



Radial Cement Bond
Gamma Ray
Casing Collar Log

Company	Kerr-Mcgee Oil & Gas Onshore, L.P.			Location:	API # : 05-123-20771	Other Services
Well	Sutton Founders 1					None
Field	Wattenberg					
County	Weld					
State	Colorado					
Permanent Datum	SEC 8	TWP 1N	RGE 66W			Elevation
Log Measured From				Ground Level	Elevation	4953'
Drilling Measured From				Kelly Bushing	12 FT	K.B. 4965'
				Kelly Bushing		D.F. 4964'
						G.L. 4953'

Date	21-Feb-2017		
Run Number	One		
Depth Driller	8070 FT		
Depth Logger	7310 FT		
Bottom Logged Interval	7305 FT		
Top Log Interval	Surface		
Open Hole Size	8.750"		
Type Fluid	Water		
Density / Viscosity	8.34 lb/gal		
Max. Recorded Temp.	238°F		
Estimated Cement Top	492 FT		
Time Well Ready	ROA		
Time Logger on Bottom	08:00		
Equipment Number	HD-0324		
Location	Fort Lupton, CO		
Recorded By	Jack Amidei		
Witnessed By	Traux Deal		

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	8 5/8	24	---	Surface	921 FT		
Intermediate #1	4 1/2	11.6	---	Surface	8048 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 reported at 12 FT
Adjusted log -1 FT to correlate with Kelly Bushing
Log ran from 7305 FT to Surface
Log ran with 0 PSI Surface Induced Pressure
Logging Tools were clean and free of debris upon completions of operations

Thank you for choosing Reliance Oilfield Services, LLC.!!

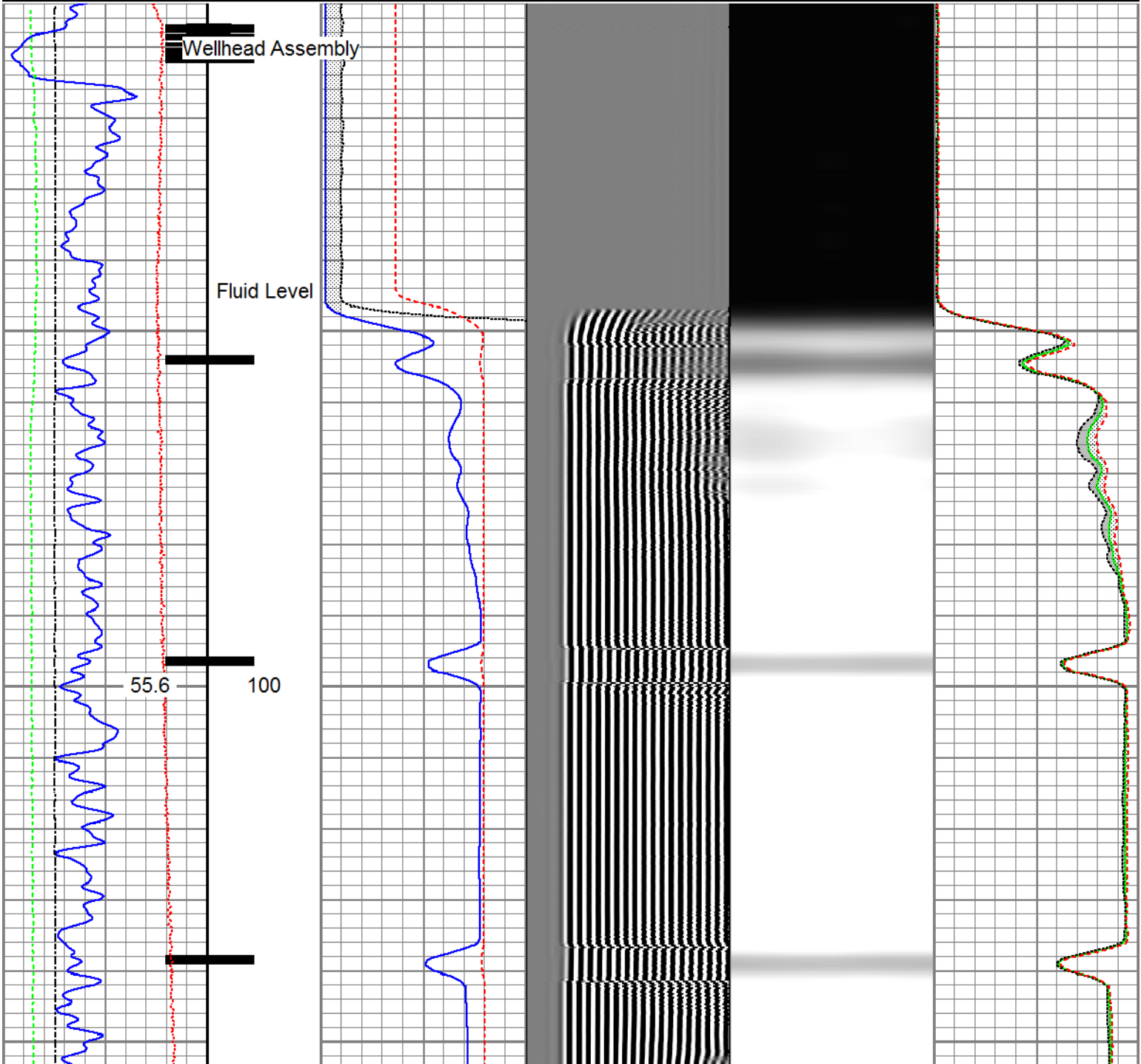


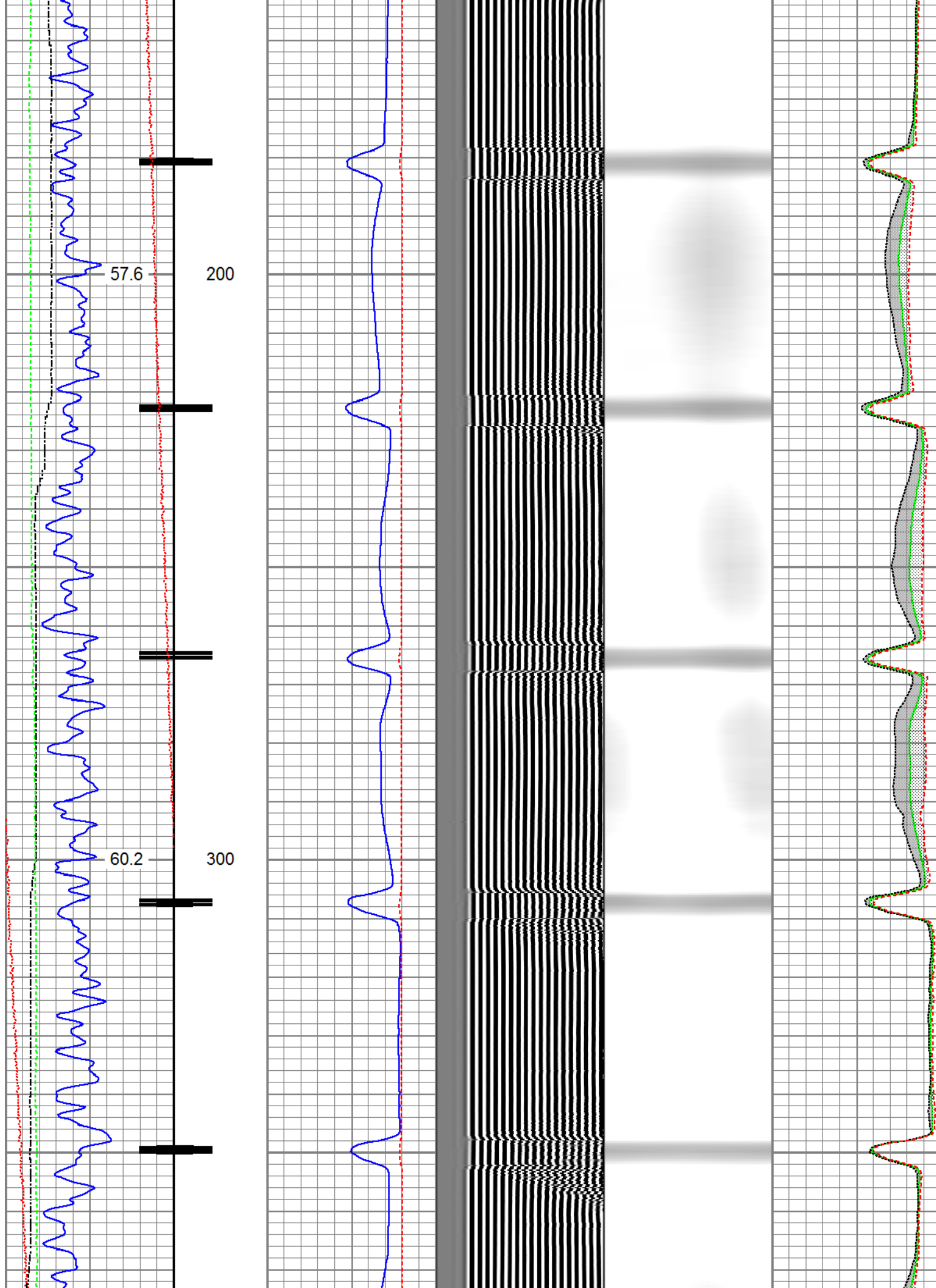
Main Pass

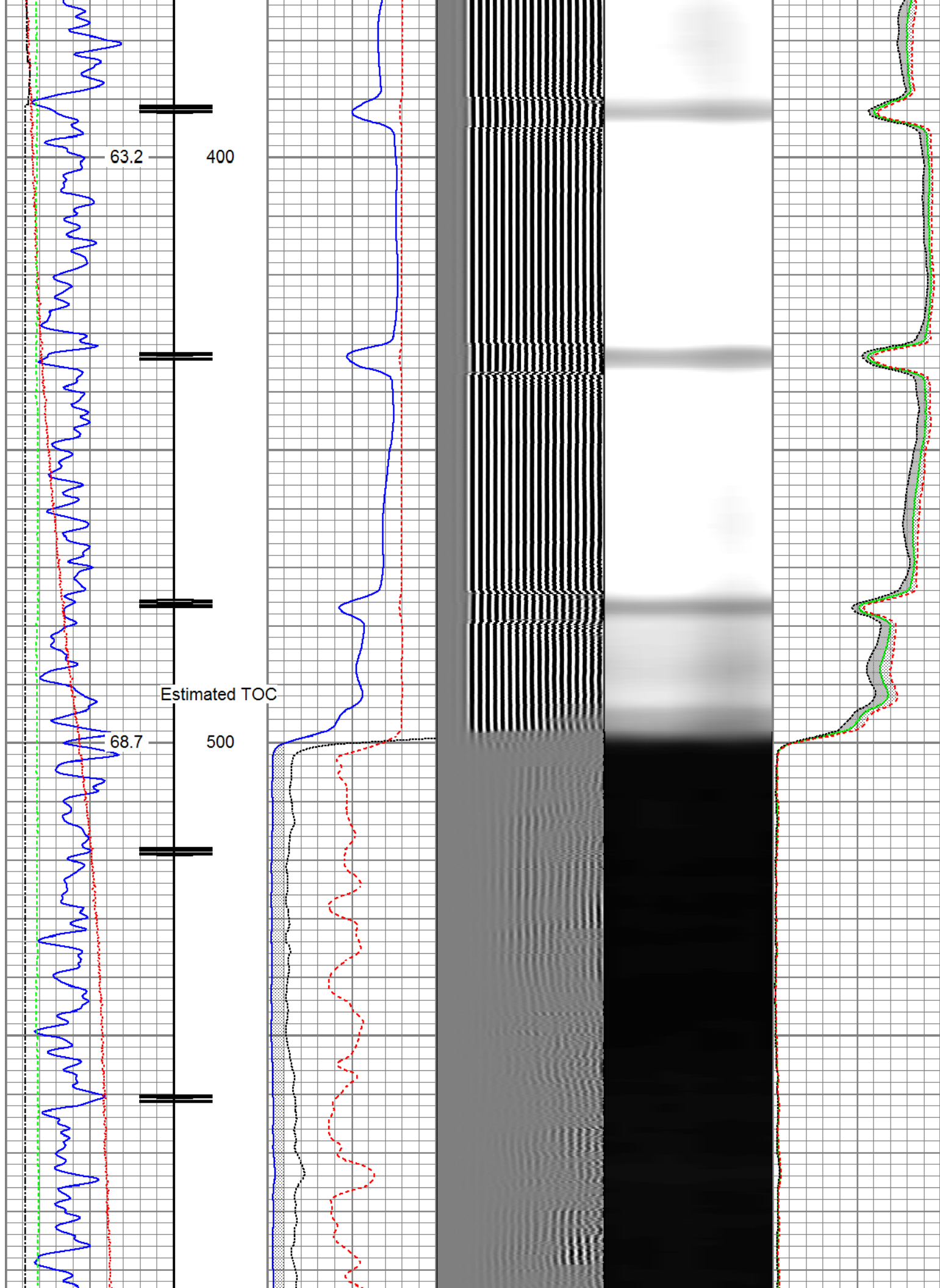
Recorded With 0 PSI Surface Induced Pressure

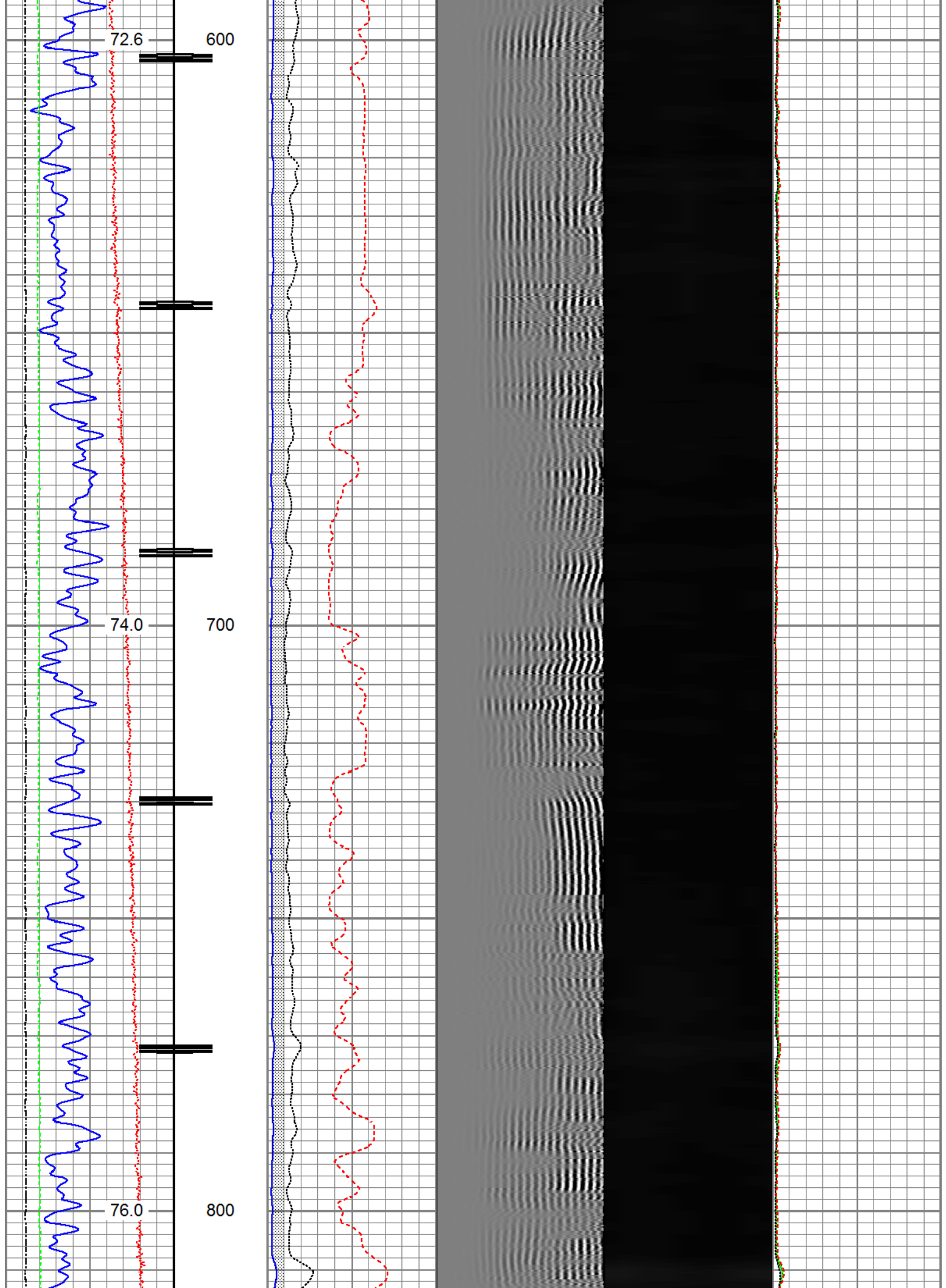
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Dataset Pathname	pass8.1
Presentation Format	ros_radrii
Dataset Creation	Tue Feb 21 09:18:09 2017
Charted by	Depth in Feet scaled 1:240

