

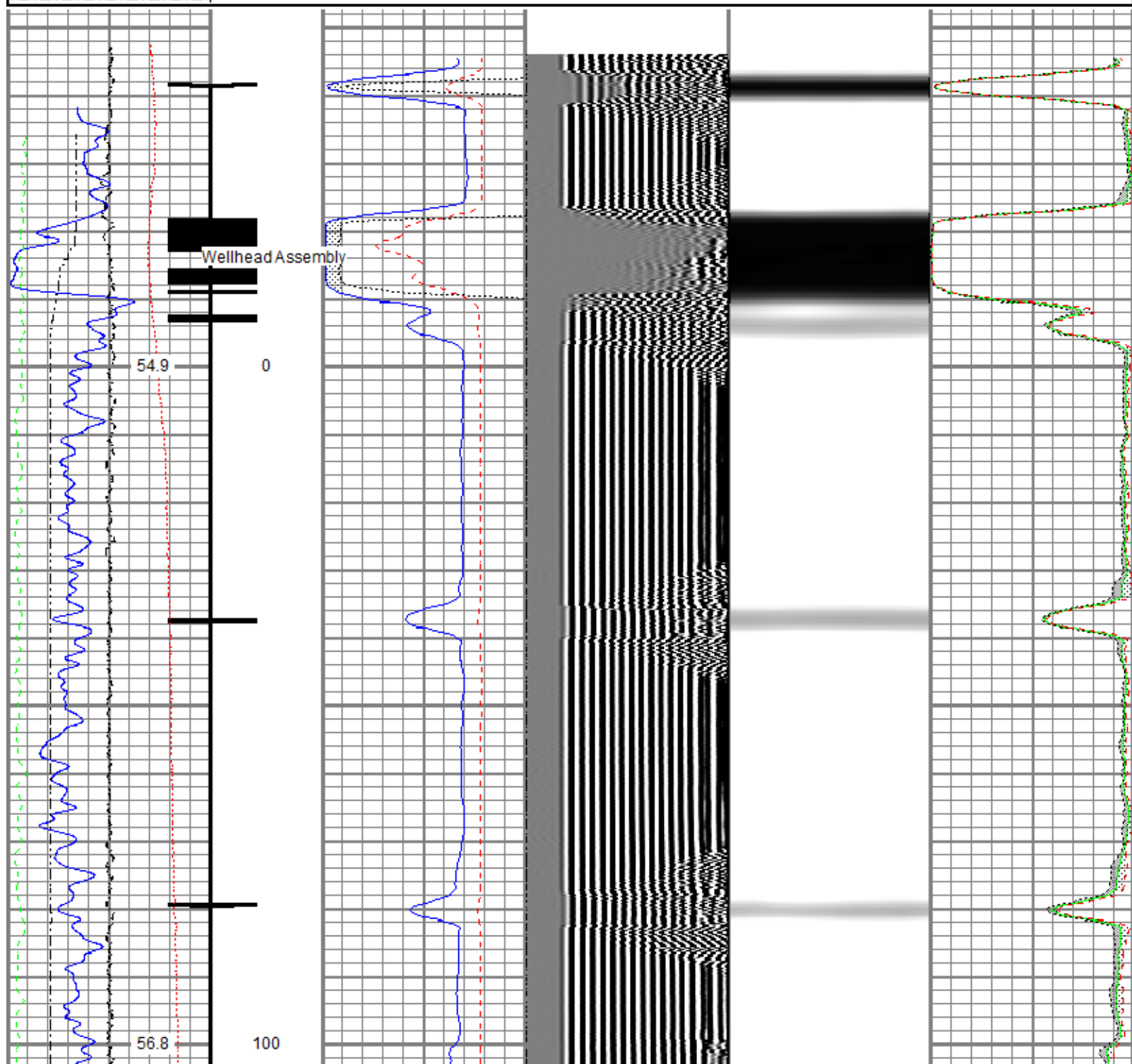
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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on 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 6752 FT Adjusted -8 FT to correlate with Marker Joint Gauge Ring/Junk Basket ran to 7640 FT Retrievable Bridge Plug set at 6828 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!!

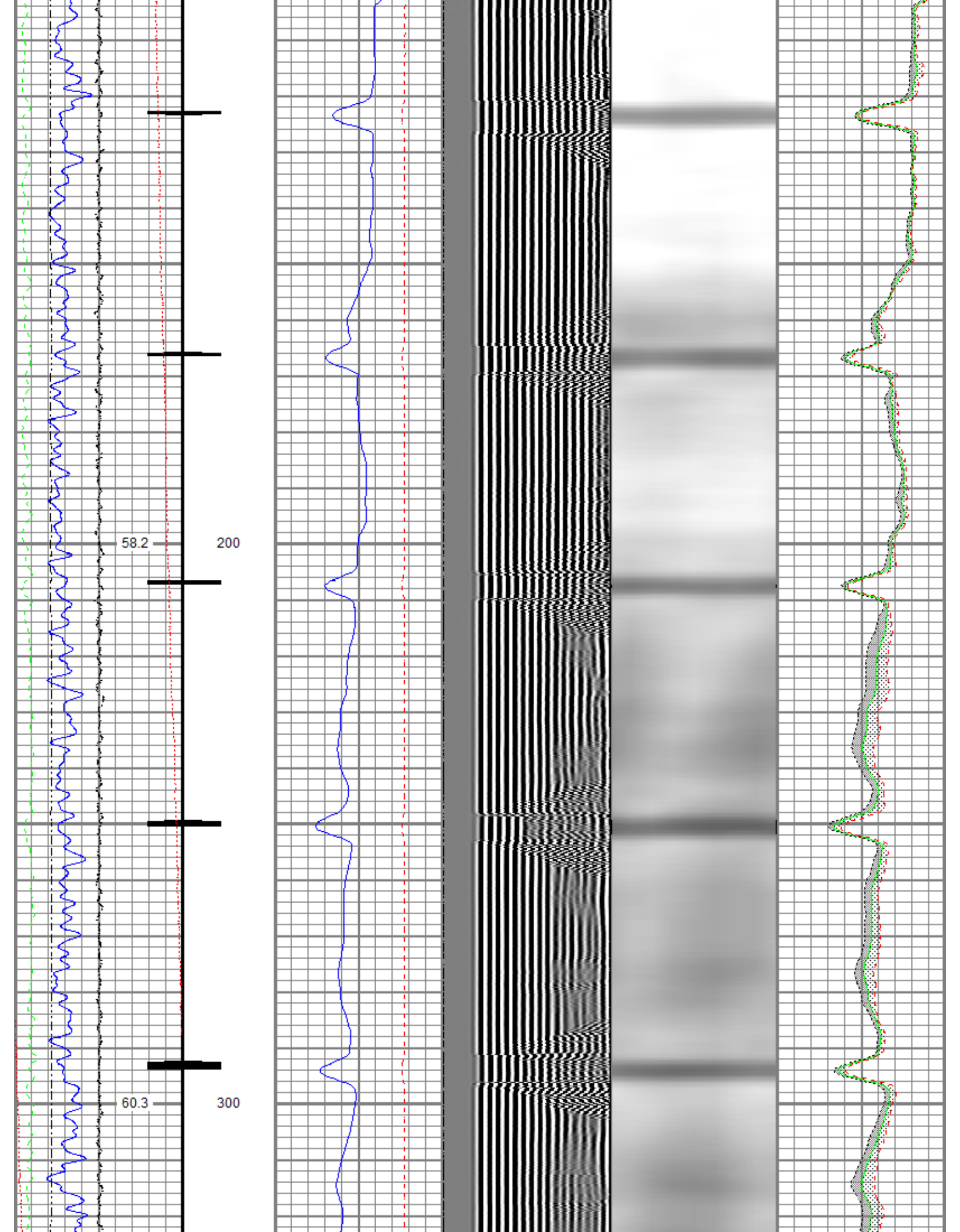


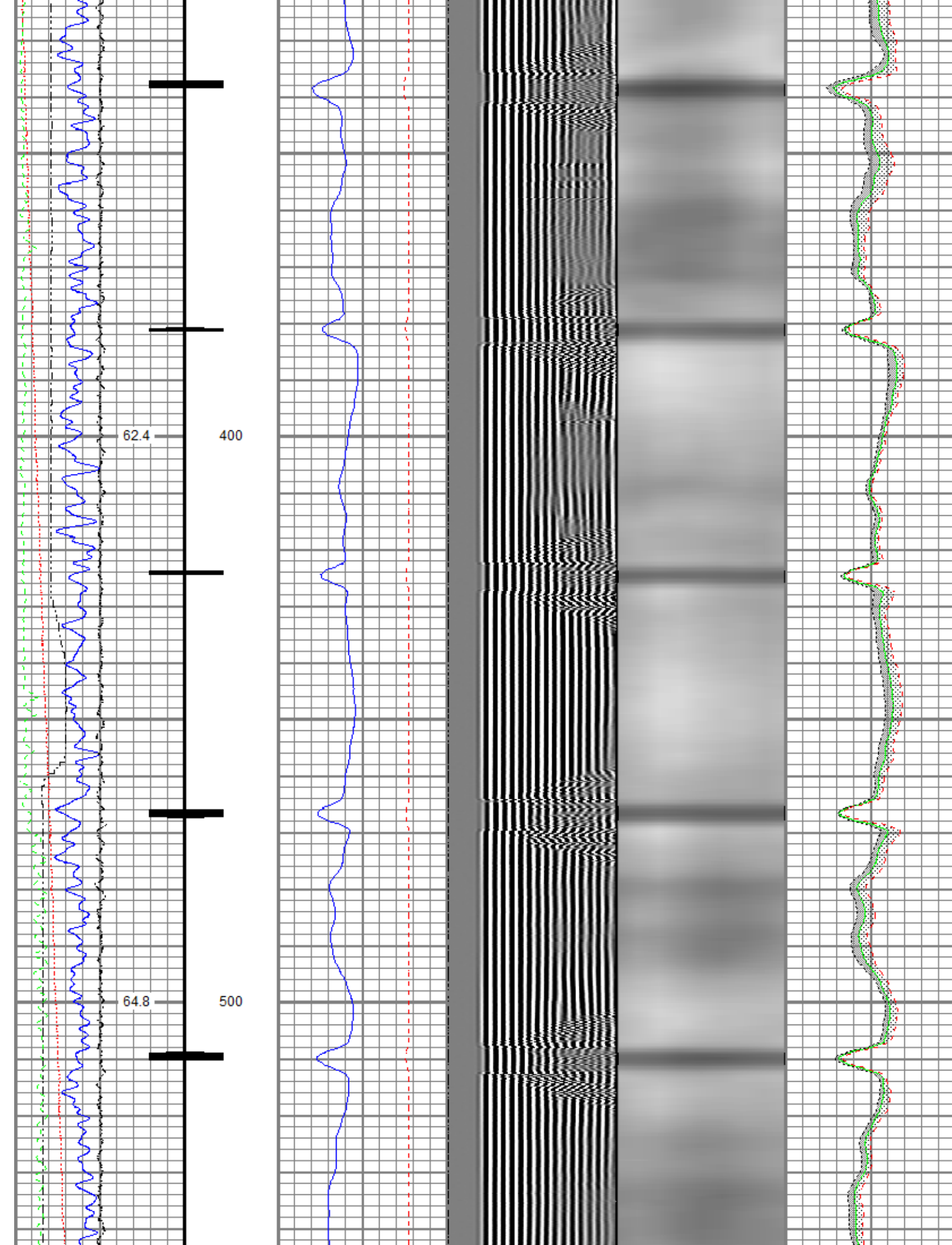
Recorded With 2800 PSI Surface Induced Pressure

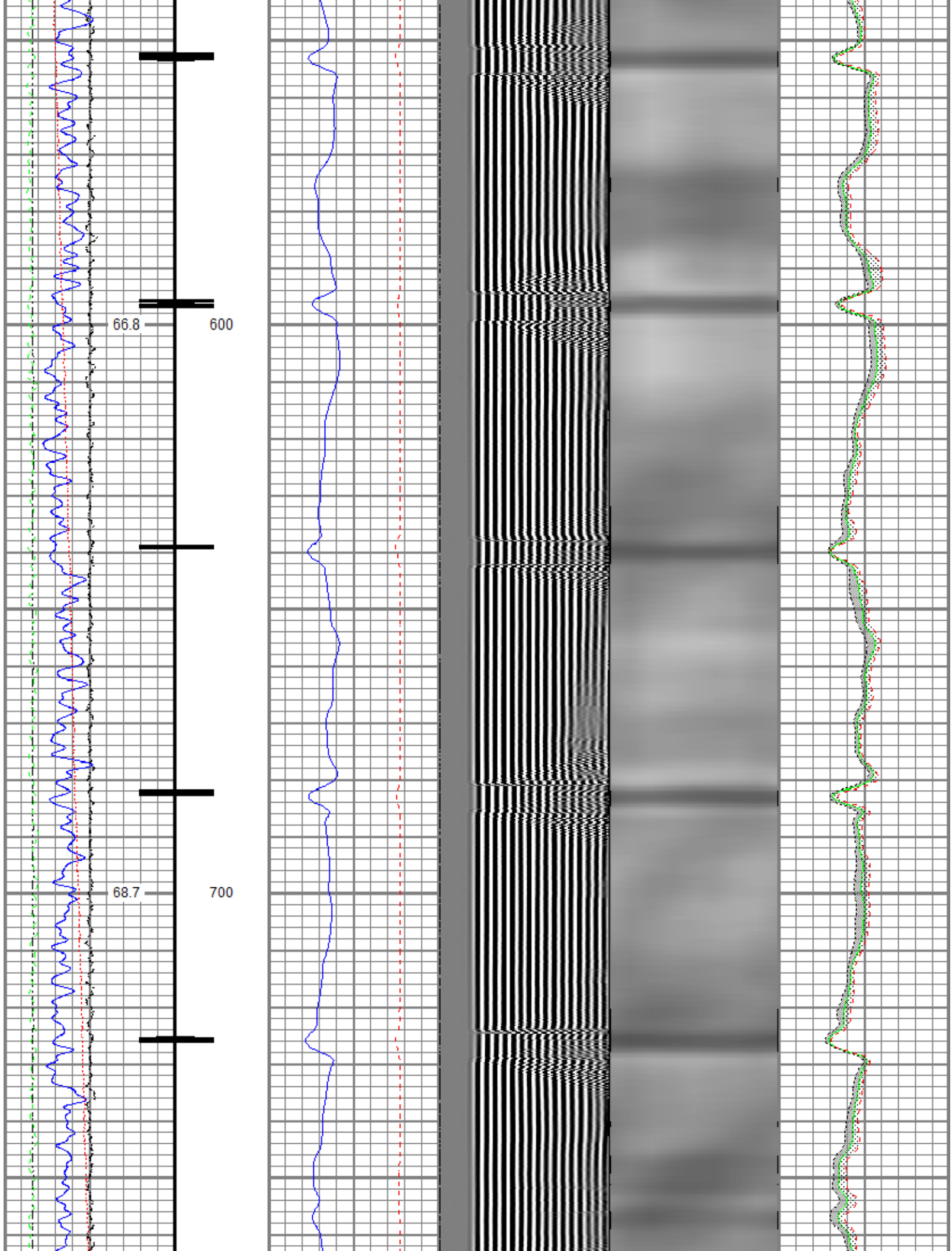
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 Dataset Pathname main.1
 Presentation Format ros_radrii
 Dataset Creation Wed Feb 03 09:04:47 2021
 Charted by Depth in Feet scaled 1:240

