



County Weld State Colorado

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


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 21 FT  
Adjusted 13 FT to correlate with Kelly Bushing  
Gauge Ring/Junk Basket ran to 7903 FT  
Retrievable Bridge Plug set at 7026 FT  
Casing Tally reported Maker Joint at 7009 FT was not logged due to RBP set depth  
Log ran with 0 PSI Surface Induced Pressure  
Logging tools were clean and free of debris upon completion of operations

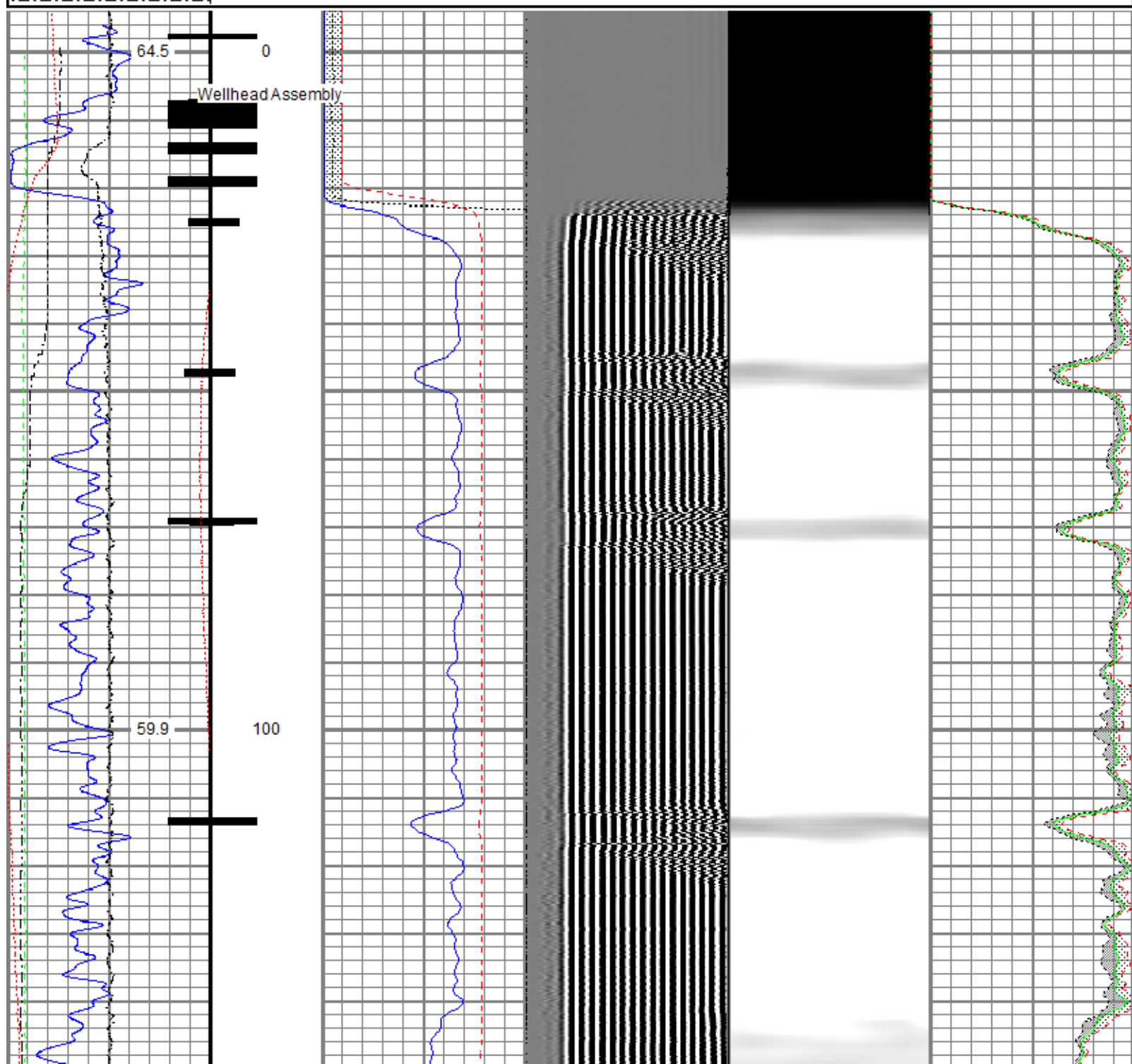
Thank you for choosing Reliance Oilfield Services, LLC!!

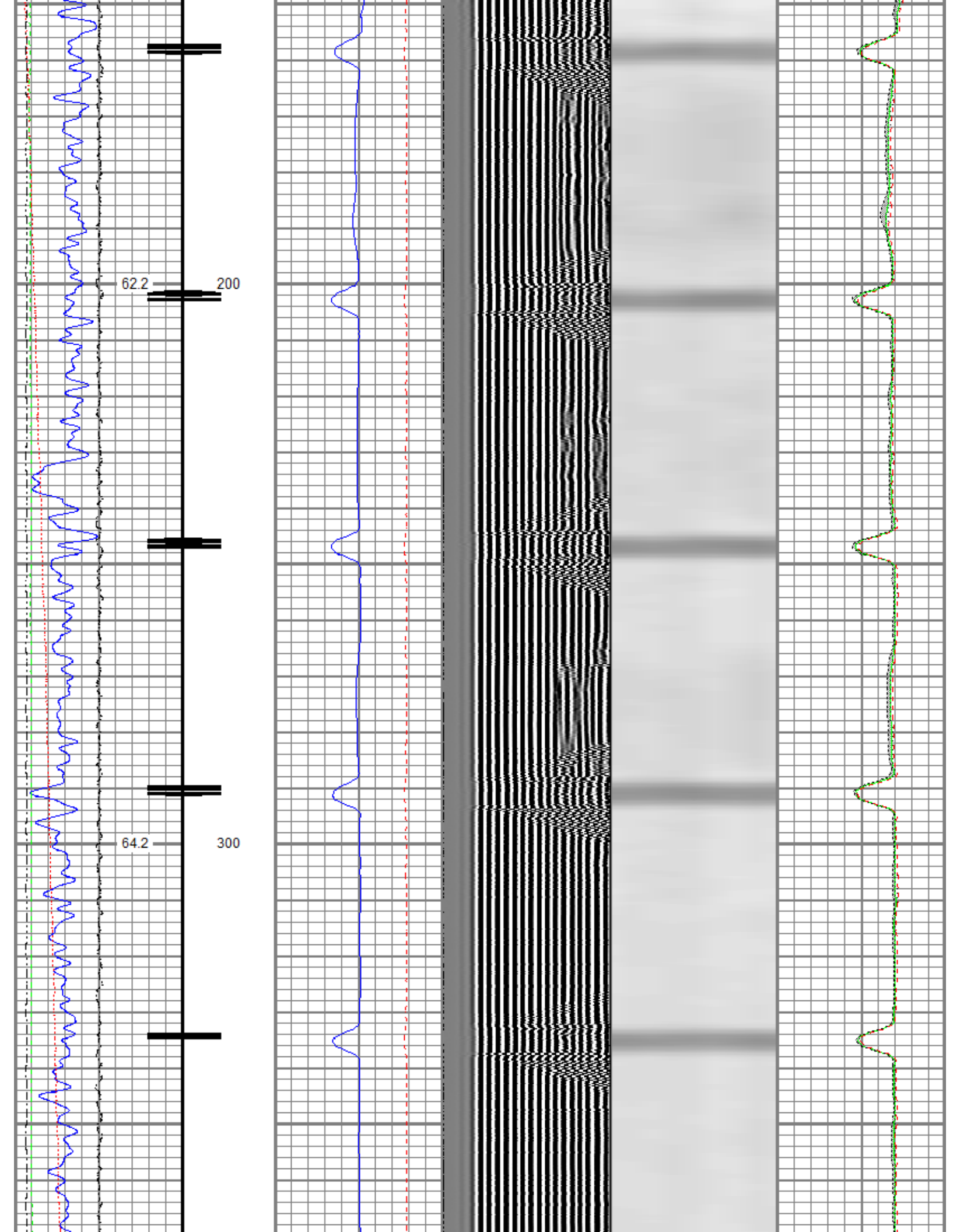
## Main Pass

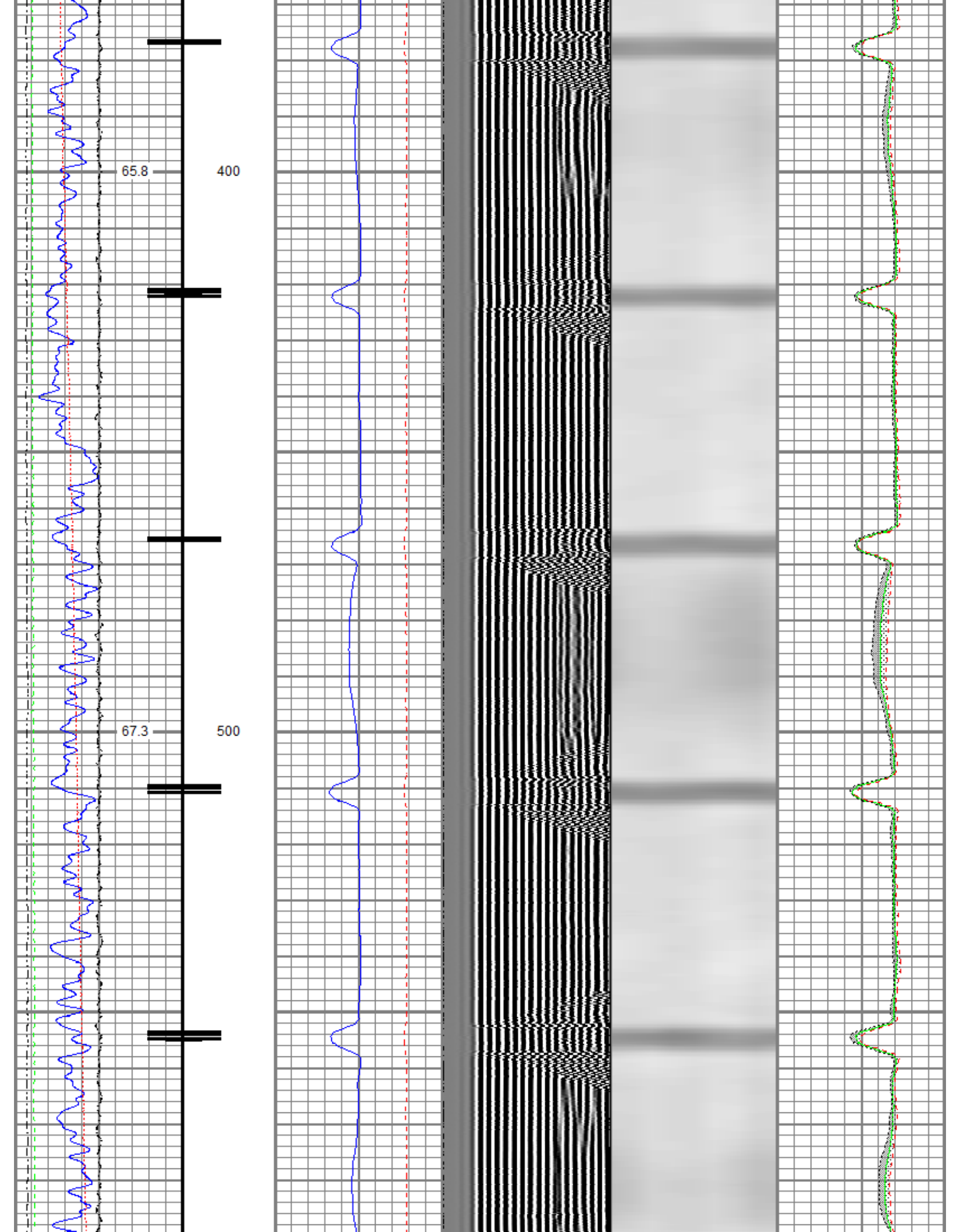


Database File 0512347869\_anadarko\_reese 21-4hz\_rbl\_04-05-19\0512347869\_anadarko\_reese 21-4hz\_rbl\_04-05-19.db  
 Dataset Pathname pass4  
 Presentation Format ros\_radrii  
 Dataset Creation Fri Apr 05 16:21:58 2019  
 Charted by Depth in Feet scaled 1:240

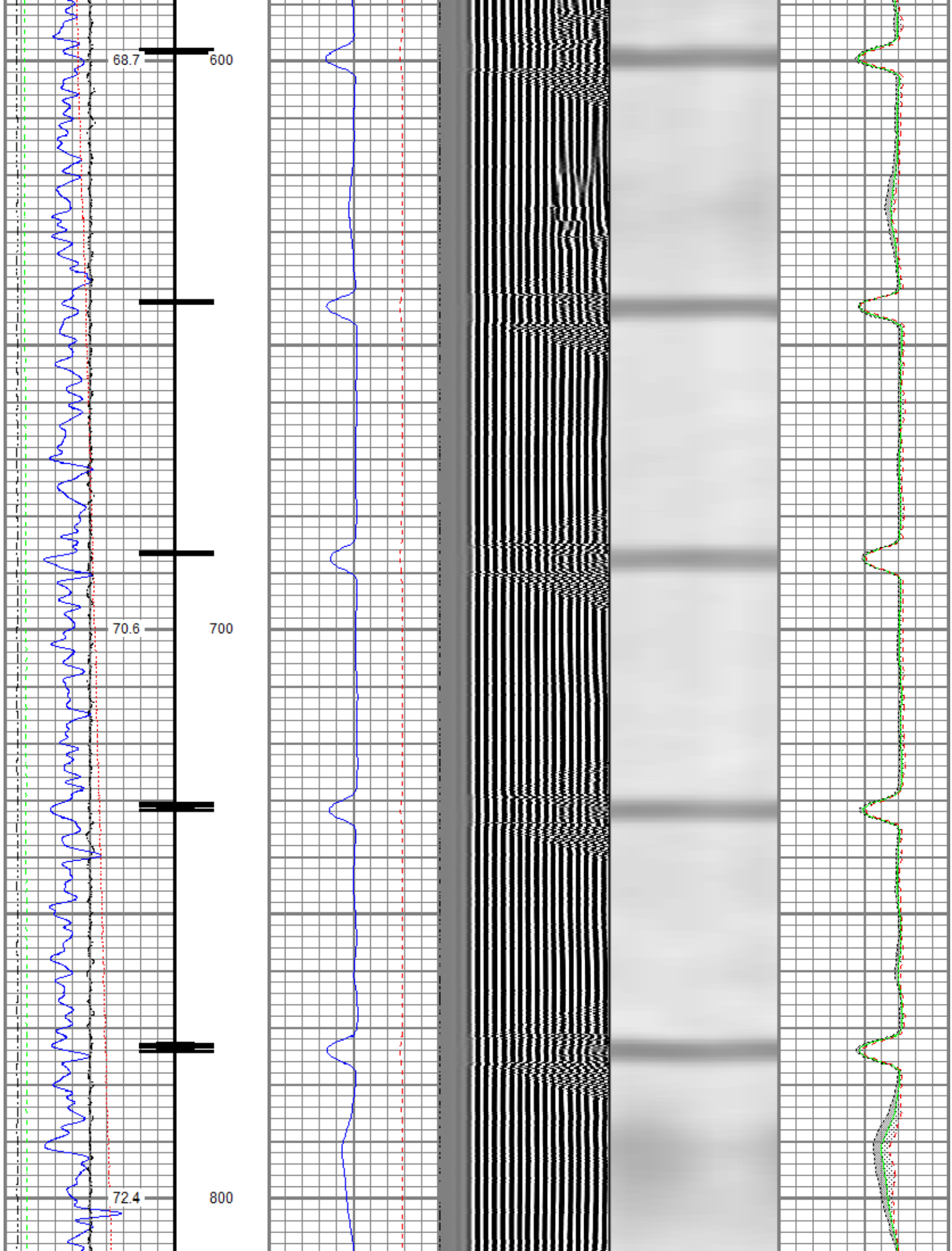
Gamma Ray	0	3' Amplitude (mV) 100	5' Variable Density Log	Sector Map	0	Average Amplitude 100
(GAPI) 120		3' Amplitude x 5	200 (usec) 1200			Minimum Amplitude
Casing Collar Locator	0	(mV) 20			0	100
0 Temperature (degF) 20		3' Travel Time				Maximum Amplitude
Line Speed	650	(usec) 150			0	100
-150 (ft/min)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

