

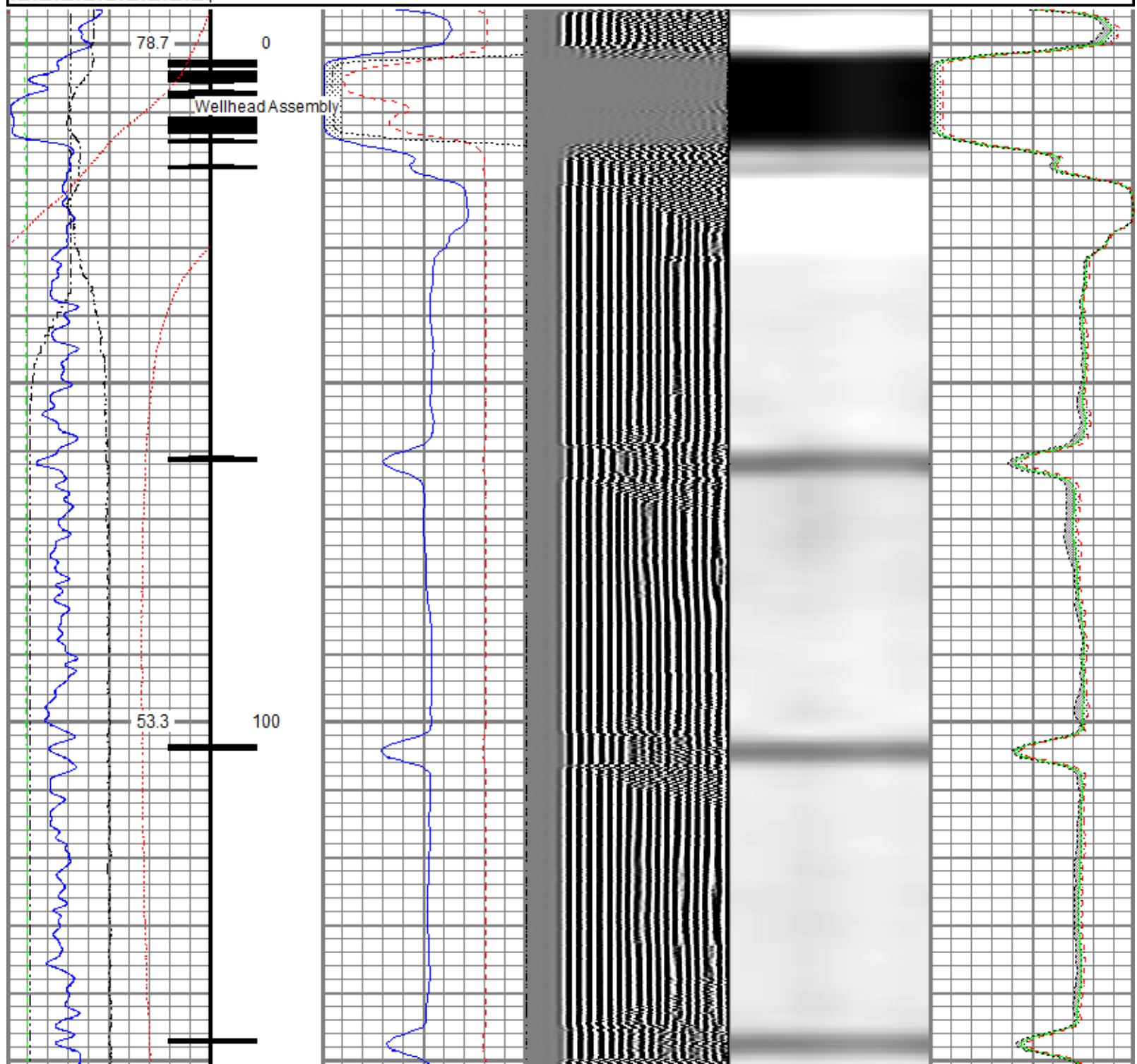
<<< Fold Here >>>
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible 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
Log ran as per customer request Depth referenced to Casing Tally reported Marker Joint at 7190 FT Adjusted +13 FT to correlate with Marker Joint Gauge Ring/Junk Basket ran to 8367 FT Retrievable Bridge Plug set at 7293 FT Log ran with 0 PSI Surface Induced Pressure Logging tools were clean and free of debris upon completion of operations Thank you for choosing Reliance Oilfield Services, LLC!!

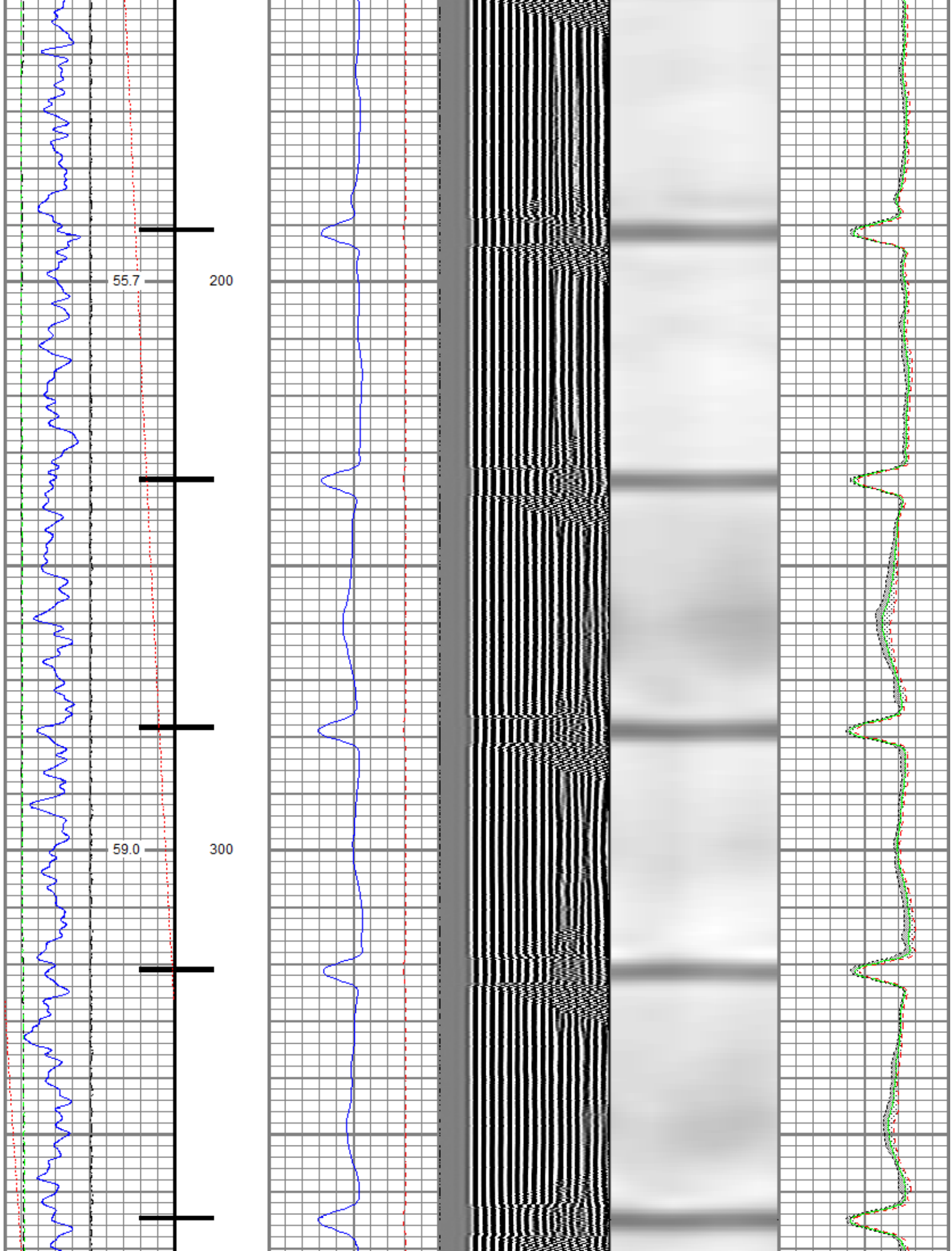


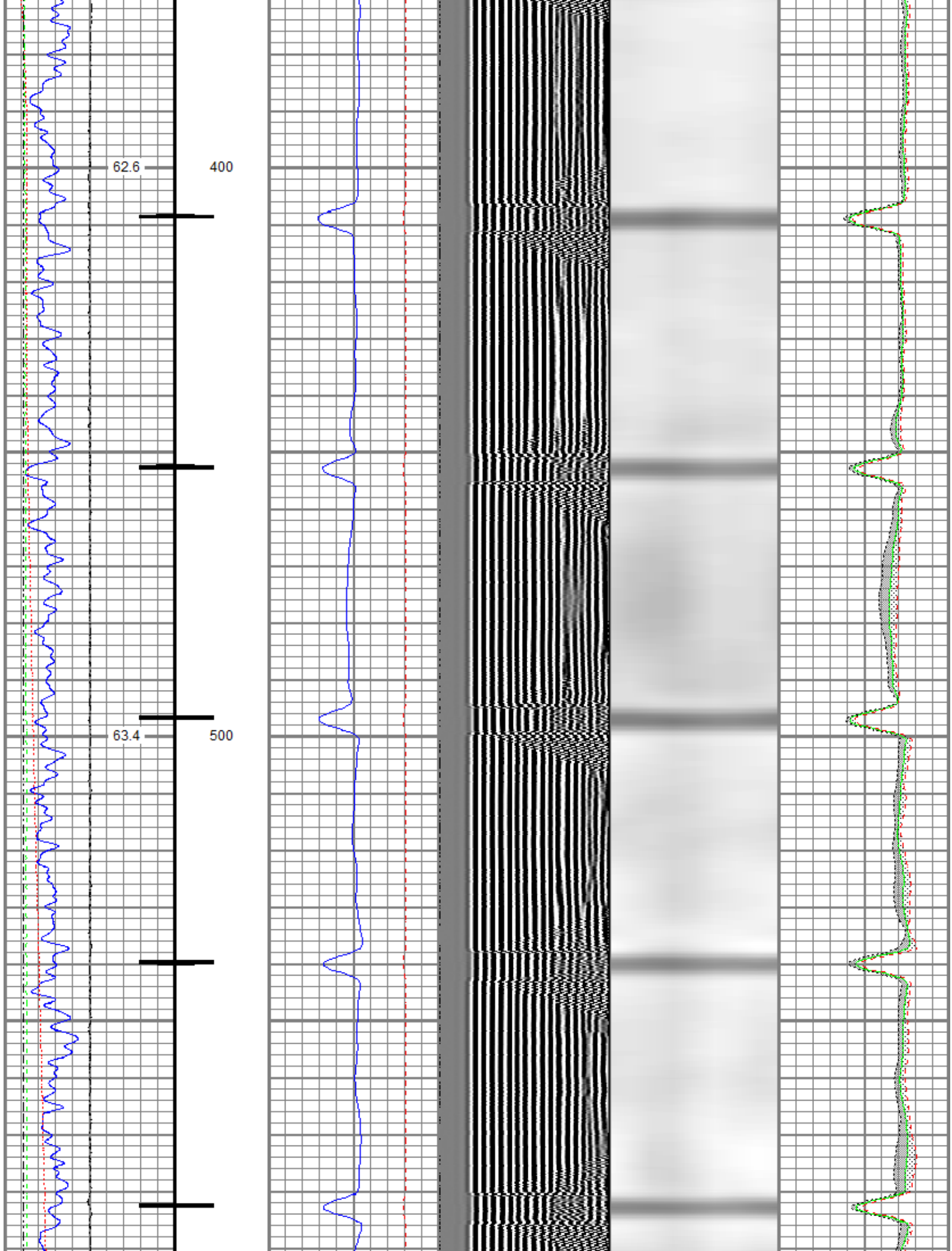
Recorded With 0 PSI Surface Induced Pressure

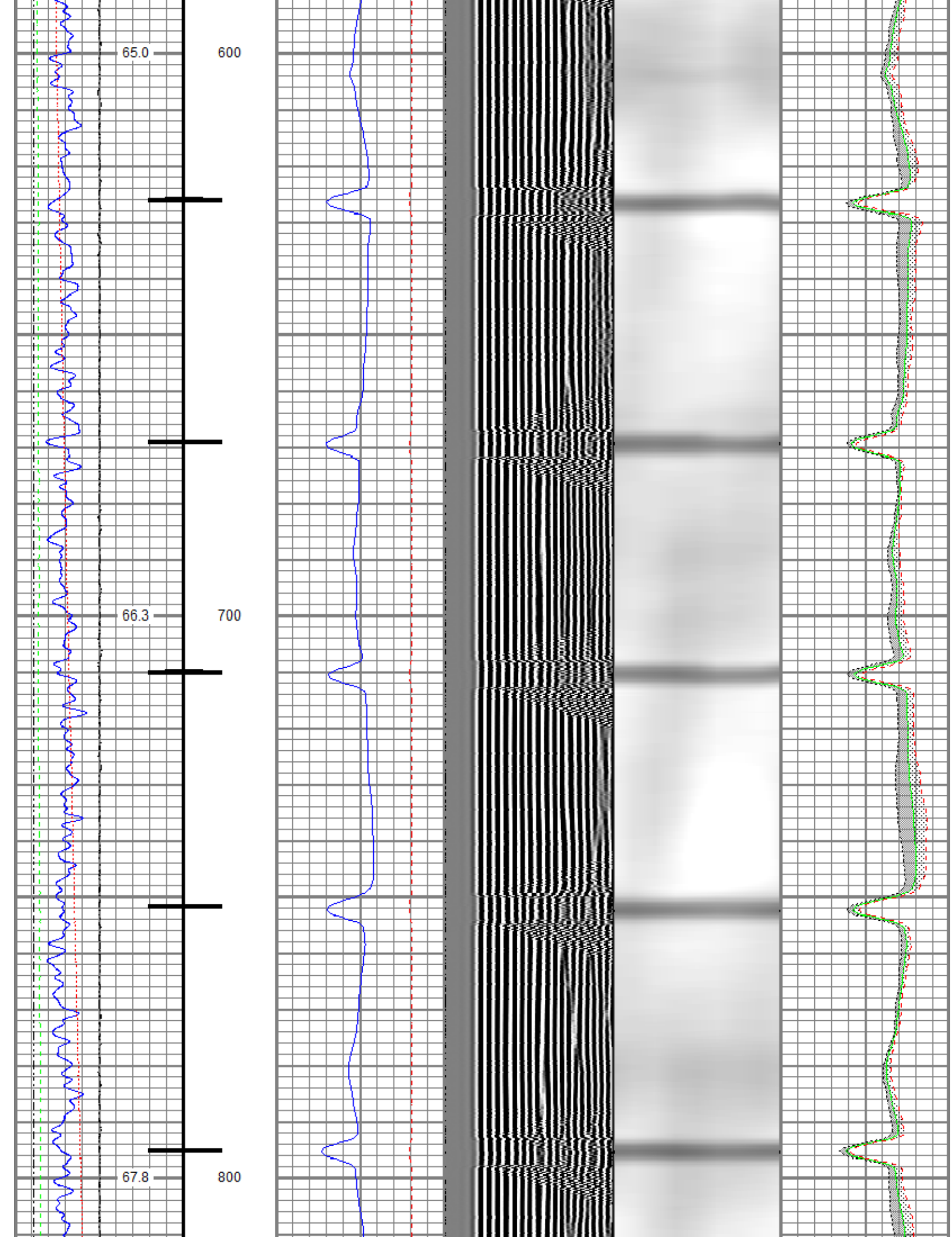
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Dataset Pathname	well20/main.1
Presentation Format	ros_radri
Dataset Creation	Tue Jul 30 12:24:50 2019
Charted by	Depth in Feet scaled 1:240

