



Radial Cement Bond
Gamma Ray
Casing Collar Log

Company Kerr-McGee Oil & Gas Onshore, L.P.
Well GE Powers 3C-26HZ
Field Wattenberg
County Weld
State Colorado

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Location:

API #: 05-123-41914

Other Services

SEC 23 TWP 2N RGE 65W

Permanent Datum Ground Level Elevation 4890'
Log Measured From Kelly Bushing 20 FT
Drilling Measured From Kelly Bushing

Elevation
K.B. 4910'
D.F. 4909'
G.L. 4890'

Date 12-OCT-2015

Run Number Two

Depth Driller 12258 FT

Depth Logger 7164 FT

Bottom Logged Interval 7160 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 12:04

Equipment Number HD-0343

Location Fort Lupton, CO

Recorded By R. Fogarty

Witnessed By Levi McArthur

Run Number

Bit From To

Size Weight From To

Size (in) Wgt (lbs/Ft) Grade Top Bottom

Surface Casing 9 5/8 36 J-55 LT&C Surface 1854 FT

Intermediate #1 5 1/2 17 HCP-110 LTC Surface 12249 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
Log Correlated to 20 FT Kelly Bushing
Casing Tally Reported Marker Joint Top at 6400 FT
Log Recorded Marker Joint Top at 6405 FT
Gauge Ring Ran to 7164 FT
Log Ran as deep as possible to surface
Log was ran with 2800 PSI surface induced pressure
No debris found on logging tools upon completion of run

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



Main Pass

Recorded with 2800 PSI Surface Induced Pressure

Database File: c:\warrior\data\0512341914_anadarko_ge powers 3c-26hz_10-12-15_rb\0512341914_anadarko_ge

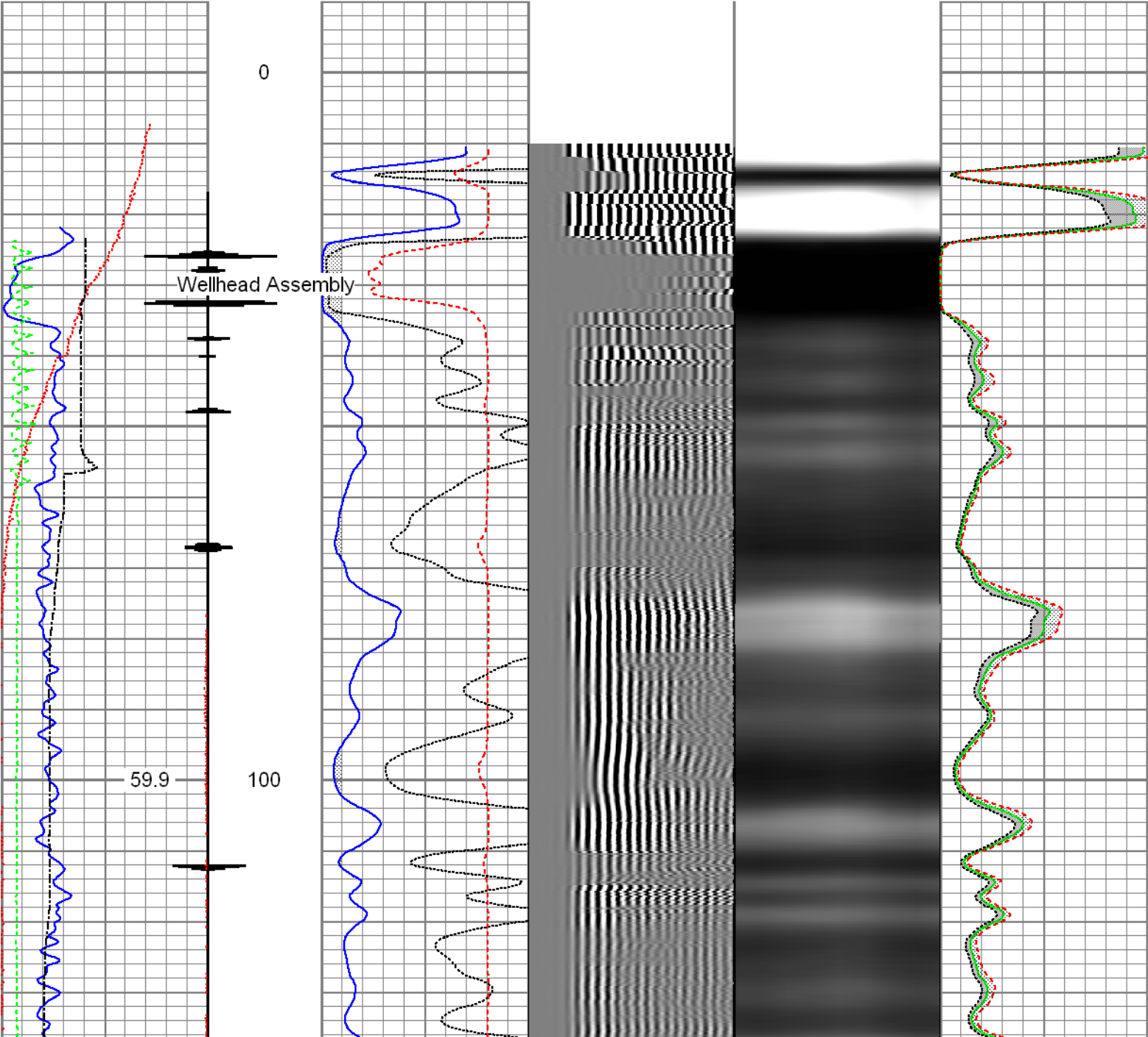
Dataset Pathname: pass4

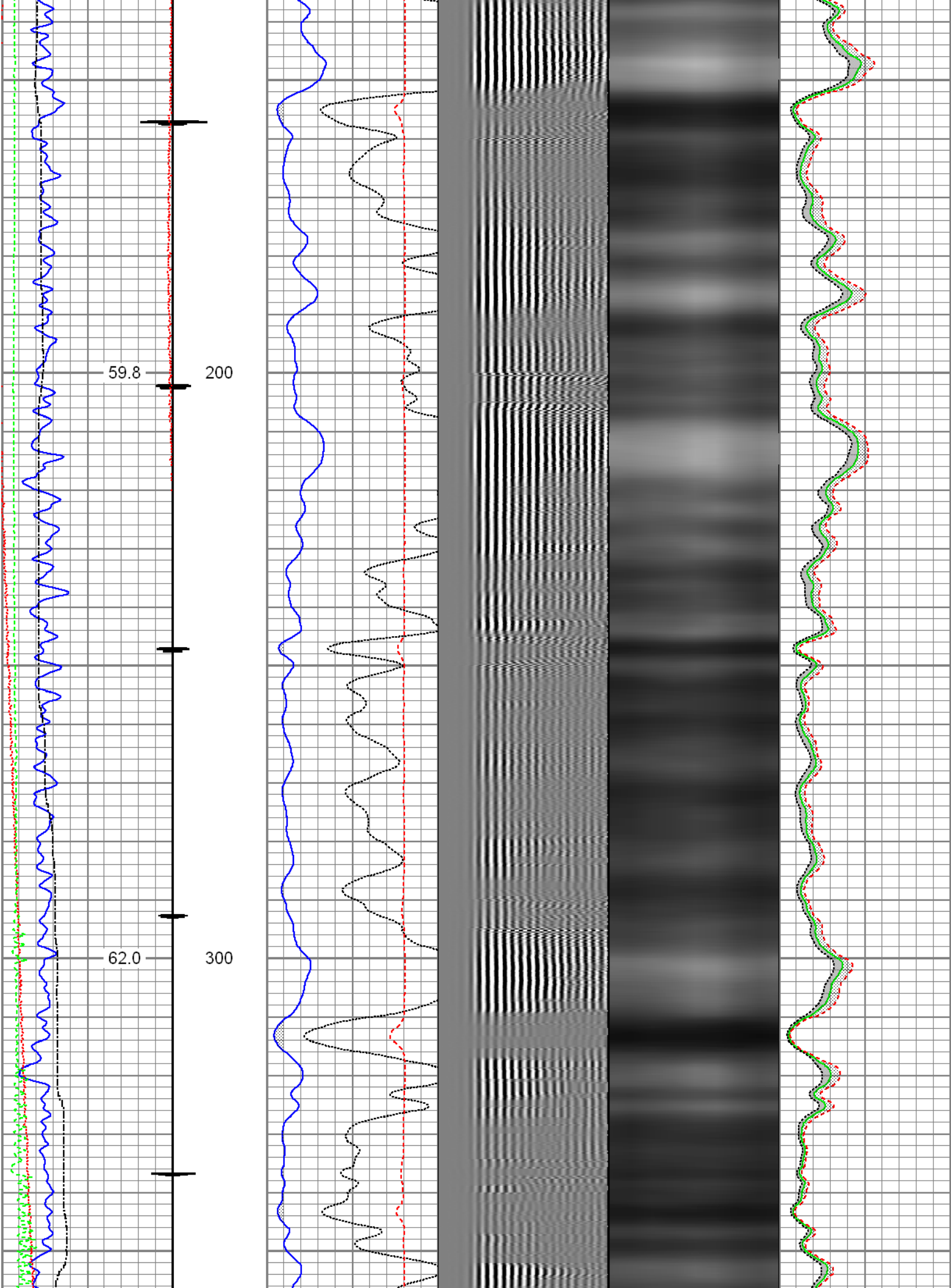
Presentation Format: radii

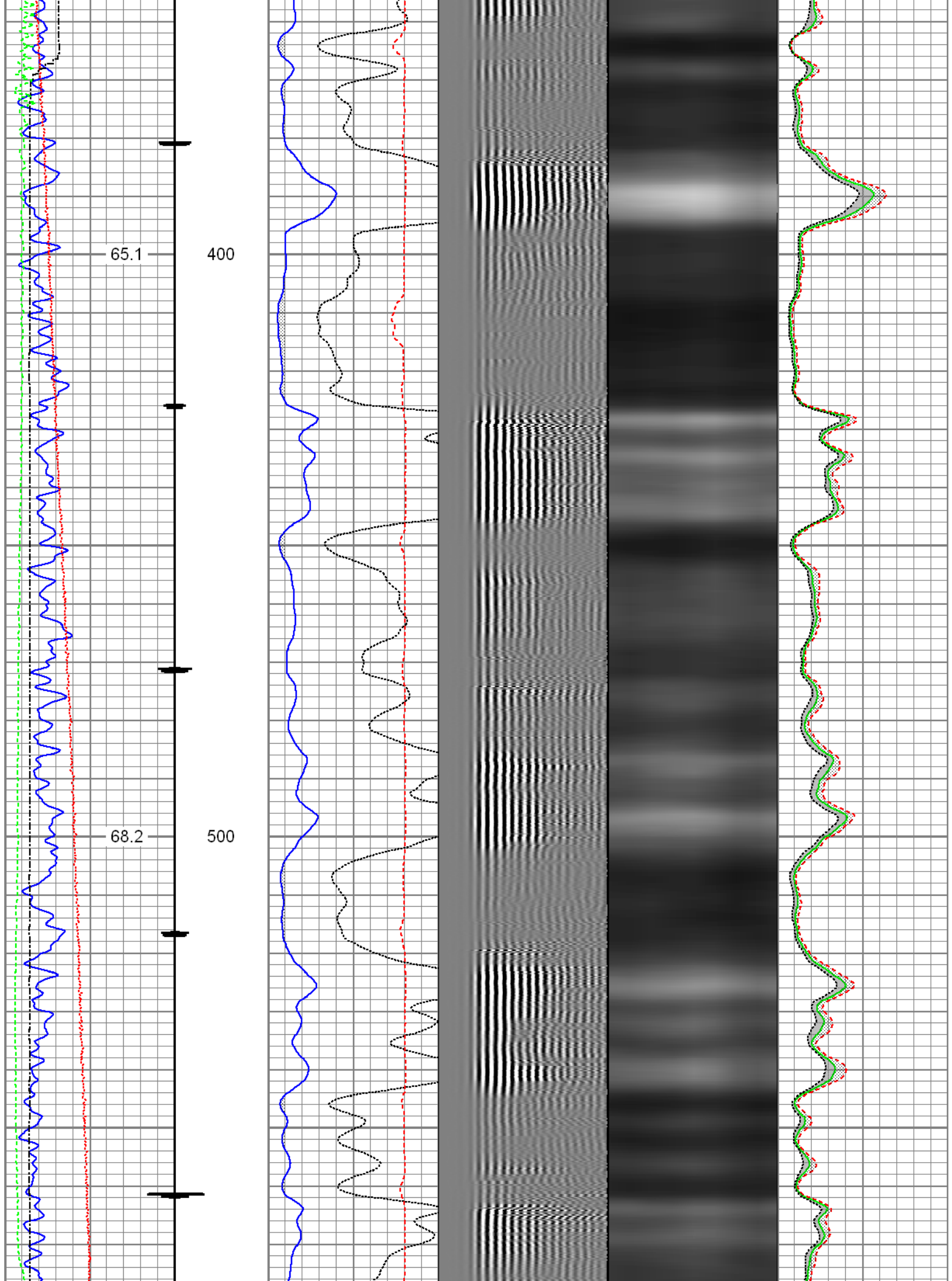
Dataset Creation: Mon Oct 12 12:03:48 2015 by Log 7.0 B1

