



Radial Cement Bond  
Gamma Ray  
Casing Collar Log

Company	Kerr-McGee Oil and Gas Onshore LP	Company	Kerr-McGee Oil and Gas Onshore LP
Well	Meguire 29C-16HZ	Well	Meguire 29C-16HZ
Field	Wattenberg	Field	Wattenberg
County	Weld	County	Weld
State	Colorado	State	Colorado
Location:		API # : 05-123-41938	Other Services
SEC 21 TWP 2N RGE 65W		Ground Level	Elevation
Permanent Datum		Ground Level	Elevation
Log Measured From		Kelly Bushing	20 FT
Drilling Measured From		Kelly Bushing	Elevation
			K.B. 4916'
			D.F. 4915'
			G.L. 4896'

Date	10-DEC-2015
Run Number	Three
Depth Driller	15481 FT
Depth Logger	7412 FT
Bottom Logged Interval	7410 FT
Top Log Interval	Surface
Open Hole Size	7.875"
Type Fluid	Water
Density / Viscosity	8.34 lbm/gal
Max. Recorded Temp.	246°F
Estimated Cement Top	Surface
Time Well Ready	ROA
Time Logger on Bottom	09:00
Equipment Number	HD-0331
Location	Ft. Lupton, CO
Recorded By	C. Bryan
Witnessed By	Darrell Botwell

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	1859 FT		
Intermediate #1	5 1/2	17	P-110	Surface	15474 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 Marker Joint Top at 6677 FT  
Adjusted log +4 FT to correlate with Marker Joint Top  
Gauge Ring/Junk Basket ran to 7526 FT with no debris found  
Recorded 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 Surface Integrated Services.

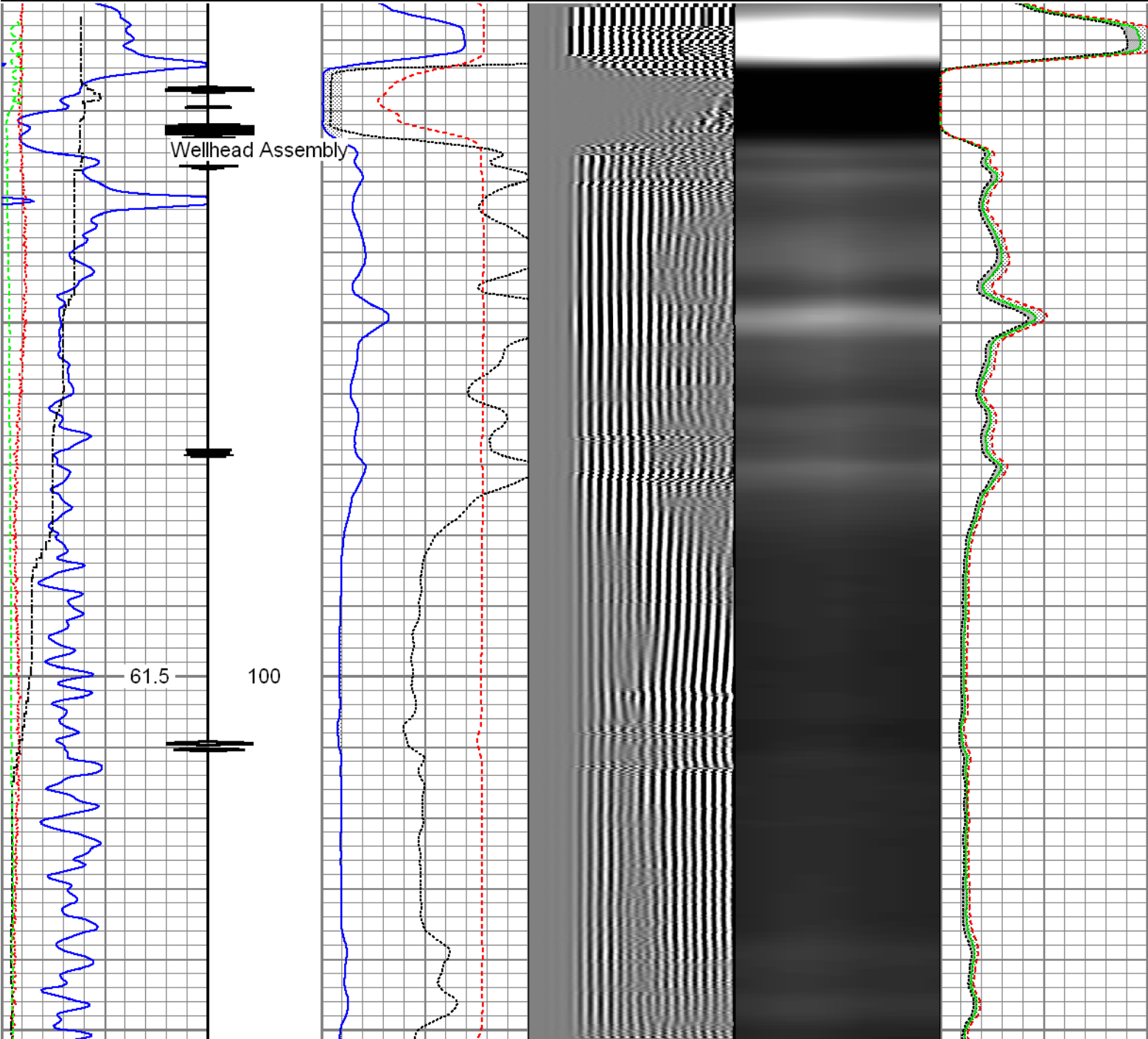


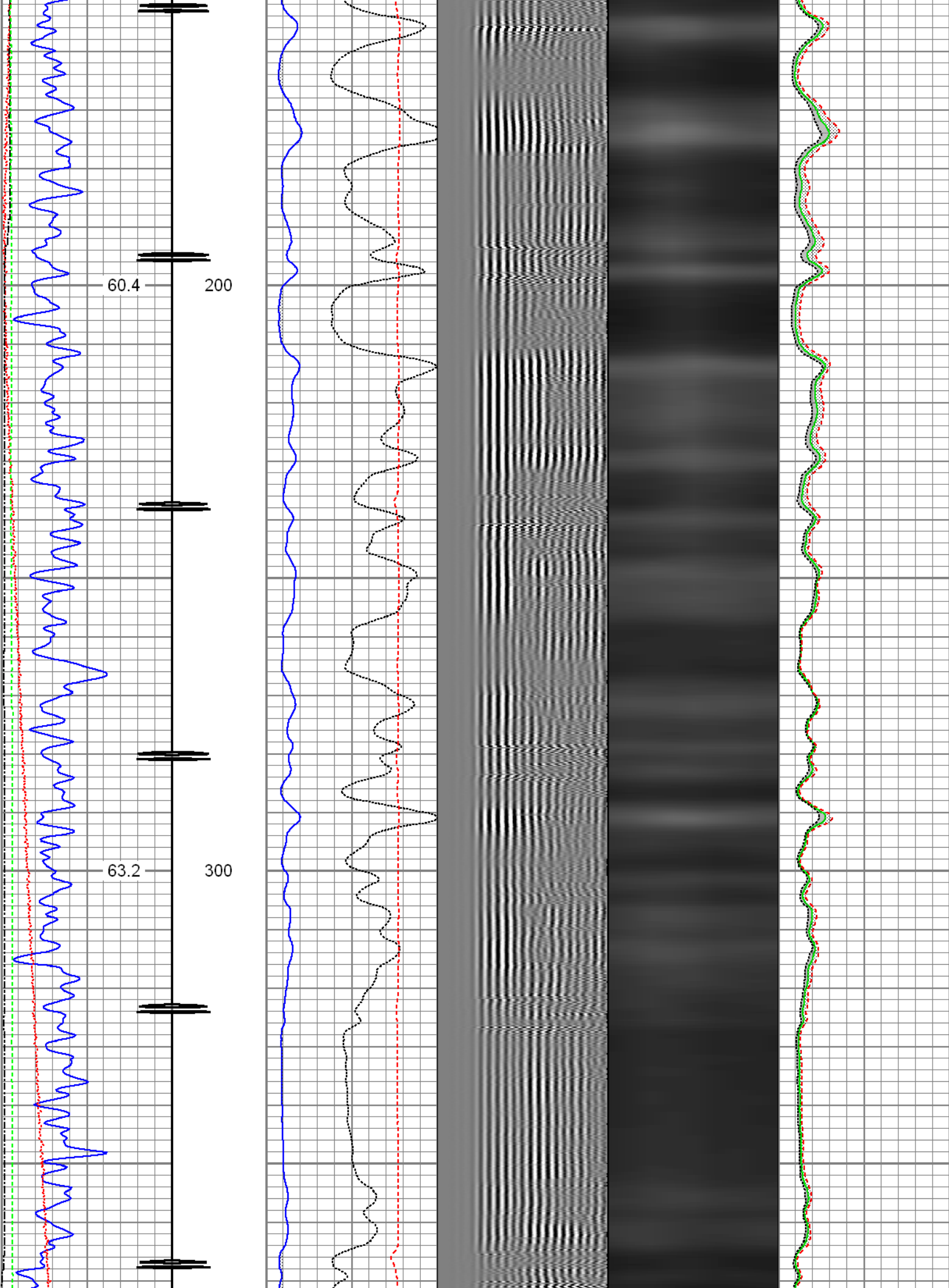
Main Pass

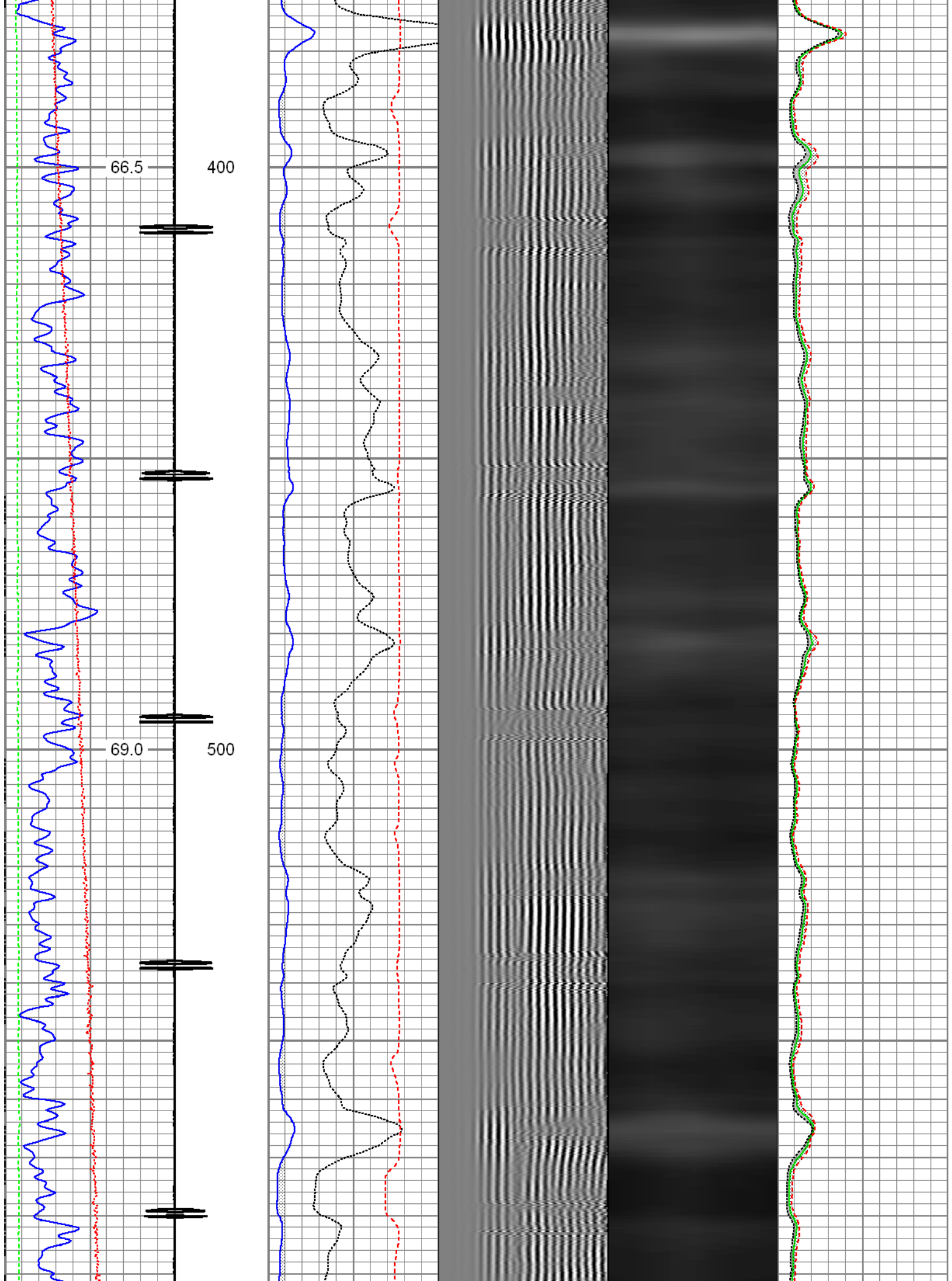
Recorded with 2800 PSI Surface Induced Pressure

Database File: 0512341938\_anadarko\_meguire 29c-16hz\_12-10-15\_rbl.db  
Dataset Pathname: main  
Presentation Format: radii  
Dataset Creation: Thu Dec 10 15:06:37 2015 by Log 7.0 B1  
Charted by: Depth in Feet scaled 1:240

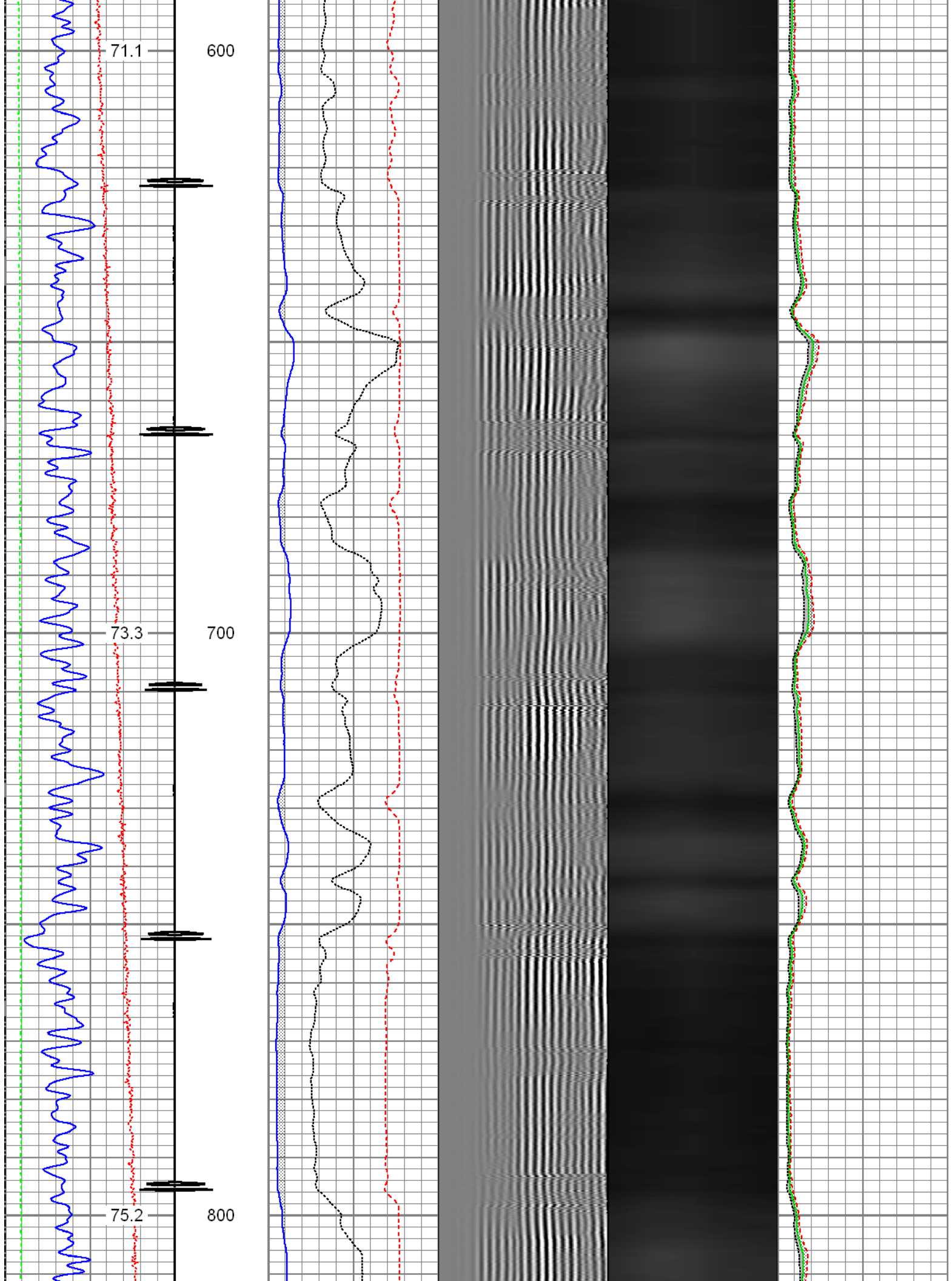
Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120	0 (mV) 100	200 1200		0 100
Casing Collar Locator	3' Amplitude x 5			Minimum Amplitude
Temperature	0 (mV) 20			0 100
0 (degF) 20	3' Travel Time			Maximum Amplitude
Line Speed	650 (usec) 150			0 100
-150 (ft/min) 150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