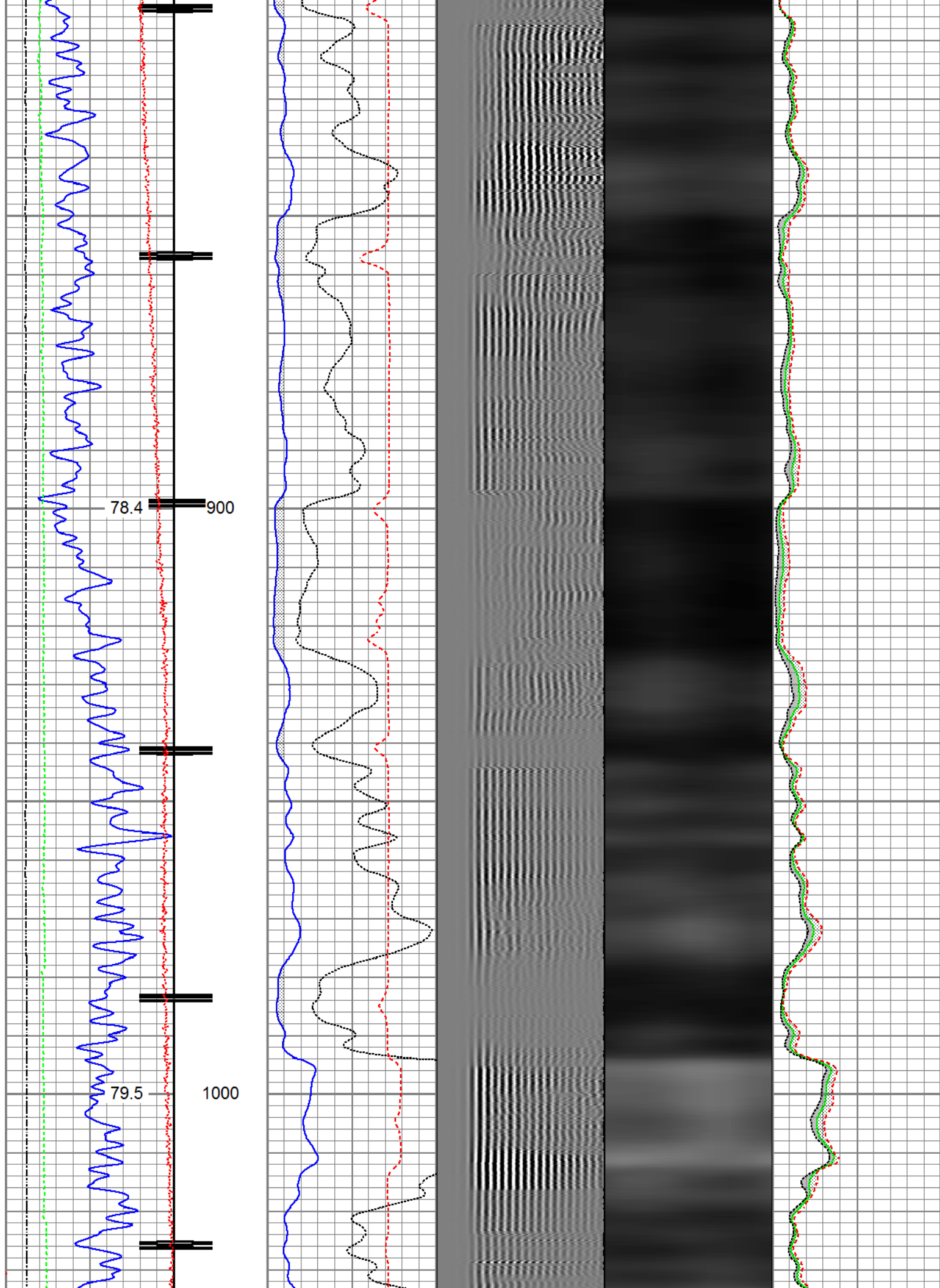
Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120	0 (mV) 100	200 1200		0 100
Casing Collar Locator	3' Amplitude x 5			Minimum Amplitude
	0 (mV) 20			0 100
Temperature	3' Travel Time			Maximum Amplitude
0 (degF) 20	650 (usec) 150			0 100
Line Speed				
-150 (ft/min)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