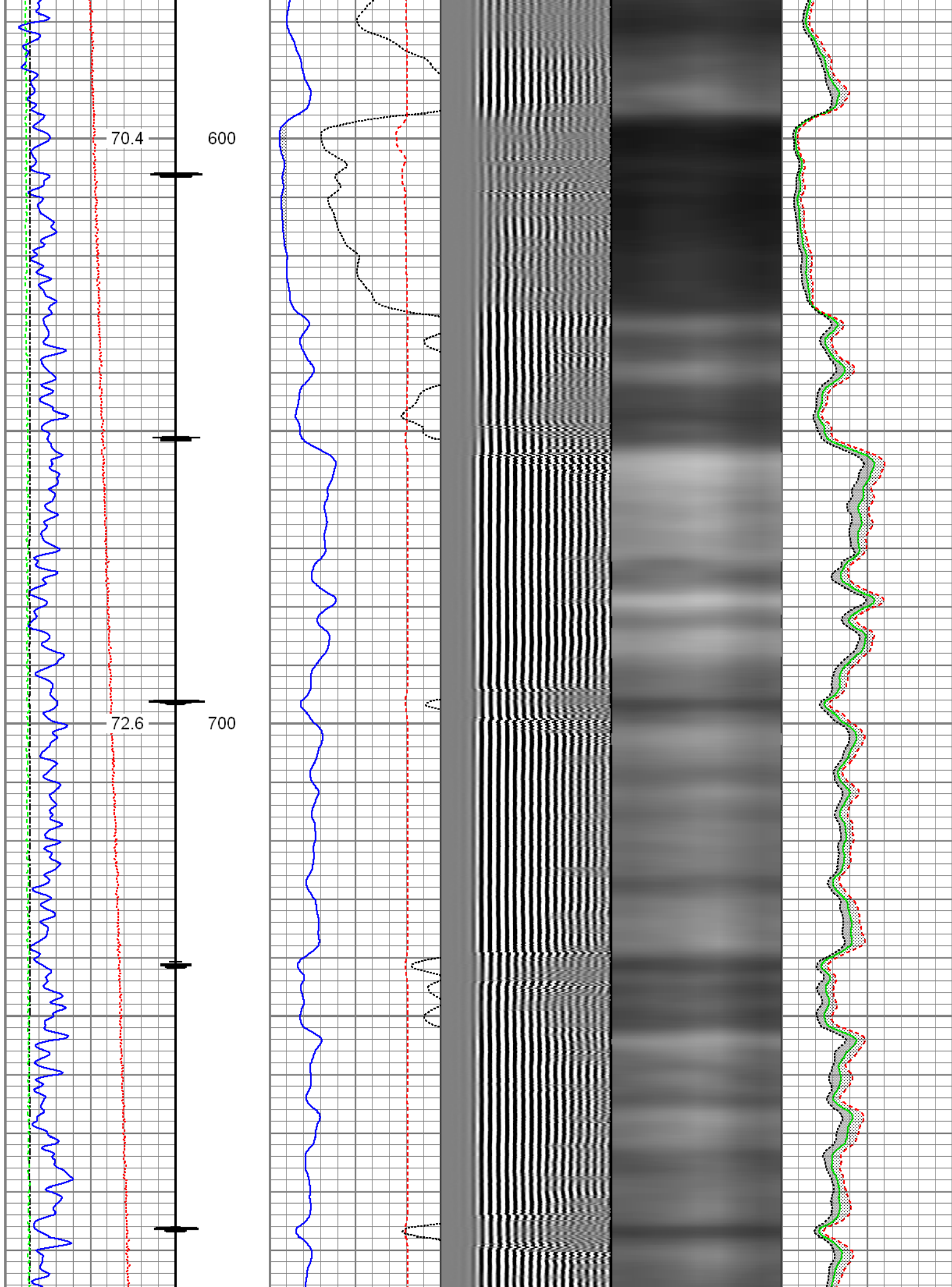
Charted by: Depth in Feet scaled 1:240

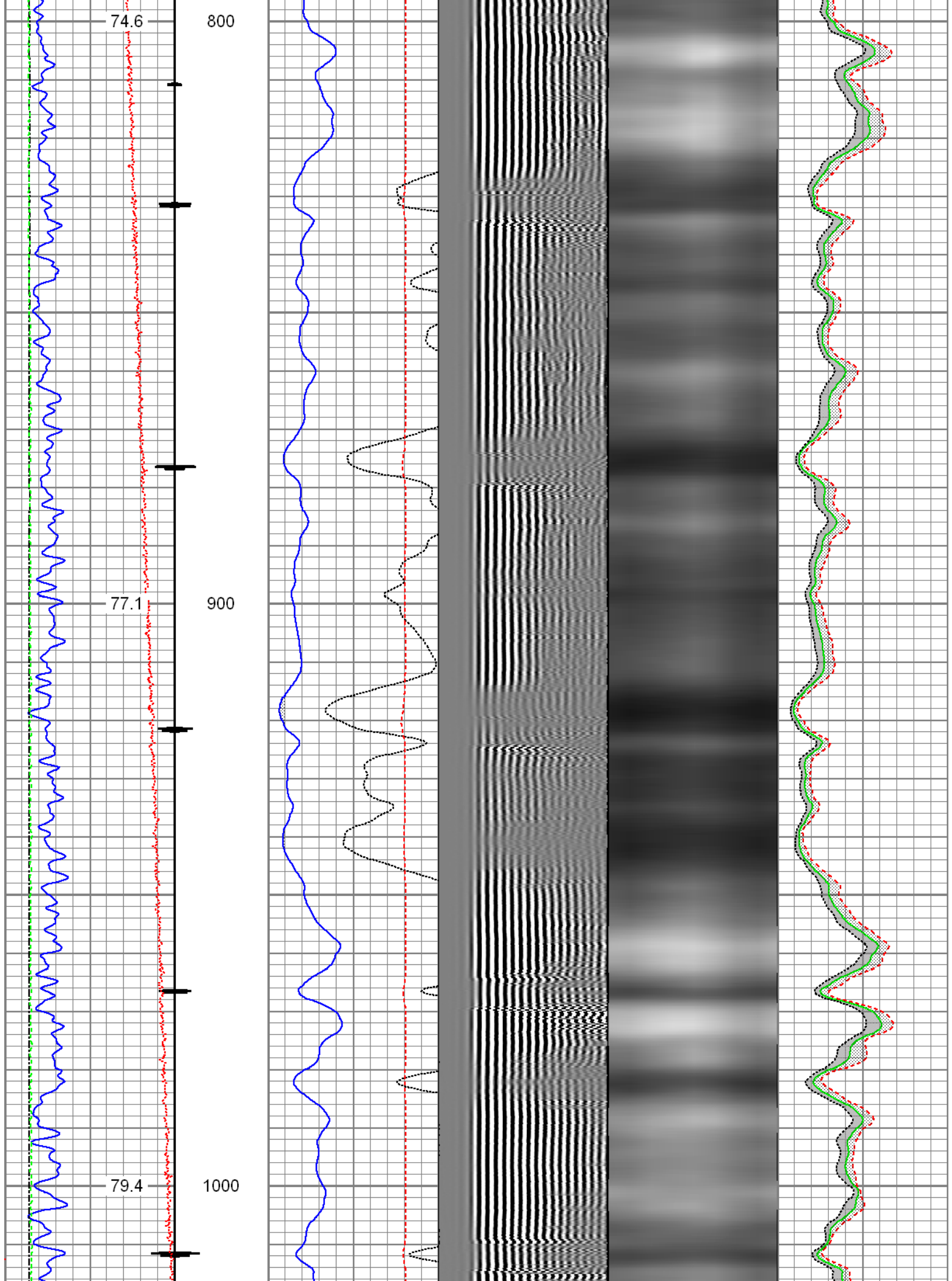
Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 170	0 (mV) 100	200 1200		0 100
Casing Collar Locator	3' Amplitude x 5			Mimimum Amplitude
Temperature	0 (mV) 20			0 100
0 (degF) 20	3' Travel Time			Maximum Amplitude
Line Speed	650 (usec) 150			0 100
-150 (ft/min) 150				
Line Tension				
0 (lb) 2000				

