



Radial Cement Bond
Gamma Ray
Casing Collar Log

Company		Kerr-McGee Oil & Gas Onshore, L.P.	
Well		I & J 7-6	
Field		Wattenberg	
County		Weld	
State		Colorado	
Location:		API #: 05-123-26878	
SEC 6		TWP 1N RGE 68W	
Permanent Datum		Ground Level	
Log Measured From		Kelly Bushing	
Drilling Measured From		Kelly Bushing	
Elevation		4972'	
Other Services		None	
Date		29-APR-2017	
Run Number		One	
Depth Driller		8224 FT	
Depth Logger		4986 FT	
Bottom Logged Interval		4980 FT	
Top Log Interval		Surface	
Open Hole Size		8.750"	
Type Fluid		Water	
Density / Viscosity		8.34 lb/gal	
Max. Recorded Temp.		164°F	
Estimated Cement Top		See Log	
Time Well Ready		ROA	
Time Logger on Bottom		0800	
Equipment Number		HD-0324	
Location		Fort Lupton, CO	
Recorded By		Jack Amidei	
Witnessed By		Luis Morales	
Borehole Record		Tubing Record	
Run Number		Bit	
From		To	
Size (in)		Weight (lb/ft)	
From		To	
Casing Record		Size (in)	
Surface Casing		8 5/8	
Intermediate #1		4 1/2	
Intermediate #2		11.6	
Liner		Grade	
		J-55	
		1-80 LTC	
		Top	
		Surface	
		Bottom	
		684 FT	
		8080 FT	

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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 Previous Log Collars Reported at 3549 and 3586 FT
Adjusted Log -16 FT to correlate with Previous Log
Log ran from 4986 FT to Surface
Log ran with 0 PSI Surface Induced Pressure
Logging tools came out clean and free of debris upon completion of operations

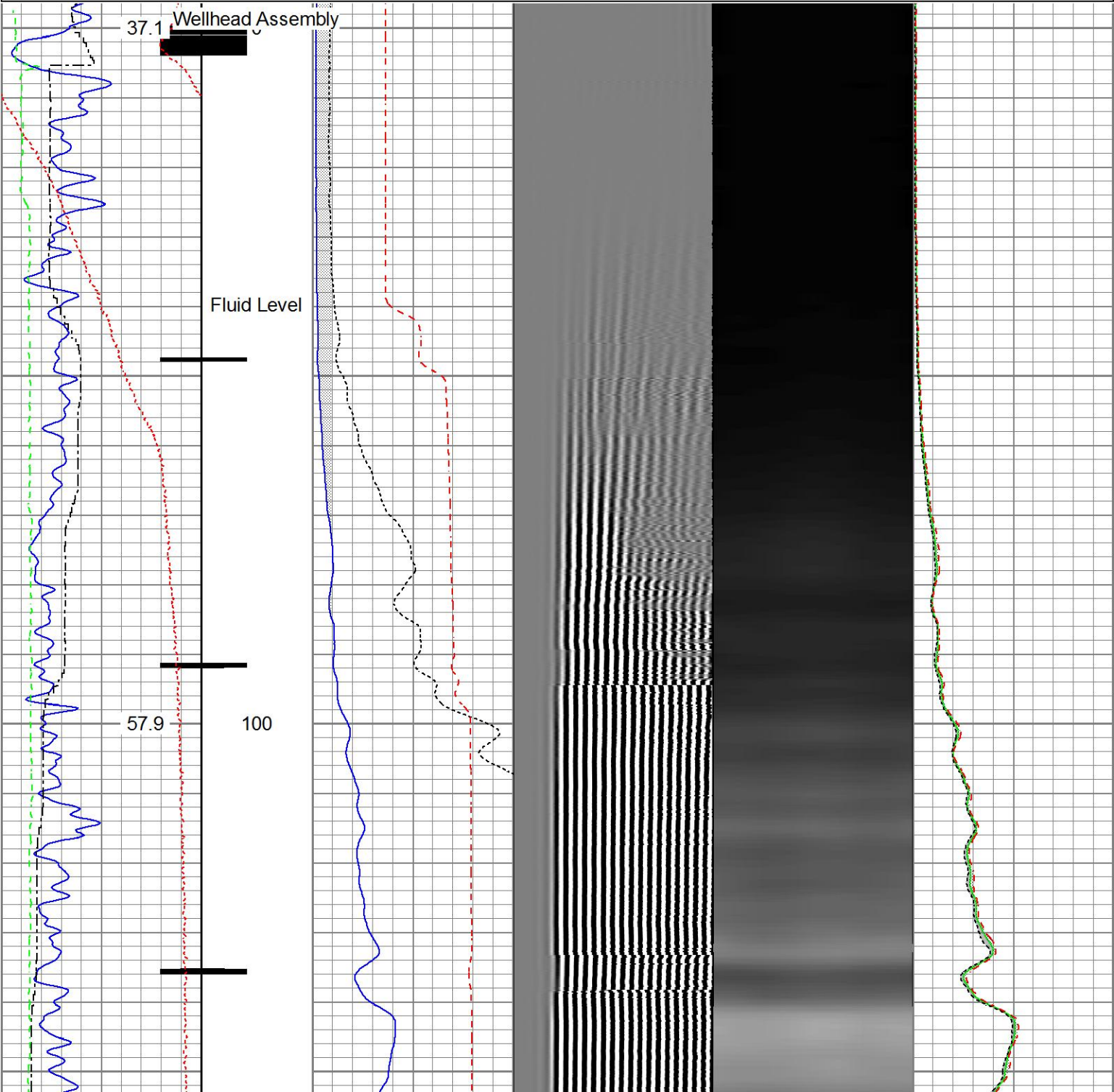
Thank you for choosing Reliance Oilfield Services, LLC!!

