



Radial Cement Bond  
Gamma Ray  
Casing Collar Log

Company	Kerr-McGee Oil & Gas Onshore, L.P.		
Well	Meguire 3N-16HZ		
Field	Wattenberg		
County	Weld		
State	Colorado		
Location:	Company	Kerr-McGee Oil & Gas Onshore, L.P.	
	Well	Meguire 3N-16HZ	
	Field	Wattenberg	
	County	Weld	
Other Services	State	Colorado	
	API # :	05-123-41978	
	JB/GR		
	Elevation		
Permanent Datum	Ground Level	Elevation 4889'	
Log Measured From	Kelly Bushing	20 FT	
Drilling Measured From	Kelly Bushing	G.L. 4889'	

Date	02-DEC-2015
Run Number	One
Depth Driller	15132 FT
Depth Logger	7202 FT
Bottom Logged Interval	7197 FT
Top Log Interval	Surface
Open Hole Size	7.875"
Type Fluid	Water
Density / Viscosity	8.34 lbm/gal
Max. Recorded Temp.	235°F
Estimated Cement Top	Surface
Time Well Ready	ROA
Time Logger on Bottom	11:11 A.M.
Equipment Number	HD-0325
Location	Fort Lupton, CO
Recorded By	J. Morrison
Witnessed By	Steve Vigil

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record	Size (in)	Wgt (lbs/Ft)	Grade	Top	Bottom		
Surface Casing	9 5/8	36	J55	Surface	1859 FT		
Intermediate #1							
Intermediate #2							
Liner	5 1/2	17	HCP 110	Surface	15114 FT		

<<< 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 6409 FT  
Adjusted log 0 FT to correlate with Marker Joint  
Recorded with 2800 PSI Surface Induced Pressure

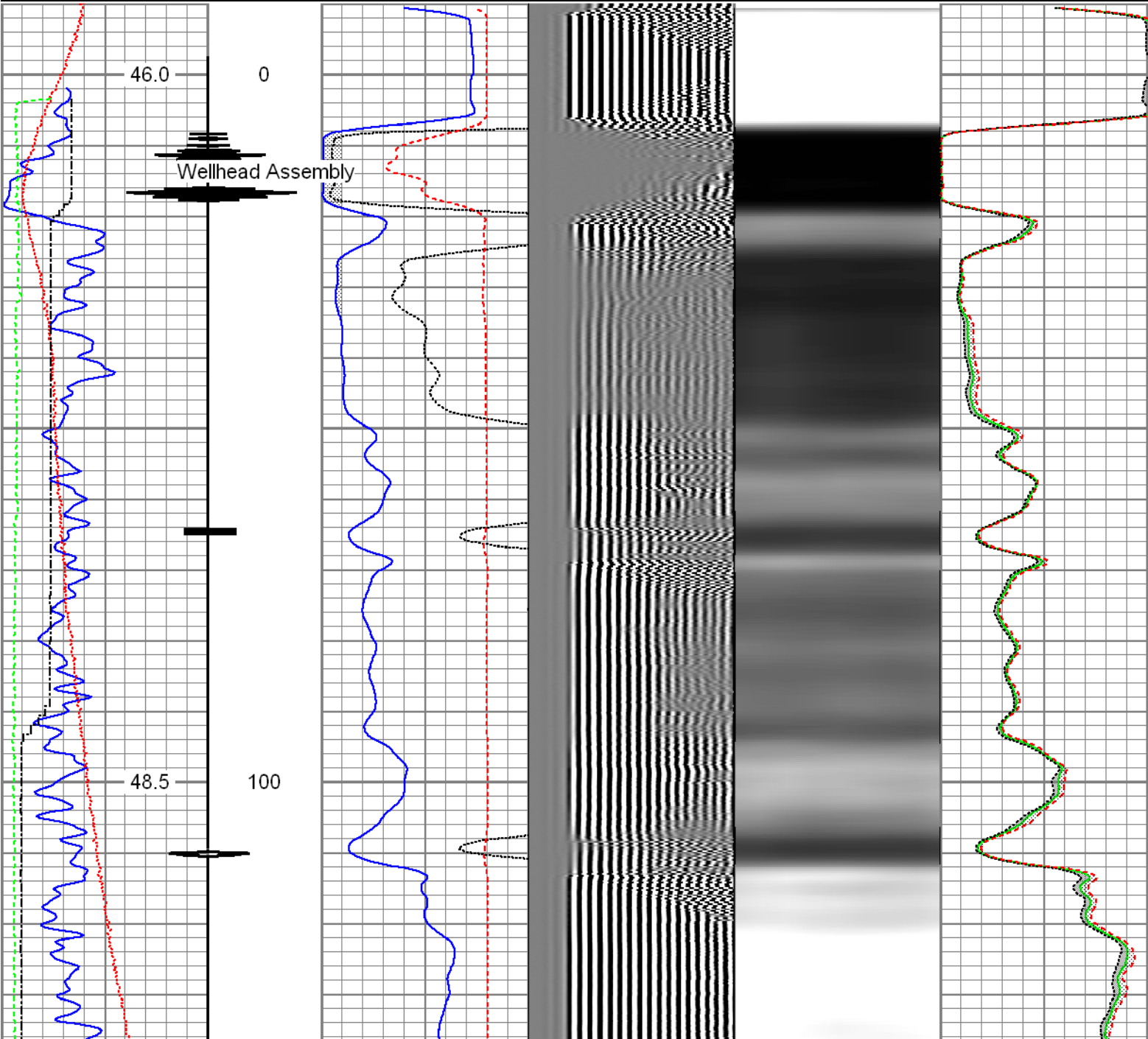
Thank you for choosing FMC Technologies Surface Integrated Services.

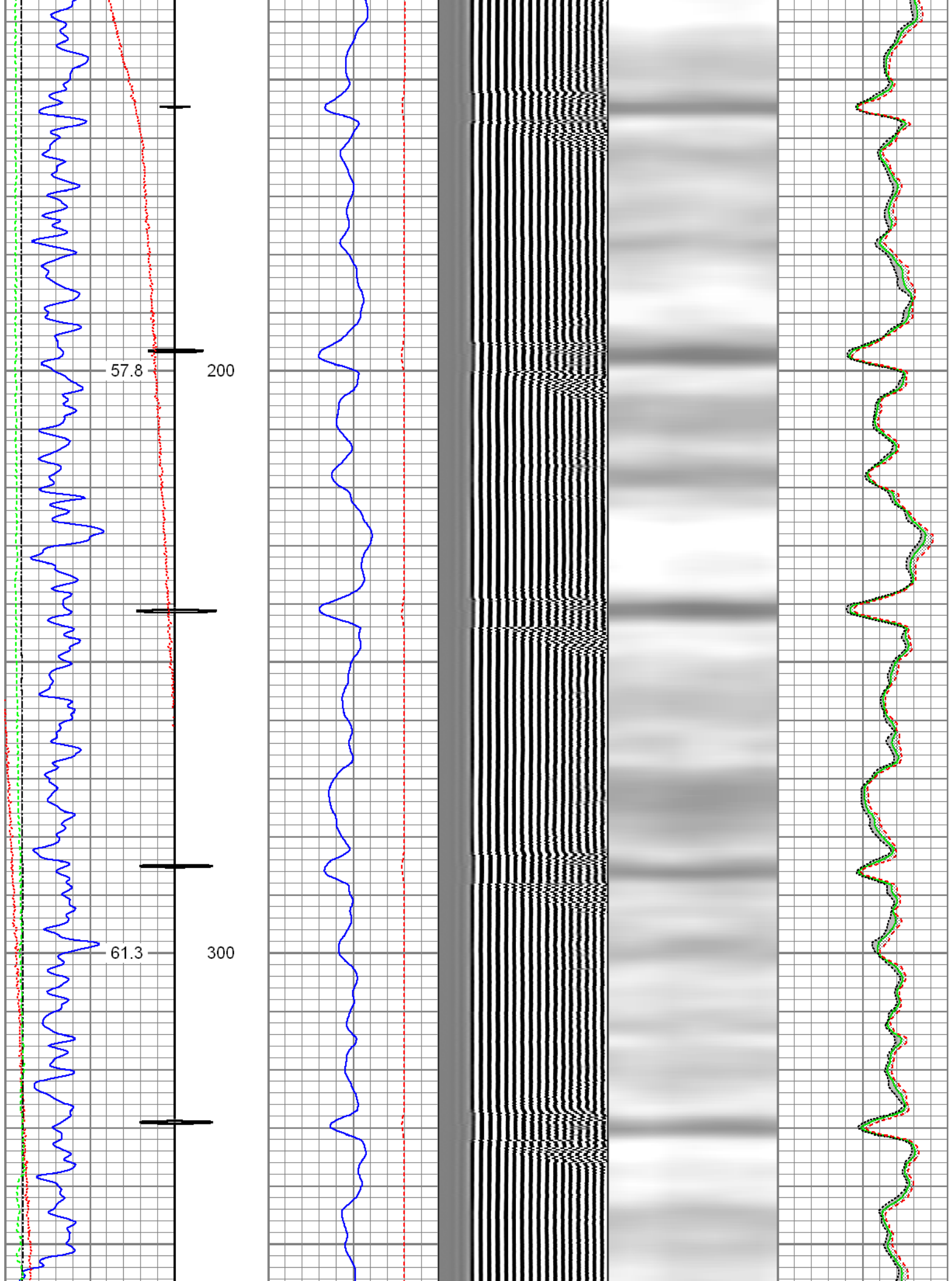


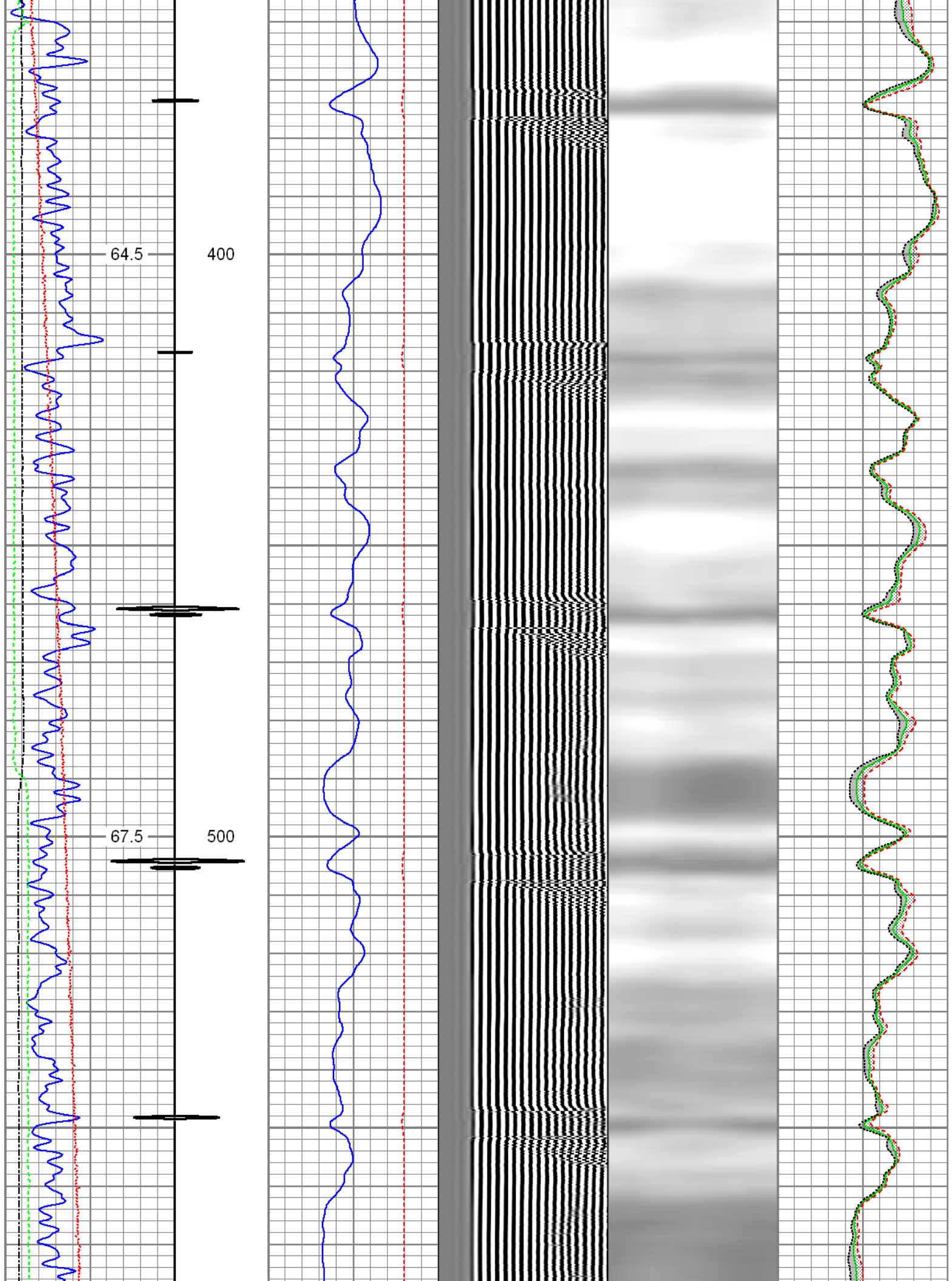
Main Pass

Recorded with 2800 PSI Surface Induced Pressure

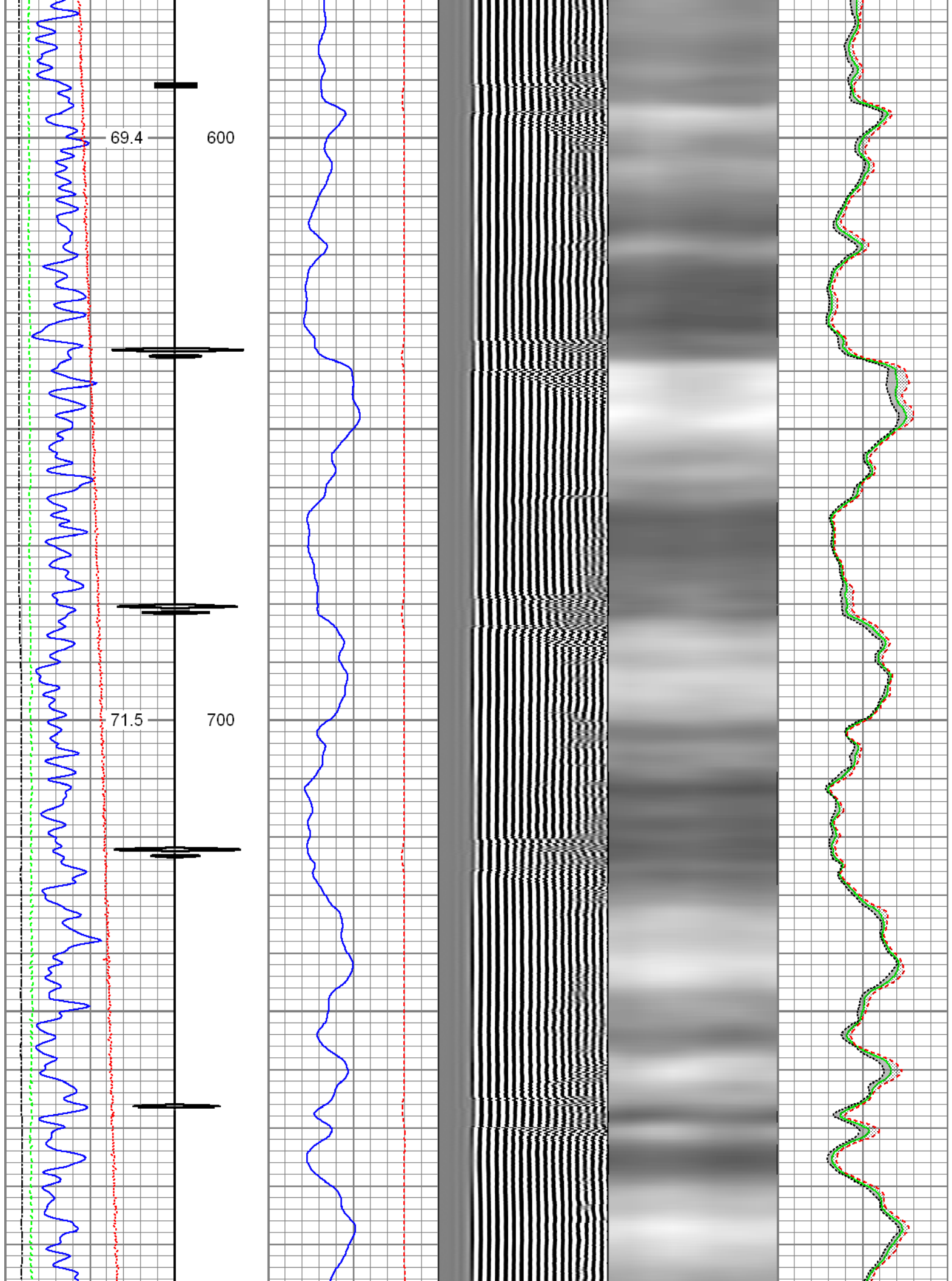
Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120	0 (mV) 100	200 1200		0 100
Casing Collar Locator	3' Amplitude x 5			Mimimum Amplitude
Temperature	0 (mV) 20			0 100
0 (degF) 20	3' Travel Time			Maximum Amplitude
Line Speed	650 (usec) 150			0 100
-150 (ft/min) 150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

