



Radial Cement Bond
Gamma Ray
Casing Collar Log

Company TEP Rocky Mountain LLC

Well Puckett GM 543-8

Field Grand Valley

County Garfield State Colorado

Location: API #: 05-045-24091

Other Services

SEC 8 TWP 7S RGE 96W

Elevation

Permanent Datum Ground Level Elevation 6281'

Log Measured From Kelly Bushing 24 FT

Drilling Measured From Kelly Bushing

K.B. 6305'

D.F. ---

G.L. 6281'

Date 19-NOV-2019

Run Number One

Depth Driller 7360 FT

Depth Logger 7296 FT

Bottom Logged Interval 7282 FT

Top Log Interval Surface

Open Hole Size 8.750"

Type Fluid Water

Density / Viscosity 8.34 lb/gal

Max. Recorded Temp. 212°F

E. Estimated Cement Top See Log

Time Well Ready ROA

Time Logger on Bottom 01:50

Equipment Number HD-0359

Location Grand Junction, CO

Recorded By J. Donnelly

Witnessed By ---

Run Number

Bit From To

Size Weight From To

Casing Record Size (in) Wgt (lbs/ft) Grade Top Bottom

Surface Casing 9.5/8 32.3 H-40 Surface 1020 FT

Intermediate #1 4 1/2 11.6 P-110 Surface 7319 FT

Intermediate #2

Inner

<<< 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 24 FT
Marker Joint logged from 4800 - 4821 FT
Recorded with 0 PSI Surface Induced Pressure

Thank you for choosing Reliance Oilfield Services, LLC!!

Main Pass

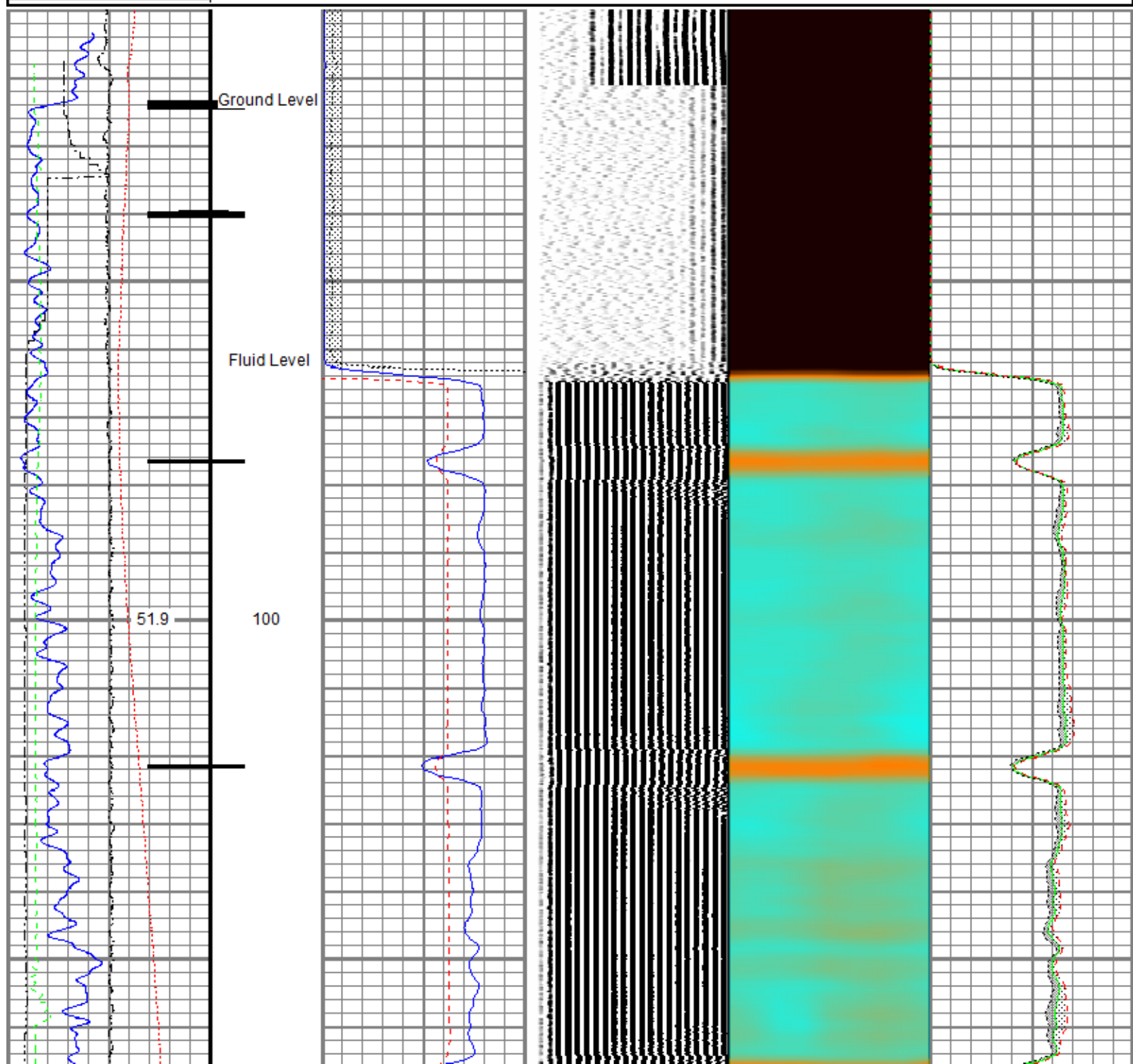


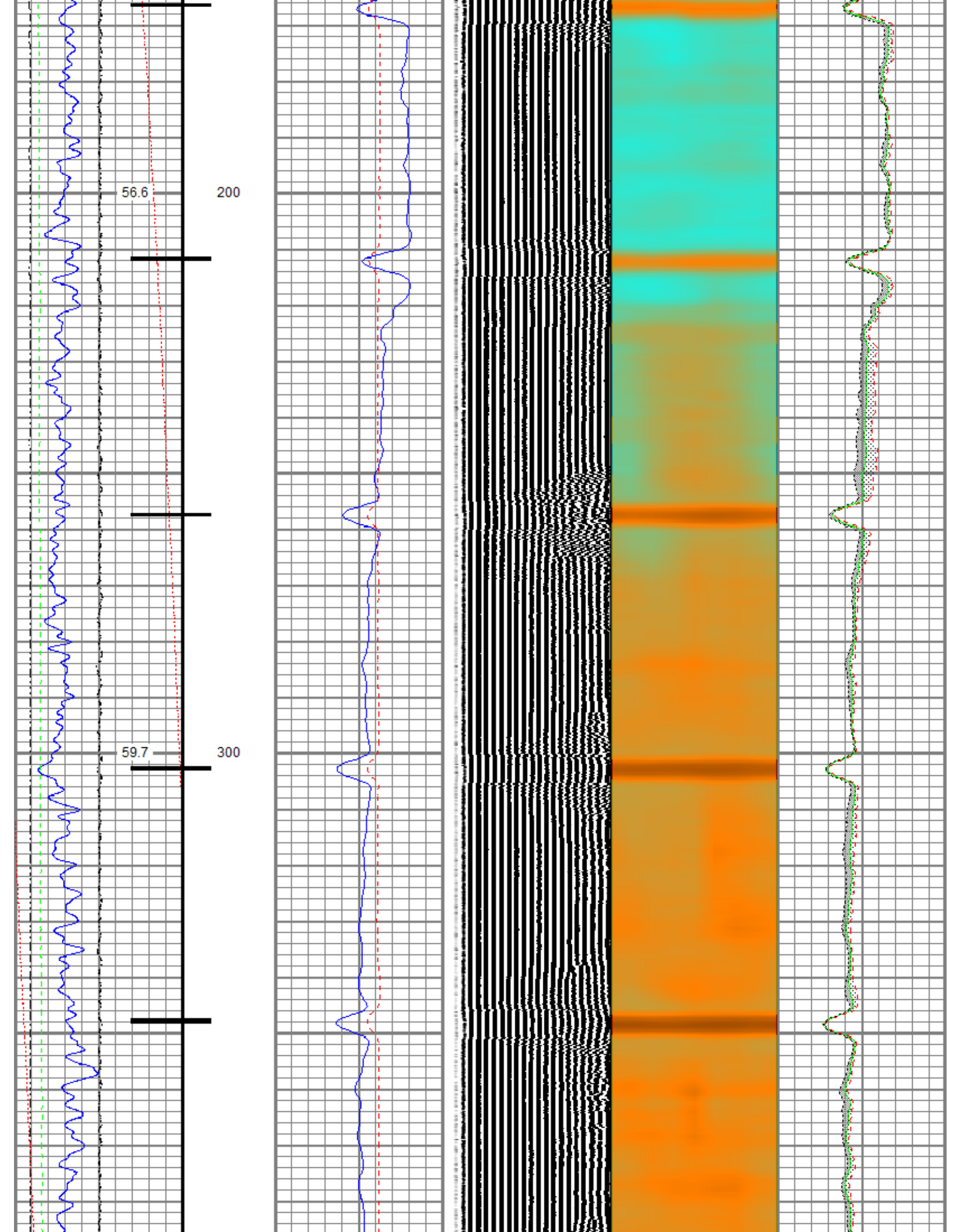
Recorded With 0 PSI Surface Induced Pressure

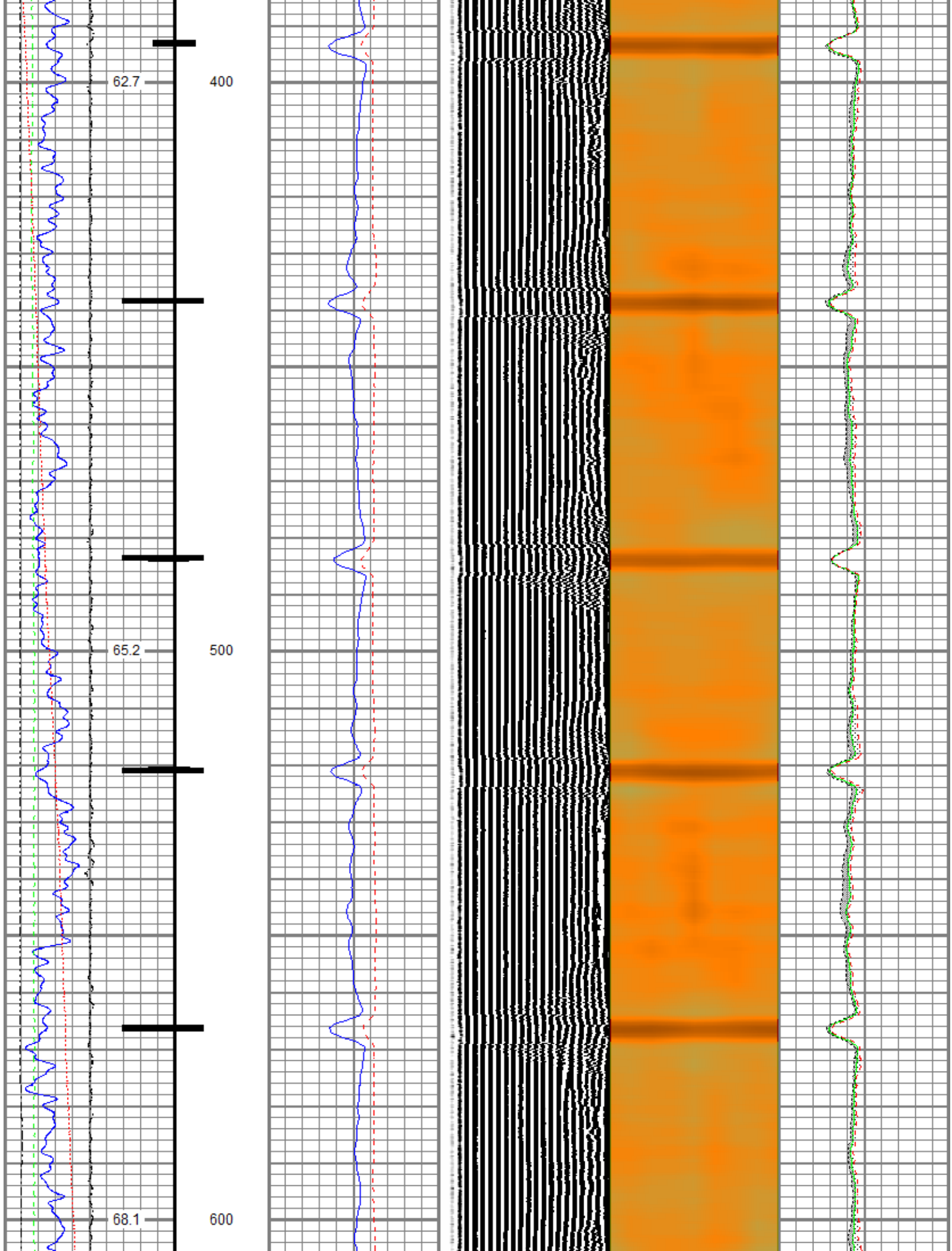
Recorded with 0 PSI Surface Induced Pressure

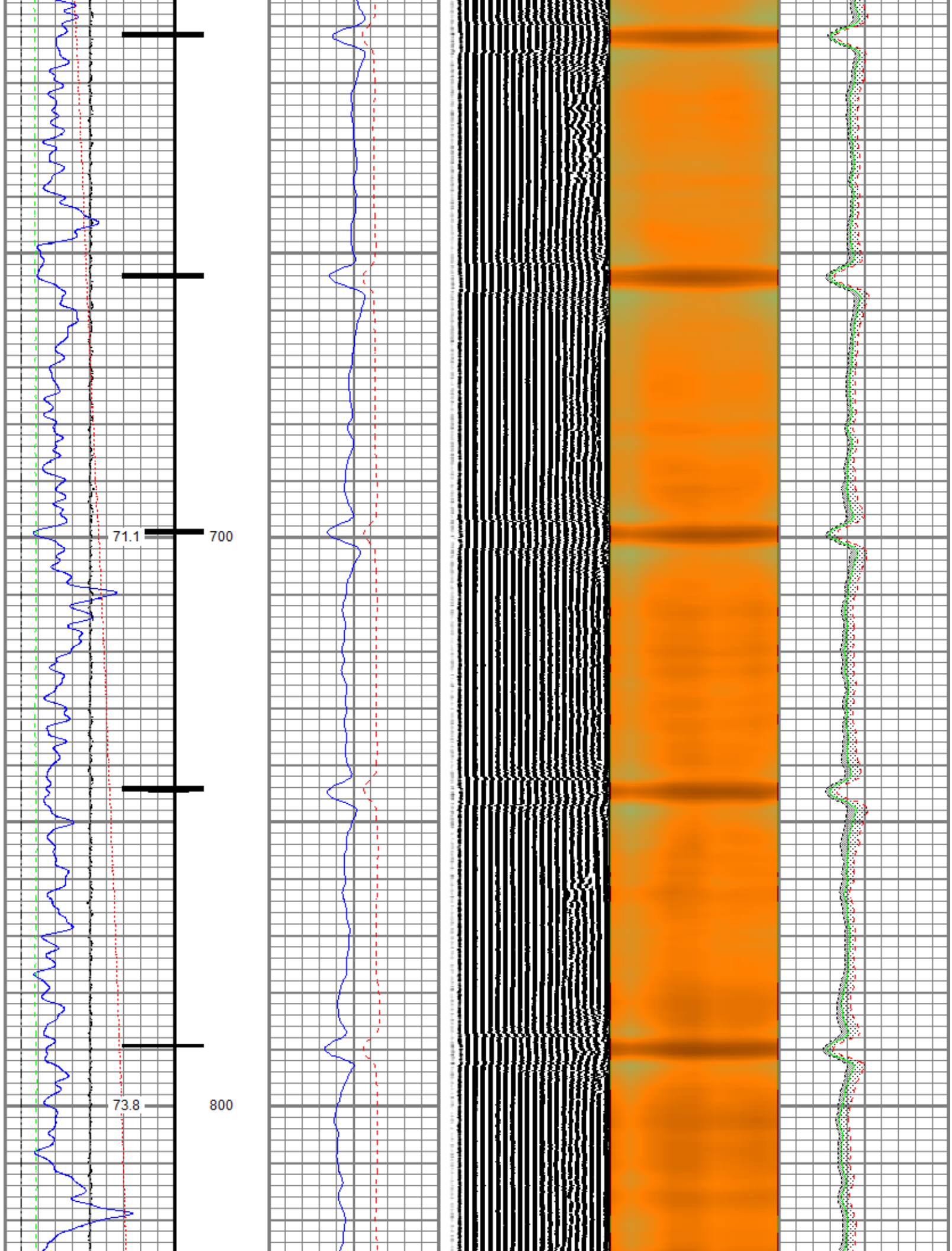
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 Dataset Pathname run2/Main.1
 Presentation Format ros_rbt004_tep
 Dataset Creation Wed Nov 20 17:11:07 2019
 Charted by Depth in Feet scaled 1:240

