



Radial Cement Bond
Gamma Ray
Casing Collar Log

Company Kerr-McGee Oil & Gas Onshore, L.P.

Well Nelson 35-5HZ

Field Wattenberg

County Weld State Colorado

Location: API #: 05-123-51249

Other Services

SEC 35 TWP 2N RGE 68W

RBP
JBGR

Permanent Datum Ground Level Elevation 4955'

Elevation

Log Measured From Ground Level

K.B. 4975'

Drilling Measured From Kelly Bushing

D.F. ---
G.L. 4955'

Date 11-MAY-2021

Run Number One

Depth Driller 21569 FT

Depth Logger 6942 FT

Bottom Logged Interval 6930 FT

Top Log Interval Surface

Open Hole Size 8.5"

Type Fluid Water

Density / Viscosity 8.34 lb/gal

Max. Recorded Temp. 212°F

E. estimated Cement Top See Log

Time Well Ready R.O.A

Time Logger on Bottom 12.24

E. equipment Number HD-361

Location Plateville, CO

Recorded By S. Lopez

Witnessed By J. McMillan

Run Number

Bit From To

Size

Weight

From To

Top

Bottom

Casing Record Size (in) Wgt (lbs/ft) Grade Top Bottom
Surface Casing 9 5/8 36 J-55 Surface 1910 FT
Intermediate #1 5 1/2 17 HC P-110 Surface 21568 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 Casing Tally reported Marker Joint at 6904 FT
Adjusted +16 FT to correlate with Marker Joint
Gauge Ring/Junk Basket ran to 7241 FT
Retrievable Bridge Plug set at 6982 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!!

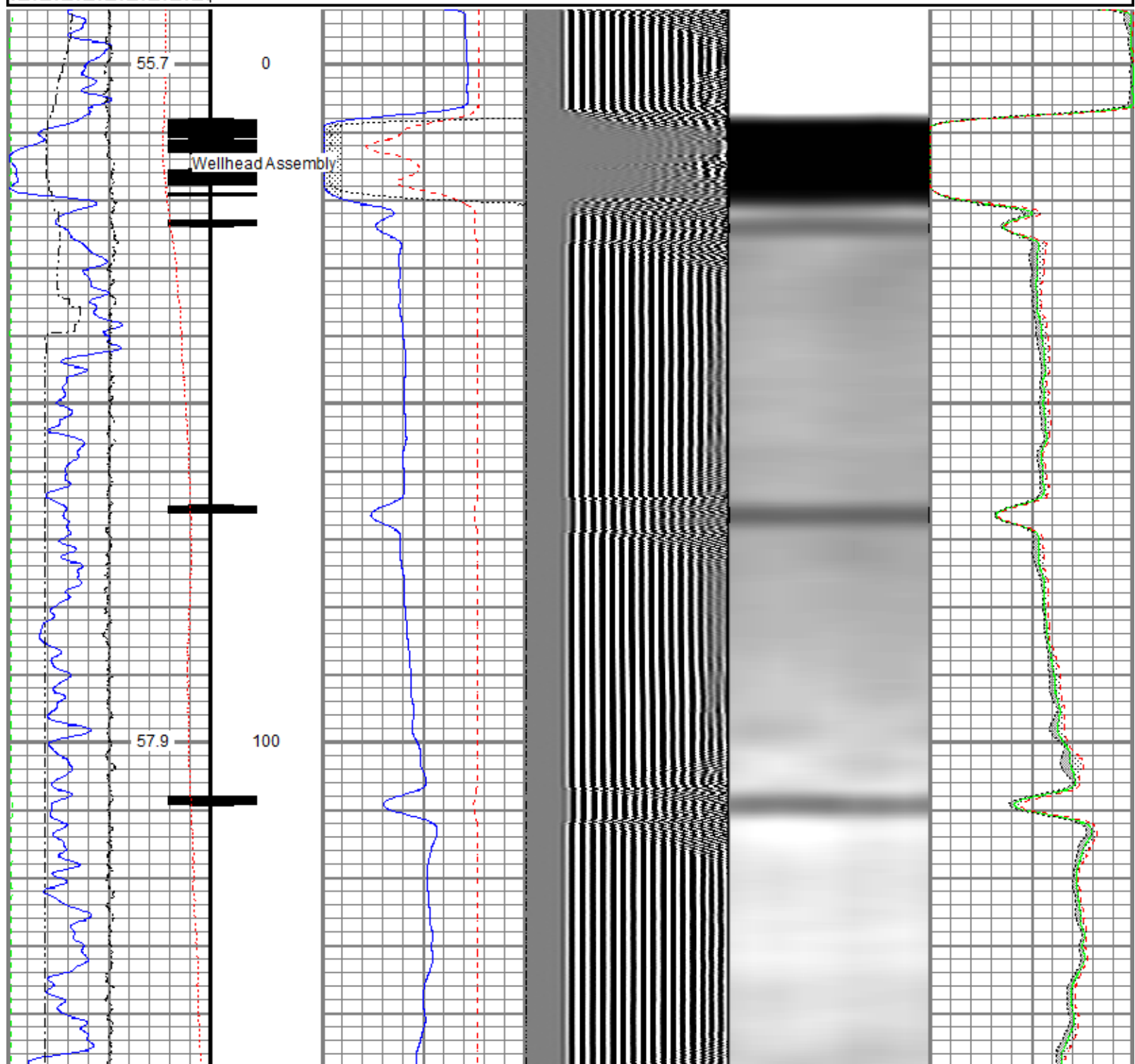
Main Pass

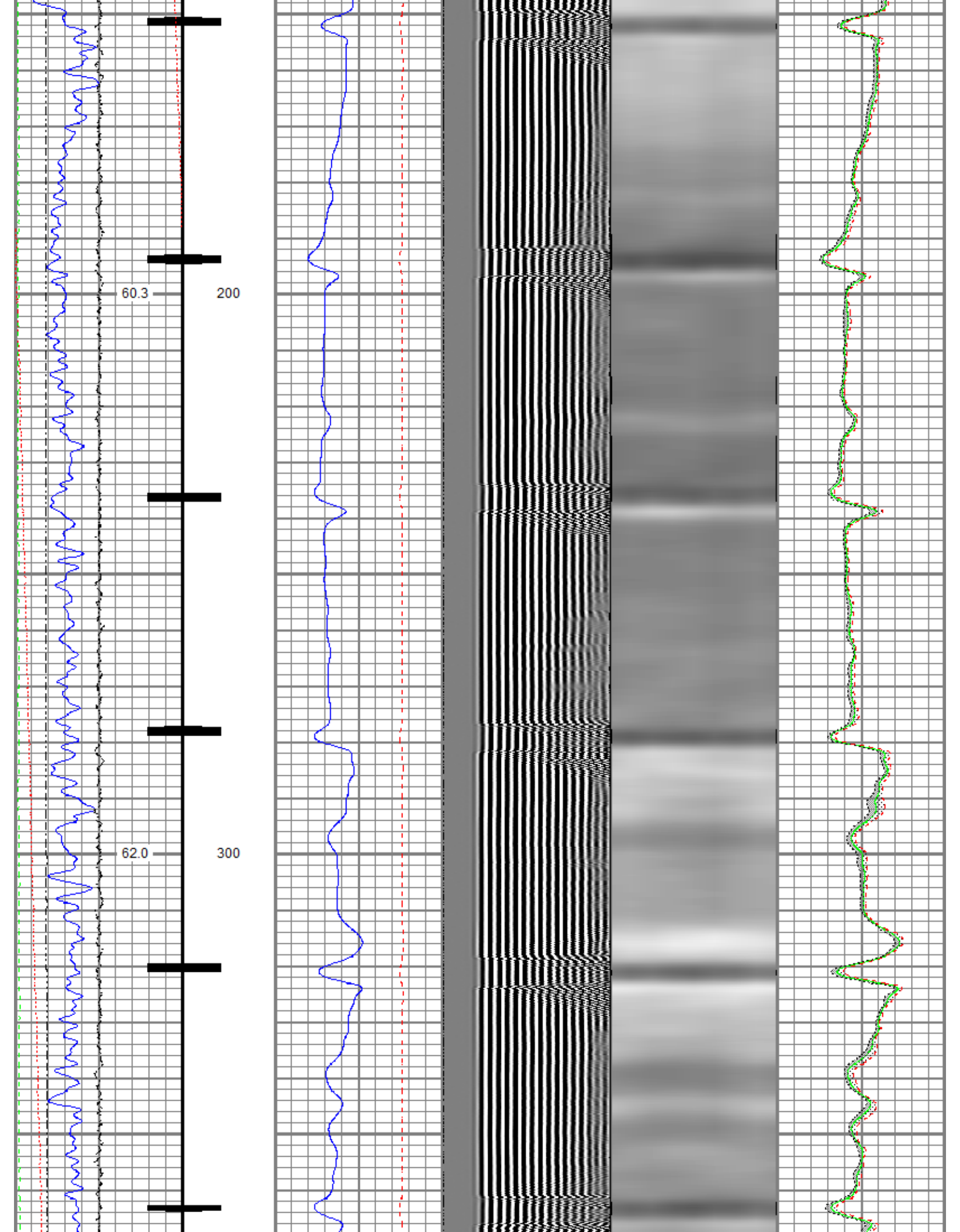


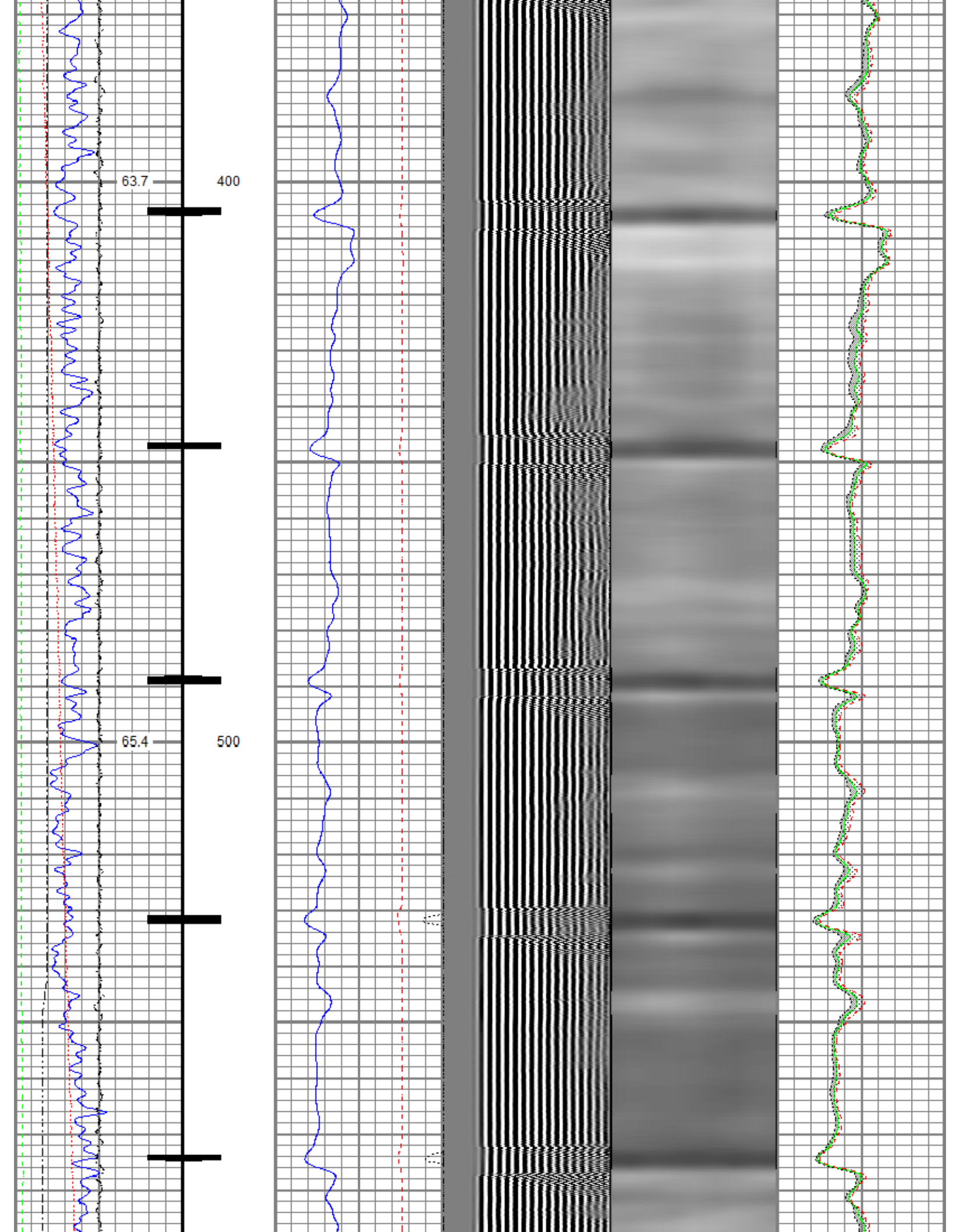
Recorded With 2800 PSI Surface Induced Pressure

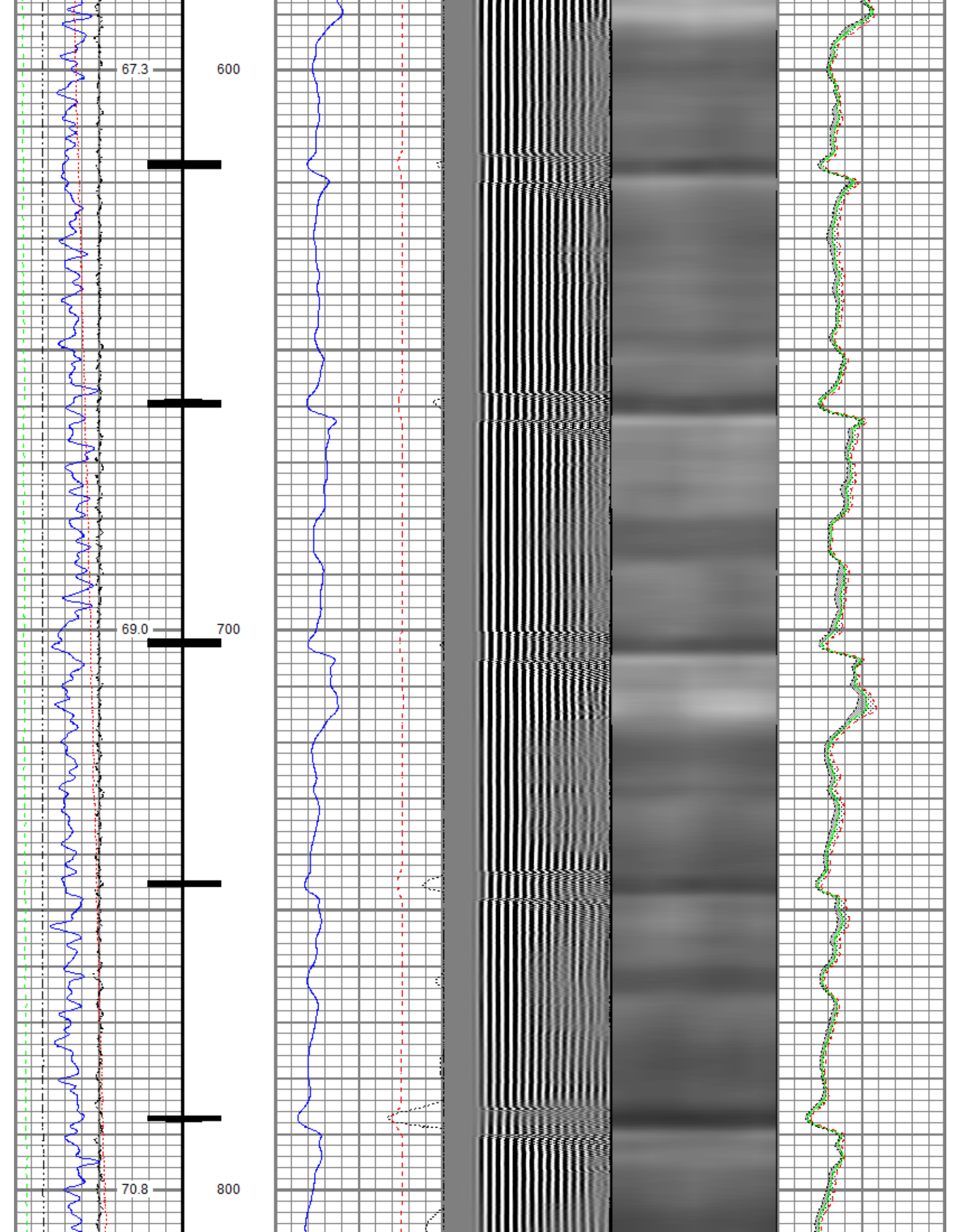
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Dataset Pathname	pass4.2
Presentation Format	ros_radri
Dataset Creation	Wed May 12 16:02:11 2021
Charted by	Depth in Feet scaled 1:240

