



Radial Cement Bond
Gamma Ray
Casing Collar Log

Company	Kerr-McGee Oil and Gas Onshore LP				
Well	Viper Pyro 16N-10HZ				
Field	Wattenberg				
County	Weld				
State	Colorado				
Company	Kerr-McGee Oil and Gas Onshore LP				
Well	Viper Pyro 16N-10HZ				
Field	Wattenberg				
County	Weld	State	Colorado		
Location:	API # : 05-123-41429		Other Services Gauge Ring Junk Basket		
SEC 15 TWP 3N RGE 67W			Elevation		
Permanent Datum	Ground Level	Elevation	4794'		
Log Measured From	Kelly Bushing	20 FT	K.B. 4814' D.F. 4813' G.L. 4794'		
Drilling Measured From	Kelly Bushing				

Date	13-OCT-2015
Run Number	Two
Depth Driller	12609 FT
Depth Logger	7257 FT
Bottom Logged Interval	7252 FT
Top Log Interval	Surface
Open Hole Size	7.875
Type Fluid	Water
Density / Viscosity	8.34 lbm/gal
Max. Recorded Temp.	228°F
Estimated Cement Top	Surface
Time Well Ready	ROA
Time Logger on Bottom	0945
Equipment Number	HD-0255
Location	Ft. Lupton, CO
Recorded By	J. Amidei
Witnessed By	J. Adams

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 LT&C	Surface	1880 FT		
Intermediate #1	5 1/2	17	HCP-110 LT&C	Surface	12601 FT		
Intermediate #2							
Liner							

<<<< 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 Kelly Bushing at 20 FT
Adjusted log -4 FT to correlate with Kelly Bushing
Gauge Ring/Junk Basket ran to 7253 FT with no debris found
Log ran from 7257 FT to surface
Log ran with 2800 PSI surface induced pressure
Logging tools were clean and free of any debris upon completion of operations

Thank you for choosing FMC Technologies Completion Services, Inc.!!

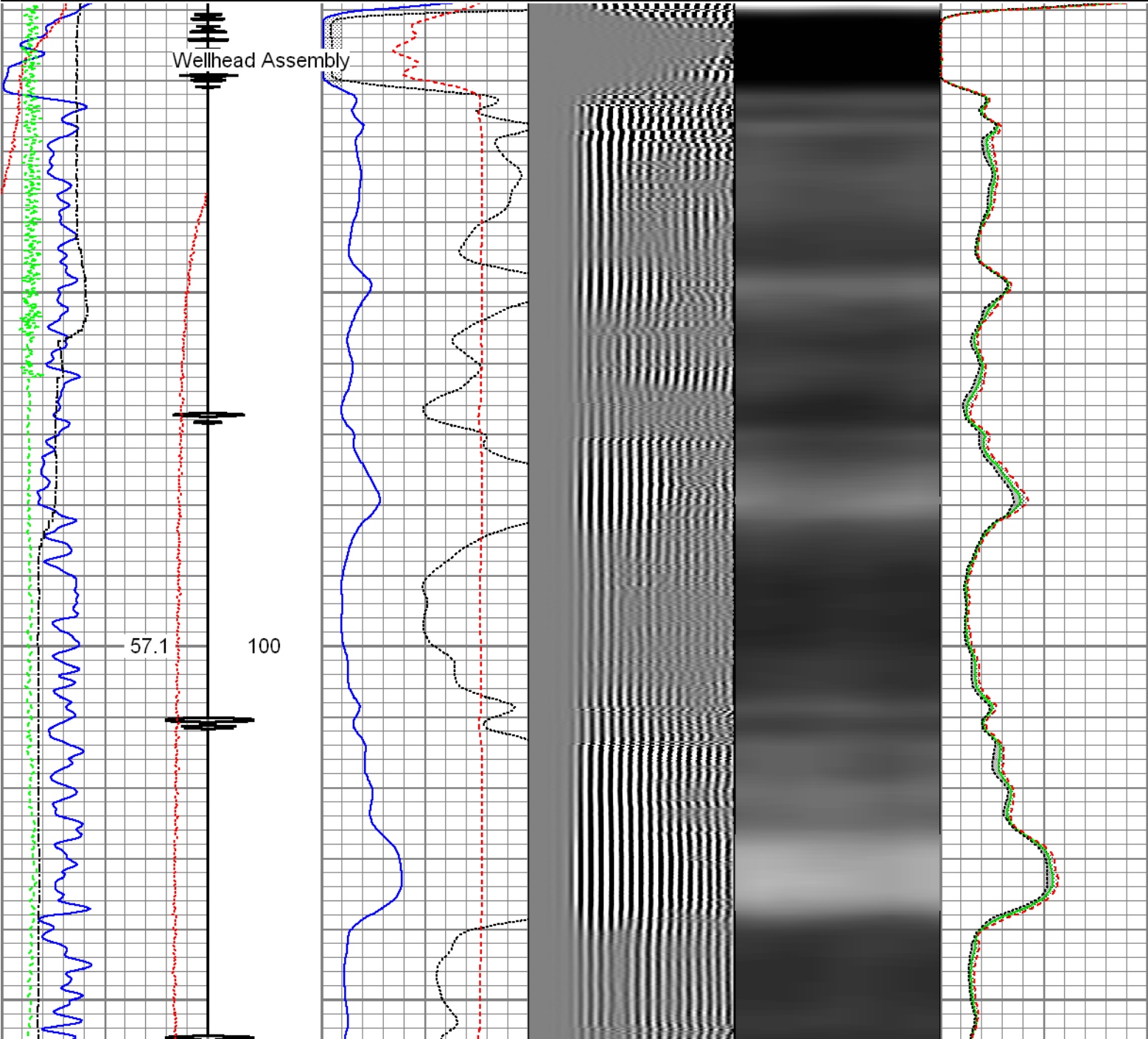


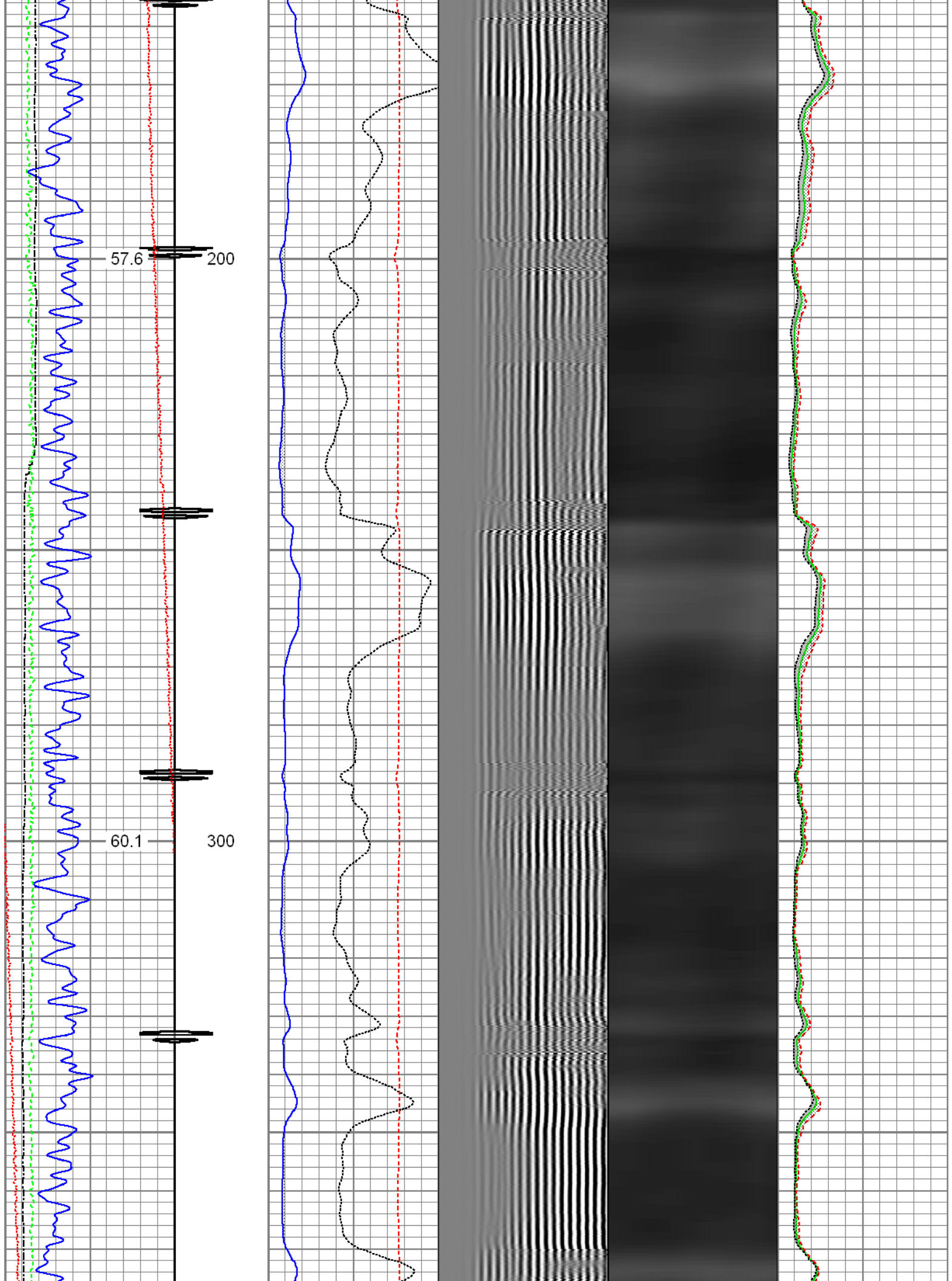
Main Pass

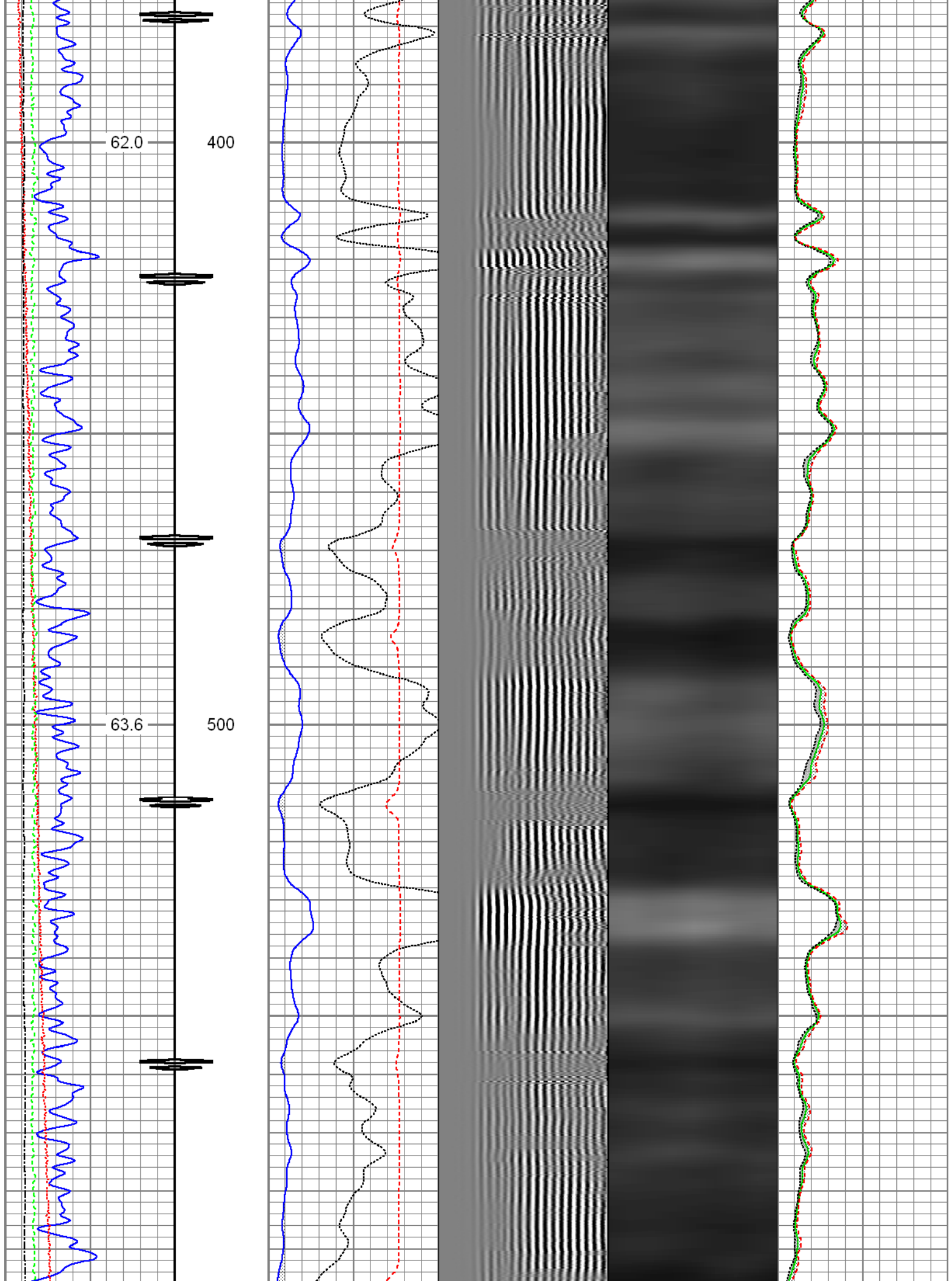
Recorded with 2800 PSI Surface Induced Pressure

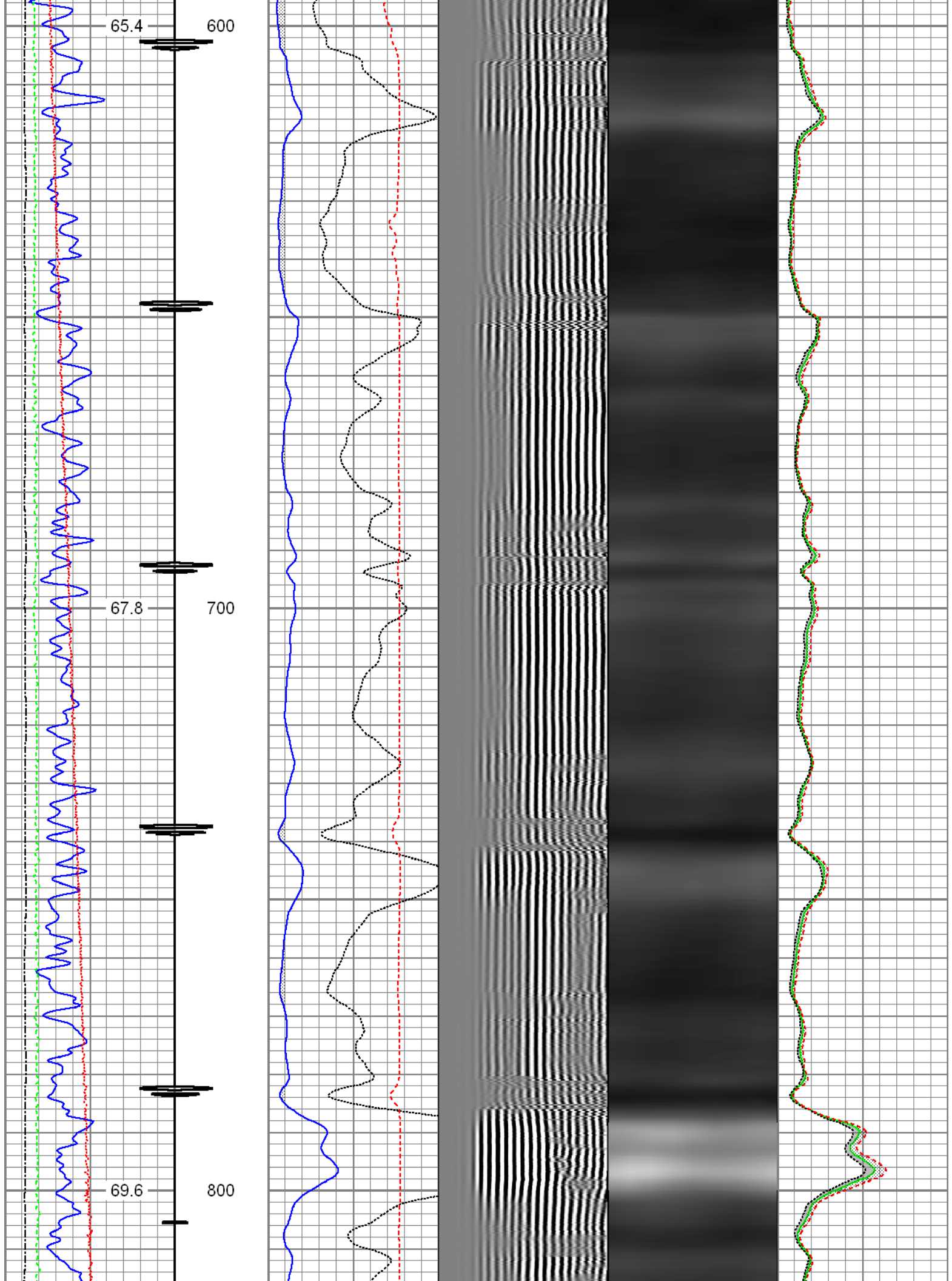
Database File: 0512341429_anadarko_viper pyro 16n-10hz_10-13-15_rbl.db
Dataset Pathname: pass4
Presentation Format: radii
Dataset Creation: Wed Oct 14 09:56:31 2015 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

