



Radial Cement Bond
Gamma Ray
Casing Collar Log

Company Kerr-McGee Oil & Gas Onshore, L.P.

Well Reese 21-3HZ

Field Wattenberg

County Weld State Colorado

Location: API #: 05-123-47873

SEC 21 TWP 2N RGE 67W

Permanent Datum Ground Level Elevation 4998'

Log Measured From Kelly Bushing 21 FT

Drilling Measured From Kelly Bushing

Other Services
GR/JB
RBP

Elevation
K.B. 5019'
D.F. ---
G.L. 4998'

Company Kerr-McGee Oil & Gas Onshore, L.P.
Well Reese 21-3HZ
Field Wattenberg
County Weld
State Colorado

Date	05-APR-2019			
Run Number	Three			
Depth Driller	15737 FT			
Depth Logger	6871 FT			
Bottom Logged Interval	6857 FT			
Top Log Interval	Surface			
Open Hole Size	7.875"			
Type Fluid	Water			
Density / Viscosity	8.34 lb/gal			
Max. Recorded Temp.	209°F			
Estimated Cement Top	See Log			
Time Well Ready	ROA			
Time Logger on Bottom	14:20			
Equipment Number	HD-0363			
Location	Platteville, CO			
Recorded By	M Hayes			
Witnessed By	John McCarthy			
Borehole Record				
Run Number	Bit	From	To	Size
				Weight
				From
				To
Tubing Record				
Casing Record	Size (in)	Wgt (lbs/ft)	Grade	Top
Surface Casing	9 5/8	36	J-55	Surface
Intermediate #1	5 1/2	17	HCP-110	Surface
Intermediate #2				
Inner				

<<< 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 6837 FT
Adjusted 5 FT to correlate with Marker Joint
Gauge Ring/Junk Basket ran to 7788 FT
Retrievable Bridge Plug set at 6903 FT
Log ran with 0 PSI Surface Induced Pressure
Logging tools were clean and free of debris upon completion of operations

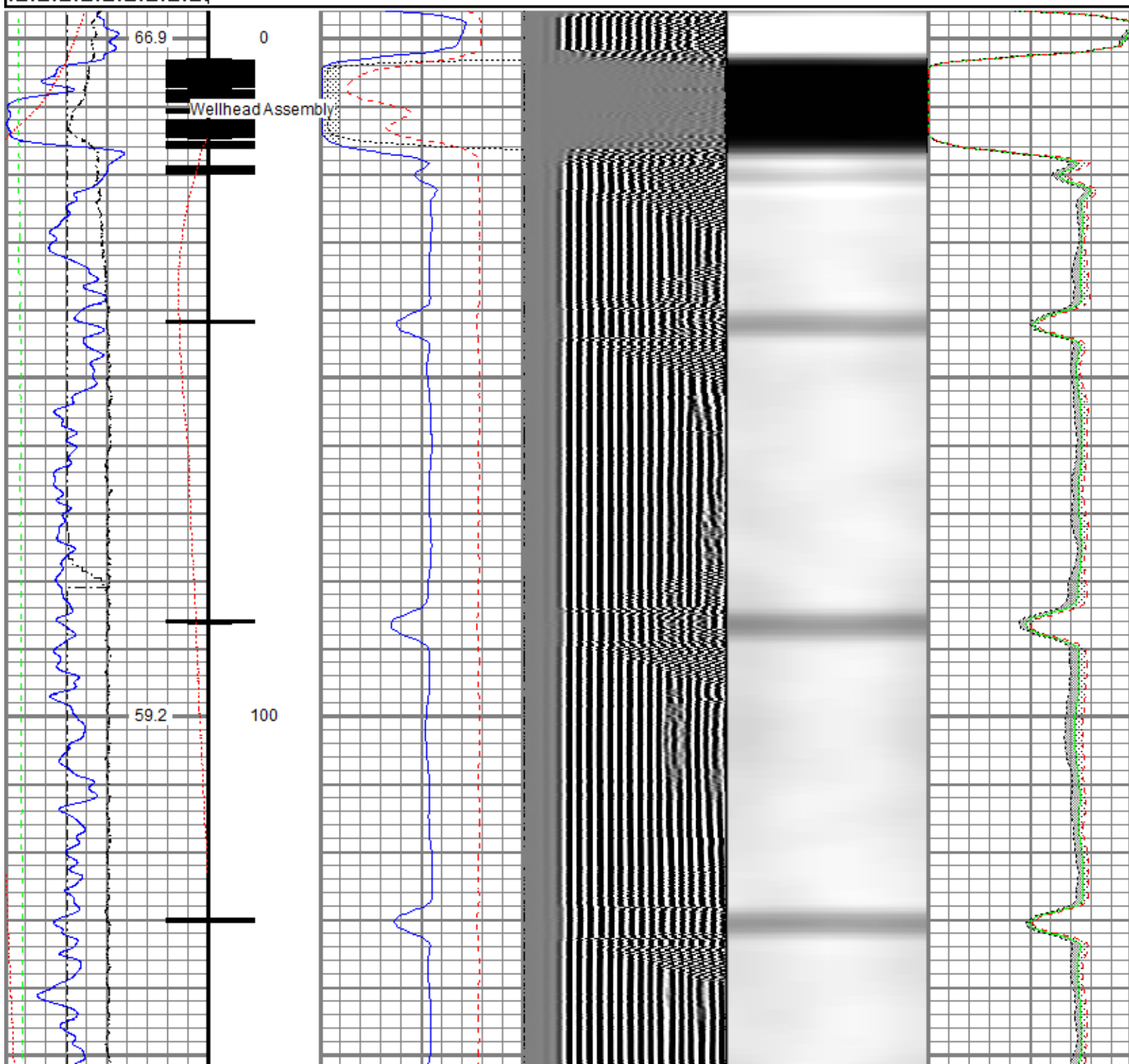
Thank you for choosing Reliance Oilfield Services, LLC!!

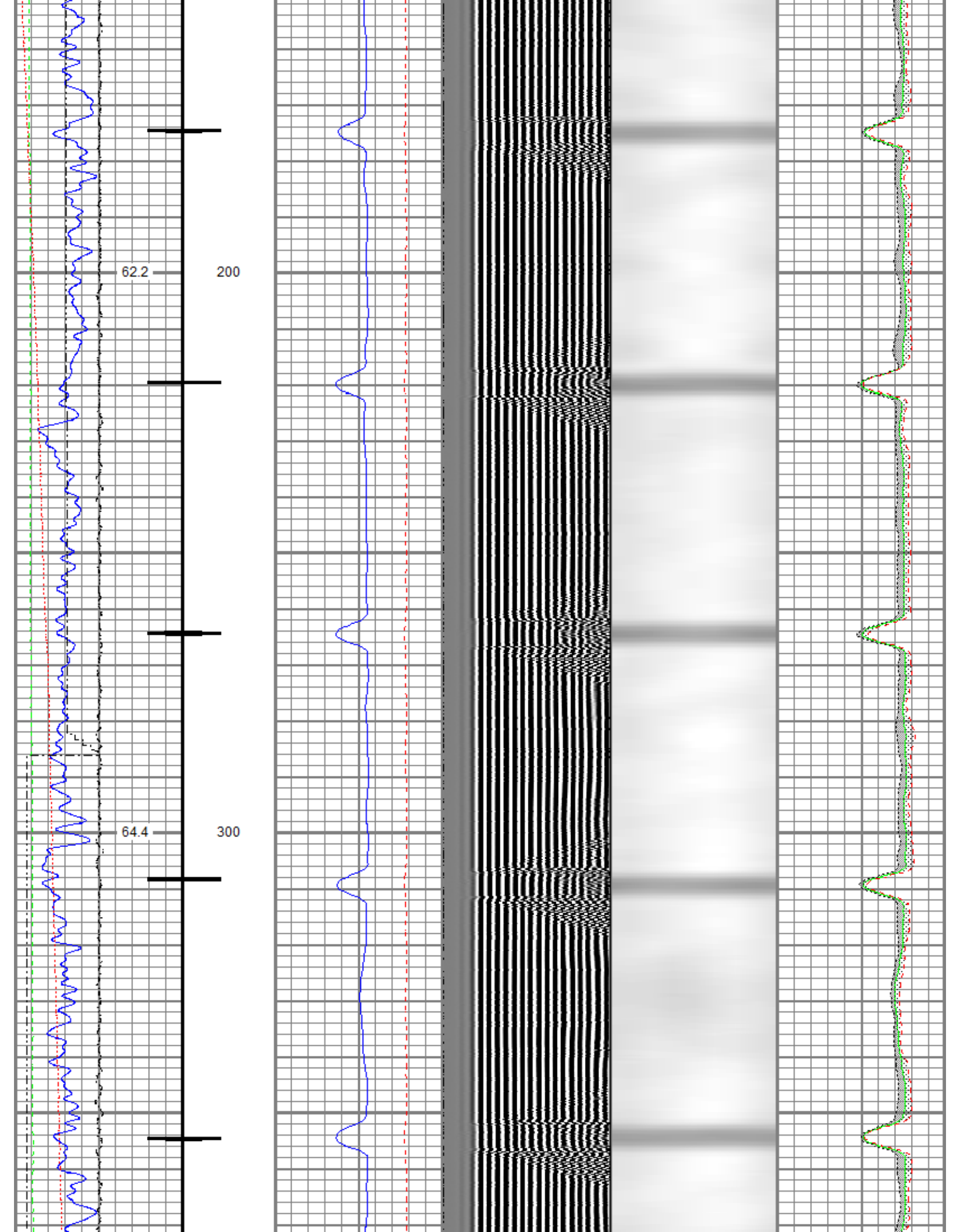
Main Pass

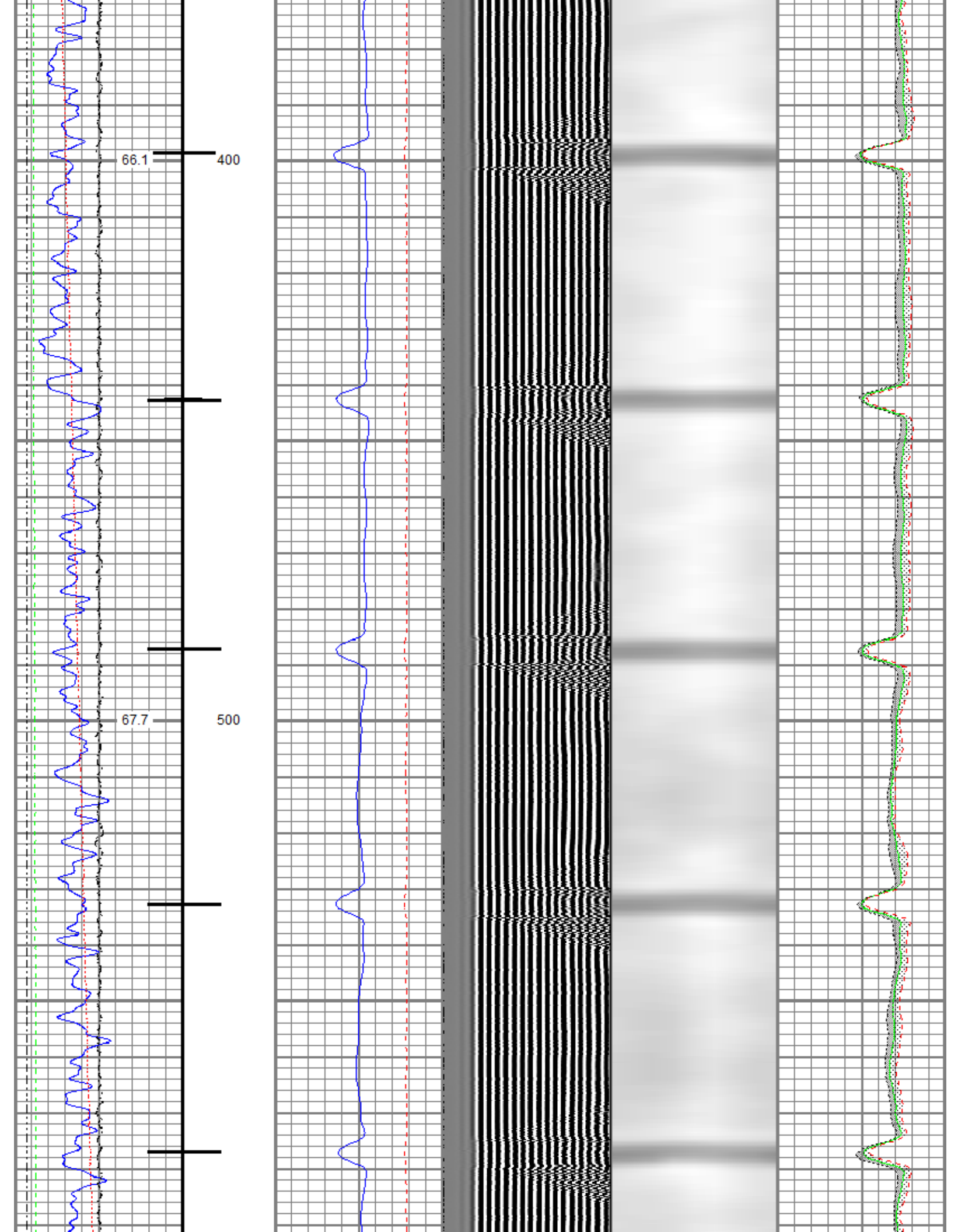


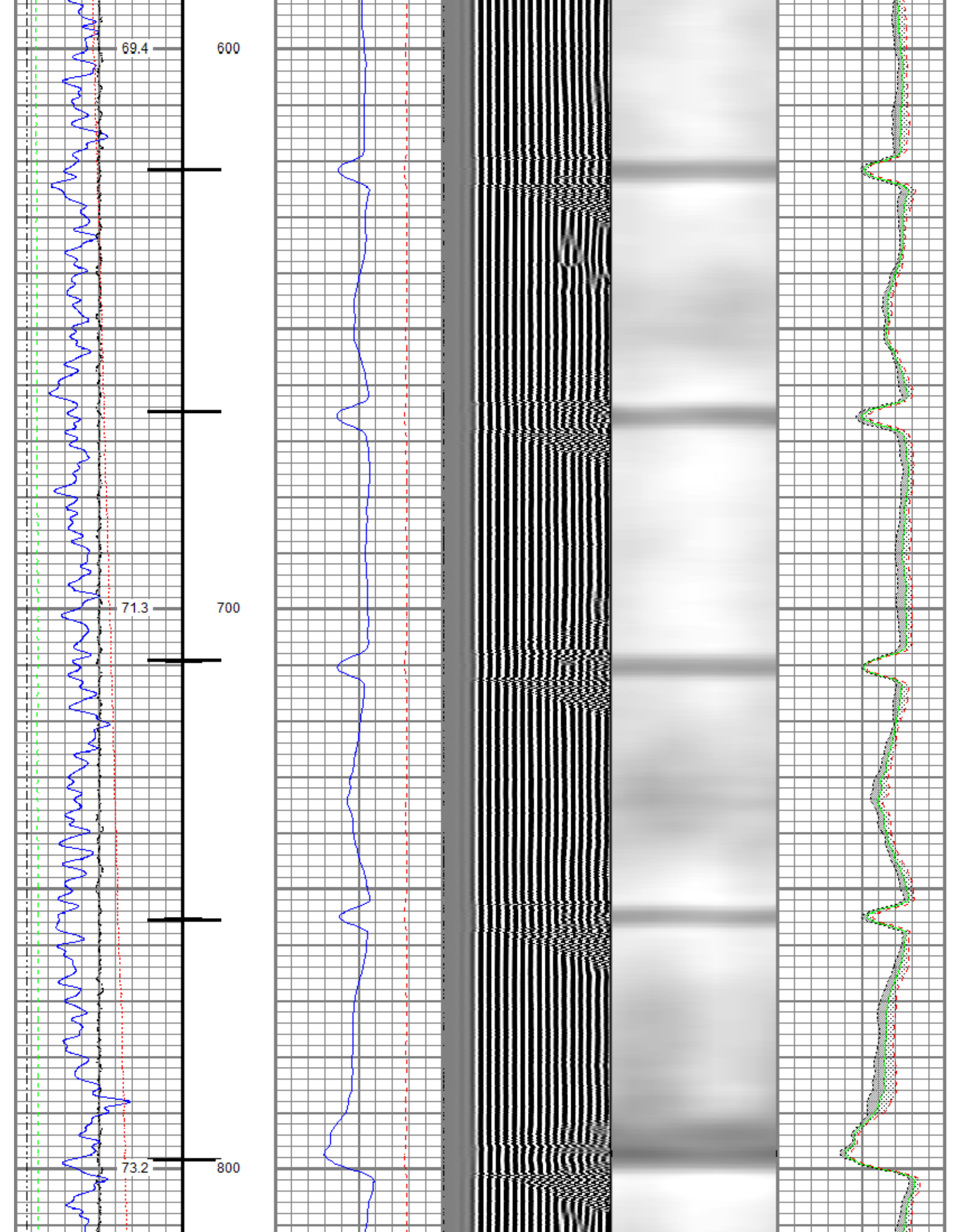
Database File 0512347873_anadarko_reese 21-3hz_rbl_04-05-19\0512347873_anadarko_reese 21-3hz_rbl_04-05-19.db
 Dataset Pathname pass4.3
 Presentation Format ros_radrii
 Dataset Creation Sat Apr 06 07:52:13 2019
 Charted by Depth in Feet scaled 1:240

