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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.
Comments
Log ran as per customer request Depth referenced to Casing Tally reported Marker Joint at 6490.7 FT Adjusted -32 FT to correlate to Marker Joint Log ran with 2500 PSI Surface Induced Pressure Logging tools were clean and free of debris upon completion of operations Thank you for choosing Reliance Oilfield Services, LLC!!

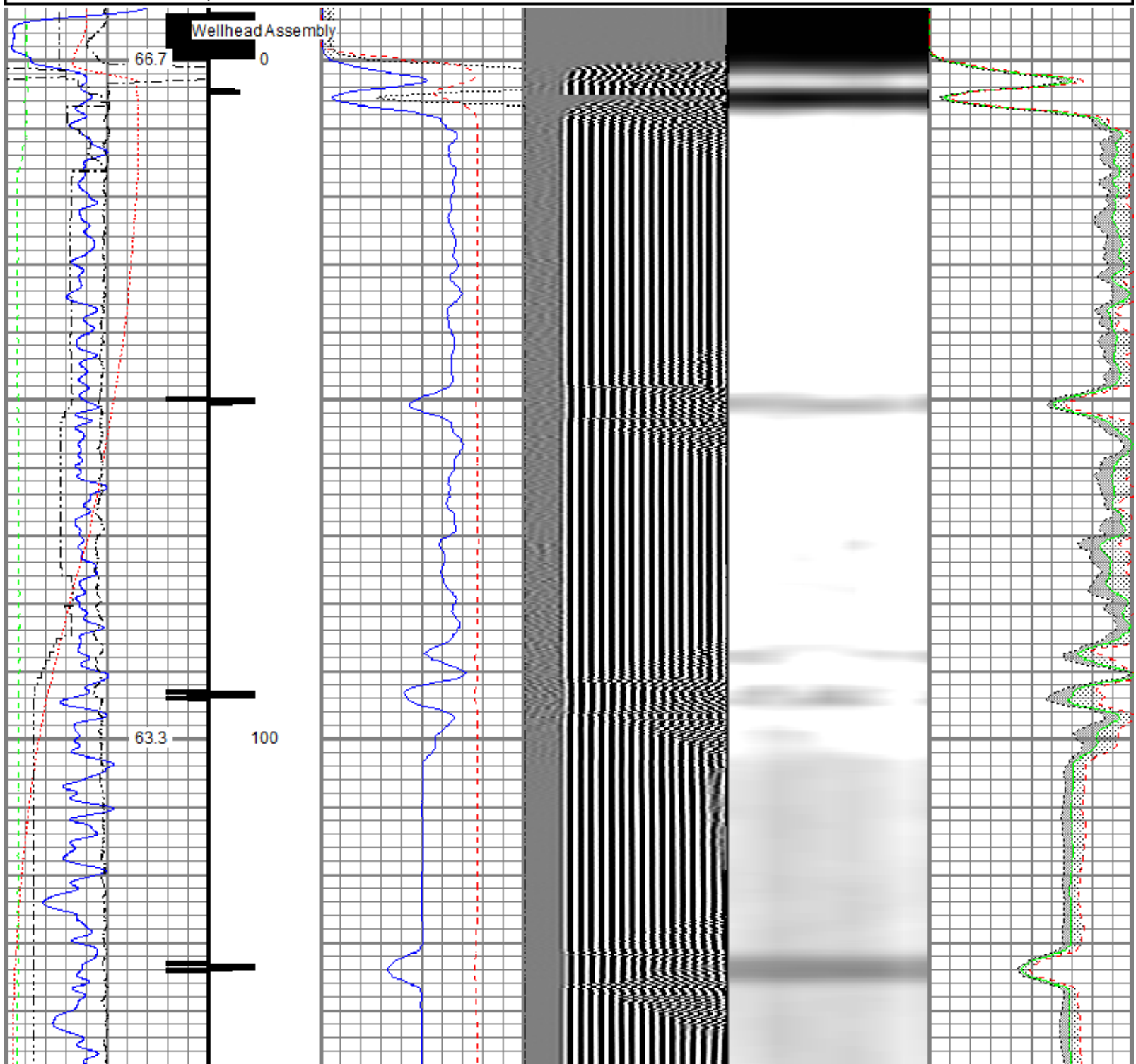


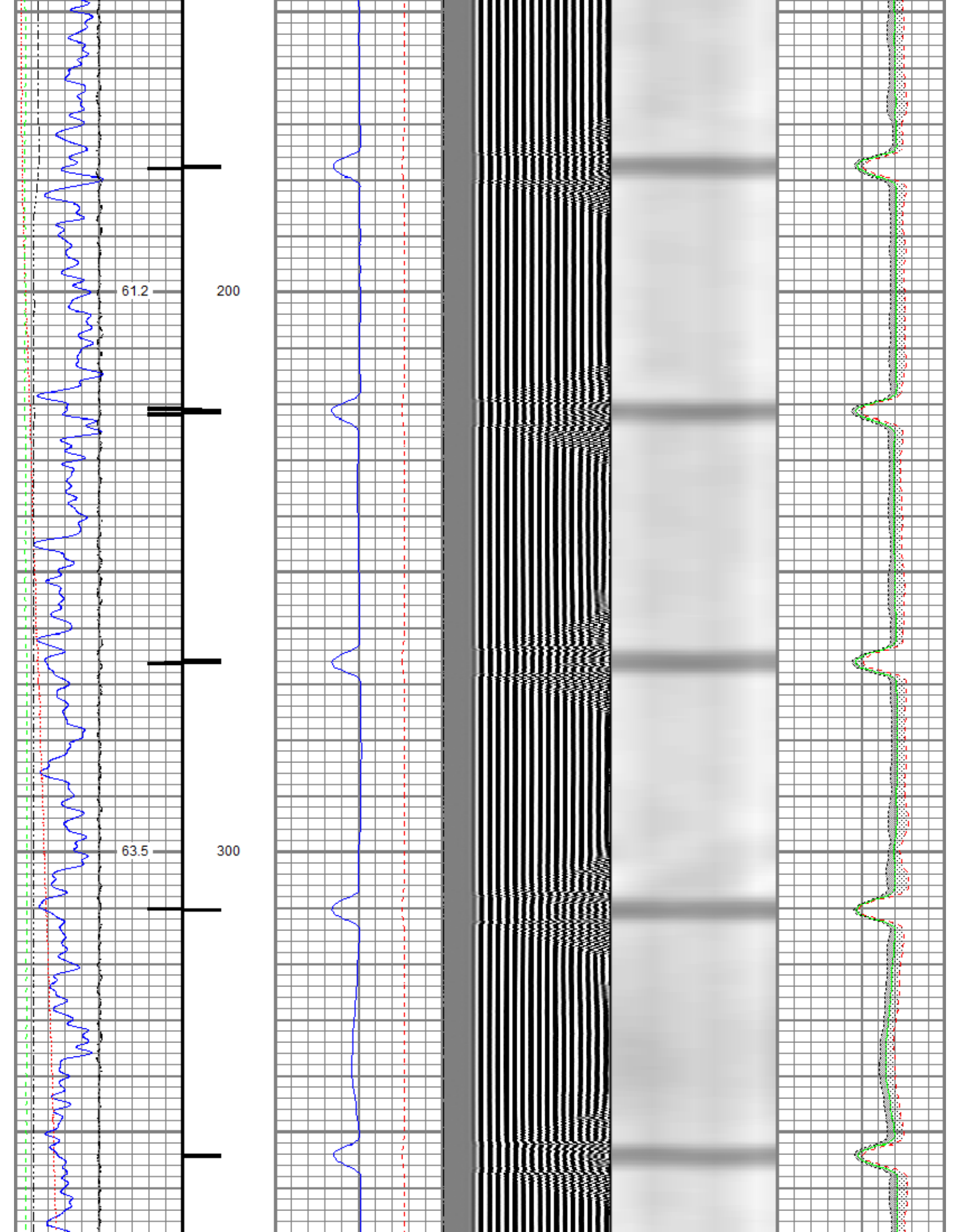
Recorded With 2500 PSI Surface Induced Pressure

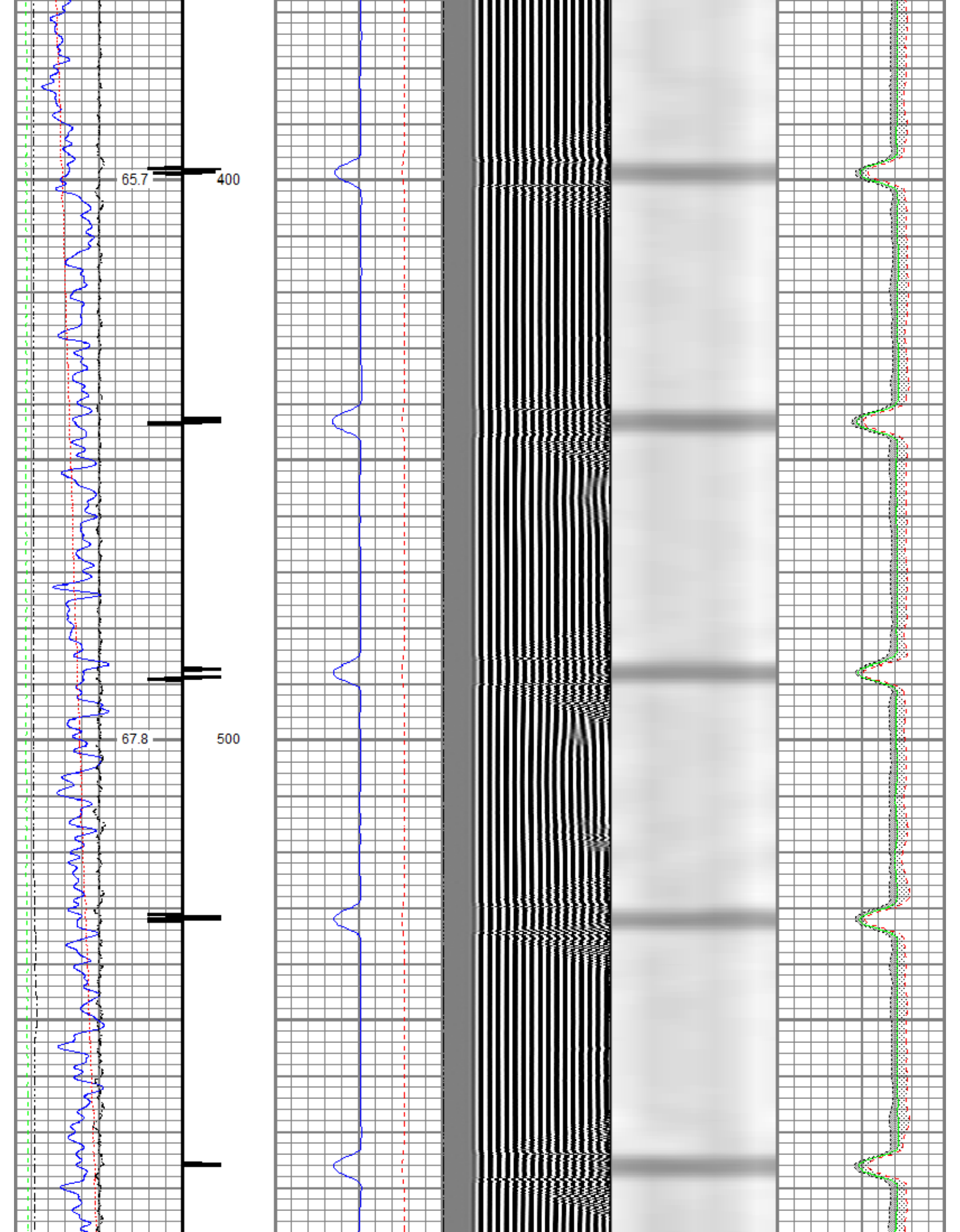
Recorded with 2500 PSI Surface Induced Pressure

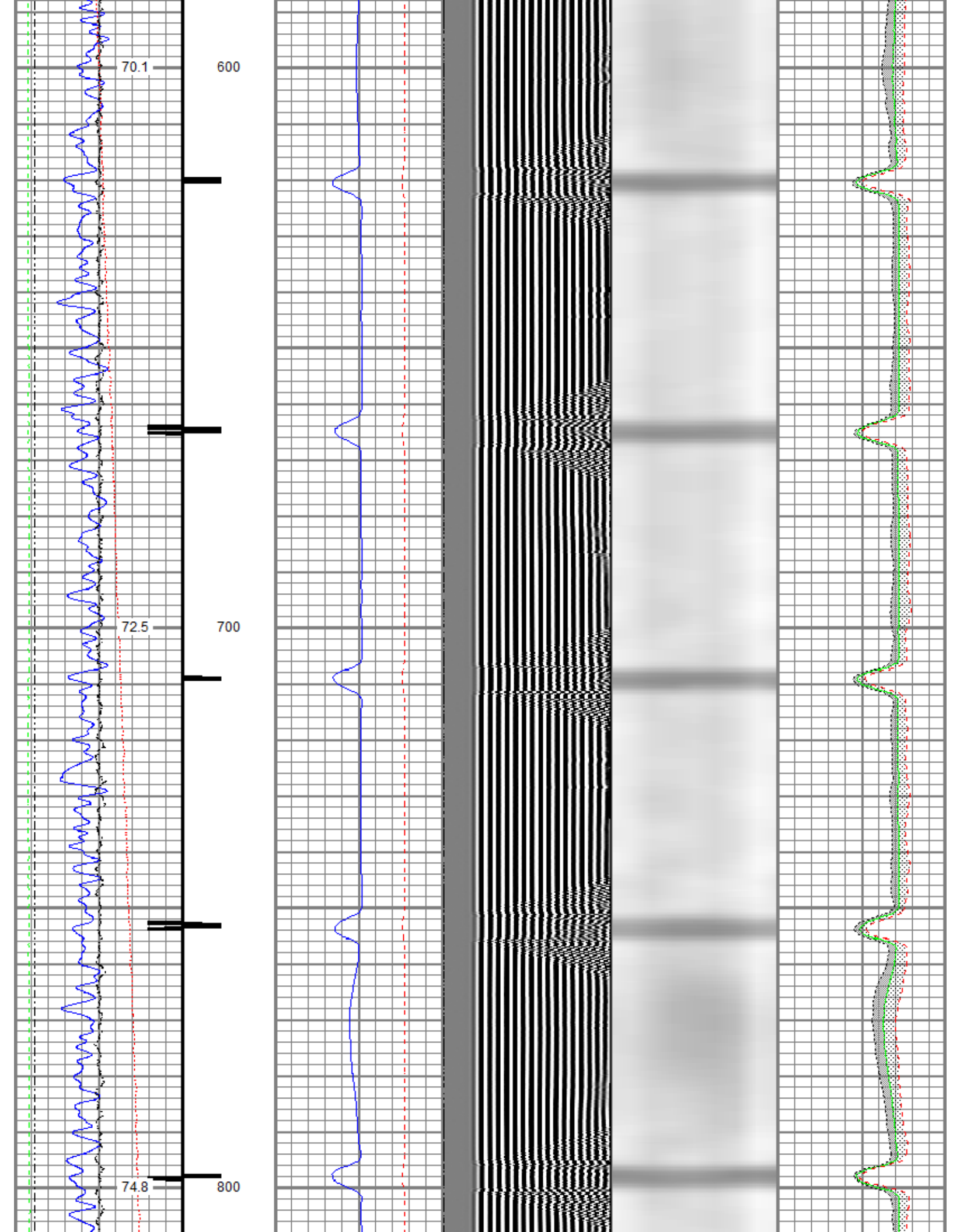
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Dataset Pathname	main.1
Presentation Format	ros_radii_noble
Dataset Creation	Wed Jun 03 09:37:04 2020
Charted by	Depth in Feet scaled 1:240