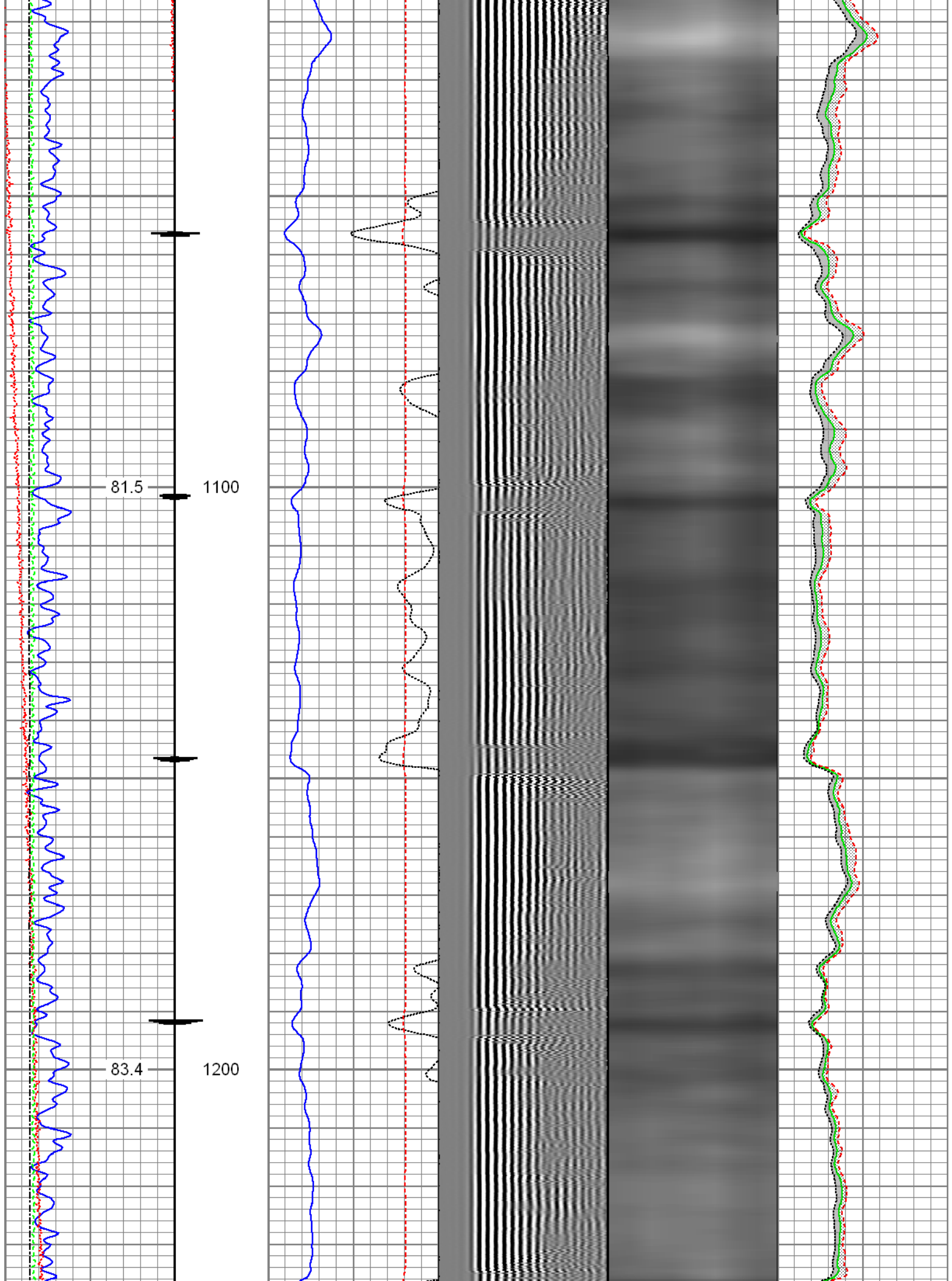


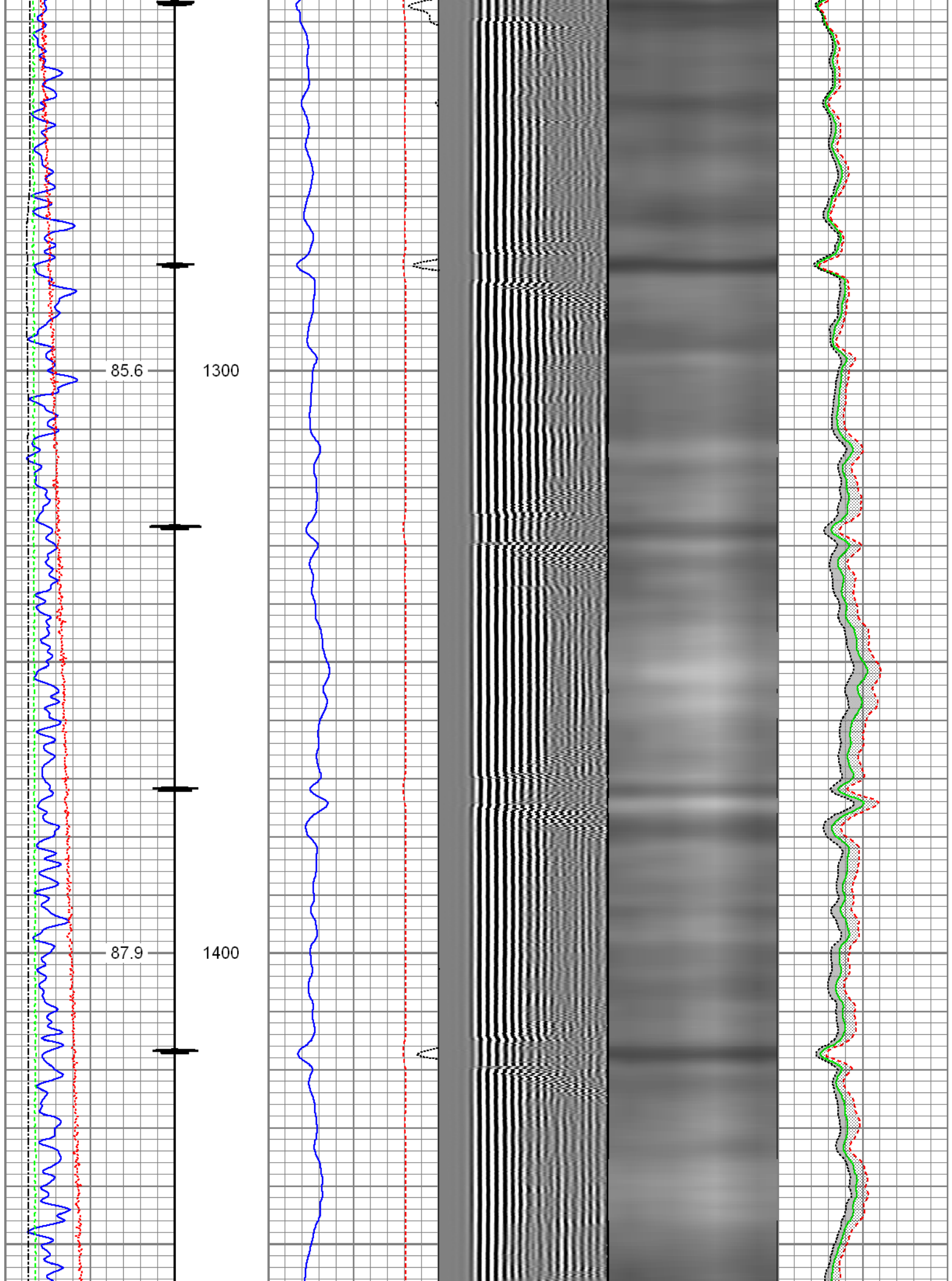


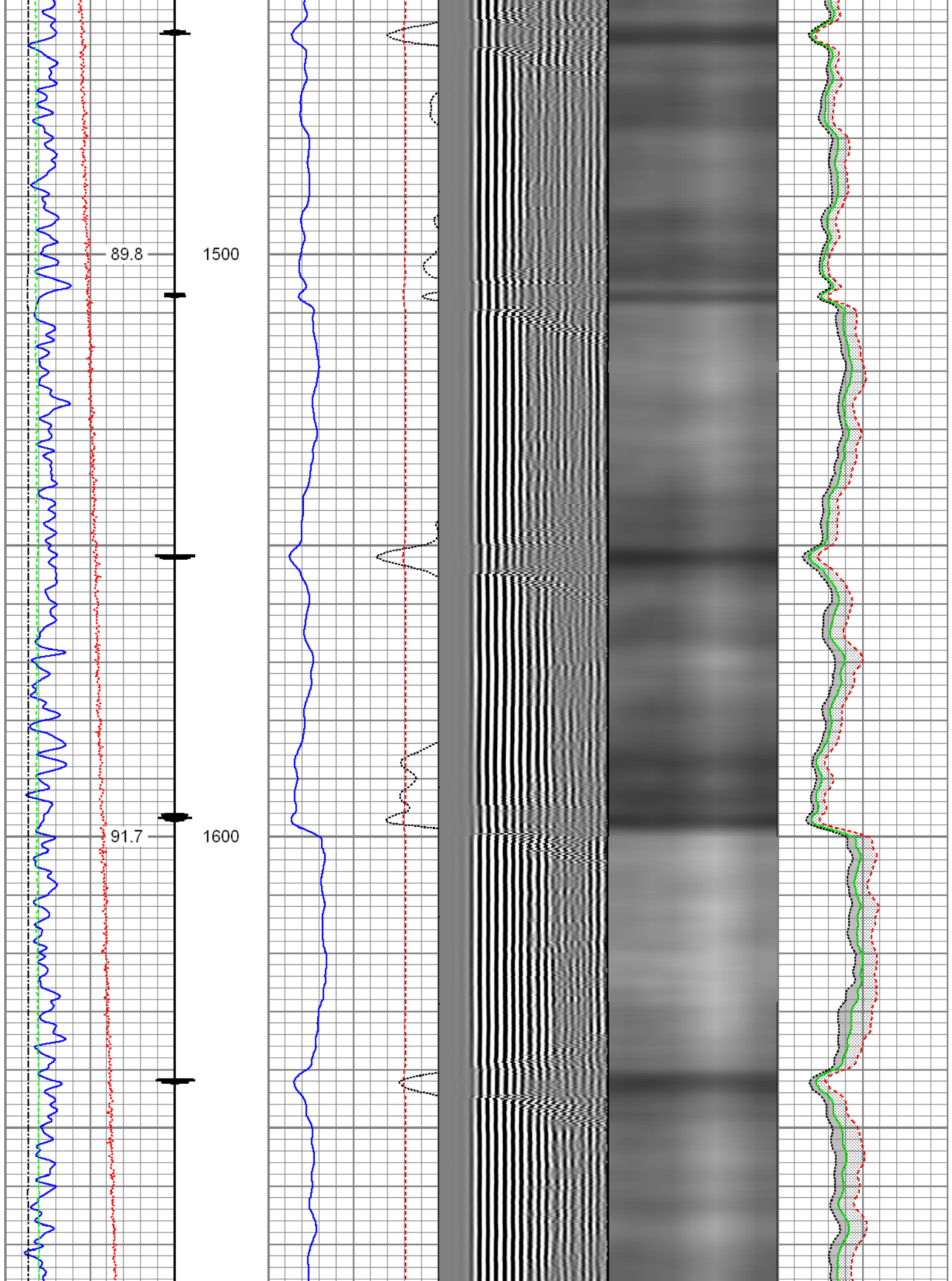


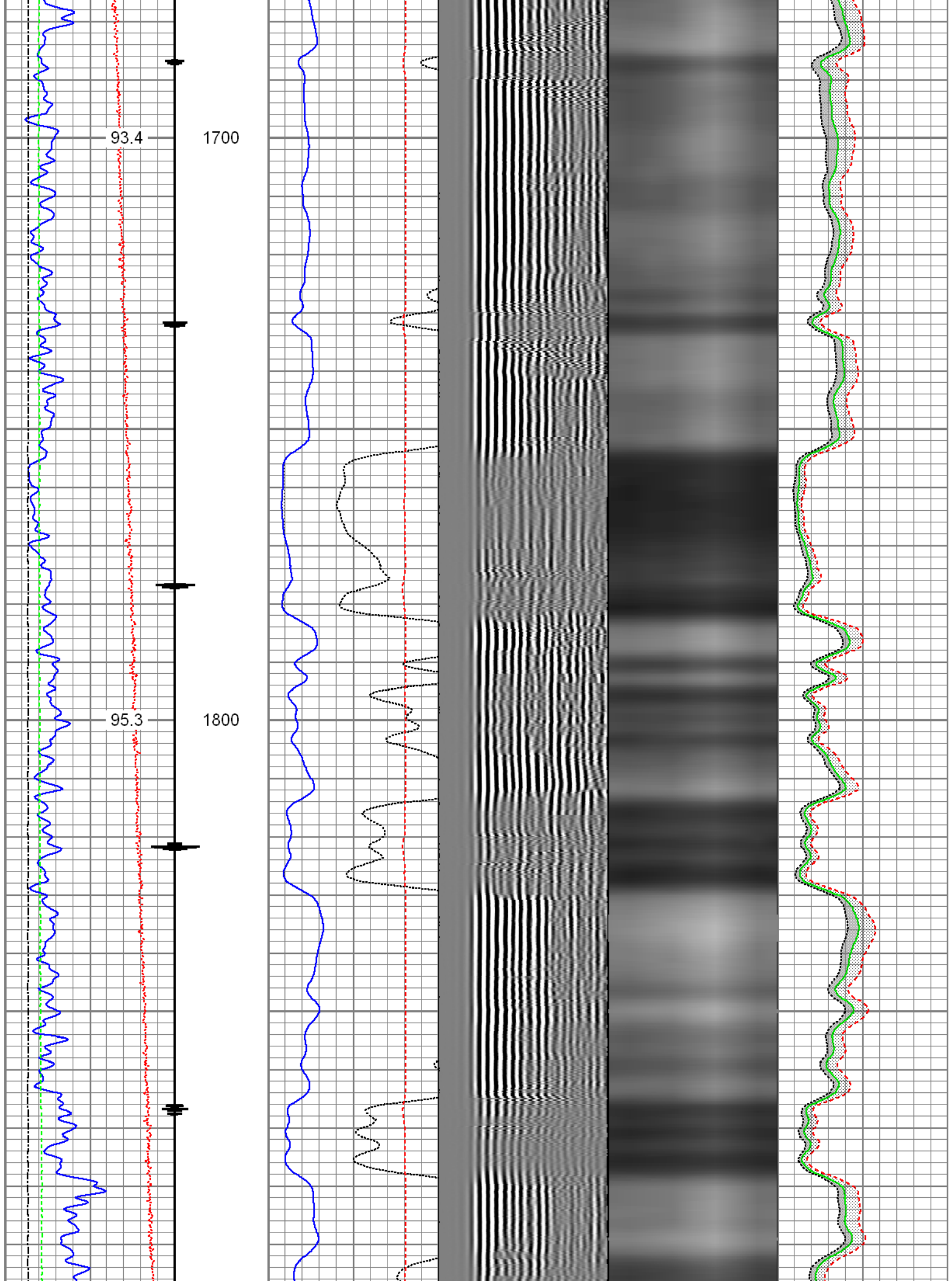


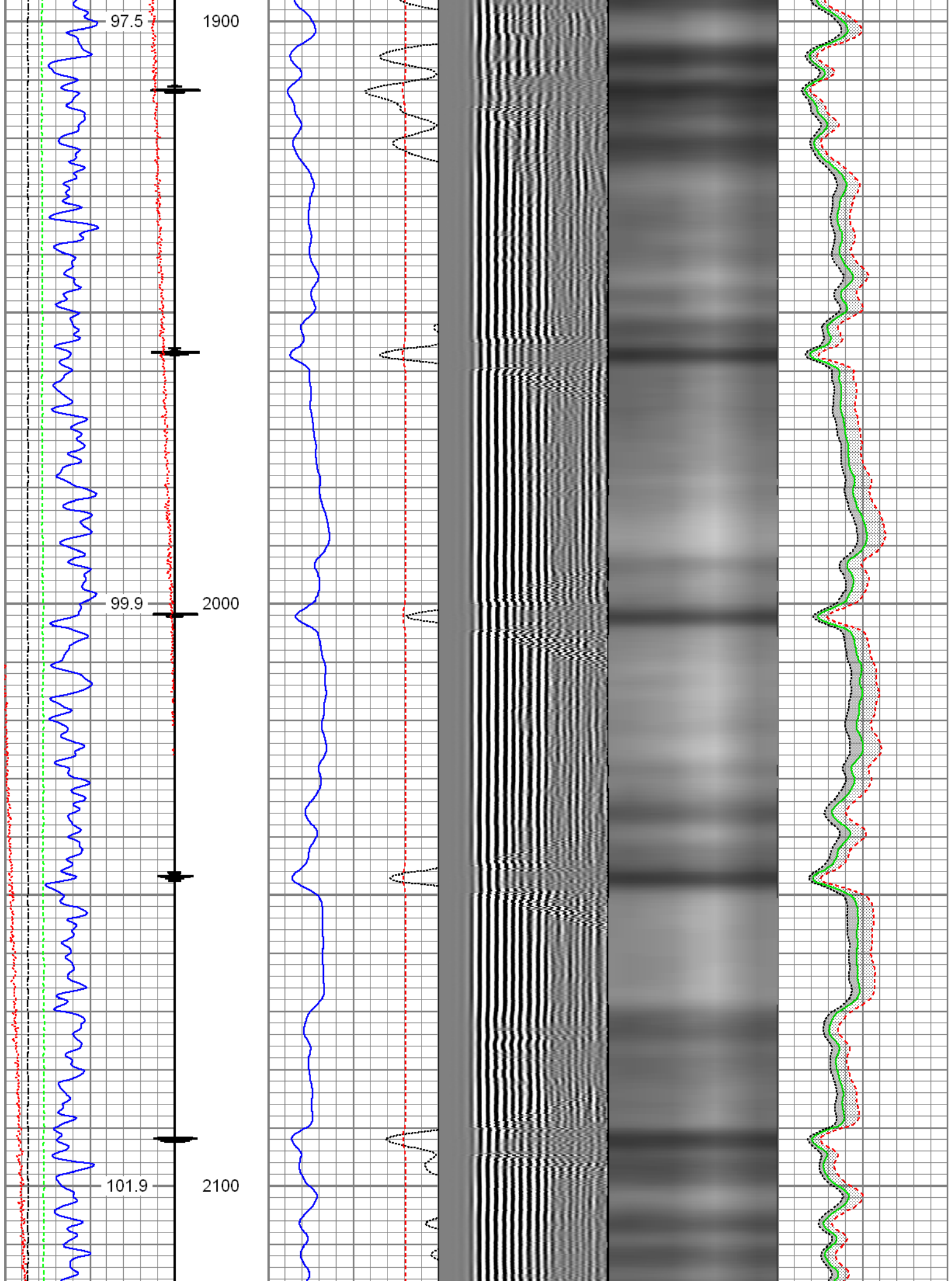


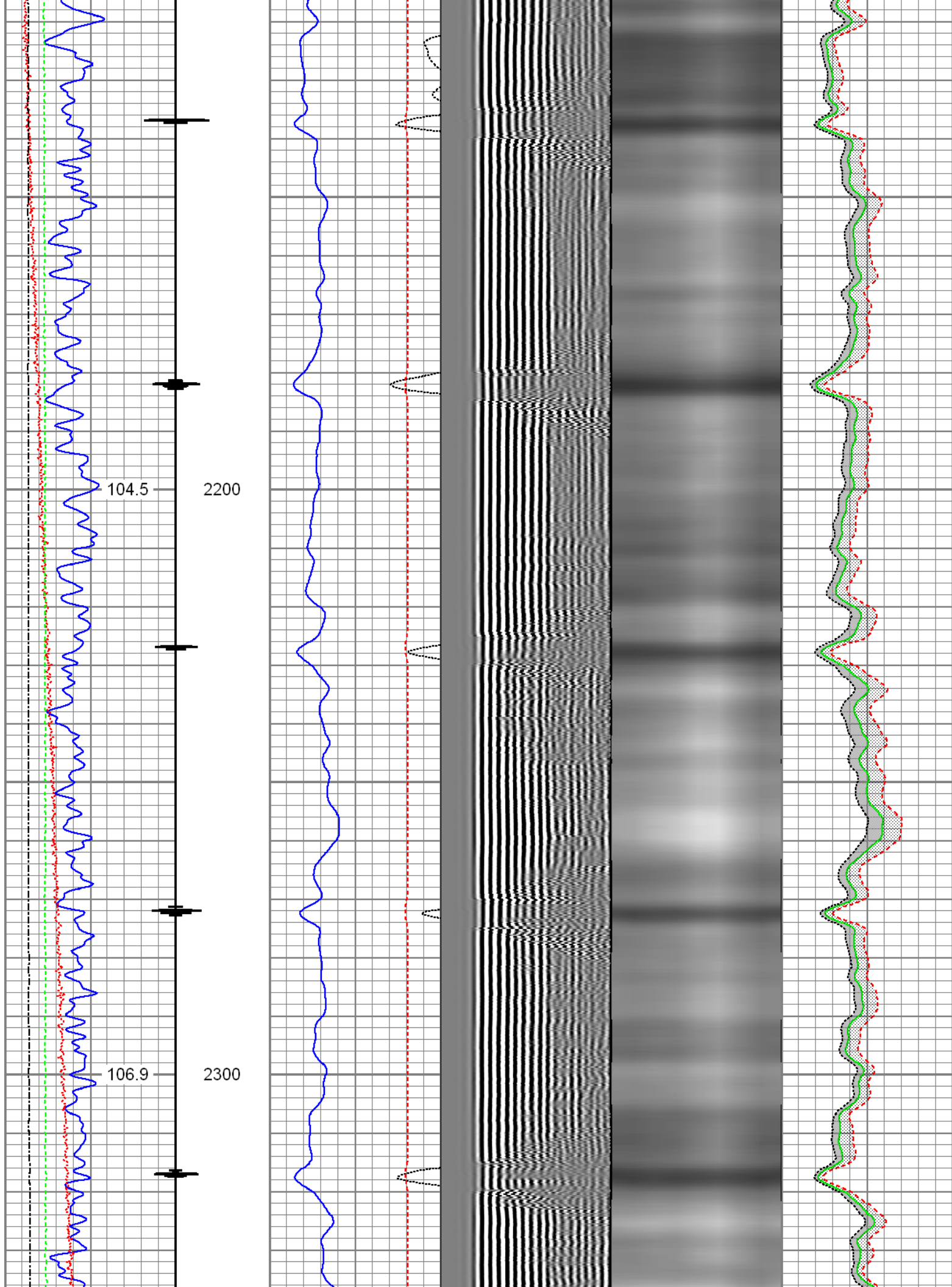


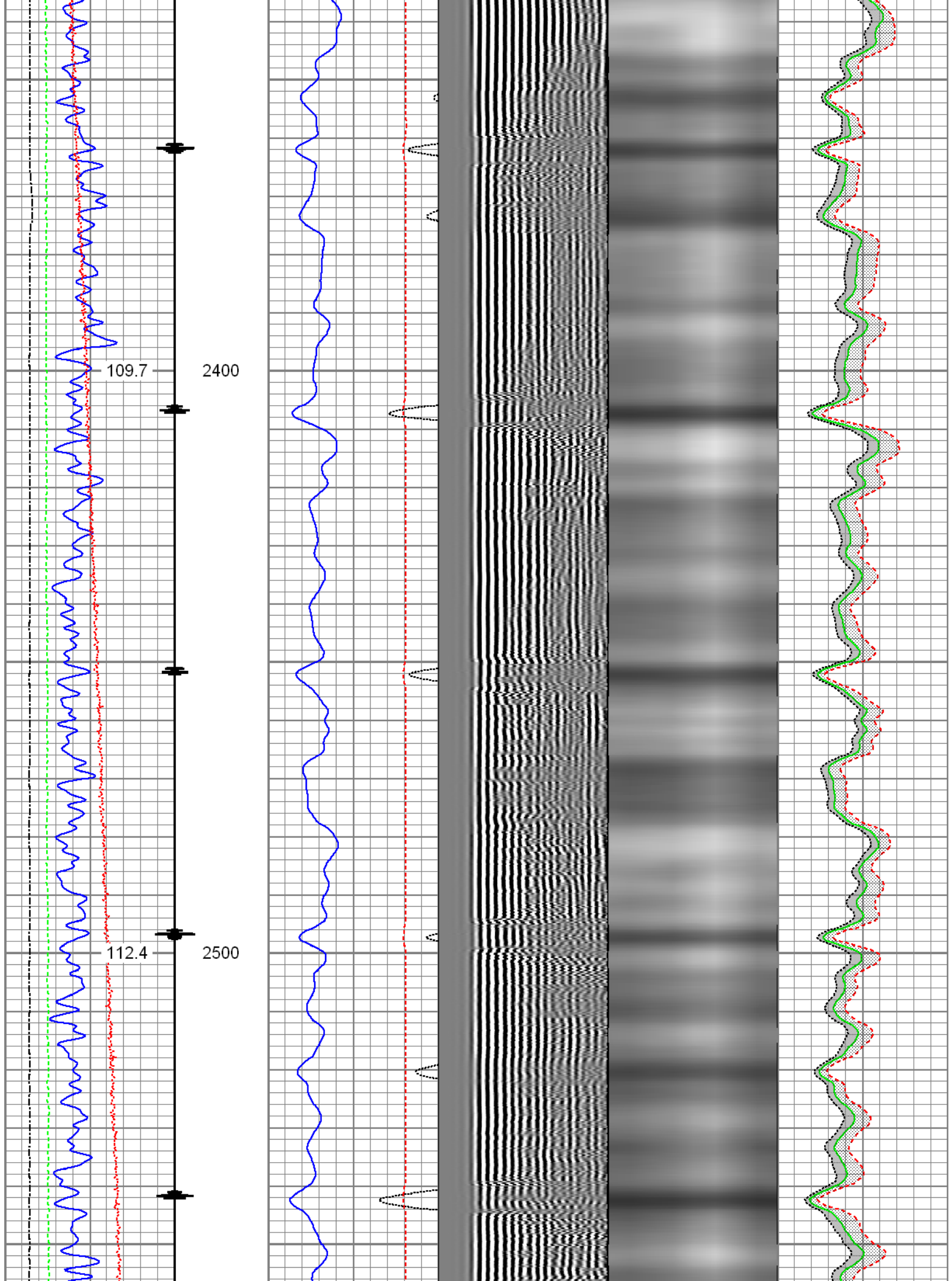


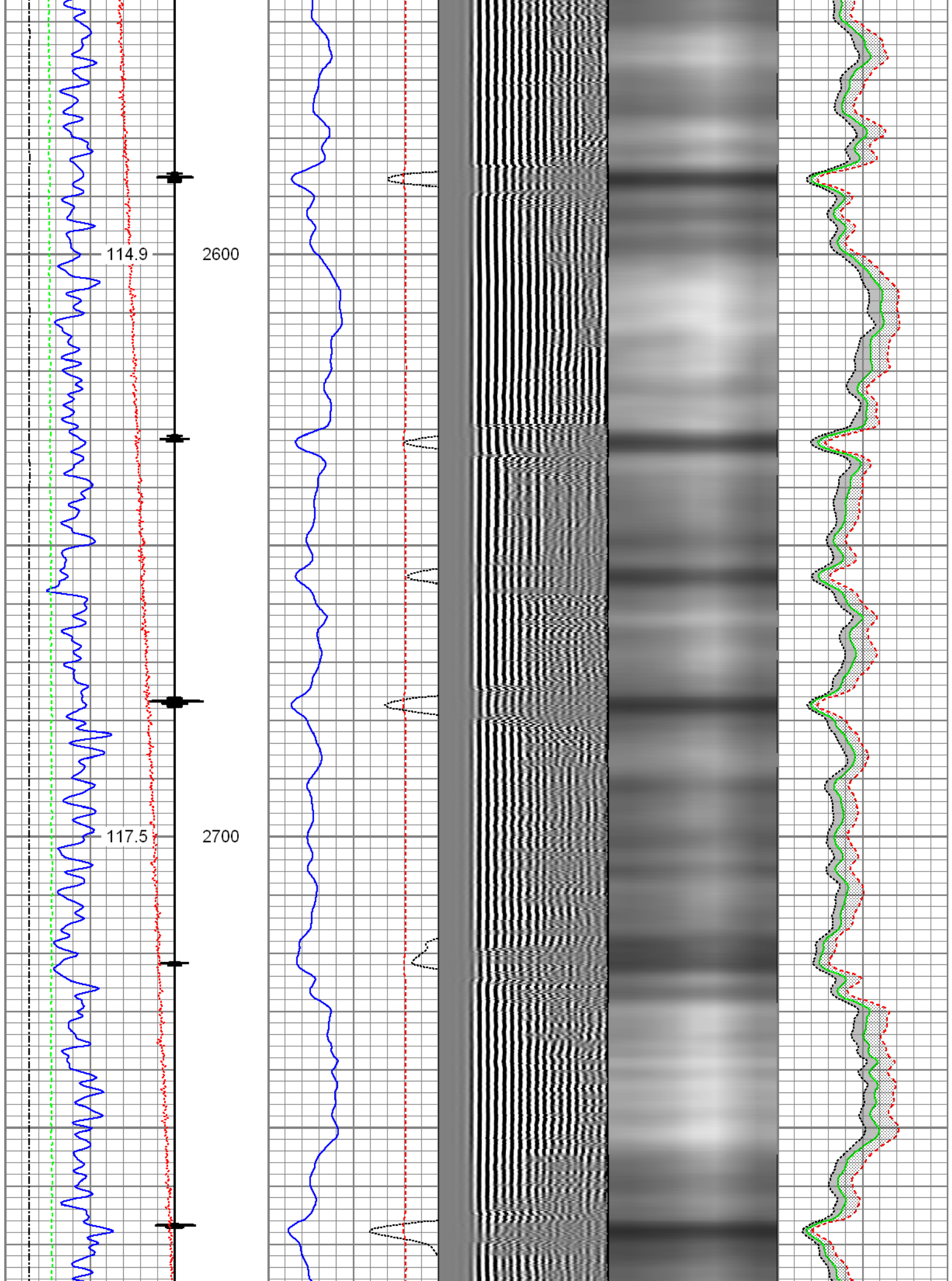


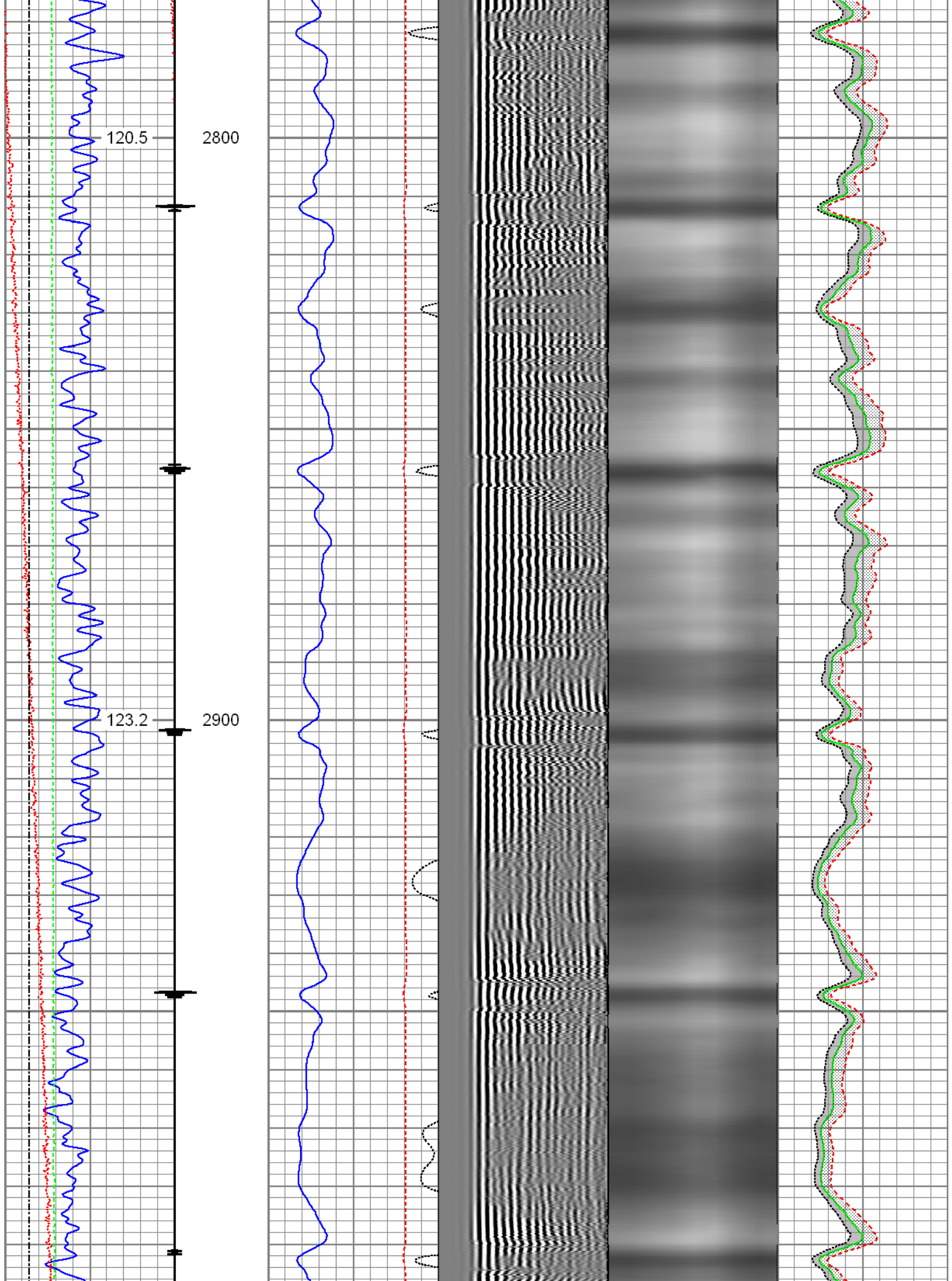


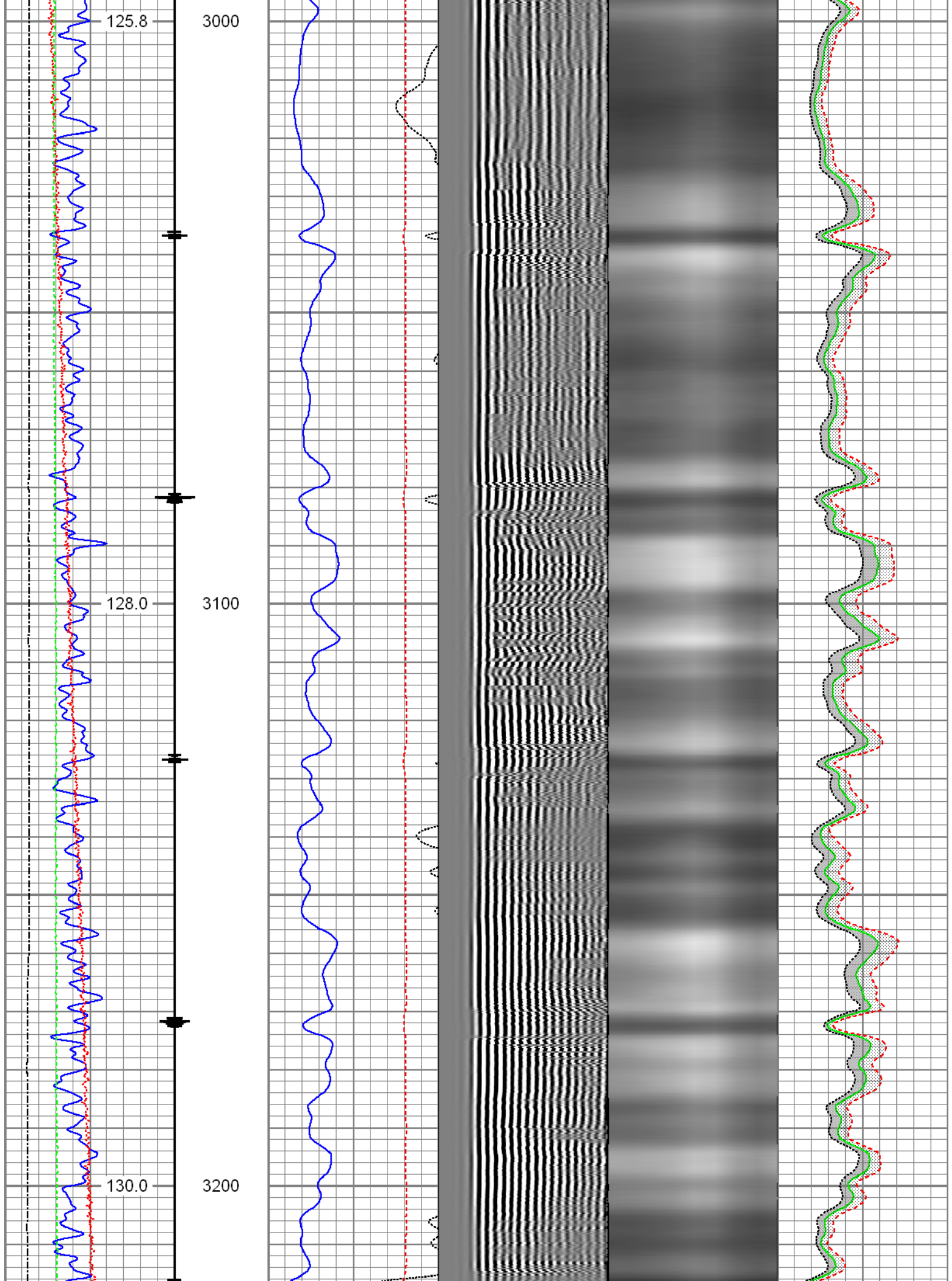


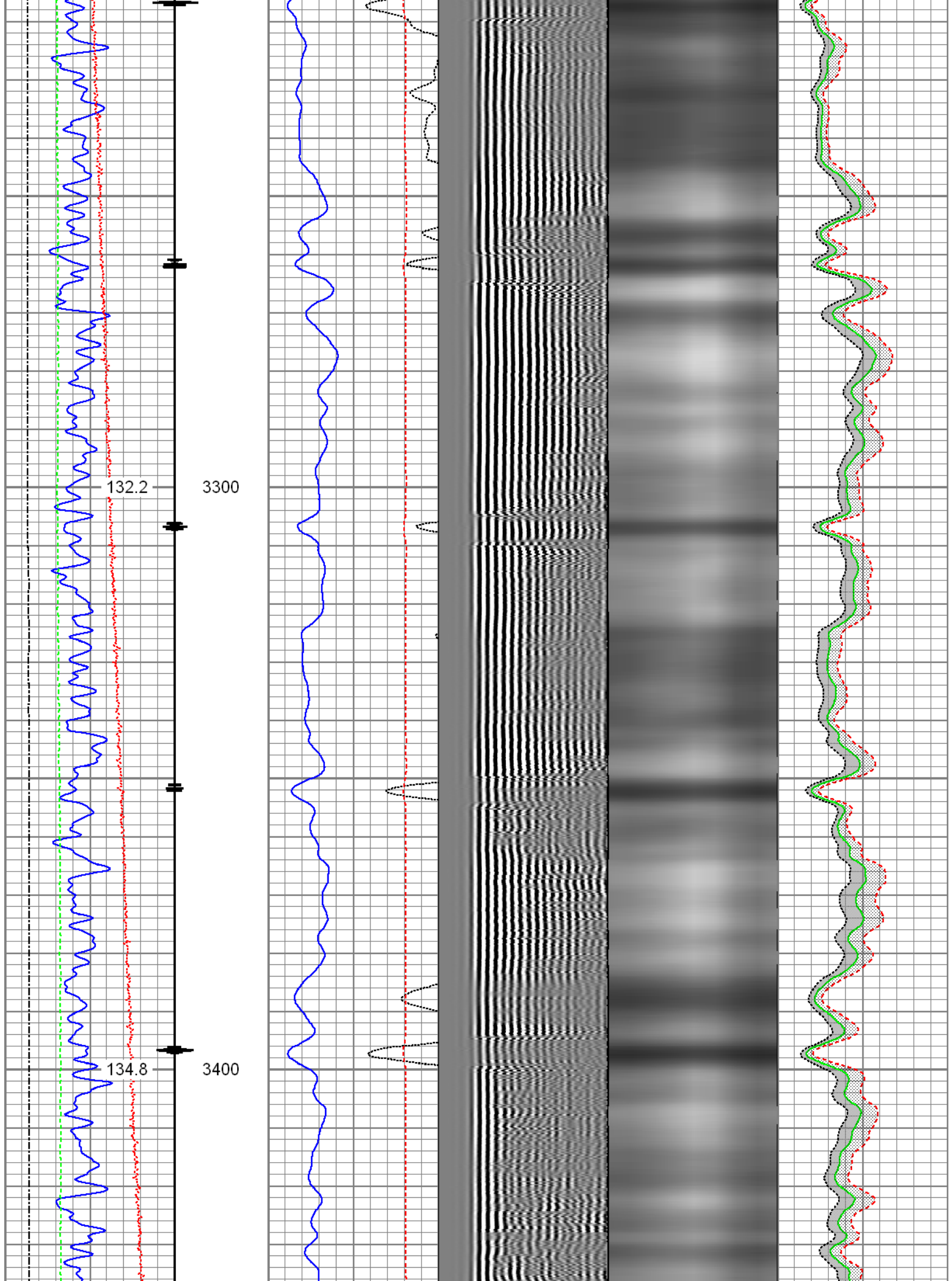


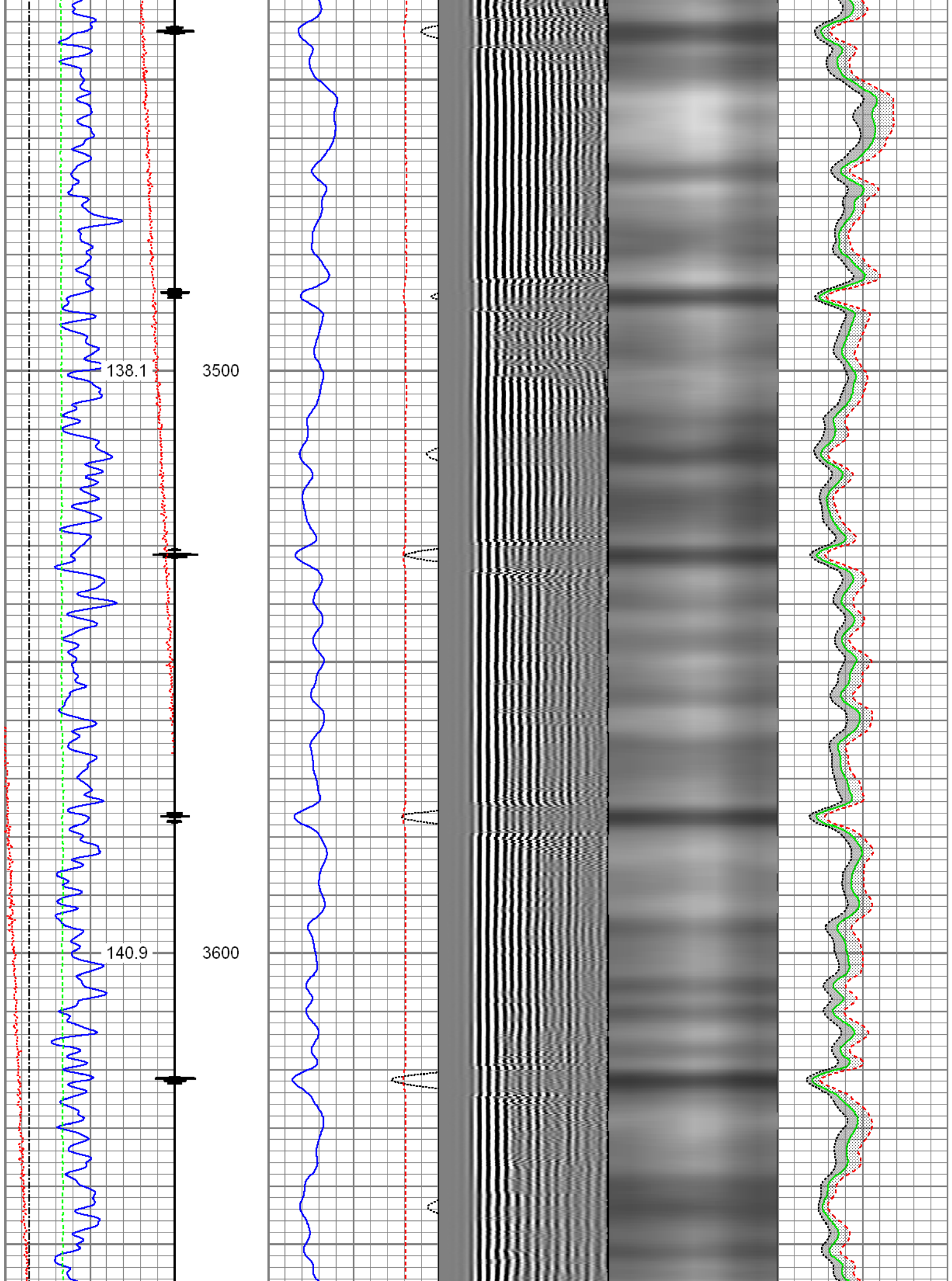


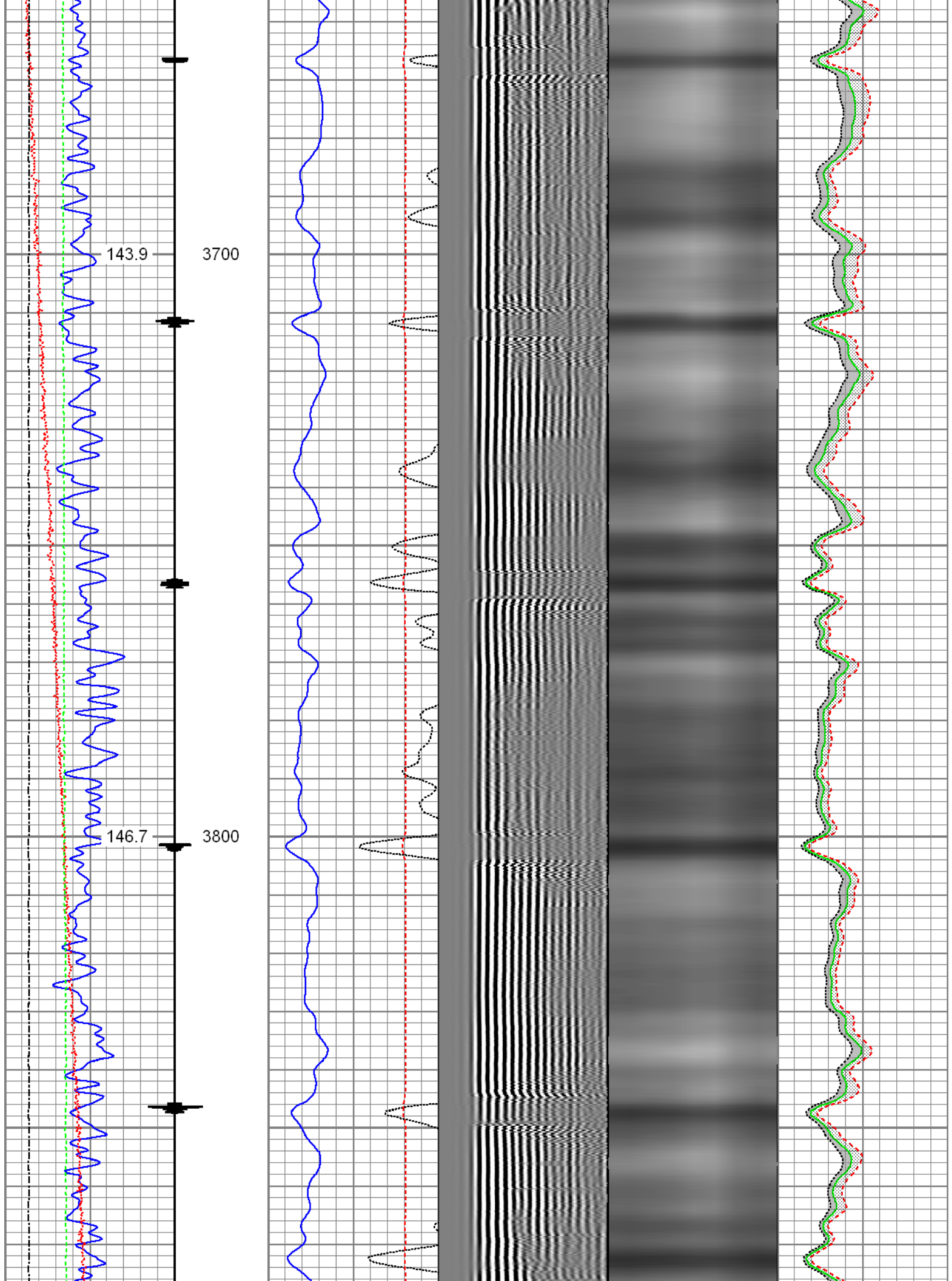


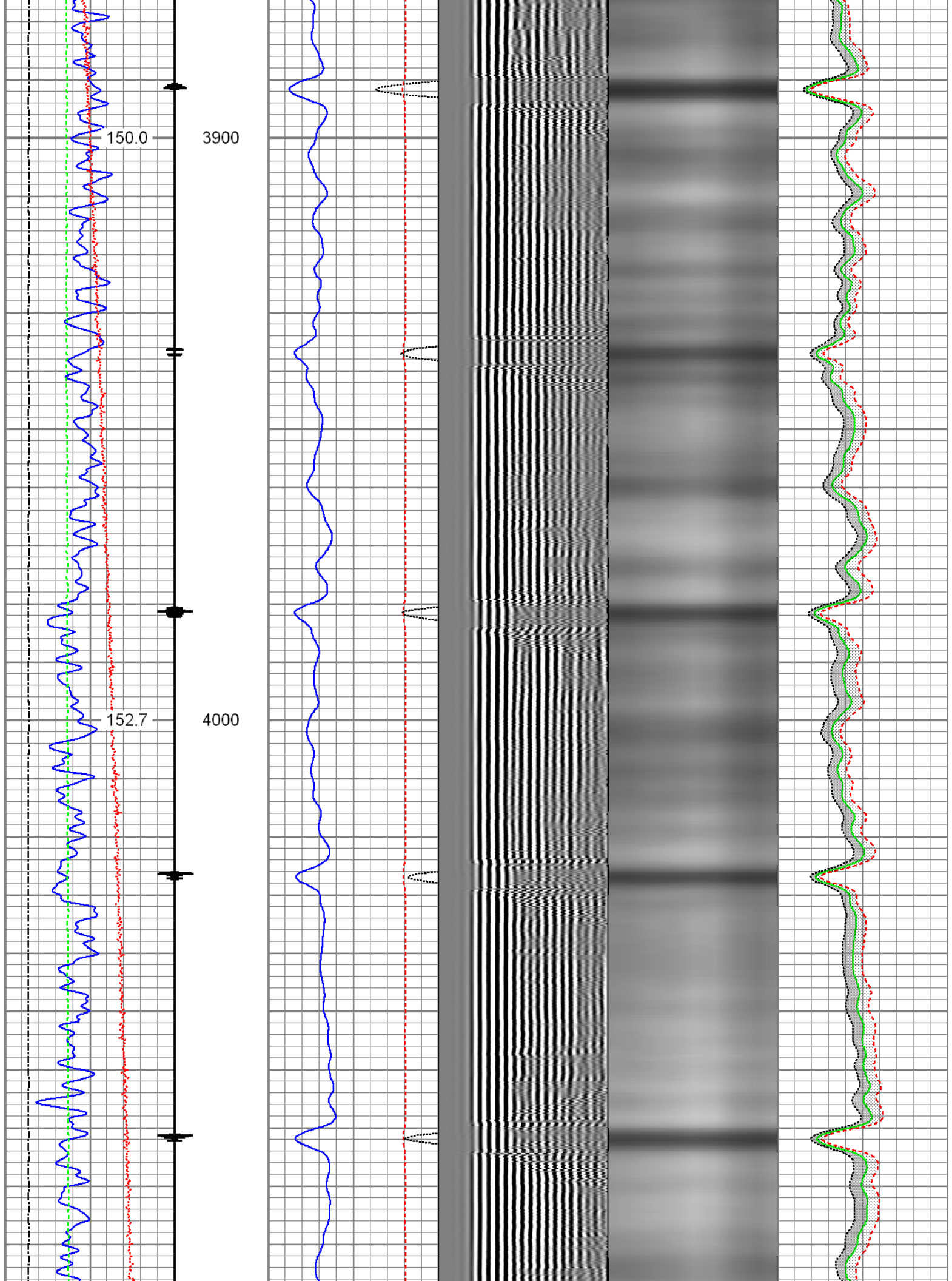


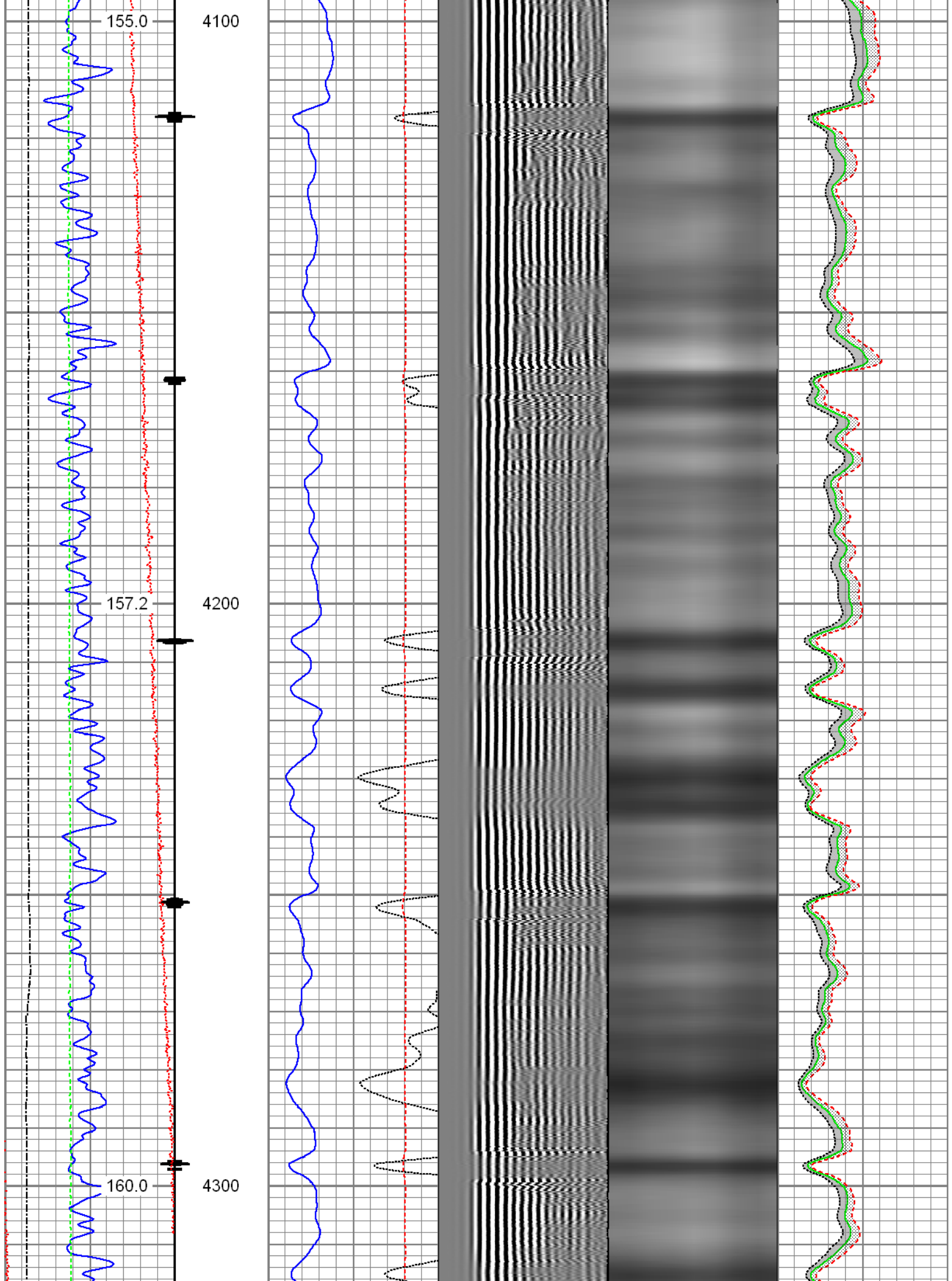


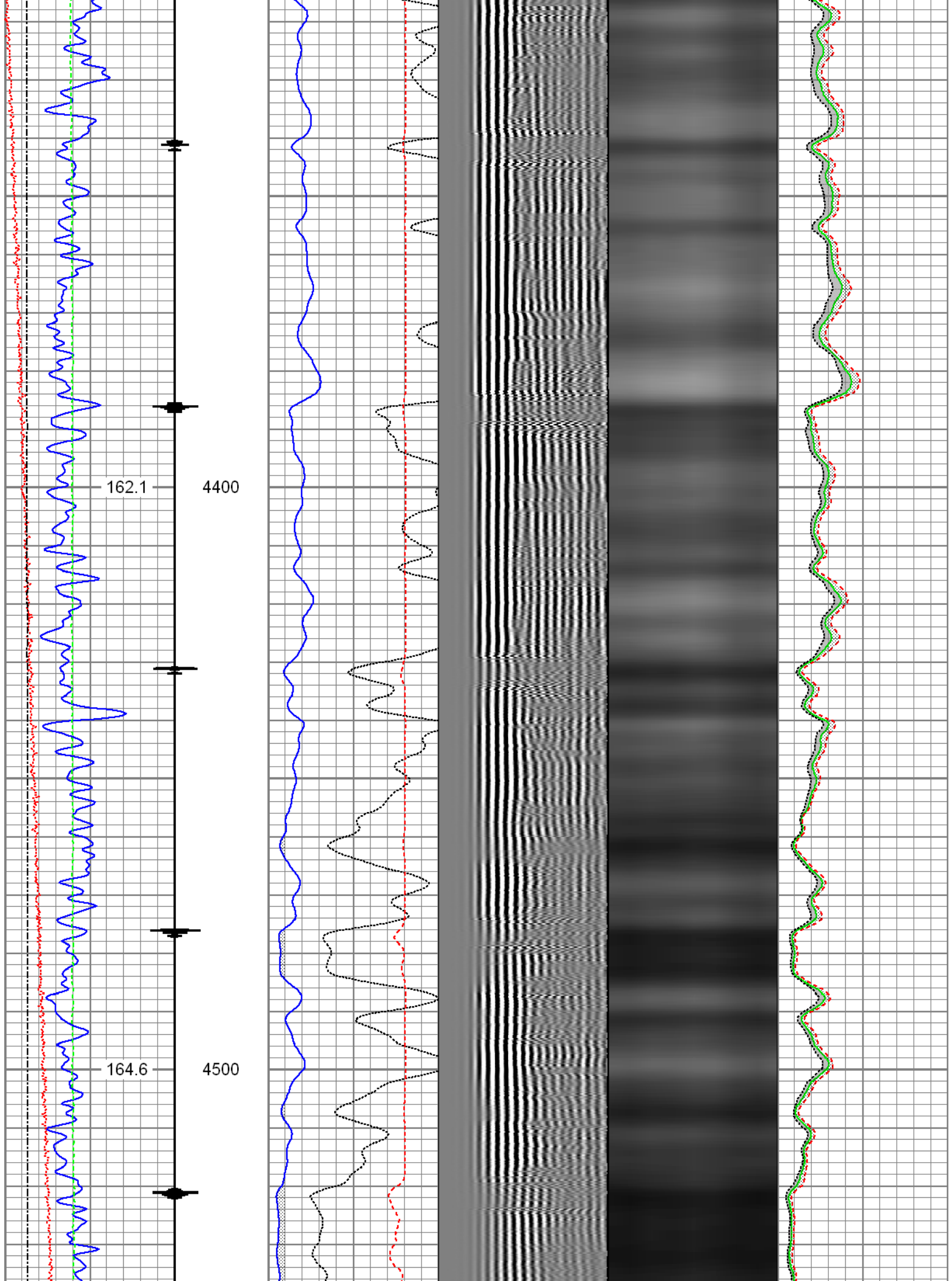


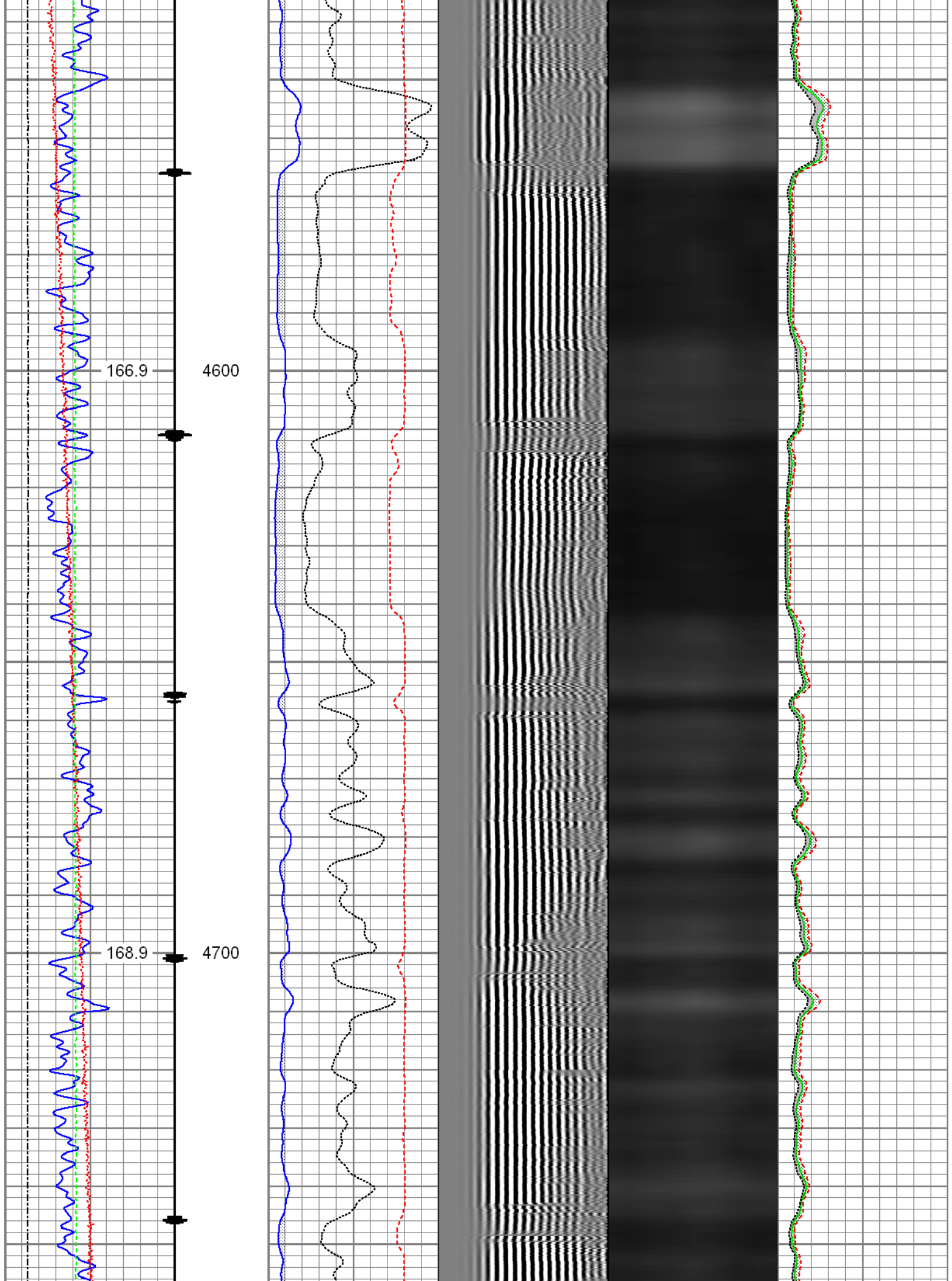


