



Liner			

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.

Log ran as per customer request
Depth referenced to Kelly Bushing at 20 FT
Adjusted -1 FT to correlate with Kelly Bushing
Casing Tally reported Marker Joint at 6474 FT but Marker Joint logged at 6432 FT
Gauge Ring/Junk Basket ran to 7788 FT with no debris
Log ran from 6556 FT to Surface
Recorded with 2800 PSI Surface Induced Pressure
Logging tools were clean and free of debris upon completion of operations

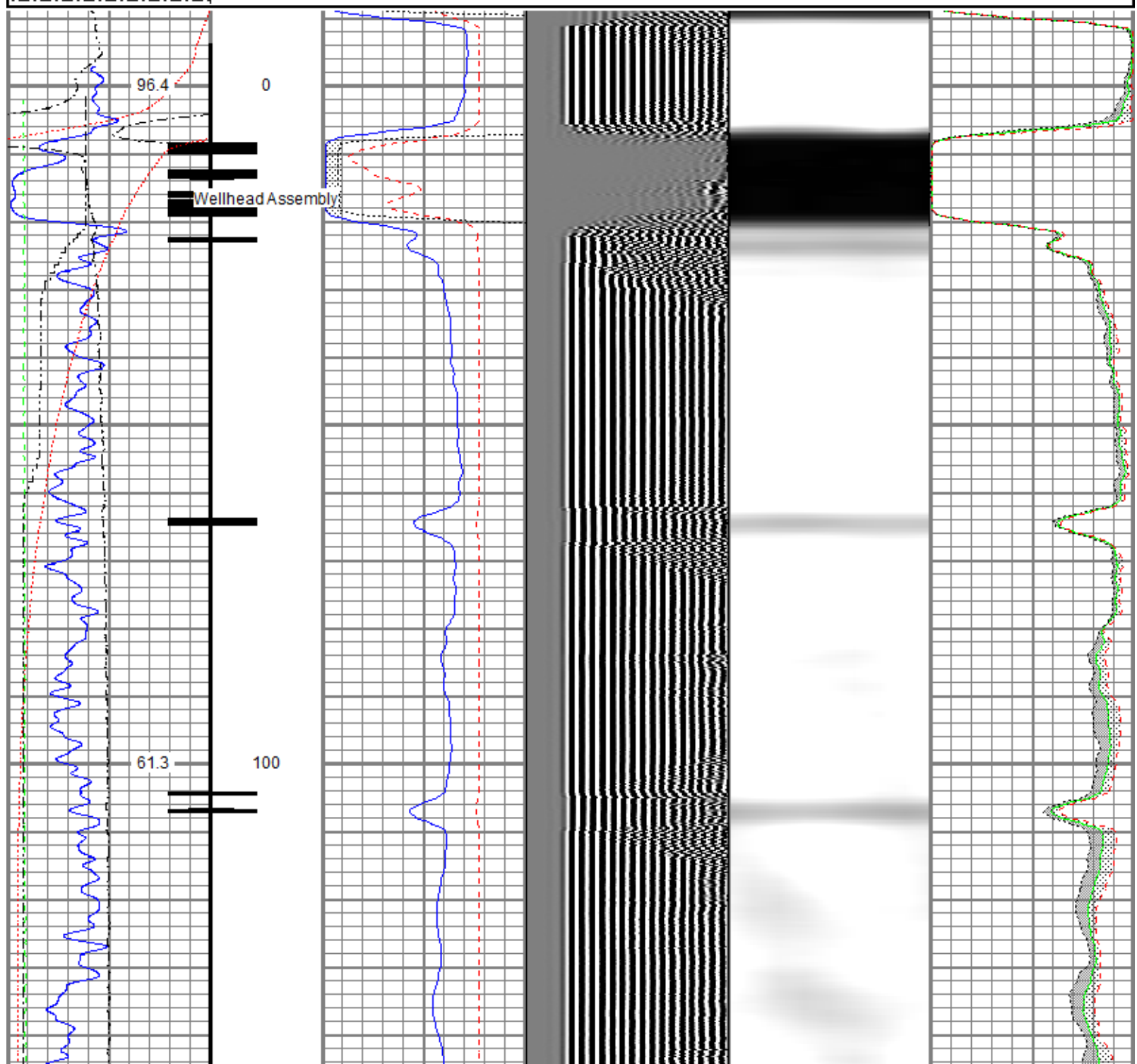
Thank you for choosing Reliance Oilfield Services, LLC!!

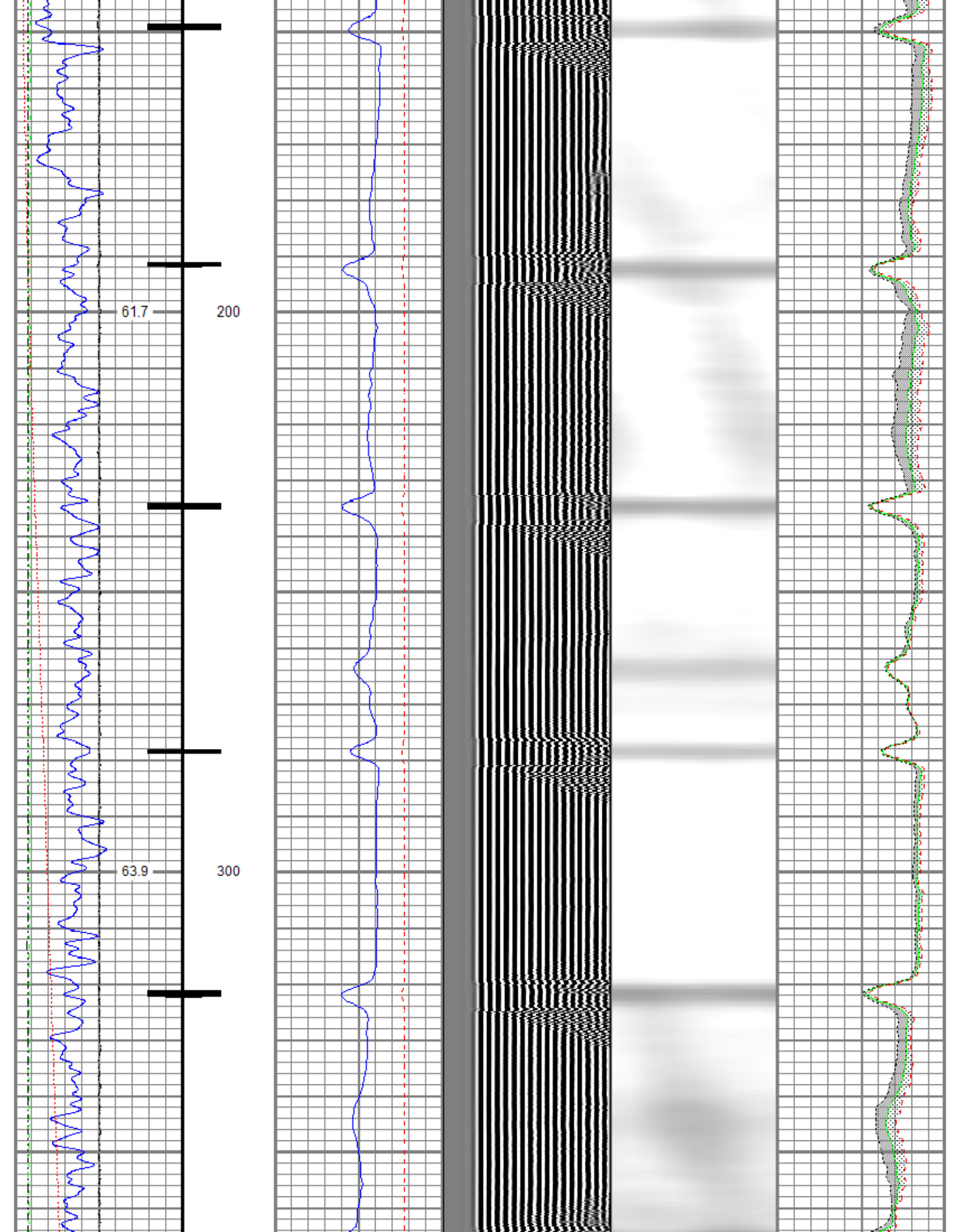


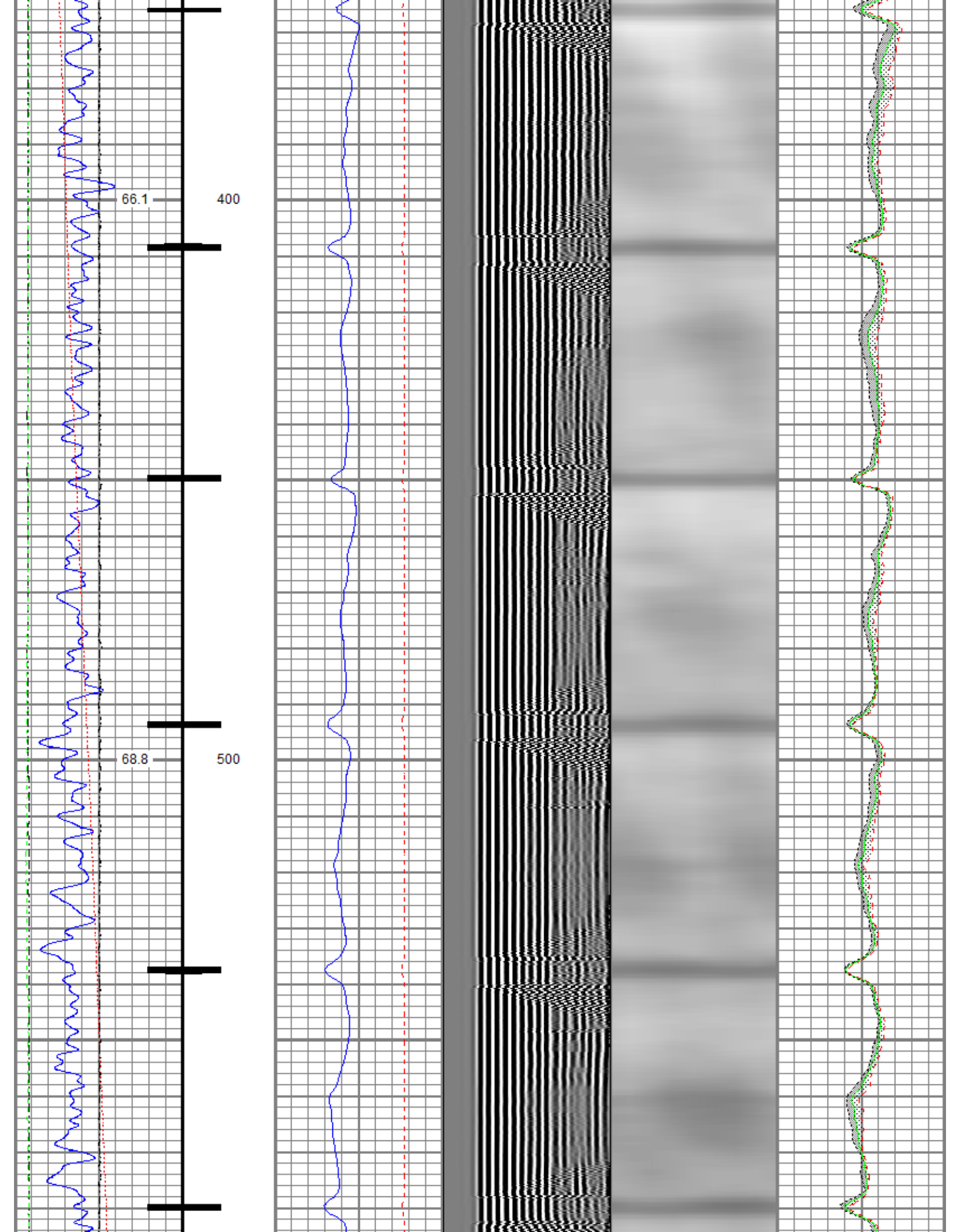
Recorded with 2000 PSI Surface-Induced Pressure

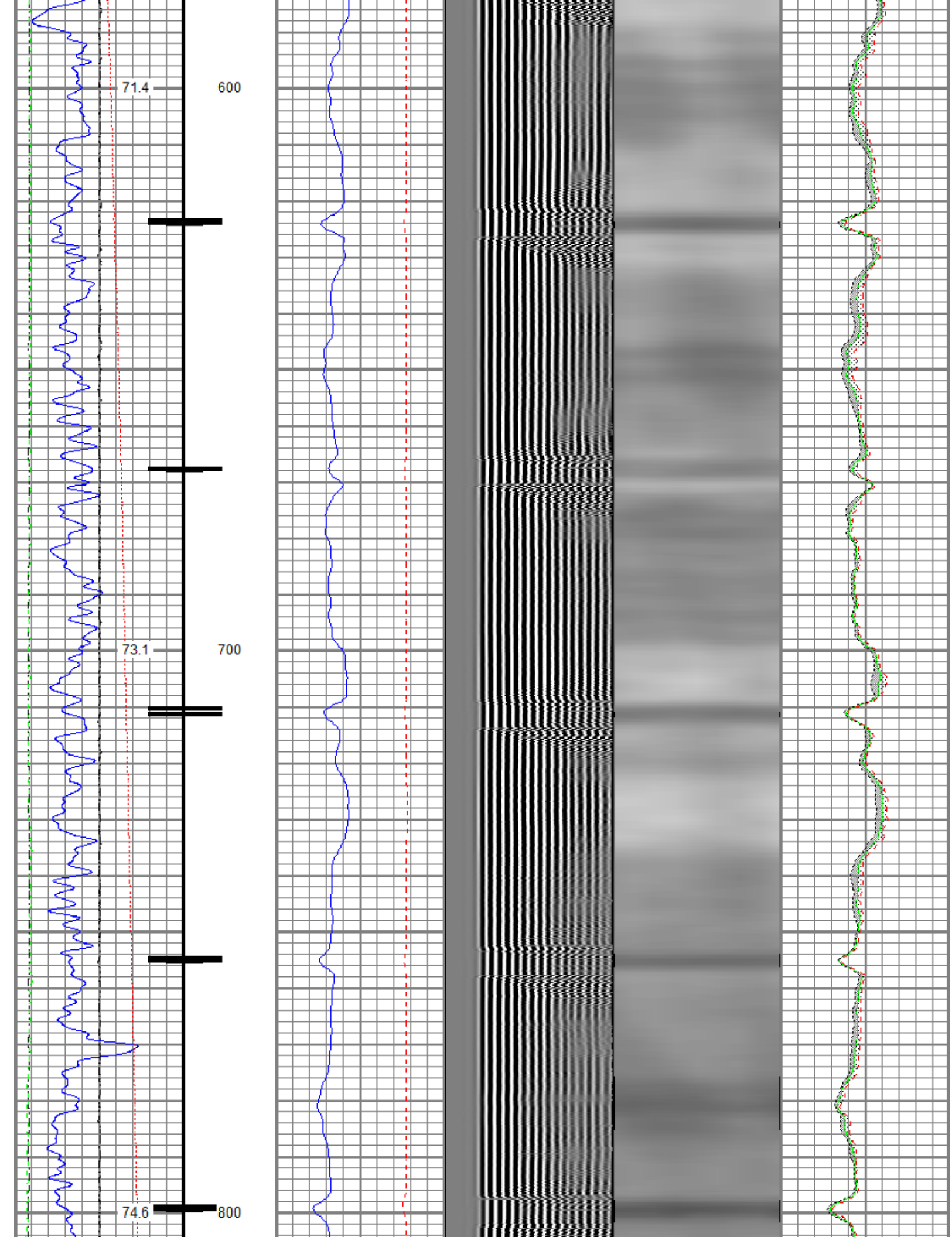
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Dataset Pathname	Main.1
Presentation Format	ros_radri
Dataset Creation	Sun Jun 10 16:00:33 2018
Charted by	Depth in Feet scaled 1:240