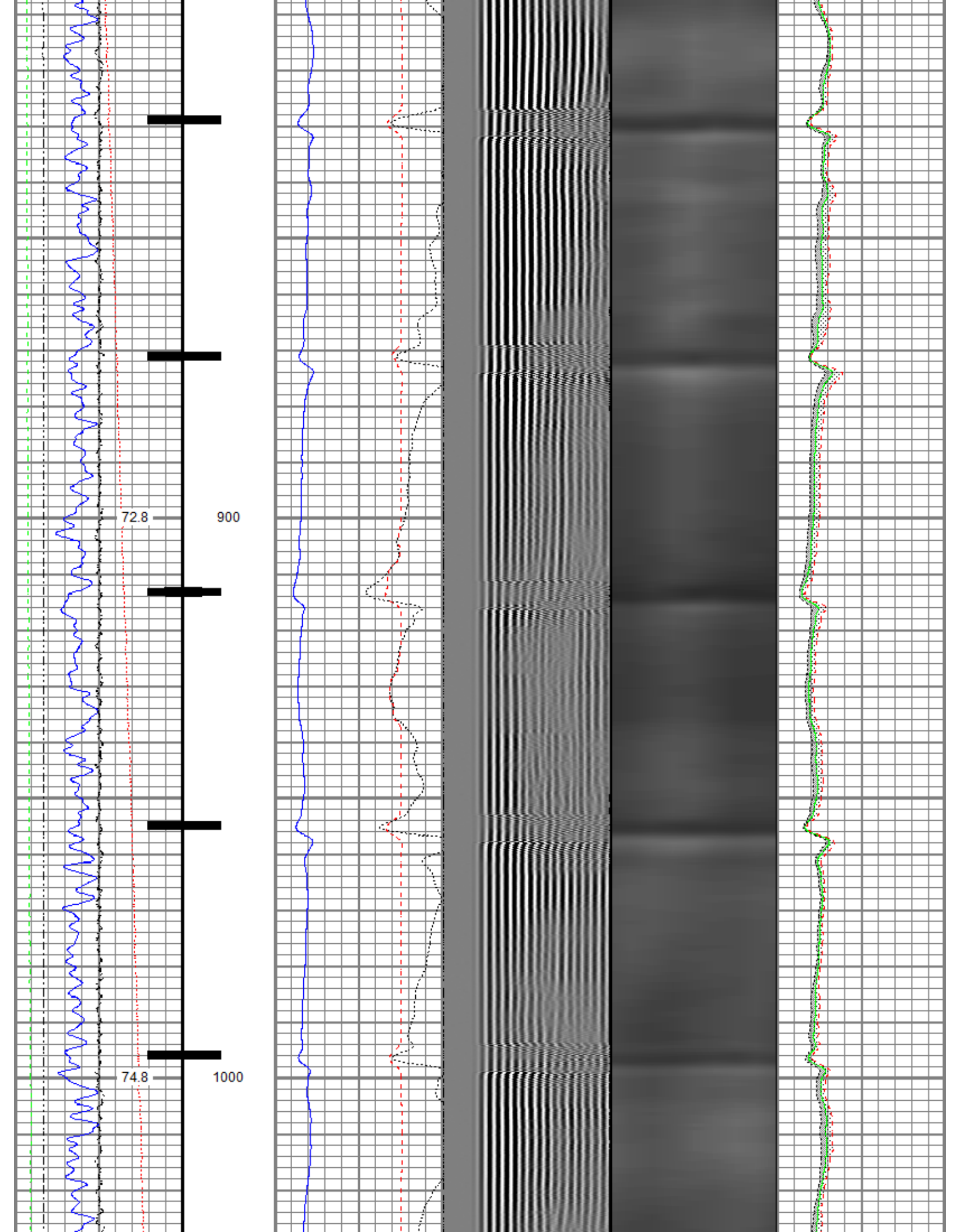
Gamma Ray	0	3' Amplitude (mV) 100	5' Variable Density Log	Sector Map	0	Average Amplitude 100
(GAPI) 120		3' Amplitude x 5	200 (usec) 1200			Minimum Amplitude
Casing Collar Locator	0	(mV) 20			0	100
Temperature (degF) 20		3' Travel Time				Maximum Amplitude
Line Speed	650	(usec) 150			0	100
(ft/min) 150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

