



Radial Cement Bond
Gamma Ray
Casing Collar Log

Company Kerr-McGee Oil & Gas Onshore, L.P.
Well Nelson 35-17HZ
Field Wattenberg
County Weld State Colorado

Location:		API # : 05-123-51250		Other Services	
SEC 35 TWP 2N RGE 68W					JBGR
Permanent Datum	Ground Level	Elevation	4955'		
Log Measured From	Ground Level	0 FT	K.B. 4975'		
Drilling Measured From	Kelly Bushing	D.F. ---			
		G.L. 4955'			

Date	13-MAY-2021						
Run Number	One						
Depth Driller	16071 FT						
Depth Logger	7300 FT						
Bottom Logged Interval	7286 FT						
Top Log Interval	Surface						
Open Hole Size	7.875"						
Type Fluid	Water						
Density / Viscosity	8.34 lb/gal						
Max. Recorded Temp.	225°F						
Estimated Cement Top	See Log						
Time Well Ready	ROA						
Time Logger on Bottom	13:51						
Equipment Number	HD-361						
Location	Platteville, CO						
Recorded By	S. Lopez						
Witnessed By	J. McMillan						
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		1867 FT
Intermediate #1	5 1/2	17		HC P-110	Surface		16061 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 6979 FT
Adjusted +21 FT to correlate with Marker Joint
Gauge Ring/Junk Basket ran to 7399 FT
Log ran with 2800 PSI Surface Induced Pressure
Logging tools were clean and free of debris upon completion of operations

Thank you for choosing Reliance Oilfield Services, LLC!!

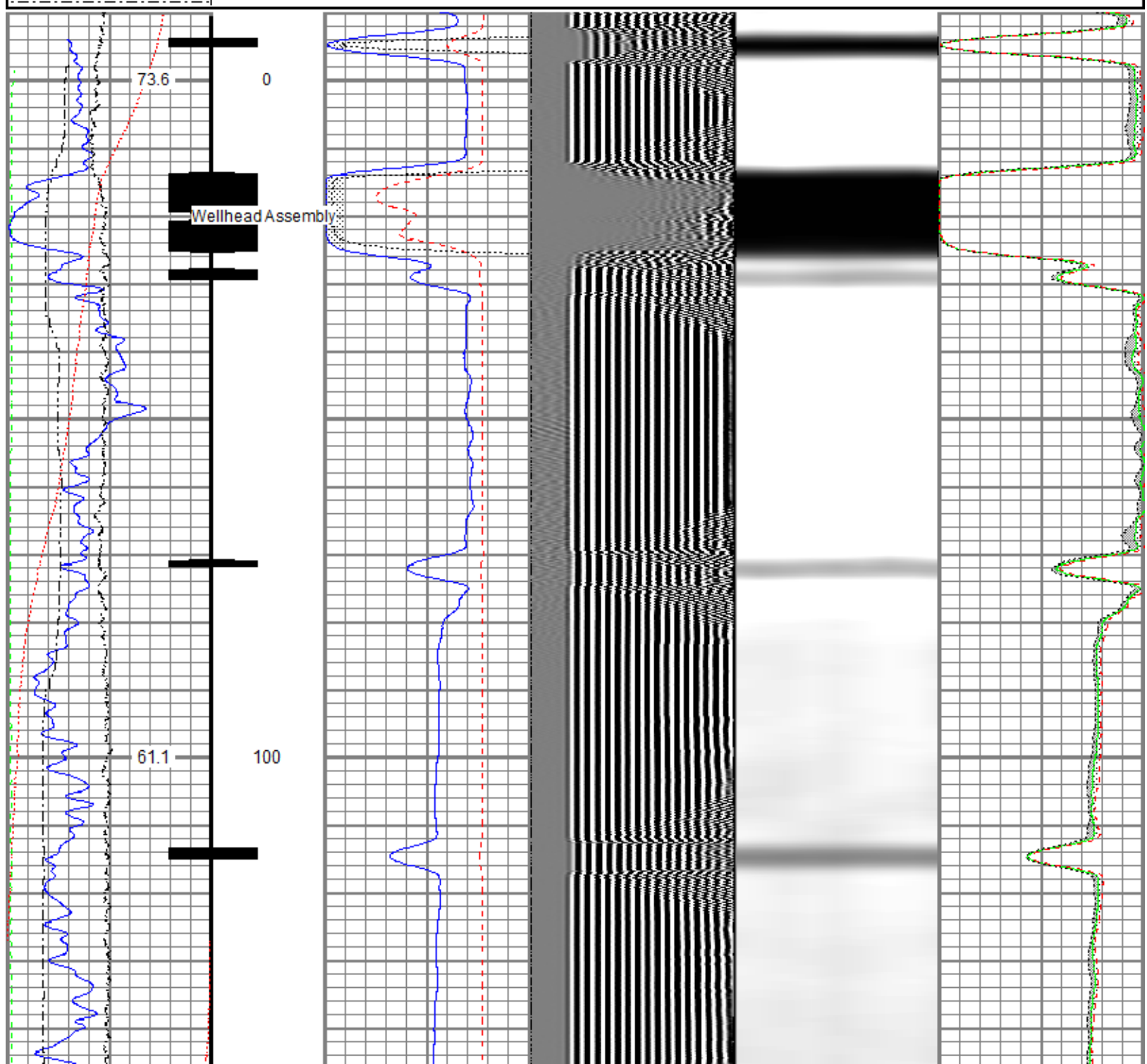


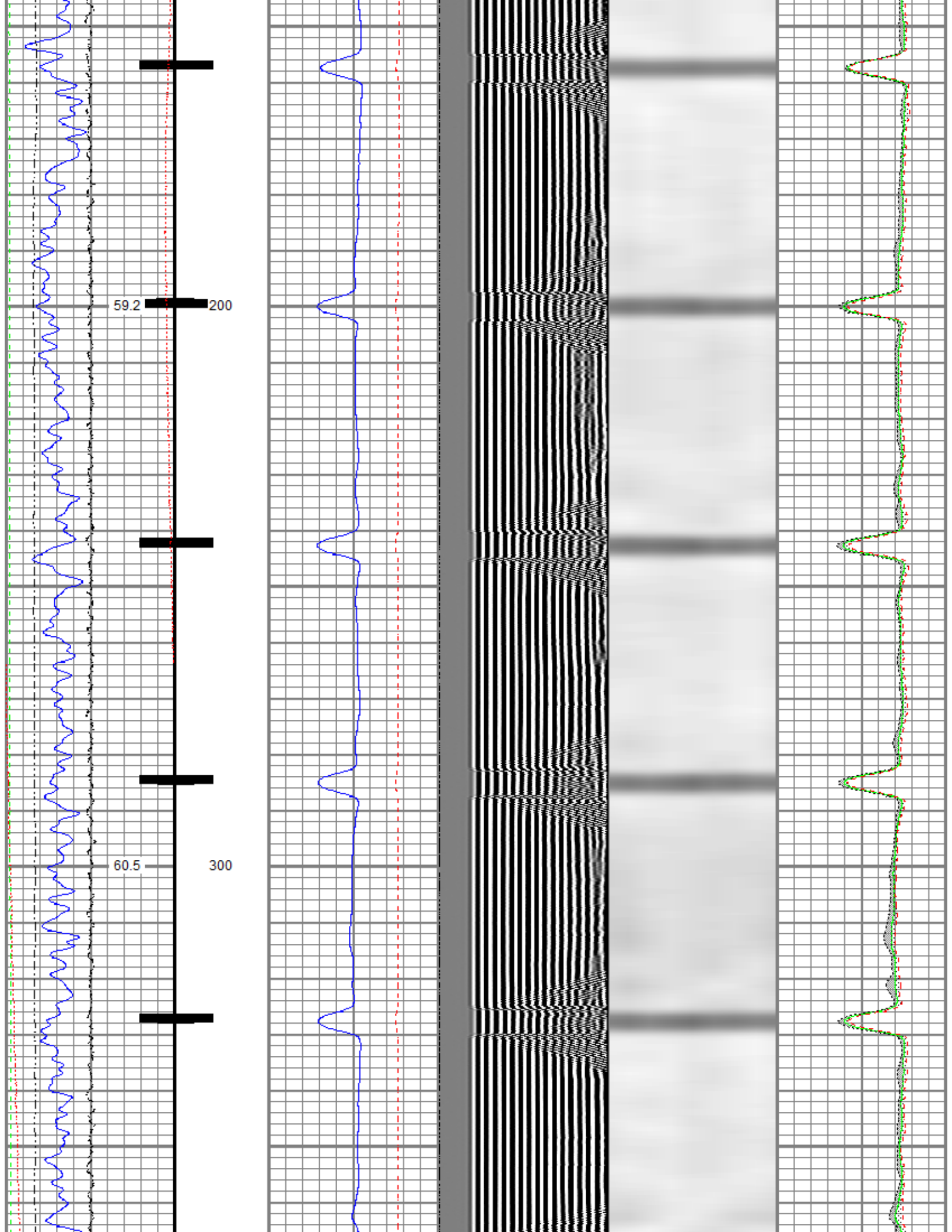
Main Pass

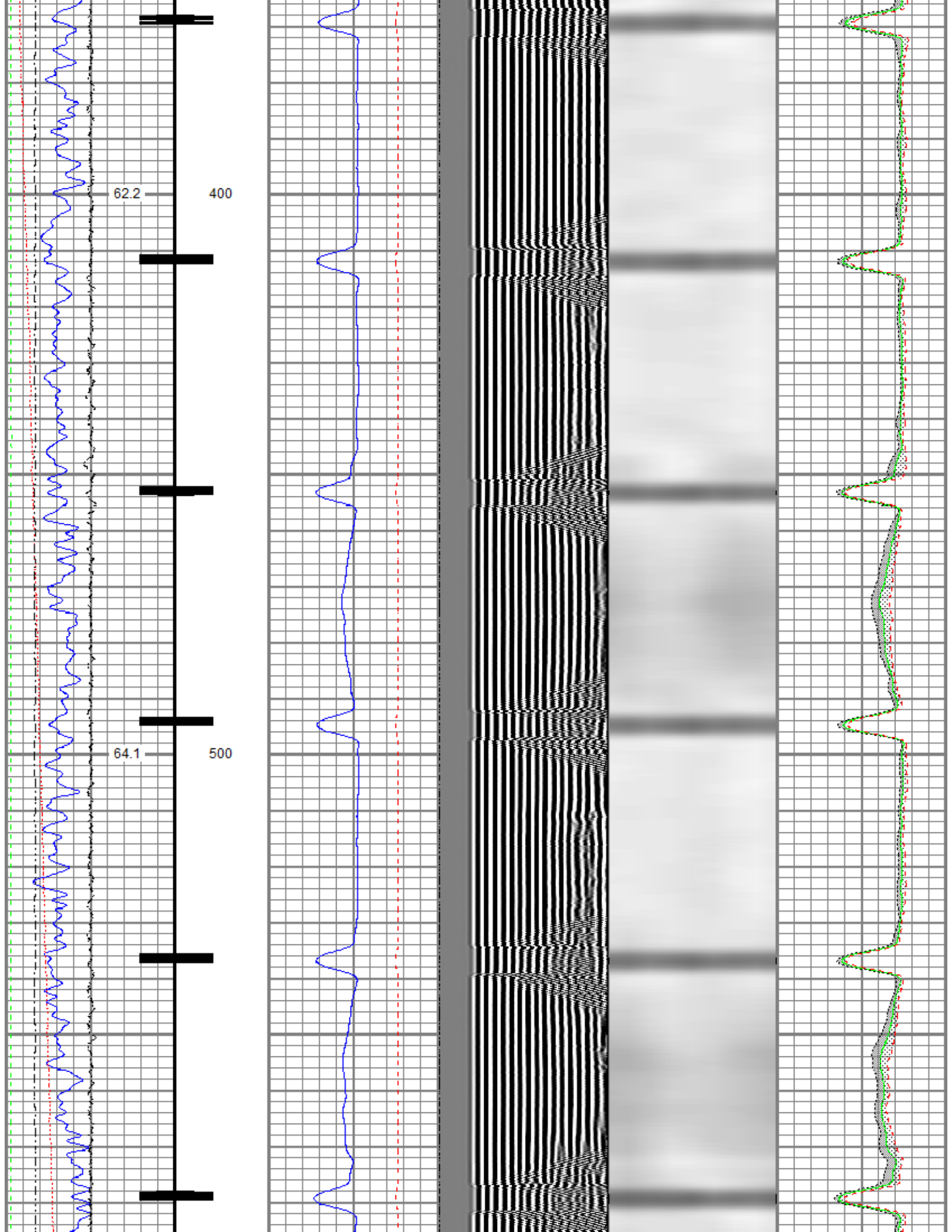
Recorded With 2800 PSI Surface Induced Pressure

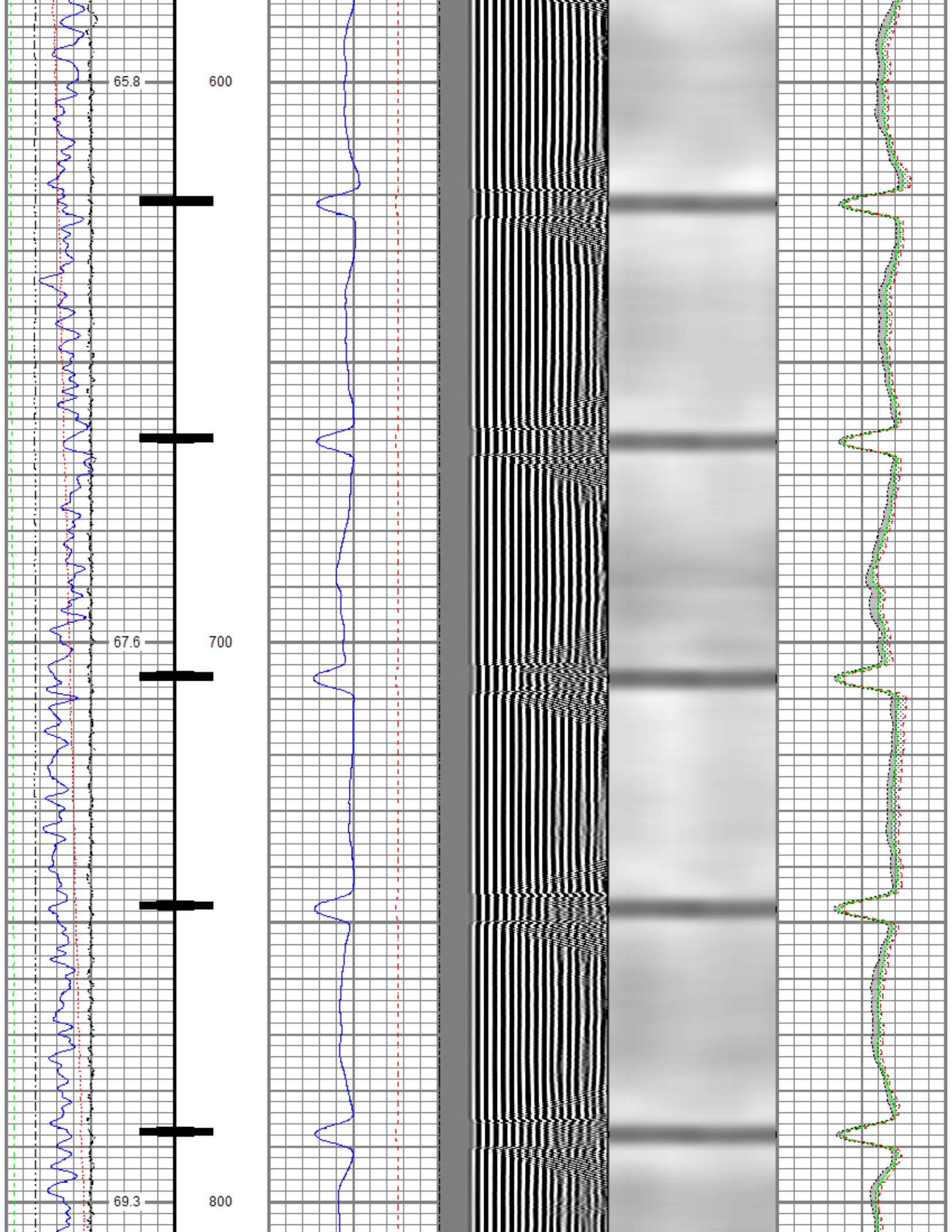
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Dataset Pathname pass4.2
Presentation Format ros_radri
Dataset Creation Sat May 15 09:14:30 2021
Charted by Depth in Feet scaled 1:240