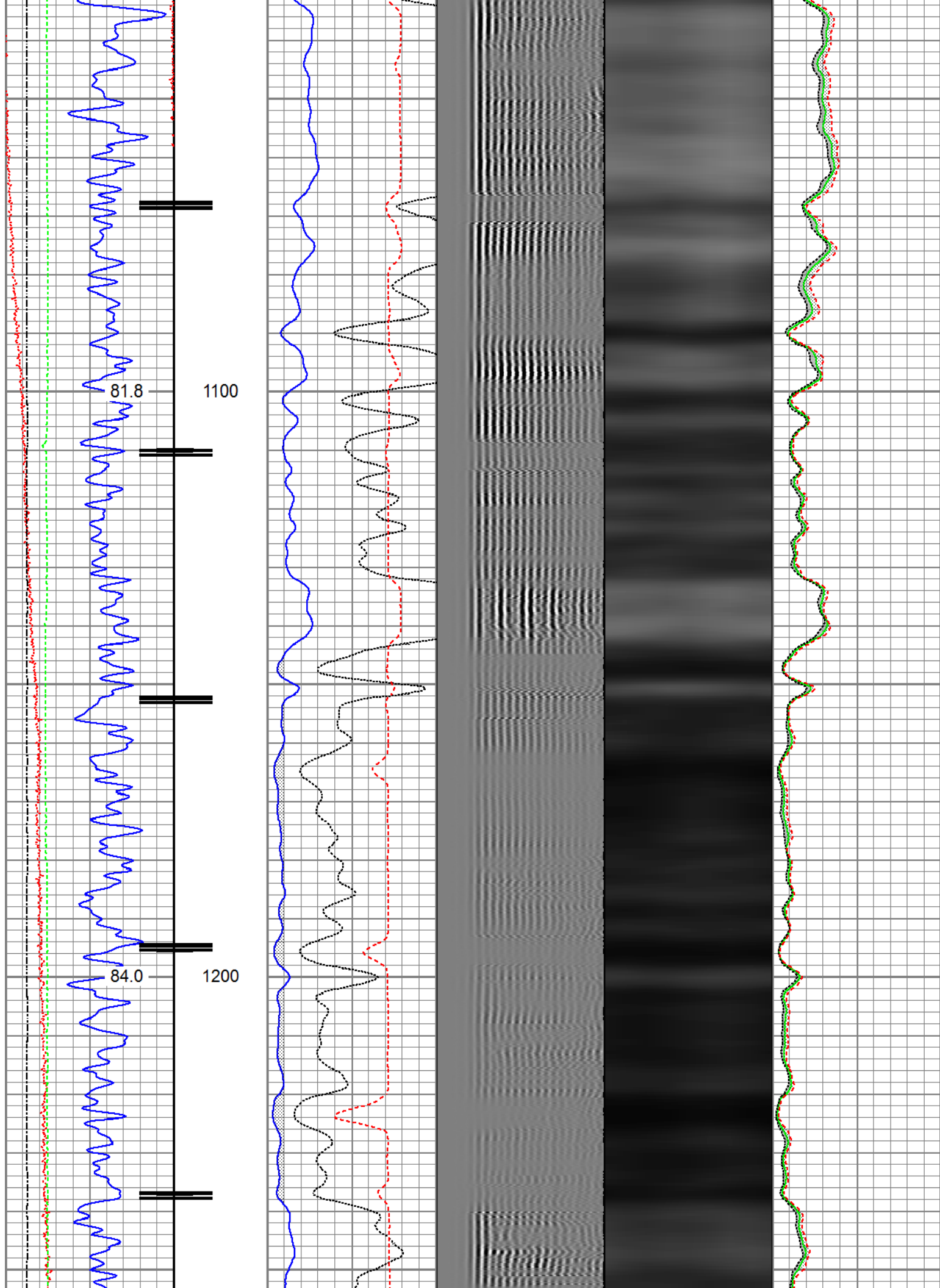


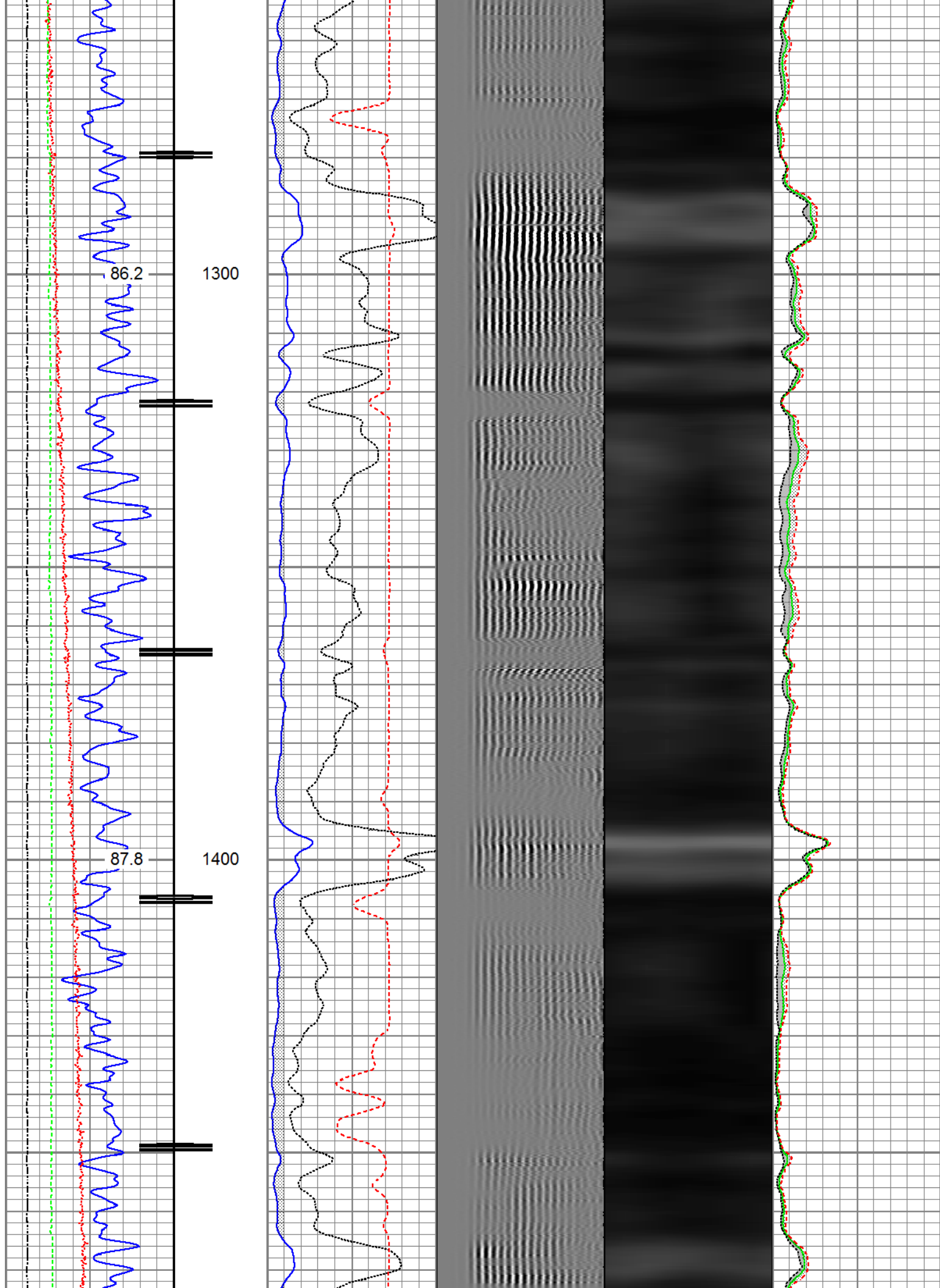


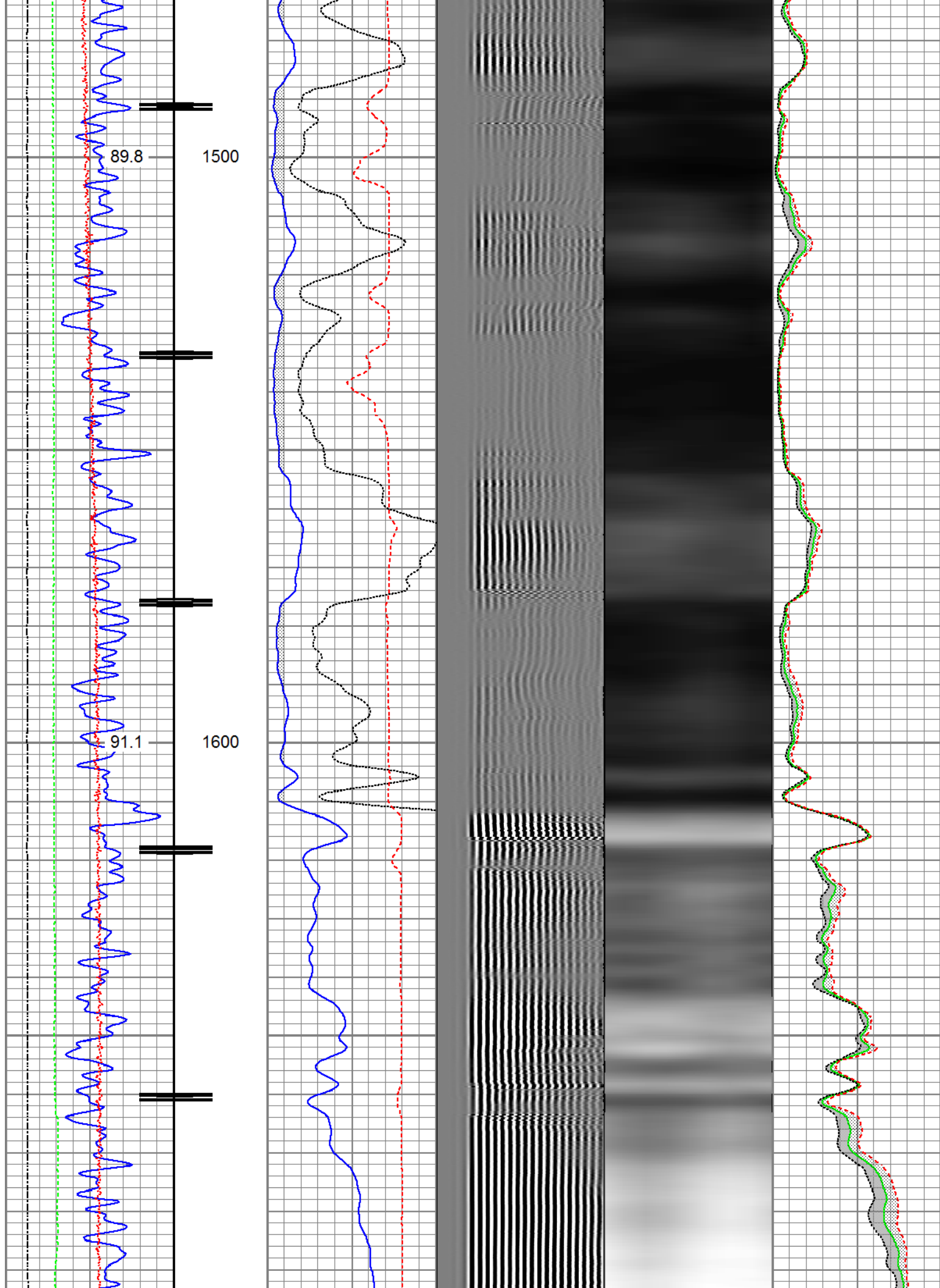


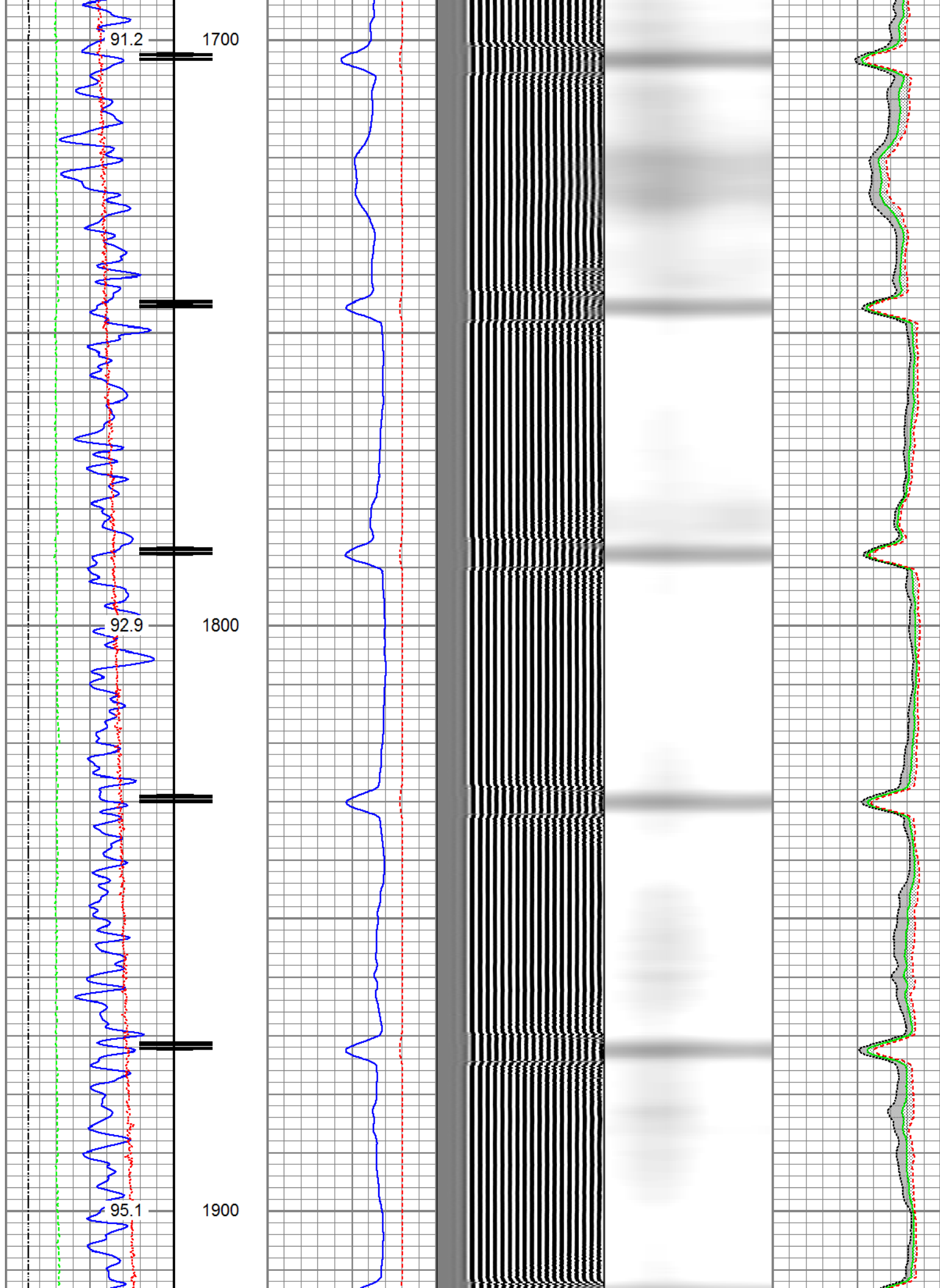


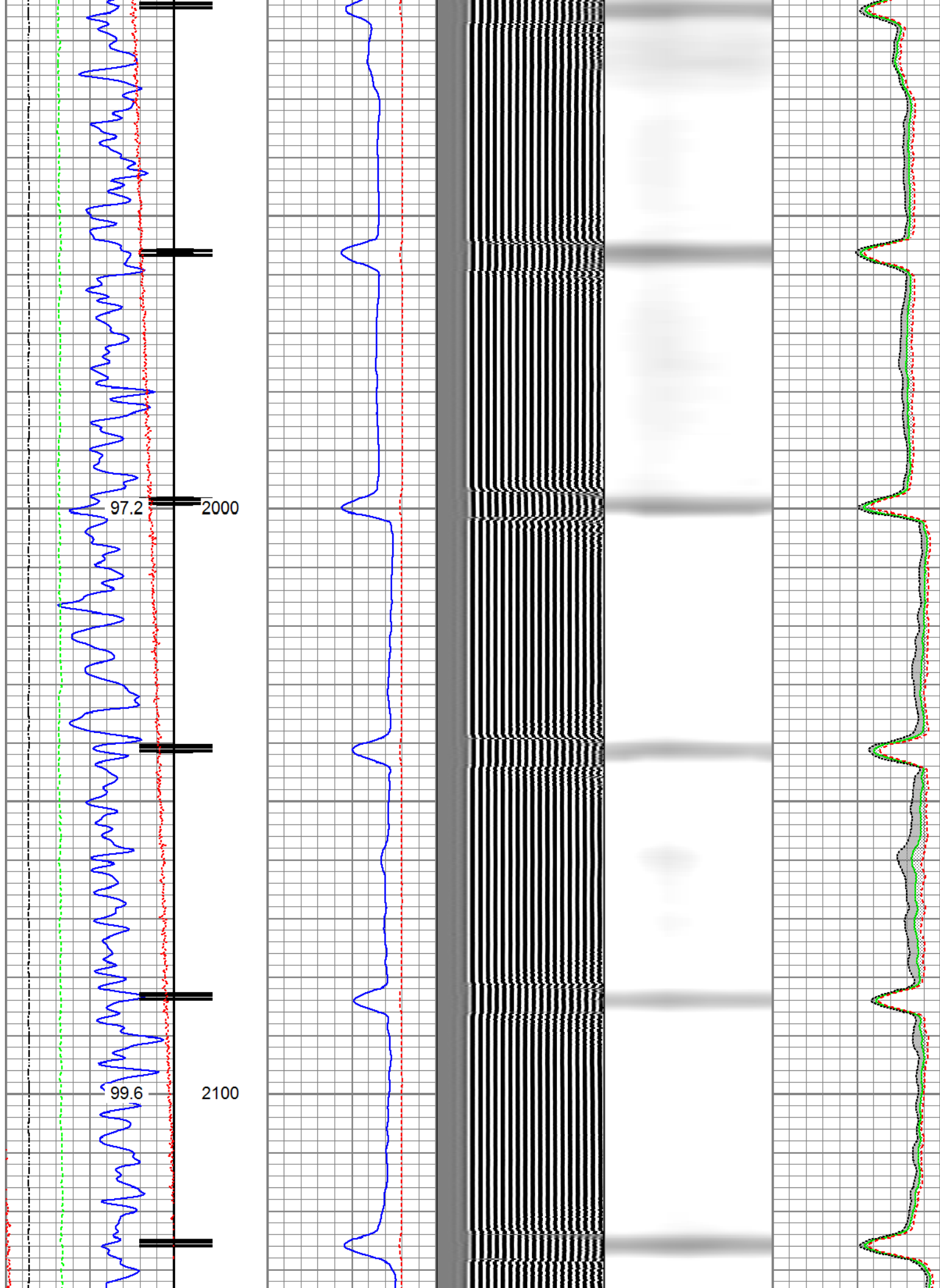


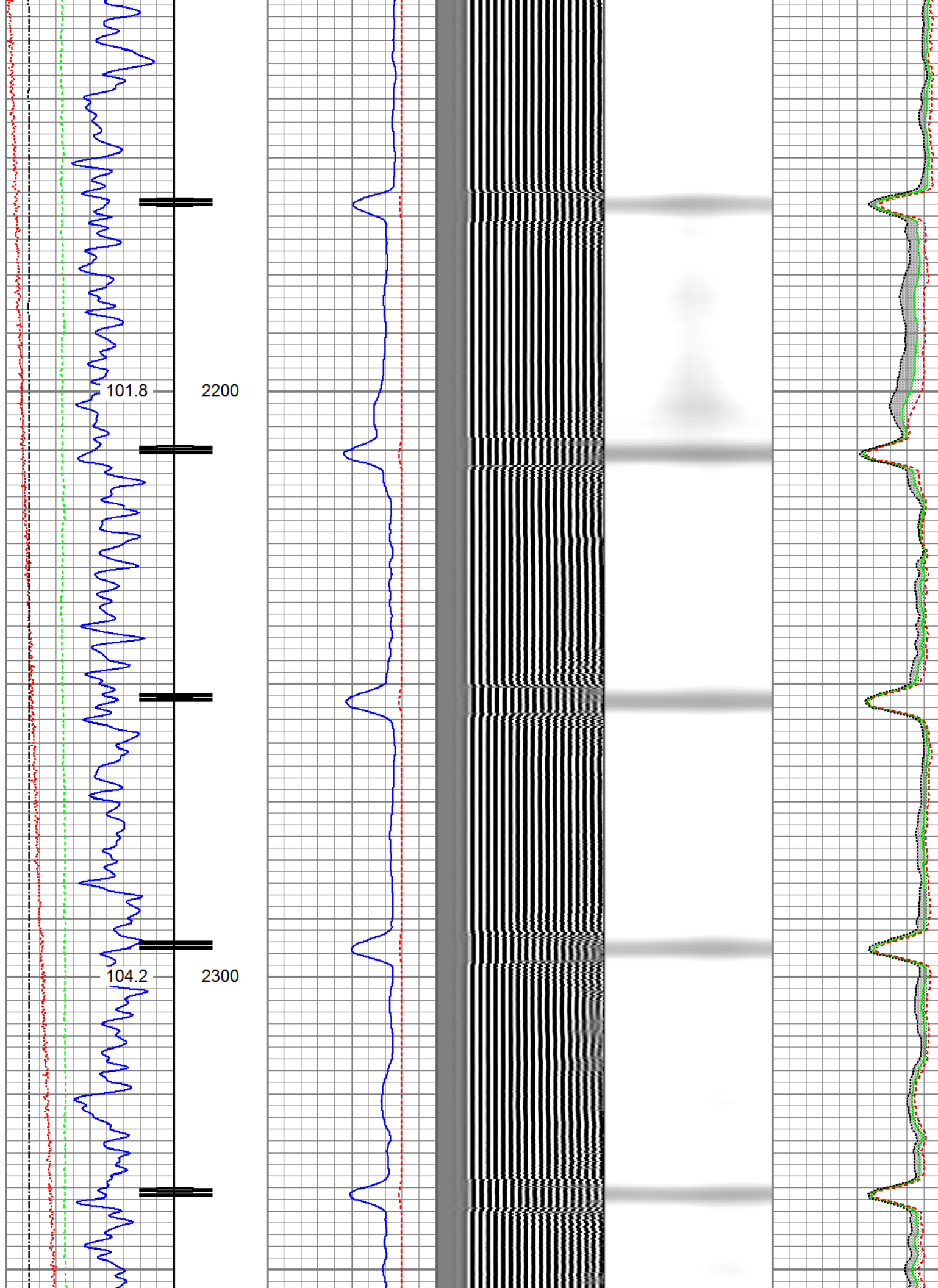


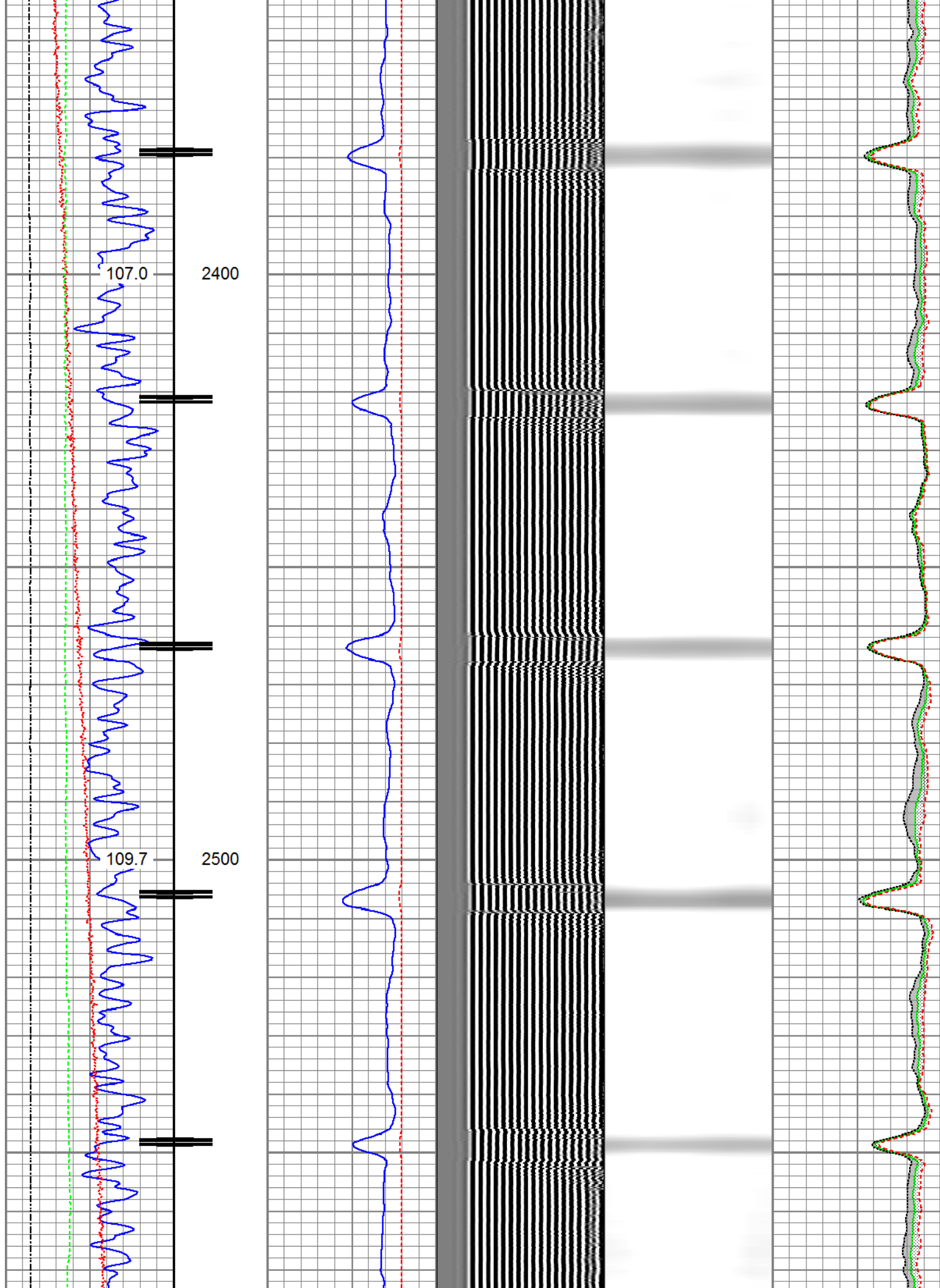


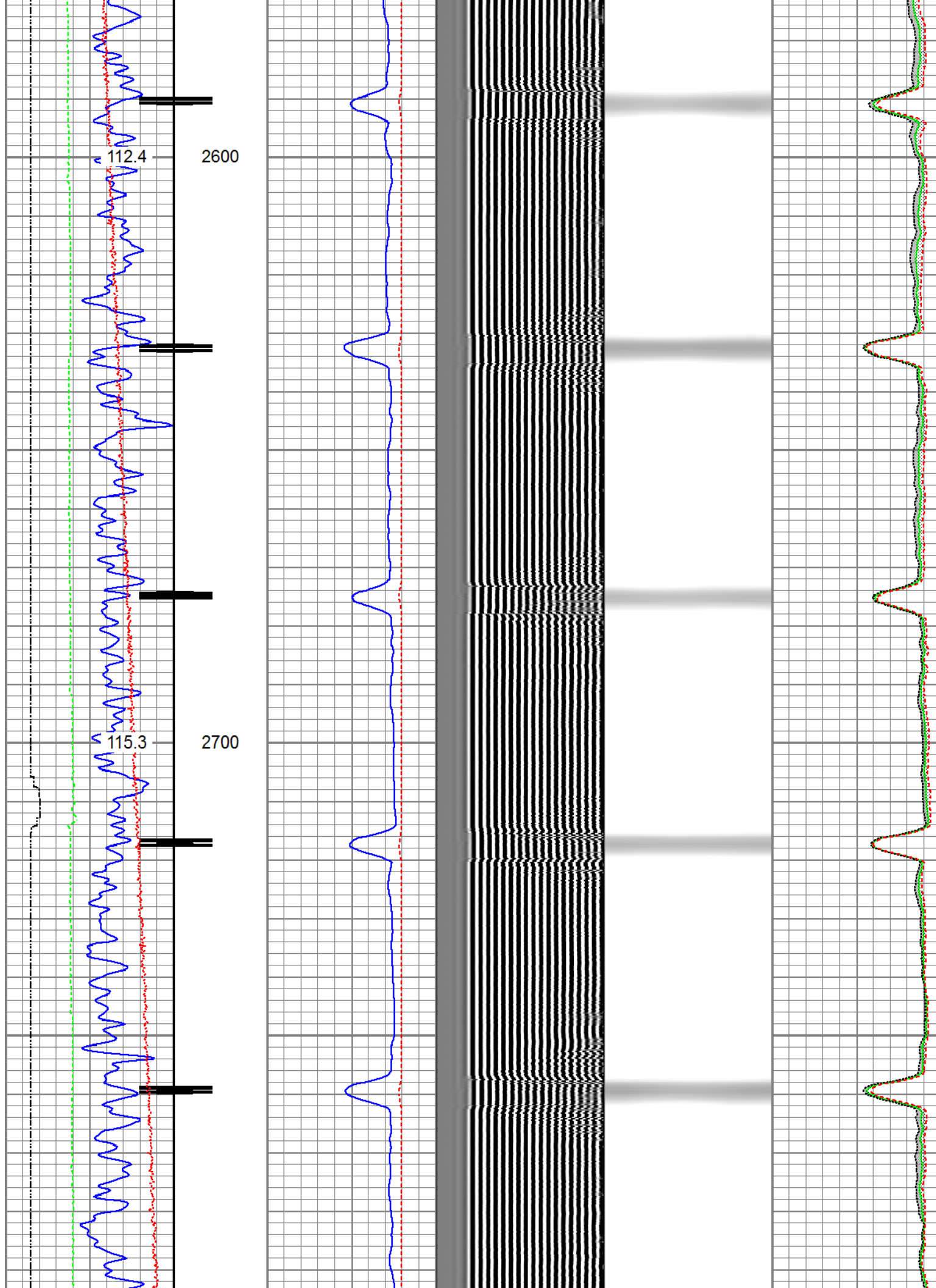


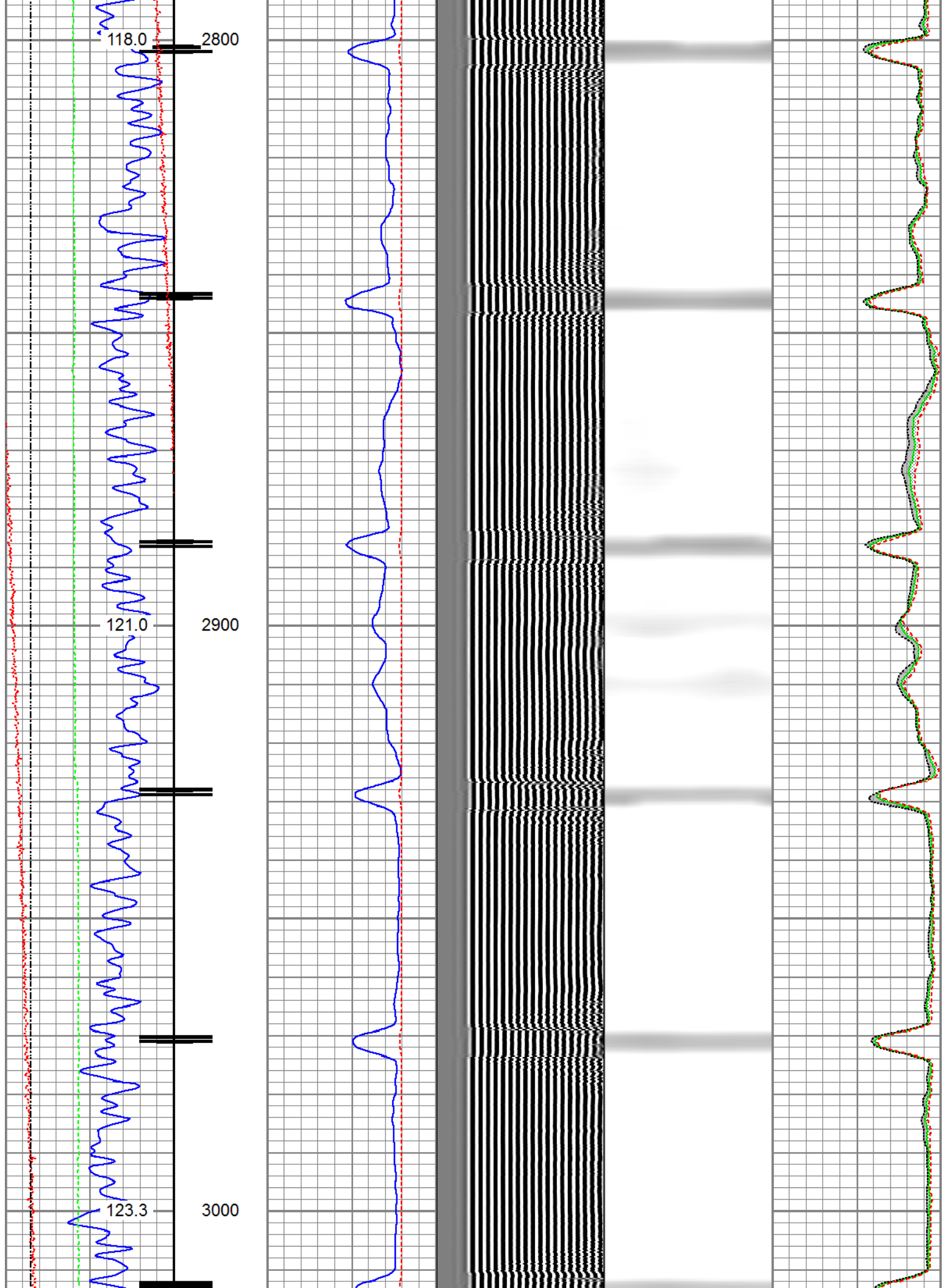


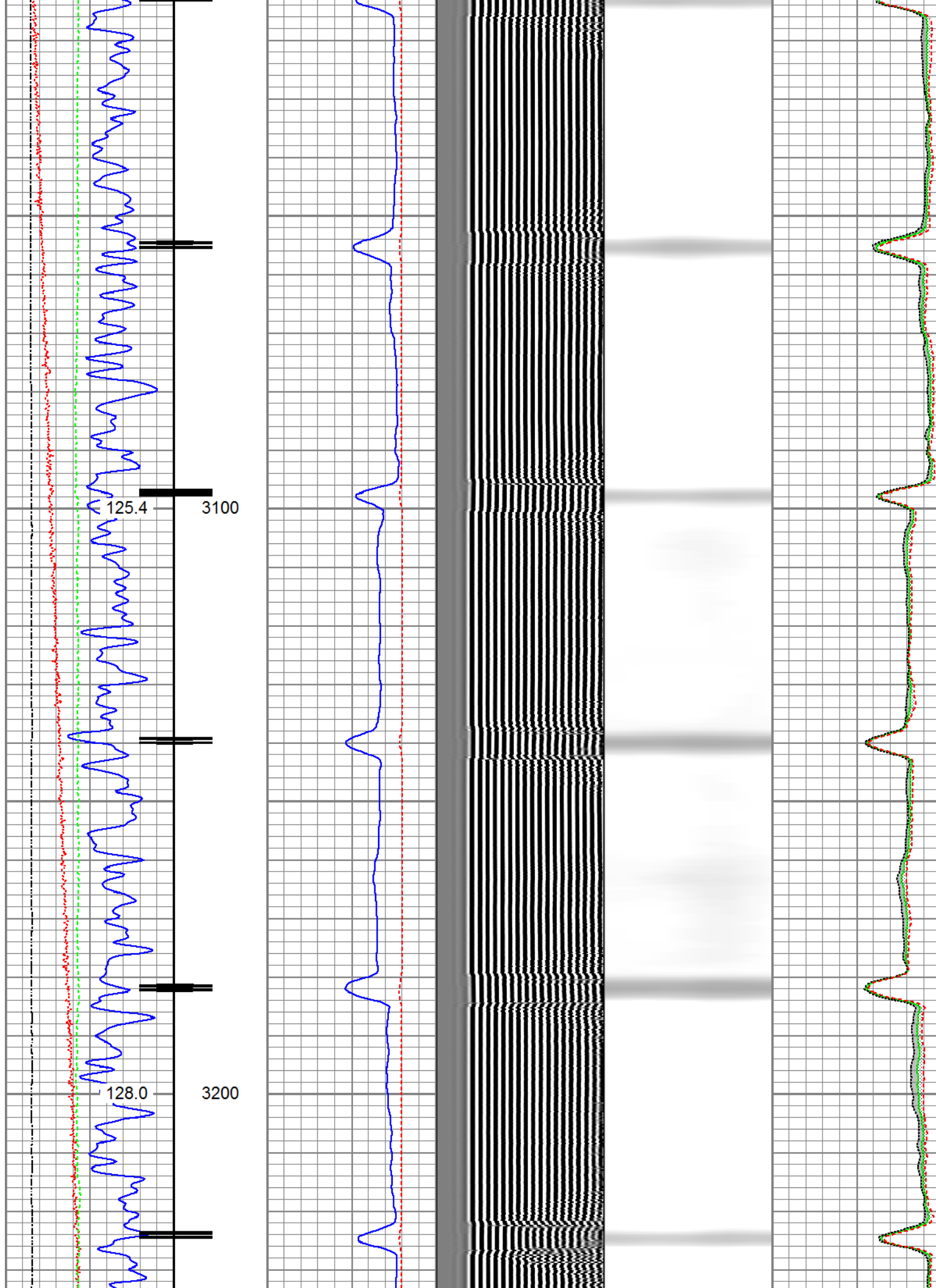


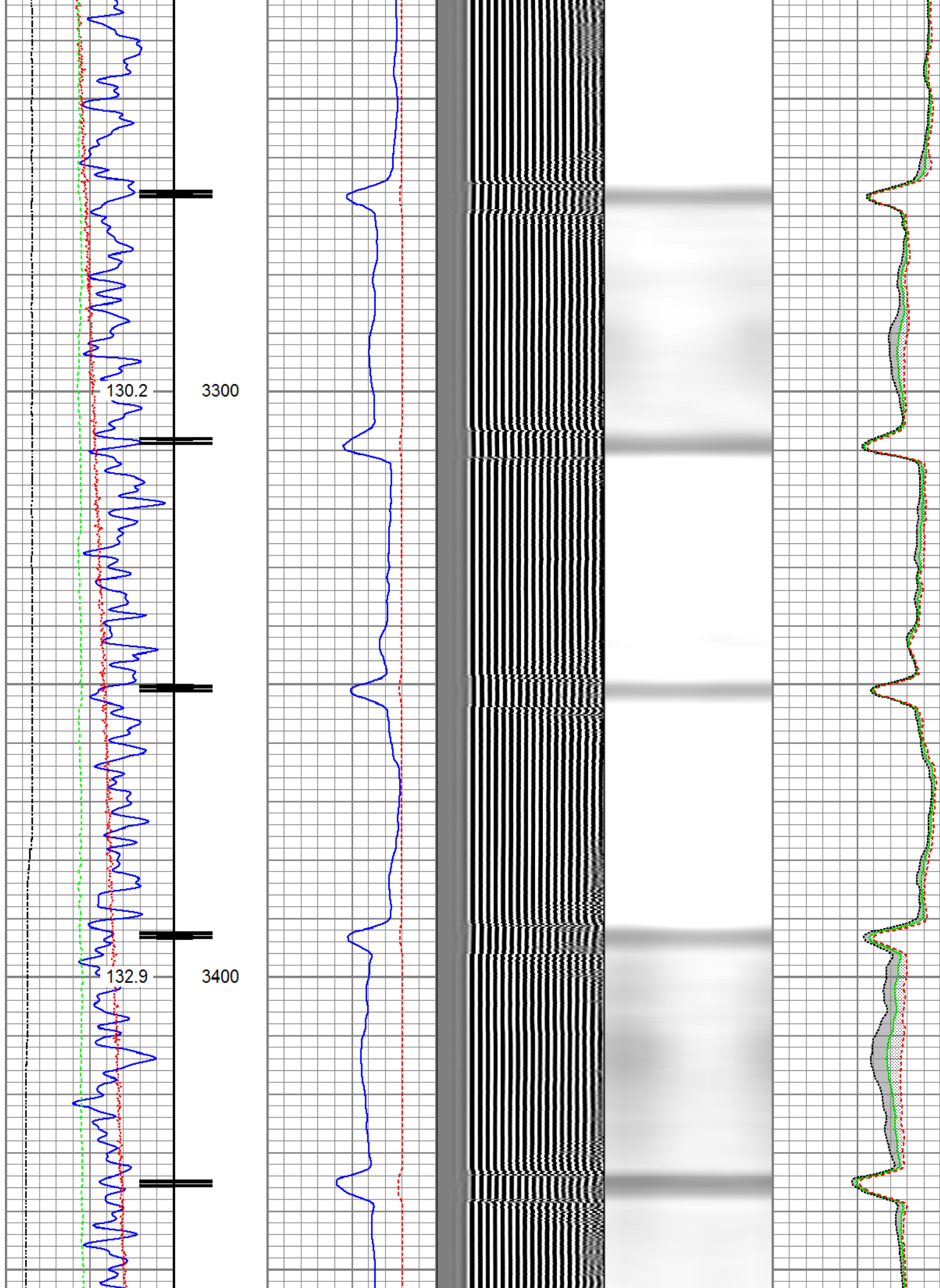


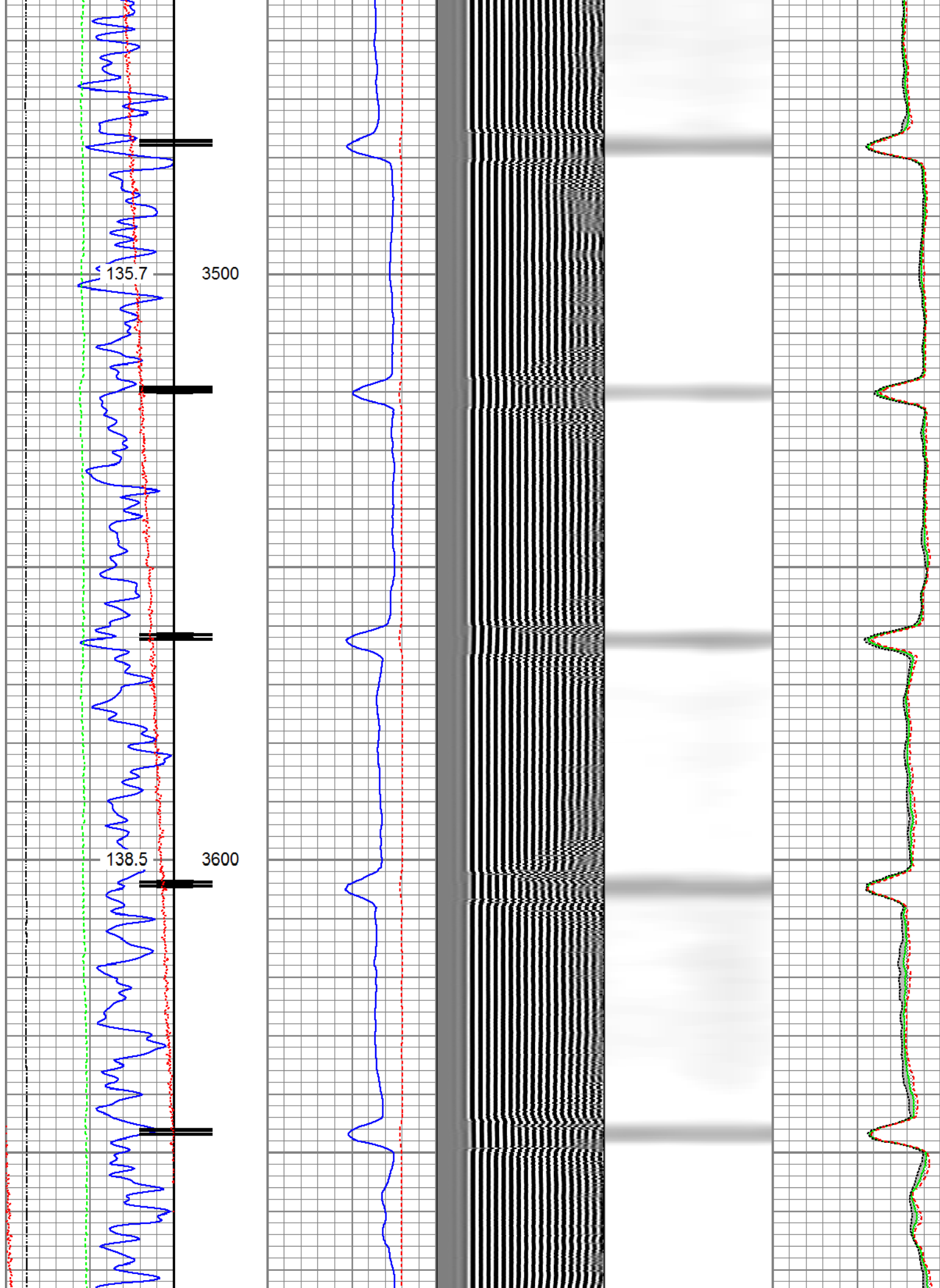


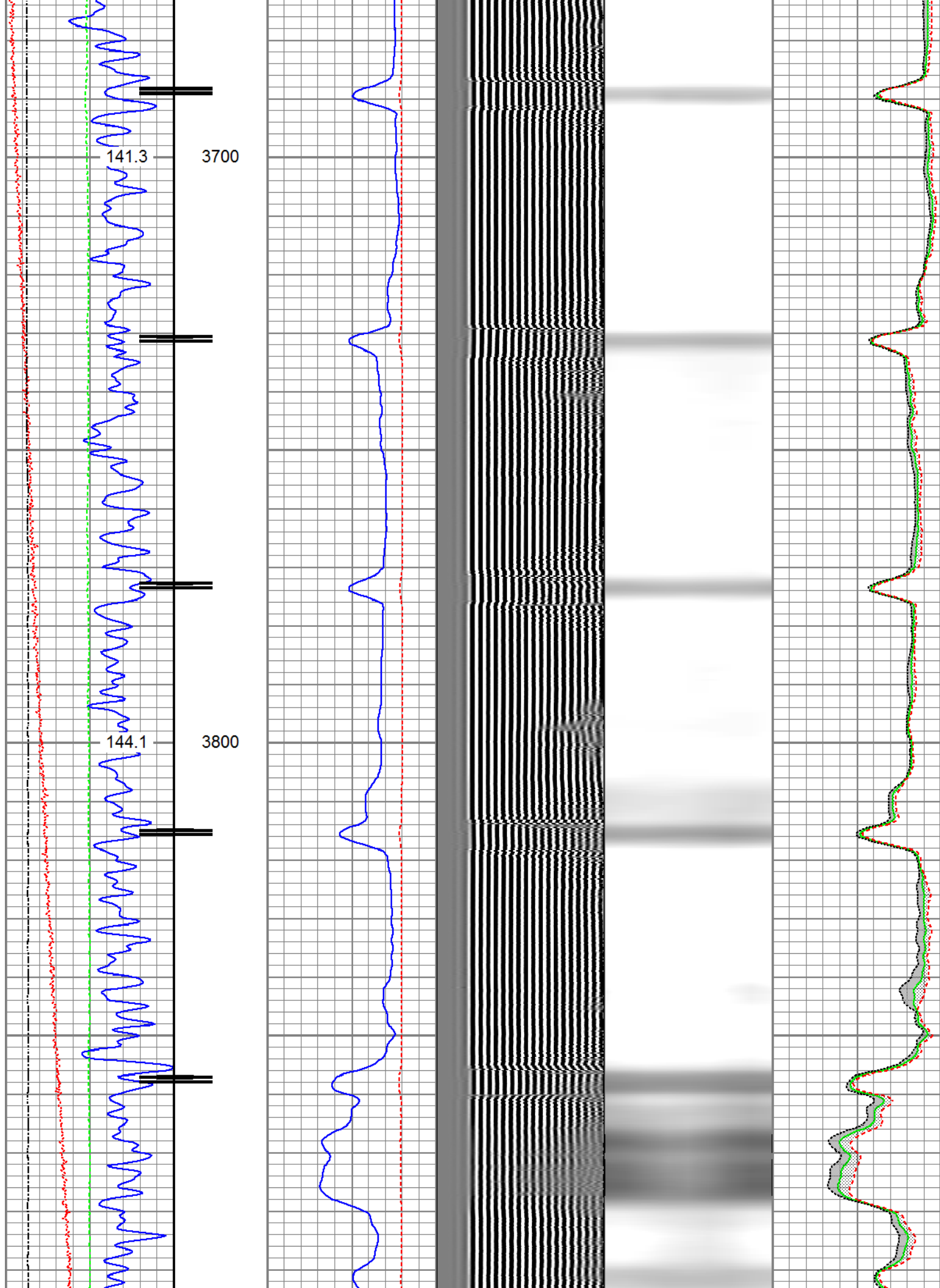


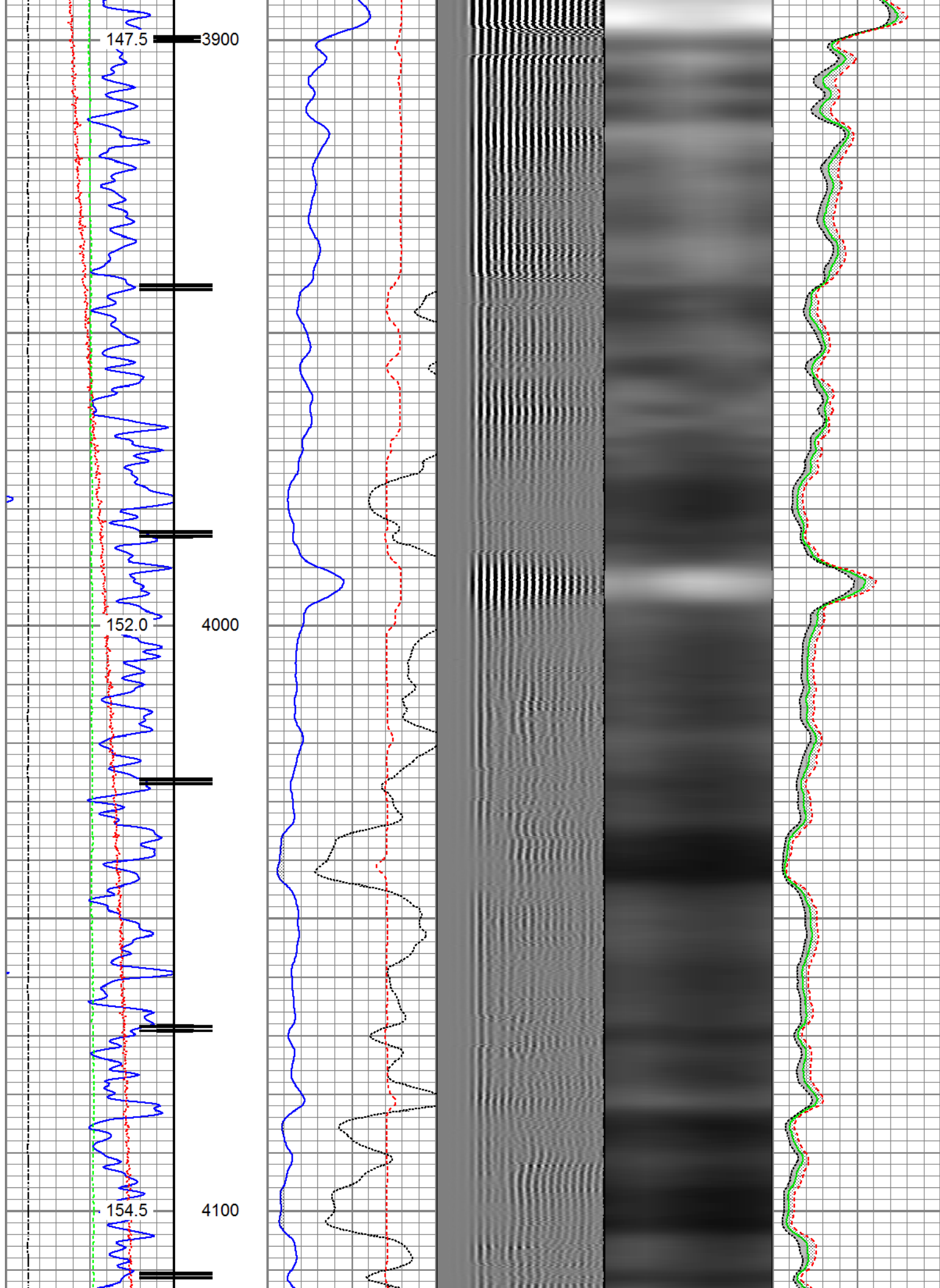


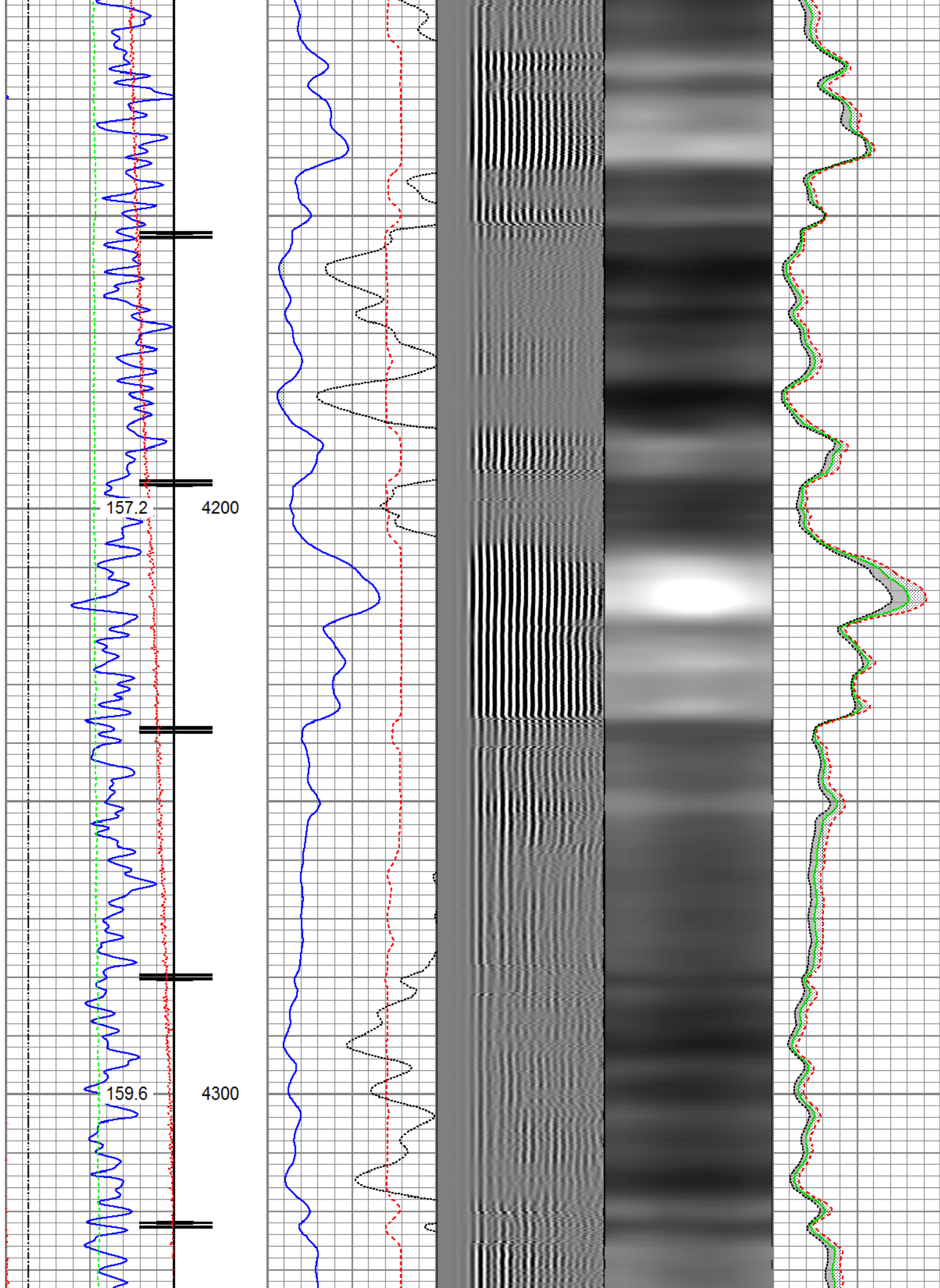


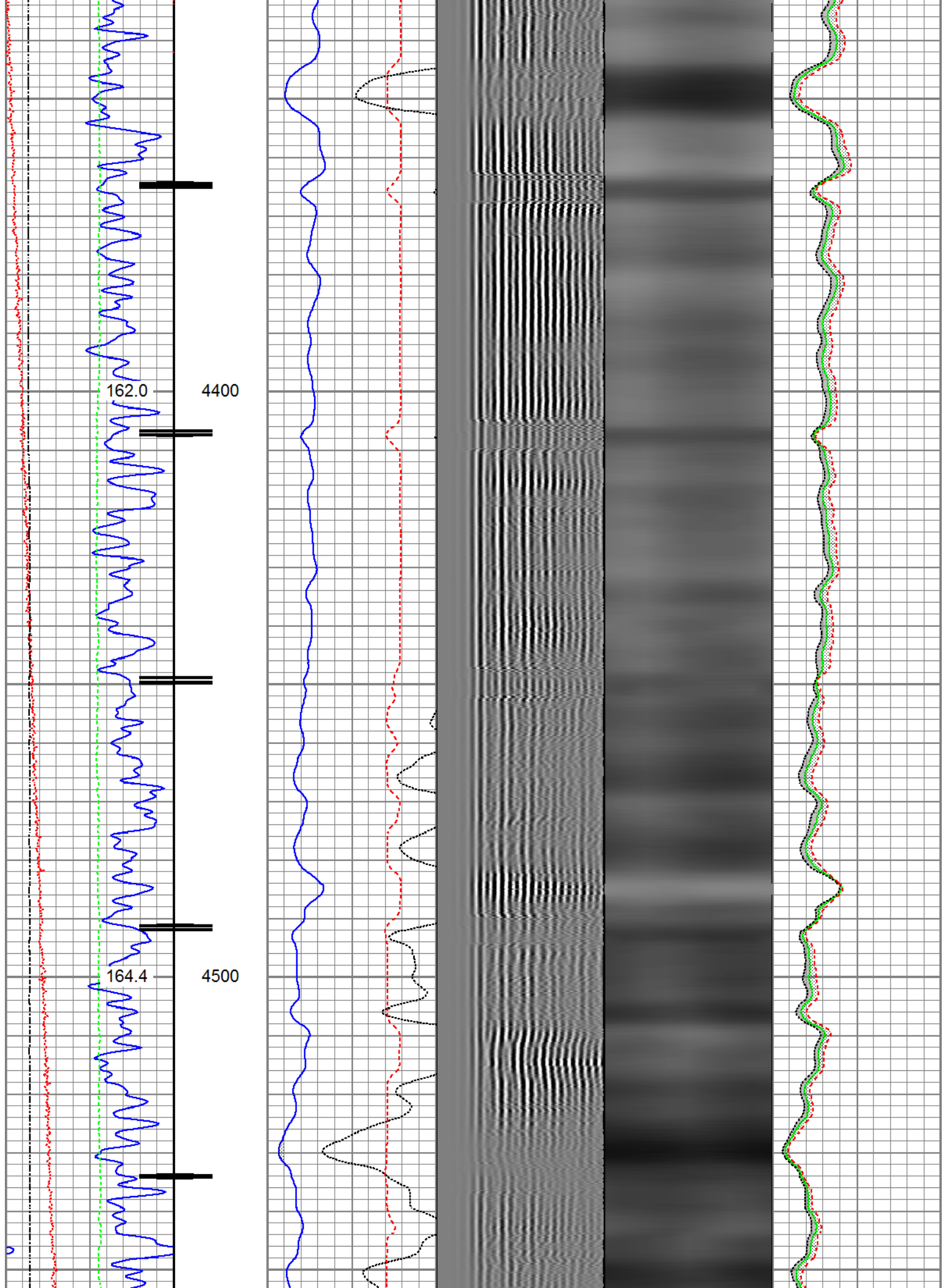


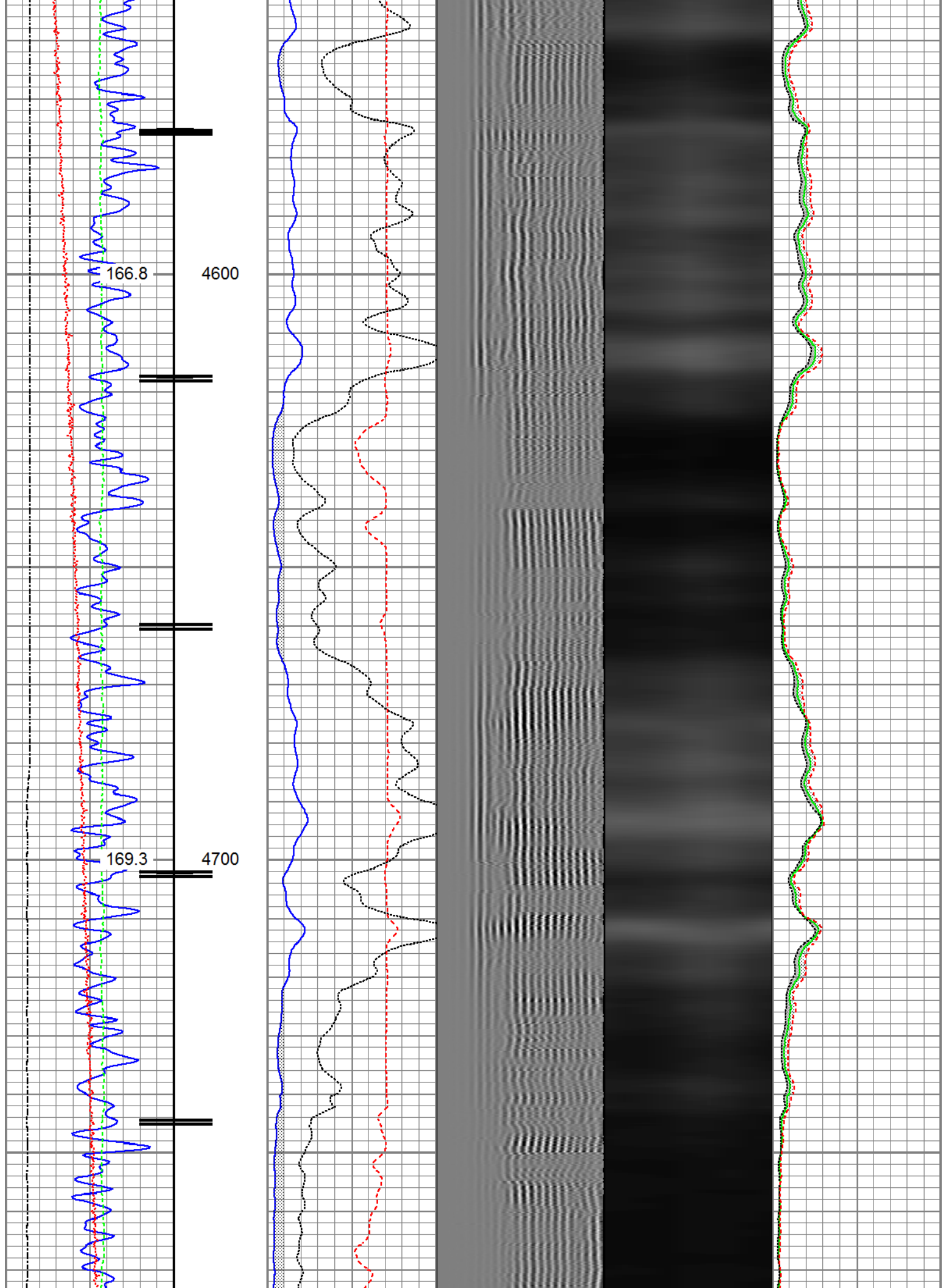