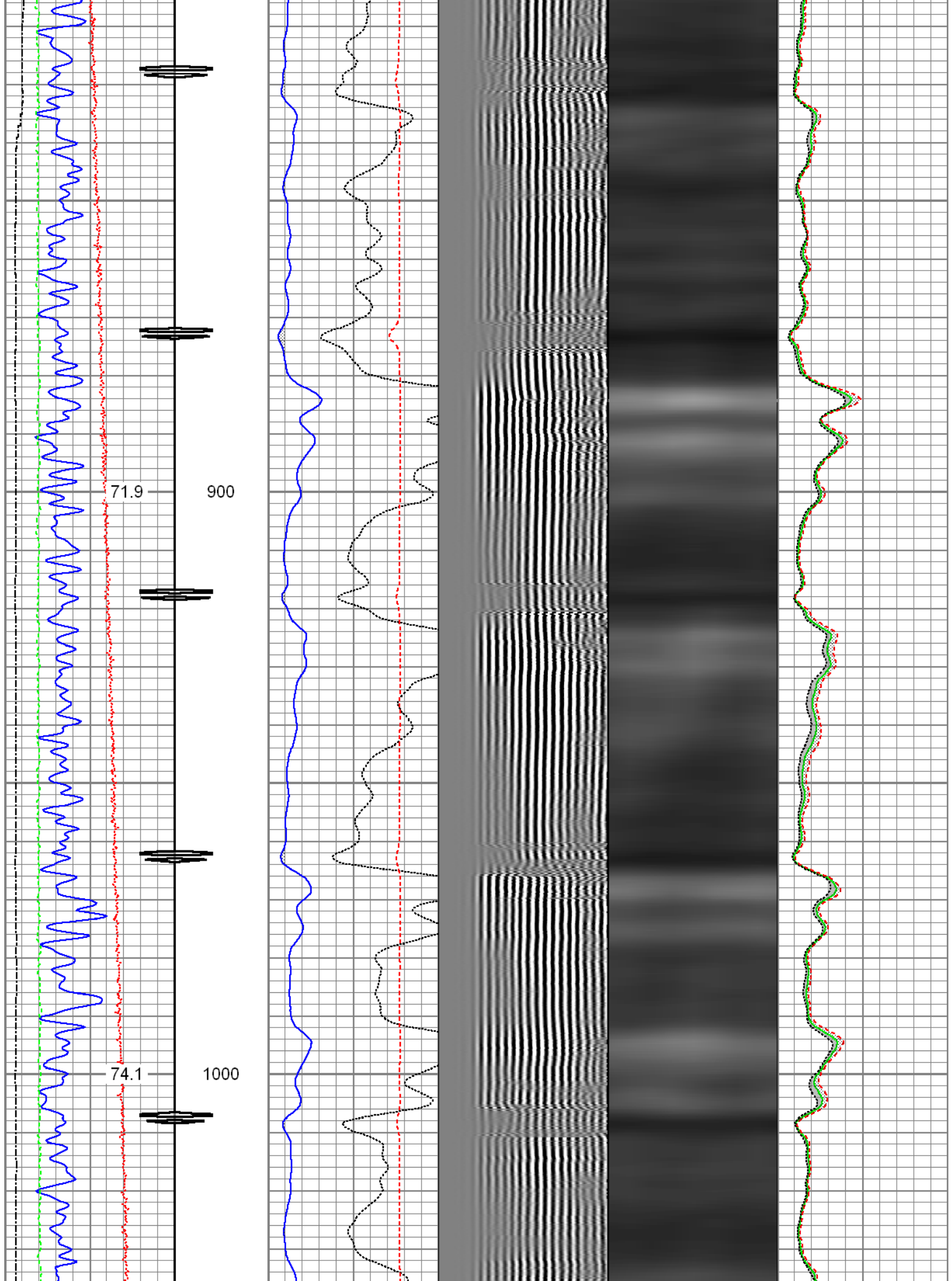
Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120	0 (mV) 100	200 1200		0 100
Casing Collar Locator	3' Amplitude x 5			Minimum Amplitude
Temperature	0 (mV) 20			0 100
0 (degF) 20	3' Travel Time			Maximum Amplitude
Line Speed	650 (usec) 150			0 100
-150 (ft/min) 150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

