



Radial Cement Bond  
Gamma Ray  
Casing Collar Log

Company	Kerr-McGee Oil & Gas OnShore L.P.	Company	Kerr-McGee Oil & Gas OnShore L.P.
Well	English Farms 38N-8HZ	Well	English Farms 38N-8HZ
Field	Wattenberg	Field	Wattenberg
County	Weld	County	Weld
State	Colorado	State	Colorado
Location:		API # : 05-123-41492	Other Services
SEC 8 TWP 1N RGE 65W		---	
Permanent Datum	Ground Level	Elevation	4932'
Log Measured From	Kelly Bushing	16 FT	
Drilling Measured From	Kelly Bushing		
		Elevation	K.B. 4948' D.F. 4947' G.L. 4932'

Date	13-AUG-2015
Run Number	One
Depth Driller	13385 FT
Depth Logger	7654 FT
Bottom Logged Interval	7650 FT
Top Log Interval	Surface
Open Hole Size	8.750"
Type Fluid	Water
Density / Viscosity	8.34 lbm/gal
Max. Recorded Temp.	238°F
Estimated Cement Top	Surface
Time Well Ready	ROA
Time Logger on Bottom	08:00
Equipment Number	HD-0340
Location	Fort Lupton, CO
Recorded By	W.Wacker
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	J-55	Surface	1859 FT		
Intermediate #1	5 1/2	17	HC-P110	Surface	13368 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  
Log ran from as deep as possible in heel from 7650 FT to surface  
Recorded Marker Joint at 6696-6709 FT  
Recorded with 2800 PSI surface induced pressure  
No debris found on logging tools after run  
  
Thank you for choosing FMC Technologies Completion Services, Inc.!!

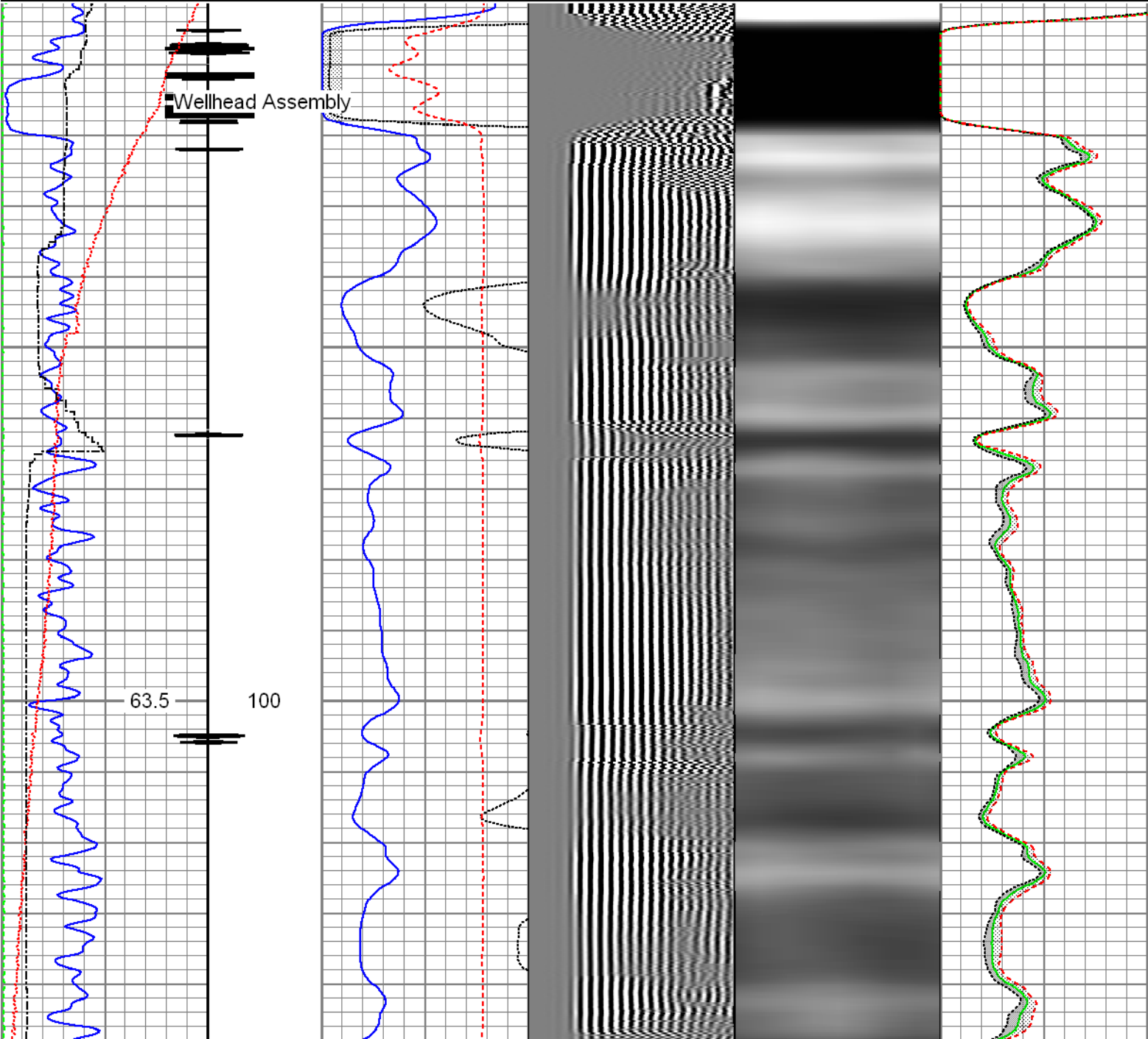


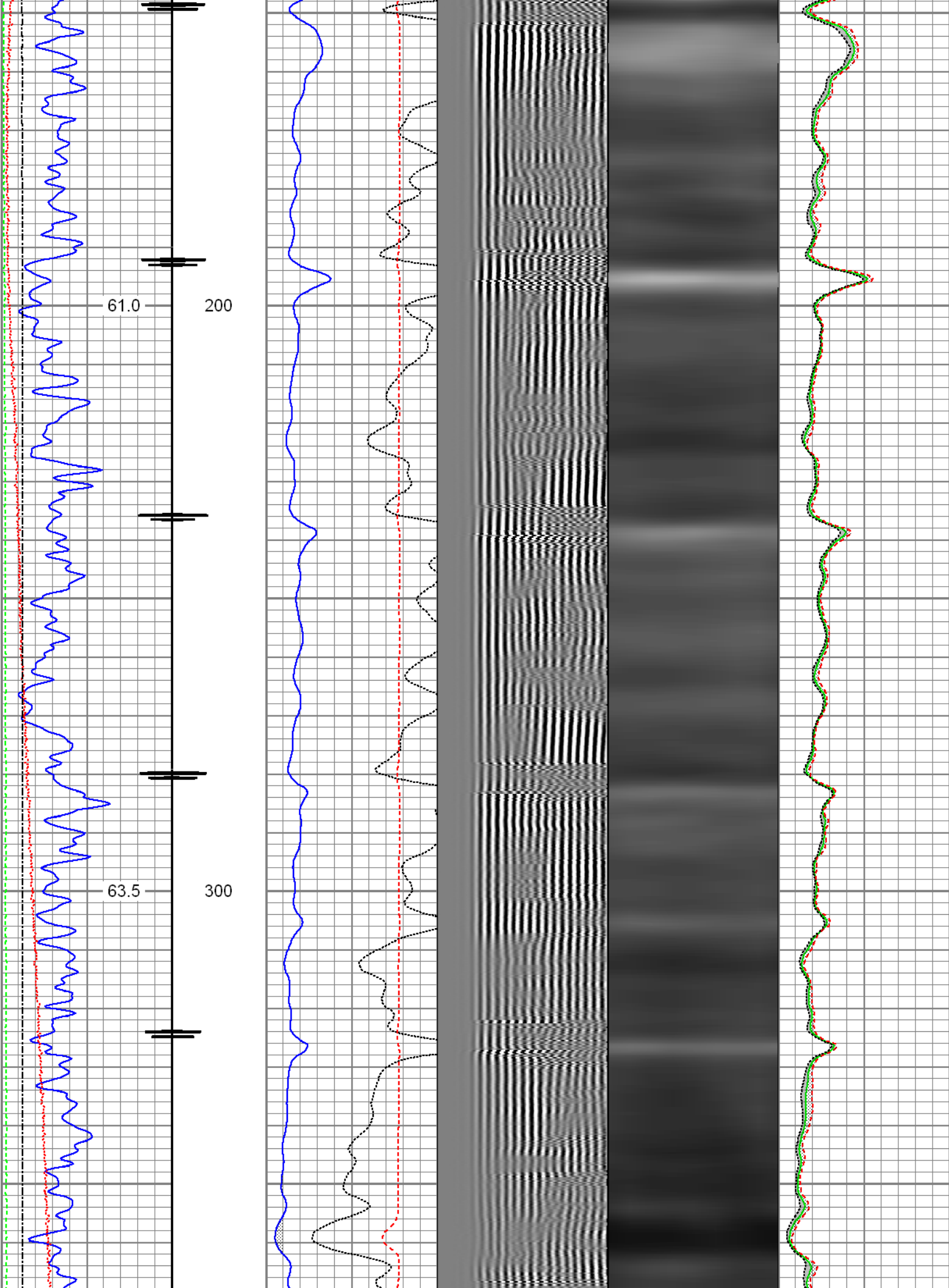
Main Pass

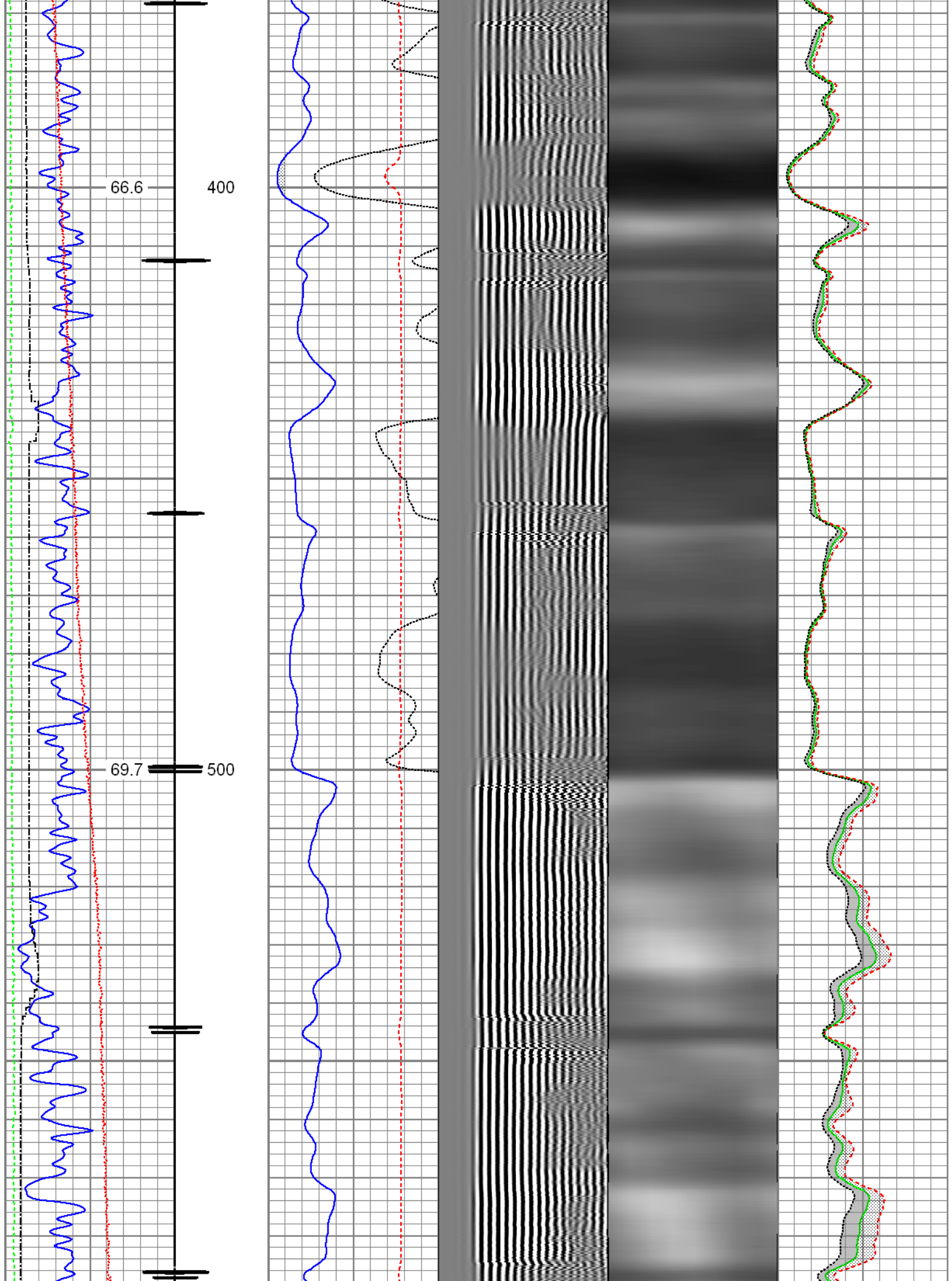
Logged with 2800 PSI Surface Induced Pressure

Database File: 0512341492\_anadarko\_english farms 38n-8hz\_08-13-15\_rbl.db  
Dataset Pathname: main  
Presentation Format: radii  
Dataset Creation: Thu Aug 13 08:37:00 2015 by Log 7.0 B1  
Charted by: Depth in Feet scaled 1:240

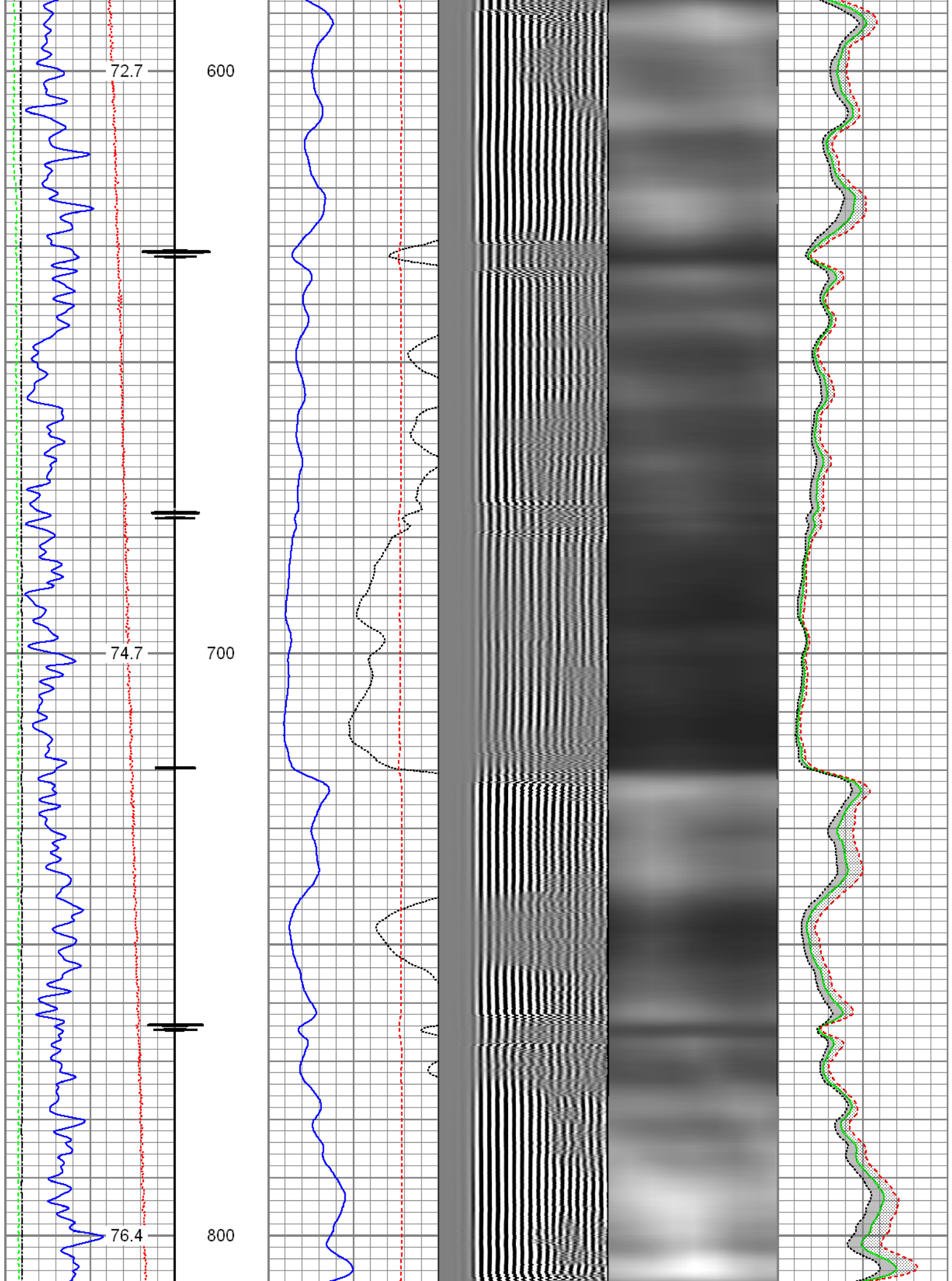
Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120	0 (mV) 100	200 1200		0 100
Casing Collar Locator	3' Amplitude x 5			Mimimum Amplitude
Temperature	0 (mV) 20			0 100
0 (degF) 20	3' Travel Time			Maximum Amplitude
Line Speed	650 (usec) 150			0 100
-150 (ft/min) 150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