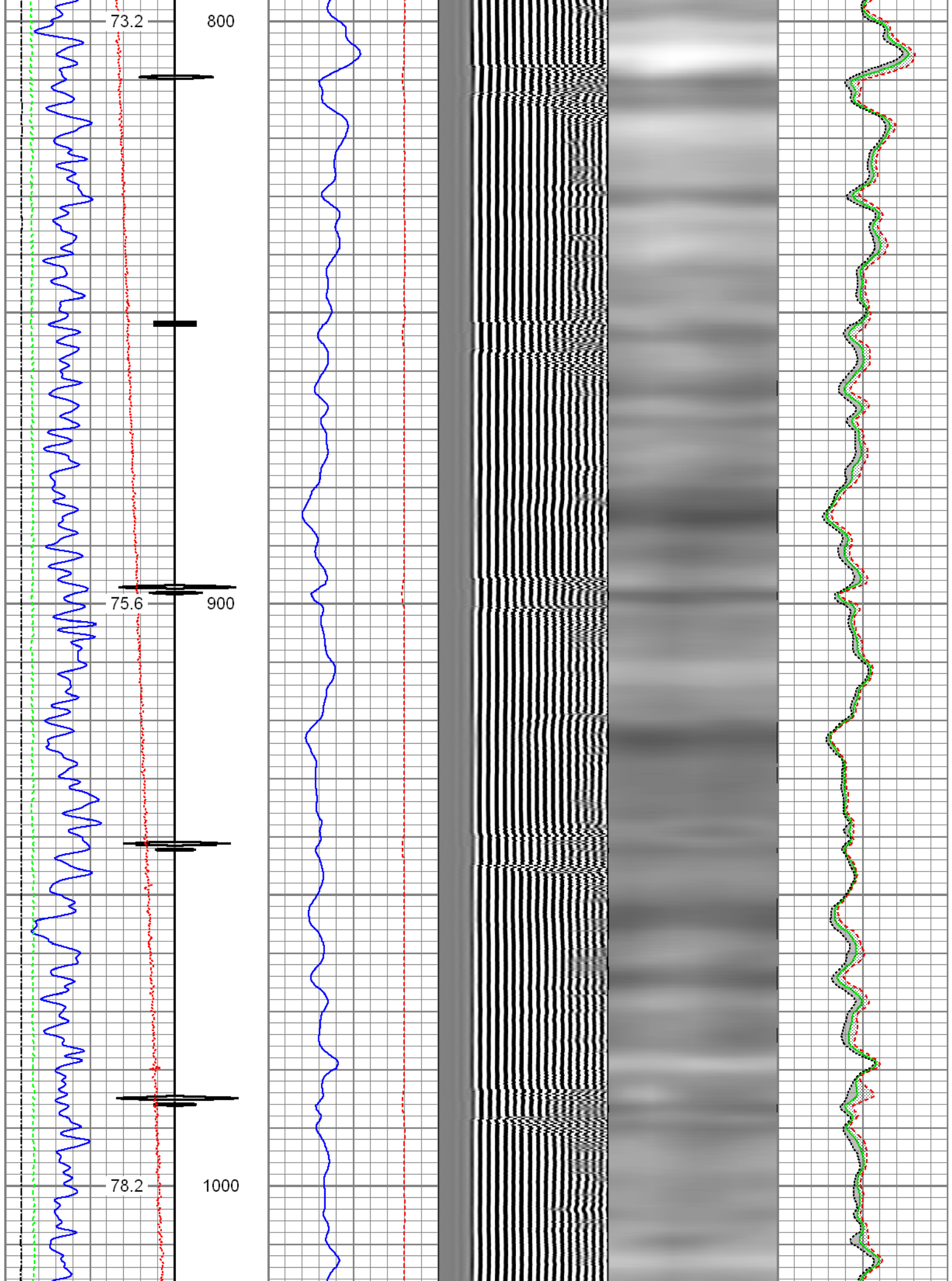


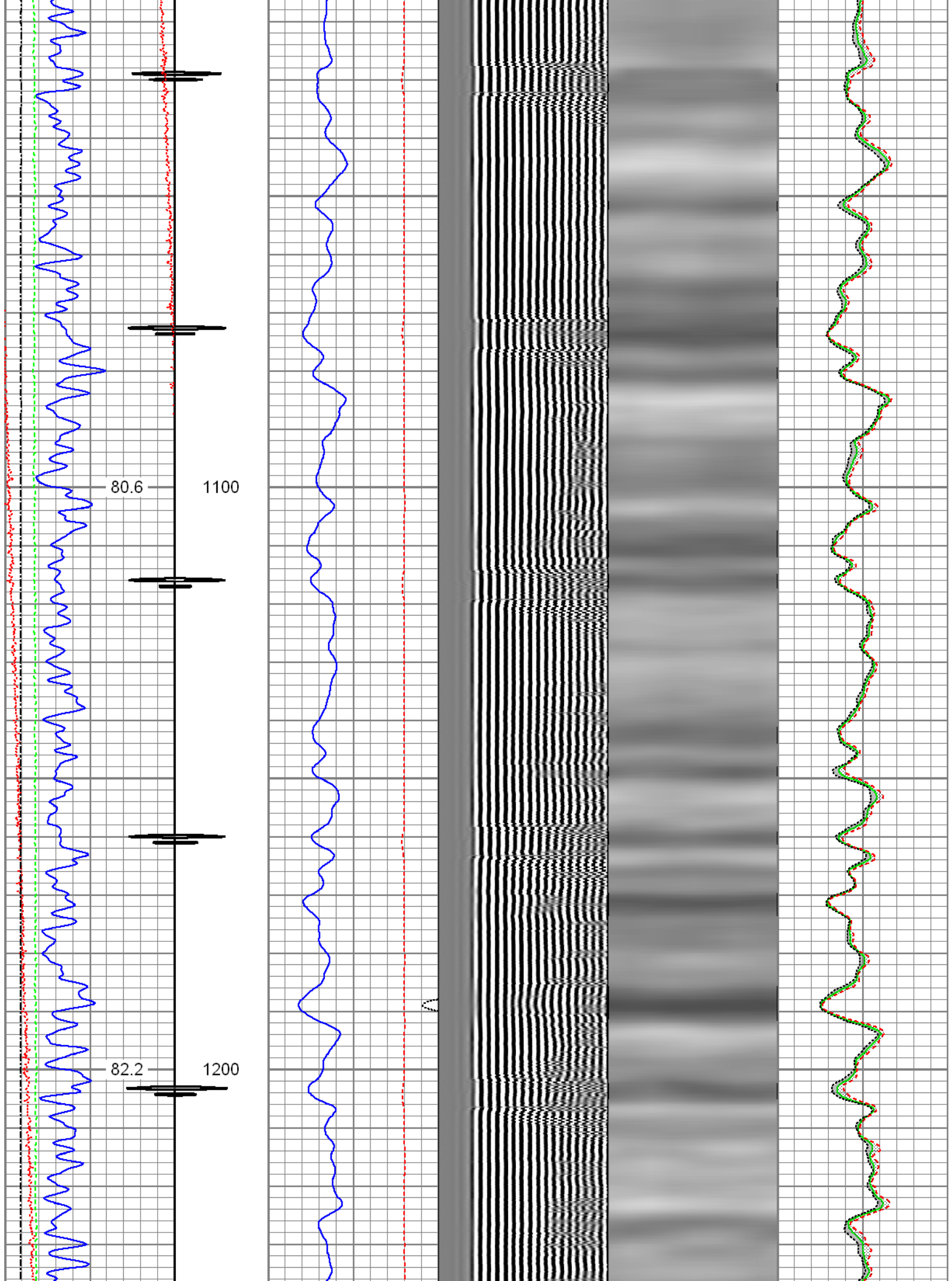




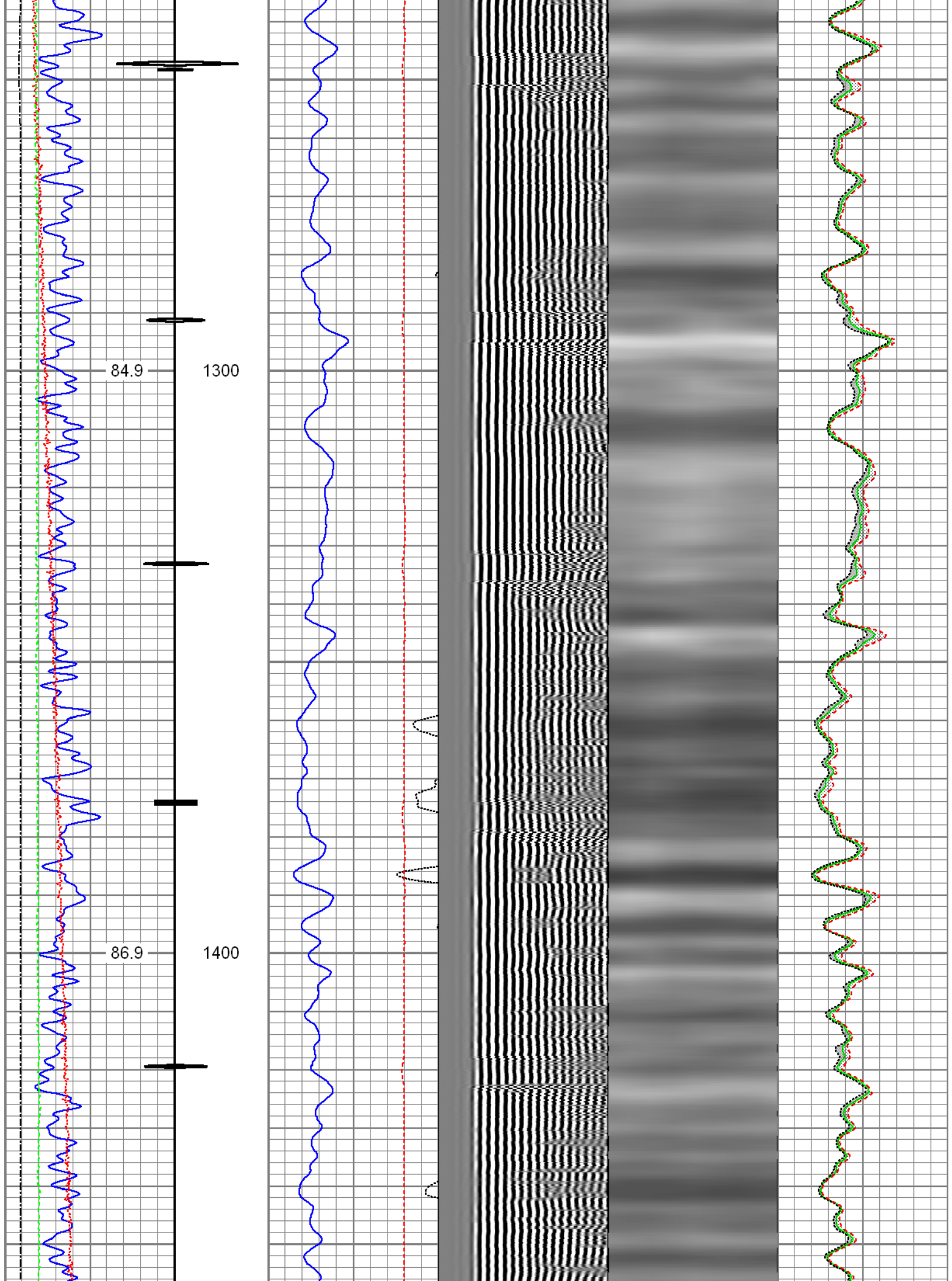




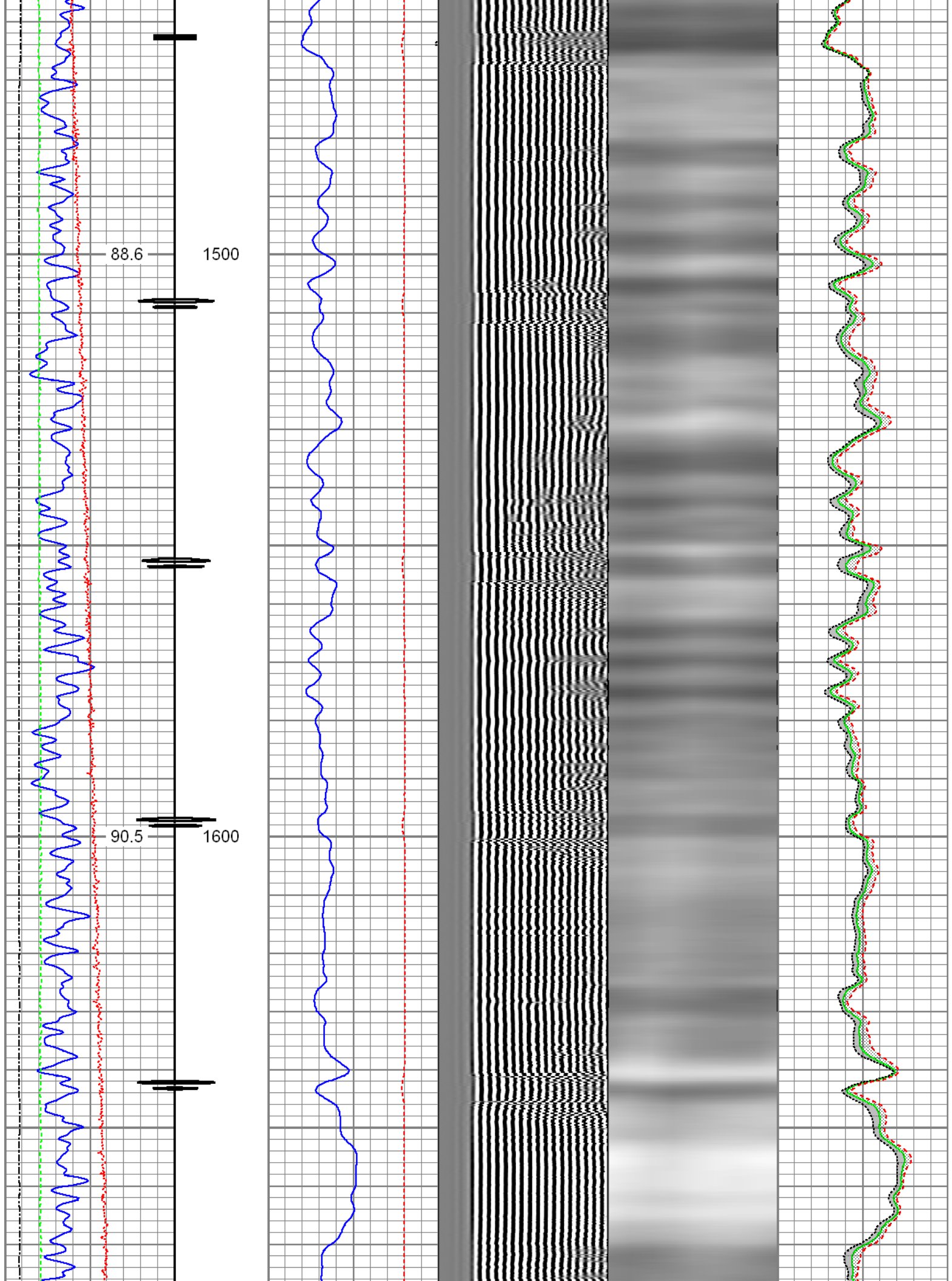


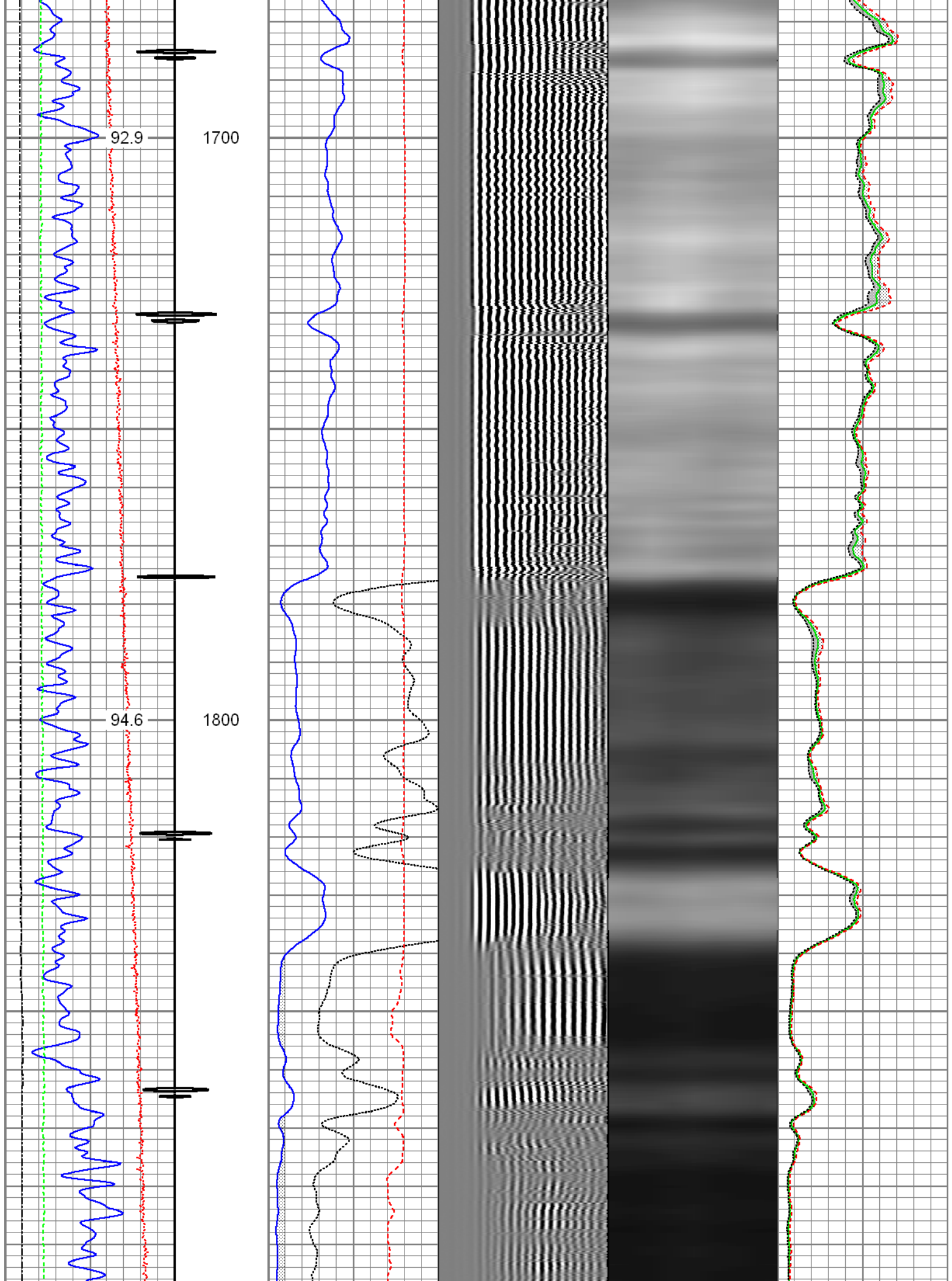


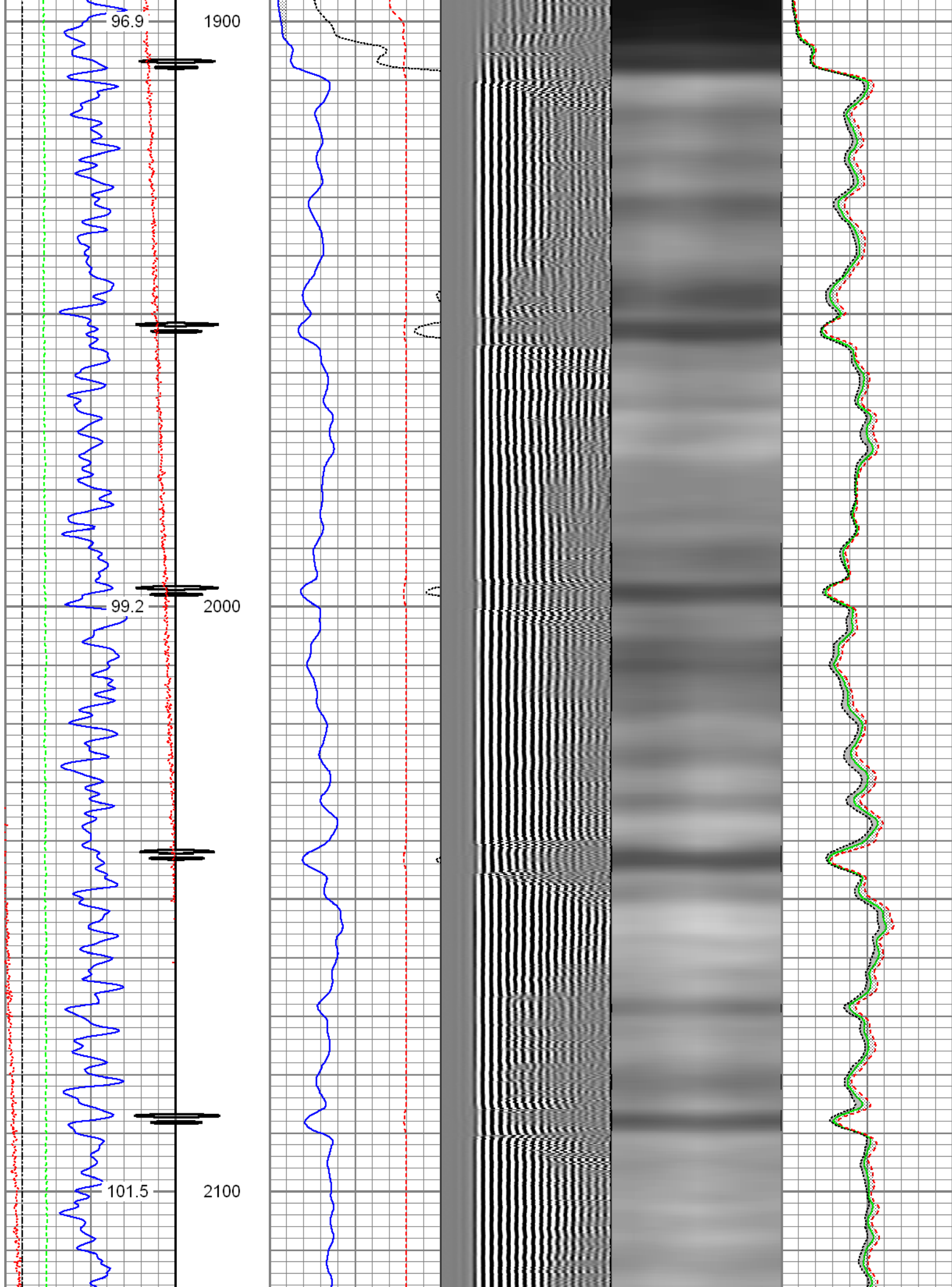




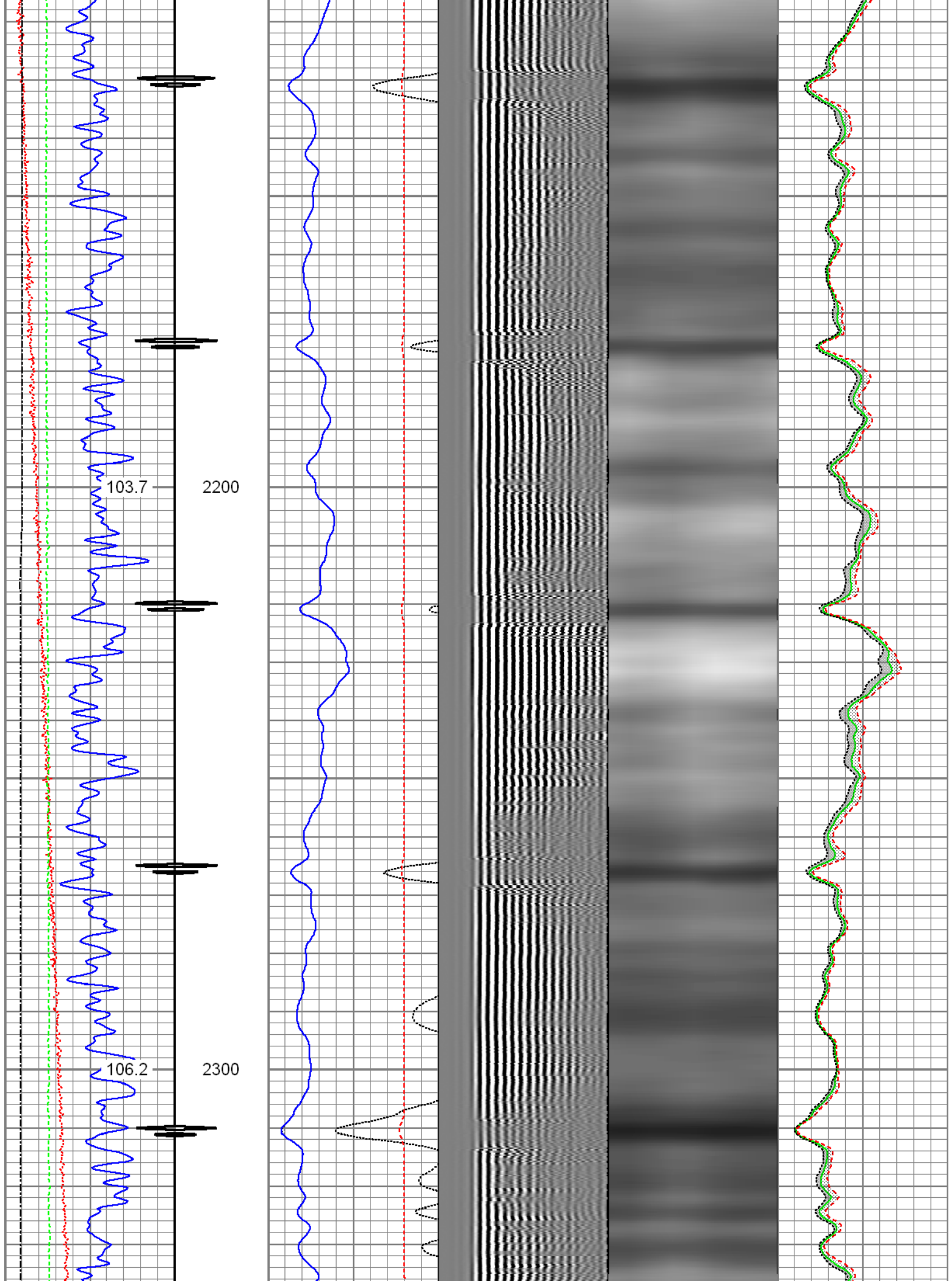




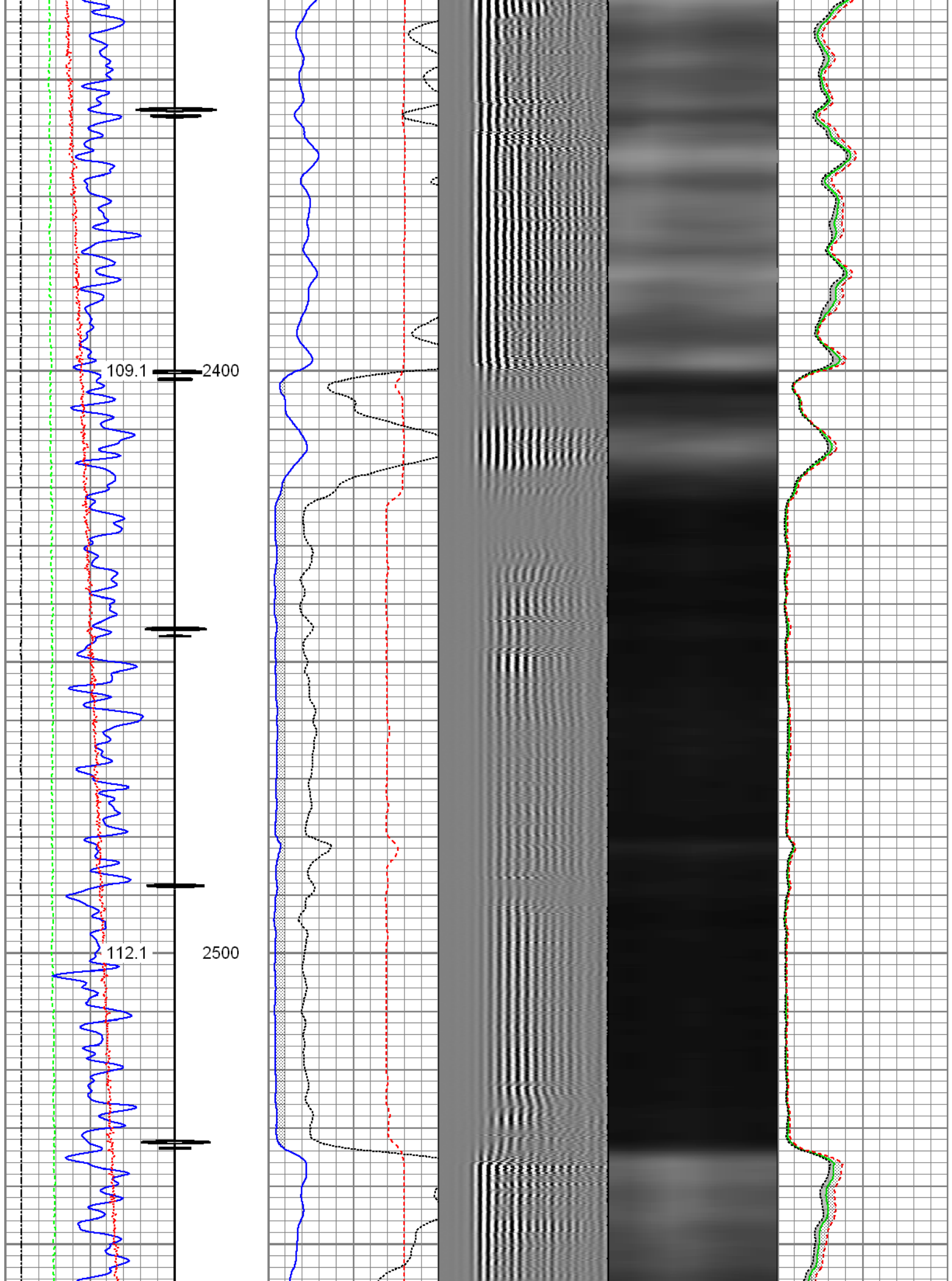


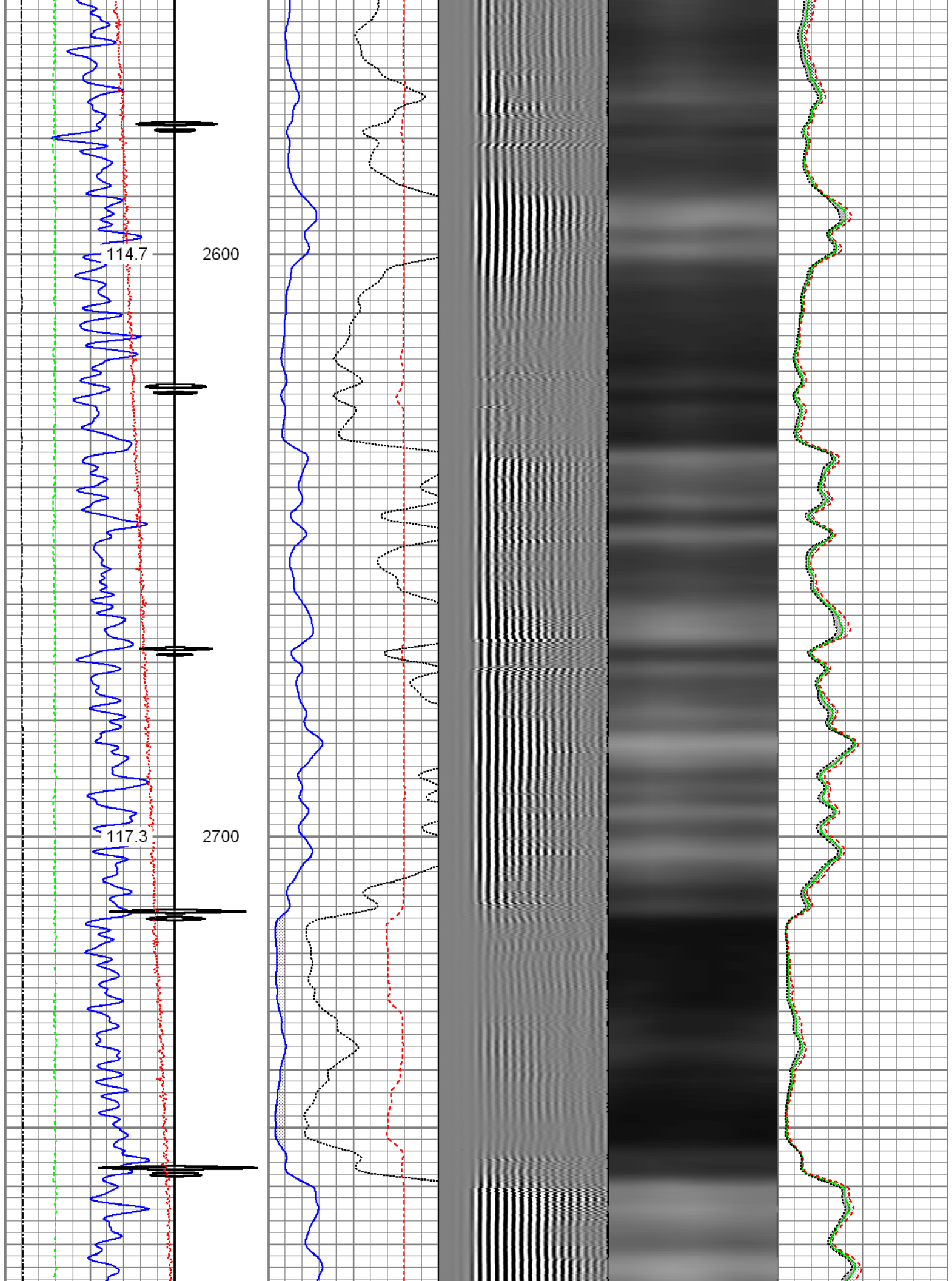


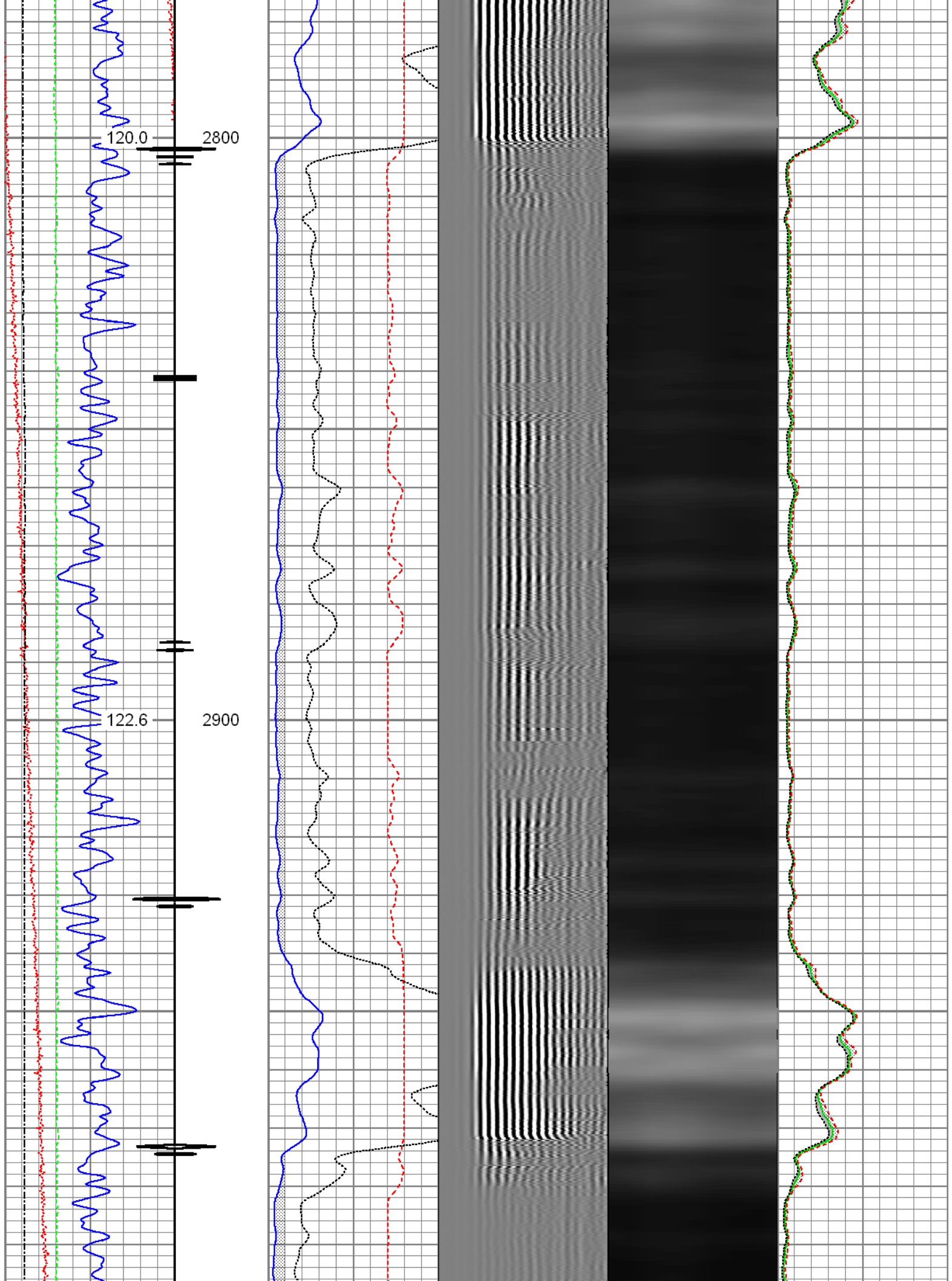


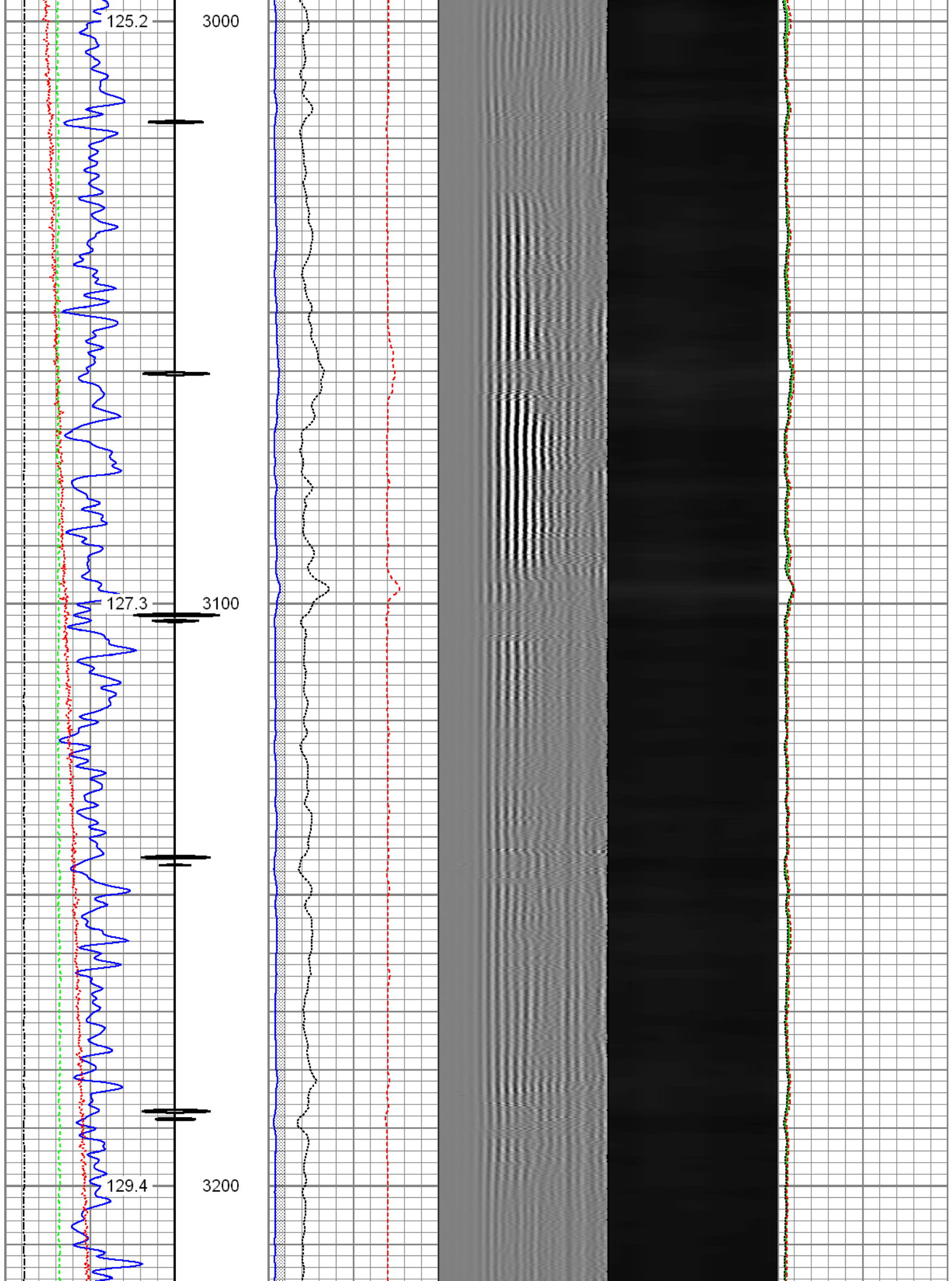




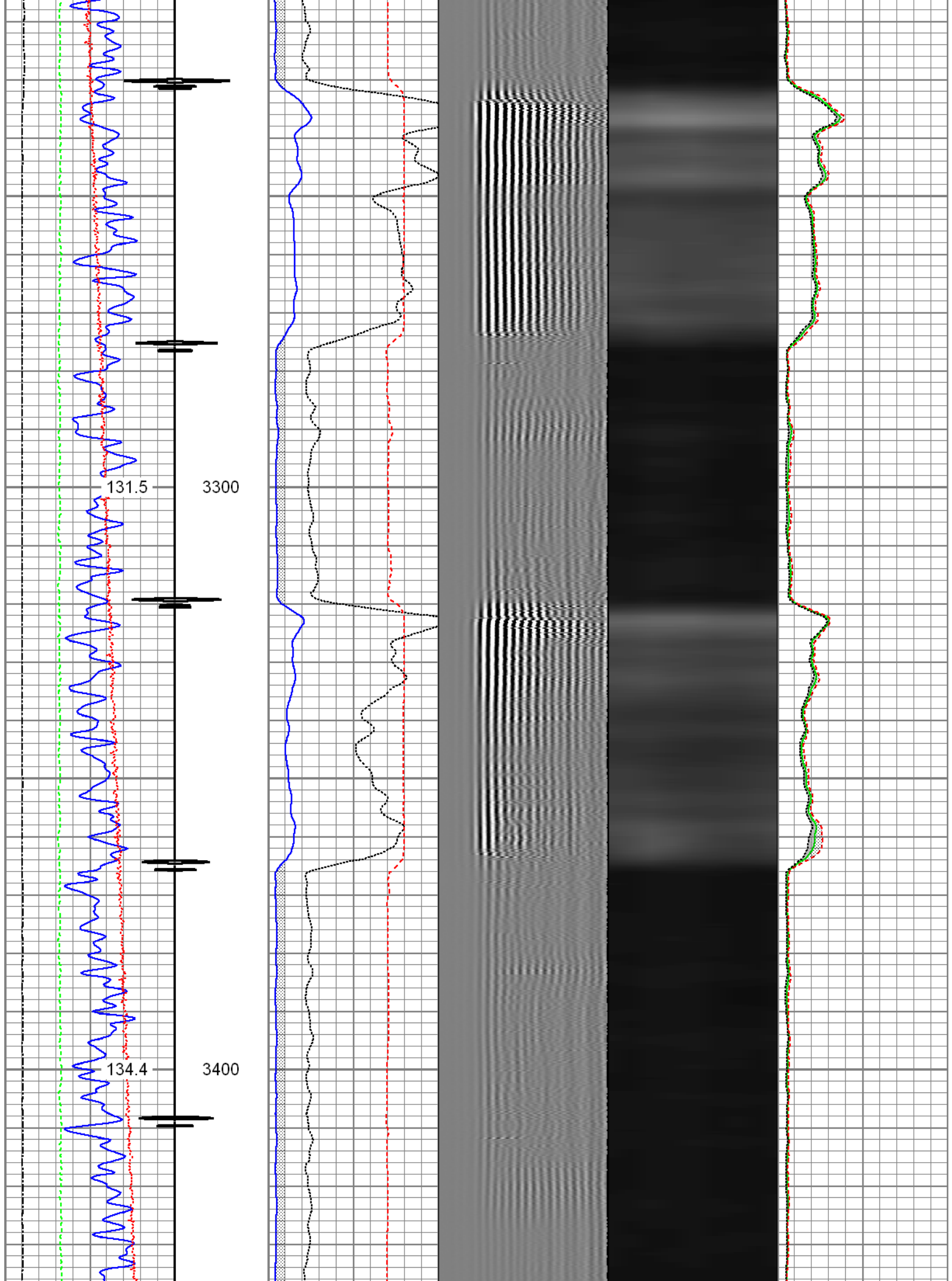


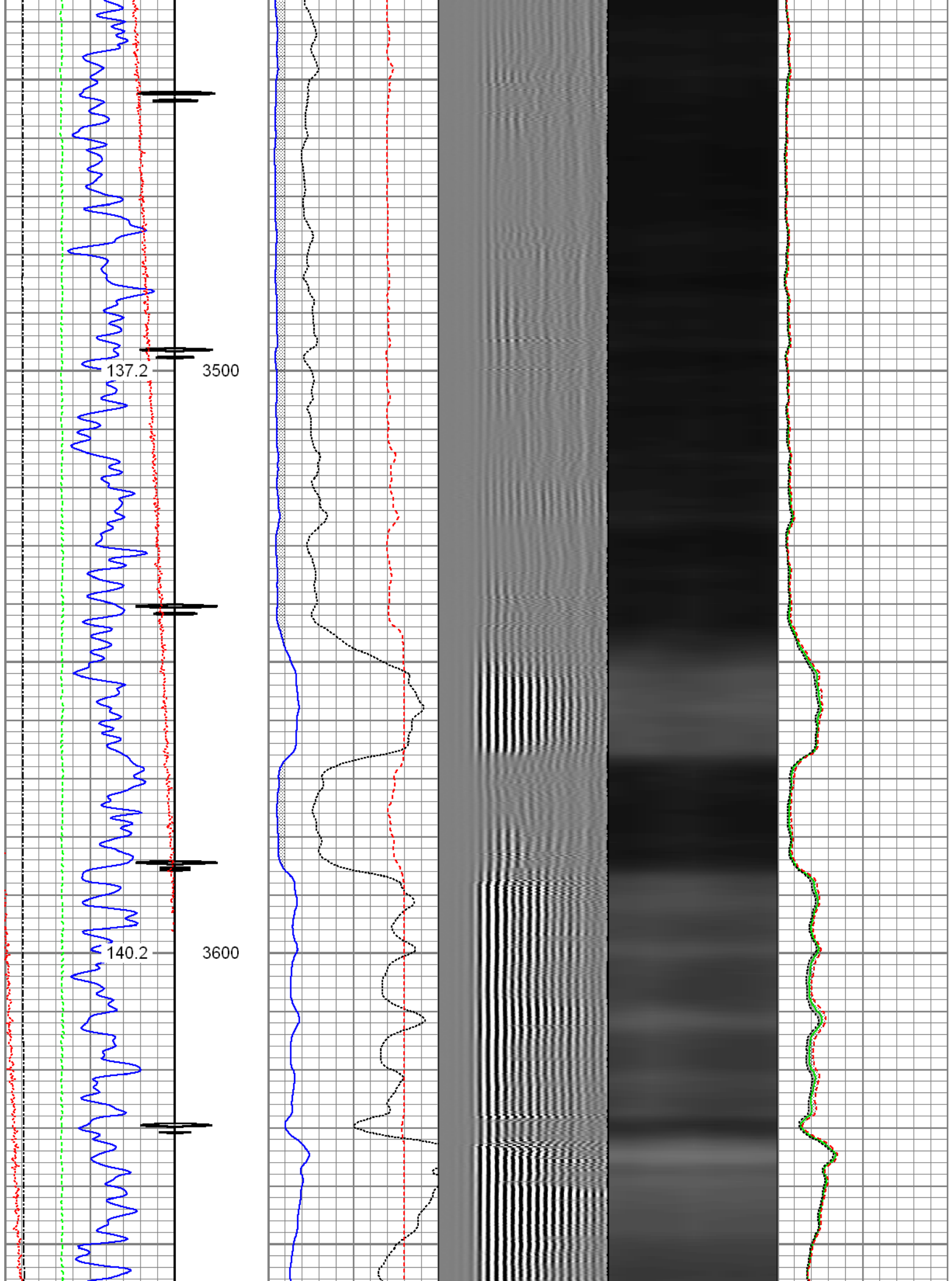


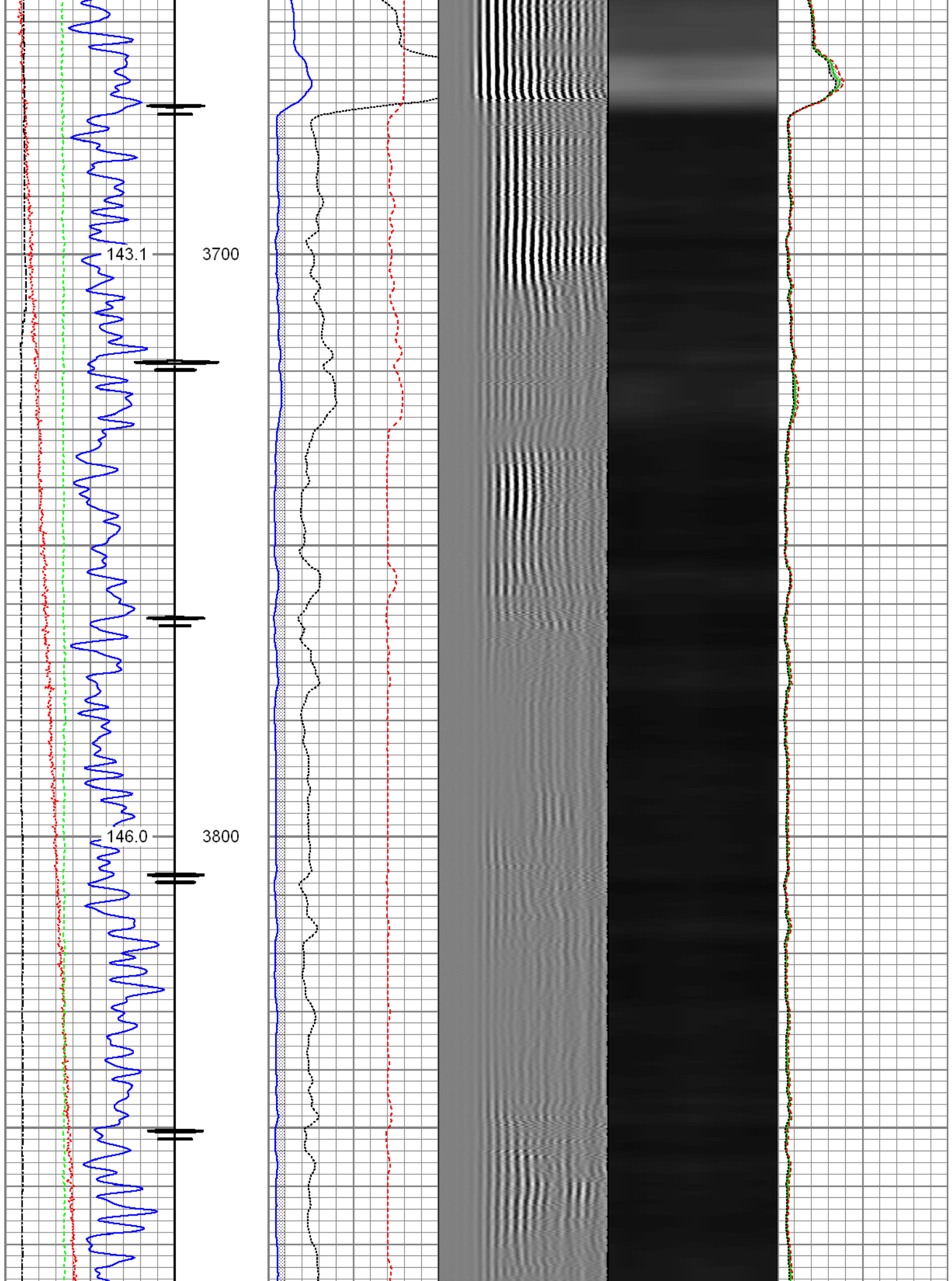


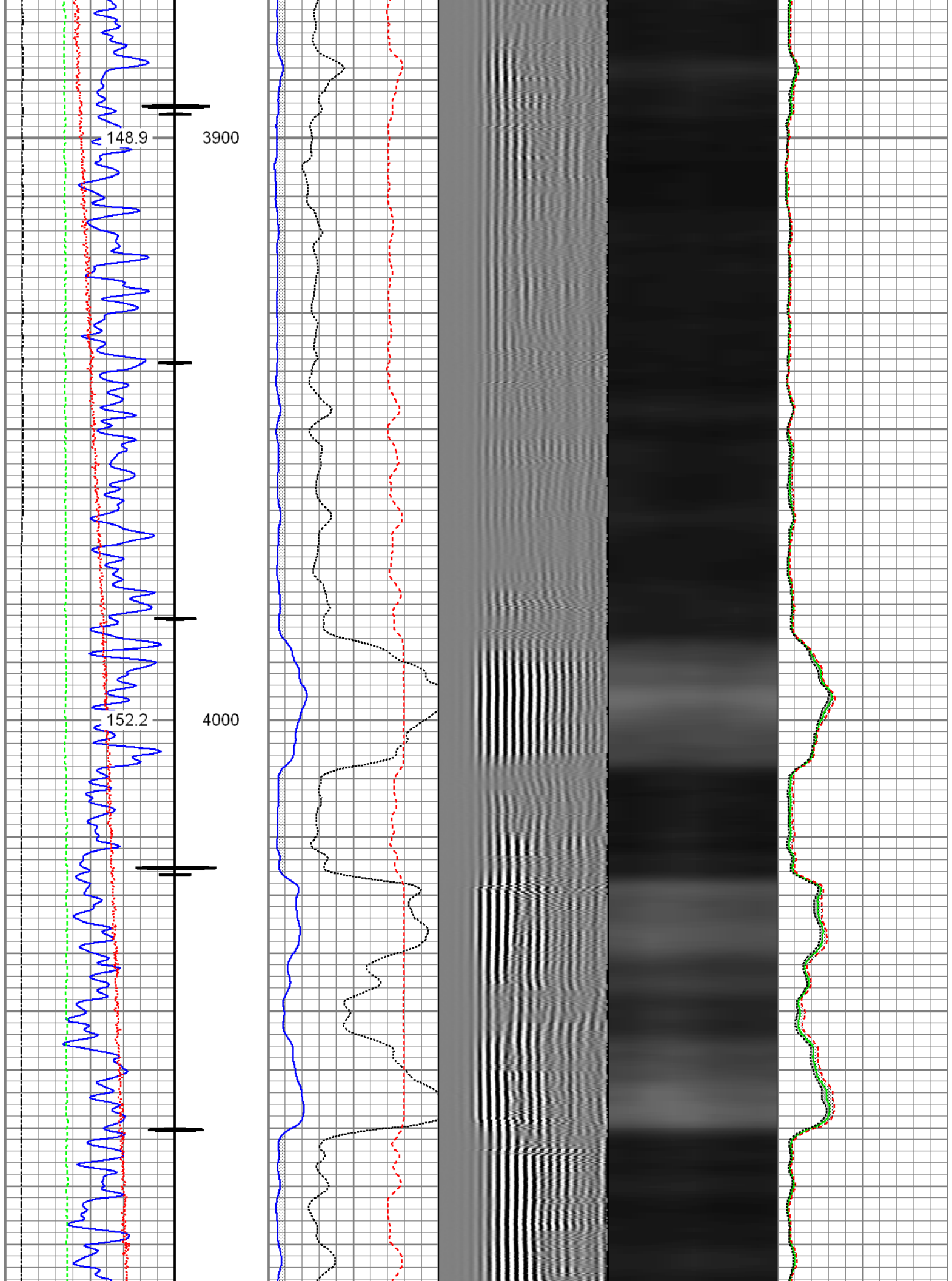




