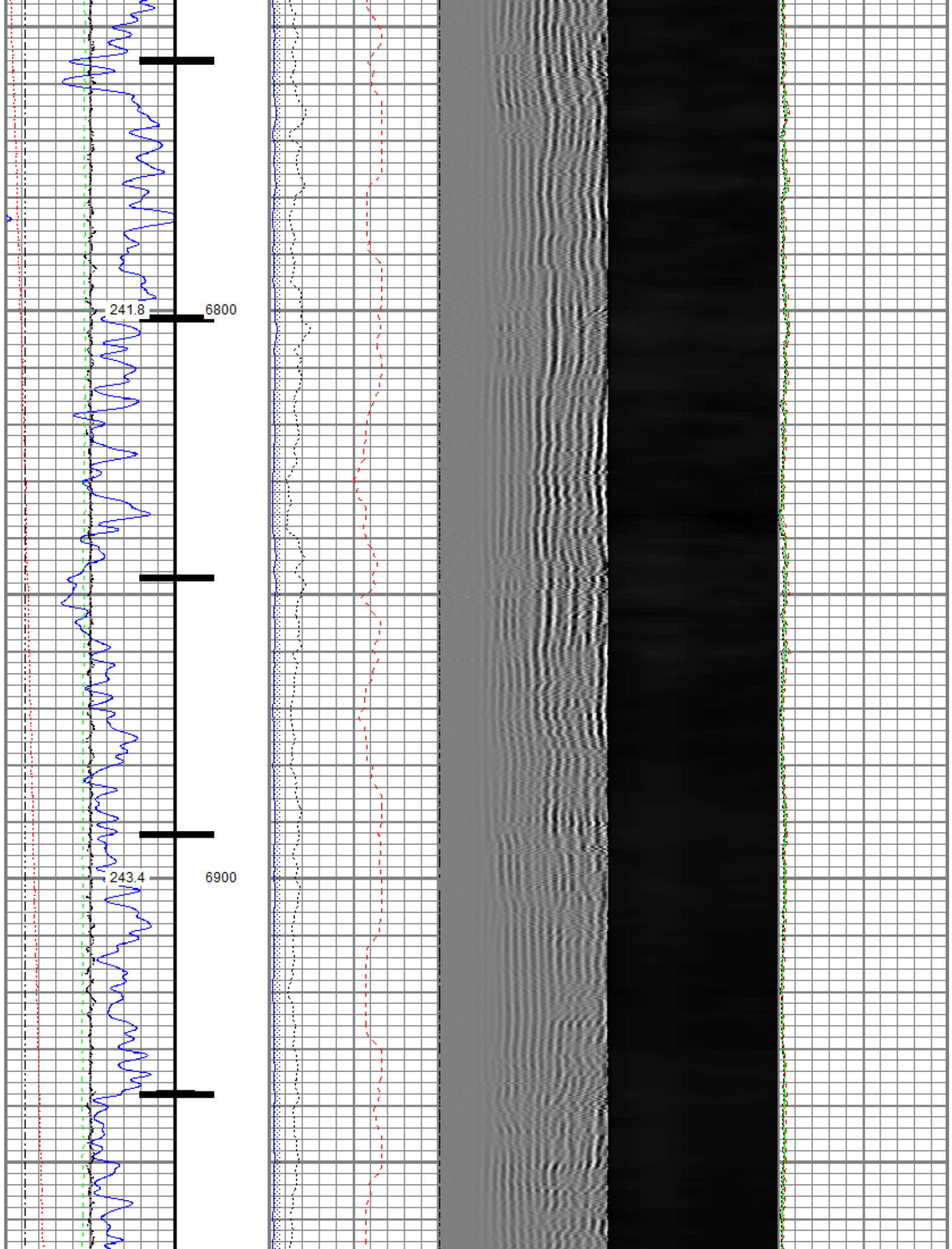






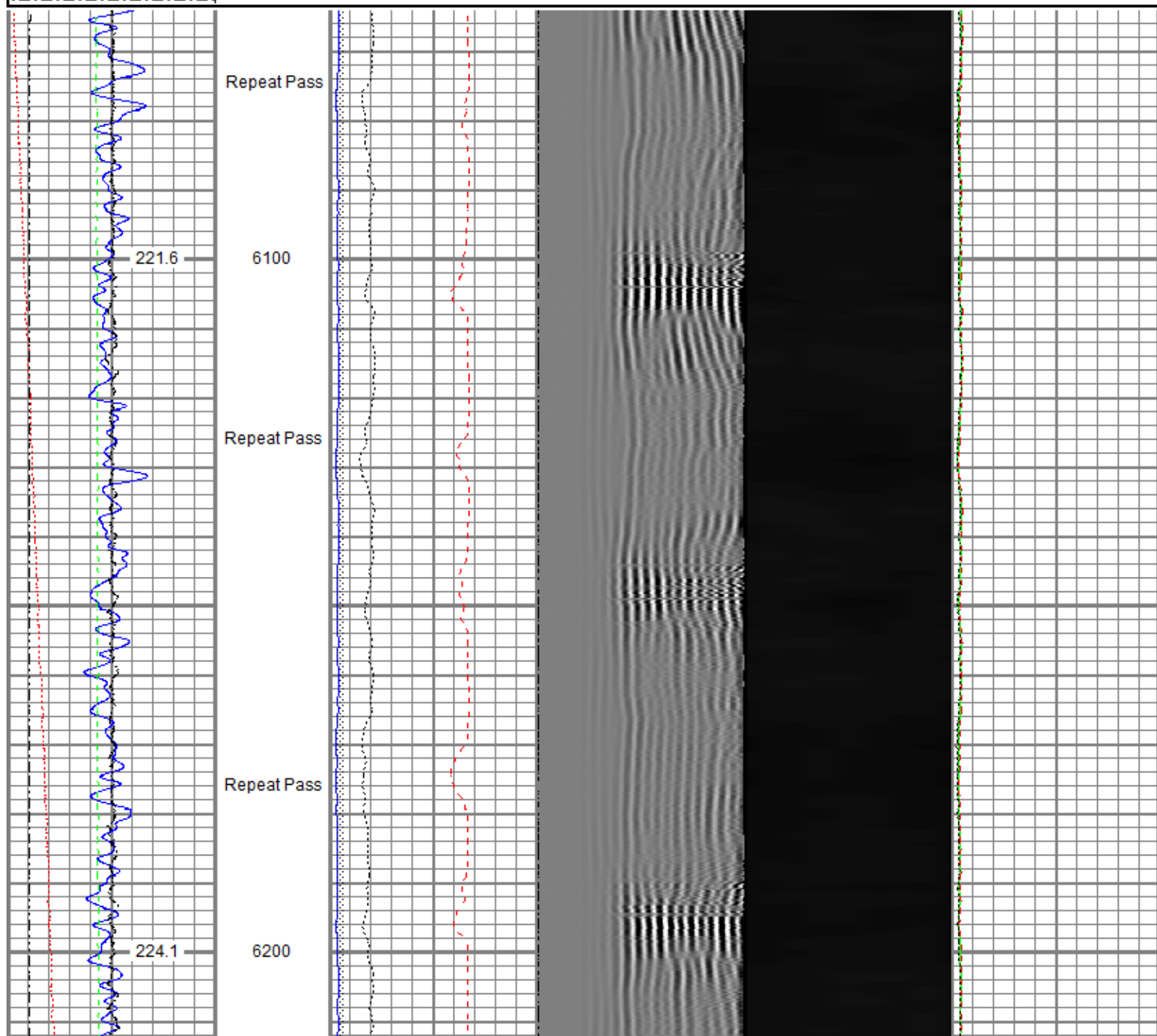


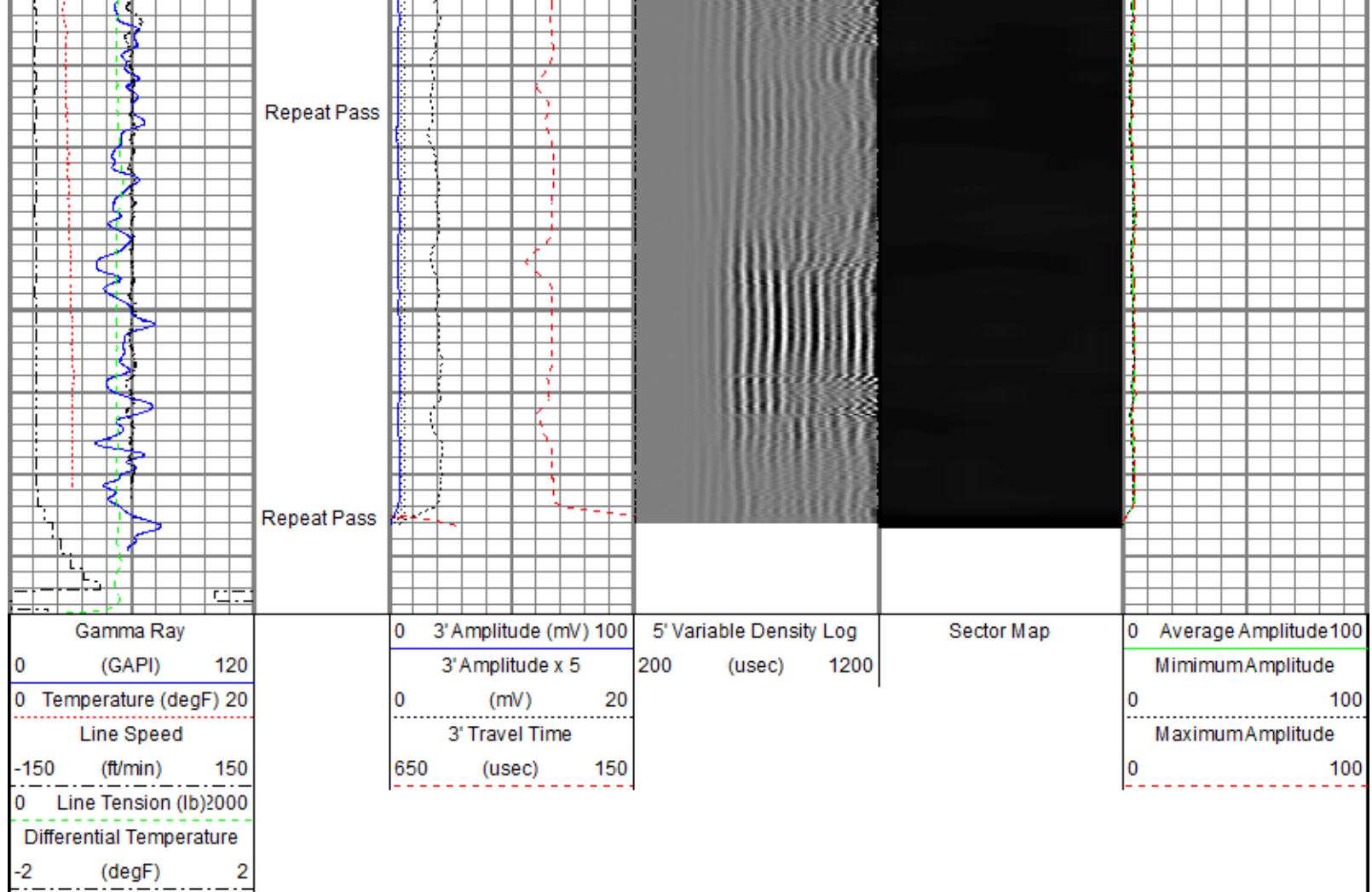




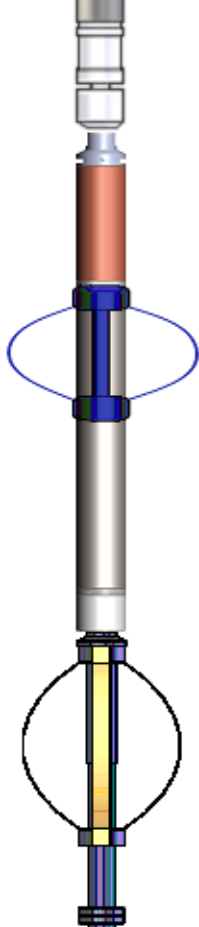
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 Dataset Pathname pass2.1
 Presentation Format ros_radrii_noble
 Dataset Creation Sat Dec 19 18:11:38 2020
 Charted by Depth in Feet scaled 1:240

