

Company		Kerr-McGee Oil and Gas Onshore LP	
Well		Douthit 8N-27HZ	
Field		Wattenberg	
County		Weld	
State		Colorado	
Company		Kerr-McGee Oil and Gas Onshore LP	
Well		Douthit 8N-27HZ	
Field		Wattenberg	
County		Weld	
State		Colorado	
Location:		API #: 05-123-39499	
Permanent Datum		1500' FNL & 309' FEL SENE	
Log Measured From		Lat / Long 40.200245 / -104.961172	
Drilling Measured From		SEC 26 TWP T3N RGE 68W	
Ground Level		Elevation 4942	
Kelly Bushing		117 FT	
Kelly Bushing		K.B. 4959	
Kelly Bushing		D.F. 4958	
Kelly Bushing		G.L. 4942	
Elevation			
Other Services		GR/JB RBP	
Date		12-Nov-2014	
Run Number		Three	
Depth Driller		12919 FT	
Depth Logger		6619 FT	
Bottom Logged Interval		6614 FT	
Top Log Interval		174 FT	
Open Hole Size		NA	
Type Fluid		Water	
Density / Viscosity		8.34 lbm/gal	
Max. Recorded Temp.		205 Deg. F	
Estimated Cement Top		Surface	
Time Well Ready		ROA	
Time Logger on Bottom		13:15	
Equipment Number		HD-134	
Location		FT. Lupton CO	
Recorded By		J. Raby	
Witnessed By		Eddar Chaves	
Borehole Record		Tubing Record	
Run Number		Bit	
From		To	
Size		Weight	
From		To	
Casing Record		Size (in)	
Surface Casing		9-5/8"	
Intermediate #1		7"	
Intermediate #2		4.5"	
Liner		11.6	
Grade		Top	
Bottom		Bottom	
J-55		1241 FT	
P-110		7640 FT	
P-110		6597 FT	
12904 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.

