



Radial Cement Bond  
Gamma Ray  
Casing Collar Log

Company	Kerr-McGee Oil and Gas Onshore LP		
Well	Carter 14N-33HZ		
Field	Wattenberg		
County	Weld		
State	Colorado		
Company		Kerr-McGee Oil and Gas Onshore LP	
Well		Carter 14N-33HZ	
Field		Wattenberg	
County		Weld	State Colorado
Location:		API # : 05-123-41552	Other Services
SEC 33 TWP 2N RGE 66W			JB/GR
Permanent Datum	Ground Level	Elevation	4960'
Log Measured From	Kelly Bushing	16 FT	K.B. 4976' D.F. --- G.L. 4960'
Drilling Measured From	Kelly Bushing		

Date	03-NOV-2015
Run Number	Two
Depth Driller	12699 FT
Depth Logger	7590 FT
Bottom Logged Interval	7586 FT
Top Log Interval	Surface
Open Hole Size	7.875"
Type Fluid	Water
Density / Viscosity	8.34 lbm/gal
Max. Recorded Temp.	237°F
Estimated Cement Top	Surface
Time Well Ready	ROA
Time Logger on Bottom	10:30 AM
Equipment Number	HD-0255
Location	Ft. Lupton, CO
Recorded By	R. Cameron
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 LT&C	Surface	1851 FT		
Intermediate #1	5 1/2	17	HCP-110 LT&C	Surface	12699 FT		
Intermediate #2							
Liner							

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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 16 FT  
Casing Tally reported Marker Joint at 6900 FT  
Recorded Marker Joint at 6850 FT  
Gauge Ring/Junk Basket ran to 7590 FT with no debris found  
Log ran from 7510 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: c:\warrior\data\0512341552\_anadarko\_carter 14n-33hz\_11-03-15\_rbl\processed\_0512341552\_anada

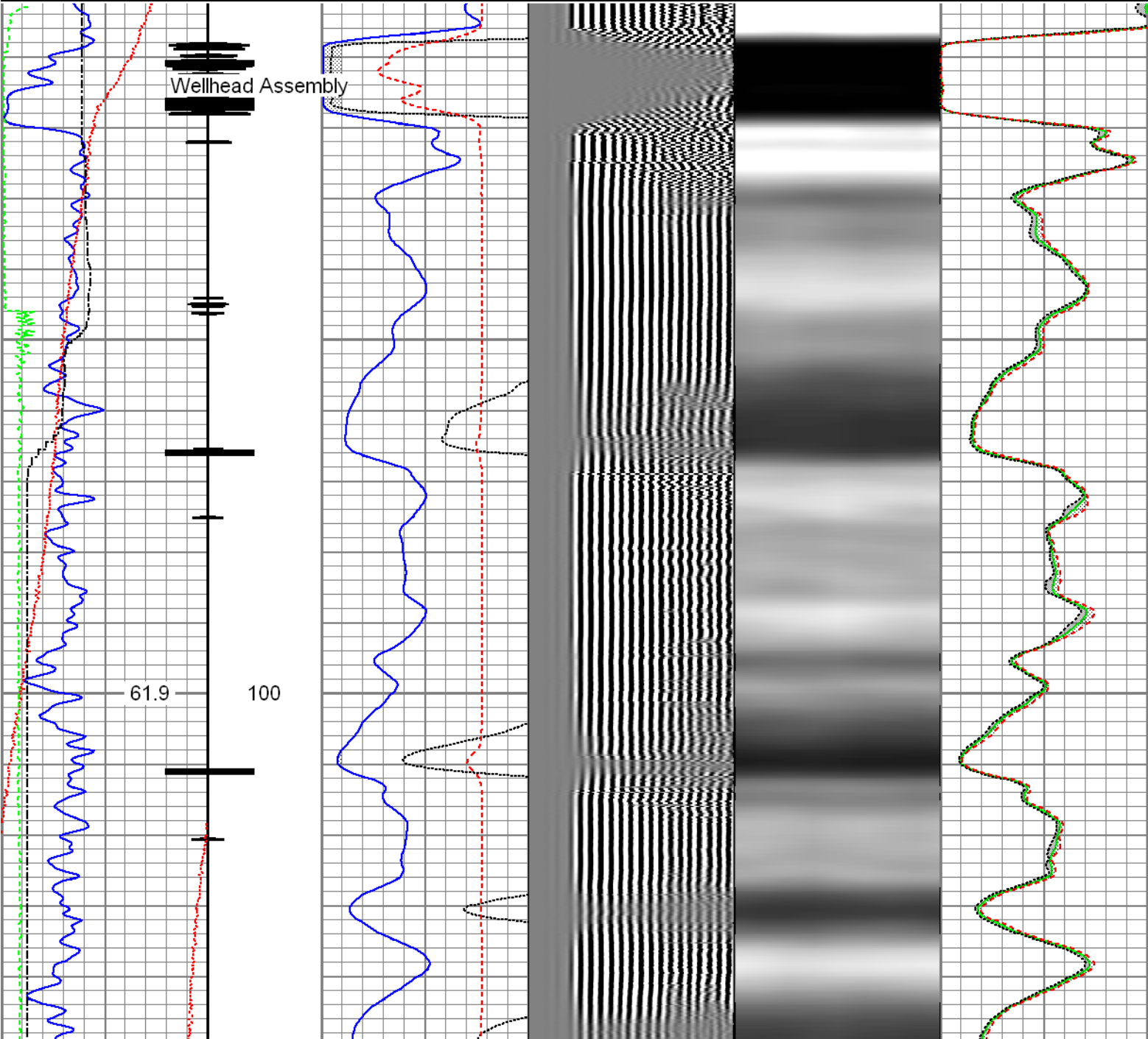
Dataset Pathname: pass7

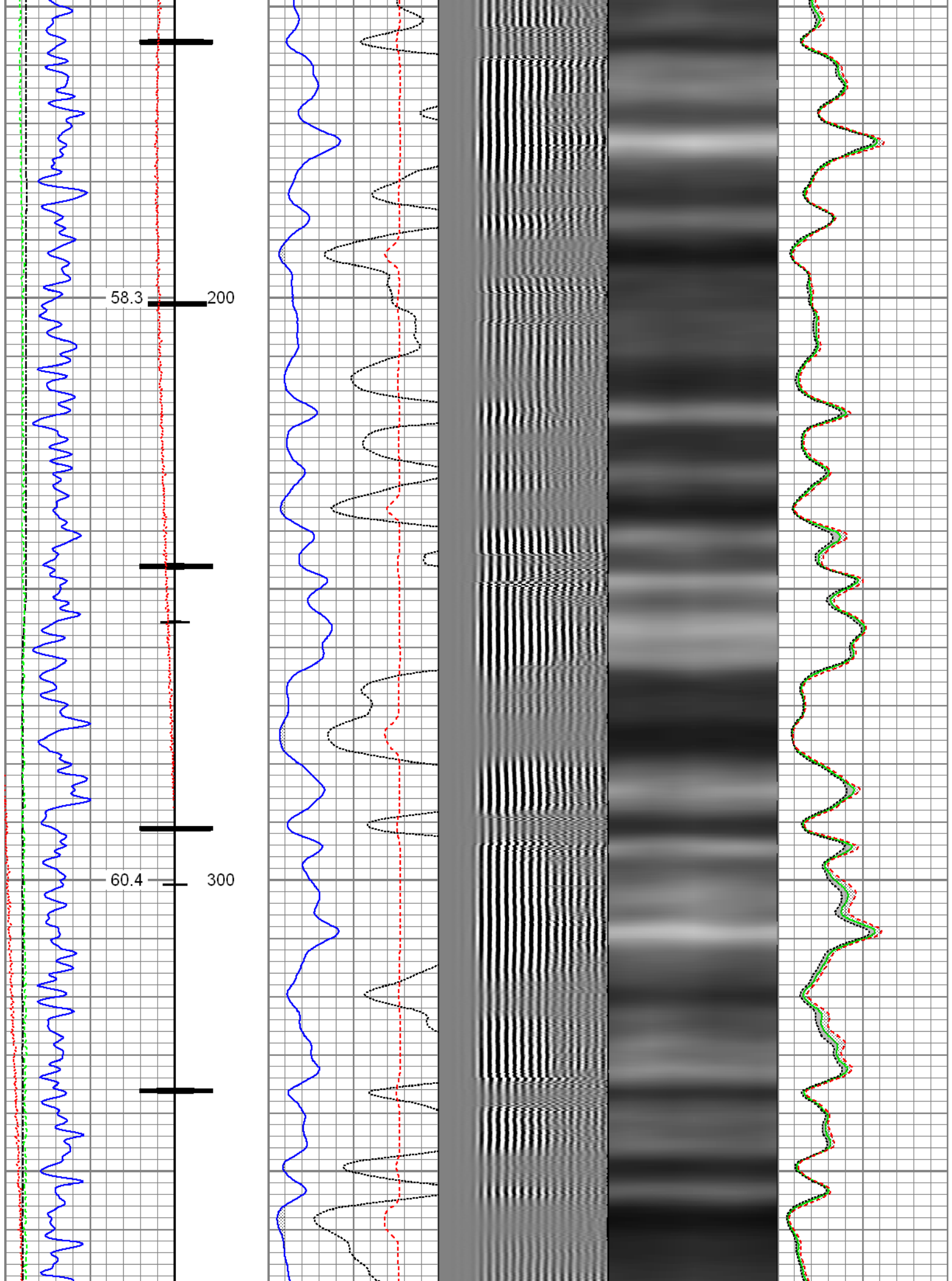
Presentation Format: radii

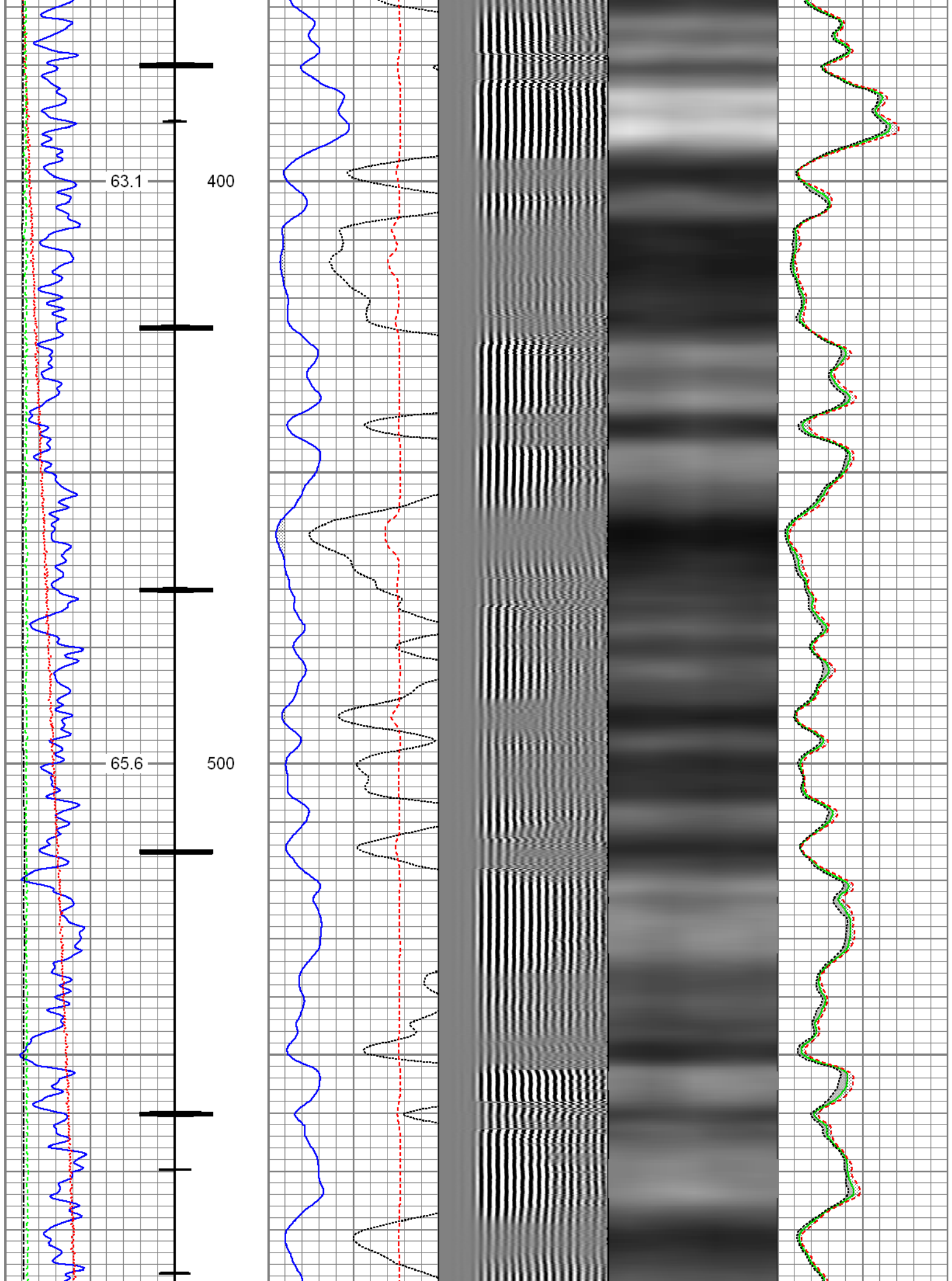
Dataset Creation: Tue Nov 03 10:36:00 2015 by Log 7.0 B1

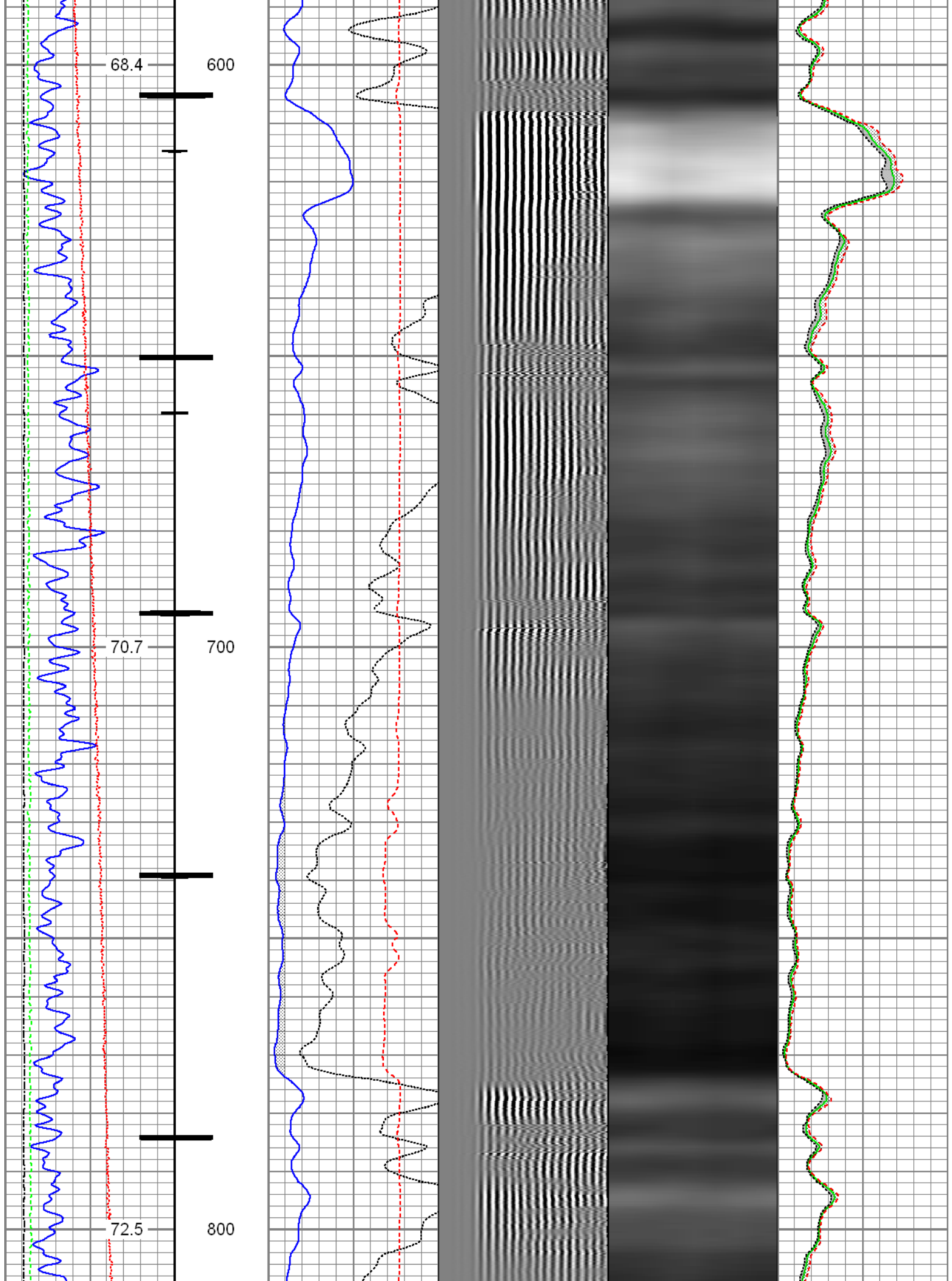
Charted by: Depth in Feet scaled 1:240

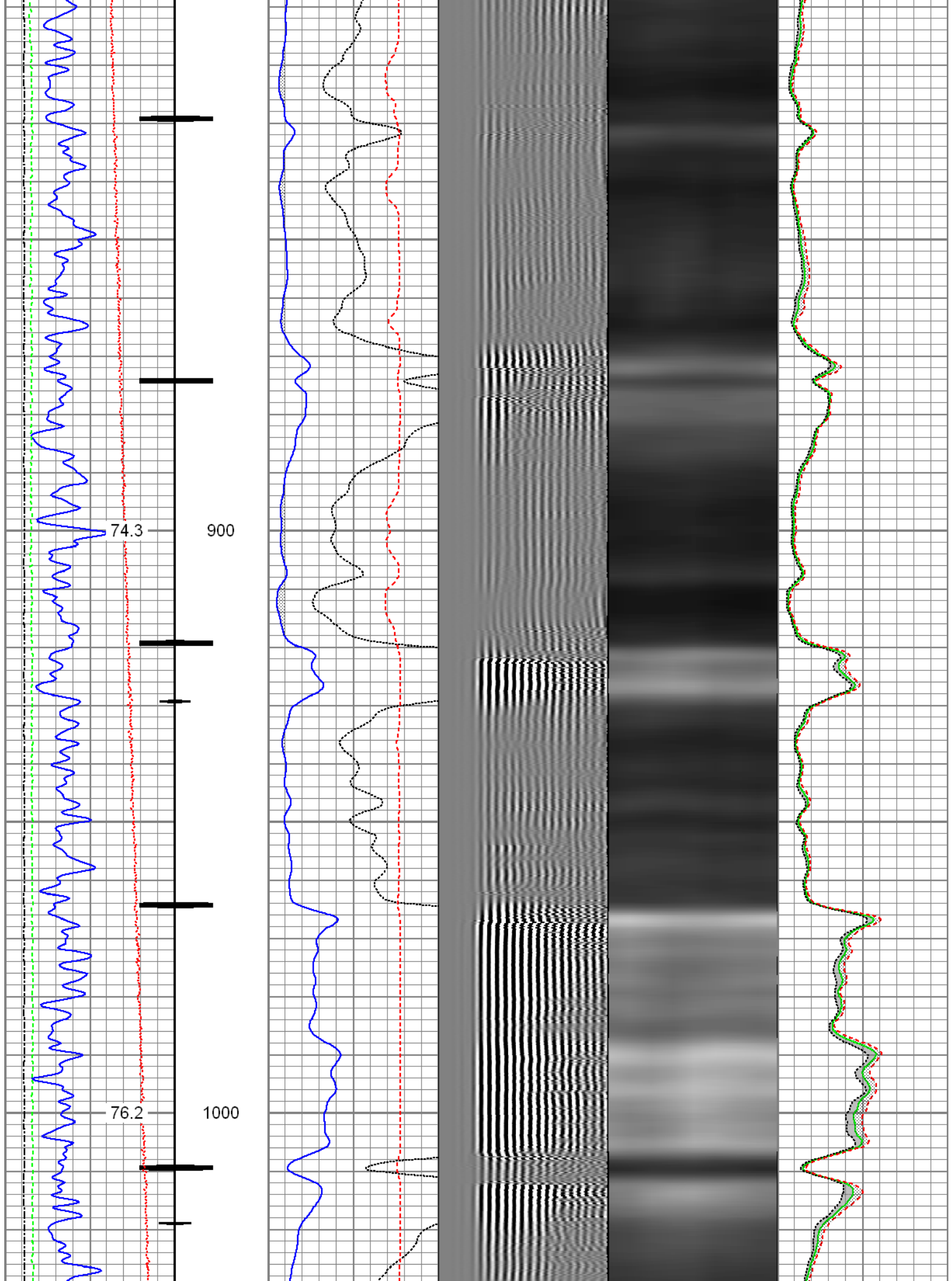
Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120	0 (mV) 100	200 1200		0 100
Casing Collar Locator	3' Amplitude x 5			Minimum Amplitude
Temperature	0 (mV) 20			0 100
0 (degF) 20	3' Travel Time			Maximum Amplitude
Line Speed	650 (usec) 150			0 100
-150 (ft/min) 150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

