



Radial Cement Bond
Gamma Ray
Casing Collar Log

Company		Kerr-McGee Oil & Gas Onshore, L.P.	
Well		Folley South 1	
Field		Wattenberg	
County		Larimer	
State		Colorado	
Location:		API # : 05-069-06484	
Permanent Datum		SEC 13 TWP 5N RGE 68W	
Log Measured From		Ground Level	
Drilling Measured From		Kelly Bushing	
		Elevation 4886'	
		Gauge Ring	
		Elevation	
		K.B. 4907'	
		D.F. 4906'	
		G.L. 4886'	
Date		09-SEP-2016	
Run Number		Two	
Depth Driller		17048 FT	
Depth Logger		6804 FT	
Bottom Logged Interval		6797 FT	
Top Log Interval		Surface	
Open Hole Size		7.875"	
Type Fluid		Water	
Density / Viscosity		8.34 lbm/gal	
Max. Recorded Temp.		212°F	
Estimated Cement Top		Surface	
Time Well Ready		ROA	
Time Logger on Bottom		15:30	
Equipment Number		HD-0343	
Location		Fort Lupton, CO	
Recorded By		Chad Bryan	
Witnessed By		Kent Evers	
Run Number		Borehole Record	
Bit		From	
		To	
		Size	
		Weight	
		From	
		To	
Casing Record		Size (in)	
Surface Casing		9 5/8	
Intermediate #1		5 1/2	
Intermediate #2		17	
Liner			
		Wgt (lbs/ft)	
		36	
		Grade	
		J-55 BTC	
		HCP-110	
		Top	
		Surface	
		Bottom	
		1843 FT	
		17048 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 Casing Tally reported Marker Joint Top at 6360 FT
Adjusted -4 FT to correlate with Marker Joint Top
Gauge Ring/Junk Basket ran to 7212 FT with no debris
Log ran from as deep as possible in heel to surface
Log ran with 2800 PSI surface induced pressure
Logging tools were clean and free of any debris upon completion of operations

Thank you for choosing Reliance Oilfield Services, LLC!!

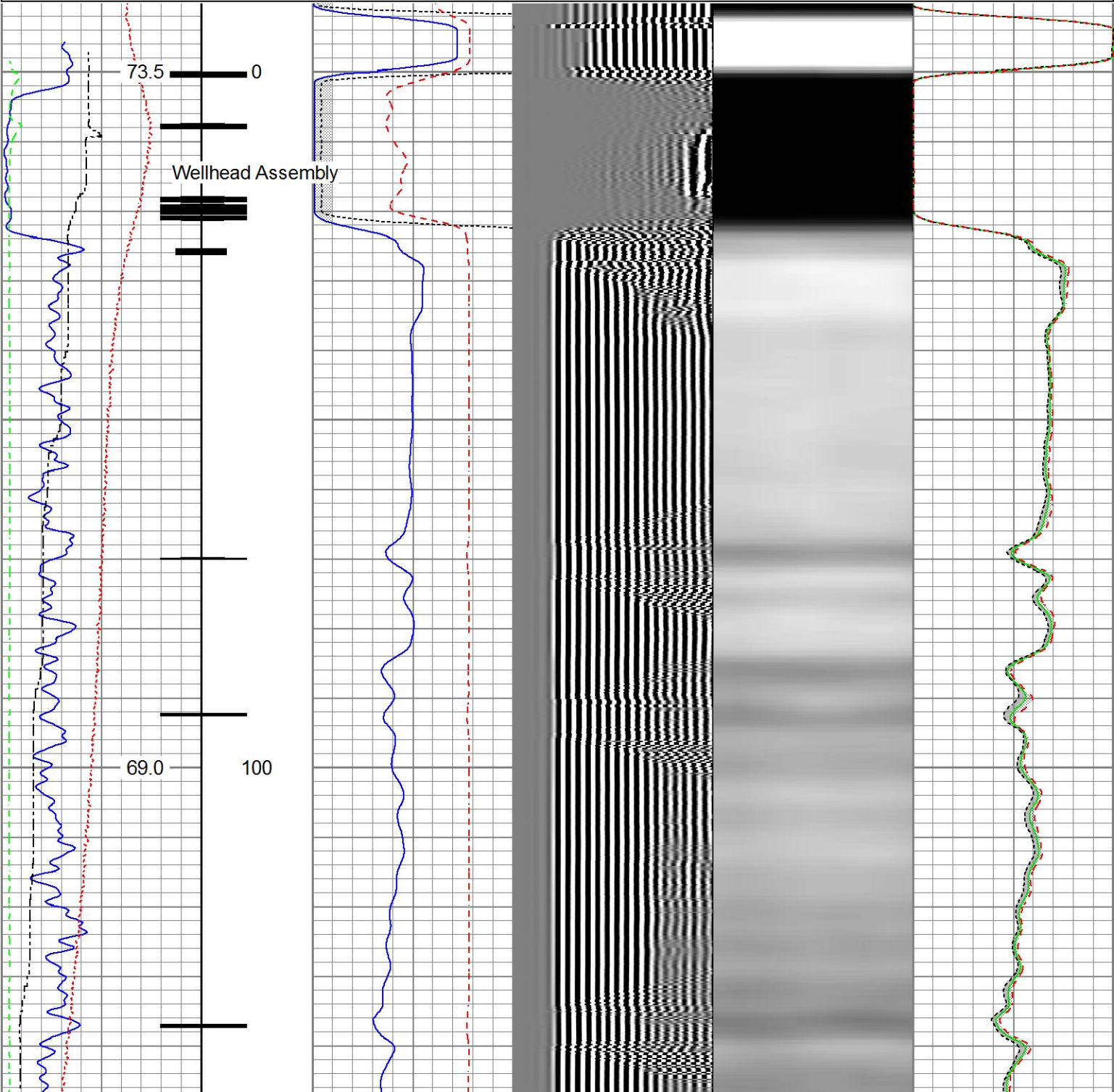


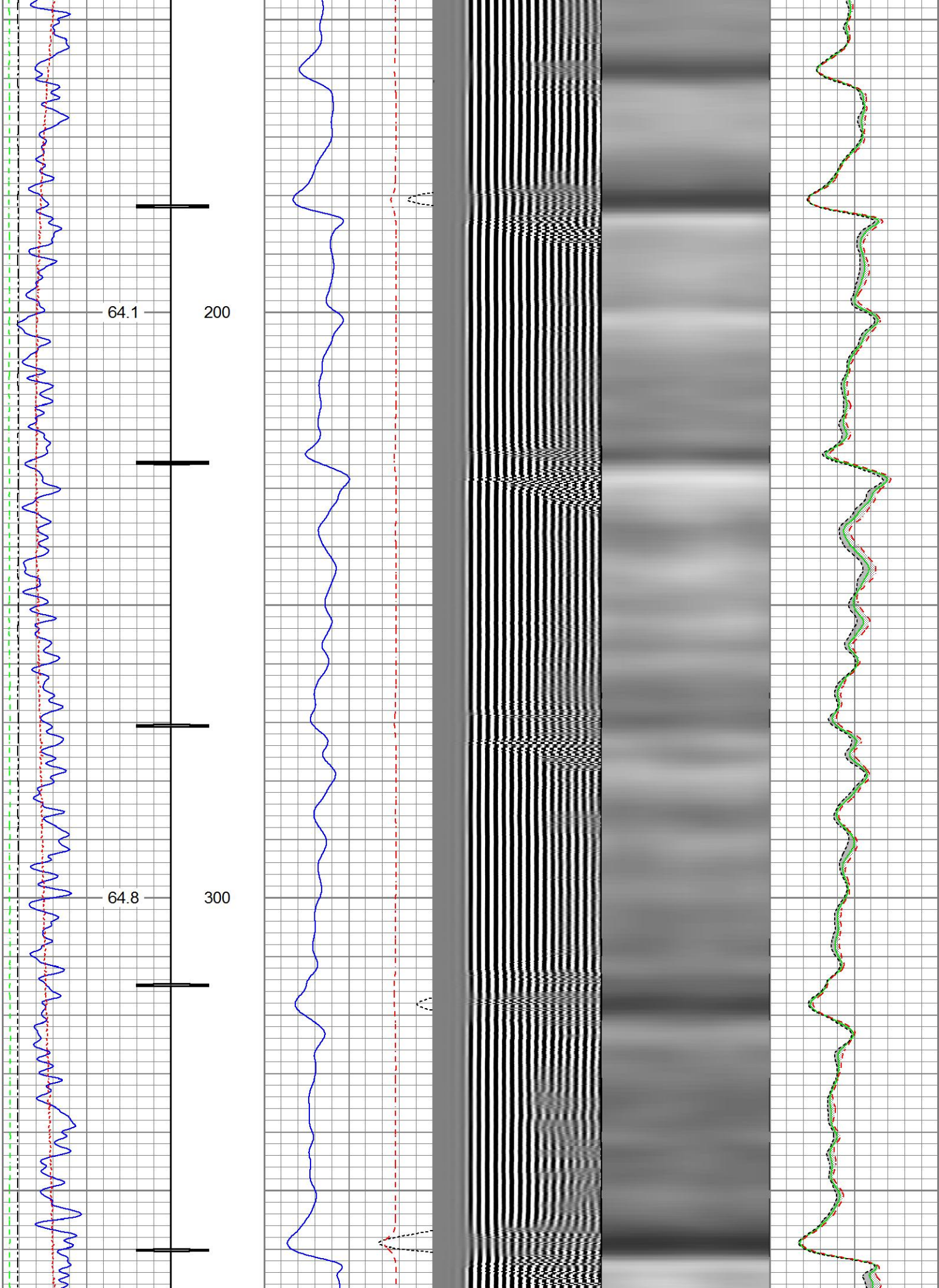
Main Pass

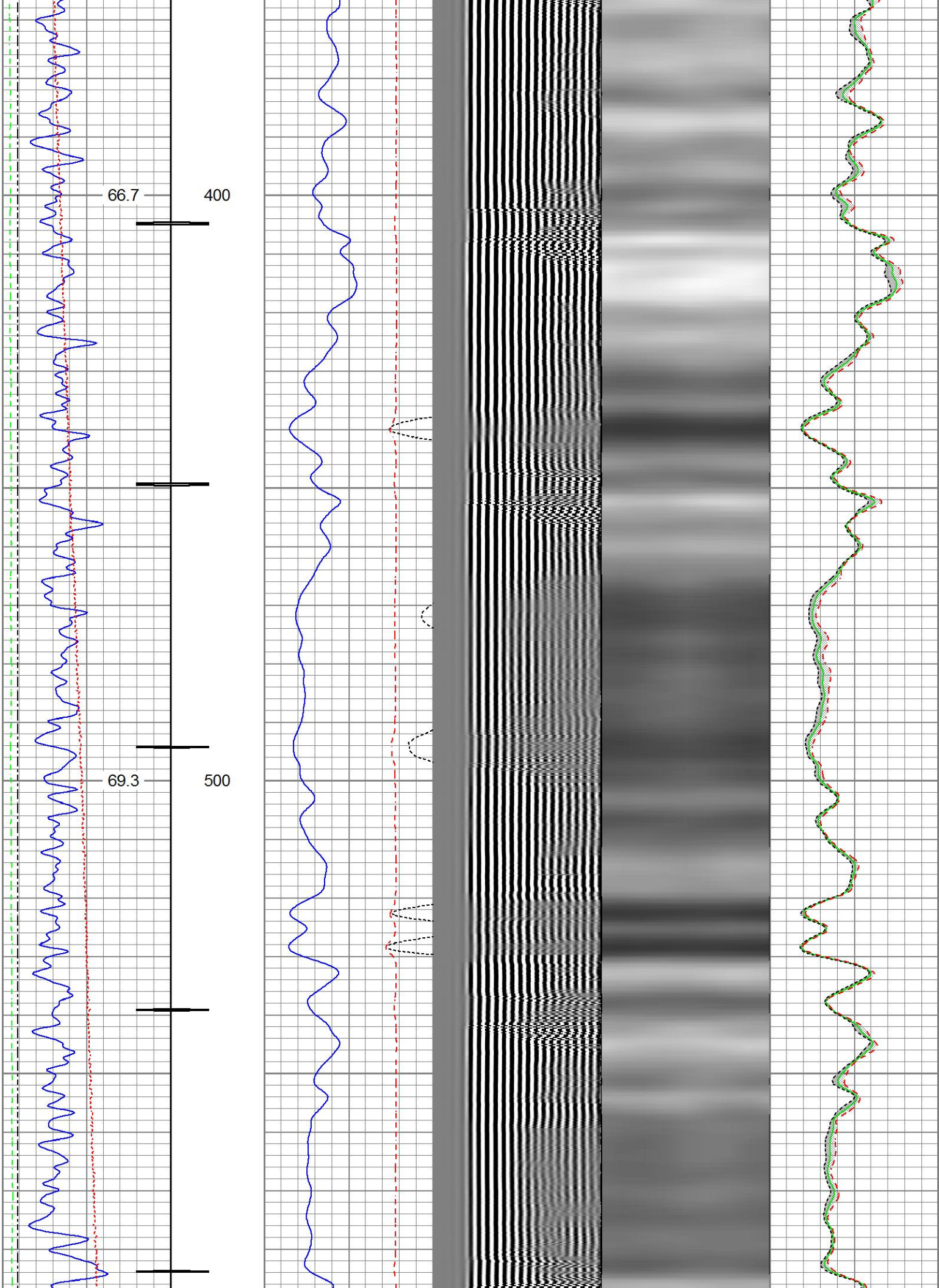
Recorded With 0 PSI Surface Induced Pressure

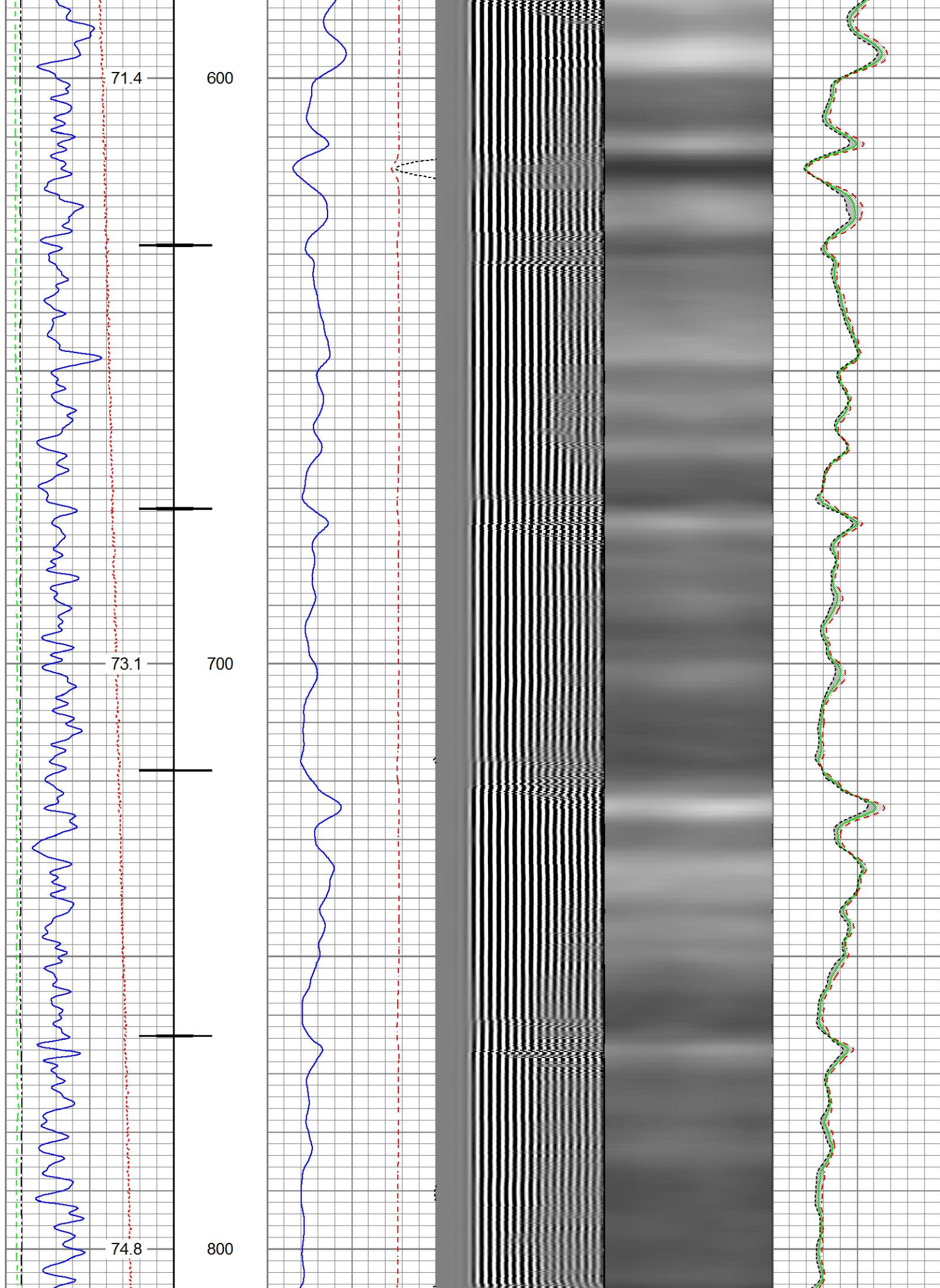
Database File	0506906484_anadarko_folley south 1_09-09-16_rbl_w8.db
Dataset Pathname	main.1
Presentation Format	ros_radri
Dataset Creation	Tue Sep 13 10:53:57 2016
Charted by	Depth in Feet scaled 1:240