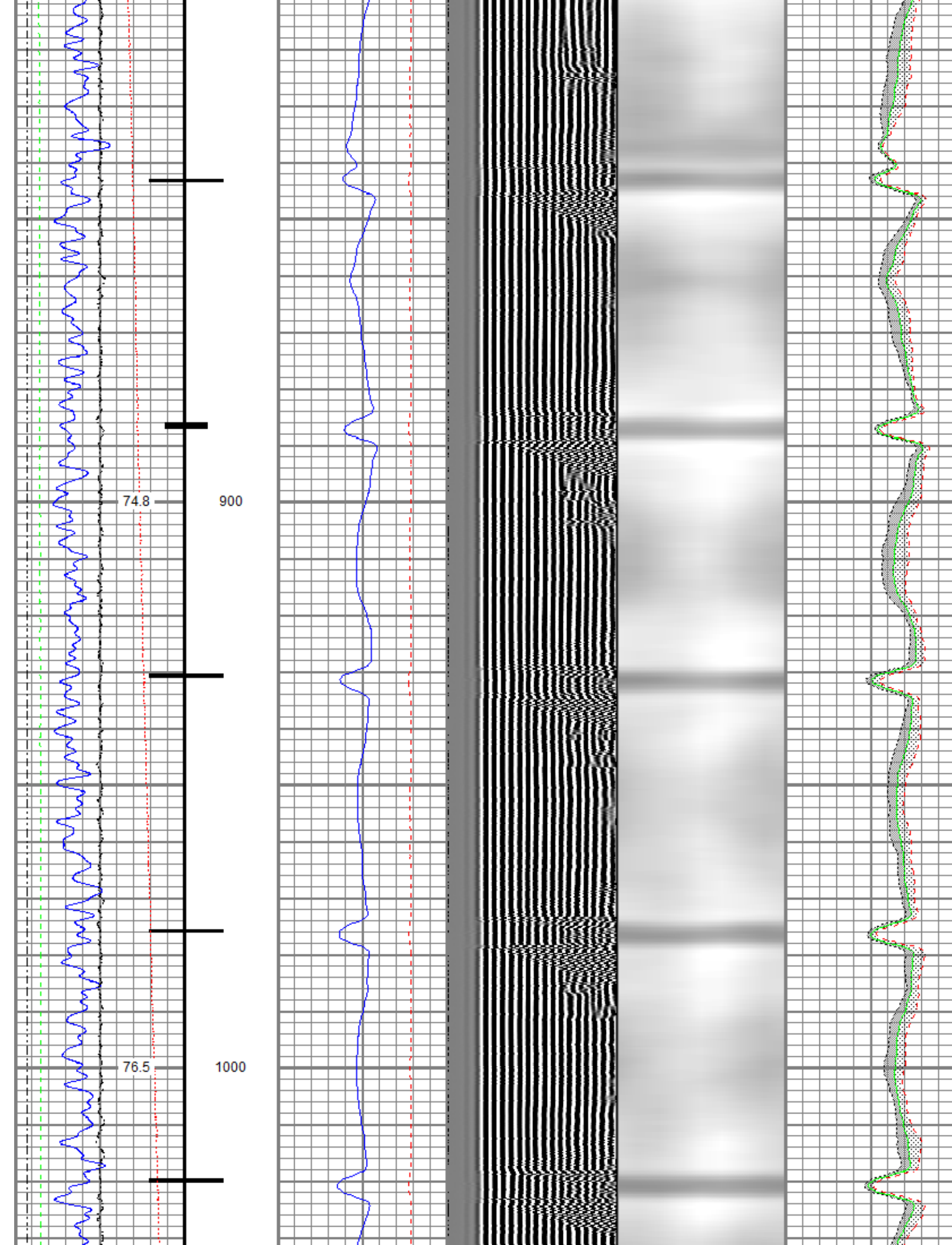
Gamma Ray	0	3' Amplitude (mV) 100	5' Variable Density Log	Sector Map	0	Average Amplitude 100
(GAPI) 120		3' Amplitude x 5	200 (usec) 1200			Minimum Amplitude
Casing Collar Locator	0	(mV) 20			0	100
Temperature (degF) 20		3' Travel Time				Maximum Amplitude
Line Speed	650	(usec) 150			0	100
-150 (ft/min)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