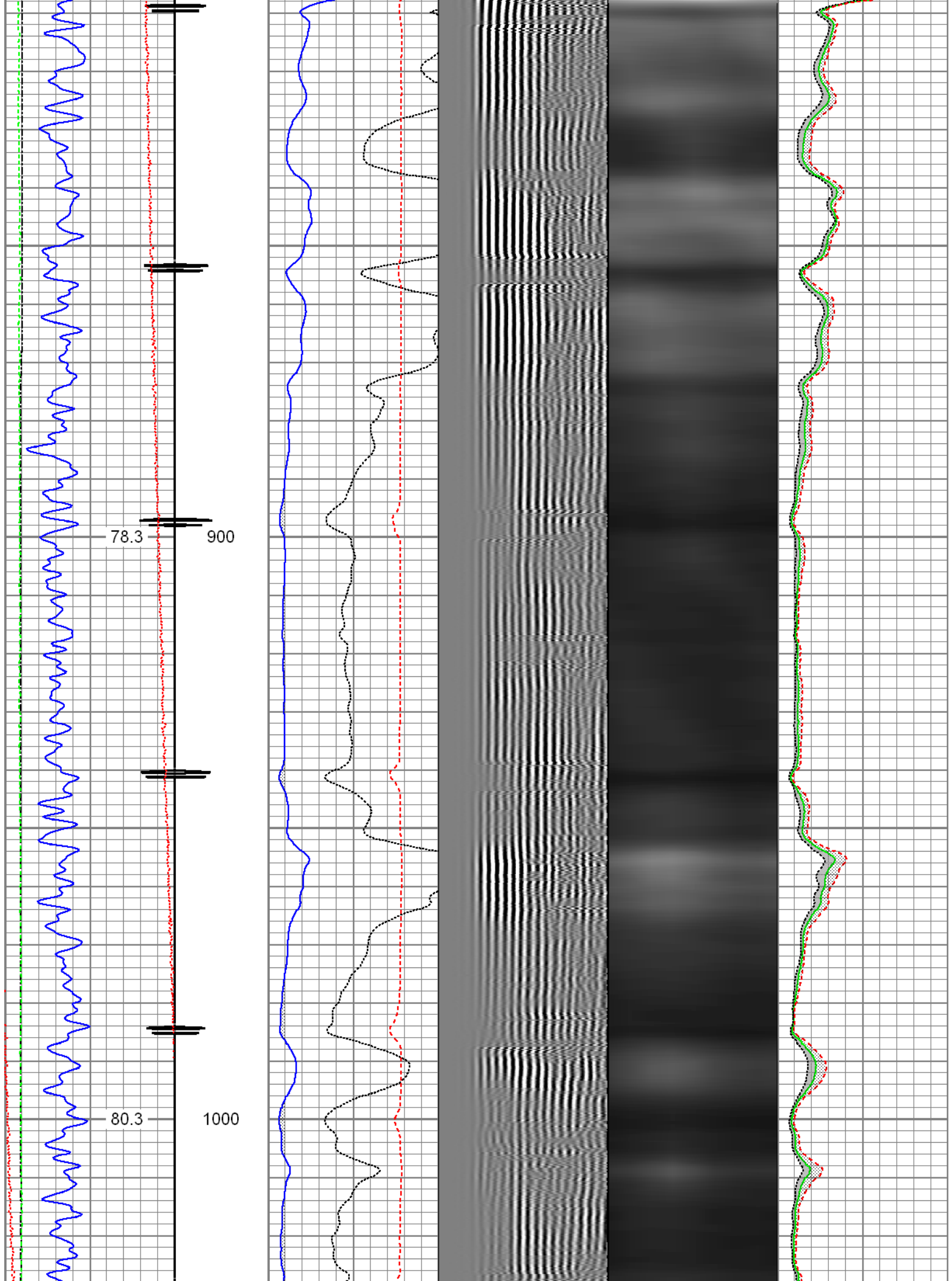


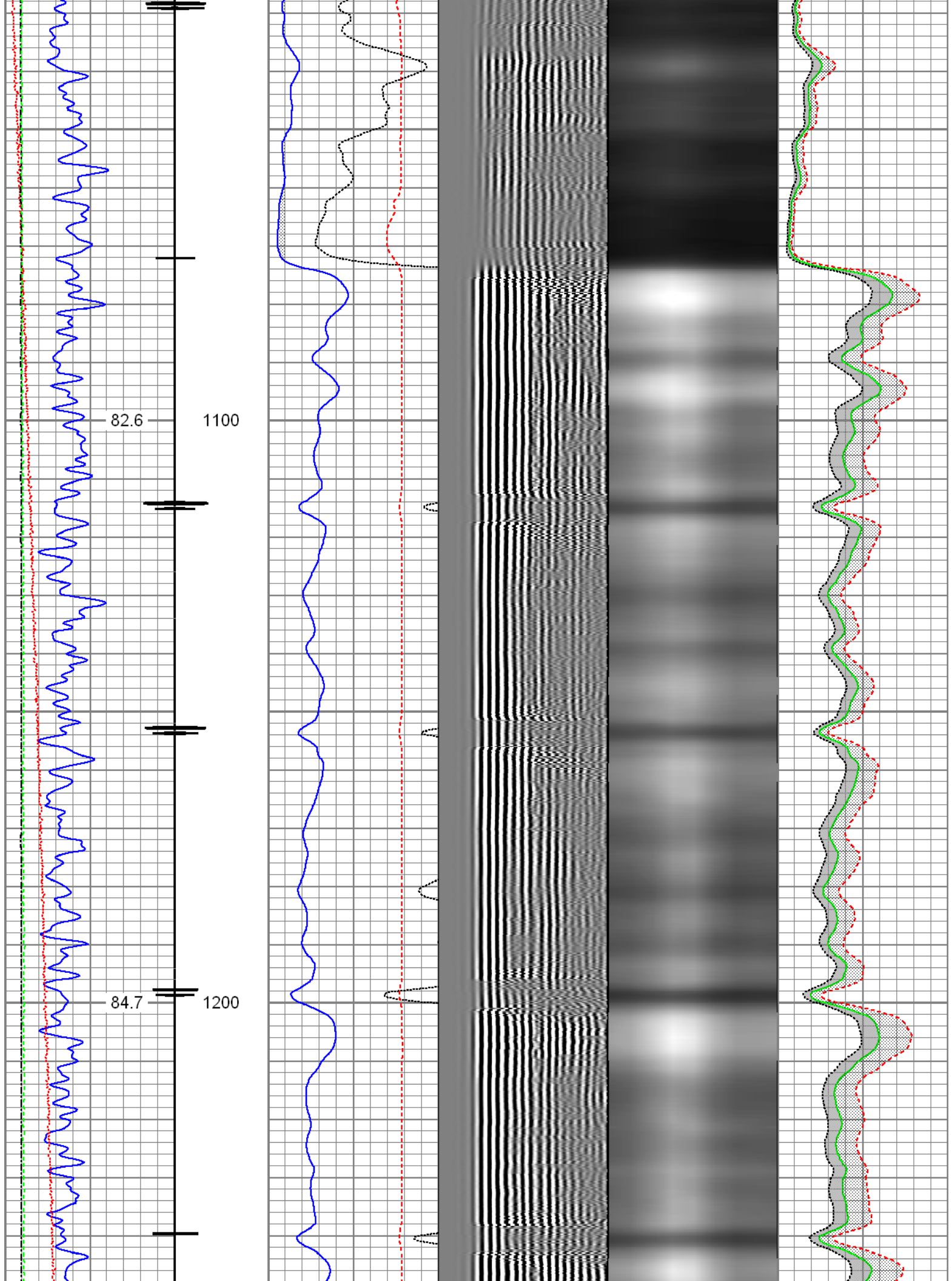




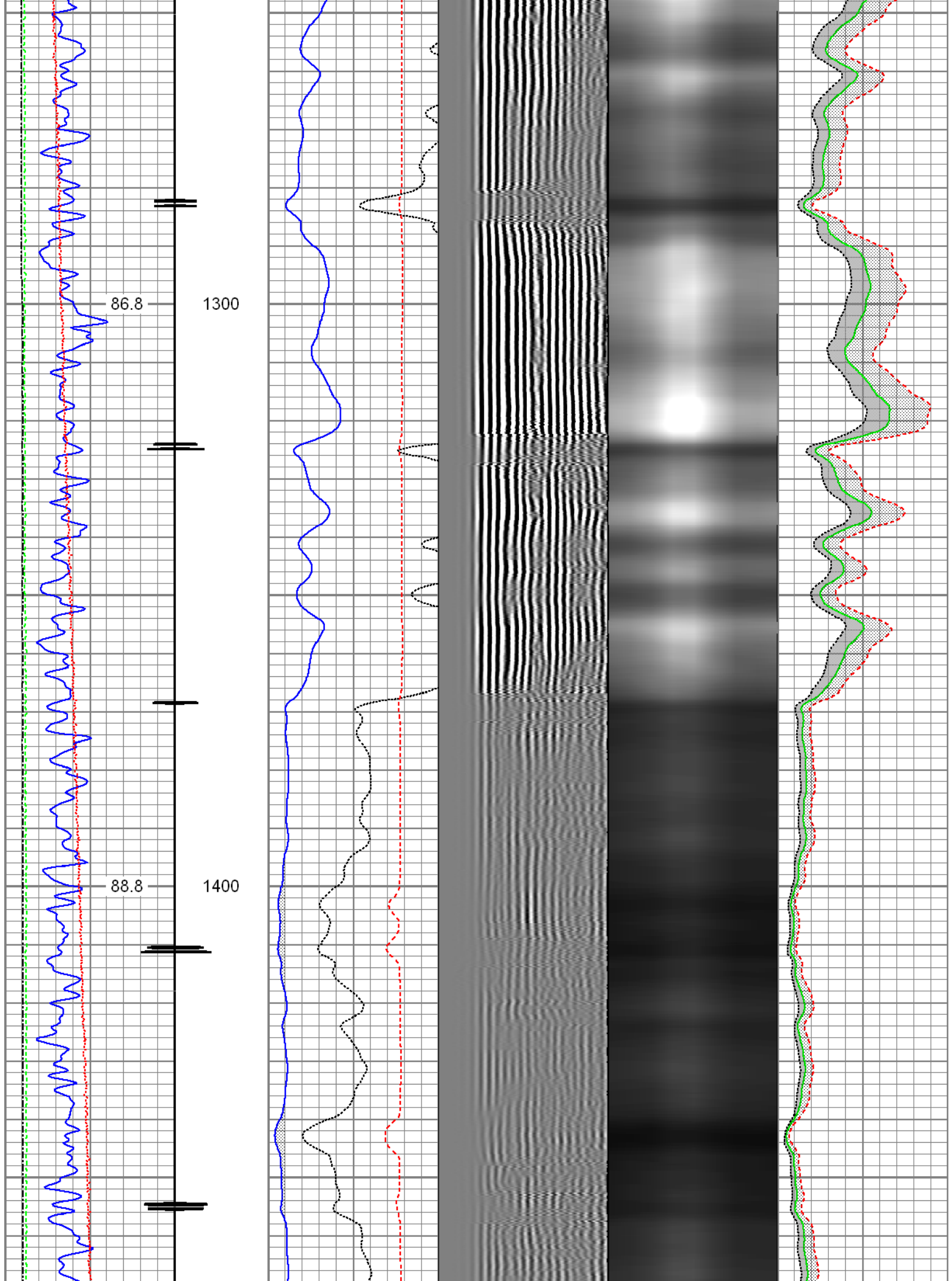




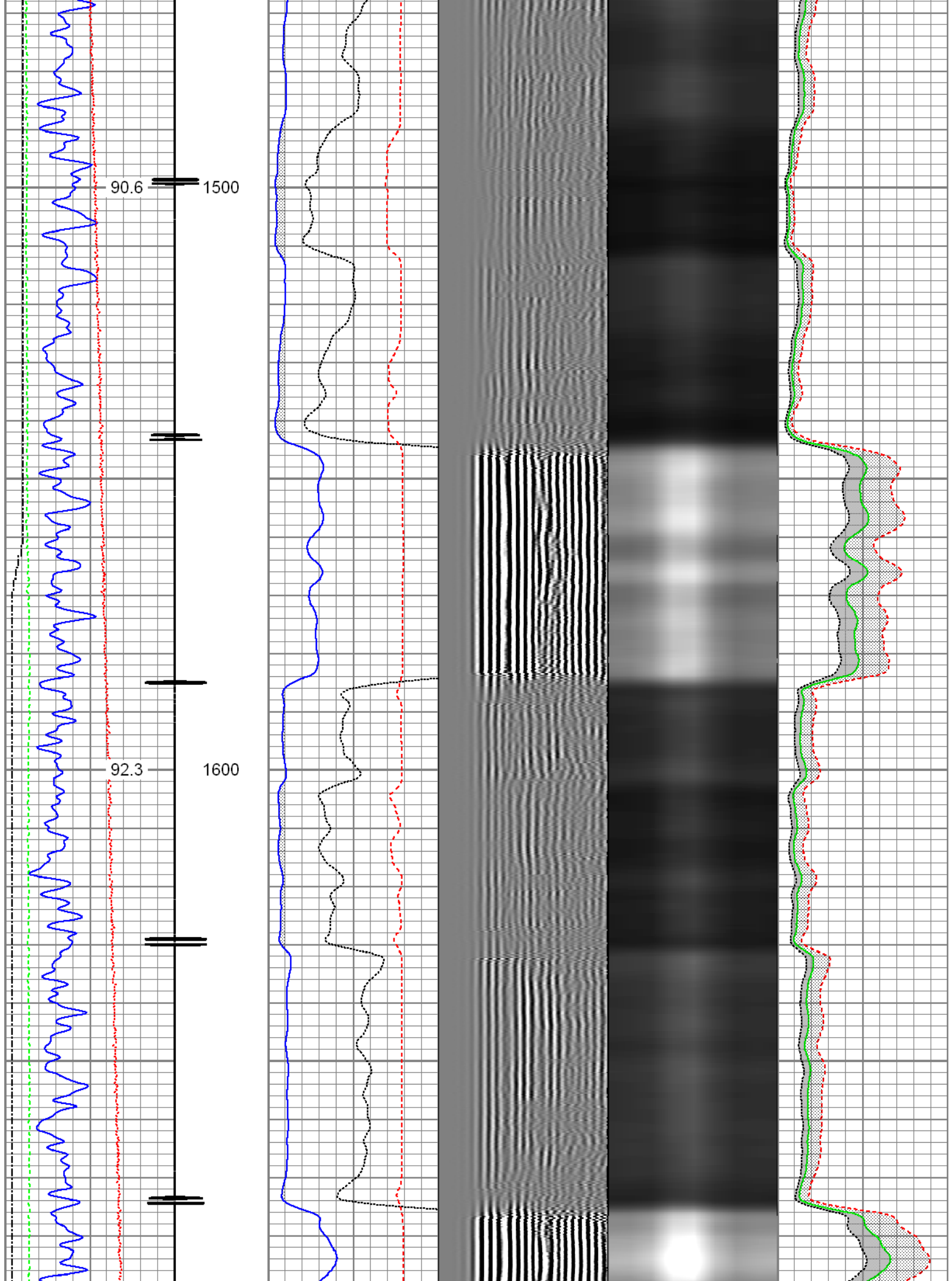


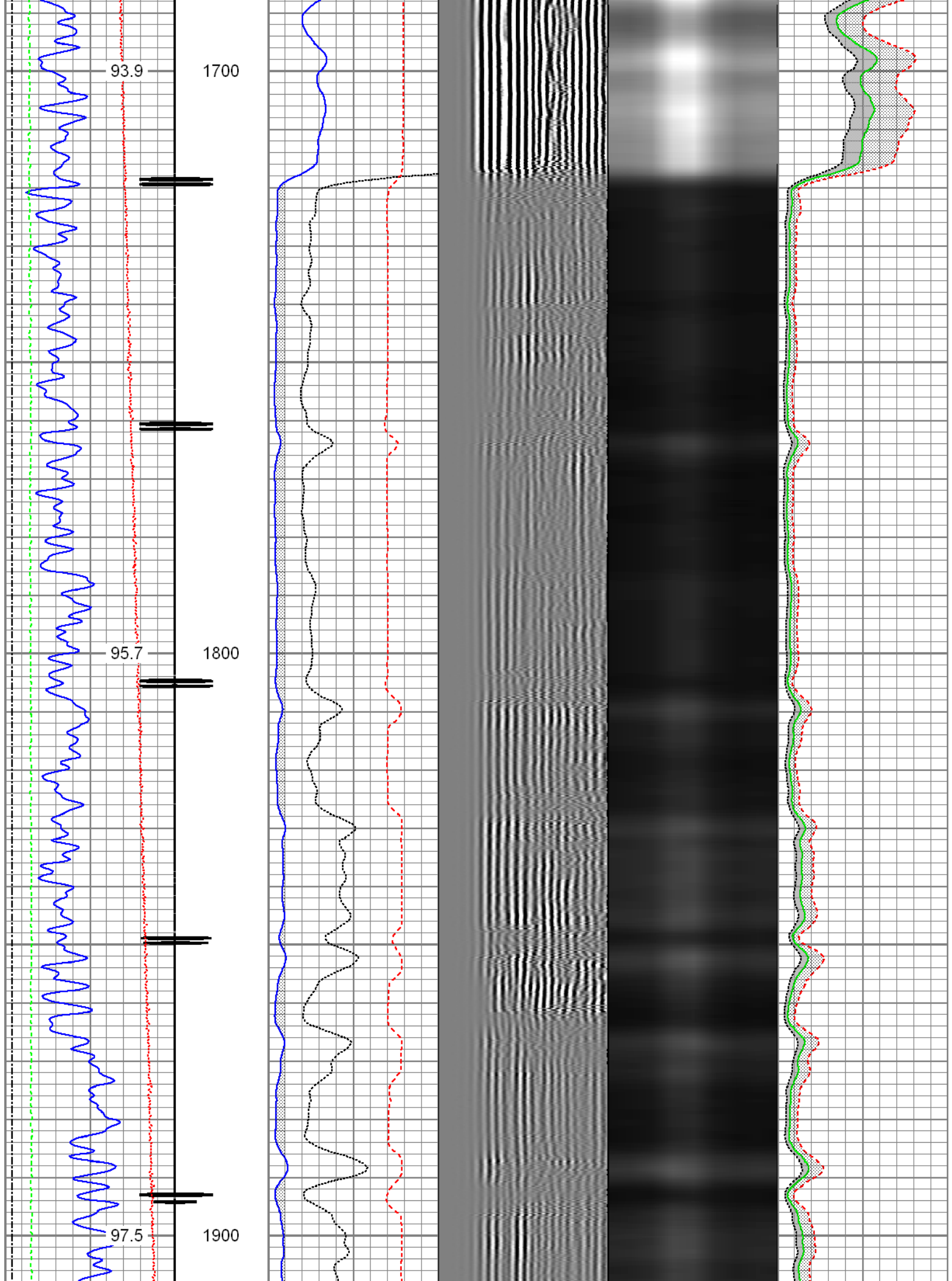


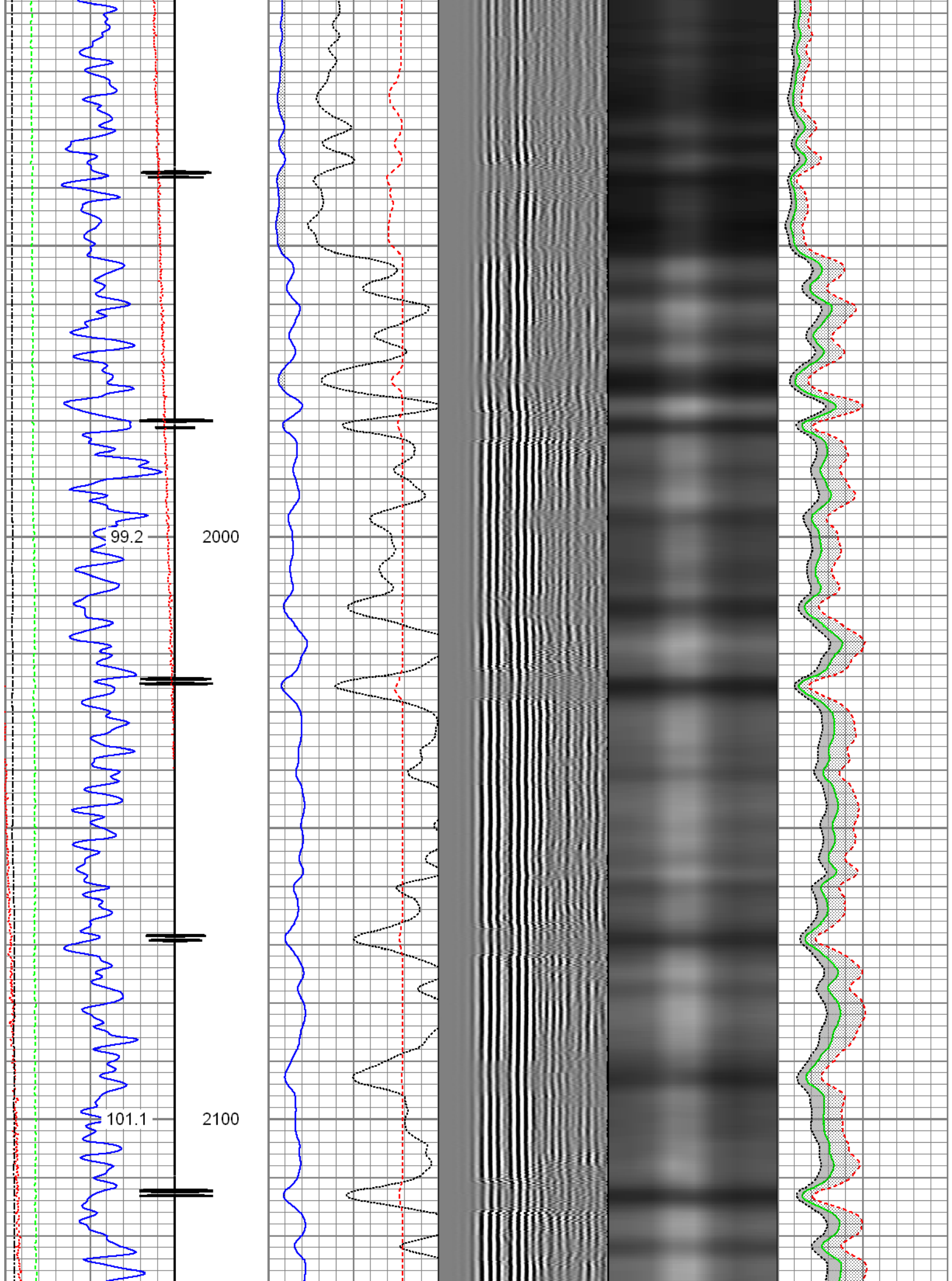




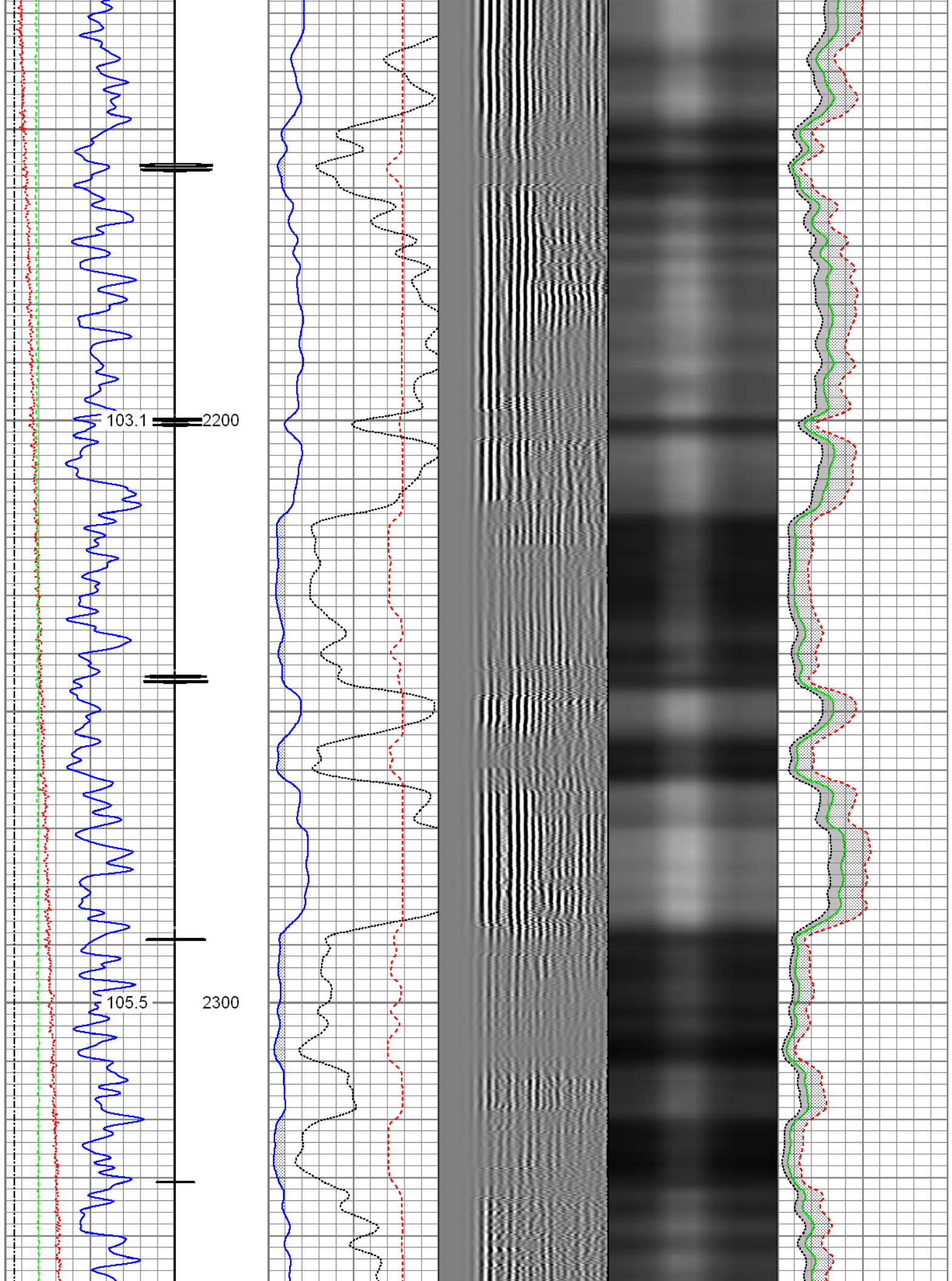




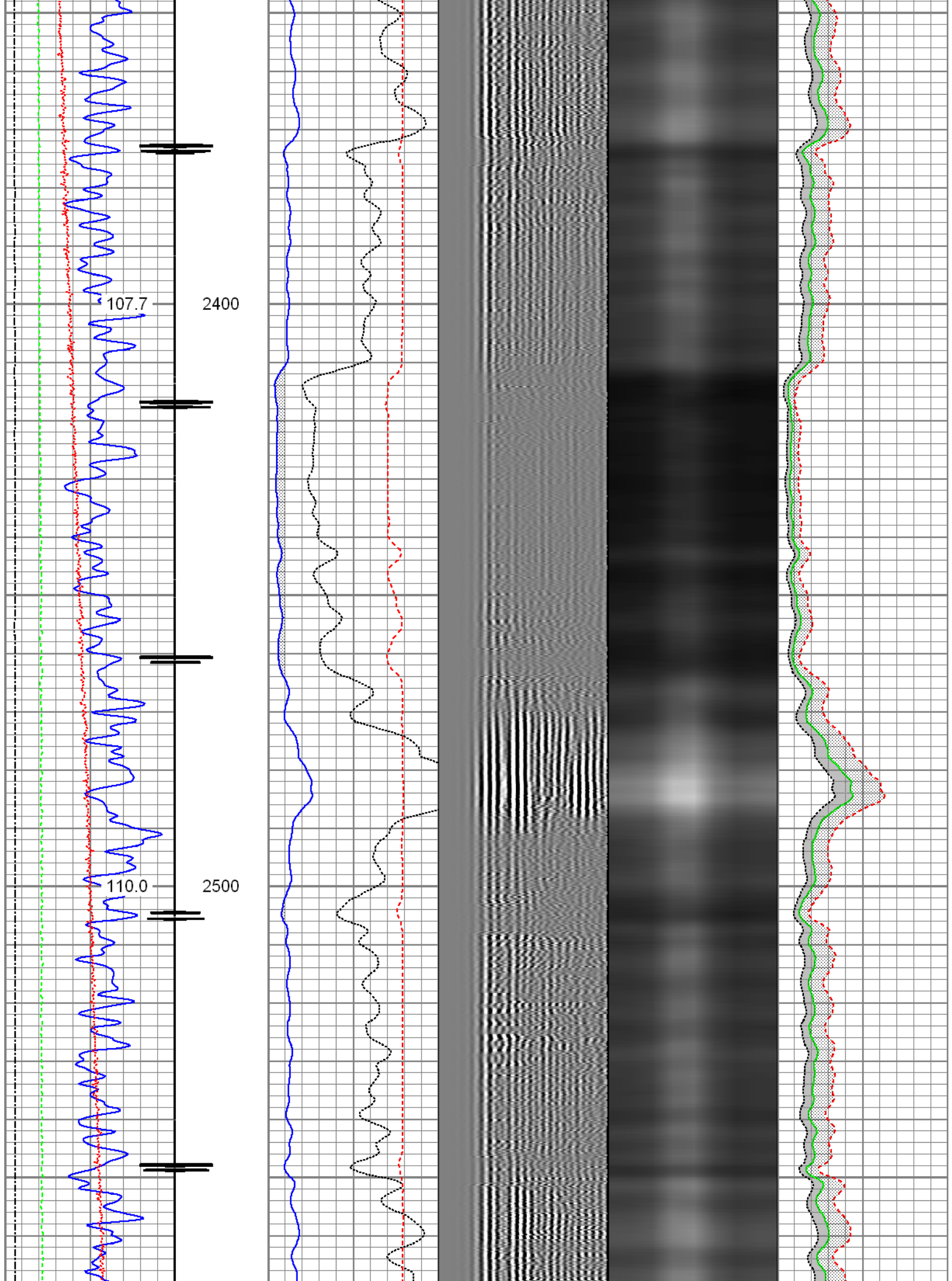


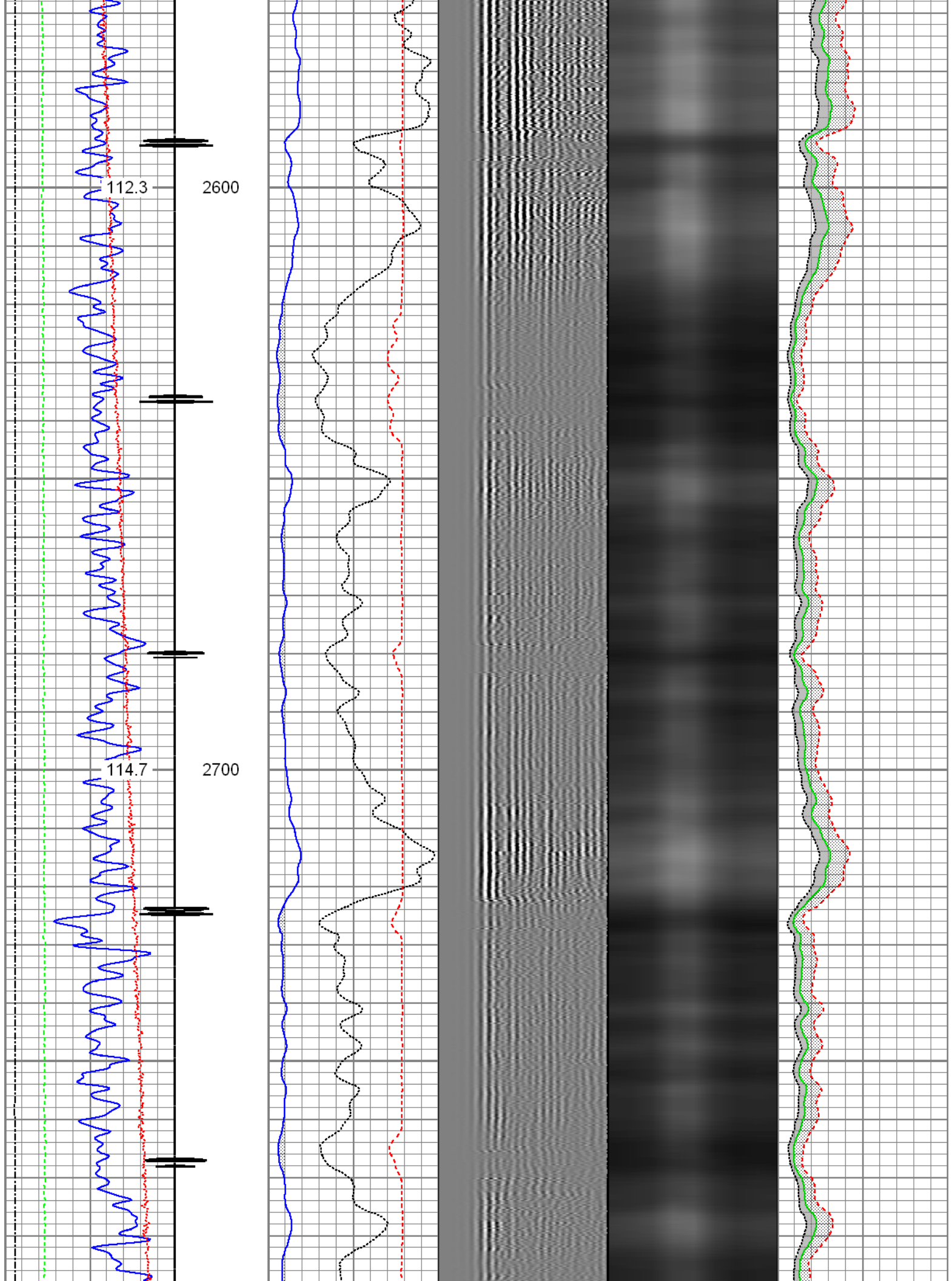


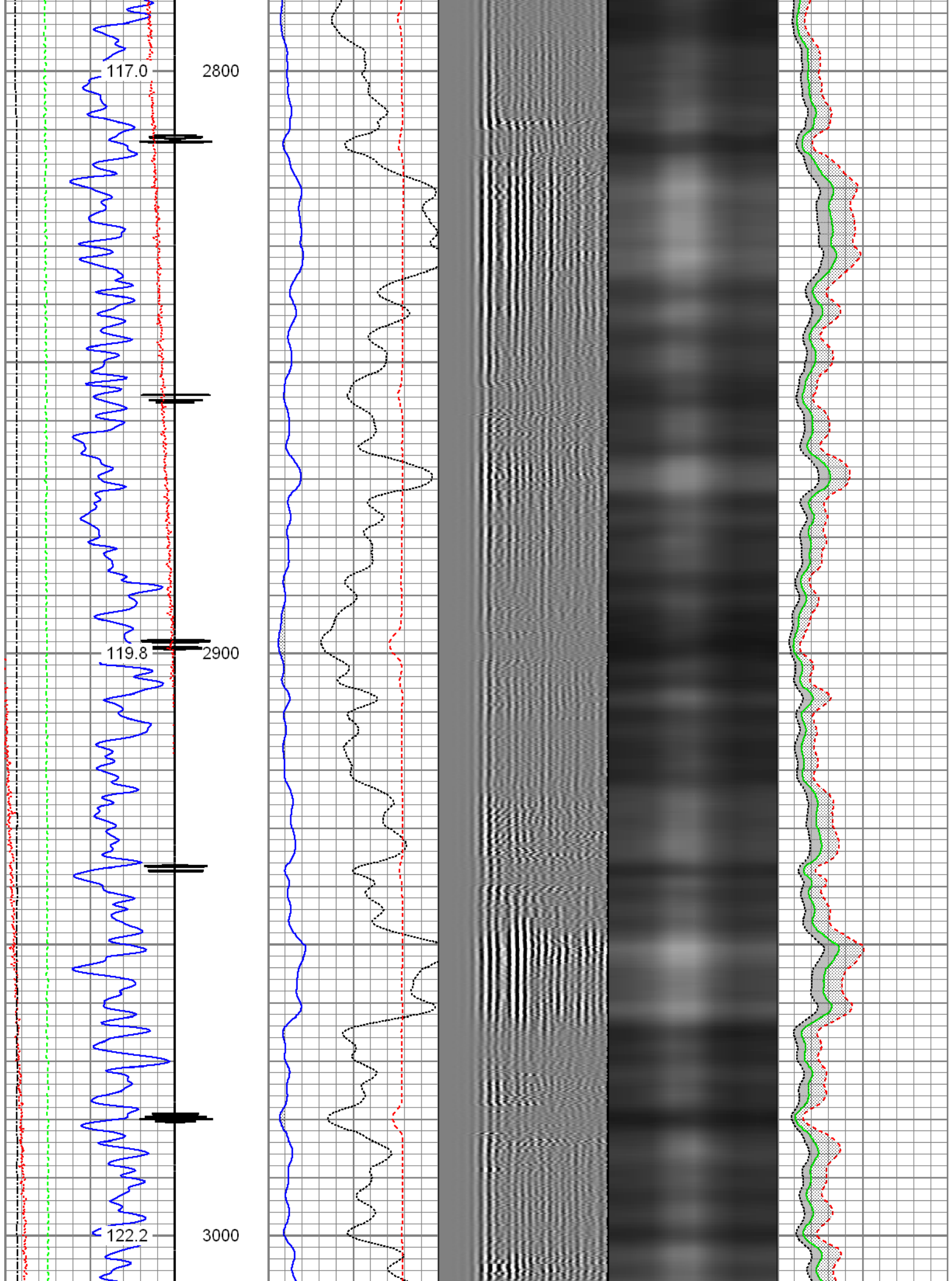




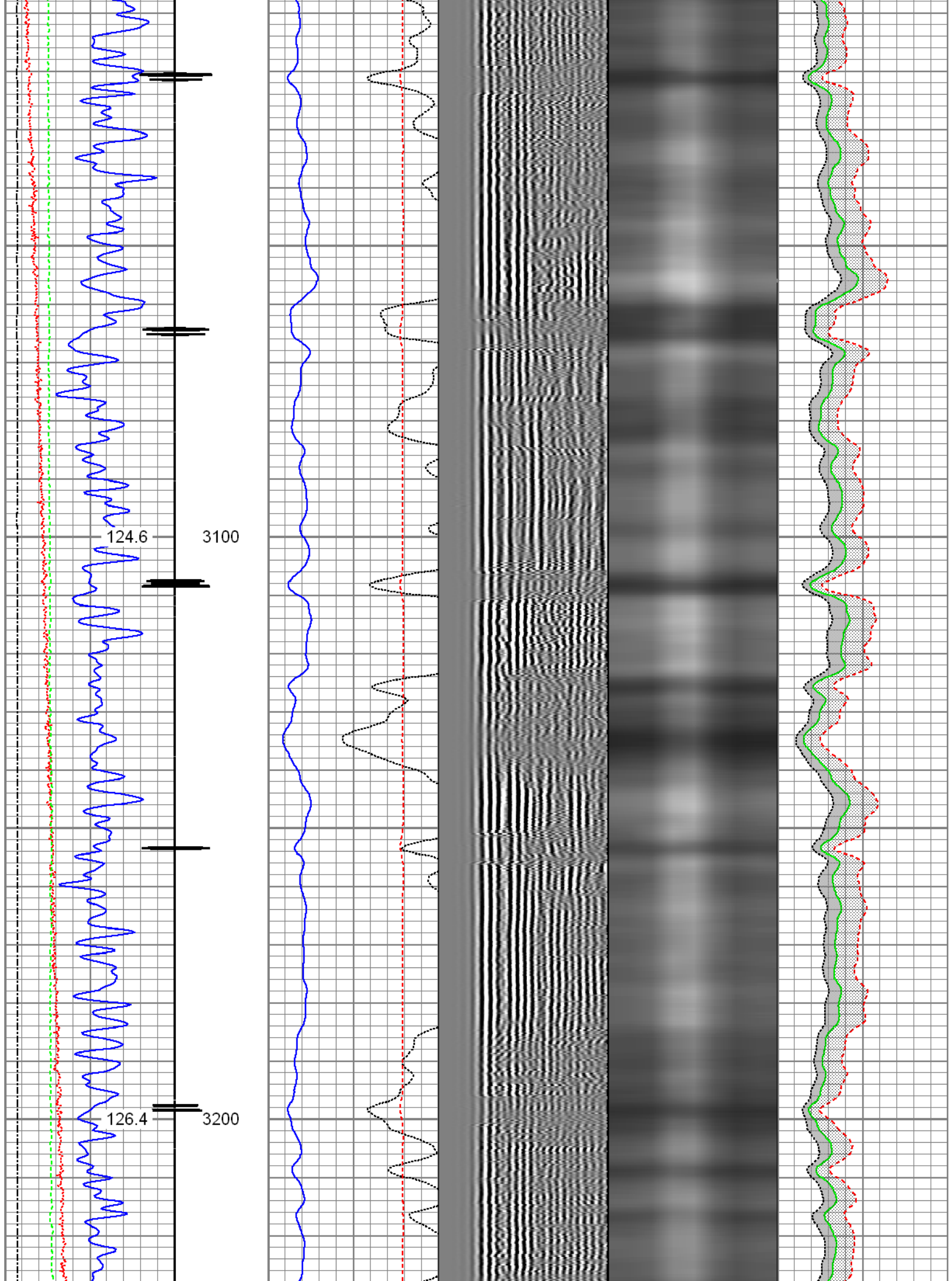