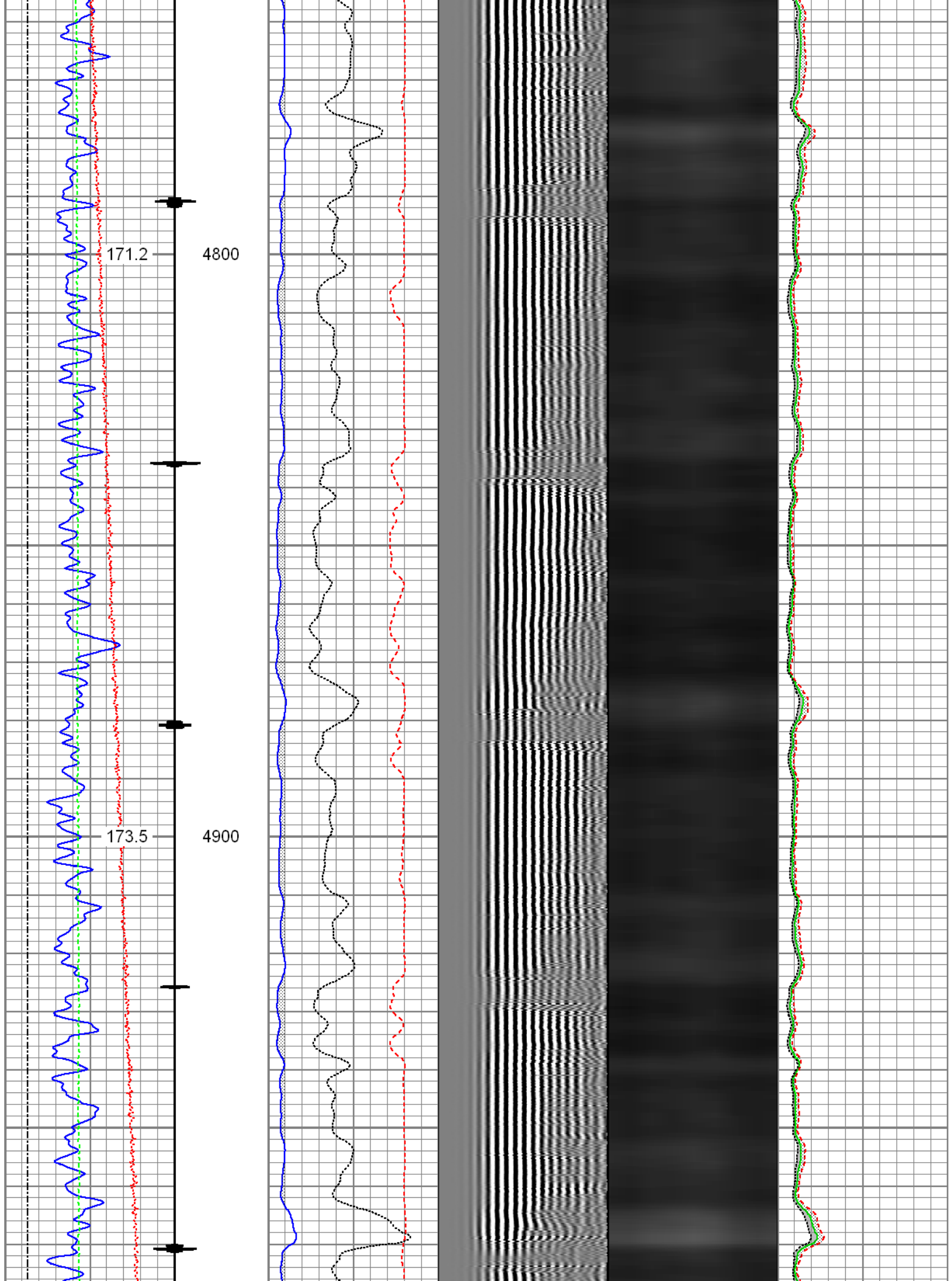


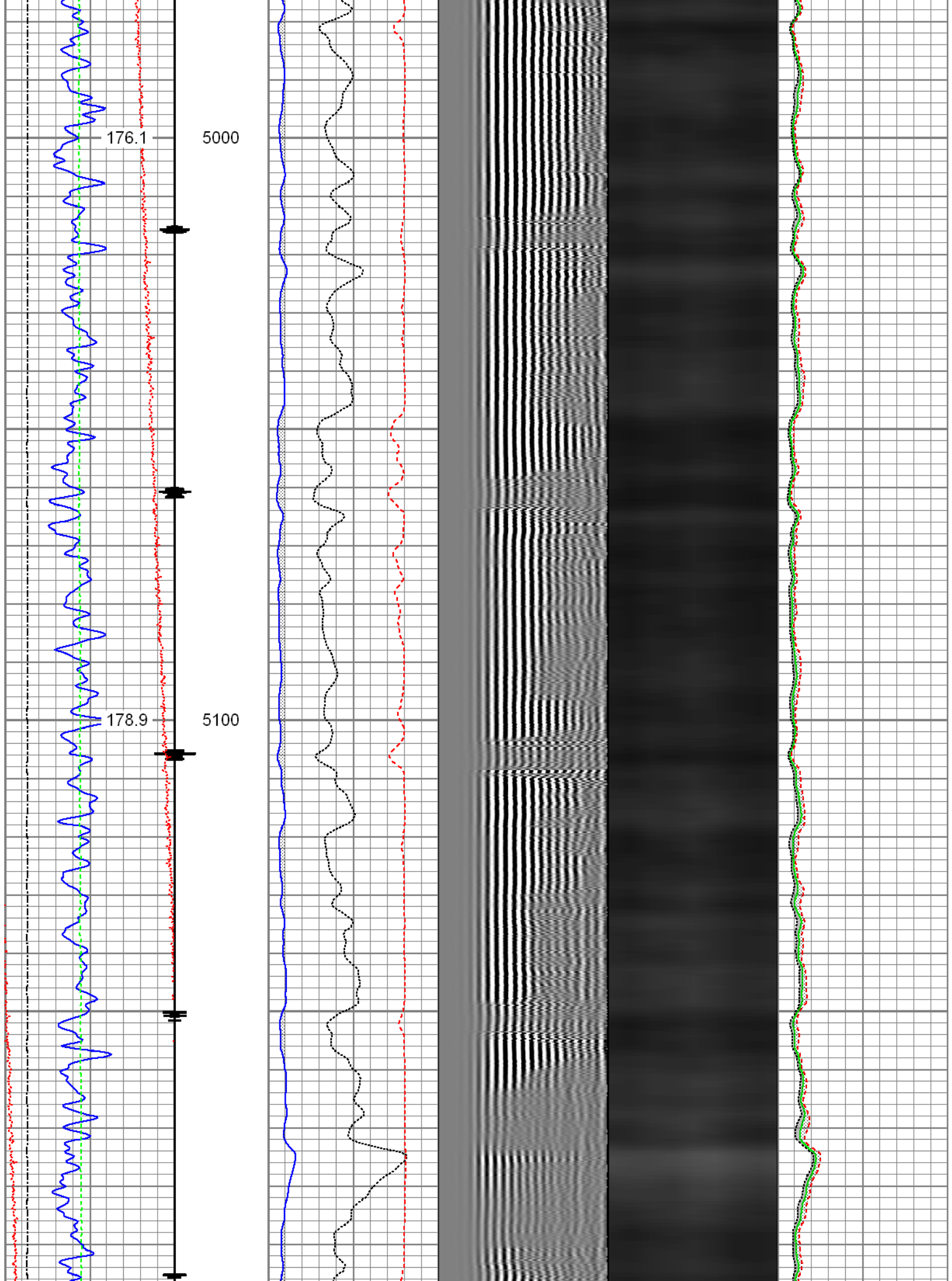


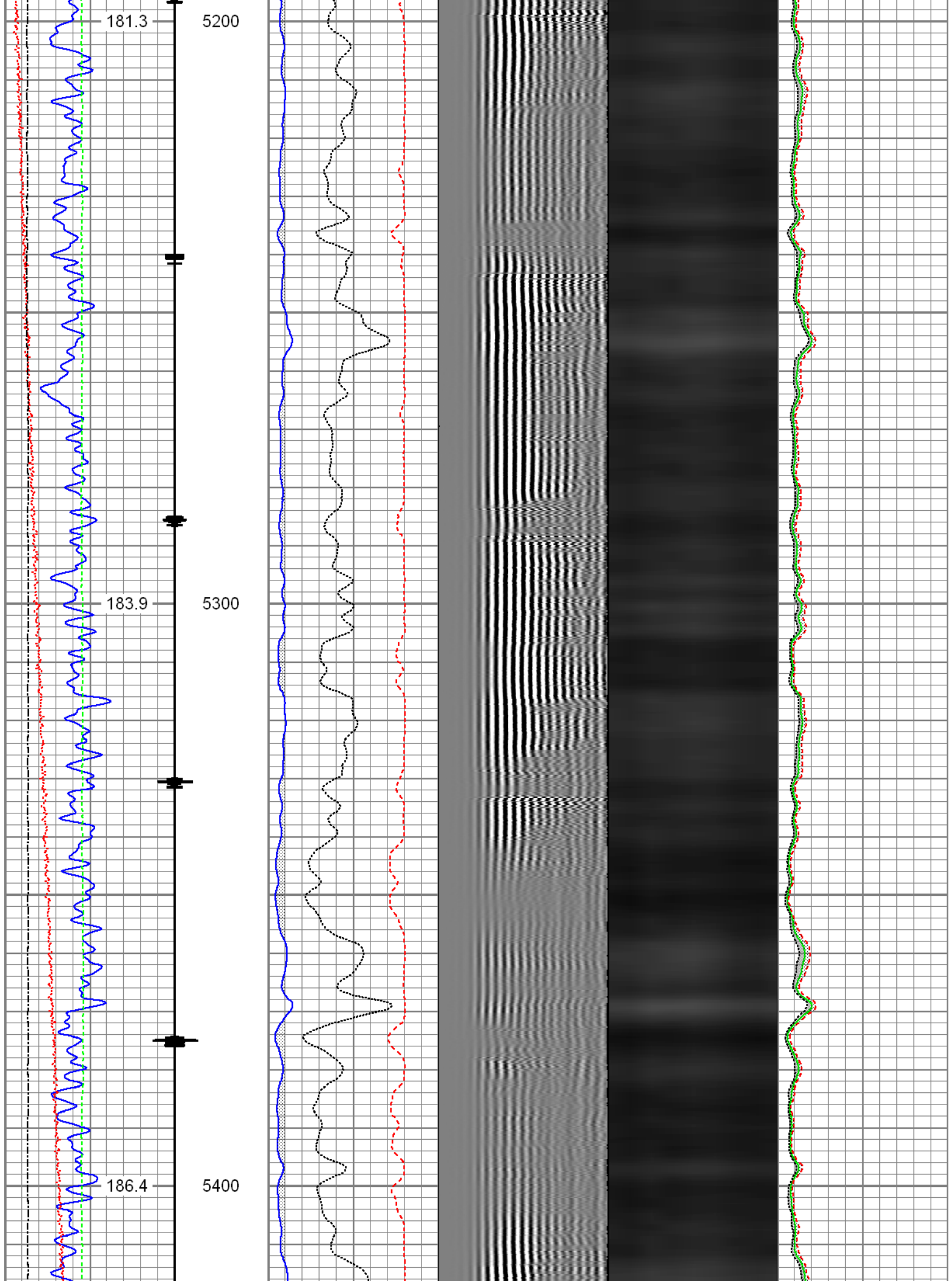


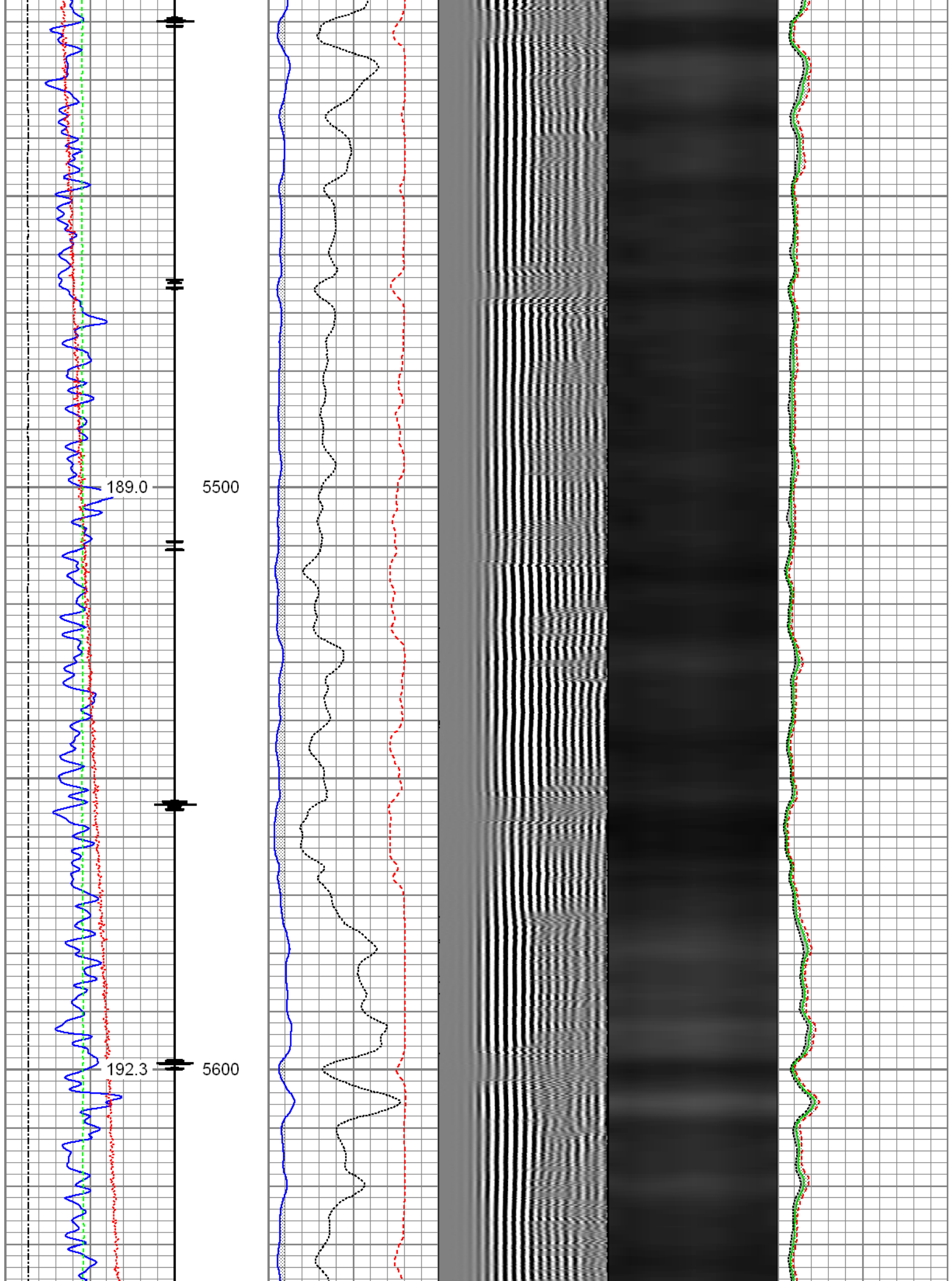


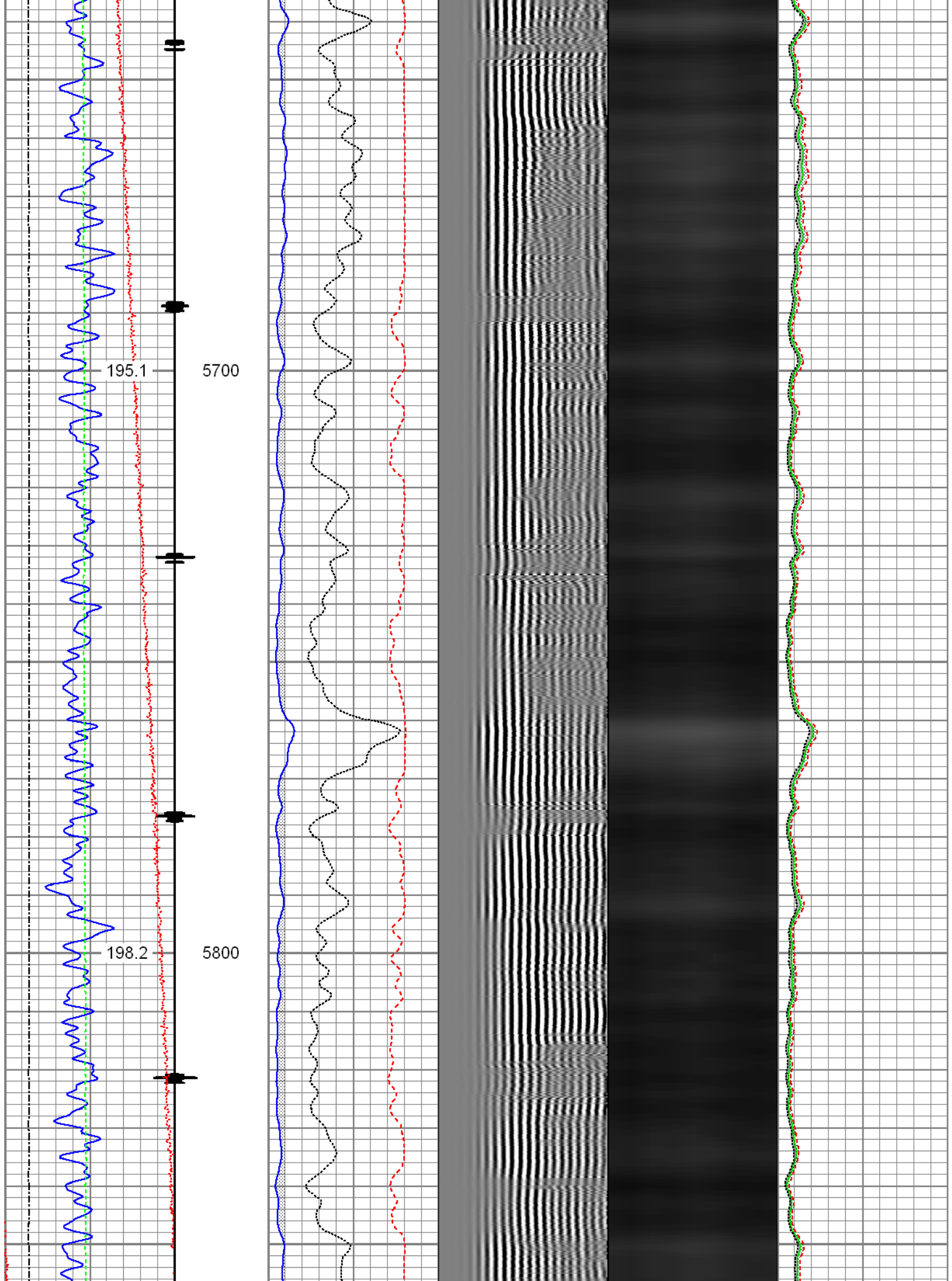


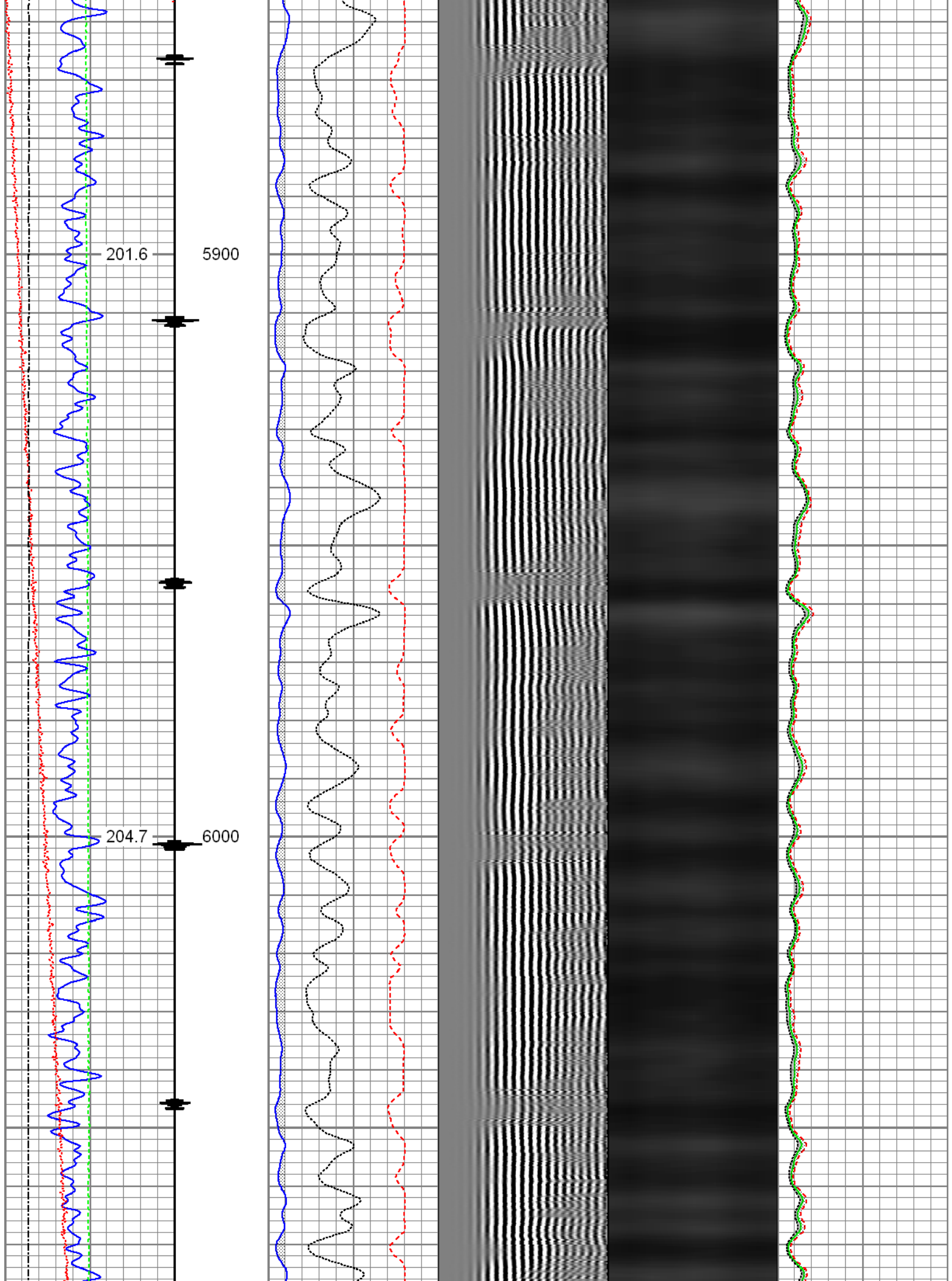


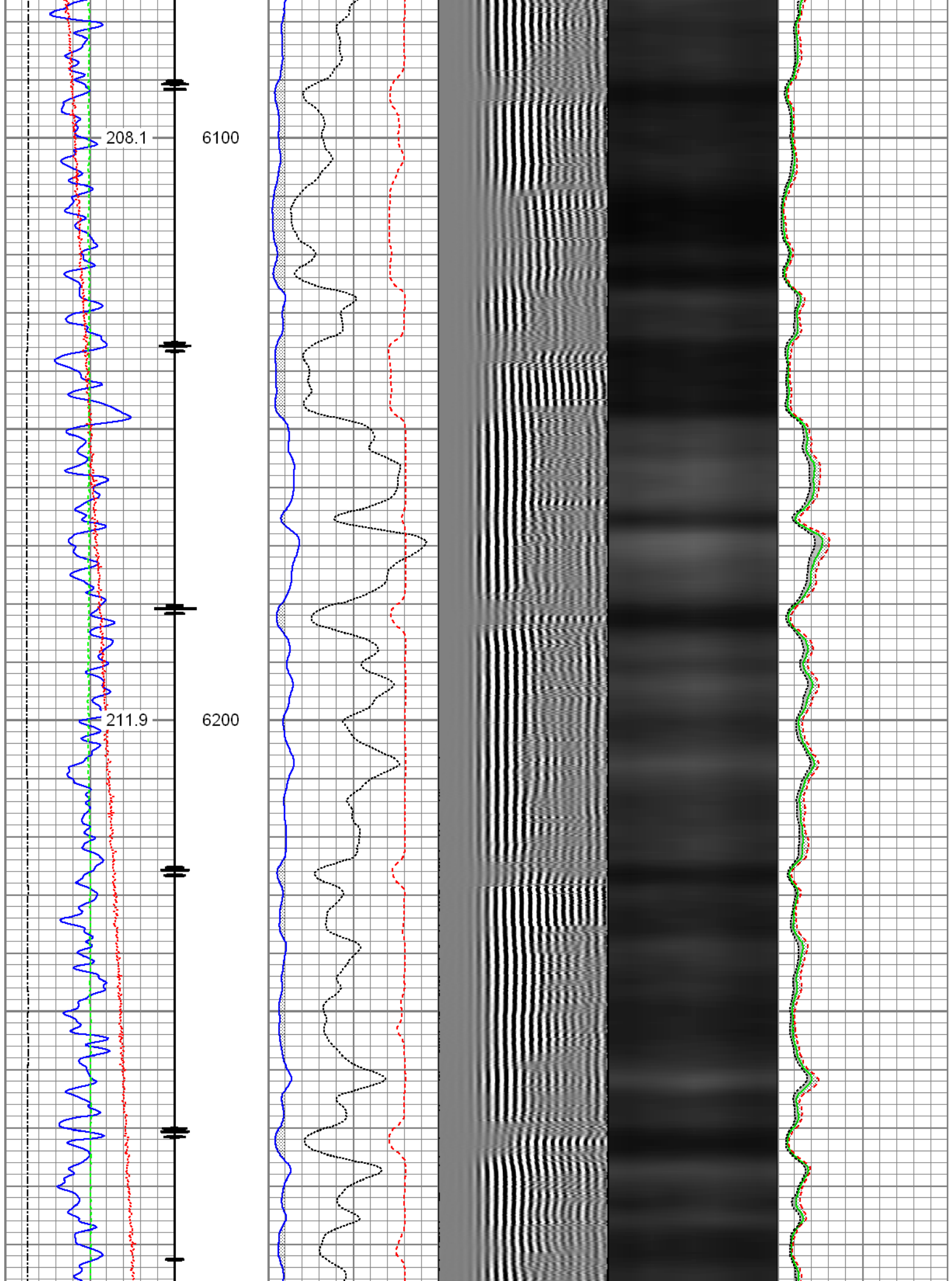


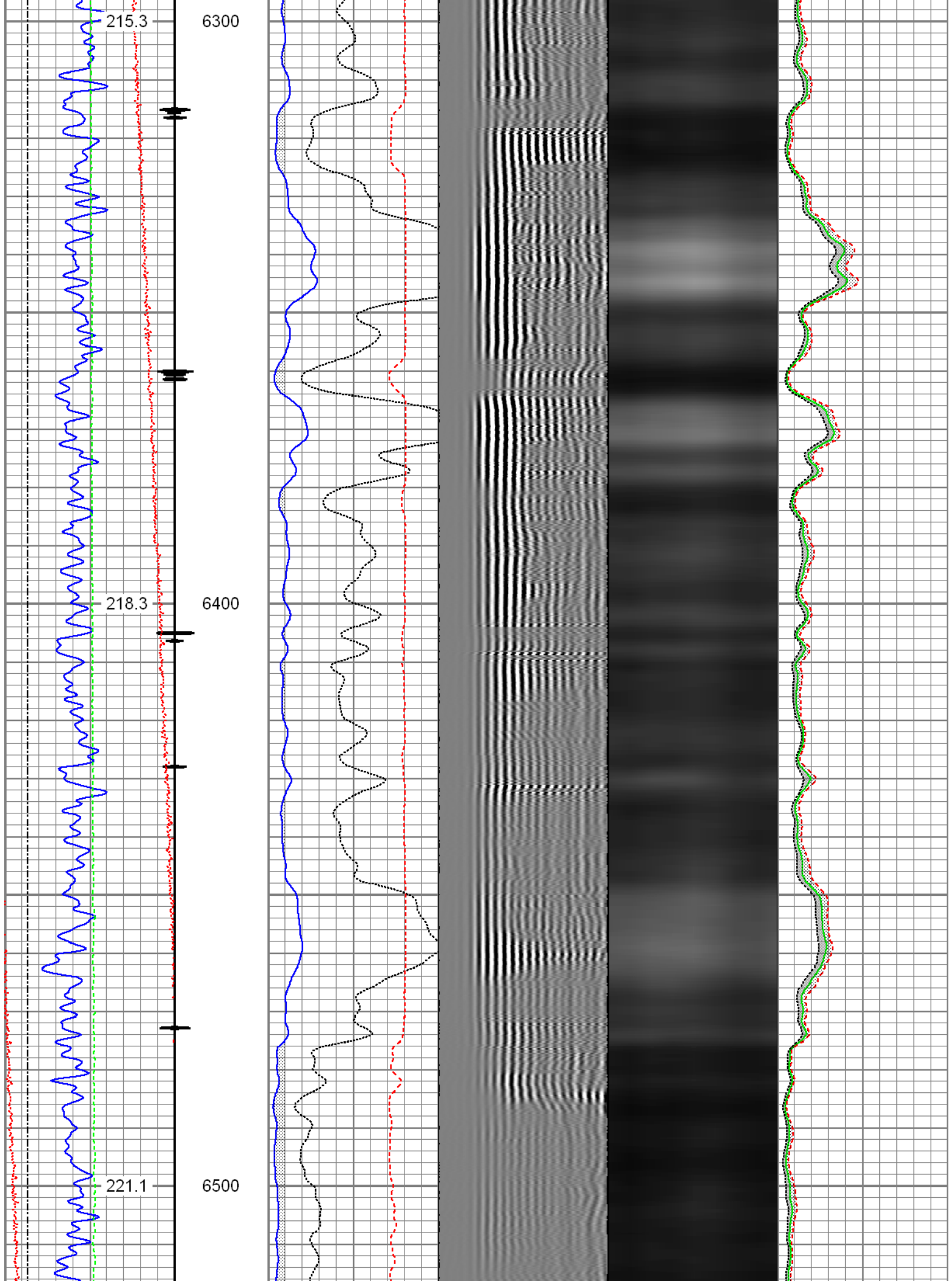


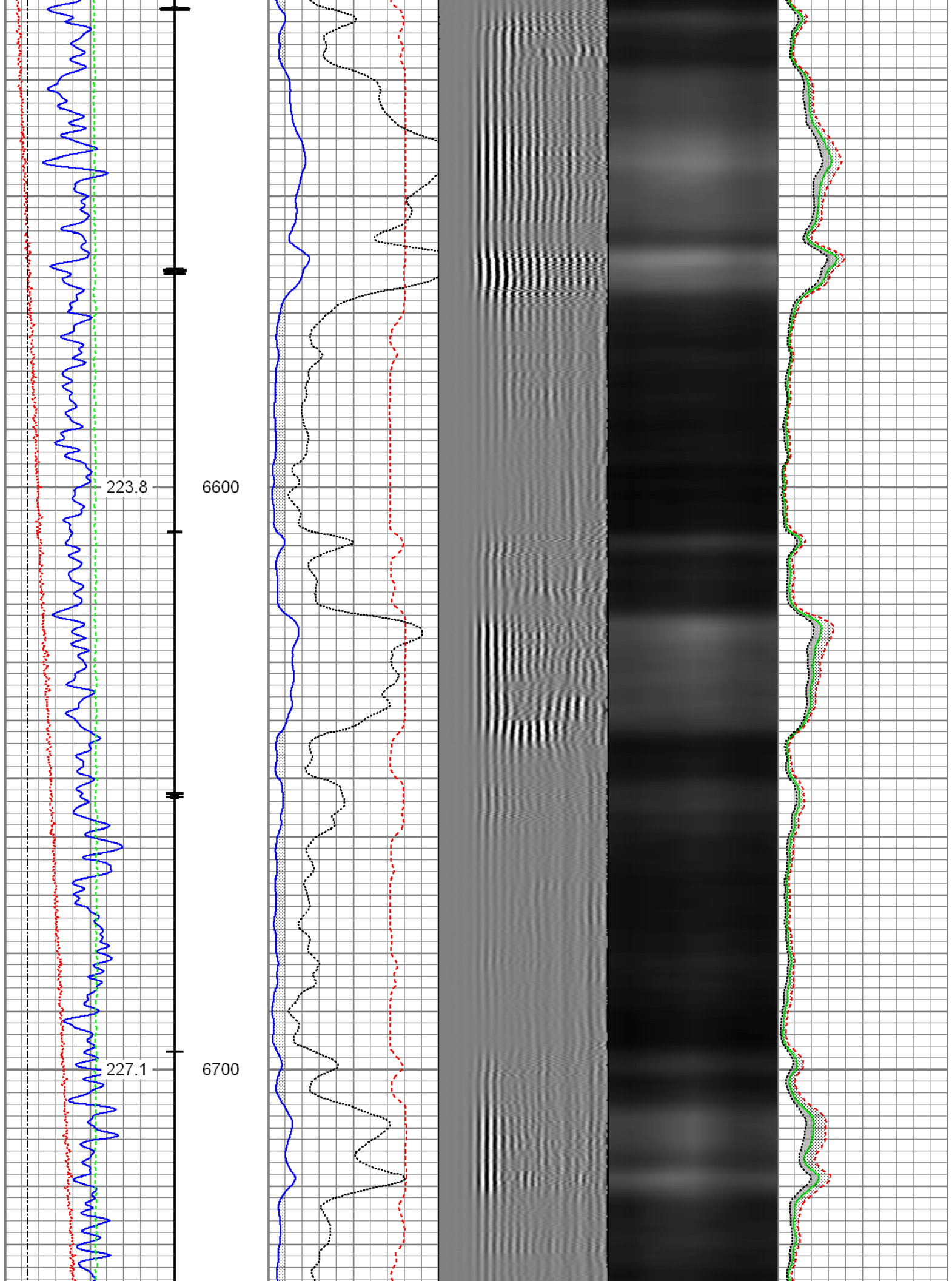


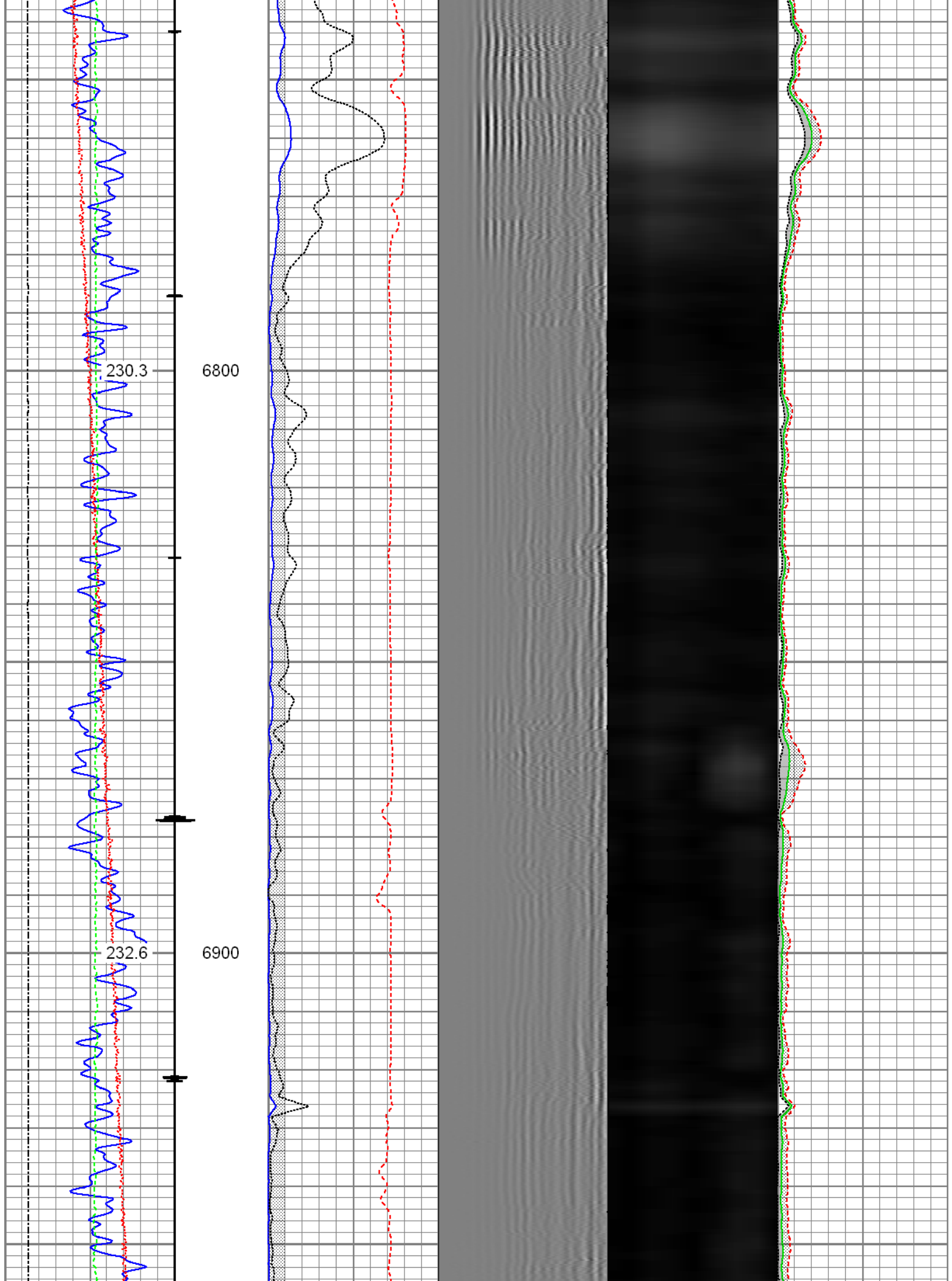


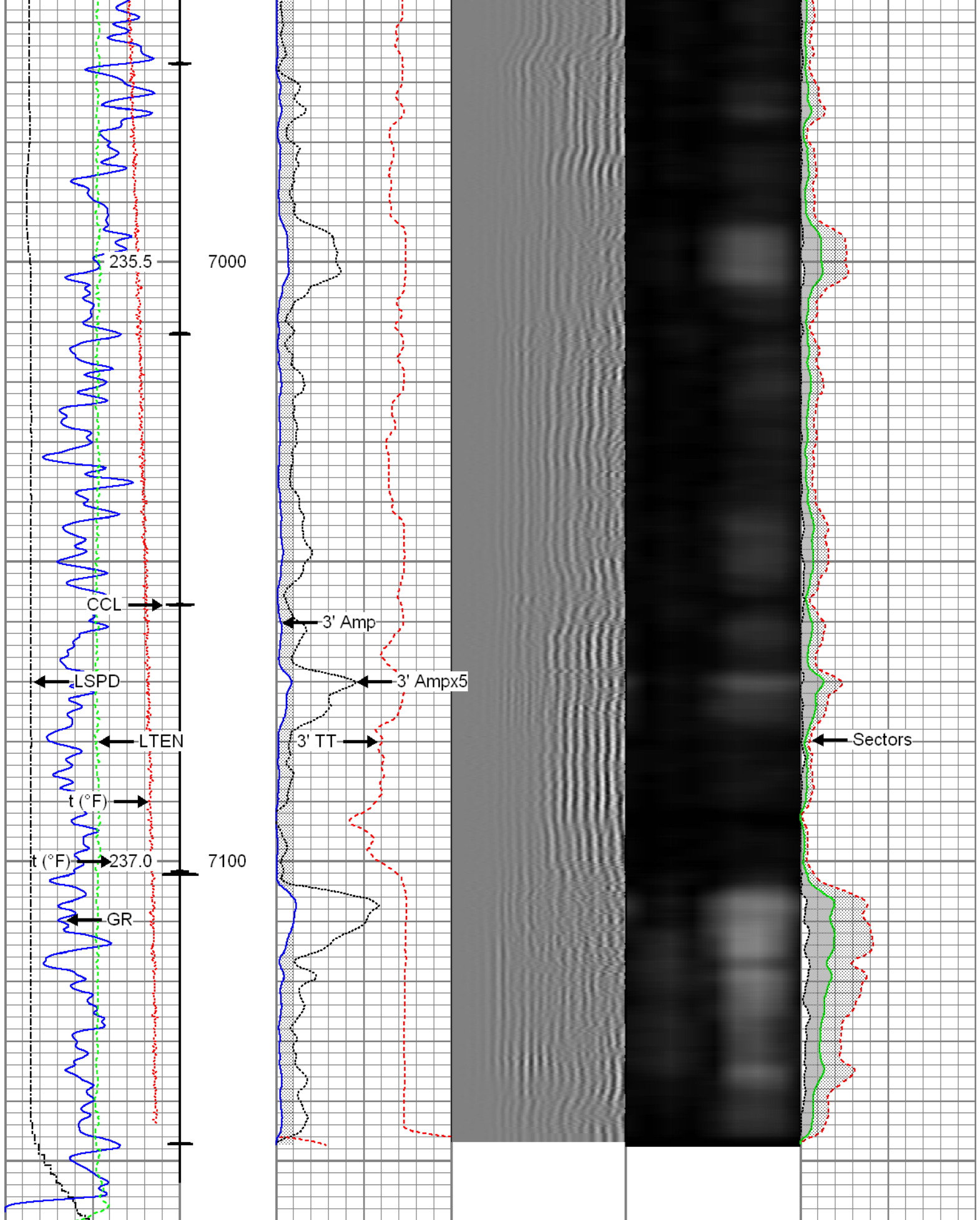









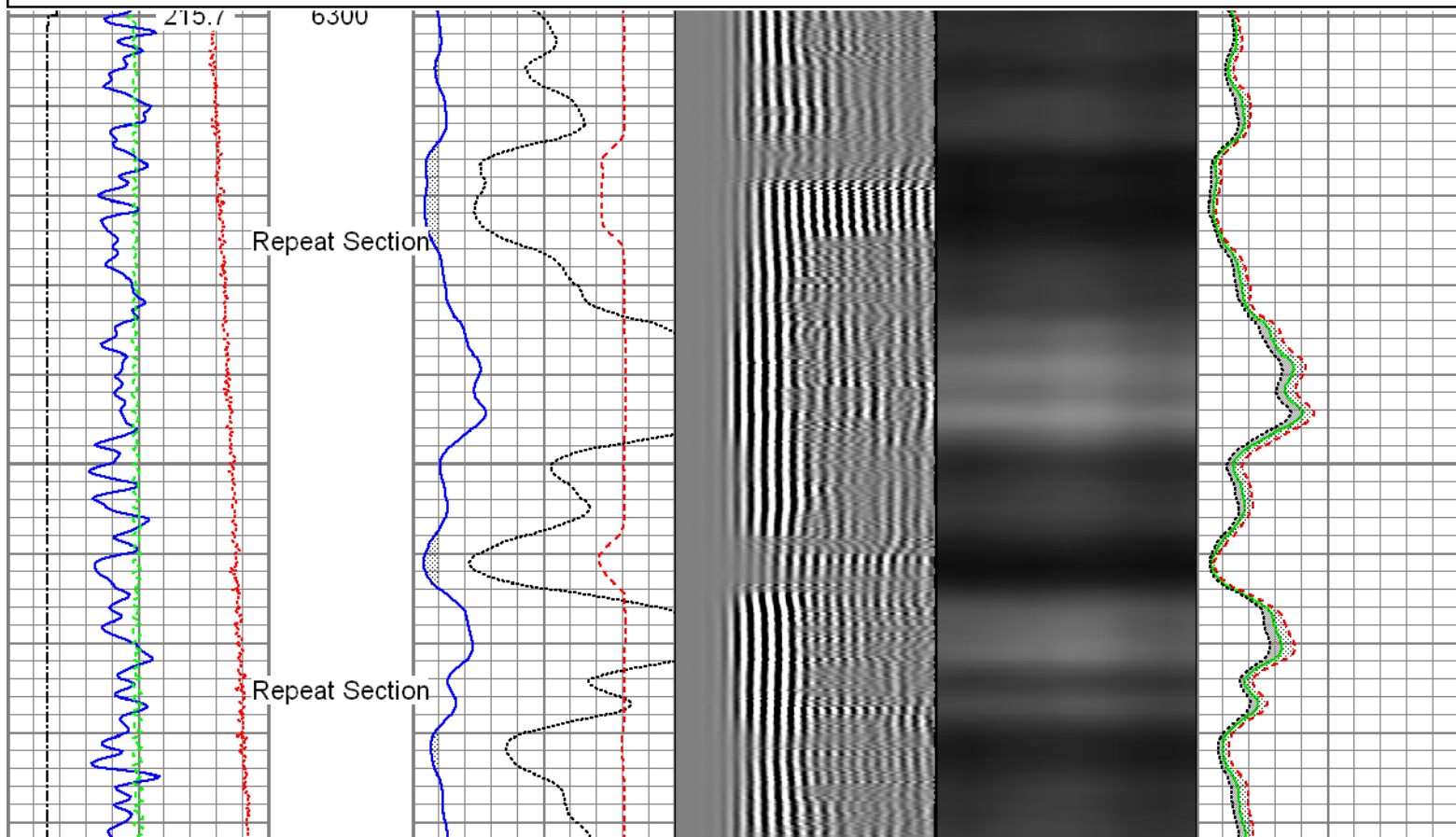


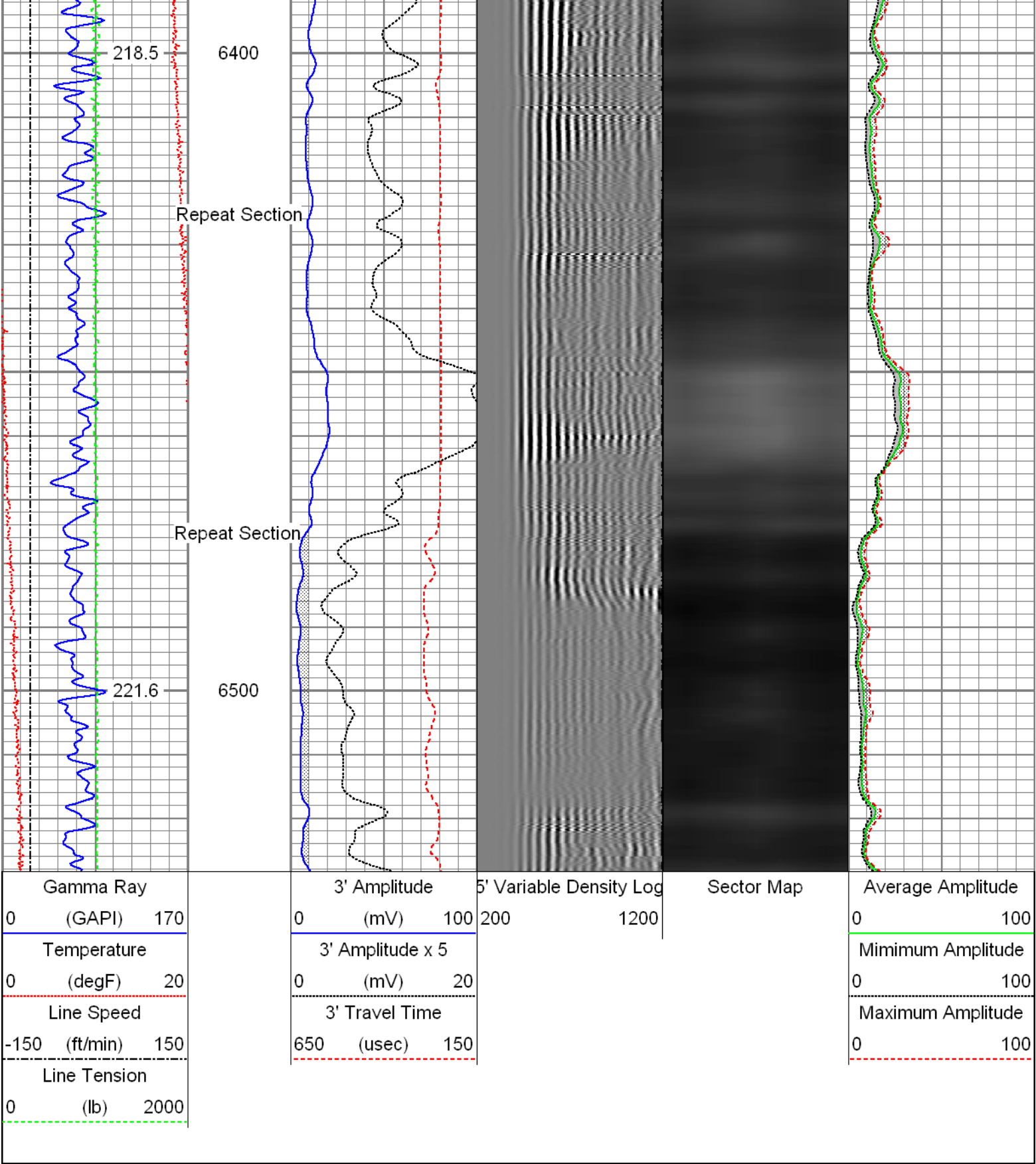


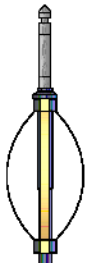
Gamma Ray (GAPI)	3' Amplitude (mV)	5' Variable Density Log	Sector Map	Average Amplitude
0 170	0 100	200 1200		0 100
Casing Collar Locator	3' Amplitude x 5			Minimum Amplitude