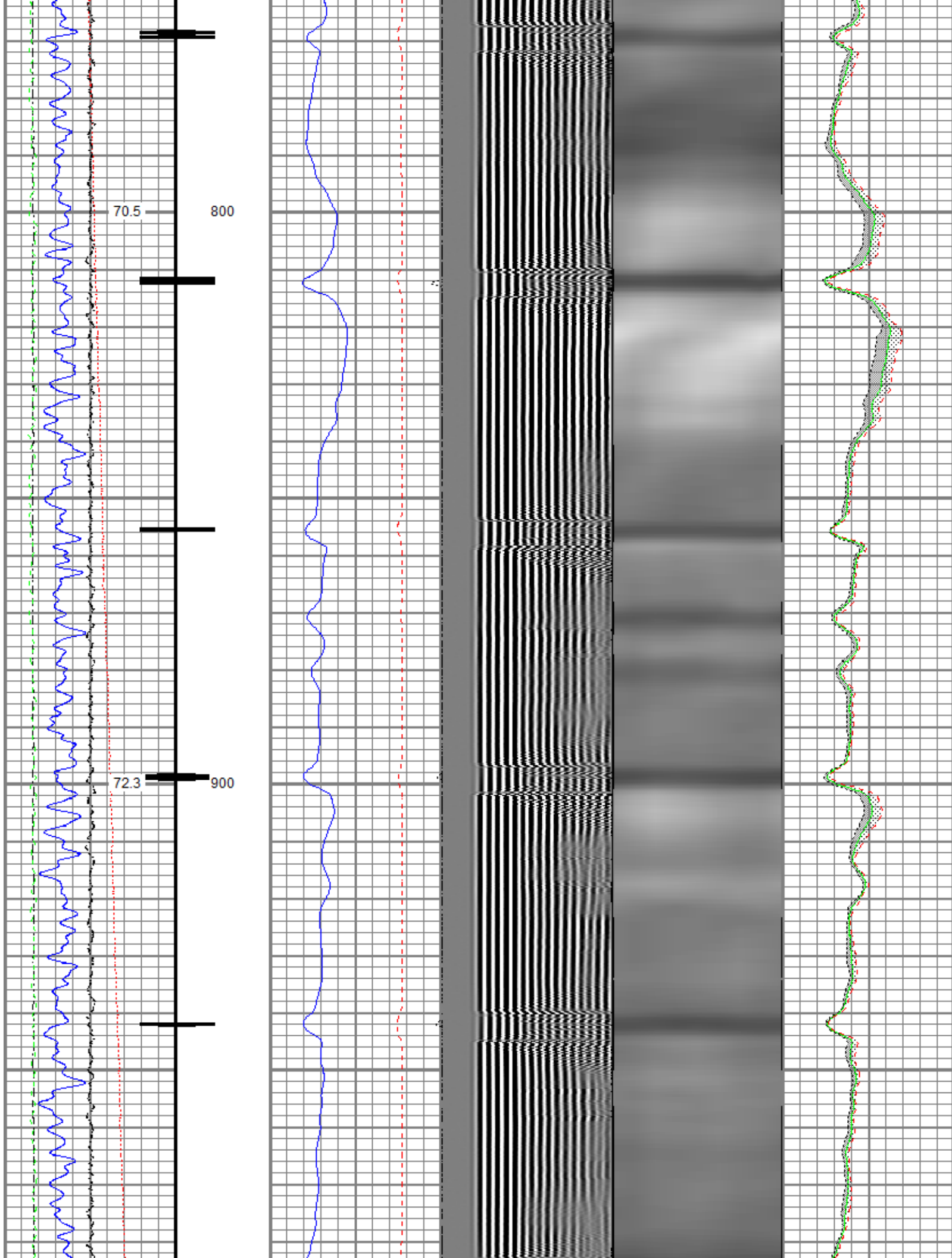
Gamma Ray	0	3' Amplitude (mV) 100	5' Variable Density Log	Sector Map	0	Average Amplitude 100
(GAPI) 120		3' Amplitude x 5	200 (usec) 1200			Minimum Amplitude
Casing Collar Locator	0	(mV) 20			0	100
Temperature (degF) 20		3' Travel Time				Maximum Amplitude
Line Speed	650	(usec) 150			0	100
-150 (ft/min)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