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





Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
ErrCt	18.10		Titan CHD-16875 GO	1.03	1.69	5.40
RBT_HV	17.07		Titan 1-11/16" Assembled Electric Cable Head with 1" Fishing Neck			
TEMP	14.16		SO BS CENT-2750-4500 Slip Over 2-3/4" I.D. for 4-1/2" O.D. Casing Bow Spring Centralizer	1.33	3.25	10.00
RBT_ACCZ	11.93		Probe Radii ACC-2750 RBTa (FW1302-002)	9.39	2.75	105.00
RBT_ACCY	11.93		Probe 2-3/4" Radial Cement Bond Tool with Integral Temperature Sub and Accelerometer			
RBT_ACCX	11.93					
WVFSYNC	11.93					
WVFS8	11.93					
WVFS7	11.93					
WVFS6	11.93					
WVFS5	11.93					
WVFS4	11.93					

WVFS3	11.93					
WVFS2	11.93					
WVFS1	11.93					
WVFCAL	11.93					
WVF3FT	11.93					
WVF5FT	10.93					
CCL\$2	6.80					
CCL\$1	6.80					
GR	5.46		SO BS CENT-2750-4500 Slip Over 2-3/4" I.D. for 4-1/2" O.D. Casing Bow Spring Centralizer Probe GR-CCL-2750 6PB (FW1810-001) Probe 2-3/4" rev.1 Digital Scintillation Gamma Ray/CCL Combined with 6 Pin Bottom for CNT	1.33	3.25	10.00
				4.80	2.75	55.00
			Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00
LOCTIM	0.00					
UTCTIM	0.00					
Dataset:		Noble_Guttersen D09 765_RBL_12-19-20.db: field/well/run1/pass4.1				
Total length:		18.10 ft				
Total weight:		226.40 lb				
O.D.:		3.25 in				

Calibration Report						
Database File	C:\ProgramData\Warrior\Data\Noble_Guttersen D09 765\Noble_Guttersen D09 765_RBL_12-19-20.db					
Dataset Pathname	pass4.1					
Dataset Creation	Sat Dec 19 13:47:46 2020					
Gamma Ray Calibration Report						
Serial Number:	FW1810-001					
Tool Model:	2750 6PB					
Performed:	Tue Dec 03 09:24:53 2019					
Calibrator Value:	637.0	GAPI				
Background Reading:	100.1	cps				
Calibrator Reading:	1264.5	cps				
Sensitivity:	0.5471	GAPI/cps				
Segmented Cement Bond Log Calibration Report						
Serial Number:	FW1302-002					
Tool Model:	2750 RBTa					
Calibration Casing Diameter:	5.500	in				
Calibration Depth:	-6.608	ft				
Master Calibration, performed (Derived):						
Raw (v)		Calibrated (mv)		Results		
Zero	Cal	Zero	Cal	Gain	Offset	

3'	0.002	0.679	0.800	71.921	104.962	0.640
CAL	0.006	0.665				
5'	0.001	0.664	0.800	71.921	107.184	0.741
SUM						
S1	0.001	0.646	0.000	100.000	155.068	-0.166
S2	0.001	0.702	0.000	100.000	142.835	-0.210
S3	0.002	0.772	0.000	100.000	129.826	-0.236
S4	0.002	0.743	0.000	100.000	134.904	-0.242
S5	0.001	0.710	0.000	100.000	141.137	-0.176
S6	0.001	0.671	0.000	100.000	149.317	-0.156
S7	0.001	0.643	0.000	100.000	155.681	-0.147
S8	0.001	0.625	0.000	100.000	160.204	-0.164

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.006	0.665	1.000	0.000

Air Zero Calibration, performed Sat Dec 19 07:44:50 2020:

	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	

Inclinometer Calibration Report

Performed:	Tue Dec 03 09:24:53 2019				
	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	-891.00	891.00	-1.00	1.00	gee
Y Accelerometer	-899.00	877.00	-1.00	1.00	gee
Z Accelerometer	-7.47	873.36	0.00	1.00	gee

Temperature Calibration Report

Serial Number:	FW1302-002				
Tool Model:	2750 RBTa				
Performed:	Tue Dec 03 09:24:53 2019				
	Reference		Reading		
Low Reference:	100.00	degF	110.72	degF	
High Reference:	350.00	degF	409.18	degF	
Gain:	0.84				
Offset:	7.26				
Delta Spacing	1				



Company	Noble Energy Inc
Well	Guttersen D09-765
Field	Wattenberg
County	Weld
State	Colorado