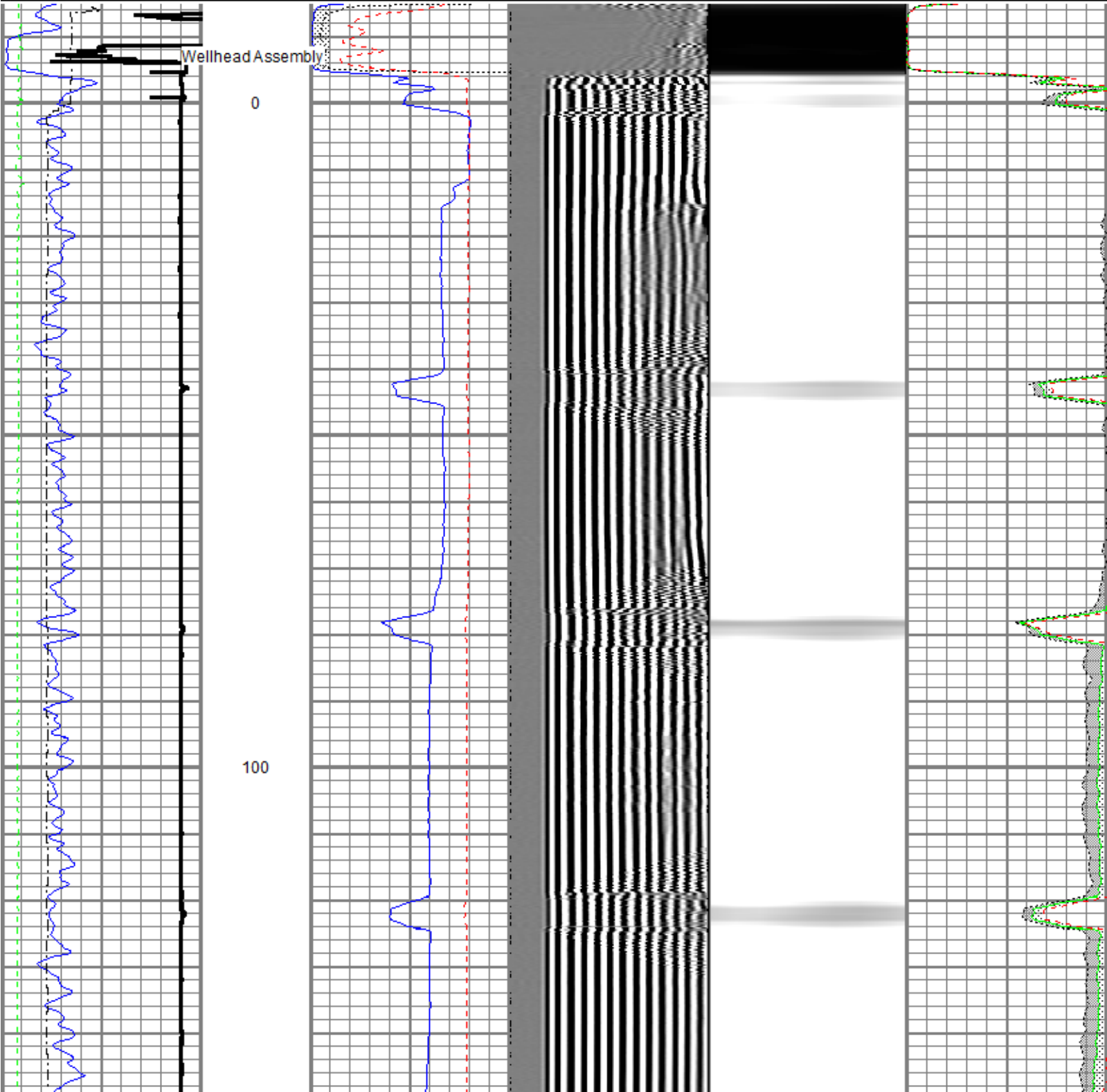
Comments

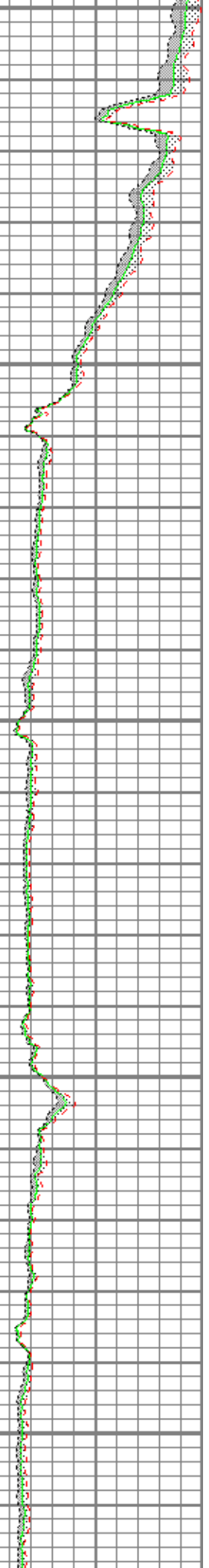
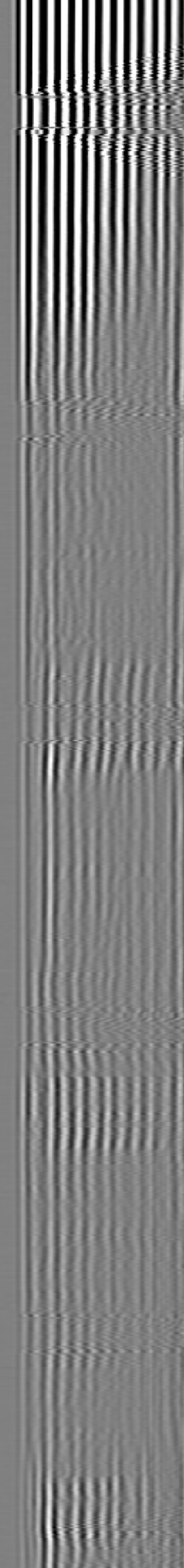
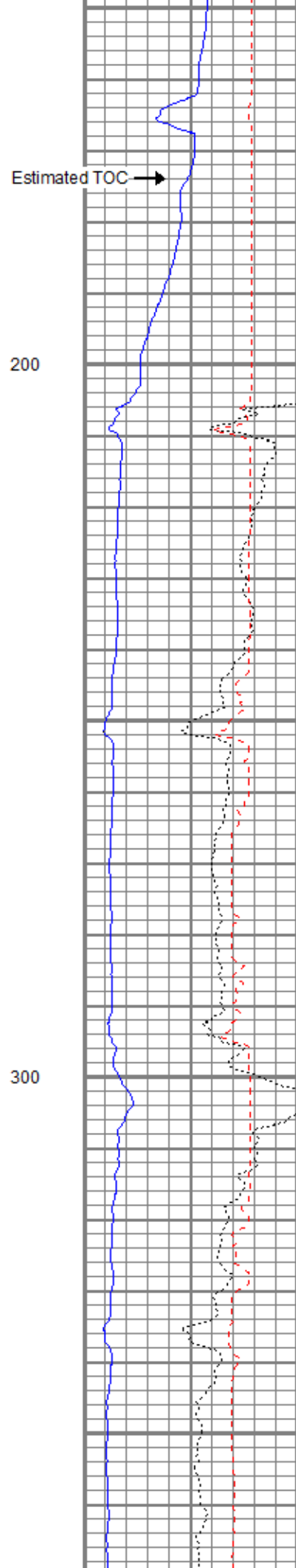
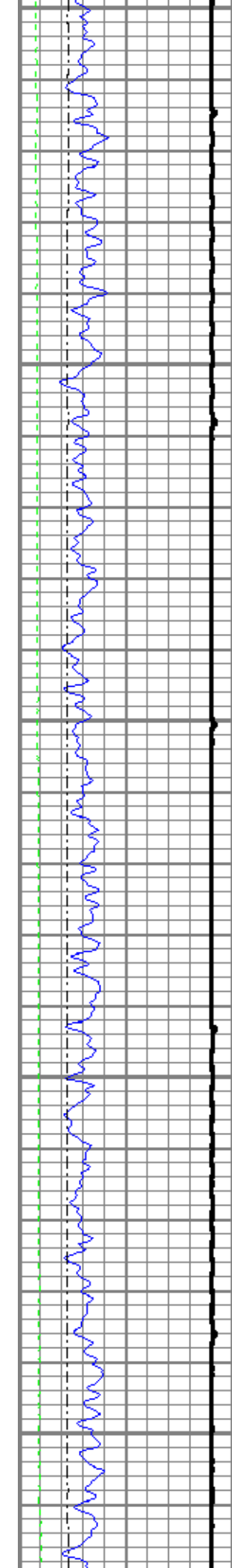
Log ran as per Customer Request.
Depth reference to Casing Tally reported Liner Top at 6597 FT.
Adjusted log -20 FT to correlate with Liner Top.
Log ran from below liner top to surface
Log ran with 2800 PSI surface Induced pressure.
No debris found on logging tools after run.

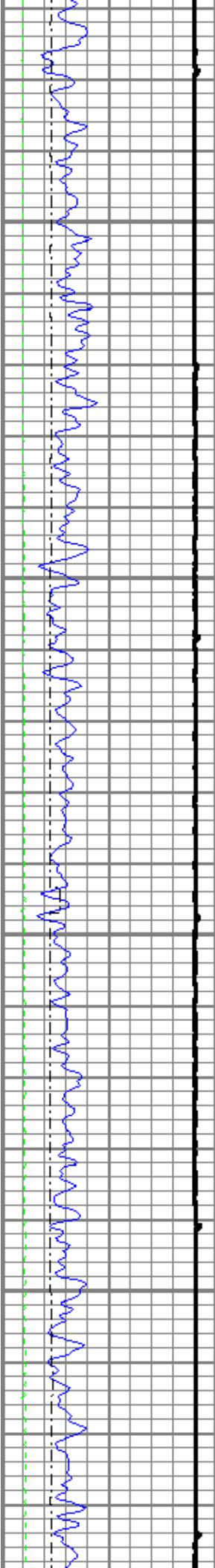