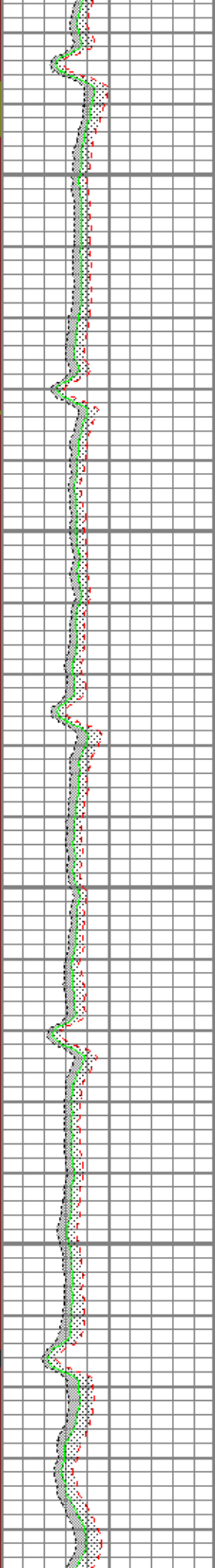
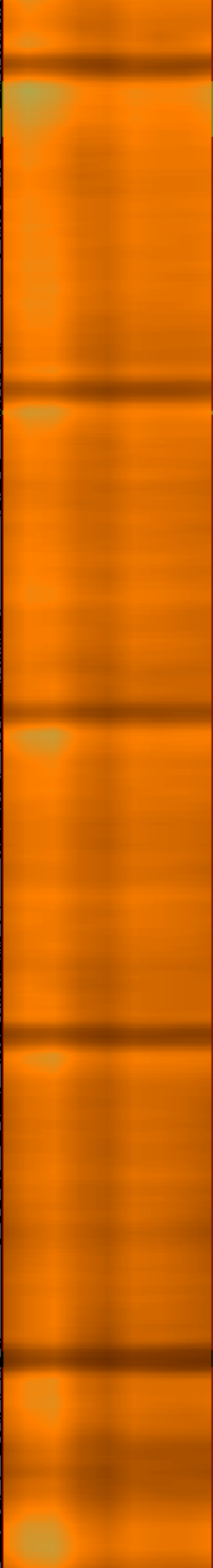
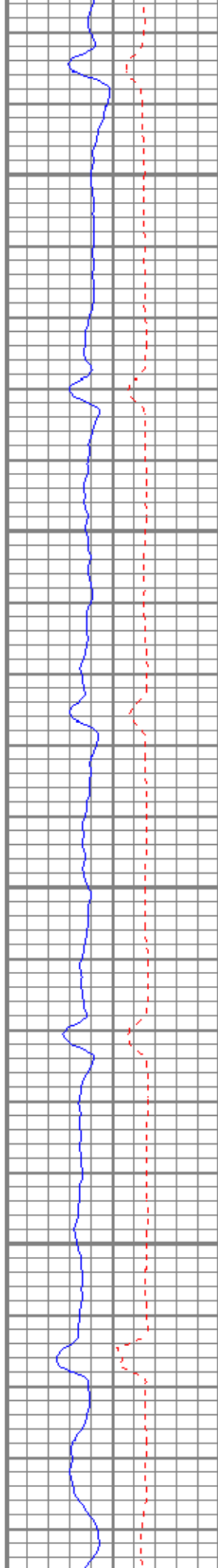
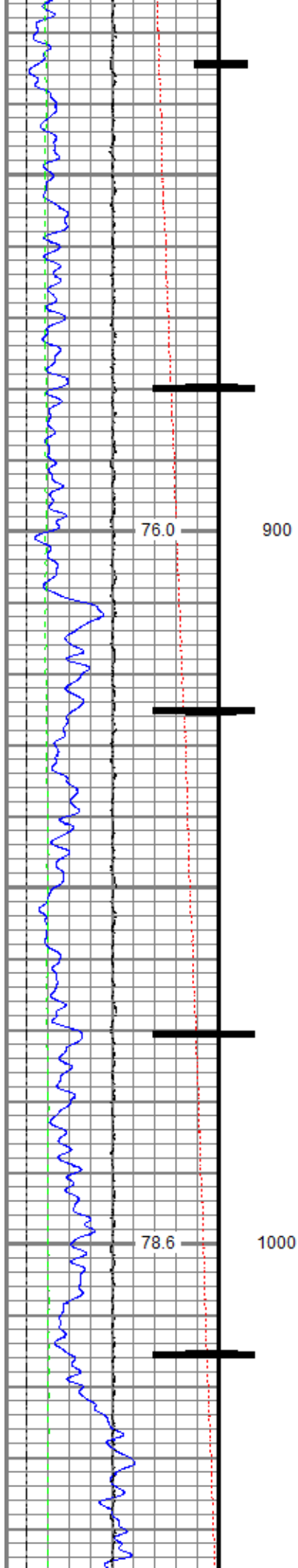
Gamma Ray	0	3' Amplitude (mV) 100	5' Variable Density Log	Sector Map	0	Average Amplitude 150
(GAPI) 200		3' Amplitude x 5	200 (usec) 1200			Minimum Amplitude
Line Speed	0	(mV) 20			0	150
(ft/min) 150		3' Travel Time				Maximum Amplitude
Line Tension (lb) 2000	0	(usec) 200			0	150
Differential Temperature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