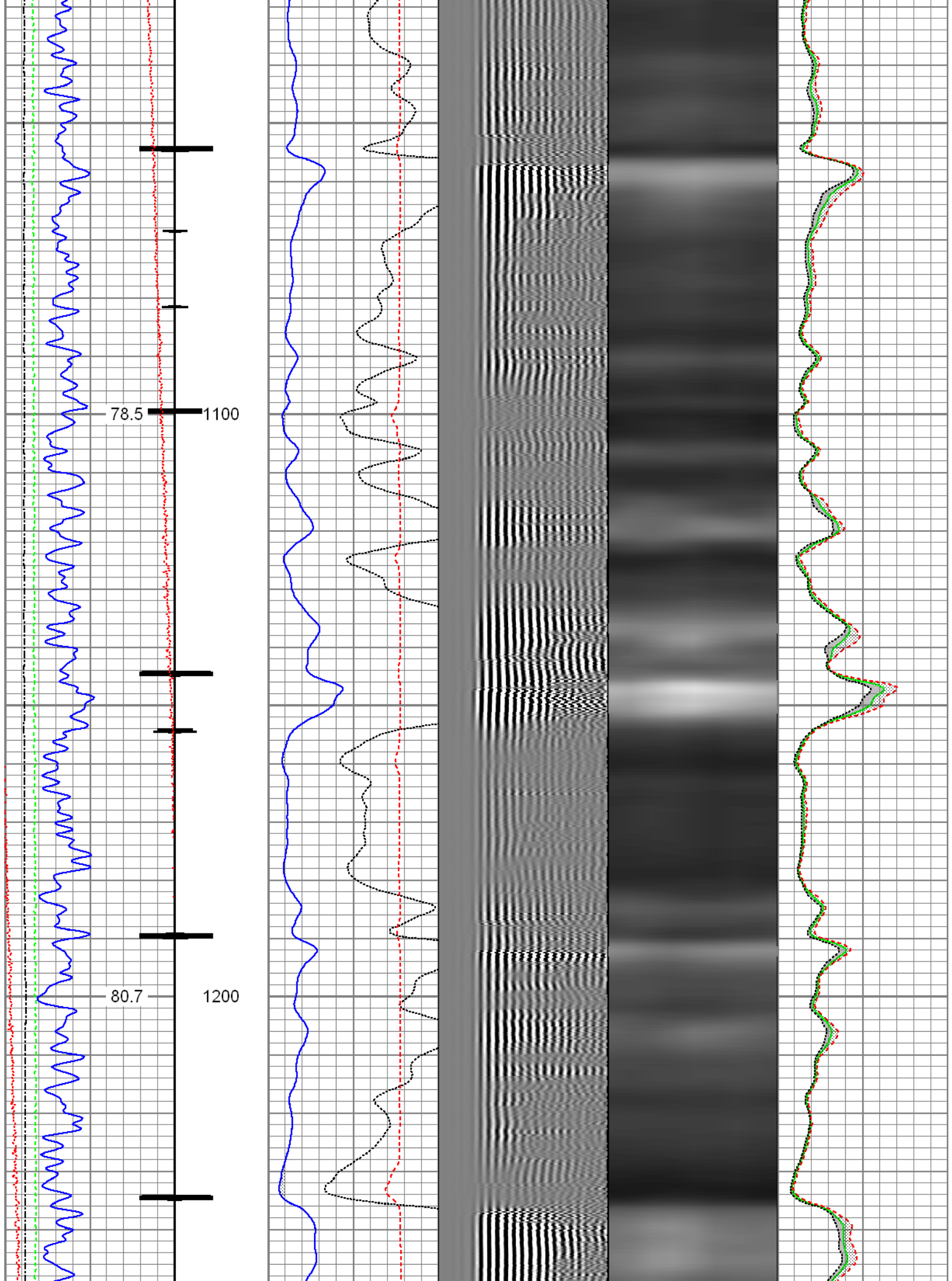


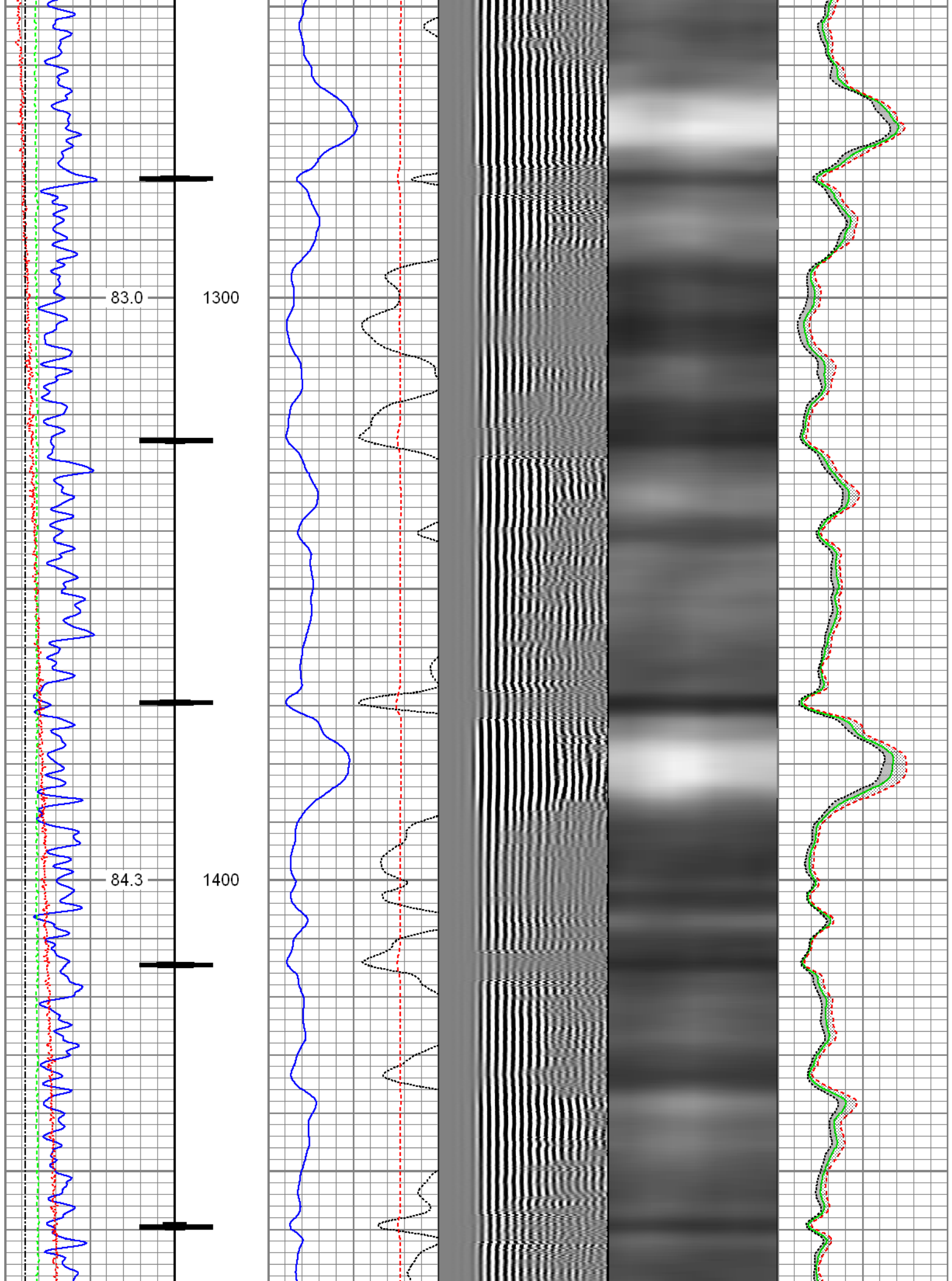


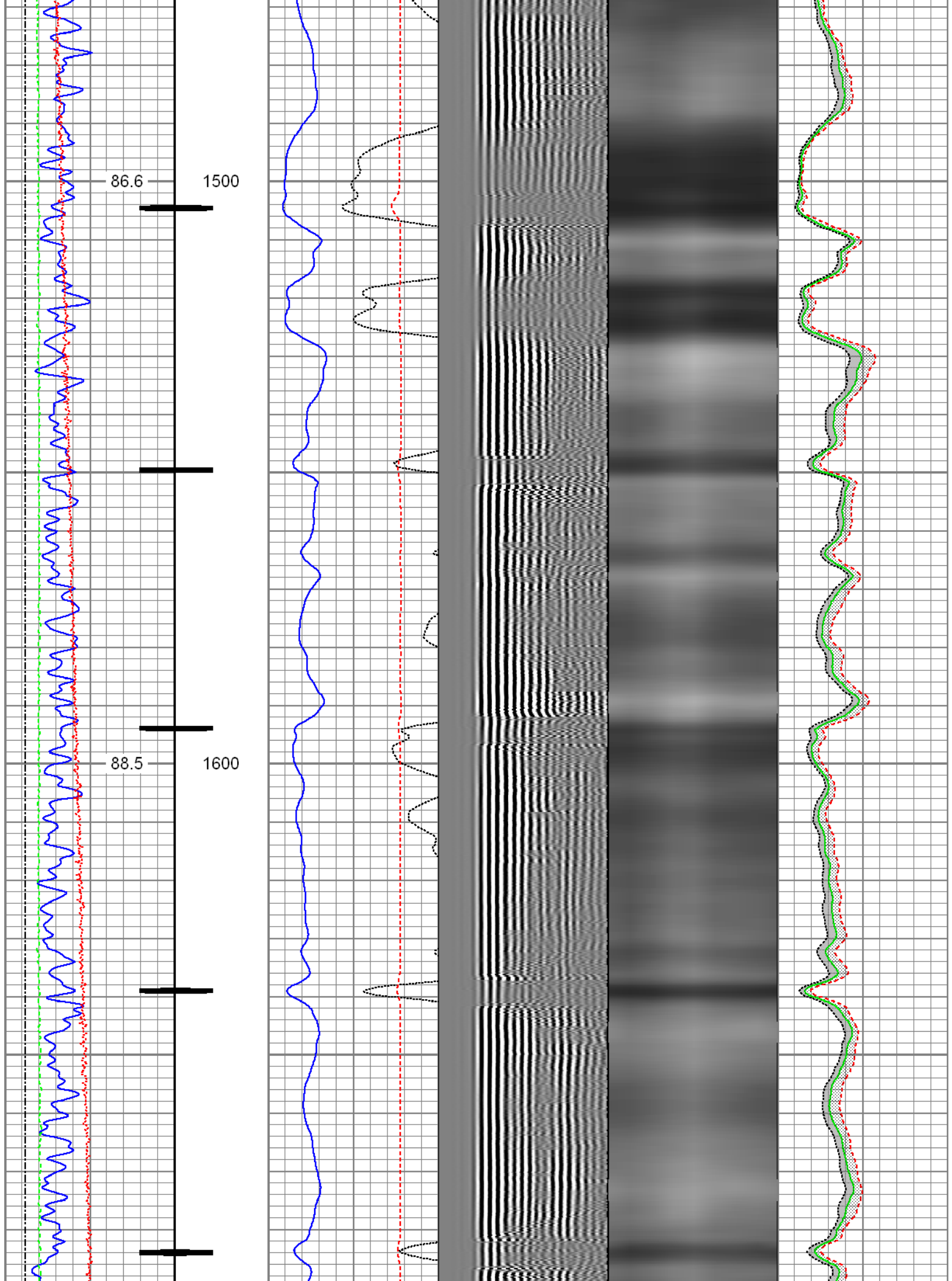


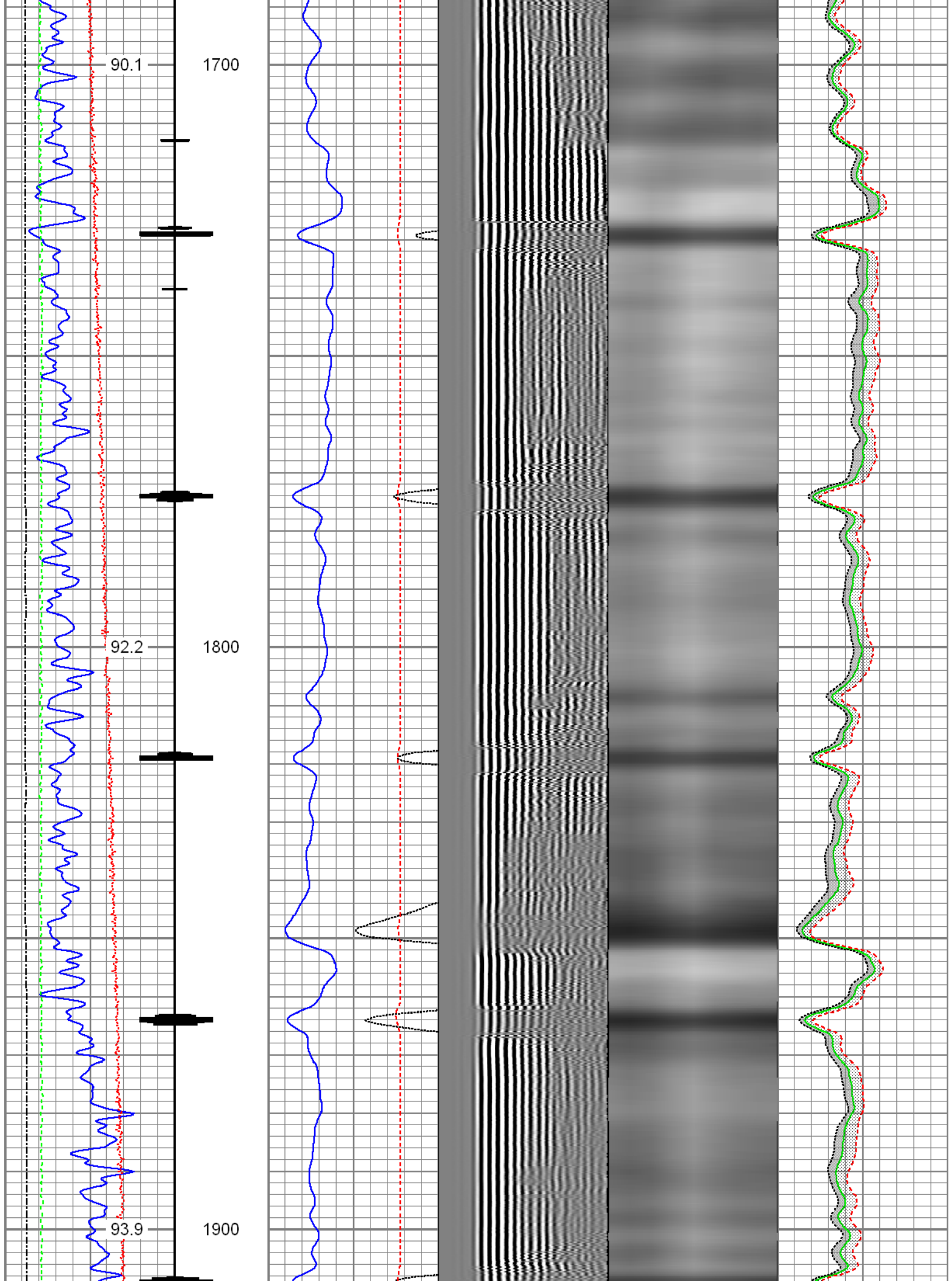


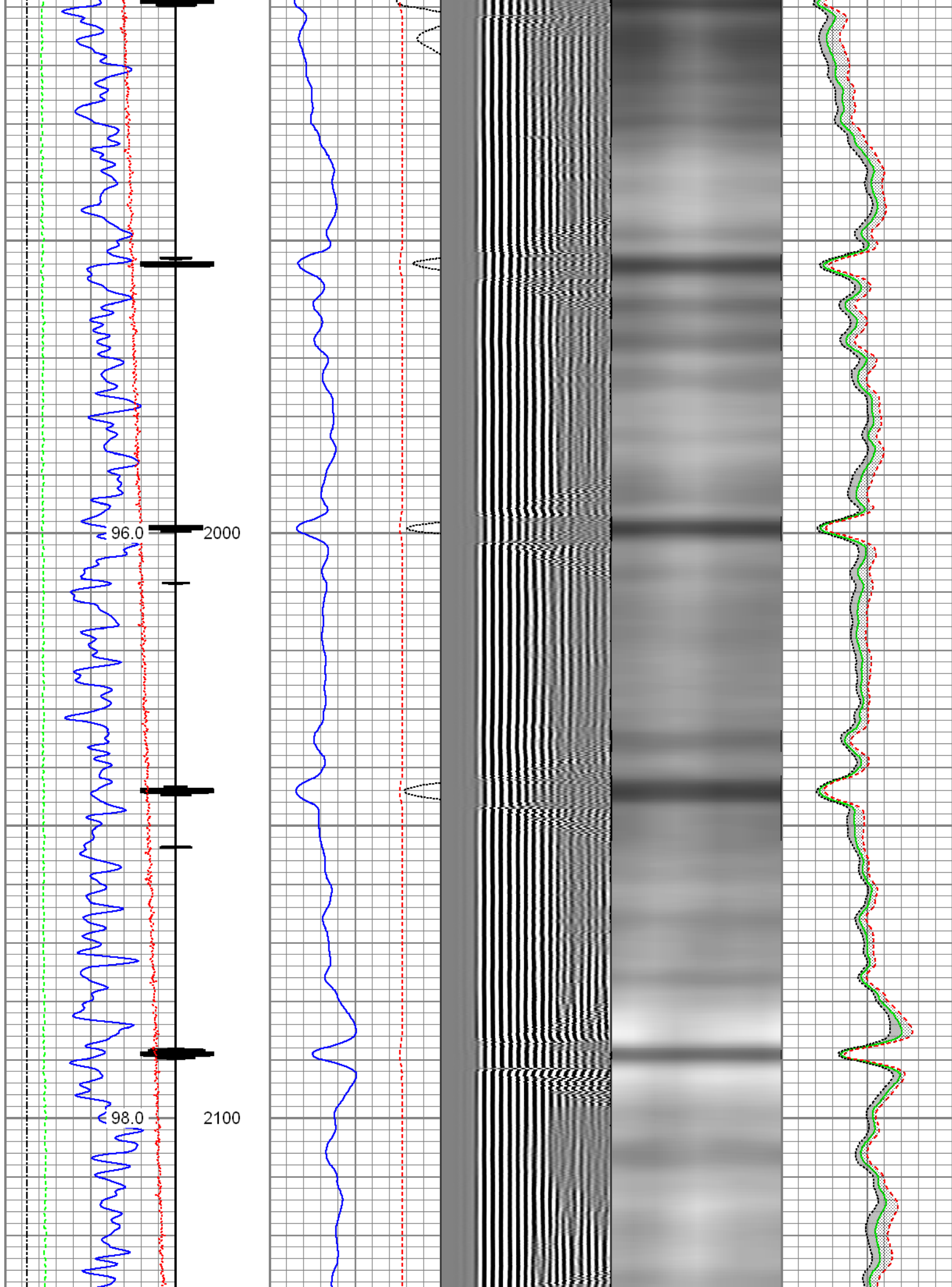


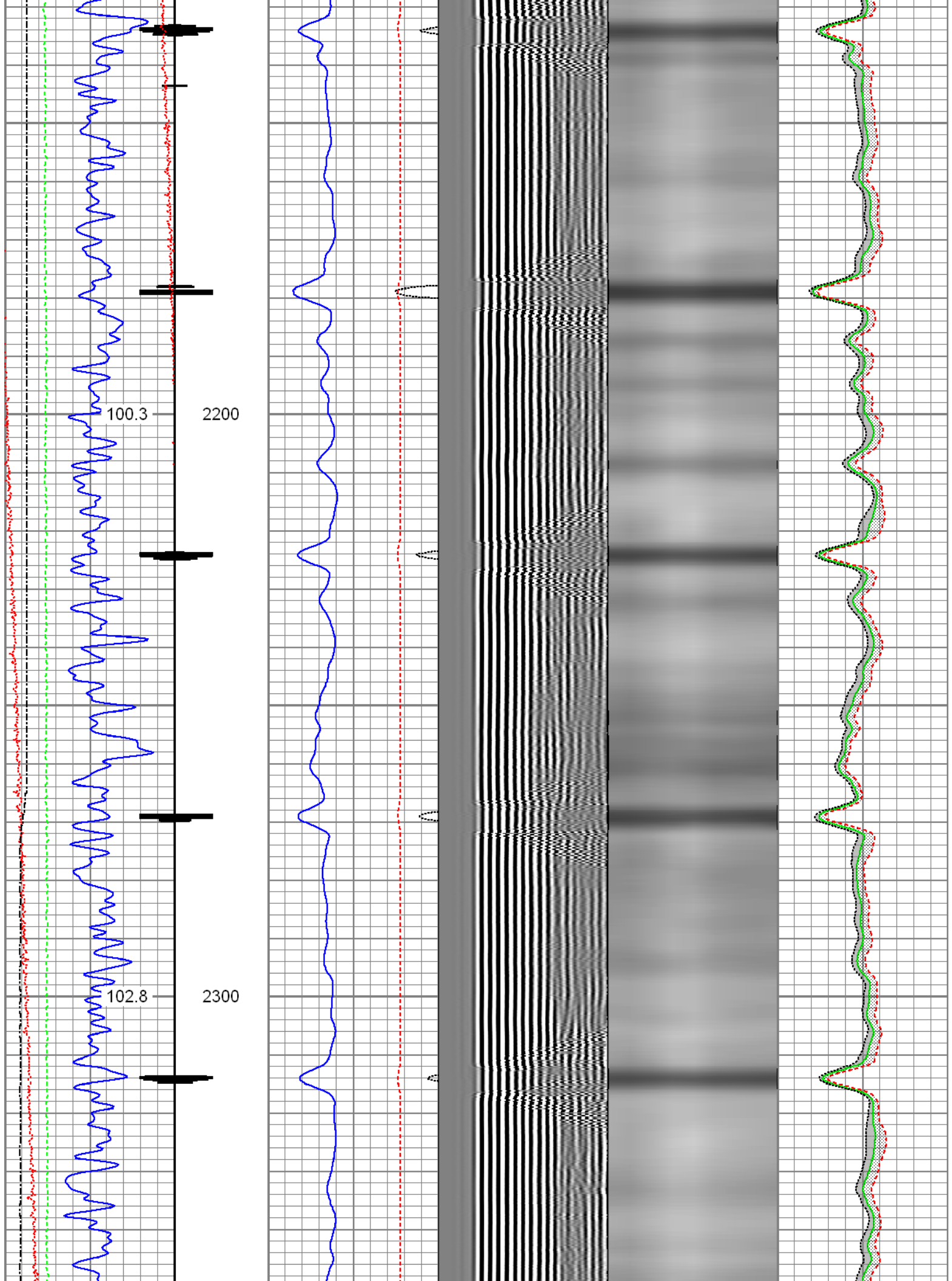


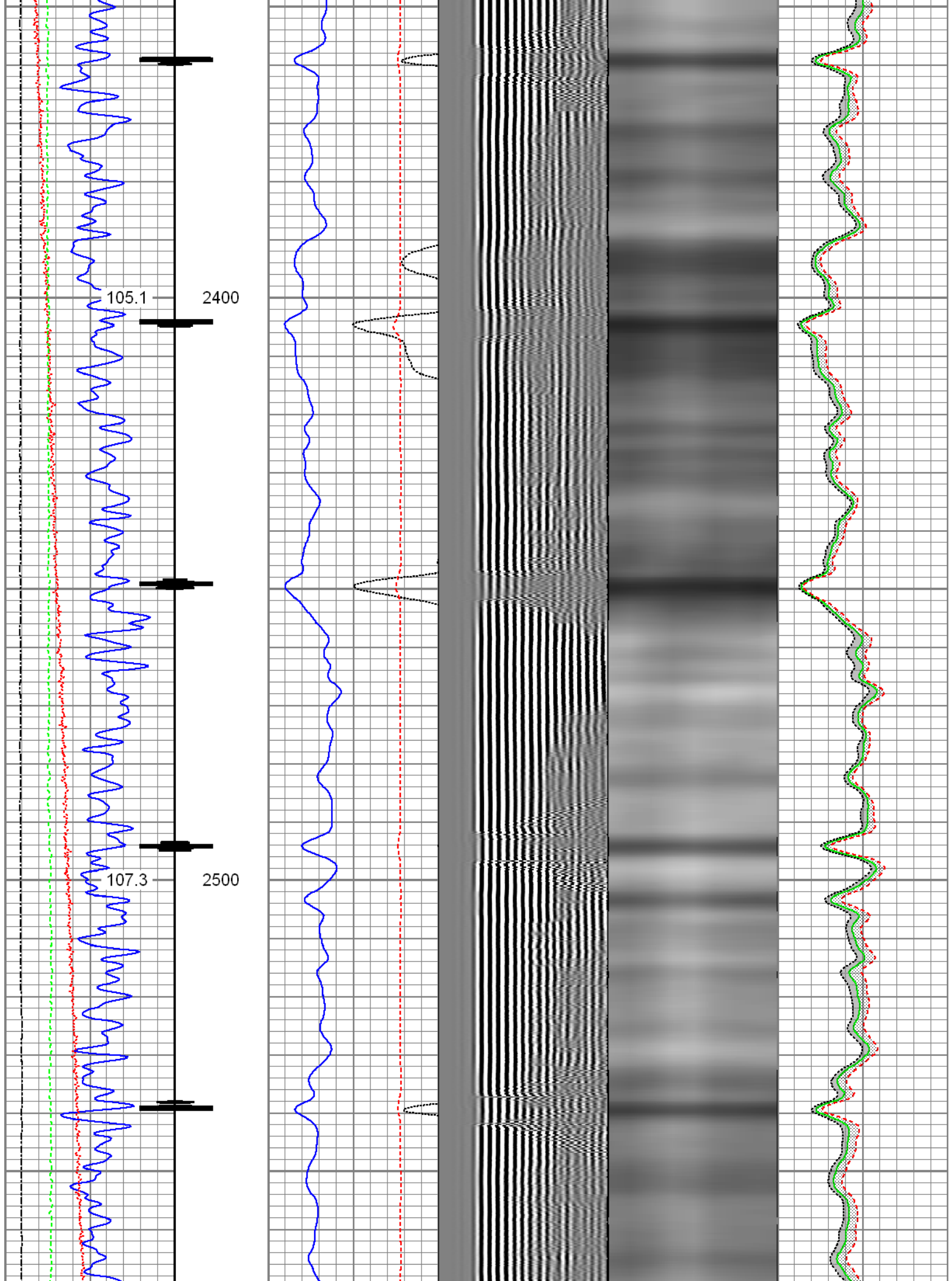


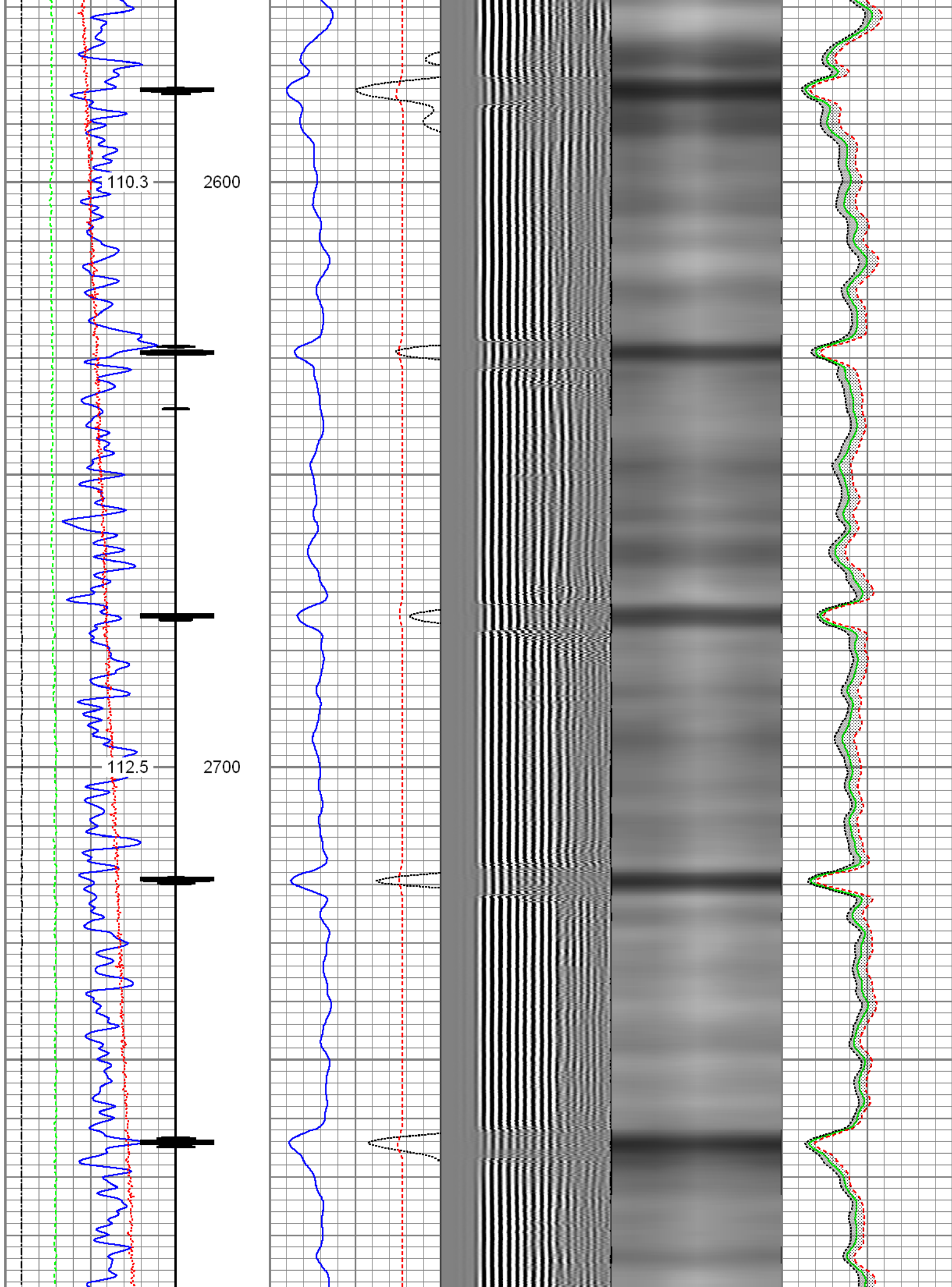


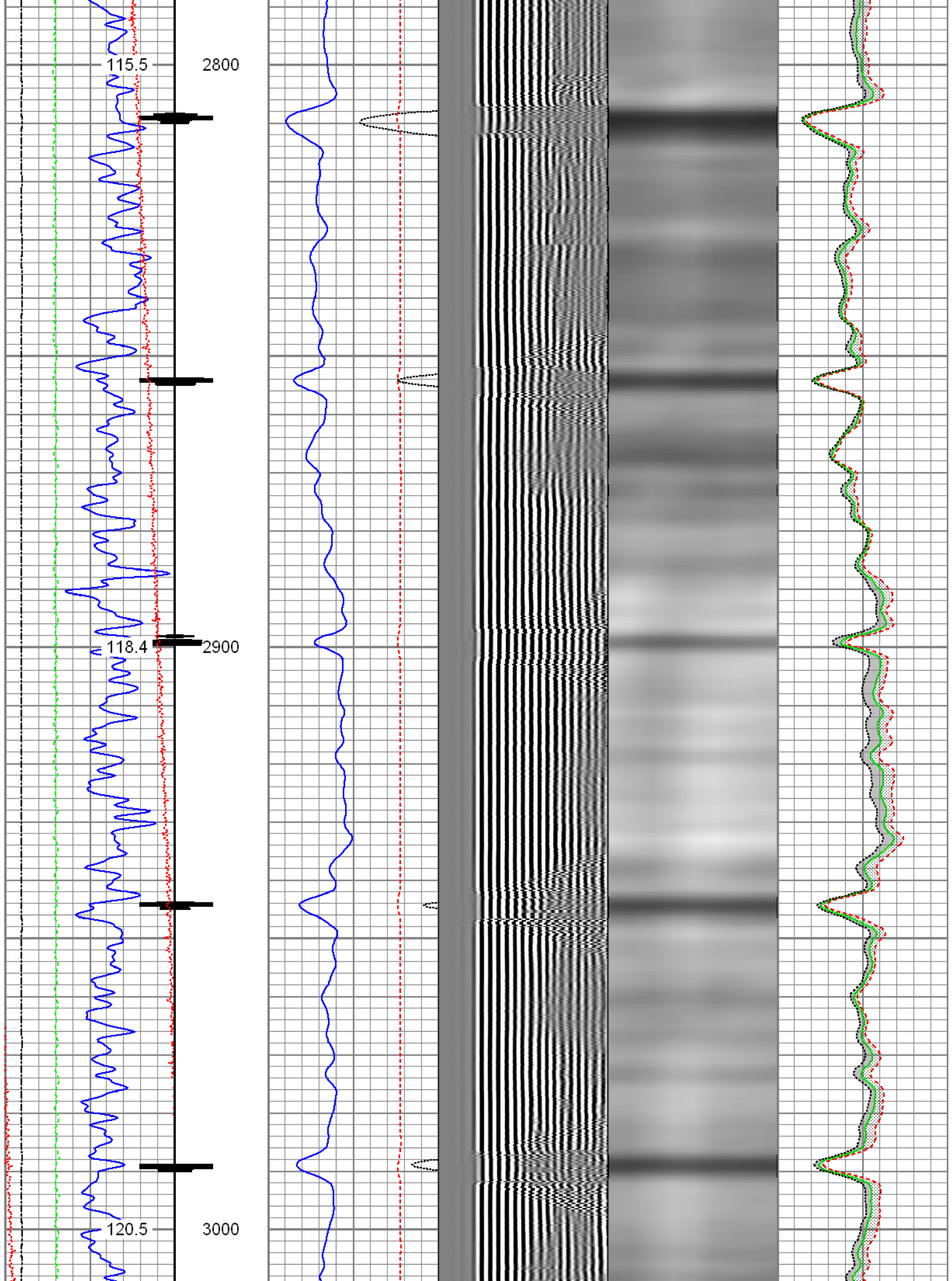


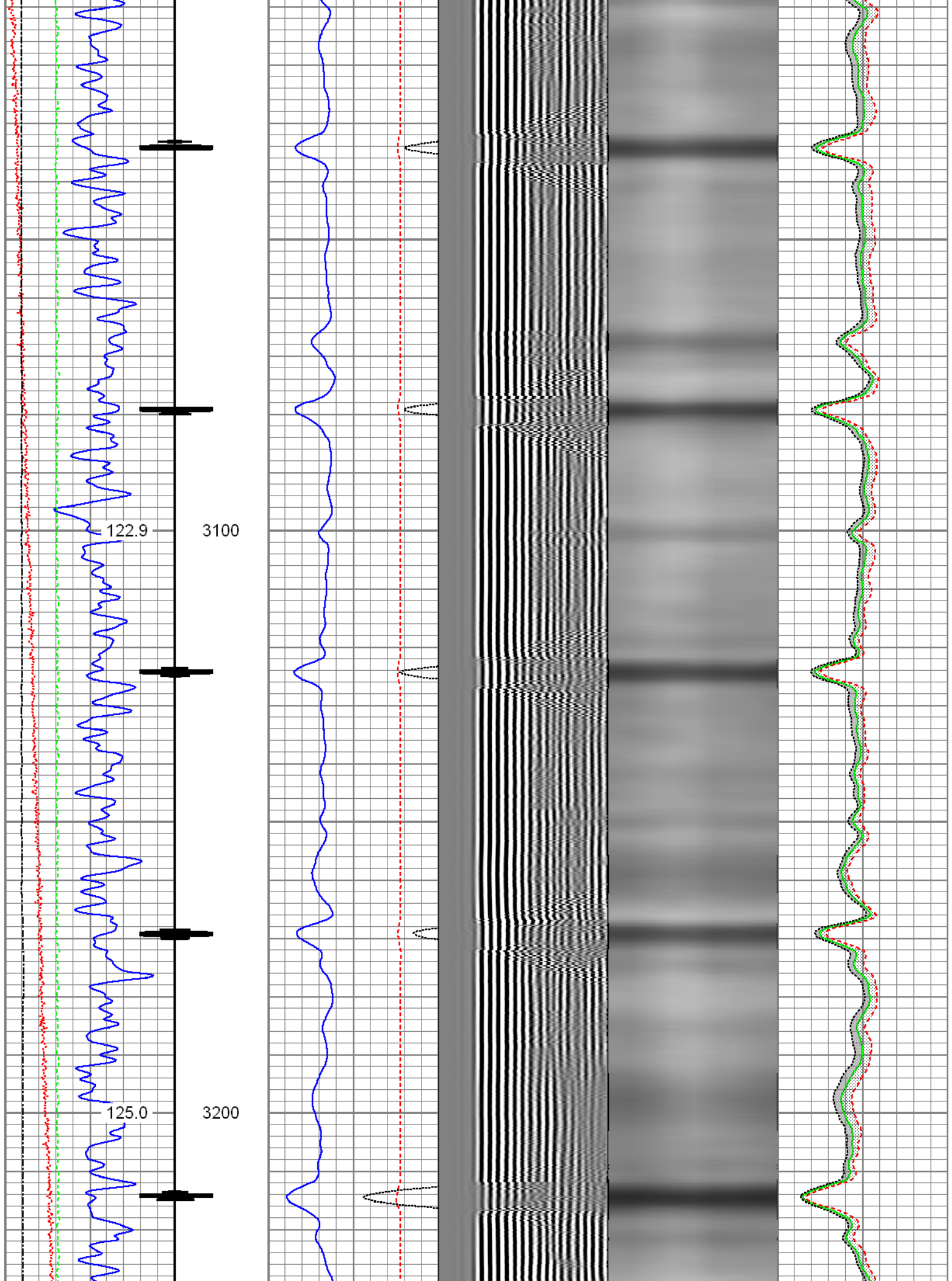


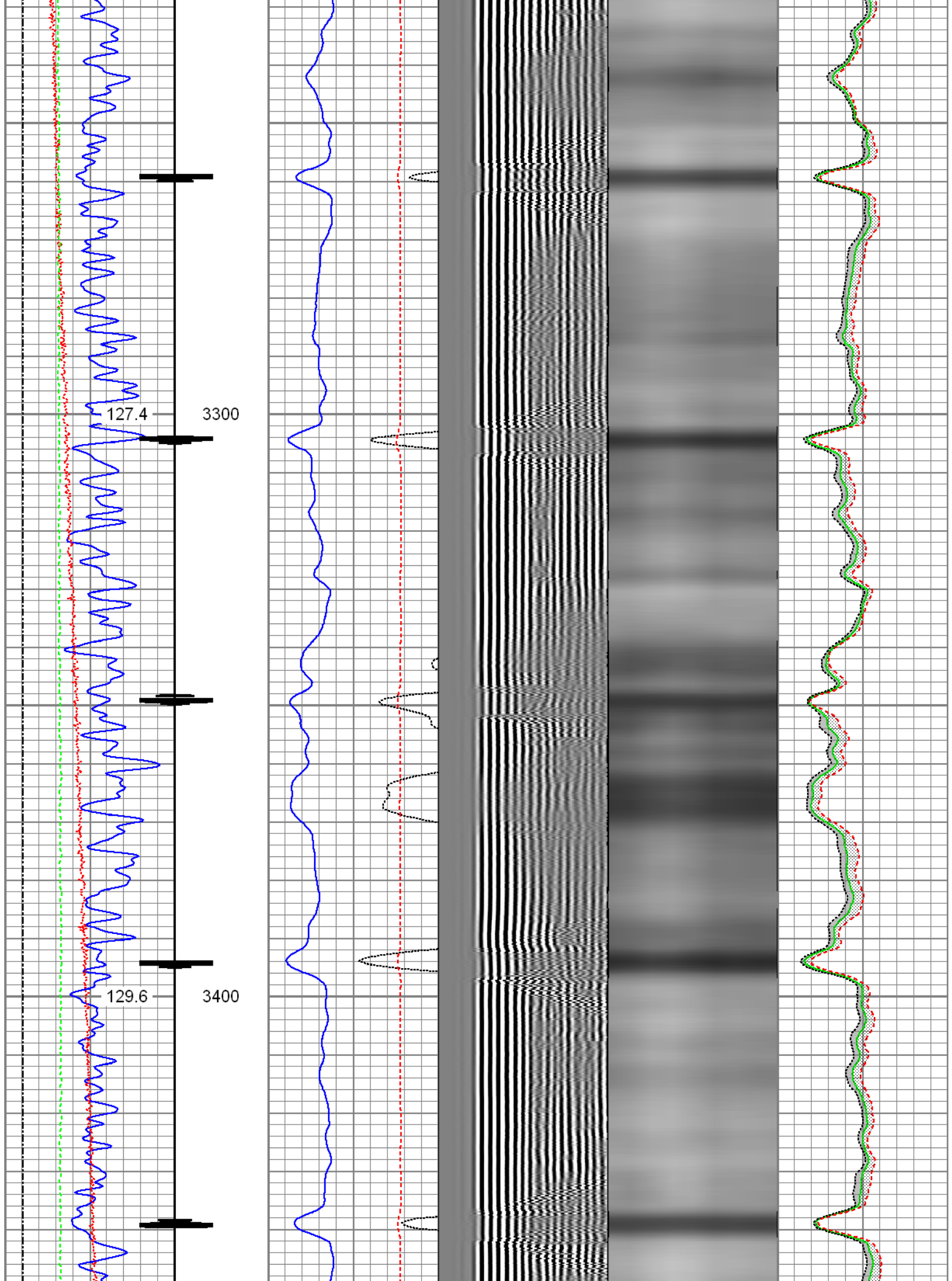


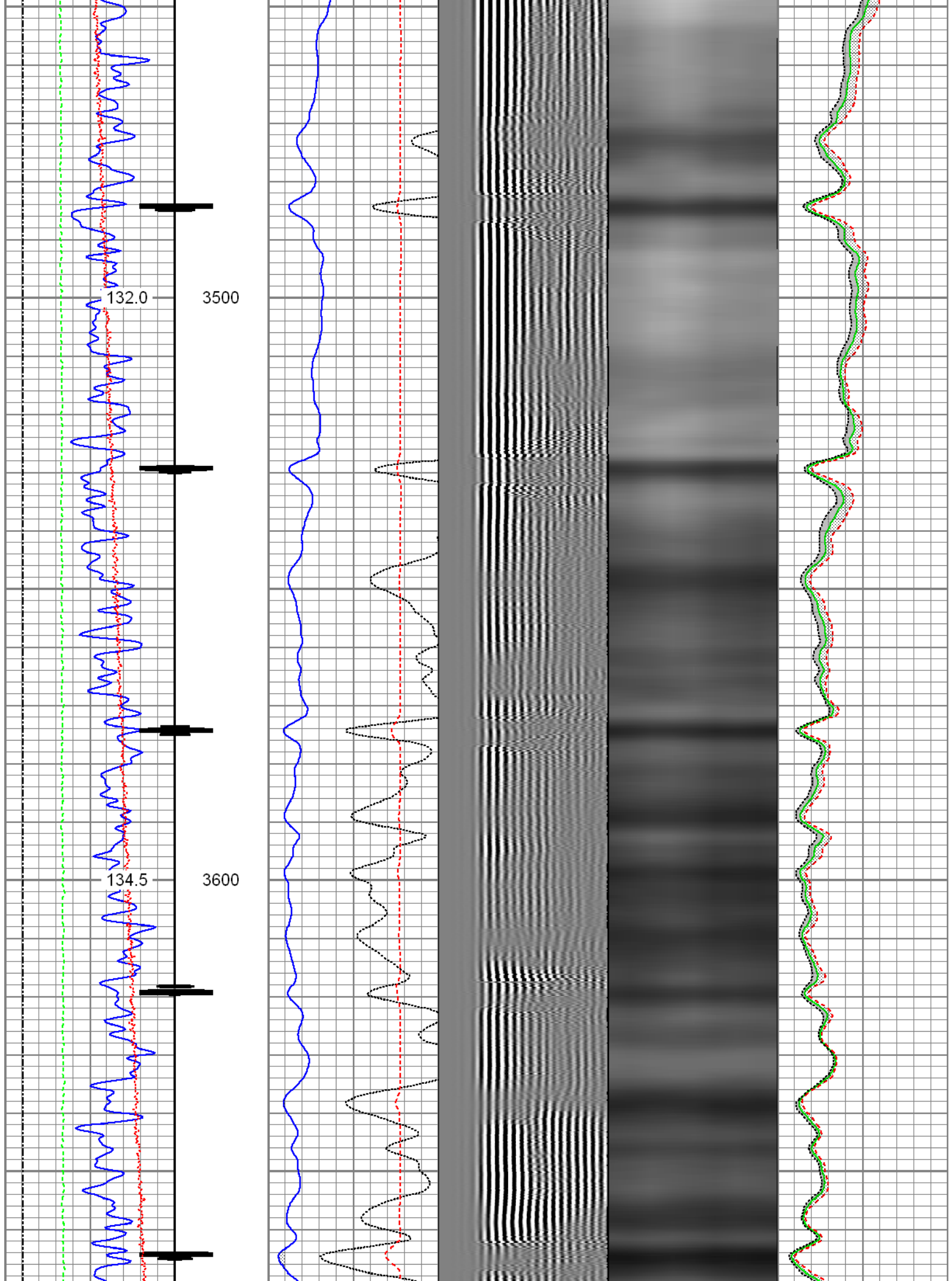


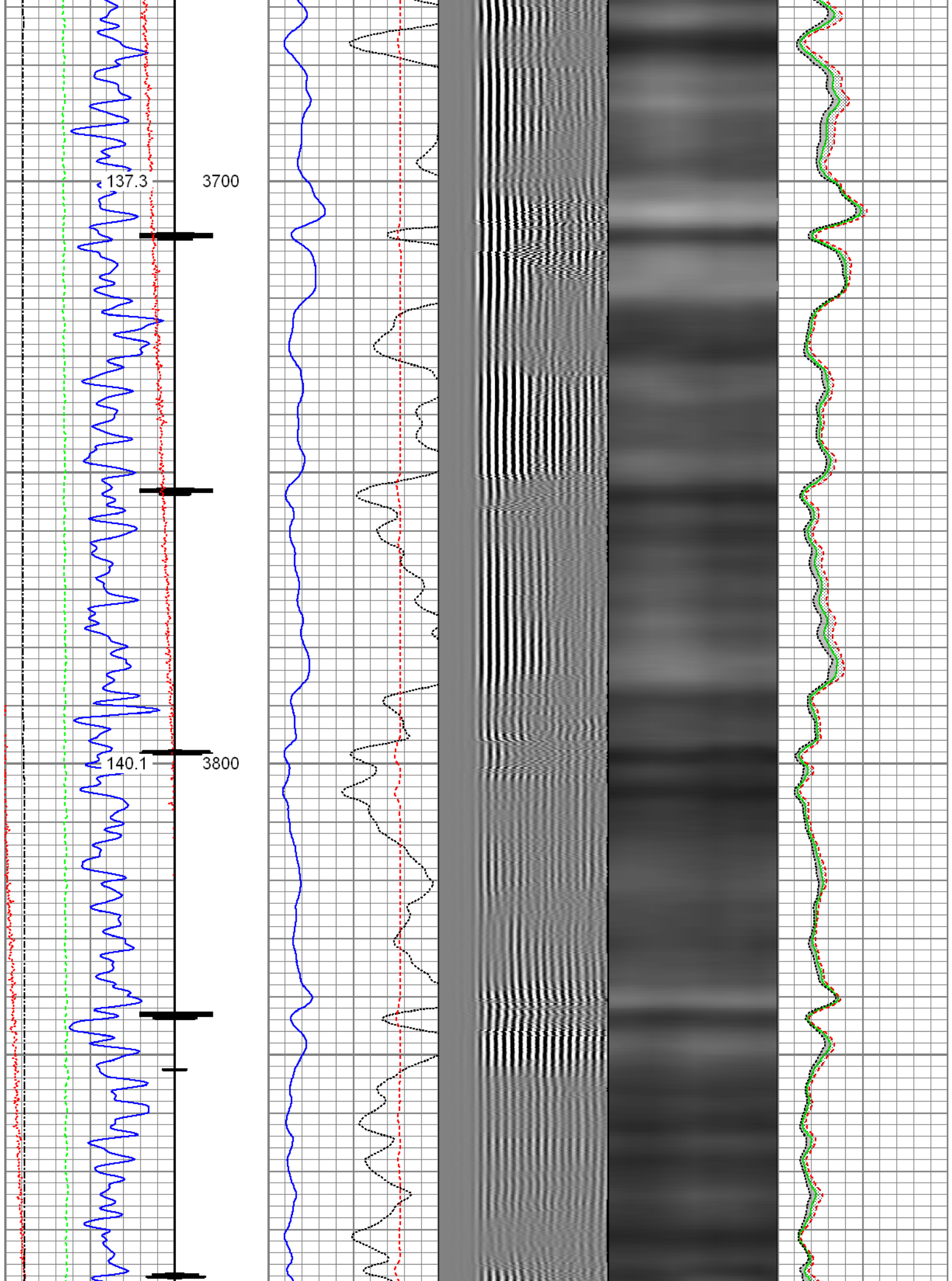


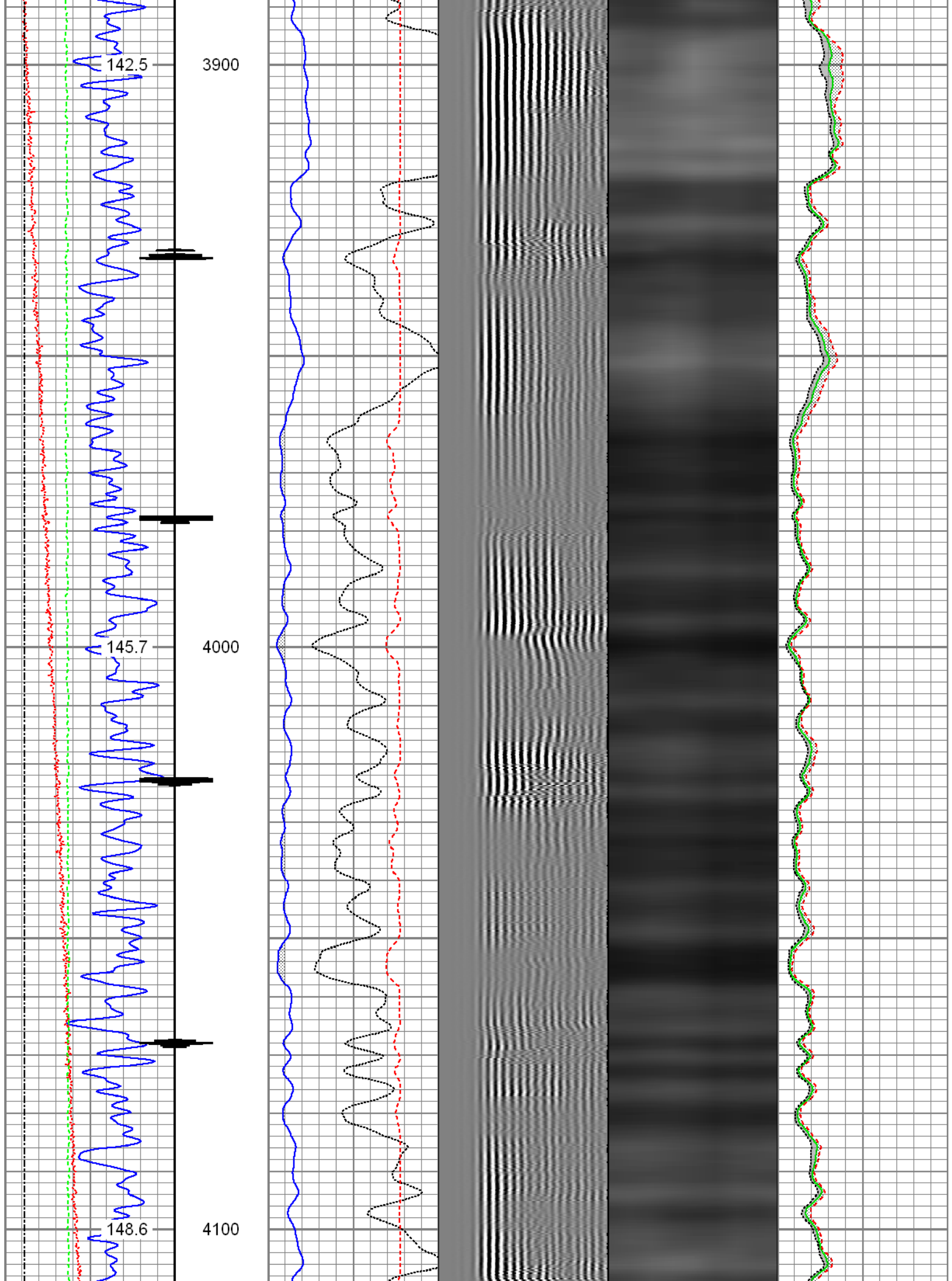