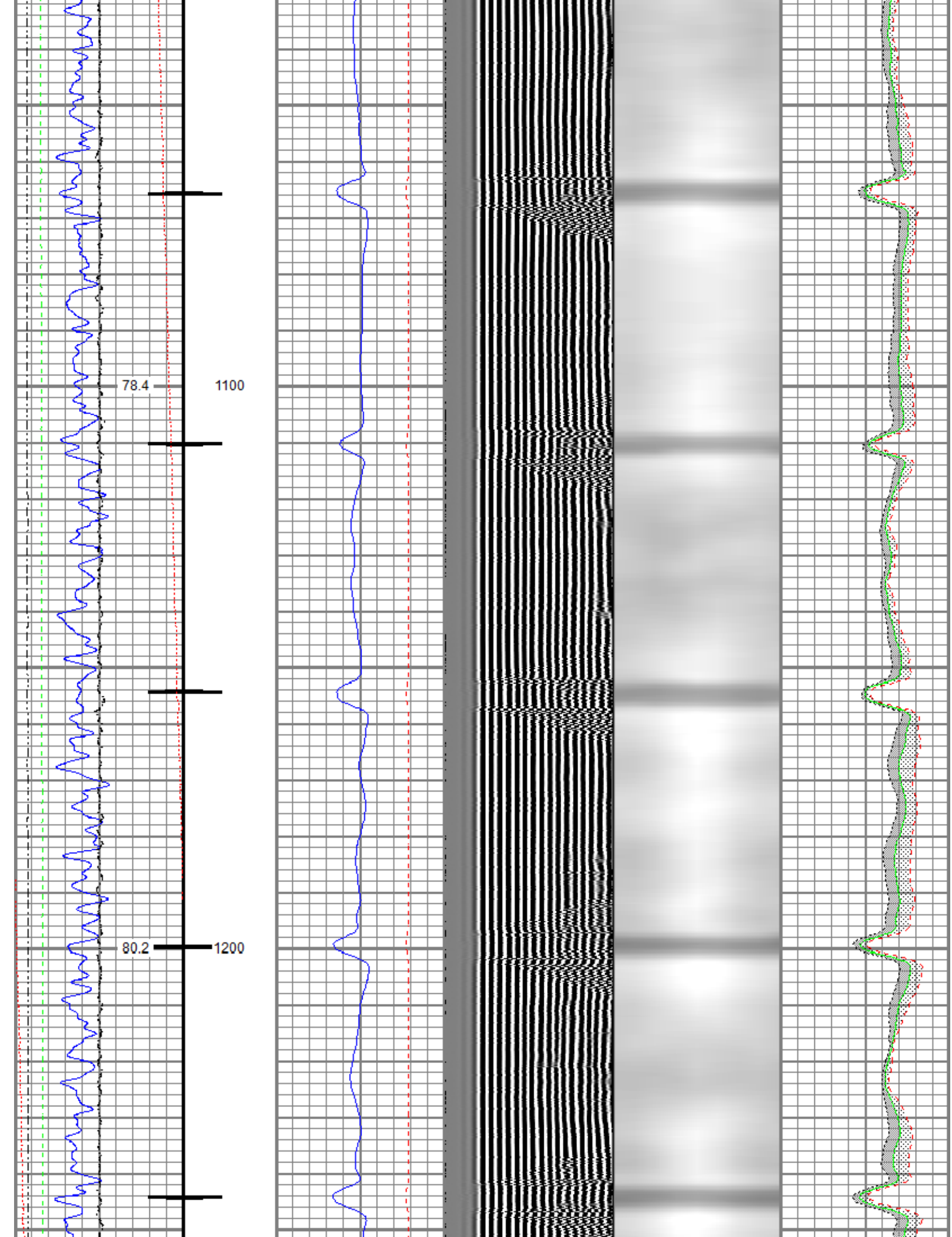


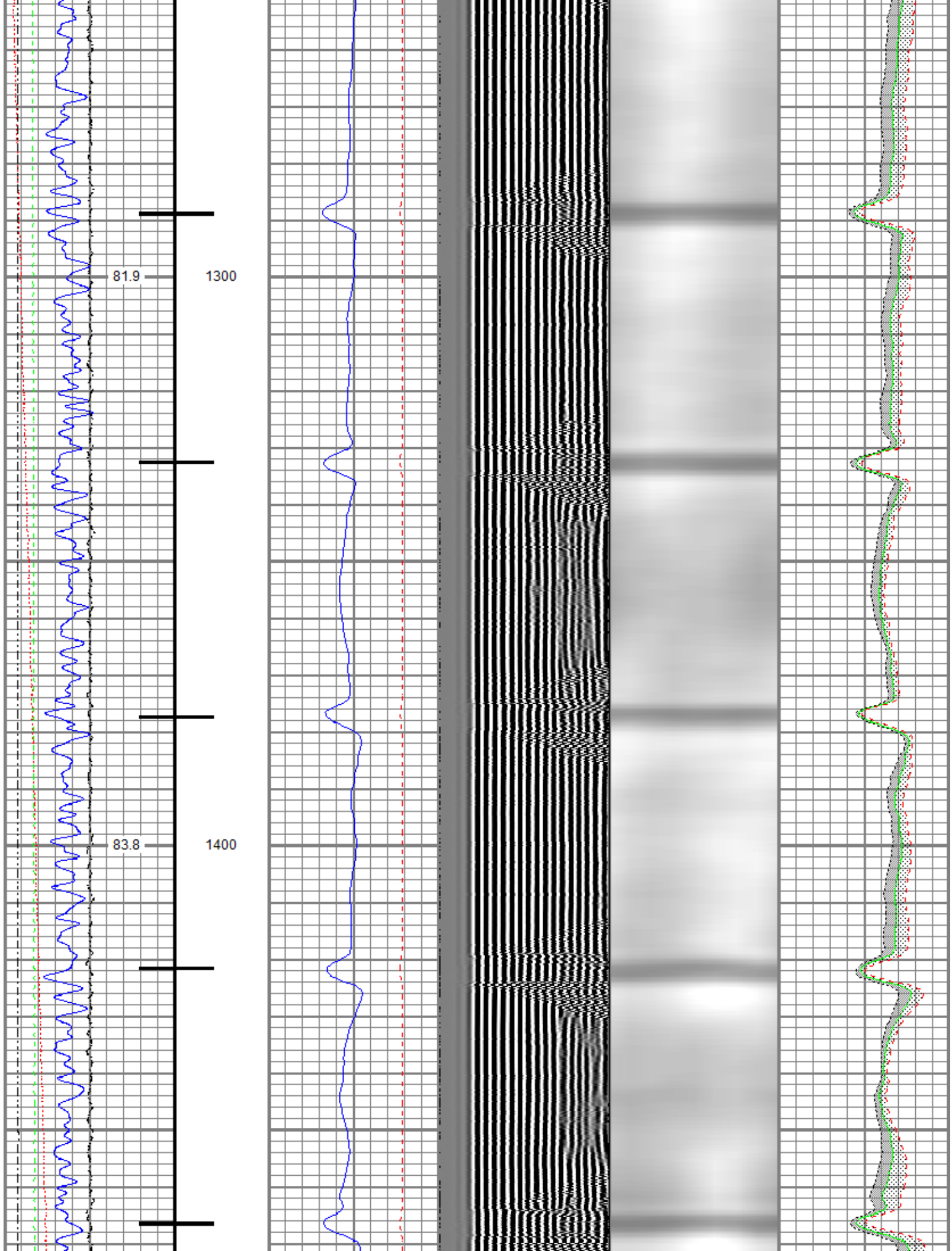


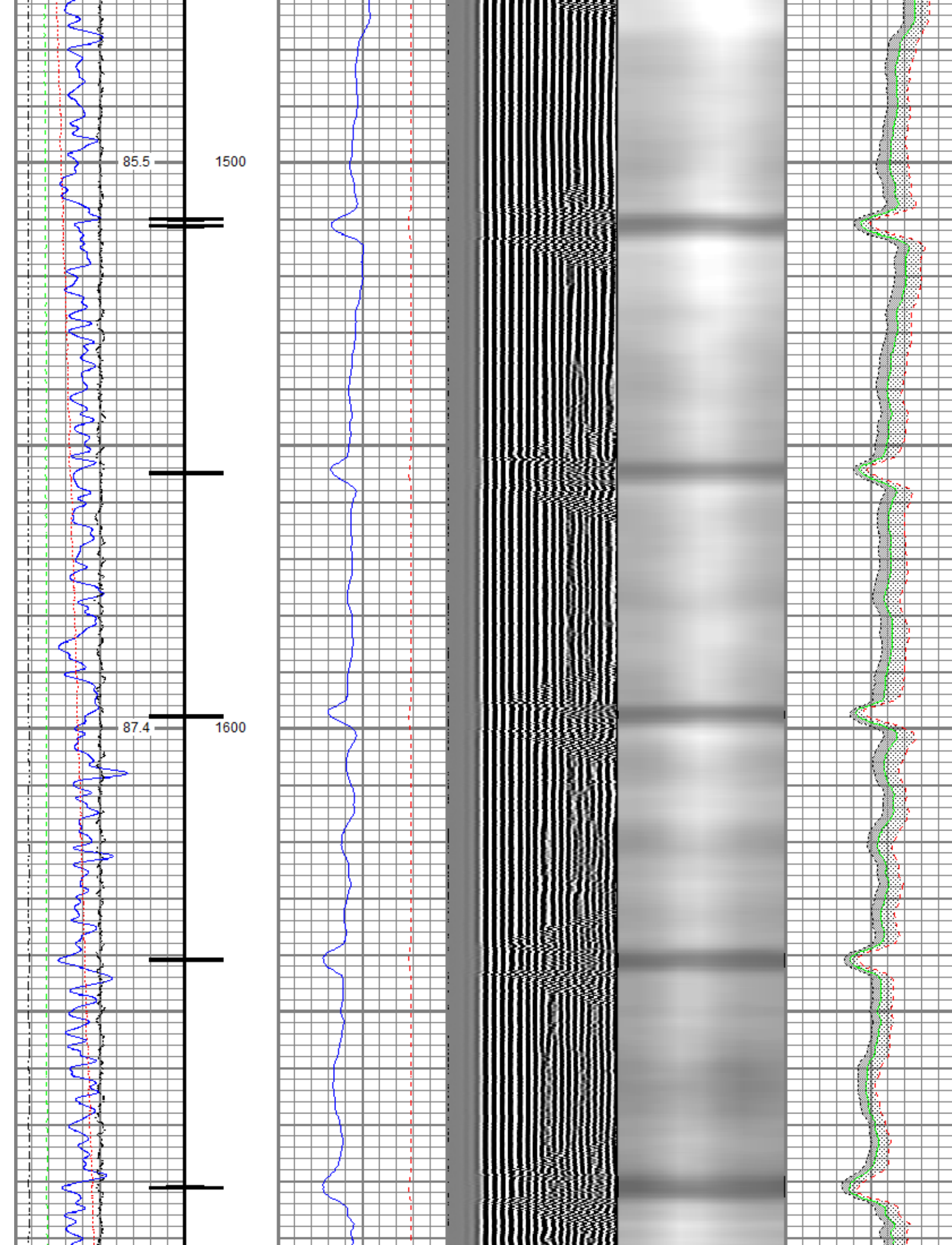


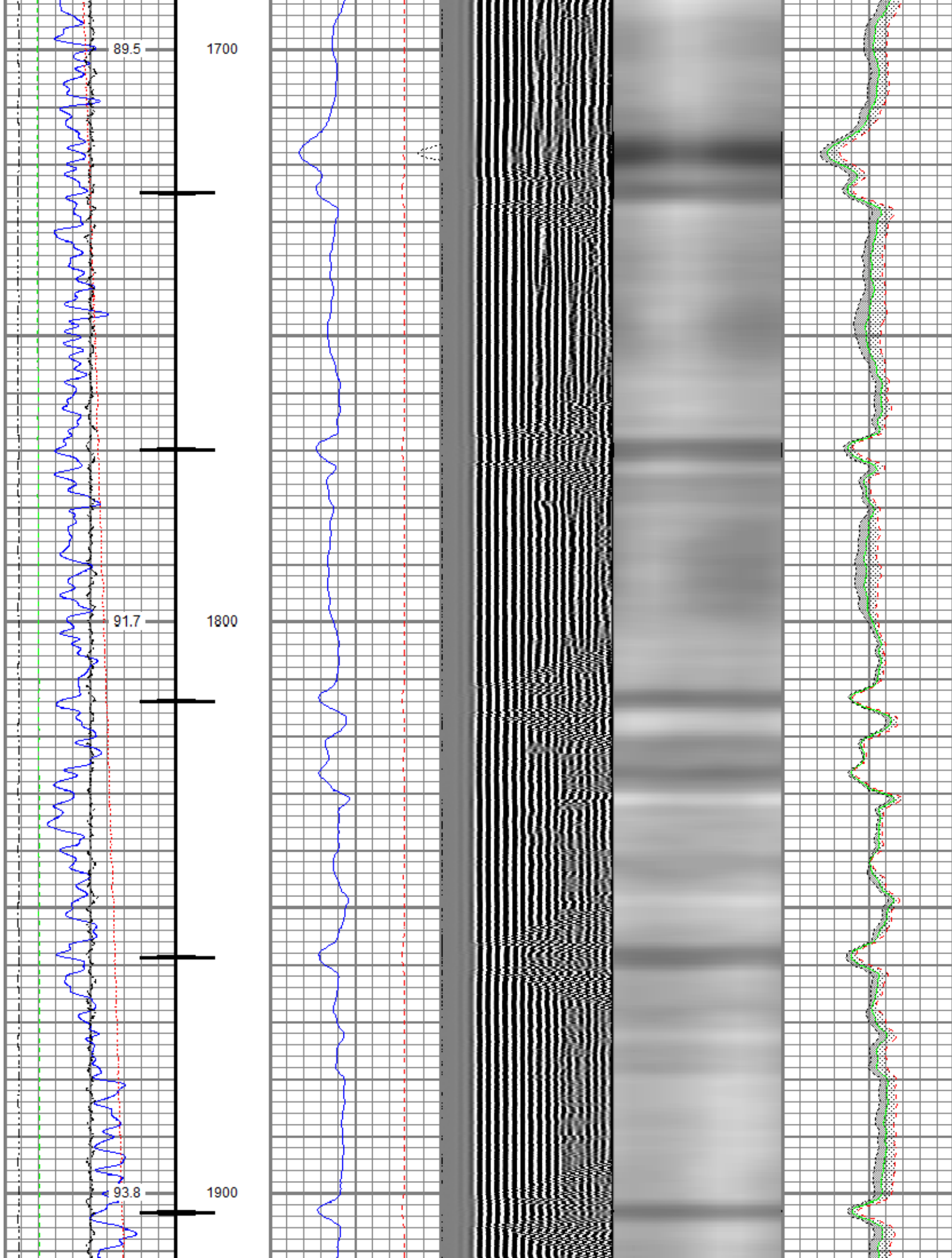


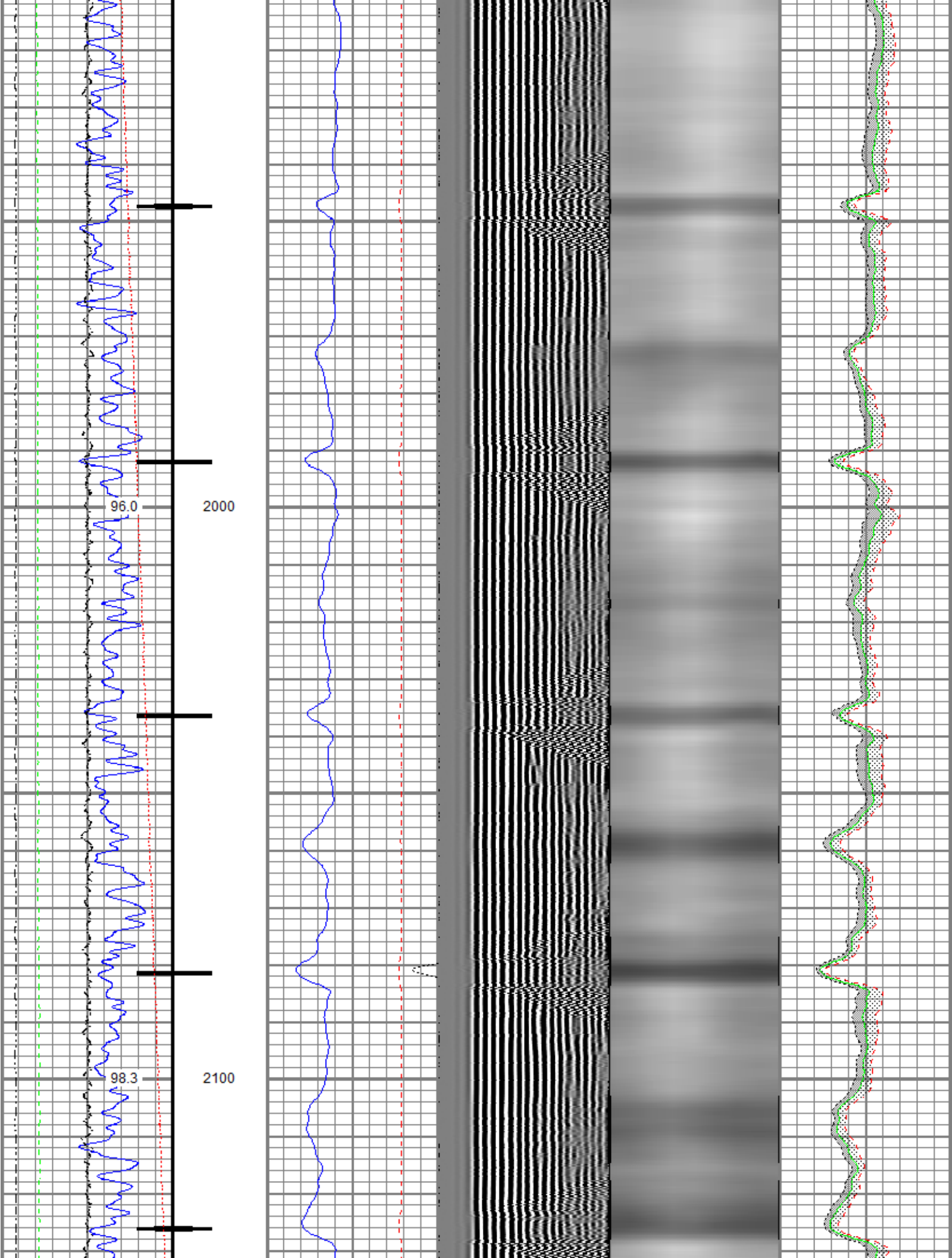


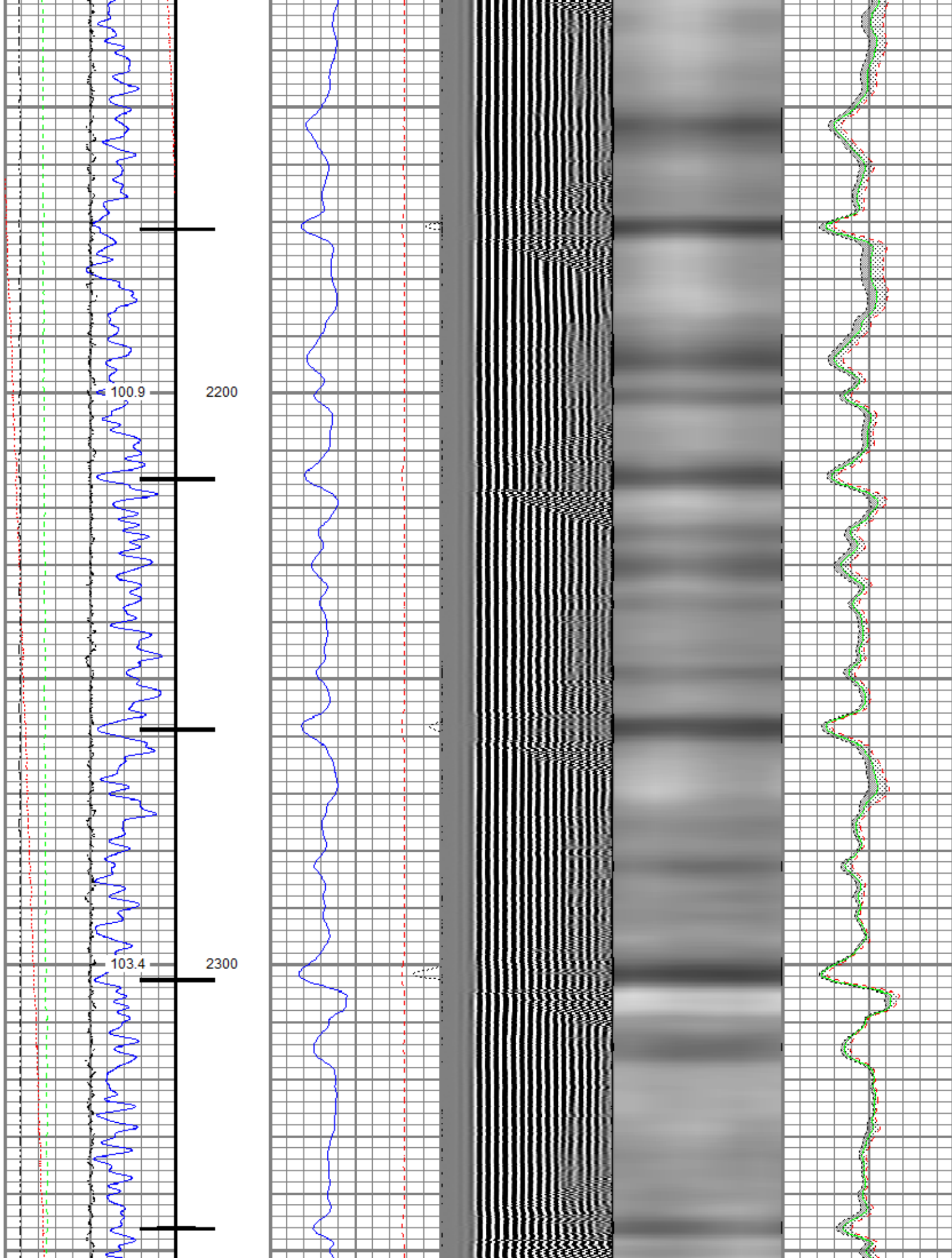


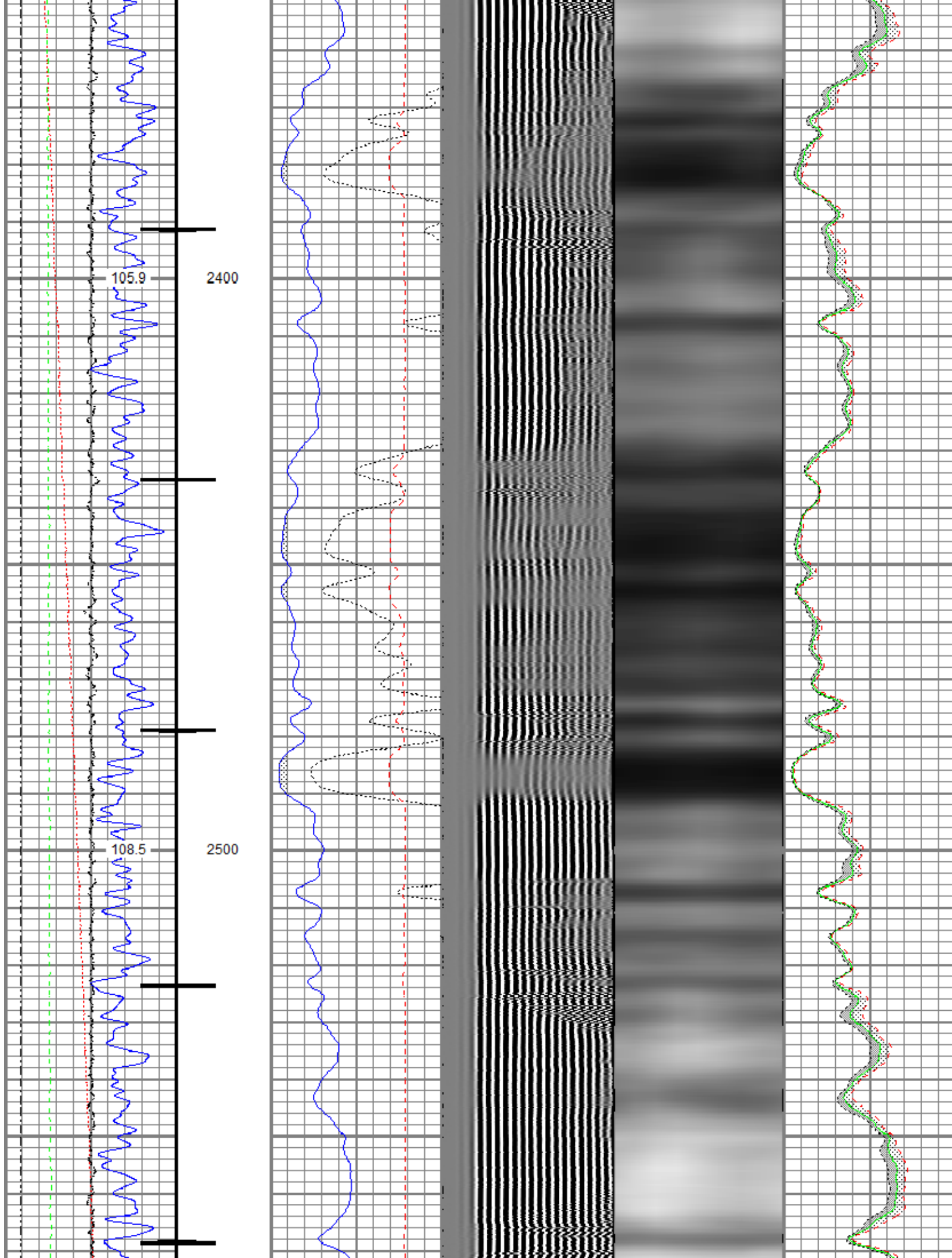


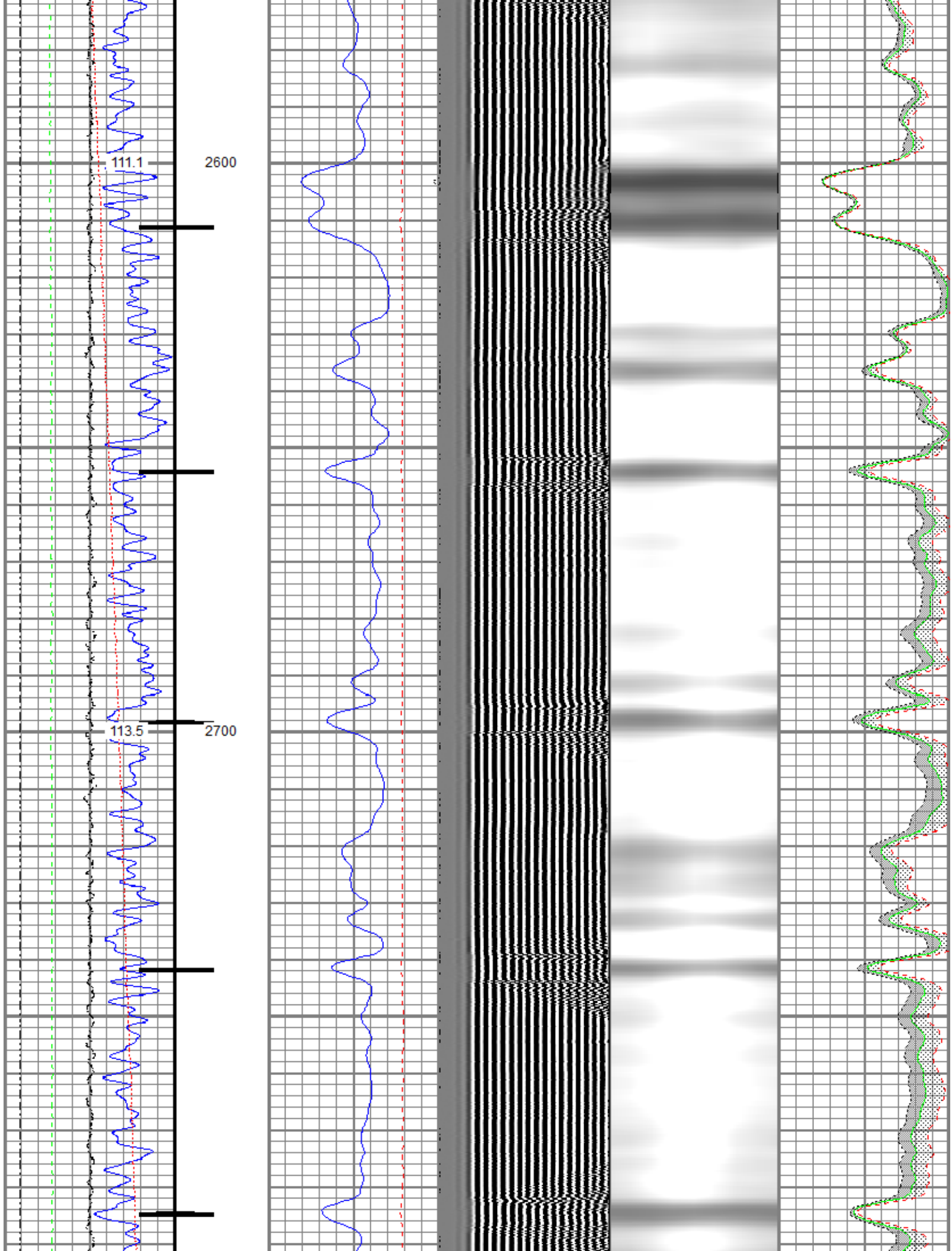


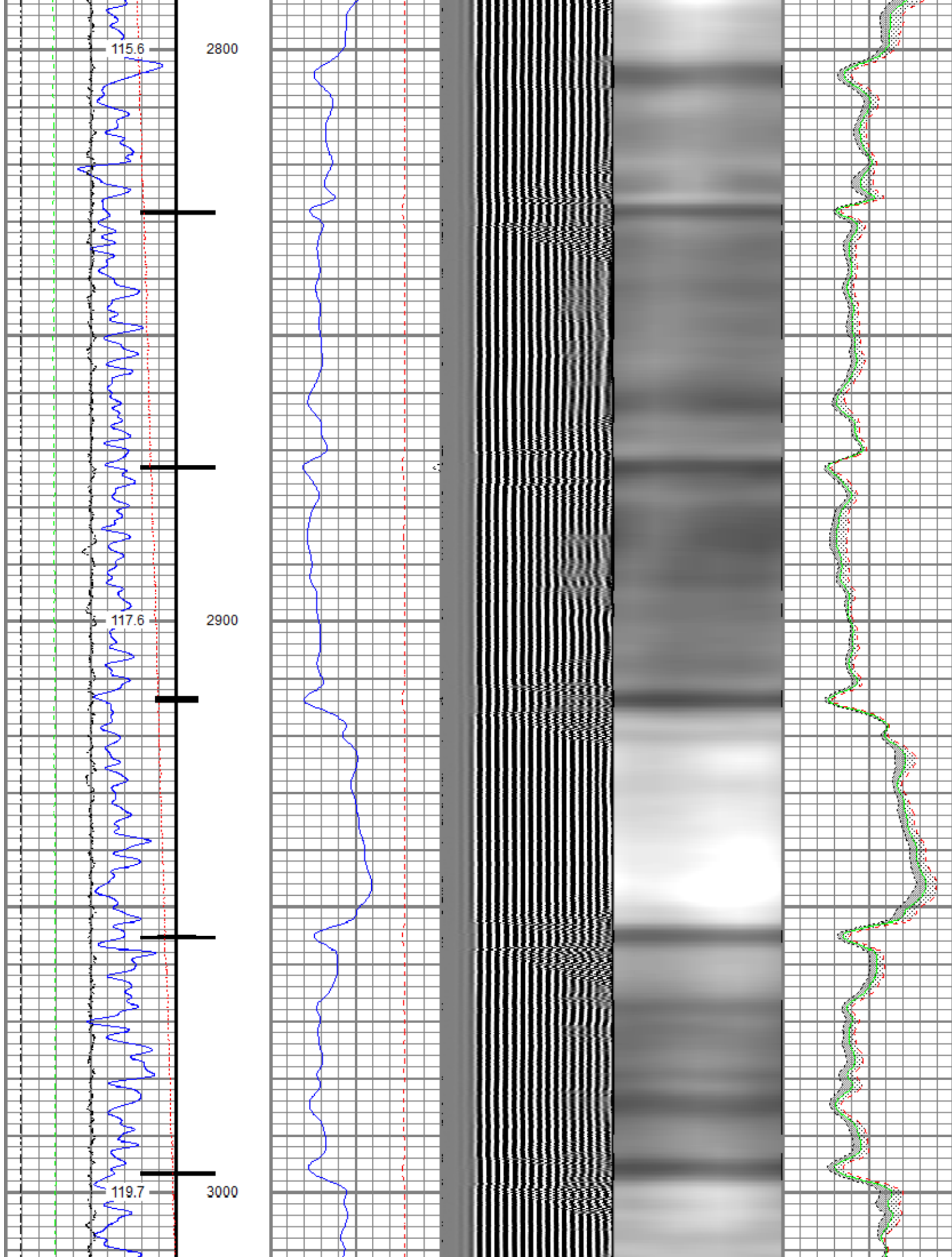


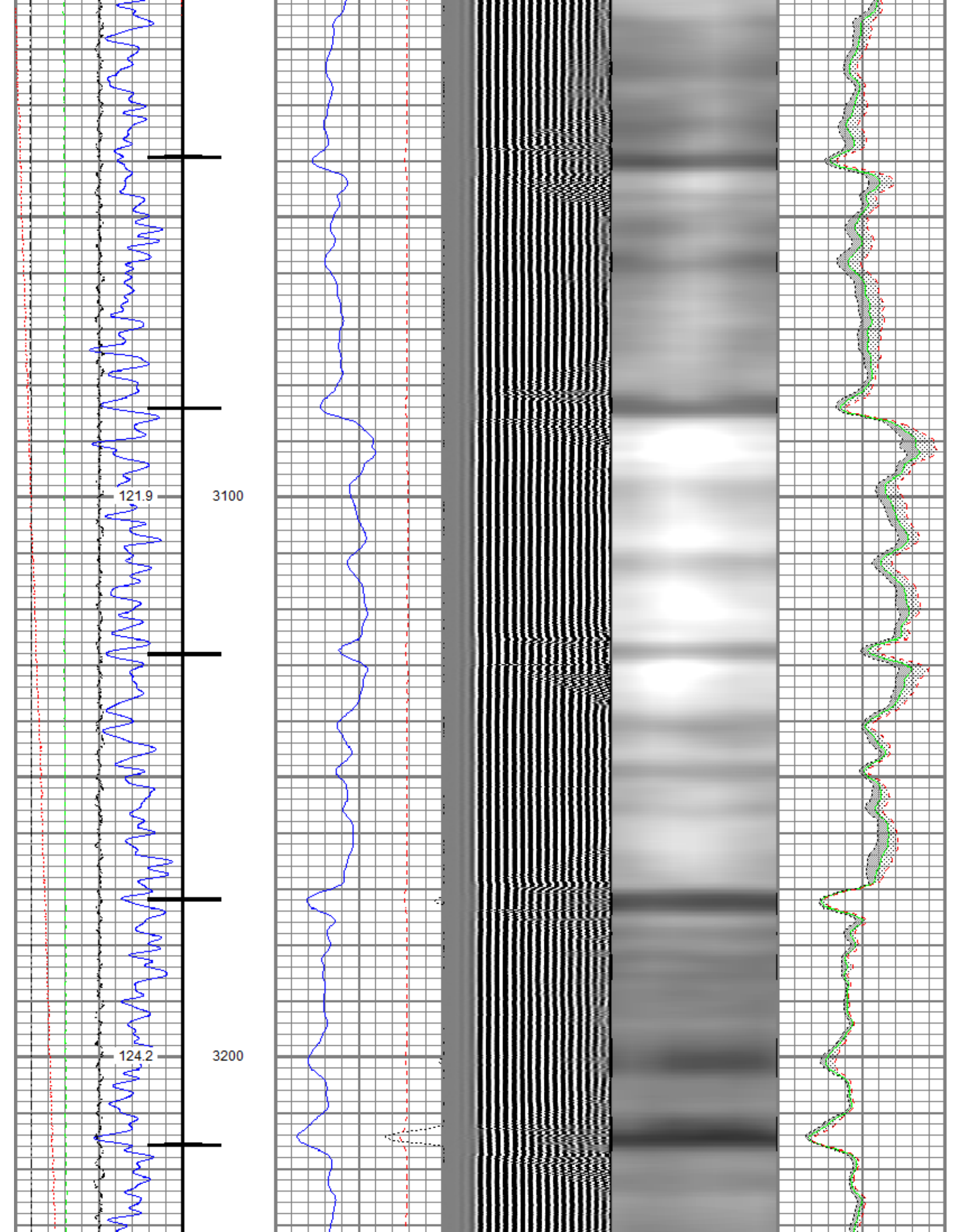


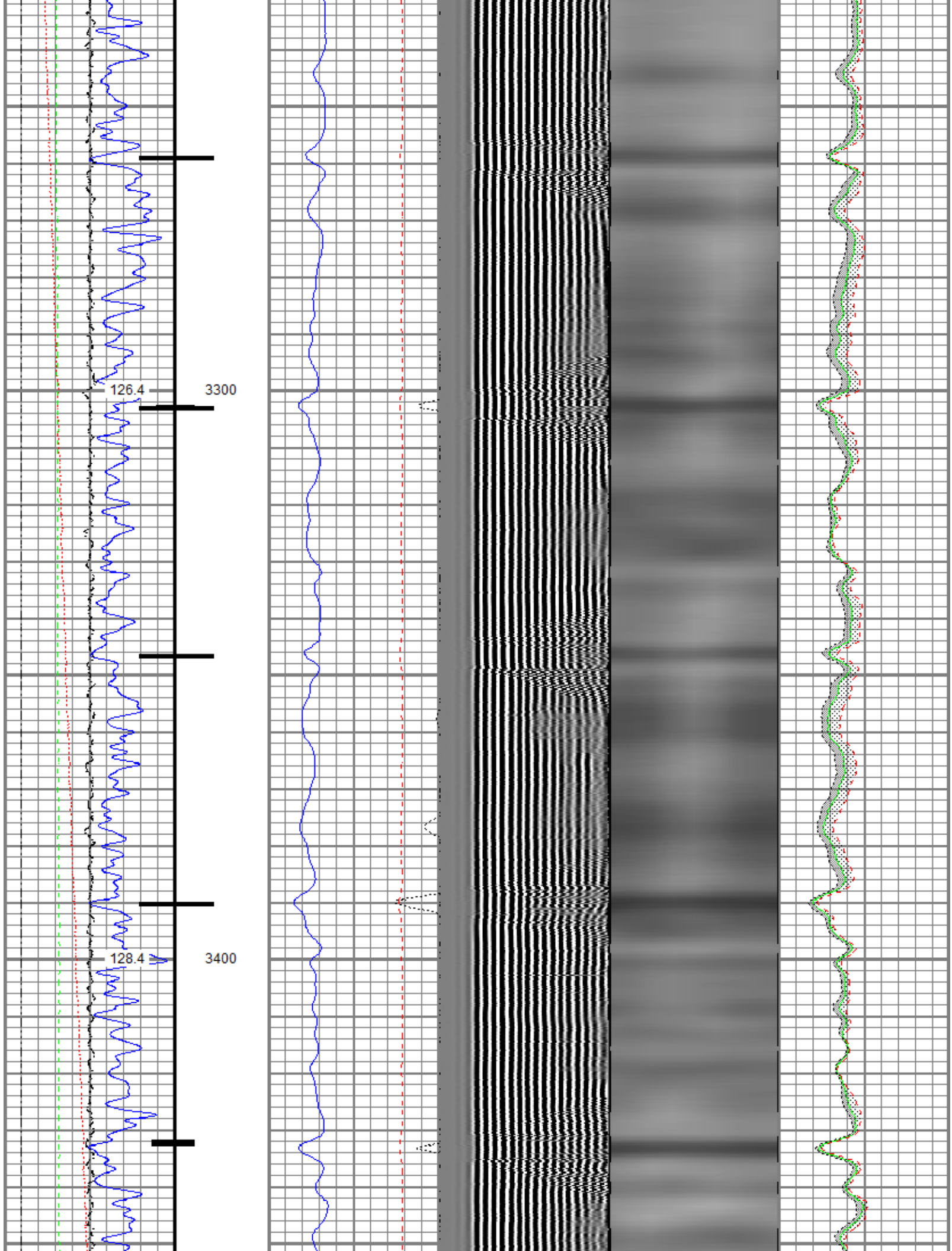


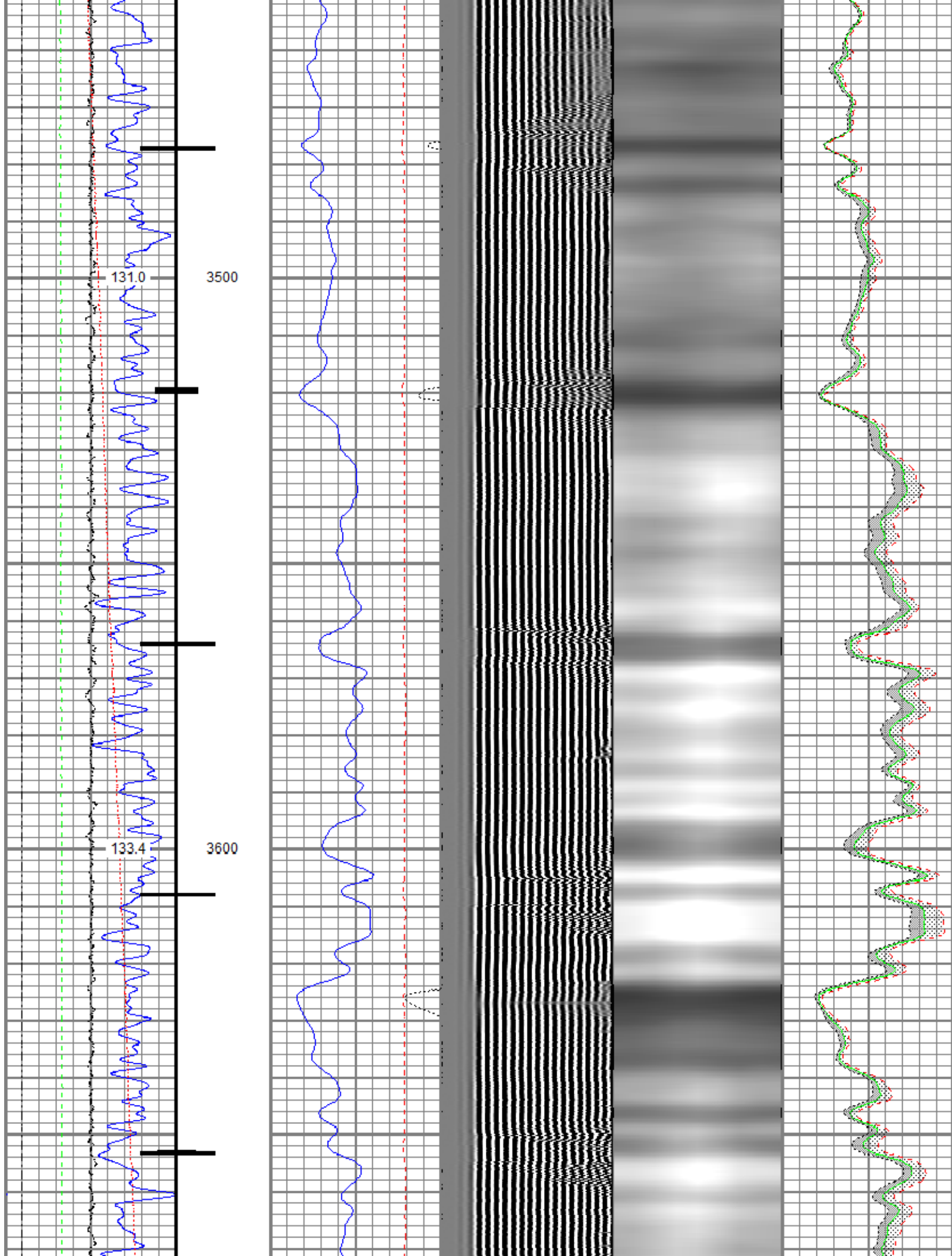


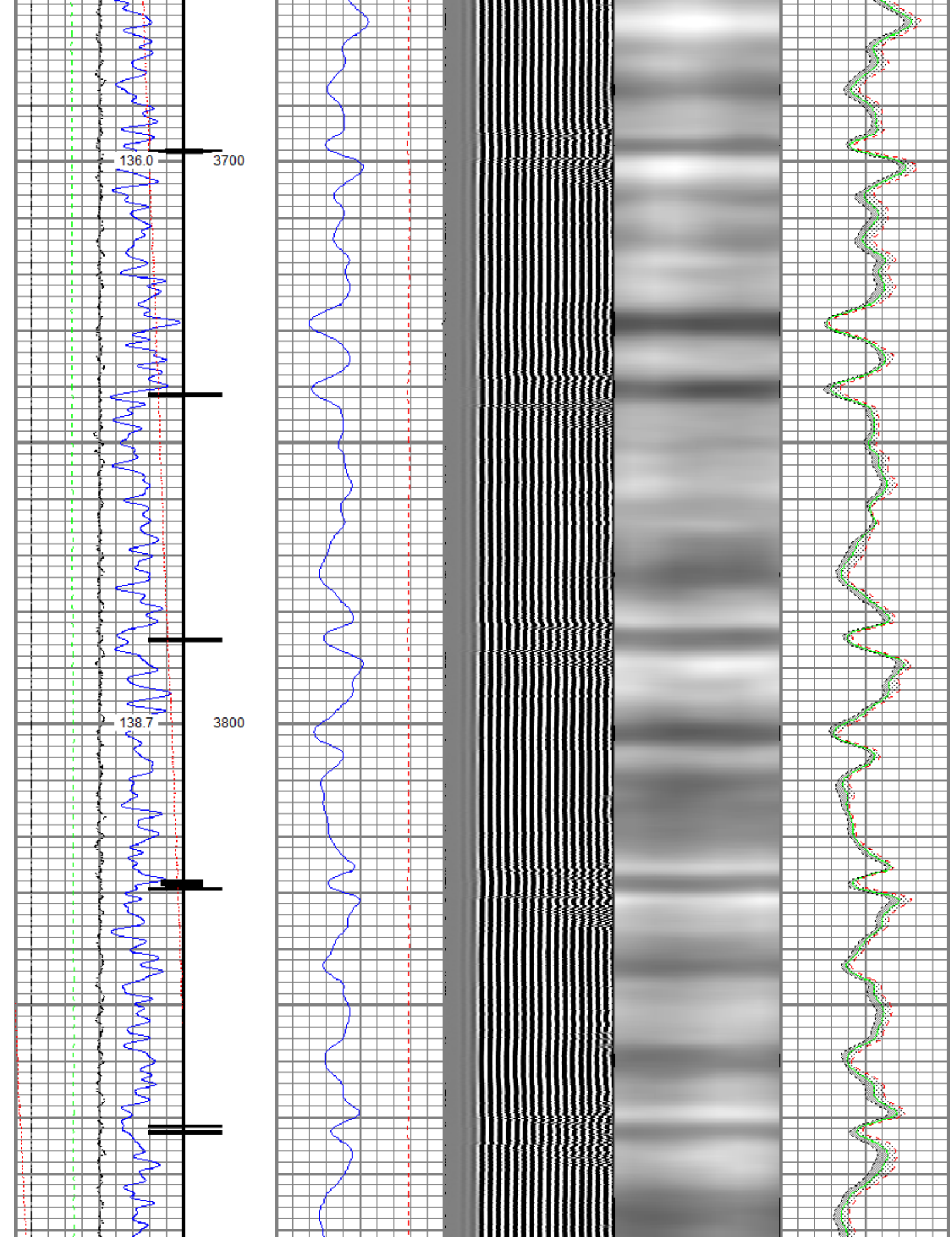


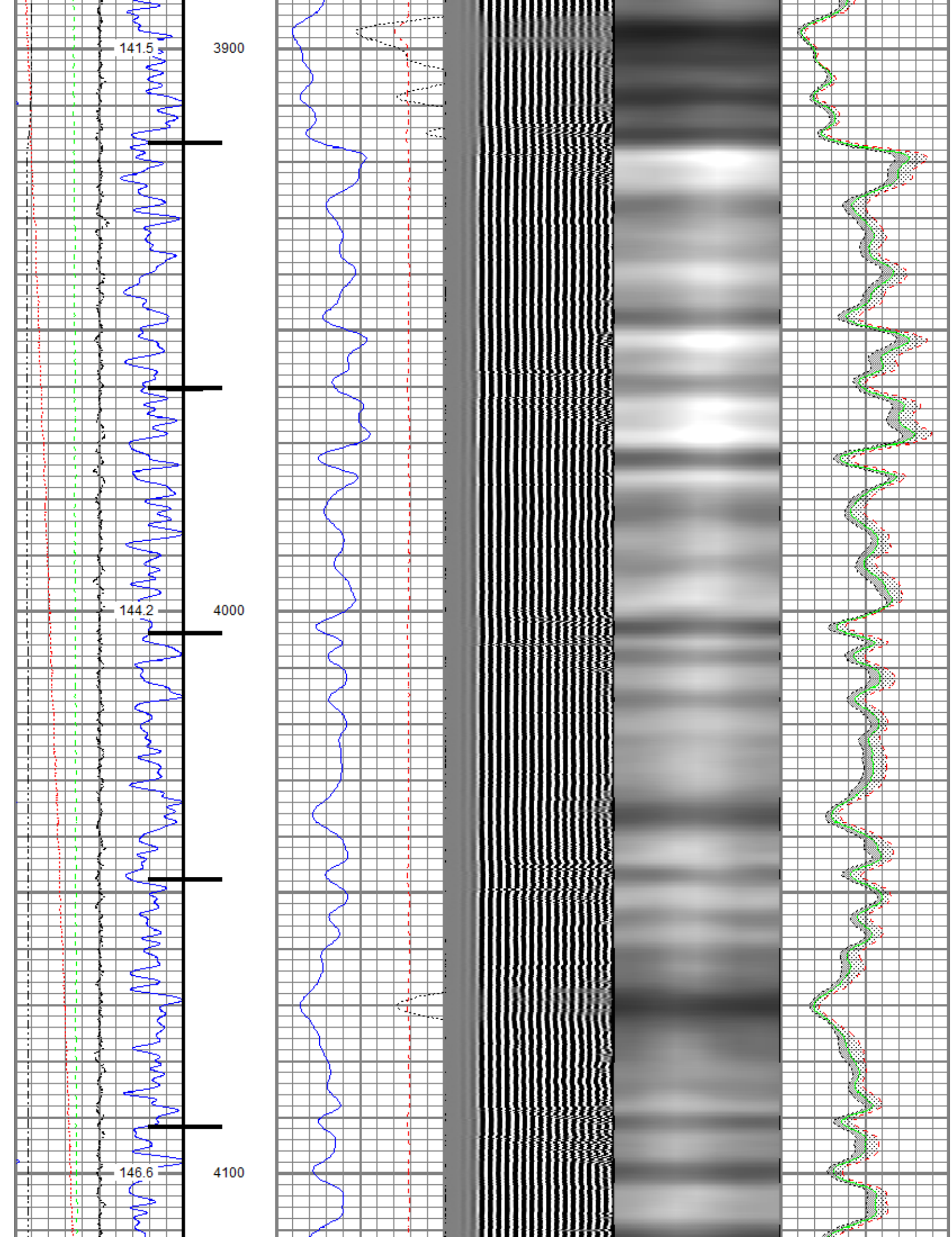


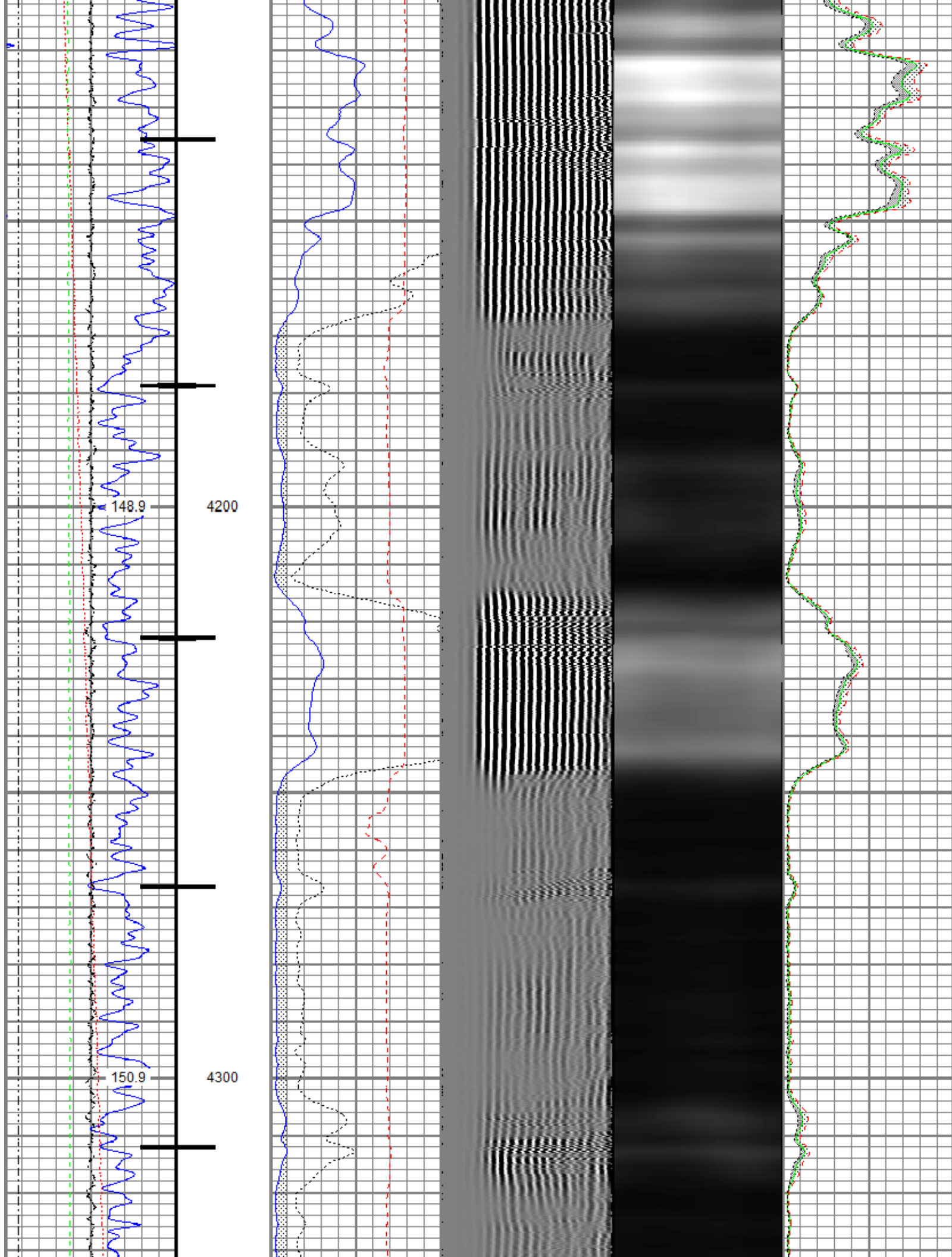


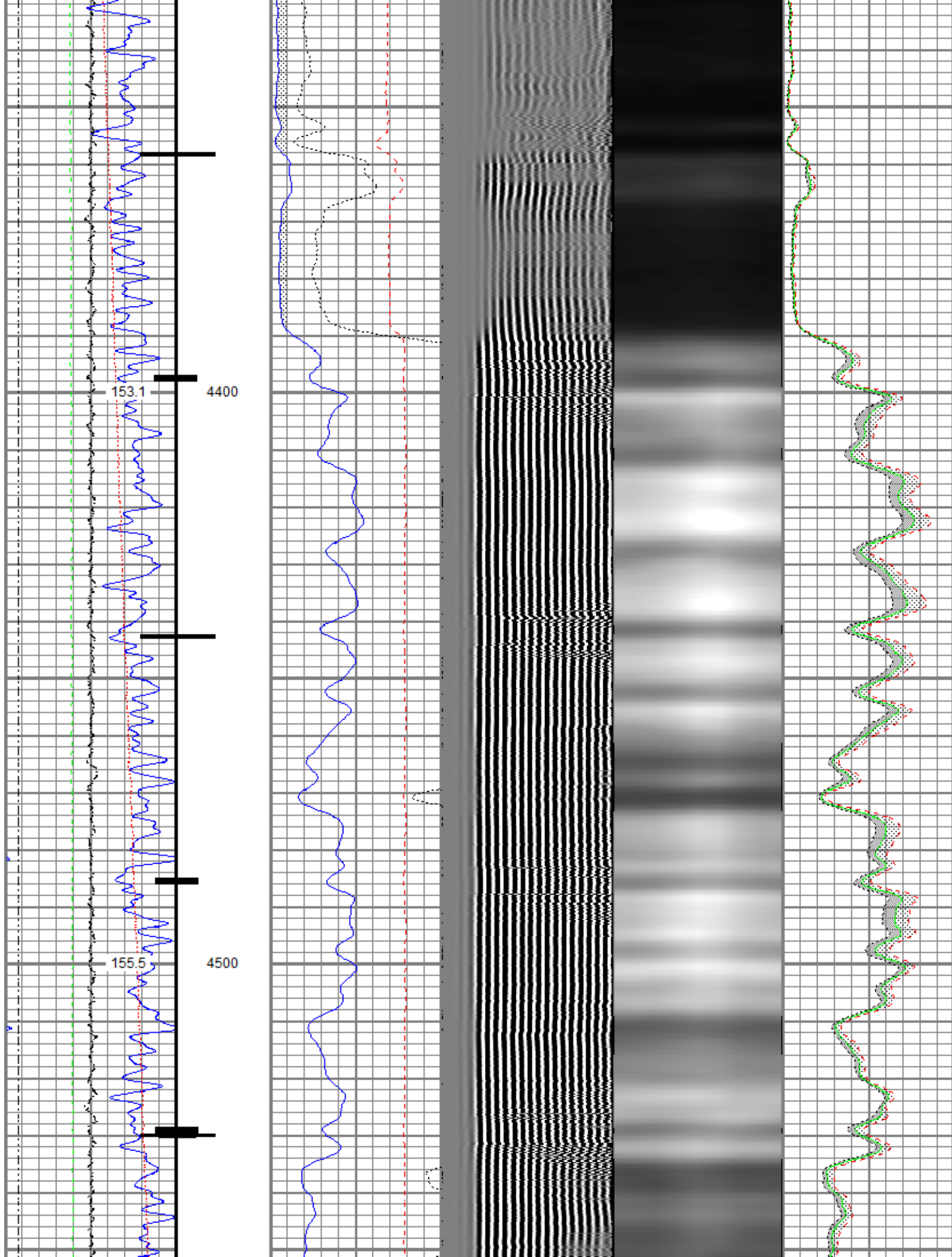


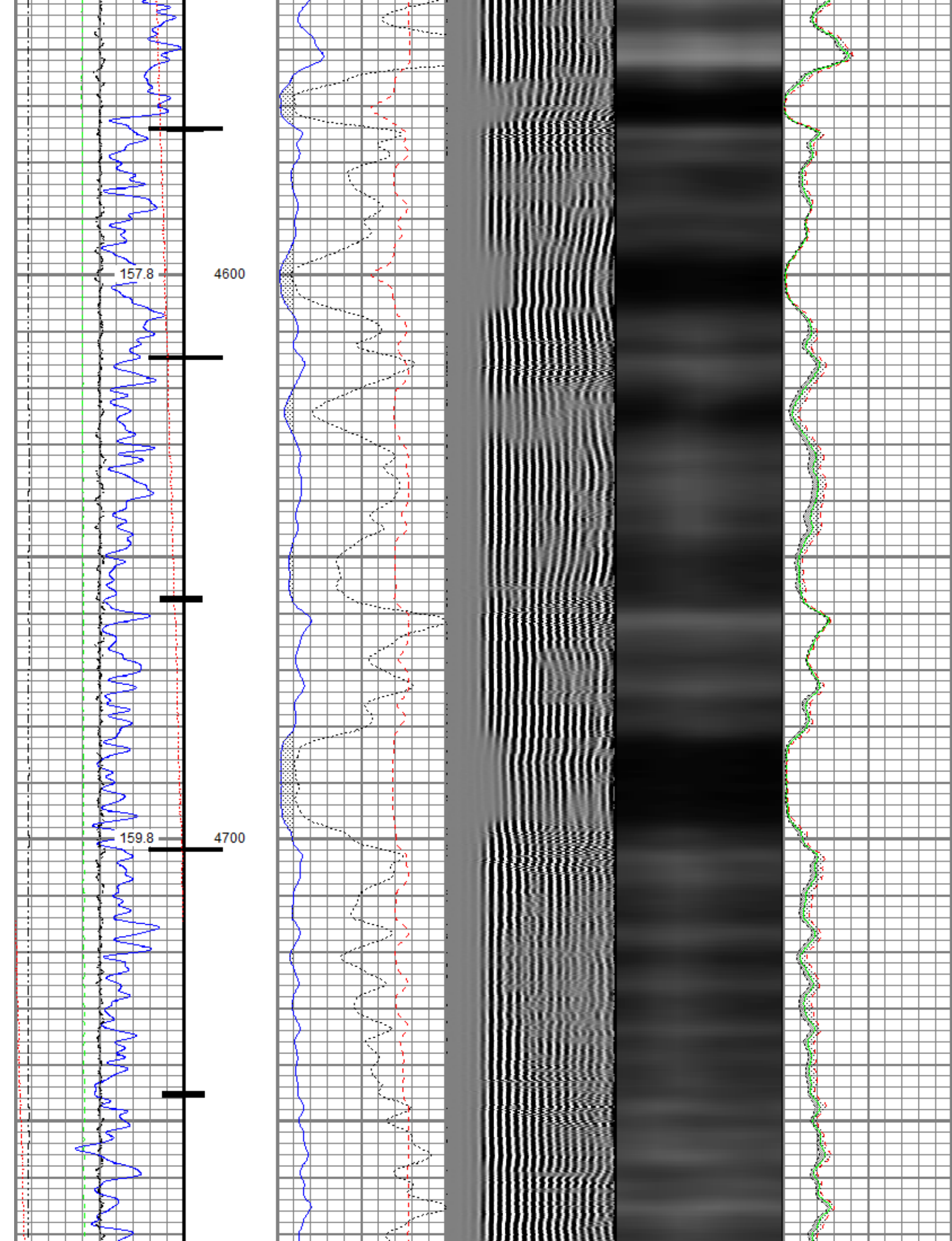


