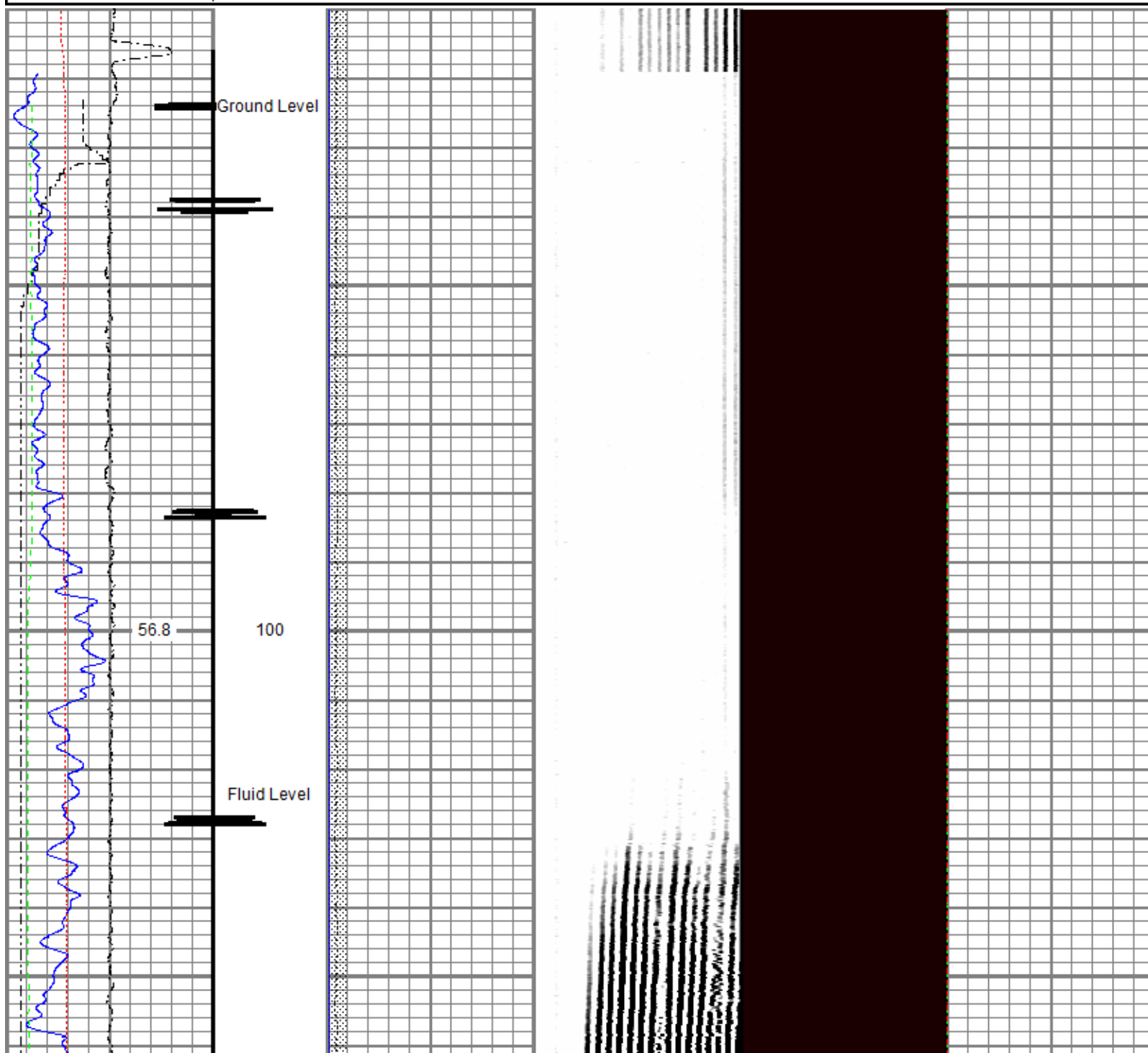


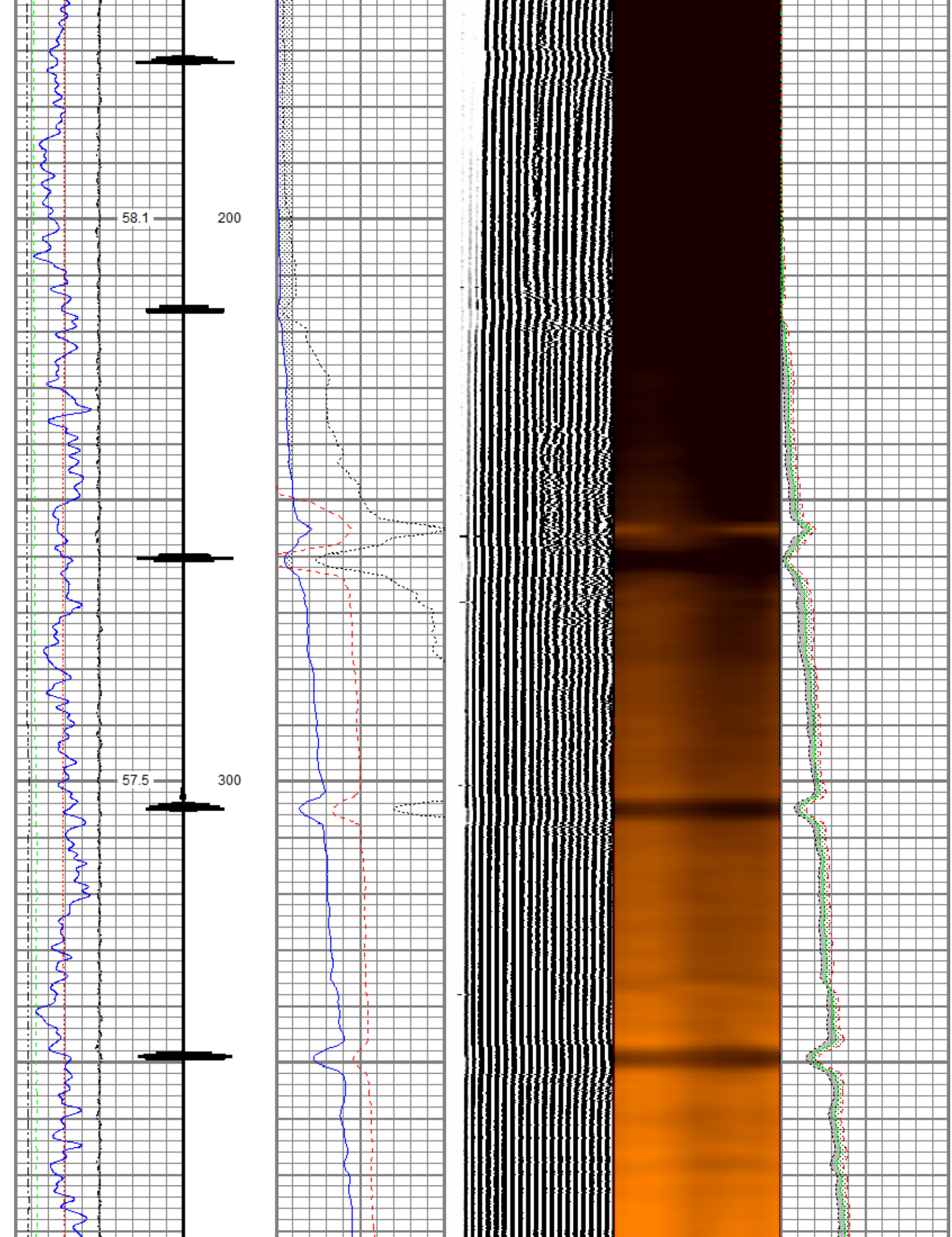


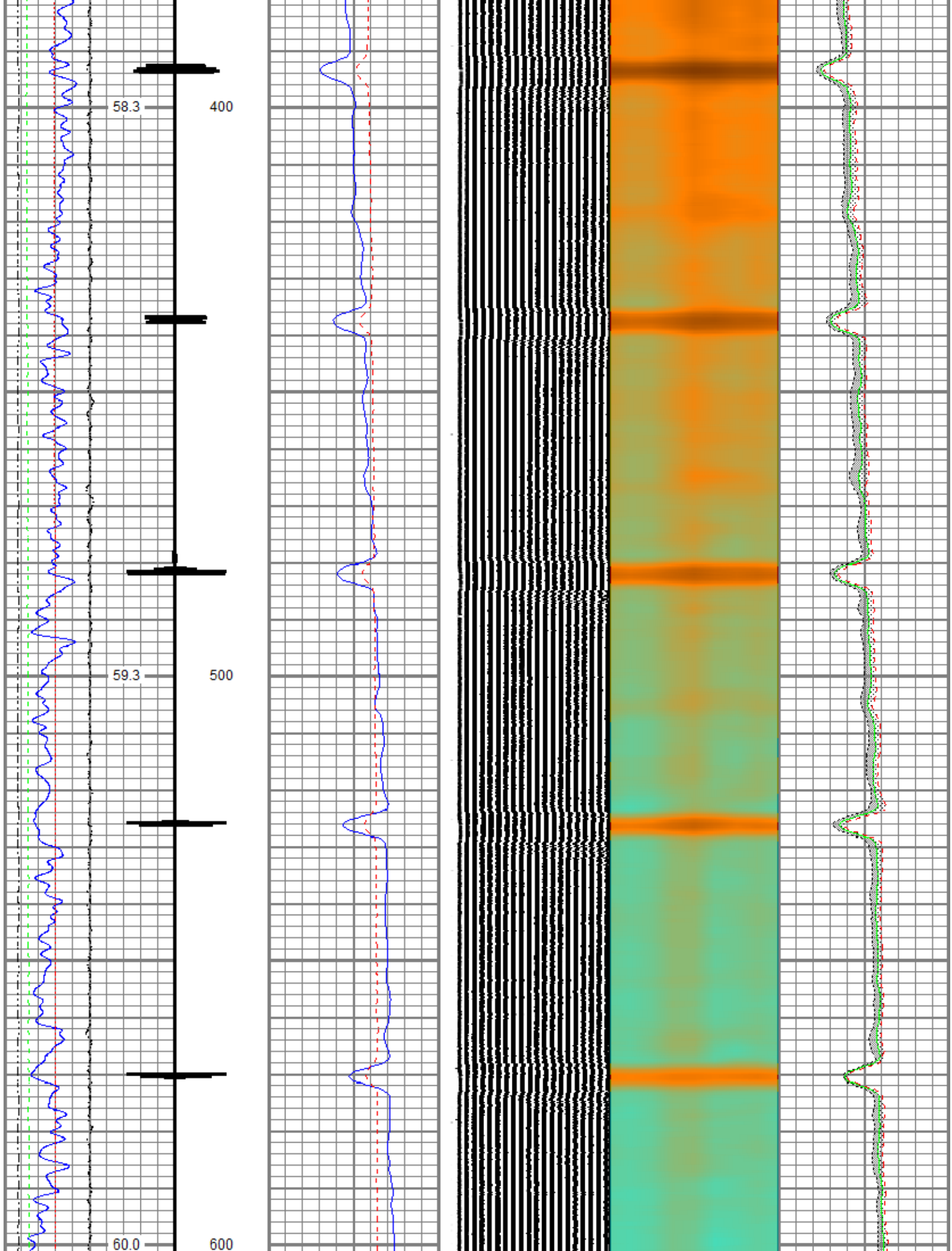
<<< Fold Here >>>
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible 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
<p>Log ran as per customer request Depth referenced to Kelly Bushing at 24 FT Marker Joint Logged from 5694-5708 FT Log ran from 9957 FT to Surface Recorded with 0 PSI Surface Induced Pressure</p> <p>Thank you for choosing Reliance Oilfield Services, LLC!</p>

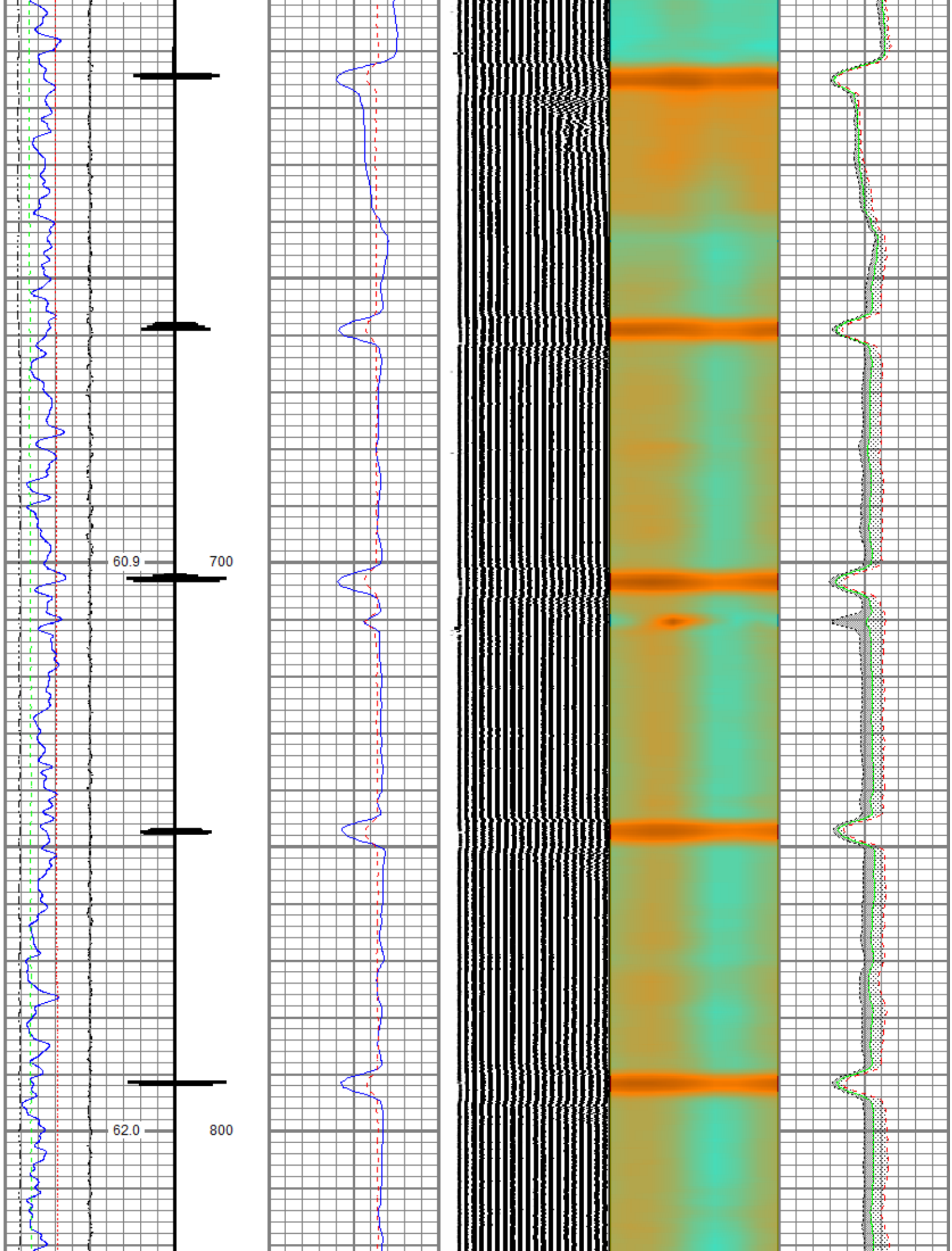
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 Dataset Pathname Main.2
 Presentation Format ros_rbt004_tep
 Dataset Creation Tue Nov 27 12:11:23 2018
 Charted by Depth in Feet scaled 1:240

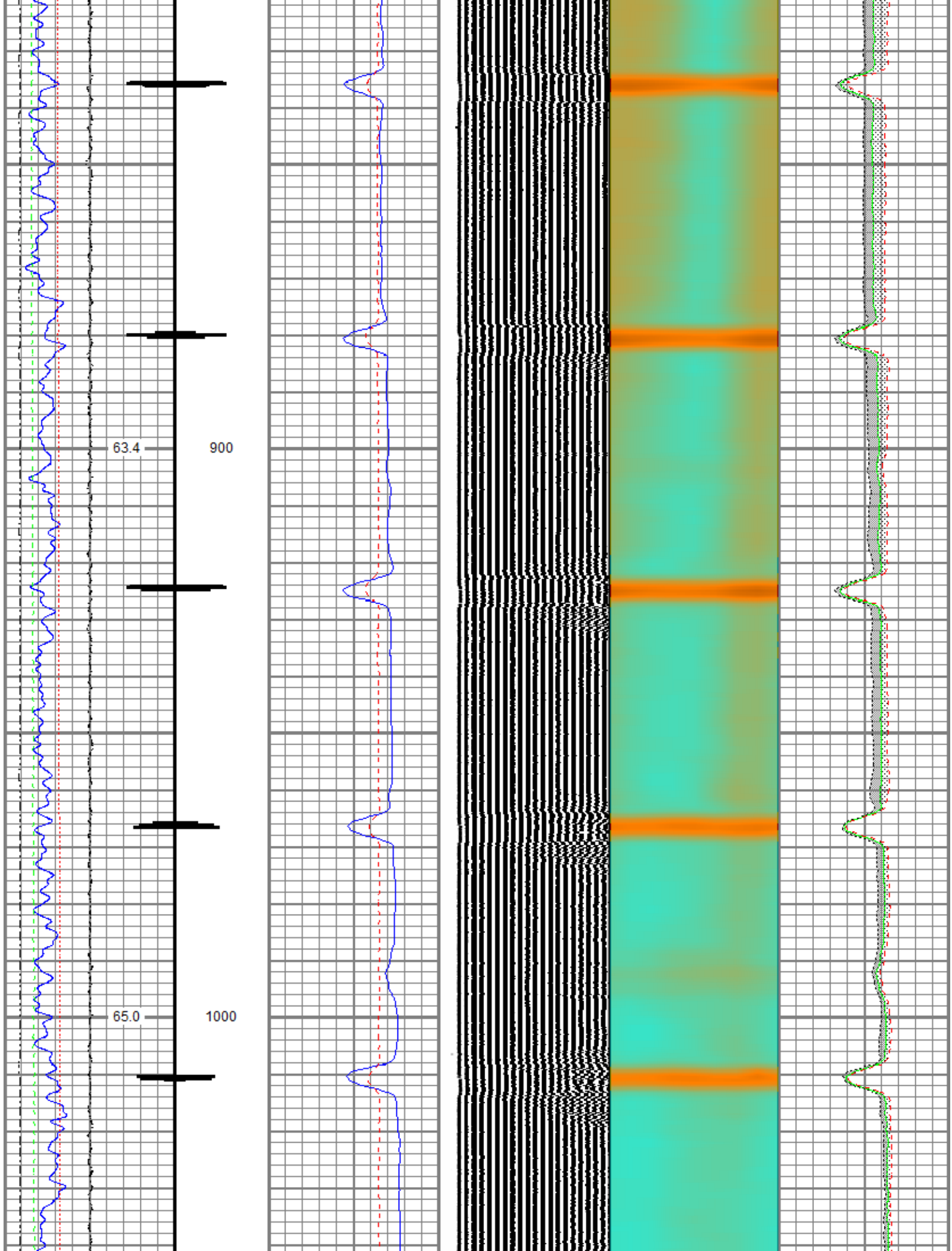
Gamma Ray	0	3' Amplitude (mV) 100	5' Variable Density Log	Sector Map	0	Average Amplitude 150
(GAPI) 200		3' Amplitude x 5	200 (usec) 1200			Minimum Amplitude
Line Speed	0	(mV) 20			0	150
(ft/min) 150		3' Travel Time				Maximum Amplitude
Line Tension (lb) 2000	0	(usec) 200			0	150
Differential Temperature						
(degF) 2						
Temperature						
(degF) 200	0					
CCL 0	10					