Temperature	0 (degF) 20	0 (mV) 20	0 100
Line Speed	-150 (ft/min) 150	3' Travel Time	Maximum Amplitude
Line Tension	0 (lb) 2000	650 (usec) 150	0 100

		Repeat Pass			
		Recorded with 2800 PSI Surface Induced Pressure			
Database File: c:\warrior\data\0512341914_anadarko_ge Dataset Pathname: pass3 Presentation Format: radii Dataset Creation: Mon Oct 12 11:56:48 2015 by Log 7.0 B1 Charted by: Depth in Feet scaled 1:240					
Gamma Ray	0 (GAPI) 170	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
Temperature	0 (degF) 20	0 (mV) 100	200 1200		0 100
Line Speed	-150 (ft/min) 150	3' Amplitude x 5			Minimum Amplitude
Line Tension	0 (lb) 2000	0 (mV) 20			0 100
		3' Travel Time			Maximum Amplitude
		650 (usec) 150			0 100





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)	9.19	2.75	105.00
WVFCAL	14.55		Probe 2-3/4" Sector Cement Bond Tool with Temperature Probe			
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	6.51		Probe_IL_BS_Cent	2.88	2.75	10.00
DCCL	6.51		Probe 2-3/4" Inline Electrical Inline Bowspring Centralizer			
GR	3.77		Probe_CCL_GR-2.75"Digital (FW1212-026)	4.54	2.75	55.00
			Probe 2-3/4" Digital CCL / Gamma Ray Combined			
			Probe_IL_BS_Cent	2.88	2.75	10.00
			Probe 2-3/4" Inline Electrical Inline Bowspring Centralizer			
Dataset: 0512341914_Anadarko_GE Powers 3C-26HZ_10-12-15_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\0512341914_Anadarko_GE Powers 3C-26HZ_10-12-15_RBL\0512341914_Anadarko
Dataset Pathname:	pass4
