



Radial Cement Bond
Gamma Ray
Casing Collar Log

Company	Kerr-McGee Oil and Gas Onshore LP		
Well	Sarchet 36G-20HZ		
Field	Wattenberg		
County	Weld		
State	Colorado		
Company		Kerr-McGee Oil and Gas Onshore LP	
Well		Sarchet 36G-20HZ	
Field		Wattenberg	
County		Weld	State Colorado
Location:		API #: 05-123-41919	
SEC 20		TWP 2N	RGE 65W
Permanent Datum		Ground Level	Elevation 4915'
Log Measured From		Kelly Bushing	16 FT
Drilling Measured From		Kelly Bushing	Elevation K.B. 4931' D.F. 4930' G.L. 4915'

Date	10-NOV-2015		
Run Number	Two		
Depth Driller	12790 FT		
Depth Logger	7451 FT		
Bottom Logged Interval	7447 FT		
Top Log Interval	Surface		
Open Hole Size	7.875"		
Type Fluid	Water		
Density / Viscosity	8.34 lbm/gal		
Max. Recorded Temp.	243°F		
Estimated Cement Top	Surface		
Time Well Ready	ROA		
Time Logger on Bottom	1:00 PM		
Equipment Number	HD-0331		
Location	Ft. Lupton, CO		
Recorded By	B. Kalkwarf		
Witnessed By	Darrel Bothwell		

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	1854 FT		
Intermediate #1	5 1/2	17	HCP-110 LTC	Surface	12776 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 Casing Tally reported Marker Joint at 6489 FT
Adjusted log +2 FT to correlate with Marker Joint
Gauge Ring/Junk Basket ran from 7500 FT to surface
Log ran from as deep as possible in heel 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\0512341919_anadarko_sarchet 36g-20hz_11-10-15_rbl\0512341919_anadarko_sarch

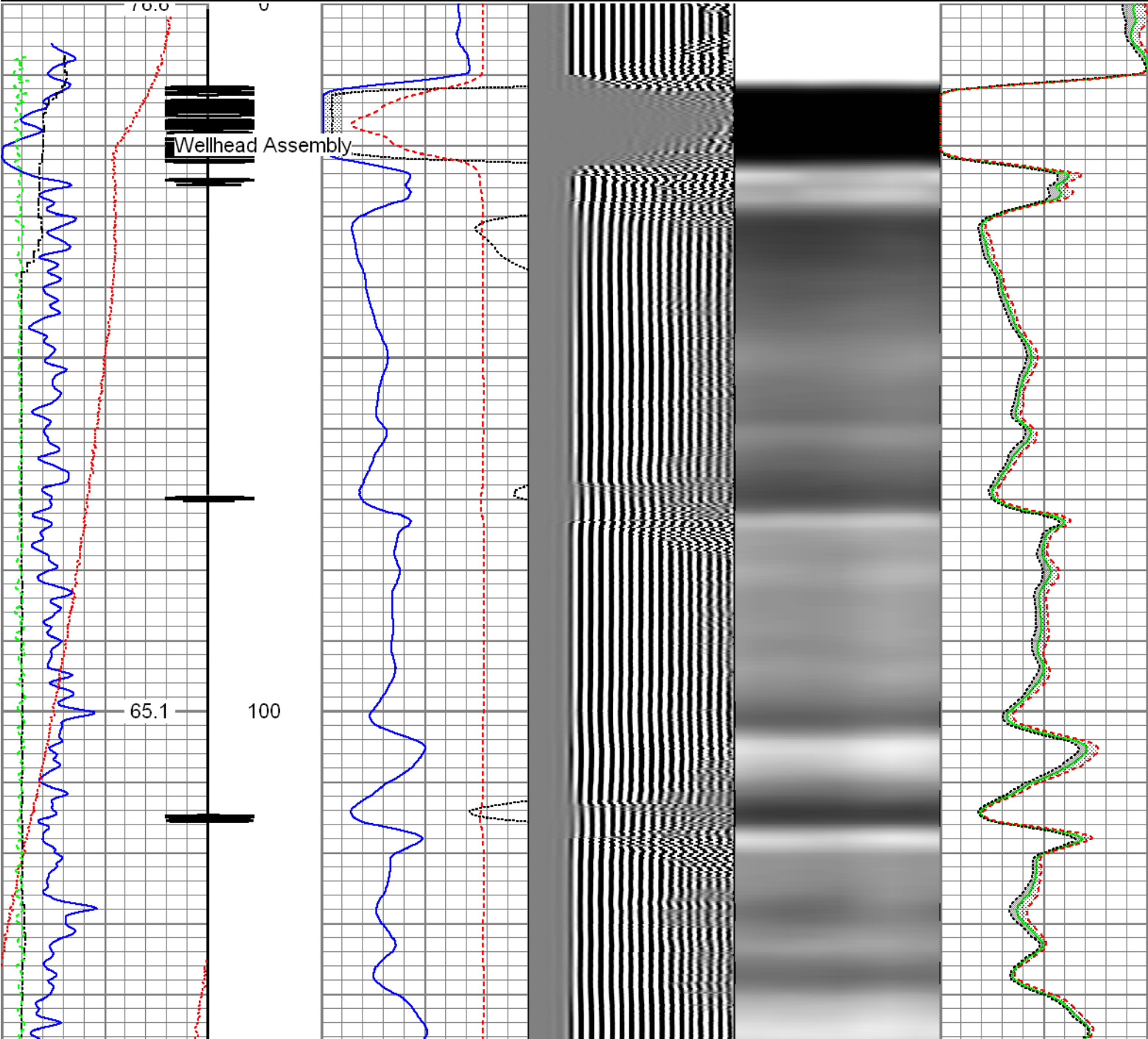
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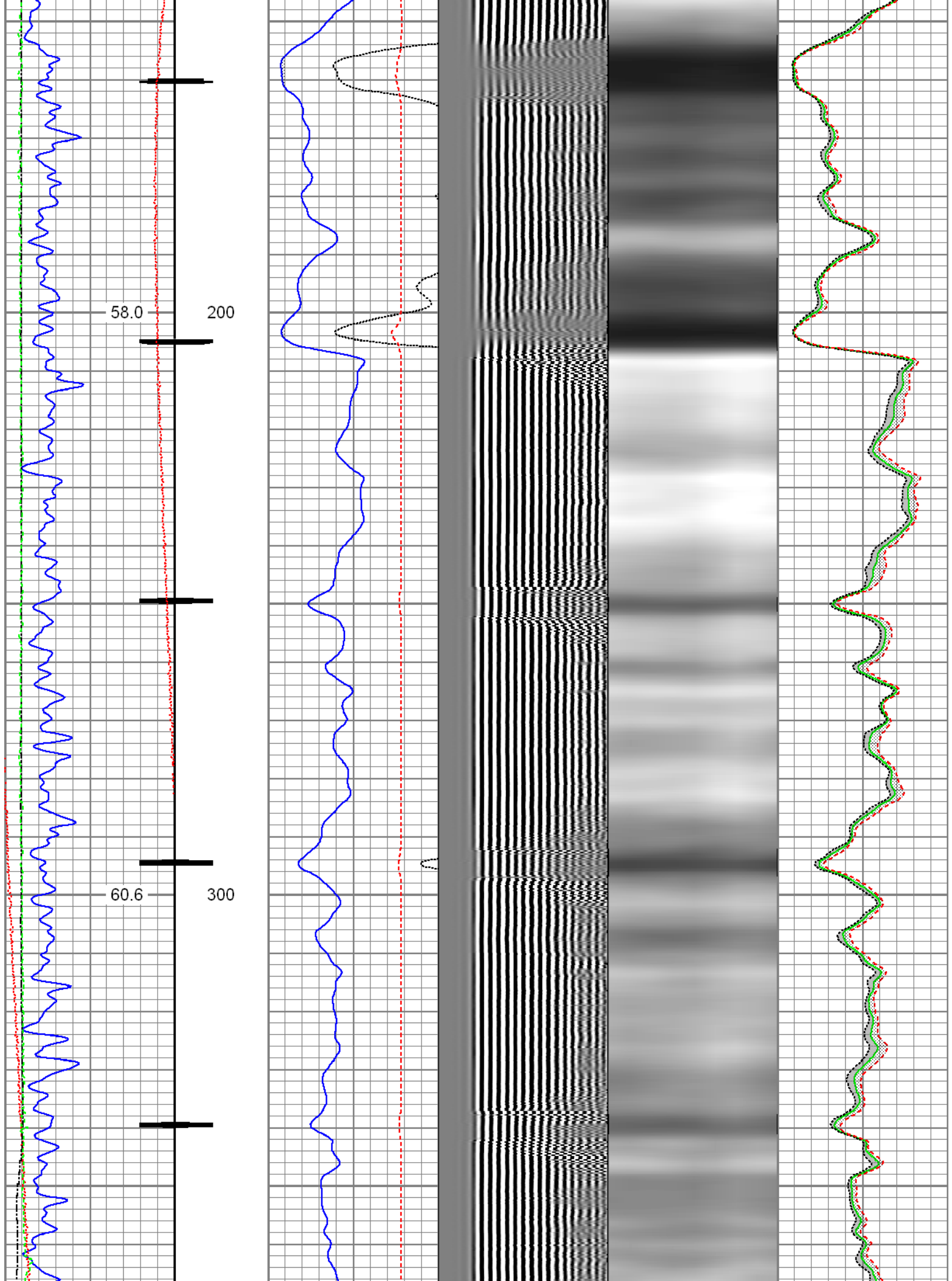
Presentation Format: radii

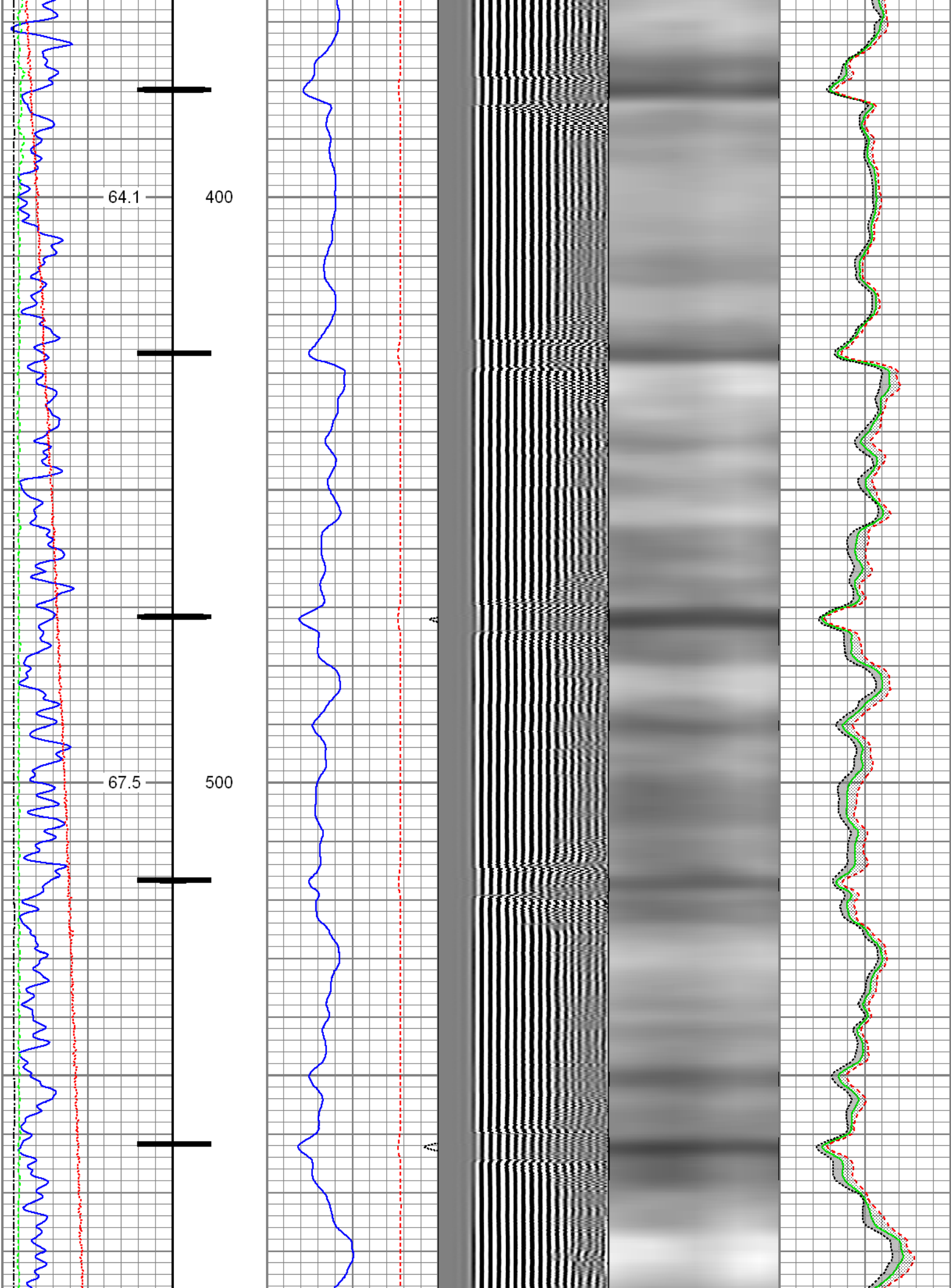
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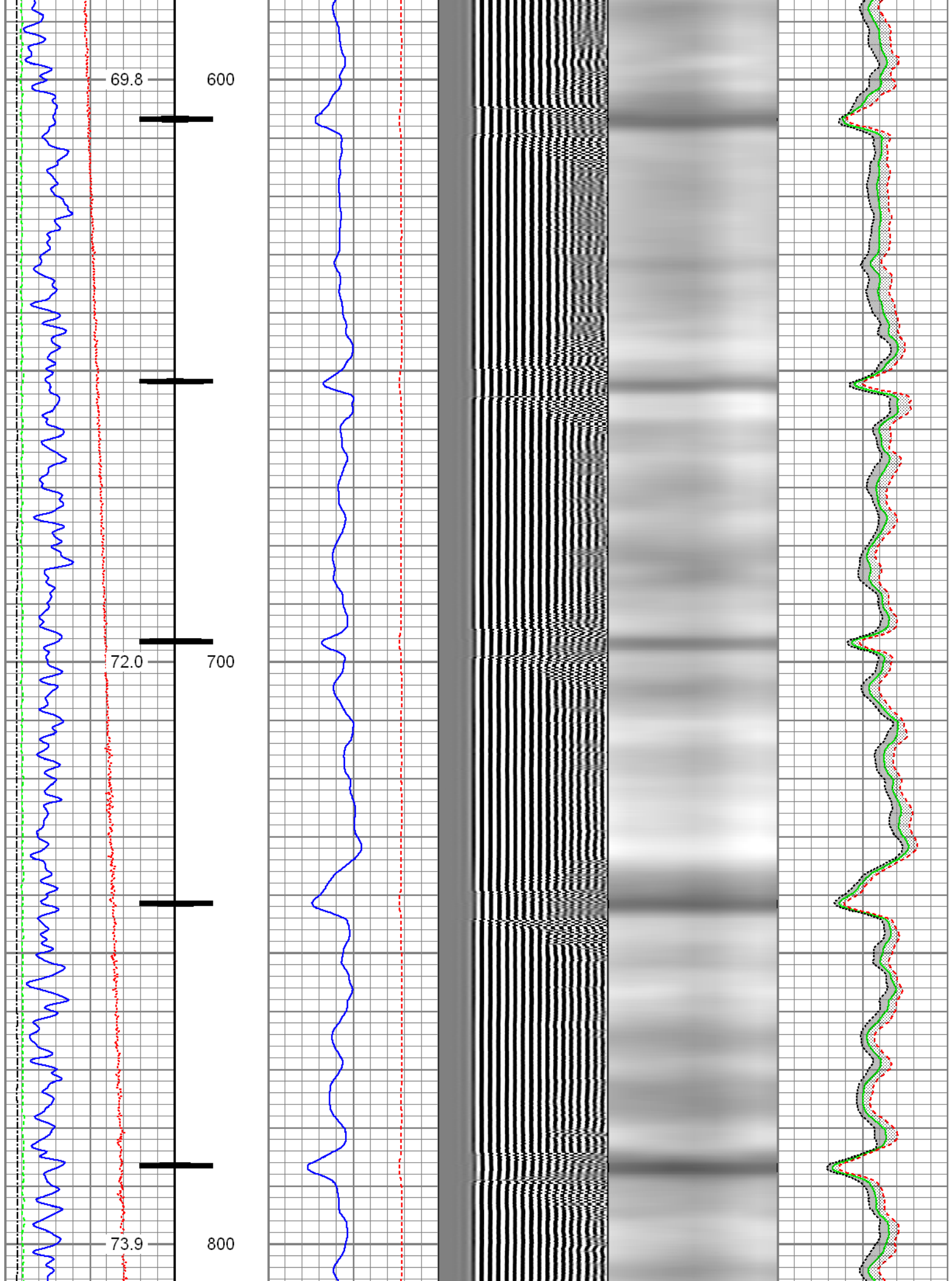
Charted by: Depth in Feet scaled 1:240