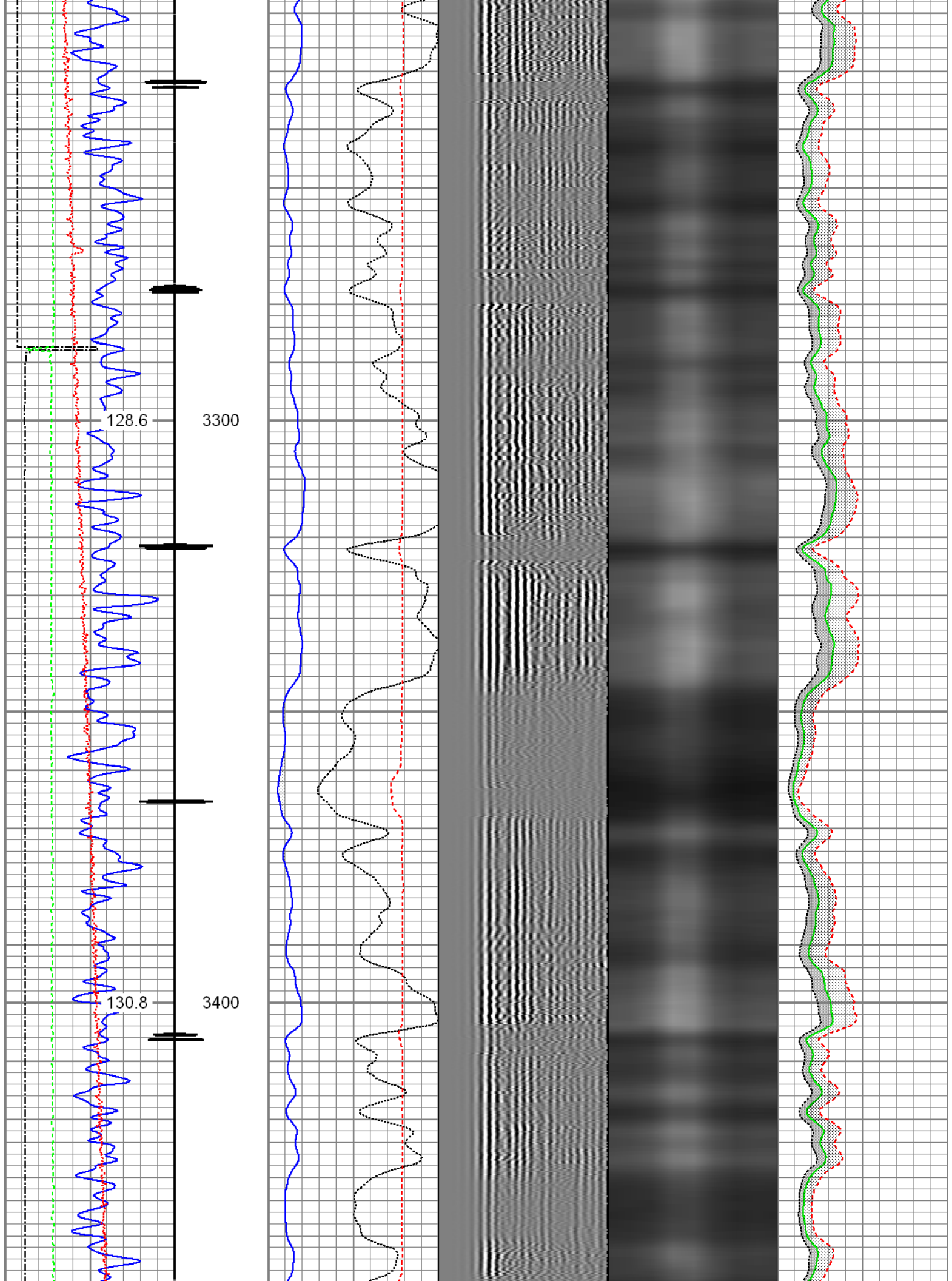


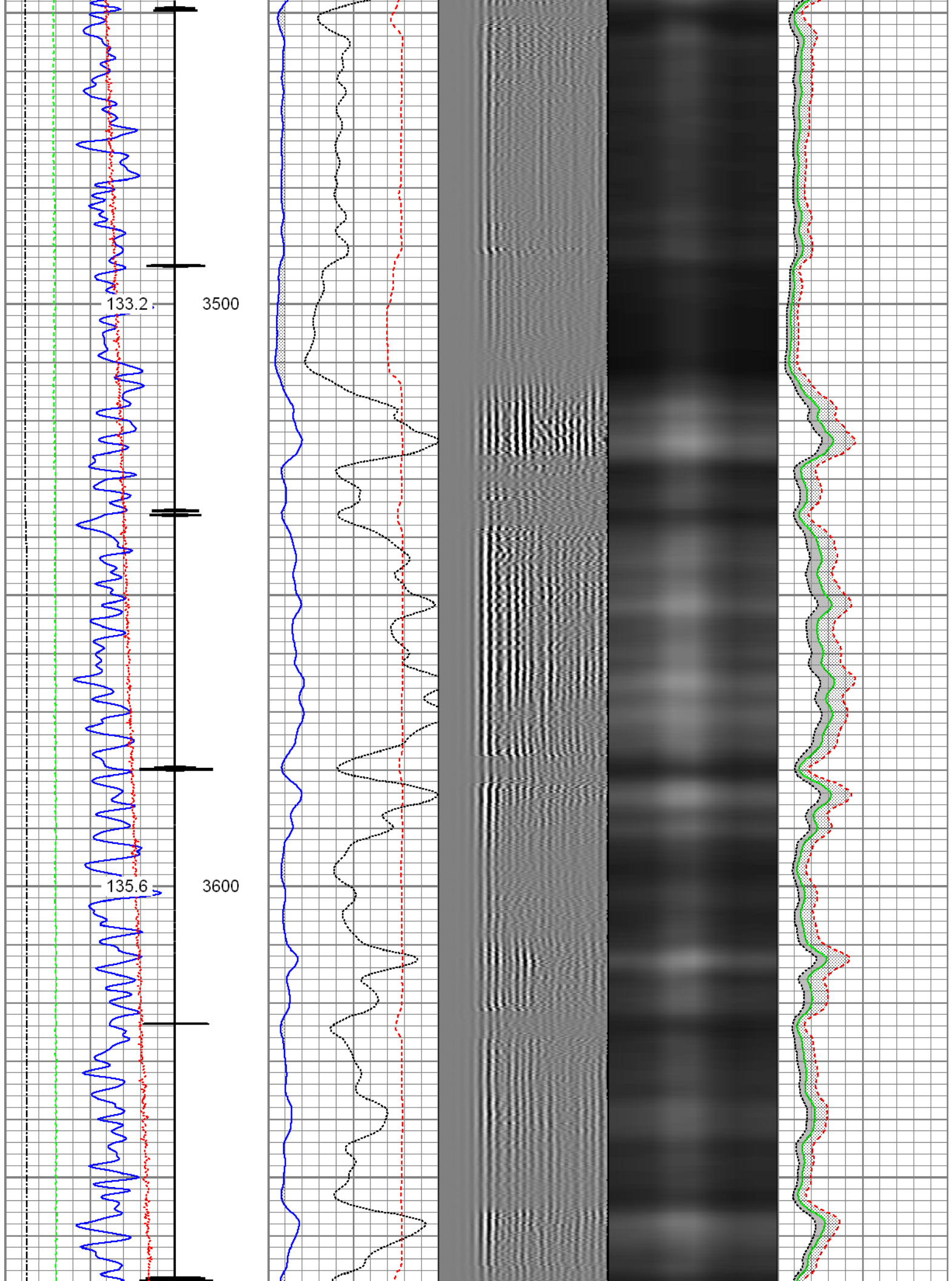


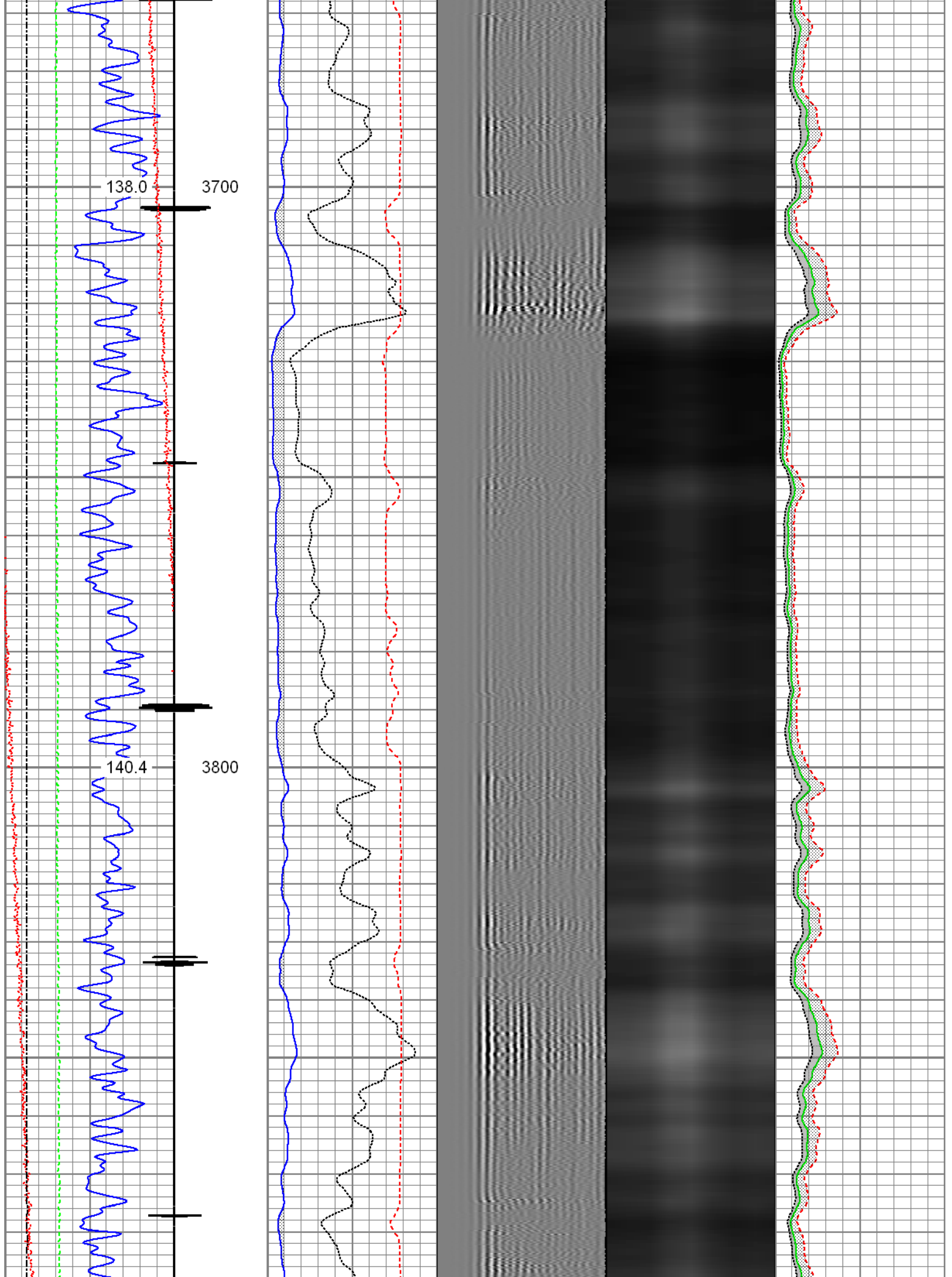




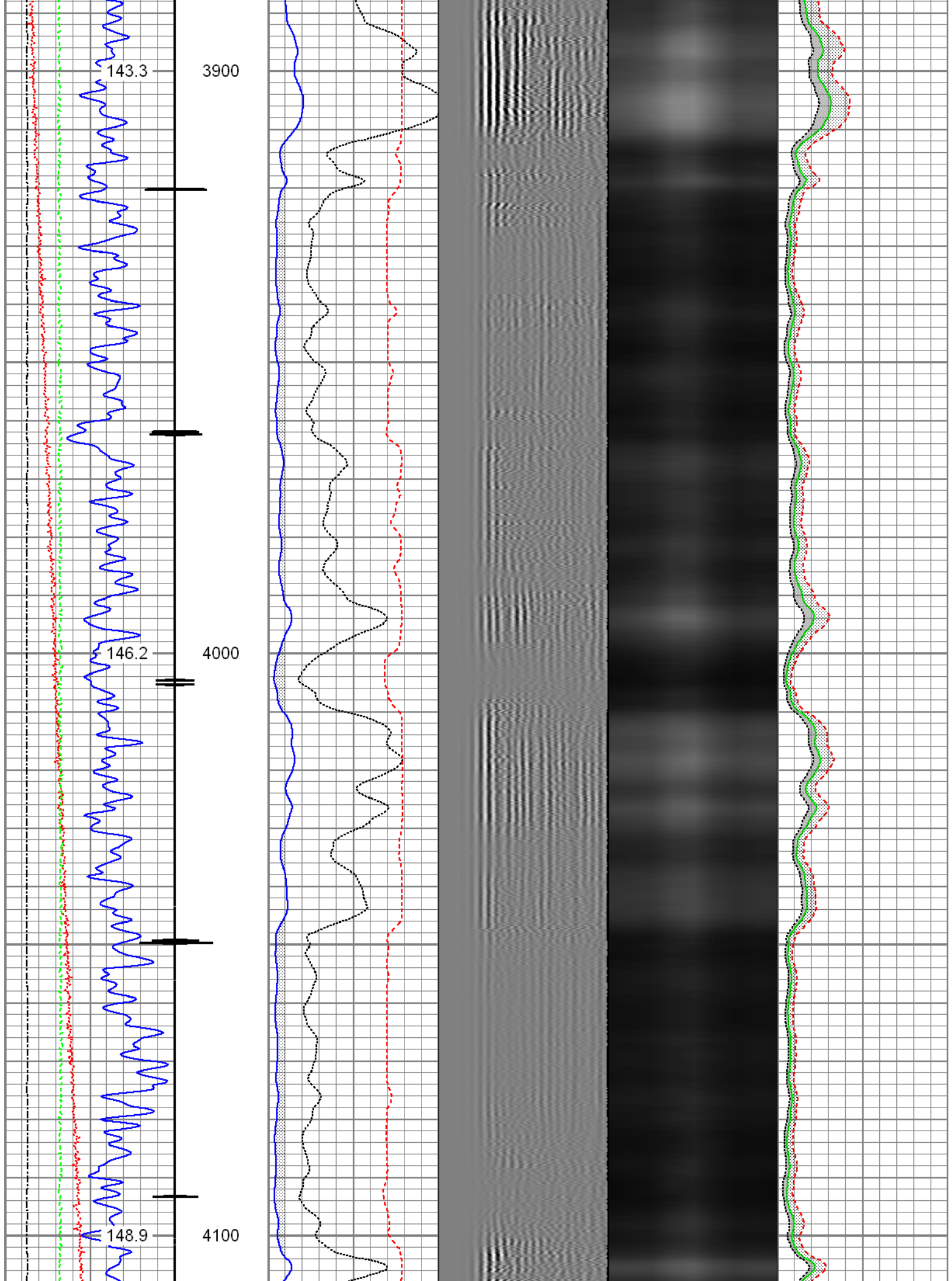




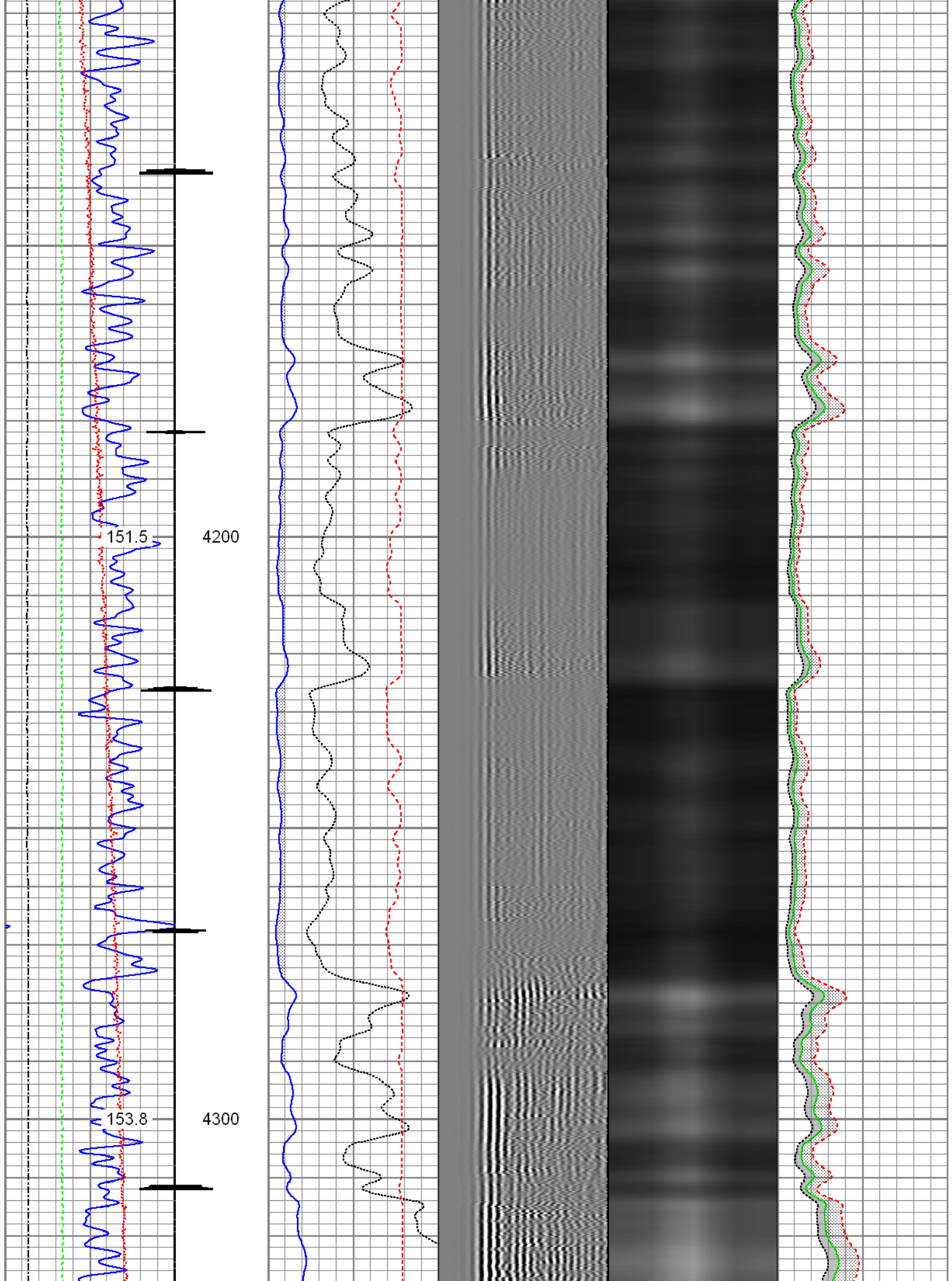


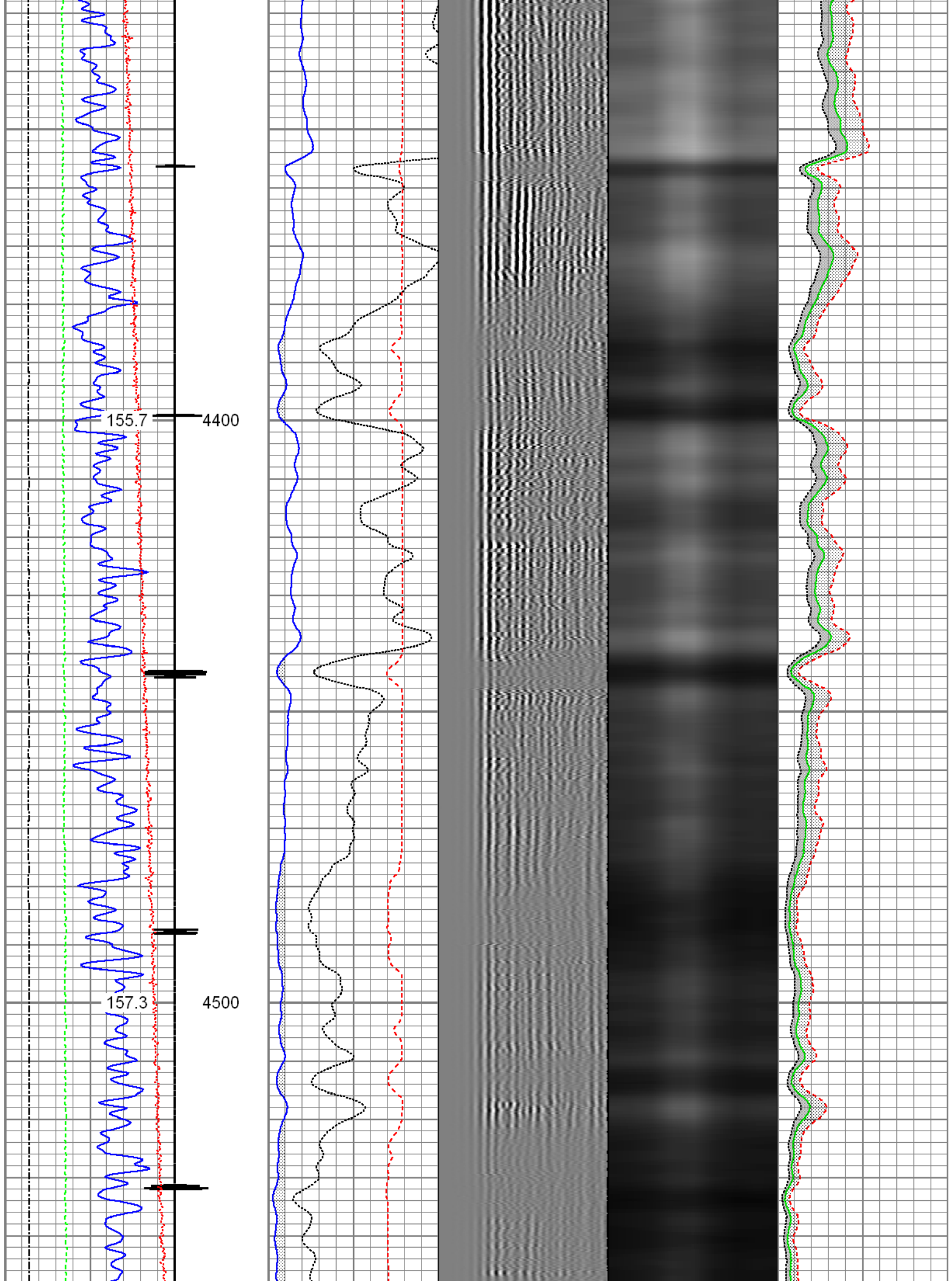


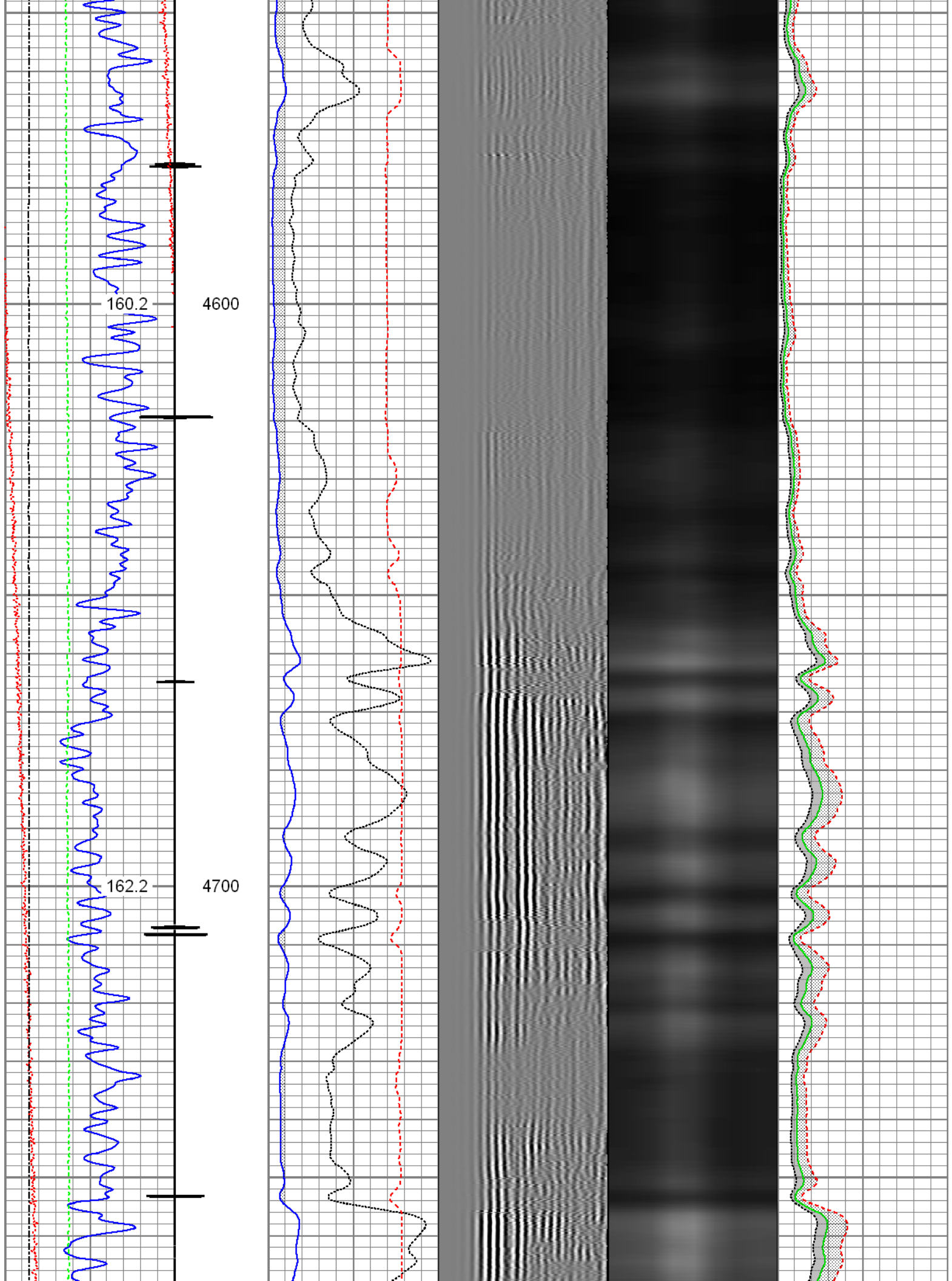




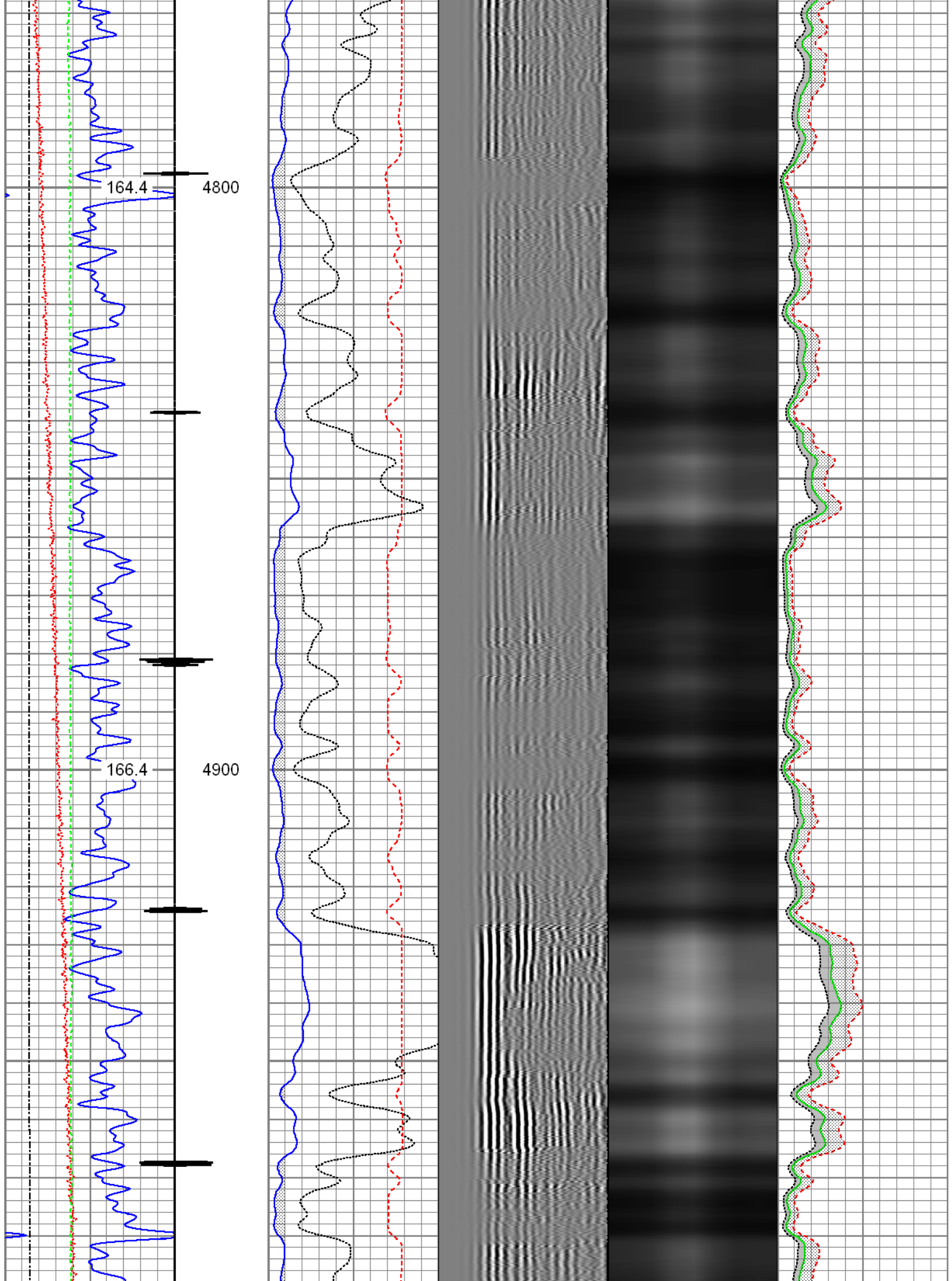


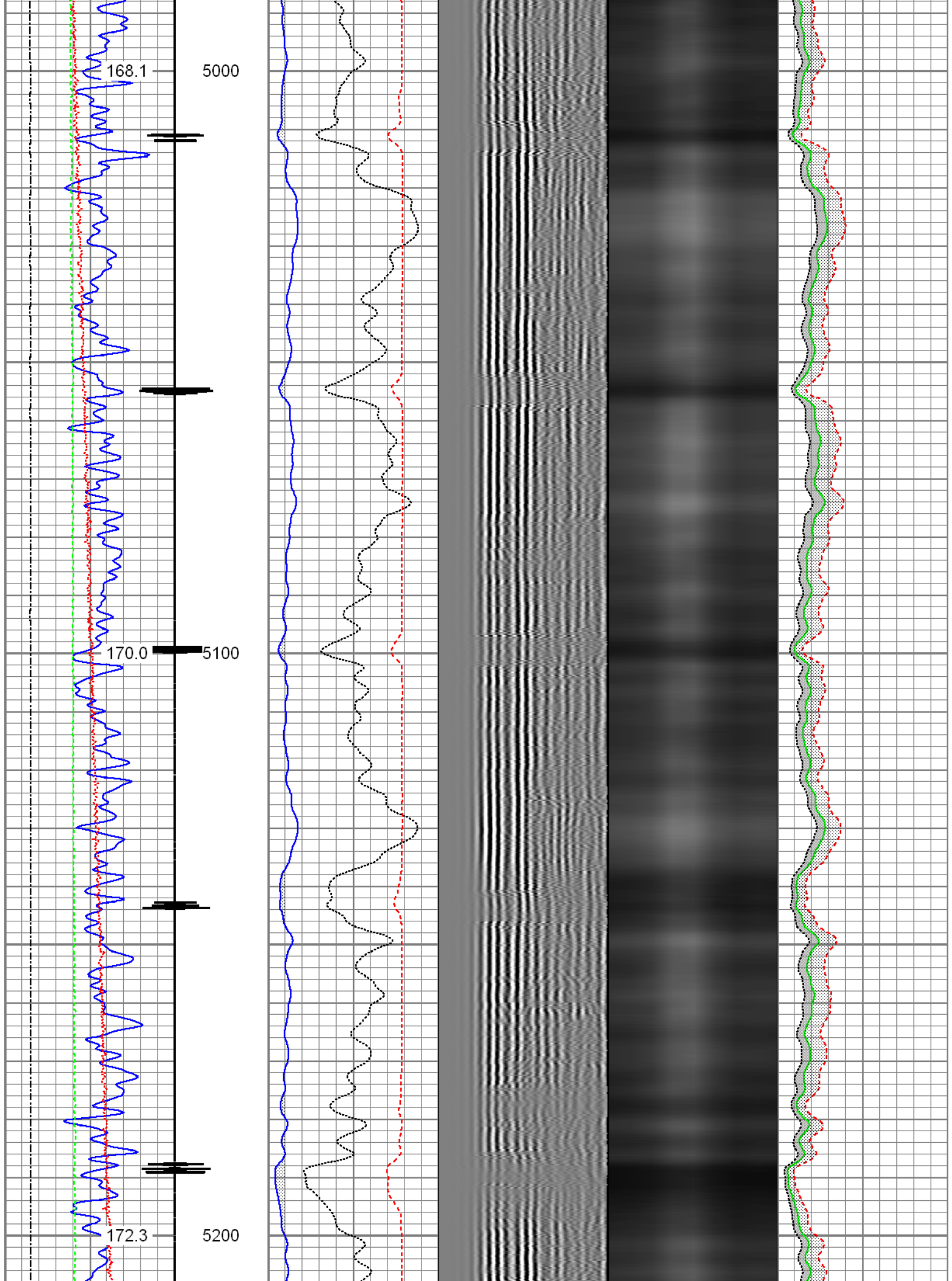


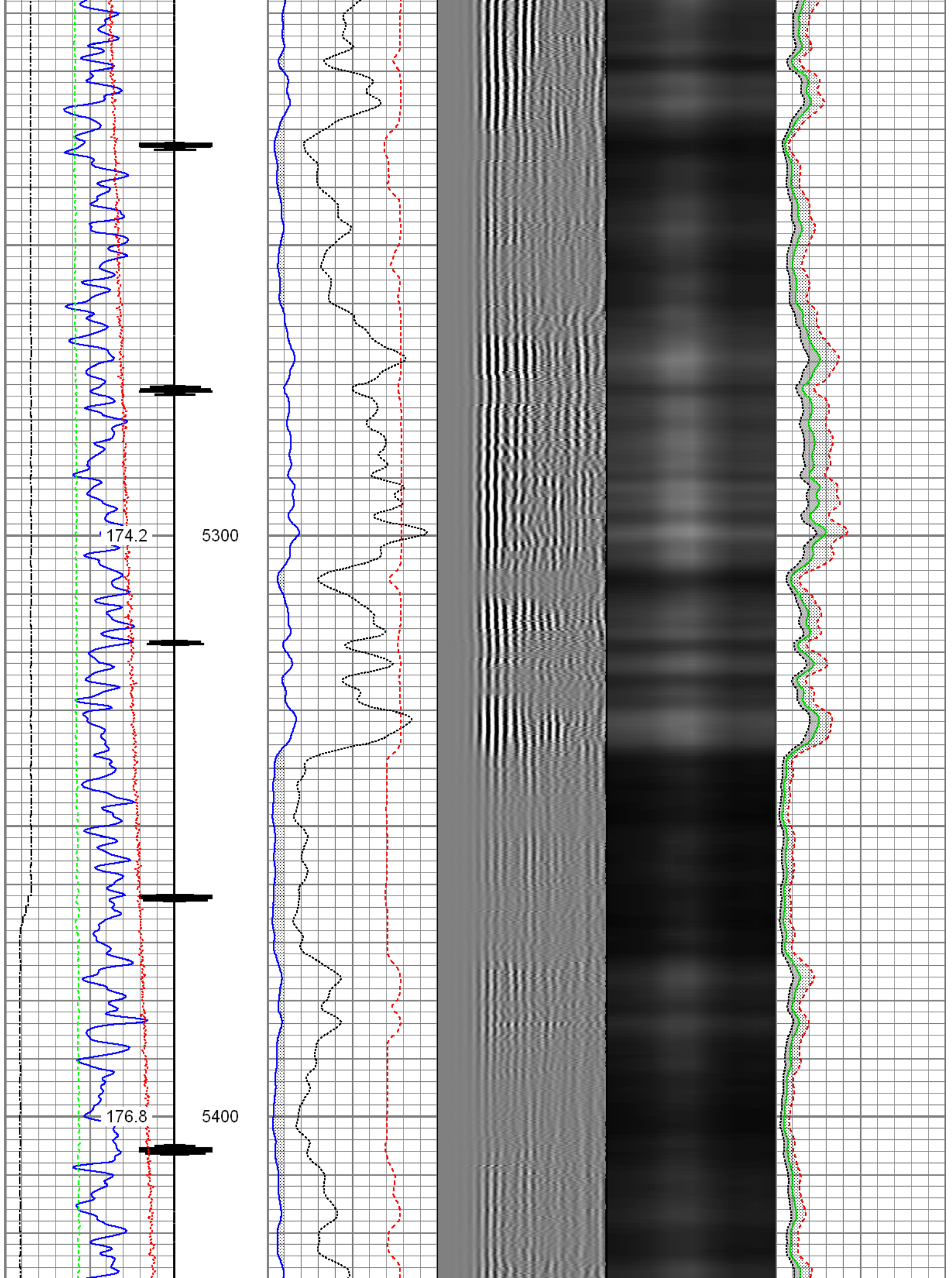




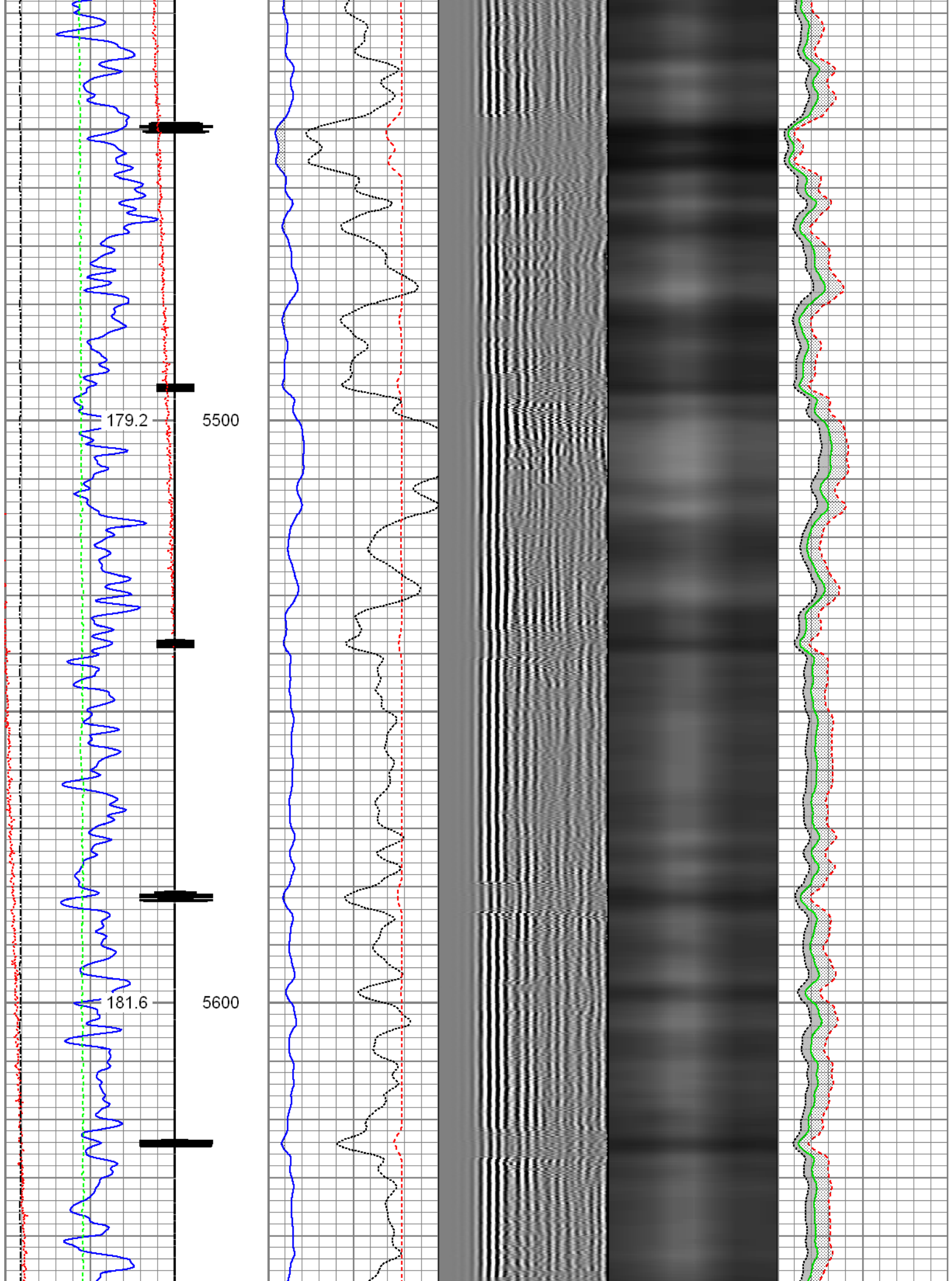