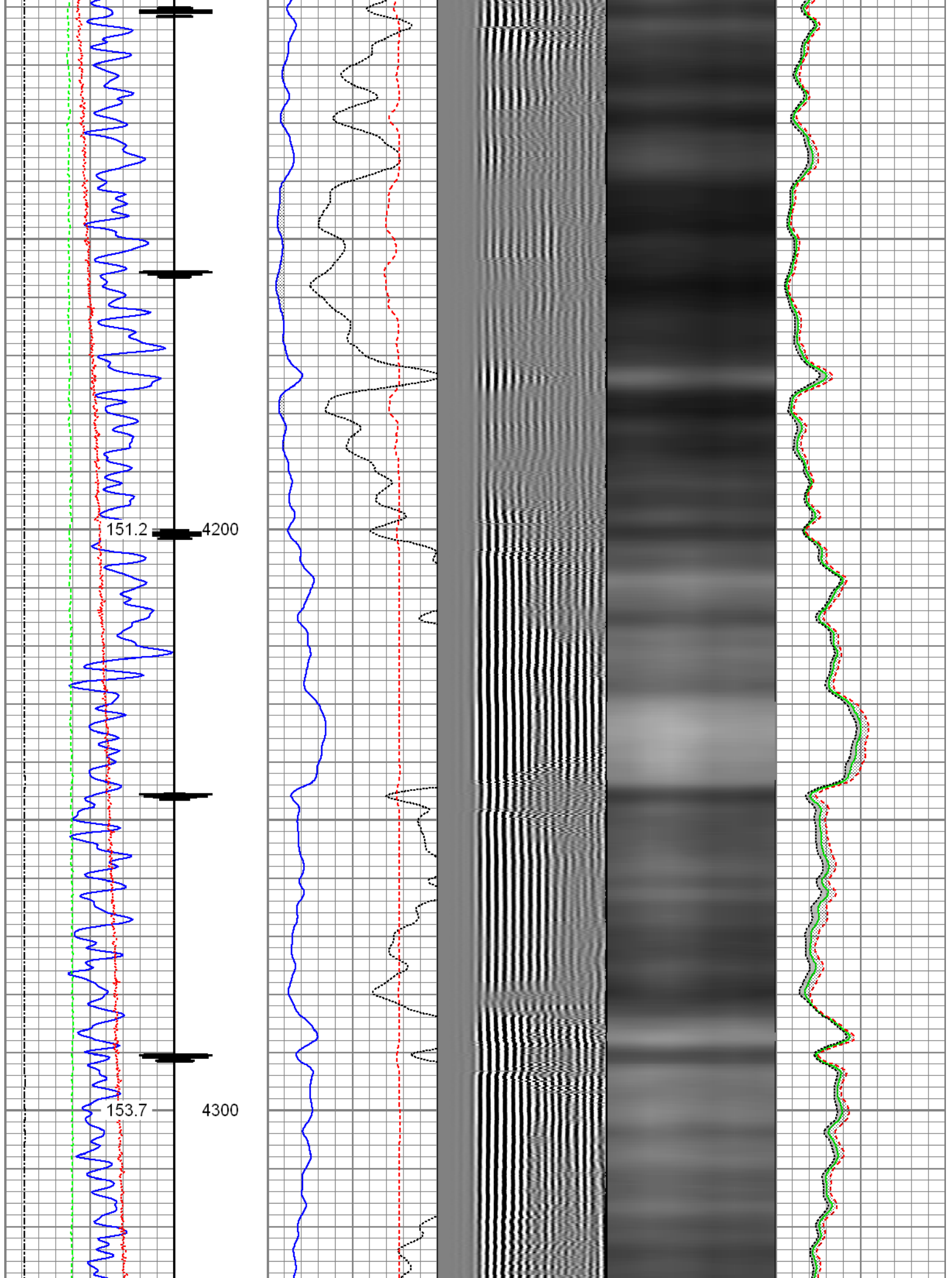


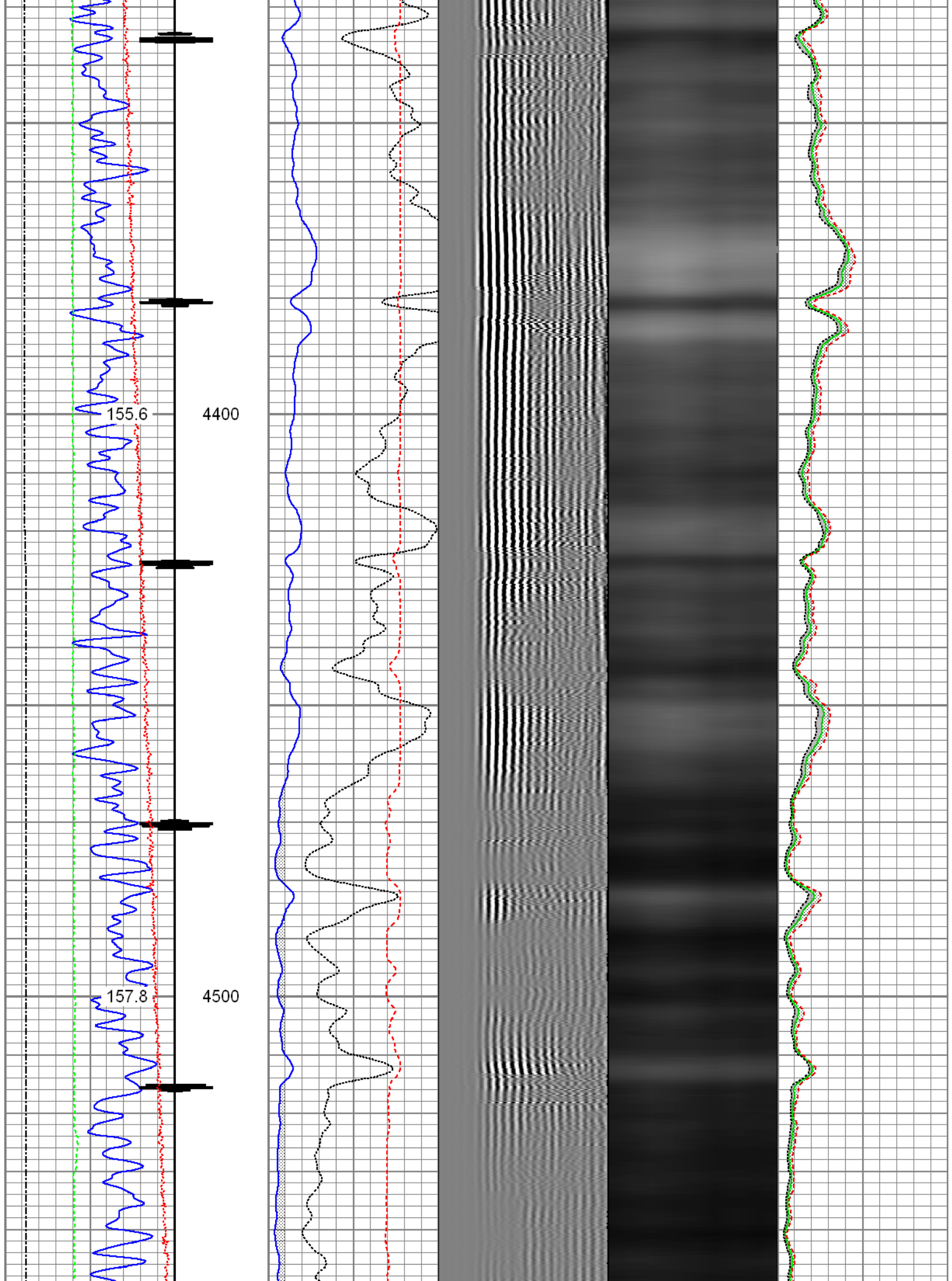


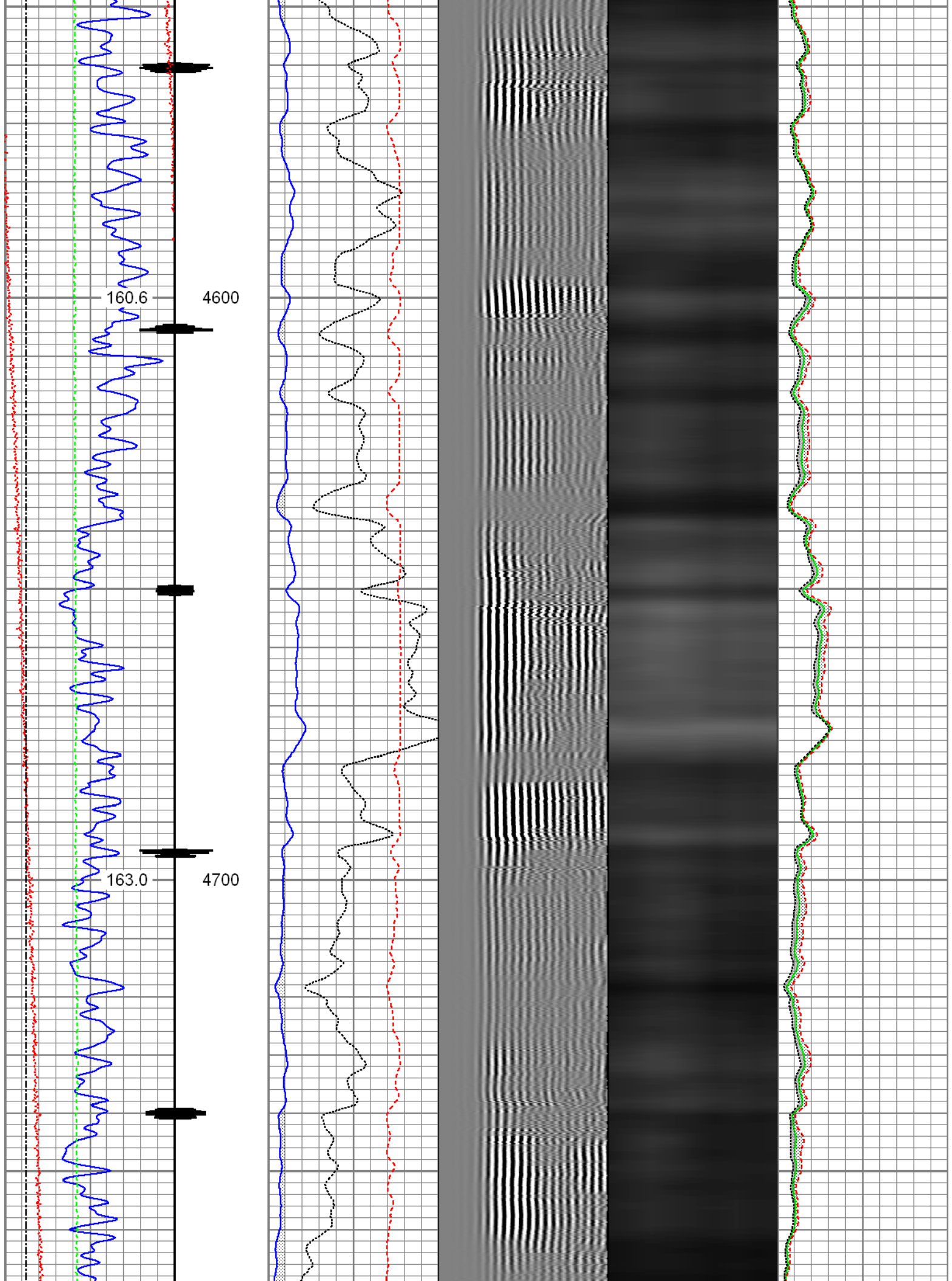


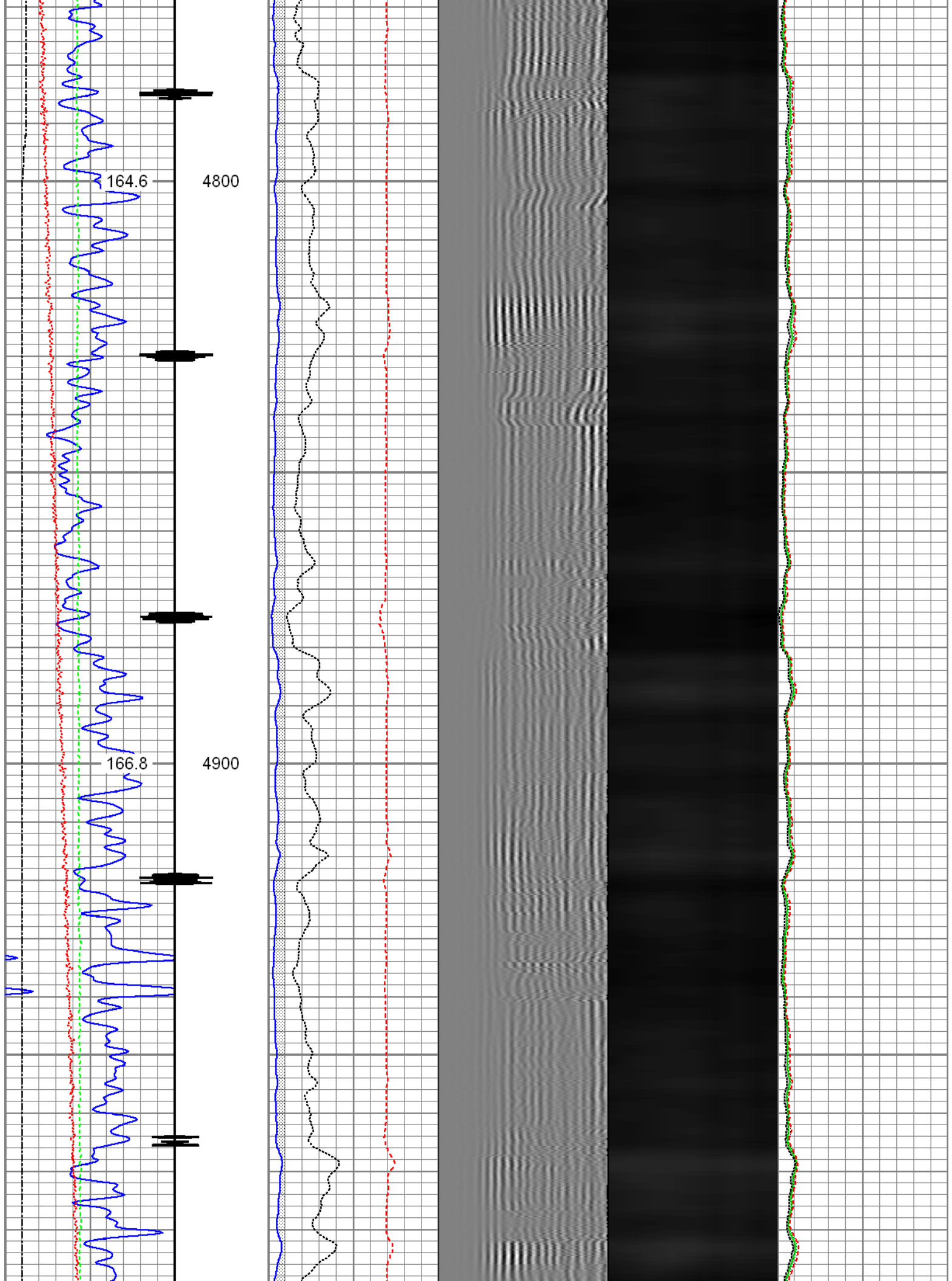


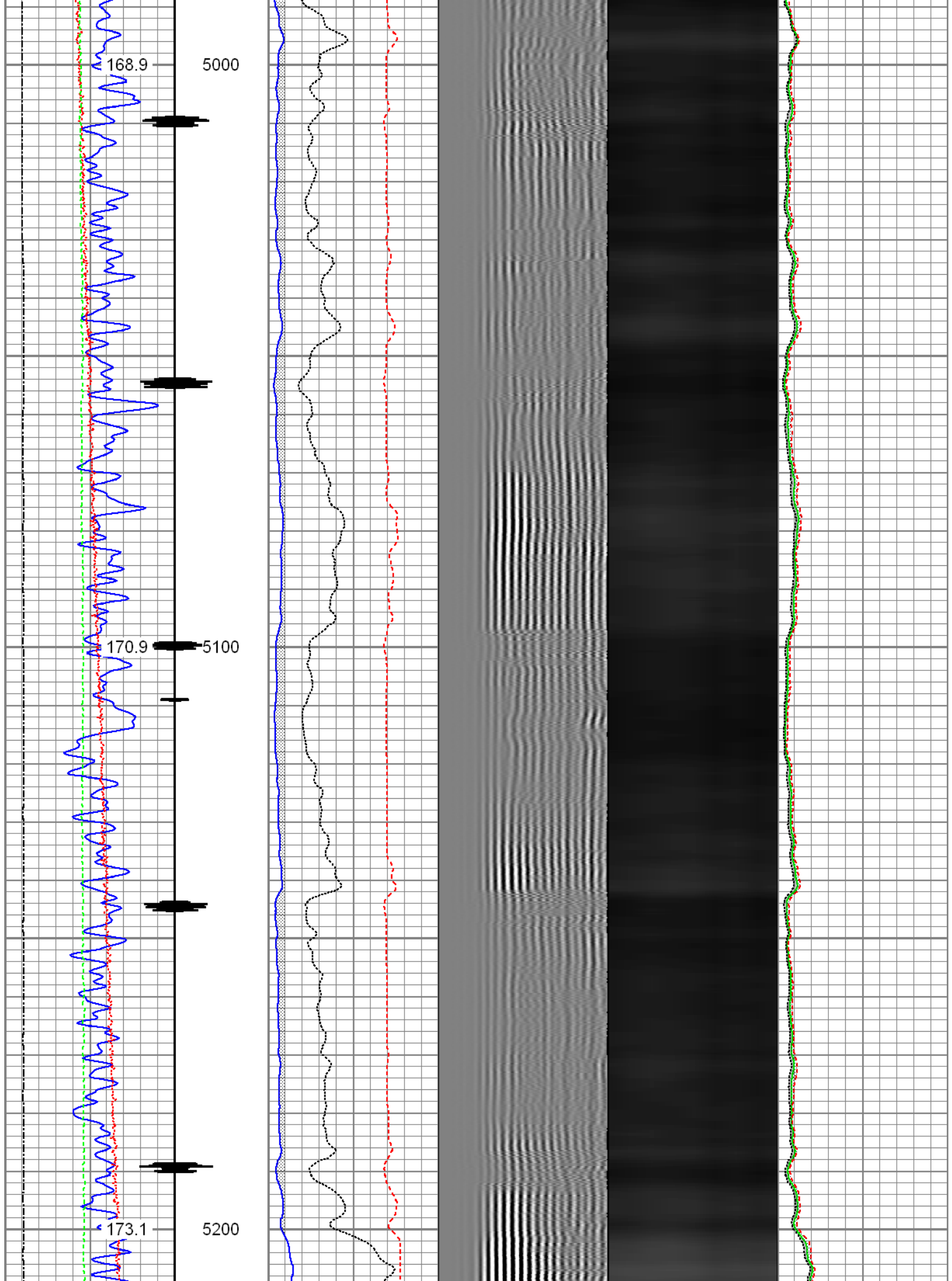


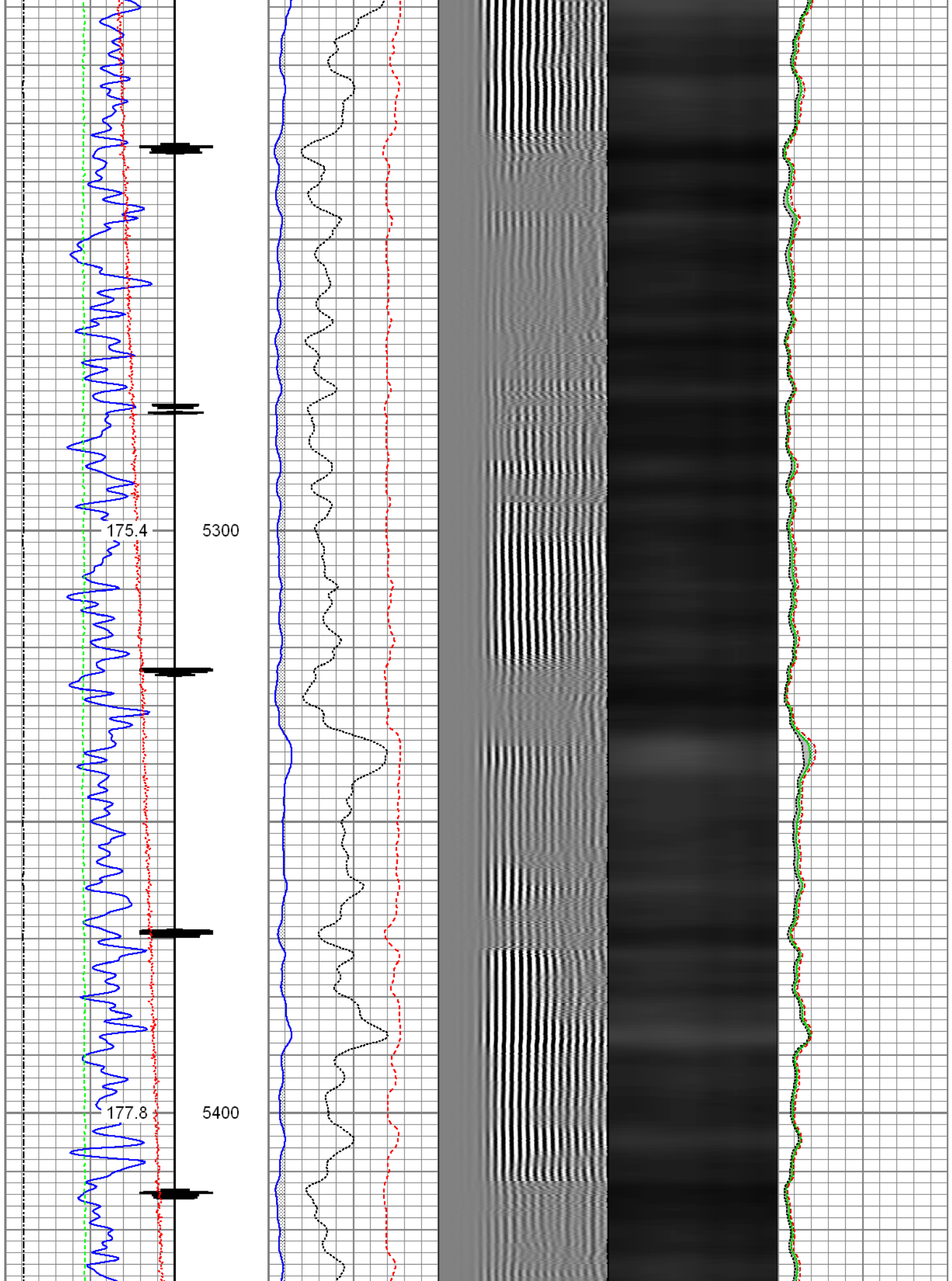


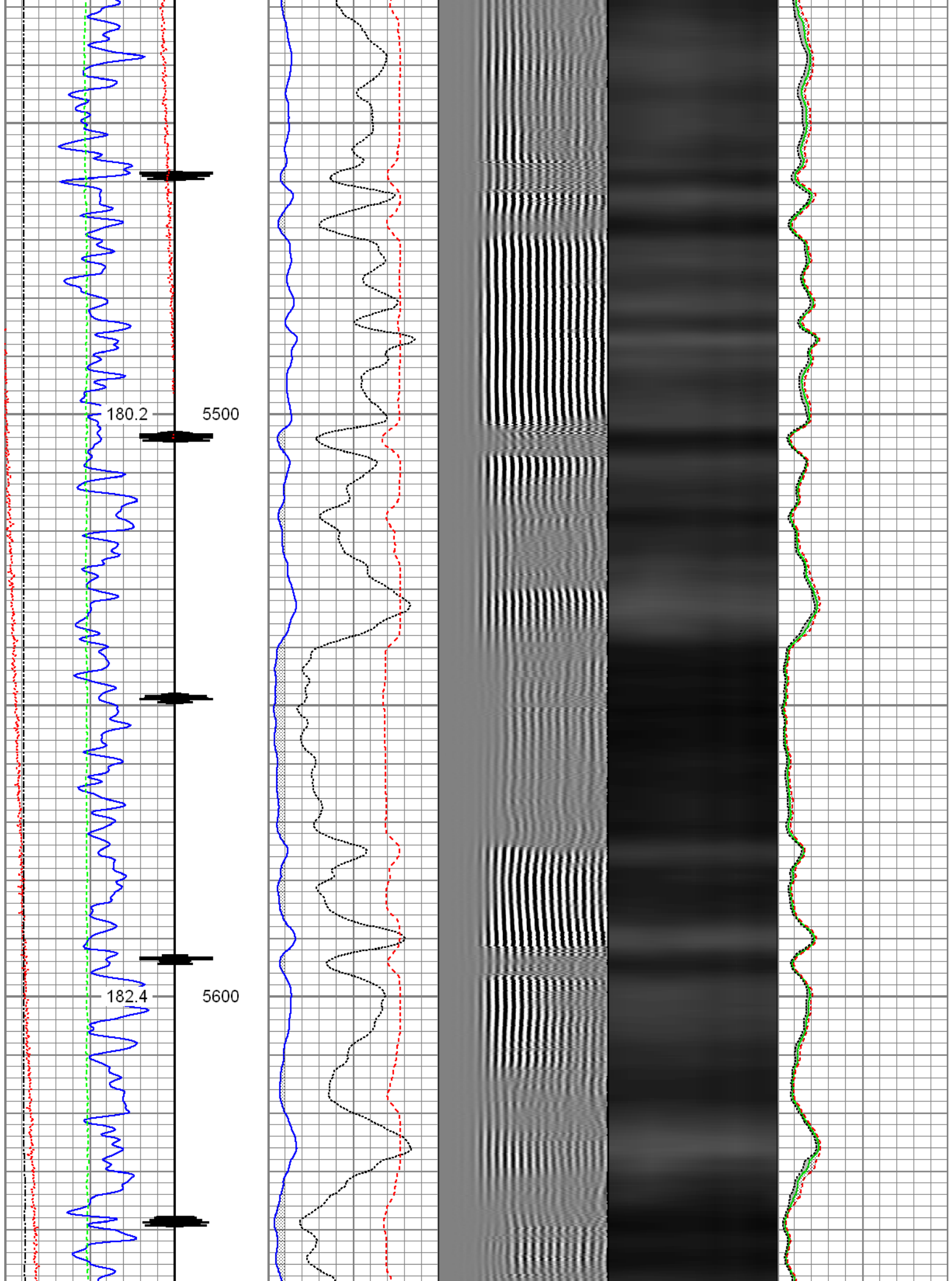


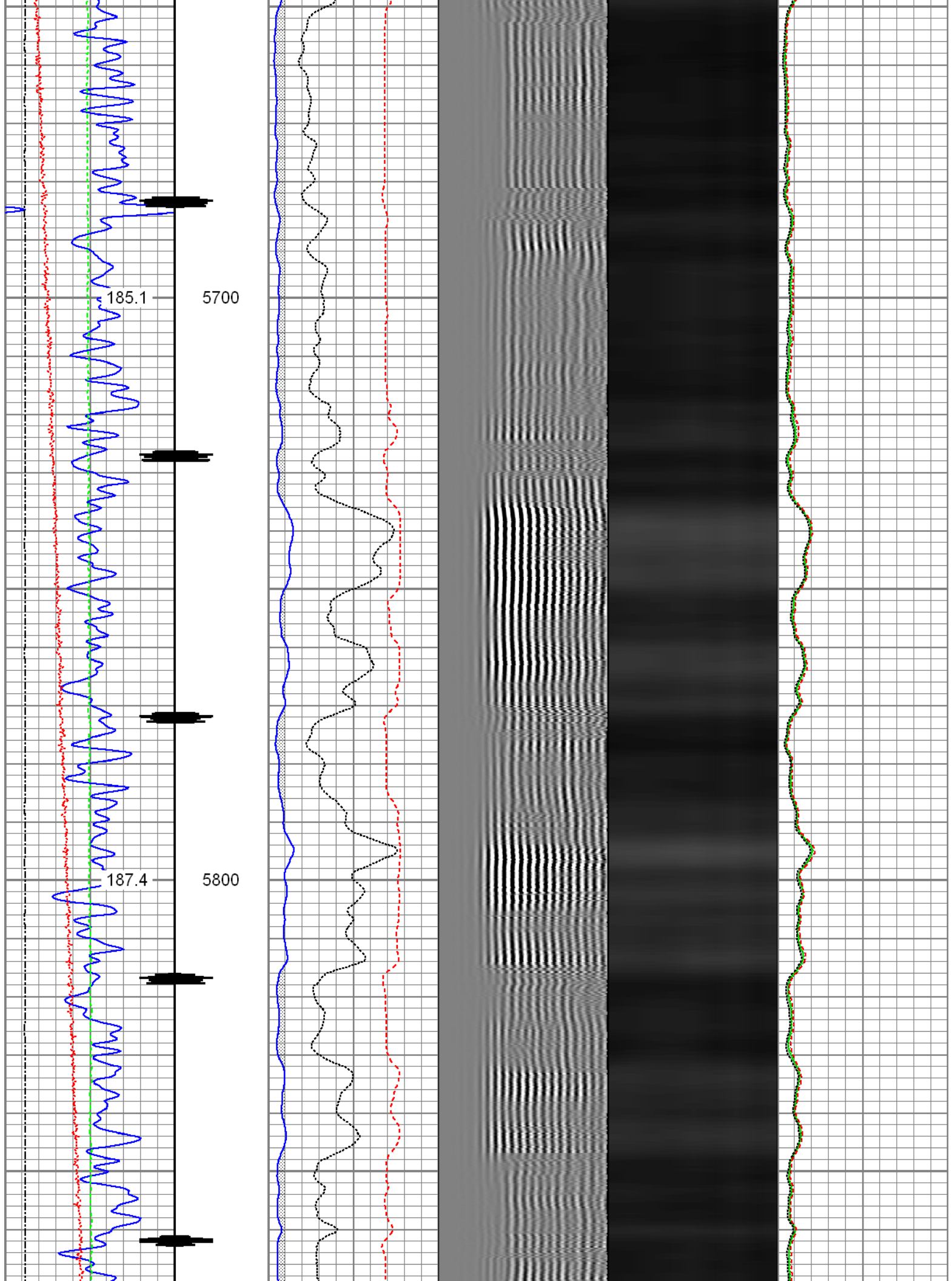


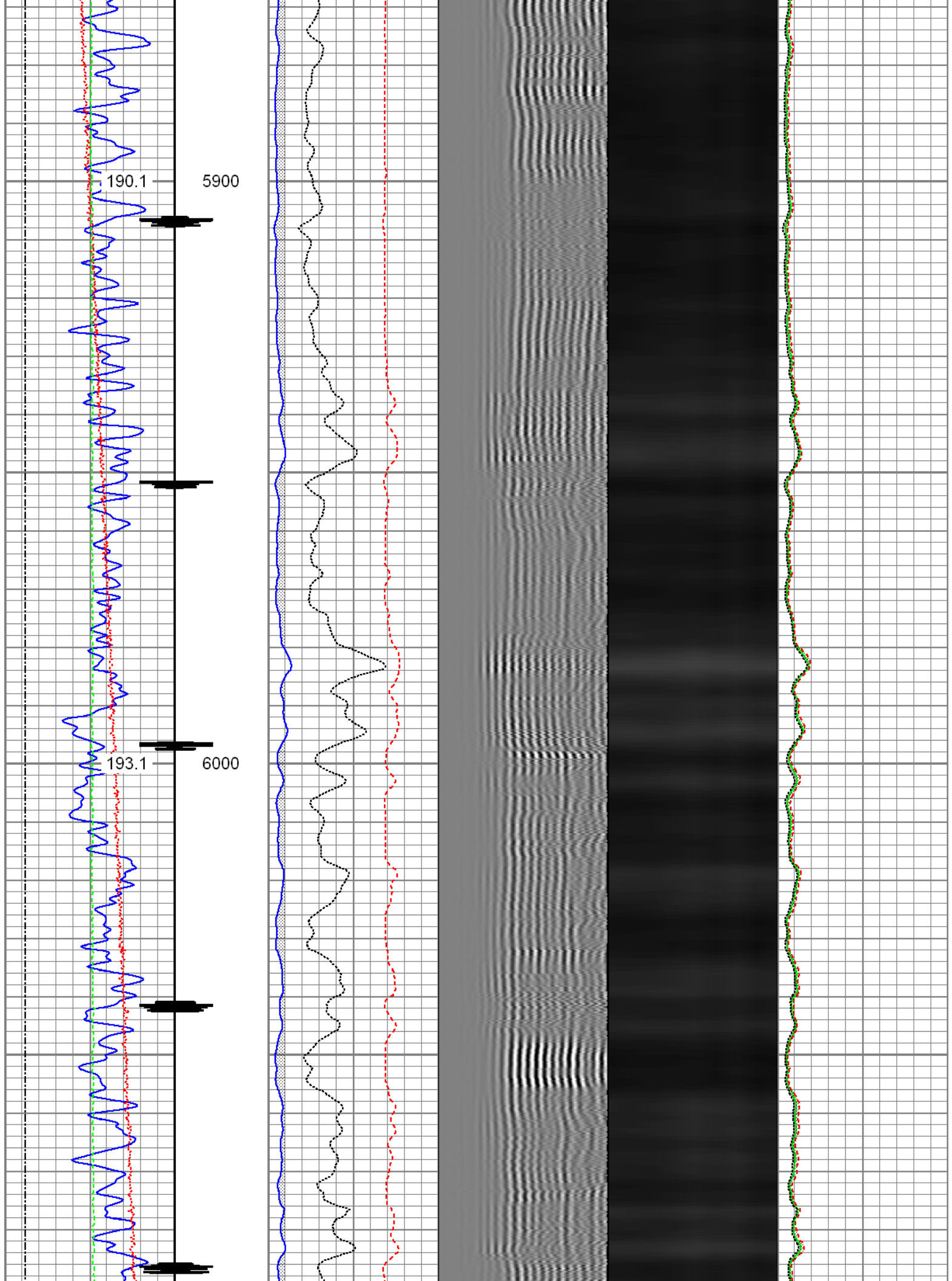


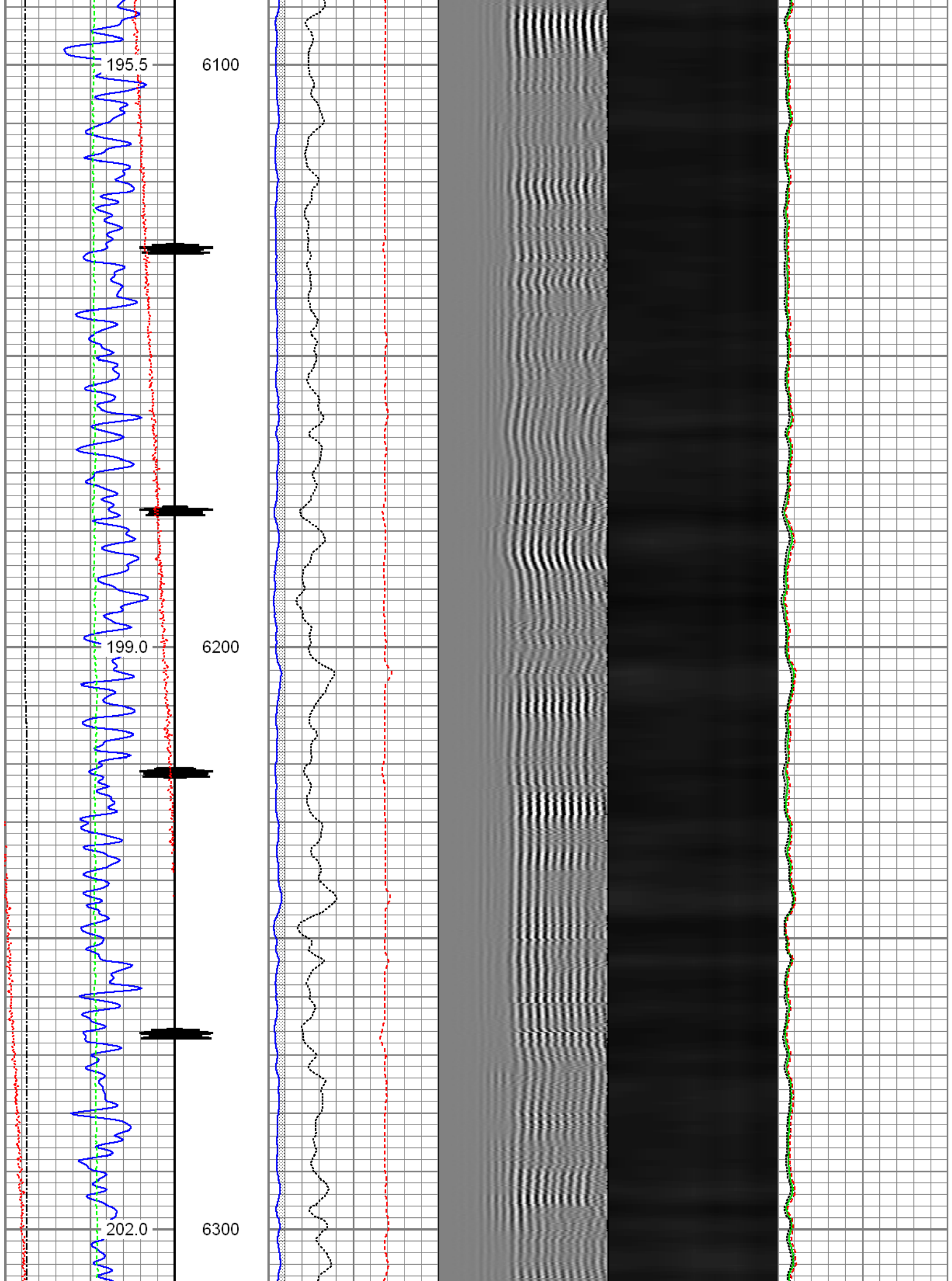


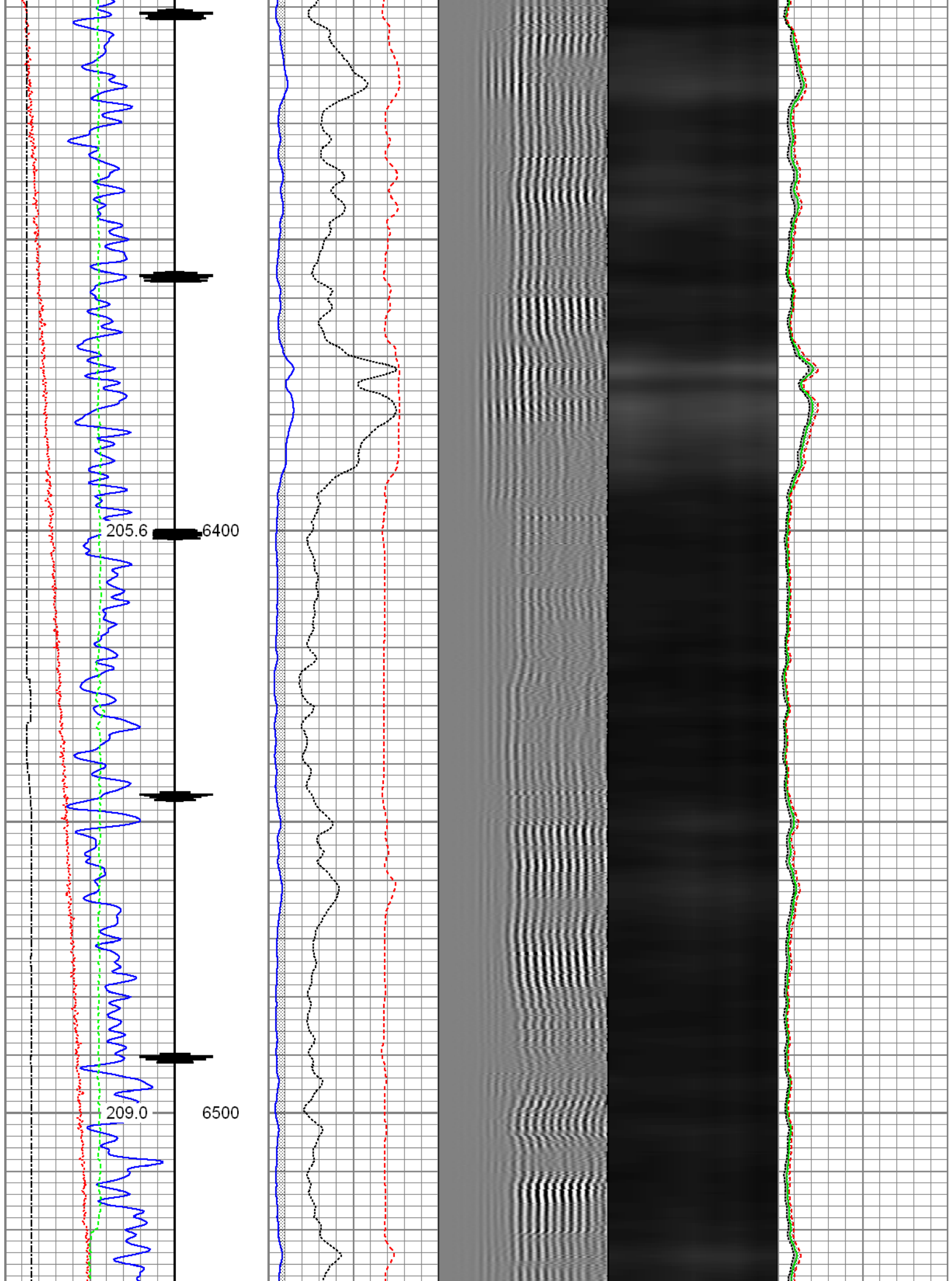


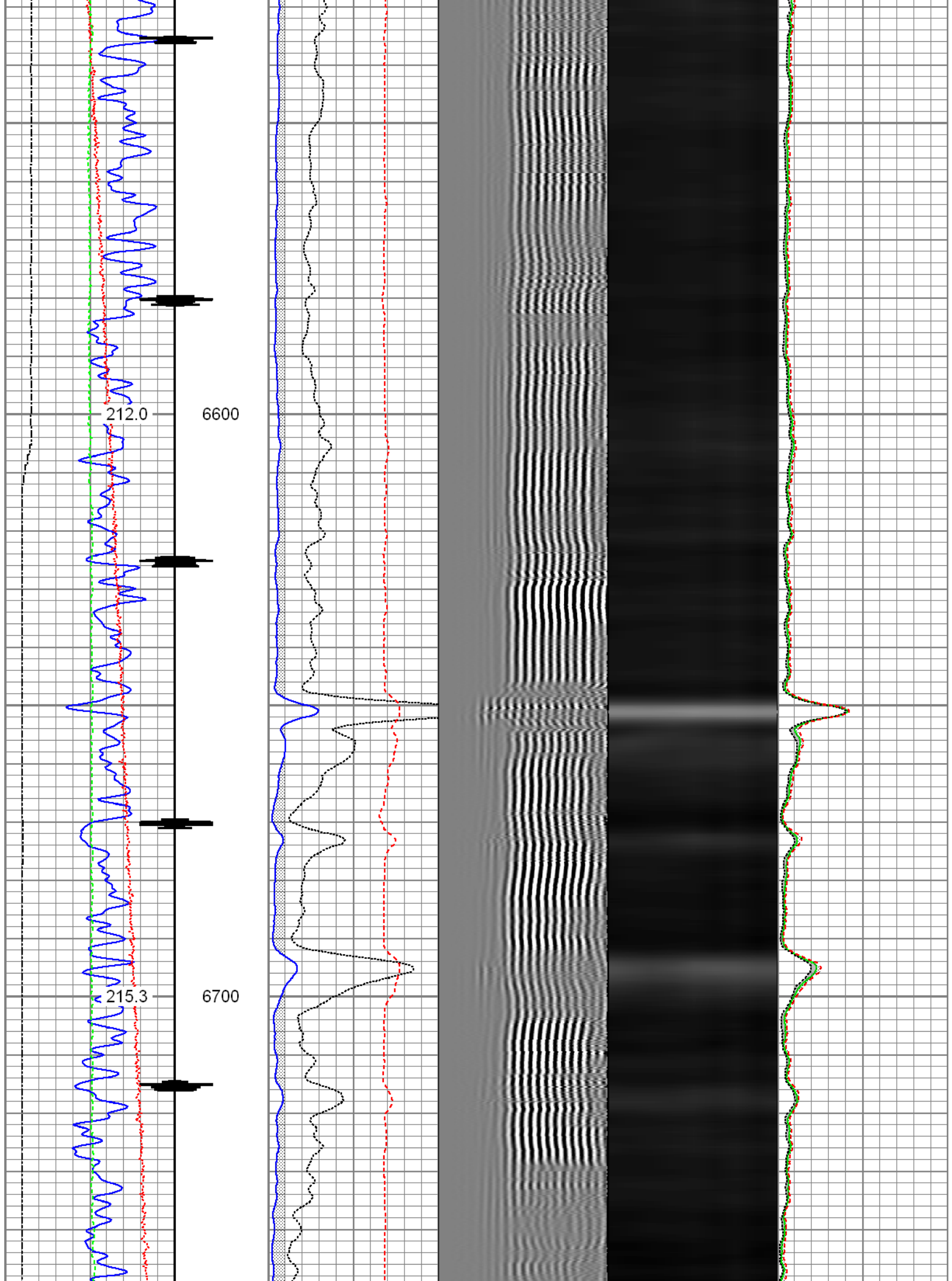


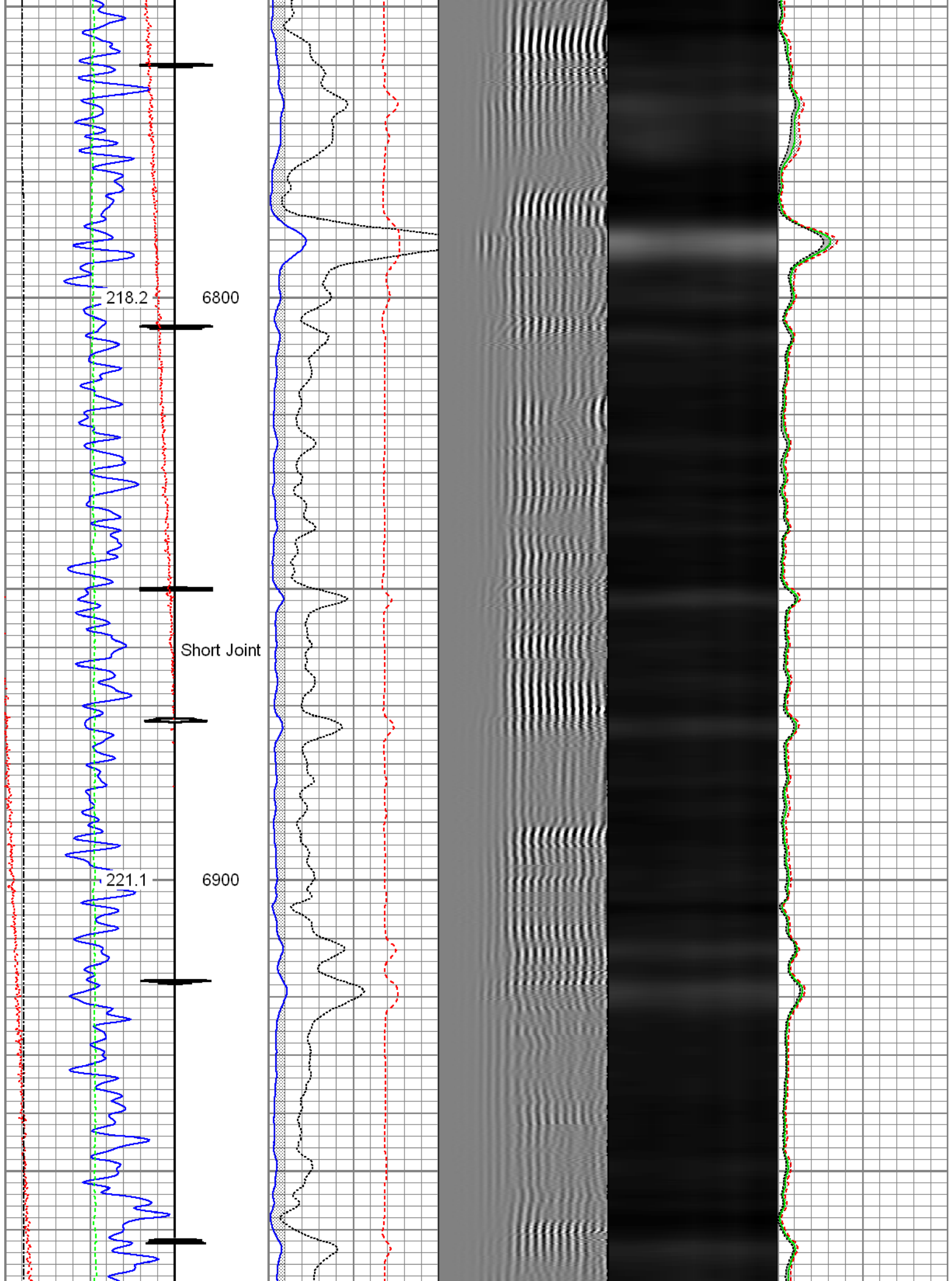