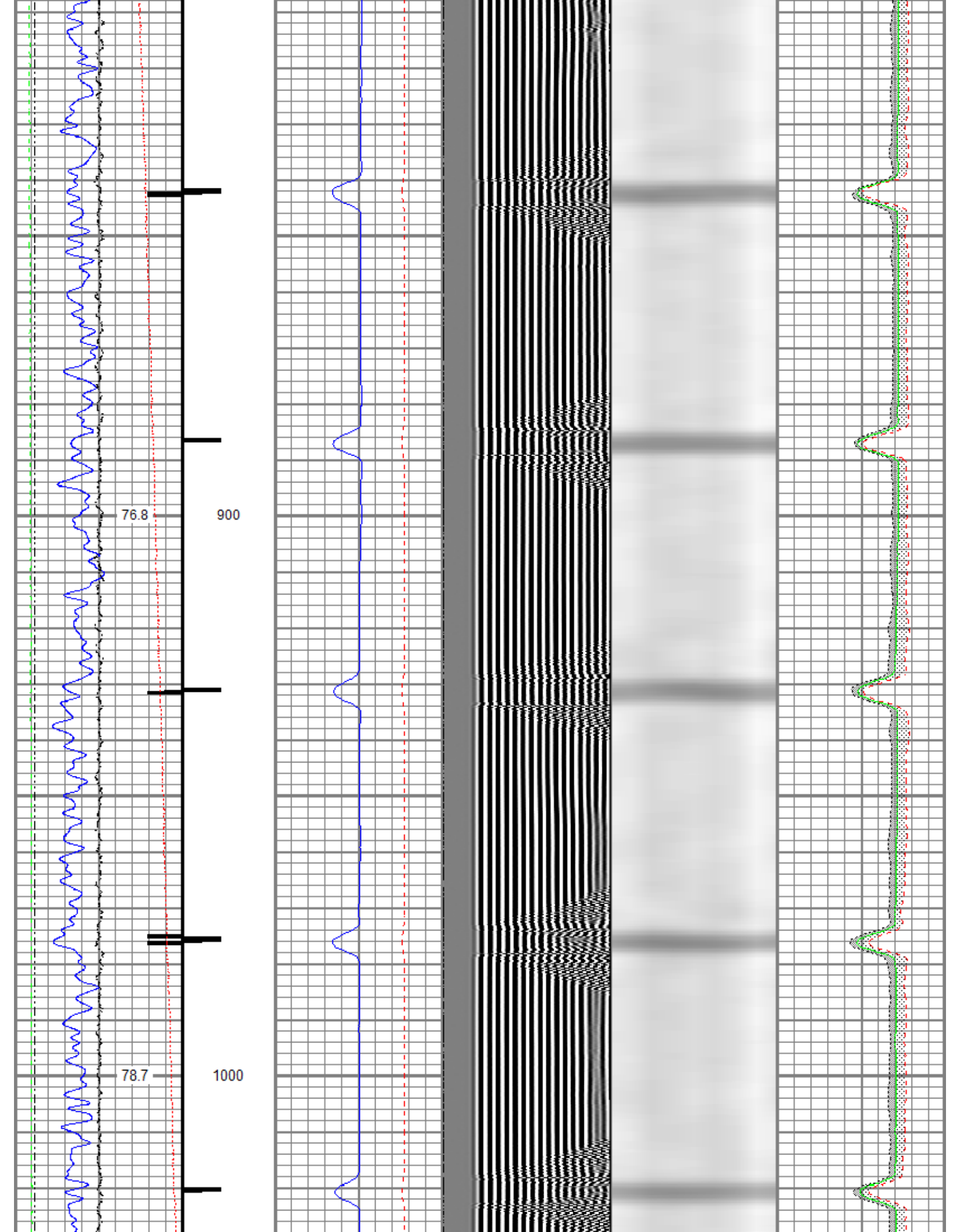
Gamma Ray	0	3' Amplitude (mV)	100	5' Variable Density Log	Sector Map	0	Average Amplitude	100
0 (GAPI) 120		3' Amplitude x 5	200 (usec)	1200			Minimum Amplitude	
Casing Collar Locator	0	(mV)	20			0		100
0 Temperature (degF) 20		3' Travel Time					Maximum Amplitude	
Line Speed	650	(usec)	150			0		100
-150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

