



Radial Cement Bond  
Gamma Ray  
Casing Collar Log

Company	Kerr-McGee Oil & Gas Onshore, L.P.		
Well	Joker 26N2-9HZ		
Field	Wattenberg		
County	Weld		
State	Colorado		
Location:	Company	Kerr-McGee Oil & Gas Onshore, L.P.	
	Well	Joker 26N2-9HZ	
	Field	Wattenberg	
	County	Weld	
Other Services	State	Colorado	
	AP# :	05-123-41330	
	SEC	9	TWP 1N RGE 65W
	Permanent Datum	Ground Level	
Elevation	Log Measured From	Kelly Bushing	
	Drilling Measured From	Kelly Bushing	
		25 FT	
		K.B. 4996'	
		D.F. 4995'	
		G.L. 4971'	

Date	10-SEP-2015
Run Number	Two
Depth Driller	11975 FT
Depth Logger	7100 FT
Bottom Logged Interval	7096 FT
Top Log Interval	Surface
Open Hole Size	7.875
Type Fluid	Water
Density / Viscosity	8.34 lbm/gal
Max. Recorded Temp.	228°F
Estimated Cement Top	Surface
Time Well Ready	ROA
Time Logger on Bottom	2:35 PM
Equipment Number	HD-0311
Location	Ft. Lupton, CO
Recorded By	B. Kalkwarf
Witnessed By	Darrel Bothwell

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record	Size (in)	Wgt (lbs/Ft)	Grade	Top	Bottom		
Surface Casing	9 5/8	36	J55 LT&C	Surface	1852 FT		
Intermediate #1							
Intermediate #2	5 1/2	17	HCP-110 LTC	Surface	11961 FT		
Liner							

<<< 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  
Log was measured from KB 25 FT  
Recorded Marker Joint at 6405 FT- 6428 FT  
Log ran from as deep as possible in heel to Surface  
Recorded with 2800 PSI Surface Induced Pressure  
Logging tools were clean and free of debris upon completion of operations  
  
Thank you for choosing FMC Technologies Completion Services, Inc.!!



Main Pass

Recorded with 2800 PSI Surface Induced Pressure

Database File:0512341330\_anadarko\_joker 26n2-9hz\_09-10-15\_rbl.db

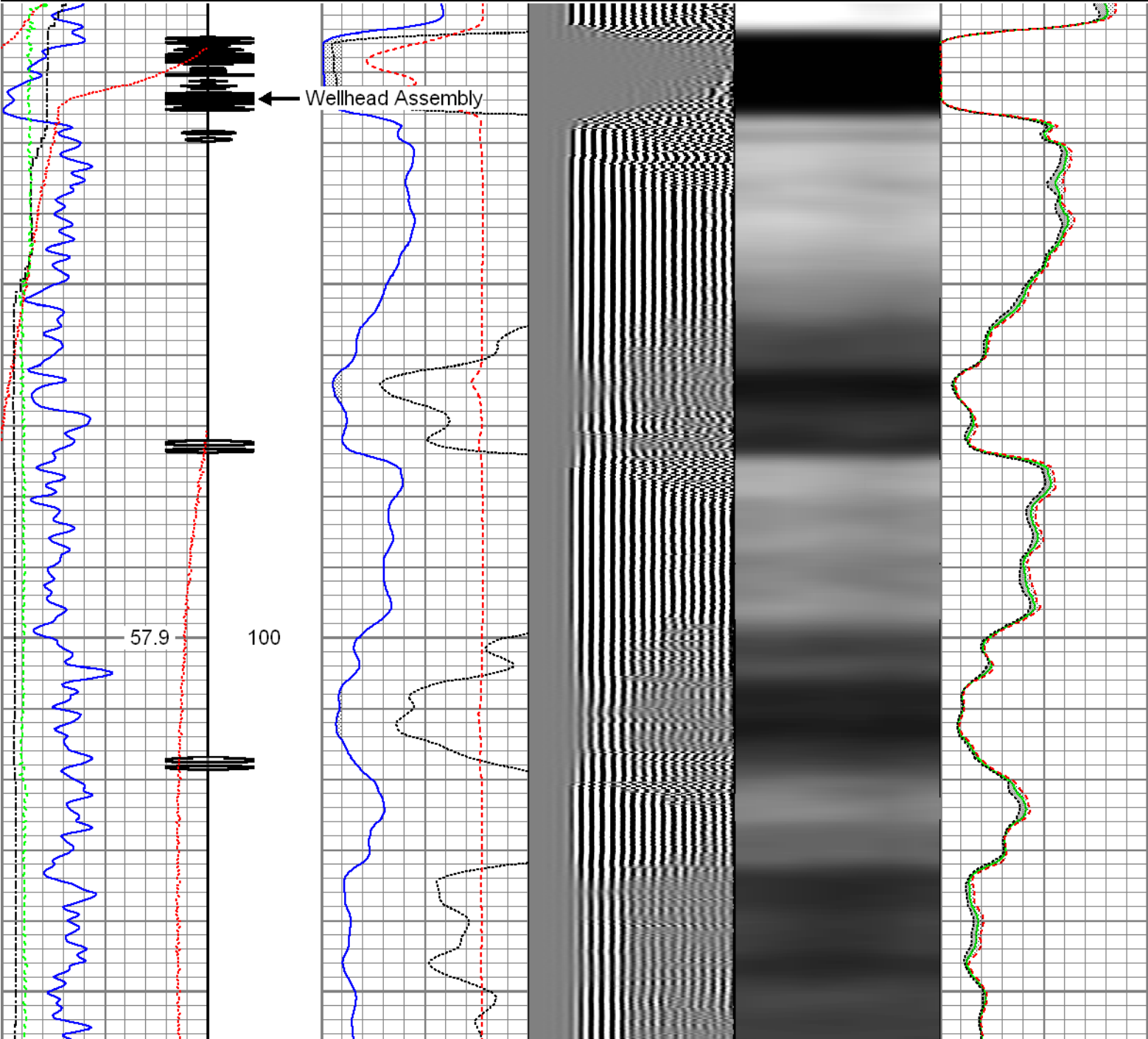
Dataset Pathname:pass5

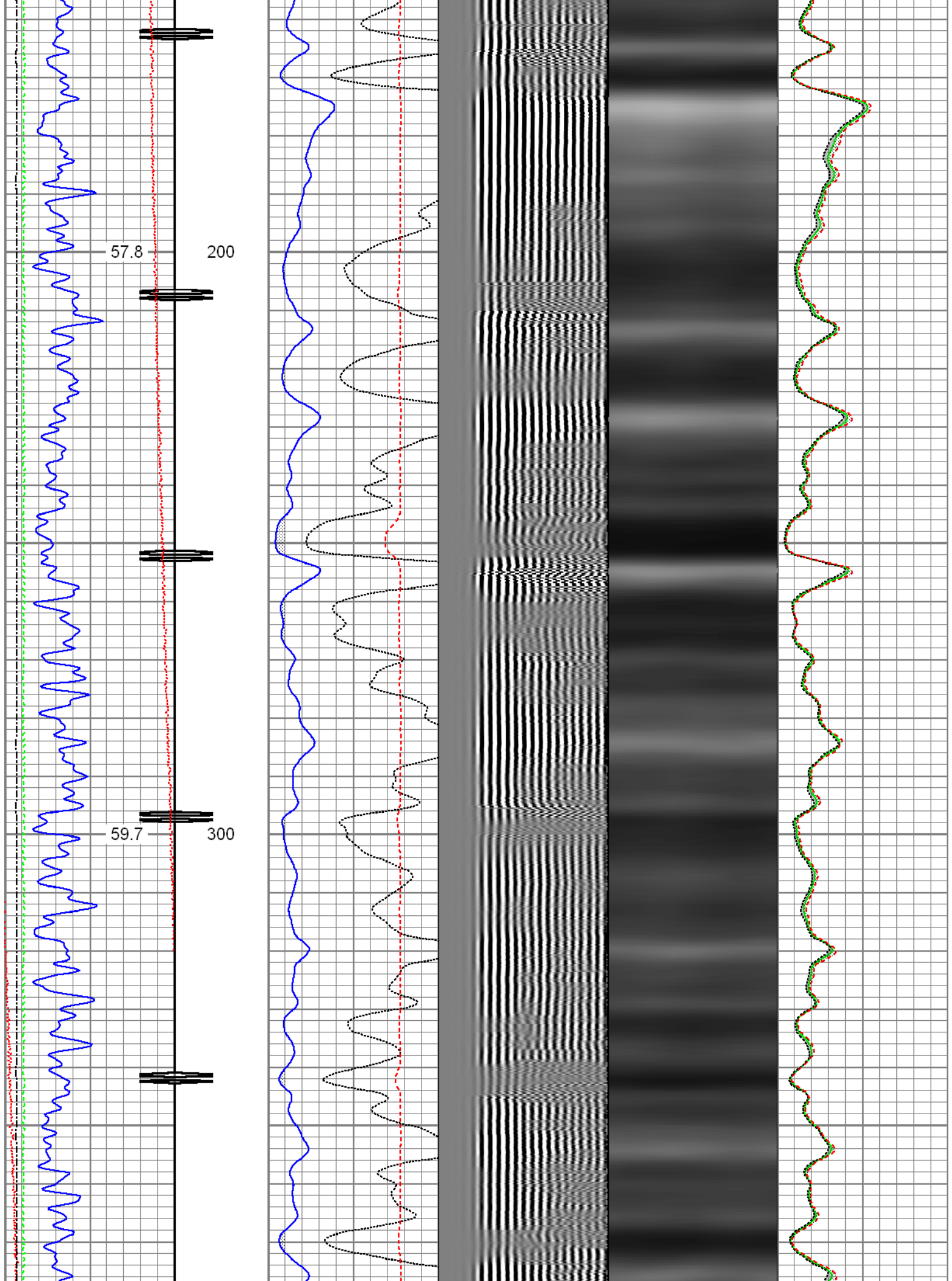
Presentation Format:radii

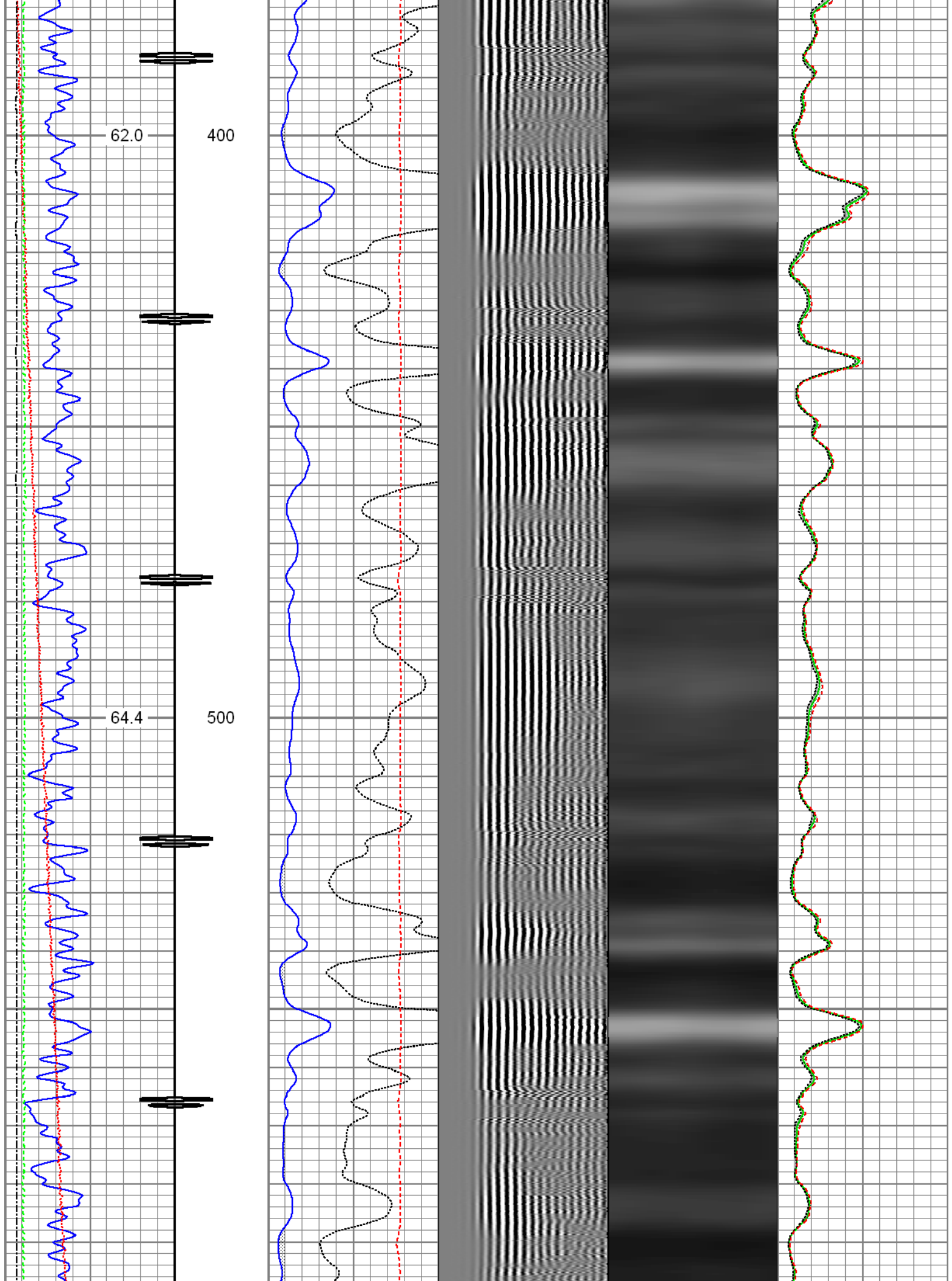
Dataset Creation:Thu Sep 10 14:37:53 2015 by Log 7.0 B1

Charted by:Depth in Feet scaled 1:240

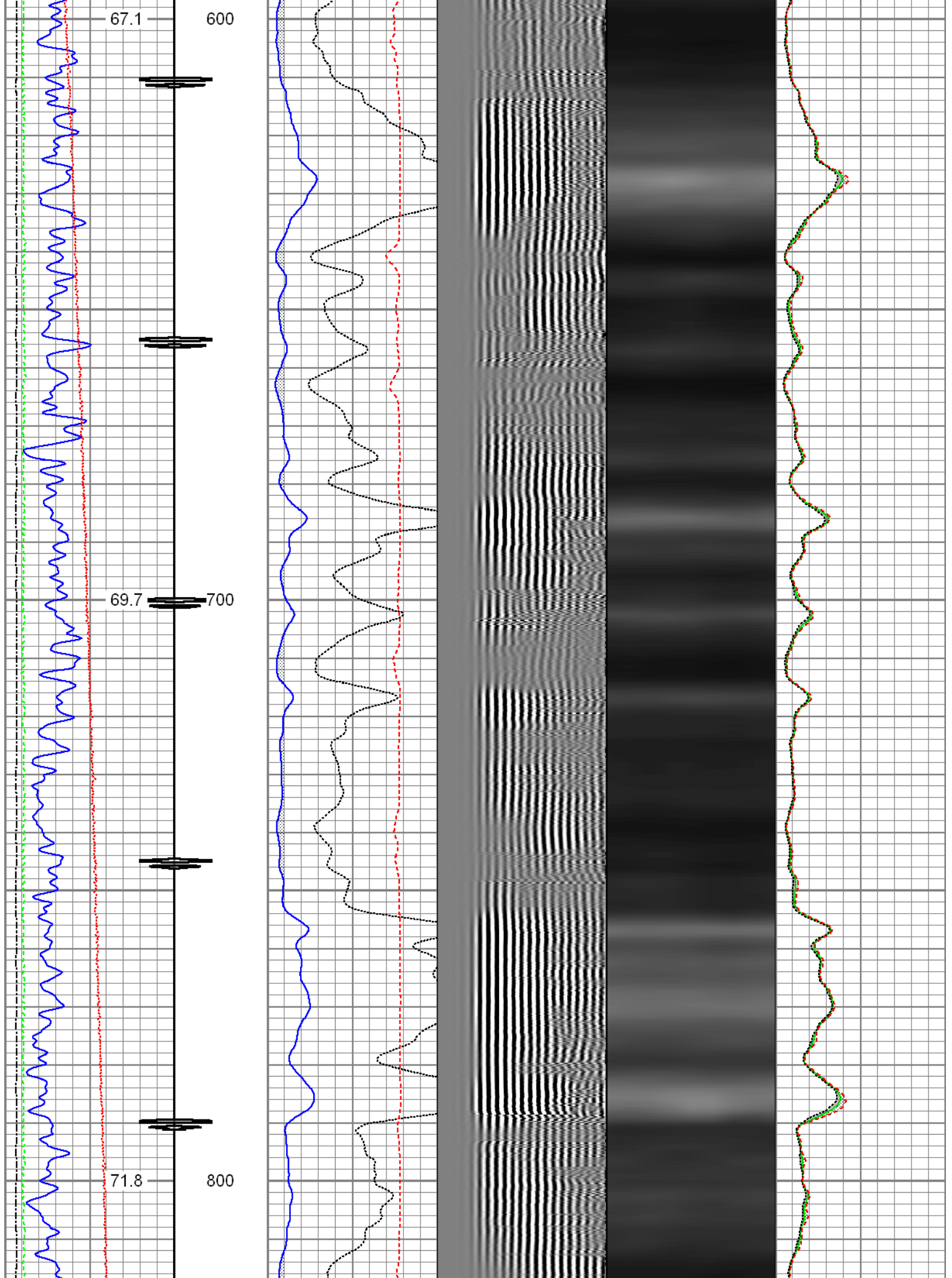
Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120	0 (mV) 100	200 1200		0 100
Casing Collar Locator	3' Amplitude x 5			Minimum Amplitude
Temperature	0 (mV) 20			0 100
0 (degF) 20	3' Travel Time			Maximum Amplitude
Line Speed	650 (usec) 150			0 100
-150 (ft/min) 150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