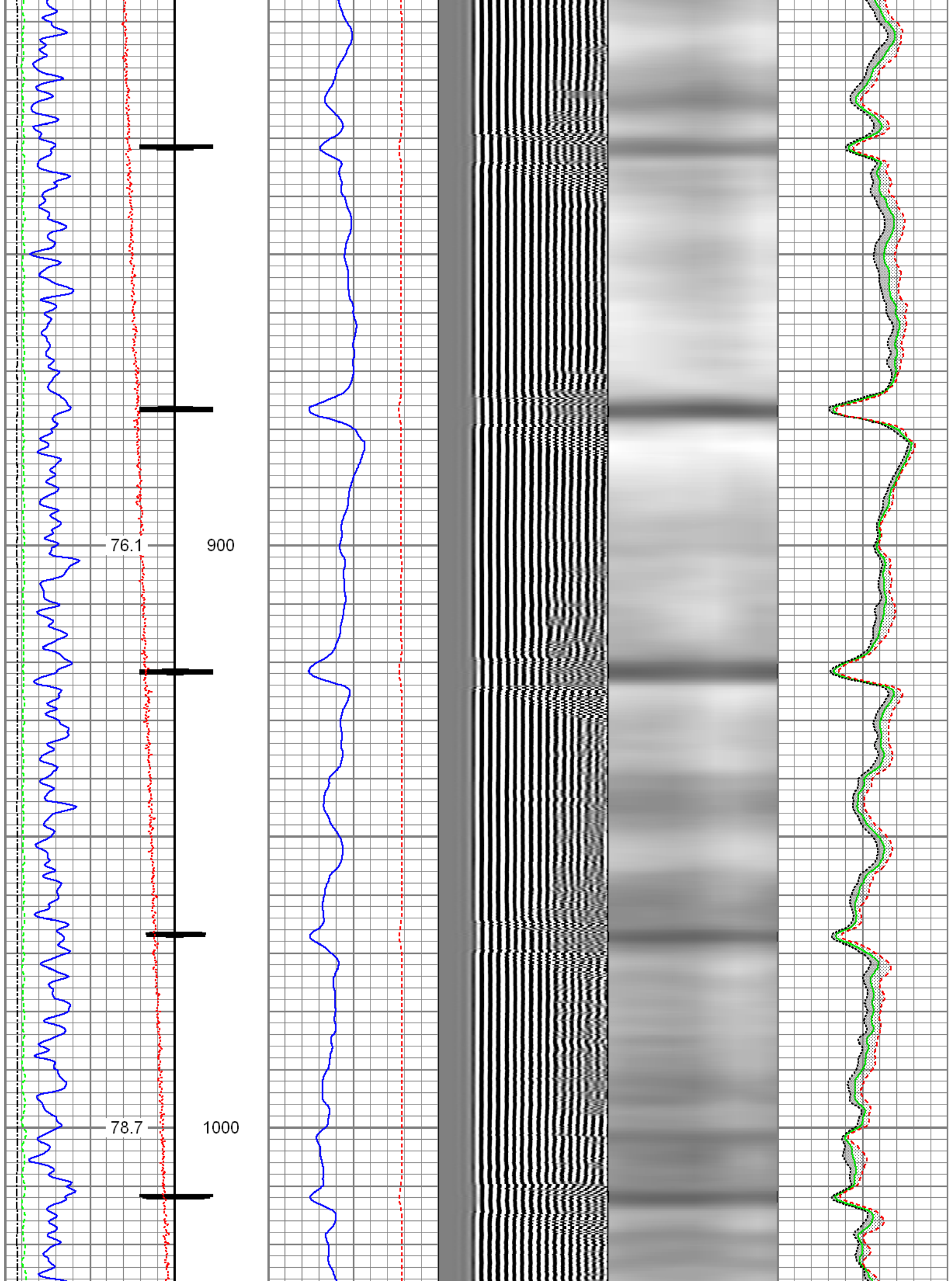
Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 150	0 (mV) 100	200 1200		0 100
Casing Collar Locator	3' Amplitude x 5			Mimimum Amplitude
Temperature	0 (mV) 20			0 100
0 (degF) 20	3' Travel Time			Maximum Amplitude
Line Speed	650 (usec) 150			0 100
-150 (ft/min) 150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