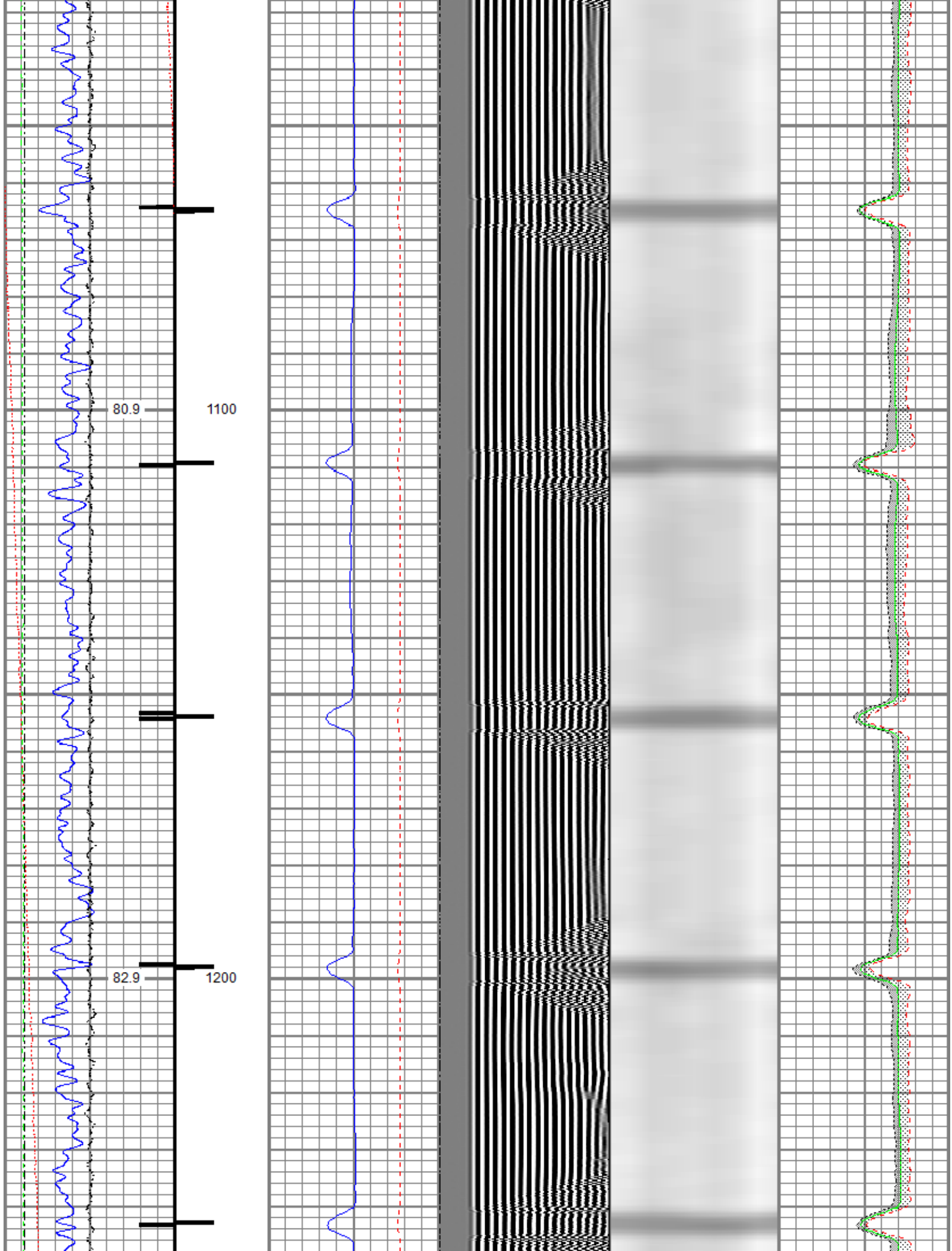


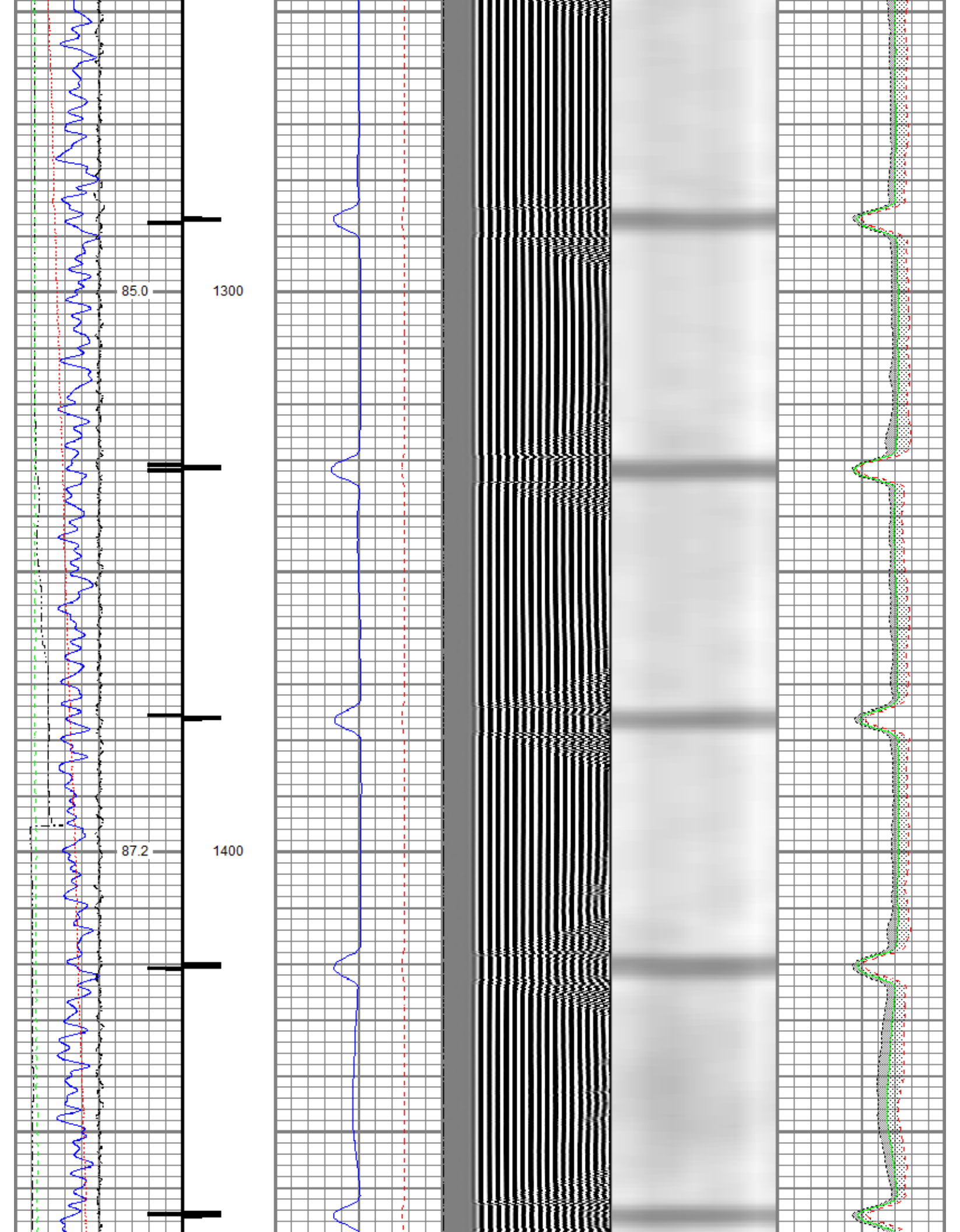


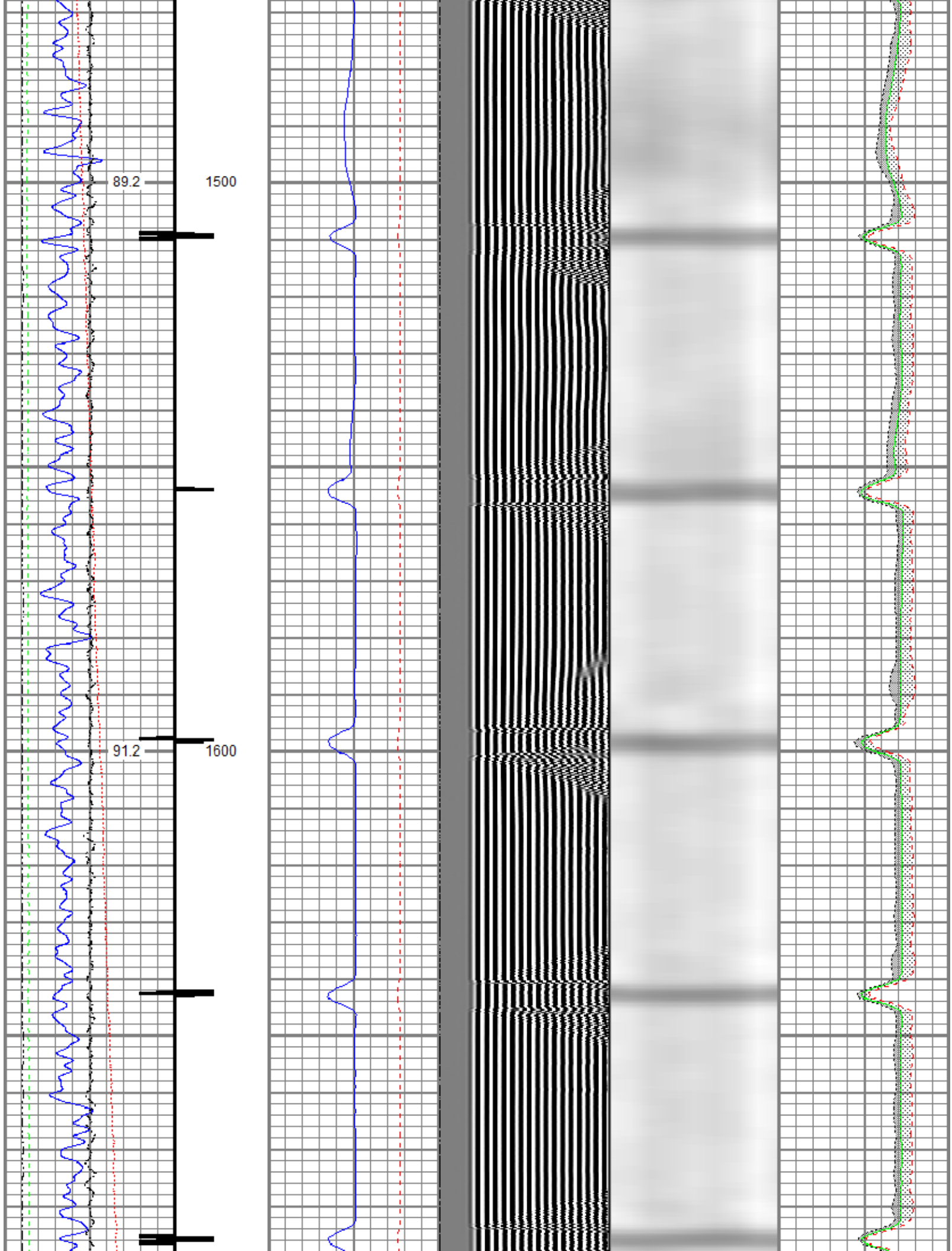


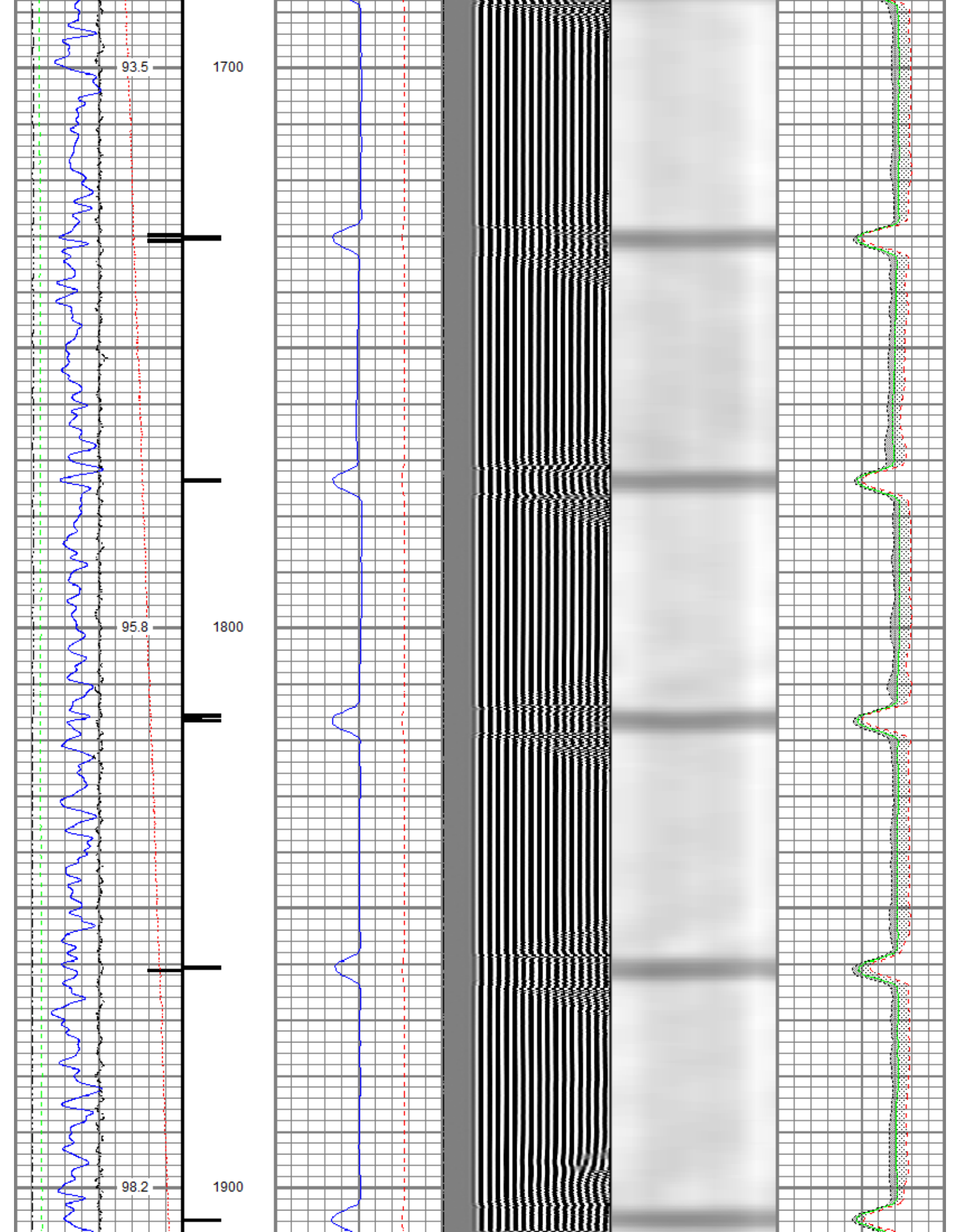


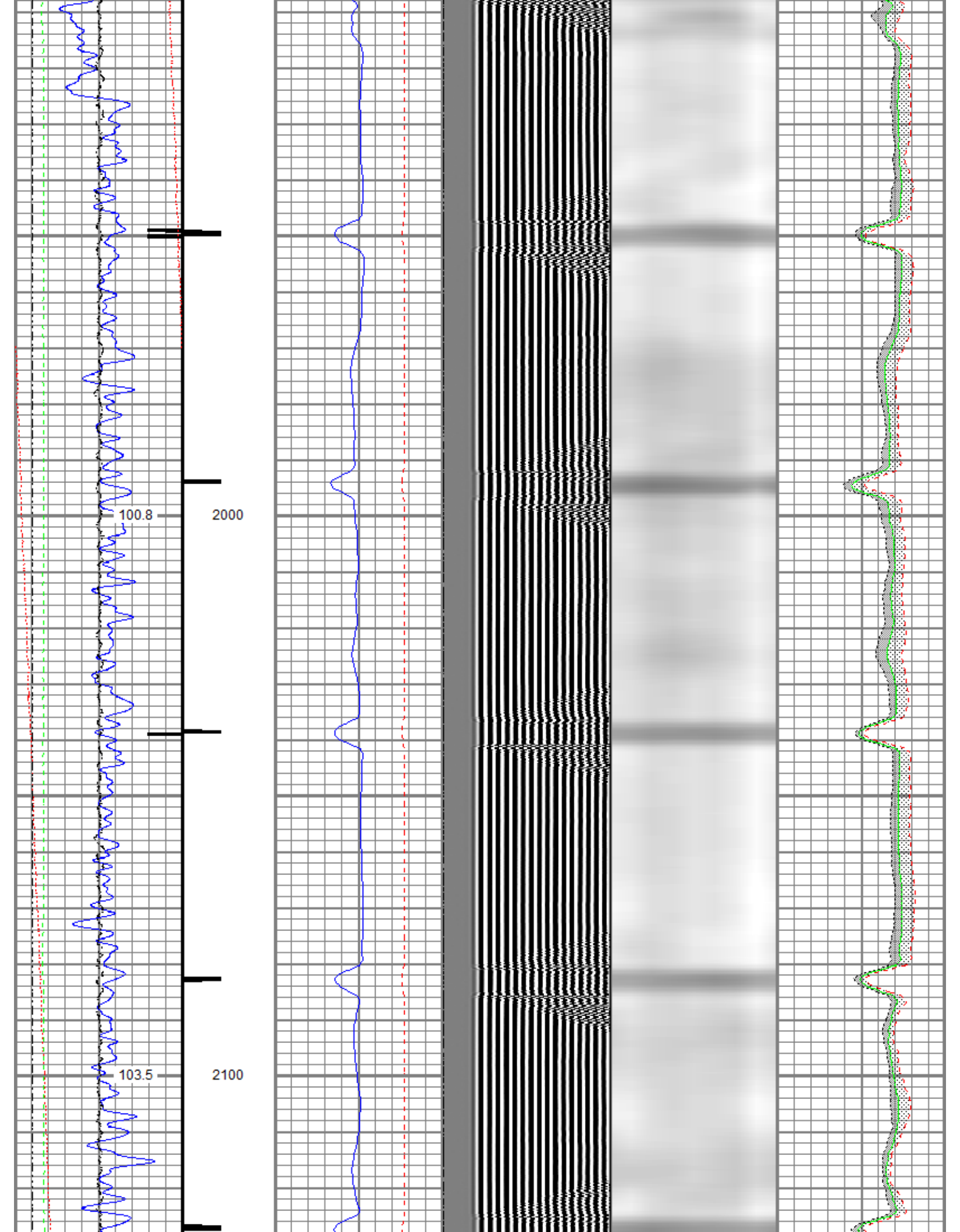


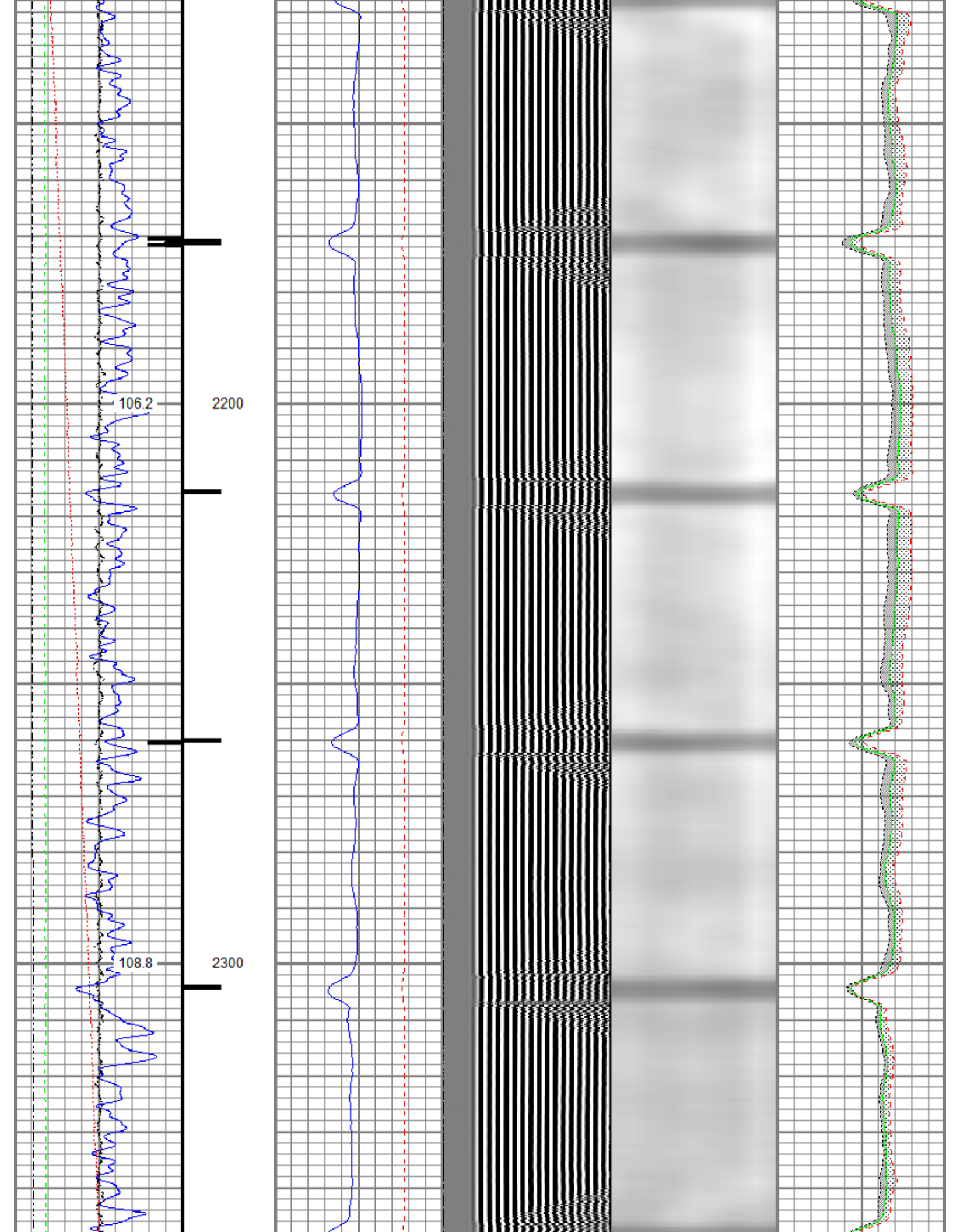


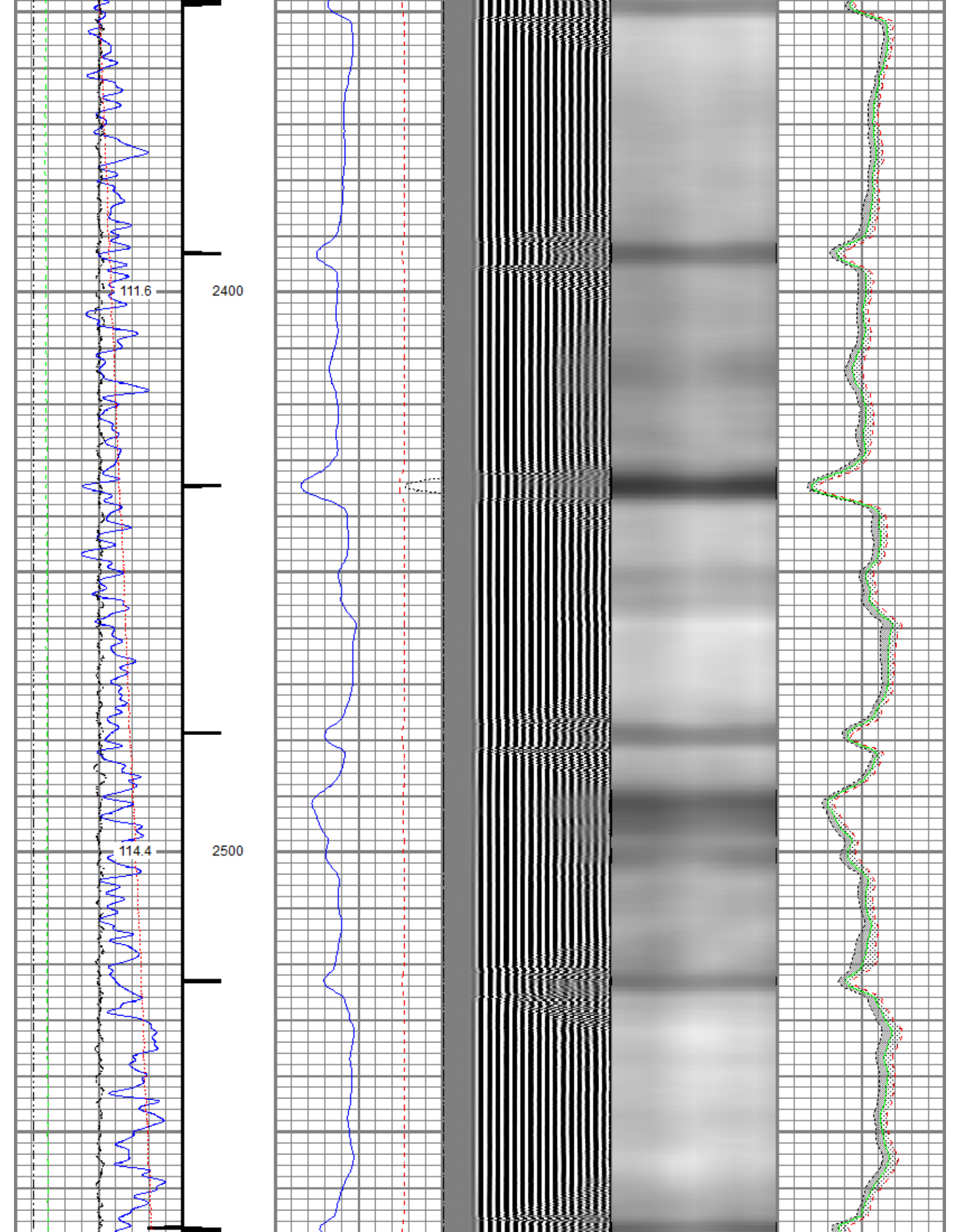


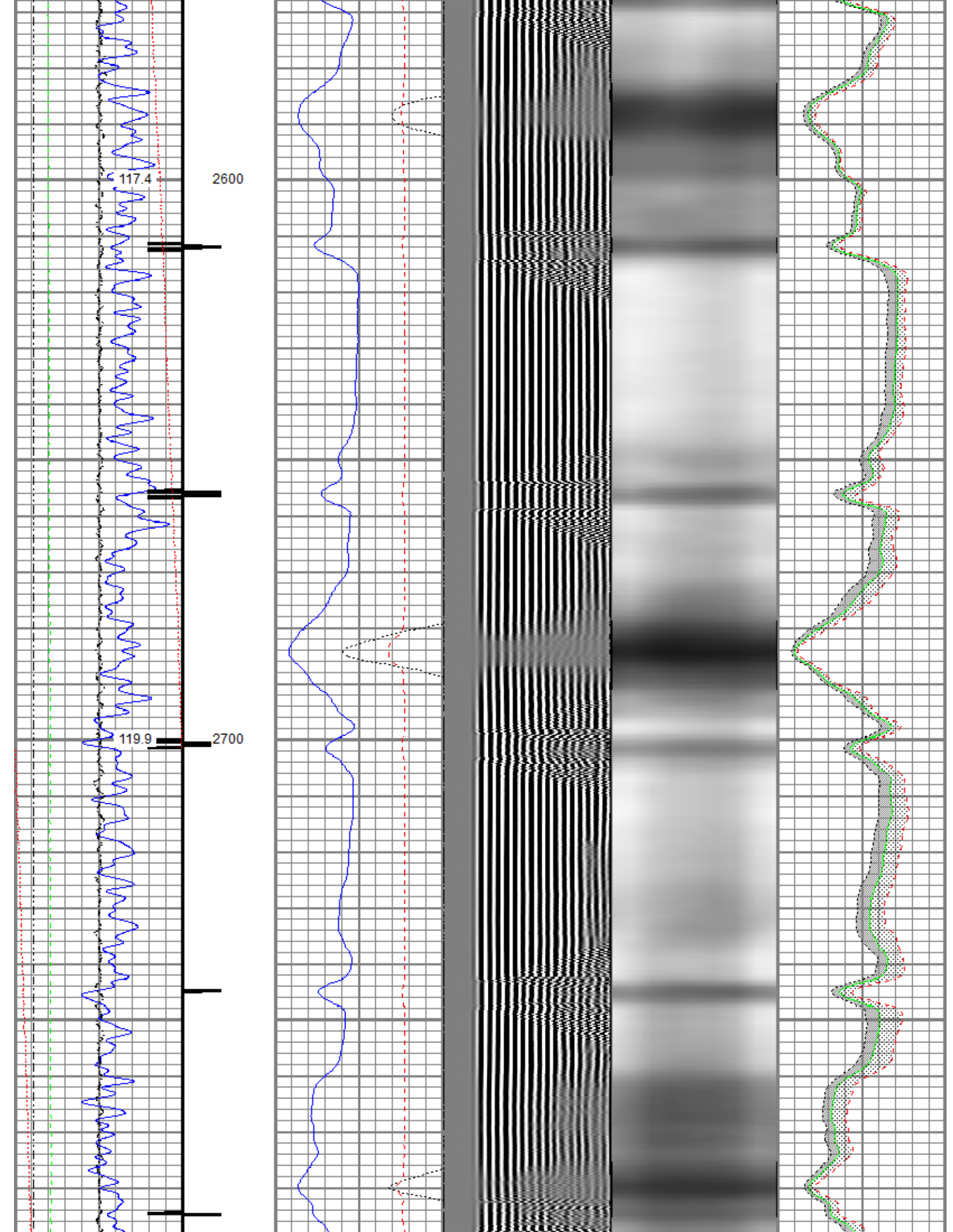


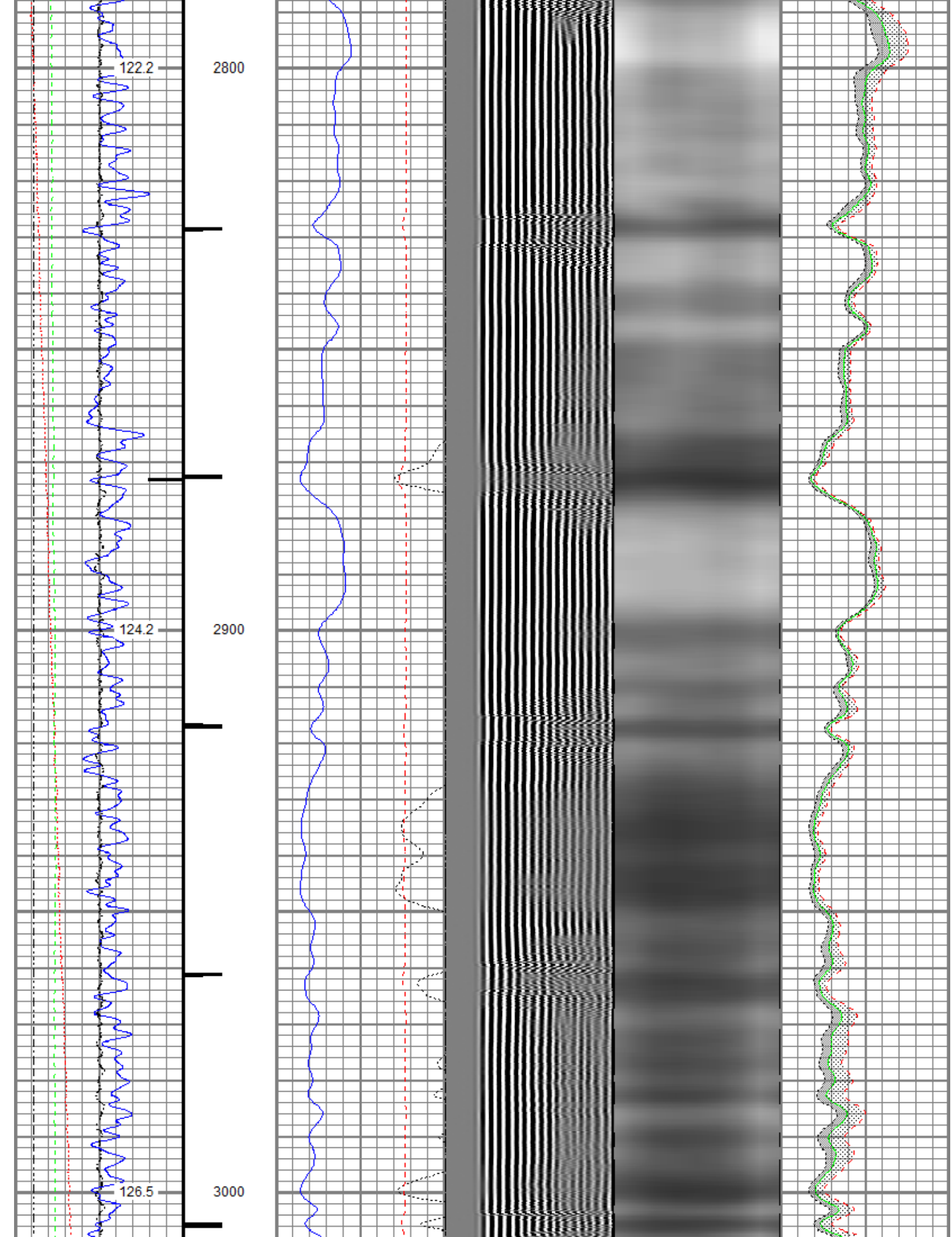


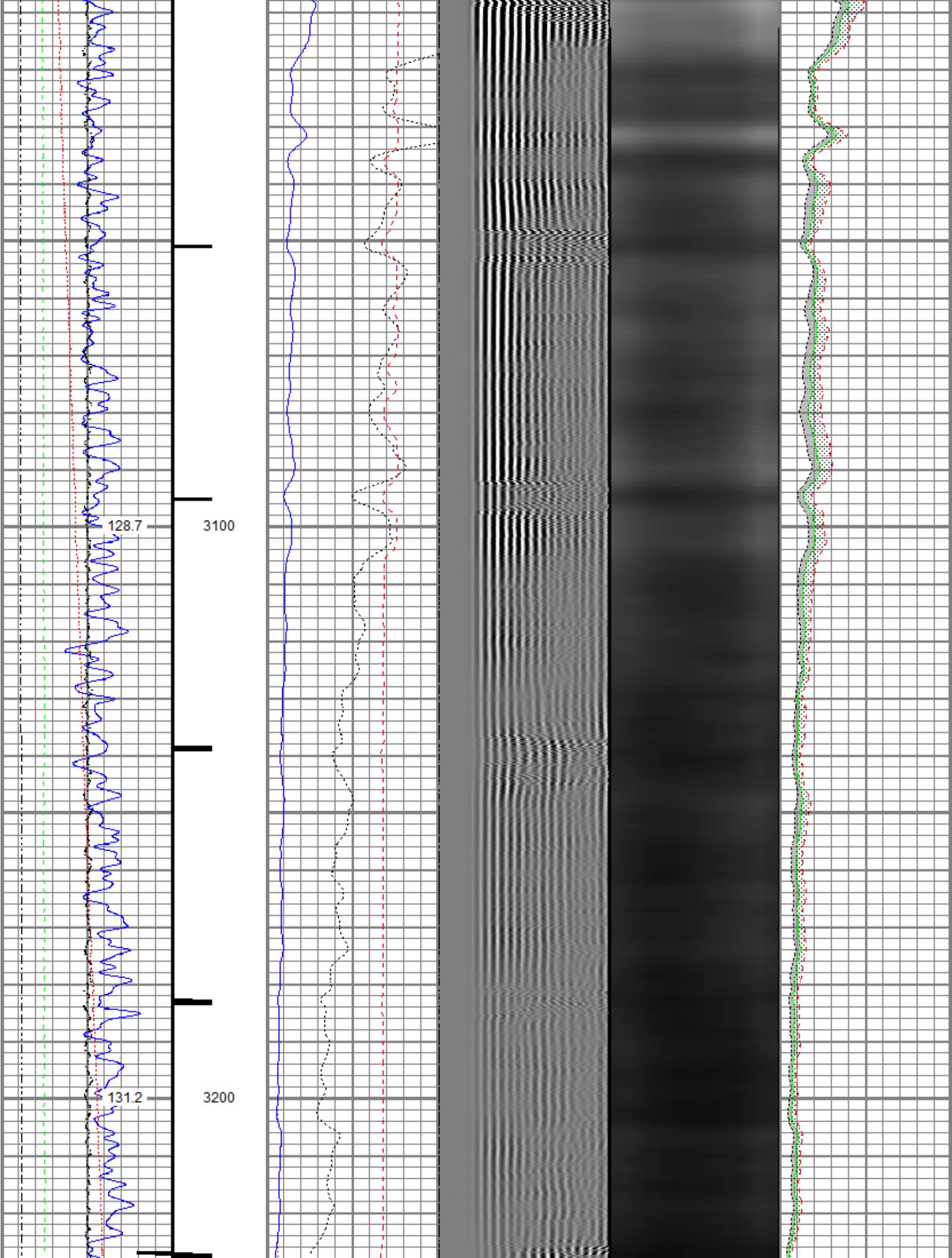


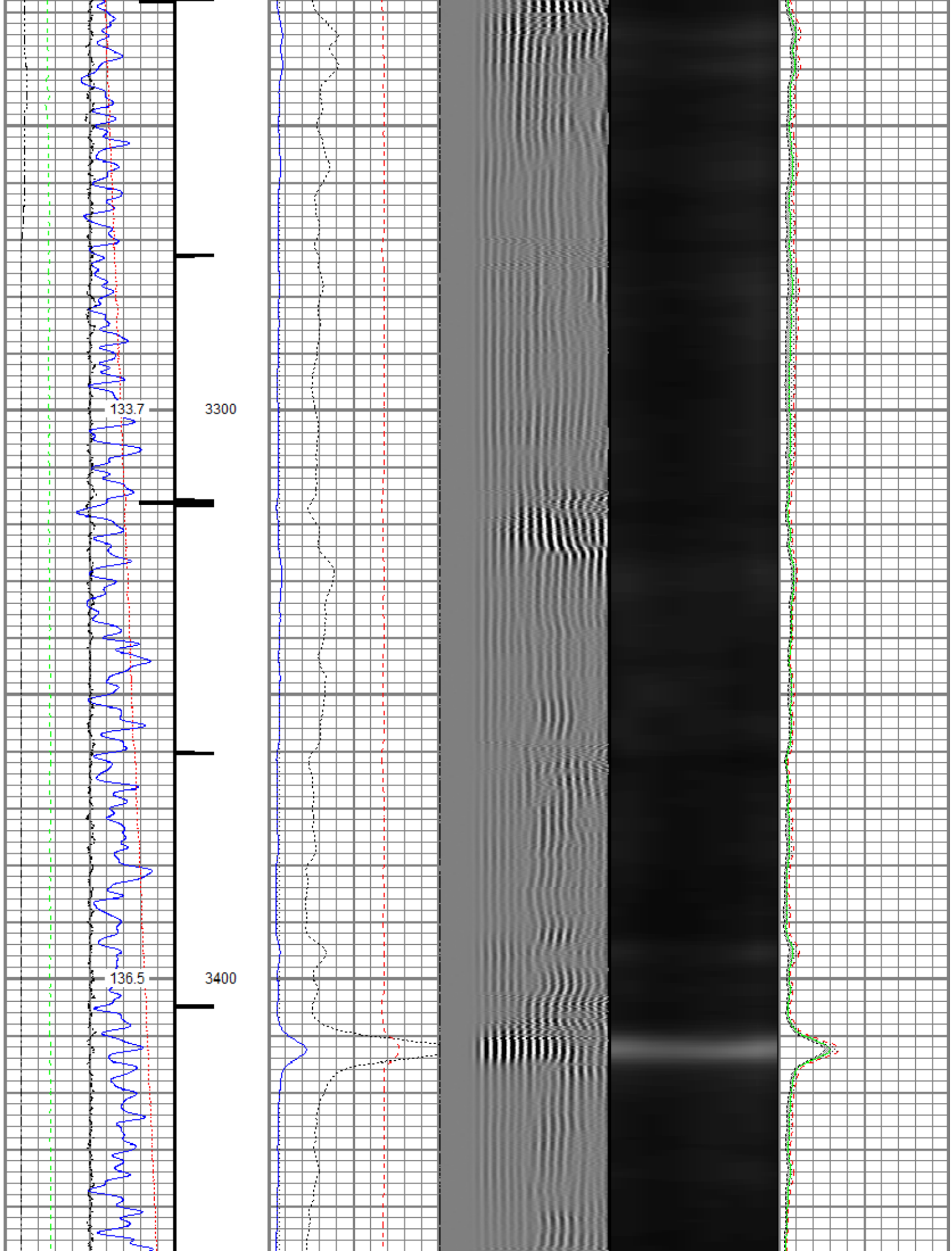


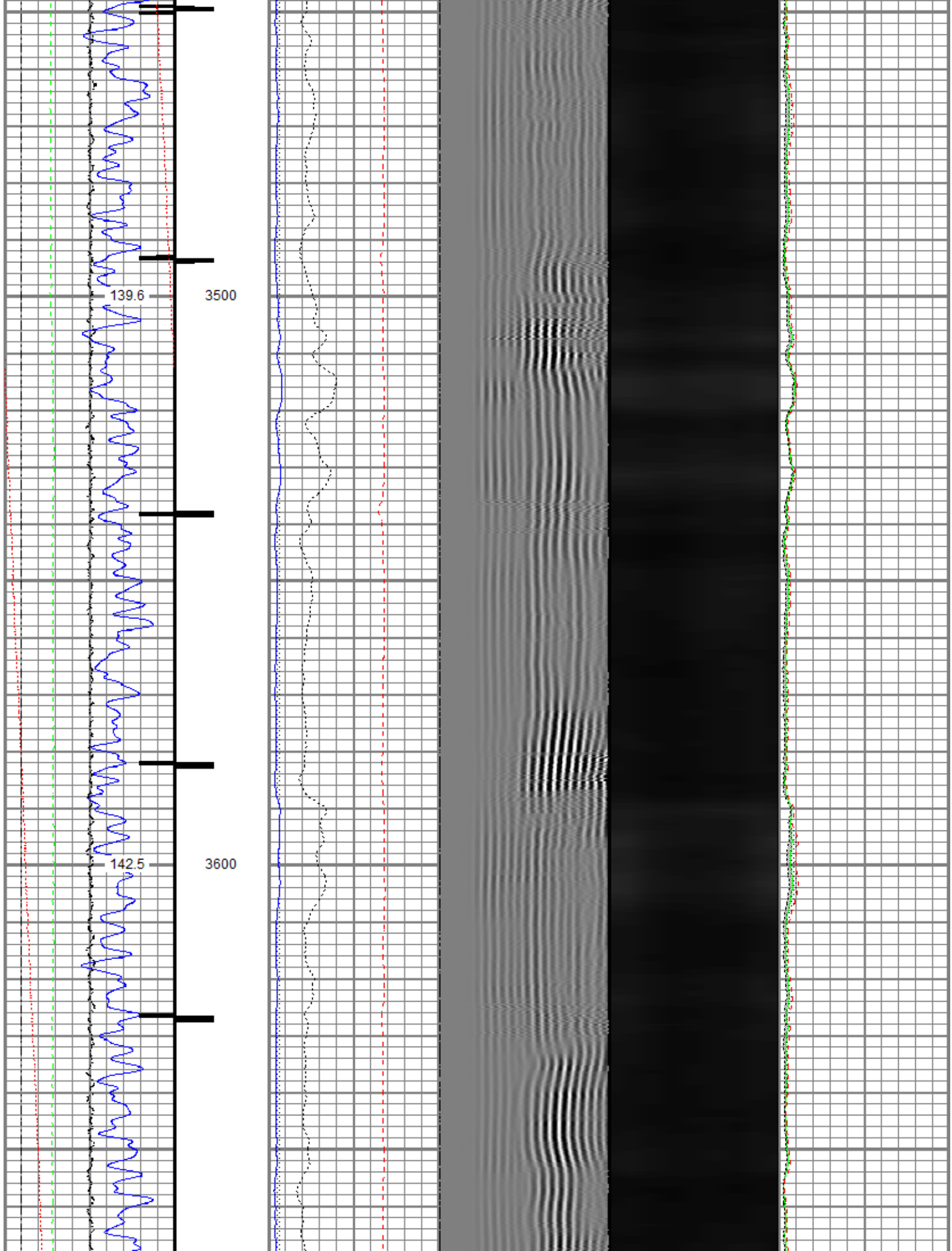


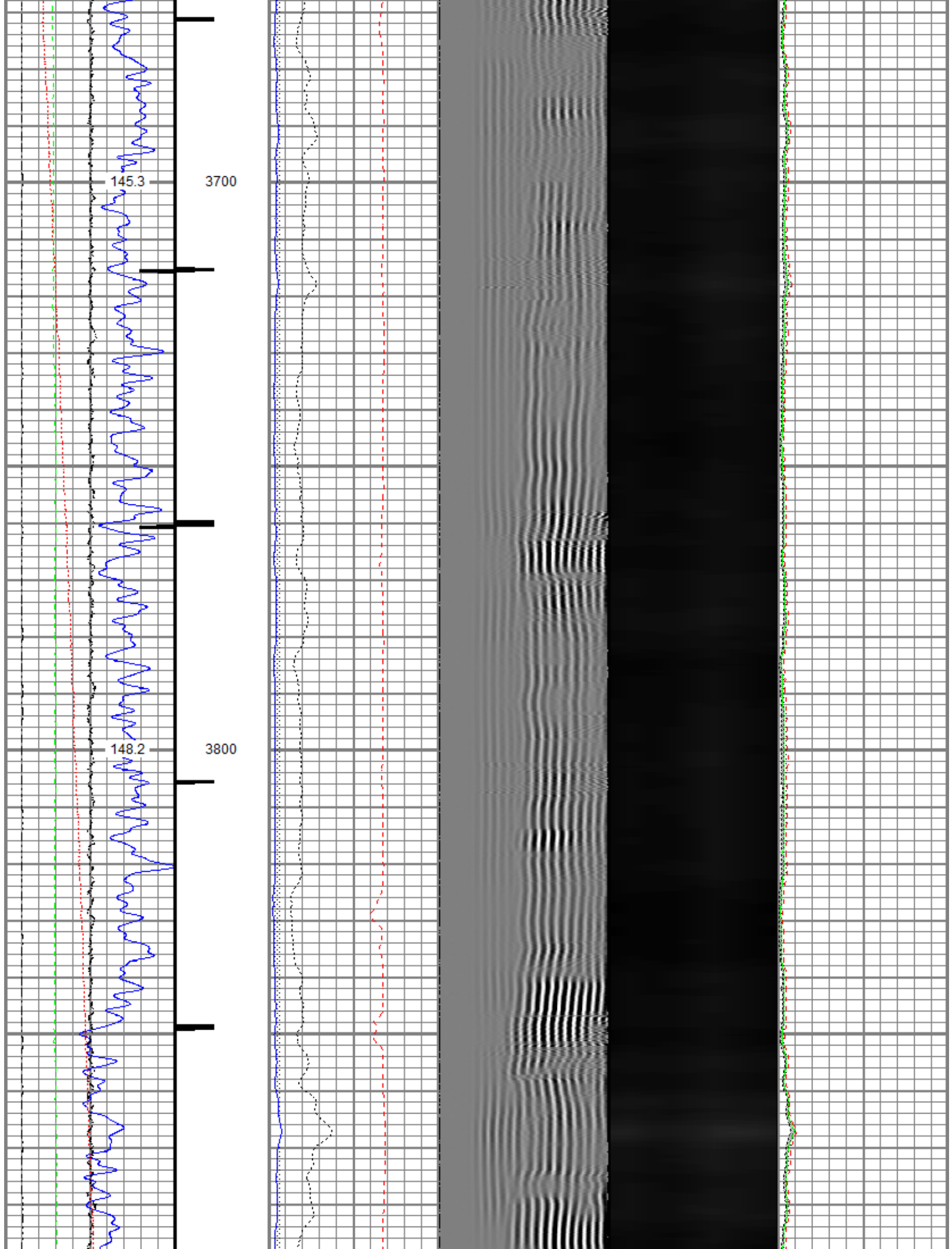