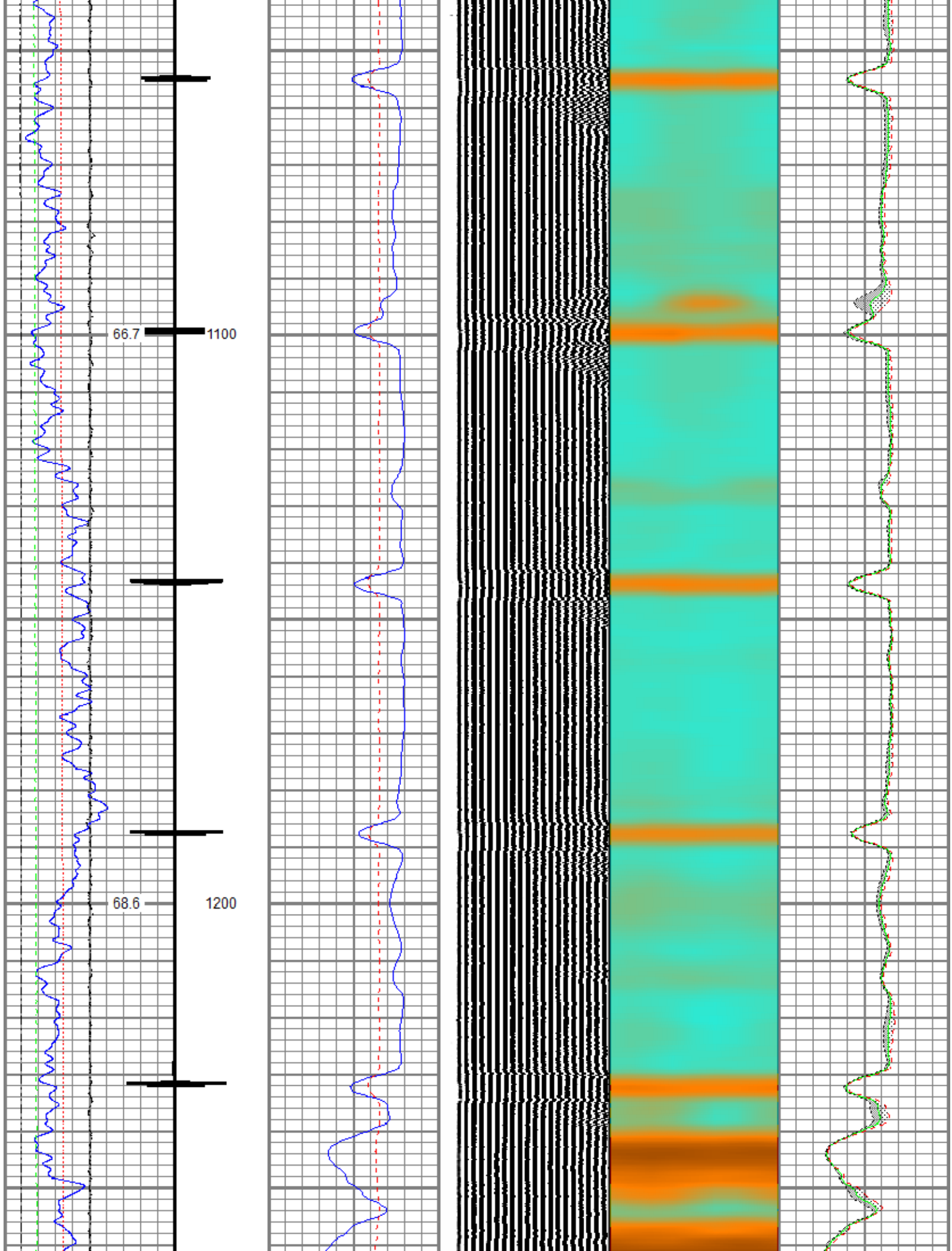


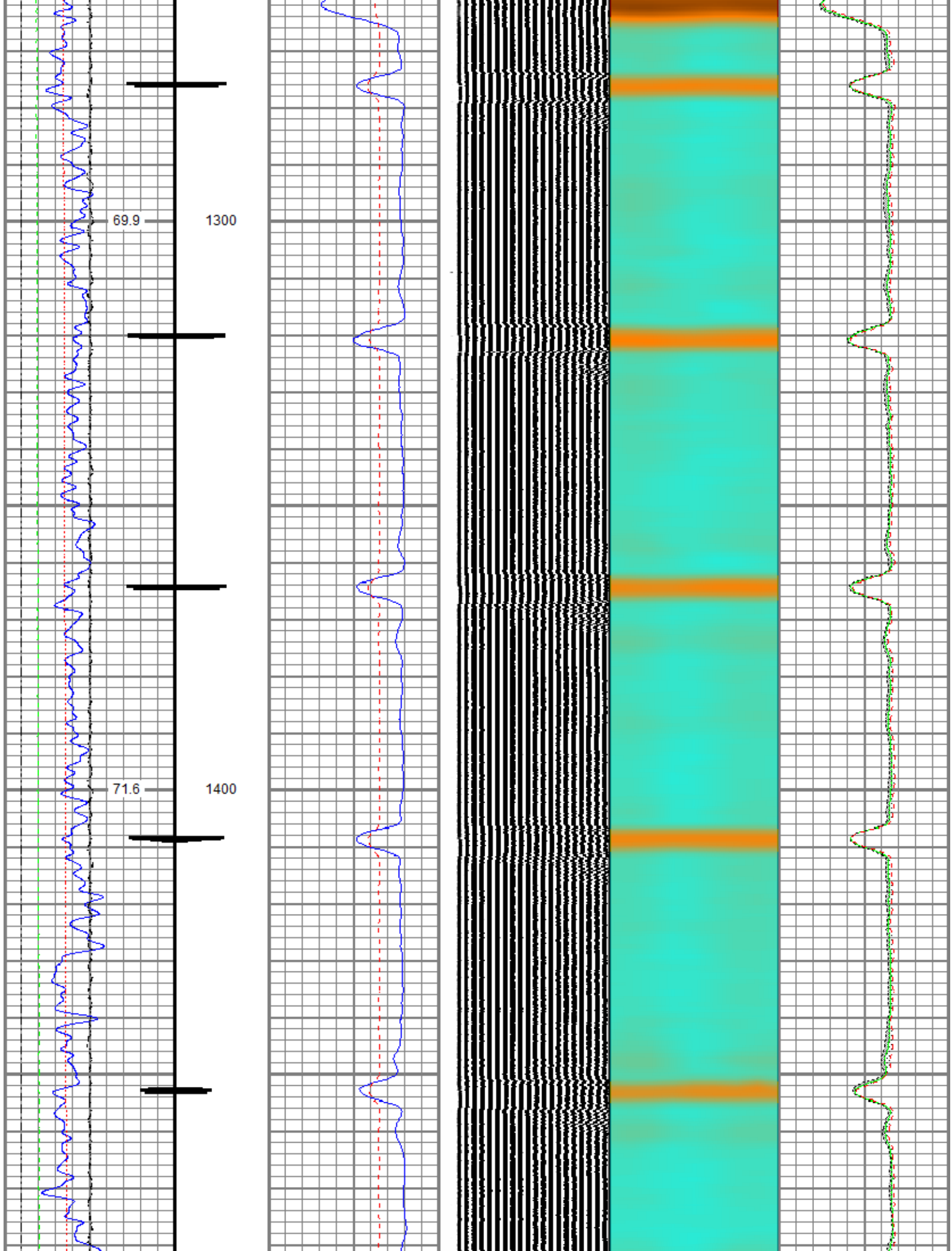


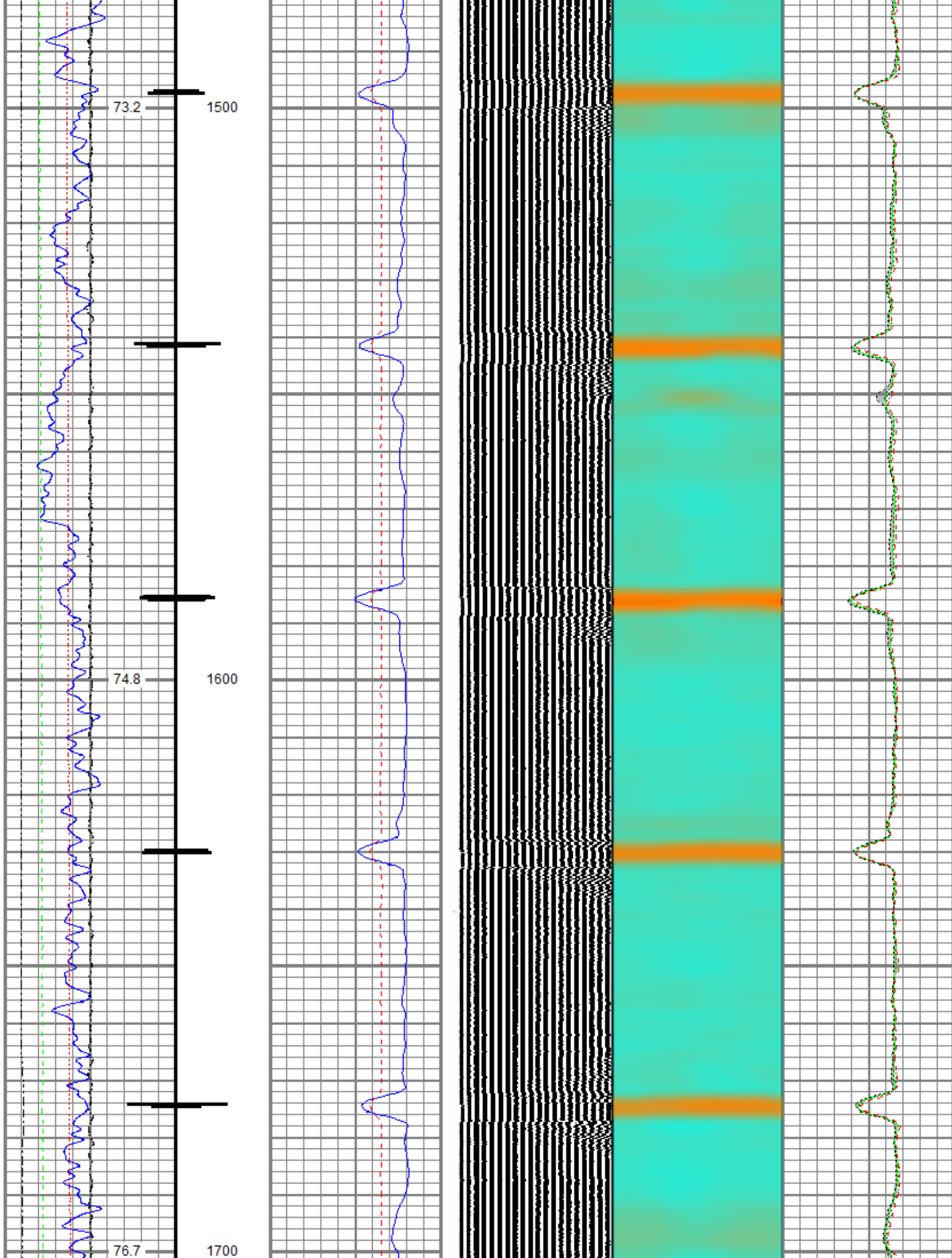


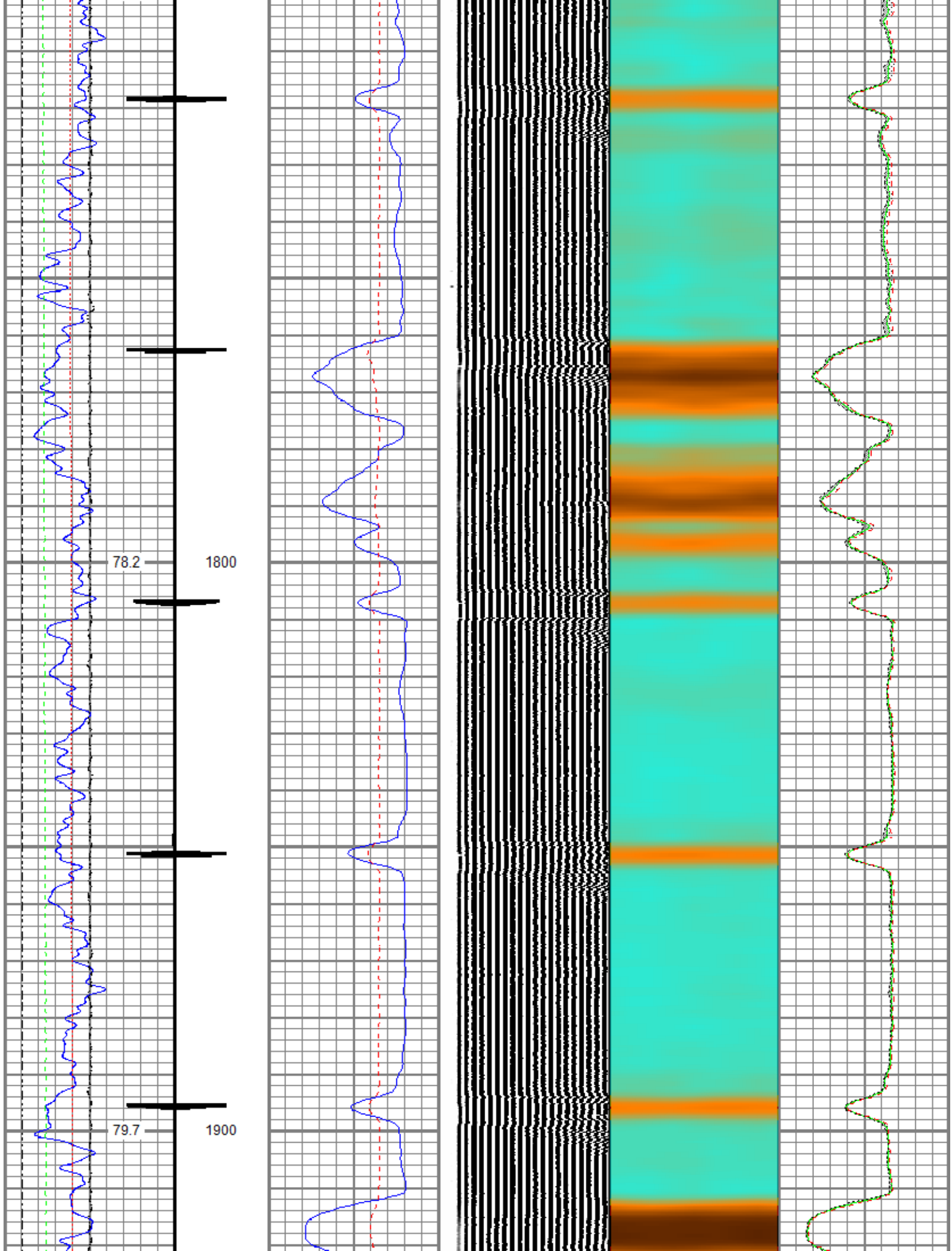


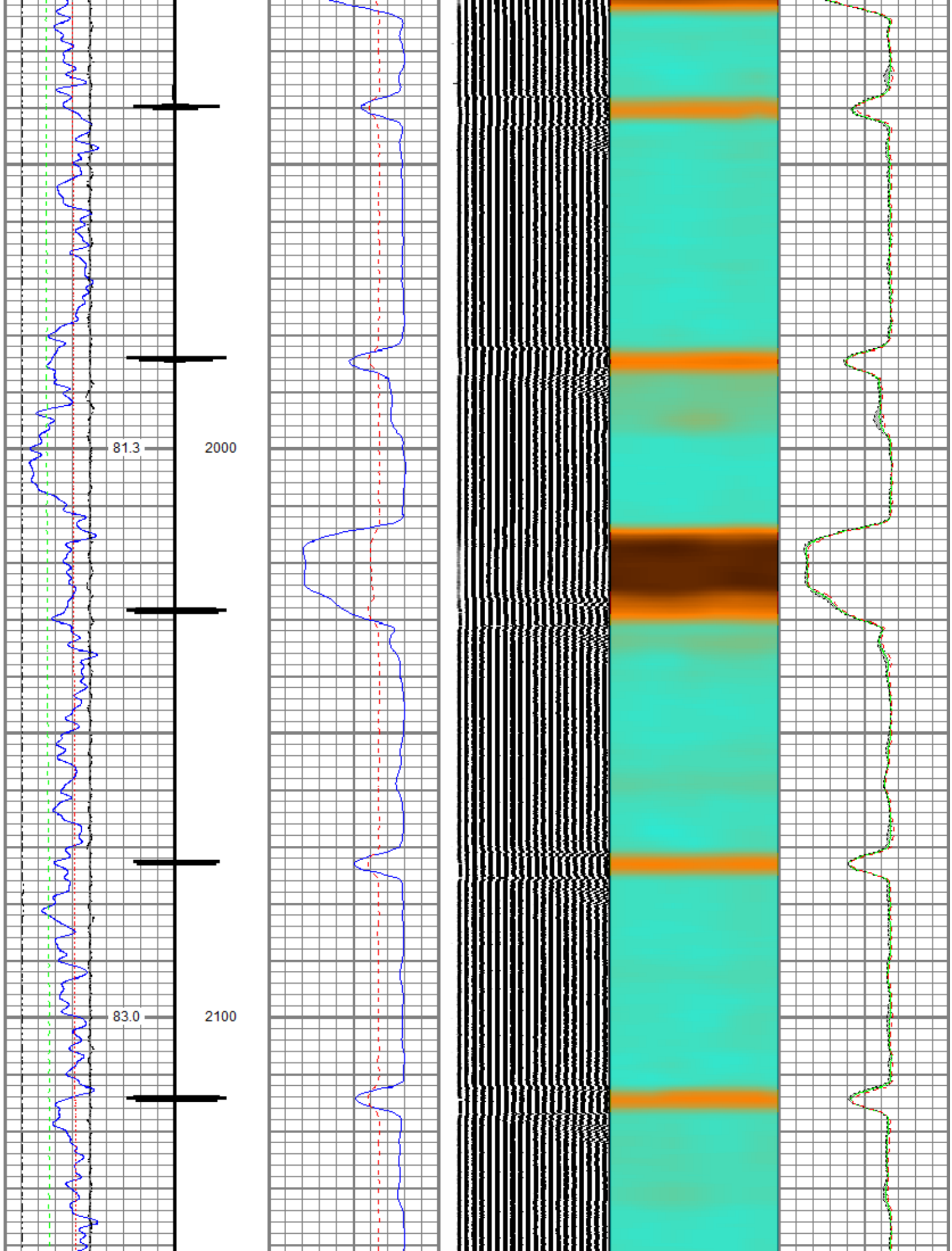


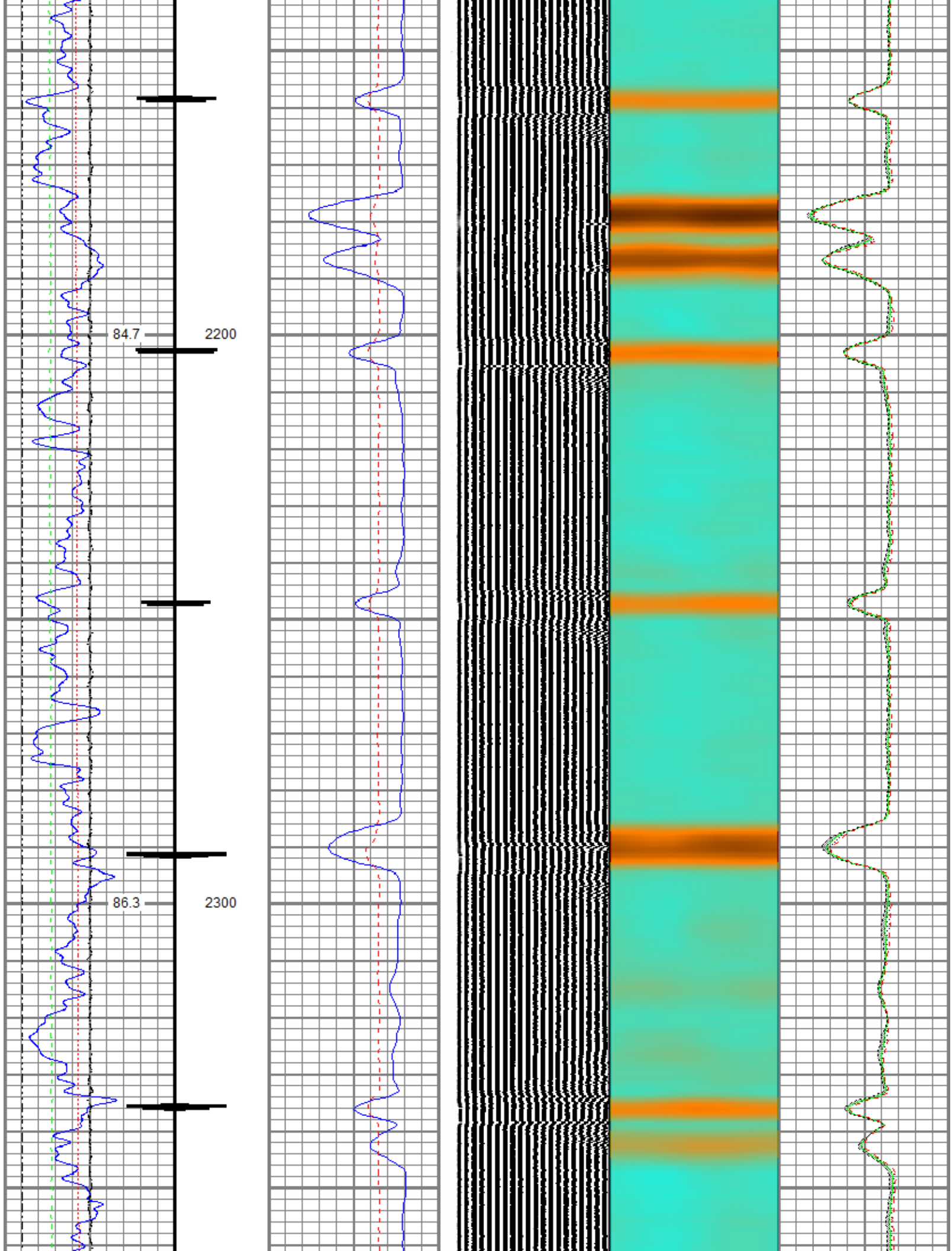


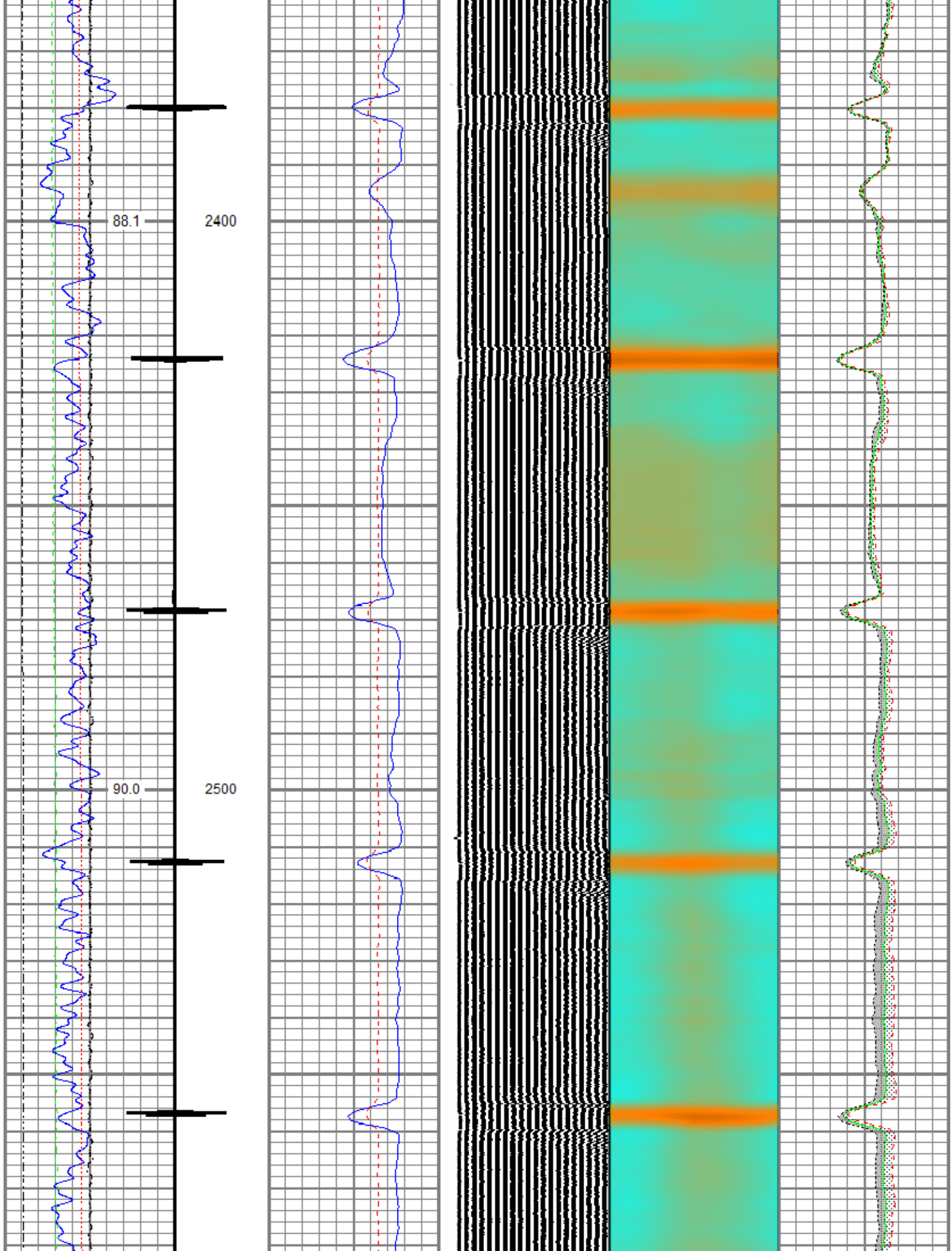


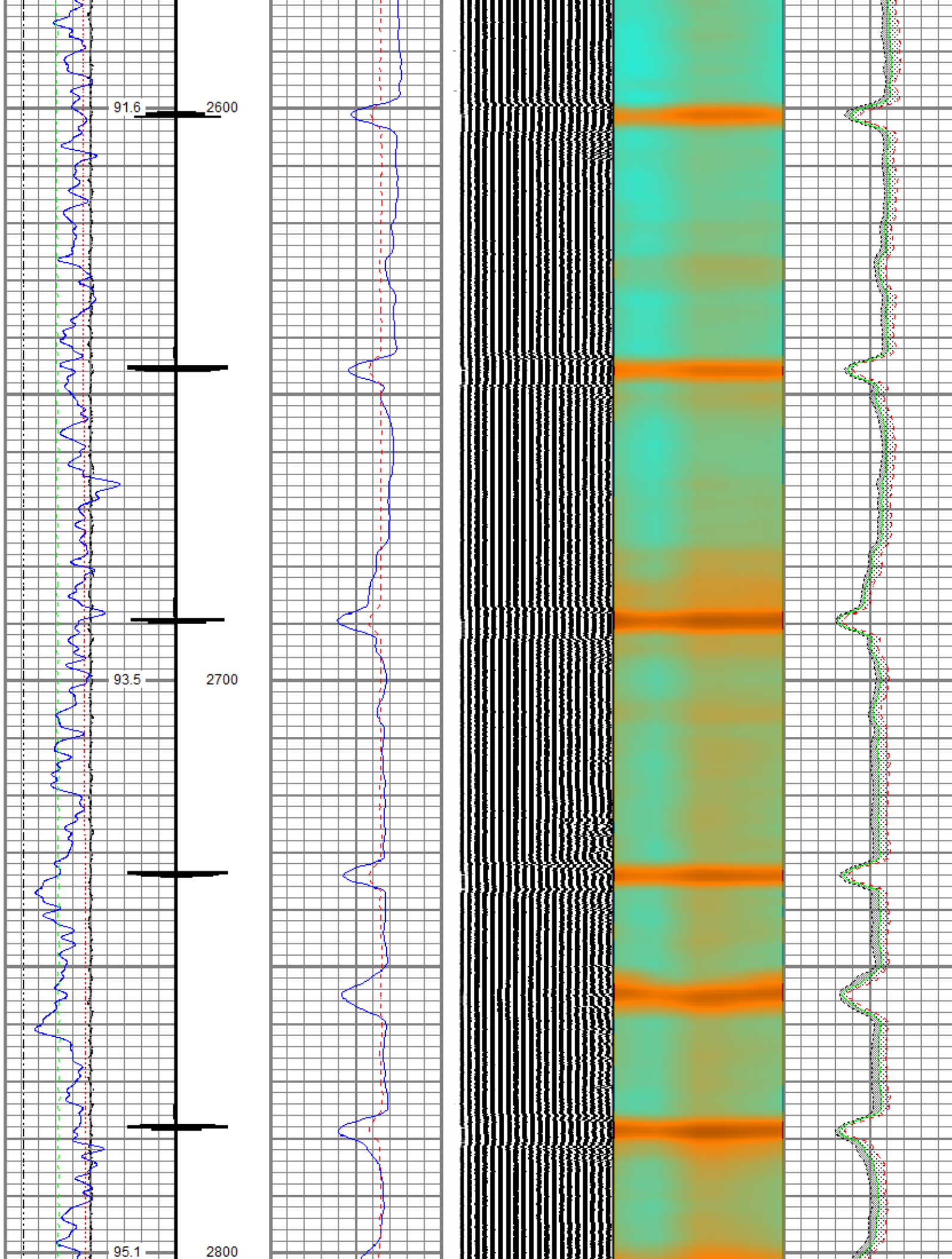


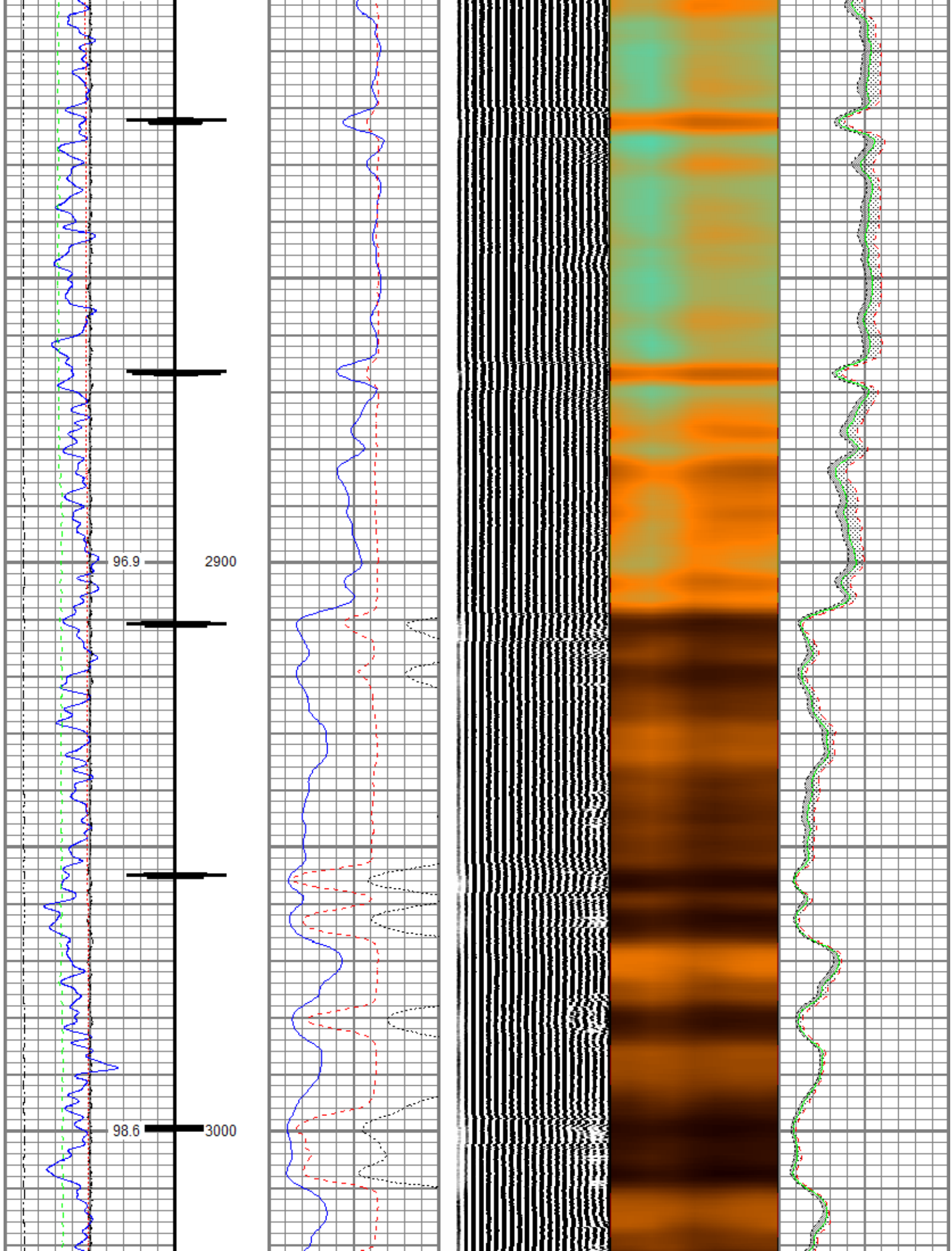


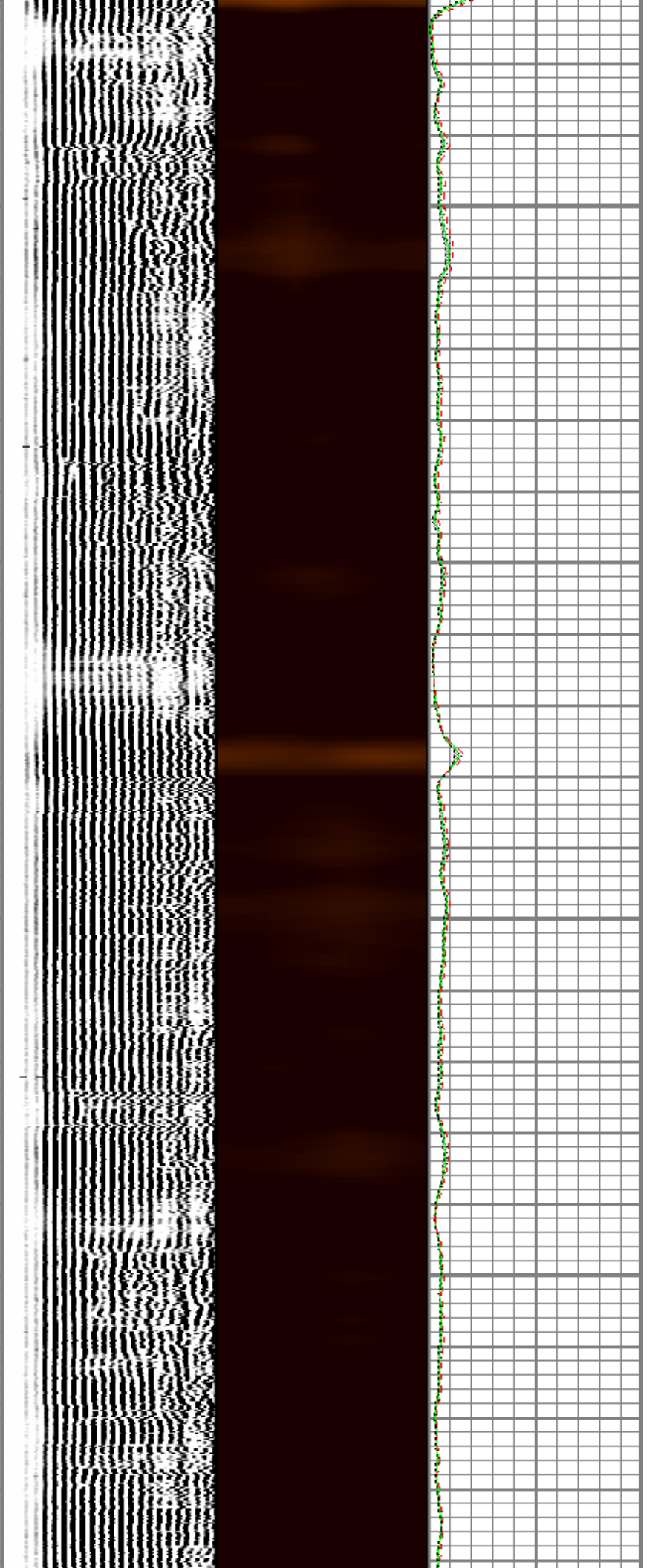
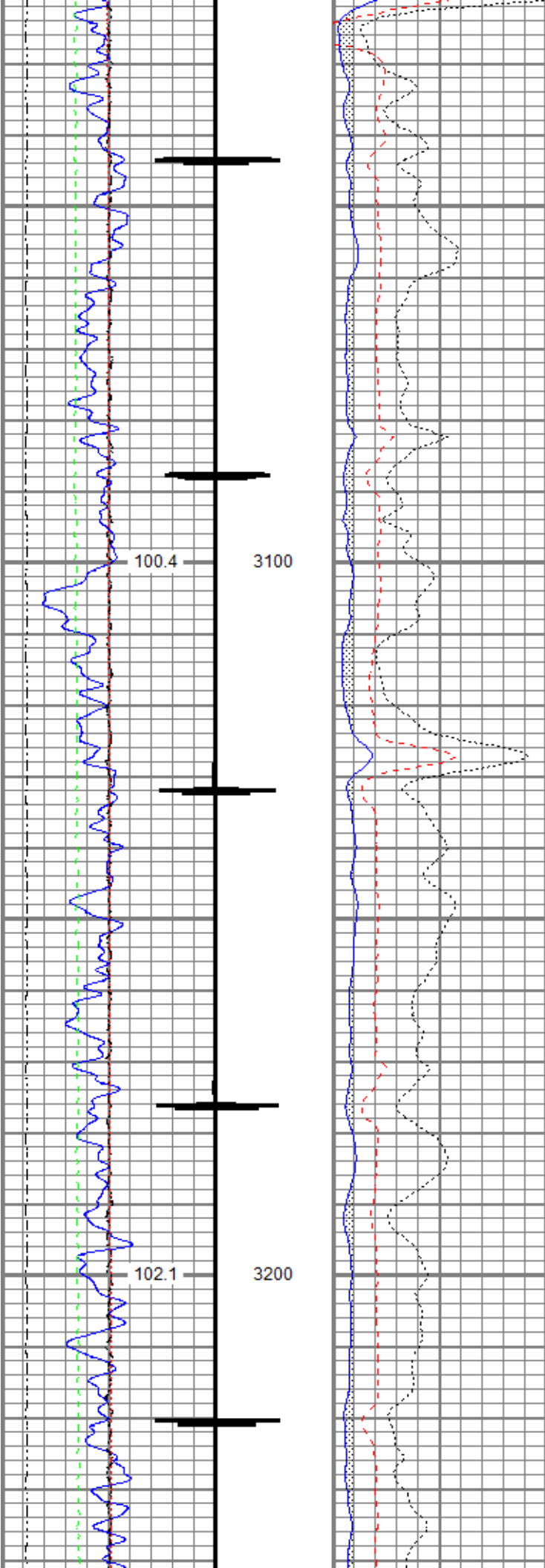