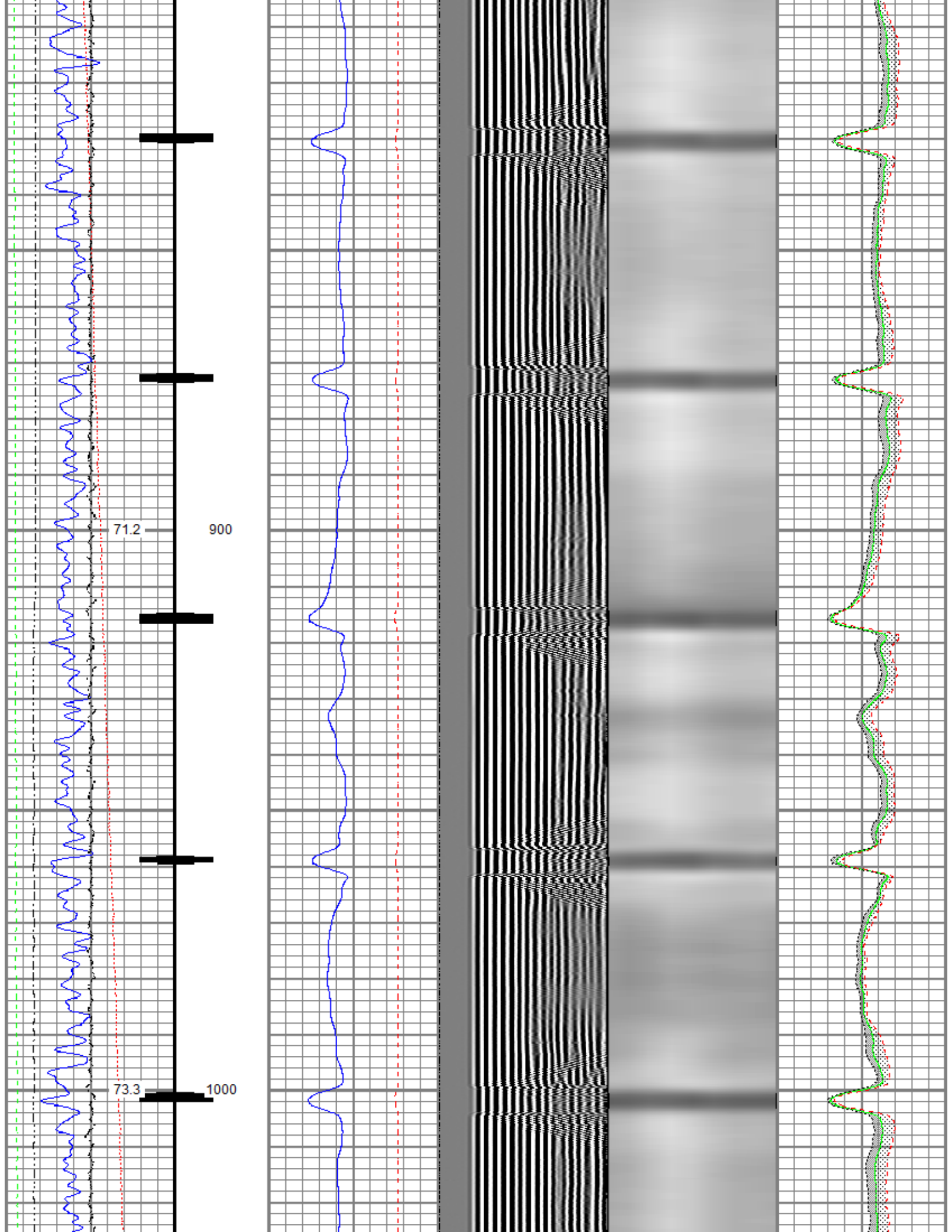
Gamma Ray	0	3' Amplitude (mV)	100	5' Variable Density Log	Sector Map	0	Average Amplitude	100
(GAPI)	120	3' Amplitude x 5	200	(u sec)	1200		Minimum Amplitude	
Casing Collar Locator		0	(mV)	20		0	100	
Temperature (degF)	20	3' Travel Time					Maximum Amplitude	
Line Speed		650	(u sec)	150		0	100	
(ft/min)	150							
Line Tension (lb)	2000							
Differential Temperature								
(degF)	2							