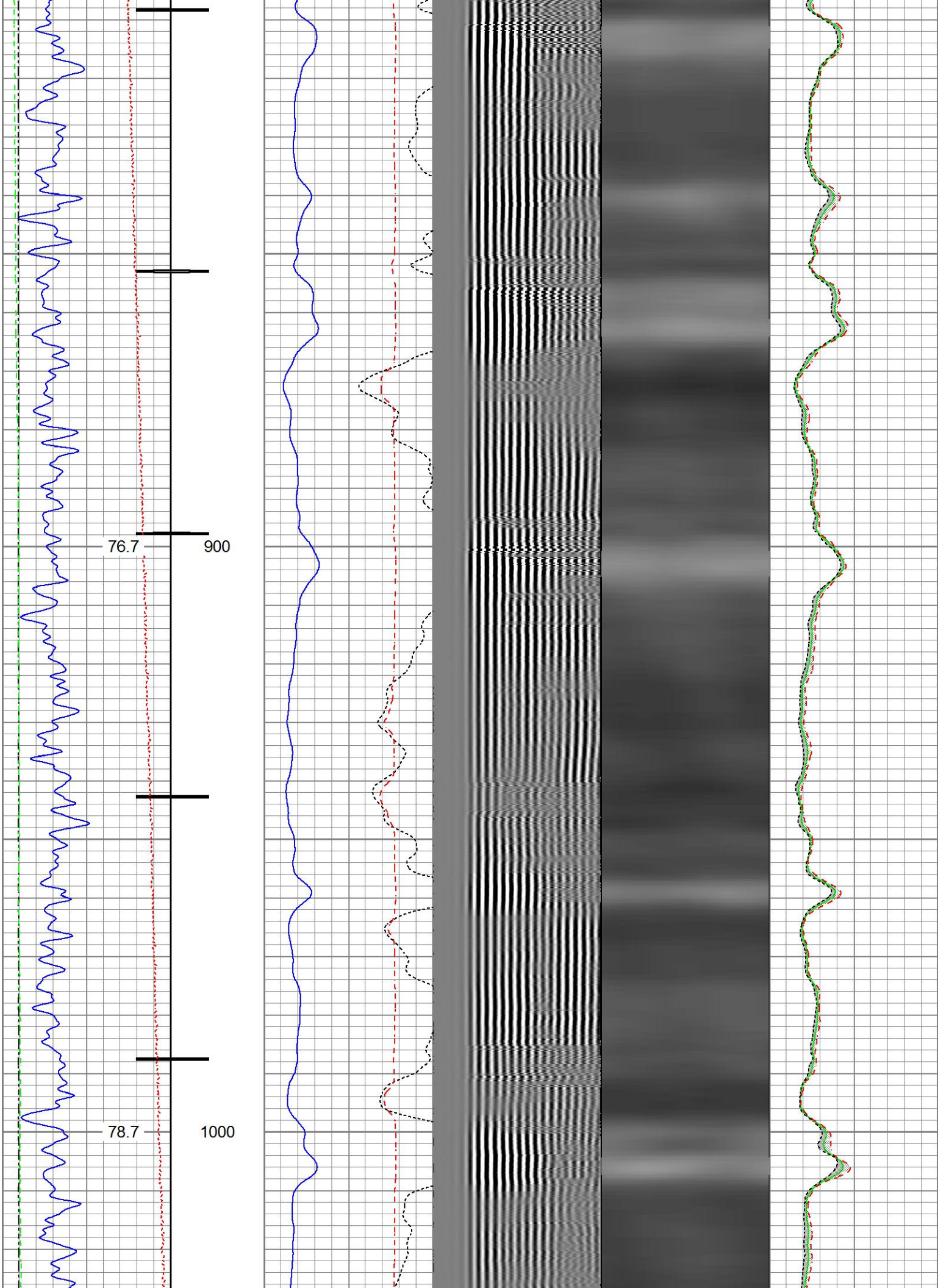
Gamma Ray		3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120		0 (mV) 100	200 1200		0 100
Casing Collar Locator		3' Amplitude x 5			Minimum Amplitude
Temperature		0 (mV) 20			0 100
0 (degF) 20		3' Travel Time			Maximum Amplitude
Line Speed		650 (usec) 150			0 100
-150 (ft/min)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

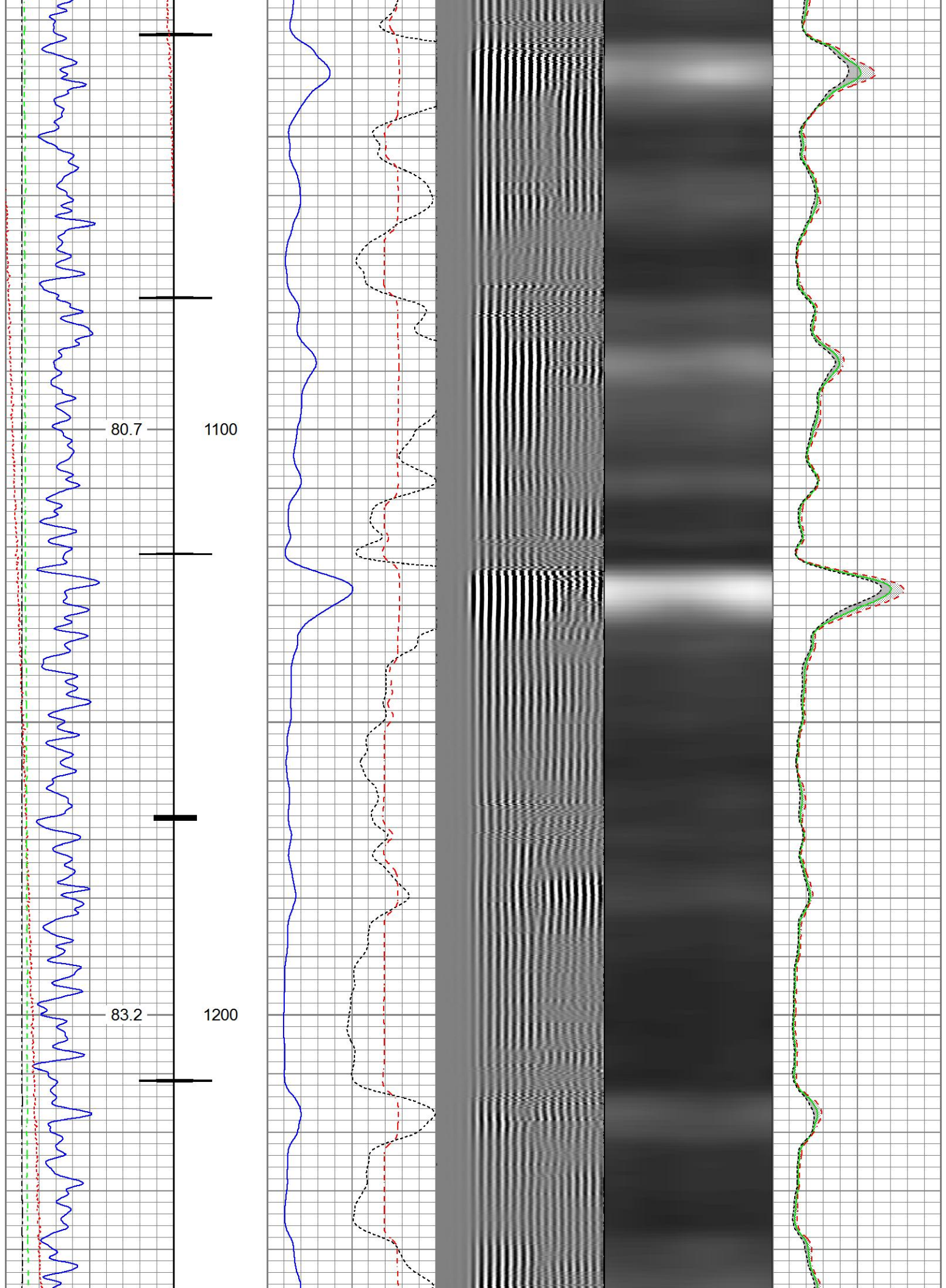


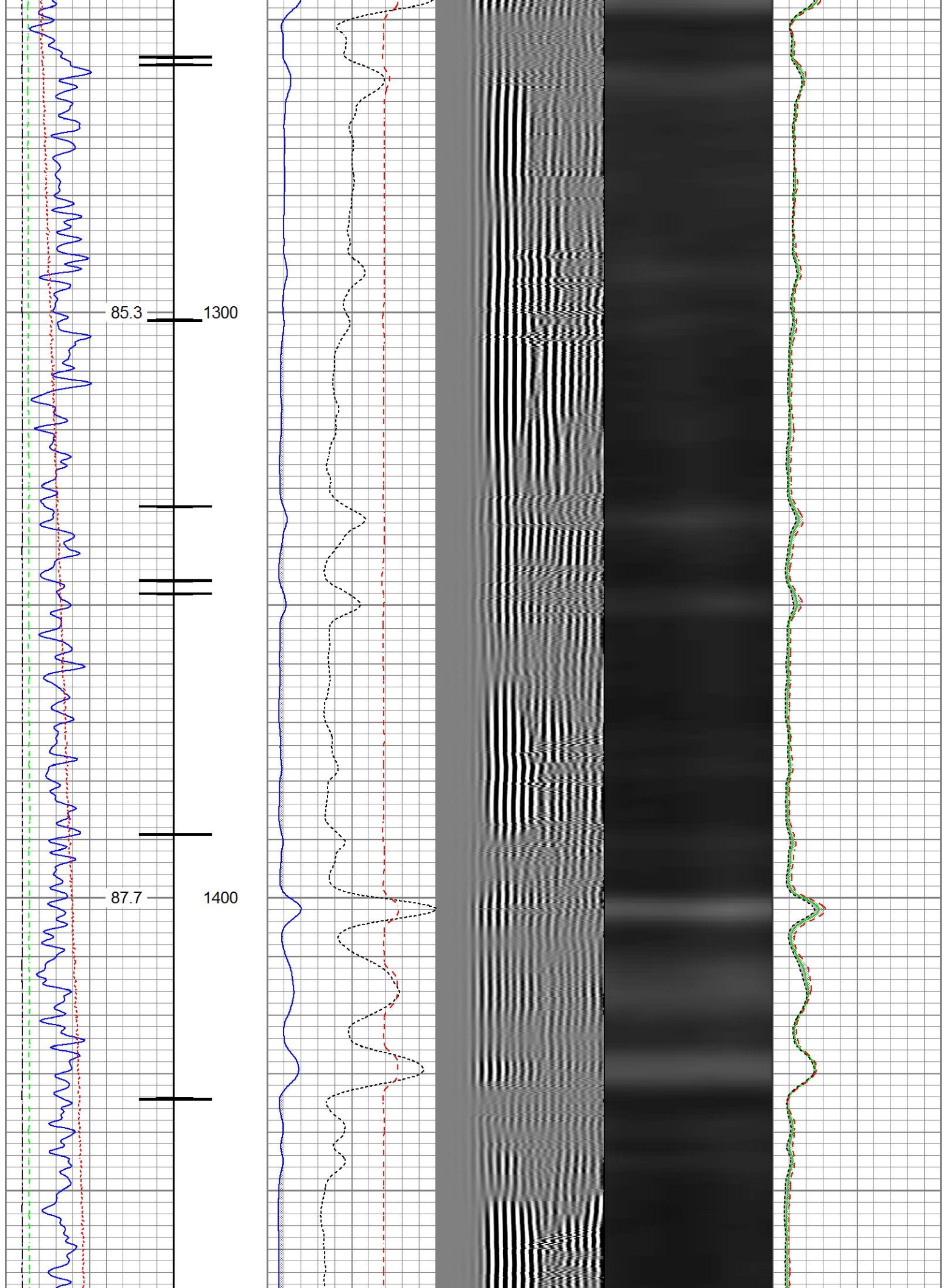


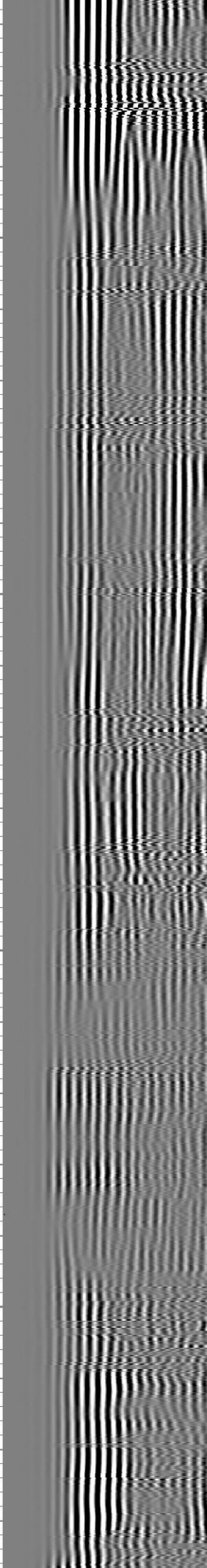
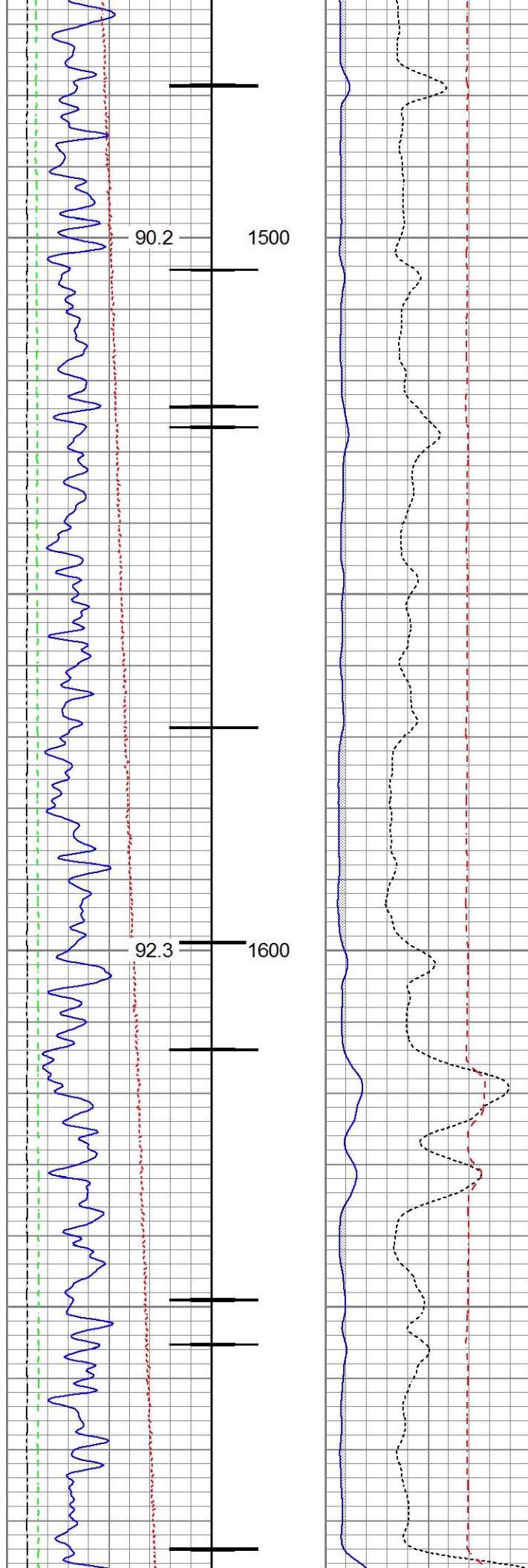