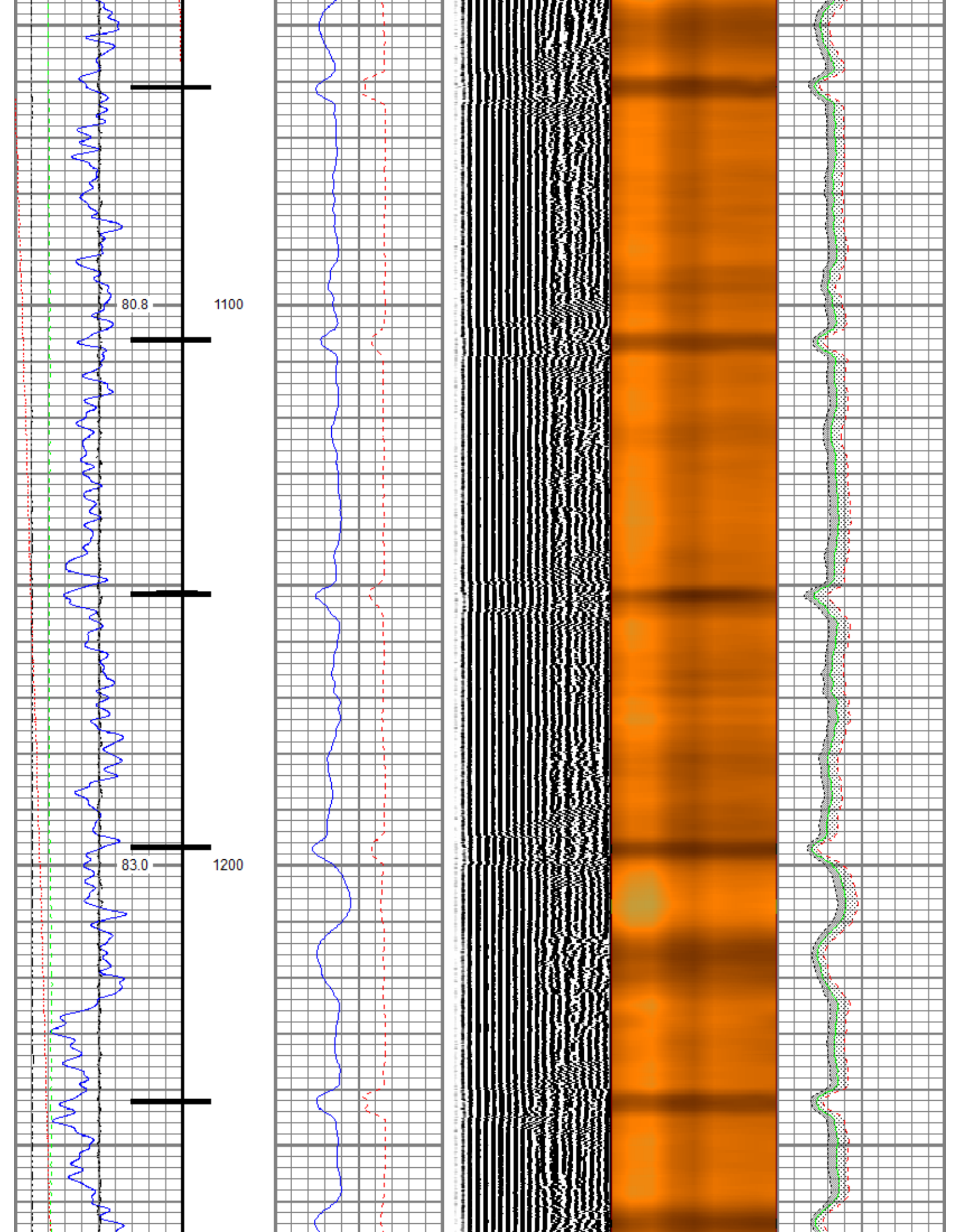


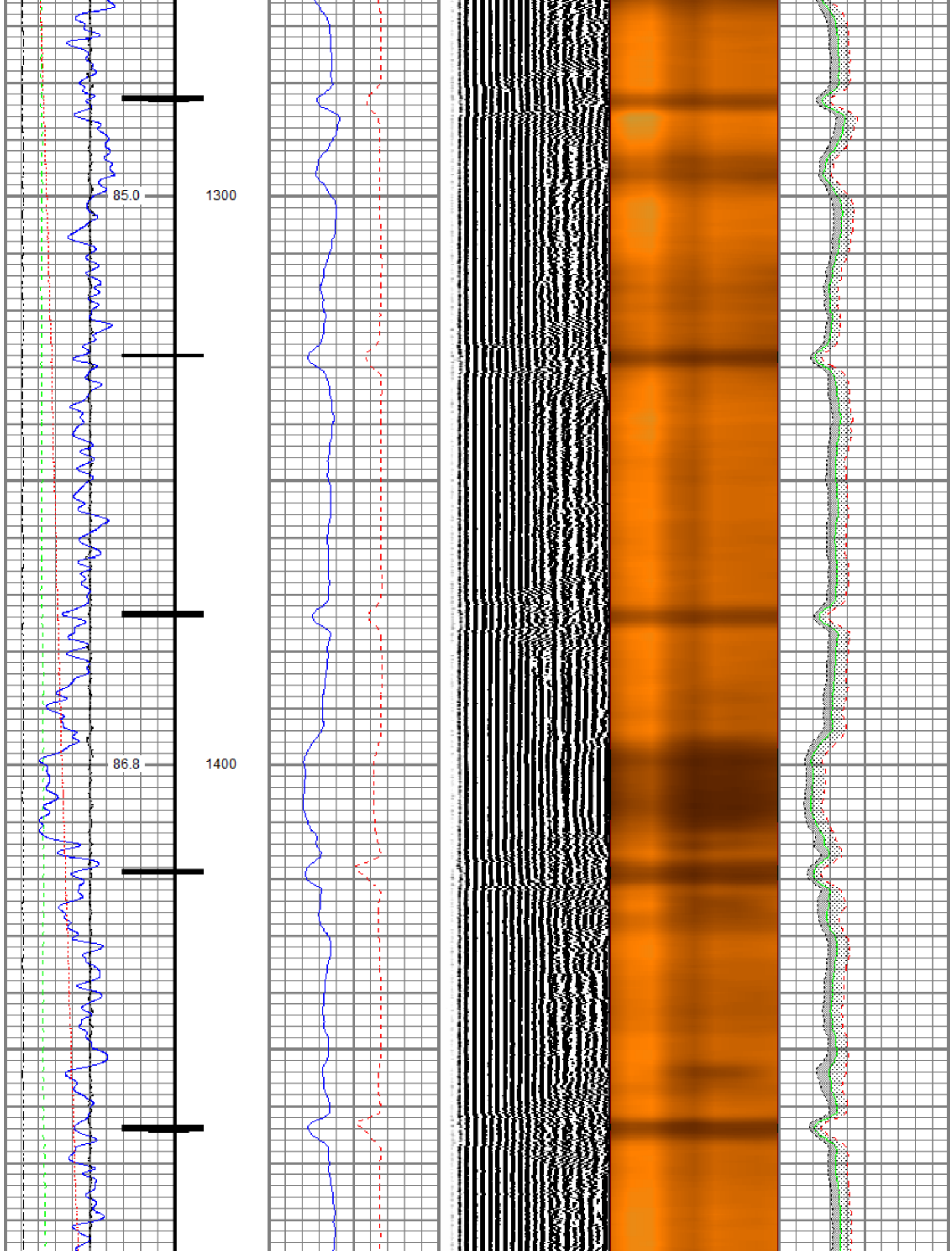


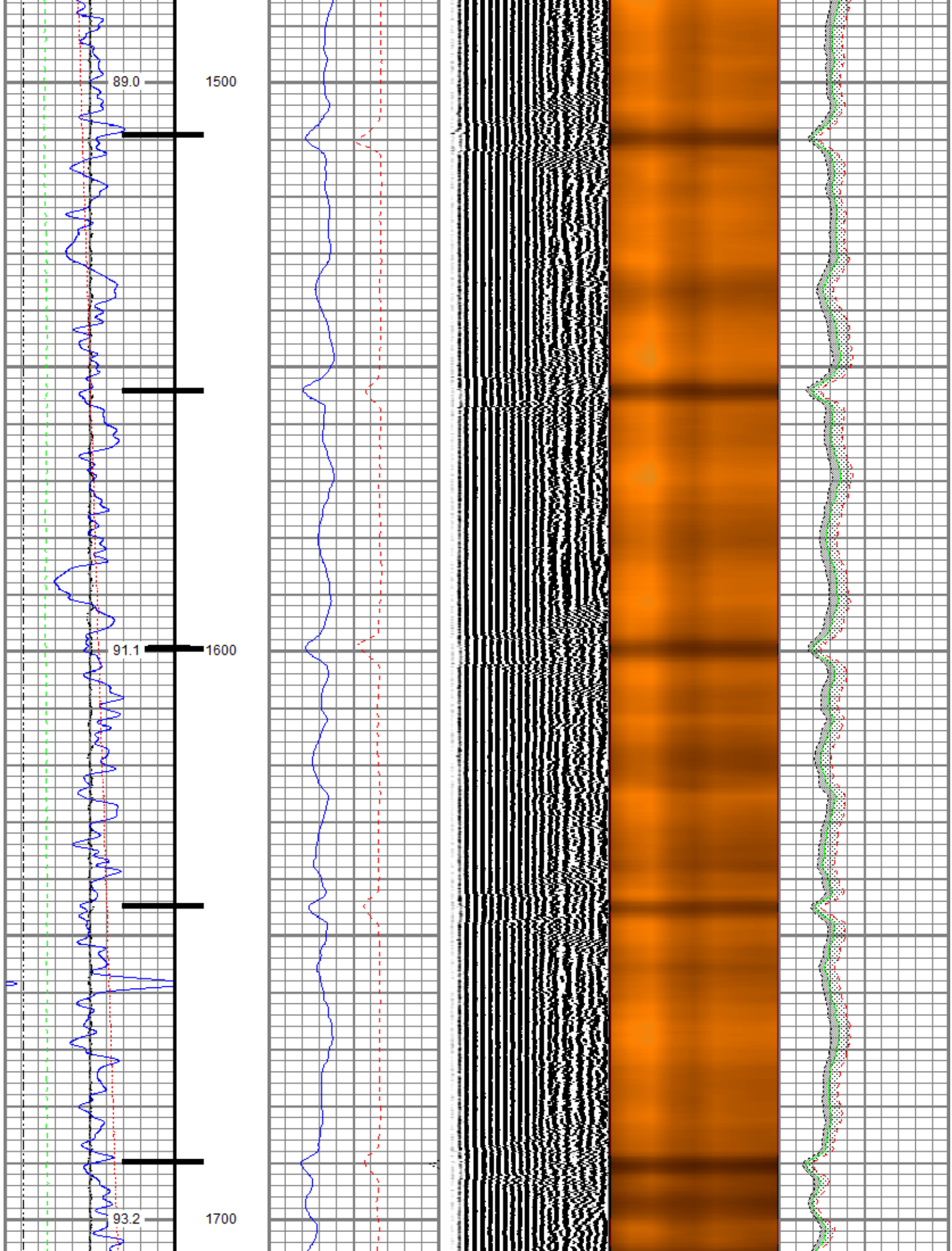


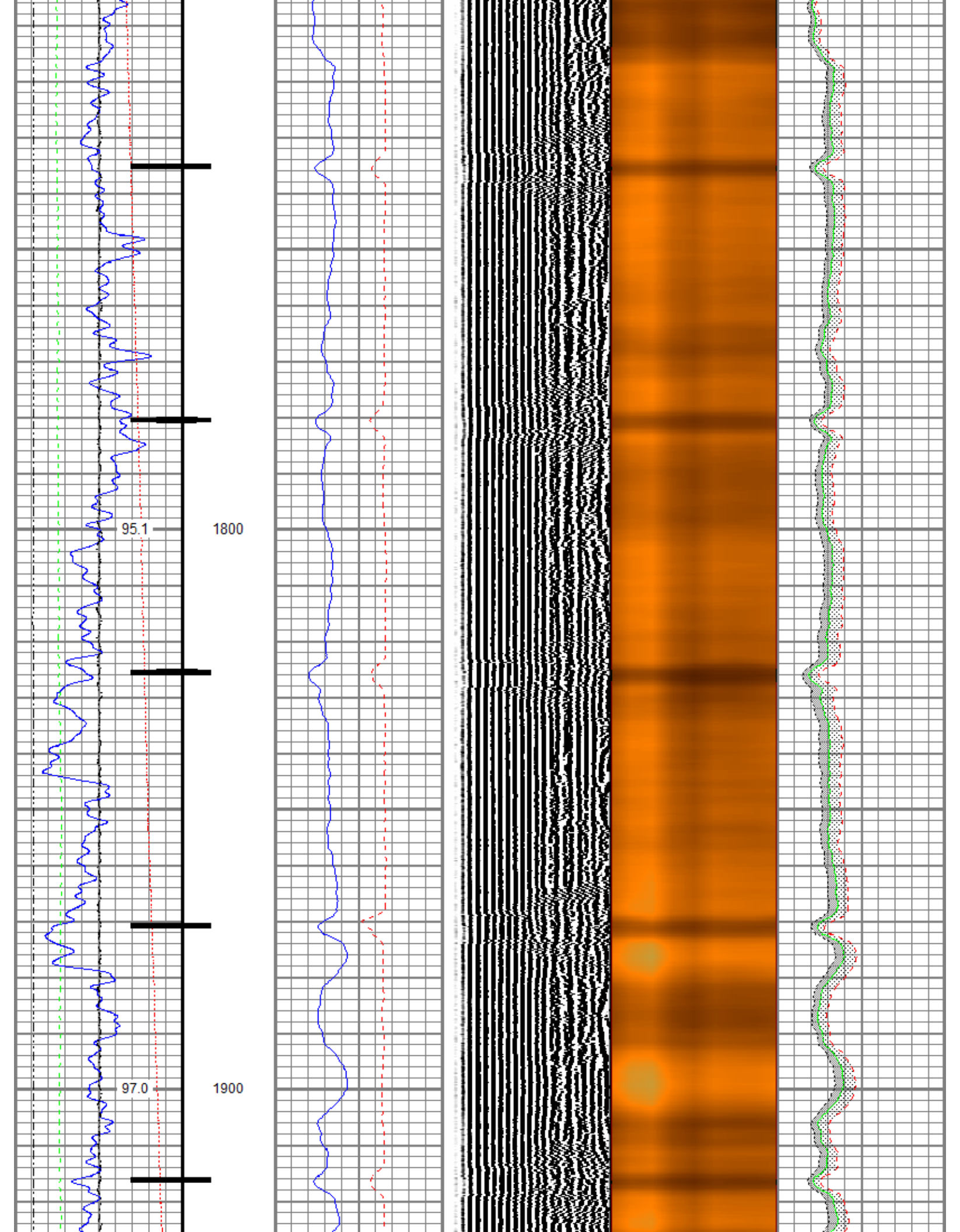


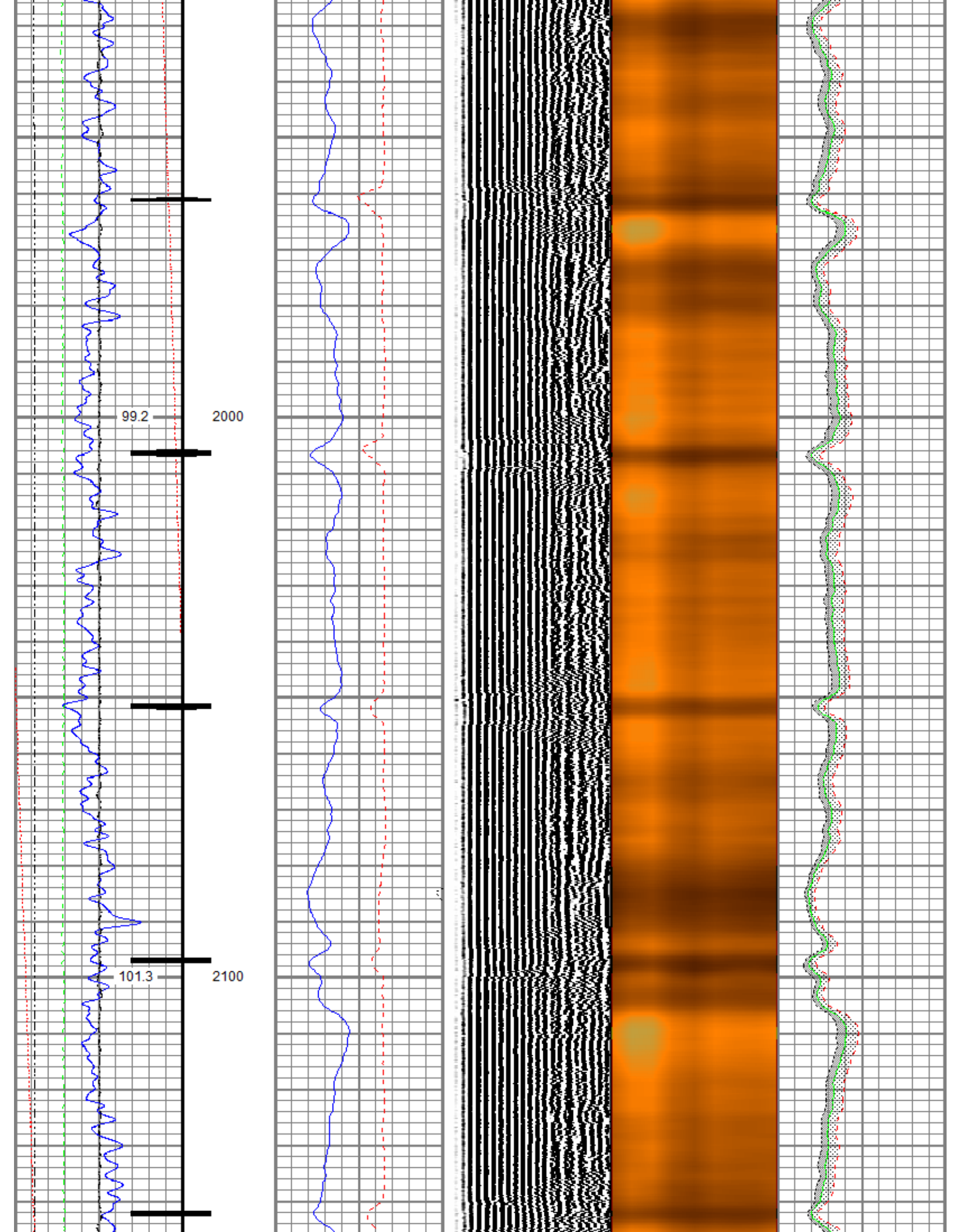


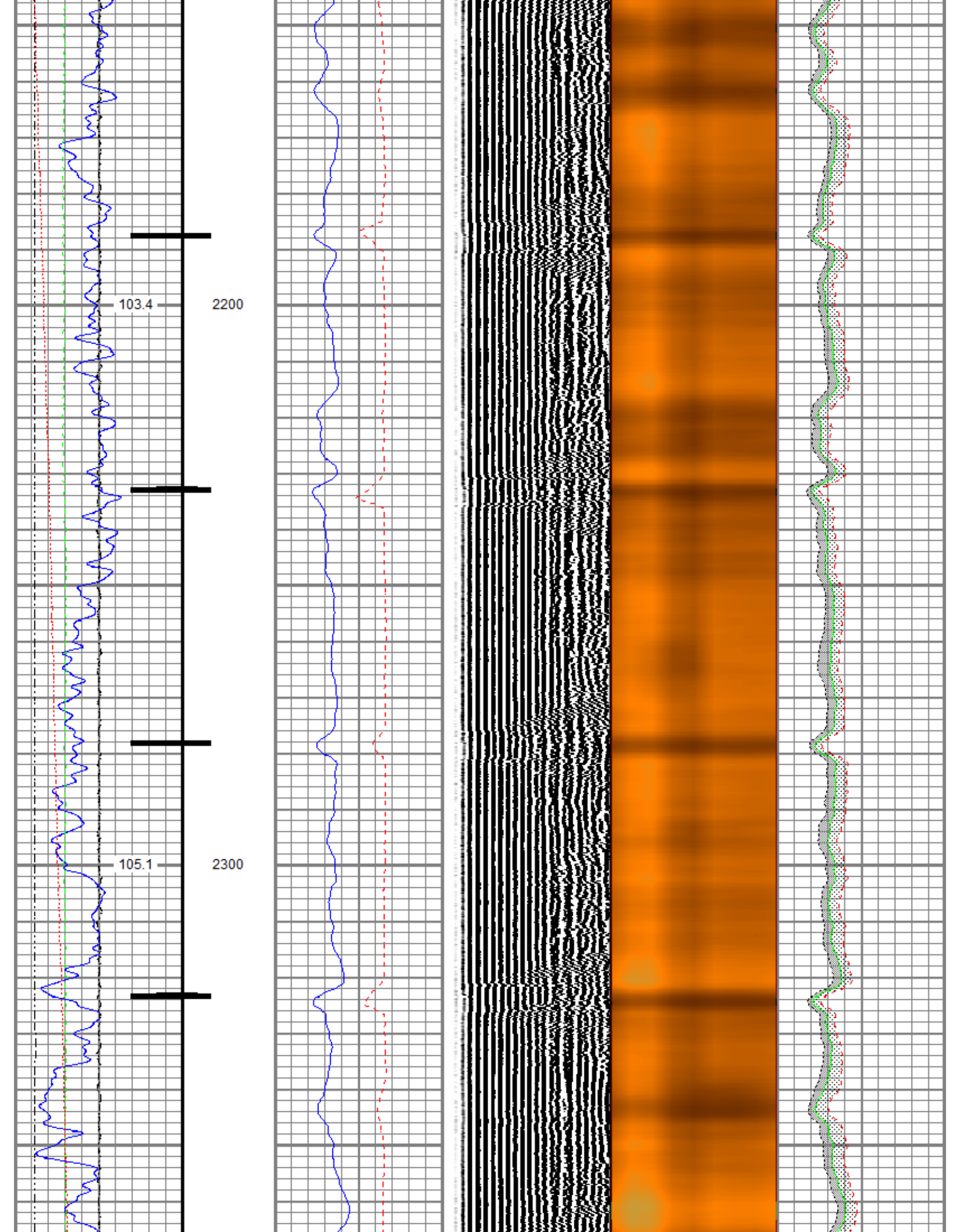


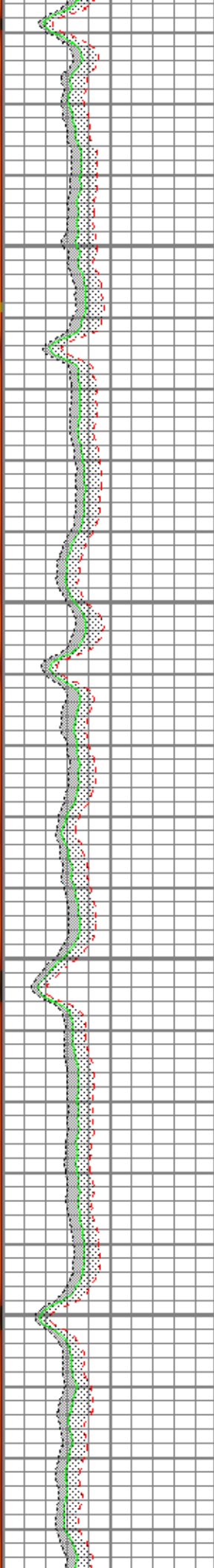
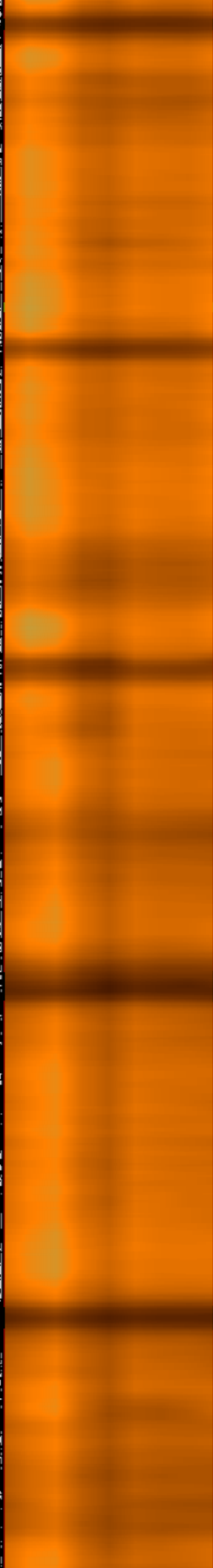
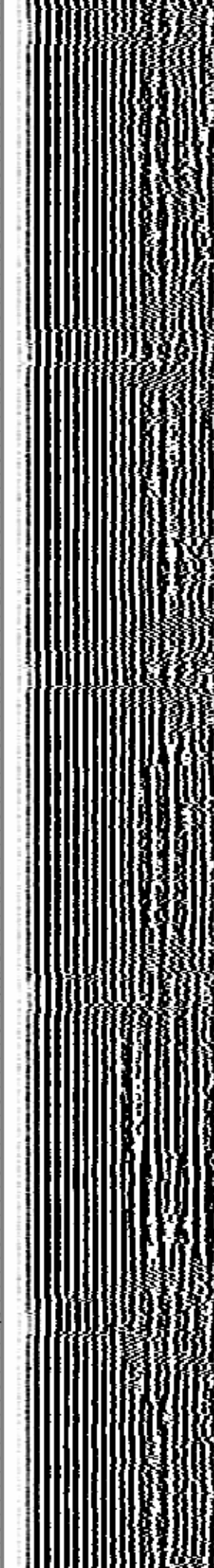
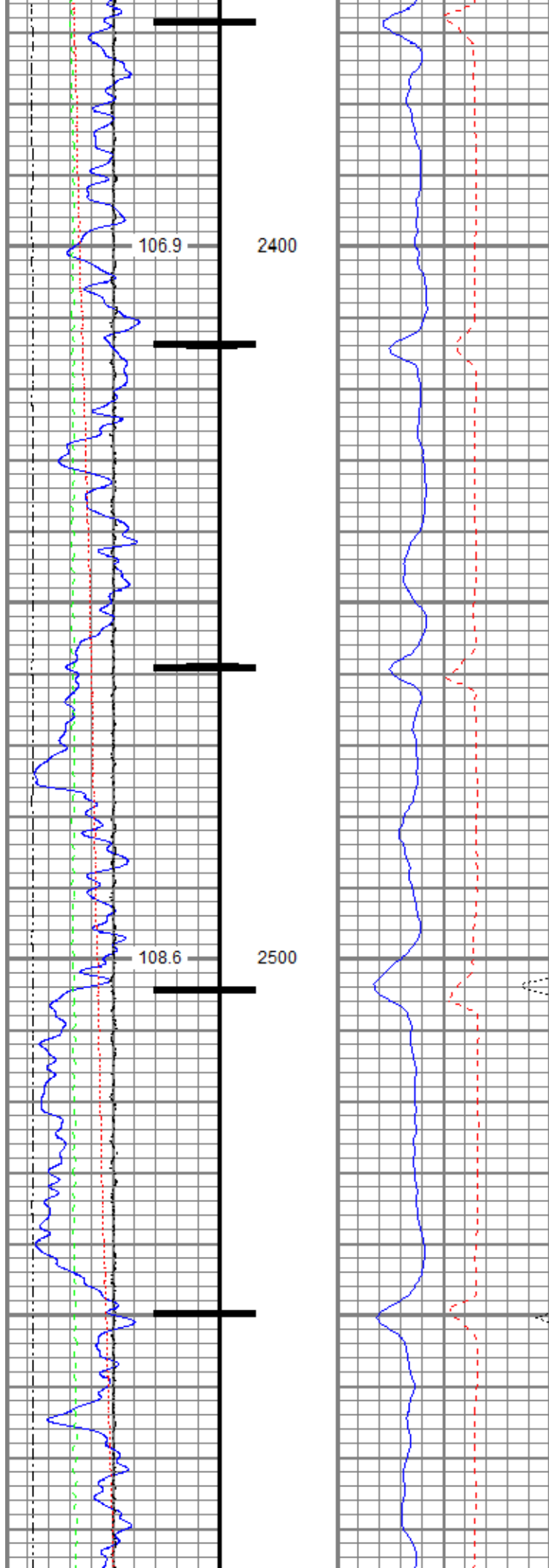


