



Radial Cement Bond Gamma Ray Casing Collar Log

Company	Kerr McGee Oil & Gas Onshore LP
Well	Barefoot 30C-25HZ
Field	Wattenberg
County	Weld
State	Colorado
Company	Kerr McGee Oil & Gas Onshore LP
Well	Barefoot 30C-25HZ
Field	Wattenberg
County	Weld
State	Colorado
Location:	API # : 05-123-39189-00
SHL: 539' FNL 514' FEL Latitude: 40.20307 / Longitude: -104.943613 SEC 25 TWP 3N RGE 68W	Other Services Gauge Ring RBP MIT
Permanent Datum Log Measured From Drilling Measured From	Ground Level Kelly Bushing Kelly Bushing
	Elevation 4891' 17 FT G.L. 4891'

Date	20-SEP-2014
Run Number	One
Depth Driller	13.369 FT
Depth Logger	6925 FT
Bottom Logged Interval	6920 FT
Top Log Interval	Surface
Open Hole Size	9.625
Type Fluid	Water
Density / Viscosity	8.34 lb/gal
Max. Recorded Temp.	245° F
Estimated Cement Top	Surface
Time Well Ready	ROA
Time Logger on Bottom	13:48
Equipment Number	HD 0255
Location	Ft. Lupton, CO
Recorded By	Greg Jackson
Witnessed By	John McCarthy

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	9.625	36	J-55 LTC	Surface	1399 FT		
Intermediate #1	7	26	P-110 LTC	Surface	7894 FT		
Intermediate #2							
Liner	4.5	11.6	P-110 LTC/DOX	6854 FT	13,354 FT		

>>> 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 ran from plug (set 1 1/2 joints deeper than liner) to surface.
Log ran with 2800 PSI surface induced pressure.
Adjusted -8 FT to correlate to reported liner top.

Thank you for choosing FMC Technologies Completion Services, Inc.!!

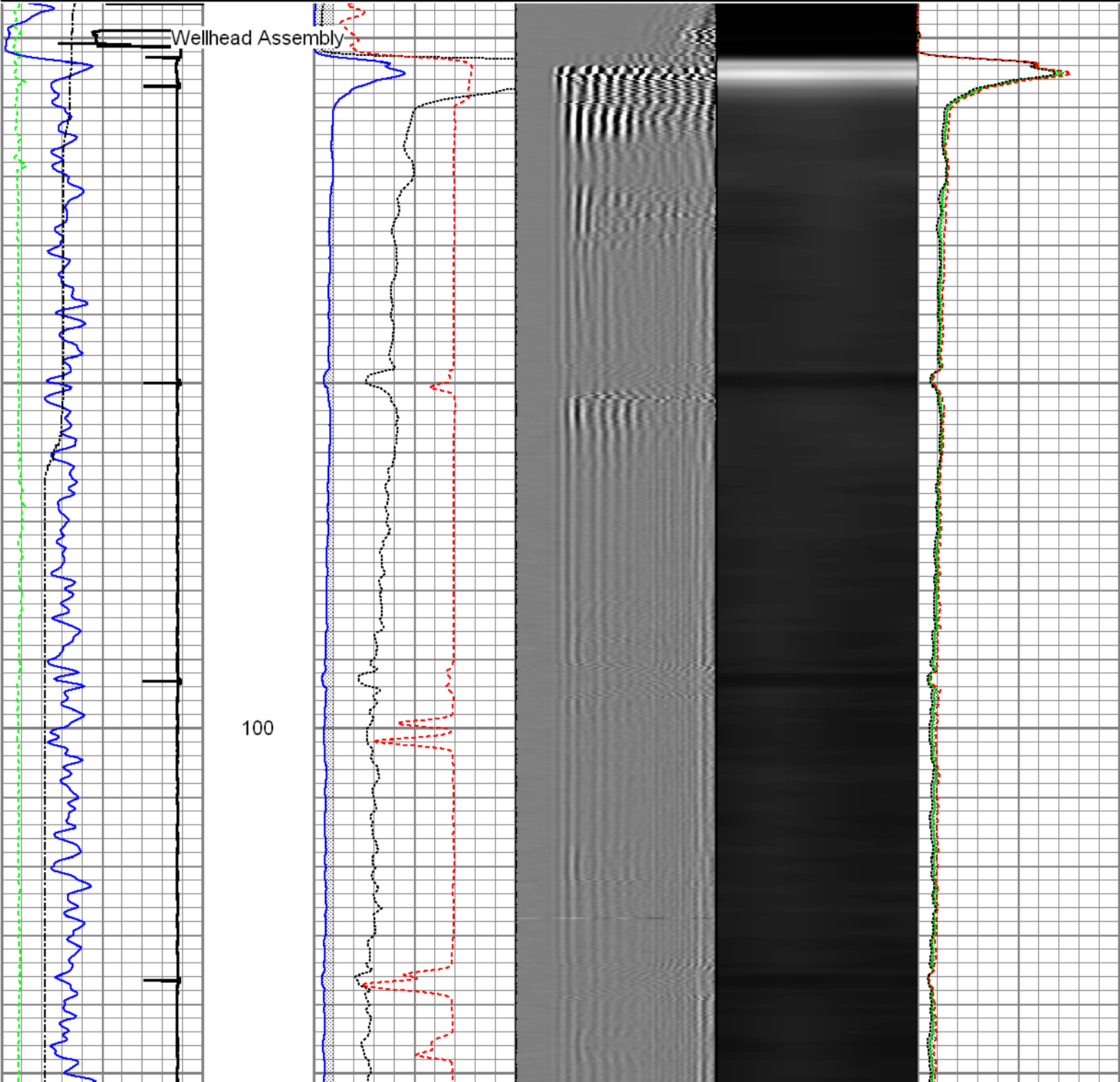


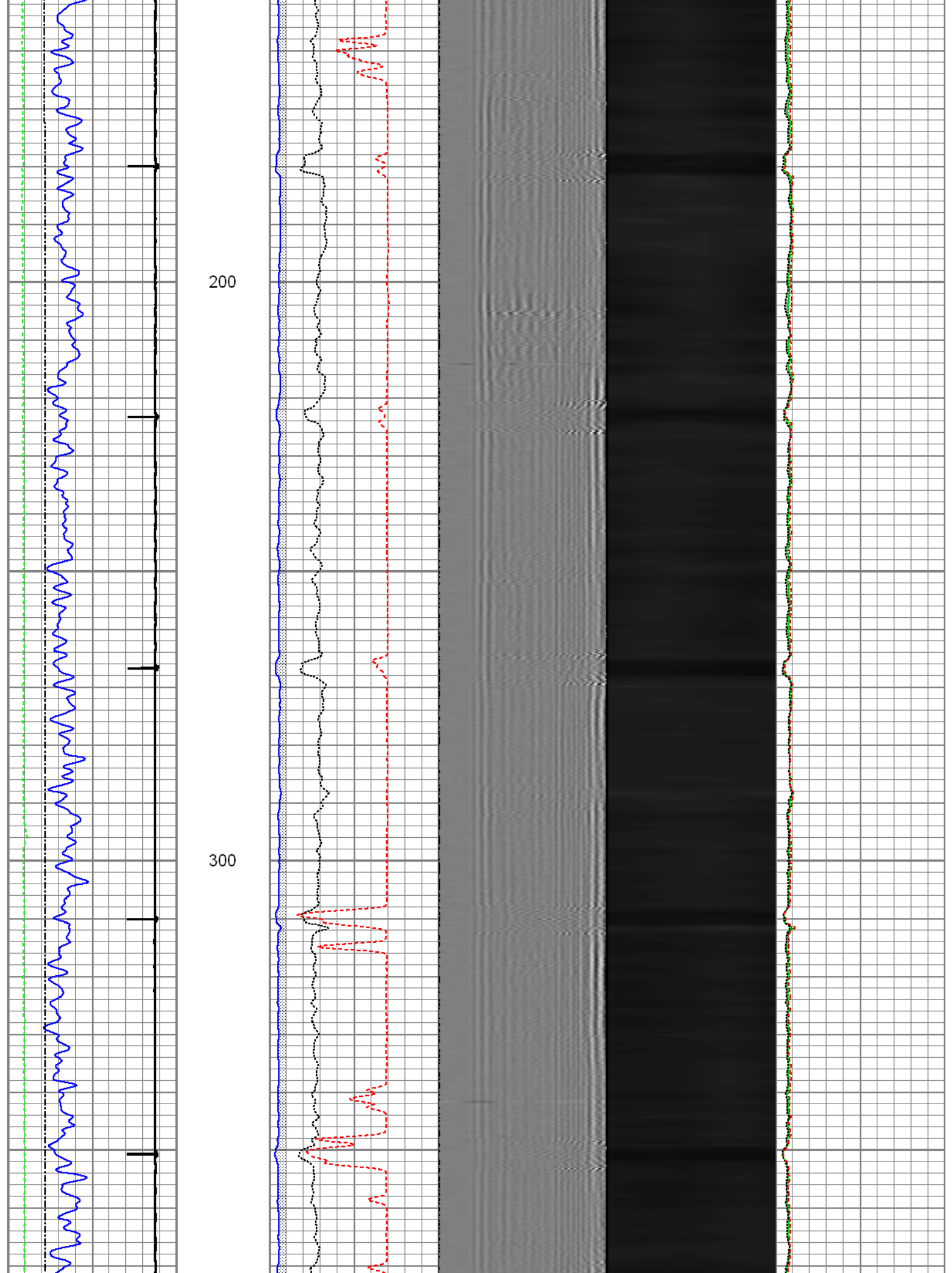
Main Pass

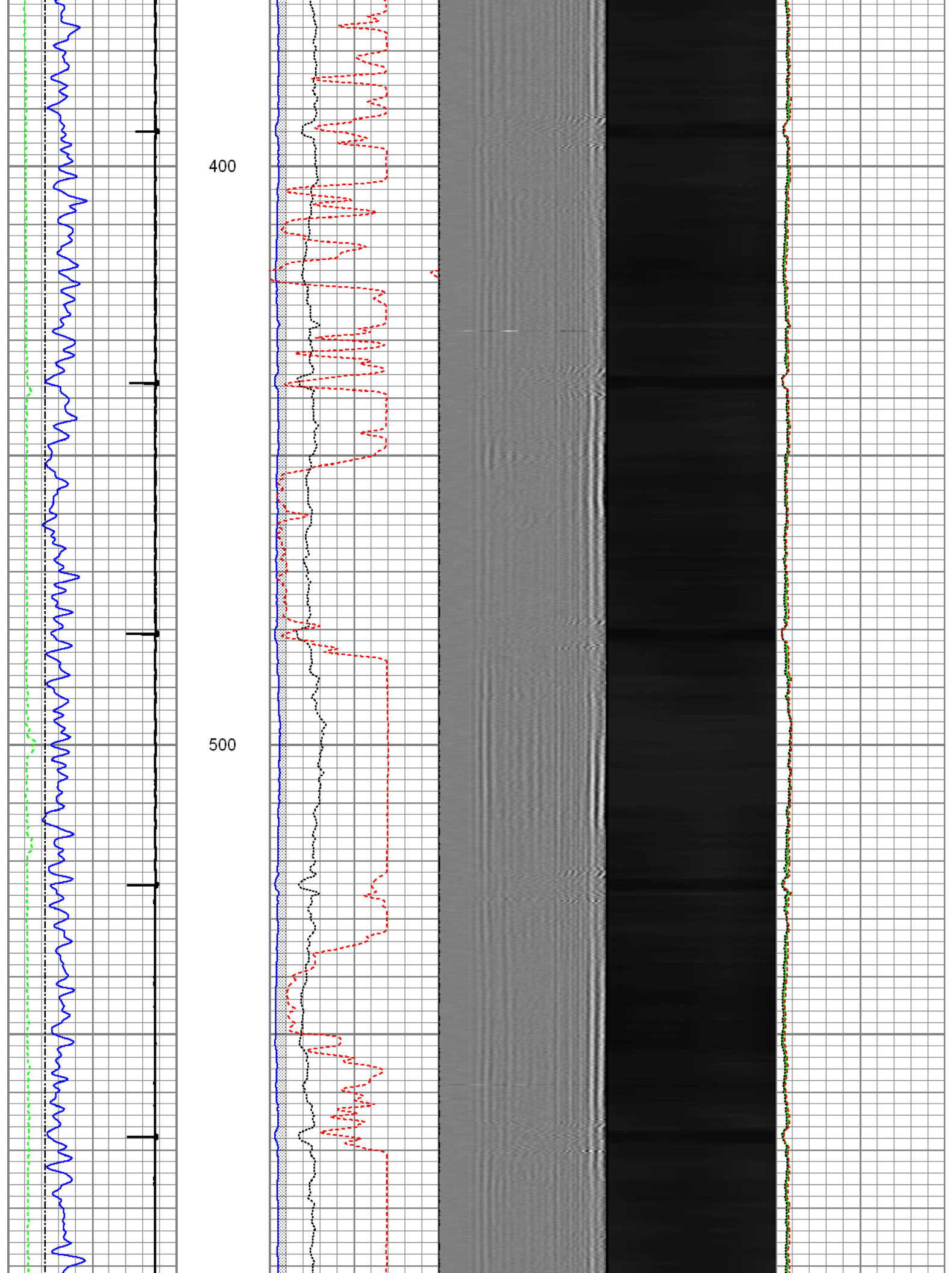
Logged with 2800 PSI Surface Induced Pressure

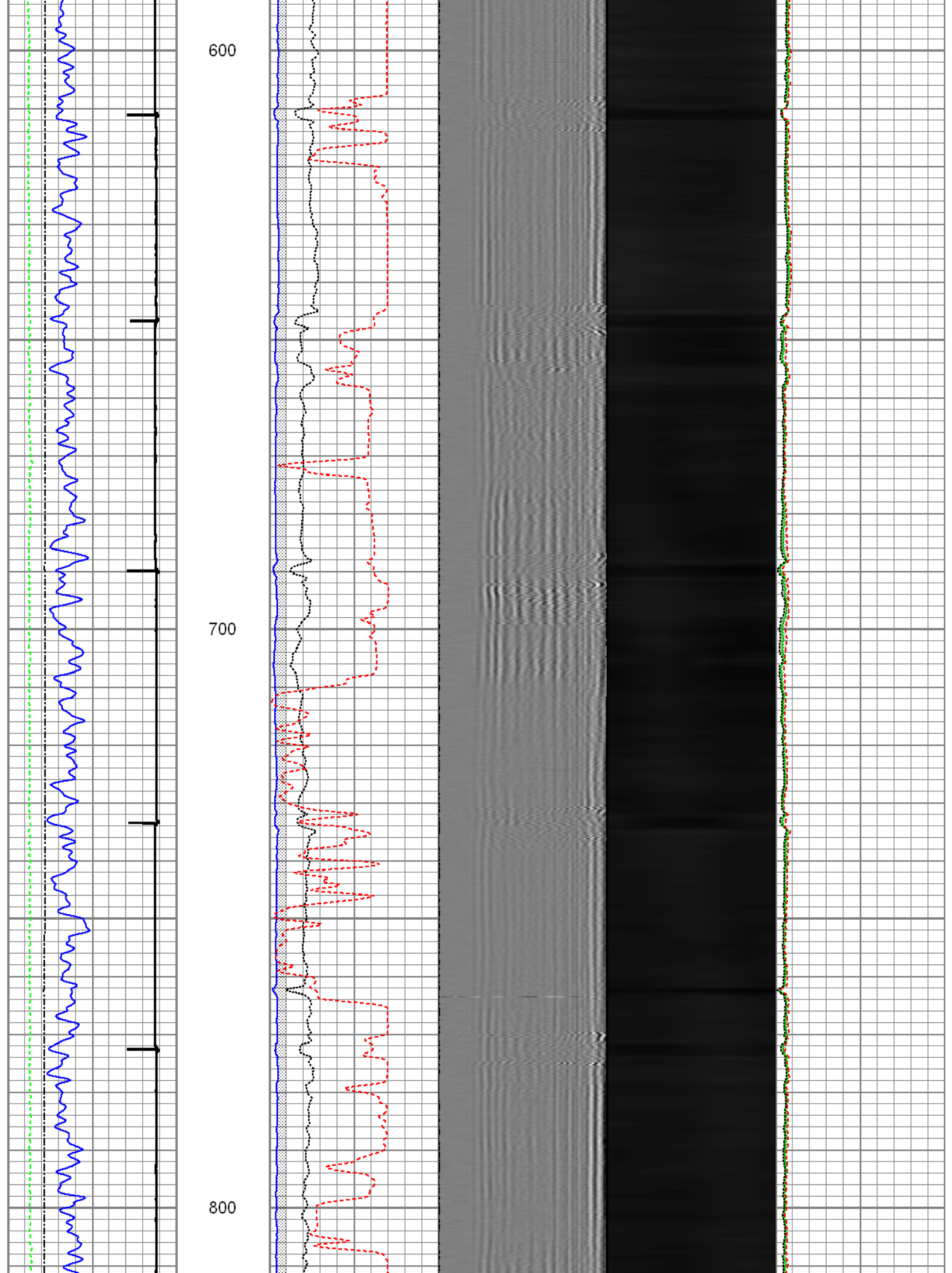
Database File: 0512339189_anadarko_barefoot 30c-25hz_09-20-14_mit_rbl.db
Dataset Pathname: main1
Presentation Format: rbt4_mit
Dataset Creation: Sat Sep 20 13:48:14 2014 by Log SCH 111116
Charted by: Depth in Feet scaled 1:240