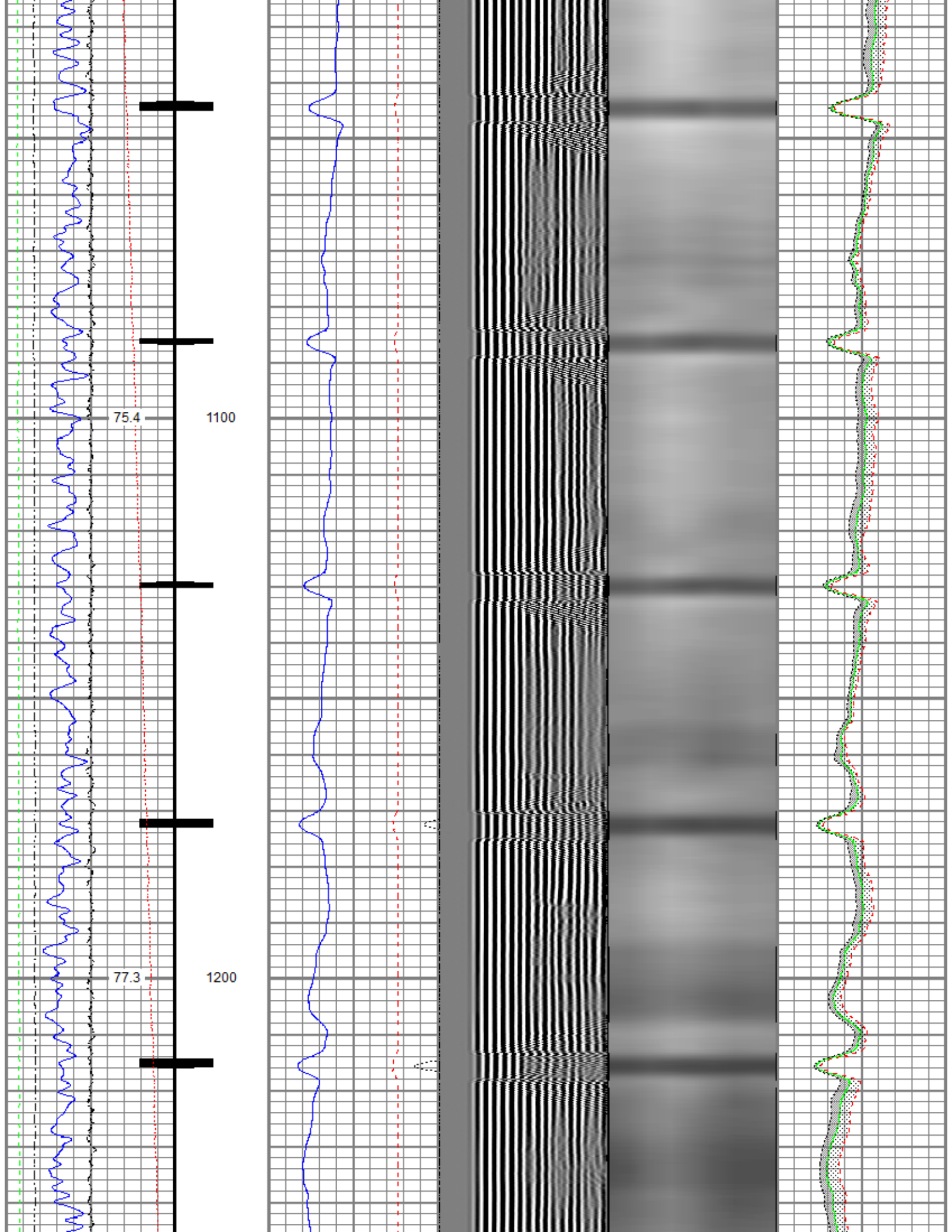


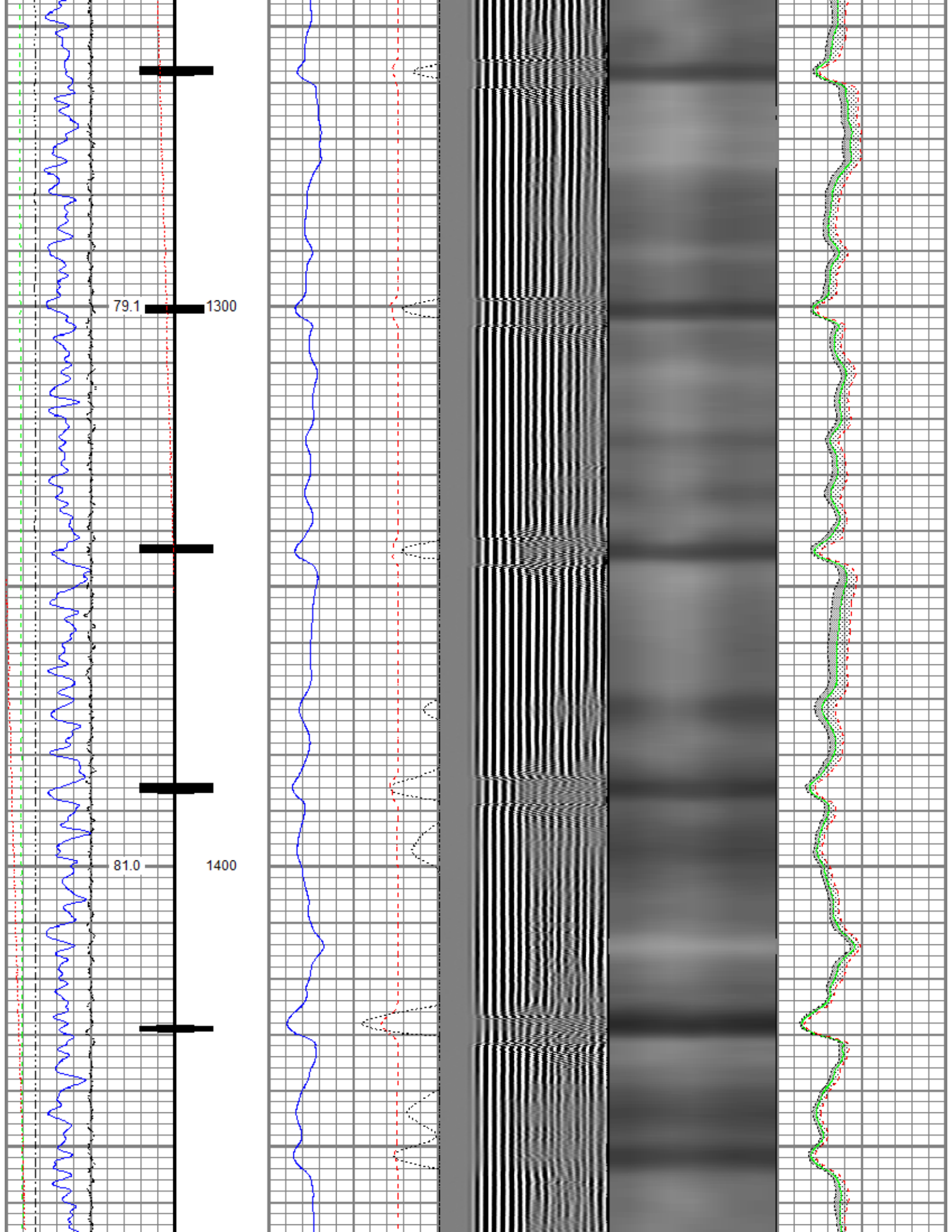


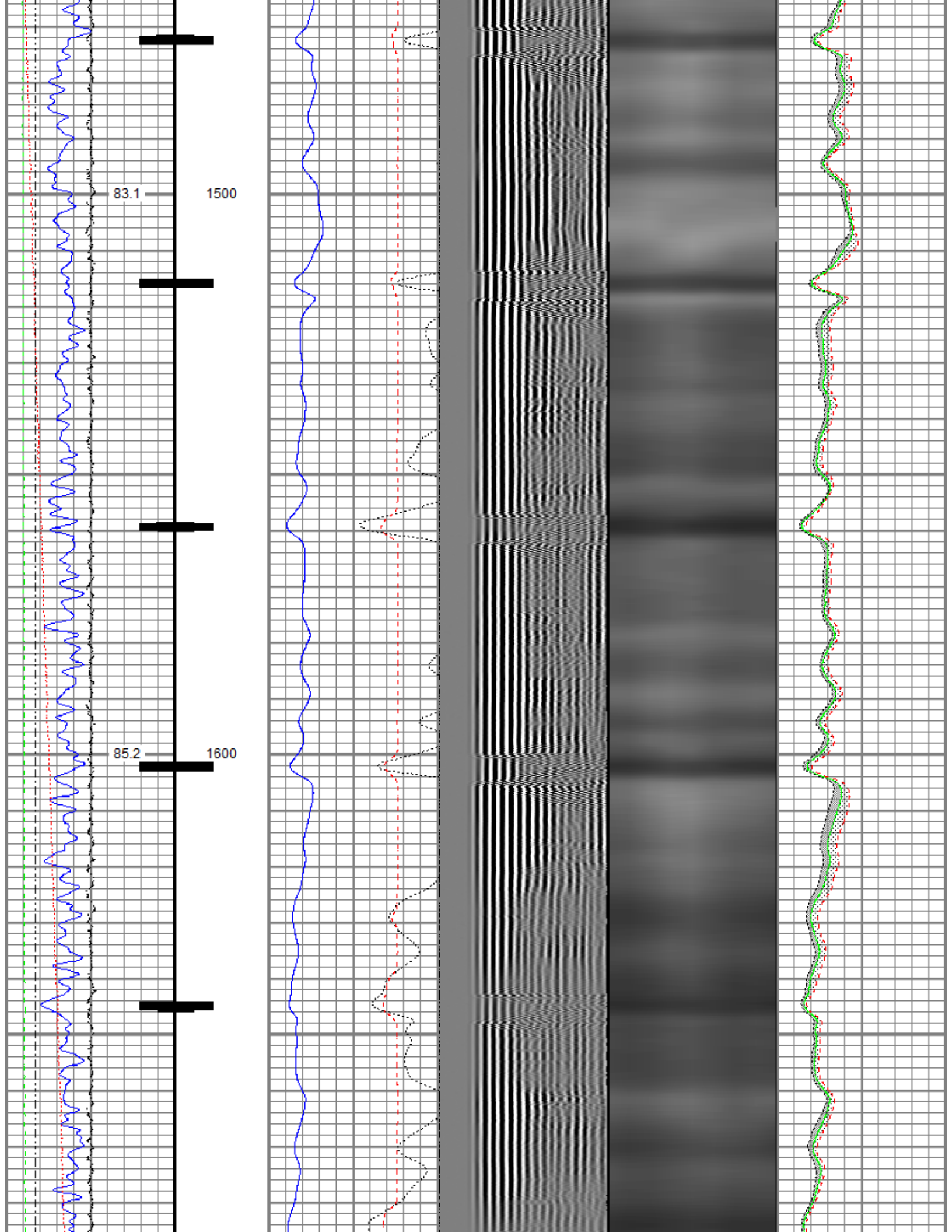


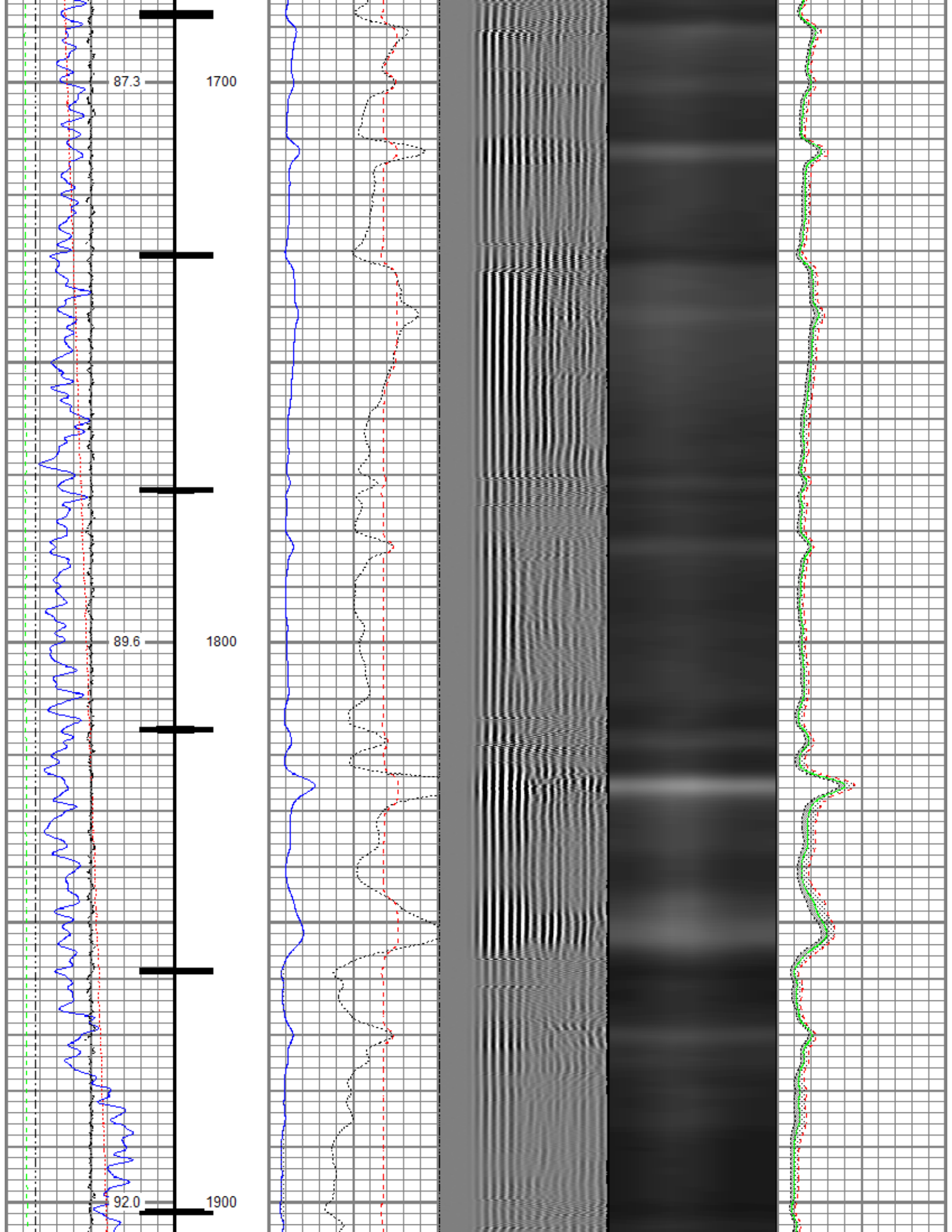


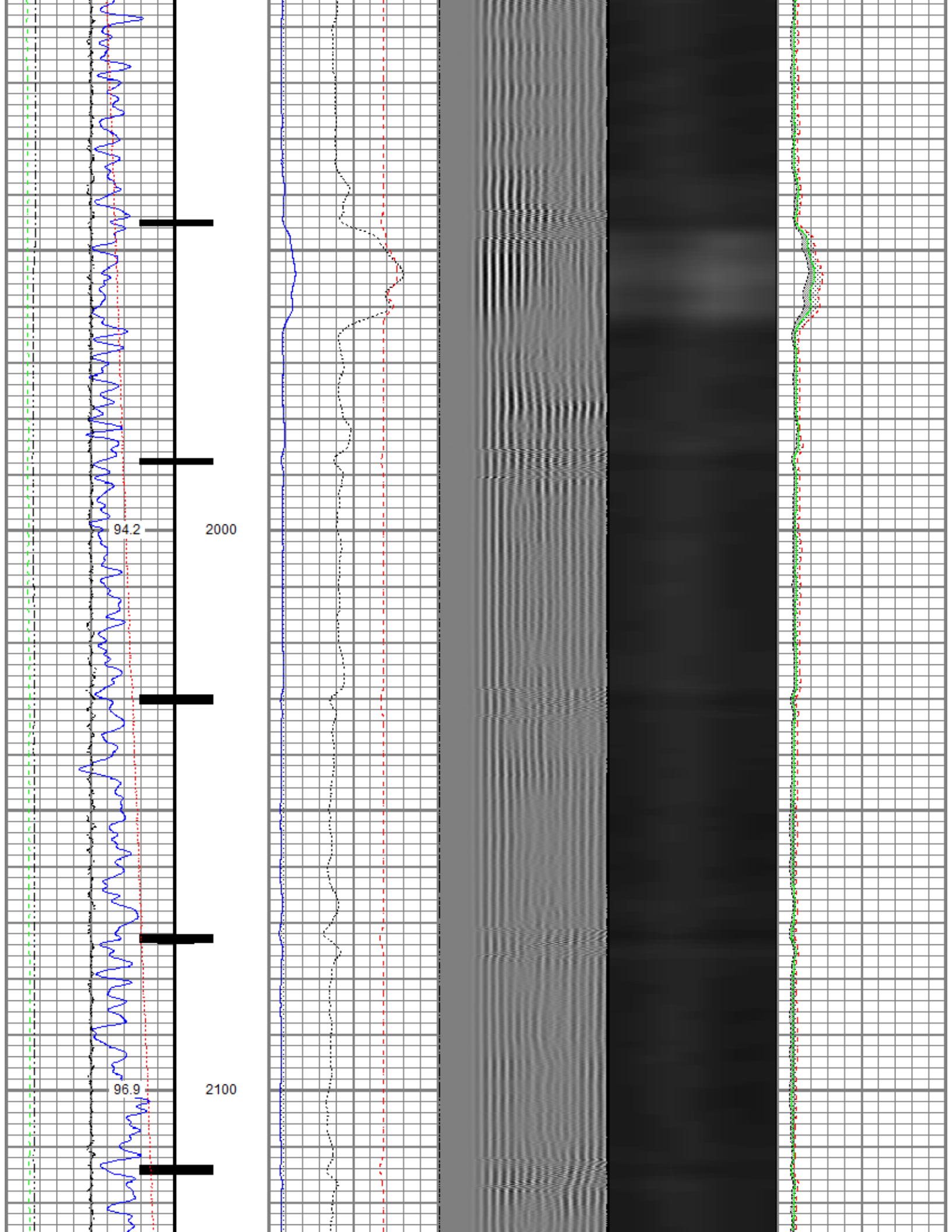


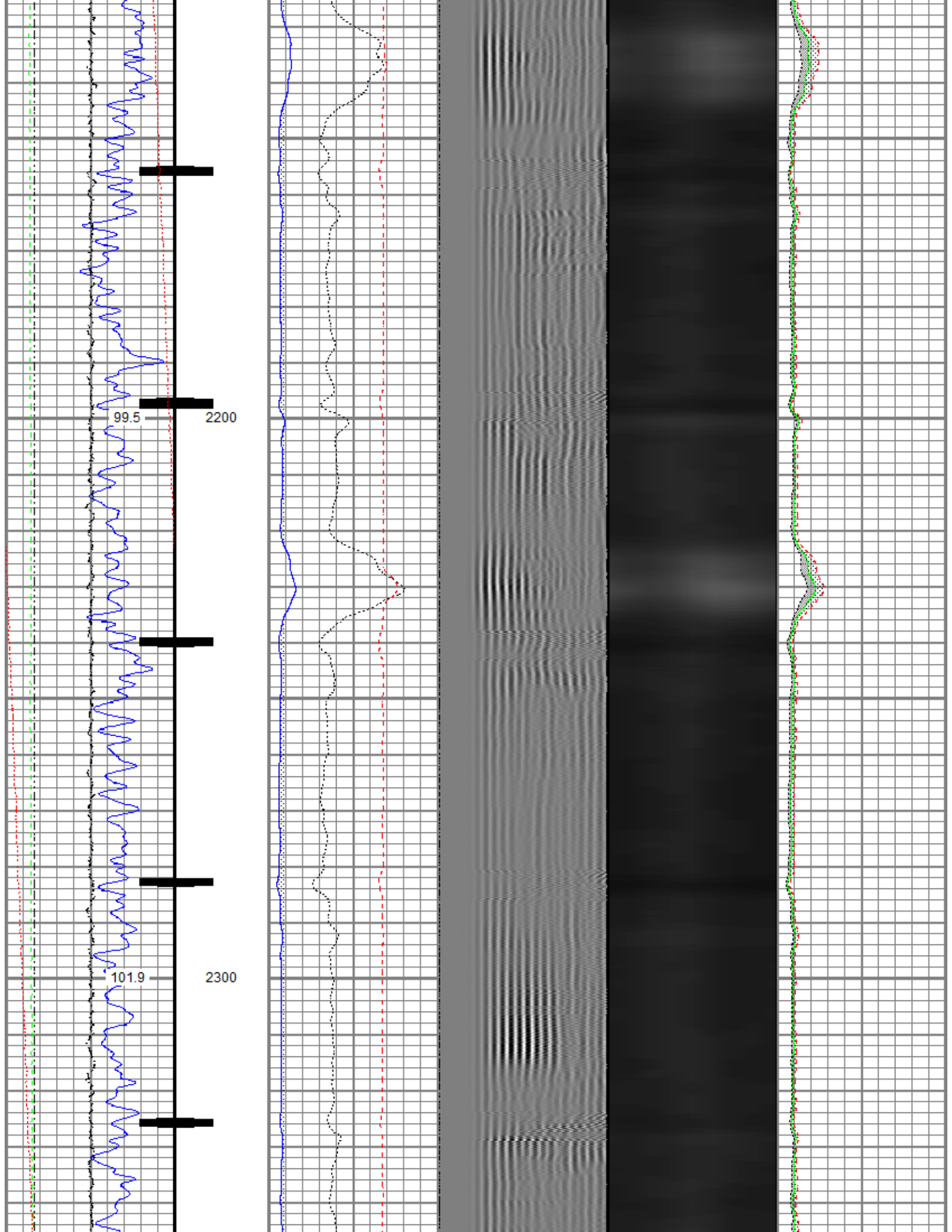


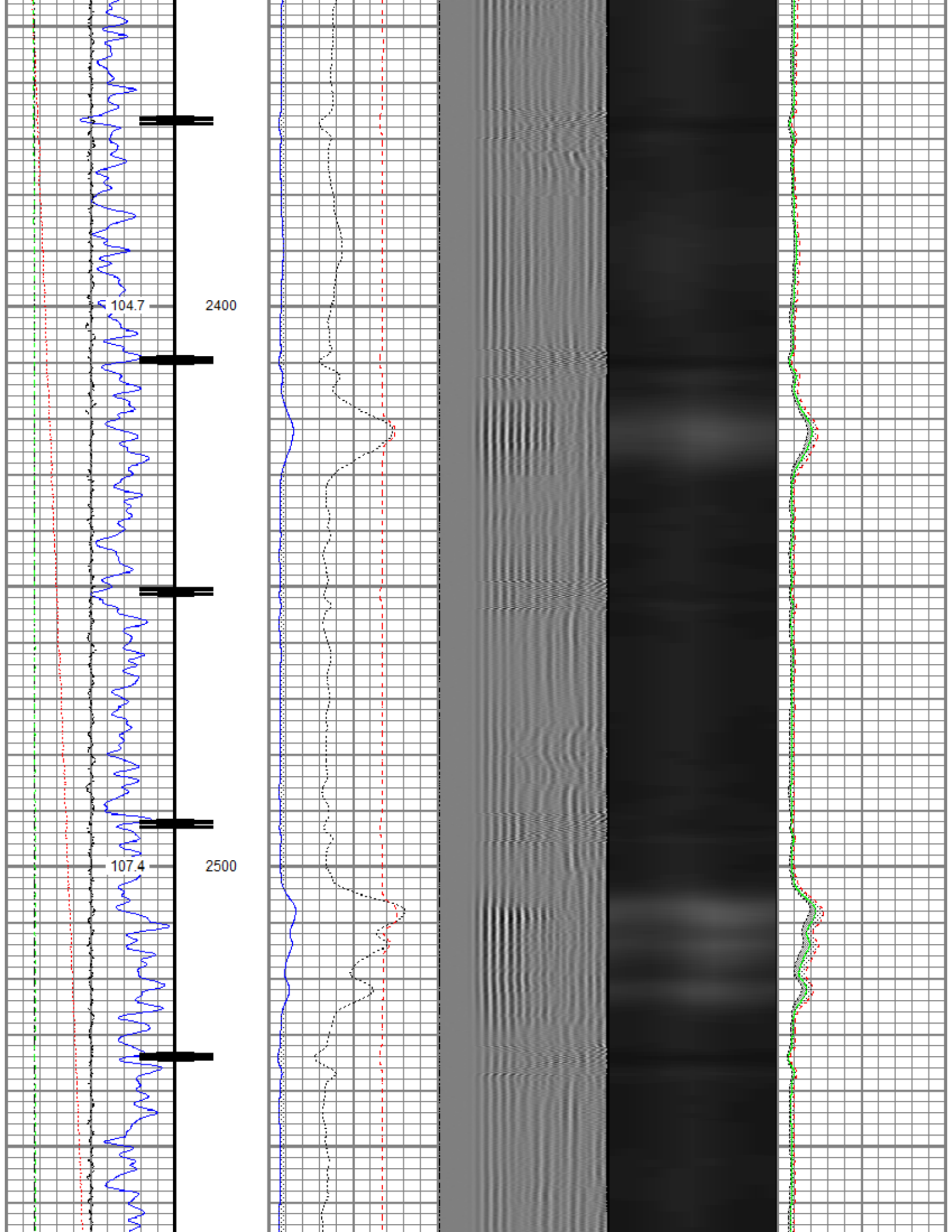


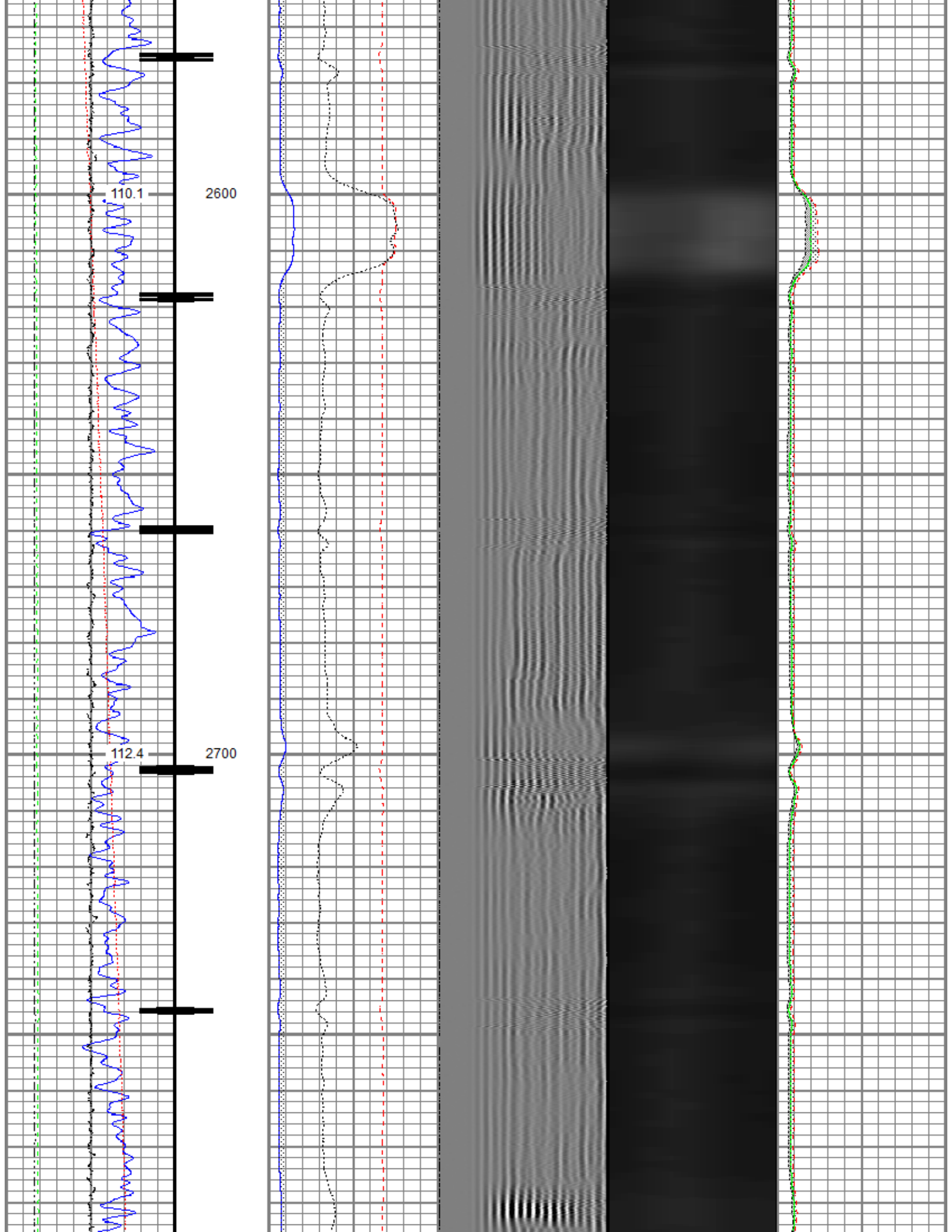


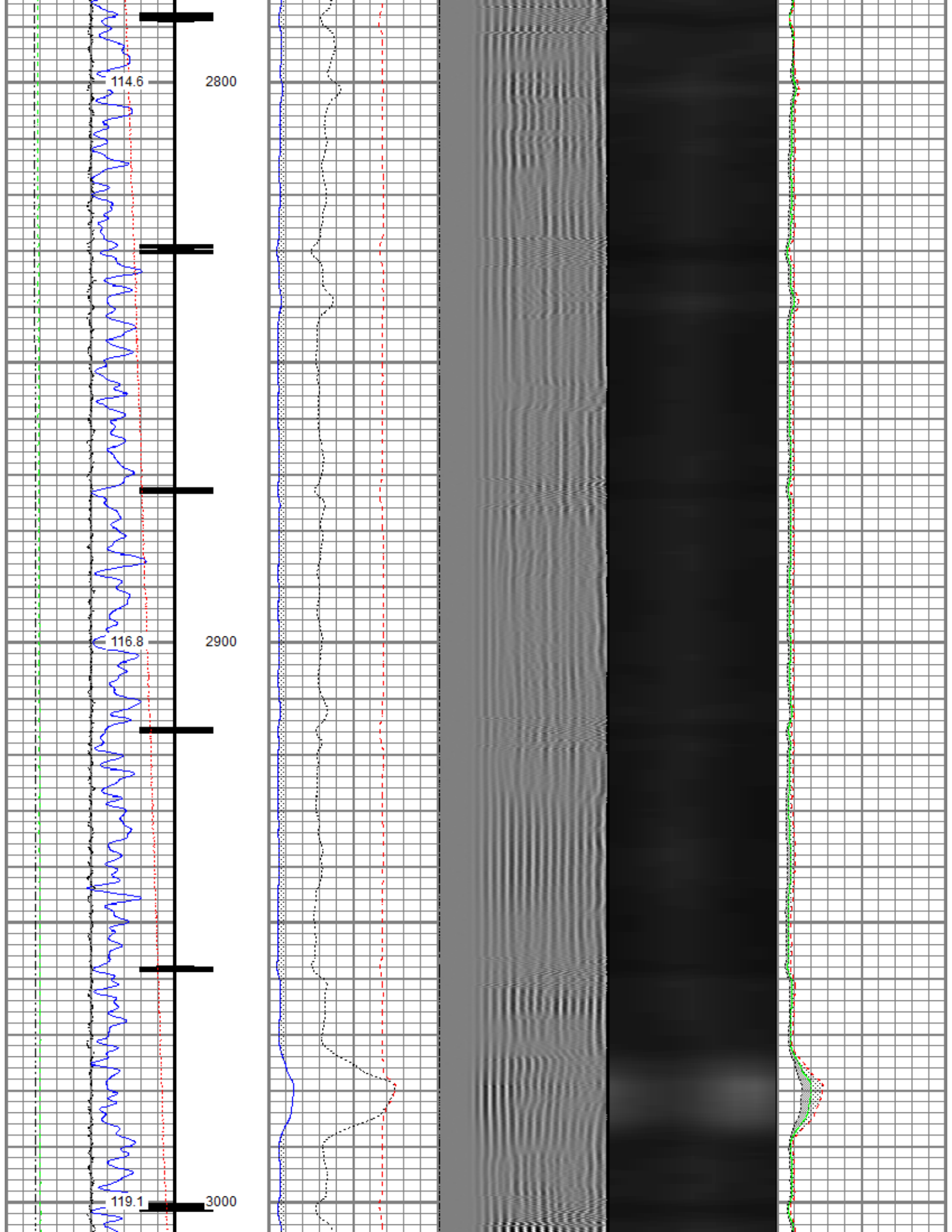


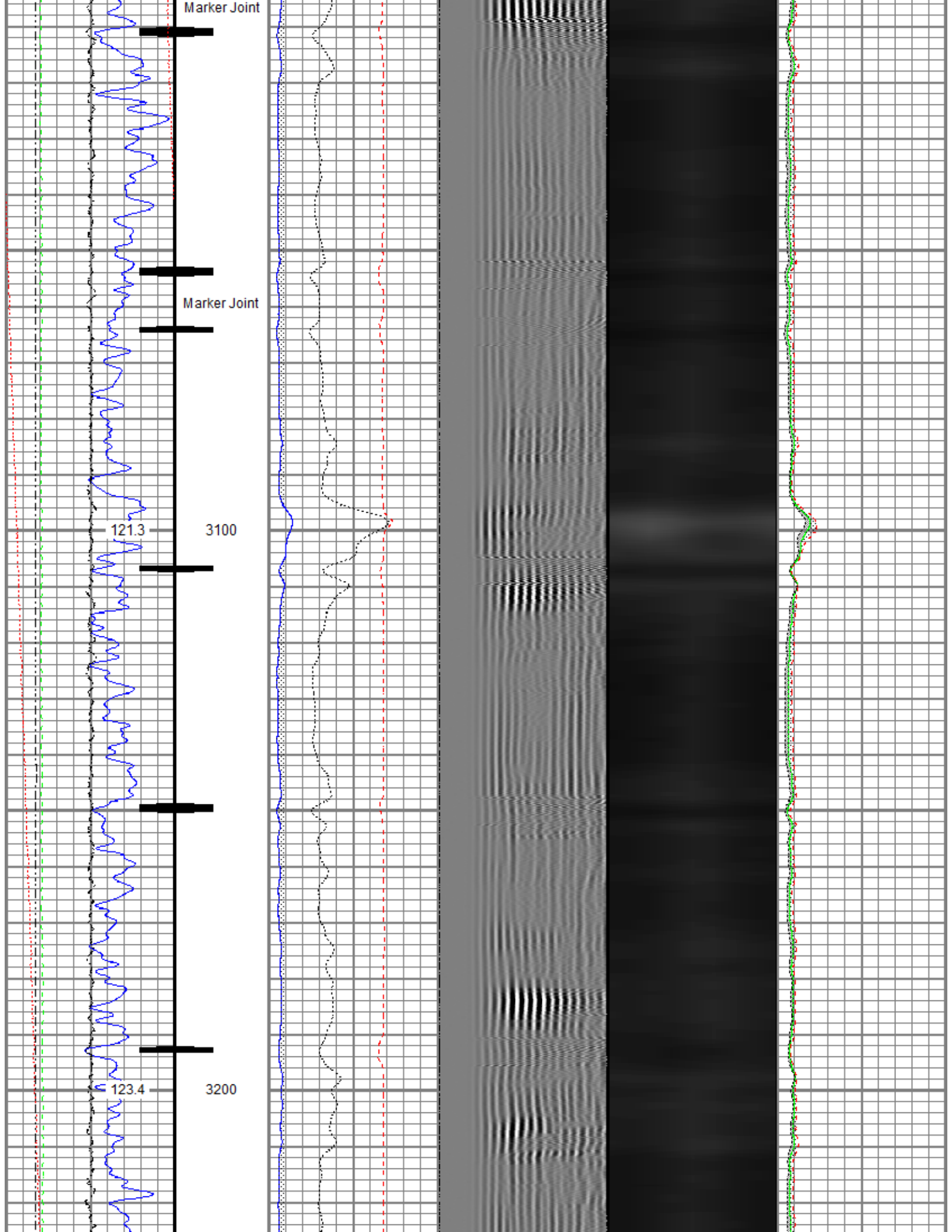


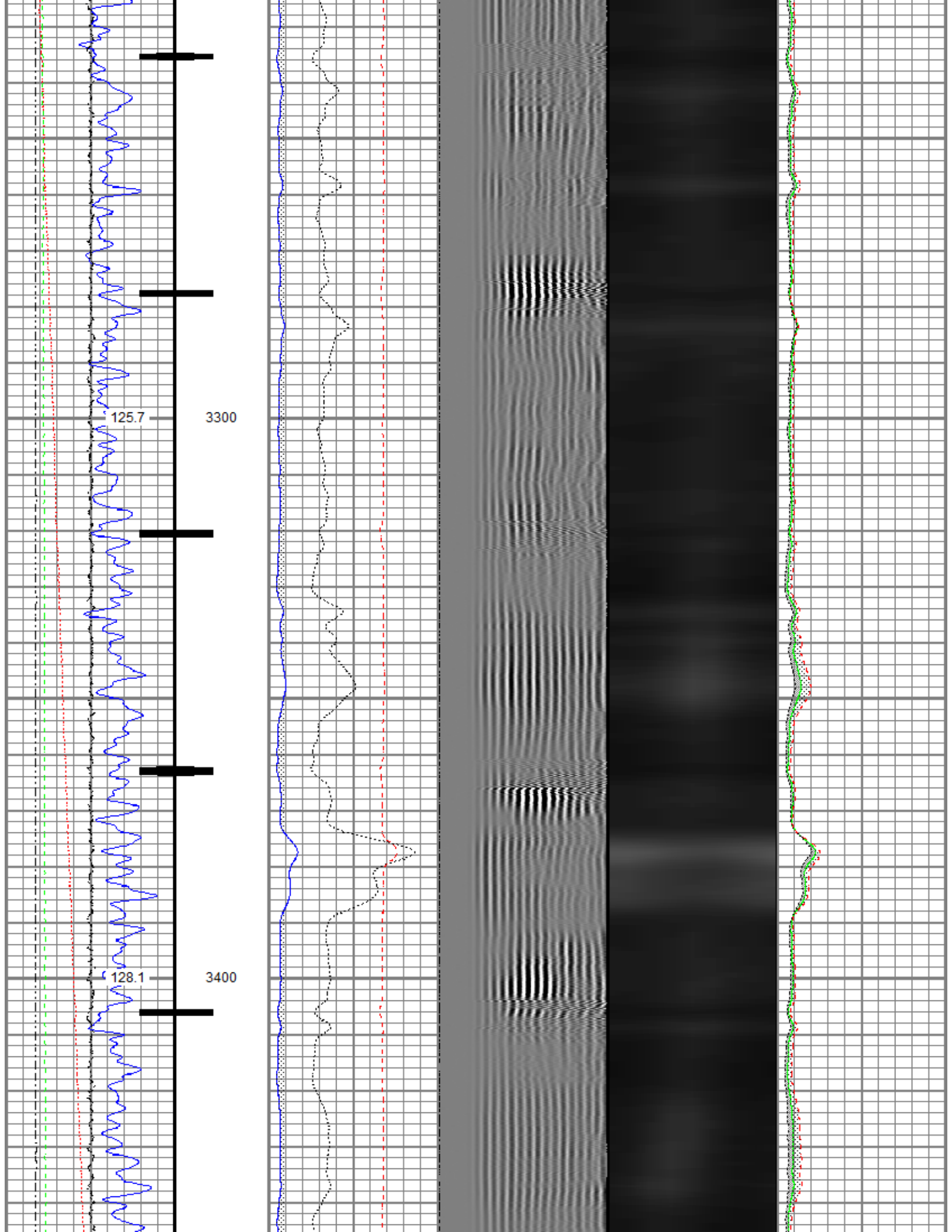


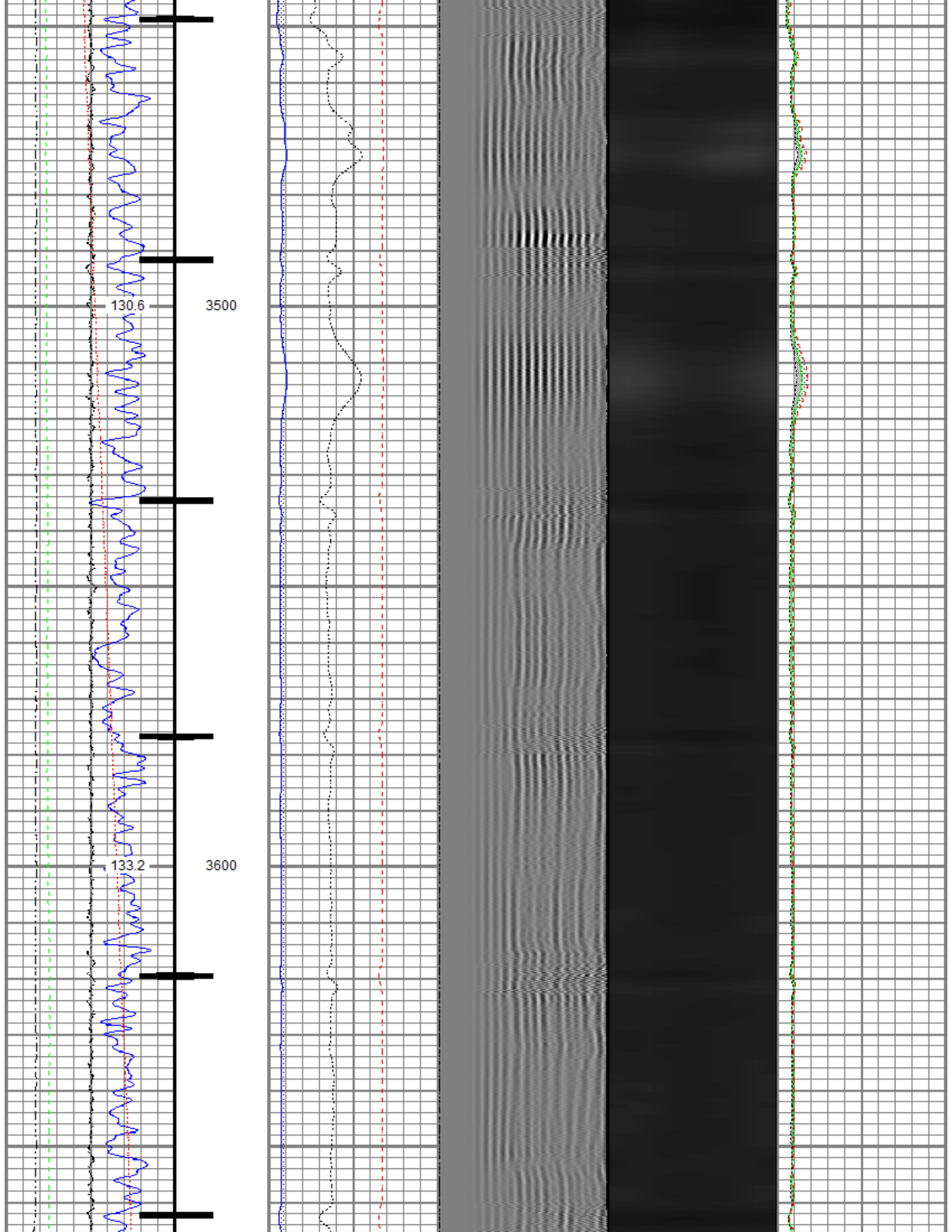


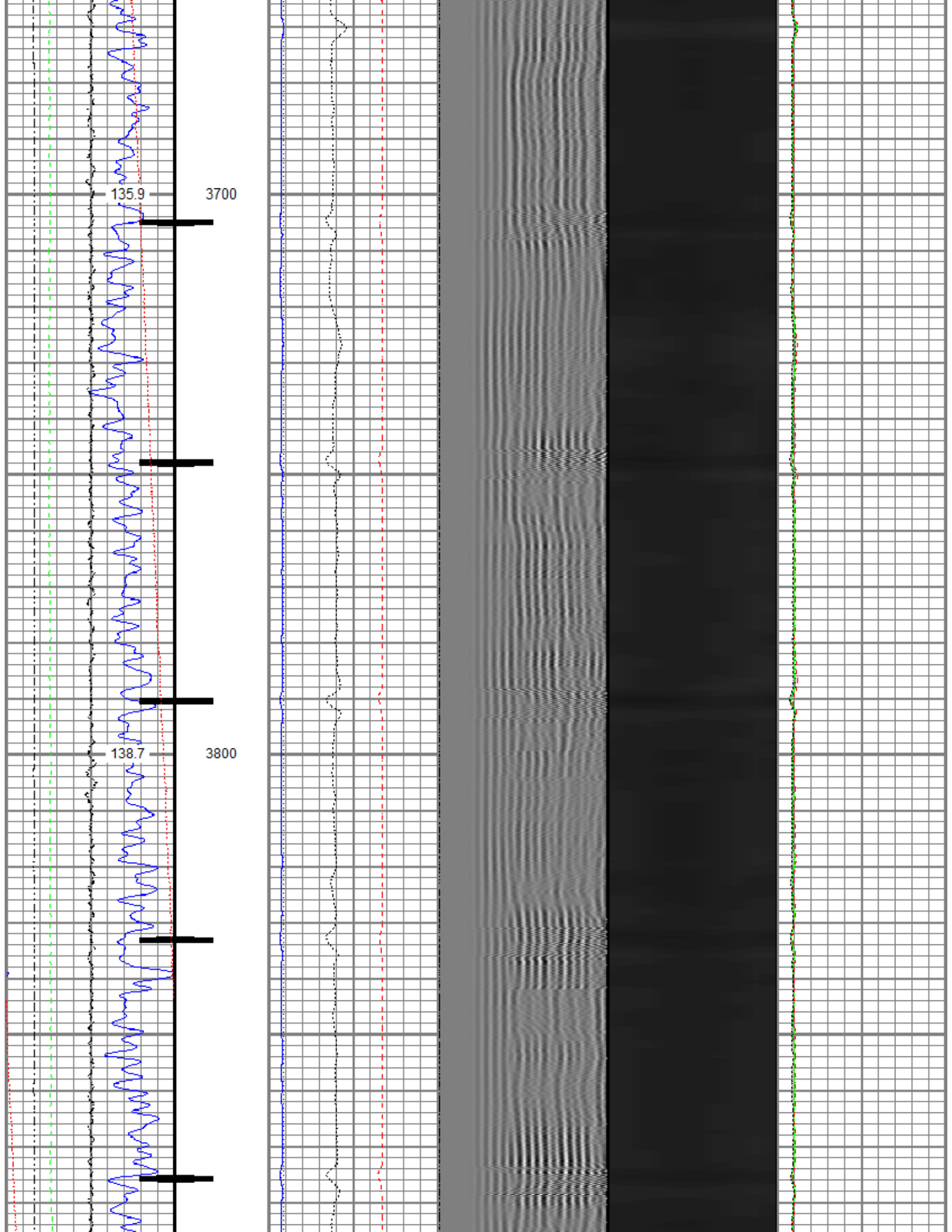


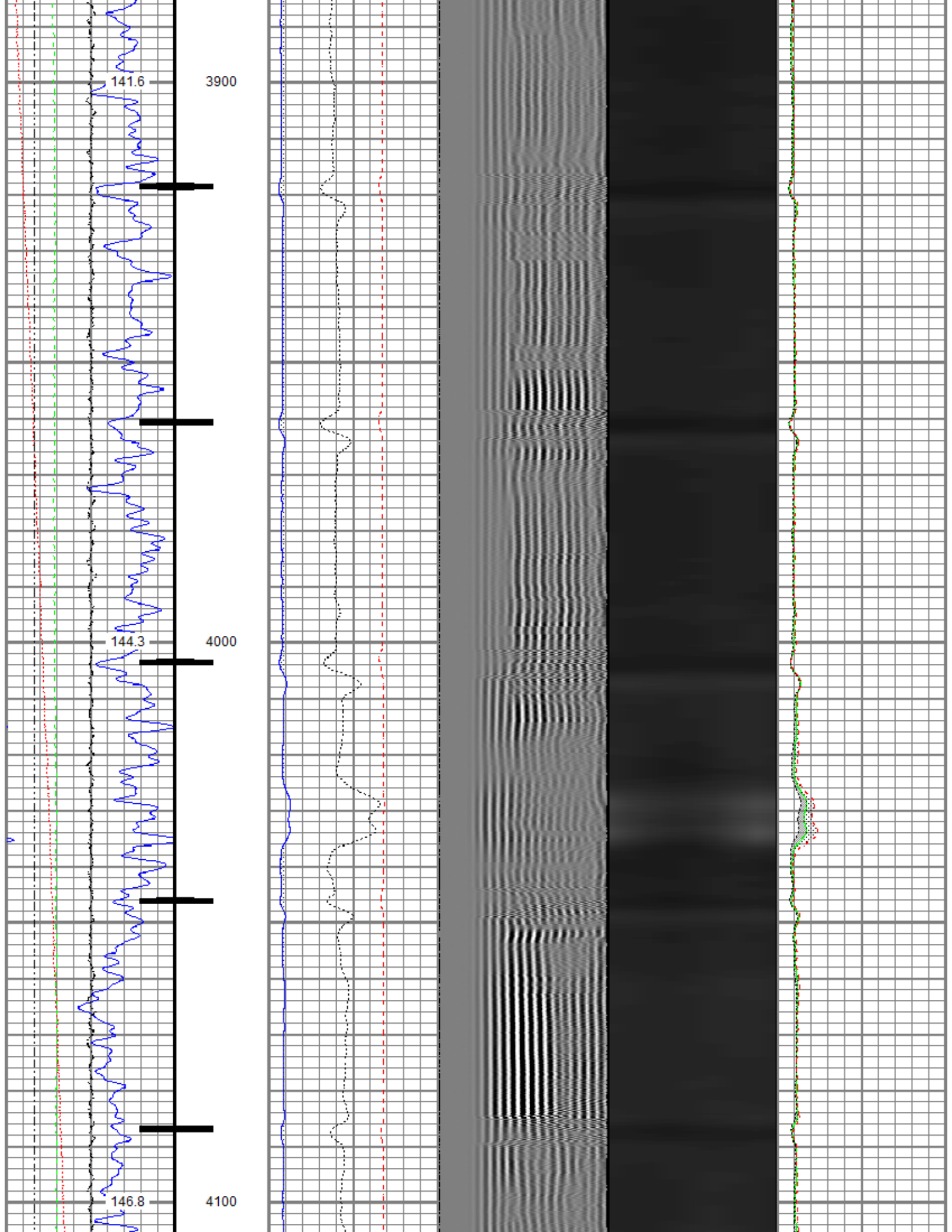


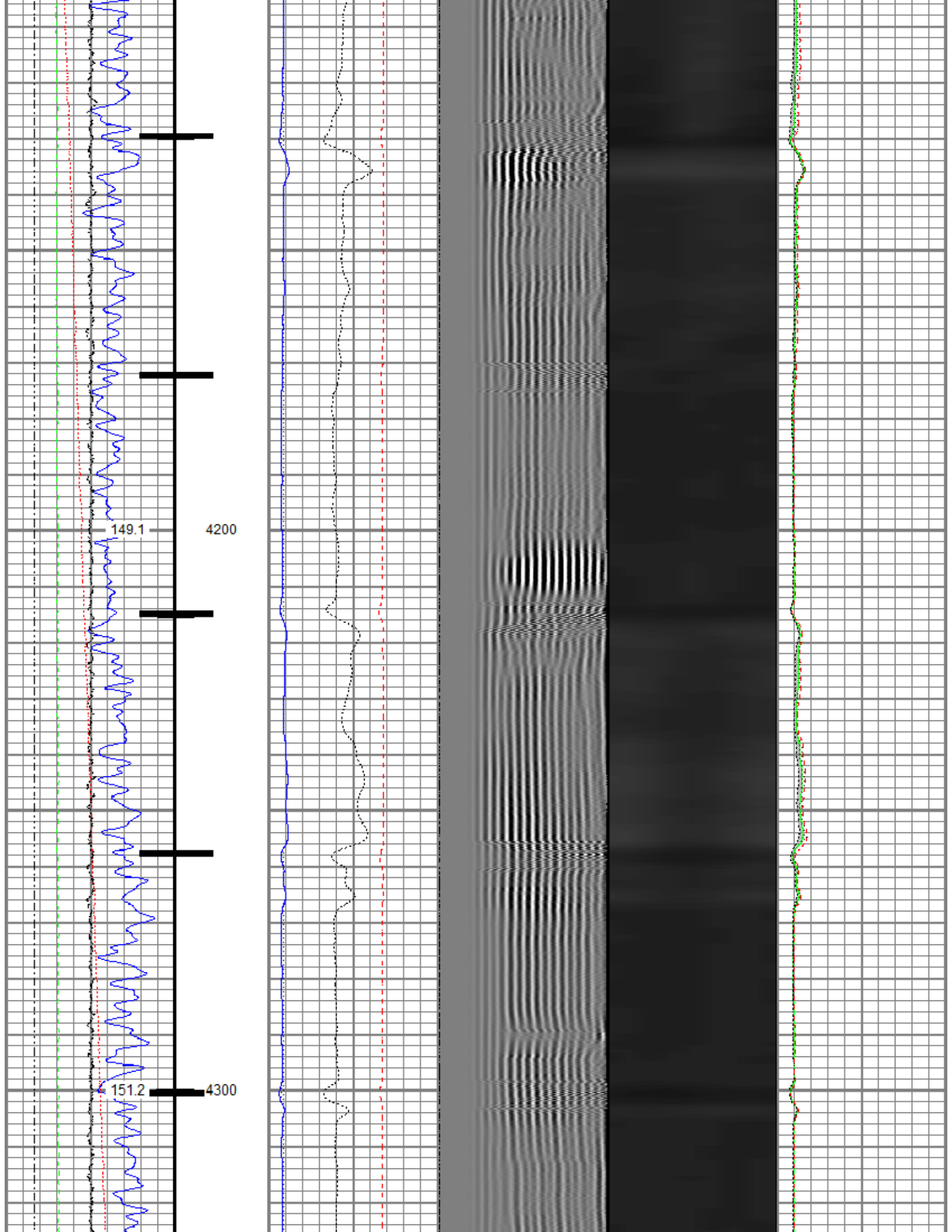


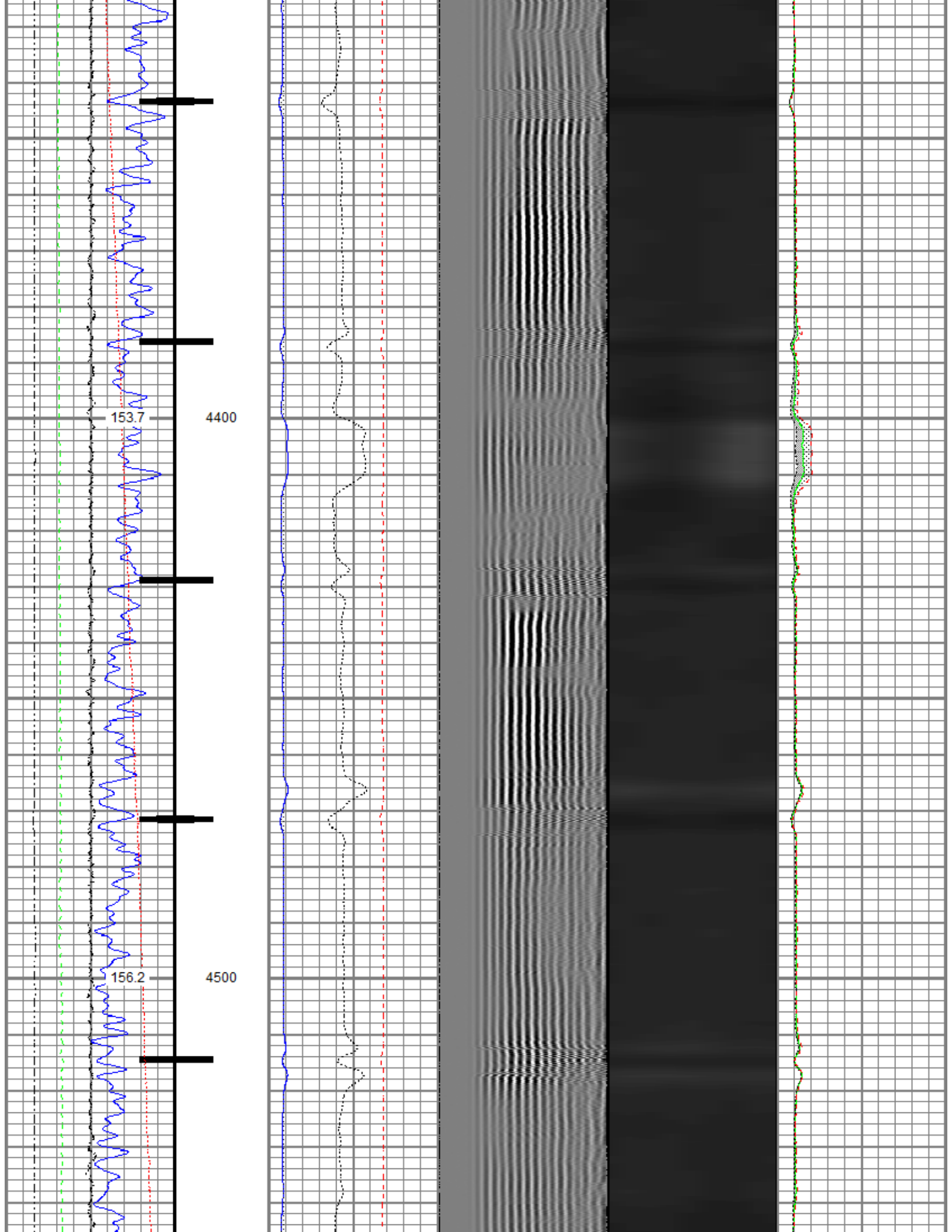


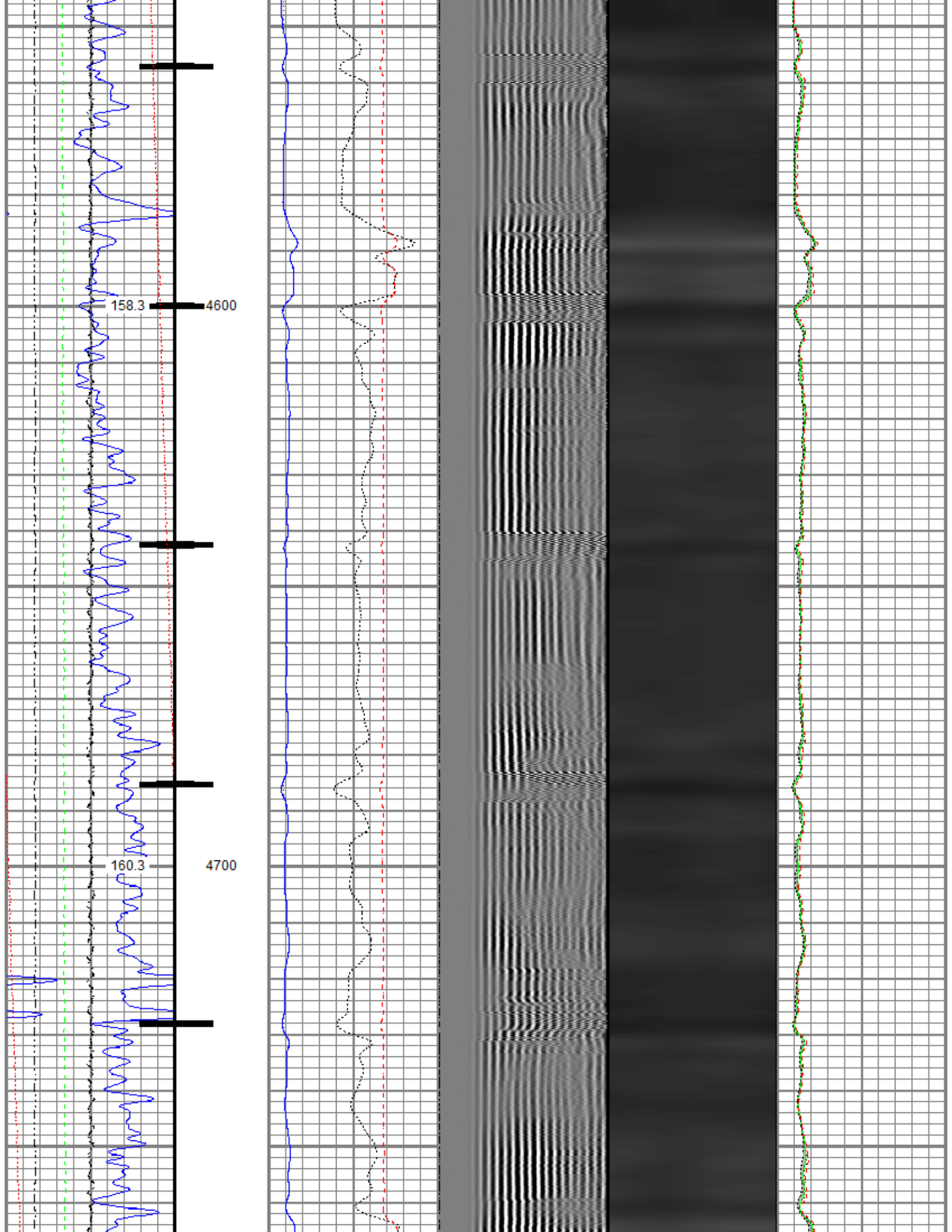


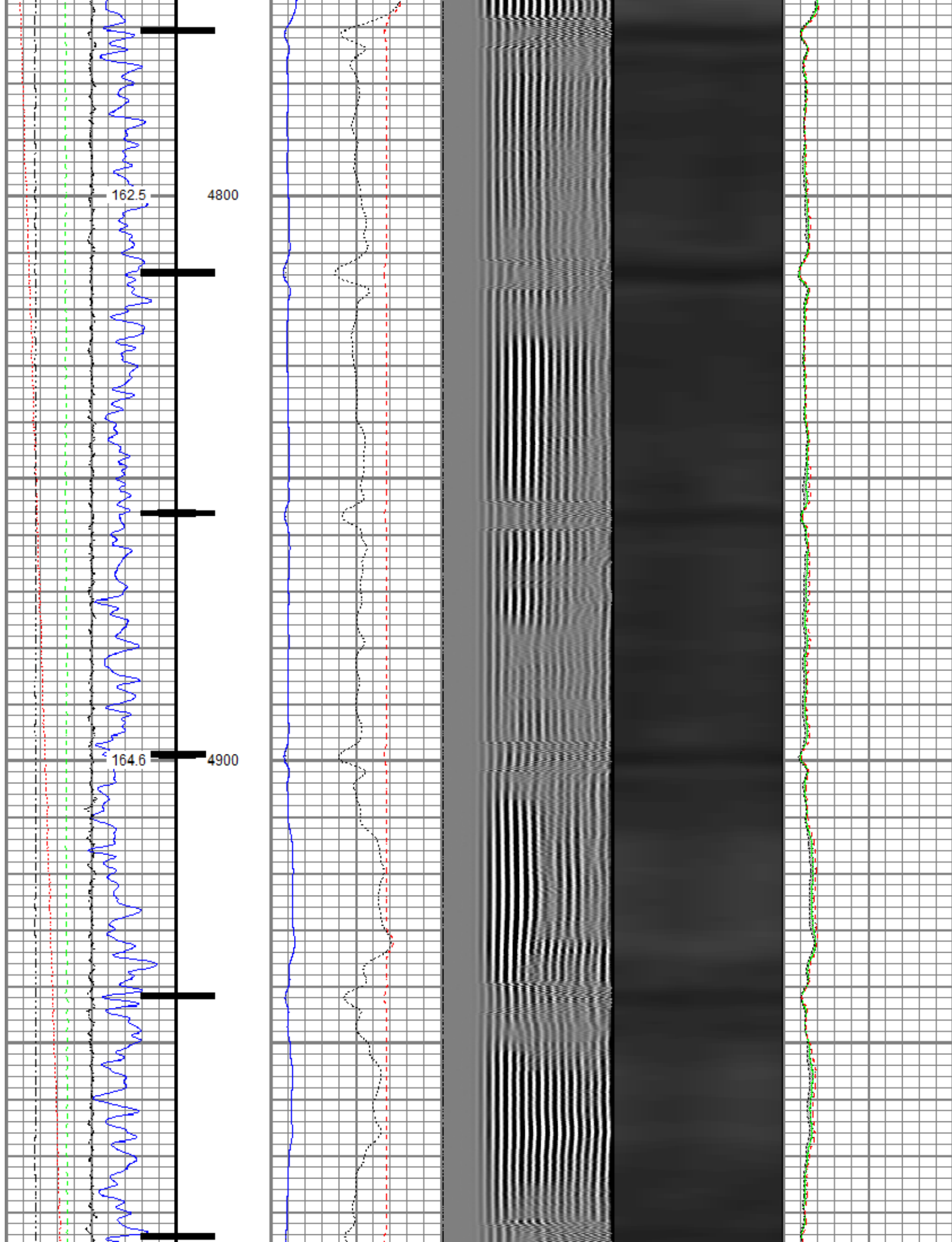


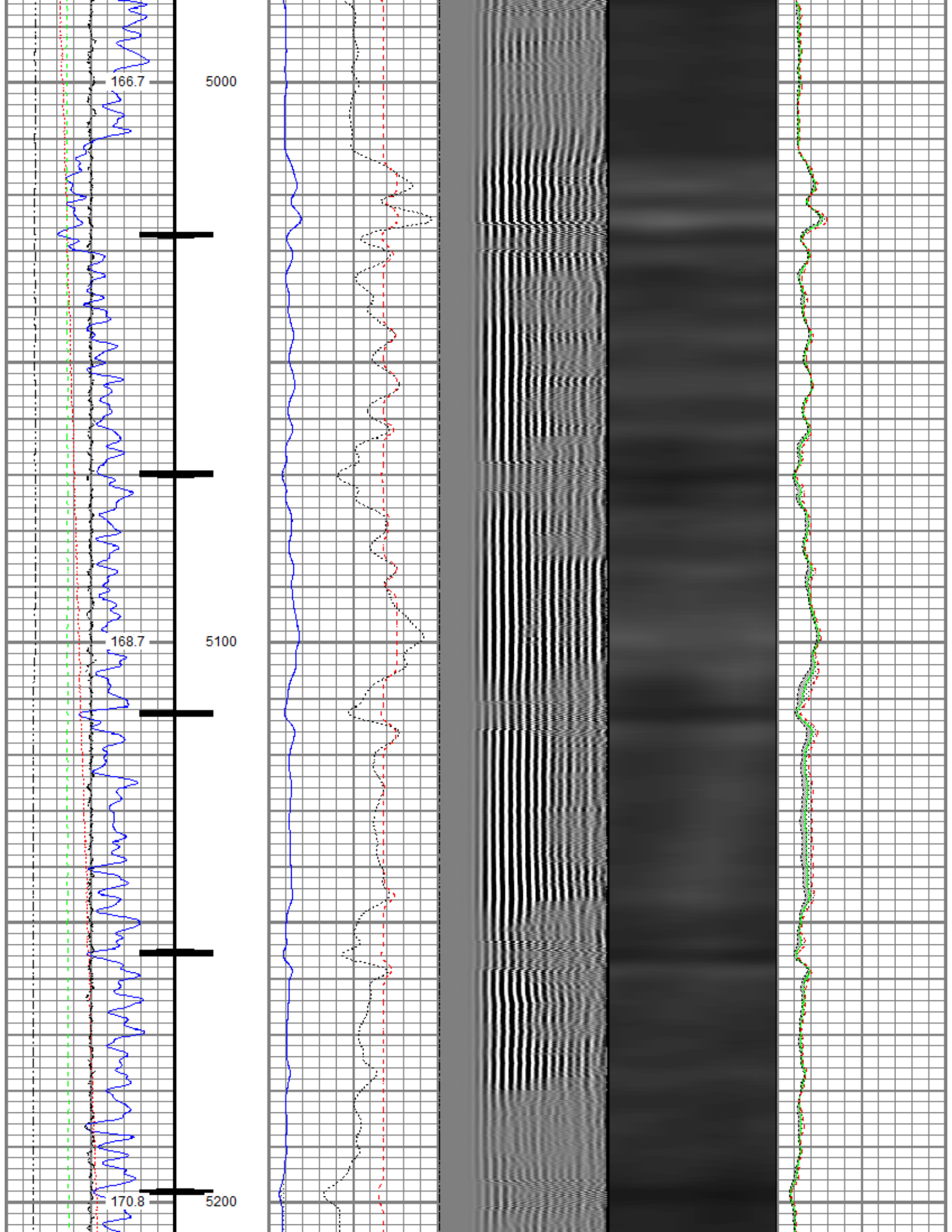