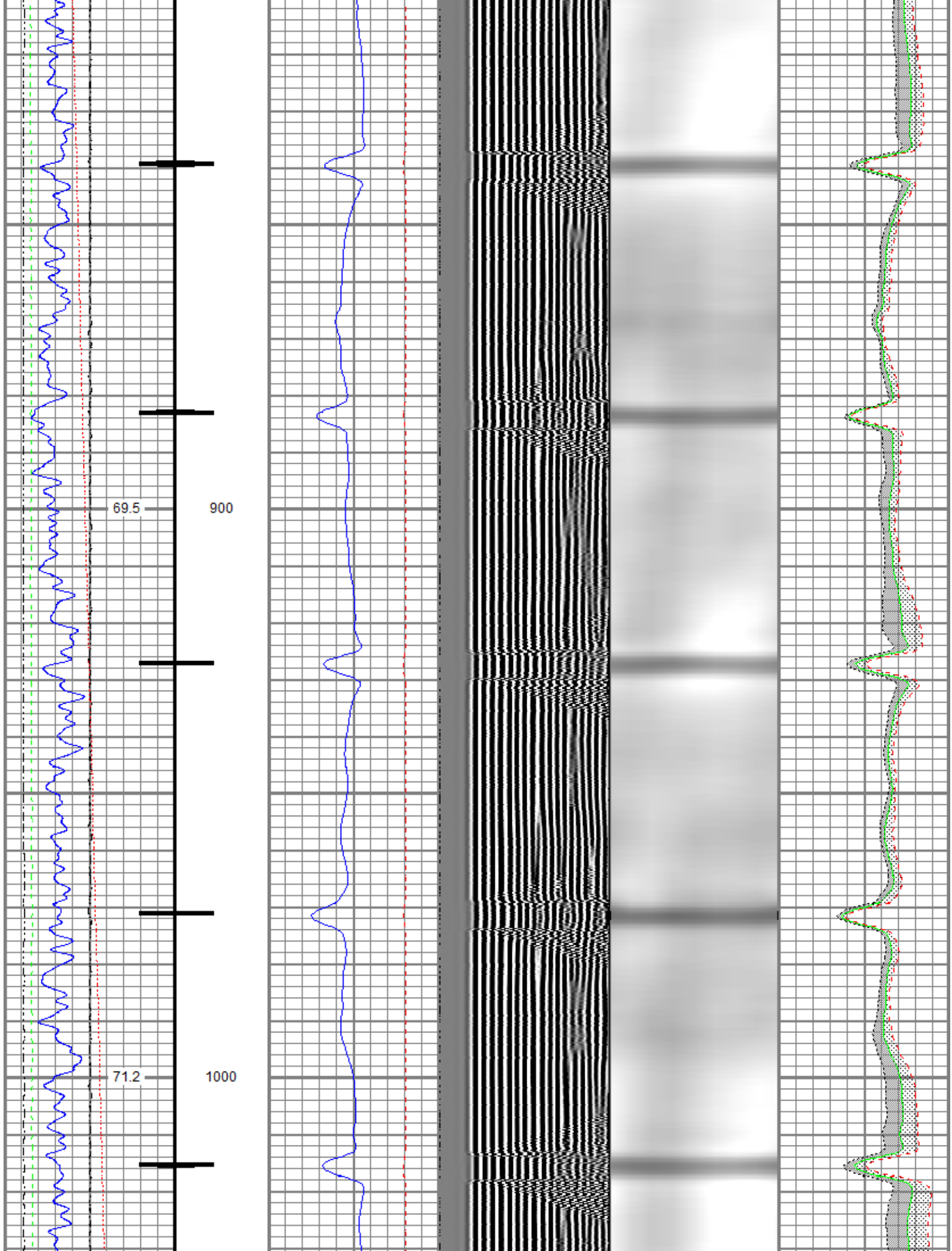
Gamma Ray	0	3' Amplitude (mV)	100	5' Variable Density Log	Sector Map	0	Average Amplitude	100
(GAPI)	120	3' Amplitude x 5	200	(usec)	1200		Minimum Amplitude	
Casing Collar Locator		0	(mV)	20		0		100
0 Temperature (degF)	20	3' Travel Time					Maximum Amplitude	
Line Speed		650	(usec)	150		0		100
-150 (ft/min)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