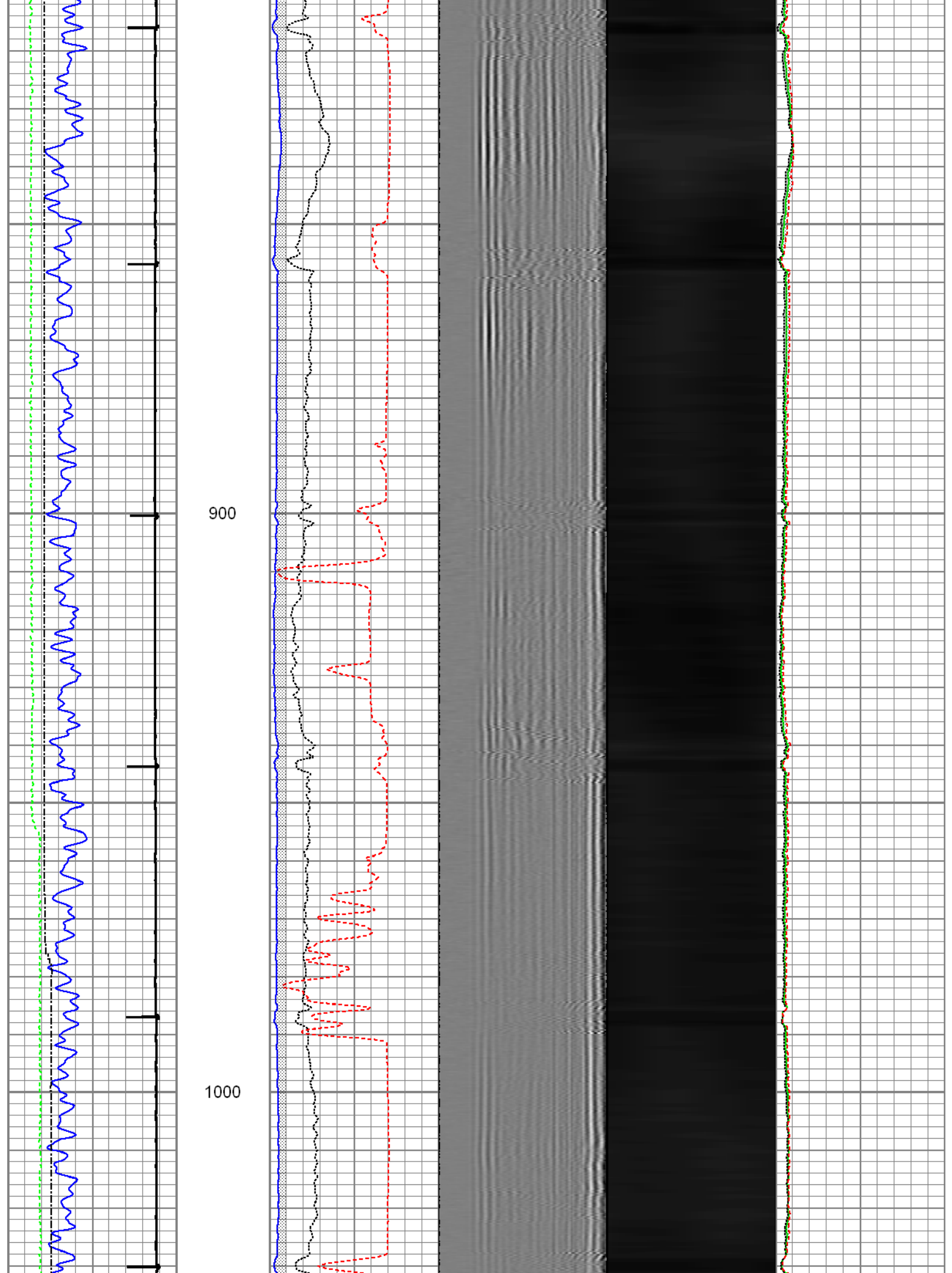
Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120	0 (mV) 100	200 1200		0 100
Casing Collar Locator	3' Amplitude x 5			Minimum Amplitude
Line Speed	0 (mV) 20			0 100
-100 (ft/min) 100	3' Travel Time			Maximum Amplitude
Line Tension	650 (usec) 150			0 100
0 (lb) 2000				

