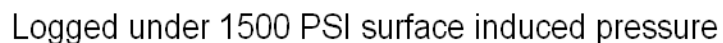


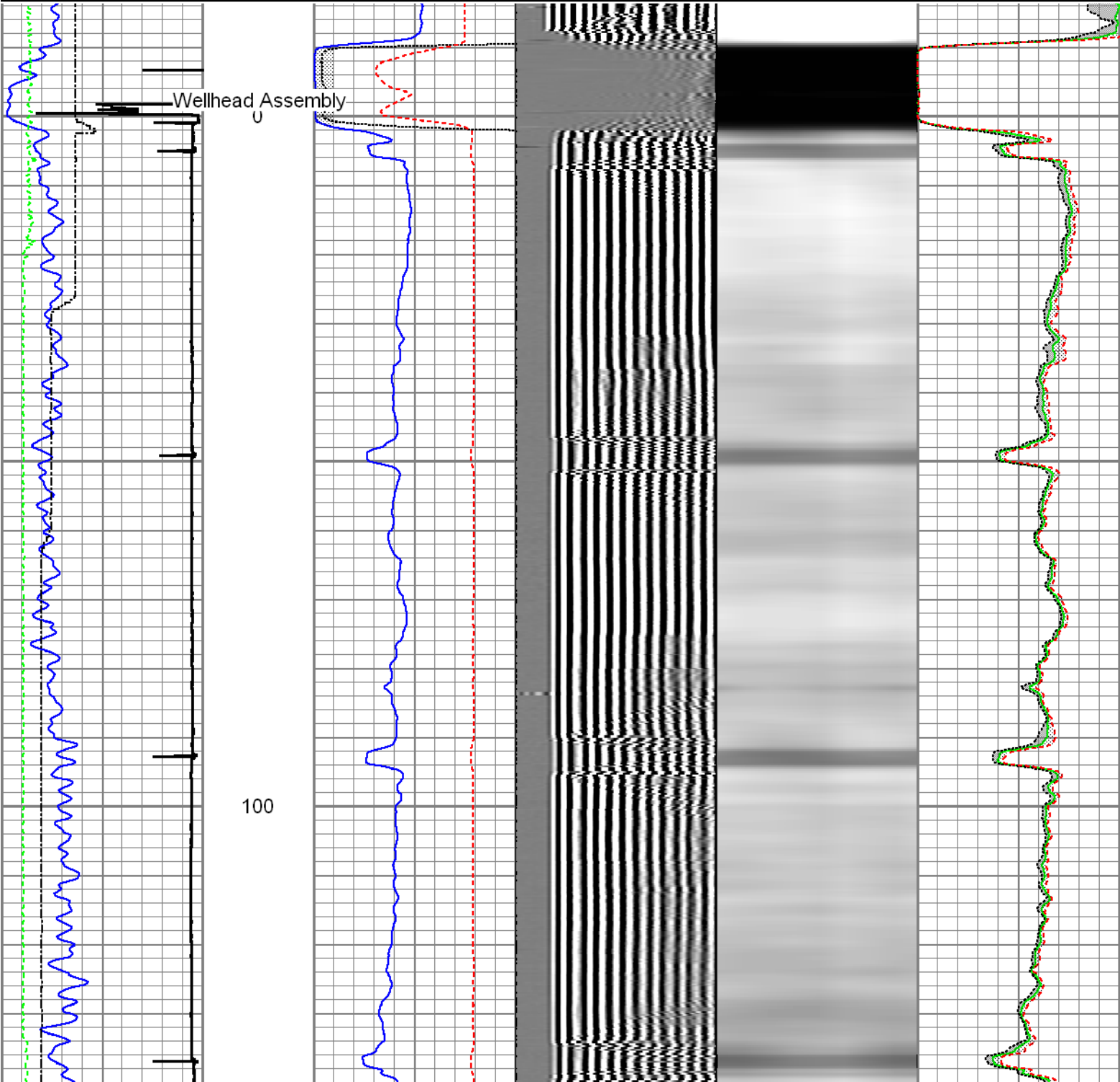


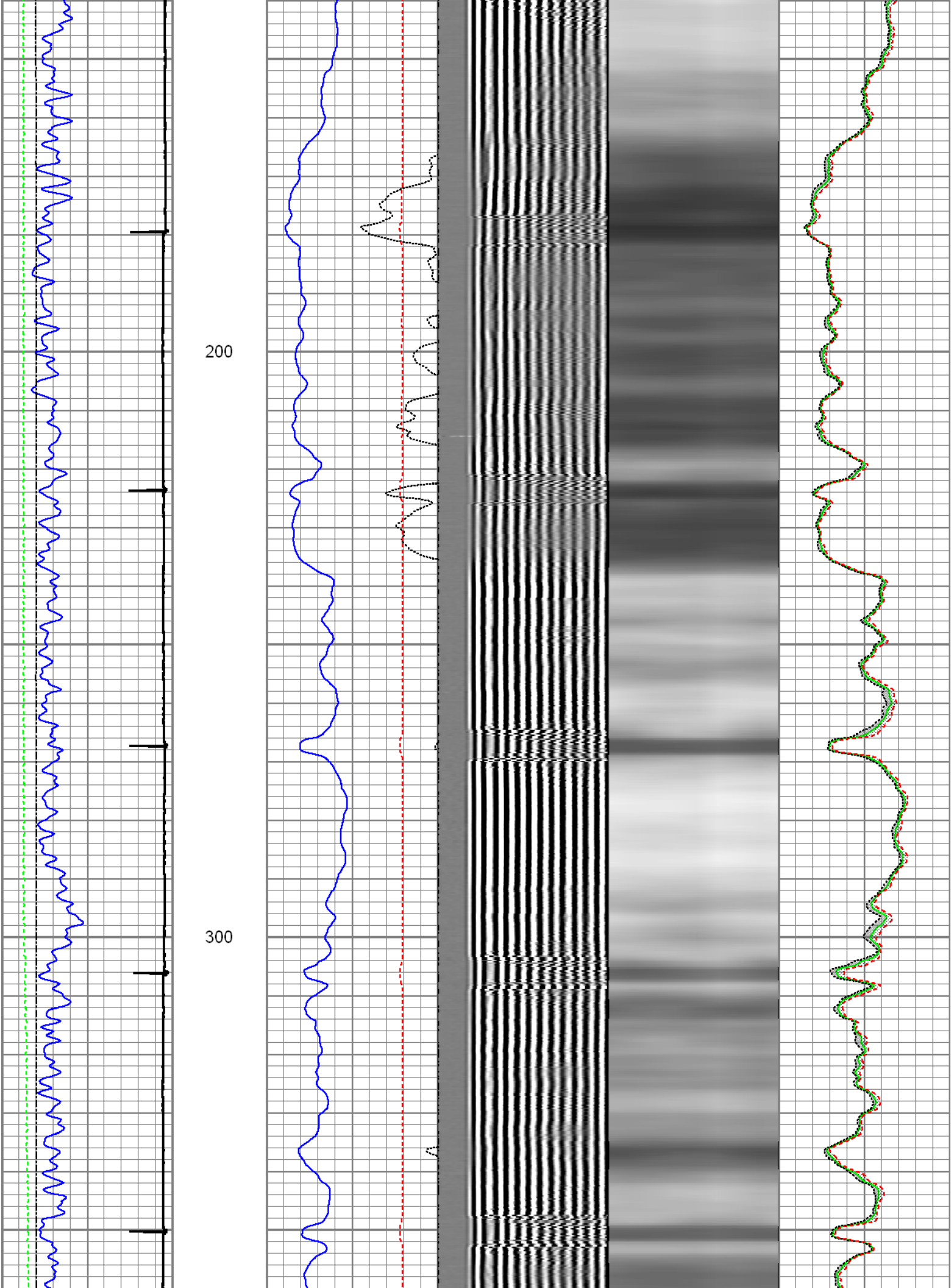
<<< Fold Here >>>
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible 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. All wireline depths measured from KB zero at 21 FT. Depth referenced to casing tally reported liner top at 5082 FT. Adjusted log -22 FT from KB zero to correlate with liner top. Log ran from just below liner top to surface. Log ran with 1500 PSI surface induced pressure. Thank you for choosing FMC Technologies Completion Services, Inc.!!