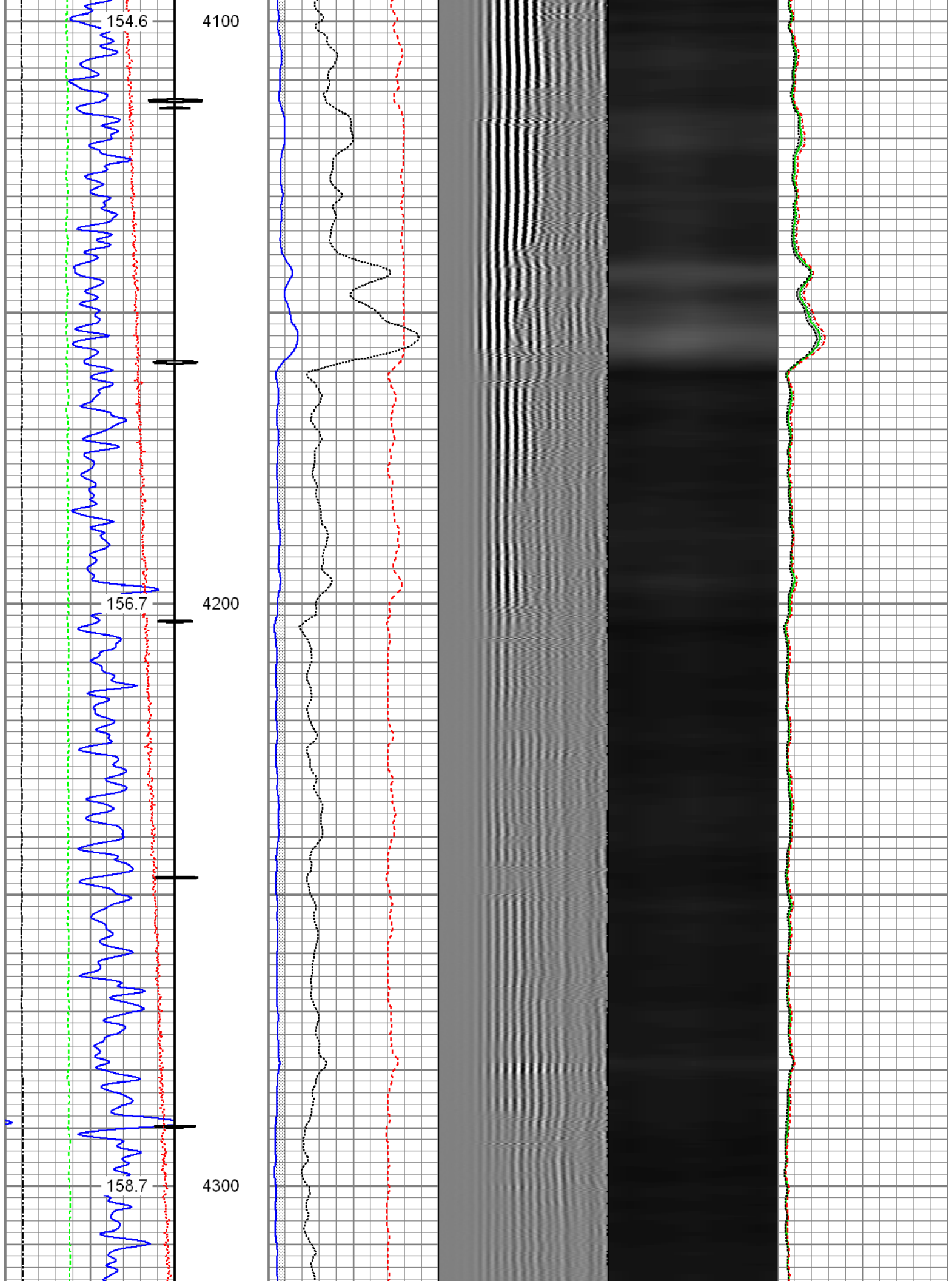


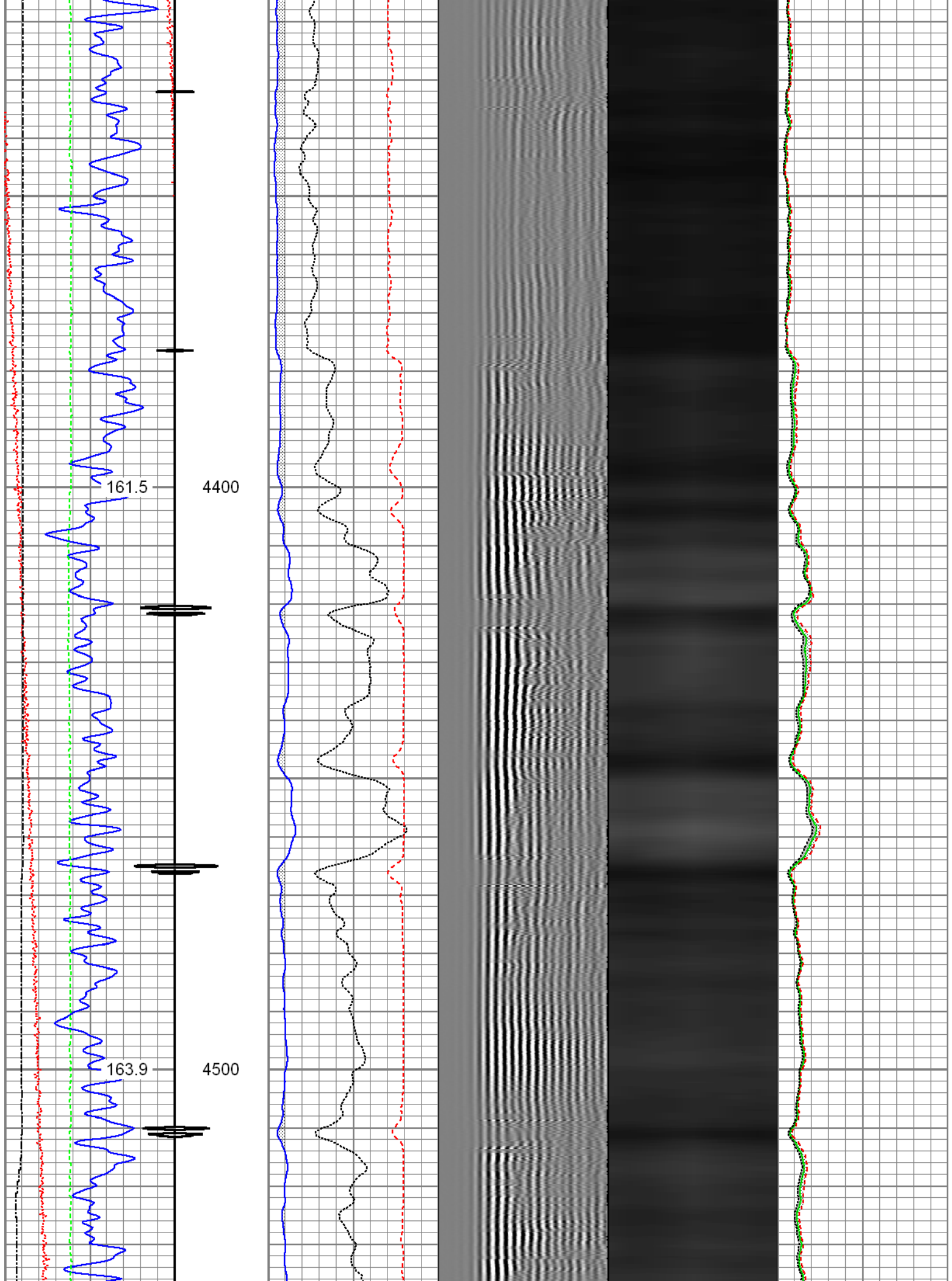


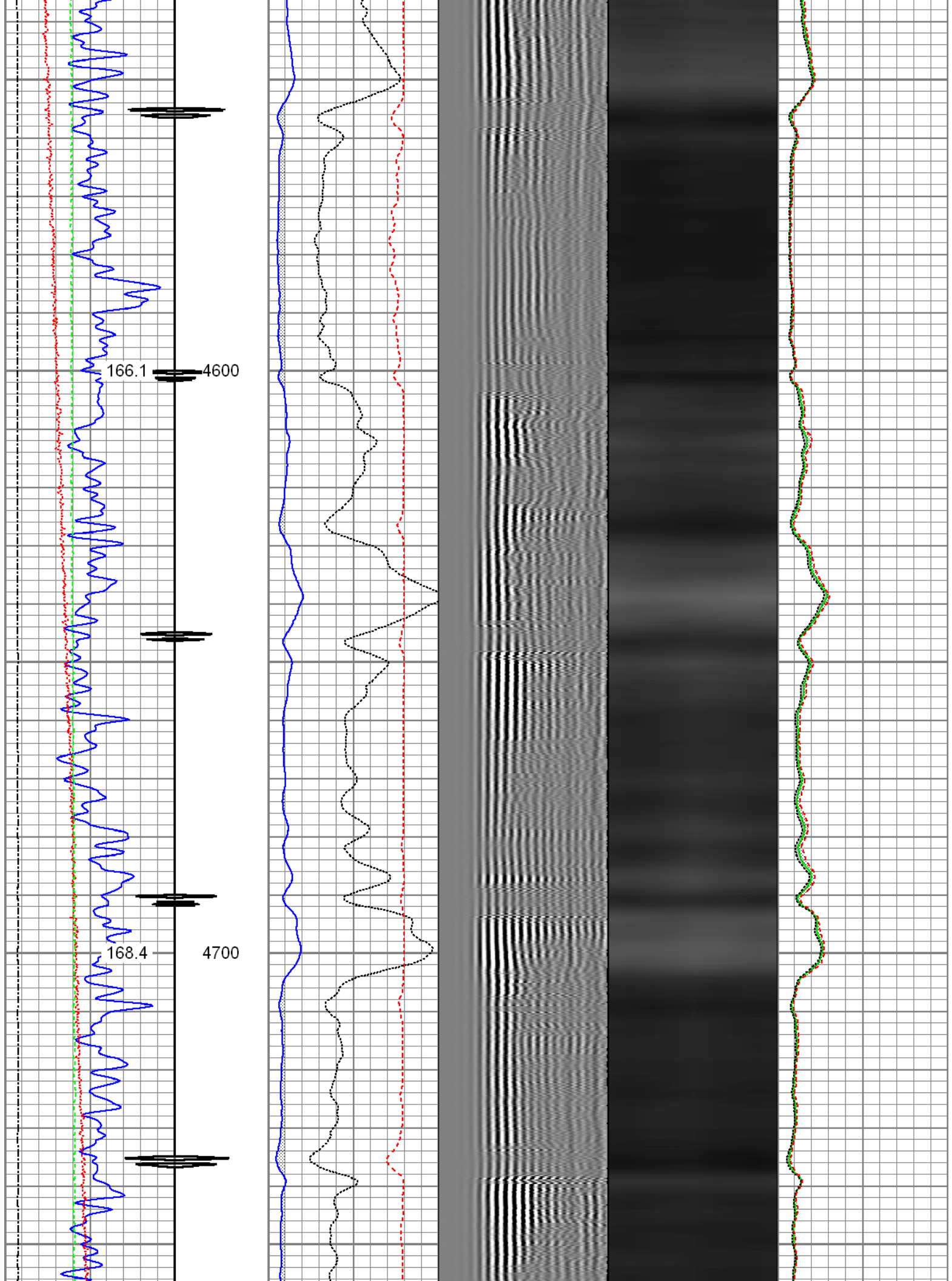


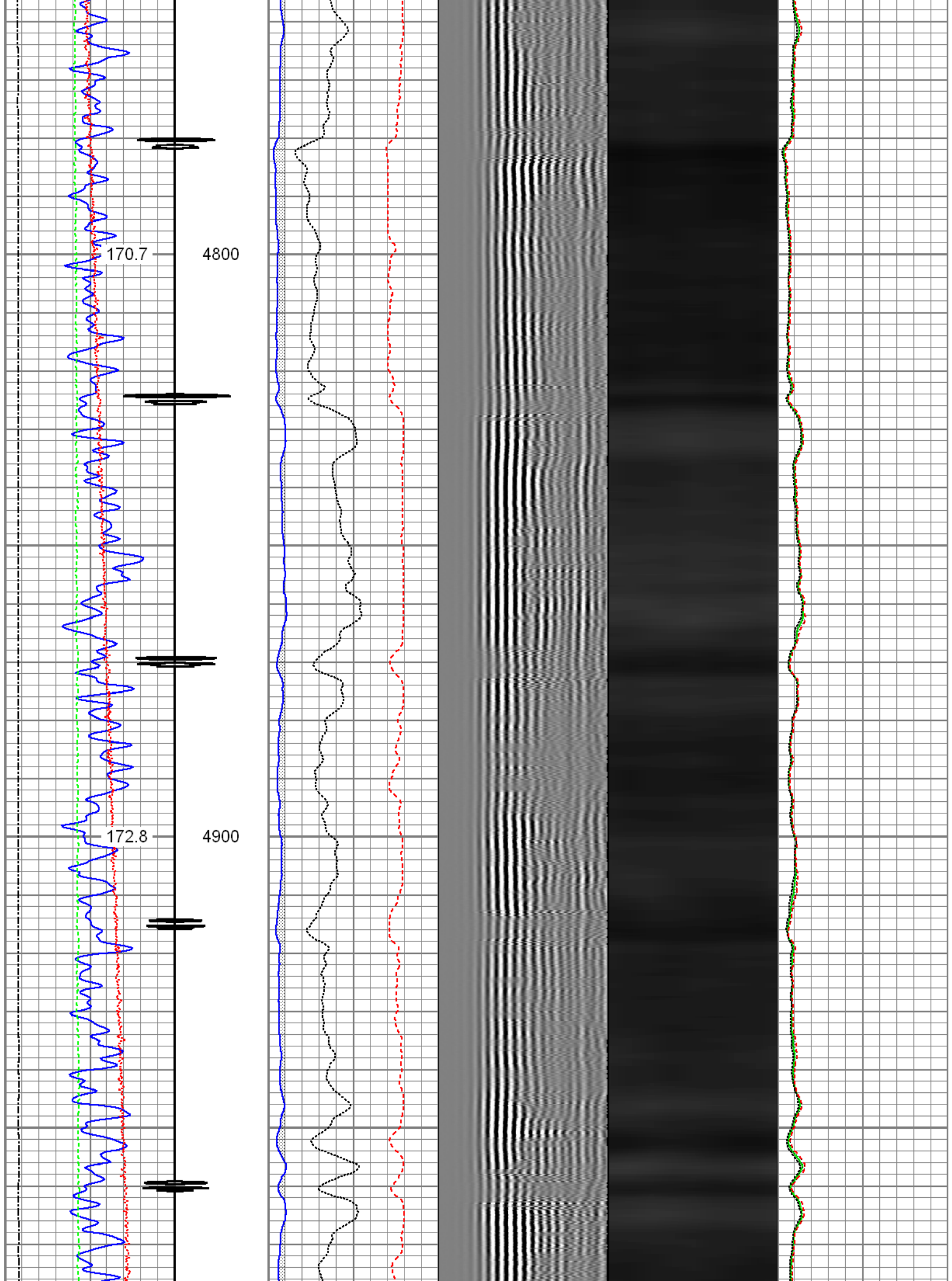




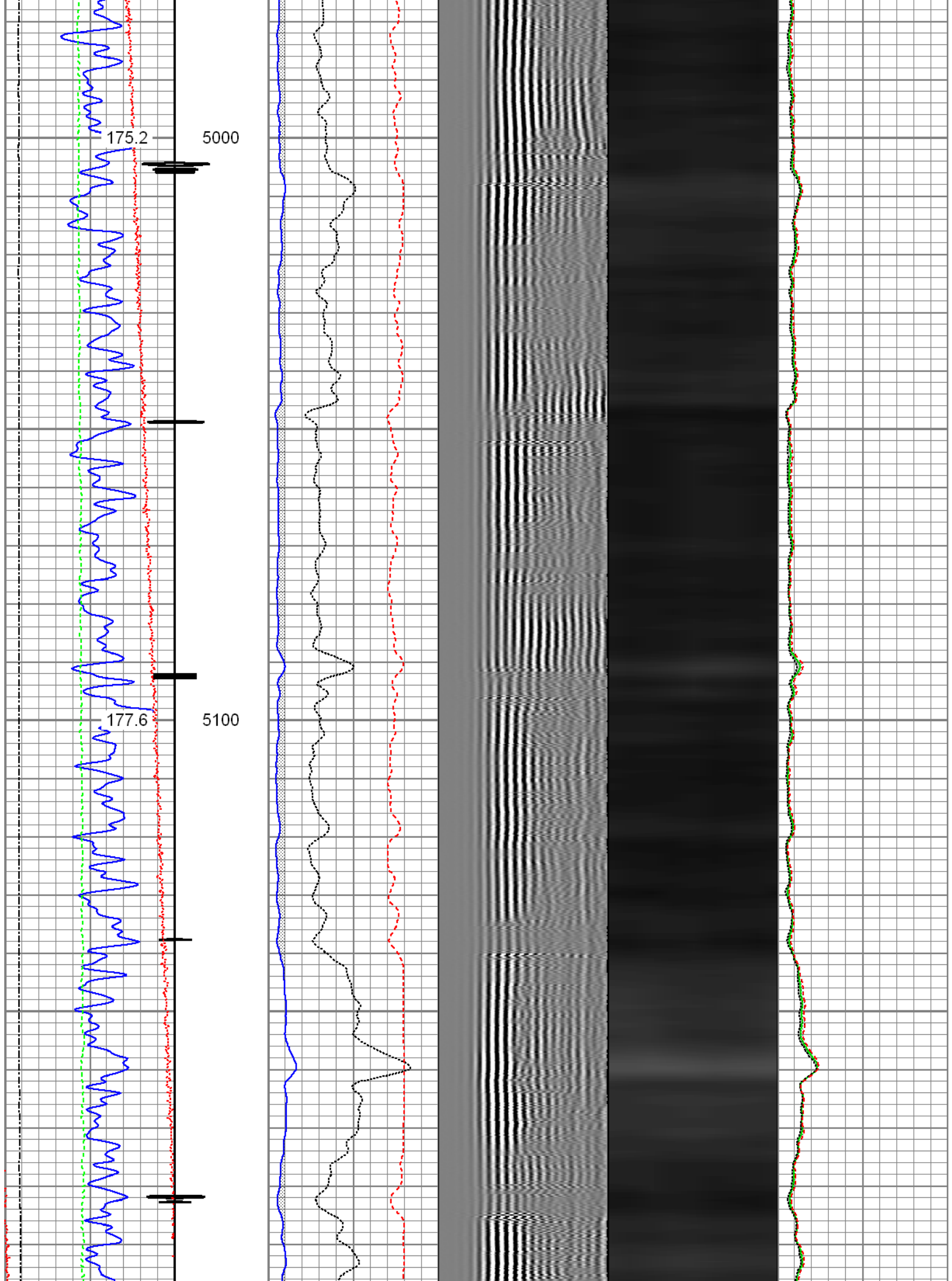


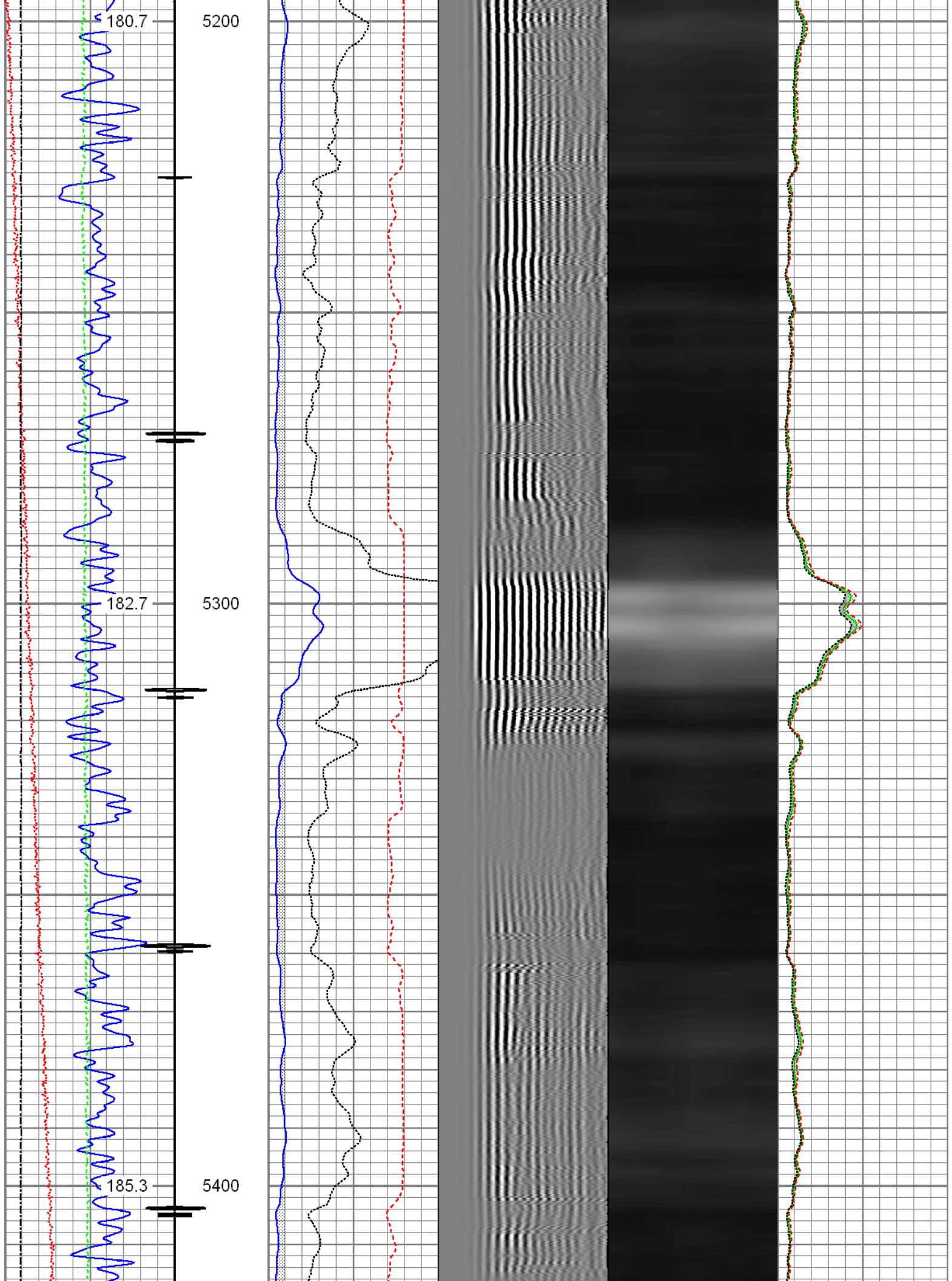


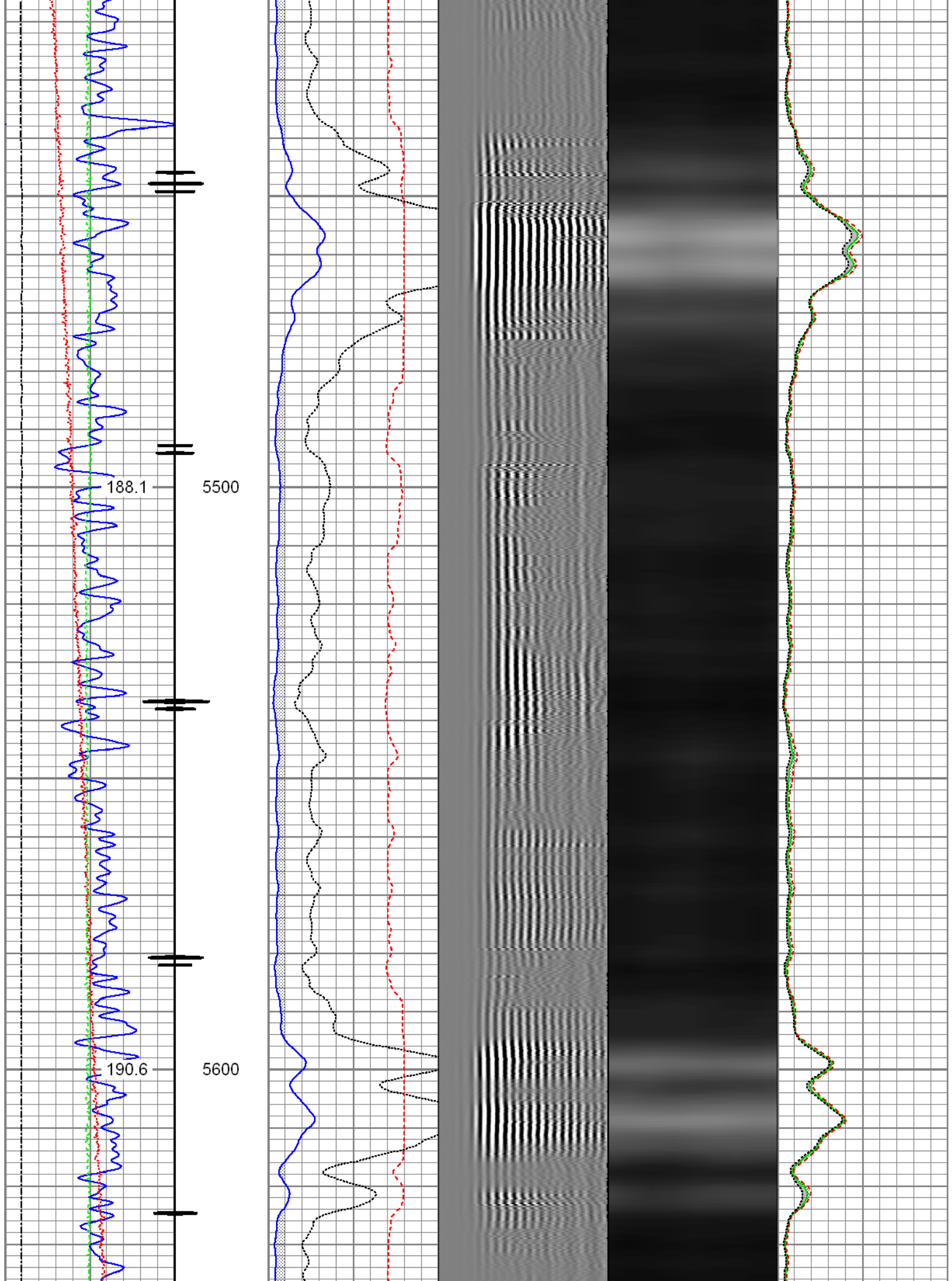


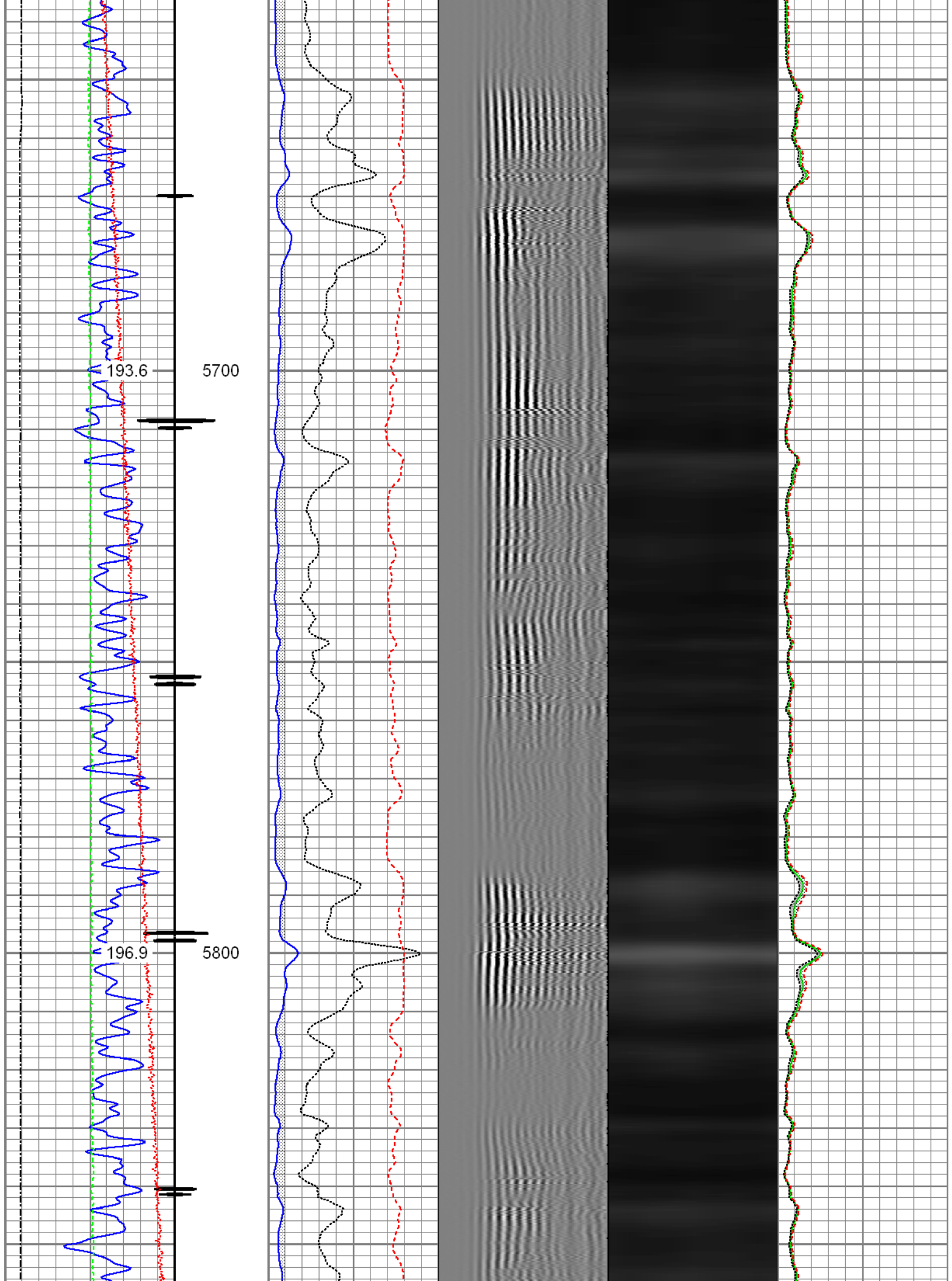




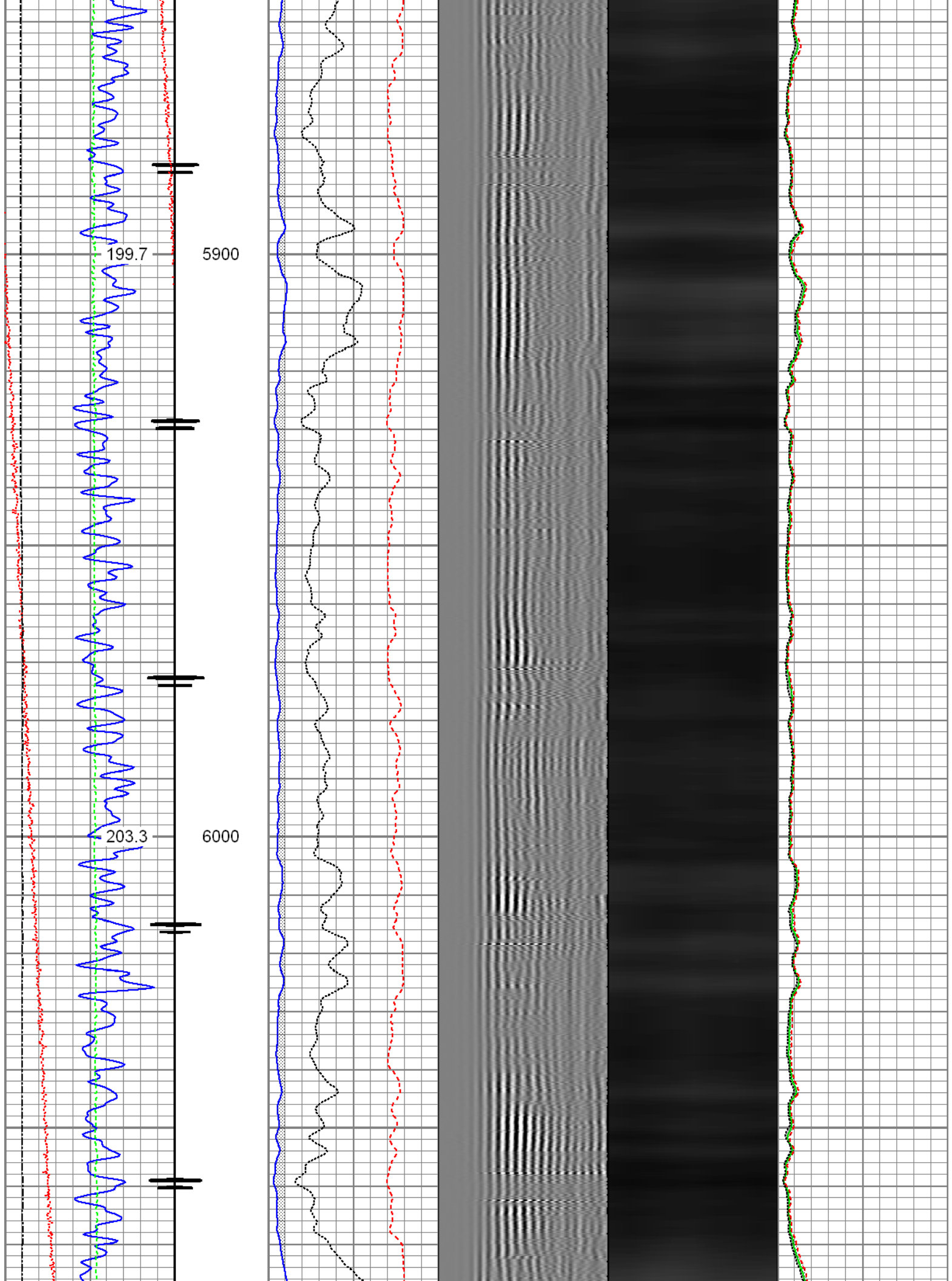


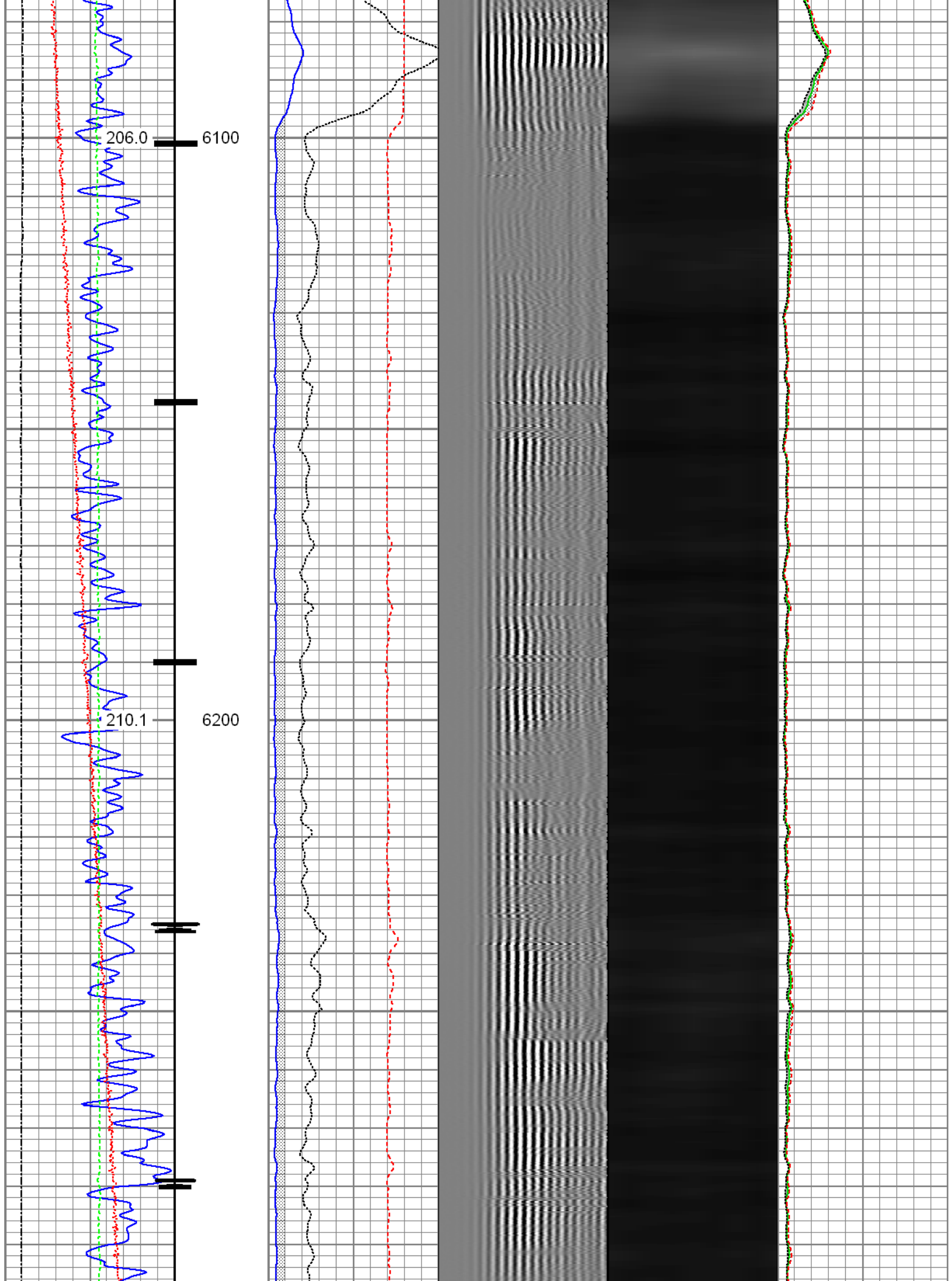


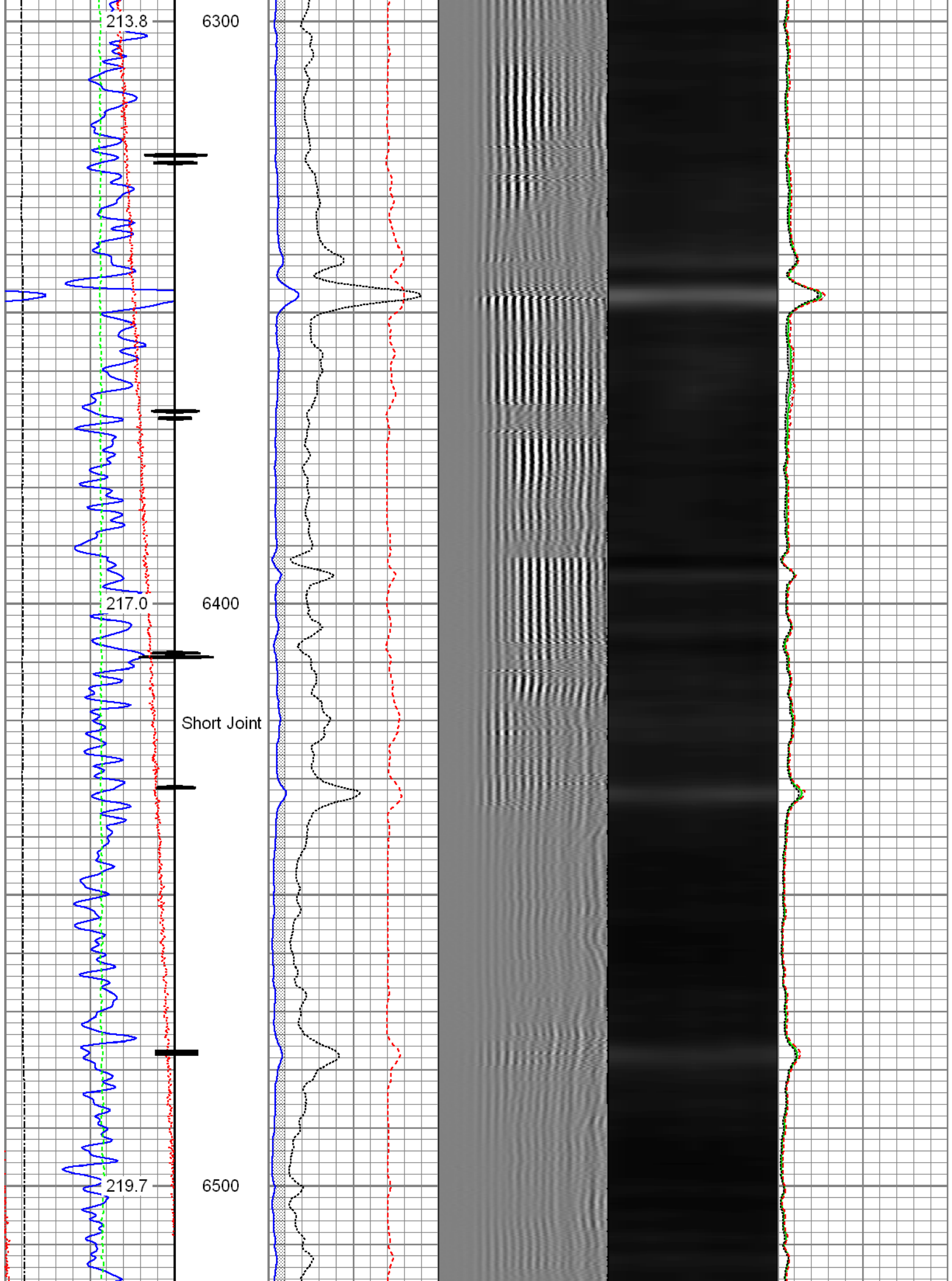


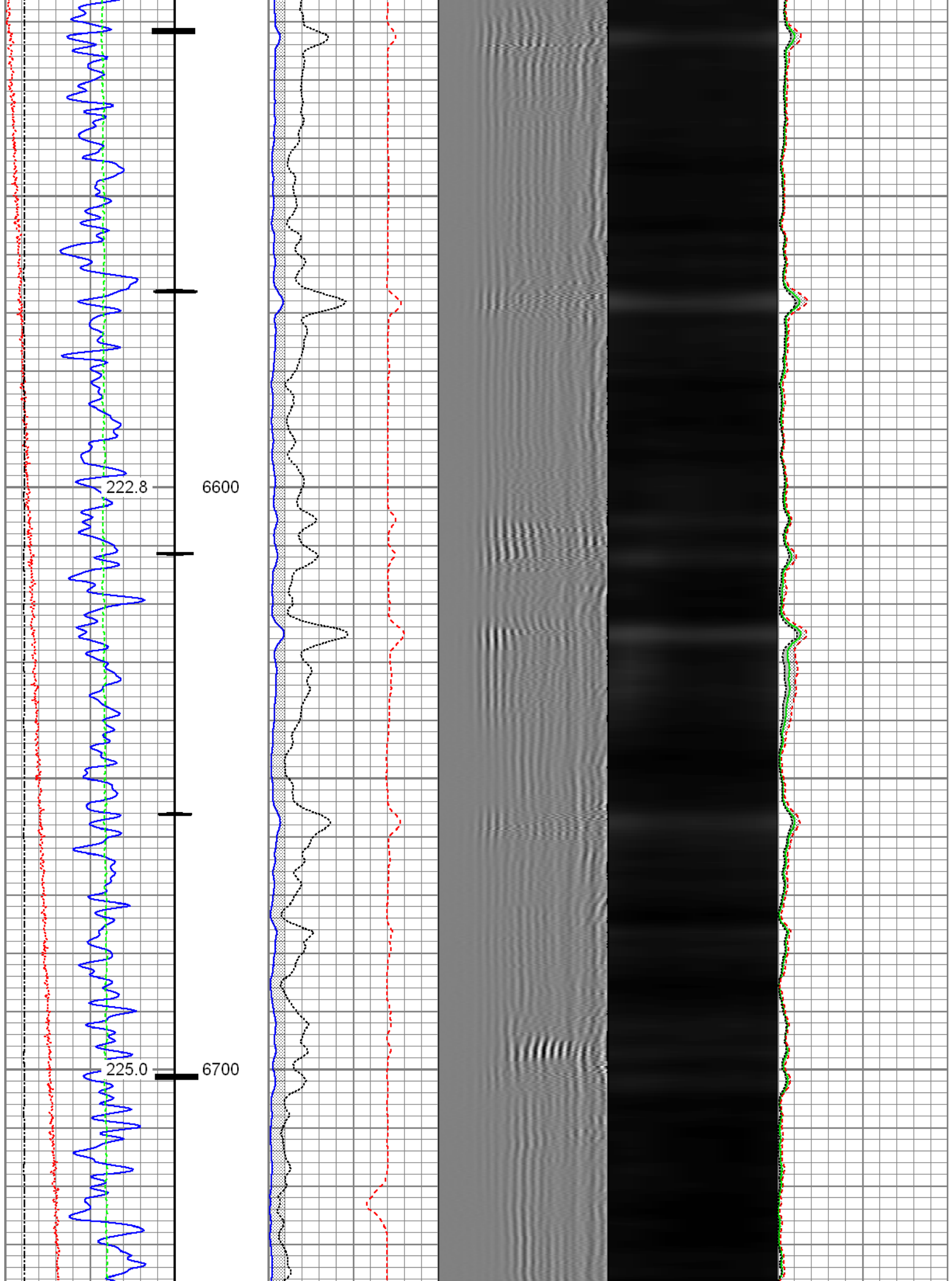




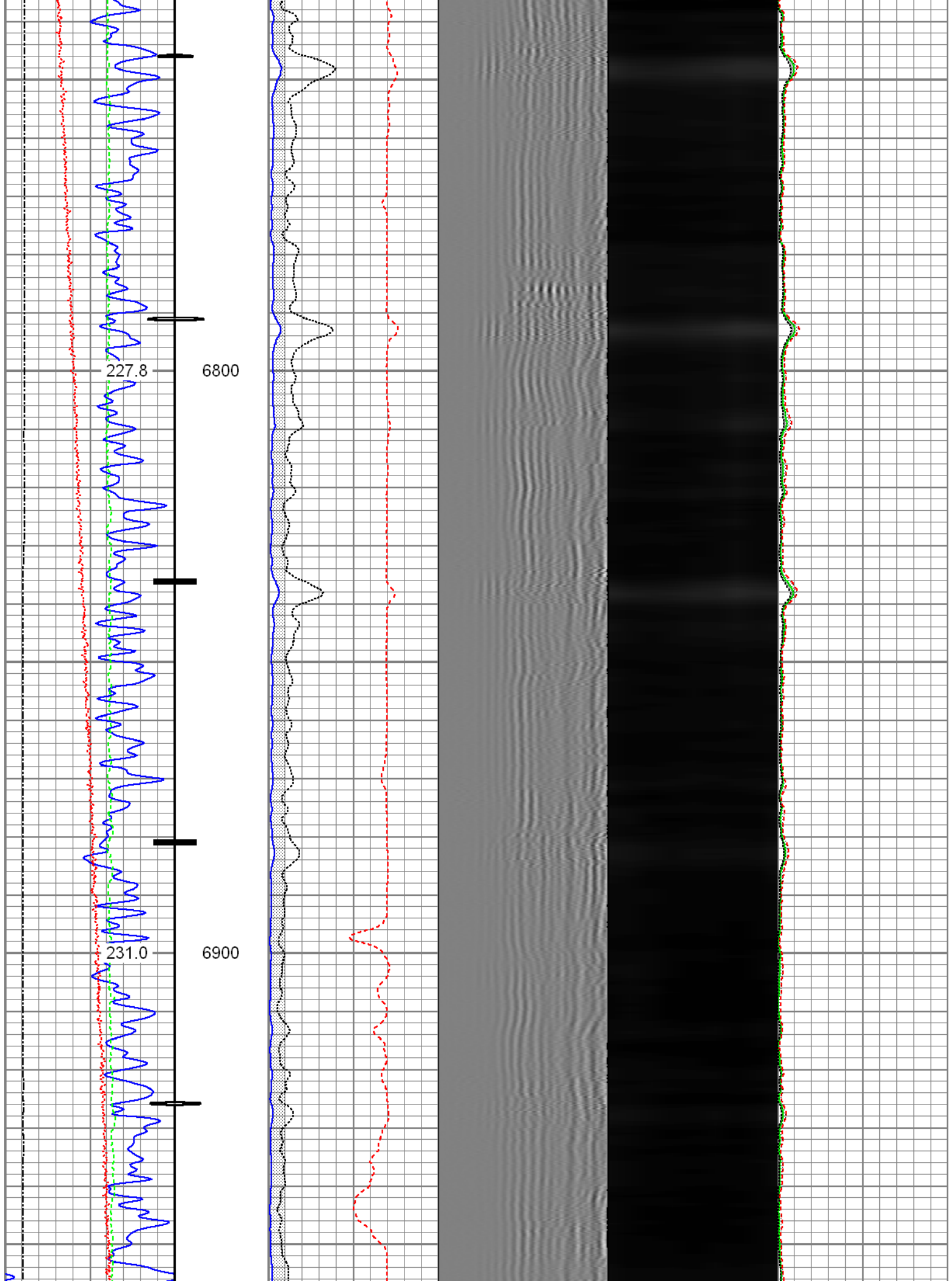


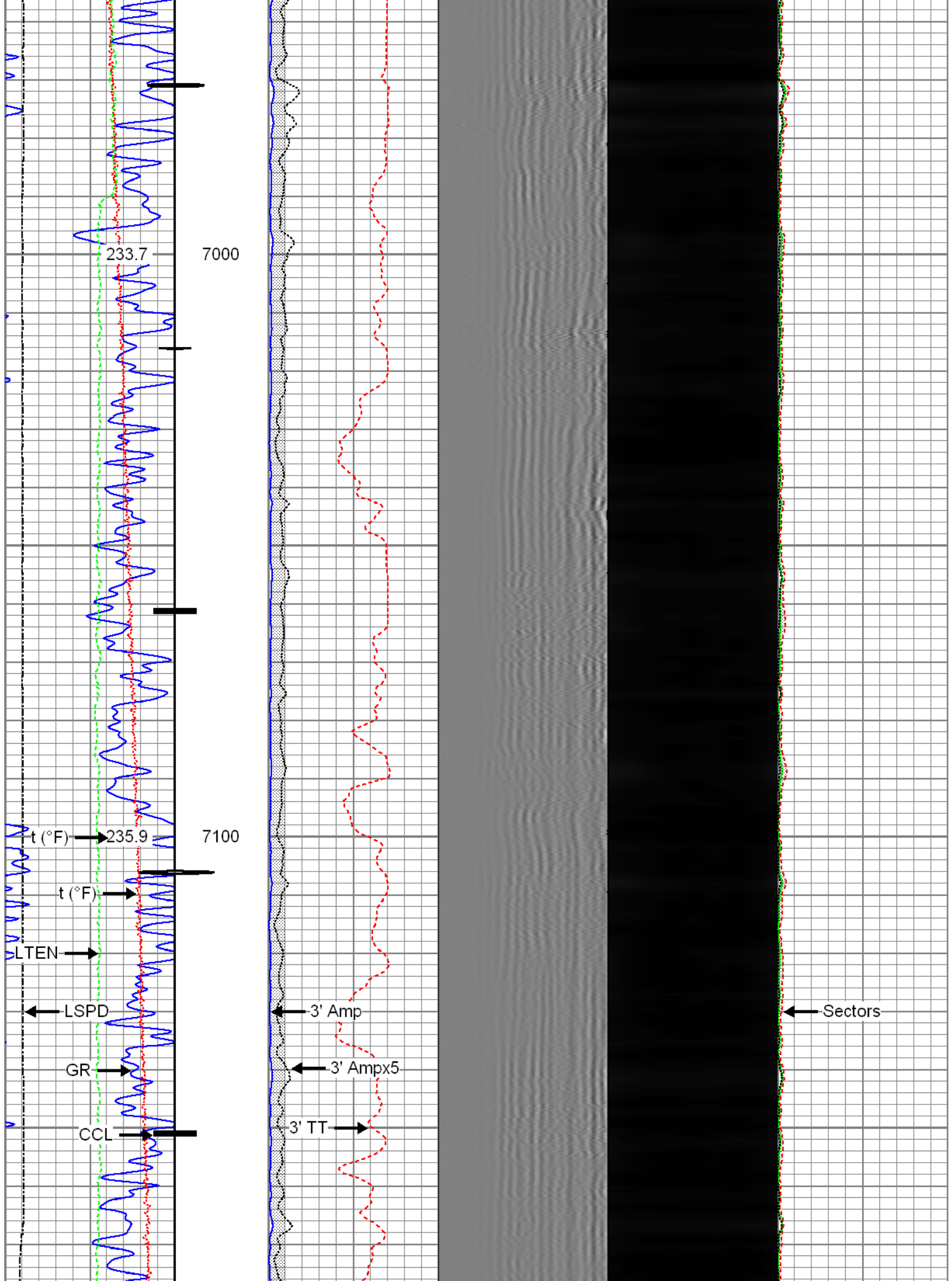