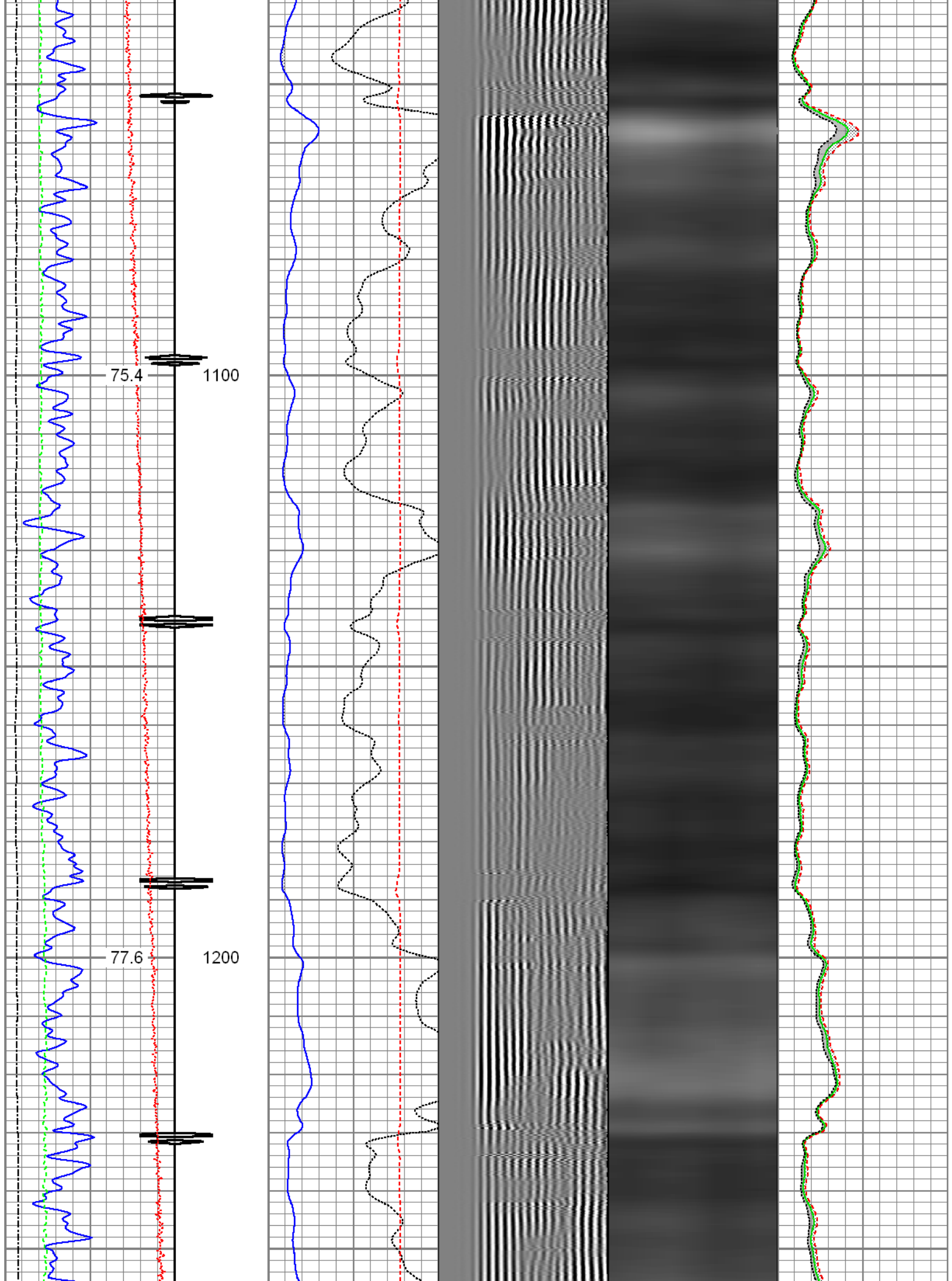


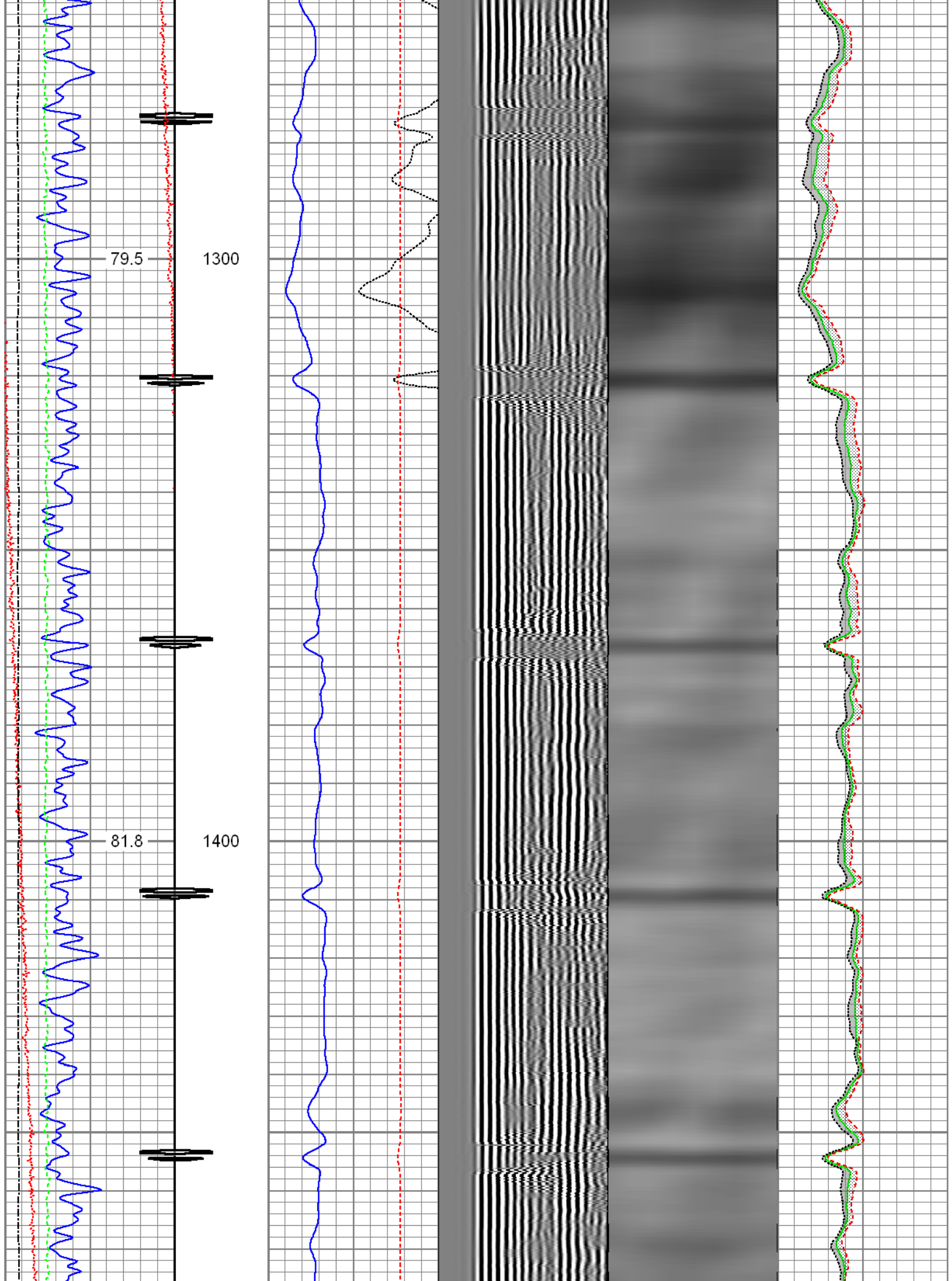


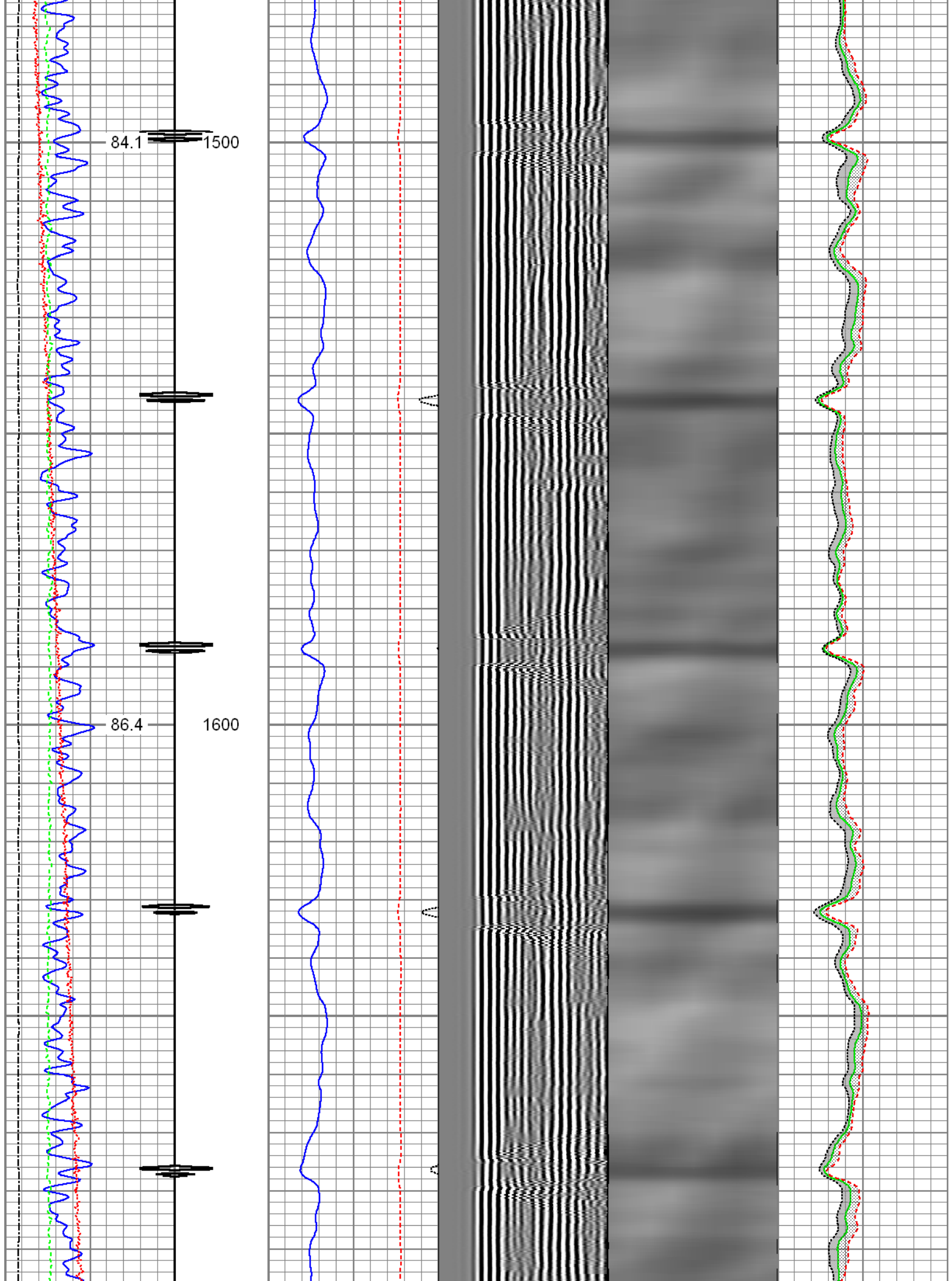


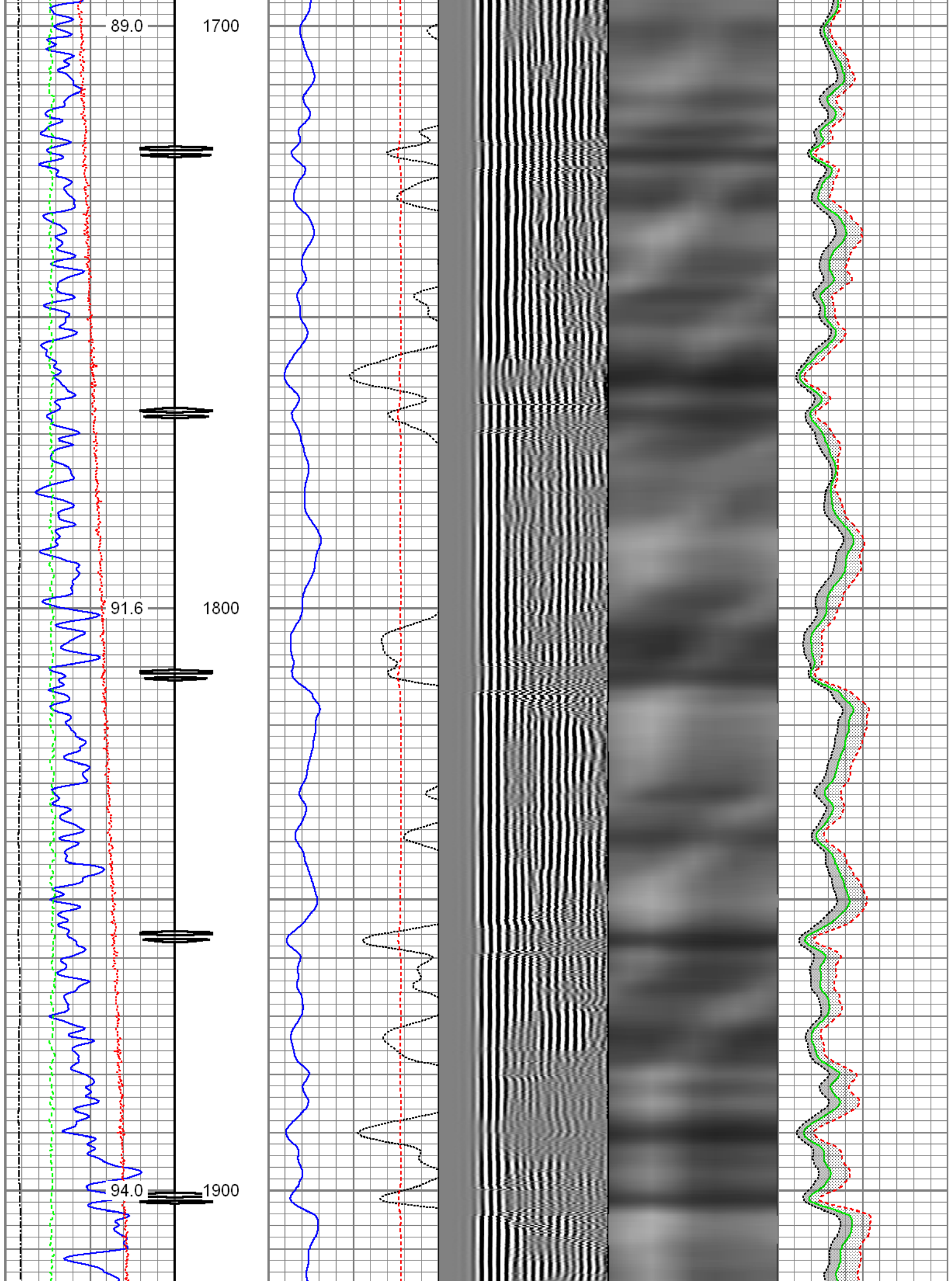


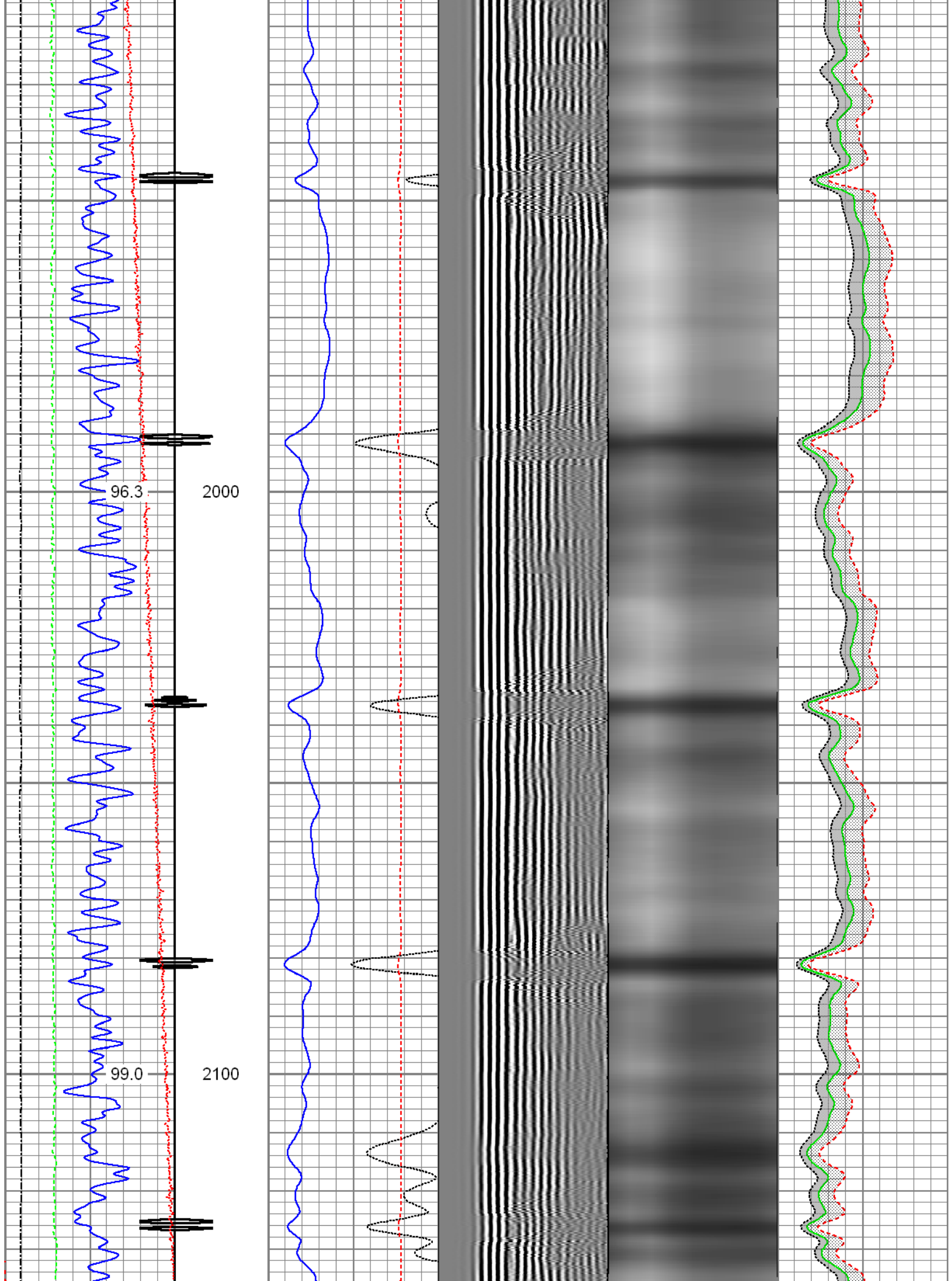


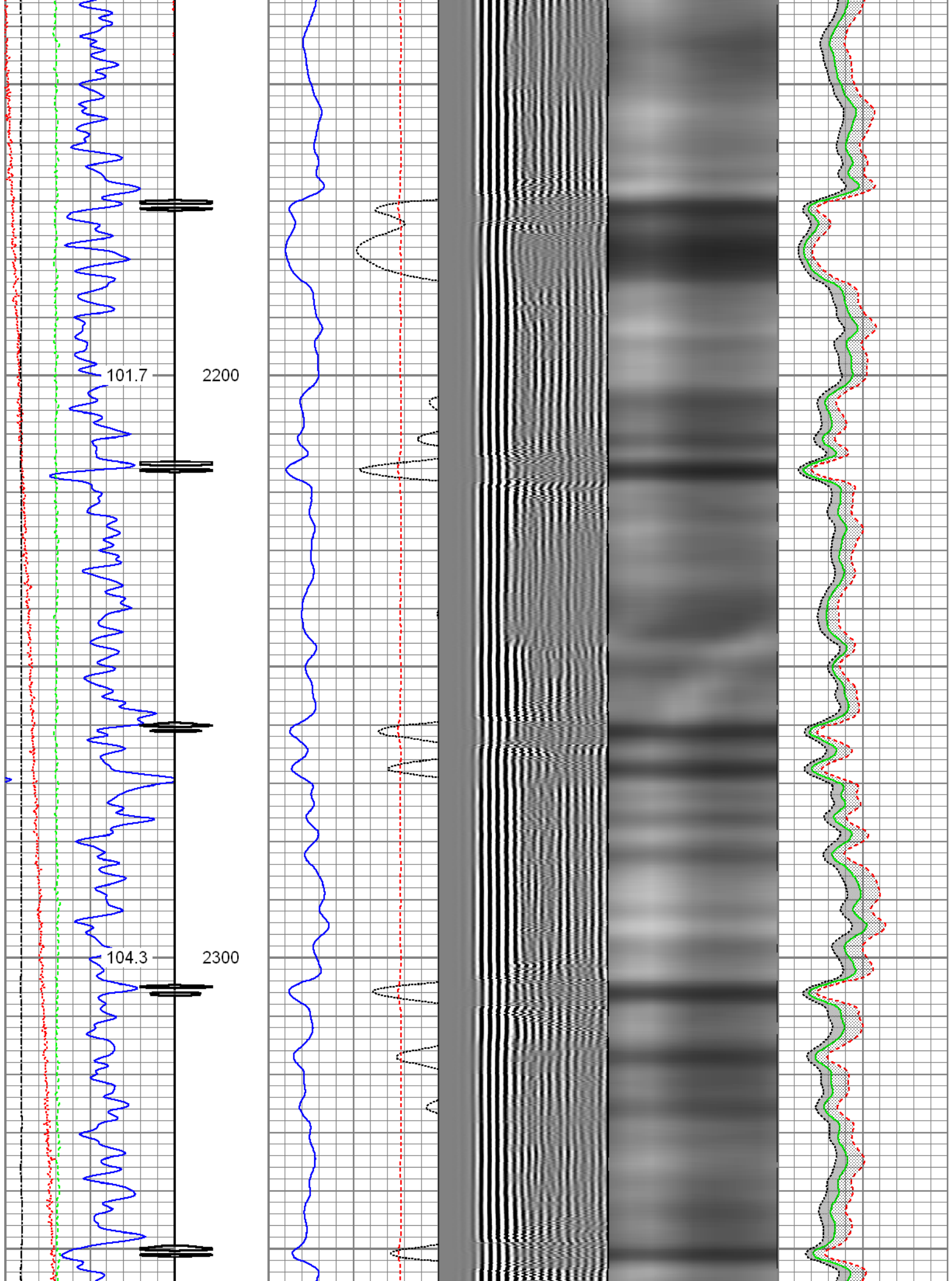


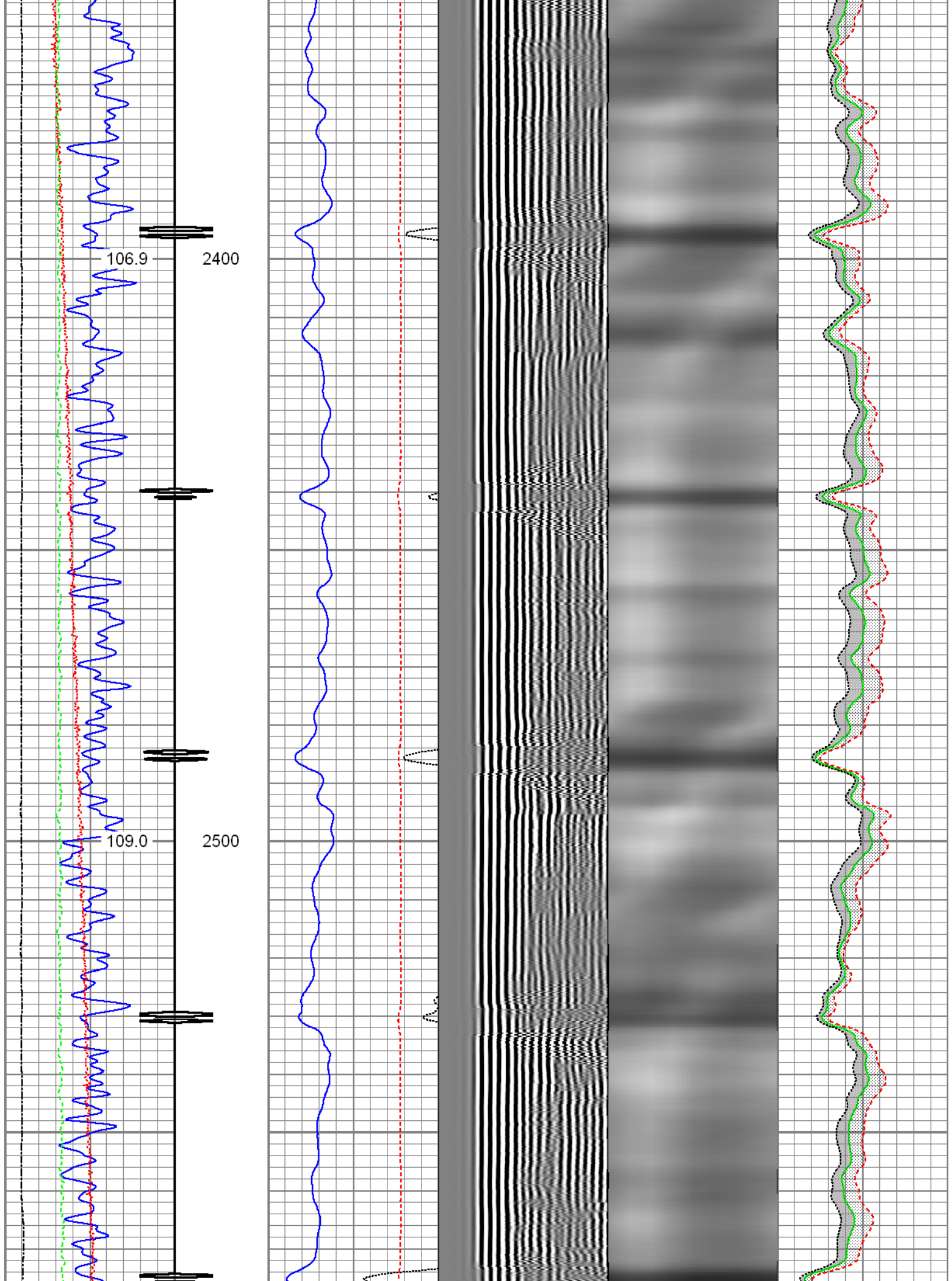


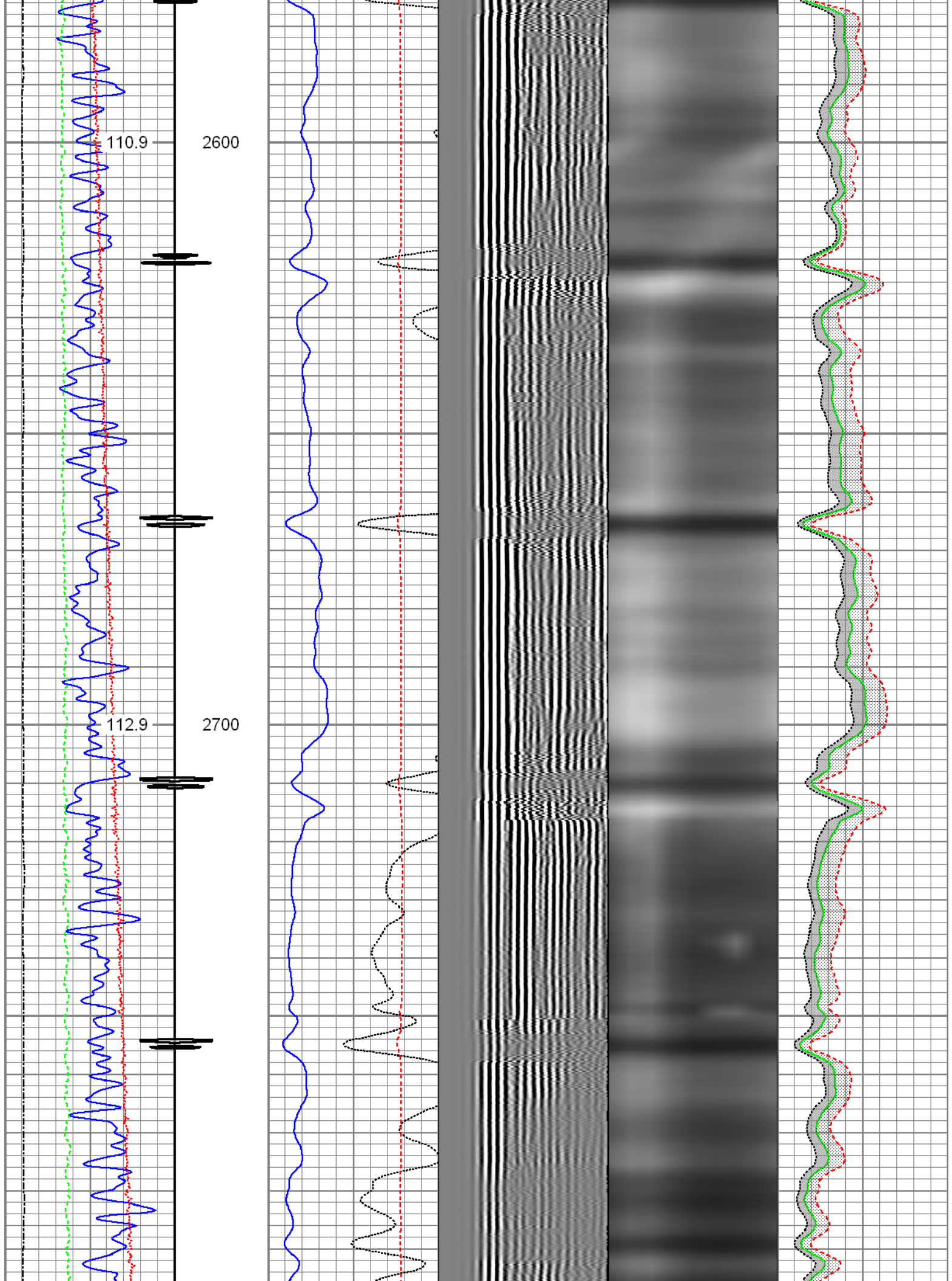


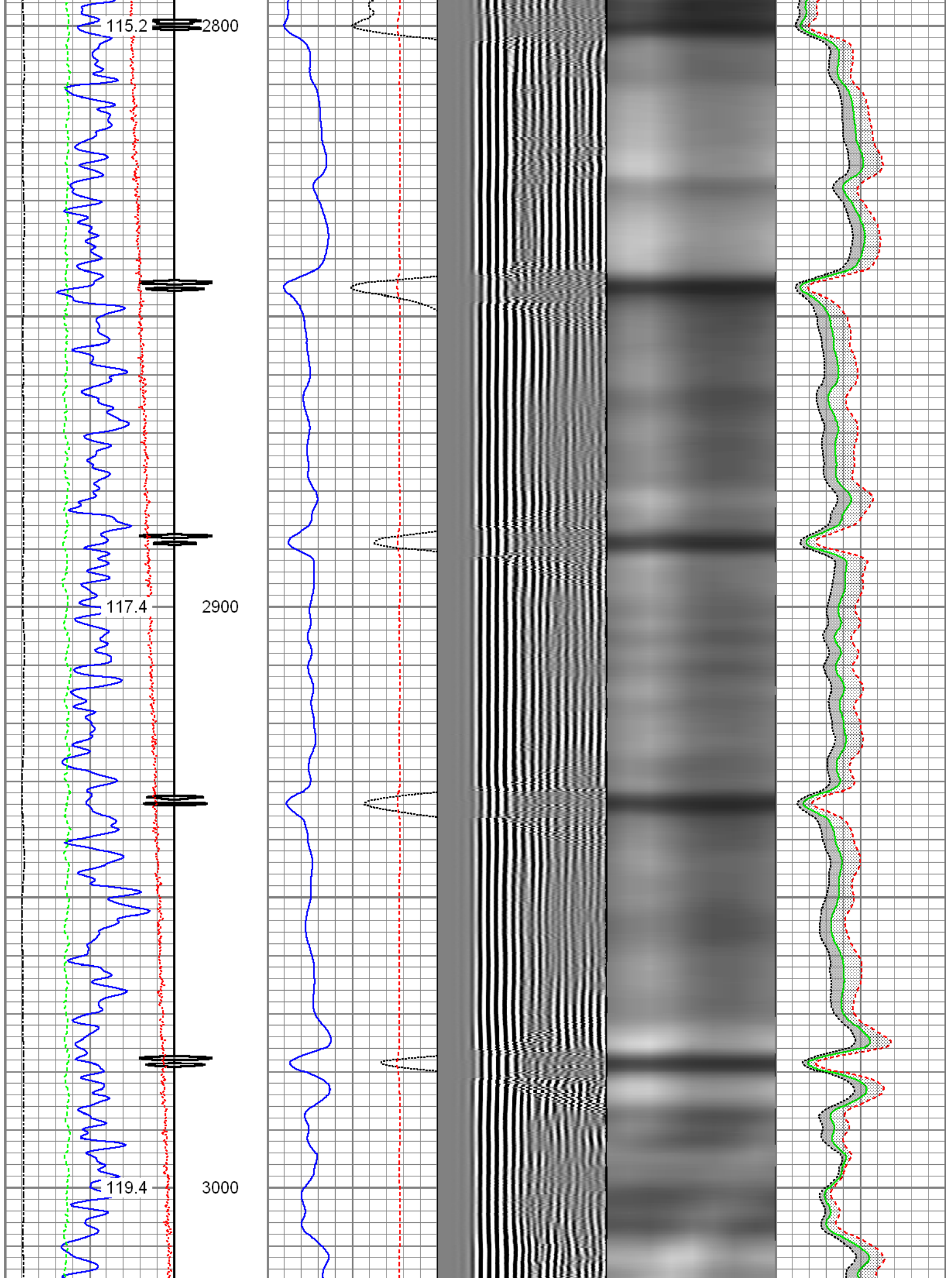


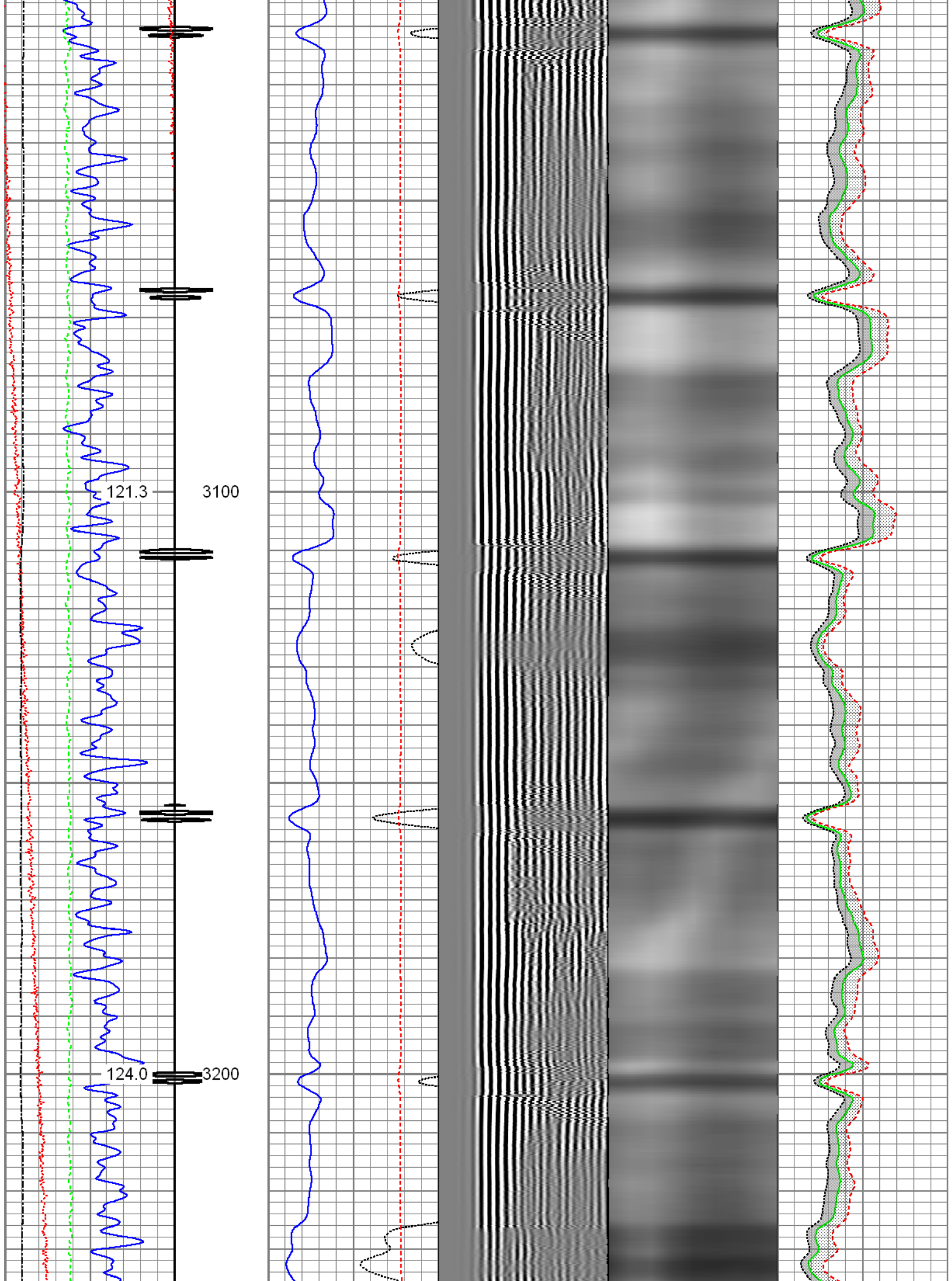


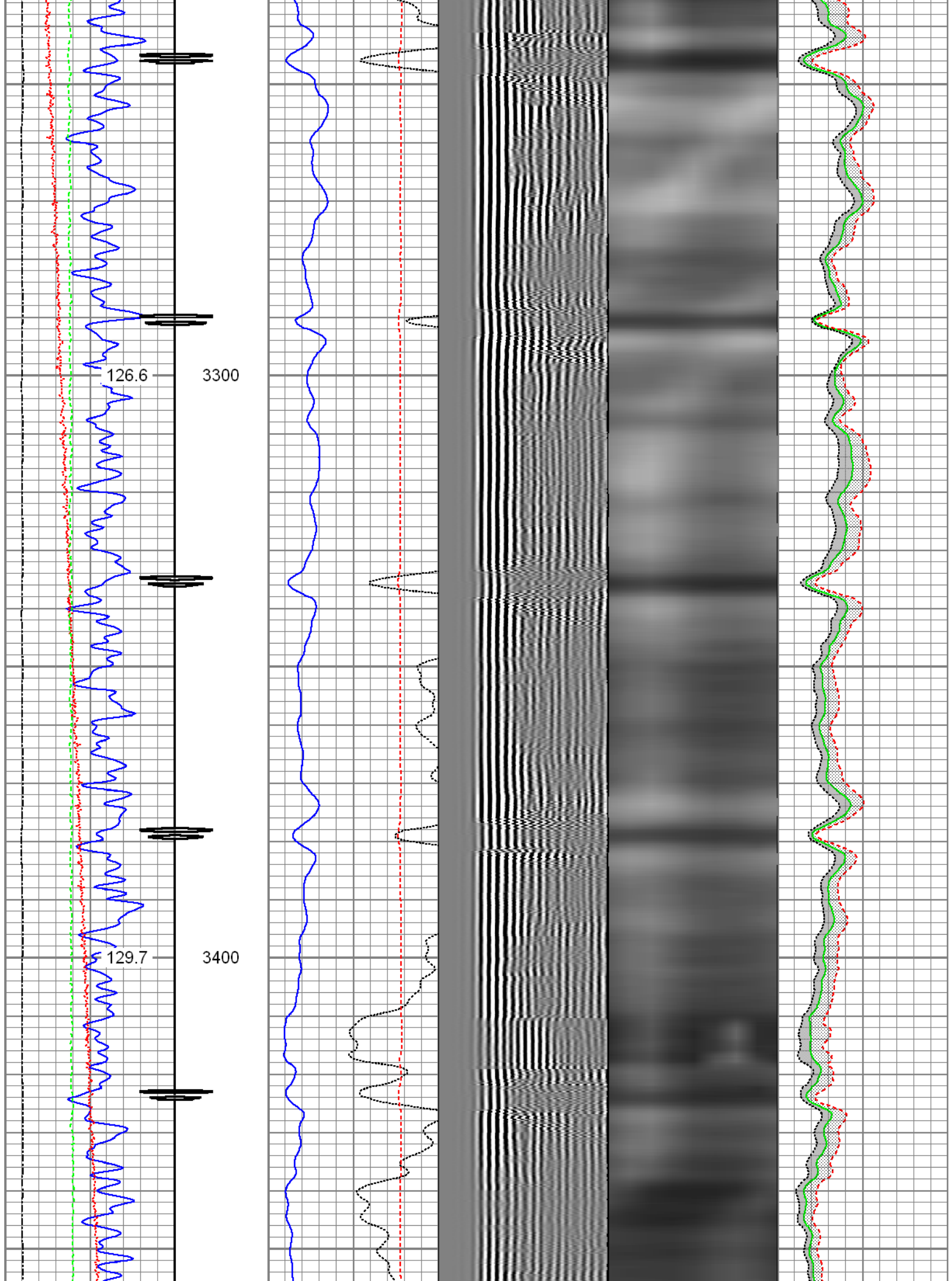


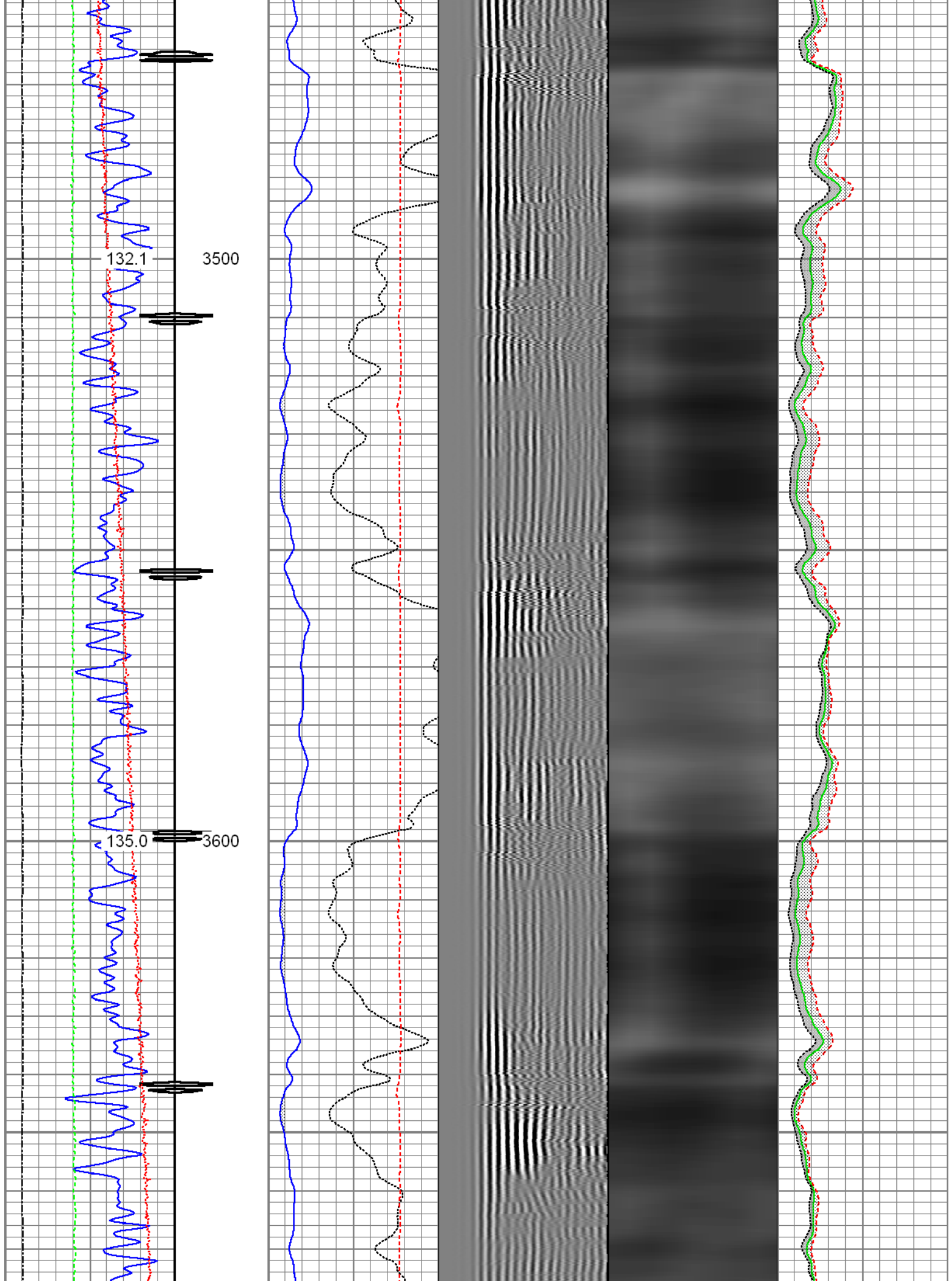


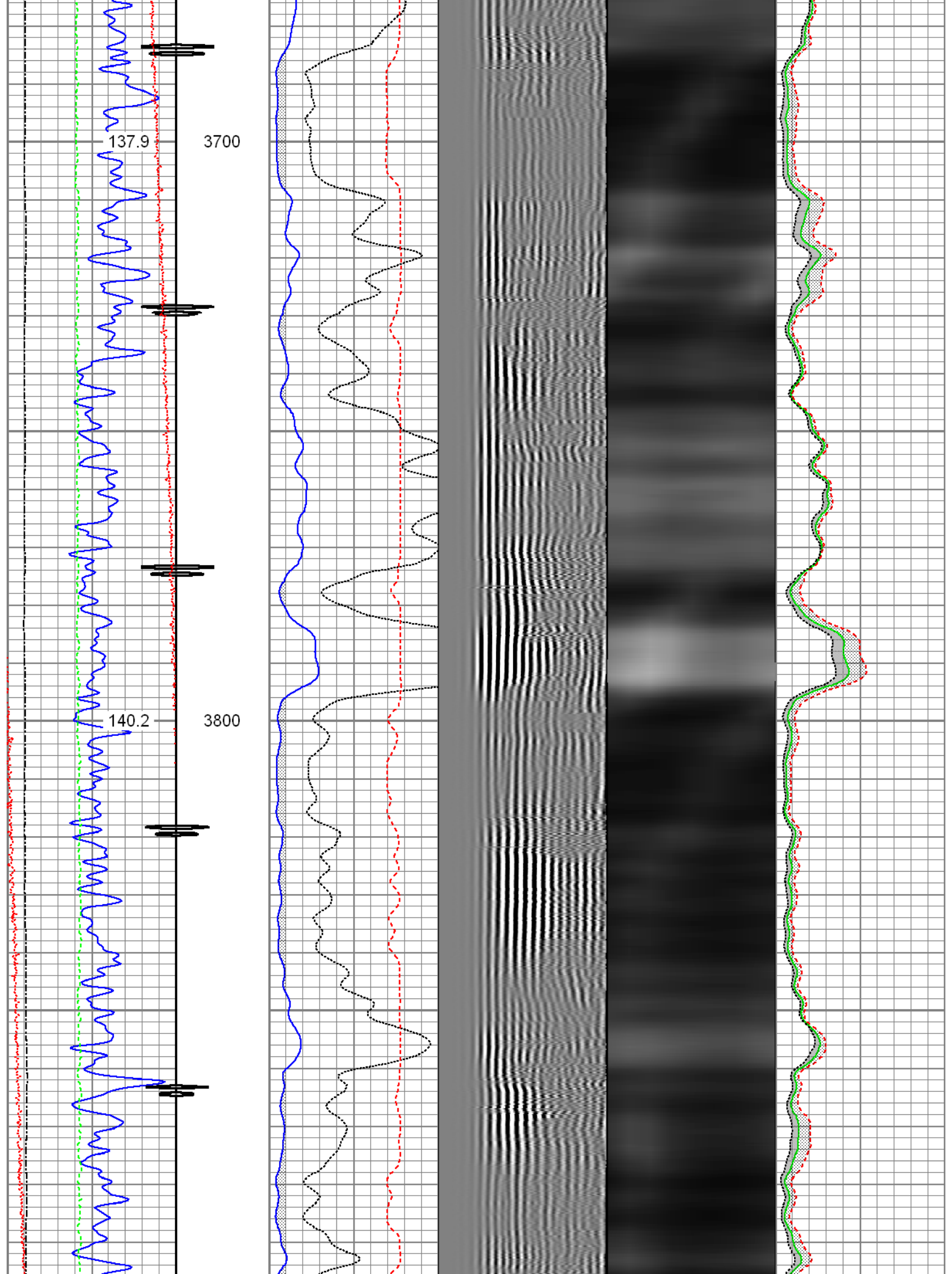


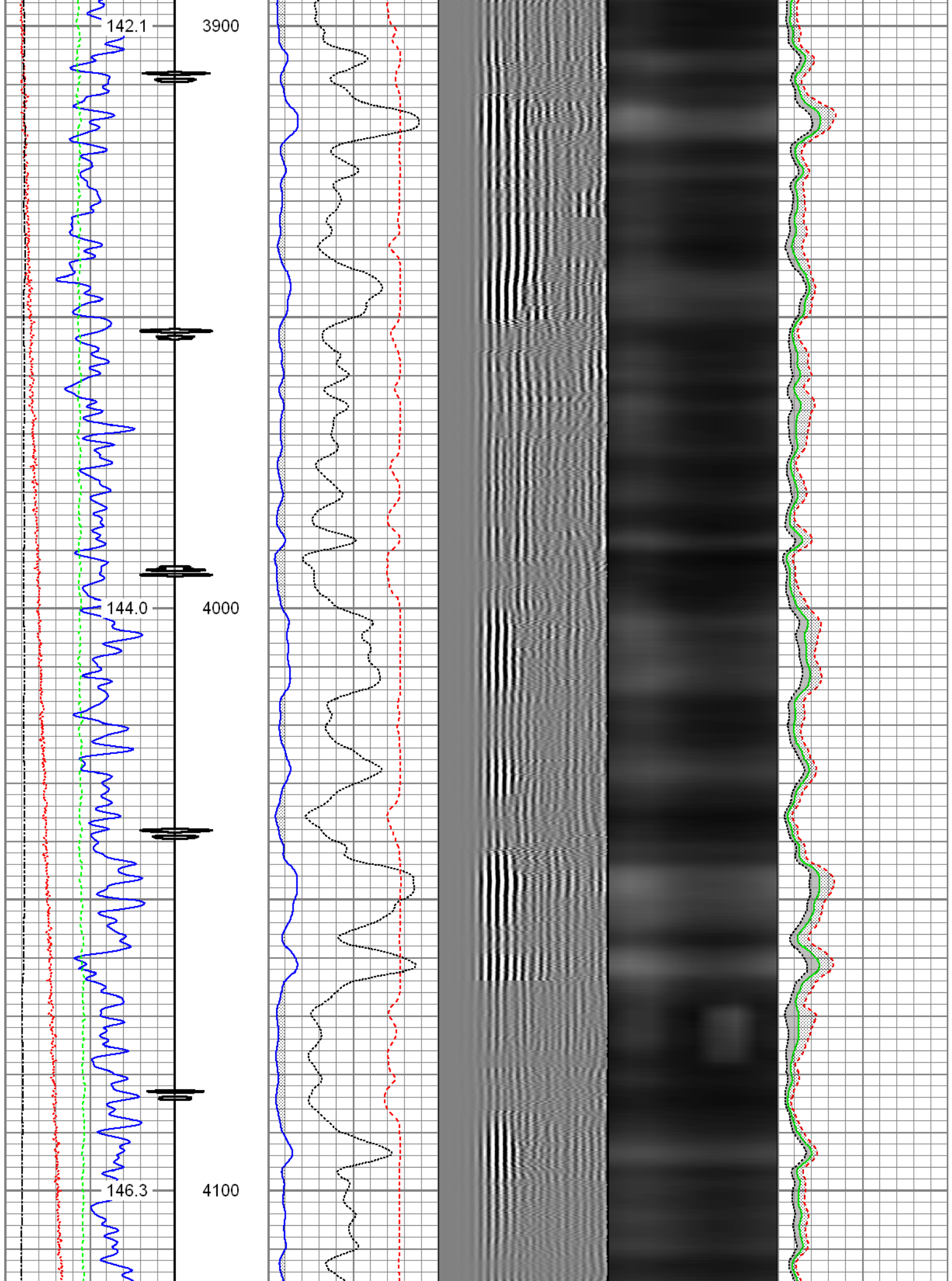