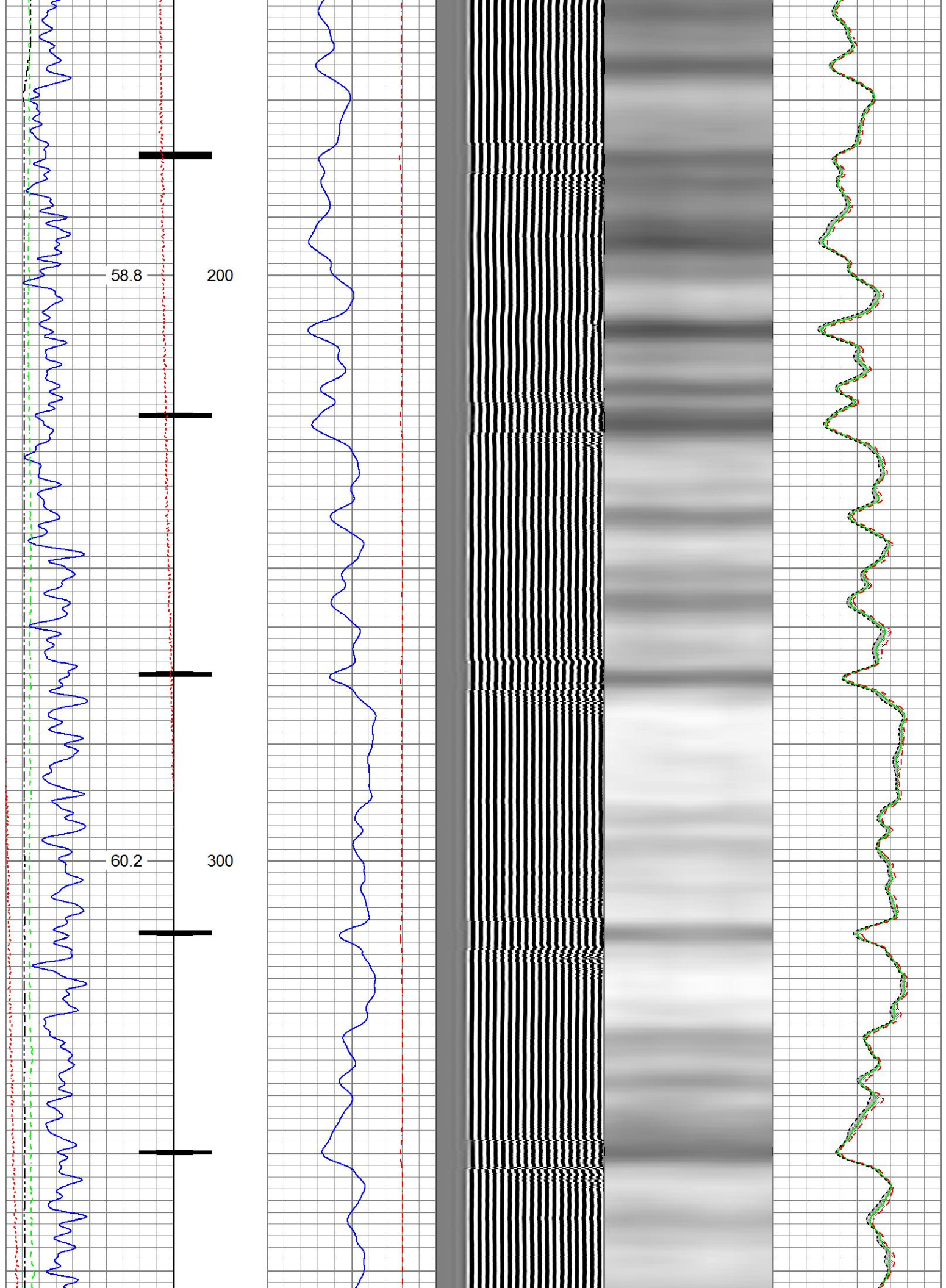


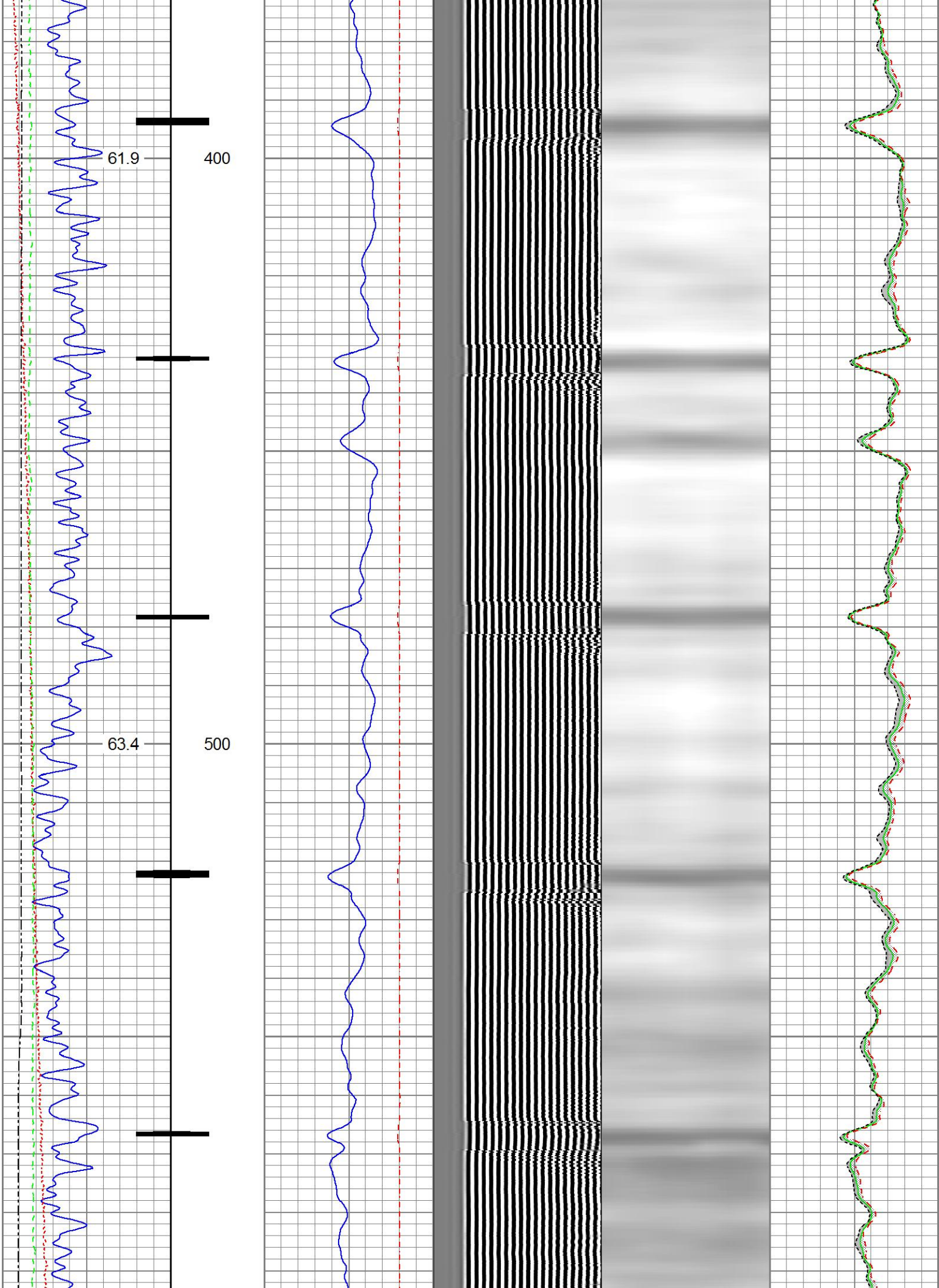
Main Pass

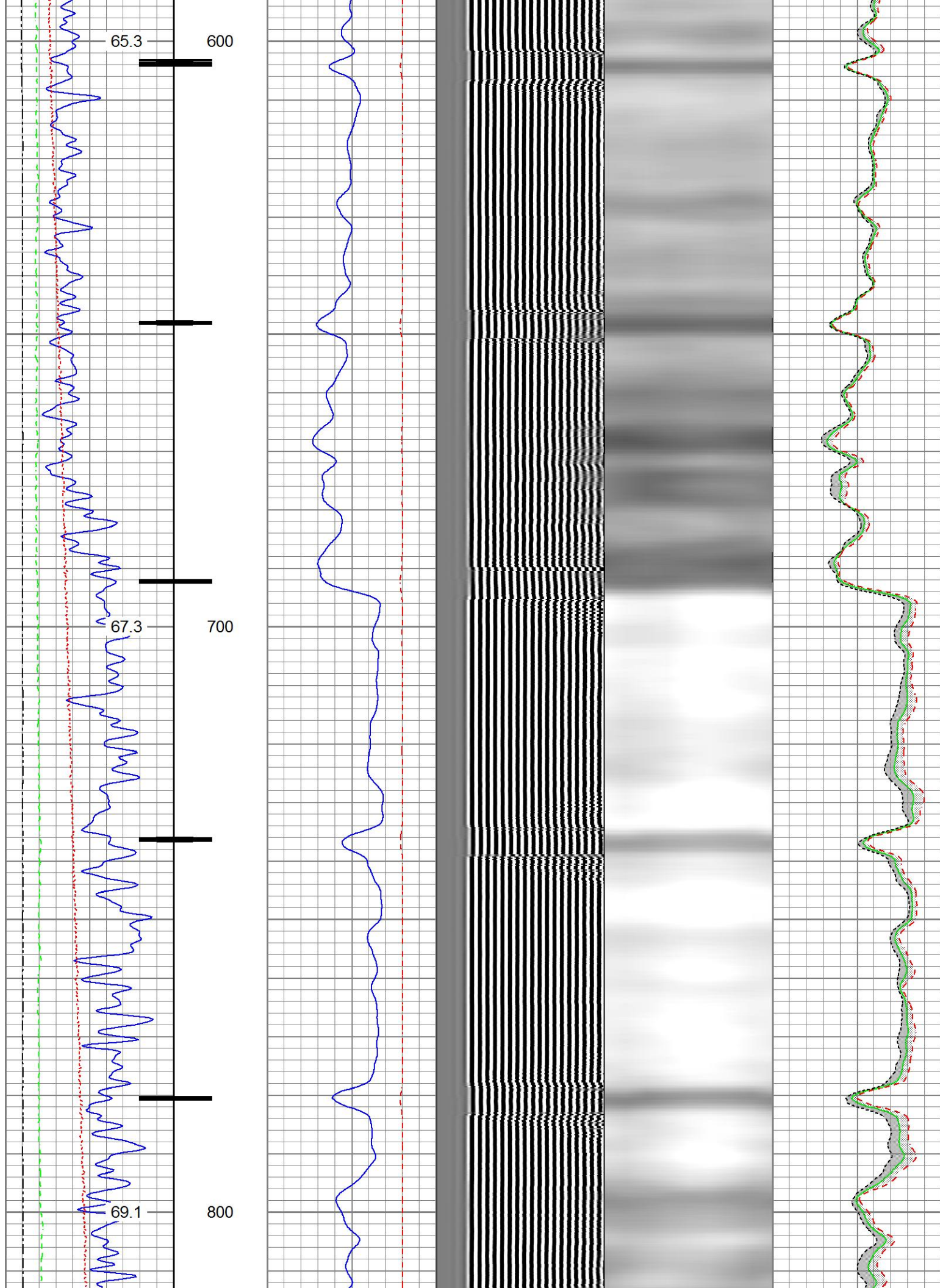
Recorded With 0 PSI Surface Induced Pressure

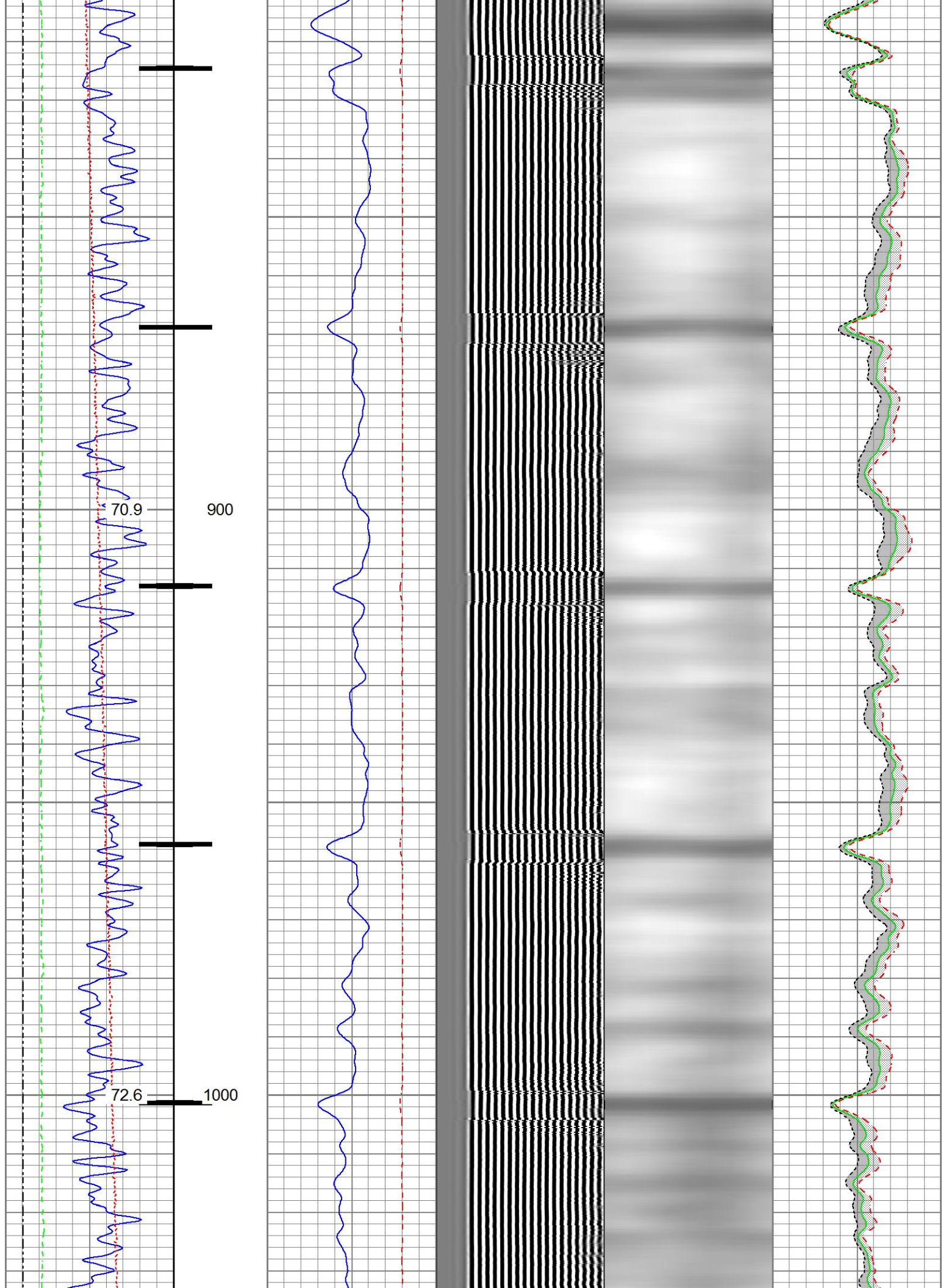
Gamma Ray			3' Amplitude			5' Variable Density Log		Sector Map	Average Amplitude		
0	(GAPI)	120	0	(mV)	100	200	1200		0	100	
Casing Collar Locator			3' Amplitude x 5						Minimum Amplitude		
Temperature			0 (mV) 20						0 100		
0	(degF)	20	3' Travel Time						Maximum Amplitude		
Line Speed			650 (usec)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