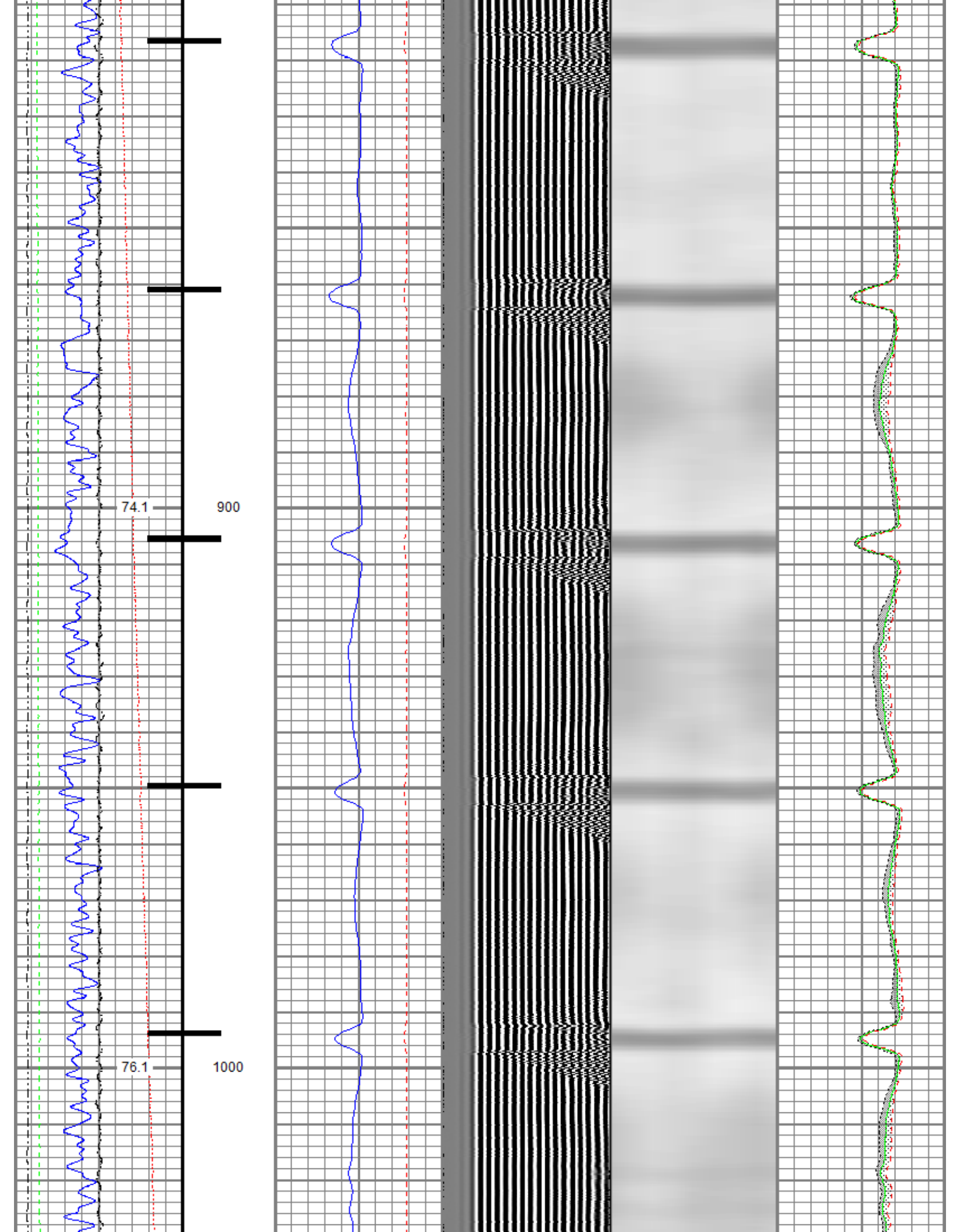


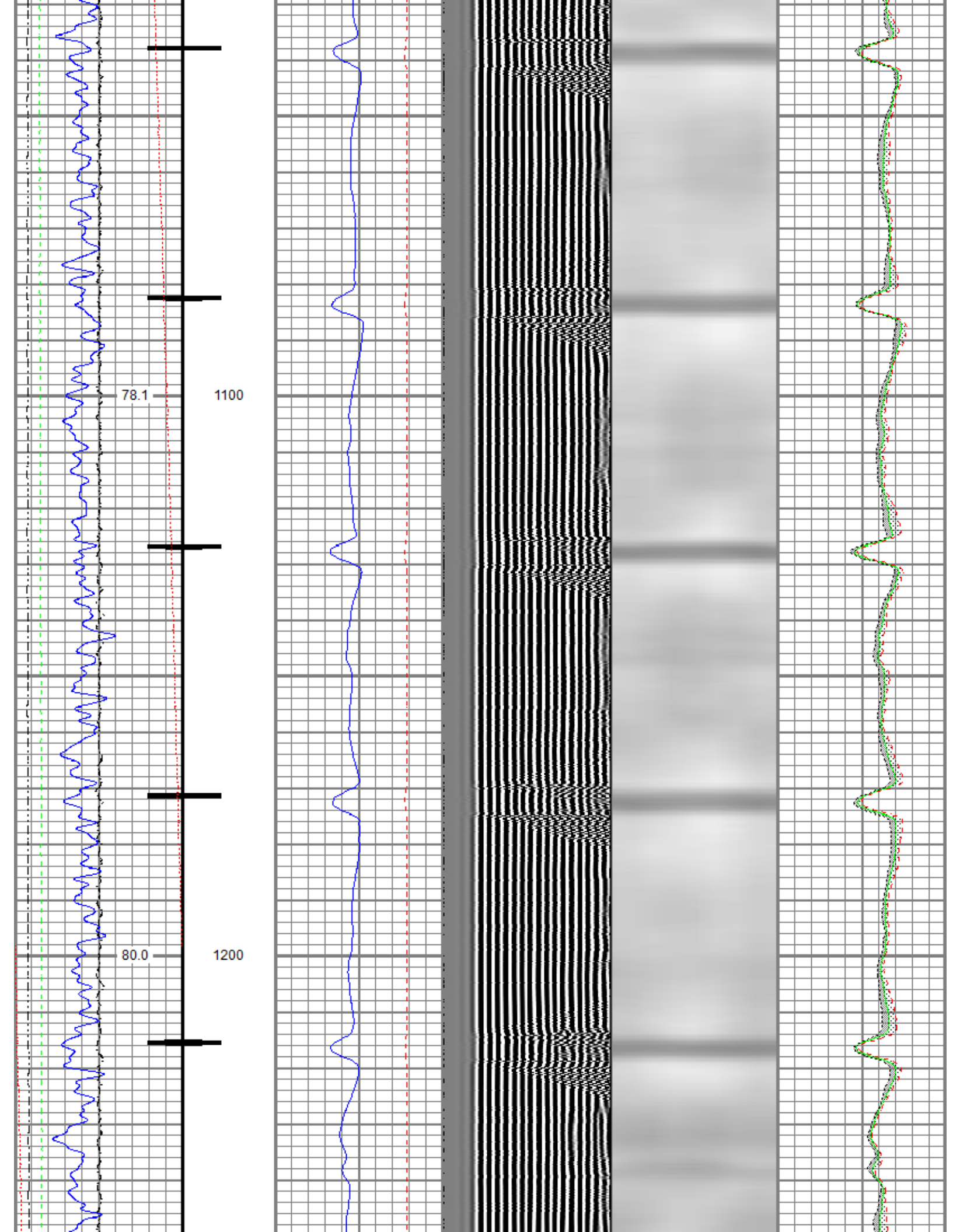


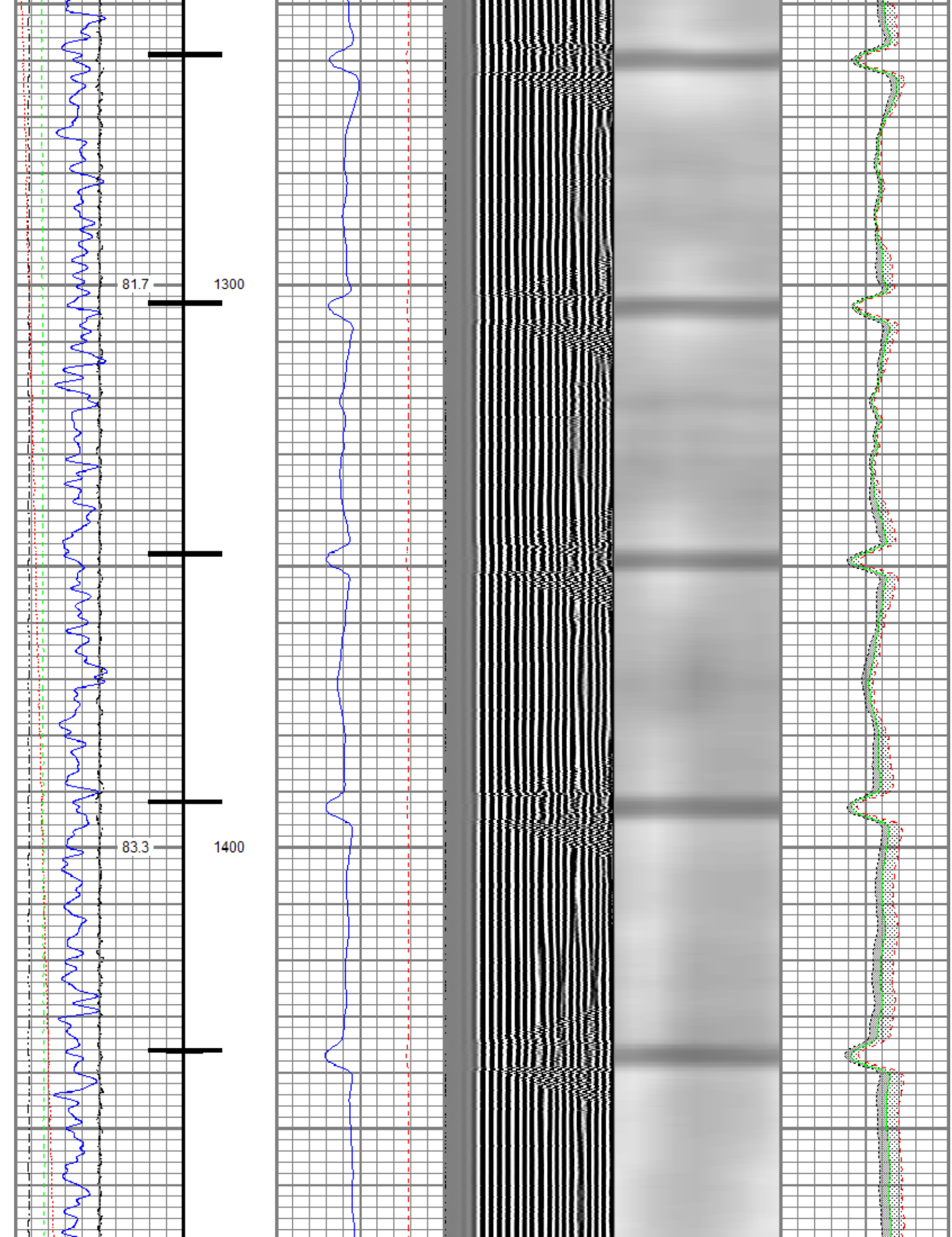




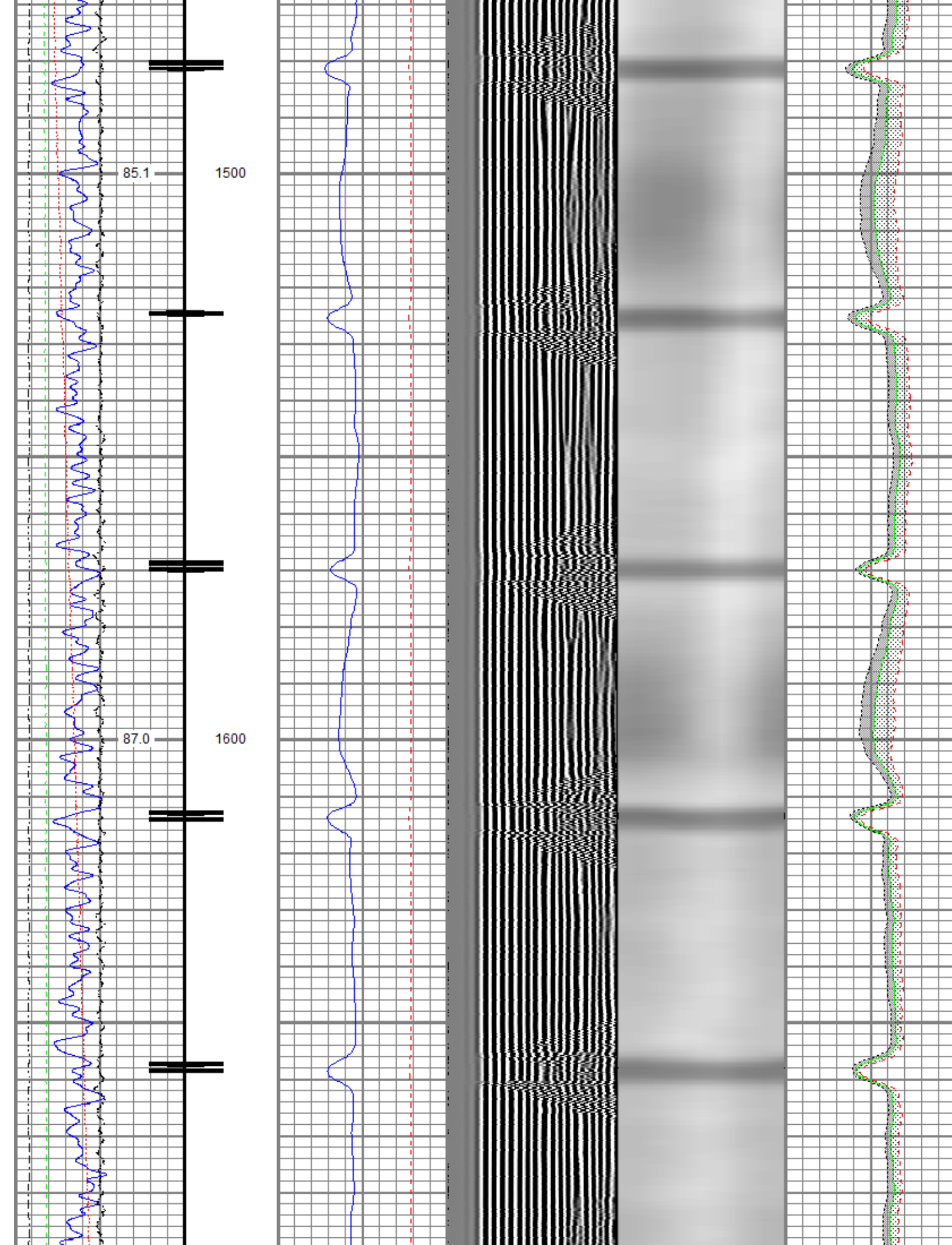


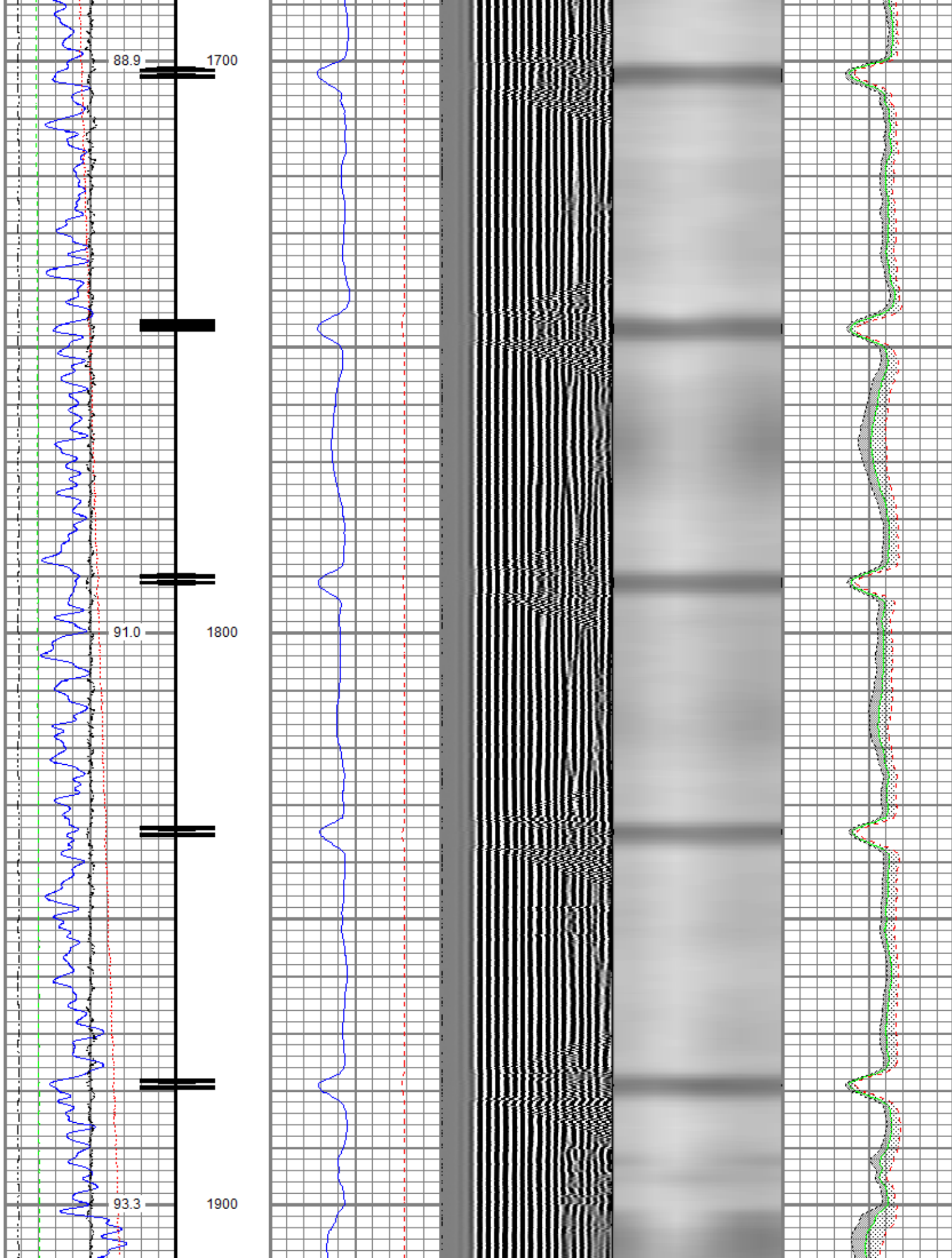


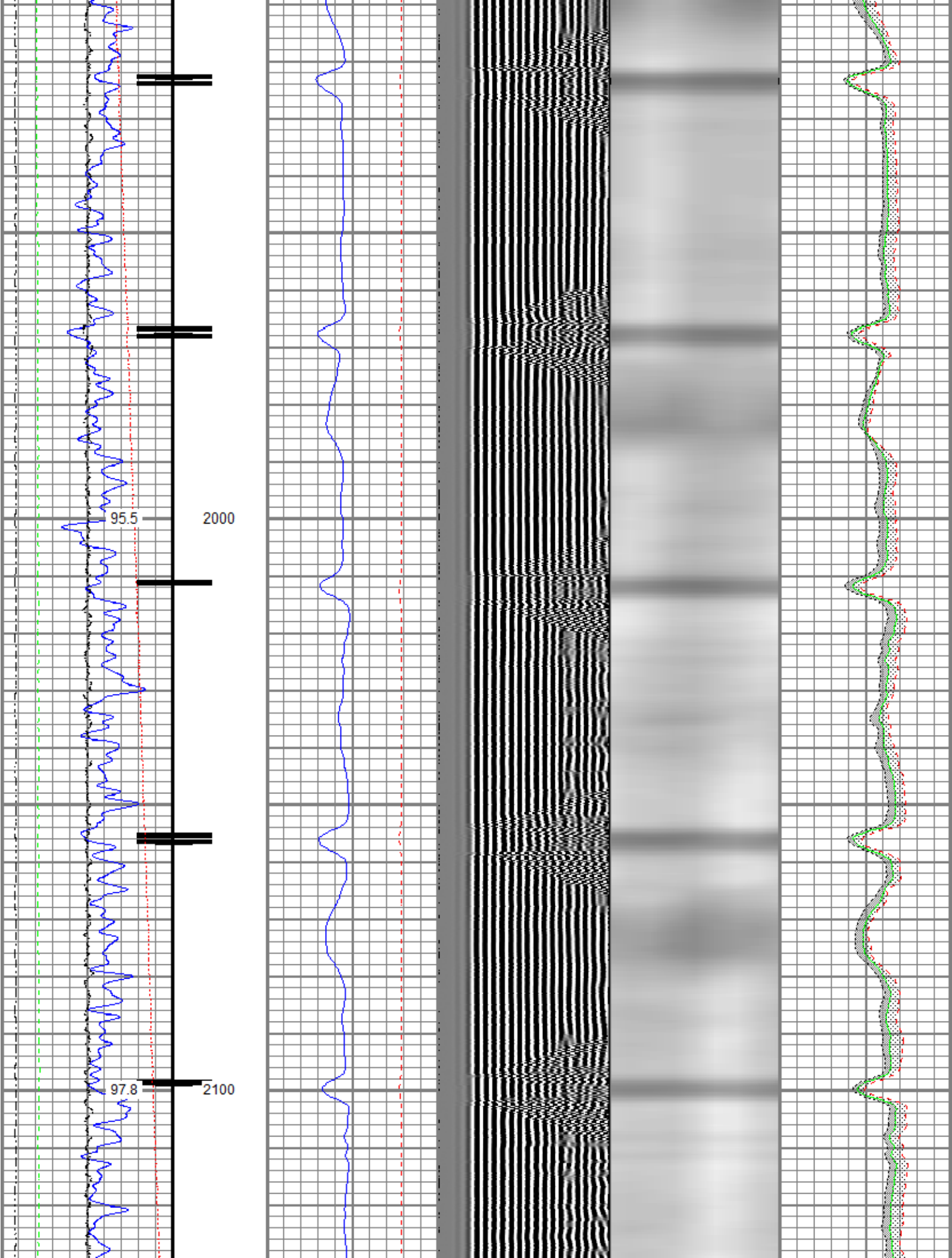




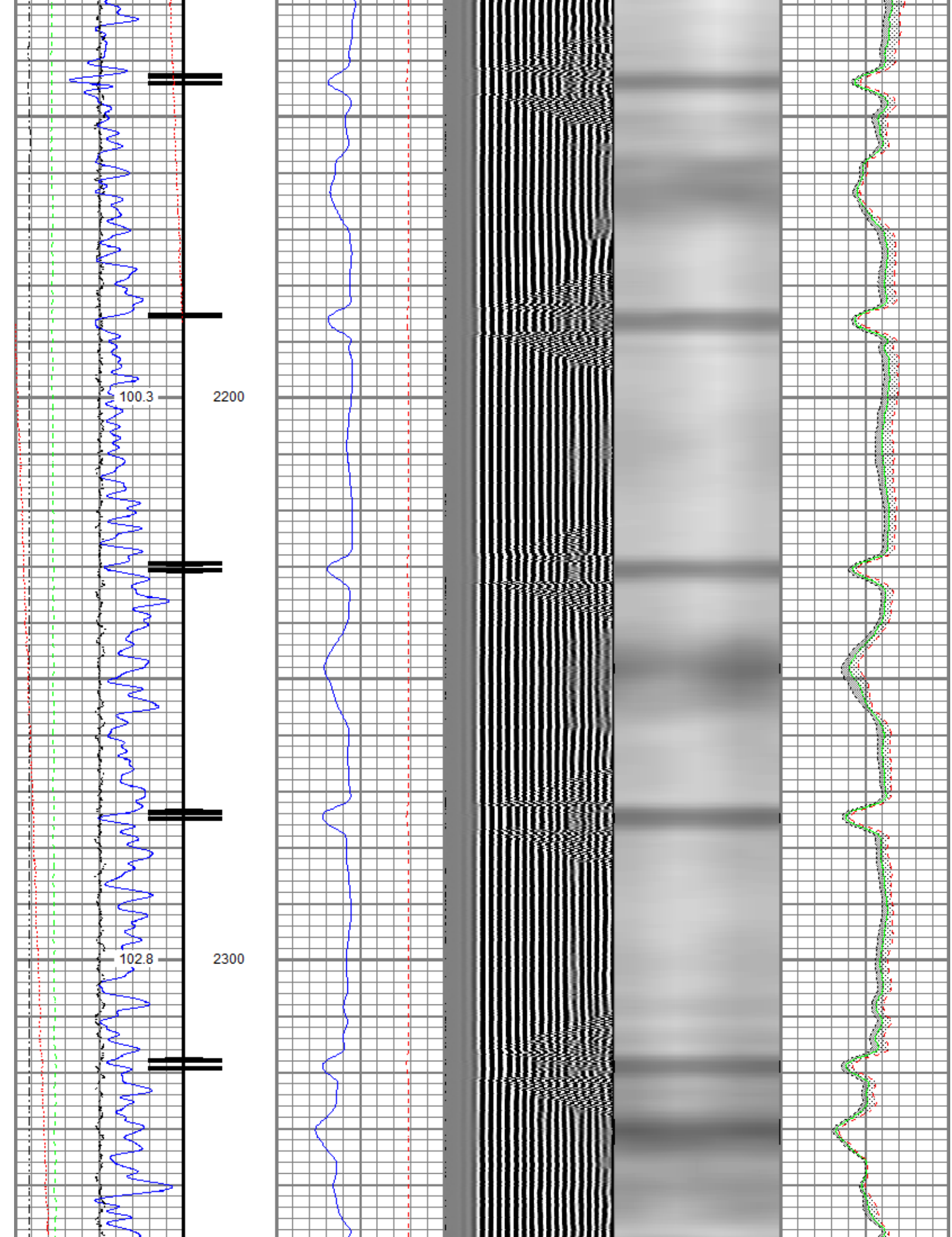




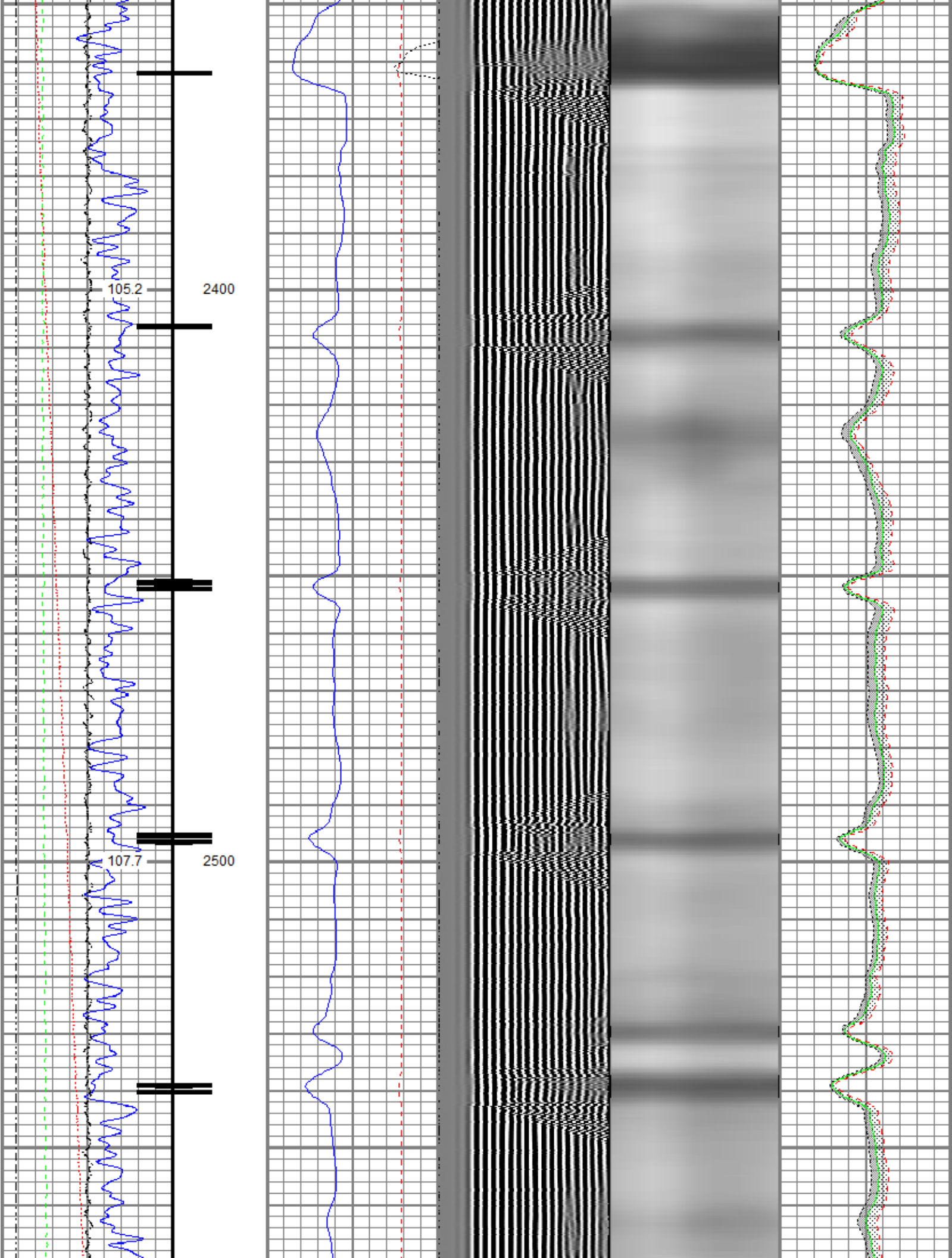


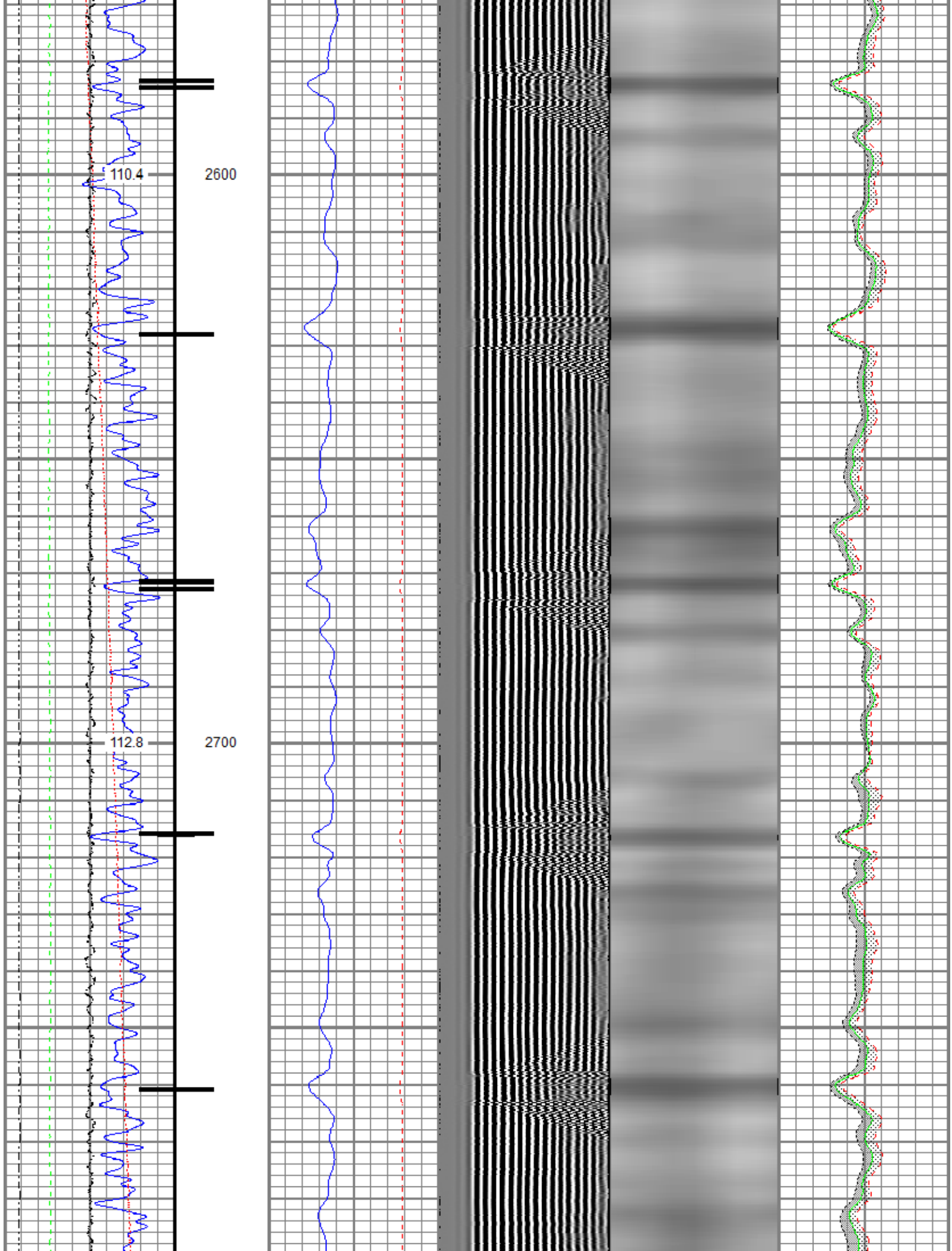


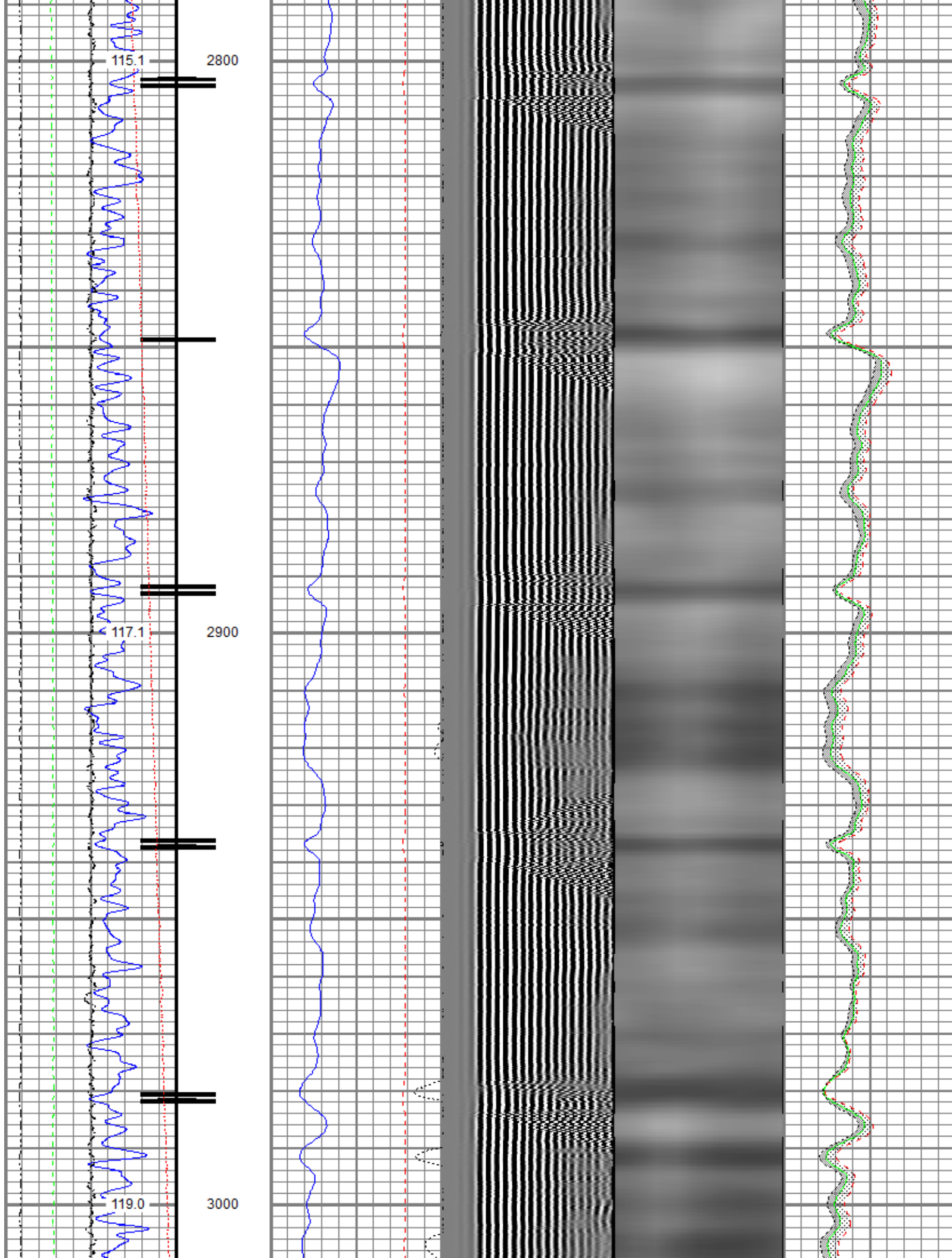




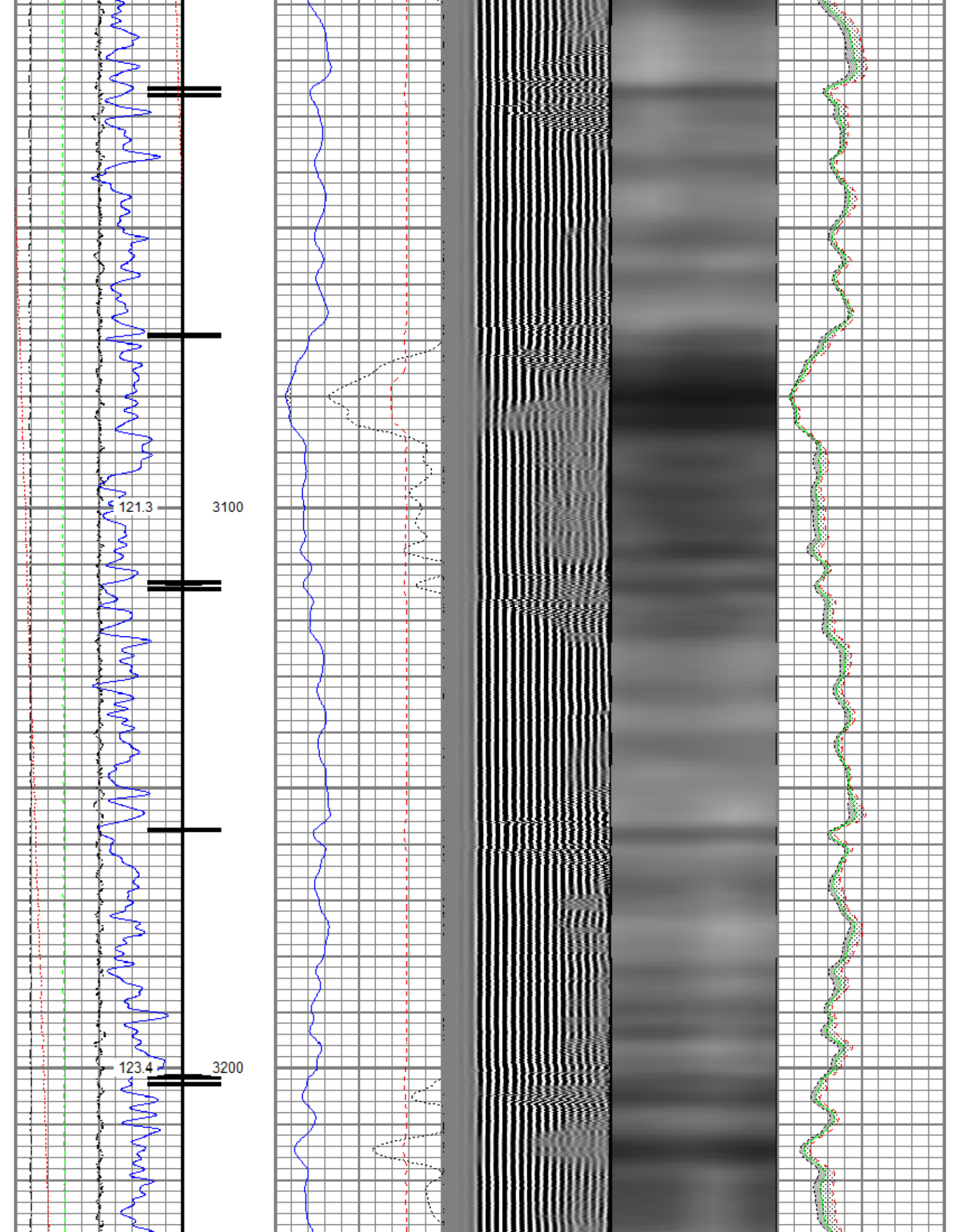