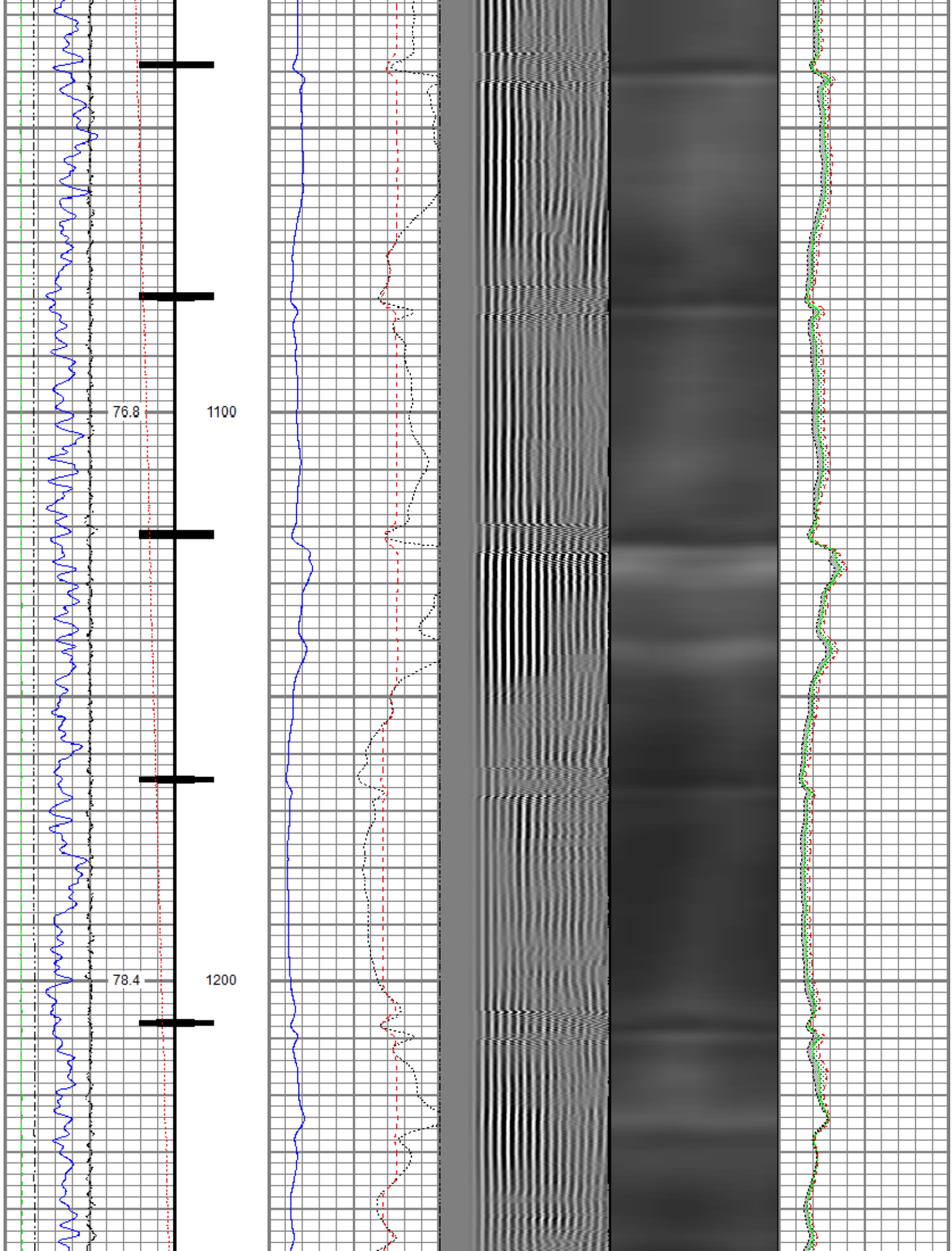


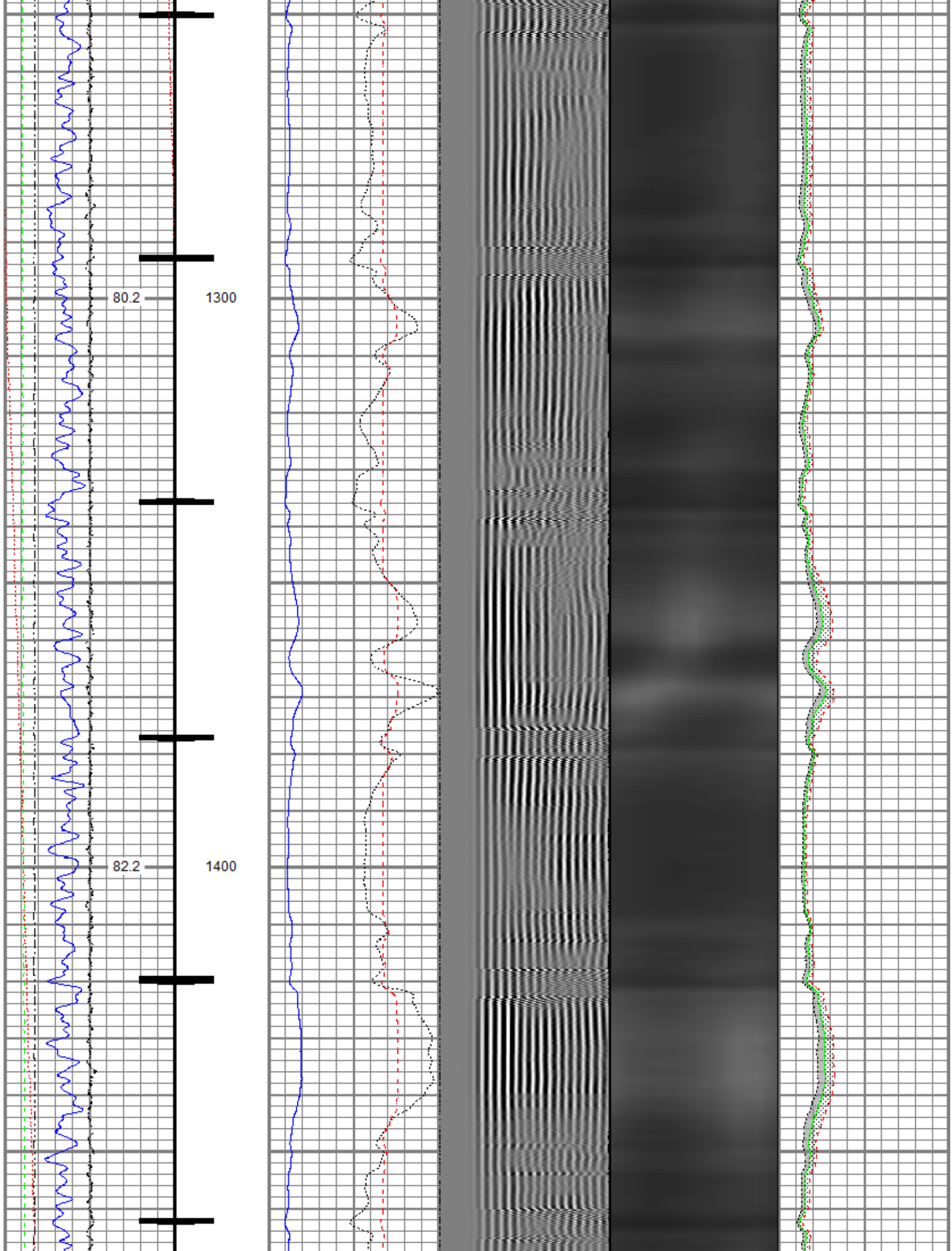


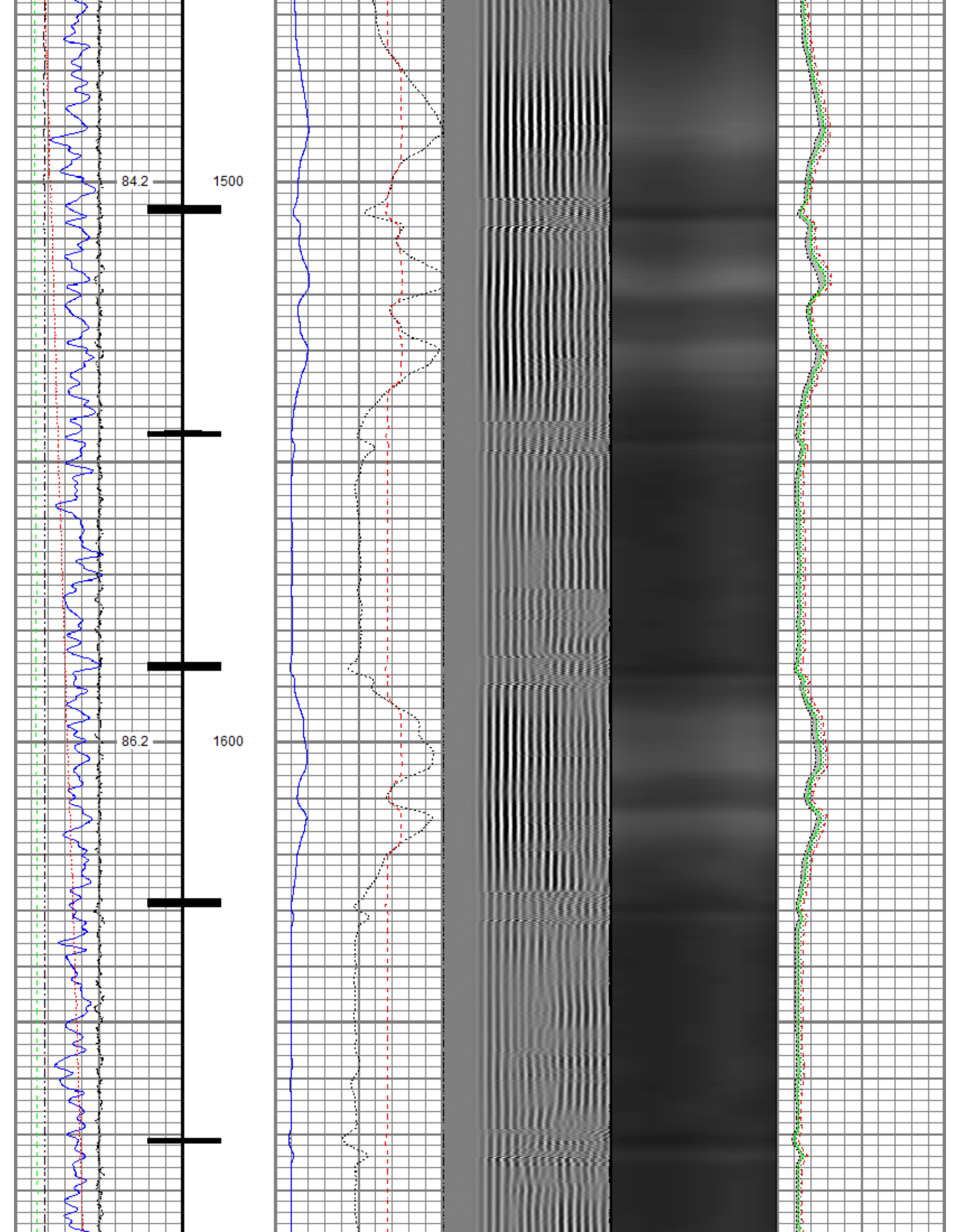


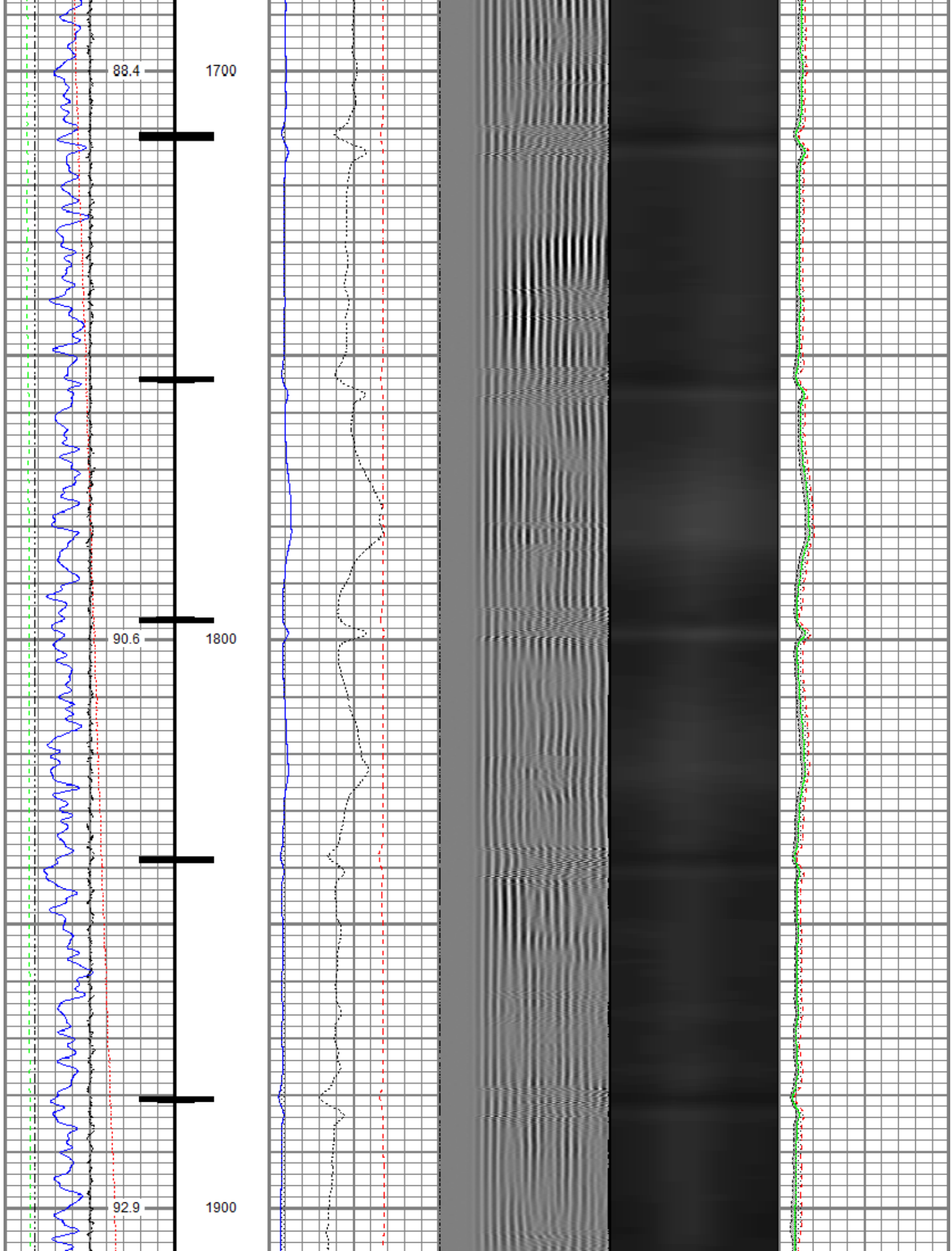


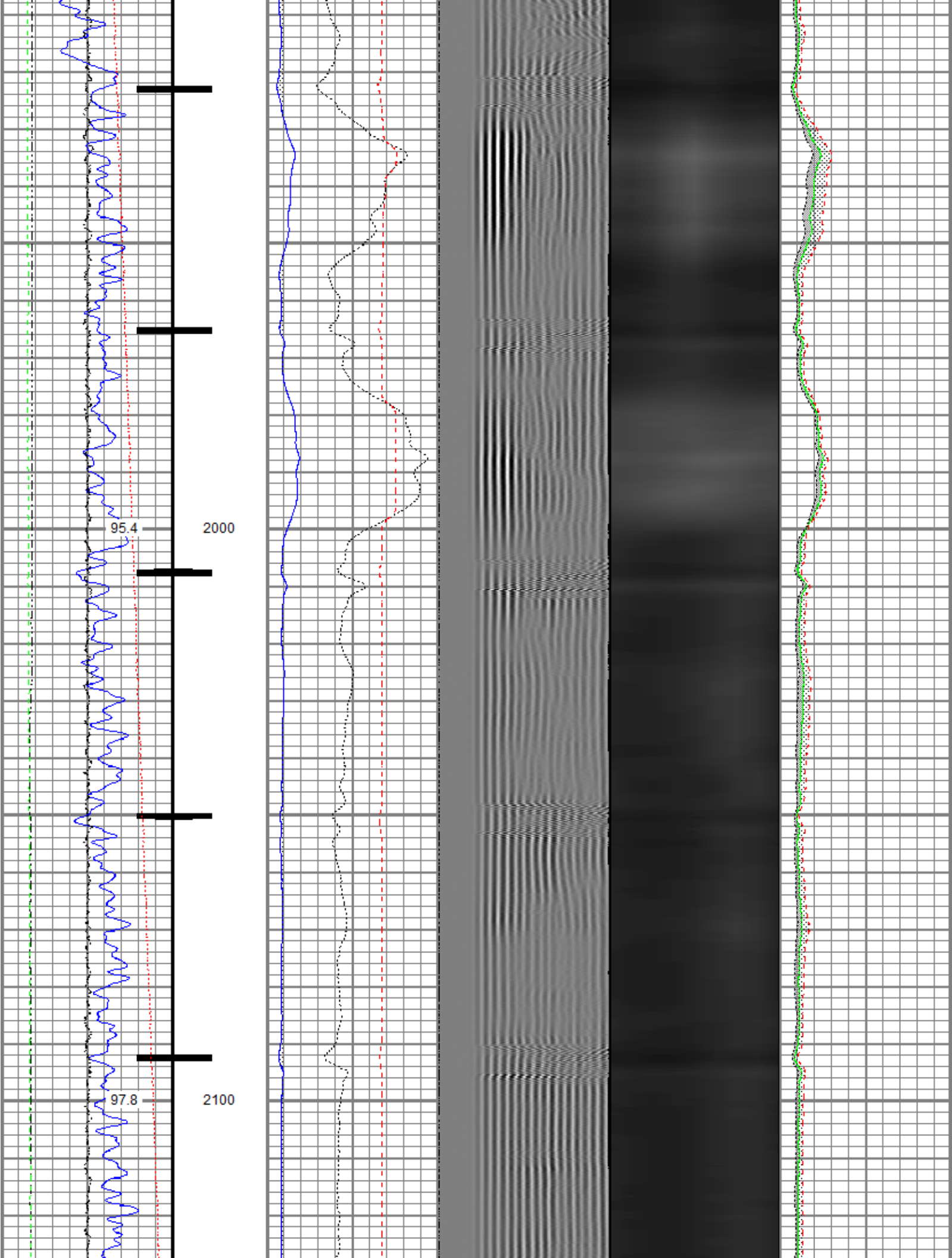


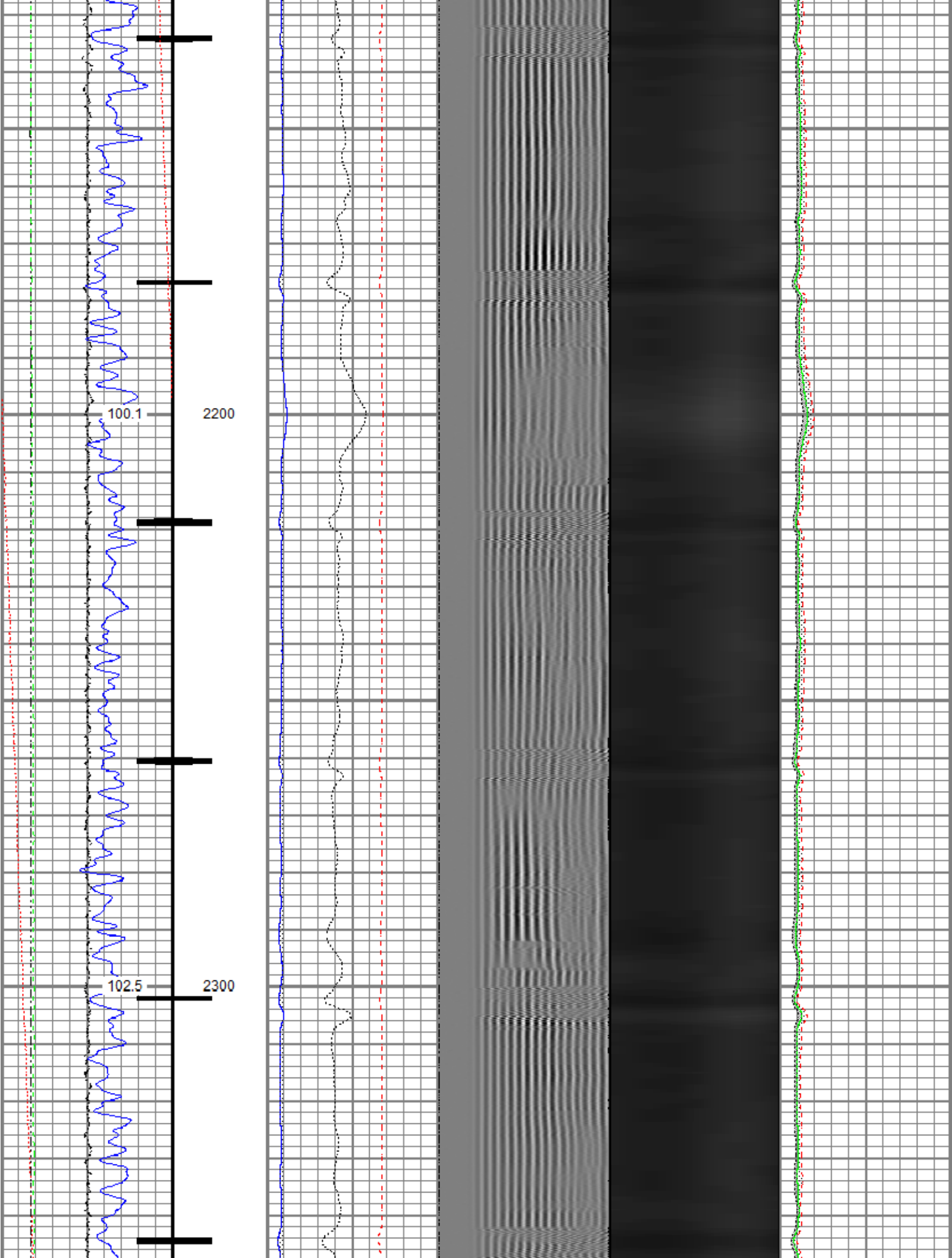


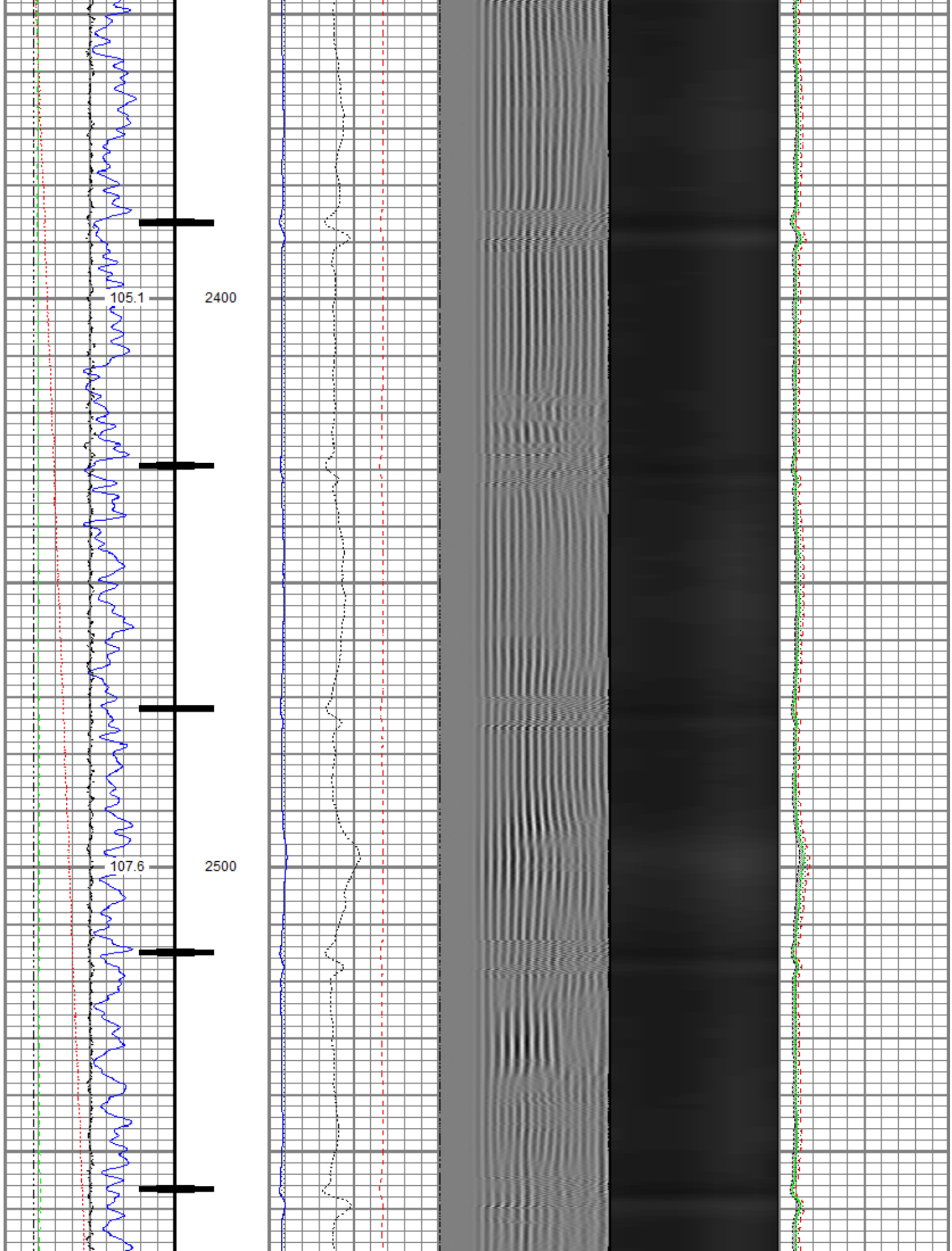


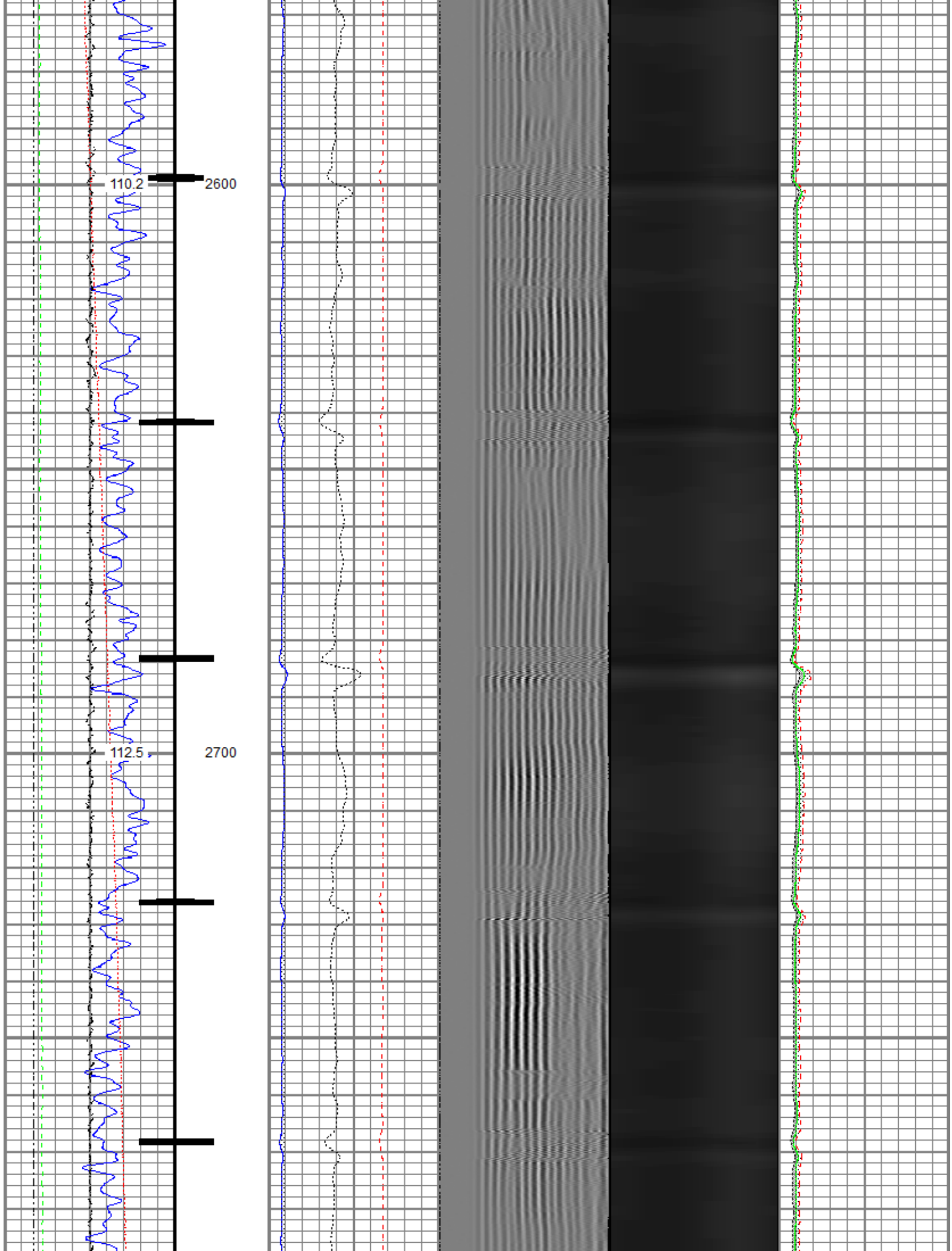


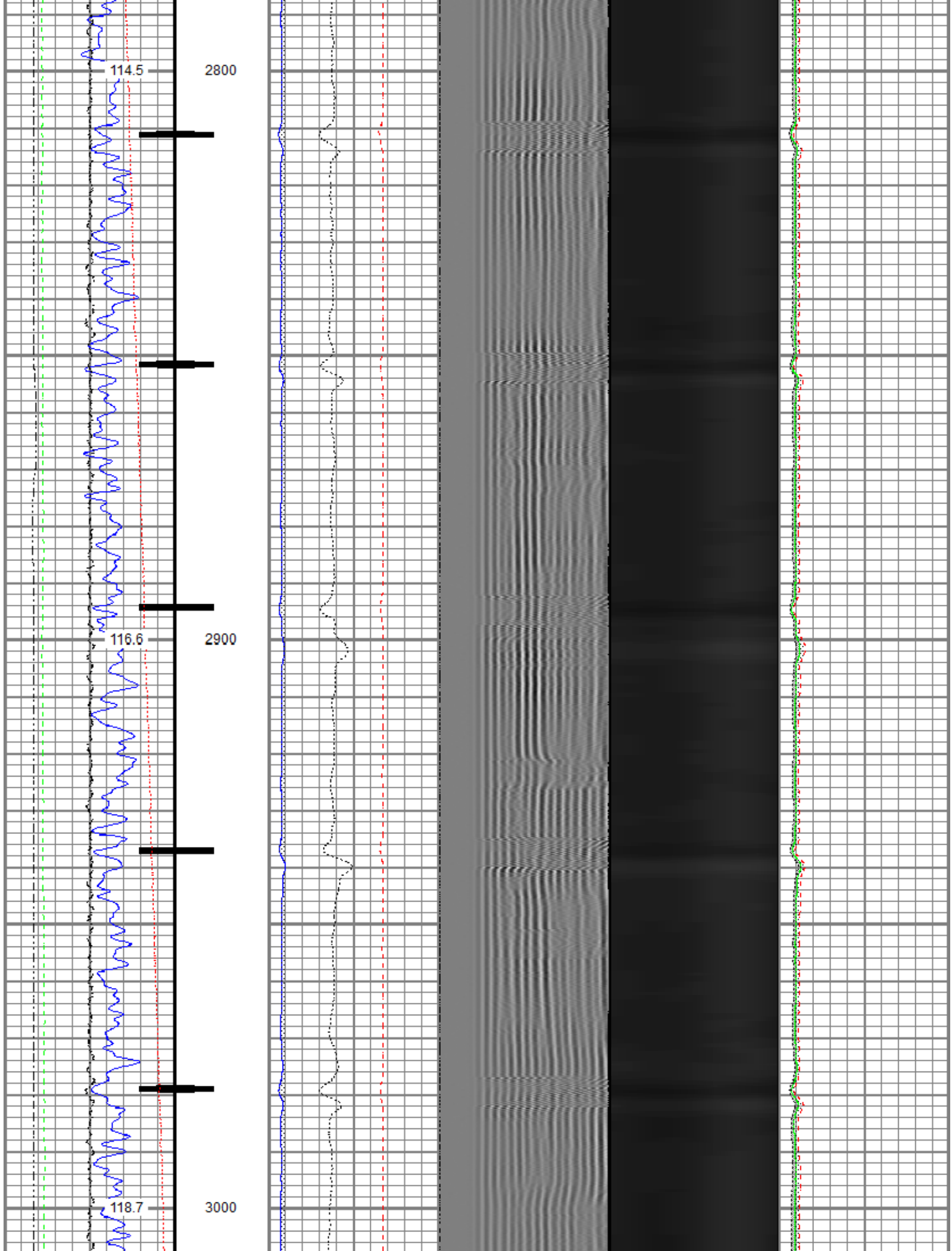


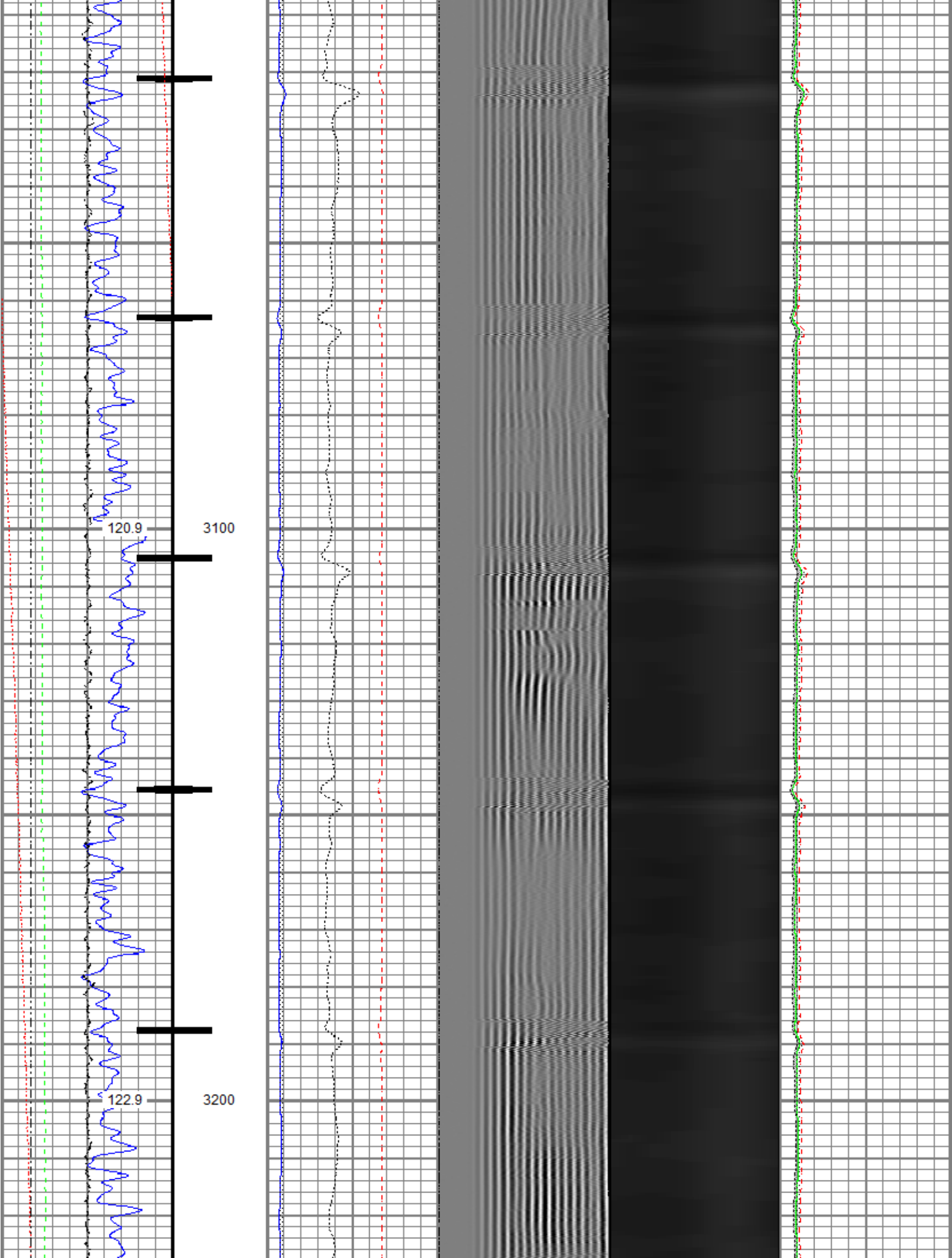


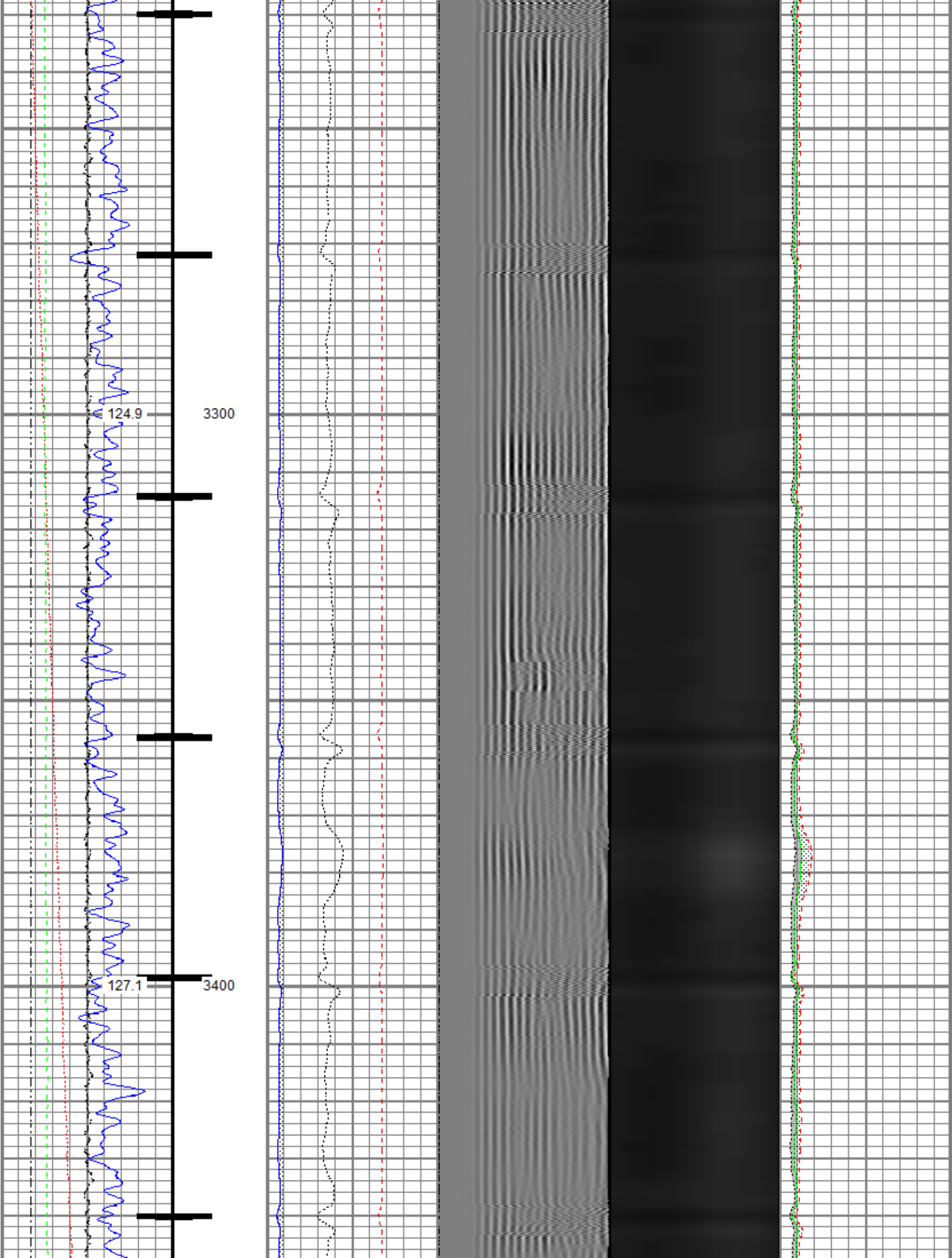


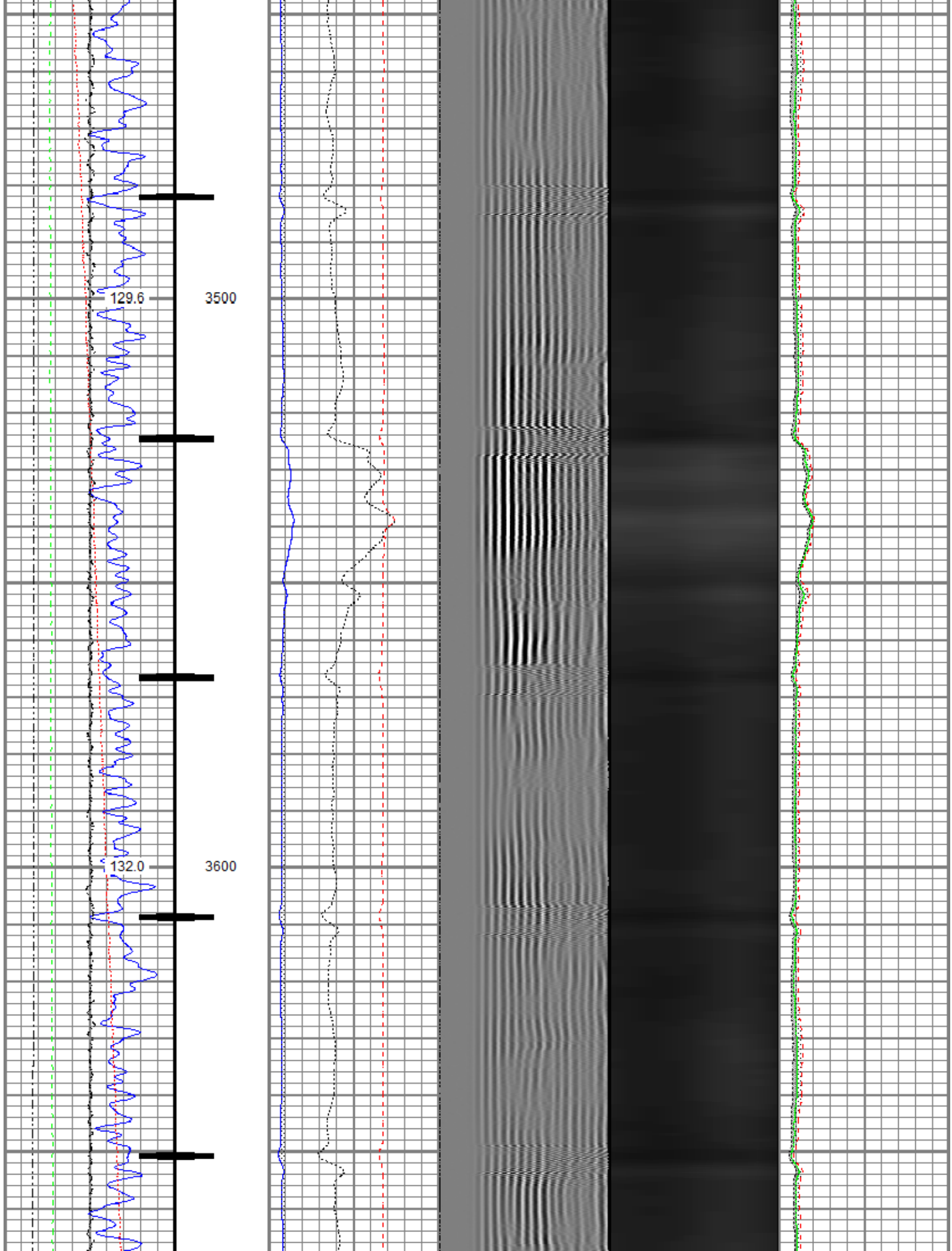