Thank you for Choosing FMC Technologies Completion Services, Inc.!!

Database File: anadarko_douthit 8n-27hz_rcbl mit_11-nov-2014.db
 Dataset Pathname: pass5
 Presentation Format: rbt4_mit
 Dataset Creation: Wed Nov 12 13:05:57 2014 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240

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

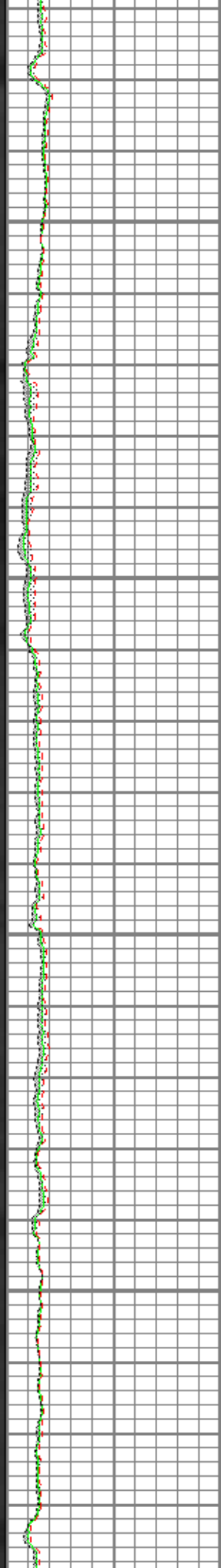
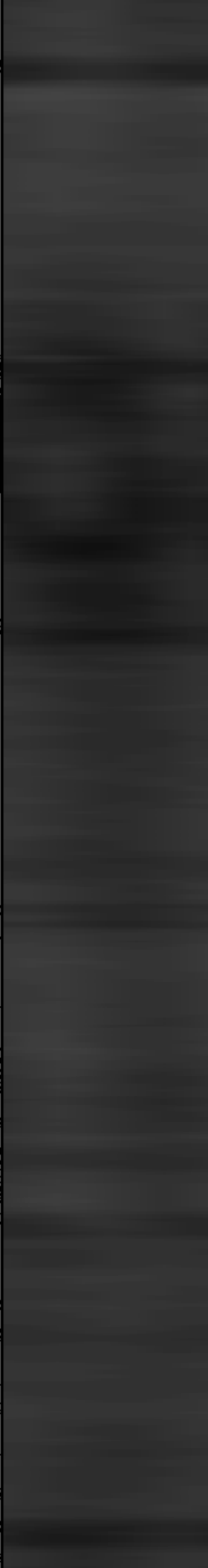
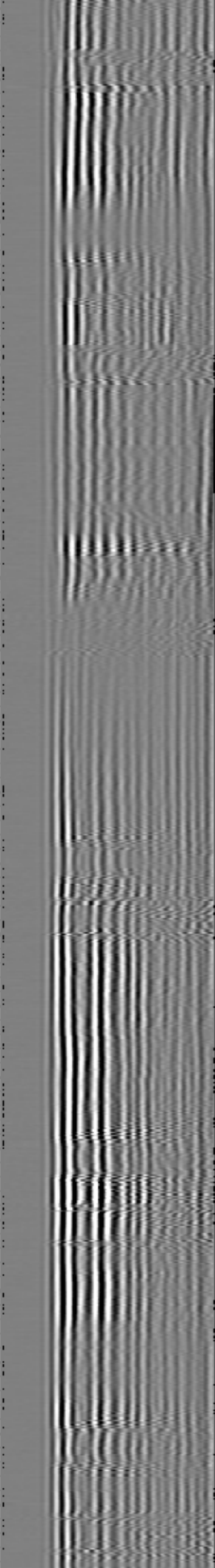
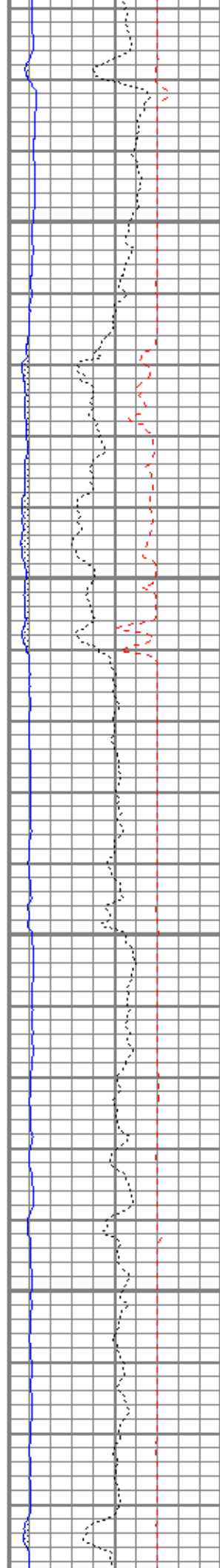