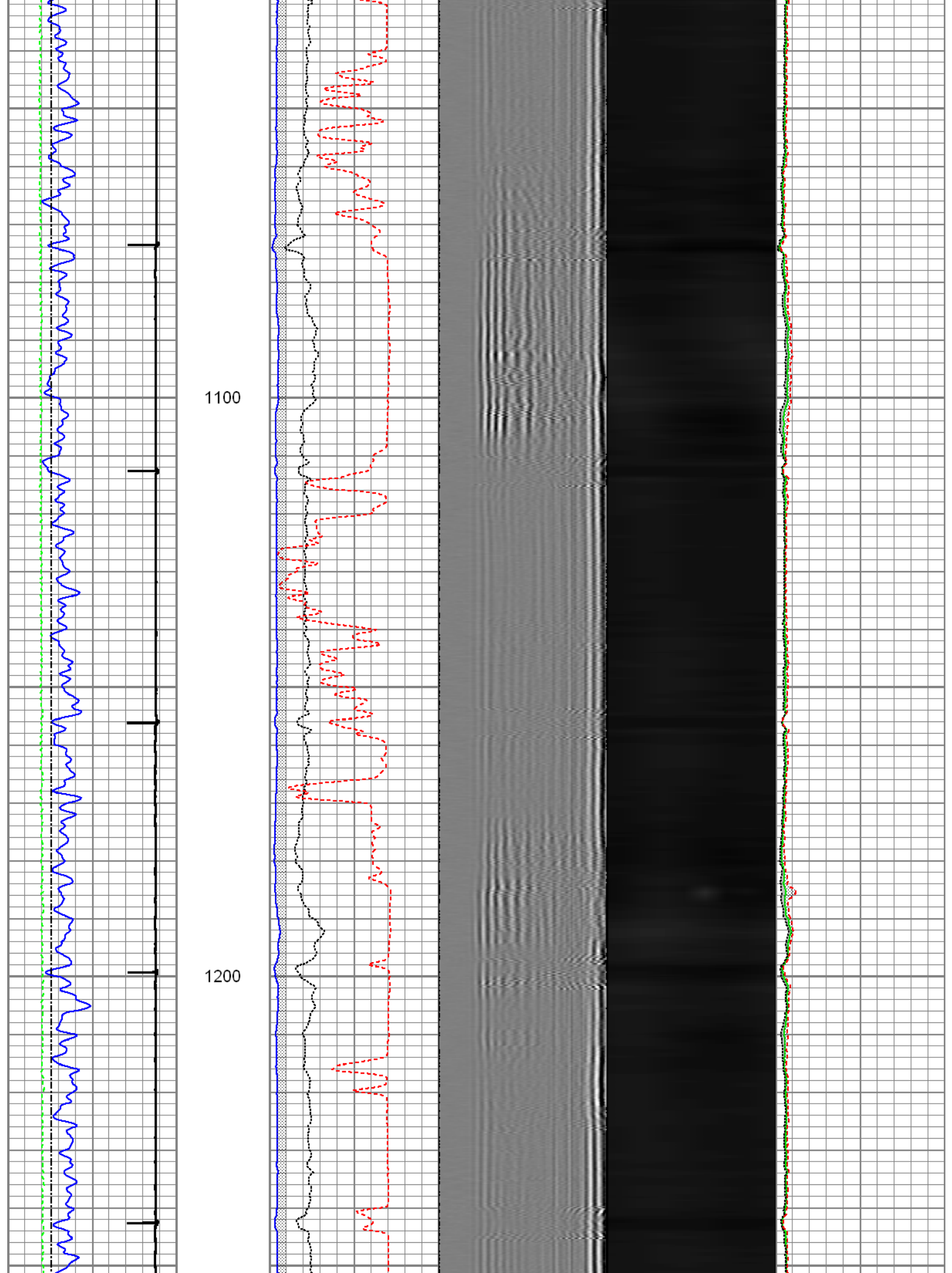


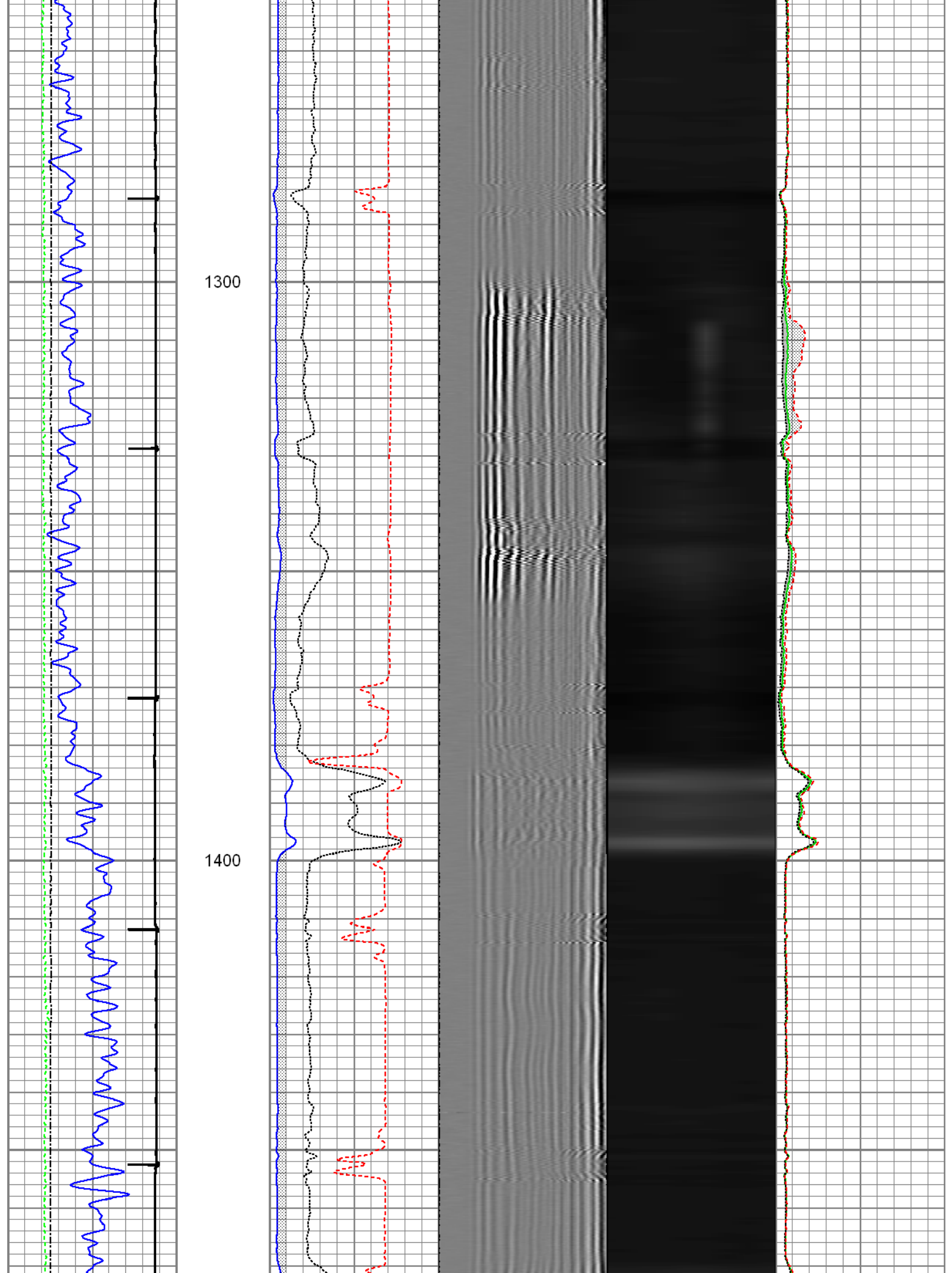


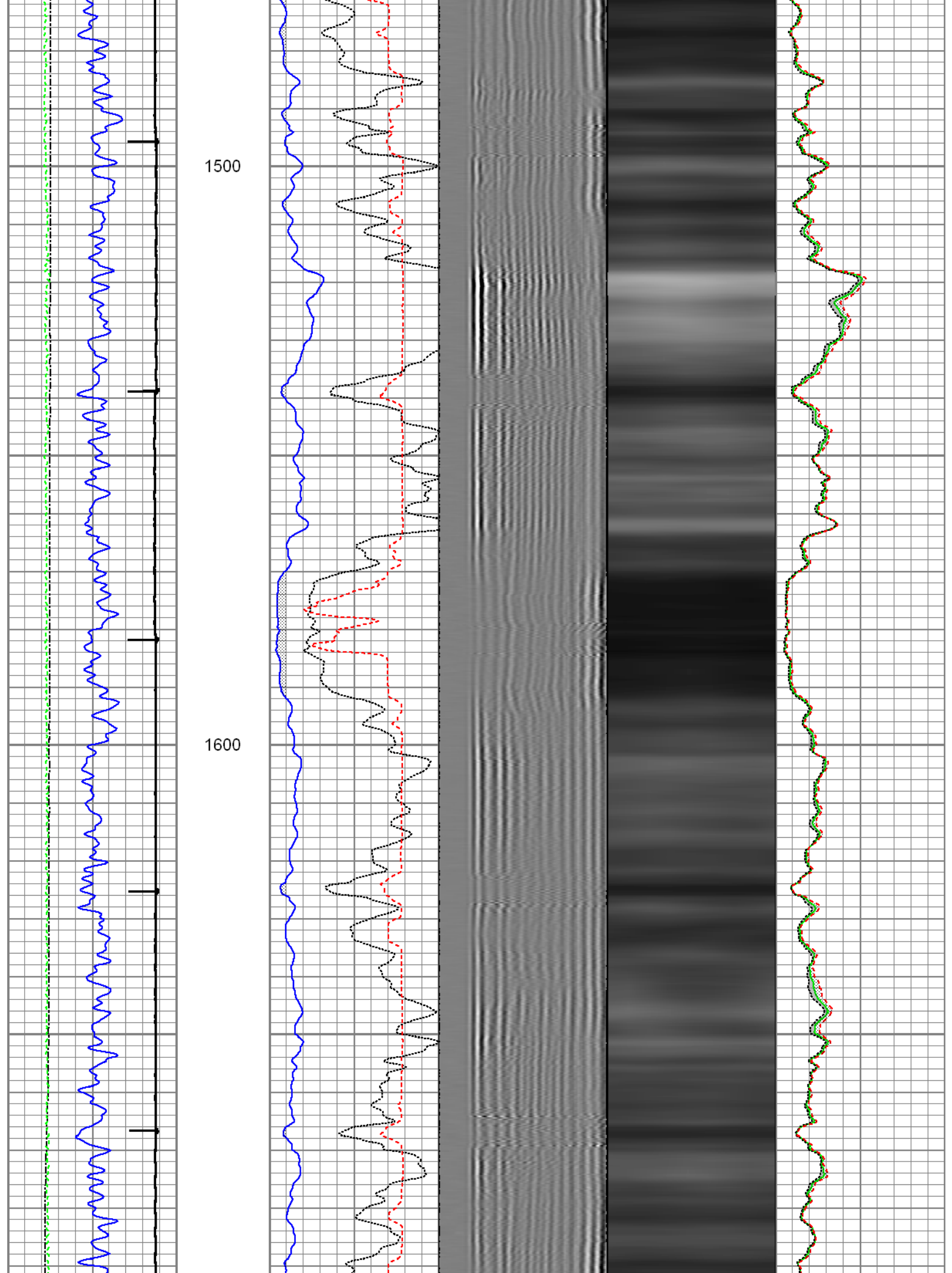


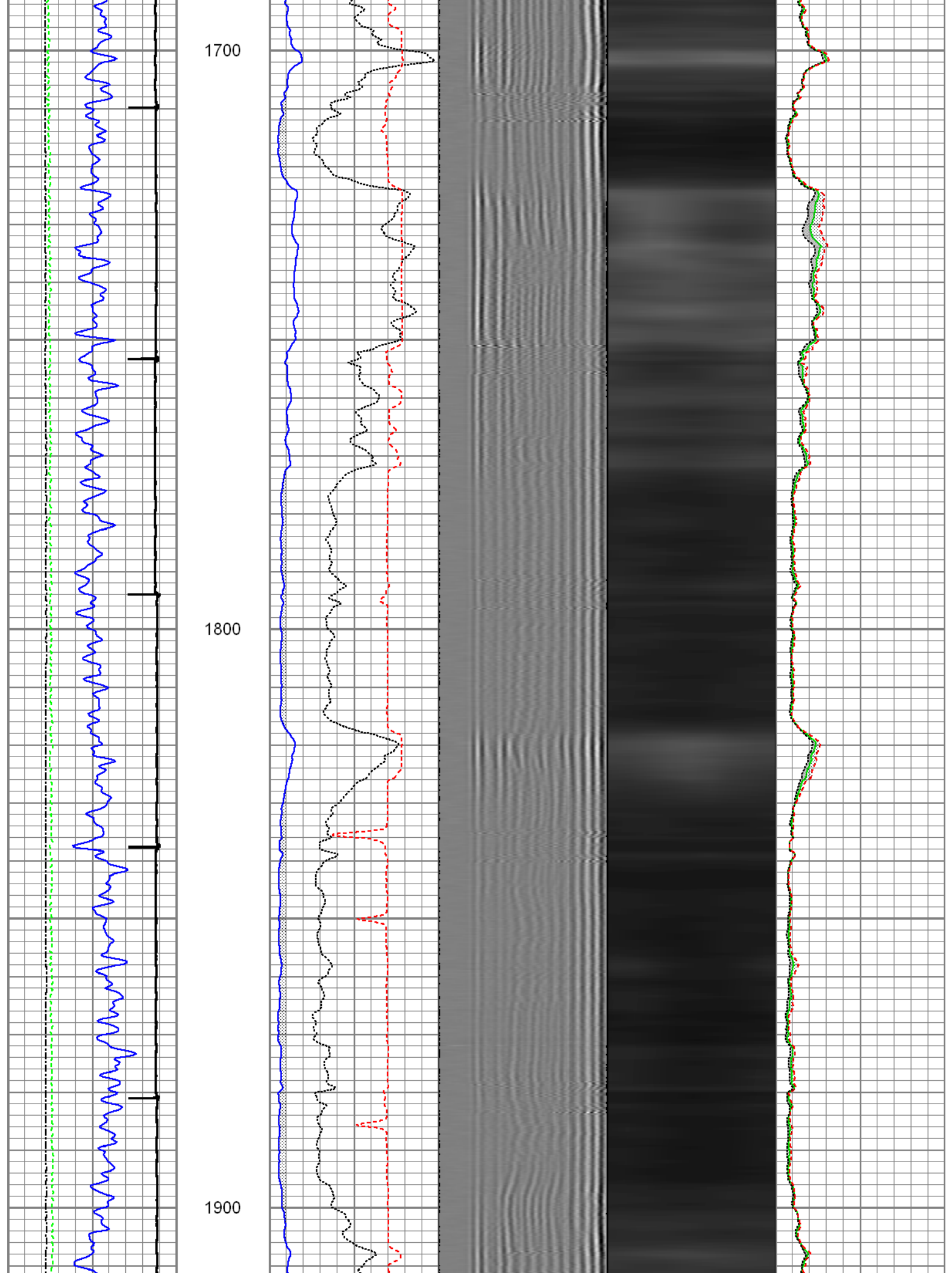


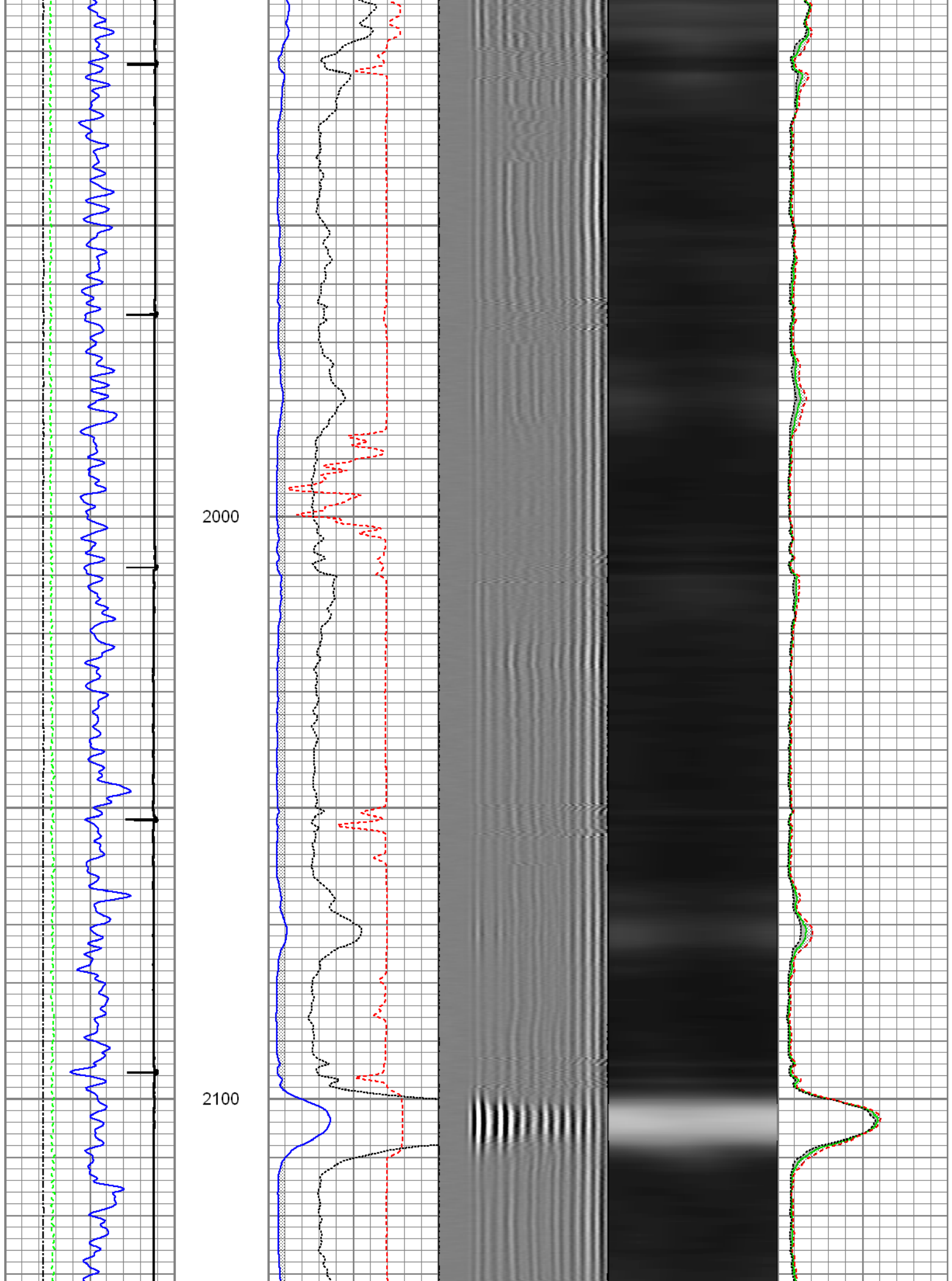


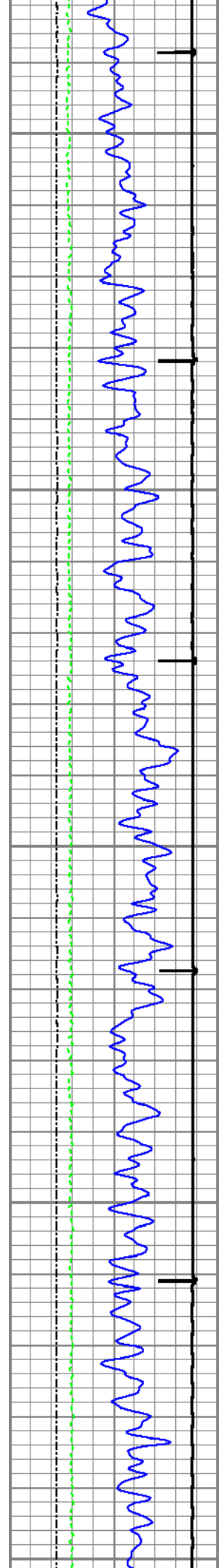






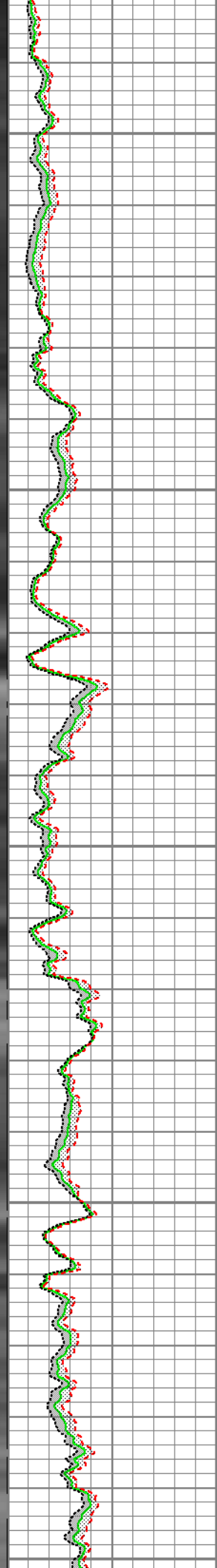
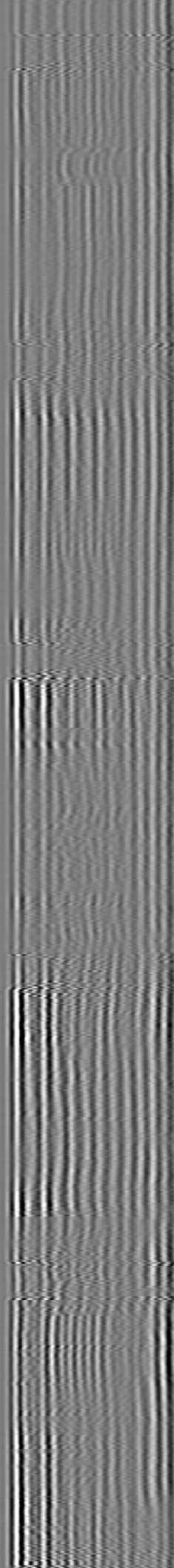
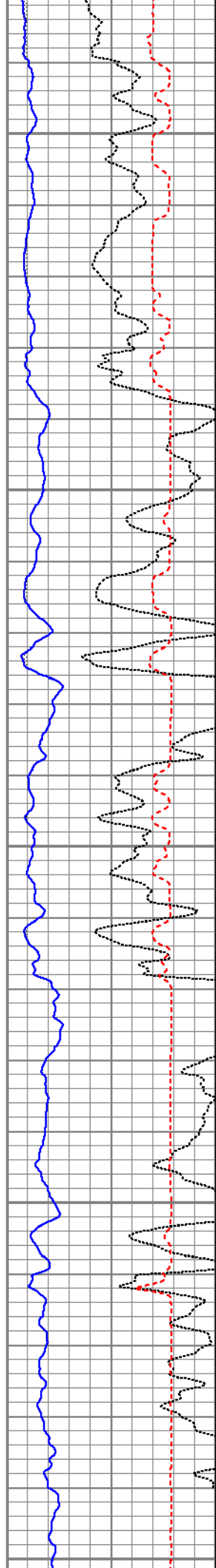