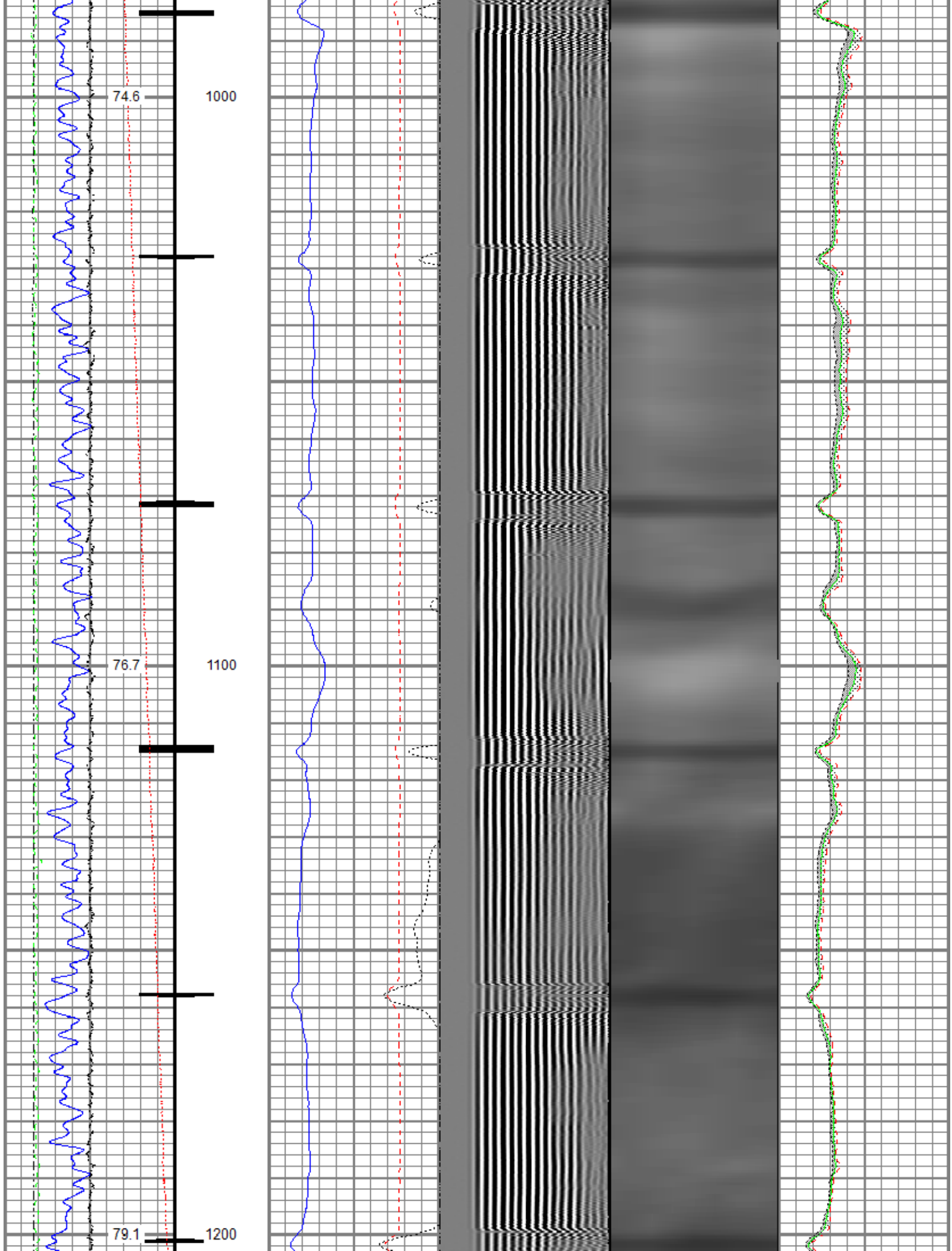


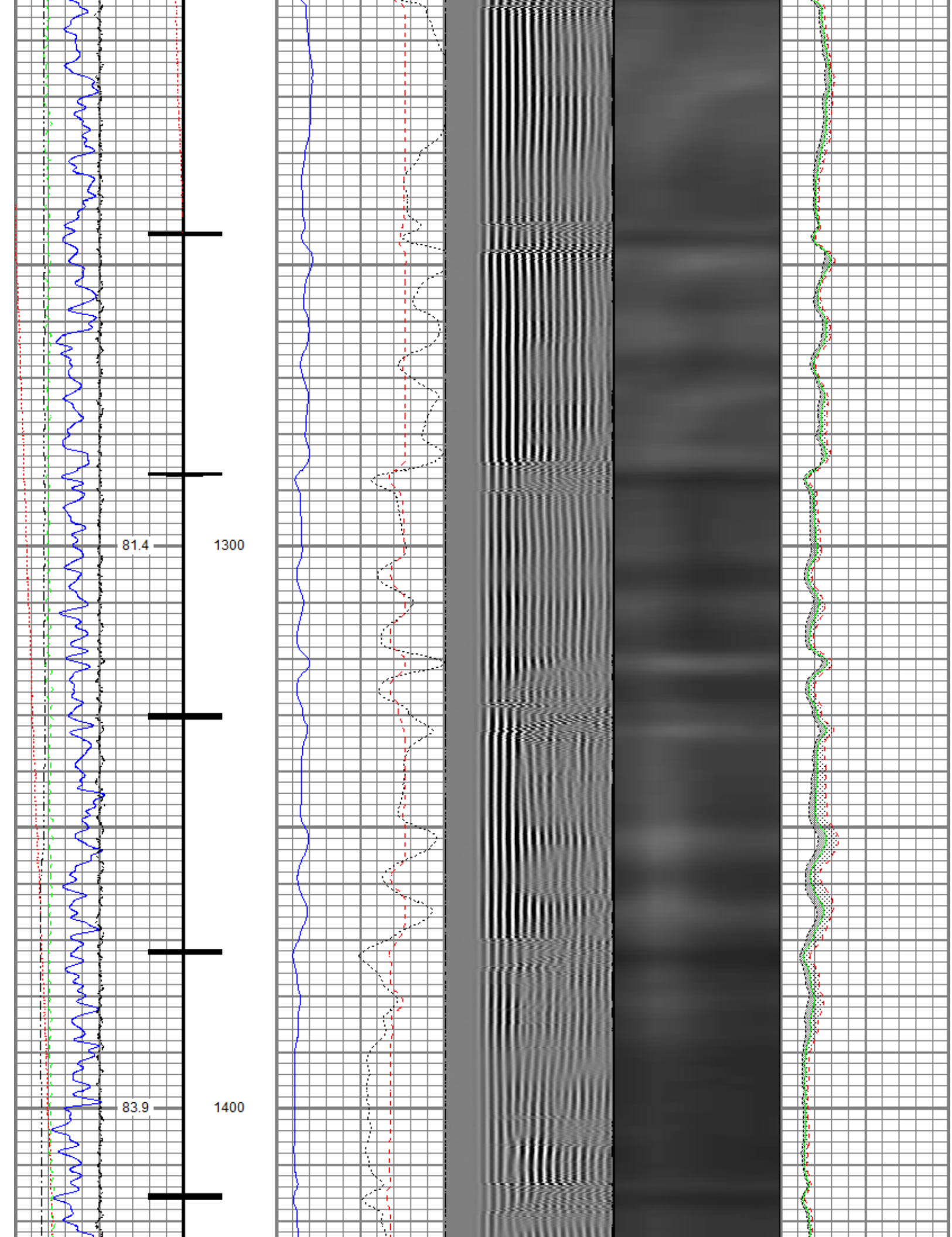


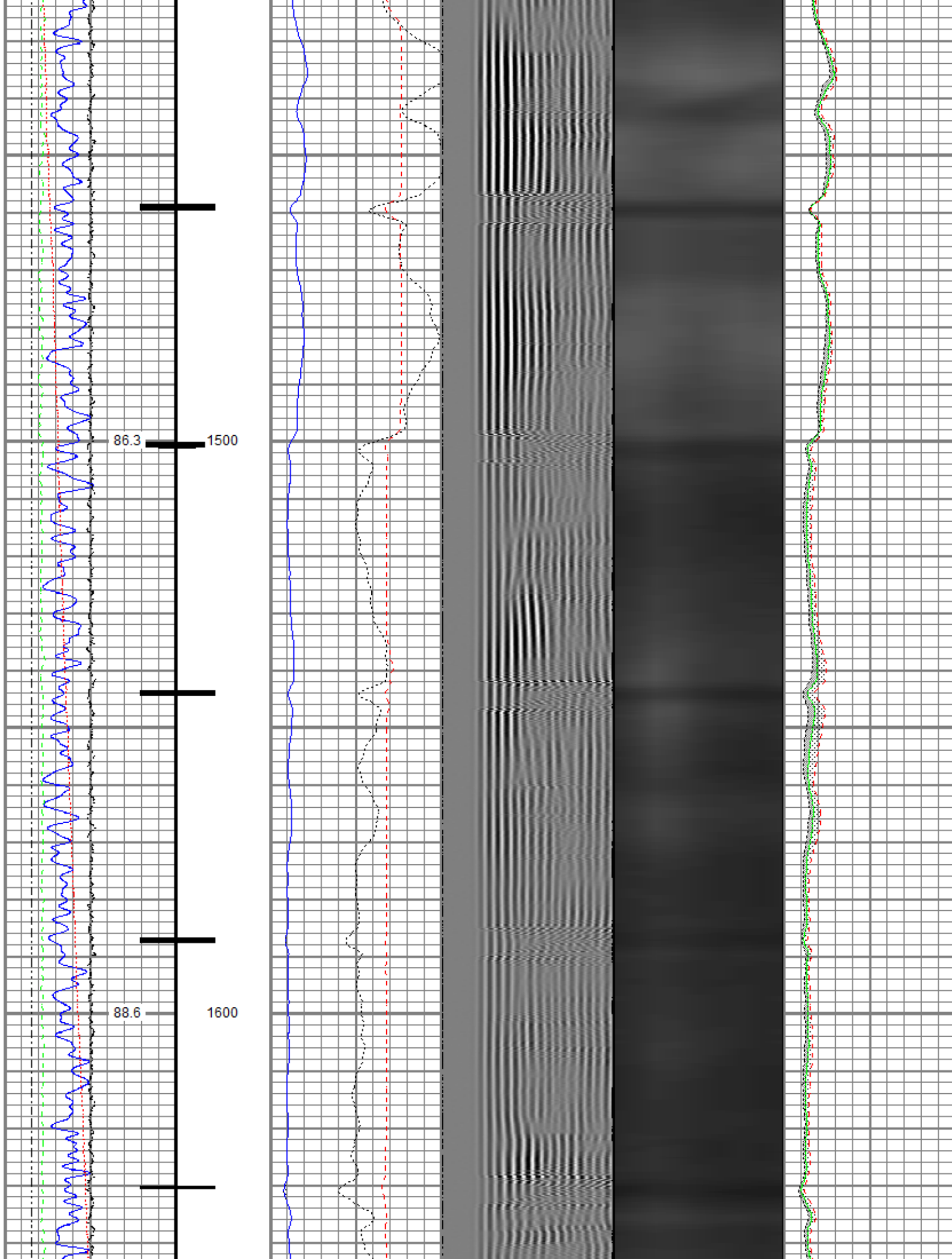




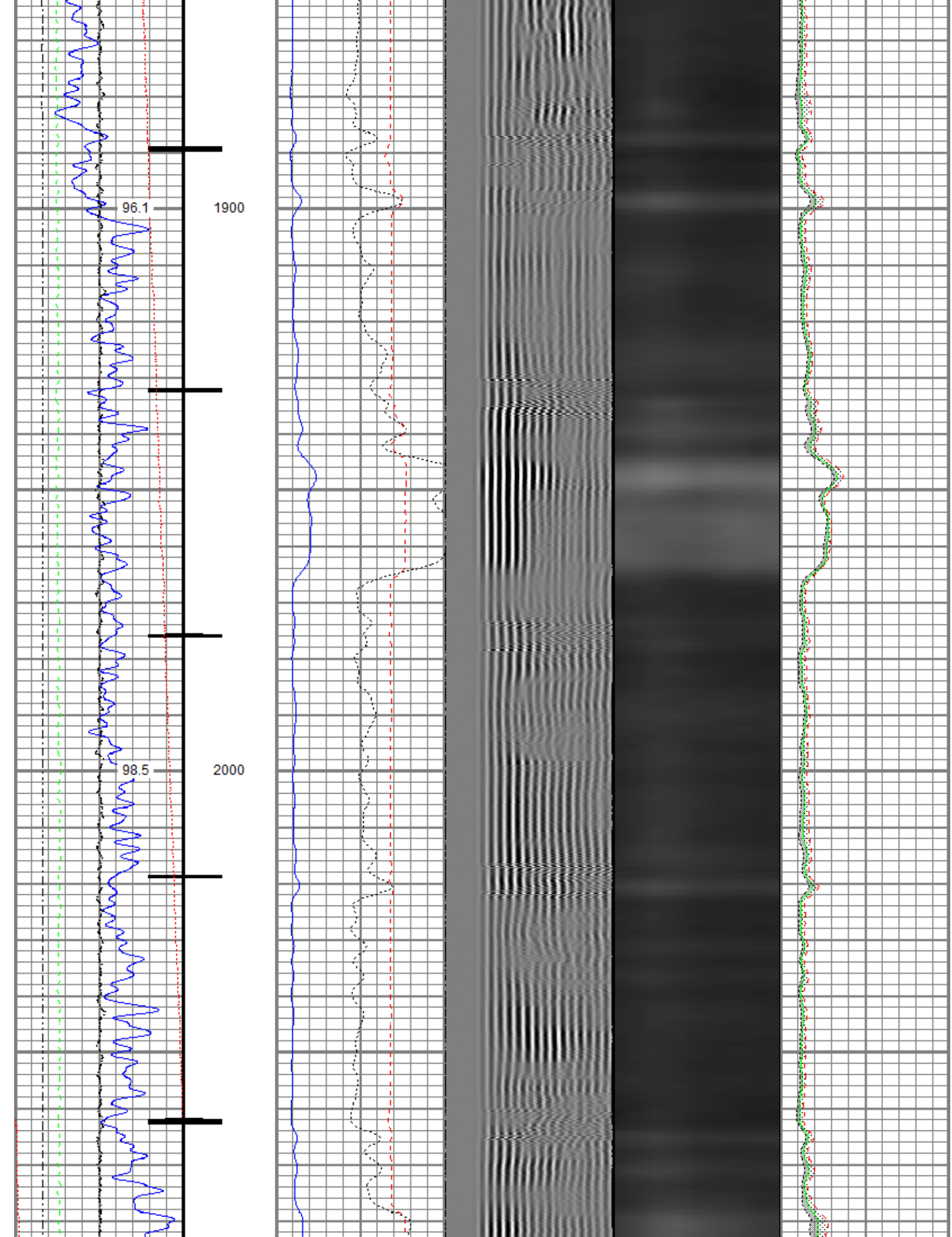


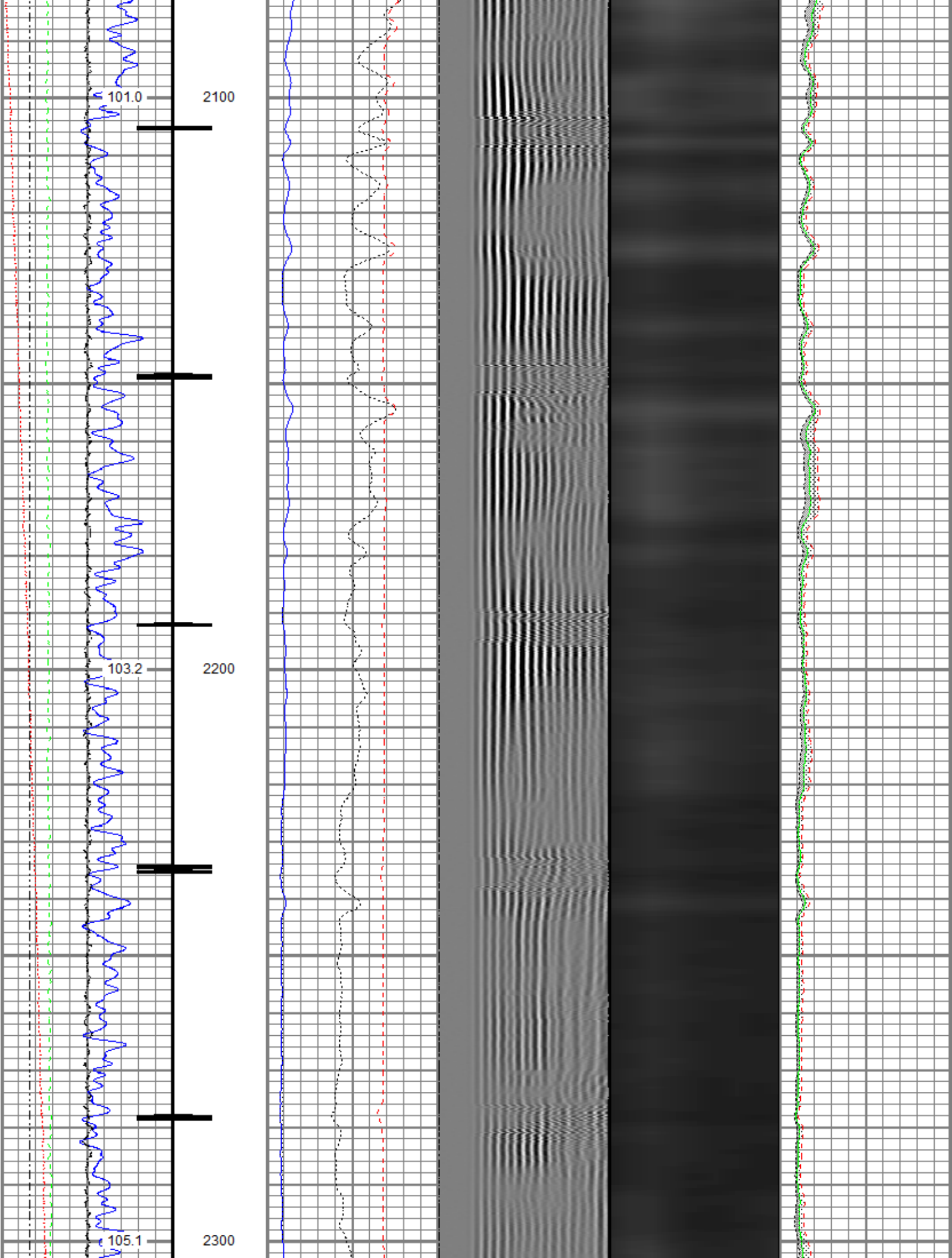


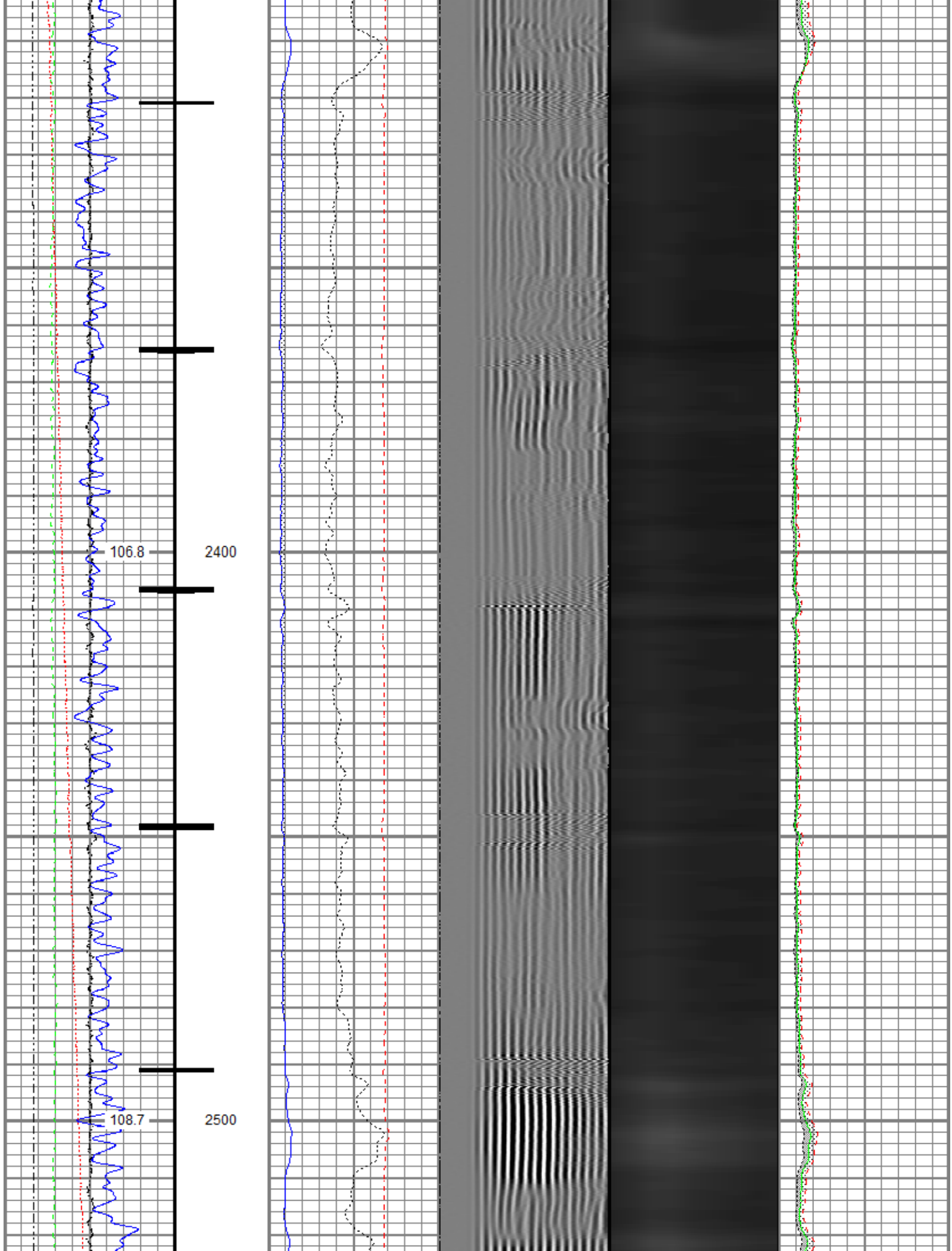


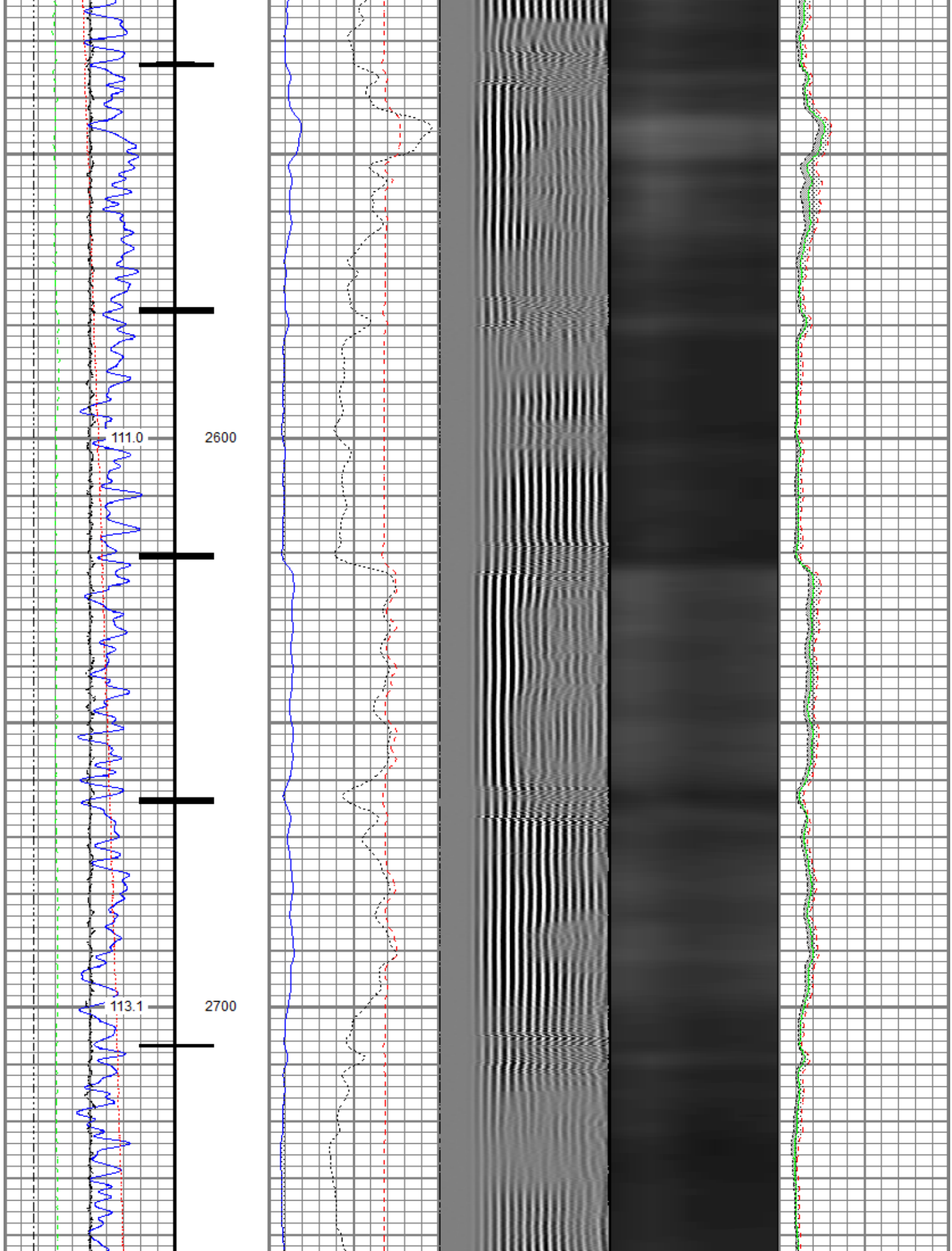


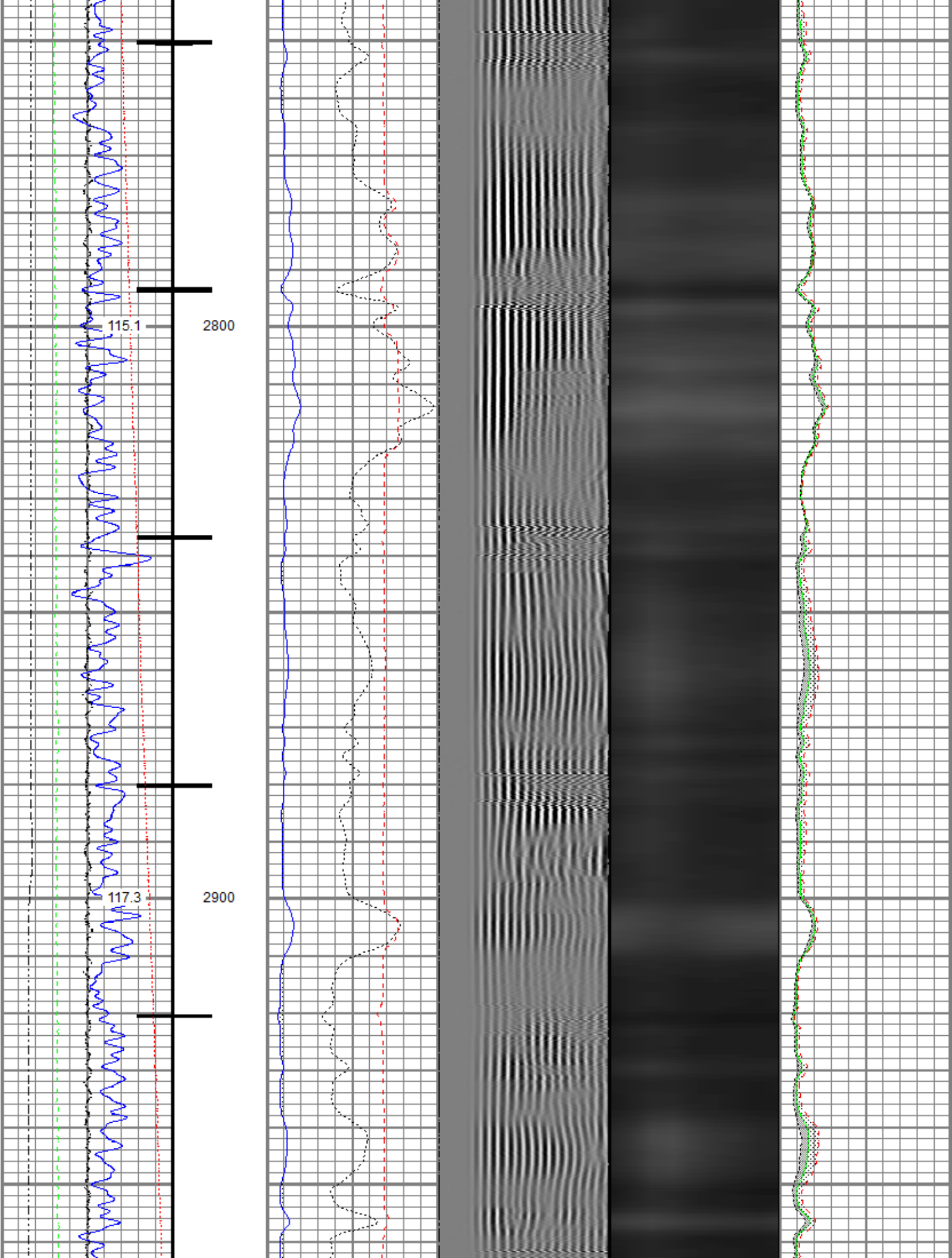


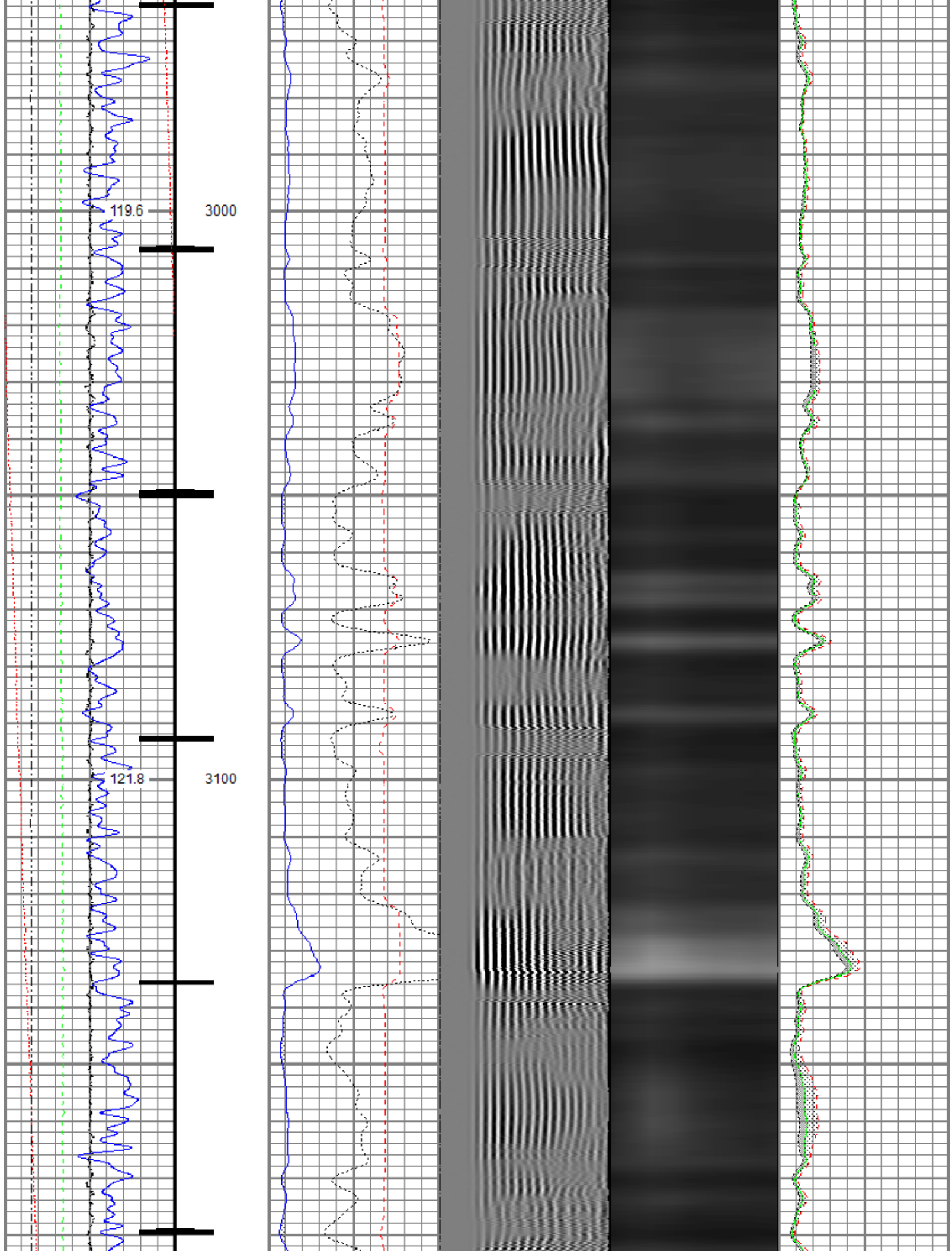


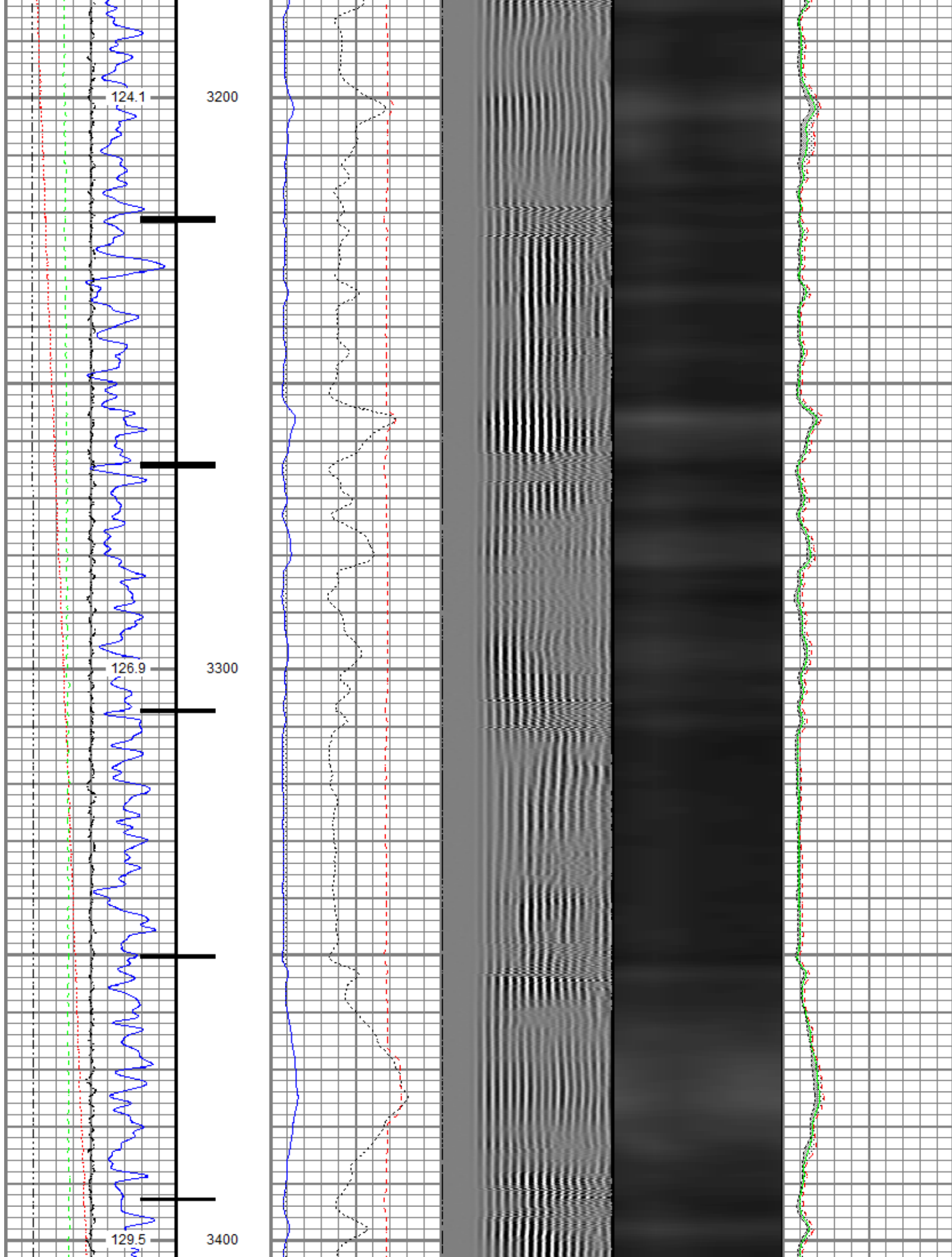


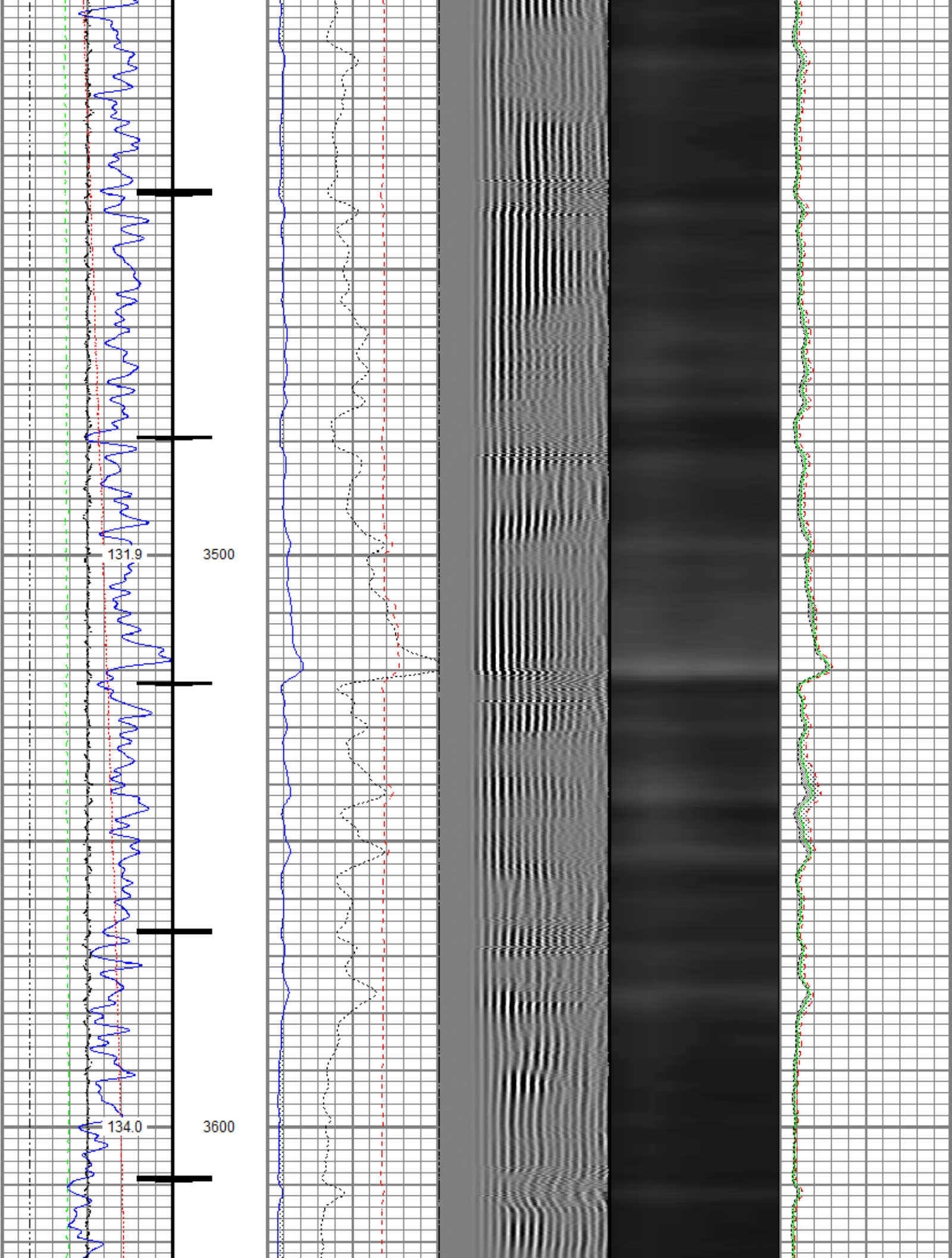


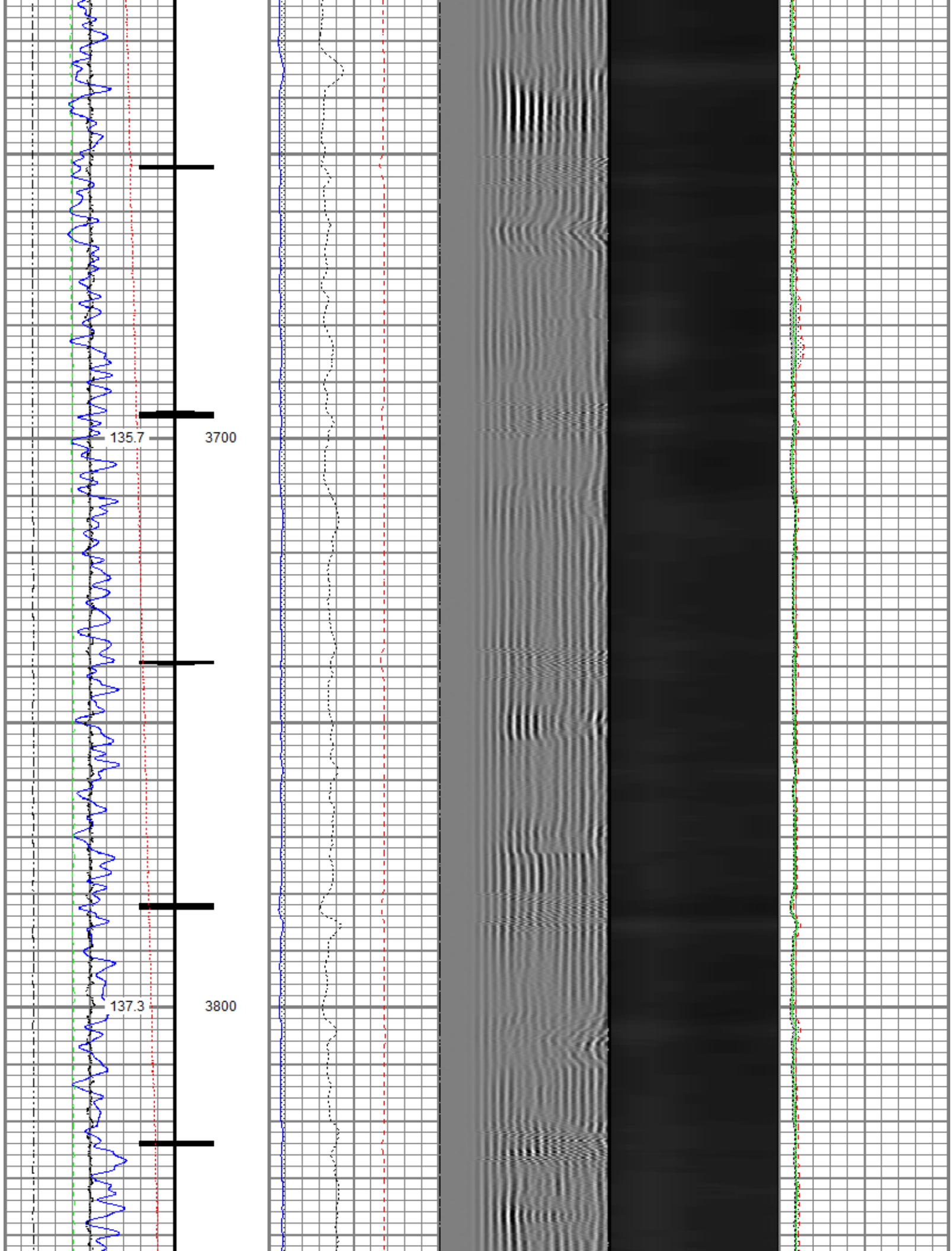


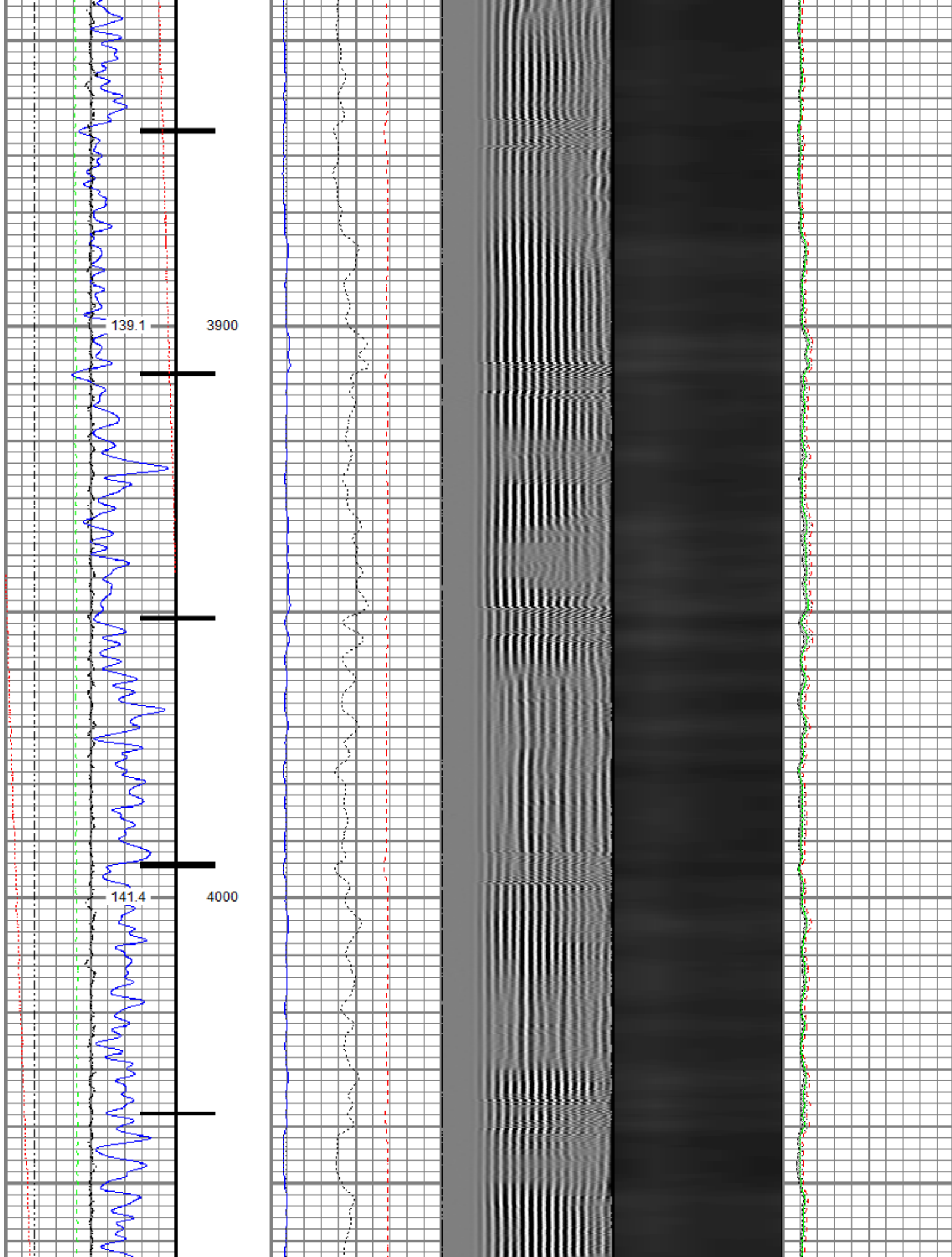


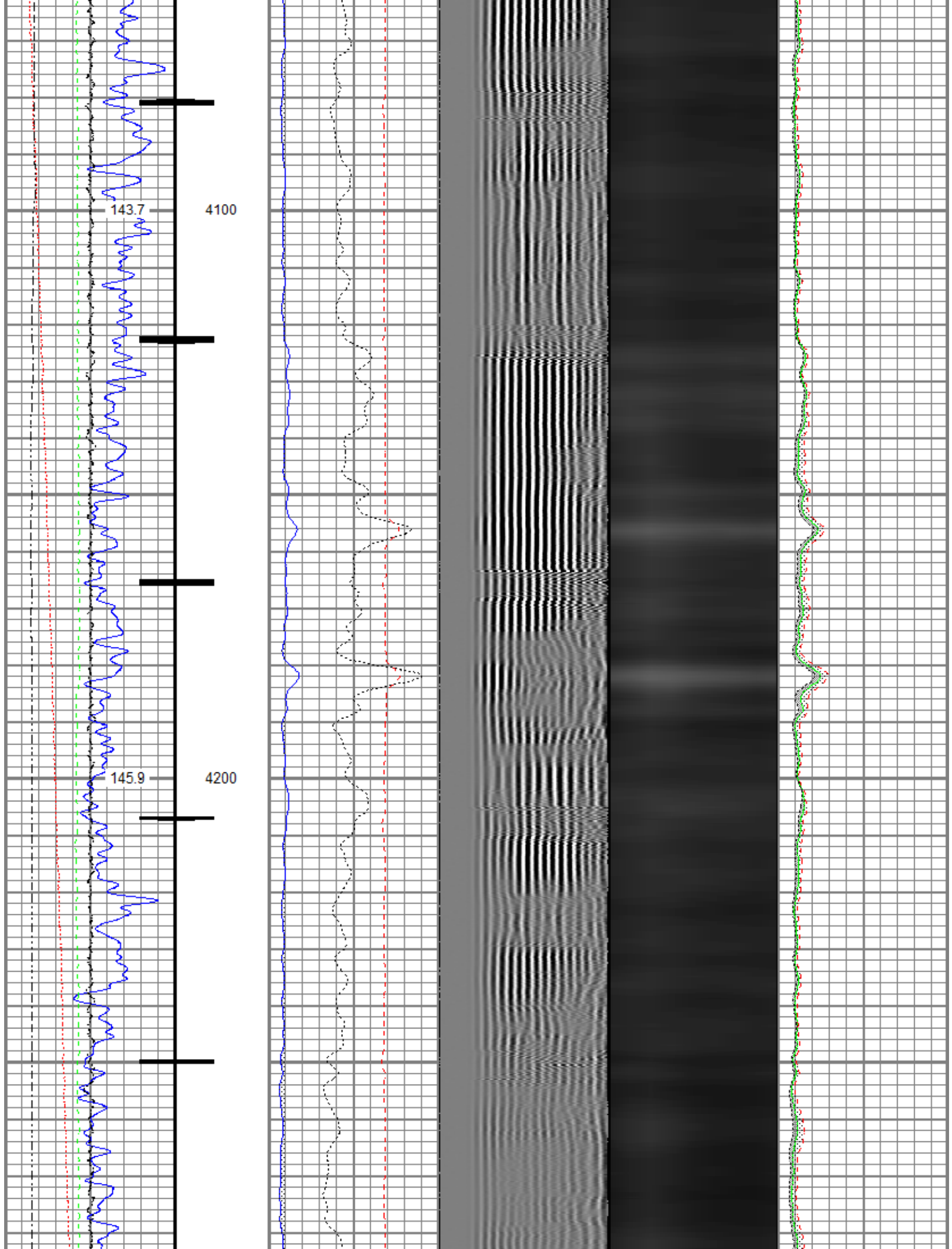


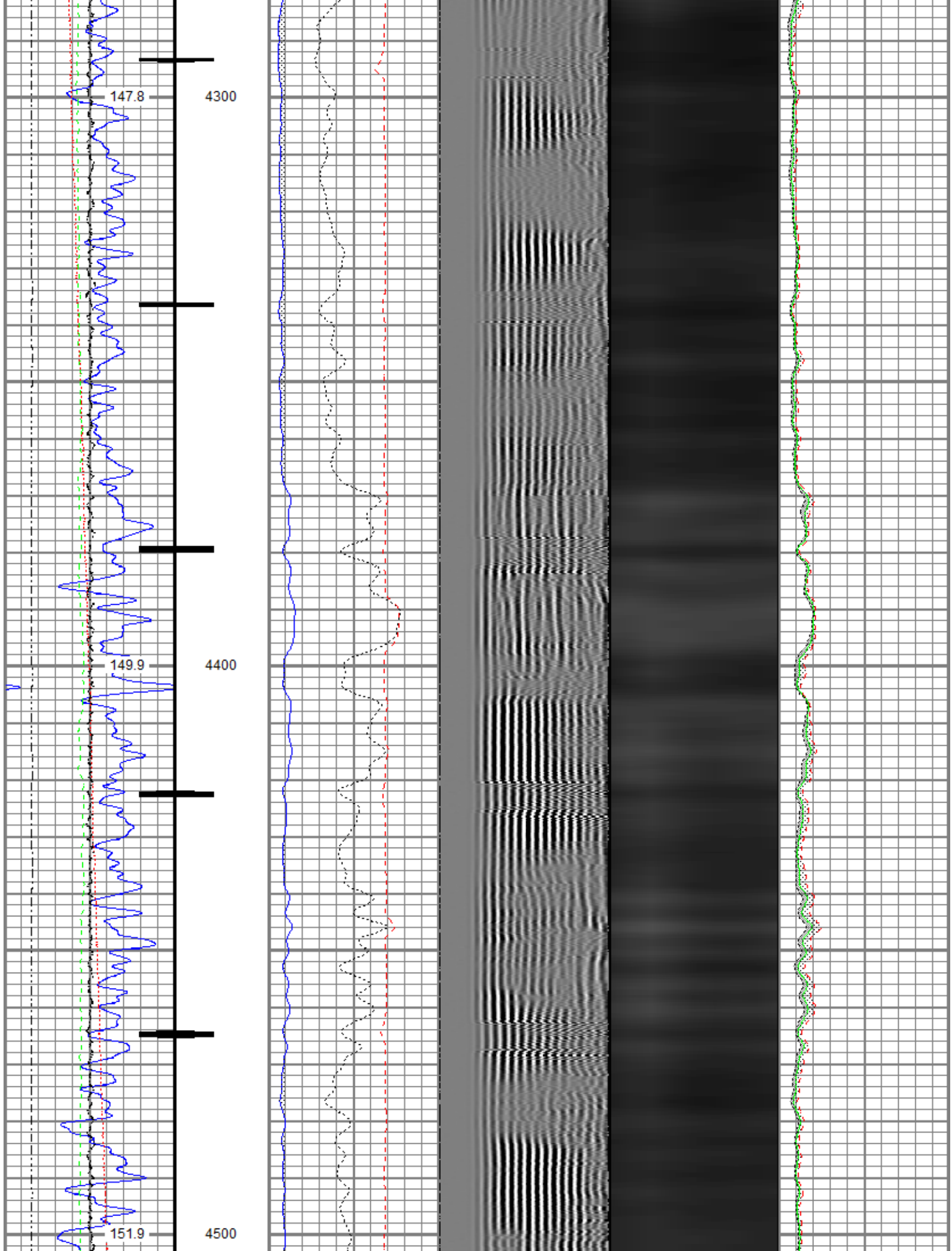


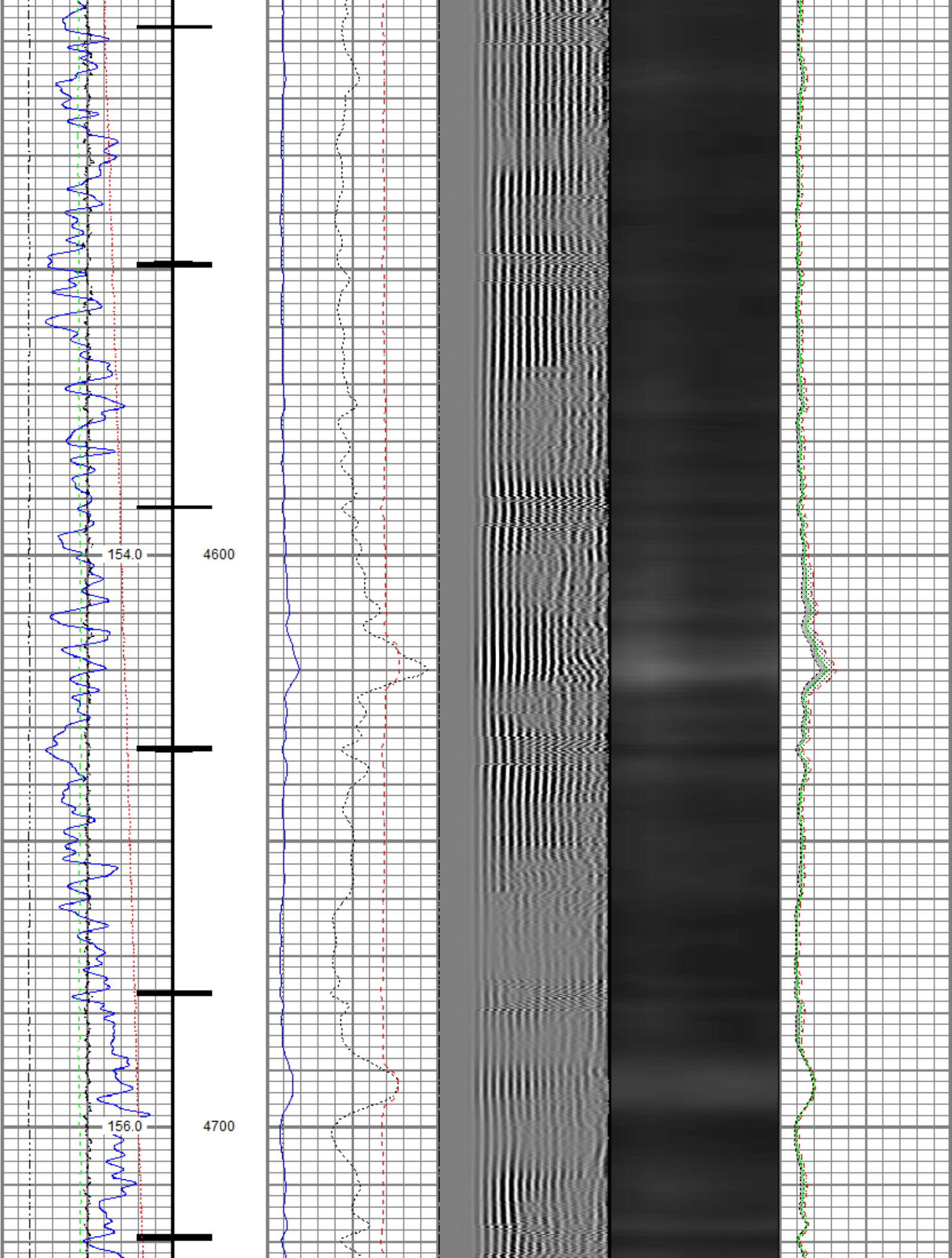


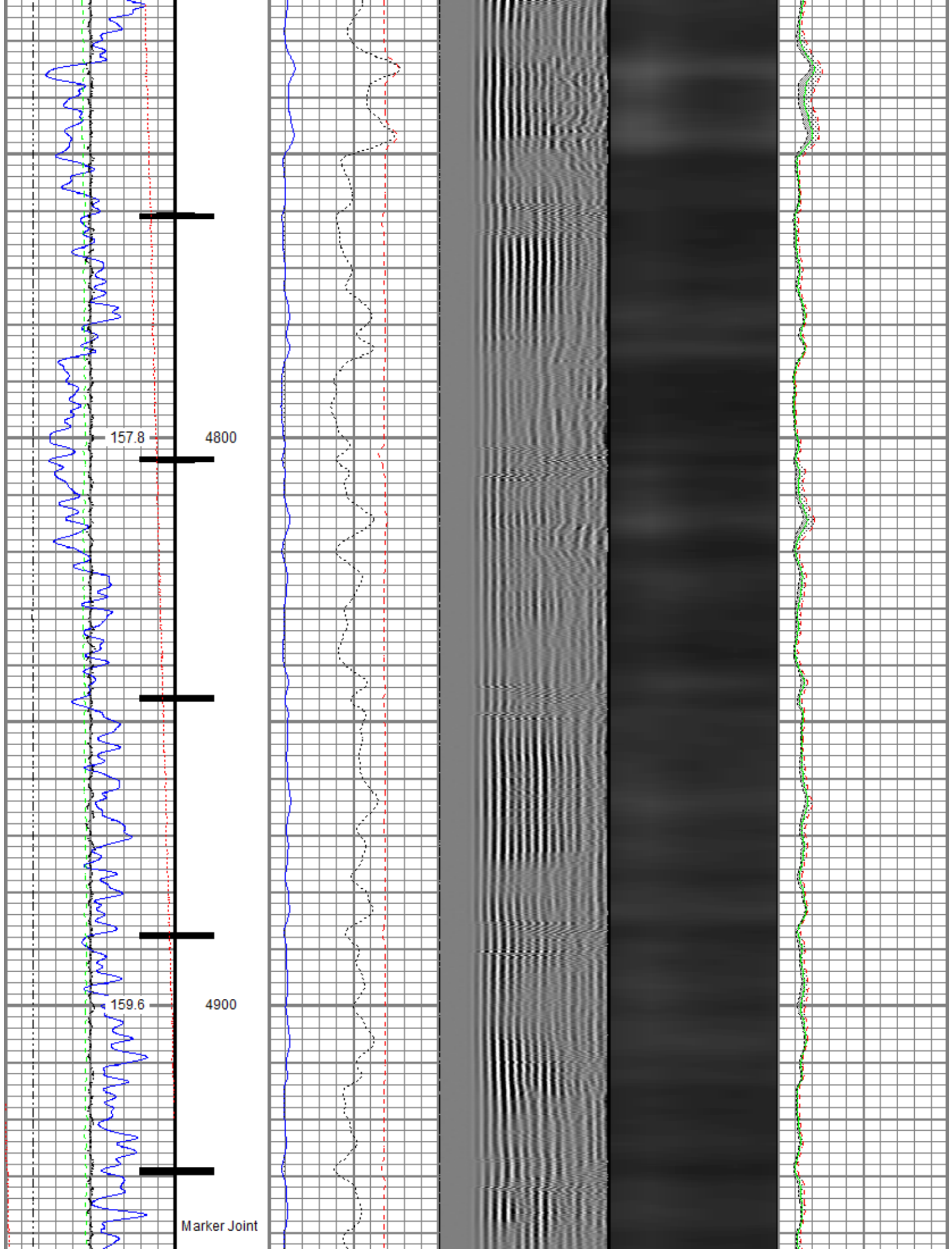