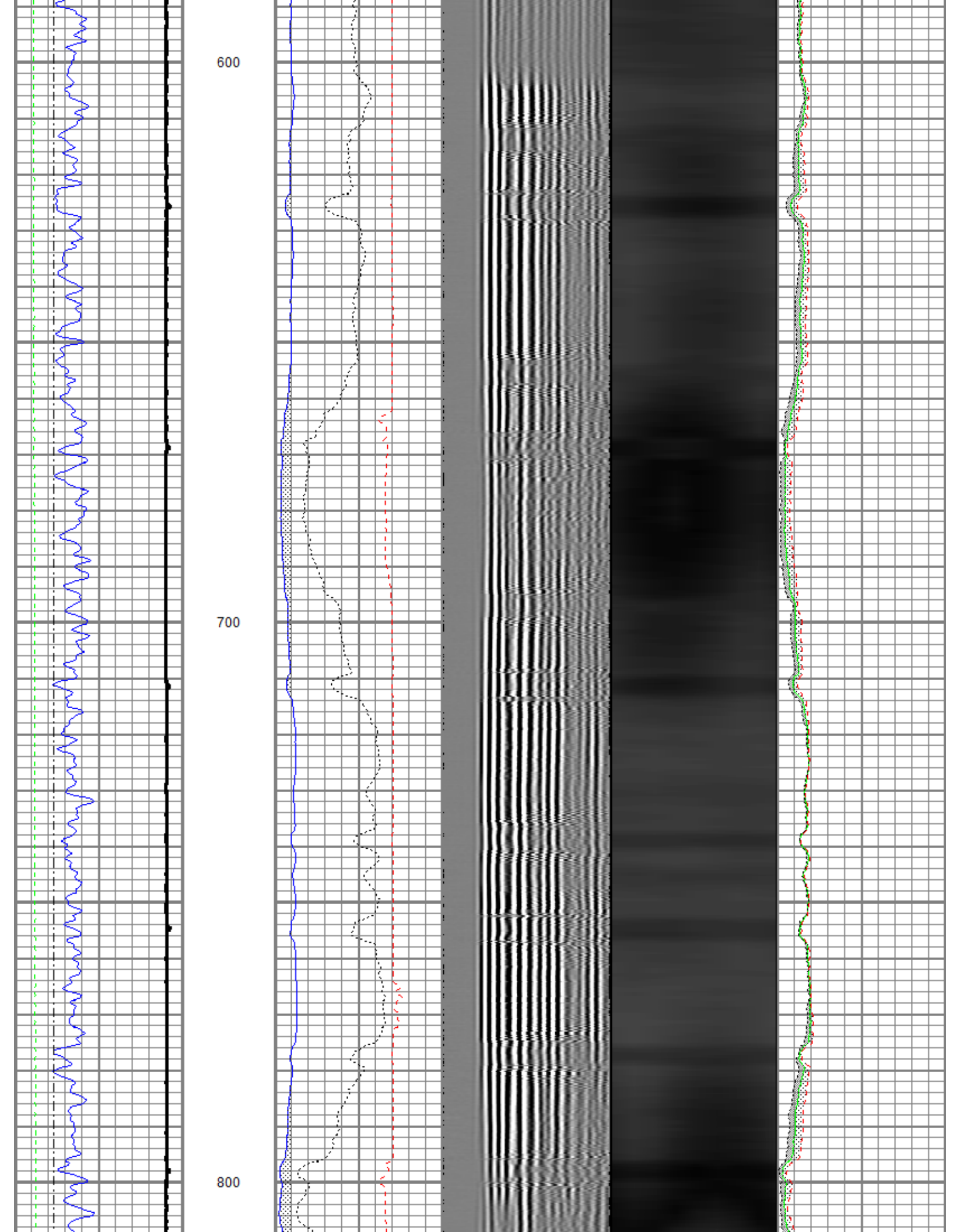


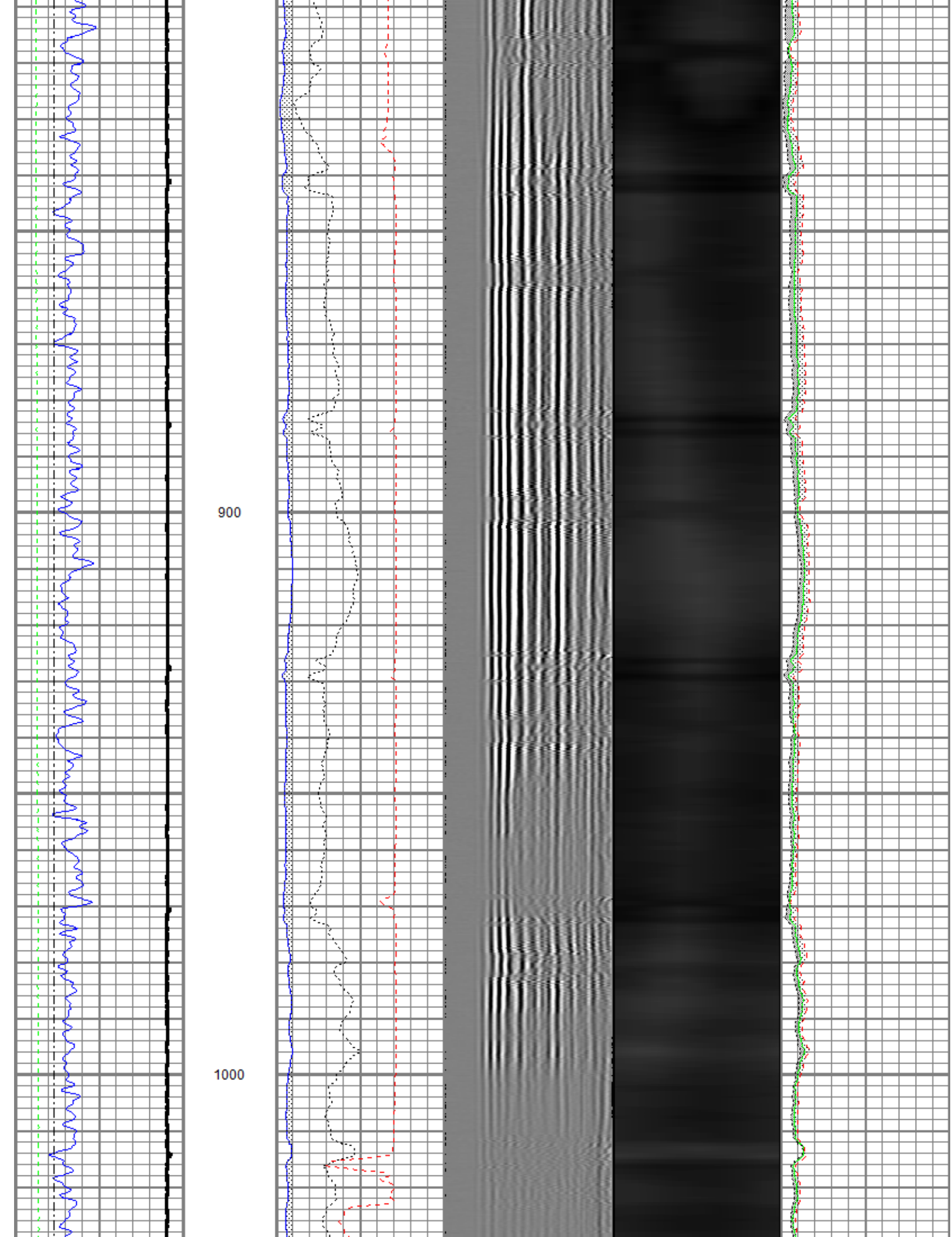


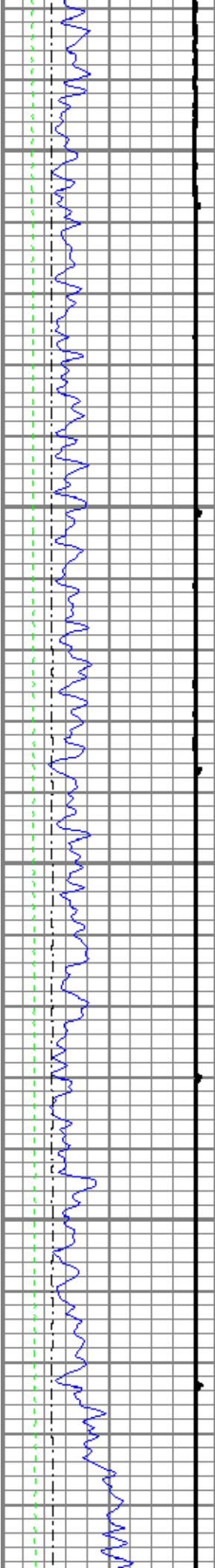
400