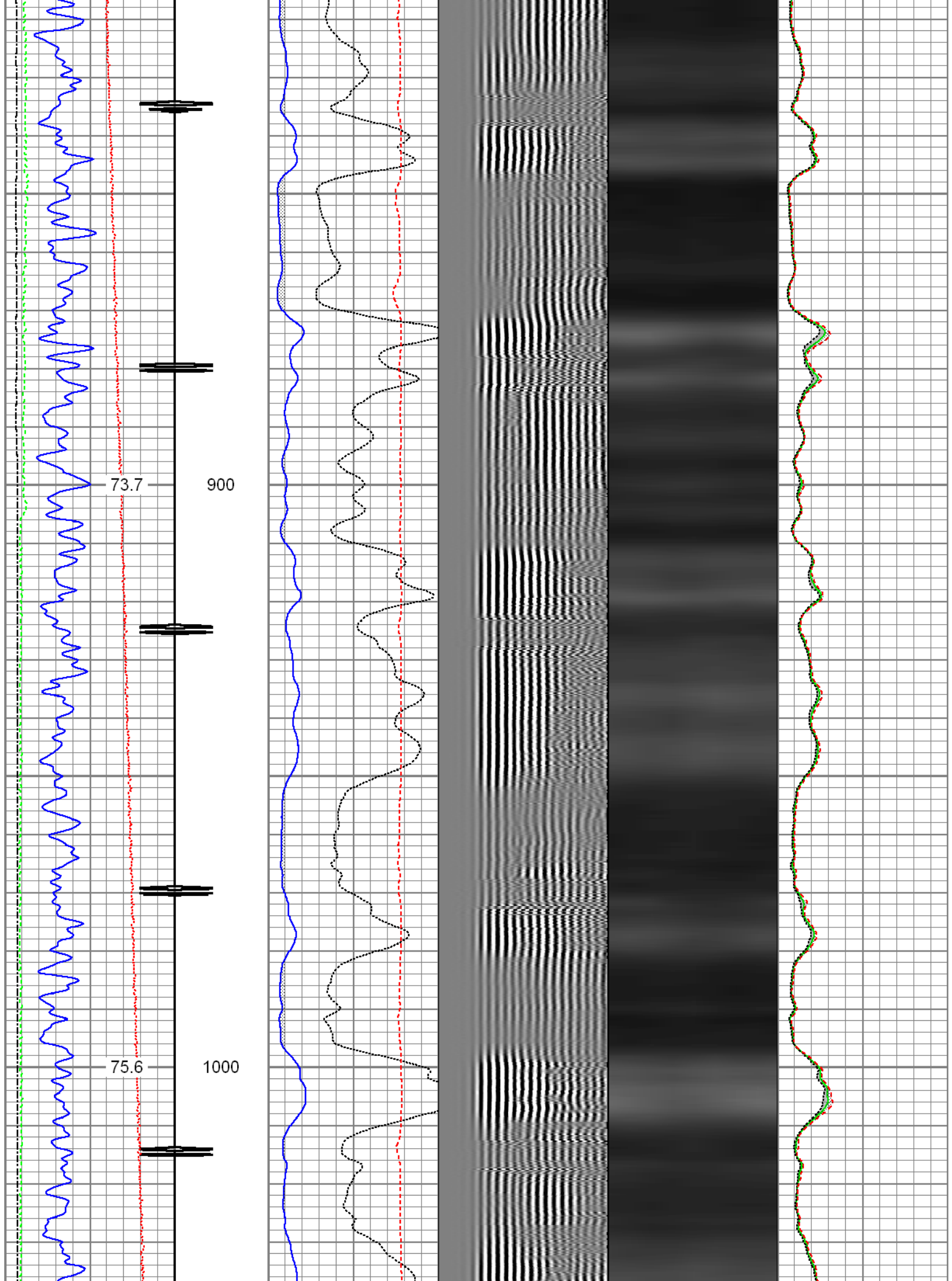


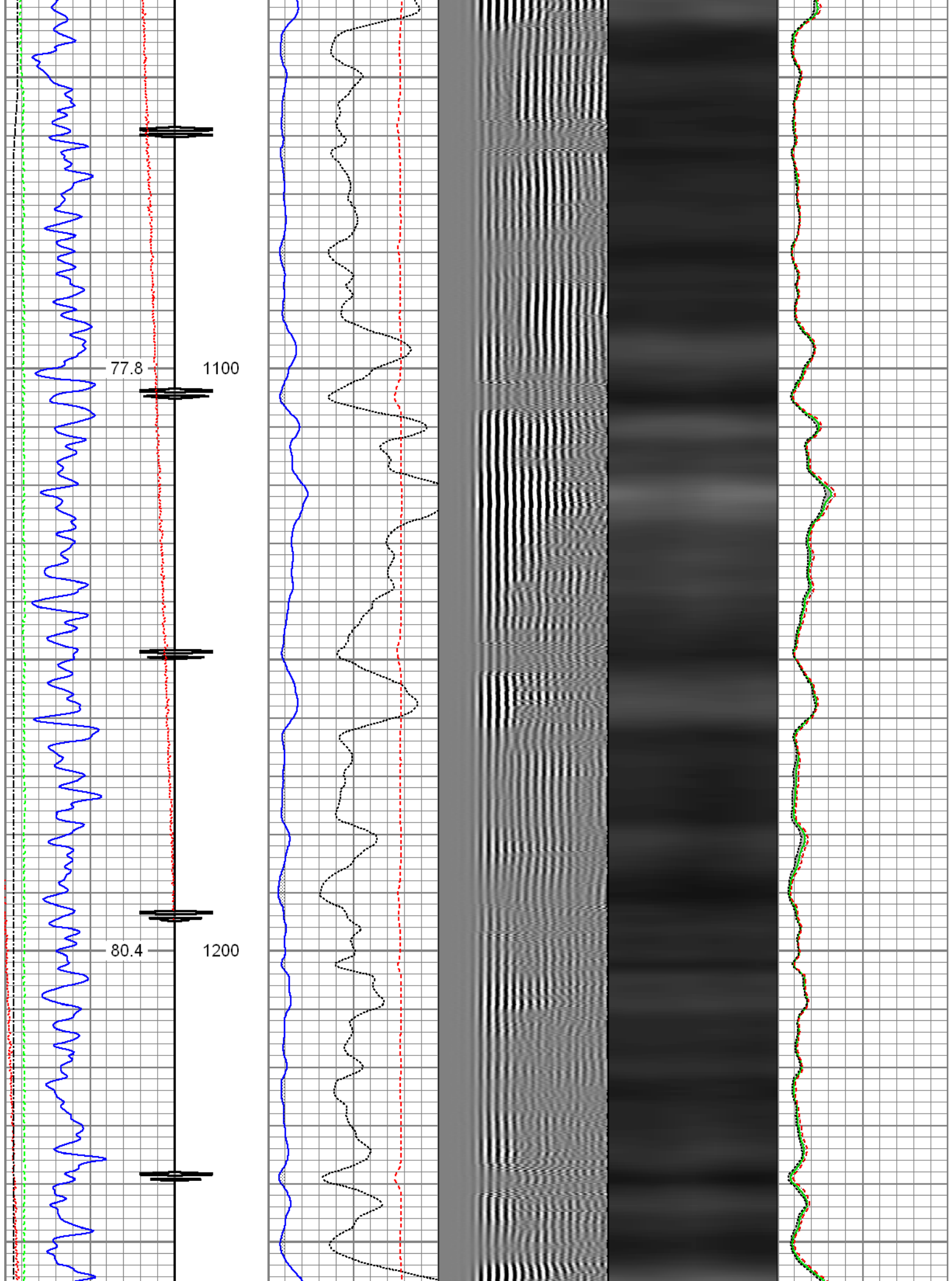


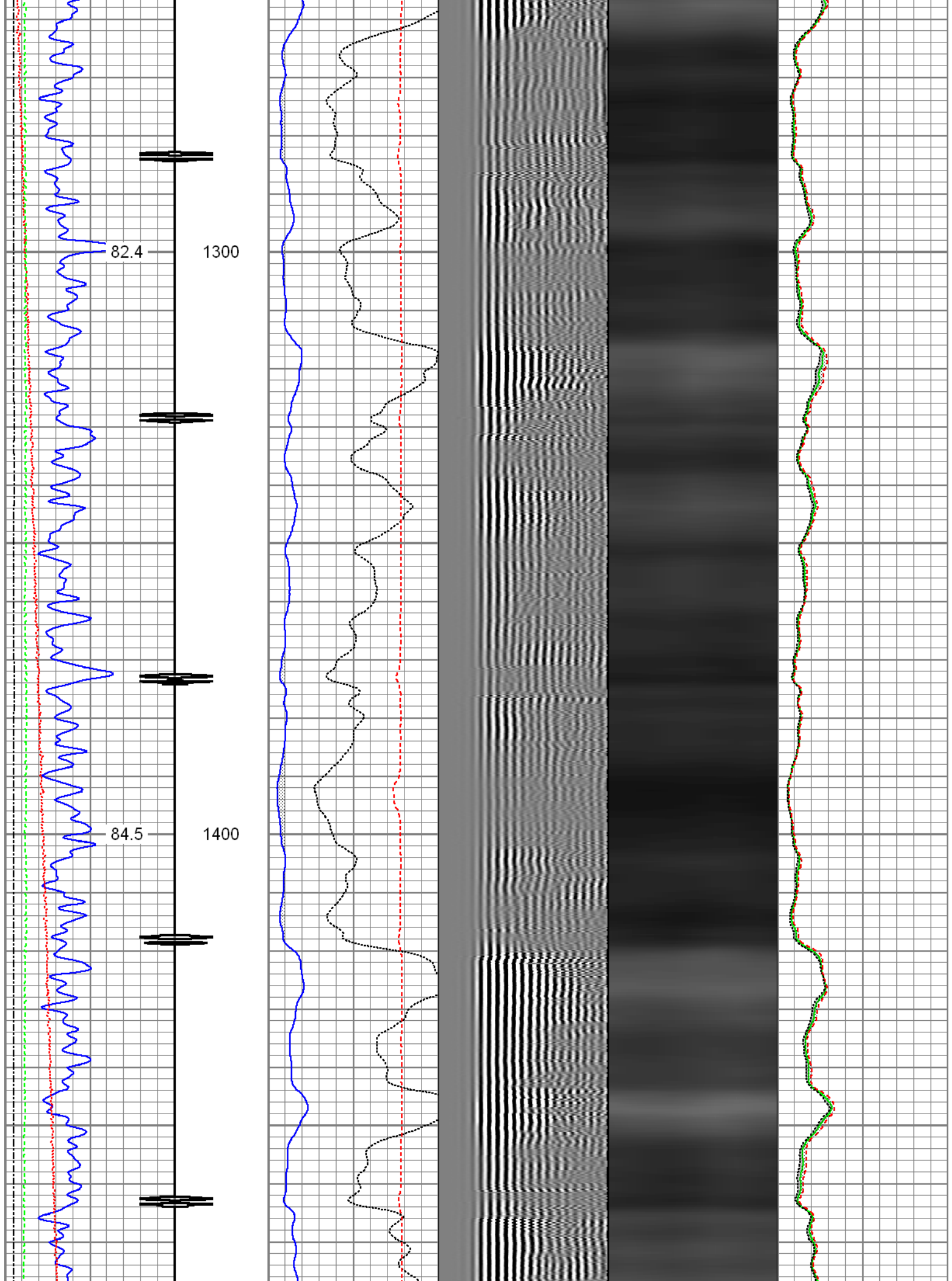




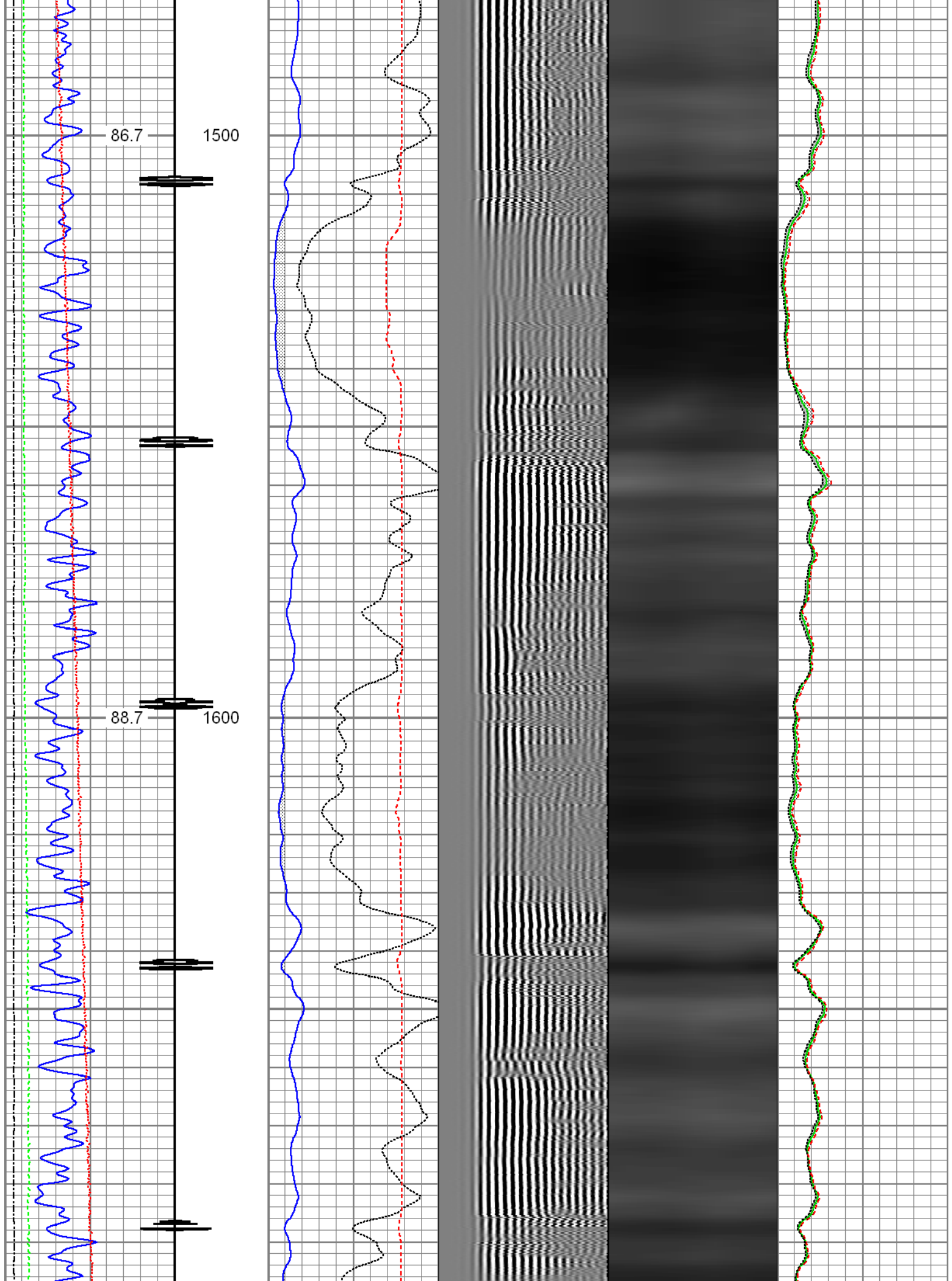


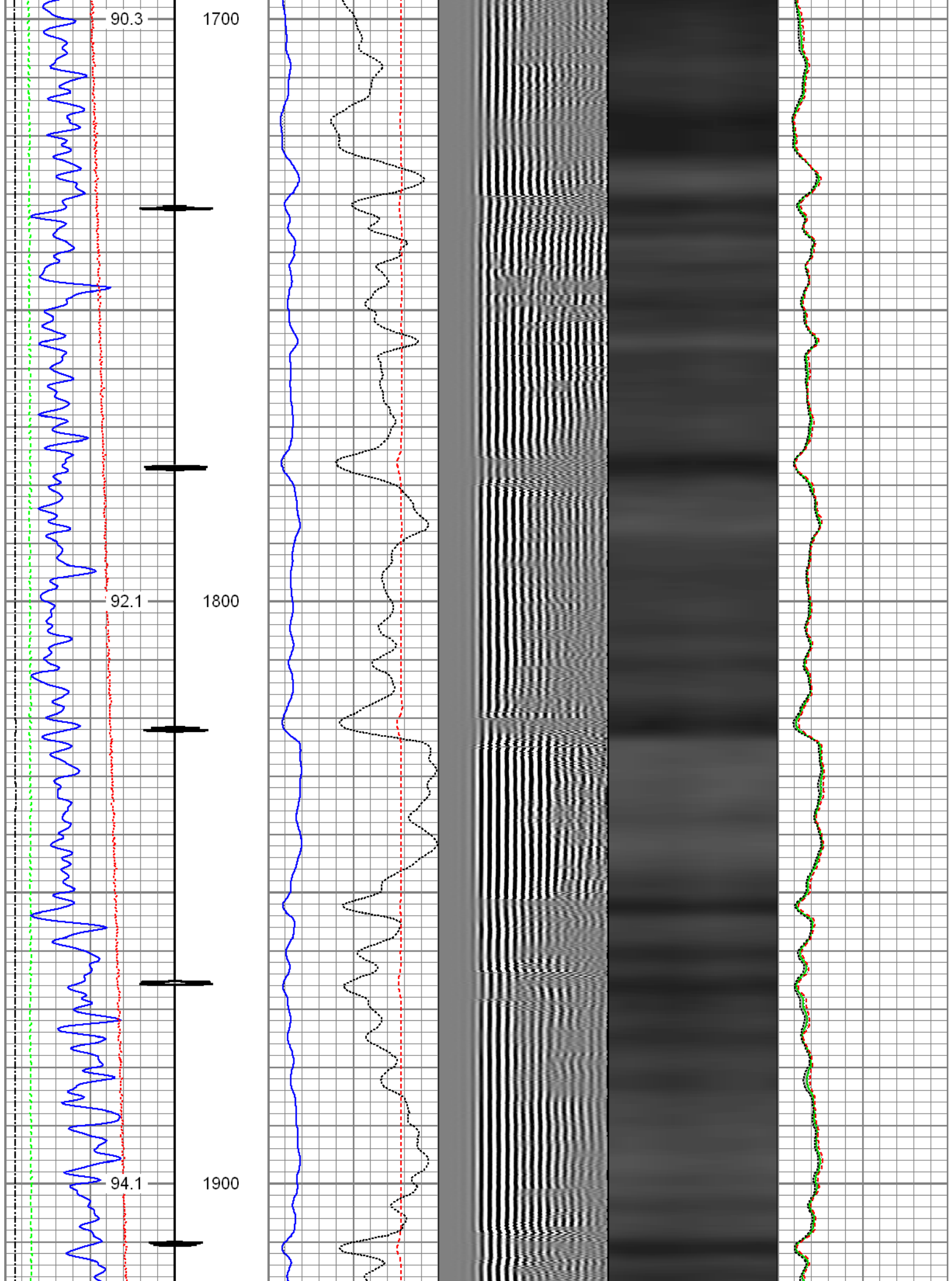


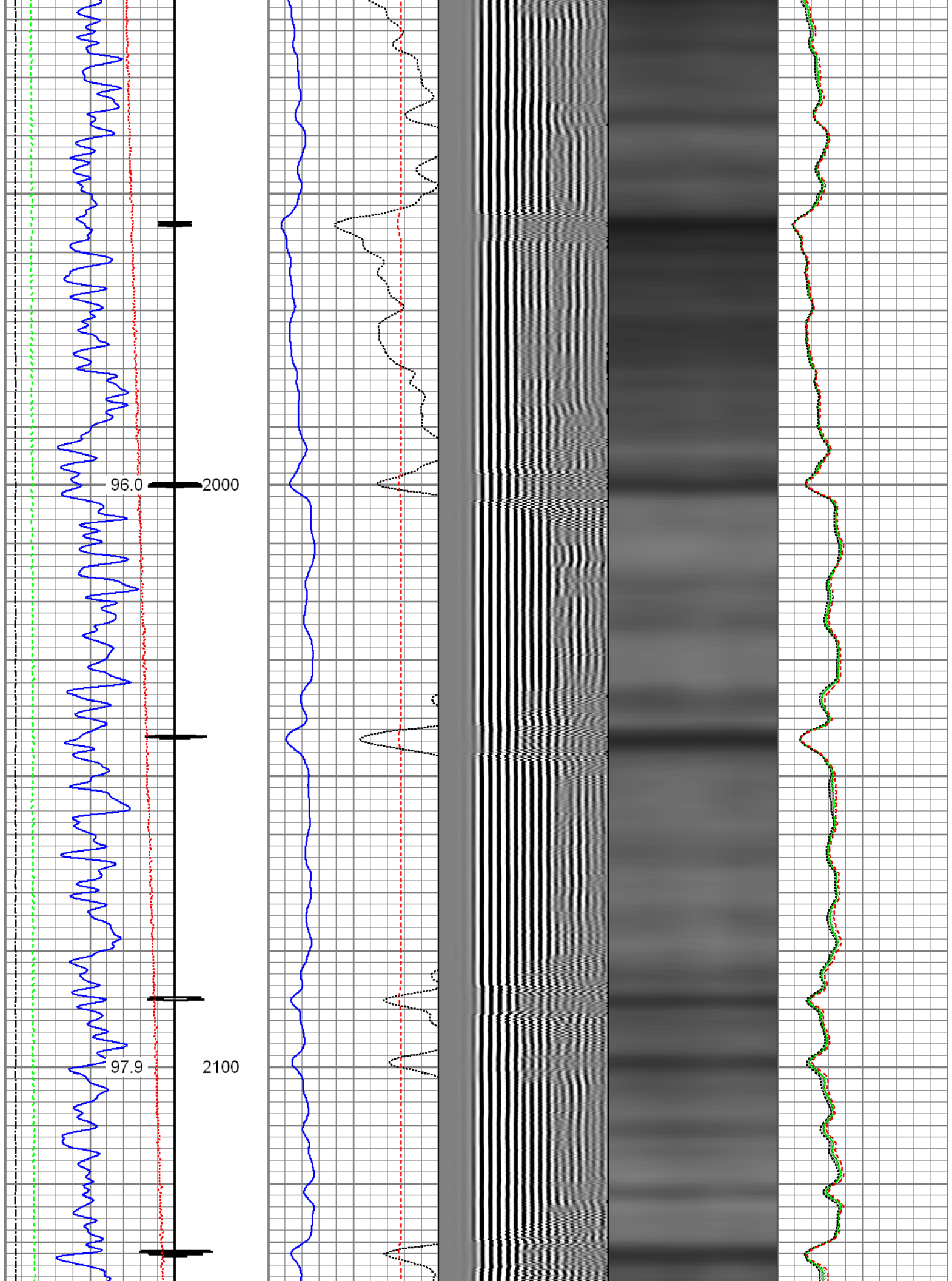


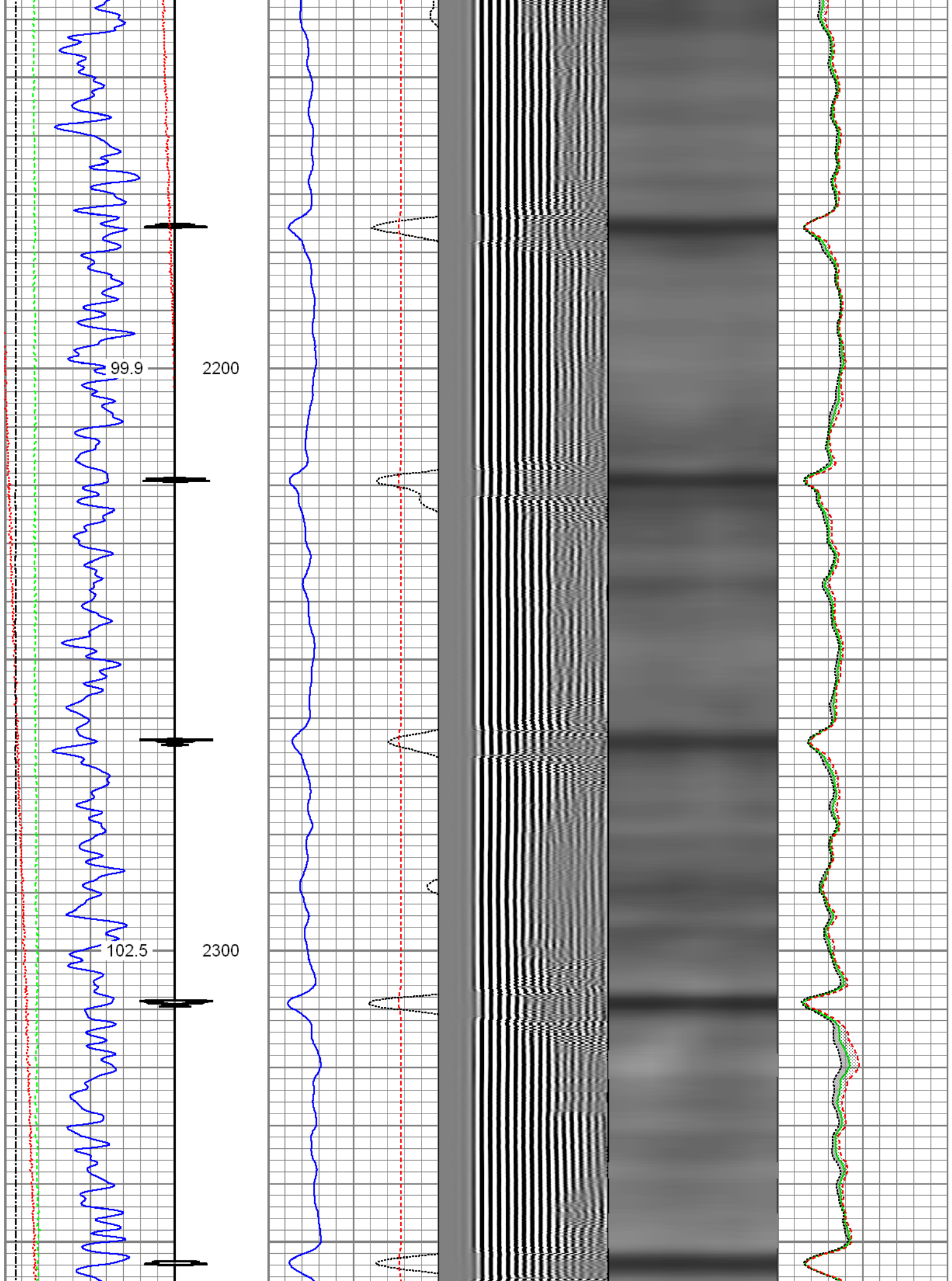




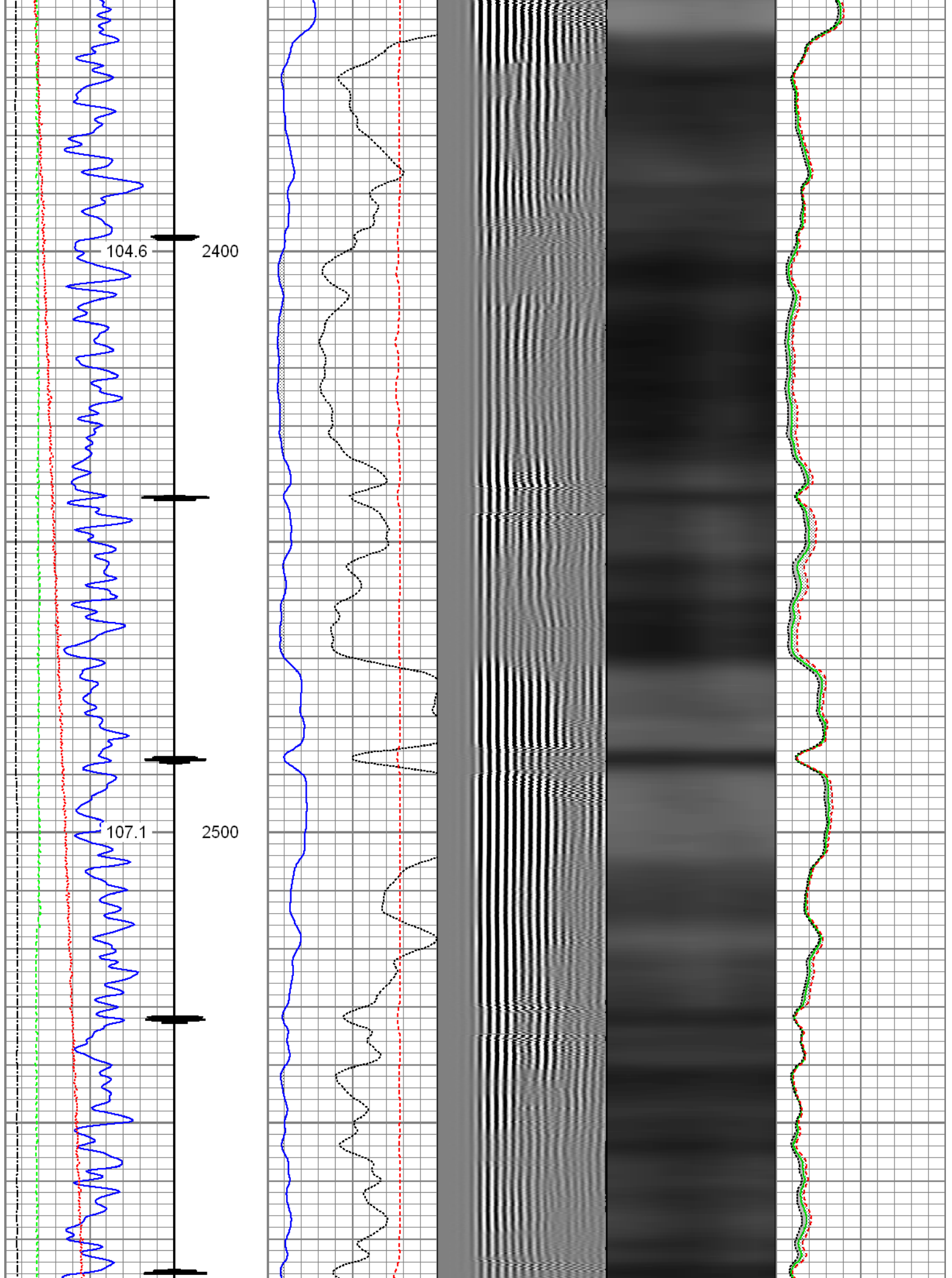


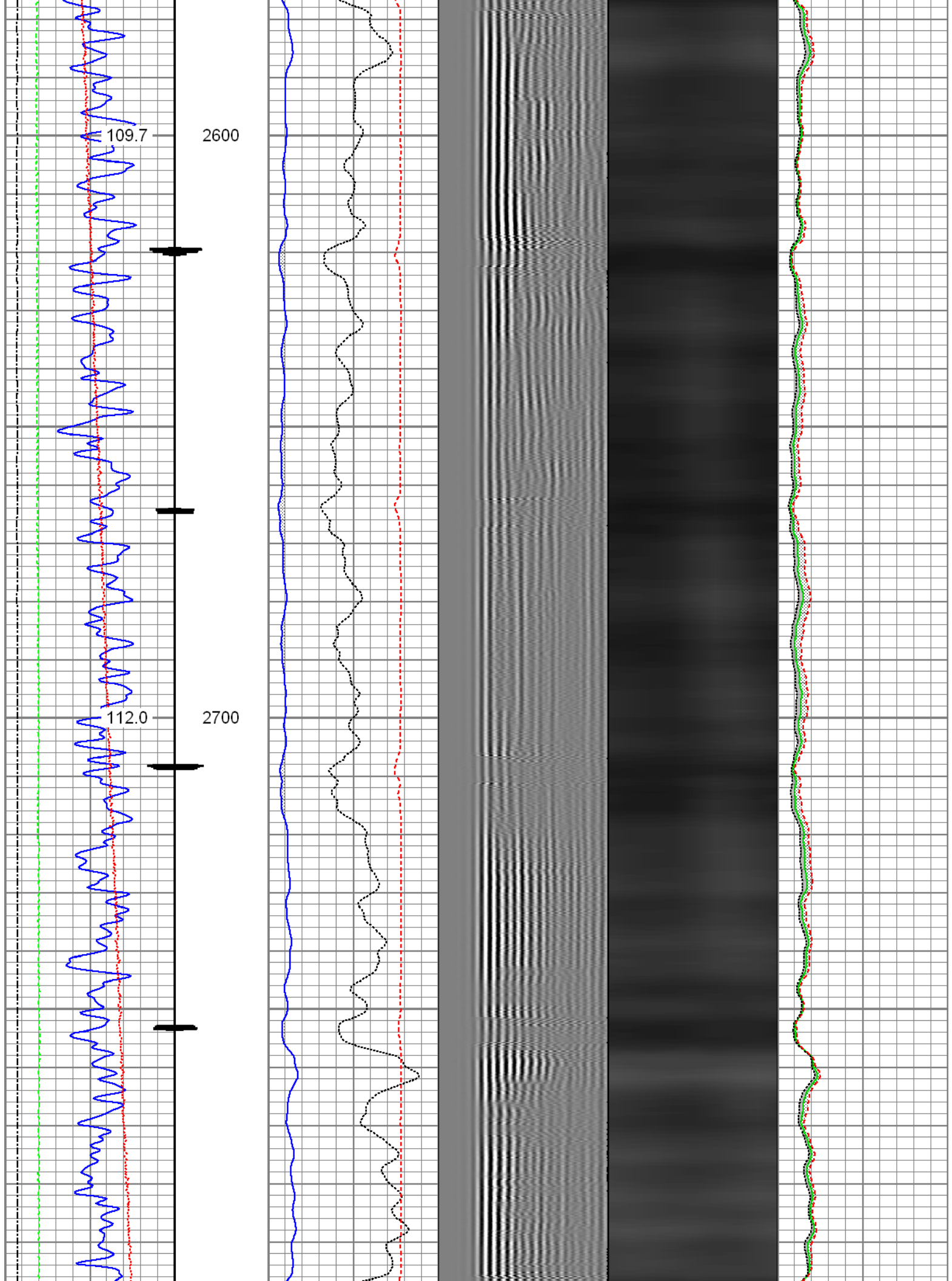


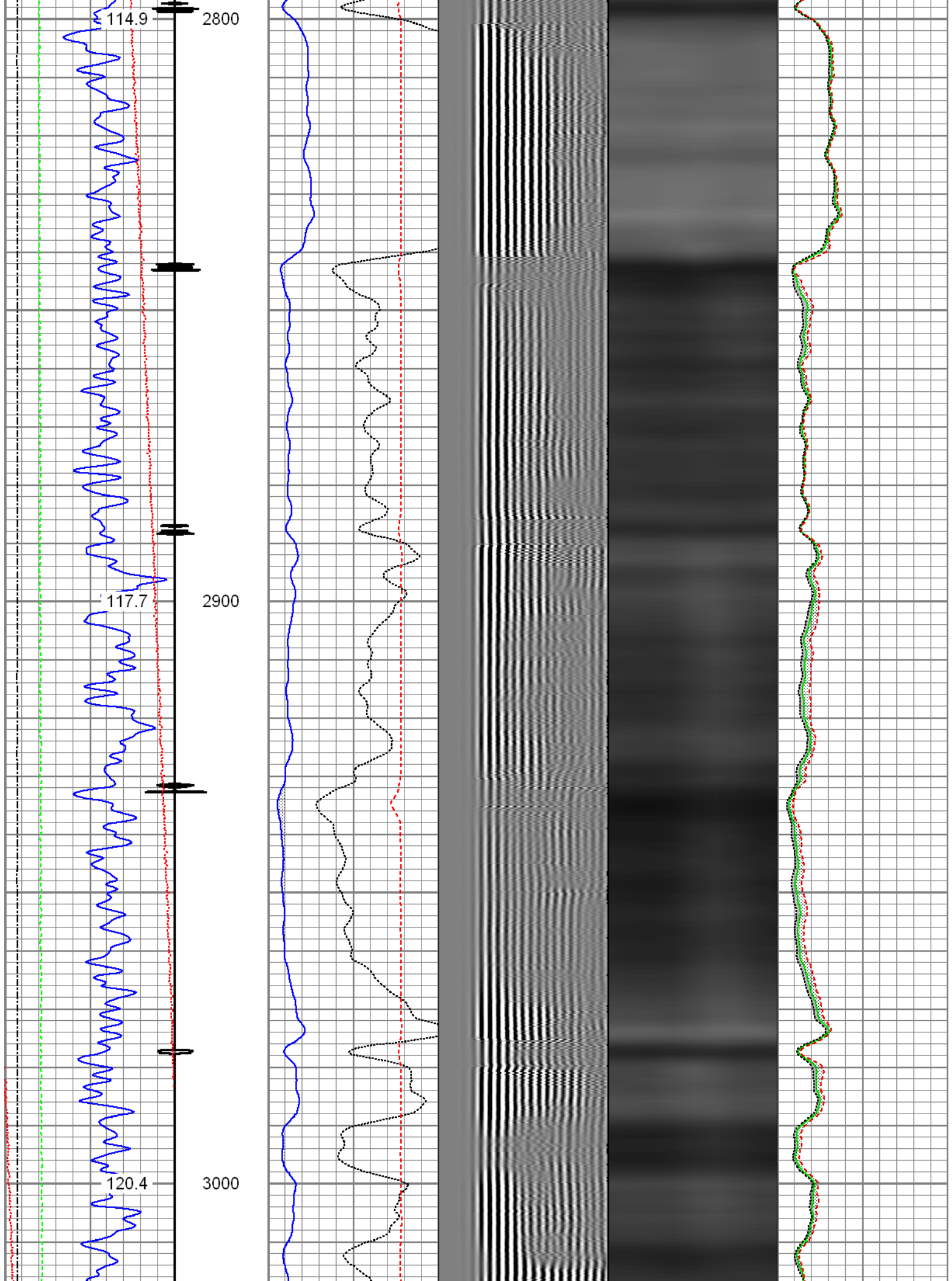


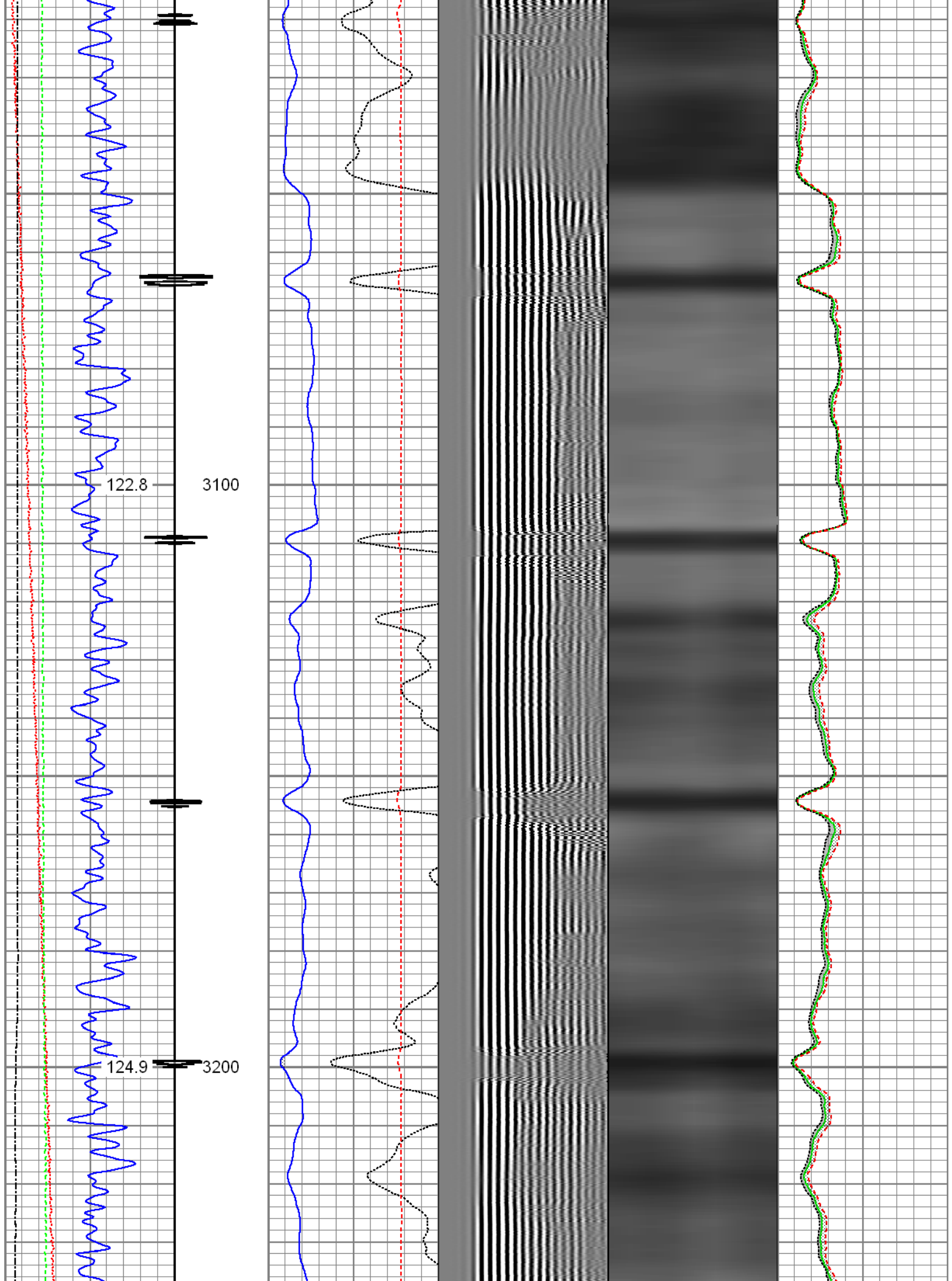




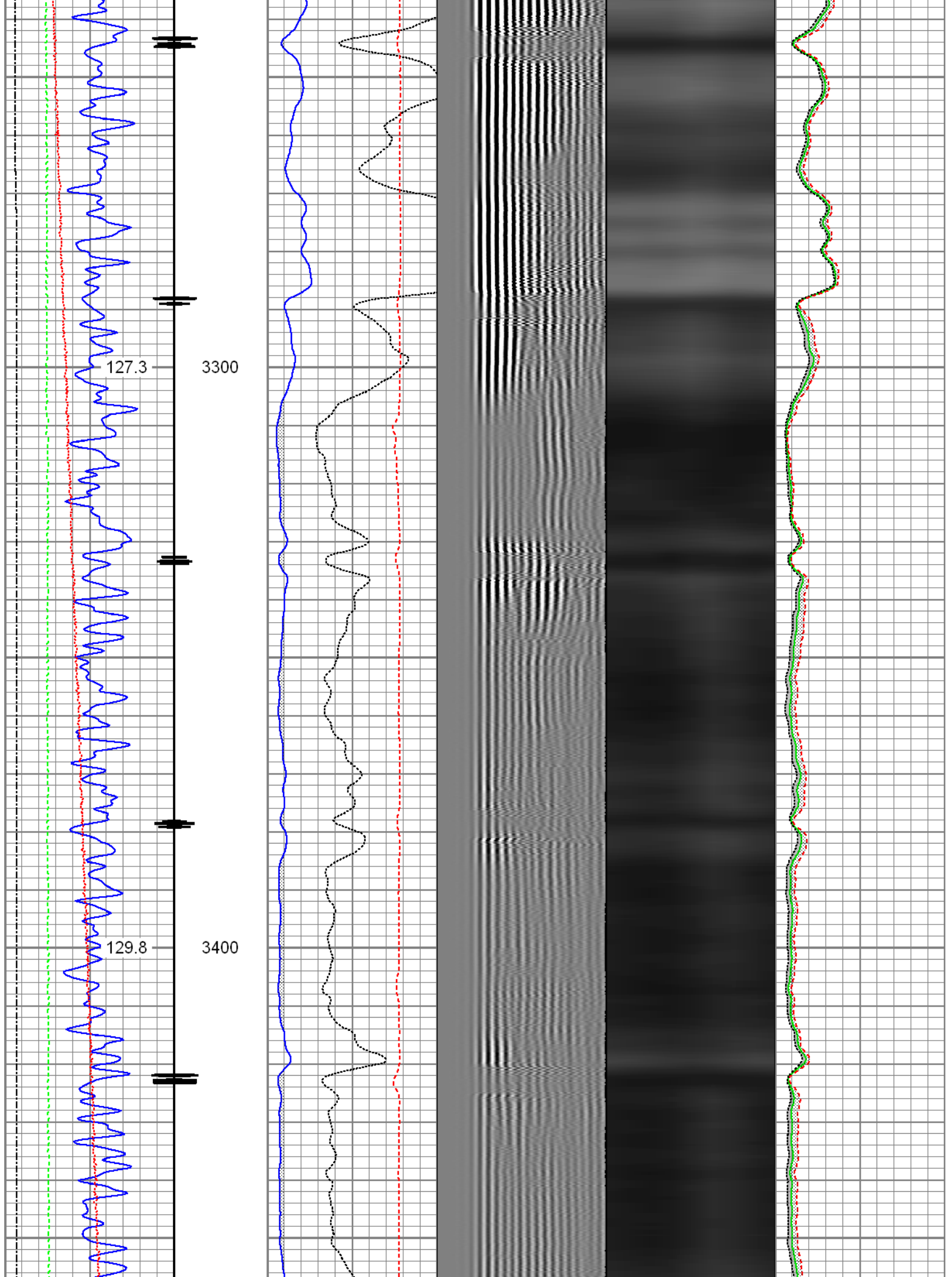


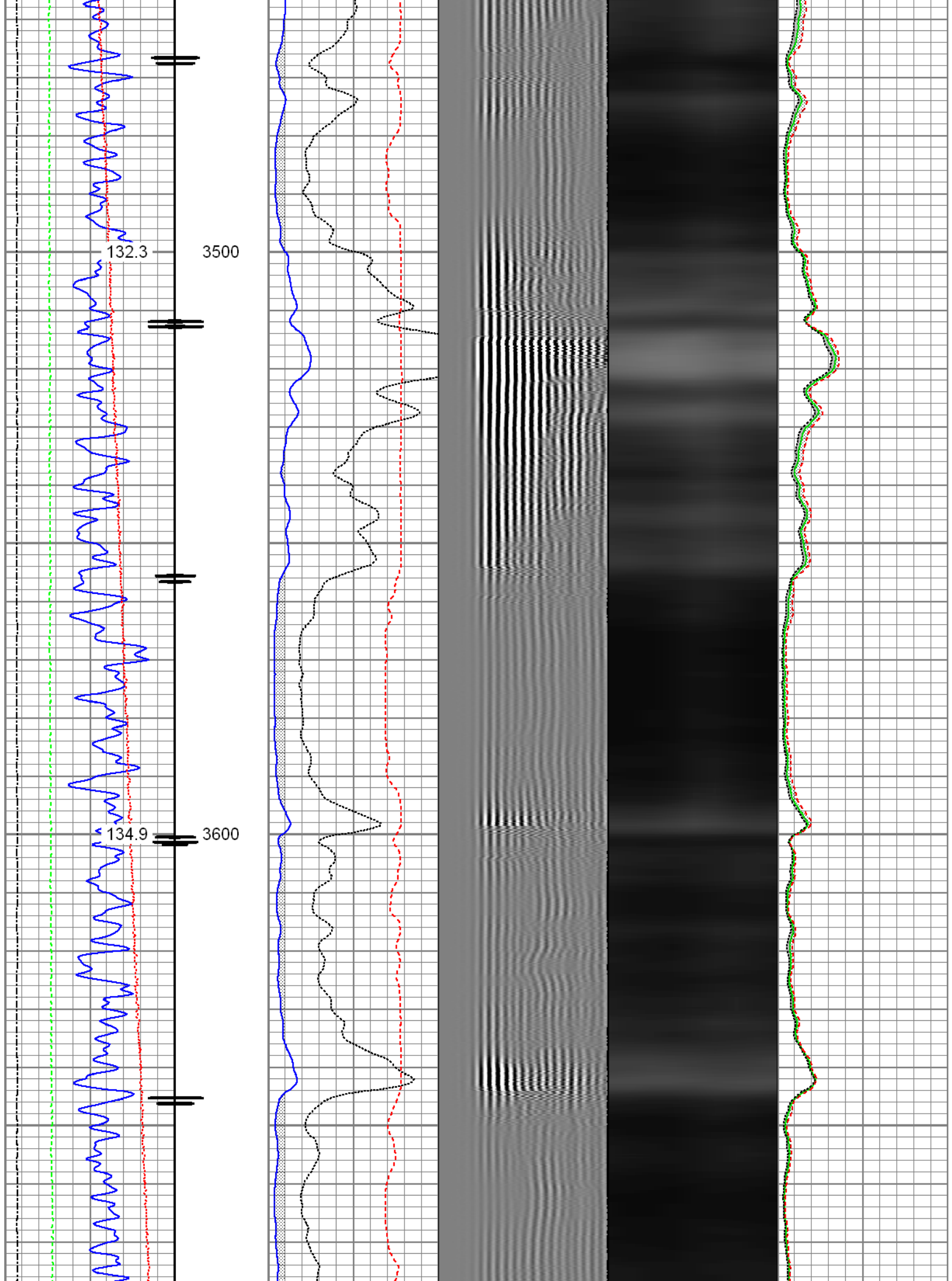


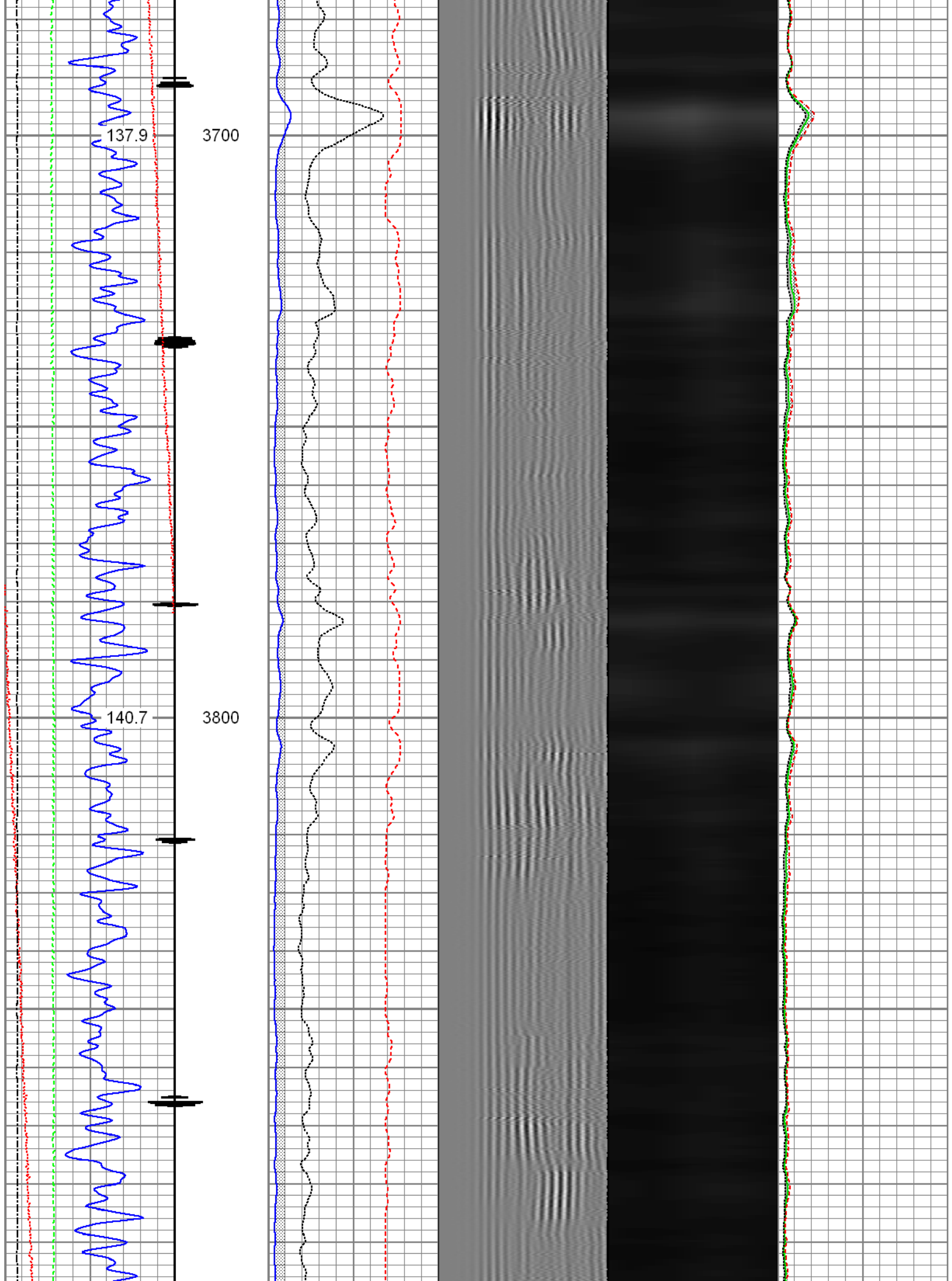


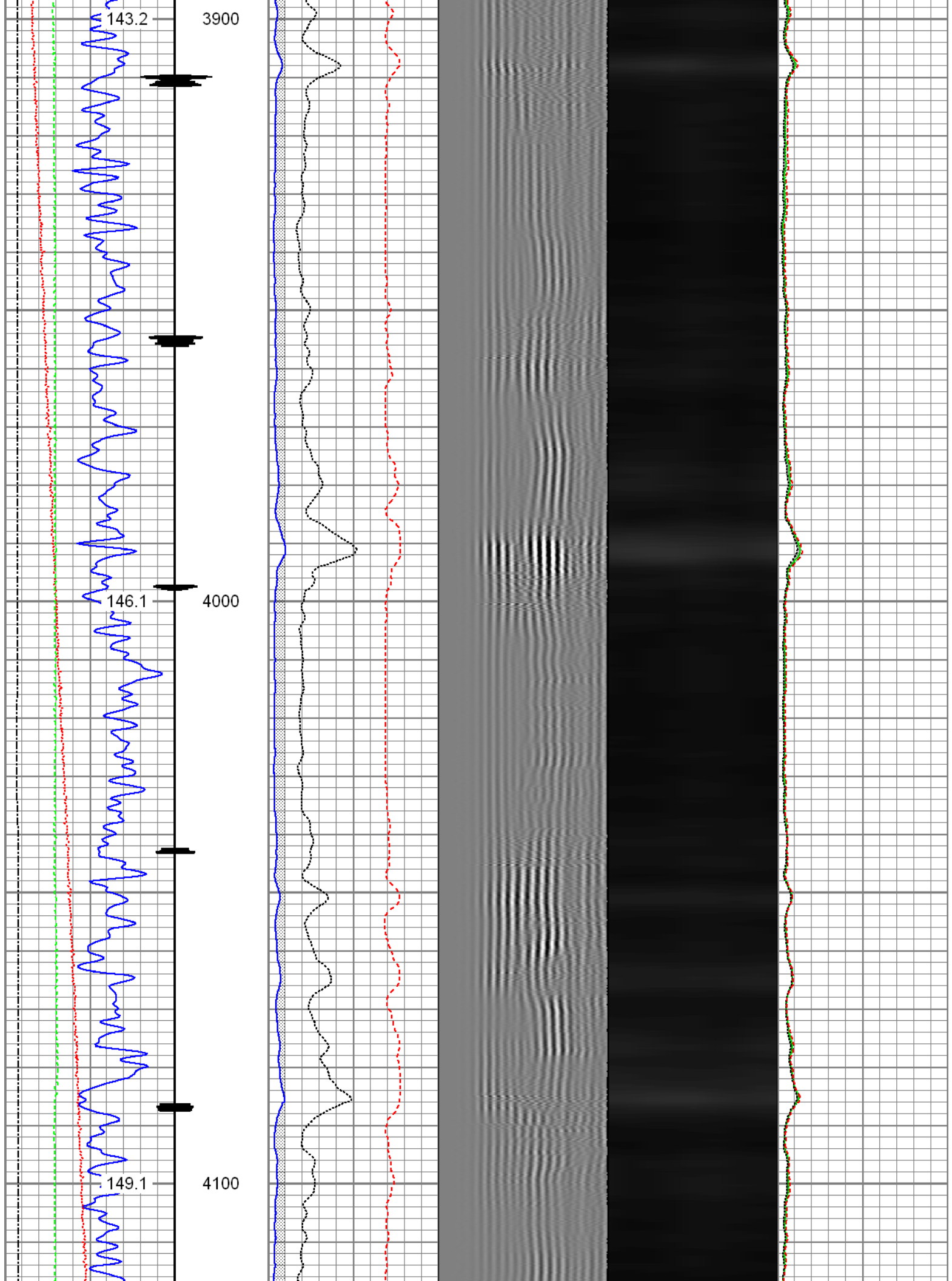




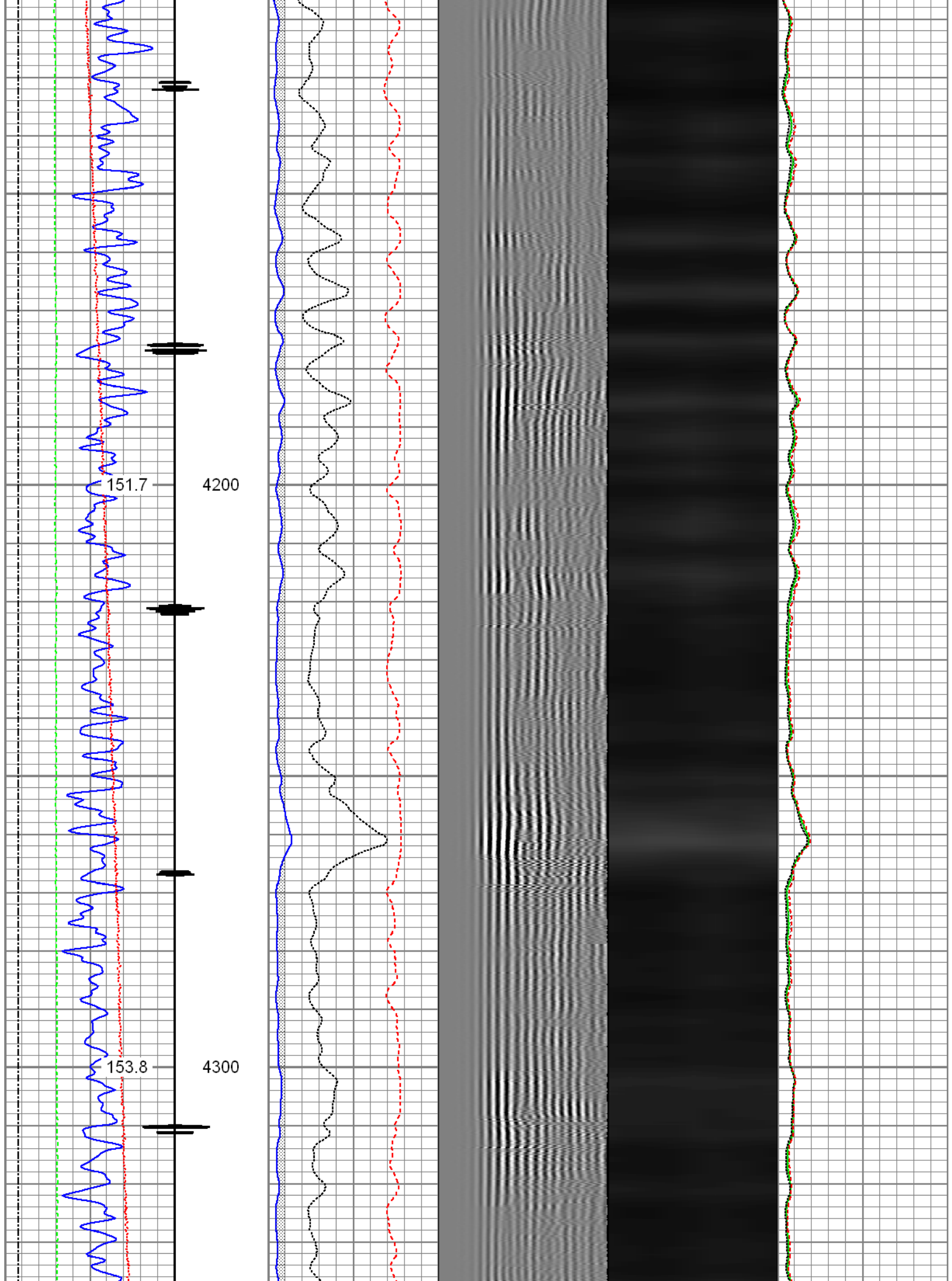