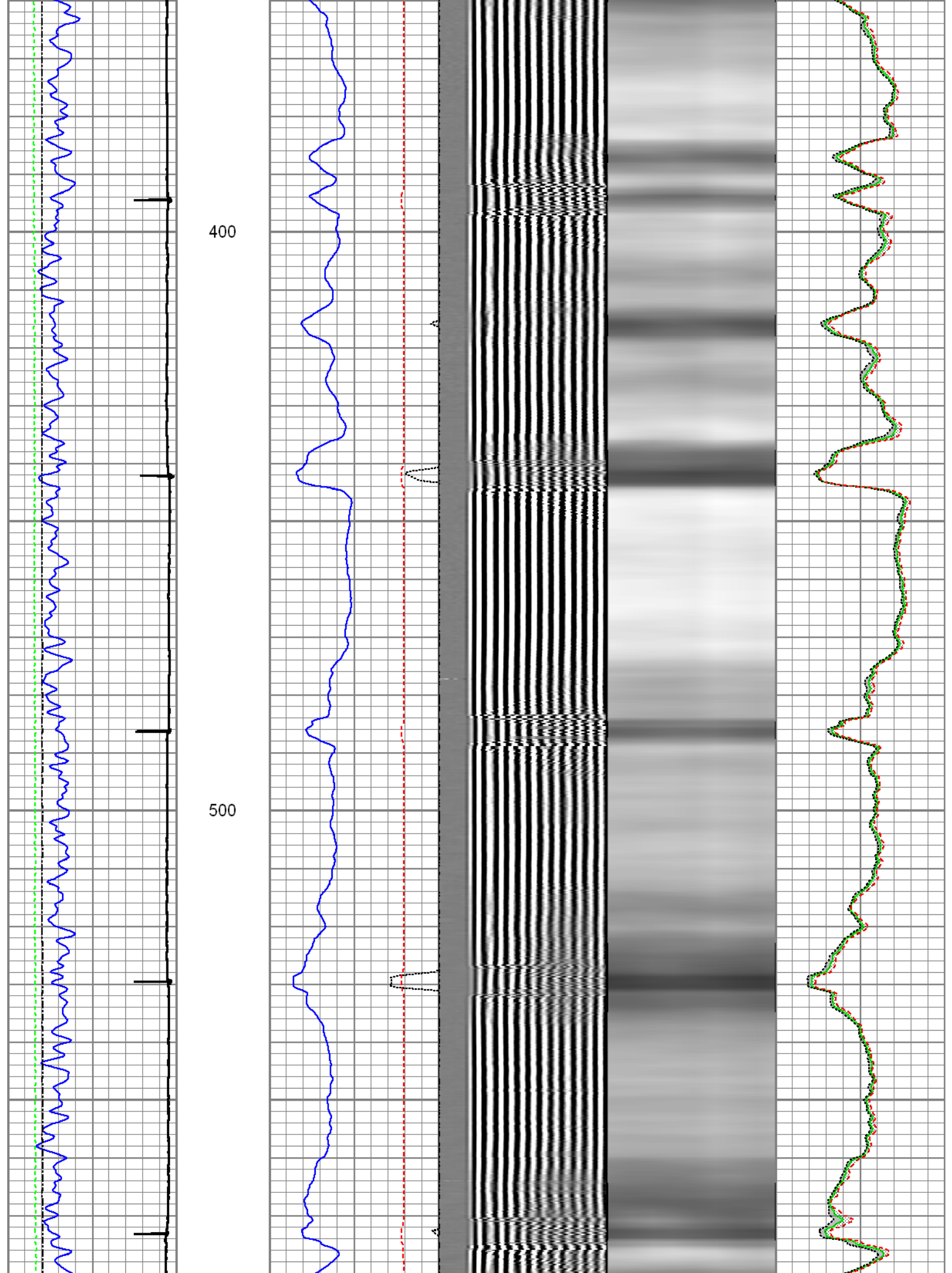


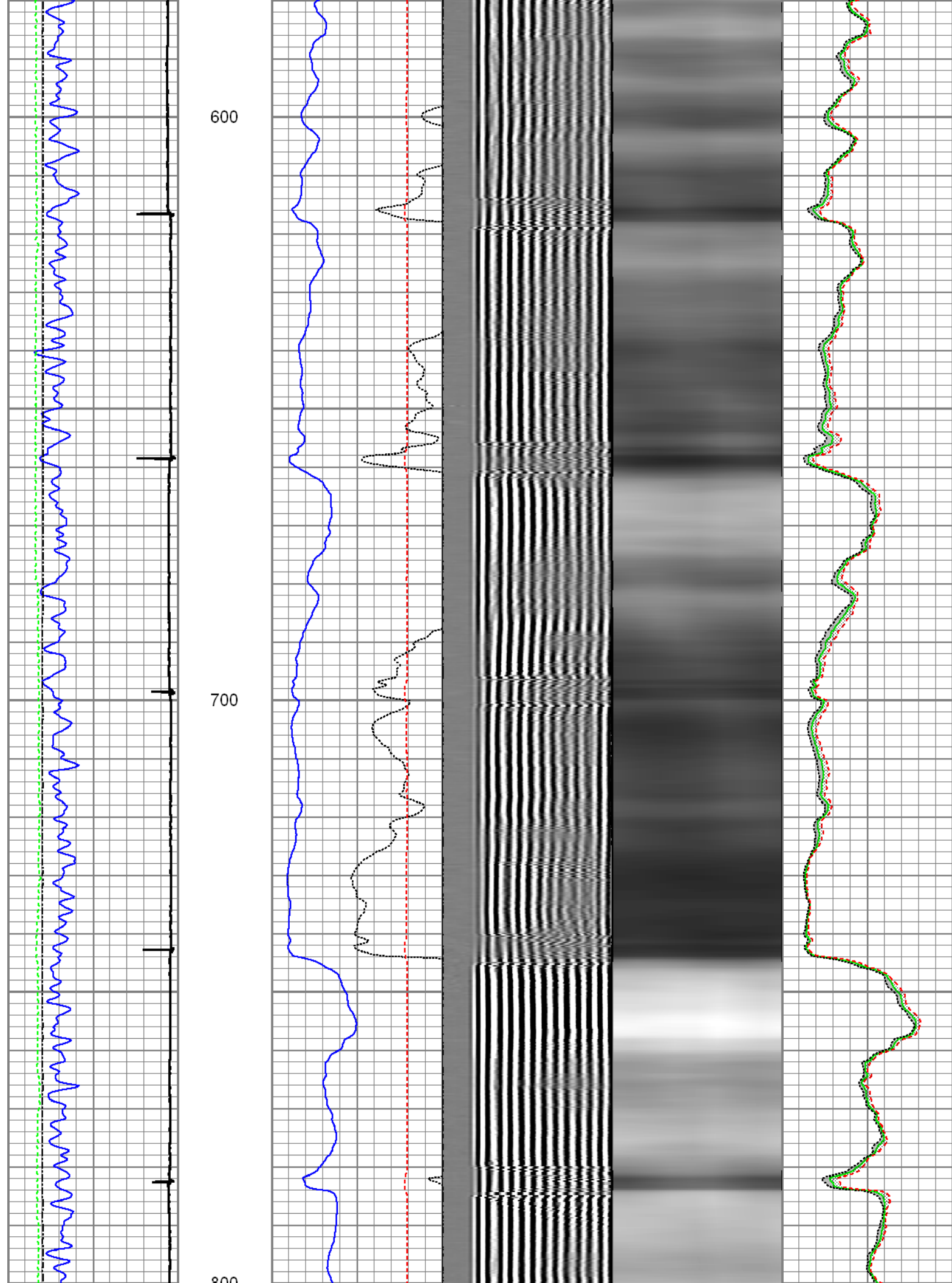
Database File: 04-18-15_whiting_razor 11h-1415a_mit_rbl.db
Dataset Pathname: pass5
Presentation Format: rbt4_mit
Dataset Creation: Sat Apr 18 08:34:29 2015 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

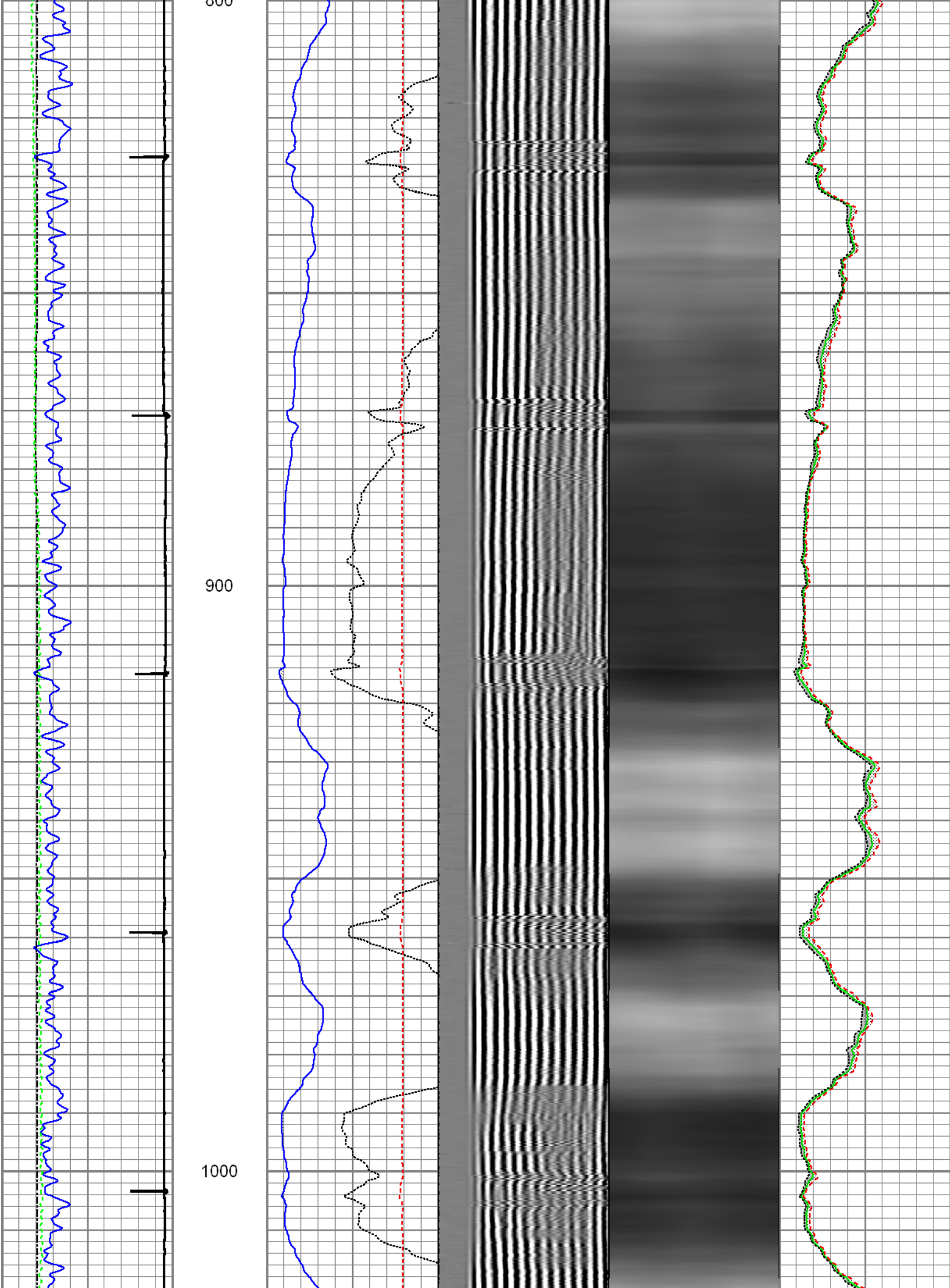
Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120	0 (mV) 100	200 1200		0 100
Line Speed	3' Amplitude x 5			Minimum Amplitude
-100 (ft/min) 100	0 (mV) 20			0 100
Line Tension	3' Travel Time			Maximum Amplitude
0 (lb) 2000	650 (usec) 150			0 100
Casing Collar Locator				