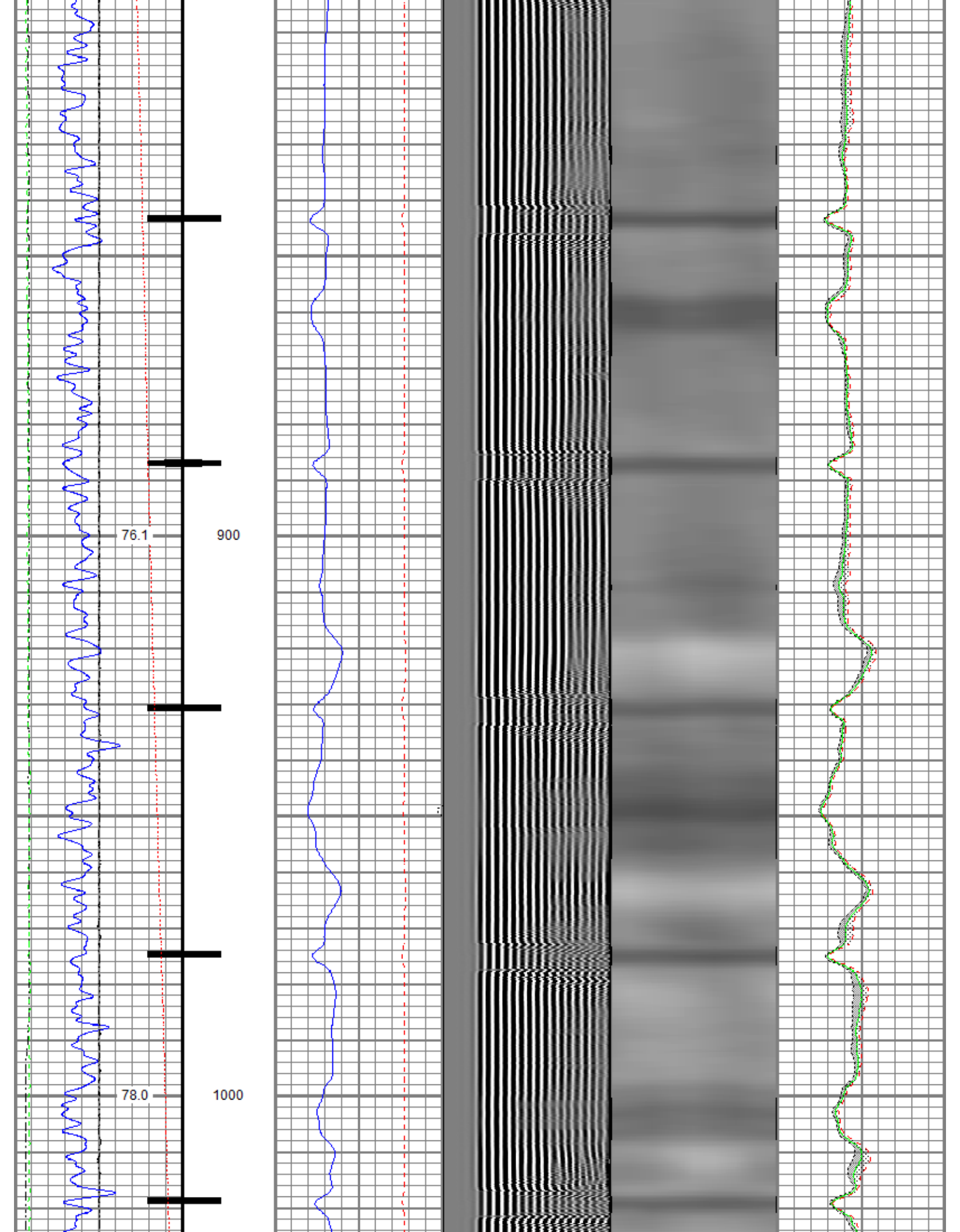
Gamma Ray	0	3' Amplitude (mV) 100	5' Variable Density Log	Sector Map	0	Average Amplitude 100
(GAPI) 120		3' Amplitude x 5	200 (usec) 1200			Minimum Amplitude
Casing Collar Locator	0	(mV) 20			0	100
Temperature (degF) 20		3' Travel Time				Maximum Amplitude
Line Speed	650	(usec) 150			0	100
(ft/min) 150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

