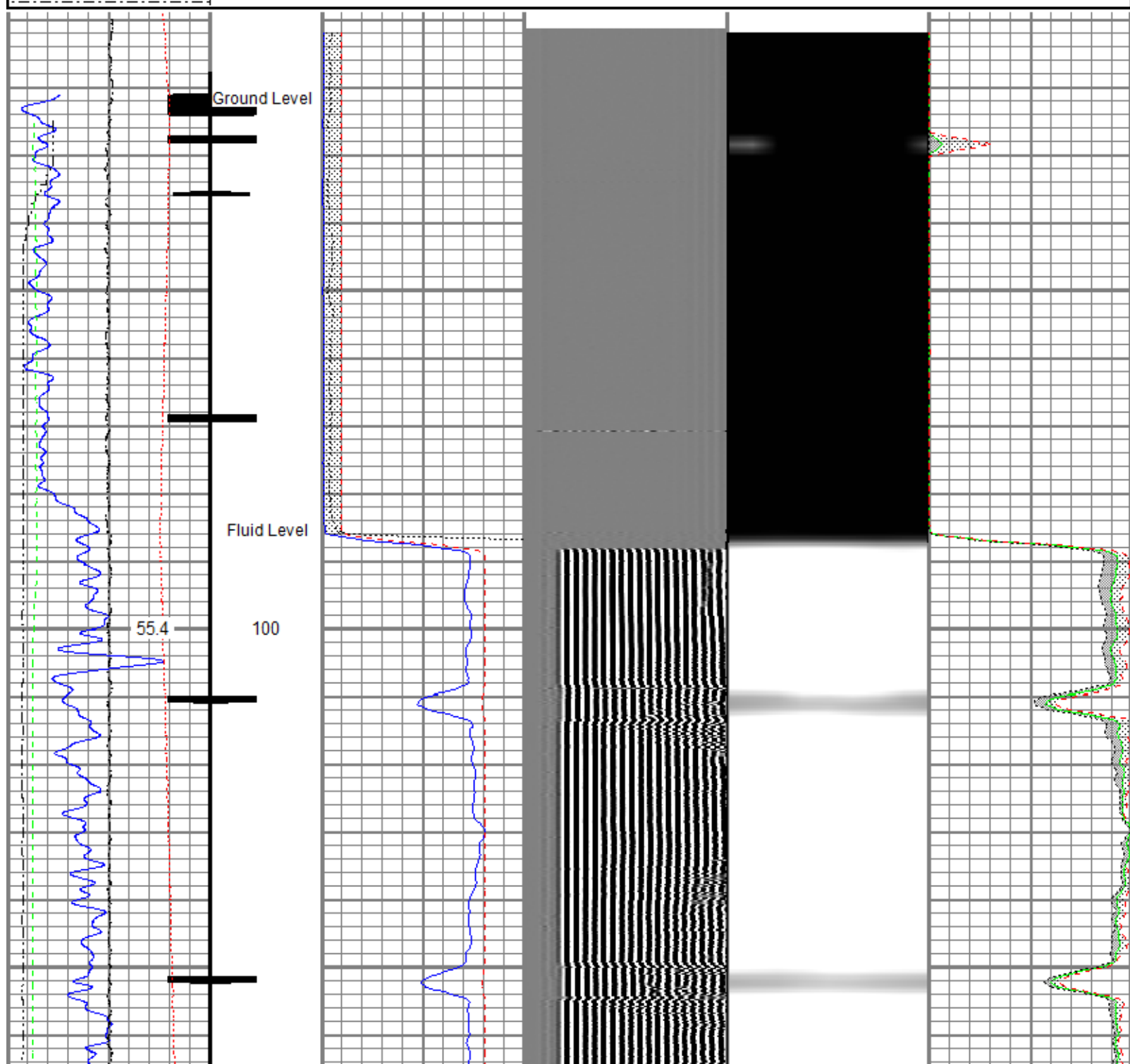
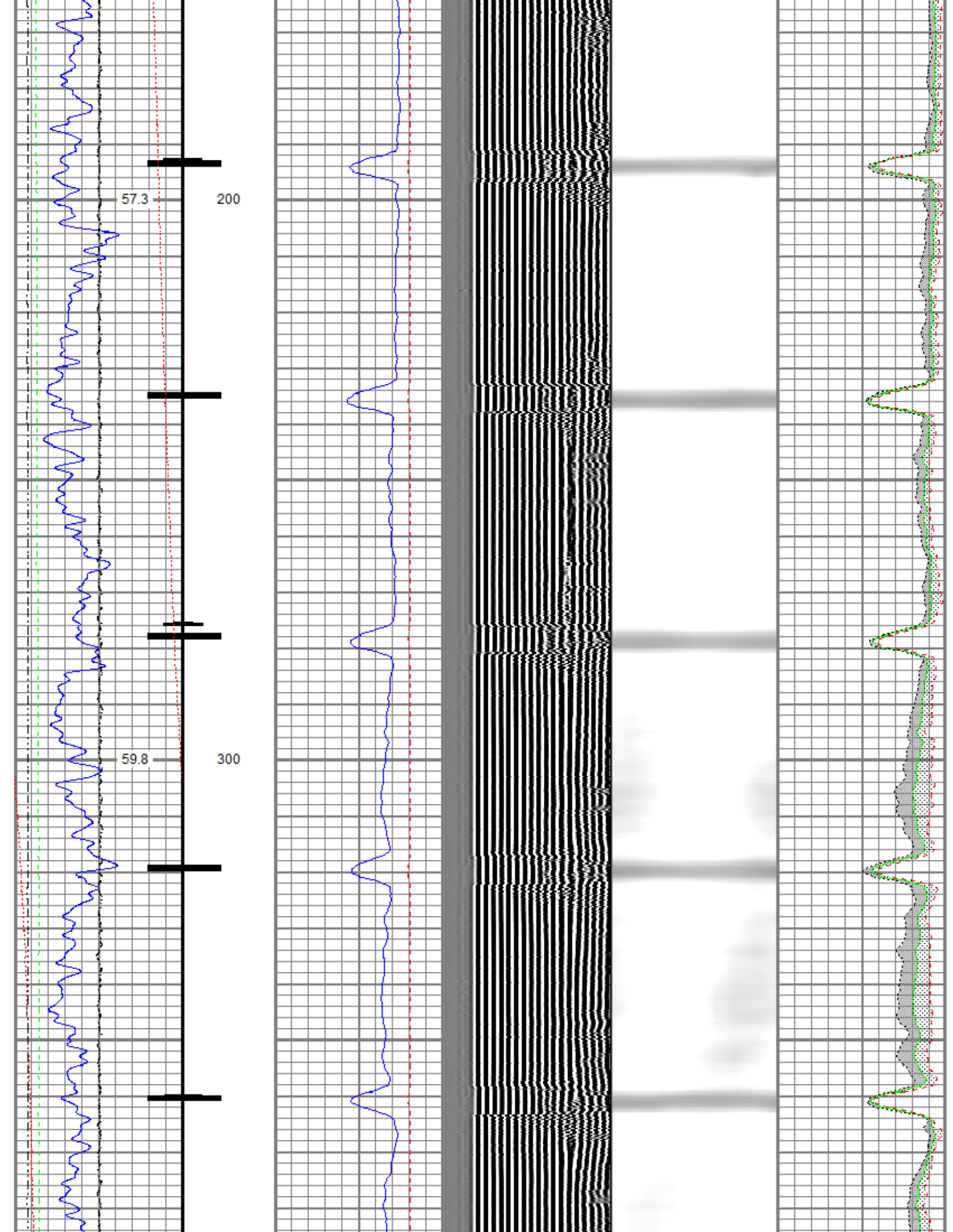


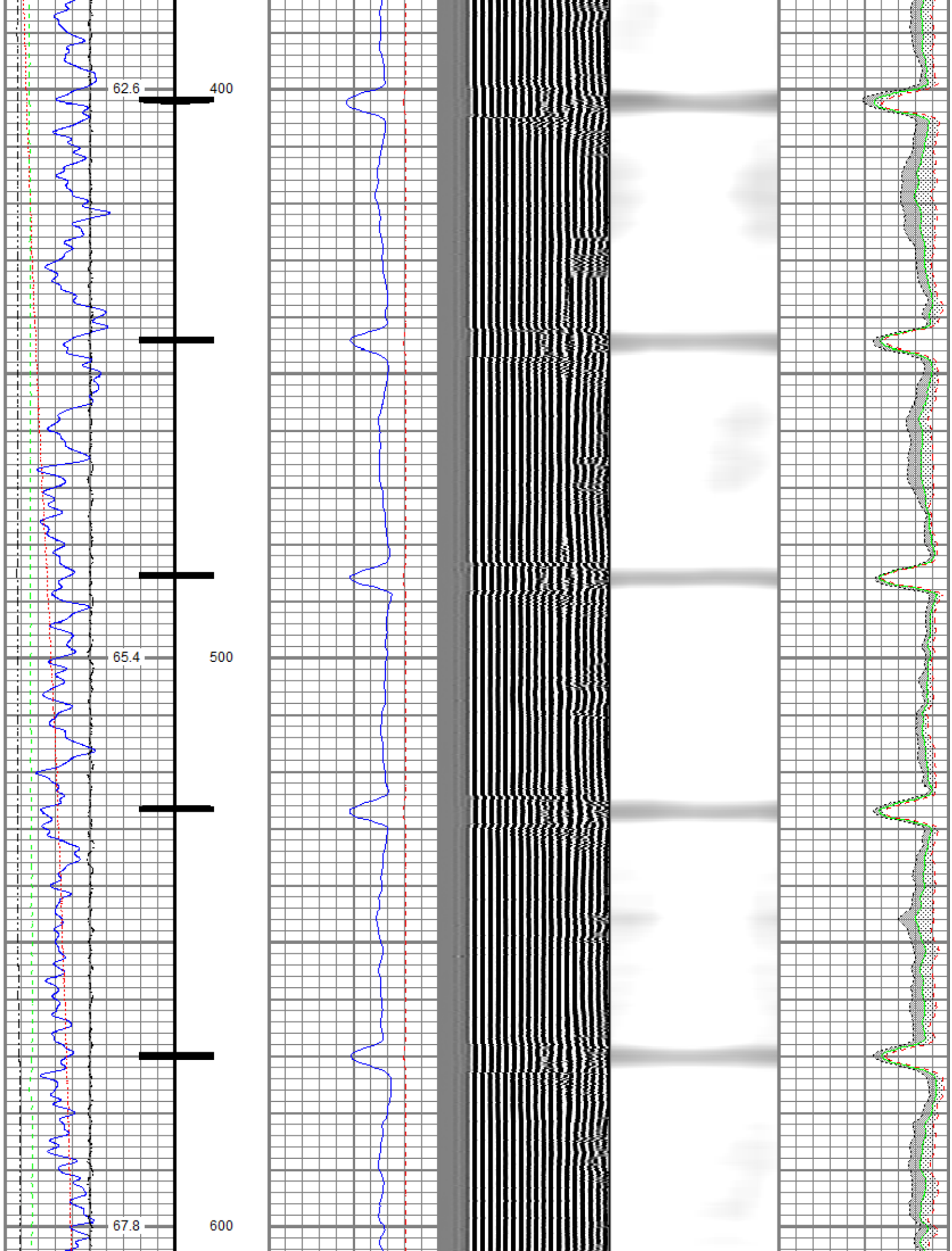
<<< Fold Here >>>
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible 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 Depth referenced to Kelly Bushing at 21 FT Recorded Marker Joints at 6026 - 6037 FT, 7545 - 7556 FT and 9444 - 9454 FT Log ran with 0 PSI Surface Induced Pressure Thank you for choosing Reliance Oilfield Services, LLC!

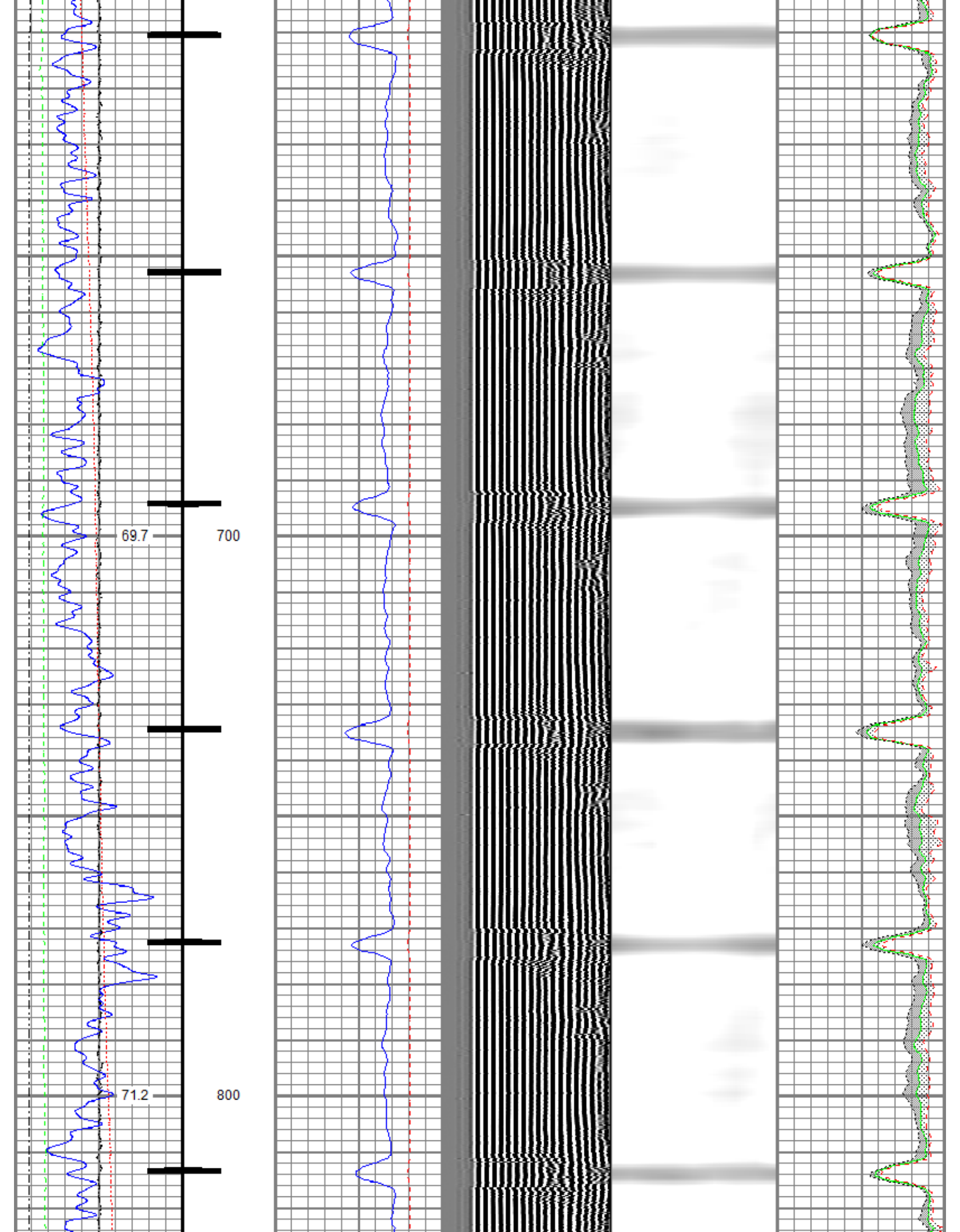
Database File	ursa\ursa_boies ranch c-240 fed 21b-25-2-98_rbl_02-14-19\ursa_boies ranch c-240 fed 21b-25-2-98_rbl_02-14-19.db
Dataset Pathname	main.1
Presentation Format	ros_radri
Dataset Creation	Fri Feb 15 10:58:26 2019
Charted by	Depth in Feet scaled 1:240

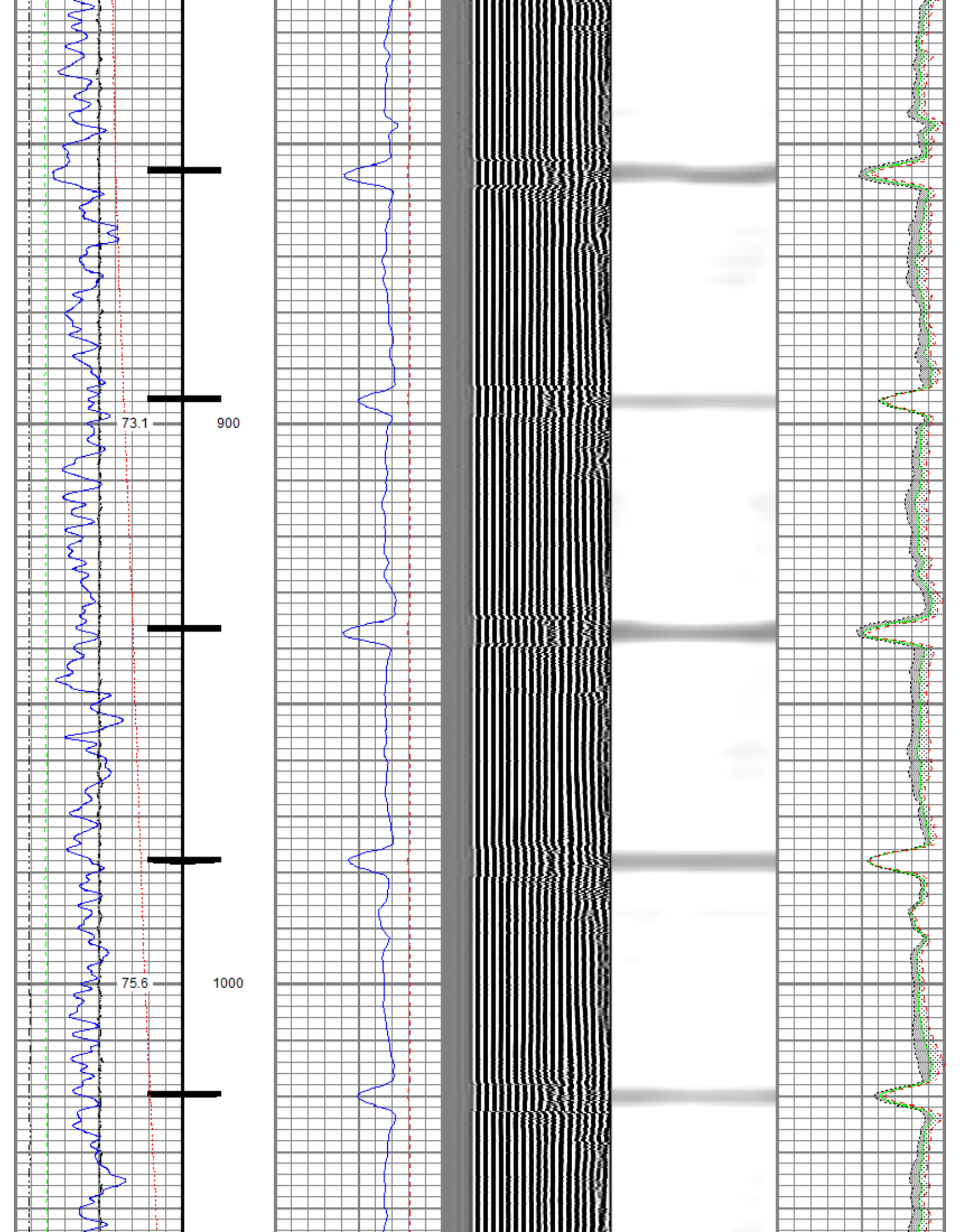
Gamma Ray	0	3' Amplitude (mV)	100	5' Variable Density Log	Sector Map	0	Average Amplitude	100
(GAPI)	120	3' Amplitude x 5	200	1200			Minimum Amplitude	
Casing Collar Locator	0	(mV)	20			0	100	
Temperature (degF)	20	3' Travel Time					Maximum Amplitude	
Line Speed	650	(usec)	150			0	100	
(ft/min)	150	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