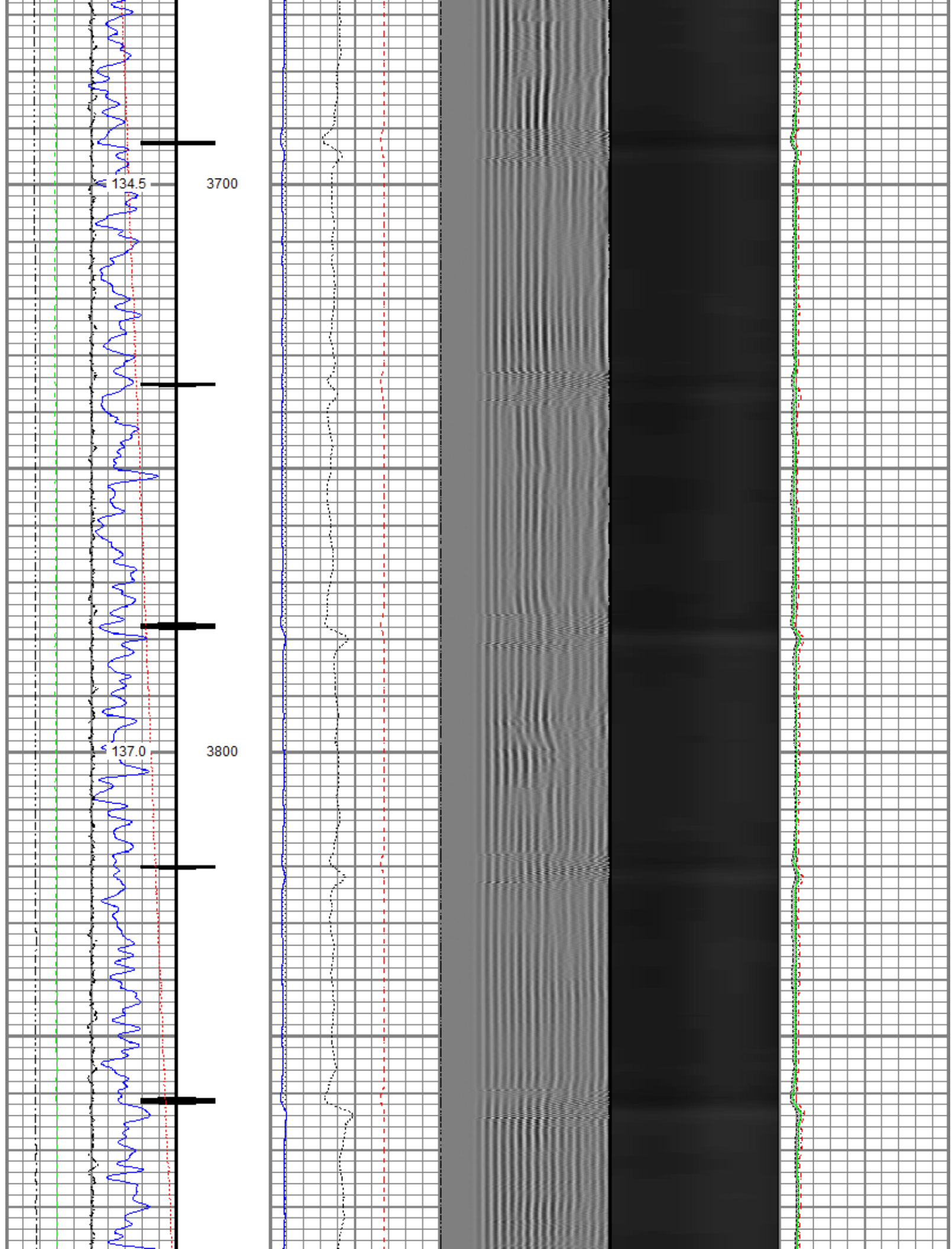


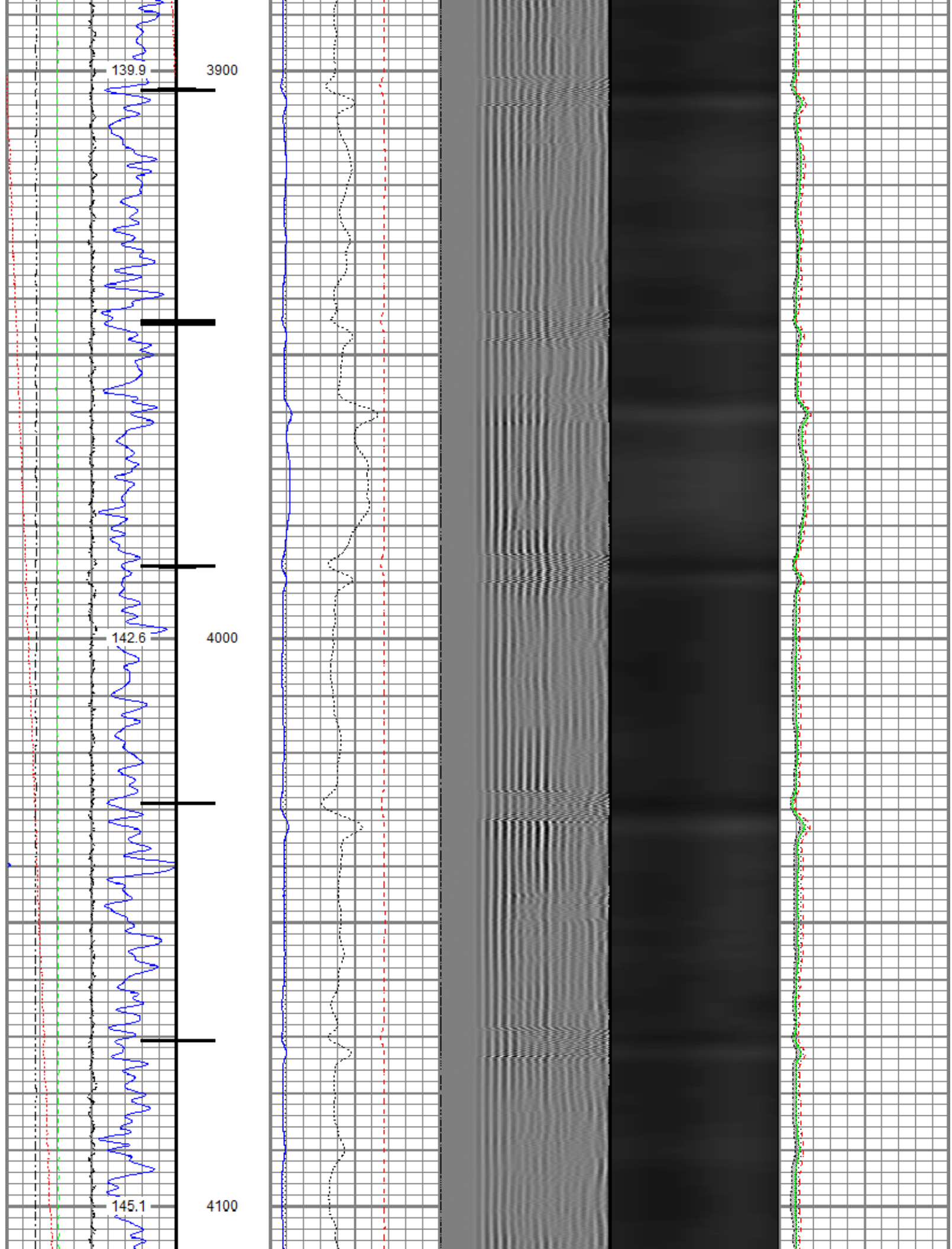


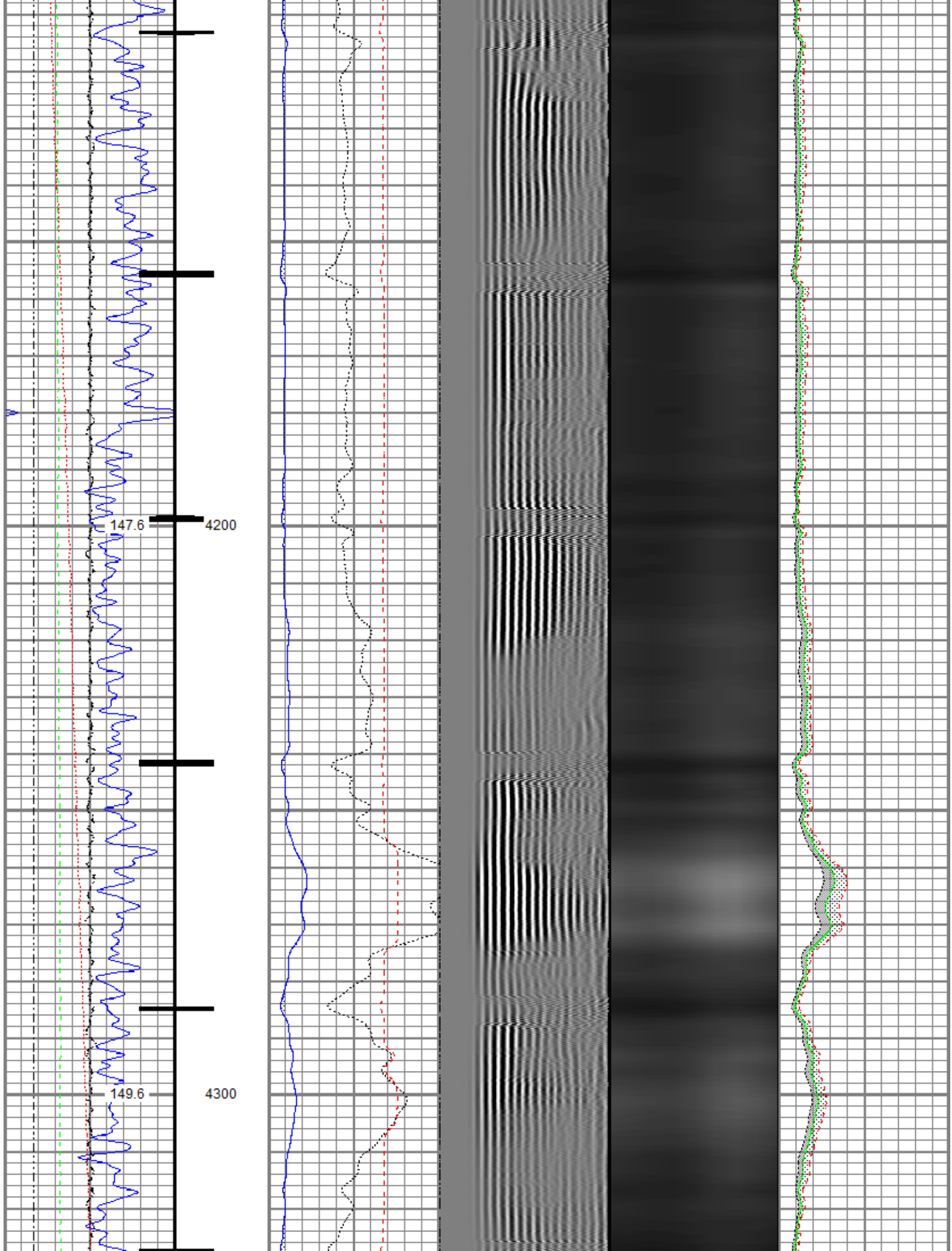


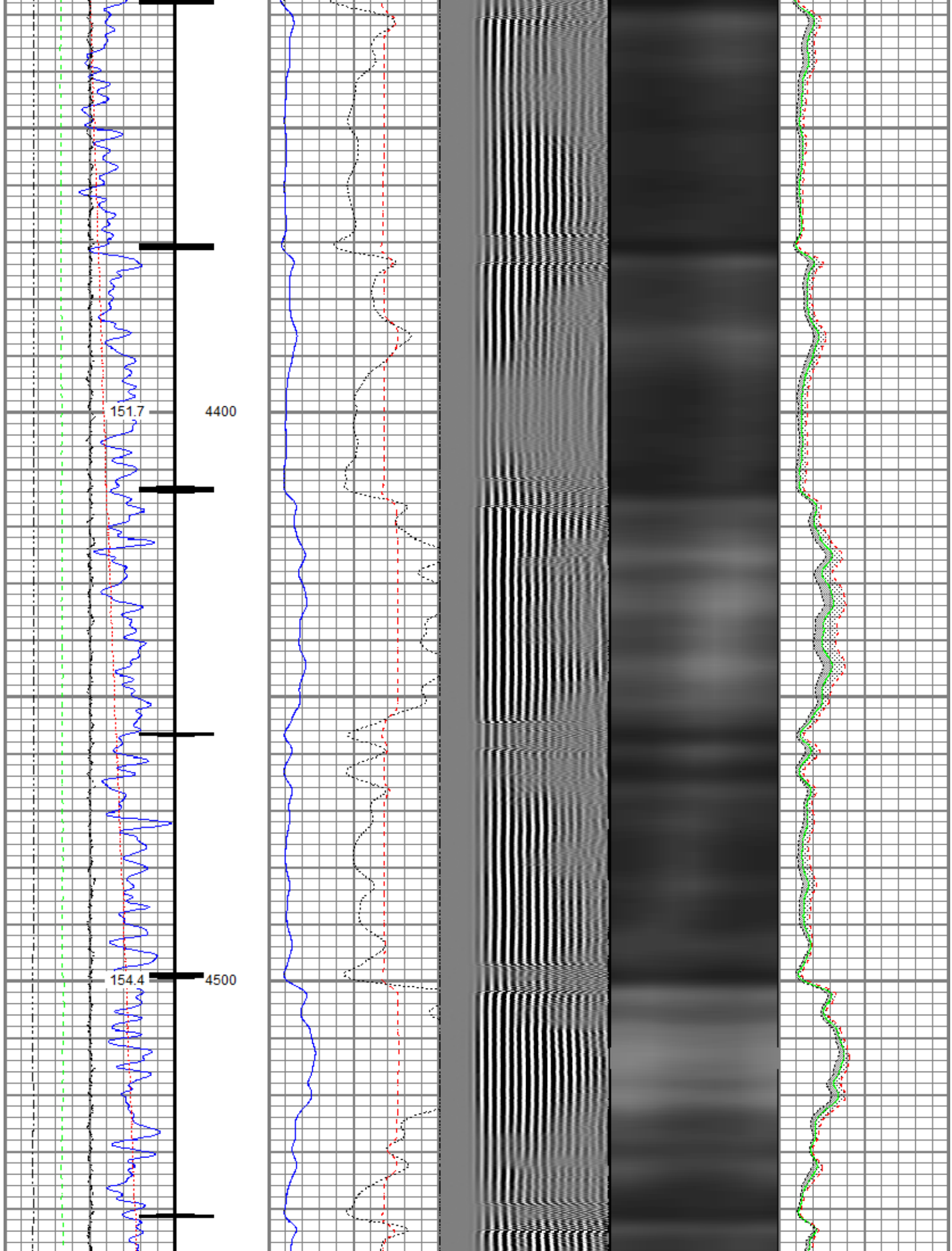


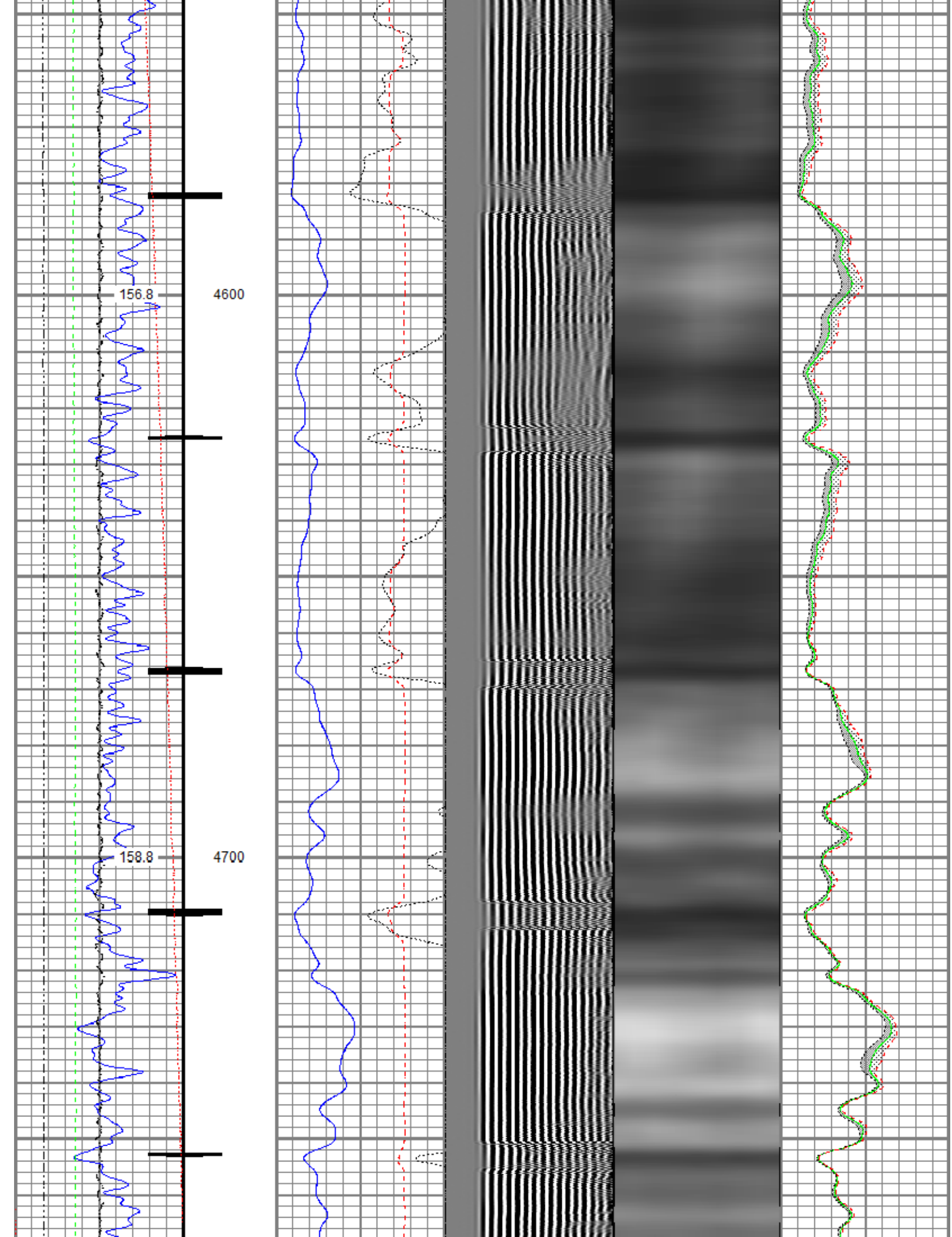


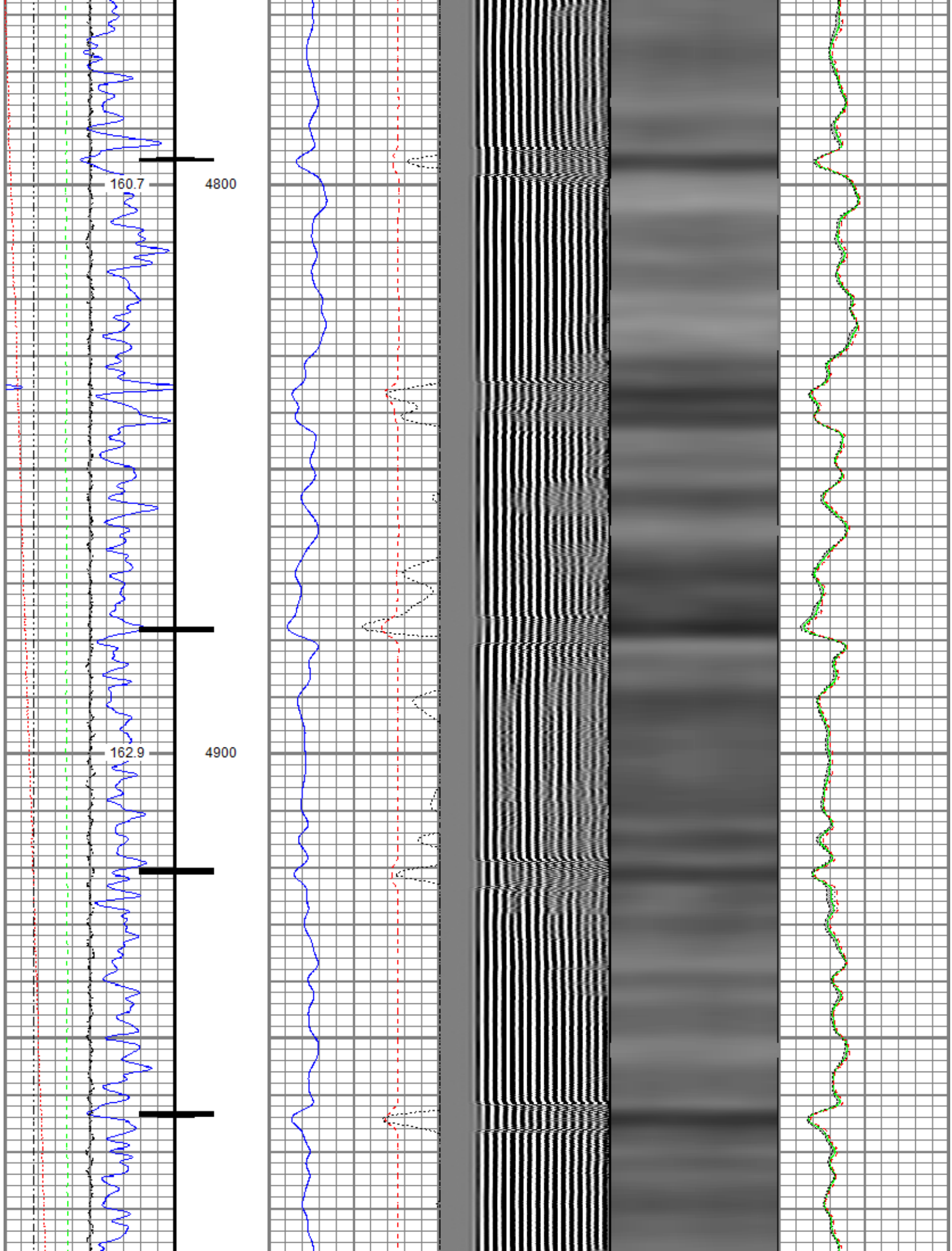


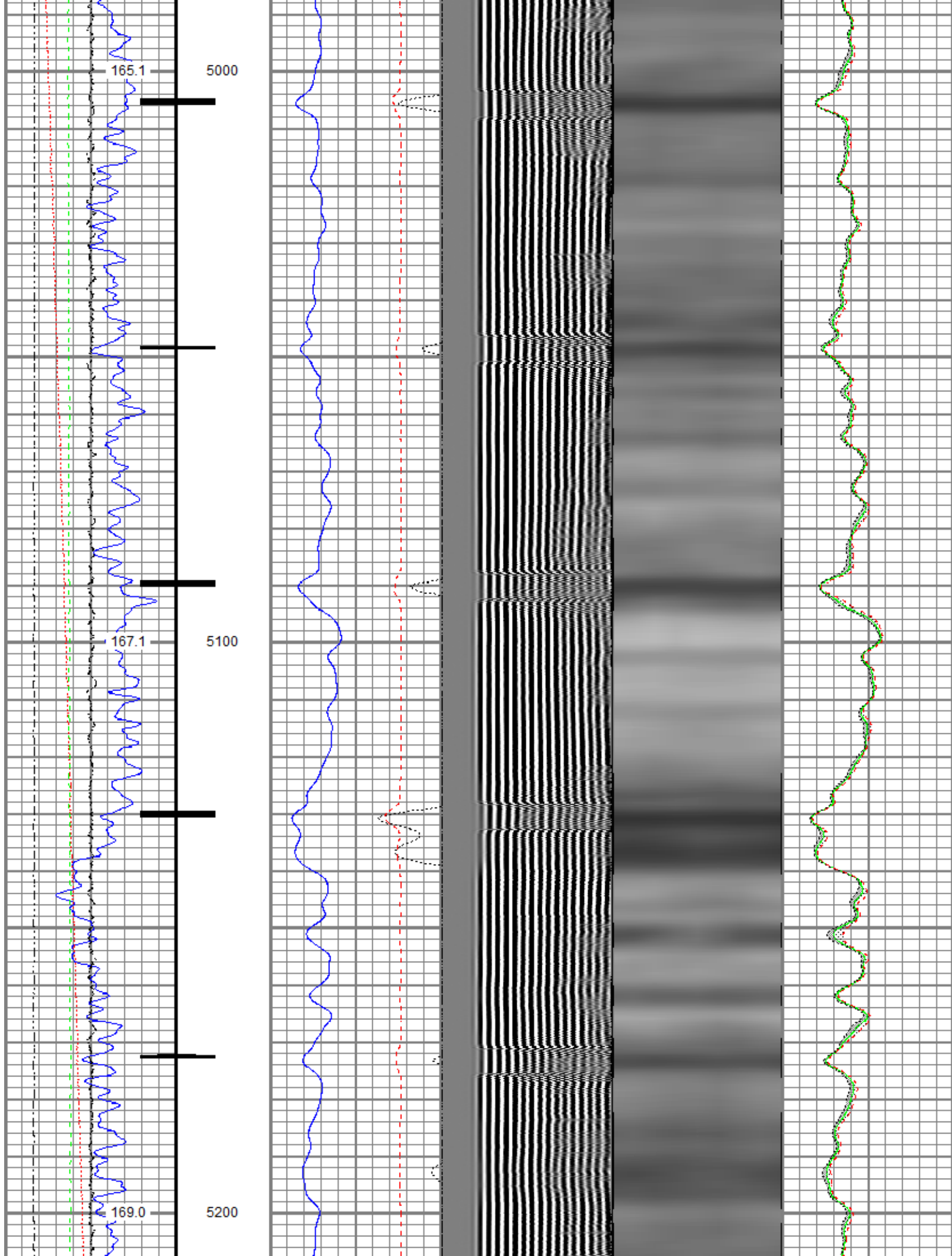


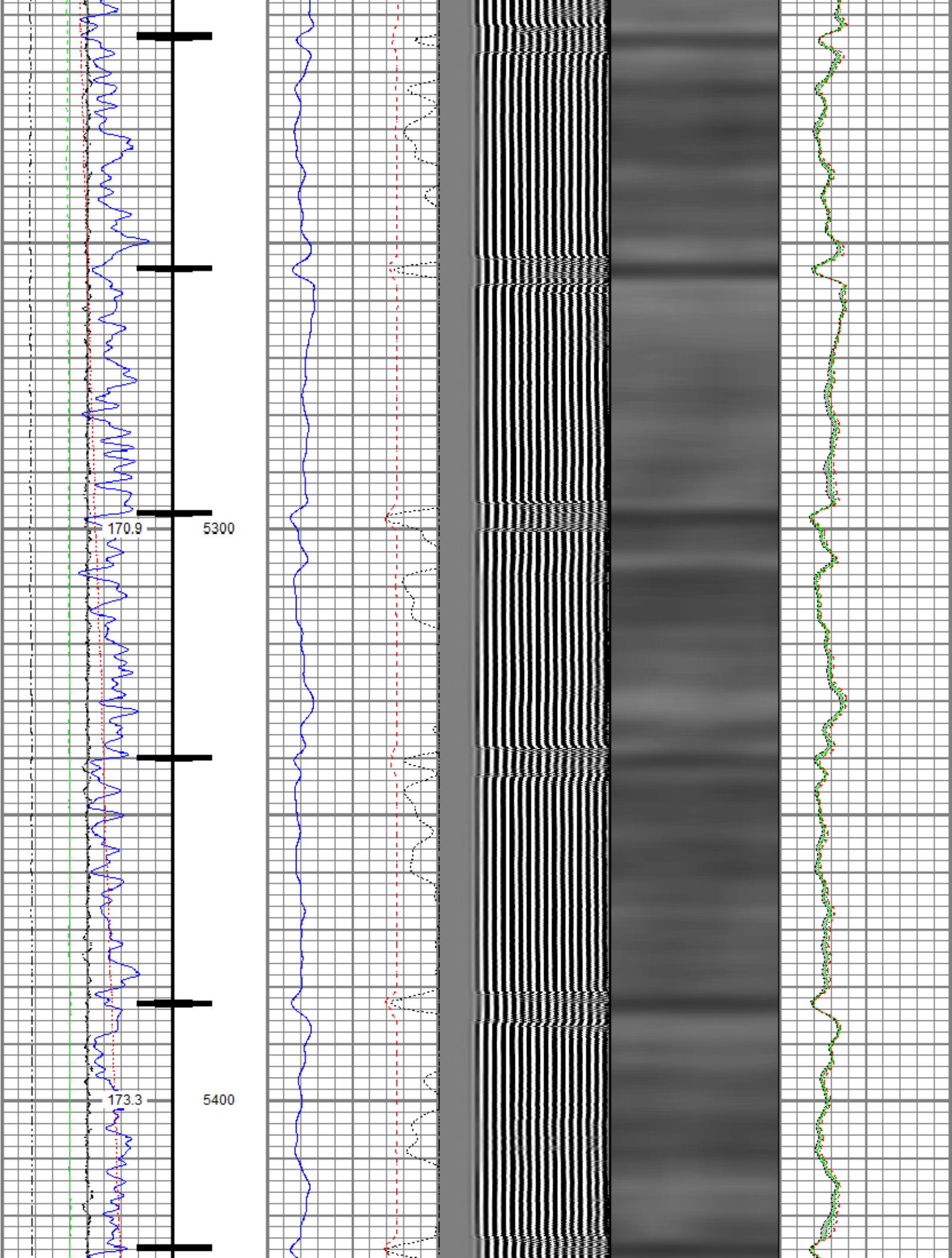


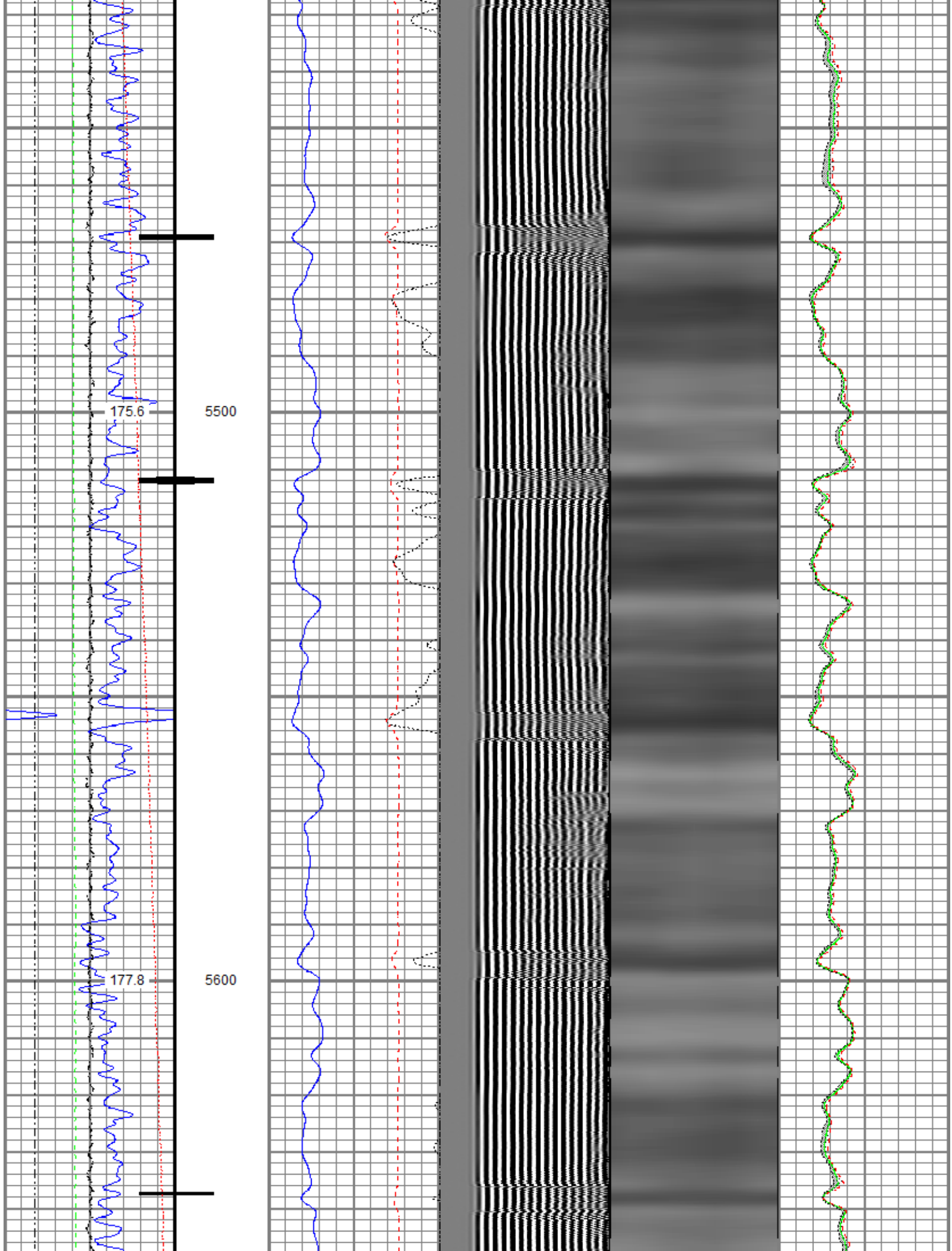


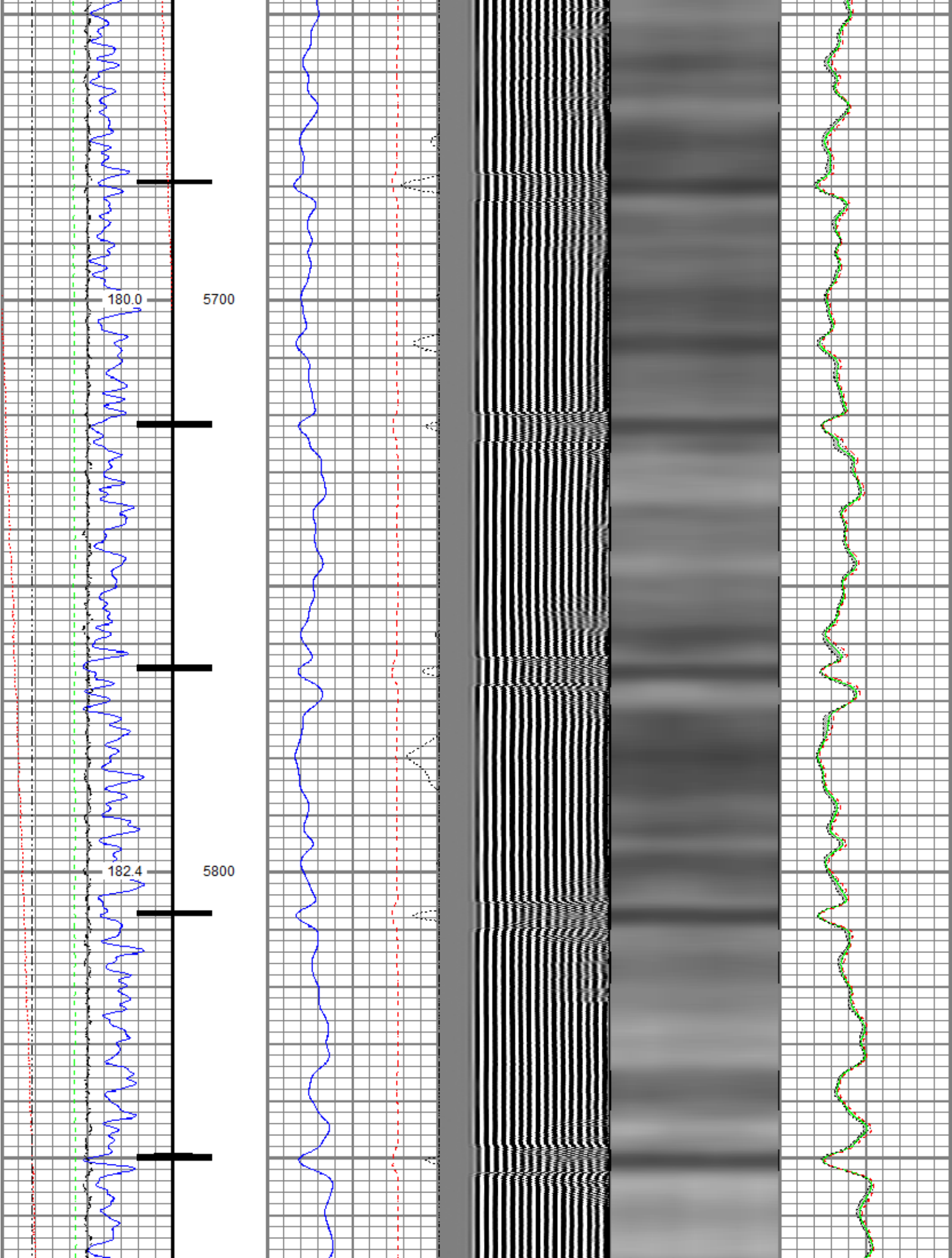


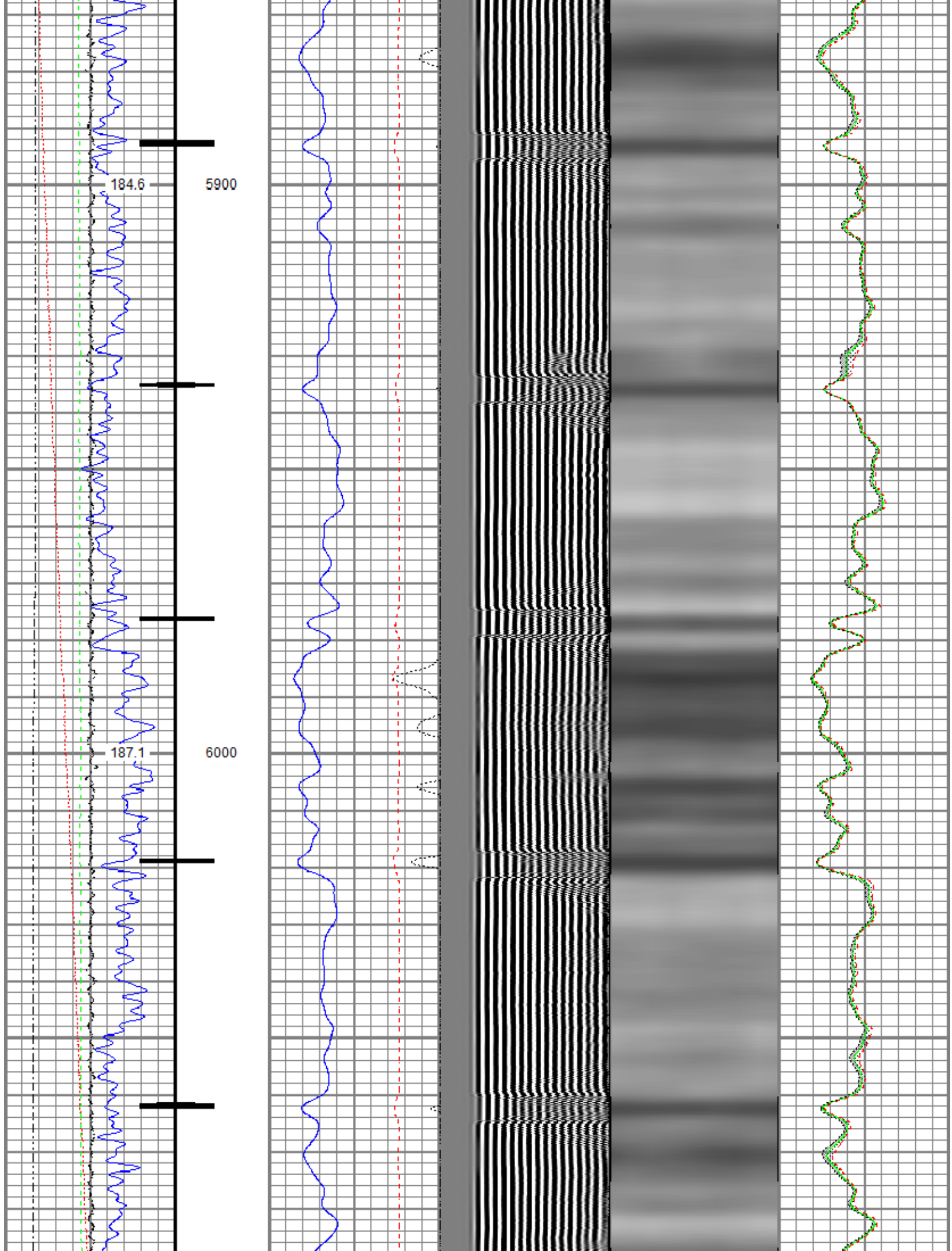


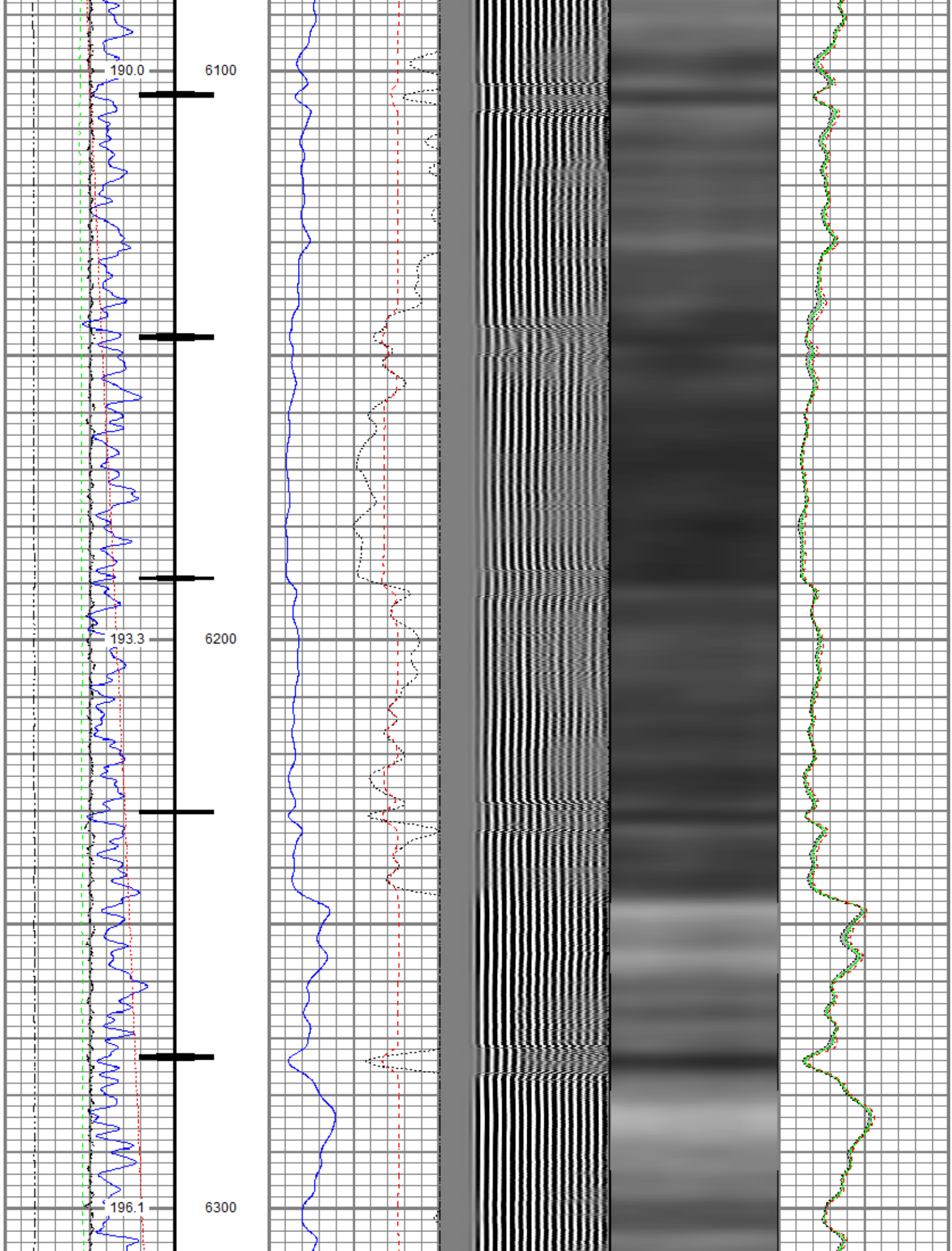


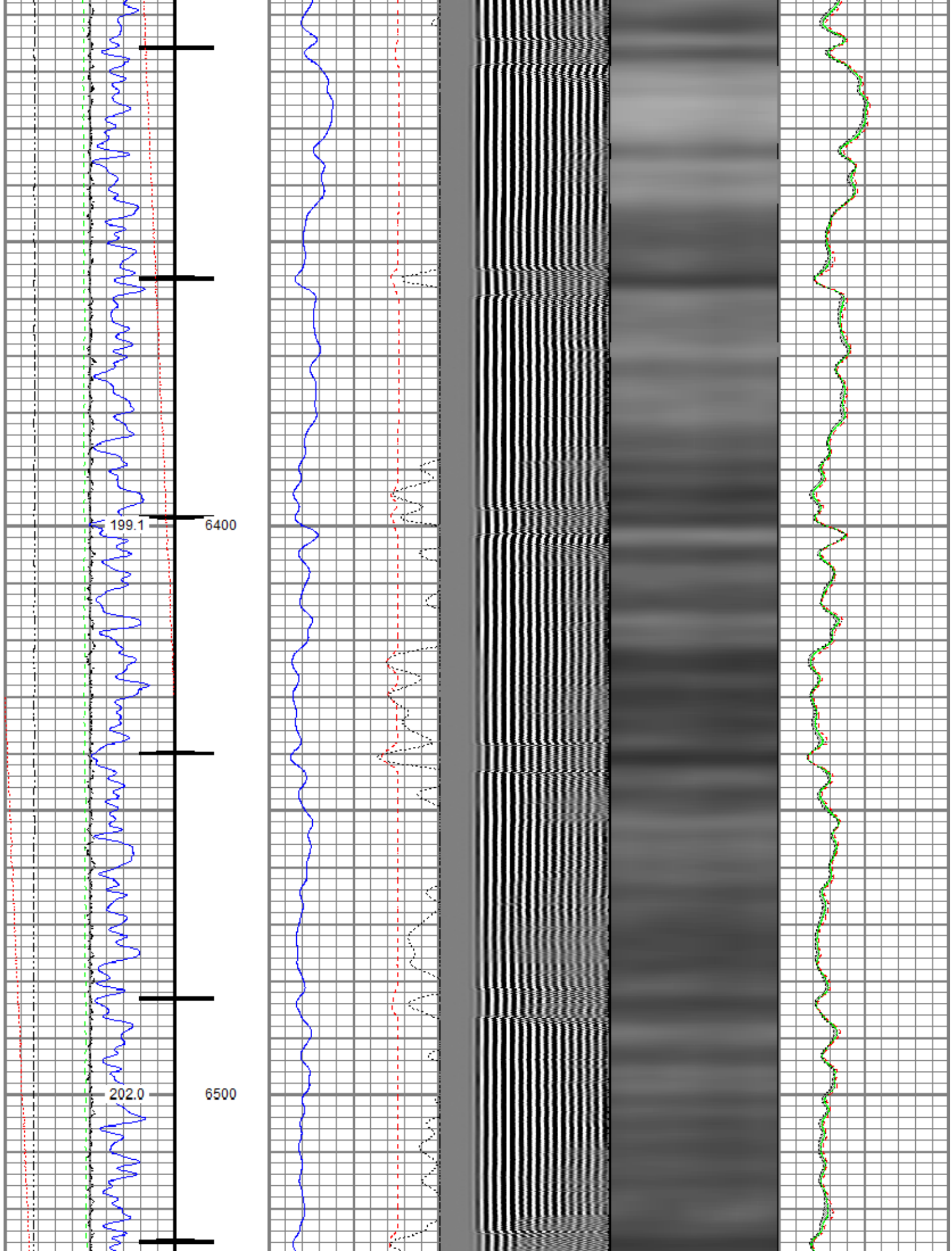