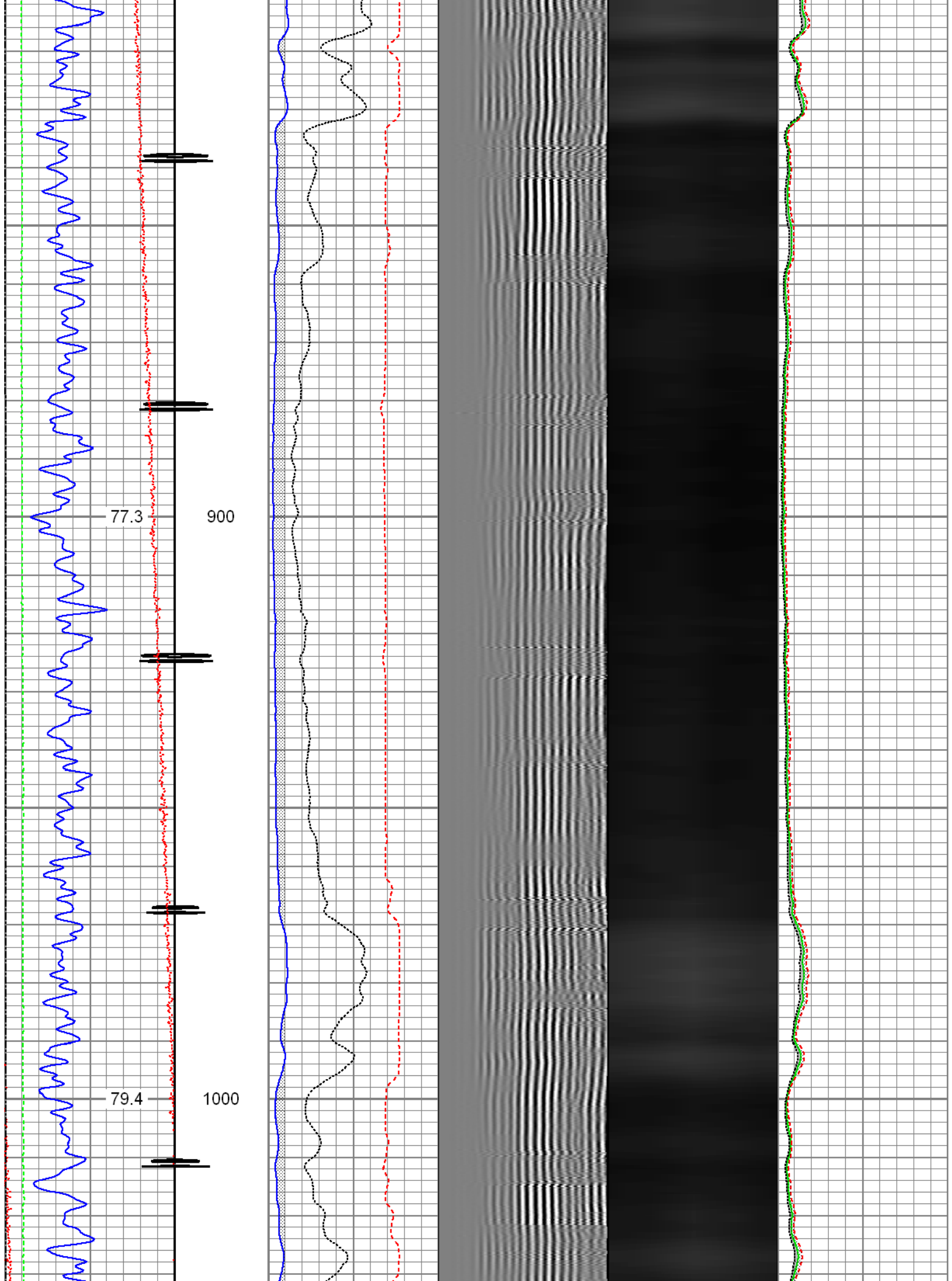


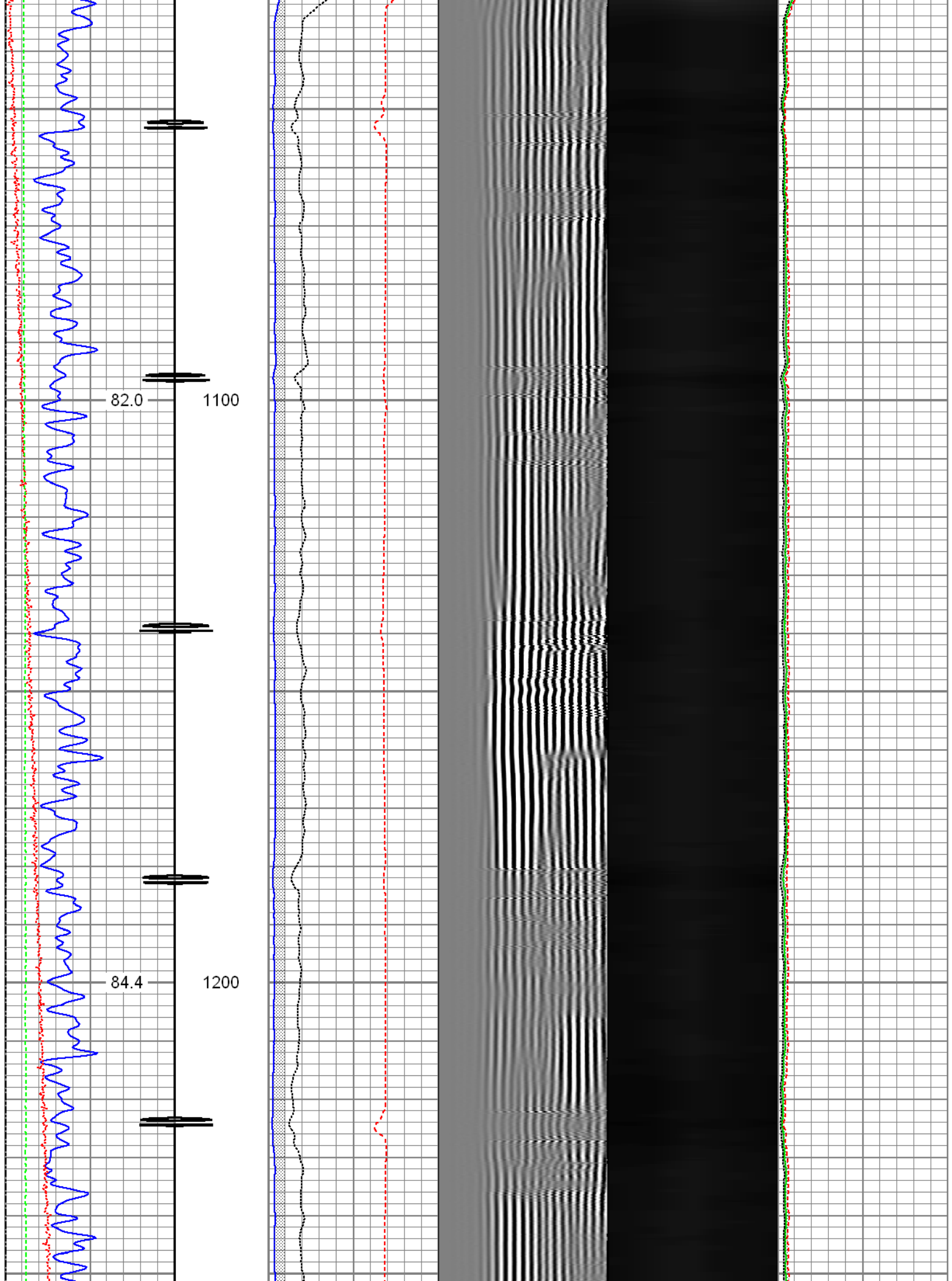


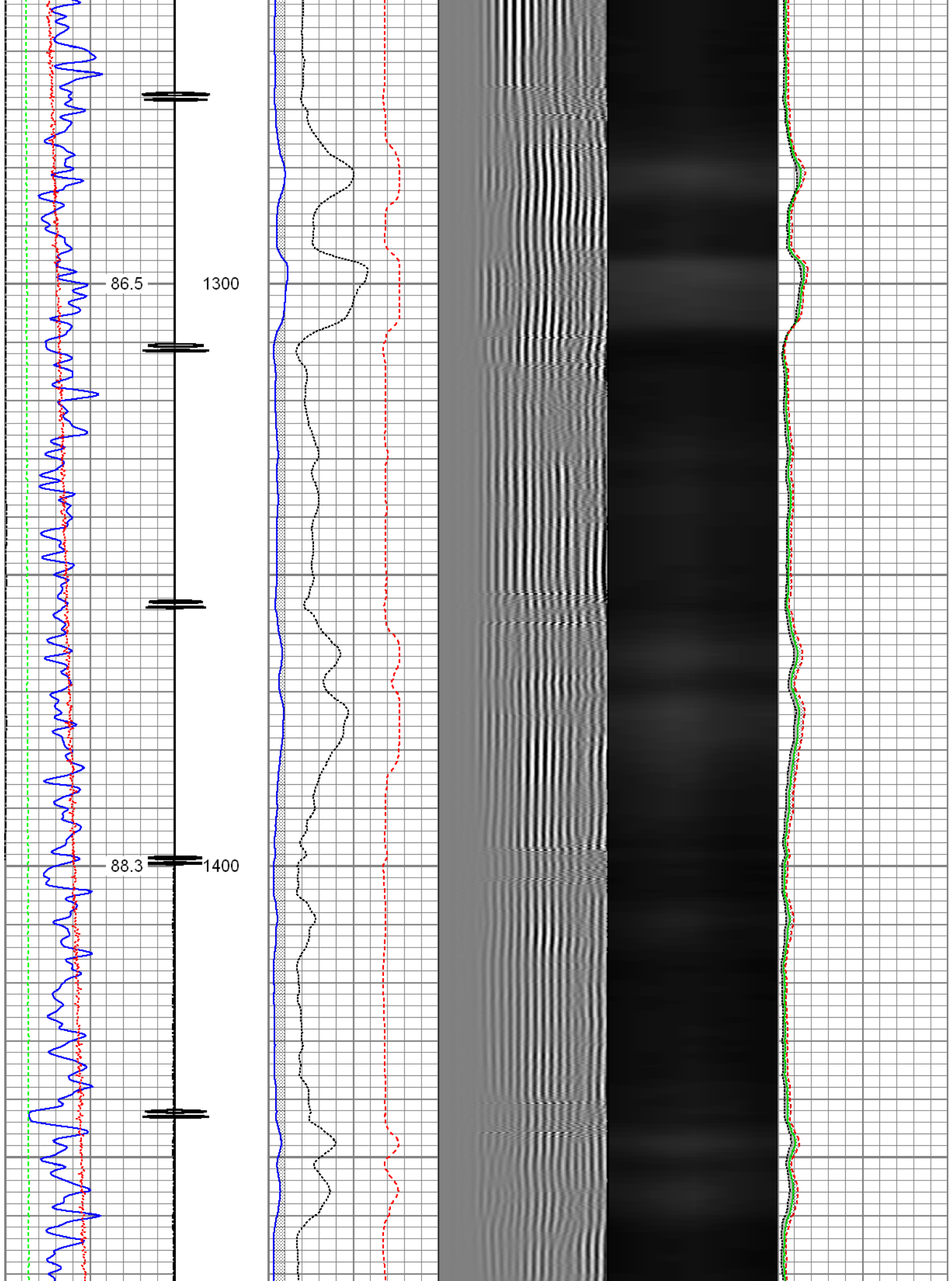




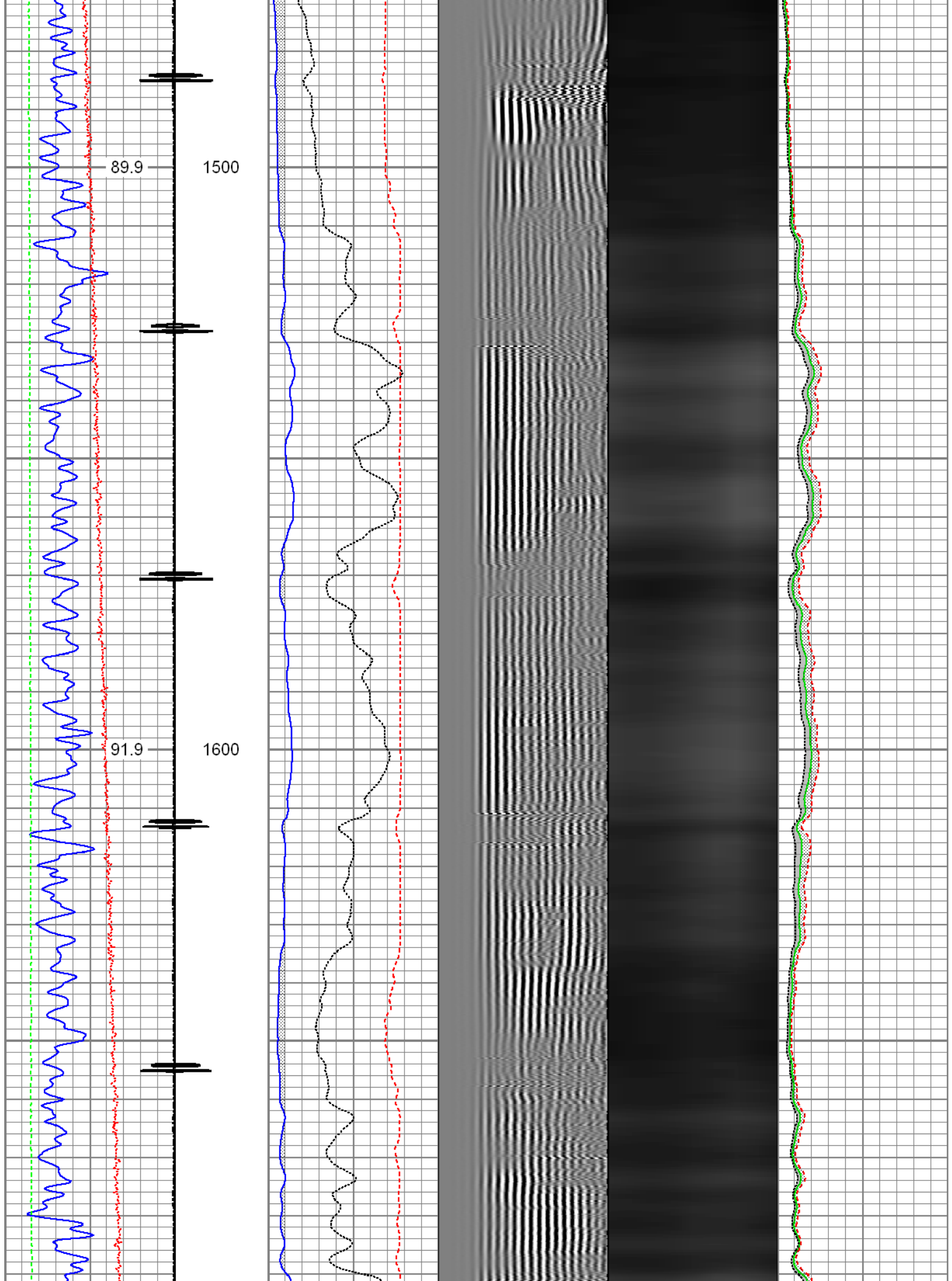


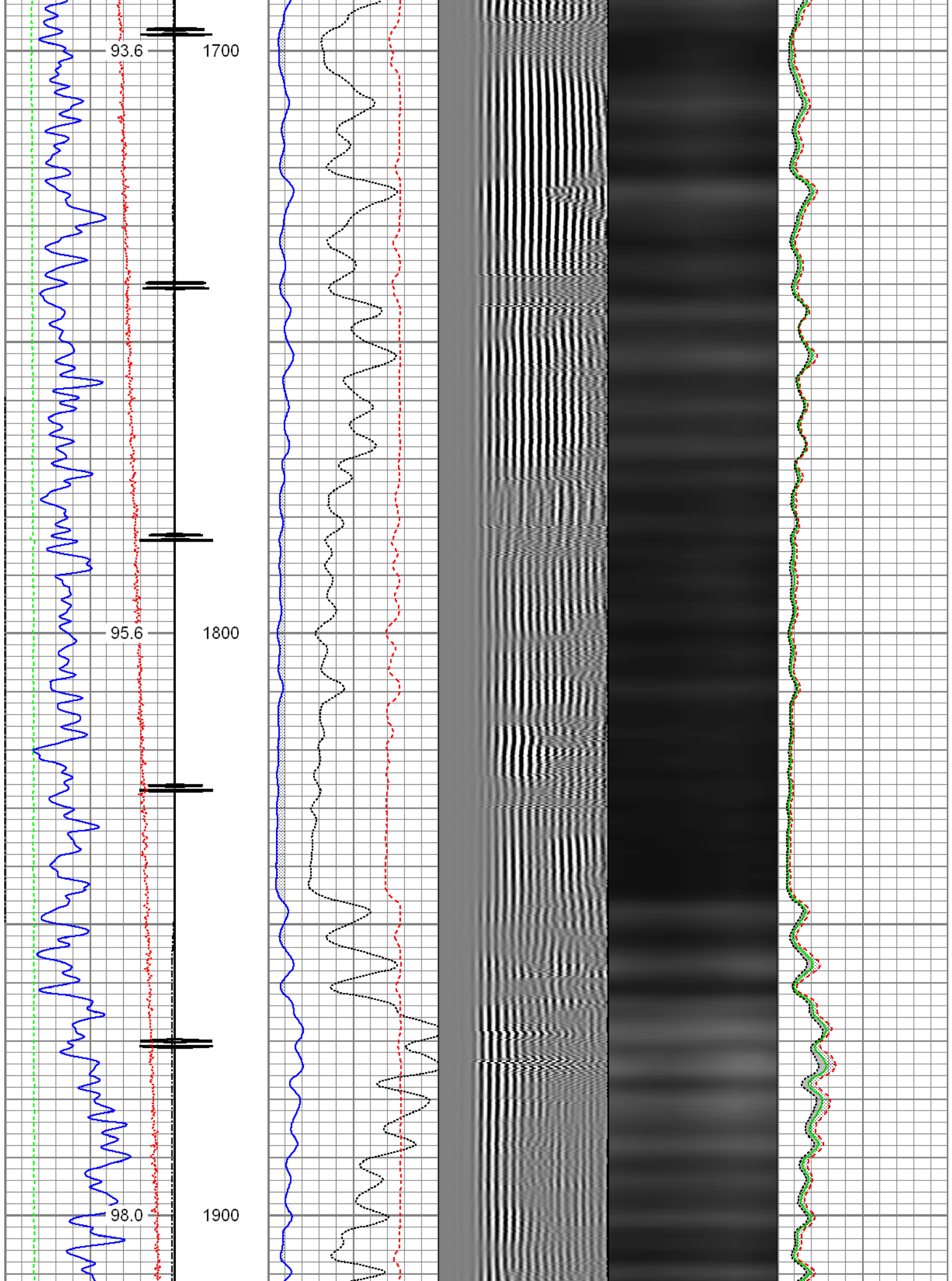


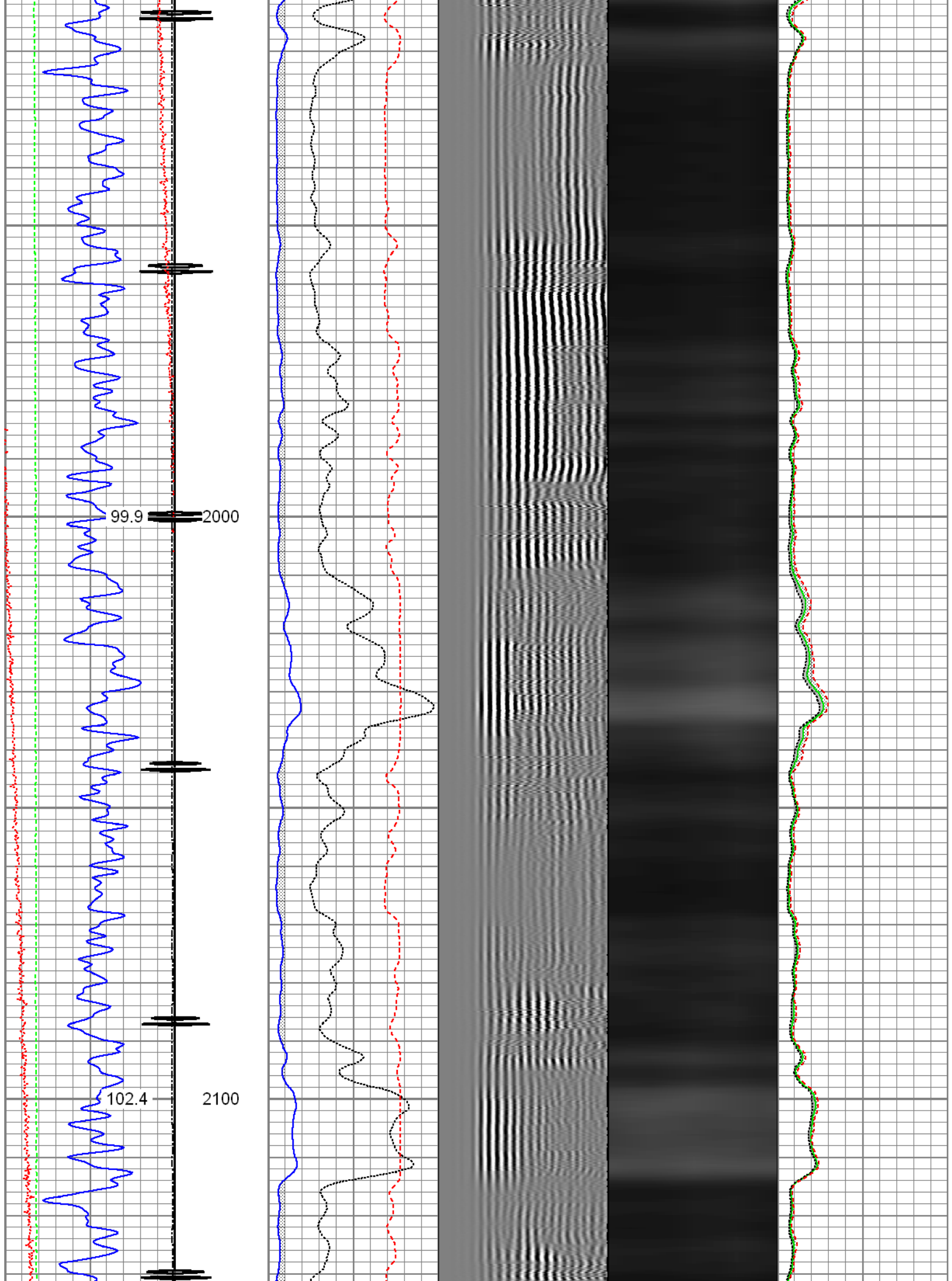


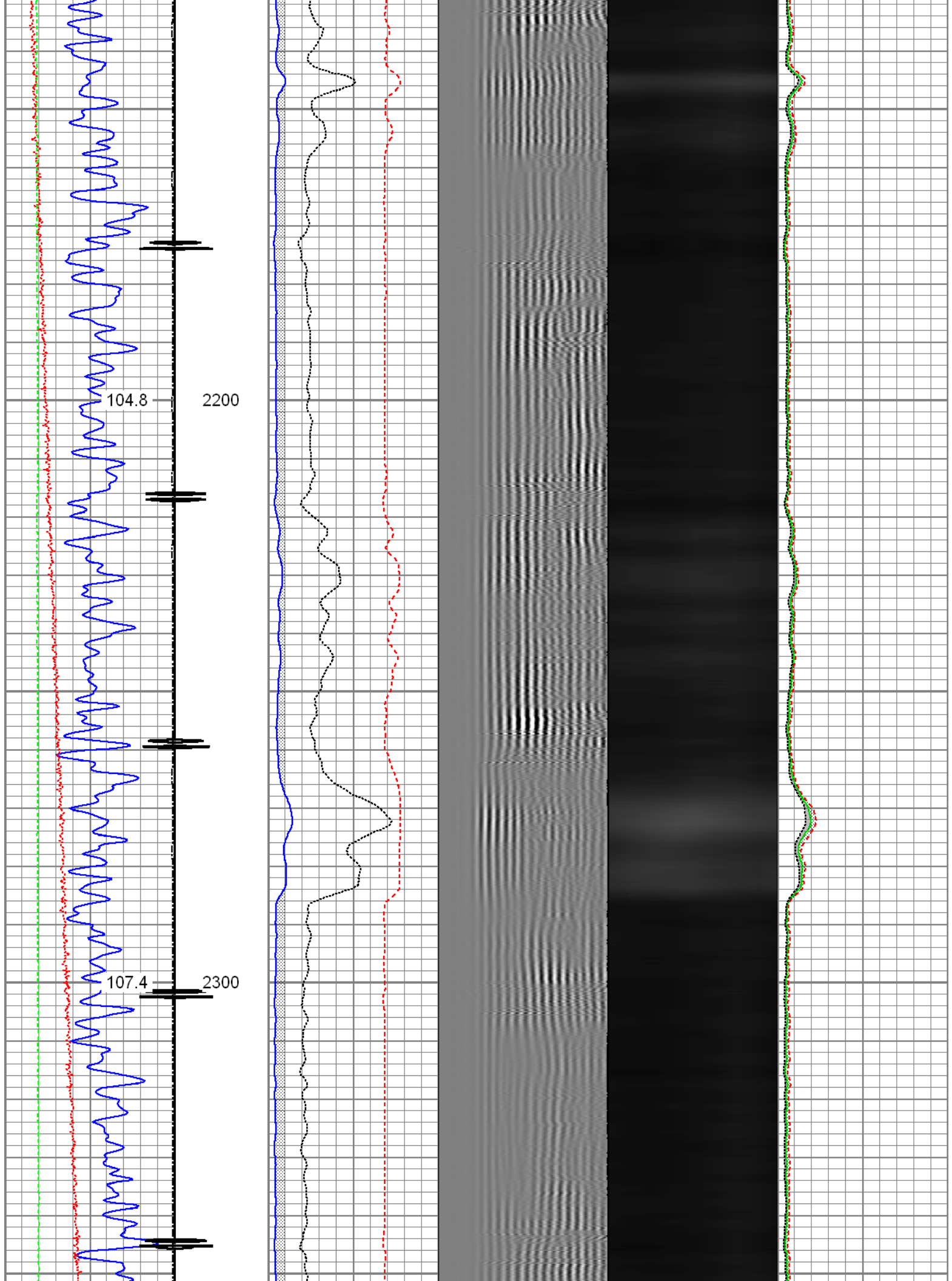




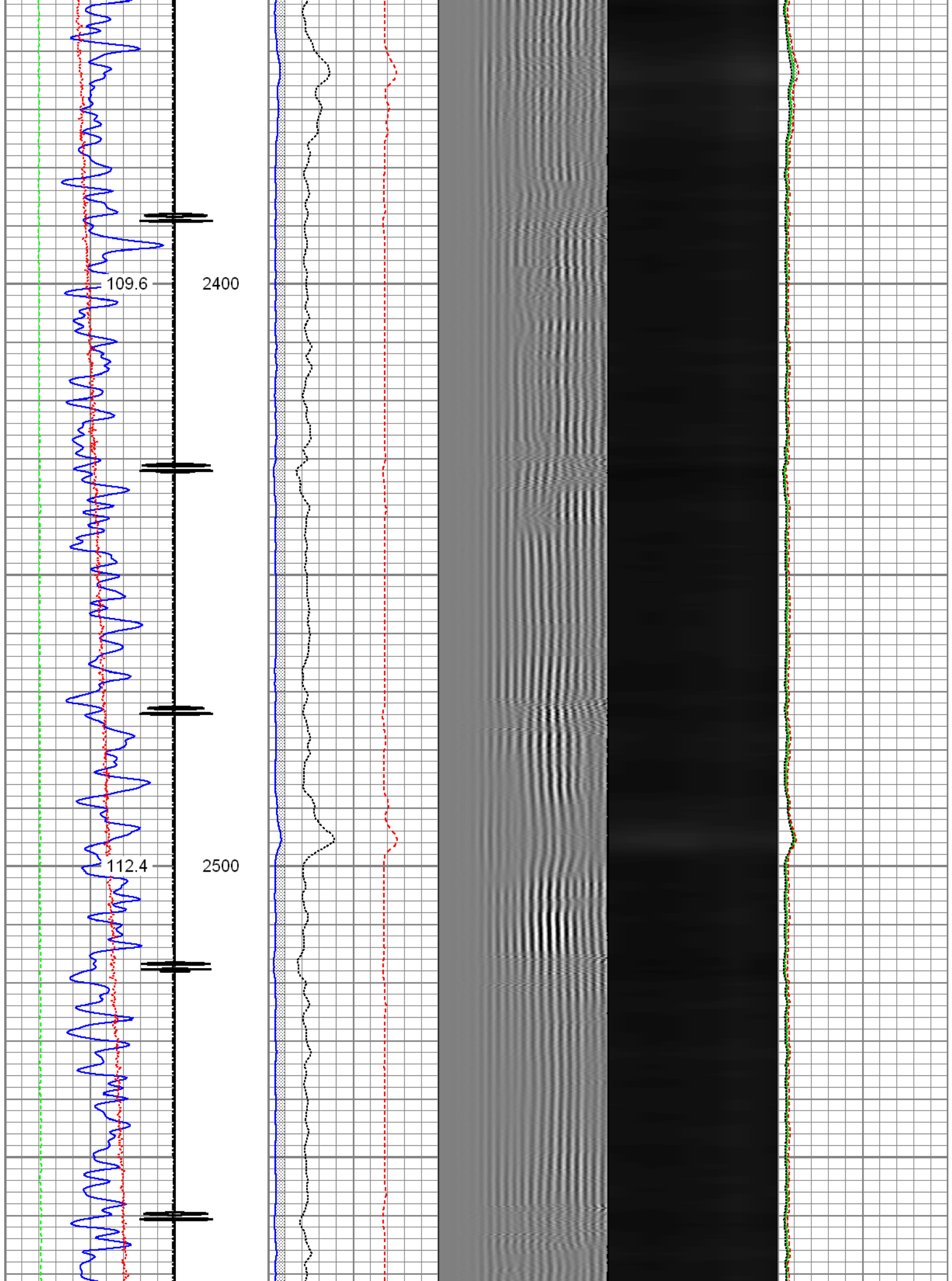


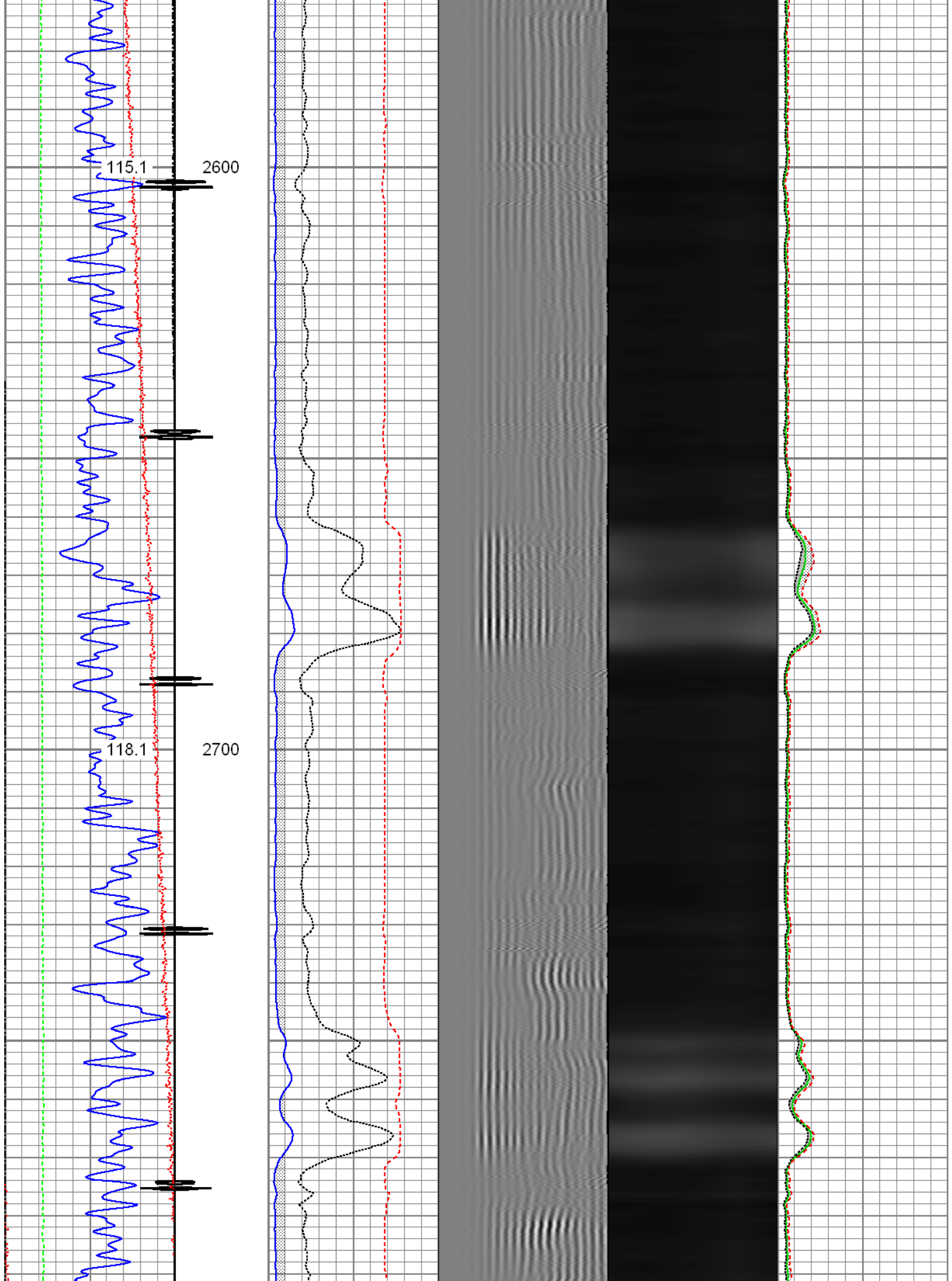


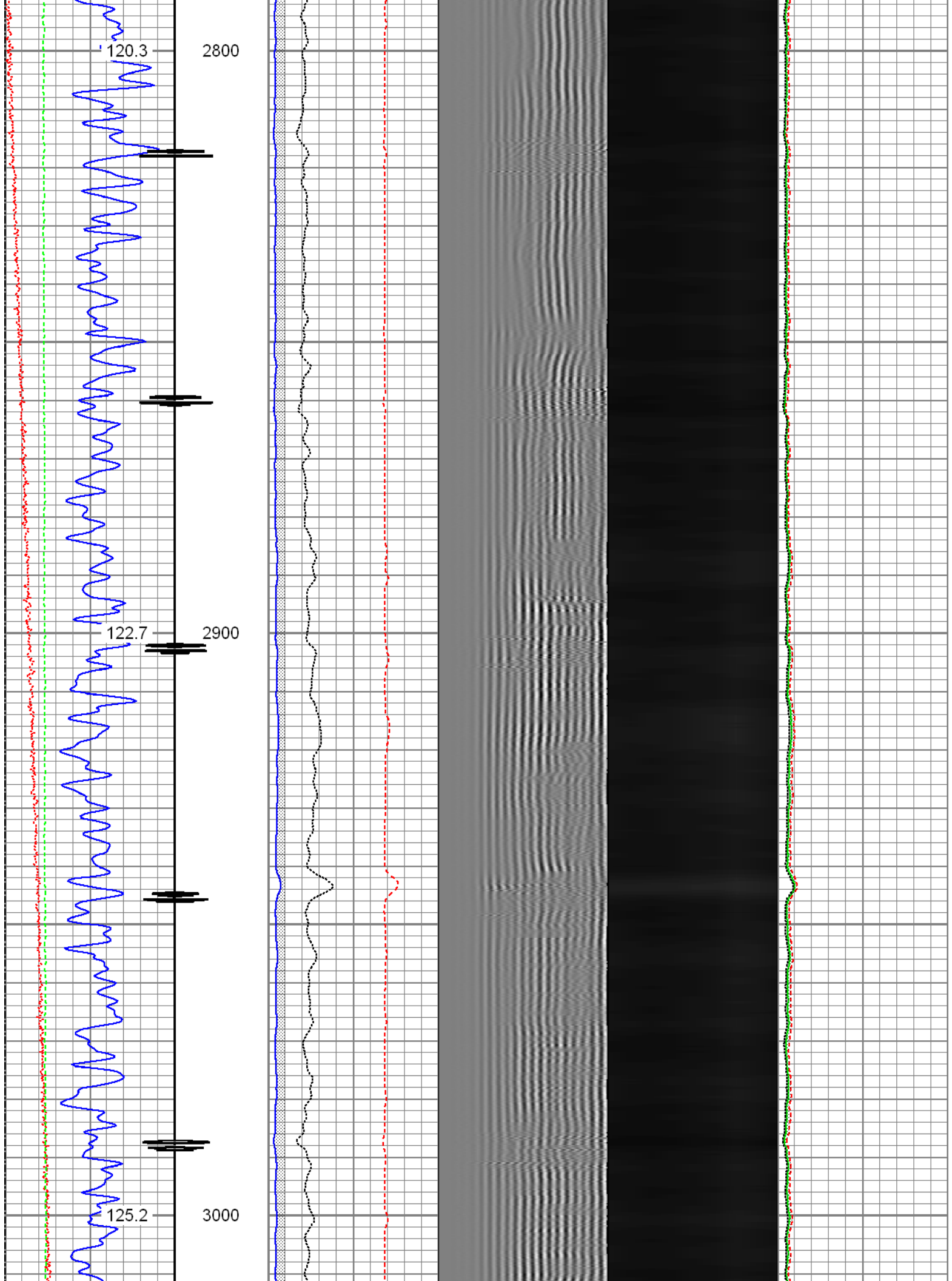


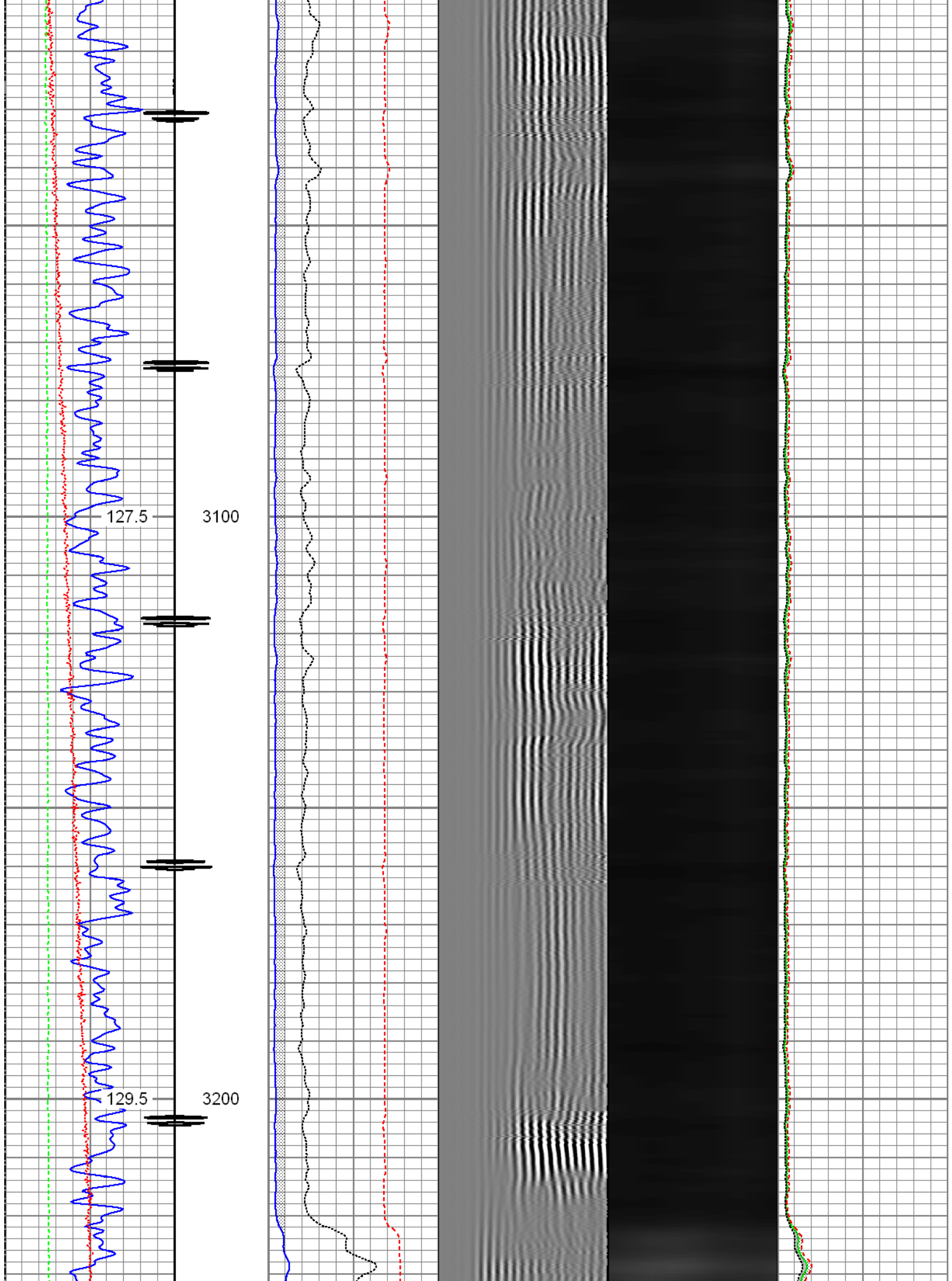




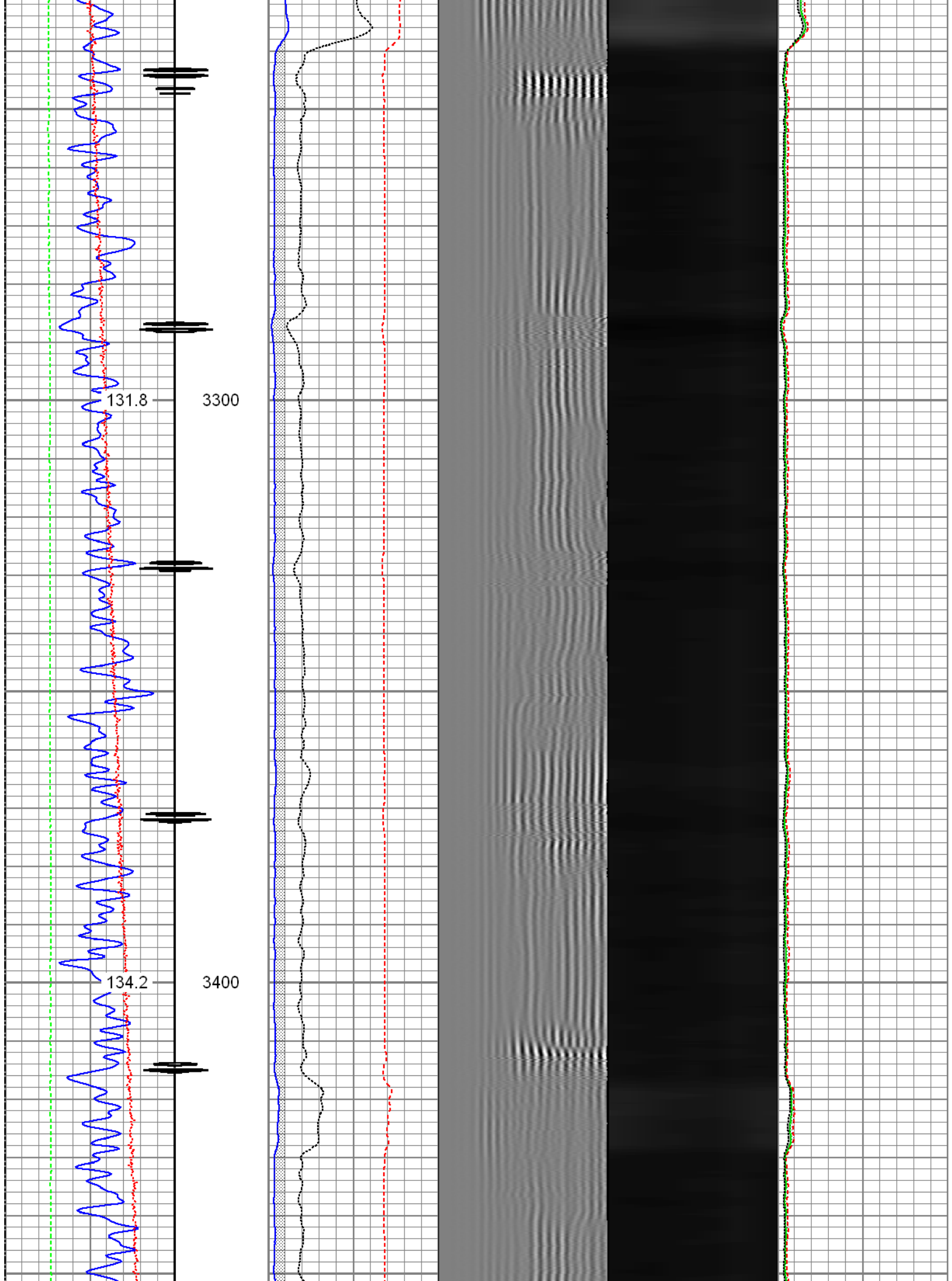


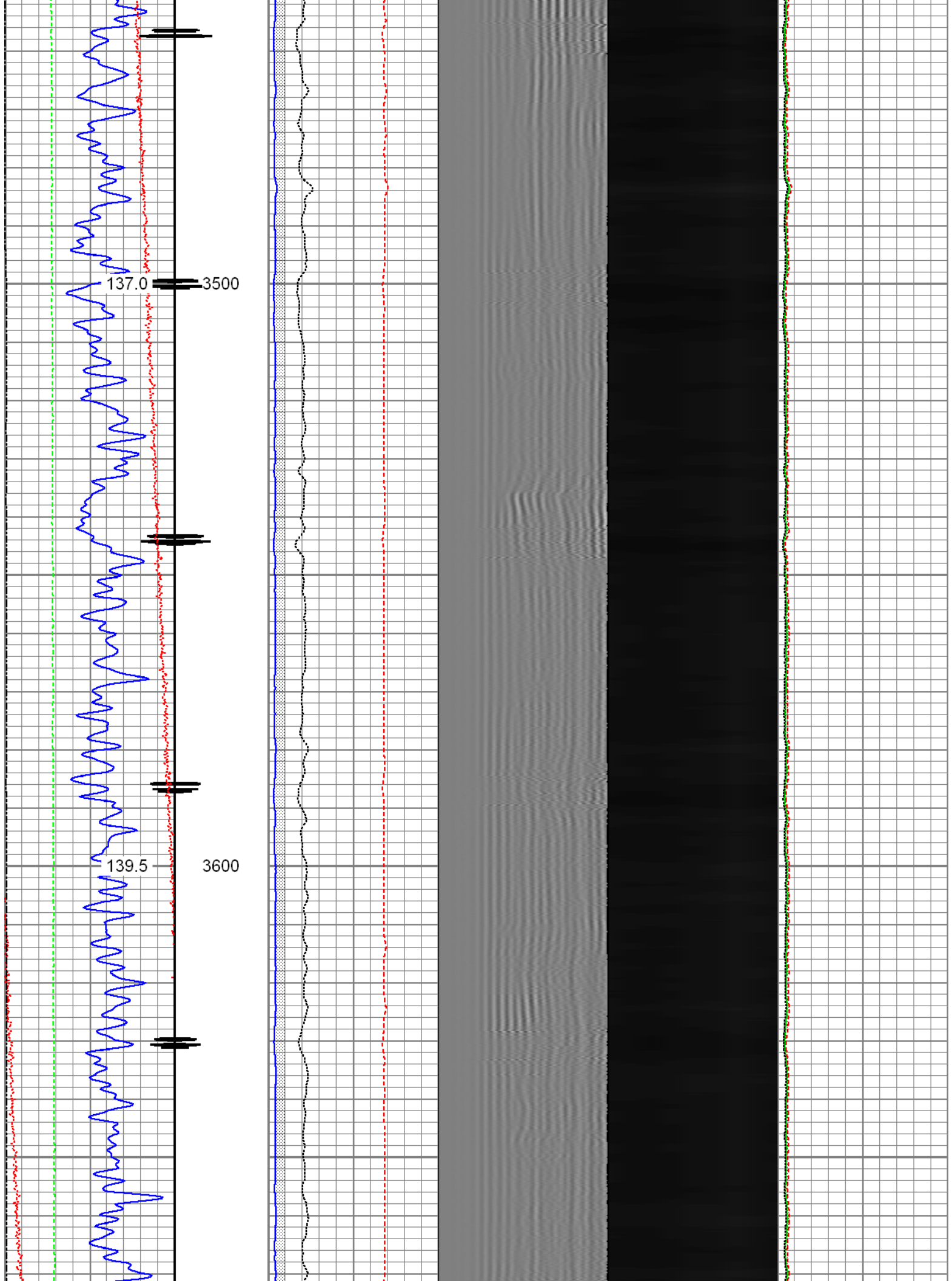


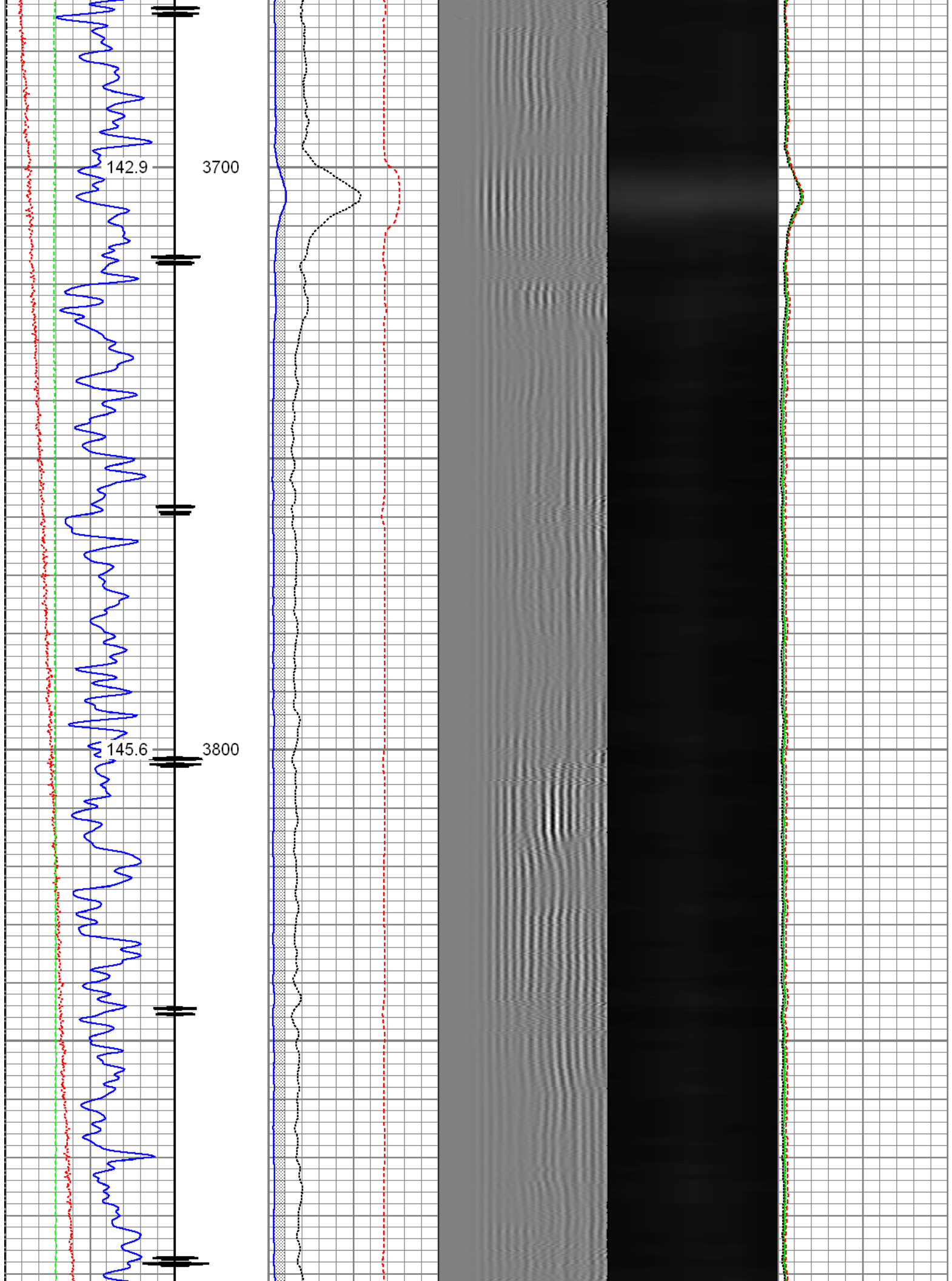