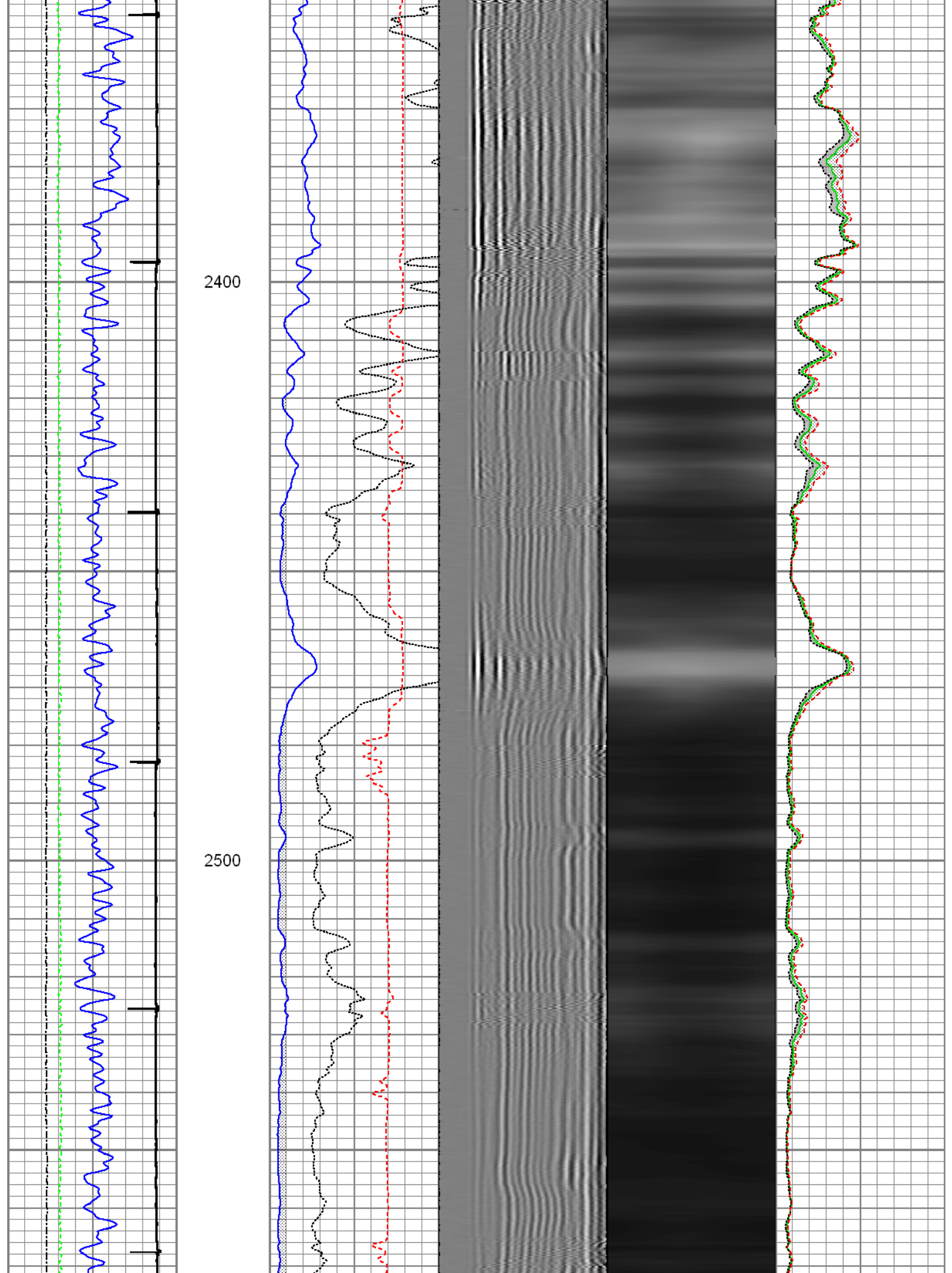


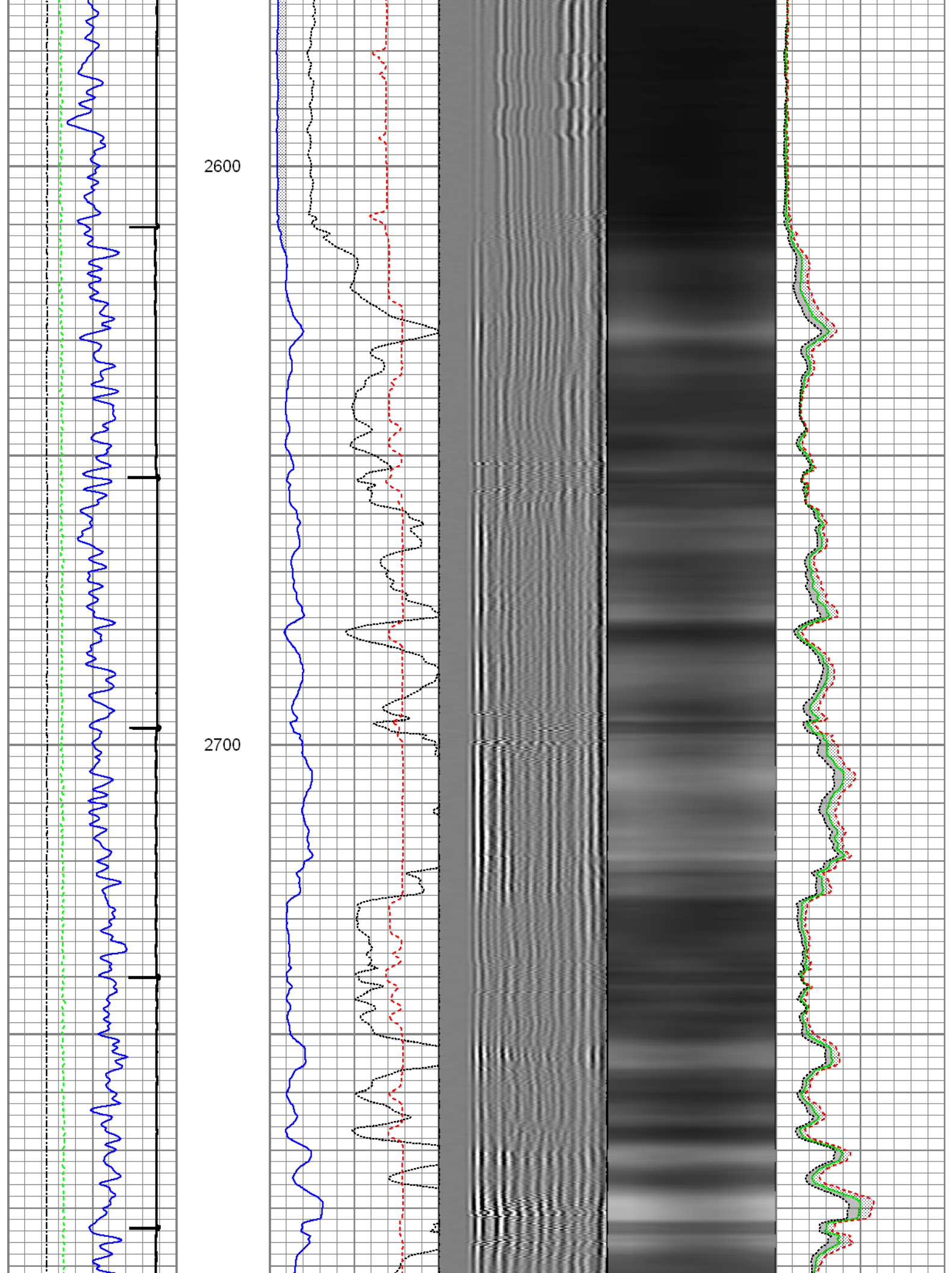


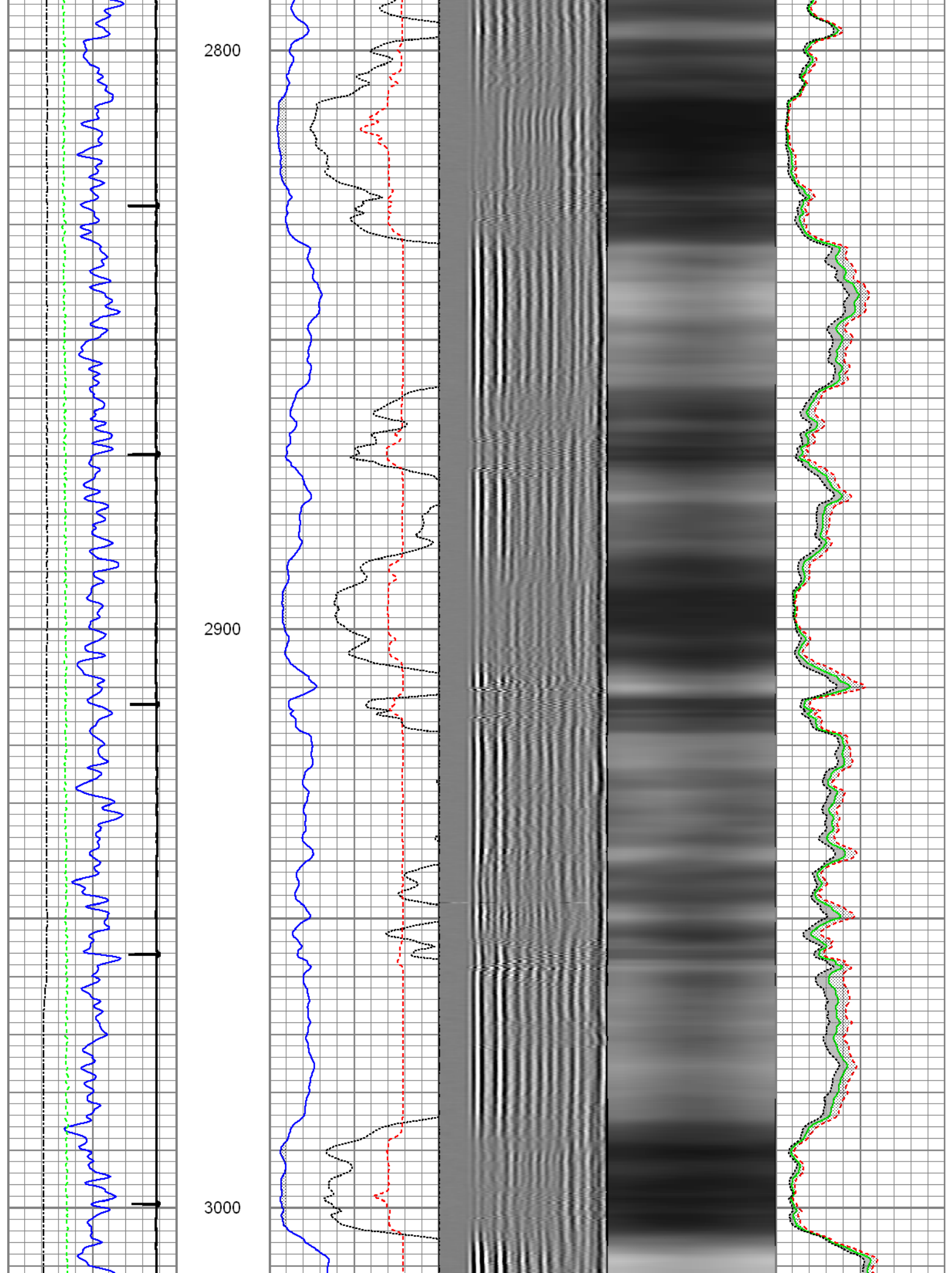
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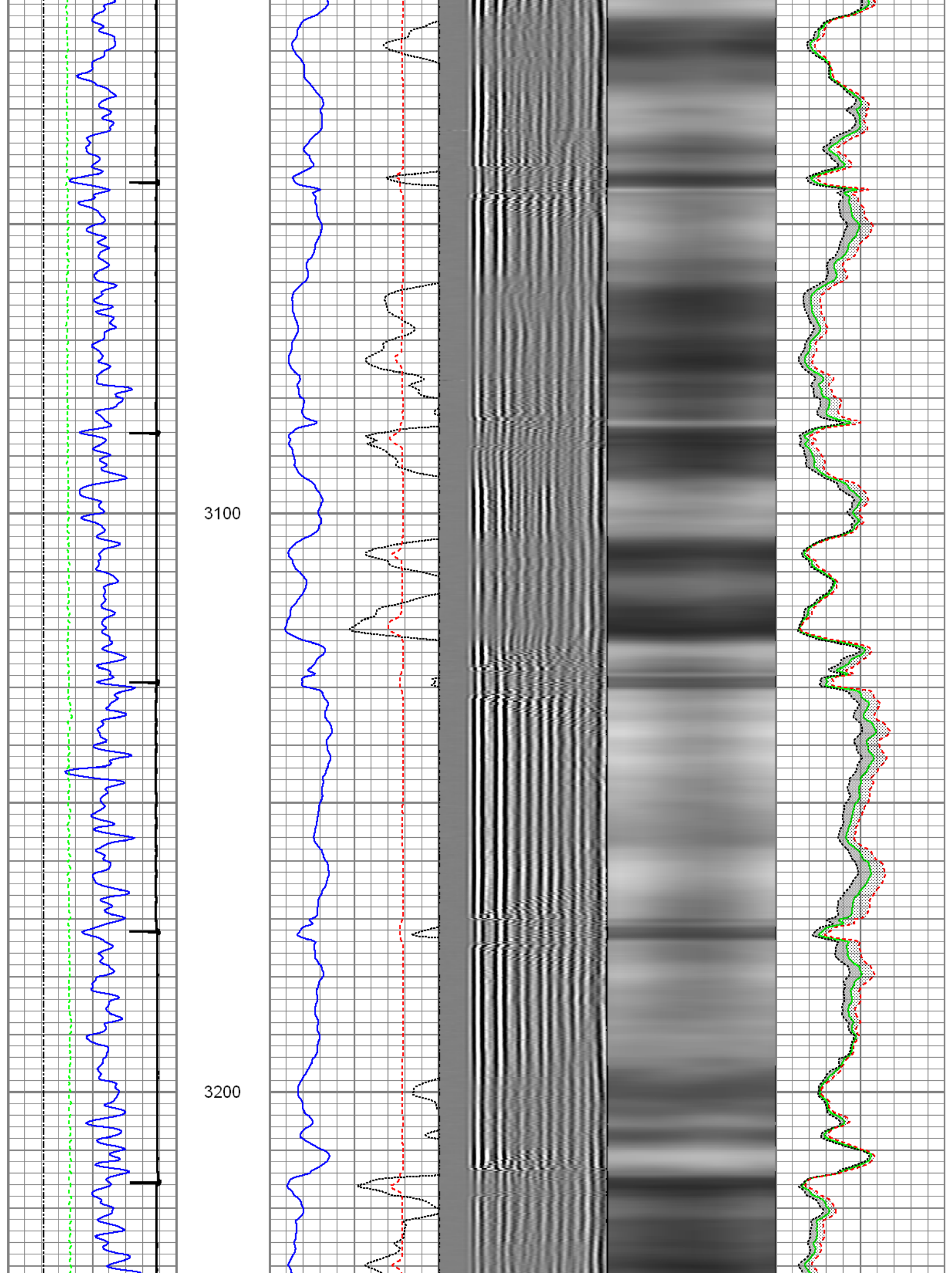
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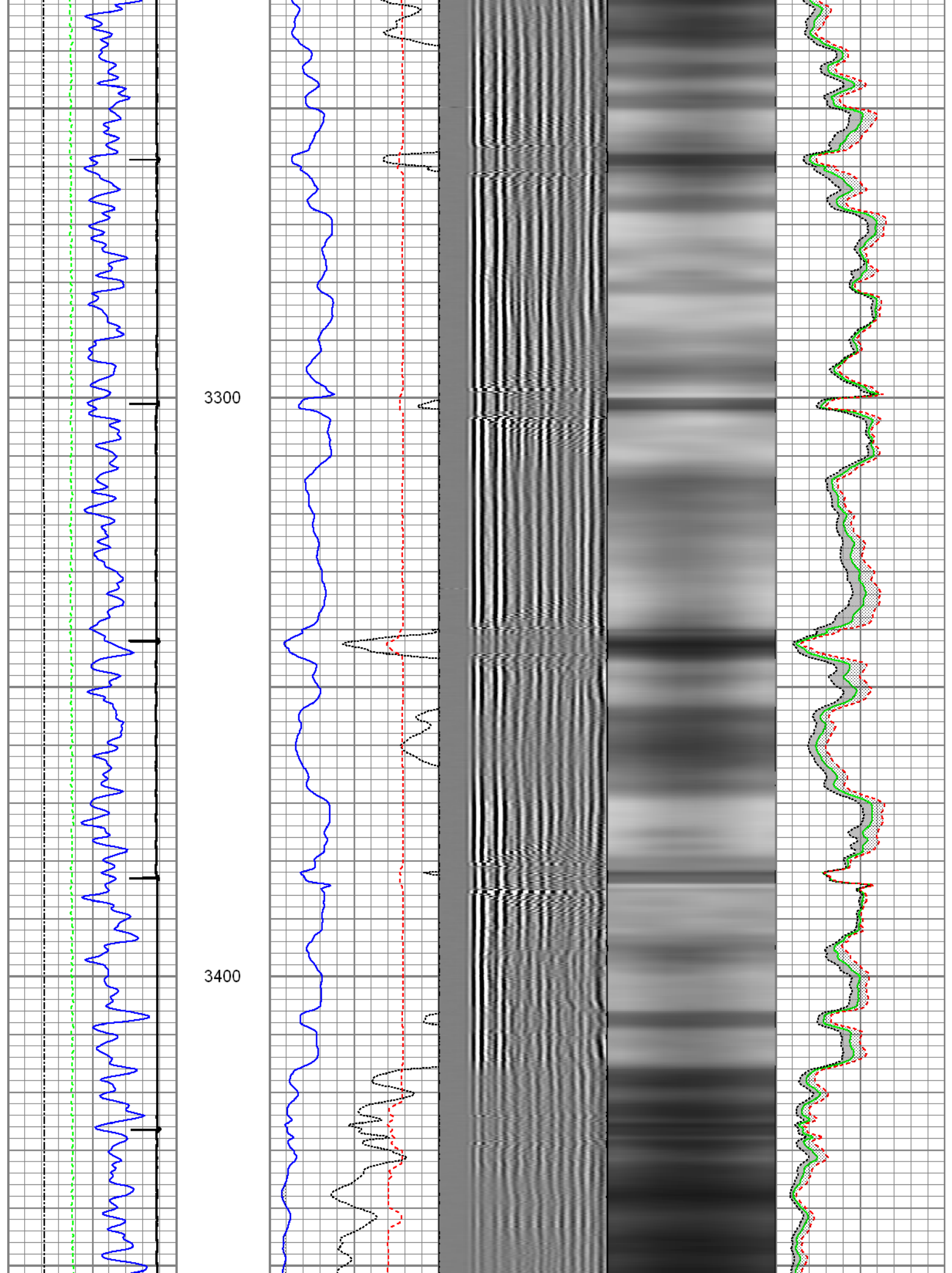