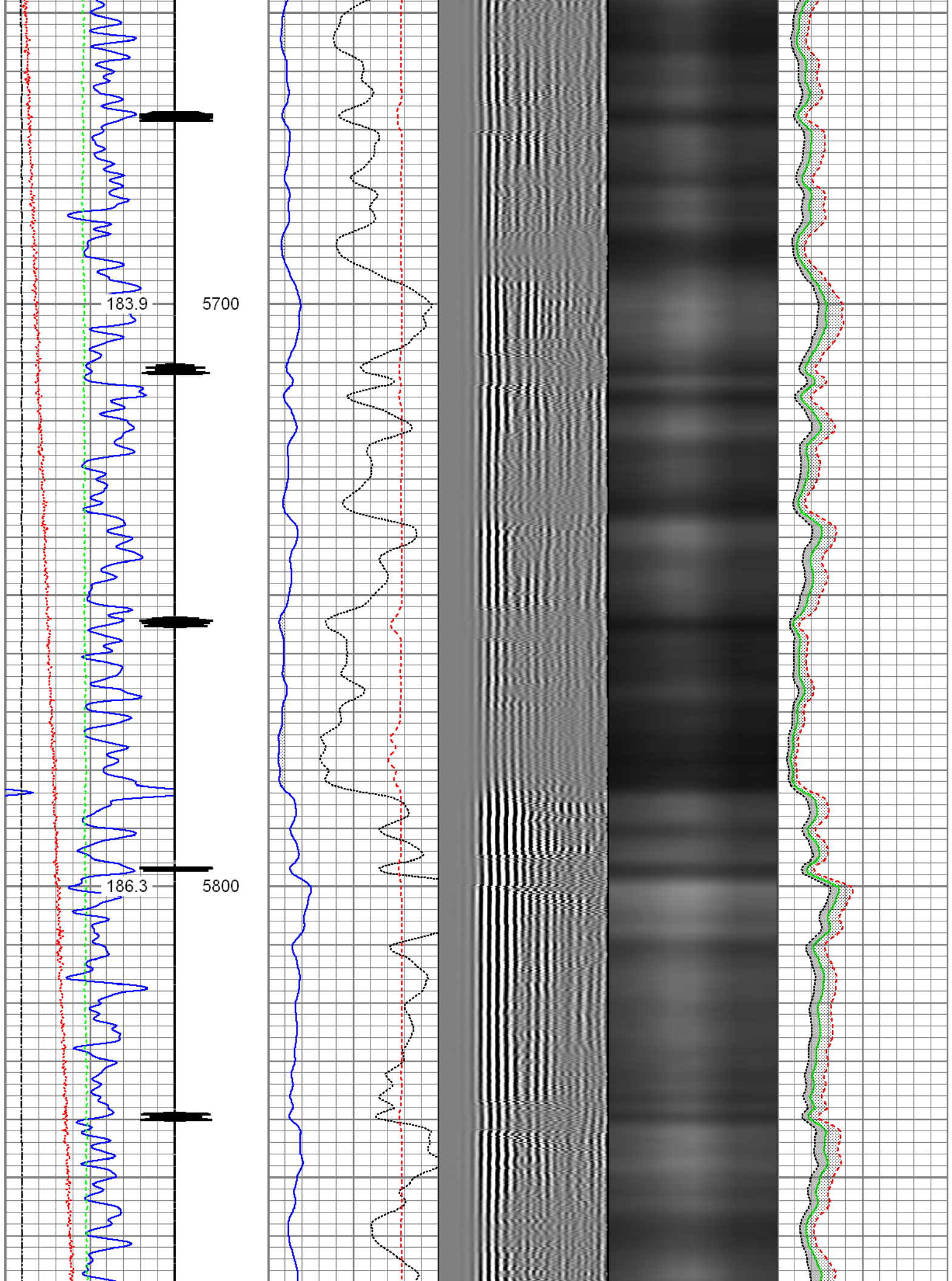


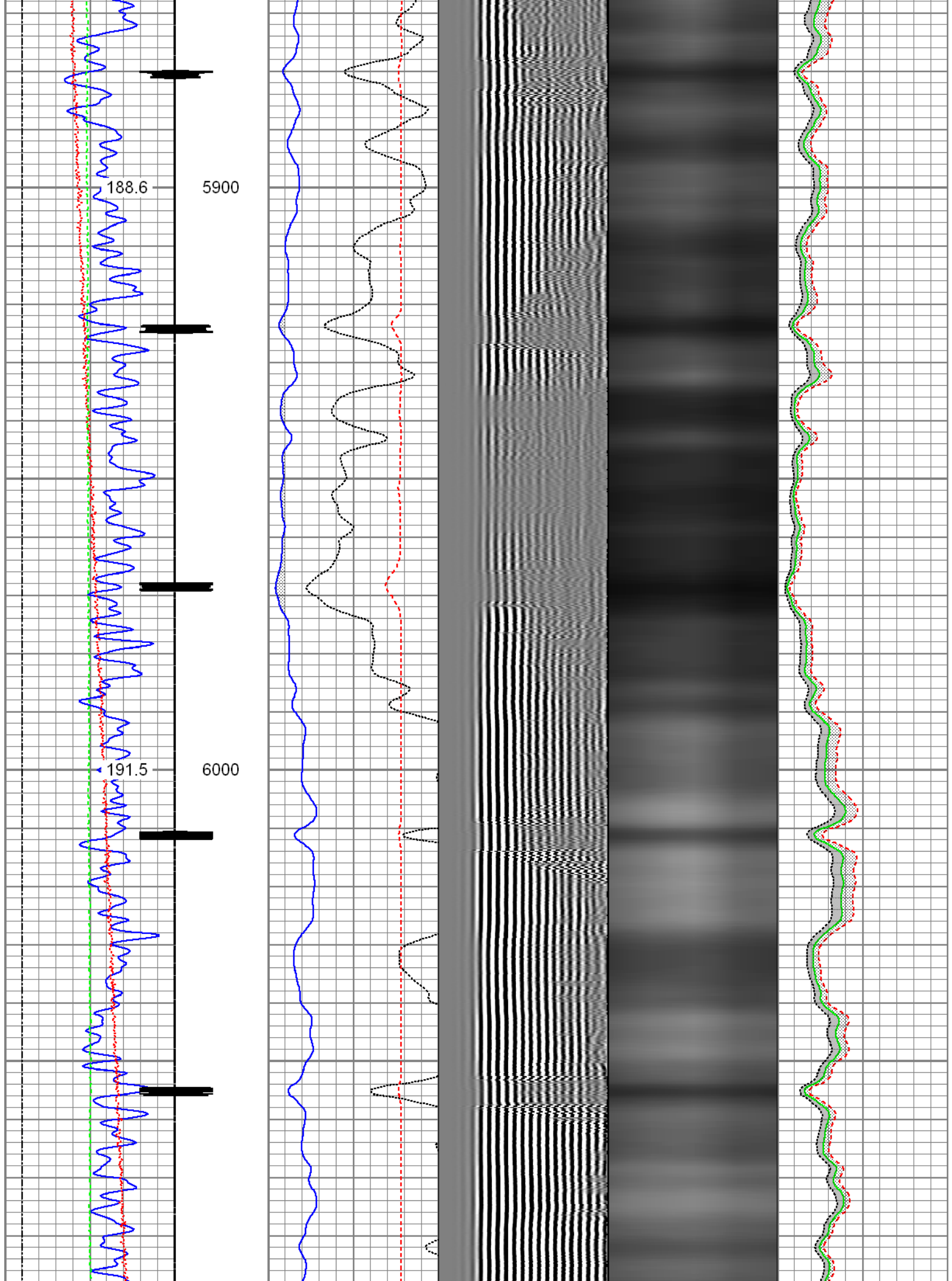




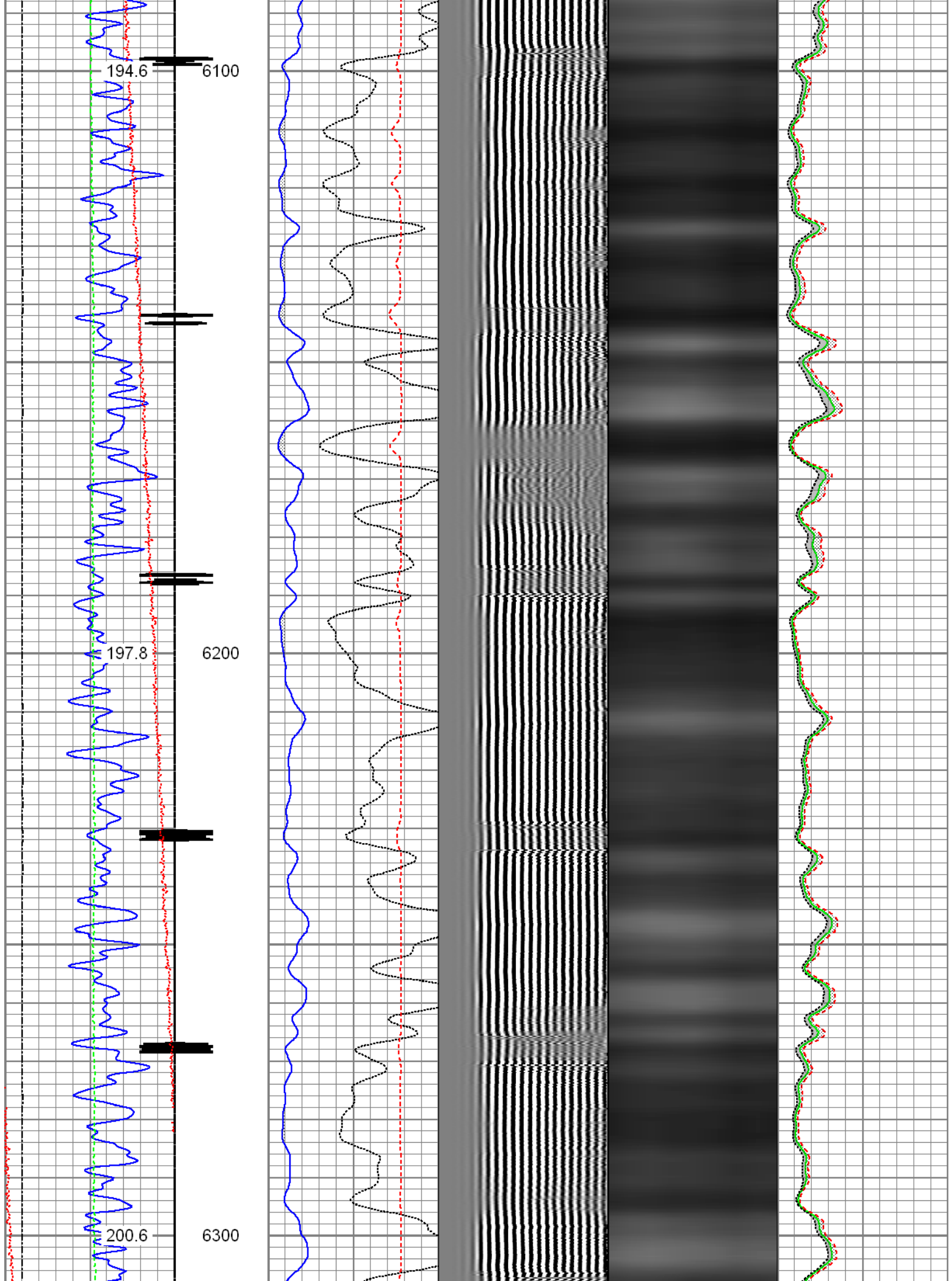


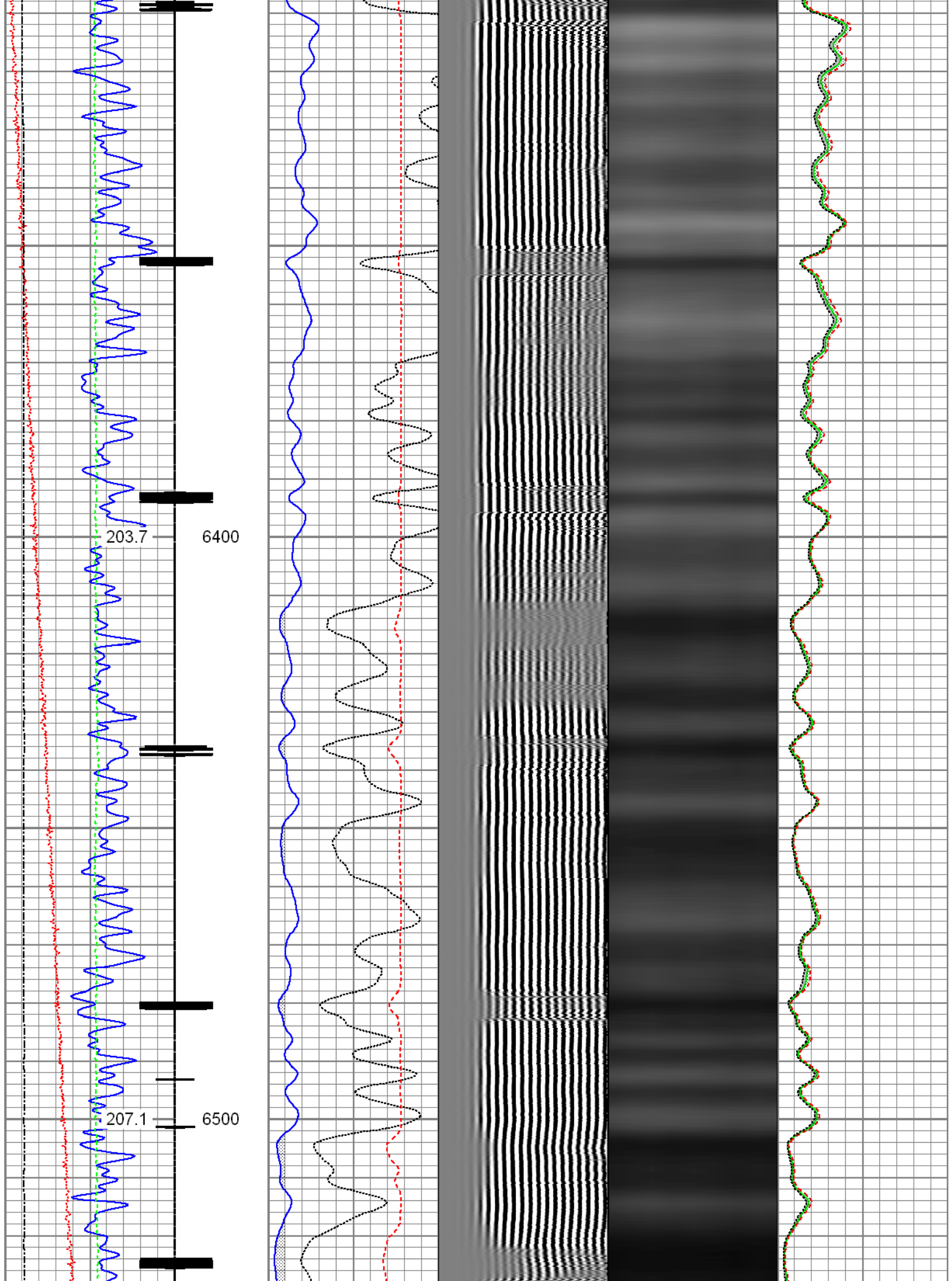


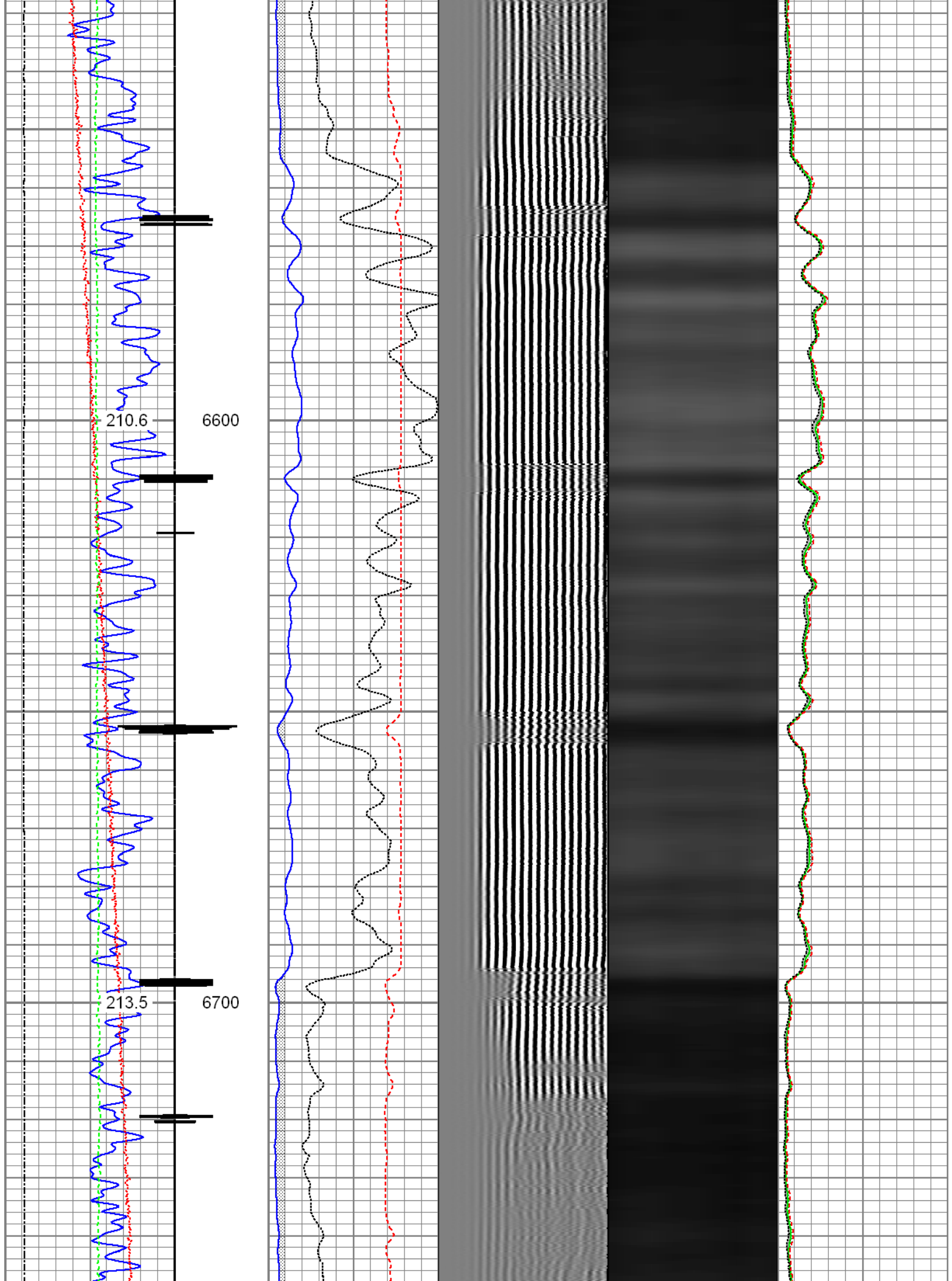




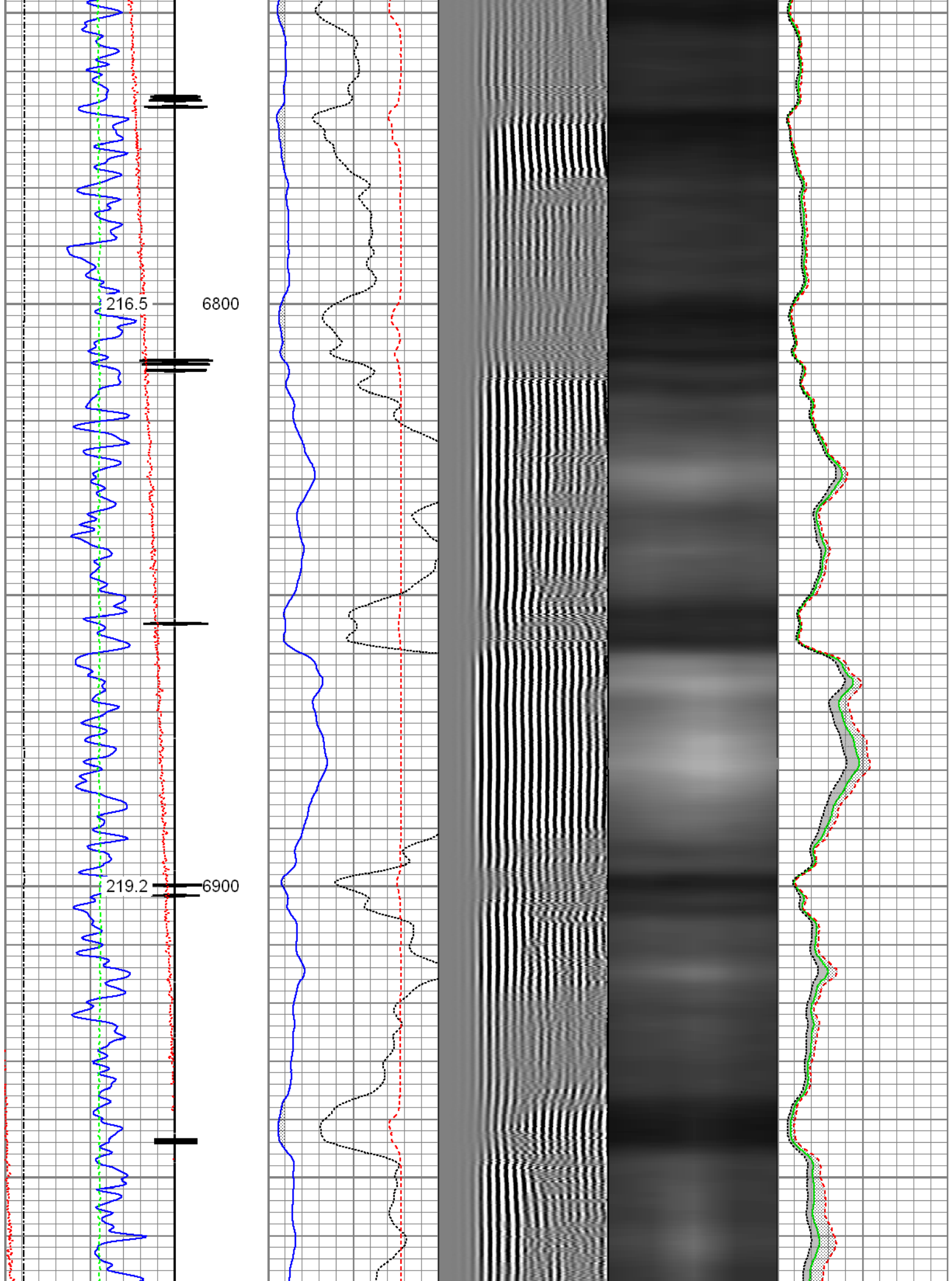


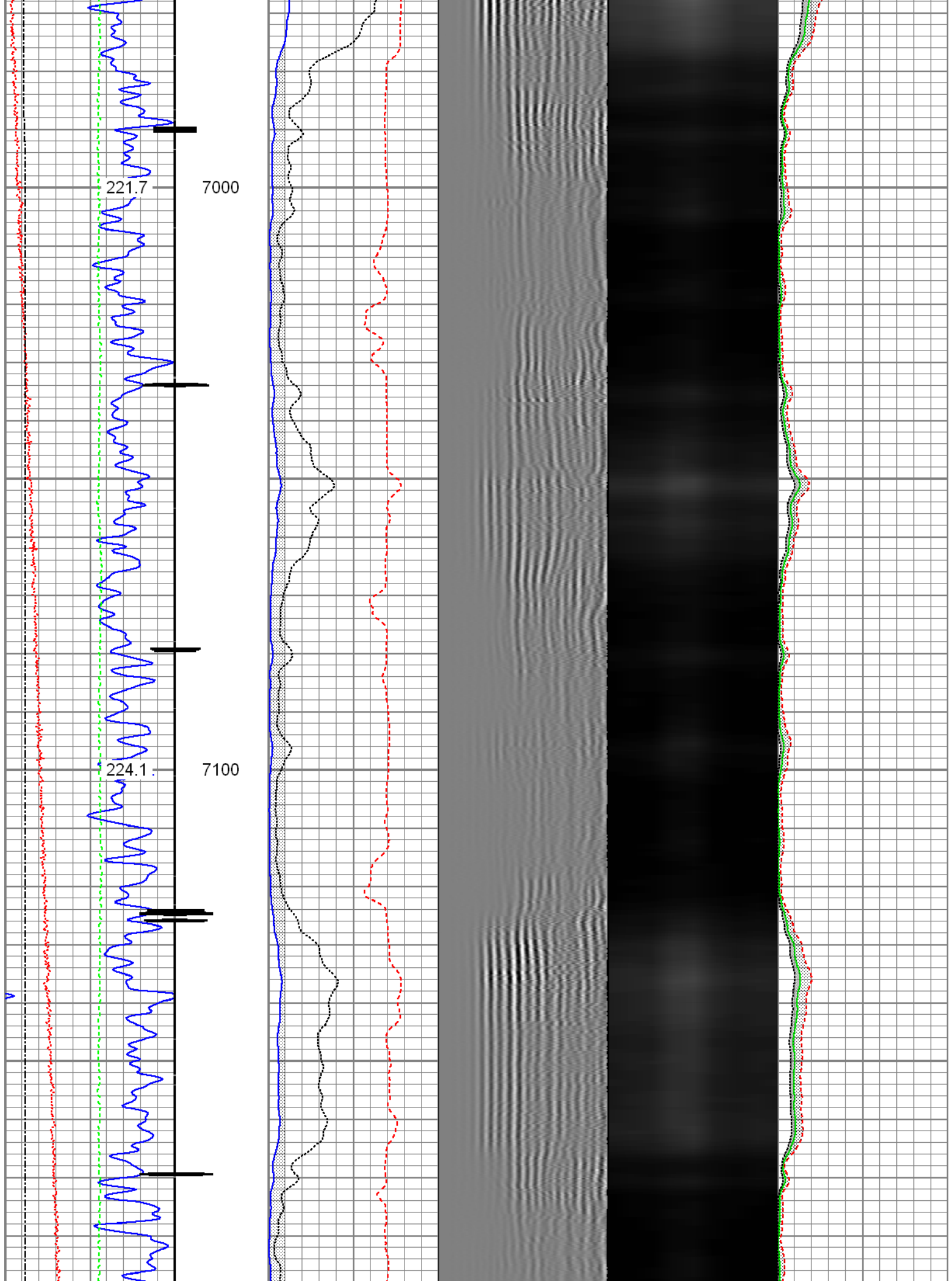


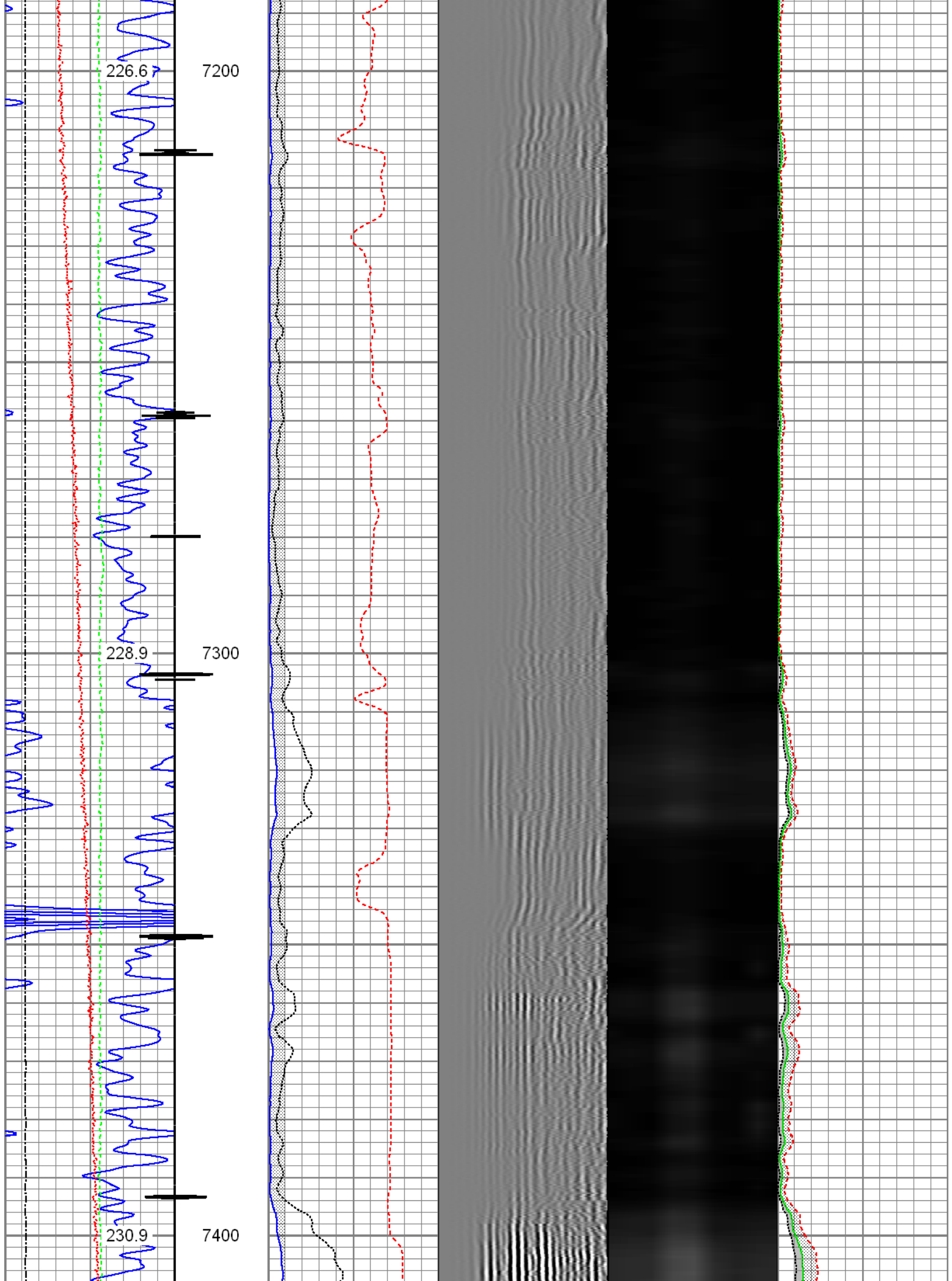




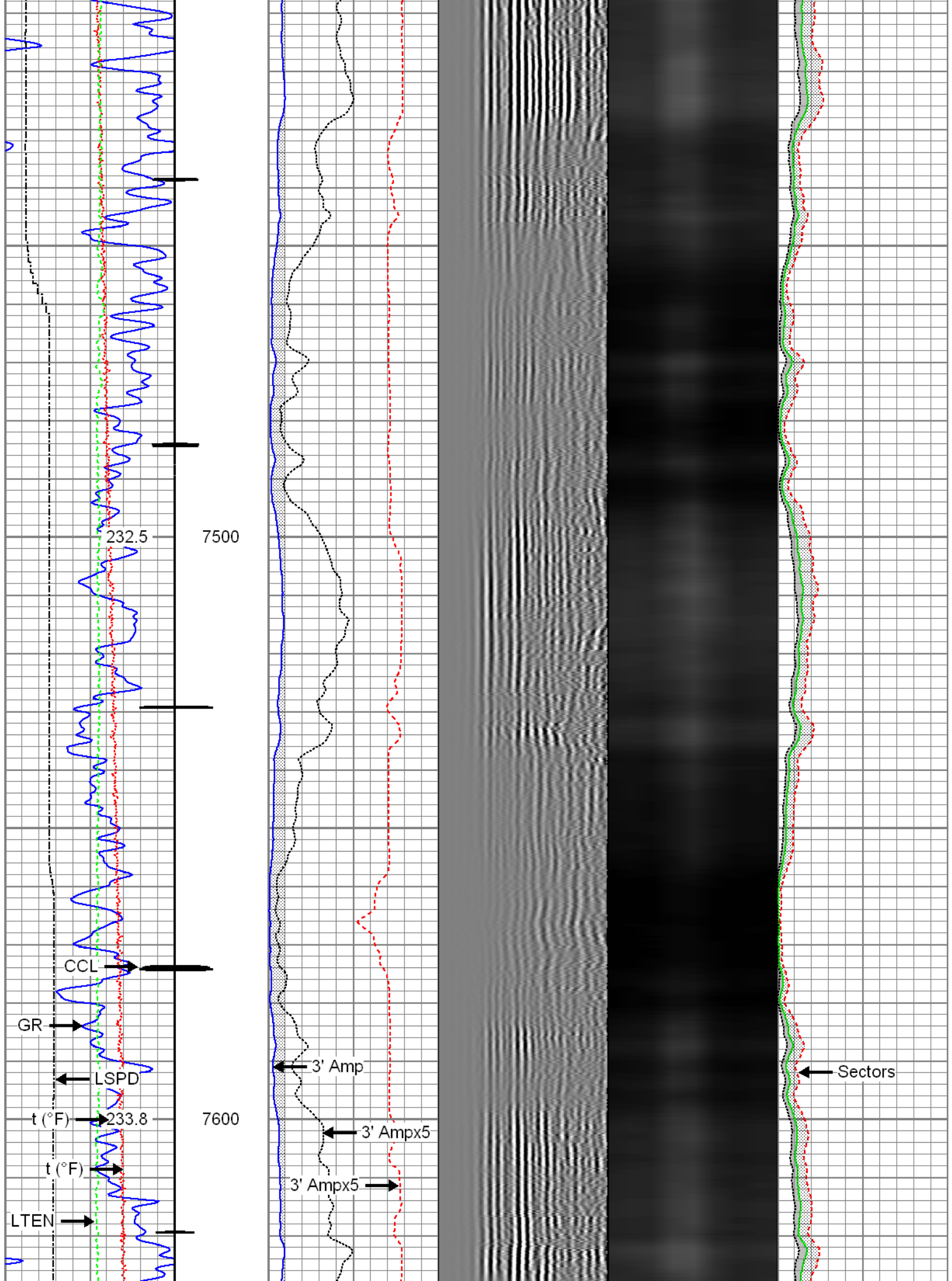


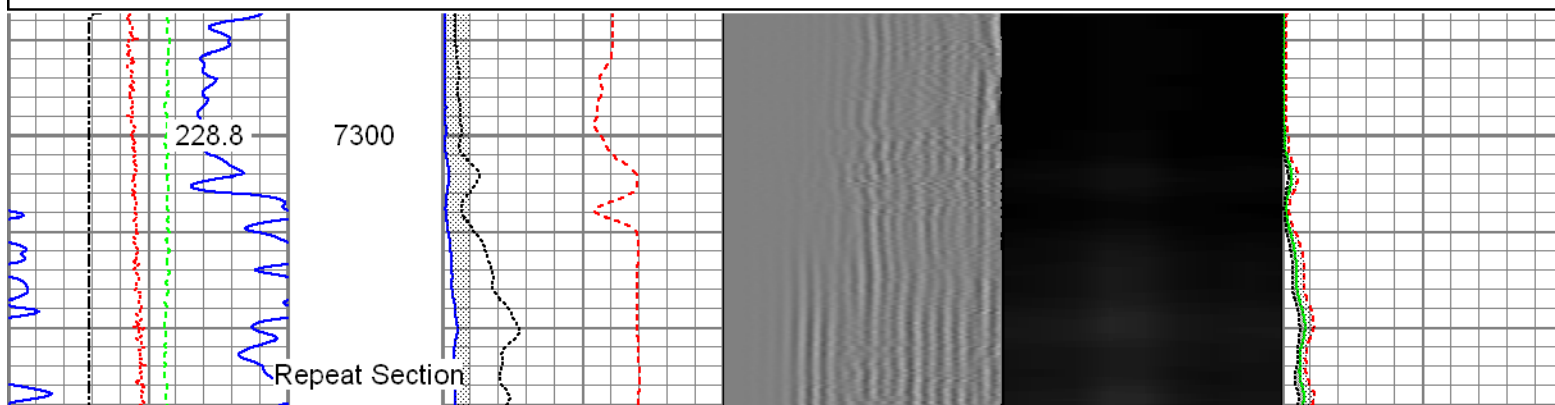
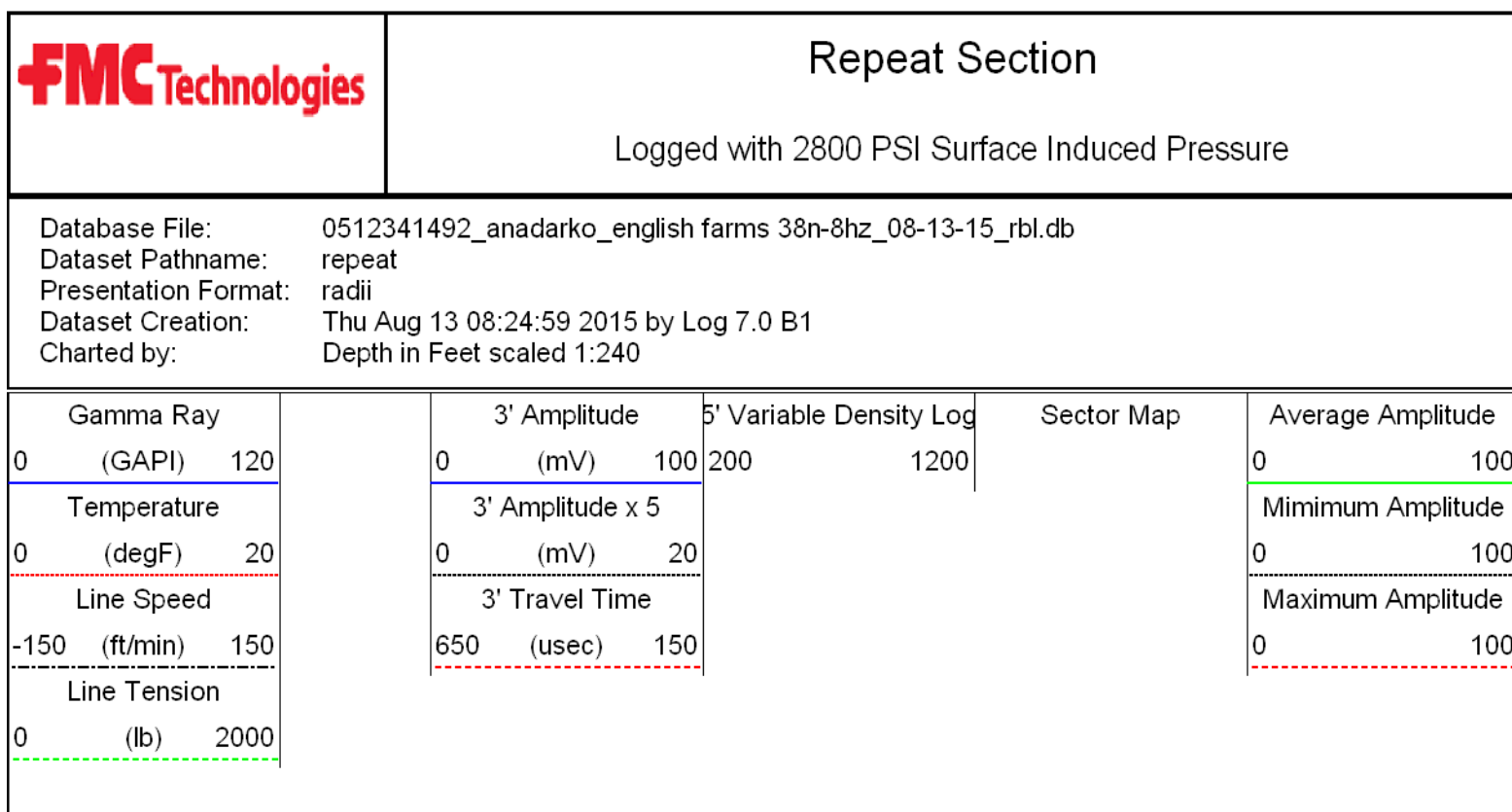