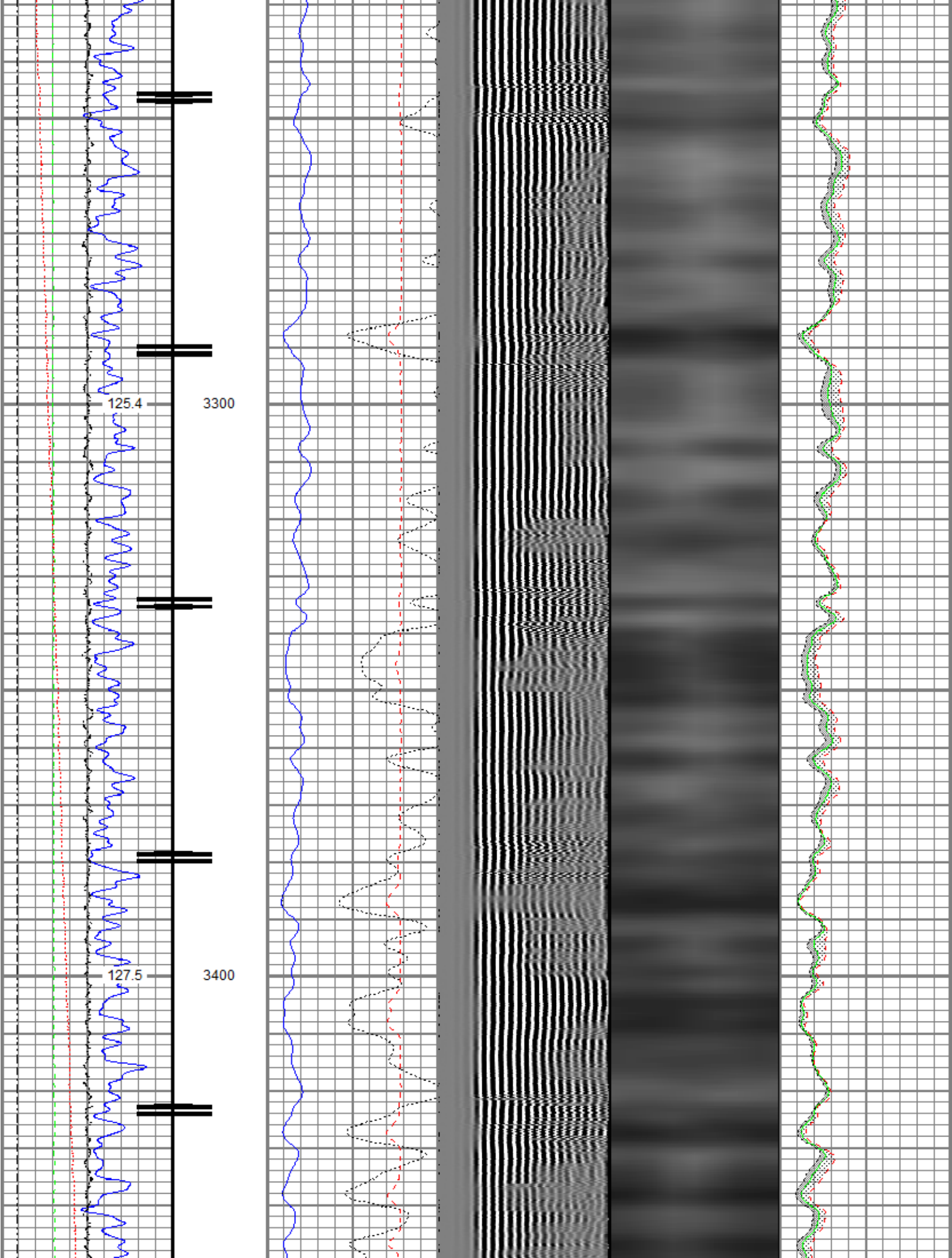


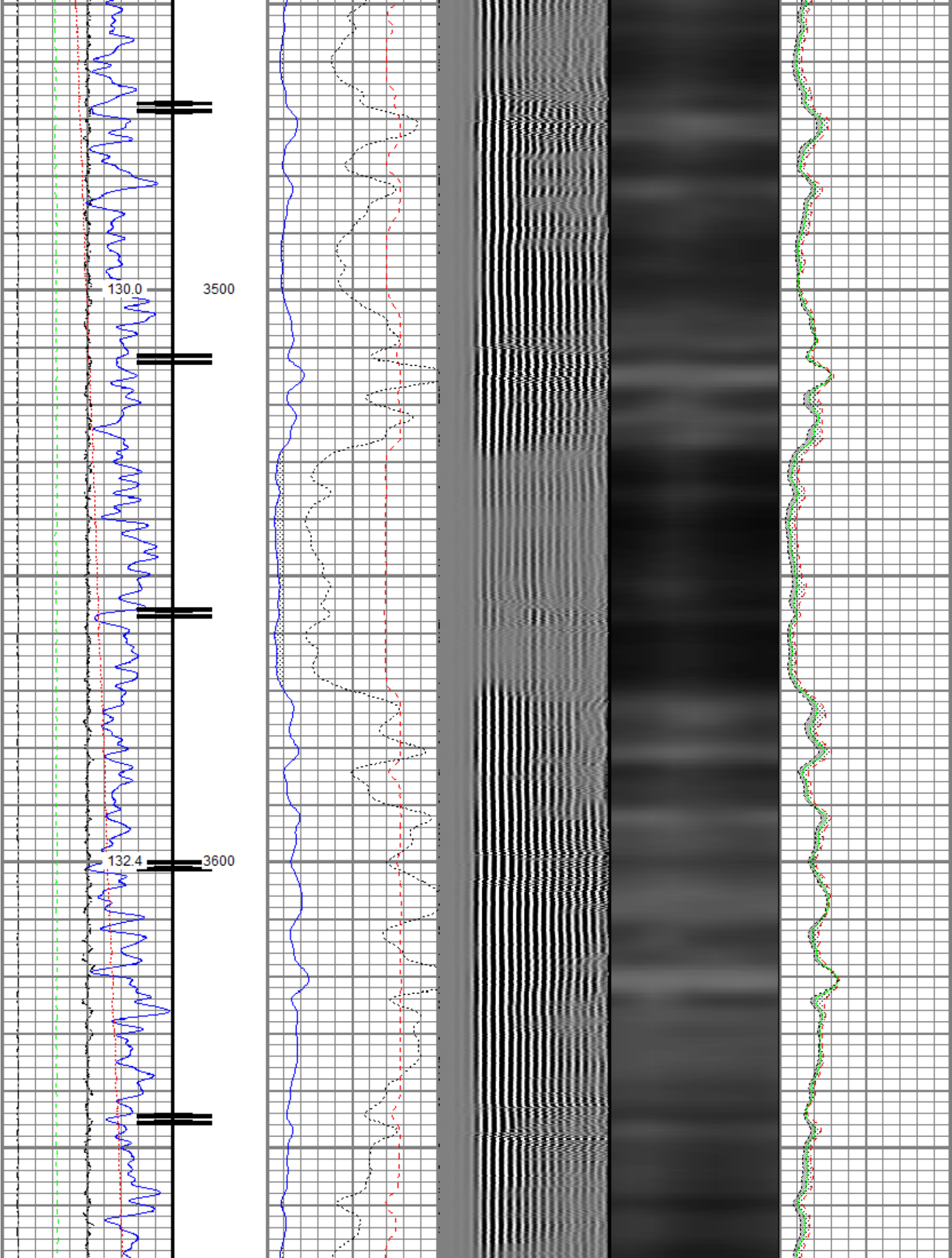


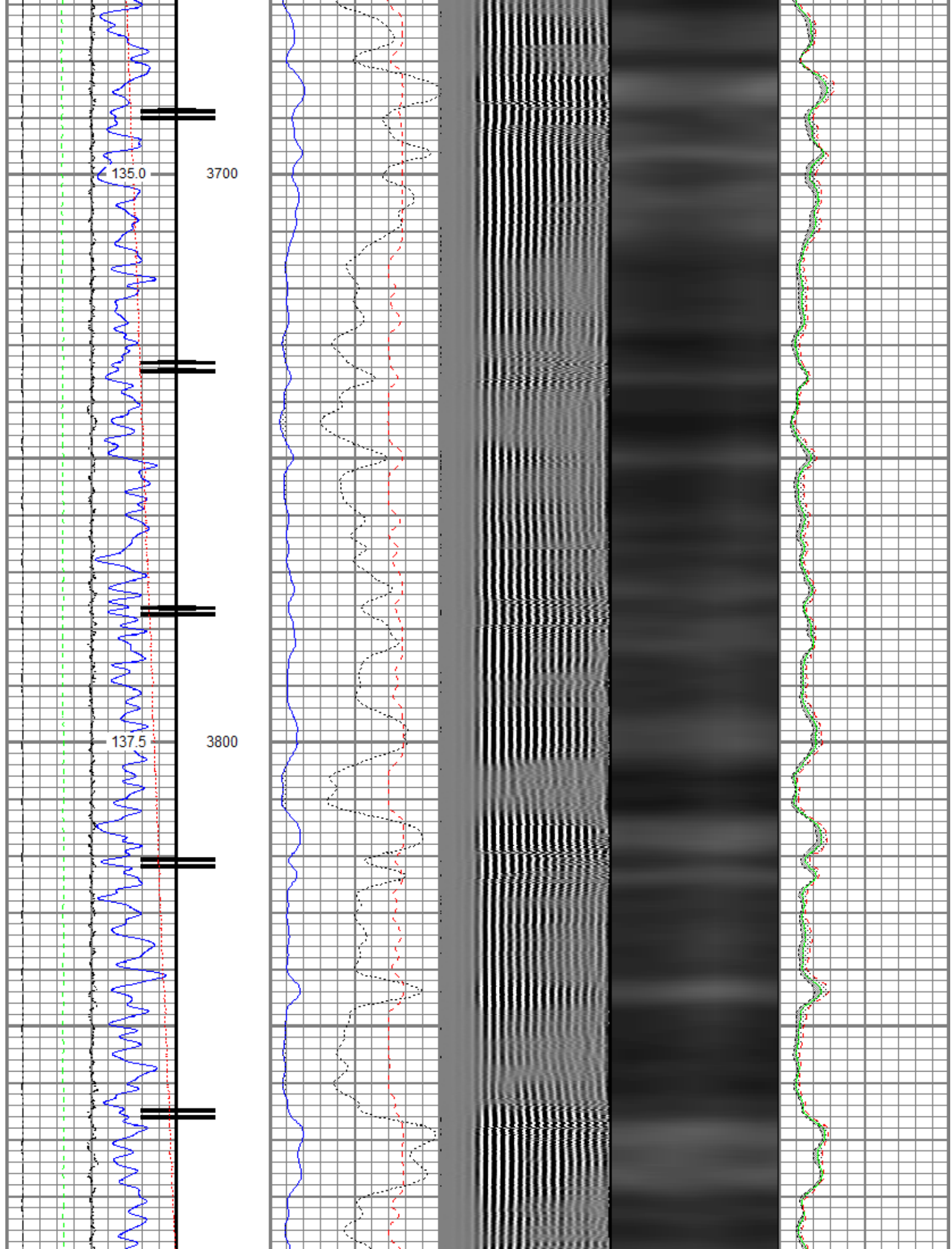




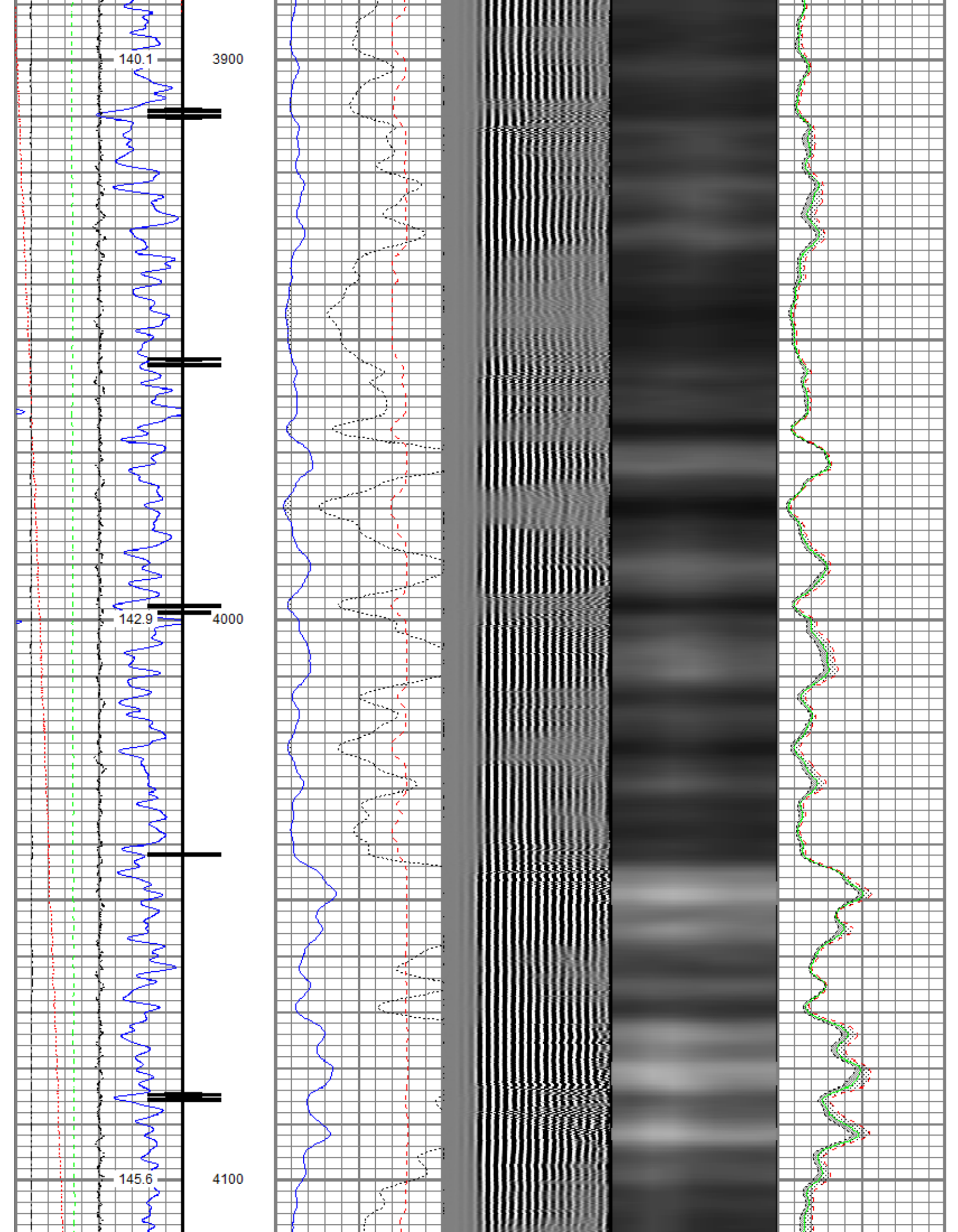




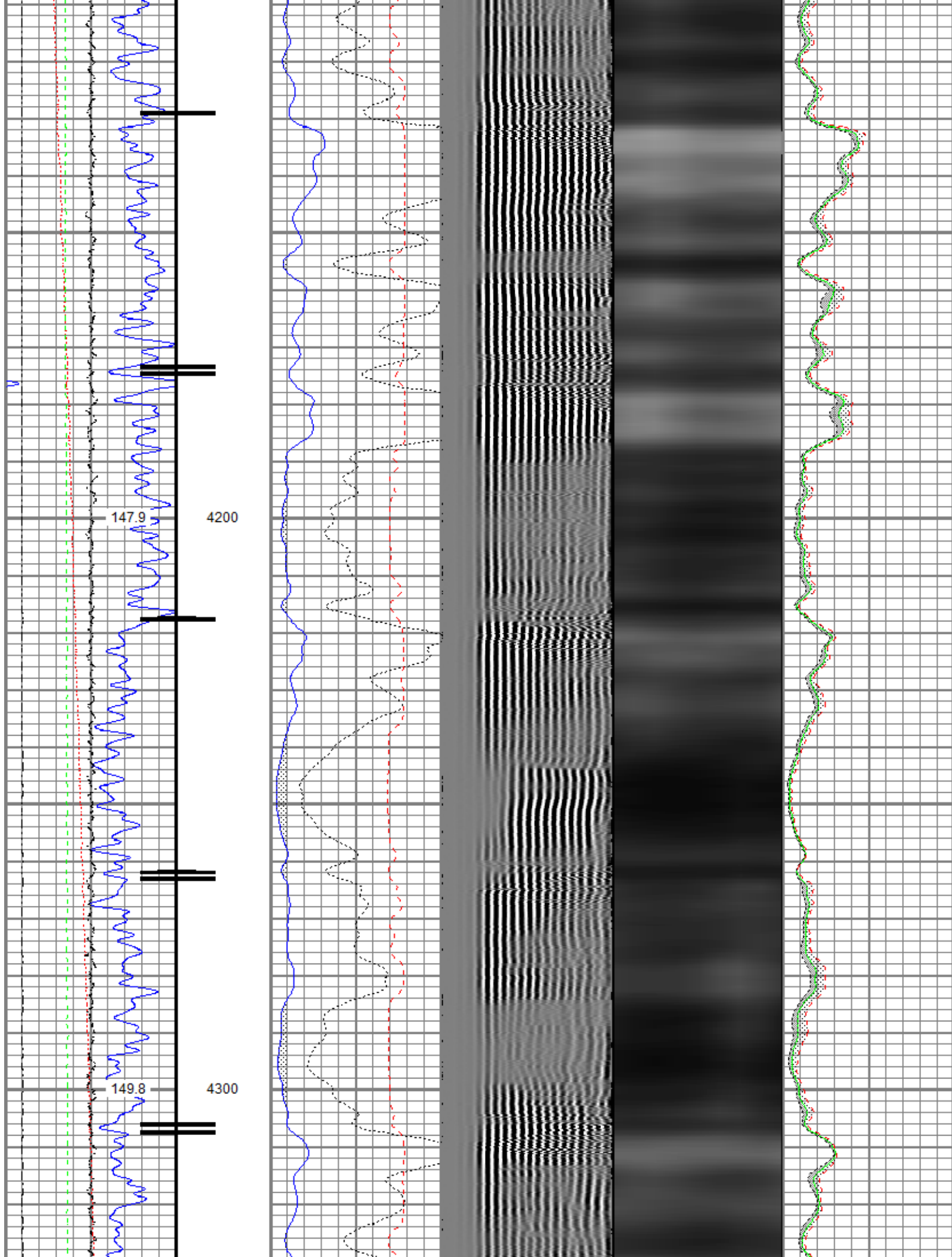


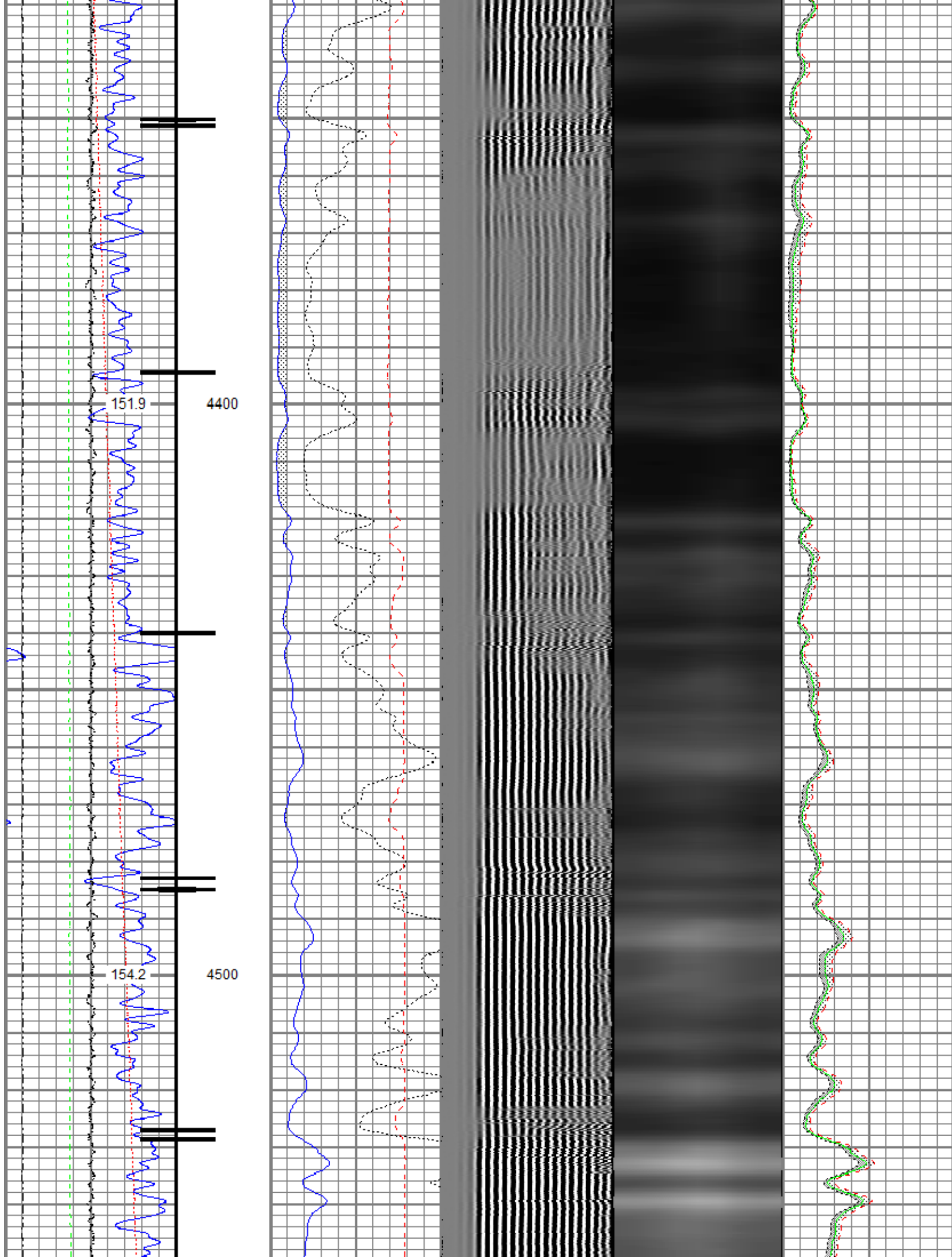


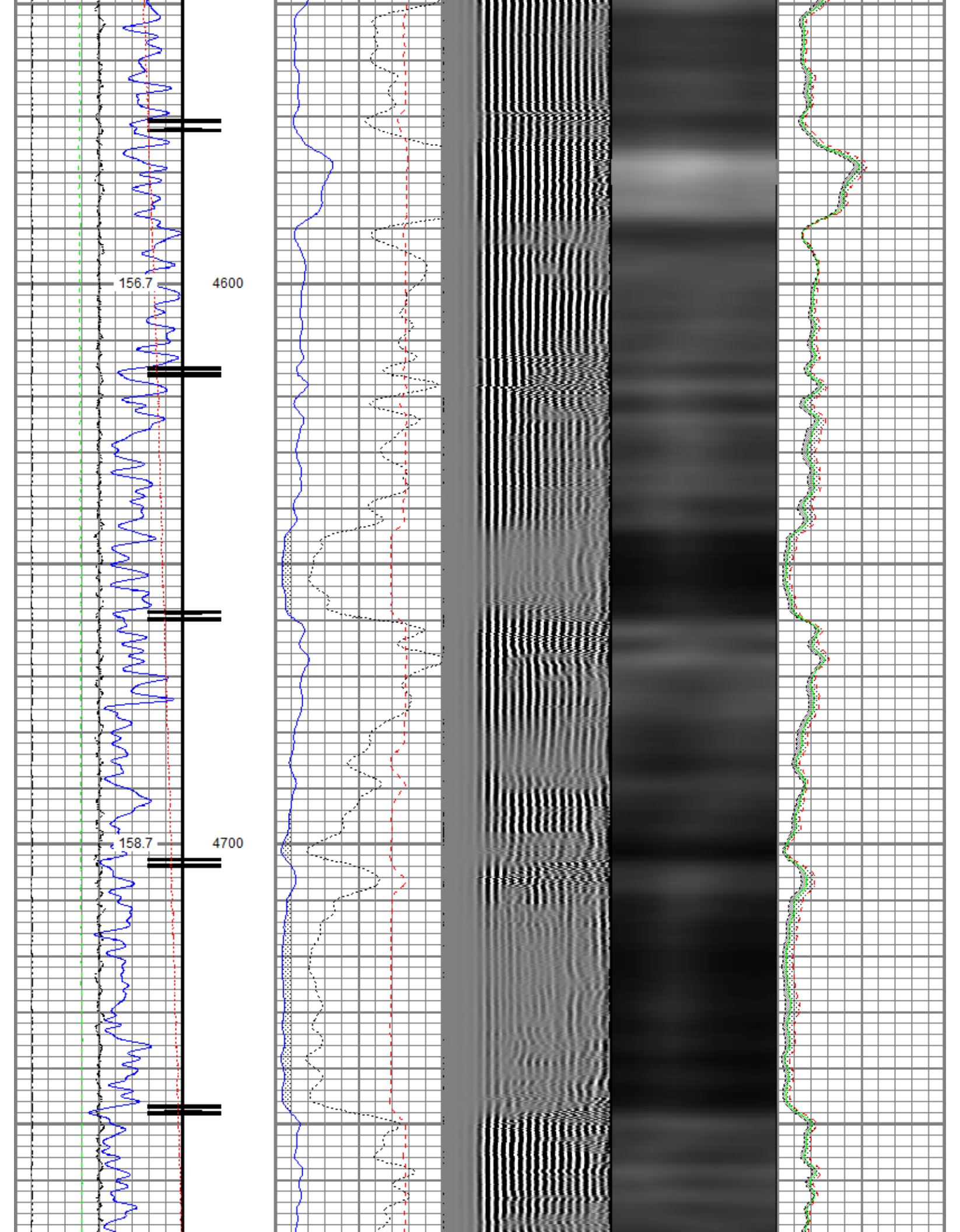




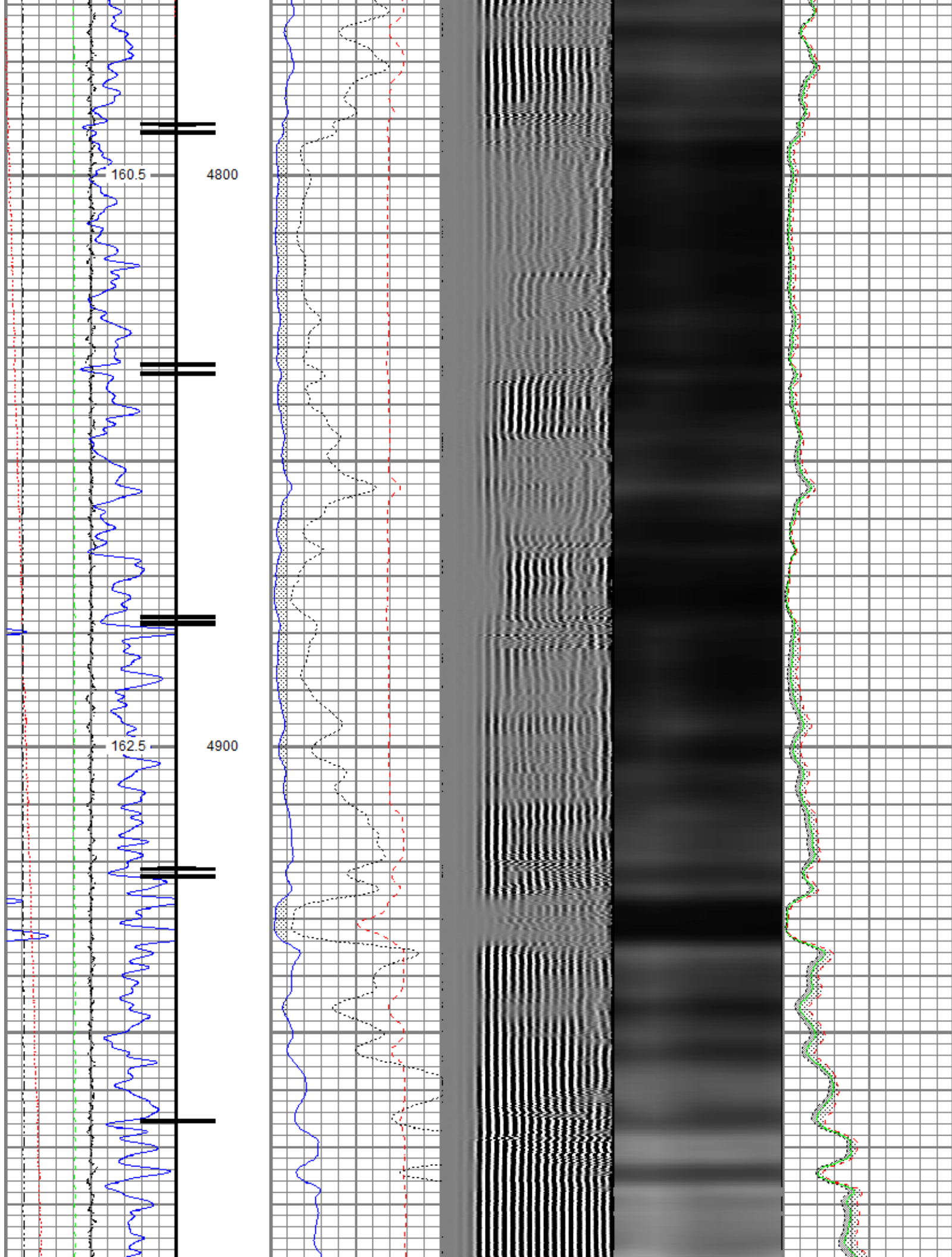


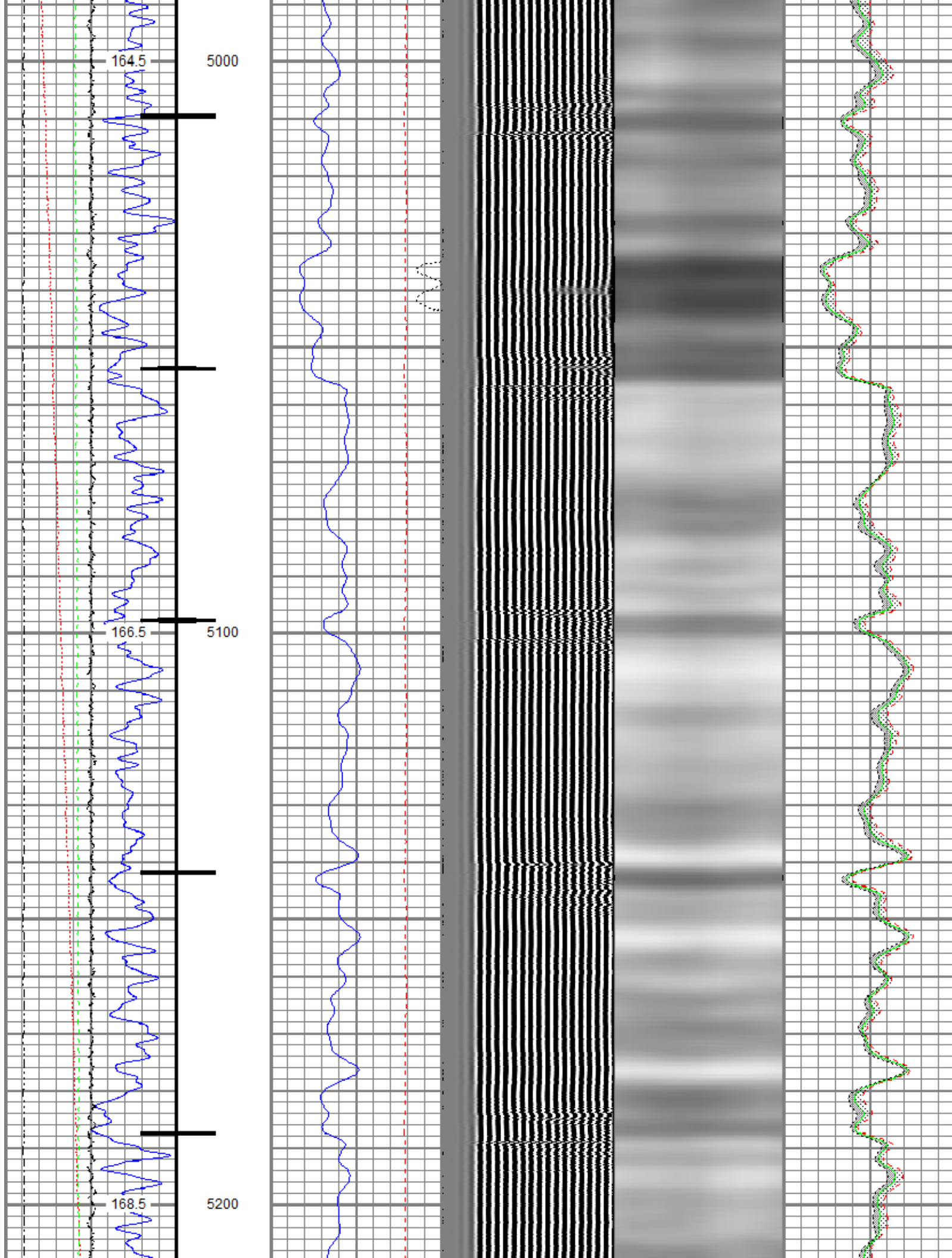


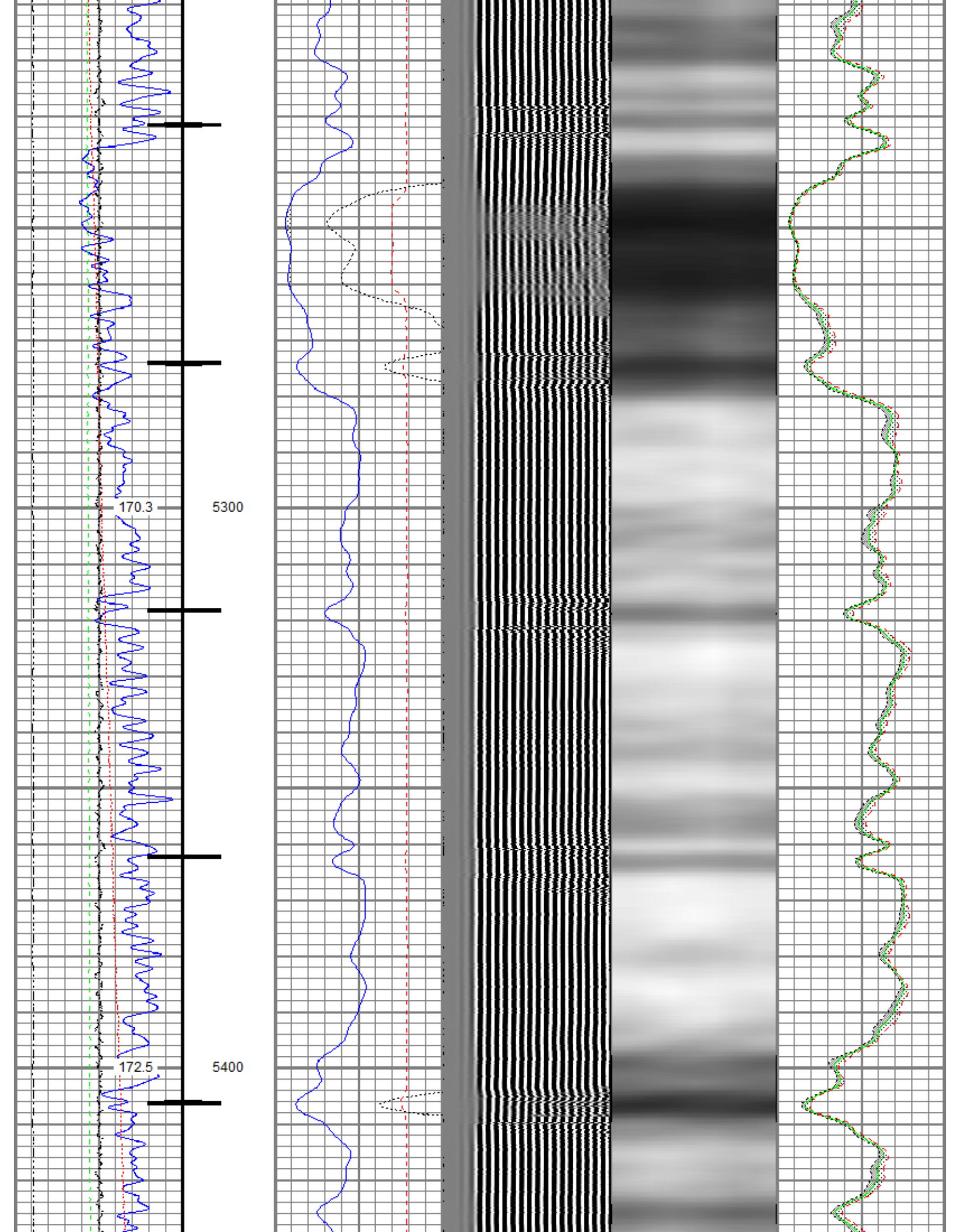




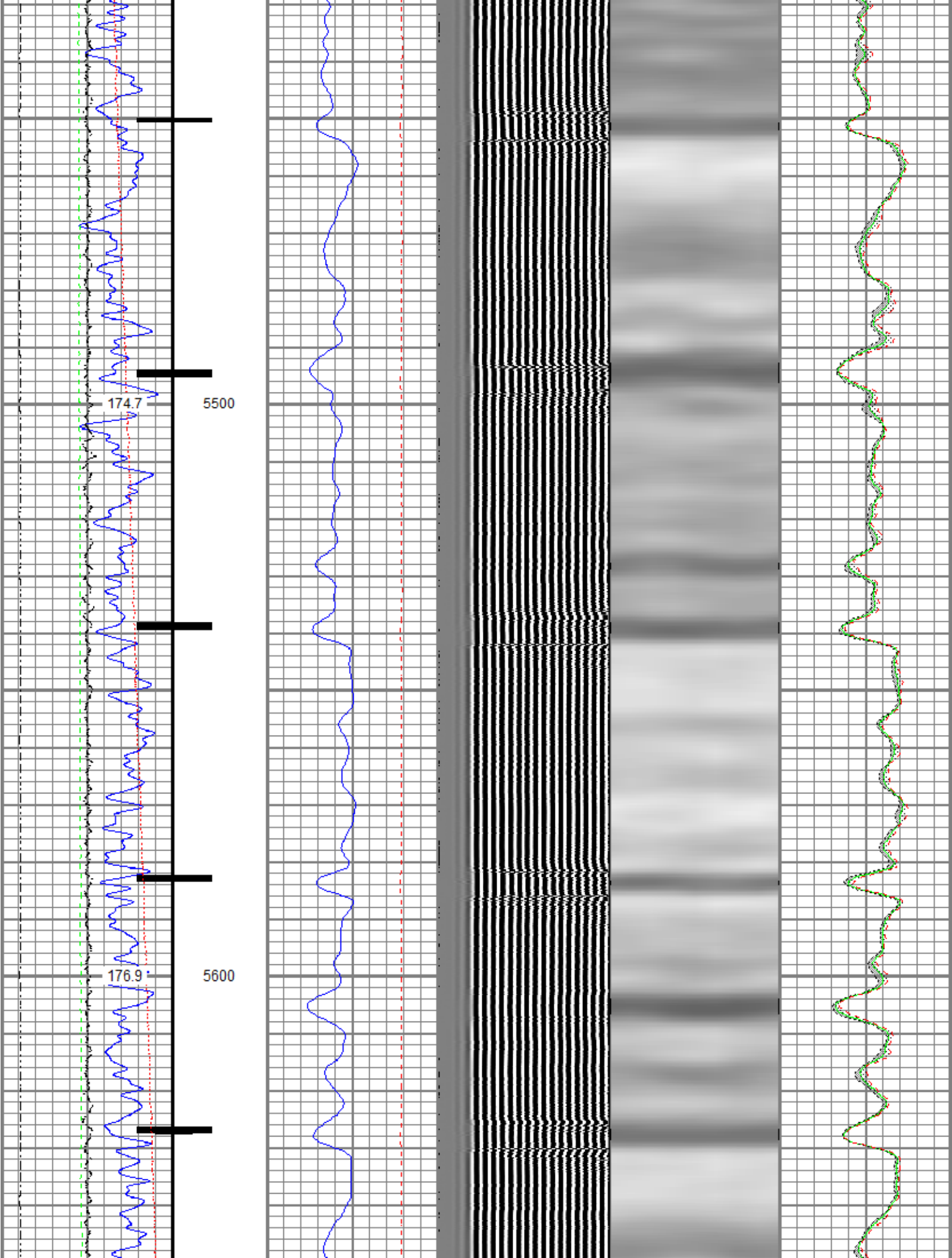