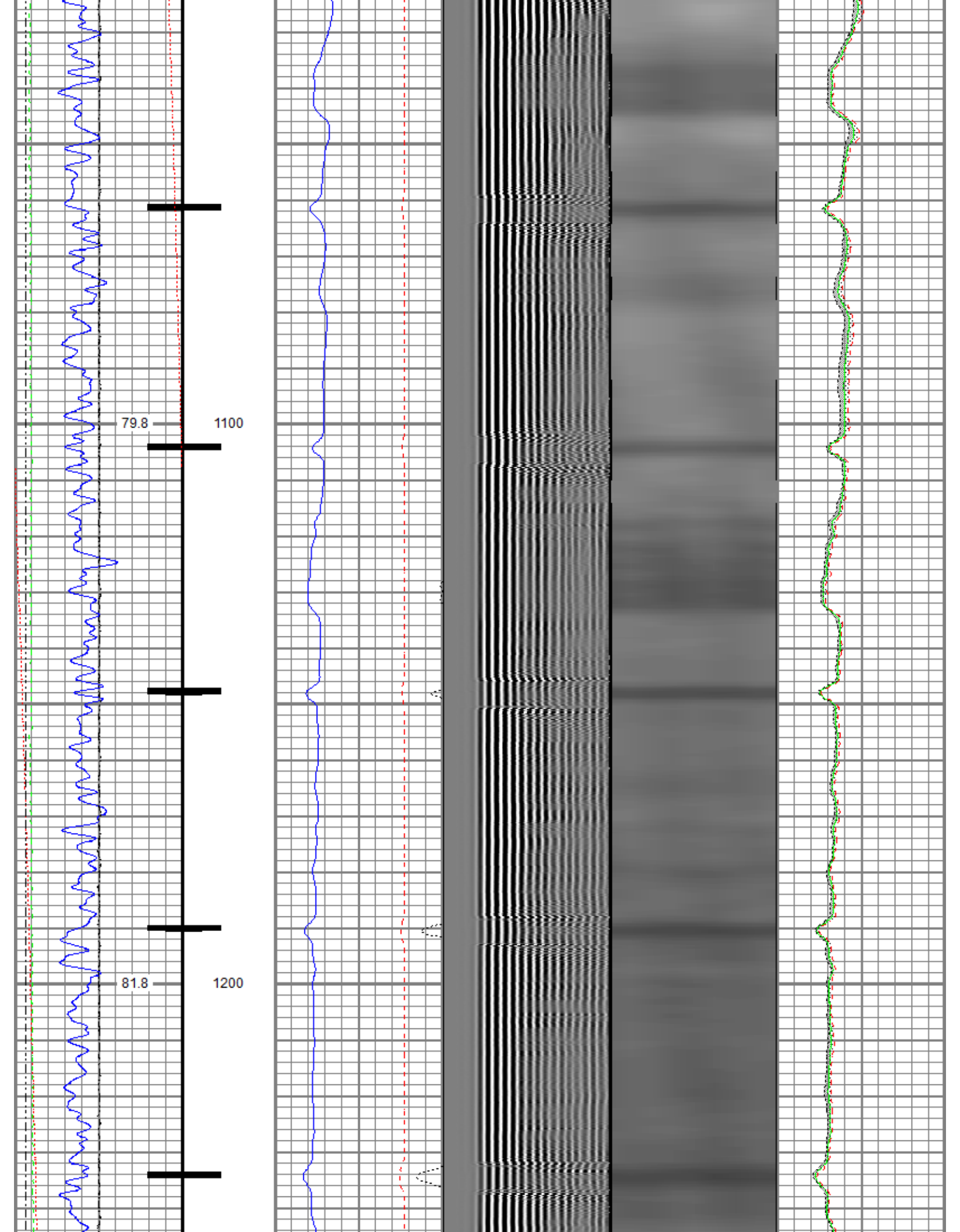


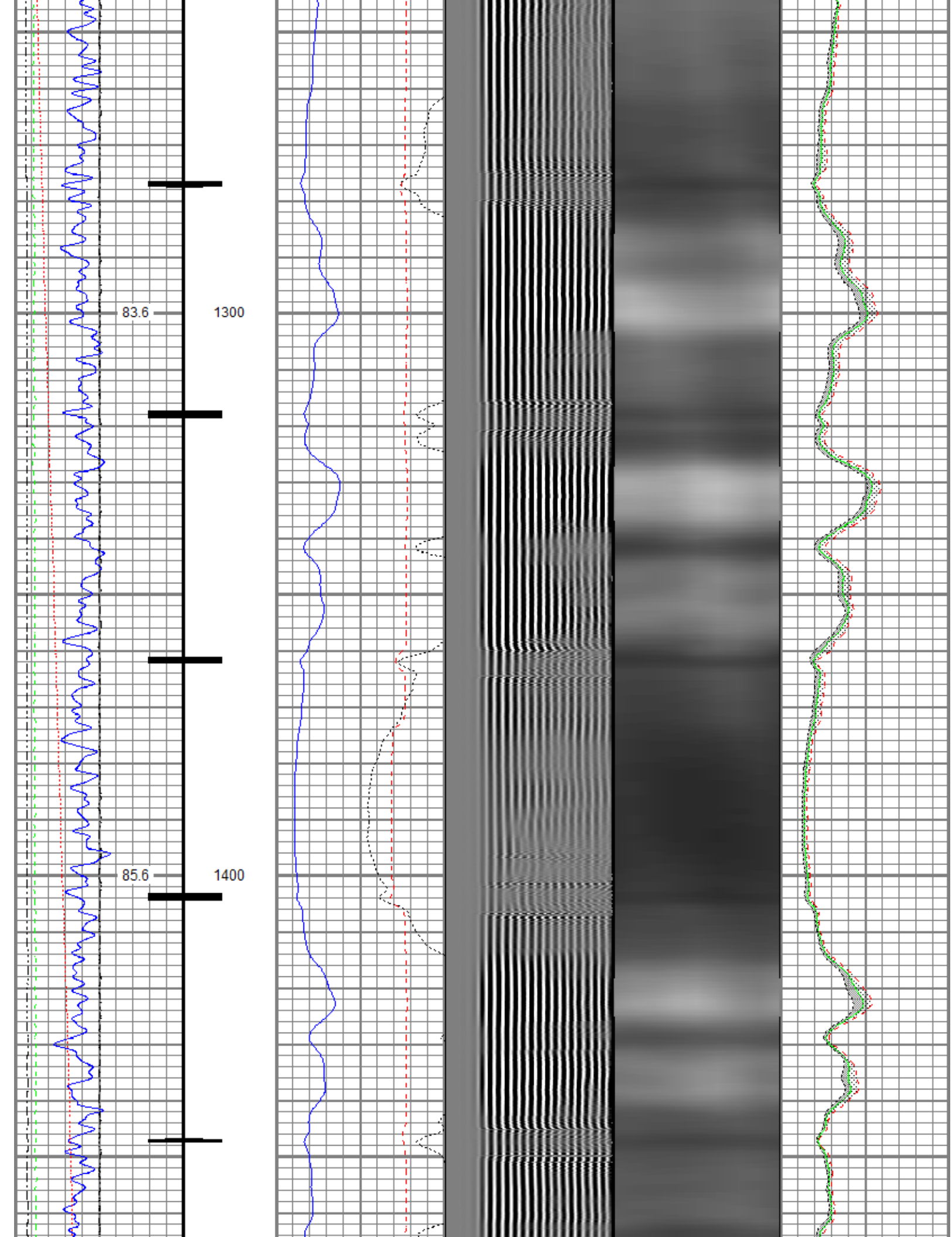


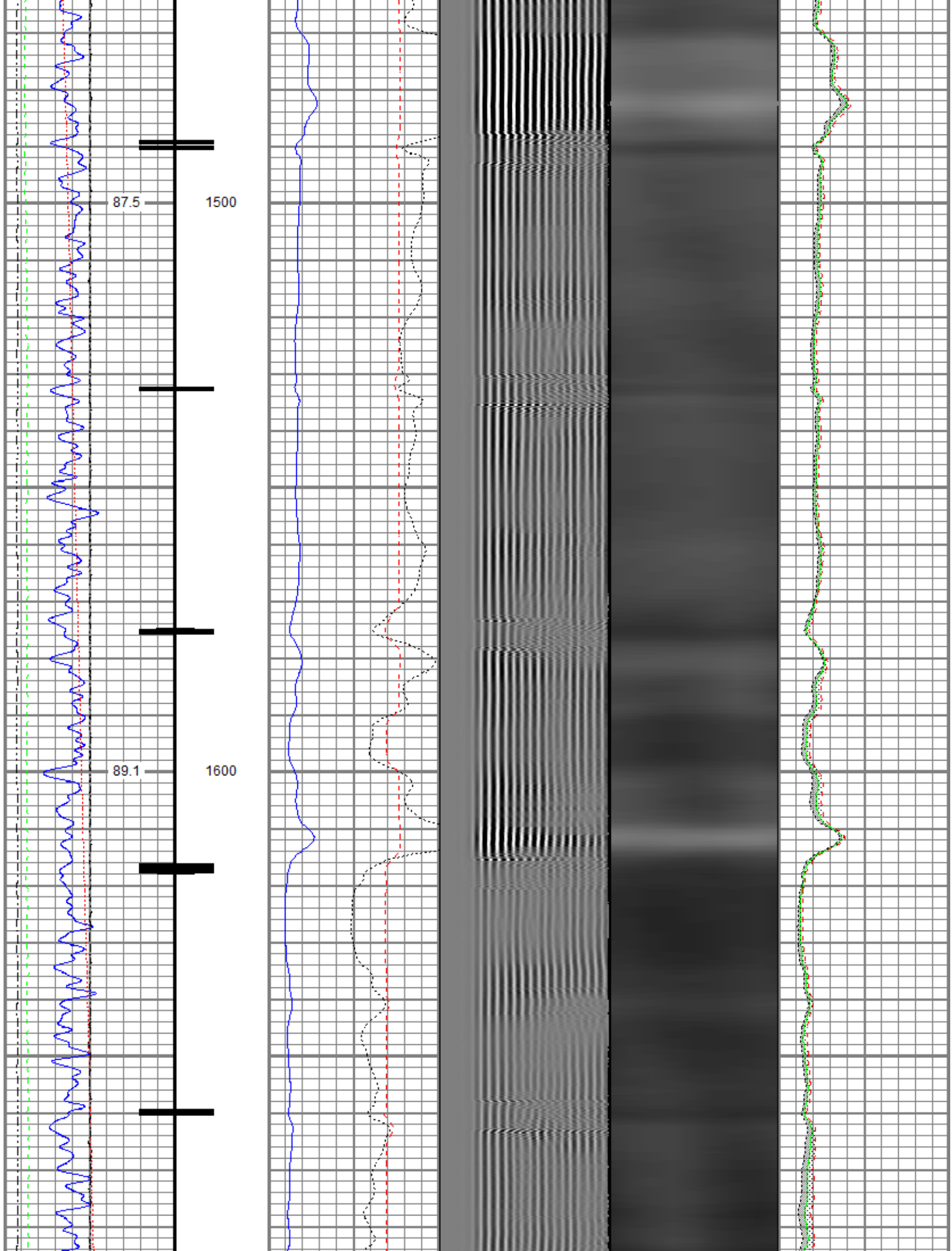


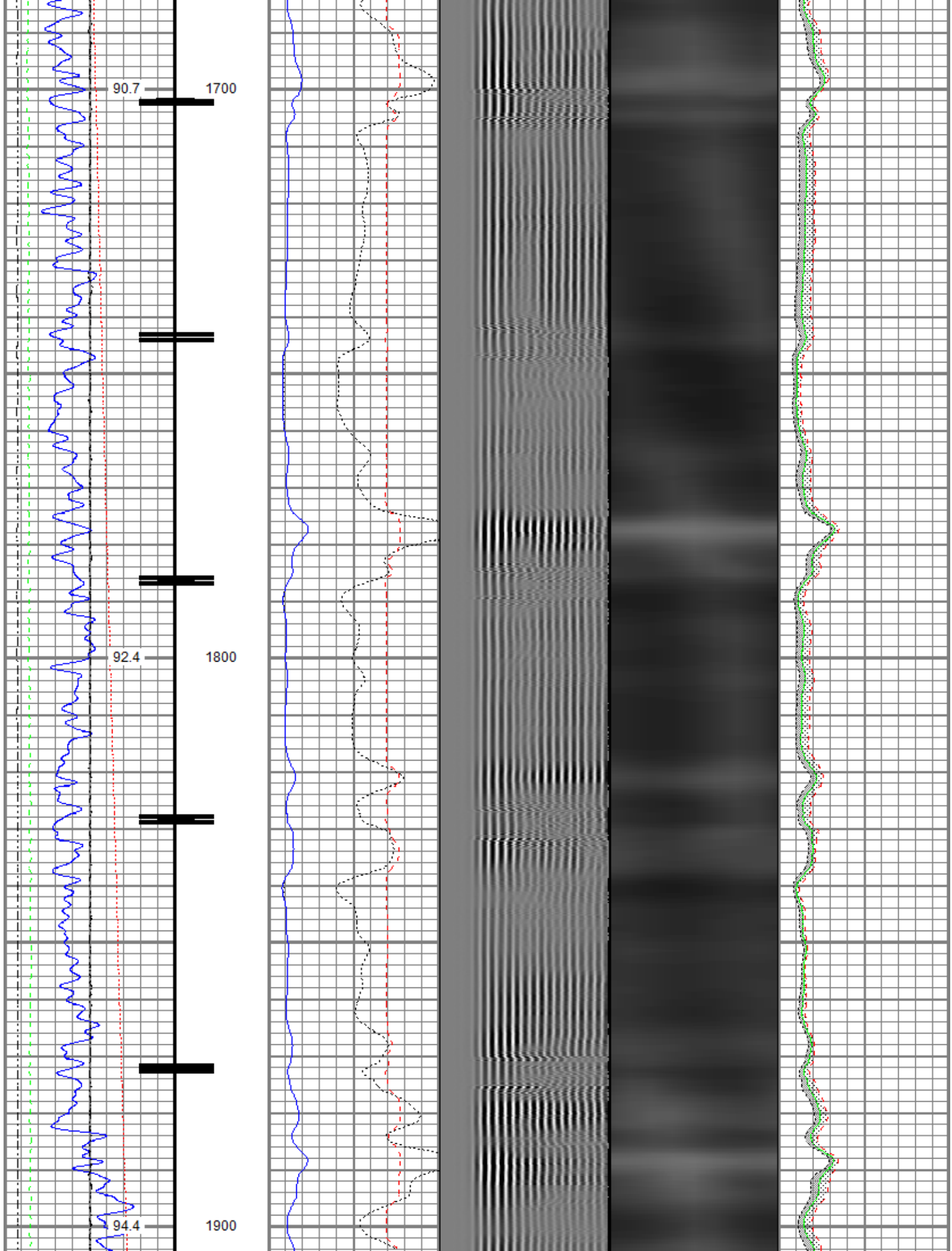


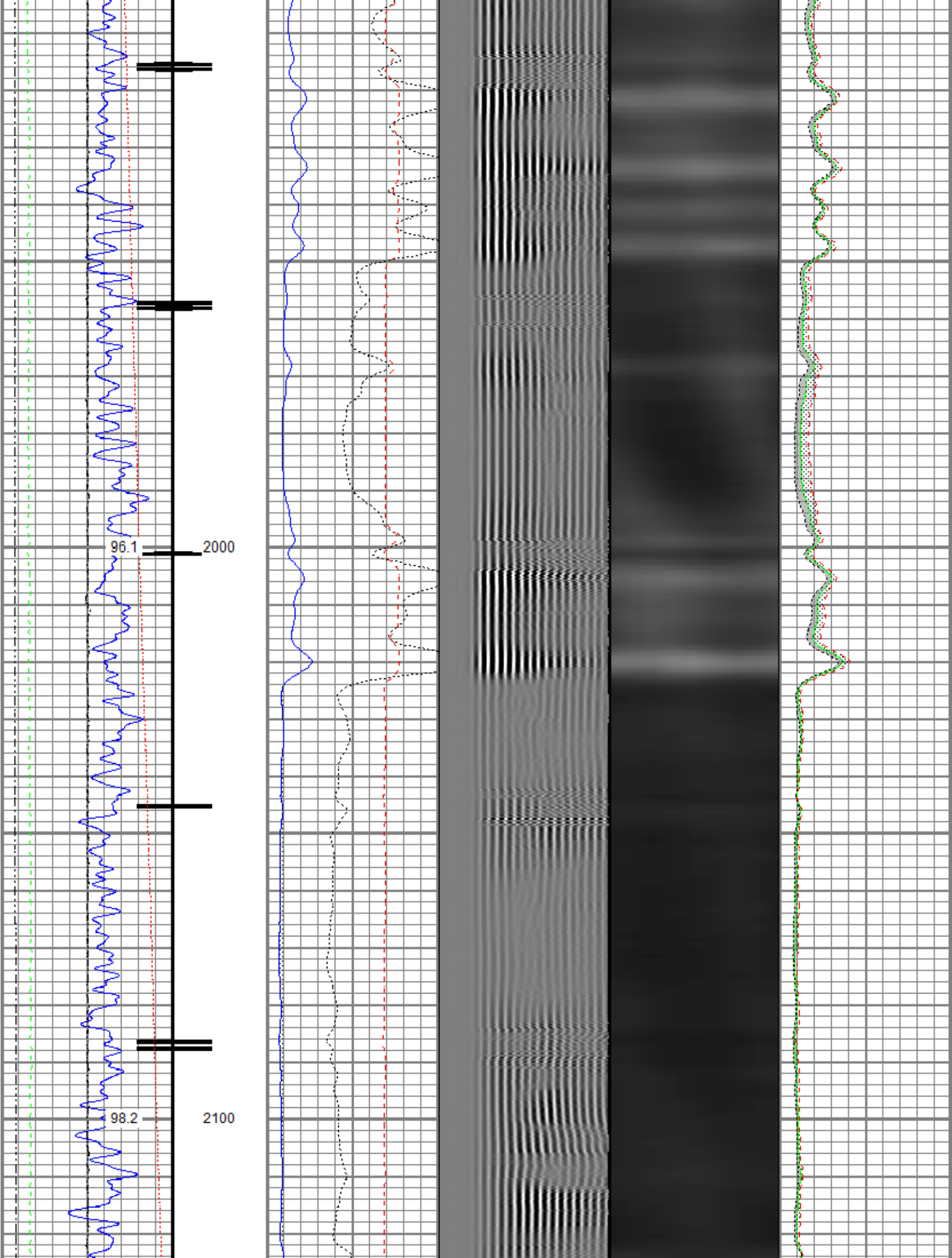


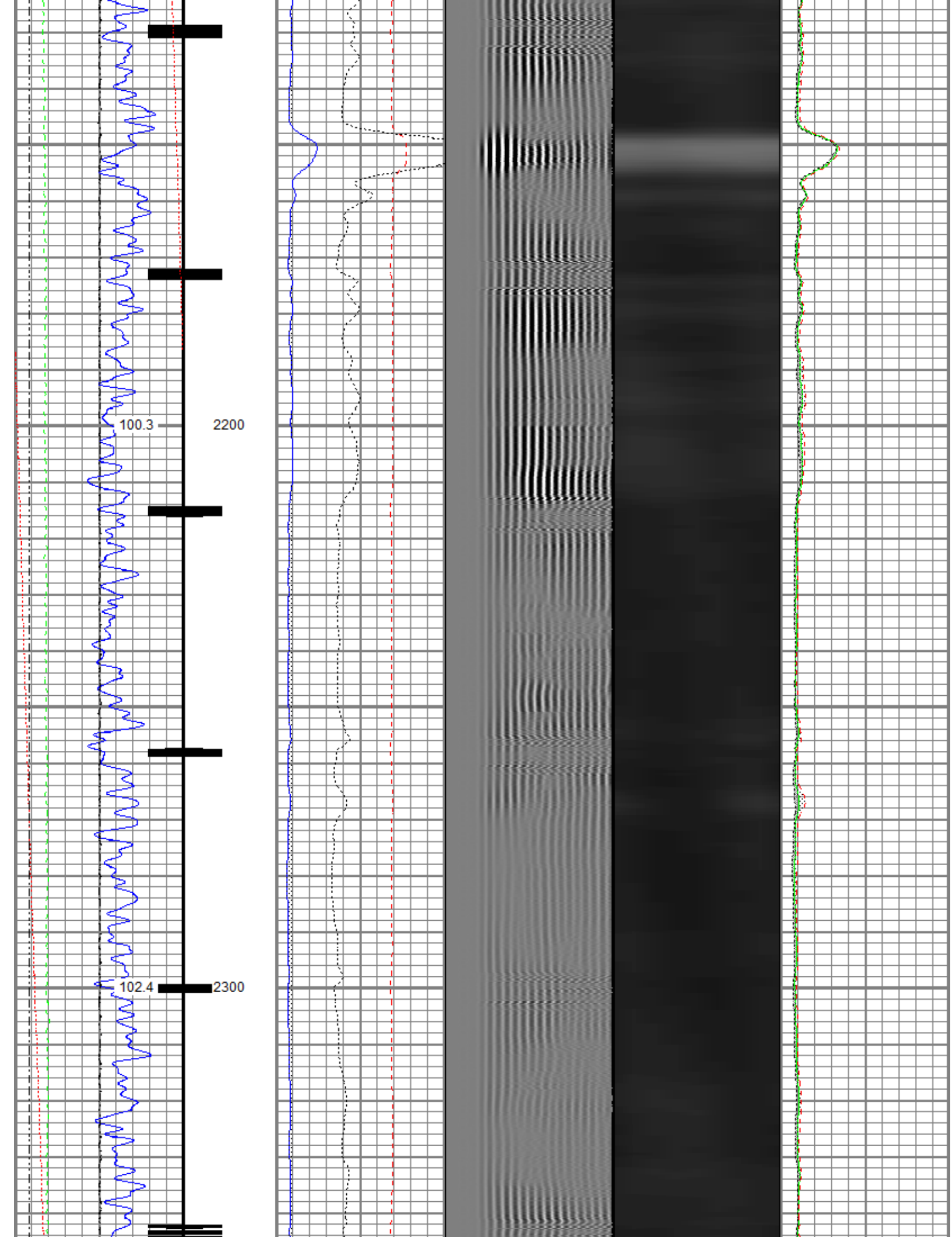


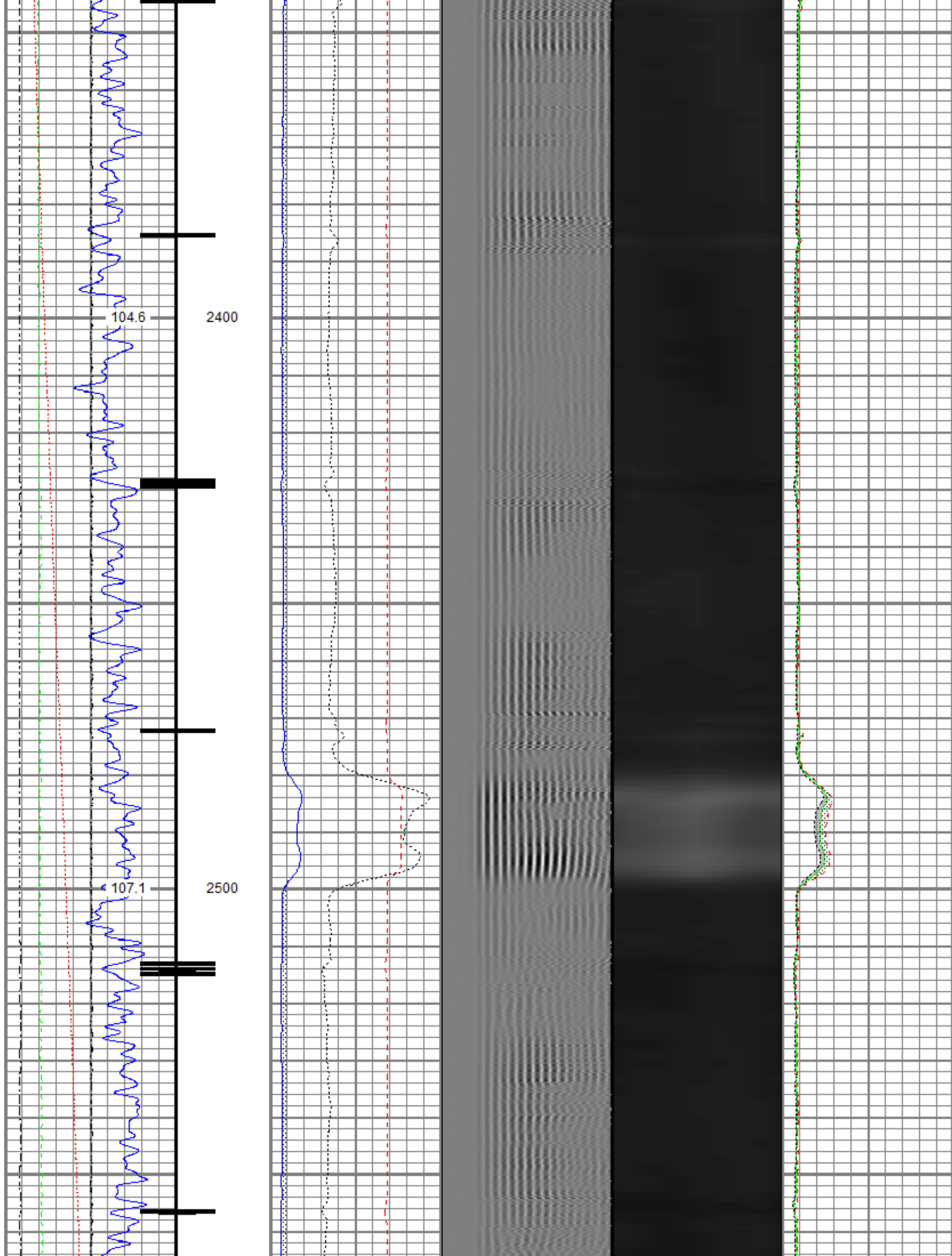


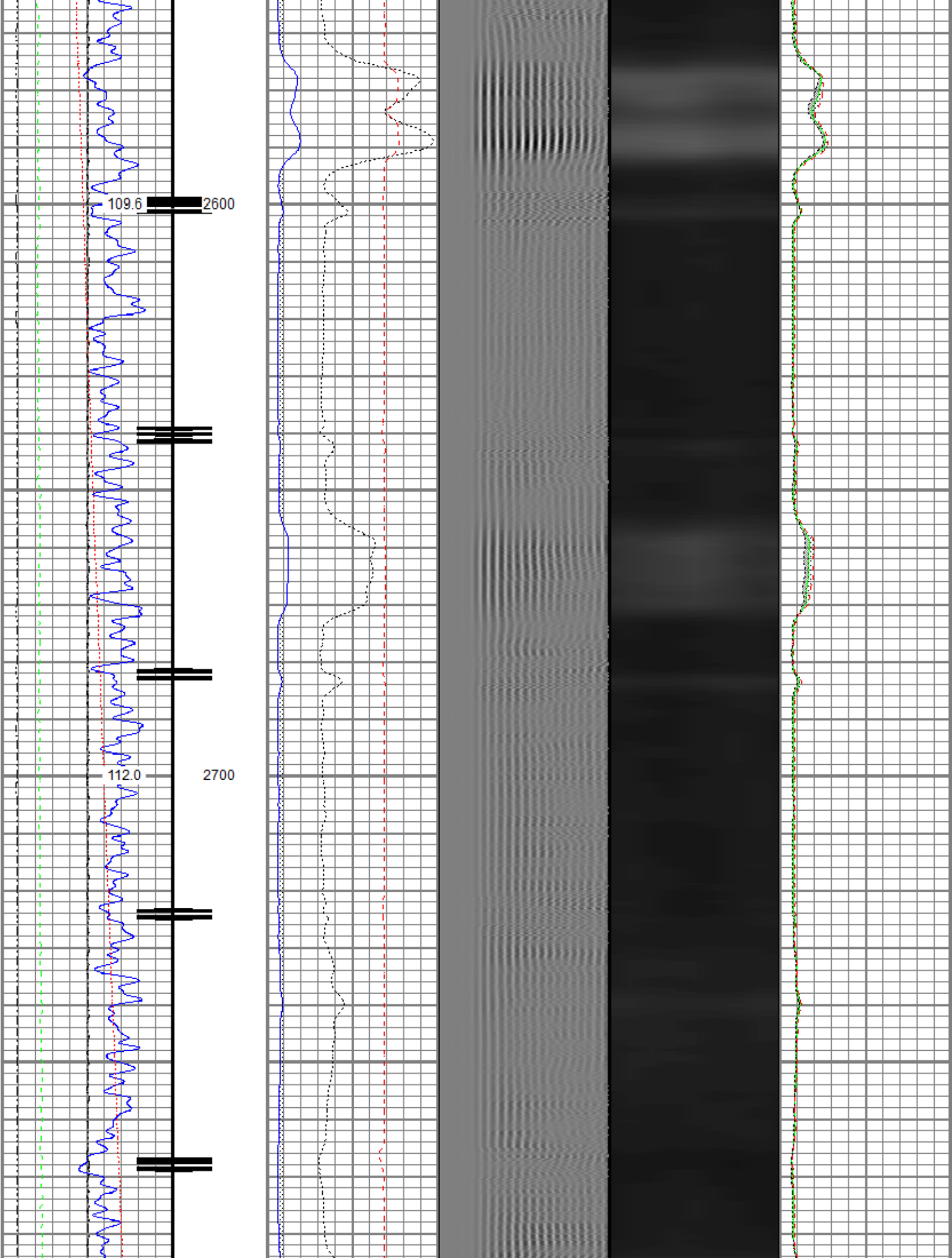


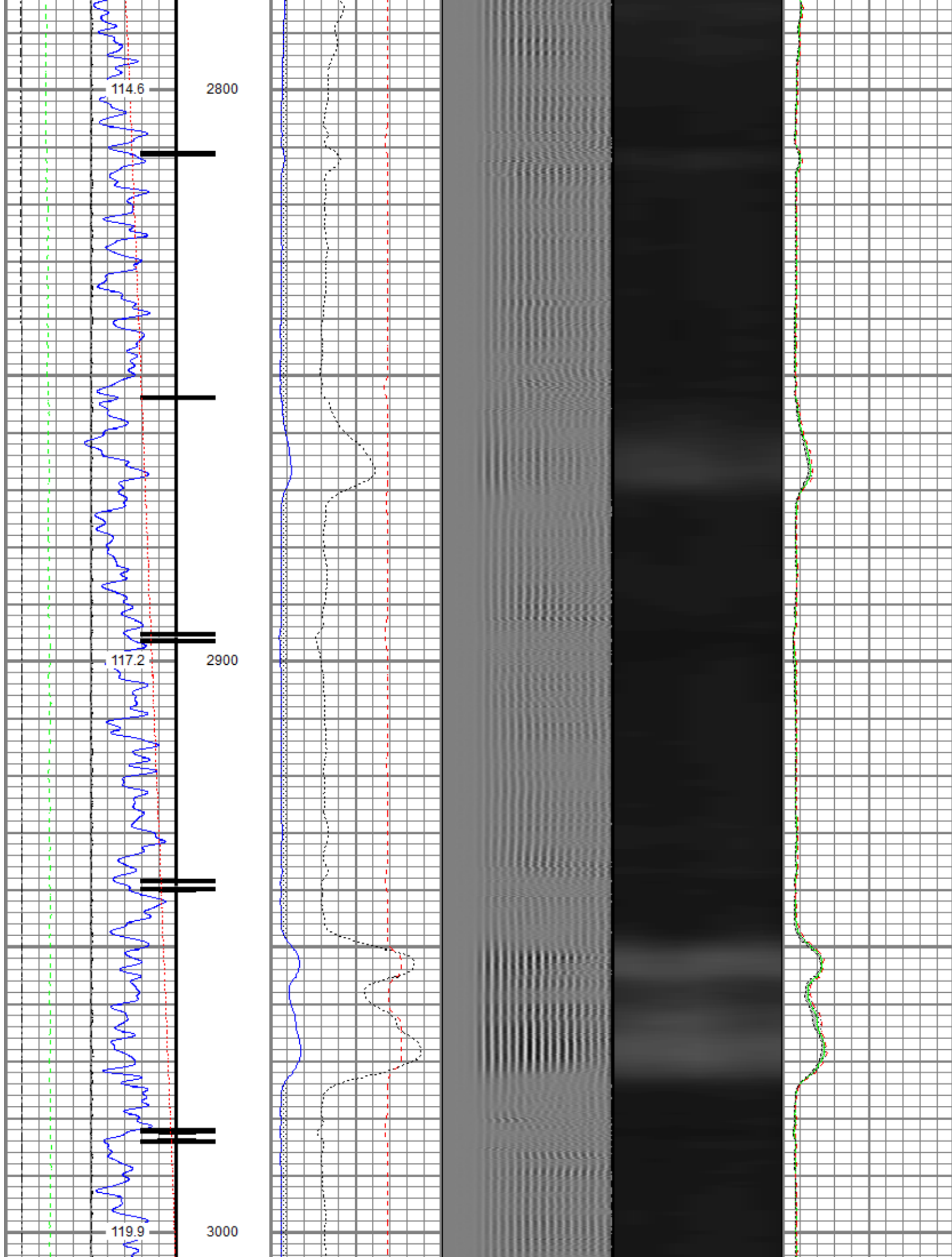


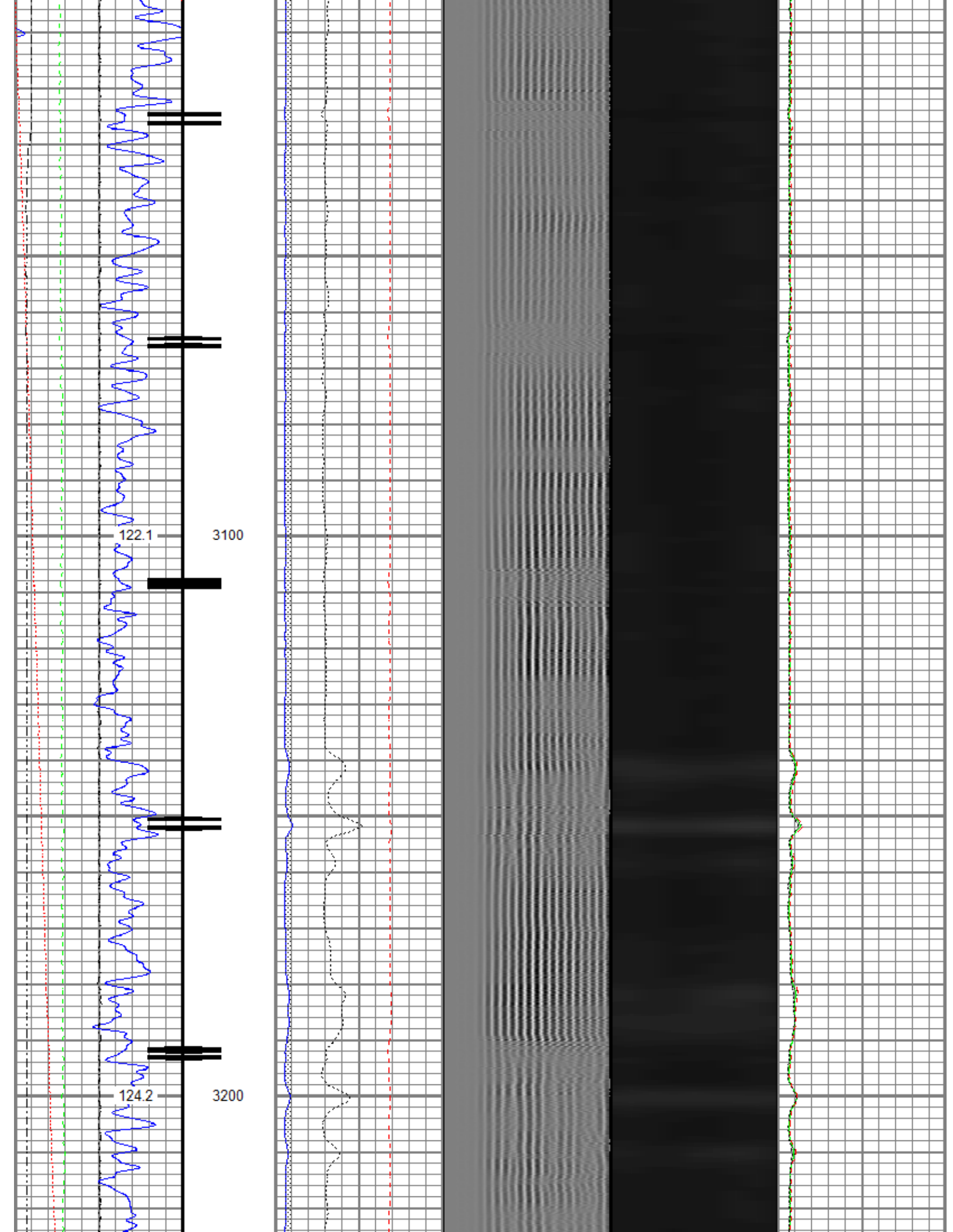


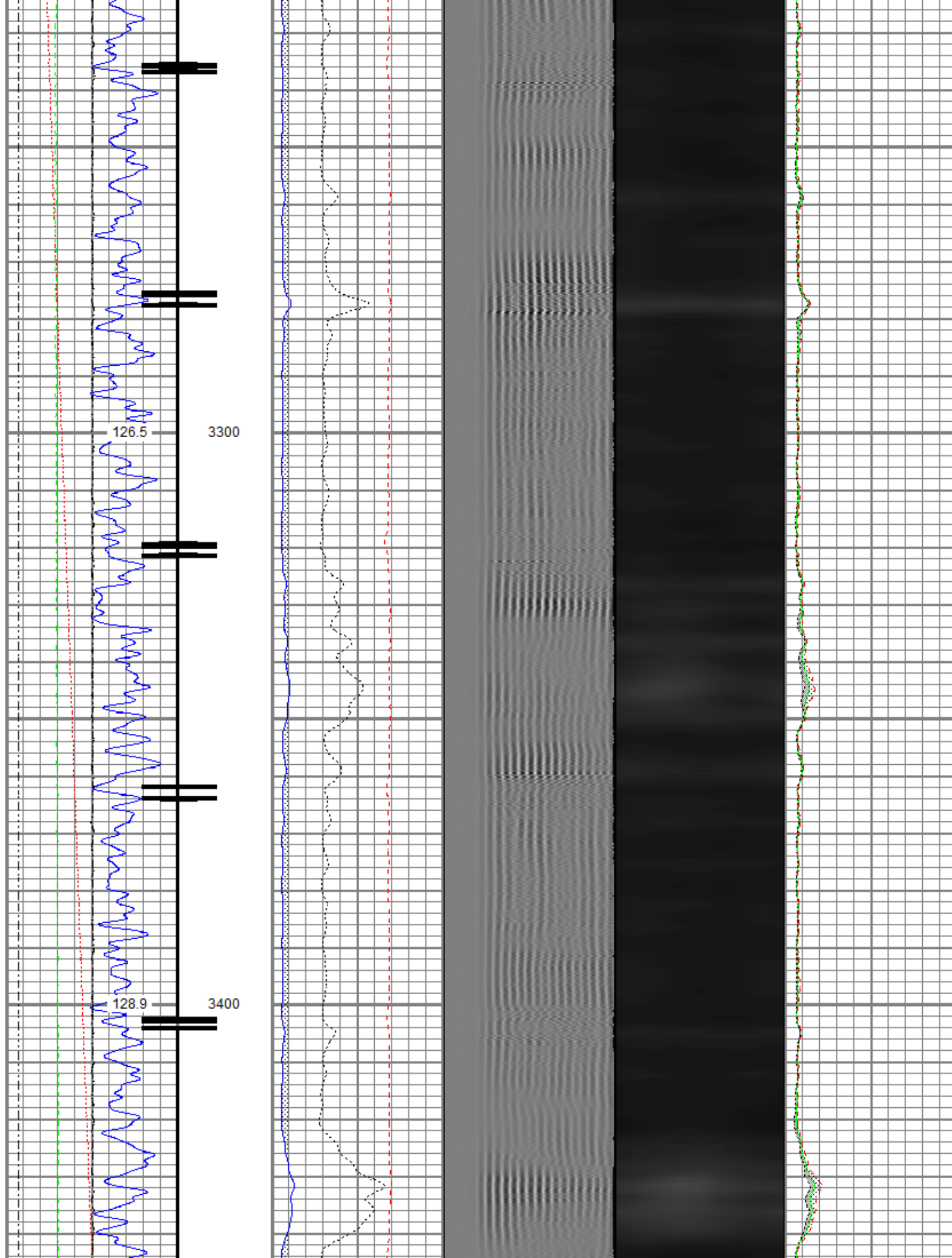


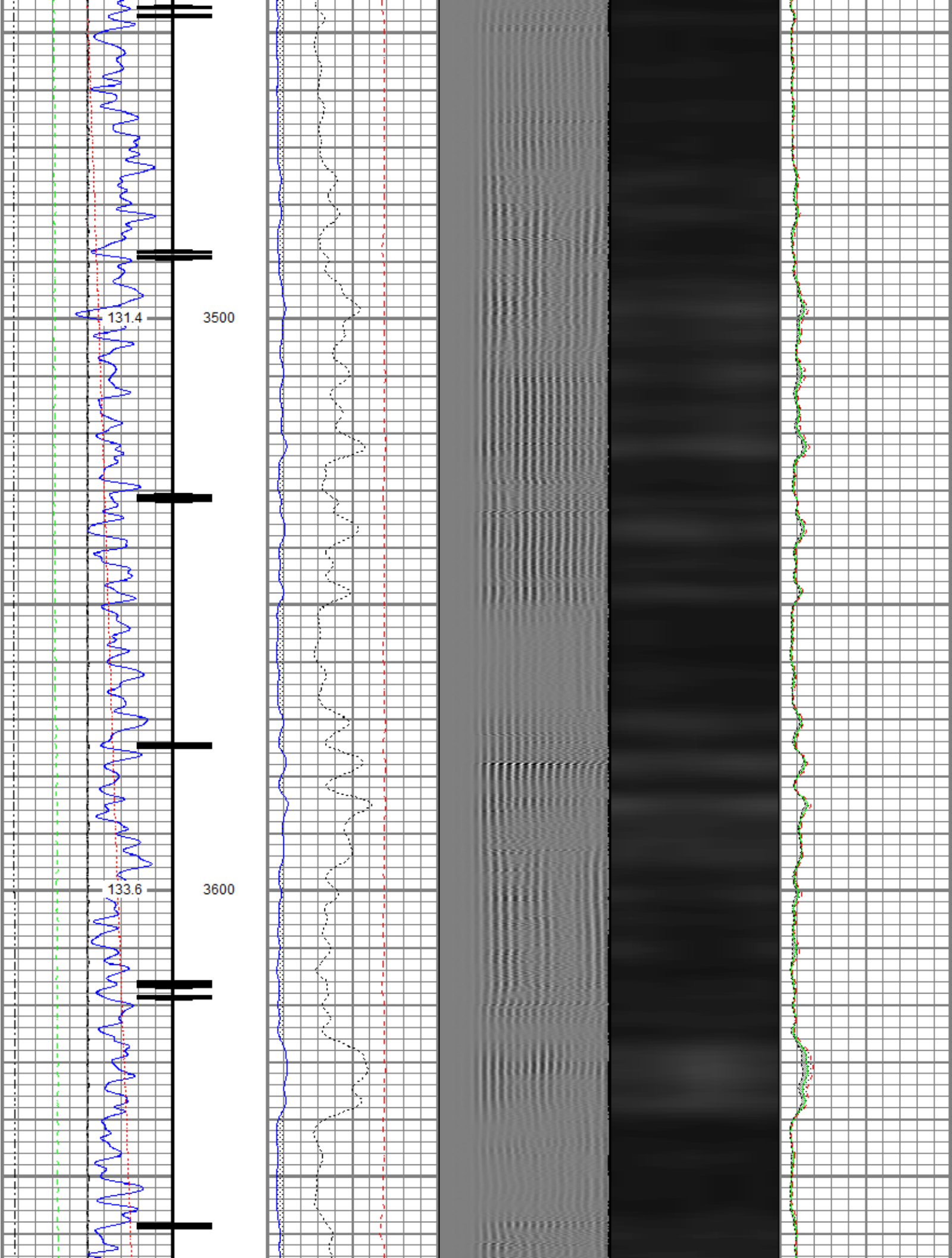


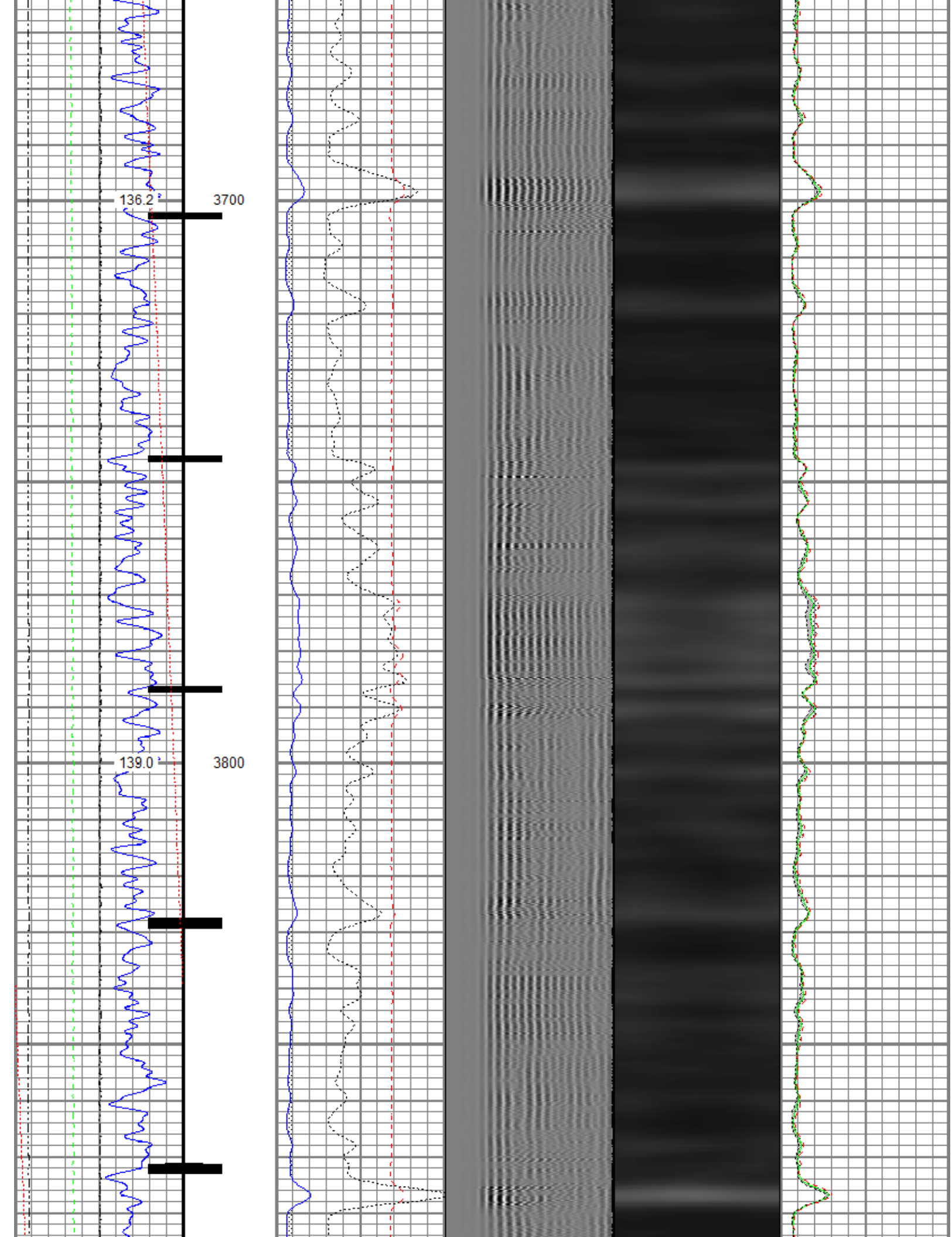


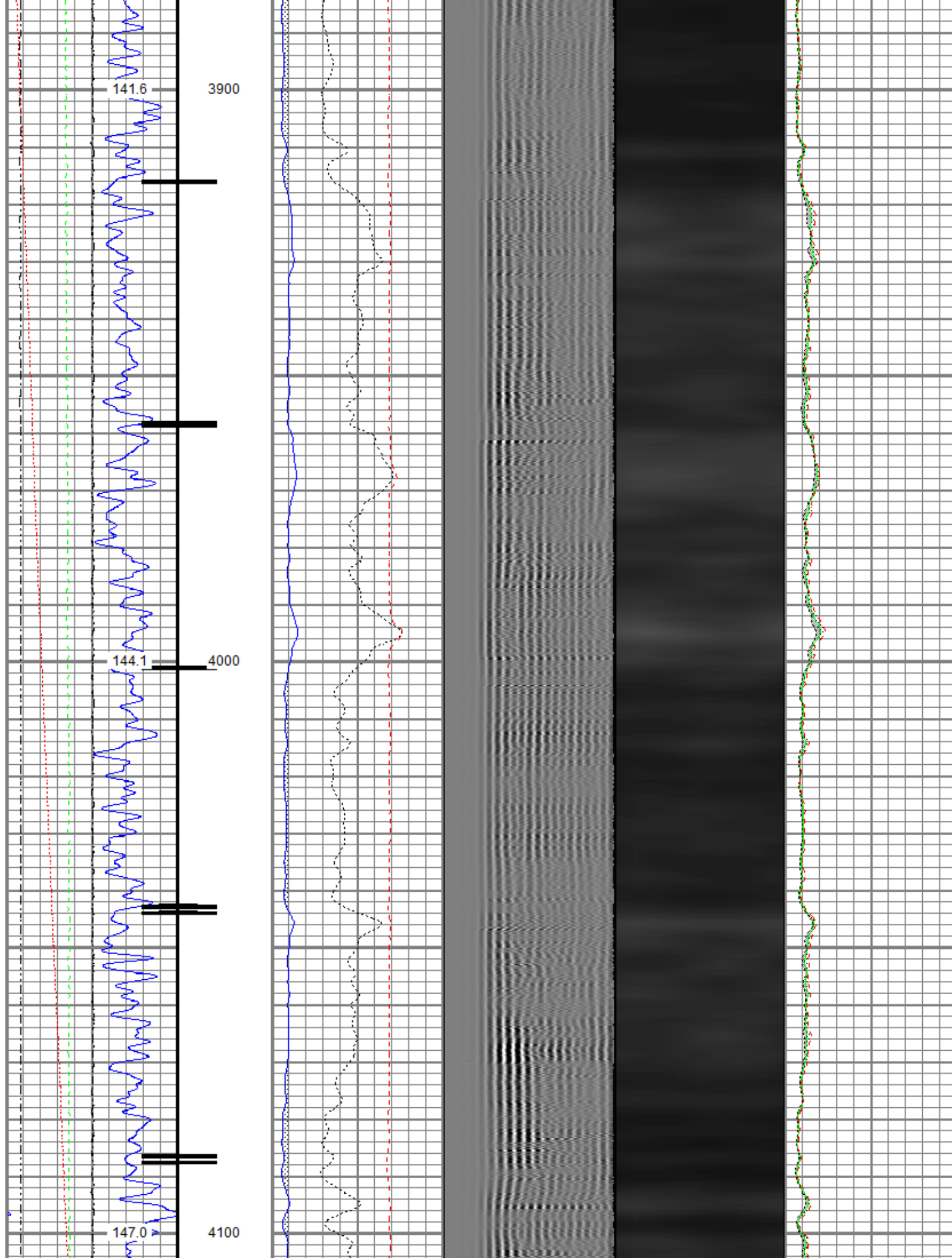


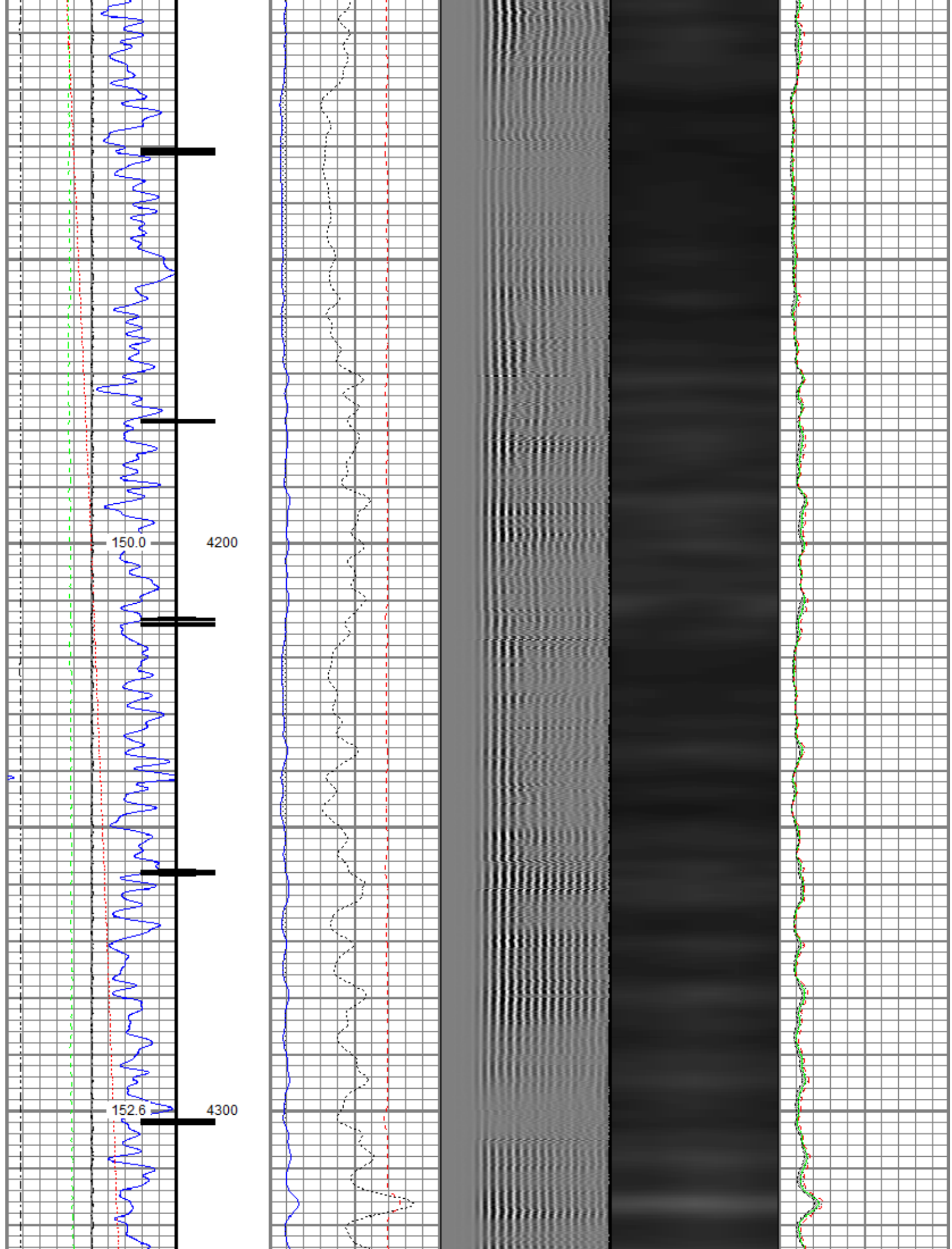


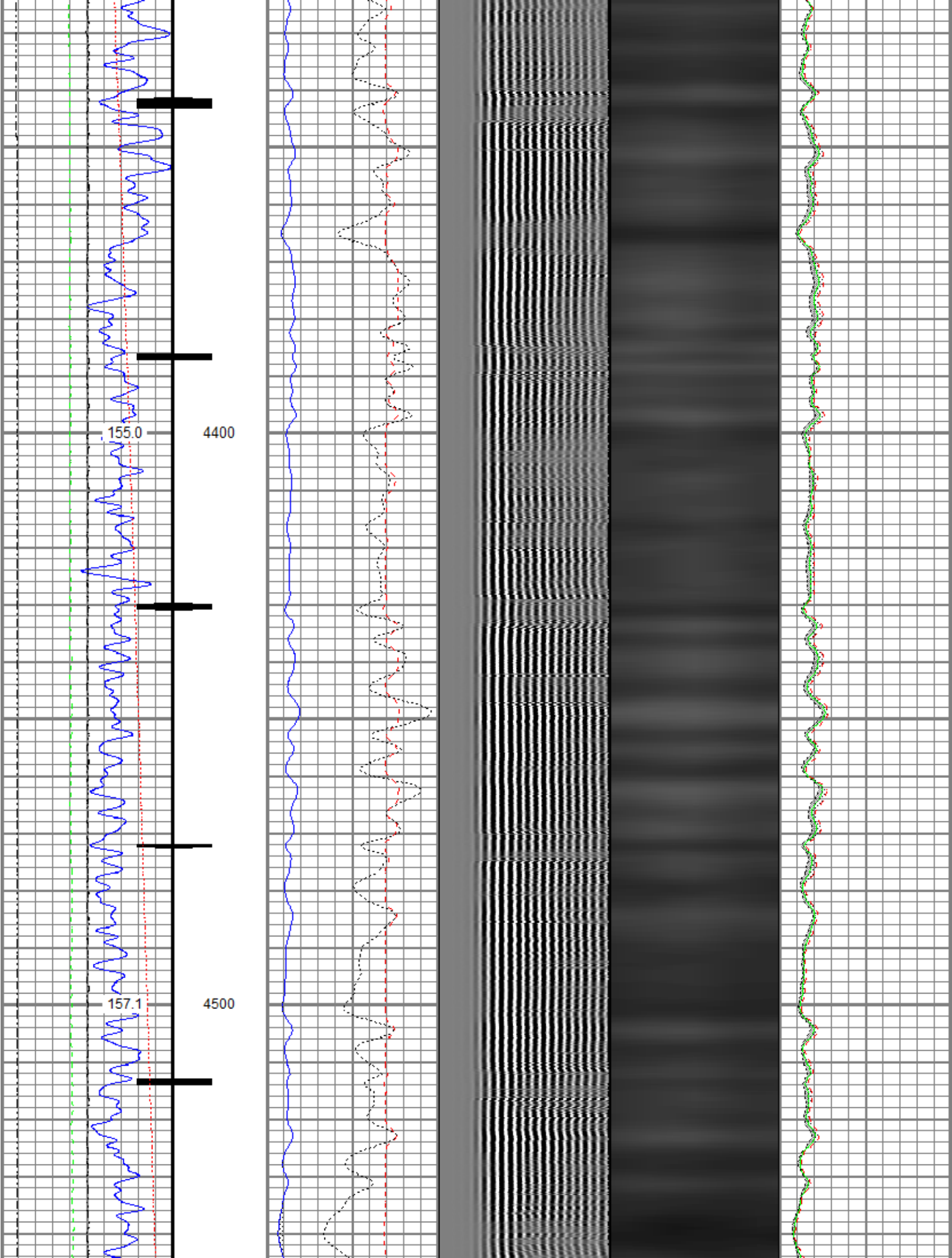


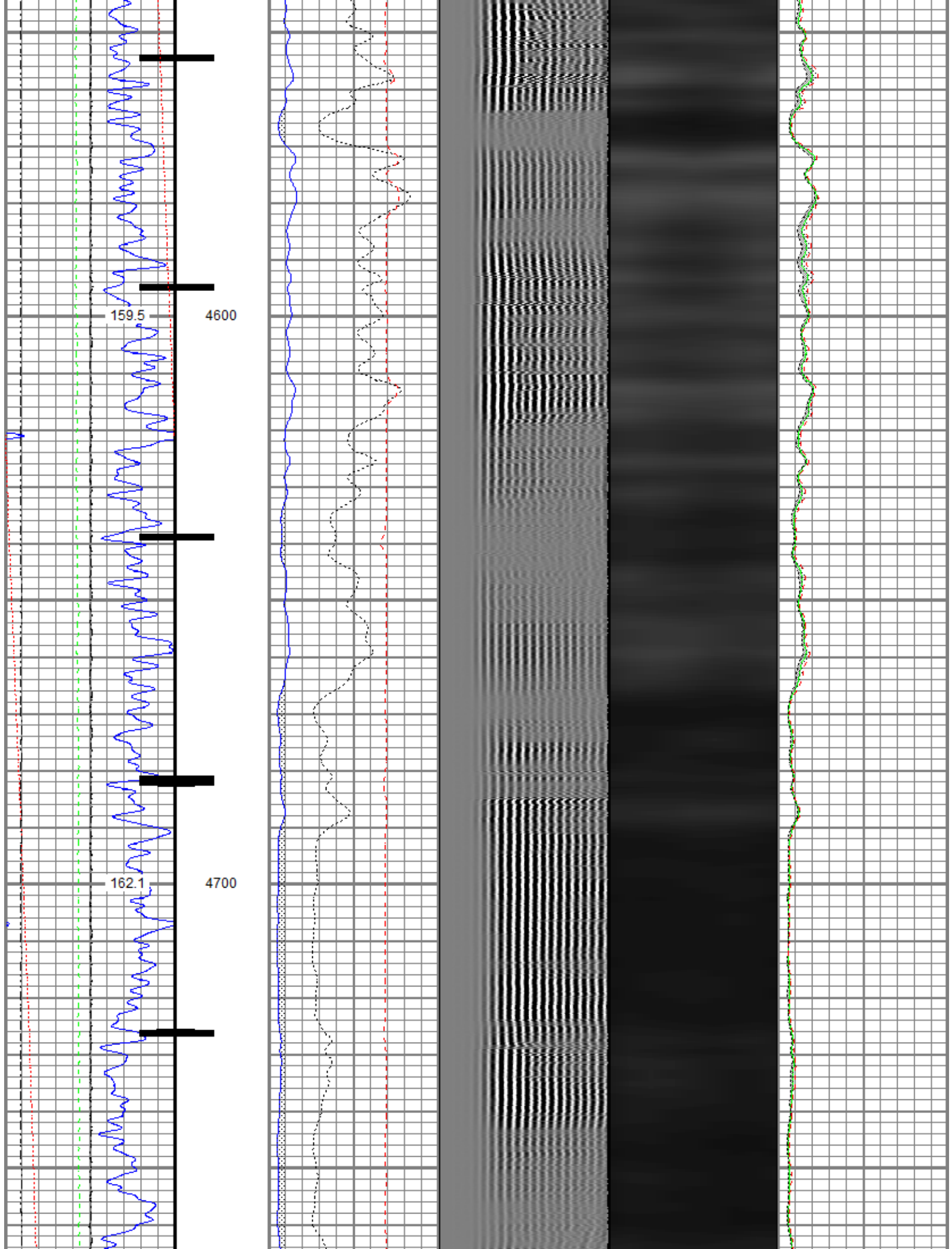