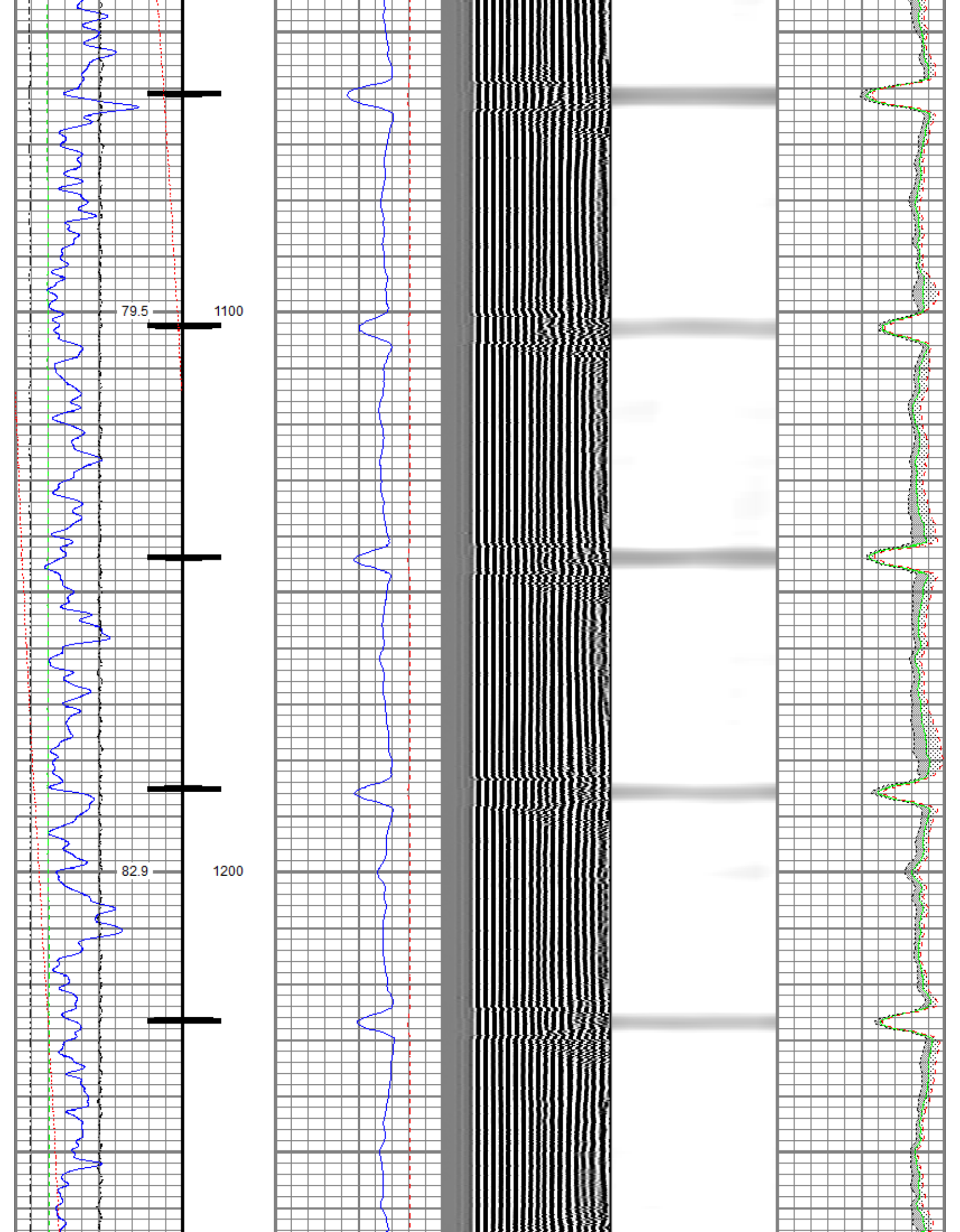


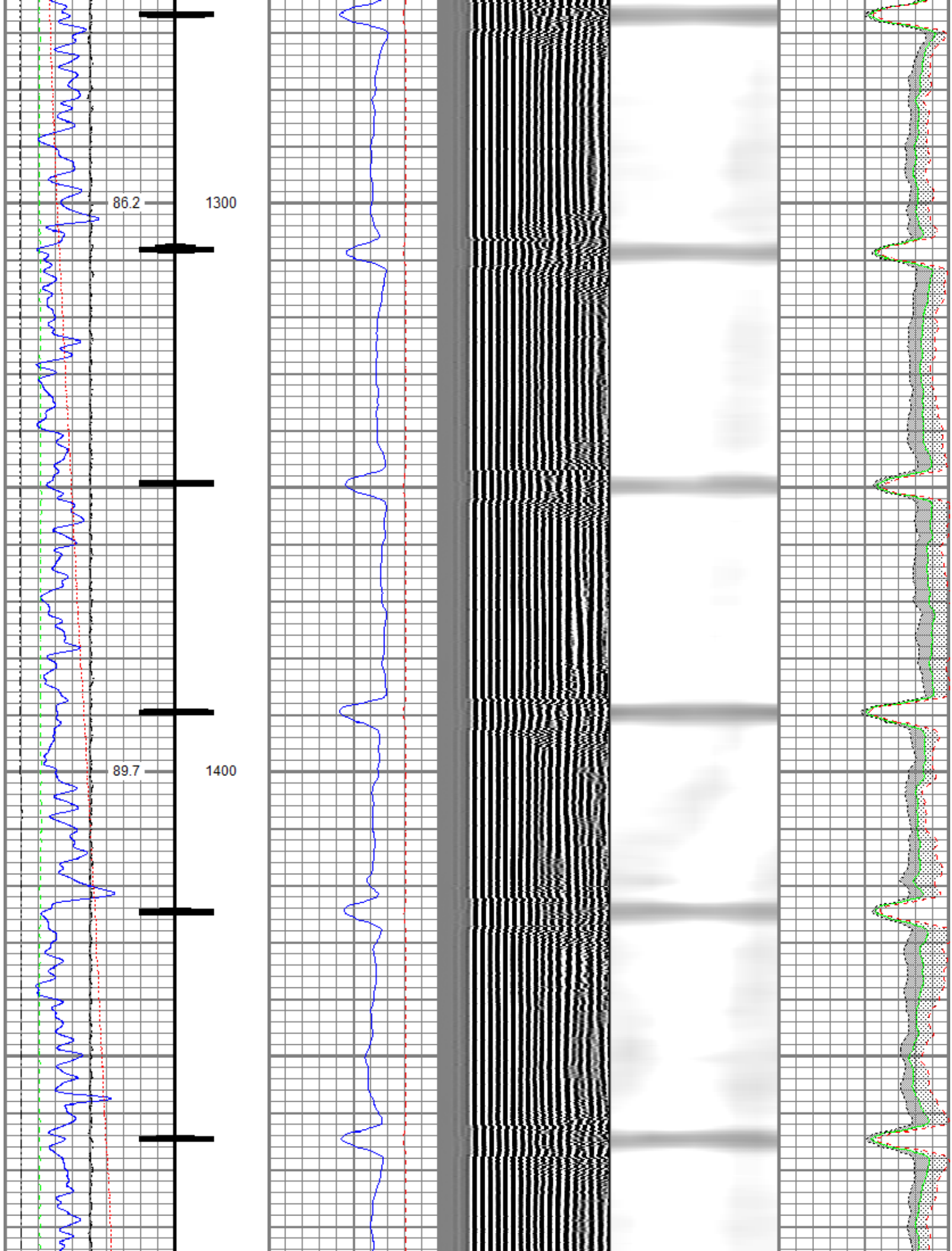


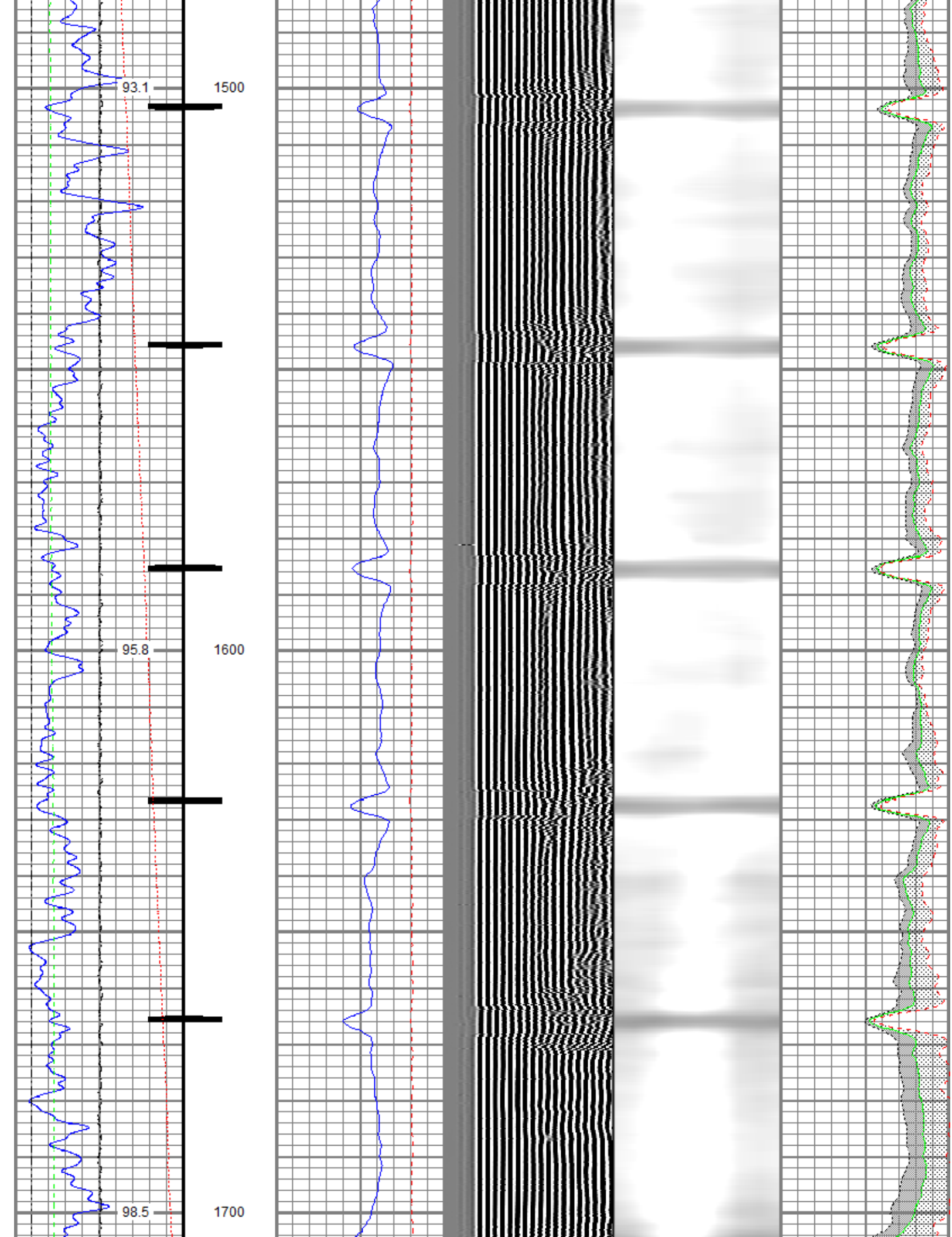


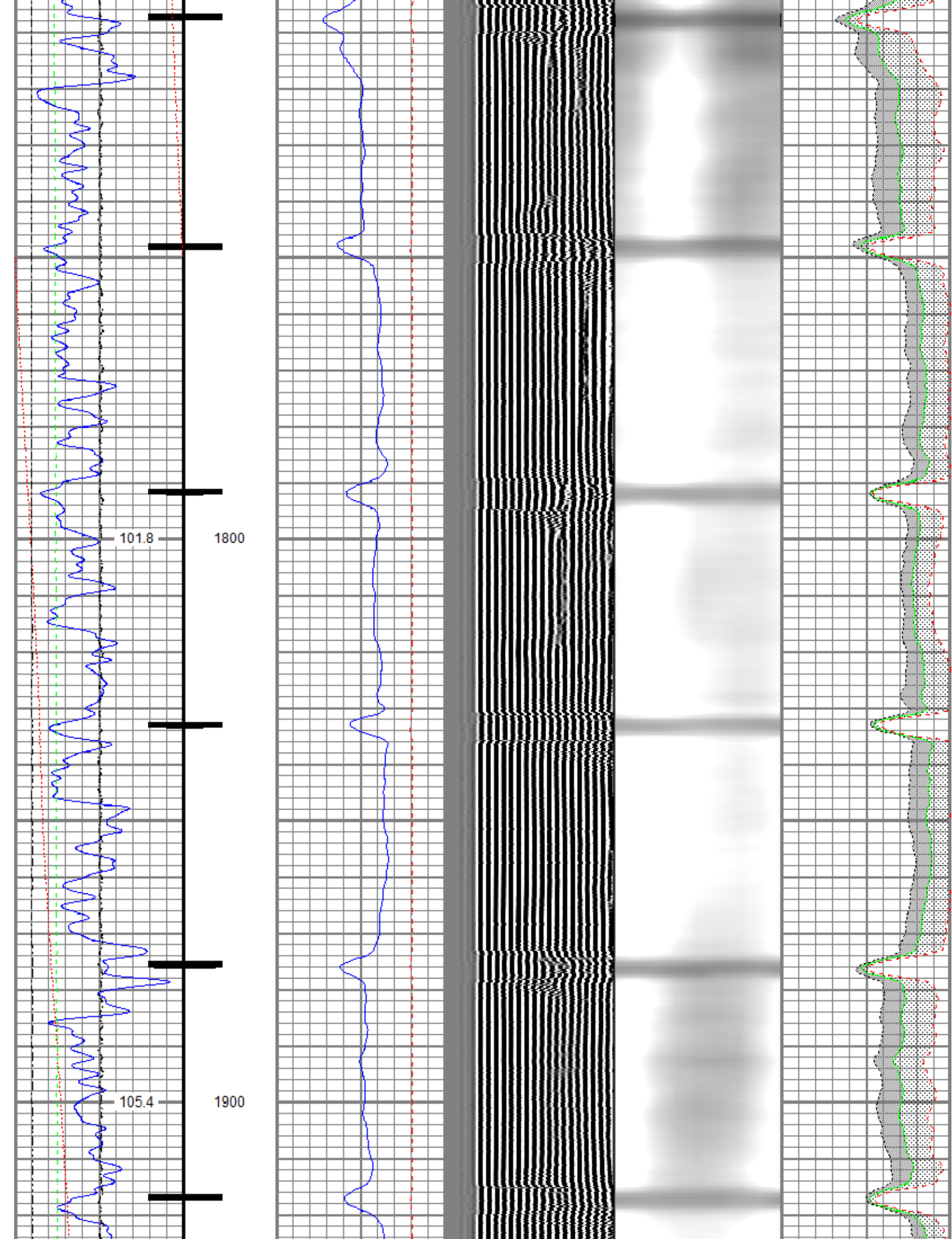


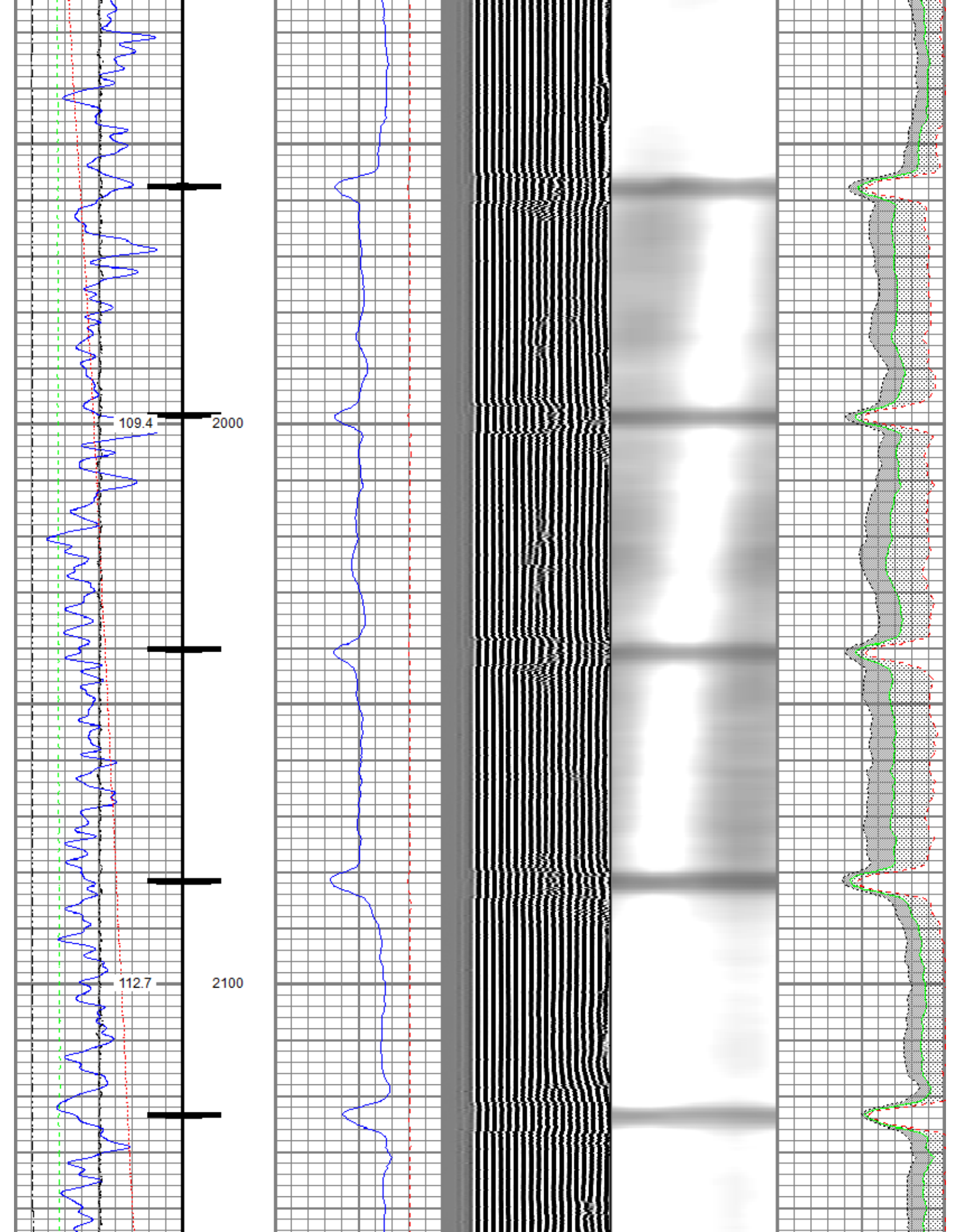


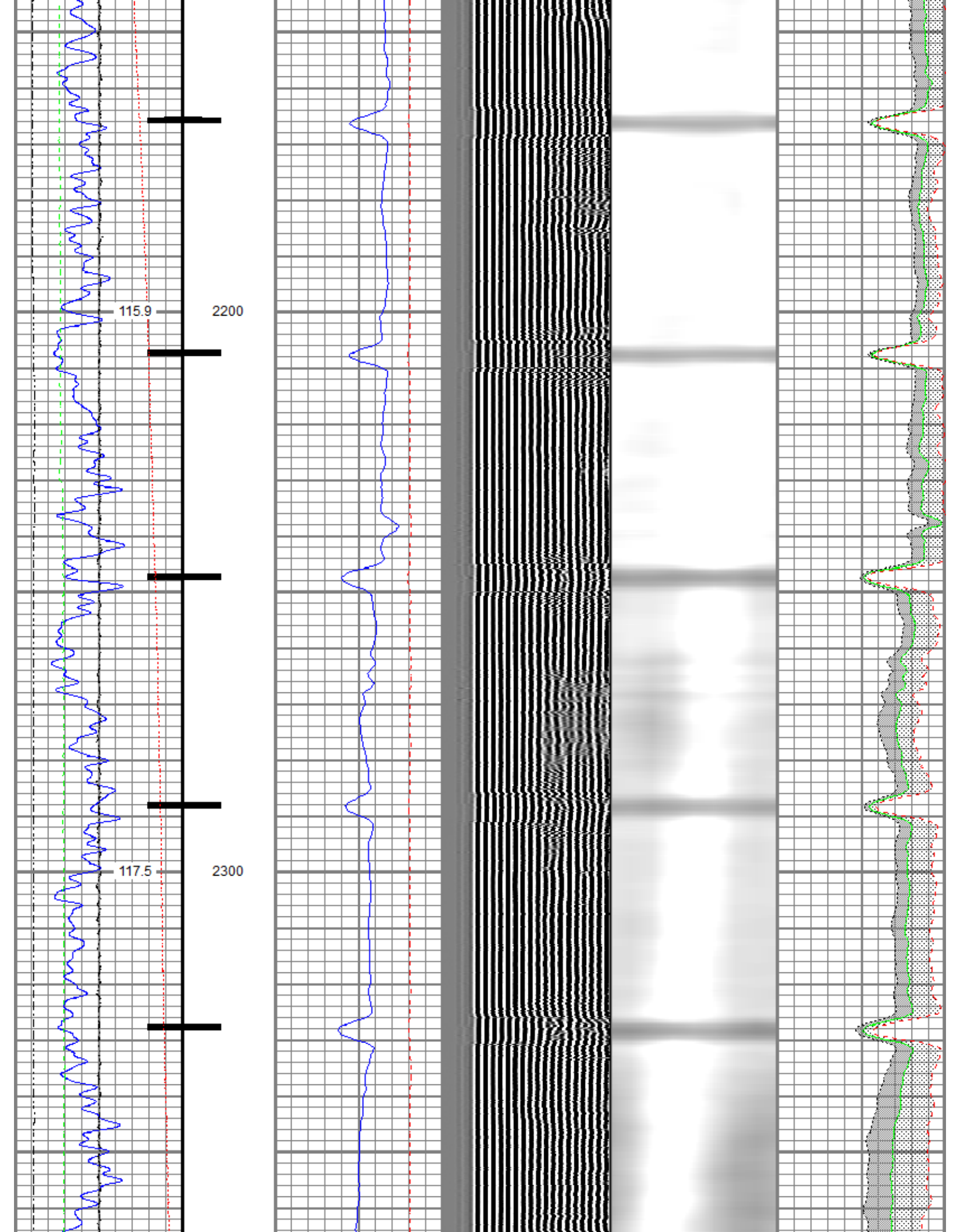


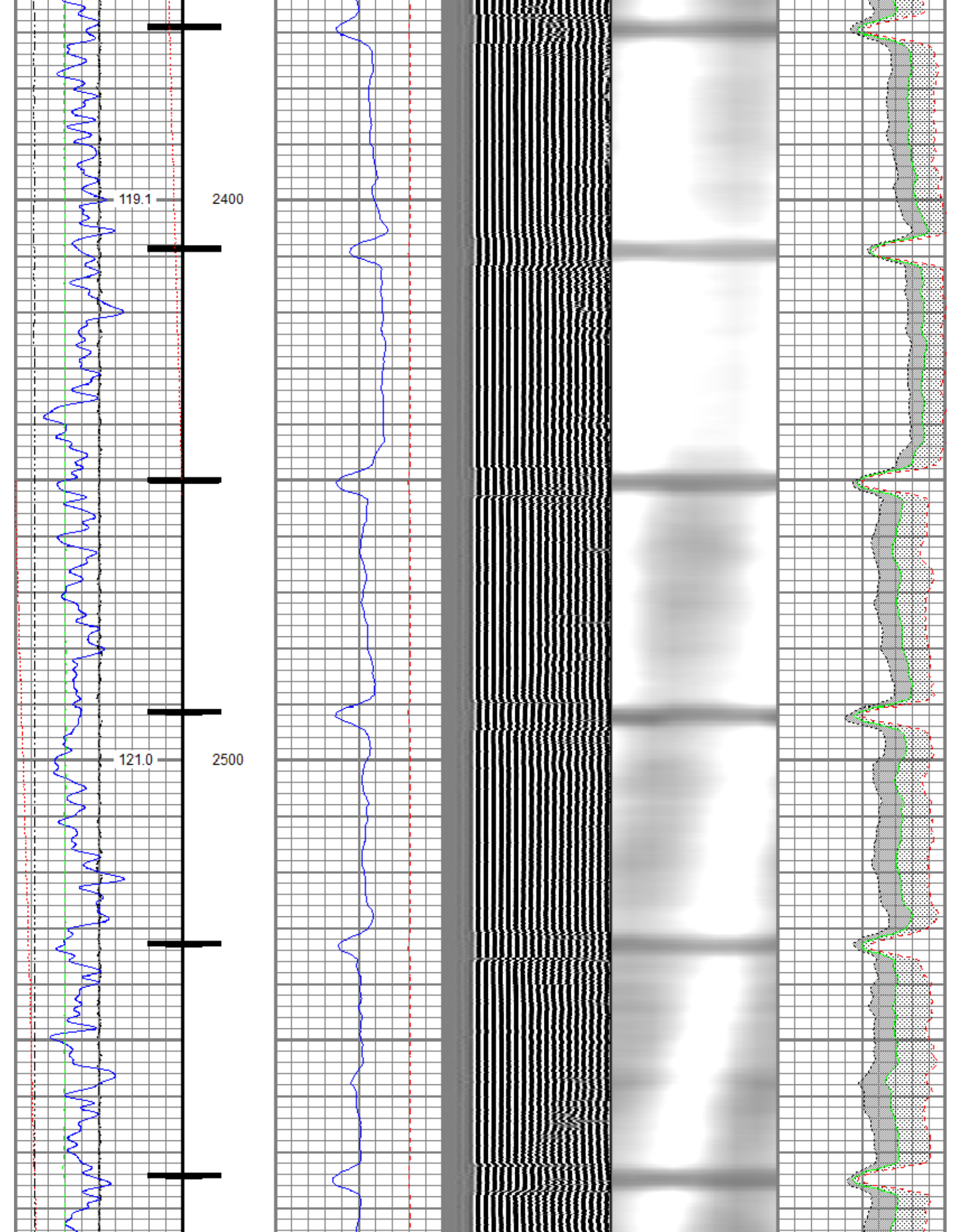


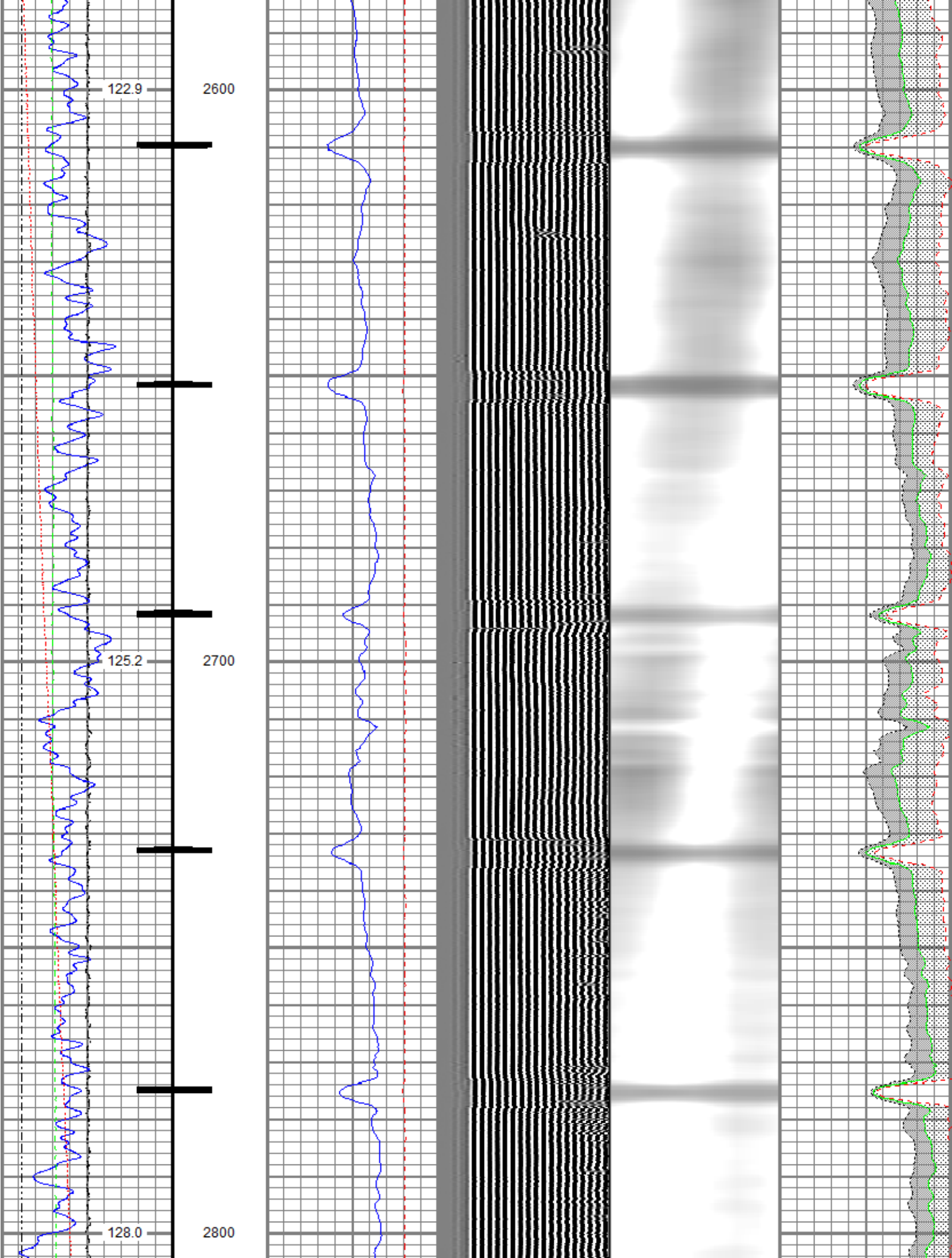