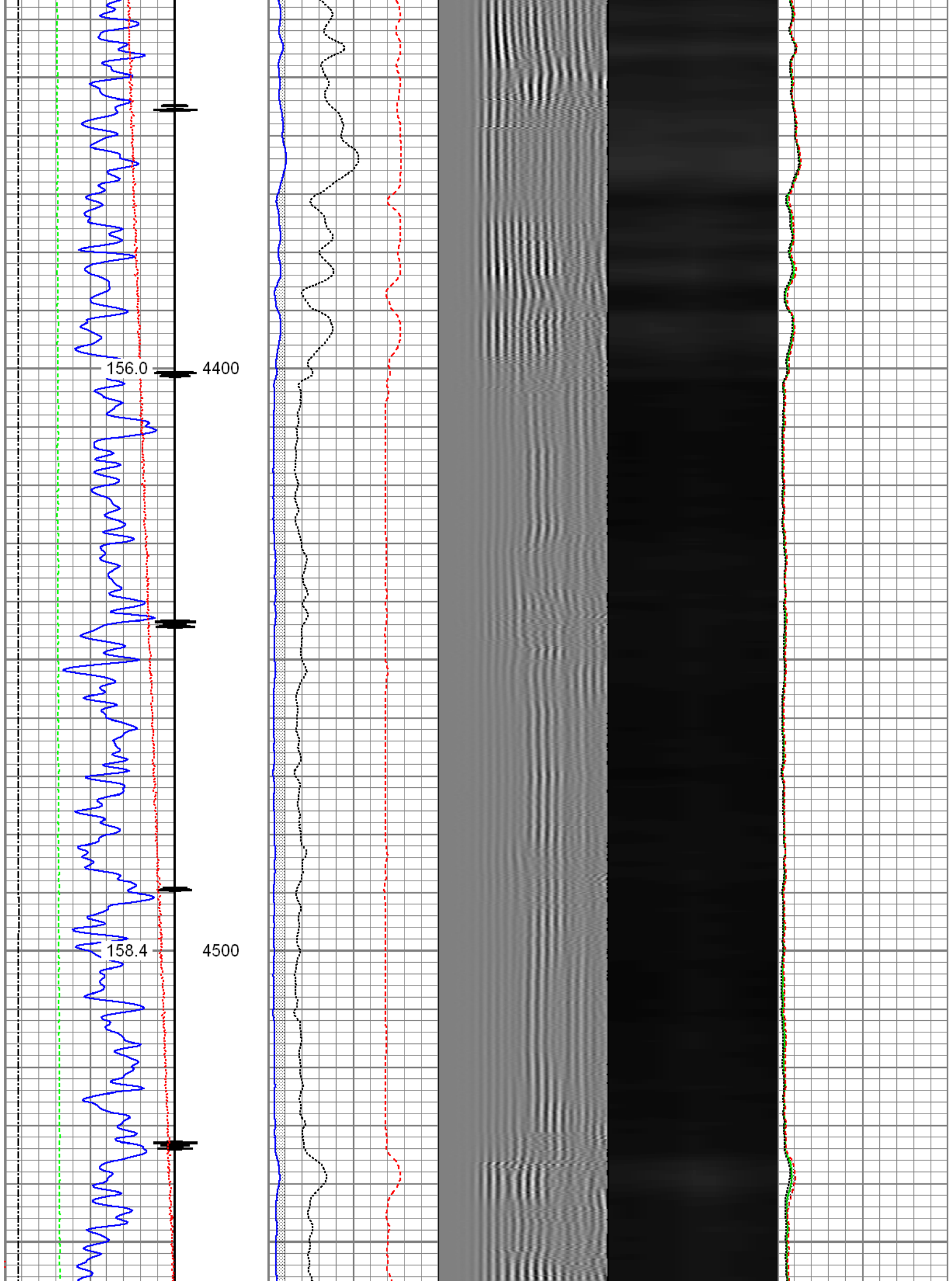


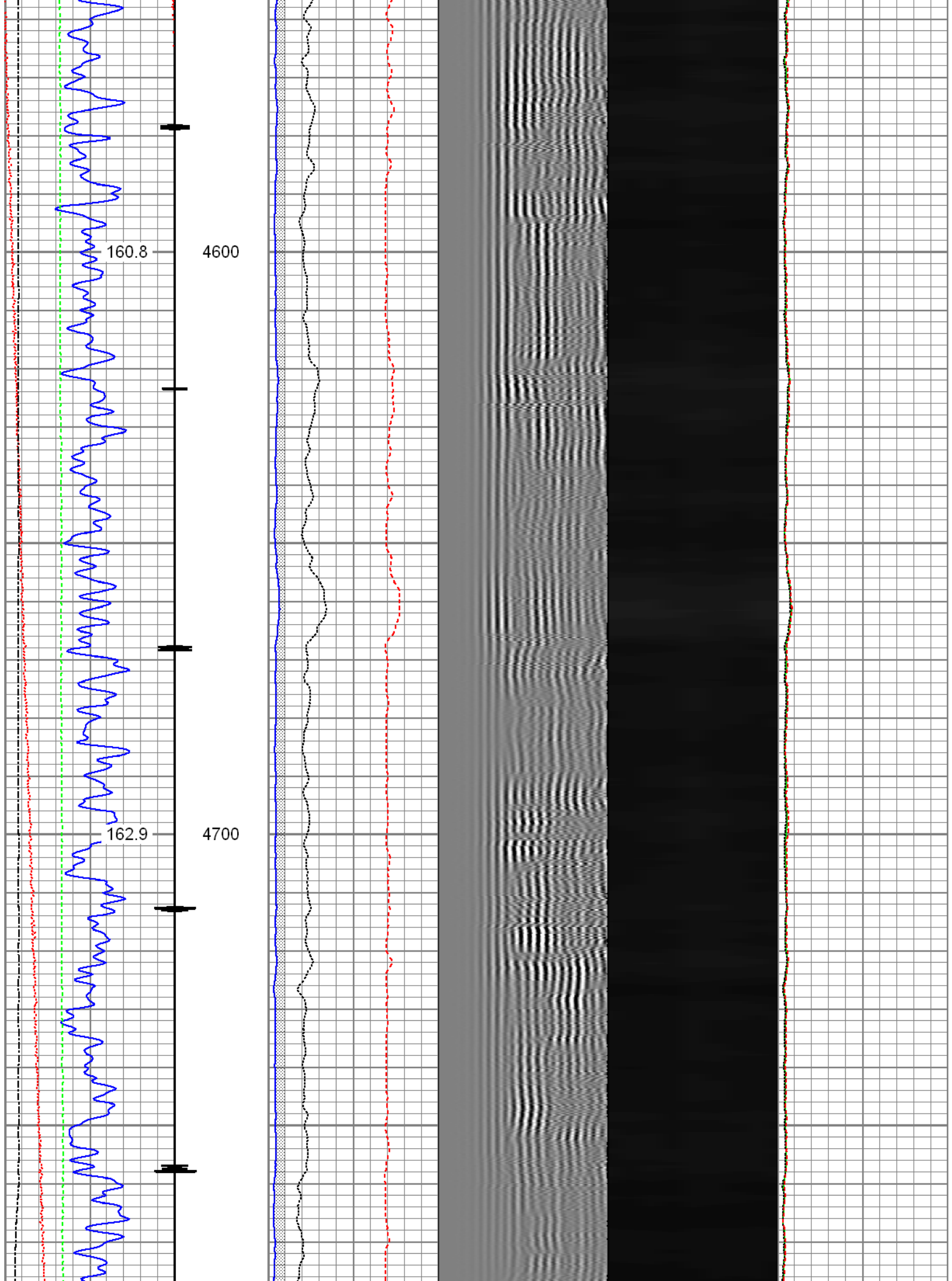


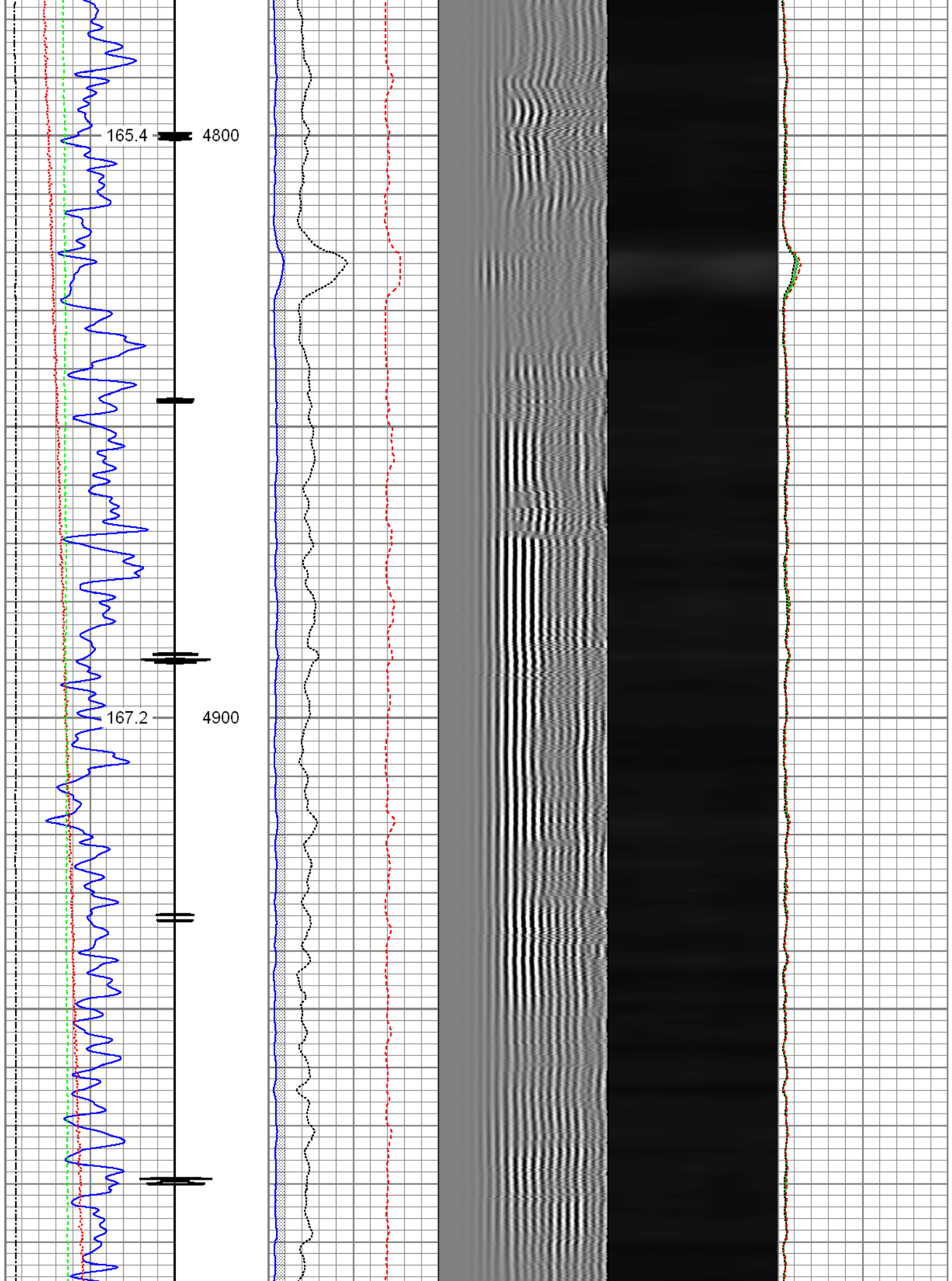




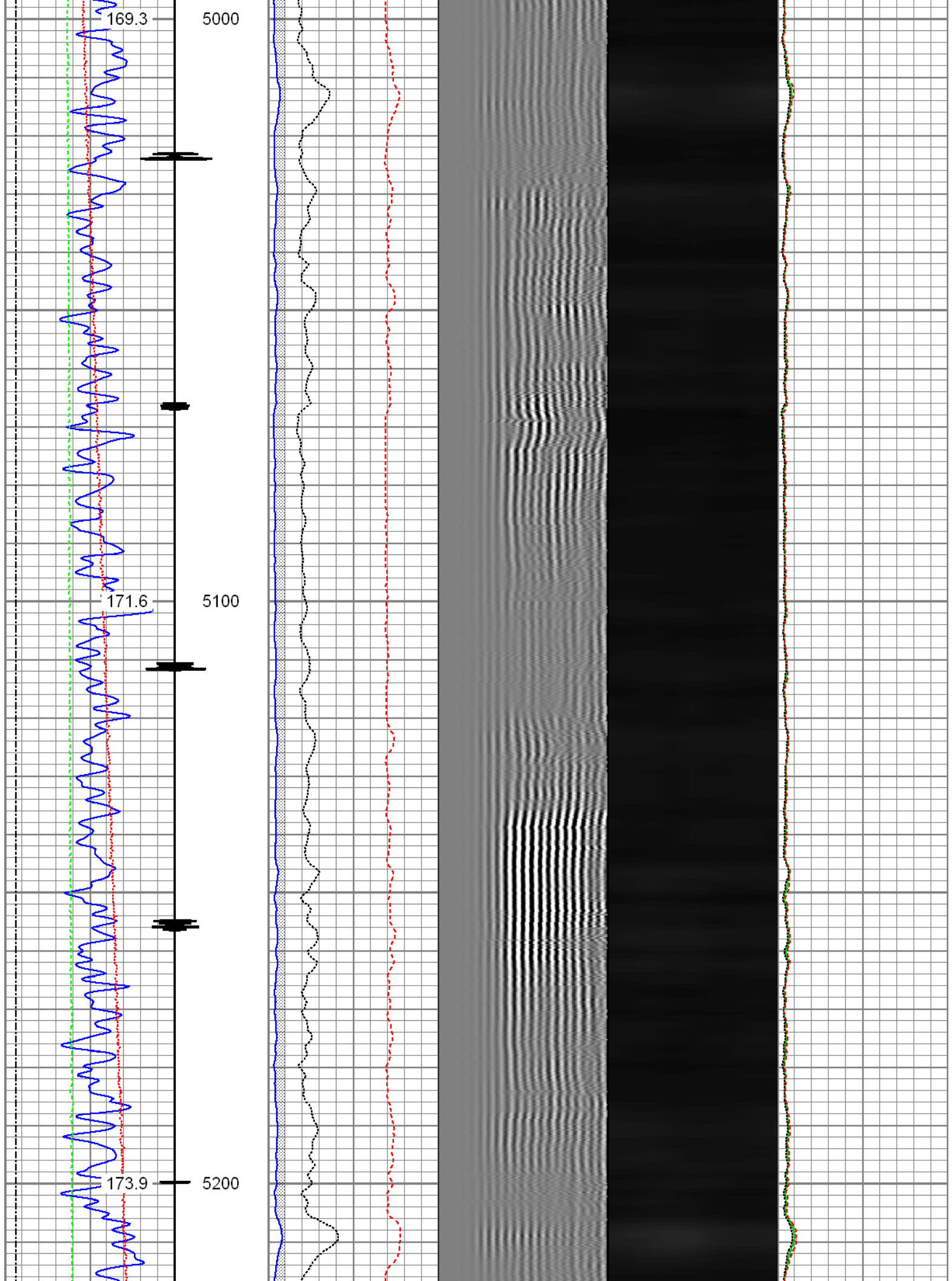


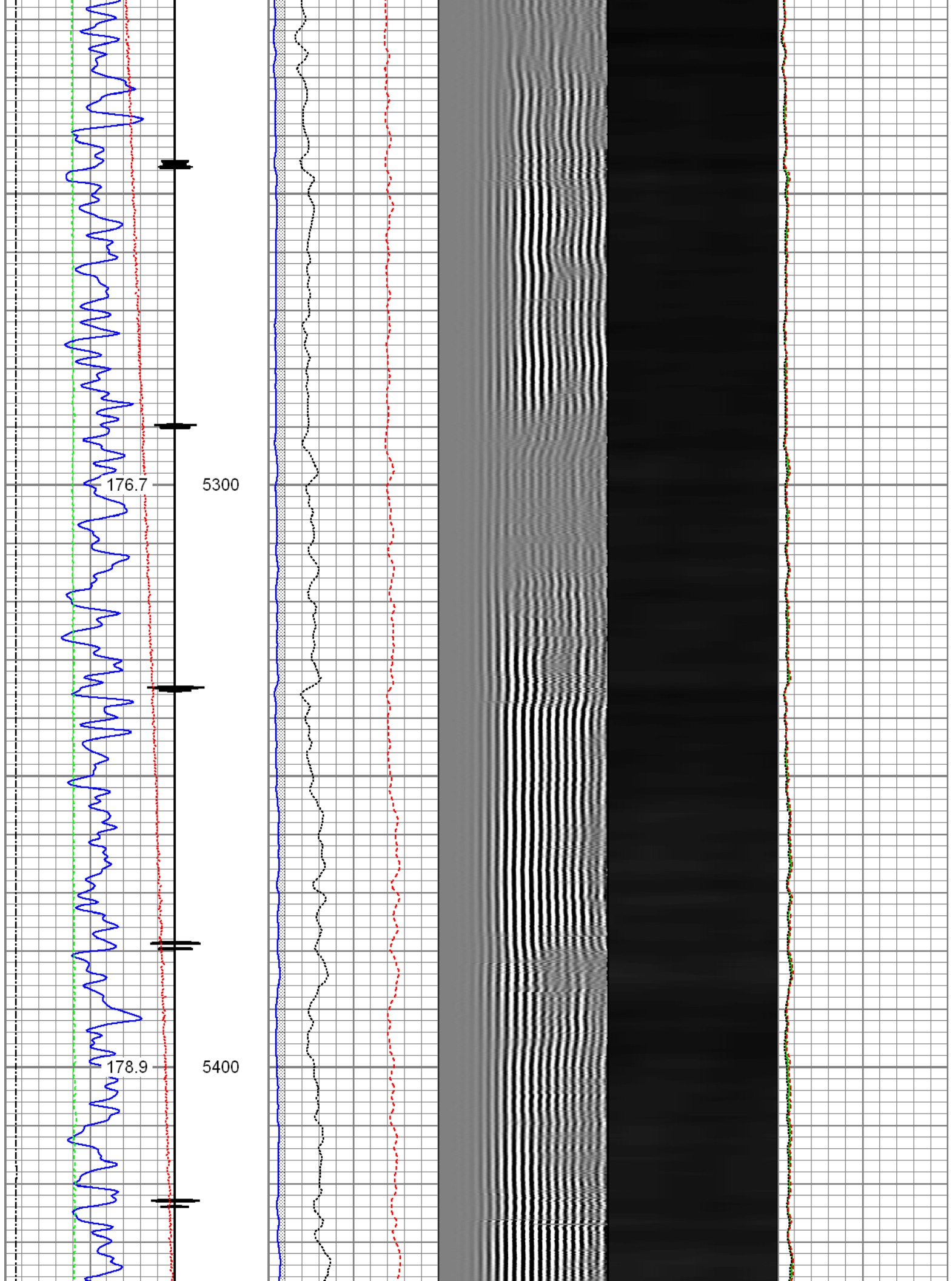


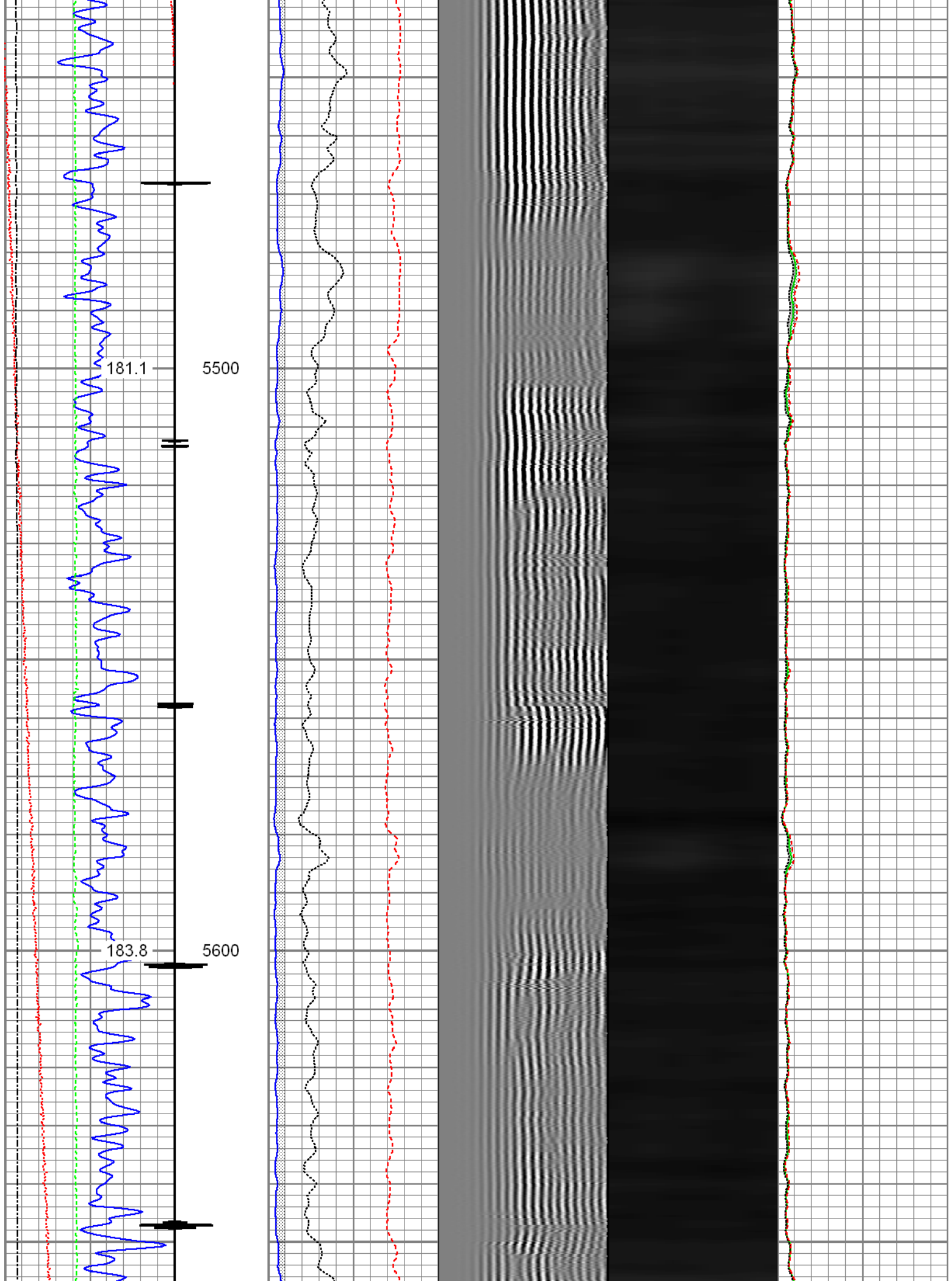


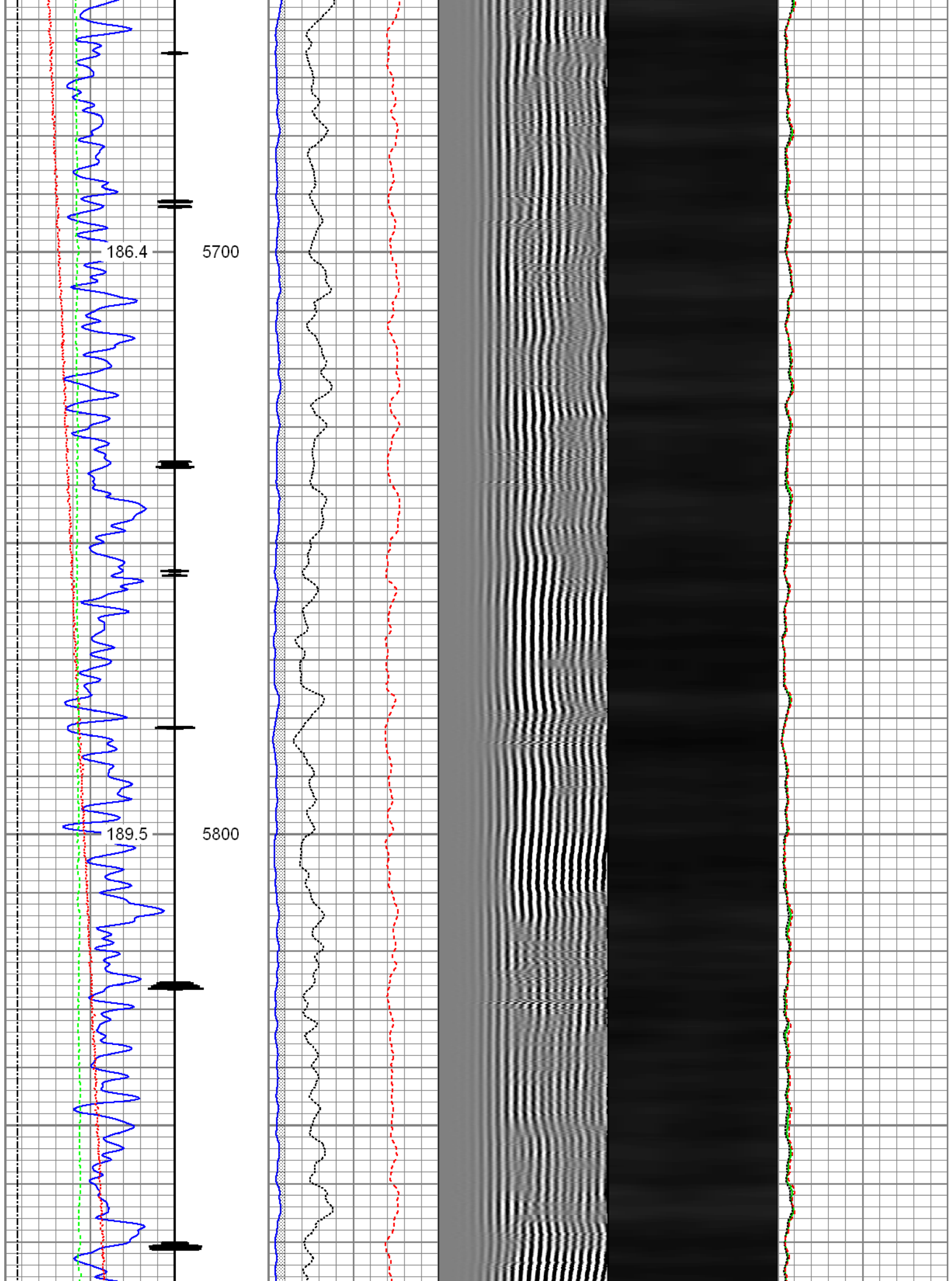




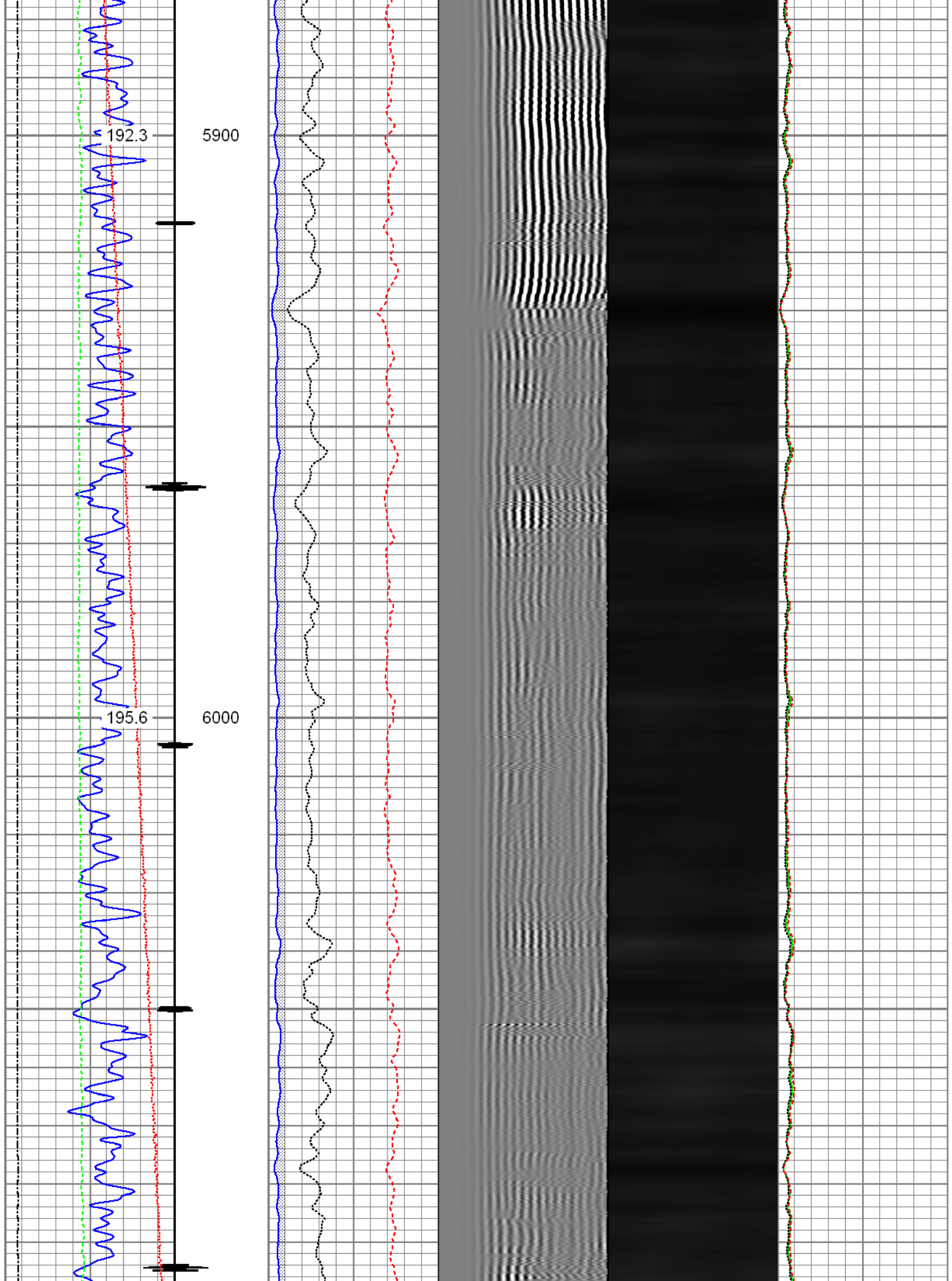


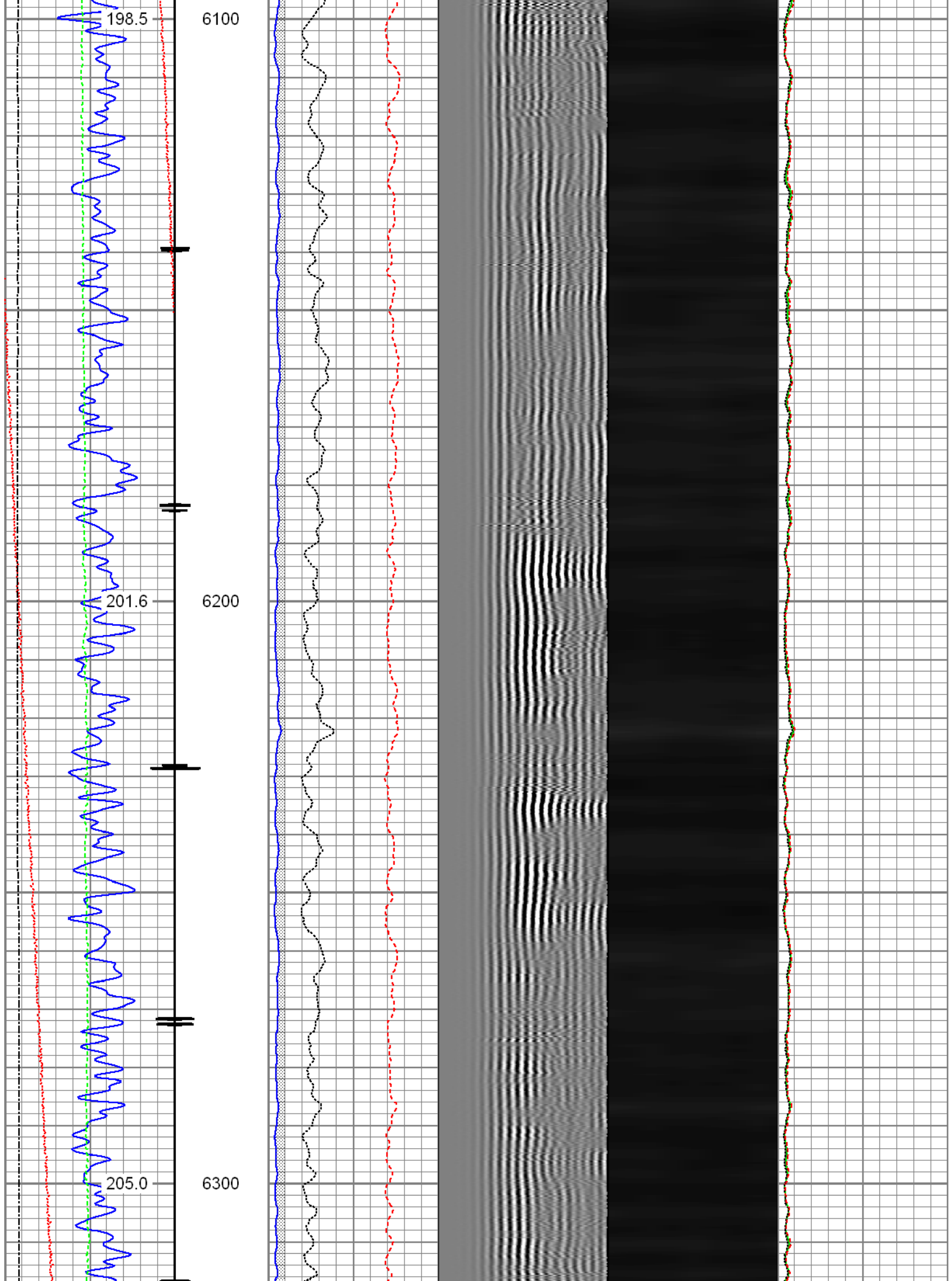


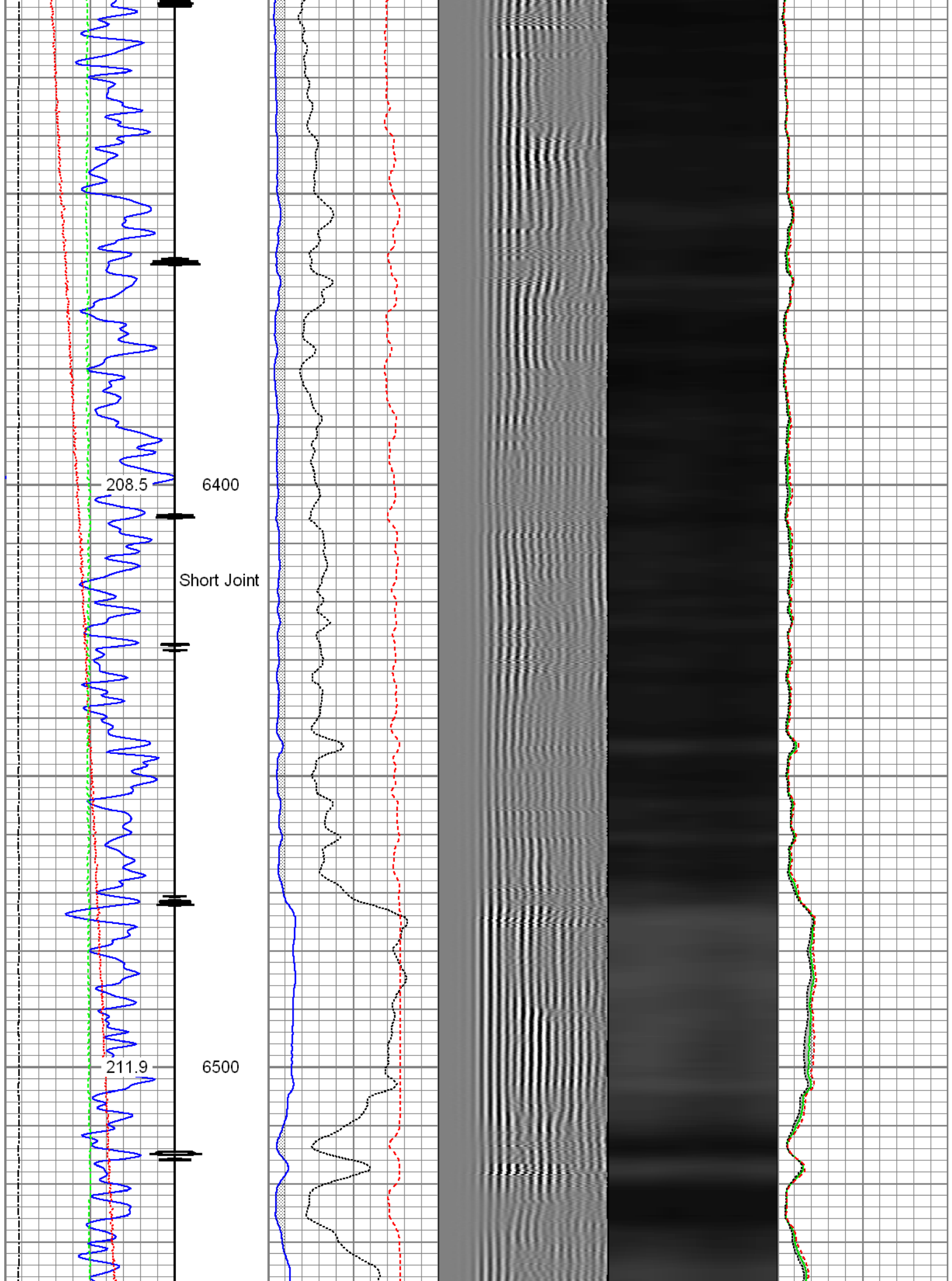


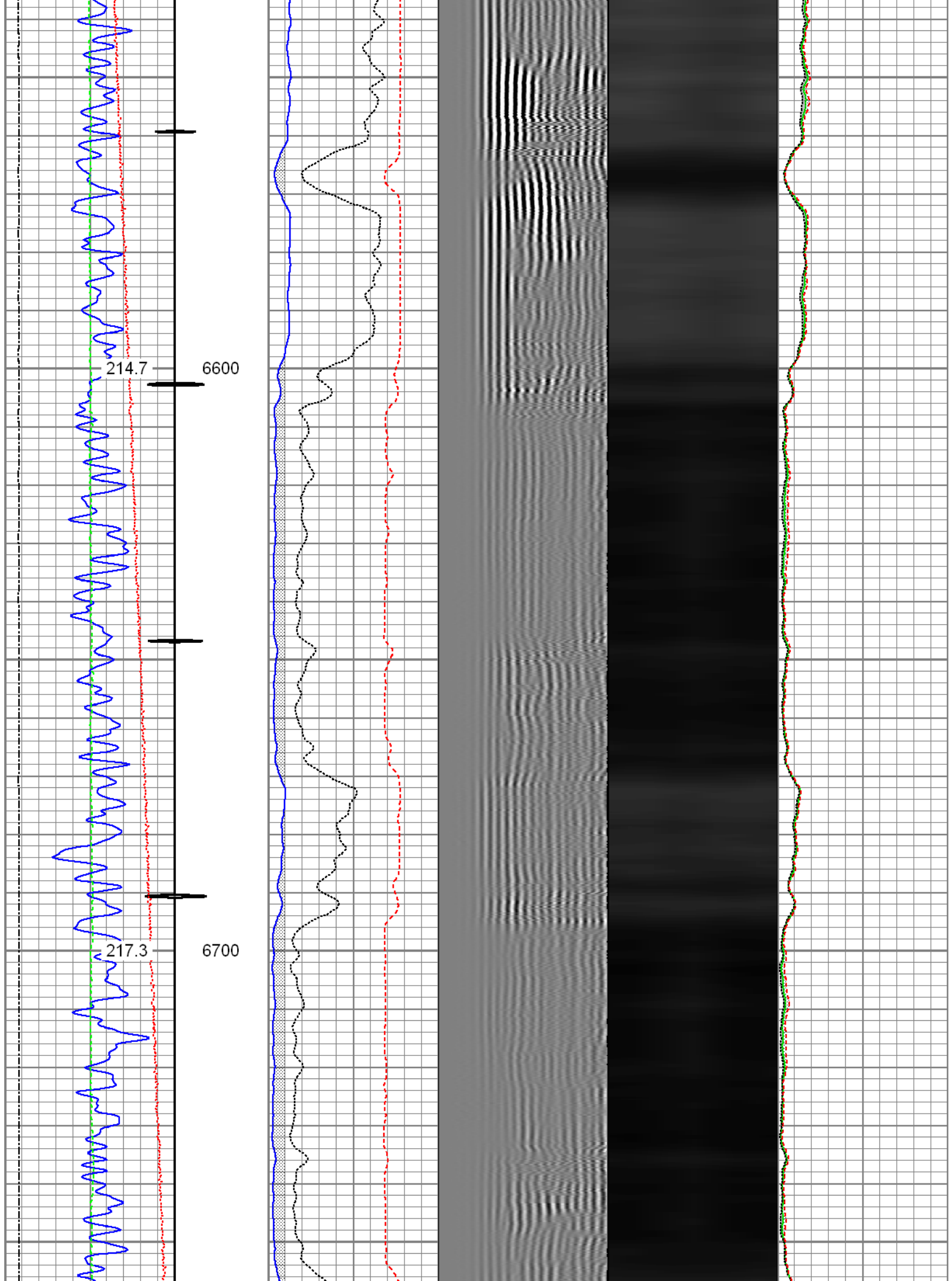




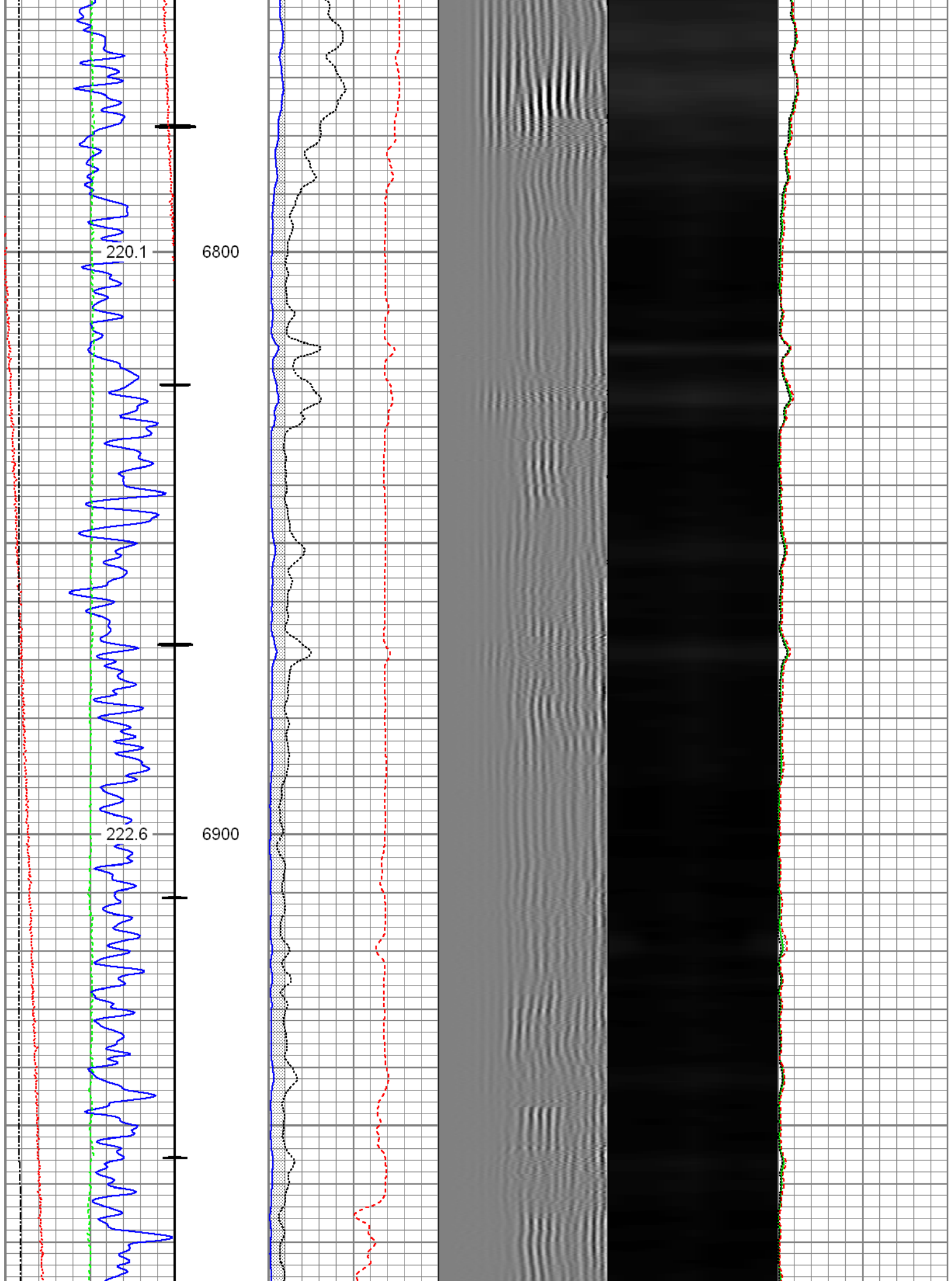


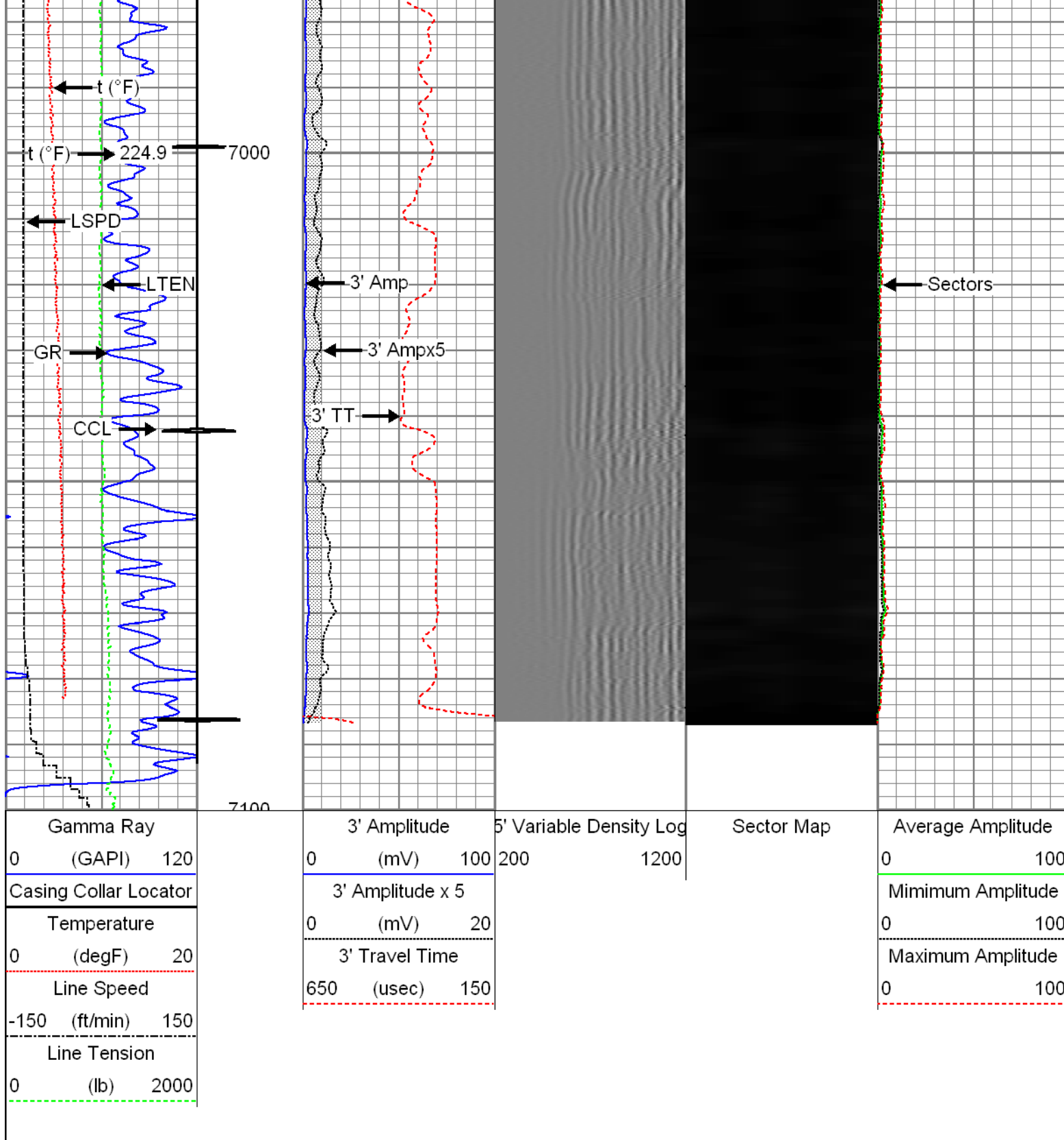










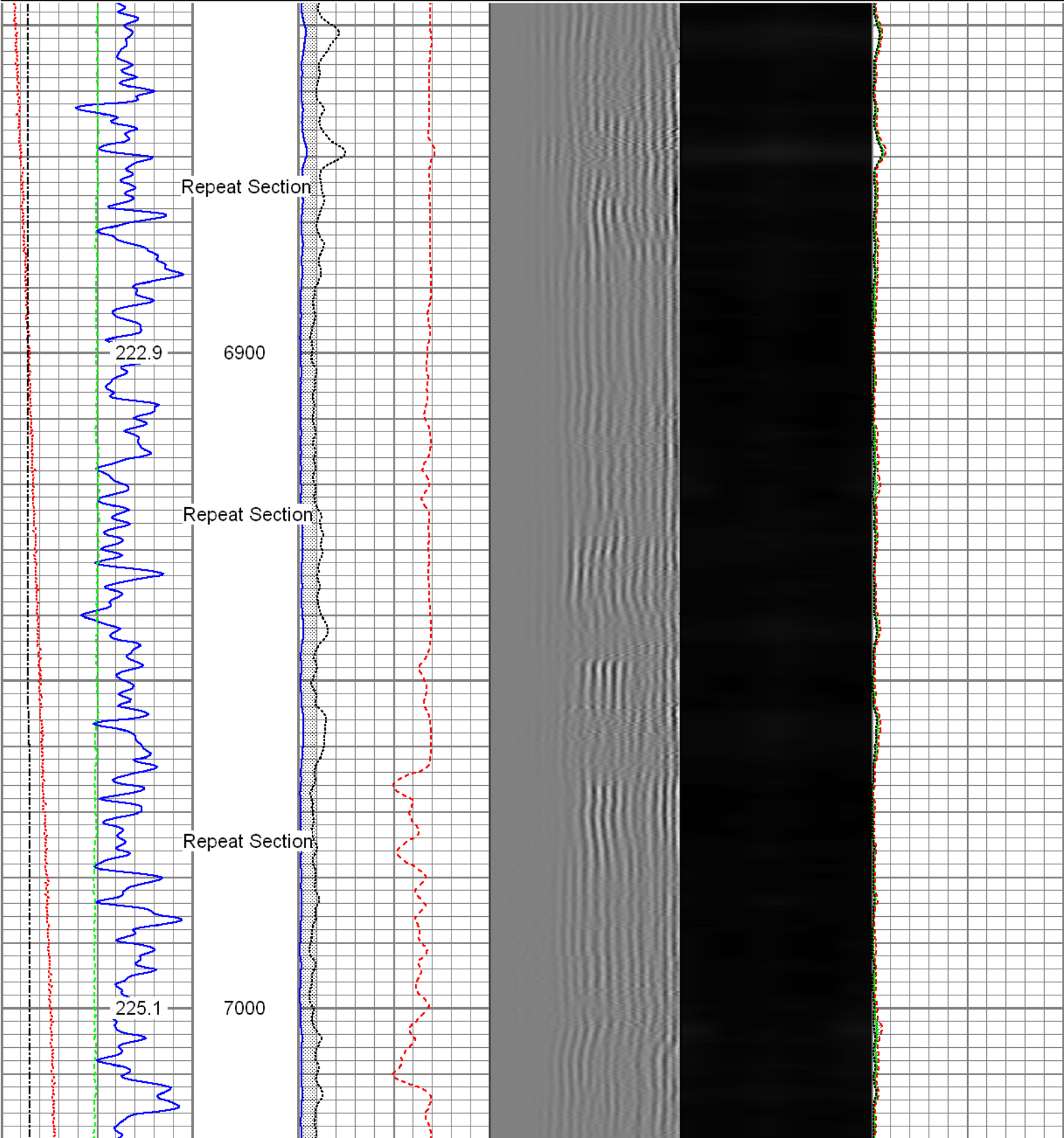


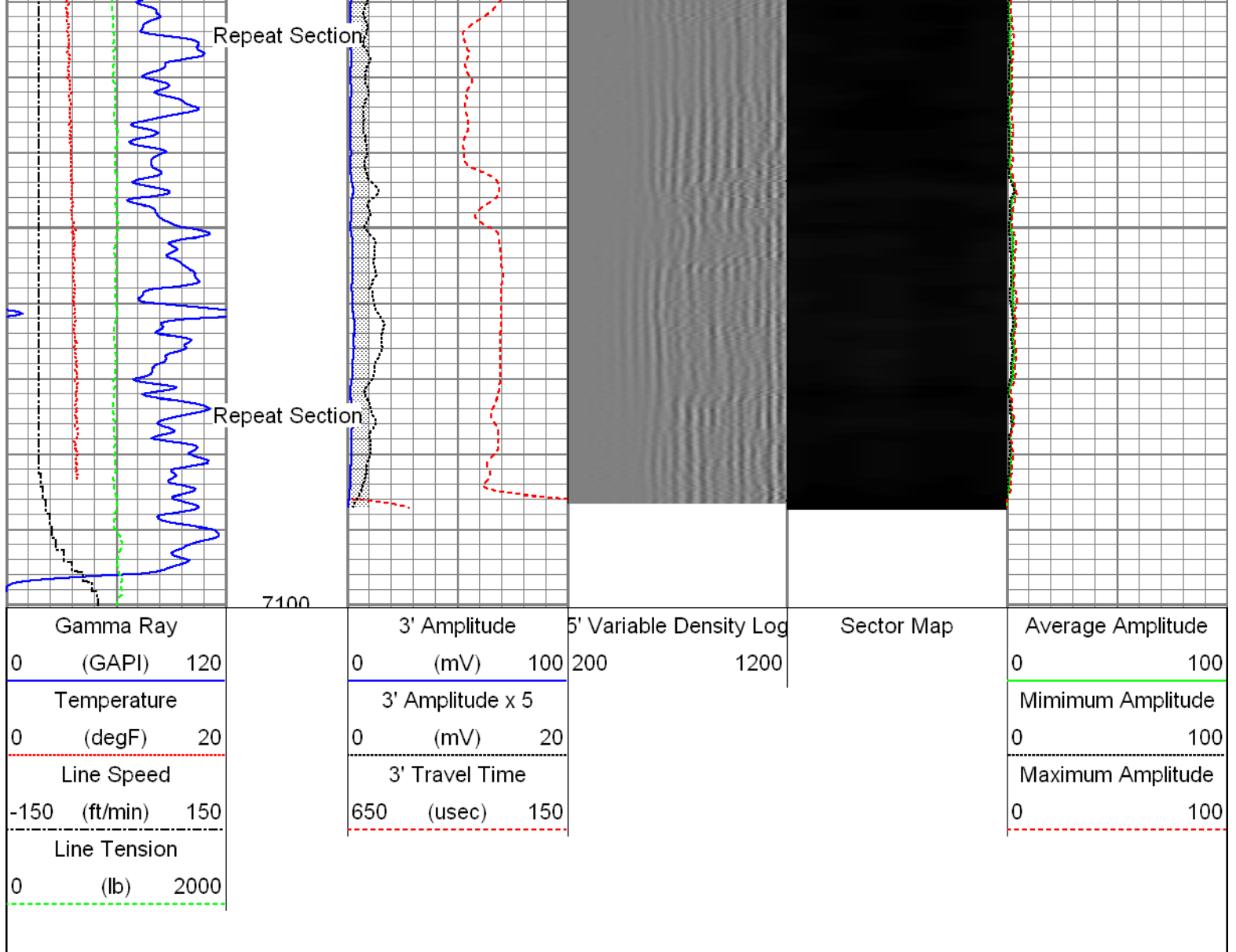