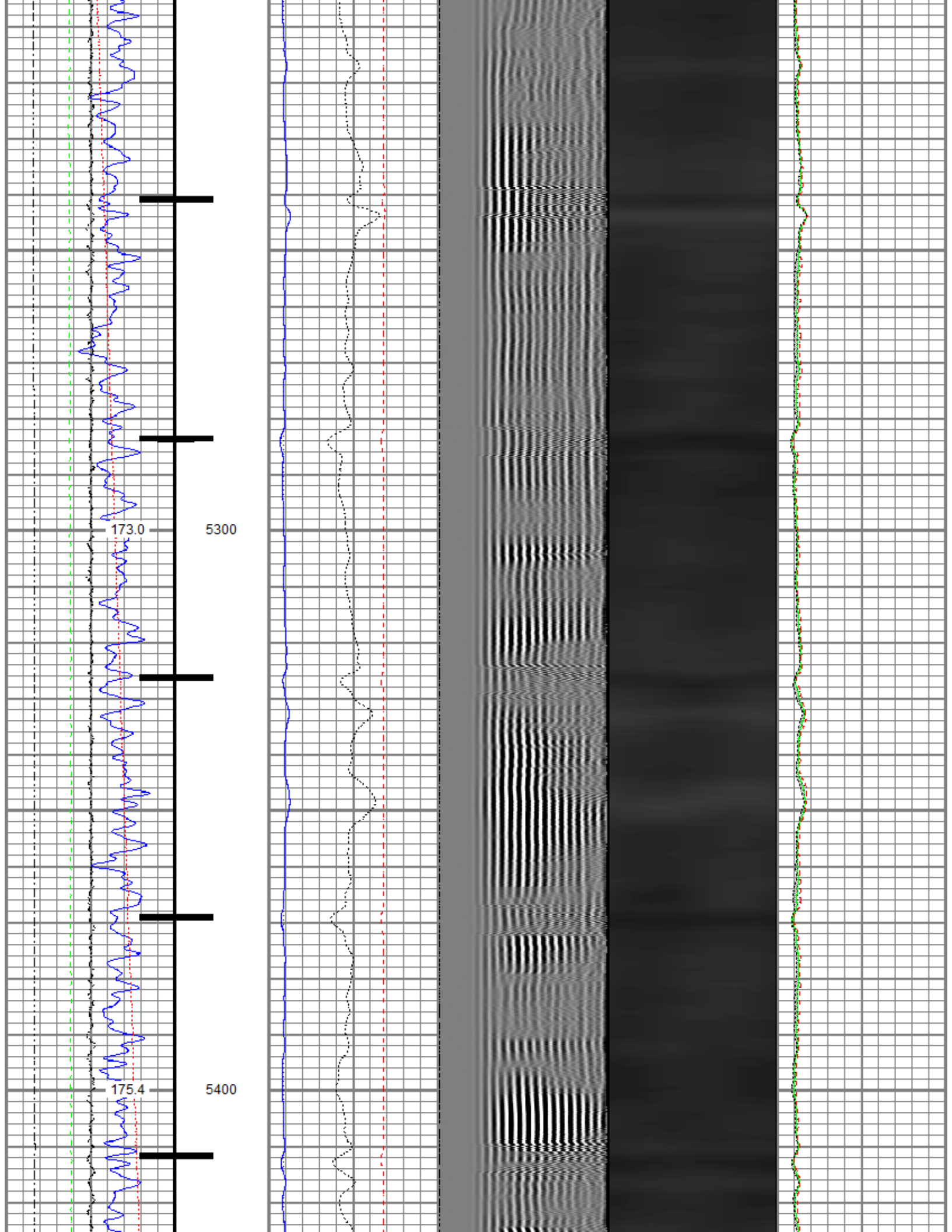


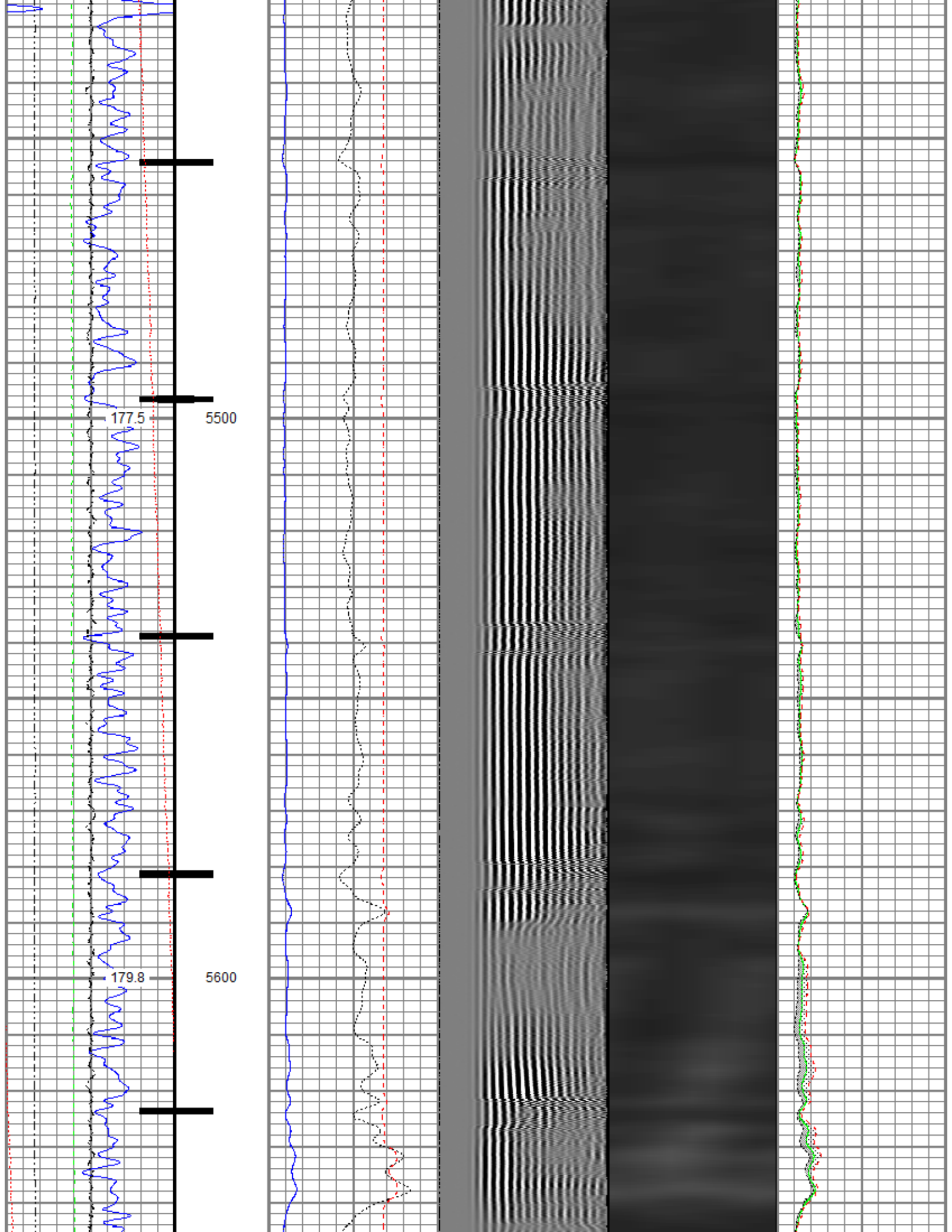


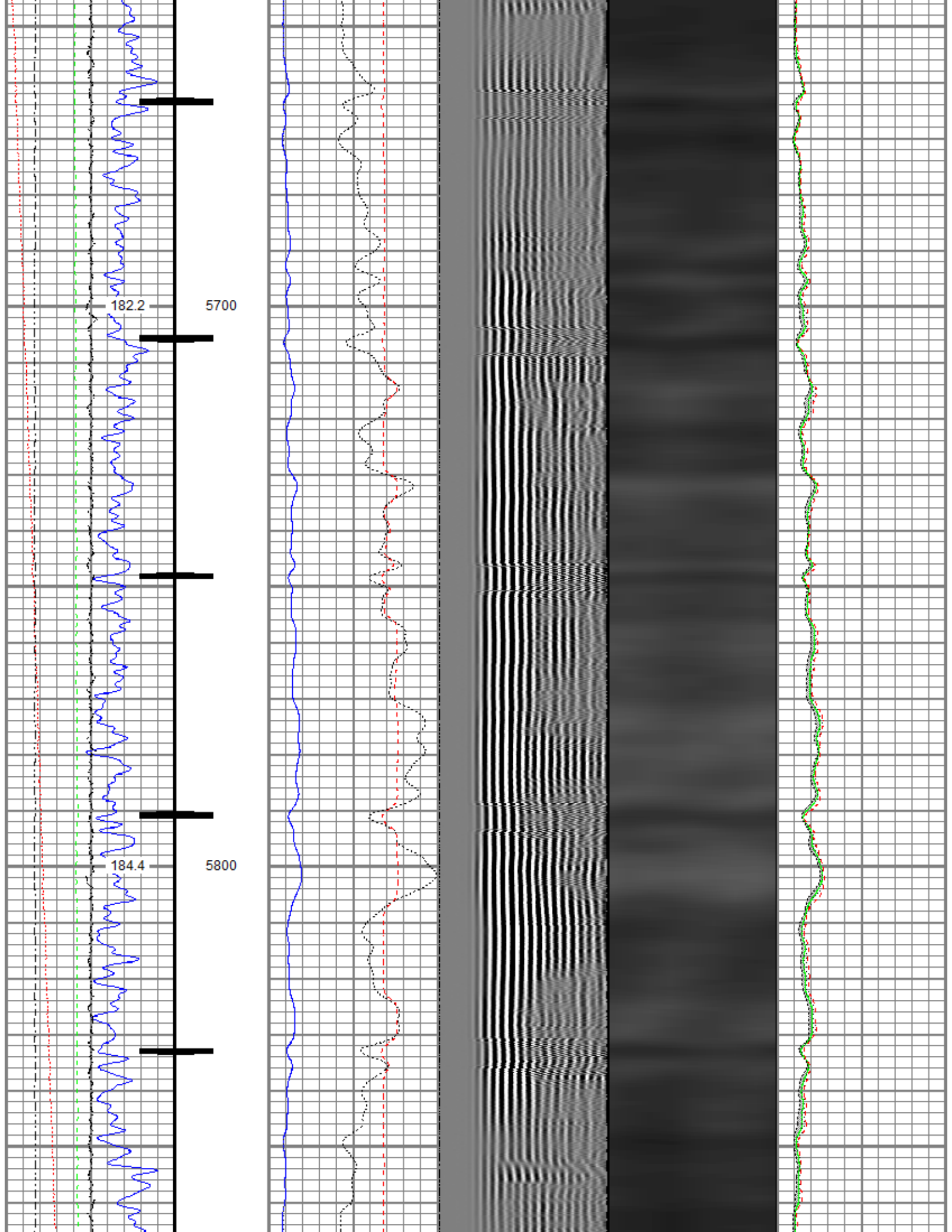


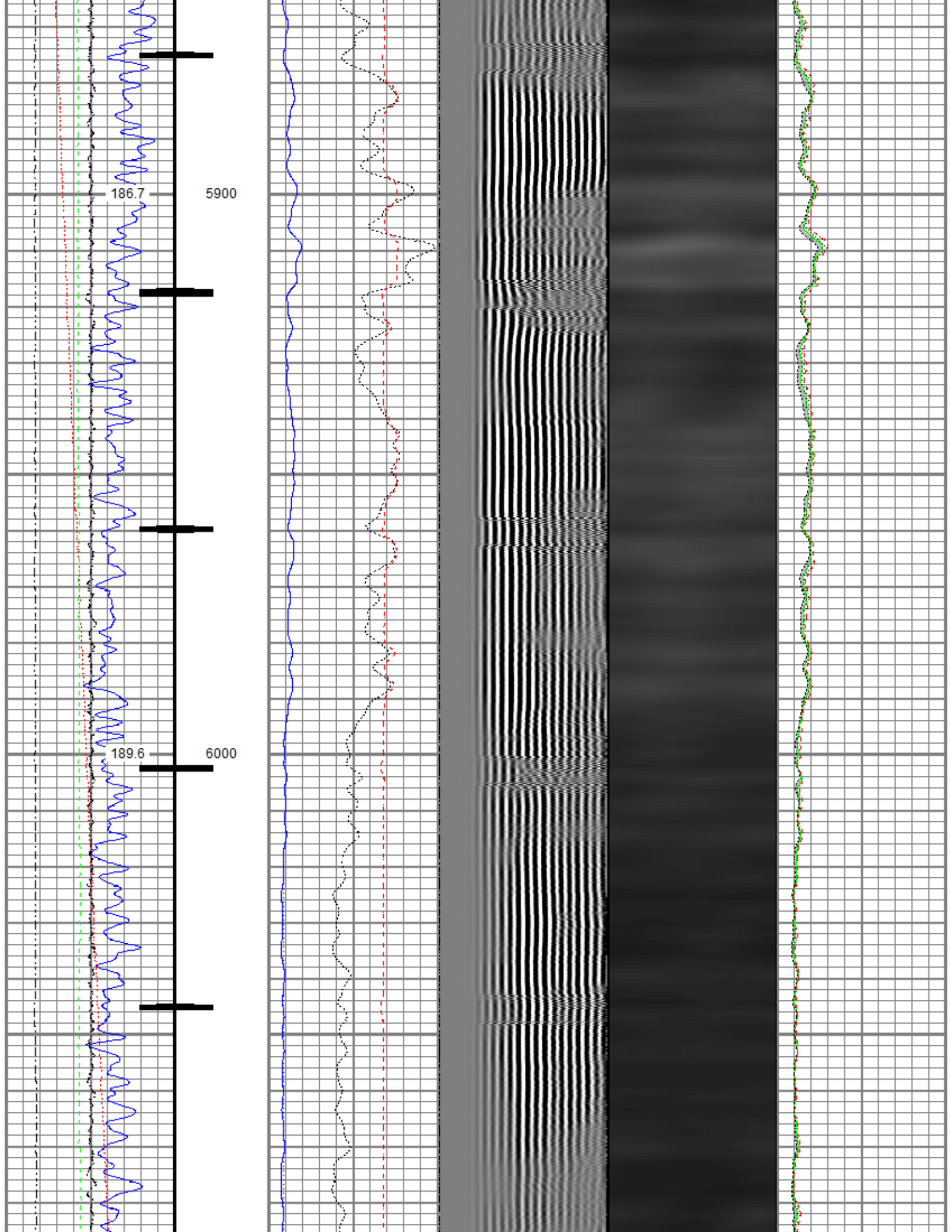


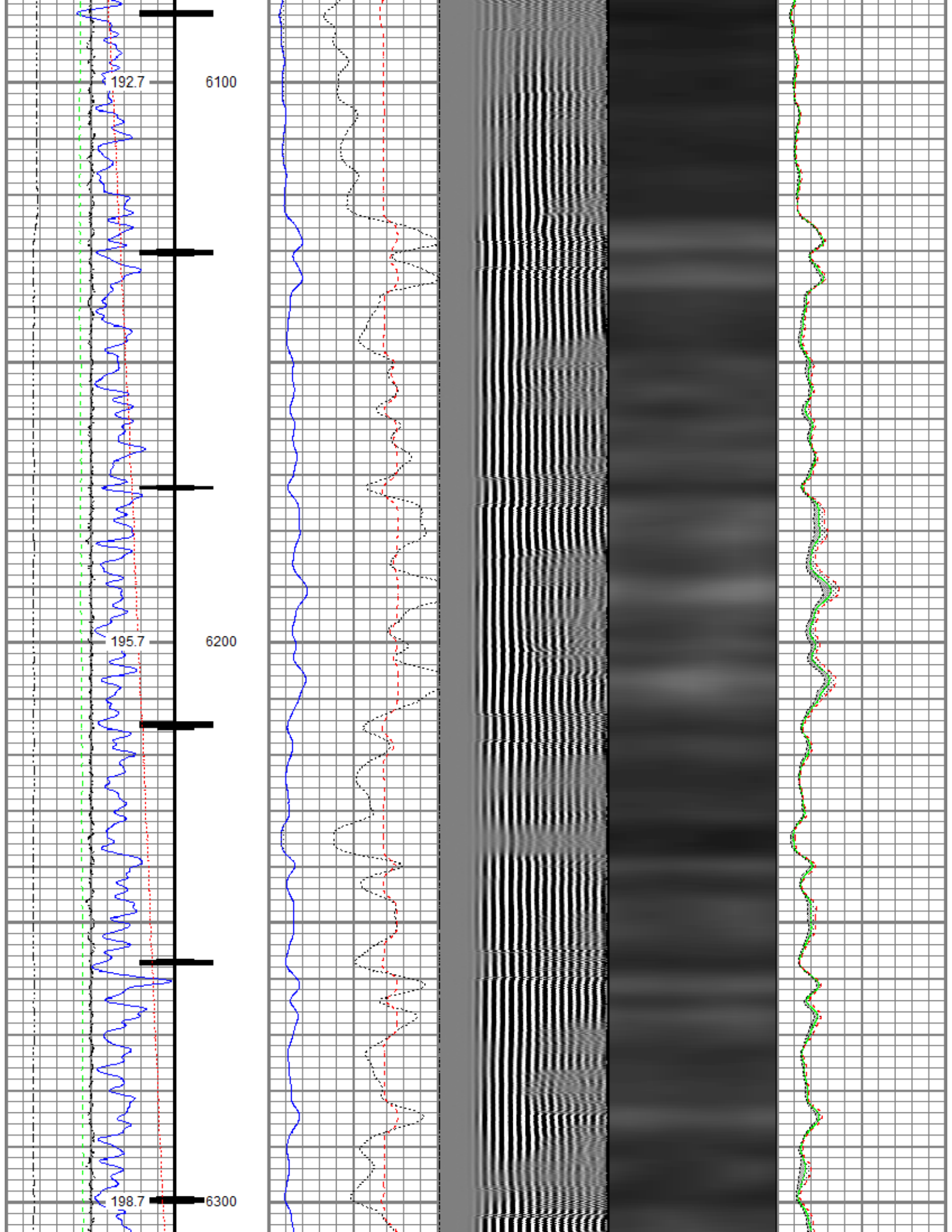


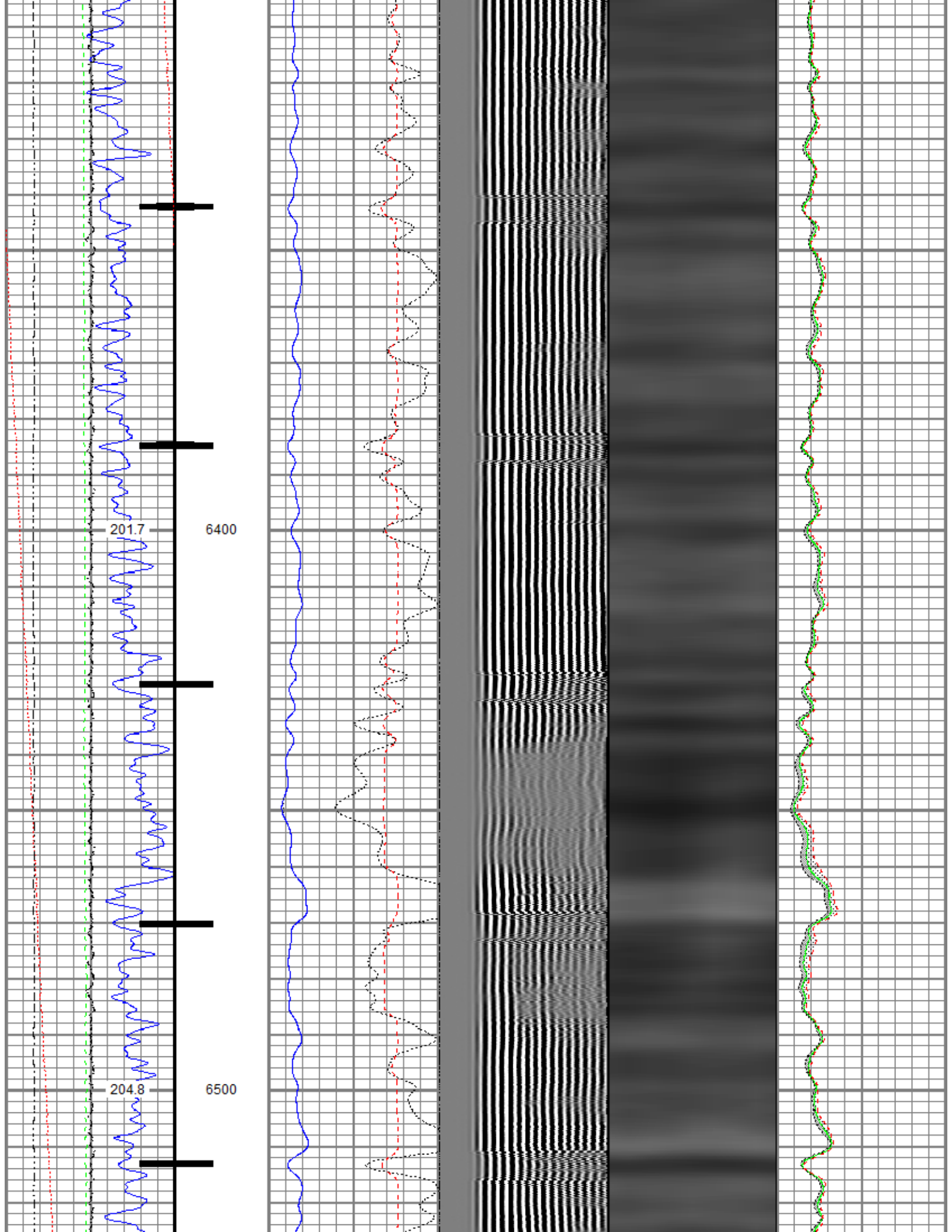


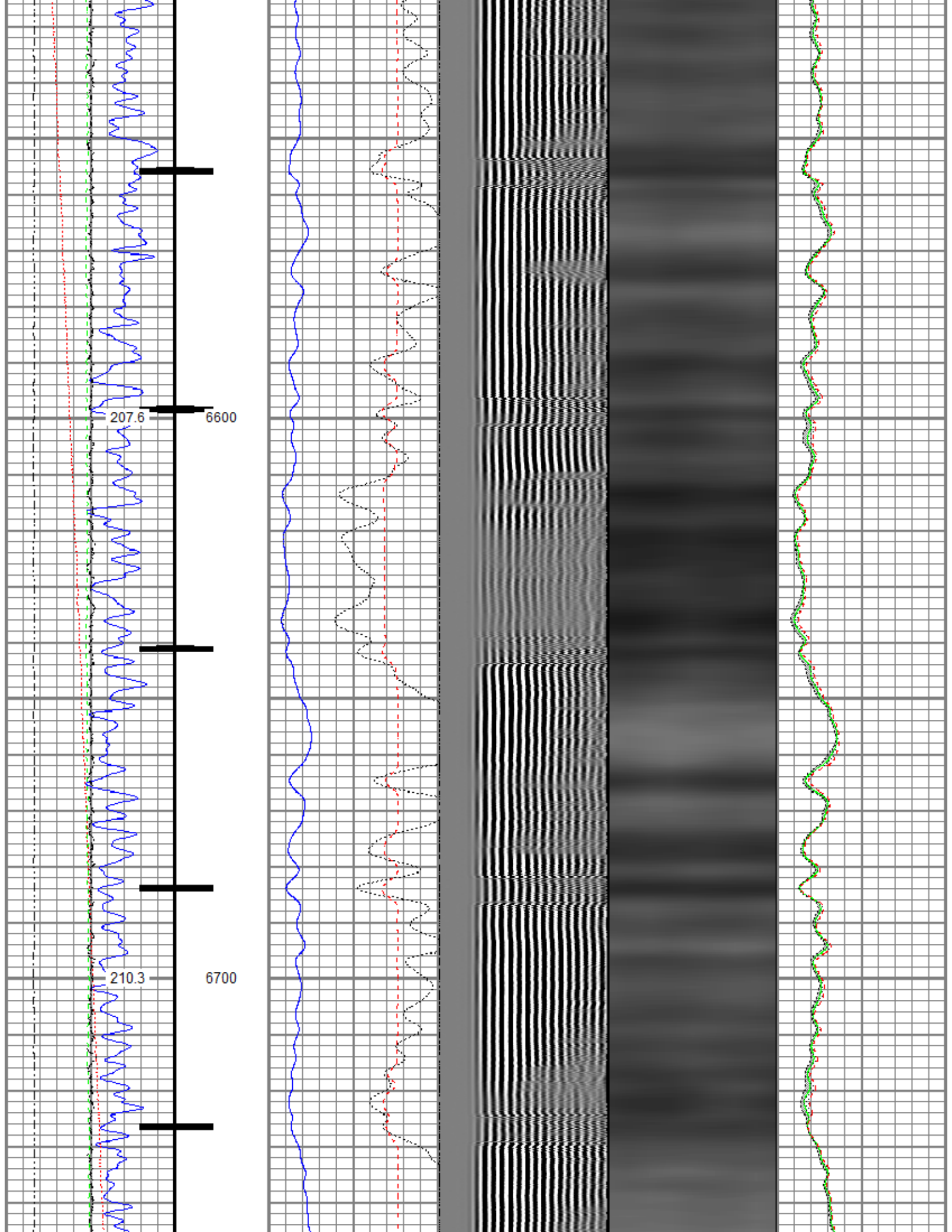


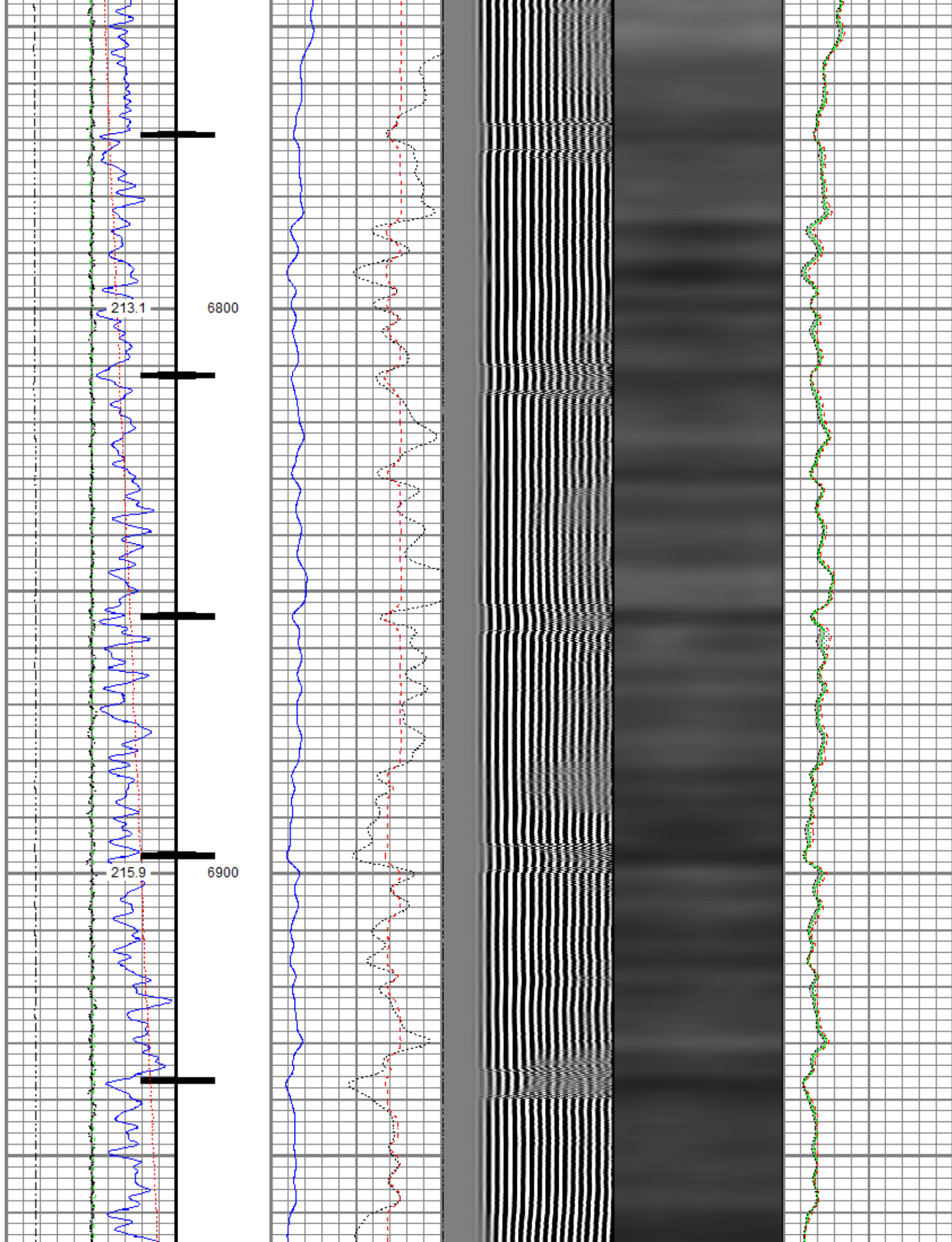


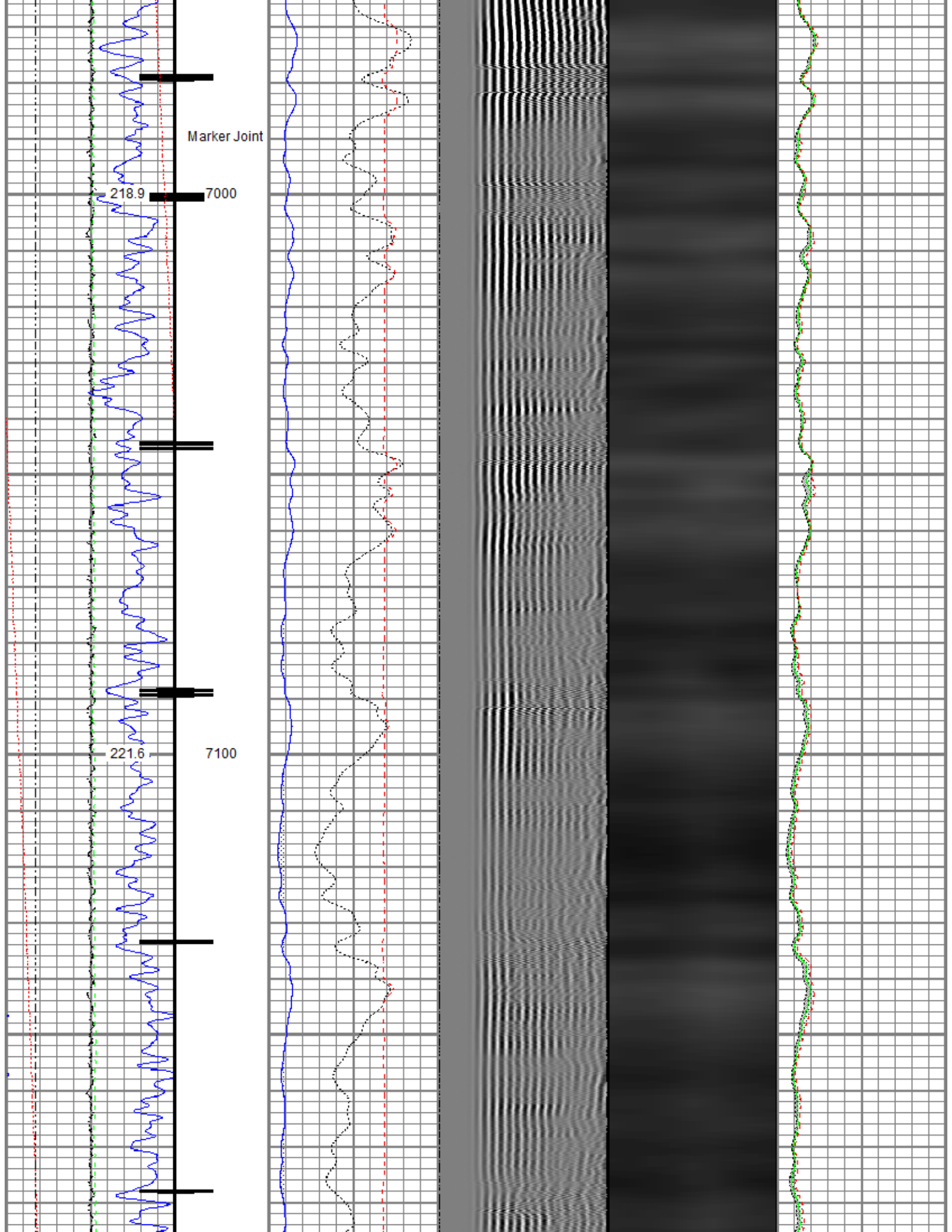


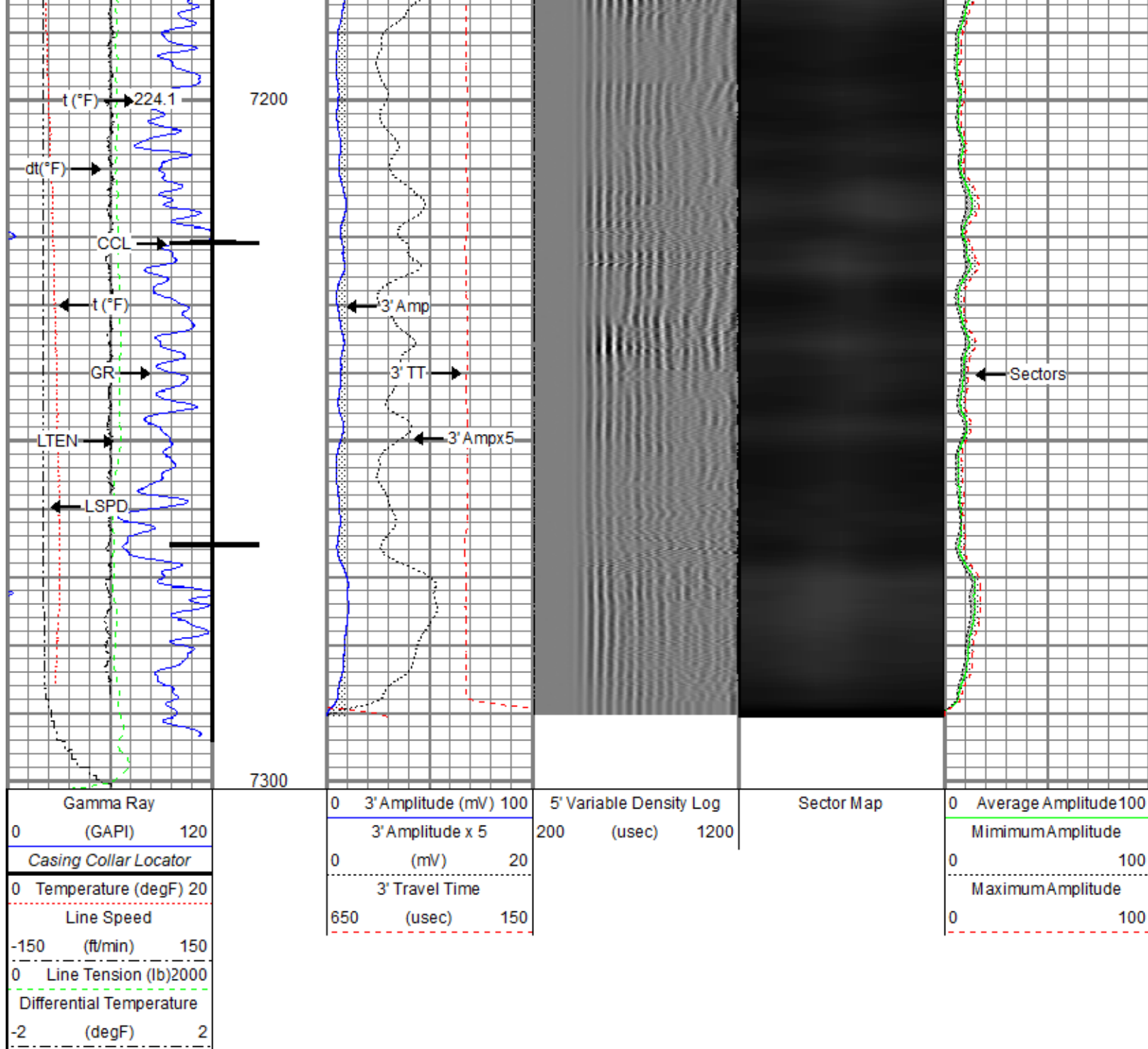








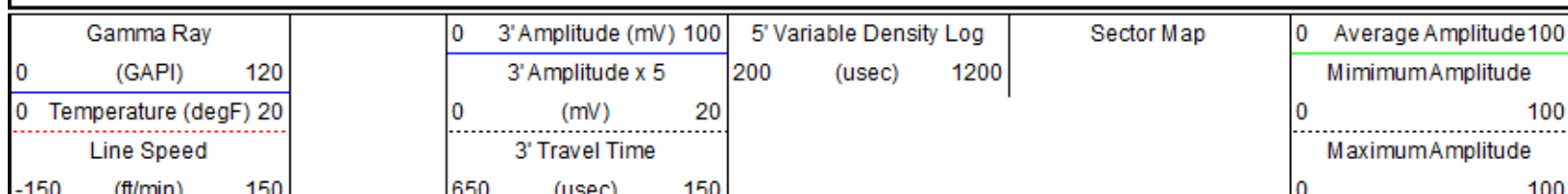


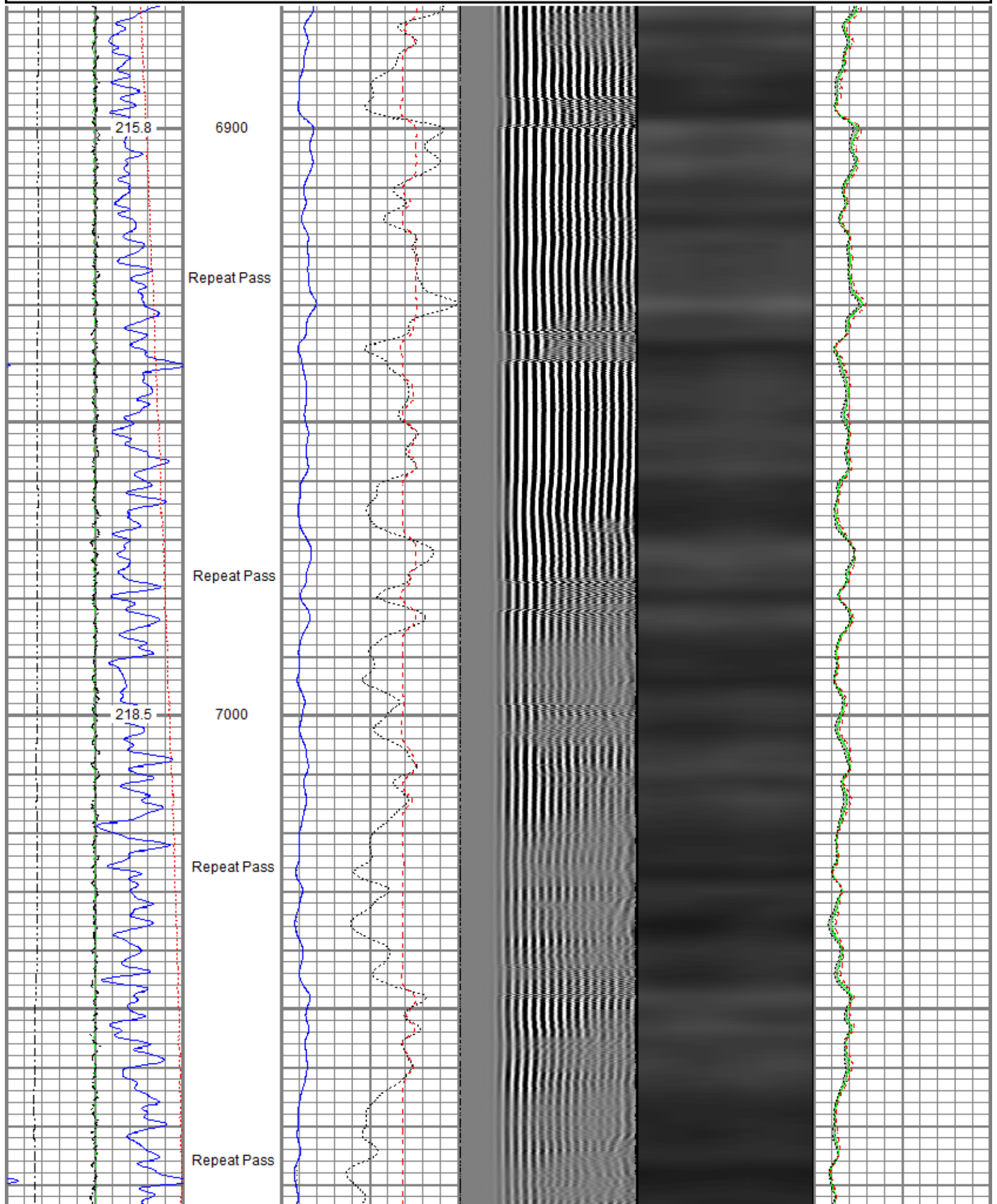


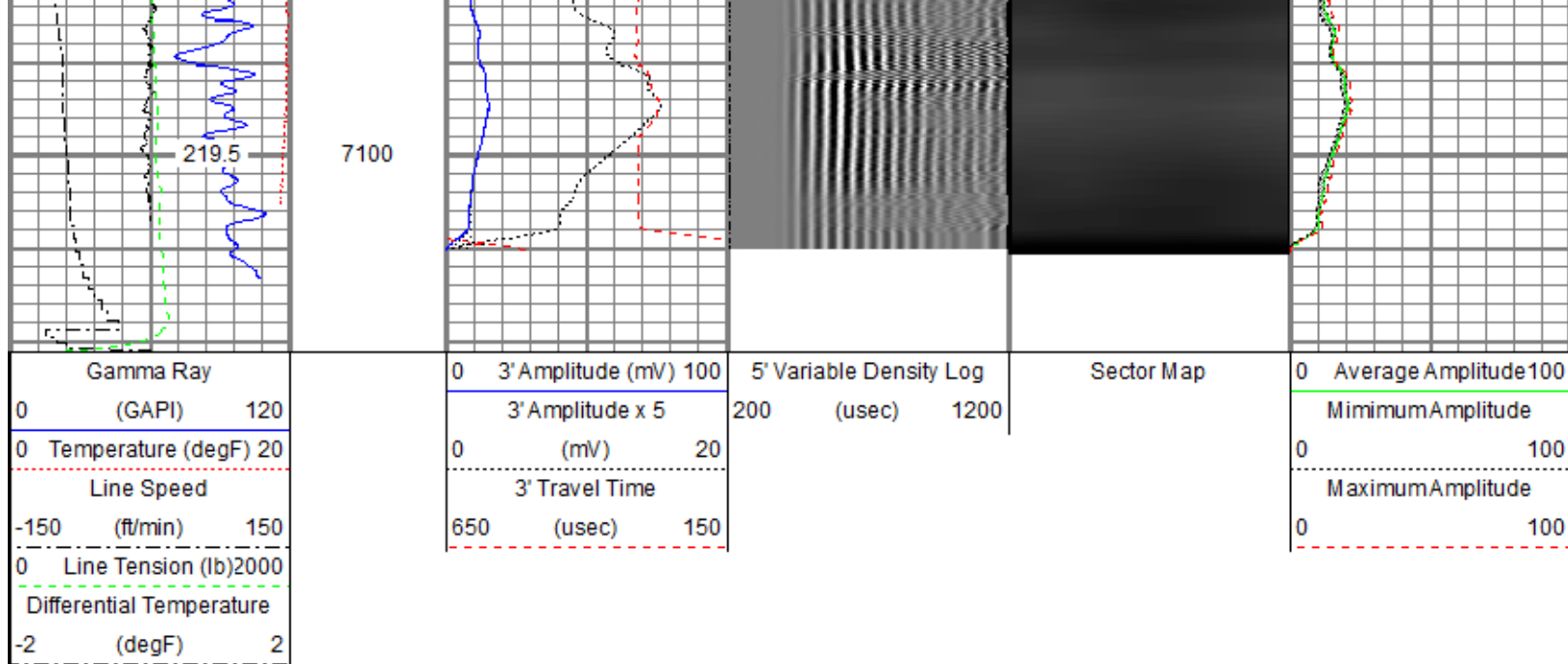
Repeat Pass

Recorded With 2800 PSI Surface Induced Pressure

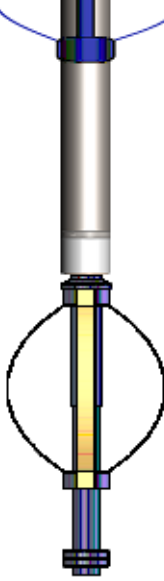
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 Dataset Pathname pass2.2
 Presentation Format ros_radri