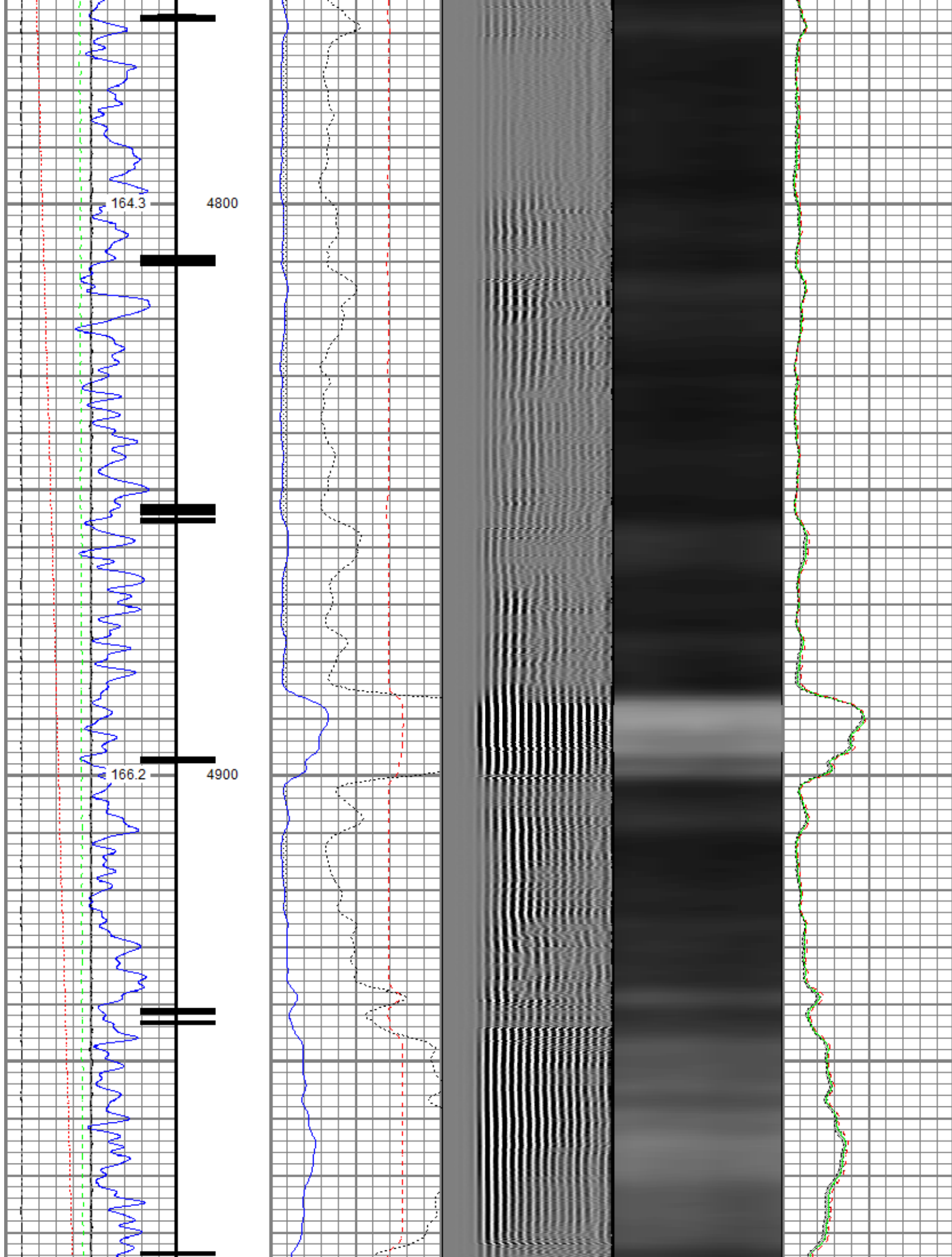


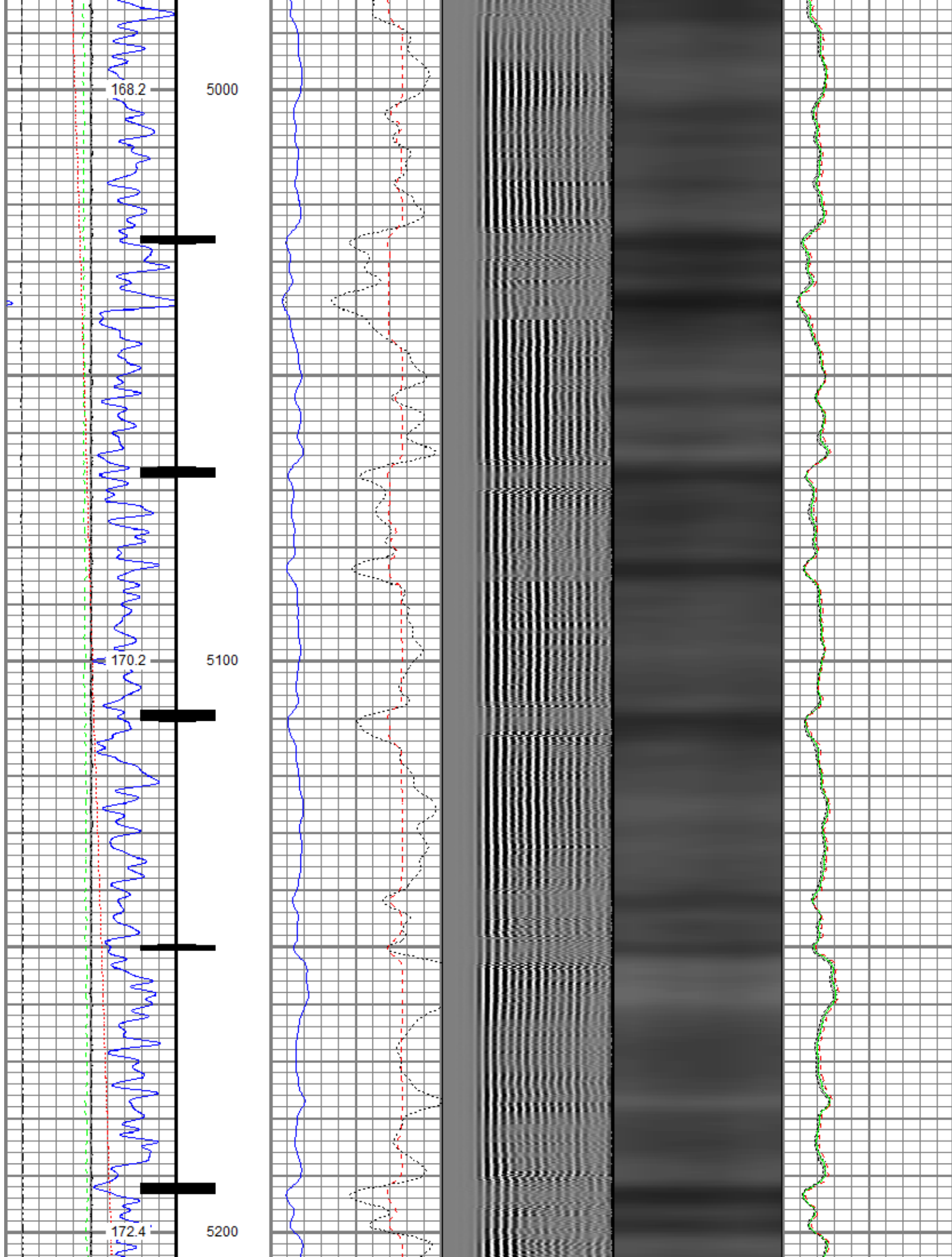


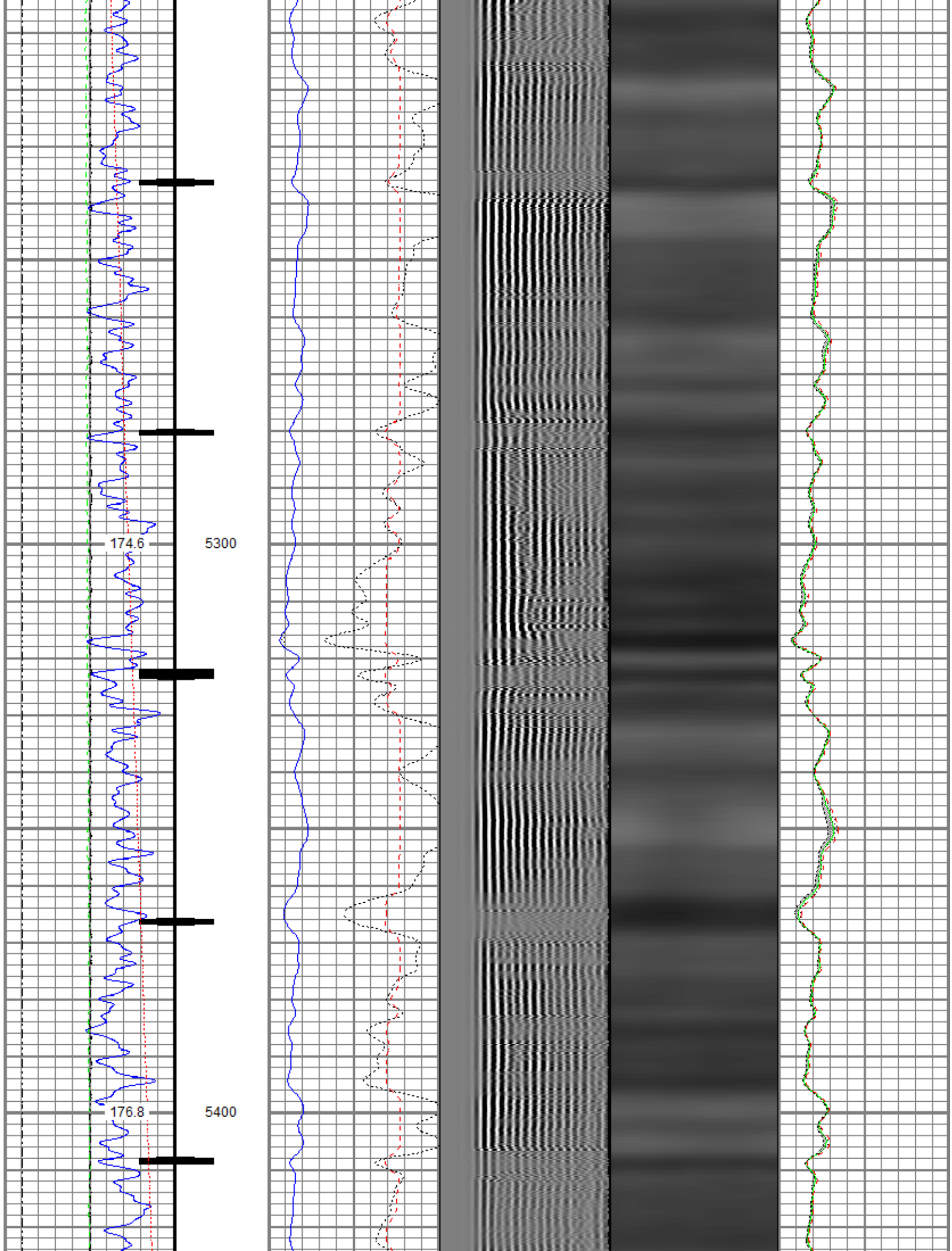


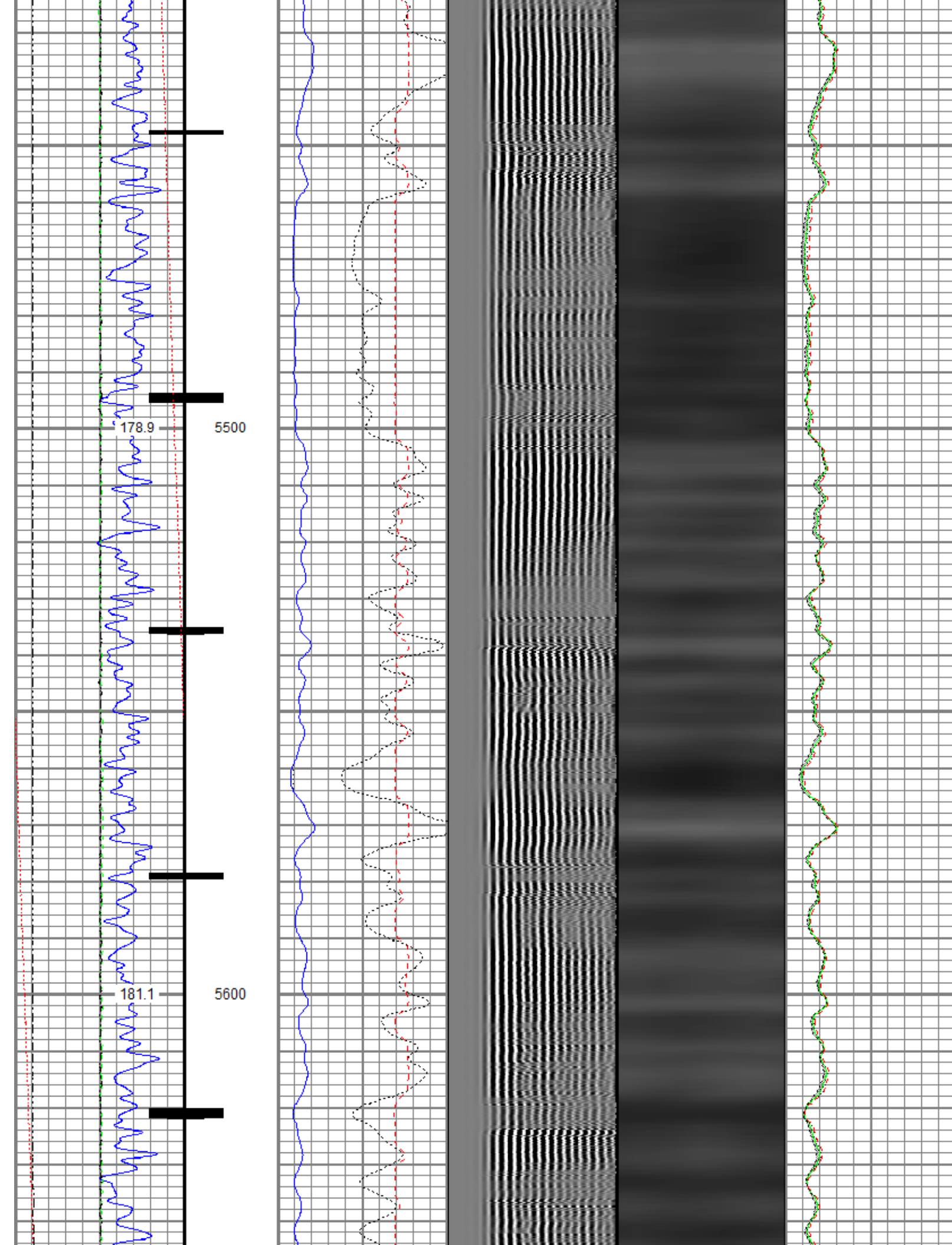


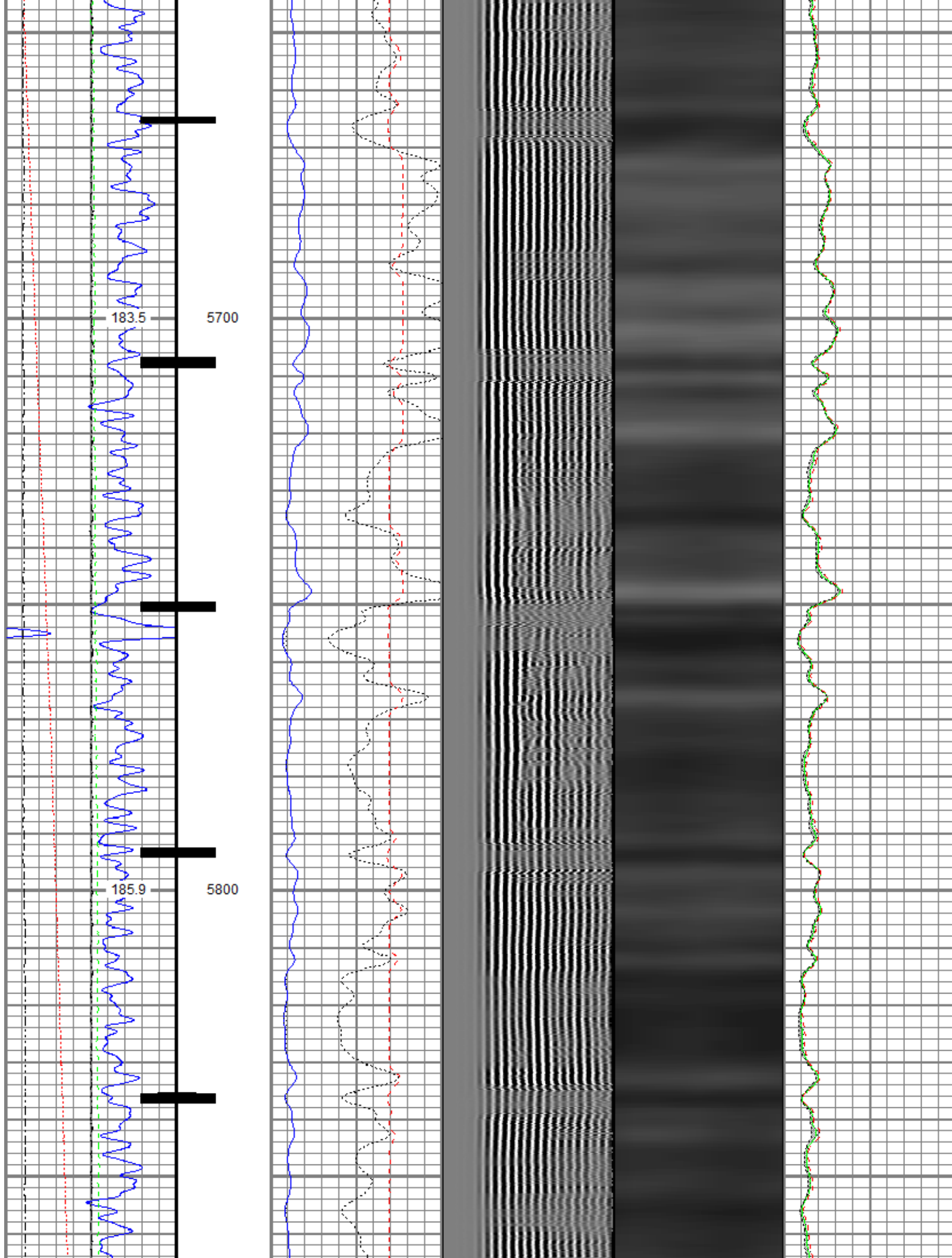


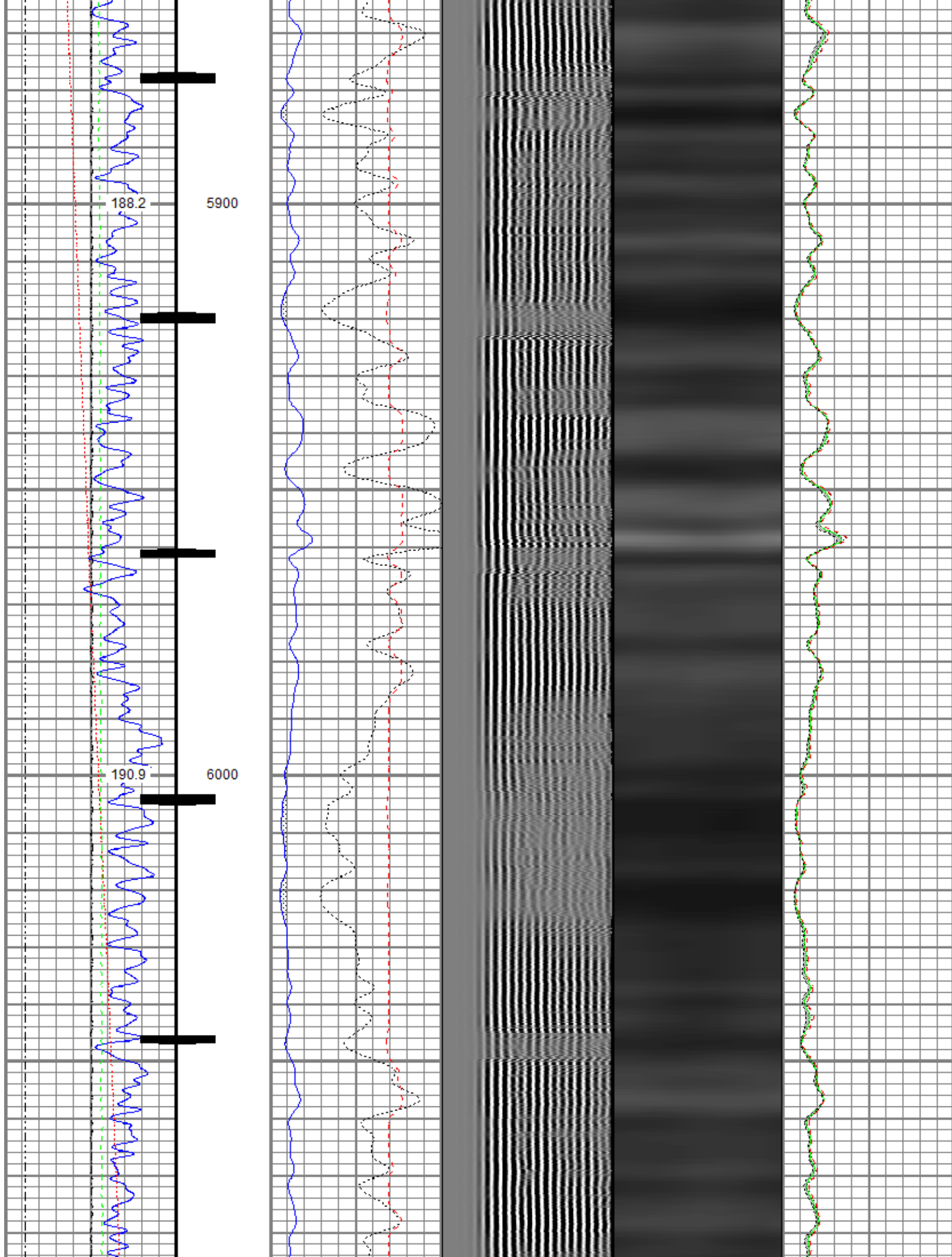


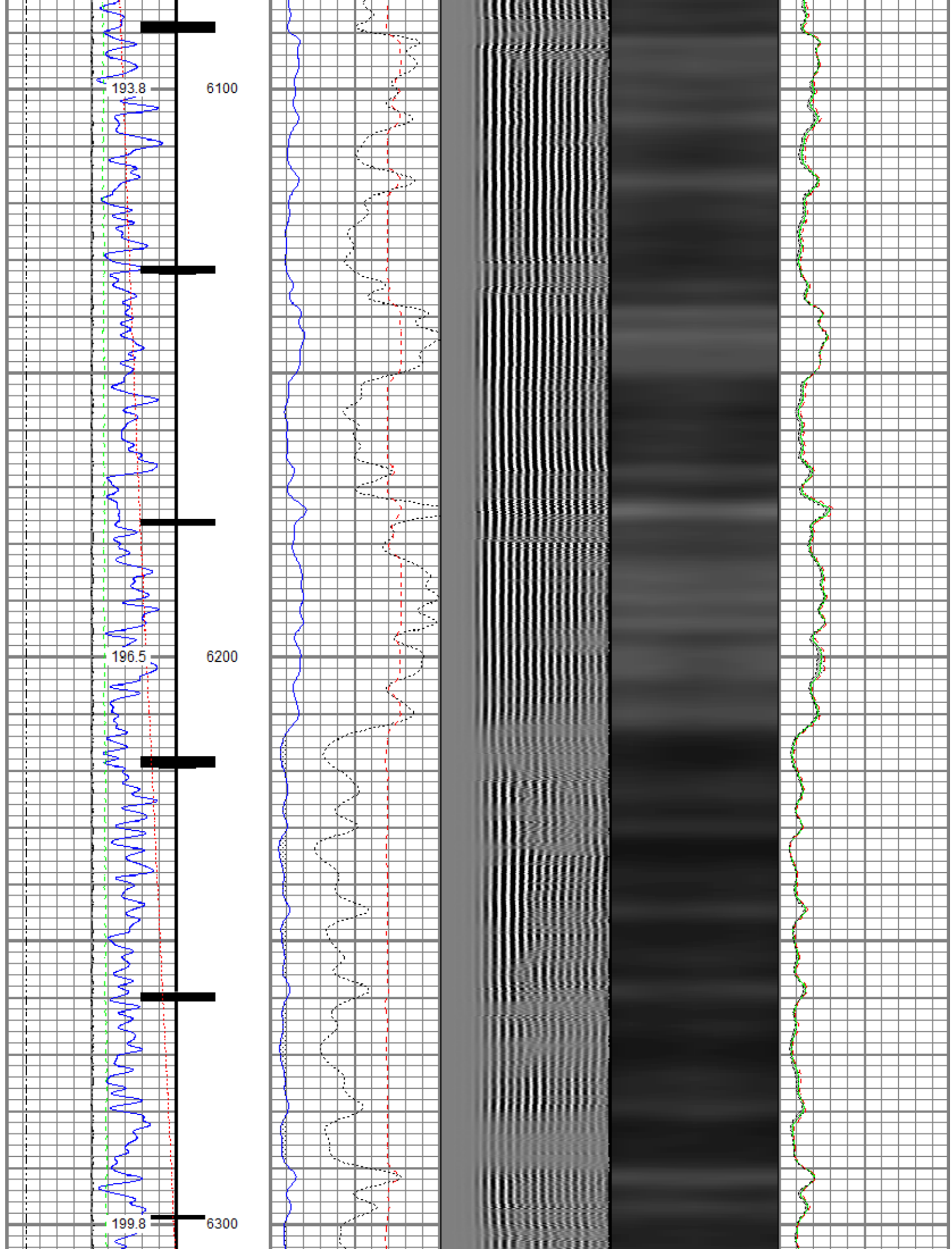


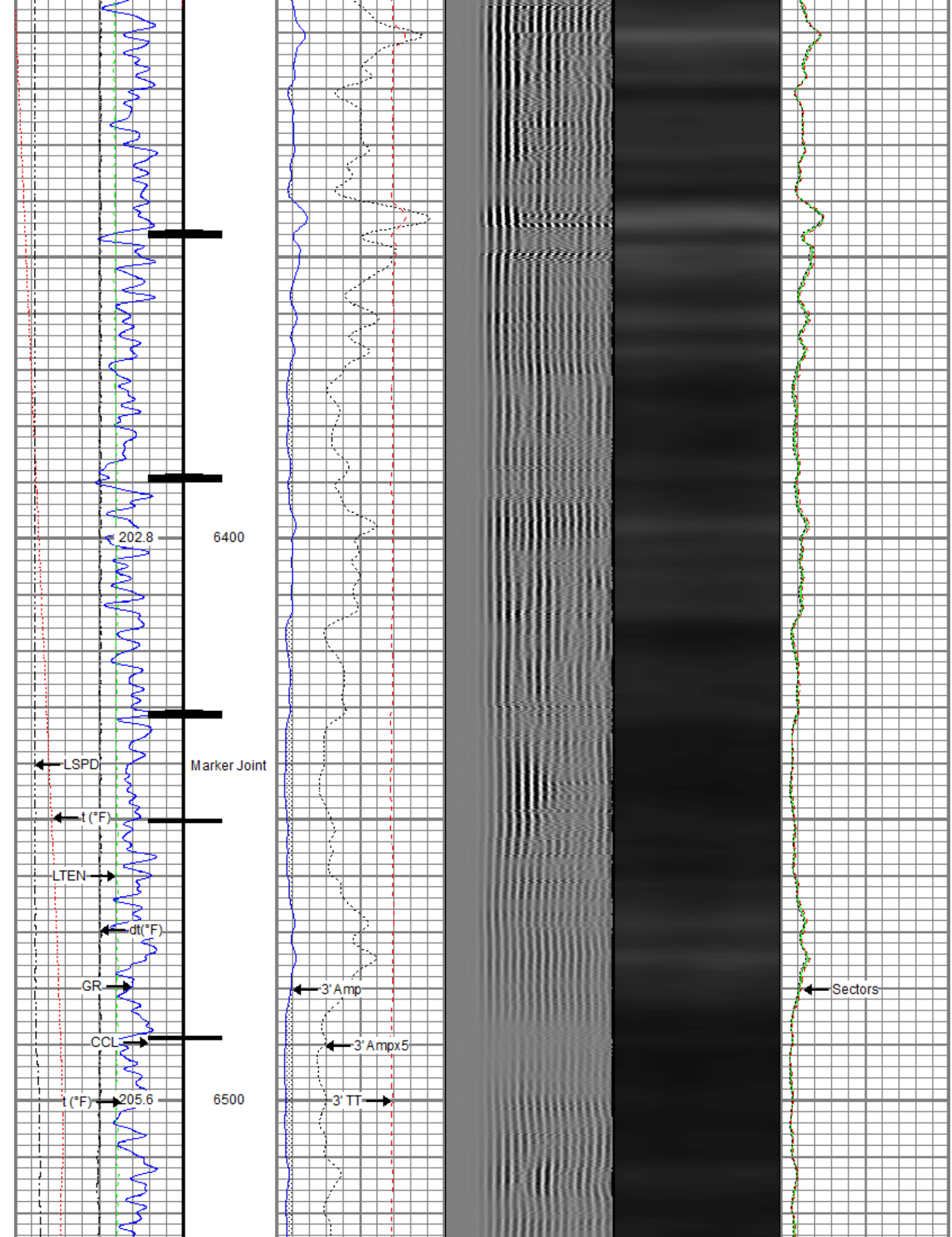


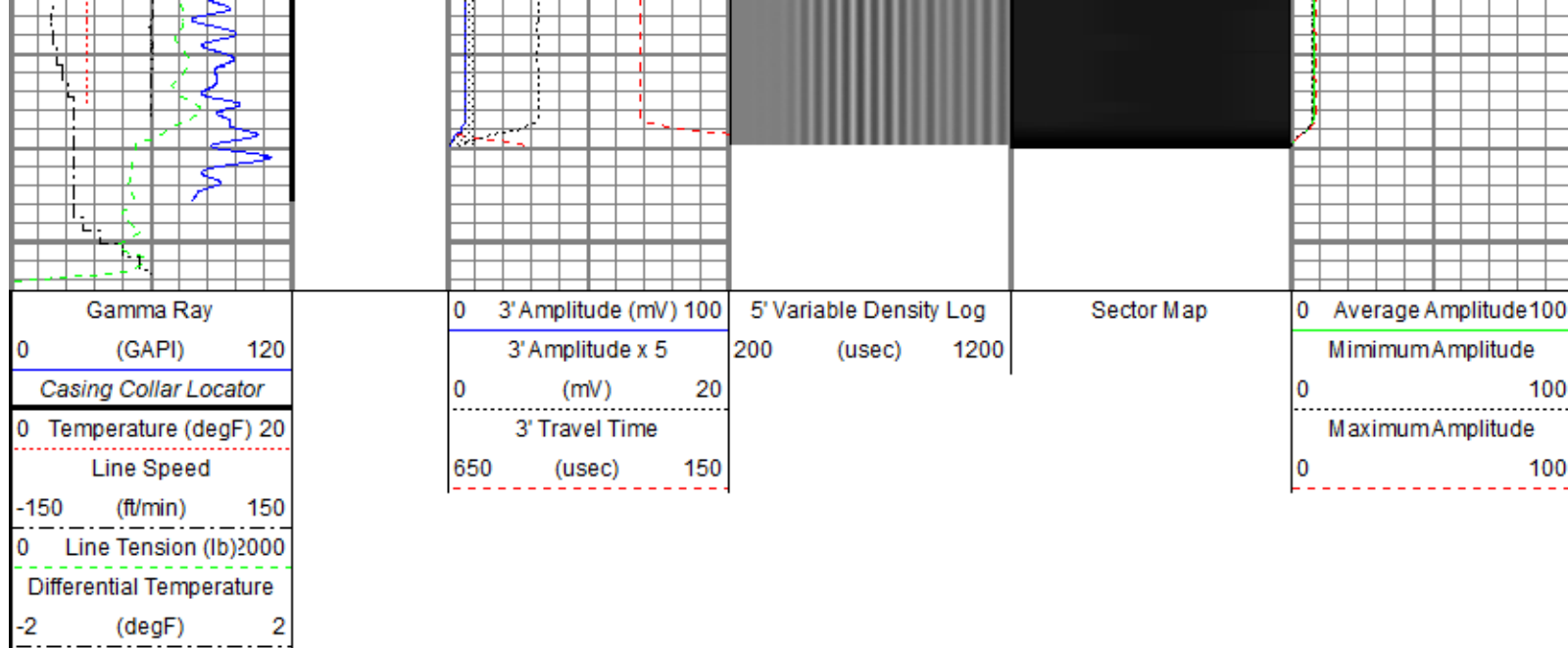








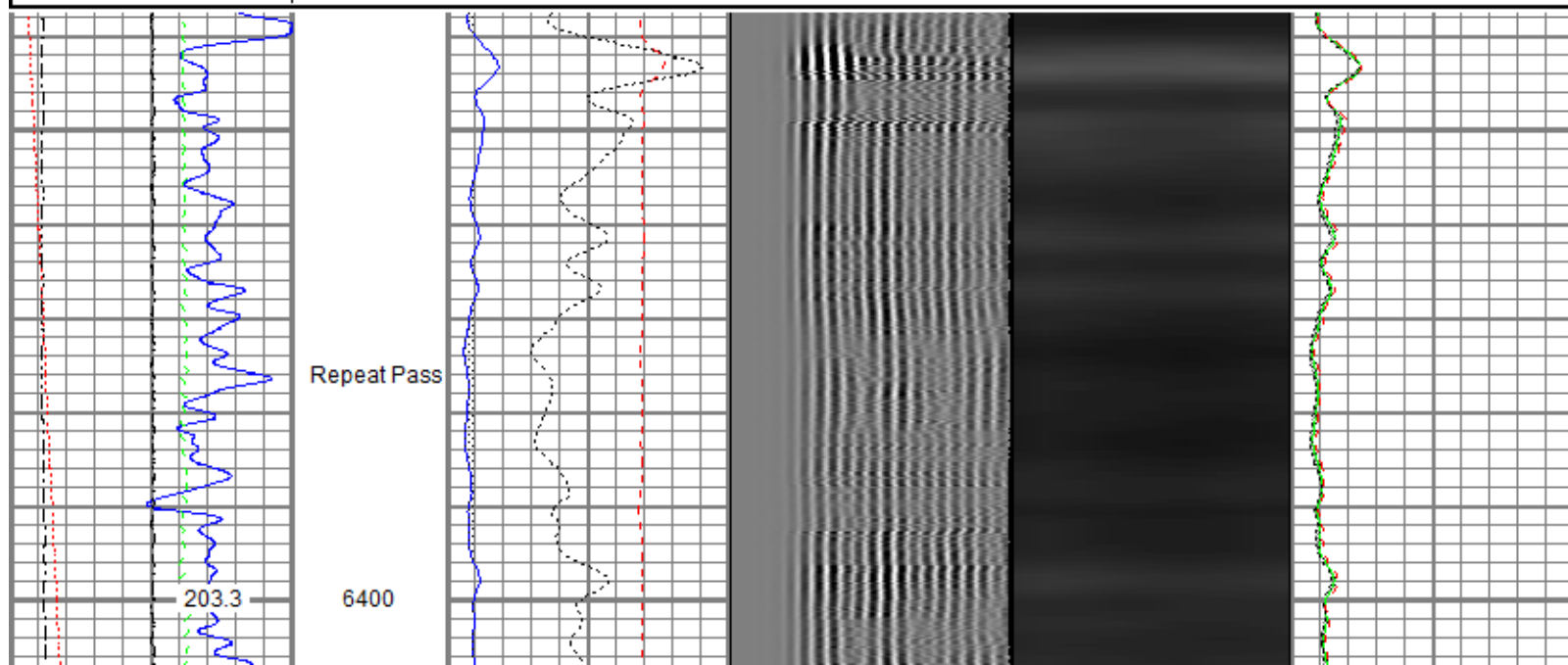
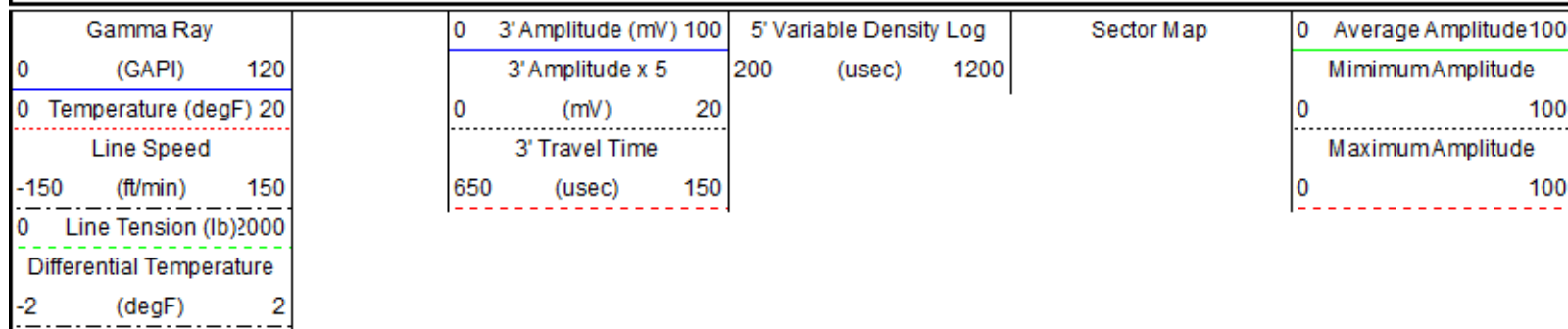


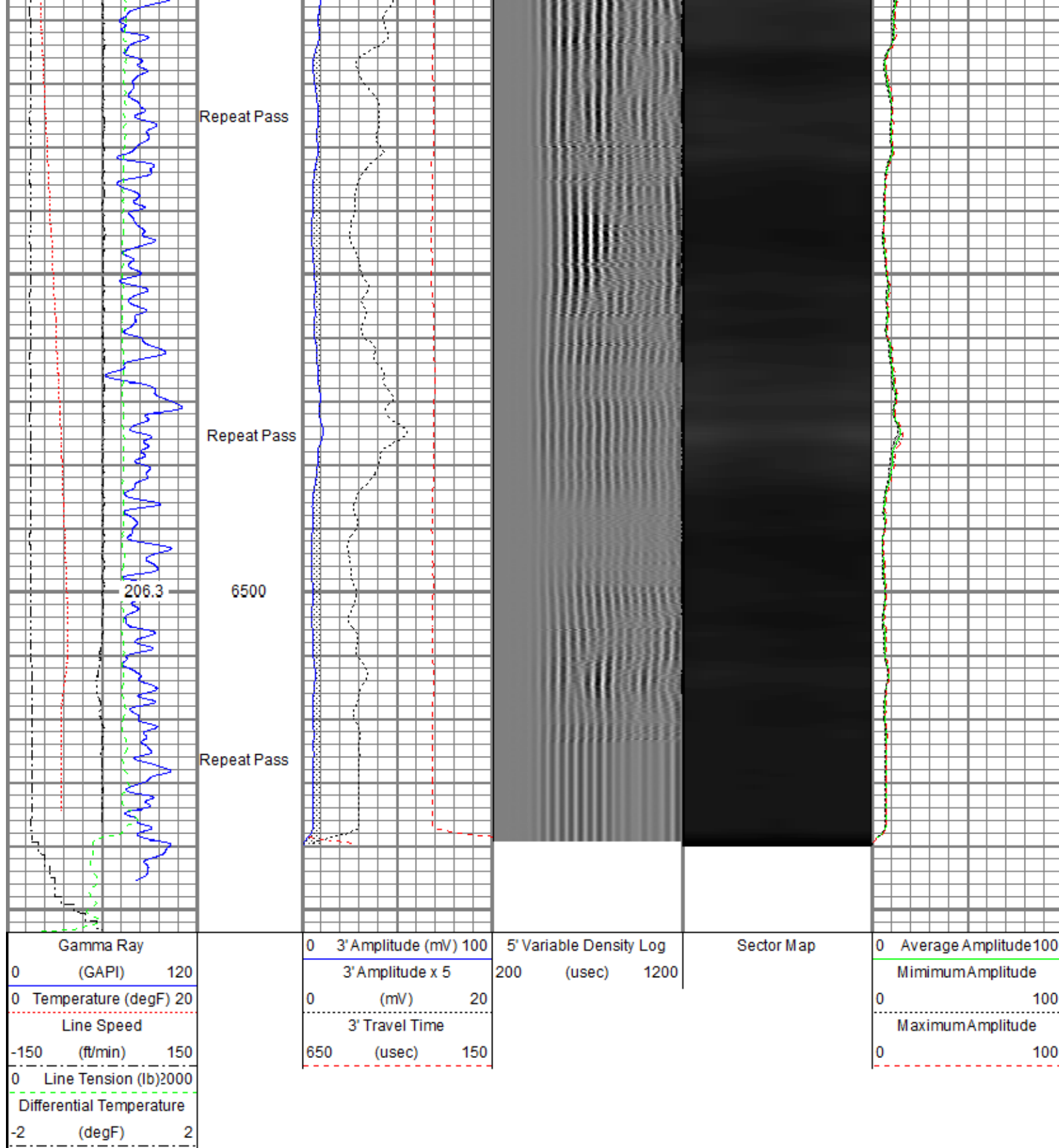


Repeat Pass

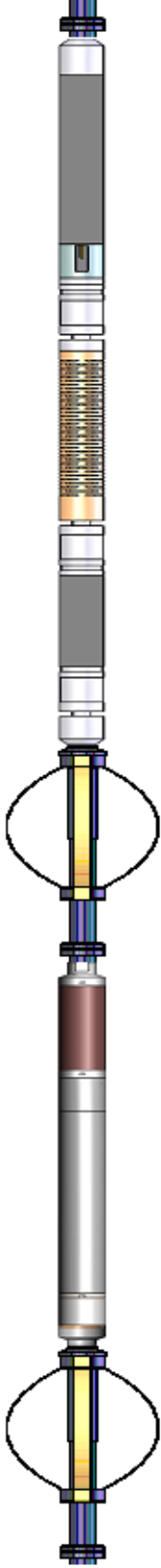
Recorded with 2800 PSI Surface Induced Pressure

Database File 0512346267_anadarko_quarter circle 24-3hz_rbl_06-10-18\processed_0512346267_anadarko_quarter circle 24-3hz_rbl_06-10-18