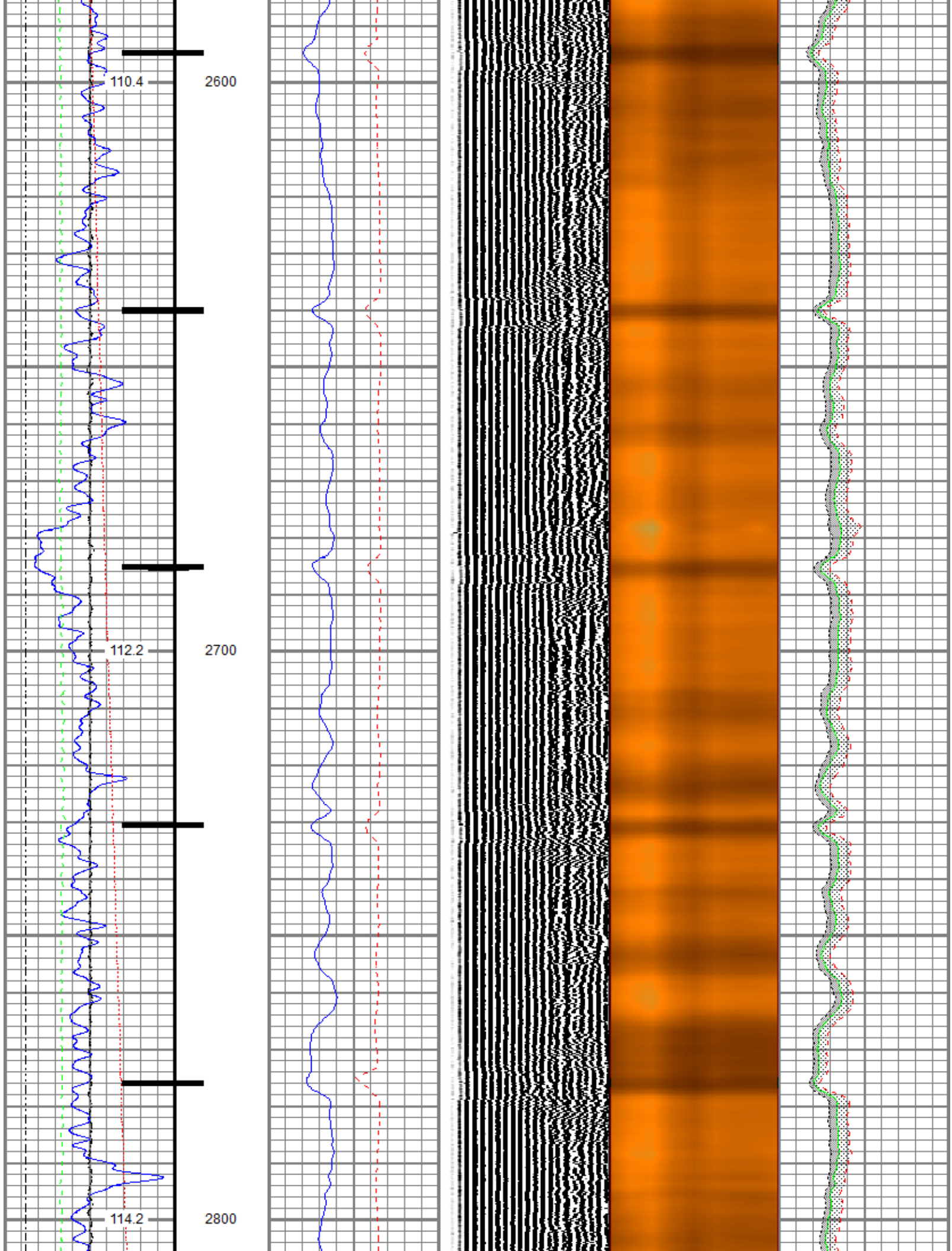


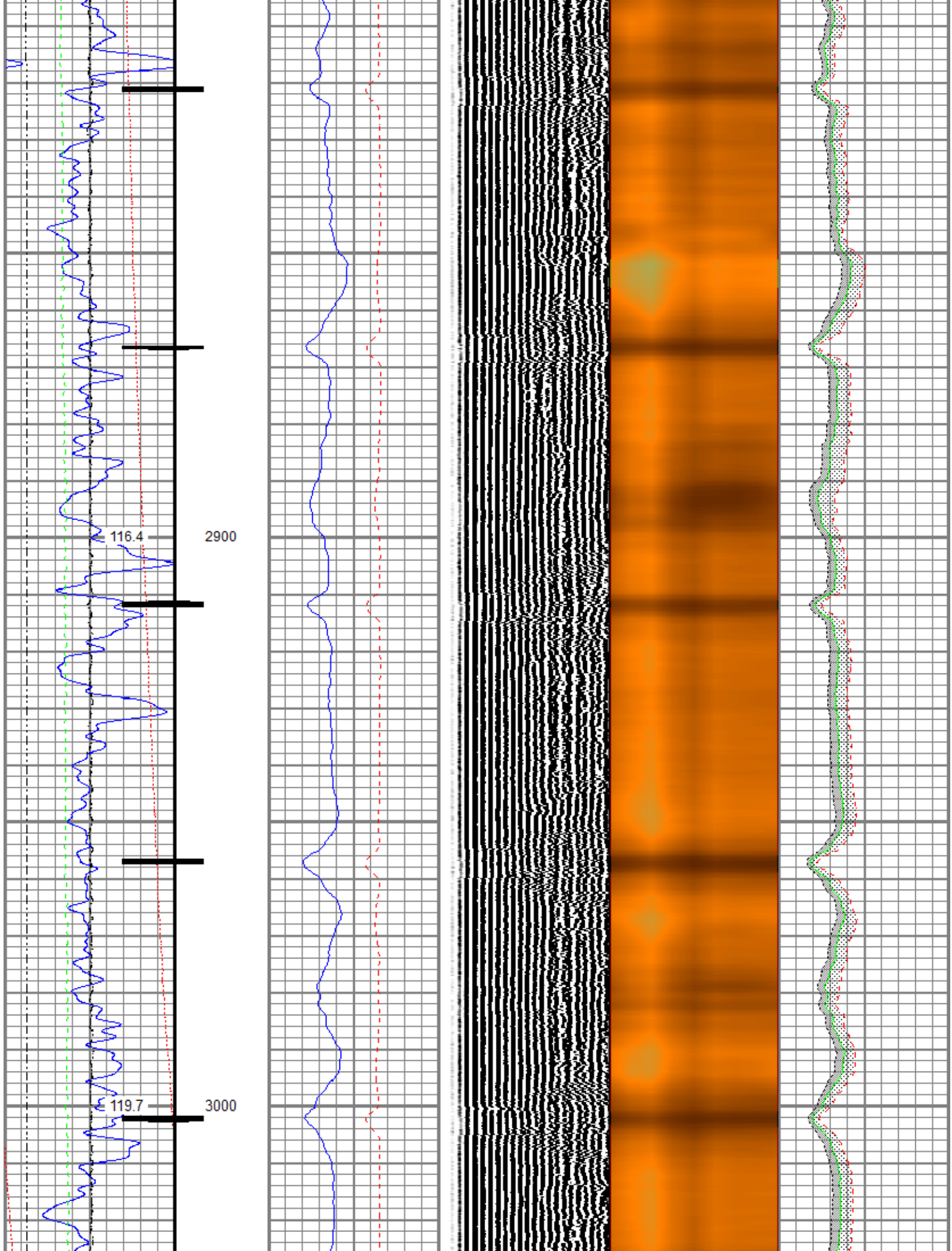


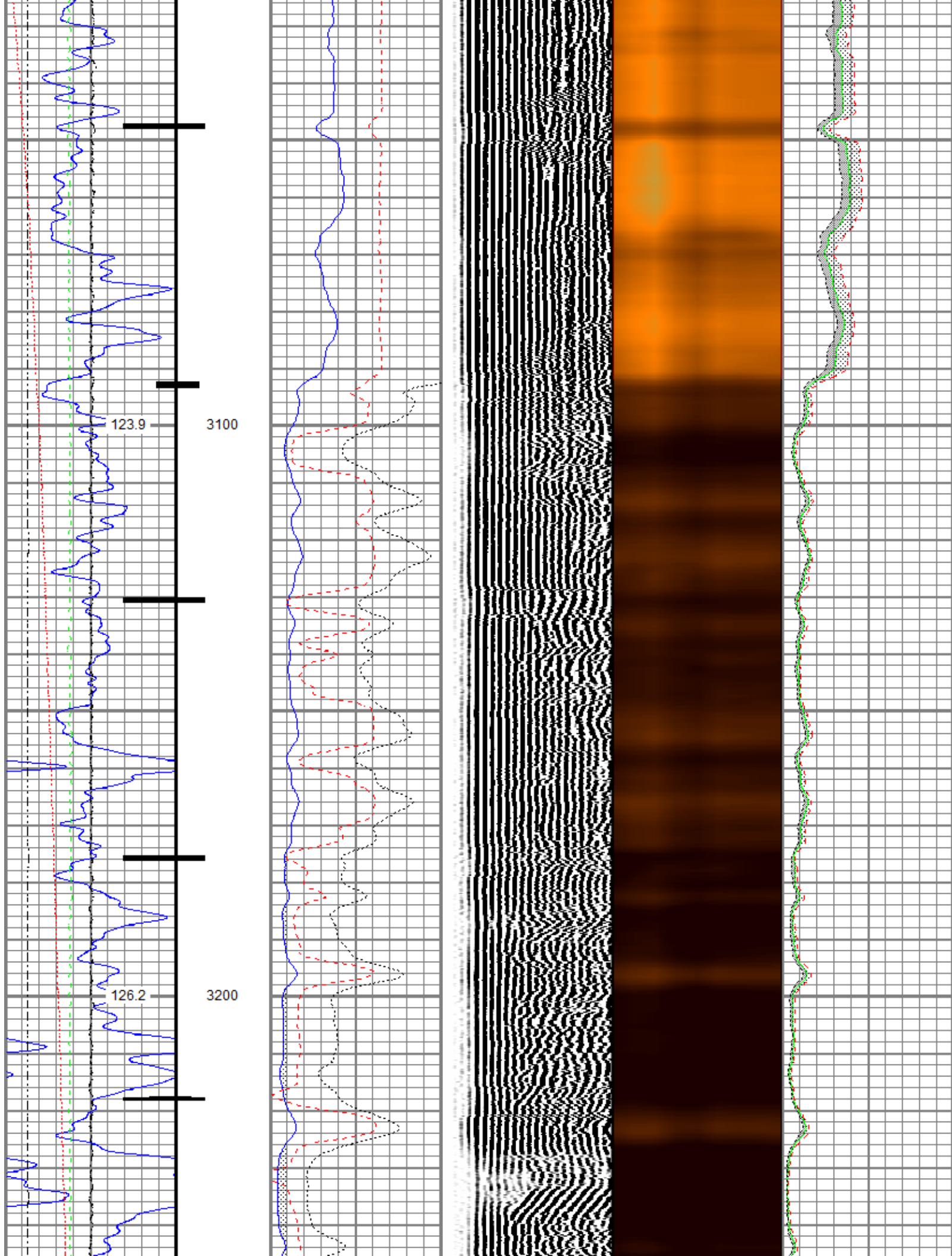


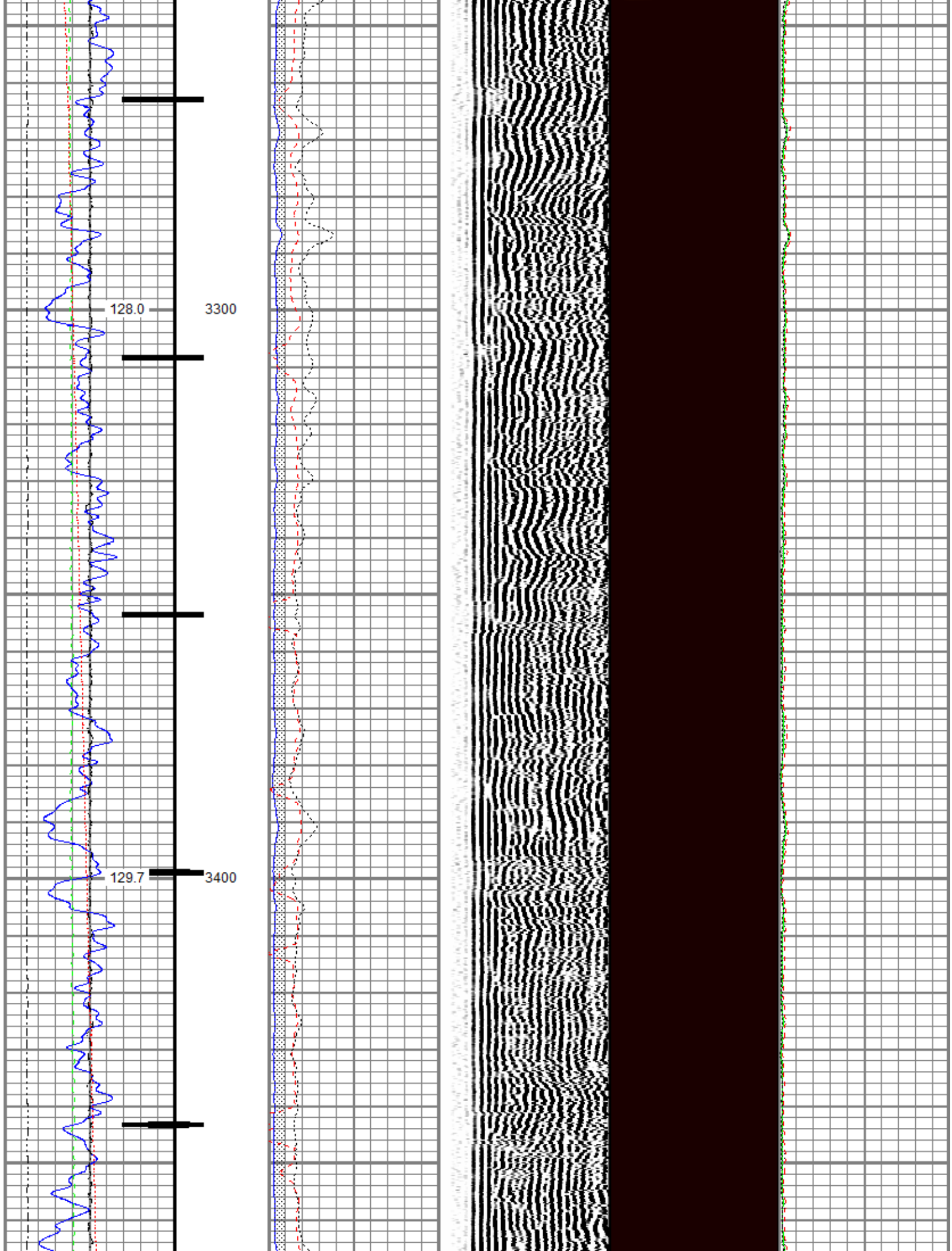


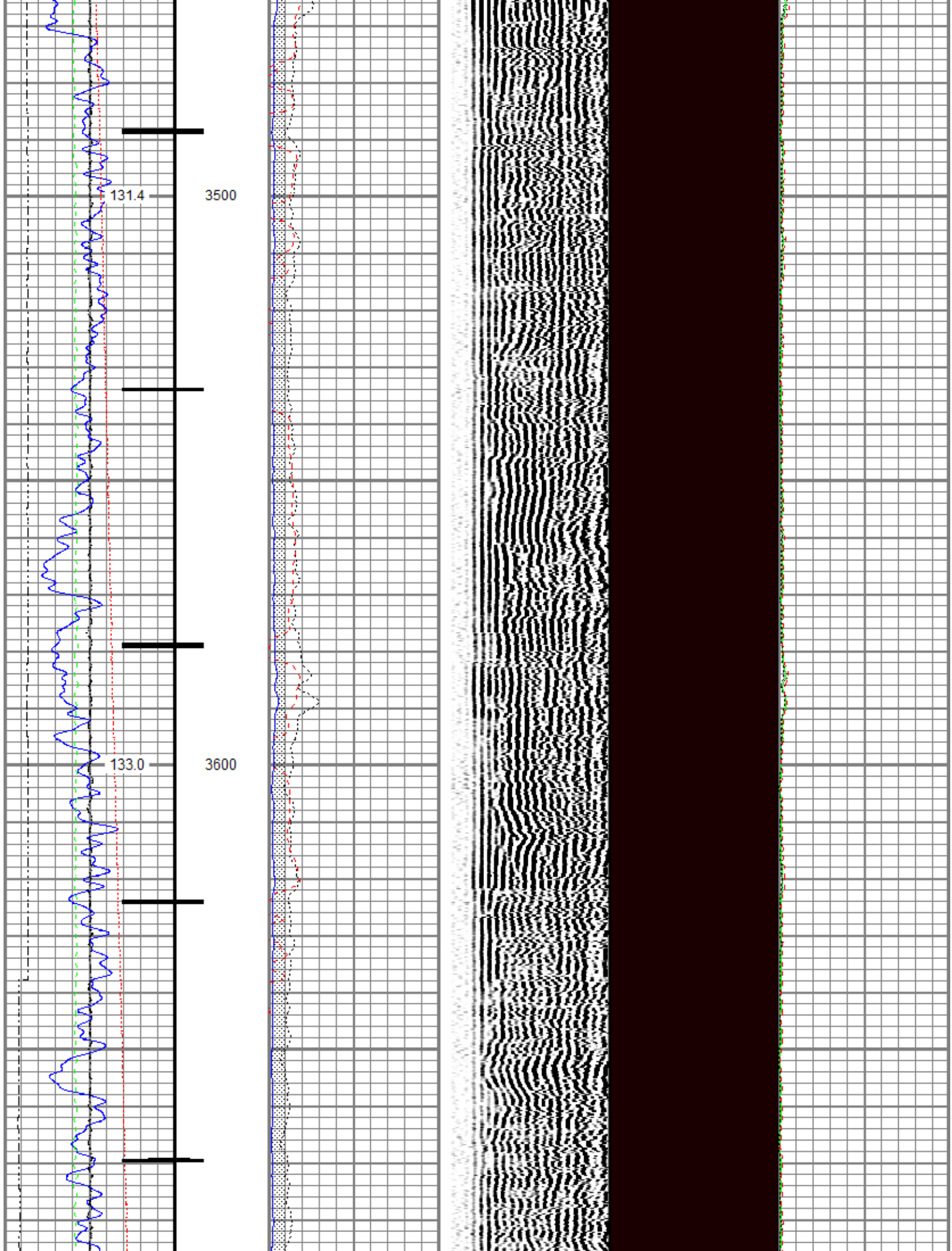


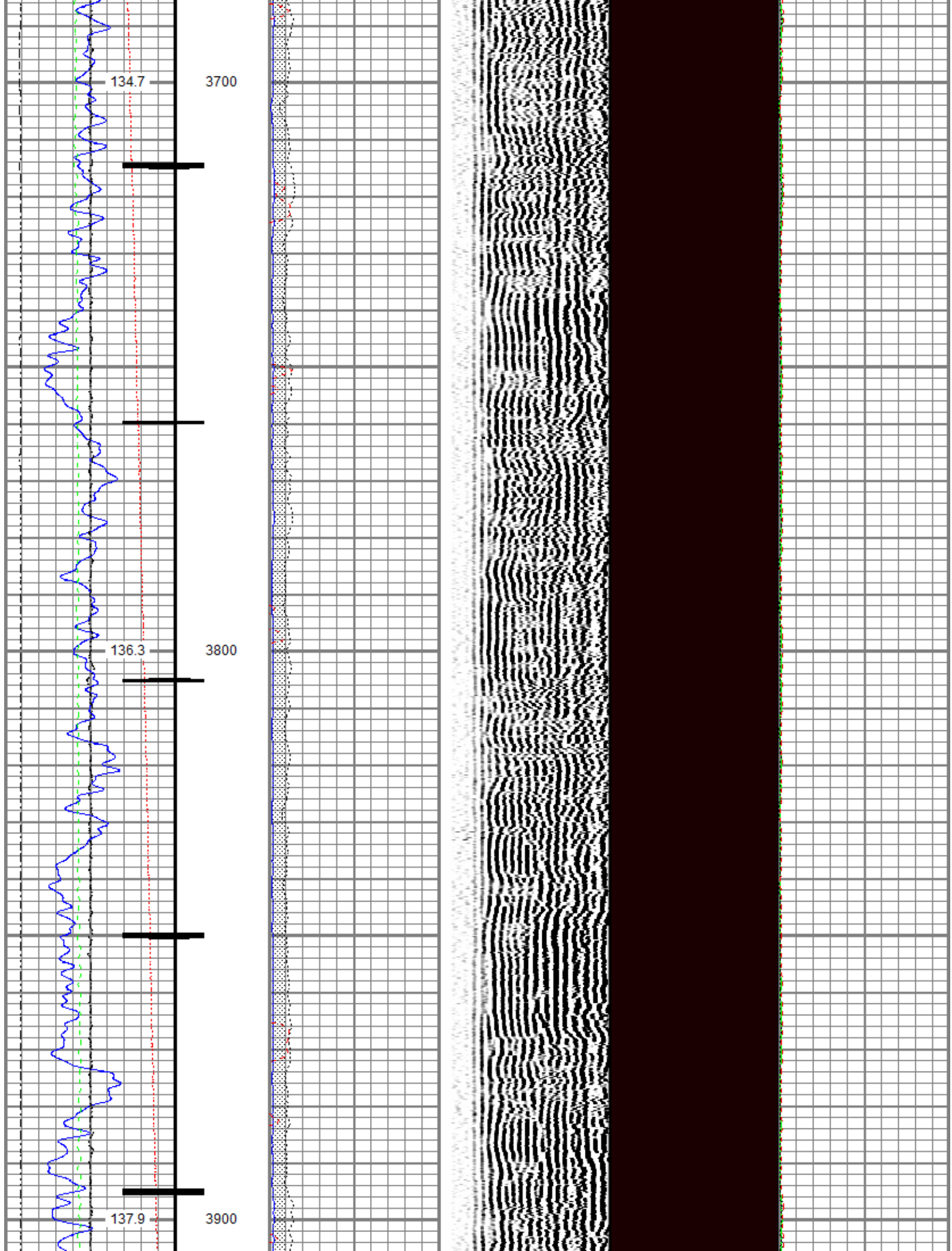