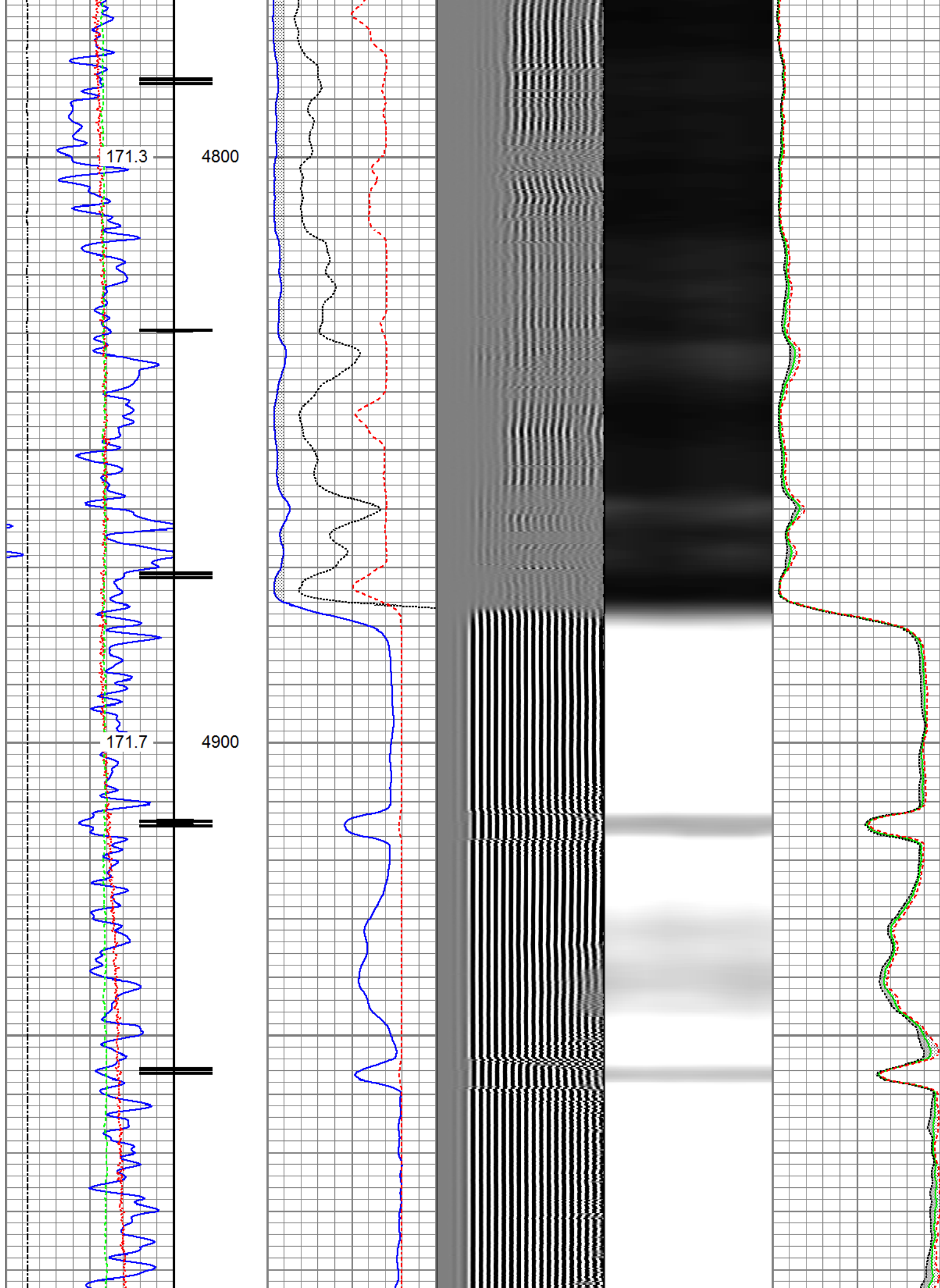


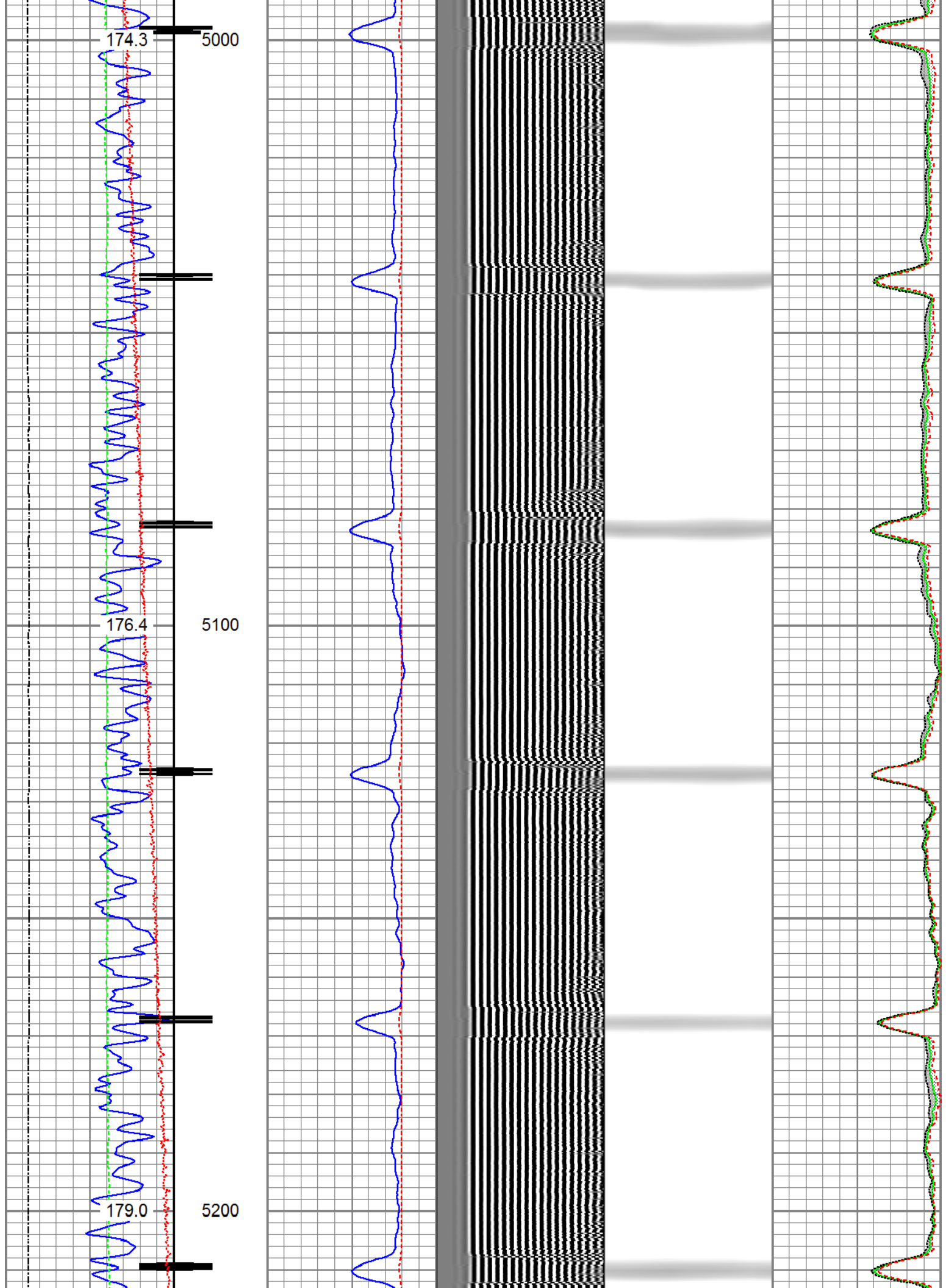


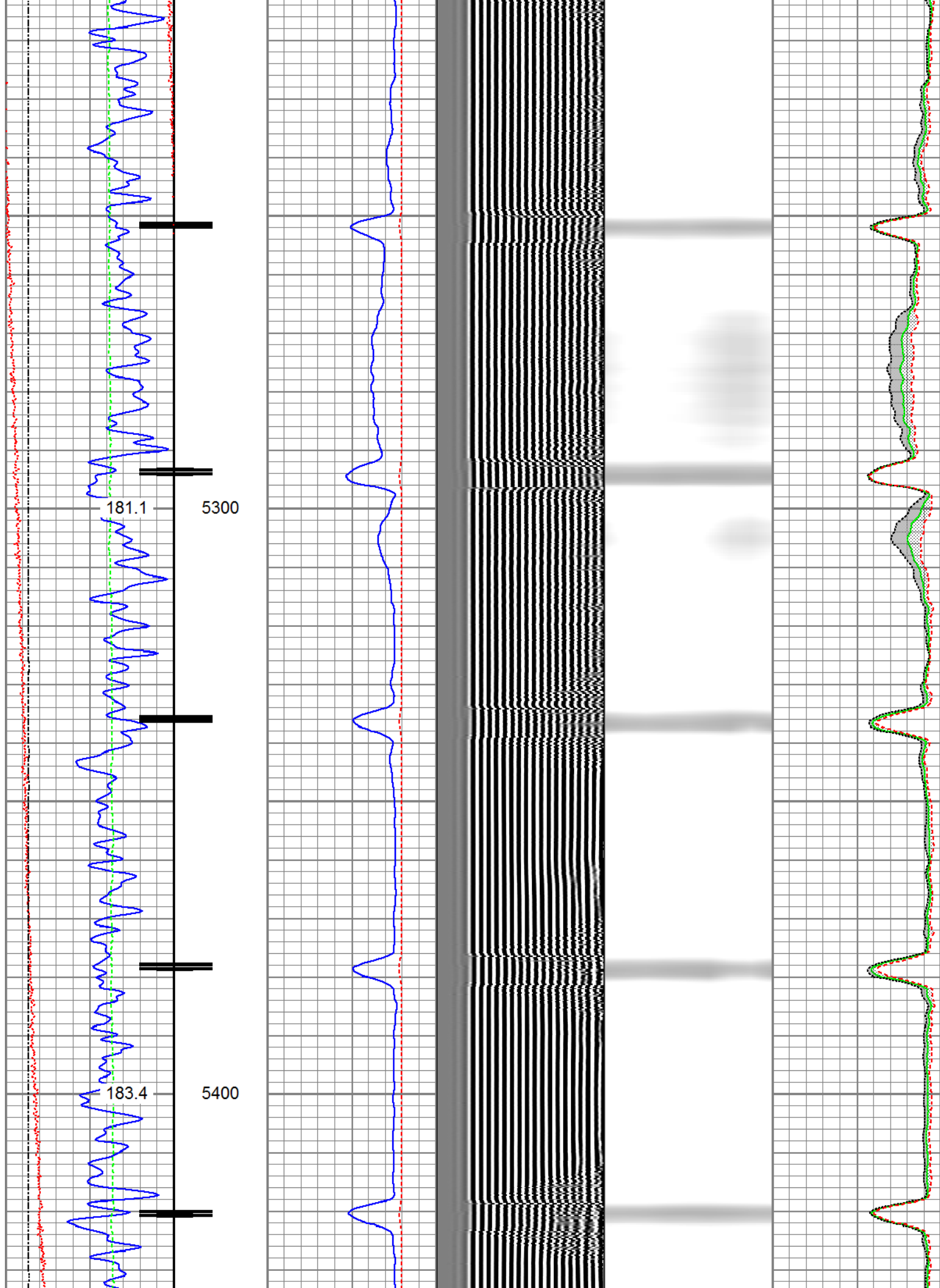


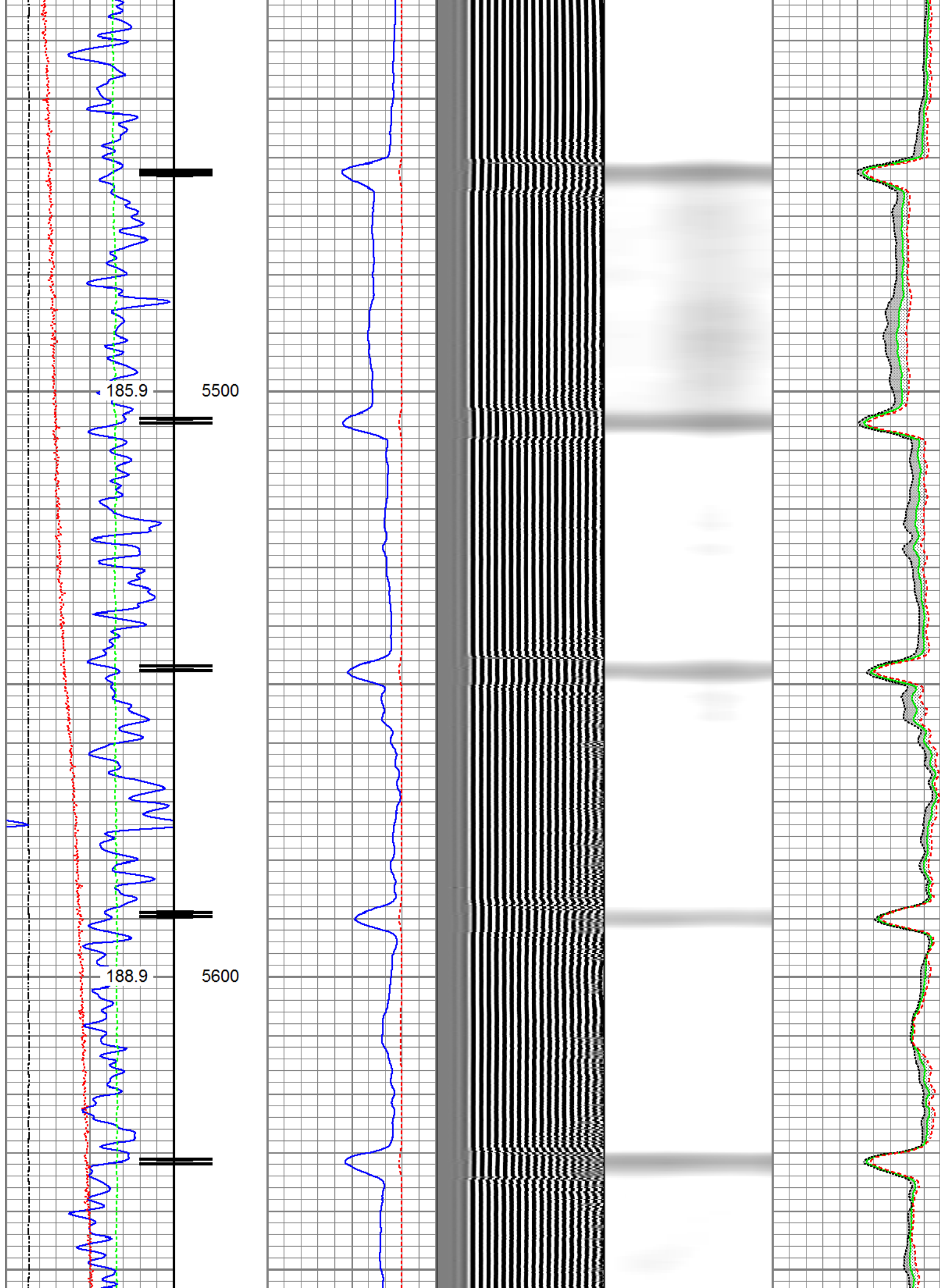


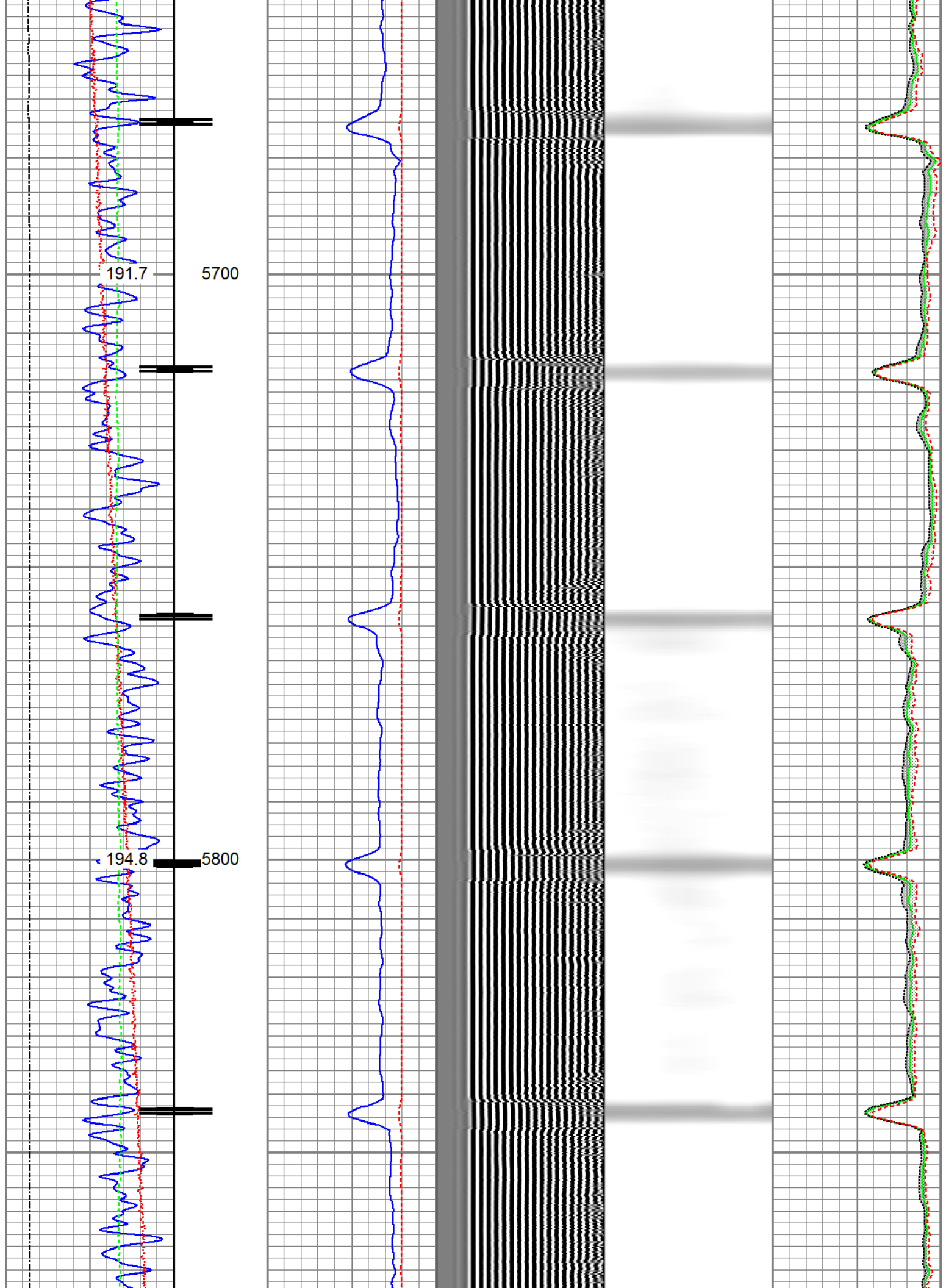


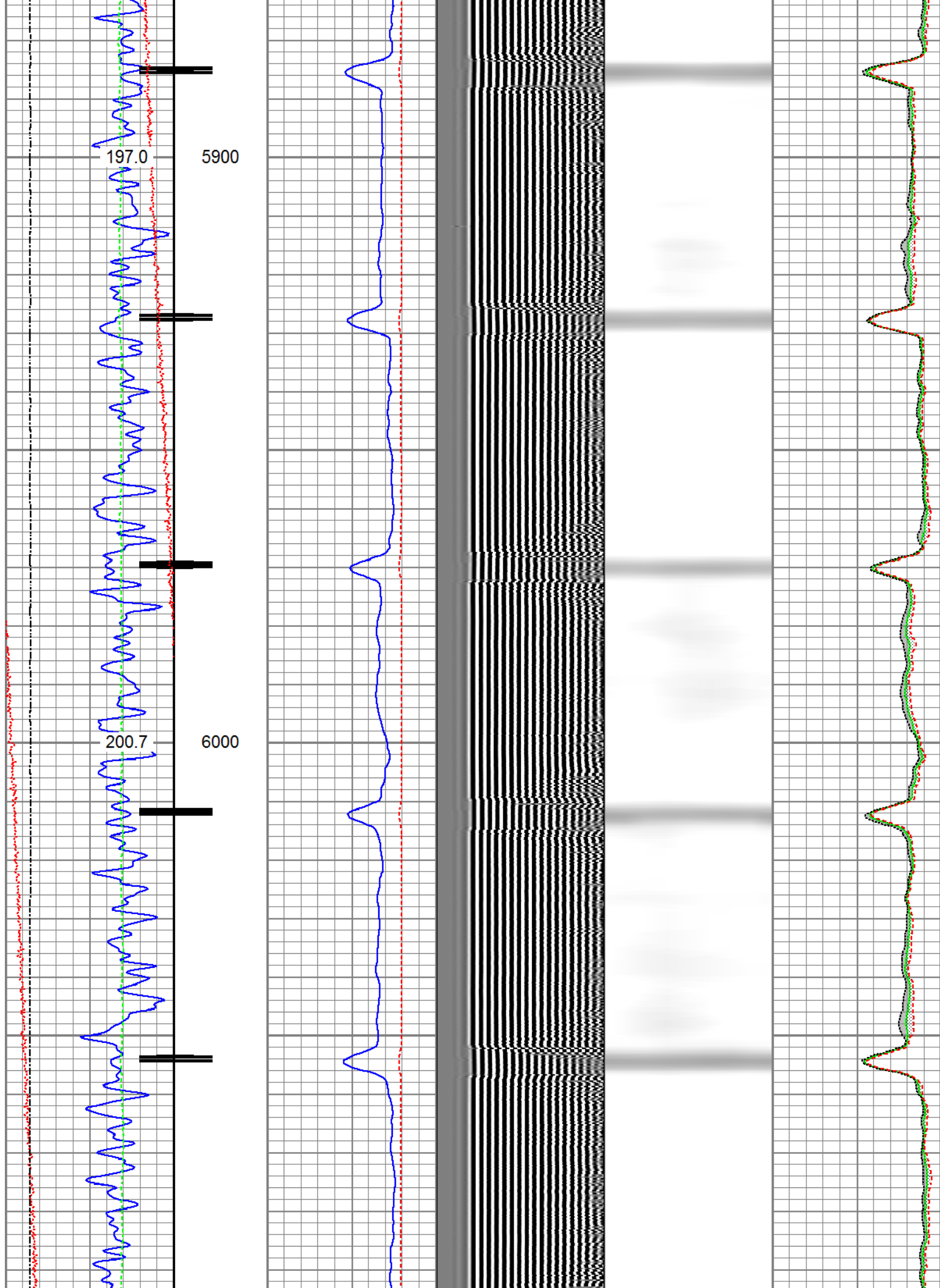


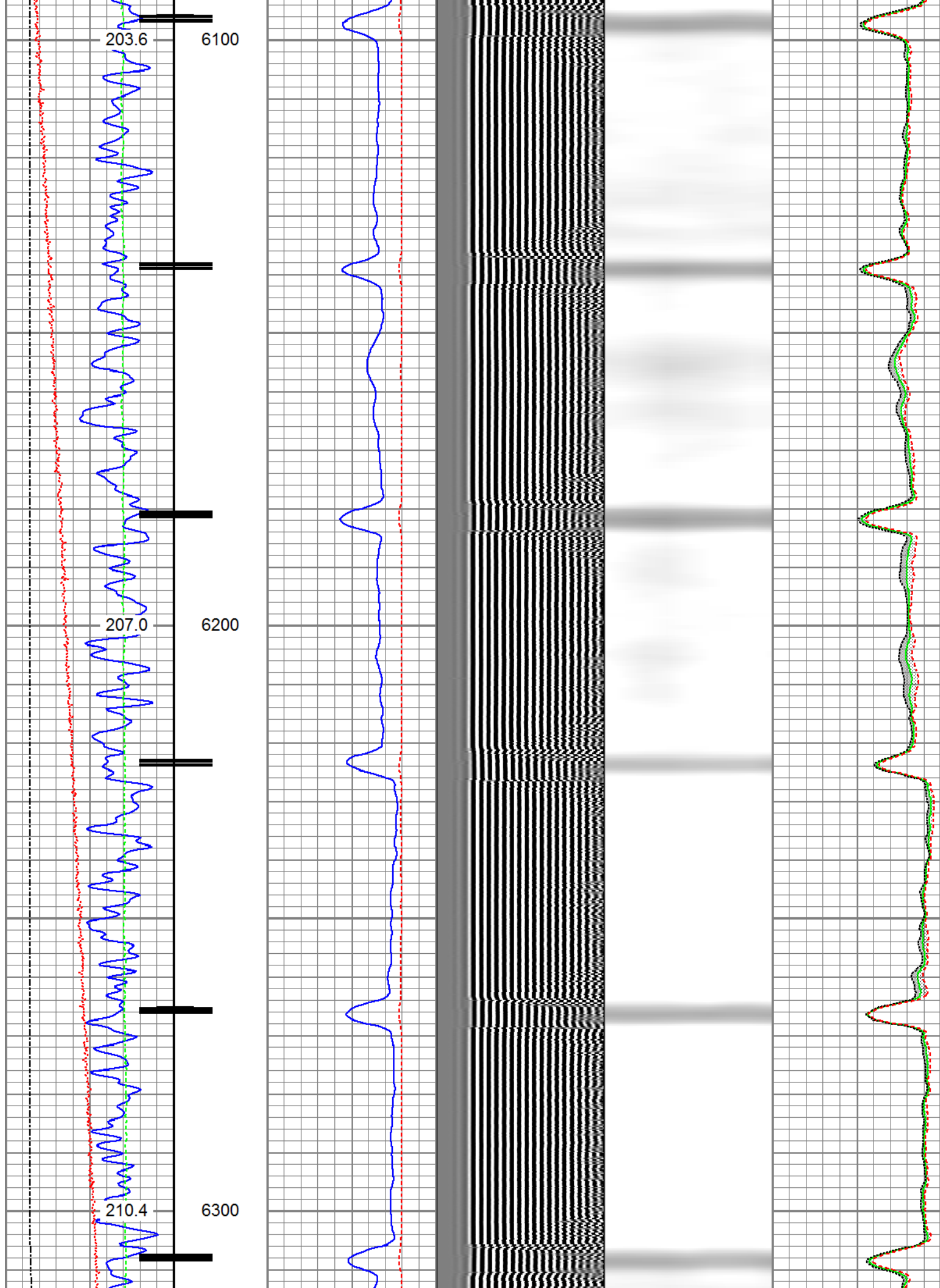


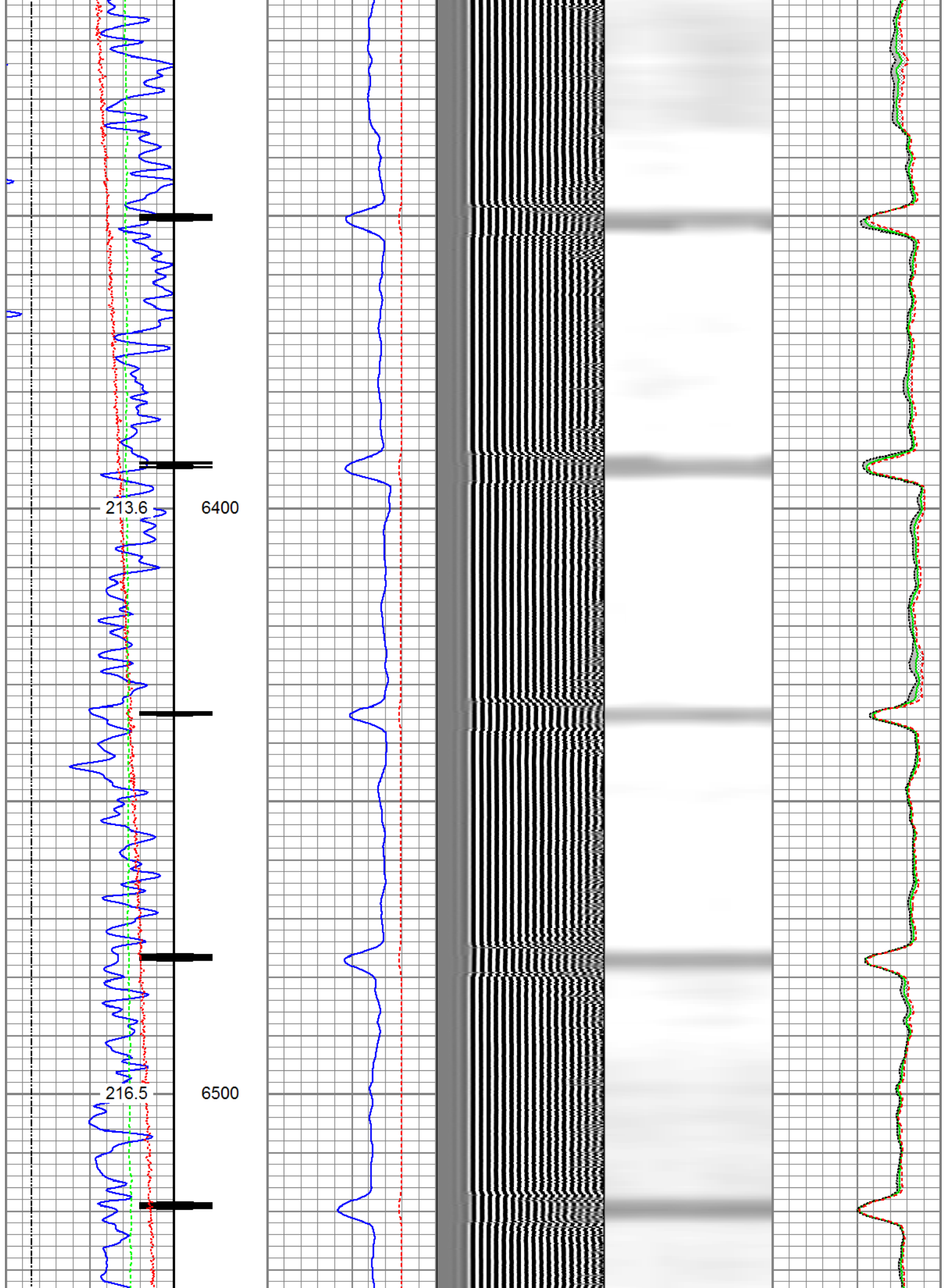


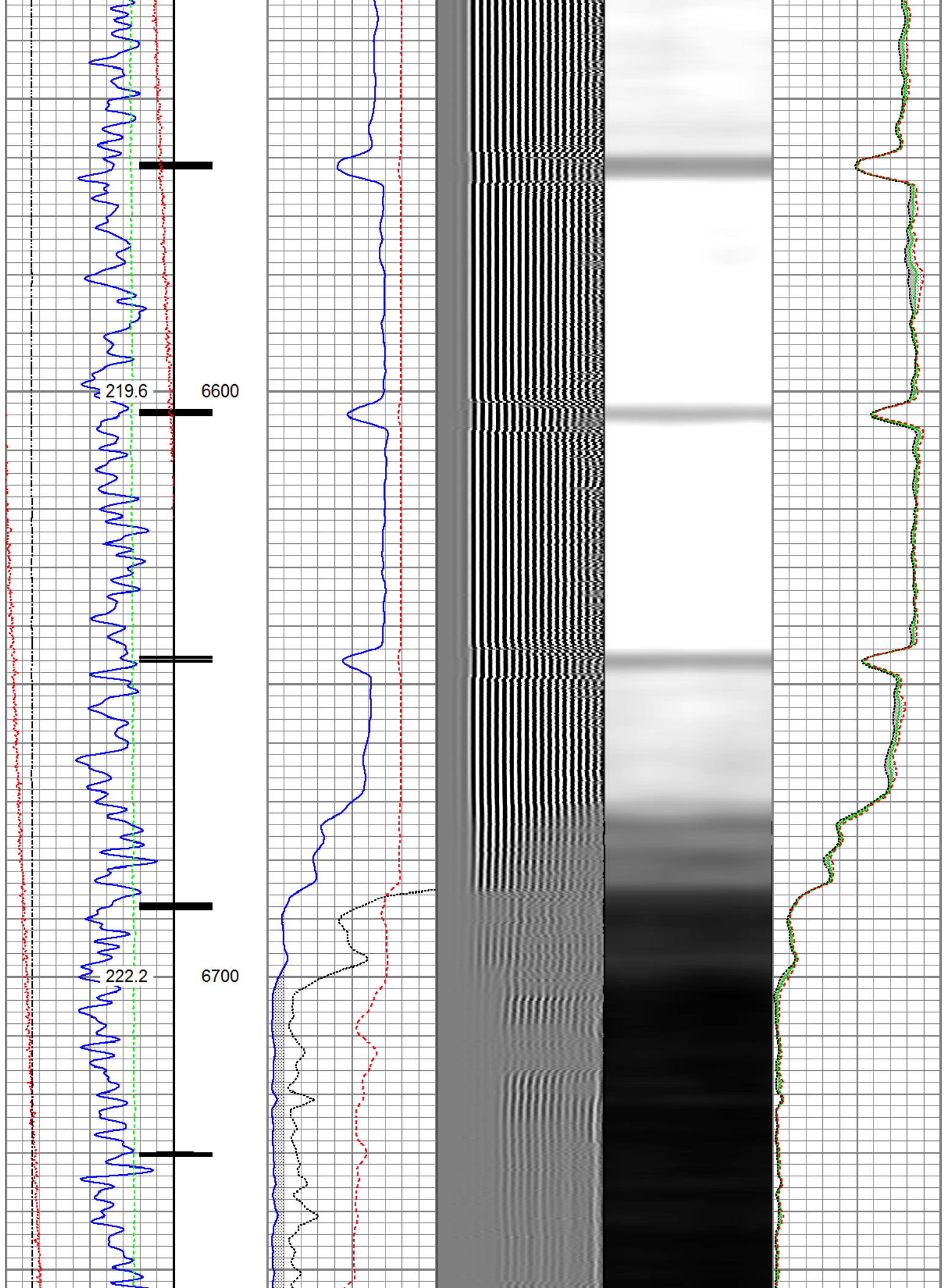


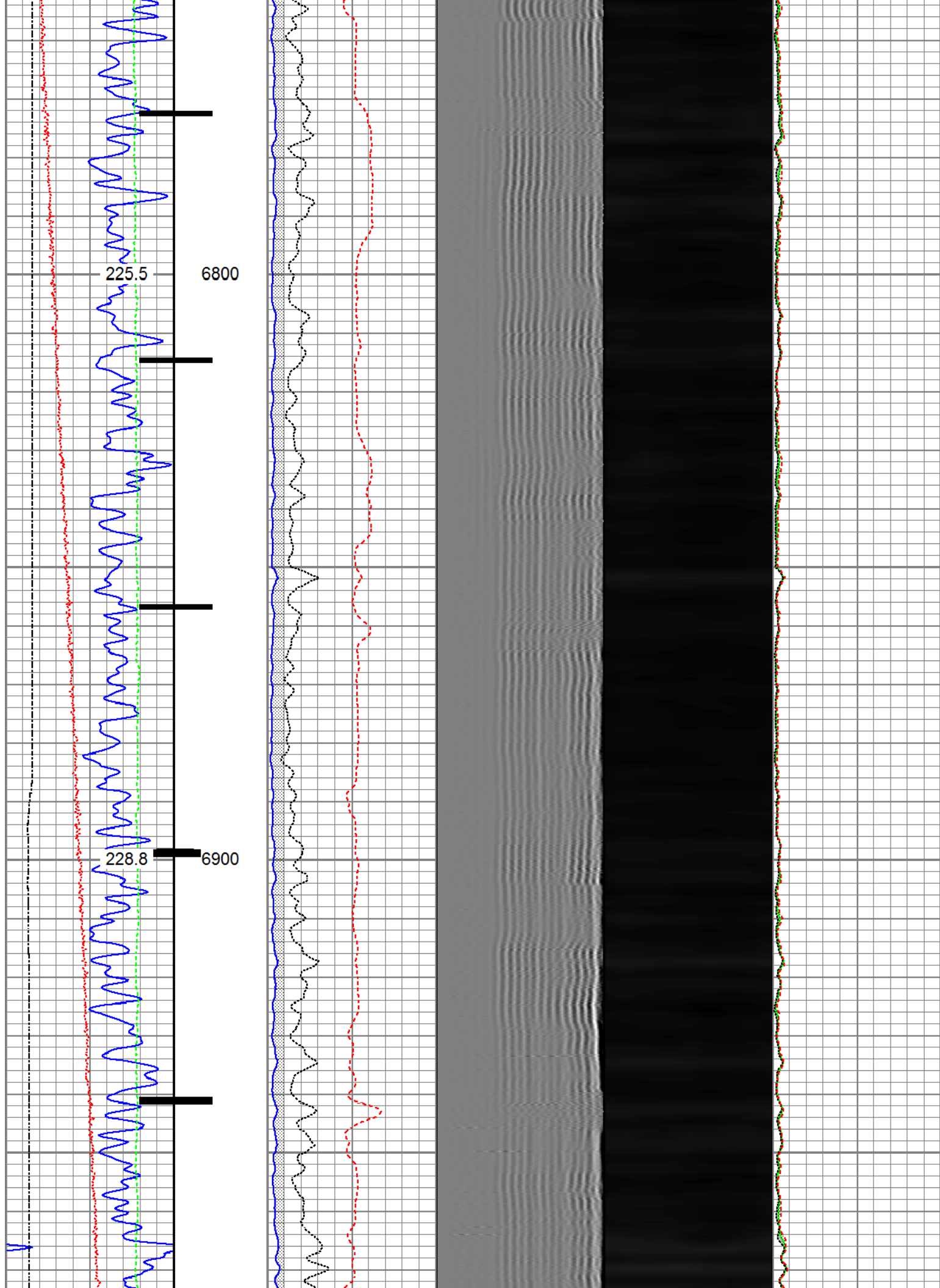


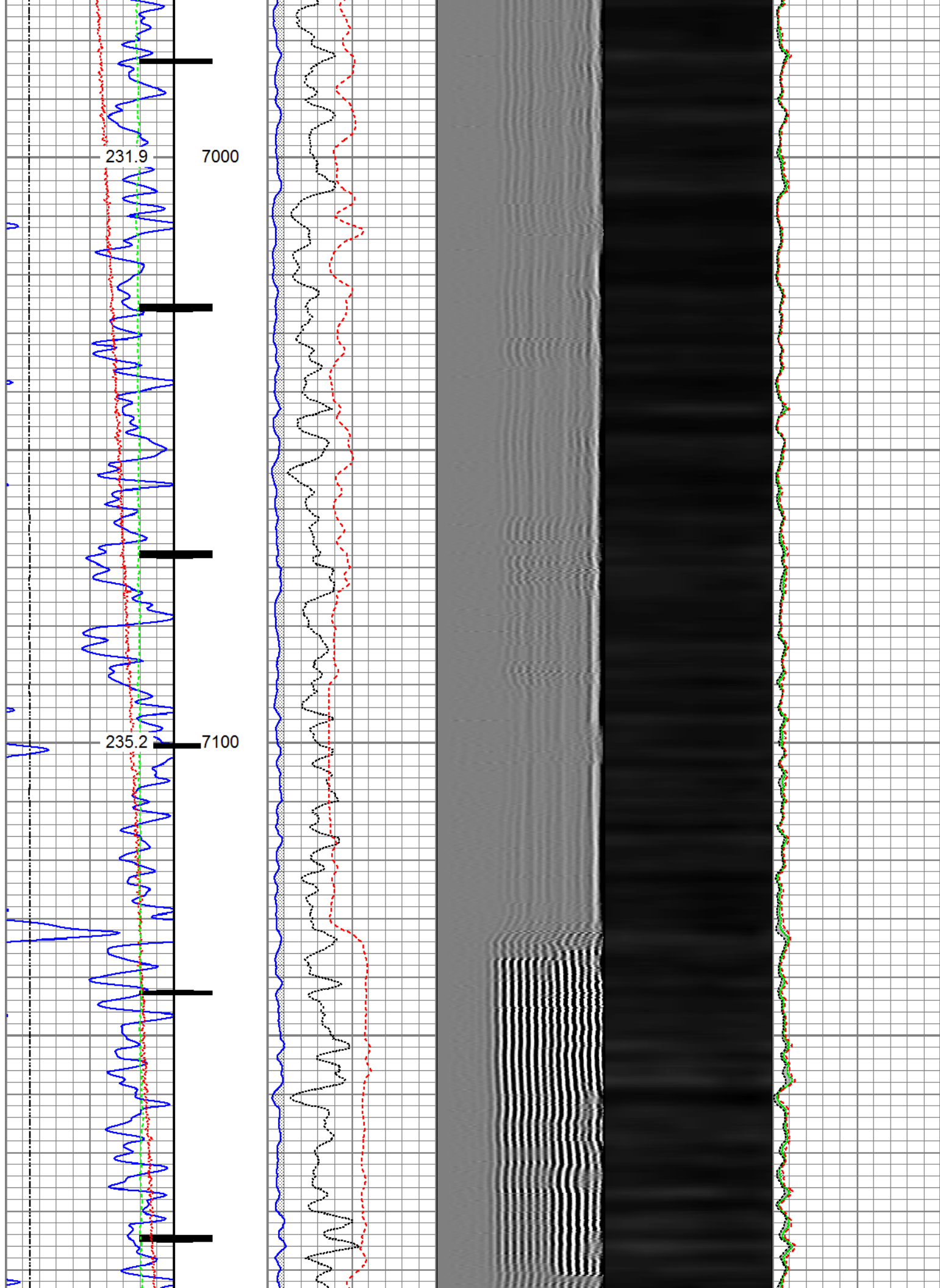


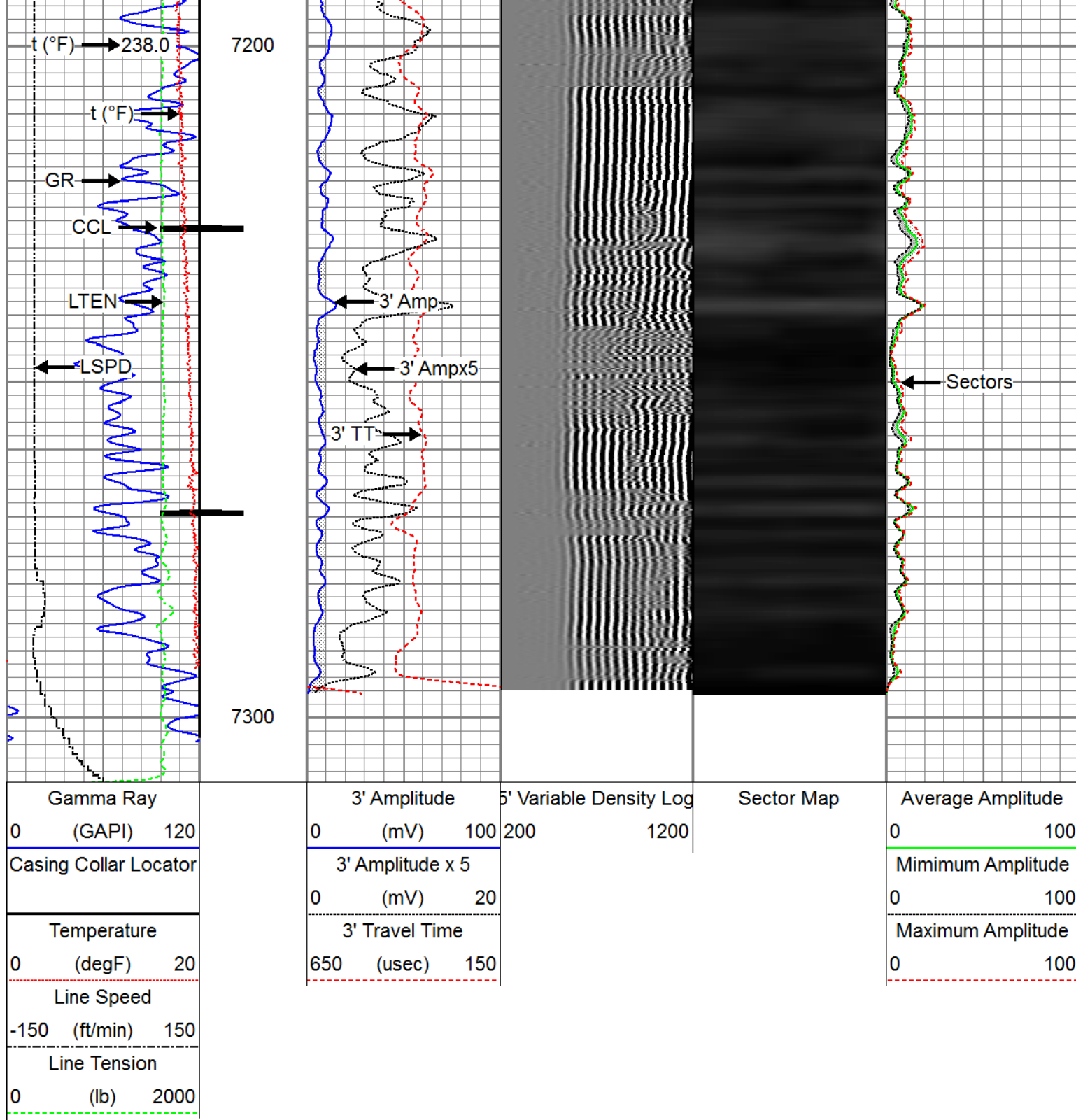








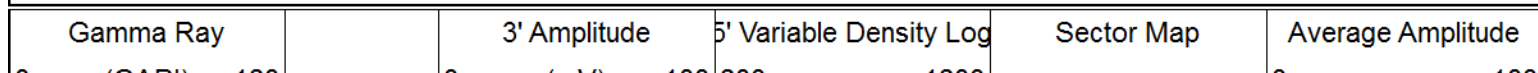




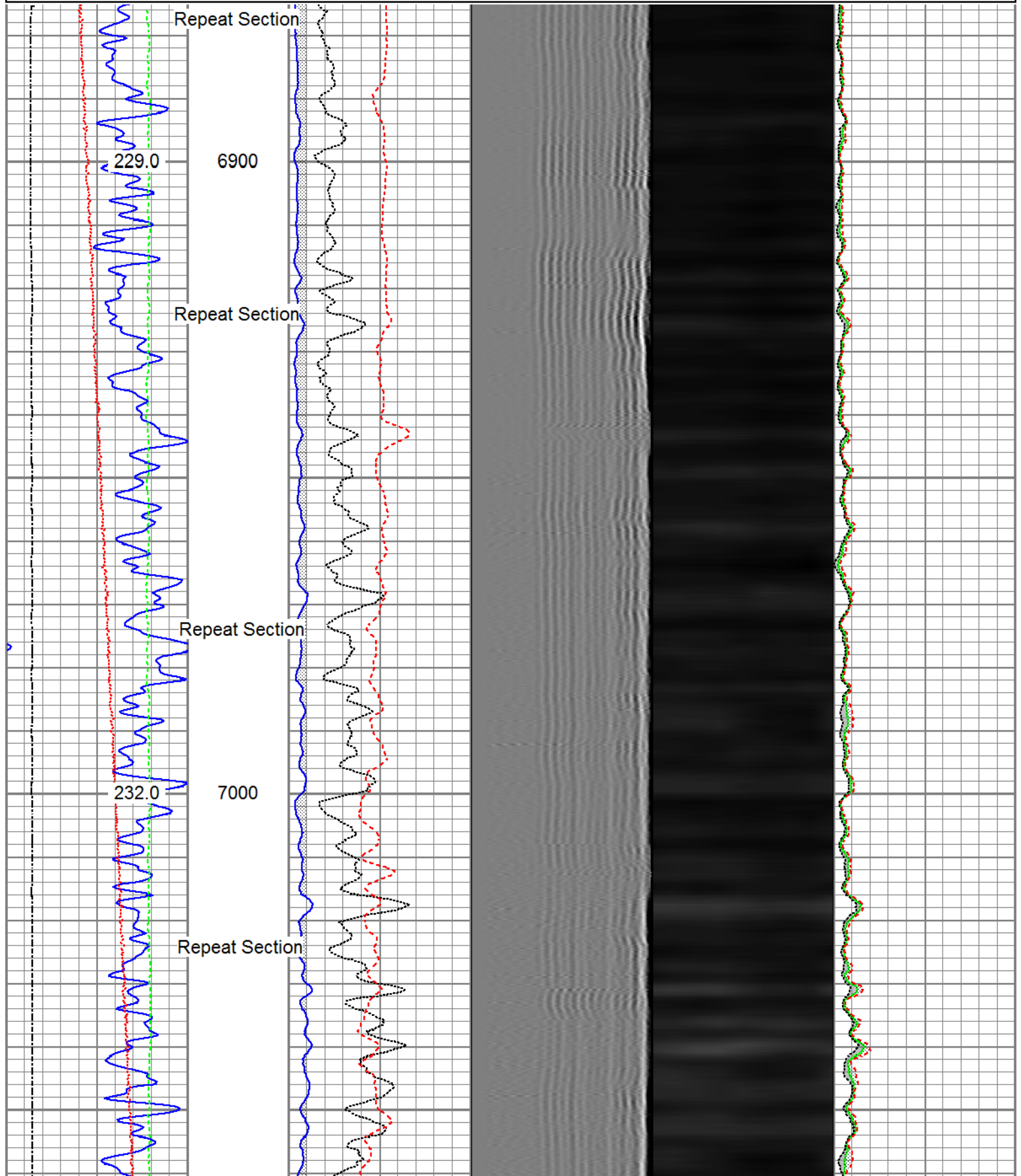
Repeat Pass

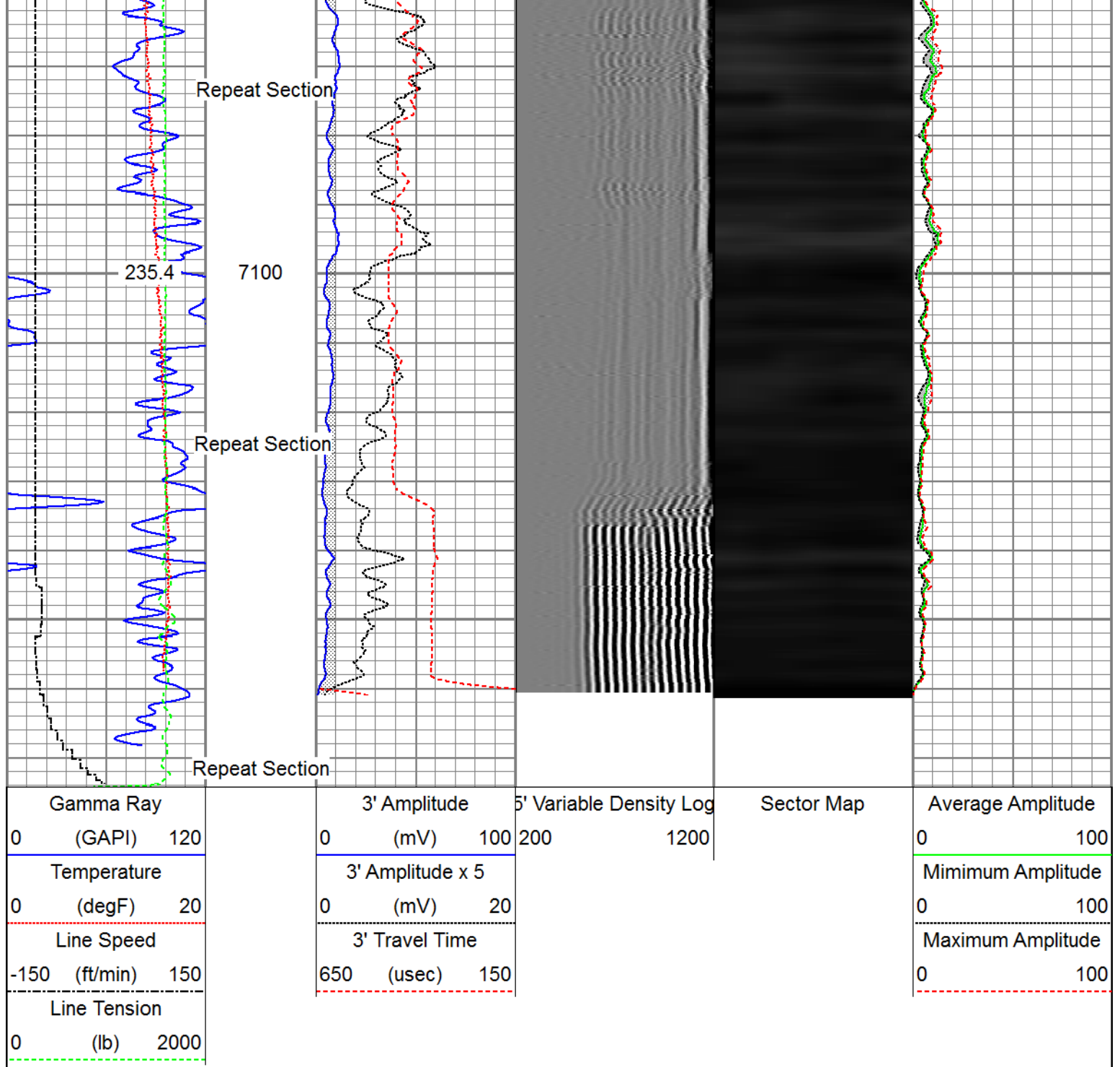
Recorded With 0 PSI Surface Induced Pressure