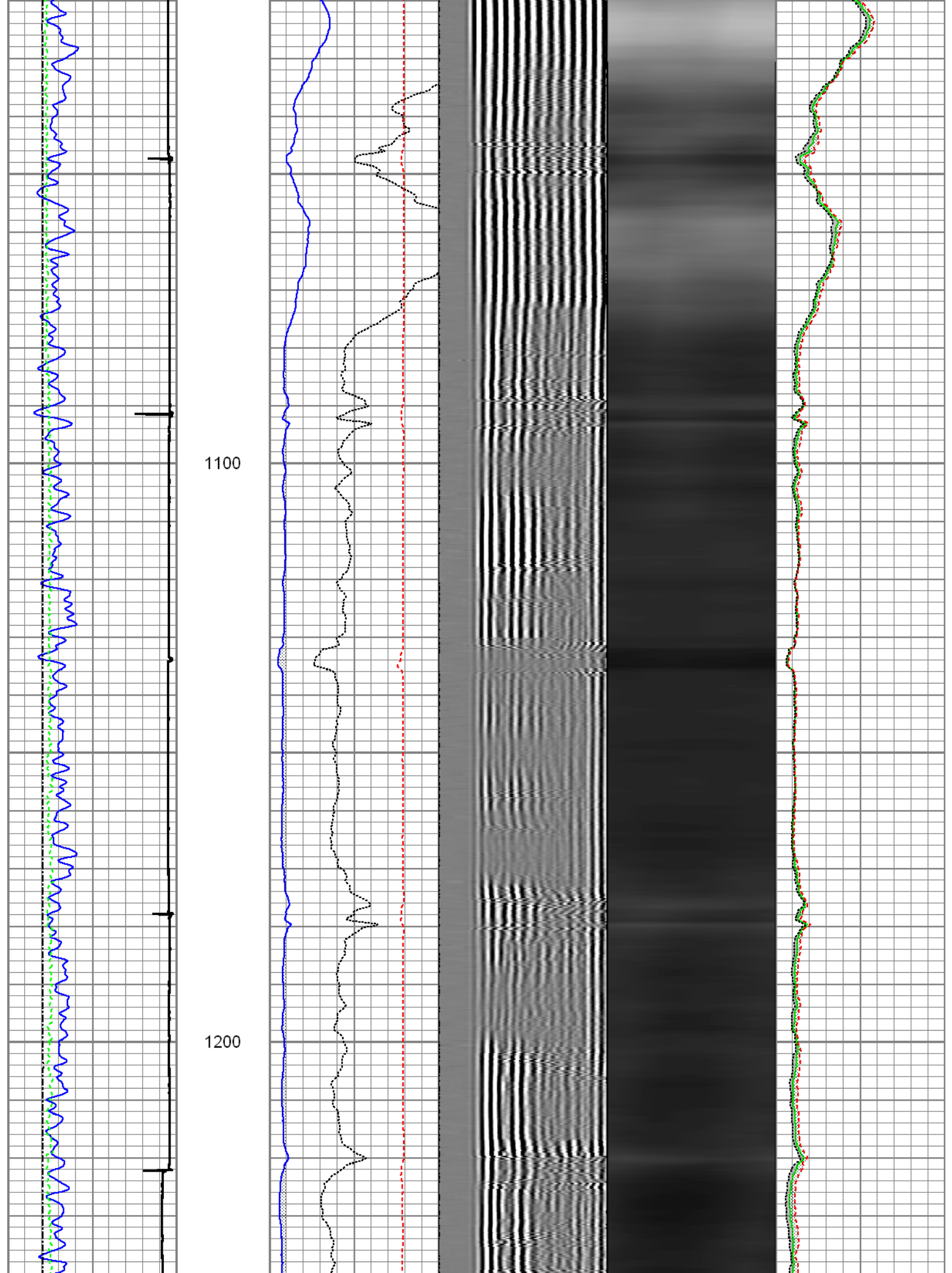


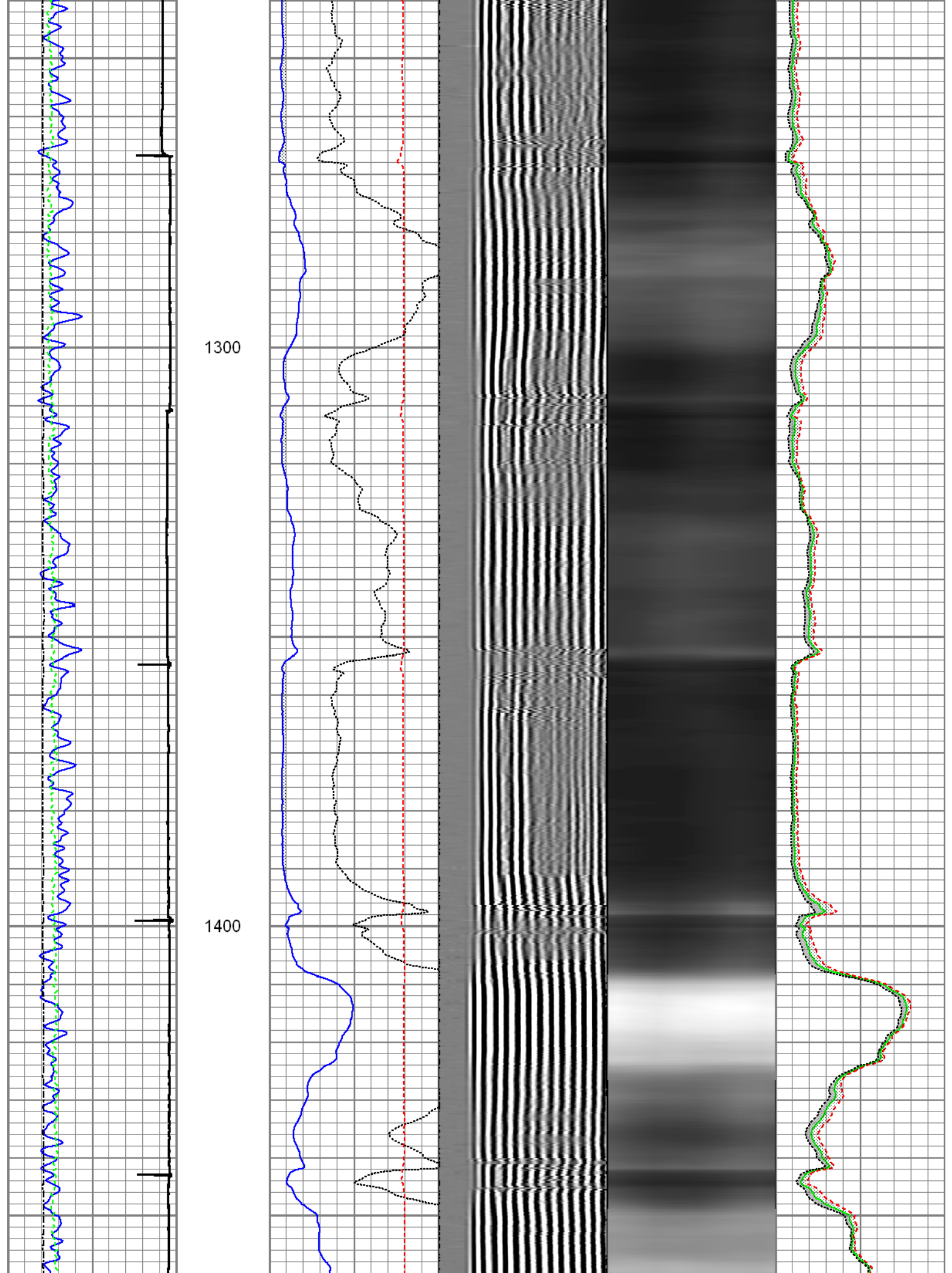


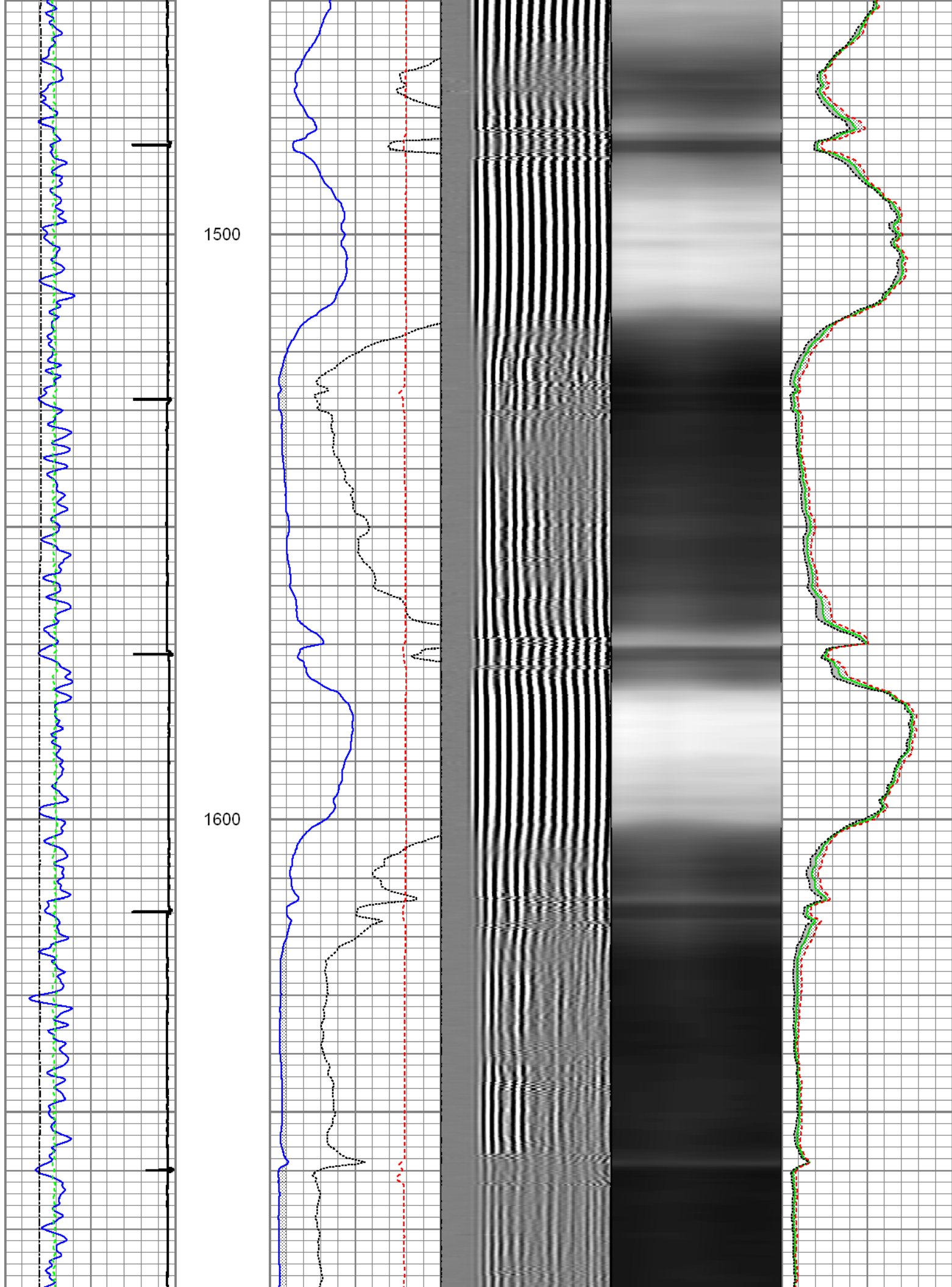


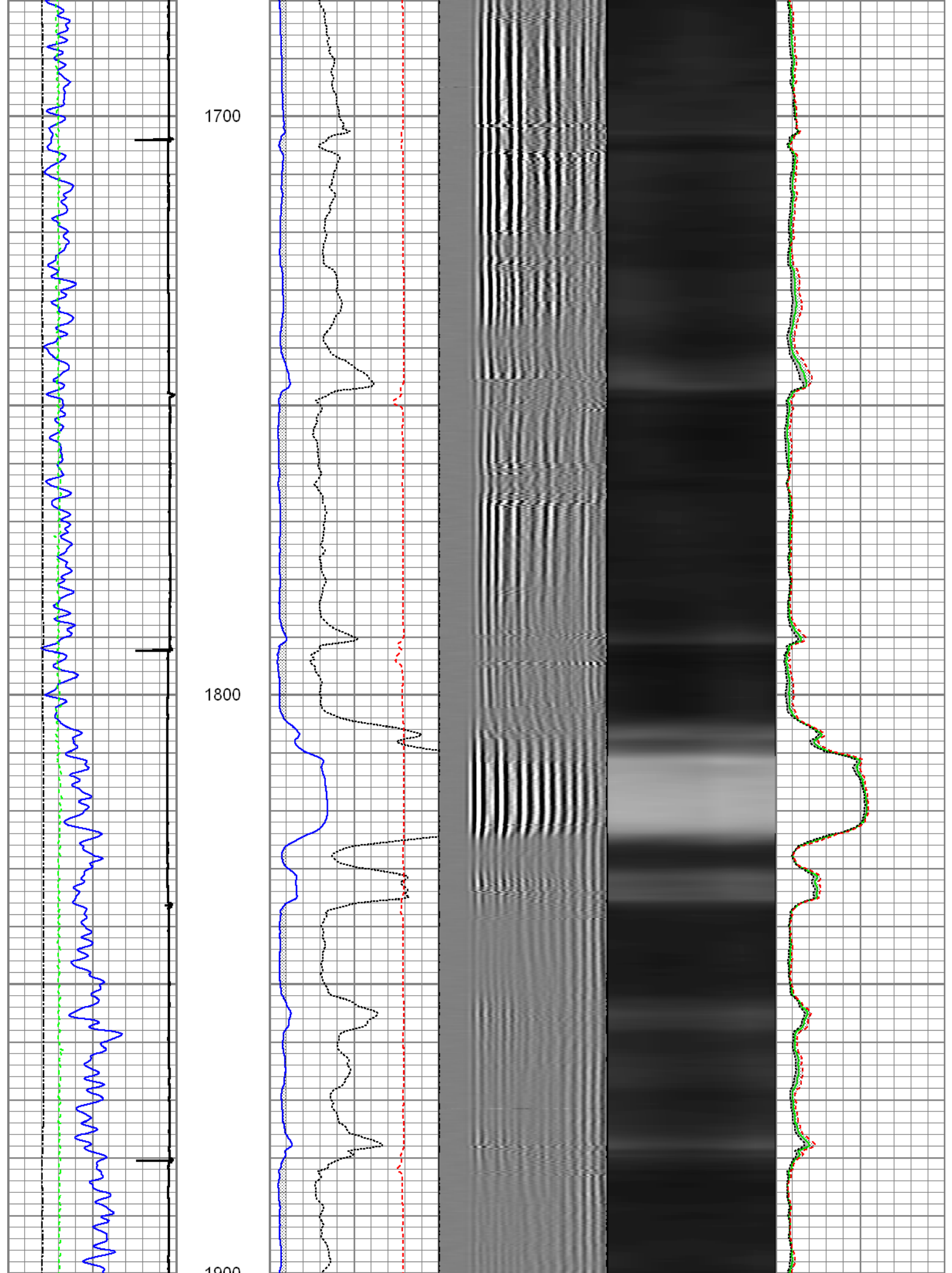


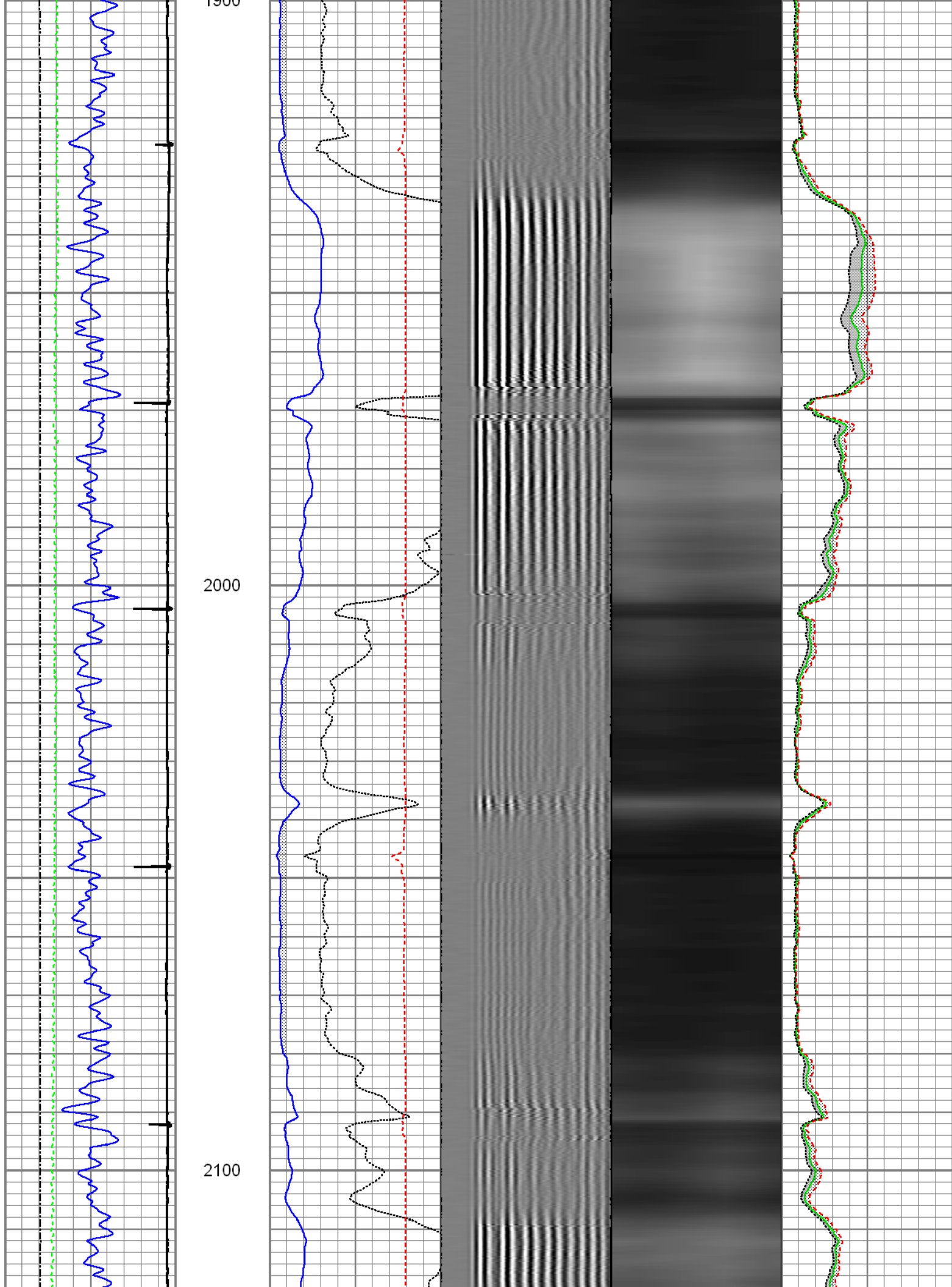






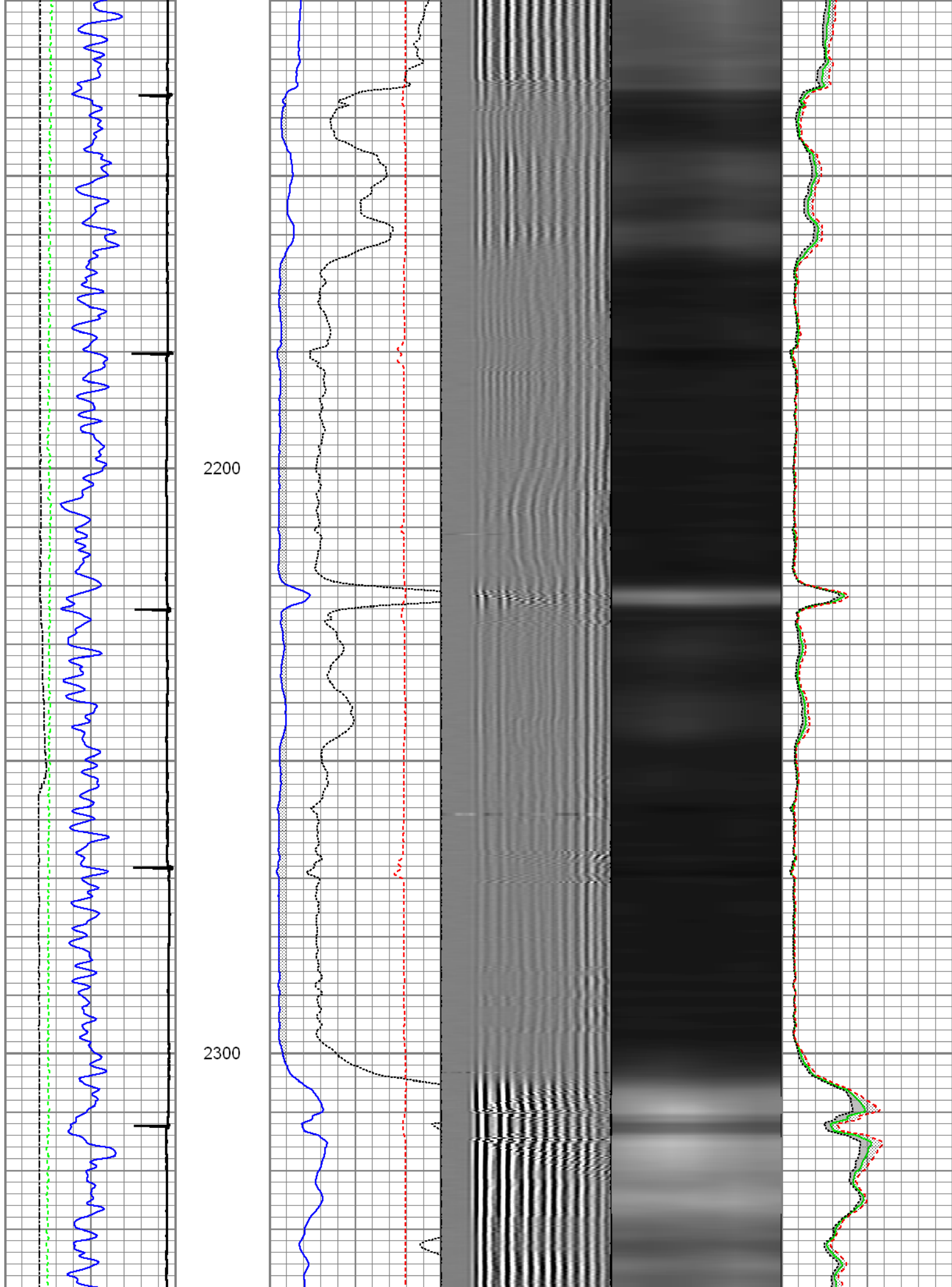