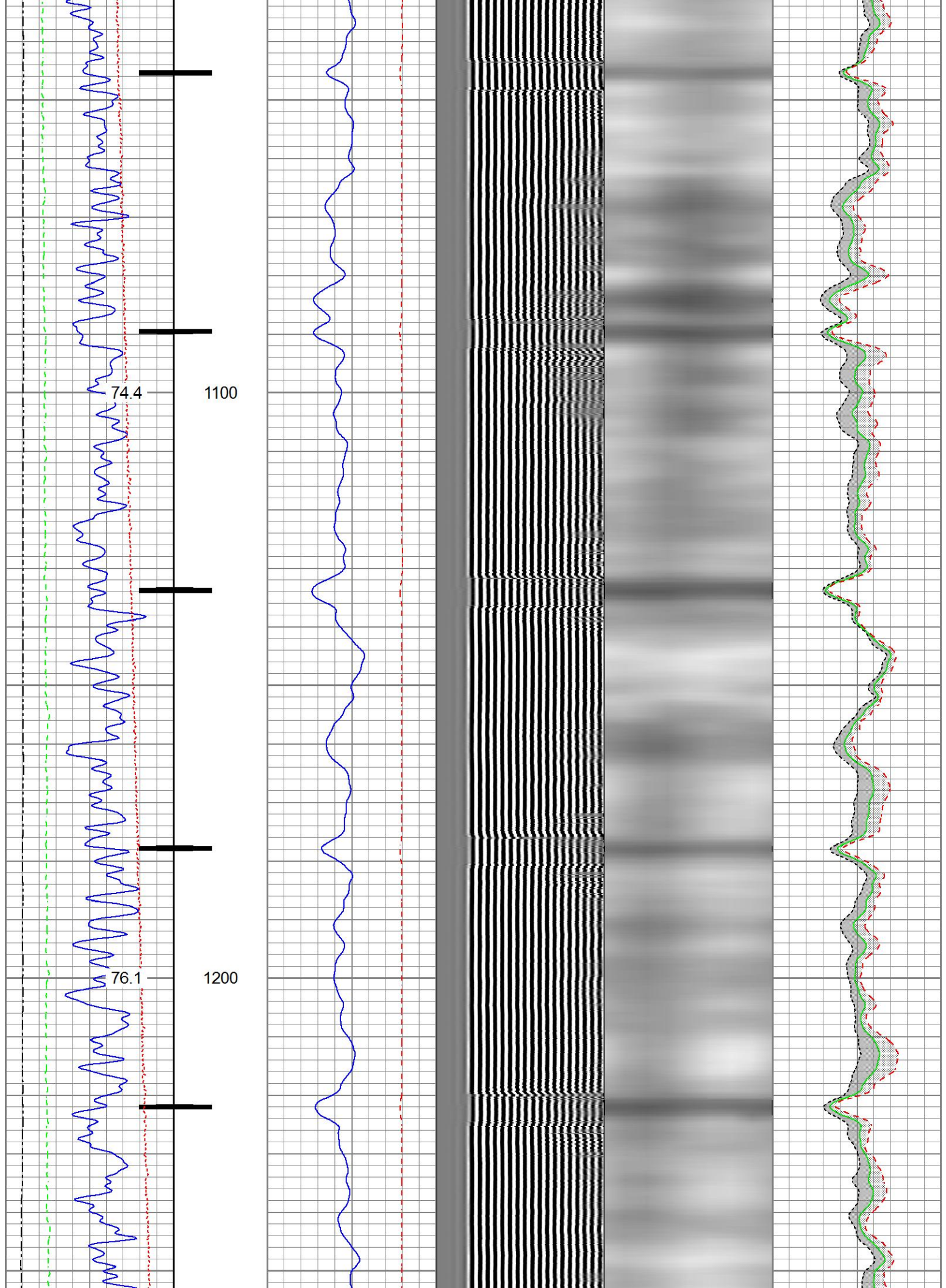


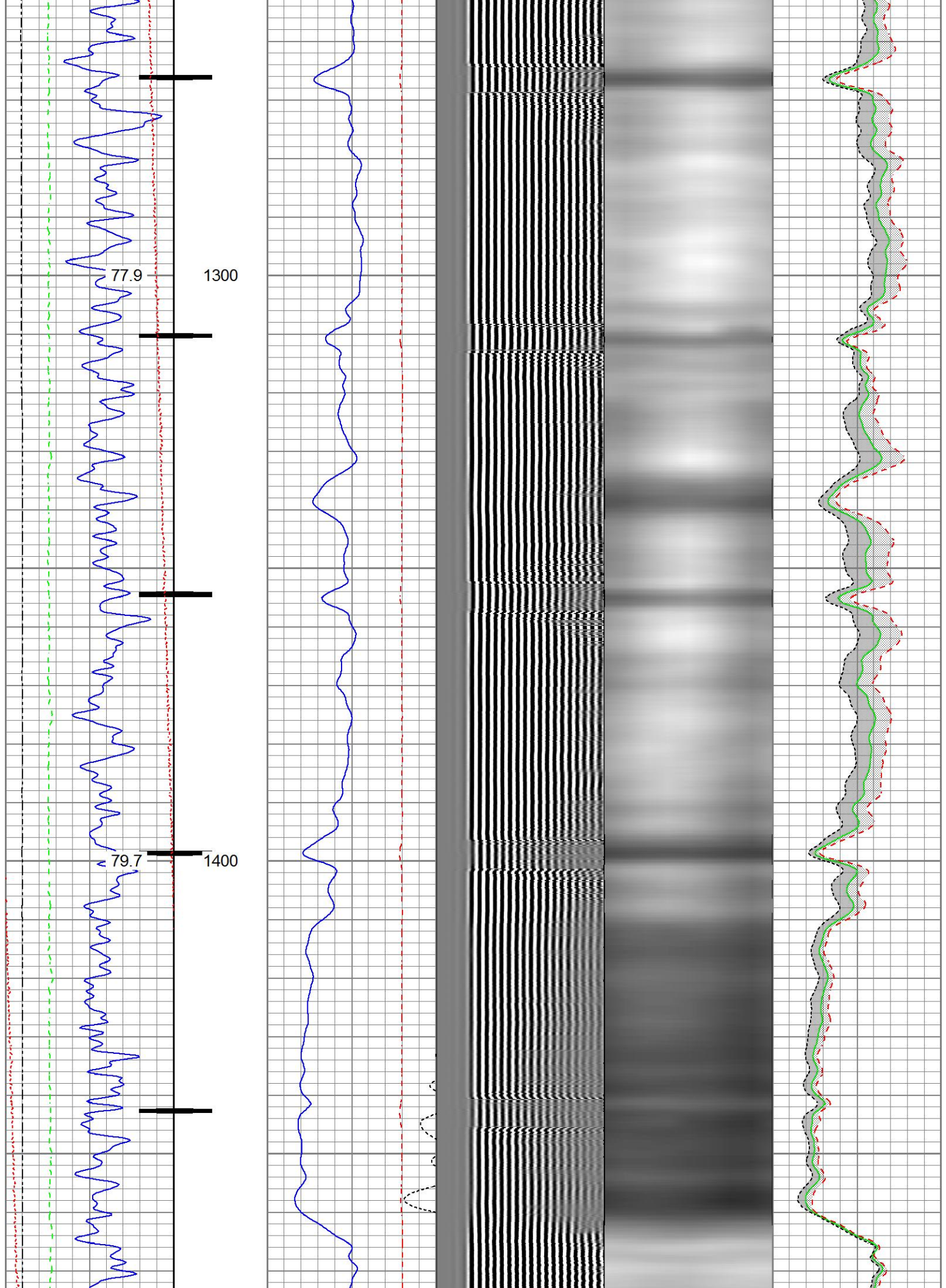


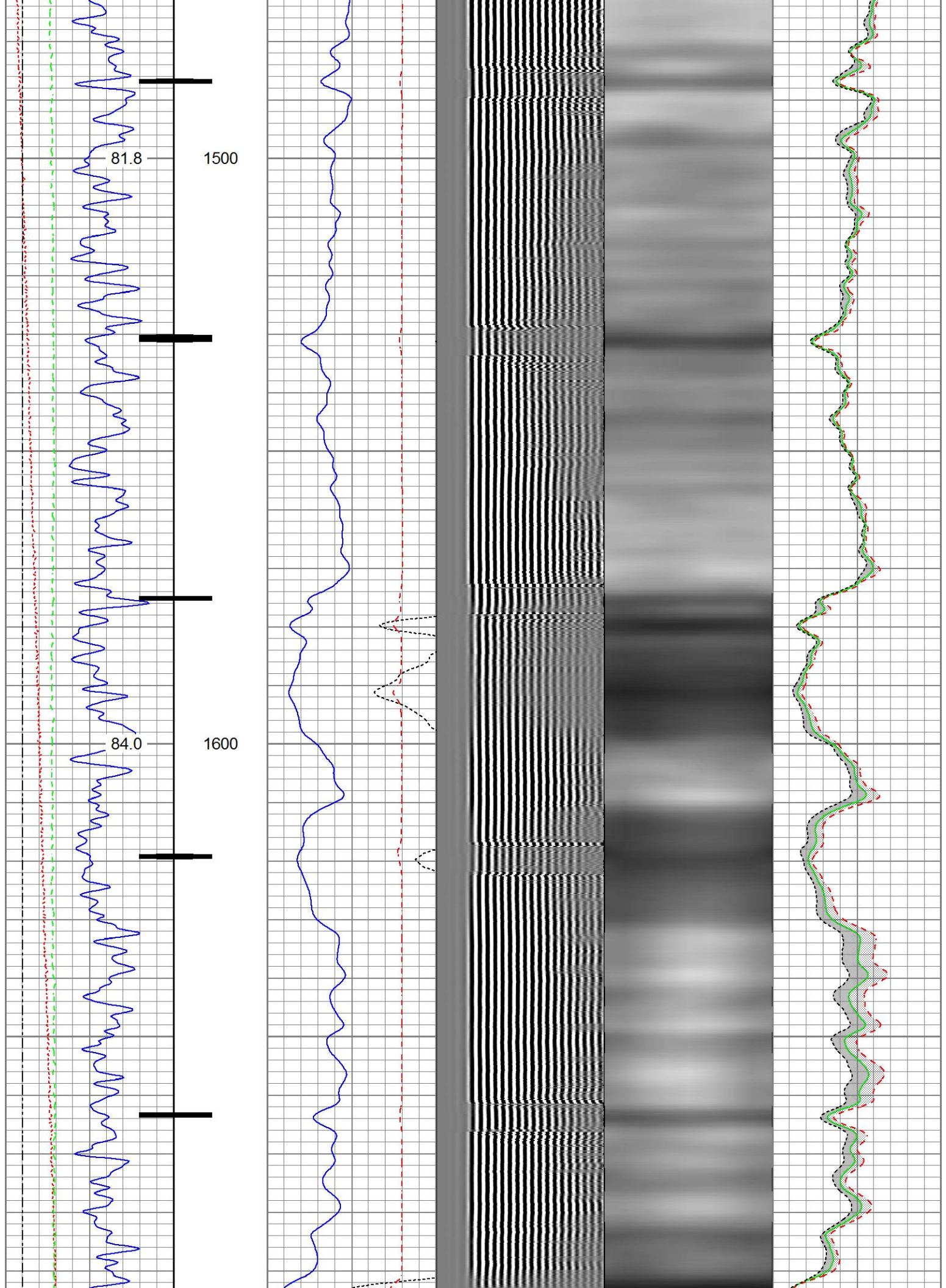


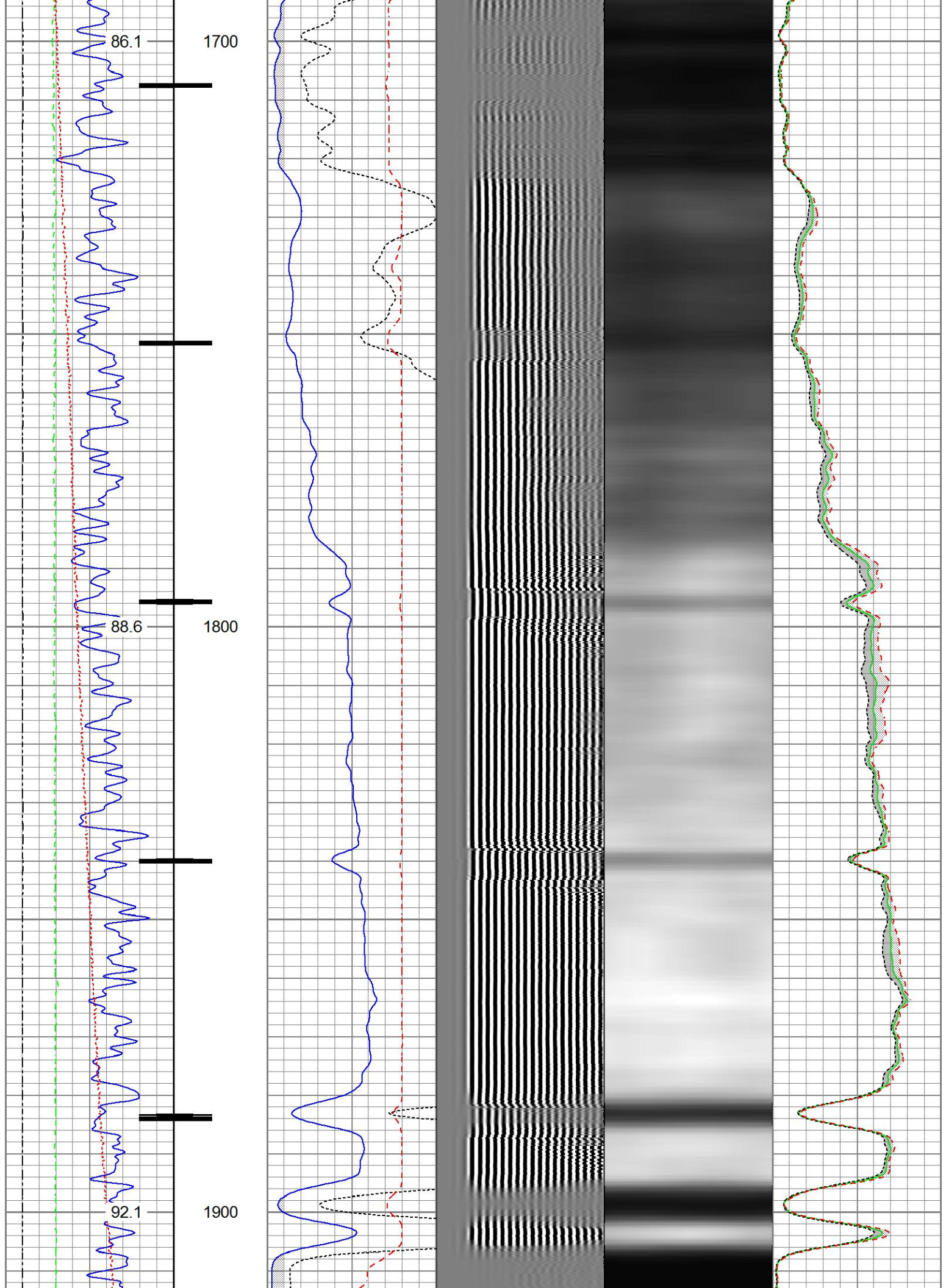


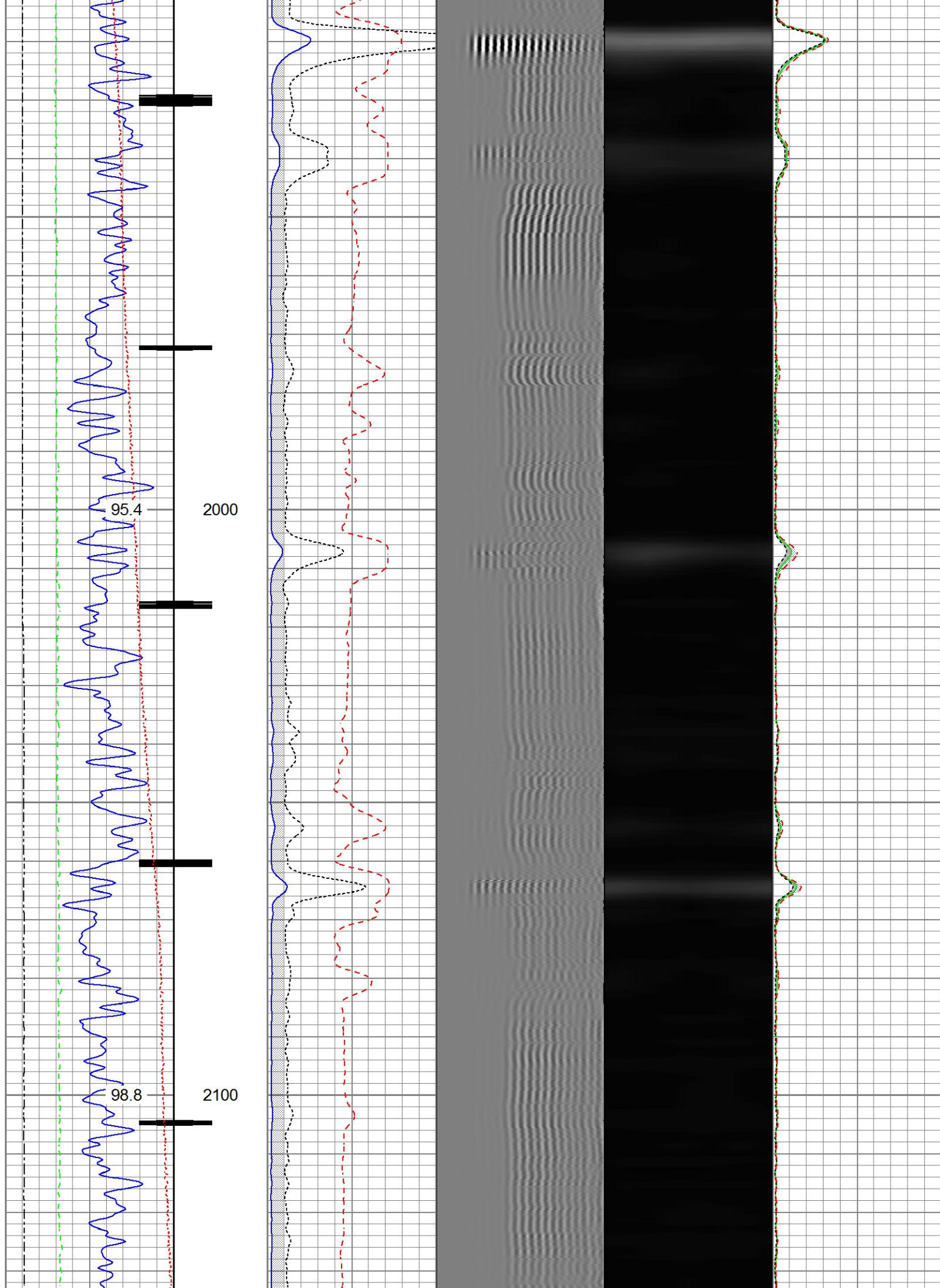