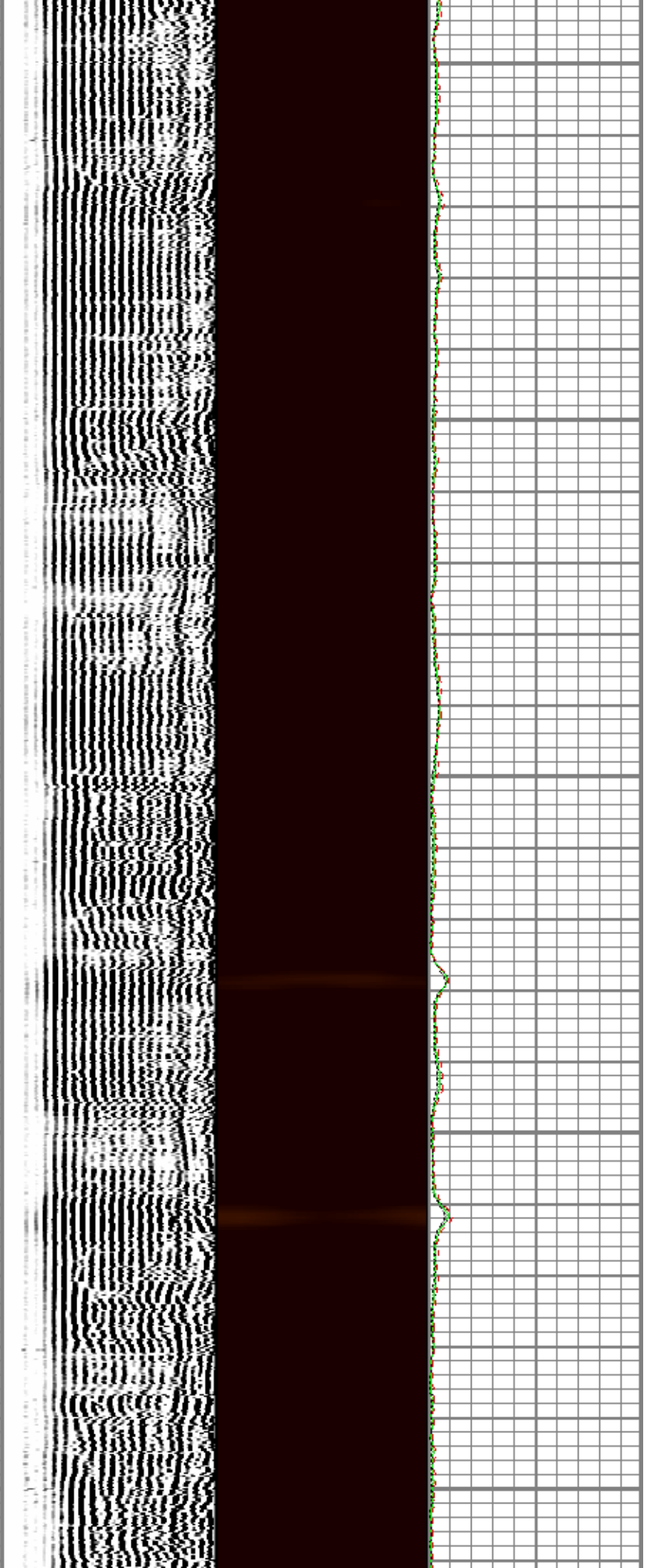
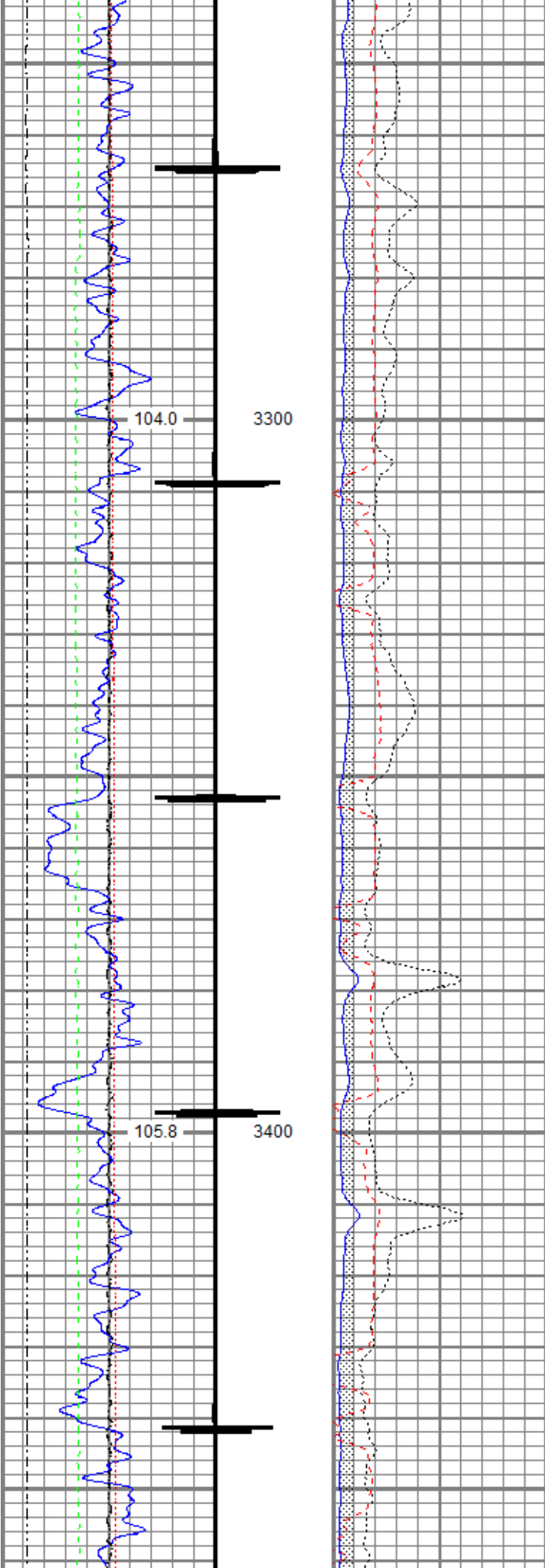


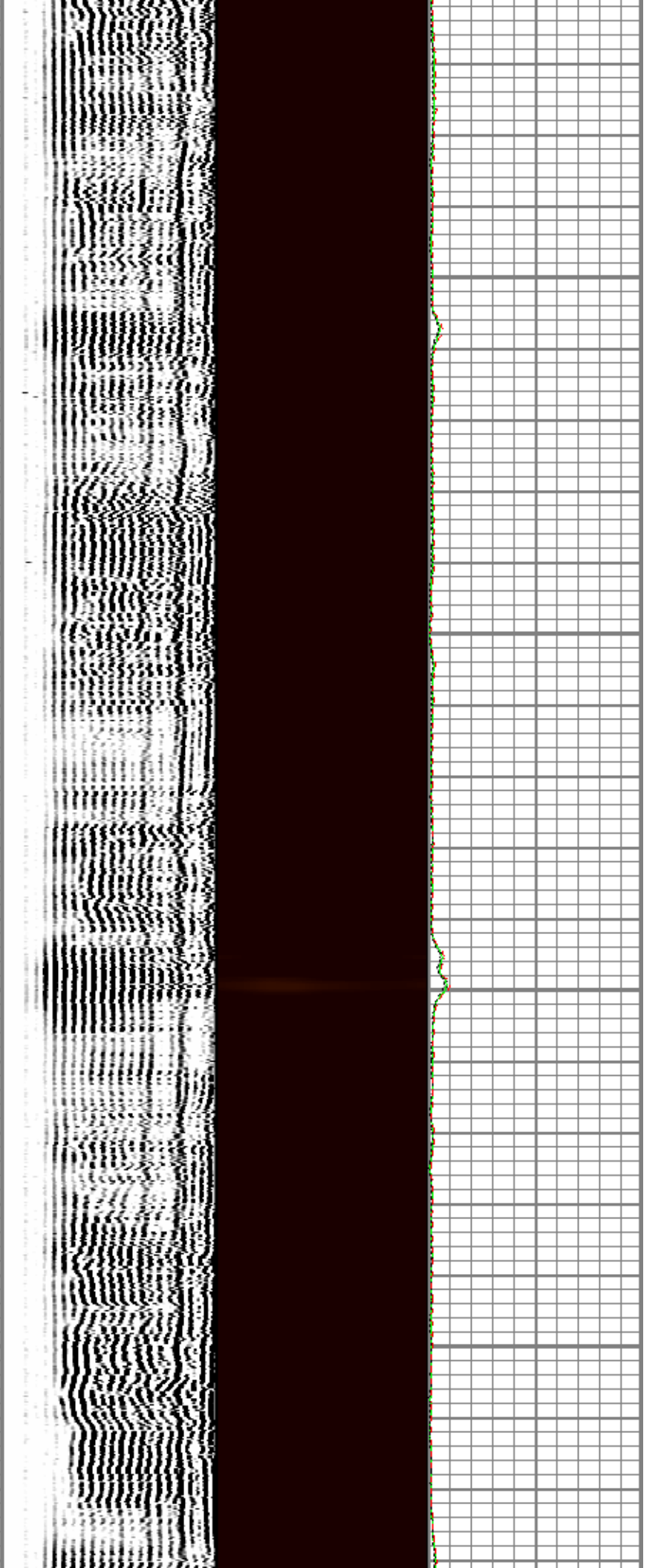
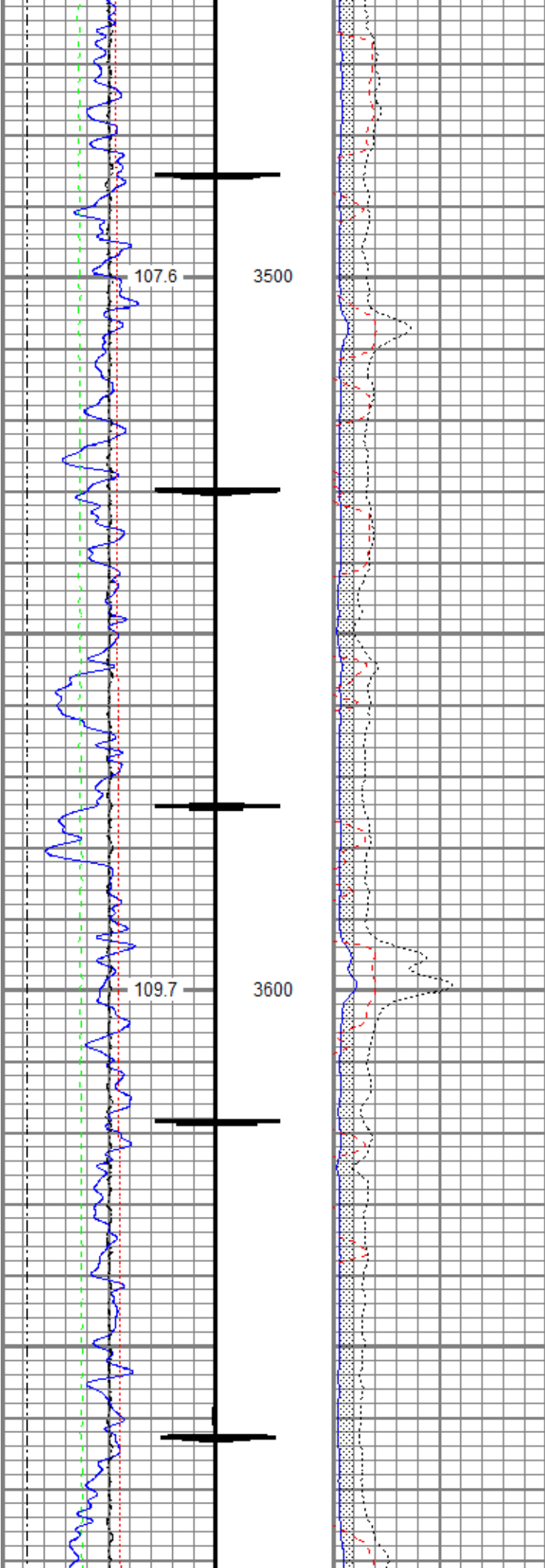


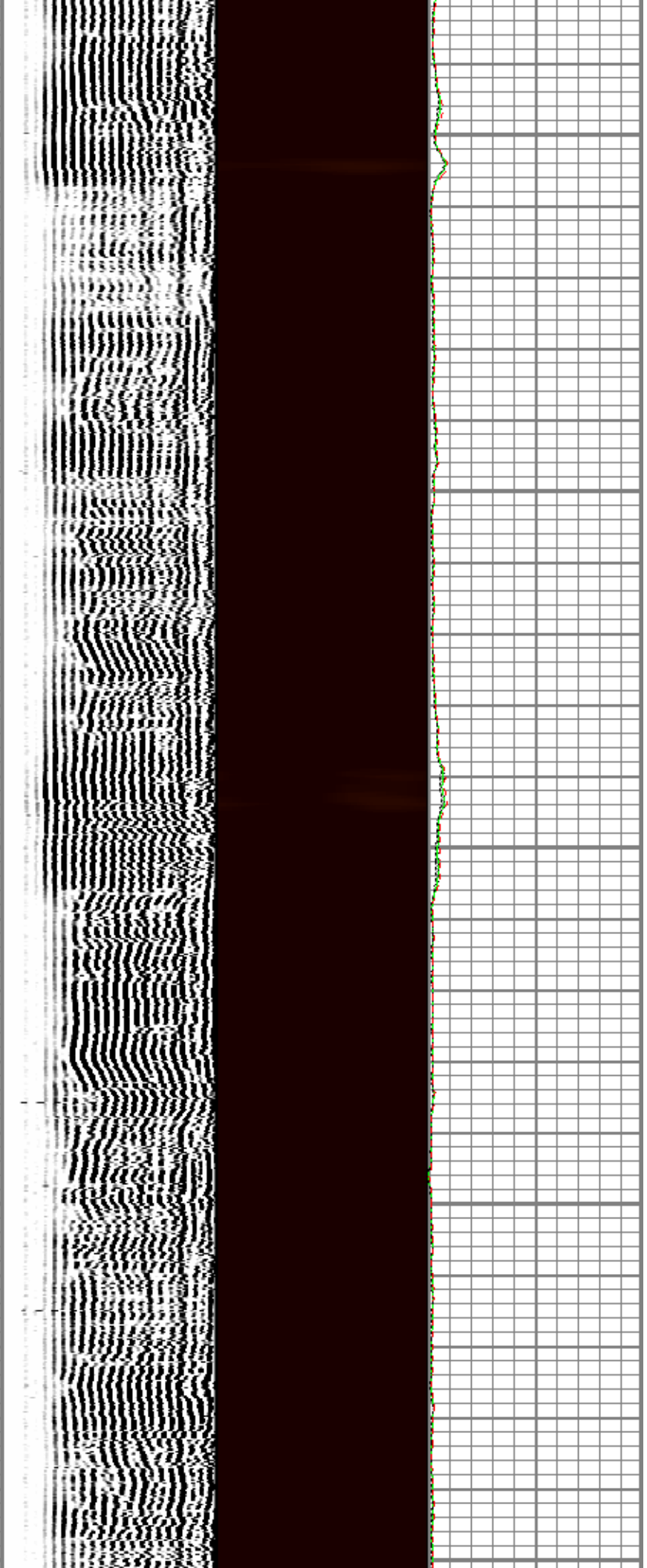
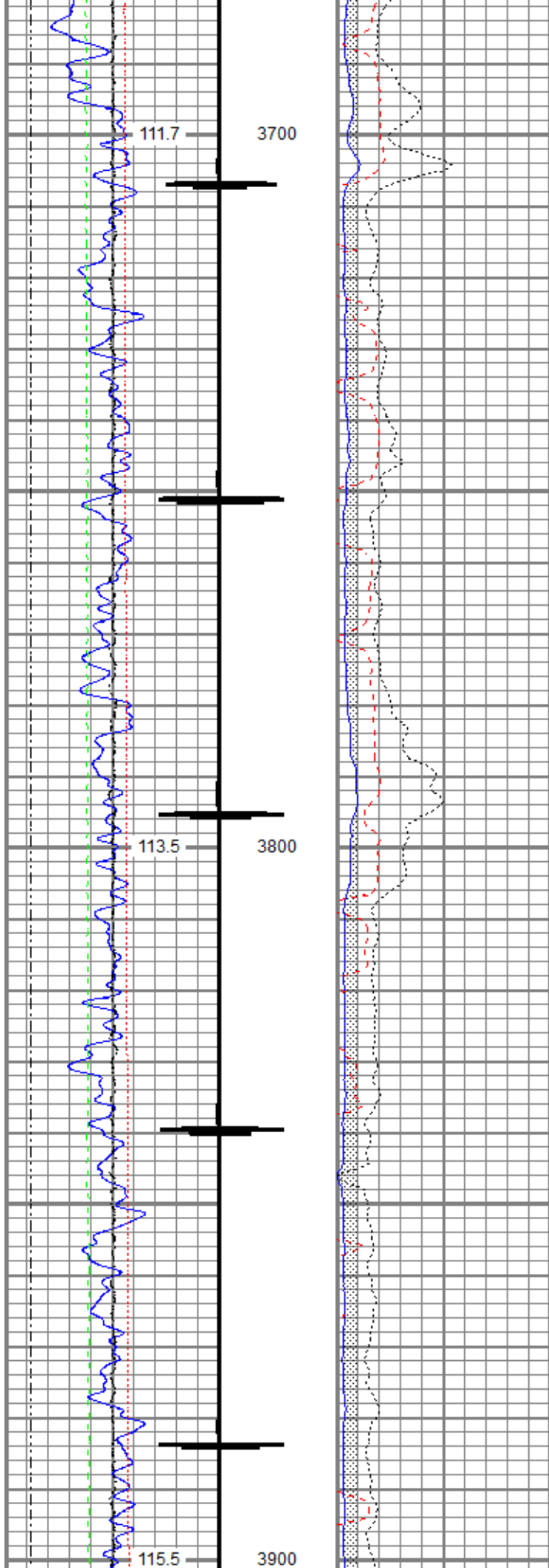


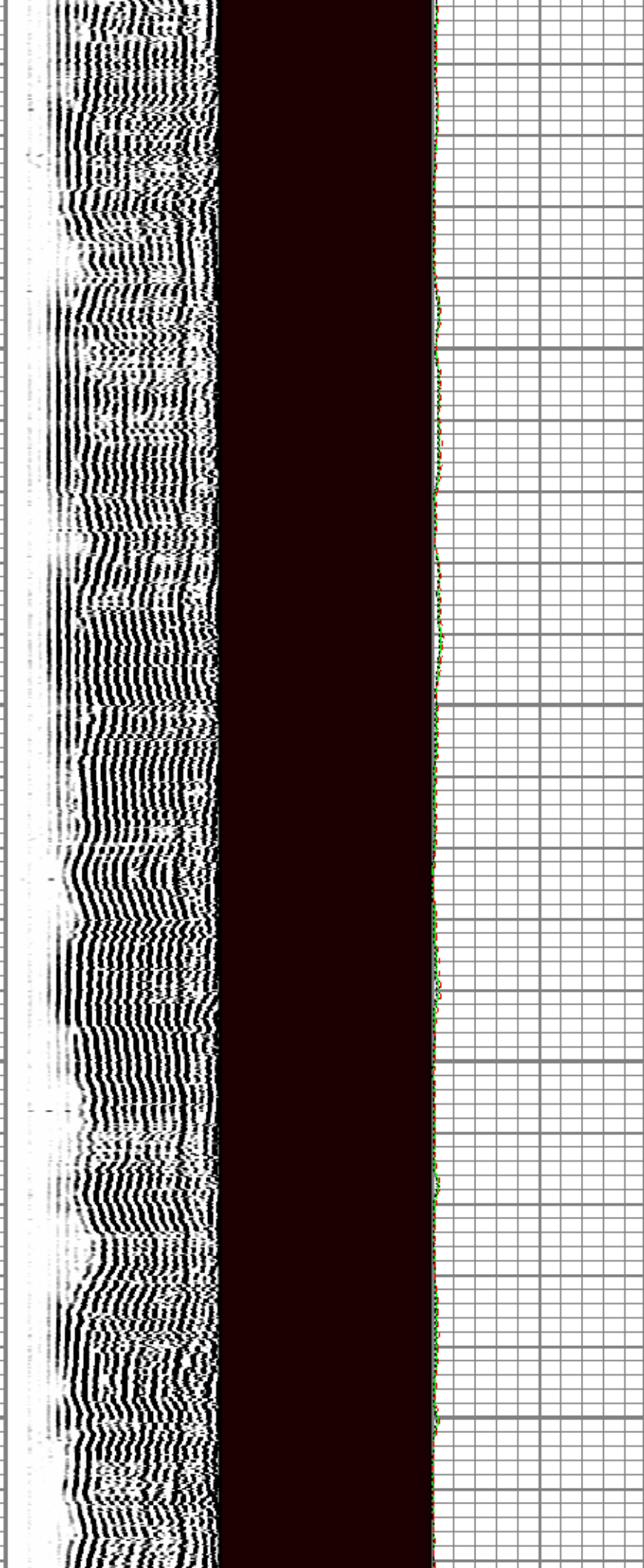
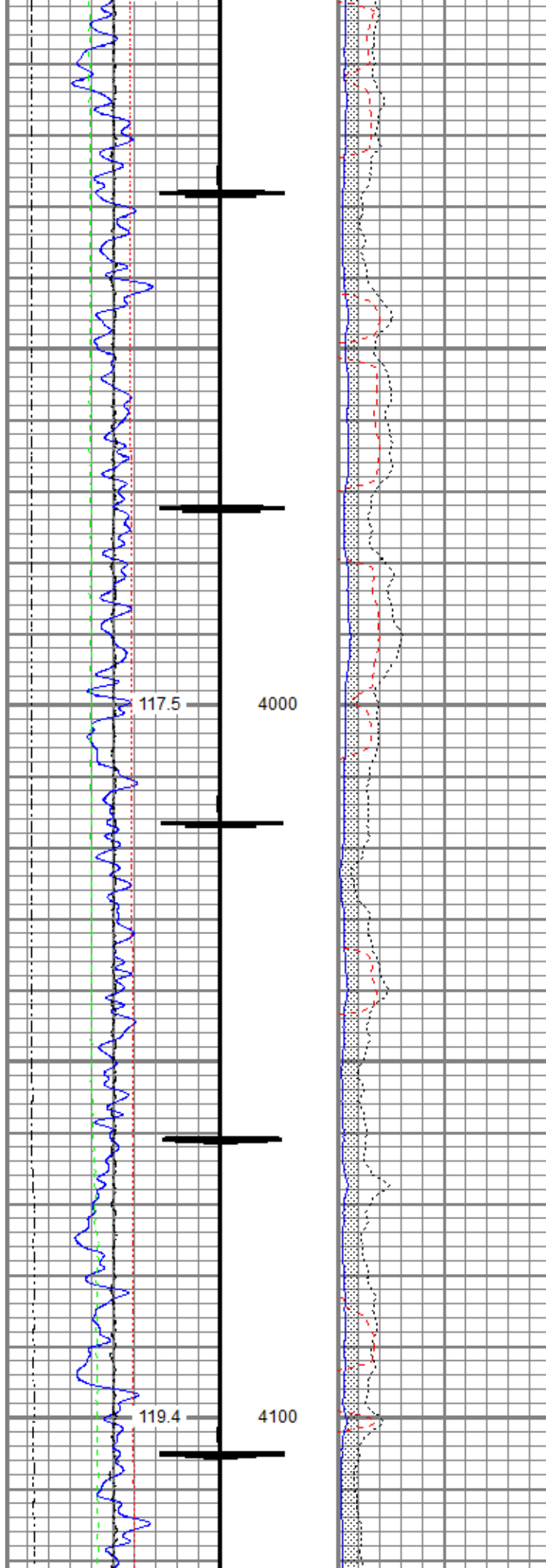


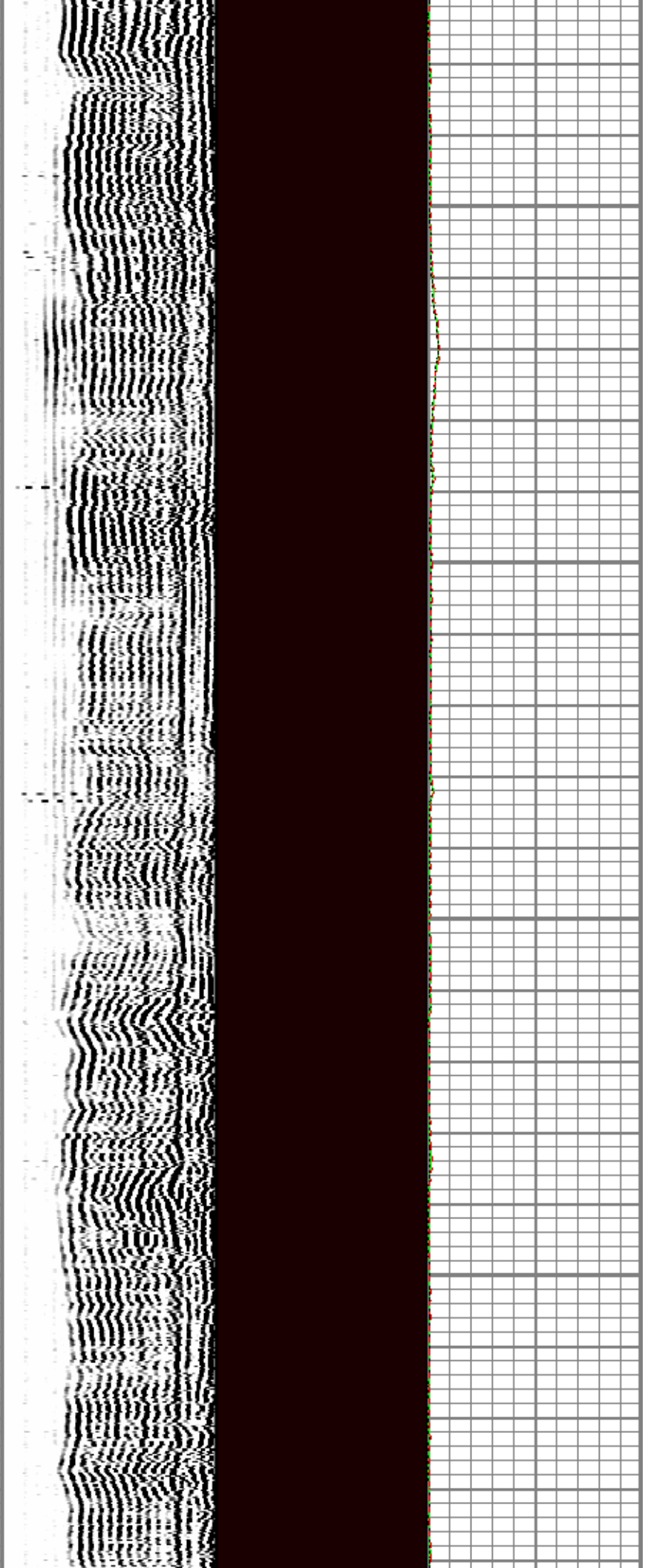
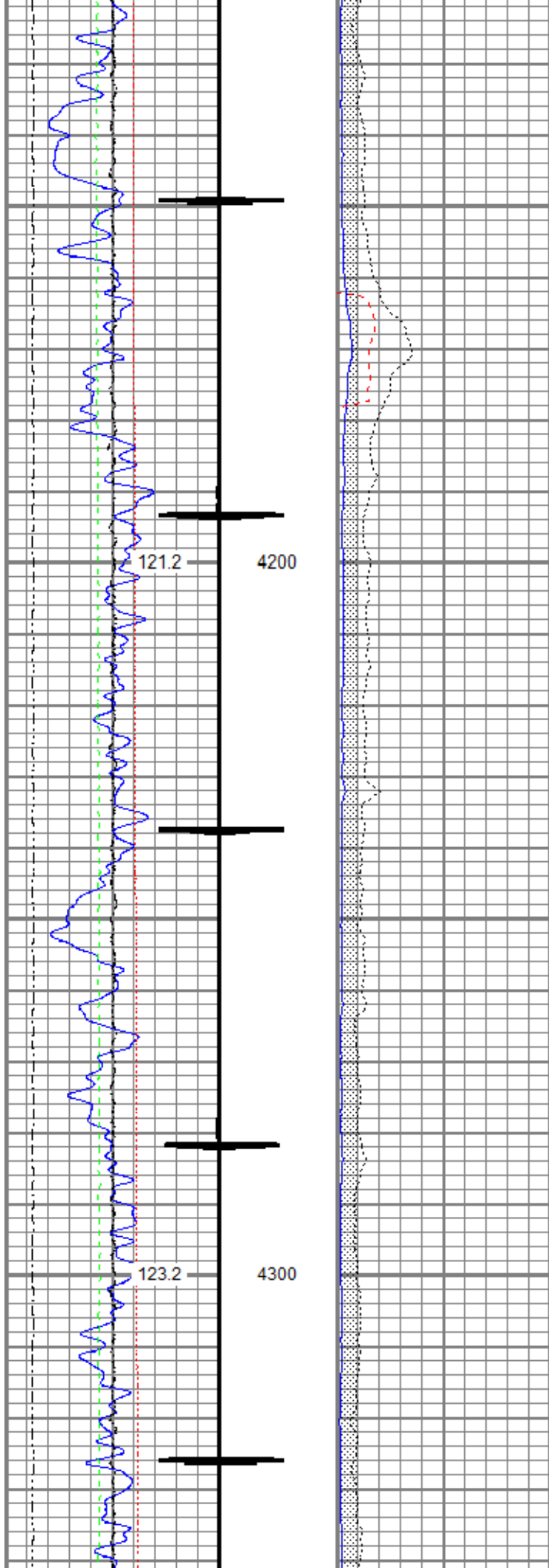