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 Dataset Creation Wed Feb 22 12:40:00 2017
 Charted by Depth in Feet scaled 1:240

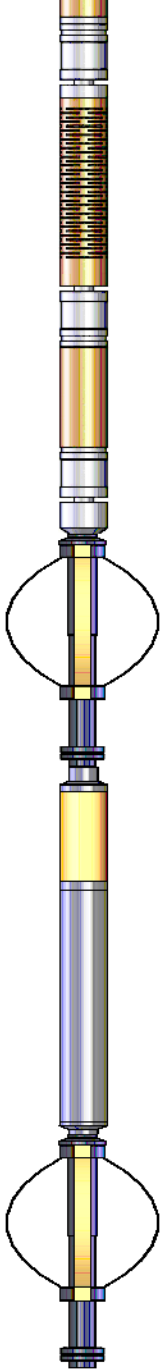


0	(GAPI)	120	0	(mV)	100	200	1200	0		100
Temperature			3' Amplitude x 5			Mimimum Amplitude				
0	(degF)	20	0	(mV)	20	0				
Line Speed			3' Travel Time			Maximum Amplitude				
-150	(ft/min)	150	650	(usec)	150	0				
Line Tension										
0	(lb)	2000								





Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Titan_Electric_Cable_Heads-Titan_1-11/16" Electric Cable Head with 1" Fishing Neck	1.03	1.69	5.40
			Probe_ELine_BowSpring_Centralizer-P_EB Probe 2-3/4" Electric Inline Bowspring Centralizer	2.8875	2.75	20.00

Temp	16.72				
WVFS8	14.55		Probe_RADII-C-P_RBT_2750 (FW1302-0029.19) Probe 2-3/4" Sector Cement Bond Tool with Temperature Probe	2.75	105.00