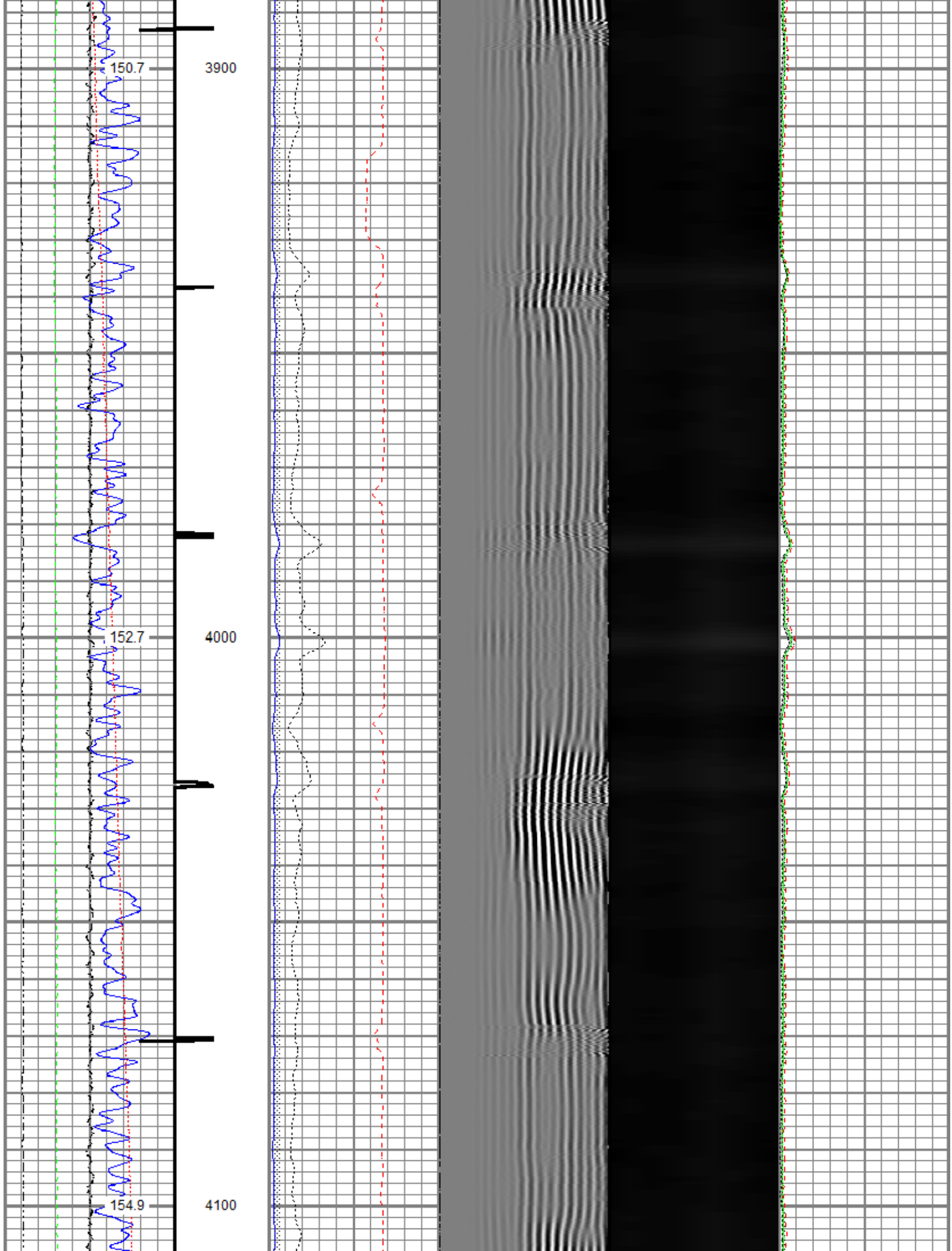


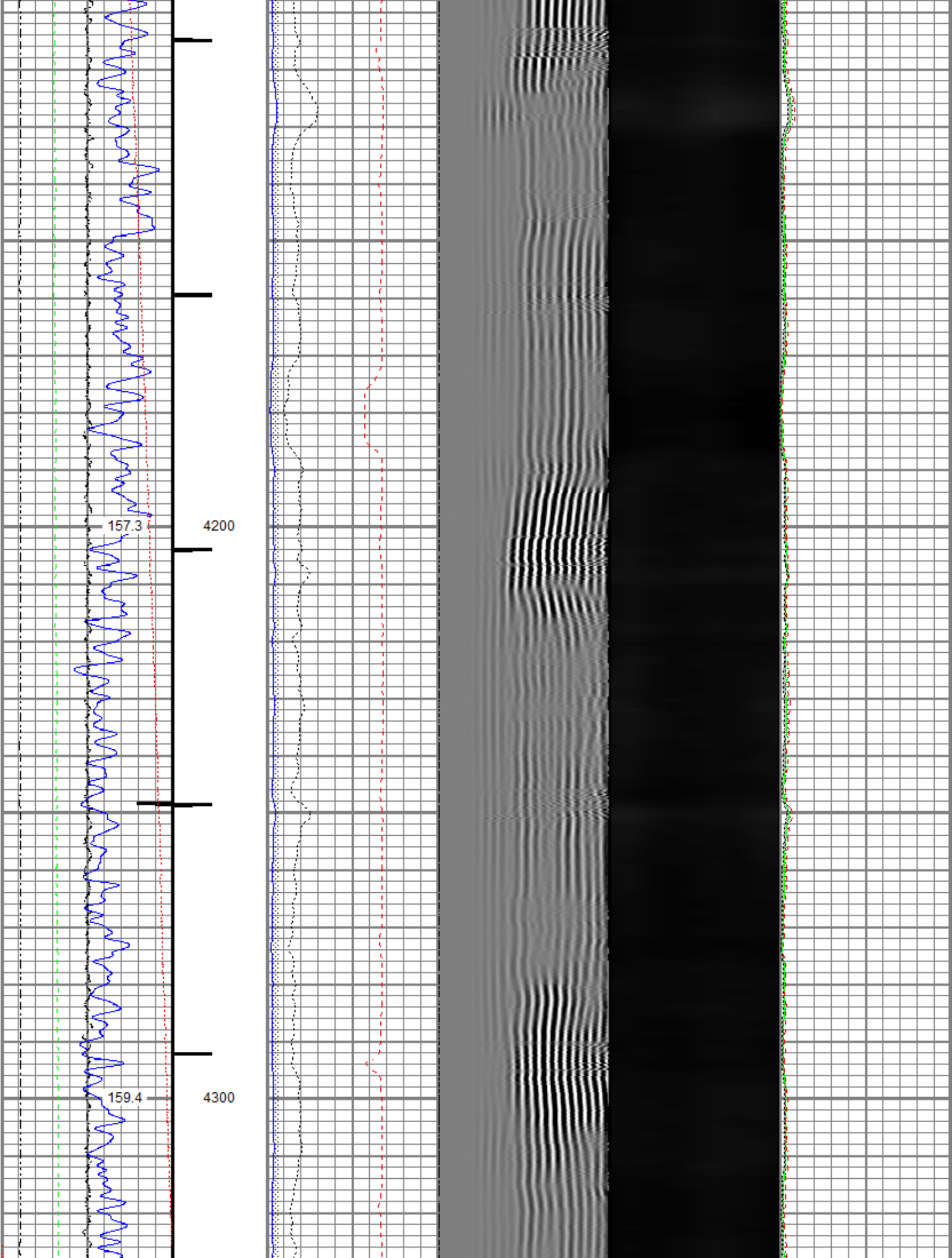


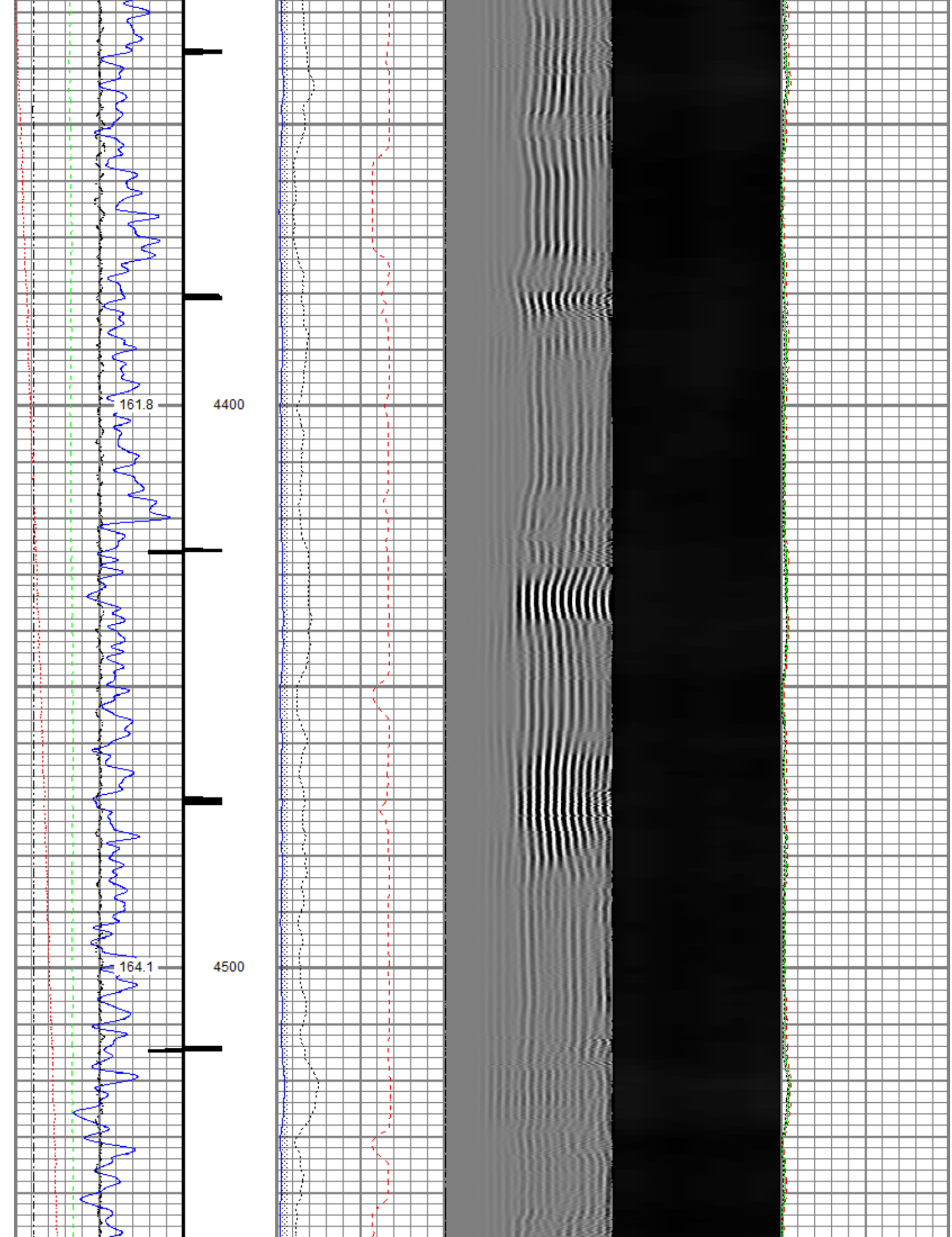


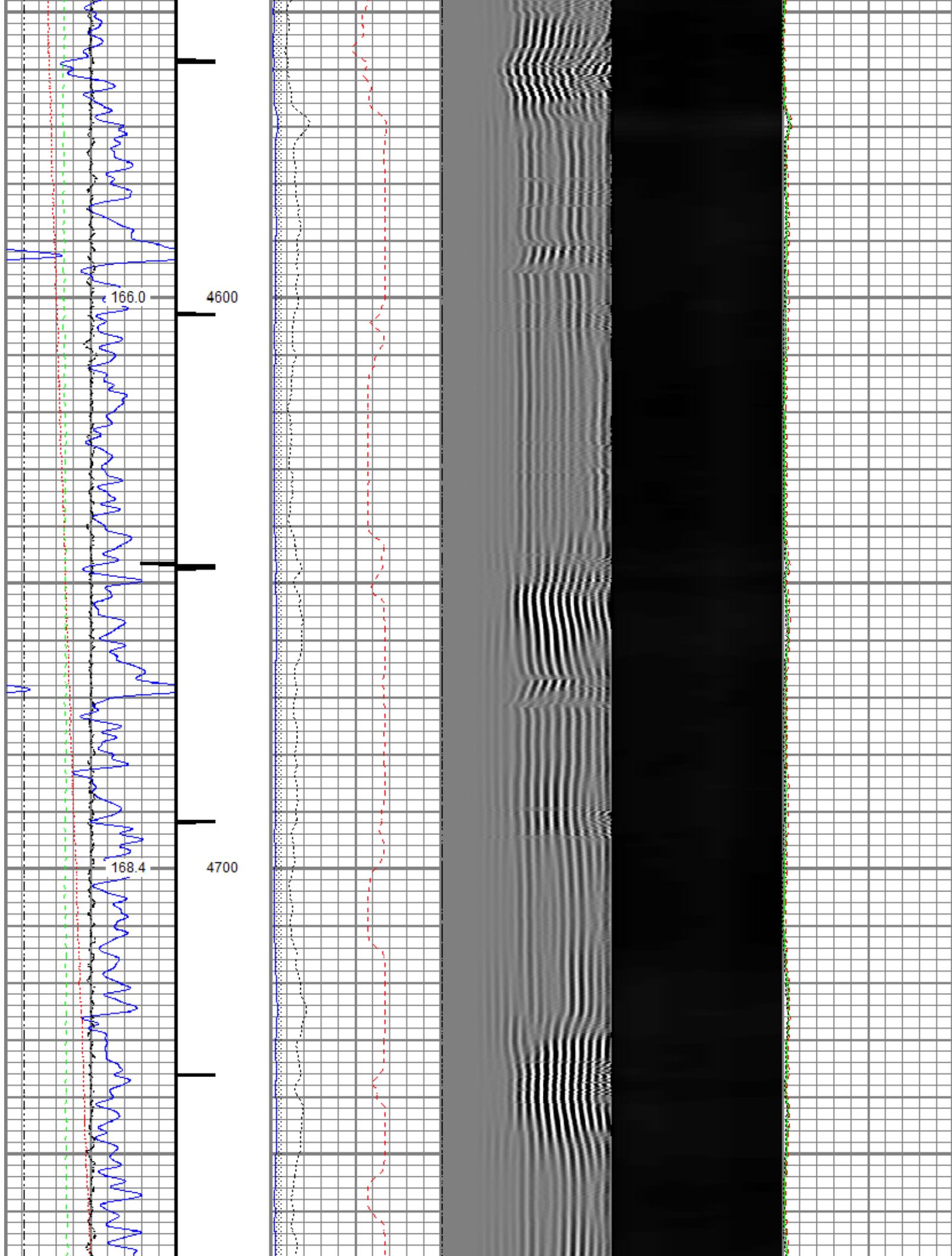


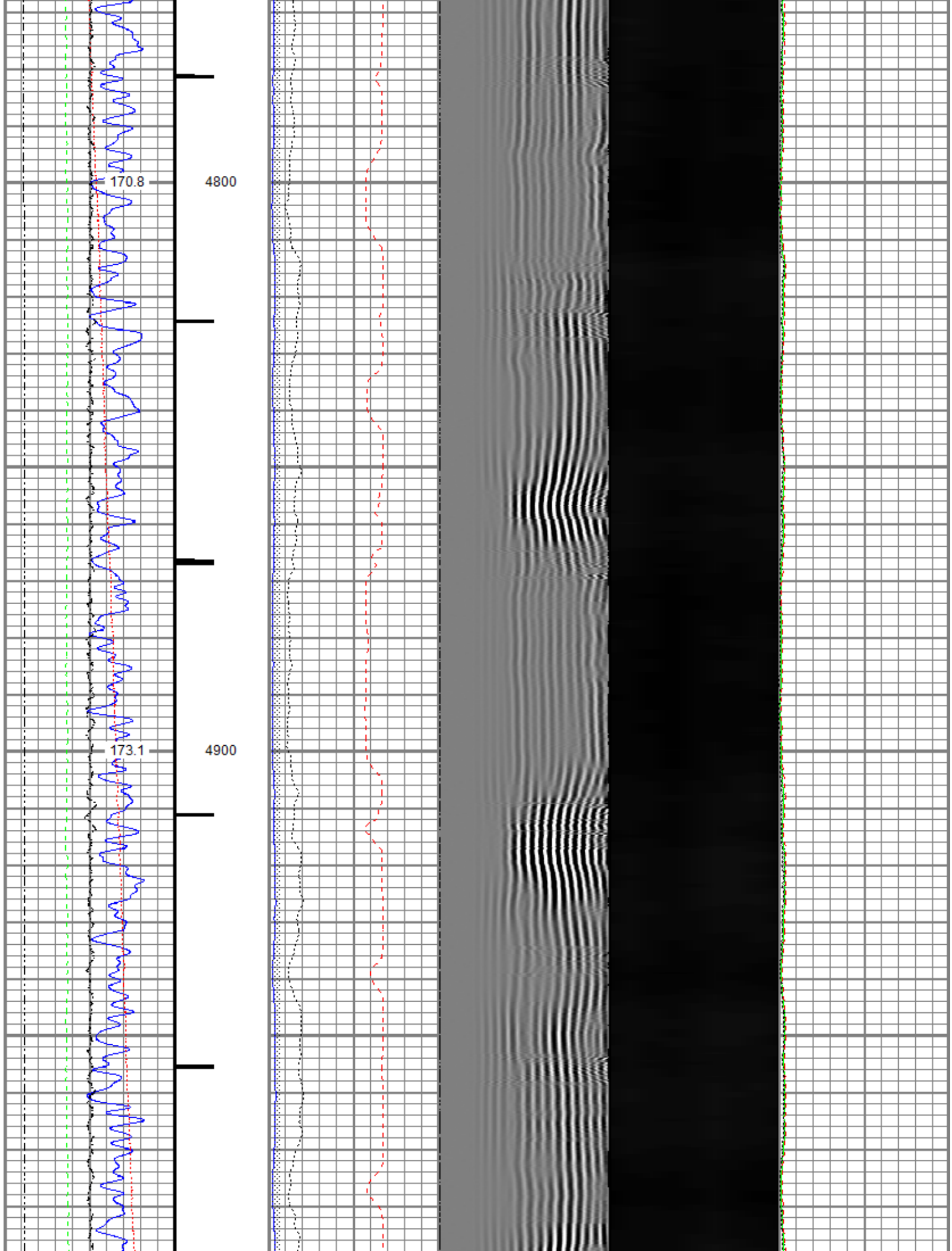


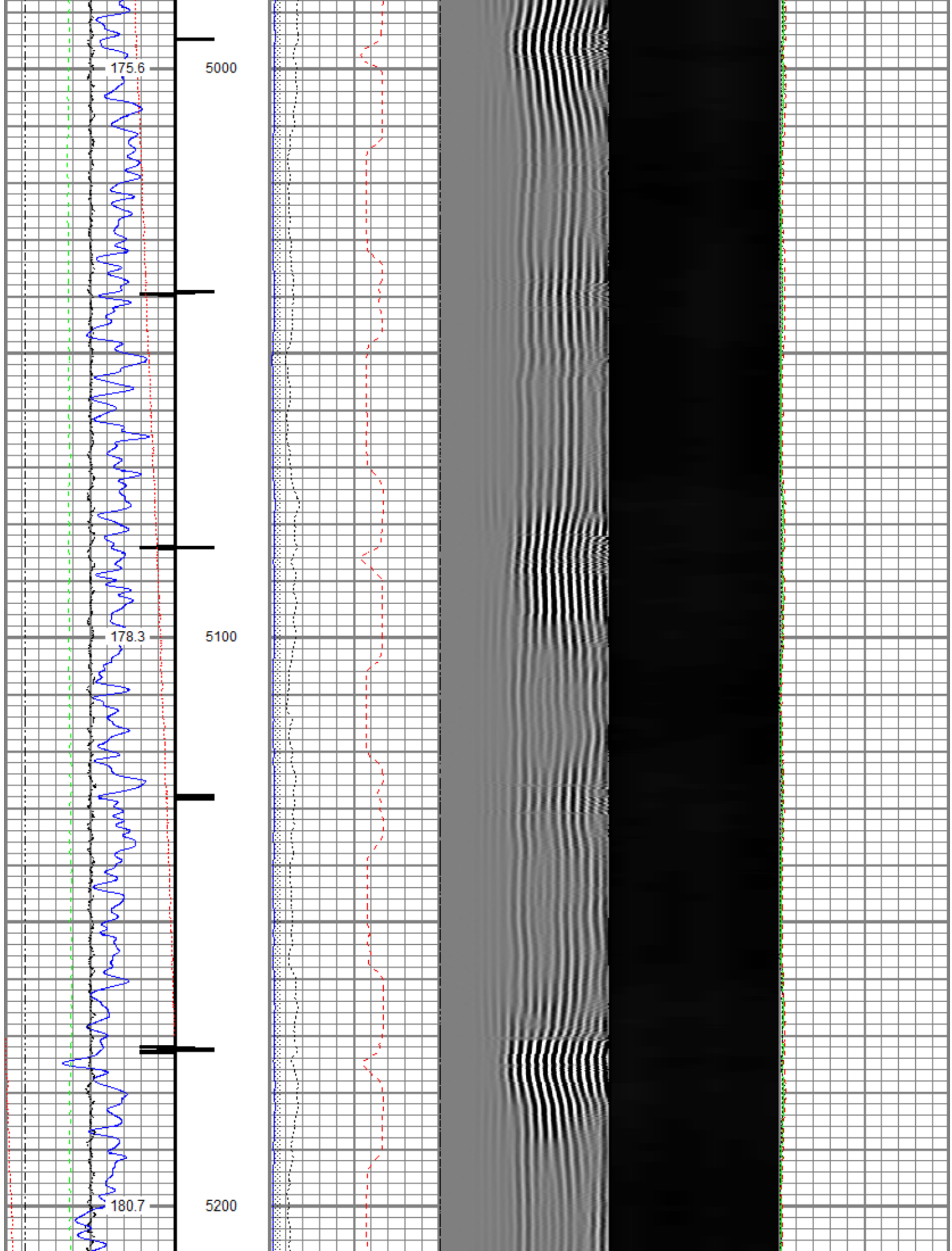


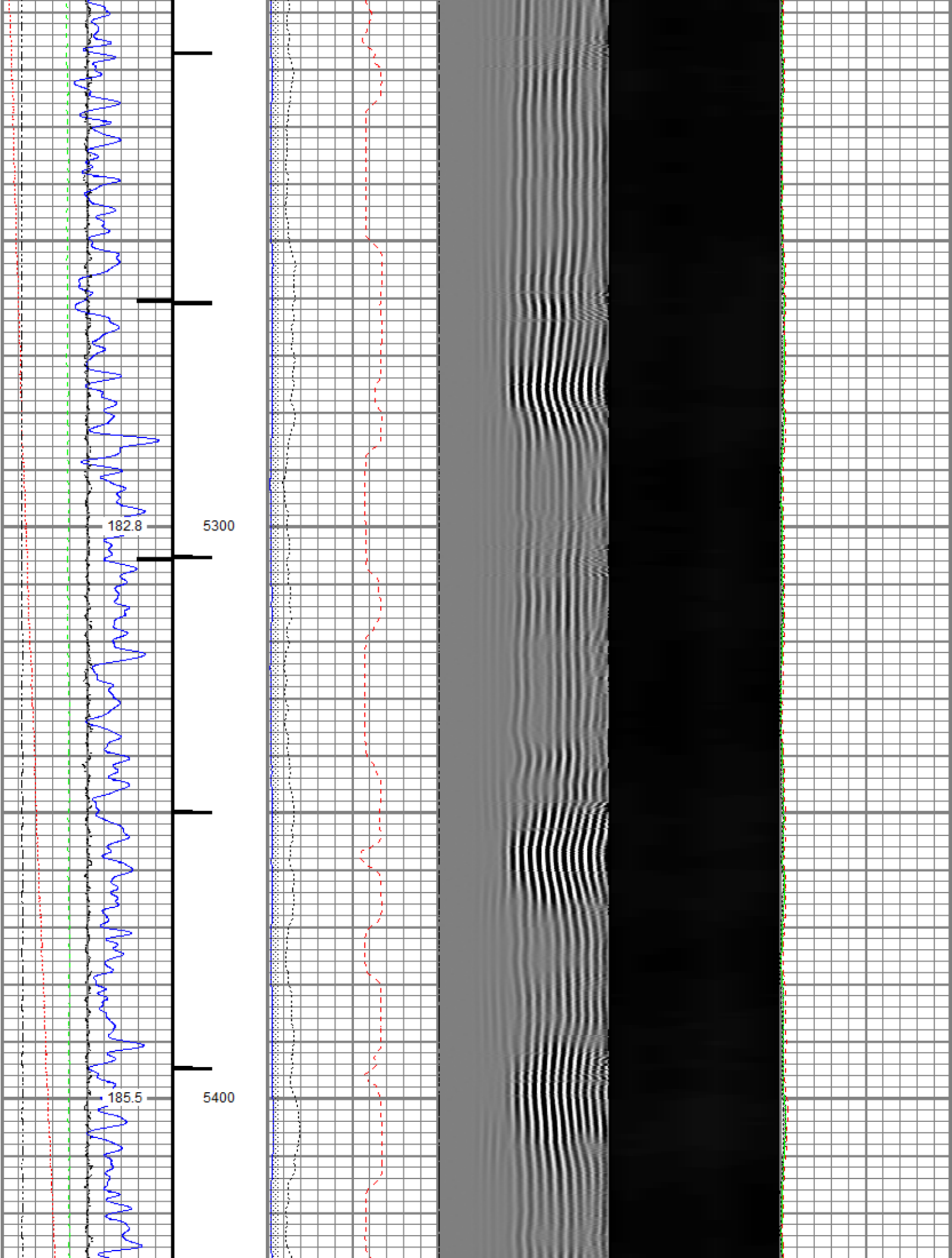


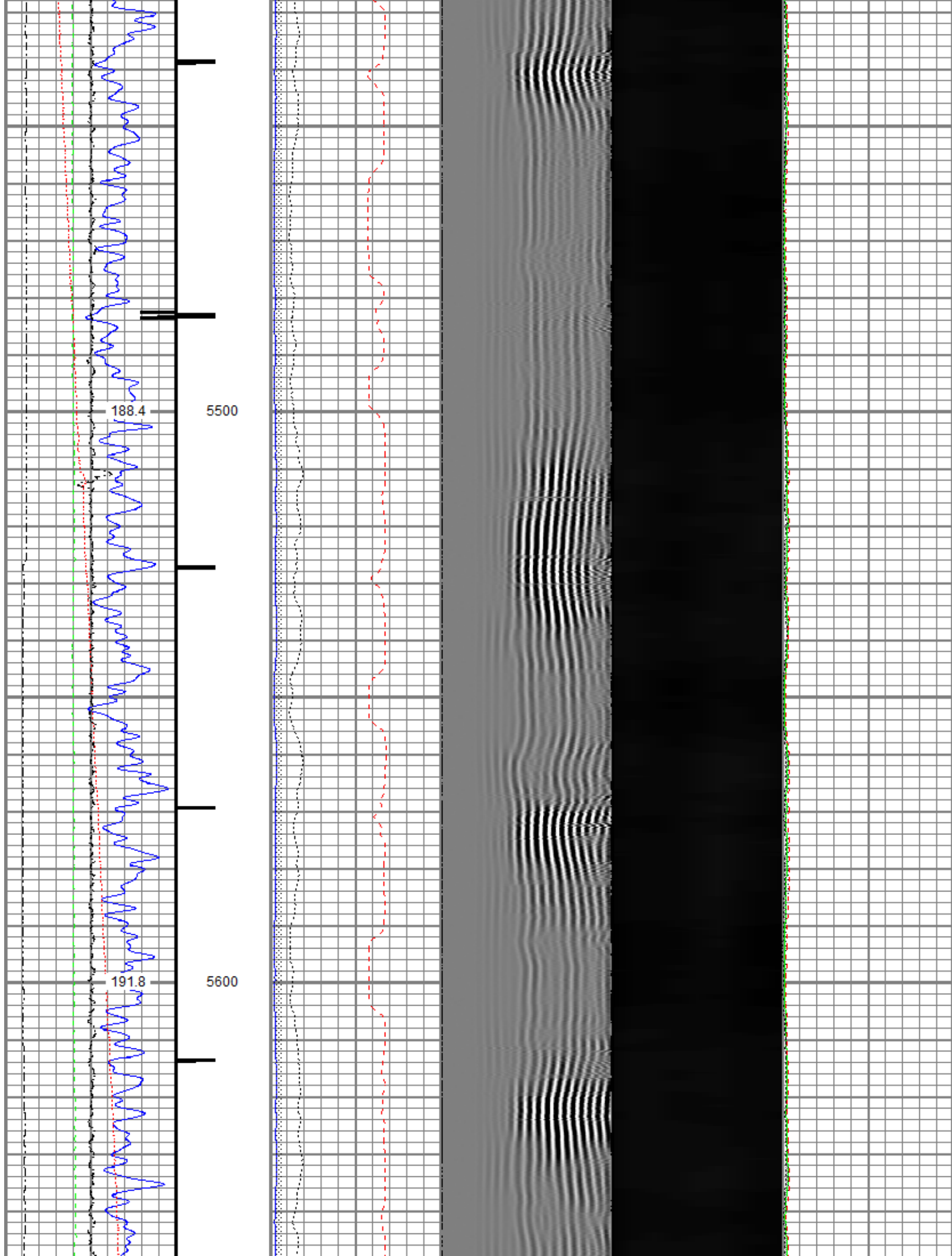


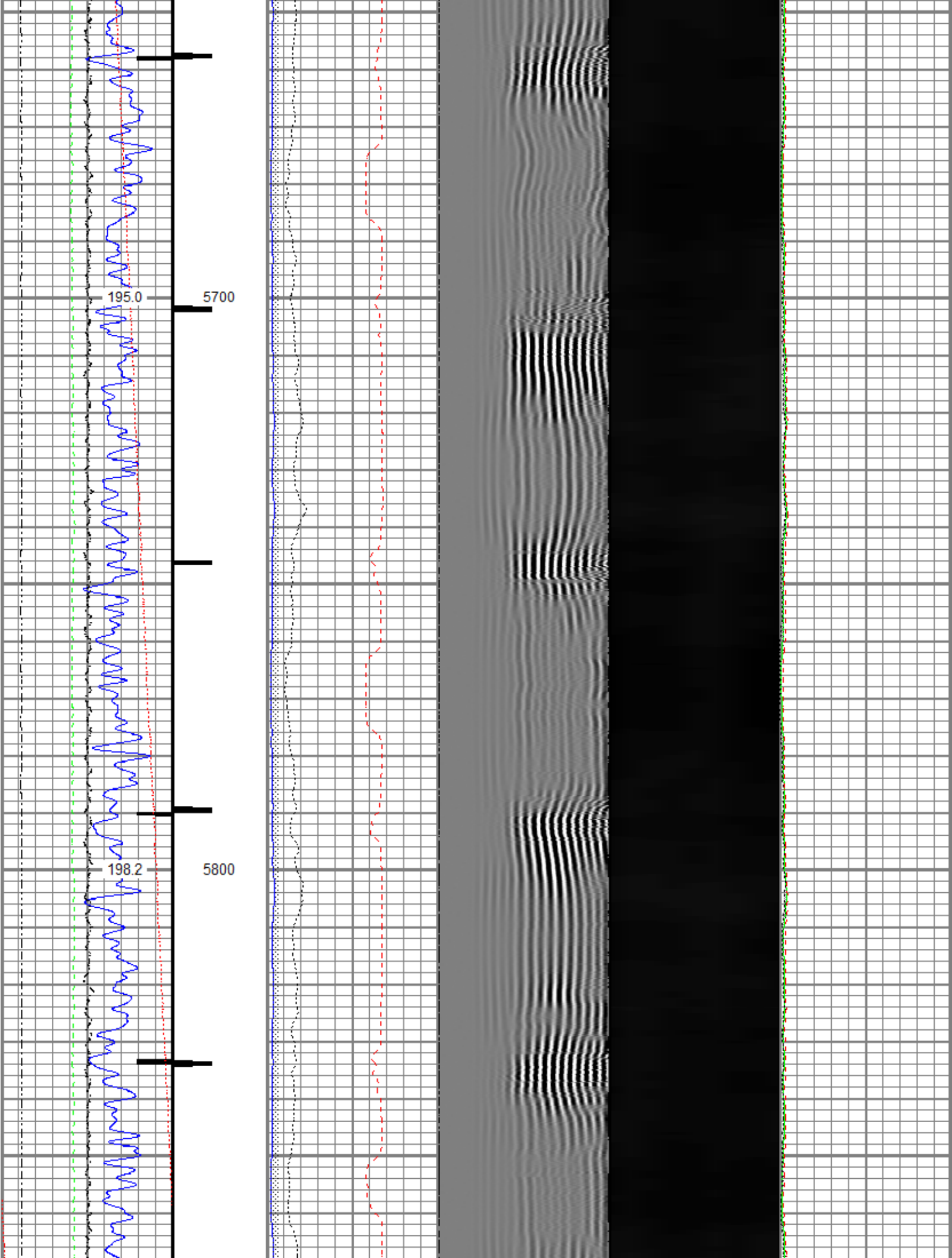


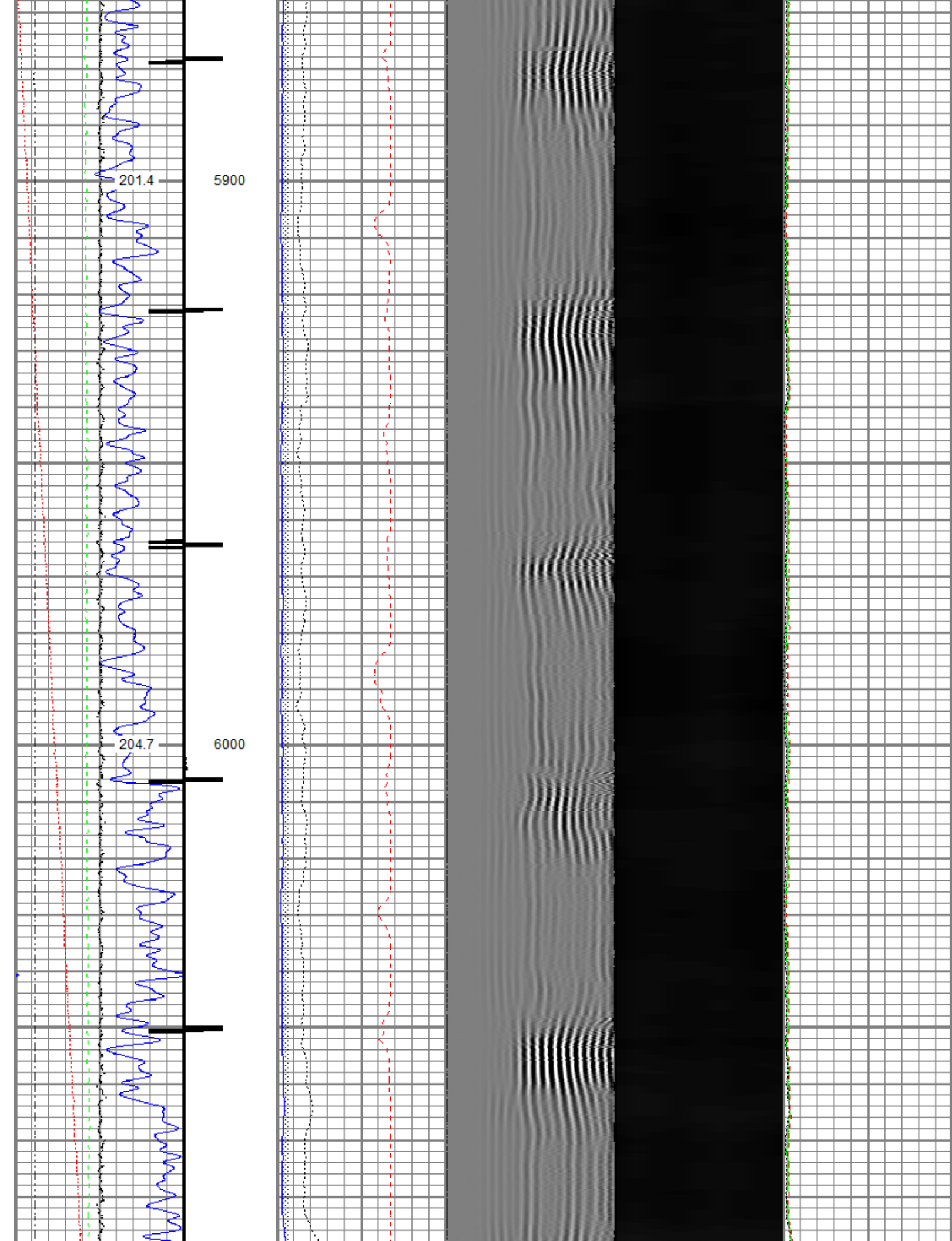


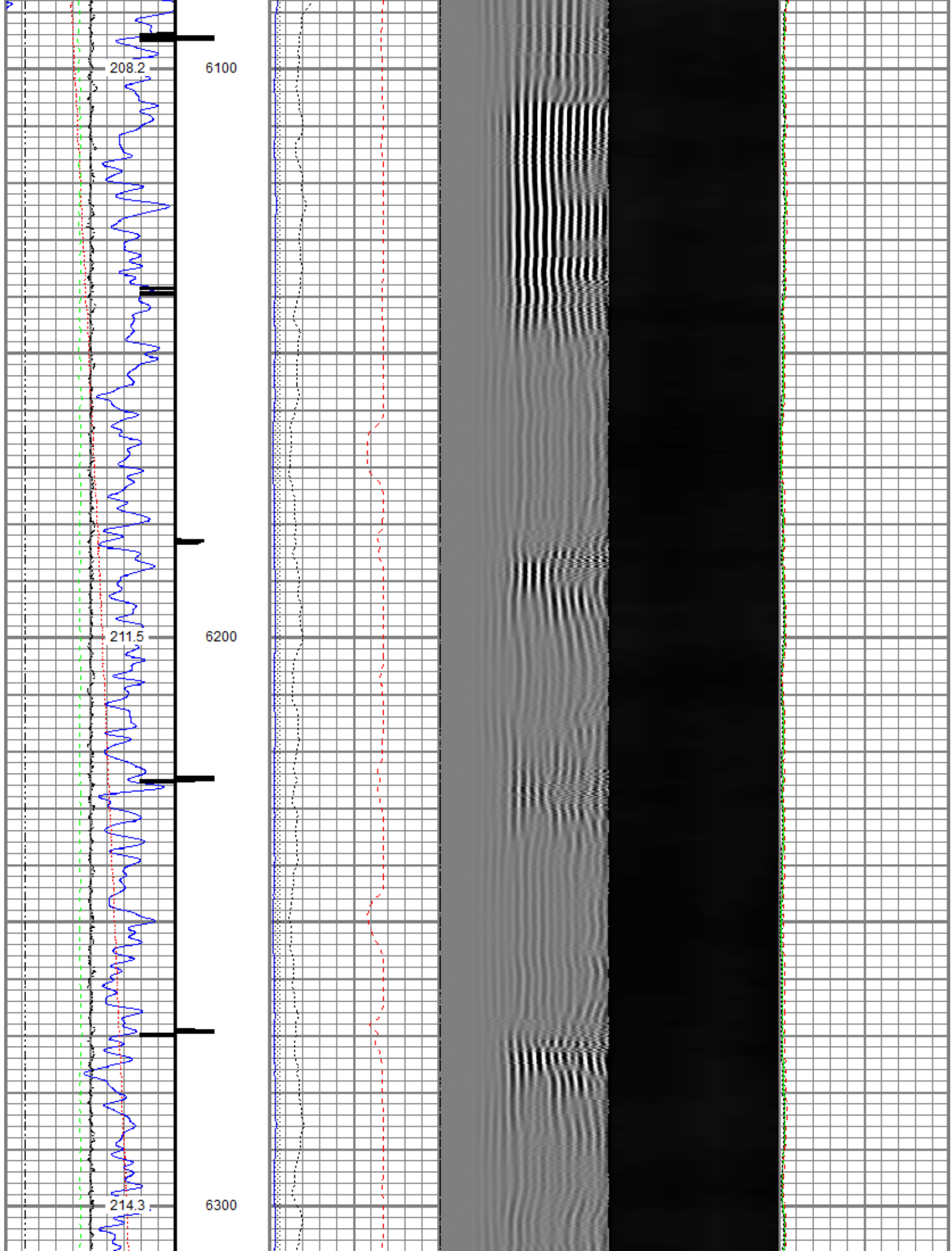


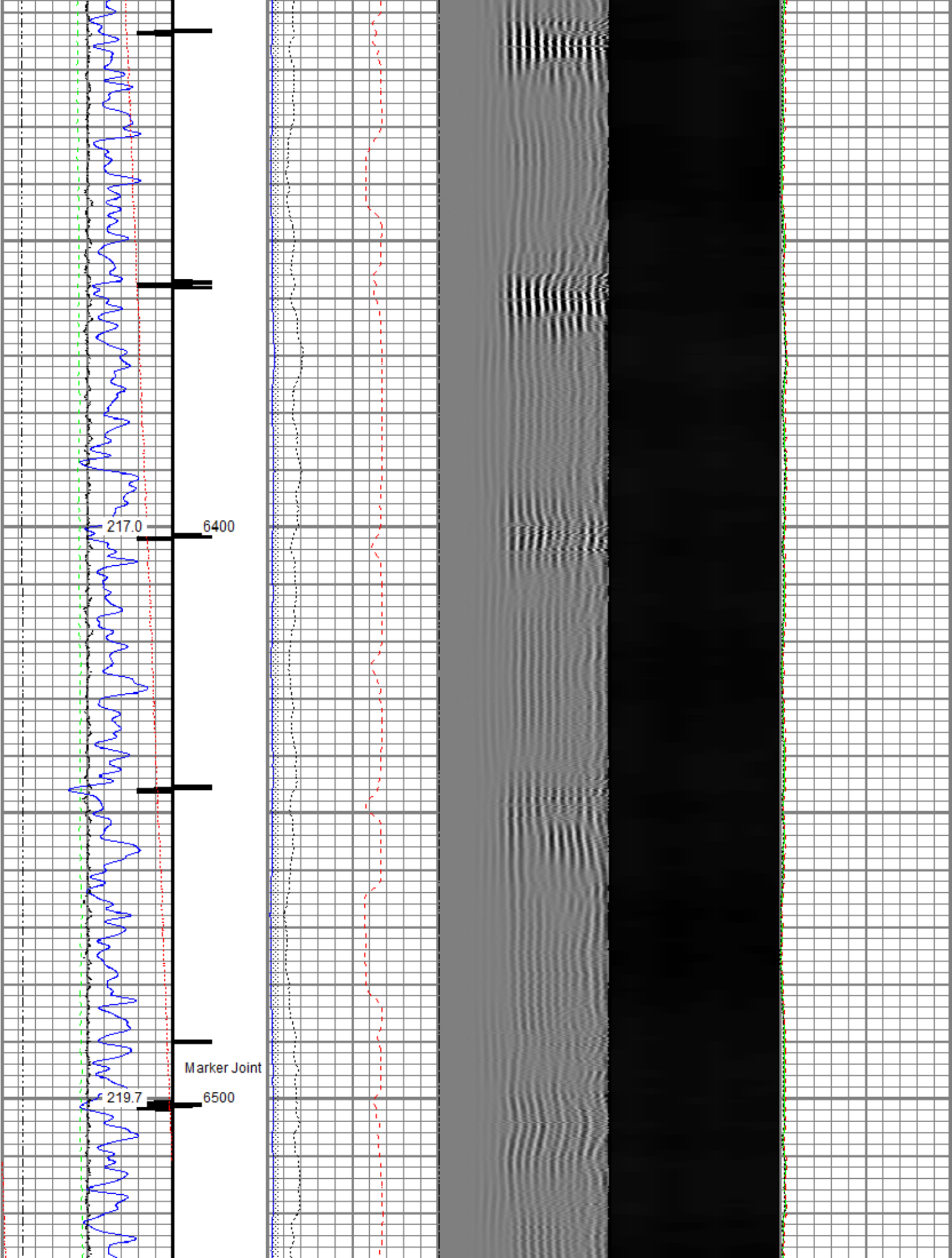