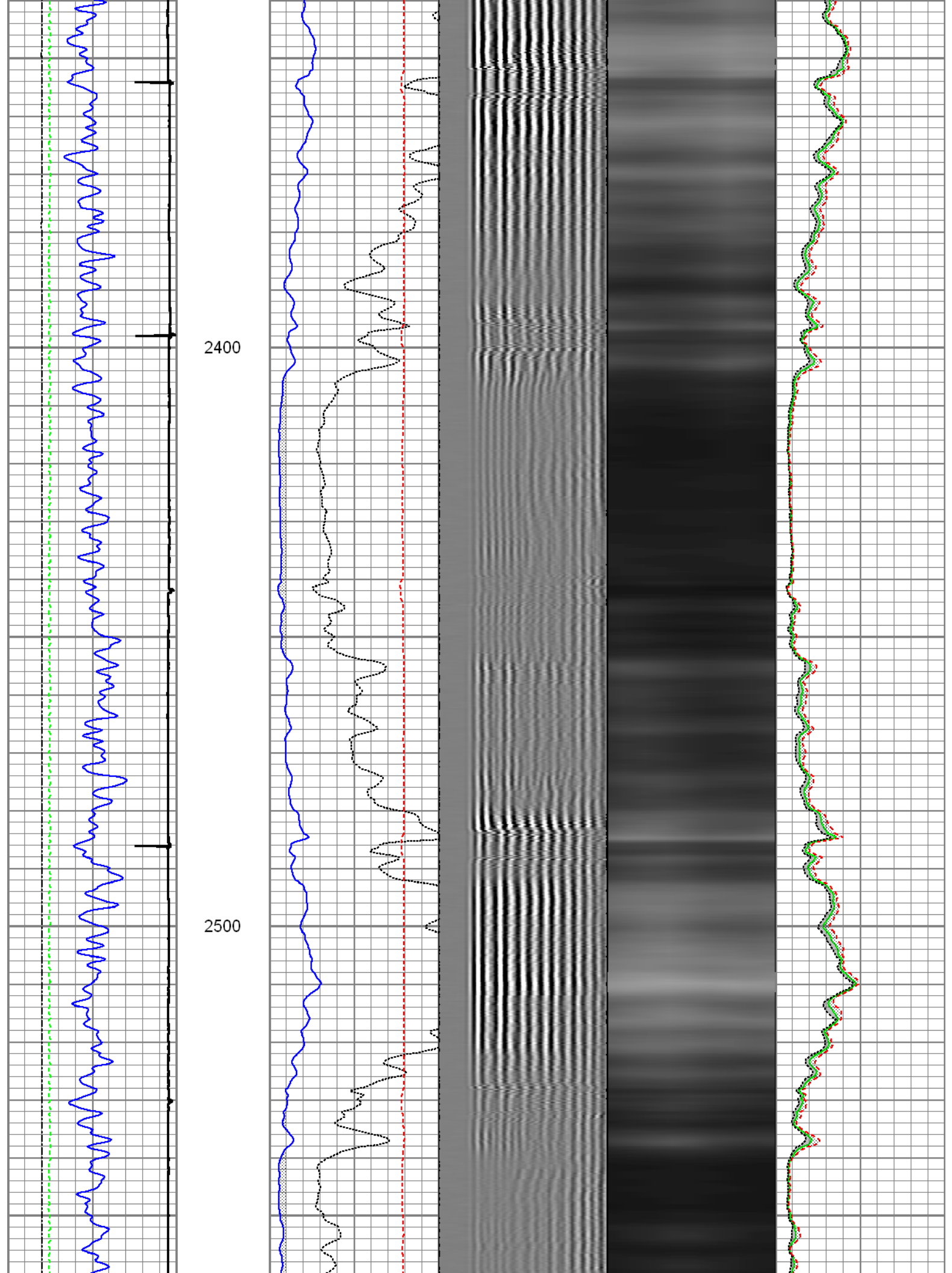


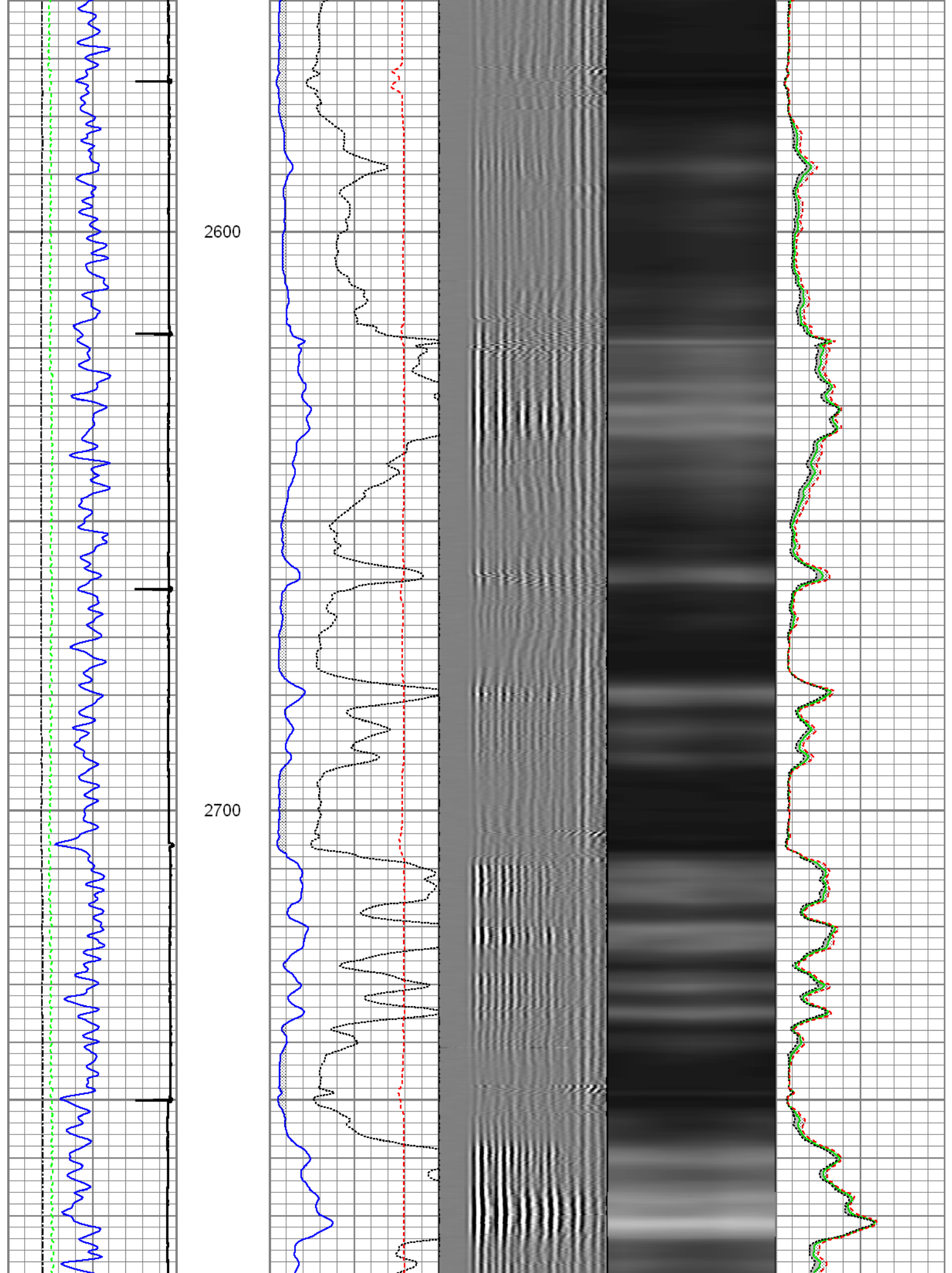


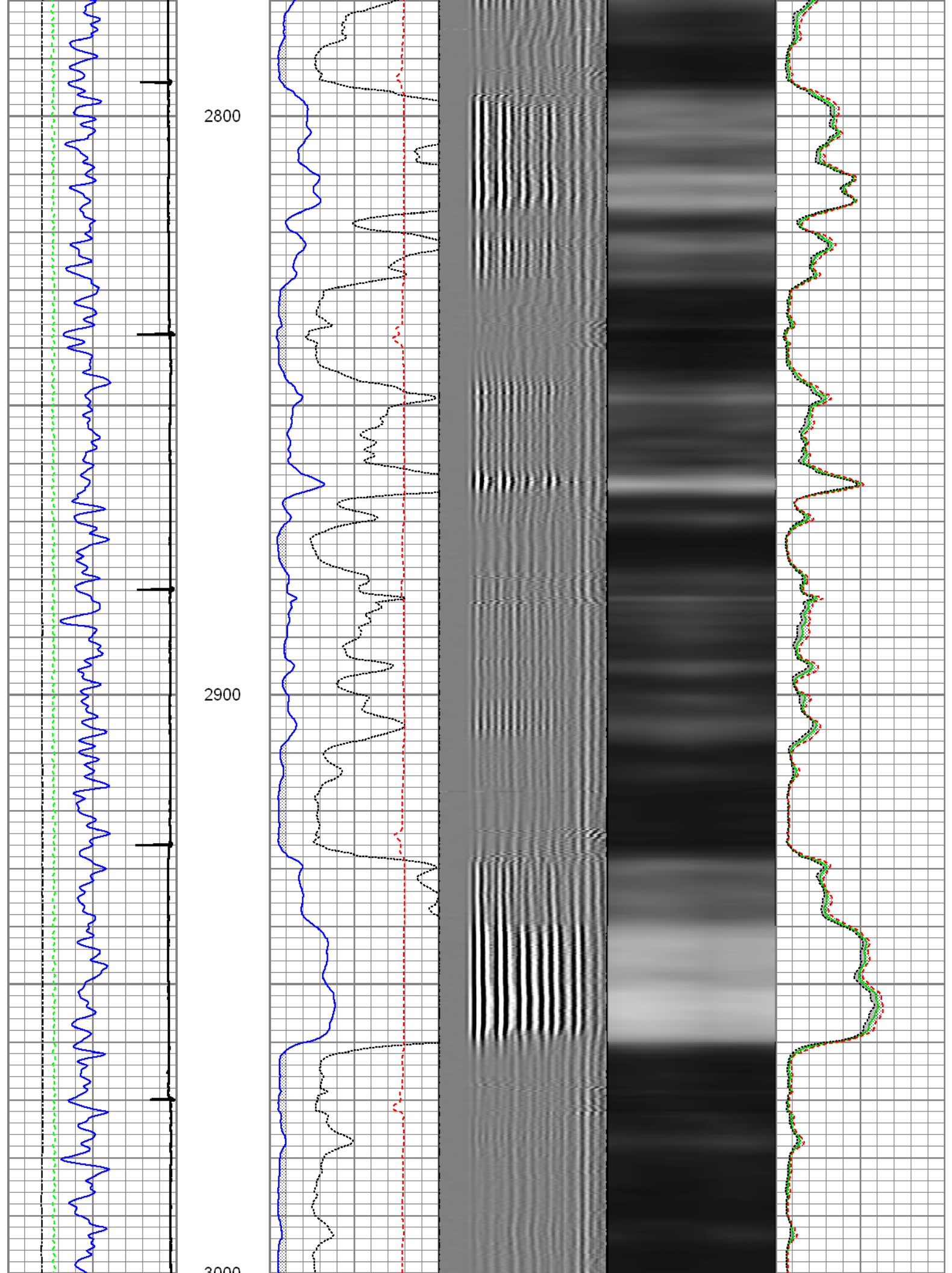
2200

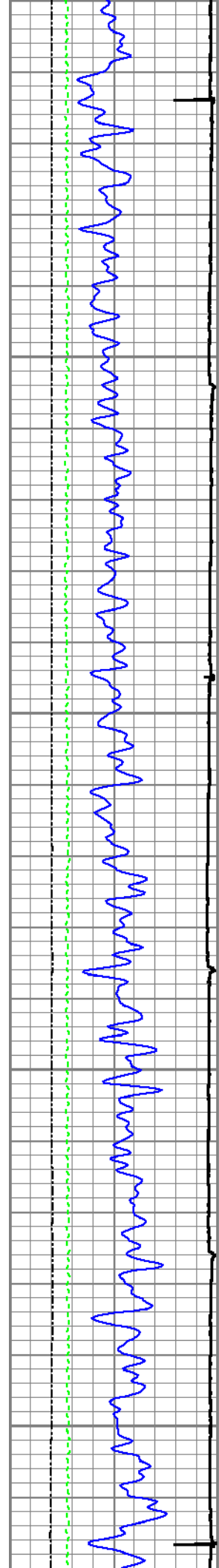
2300



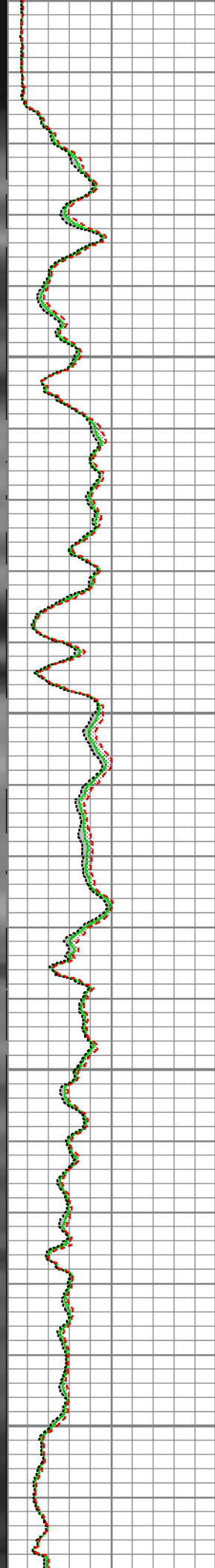
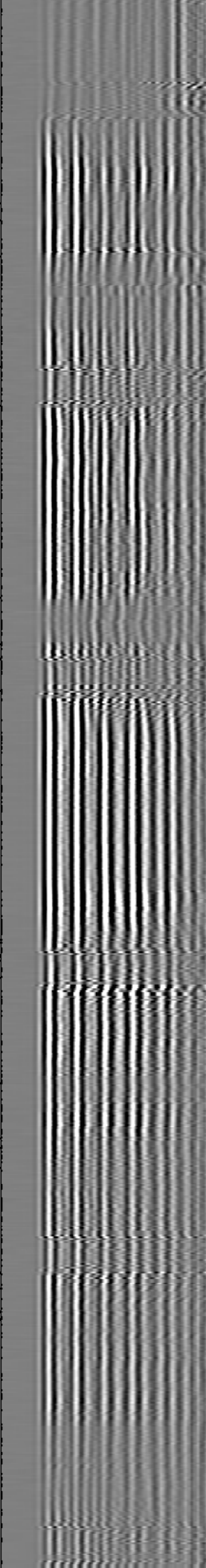