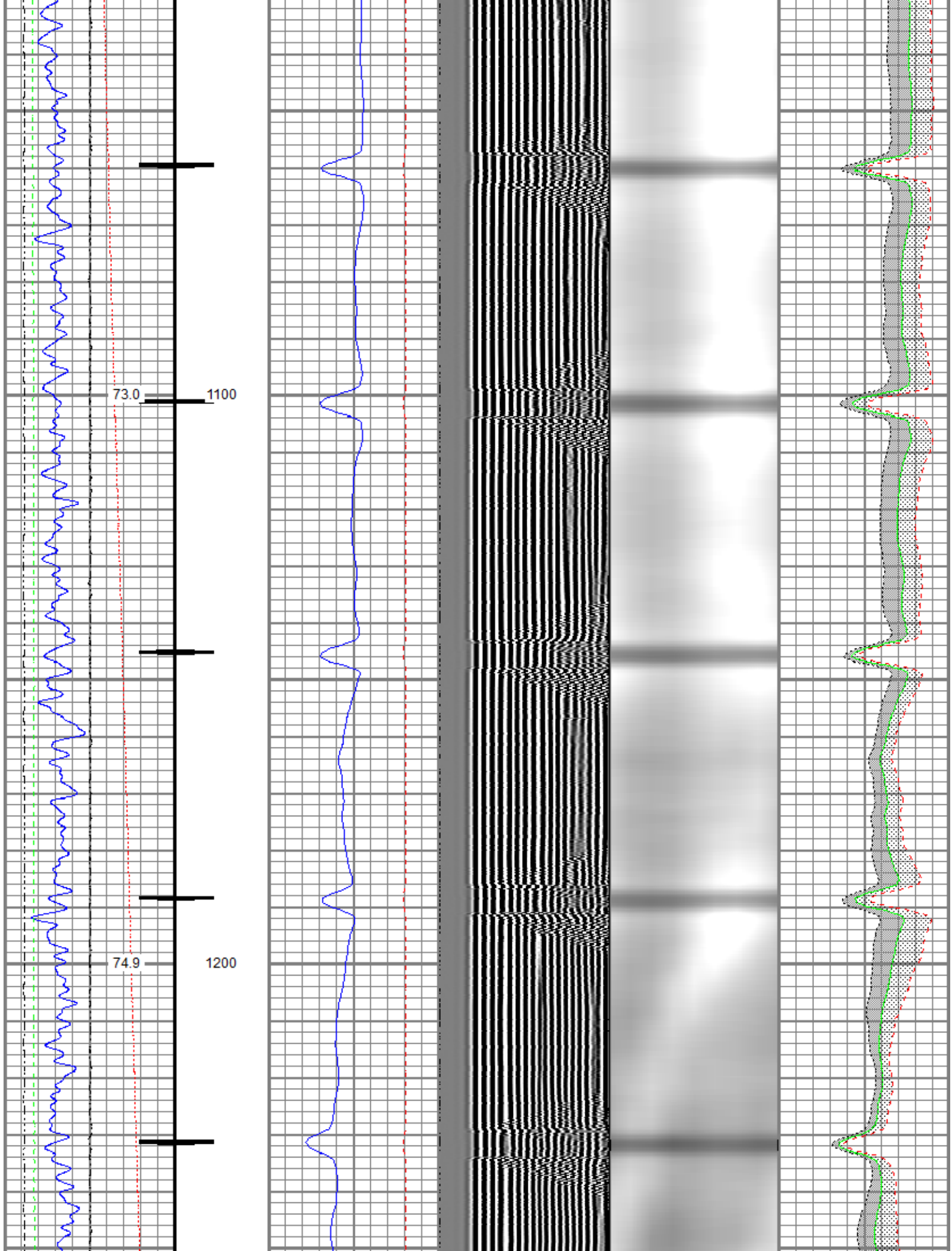


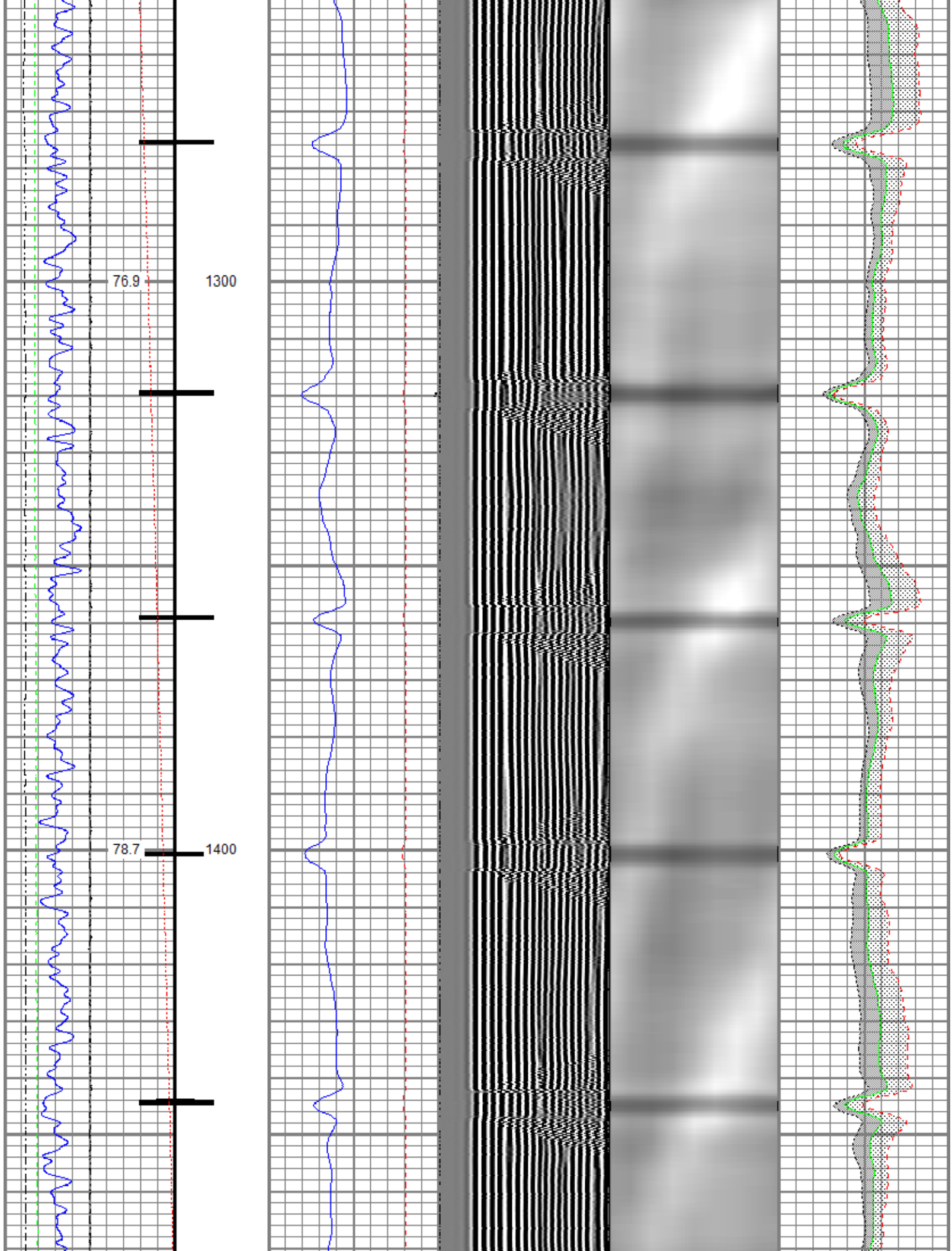


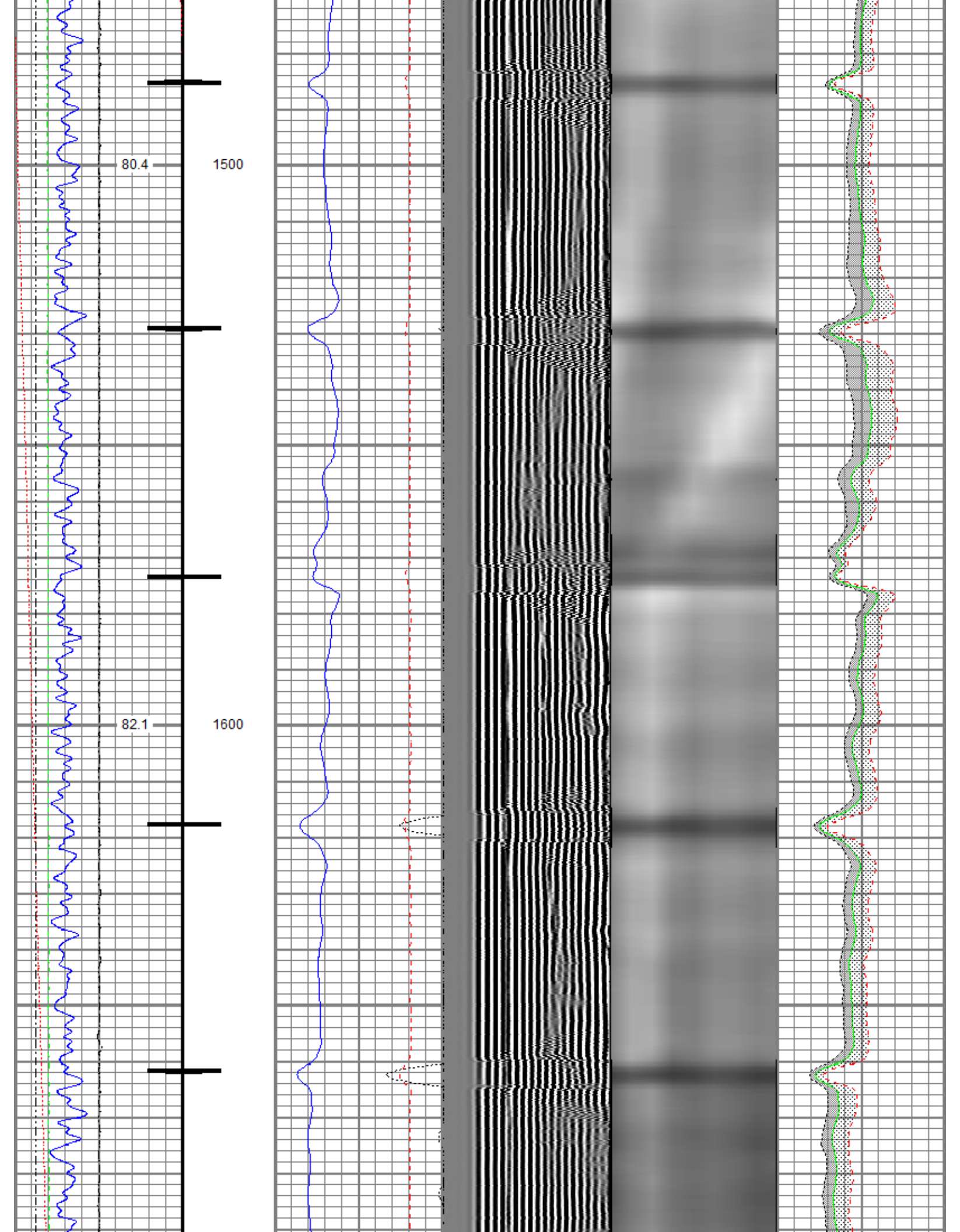


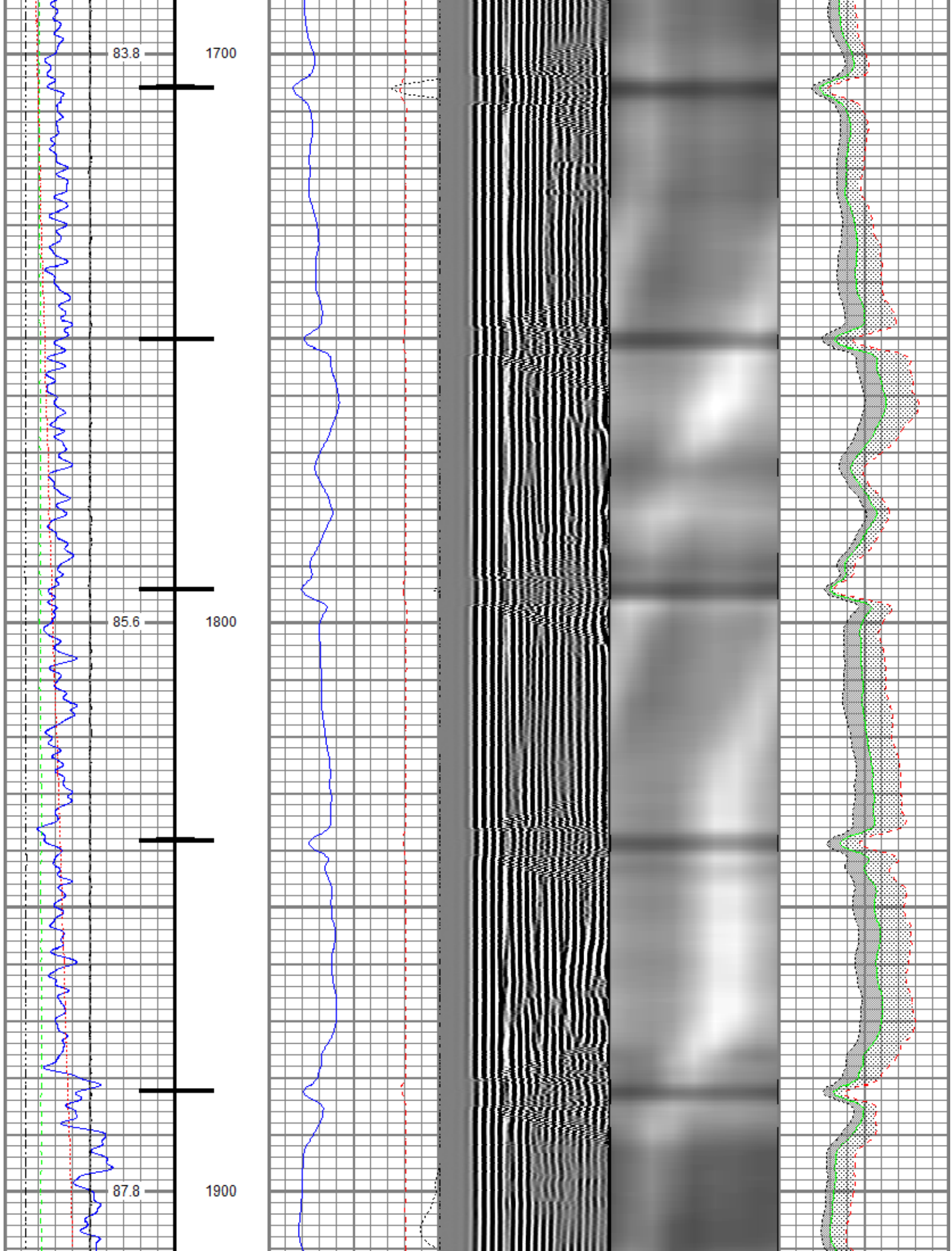


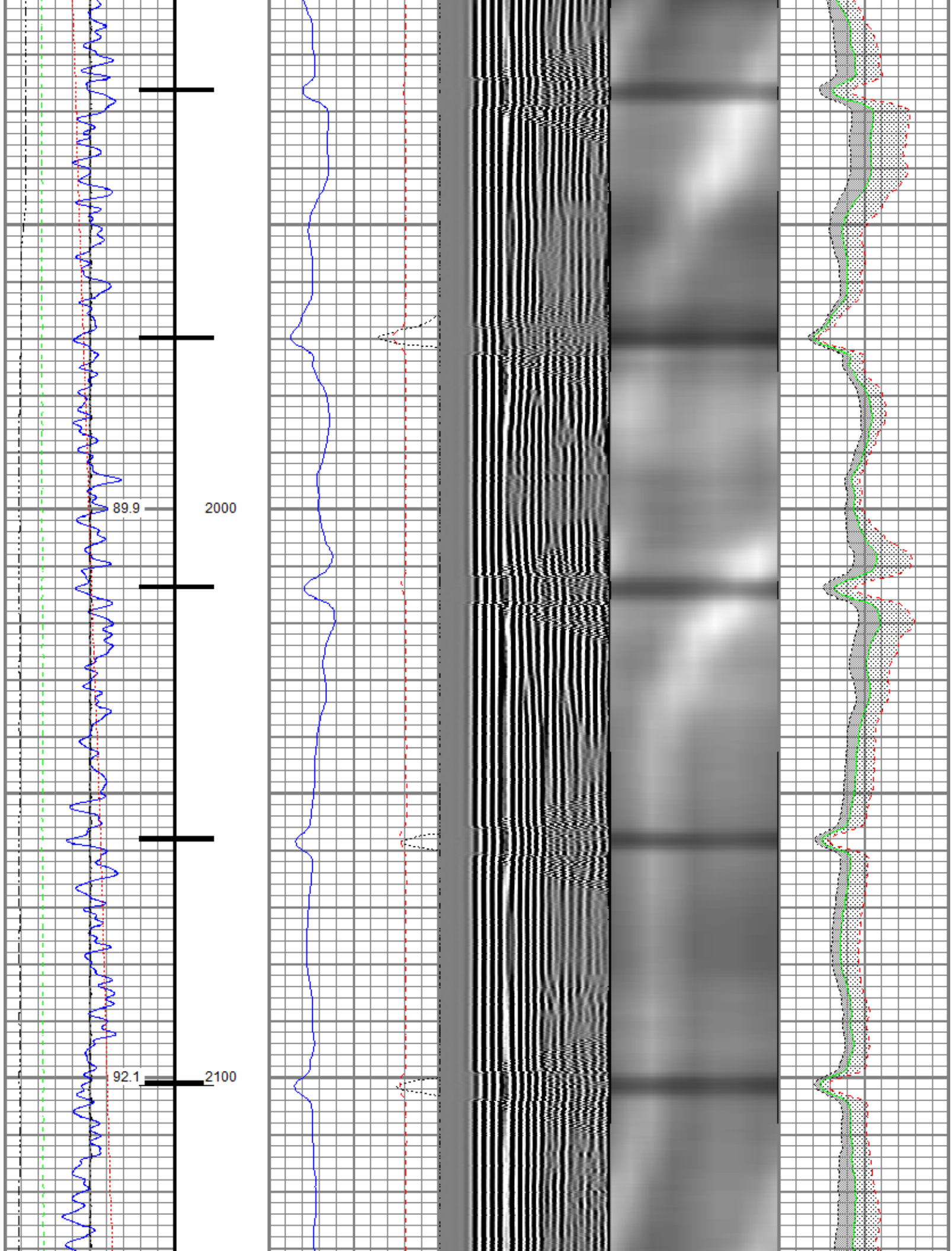


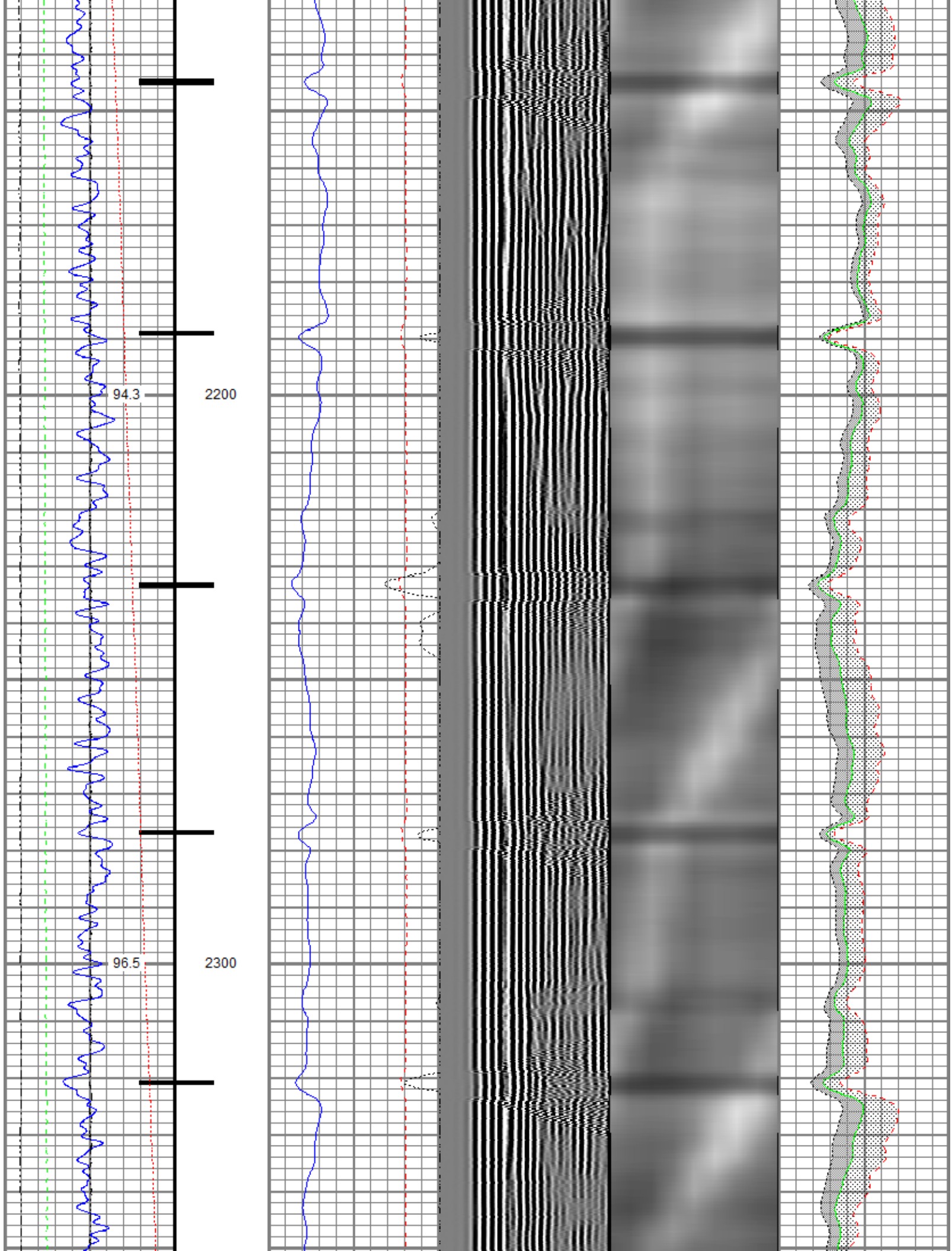


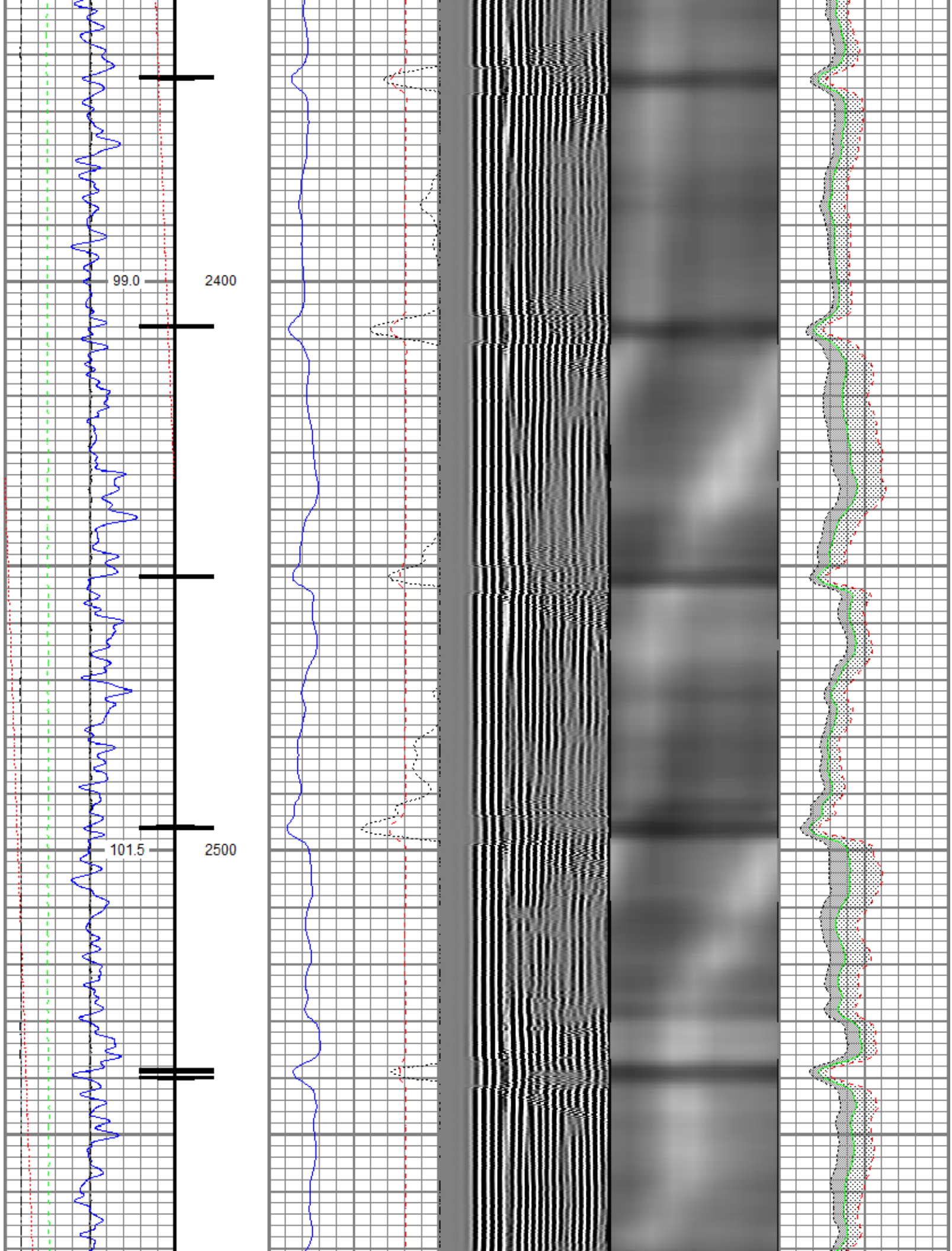


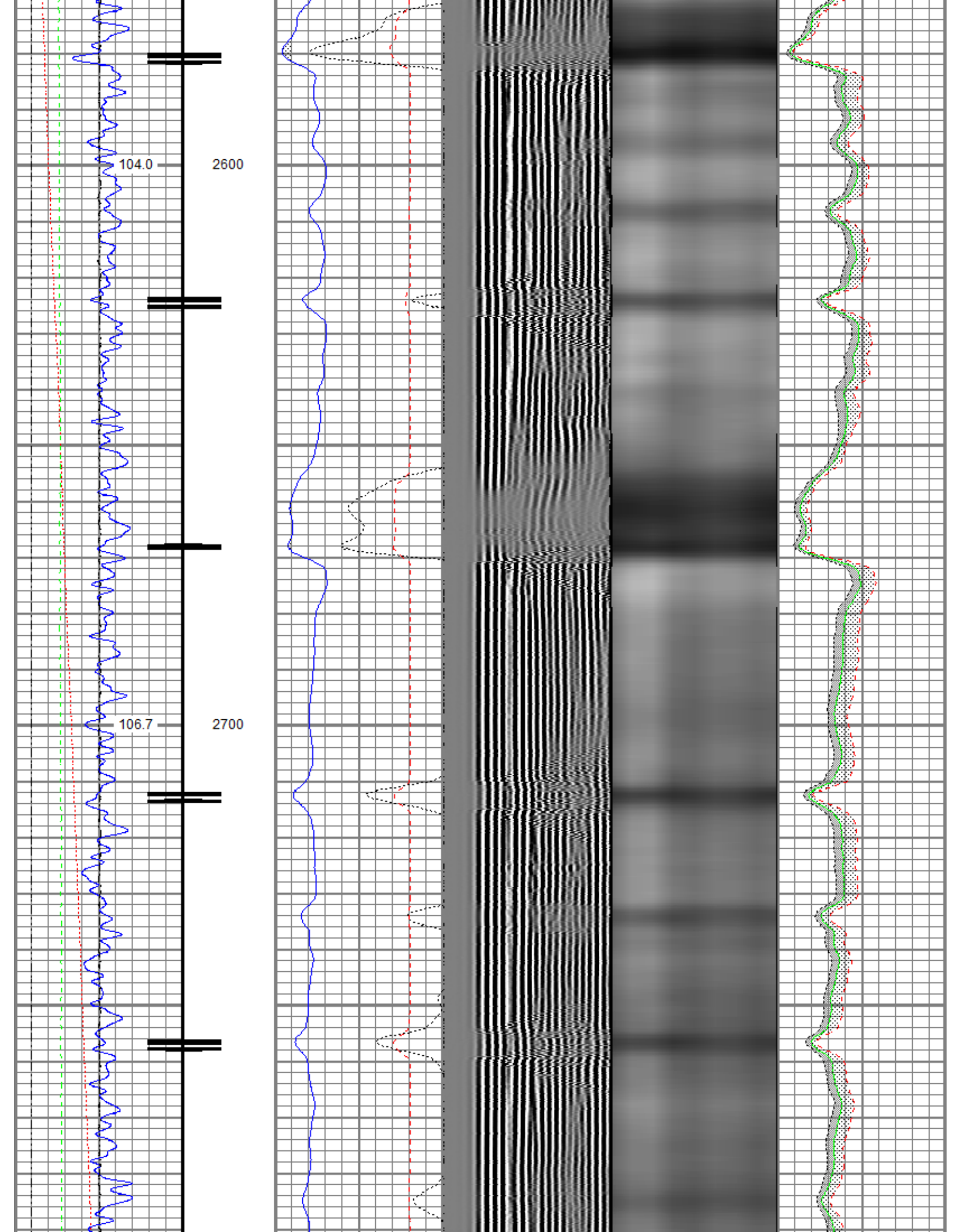


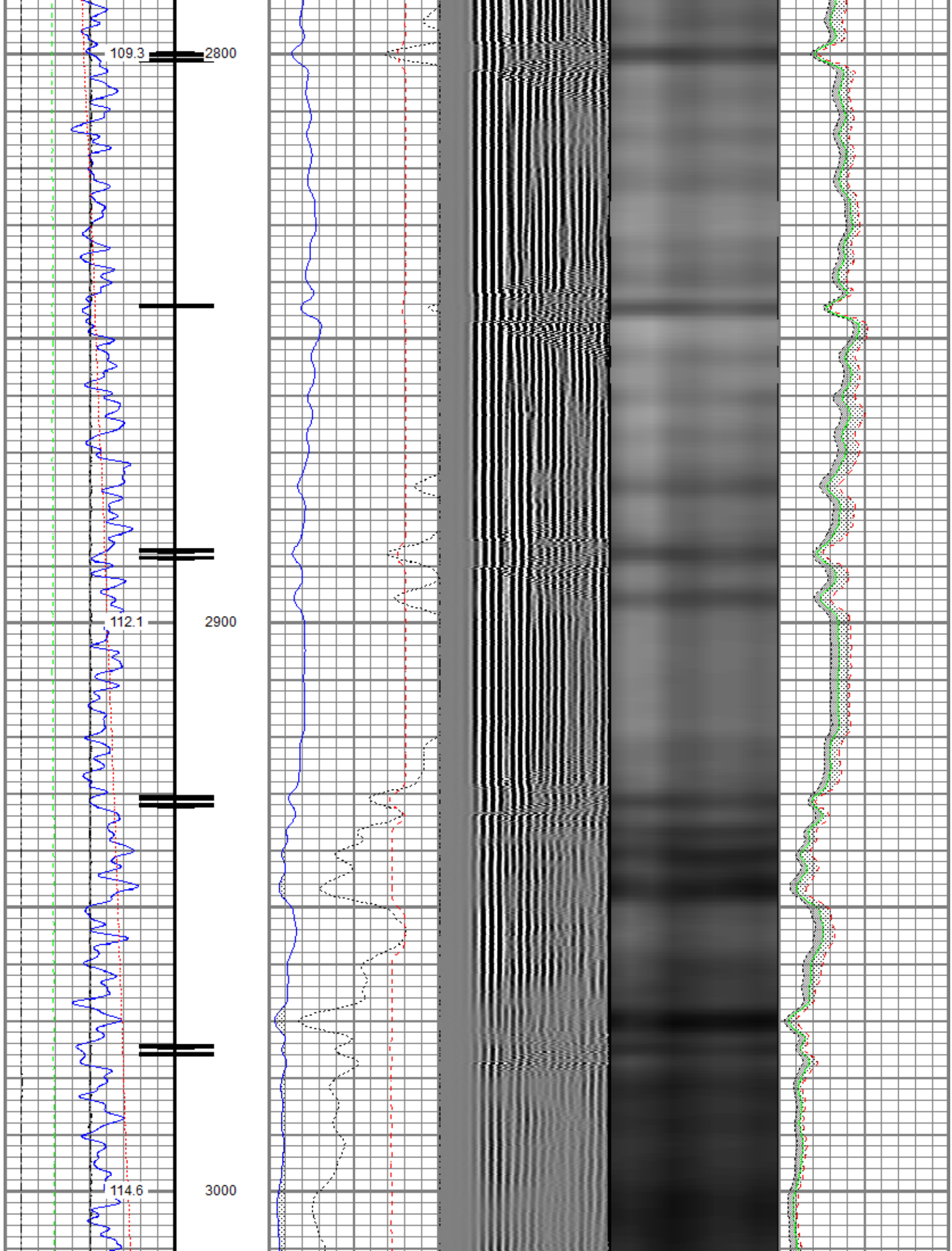


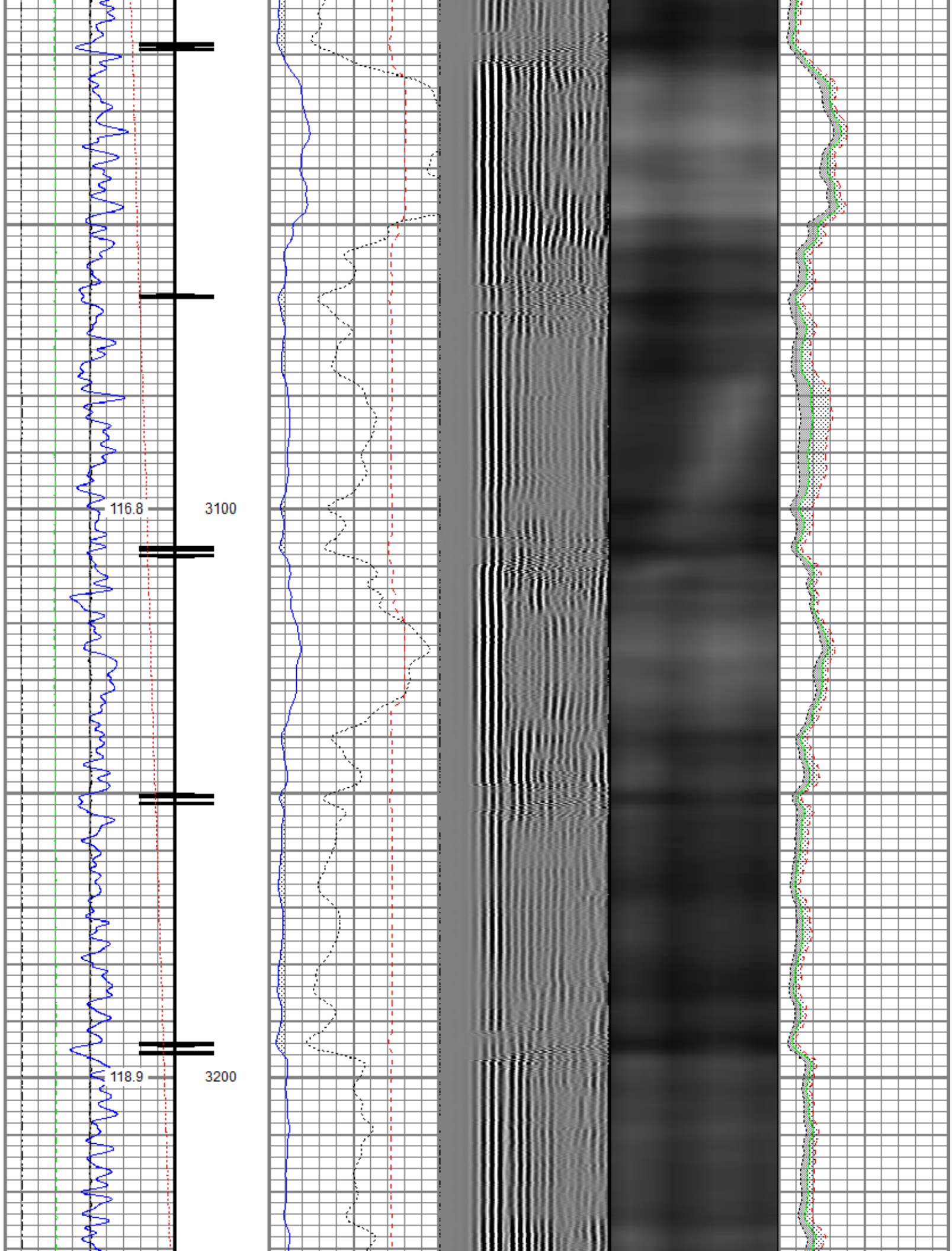


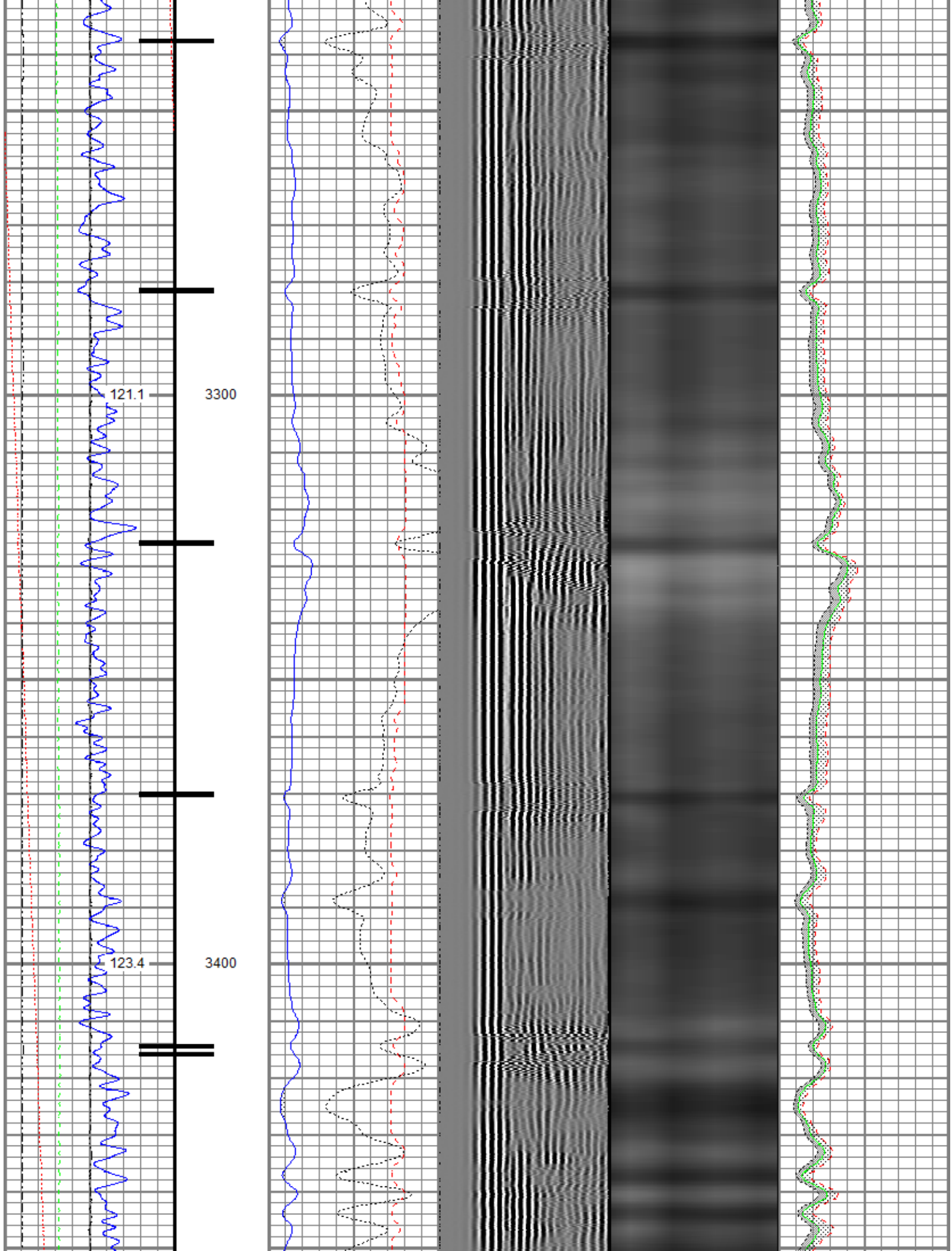


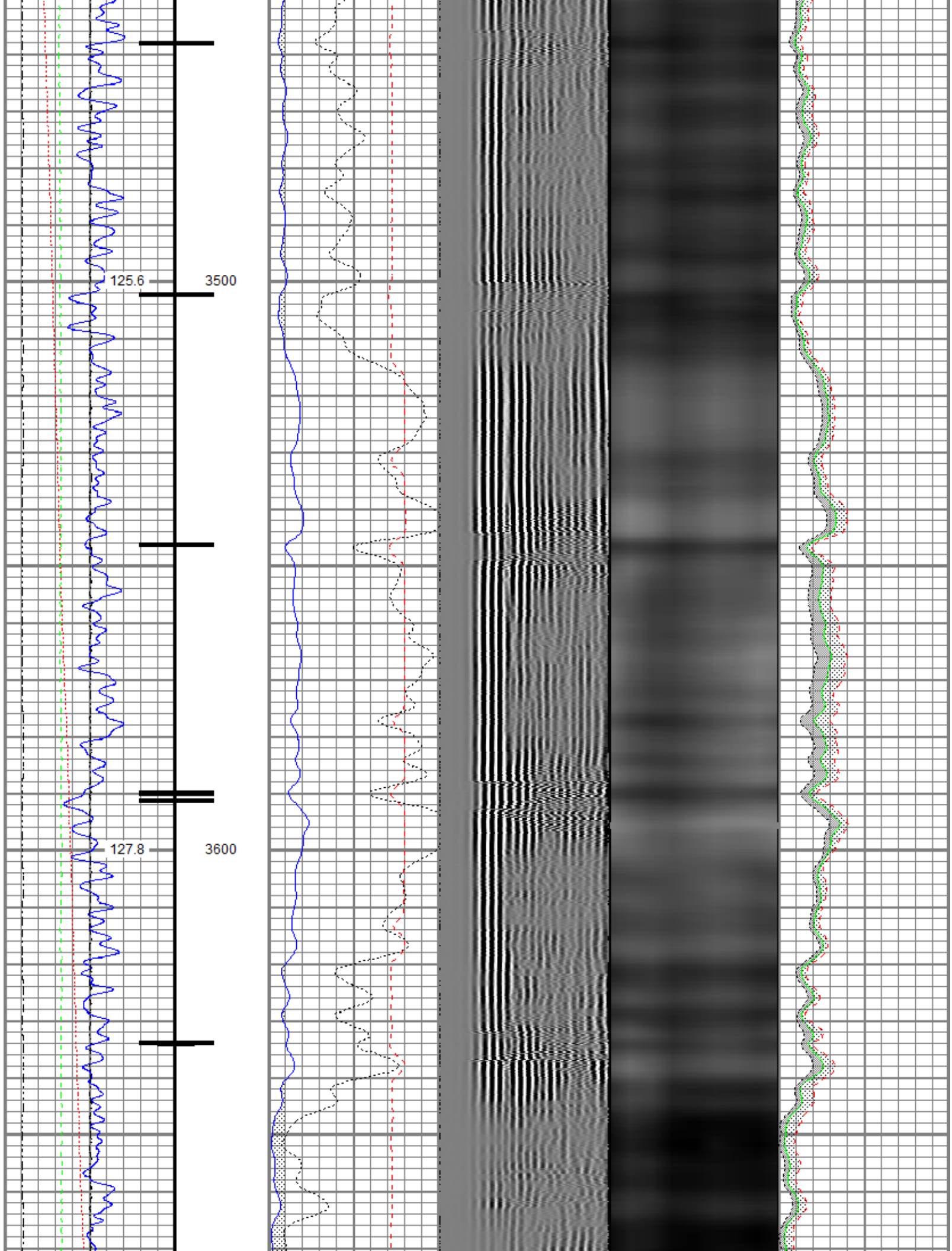


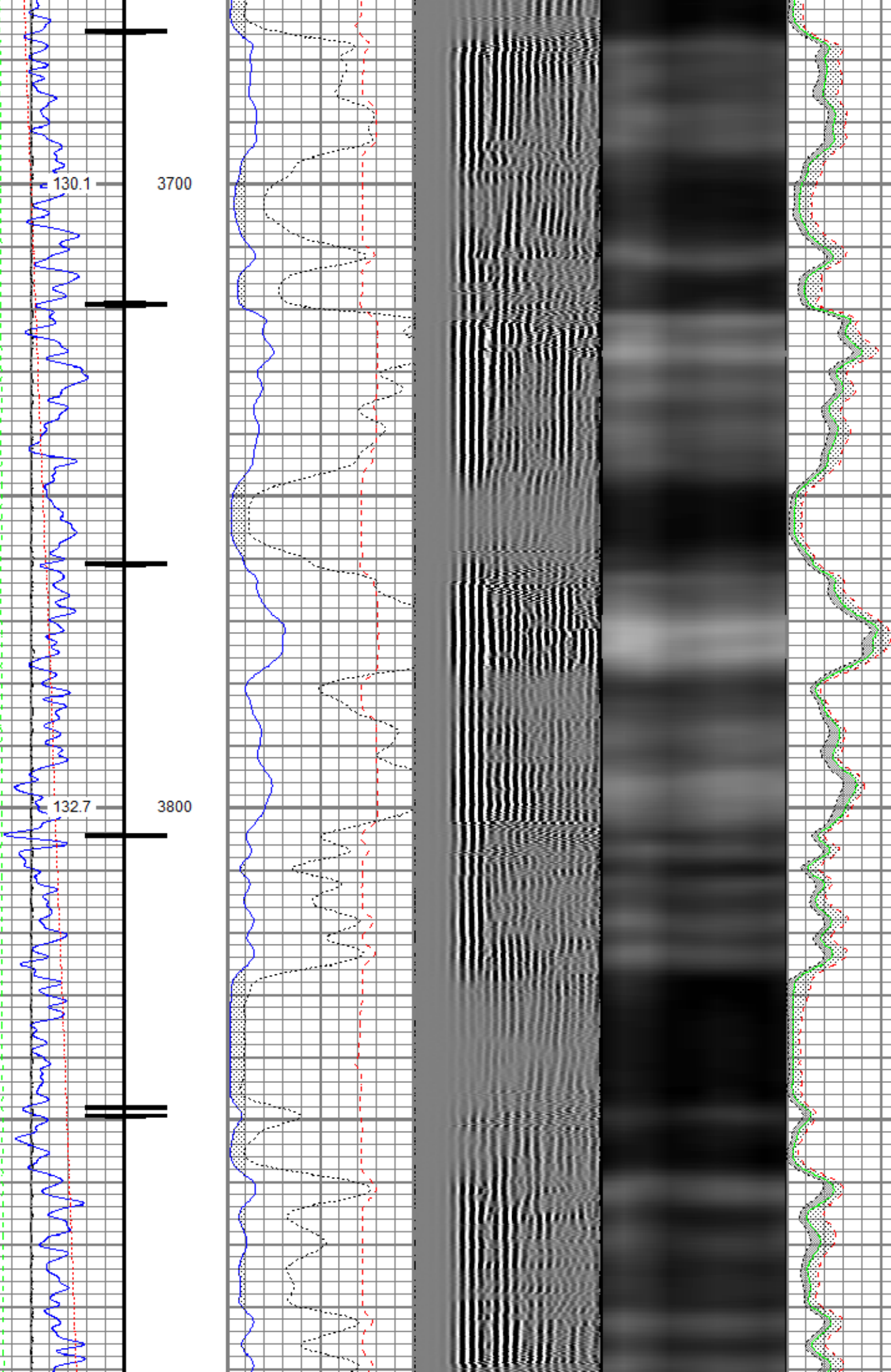