## Repeat Pass

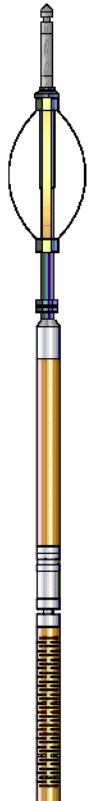
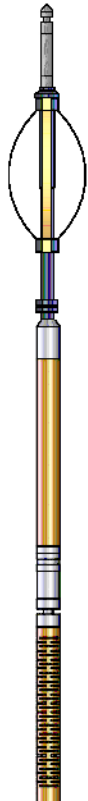
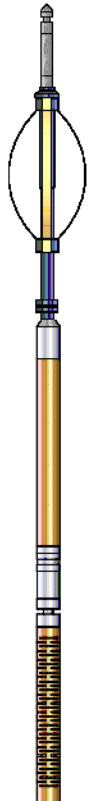
Recorded with 2800 PSI Surface Induced Pressure

Database File: 0512341330\_anadarko\_joker 26n2-9hz\_09-10-15\_rbl.db  
 Dataset Pathname: pass3  
 Presentation Format: radii  
 Dataset Creation: Thu Sep 10 14:34:01 2015 by Log 7.0 B1  
 Charted by: Depth in Feet scaled 1:240

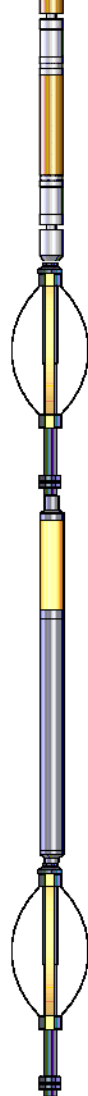
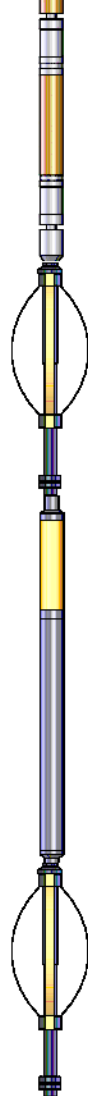
Gamma Ray			3' Amplitude			5' Variable Density Log		Sector Map		Average Amplitude	
0	(GAPI)	120	0	(mV)	100	200	1200			0	100
Temperature			3' Amplitude x 5							Minimum Amplitude	