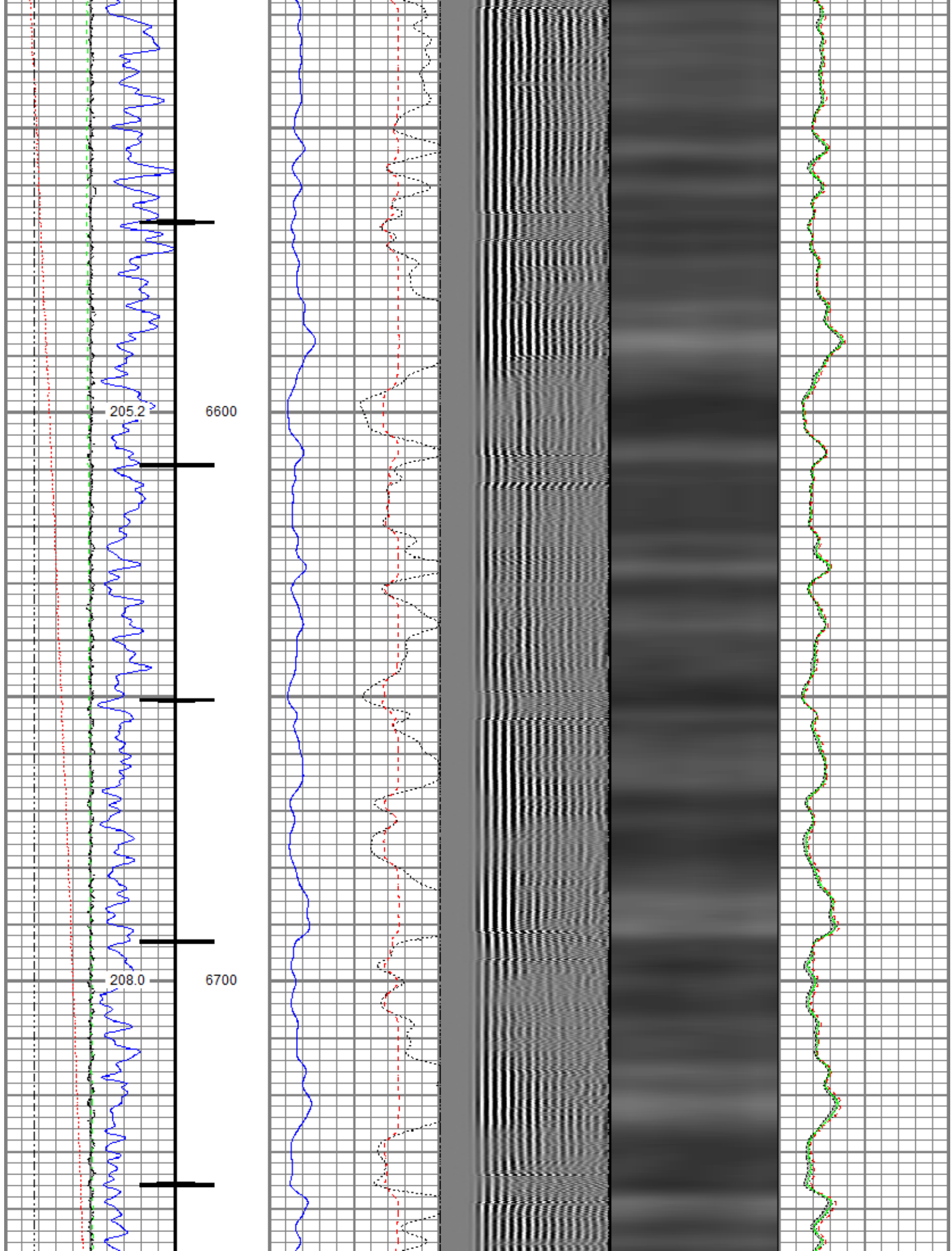


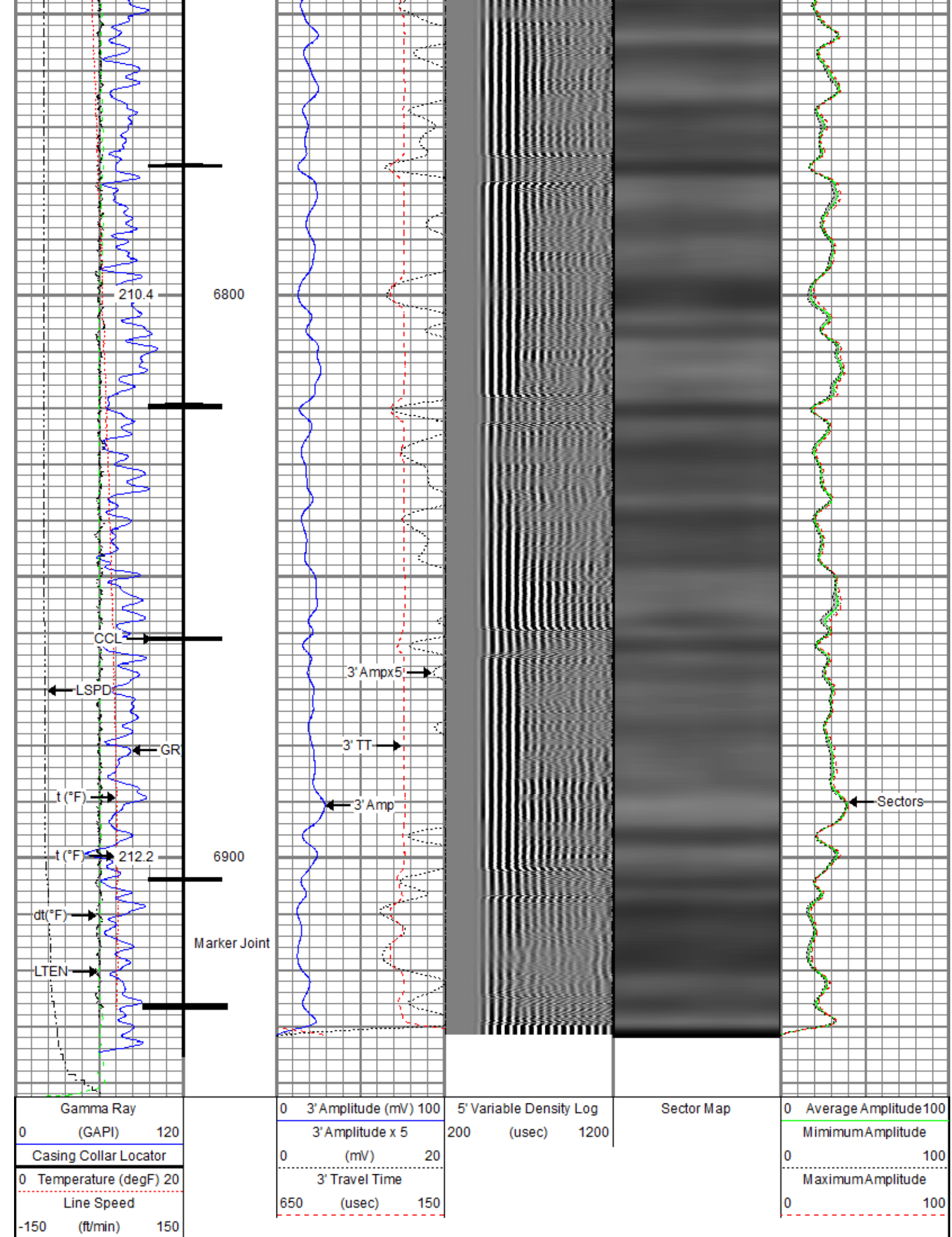












0	Line Tension (lb)	2000
	Differential Temperature	
-2	(degF)	2

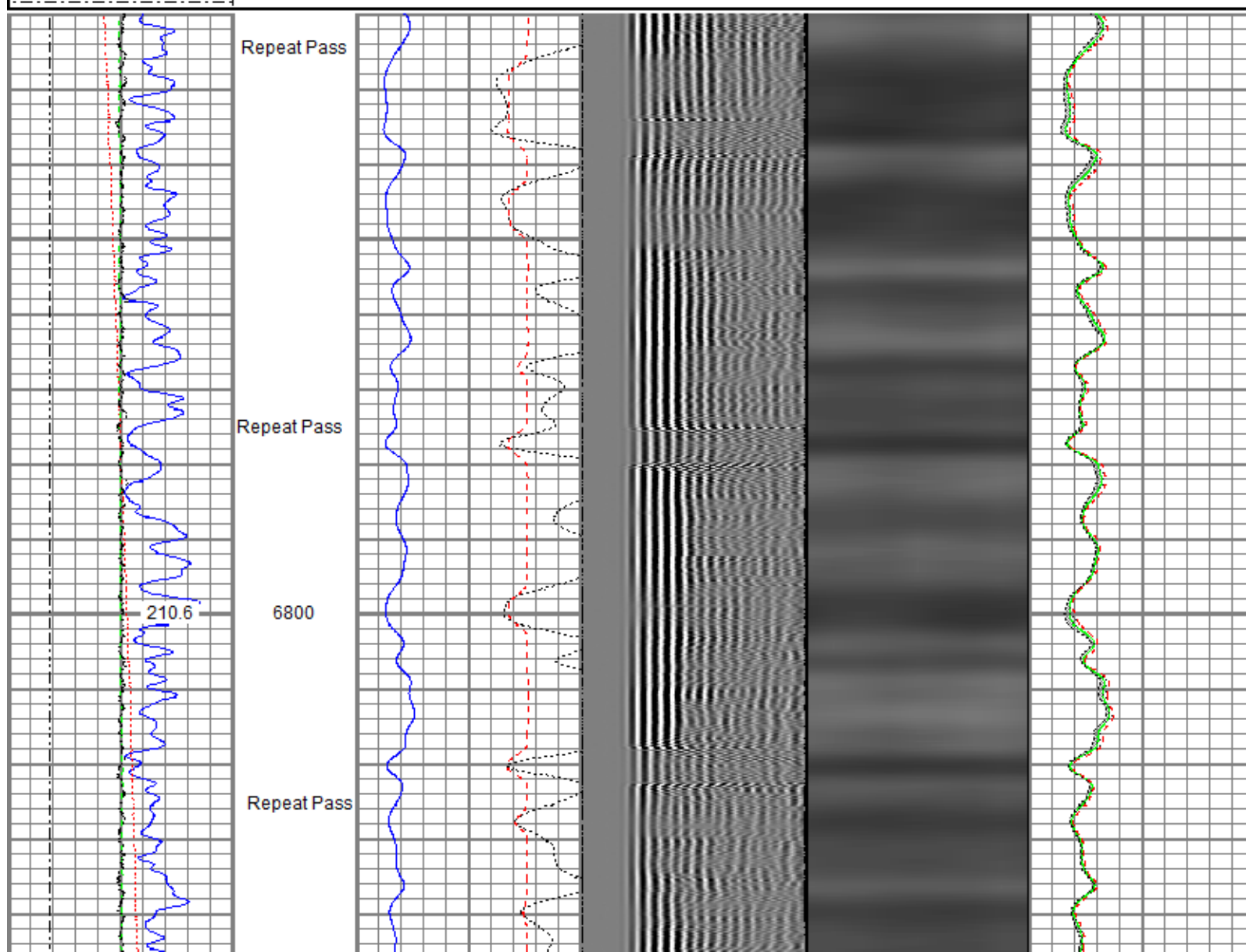


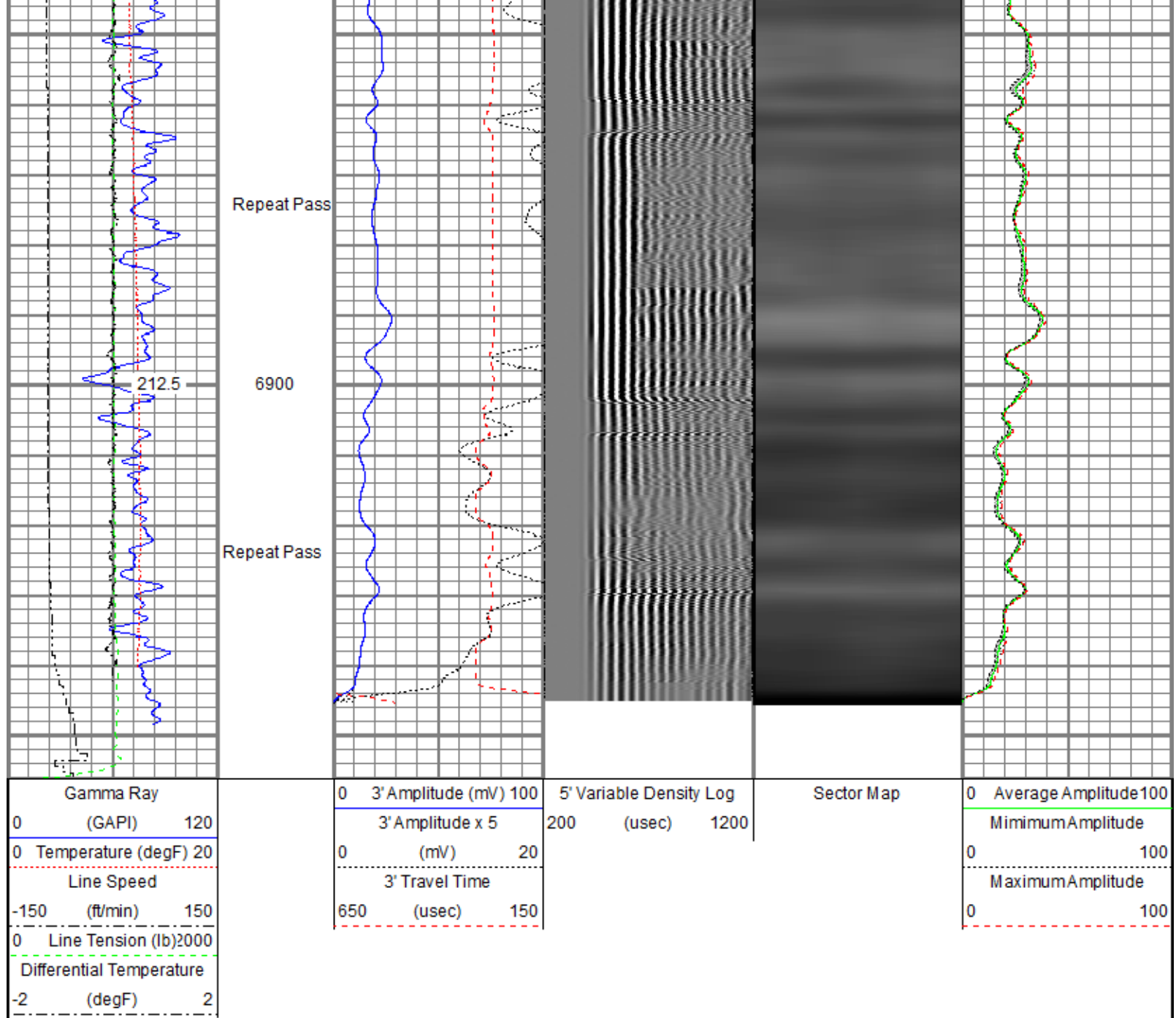
Repeat Pass

Recorded With 2800 PSI Surface Induced Pressure

Database File oxy\0512351249_oxy_nelson 35-5hz_rbl_05-11-21\0512351249_oxy_nelson 35-5hz_rbl_05-11-21.db
Dataset Pathname pass2.2
Presentation Format ros_radrii
Dataset Creation Wed May 12 16:08:39 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	