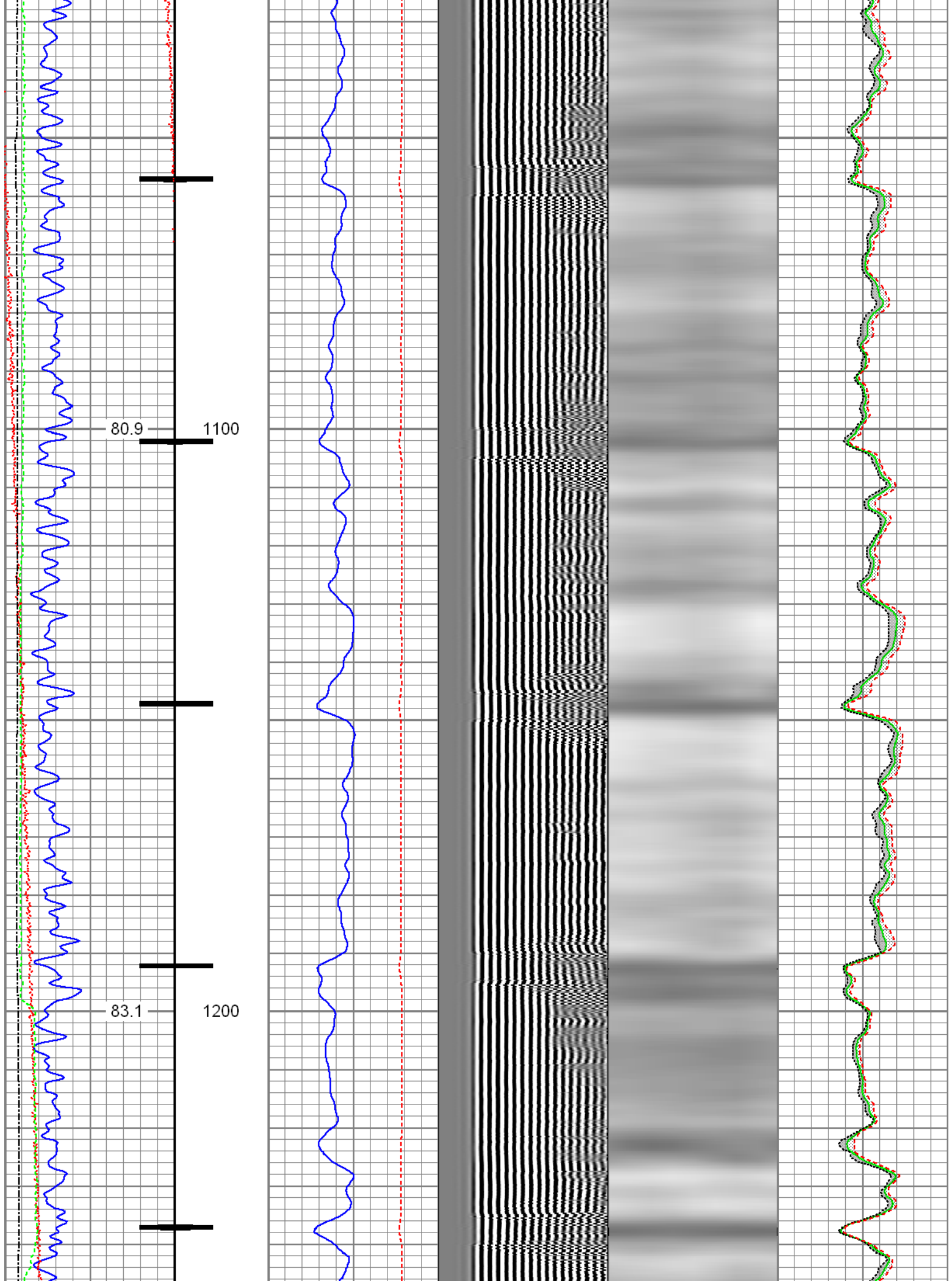


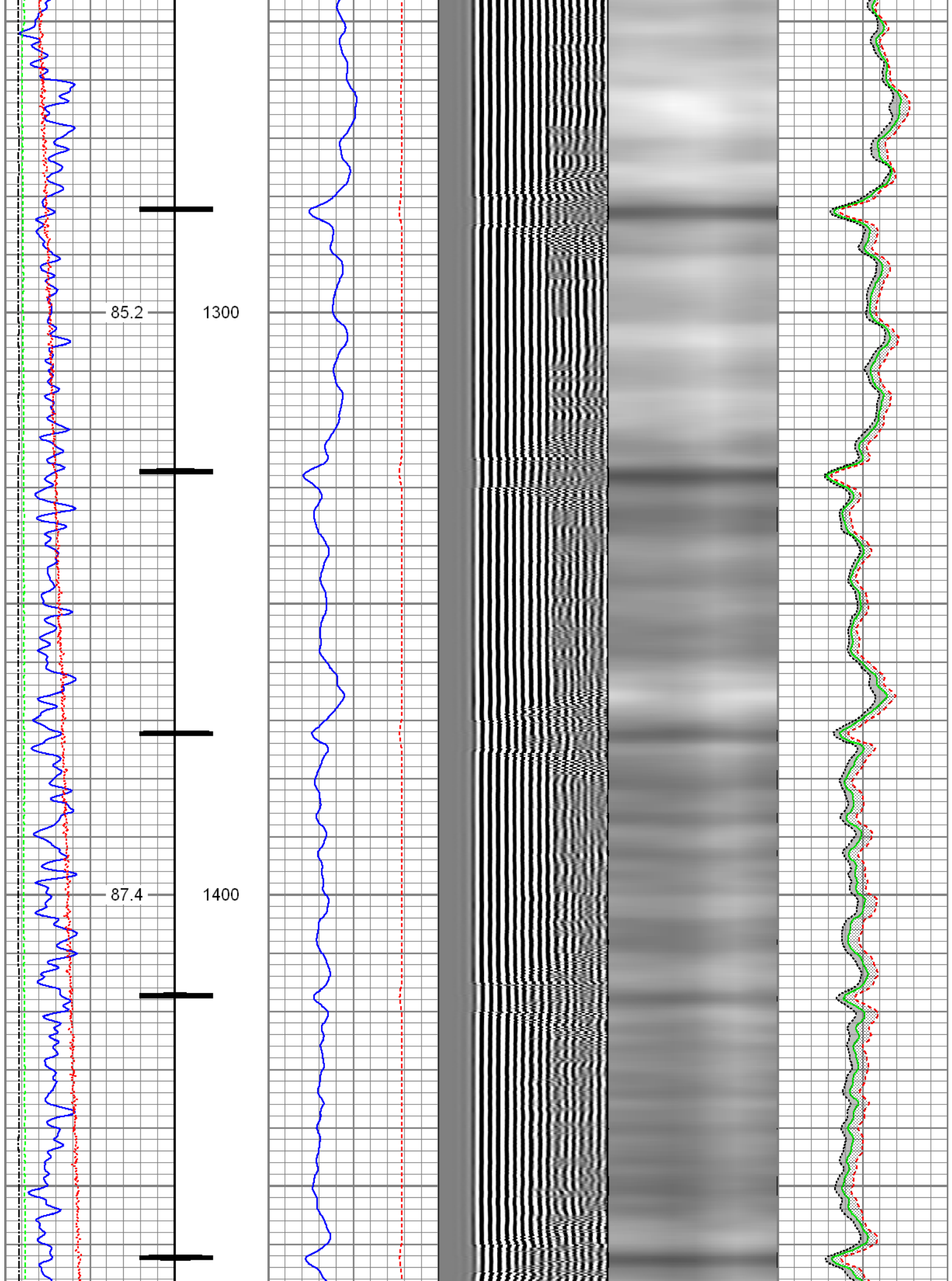


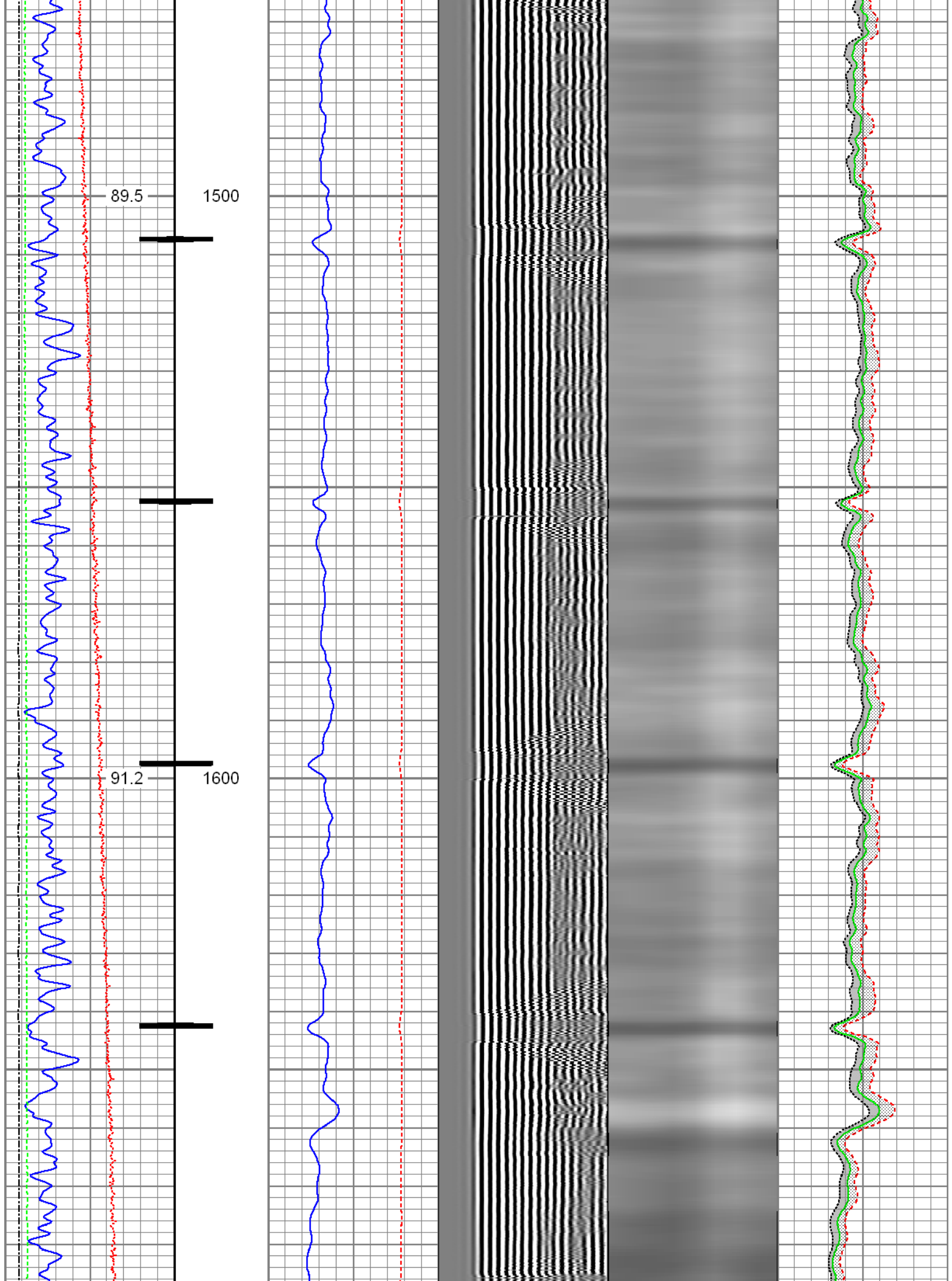


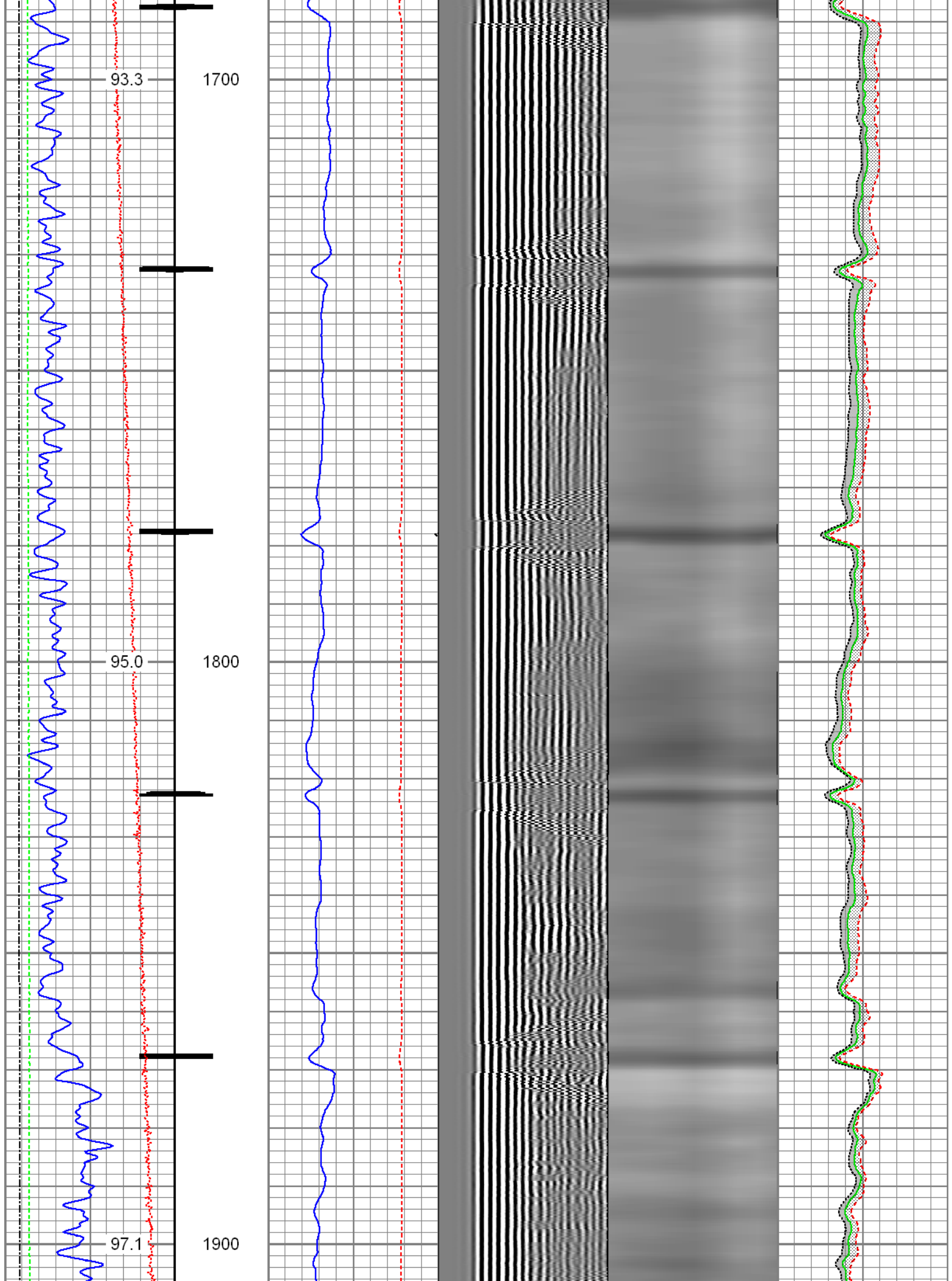


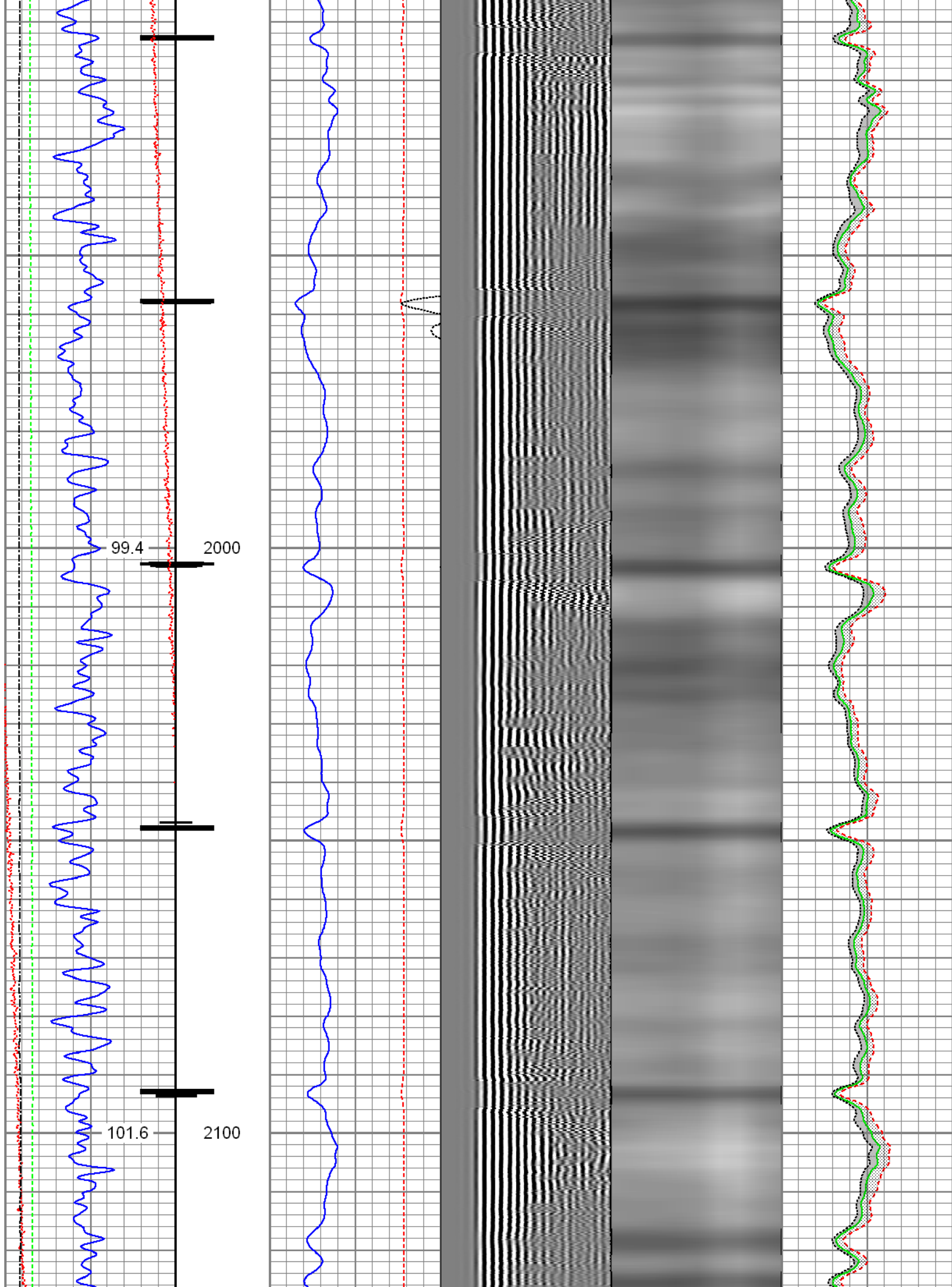


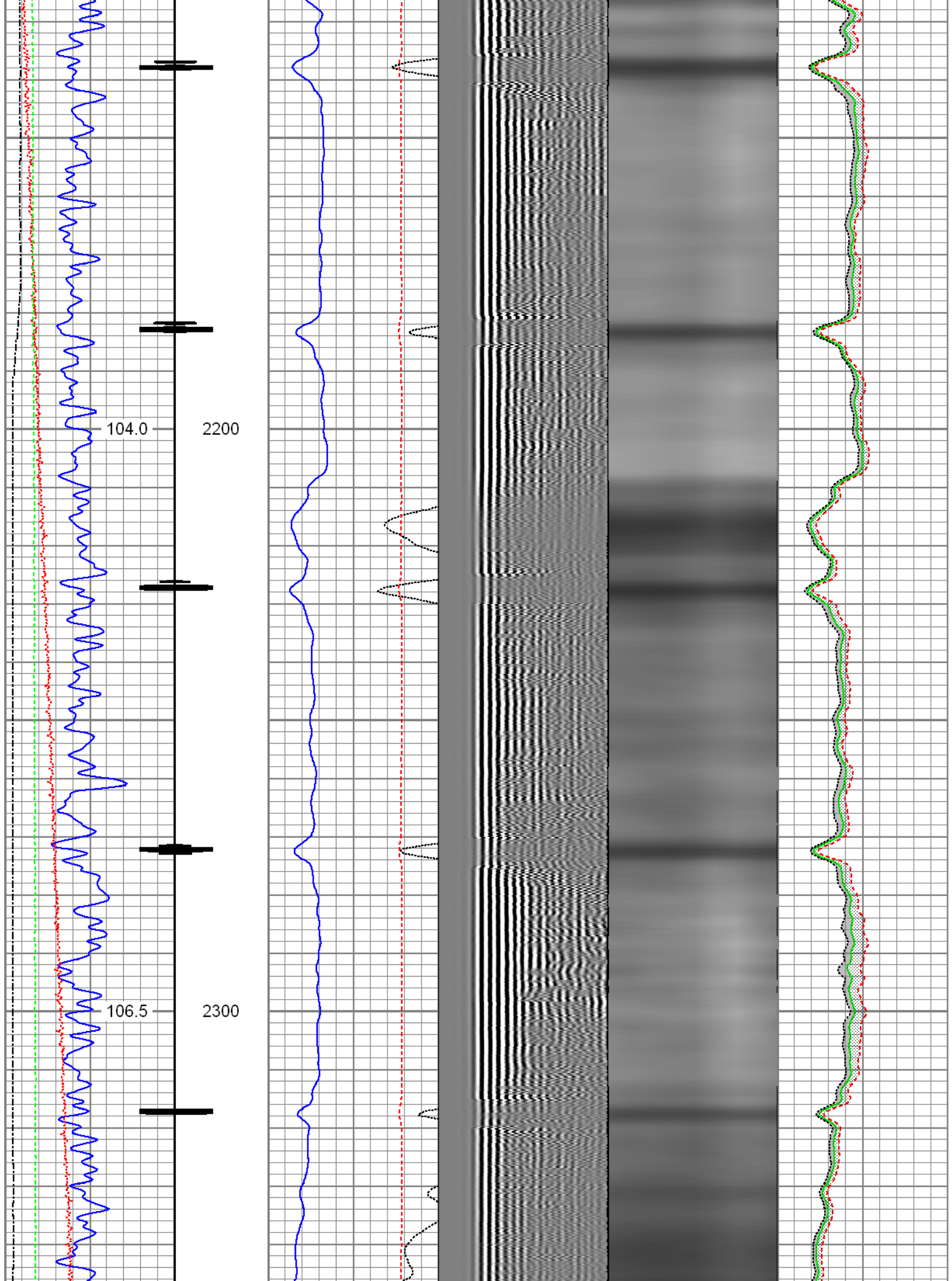


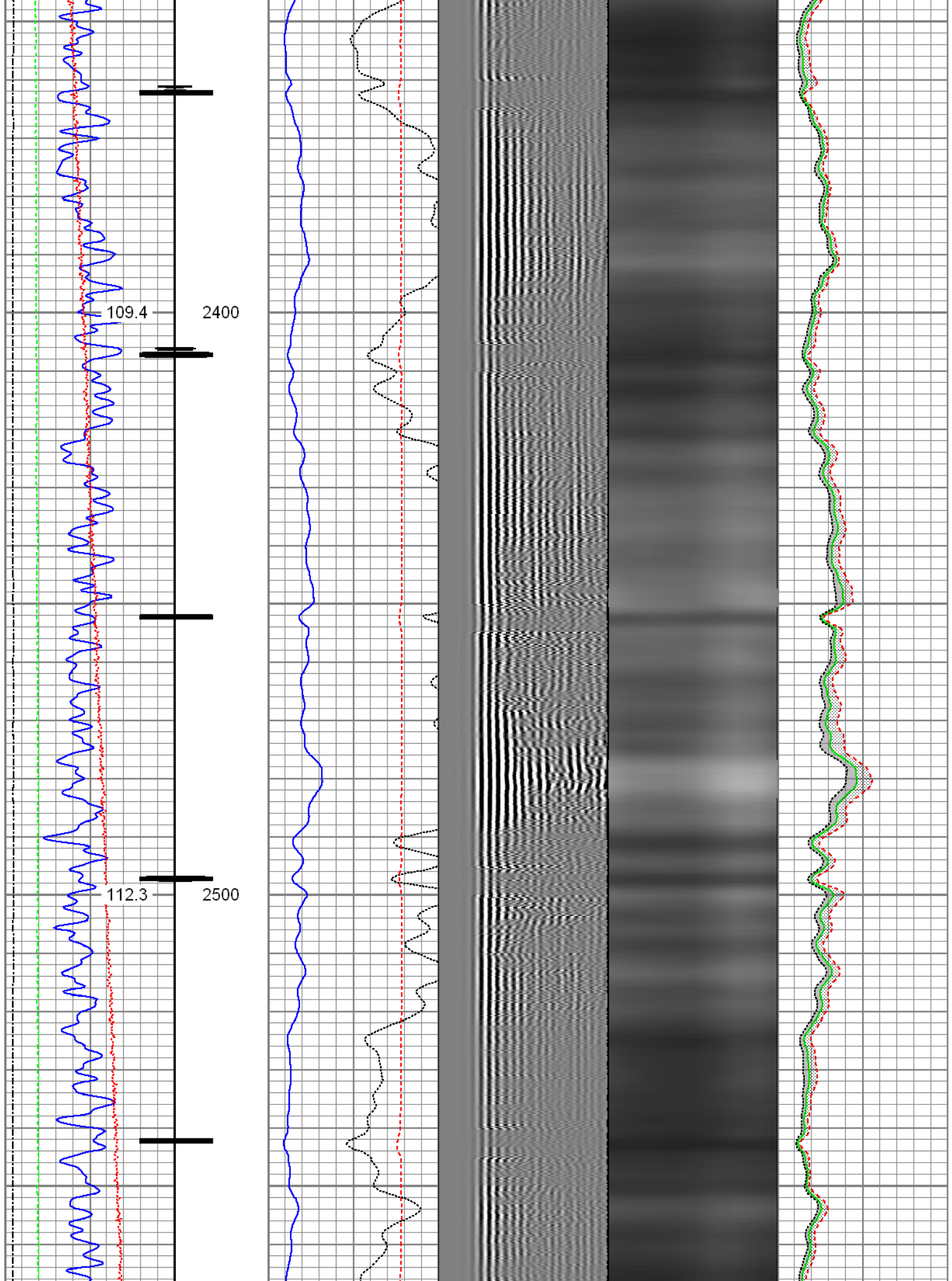


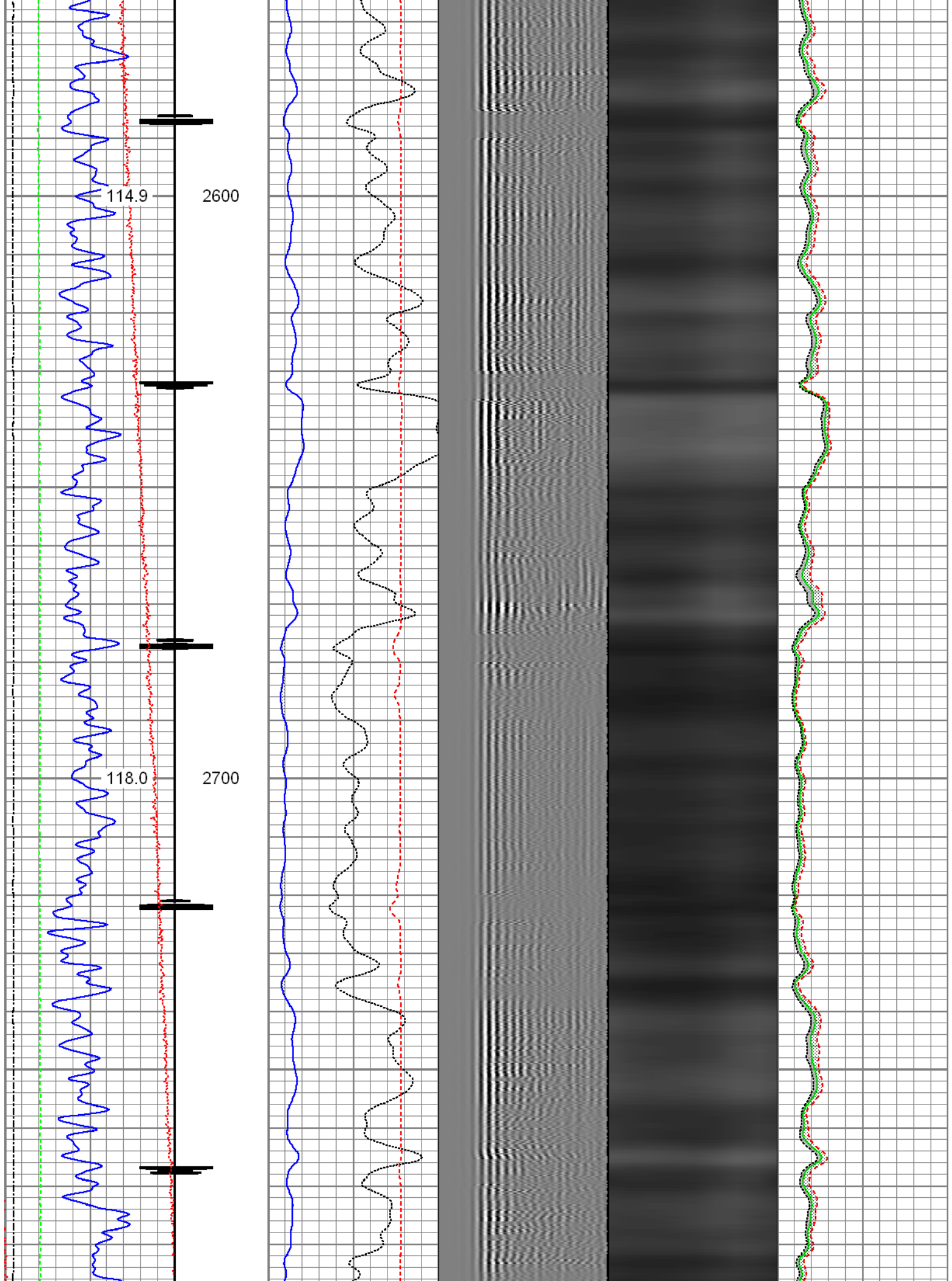


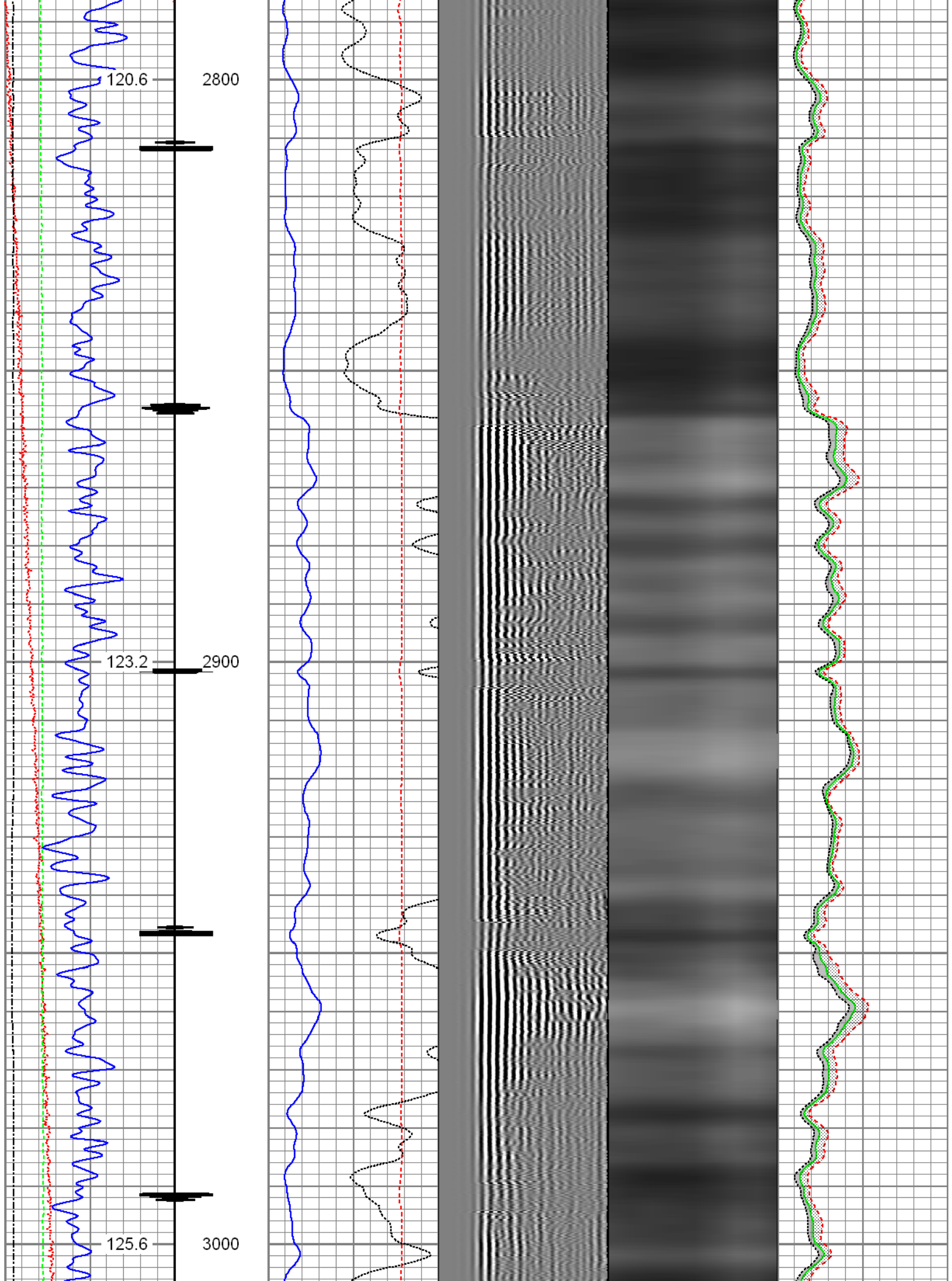


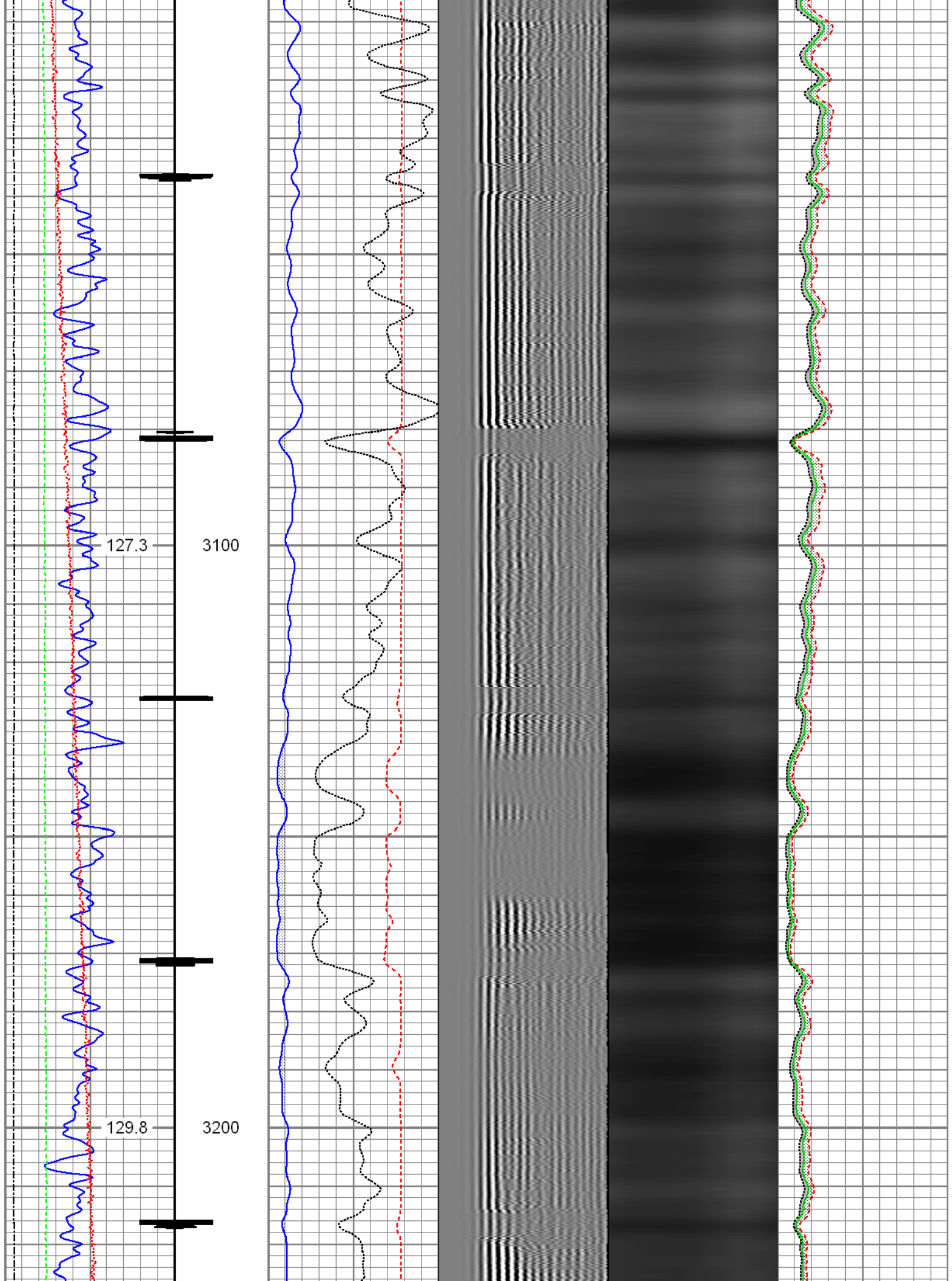


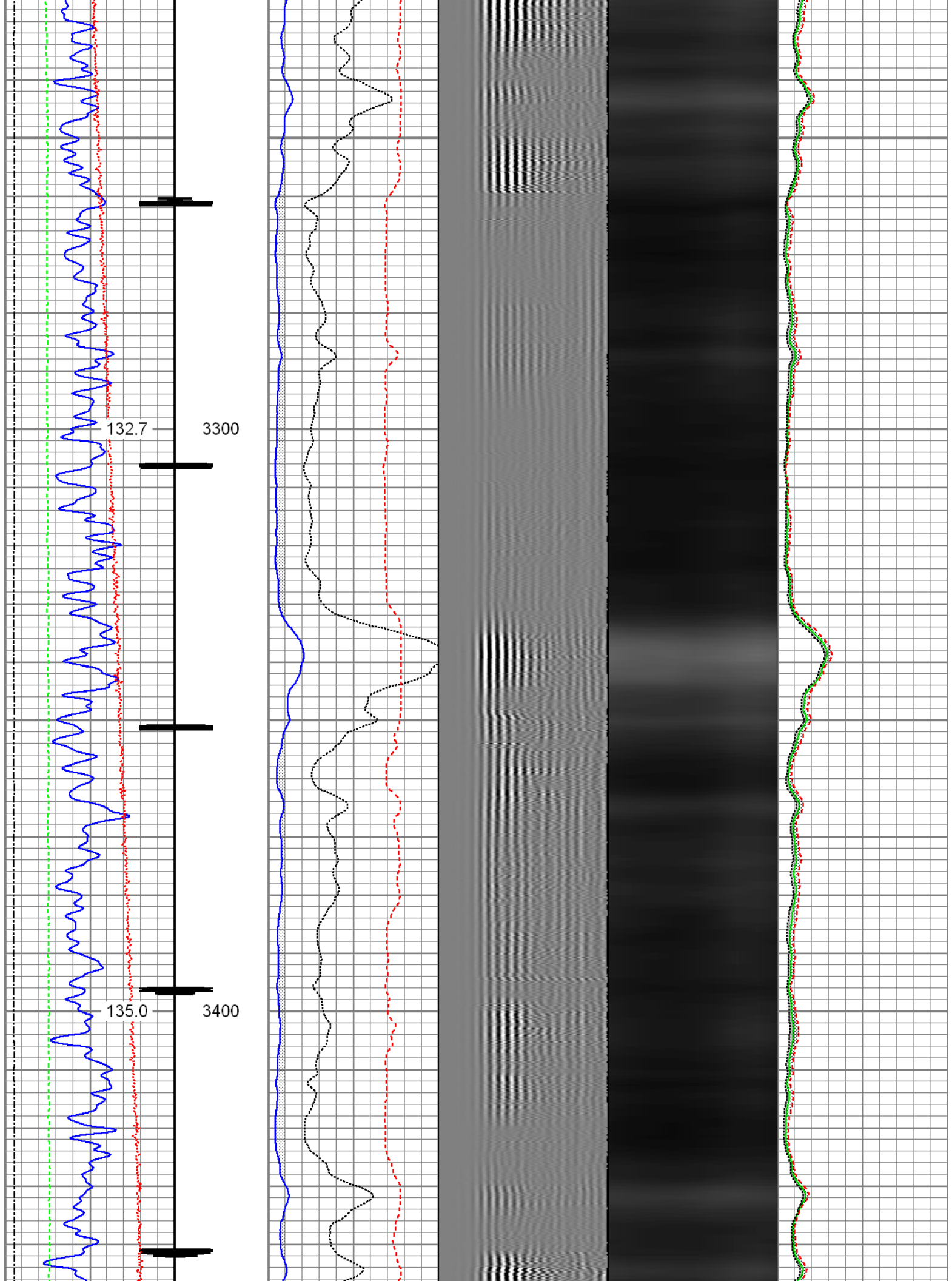


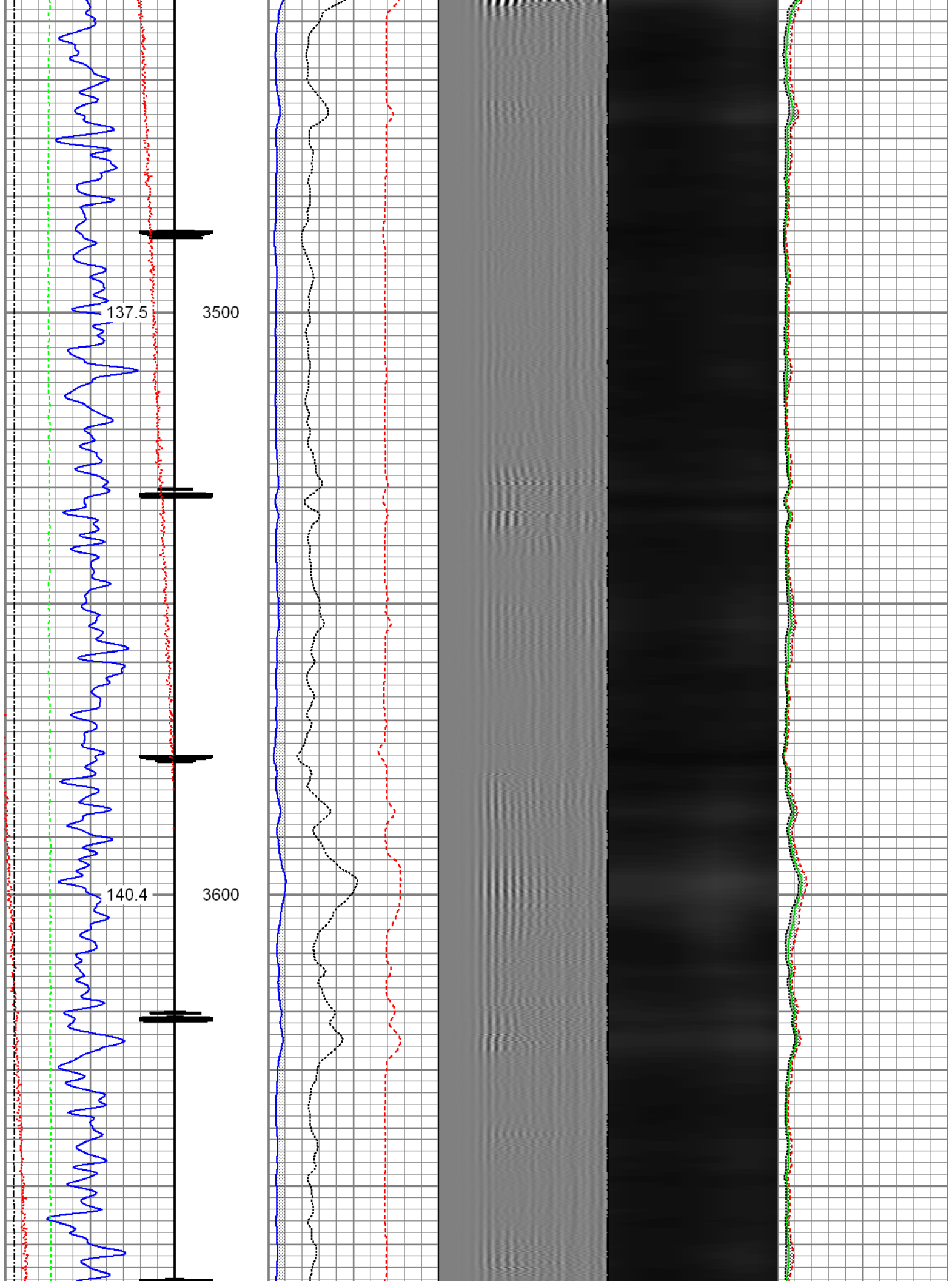


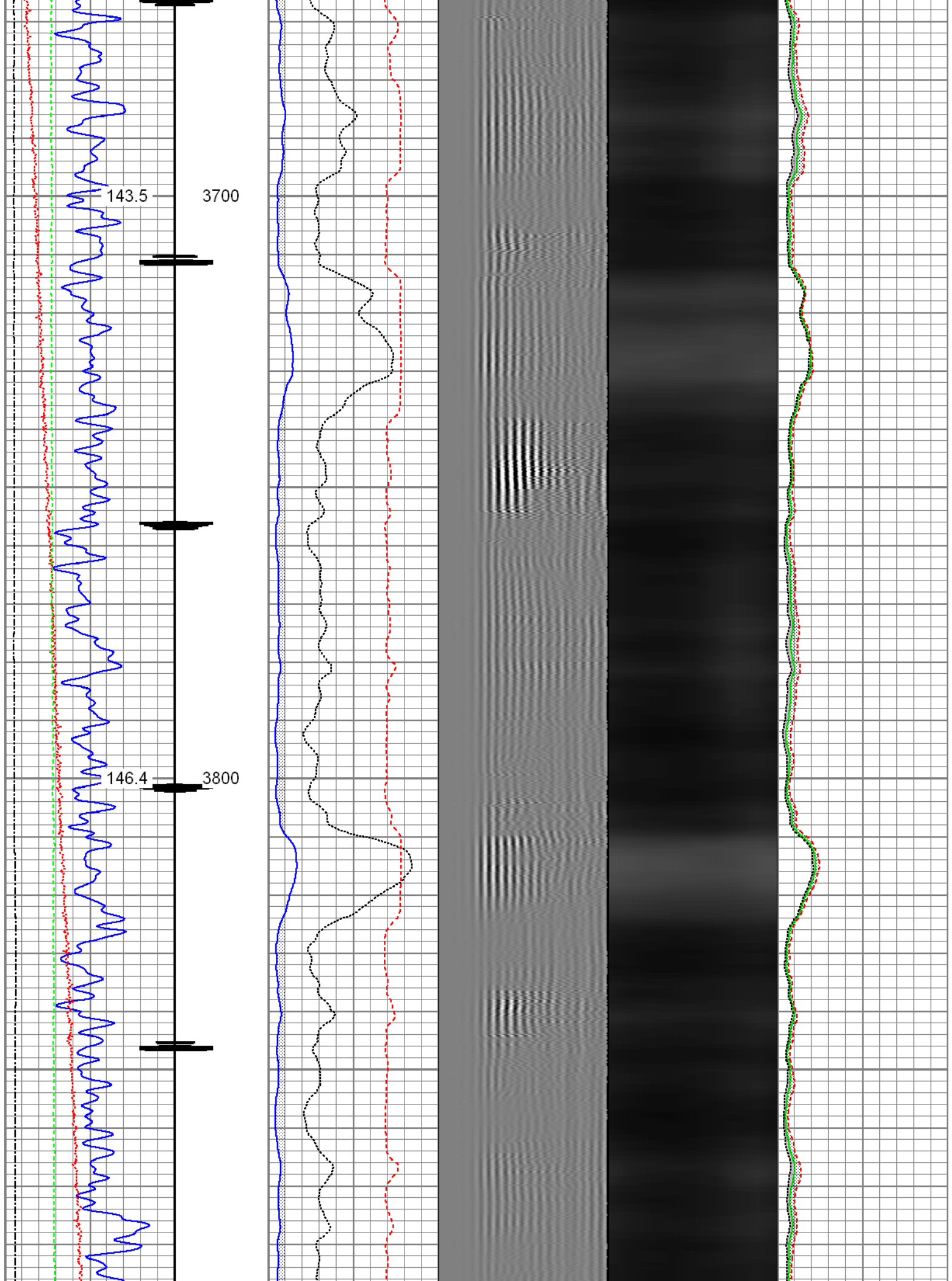


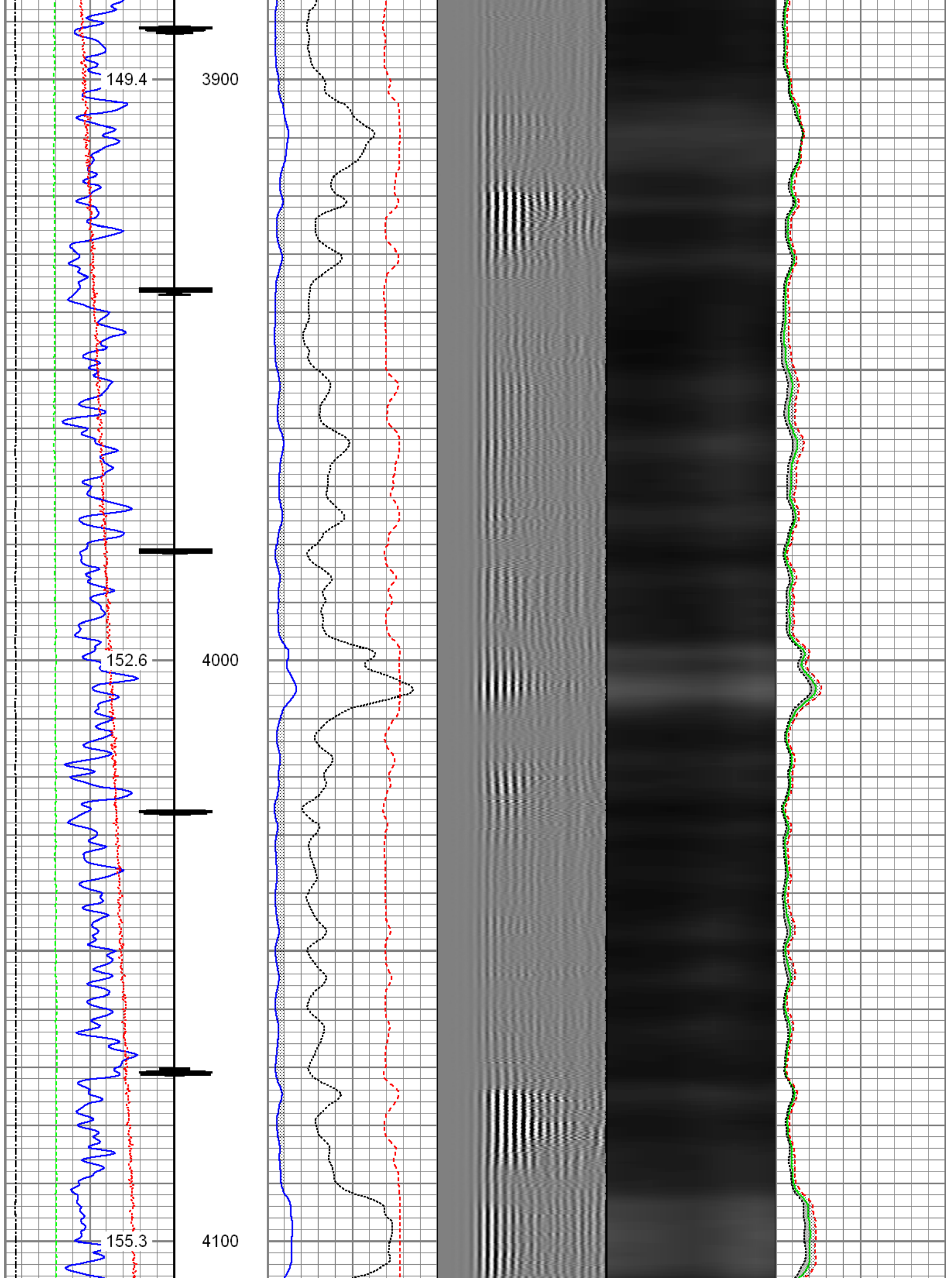