500



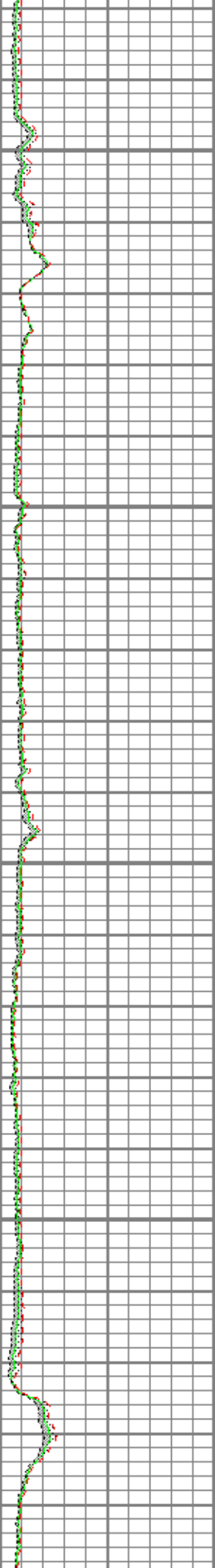
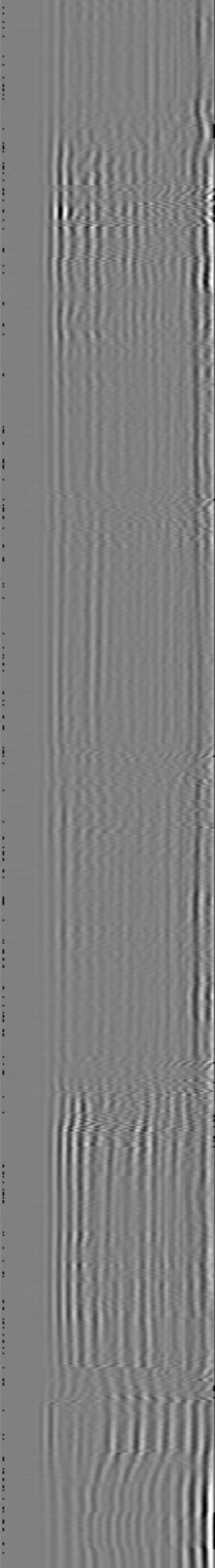
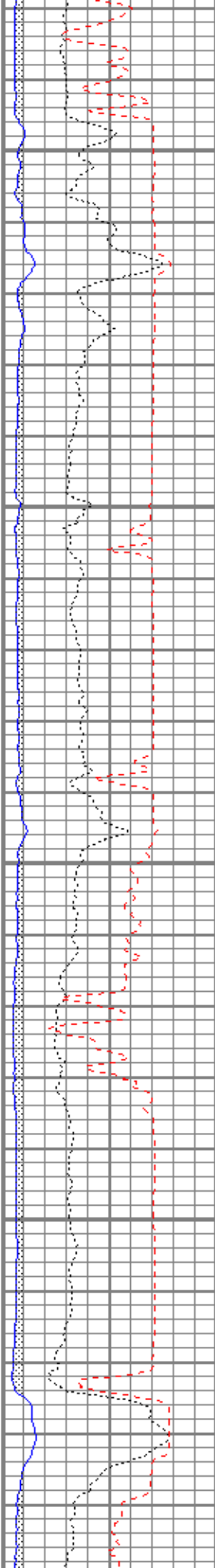