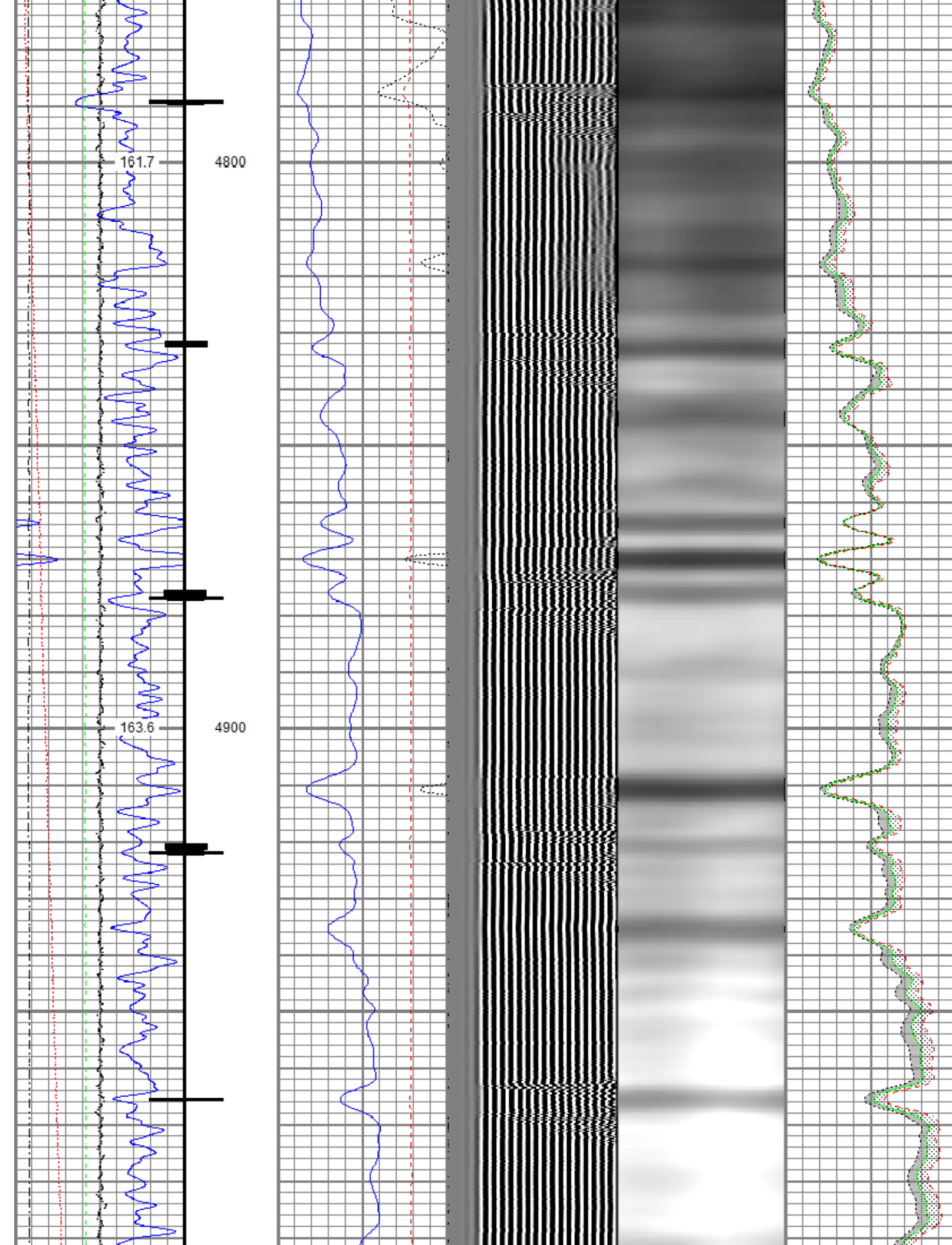


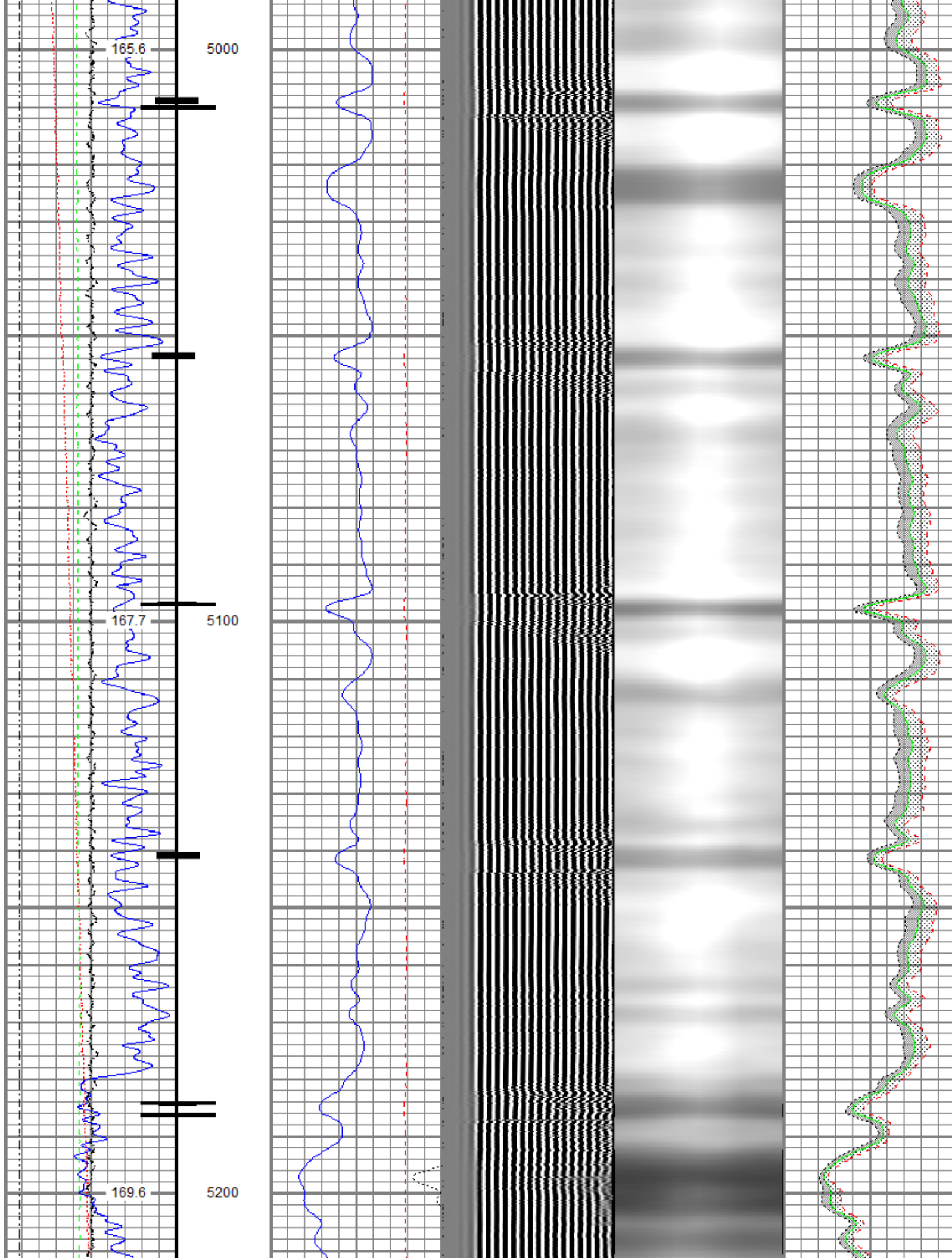


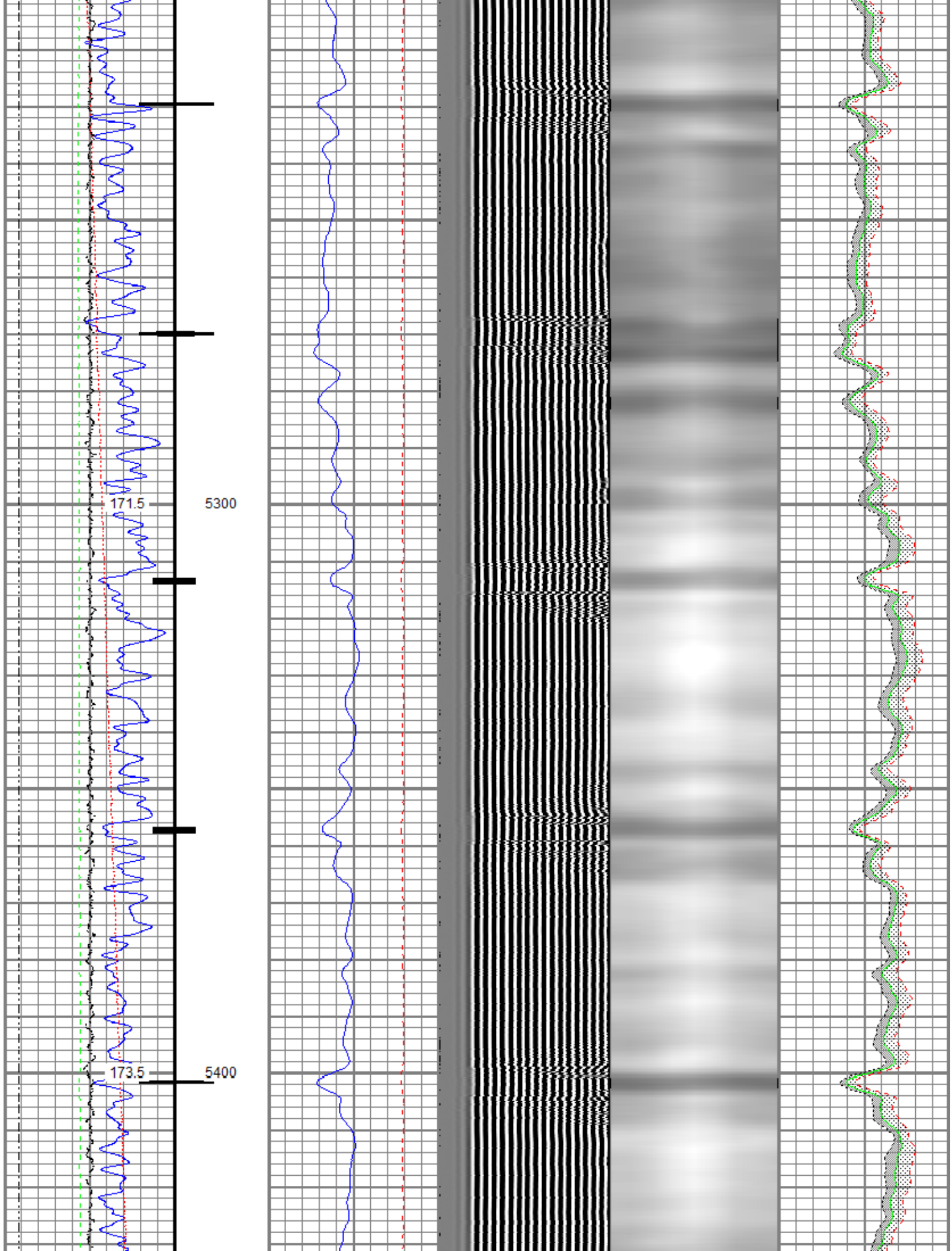


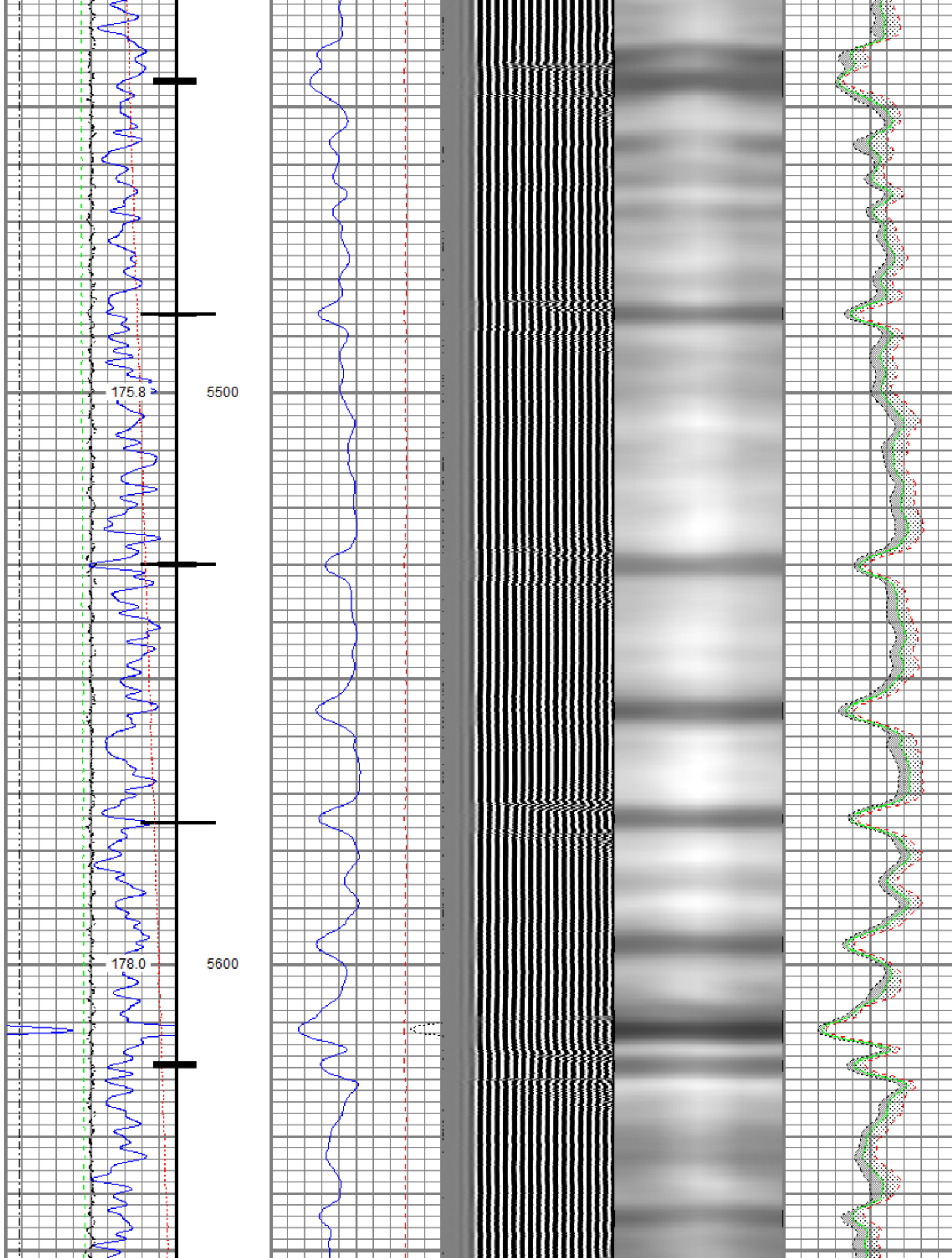


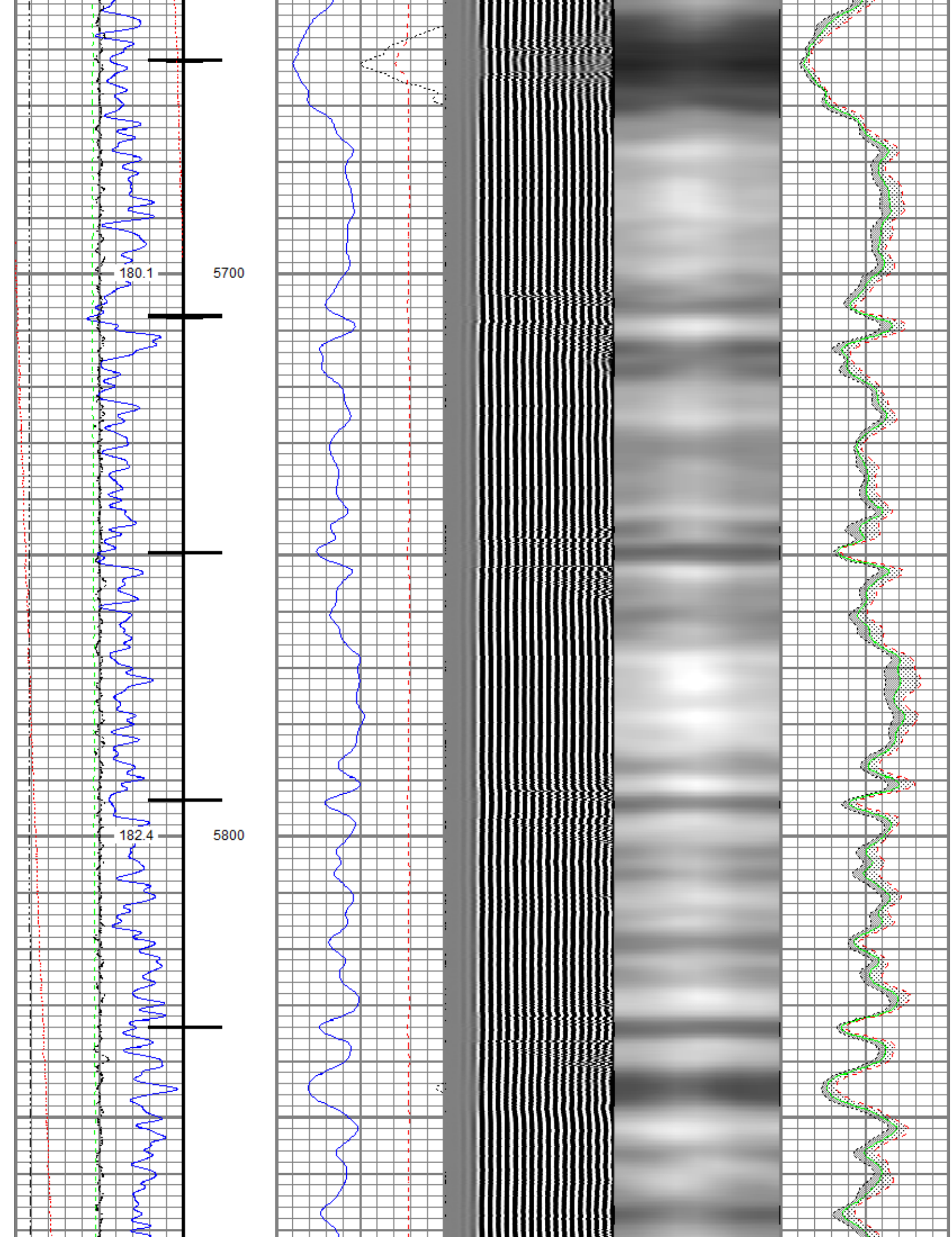


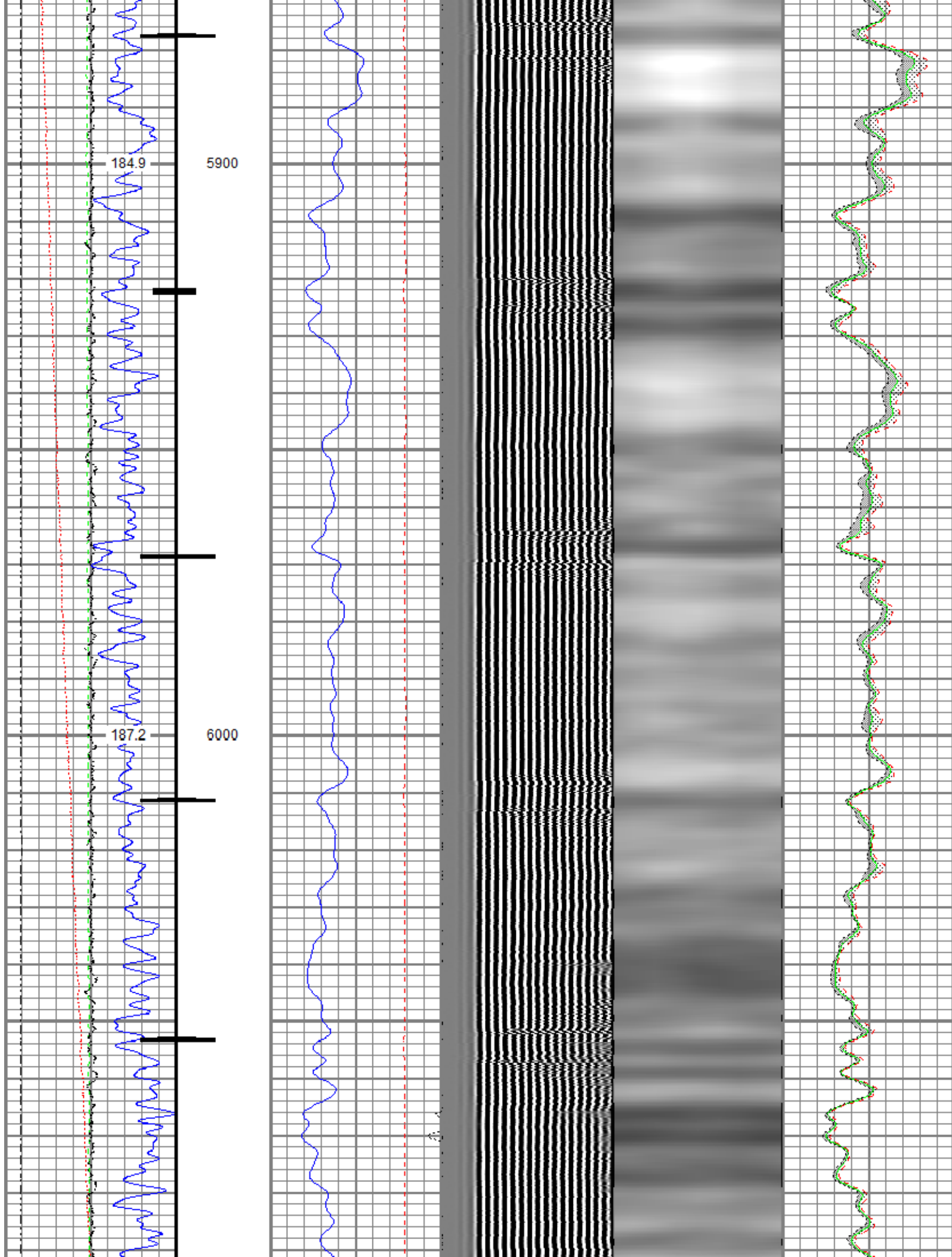


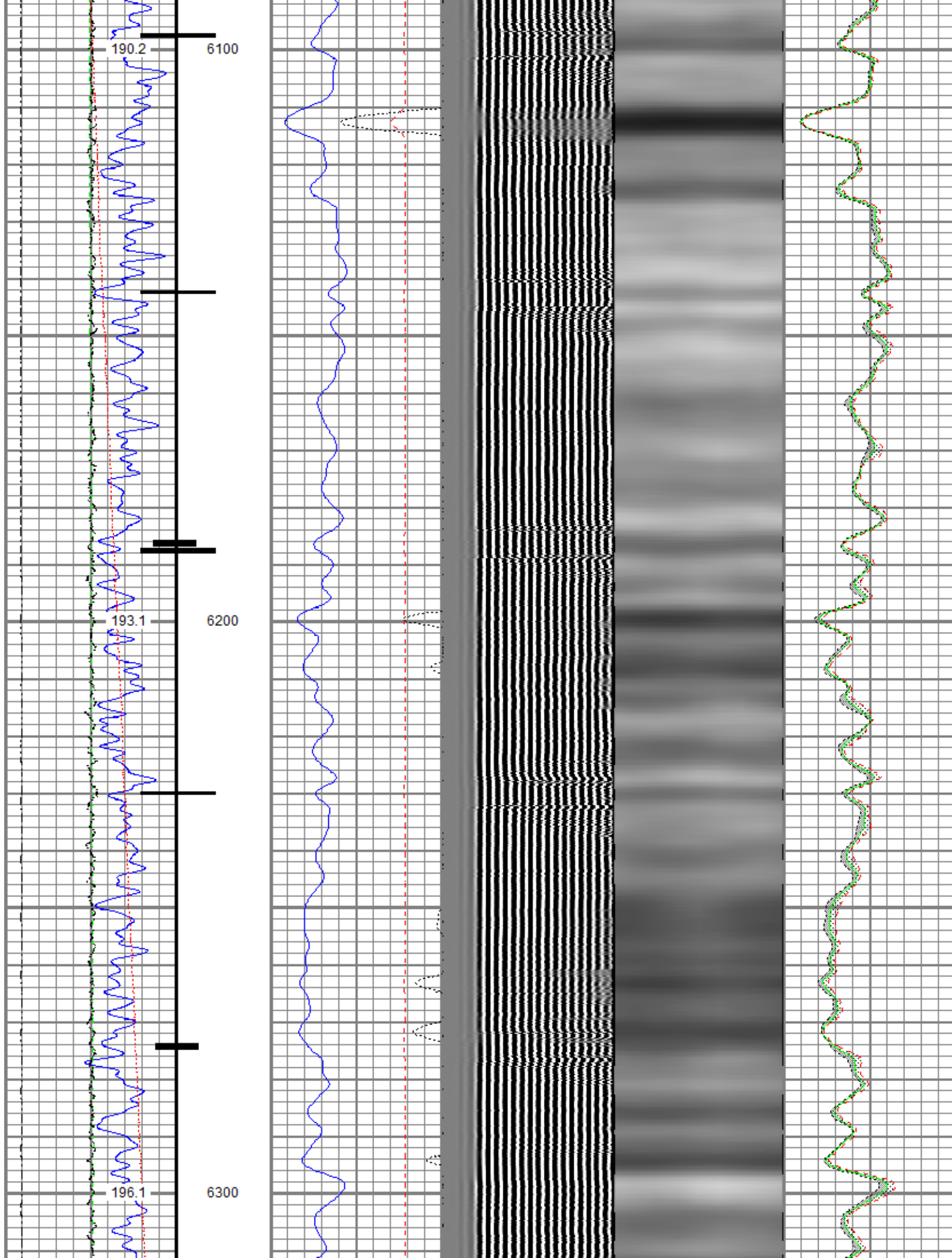


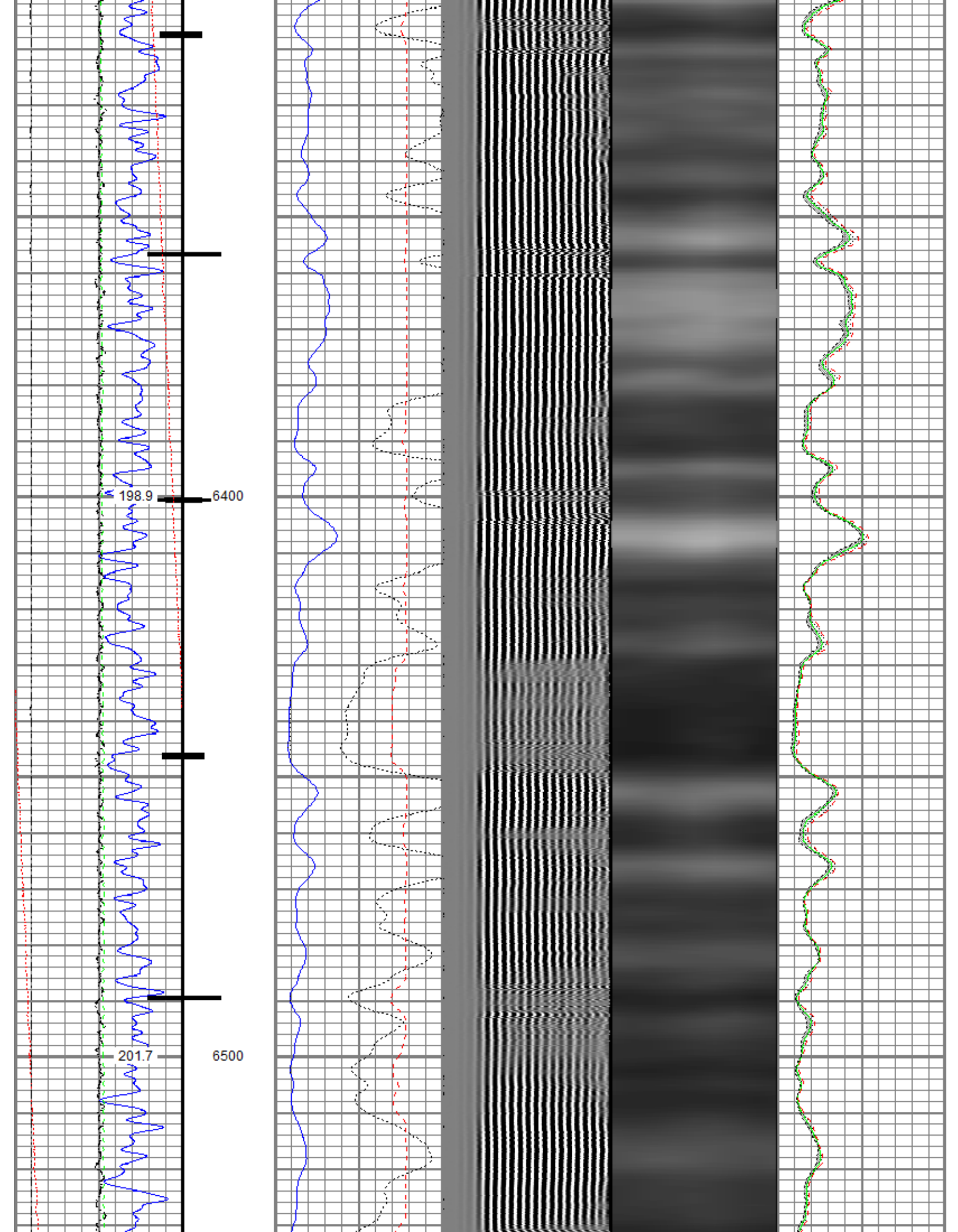


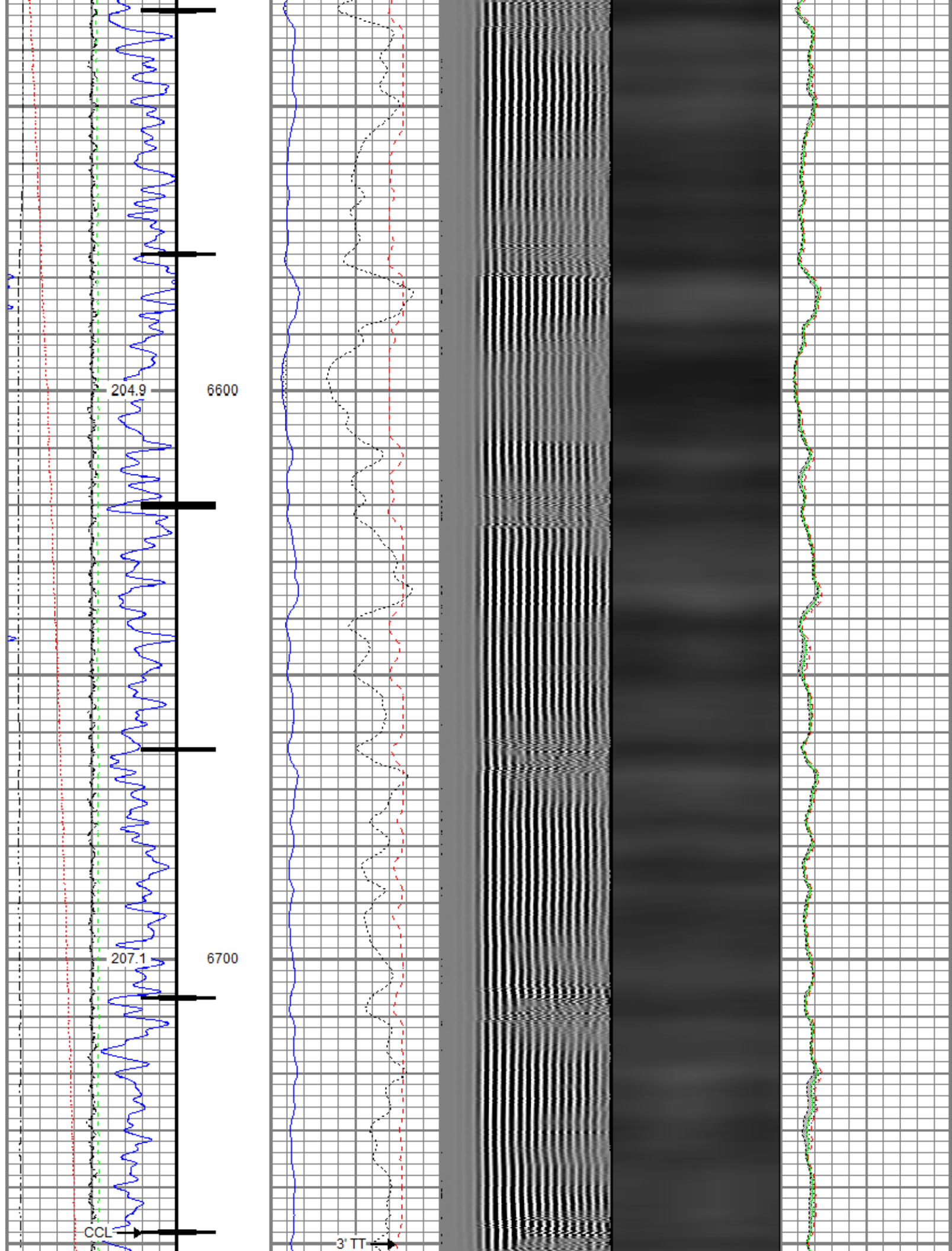








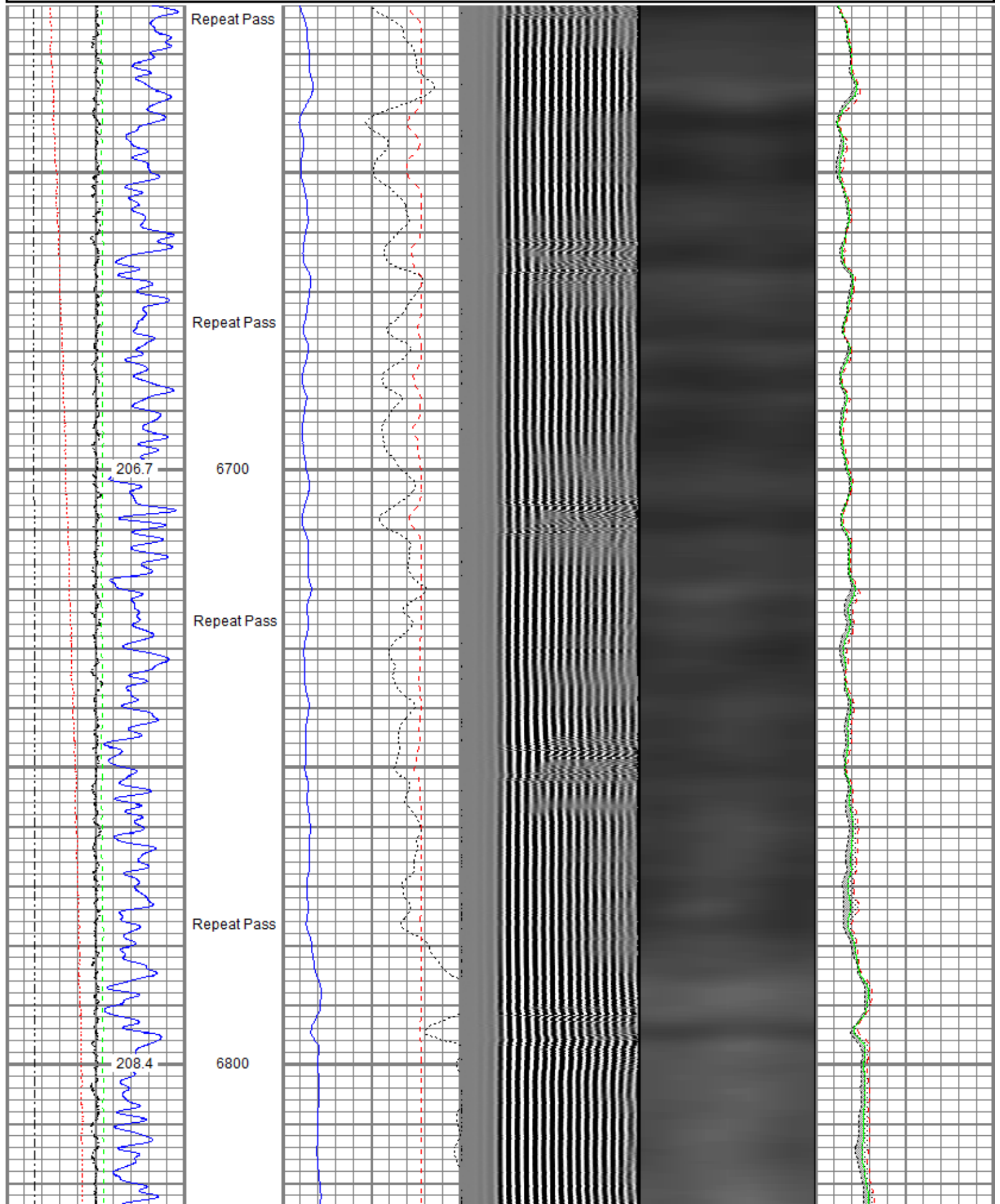


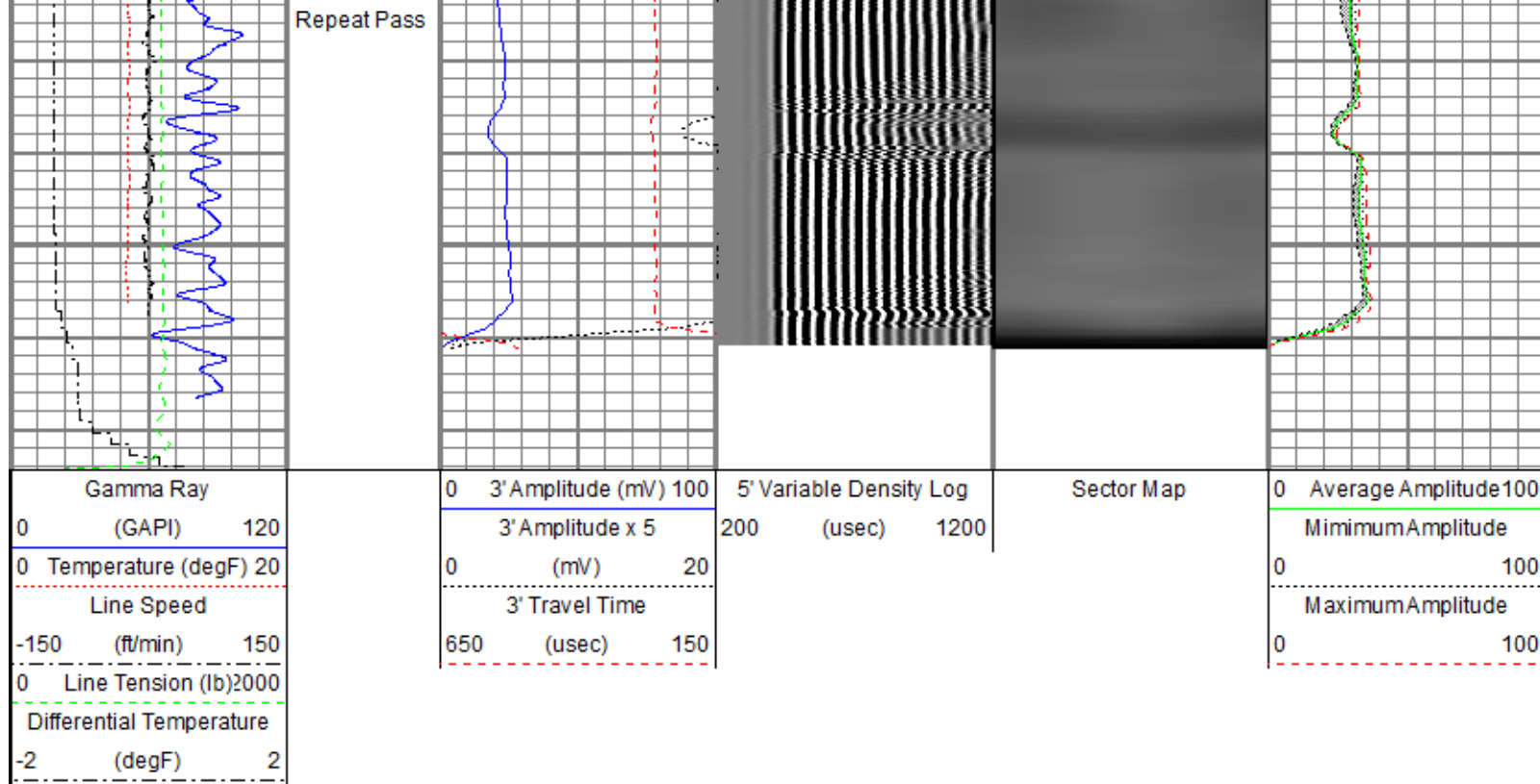


-150 (ft/min) 150
0 Line Tension (lb) 2000
Differential Temperature
-2 (degF) 2

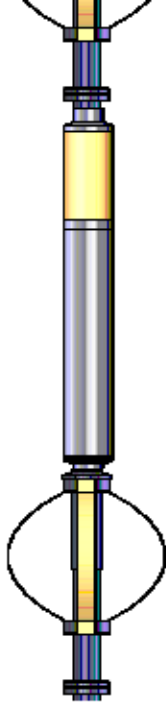
650 (usec) 150

0 100