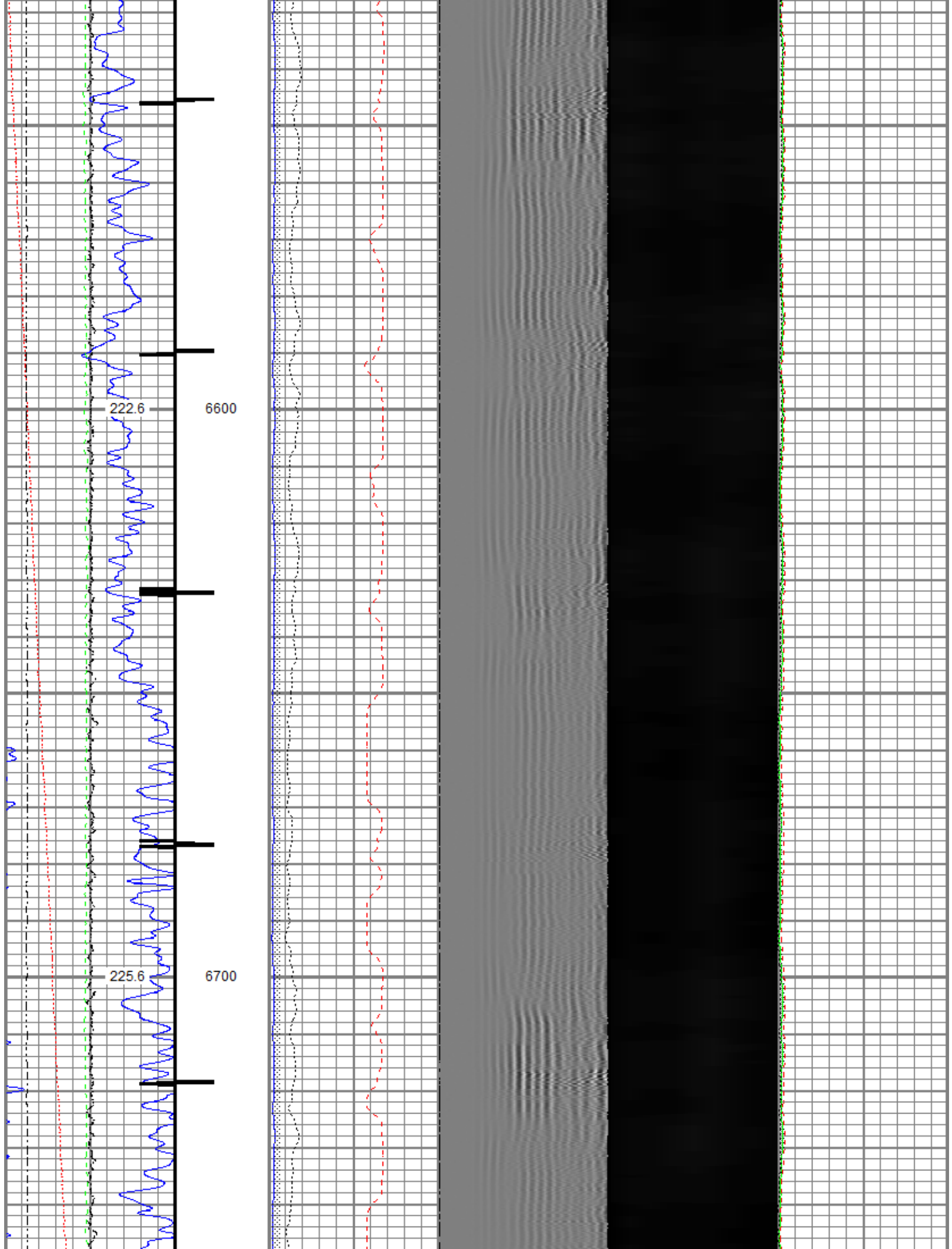


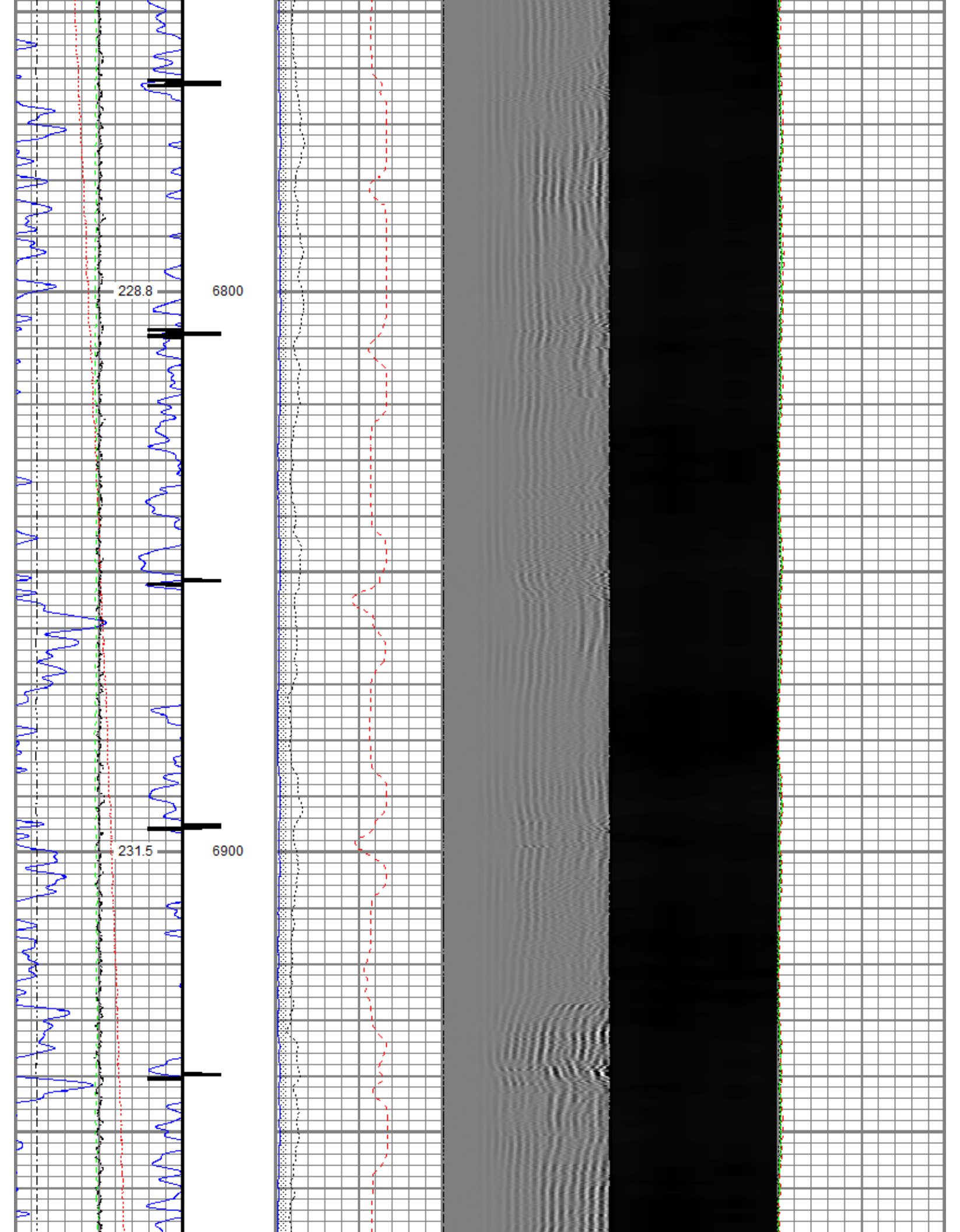


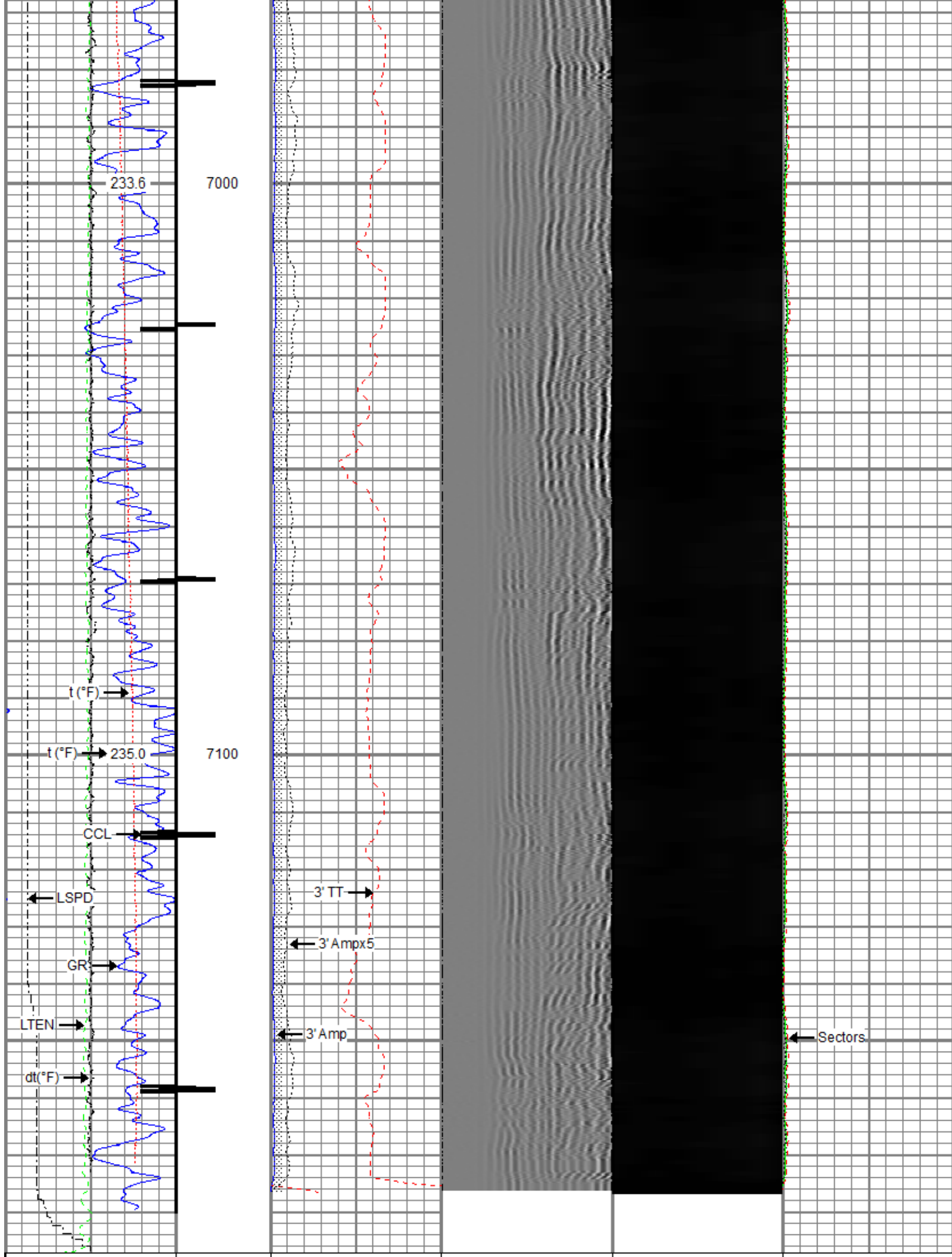












Gamma Ray	0	3' Amplitude (mV) 100	5' Variable Density Log	Sector Map	0	Average Amplitude 100
(GAPI) 120		3' Amplitude x 5	200 (usec) 1200			Minimum Amplitude
Casing Collar Locator	0	(mV) 20			0	100
Temperature (degF) 20		3' Travel Time				Maximum Amplitude
Line Speed	650	(usec) 150			0	100
-150 (ft/min)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

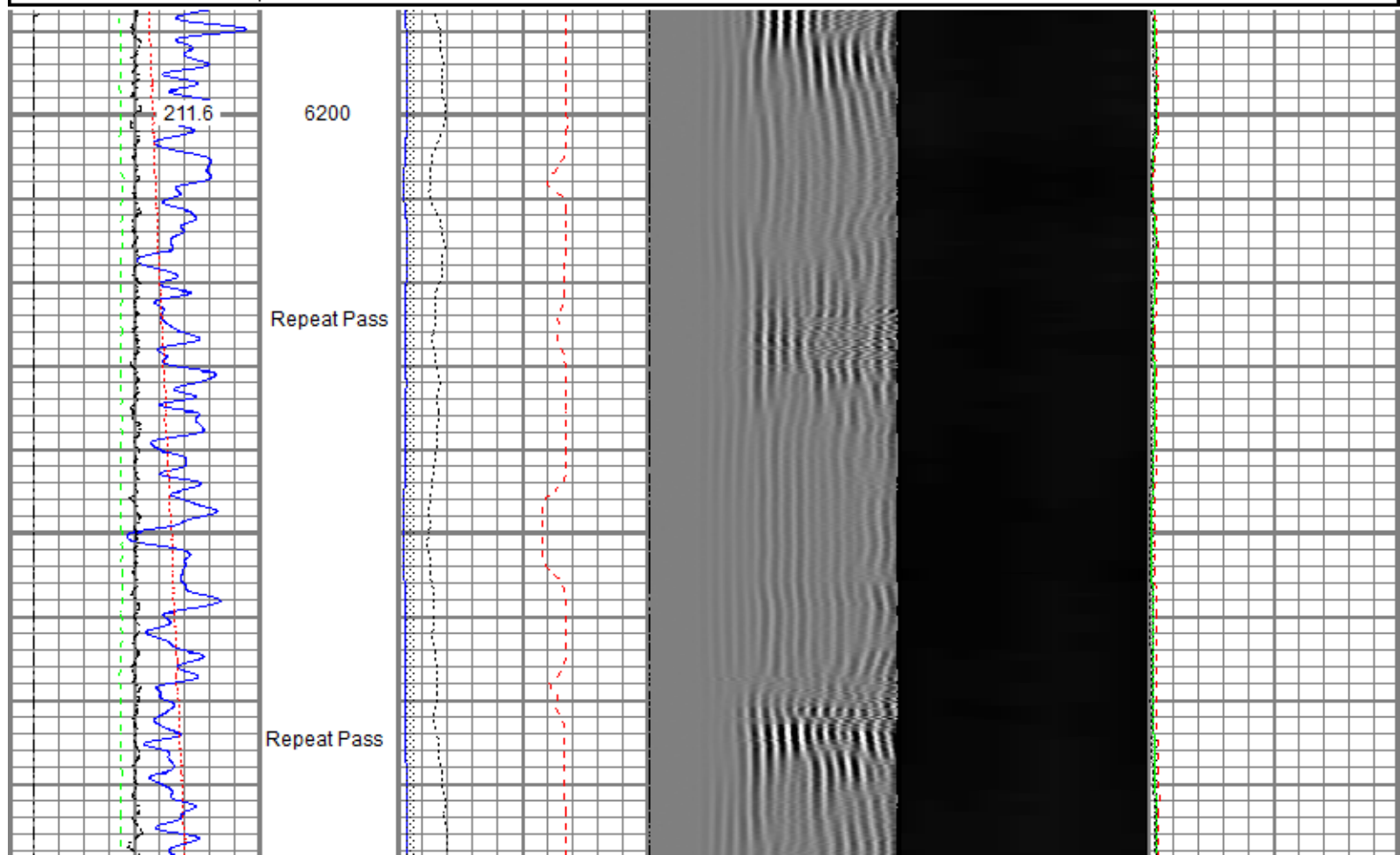