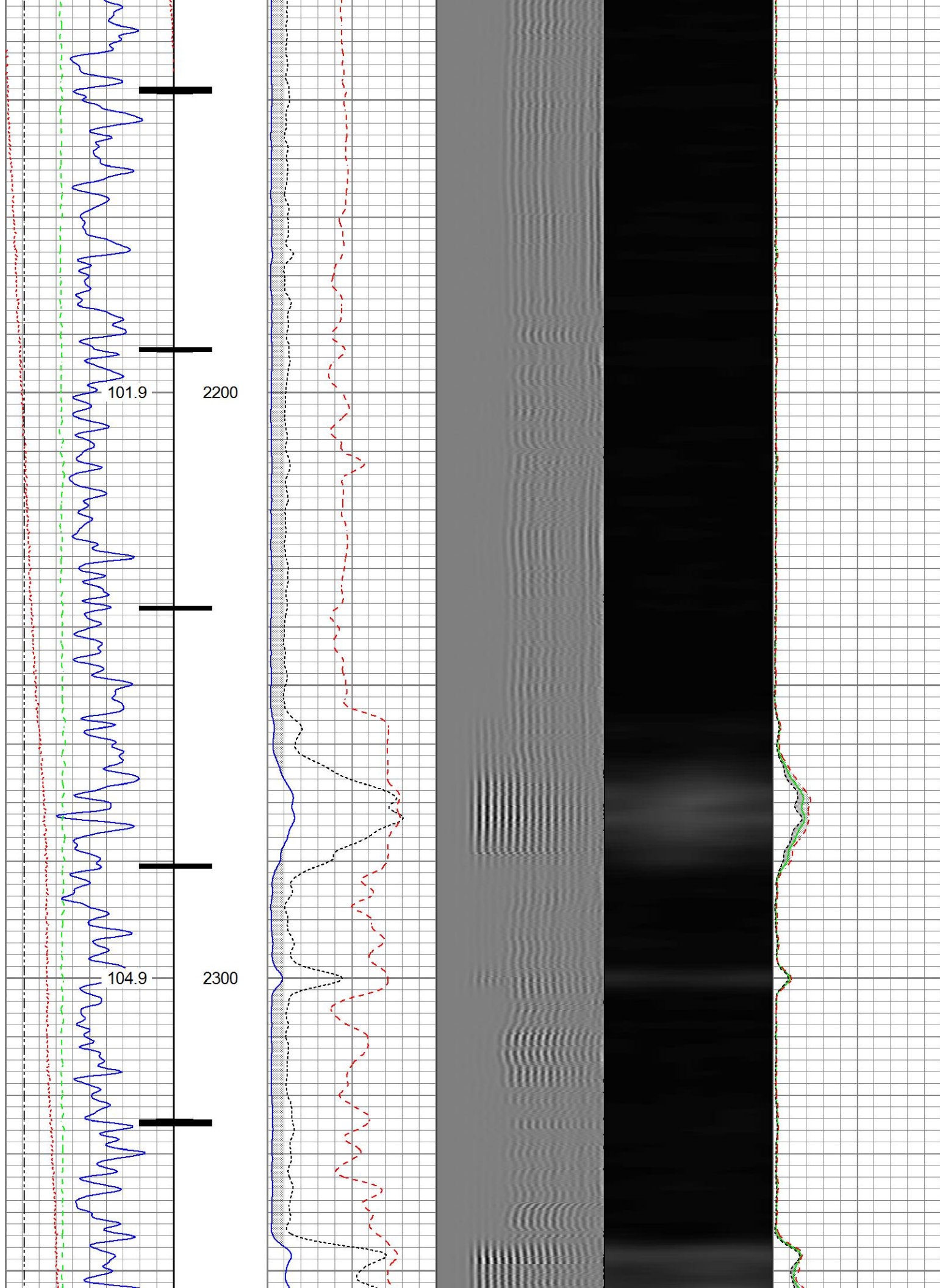


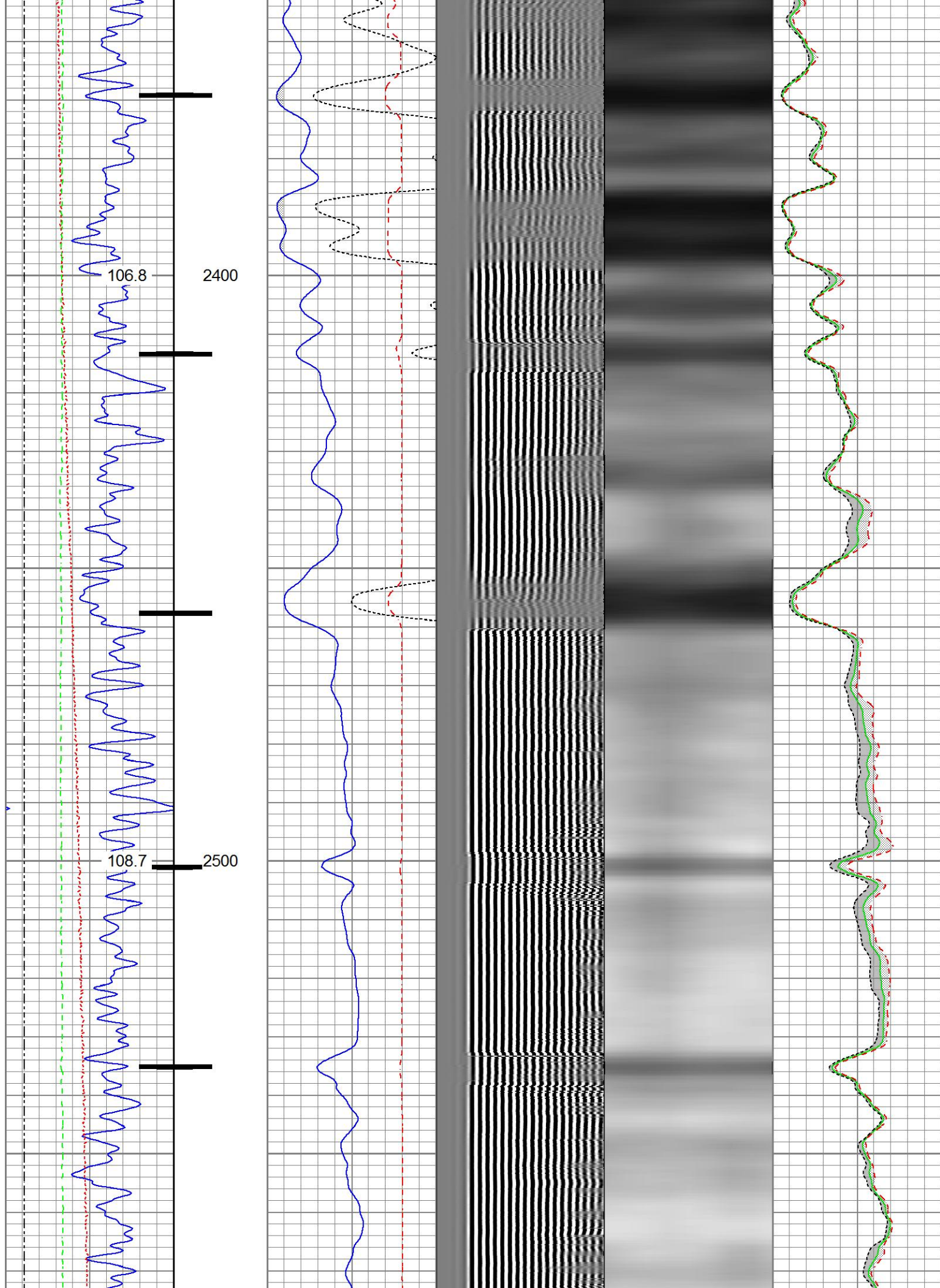


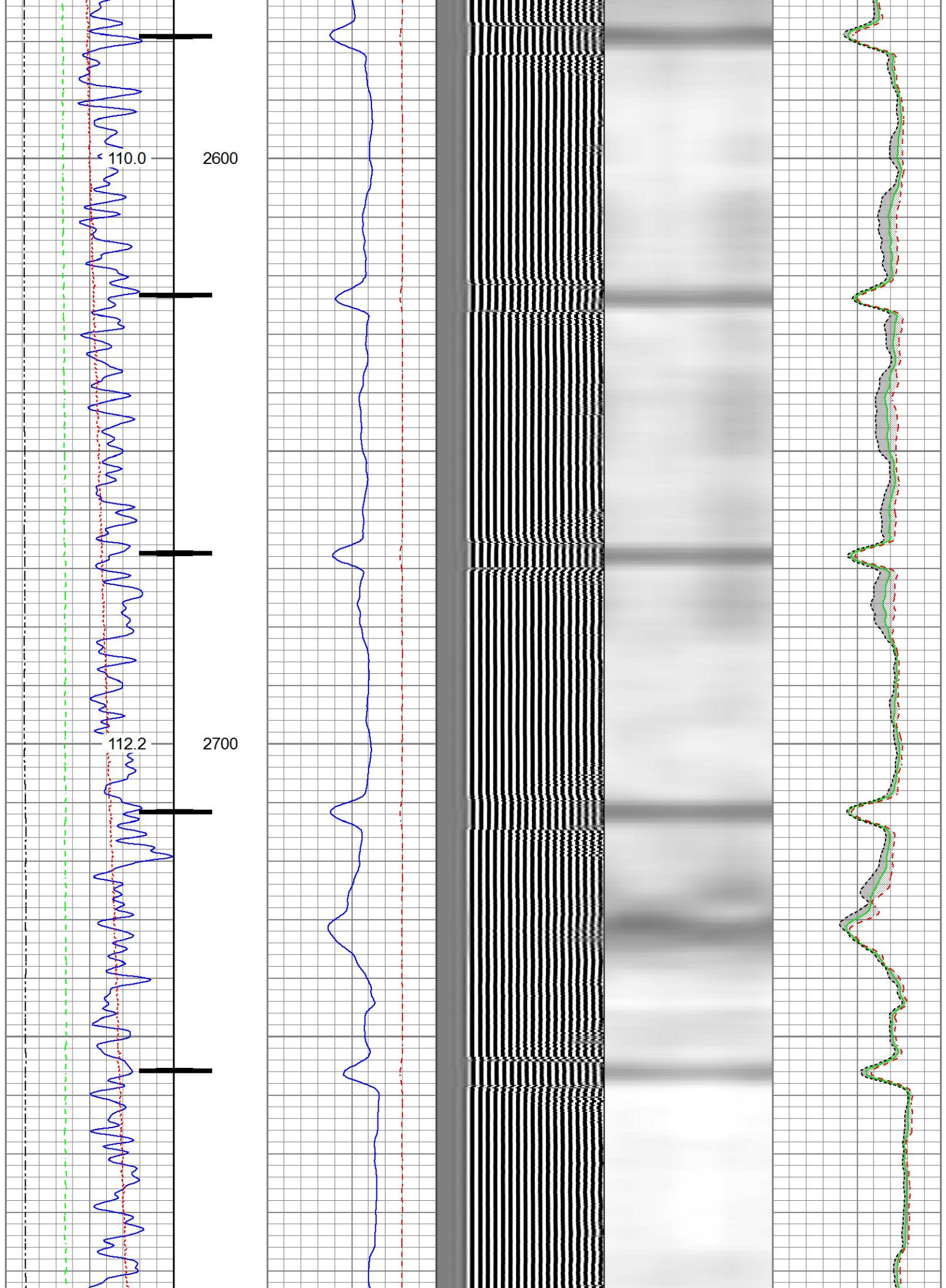


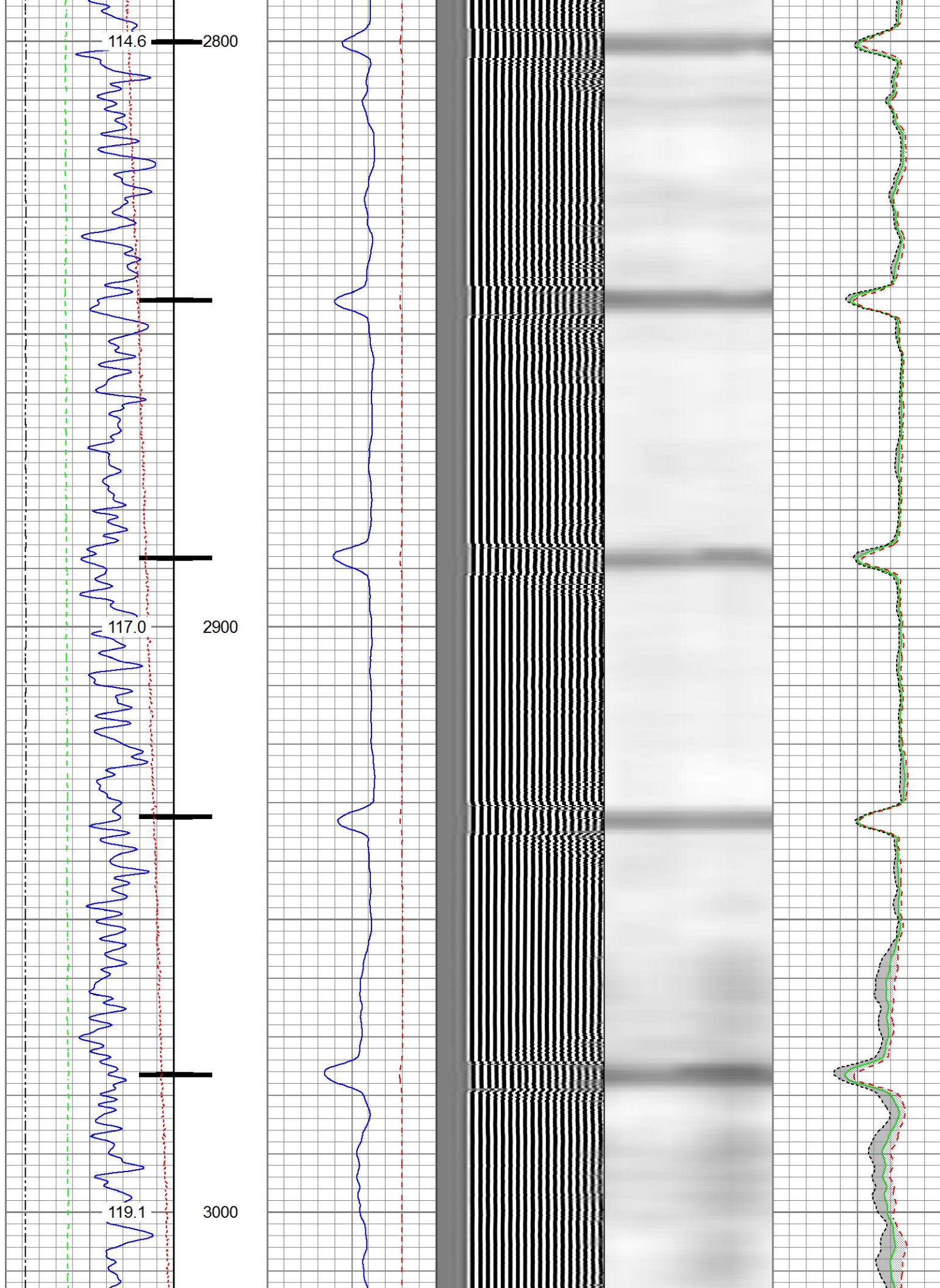


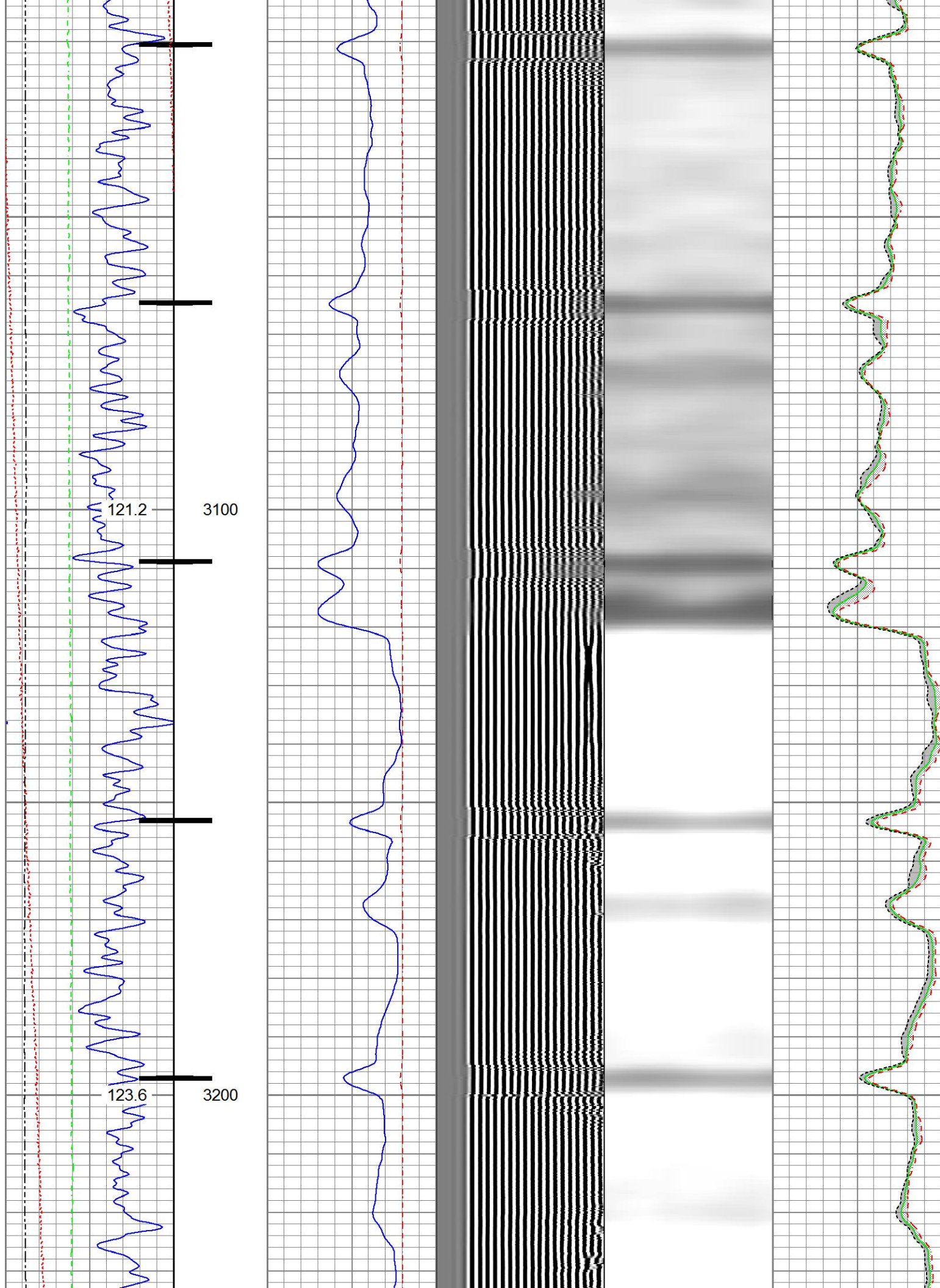