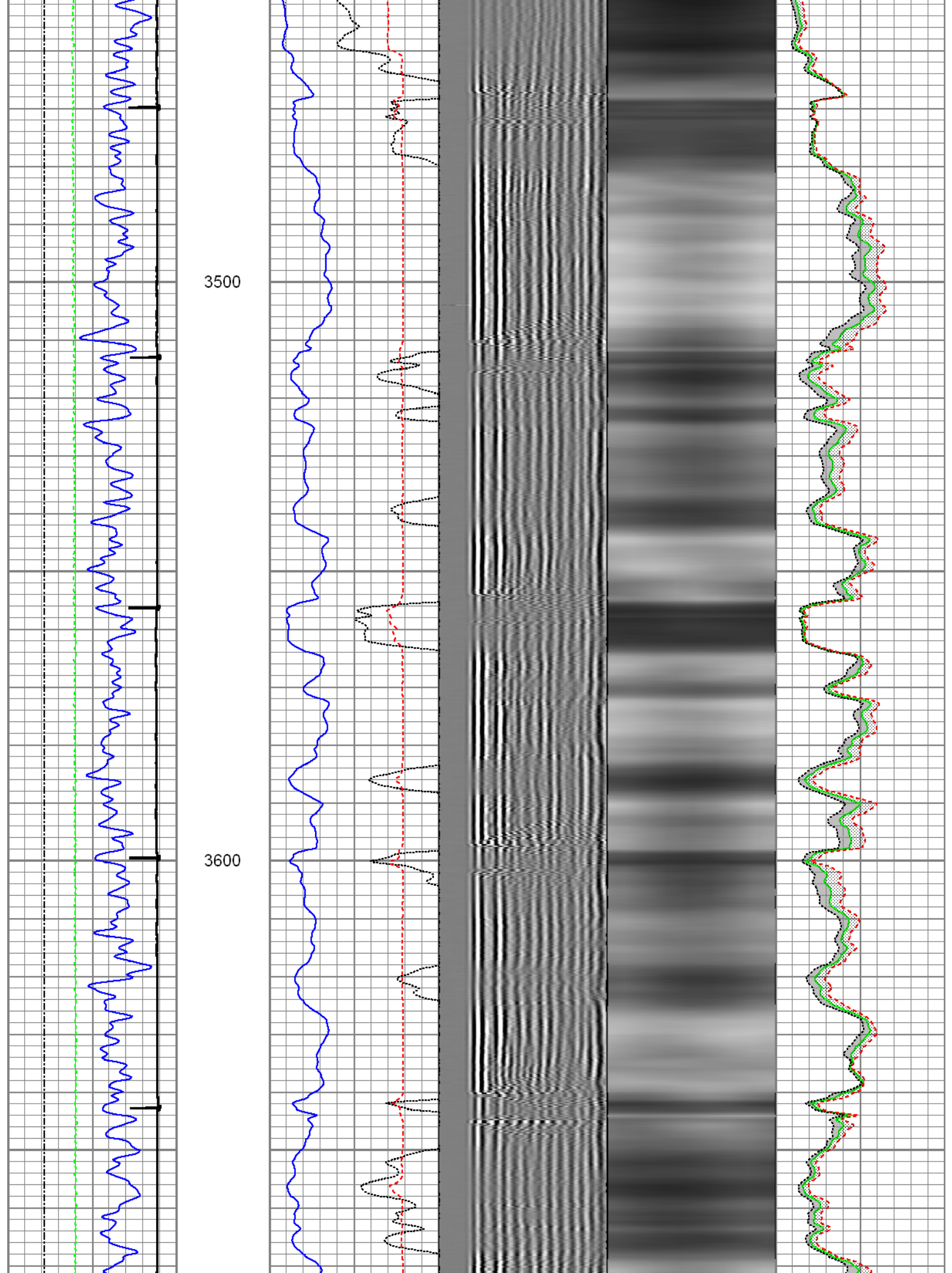


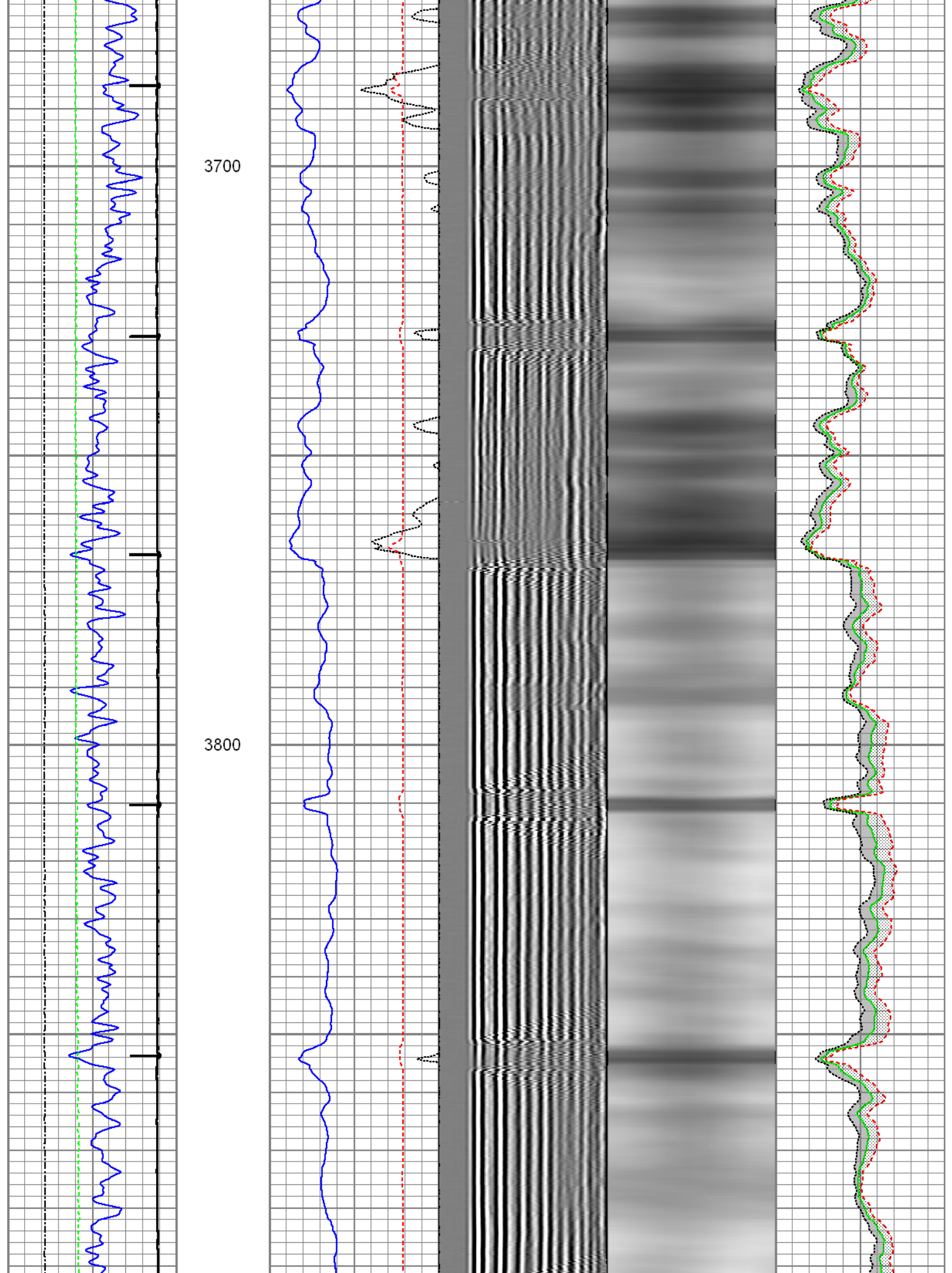








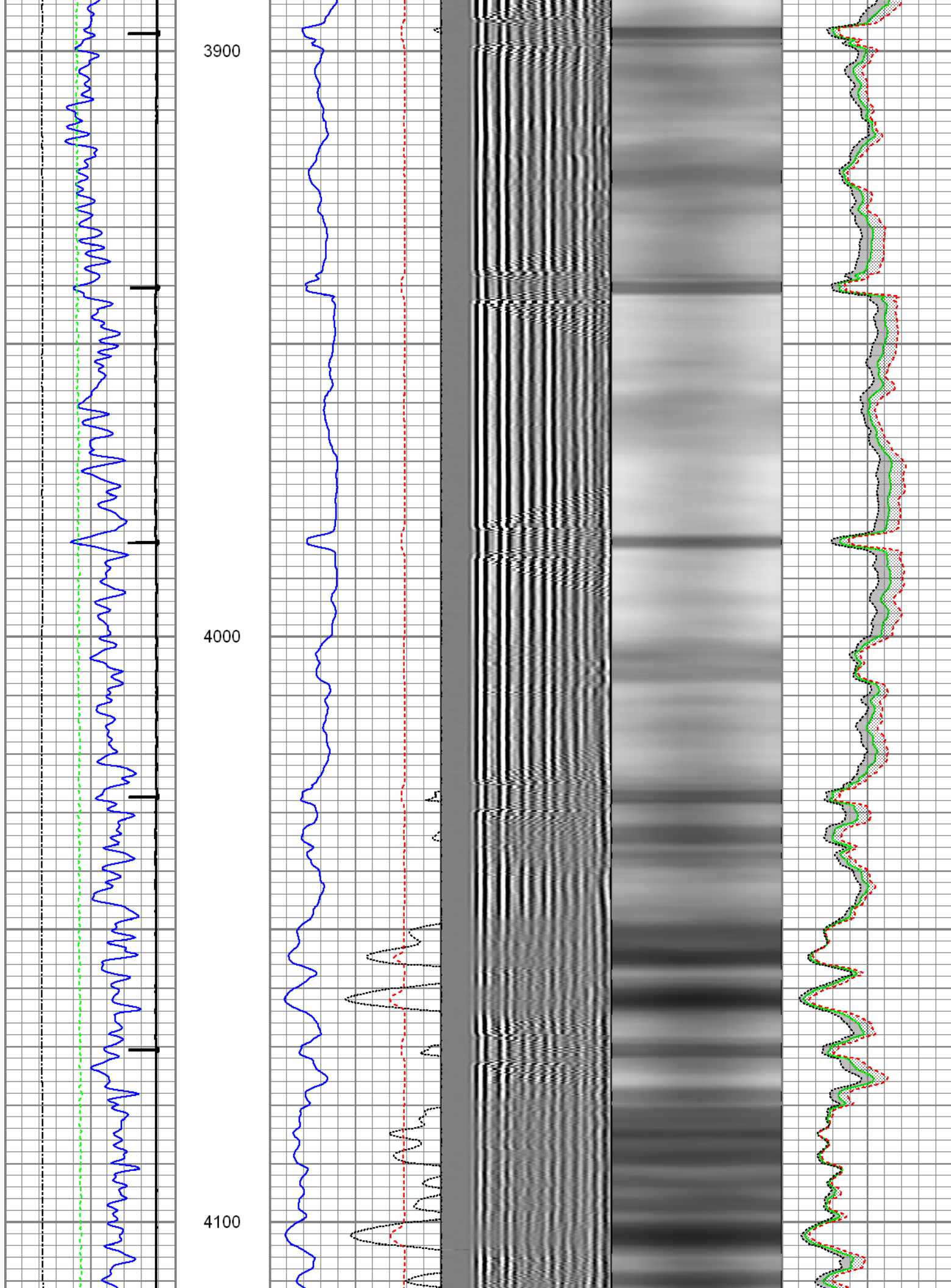


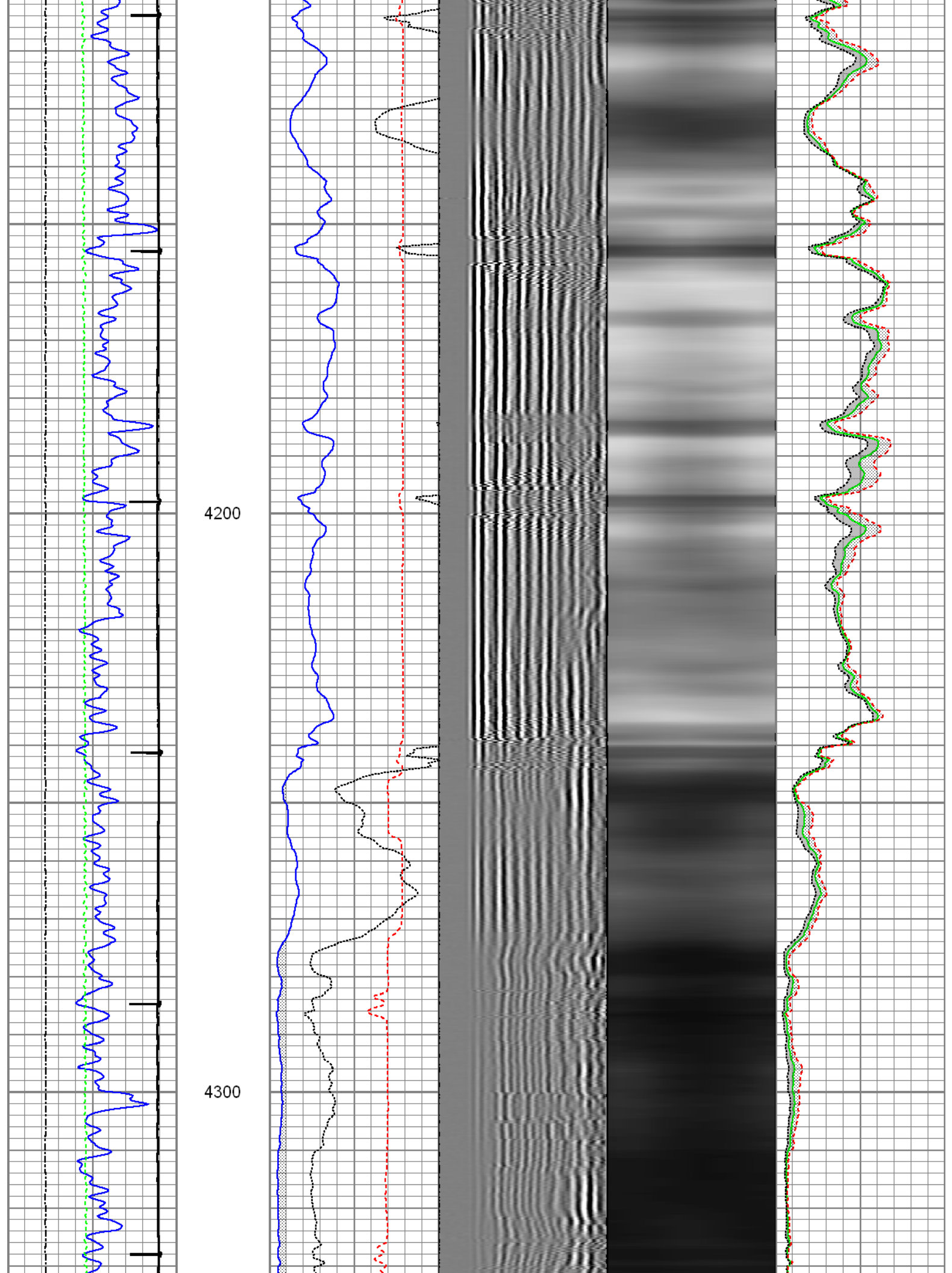


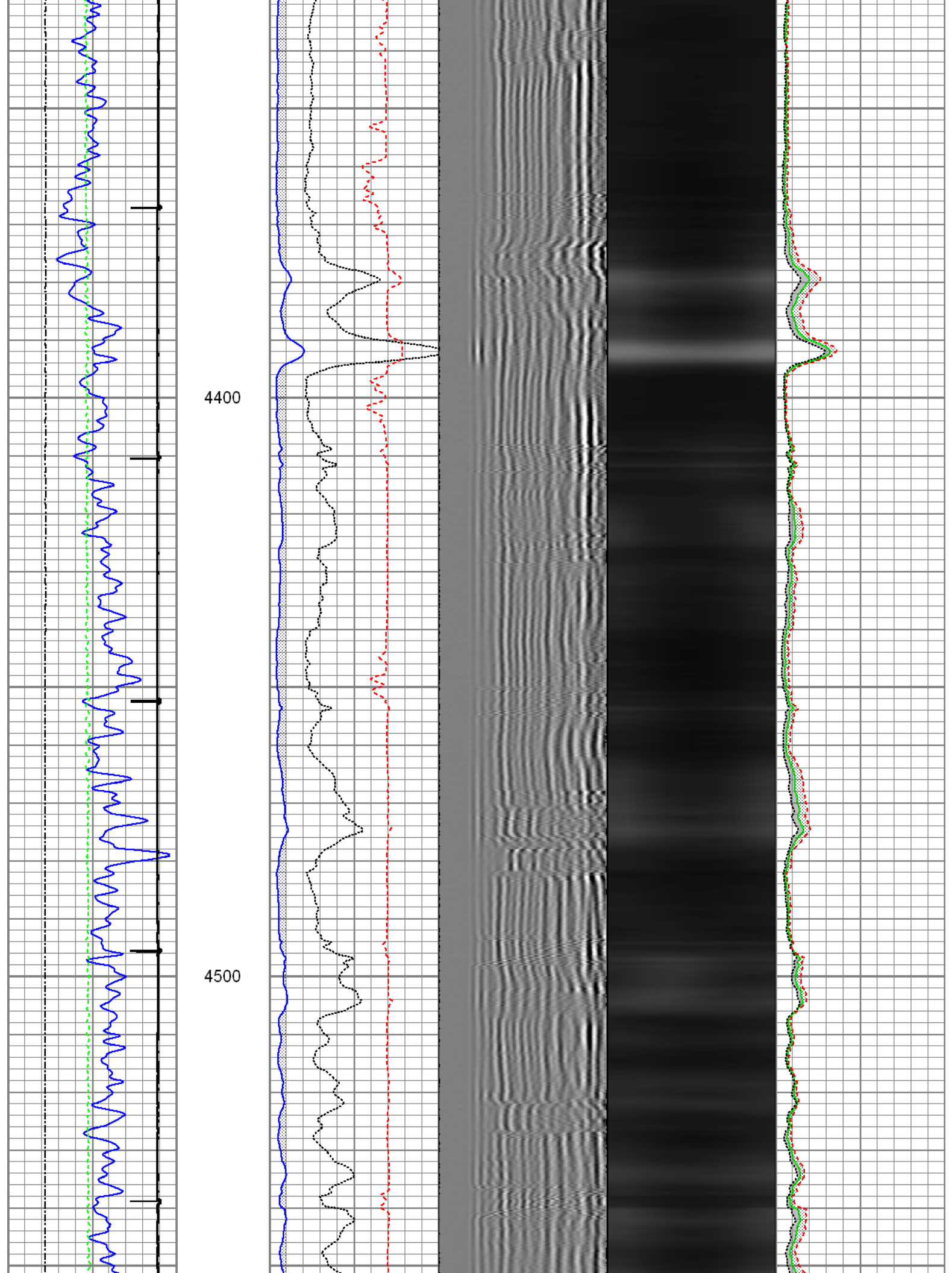
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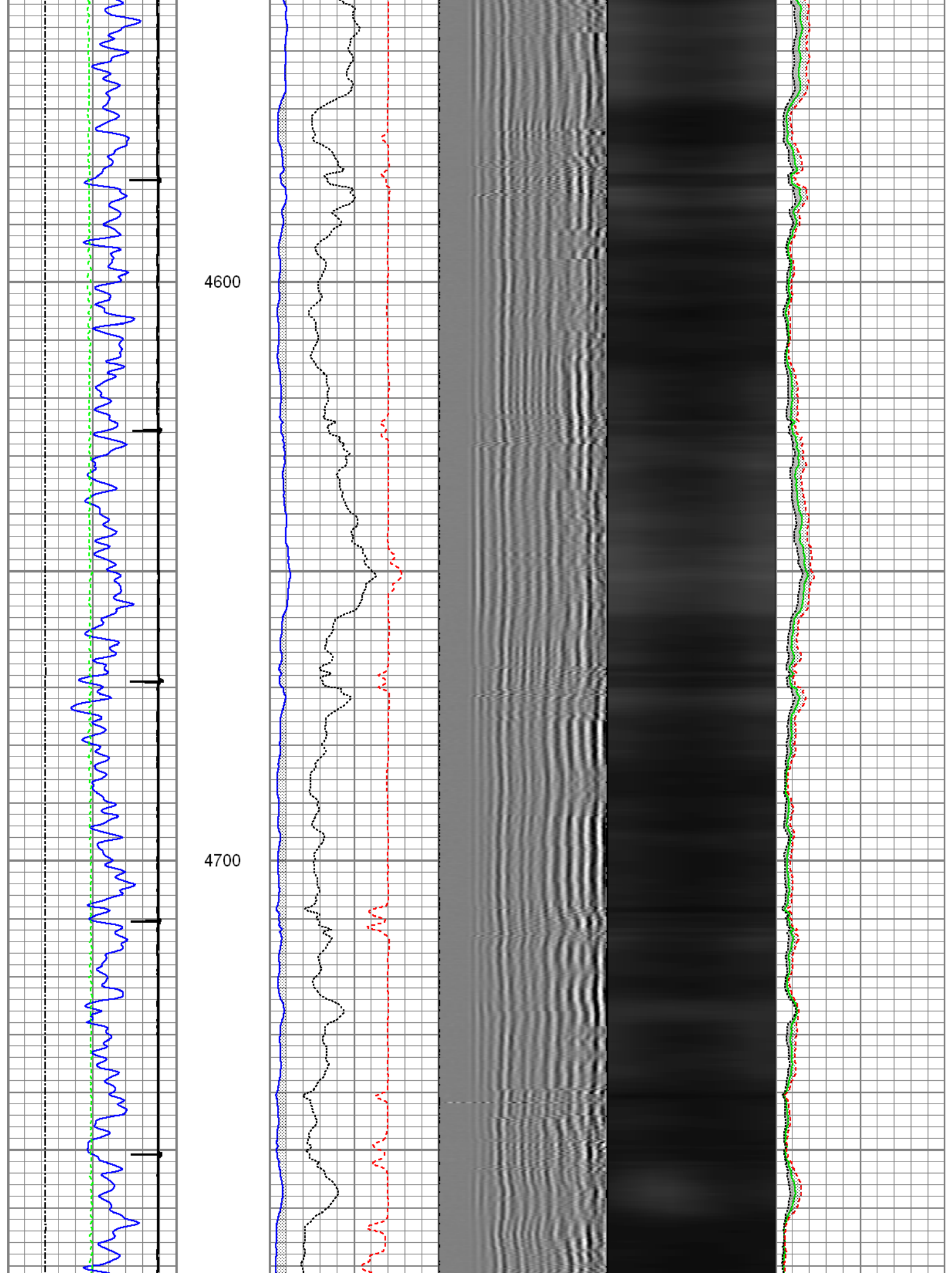
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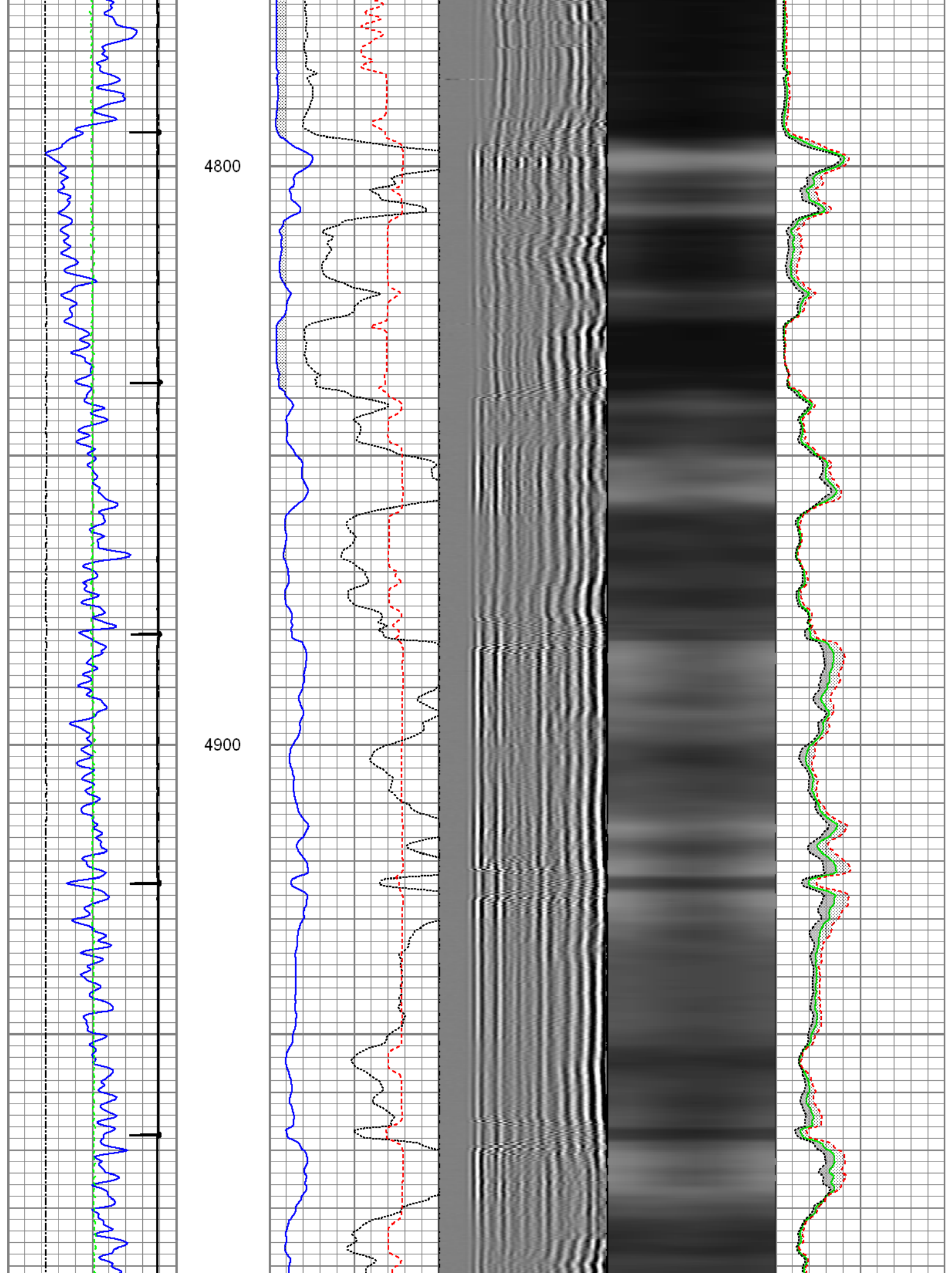
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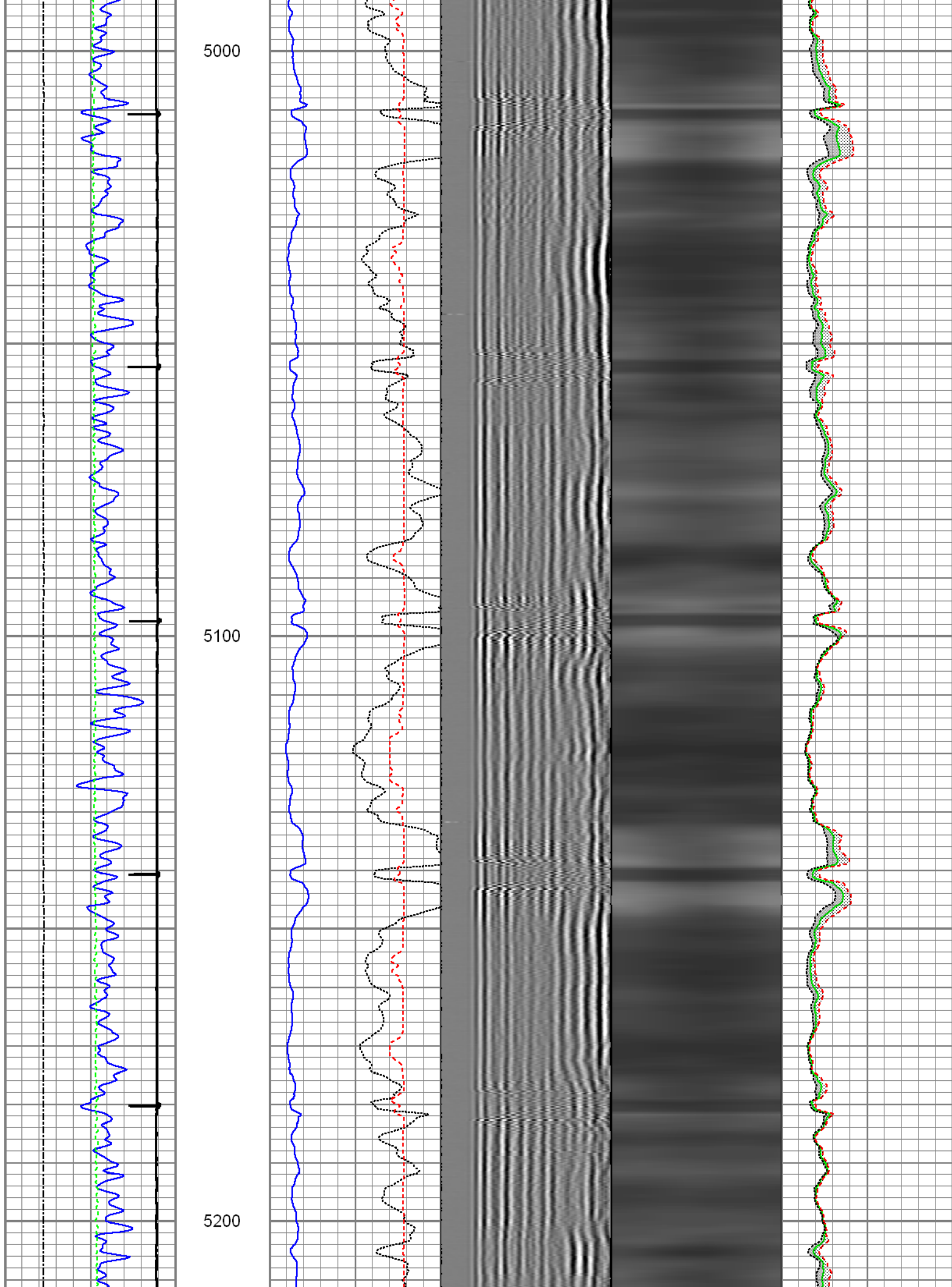