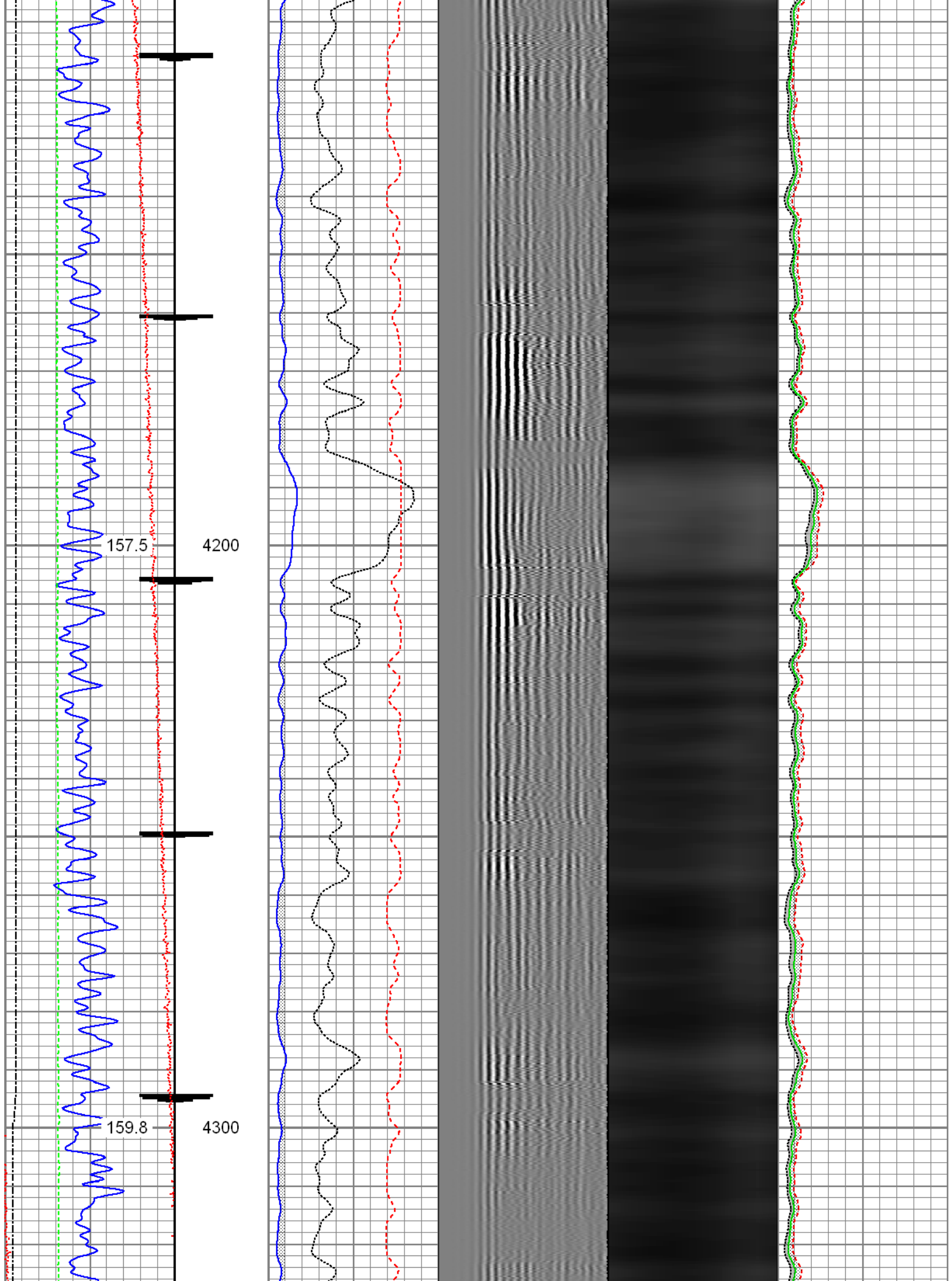


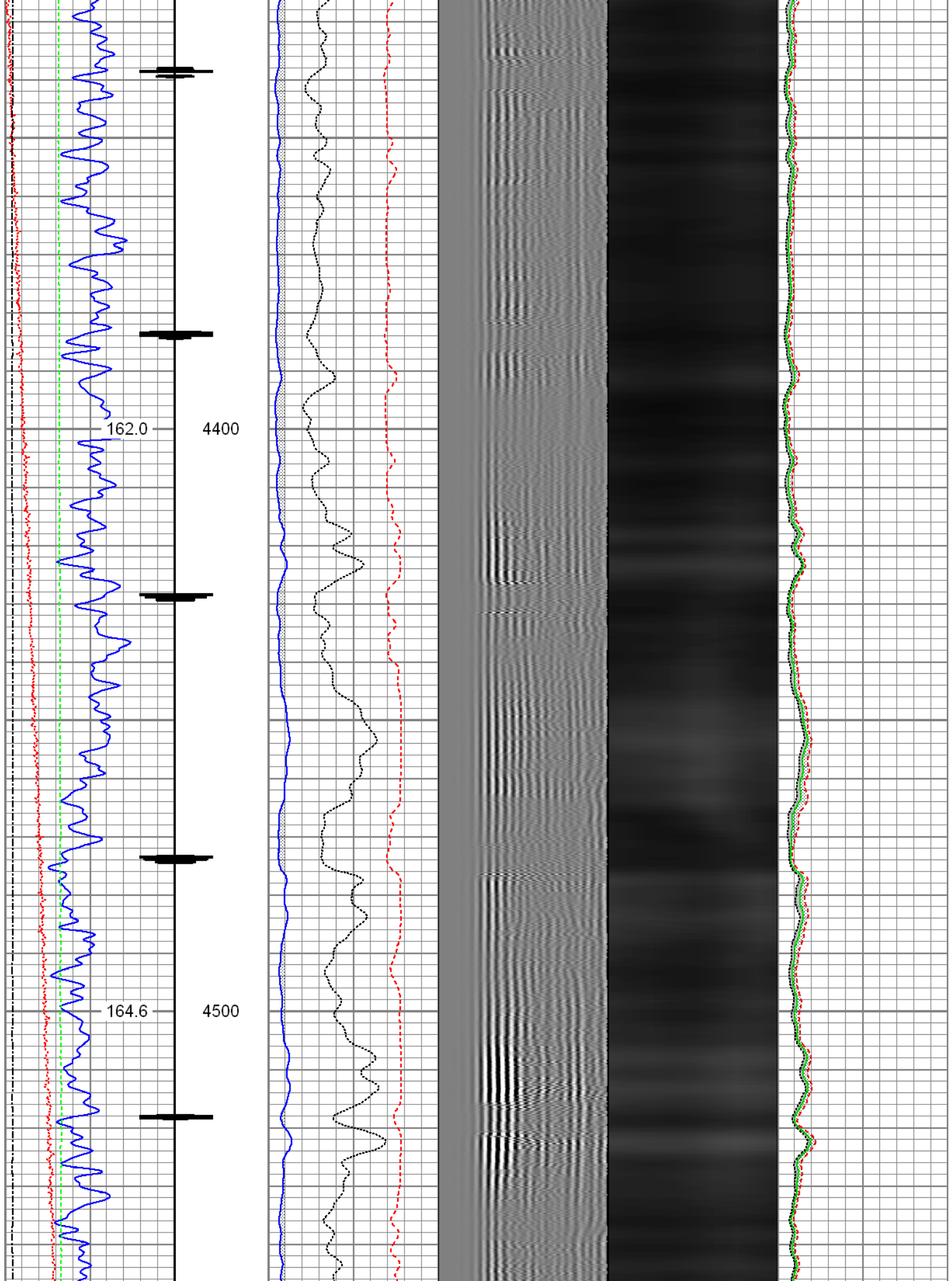


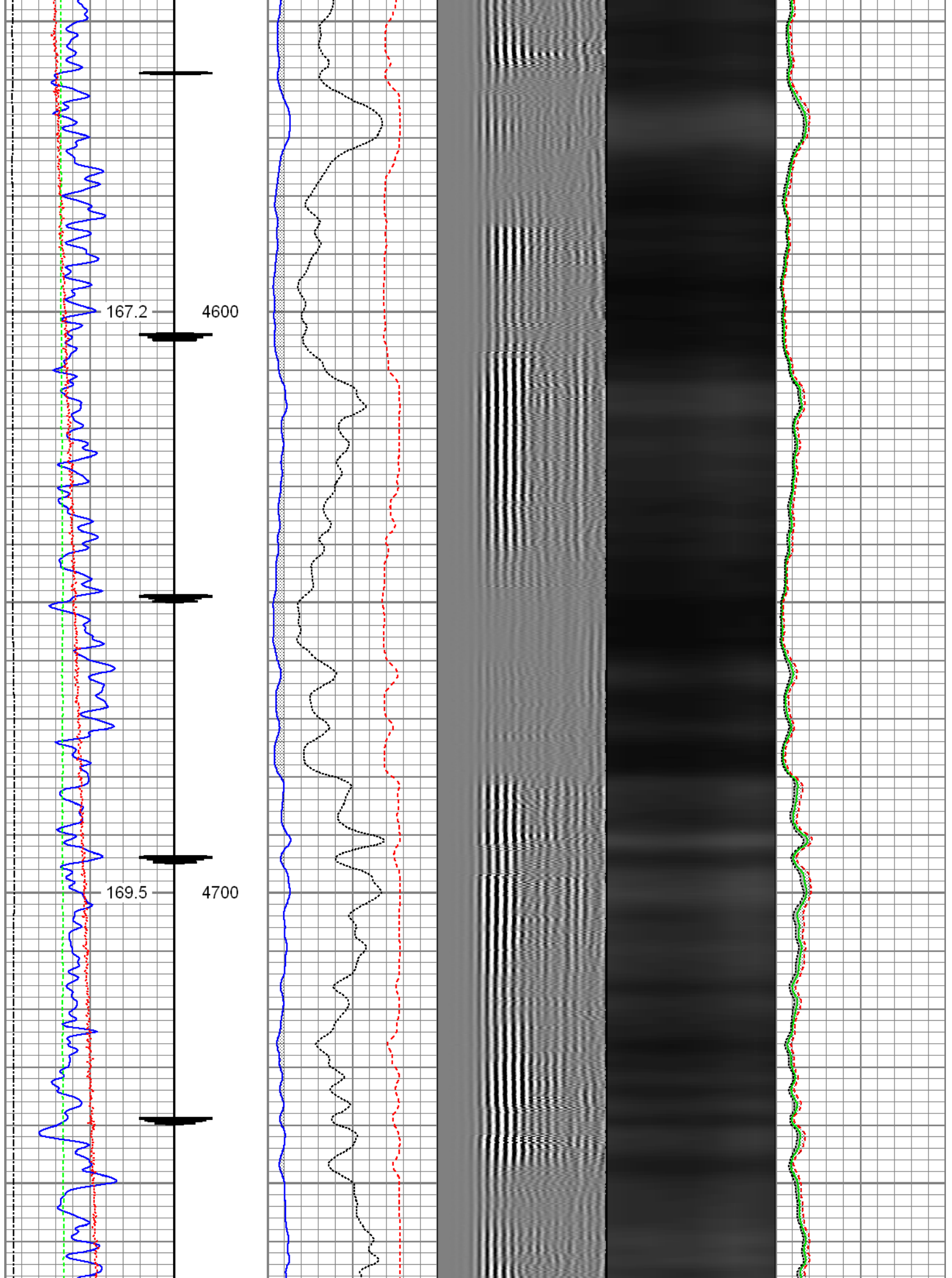


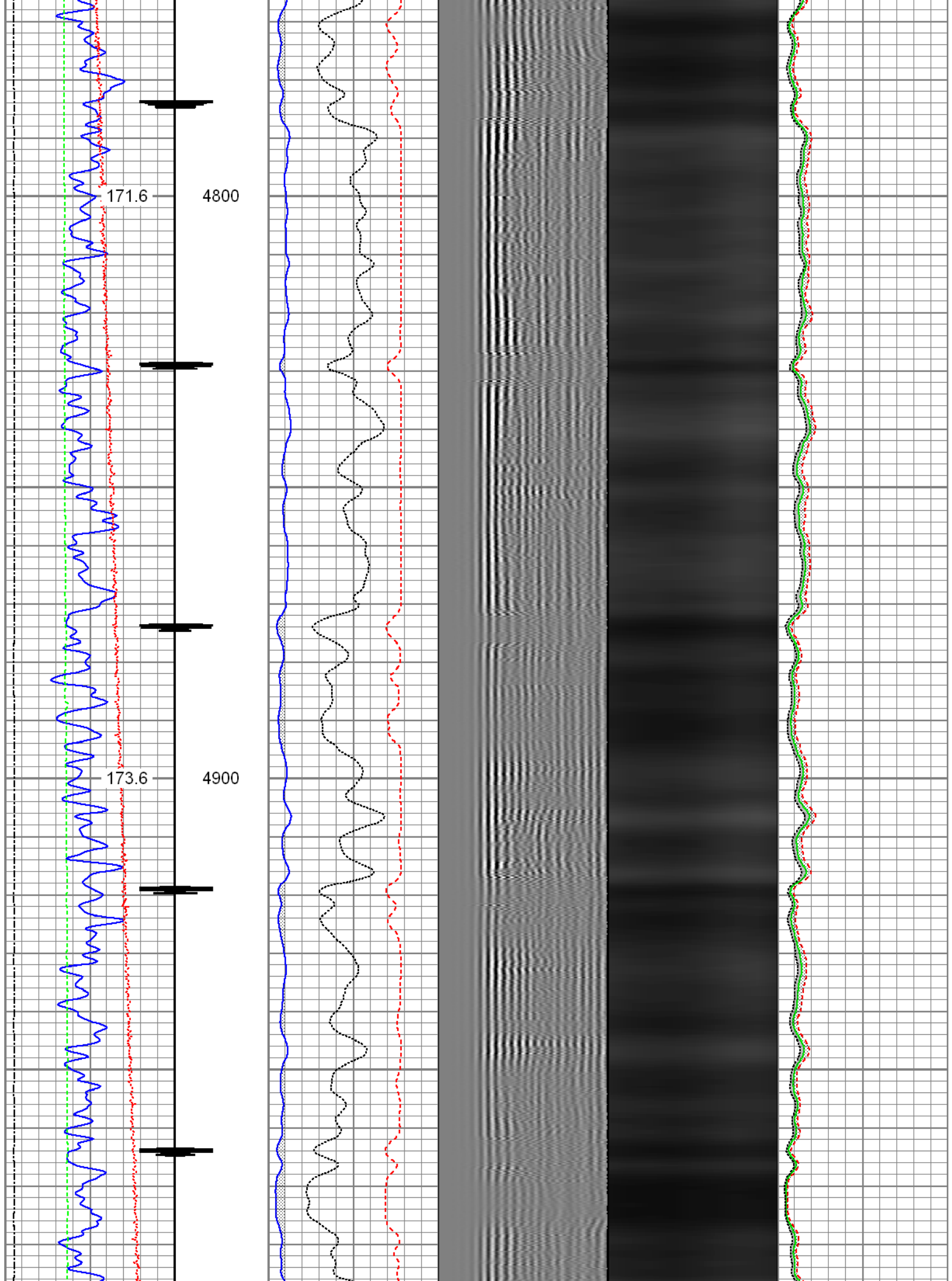


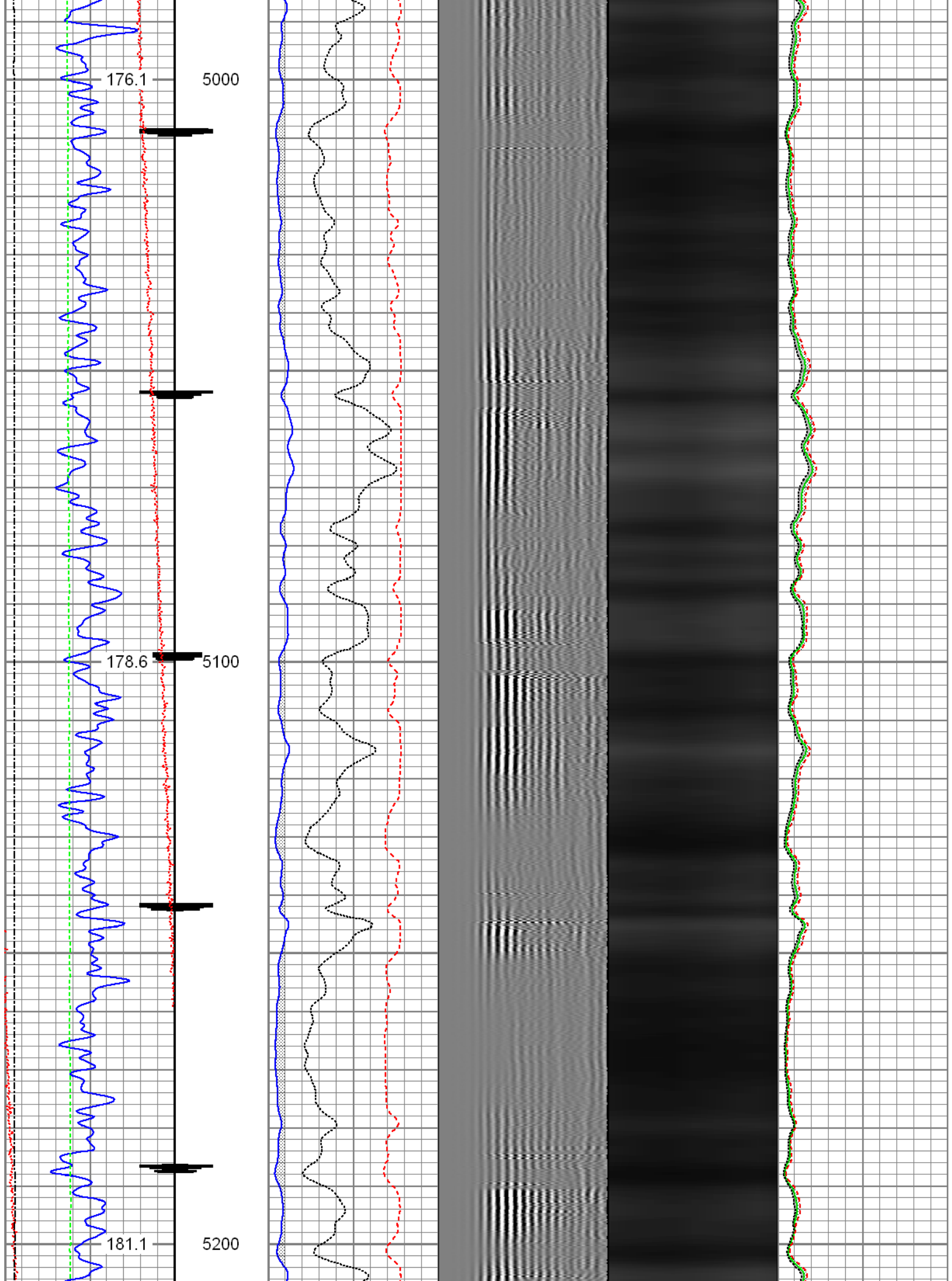


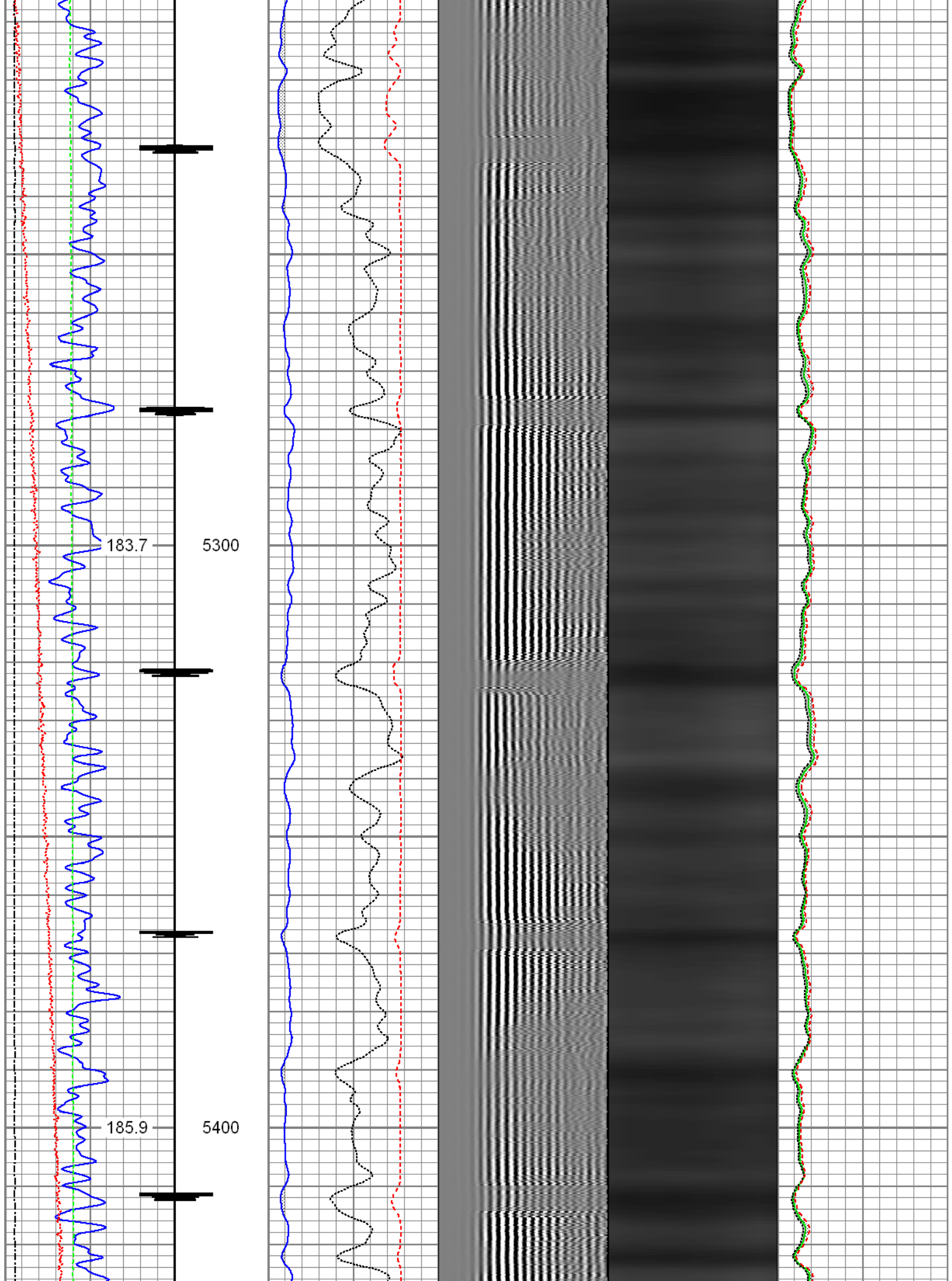


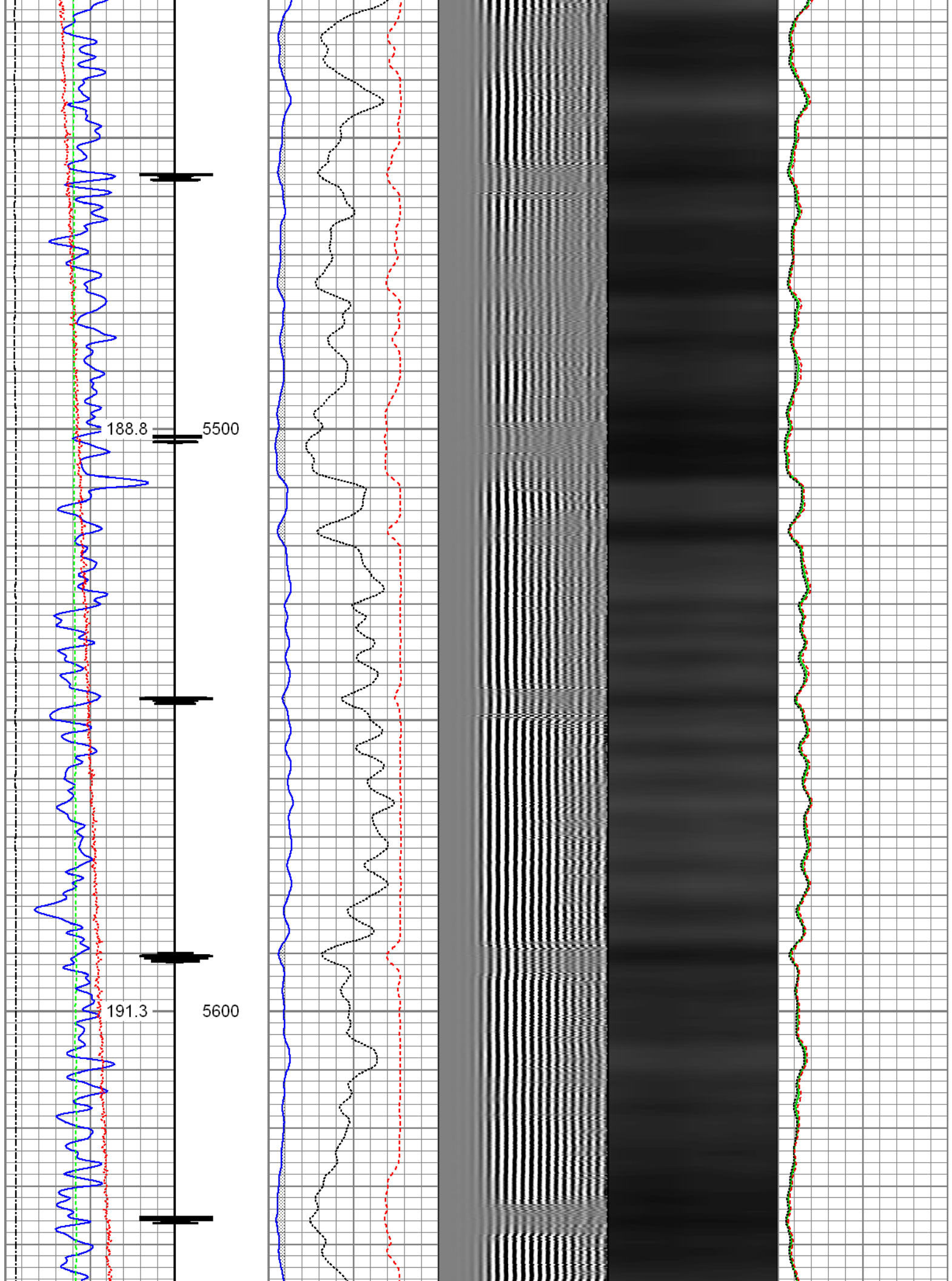


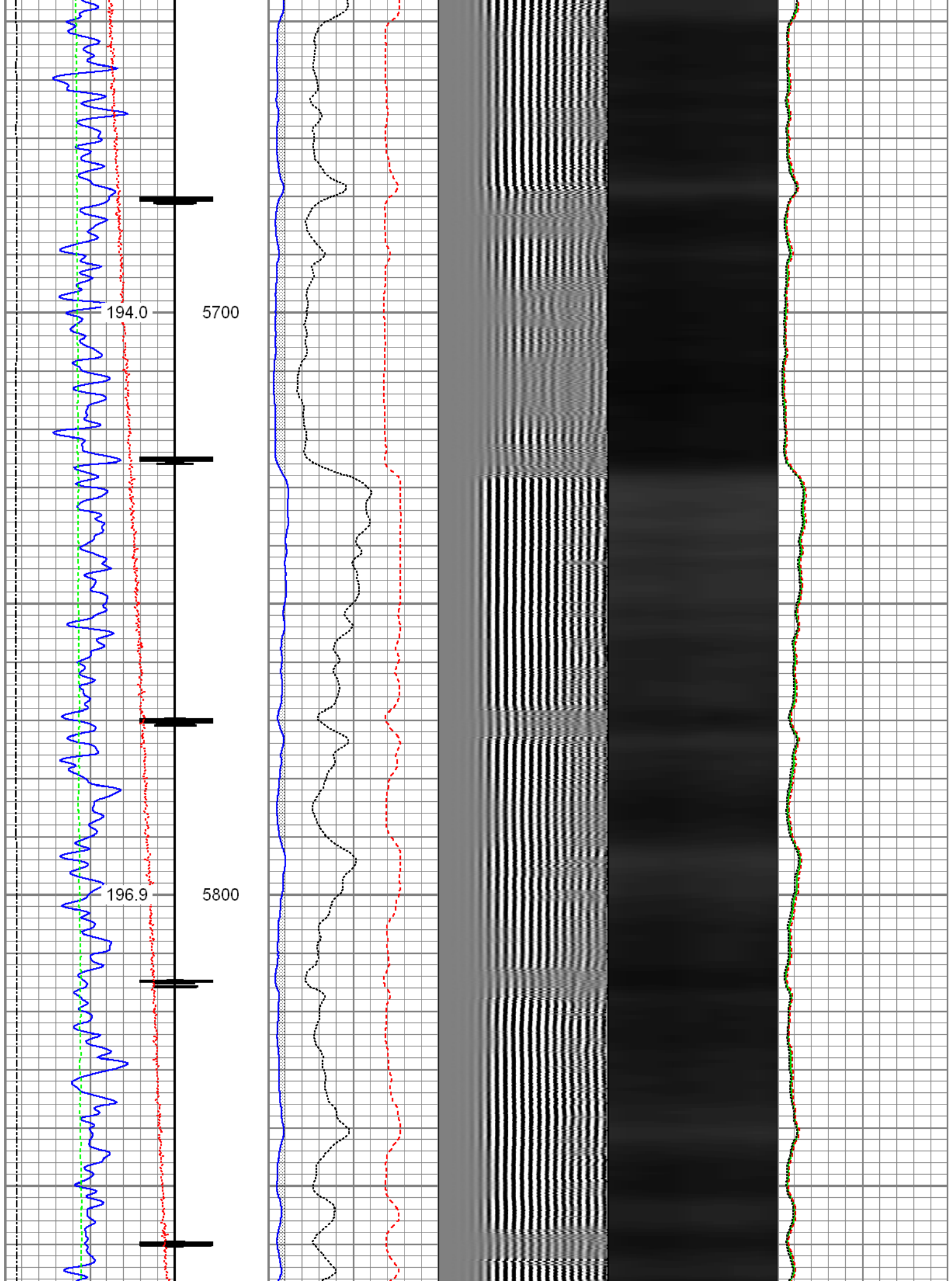


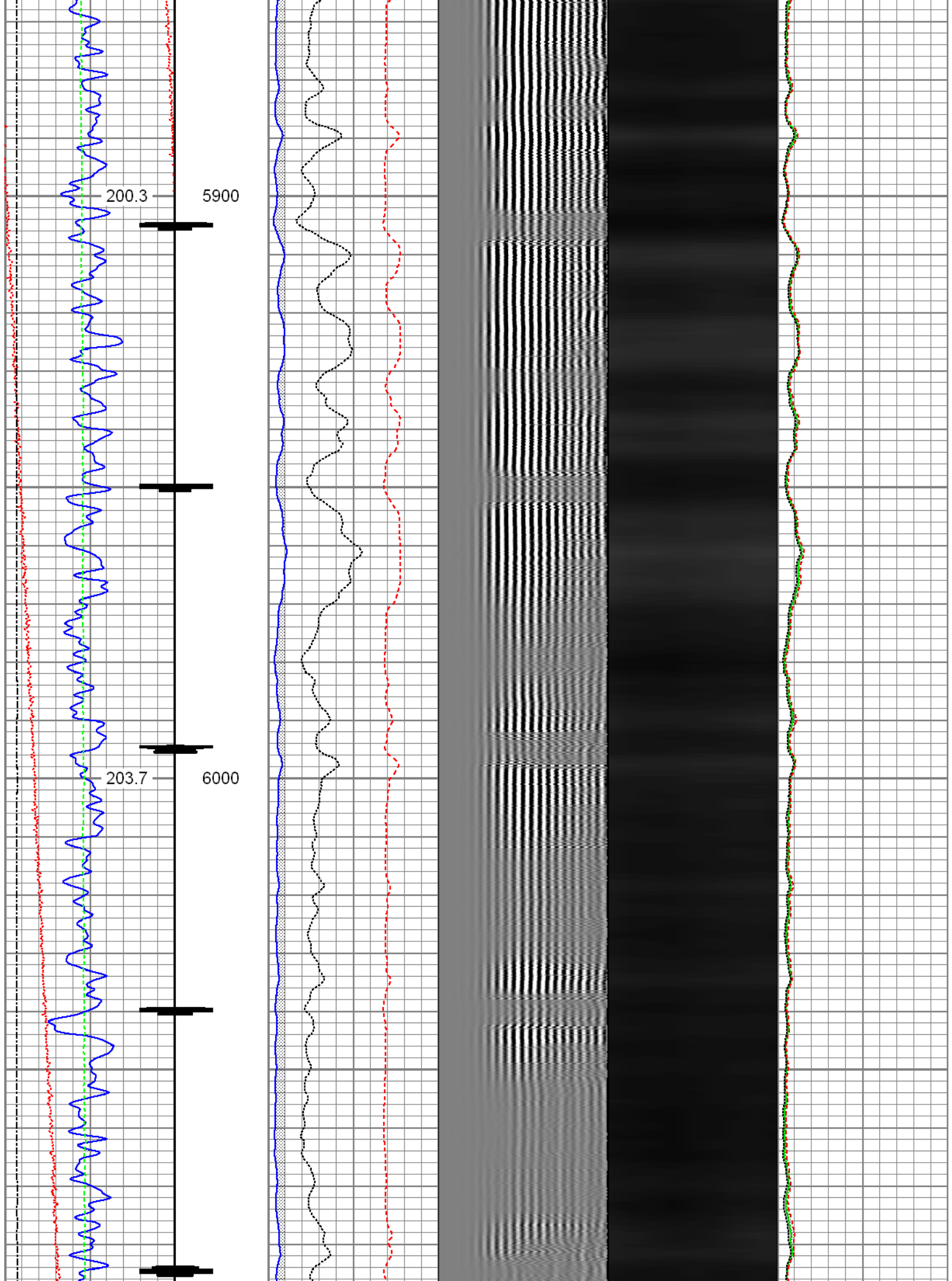


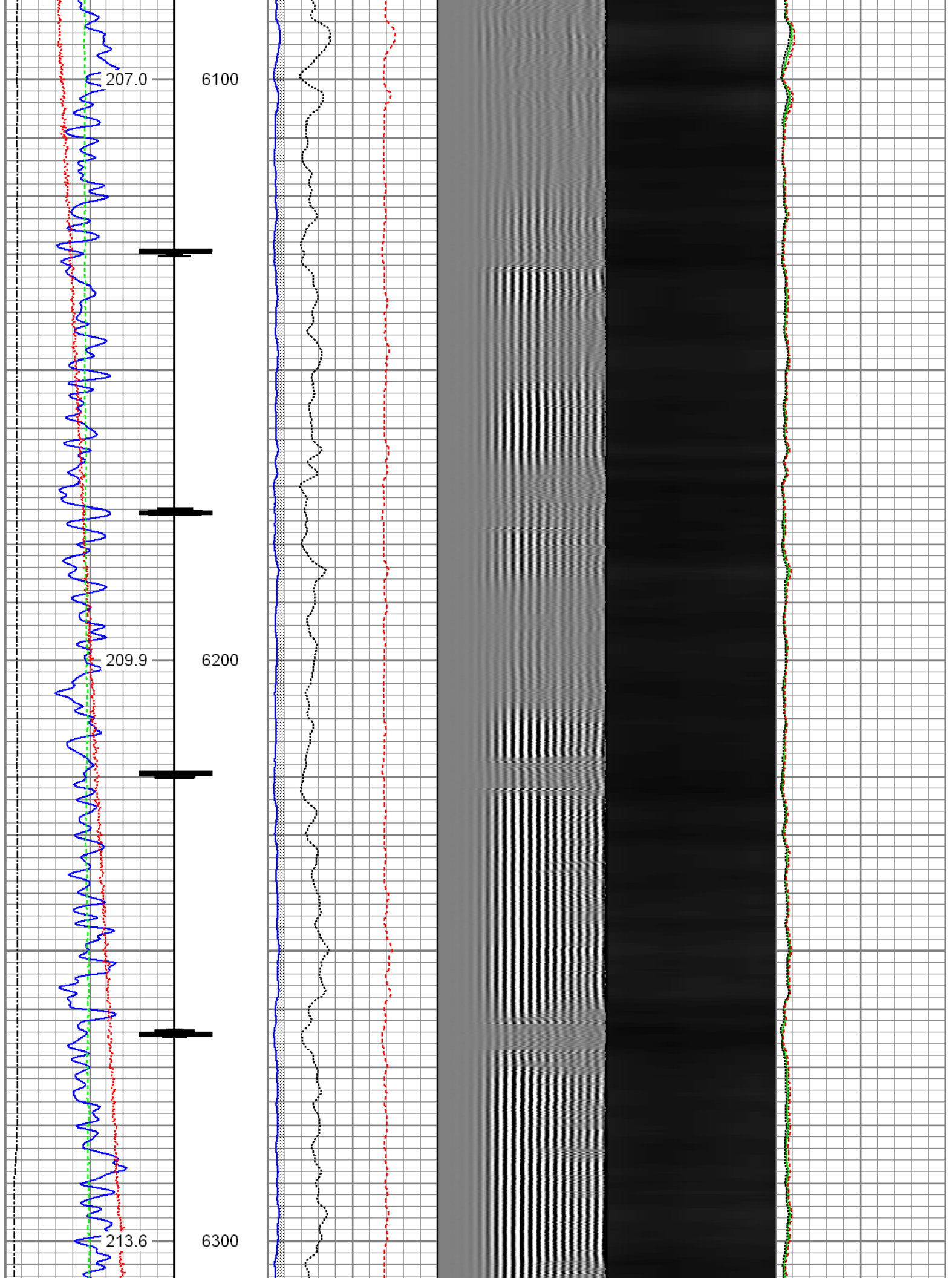


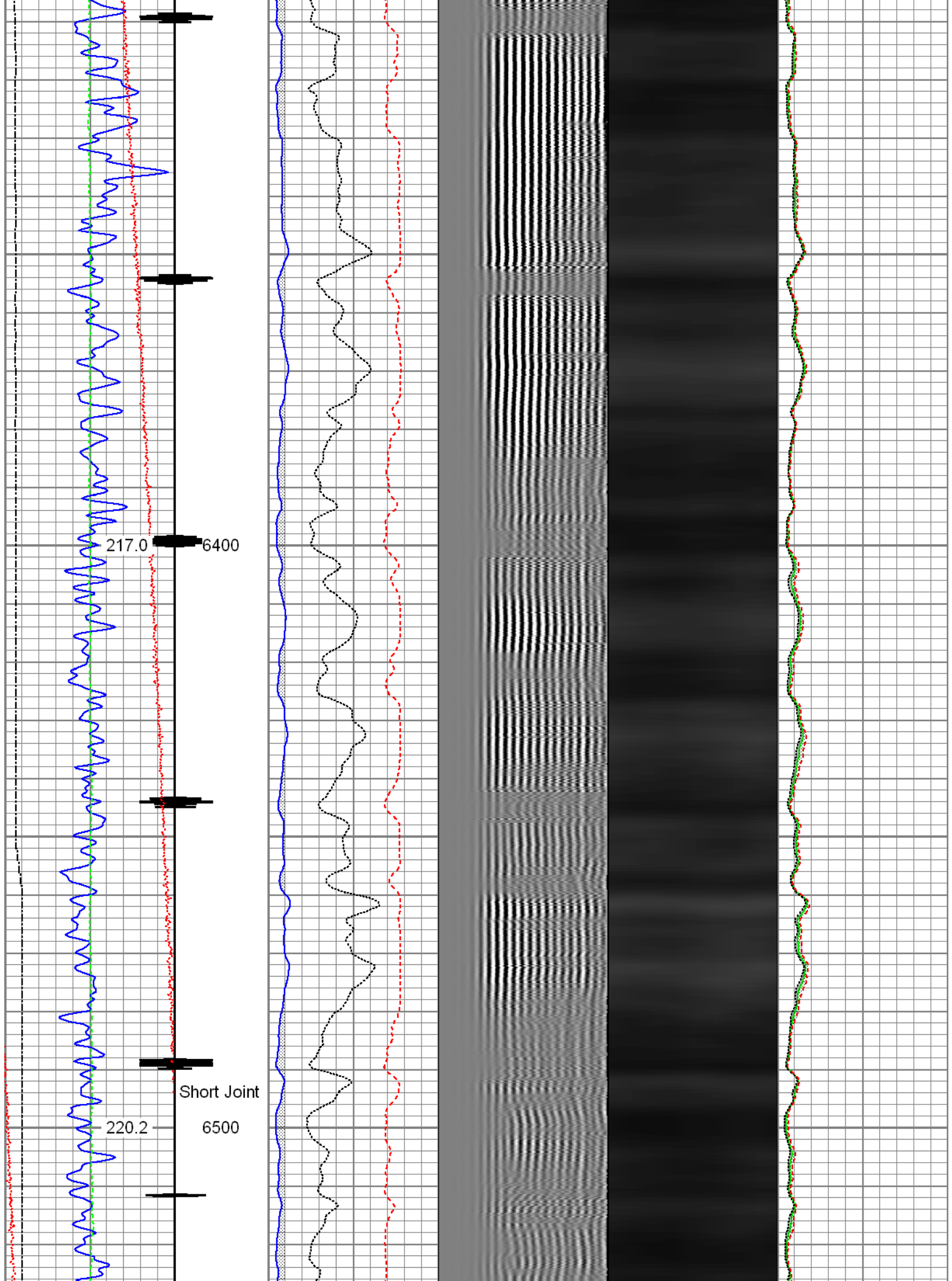


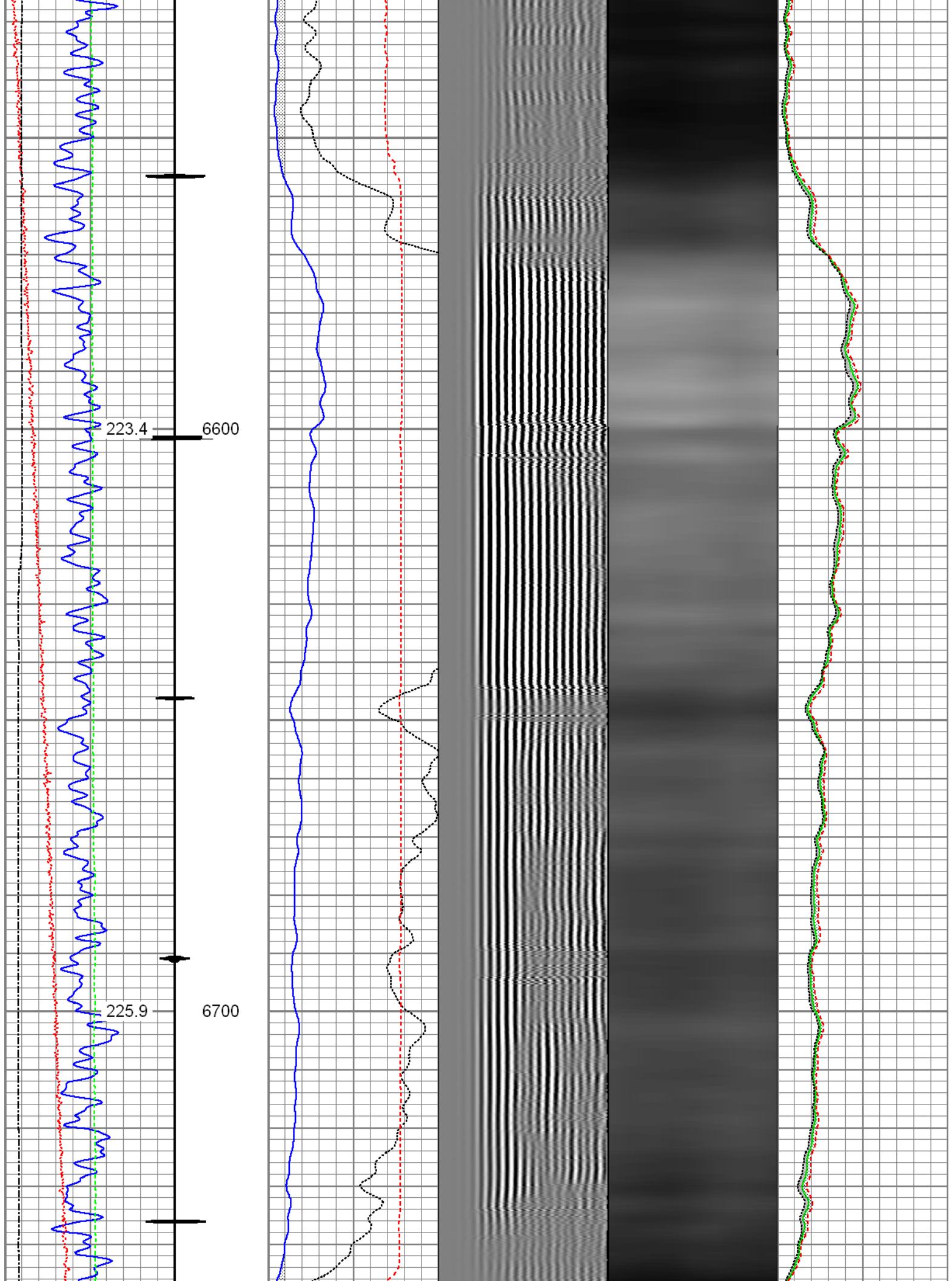


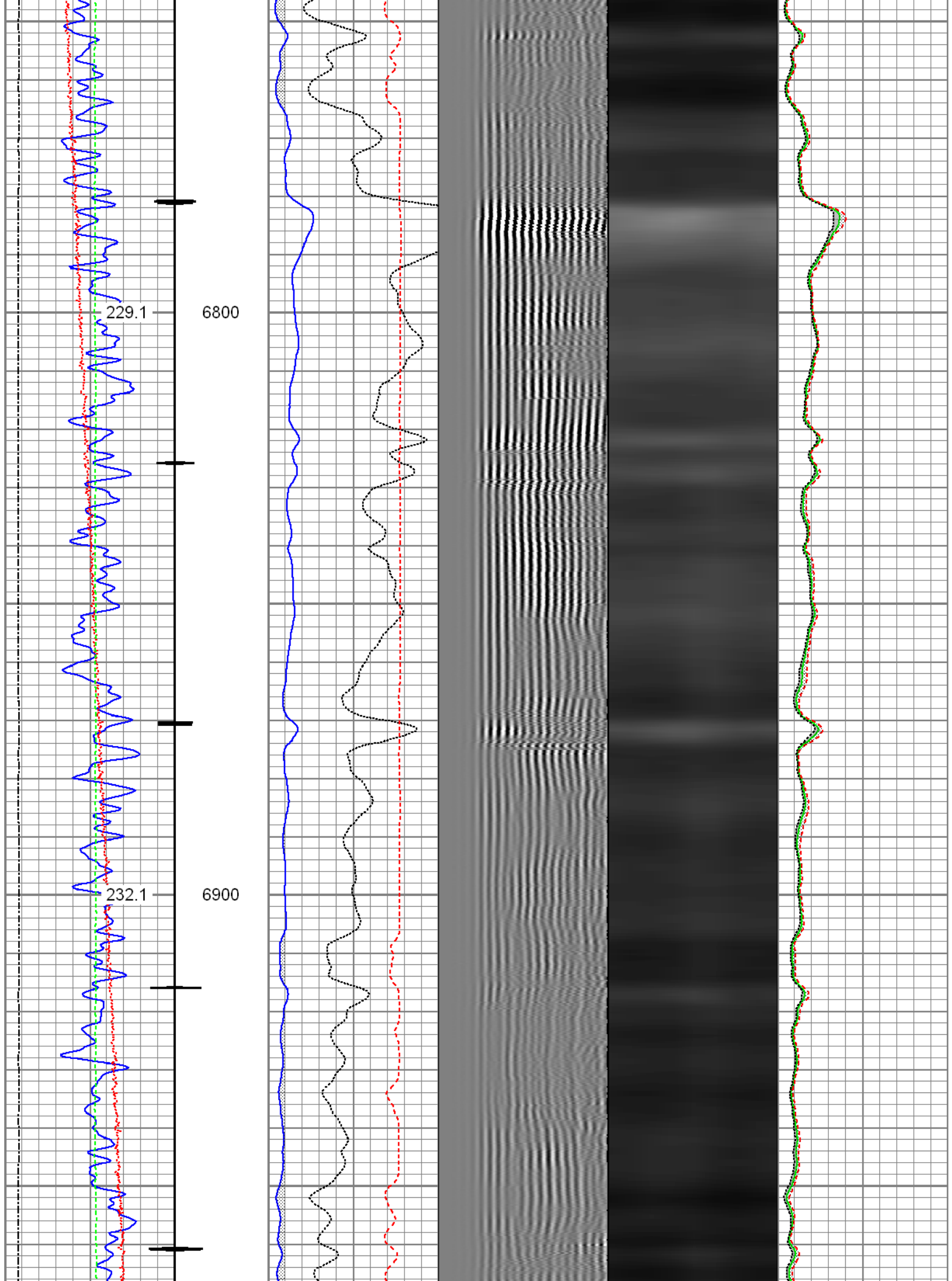


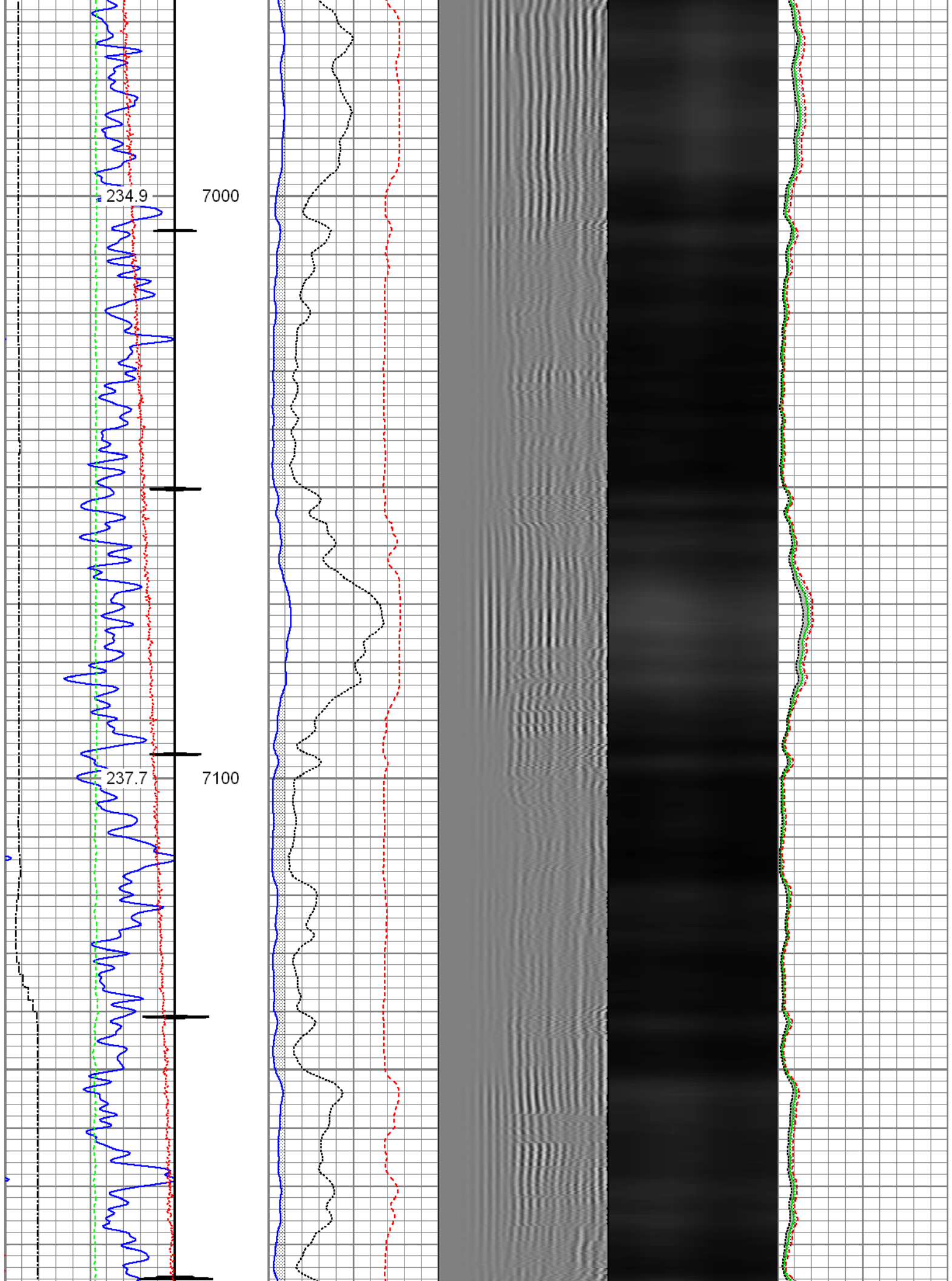