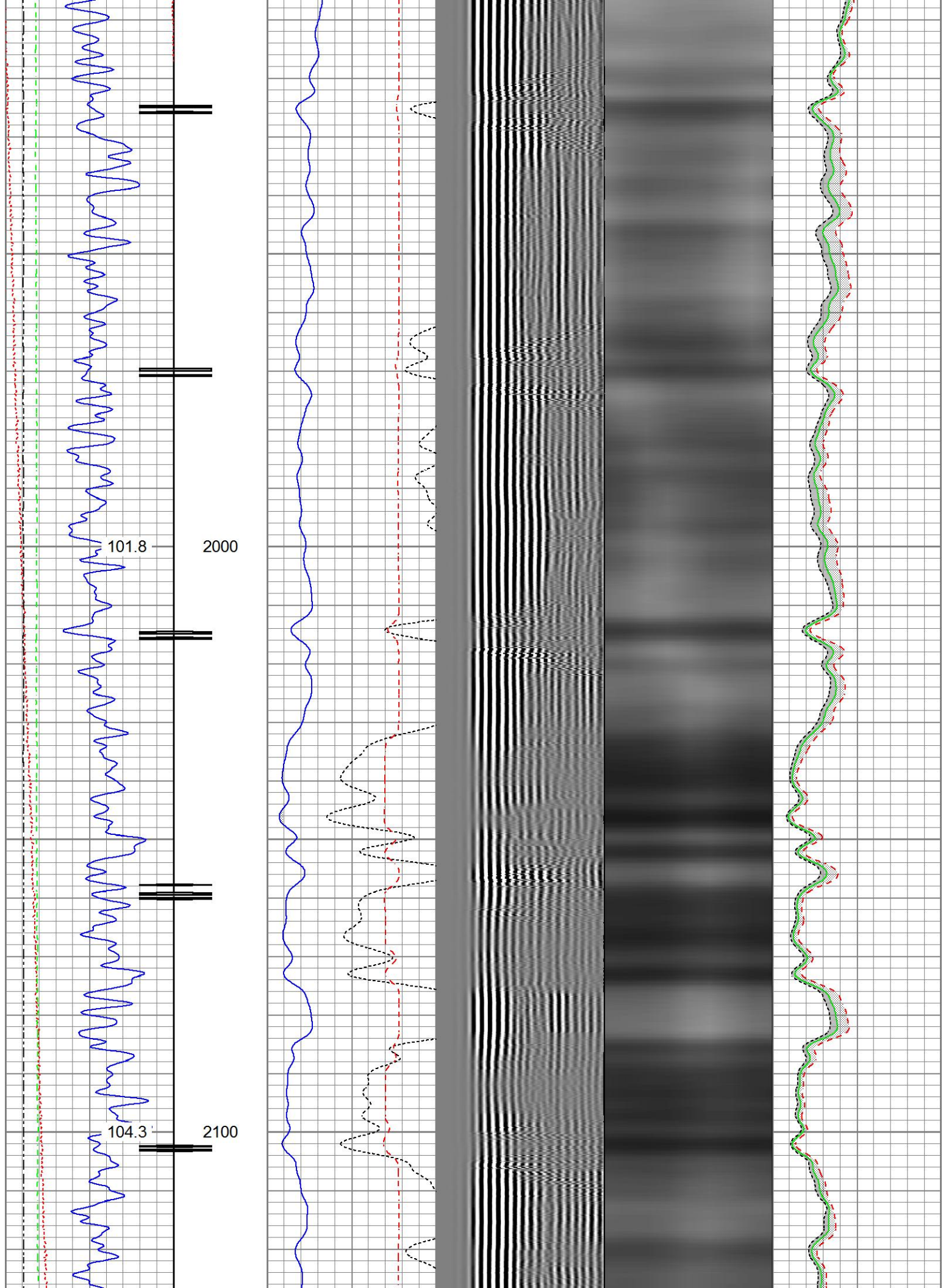


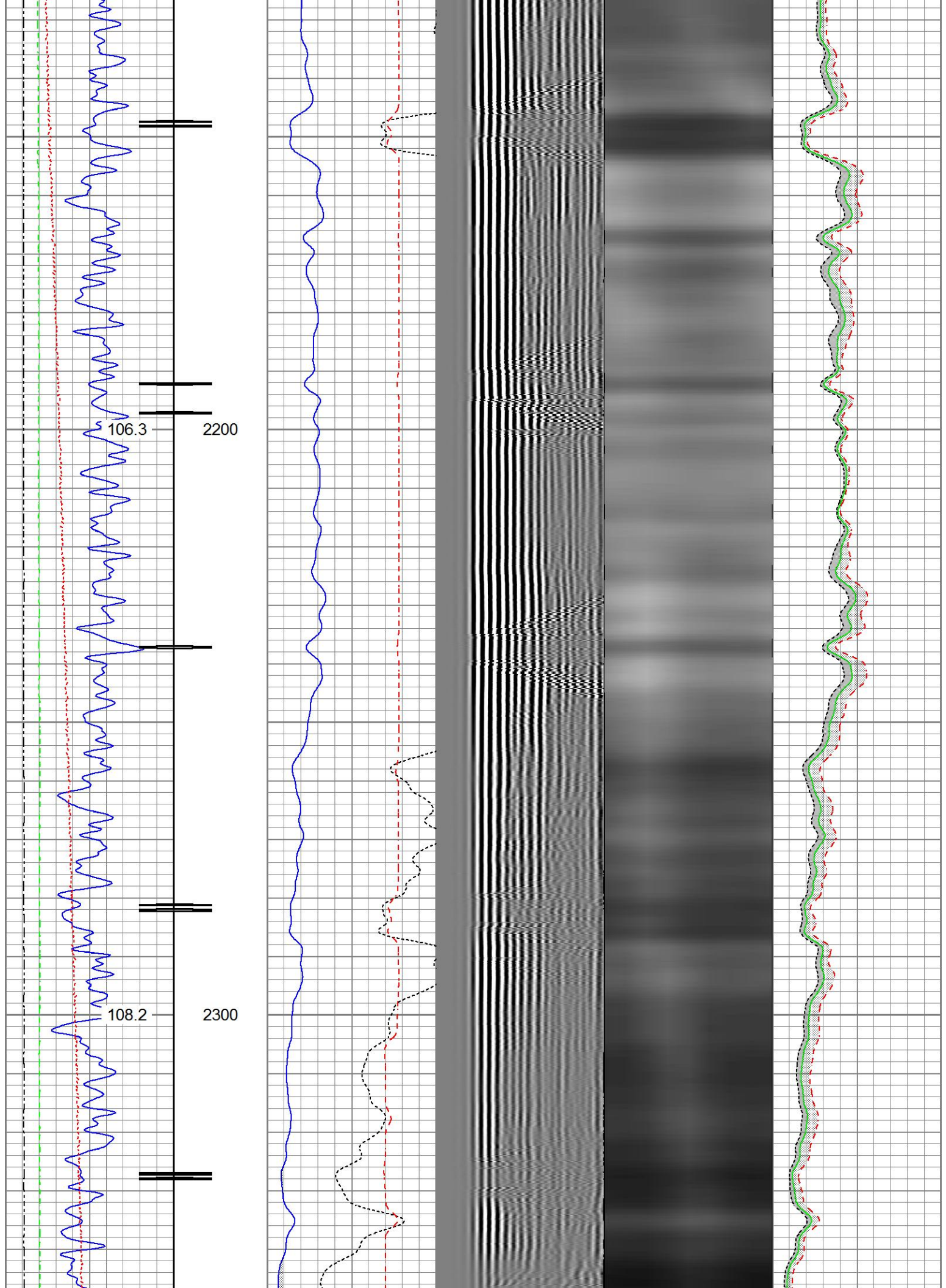


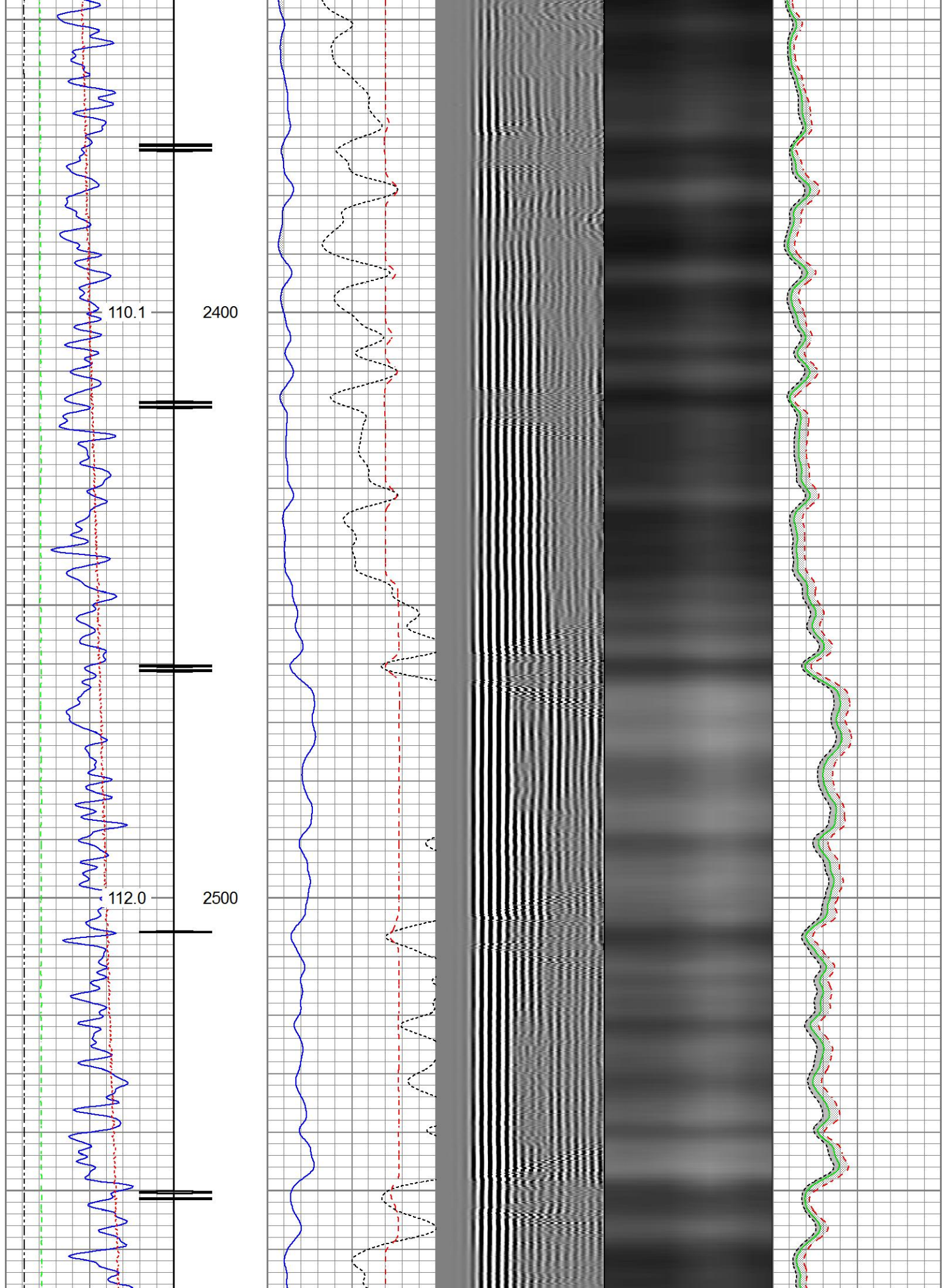


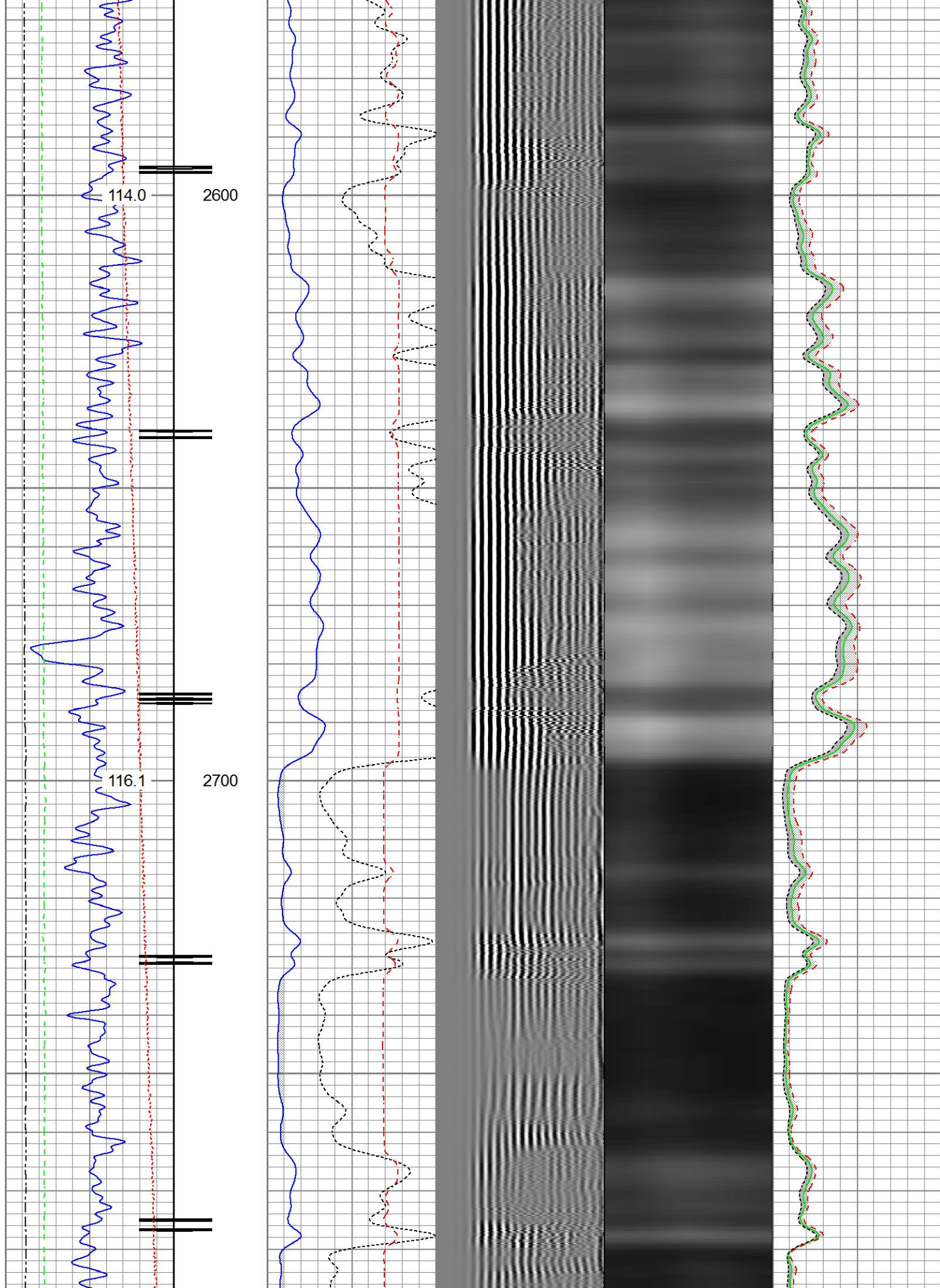


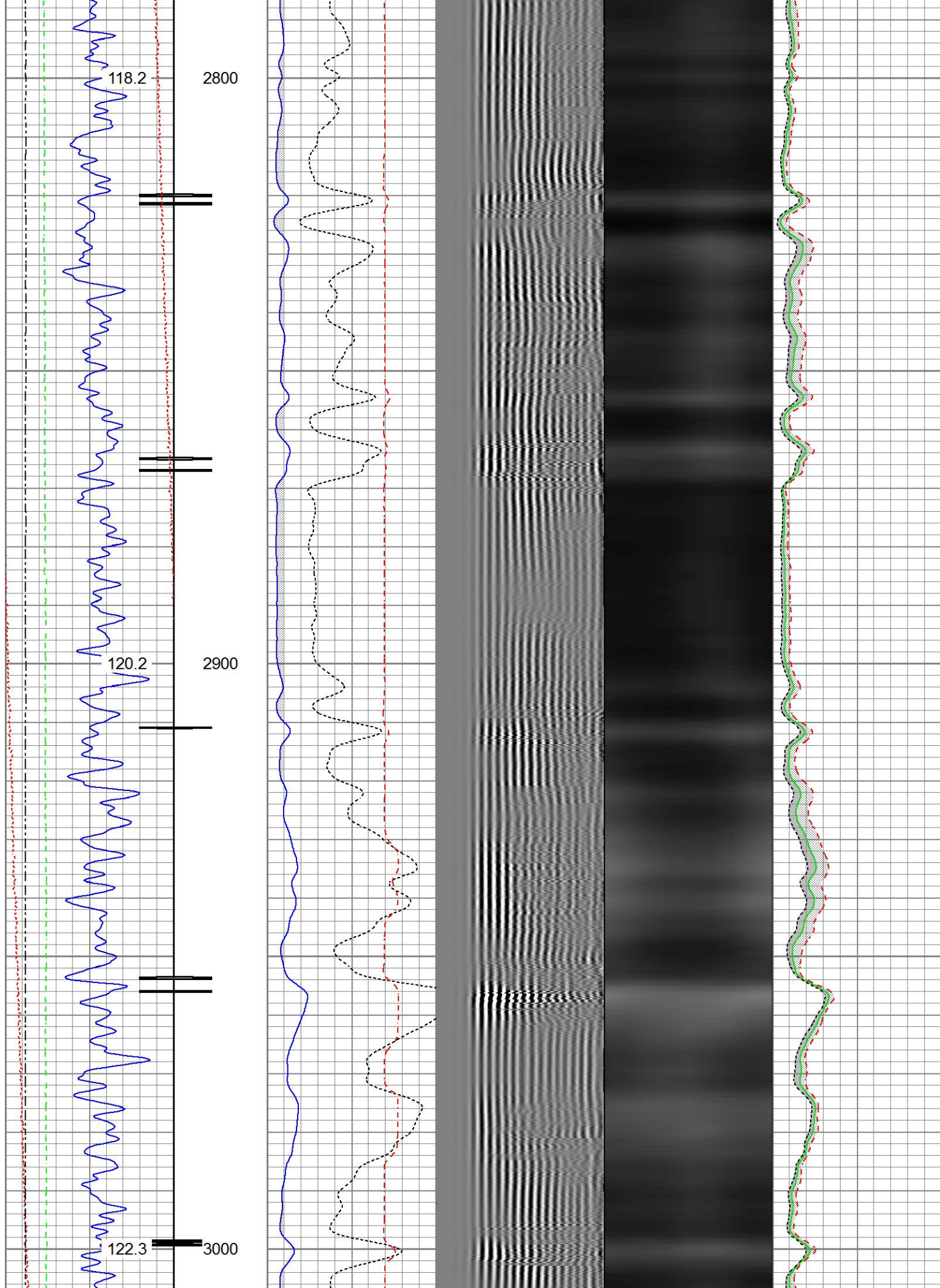


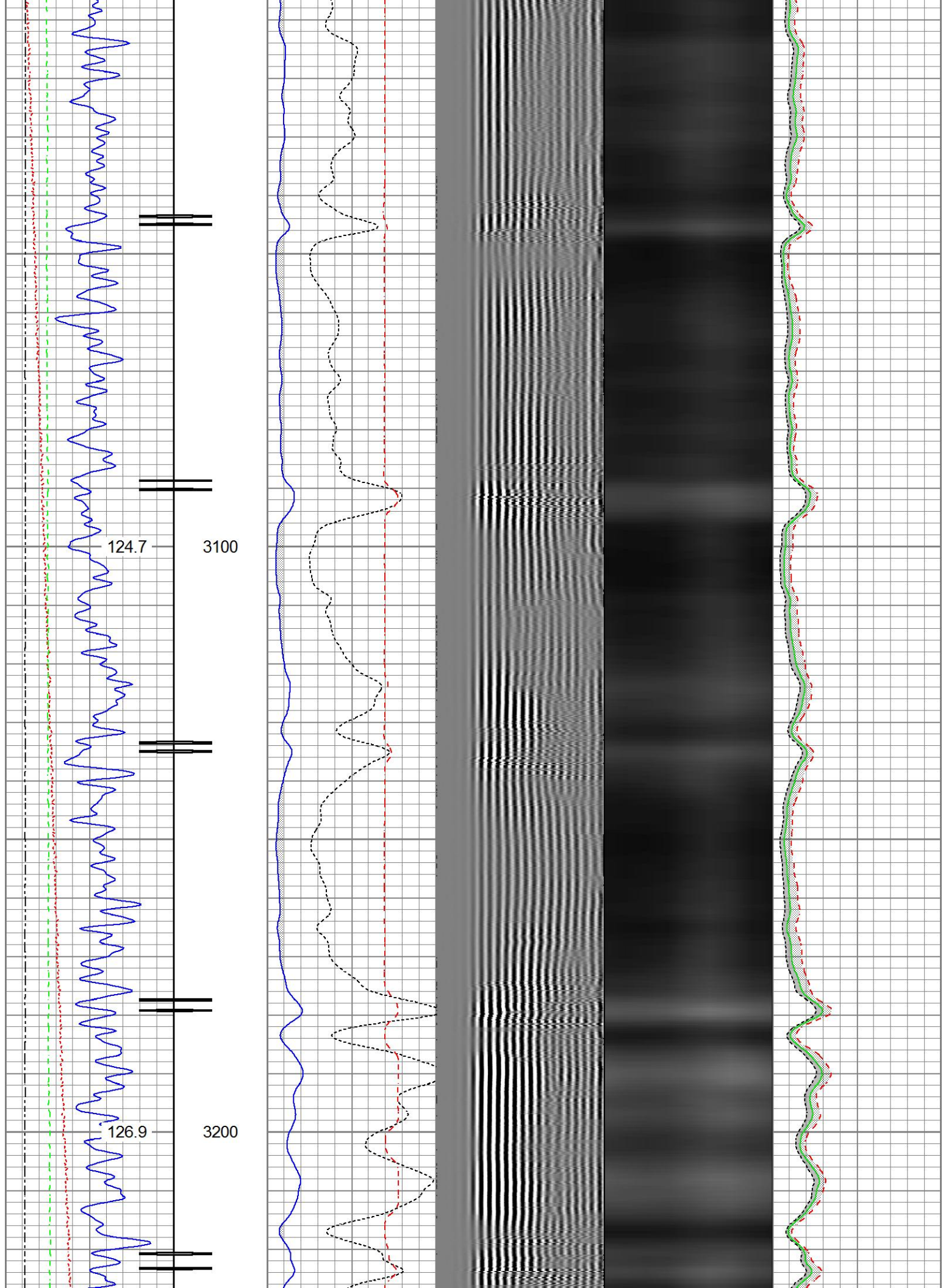


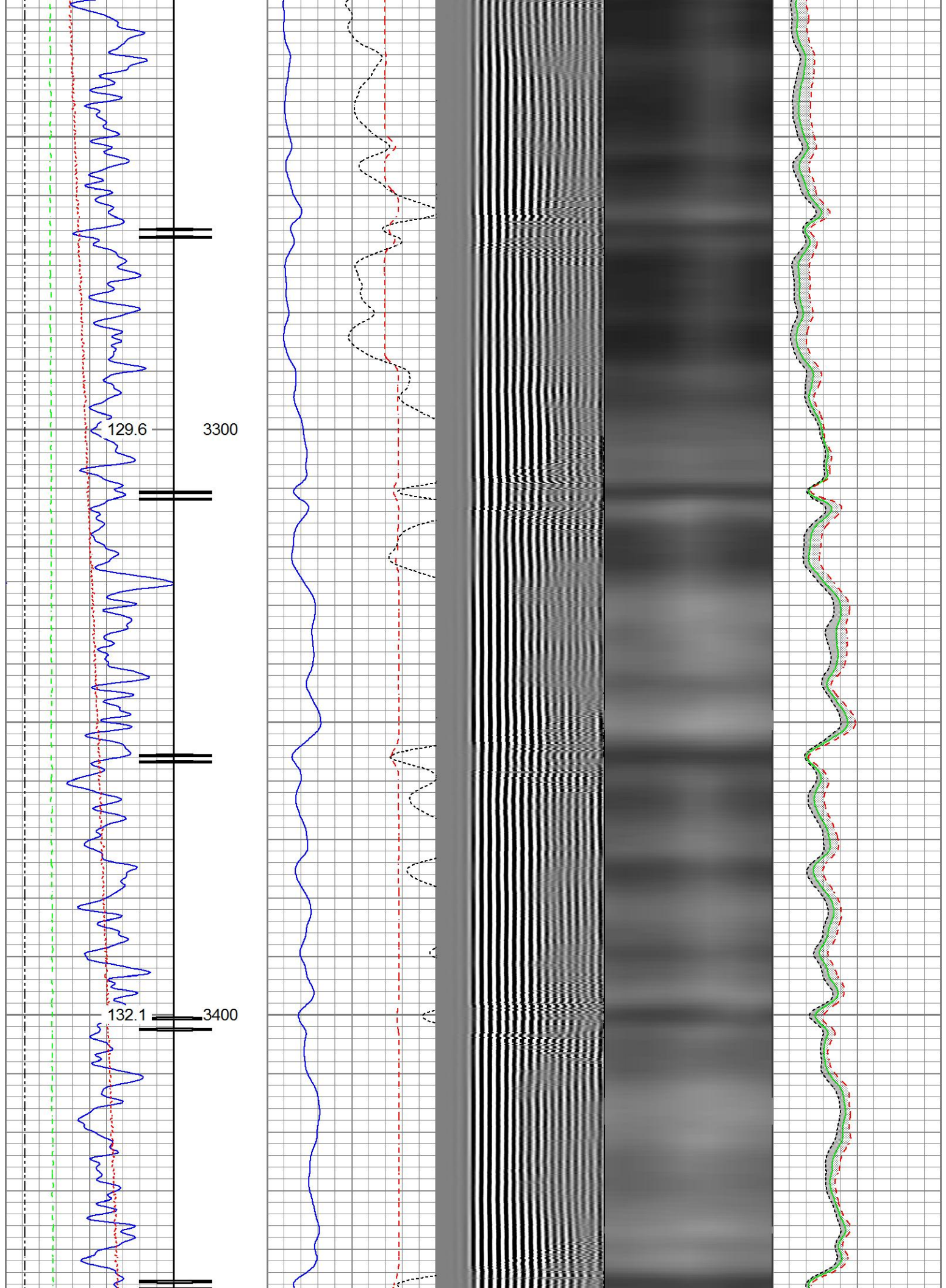


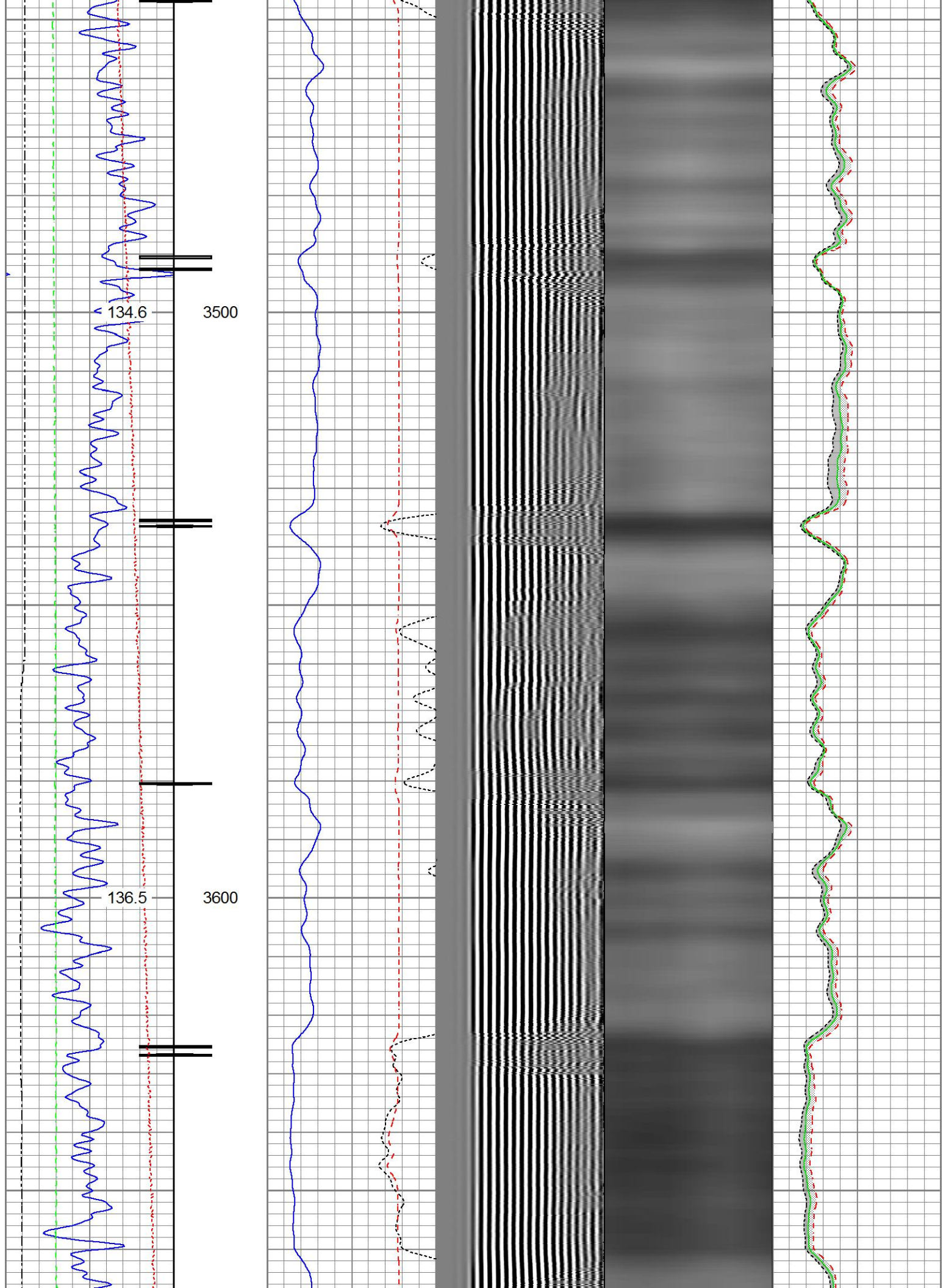


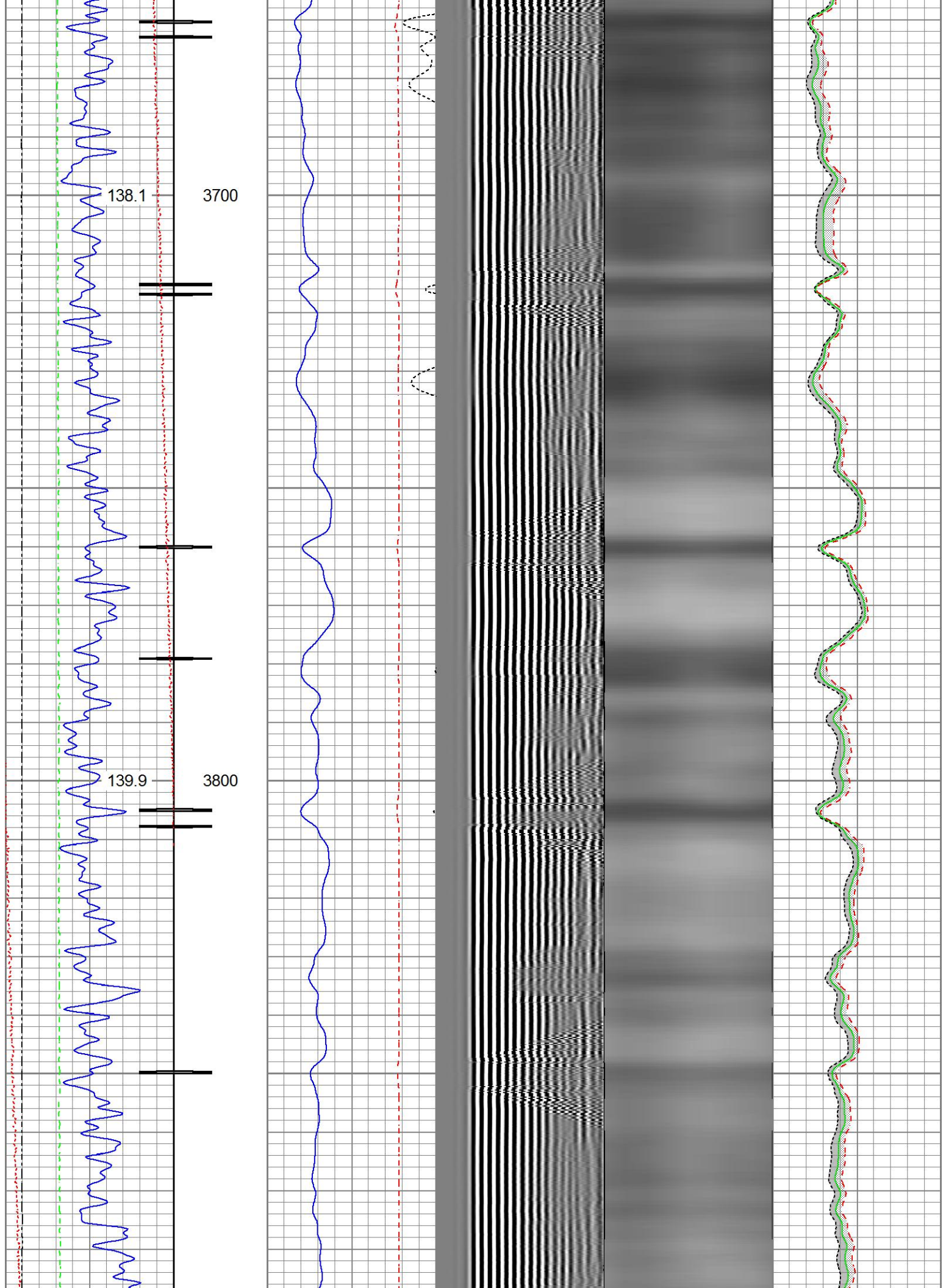


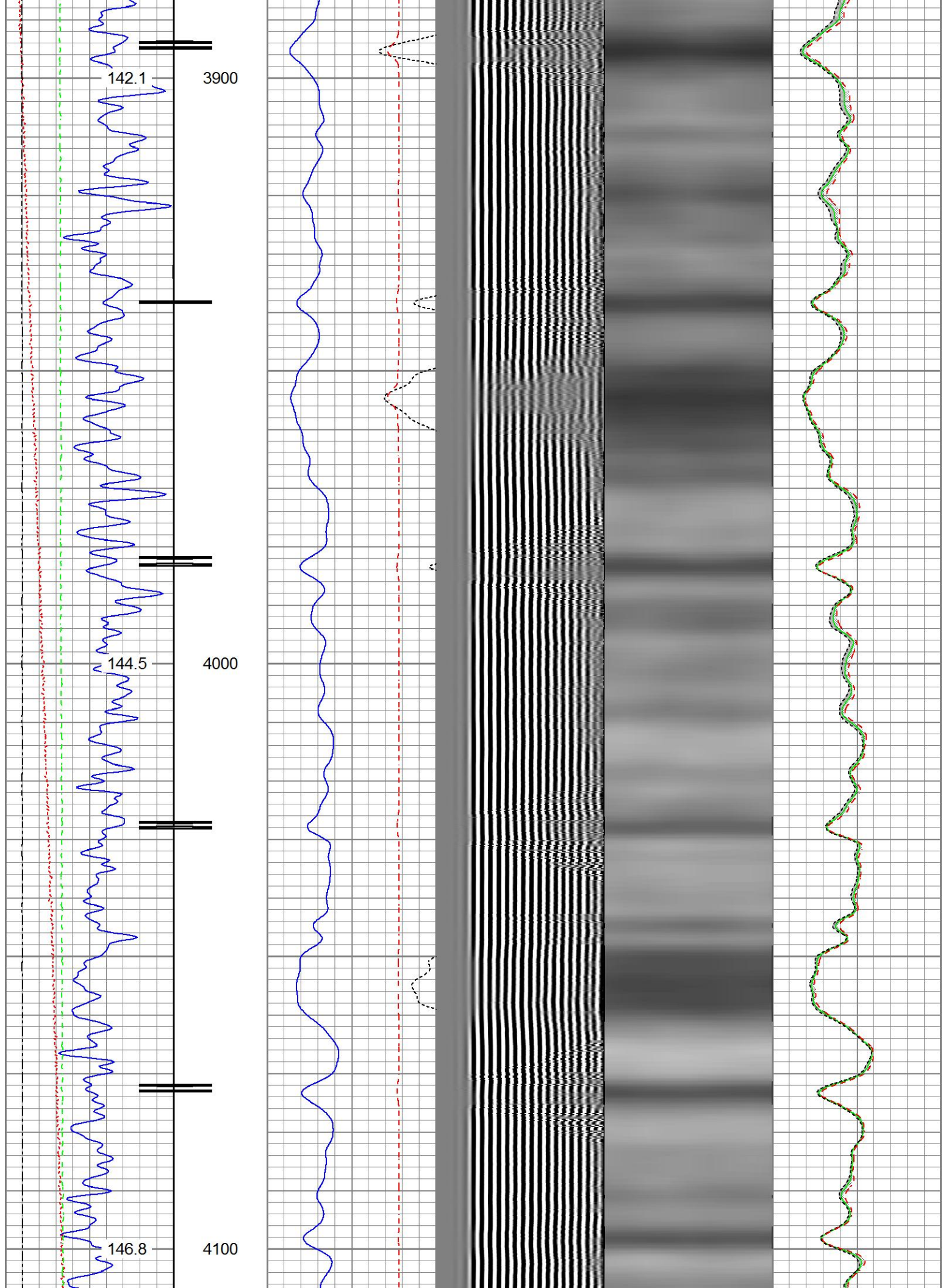


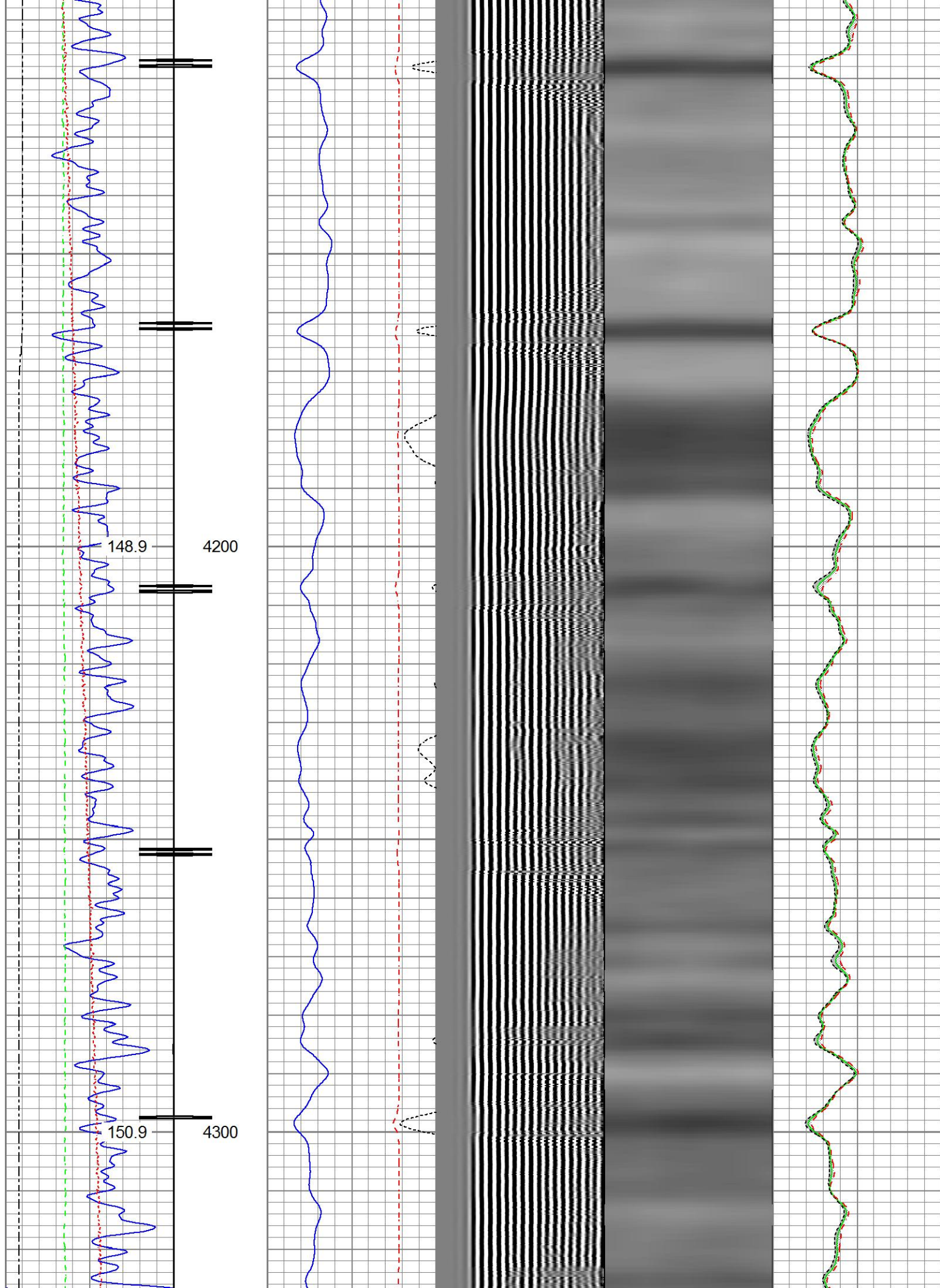


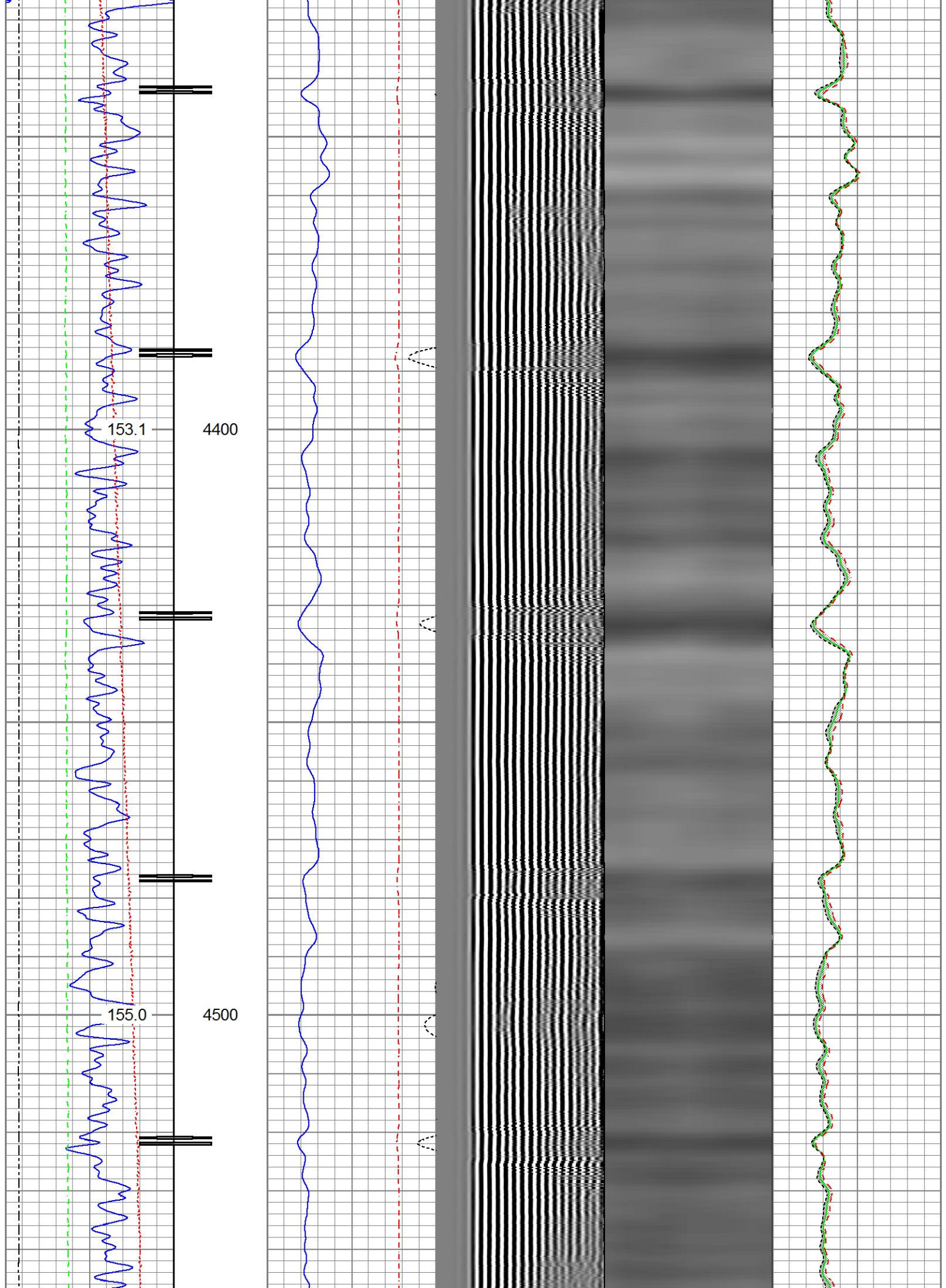


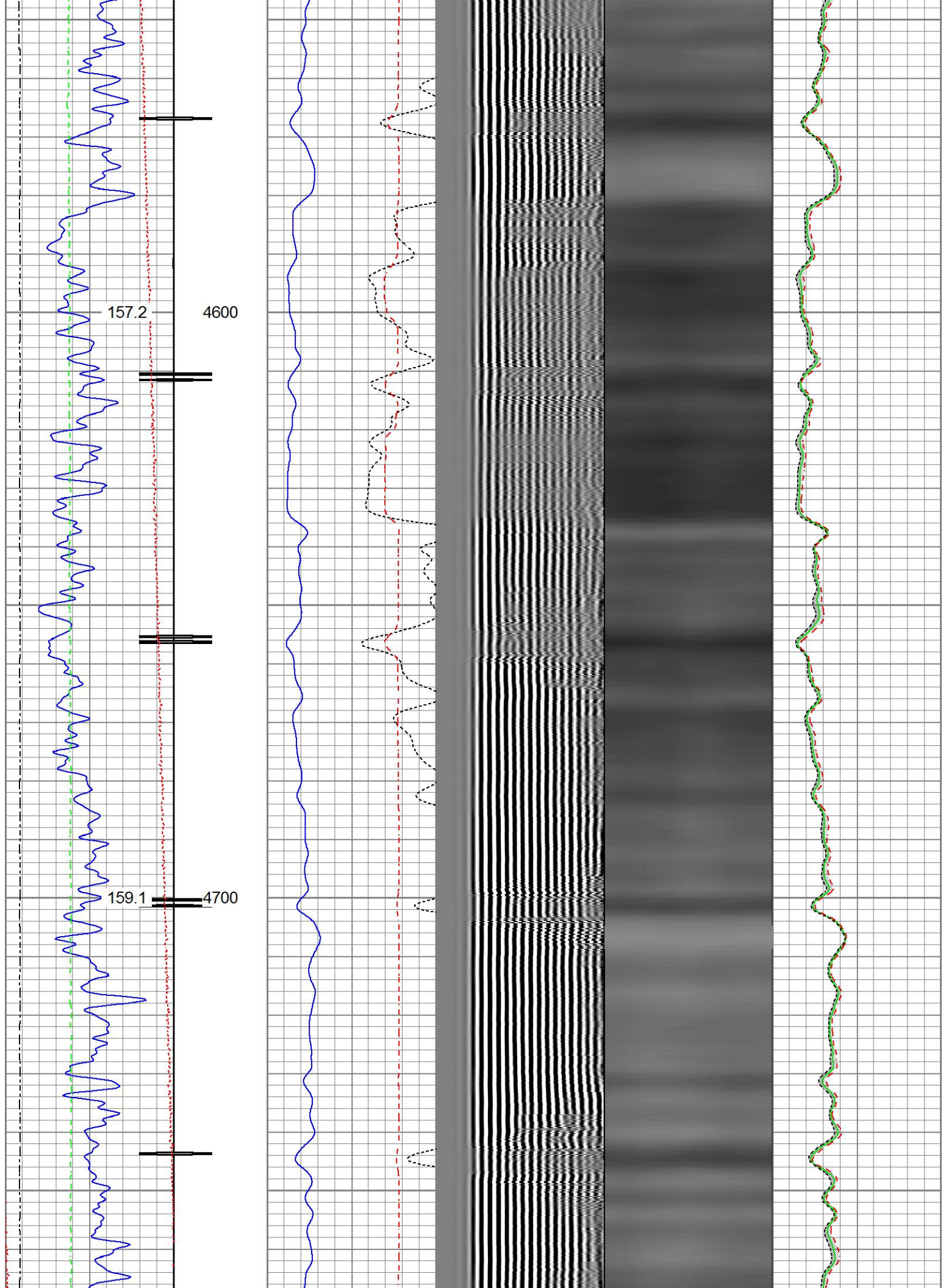


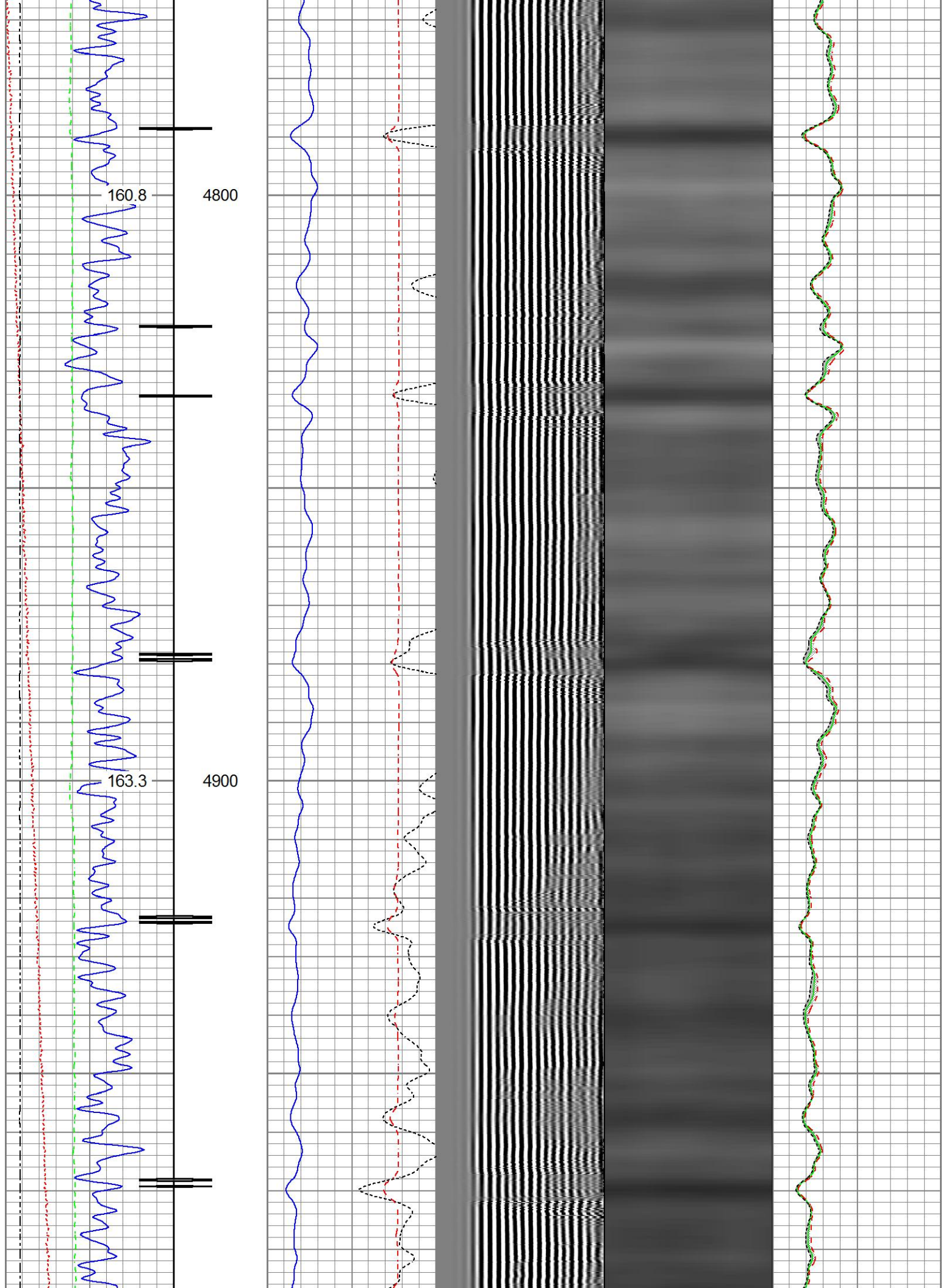


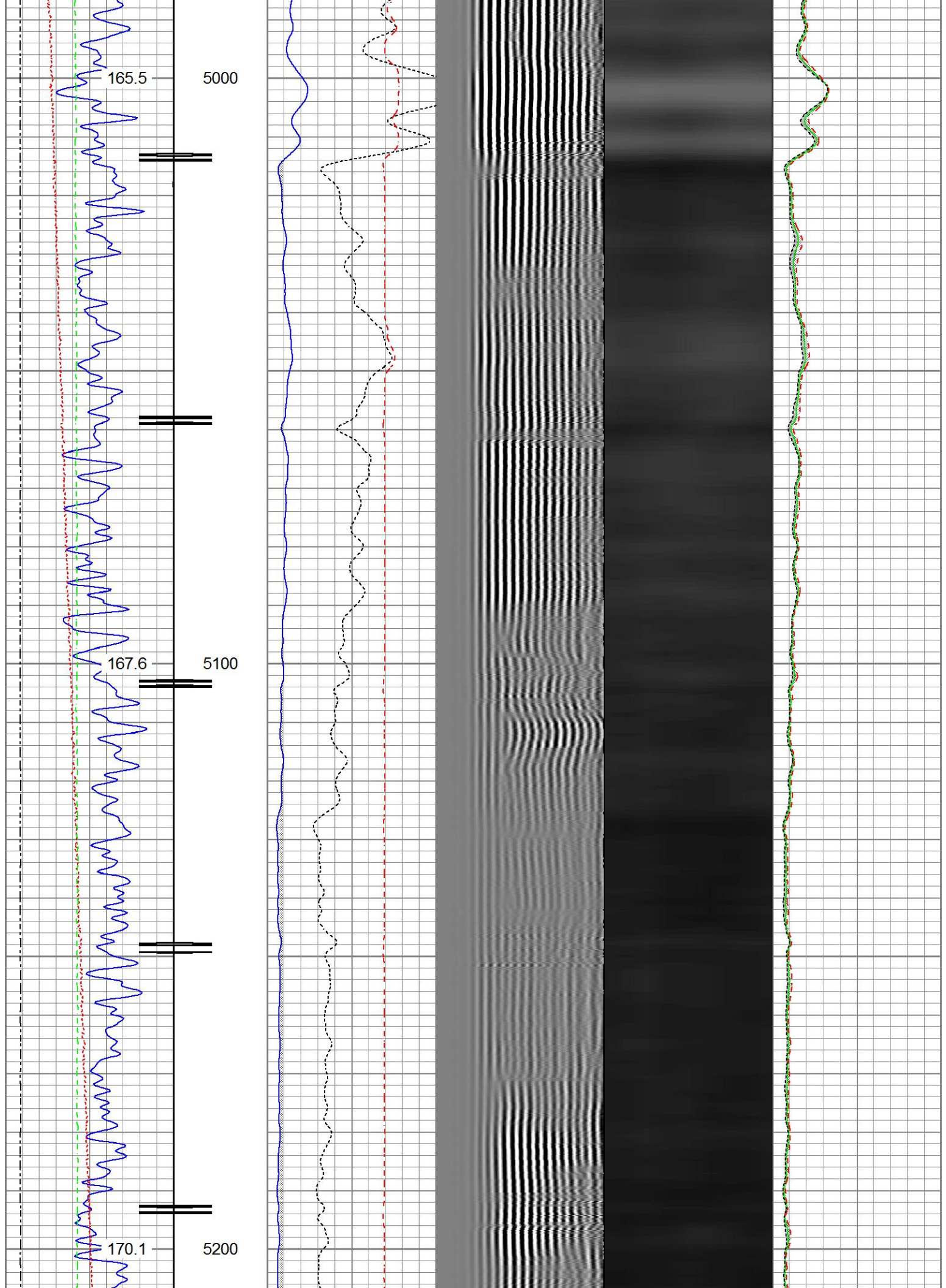


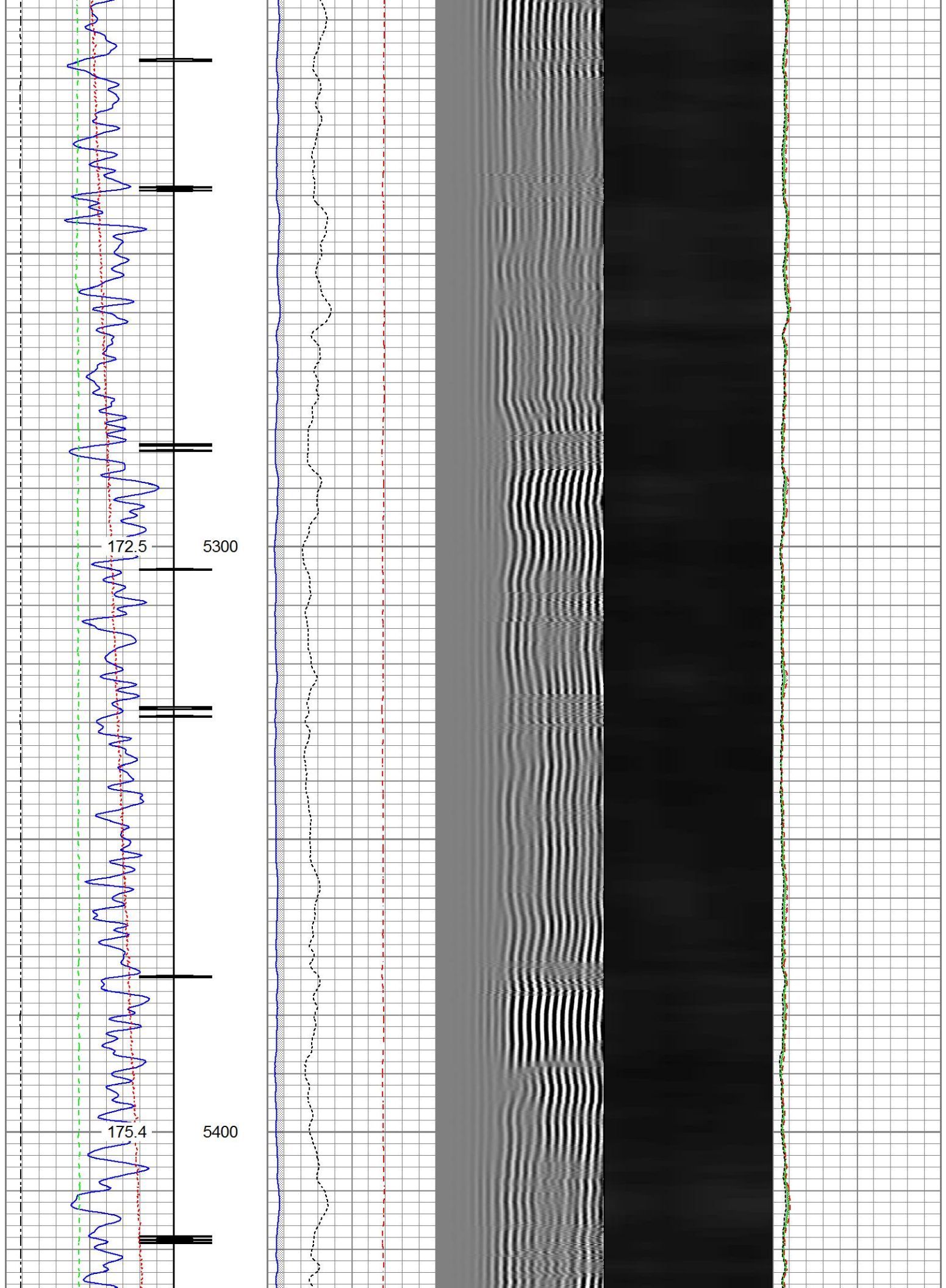