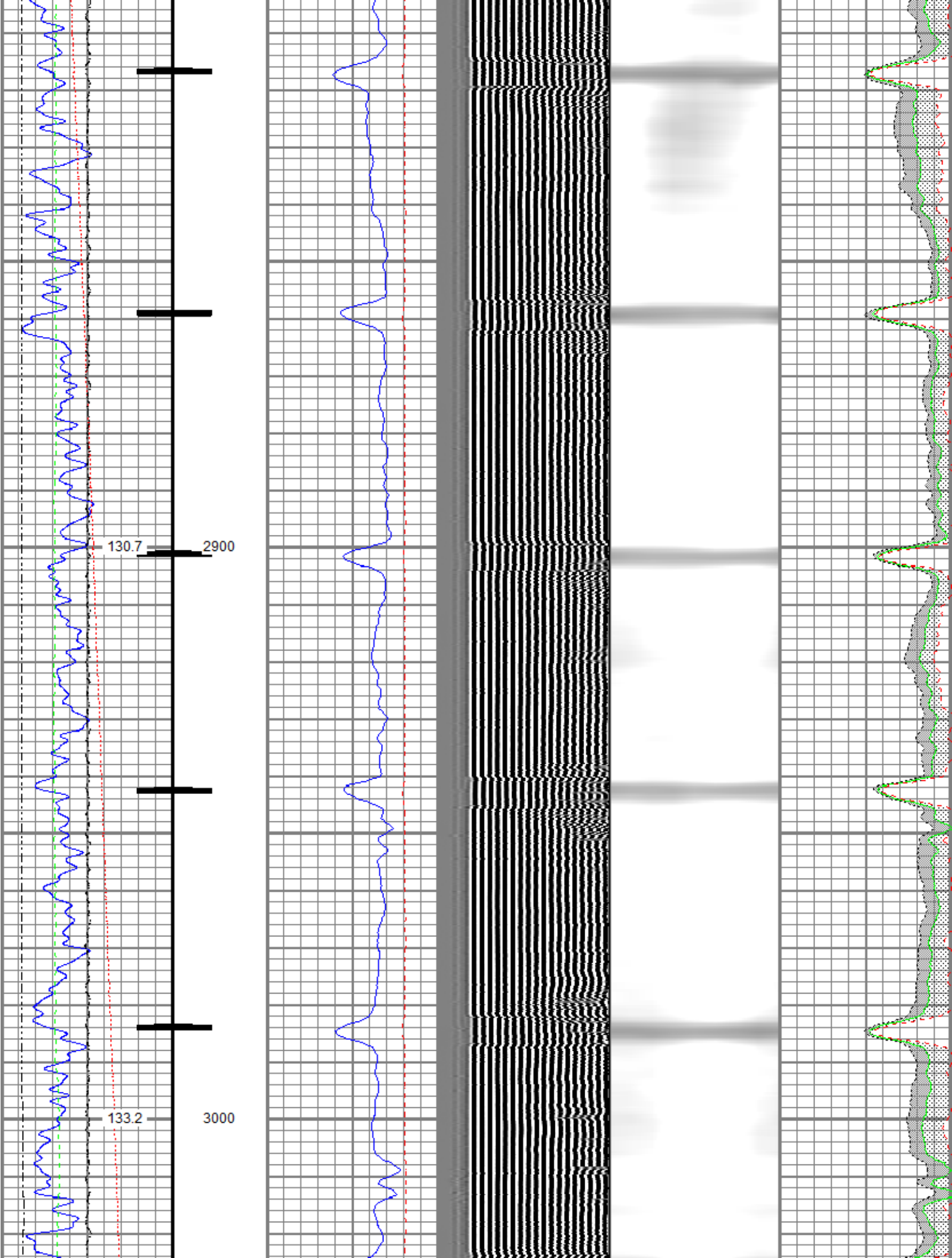


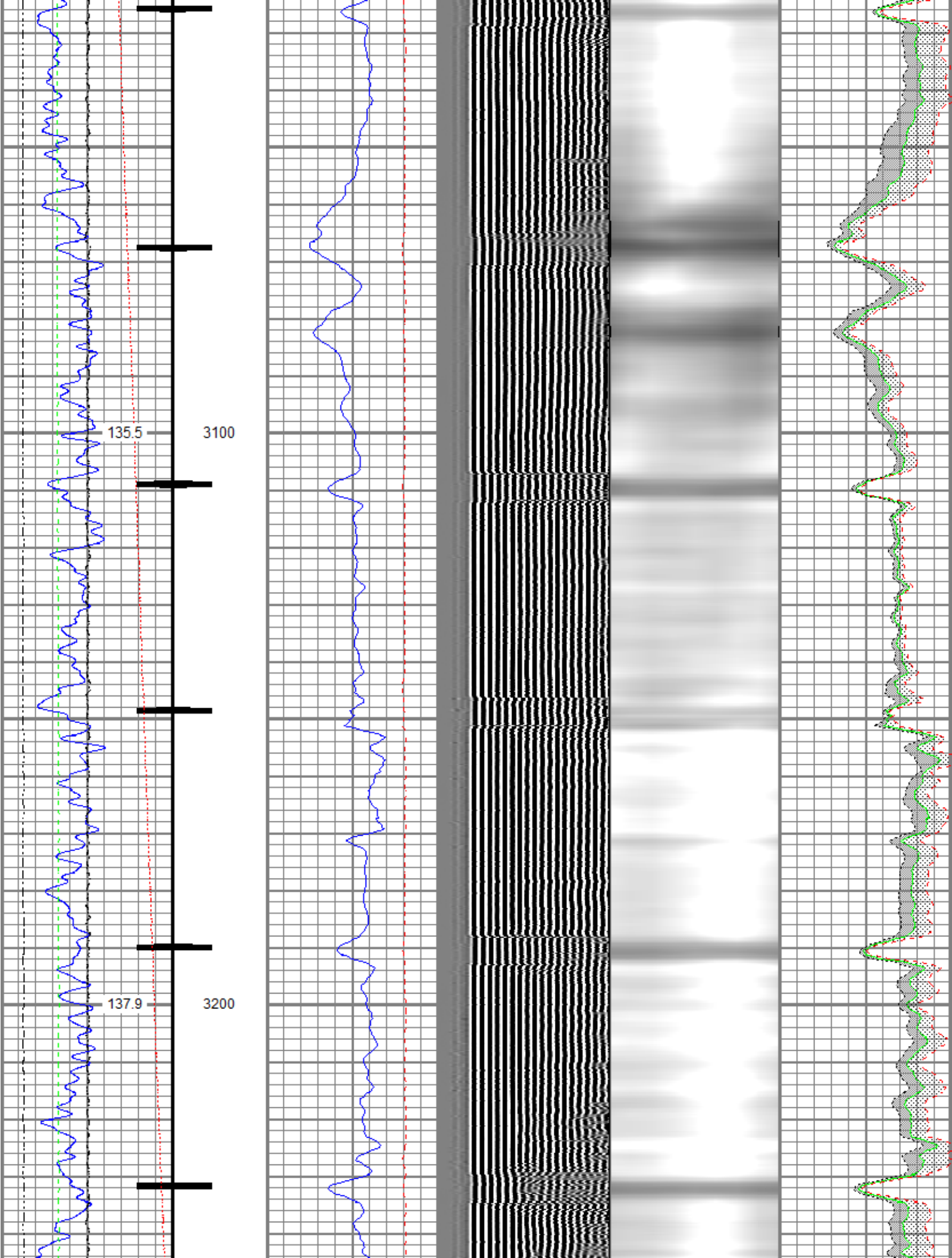


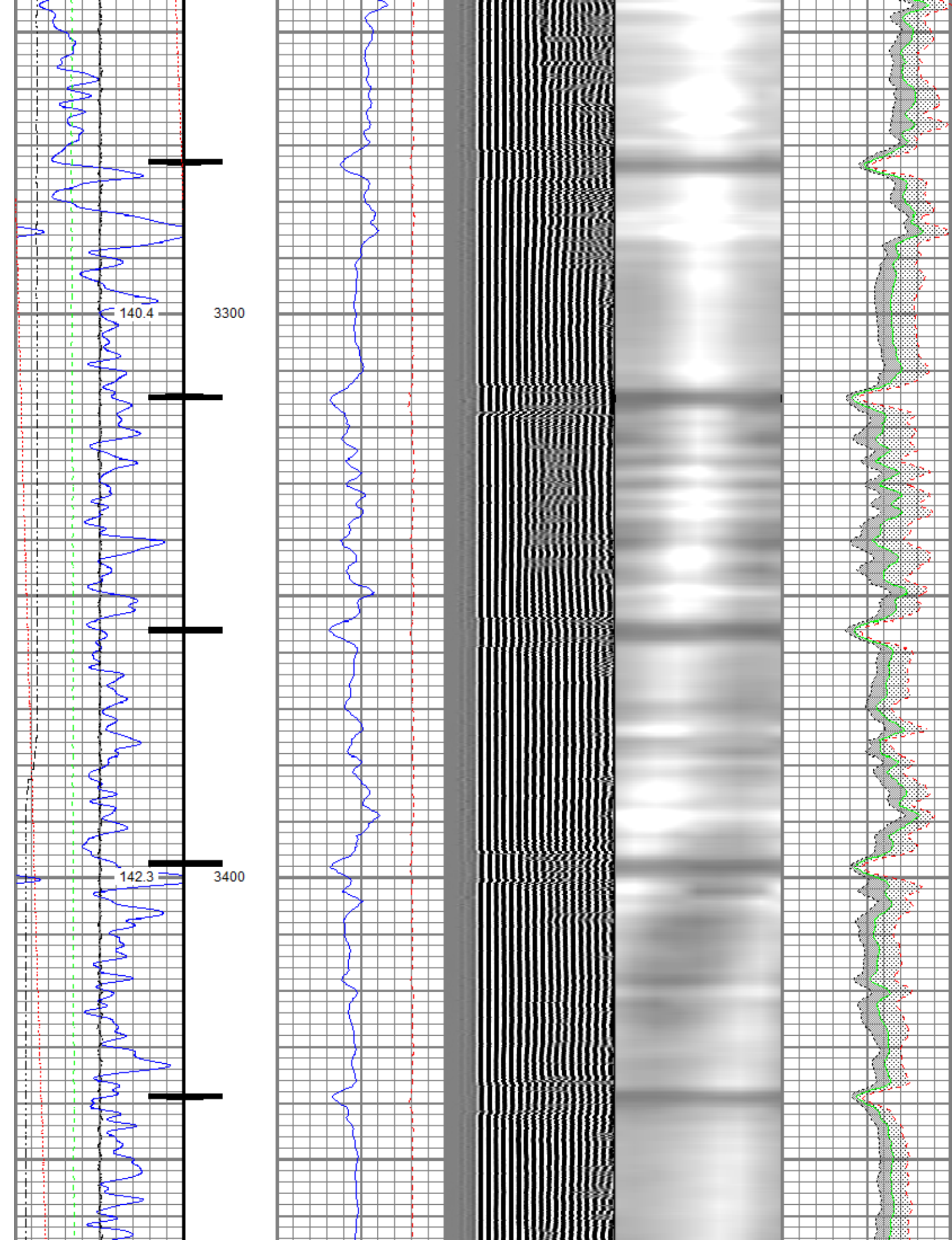


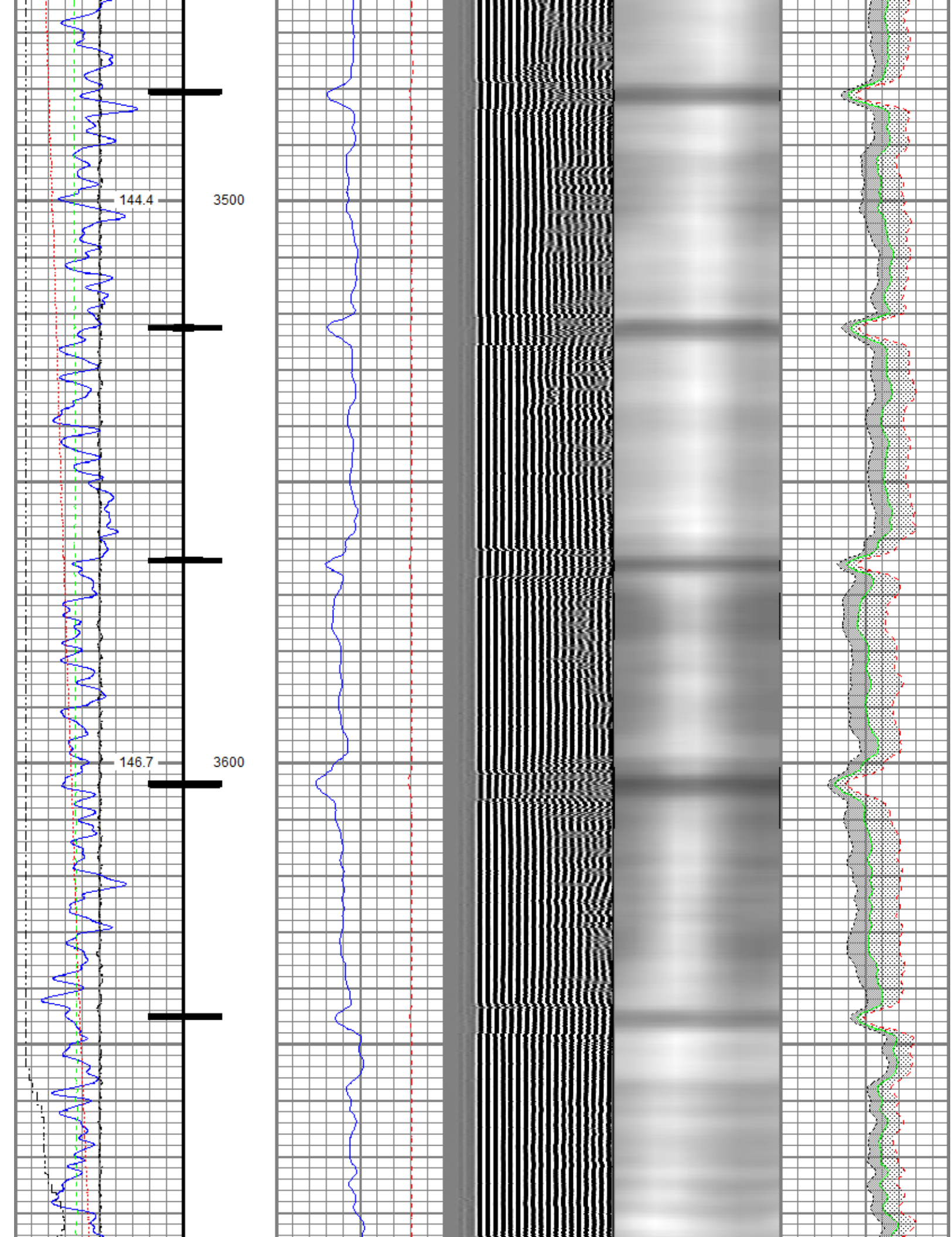


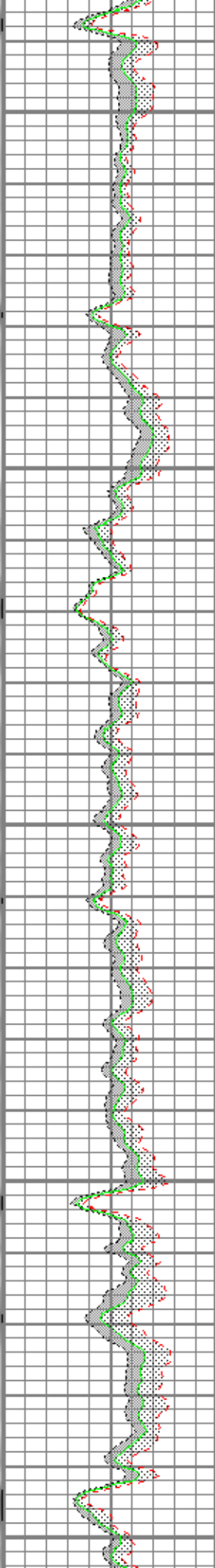
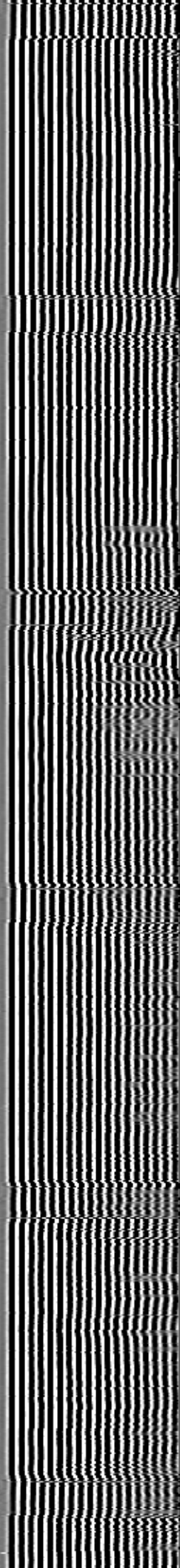
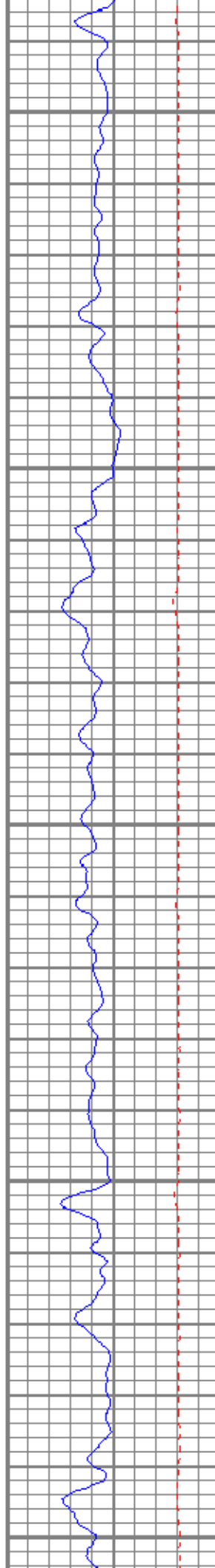
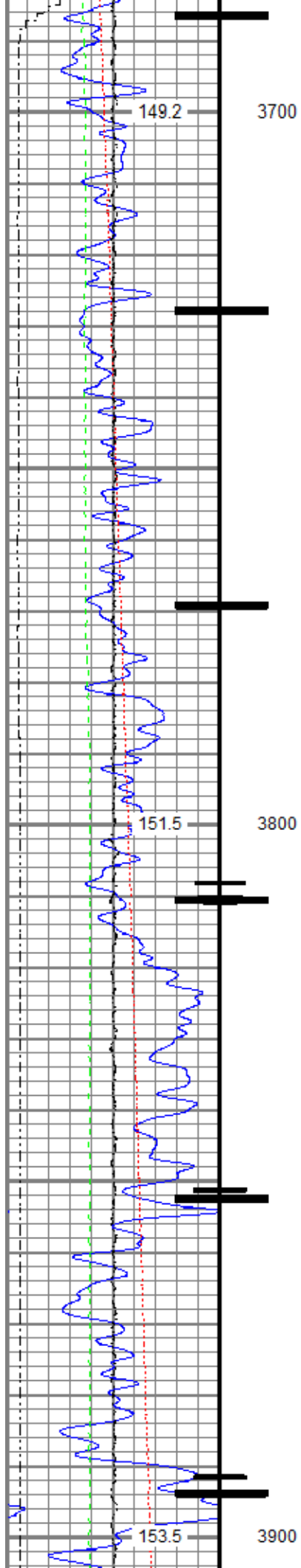