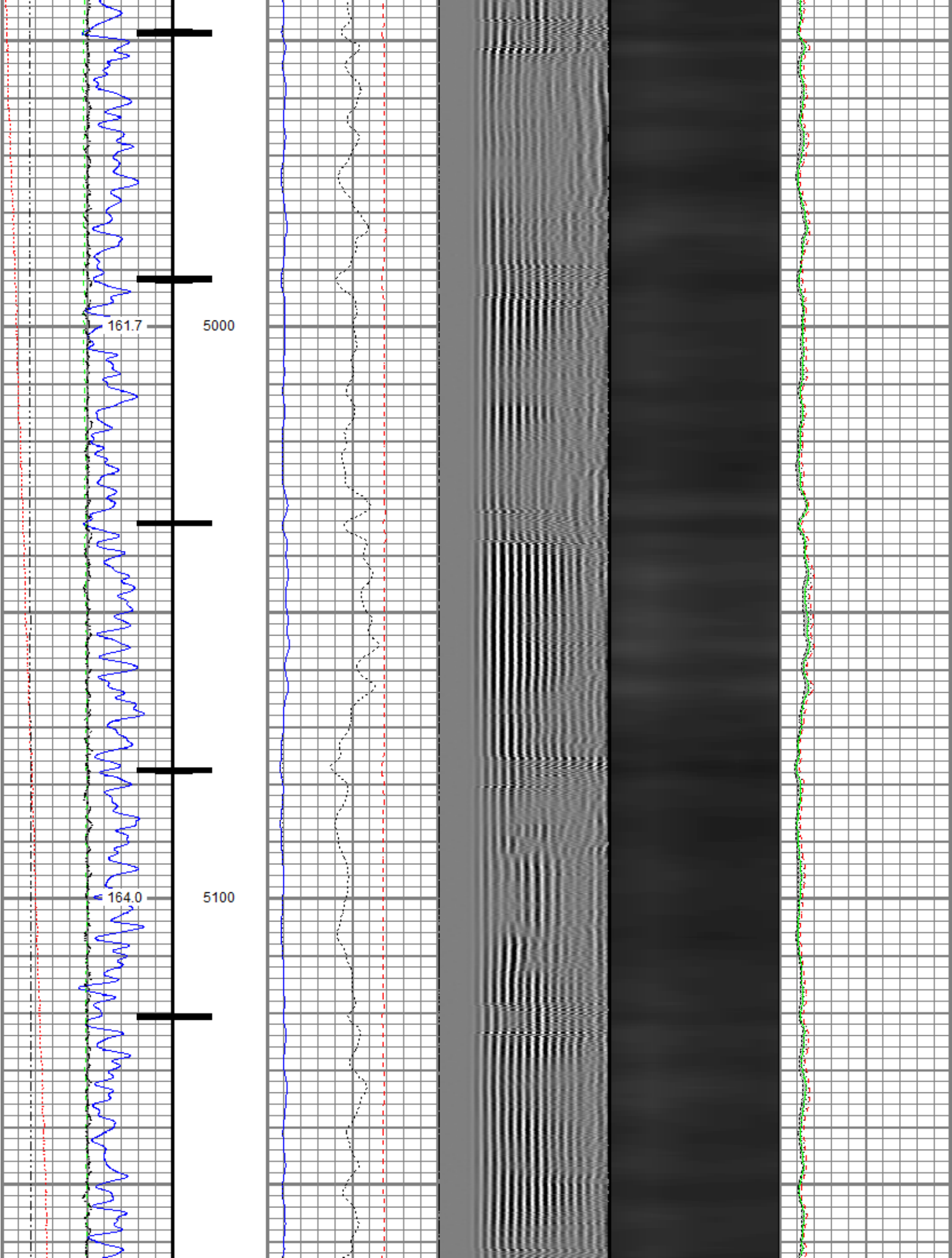


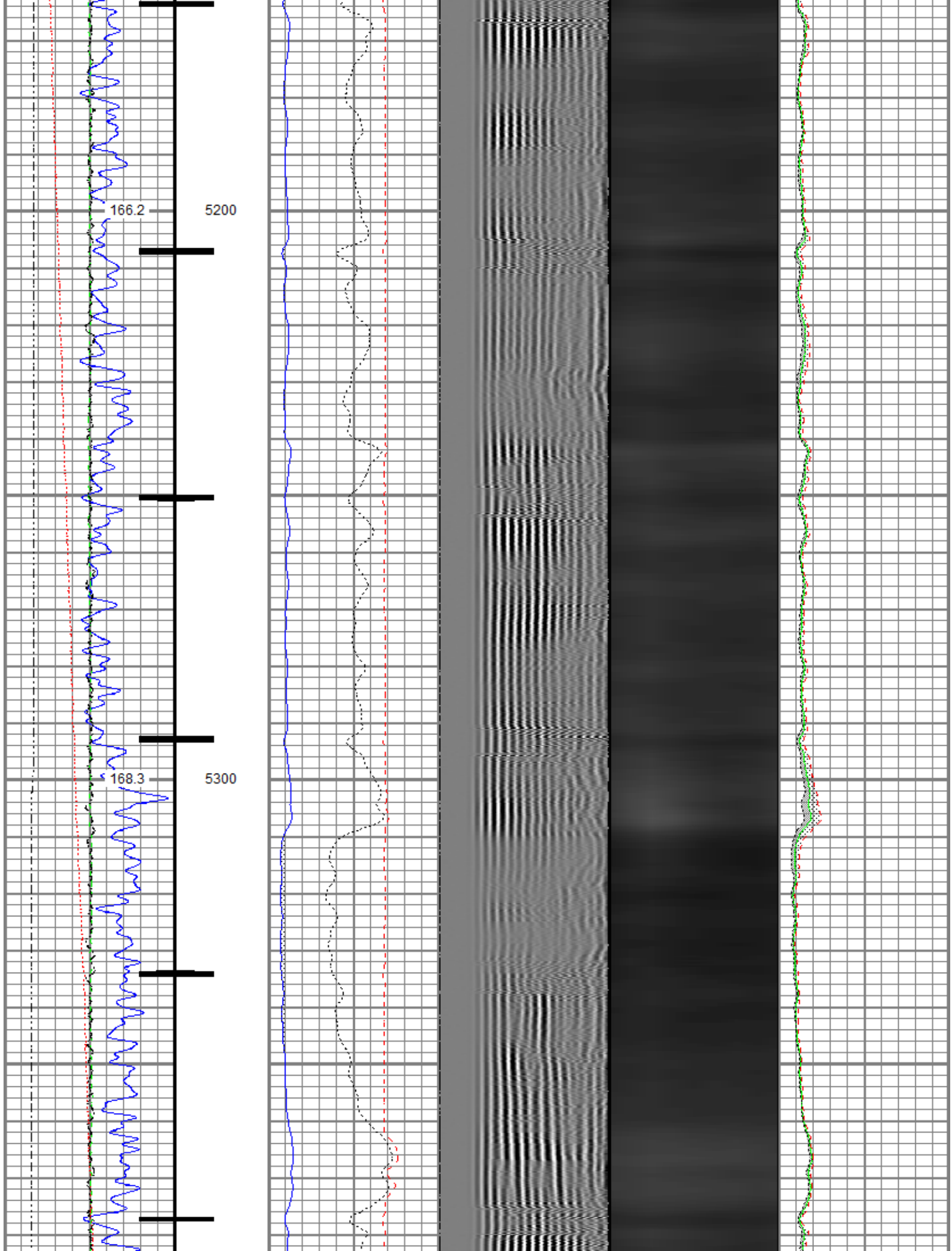


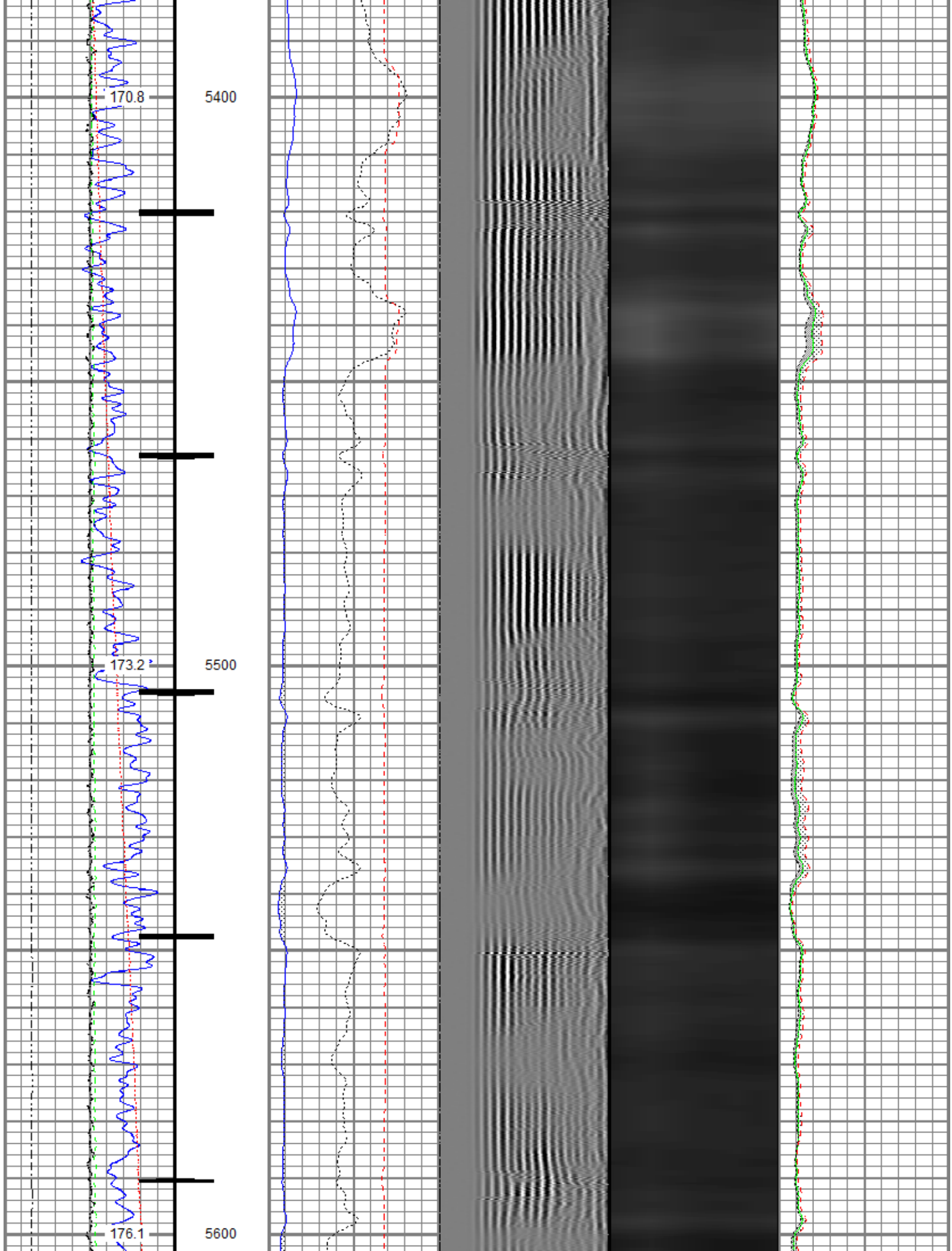


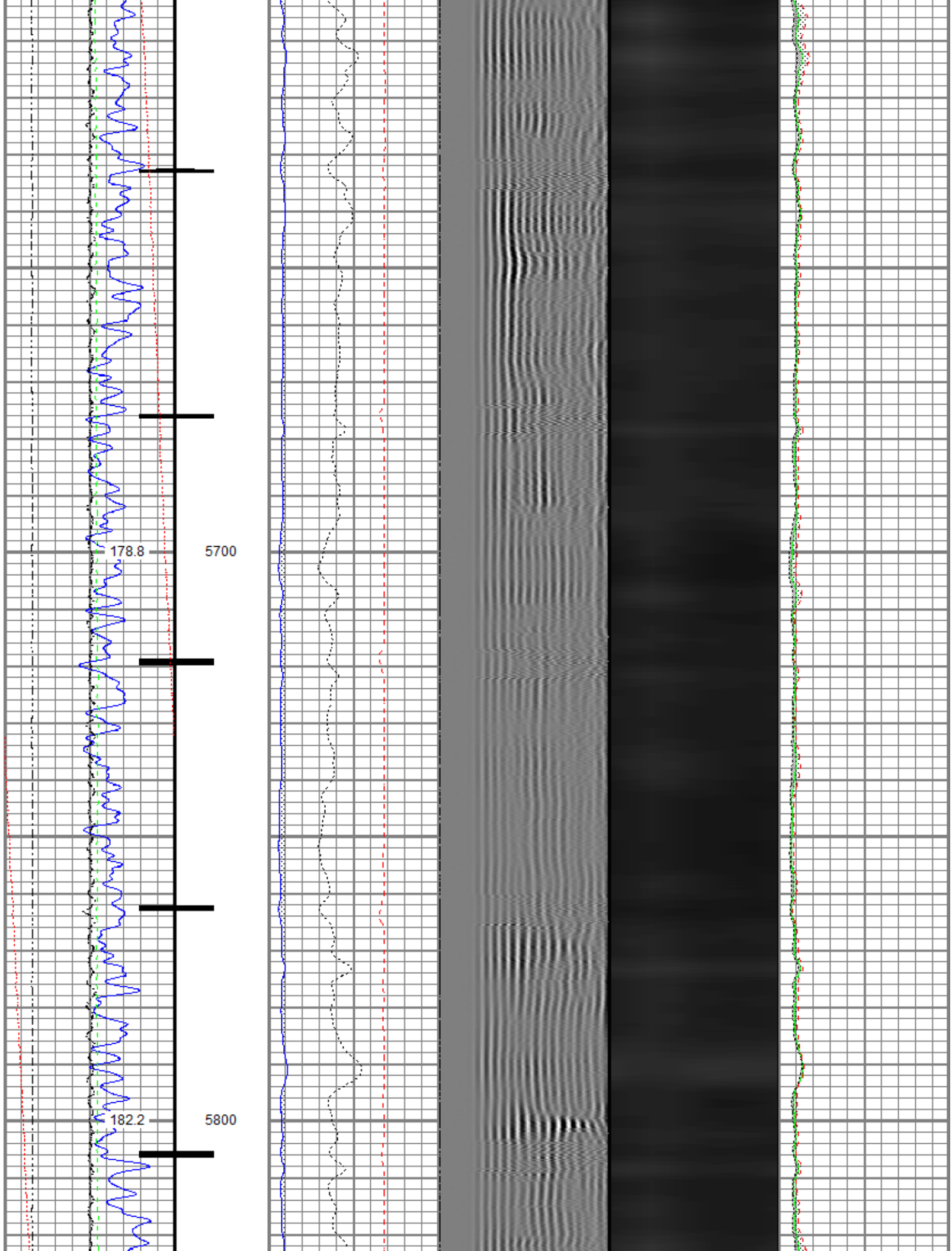


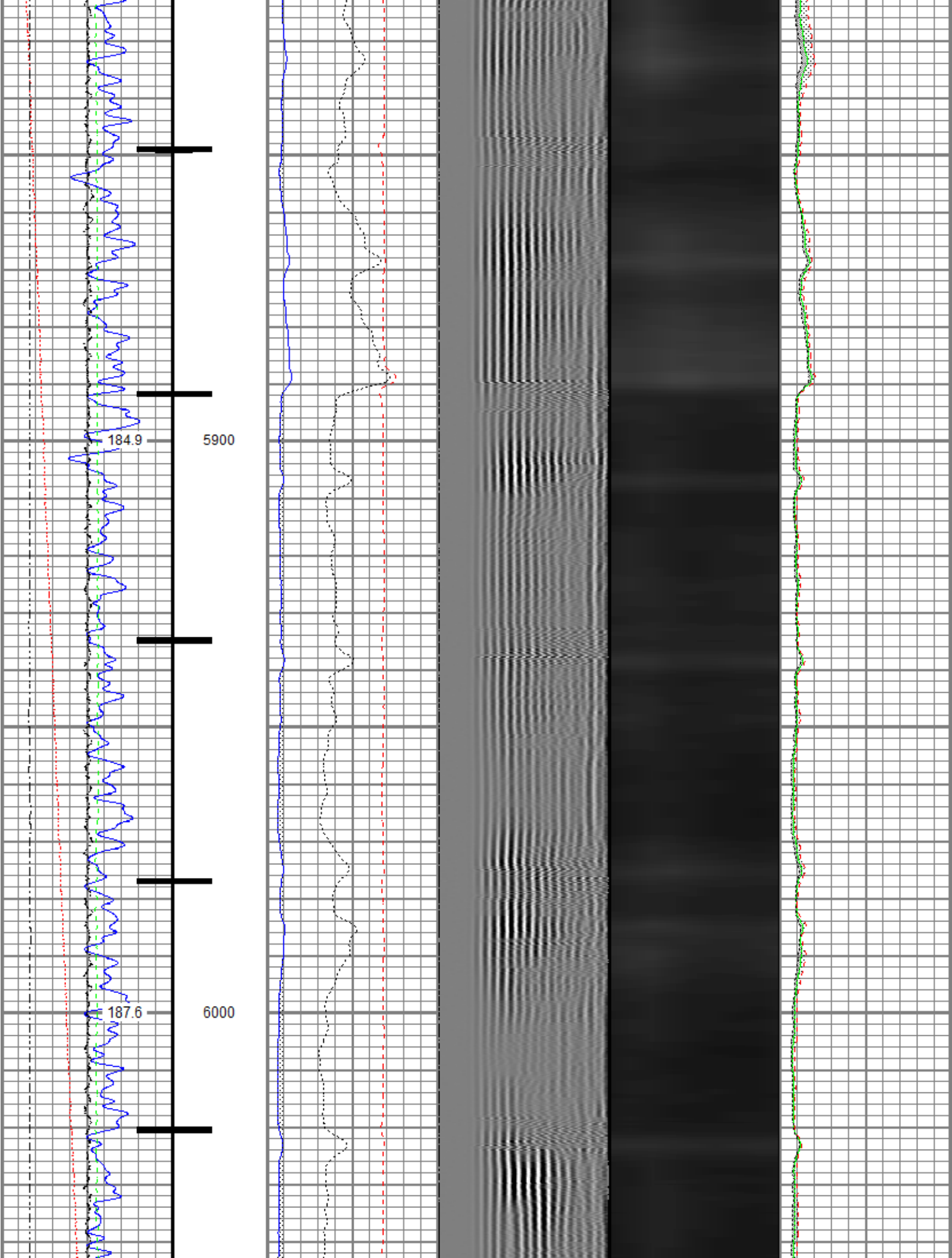


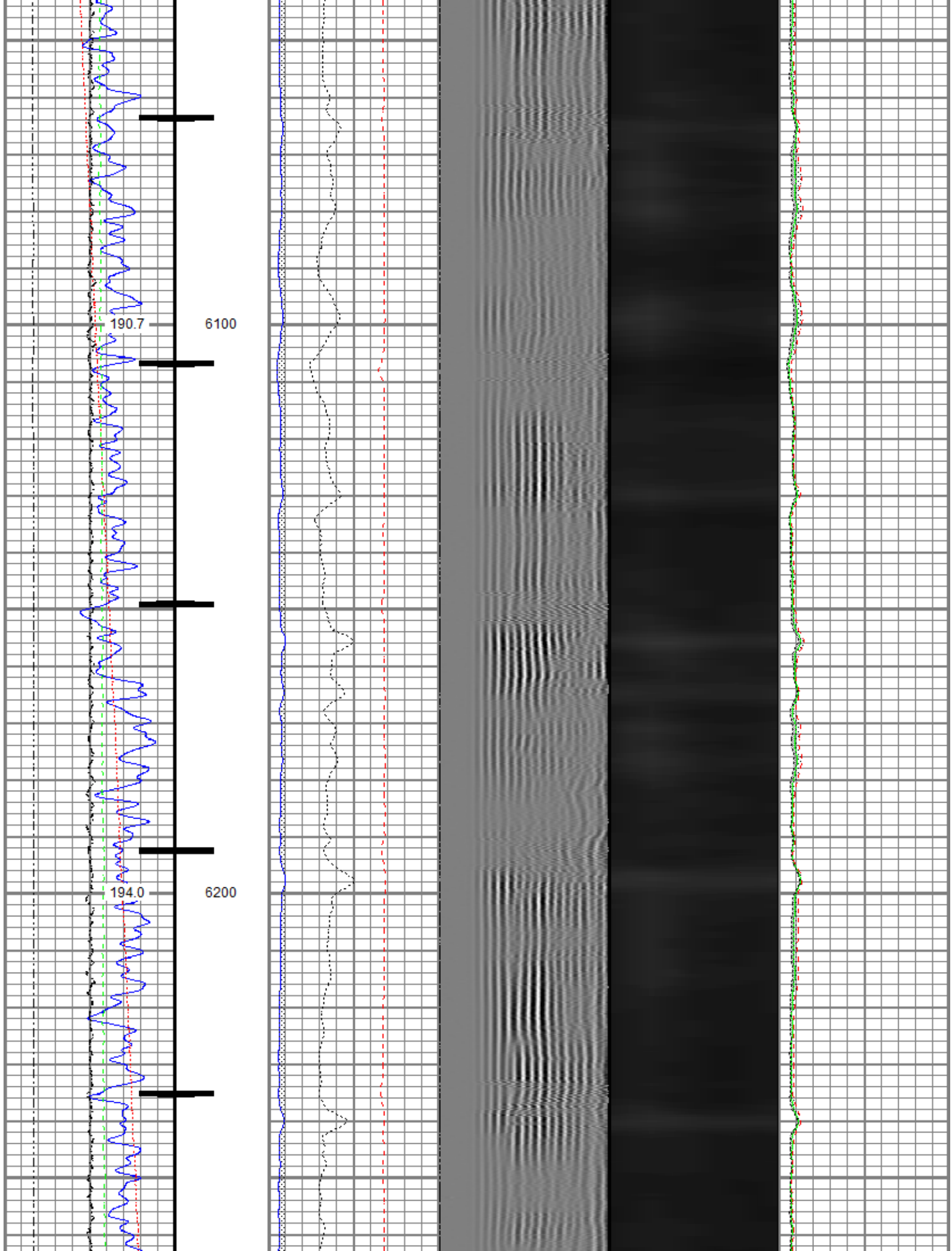


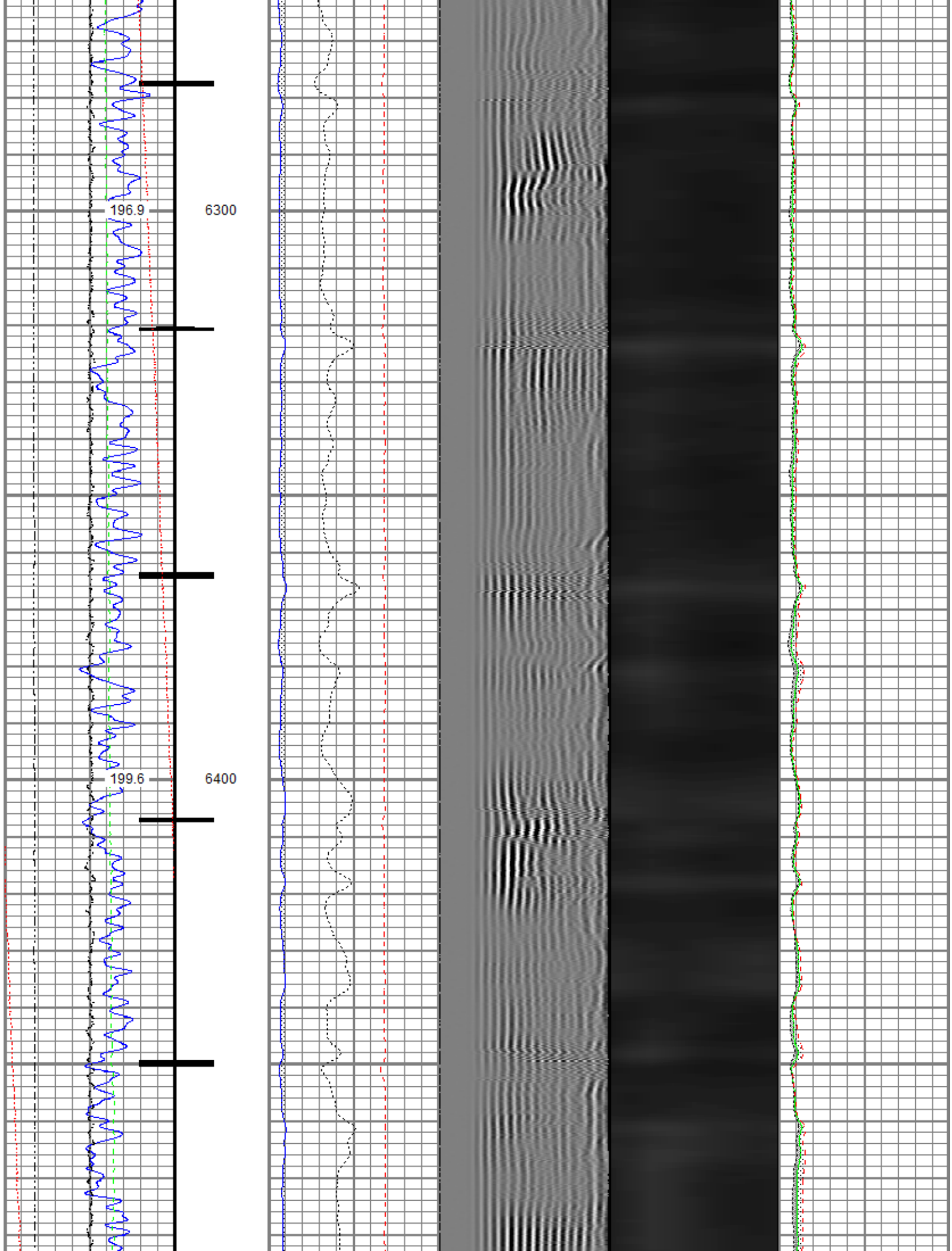


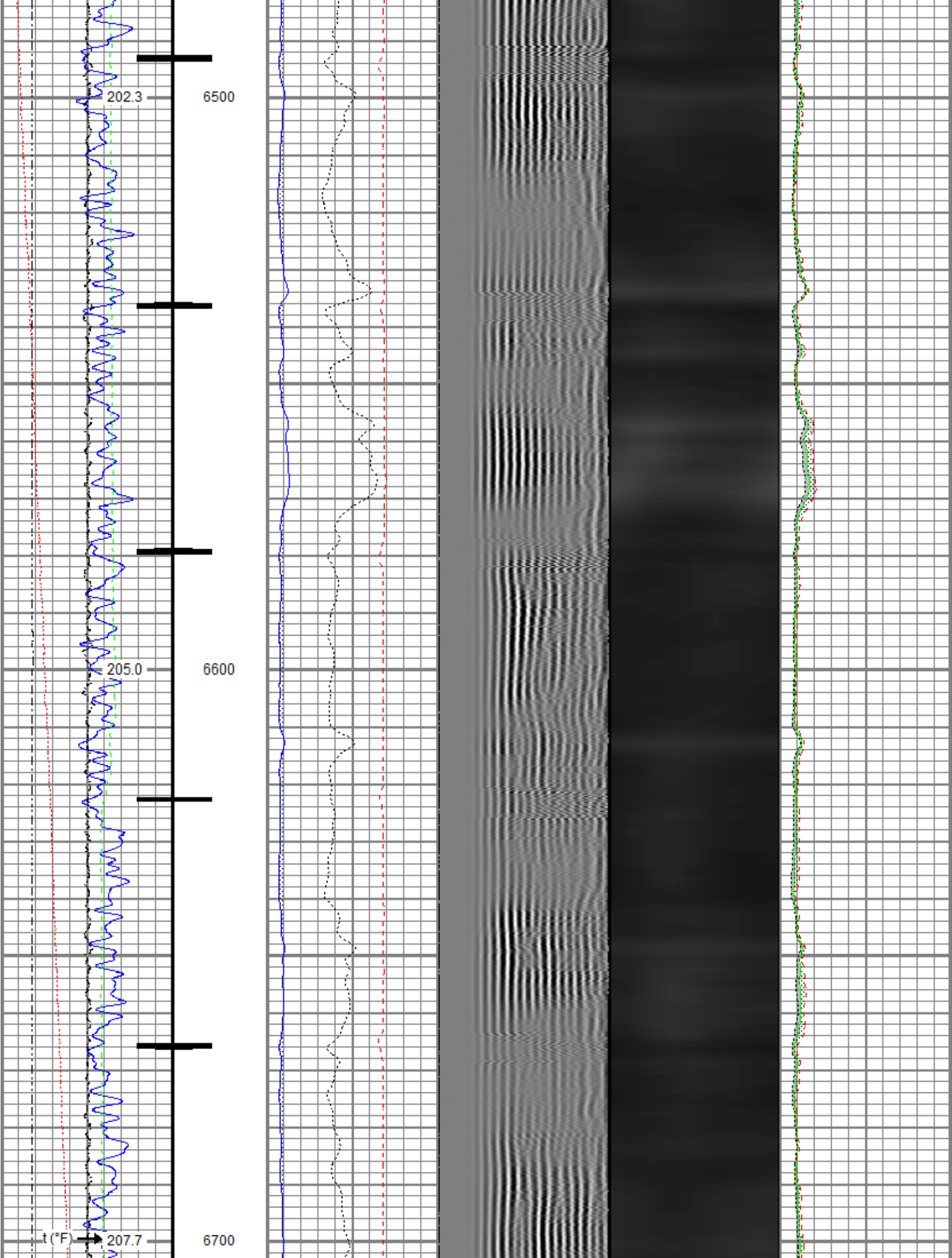


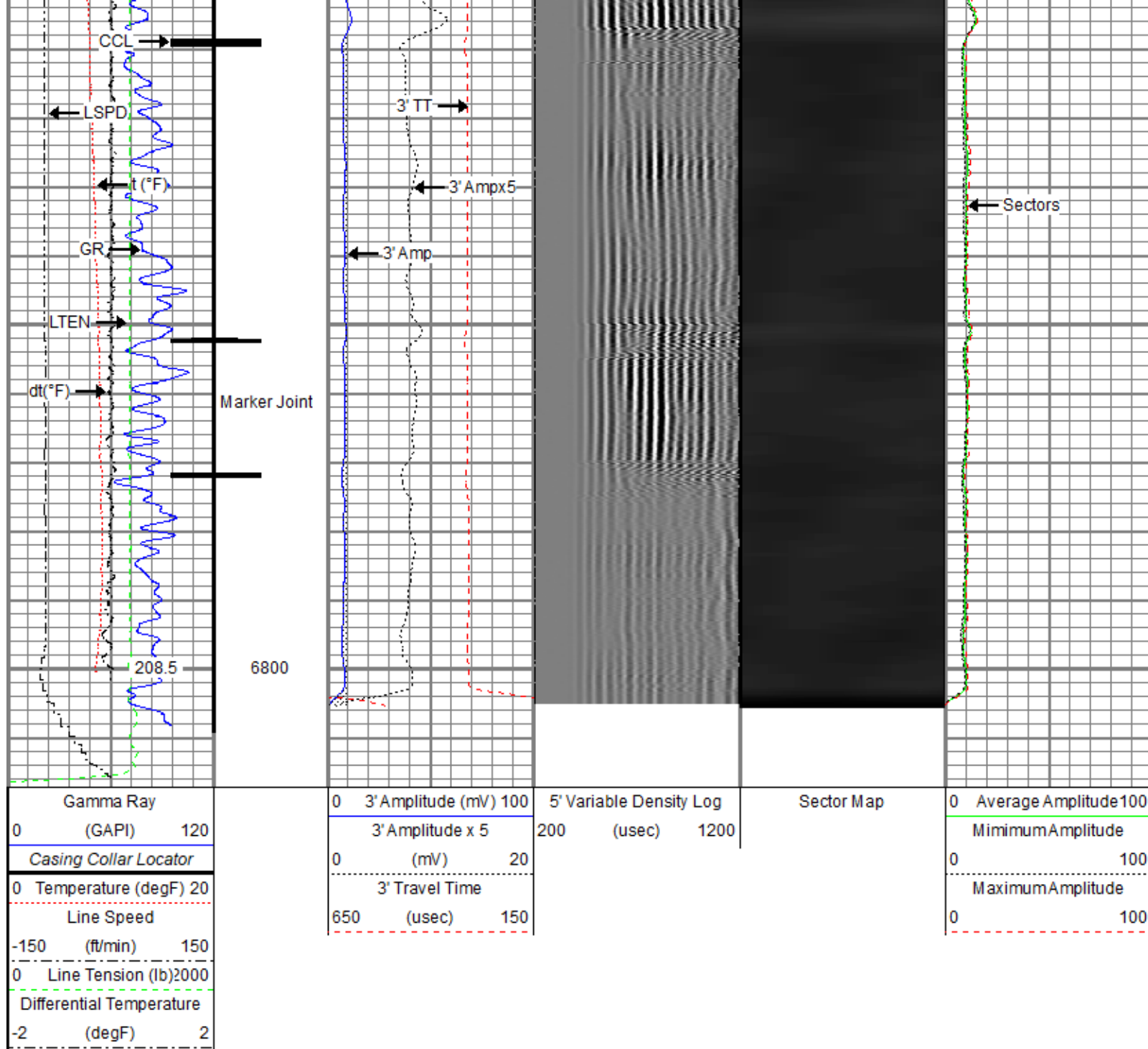








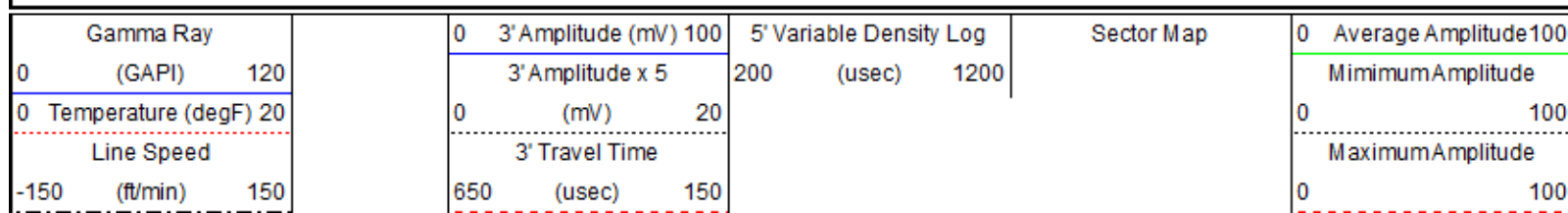




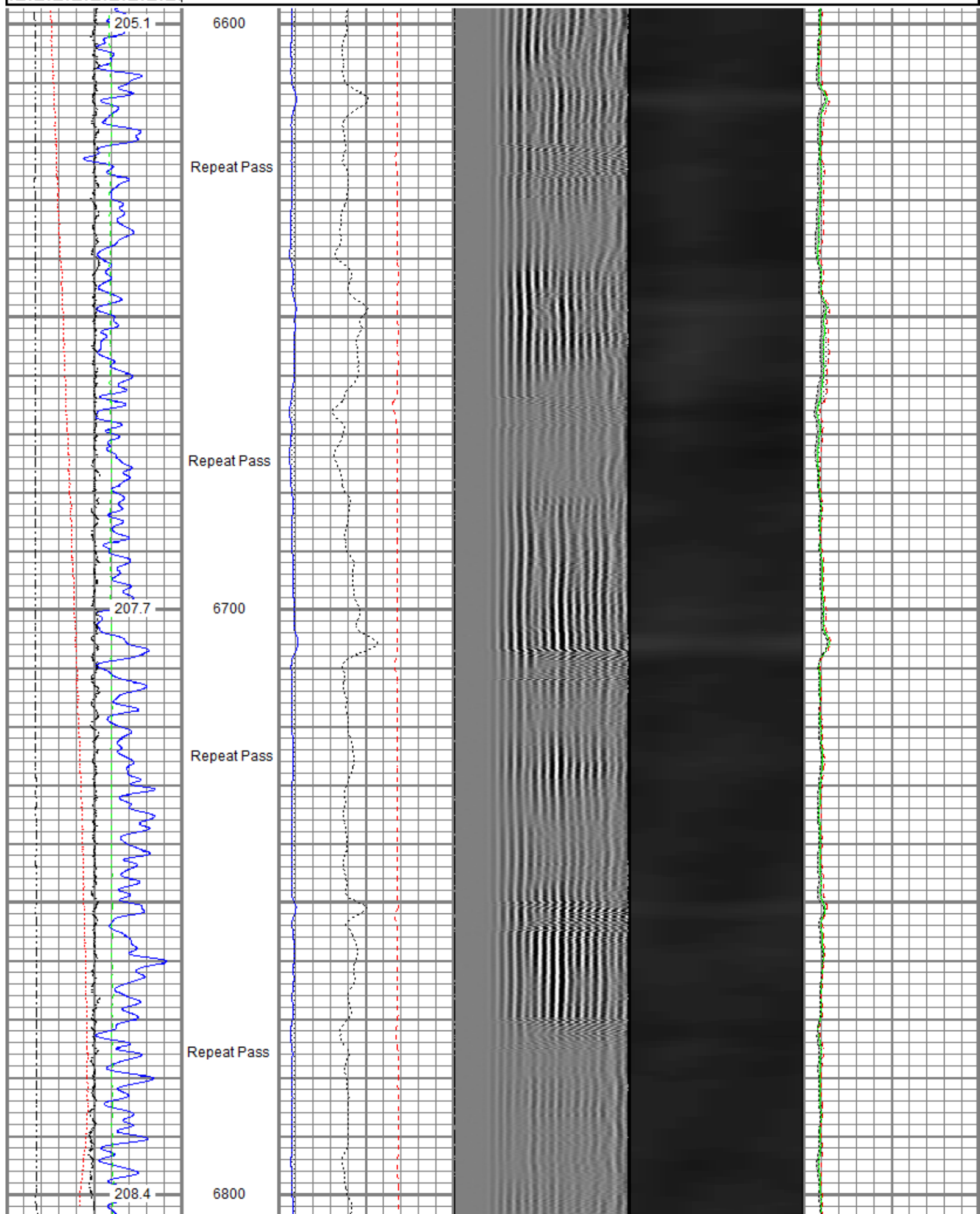
Repeat Pass

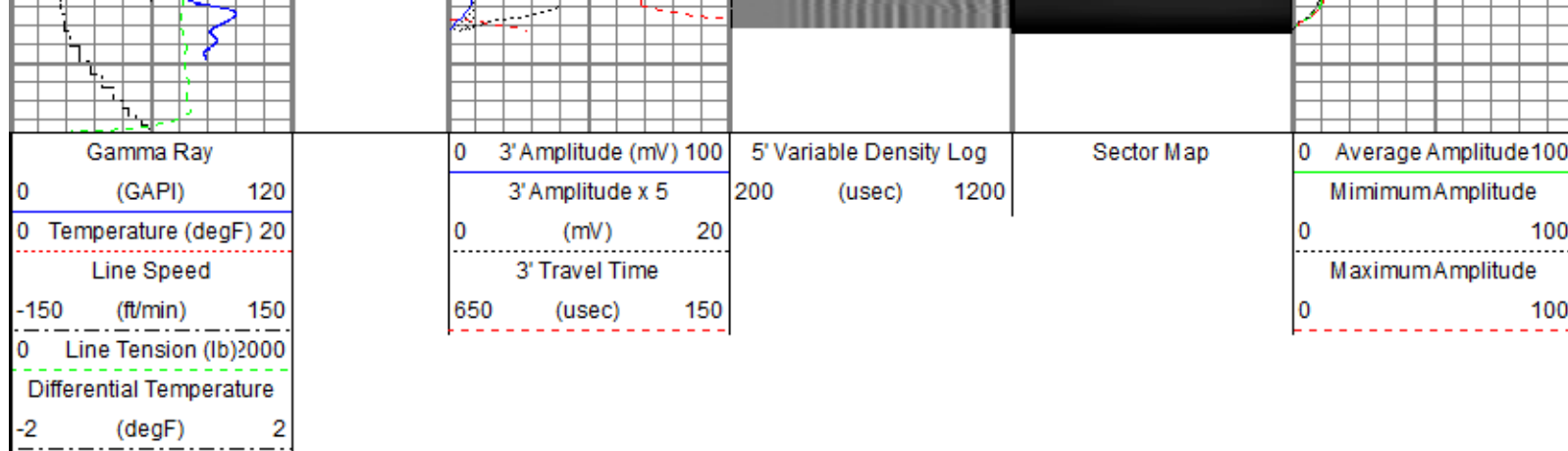
Recorded With 2800 PSI Surface Induced Pressure

Database File oxy\0512350820_oxy_cummings 19-13hz_rbl_02-03-21\0512350820_oxy_cummings 19-13hz_rbl_02-03-21.db
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 Presentation Format ros_radrii