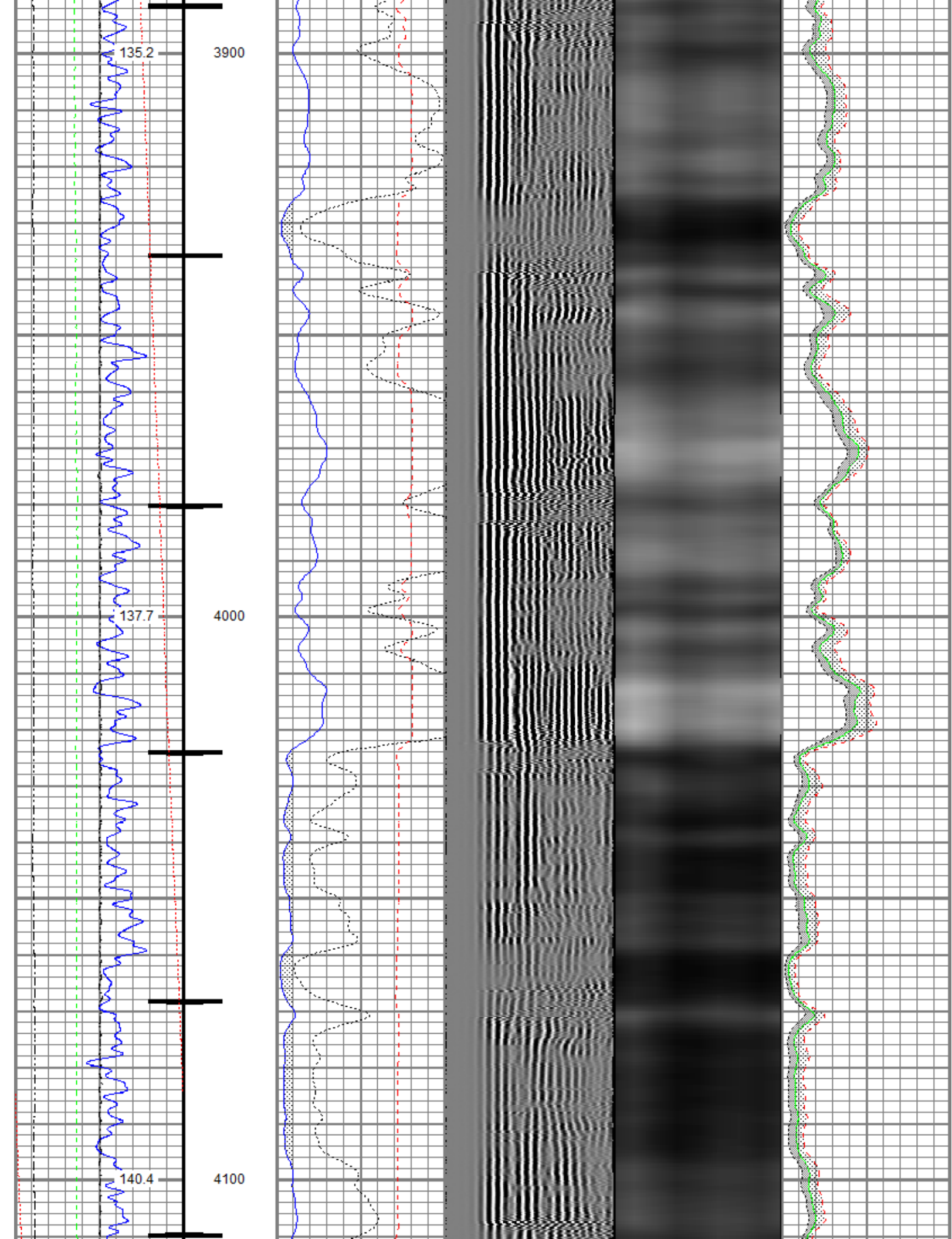


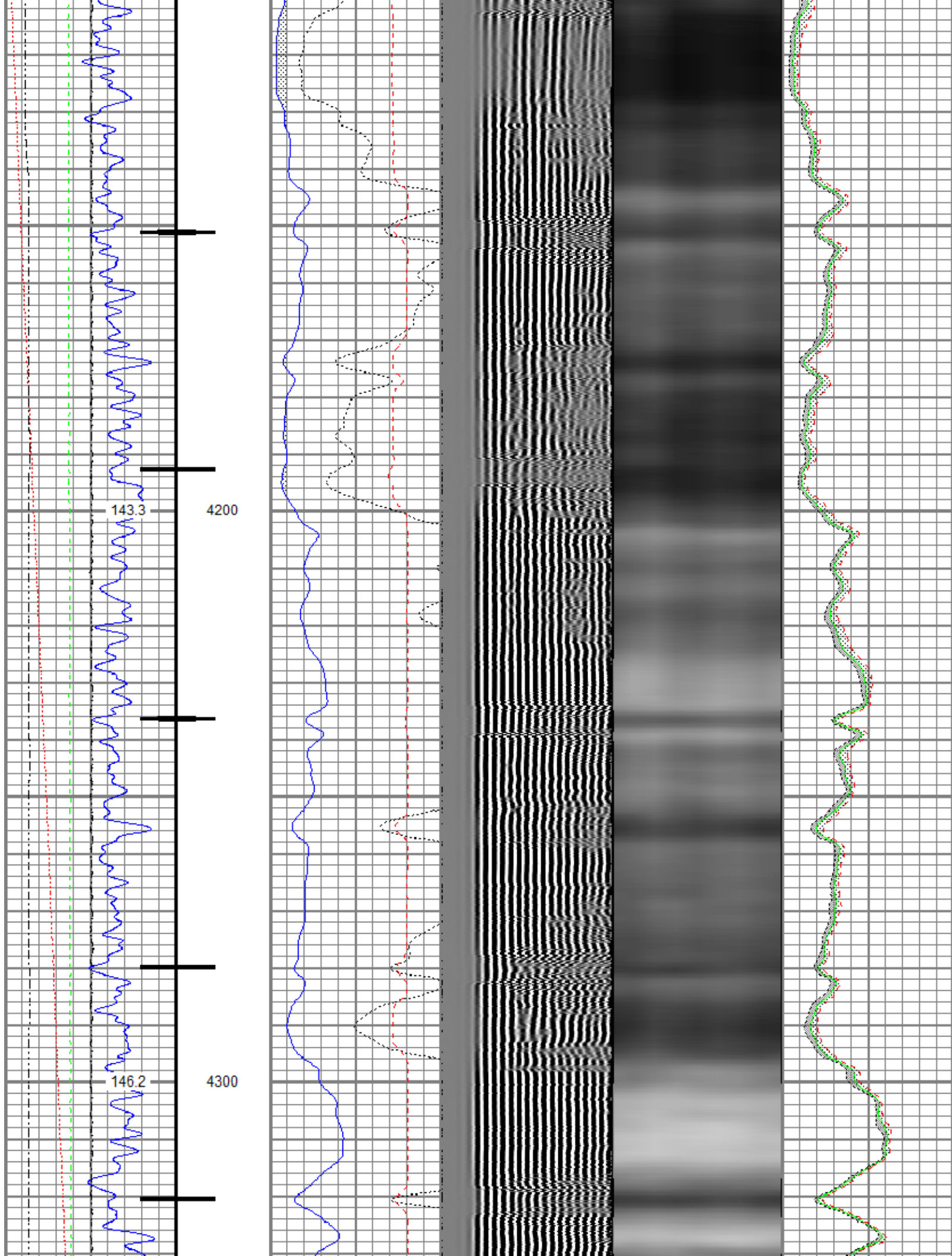


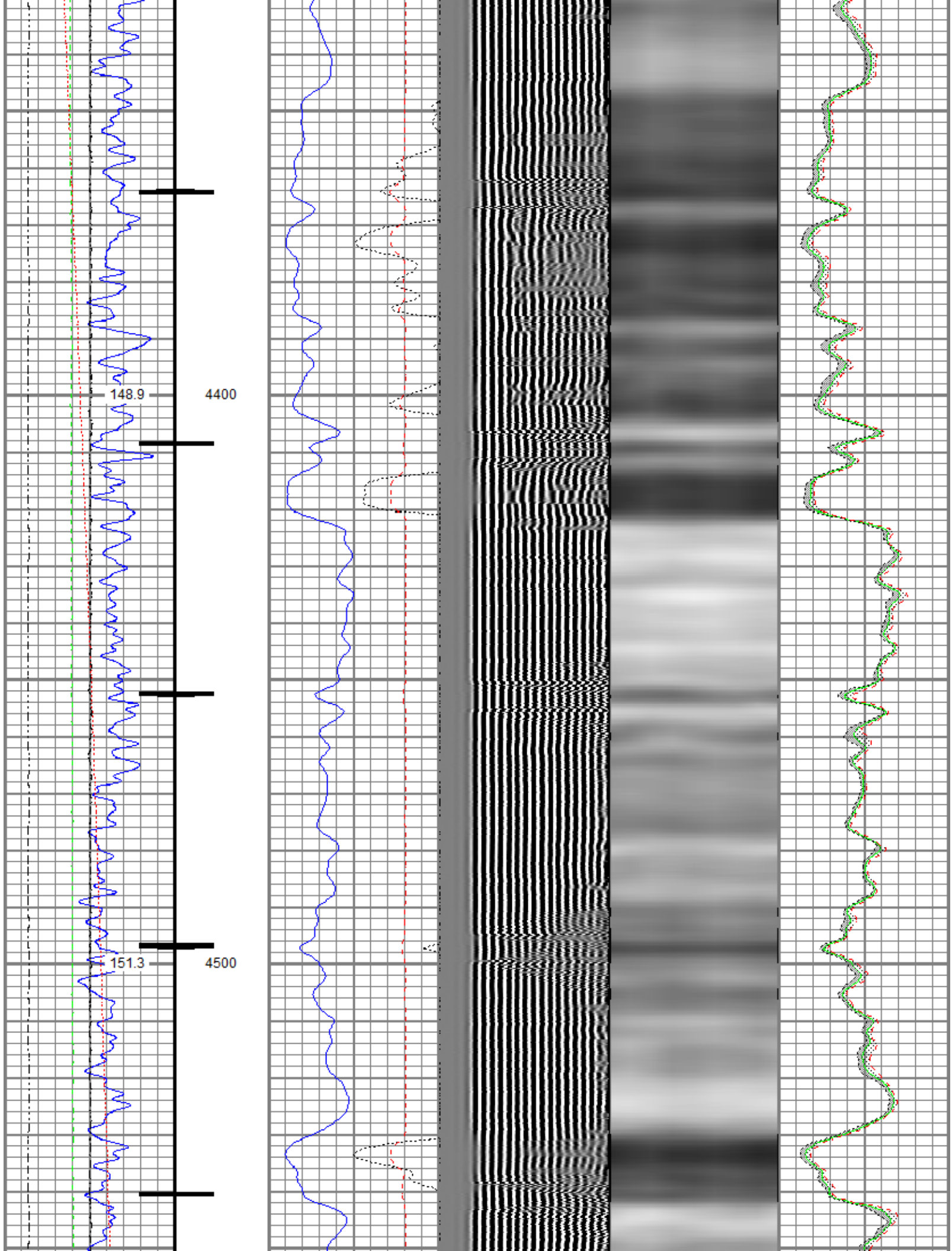


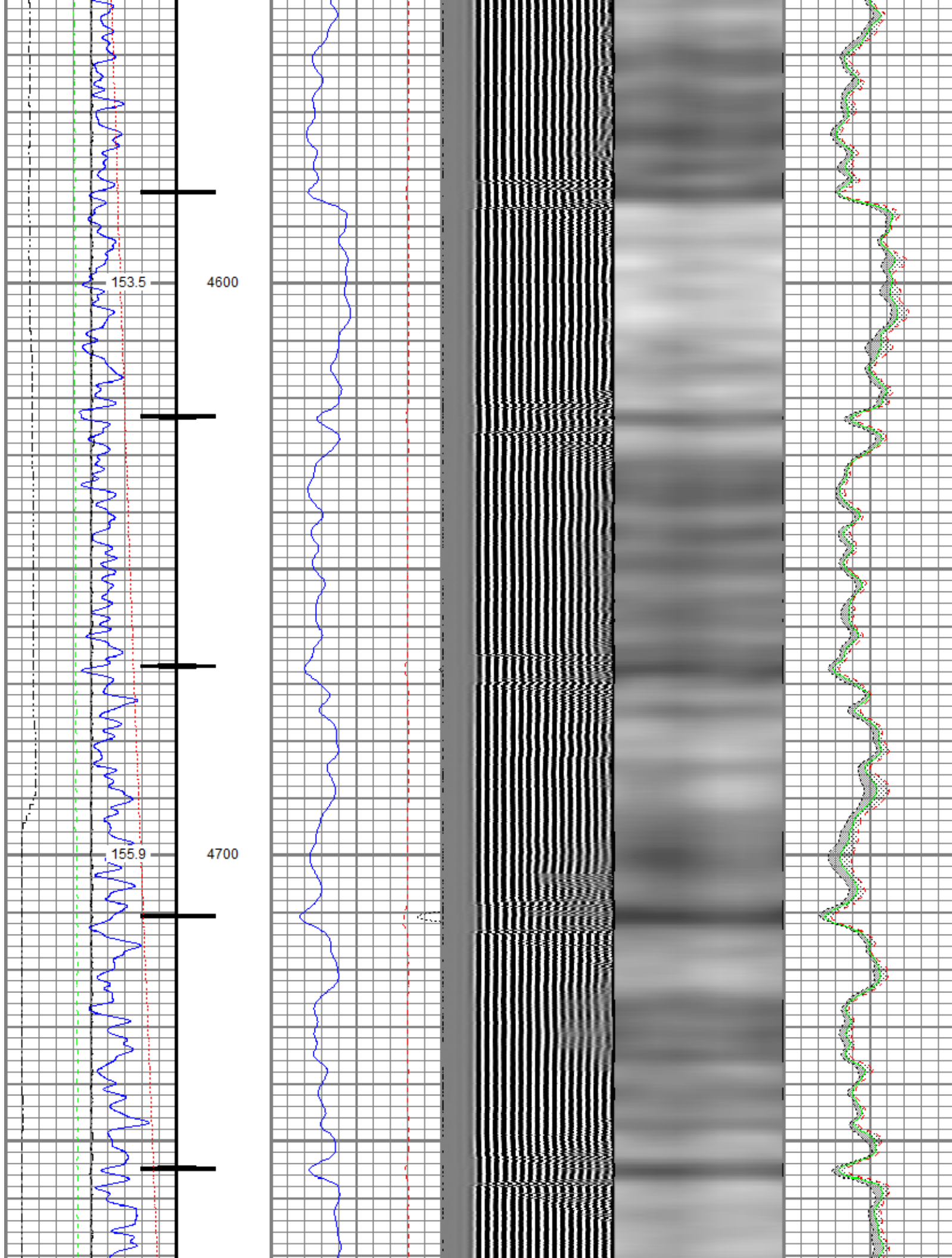


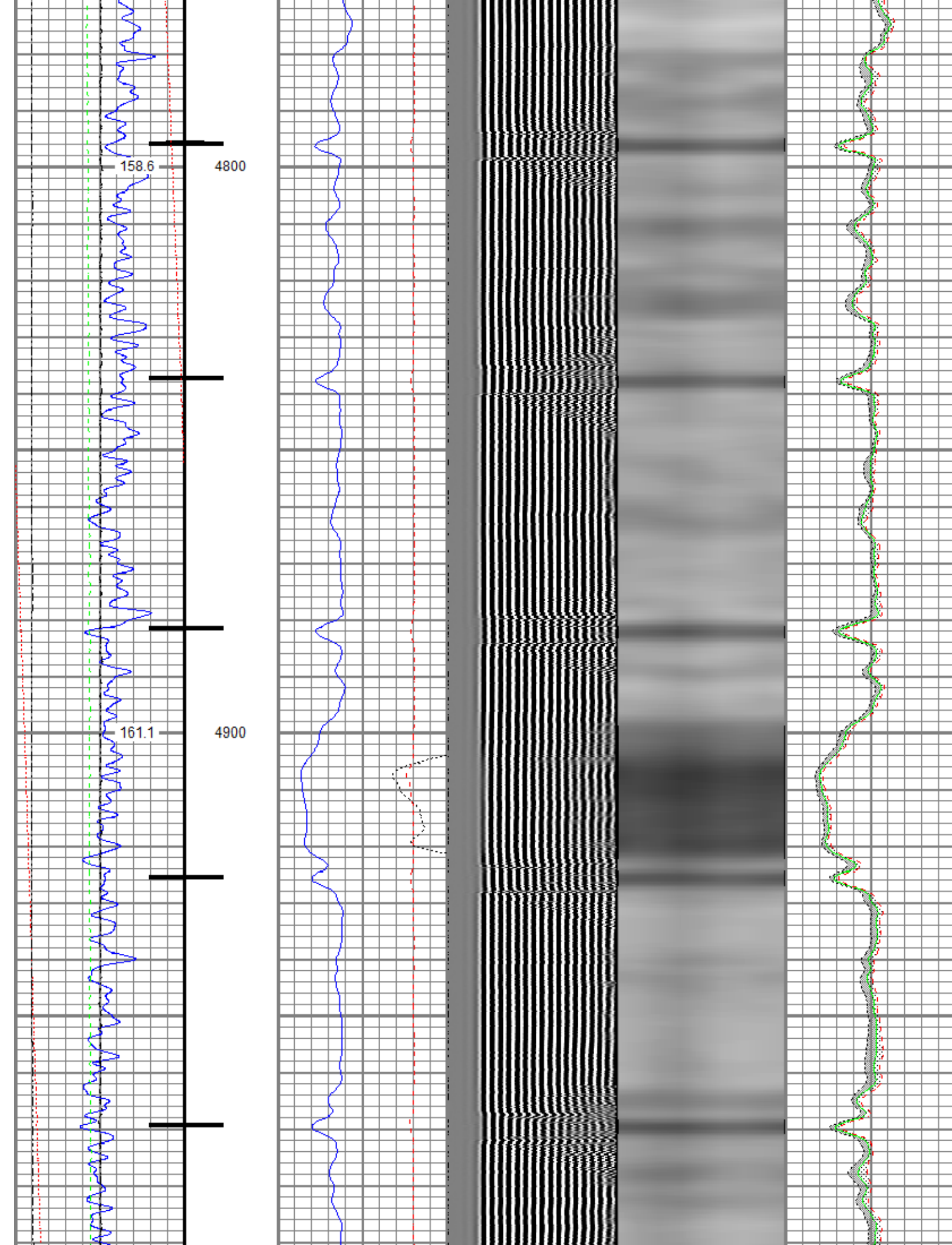


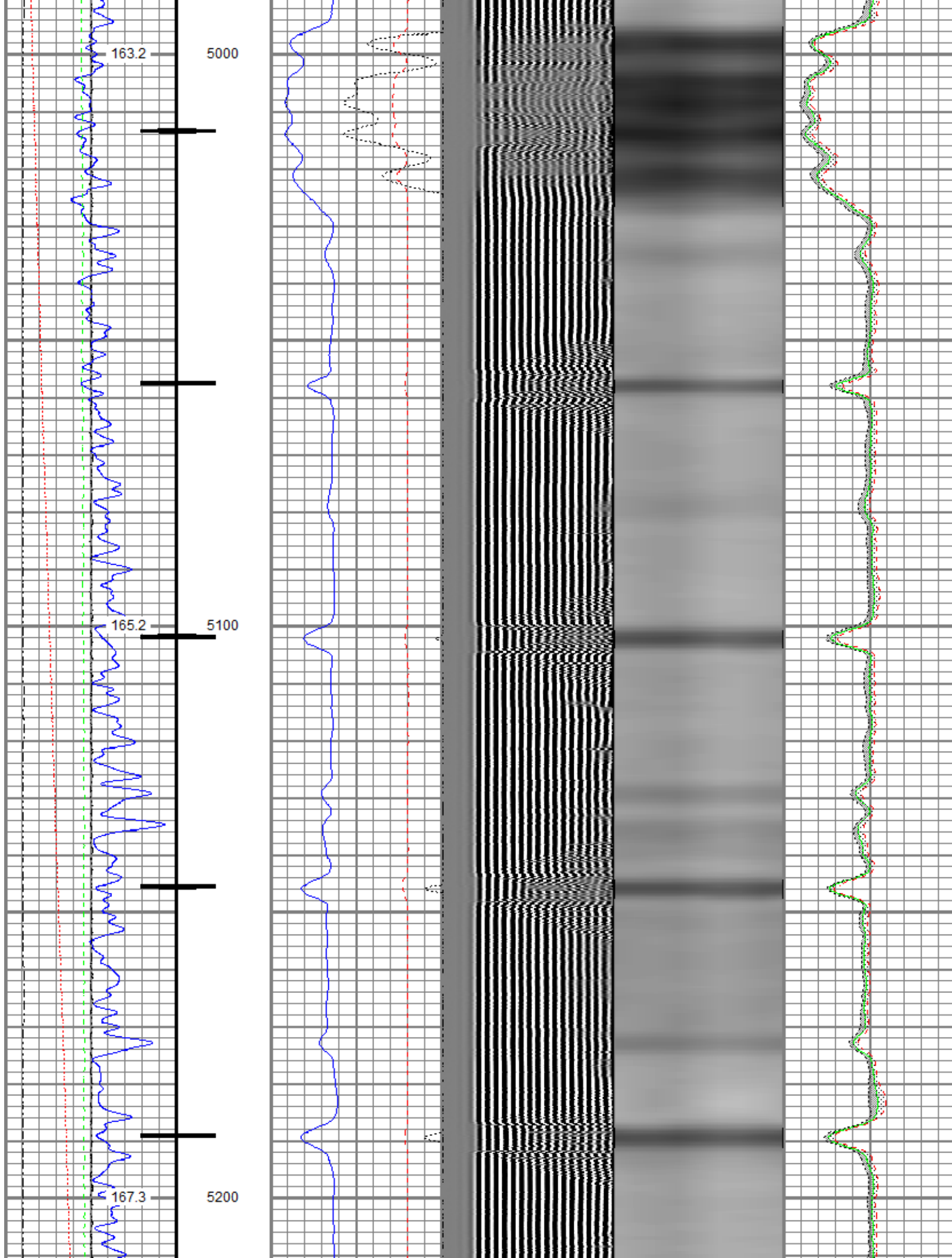


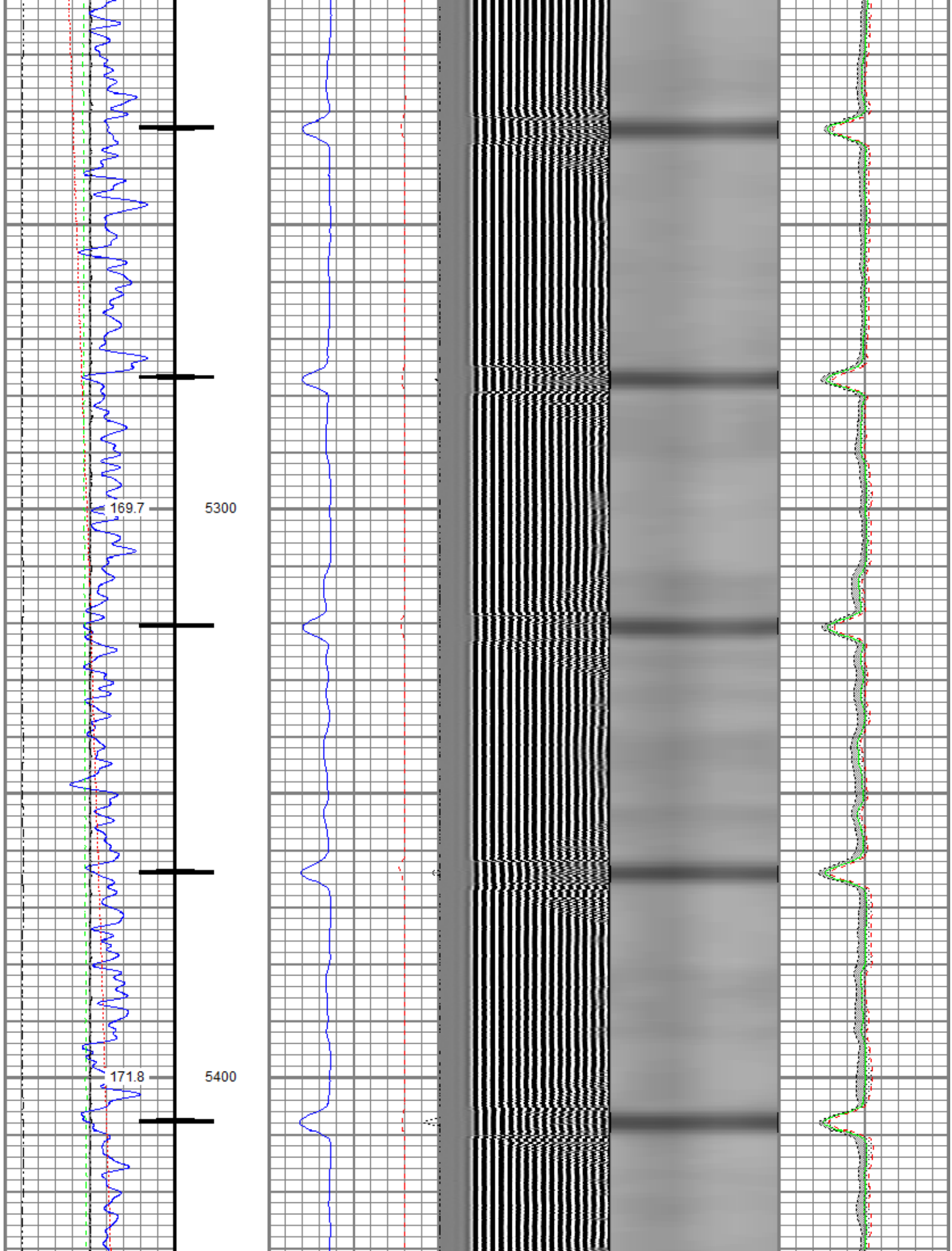


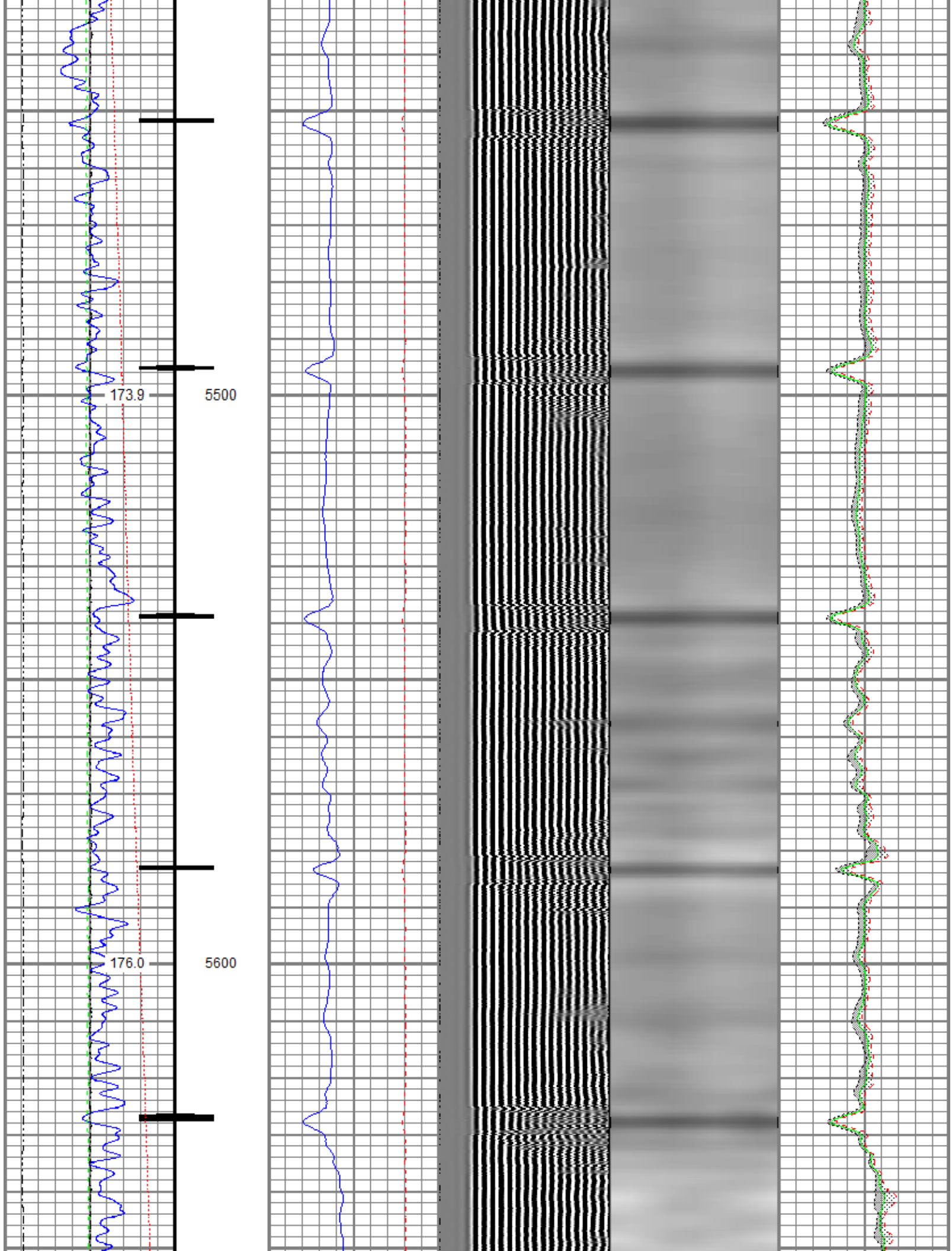


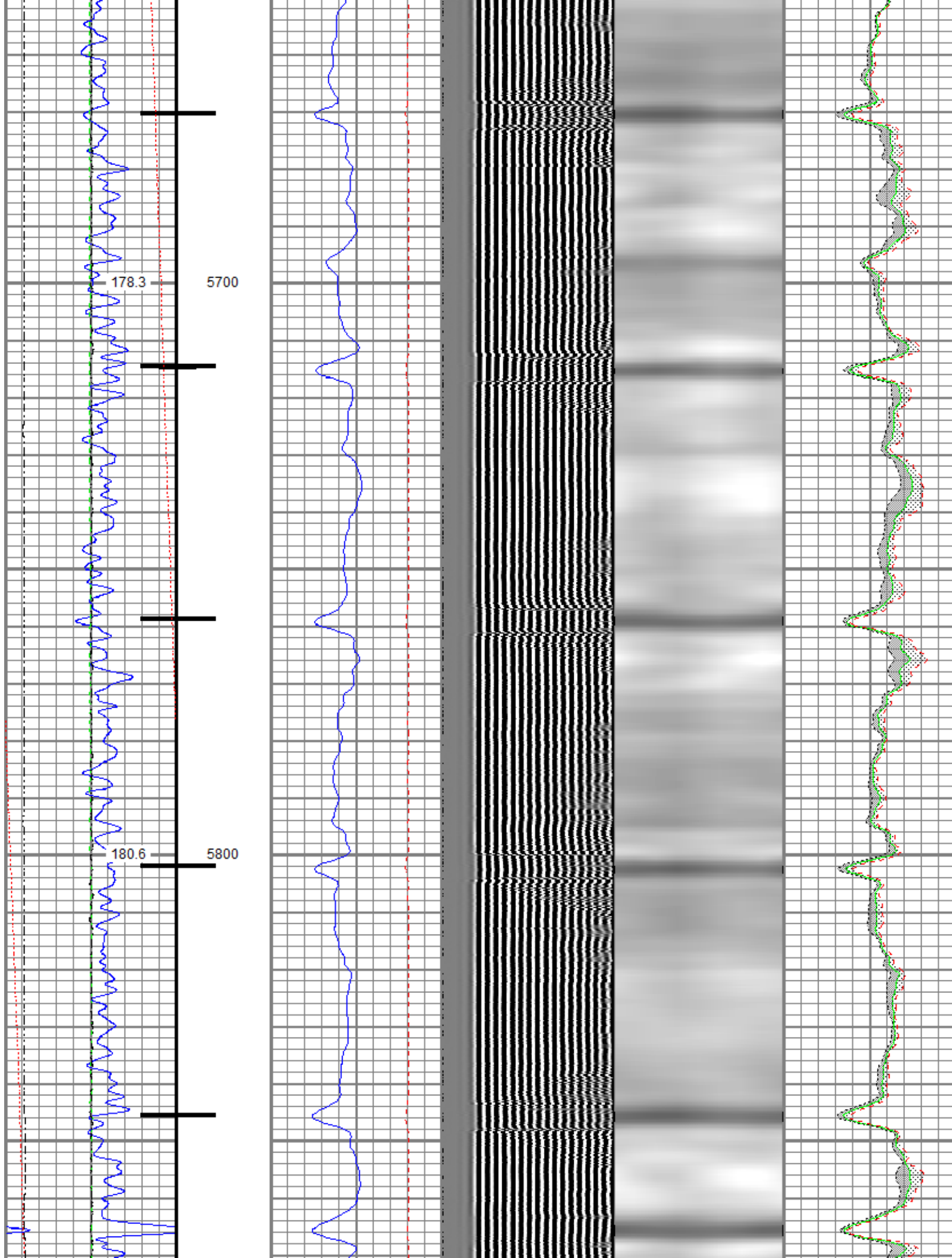


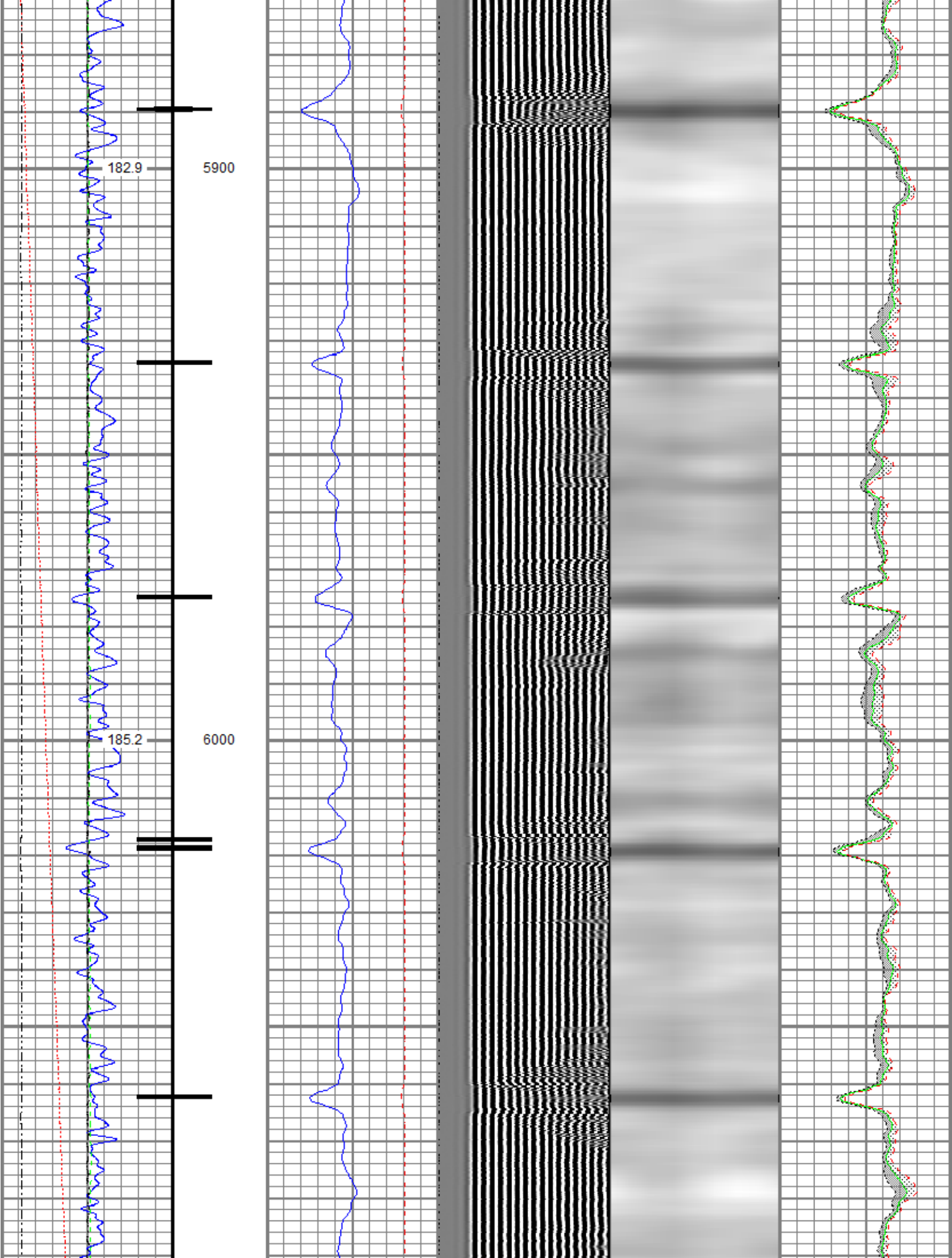


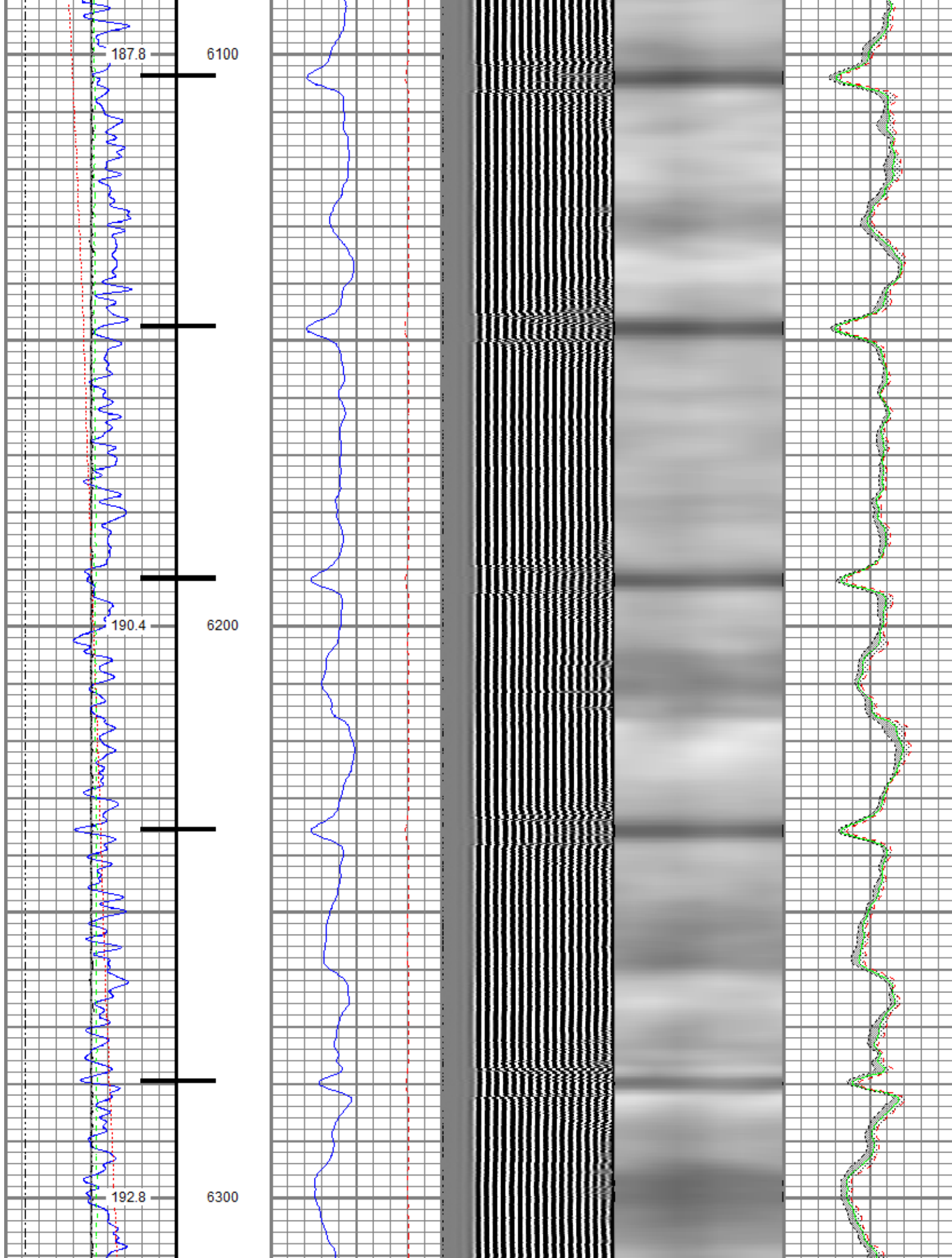


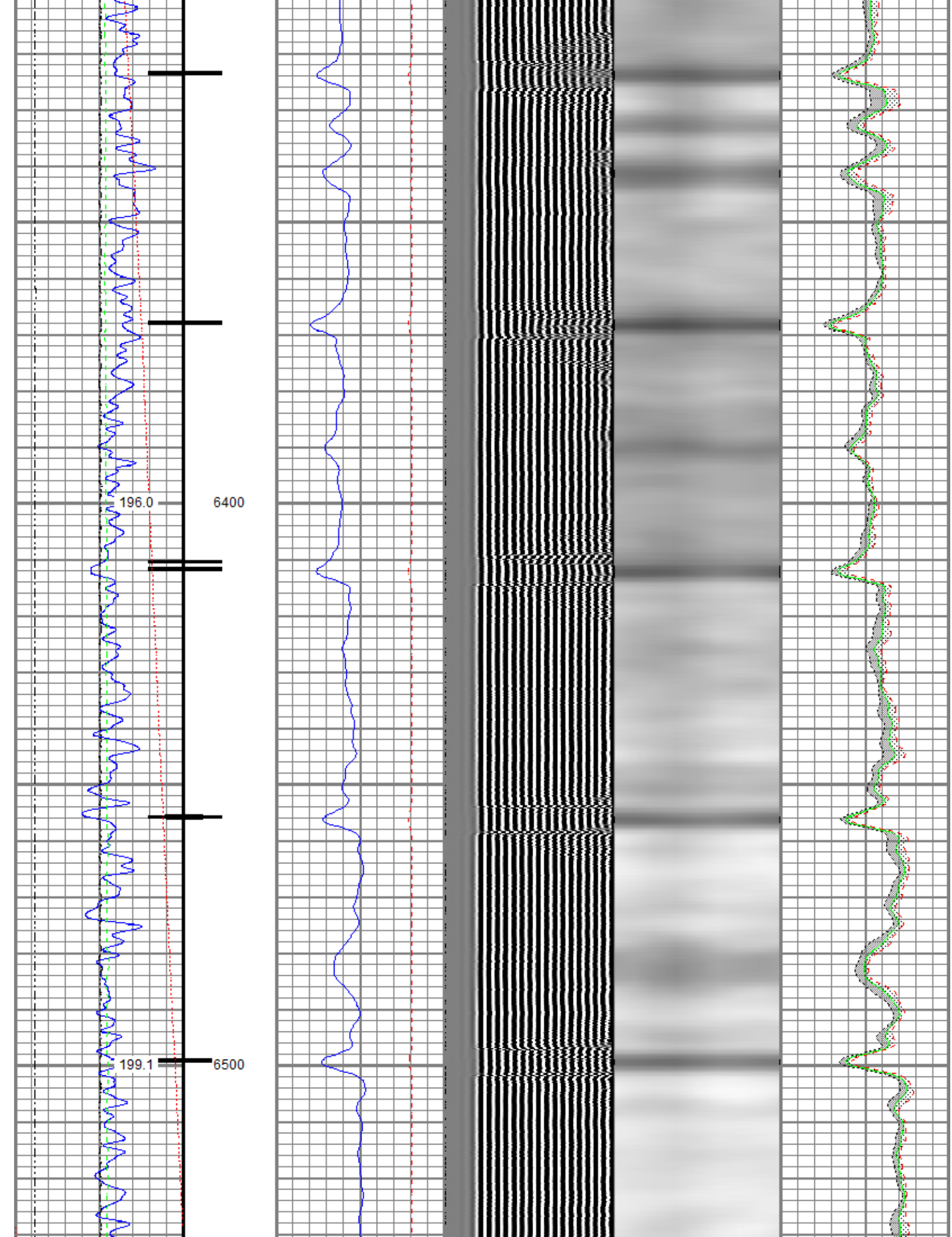


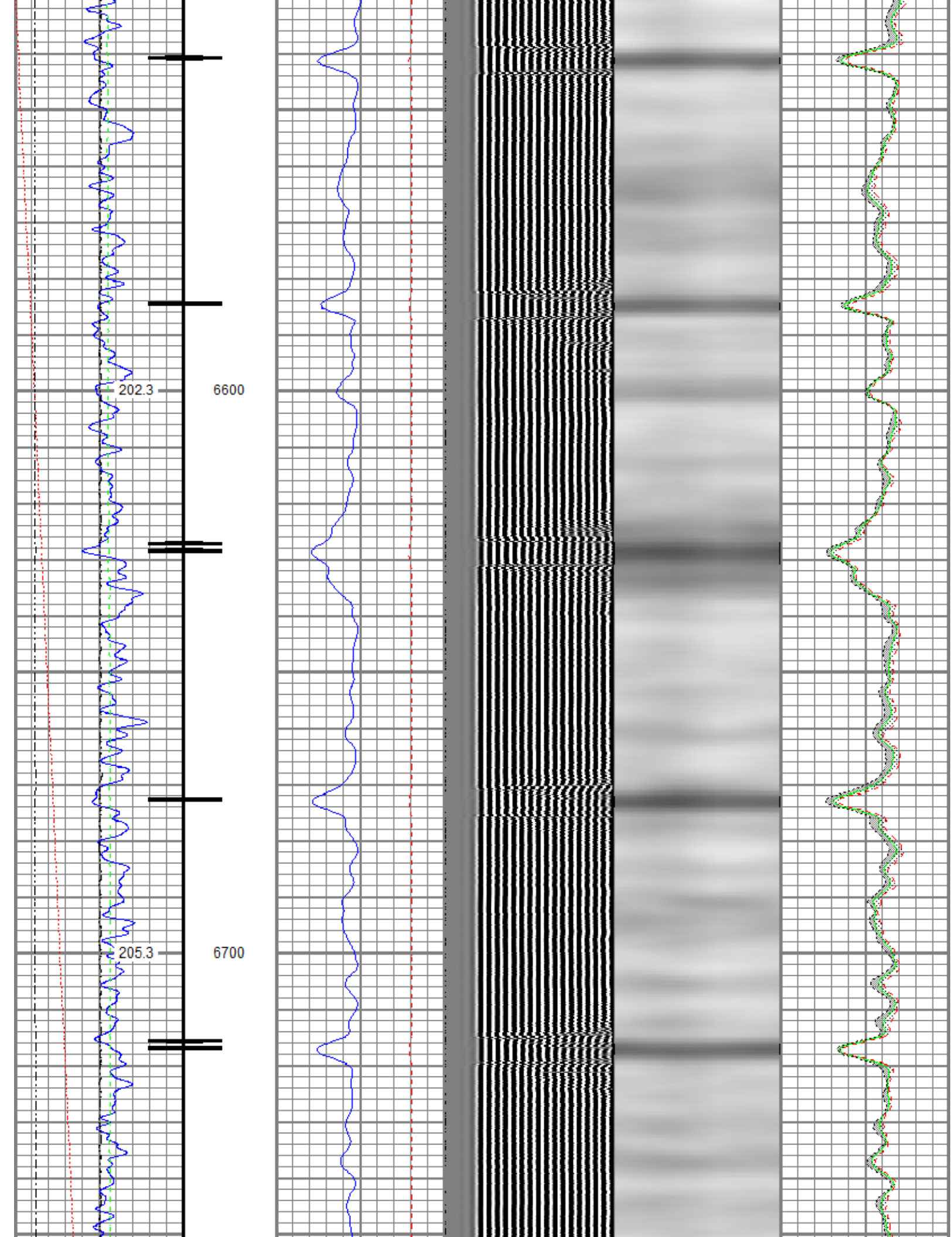


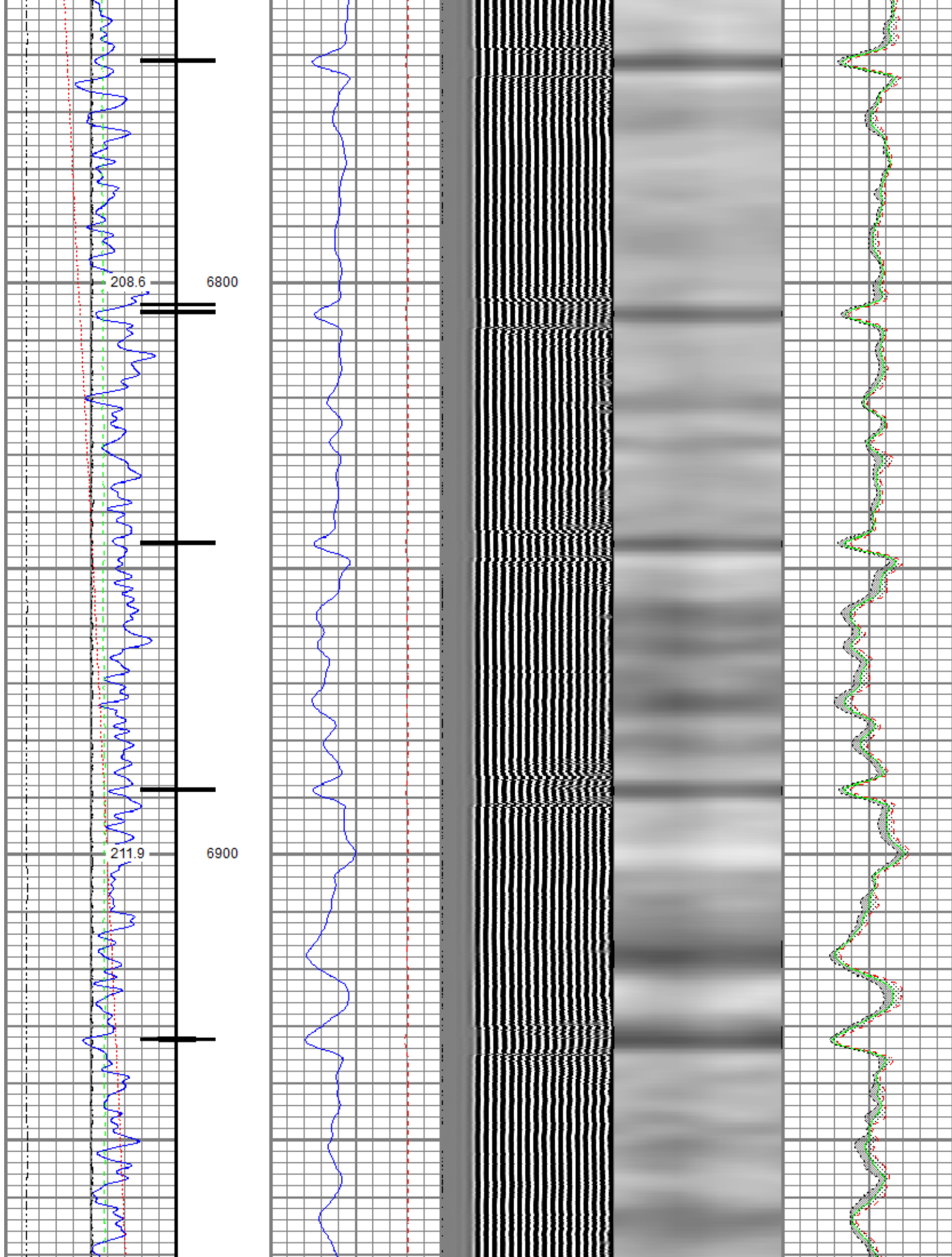