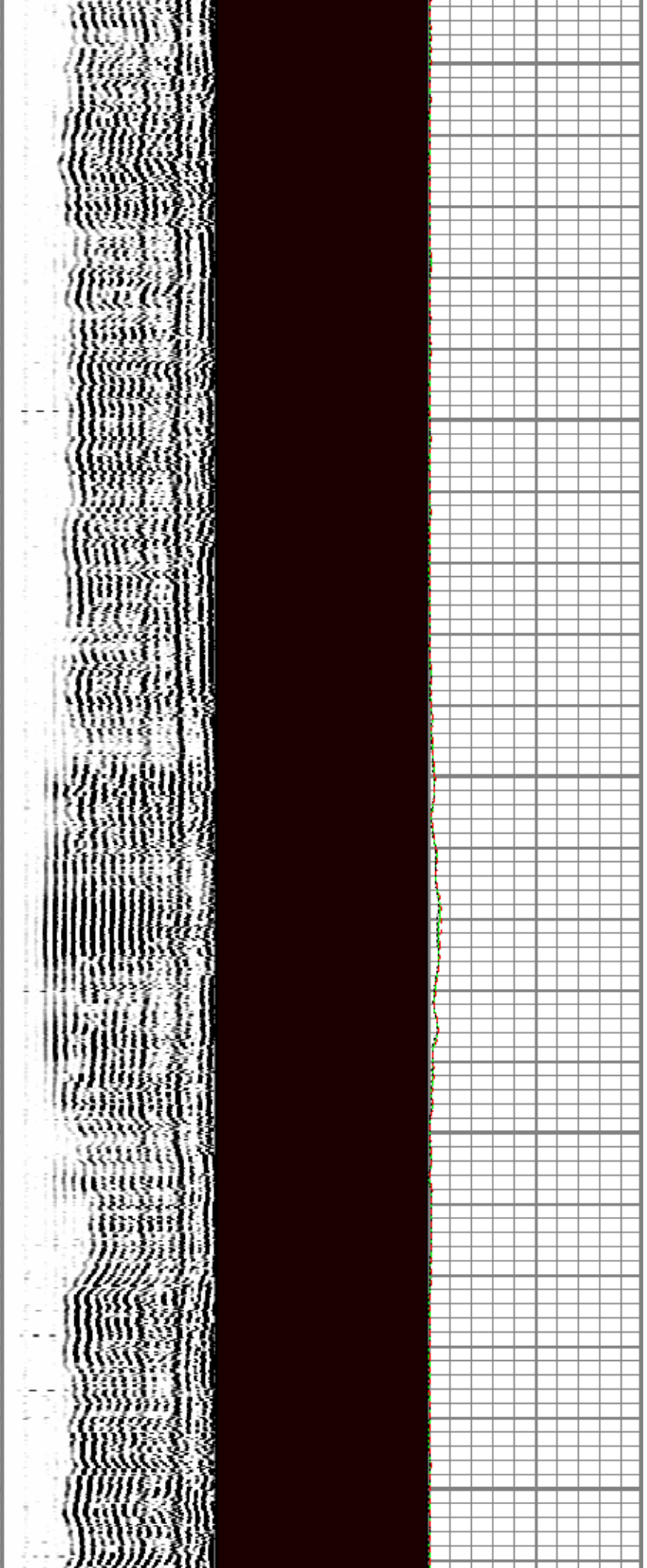
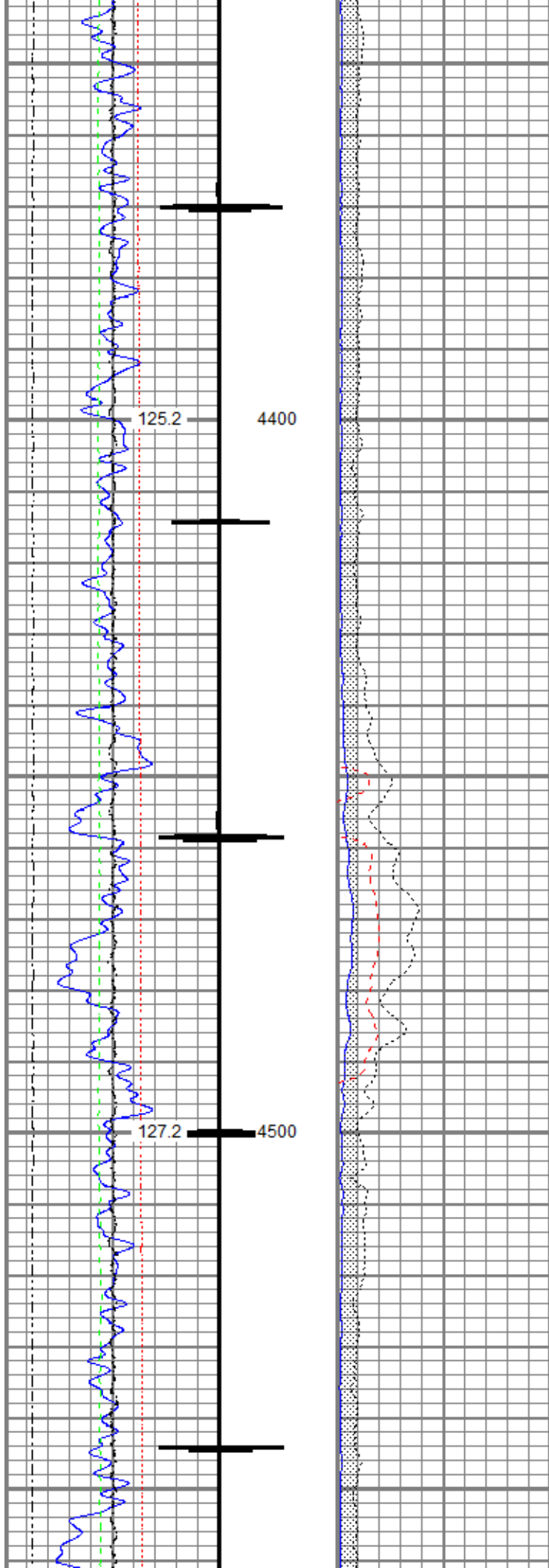


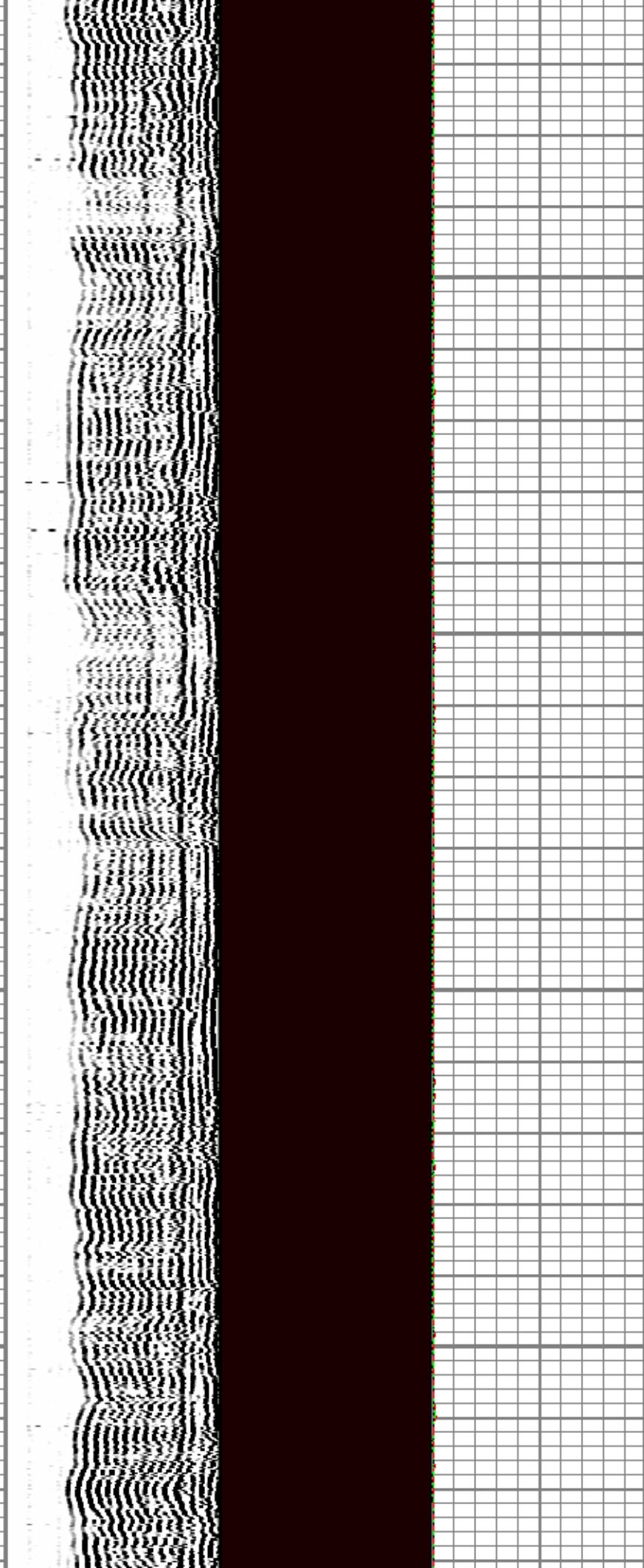
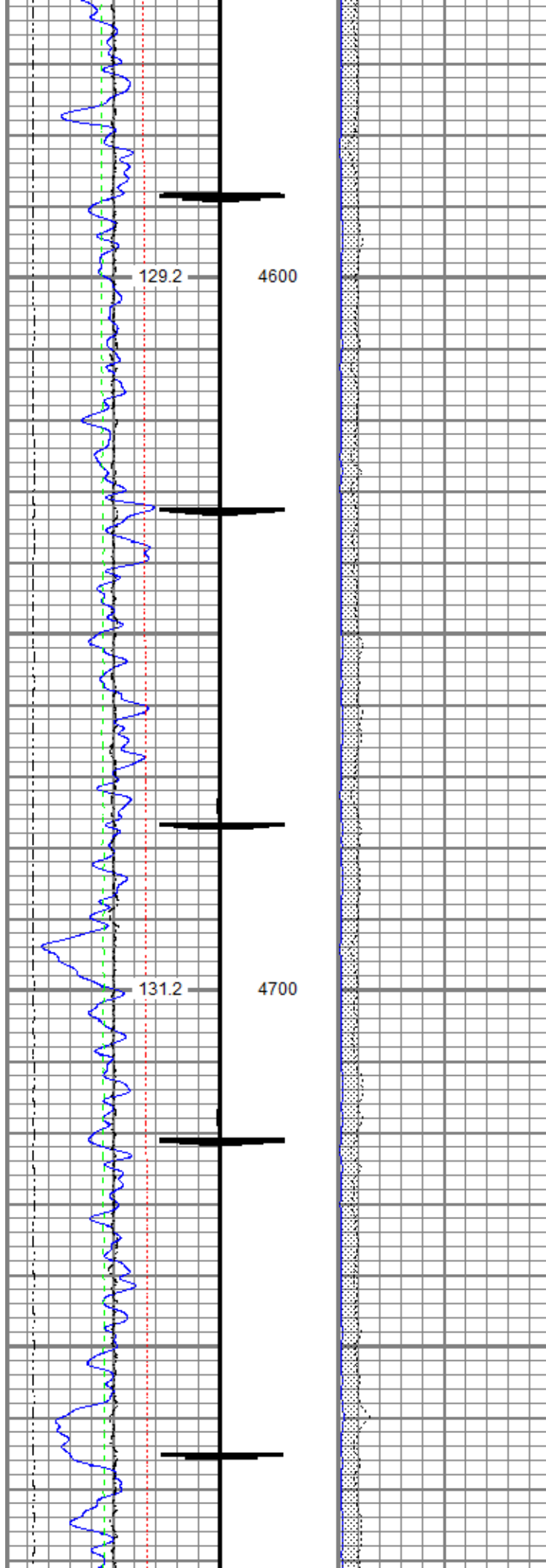


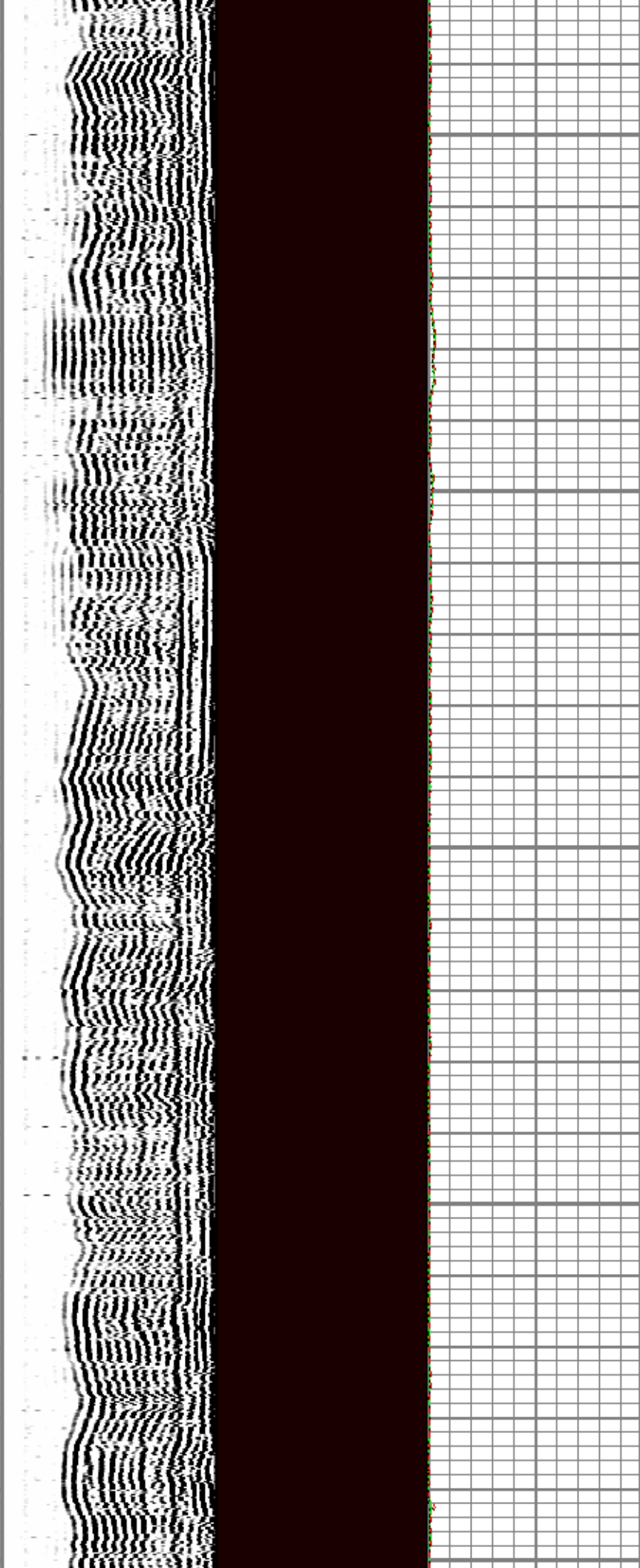
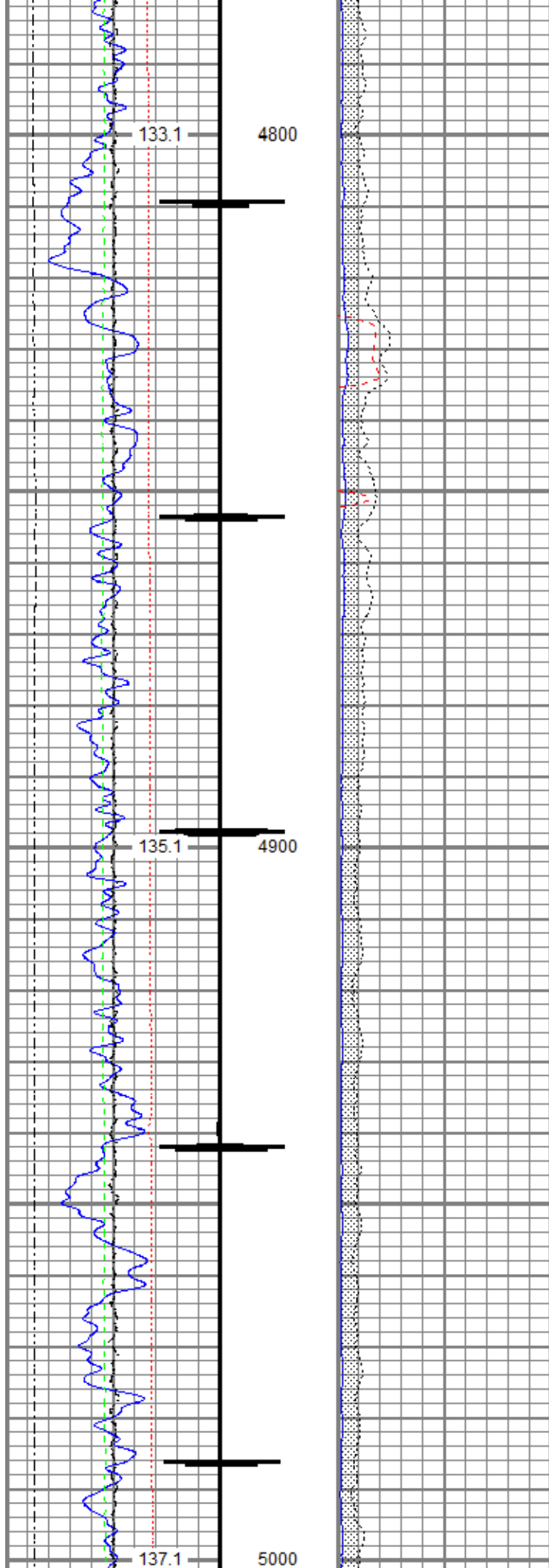


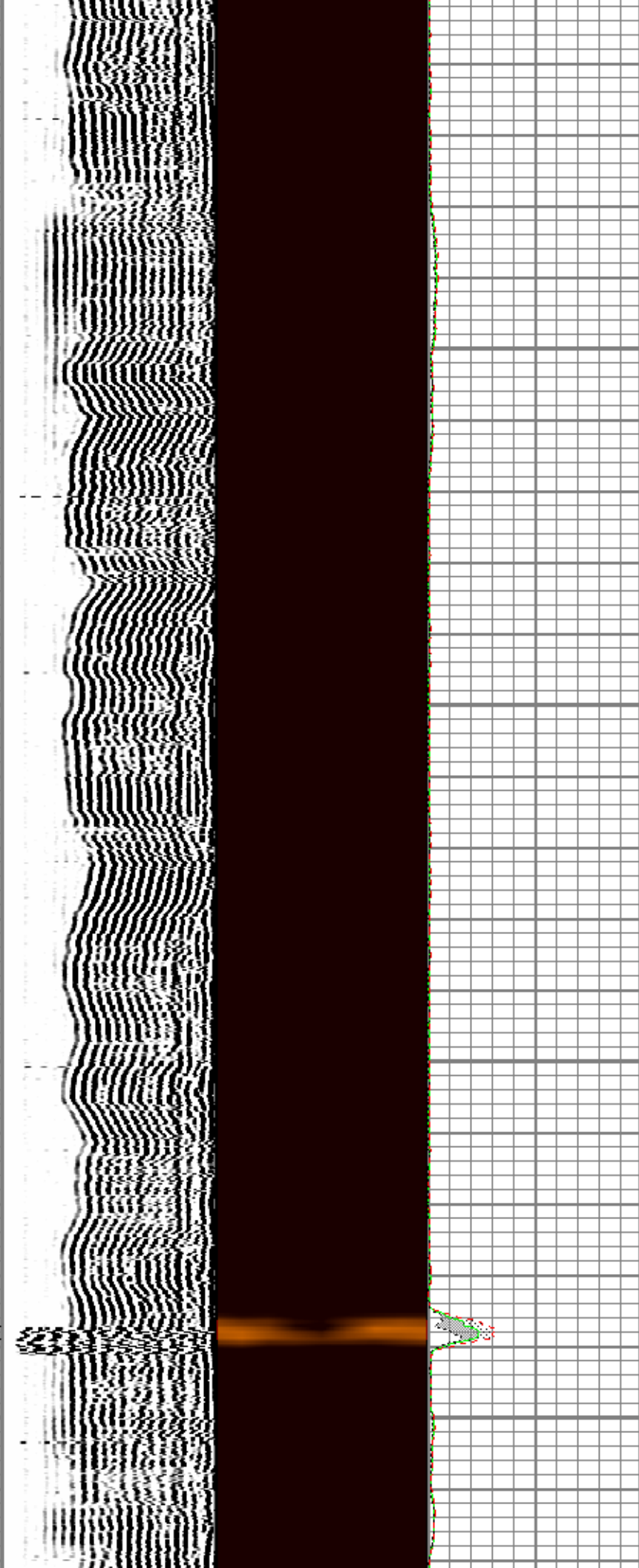
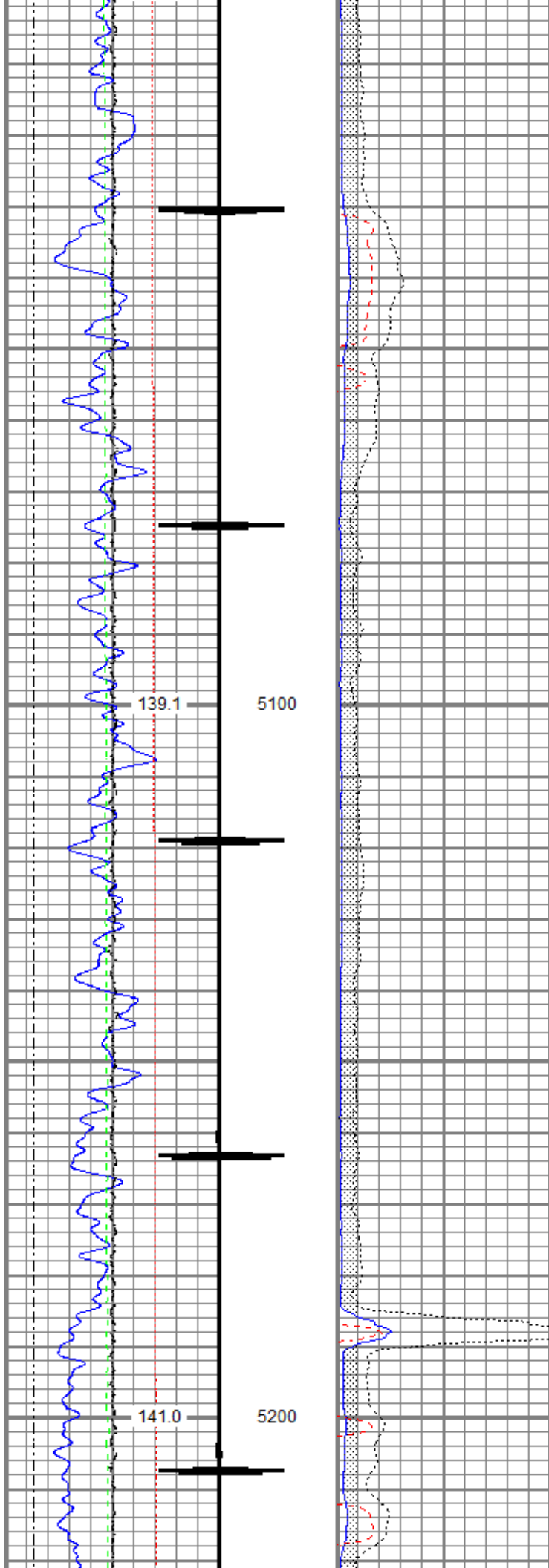


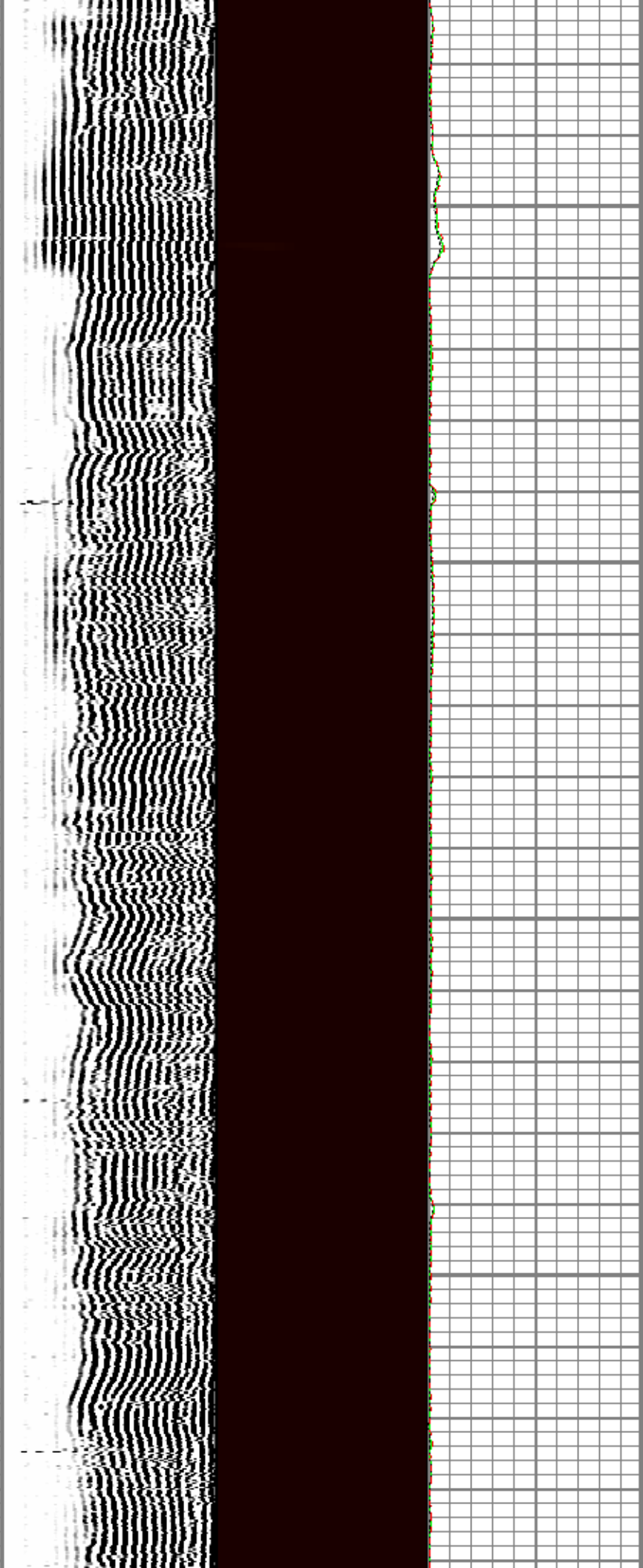
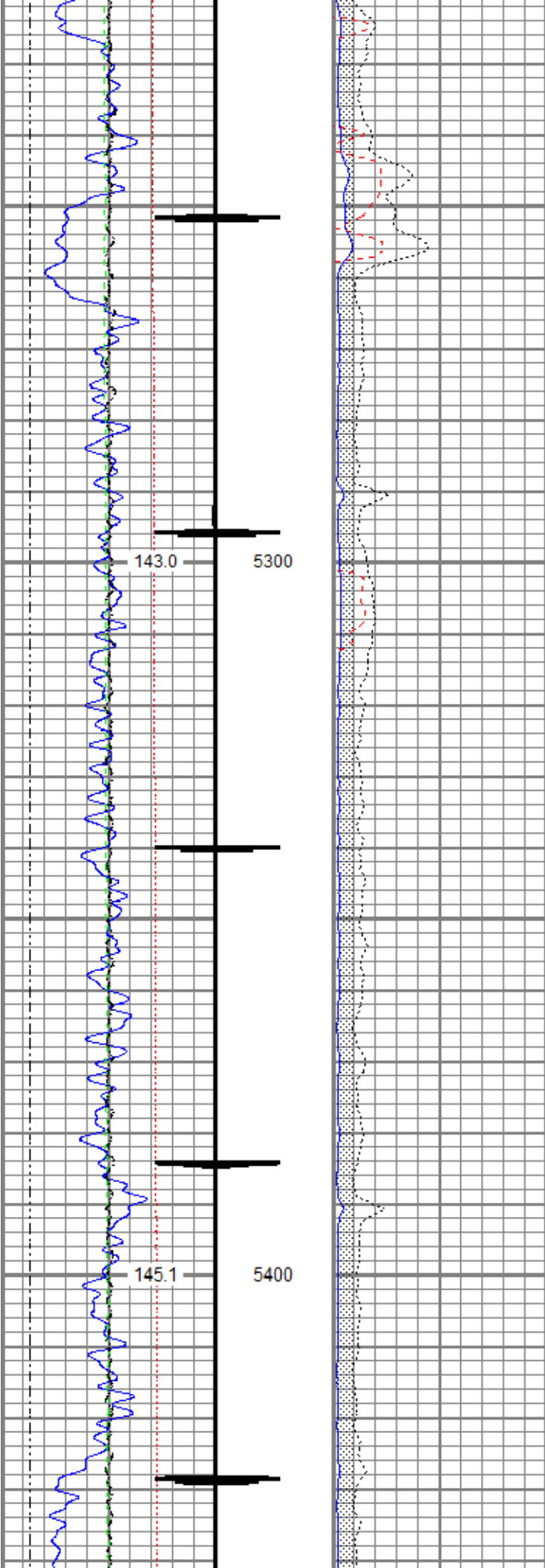