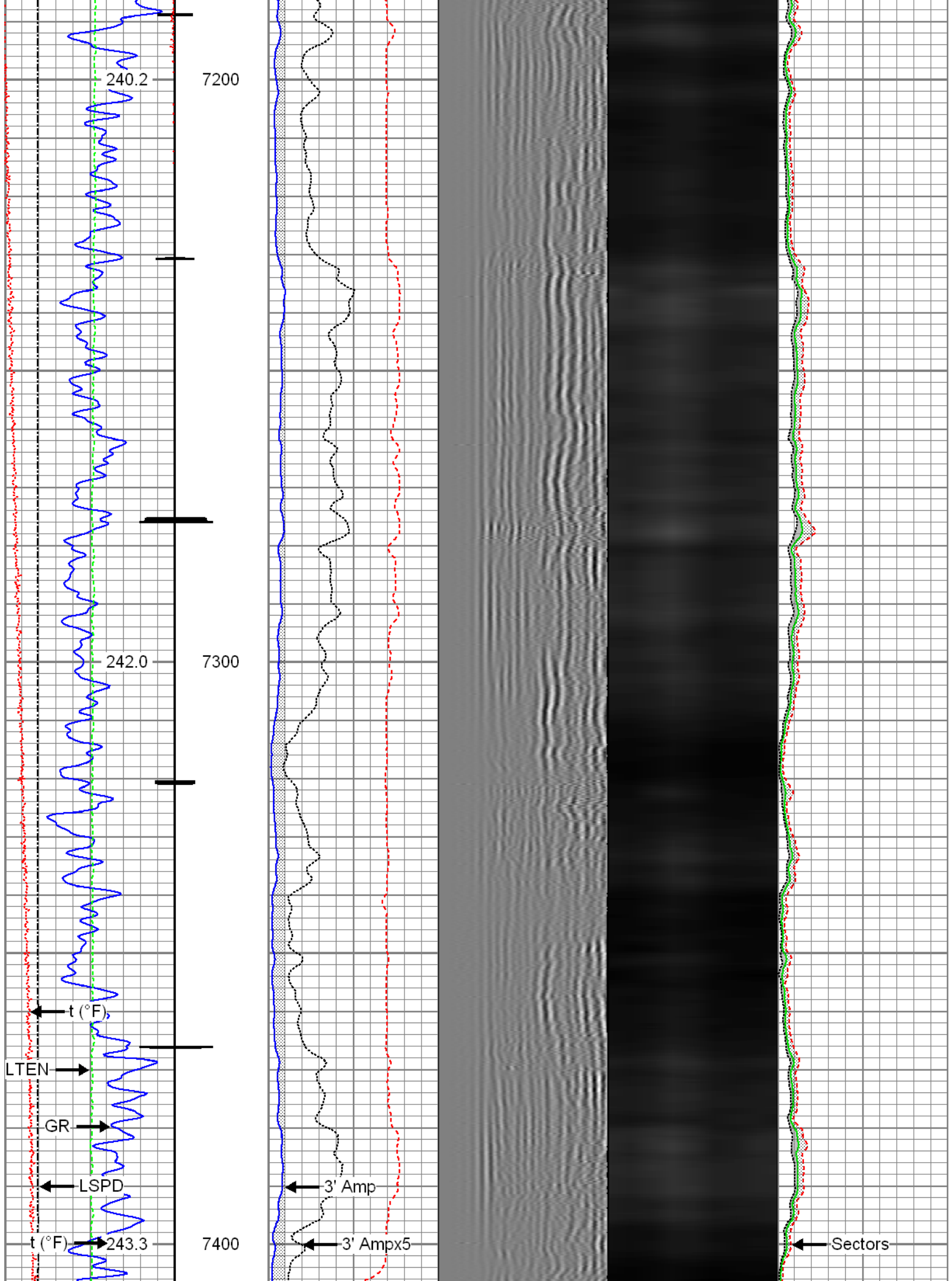


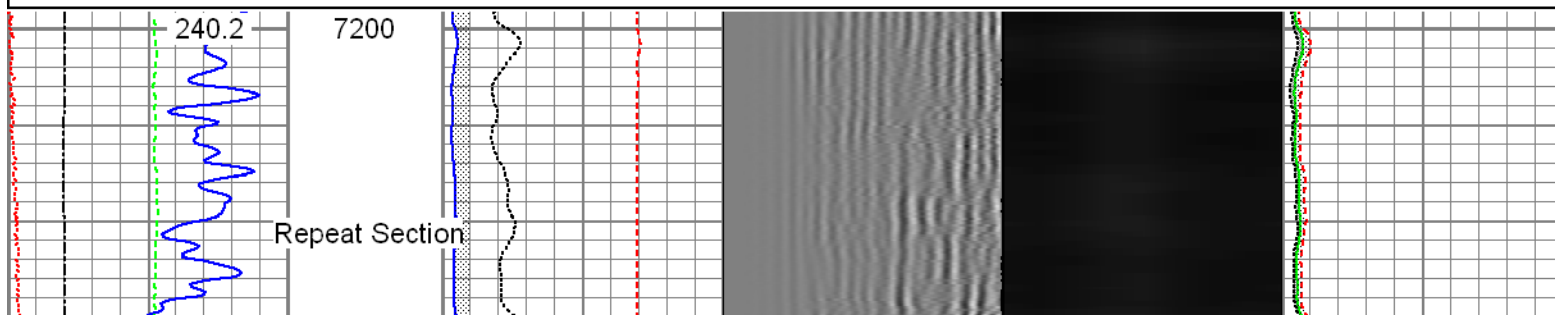
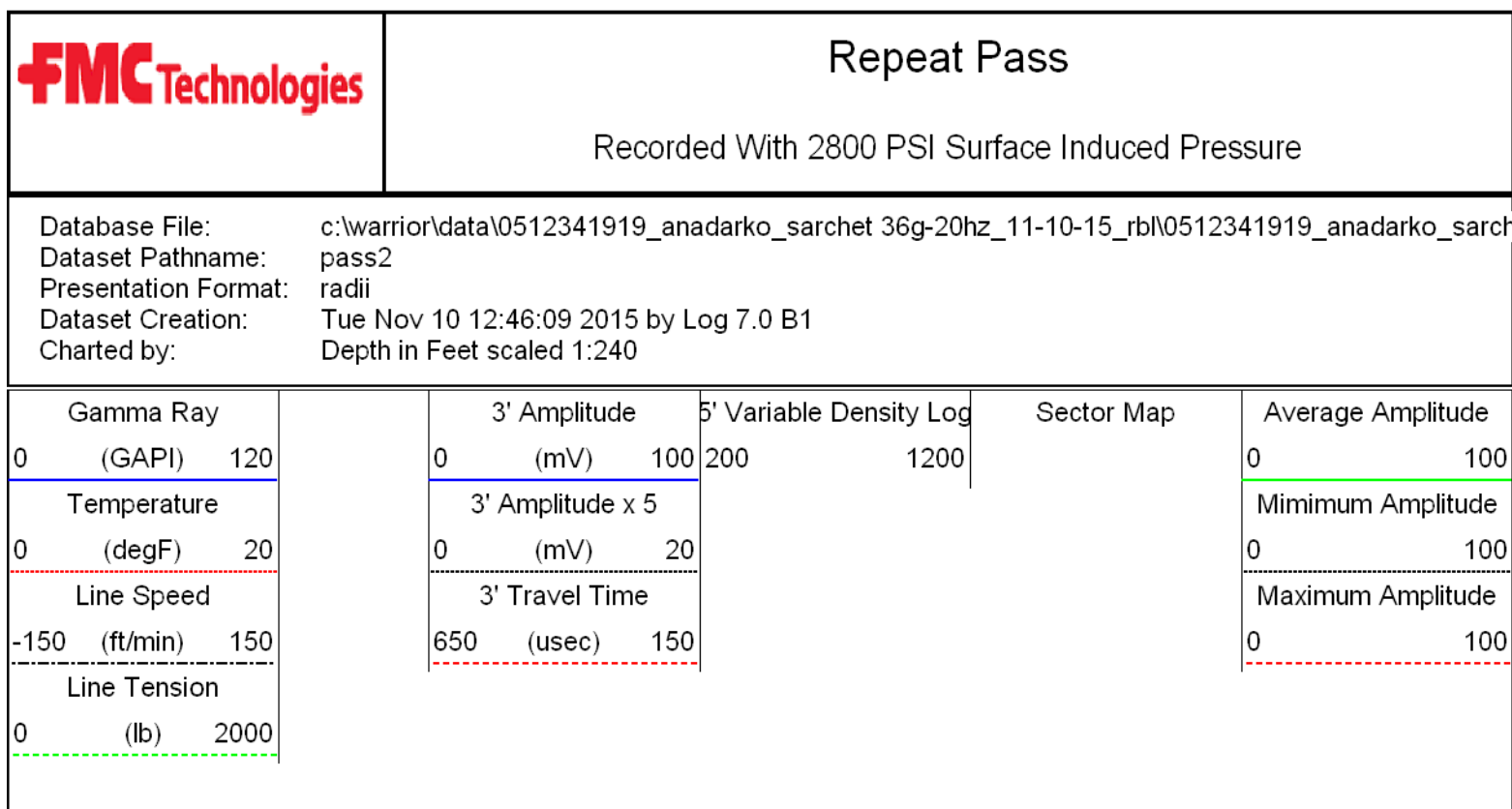
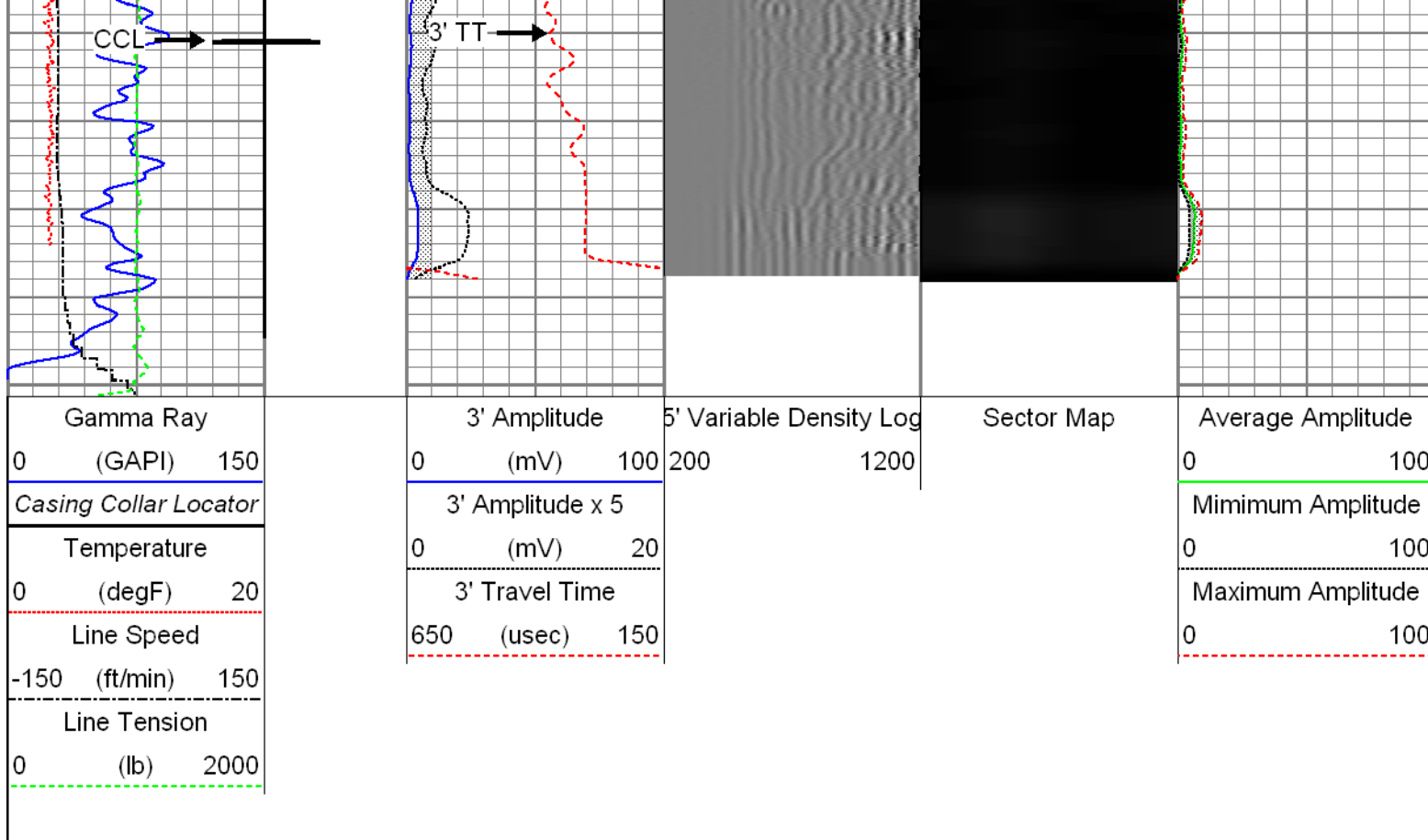


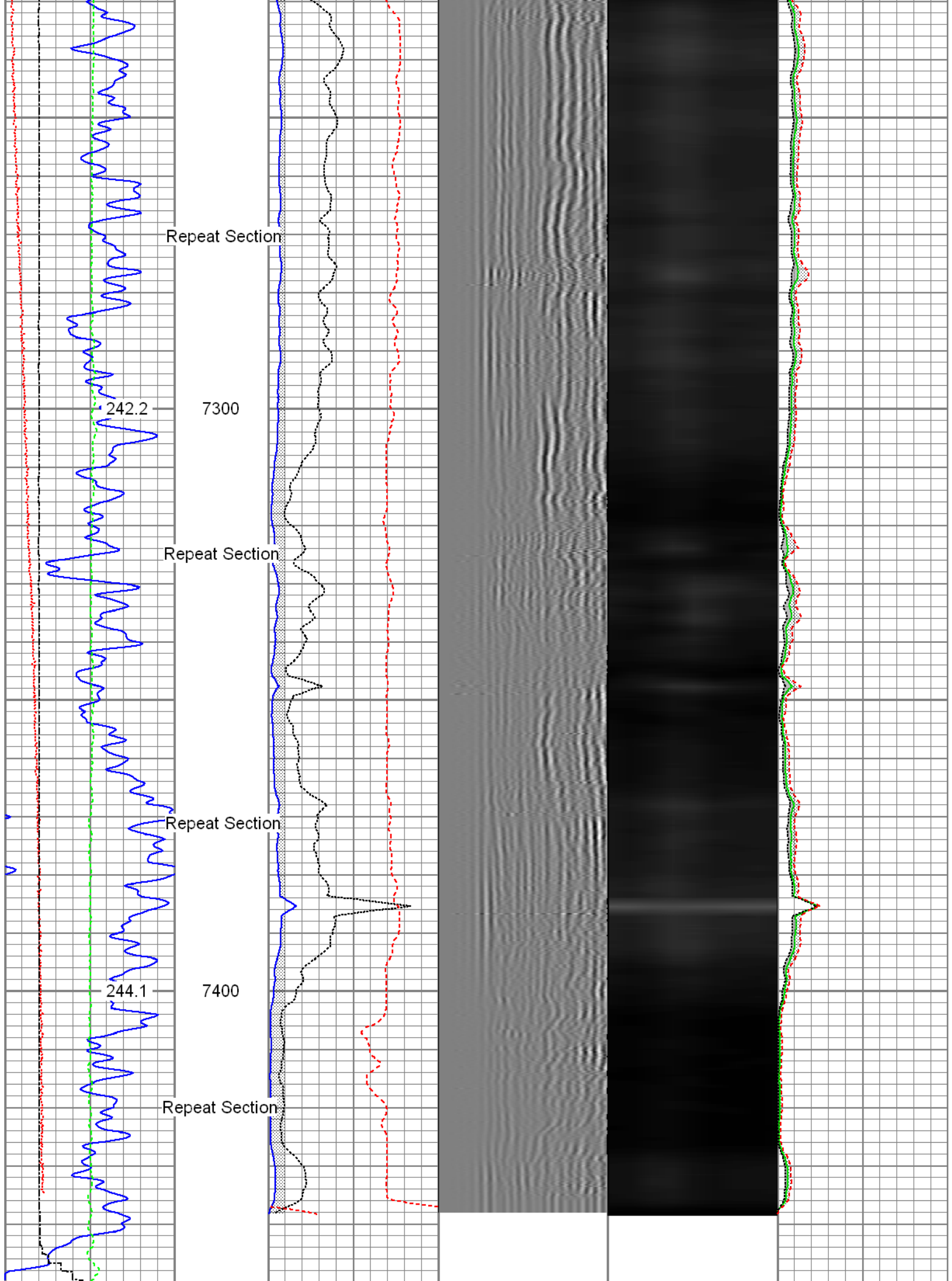






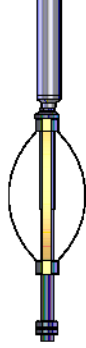






Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120	0 (mV) 100	200 1200		0 100
Temperature	3' Amplitude x 5			Minimum Amplitude
0 (degF) 20	0 (mV) 20			0 100
Line Speed	3' Travel Time			Maximum Amplitude
-150 (ft/min) 150	650 (usec) 150			0 100
Line Tension				
0 (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					