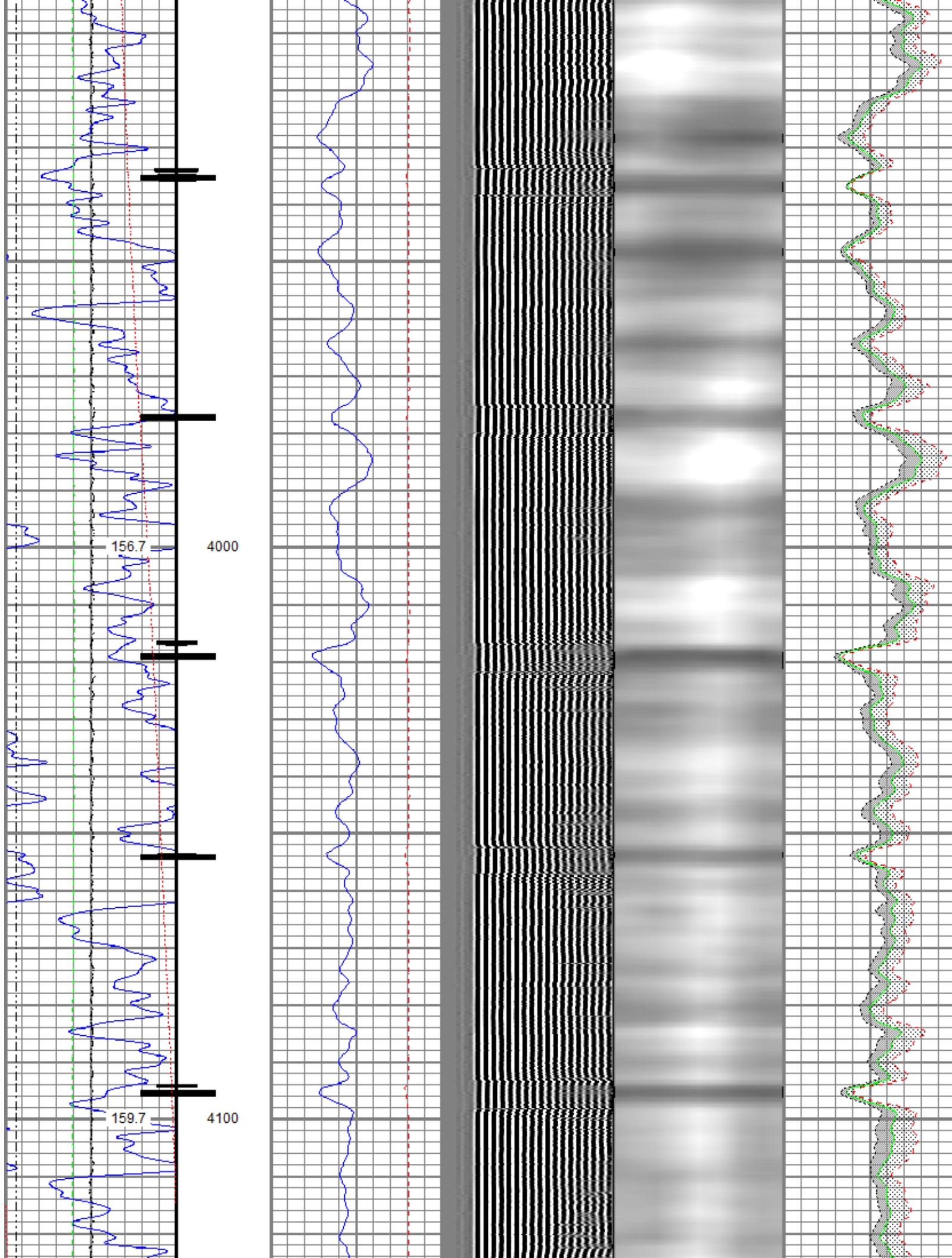


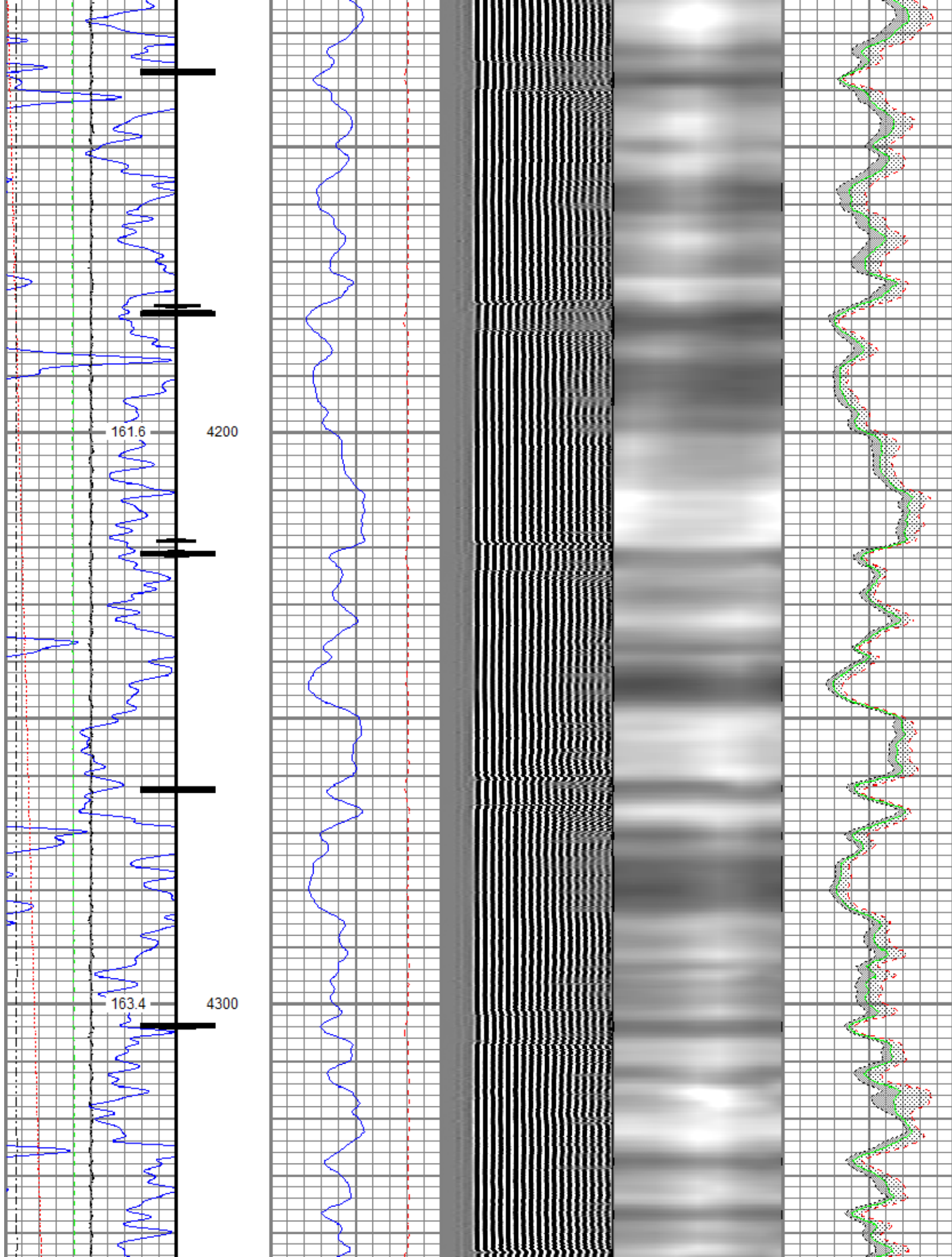


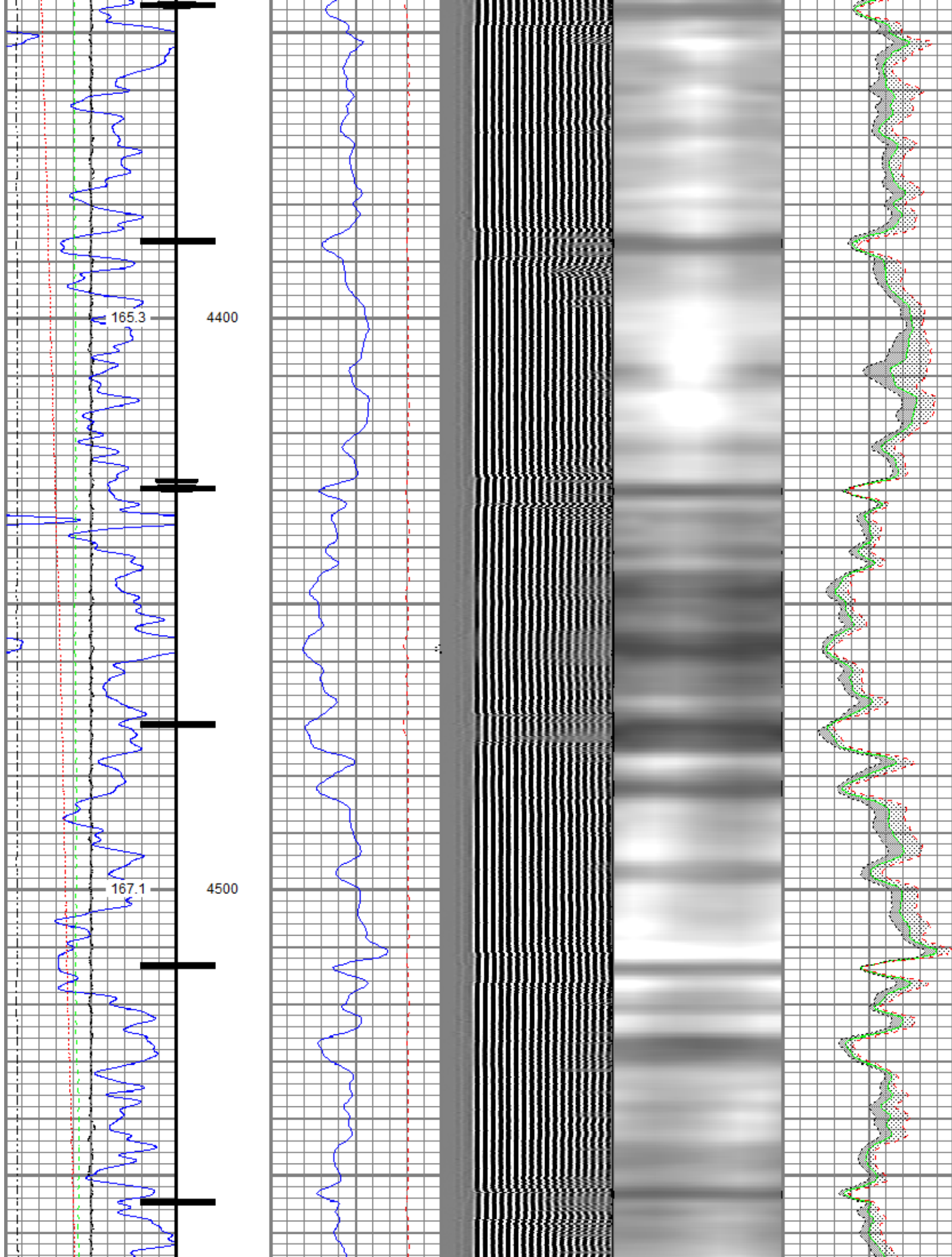


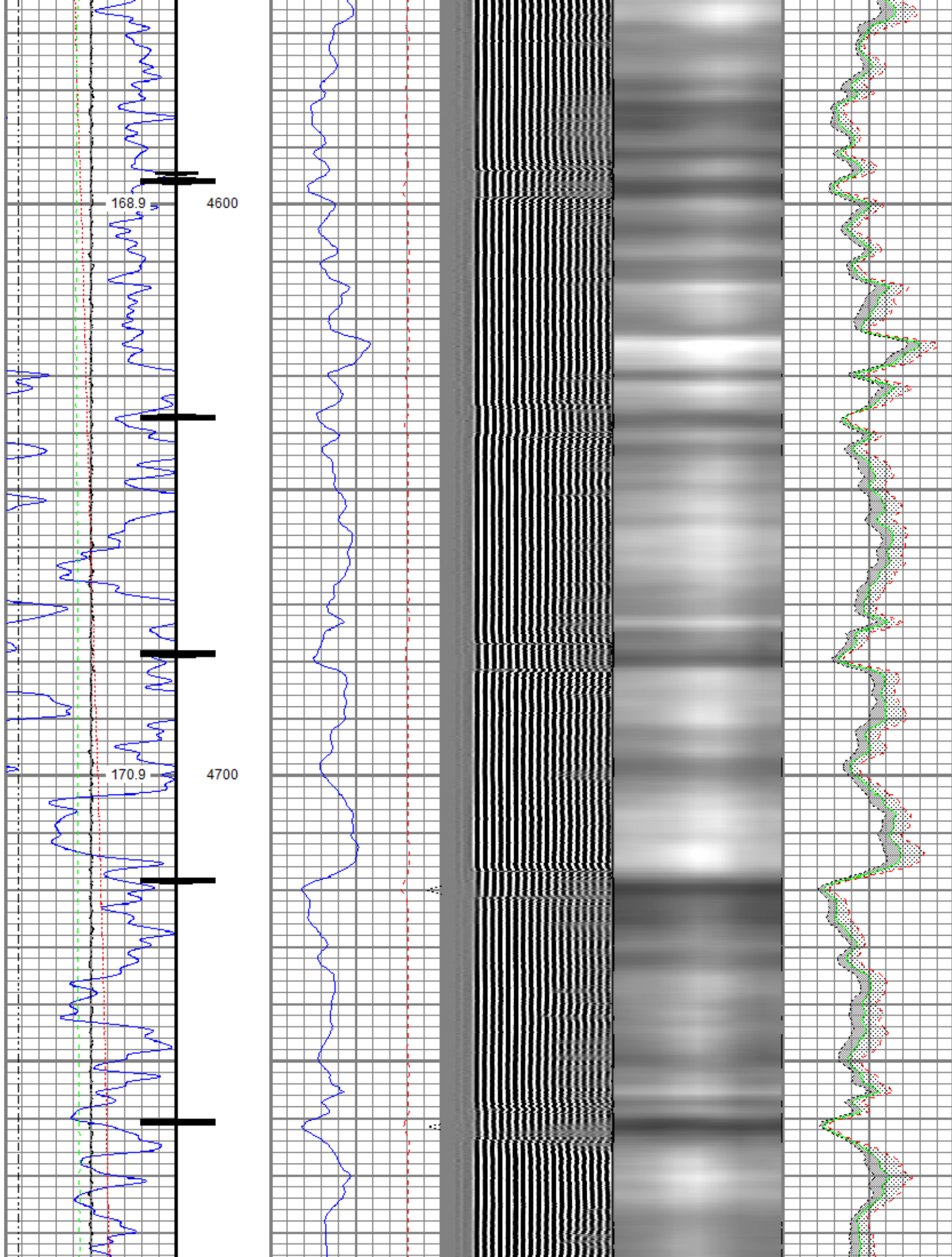


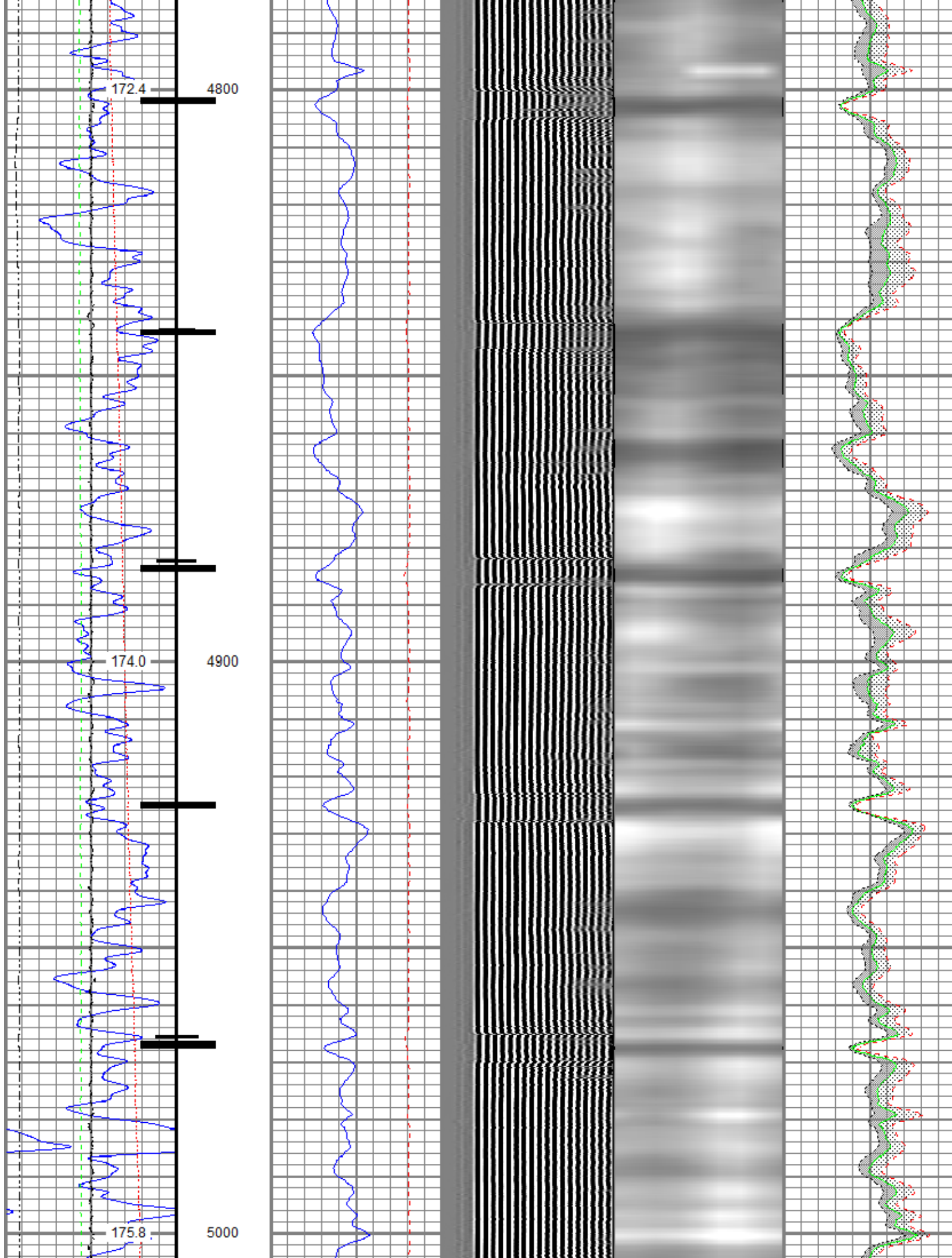


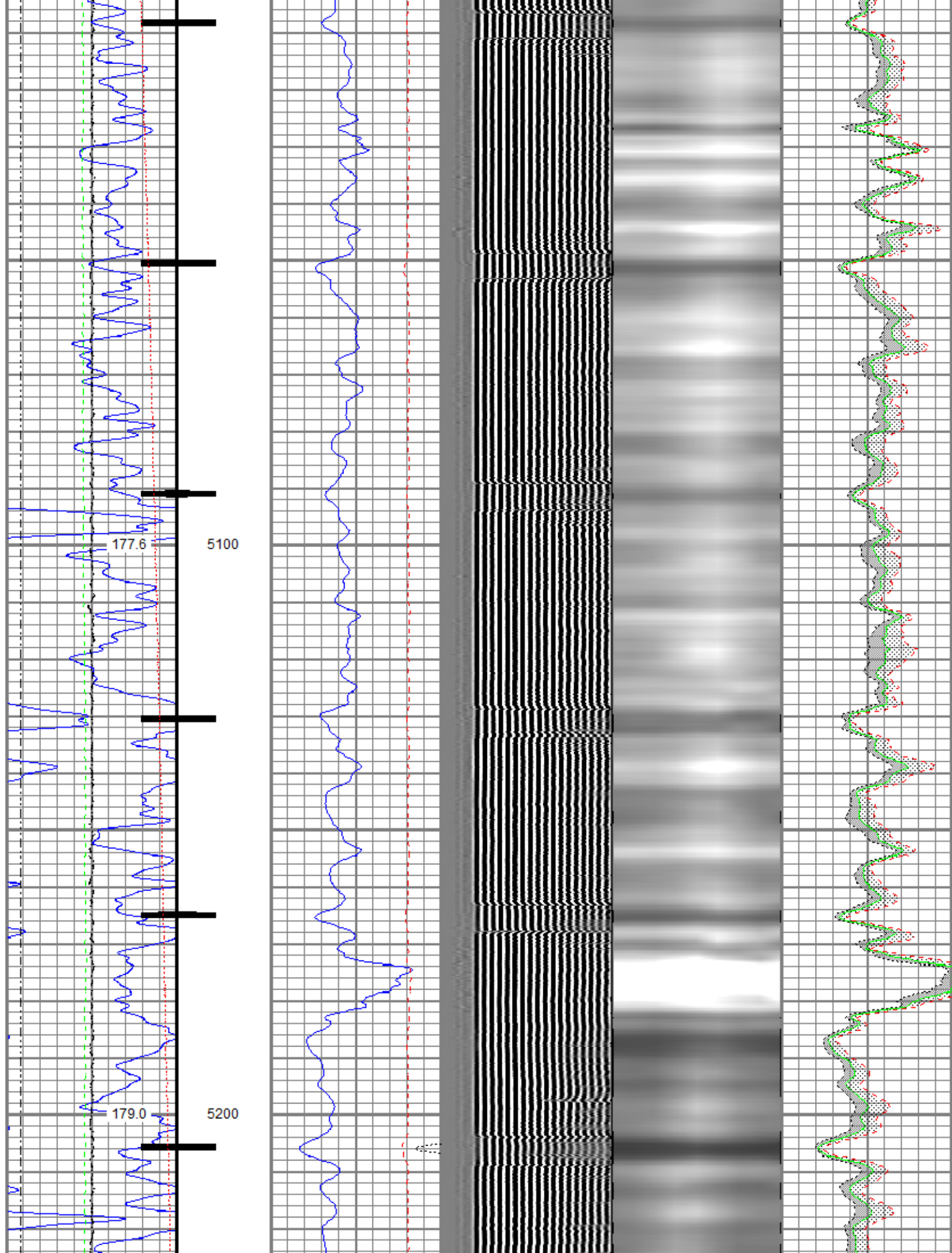


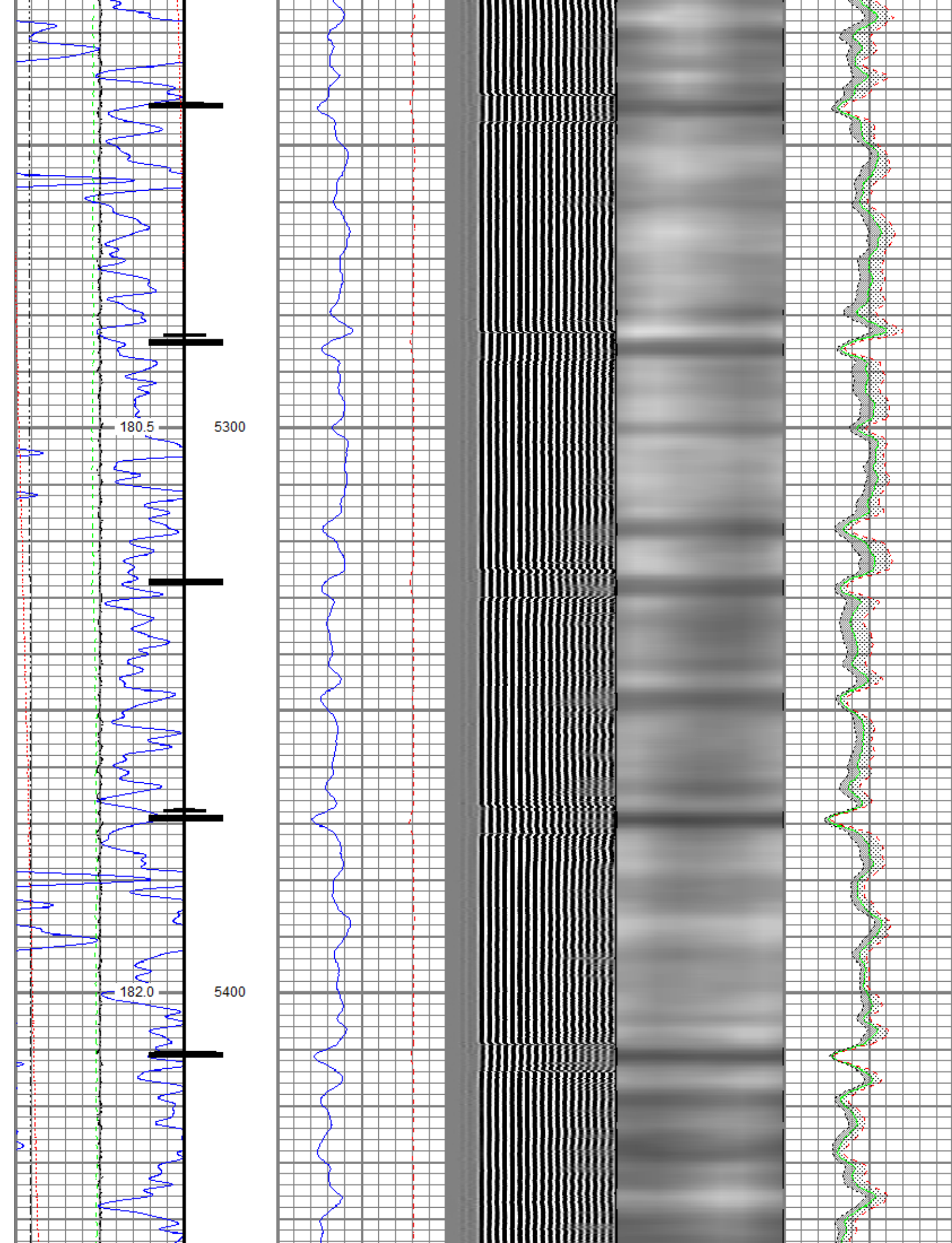


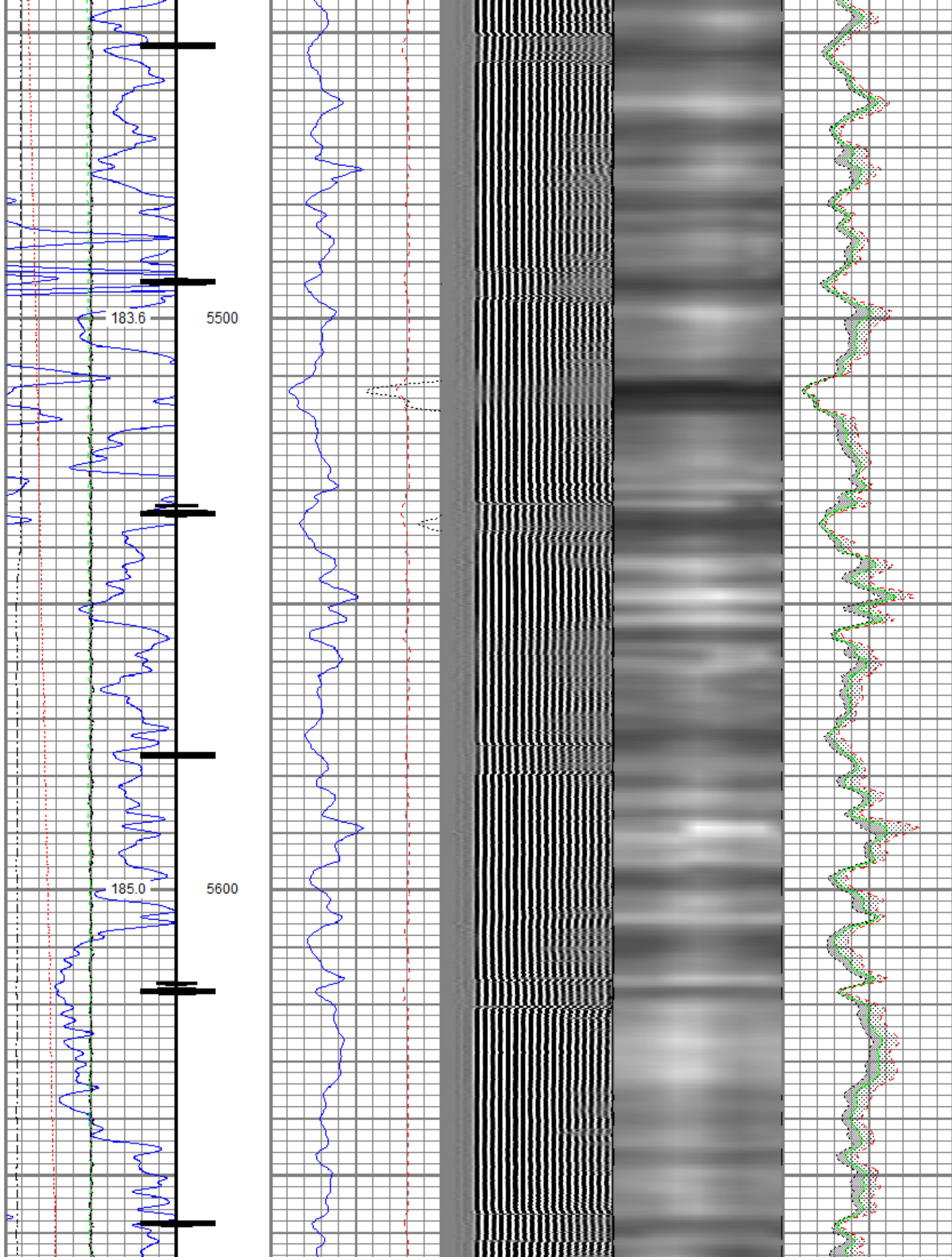


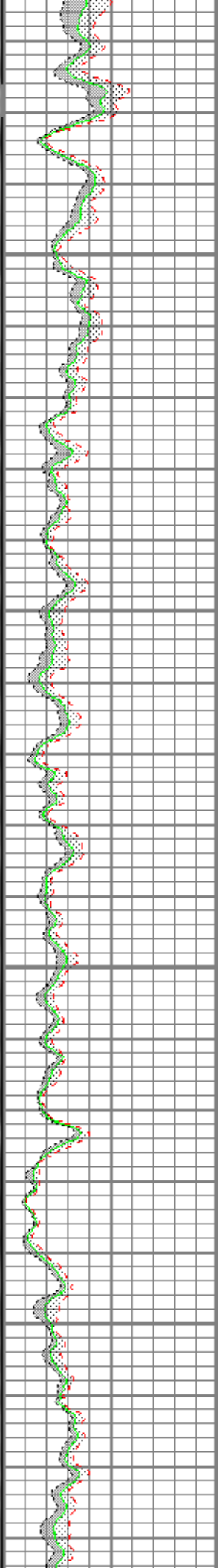
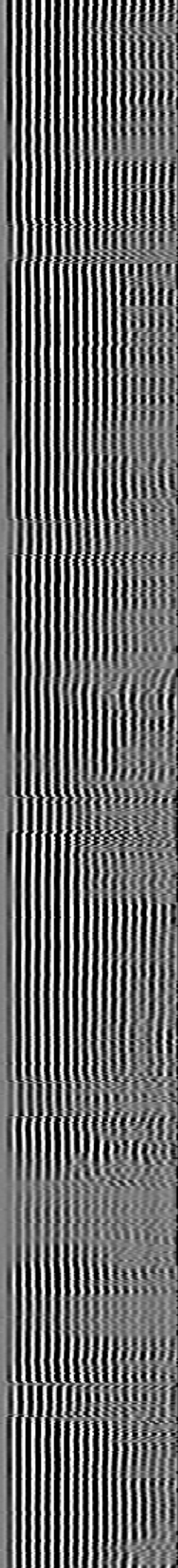
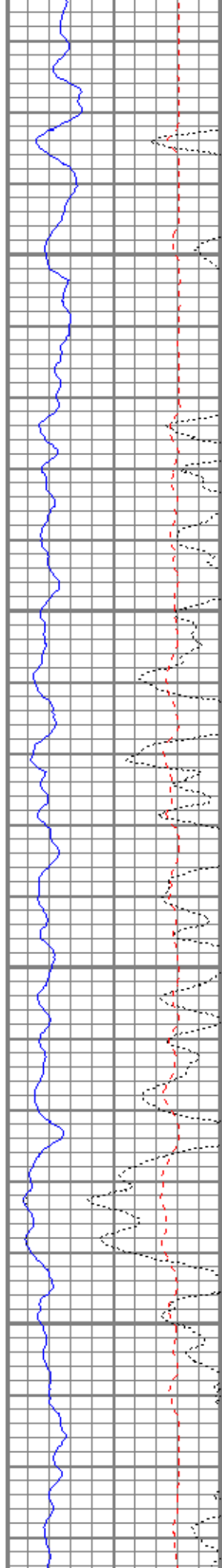
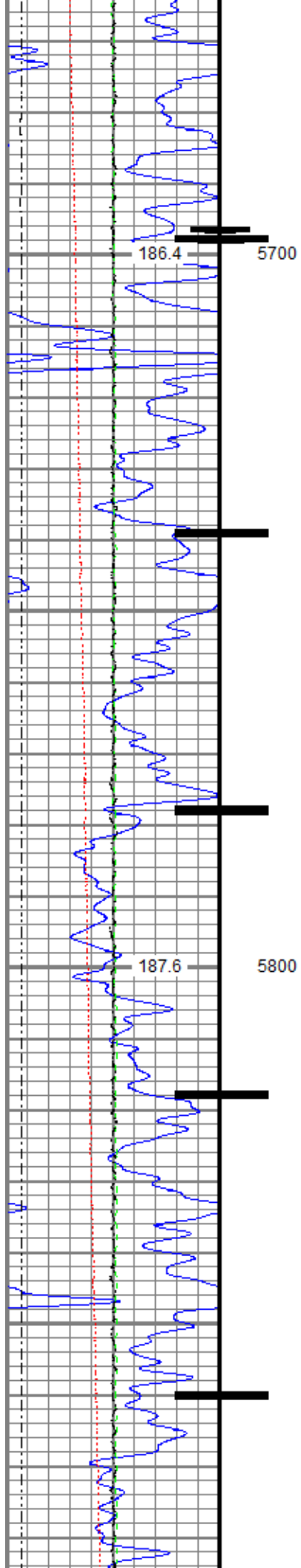