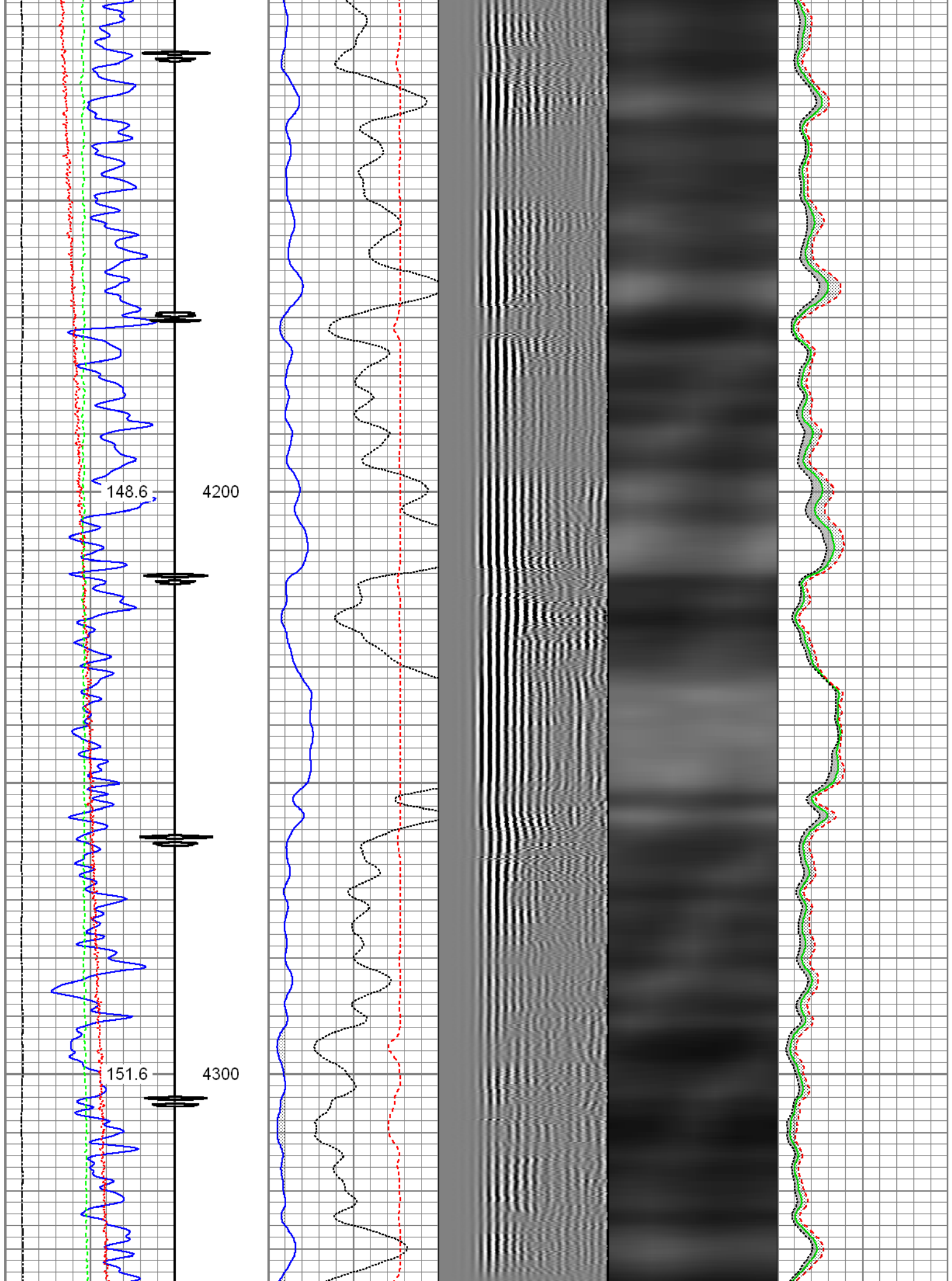


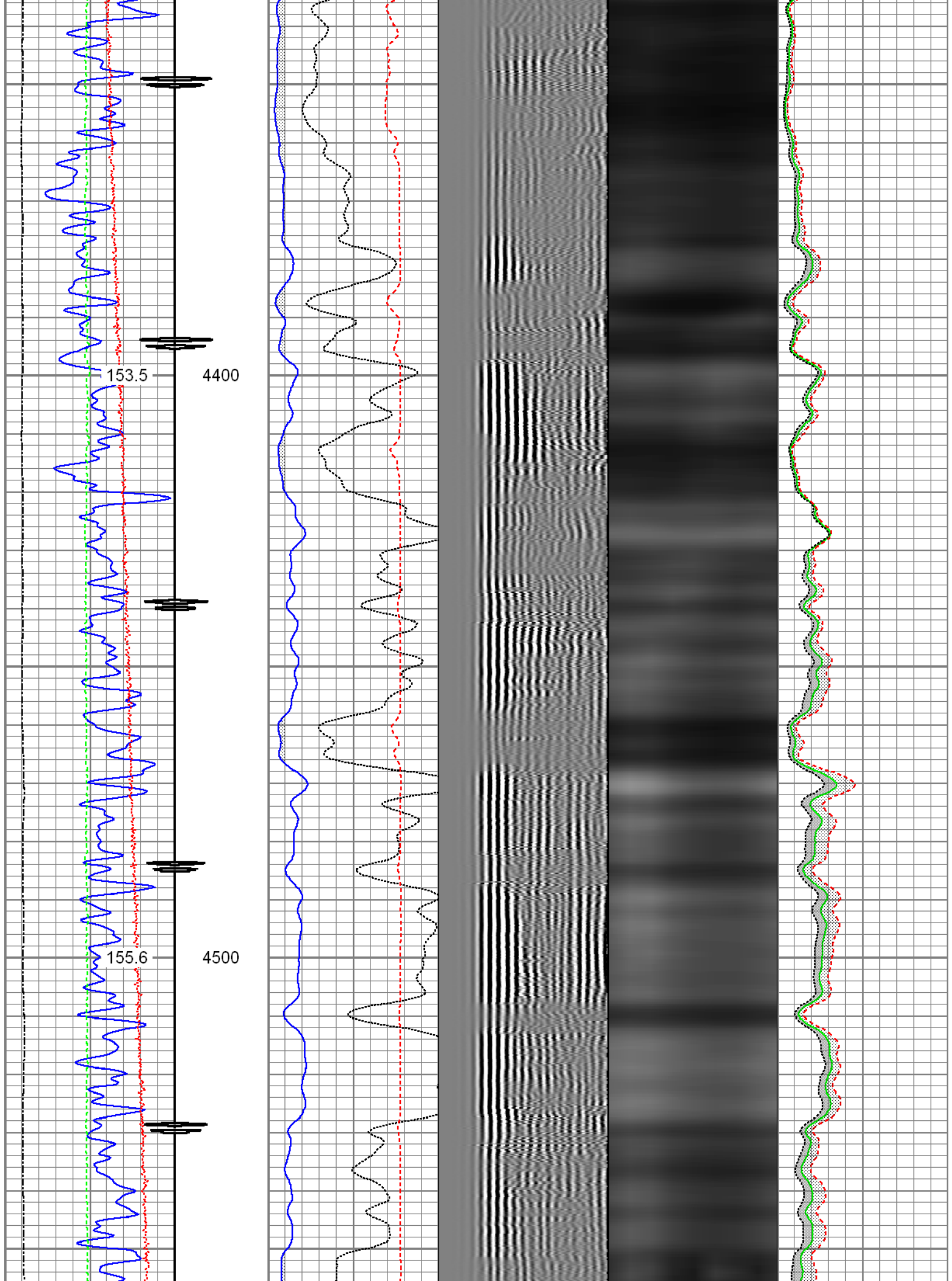


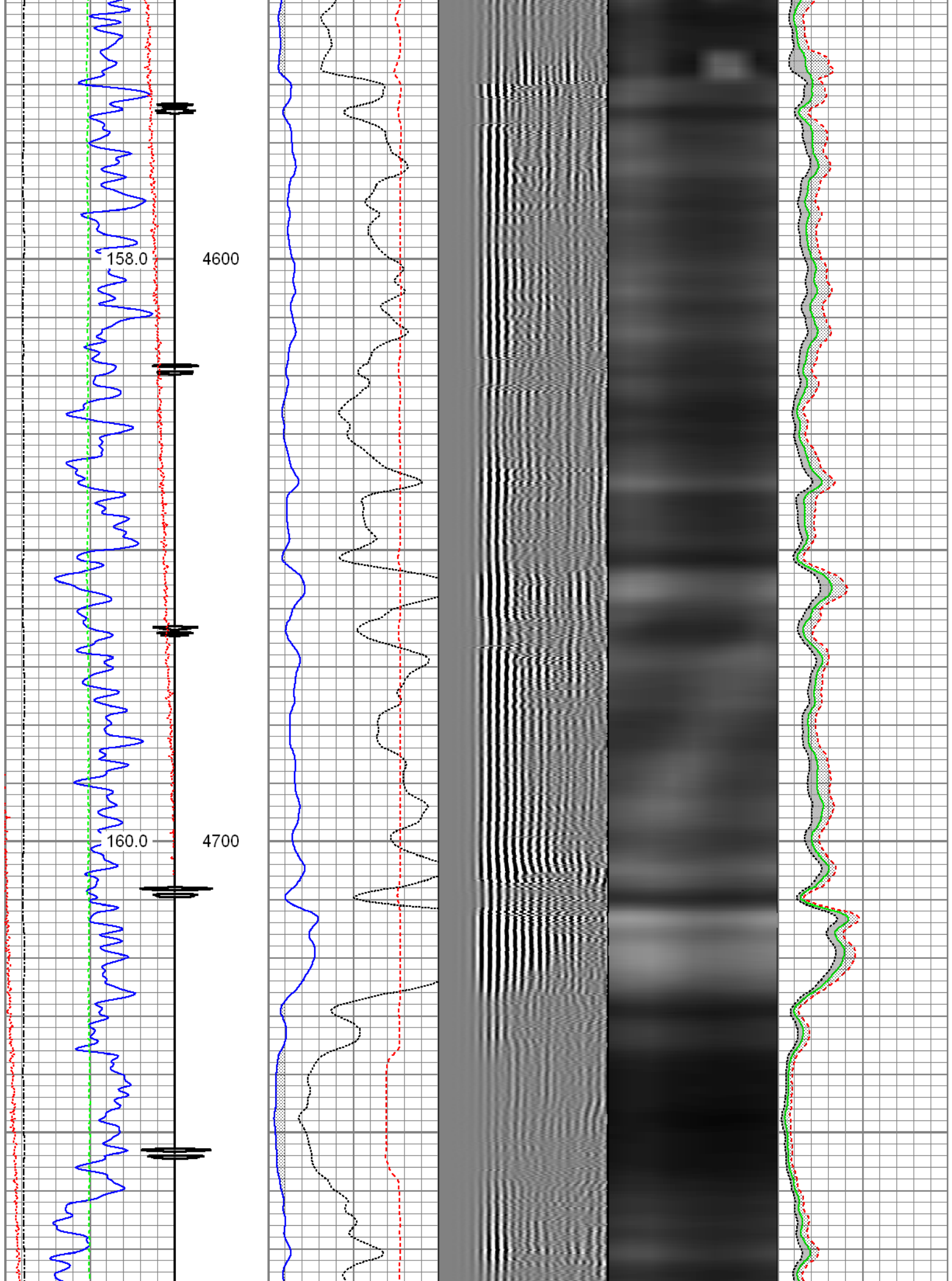


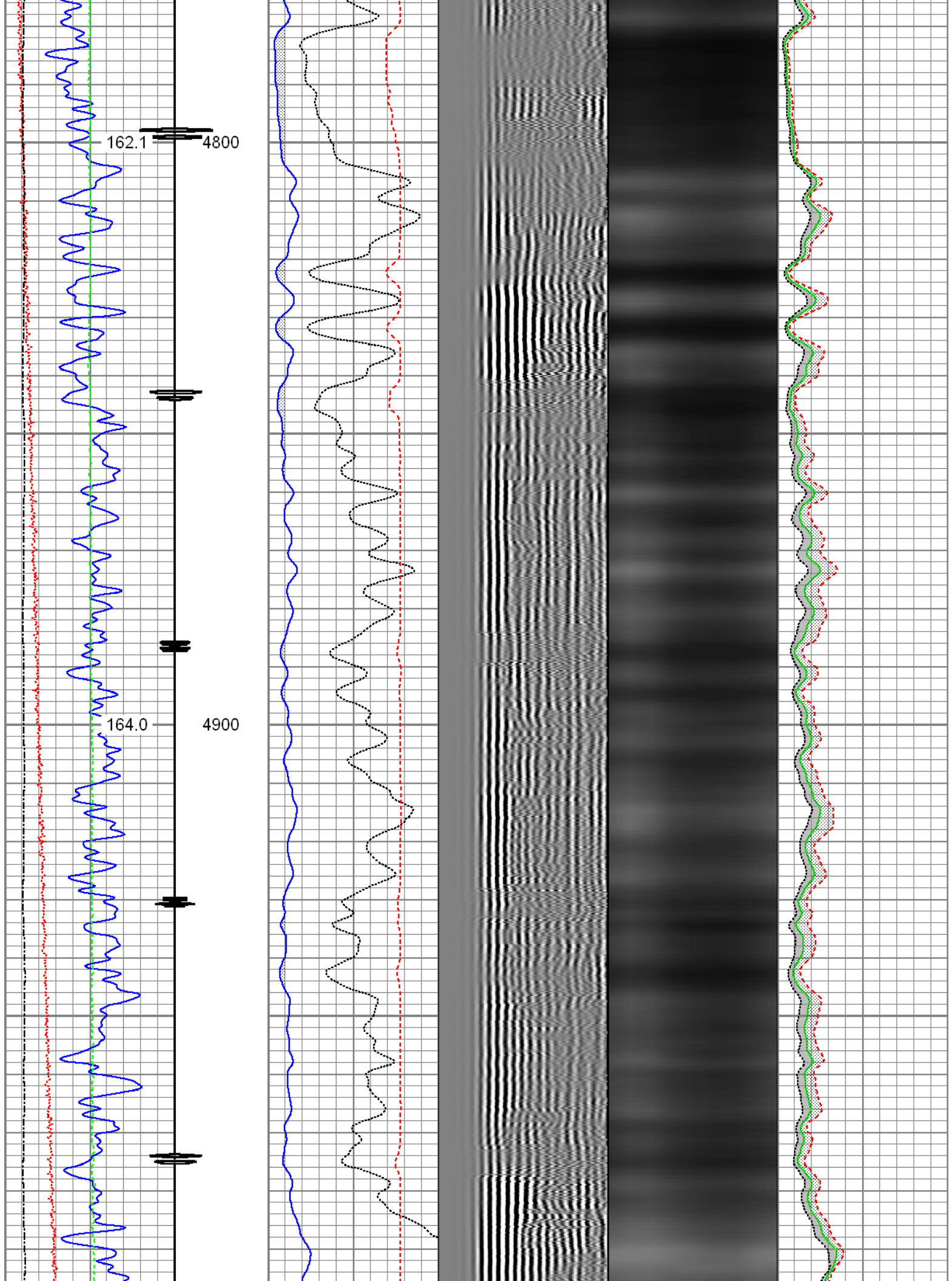


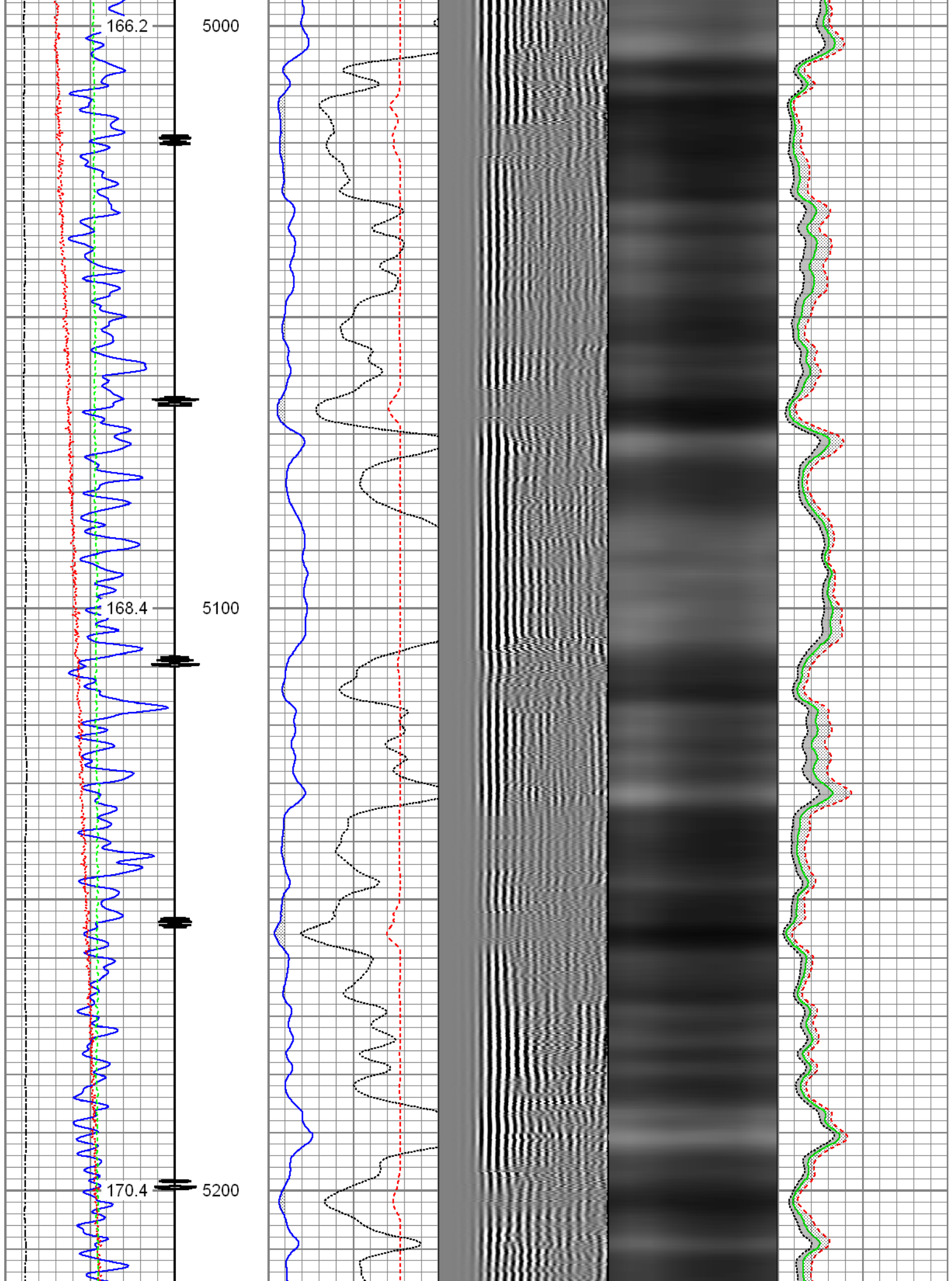


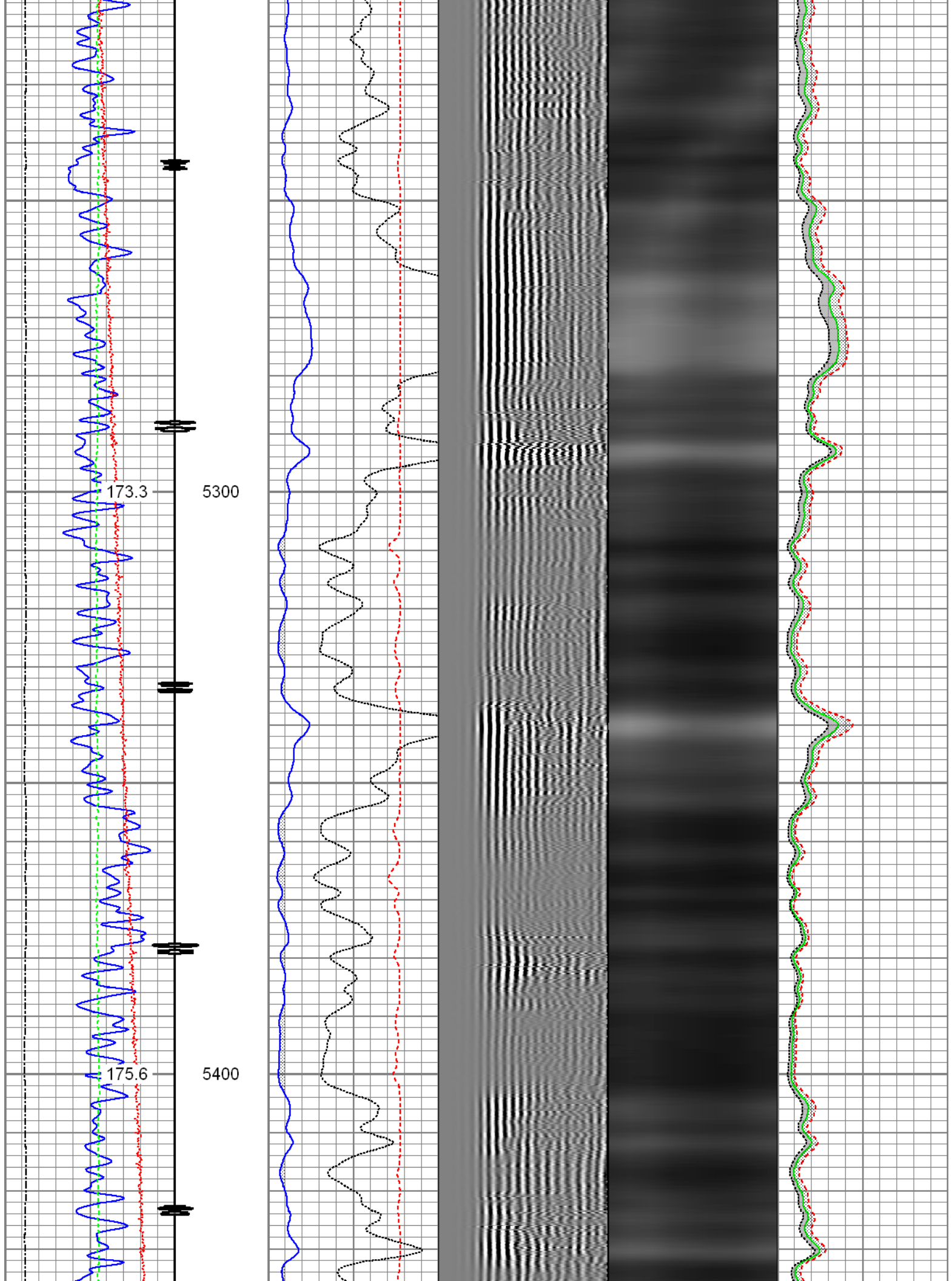


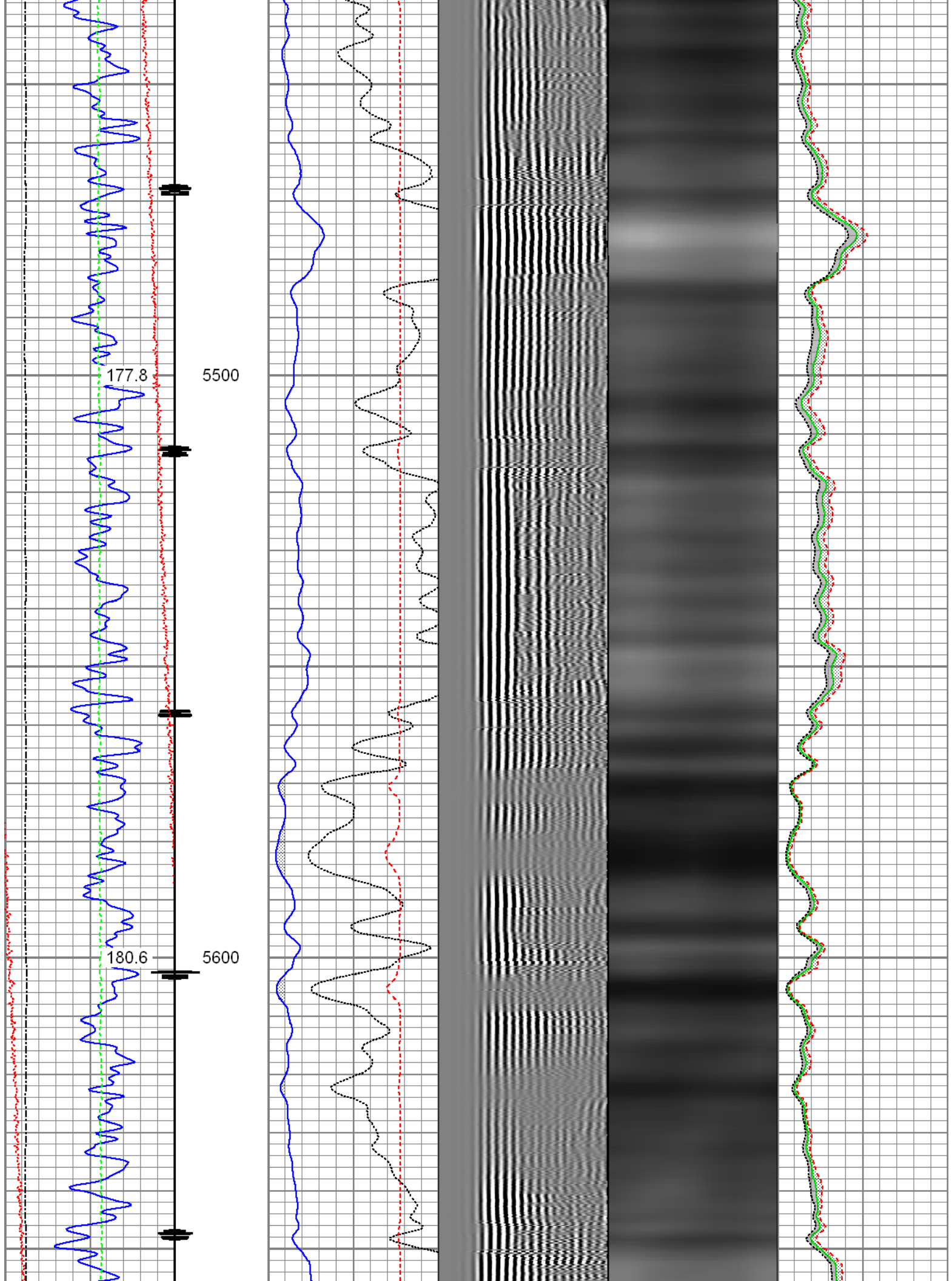


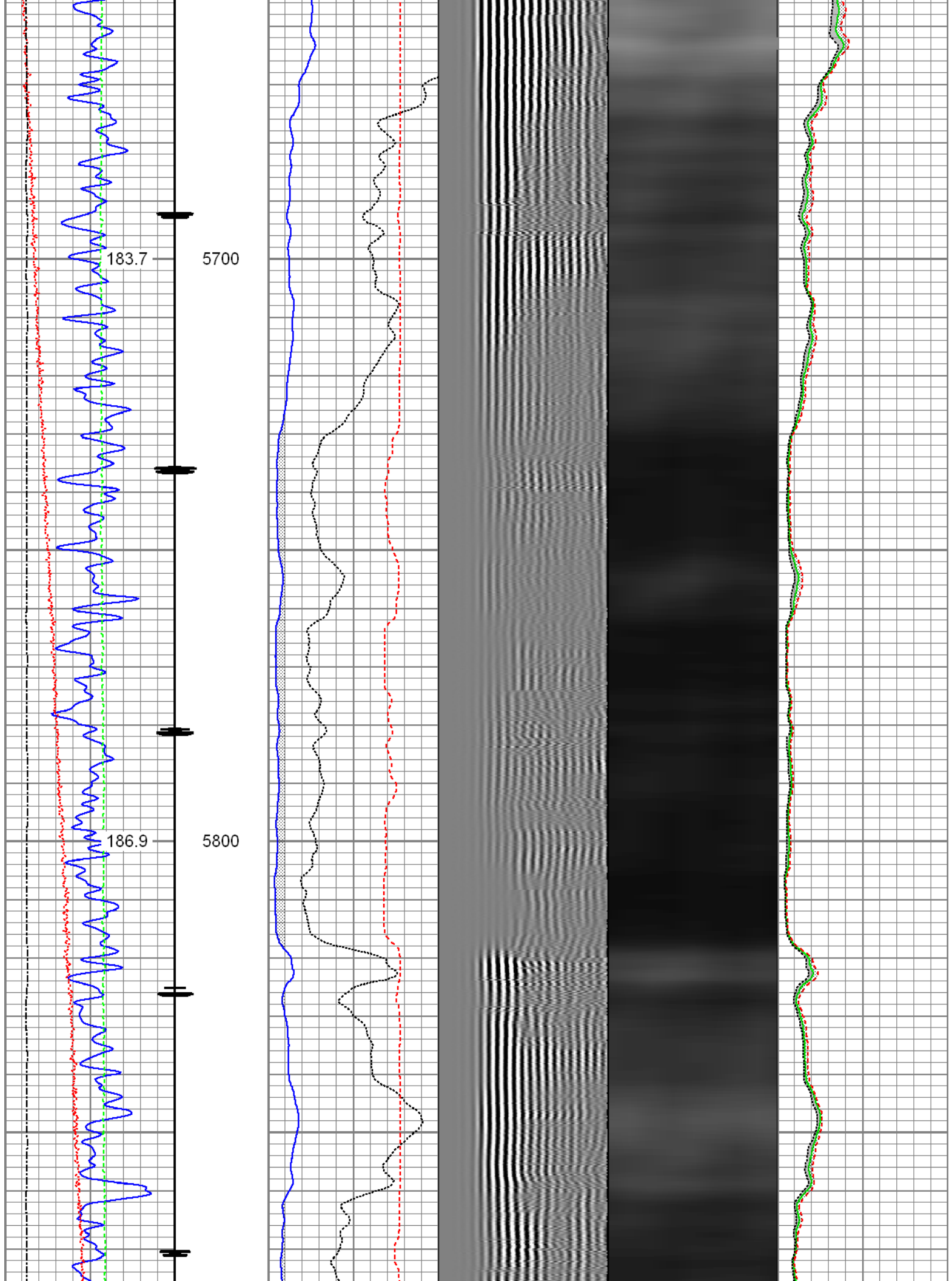


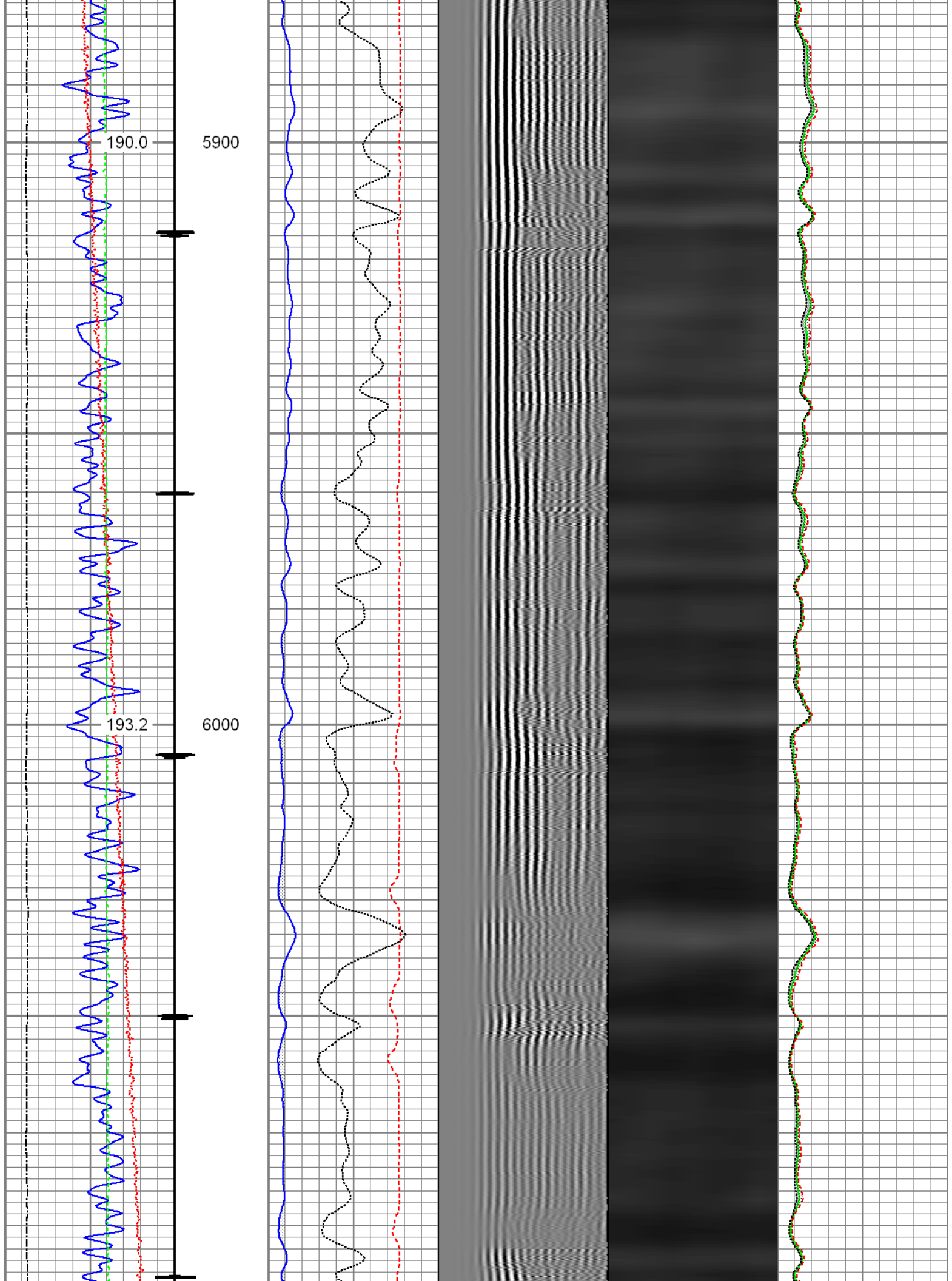


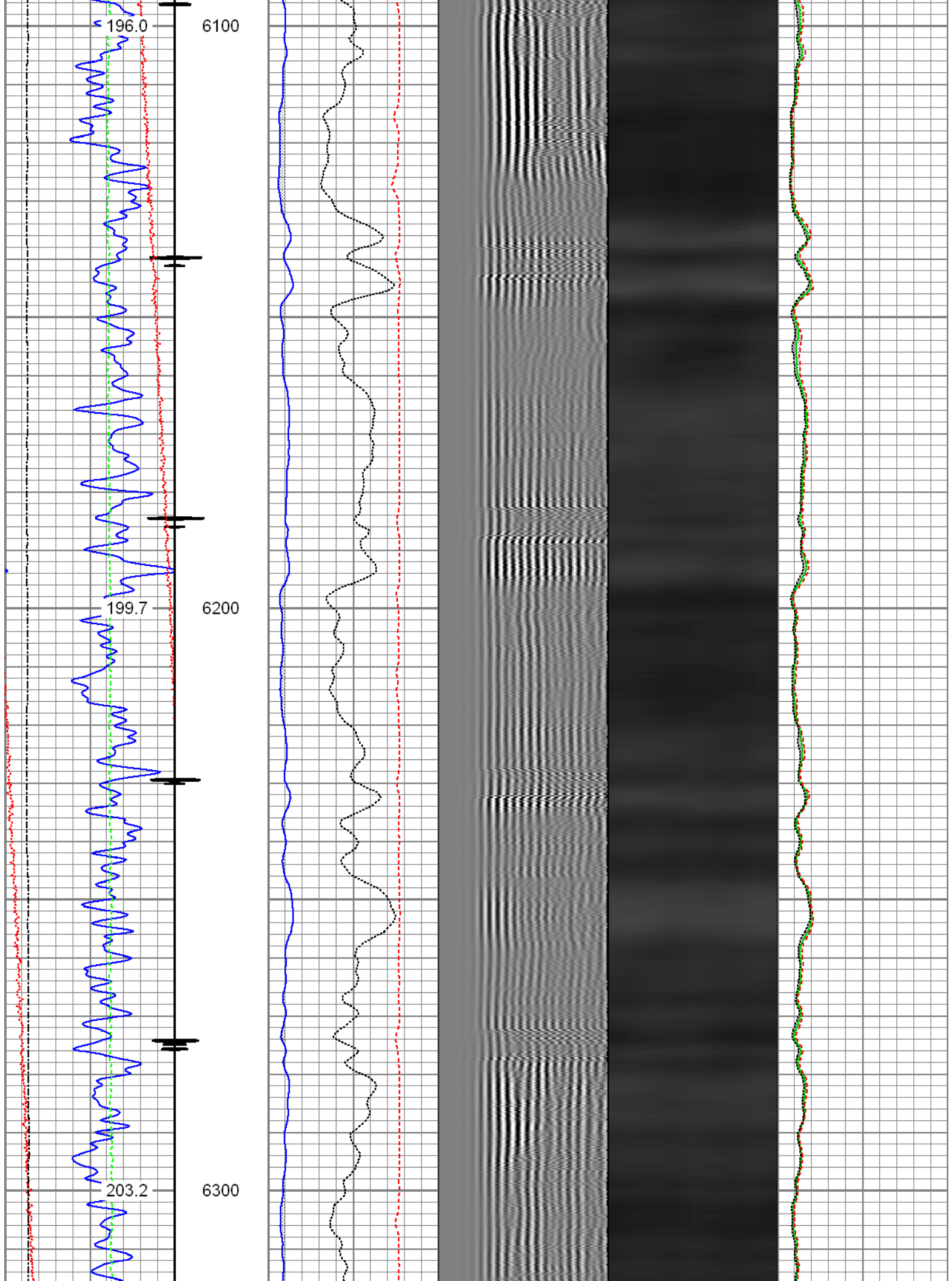


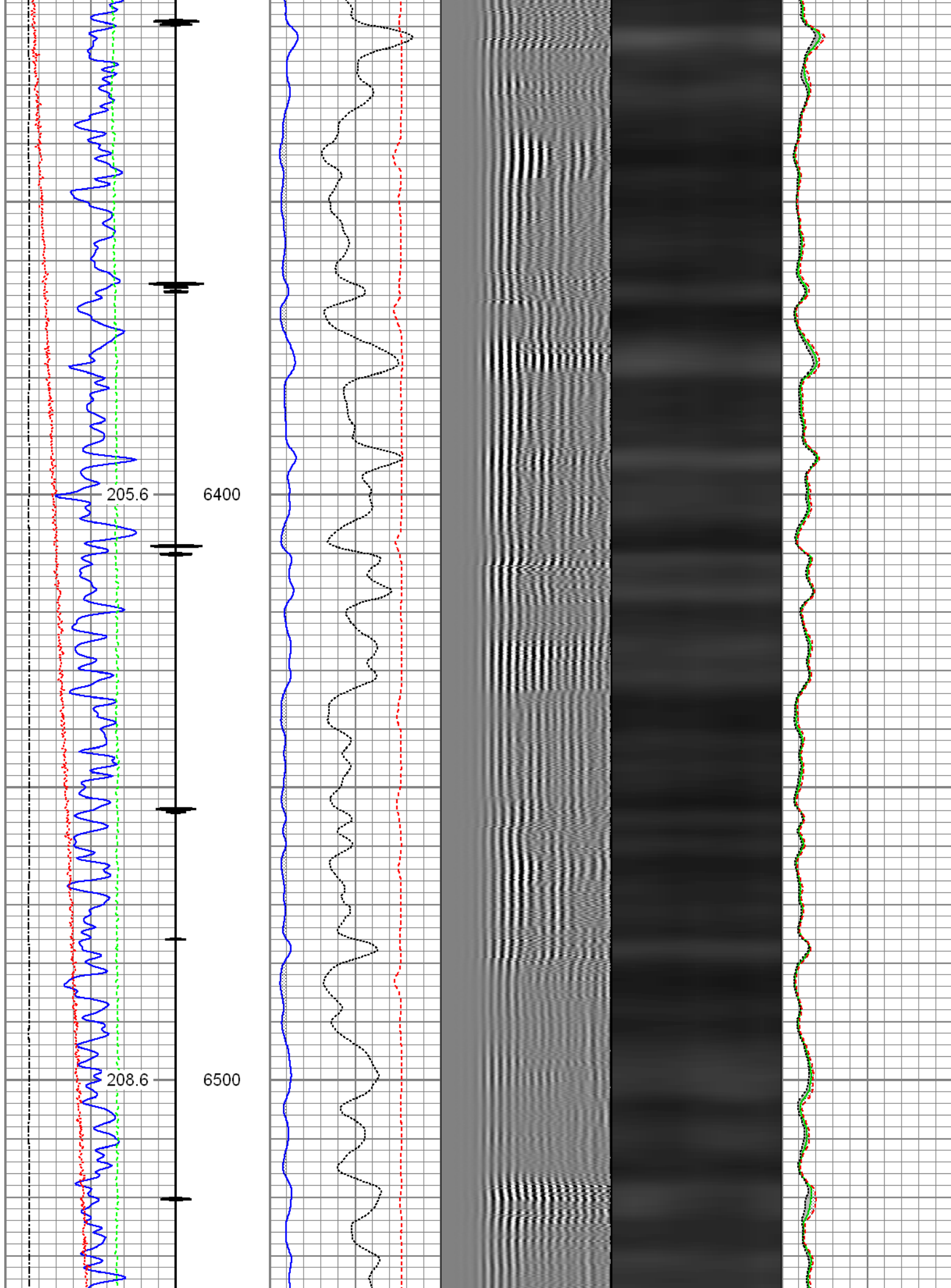


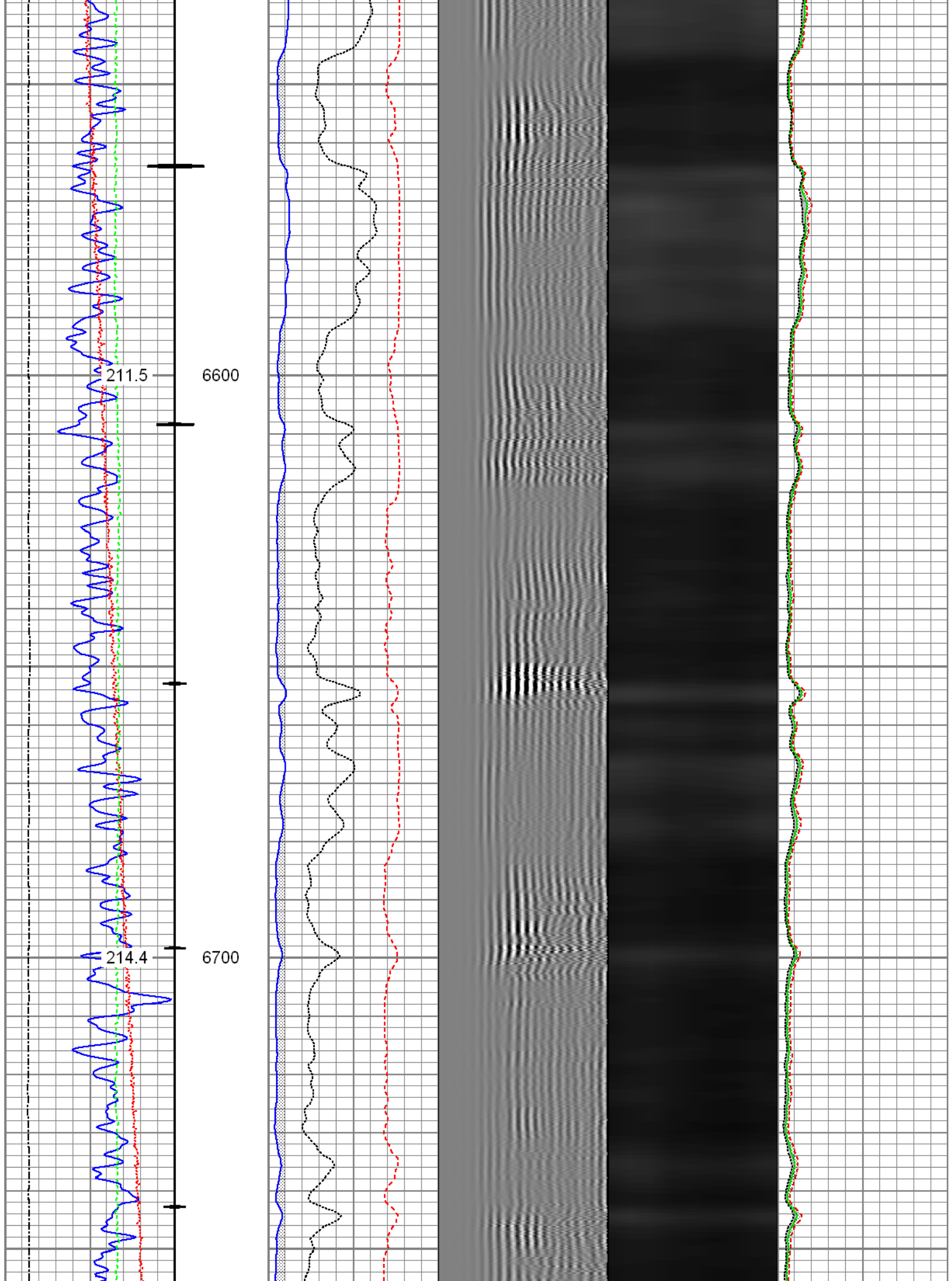


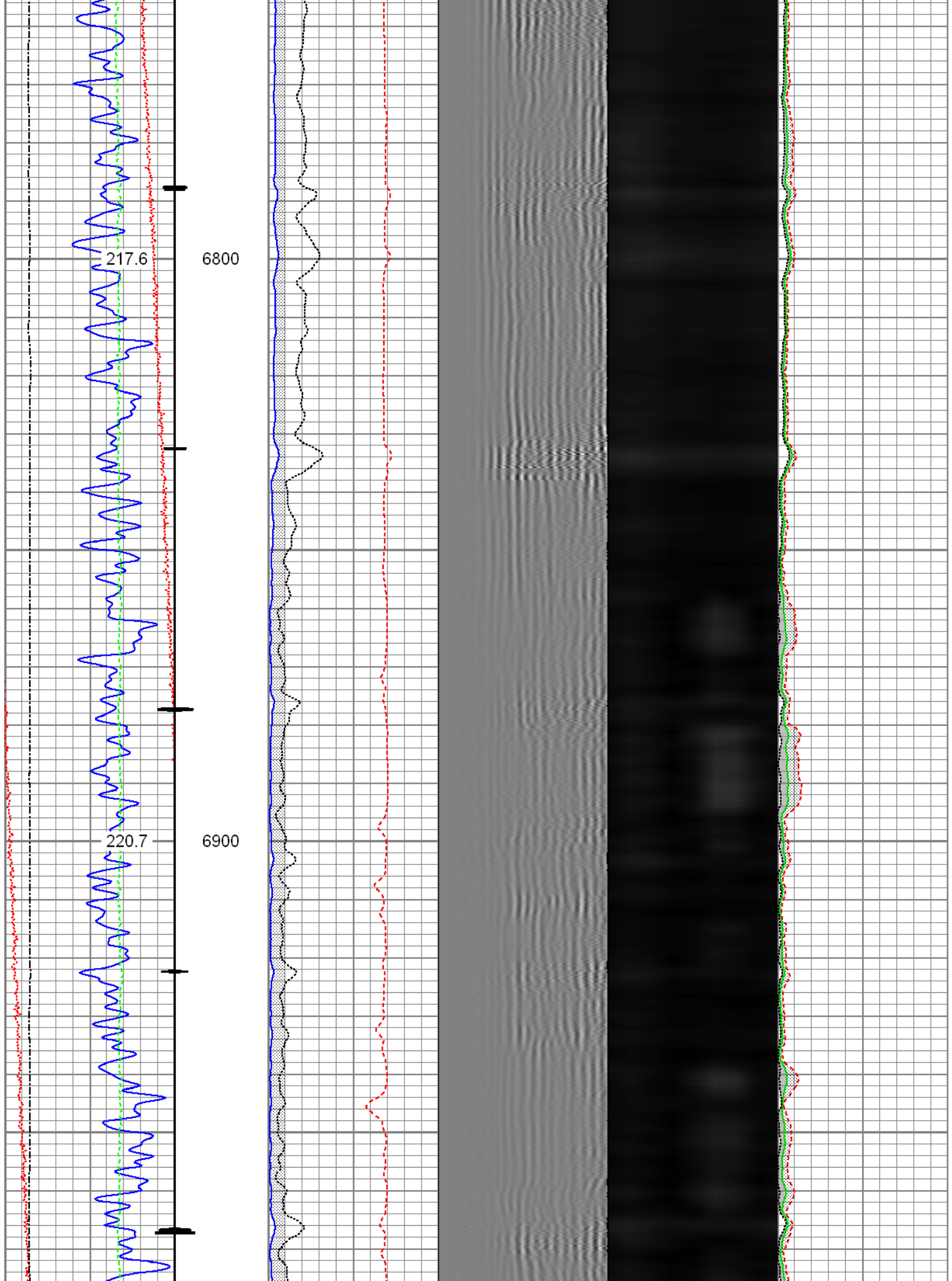


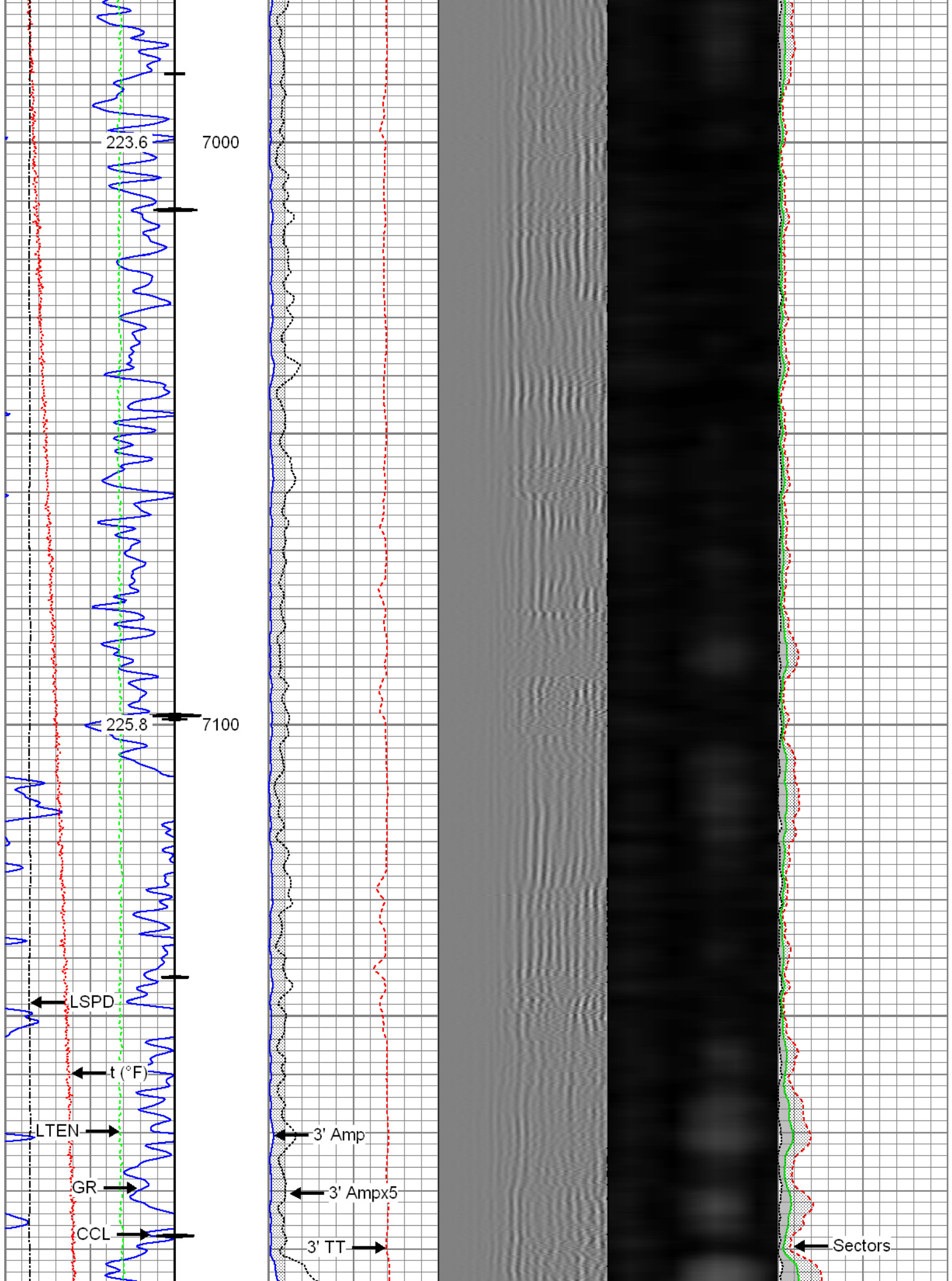