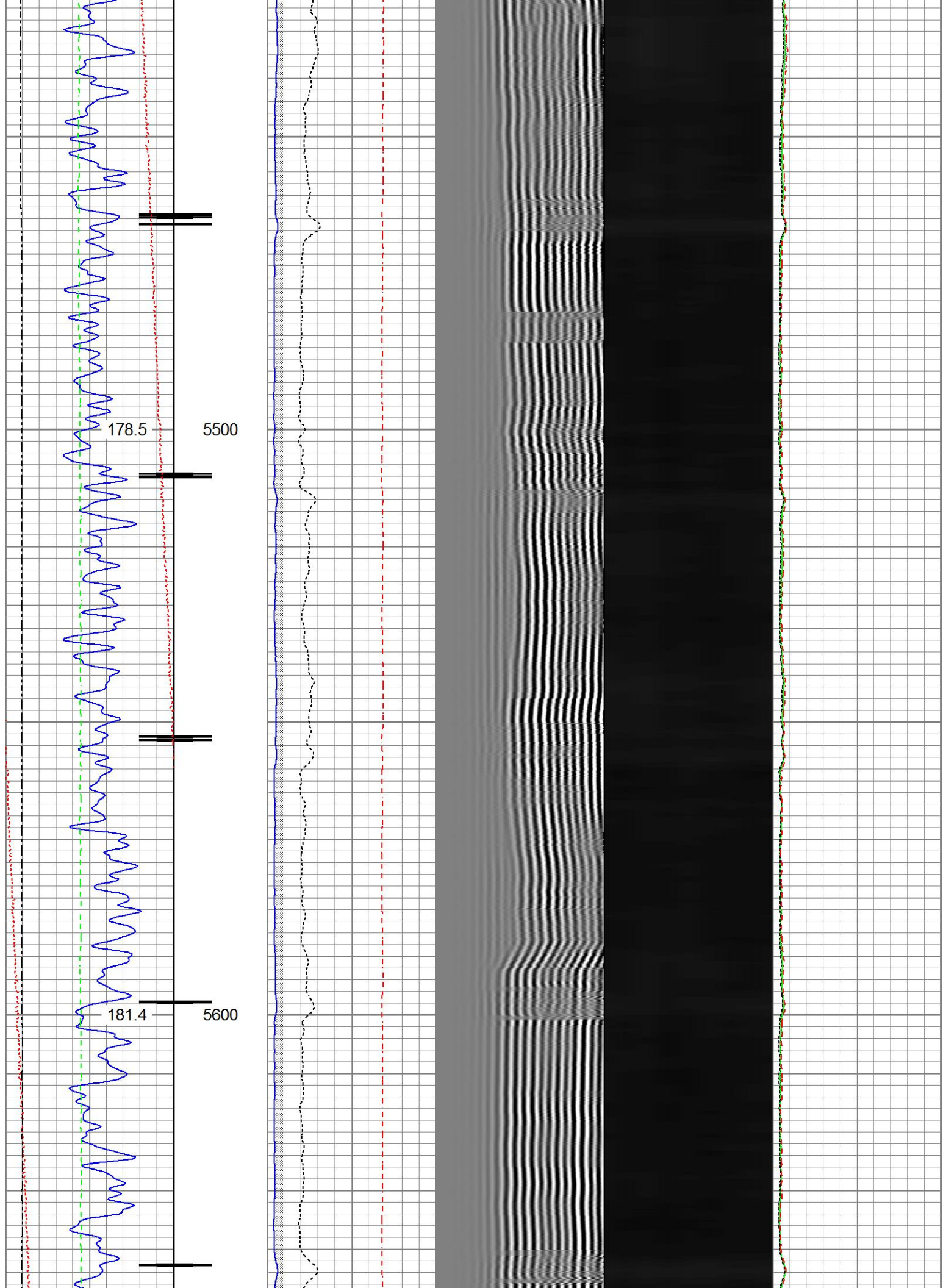


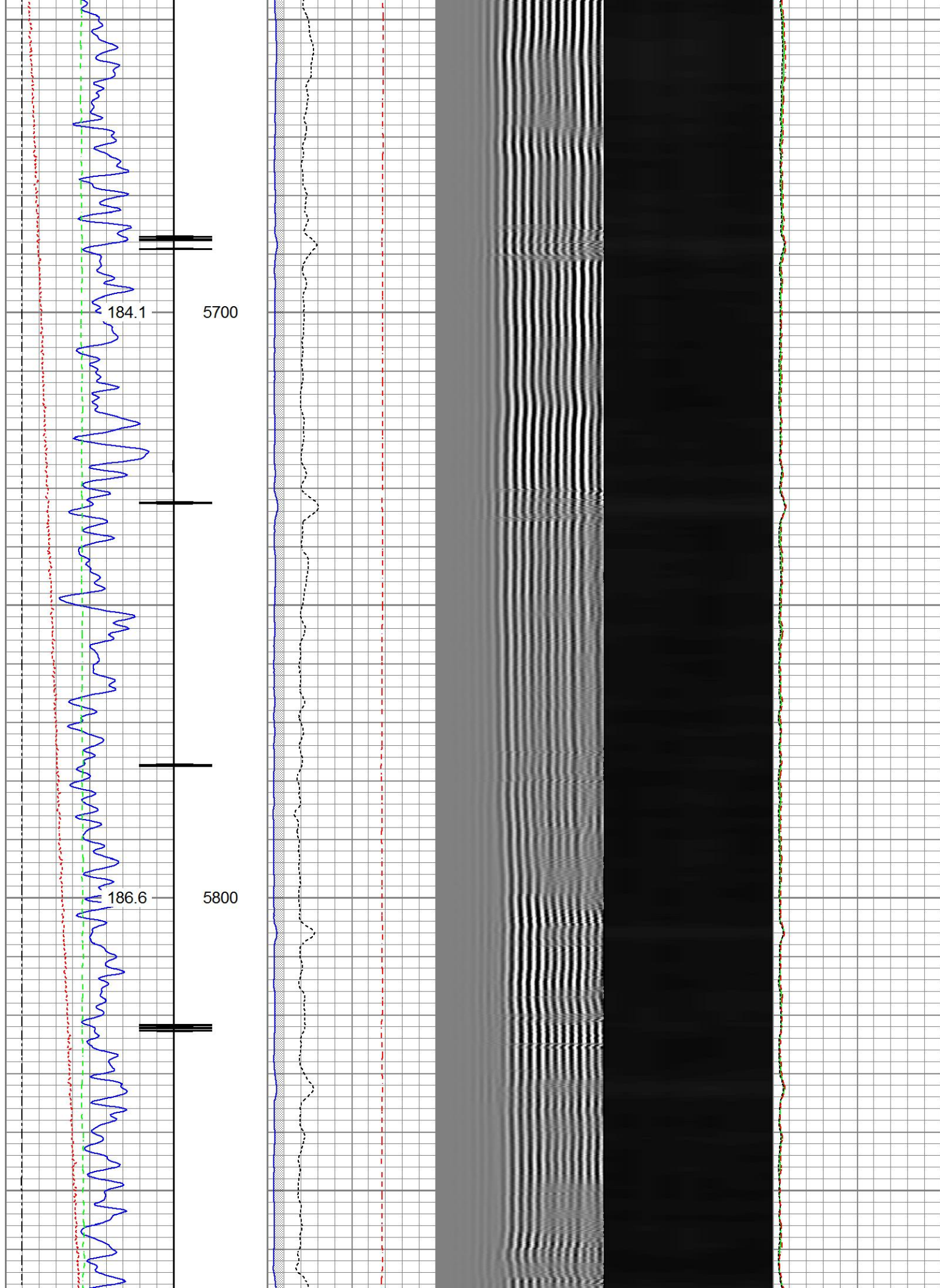


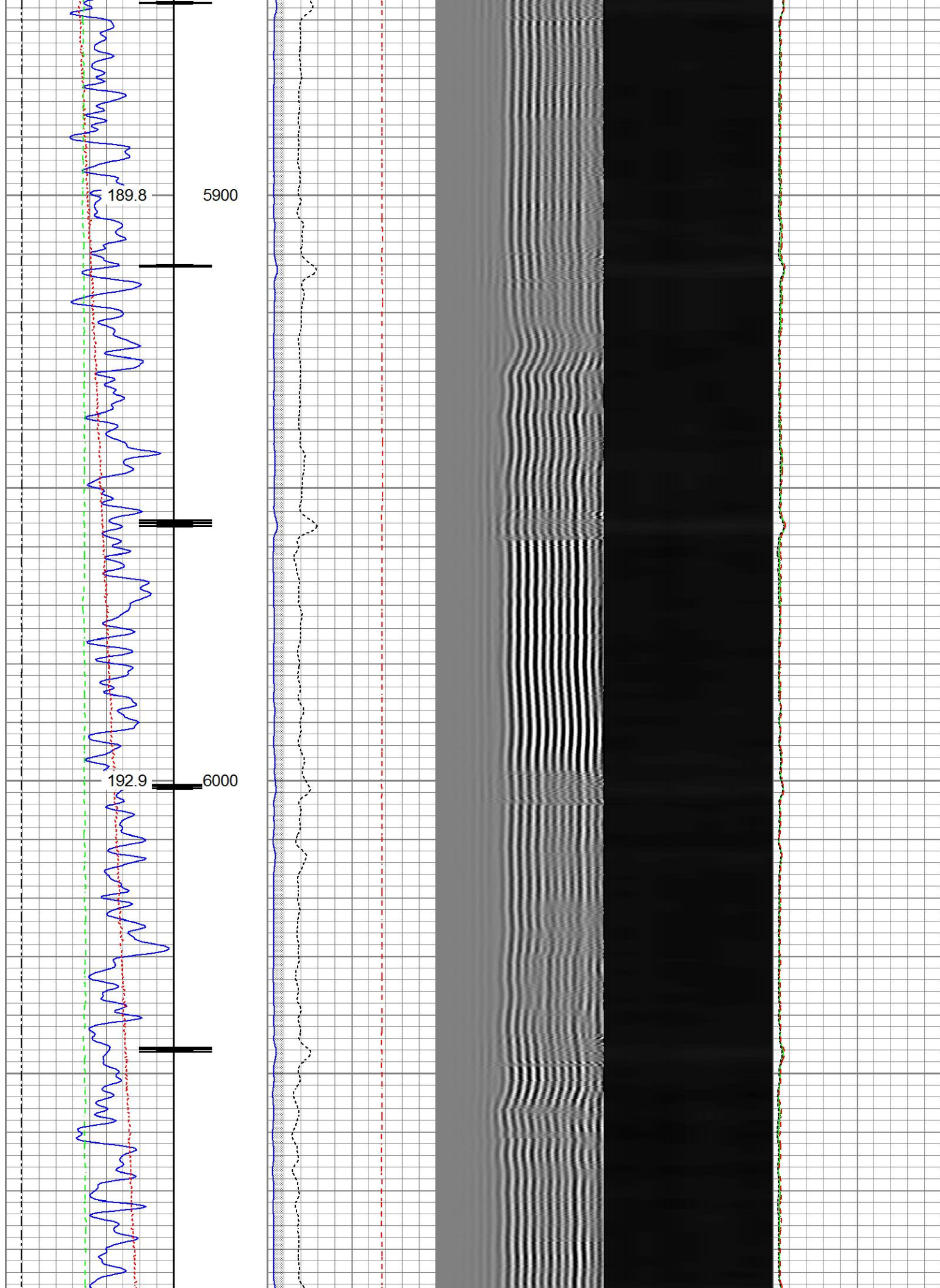


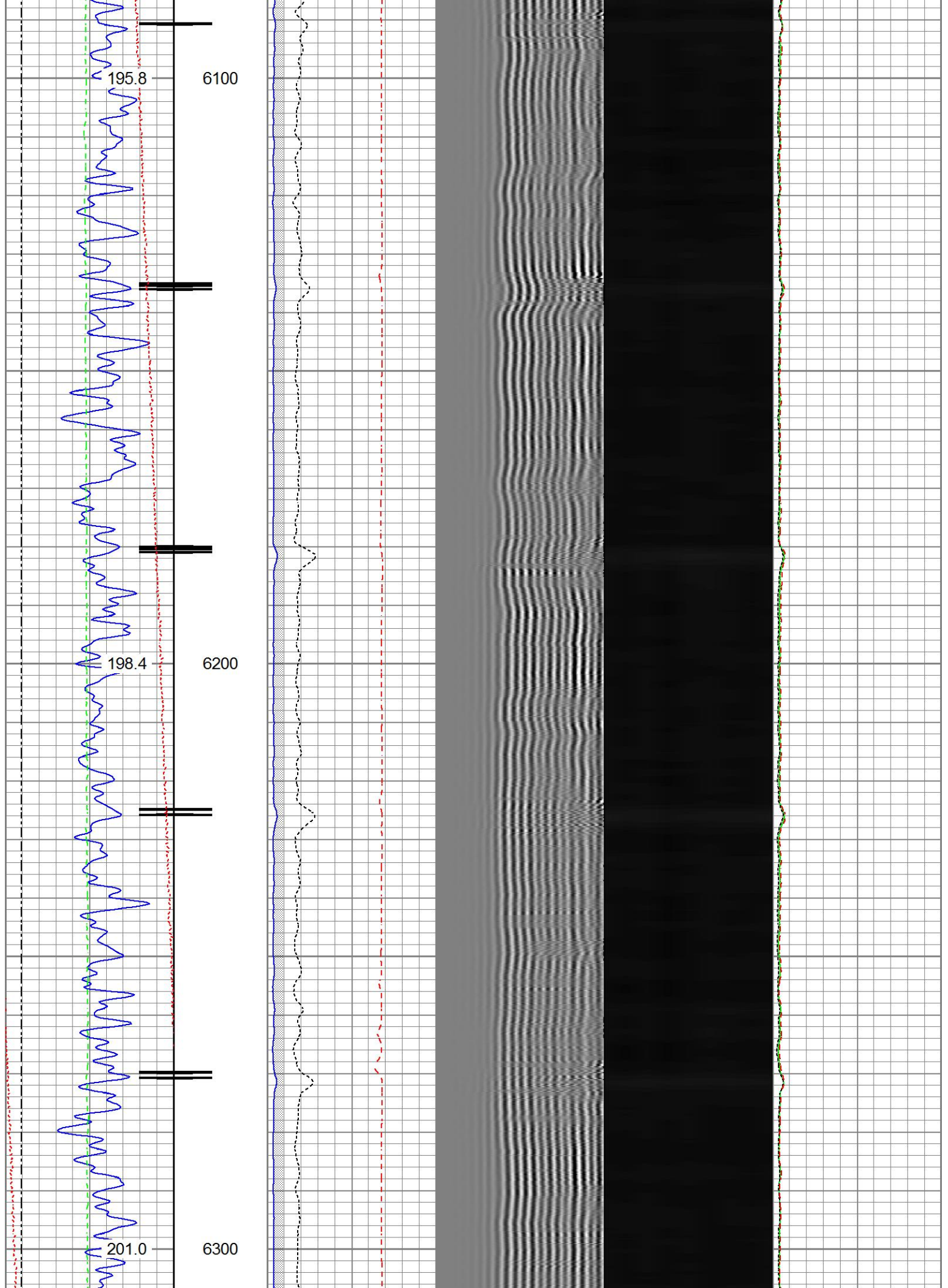


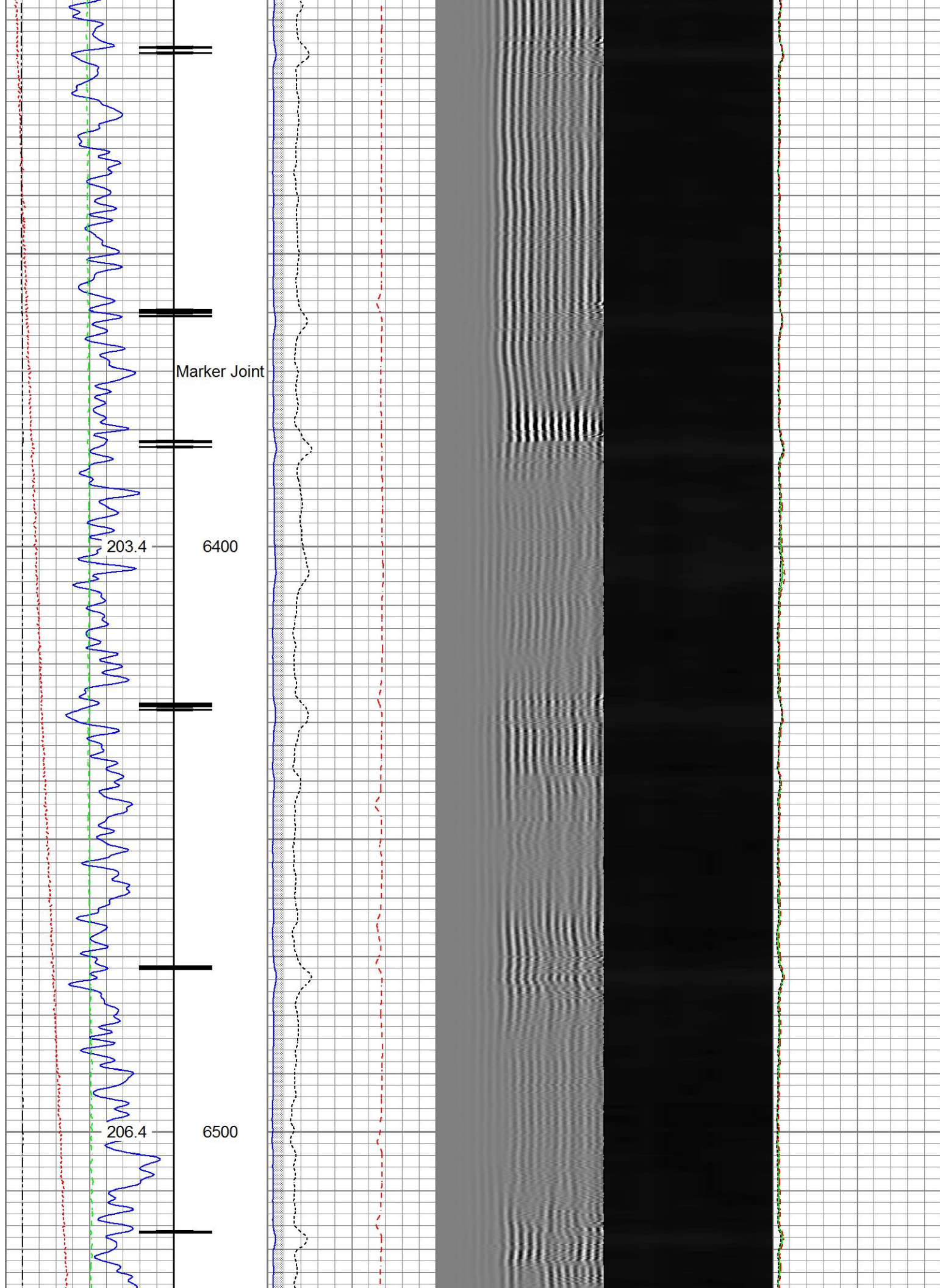


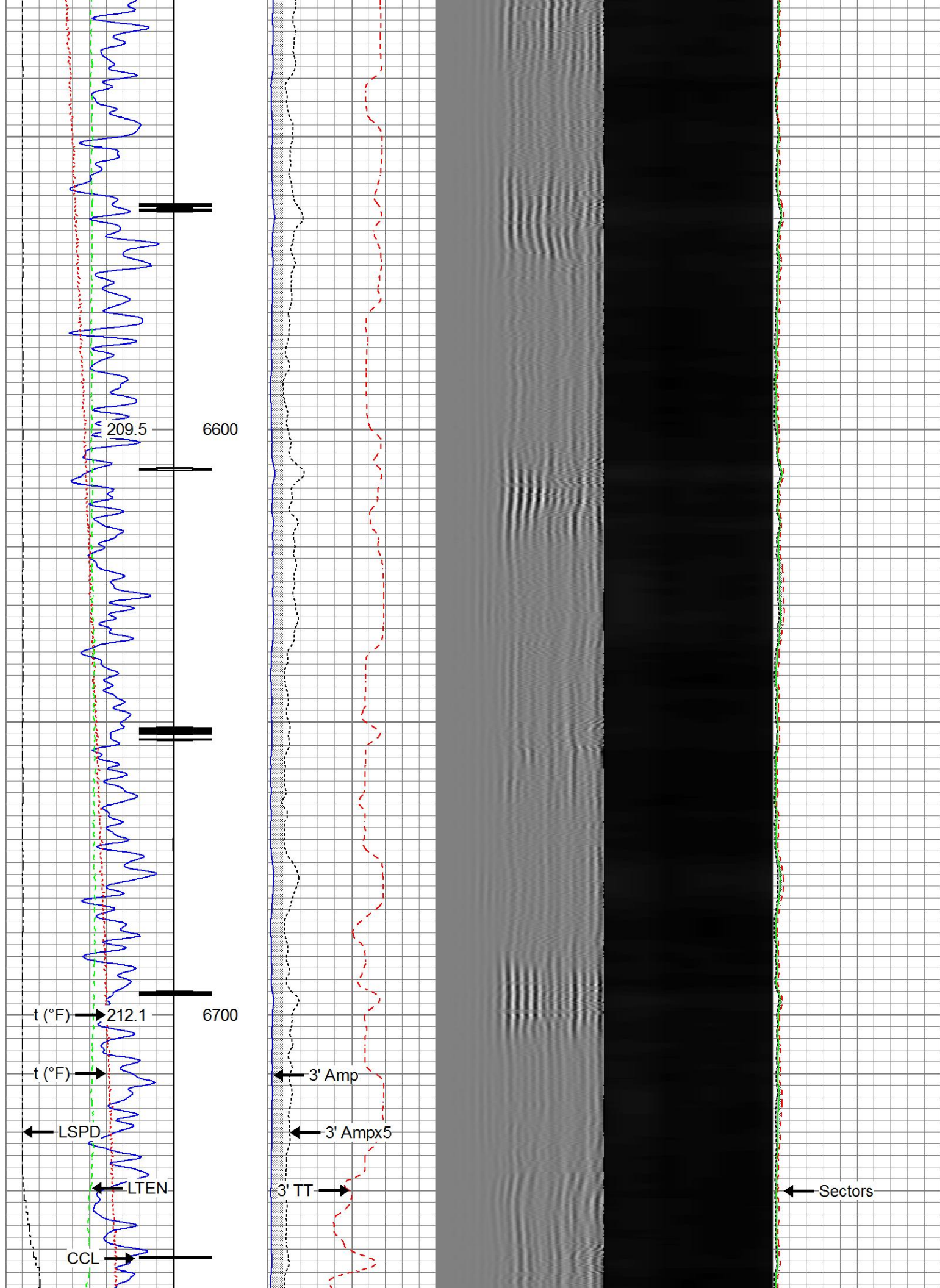


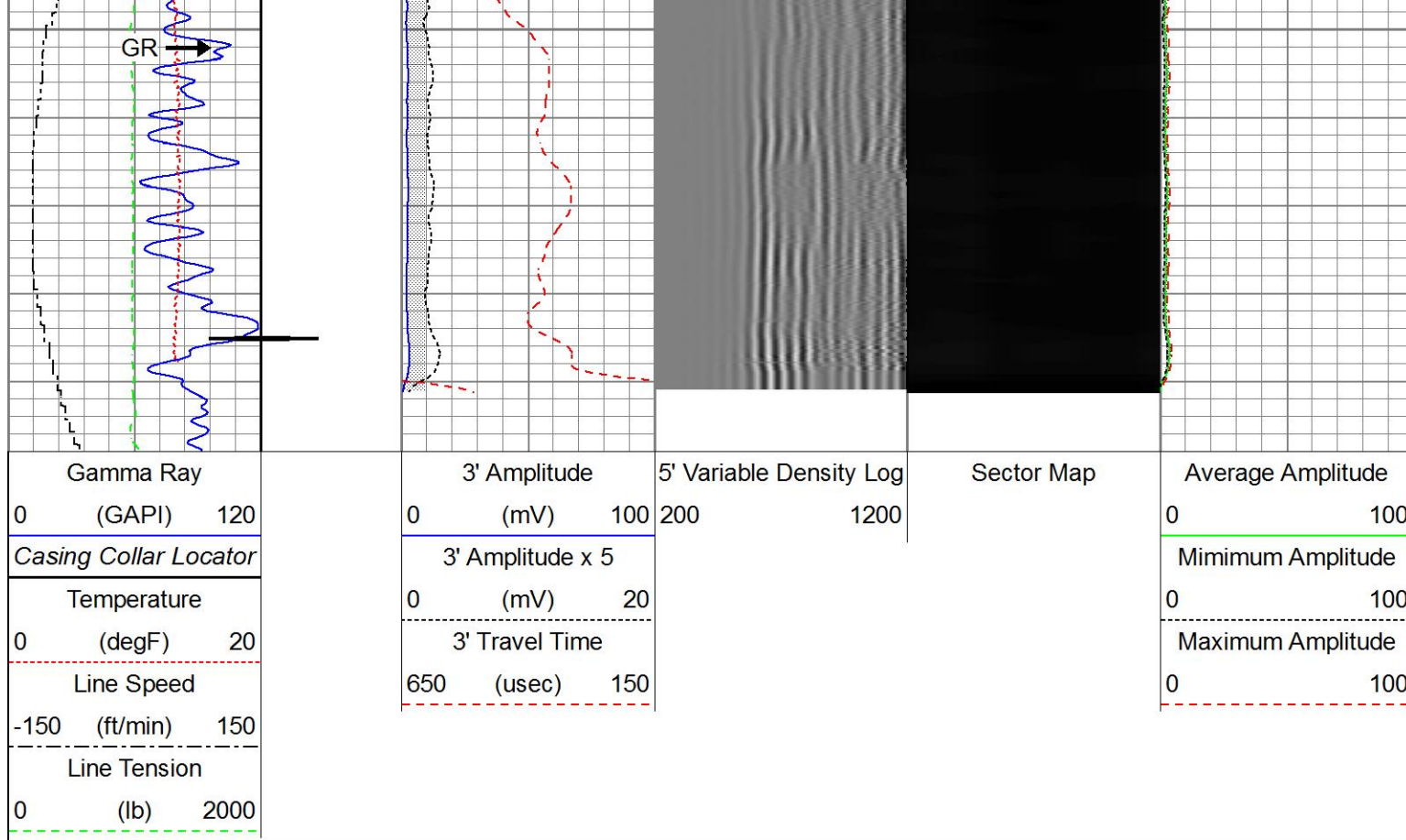








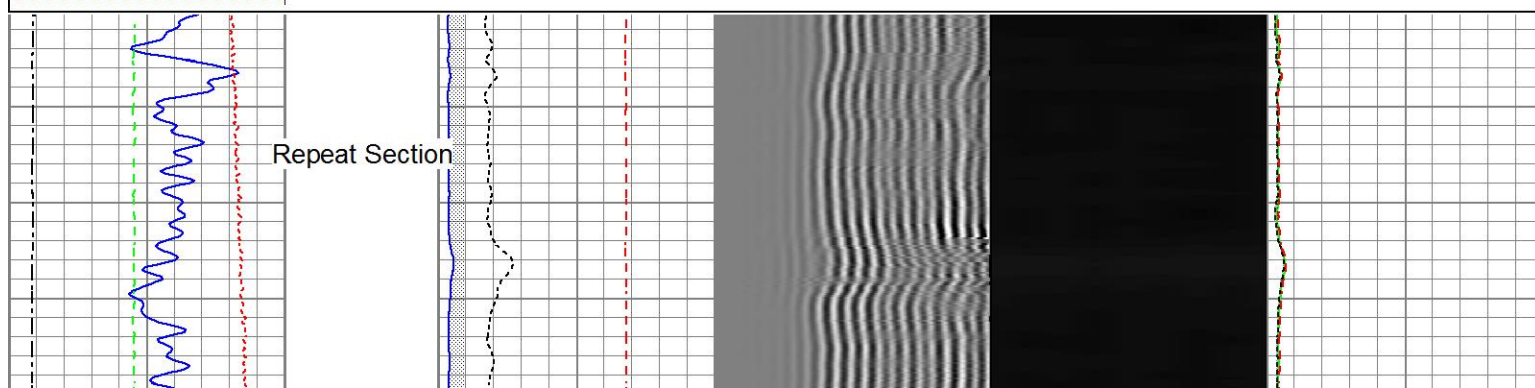
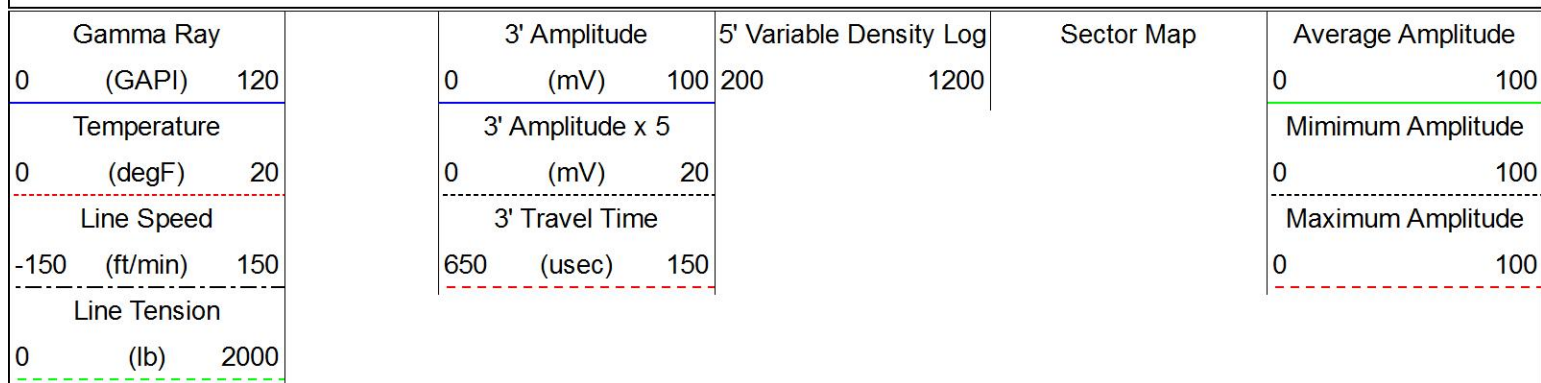


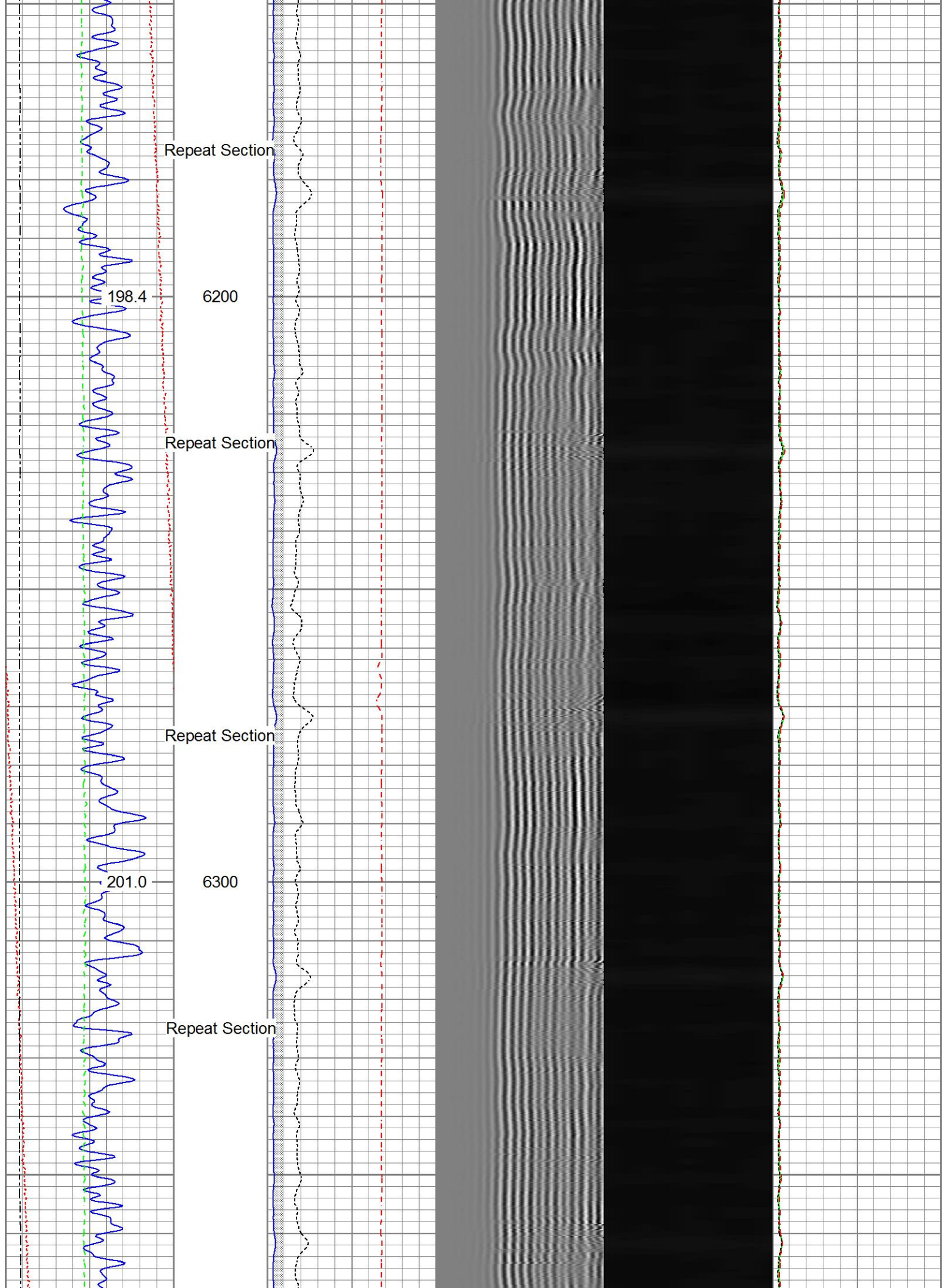


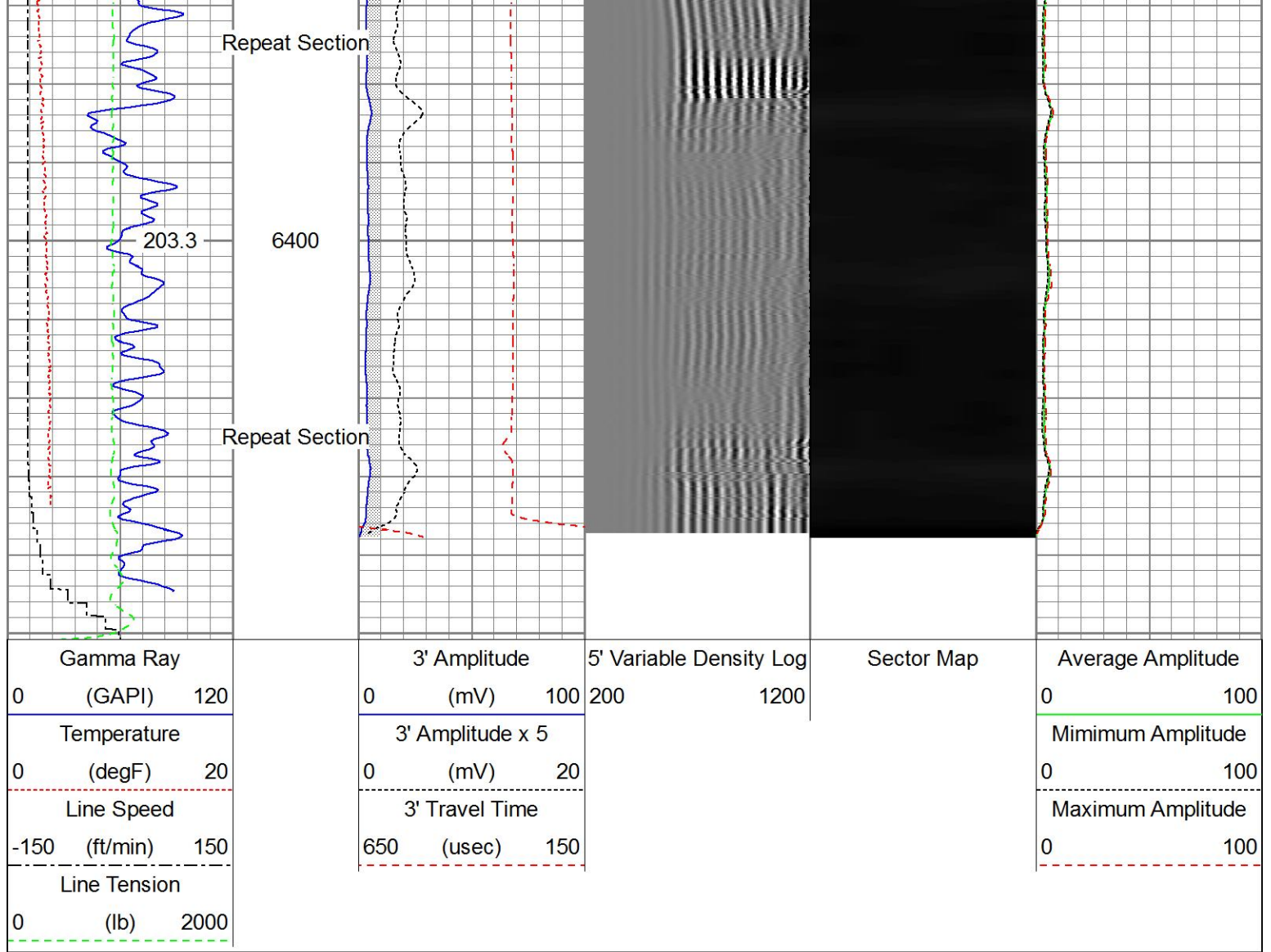
Repeat Pass


Recorded With 2800 PSI Surface Induced Pressure

Database File 0506906484_anadarko_folley south 1_09-09-16_rbl_w8.db
 Dataset Pathname repeat2.1