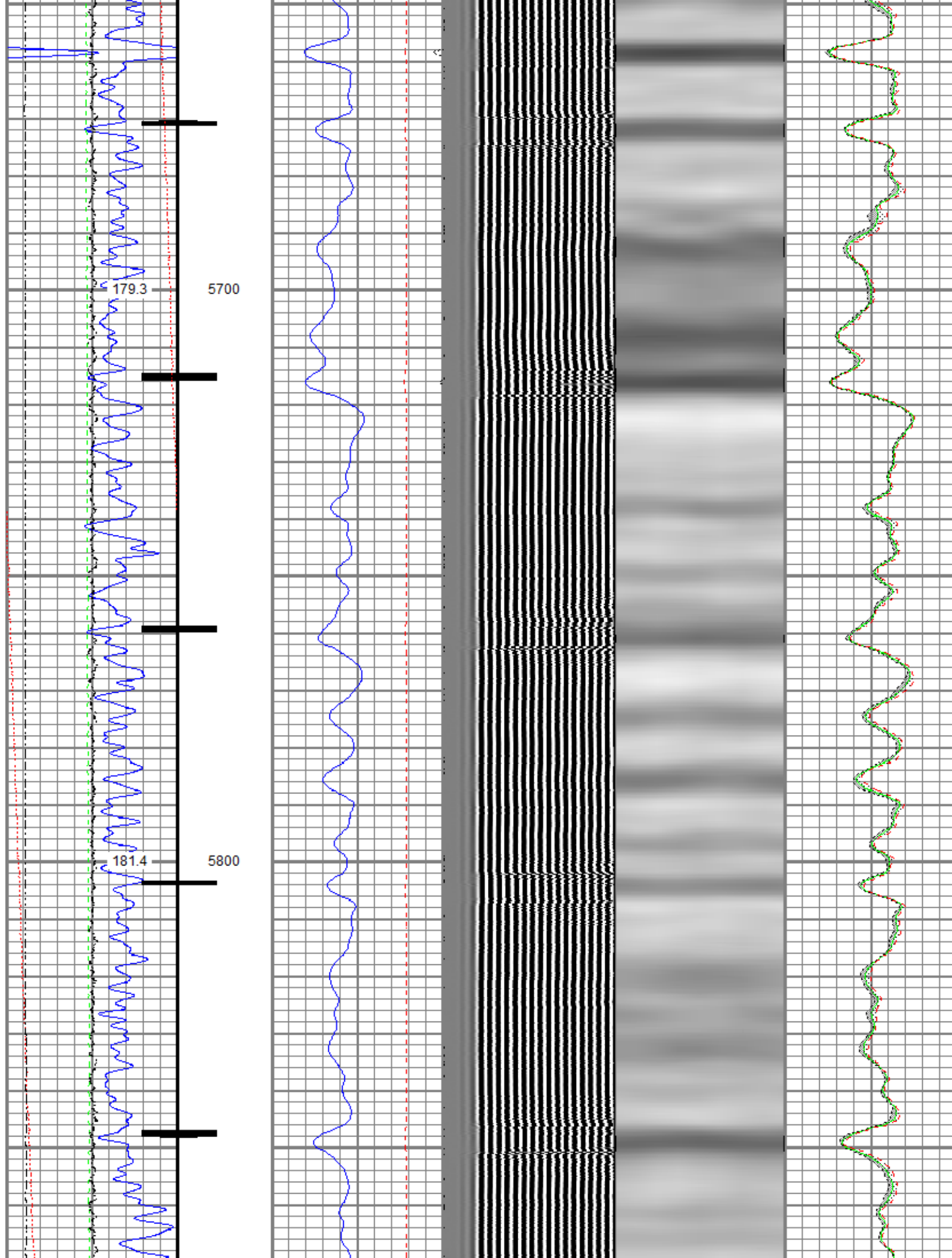


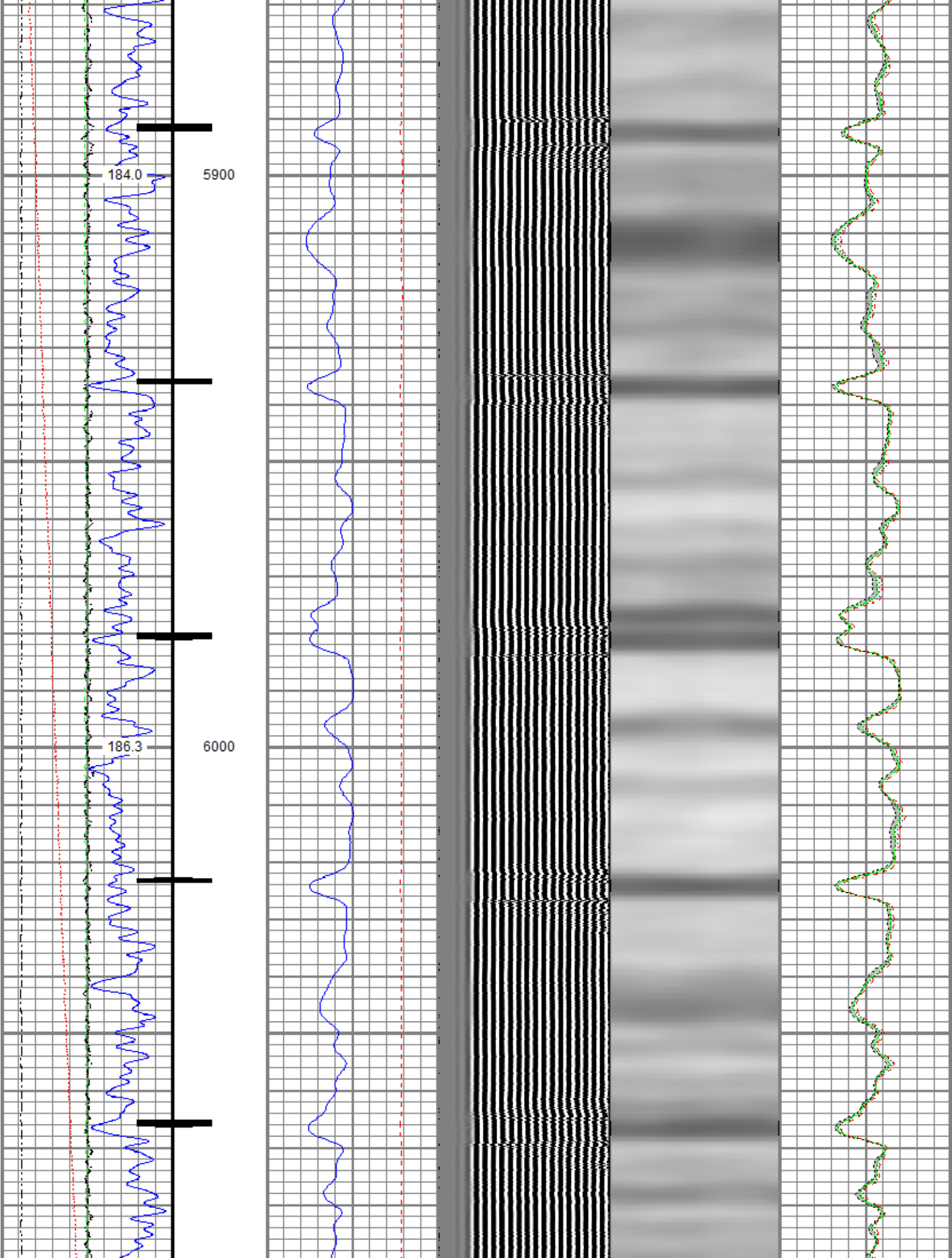




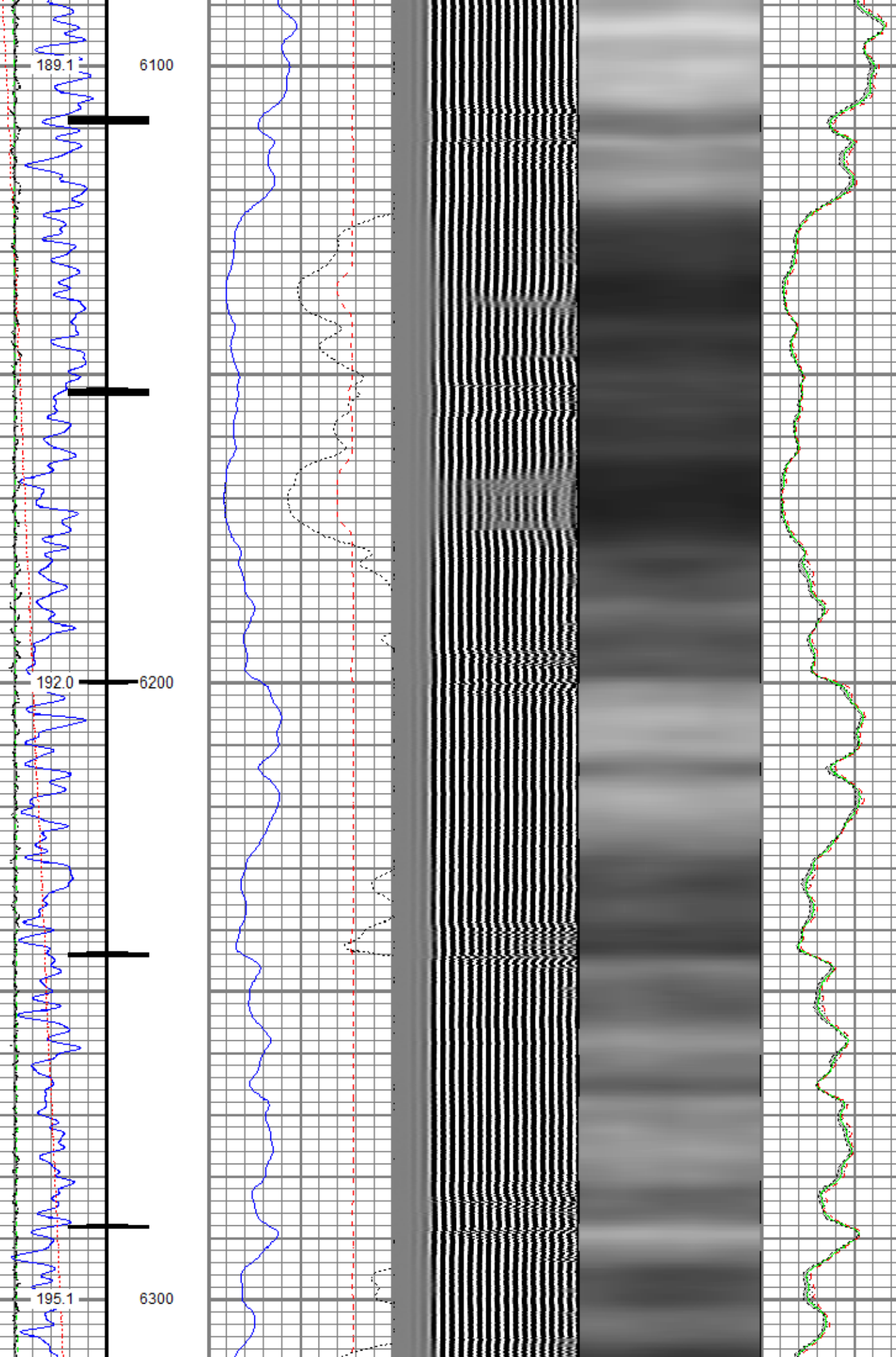


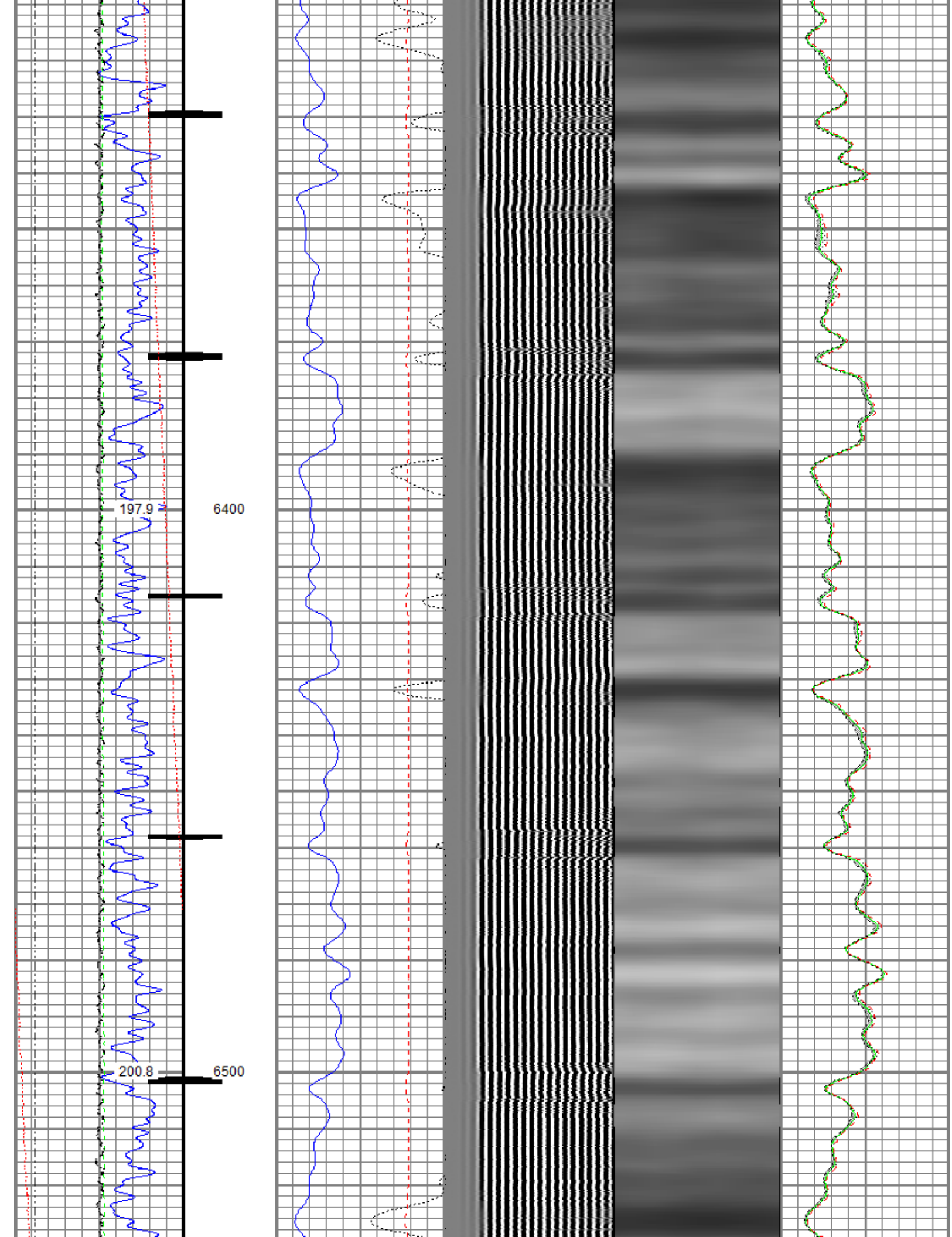


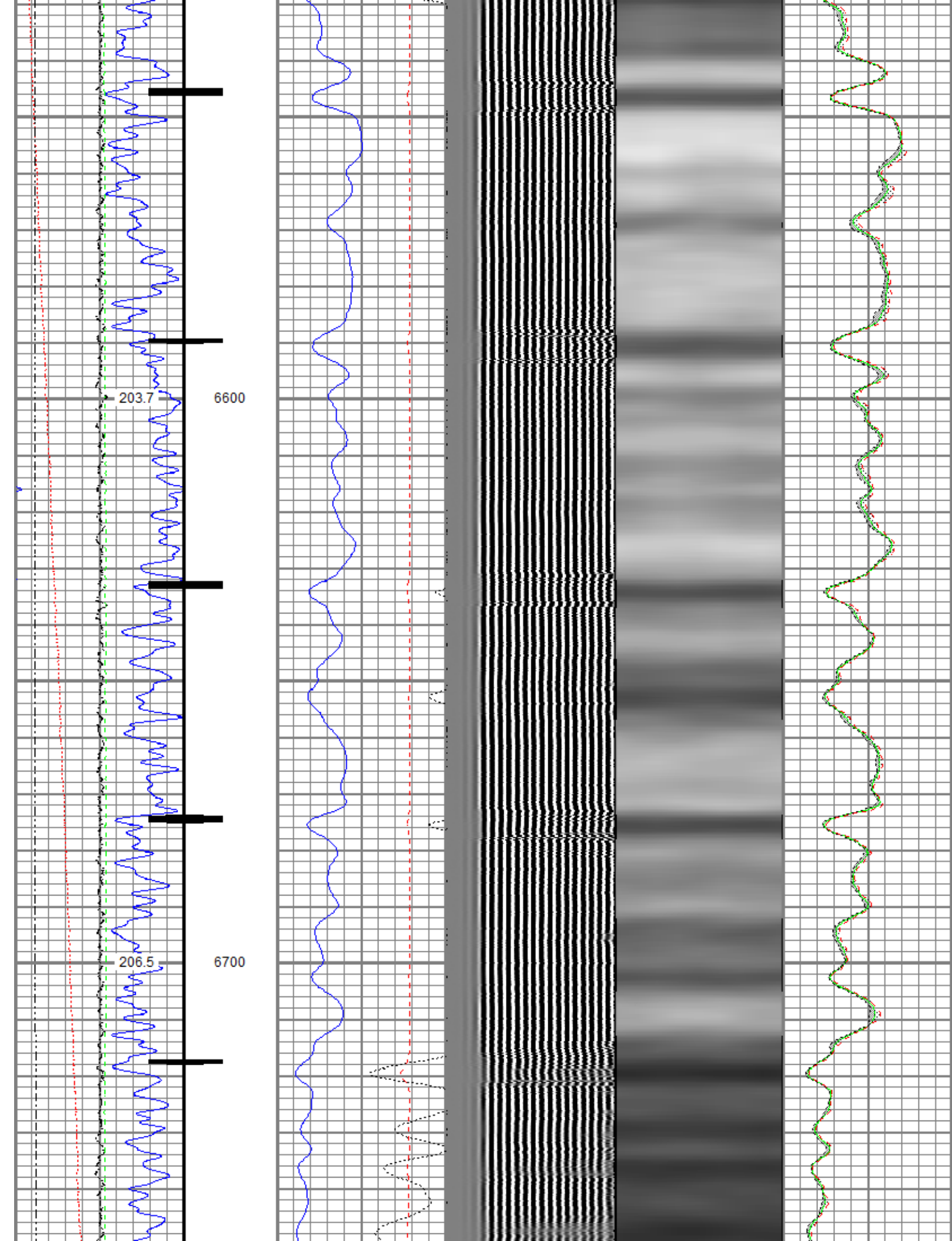




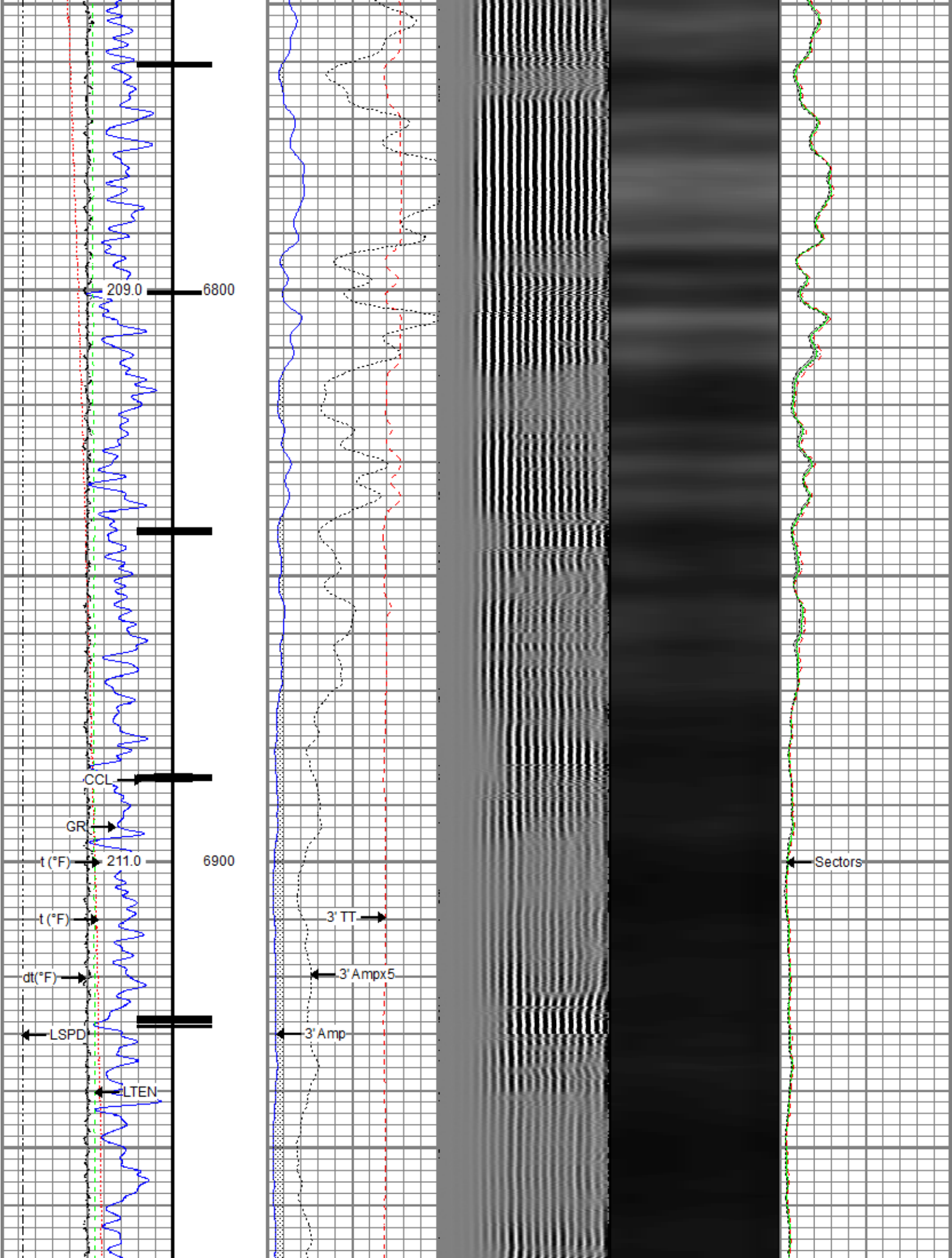


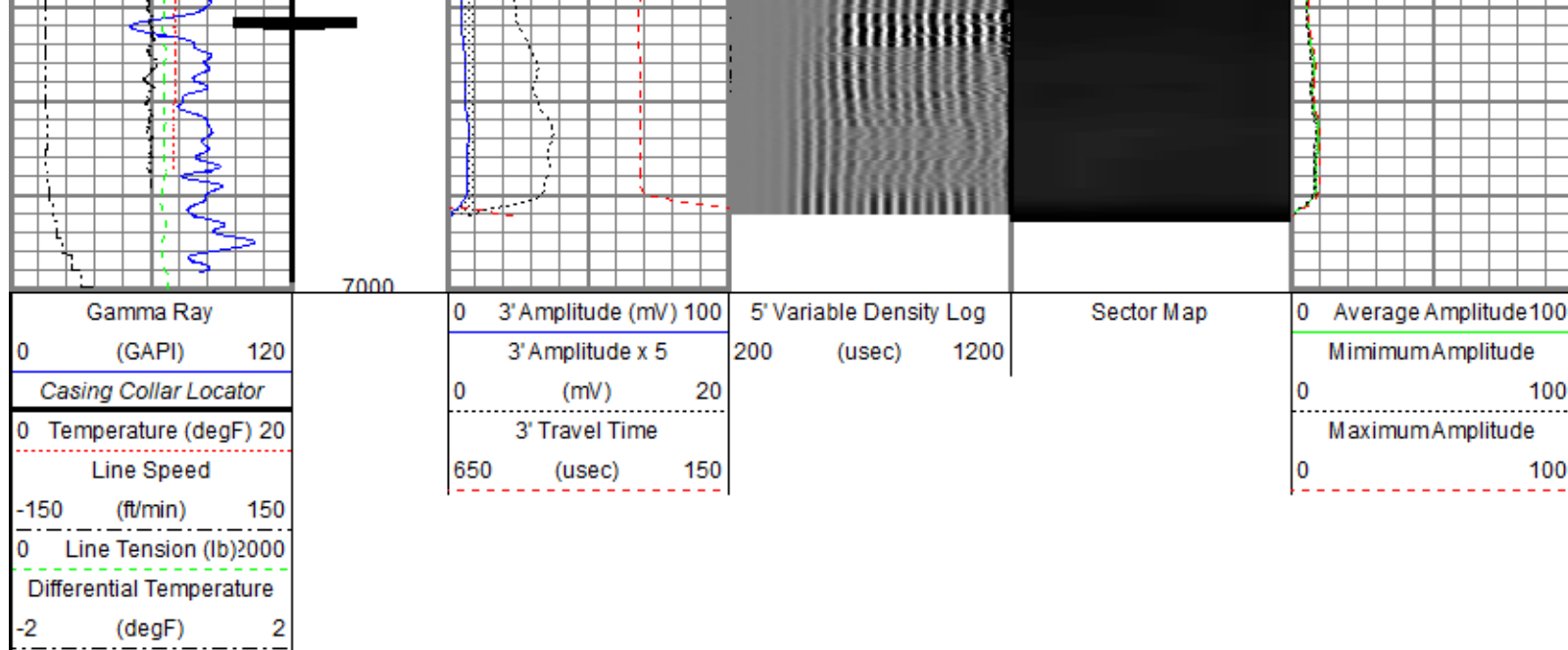








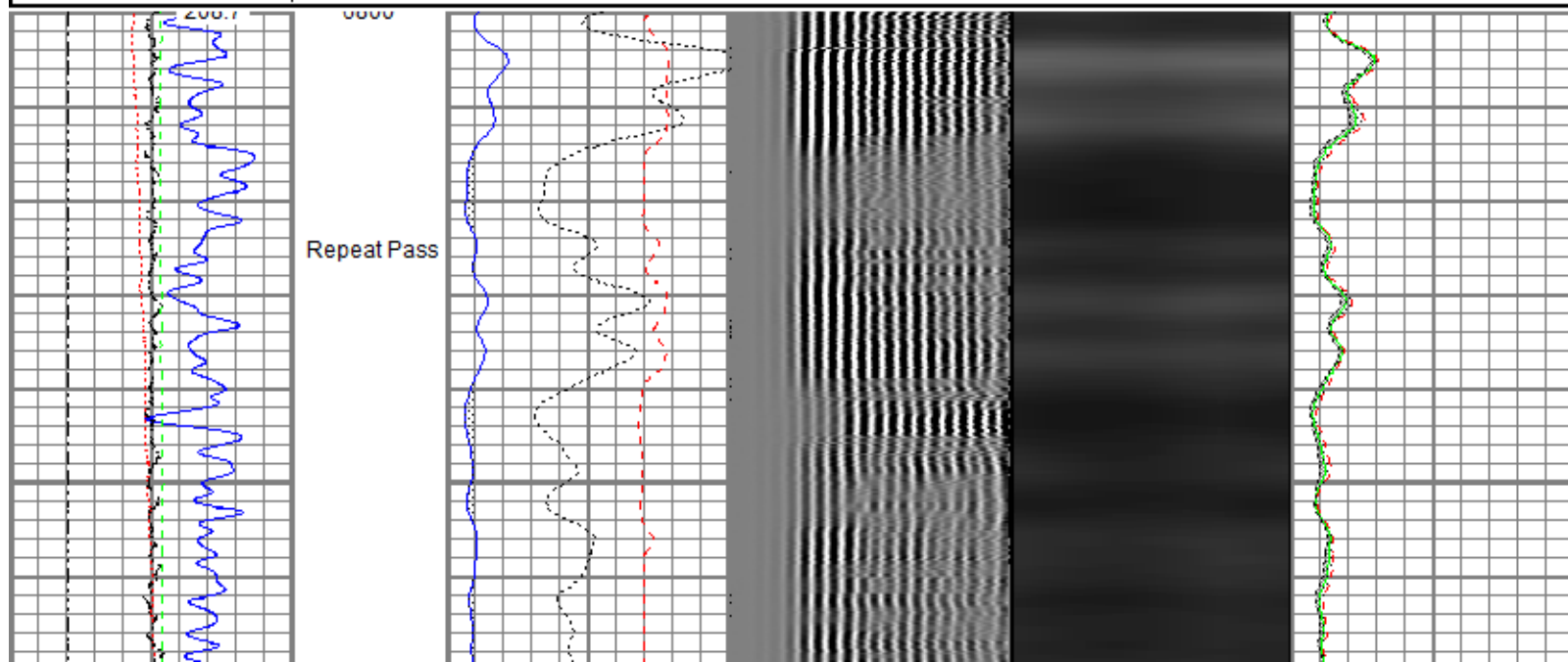
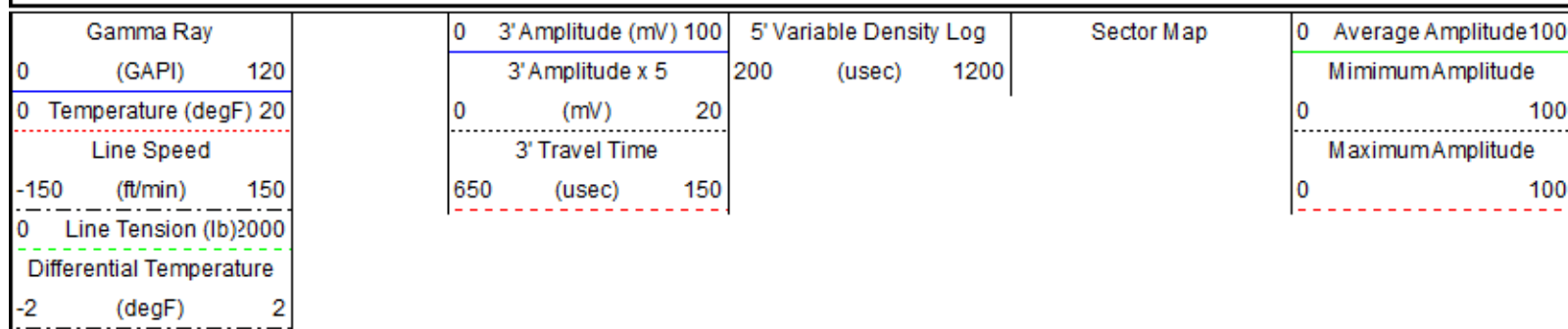


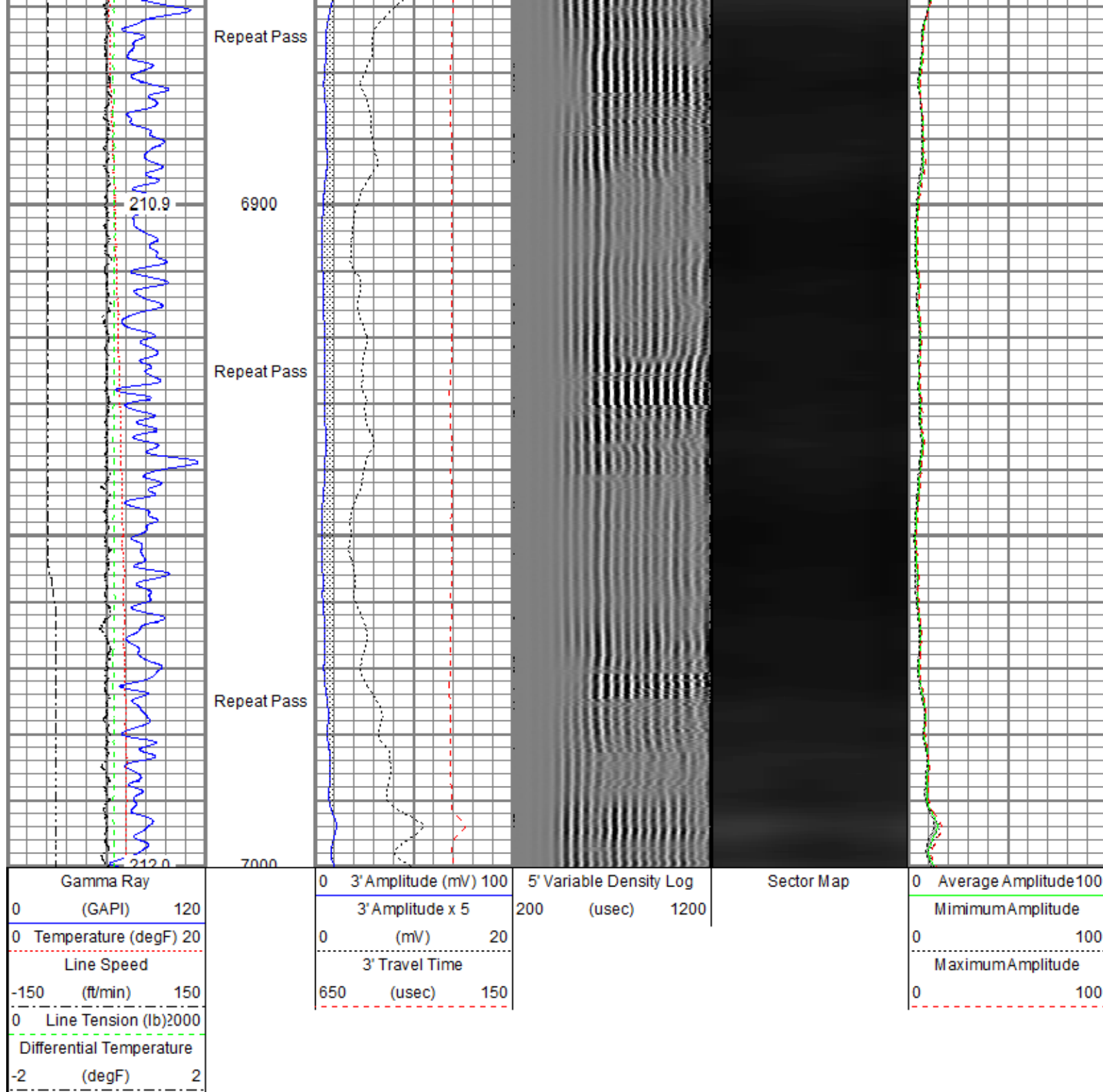


## Repeat Pass

Recorded With 0 PSI Surface Induced Pressure