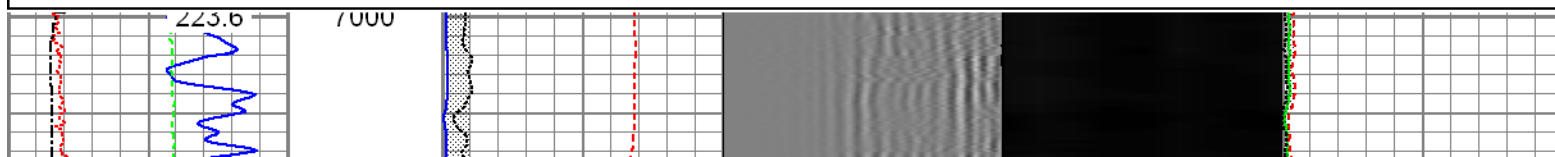
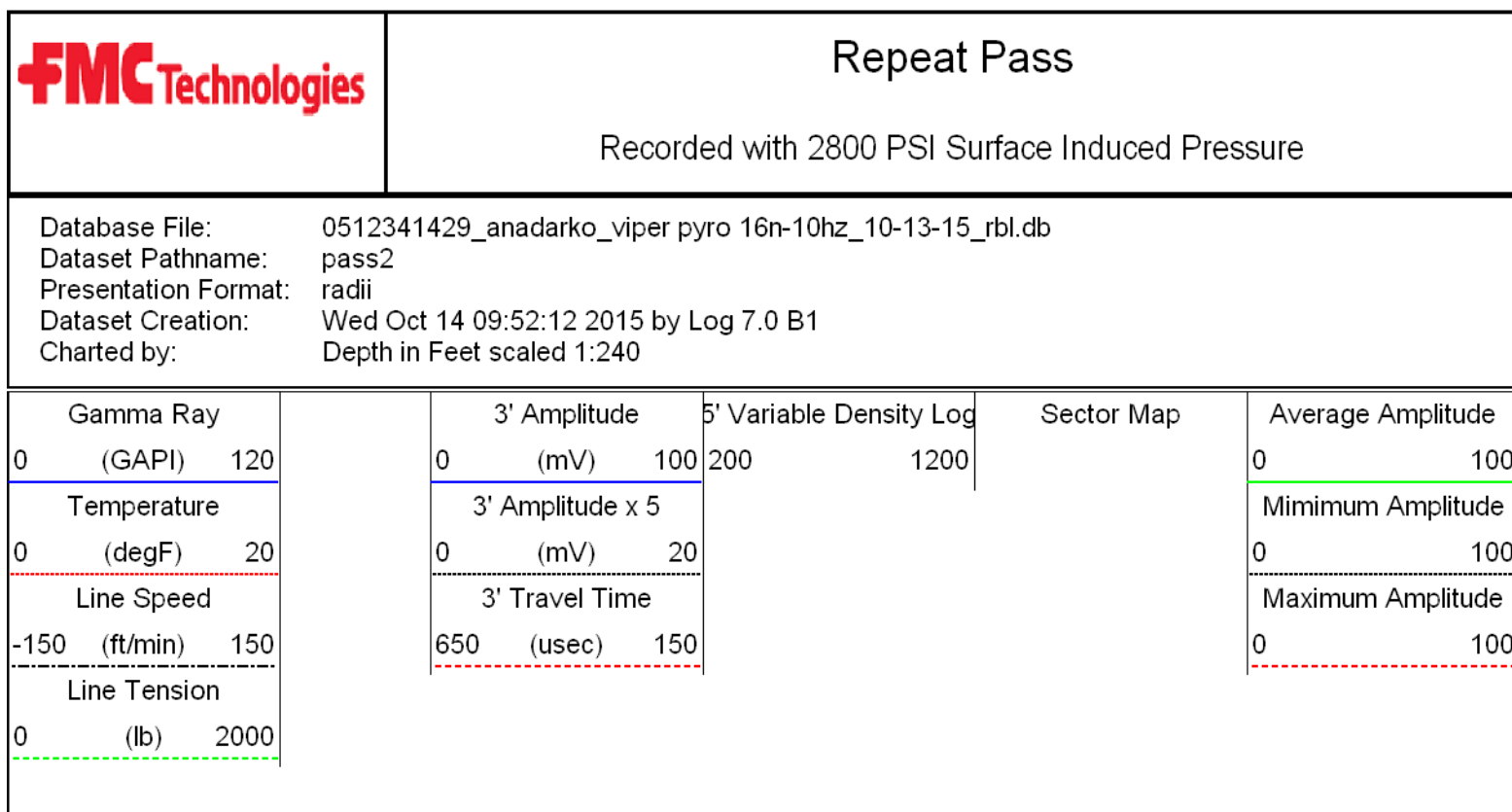
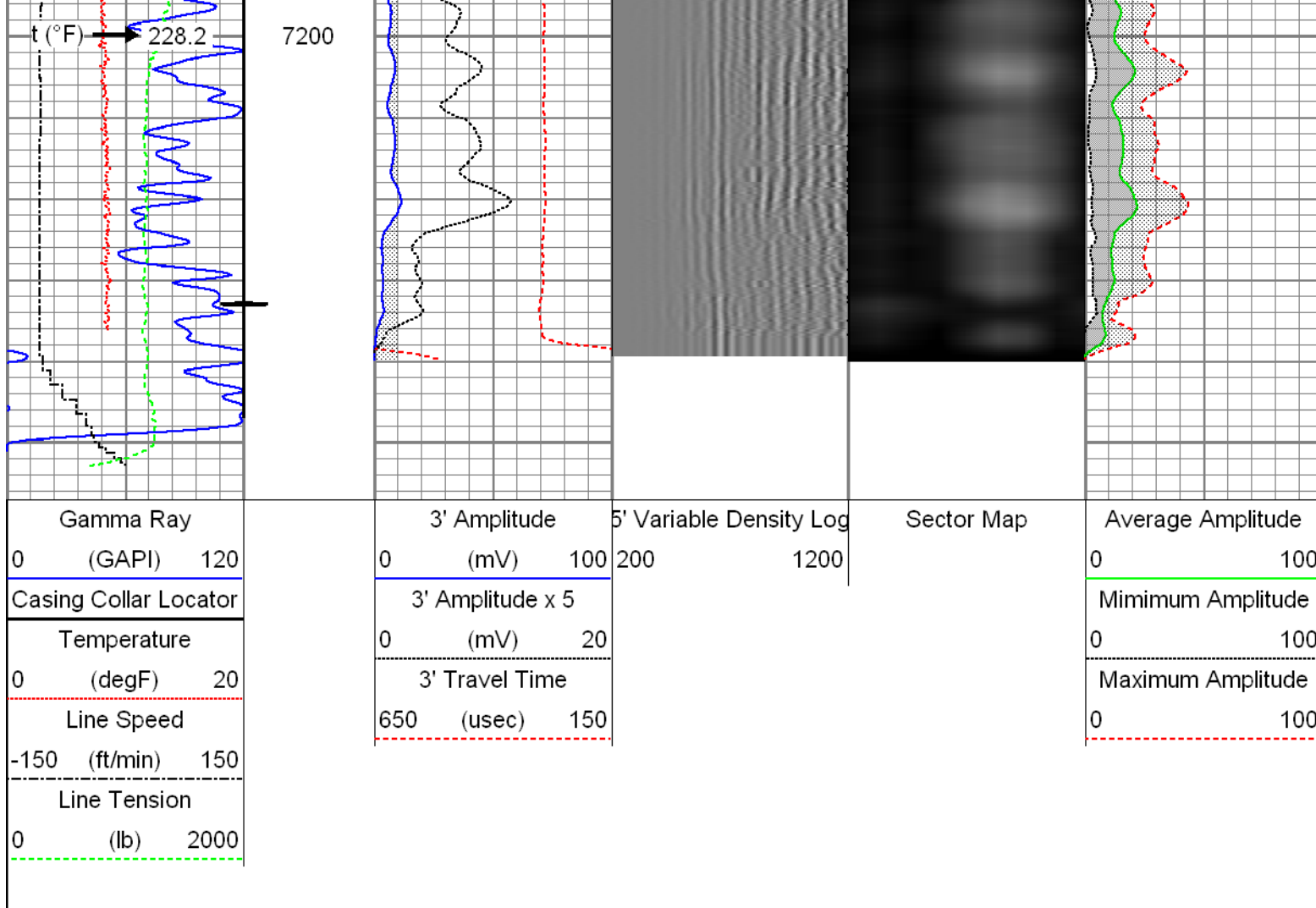


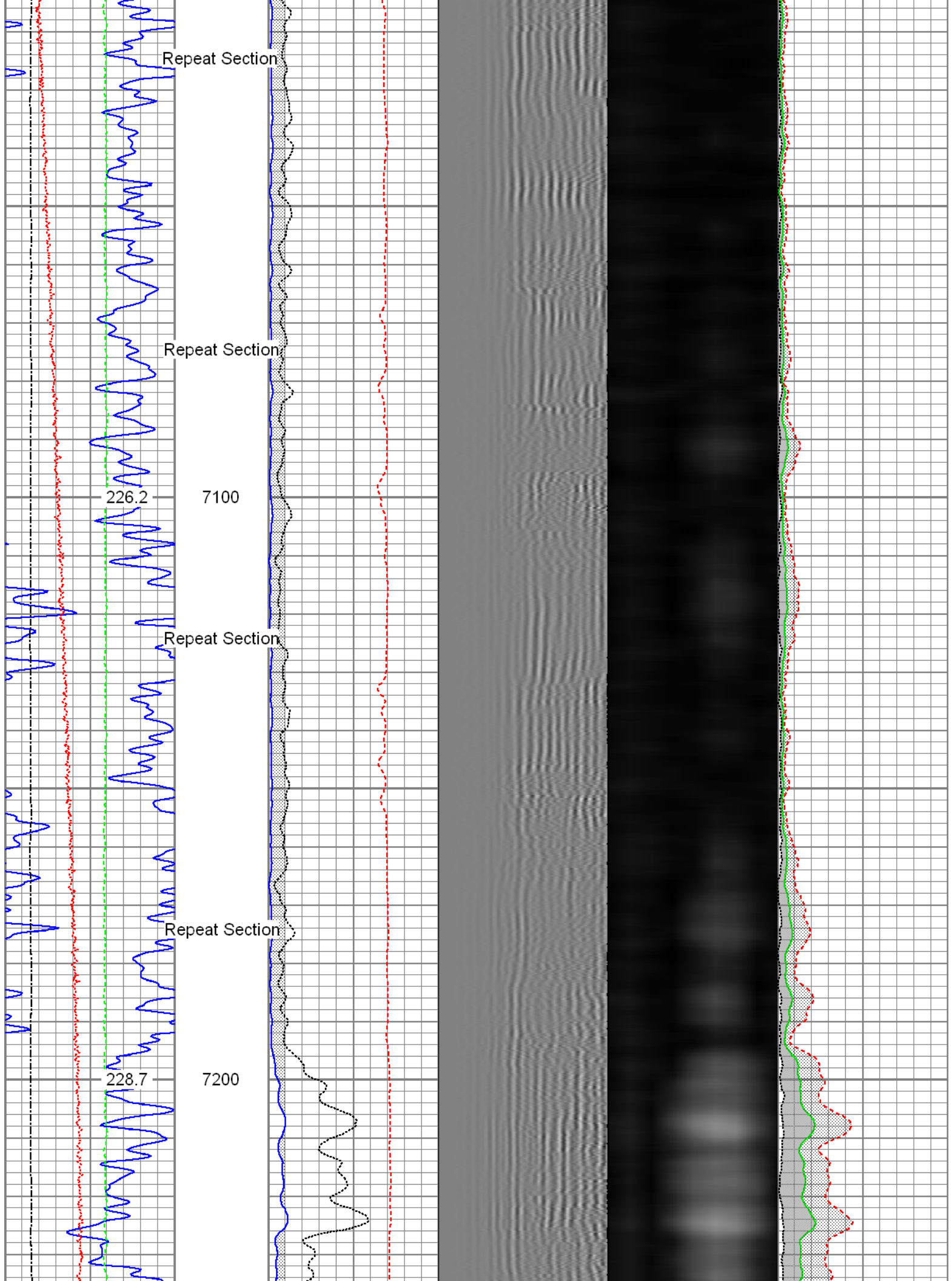


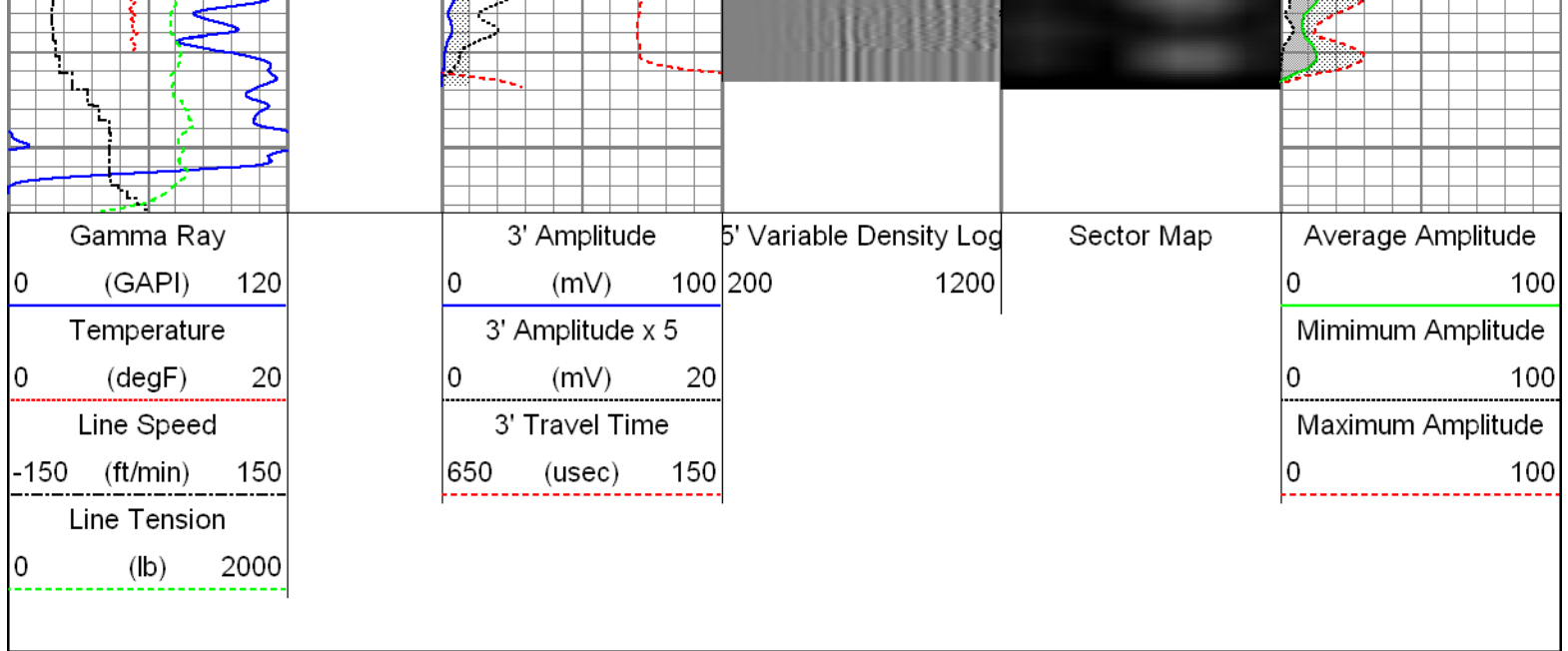




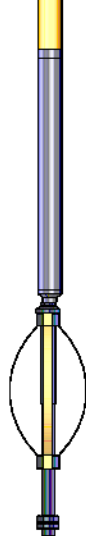








Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			T_CH14375_1_GO Titan 1-7/16" Assembled Electric Cable Head with 1" Fishing Neck	1.03	1.44	4.00
			Probe_IL_BS_Cent Probe 2-3/4" Inline Electrical Inline Bowspring Centralizer	2.88	2.75	10.00
HeadVolt	19.49					
Temp	16.72					