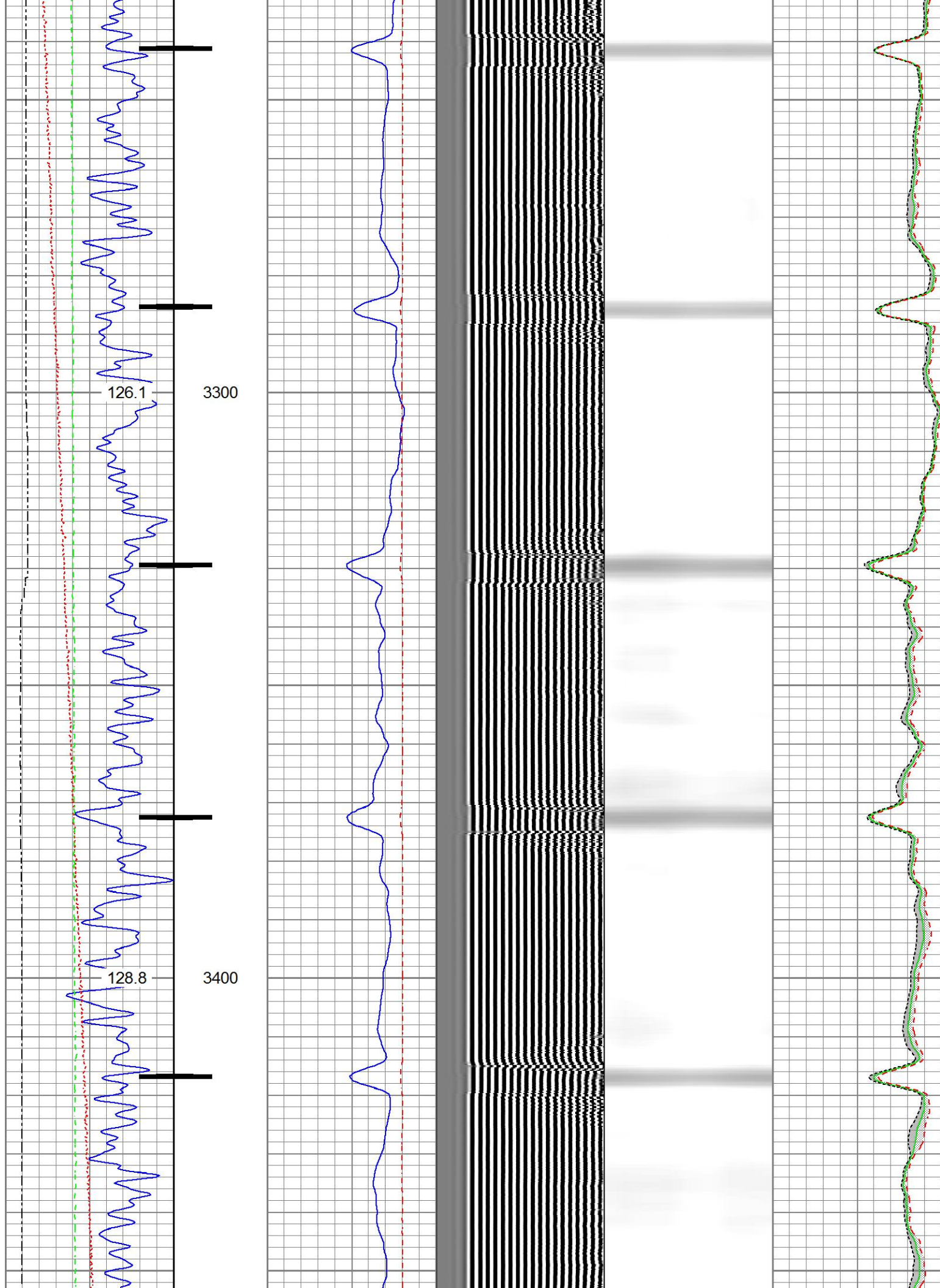


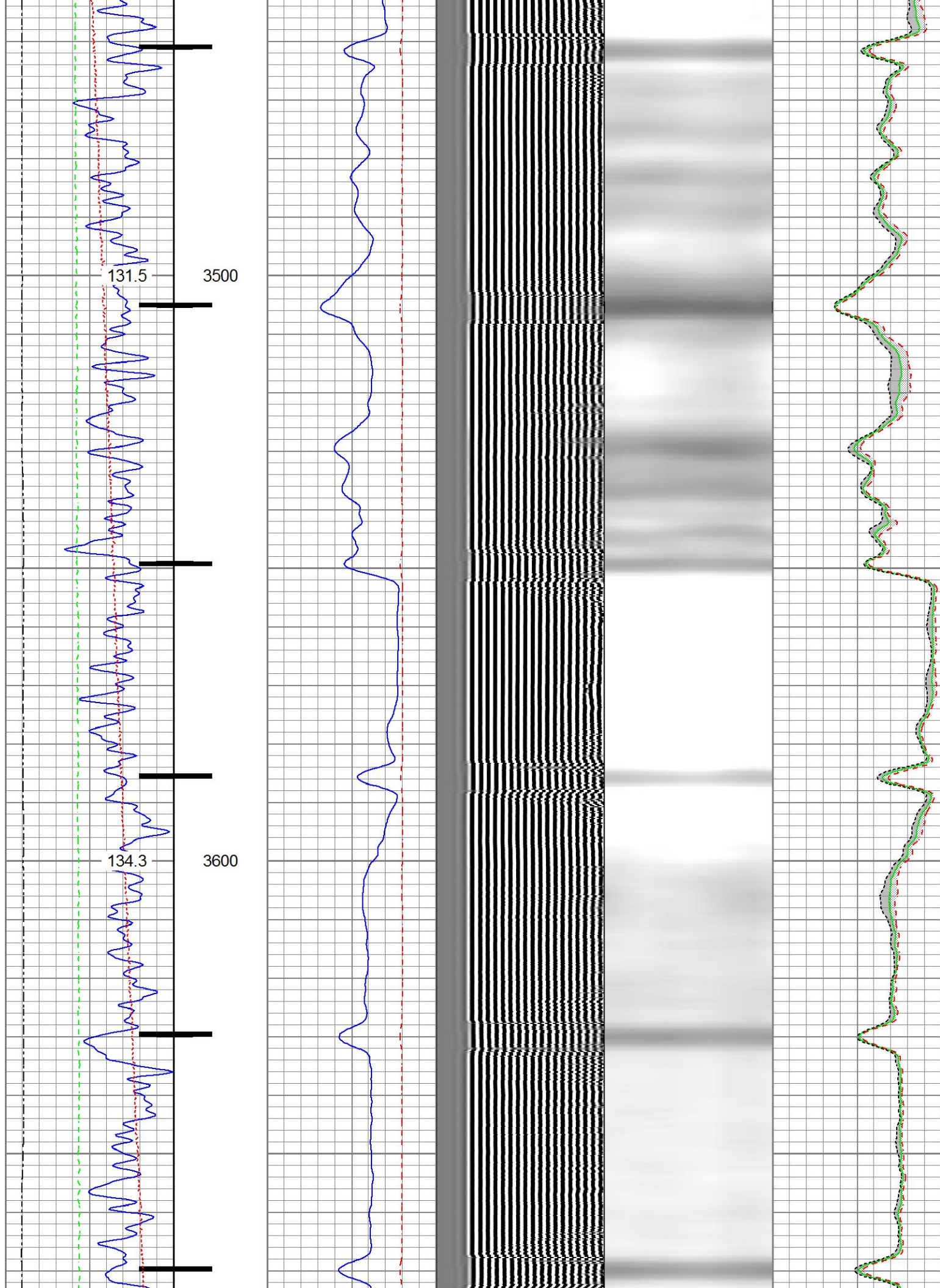


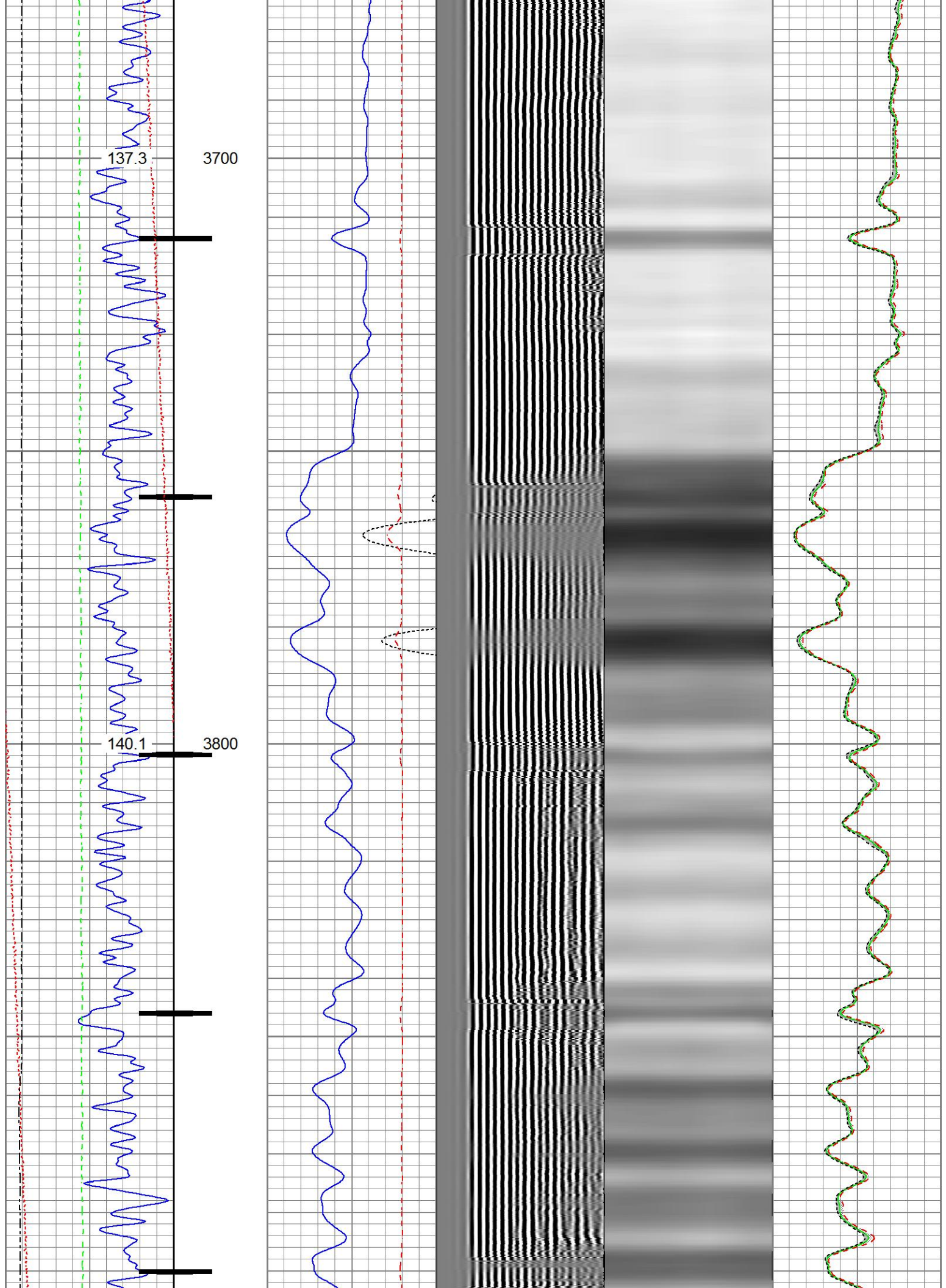


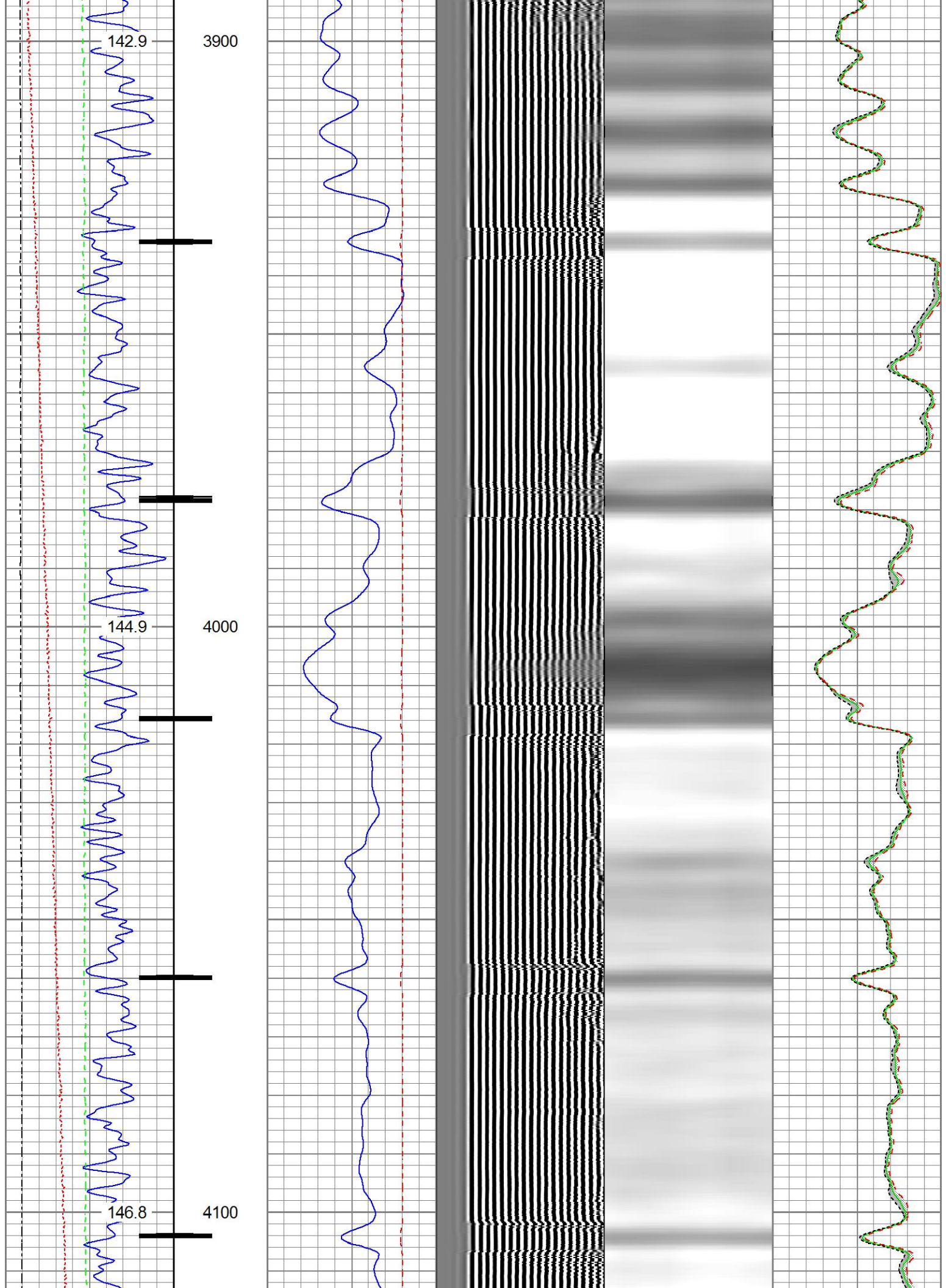