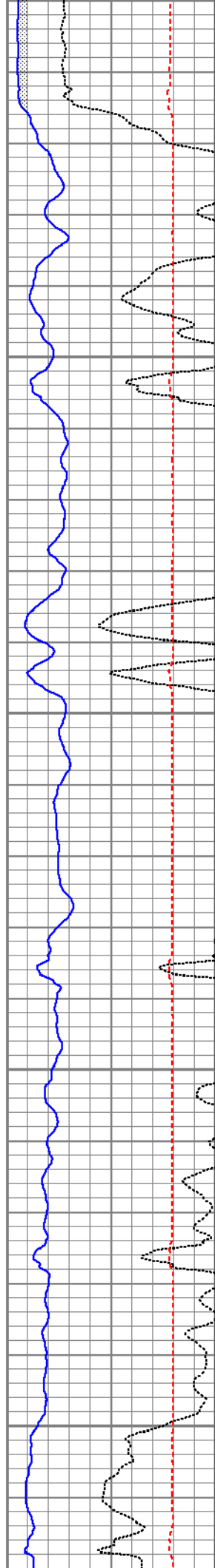


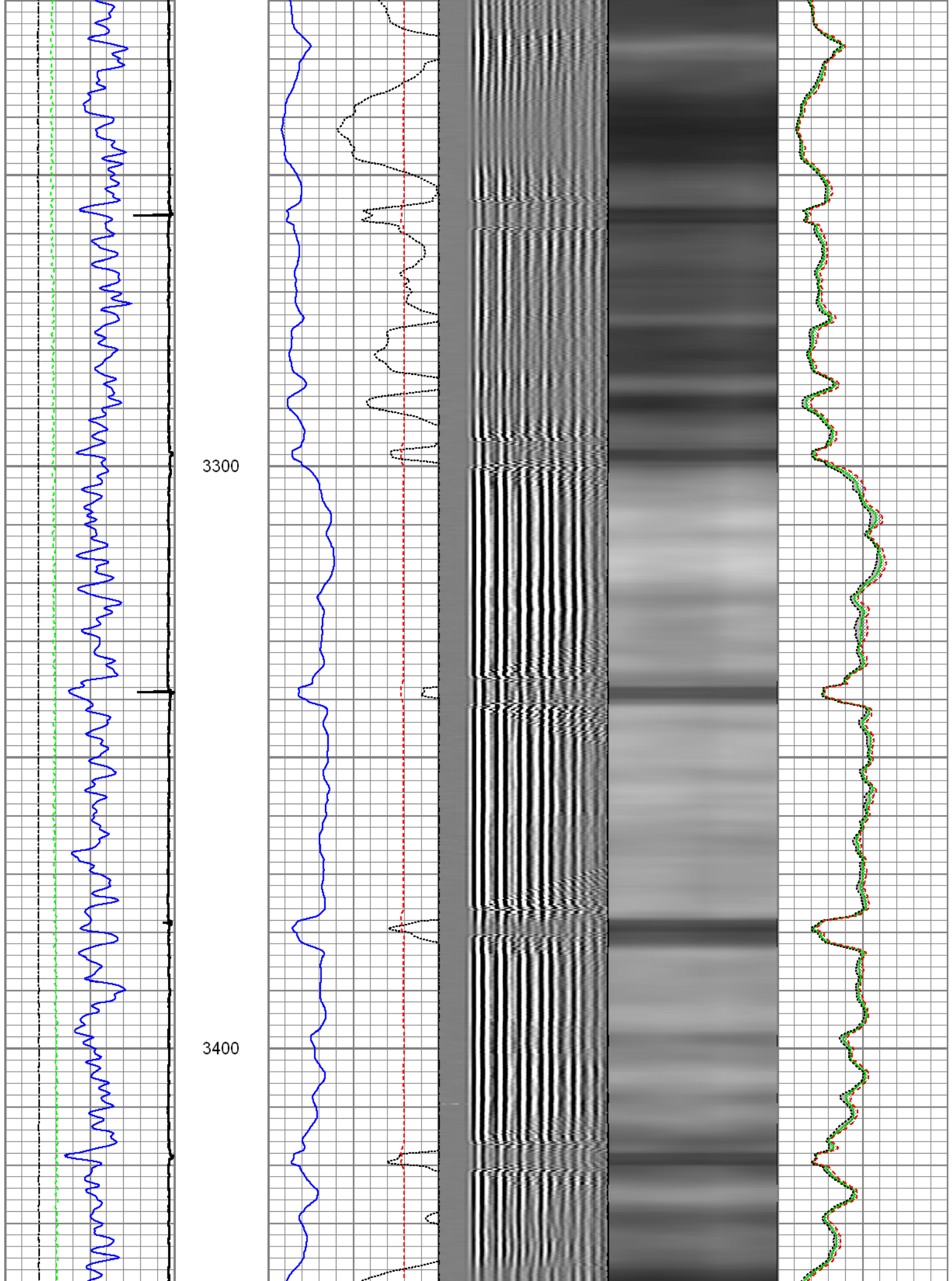


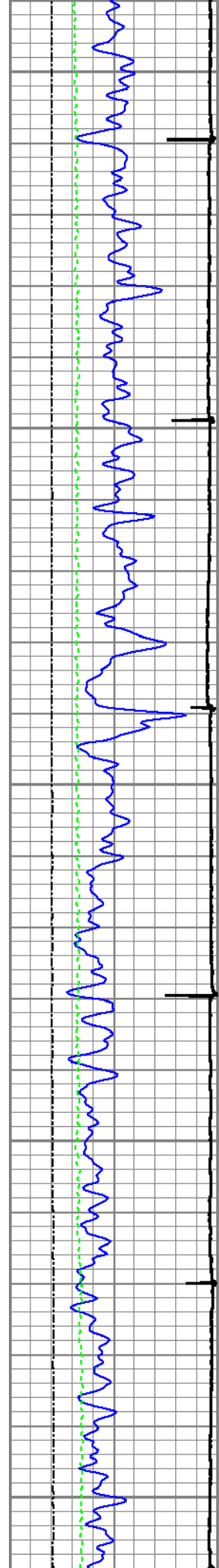




3000
3100
3200

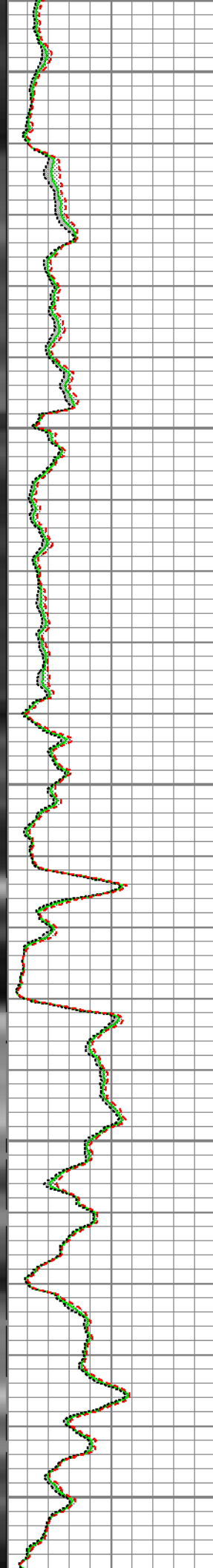
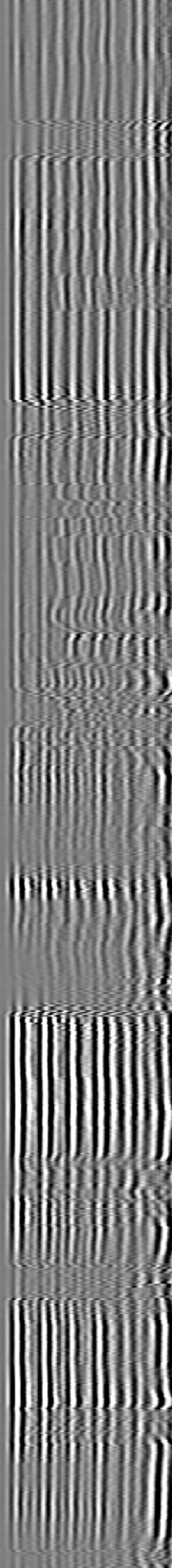
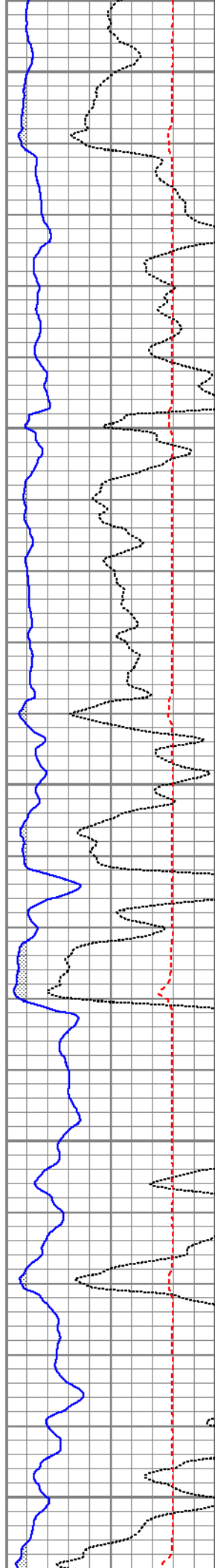