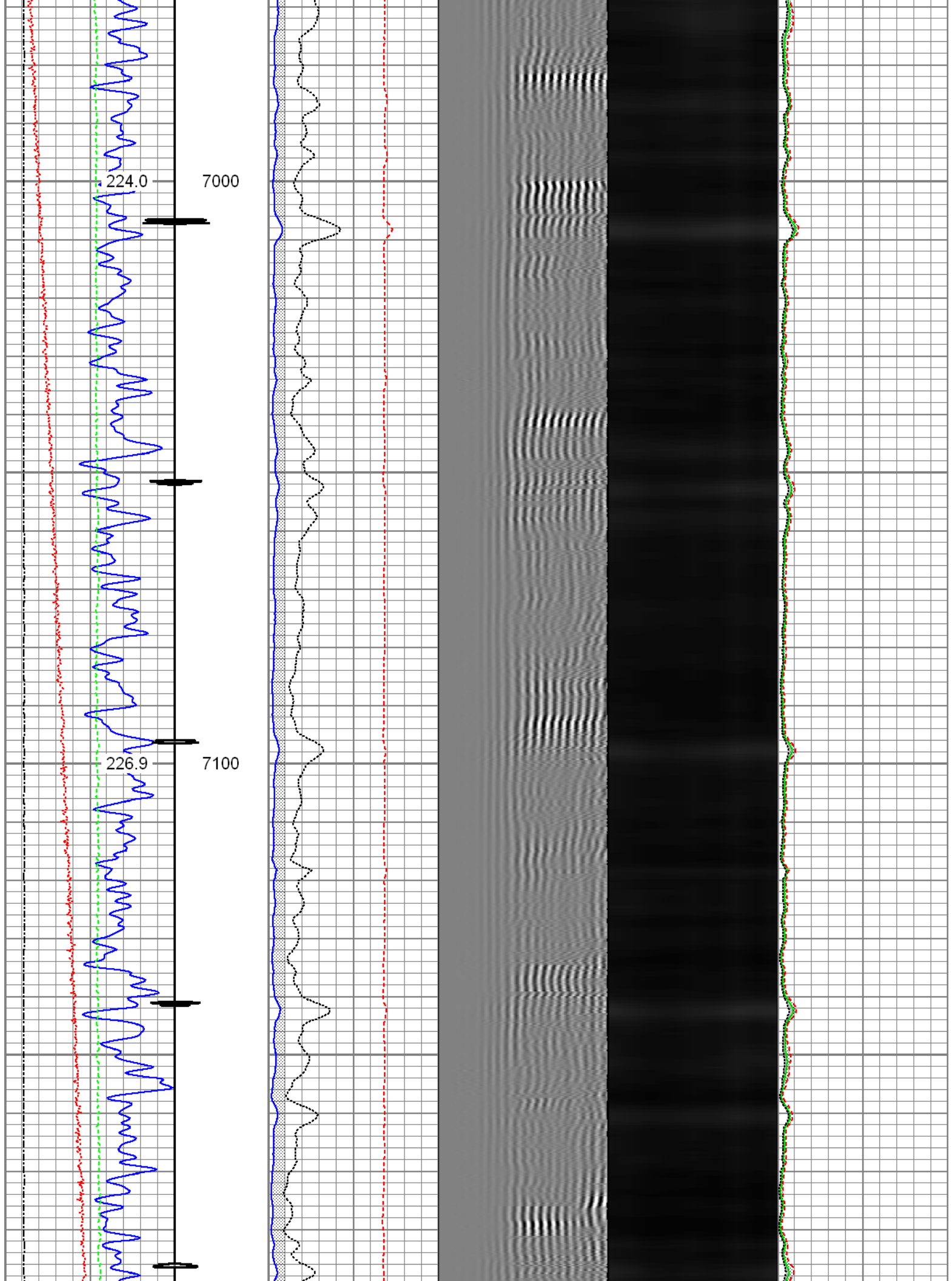


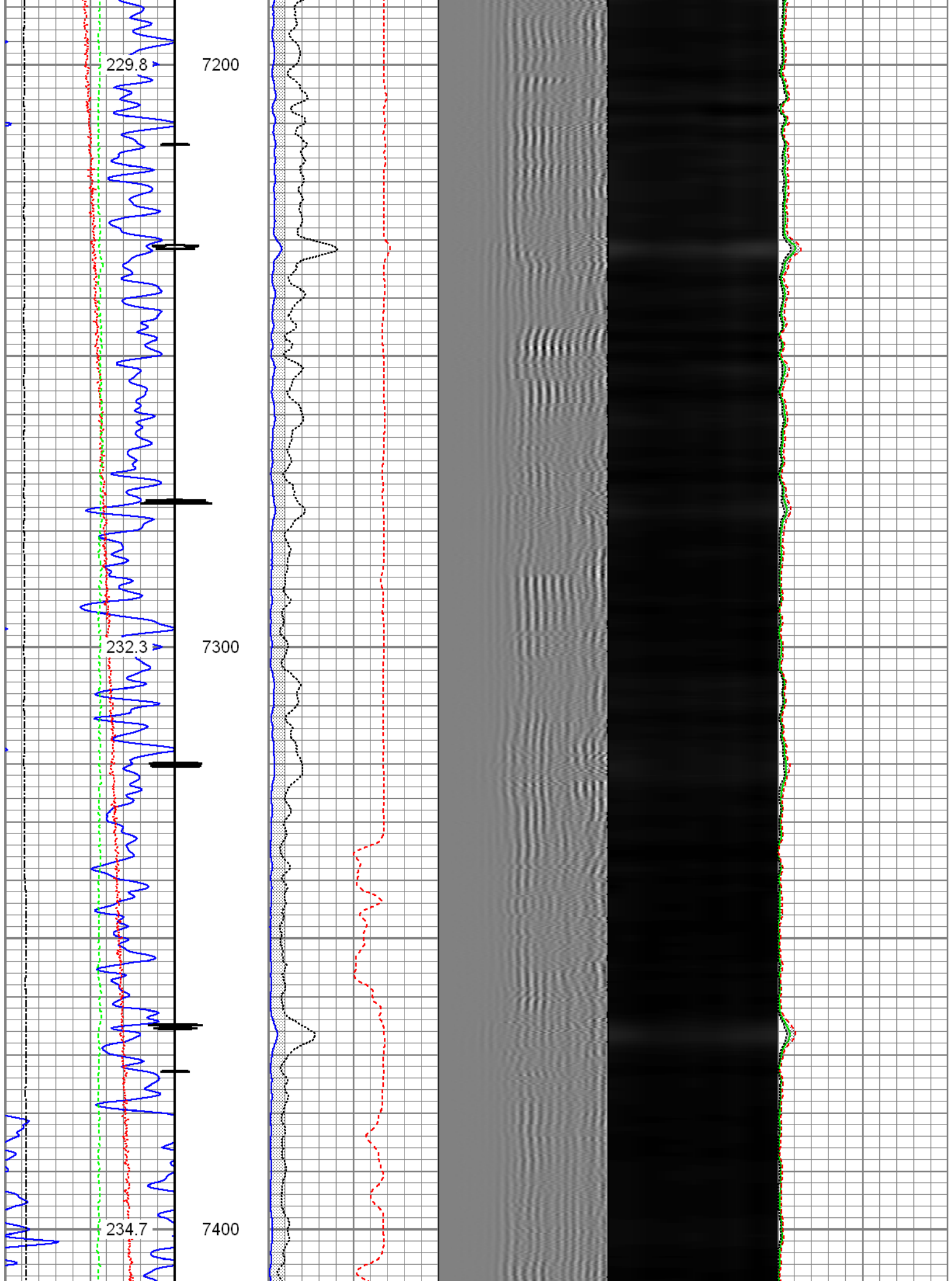


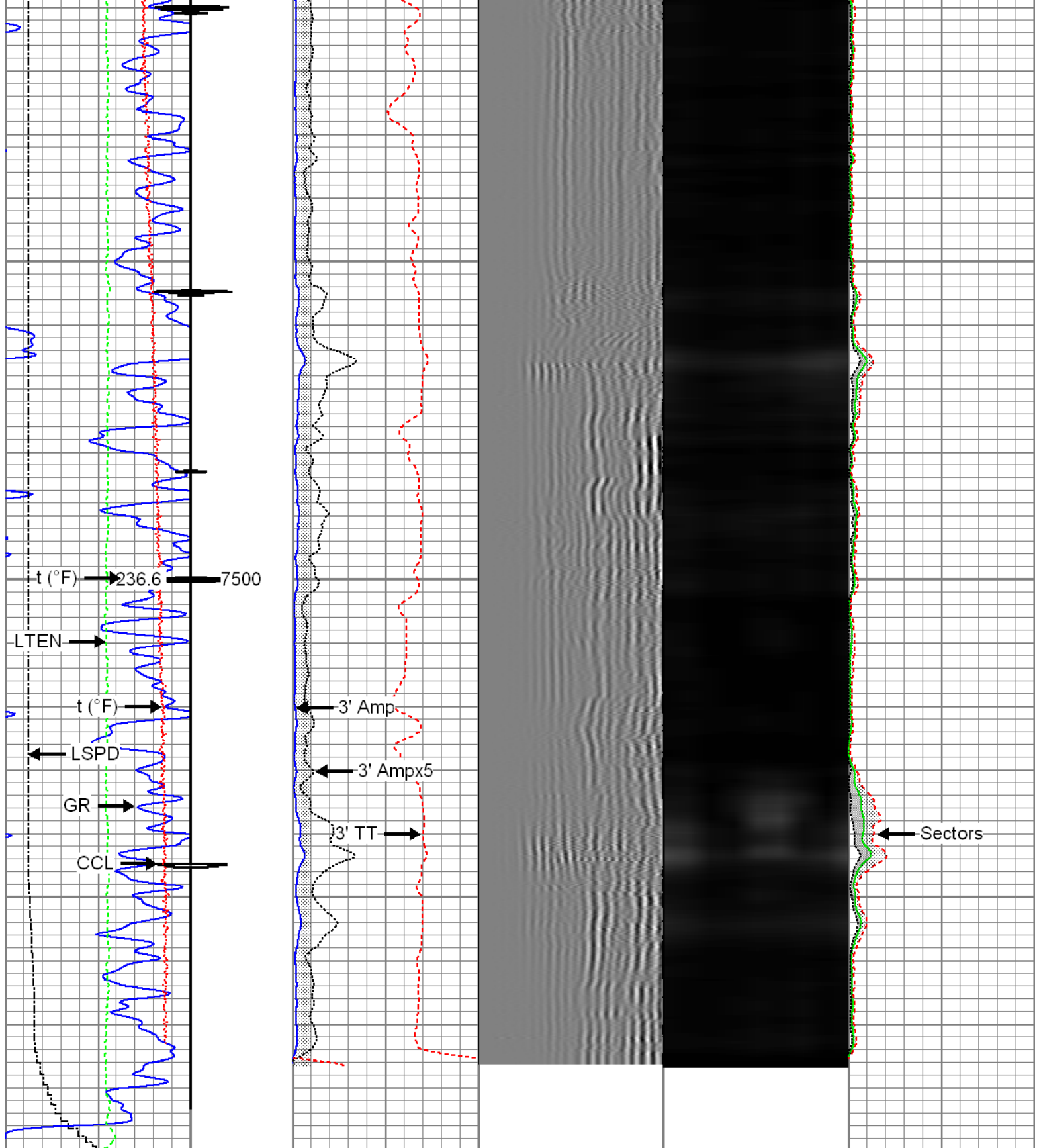






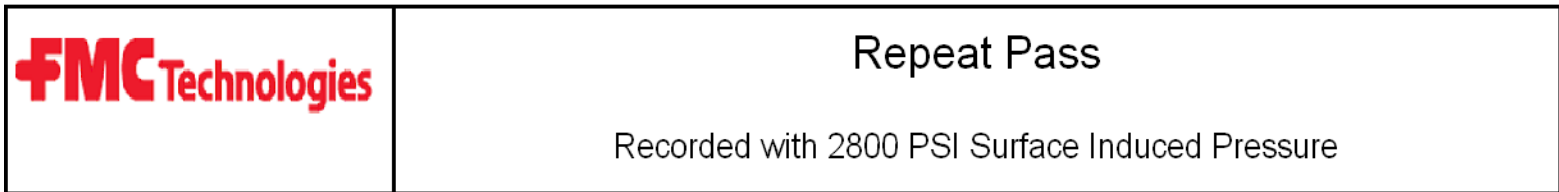







Gamma Ray 0 (GAPI) 120	3' Amplitude 0 (mV) 100	5' Variable Density Log 200 1200	Sector Map	Average Amplitude 0 100
Casing Collar Locator	3' Amplitude x 5 0 (mV) 20			Minimum Amplitude 0 100
Temperature 0 (degF) 20	3' Travel Time 650 (usec) 150			Maximum Amplitude 0 100
Line Speed -150 (ft/min) 150		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

0 (lb) 2000

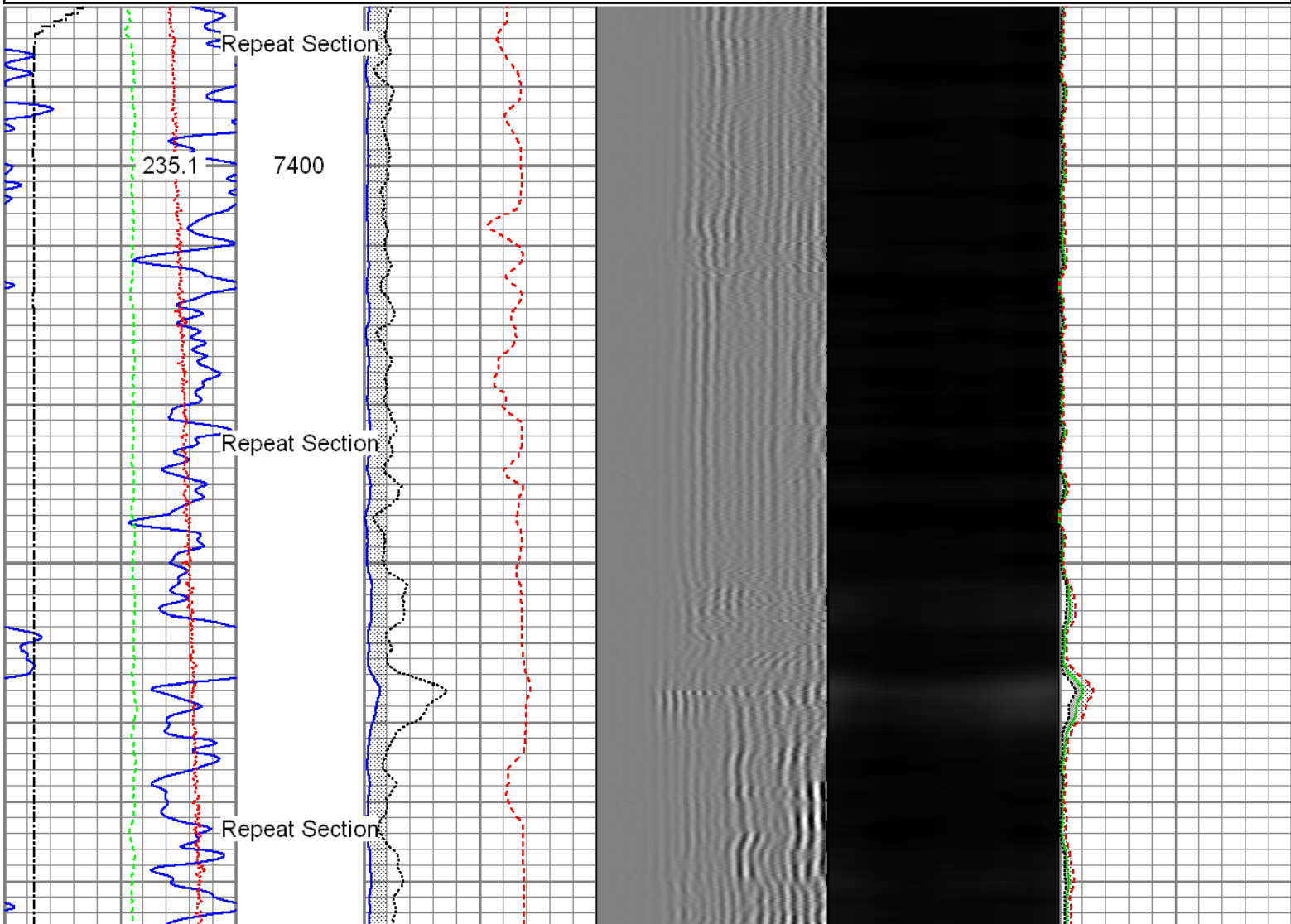