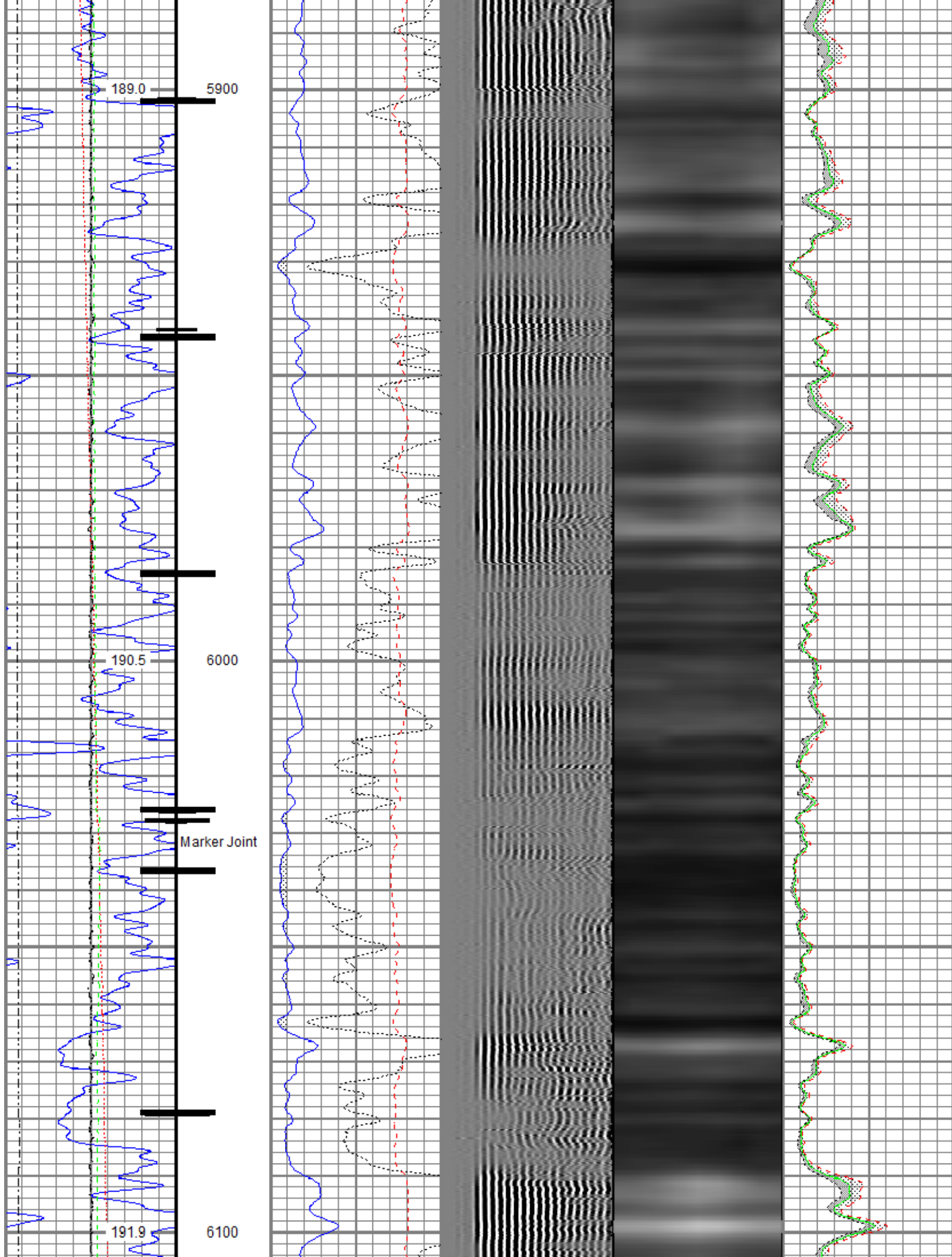


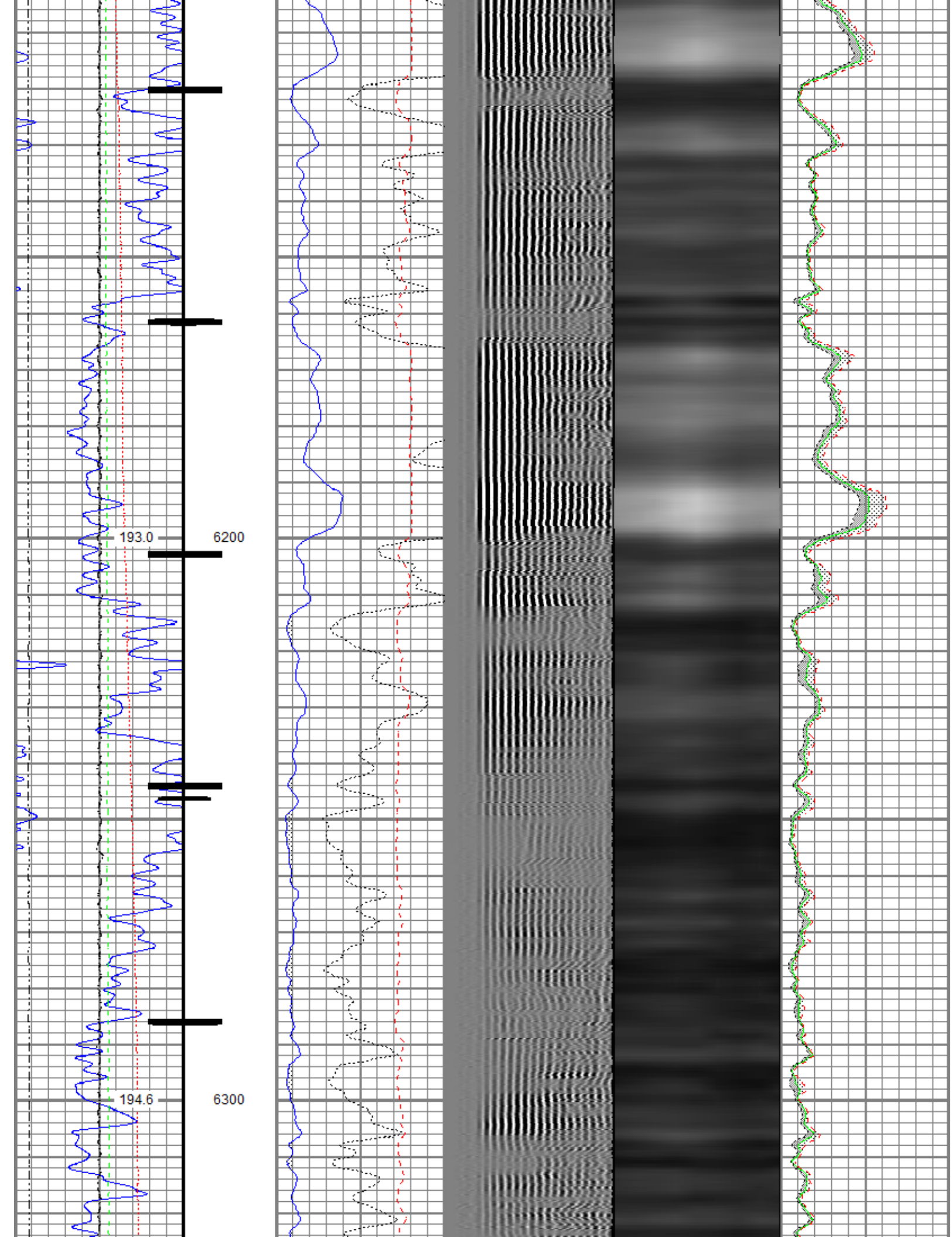


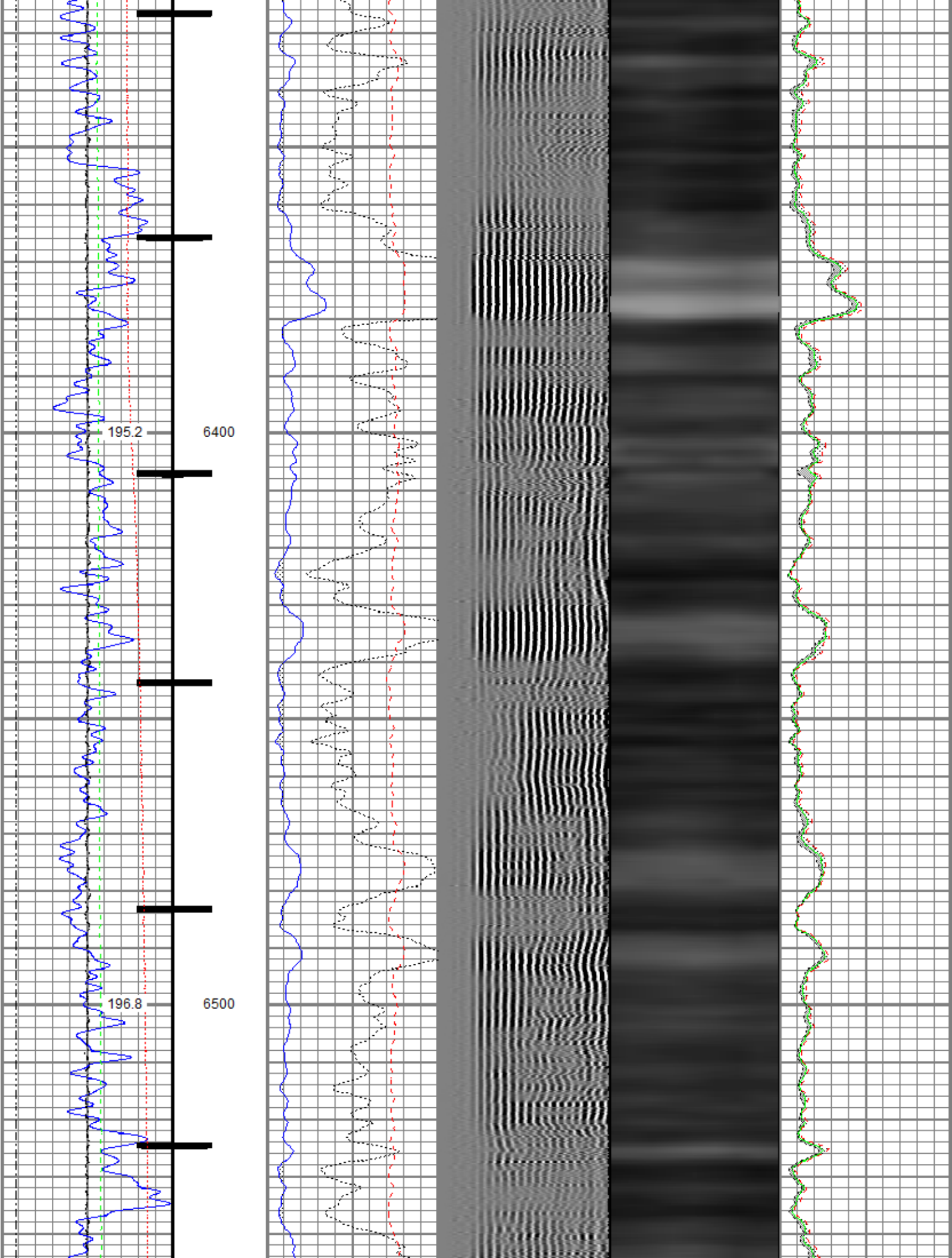


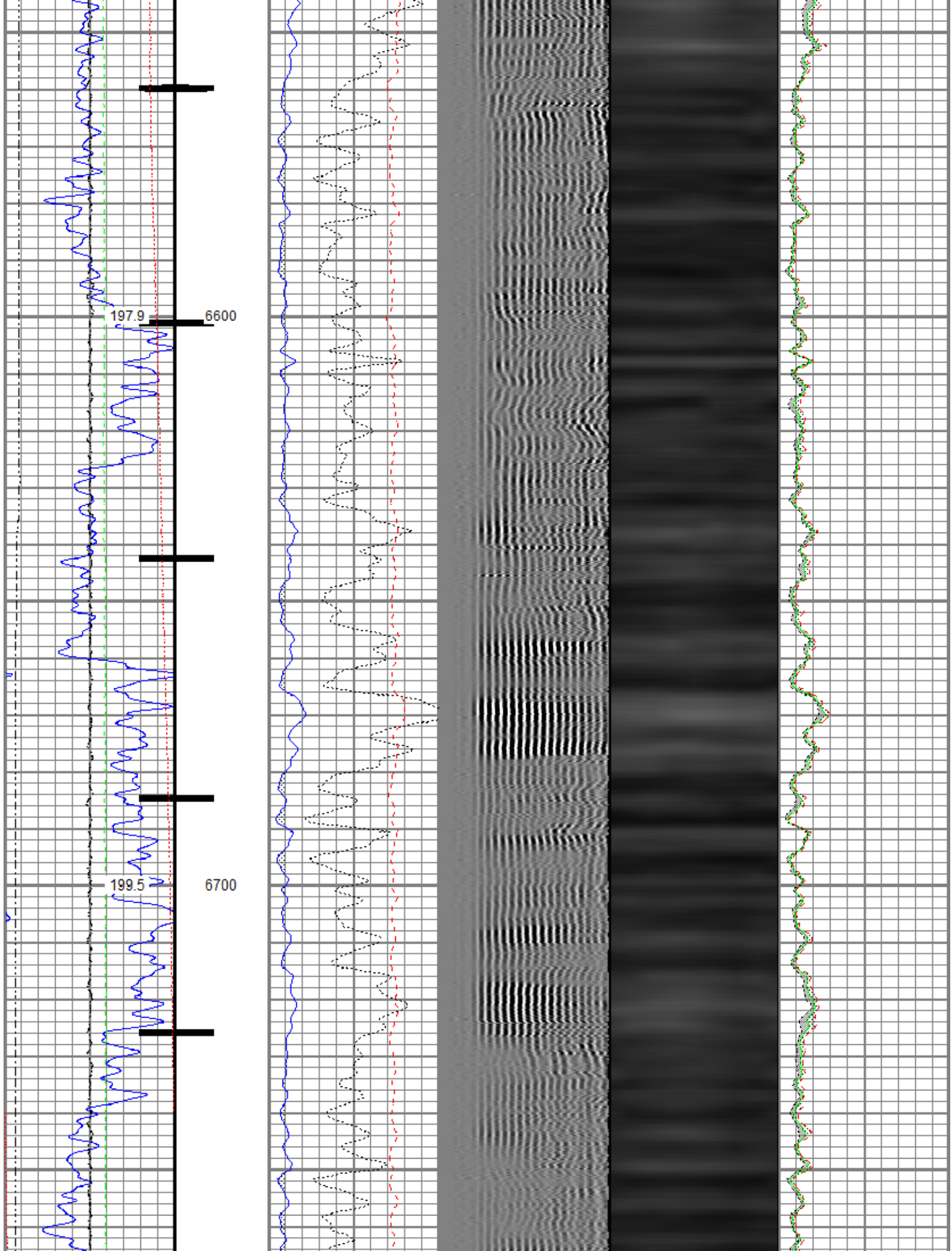


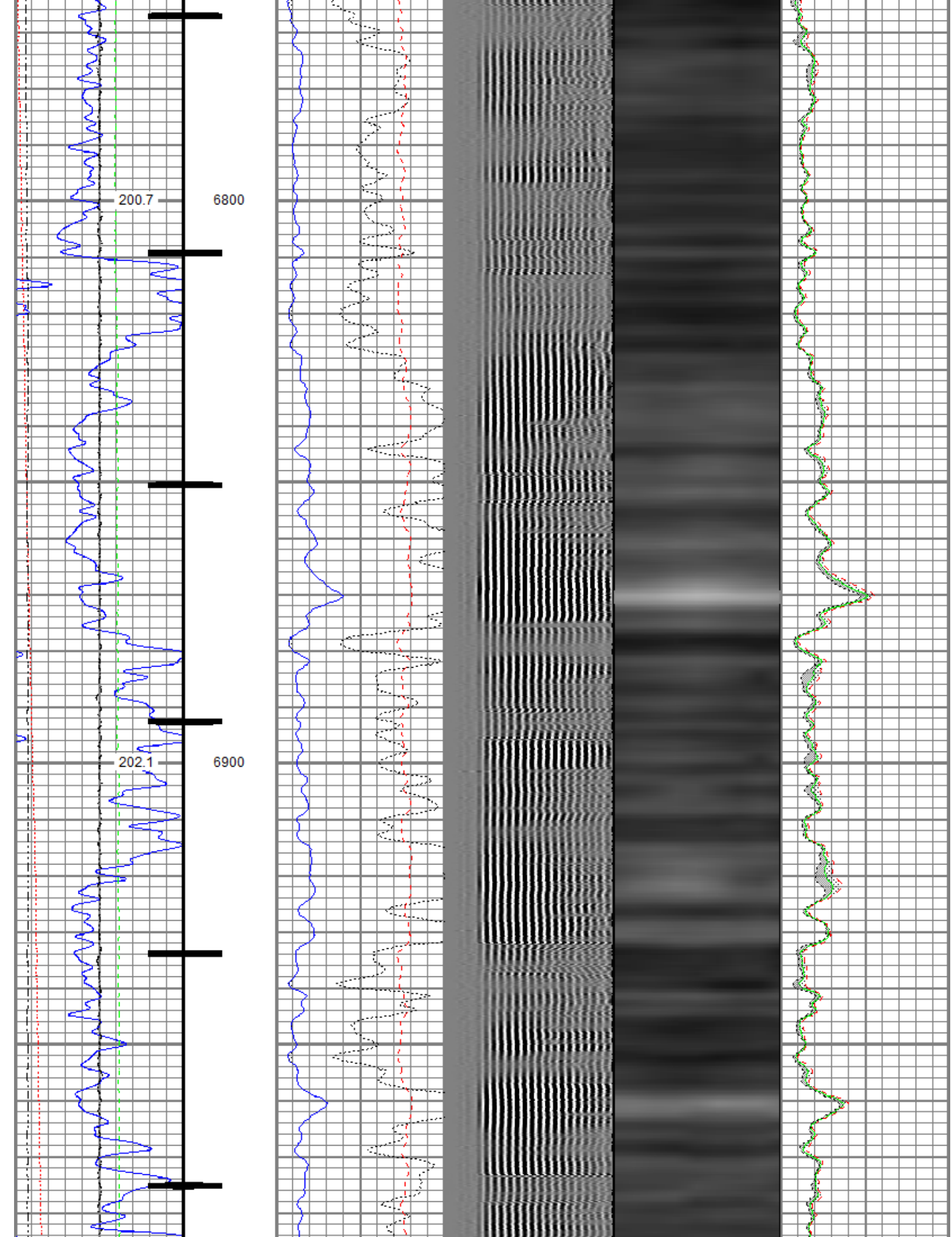


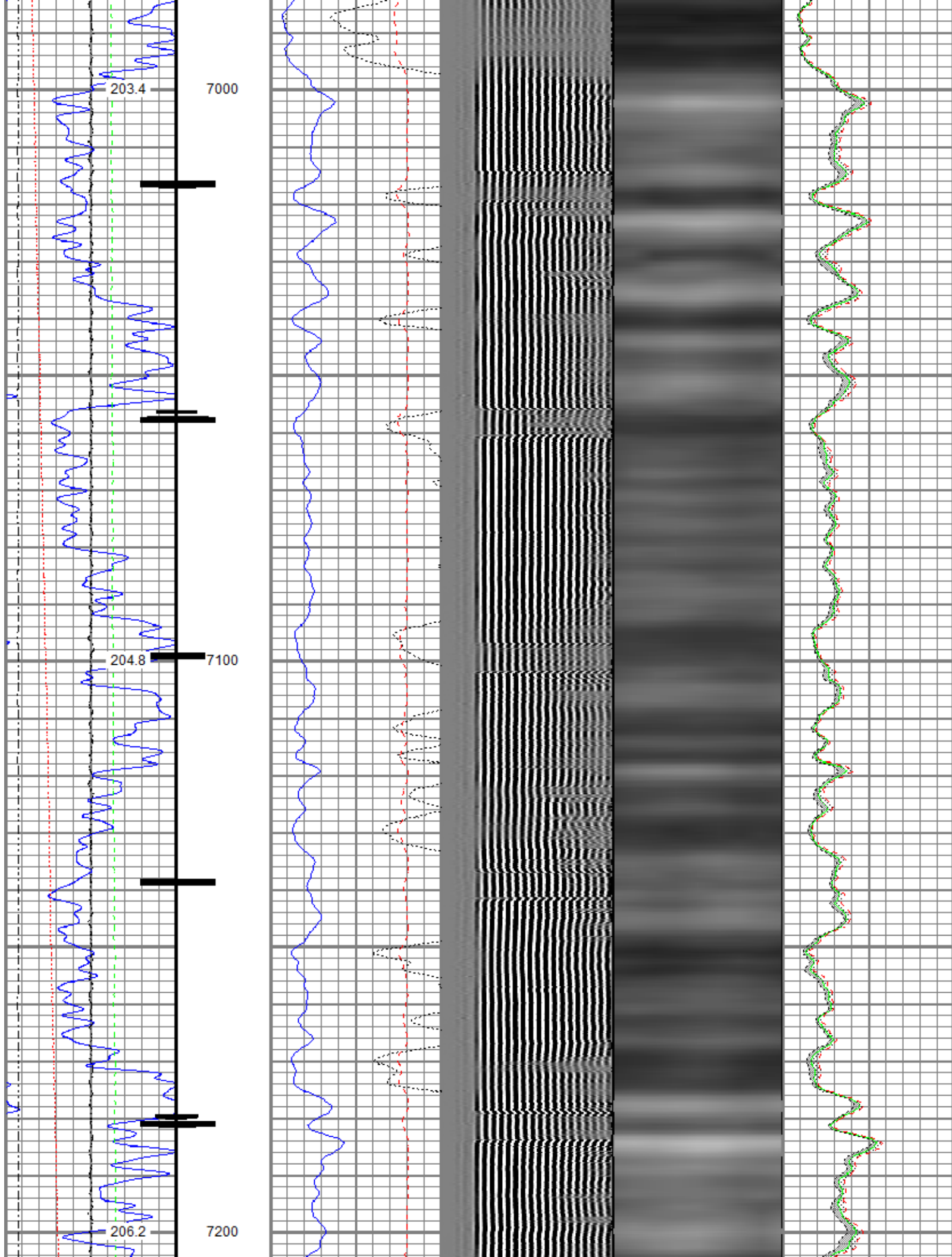


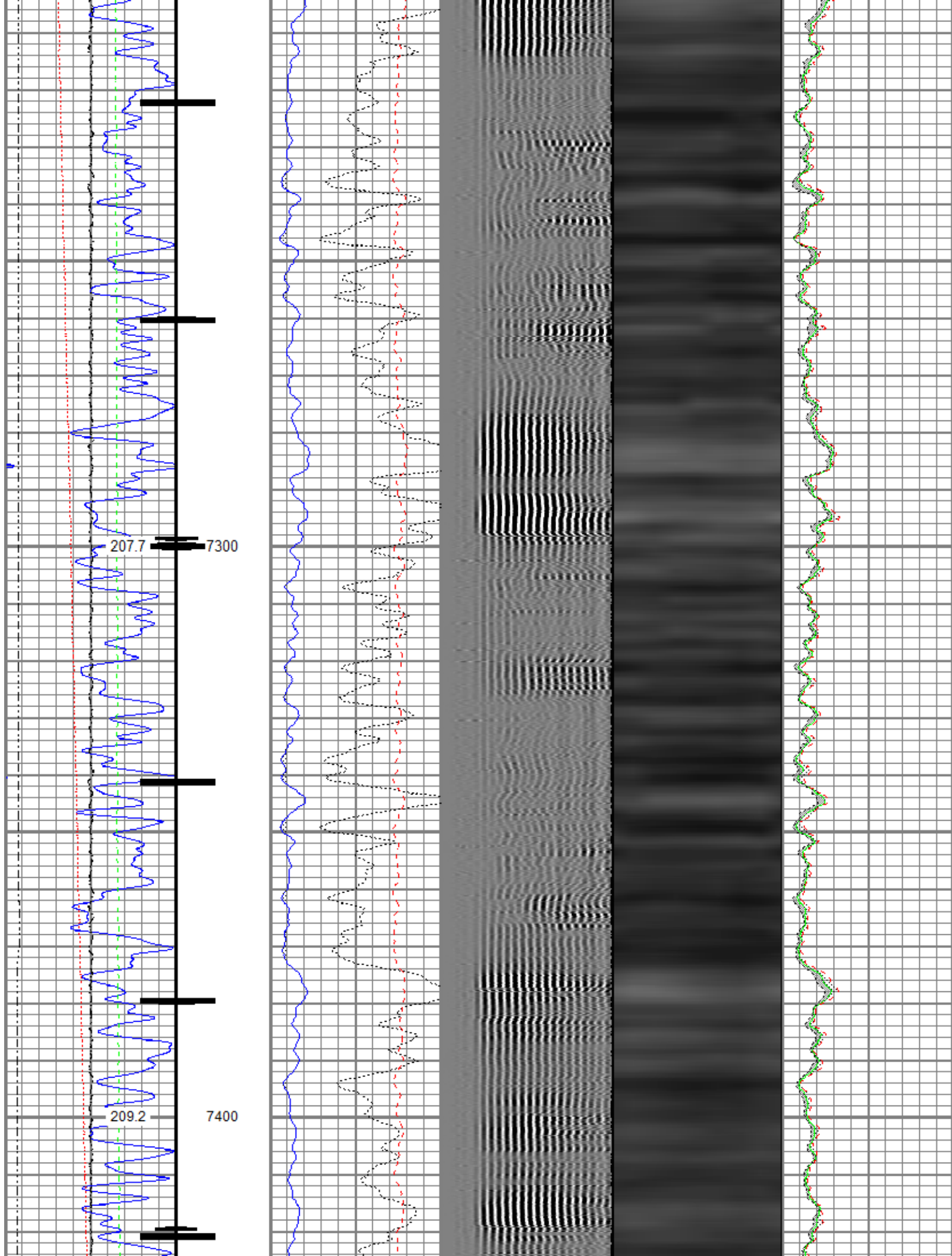


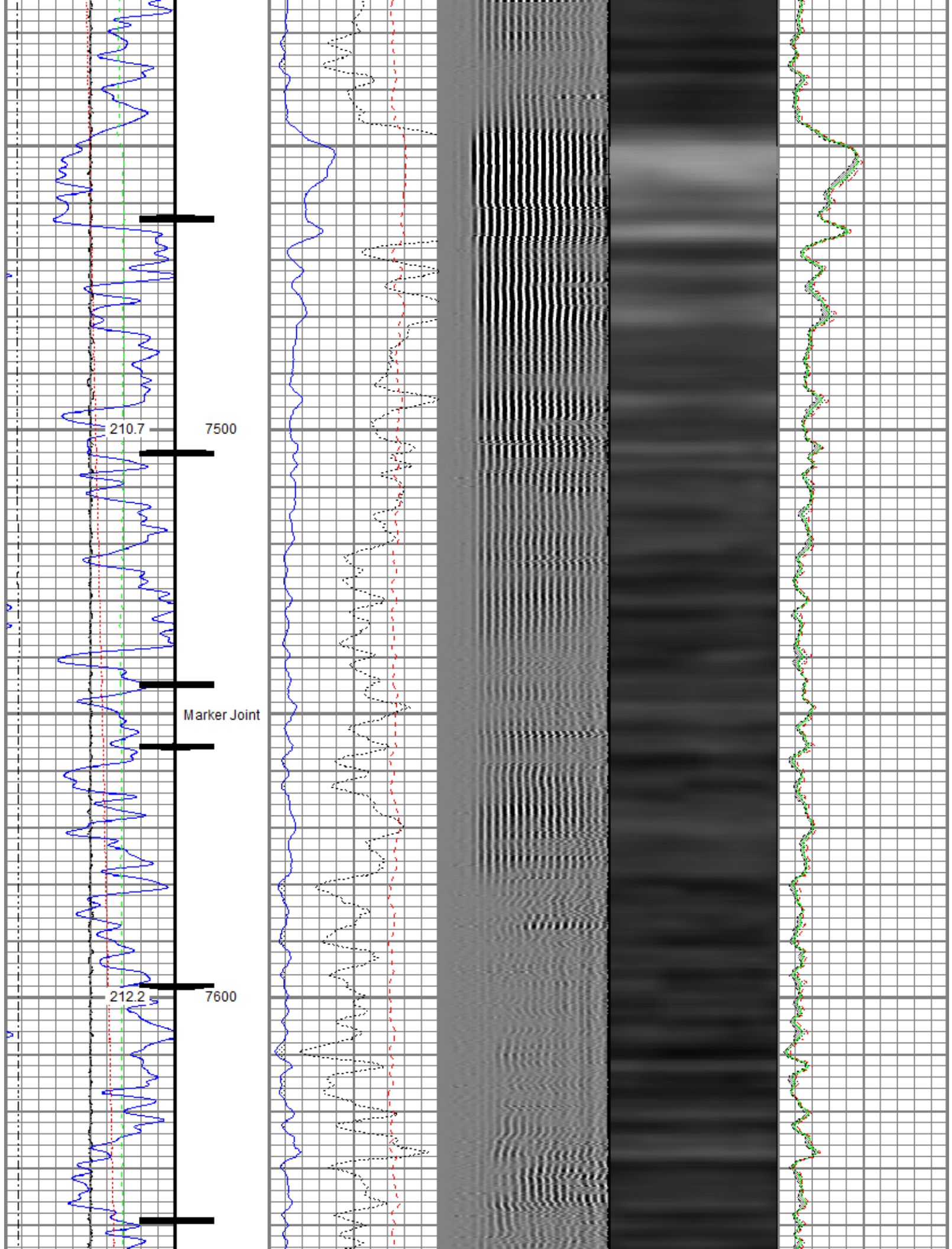


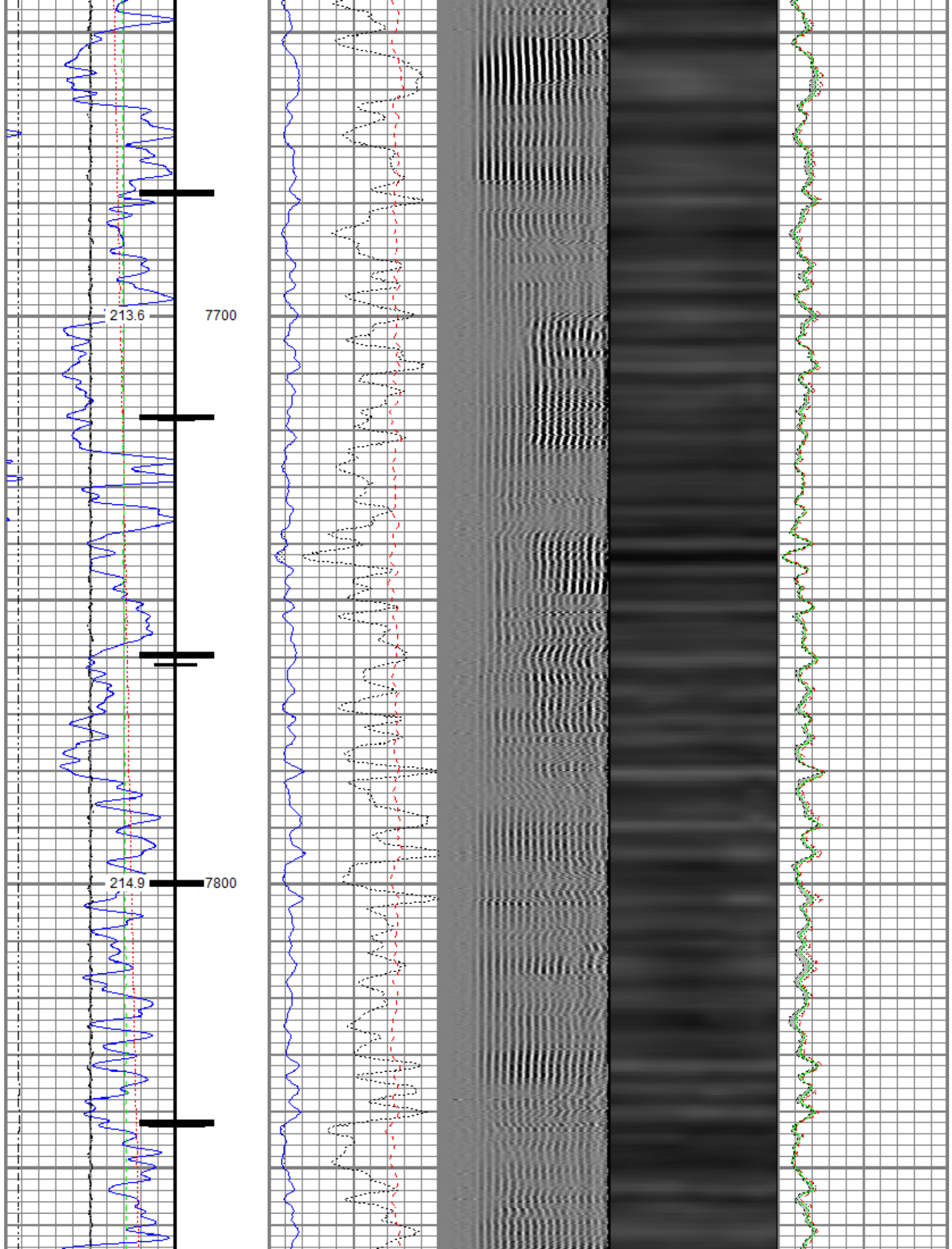


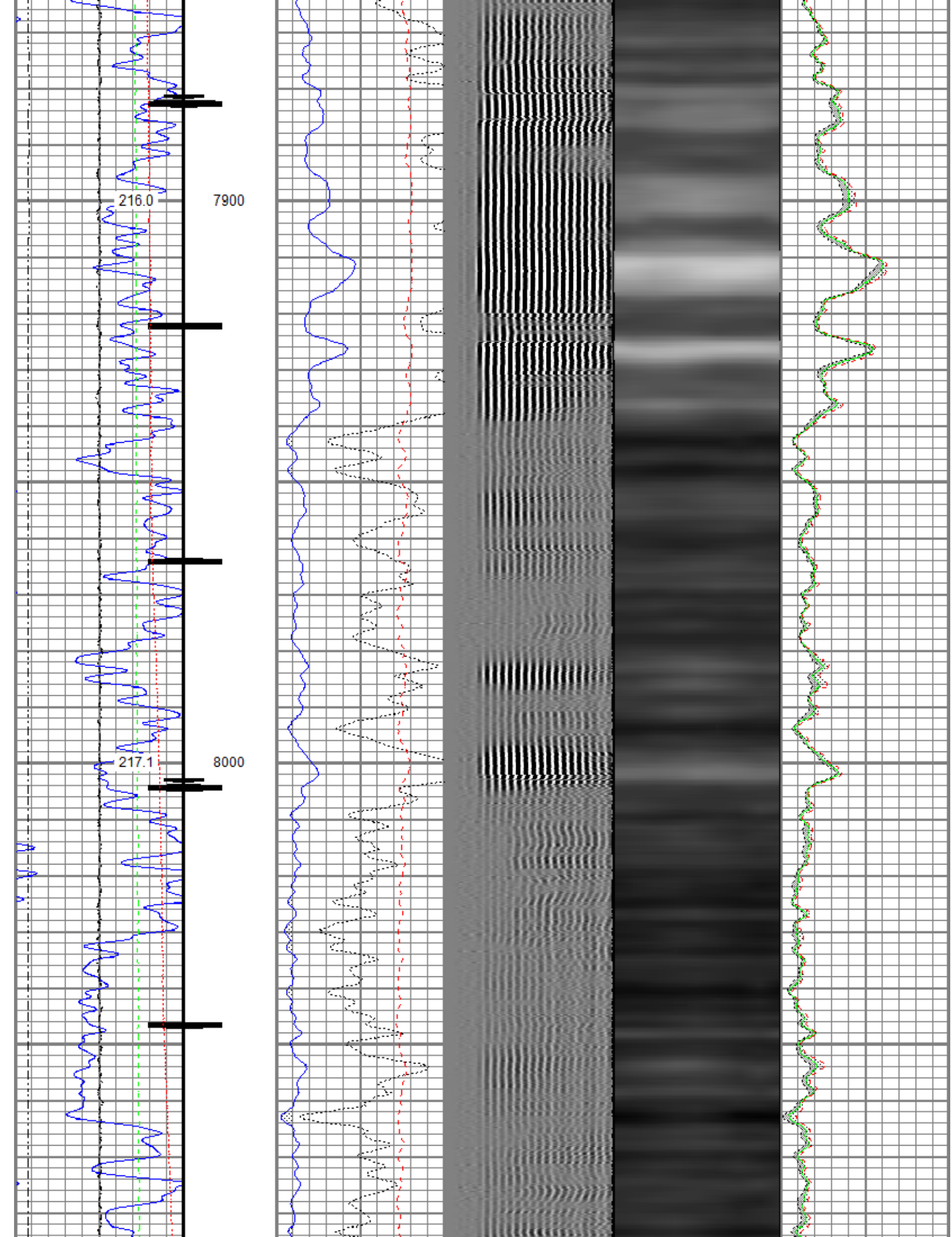


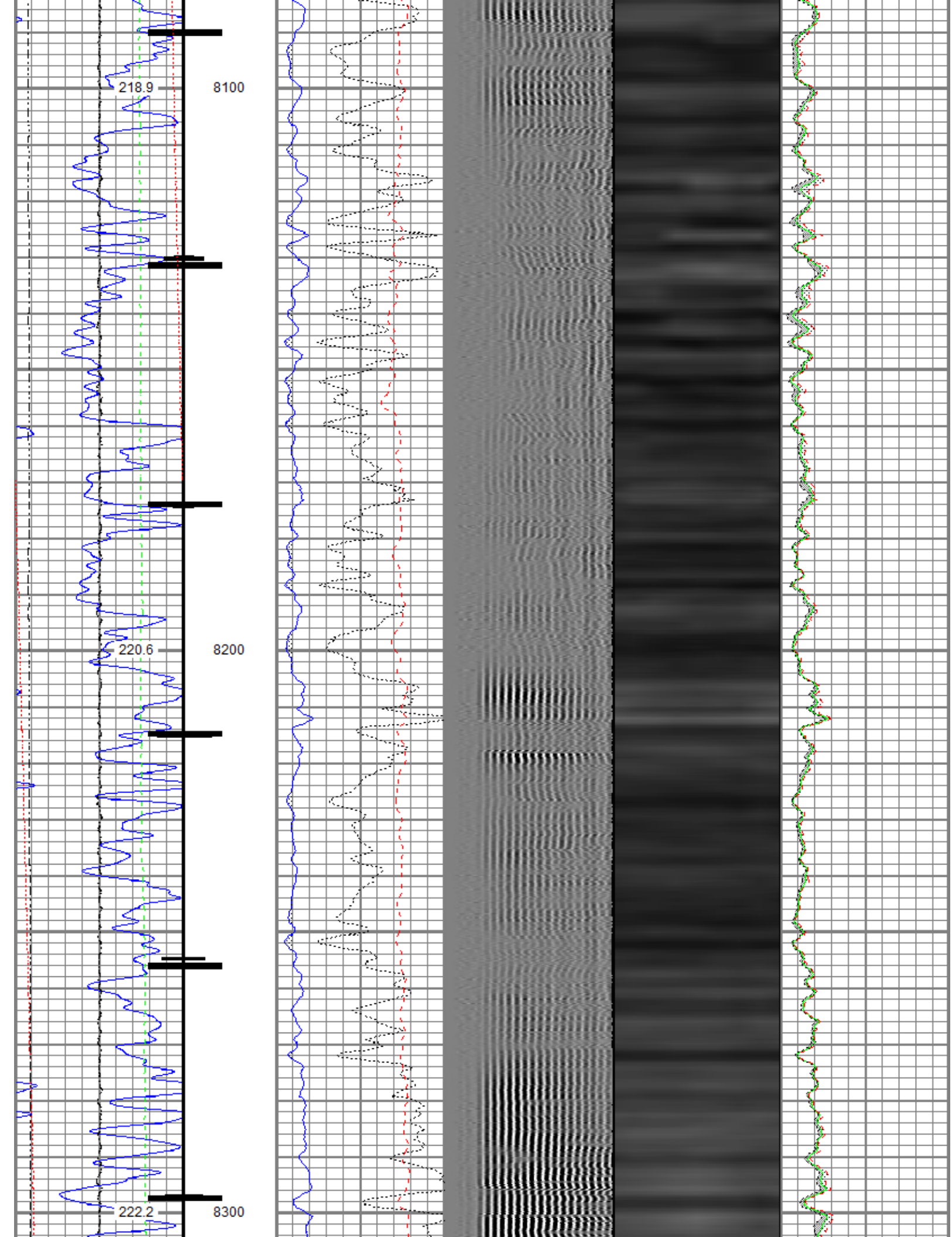