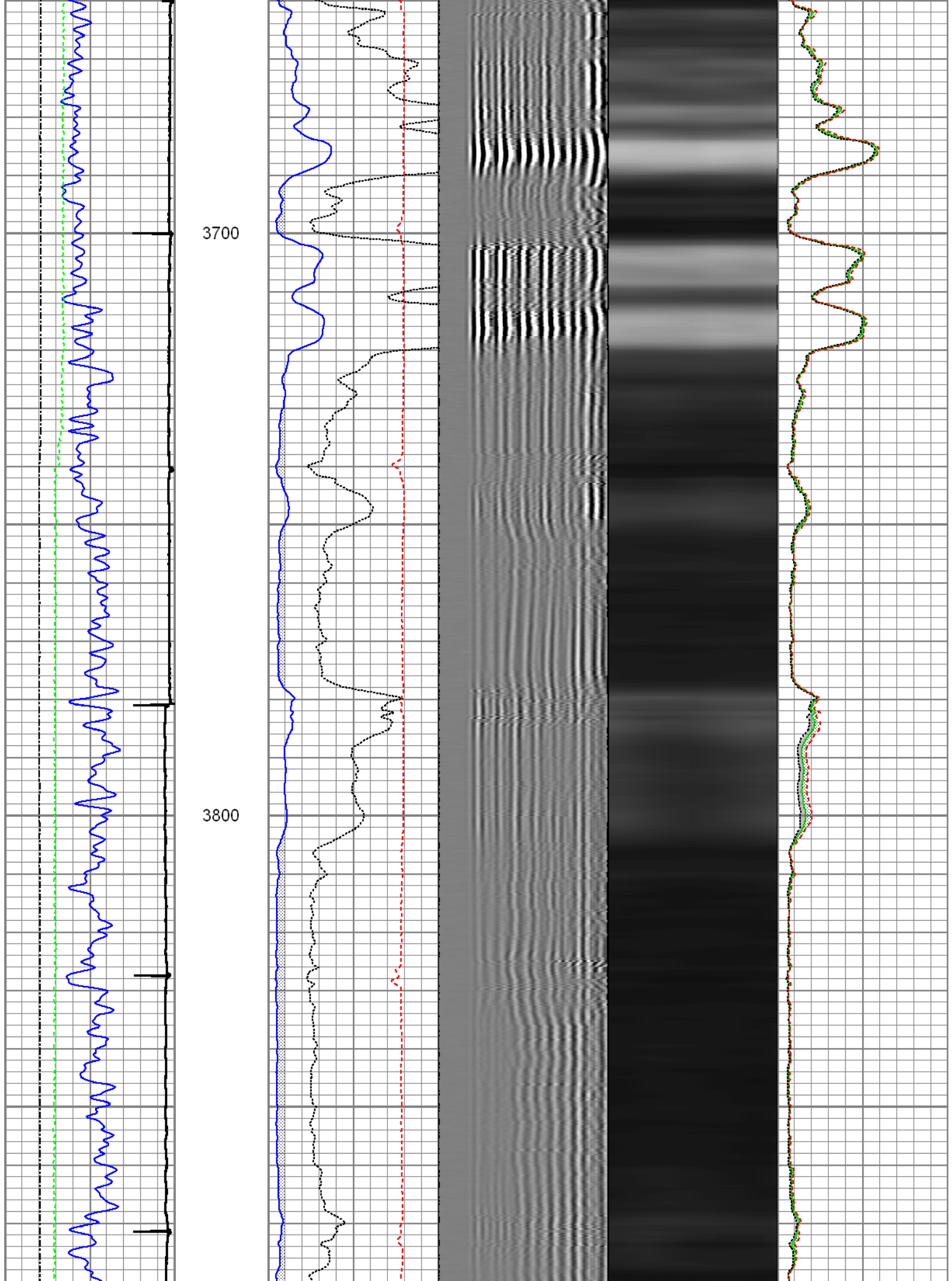


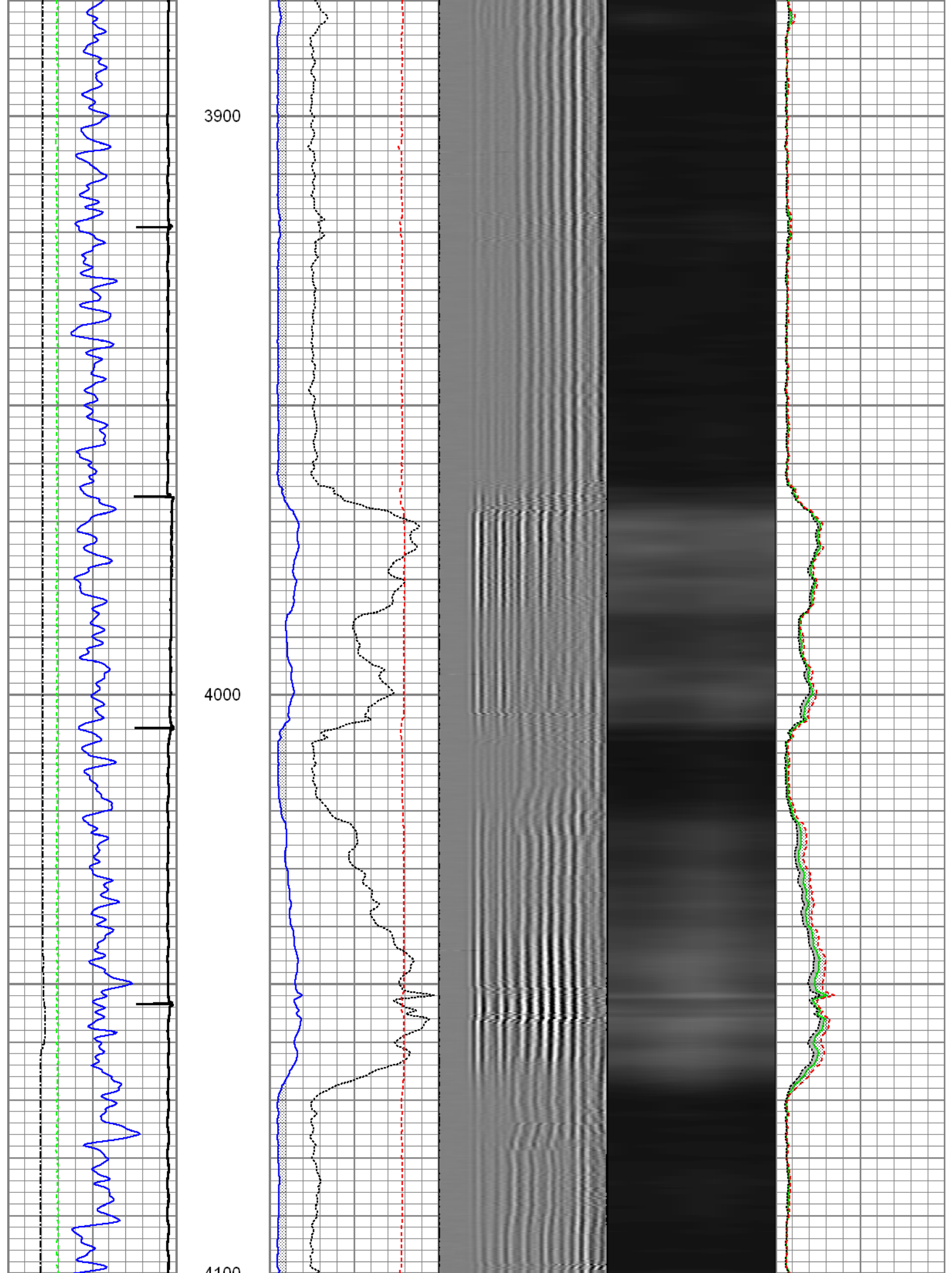


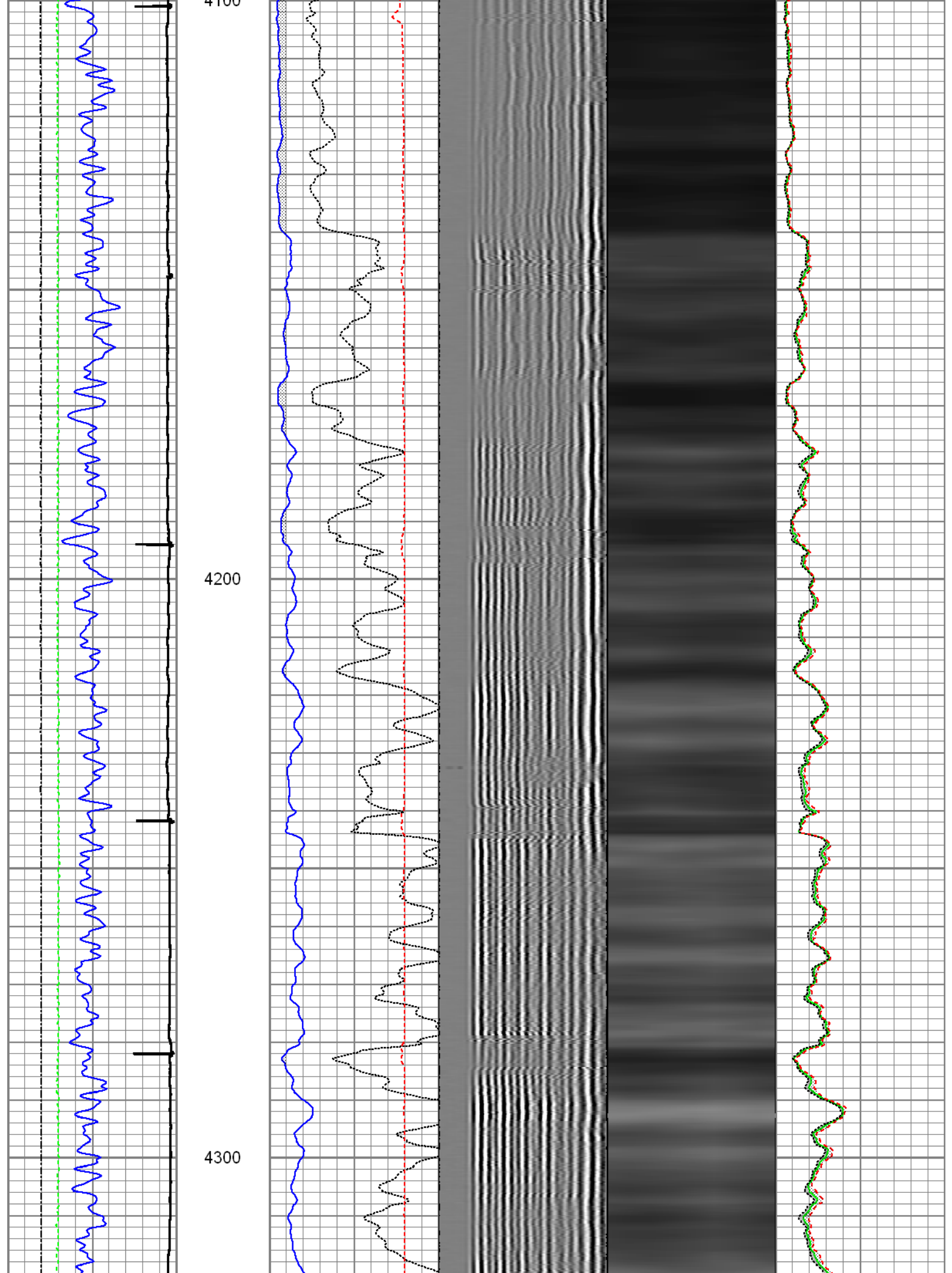
3500

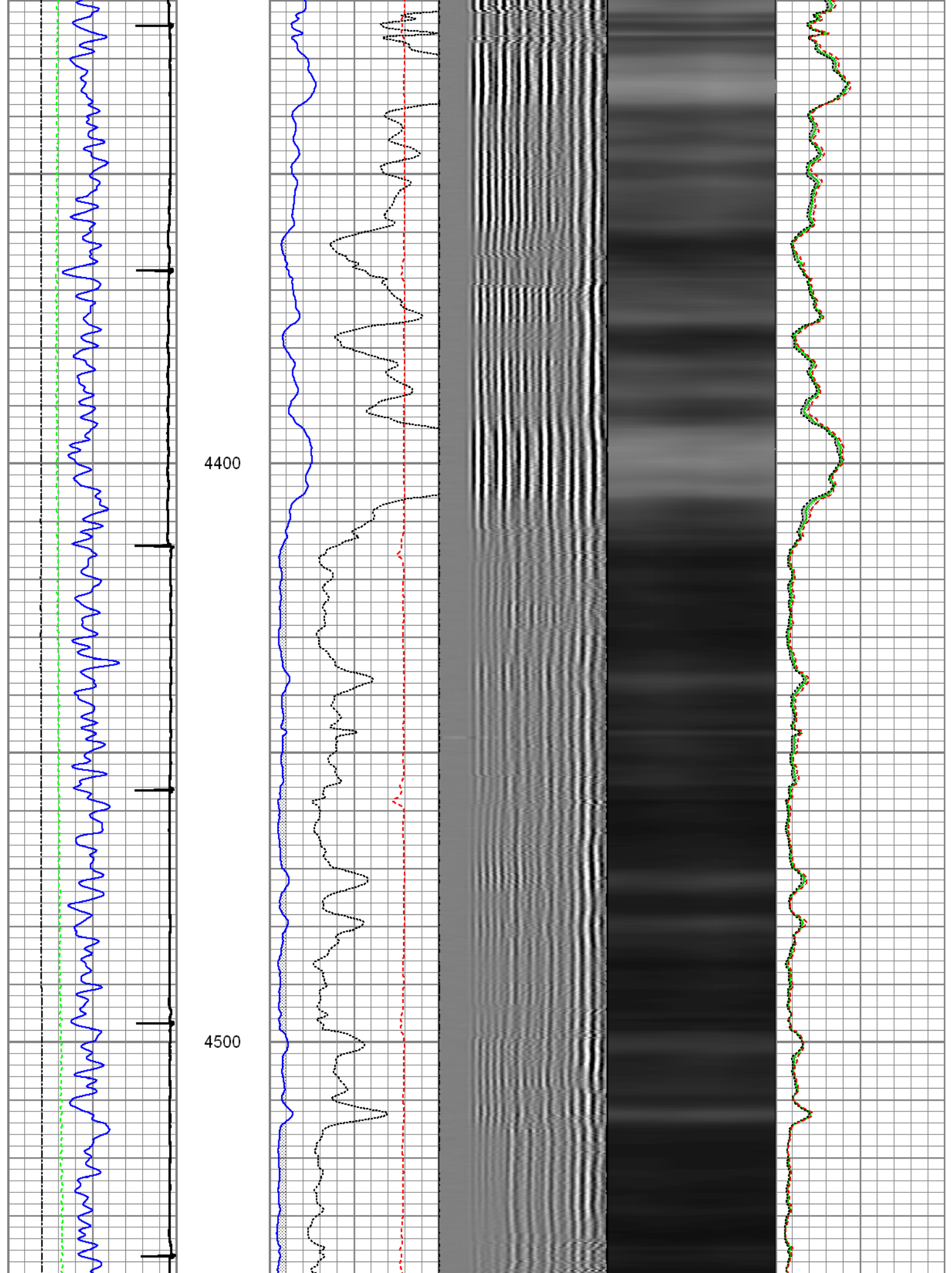
3600

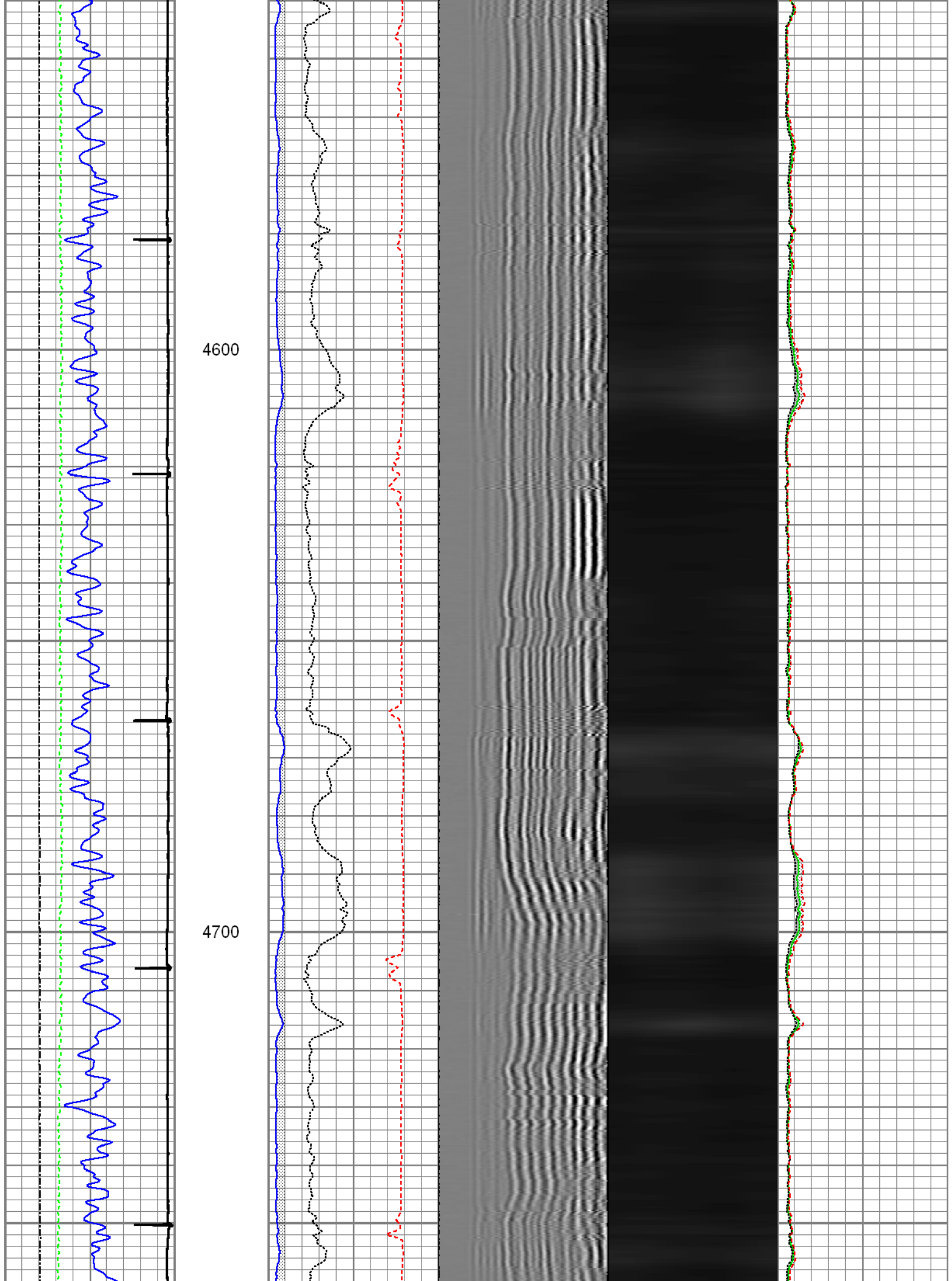


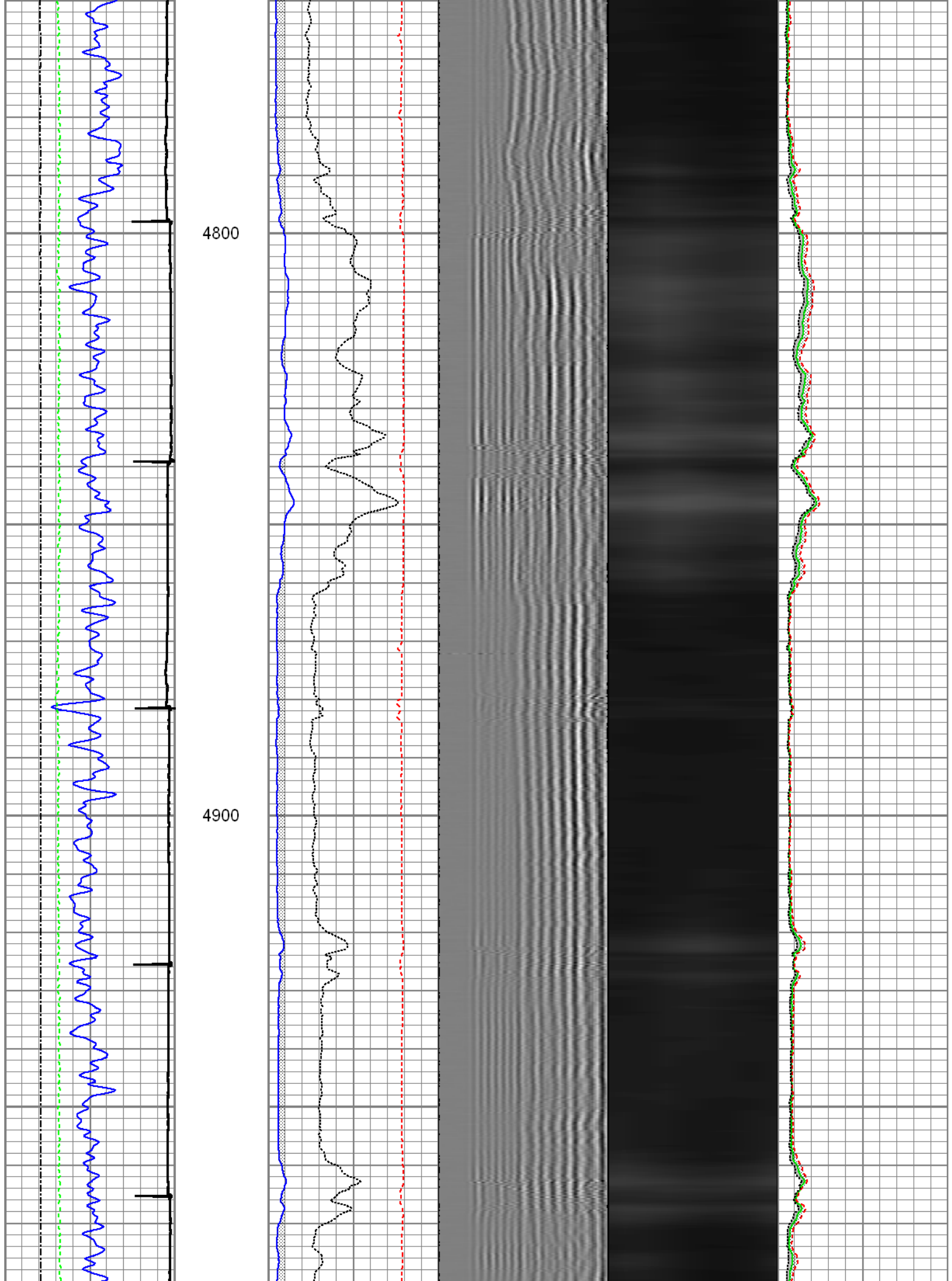


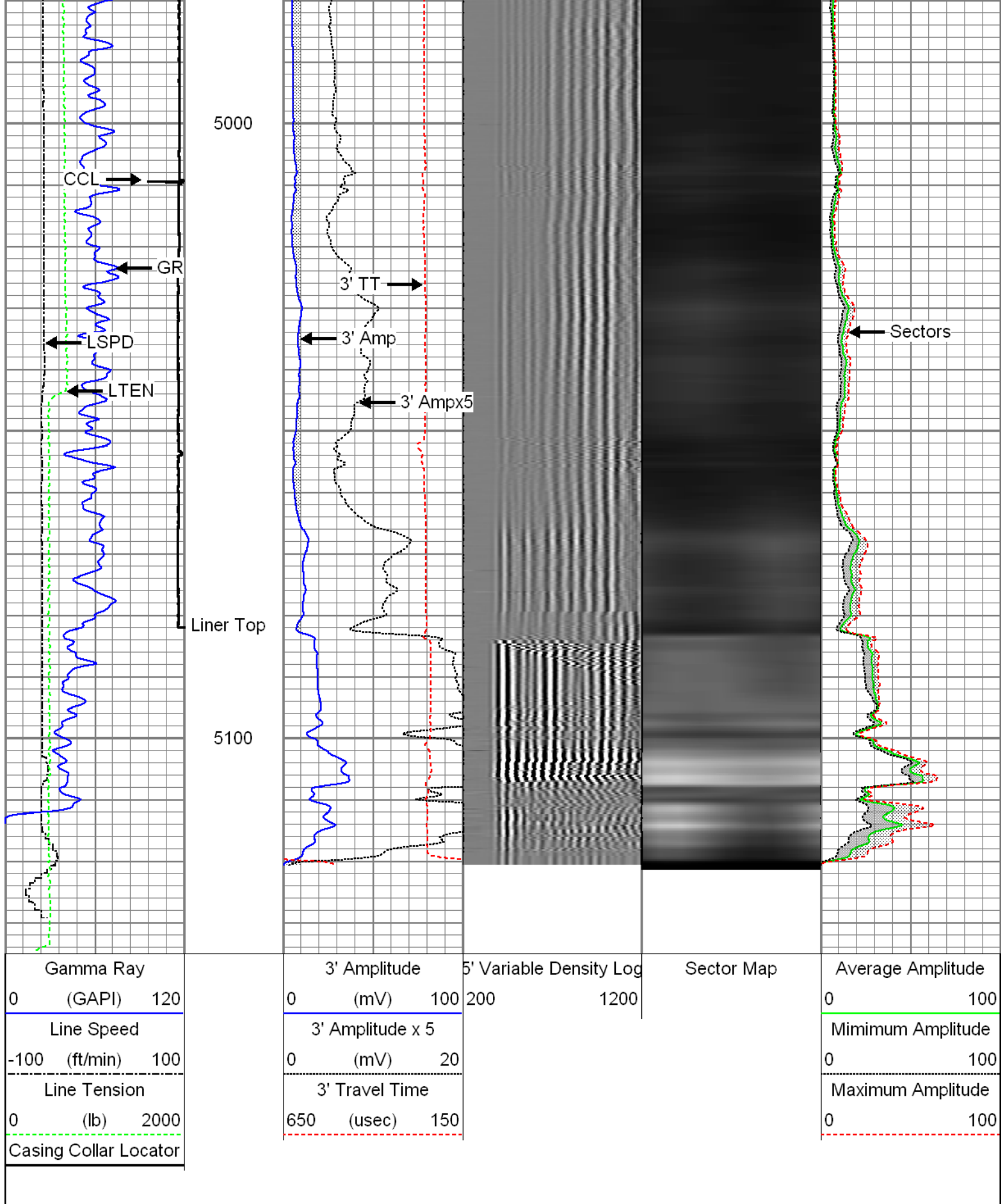






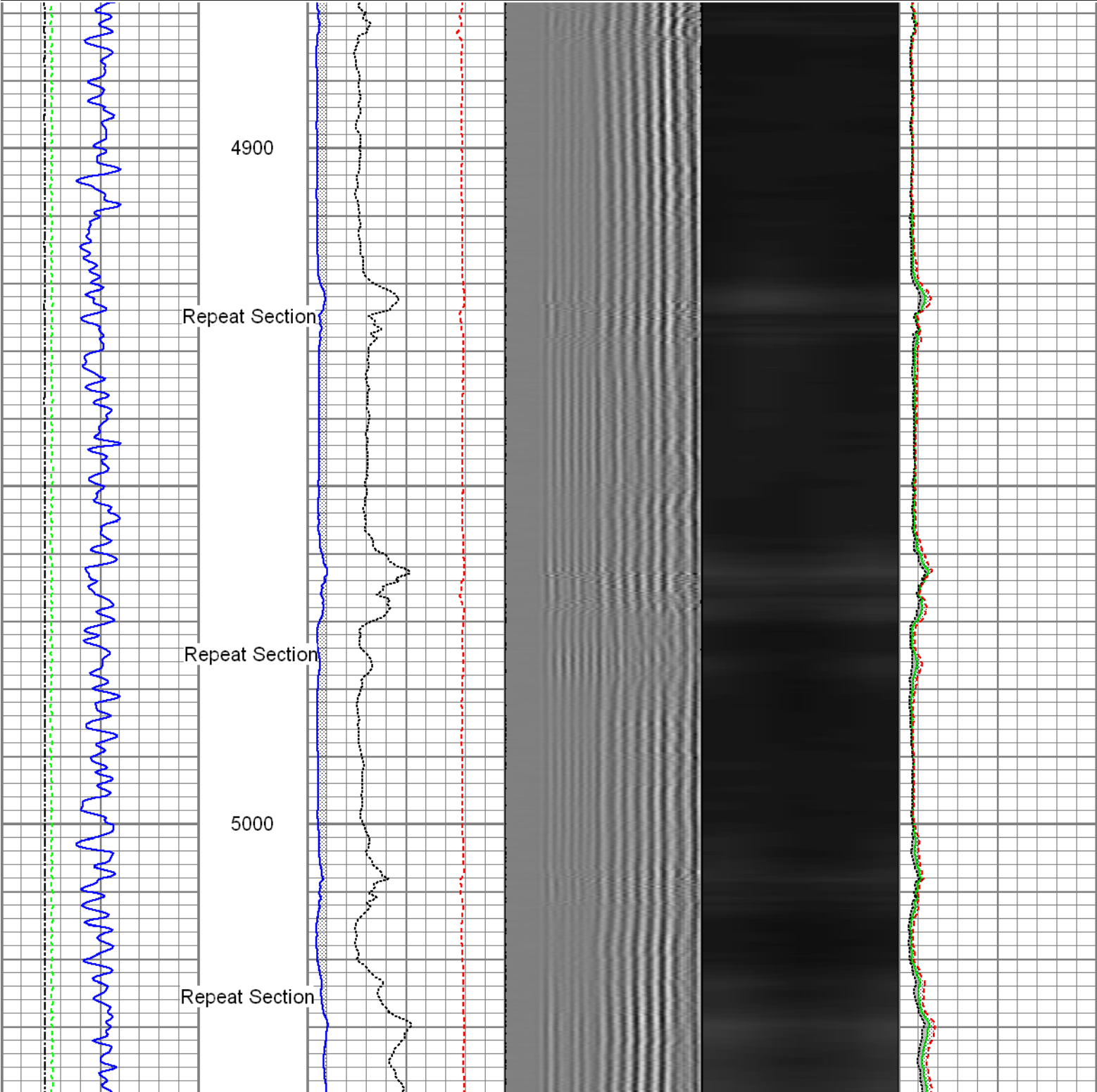


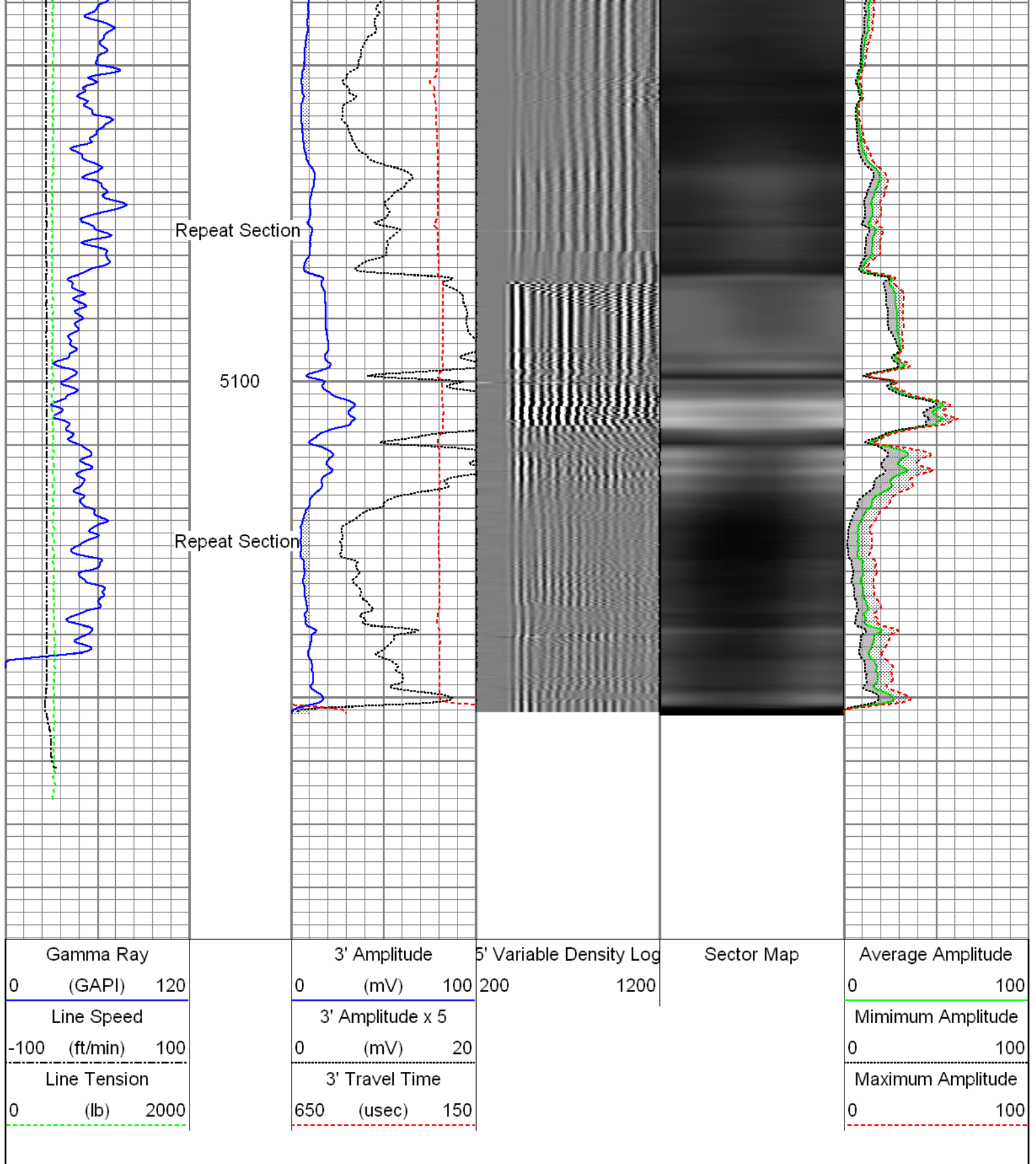




Database File: 04-18-15_whiting_razor 11h-1415a_mit_rbl.db
Dataset Pathname: pass3
Presentation Format: rbt4_mit
Dataset Creation: Sat Apr 18 08:23:37 2015 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

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





Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			T_CH14375_1_GO Titan 1-7/16" Assembled Electric Cable Head with 1" Fishing Neck	1.03	1.44	4.00
			UW_AGS-UW_AGS_001 (215017) Sondex Adapter - GO Box to Sondex Pin	0.21	1.69	1.00
			UW_XTU-UW_XTU_002 (211461) Crossover Ultrawire Toolbus to Ultralink	1.58	1.69	6.50

GR	22.81		UW_PGR-UW_PGR_020 (10013899) Production Gamma Ray	1.93	1.69	9.50
			UW_PRC #4 -DSSRAC (080) 2-3/4" DSS 5 Arm Roller Centralizer	2.55	2.75	32.00
			UW_RBT-UW_RBT_004 (10022773) Sondex Ultrawire 3-1/8" Radial Bond Tool	9.47	3.13	140.00
WVF3FT	15.42					
WVFS1	15.42					
WVFS2	15.42					
WVFS3	15.42					
WVFS4	15.42					
WVFS5	15.42					
WVFS6	15.42					
WVFS7	15.42					
WVFS8	15.42					
CBLTEMP	15.42					
CBLROT	15.42					
WVF5FT	14.42					
			UW_PRC-DSSRAC (082) 2-3/4" DSS 5 Arm Roller Centralizer	2.55	2.75	32.00
MIT	5.41		UW_MIT-UW_MIT40_042 (10014703) 40 Multifinger Imaging Tool	4.54	2.75	61.10
			UW_PRC #3 -UW_PRC_057 (1038) Sondex 2-3/4" 4-Arm Production Roller Centraliser	2.98	2.75	32.00
TSTAMP	0.00		UW_BUL-UW_BUL_006 (218707) Sondex Ultrawire Bullnose Terminator	0.22	1.69	1.20