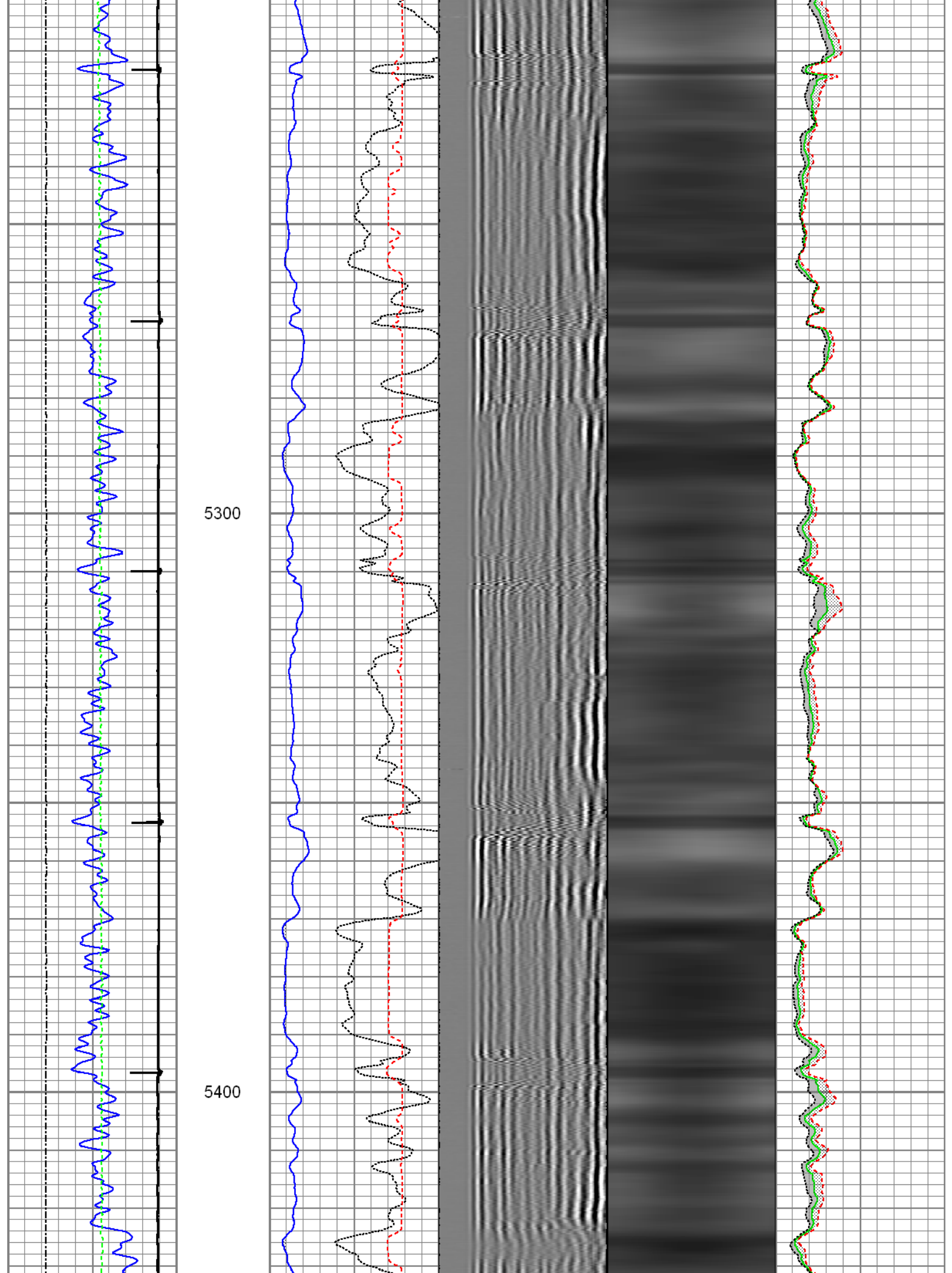


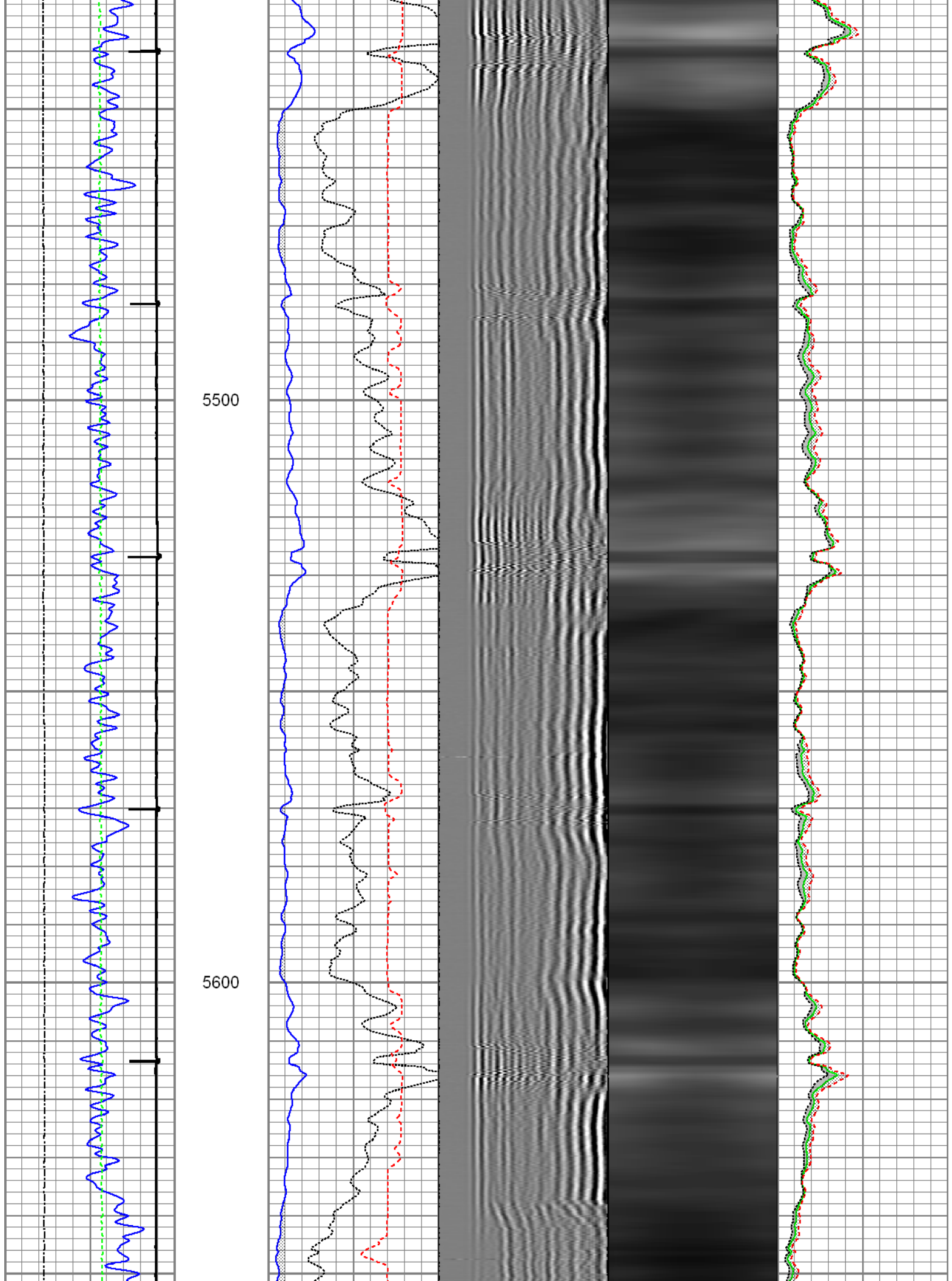


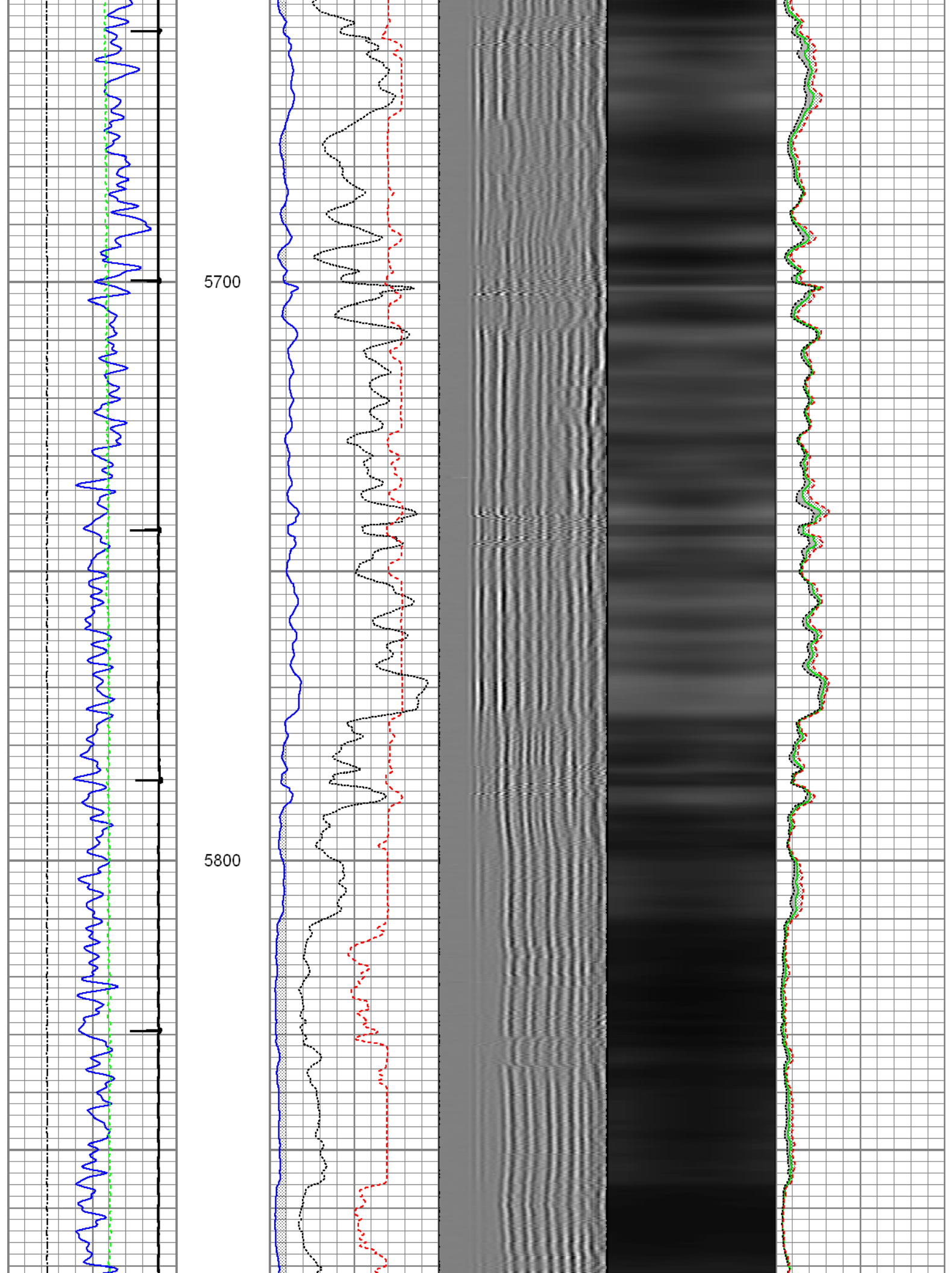


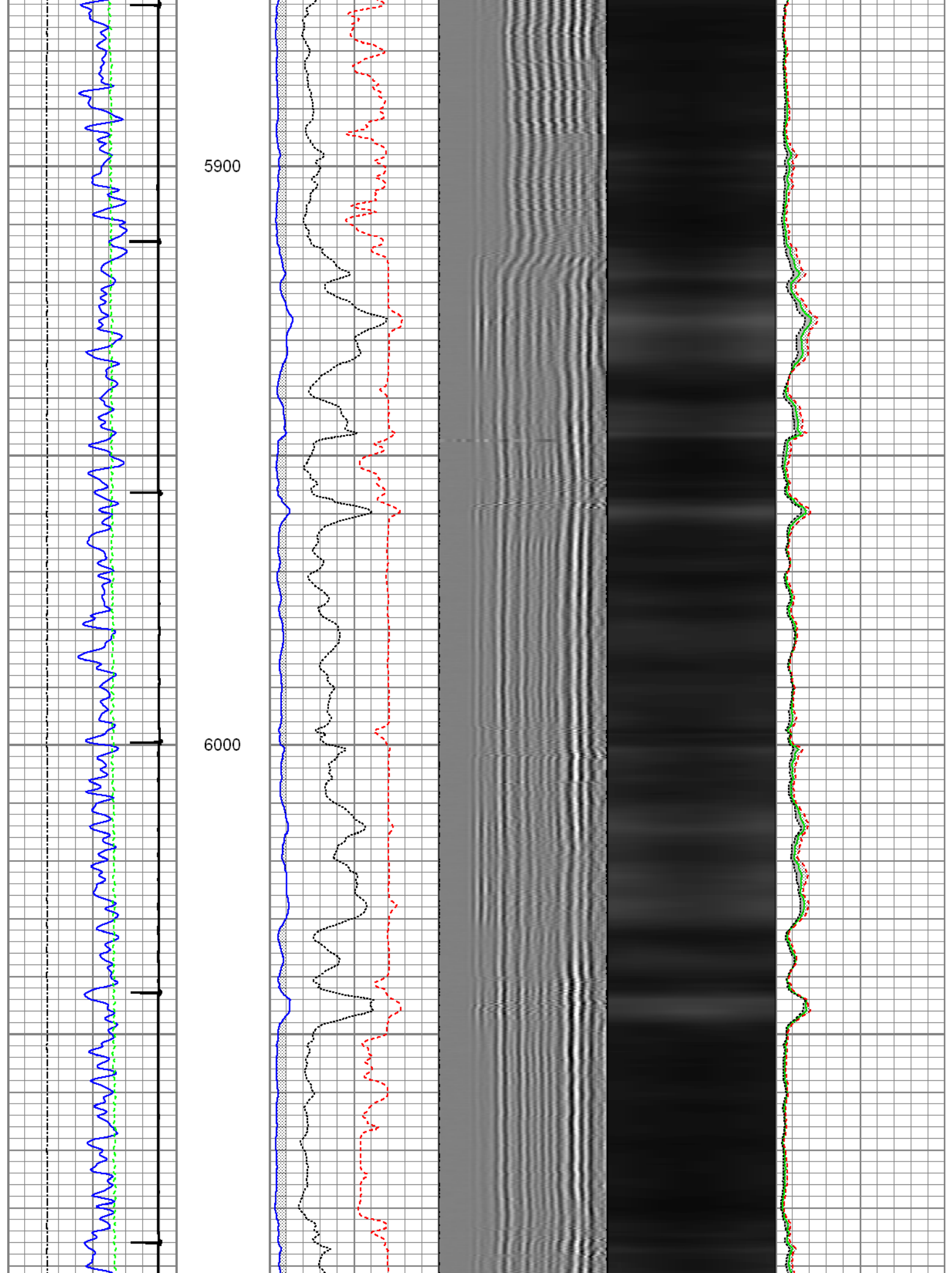


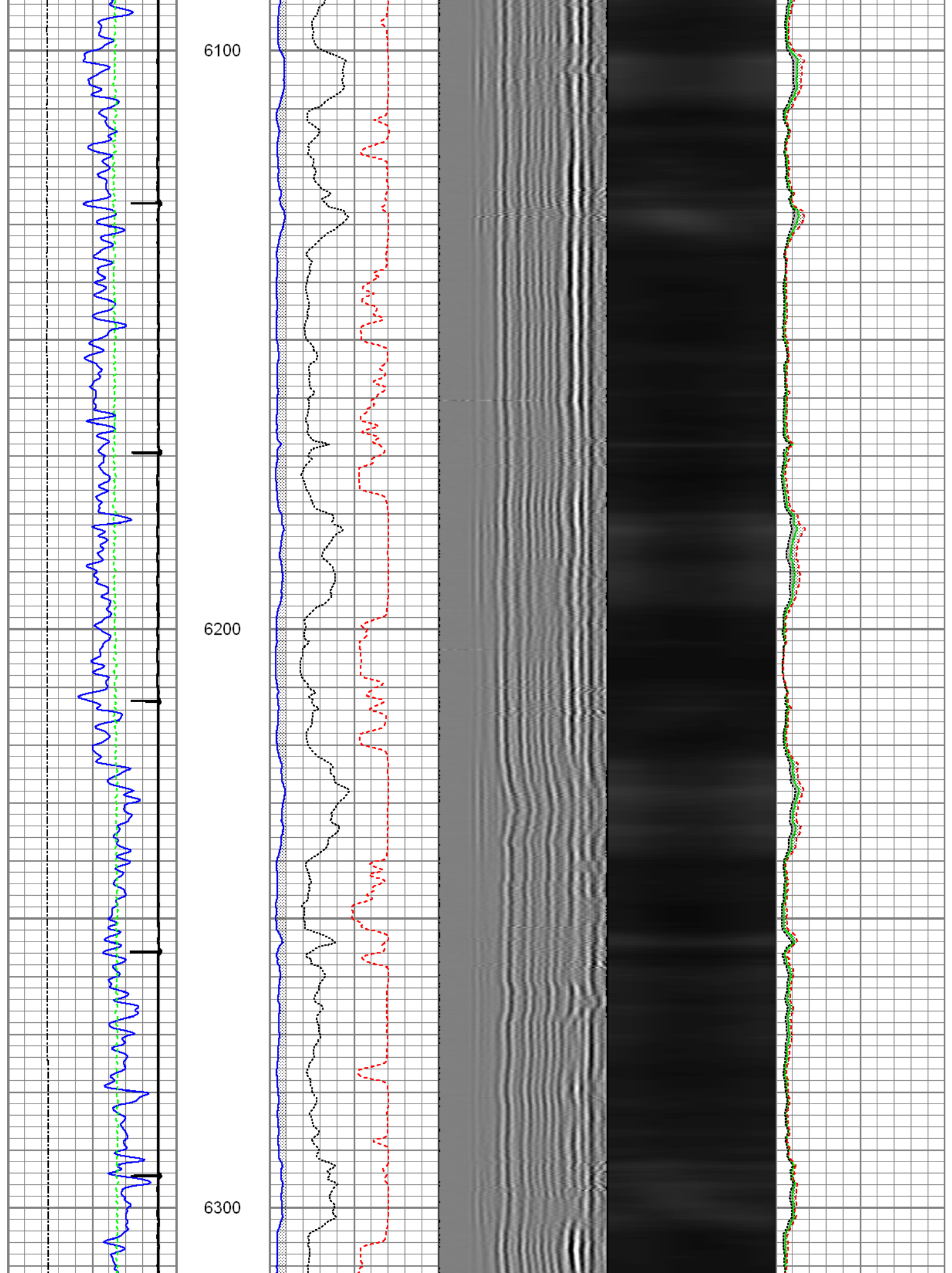


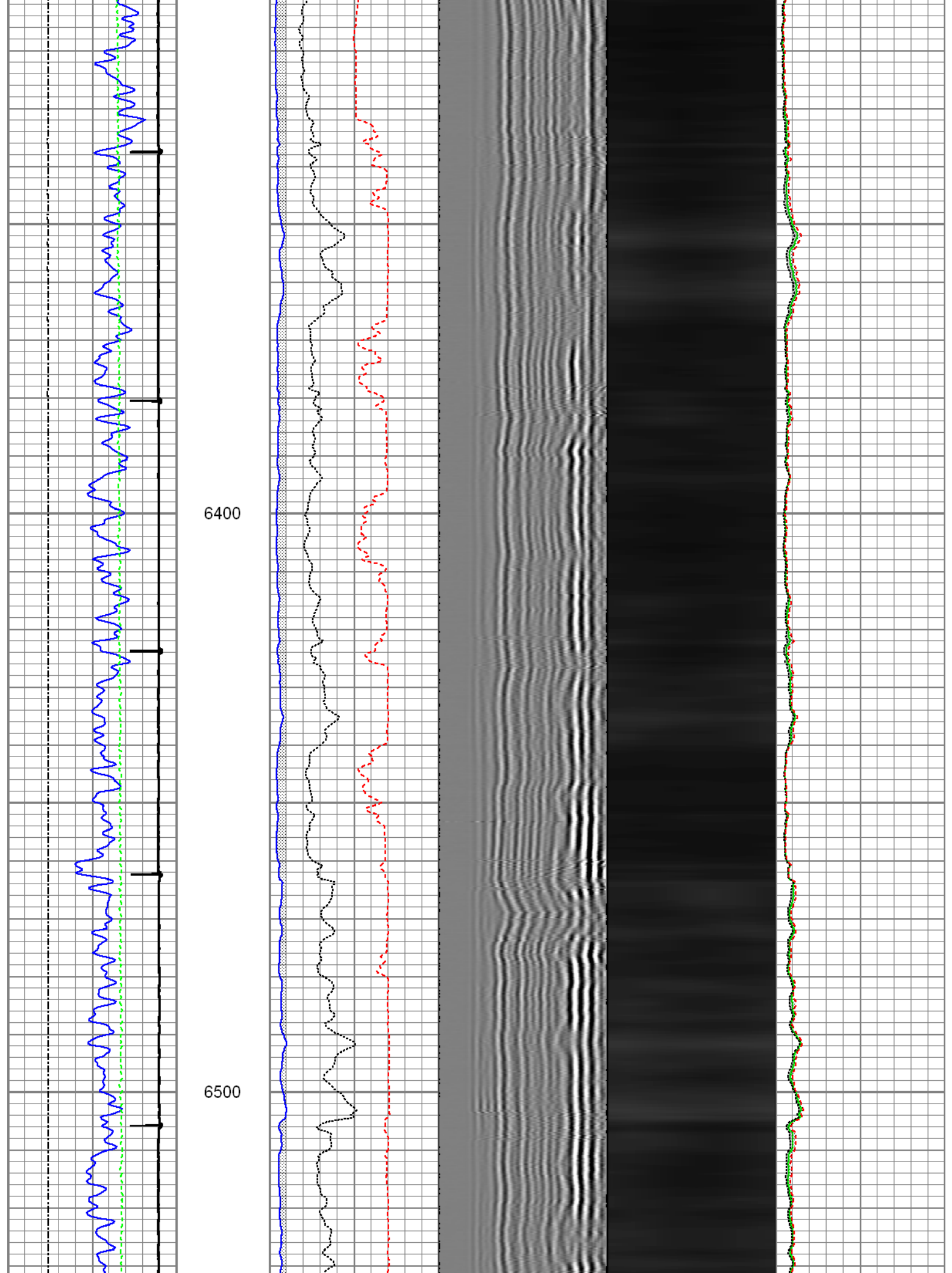


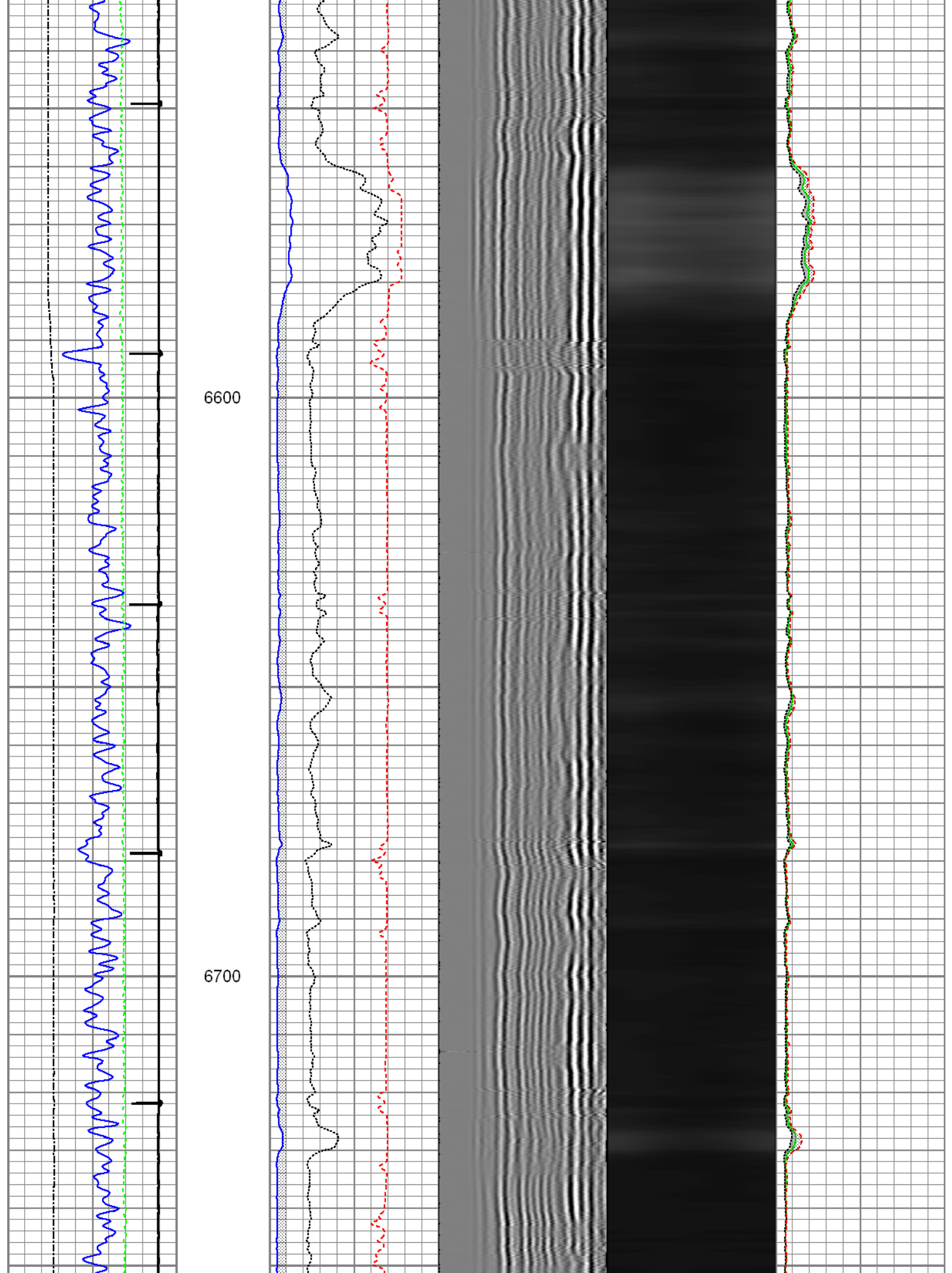


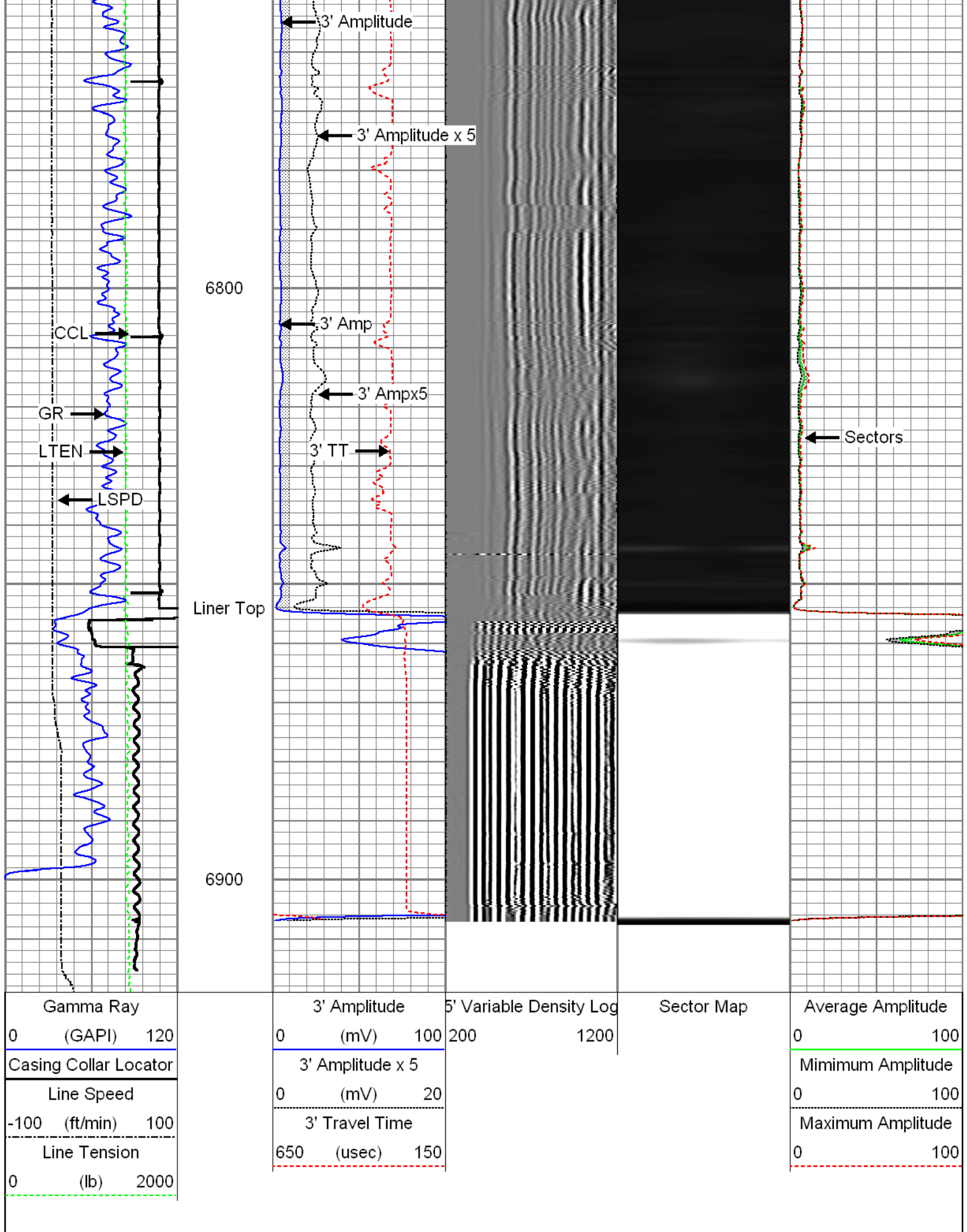








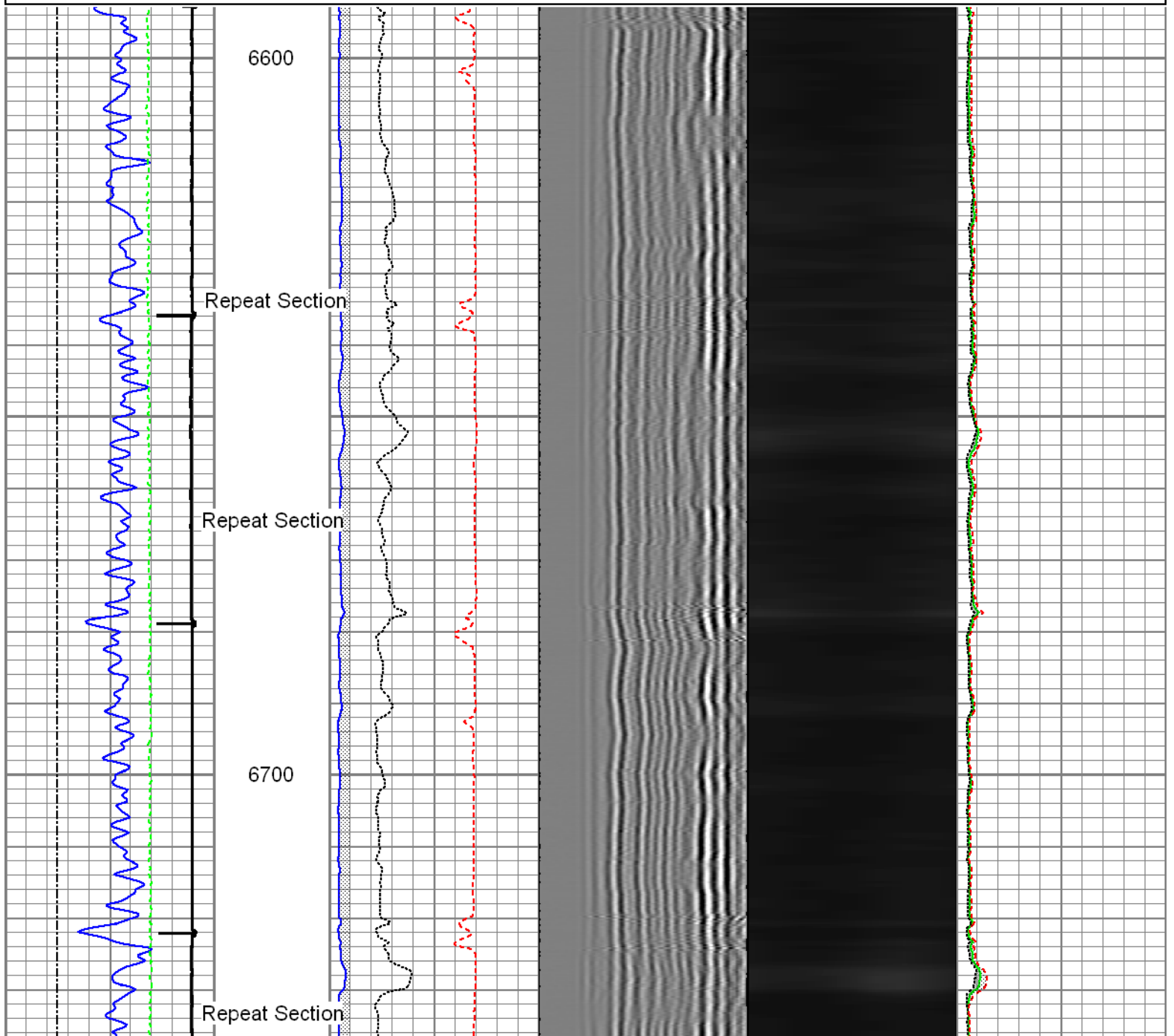


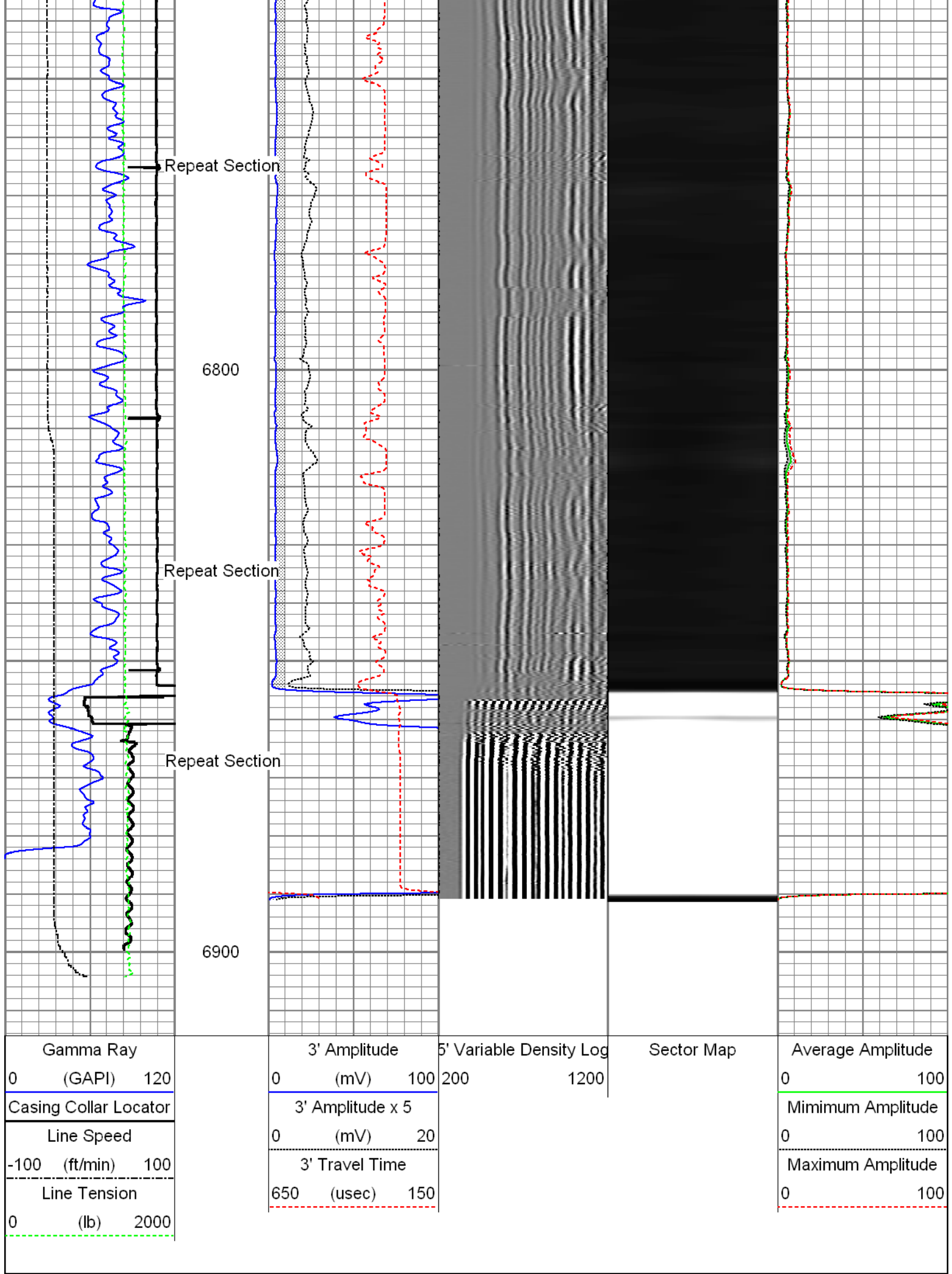


Logged with 2800 PSI Surface Induced Pressure

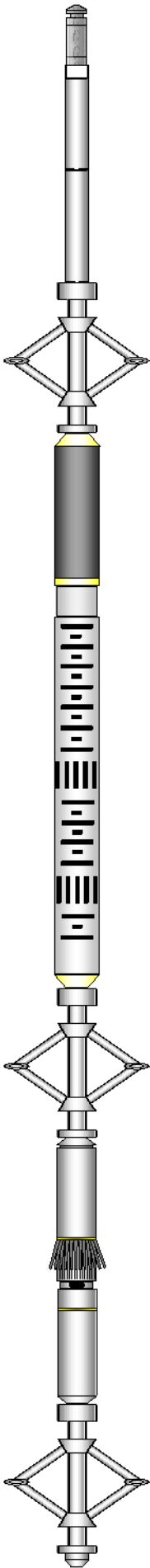
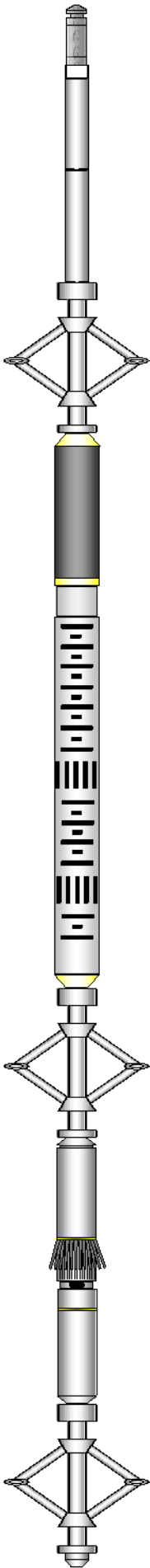
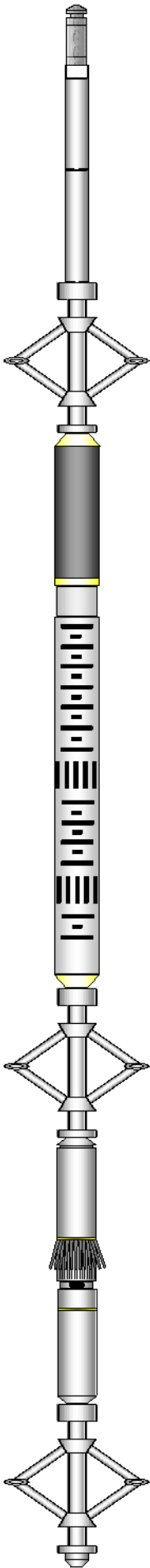
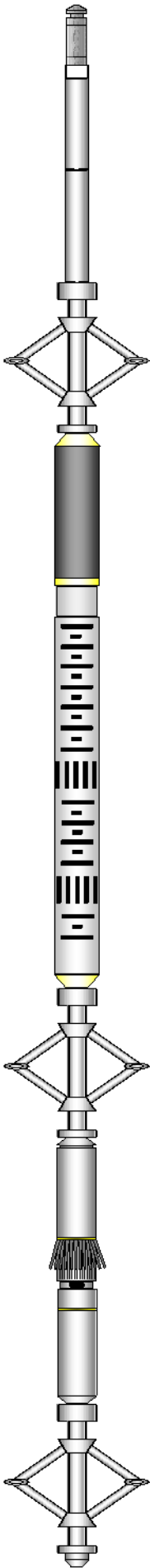
Database File: 0512339189_anadarko_barefoot 30c-25hz_09-20-14_mit_rbl.db
 Dataset Pathname: repeat1
 Presentation Format: rbt4_mit
 Dataset Creation: Sat Sep 20 13:34:17 2014 by Log SCH 111116
 Charted by: Depth in Feet scaled 1:240

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





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

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
GR	22.37		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 (051219) Crossover Ultrawire Toolbus to Ultralink	1.58	1.69	6.50
			UW_PGR-UW_PGR_020 (211727) Production Gamma Ray	1.93	1.69	9.50
			UW_PRC-DSSRAC (080) 2-3/4" DSS 5 Arm Roller Centralizer	2.55	2.75	32.00
WV3FT	14.99		UW_RBT-UW_RBT_004 (10013454) Sondex Ultrawire 3-1/8" Radial Bond Tool	9.47	3.13	140.00
WVFS1	14.99					
WVFS2	14.99					
WVFS3	14.99					
WVFS4	14.99					
WVFS5	14.99					
WVFS6	14.99					
WVFS7	14.99					
WVFS8	14.99					
CBLTEMP	14.99					
CBLROT	14.99					
WV5FT	13.99					
MIT	4.97		UW_PRC #3 -DSSRAC (081) 2-3/4" DSS 5 Arm Roller Centralizer	2.55	2.75	32.00
			UW_MIT-UW_MIT40_027 (211111) 40 Multifinger Imaging Tool	4.54	2.75	61.10
			UW_PRC-DSSRAC (082) 2-3/4" DSS 5 Arm Roller Centralizer	2.55	2.75	32.00
TSTAMP	0.00		UW_BUL-UW_BUL_006 (218707) Sondex Ultrawire Bullnose Terminator	0.22	1.69	1.20