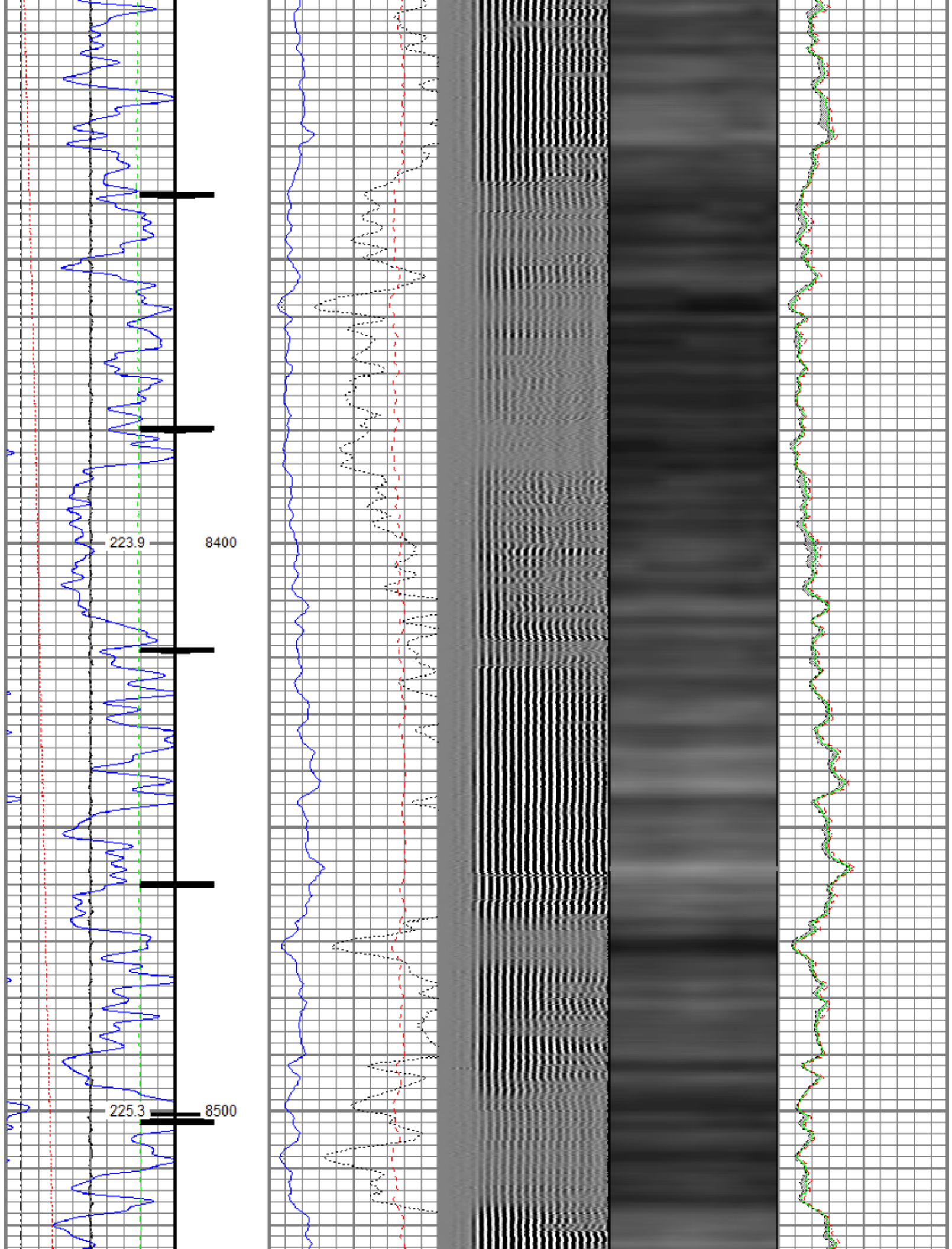


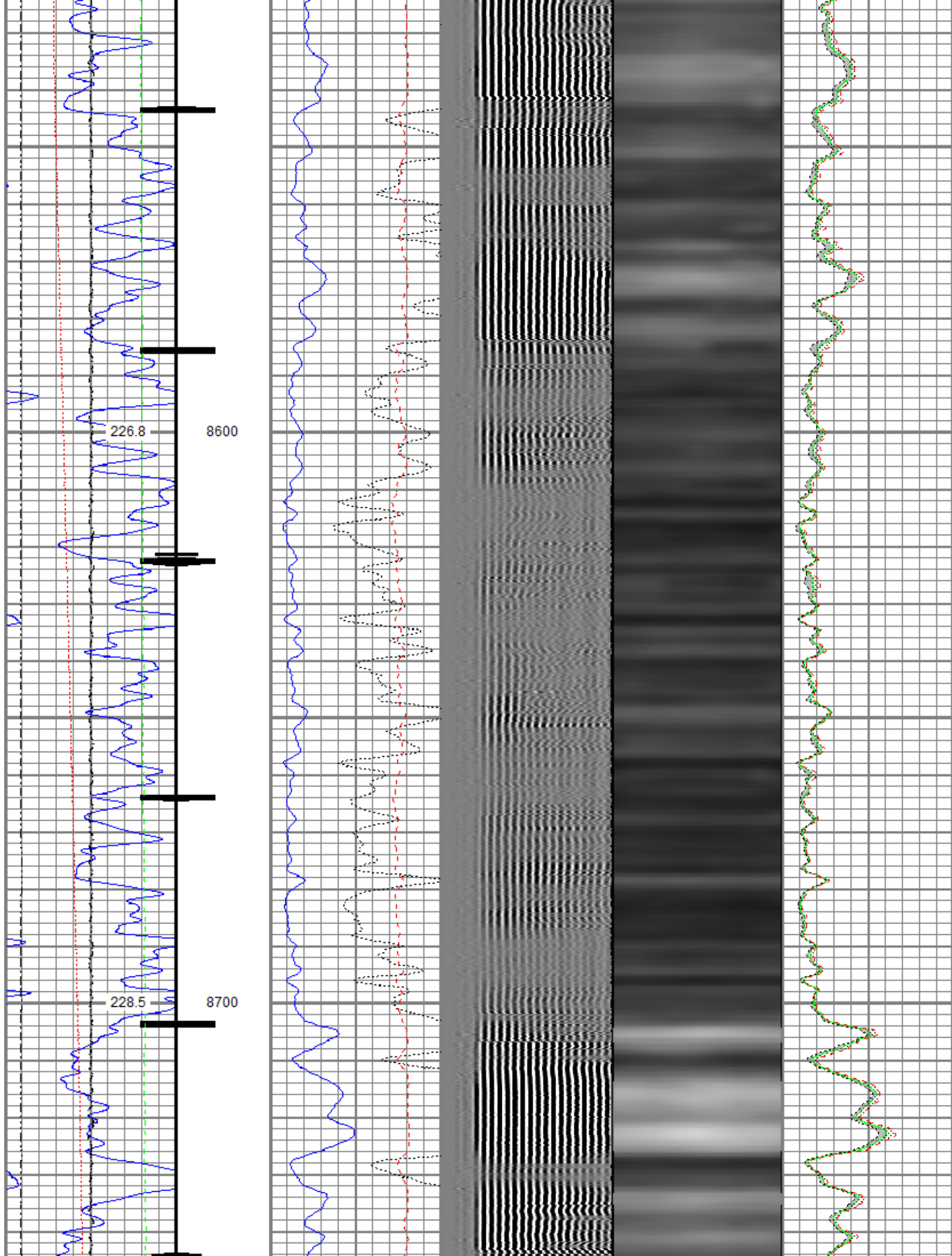


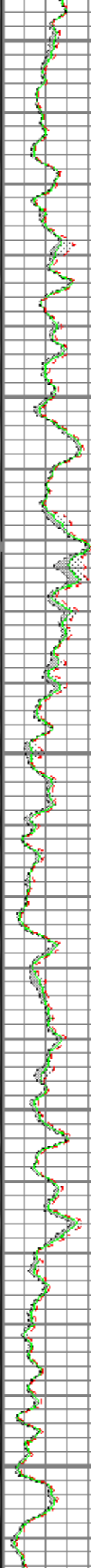
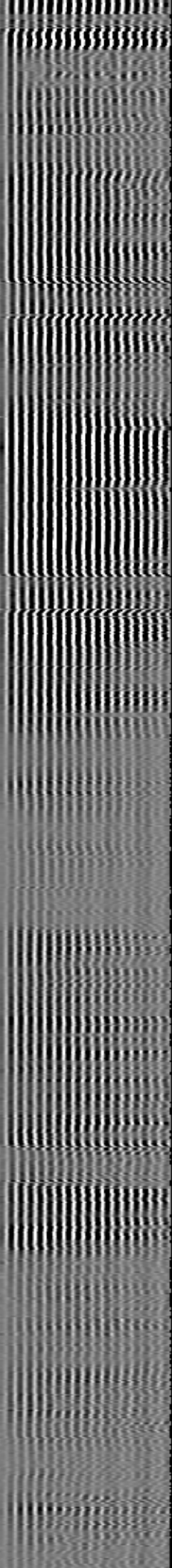
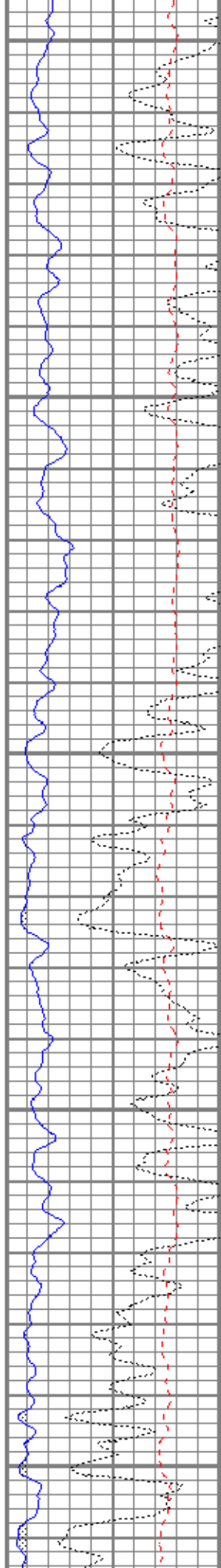
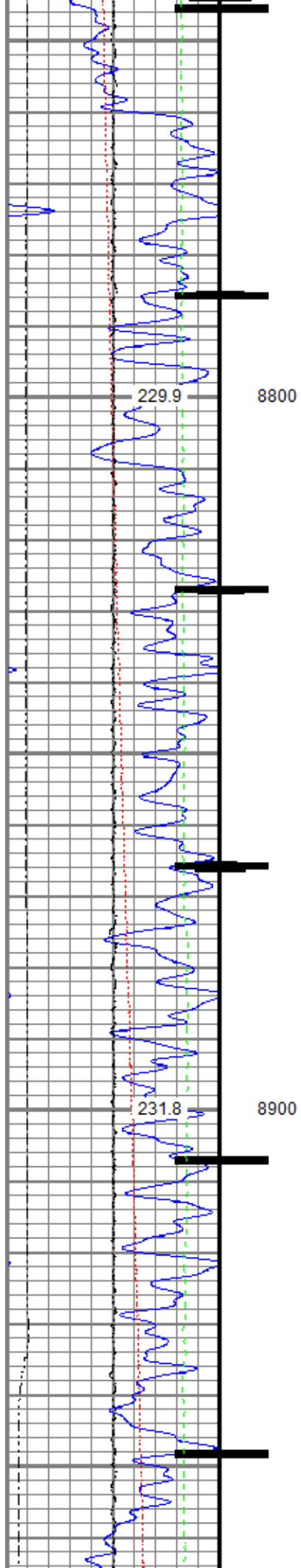


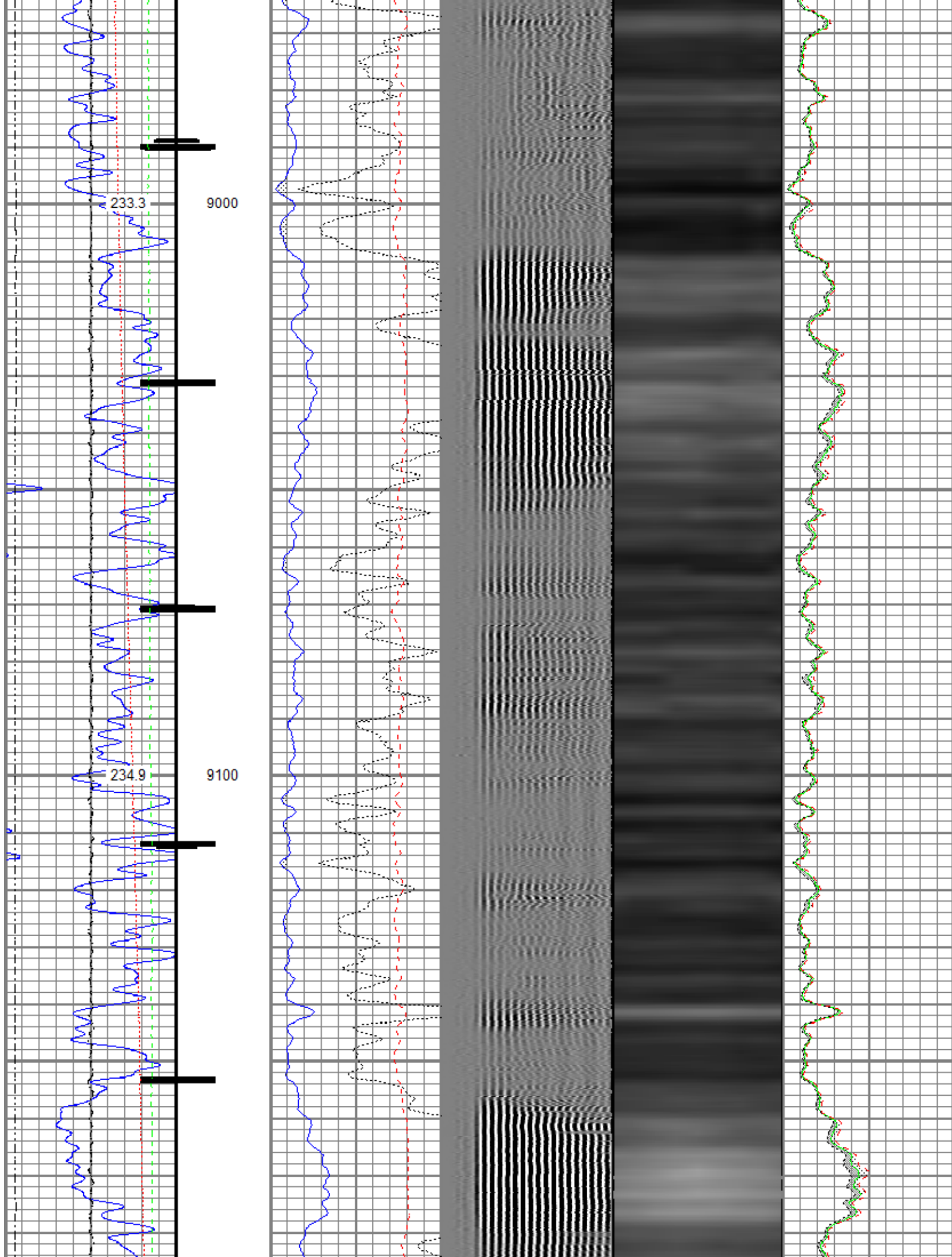


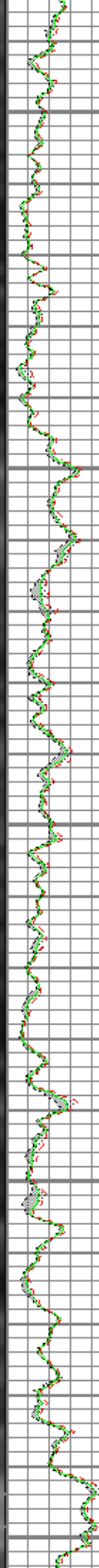
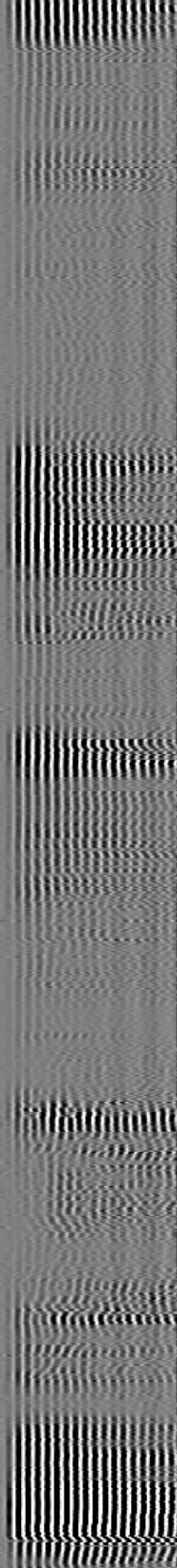
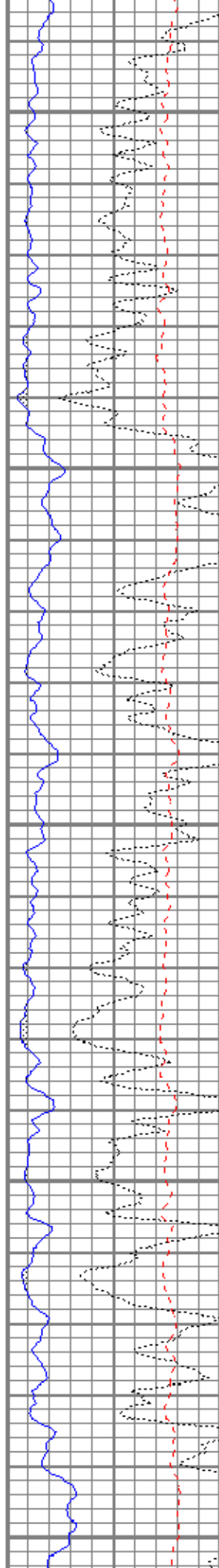
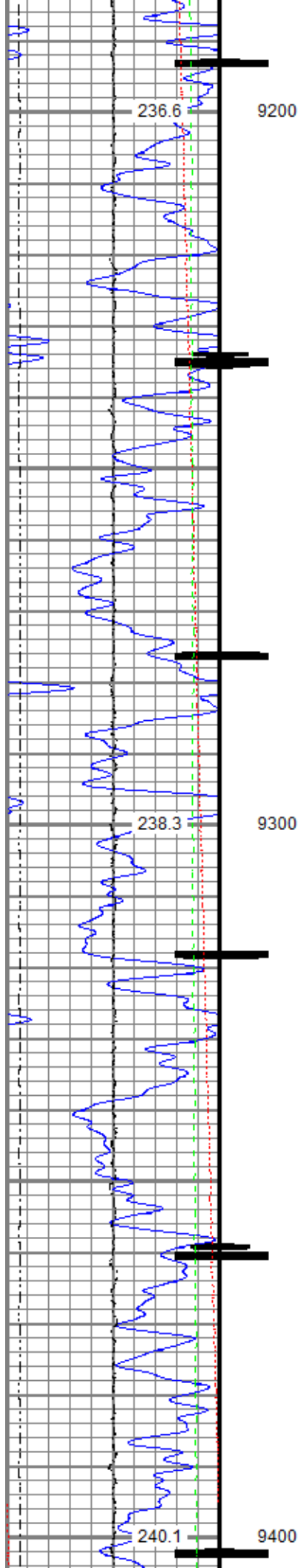