Dataset: 04-18-15_Whiting_Razor 11H-1415A_MIT_RBL.db: field/well/run1/pass5 Total Length: 27.05 ft Total Weight: 319.30 lb O.D. 3.13 in						

Database File: 04-18-15_whiting_razor 11h-1415a_mit_rbl.db Dataset Pathname: pass5 Dataset Creation: Sat Apr 18 08:34:29 2015 by Log 7.0 B1		Calibration Report
Multi-finger Imaging Tool Calibration Report		

Serial Number: 10014703
Number of Fingers: 40
Tool Model: UW_MIT40_042

Inclinometer Calibration Report
Performed: Fri Sep 20 11:47:48 2013
Calibration Angle: 45

		Inc X	Inc Y
Vertical:		1963	1960
Finger 1 up:		1748	1727
Finger 31 up:		2195	1742
Finger 21 up:		2178	2188
Finger 11 up:		1727	2173
Sensitivity ratio:	1.00706		
X-axis angle:	132.825		
Deviation const.:	317.775		

Finger Calibration Report
Performed: Sat Apr 18 07:47:26 2015

Ring size: (in)	4		5		6		7
		Sens		Sens		Sens	
Finger 01:	1088	391.0	1479	385.0	1864	396.0	2260
Finger 02:	1039	393.0	1432	400.0	1832	423.0	2255
Finger 03:	1053	387.0	1440	387.0	1827	410.0	2237
Finger 04:	1017	401.0	1418	406.0	1824	433.0	2257
Finger 05:	1042	386.0	1428	382.0	1810	406.0	2216
Finger 06:	1022	393.0	1415	392.0	1807	421.0	2228
Finger 07:	1033	394.0	1427	383.0	1810	416.0	2226
Finger 08:	1026	402.0	1428	398.0	1826	434.0	2260
Finger 09:	1078	401.0	1479	382.0	1861	407.0	2268
Finger 10:	1018	389.0	1407	380.0	1787	414.0	2201
Finger 11:	1045	402.0	1447	393.0	1840	428.0	2268
Finger 12:	1121	394.0	1515	365.0	1880	390.0	2270
Finger 13:	1050	387.0	1437	383.0	1820	422.0	2242
Finger 14:	1028	403.0	1431	396.0	1827	438.0	2265
Finger 15:	1006	400.0	1406	403.0	1809	443.0	2252
Finger 16:	1031	391.0	1422	388.0	1810	429.0	2239
Finger 17:	1100	392.0	1492	380.0	1872	411.0	2283
Finger 18:	1075	378.0	1453	370.0	1823	407.0	2230
Finger 19:	1065	392.0	1457	388.0	1845	420.0	2265
Finger 20:	980	383.0	1363	396.0	1759	436.0	2195
Finger 21:	1057	380.0	1437	383.0	1820	419.0	2239
Finger 22:	1074	388.0	1462	396.0	1858	418.0	2276