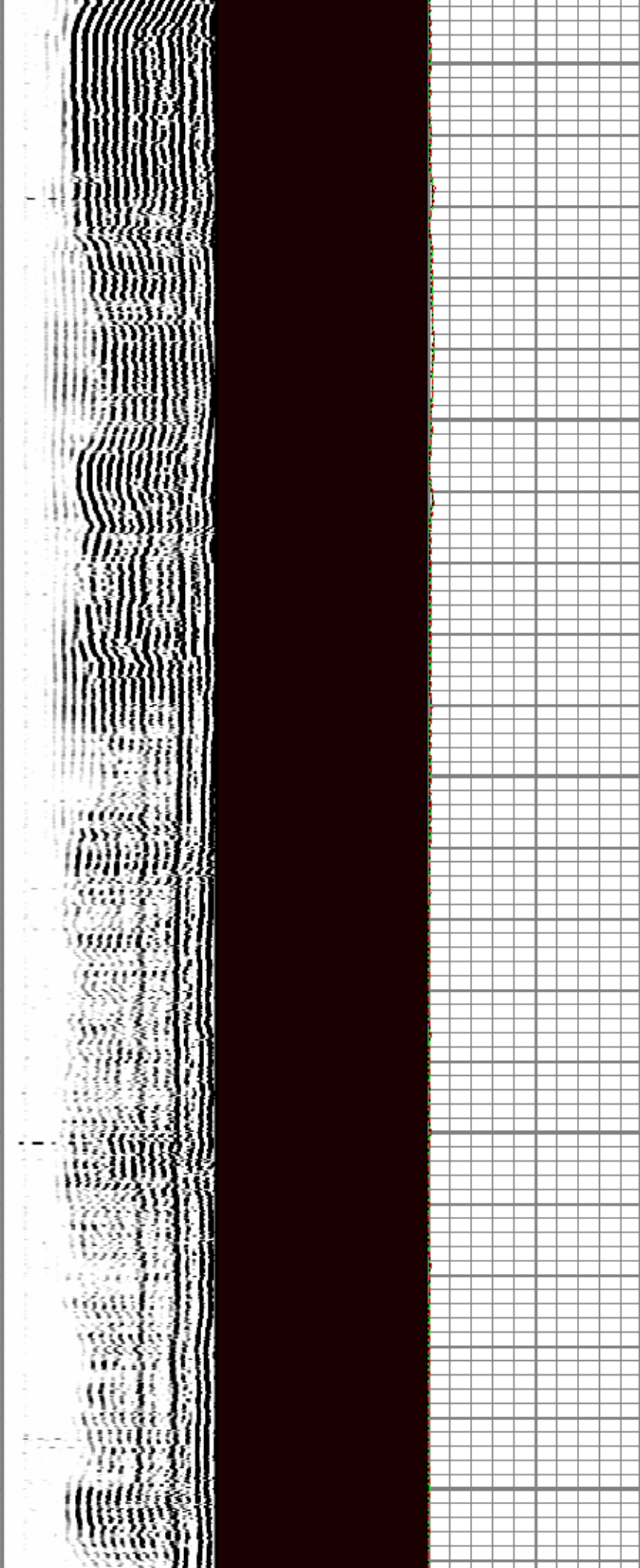
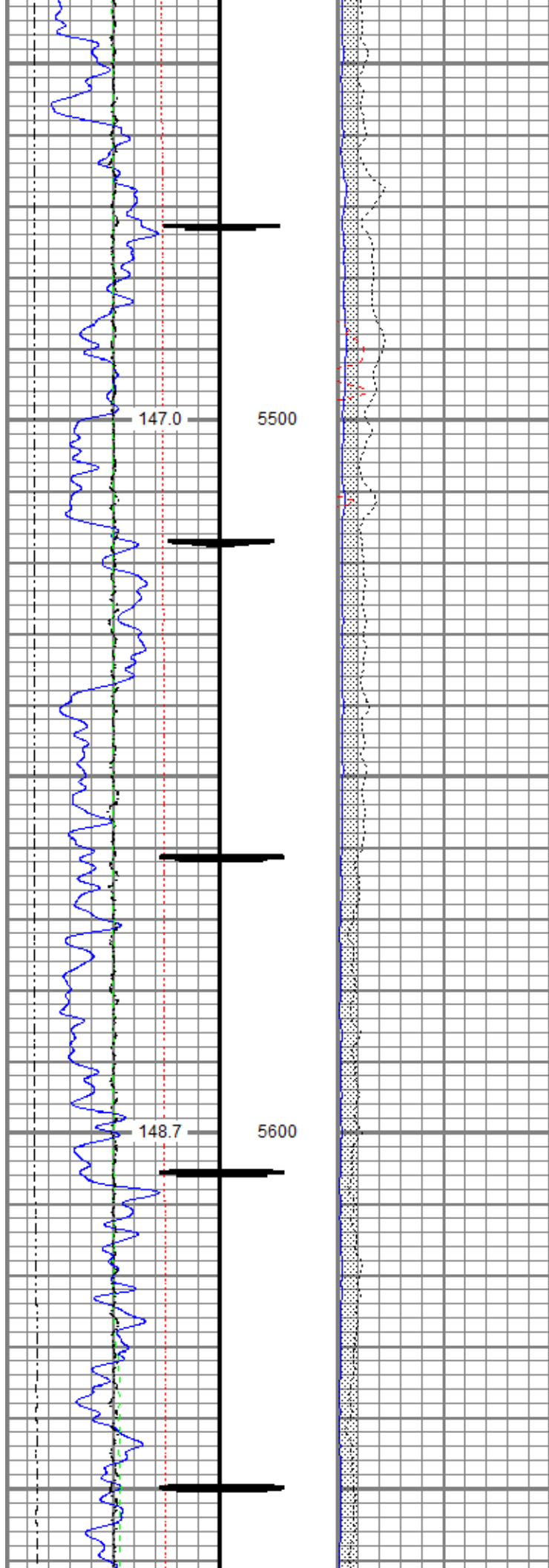


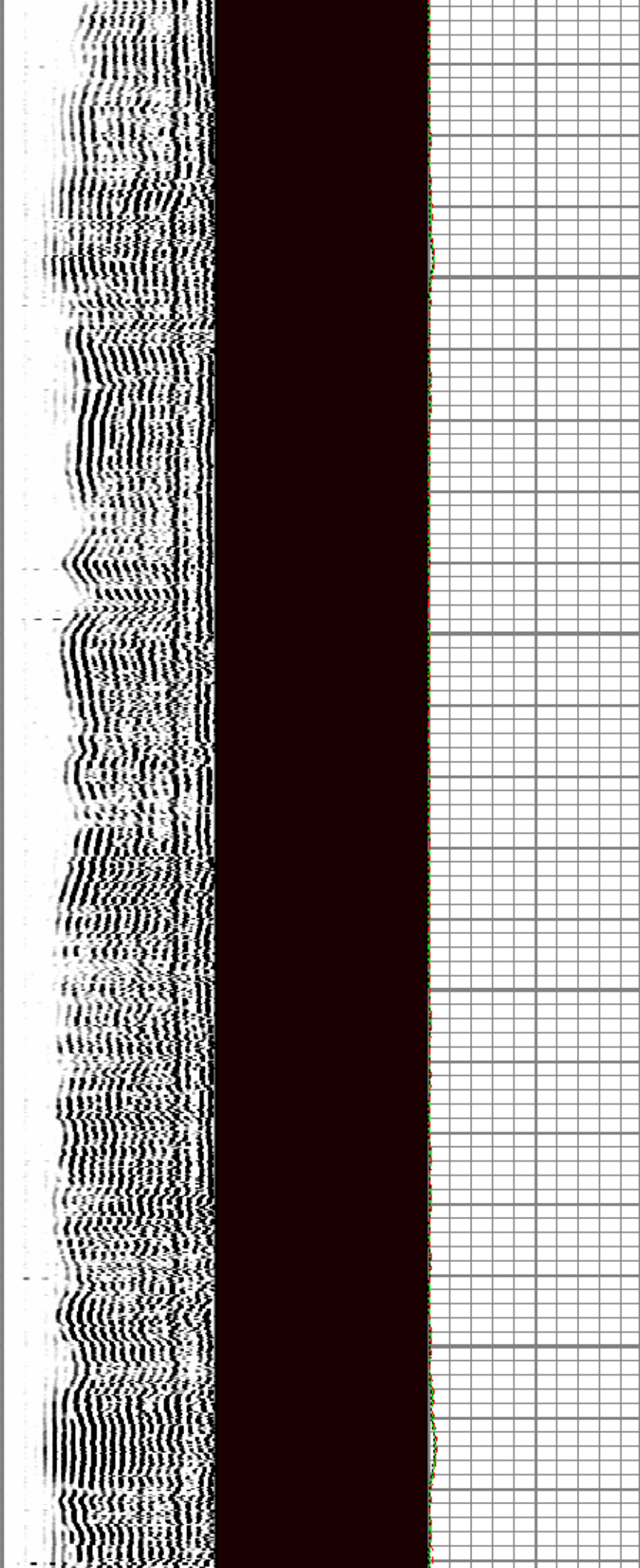
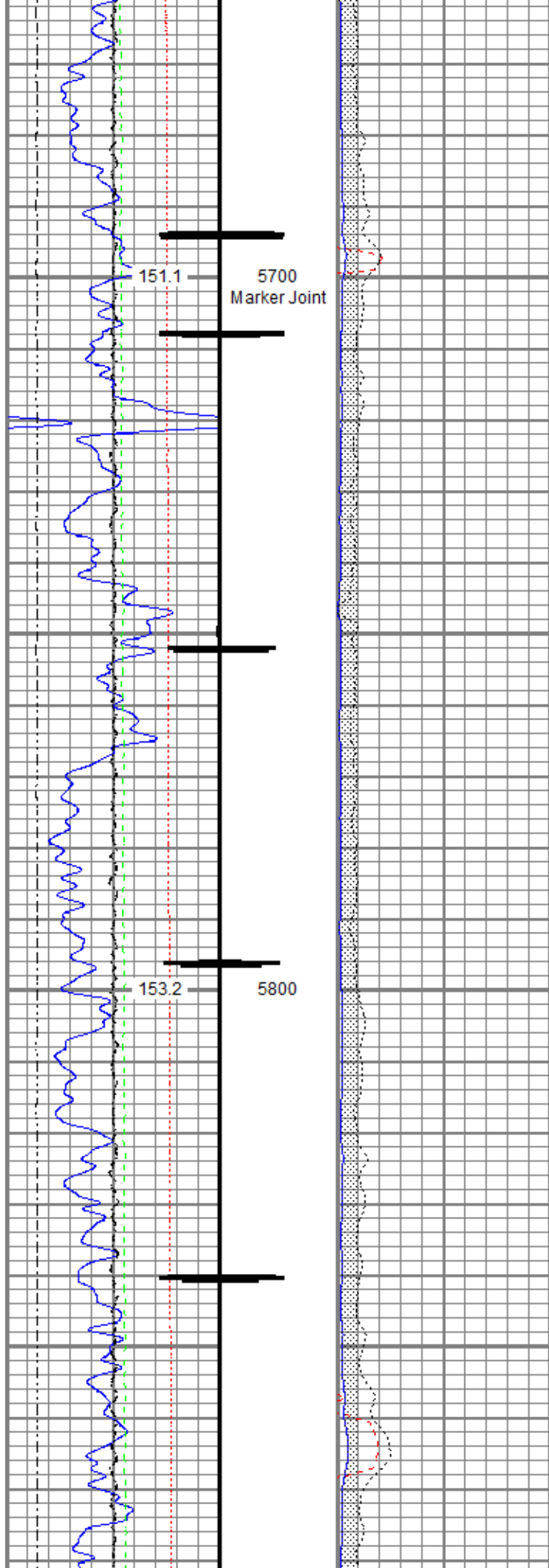


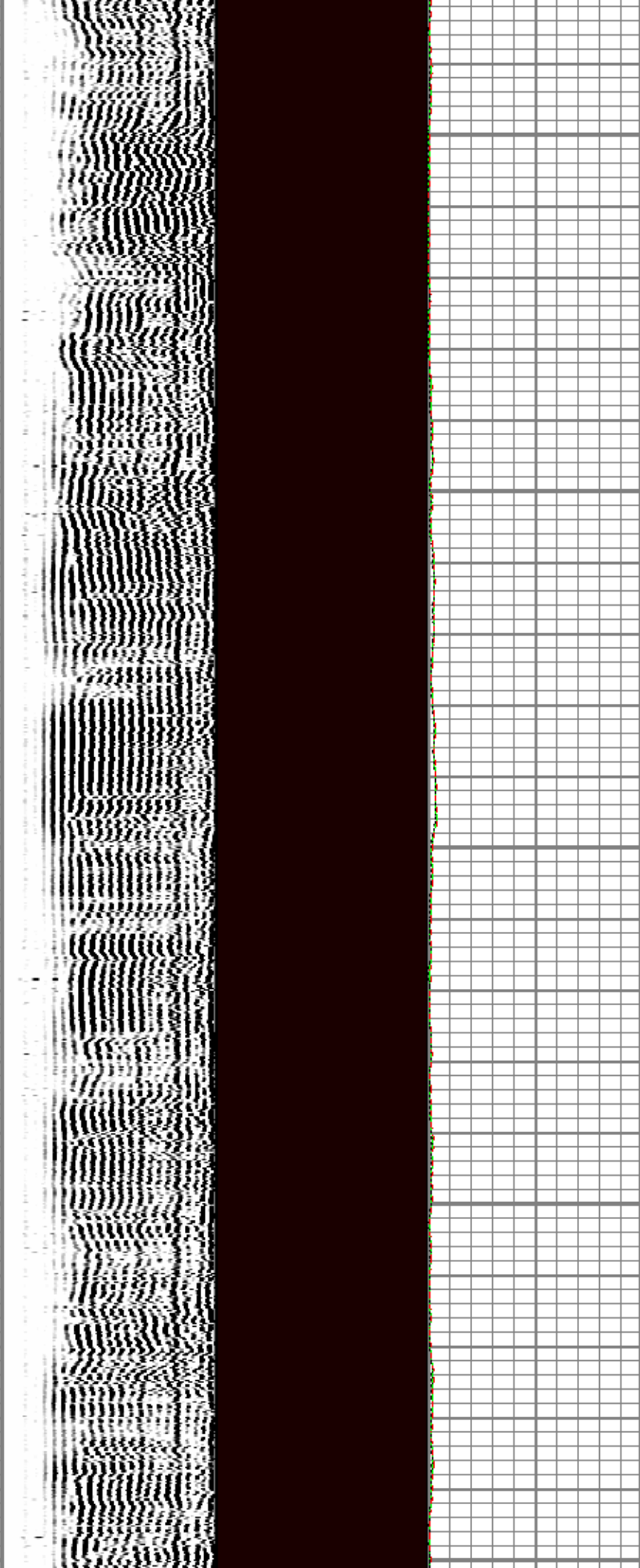
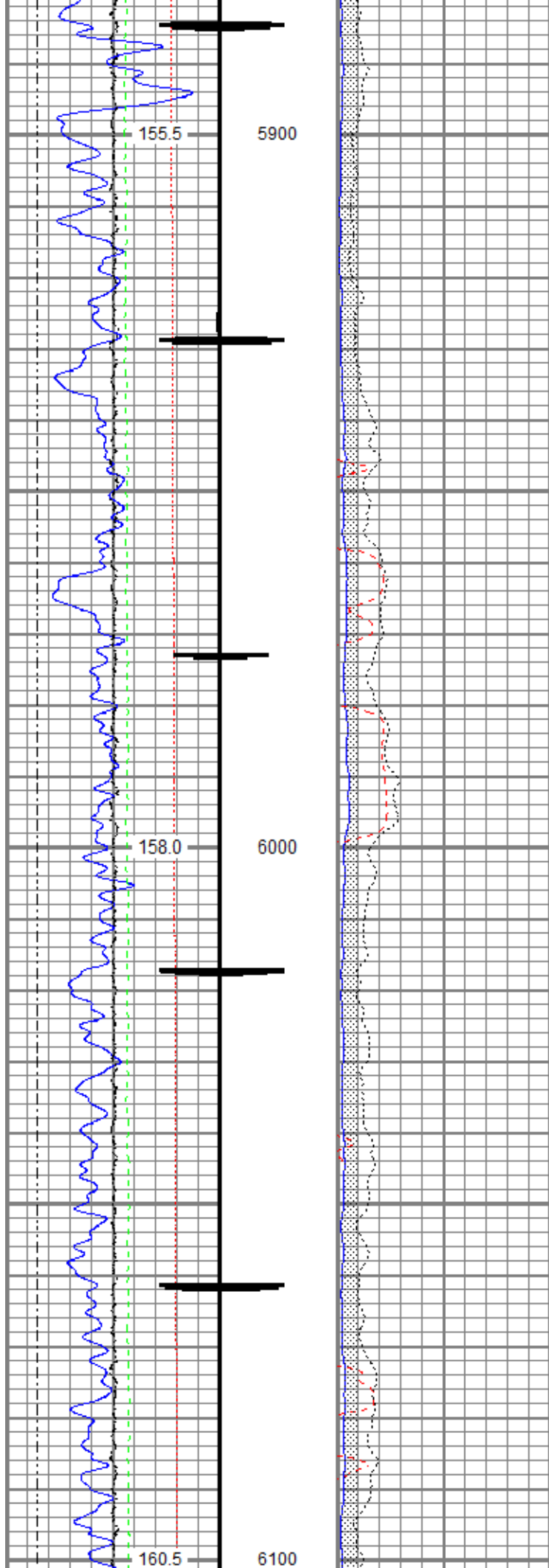


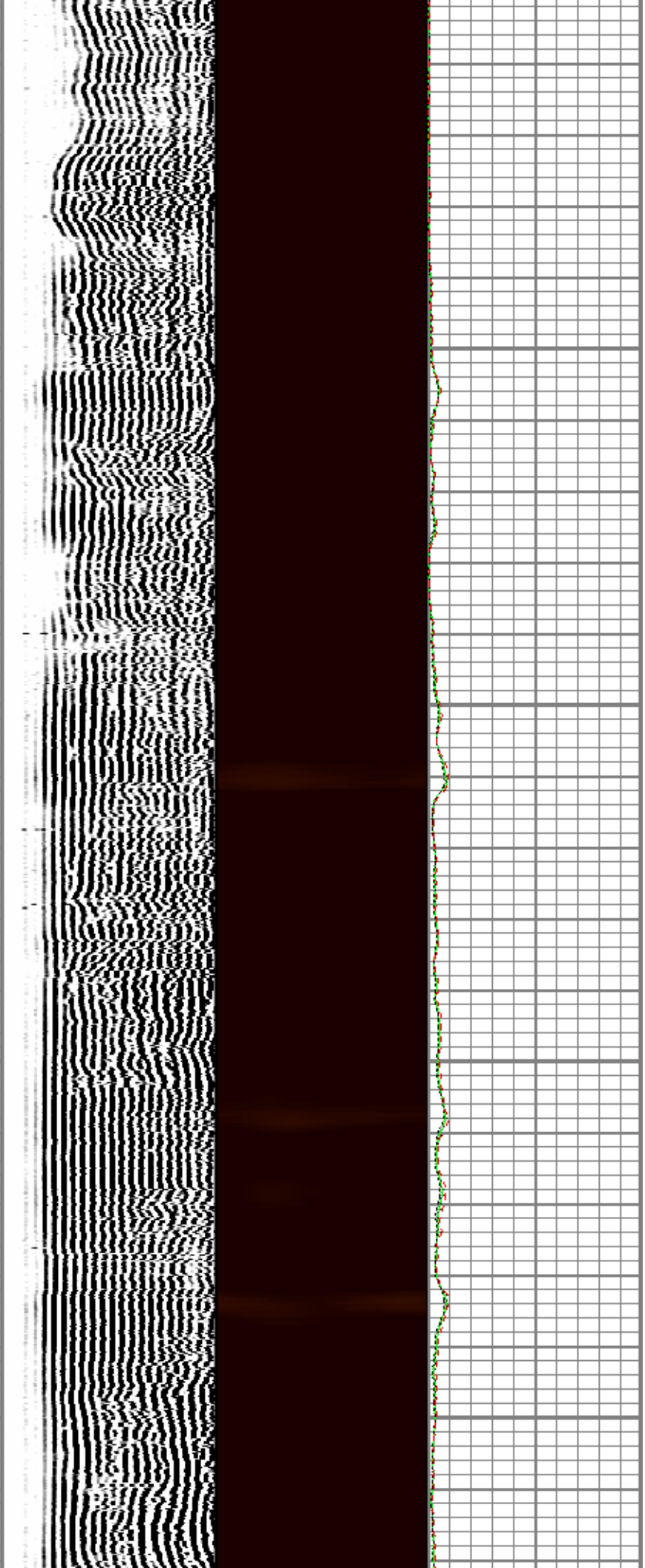
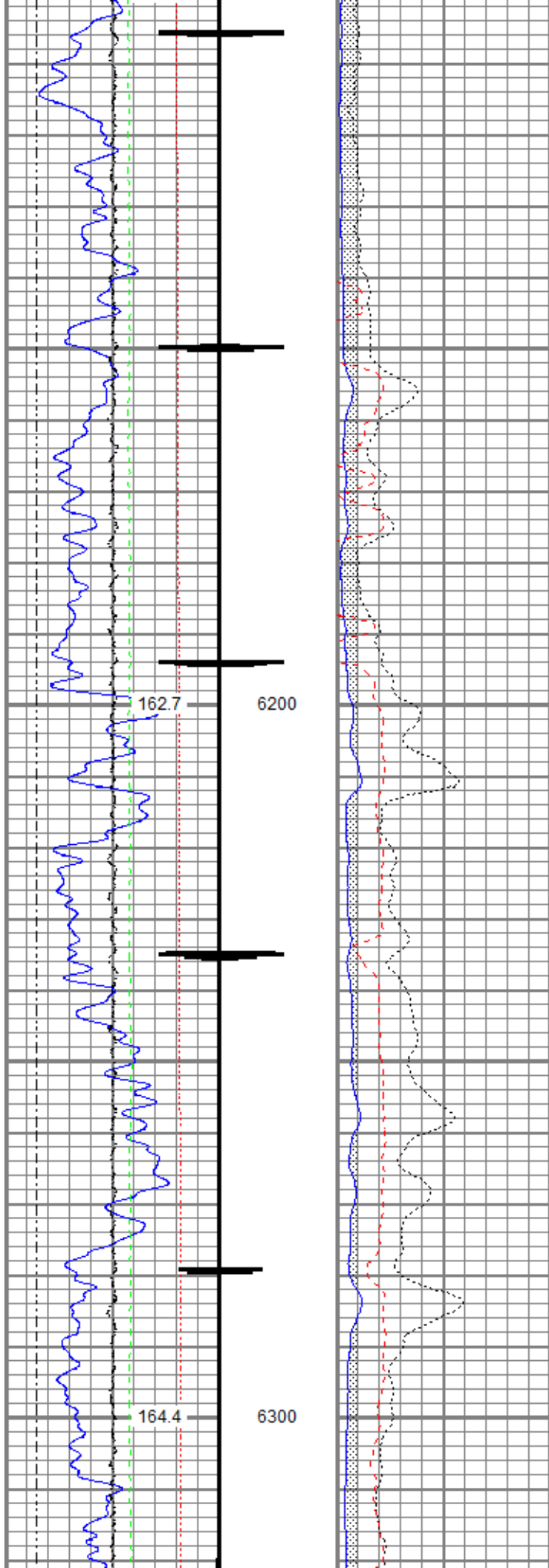


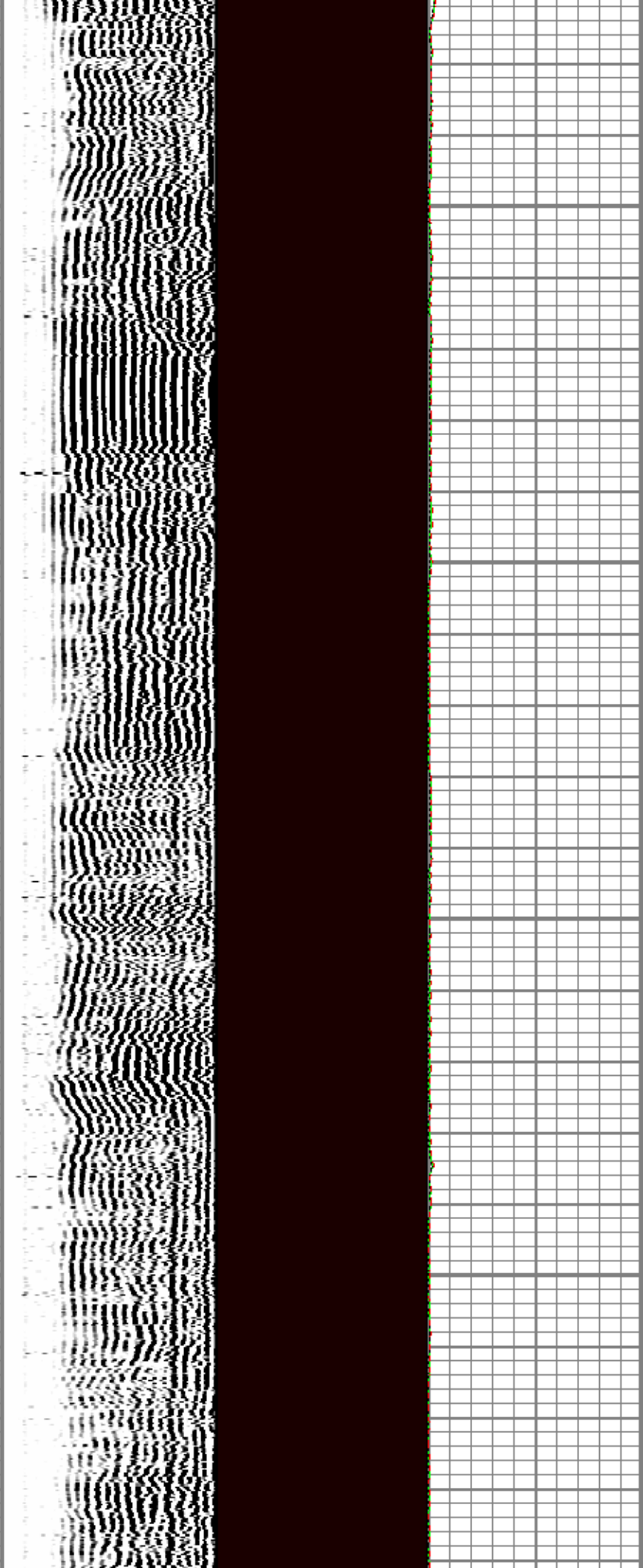
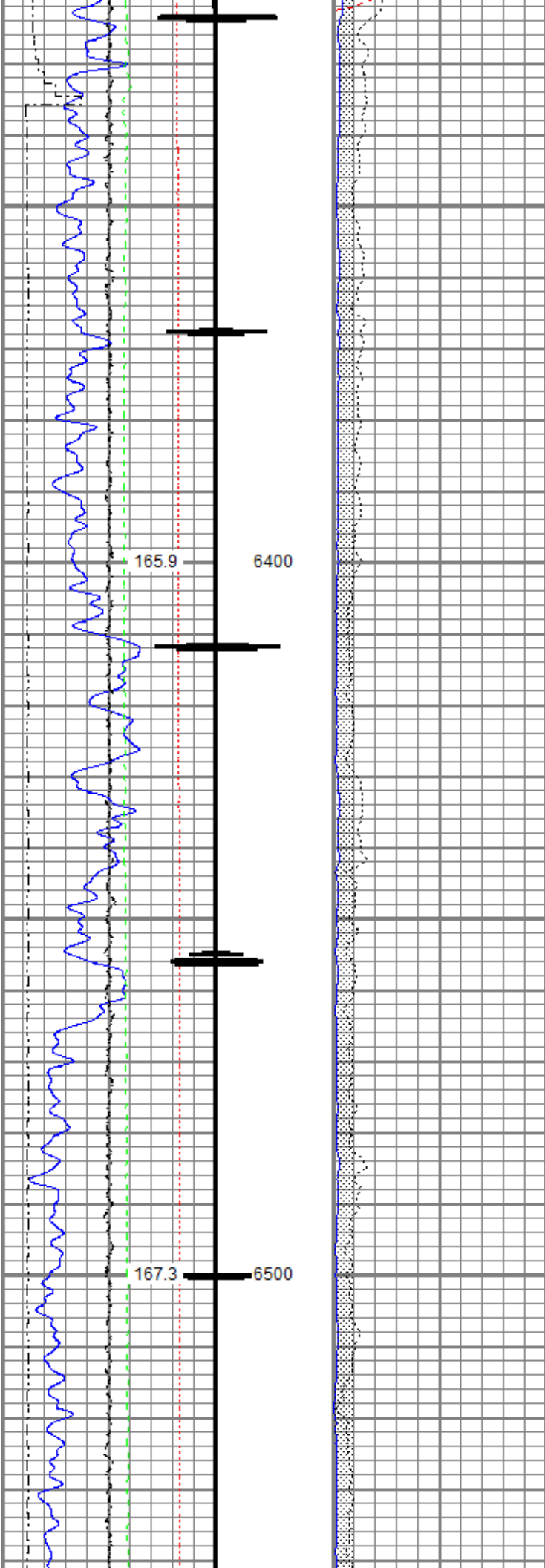