 Presentation Format ros_radrii
 Dataset Creation Tue Sep 13 11:01:02 2016
 Charted by Depth in Feet scaled 1:240







Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
HeadVolt	19.54		Titan_Electric_Cable_Heads-Titan_1-11/161.03 Electric Cable Head with 1" Fishing Neck	EE2.88_275	1.69	5.40
			Probe_ELine_BowSpring_Centralizer-P Probe 2-3/4" Electric Inline Bowspring Centralizer	2.75	2.75	20.00
			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
Temp	16.75					
WVFS8	14.58					
WVFS7	14.58					
WVFS6	14.58					
WVFS5	14.58					

WVFS4	14.58				
WVFS3	14.58				
WVFS2	14.58				
WVFS1	14.58				
WVFCAL	14.58				
WV3FT	14.58				
WV5FT	13.58				
HEADVOLT	10.33				
DCCL	6.51				
CCL	6.51				
GR	3.77				
		Probe_ELine_BowSpring_Centralizer-P Probe 2-3/4" Electric Inline Bowspring Centralizer	EE2.88,275	2.75	20.00
		Probe_GR_CCL-P_CGR_2750_S (FW1214.571) Probe 2-3/4" Digital CCL / Gamma Ray Combined	1214.571	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:	0506906484_Anadarko_Folley South 1_09-09-16_RBL_w8.db: field/well/run1/main
Total length:	23.43 ft
Total weight:	225.40 lb
O.D.:	2.75 in

Calibration Report		
Database File	0506906484_Anadarko_Folley South 1_09-09-16_RBL_w8.db	
Dataset Pathname	main	
Dataset Creation	Fri Sep 09 15:36:49 2016	
Gamma Ray Calibration Report		
Serial Number:	FW1211-081	
Tool Model:	P_CGR_2750_S	