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 (FW1302-001) Probe 2-3/4" Radial Cement Bond Tool with Integral Temperature Sub	9.39	2.75	105.00
			Probe CENT-2750	2.88	2.75	20.00
TEMP	16.75					
WVFS8	14.52					
WVFS7	14.52					
WVFS6	14.52					
WVFS5	14.52					
WVFS4	14.52					
WVFS3	14.52					
WVFS2	14.52					
WVFS1	14.52					
WVFCAL	14.52					
WVF3FT	14.52					
WVF5FT	13.52					

			Probe 2-3/4" Electric Inline Bowspring Centralizer			
CCL\$2	6.51					
CCL\$1	6.51					
GR	5.26		Probe GR-CCL-2750 GOB (FW1212-026) Probe 2-3/4" rev.2 Digital Scintillation Gamma Ray/CCL Combined with GO Bottom	4.51	2.75	55.00
			Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00
Dataset: 0512347873_anadarko_reese 21-3hz_rbl_04-05-19.db: field/well/run1/pass4.3 Total length: 23.57 ft Total weight: 223.60 lb O.D.: 2.75 in						

Calibration Report						
Database File	c:\programdata\warrior\data\0512347873_anadarko_reese 21-3hz_rbl_04-05-19\0512347873_anadarko_reese 21-3hz_rbl_04-05-19					
Dataset Pathname	pass4.3					
Dataset Creation	Sat Apr 06 07:52:13 2019					
Gamma Ray Calibration Report						
Serial Number:	FW1212-026					
Tool Model:	2750 GOB					
Performed:	Mon Oct 01 11:32:38 2018					
Calibrator Value:	637.0	GAPI				
Background Reading:	113.7	cps				
Calibrator Reading:	1029.1	cps				
Sensitivity:	0.6959	GAPI/cps				
Segmented Cement Bond Log Calibration Report						
Serial Number:	FW1302-001					
Tool Model:	2750 RBT					
Calibration Casing Diameter:	5.500	in				