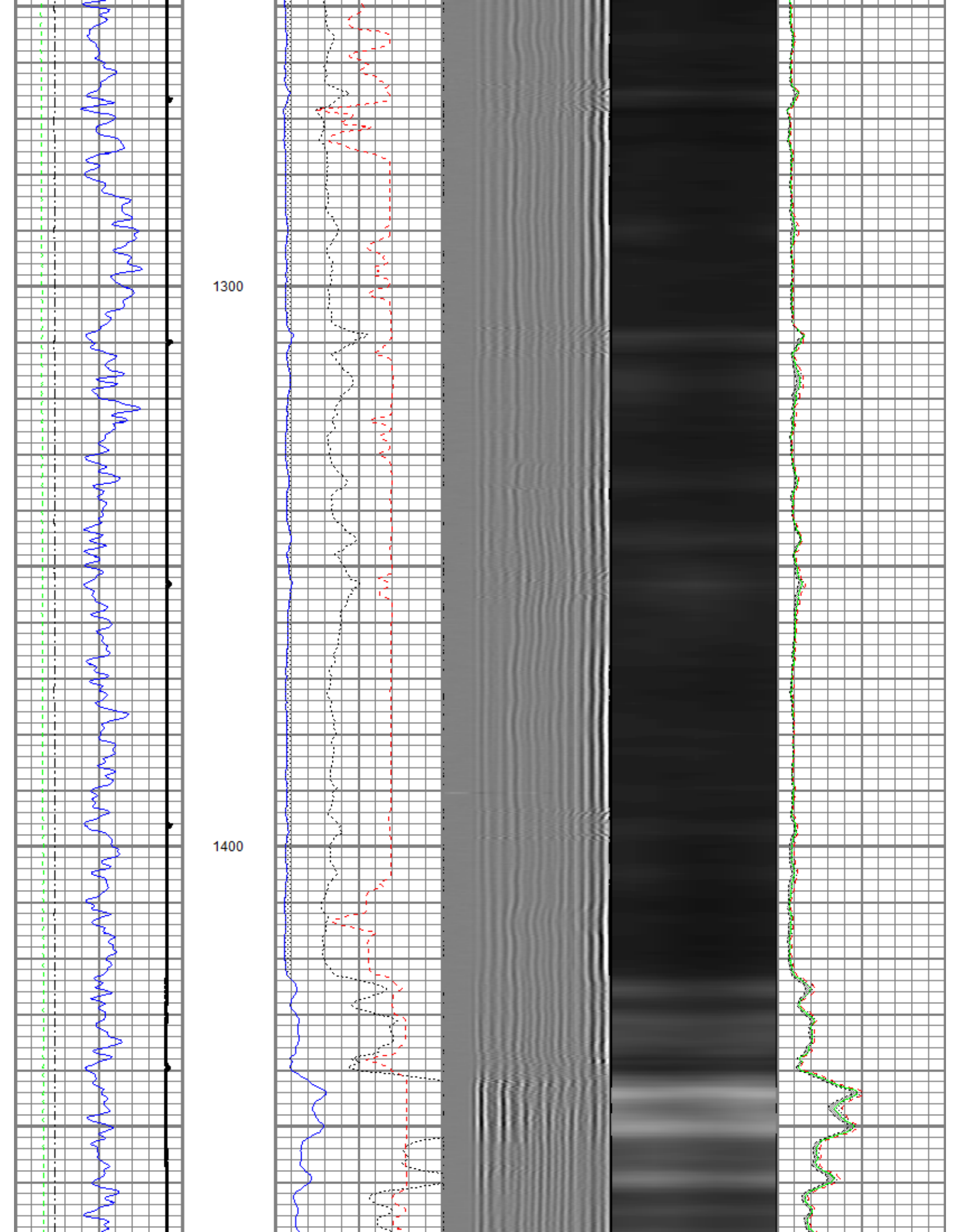


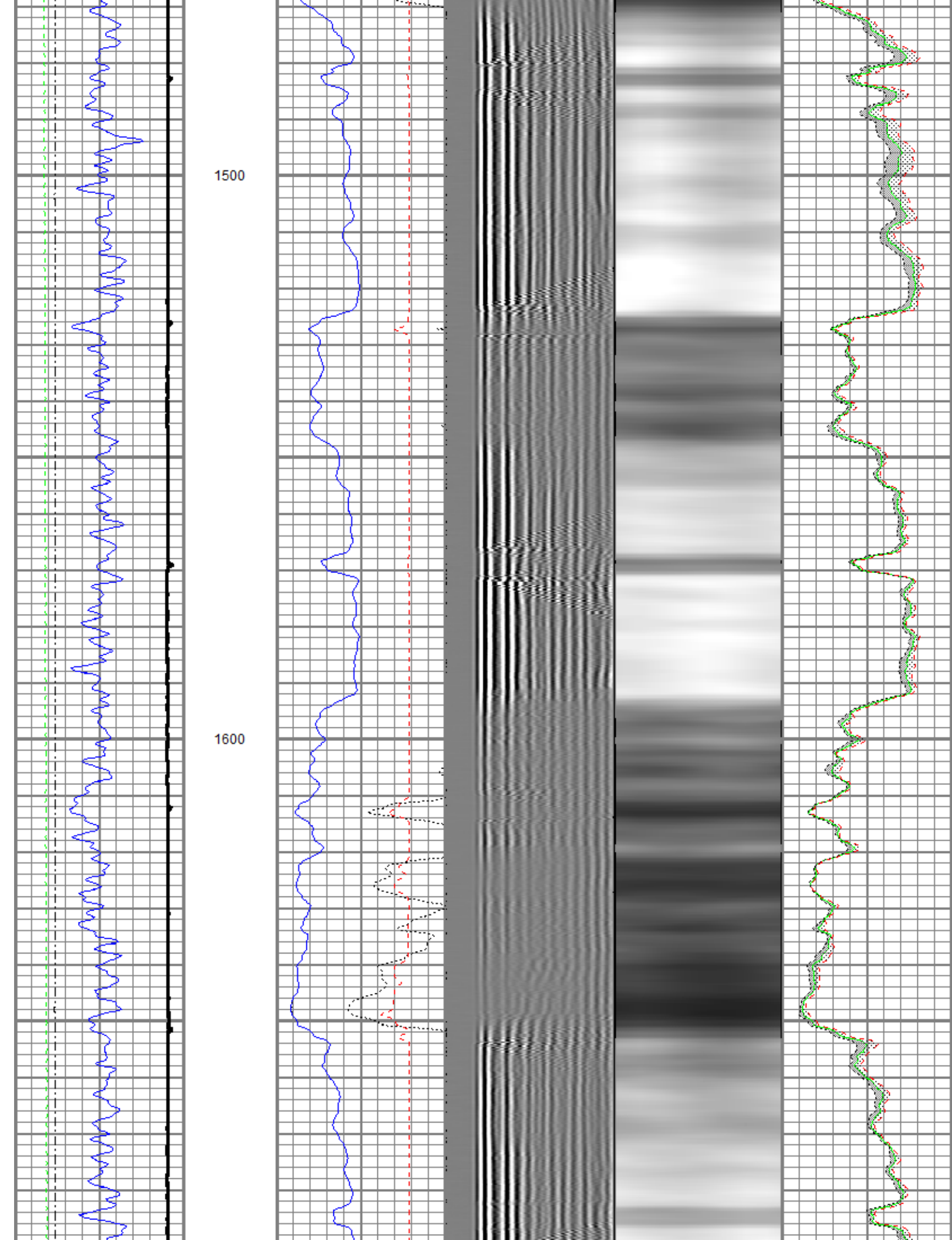


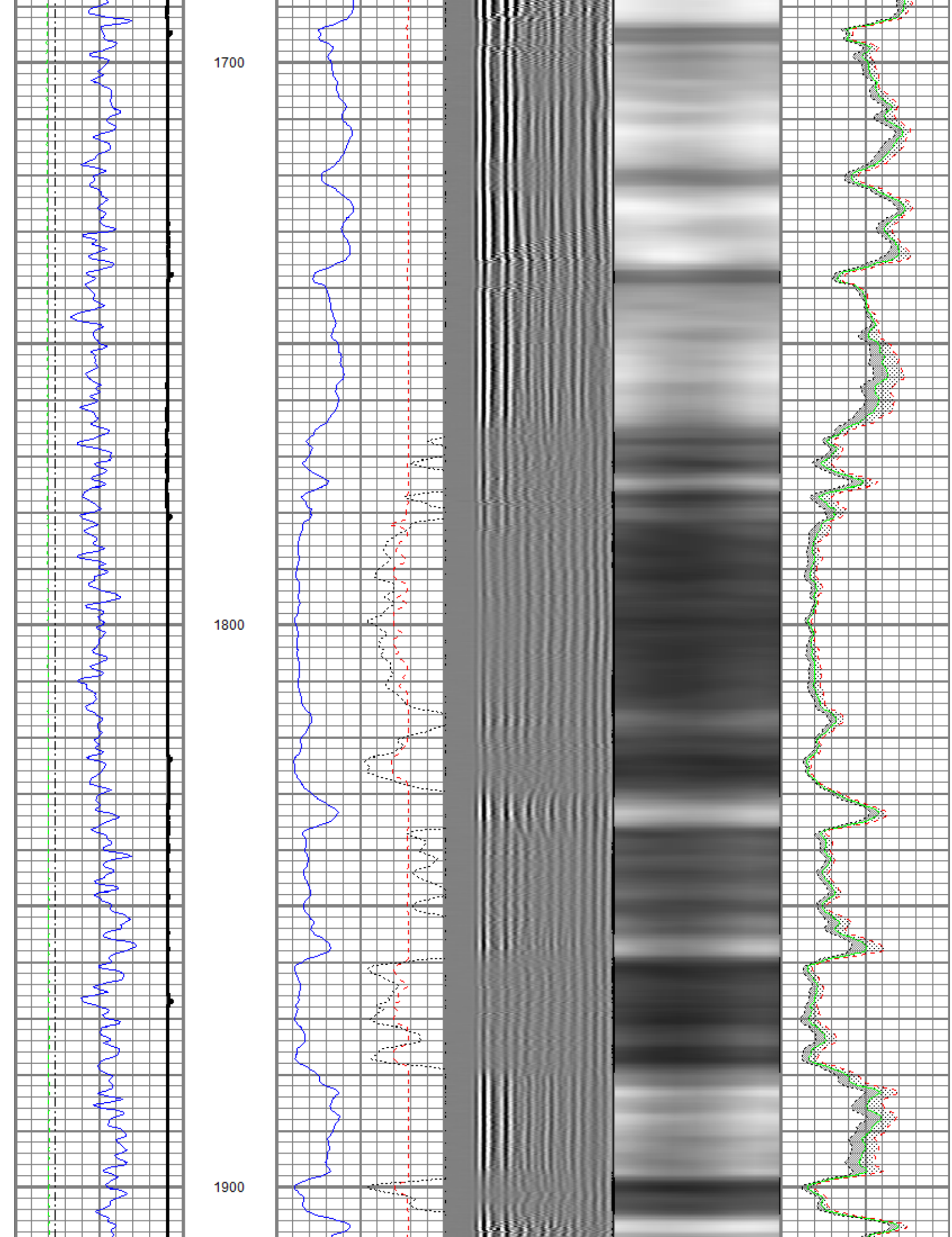
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