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					
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 (FW1211-026) 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: 0512341919_Anadarko_Sarchet 36G-20HZ_11-10-15_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:	c:\warrior\data\0512341919_anadarko_sarchet 36g-20hz_11-10-15_rbl\0512341919_anadarko_sarchet
Dataset Pathname:	pass4.1
Dataset Creation:	Wed Nov 11 09:30:18 2015 by Calc SCH 120430

Gamma Ray Calibration Report		
Serial Number:	FW1211-026	
Tool Model:	2.75"Digital	
Performed:	Tue Nov 10 08:58:49 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:	57.713	ft


Master Calibration, performed Wed Nov 11 09:30:15 2015:						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.004	0.591	1.000	71.921	120.822	0.504
CAL	0.685	0.784				
5'	0.004	0.410	1.000	71.921	174.674	0.325
SUM						
S1	0.001	0.553	0.000	100.000	181.116	-0.098
S2	0.004	0.541	0.000	100.000	186.259	-0.802
S3	0.005	0.550	0.000	100.000	183.484	-0.885
S4	0.004	0.576	0.000	100.000	175.028	-0.761
S5	0.005	0.635	0.000	100.000	158.578	-0.757
S6	0.004	0.672	0.000	100.000	149.589	-0.593
S7	0.004	0.657	0.000	100.000	153.180	-0.590
S8	0.004	0.608	0.000	100.000	165.556	-0.711

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	0.685	0.784	1.000	0.000

Air Zero Calibration, performed Tue Nov 10 09:01:53 2015:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.003		0.000		0.000	
5'	0.003		0.000		-0.000	
SUM						
S1	-0.002		0.000		0.000	
S2	0.003		0.000		0.000	
S3	0.003		0.000		-0.000	
S4	0.003		0.000		-0.000	
S5	0.004		0.000		-0.000	
S6	0.003		0.000		-0.000	
S7	0.003		0.000		-0.000	
S8	0.003		0.000		0.000	

	Company	Kerr-McGee Oil and Gas Onshore LP
	Well	Sarchet 36G-20HZ
	Field	Wattenberg
	County	Weld
	State	Colorado