0	(degF)	20	0	(mV)	20					0	100
Line Speed			3' Travel Time							Maximum Amplitude	
-150	(ft/min)	150	650	(usec)	150			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





Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
HeadVolt	19.49		T_CH14375_1_GO Titan 1-7/16" Assembled Electric Cable Head with 1" Fishing Neck	1.03	1.44	4.00
			Probe_IL_BS_Cent Probe 2-3/4" Inline Electrical Inline Bowspring Centralizer	2.88	2.75	10.00
			Probe_RADII-C-2-3/4" (FW1302-002) Probe 2-3/4" Sector Cement Bond Tool with Temperature Probe	9.19	2.75	105.00
Temp	16.72					
WVF3FT	14.55					
WVFCAL	14.55					
WVFS1	14.55					



WVFS2	14.55		Probe_IL_BS_Cent Probe 2-3/4" Inline Electrical Inline Bowspring Centralizer	2.88	2.75	10.00				
WVFS3	14.55									
WVFS4	14.55									
WVFS5	14.55									
WVFS6	14.55									
WVFS7	14.55									
WVFS8	14.55									
WVF5FT	13.55									
CCL	6.51		Probe_CCL_GR-2.75"Digital (FW1211-081) 4.54 Probe 2-3/4" Digital CCL / Gamma Ray Combined	2.88	2.75	10.00				
DCCL	6.51									
GR	3.77									
Dataset:		0512341330_Anadarko_Joker 26N2-9HZ_09-10-15_RBL.db: field/well/run1/pass5								
Total Length:		23.40 ft								
Total Weight:		194.00 lb								
O.D.		2.75 in								

Calibration Report			
Database File:	0512341330_Anadarko_Joker 26N2-9HZ_09-10-15_RBL.db		
Dataset Pathname:	pass5		