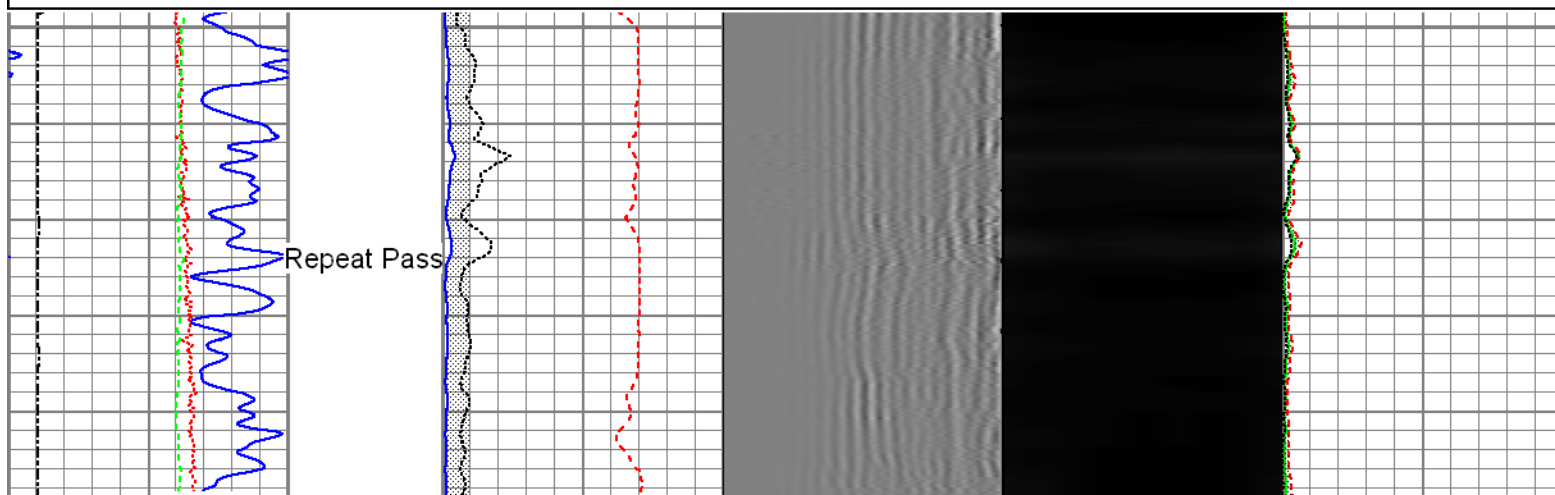
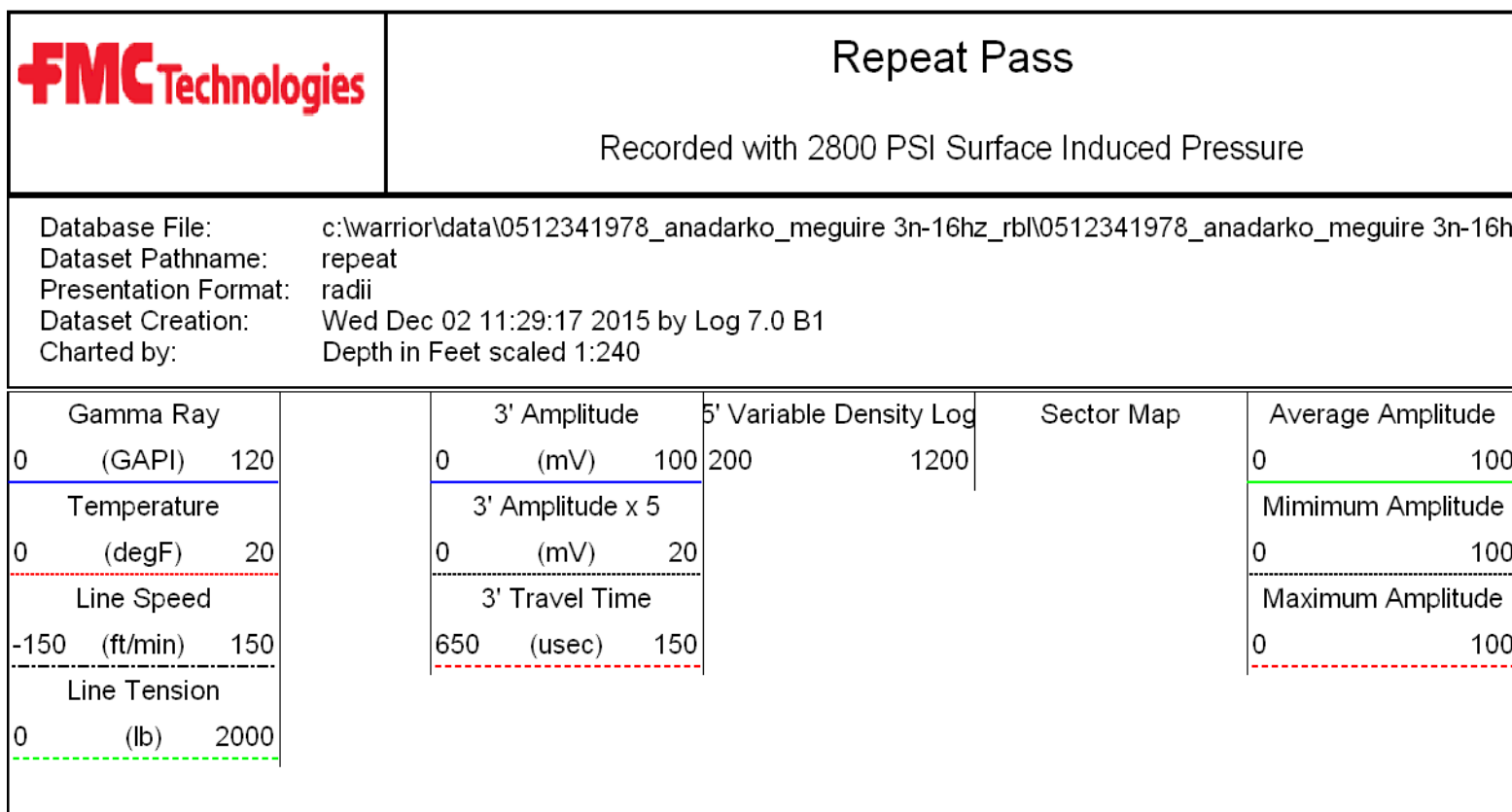
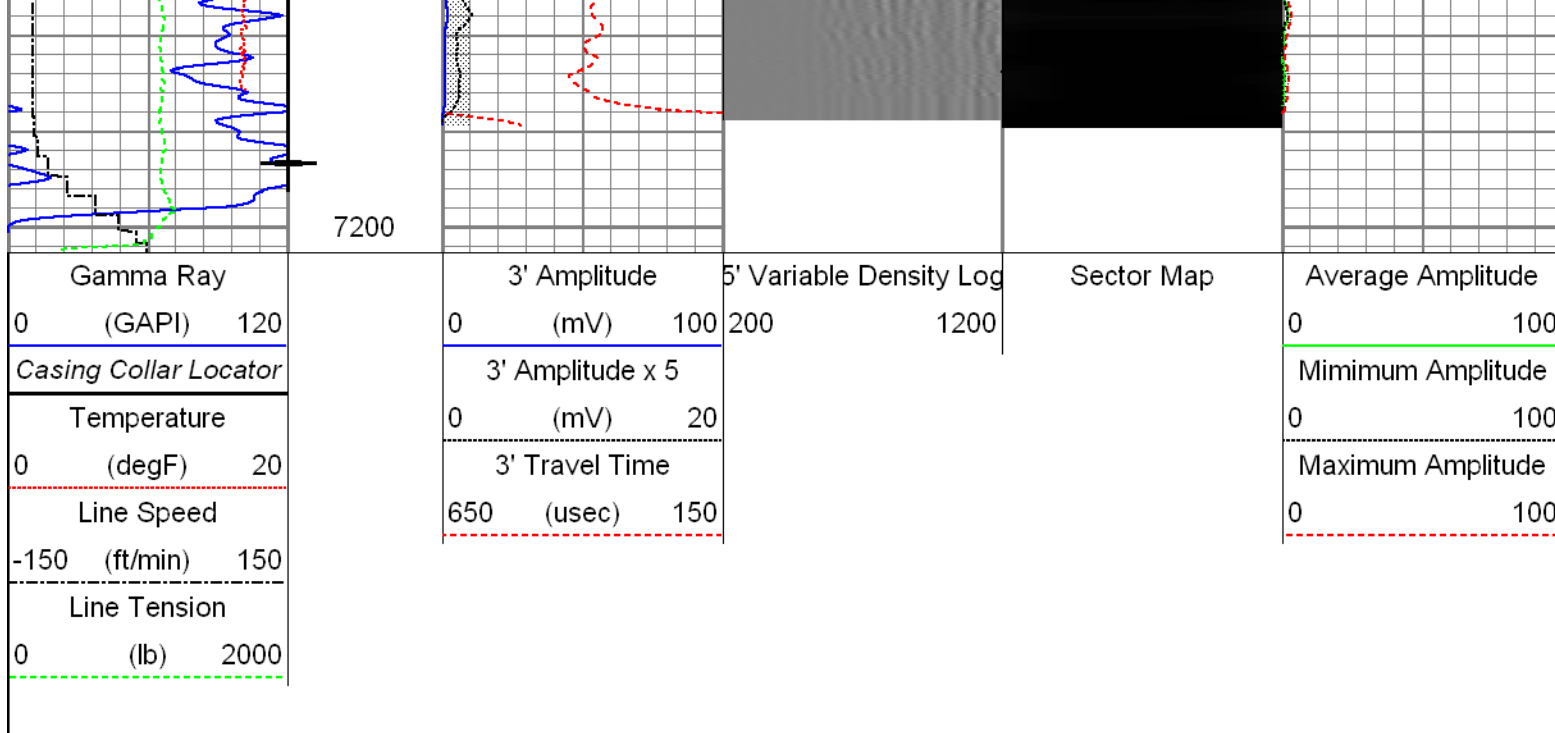


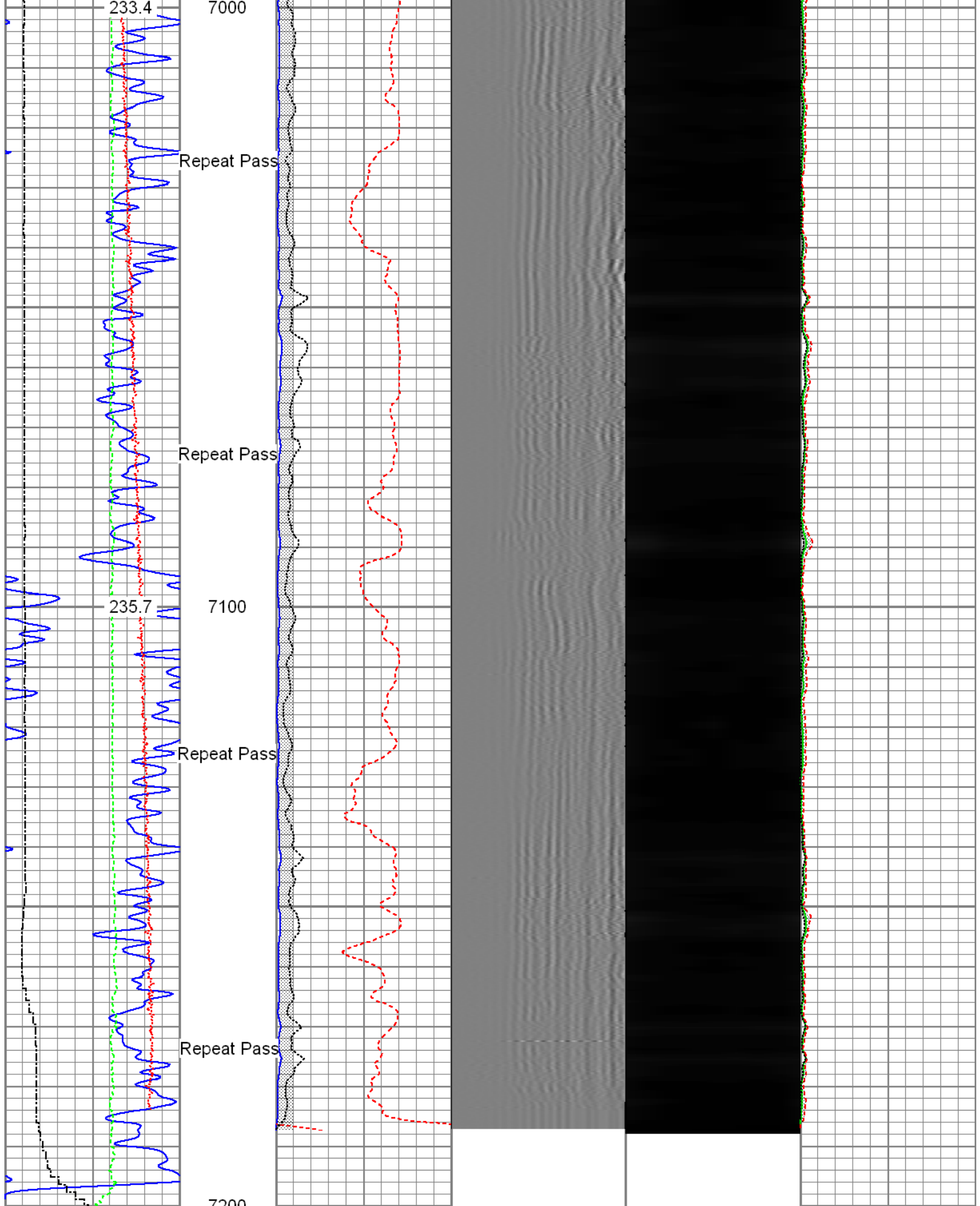








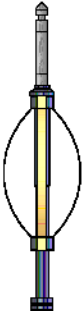



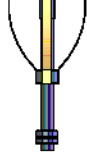


Gamma Ray (GAPI)	3' Amplitude (mV)	5' Variable Density Log	Sector Map	Average Amplitude
0 120	0 100	200 1200		0 100
Temperature (degF)	3' Amplitude x 5 (mV)			Minimum Amplitude
0 20	0 20			0 100



Line Speed -150 (ft/min) 150	3' Travel Time 650 (usec) 150	Maximum Amplitude 0 100
Line Tension 0 (lb) 2000		

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