WVF3FT	14.55		Probe_RADII-C-2-3/4" (FW1302-002) 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		Probe_IL_BS_Cent Probe 2-3/4" Inline Electrical Inline Bowspring Centralizer	2.88	2.75	10.00

CCL DCCL	6.51 6.51		Probe_CCL_GR-2.75"Digital (FW1212-026) 4.54 Probe 2-3/4" Digital CCL / Gamma Ray Combined	2.75	55.00
GR	3.77		Probe_IL_BS_Cent Probe 2-3/4" Inline Electrical Inline Bowspring Centralizer	2.88	10.00
Dataset: 0512341429_Anadarko_Viper Pyro 16N-10HZ_10-13-15_RBL.db: field/well/run1/pass4 Total Length: 23.40 ft Total Weight: 194.00 lb O.D. 2.75 in					

Calibration Report	
Database File:	0512341429_Anadarko_Viper Pyro 16N-10HZ_10-13-15_RBL.db
Dataset Pathname:	pass4
Dataset Creation:	Wed Oct 14 09:56:31 2015 by Log 7.0 B1

Gamma Ray Calibration Report		
Serial Number:	FW1212-026	
Tool Model:	2.75"Digital	
Performed:	Tue Oct 13 15:23:30 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:	FW1302-002	
Tool Model:	2-3/4"	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	7218.766	ft

Master Calibration, performed Wed Oct 14 07:54:11 2015:						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.010	0.602	0.800	71.921	120.032	-0.362
CAL	0.010	0.720				
5'	0.010	0.535	0.800	71.921	135.500	-0.520
SUM						
S1	0.010	0.554	0.000	100.000	183.706	-1.765
S2	0.010	0.540	0.000	100.000	188.413	-1.819
S3	0.010	0.566	0.000	100.000	179.799	-1.732
S4	0.009	0.606	0.000	100.000	167.536	-1.585
S5	0.010	0.662	0.000	100.000	153.322	-1.492

S6	0.010	0.674	0.000	100.000	150.624	-1.465
S7	0.010	0.643	0.000	100.000	157.924	-1.544
S8	0.010	0.596	0.000	100.000	170.482	-1.657

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	0.010	0.720	1.000	0.000

Air Zero Calibration, performed Wed Oct 14 07:54:30 2015:

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



Company Kerr-McGee Oil and Gas Onshore LP
Well Viper Pyro 16N-10HZ
Field Wattenberg
County Weld
State Colorado