Finger 23:	1083	383.0	1466	390.0	1856	412.0	2268
Finger 24:	1093	357.0	1450	368.0	1818	385.0	2203
Finger 25:	1071	386.0	1457	400.0	1857	419.0	2276
Finger 26:	1023	368.0	1391	388.0	1779	412.0	2191
Finger 27:	1182	391.0	1573	396.0	1969	402.0	2371
Finger 28:	1052	358.0	1410	383.0	1793	398.0	2191
Finger 29:	1018	370.0	1388	396.0	1784	411.0	2195
Finger 30:	988	370.0	1358	405.0	1763	405.0	2168
Finger 31:	1198	396.0	1594	414.0	2008	408.0	2416
Finger 32:	970	366.0	1336	392.0	1728	385.0	2113
Finger 33:	1068	390.0	1458	412.0	1870	423.0	2293
Finger 34:	970	367.0	1337	392.0	1729	405.0	2134
Finger 35:	1121	398.0	1519	412.0	1931	413.0	2344
Finger 36:	1032	361.0	1393	377.0	1770	384.0	2154
Finger 37:	1123	401.0	1524	408.0	1932	414.0	2346
Finger 38:	1067	375.0	1442	384.0	1826	392.0	2218
Finger 39:	1038	363.0	1401	370.0	1771	382.0	2153
Finger 40:	952	383.0	1335	410.0	1745	425.0	2170

Segmented Cement Bond Log Calibration Report

Serial Number: 10022773
Tool Model: UW_RBT_004

Calibration Casing Diameter: 7.000 in
Calibration Depth: 21.000 ft

Master Calibration, performed Sat Apr 18 07:49:58 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	0.002	1.000	0.800	62.165	61.483	0.682
5FT	-0.001	1.000	0.800	62.165	61.280	0.885
S1	0.002	1.000	0.000	100.000	100.190	-0.190
S2	0.001	1.000	0.000	100.000	100.077	-0.077
S3	0.001	1.000	0.000	100.000	100.077	-0.077
S4	0.001	1.000	0.000	100.000	100.111	-0.111
S5	0.001	1.000	0.000	100.000	100.126	-0.126
S6	0.001	1.000	0.000	100.000	100.122	-0.122
S7	0.001	1.000	0.000	100.000	100.122	-0.122
S8	0.001	1.000	0.000	100.000	100.126	-0.126

Gamma Ray Calibration Report

Serial Number: 10013899
Tool Model: UW_PGR_020
Performed: Sun Jun 13 13:33:21 1993

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 1.0000 GAPI/cps



Company Whiting Oil & Gas Corporation
Well Razor 11H-1415A
Field Wildcat
County Weld
State Colorado