WVFS7	14.55				
WVFS6	14.55				
WVFS5	14.55				
WVFS4	14.55				
WVFS3	14.55				
WVFS2	14.55				
WVFS1	14.55				
WVFCAL	14.55				
WVF3FT	14.55				
WVF5FT	13.55				
HeadVolt	10.30				
			Probe_ELine_BowSpring_Centralizer-P_EB	2.8875	20.00
DCCL	6.51				
CCL	6.51				
		Probe_GR_CCL-P_CGR_2750_S (FW1211-4.54) Probe 2-3/4" Digital CCL / Gamma Ray Combined	2.75	55.00	
GR	3.77				
		Probe_ELine_BowSpring_Centralizer-P_EB	2.8875	20.00	
		Probe 2-3/4" Electric Inline Bowspring Centralizer			
Dataset: PROCESSED_0512320771_Anadarko_Sutton Founders 1_02-21-17_RBL_W8.db: field/well/run1/pass8.1 Total length: 23.40 ft Total weight: 225.40 lb O.D.: 2.75 in					

Calibration Report	
Database File	C:\ProgramData\Warrior\Data\anadarko_sutton_founders_1_rcbl_21_feb_2017_w8\PROCESSED_0512320771_Anadarko_Sutton Founders 1_02-21-17_RBL_W8.db: field/well/run1/pass8.1
Dataset Pathname	pass8.1
Dataset Creation	Tue Feb 21 09:18:09 2017

Gamma Ray Calibration Report		
Serial Number:	FW1211-081	
Tool Model:	P_CGR_2750_S	
Performed:	Sat Jan 07 07:43:48 2017	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps

Sensitivity:

0.6061

GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: FW1302-002
Tool Model: P_RBT_2750

Calibration Casing Diameter: 4.500 in
Calibration Depth: 132.129 ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	0.519	0.800	81.196	154.951	0.773
CAL	0.722	0.728				
5'	0.000	0.421	0.800	81.196	191.081	0.757
SUM						
S1	0.000	0.528	0.000	100.000	189.585	-0.028
S2	0.000	0.509	0.000	100.000	196.595	-0.034
S3	0.000	0.504	0.000	100.000	198.599	-0.045
S4	0.000	0.515	0.000	100.000	194.152	-0.048
S5	0.000	0.542	0.000	100.000	184.598	-0.060
S6	0.000	0.562	0.000	100.000	178.134	-0.049
S7	0.000	0.559	0.000	100.000	179.008	-0.045
S8	0.000	0.551	0.000	100.000	181.649	-0.041

Internal Reference Calibration, performed Wed Sep 14 11:34:04 2016:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.722	0.728	1.000	0.000

Air Zero Calibration, performed Tue Feb 21 07:23:57 2017:

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



Company Kerr-Mcgee Oil & Gas Onshore, L.P.
Well Sutton Founders 1
Field Wattenberg
County Weld

State

Colorado