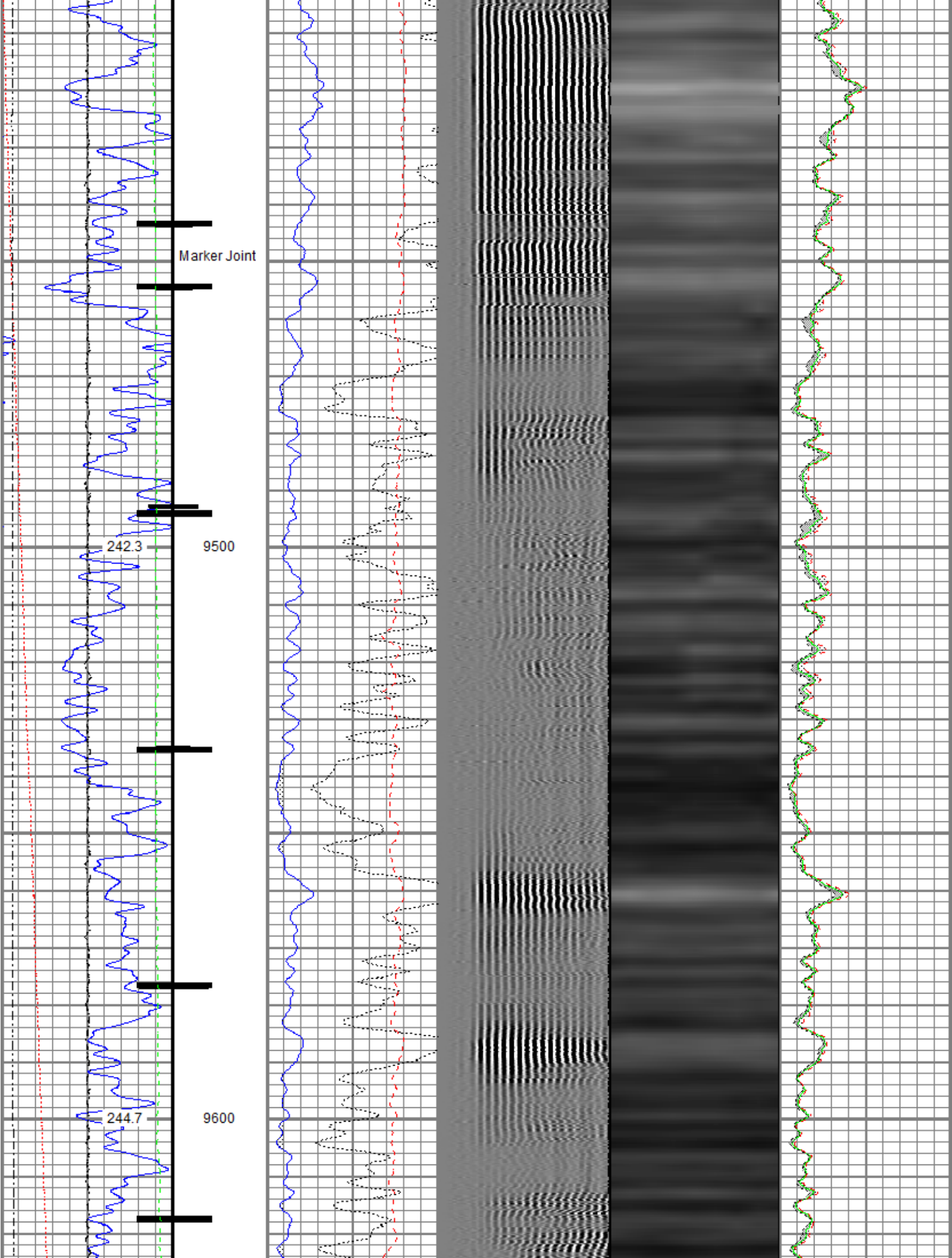


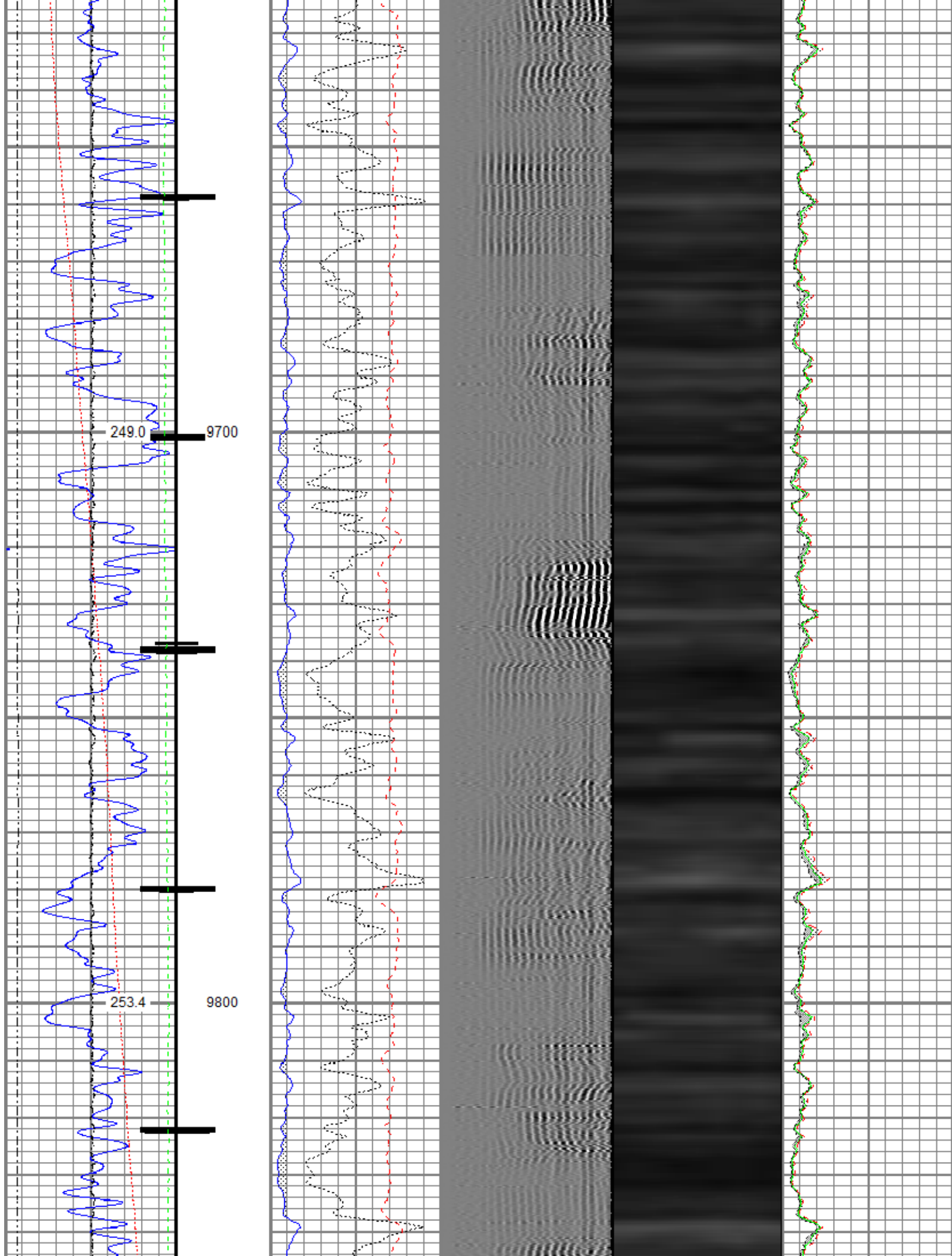


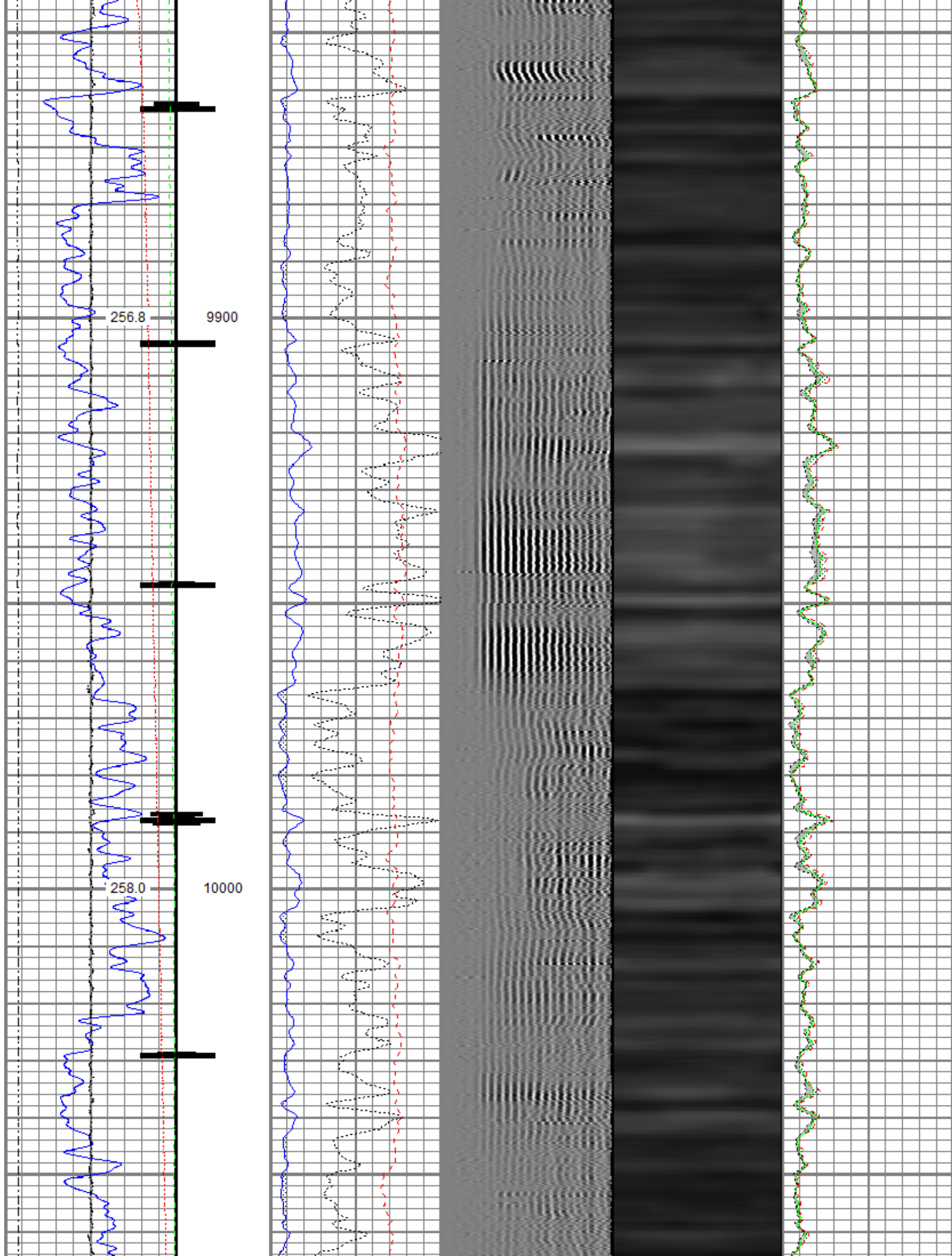


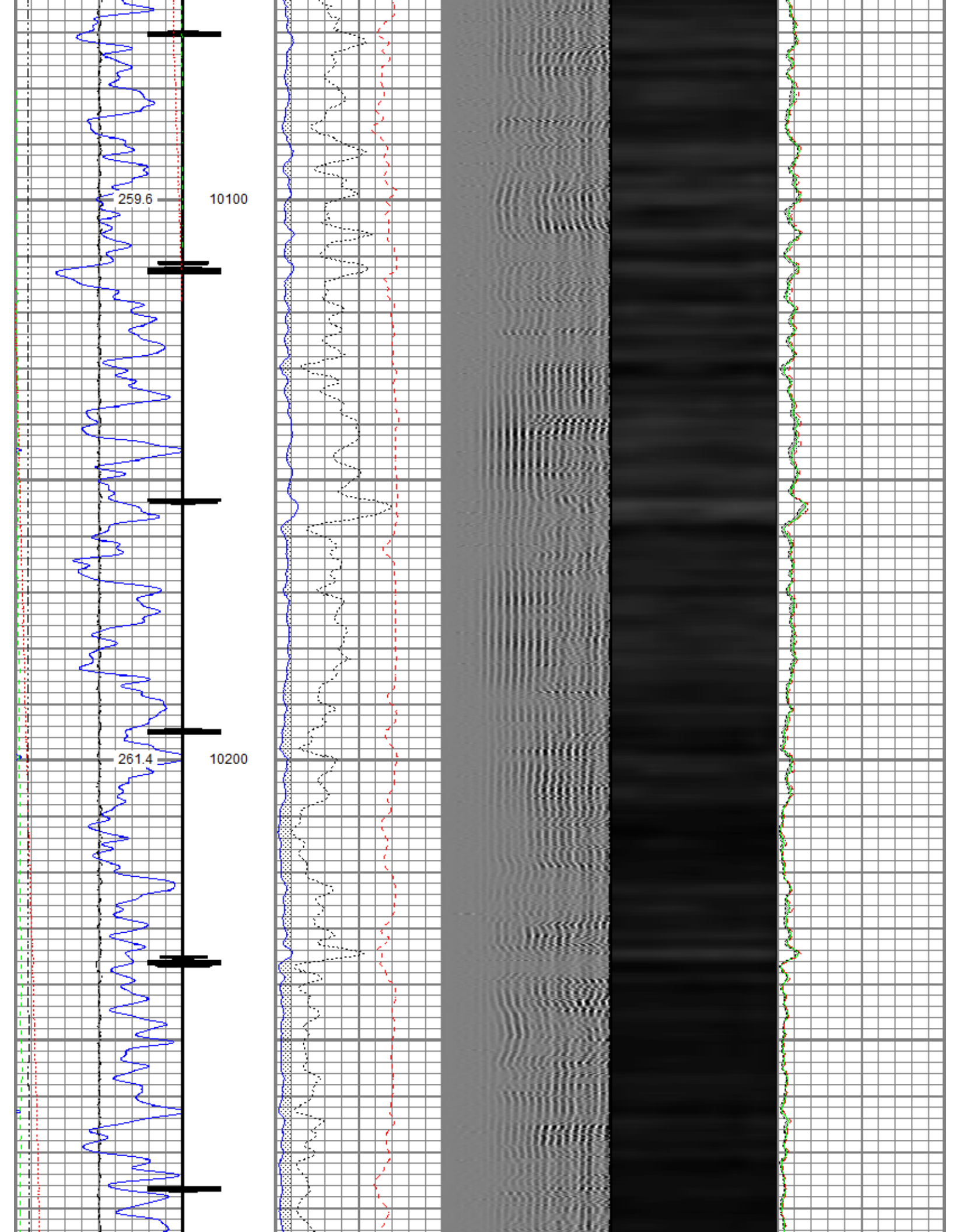


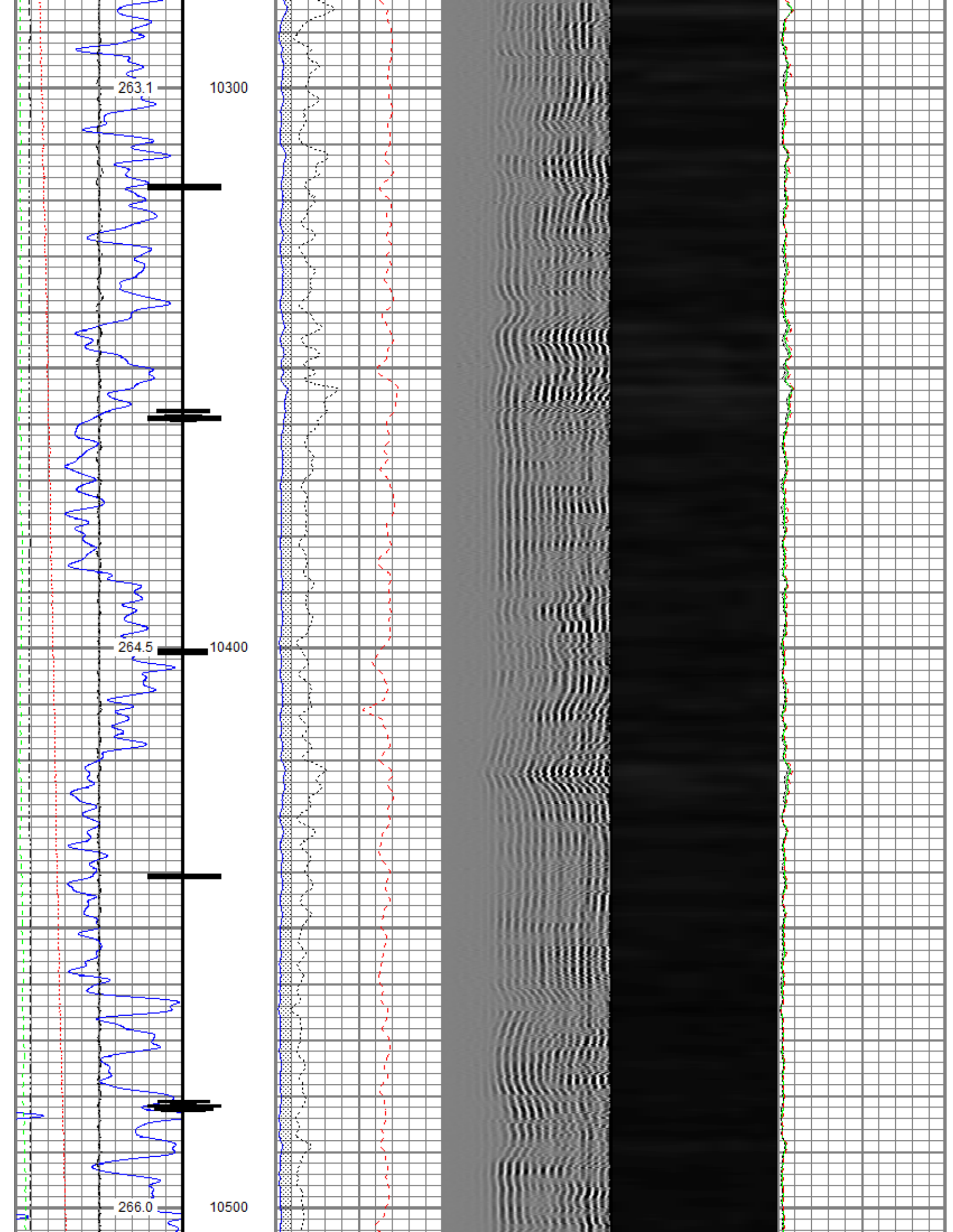


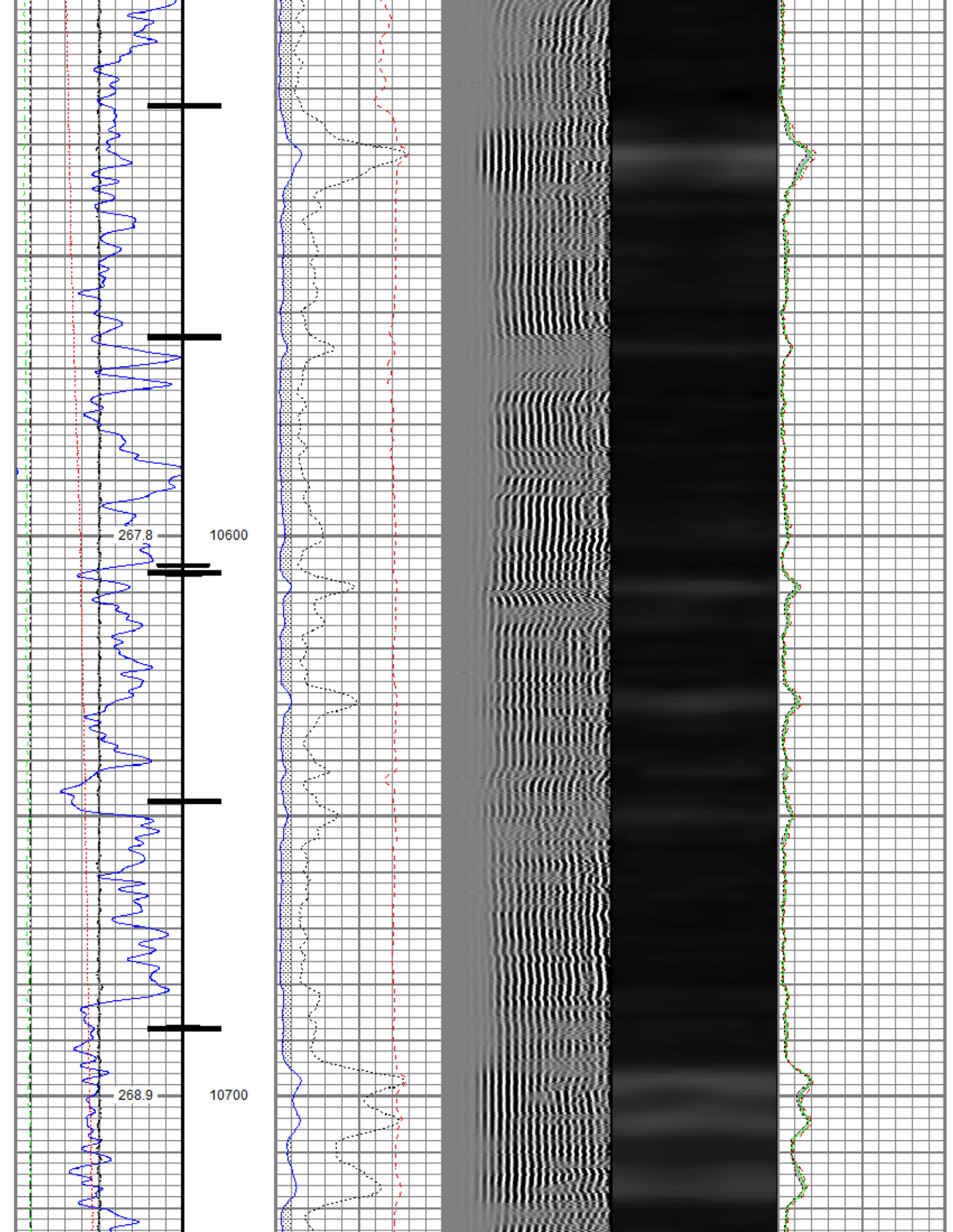


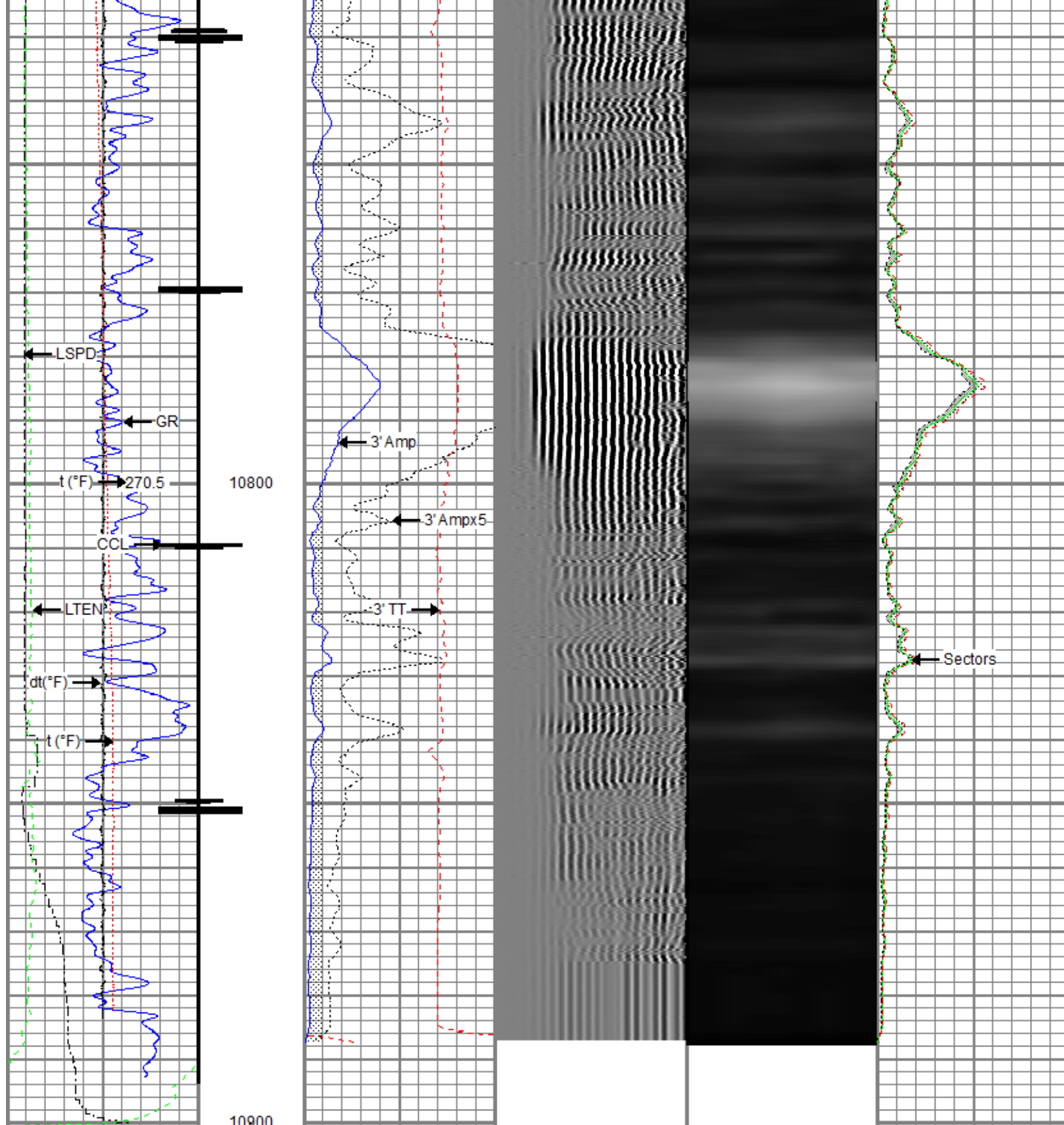












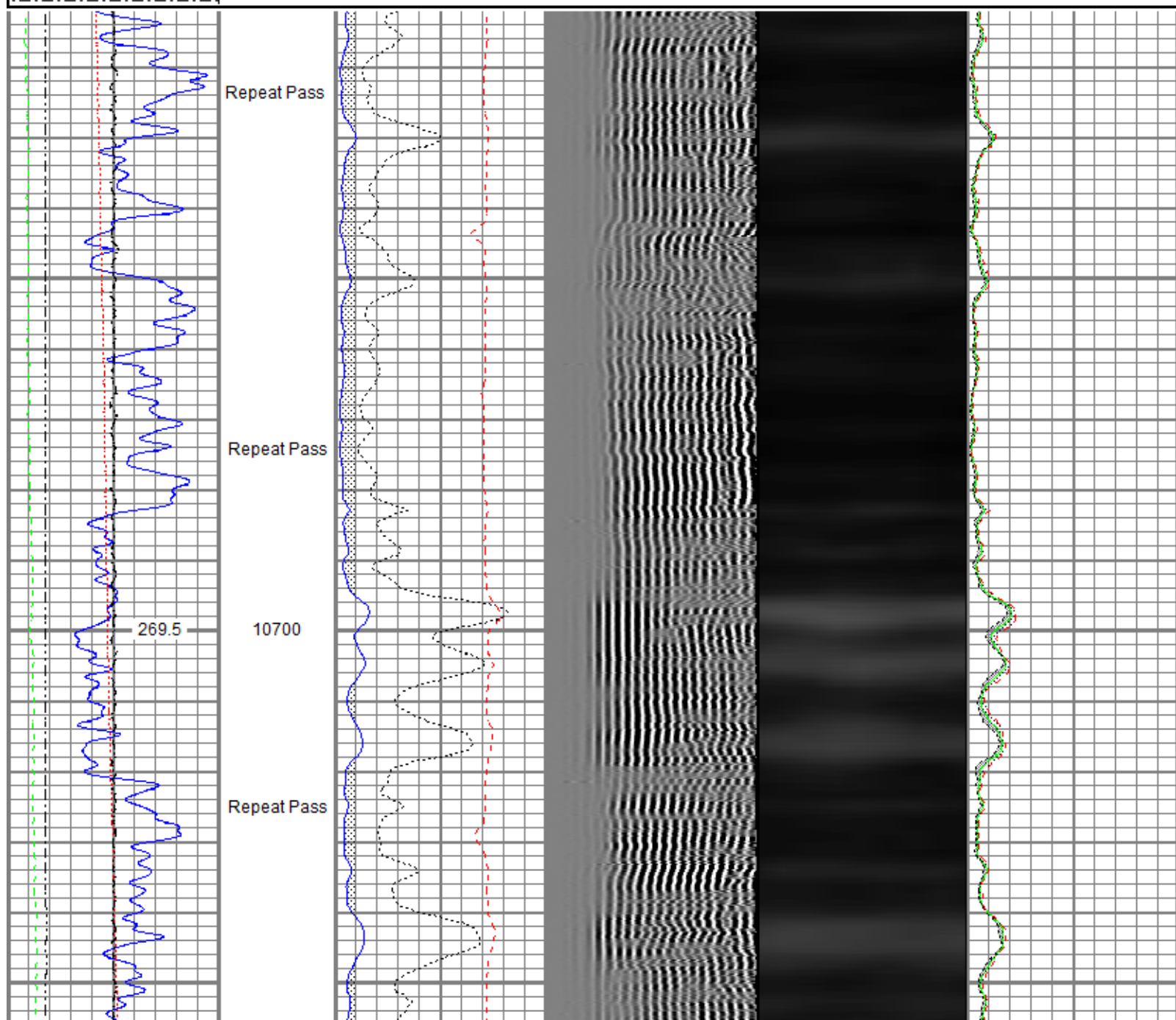
Gamma Ray (GAPI)	0	120
Casing Collar Locator	0	20
Temperature (degF)	0	20
Line Speed	-150	150
Line Tension (lb)	0	2000
Differential Temperature	-2	2
3' Amplitude (mV)	0	100
3' Amplitude x 5 (mV)	0	20
3' Travel Time (usec)	650	150
5' Variable Density Log	200	1200
Sector Map		
Average Amplitude 100	0	100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

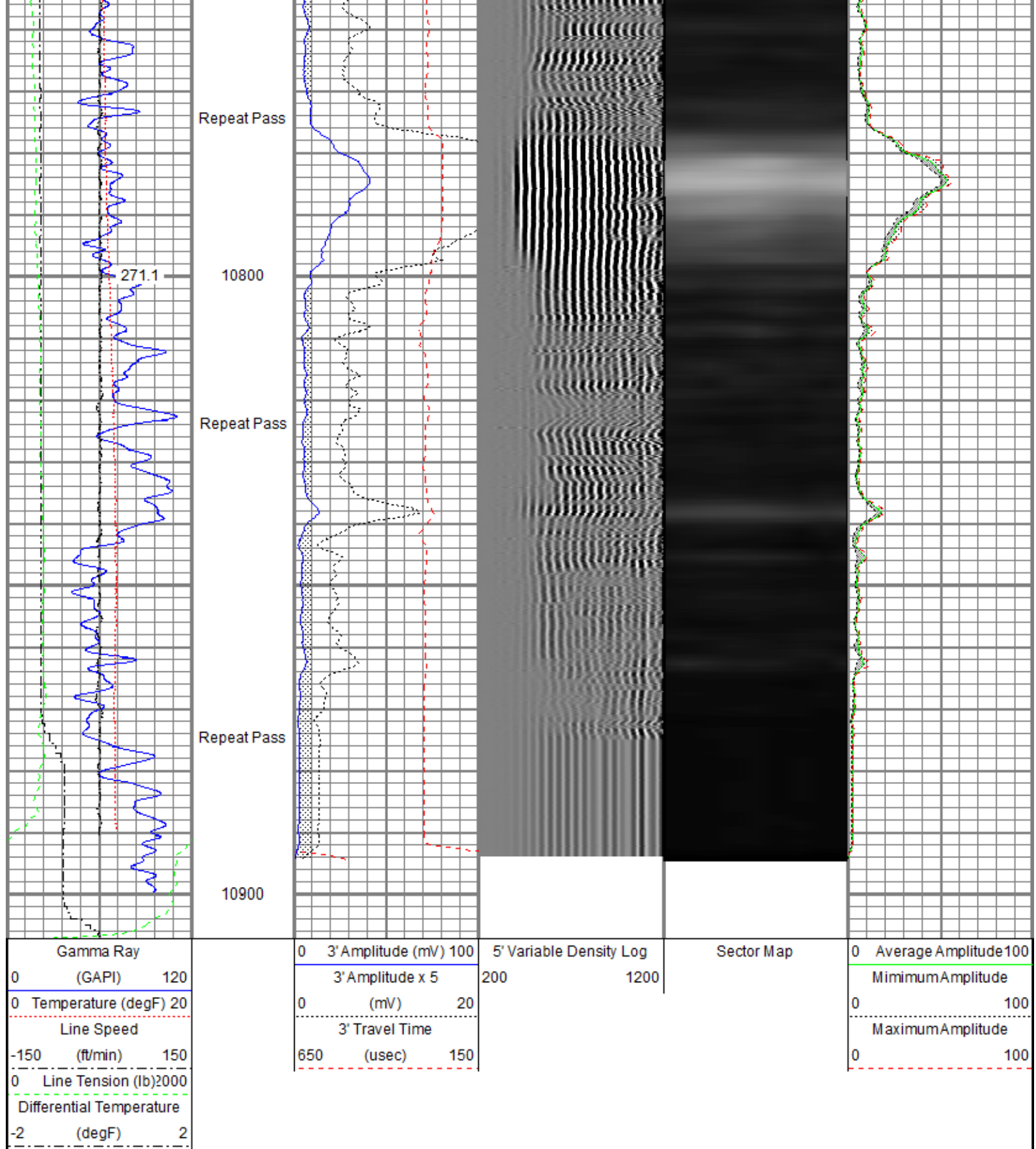
Repeat Pass

Recorded With 0 PSI Surface Induced Pressure

Database File ursalursa_boies ranch c-240 fed 21b-25-2-98_rbl_02-14-19\ursa_boies ranch c-240 fed 21b-25-2-98_rbl_02-14-19.db
 Dataset Pathname repeat.2
 Presentation Format ros_radrii
 Dataset Creation Fri Feb 15 11:05:43 2019
 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			Minimum Amplitude
0 Temperature (degF) 20	0	(mV) 20			0	100
Line Speed		3' Travel Time				Maximum Amplitude
-150 (ft/min) 150	650	(usec) 150			0	100
0 Line Tension (lb) 2000						
Differential Temperature						
-2 (degF) 2						





Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Titan CHD-14375 GO Titan 1-7/16" Assembled Electric Cable Head w/ 1" Fishing Neck	1.03	1.44	3.60
			DSS RAC-2750 5A GO DSS 2-3/4" Baller 5-Arm Control Line w/ GO Ends	2.55	2.75	32.00

			DSS 2-3/4" Roller 5 Arm Centralizer w/ GO Ends			
TEMP	16.33					
WVFS8	14.10		Probe Radii-2750 RBT (101013)	9.39	2.75	105.00
WVFS7	14.10		Probe 2-3/4" Radial Cement Bond Tool with Integral			
WVFS6	14.10		Temperature Sub			
WVFS5	14.10					
WVFS4	14.10					
WVFS3	14.10					
WVFS2	14.10					
WVFS1	14.10					
WVFCAL	14.10					
WVF3FT	14.10					
WVF5FT	13.10					
			DSS RAC-2750 5A GO	2.55	2.75	32.00
			DSS 2-3/4" Roller 5 Arm Centralizer w/ GO Ends			
CCL\$2	6.42					
CCL\$1	6.42					
GR	5.18		Probe GR-CCL-2750 GOB (FW1211-081)	4.51	2.75	55.00
			Probe 2-3/4" rev.2 Digital Scintillation Gamma			
			Ray/CCL Combined			
			DSS RAC-2750 5A GO	2.55	2.75	32.00