Dataset: 0512339189_anadarko_barefoot 30c-25hz_09-20-14_mit_rbl.db: field/well/run1/main1
 Total Length: 26.62 ft
 Total Weight: 319.30 lb

Calibration Report

Database File: 0512339189_anadarko_barefoot 30c-25hz_09-20-14_mit_rbl.db
 Dataset Pathname: main1
 Dataset Creation: Sat Sep 20 13:48:14 2014 by Log SCH 111116

Multi-finger Imaging Tool Calibration Report

Serial Number: 211111
 Number of Fingers: 40
 Tool Model: UW_MIT40_027

Inclinometer Calibration Report

Performed: Mon Nov 18 15:31:59 2013
 Calibration Angle: 46

		Inc X	Inc Y
Vertical:		1931	1952
Finger 1 up:		1959	2266
Finger 31 up:		1608	1962
Finger 21 up:		1927	1623
Finger 11 up:		2253	1930
Sensitivity ratio:	1.0031		
X-axis angle:	272.845		
Deviation const.:	311.818		

Finger Calibration Report

Performed: Sat Sep 20 12:45:53 2014

Ring size: (in)	4	Sens	5	Sens	6	Sens	7
Finger 01:	974	377.0	1351	404.0	1755	437.0	2192
Finger 02:	1009	372.0	1381	402.0	1783	428.0	2211
Finger 03:	1000	369.0	1369	403.0	1772	433.0	2205
Finger 04:	961	368.0	1329	402.0	1731	435.0	2166
Finger 05:	986	364.0	1350	398.0	1748	426.0	2174
Finger 06:	973	370.0	1343	404.0	1747	436.0	2183
Finger 07:	1097	335.0	1432	370.0	1802	400.0	2202
Finger 08:	1006	354.0	1360	400.0	1760	429.0	2189
Finger 09:	997	364.0	1361	403.0	1764	429.0	2193
Finger 10:	1040	317.0	1357	352.0	1709	371.0	2080
Finger 11:	1091	370.0	1461	399.0	1860	420.0	2280
Finger 12:	1165	382.0	1547	414.0	1961	432.0	2393
Finger 13:	1098	348.0	1446	387.0	1833	413.0	2246
Finger 14:	1197	333.0	1530	358.0	1888	377.0	2265
Finger 15:	1022	370.0	1392	413.0	1805	435.0	2240
Finger 16:	1141	353.0	1494	393.0	1887	402.0	2289
Finger 17:	1052	360.0	1412	405.0	1817	429.0	2246
Finger 18:	1032	366.0	1398	409.0	1807	432.0	2239
Finger 19:	1034	365.0	1399	414.0	1813	444.0	2257
Finger 20:	1099	354.0	1453	395.0	1848	415.0	2263
Finger 21:	1092	362.0	1454	406.0	1860	431.0	2291