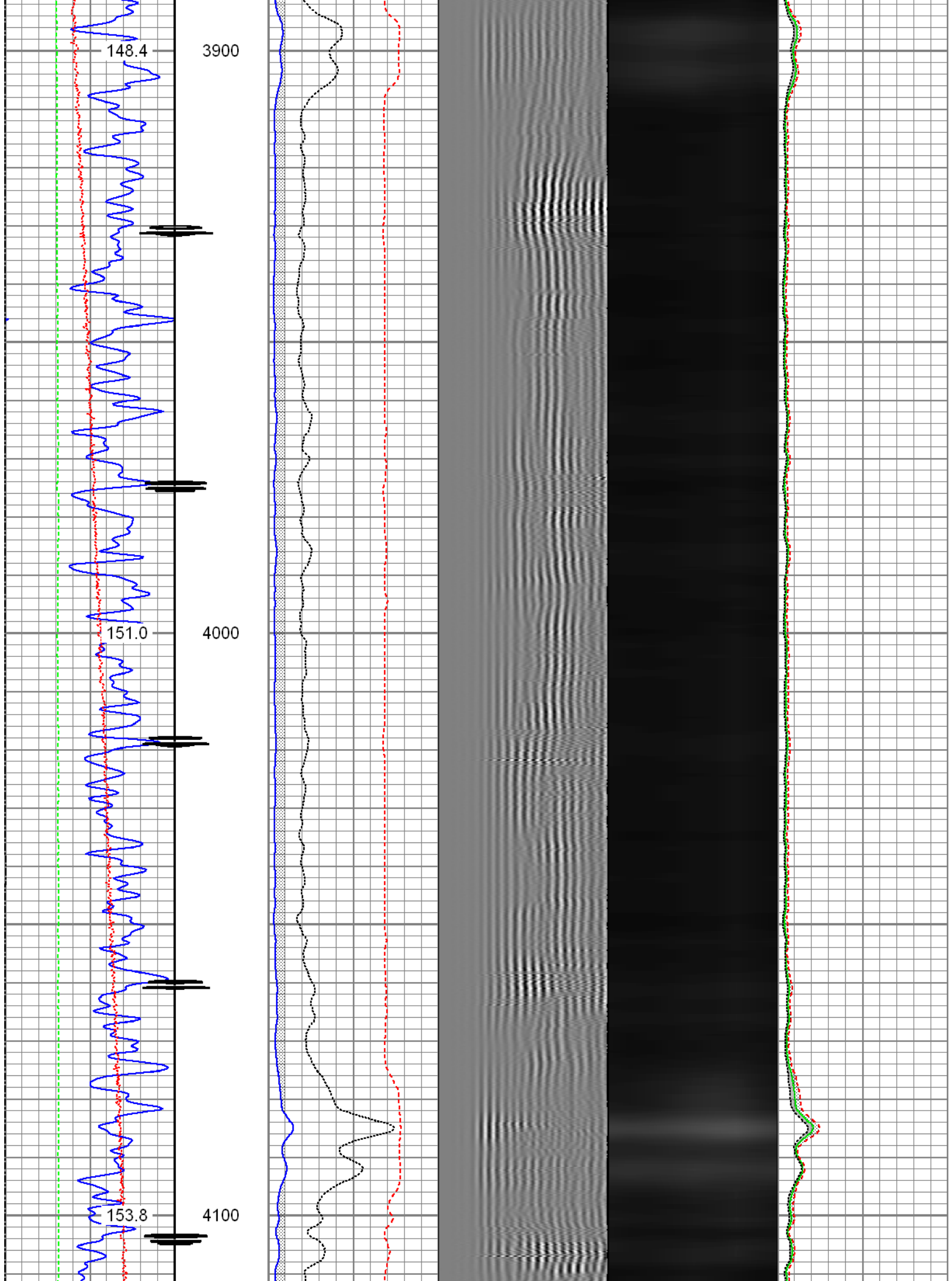




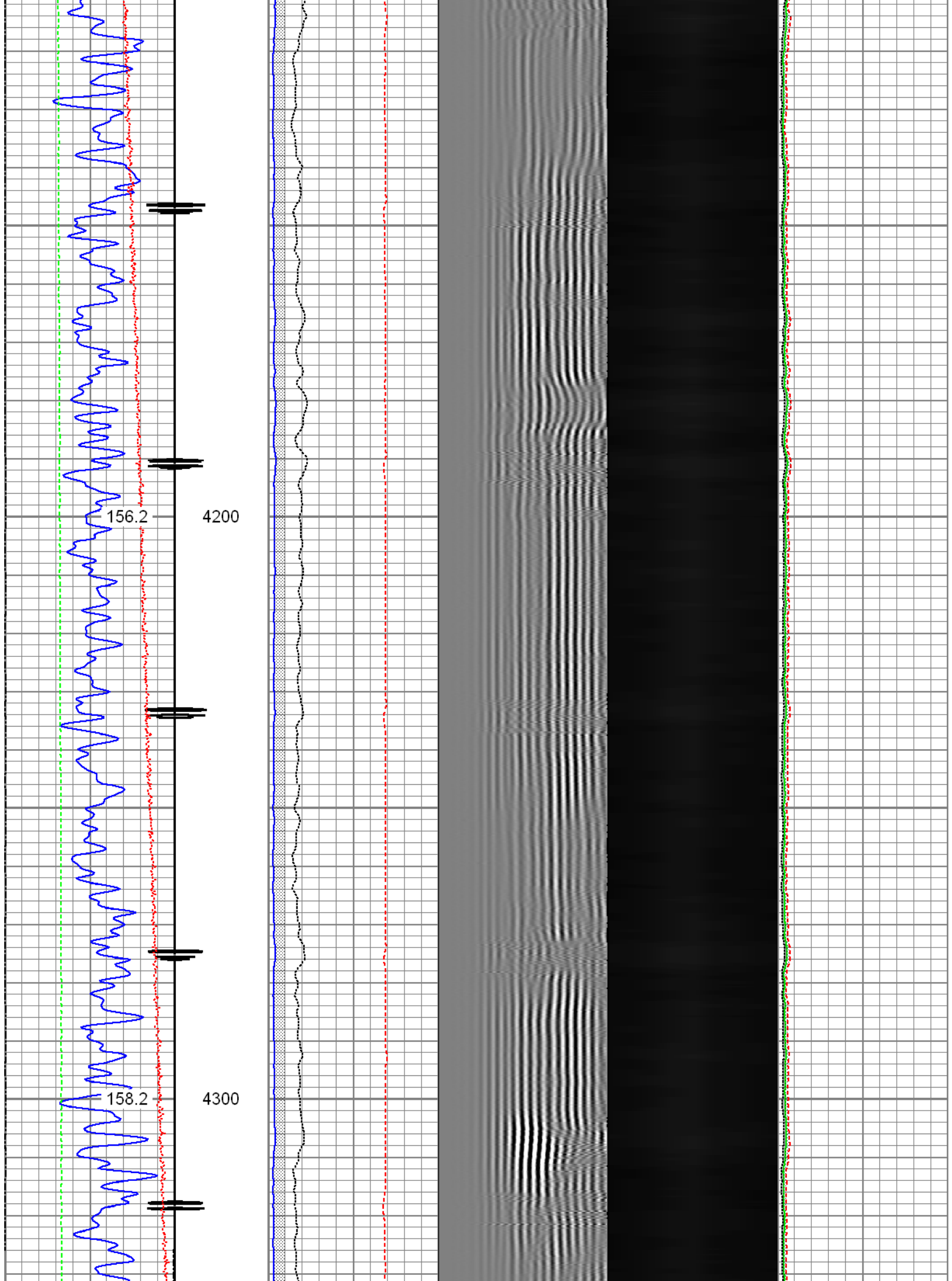


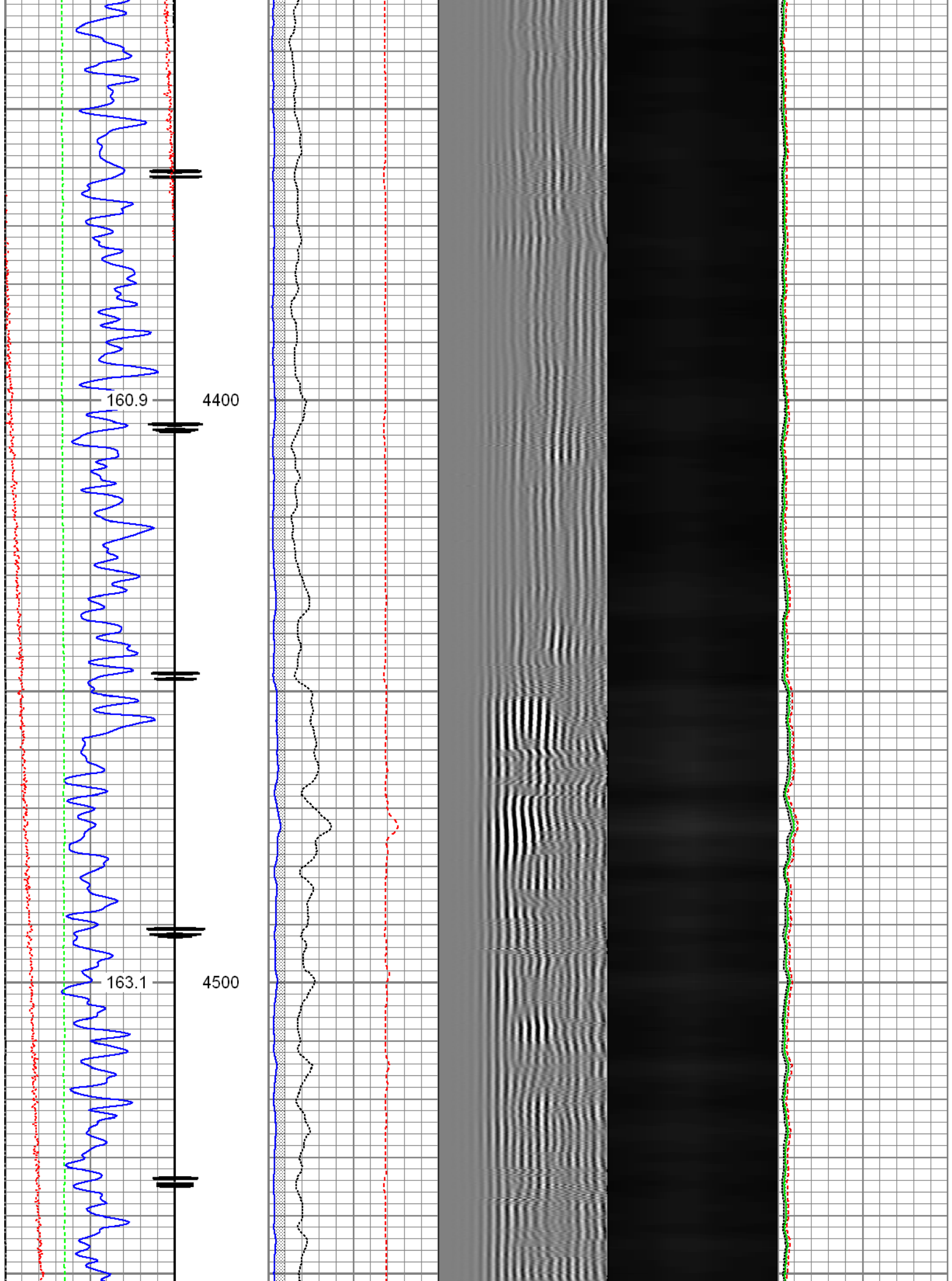


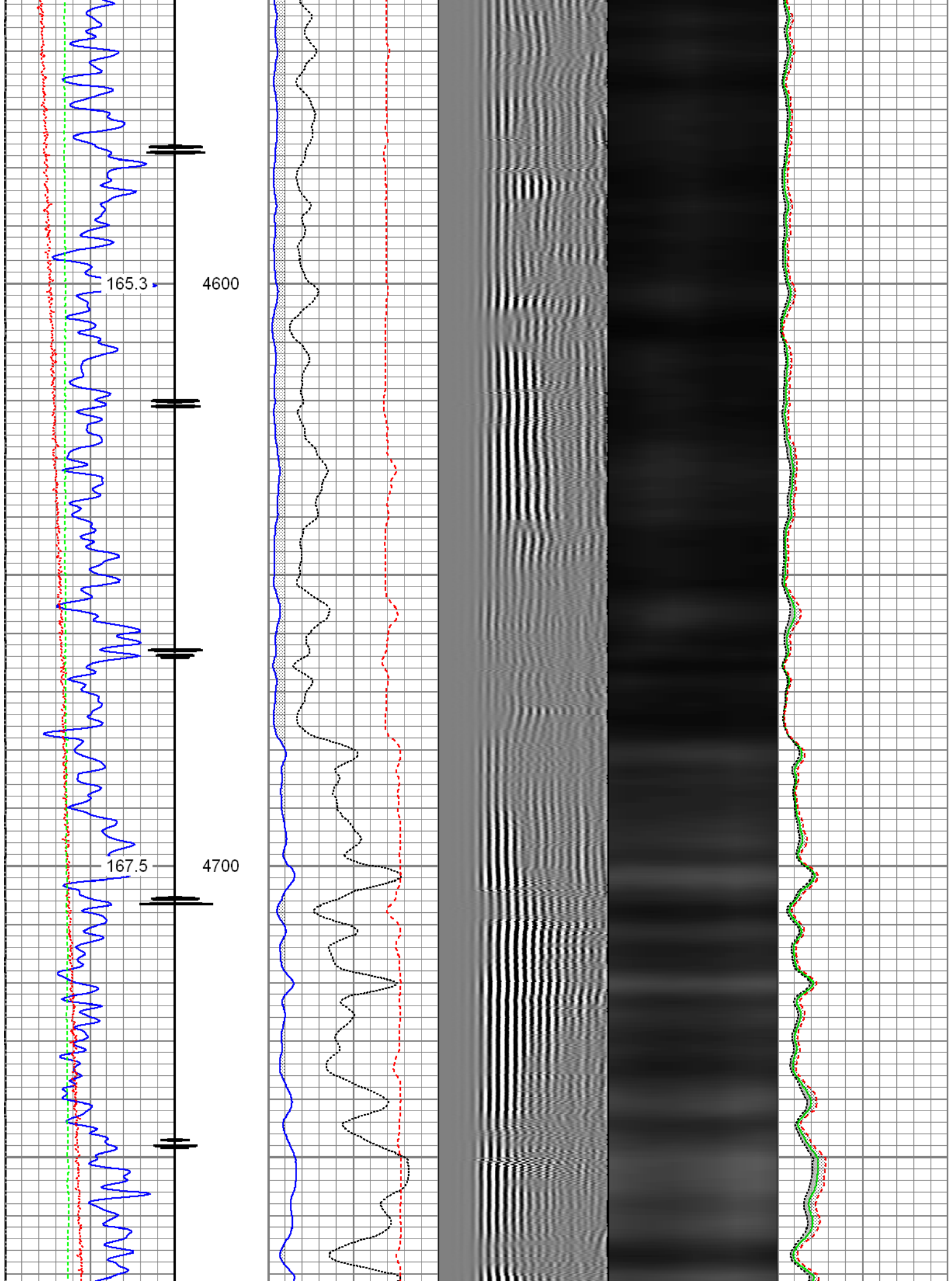


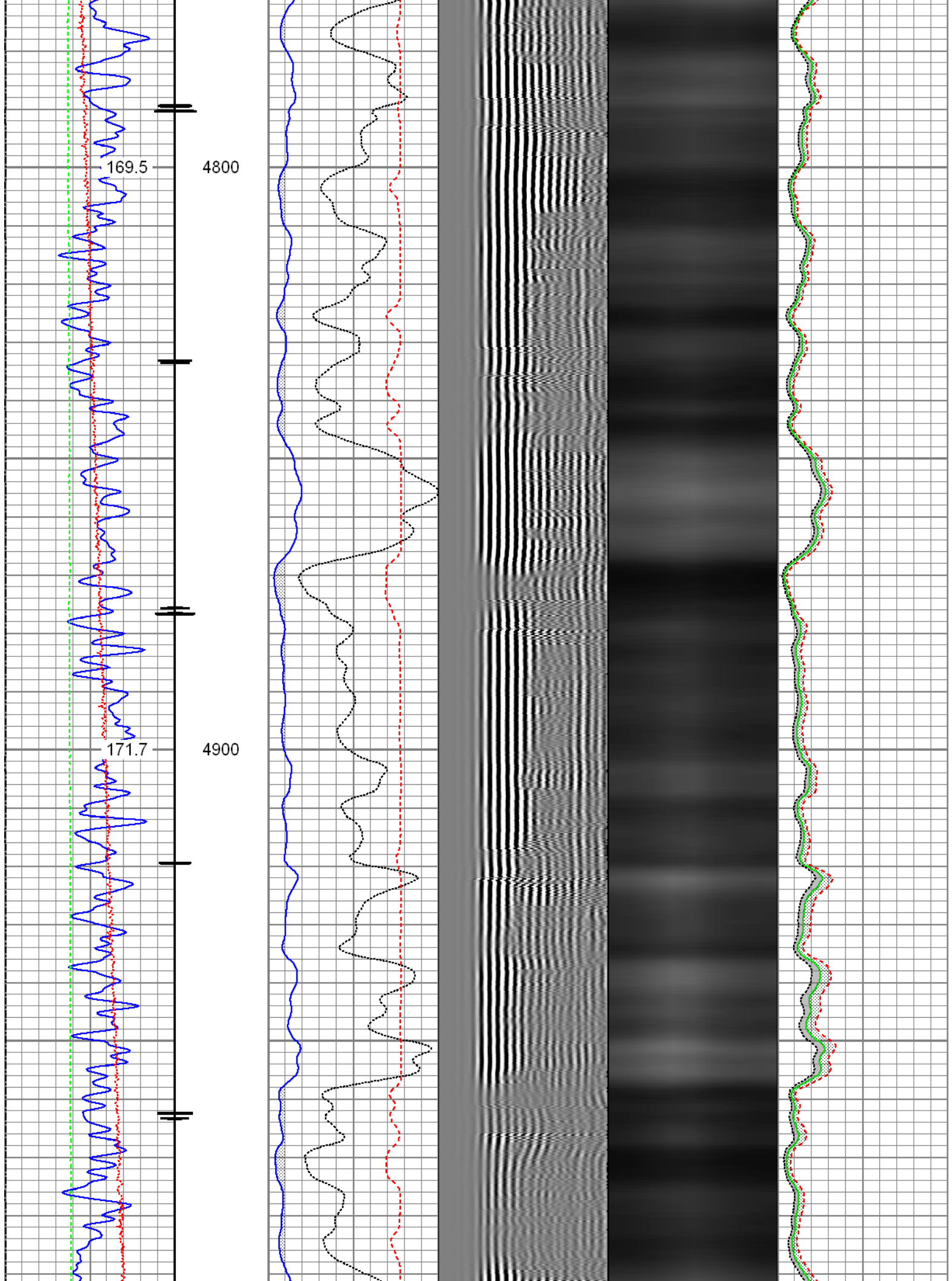




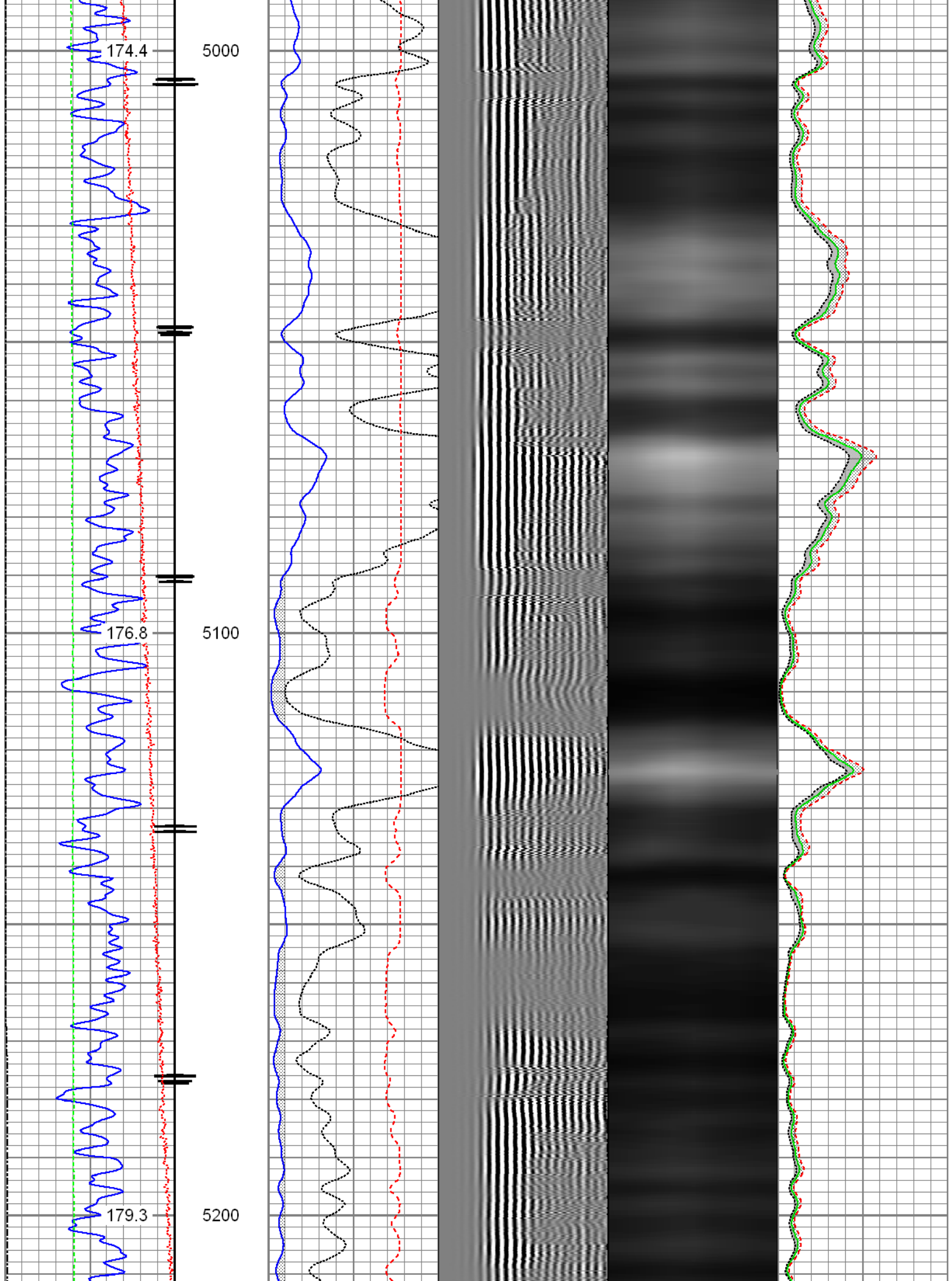


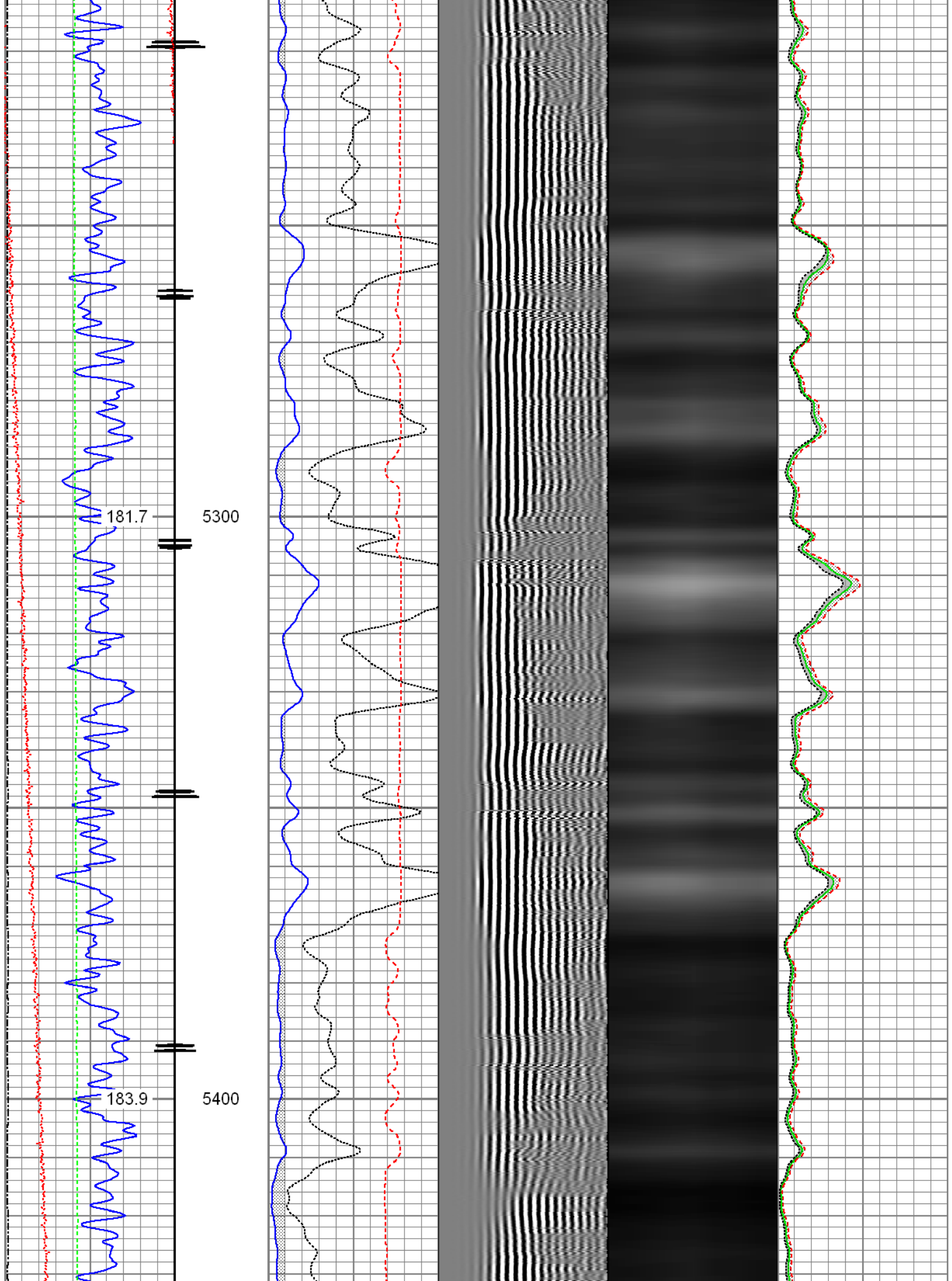


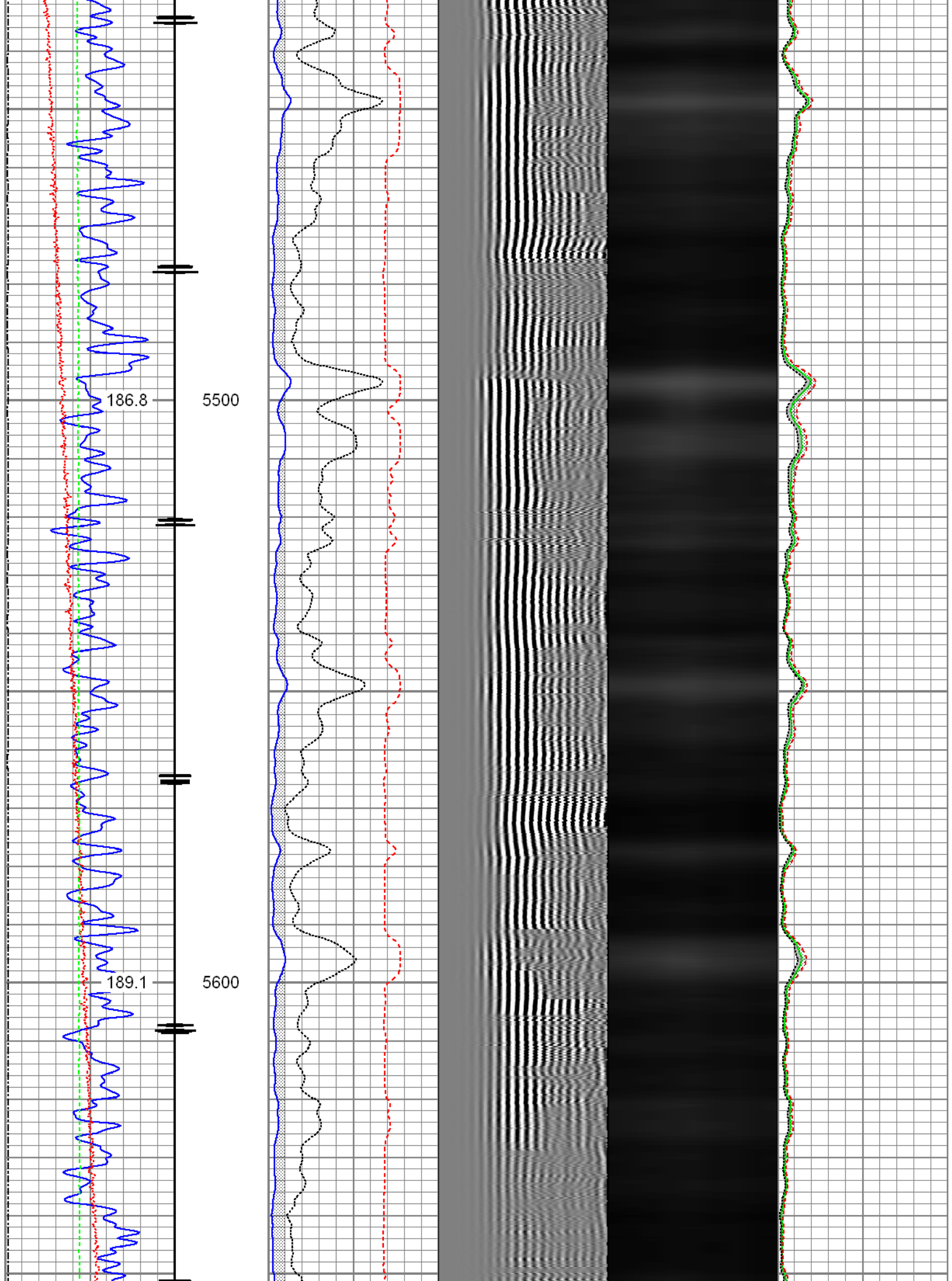




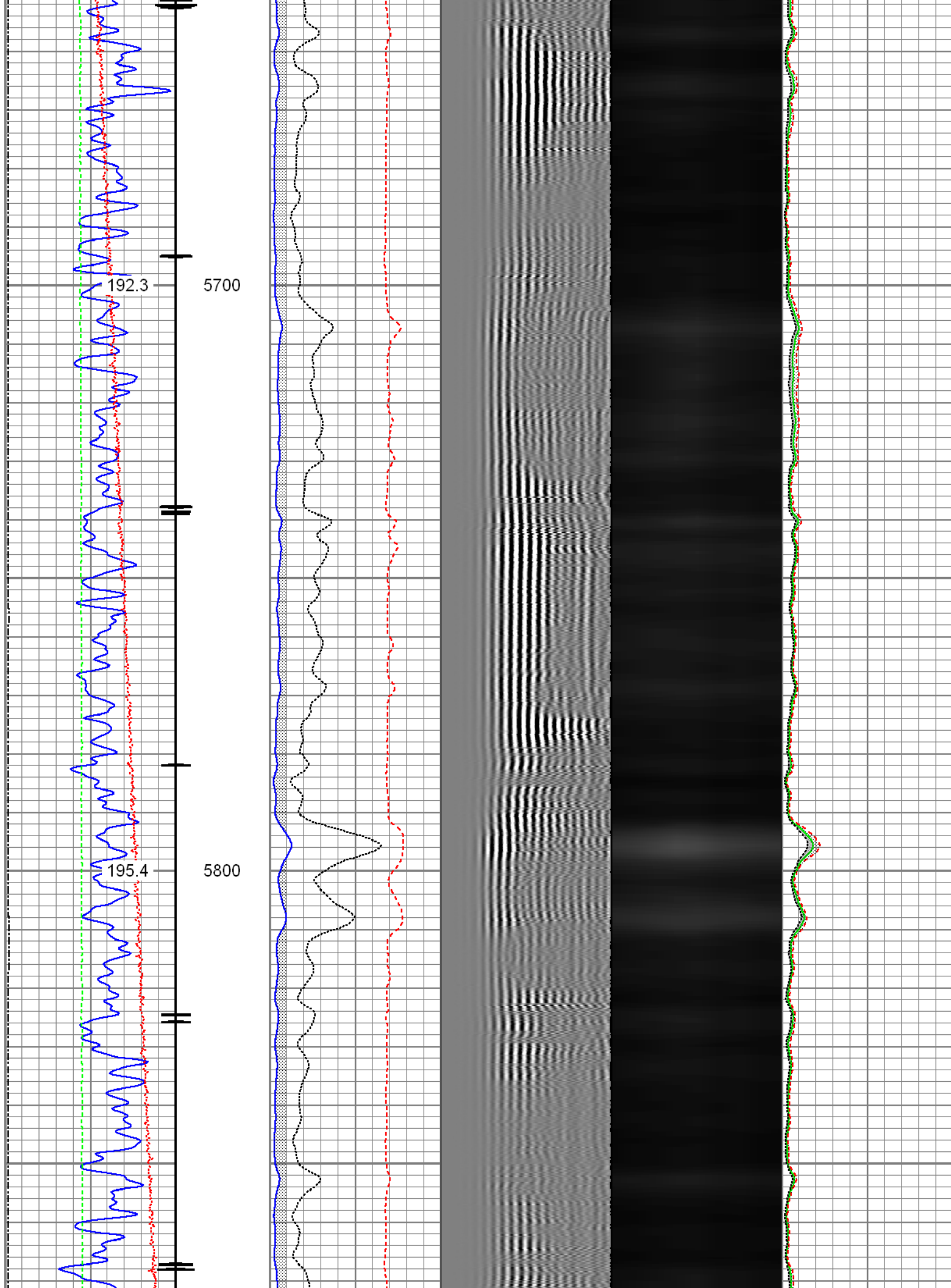




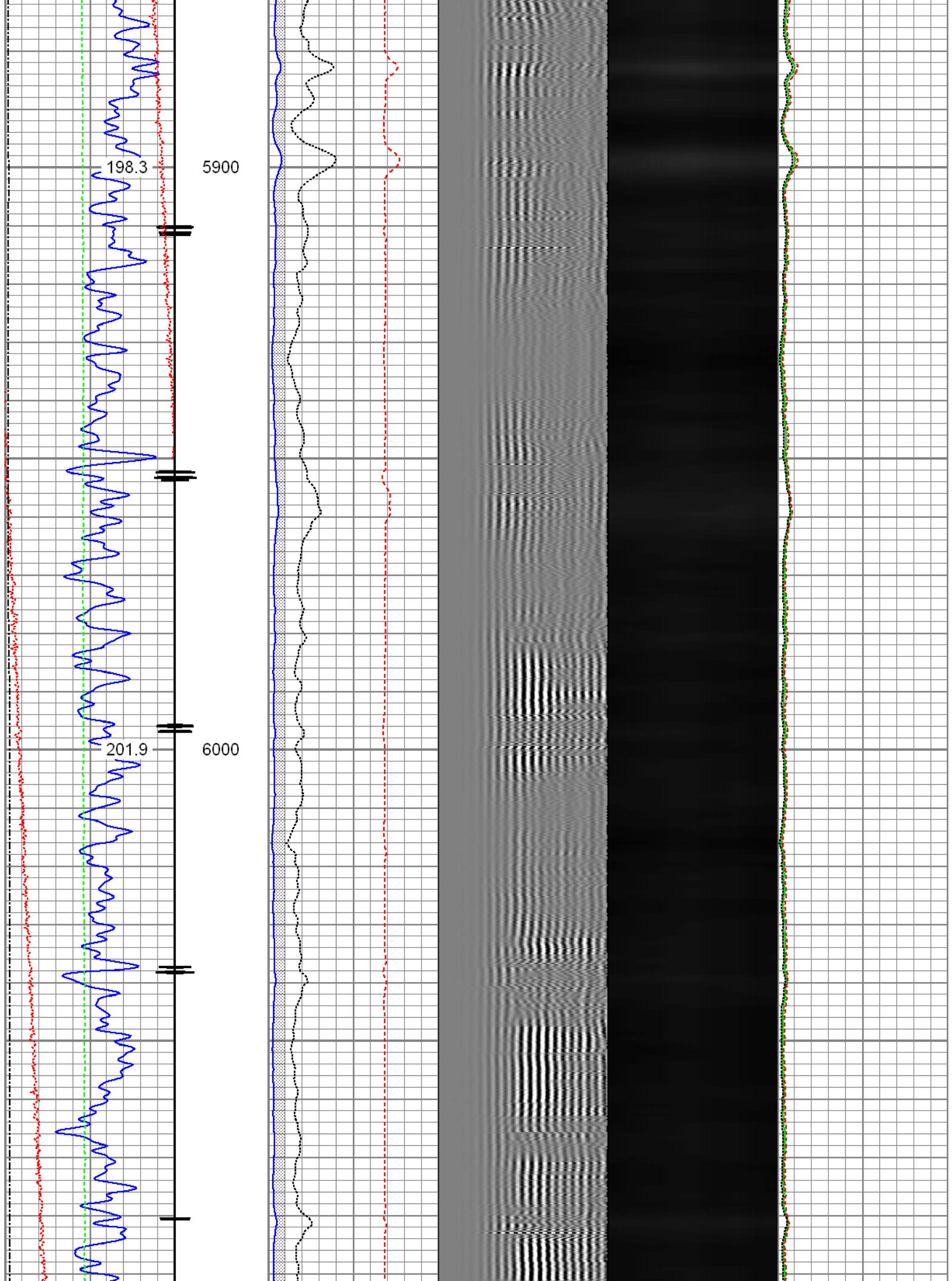


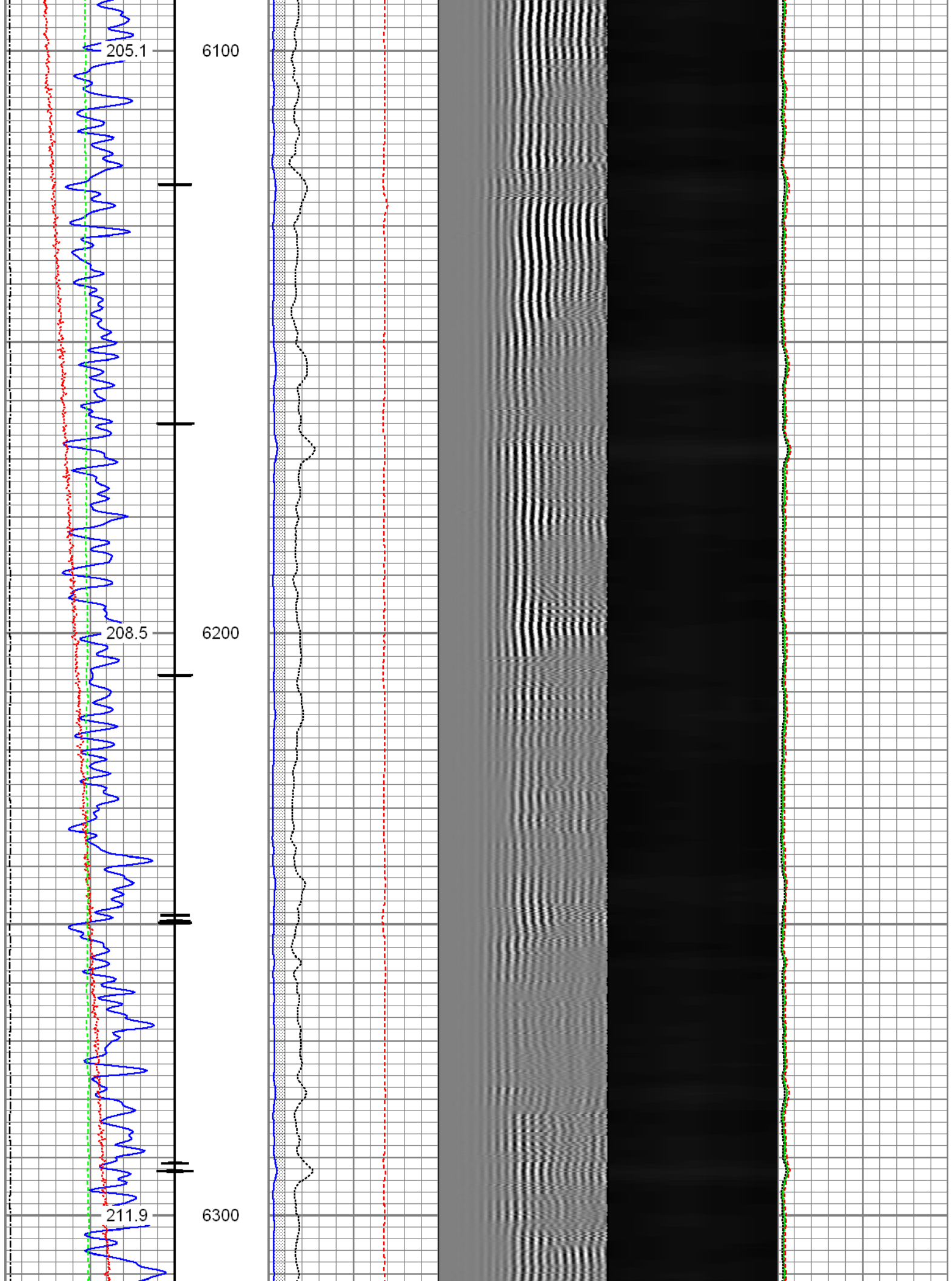


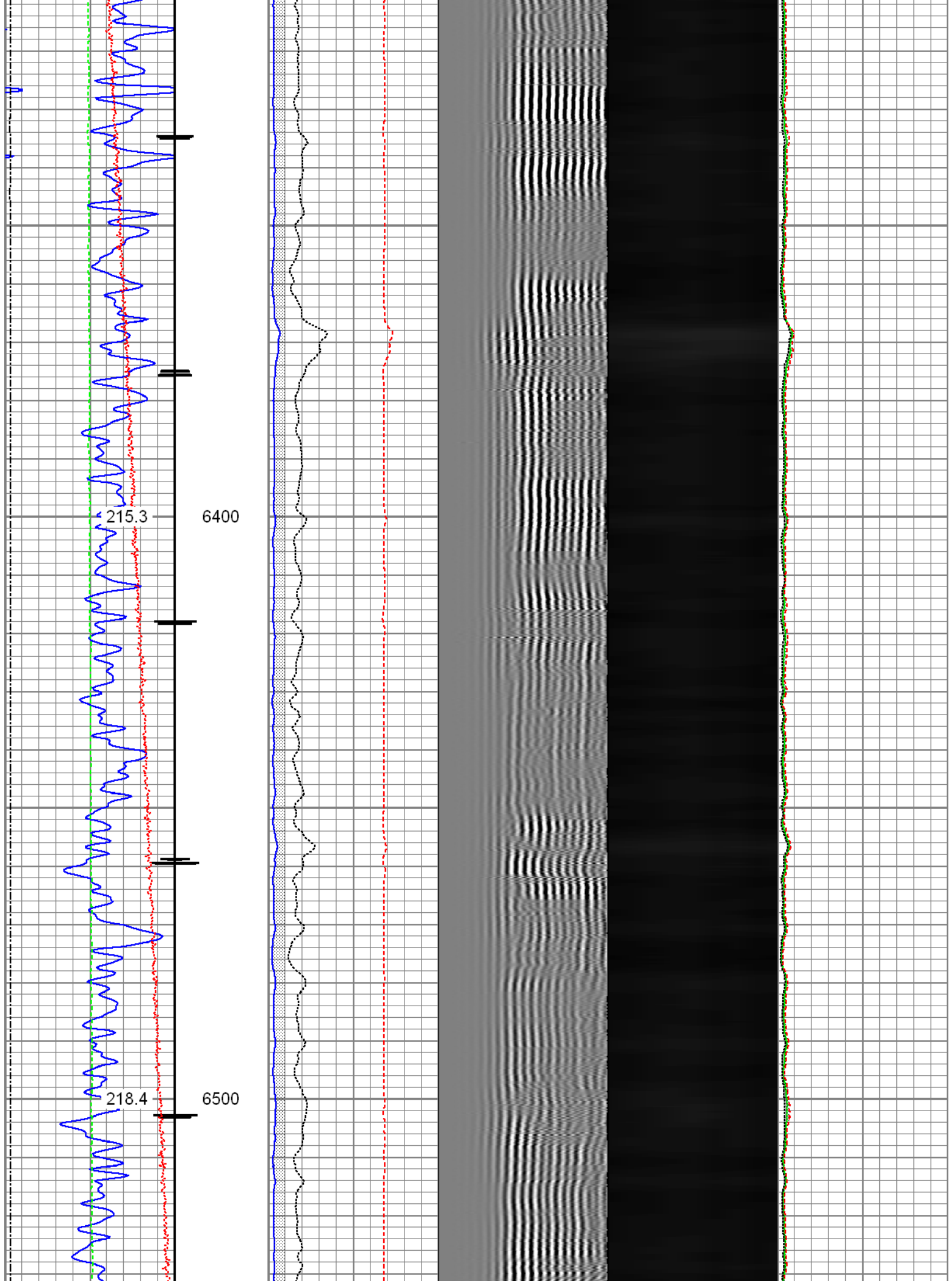


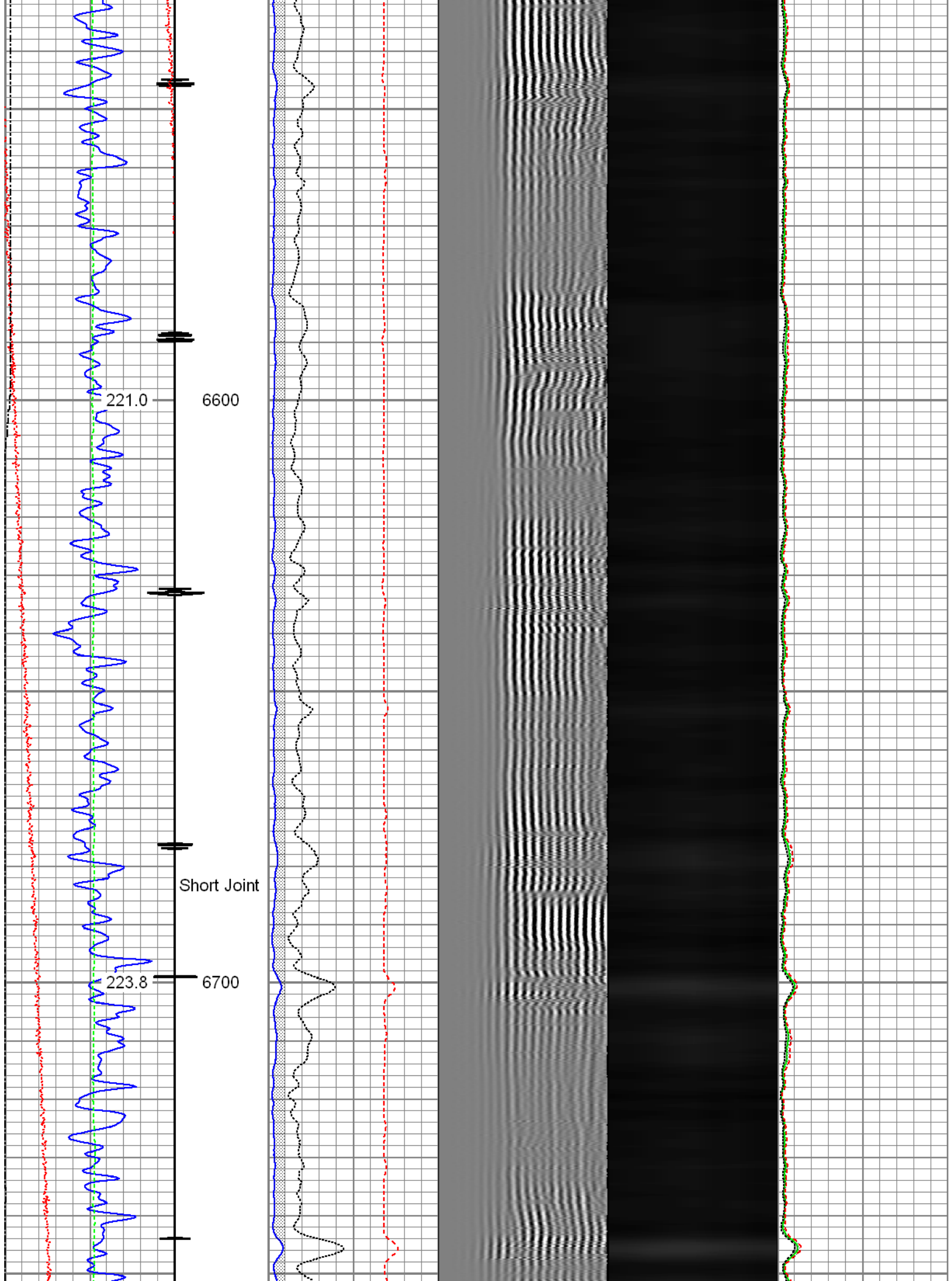




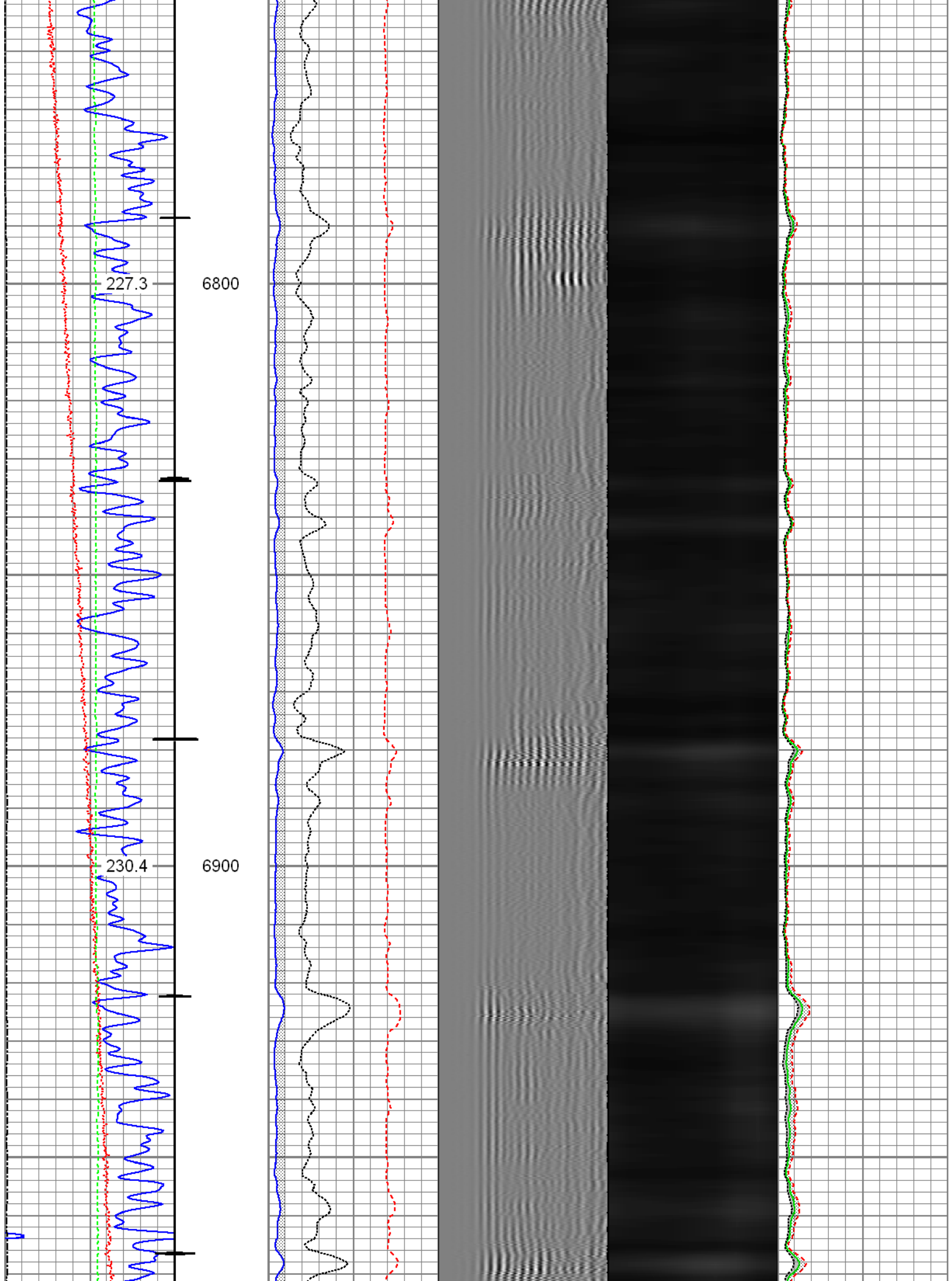


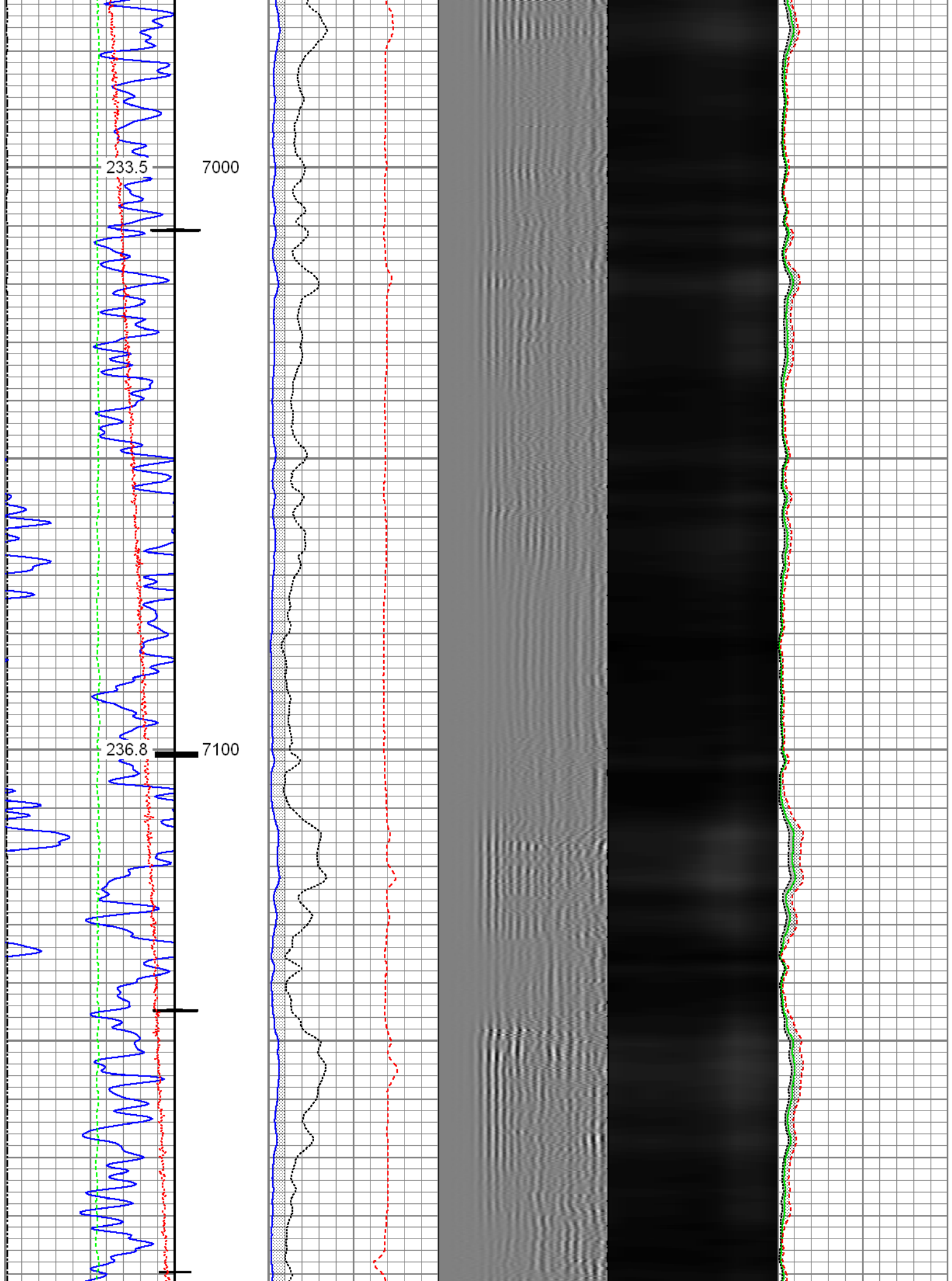