 Dataset Pathname Repeat.2
 Presentation Format ros_radial
 Dataset Creation Thu Jun 14 11:52:06 2018
 Charted by Depth in Feet scaled 1:240





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

TEMP	17.33					
WVFS8	15.09		Probe Raddi-2750 RBT (FW1305-096) Probe 2-3/4" Radial Cement Bond Tool with Integral Temperature Sub	9.39	2.75	105.00
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					
CCL\$2	7.08		Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00
CCL\$1	7.08					
GR	5.75		Probe GR-CCL-2750 6PB (FW1304-132) 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_0512346267_Anadarko_Quarter Circle 24-3HZ_RBL_06-10-18_2800 PSI.db: field/well/run1/Main.1						
Total length: 24.15 ft						
Total weight: 225.60 lb						
O.D.: 2.75 in						

Calibration Report	
Database File	C:\ProgramData\Warrior\Data\0512346267_Anadarko_Quarter Circle 24-3HZ_RBL_06-10-18\PROCESSED_0512346267_Anadarko_Quarter Circle 24-3HZ_RBL_06-10-18_2800 PSI.db: field/well/run1/Main.1
Dataset Pathname	Main.1
Dataset Creation	Sun Jun 10 16:00:33 2018

Gamma Ray Calibration Report	
Serial Number:	FW1304-132
Tool Model:	2750 6PB

Performed:	Tue Nov 28 11:17:11 2017	
Calibrator Value:	637.0	GAPI
Background Reading:	109.1	cps
Calibrator Reading:	1009.7	cps
Sensitivity:	0.7072	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	FW1305-096	