 Dataset Creation Sat May 15 09:20:19 2021
 Charted by Depth in Feet scaled 1:240







Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
ErrCt	18.10		Titan CHD-16875 GO	1.03	1.69	5.40
RBT_HV	17.07		Titan 1-11/16" Assembled Electric Cable Head with 1" Fishing Neck			
			SO BS CENT-2750-4500	1.33	3.25	10.00
			Slip Over 2-3/4" I.D. for 4-1/2" O.D. Casing Bow Spring Centralizer			
TEMP	14.16					
			Probe Radii ACC-2750 RBTa (FW1302-002)	9.39	2.75	105.00
			Probe 2-3/4" Radial Cement Bond Tool with Integral Temperature Sub and Accelerometer			
RBT_ACCZ	11.93					
RBT_ACCY	11.93					
RBT_ACCX	11.93					
WVFSYNC	11.93					
WVFS8	11.93					
WVFS7	11.93					
WVFS6	11.93					
WVFS5	11.93					
WVFS4	11.93					
WVFS3	11.93					
WVFS2	11.93					
WVFS1	11.93					
WVFCAL	11.93					
WVF3FT	11.93					
WVF5FT	10.93					
CCL\$2	6.80					
CCL\$1	6.80					
	5.40		SO BS CENT-2750-4500	1.33	3.25	10.00

GR	5.46		Slip Over 2-3/4" I.D. for 4-1/2" O.D. Casing Bow Spring Centralizer Probe GR-CCL-2750 6PB (FW1304-132) Probe 2-3/4" rev.1 Digital Scintillation Gamma Ray/CCL Combined with 6 Pin Bottom for CNT	4.80	2.75	55.00
LOCTIM	0.00		Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00
UTCTIM	0.00					
Dataset: 0512351250_oxy_nelson 35-17hz_rbl_05-13-21.db: field/well/run1/pass4.2 Total length: 18.10 ft Total weight: 215.40 lb O.D.: 3.25 in						

Calibration Report						
Database File	0512351250_oxy_nelson 35-17hz_rbl_05-13-21.db					
Dataset Pathname	pass4.2					
Dataset Creation	Sat May 15 09:14:30 2021					
Gamma Ray Calibration Report						
Serial Number:	FW1304-132					
Tool Model:	2750 6PB					