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)
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

RBT_ACCZ	11.93		Probe 2-3/4" Radial Cement Bond Tool with Integral Temperature Sub and Accelerometer					
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	SO BS CENT-2750-4500 Slip Over 2-3/4" I.D. for 4-1/2" O.D. Casing Bow Spring Centralizer	1.33	3.25	10.00			
CCL\$1	6.80		4.80	2.75	55.00			
GR	5.46		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					
		Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00			
LOCTIM	0.00							
UTCTIM	0.00							
Dataset:		0512351249_oxy_nelson 35-5hz_rbl_05-11-21.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	c:\programdata\warrior\data\oxy\0512351249_oxy_nelson 35-5hz_rbl_05-11-21\0512351249_oxy_nelson 35-5hz_rbl_05-11-21	
Dataset Pathname	pass4.2	
Dataset Creation	Wed May 12 16:02:11 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'	0.009	0.648	0.800	71.921	111.377	-0.236
CAL	0.006	0.675				
5'	0.009	0.585	0.800	71.921	123.282	-0.254
SUM						
S1	0.006	0.611	0.000	100.000	165.336	-0.988
S2	0.008	0.649	0.000	100.000	155.958	-1.233
S3	0.009	0.692	0.000	100.000	146.572	-1.366
S4	0.009	0.690	0.000	100.000	146.832	-1.353
S5	0.009	0.674	0.000	100.000	150.325	-1.301
S6	0.008	0.662	0.000	100.000	152.830	-1.164
S7	0.007	0.636	0.000	100.000	159.143	-1.193
S8	0.008	0.609	0.000	100.000	166.271	-1.274

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			



Company	Kerr-McGee Oil & Gas Onshore, L.P.
Well	Nelson 35-5HZ
Field	Wattenberg
County	Weld
State	Colorado