Calibration Depth:	21.910	ft				
Master Calibration, performed (Derived):						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.005	0.821	0.800	71.921	87.166	0.326
CAL	0.005	0.766				
5'	0.009	0.751	0.800	71.921	95.839	-0.082
SUM						
S1	0.006	0.806	0.000	100.000	124.987	-0.692
S2	0.007	0.788	0.000	100.000	128.004	-0.841
S3	0.008	0.787	0.000	100.000	128.344	-1.007
S4	0.008	0.812	0.000	100.000	124.379	0.961

S4	0.008	0.812	0.000	100.000	116.379	-0.961
S5	0.008	0.867	0.000	100.000	116.411	-0.961
S6	0.007	0.892	0.000	100.000	112.990	-0.764
S7	0.007	0.874	0.000	100.000	115.344	-0.792
S8	0.007	0.842	0.000	100.000	119.680	-0.817

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.005	0.766	1.000	0.000

Air Zero Calibration, performed Fri Apr 05 09:38:45 2019:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.004		0.000		0.000	
5'	0.004		0.000		0.000	
SUM						
S1	0.005		0.000		-0.000	
S2	0.004		0.000		0.000	
S3	0.004		0.000		0.000	
S4	0.005		0.000		0.000	
S5	0.004		0.000		0.000	
S6	0.005		0.000		0.000	
S7	0.005		0.000		-0.000	
S8	0.005		0.000		-0.000	

Temperature Calibration Report

Serial Number: FW1302-001
Tool Model: 2750 RBT
Performed: Mon Oct 01 11:32:14 2018

	Reference	Reading
Low Reference:	100.00 degF	107.47 degF
High Reference:	350.00 degF	404.08 degF

Gain: 0.84
Offset: 9.42
Delta Spacing: 1



Company: Kerr-McGee Oil & Gas Onshore, L.P.
Well: Reese 21-3HZ
Field: Wattenberg
County: Weld
State: Colorado