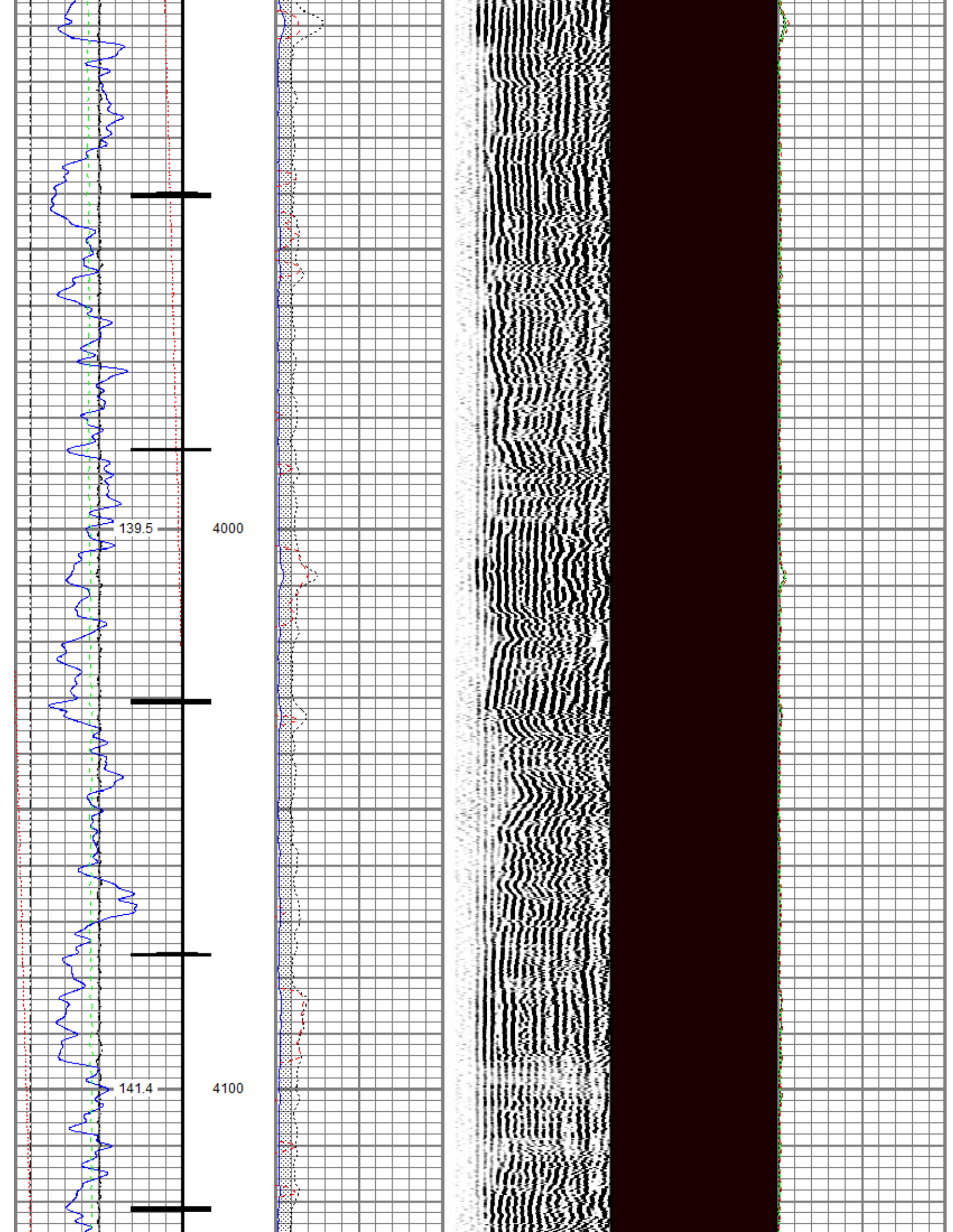


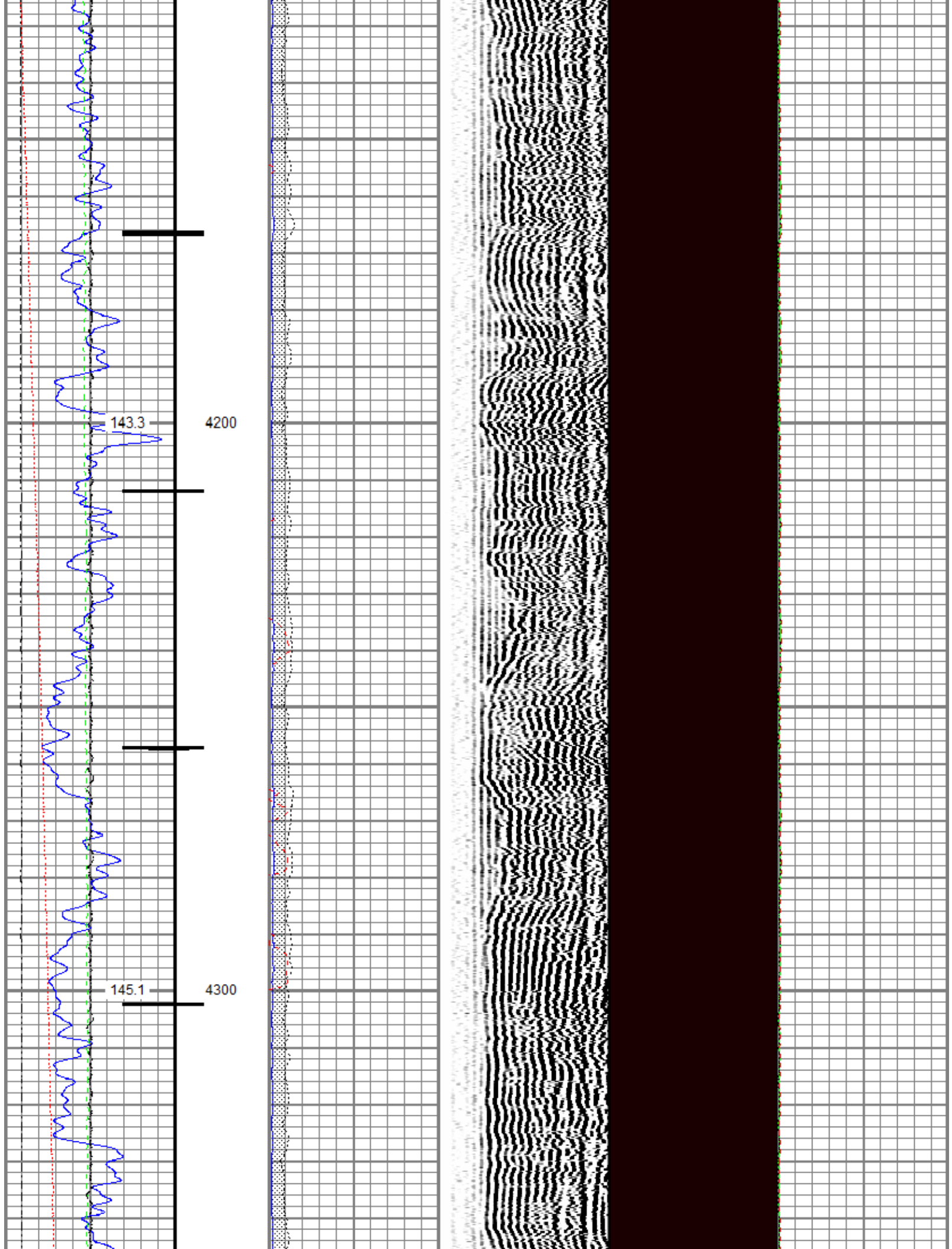


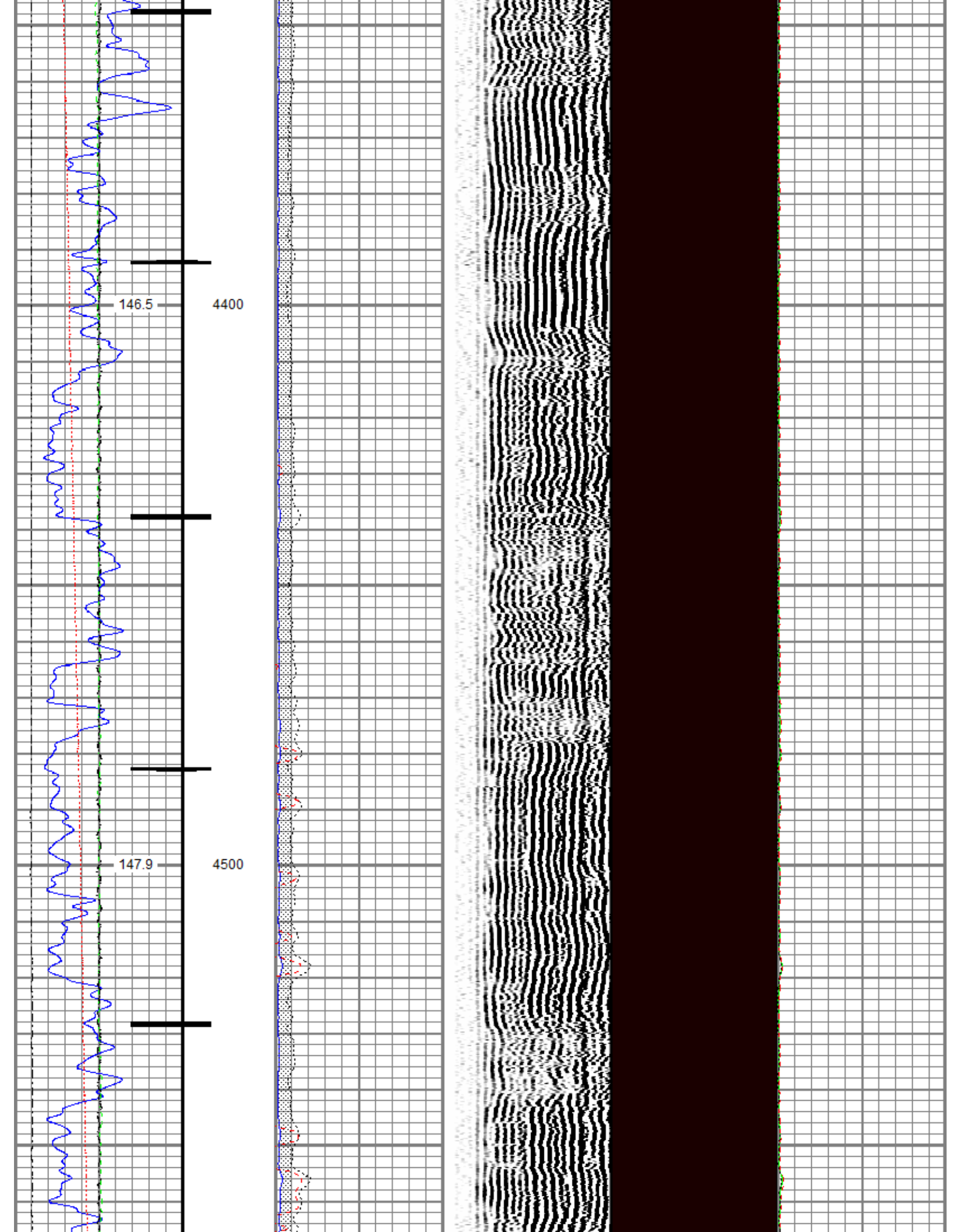


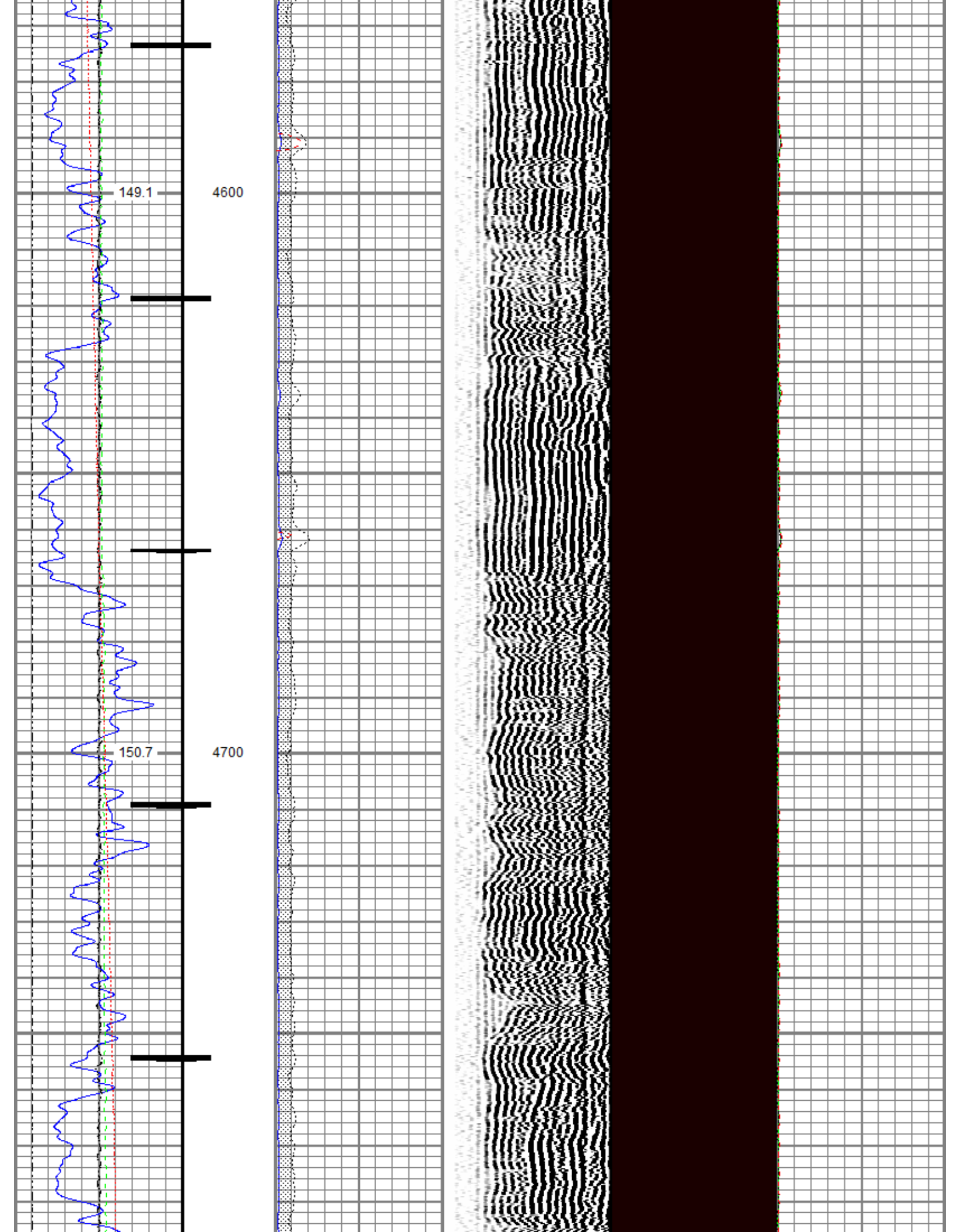


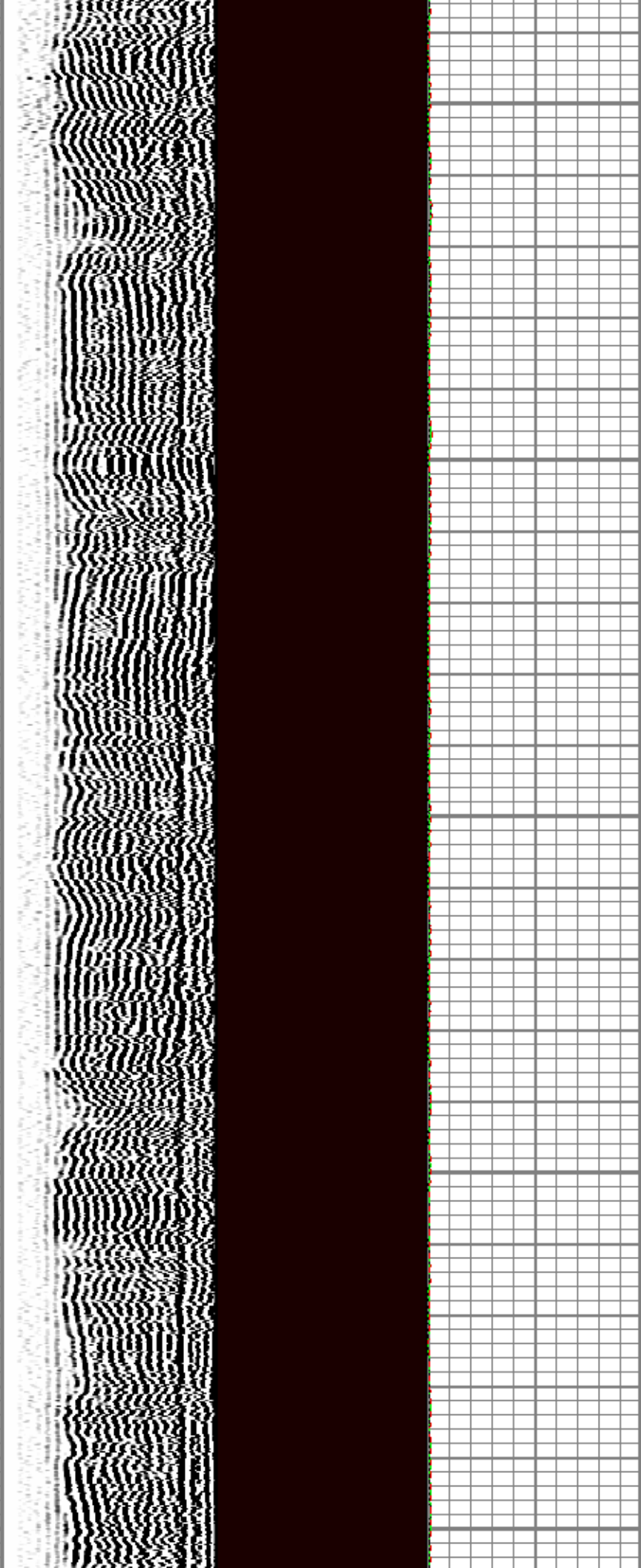
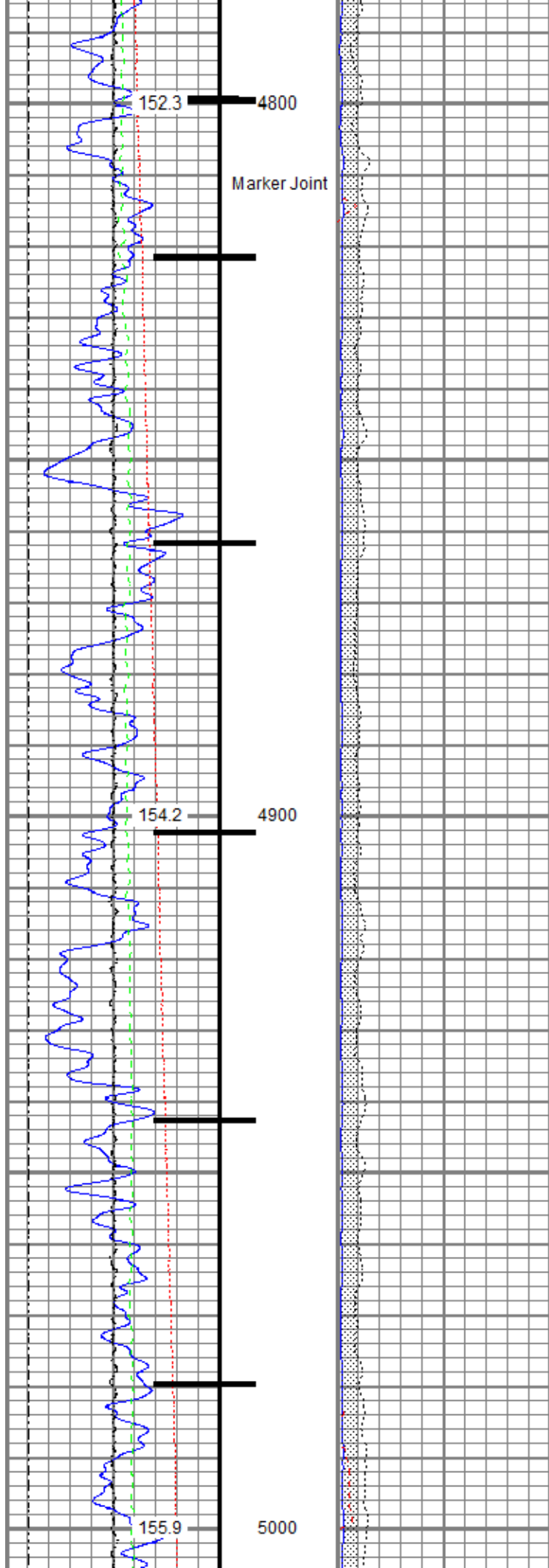