Database File 0512347869\_anadarko\_reese 21-4hz\_rbl\_04-05-19\0512347869\_anadarko\_reese 21-4hz\_rbl\_04-05-19.db  
 Dataset Pathname pass2  
 Presentation Format ros\_radri  
 Dataset Creation Fri Apr 05 16:17:12 2019  
 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



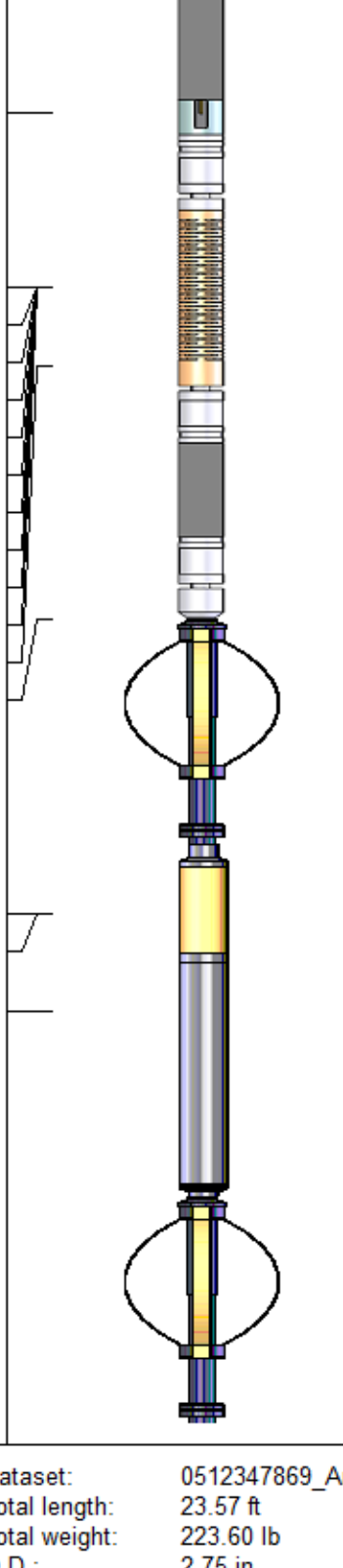
Tool Joint	Tool Joint Depth (ft)	Tool Joint Description	Tool Joint Length (ft)	Tool Joint Weight (lb)	Tool Joint O.D. (in)
TEMP	16.75				