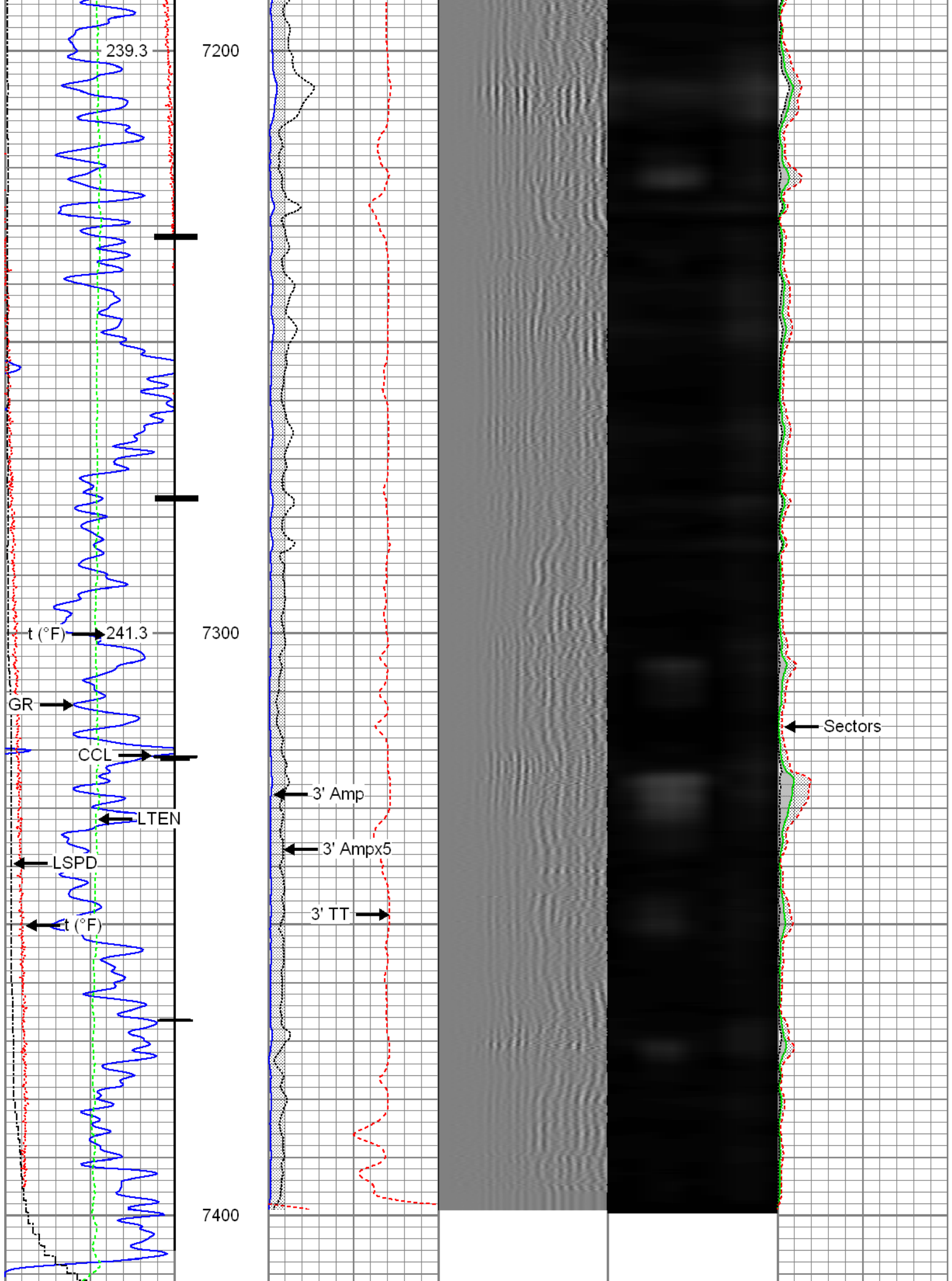






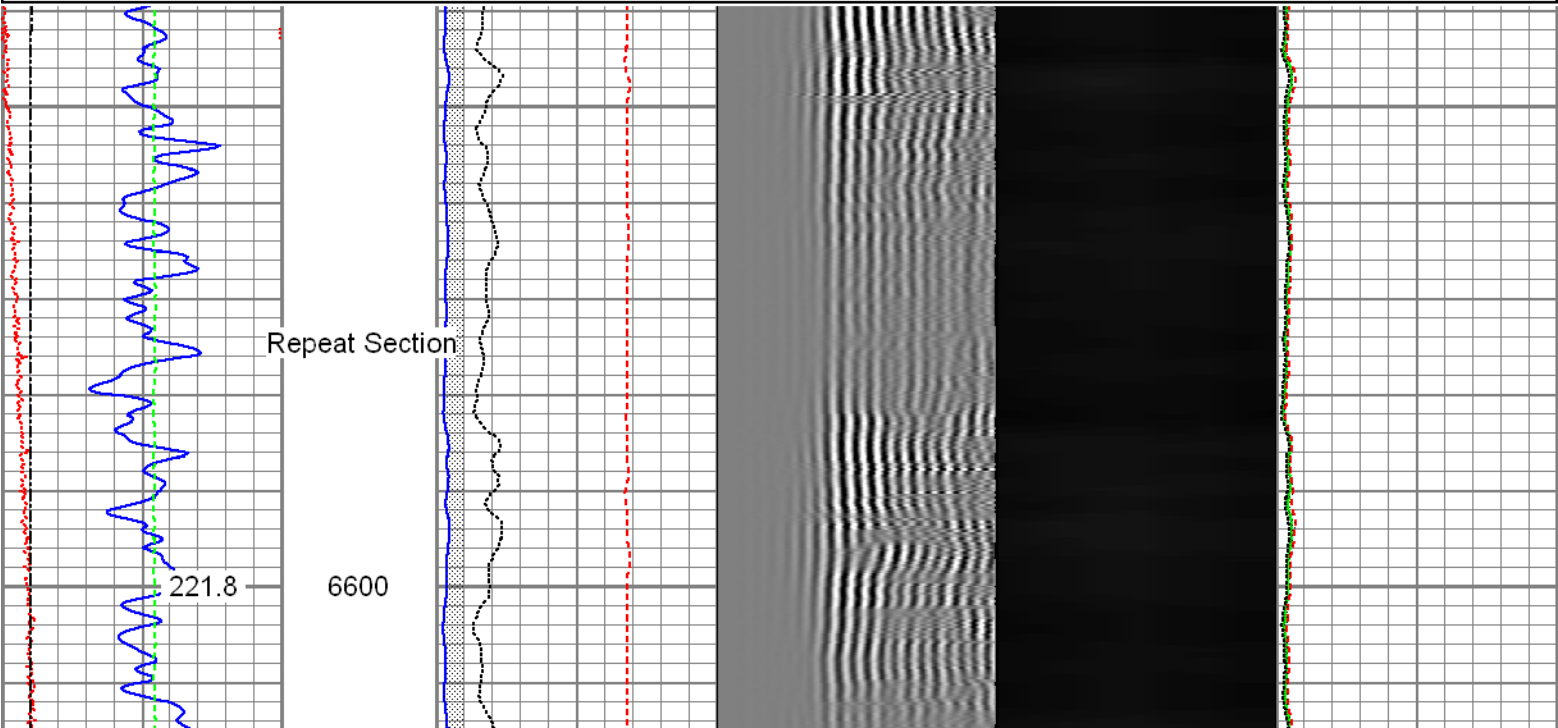




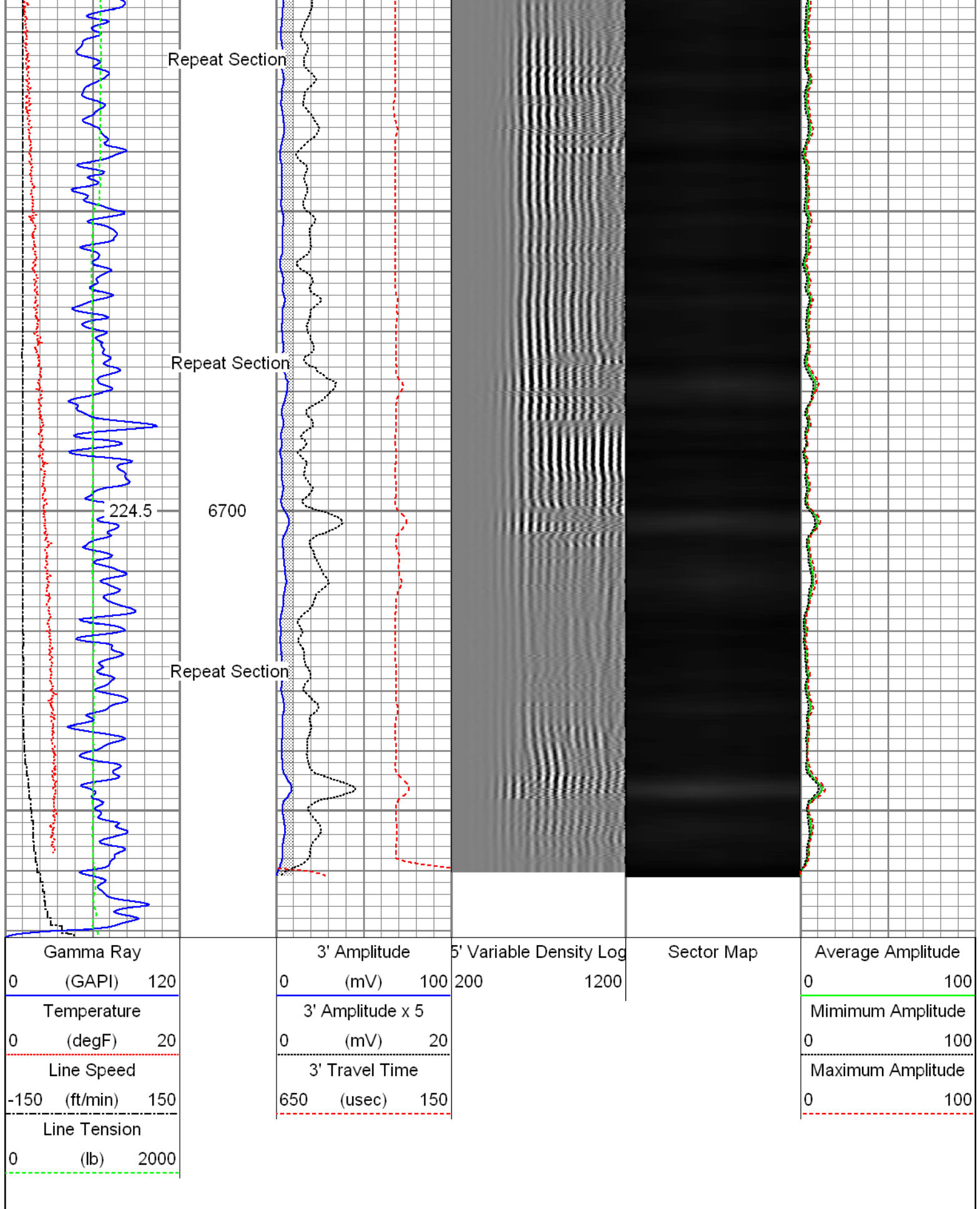


Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120	0 (mV) 100	200 1200		0 100
Casing Collar Locator	3' Amplitude x 5			Minimum Amplitude
Temperature	0 (mV) 20			0 100
0 (degF) 20	3' Travel Time			Maximum Amplitude
Line Speed	650 (usec) 150			0 100
-150 (ft/min) 150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

<div>FMC Technologies</div>		<div>Repeat Section</div> <div>Recorded with 2800 PSI Surface Induced Pressure</div>		