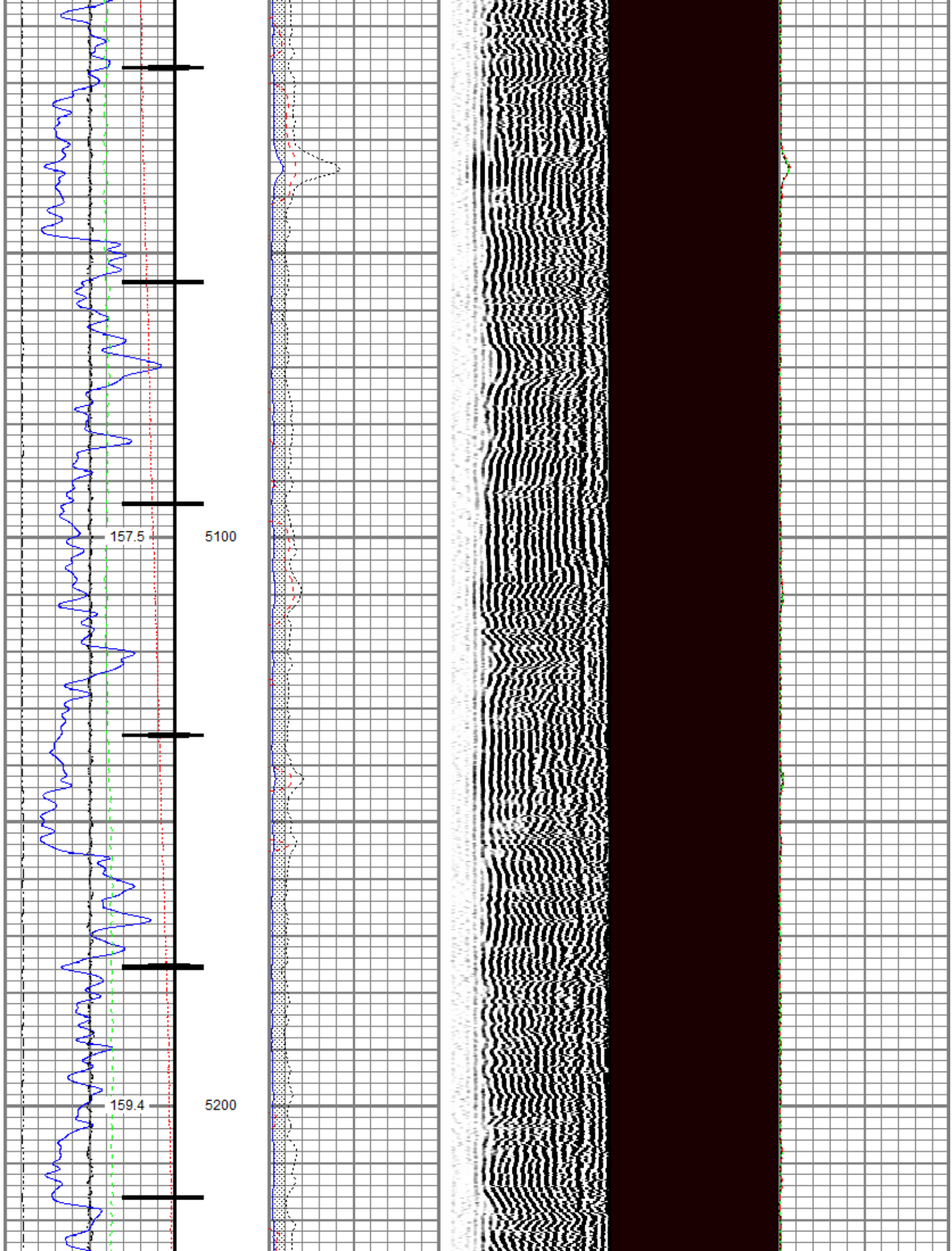


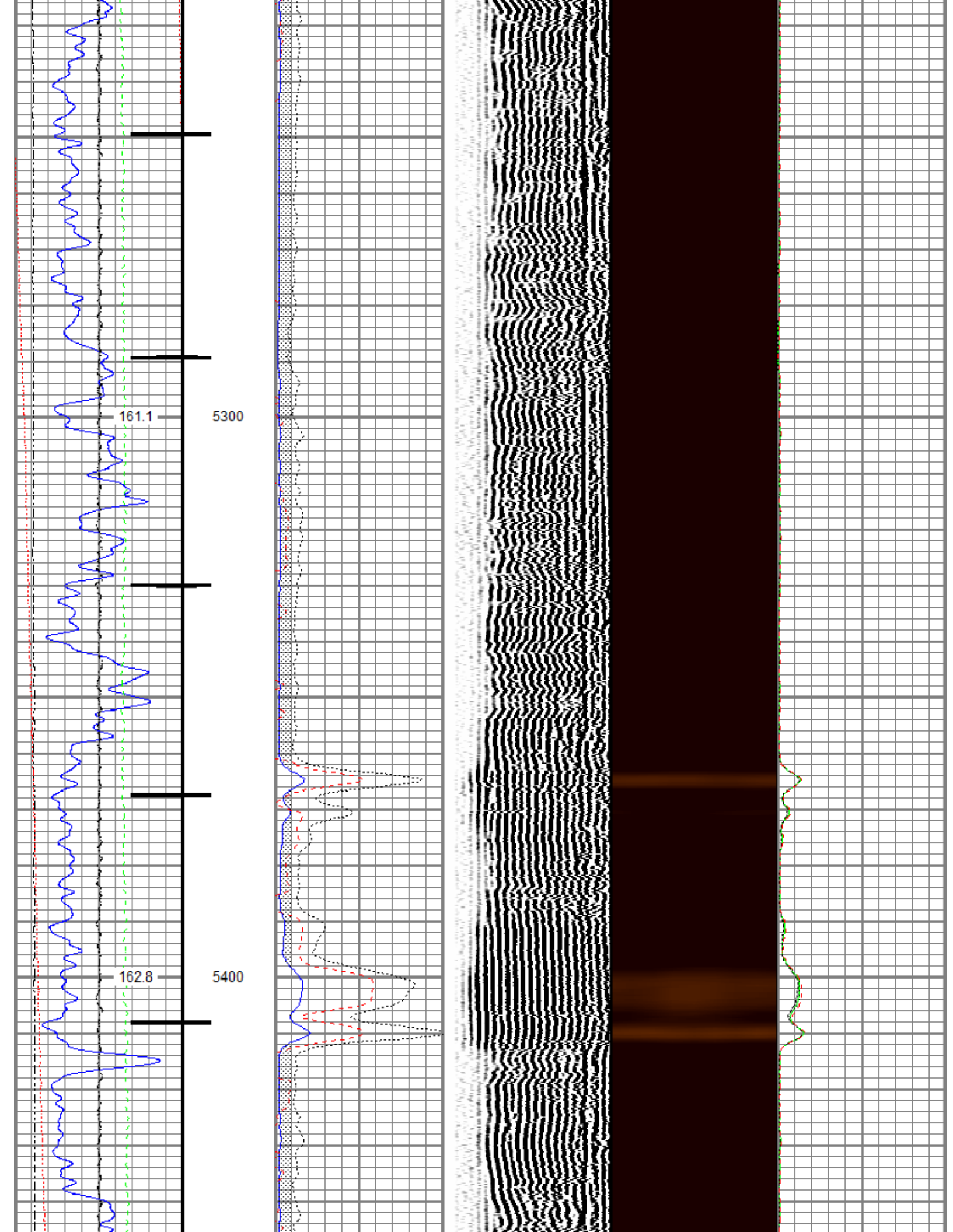


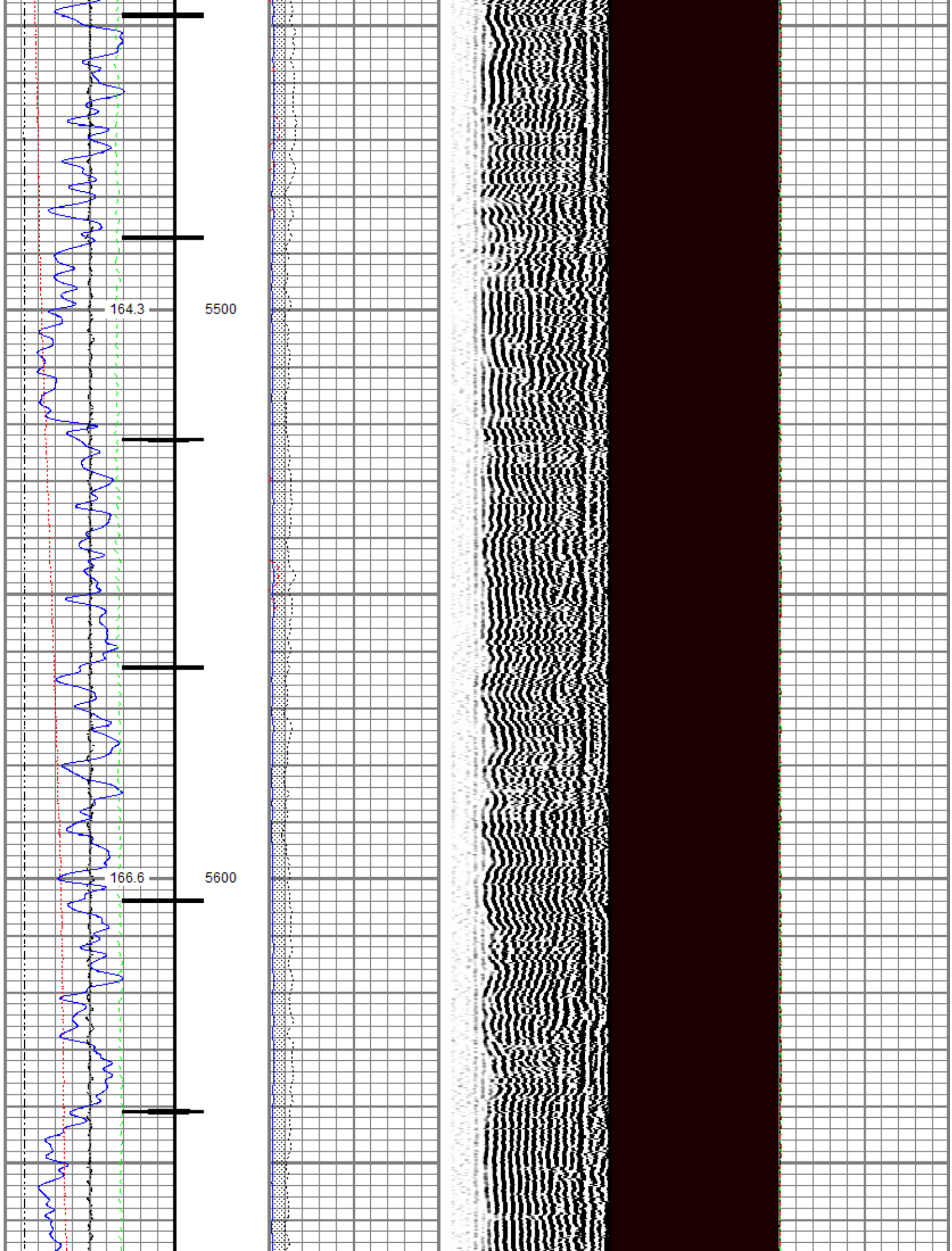


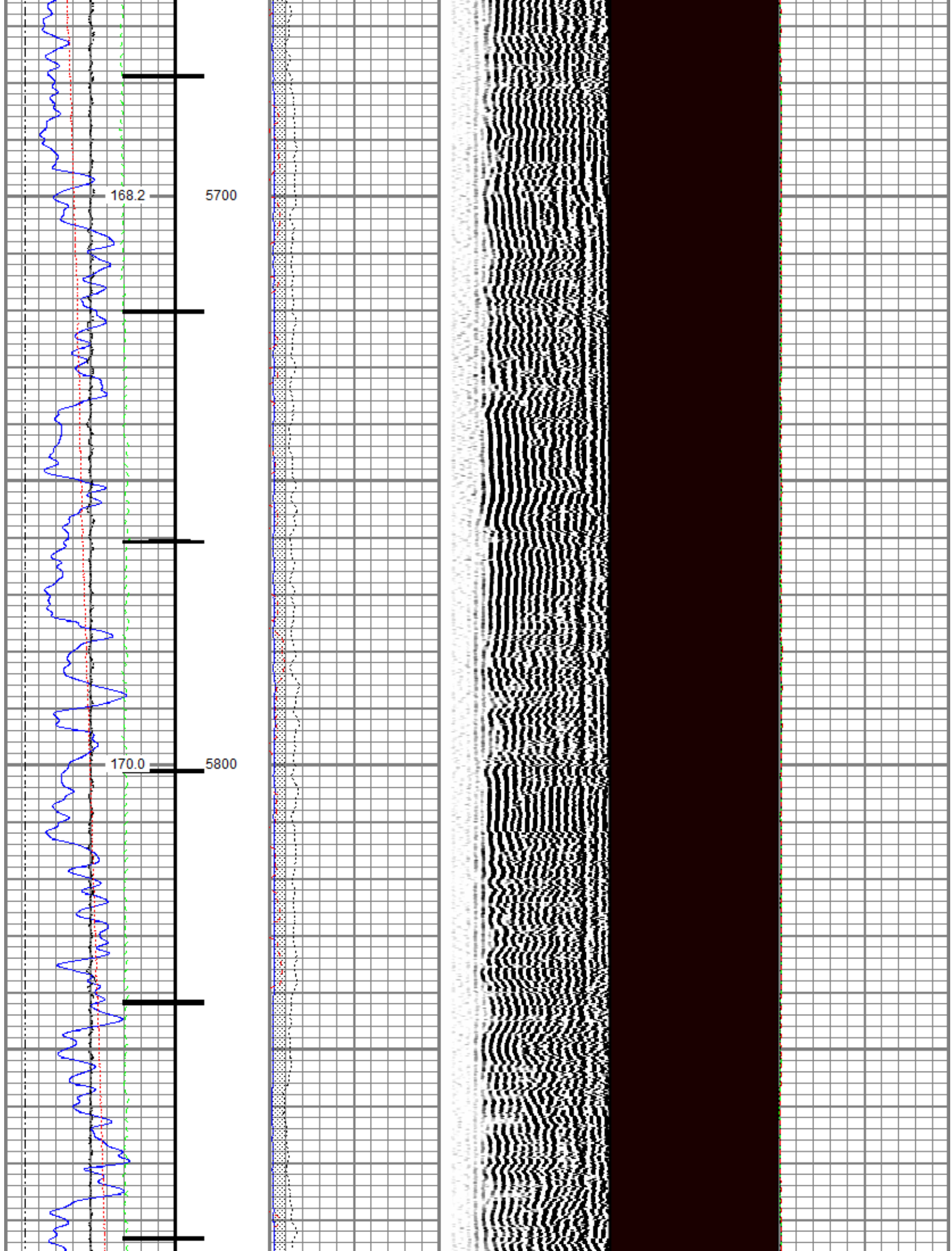


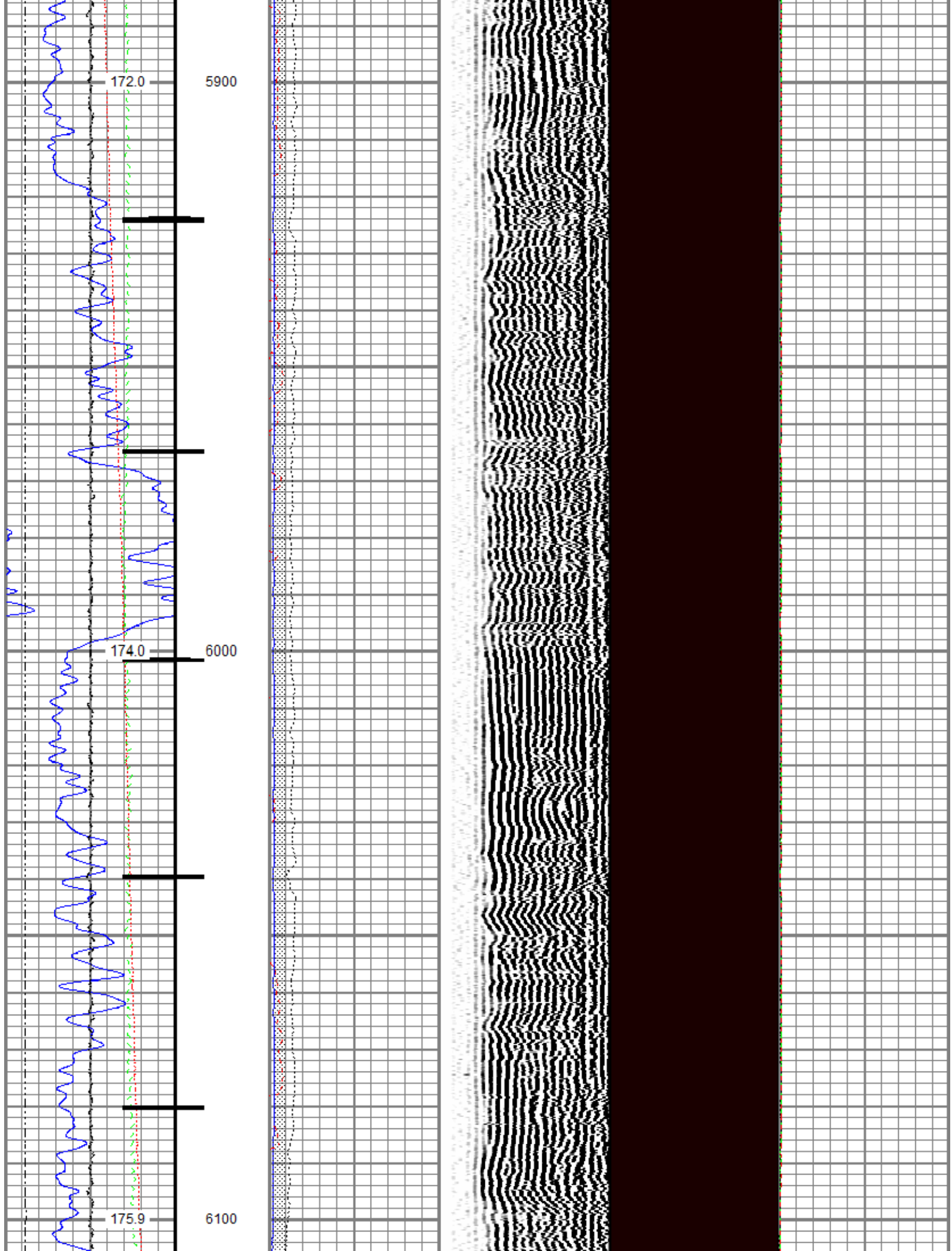