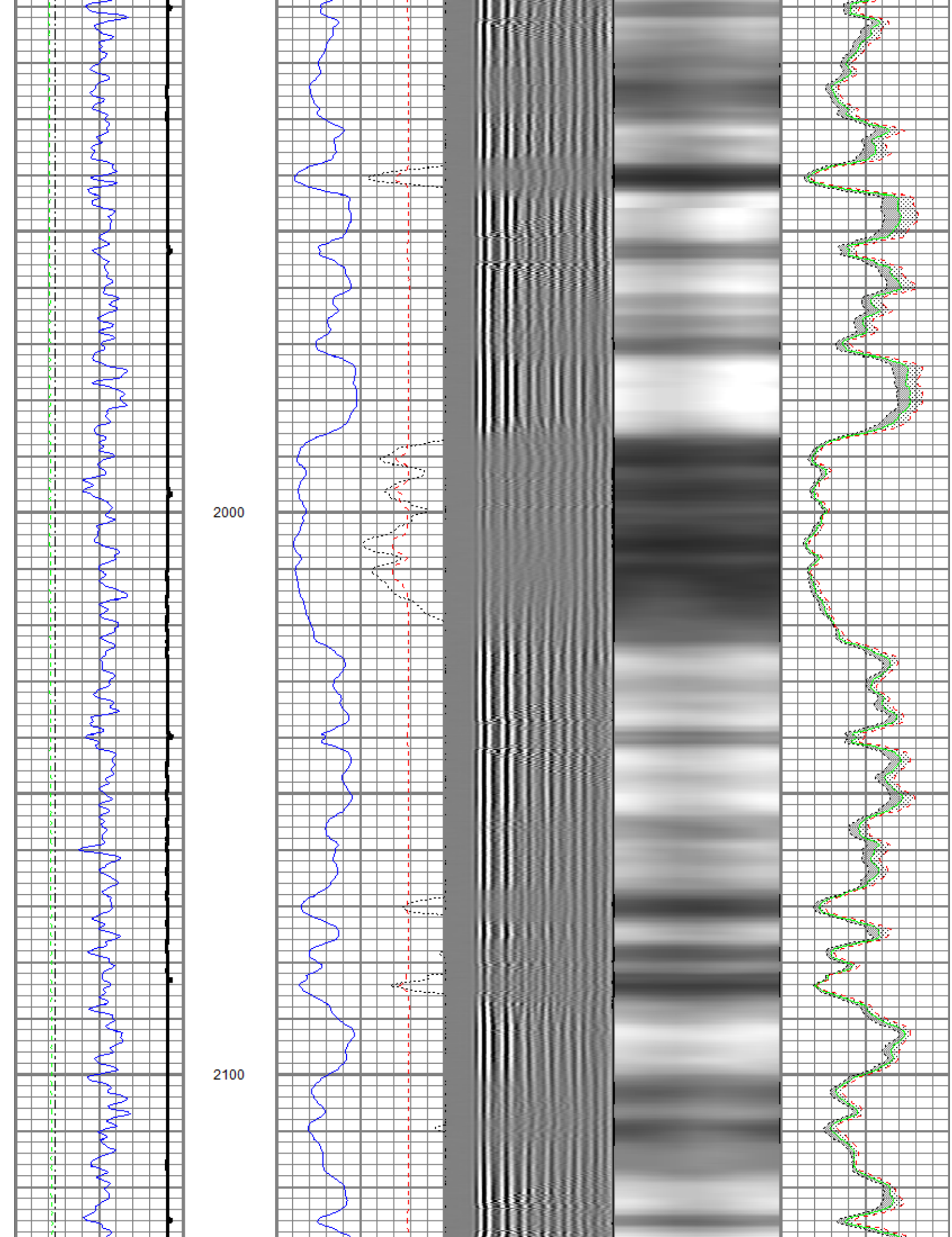
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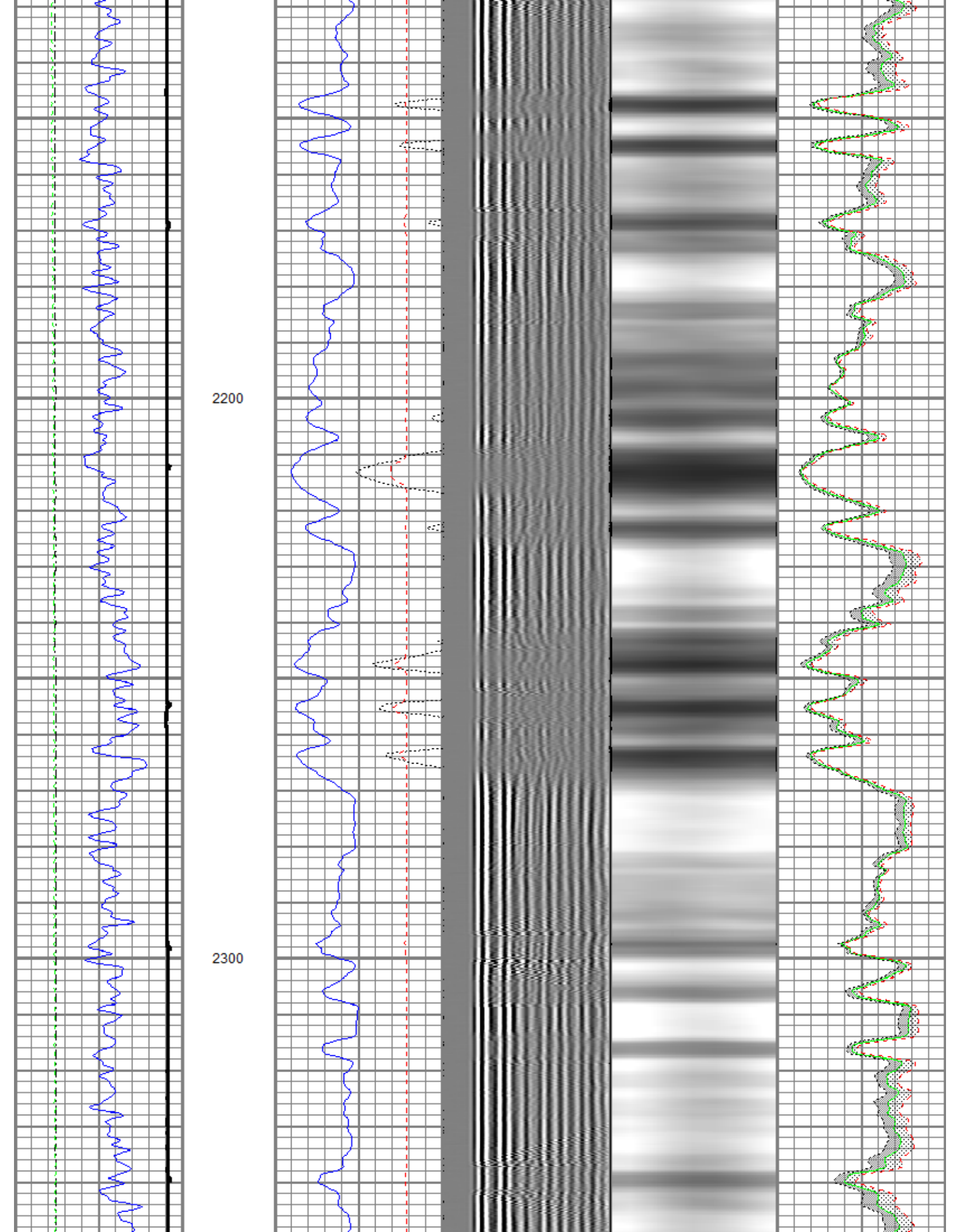