Performed:	Sat Feb 06 11:31:52 2016	
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:	5.500	in
Calibration Depth:	-11.776	ft

Master Calibration, performed Fri Sep 09 14:24:31 2016:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.002	0.753	0.800	71.921	94.699	0.643
CAL	0.001	0.772				
5'	0.002	0.714	0.800	71.921	99.807	0.640
SUM						
S1	0.001	0.742	0.000	100.000	135.070	-0.186
S2	0.001	0.746	0.000	100.000	134.293	-0.190
S3	0.002	0.745	0.000	100.000	134.513	-0.202
S4	0.002	0.739	0.000	100.000	135.600	-0.220
S5	0.001	0.755	0.000	100.000	132.754	-0.170
S6	0.001	0.756	0.000	100.000	132.434	-0.175
S7	0.003	0.756	0.000	100.000	132.769	-0.357
S8	0.002	0.755	0.000	100.000	132.681	-0.232

Internal Reference Calibration, performed Wed Aug 03 10:40:08 2016:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.001	0.772	1.000	0.000

Air Zero Calibration, performed Fri Sep 09 14:24:53 2016:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.002		0.000		-0.000	
5'	0.002		0.000		-0.000	
SUM						
S1	0.001		0.000		0.000	
S2	0.001		0.000		-0.000	
S3	0.001		0.000		0.000	
S4	0.002		0.000		0.000	
S5	0.001		0.000		0.000	
S6	0.001		0.000		-0.000	
S7	0.003		0.000		-0.000	
S8	0.002		0.000		-0.000	



Company Kerr-McGee Oil & Gas Onshore, L.P.
 Well Folley South 1
 Field Wattenberg
 County Larimer
 State Colorado