Finger 22:	1105	367.0	1472	404.0	1876	430.0	2306
Finger 23:	1072	363.0	1435	414.0	1849	441.0	2290
Finger 24:	1236	339.0	1575	367.0	1942	392.0	2334
Finger 25:	1208	357.0	1565	389.0	1954	401.0	2355
Finger 26:	1223	344.0	1567	364.0	1931	372.0	2303
Finger 27:	1183	345.0	1528	375.0	1903	391.0	2294
Finger 28:	1235	350.0	1585	368.0	1953	379.0	2332
Finger 29:	1214	344.0	1558	369.0	1927	376.0	2303
Finger 30:	1189	338.0	1527	366.0	1893	389.0	2282
Finger 31:	1203	351.0	1554	372.0	1926	386.0	2312
Finger 32:	1227	337.0	1564	356.0	1920	365.0	2285
Finger 33:	1049	370.0	1419	412.0	1831	438.0	2269

Finger 33:	1049	379.0	1419	412.0	1851	458.0	2265
Finger 34:	1089	365.0	1454	396.0	1850	415.0	2265
Finger 35:	1182	343.0	1525	367.0	1892	389.0	2281
Finger 36:	1121	349.0	1470	371.0	1841	391.0	2232
Finger 37:	1056	370.0	1426	397.0	1823	419.0	2242
Finger 38:	1055	365.0	1420	386.0	1806	407.0	2213
Finger 39:	1069	379.0	1448	407.0	1855	435.0	2290
Finger 40:	971	371.0	1342	400.0	1742	428.0	2170

Segmented Cement Bond Log Calibration Report

Serial Number: 10013454
Tool Model: UW_RBT_004

Calibration Casing Diameter: 7.000 in
Calibration Depth: 277.584 ft

Master Calibration, performed Sat Sep 20 09:41:04 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	-0.001	0.745	0.800	62.165	82.183	0.900
5FT	-0.003	0.785	0.800	62.165	77.963	0.997
S1	-0.001	0.730	0.000	100.000	136.752	0.162
S2	-0.004	0.738	0.000	100.000	134.837	0.474
S3	-0.002	0.750	0.000	100.000	132.944	0.320
S4	-0.004	0.758	0.000	100.000	131.226	0.466
S5	-0.002	0.761	0.000	100.000	131.144	0.219
S6	-0.003	0.757	0.000	100.000	131.451	0.432
S7	-0.002	0.742	0.000	100.000	134.456	0.271
S8	-0.002	0.735	0.000	100.000	135.632	0.291

Gamma Ray Calibration Report

Serial Number: 211727
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 Kerr McGee Oil & Gas Onshore LP
Well Barefoot 30C-25HZ
Field Wattenberg
County Weld
State Colorado