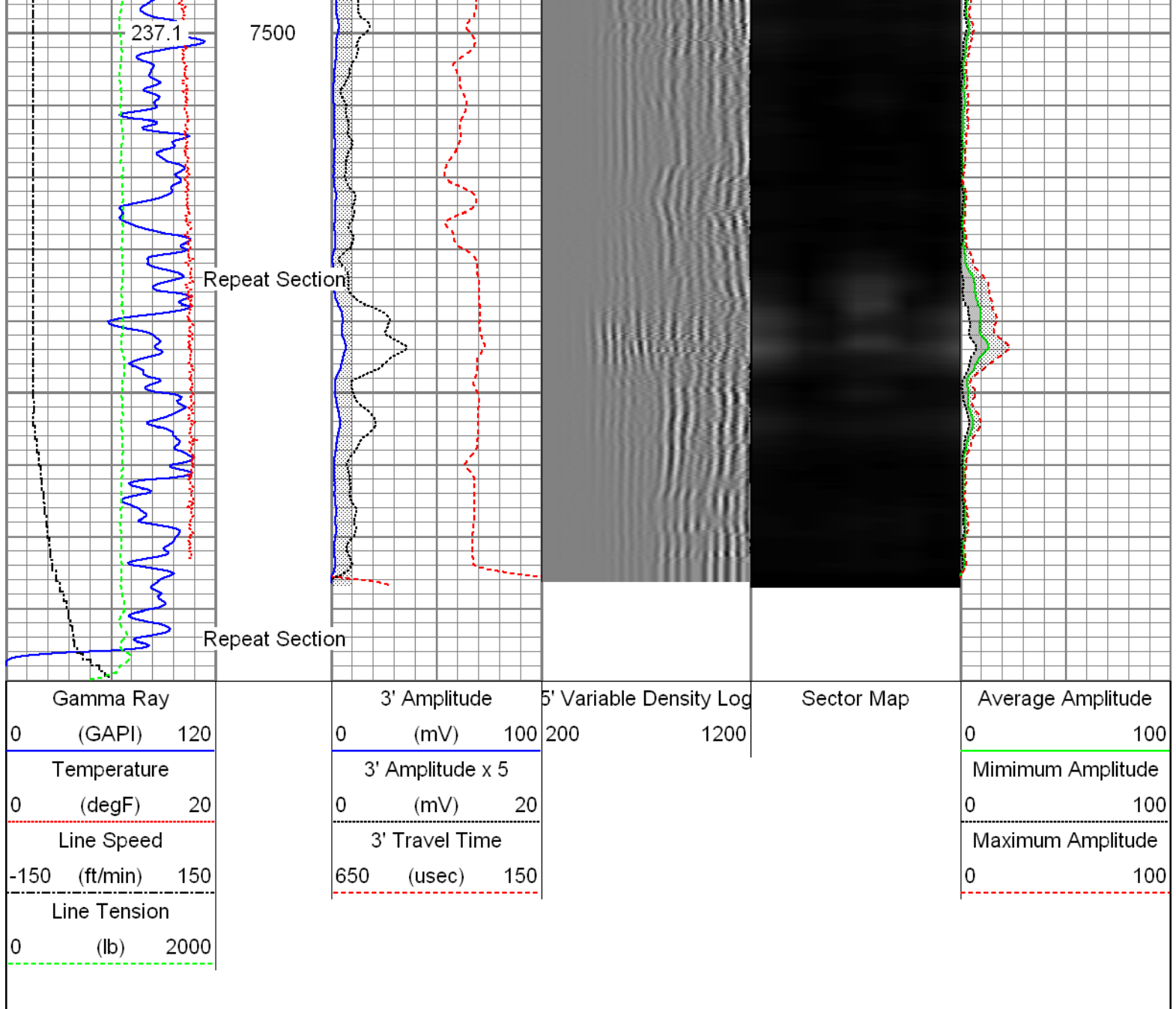
	<p>Repeat Pass</p> <p>Recorded with 2800 PSI Surface Induced Pressure</p>
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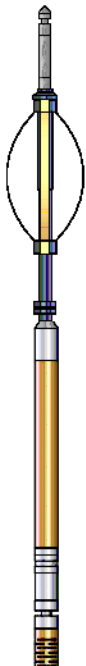
	<p>Repeat Pass</p> <p>Recorded with 2800 PSI Surface Induced Pressure</p>
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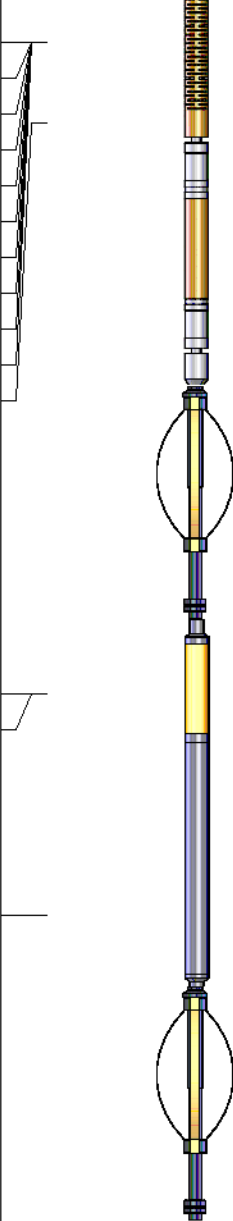
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Dataset Pathname:	pass5
Presentation Format:	radii
Dataset Creation:	Tue Nov 03 10:30:33 2015 by Log 7.0 B1
Charted by:	Depth in Feet scaled 1:240