 Dataset Creation Thu Feb 04 09:11:45 2021
 Charted by Depth in Feet scaled 1:240

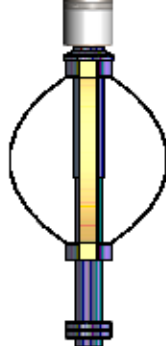


0 Line Tension (lb)2000
Differential Temperature
-2 (degF) 2





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-2750-5500	1.50	3.25	11.00
			Slip Over 2-3/4" I.D. for 5-1/2" 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					
GR	5.46		SO BS CENT-2750-5500	1.50	3.25	11.00
			Slip Over 2-3/4" I.D. for 5-1/2" O.D. Casing Bow Spring Centralizer			
			Probe GR-CCL-2750 6PB (101001)	4.80	2.75	55.00
			Probe 2-3/4" rev.1 Digital Scintillation Gamma Ray/CCL Combined with 6 Pin Bottom for CNT			

LOCTIM UTCTIM	0.00 0.00		Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00
Dataset: 0512350820_oxy_cummings 19-13hz_rbl_02-03-21.db: field/well/run1/main.1 Total length: 18.10 ft Total weight: 207.40 lb O.D.: 3.25 in						

Calibration Report	
Database File	C:\ProgramData\Warrior\Data\Oxy\0512350820_Oxy_Cummings 19-13HZ_RBL_02-03-21\0512350820_Oxy_Cummings 19-13HZ_RBL_02-03-21
Dataset Pathname	main.1
Dataset Creation	Wed Feb 03 09:04:47 2021

Gamma Ray Calibration Report		
Serial Number:	101001	
Tool Model:	2750 6PB	
Performed:	Tue Dec 03 09:24:53 2019	
Calibrator Value:	637.0	GAPI
Background Reading:	100.6	cps
Calibrator Reading:	981.1	cps
Sensitivity:	0.7235	GAPI/cps

Segmented Cement Bond Log Calibration Report		
Serial Number:	FW1302-002	
Tool Model:	2750 RBTa	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	65.999	ft