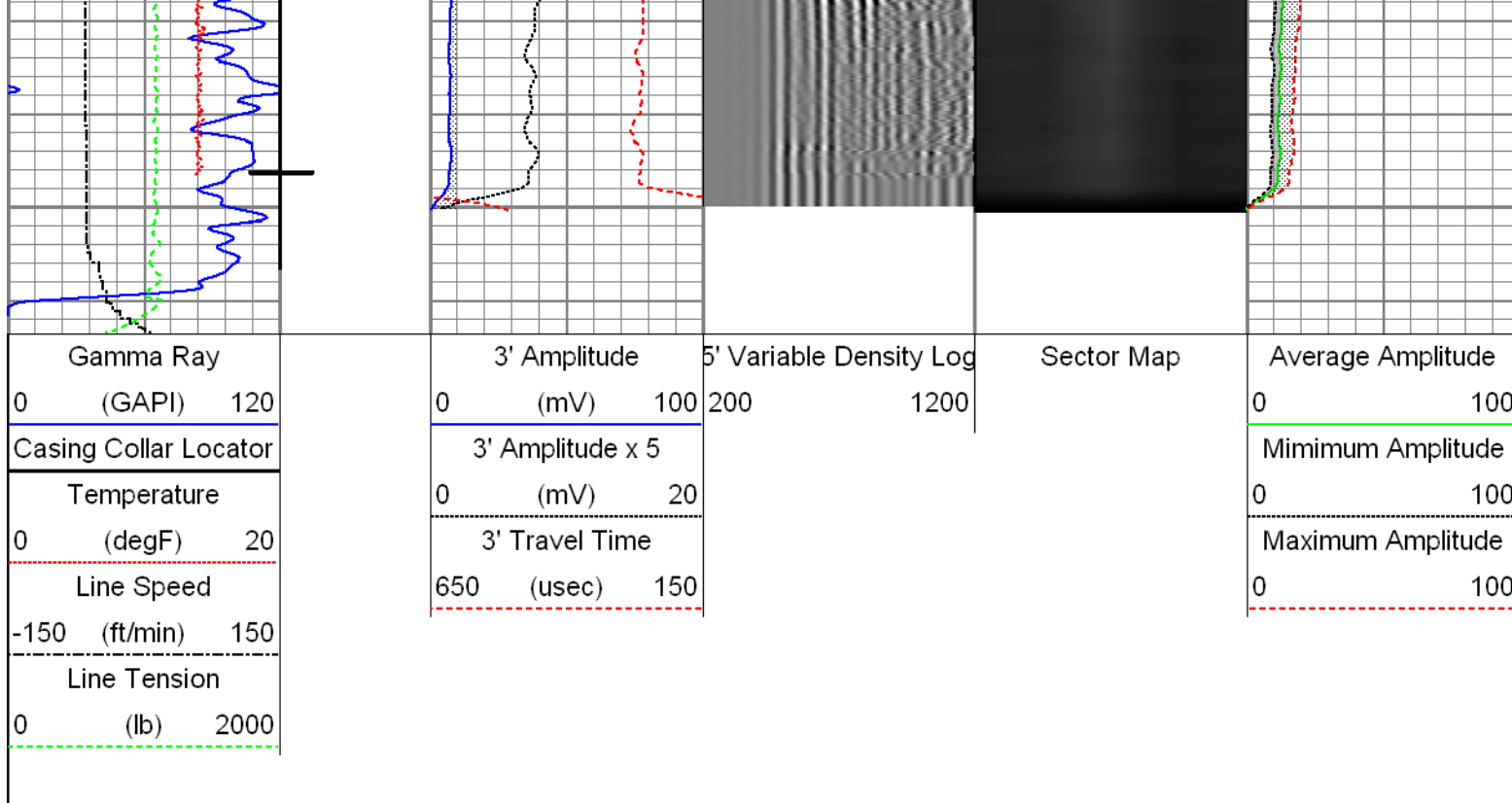


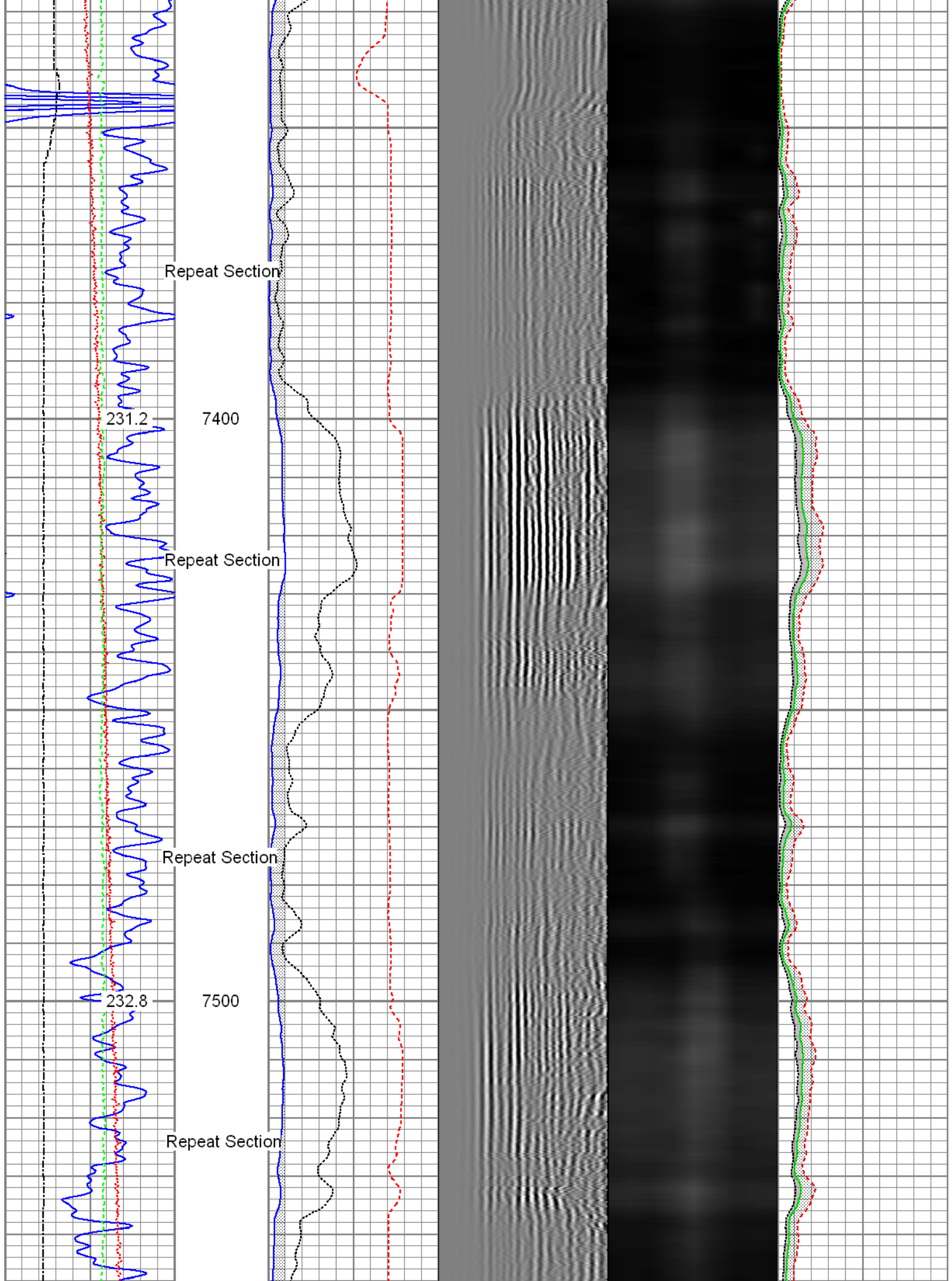
















Temp	16.72					
WVF3FT	14.55		Probe_RADII-C-2-3/4" (FW1302-001) Probe 2-3/4" Sector Cement Bond Tool with Temperature Probe	9.19	2.75	105.00
WVFCAL	14.55					
WVFS1	14.55					
WVFS2	14.55					
WVFS3	14.55					
WVFS4	14.55					
WVFS5	14.55					
WVFS6	14.55					
WVFS7	14.55					
WVFS8	14.55					
WVF5FT	13.55					
			Probe_IL_BS_Cent Probe 2-3/4" Inline Electrical Inline Bowspring Centralizer	2.88	2.75	10.00