			DSS 2-3/4" Roller 5 Arm Centralizer w/ GO Ends			
			GO BN-14375	0.25	1.44	1.00
			GO 1-7/16" Bull Nose with Go Box Top			
Dataset: ursa_boies ranch c-240 fed 21b-25-2-98_rbl_02-14-19.db: field/well/run1/main.1 Total length: 22.82 ft Total weight: 260.60 lb O.D.: 2.75 in						

Calibration Report	
Database File	c:\programdata\warrior\data\ursa\ursa_boies ranch c-240 fed 21b-25-2-98_rbl_02-14-19\ursa_boies ranch c-240 fed 21b-25-2-98
Dataset Pathname	main.1
Dataset Creation	Fri Feb 15 10:58:26 2019
Gamma Ray Calibration Report	

Serial Number: FW1211-081
Tool Model: 2750 GOB
Performed: Sun Nov 12 12:22:44 2017

Calibrator Value: 637.0 GAPI
Background Reading: 112.4 cps
Calibrator Reading: 1008.7 cps
Sensitivity: 0.7107 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: 101013
Tool Model: 2750 RBT
Calibration Casing Diameter: 4.500 in
Calibration Depth: 28.773 ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.001	0.727	0.800	81.196	110.331	0.939
CAL	-0.006	0.746				
5'	-0.002	0.581	0.800	81.196	137.907	1.036
SUM						
S1	-0.004	0.695	0.000	100.000	143.064	0.558
S2	-0.003	0.676	0.000	100.000	147.343	0.457
S3	-0.004	0.706	0.000	100.000	140.894	0.570
S4	-0.003	0.754	0.000	100.000	132.168	0.376
S5	-0.002	0.778	0.000	100.000	128.283	0.242
S6	-0.001	0.767	0.000	100.000	130.163	0.168
S7	-0.003	0.743	0.000	100.000	133.887	0.456
S8	-0.000	0.719	0.000	100.000	139.102	0.035

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.006	0.746	1.000	0.000

Air Zero Calibration, performed Thu Feb 14 11:27:57 2019:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	-0.006		0.000		-0.000	
5'	-0.002		0.000		0.000	
SUM						
S1	-0.007		0.000		0.001	
S2	-0.005		0.000		0.000	
S3	-0.005		0.000		-0.000	
S4	-0.005		0.000		0.000	
S5	-0.004		0.000		-0.000	
S6	-0.005		0.000		0.001	
S7	-0.004		0.000		-0.000	
S8	-0.005		0.000		-0.000	

Temperature Calibration Report

Serial Number: 101013
Tool Model: 2750 RBT
Performed: Sun Nov 12 13:21:13 2017

	Reference	Reading
Low Reference:	100.00 degF	112.30 degF
High Reference:	350.00 degF	394.75 degF
Gain:	0.89	
Offset:	0.60	
Delta Spacing	1	



Company	Ursa Operating Company LLC
Well	Boies Ranch C-240 FED 21B-25-2-98
Field	Sulphur Creek
County	Rio Blanco
State	Colorado