Dataset Creation:	Mon Oct 12 12:03:48 2015 by Log 7.0 B1
Gamma Ray Calibration Report	
Serial Number:	FW1212-026

Serial Number: FW1212-020
 Tool Model: 2.75" Digital
 Performed: Thu Oct 01 08:00:30 2015

 Calibrator Value: 1.0 GAPI

 Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

 Sensitivity: 0.6300 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: 25.840 ft

Master Calibration, performed Mon Oct 12 09:19:44 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.006	0.604	0.800	71.921	118.971	0.048
CAL	0.706	0.706				
5'	0.009	0.708	0.800	71.921	101.786	-0.133
SUM						
S1	0.005	0.600	0.000	100.000	168.152	-0.856
S2	0.004	0.560	0.000	100.000	179.870	-0.736
S3	0.005	0.550	0.000	100.000	183.316	-0.870
S4	0.004	0.561	0.000	100.000	179.500	-0.747
S5	0.003	0.588	0.000	100.000	170.927	-0.534
S6	0.003	0.628	0.000	100.000	160.041	-0.522
S7	0.004	0.683	0.000	100.000	147.187	-0.600
S8	0.004	0.683	0.000	100.000	147.177	-0.526

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	0.706	0.706	1.000	0.000

Air Zero Calibration, performed Mon Oct 12 11:22:06 2015:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.009		0.000		-0.002	
5'	0.007		0.000		0.003	
SUM						
S1	0.003		0.000		0.002	
S2	0.009		0.000		-0.005	
S3	0.004		0.000		0.001	
S4	0.004		0.000		0.000	
S5	0.003		0.000		-0.000	
S6	0.003		0.000		0.001	
S7	0.004		0.000		0.001	
S8	0.003		0.000		0.001	



Company	Kerr-McGee Oil & Gas Onshore, L.P.
Well	GE Powers 3C-26HZ
Field	Wattenberg
County	Weld
State	Colorado