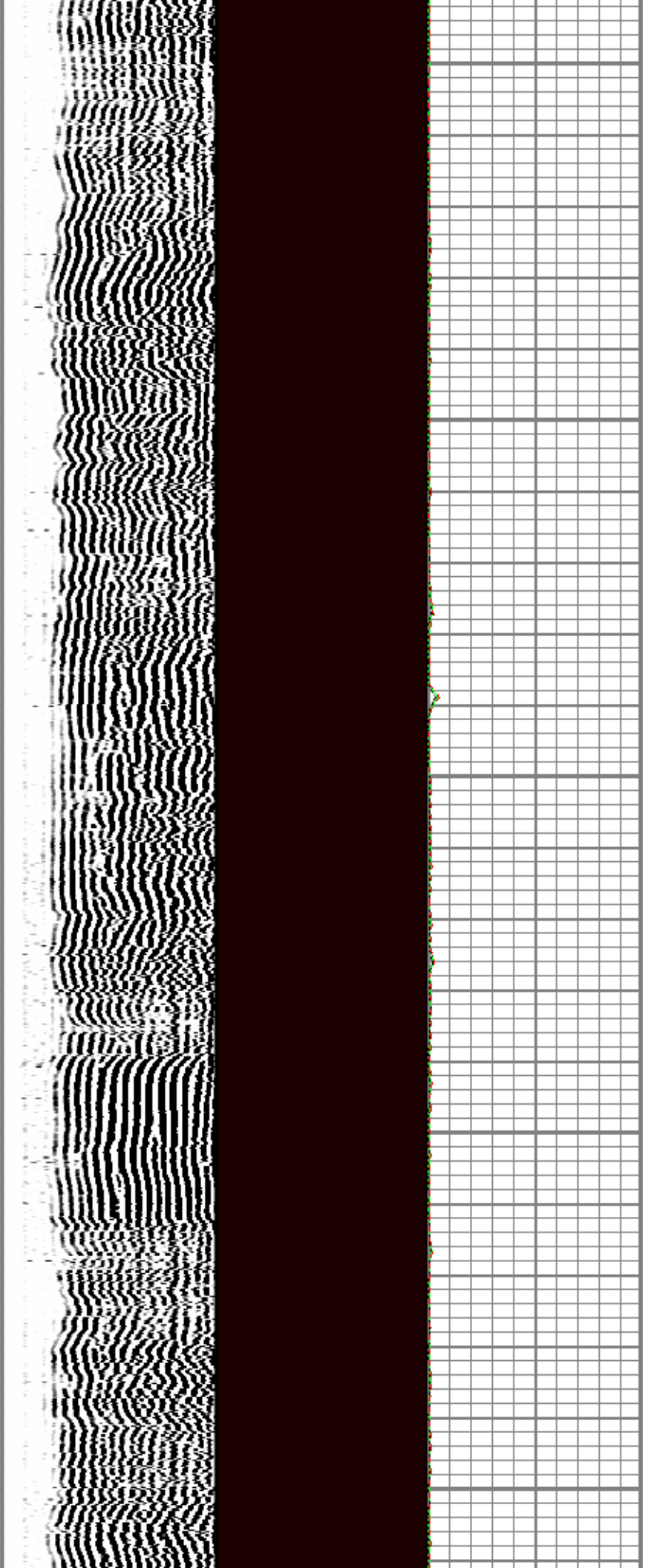
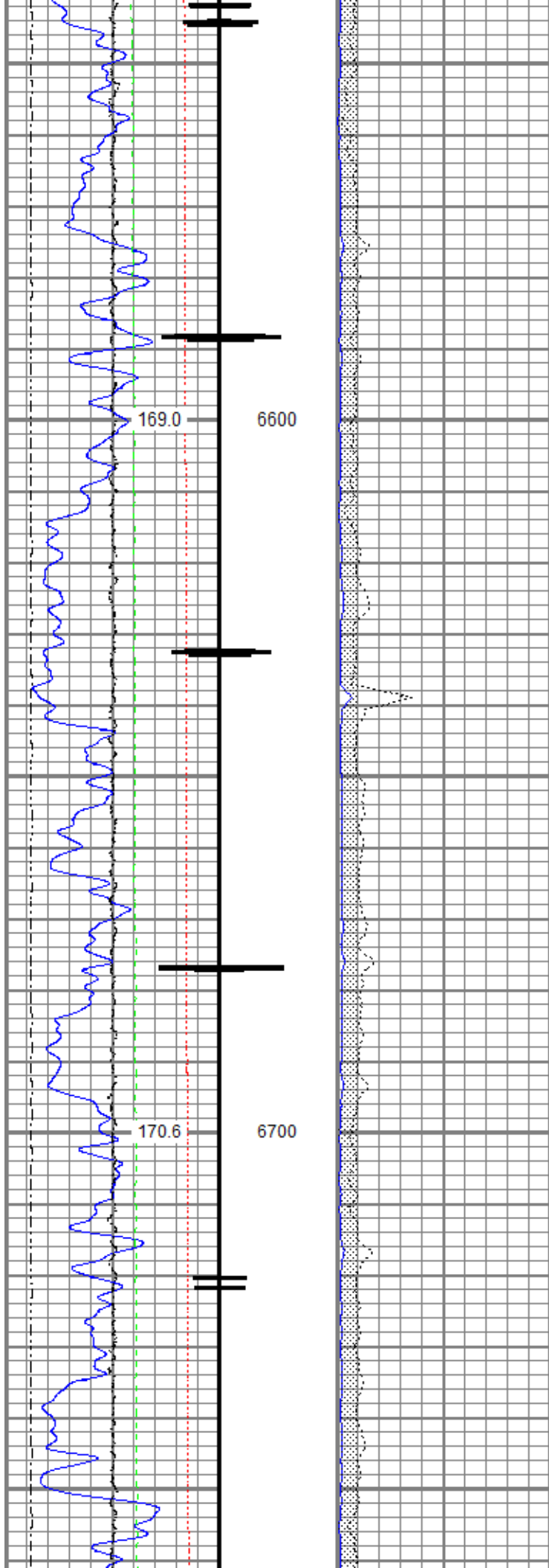


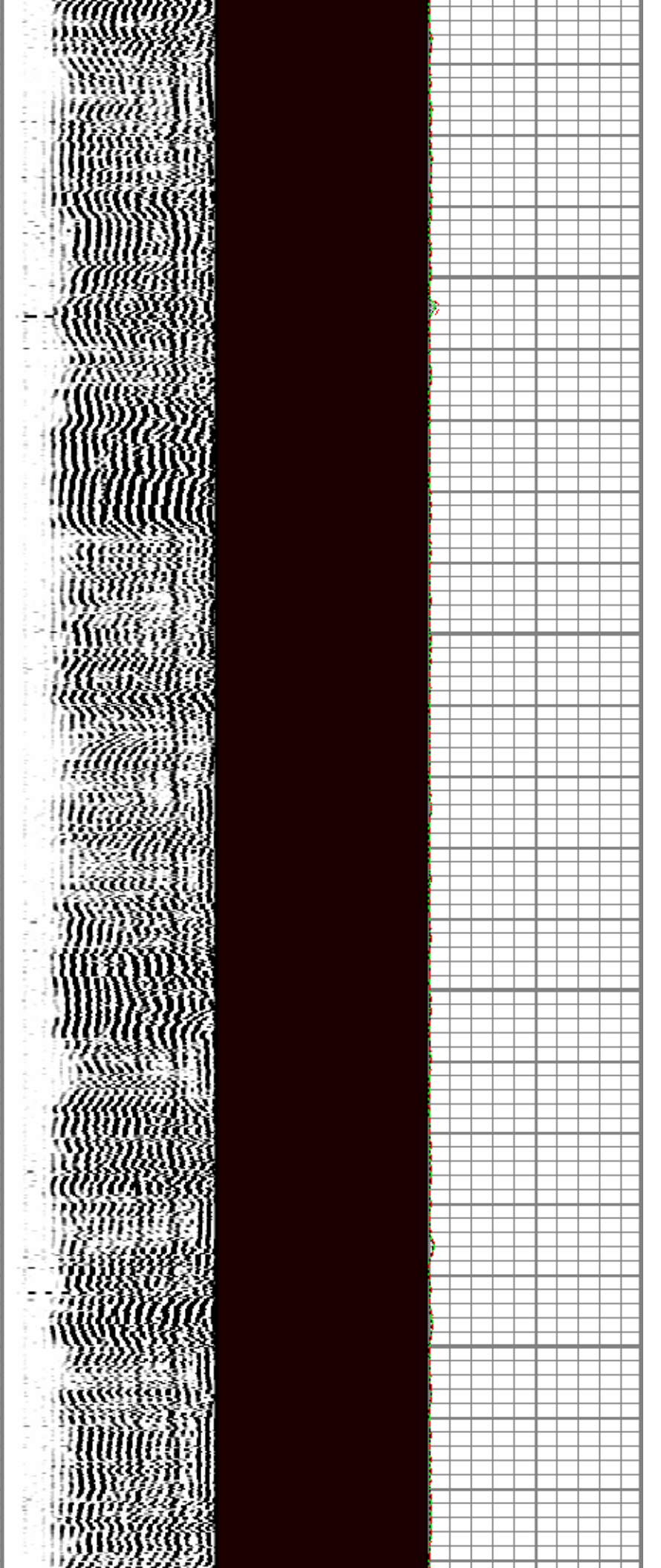
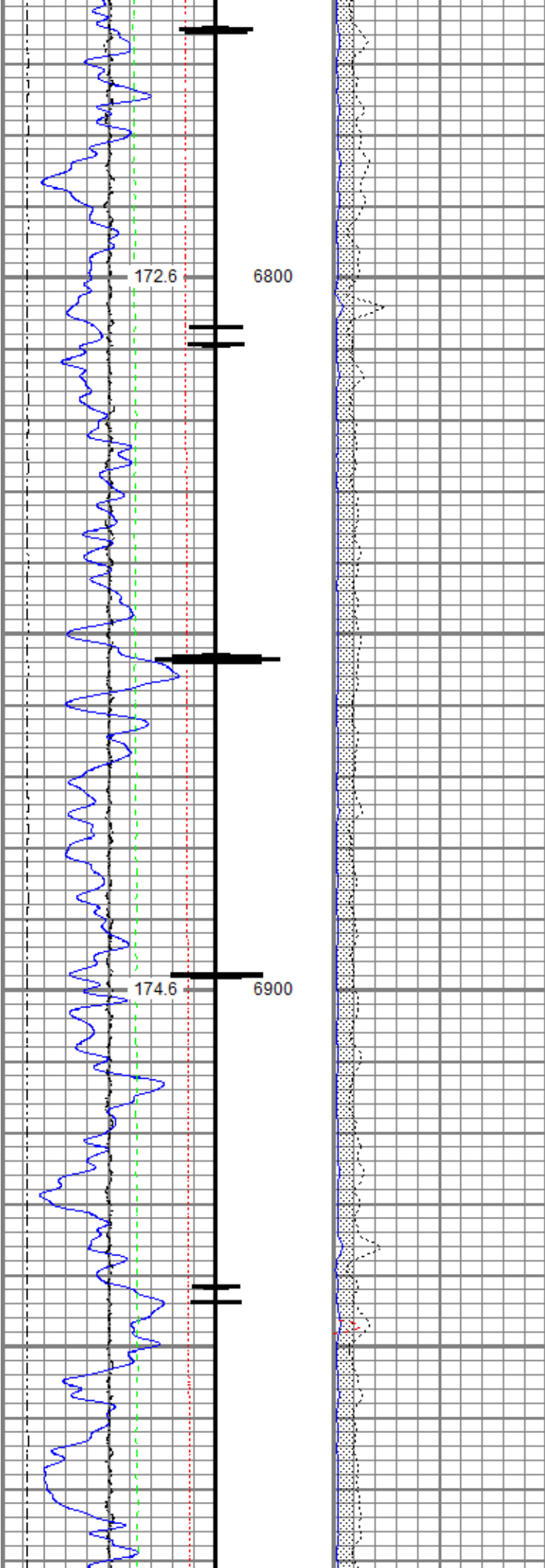


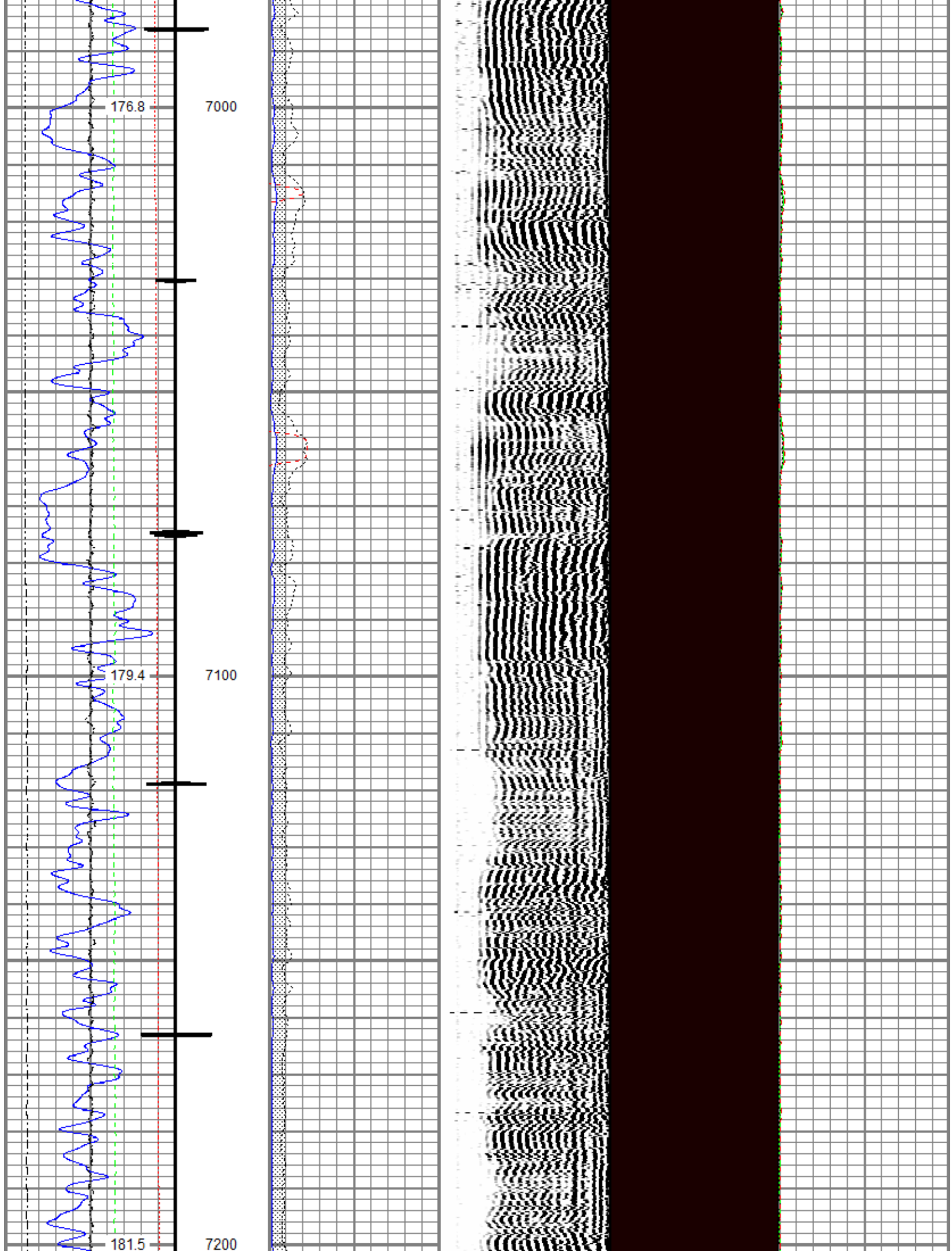


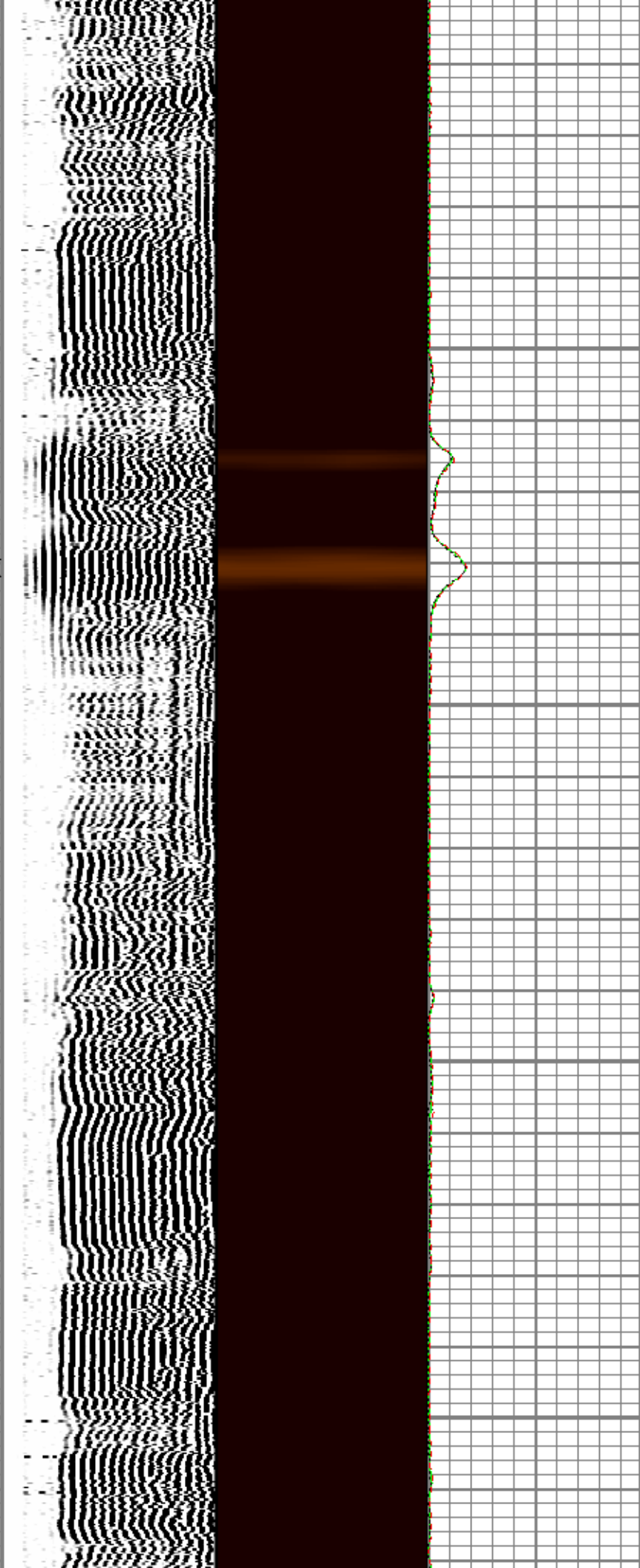
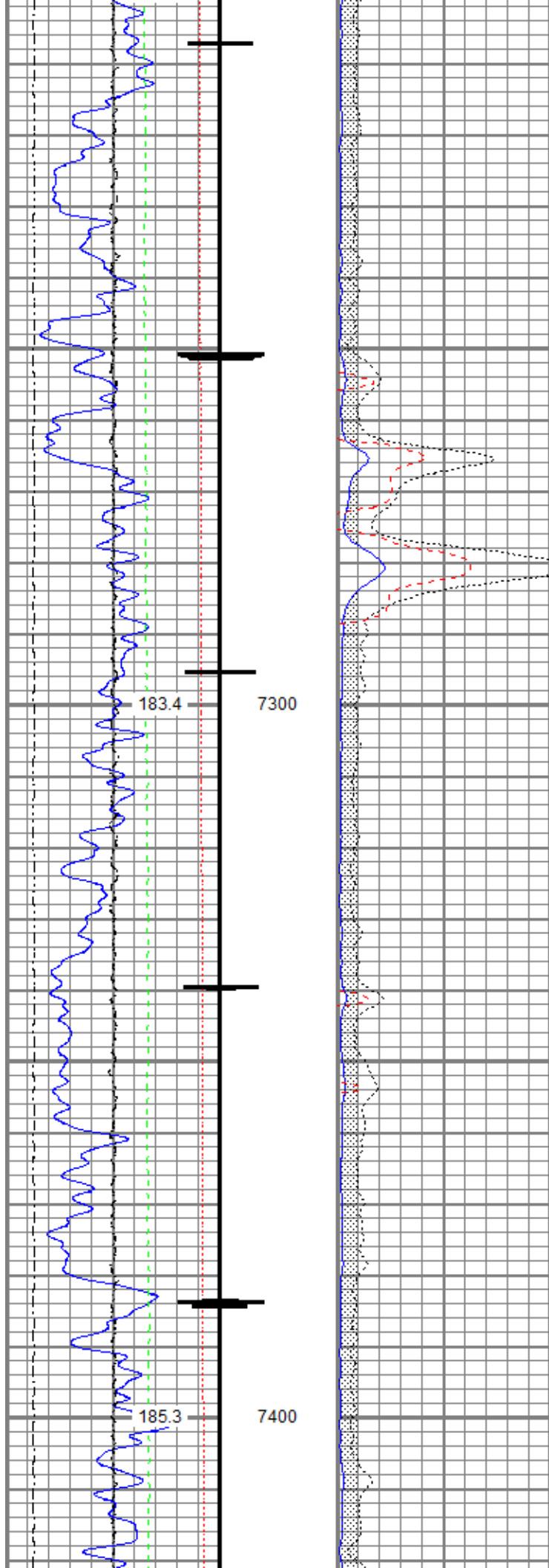


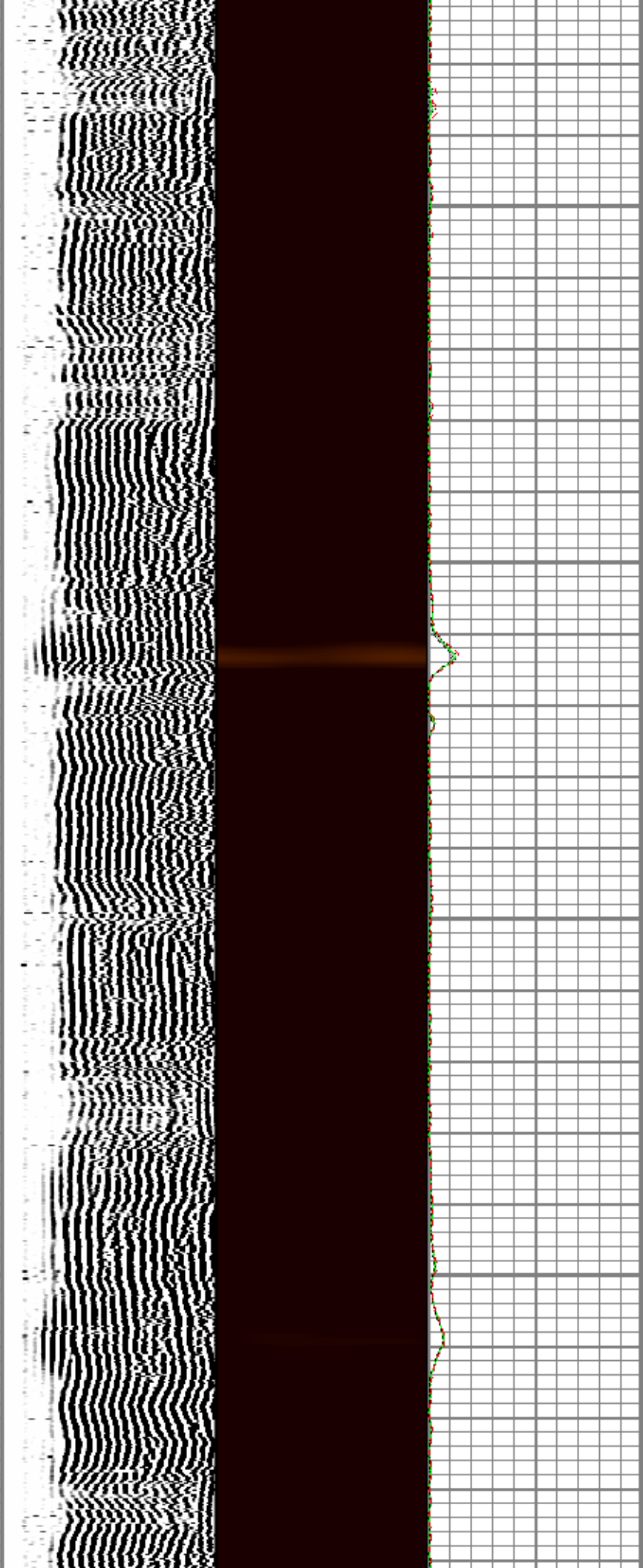
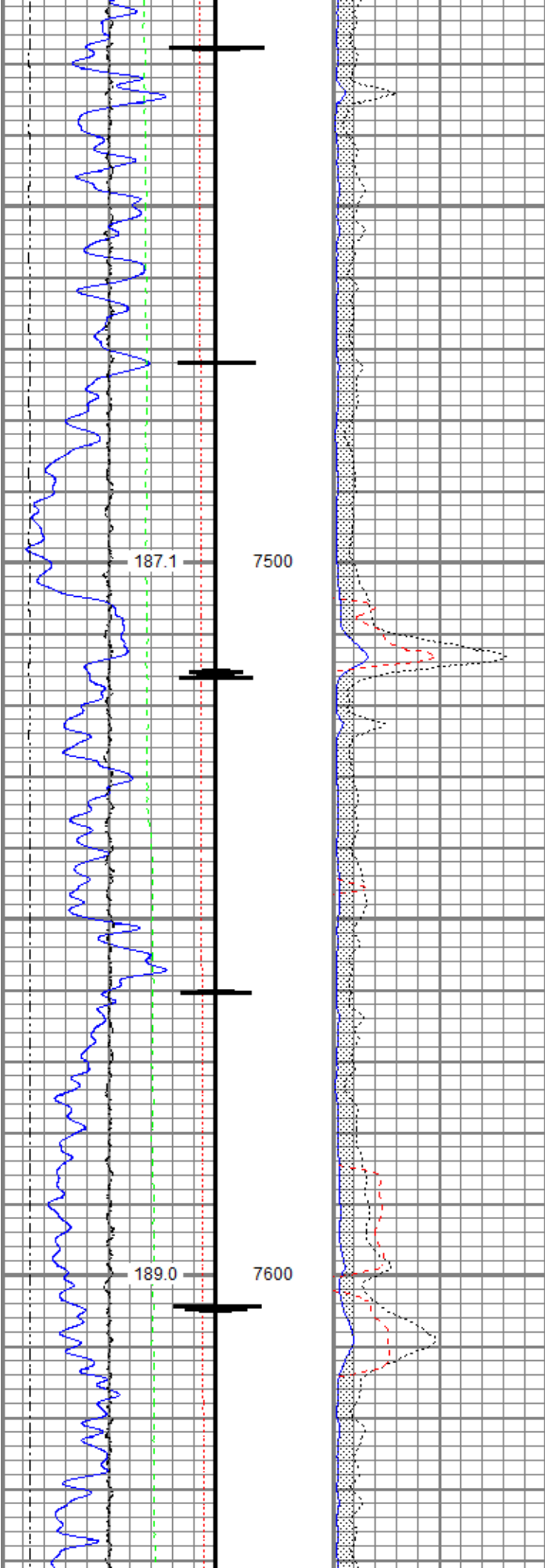


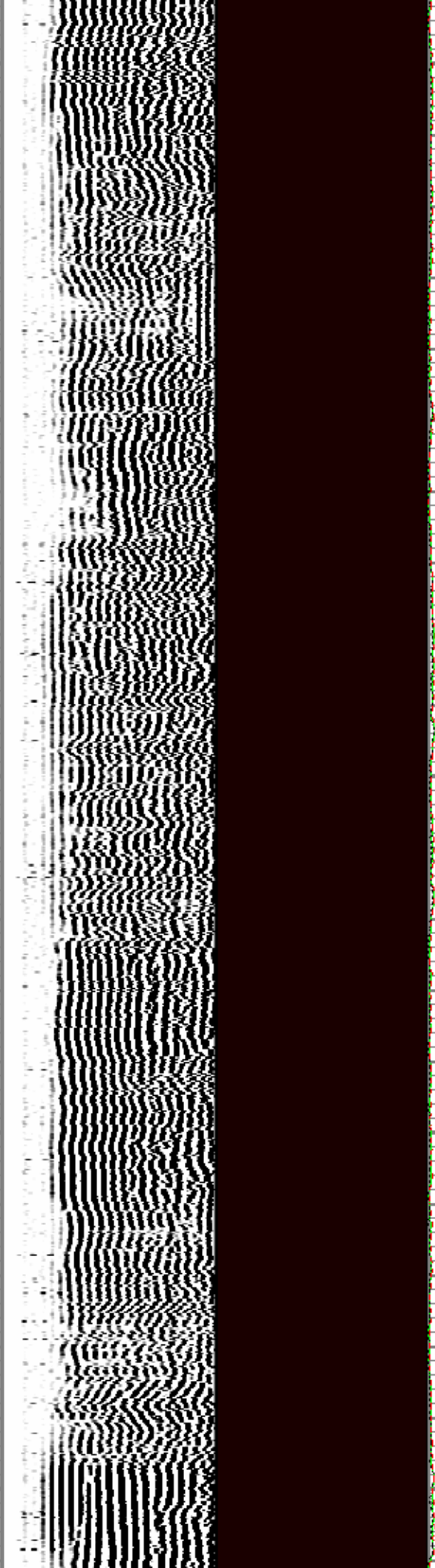
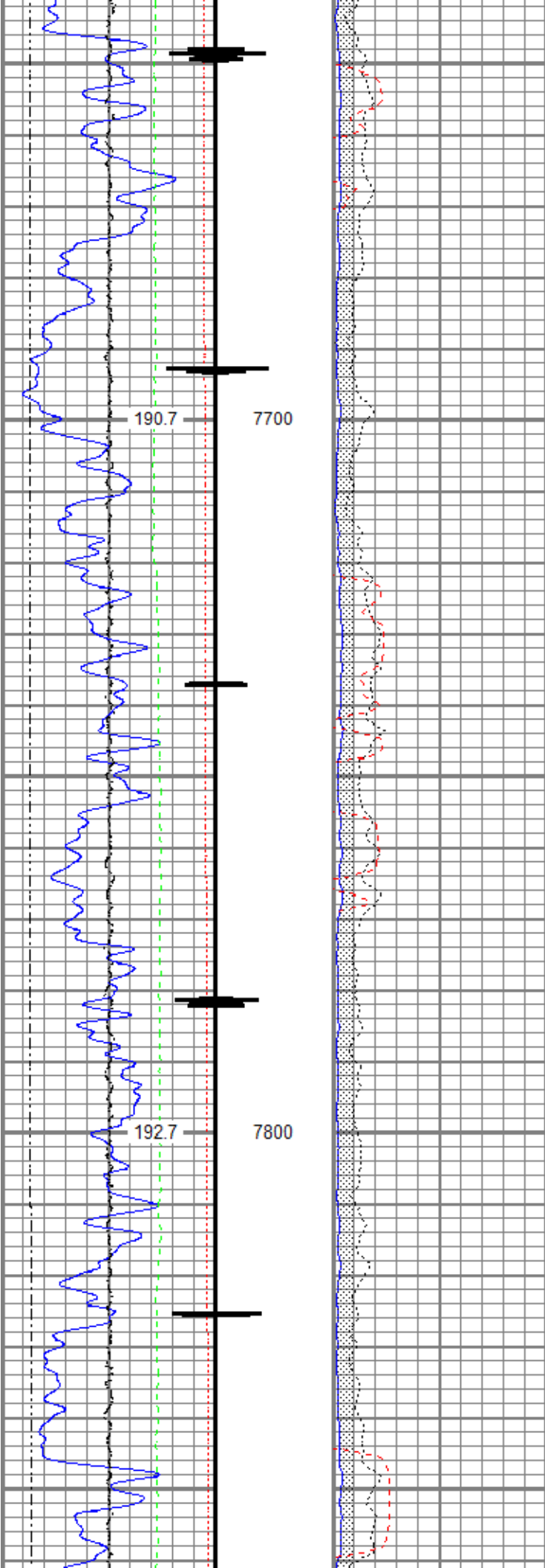