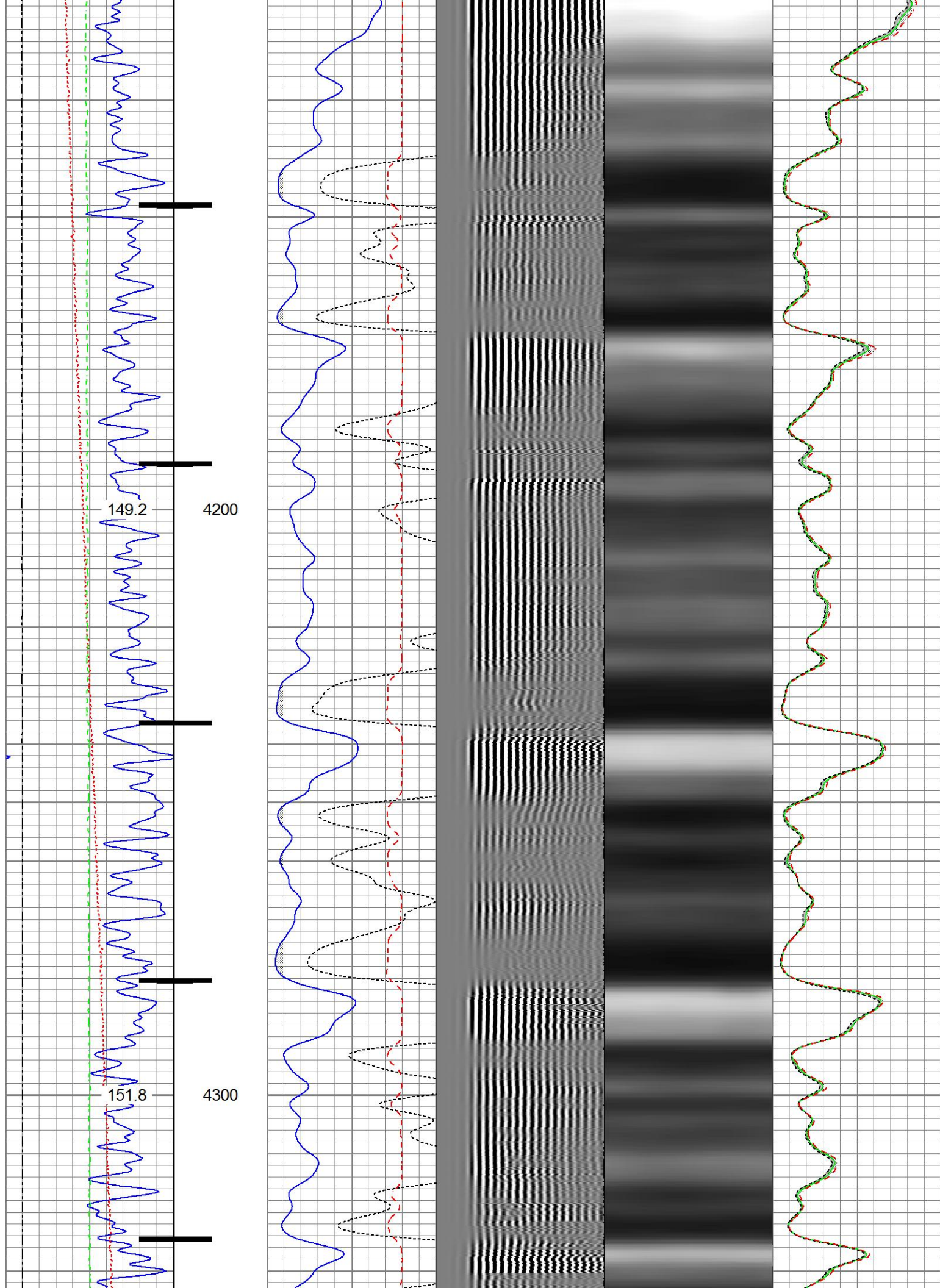


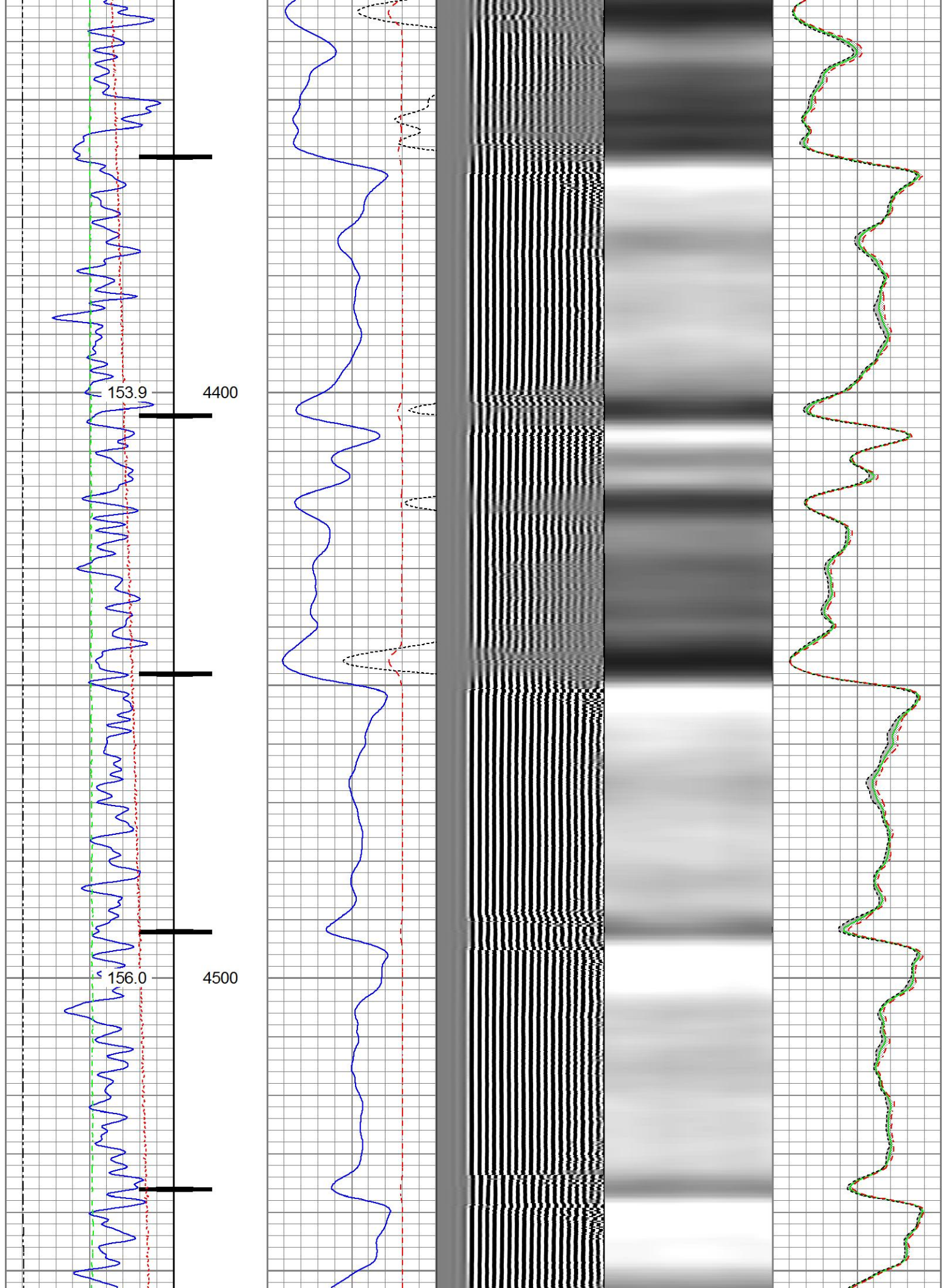


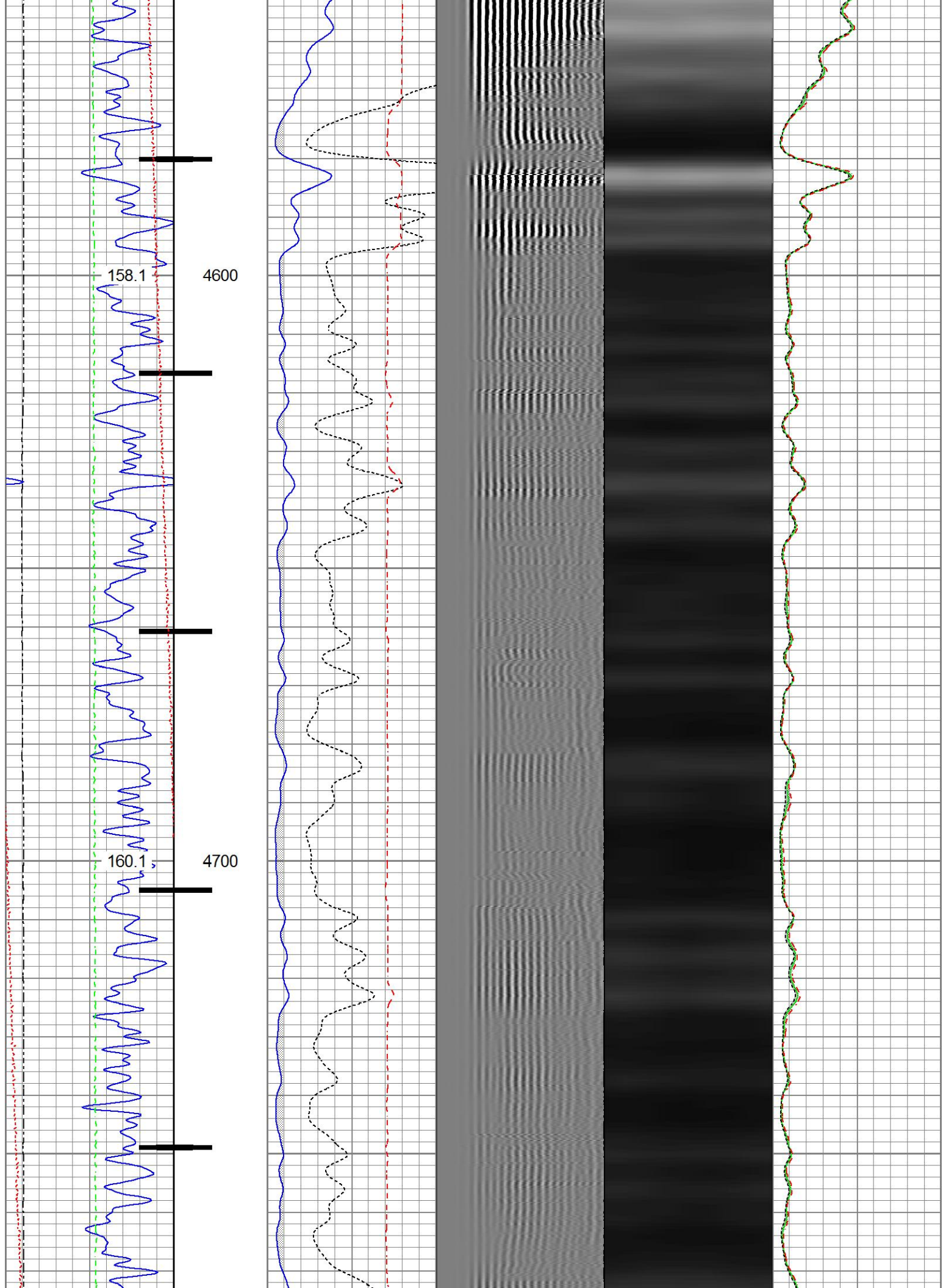


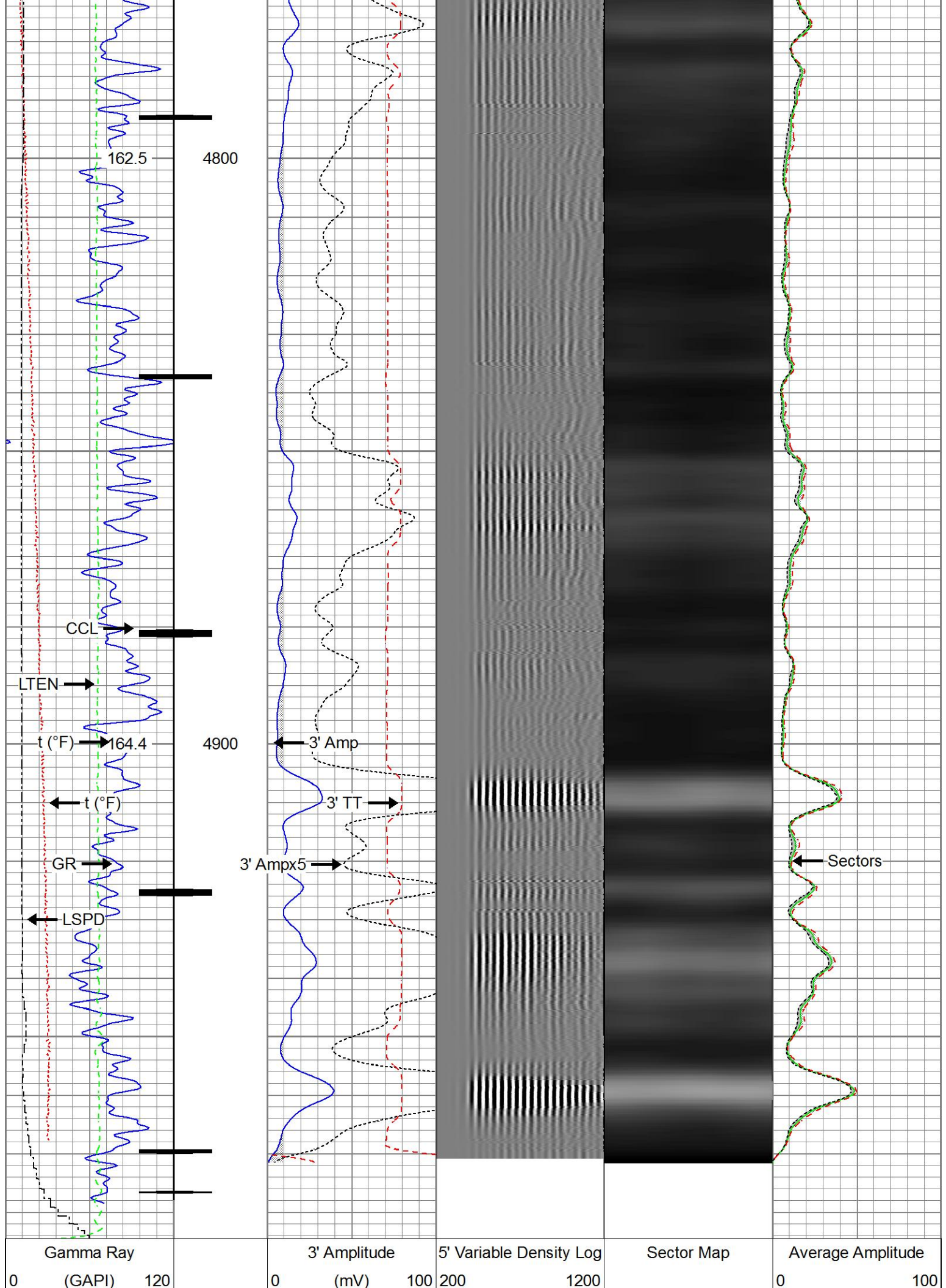












Casing Collar Locator			3' Amplitude x 5			Minimum Amplitude		
Temperature			0 (mV) 20			0 100		
0	(degF)	20	3' Travel Time			Maximum Amplitude		
Line Speed			650 (usec) 150			0 100		
-150	(ft/min)	150						
Line Tension								
0	(lb)	2000						