CCL	6.51					
DCCL	6.51		Probe_CCL_GR-2.75"Digital (FW1307-038) 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: 0512341492_Anadarko_English Farms 38N-8HZ_08-13-15_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:	0512341492_Anadarko_English Farms 38N-8HZ_08-13-15_RBL.db	
Dataset Pathname:	main	
Dataset Creation:	Thu Aug 13 08:37:00 2015 by Log 7.0 B1	
Gamma Ray Calibration Report		
Serial Number:	FW1307-038	
Tool Model:	2.75"Digital	
Performed:	Wed Jul 29 15:50:16 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: FW1302-001  
Tool Model: 2-3/4"

Calibration Casing Diameter: 5.500 in  
Calibration Depth: 443.690 ft

Master Calibration, performed Thu Aug 13 07:33:22 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.002	0.634	0.800	71.921	112.604	0.558
CAL	0.002	0.746				
5'	0.002	0.552	0.800	71.921	129.414	0.484
SUM						
S1	0.002	0.658	0.000	100.000	152.662	-0.378
S2	0.003	0.627	0.000	100.000	160.038	-0.404
S3	0.002	0.624	0.000	100.000	160.839	-0.308
S4	0.002	0.632	0.000	100.000	158.824	-0.328
S5	0.002	0.638	0.000	100.000	157.260	-0.303
S6	0.002	0.655	0.000	100.000	153.096	-0.333
S7	0.002	0.687	0.000	100.000	146.054	-0.291
S8	0.002	0.692	0.000	100.000	144.948	-0.280

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	0.002	0.746	1.000	0.000

Air Zero Calibration, performed Thu Aug 13 07:33:42 2015:

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



	County	Weld
	State	Colorado