<div>Database File: 0512341938_anadarko_meguire 29c-16hz_12-10-15_rbl.db</div> <div>Dataset Pathname: repeat</div> <div>Presentation Format: radii</div> <div>Dataset Creation: Thu Dec 10 14:59:53 2015 by Log 7.0 B1</div> <div>Charted by: Depth in Feet scaled 1:240</div>				
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)
			T_CH14375_1_GO Titan 1 7/16" Assembled Electric Cable Head with	1.03	1.44	4.00

		1\"/>		2.88	2.75	10.00
HeadVolt	19.49					
Temp	16.72					
WVFS3FT	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					
WVFS5FT	13.55					
		<b>Probe_RADII-C-2-3/4\"/&gt;</b>		9.19	2.75	105.00
		<b>Probe_IL_BS_Cent</b> Probe 2-3/4\"/>		2.88	2.75	10.00
CCL	6.51					
DCCL	6.51					
		<b>Probe_CCL_GR-2.75\"/&gt;</b>		4.54	2.75	55.00
GR	3.77					
		<b>Probe_IL_BS_Cent</b> Probe 2-3/4\"/>		2.88	2.75	10.00
Dataset: 0512341938_Anadarko_Meguire 29C-16HZ_12-10-15_RBL.db: field/well/run1/main Total Length: 23.40 ft Total Weight: 194.00 lb O.D. 2.75 in						

# Gamma Ray Calibration Report

Serial Number: FW1212-026  
Tool Model: 2.75"Digital  
Performed: Thu Dec 10 14:36:45 2015

Calibrator Value:	1.0	GAPI
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Background Reading: 0.0 cps

Calibrator Reading: 1.0 cps

Sensitivity: 0.6000 GAPI/cps