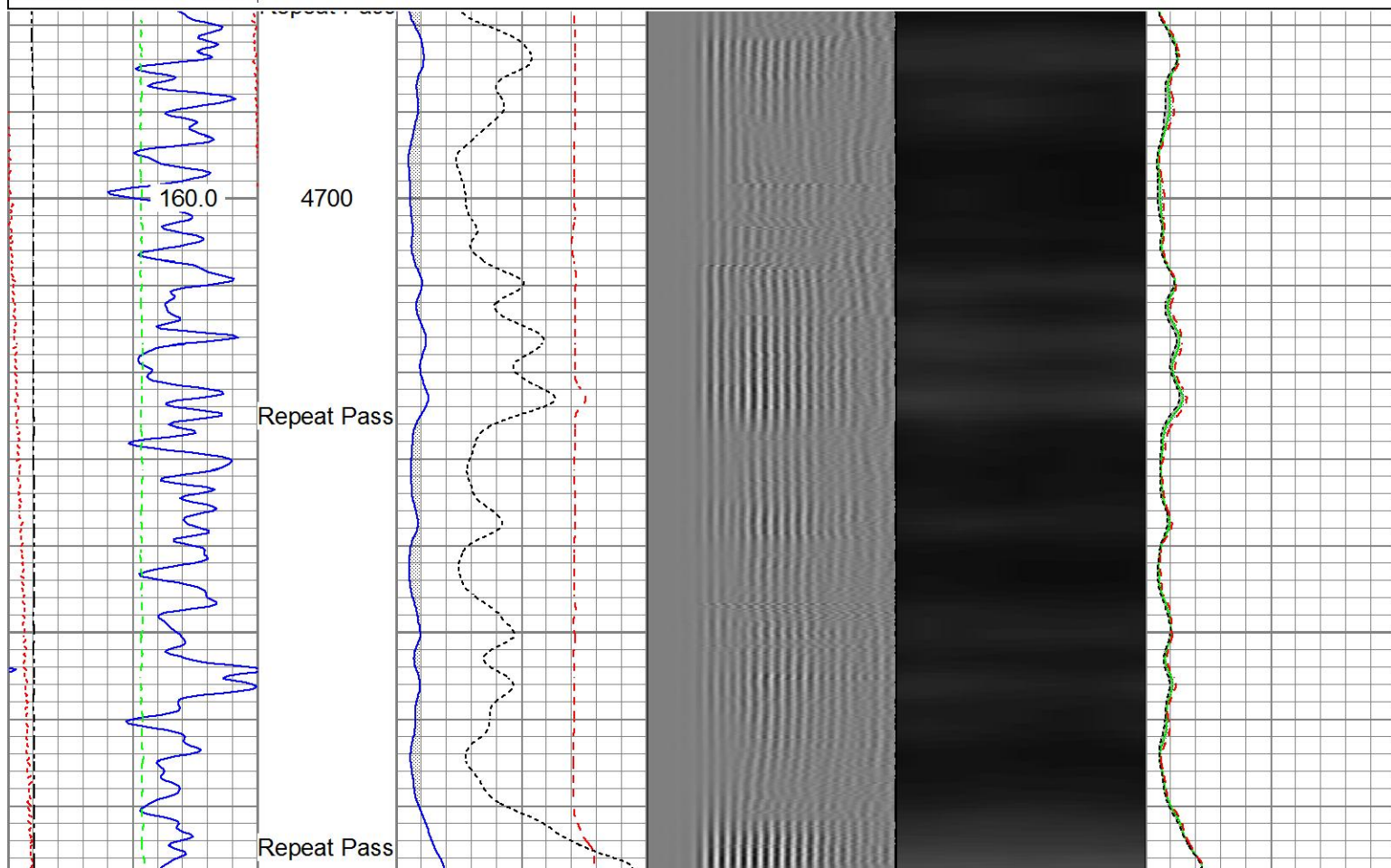


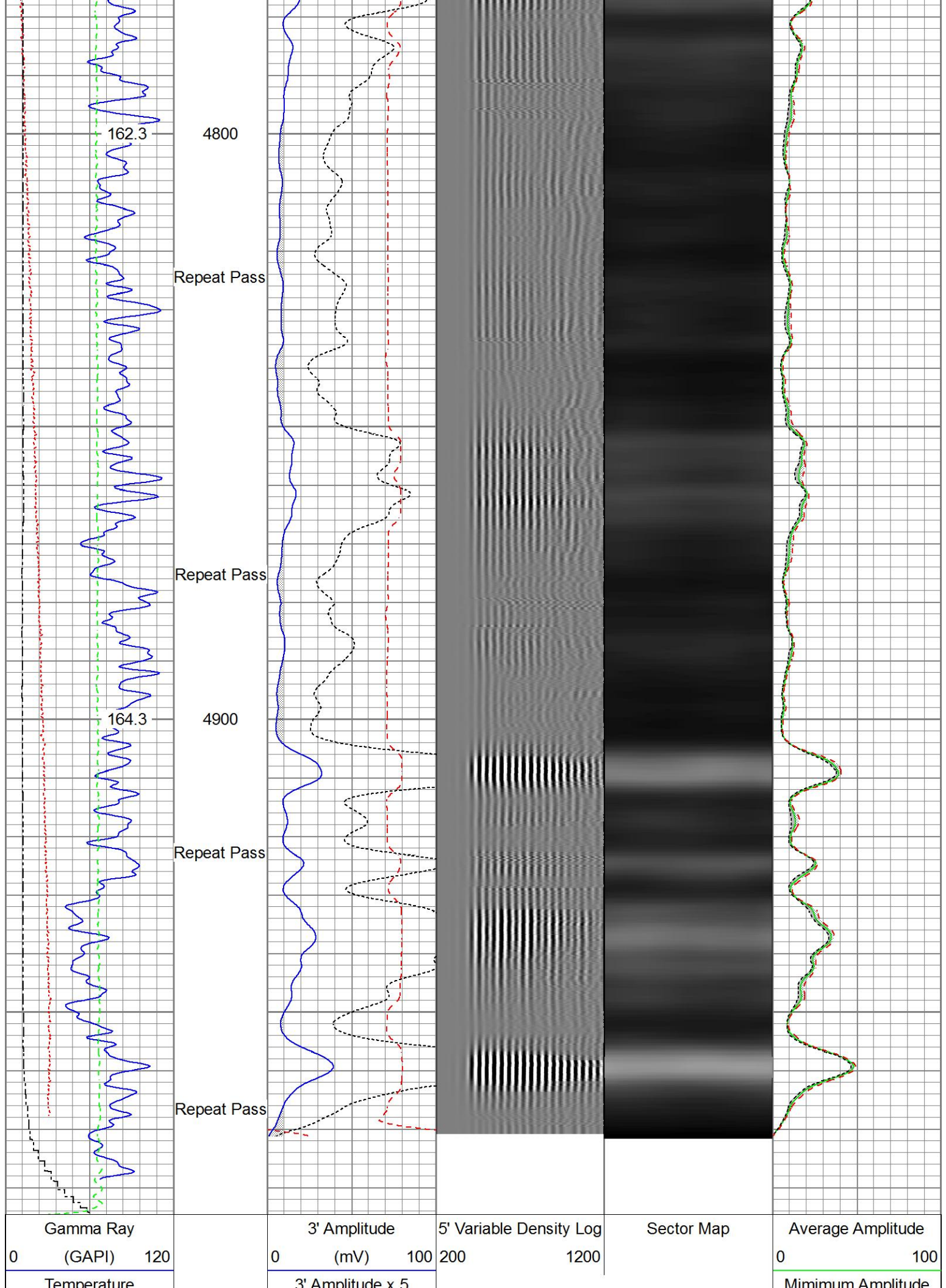
Repeat Pass

Recorded With 0 PSI Surface Induced Pressure

Database File anadarko_i & j 7-6\0512326878_anadarko_i & j 7-6_04-29-17_rbl_w8.db
Dataset Pathname pass6.1
Presentation Format ros_radrii
Dataset Creation Tue May 02 05:53:56 2017
Charted by Depth in Feet scaled 1:240

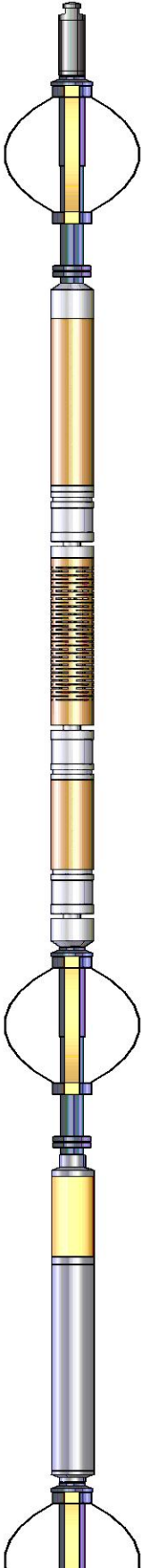
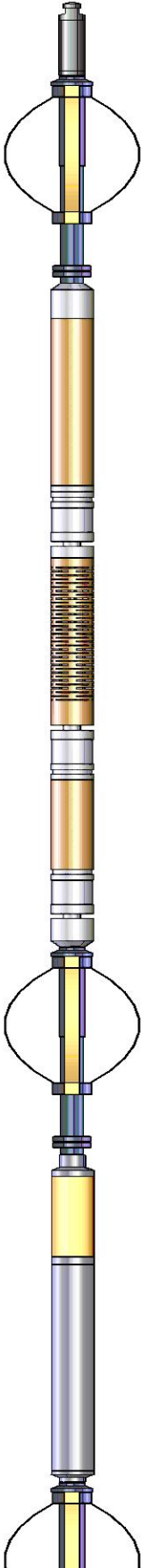
Gamma Ray			3' Amplitude			5' Variable Density Log		Sector Map		Average Amplitude	
0	(GAPI)	120	0	(mV)	100	200	1200			0	100
Temperature			3' Amplitude x 5							Minimum Amplitude	
0	(degF)	20	0	(mV)	20					0	100
Line Speed			3' Travel Time							Maximum Amplitude	
-150	(ft/min)	150	650	(usec)	150			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

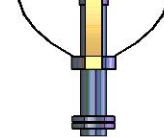




Gamma Ray (GAPI)	3' Amplitude (mV)	5' Variable Density Log	Sector Map	Average Amplitude
0 120	0 100	200 1200		0 100
Temperature	3' Amplitude x 5			Minimum Amplitude

Temperature	0 (degF) 20	0 (mV) 20	0 100
Line Speed	-150 (ft/min) 150	3' Travel Time	Maximum Amplitude
Line Tension	0 (lb) 2000	650 (usec) 150	0 100

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
Temp	16.72		Titan_Electric_Cable_Heads-Titan_1-11/161.03 Electric Cable Head with 1" Fishing Neck	1.69	1.69	5.40
			Probe_ELine_BowSpring_Centralizer-P_EE2.88_275 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.75	2.75	20.00
WVFS8	14.55		Probe_RADII-C-P_RBT_2750 (FW1302-009.19) Probe 2-3/4" Sector Cement Bond Tool with Temperature Probe	2.75	2.75	105.00
WVFS7	14.55					
WVFS6	14.55					
WVFS5	14.55					
WVFS4	14.55					
WVFS3	14.55					
WVFS2	14.55					
WVFS1	14.55					
WVFCAL	14.55					
WVF3FT	14.55					
WVF5FT	13.55					
HeadVolt	10.30					
DCCL	6.51		Probe_ELine_BowSpring_Centralizer-P_EE2.88_275 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.75	2.75	20.00
CCL	6.51					
GR	3.77		Probe_GR_CCL-P_CGR_2750_S (FW1304.543) Probe 2-3/4" Digital CCL / Gamma Ray Combined	2.75	2.75	55.00

			Probe_ELine_BowSpring_Centralizer-P Probe 2-3/4" Electric Inline Bowspring Centralizer	EE2.88.275	2.75	20.00
Dataset: 0512326878_Anadarko_ I & J 7-6_04-29-17_RBL_w8.db: field/well/run1/pass8.1 Total length: 23.40 ft Total weight: 225.40 lb O.D.: 2.75 in						

Calibration Report	
Database File	D:\Warrior\Data\Anadarko_ I & J 7-6\0512326878_Anadarko_ I & J 7-6_04-29-17_RBL_w8.db
Dataset Pathname	pass8.1
Dataset Creation	Sat Apr 29 09:01:18 2017

Gamma Ray Calibration Report		
Serial Number:	FW1307-038	
Tool Model:	P_CGR_2750_S	
Performed:	Sat Apr 29 07:33:04 2017	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.6	cps
Sensitivity:	0.6061	GAPI/cps

Segmented Cement Bond Log Calibration Report		
Serial Number:	FW1302-002	
Tool Model:	P_RBT_2750	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	3345.108	ft

Master Calibration, performed (Derived):						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	0.581	0.800	81.196	138.499	0.739
CAL	0.007	0.721				
5'	0.000	0.442	0.800	81.196	181.853	0.728
SUM						
S1	0.001	0.634	0.000	100.000	157.973	-0.126
S2	0.001	0.630	0.000	100.000	158.861	-0.102
S3	0.001	0.607	0.000	100.000	164.998	-0.103
S4	0.000	0.586	0.000	100.000	170.696	-0.034
S5	0.000	0.575	0.000	100.000	174.101	-0.068
S6	0.001	0.575	0.000	100.000	173.988	-0.098
S7	0.001	0.586	0.000	100.000	170.812	-0.124
S8	0.001	0.614	0.000	100.000	163.074	-0.114

Internal Reference Calibration, performed Wed Sep 14 11:34:04 2016:						
	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.007	0.721	1.000	0.000

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



Company	Kerr-McGee Oil & Gas Onshore, L.P.
Well	I & J 7-6
Field	Wattenberg
County	Weld
State	Colorado