Performed:	Mon Oct 19 14:19:51 2020					
Calibrator Value:	637.0	GAPI				
Background Reading:	109.1	cps				
Calibrator Reading:	1009.7	cps				
Sensitivity:	0.7072	GAPI/cps				
Segmented Cement Bond Log Calibration Report						
Serial Number:	FW1302-002					
Tool Model:	2750 RBTa					
Calibration Casing Diameter:	5.500	in				
Calibration Depth:	0.329	ft				
Master Calibration, performed (Derived):						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.008	0.664	0.800	71.921	108.324	-0.048
CAL	0.006	0.675				
5'	0.008	0.619	0.800	71.921	116.475	-0.128
SUM						
S1	0.005	0.619	0.000	100.000	162.933	-0.851
S2	0.007	0.668	0.000	100.000	151.329	-1.119
S3	0.008	0.710	0.000	100.000	142.362	-1.083
S4	0.008	0.718	0.000	100.000	140.799	-1.158
S5	0.008	0.711	0.000	100.000	142.088	-1.071
S6	0.008	0.684	0.000	100.000	147.787	-1.129
S7	0.008	0.648	0.000	100.000	156.187	-1.172
S8	0.008	0.619	0.000	100.000	163.433	-1.246

Air Zero Calibration, performed Tue May 11 07:17:44 2021:

	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

Inclinometer Calibration Report

Performed:	Mon Oct 19 14:19:51 2020				
	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	-891.00	891.00	-1.00	1.00	gee
Y Accelerometer	-899.00	877.00	-1.00	1.00	gee
Z Accelerometer	-7.47	873.36	0.00	1.00	gee

Temperature Calibration Report

Serial Number:	FW1302-002			
Tool Model:	2750 RBTa			
Performed:	Mon Oct 19 14:19:51 2020			
	Reference		Reading	
Low Reference:	100.00	degF	110.72	degF
High Reference:	350.00	degF	409.18	degF
Gain:	0.84			
Offset:	7.26			
Delta Spacing	1			



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State	Colorado