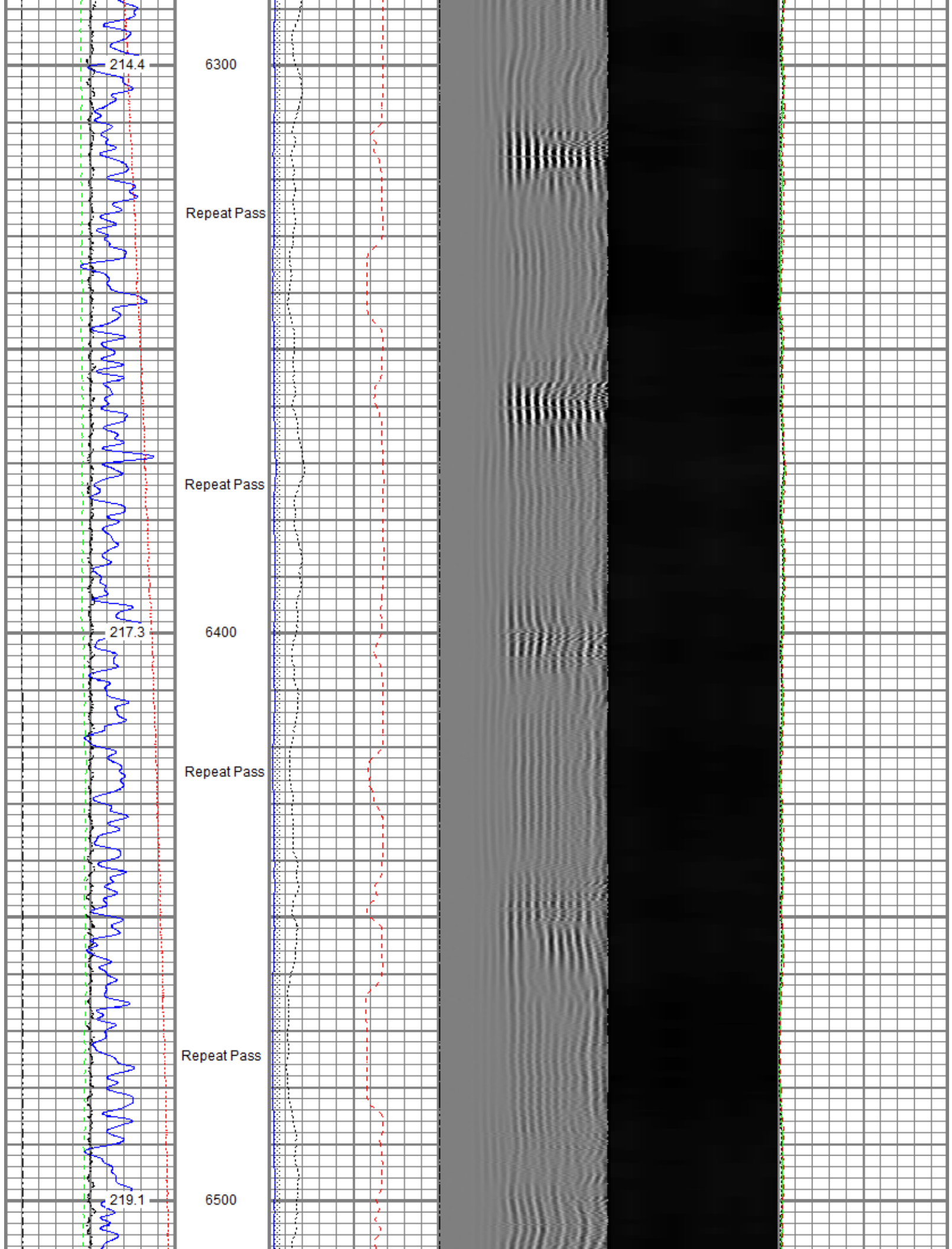
Repeat Pass

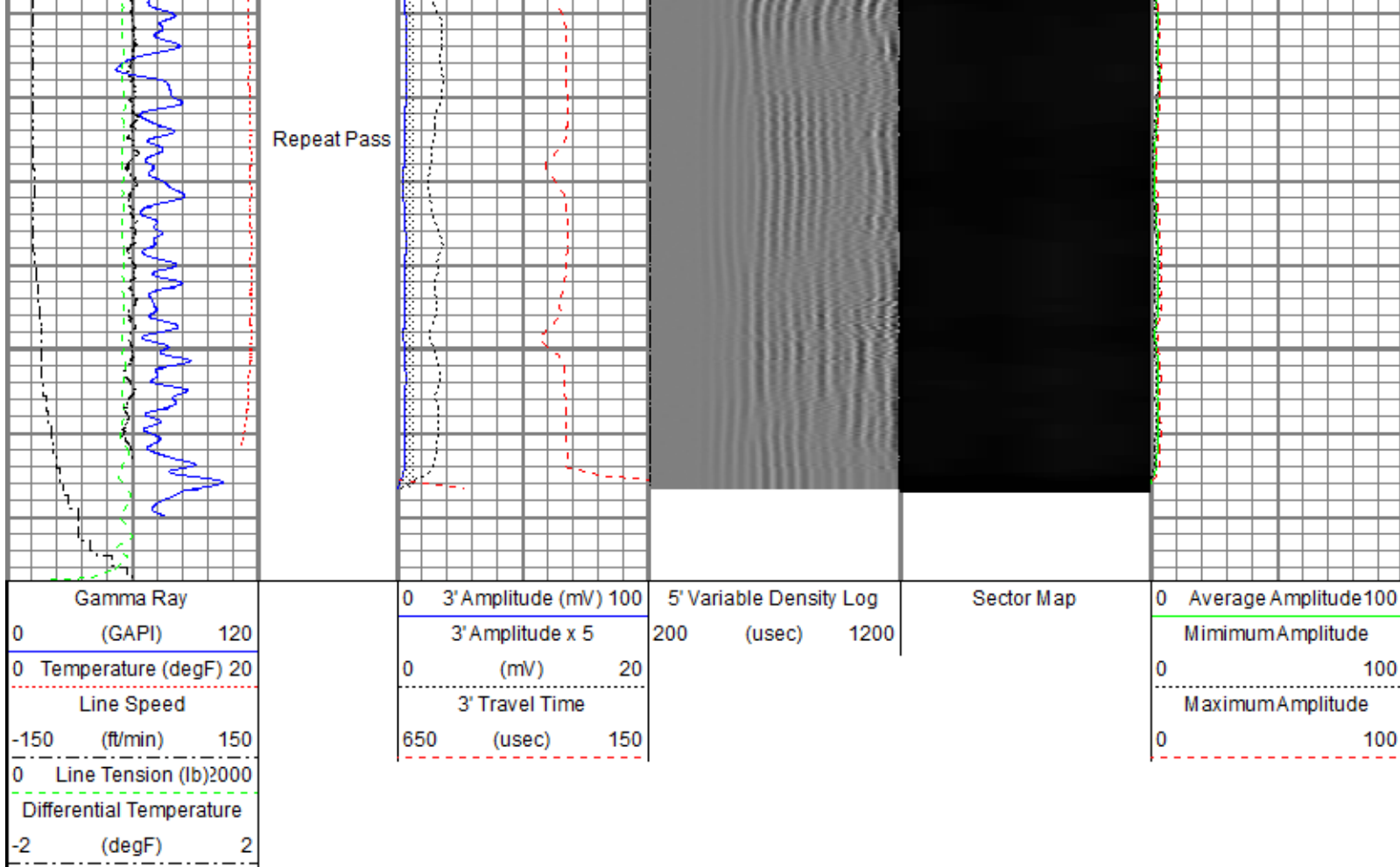
Recorded With 2500 PSI Surface Induced Pressure

Database File noble\noble_guttersen d35-780_rbl_06-03-20\noble_guttersen d35-780_rbl_06-03-20.db
Dataset Pathname repeat.2
Presentation Format ros_radri_noble
Dataset Creation Wed Jun 03 14:07:43 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
Temperature (degF) 20	0	(mV) 20			0	100
Line Speed		3' Travel Time				Maximum Amplitude
-150 (ft/min) 150	650	(usec) 150			0	100
Line Tension (lb) 2000						