WVFS8	14.52	Probe Radii-2750 RBT (FW1302-001)	9.39	2.75	105.00
WVFS7	14.52	Probe 2-3/4" Radial Cement Bond Tool with Integral Temperature Sub			
WVFS6	14.52				
WVFS5	14.52				
WVFS4	14.52				
WVFS3	14.52				
WVFS2	14.52				
WVFS1	14.52				
WVFCAL	14.52				
WVF3FT	14.52				
WVF5FT	13.52				
HEADVOLT	10.27				
CCL\$2	6.51	Probe CENT-2750	2.88	2.75	20.00
CCL\$1	6.51	Probe 2-3/4" Electric Inline Bowspring Centralizer			
GR	5.26	Probe GR-CCL-2750 GOB (FW1212-026)	4.51	2.75	55.00
		Probe 2-3/4" rev.2 Digital Scintillation Gamma Ray/CCL Combined with GO Bottom			
		Probe CENT-2750	2.88	2.75	20.00
		Probe 2-3/4" Electric Inline Bowspring Centralizer			

Dataset: 0512347869\_Anadarko\_Reese 21-4HZ\_RBL\_04-05-19.db: field/well/run1/pass4

Total length: 23.57 ft

Total weight: 223.60 lb

O.D.: 2.75 in



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'	0.002	0.894	0.800	71.921	79.780	0.610
CAL	0.005	0.766				
5'	0.001	0.910	0.800	71.921	78.234	0.698
SUM						
S1	0.002	0.839	0.000	100.000	119.470	-0.274
S2	0.003	0.827	0.000	100.000	121.242	-0.305
S3	0.002	0.839	0.000	100.000	119.541	-0.241
S4	0.002	0.899	0.000	100.000	111.508	-0.240
S5	0.002	0.993	0.000	100.000	100.897	-0.232
S6	0.002	1.002	0.000	100.000	100.002	-0.243
S7	0.002	0.953	0.000	100.000	105.251	-0.261
S8	0.002	0.902	0.000	100.000	111.166	-0.277

#### 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	



Company	Kerr-McGee Oil & Gas Onshore, L.P.
Well	Reese 21-4HZ
Field	Wattenberg
County	Weld
State	Colorado