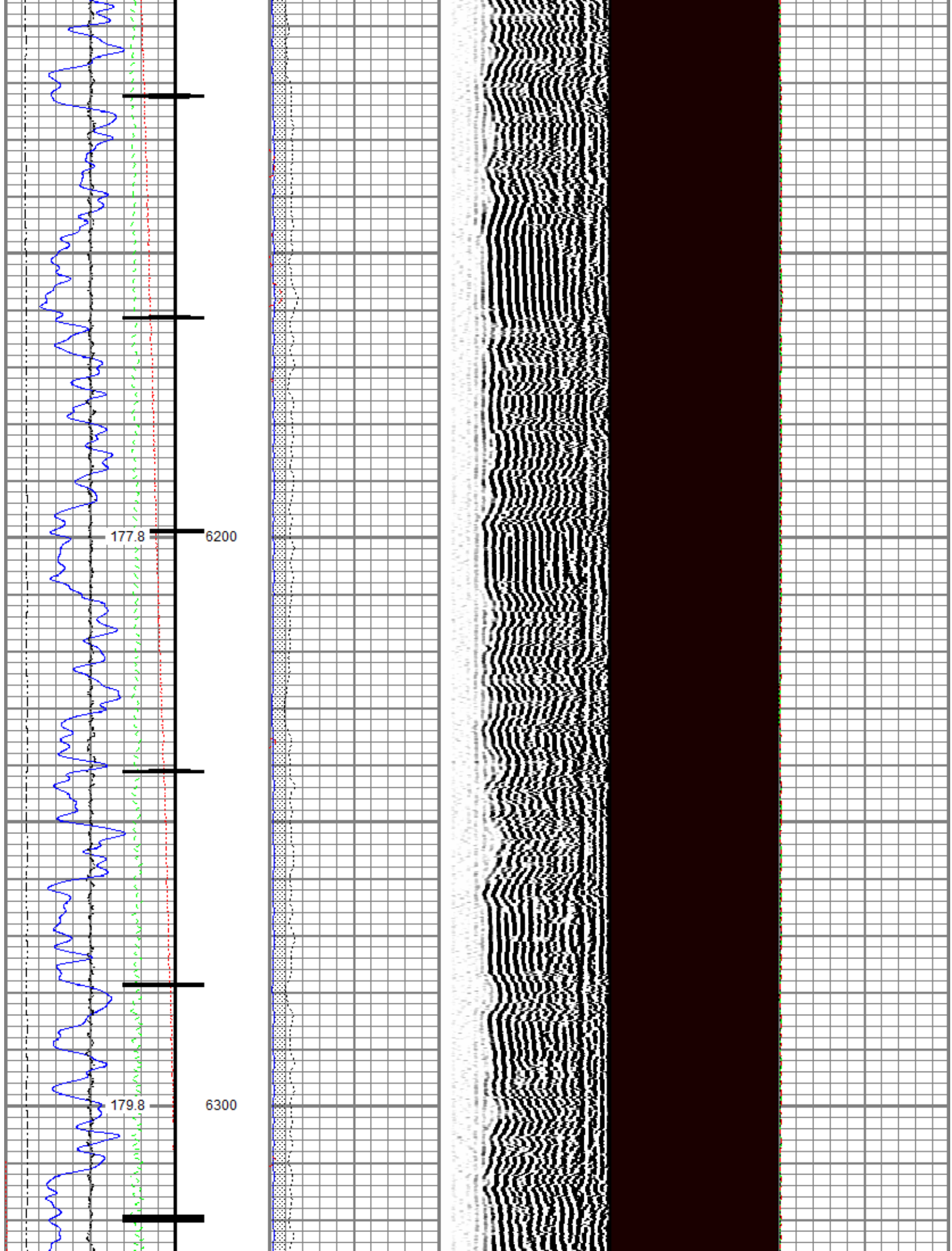


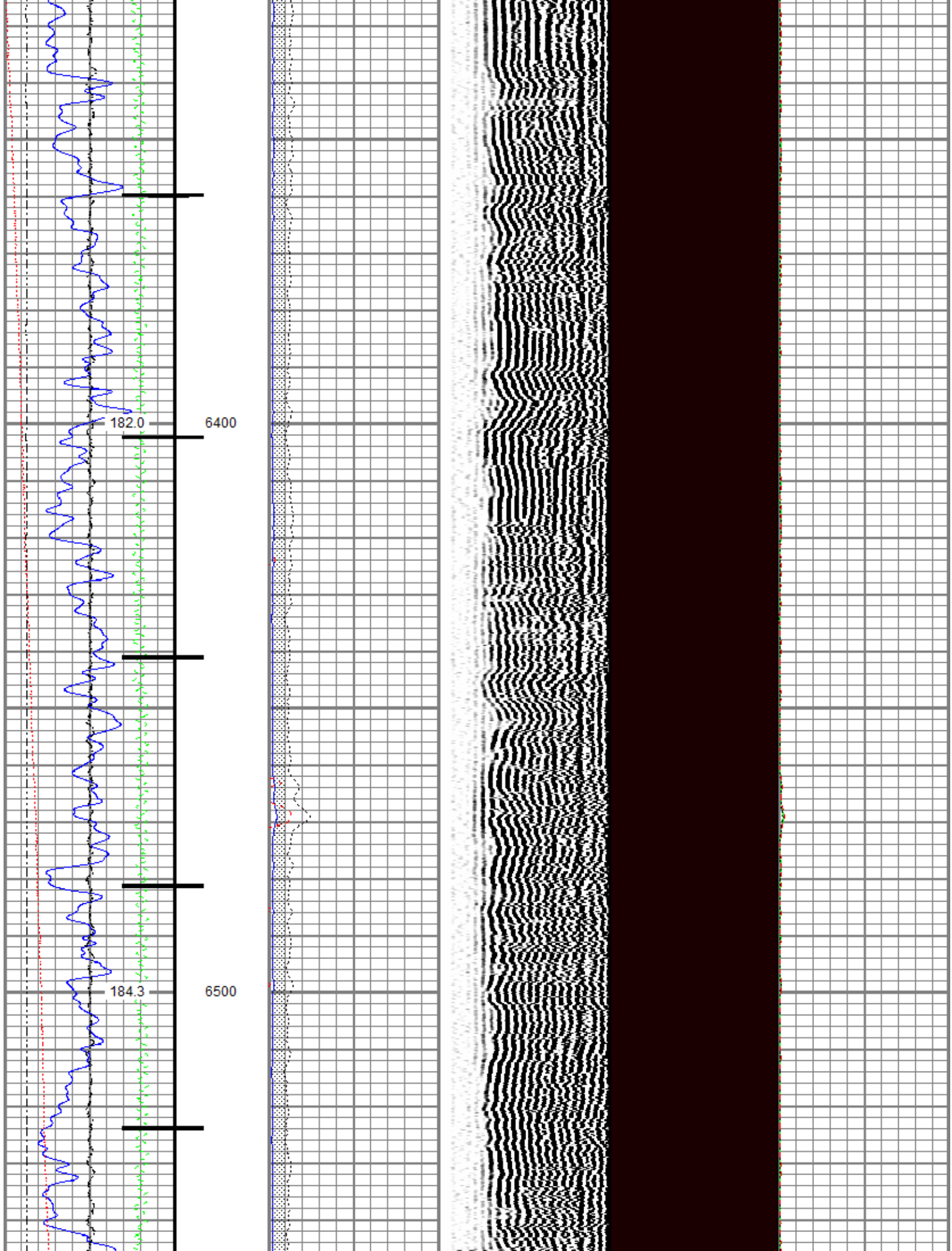


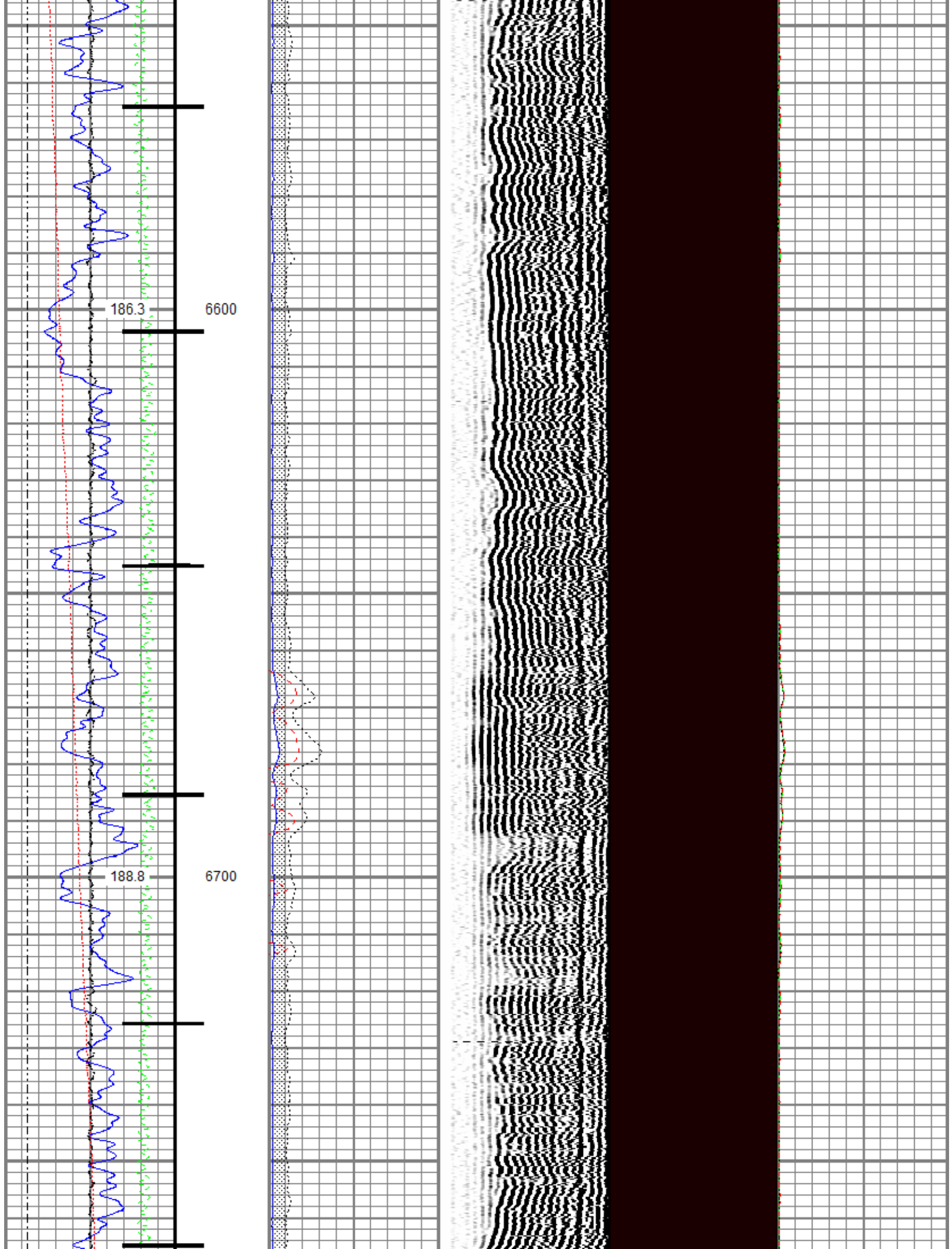


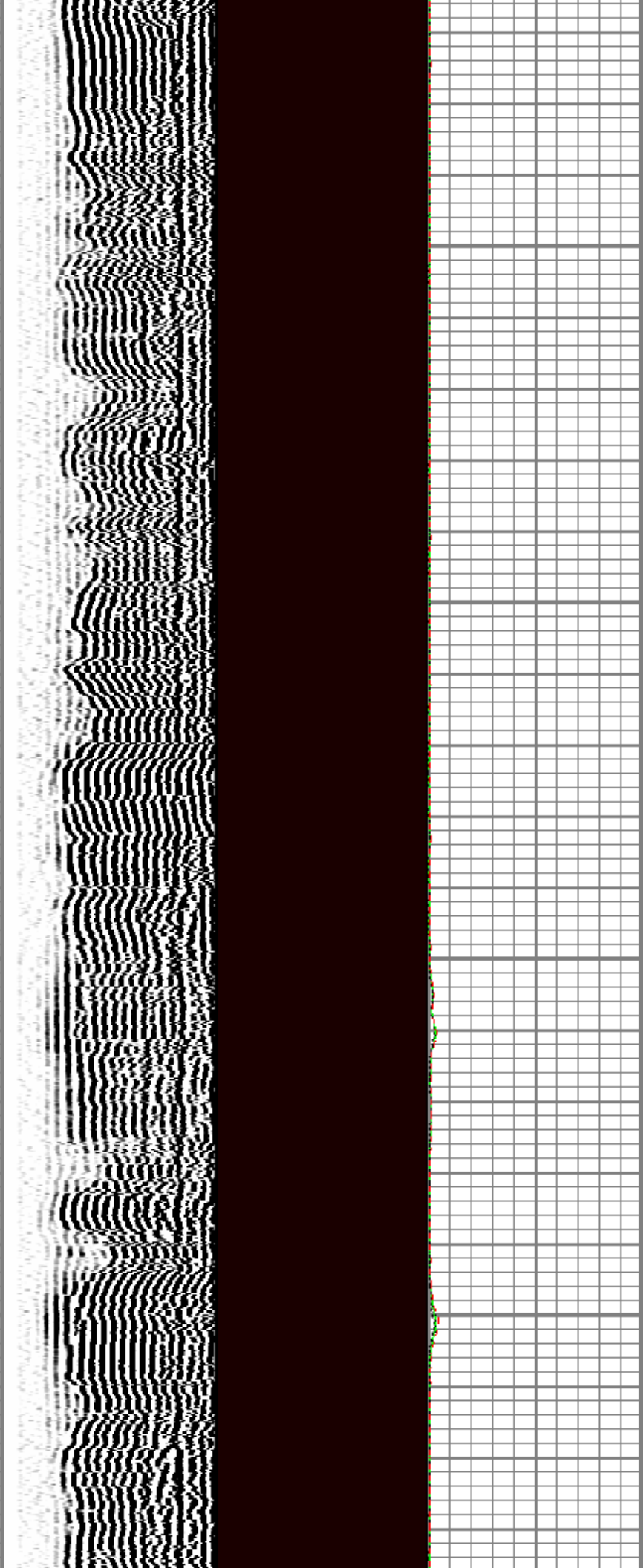
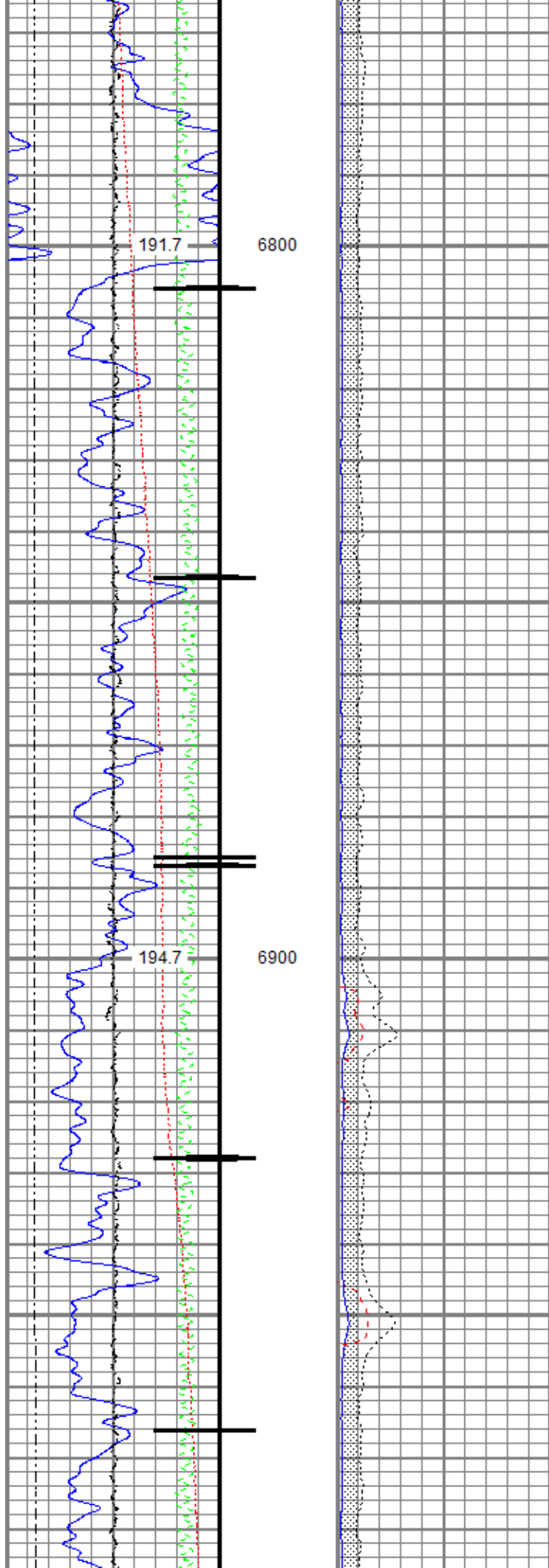