HeadVolt	19.49		T_CH14375_1_GO Titan 1-7/16" Assembled Electric Cable Head with 1" Fishing Neck	1.03	1.44	4.00
			Probe_IL_BS_Cent Probe 2-3/4" Inline Electrical Inline Bowspring Centralizer	2.88	2.75	10.00
Temp	16.72					
WVF3FT	14.55		Probe_RADII-C-2-3/4" (FW1305-098) Probe 2-3/4" Sector Cement Bond Tool with Temperature Probe	9.19	2.75	105.00
WVFCAL	14.55					
WVFS1	14.55					
WVFS2	14.55					
WVFS3	14.55					
WVFS4	14.55					
WVFS5	14.55					
WVFS6	14.55					
WVFS7	14.55					
WVFS8	14.55					
WVF5FT	13.55					
CCL DCCL	6.51		Probe_IL_BS_Cent Probe 2-3/4" Inline Electrical Inline Bowspring Centralizer	2.88	2.75	10.00
	6.51					
			Probe_CCL_GR-2.75"Digital (FW1212-026) Probe 2-3/4" Digital CCL / Gamma Ray Combined	4.54	2.75	55.00
GR	3.77					



Probe\_IL\_BS\_Cent  
Probe 2-3/4" Inline Electrical Inline Bowspring  
Centralizer

2.88

2.75

10.00

Dataset: 0512341978\_Anadarko\_Meguire 3N-16HZ\_RBL.db: field/well/run1/main  
Total Length: 23.40 ft  
Total Weight: 194.00 lb  
O.D. 2.75 in

#### Calibration Report

Database File: C:\Warrior\Data\0512341978\_Anadarko\_Meguire 3N-16HZ\_RBL\0512341978\_Anadarko\_Meguire 3N-  
Dataset Pathname: main  
Dataset Creation: Wed Dec 02 11:33:09 2015 by Log 7.0 B1

#### Gamma Ray Calibration Report

Serial Number: FW1212-026  