## Segmented Cement Bond Log Calibration Report

Serial Number: FW1305-096  
Tool Model: 2-3/4"

Calibration Casing Diameter: 5.500 in

Calibration Sucking Diameter:	0.000	in
Calibration Depth:	20.096	ft

Master Calibration, performed Thu Dec 10 14:30:04 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.002	0.647	0.800	71.921	110.162	0.594
CAL	0.002	0.671				
5'	0.002	0.595	0.800	71.921	119.906	0.588
SUM						
S1	0.001	0.651	0.000	100.000	154.025	-0.224
S2	0.002	0.652	0.000	100.000	153.762	-0.255
S3	0.002	0.653	0.000	100.000	153.636	-0.279
S4	0.002	0.653	0.000	100.000	153.489	-0.294
S5	0.002	0.653	0.000	100.000	153.572	-0.304
S6	0.002	0.652	0.000	100.000	153.852	-0.321
S7	0.002	0.652	0.000	100.000	153.898	-0.310
S8	0.002	0.651	0.000	100.000	154.136	-0.305


Internal Reference Calibration, performed Thu Dec 10 14:31:42 2015:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.002	0.670	0.002	0.671	1.001	0.000

Air Zero Calibration, performed Thu Dec 10 14:30:31 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	0.001	0.000	0.000
S2	0.002	0.000	0.000
S3	0.001	0.000	0.000

S3	0.001	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

	Company	Kerr-McGee Oil and Gas Onshore LP
	Well	Meguire 29C-16HZ
	Field	Wattenberg
	County	Weld
	State	Colorado