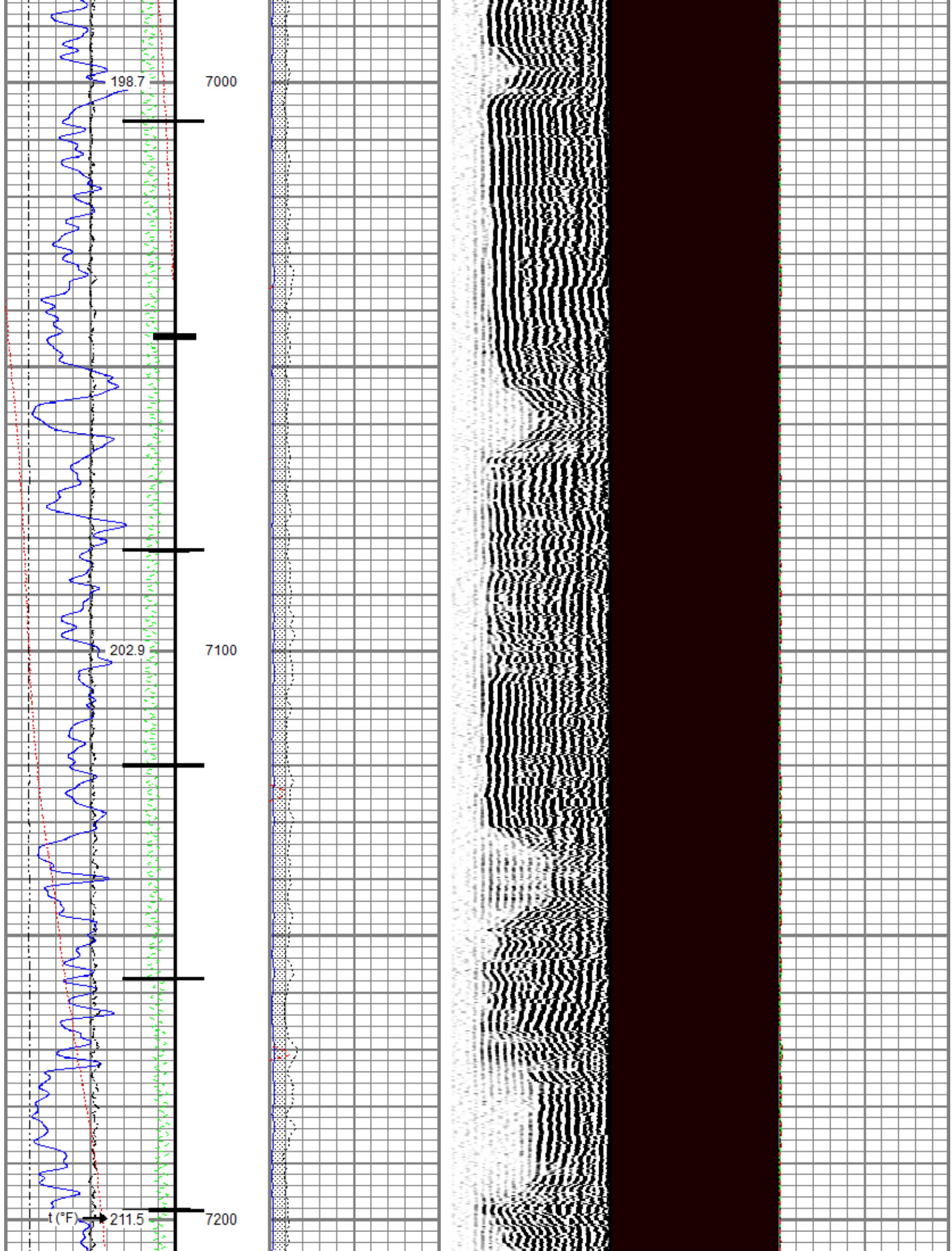


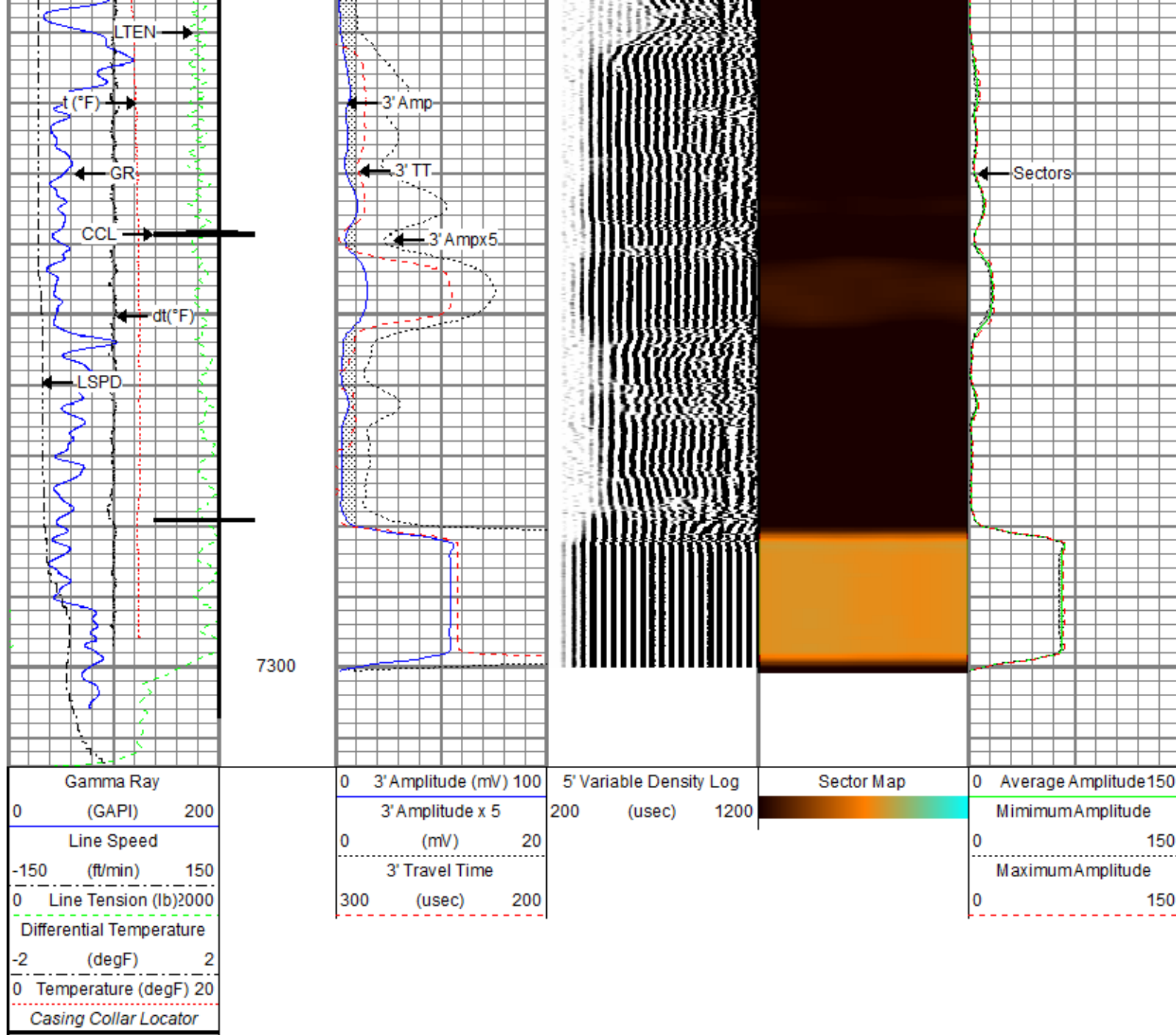








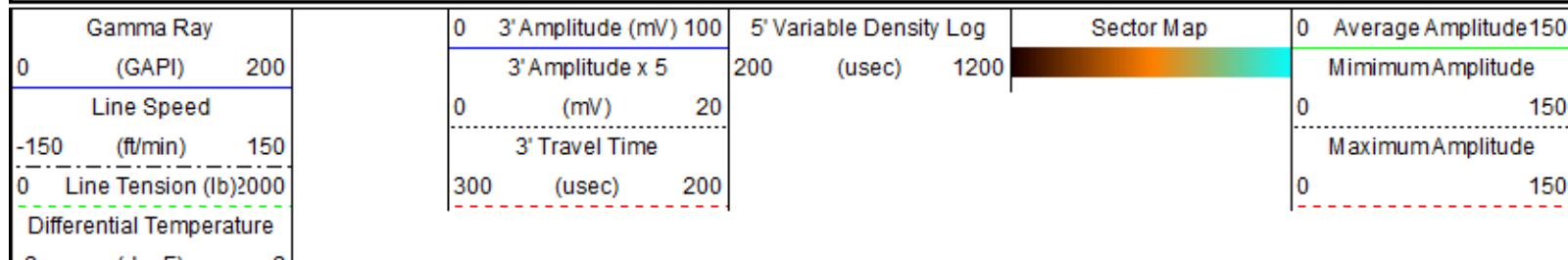




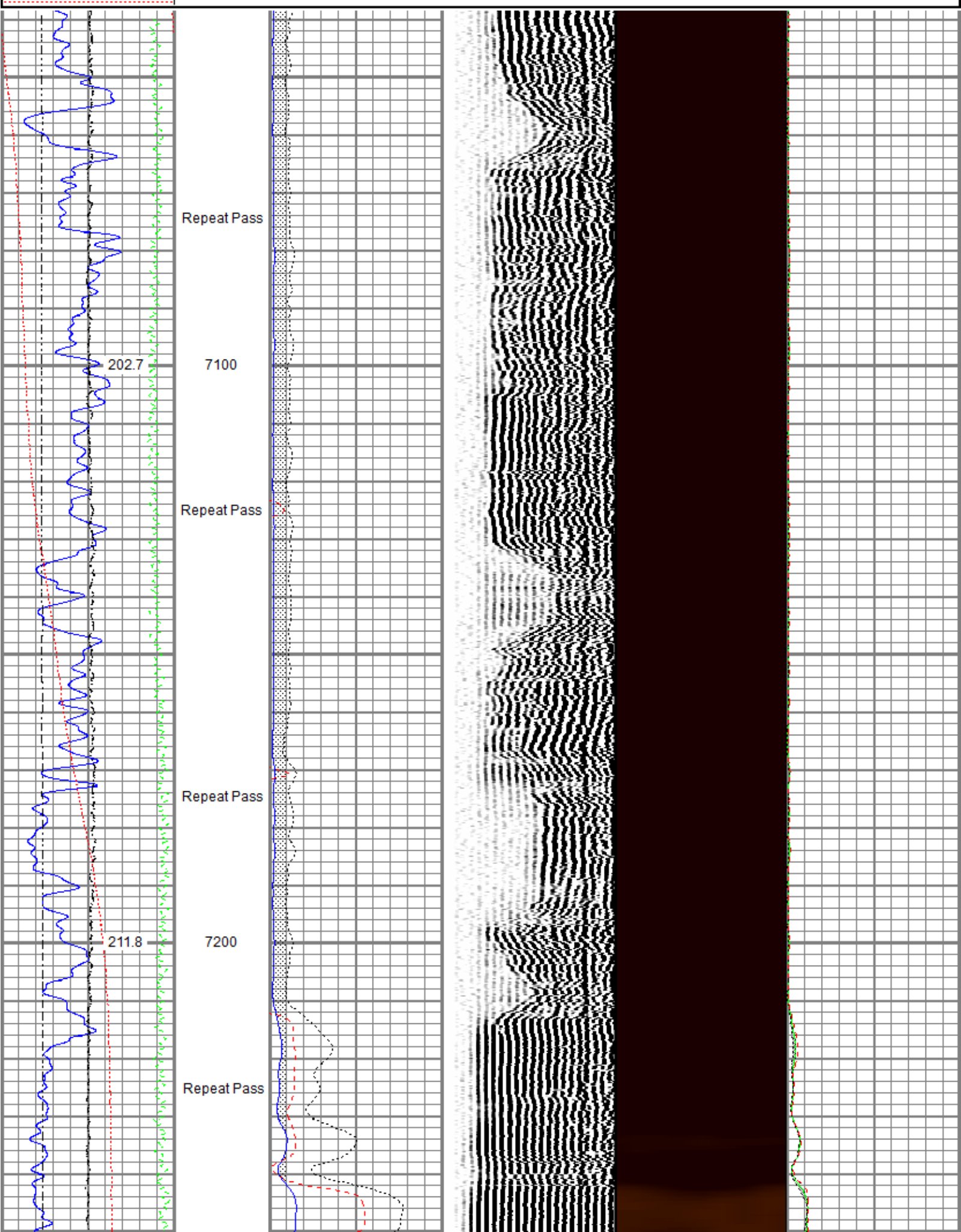
Repeat Pass

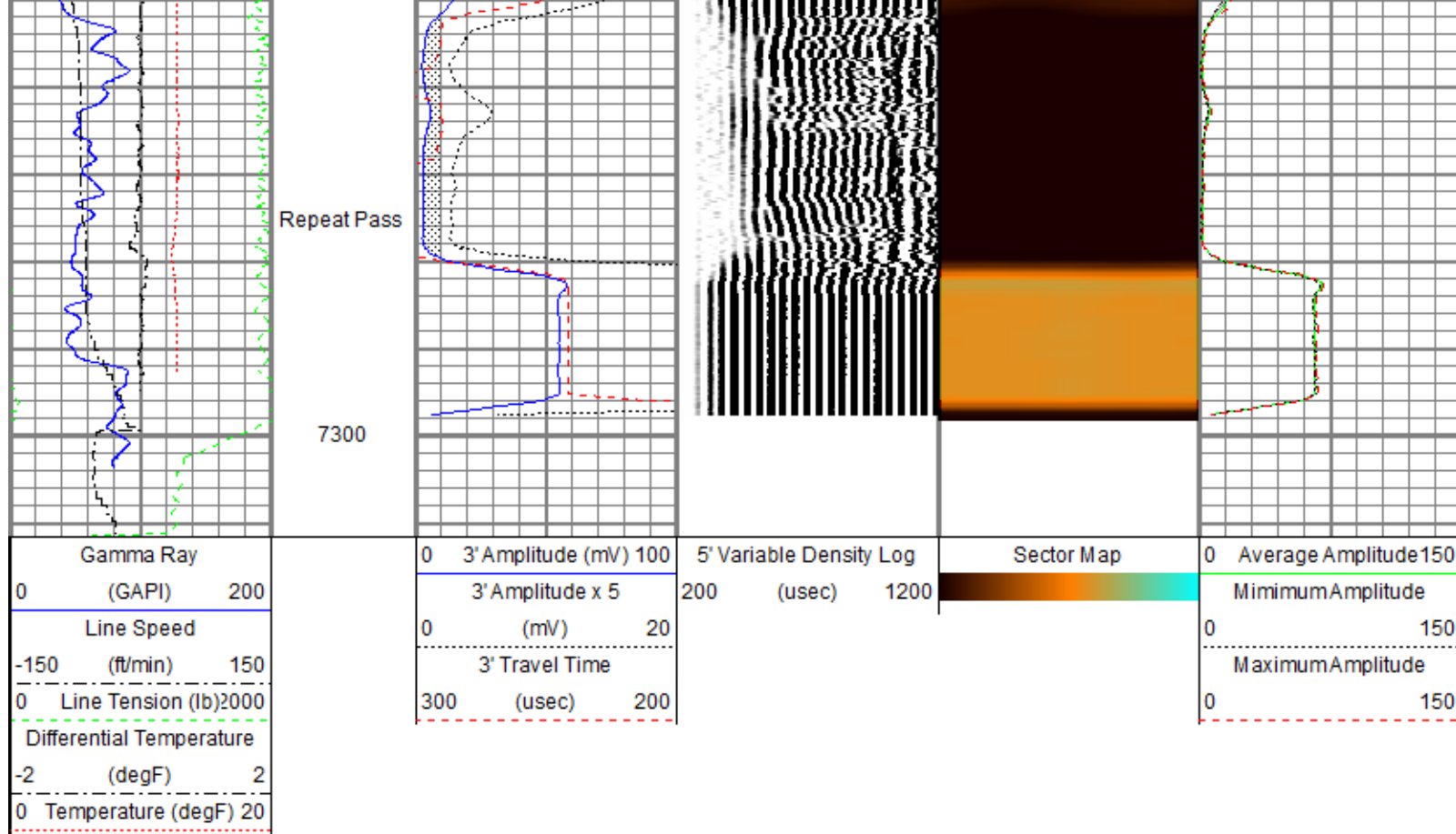
Recorded With 0 PSI Surface Induced Pressure

Database File: tep_puckett gm 543-8_rbl_11-19-19\tep_puckett gm 543-8_rbl_11-19-19.db
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 Presentation Format: ros_rbt004_tep
 Dataset Creation: Wed Nov 20 17:14:05 2019
 Charted by: Depth in Feet scaled 1:240

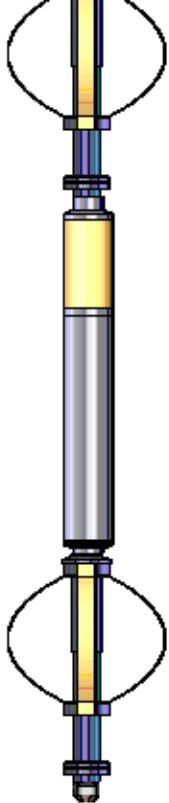


(degF) 2
0 Temperature (degF) 20





Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Titan CHD-14375 GO Titan 1-7/16" Assembled Electric Cable Head with 1" Fishing Neck	1.03	1.44	3.60
			Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00
			Probe Radii-2750 RBT (120855) Probe 2-3/4" Radial Cement Bond Tool with Integral Temperature Sub	9.39	2.75	105.00
TEMP	17.00					
WVFS8	14.77					
WVFS7	14.77					
WVFS6	14.77					
WVFS5	14.77					
WVFS4	14.77					
WVFS3	14.77					
WVFS2	14.77					
WVFS1	14.77					
WVFCAL	14.77					
WVF3FT	14.77					

WVF5FT	13.77		Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00
CCL\$2	6.76		Probe GR-CCL-2750 GOB (FW1211-081) Probe 2-3/4" rev.2 Digital Scintillation Gamma Ray/CCL Combined with GO Bottom	4.51	2.75	55.00
CCL\$1	6.76					
GR	5.51					
			Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00
			GO BN-14375 GO 1-7/16" Bull Nose with Go Box Top	0.25	1.44	1.00
Dataset: tep_puckett gm 543-8_rbl_11-19-19.db: field/well/run2/Main.1 Total length: 23.82 ft Total weight: 224.60 lb O.D.: 2.75 in						

Calibration Report						
Database File	c:\programdata\warrior\data\tep_puckett gm 543-8_rbl_11-19-19\tep_puckett gm 543-8_rbl_11-19-19.db					
Dataset Pathname	run2/Main.1					
Dataset Creation	Wed Nov 20 17:11:07 2019					
Gamma Ray Calibration Report						
Serial Number:	FW1211-081					
Tool Model:	2750 GOB					
Performed:	Mon Oct 01 11:32:39 2018					
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:	120855					
Tool Model:	2750 RBT					
Calibration Casing Diameter:	4.500	in				
Calibration Depth:	170.797	ft				
Master Calibration, performed (Derived):						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.003	0.868	0.800	81.196	92.940	0.531
CAL	0.003	0.760				
5'	0.008	0.736	0.800	81.196	110.402	-0.102
SUM						

S1	0.007	0.938	0.000	100.000	107.487	-0.774
S2	0.005	0.915	0.000	100.000	109.936	-0.572
S3	0.007	0.860	0.000	100.000	117.237	-0.812
S4	0.006	0.821	0.000	100.000	122.650	-0.712
S5	0.005	0.801	0.000	100.000	125.696	-0.676
S6	0.006	0.837	0.000	100.000	120.304	-0.668
S7	0.006	0.863	0.000	100.000	116.705	-0.660
S8	0.005	0.904	0.000	100.000	111.295	-0.596

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.003	0.760	1.000	0.000

Air Zero Calibration, performed Mon Nov 18 18:07:41 2019:

	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	

Temperature Calibration Report

Serial Number: 120855
Tool Model: 2750 RBT
Performed: Mon Oct 01 11:32:15 2018

	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 Puckett GM 543-8
Field Grand Valley
County Garfield
State Colorado