Tool Model: 2.75" Digital  
Performed: Wed Dec 02 08:59:40 2015

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps  
Calibrator Reading: 1.0 cps

Sensitivity: 0.6000 GAPI/cps

#### Segmented Cement Bond Log Calibration Report

Serial Number: FW1305-098  
Tool Model: 2-3/4"

Calibration Casing Diameter: 5.500 in  
Calibration Depth: 20.000 ft

Master Calibration, performed Wed Dec 02 08:44:05 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.008	0.617	0.800	71.921	116.752	-0.084
CAL	0.733	0.783				
5'	0.010	0.500	0.800	71.921	145.226	-0.709
SUM						
S1	0.005	0.594	0.000	100.000	169.904	-0.857
S2	0.008	0.616	0.000	100.000	164.369	-1.260
S3	0.007	0.641	0.000	100.000	157.840	-1.108
S4	0.007	0.650	0.000	100.000	155.470	-1.120
S5	0.007	0.637	0.000	100.000	158.704	-1.155
S6	0.008	0.613	0.000	100.000	165.028	-1.243
S7	0.008	0.594	0.000	100.000	170.655	-1.354
S8	0.008	0.587	0.000	100.000	172.786	-1.354

Internal Reference Calibration, performed Wed Dec 31 17:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.733	0.783	1.000	0.000

Air Zero Calibration, performed Wed Dec 02 08:43:37 2015:

	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



Company	Kerr-McGee Oil & Gas Onshore, L.P.
Well	Meguire 3N-16HZ
Field	Wattenberg
County	Weld
State	Colorado