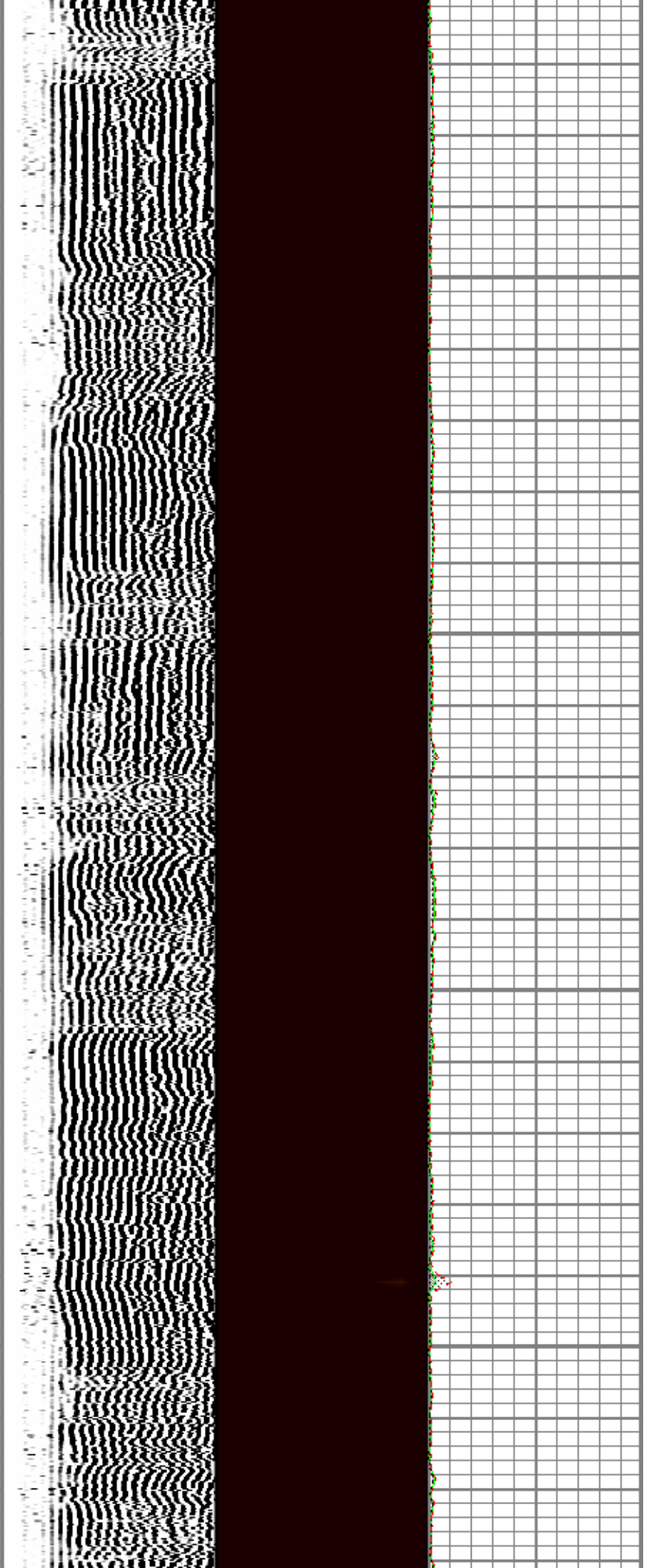
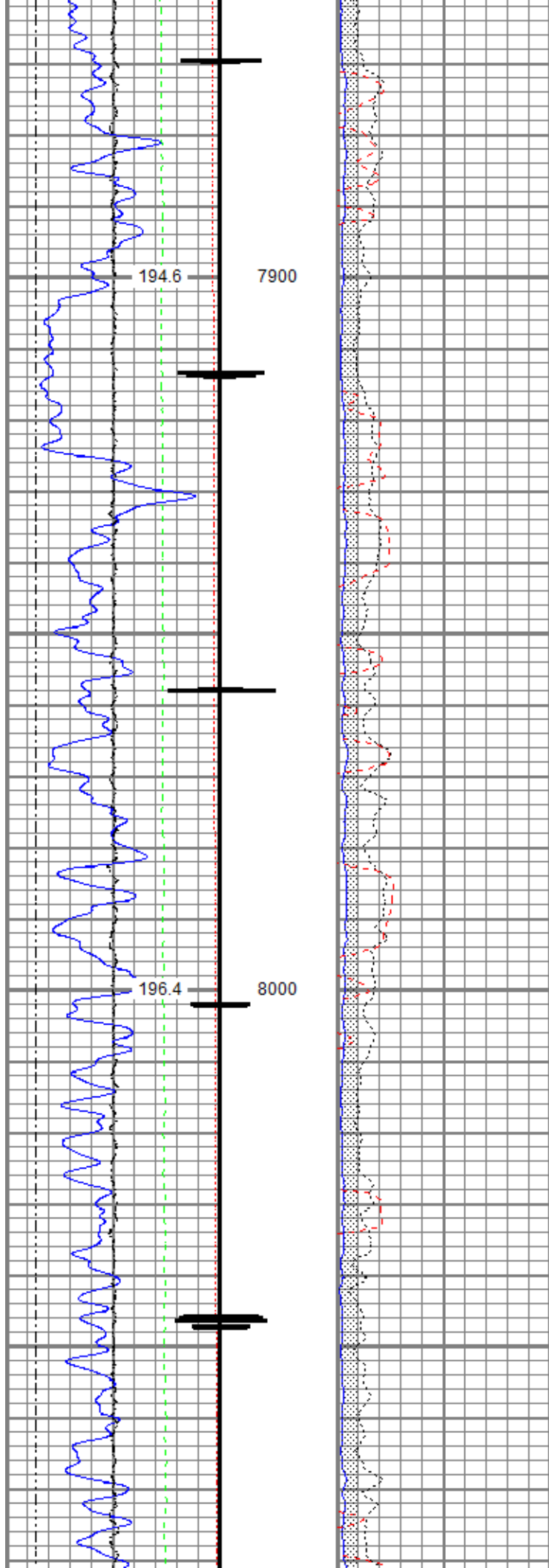


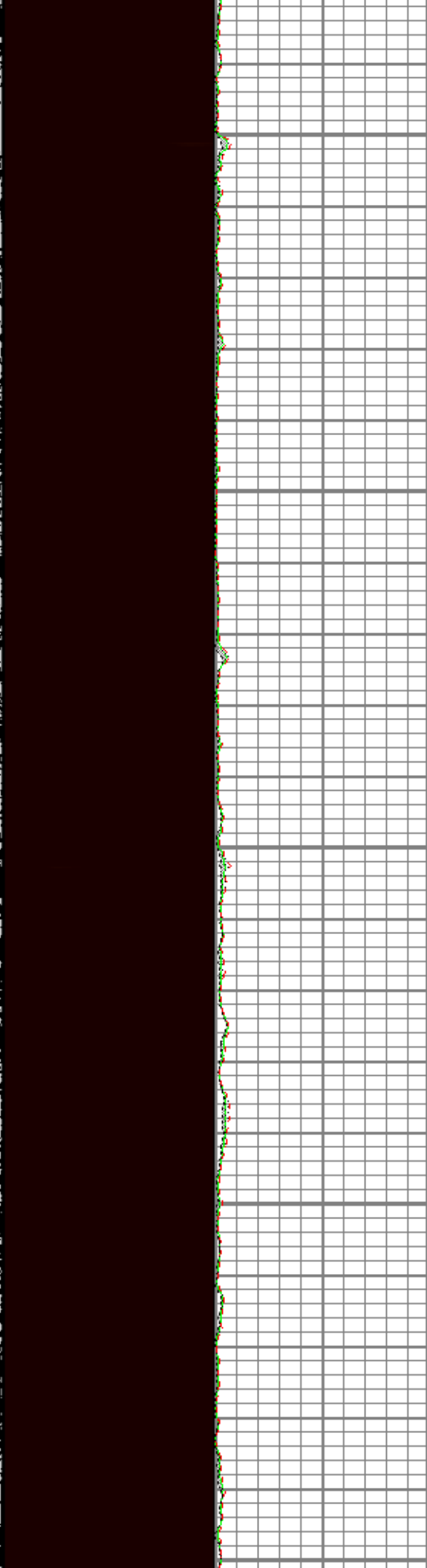
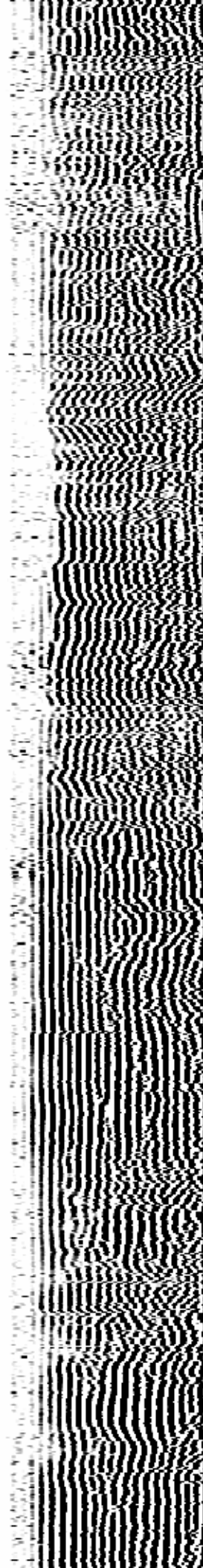
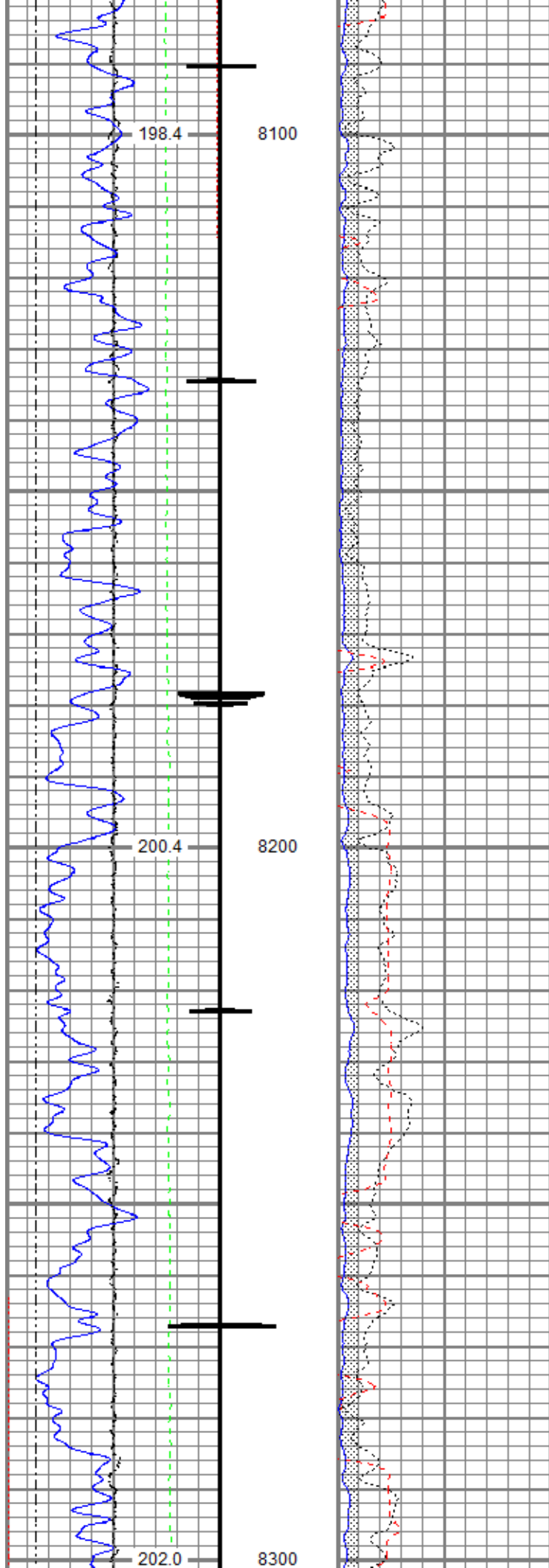


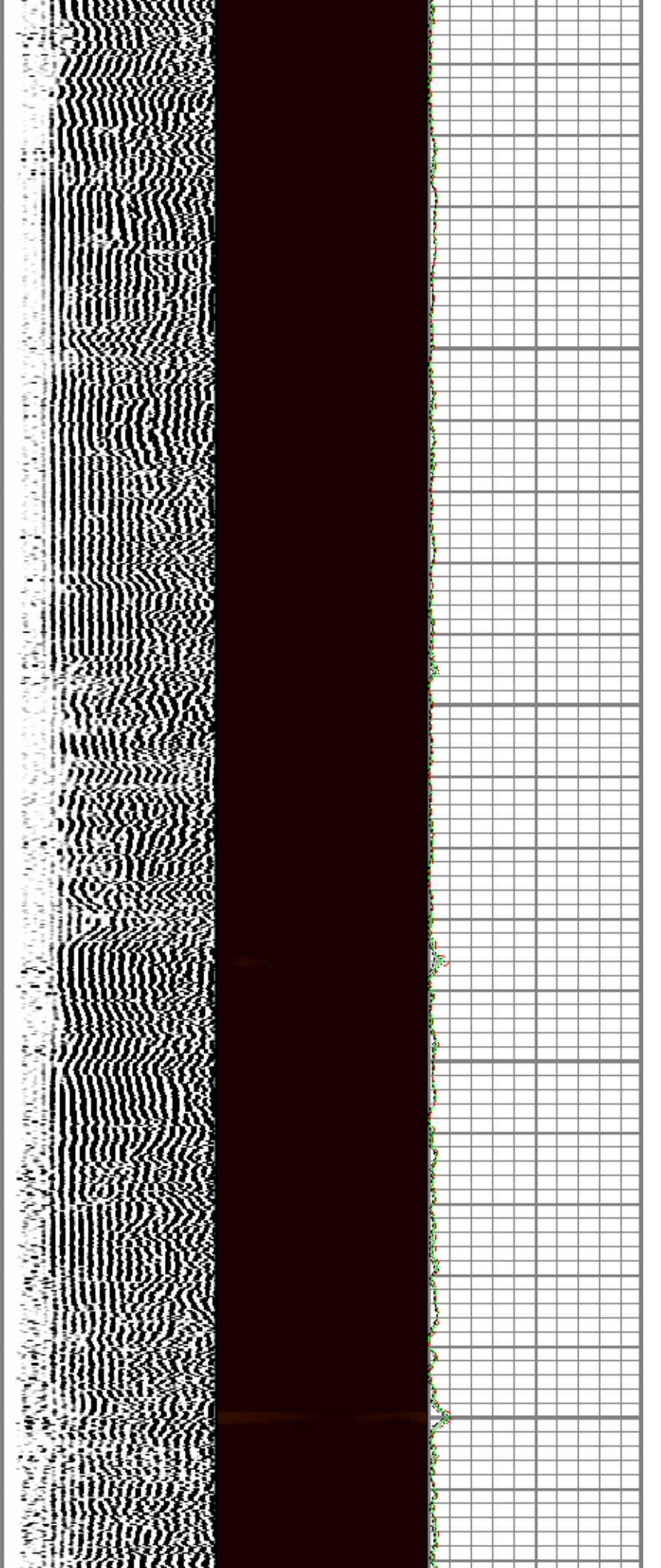
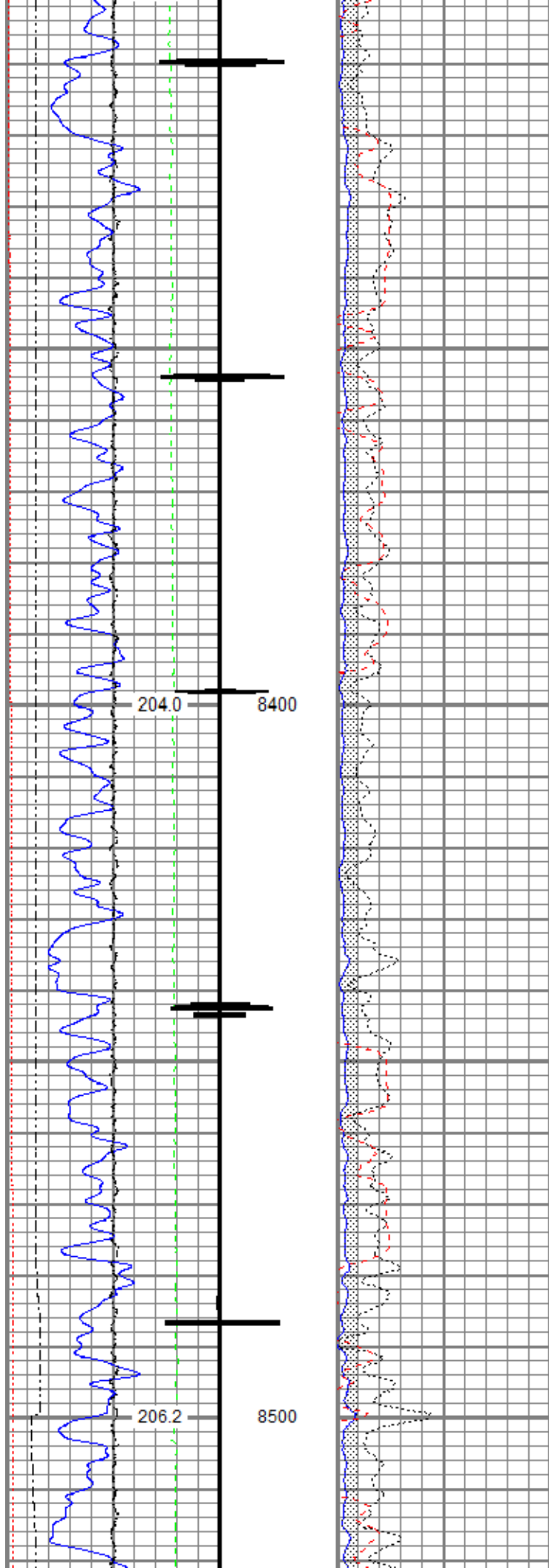