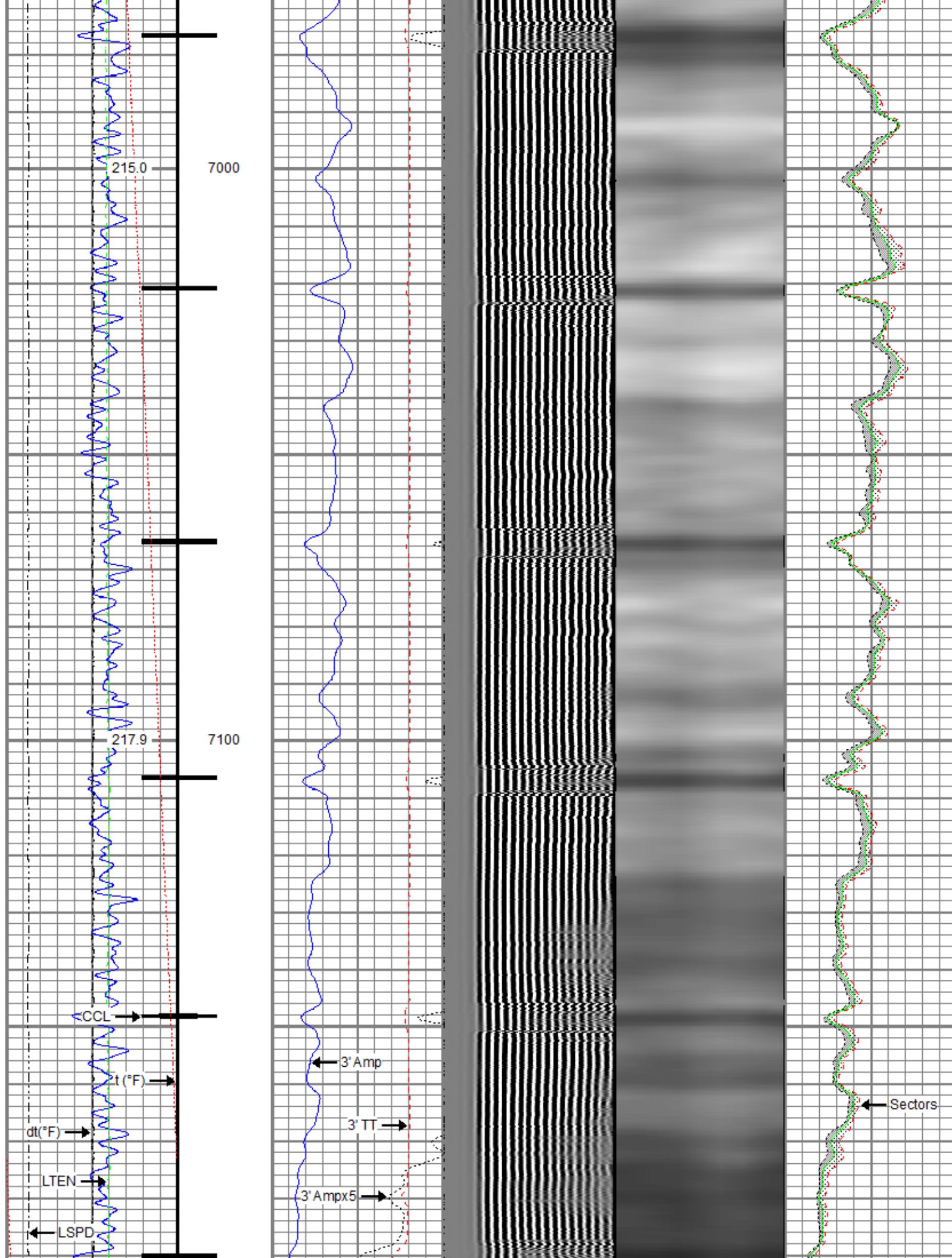


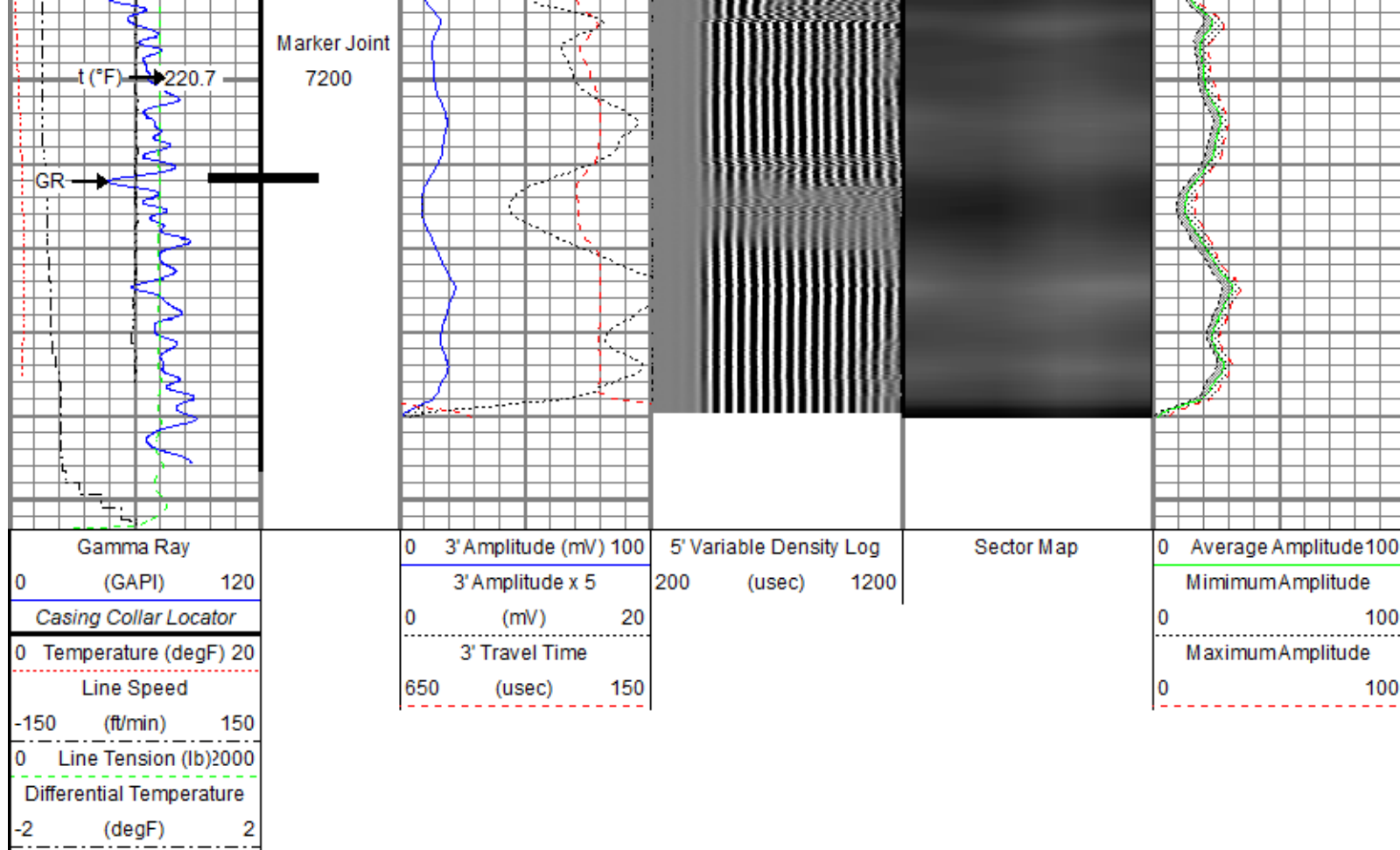








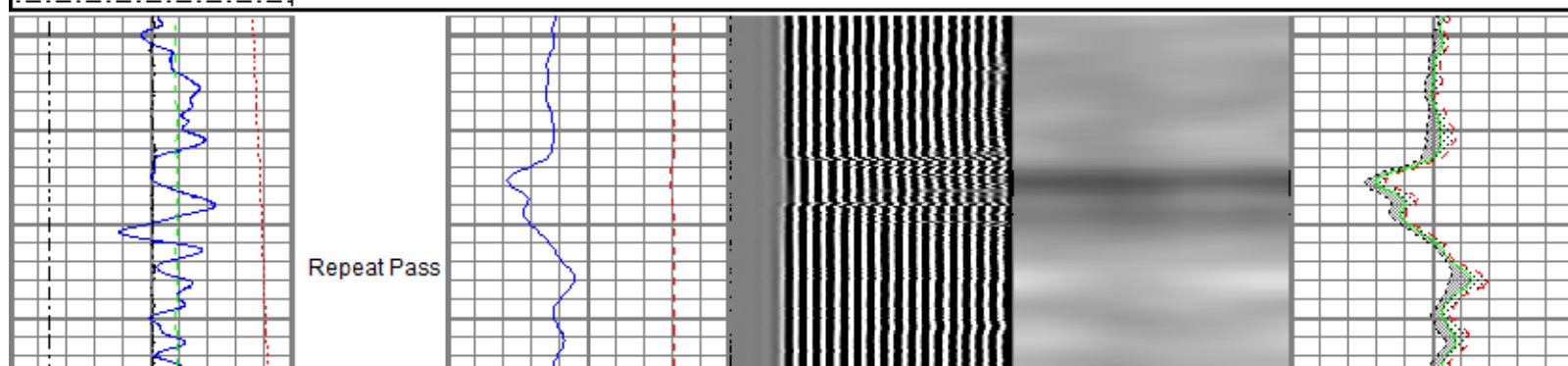
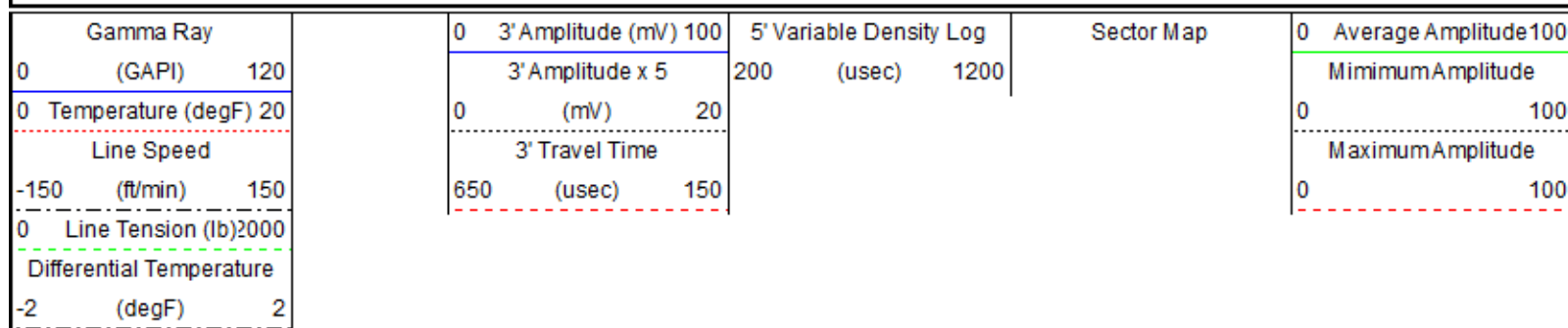


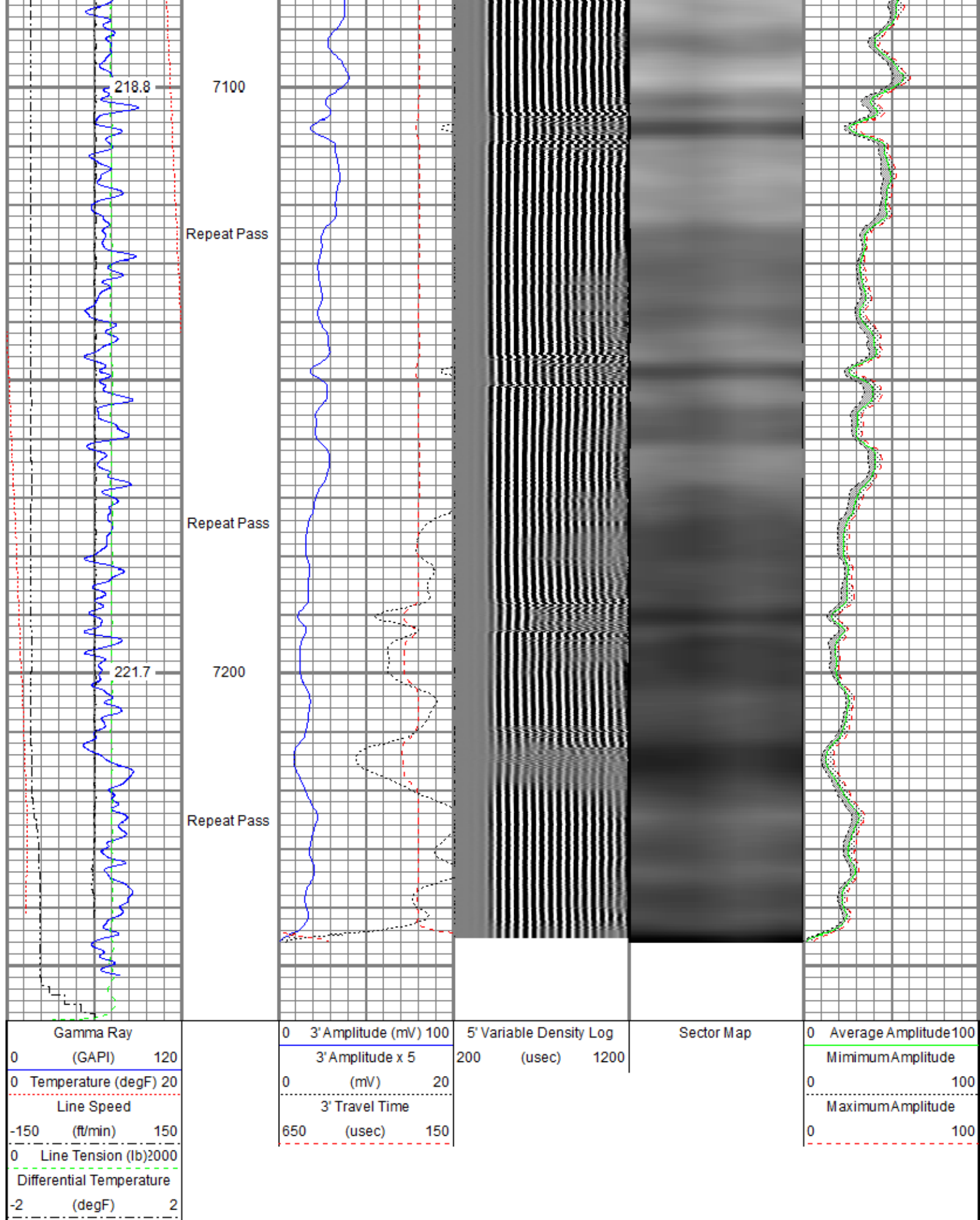


Repeat Pass

Recorded With 0 PSI Surface Induced Pressure

Database File: anadarko\0512349357_anadarko_ranger 7-20hz_rbl_07-30-19\processed_0512349357_anadarko_ranger 7-20hz_rbl_07-30-19
 Dataset Pathname: well20/repeat.2
 Presentation Format: ros_radrii
 Dataset Creation: Wed Jul 31 11:06:37 2019
 Charted by: Depth in Feet scaled 1:240





Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
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Calibration Report

Database File c:\programdata\warrior\data\anadarko\0512349357_anadarko_ranger 7-20hz_rbl_07-30-19\processed_0512349357_anadarko_
Dataset Pathname well20/main.1
Dataset Creation Tue Jul 30 12:24:50 2019

Gamma Ray Calibration Report

Serial Number: FW1810-044
Tool Model: 2750 6PB
Performed: Sat Nov 10 12:23:27 2018

Calibrator Value: 637.0 GAPI

Background Reading: 105.3 cps
Calibrator Reading: 1221.0 cps

Sensitivity: 0.5709 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: 120855
Tool Model: 2750 RBT

Calibration Casing Diameter: 5.500 in
Calibration Depth: 21.507 ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.003	0.669	0.800	71.921	106.712	0.494
CAL	0.741	0.743				
5'	0.001	0.621	0.800	71.921	114.754	0.671
SUM						
S1	0.002	0.652	0.000	100.000	154.003	-0.361
S2	0.003	0.709	0.000	100.000	141.755	-0.452
S3	0.003	0.740	0.000	100.000	135.643	-0.439
S4	0.003	0.727	0.000	100.000	138.231	-0.427
S5	-0.017	0.686	0.000	100.000	142.086	2.478
S6	-0.039	0.648	0.000	100.000	145.580	5.618
S7	-0.032	0.636	0.000	100.000	149.801	4.762
S8	-0.008	0.631	0.000	100.000	156.604	1.186


Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.741	0.743	1.000	0.000

Air Zero Calibration, performed Sun Jul 28 10:34:06 2019:

	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:	120855			
Tool Model:	2750 RBT			
Performed:	Mon Oct 01 11:32:15 2018			
	Reference		Reading	
Low Reference:	100.00	degF	112.30	degF
High Reference:	350.00	degF	394.75	degF
Gain:	0.89			
Offset:	0.60			
Delta Spacing	1			

	Company	Kerr-McGee Oil & Gas Onshore, L.P.
	Well	Ranger 7-20HZ
	Field	Wattenberg
	County	Weld
	State	Colorado