Dataset Creation:	Thu Sep 10 14:37:53 2015 by Log 7.0 B1		
Gamma Ray Calibration Report			
Serial Number:	FW1211-081		
Tool Model:	2.75"Digital		
Performed:	Fri Aug 28 07:53:28 2015		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.6000	GAPI/cps	
Segmented Cement Bond Log Calibration Report			
Serial Number:	FW1302-002		
Tool Model:	2-3/4"		
Calibration Casing Diameter:	5.500	in	
Calibration Depth:	25.000	ft	

Calibration Depth:

25.891

ft

Master Calibration, performed Thu Sep 10 08:55:48 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.004	0.795	1.000	71.921	89.662	0.606
CAL	0.729	1.486				
5'	0.005	0.447	1.000	71.921	160.374	0.168
SUM						
S1	0.002	0.746	0.000	100.000	134.405	-0.269
S2	0.005	0.738	0.000	100.000	136.438	-0.640
S3	0.005	0.761	0.000	100.000	132.133	-0.611
S4	0.005	0.816	0.000	100.000	123.232	-0.608
S5	0.005	0.886	0.000	100.000	113.521	-0.606
S6	0.005	0.896	0.000	100.000	112.288	-0.592
S7	0.005	0.853	0.000	100.000	117.847	-0.534
S8	0.005	0.799	0.000	100.000	125.895	-0.602

Internal Reference Calibration, performed Wed Dec 31 17:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.729	1.486	1.000	0.000

Air Zero Calibration, performed Thu Sep 10 08:54:03 2015:

	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	



Company	Kerr-McGee Oil & Gas Onshore, L.P.
Well	Joker 26N2-9HZ
Field	Wattenberg
County	Weld
State	Colorado