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

Tool Joint	Tool Joint Length (ft)	Tool Joint Weight (lb)	Tool Joint O.D. (in)	Tool Joint Description	Tool Joint Length (ft)	Tool Joint Weight (lb)	Tool Joint O.D. (in)
WV3FT	14.55						
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						
WV5FT	13.55						
				Probe_IL_BS_Cent	2.88	2.75	10.00
				Probe 2-3/4" Inline Electrical Inline Bowspring Centralizer			
CCL	6.51						
DCCL	6.51						
				Probe_CCL_GR-2.75"Digital (FW1212-026)	4.54	2.75	55.00
				Probe 2-3/4" Digital CCL / Gamma Ray Combined			
GR	3.77						
				Probe_IL_BS_Cent	2.88	2.75	10.00
				Probe 2-3/4" Inline Electrical Inline Bowspring Centralizer			

Dataset: PROCESSED\_0512341552\_Anadarko\_Carter 14N-33HZ\_11-03-15\_RBL.db: field/well/run1/pass7

Total Length: 23.40 ft

Total Weight: 194.00 lb

O.D. 2.75 in

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

Calibration Casing Diameter: 5.500 in  
Calibration Depth: 102.857 ft

Master Calibration, performed Tue Nov 03 09:59:26 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.010	0.444	0.800	71.921	163.746	-0.813
CAL	0.010	0.613				
5'	0.010	0.344	0.800	71.921	212.660	-1.287
SUM						
S1	0.010	0.425	0.000	100.000	240.792	-2.369
S2	0.010	0.462	0.000	100.000	220.934	-2.158
S3	0.010	0.516	0.000	100.000	197.707	-1.931
S4	0.010	0.522	0.000	100.000	195.136	-1.939
S5	0.010	0.483	0.000	100.000	211.379	-2.064
S6	0.010	0.445	0.000	100.000	230.015	-2.266
S7	0.010	0.429	0.000	100.000	238.778	-2.338
S8	0.010	0.420	0.000	100.000	243.984	-2.430

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	0.613	1.000	0.000

Air Zero Calibration, performed Tue Nov 03 09:59:49 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 Carter 14N-33HZ  
Field Wattenberg  
County Weld  
State Colorado