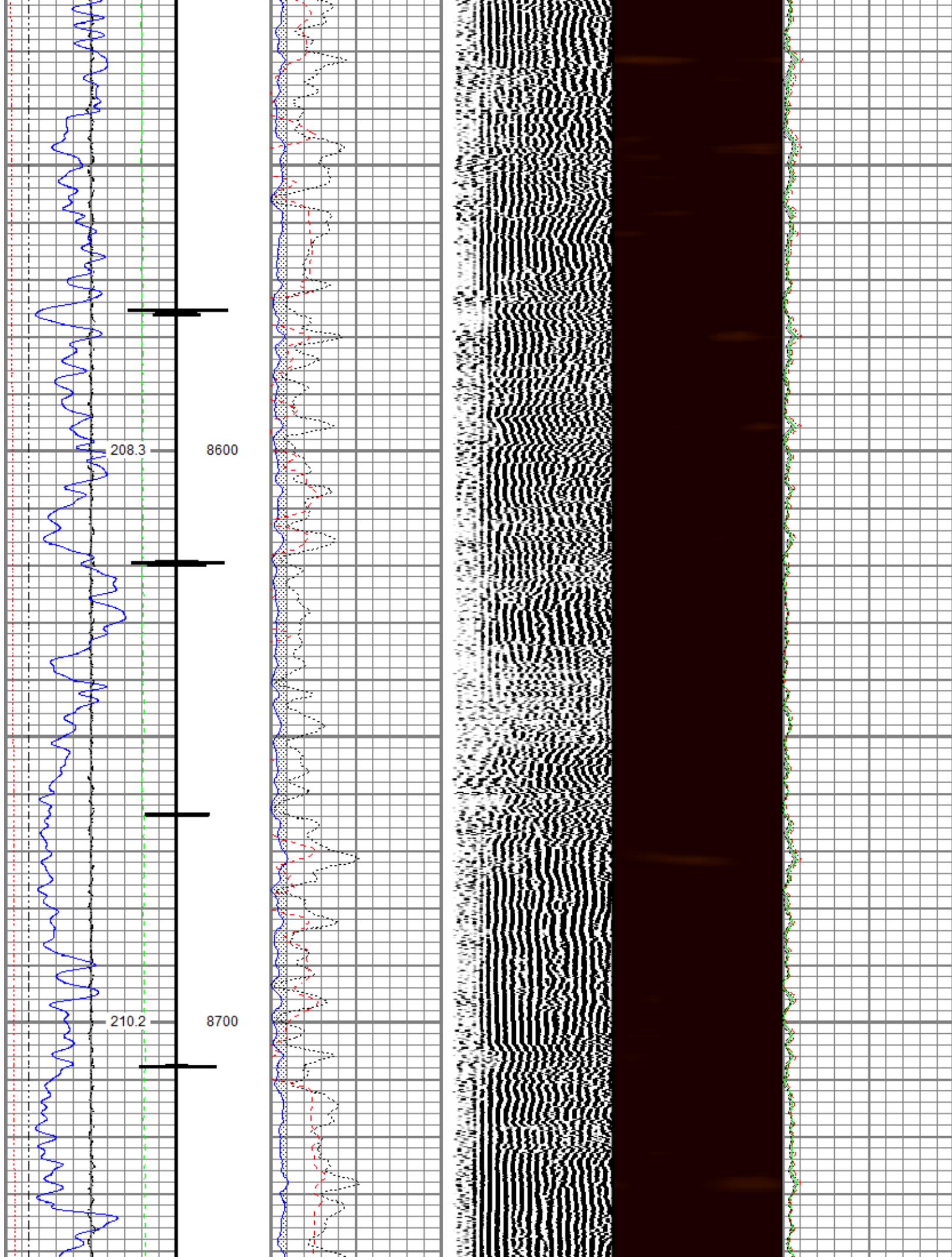


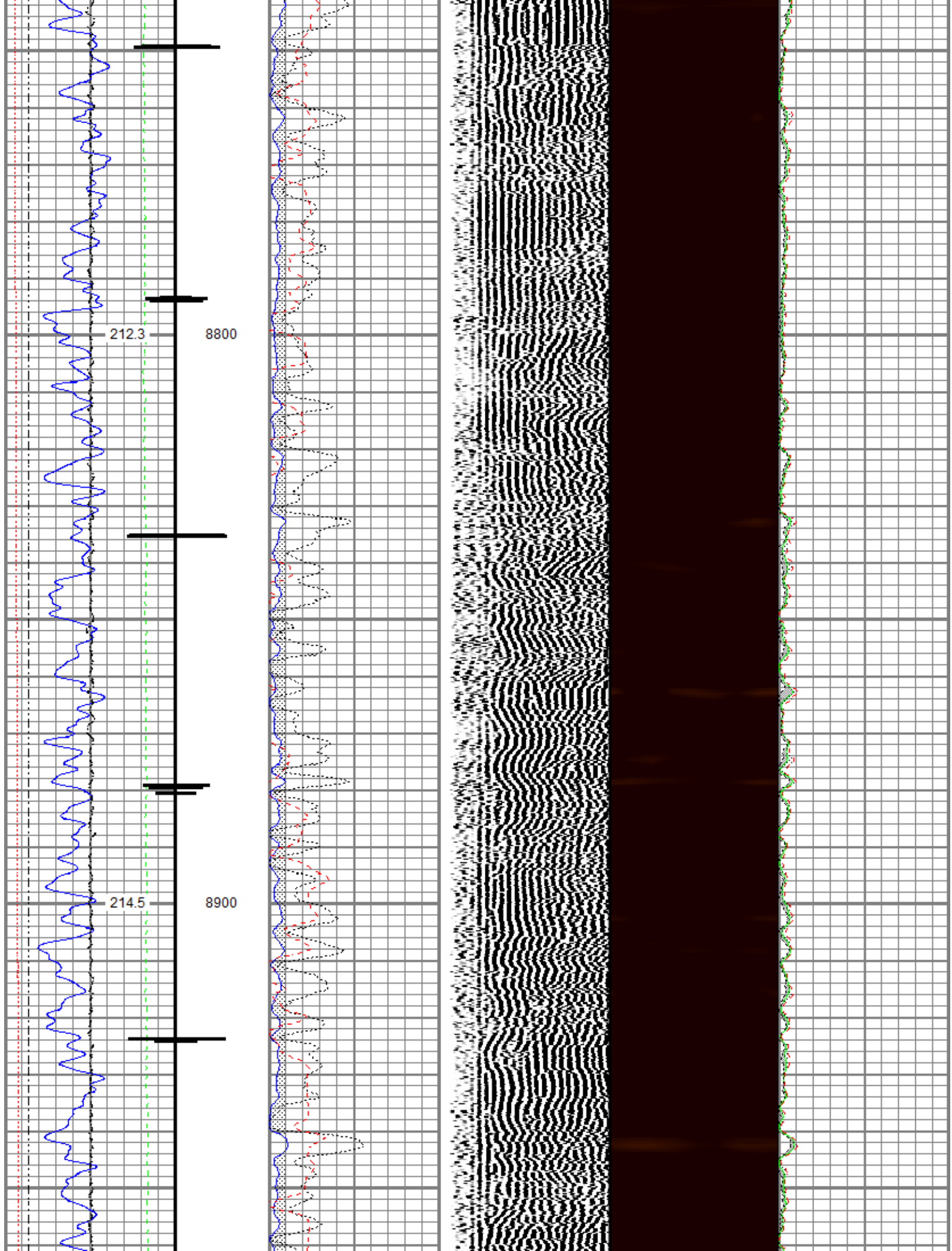


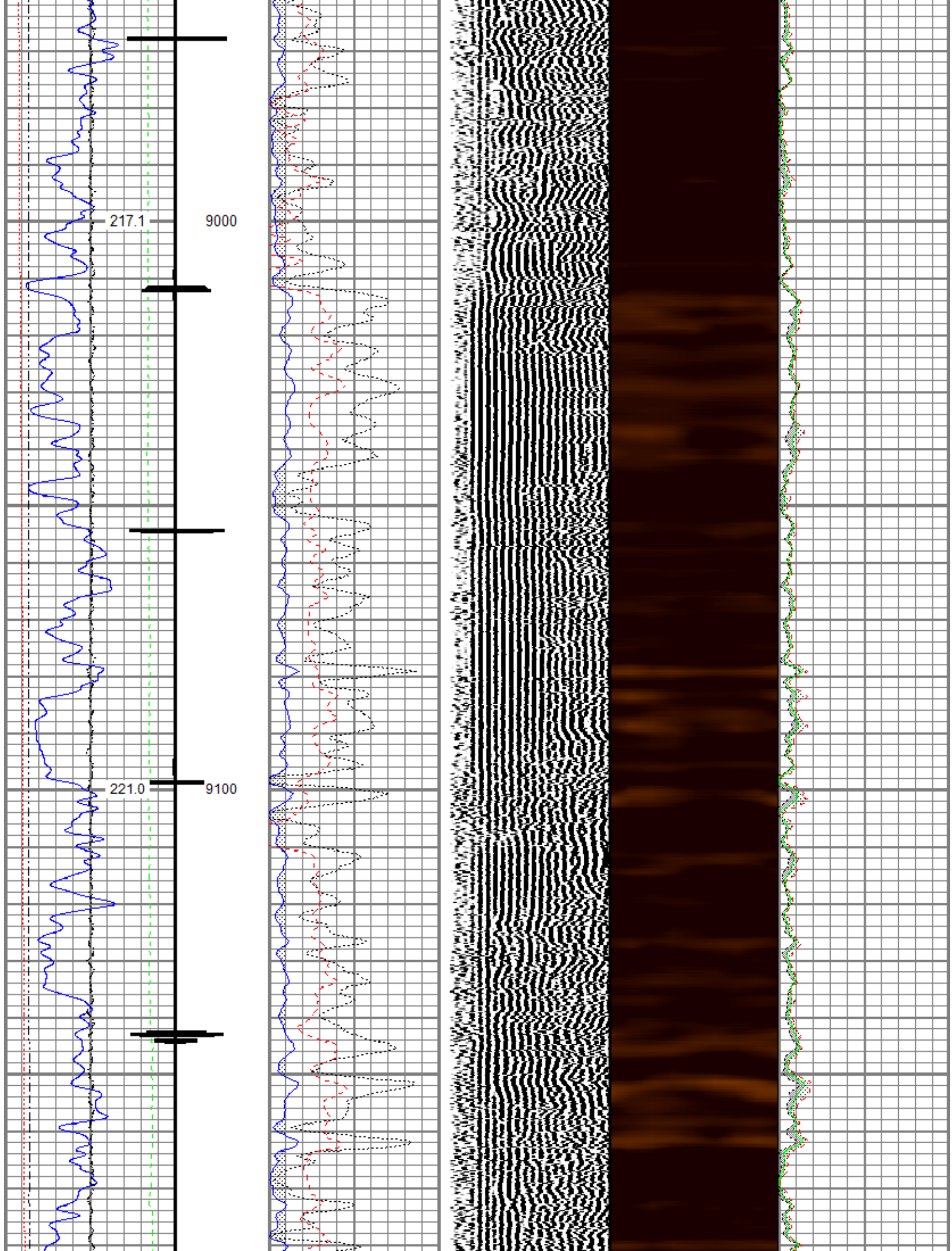


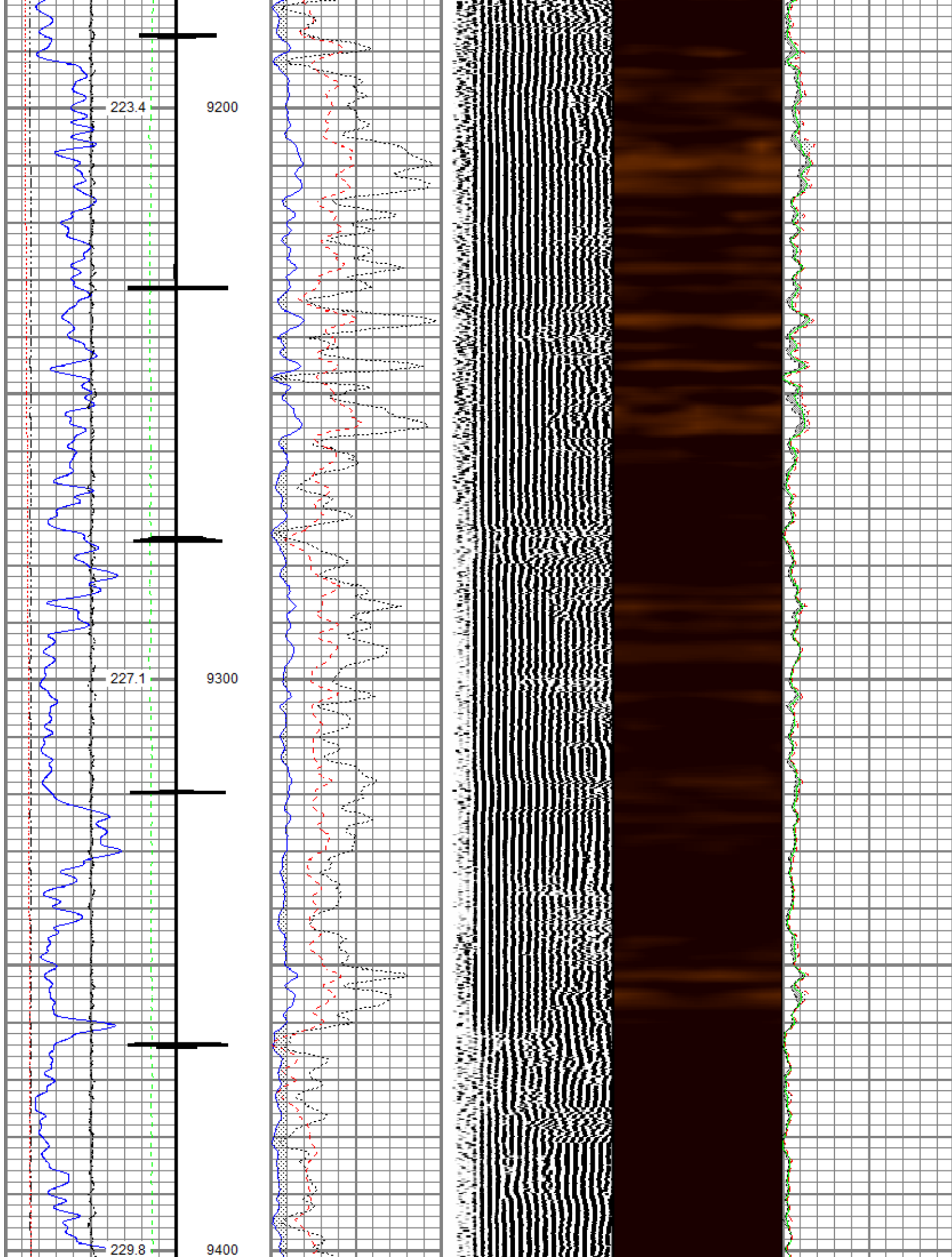


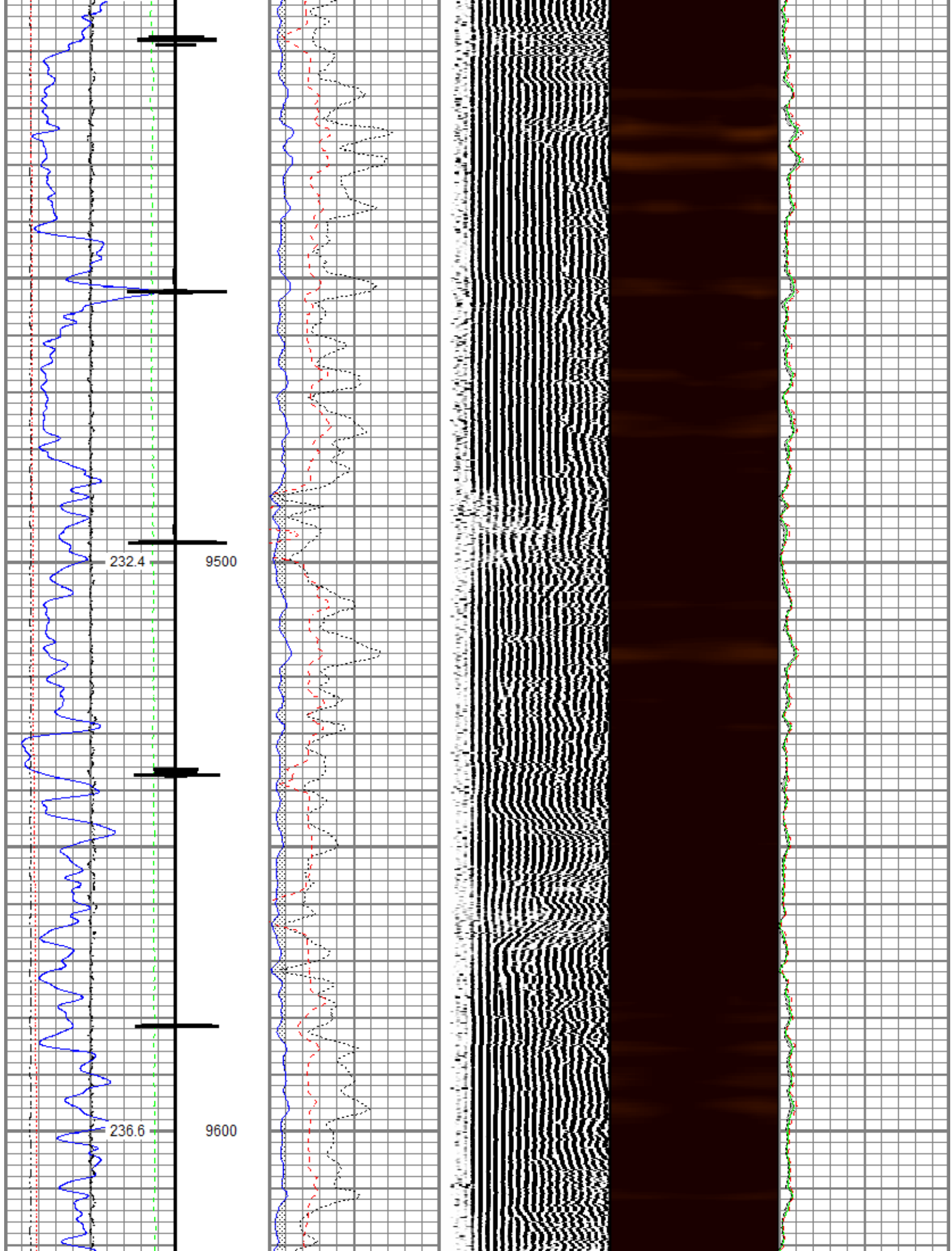


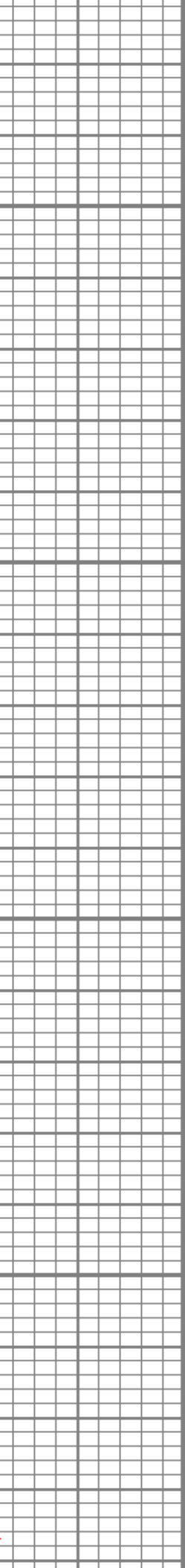
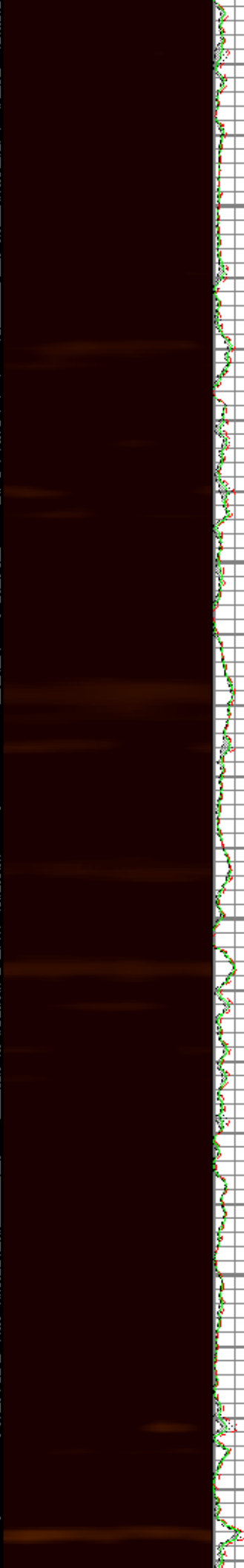
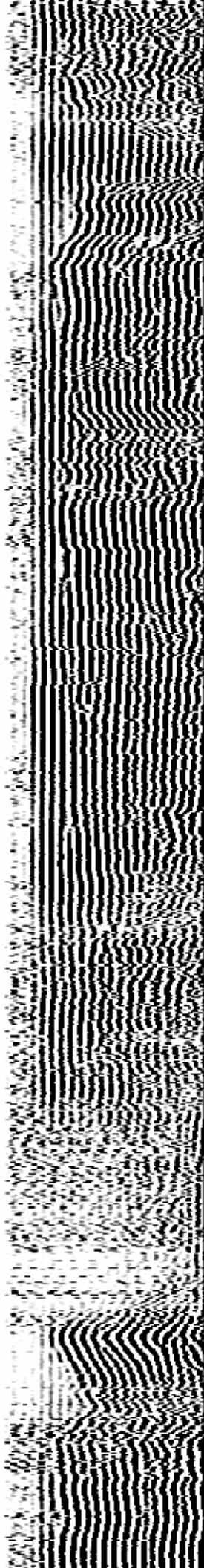
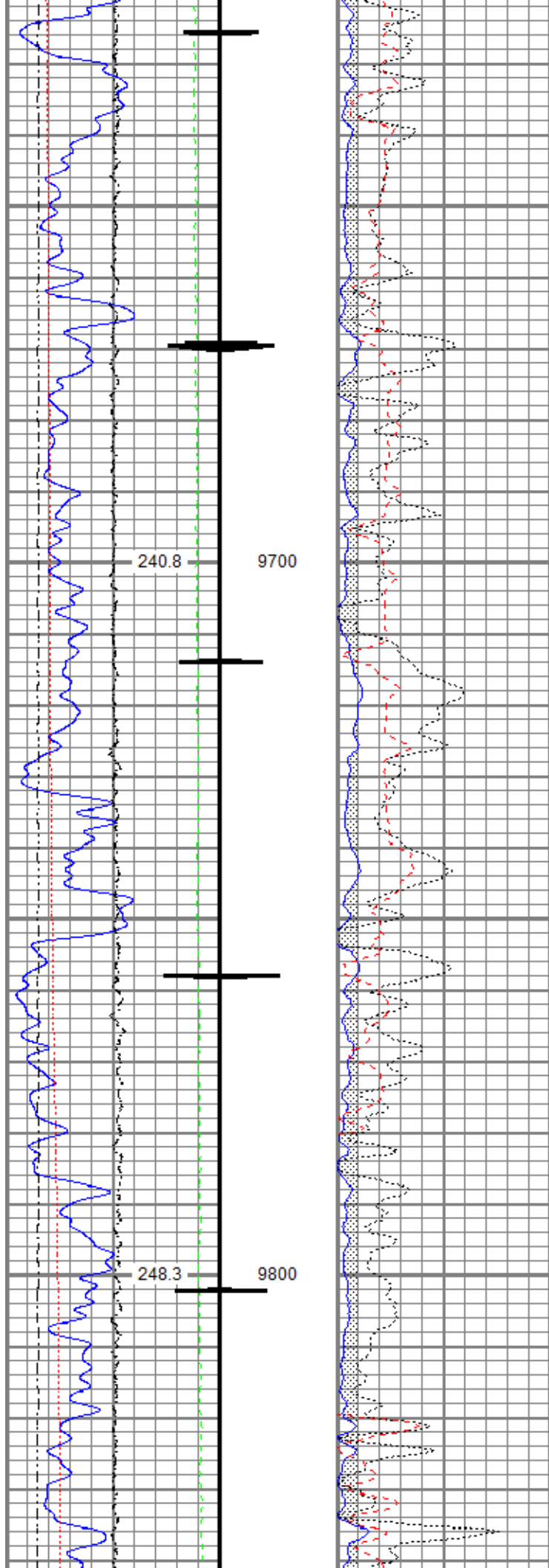


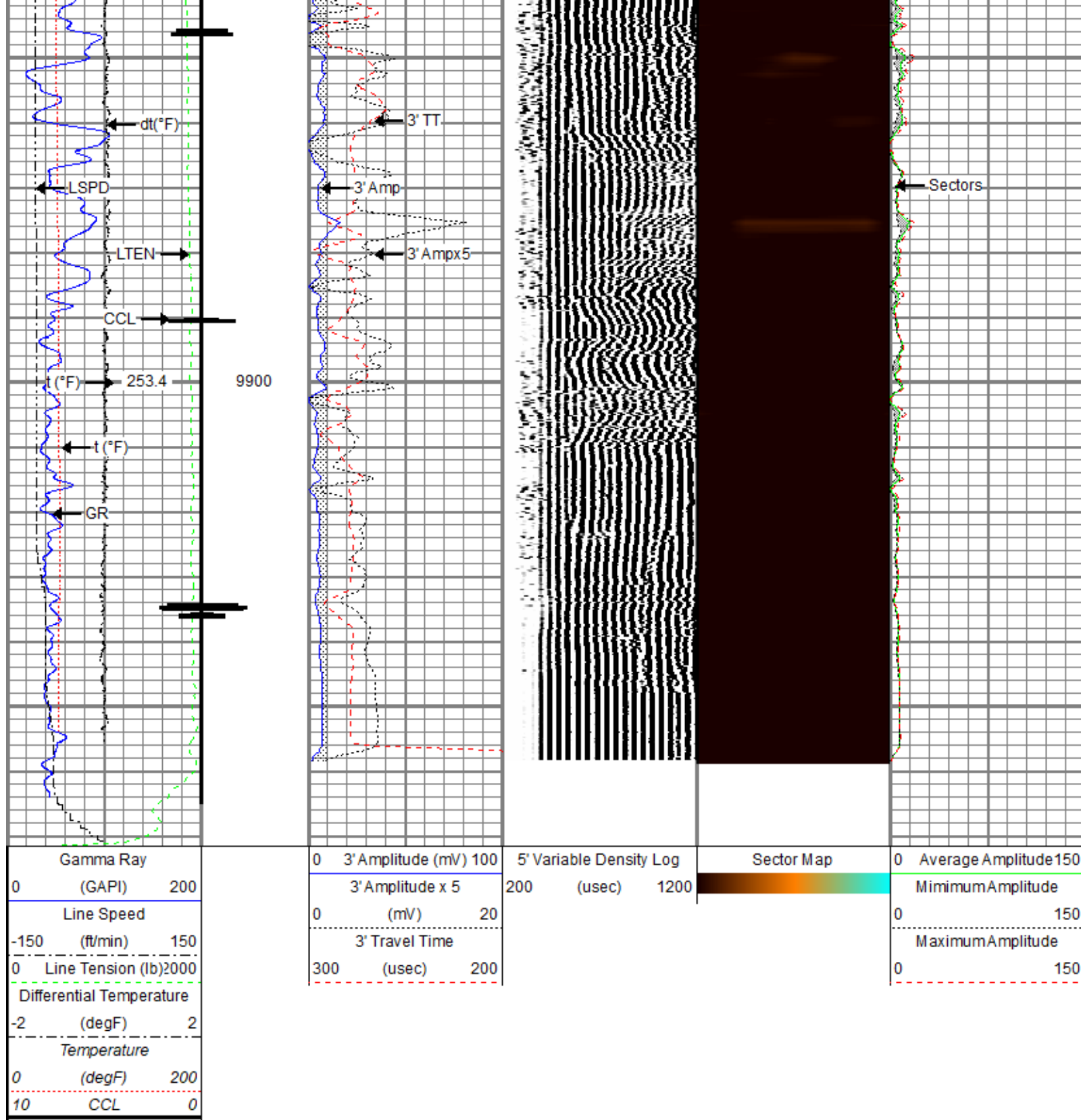













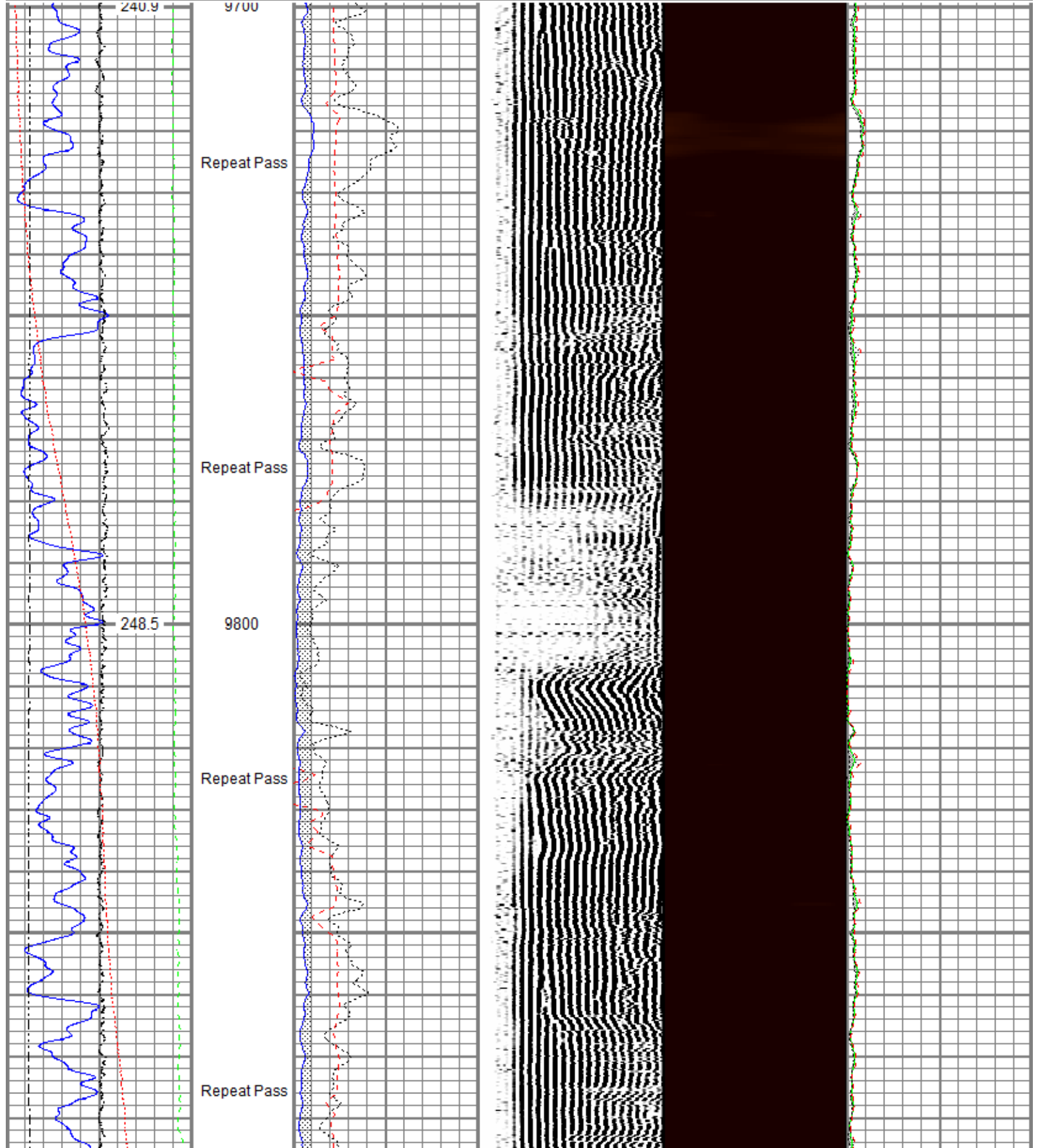


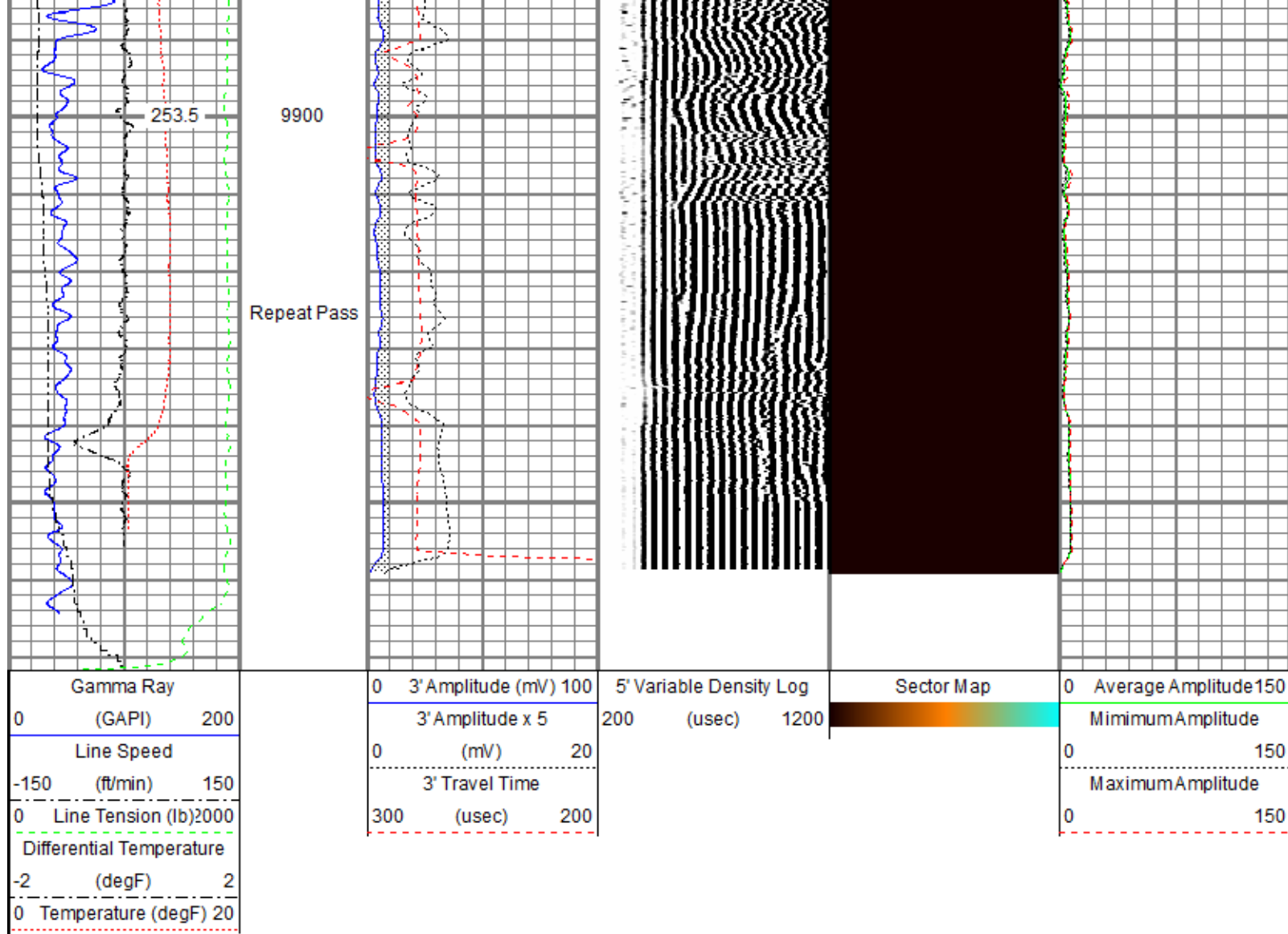
Repeat Pass

Recorded With 0 PSI Surface Induced Pressure

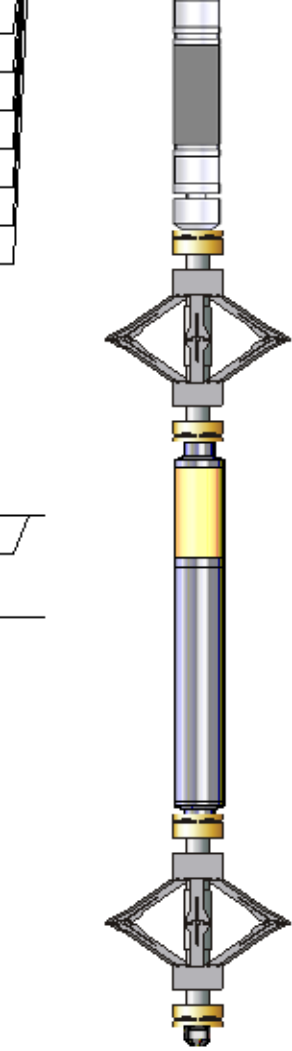
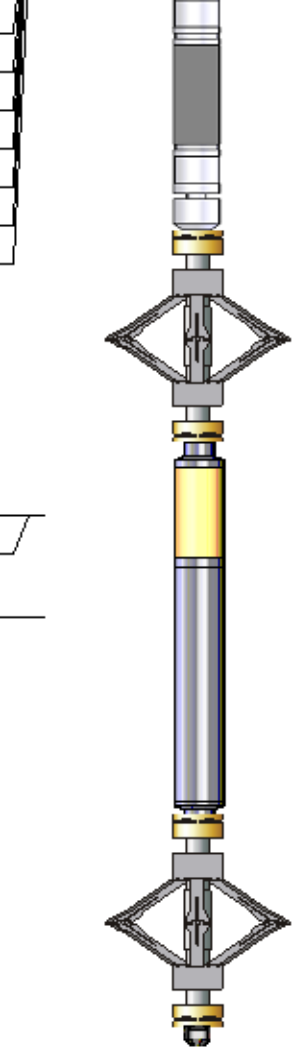
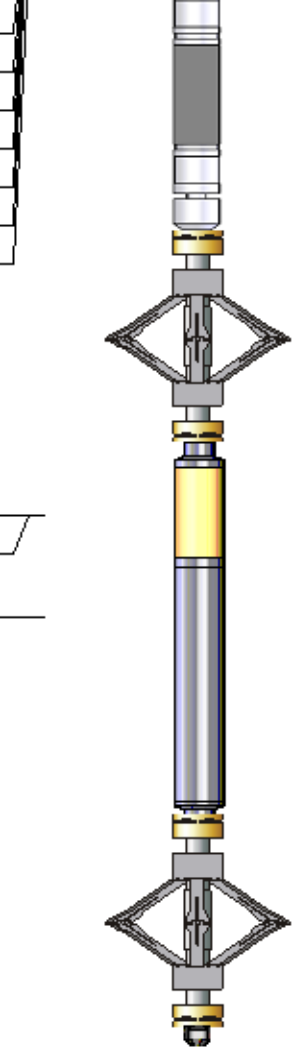
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 Dataset Pathname Repeat.1
 Presentation Format ros_rbt004_tep
 Dataset Creation Tue Nov 27 12:16:27 2018
 Charted by Depth in Feet scaled 1:240

Gamma Ray			0 3' Amplitude (mV) 100			5' Variable Density Log			Sector Map			0 Average Amplitude 150		
0 (GAPI) 200			3' Amplitude x 5			200 (usec) 1200						Minimum Amplitude		
Line Speed			0 (mV) 20									0 150		
-150 (ft/min) 150			3' Travel Time									Maximum Amplitude		
0 Line Tension (lb) 2000			300 (usec) 200									0 150		
Differential Temperature														
-2 (degF) 2														
0 Temperature (degF) 20														





Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
TEMP	16.33		Titan CHD-14375 GO	1.03	1.44	3.60
			Titan 1-7/16" Assembled Electric Cable Head w/ 1" Fishing Neck			
			DSS RAC-2750 5A GO	2.55	2.75	32.00
			DSS 2-3/4" Roller 5 Arm Centralizer w/ GO Ends			
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 Temperature Sub			
WVFS6	14.10					
WVFS5	14.10					

WVFS4	14.10		DSS RAC-2750 5A GO DSS 2-3/4" Roller 5 Arm Centralizer w/ GO Ends	2.55	2.75	32.00
WVFS3	14.10					
WVFS2	14.10					
WVFS1	14.10					
WVFCAL	14.10					
WV3FT	14.10					
WV5FT	13.10					
CCL\$2	6.42		Probe GR-CCL-2750 GOB (FW1211-081) Probe 2-3/4" rev.2 Digital Scintillation Gamma Ray/CCL Combined	4.51	2.75	55.00
CCL\$1	6.42					
GR	5.18					
			DSS RAC-2750 5A GO DSS 2-3/4" Roller 5 Arm Centralizer w/ GO Ends	2.55	2.75	32.00
			GO BN-14375 GO 1-7/16" Bull Nose with Go Box Top	0.25	1.44	1.00
Dataset:		tep_clough nr 313-3_rbl_11-26-18.db: field/well/run1/Main.2				
Total length:		22.82 ft				
Total weight:		260.60 lb				
O.D.:		2.75 in				

Calibration Report

Database File c:\programdata\warrior\data\tep\clough_nr_313-3\tep_clough nr 313-3_rbl_11-26-18.db

Dataset Pathname Repeat 1

Dataset Creation Tue Nov 27 12:16:27 2018

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: 31.357 ft


Master Calibration, performed Mon Nov 26 20:57:43 2018:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.005	0.710	0.800	81.196	112.421	1.342
CAL	0.756	0.757				
5'	-0.004	0.646	0.800	81.196	123.642	1.356
SUM						
S1	-0.006	0.703	0.000	100.000	141.028	0.805
S2	-0.003	0.697	0.000	100.000	142.905	0.432
S3	-0.004	0.686	0.000	100.000	144.777	0.648
S4	-0.004	0.717	0.000	100.000	138.848	0.501
S5	-0.003	0.731	0.000	100.000	136.241	0.419
S6	-0.004	0.723	0.000	100.000	137.629	0.546
S7	-0.004	0.702	0.000	100.000	141.711	0.565
S8	-0.004	0.715	0.000	100.000	139.060	0.543

Internal Reference Calibration, performed (Not Performed):						
	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.756	0.757	1.000	0.000

Air Zero Calibration, performed Mon Nov 26 20:58:09 2018:						
	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	-0.005		0.000		0.000	
5'	-0.002		0.000		-0.001	
SUM						
S1	-0.004		0.000		0.000	
S2	-0.004		0.000		0.000	
S3	-0.004		0.000		0.000	
S4	-0.004		0.000		0.000	
S5	-0.004		0.000		0.000	
S6	-0.005		0.000		0.000	
S7	-0.004		0.000		0.000	
S8	-0.004		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	TEP Rocky Mountain LLC
	Well	Clough NR 313-3
	Field	Rulison
	County	Garfield
	State	Colorado