Tool Model:	2750 RBT	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	-0.008	ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.001	0.654	0.800	71.921	108.910	0.702
CAL	0.682	0.688				
5'	0.000	0.619	0.800	71.921	114.967	0.757
SUM						
S1	0.000	0.607	0.000	100.000	164.938	-0.072
S2	0.000	0.611	0.000	100.000	163.693	-0.066
S3	0.001	0.636	0.000	100.000	157.409	-0.178
S4	0.001	0.668	0.000	100.000	150.031	-0.164
S5	0.001	0.695	0.000	100.000	144.106	-0.191
S6	0.001	0.703	0.000	100.000	142.485	-0.163
S7	0.001	0.683	0.000	100.000	146.649	-0.161
S8	0.002	0.649	0.000	100.000	154.382	-0.239

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.682	0.688	1.000	0.000

Air Zero Calibration, performed Sun Jun 10 06:23:50 2018:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.008		0.000		-0.000	
5'	0.010		0.000		0.000	
SUM						
S1	0.005		0.000		-0.001	
S2	0.008		0.000		-0.001	
S3	0.007		0.000		0.000	
S4	0.008		0.000		0.000	
S5	0.007		0.000		0.000	
S6	0.008		0.000		0.000	
S7	0.008		0.000		0.000	
S8	0.007		0.000		0.000	

Temperature Calibration Report

Serial Number:	FW1305-096
Tool Model:	2750 RBT
Performed:	Sun Nov 12 13:42:10 2017

Reference	Reading
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Low Reference:	100.00	degF	109.43	degF
High Reference:	350.00	degF	405.87	degF
Gain:	0.84			
Offset:	7.72			
Delta Spacing	1			



Company	Kerr-McGee Oil & Gas Onshore, L.P.
Well	Quarter Circle 24-3HZ
Field	Wattenberg
County	Weld
State	Colorado