Master Calibration, performed (Derived):						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.002	0.702	0.800	71.921	101.665	0.593
CAL	0.680	0.682				
5'	0.000	0.604	0.800	71.921	117.886	0.749
SUM						
S1	0.001	0.698	0.000	100.000	143.555	-0.182
S2	0.001	0.758	0.000	100.000	132.081	-0.109
S3	0.001	0.782	0.000	100.000	128.037	-0.168
S4	0.001	0.750	0.000	100.000	133.602	-0.178
S5	0.001	0.716	0.000	100.000	139.732	-0.089
S6	0.001	0.697	0.000	100.000	143.642	-0.111
S7	0.002	0.677	0.000	100.000	147.985	-0.239
S8	0.002	0.684	0.000	100.000	146.515	-0.243

Internal Reference Calibration, performed (Not Performed):						
	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset

CAL	0.000	0.000	0.680	0.682	1.000	0.000
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Air Zero Calibration, performed Wed Feb 03 06:51:35 2021:

	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.008	0.000	0.000
5'	0.009	0.000	-0.000
SUM			
S1	0.006	0.000	-0.000
S2	0.009	0.000	-0.001
S3	0.008	0.000	-0.000
S4	0.009	0.000	-0.000
S5	0.009	0.000	-0.001
S6	0.009	0.000	-0.001
S7	0.009	0.000	0.000
S8	0.008	0.000	0.000

Inclinometer Calibration Report

Performed:	Tue Dec 03 09:24:53 2019				
	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:	Tue Dec 03 09:24:53 2019			
	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			



Company	Kerr-McGee Oil & Gas Onshore, L.P.
Well	Cummings 19-13HZ
Field	Wattenberg
County	Weld
State	Colorado