Differential Temperature						
-2 (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			
			SO BS CENT-2750-5500	1.50	3.25	11.00
			Slip Over 2-3/4" I.D. for 5-1/2" O.D. Casing Bow Spring Centralizer			
TEMP	14.16					
			Probe Radii ACC-2750 RBTa (FW1302-002)	9.39	2.75	105.00
			Probe 2-3/4" Radial Cement Bond Tool with Integral Temperature Sub and Accelerometer			
RBT_ACCZ	11.93					
RBT_ACCY	11.93					
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					

[illegible]

CAL	0.030	0.037	0.800	71.921	121.282	-0.239
5'	0.009	0.595				
SUM						
S1	0.013	0.661	0.000	100.000	154.375	-2.023
S2	0.011	0.725	0.000	100.000	139.995	-1.475
S3	0.012	0.795	0.000	100.000	127.792	-1.560
S4	0.014	0.773	0.000	100.000	131.869	-1.879
S5	0.011	0.741	0.000	100.000	136.972	-1.539
S6	0.008	0.725	0.000	100.000	139.436	-1.094
S7	0.012	0.688	0.000	100.000	147.924	-1.761
S8	0.015	0.633	0.000	100.000	161.734	-2.369

Air Zero Calibration, performed Wed Jun 03 07:42:01 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 D35-780
Field Wattenberg
County Weld
State Colorado