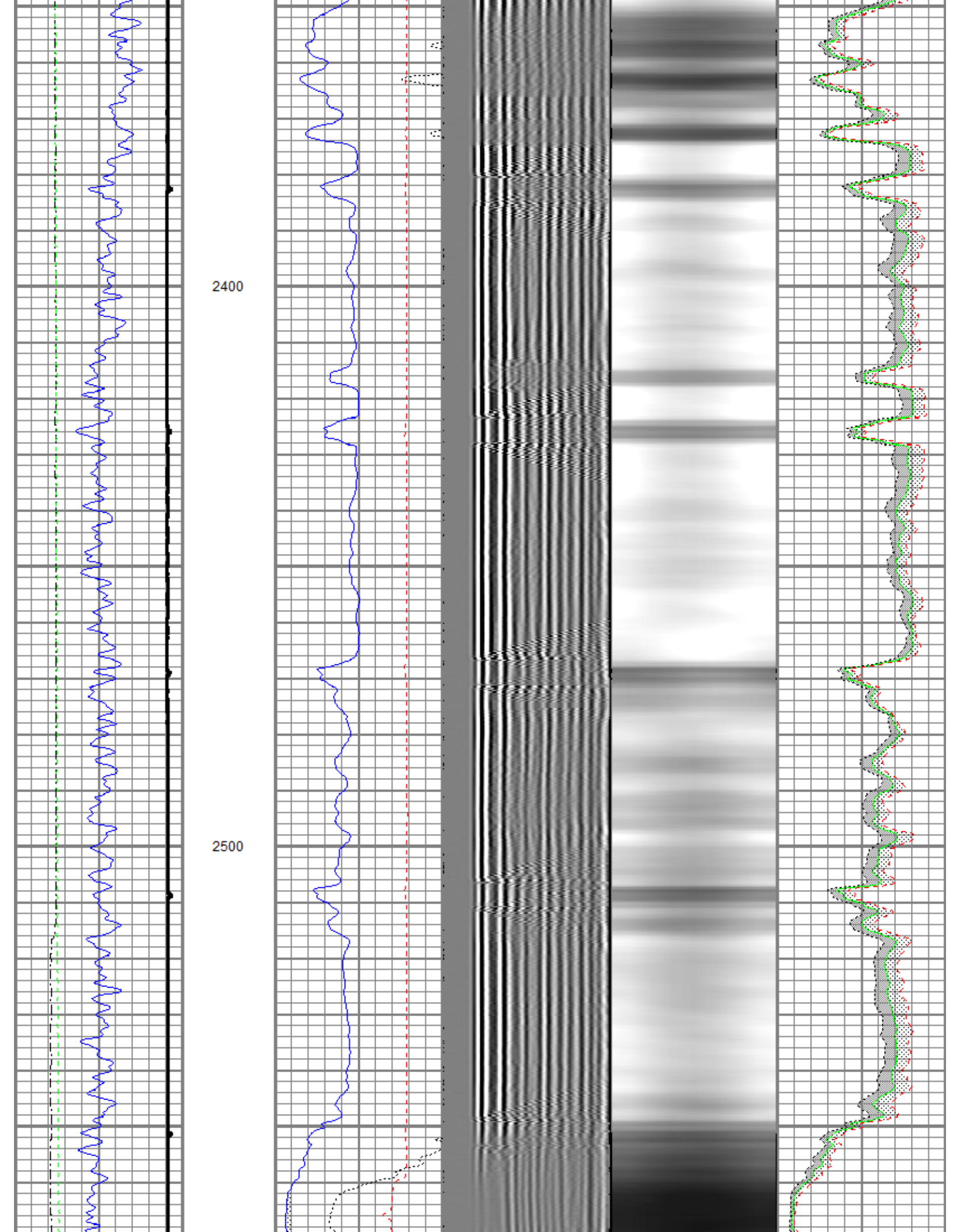


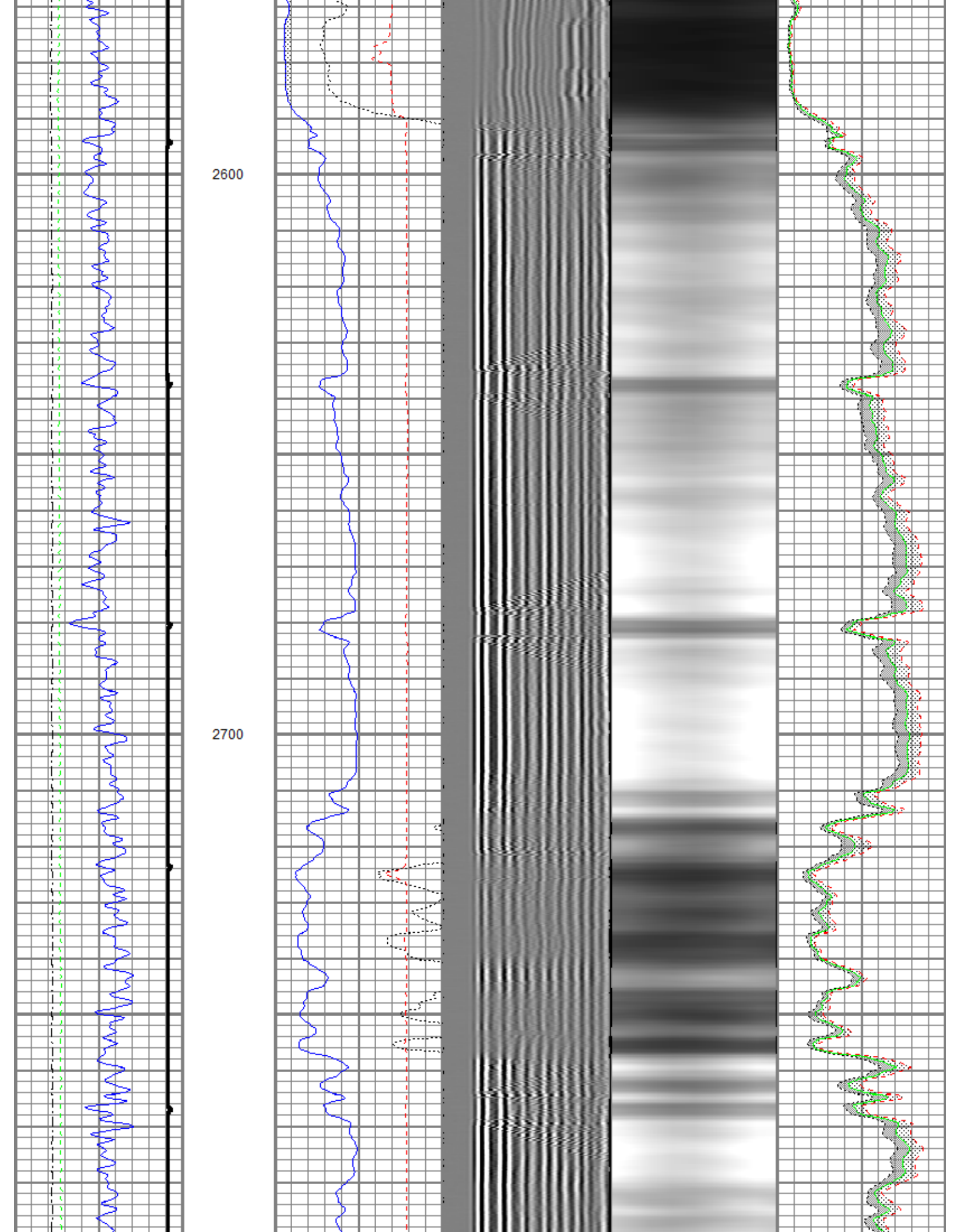


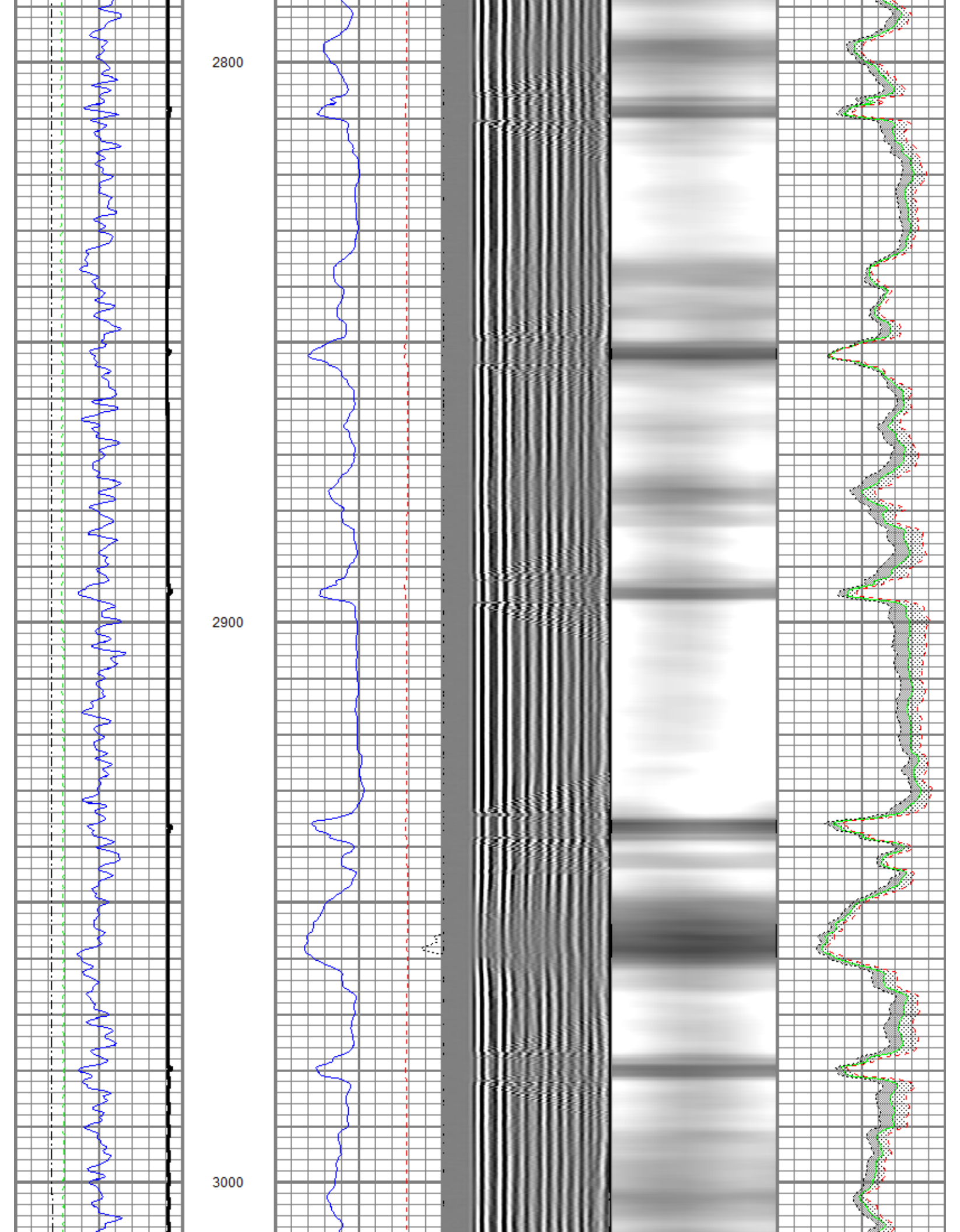


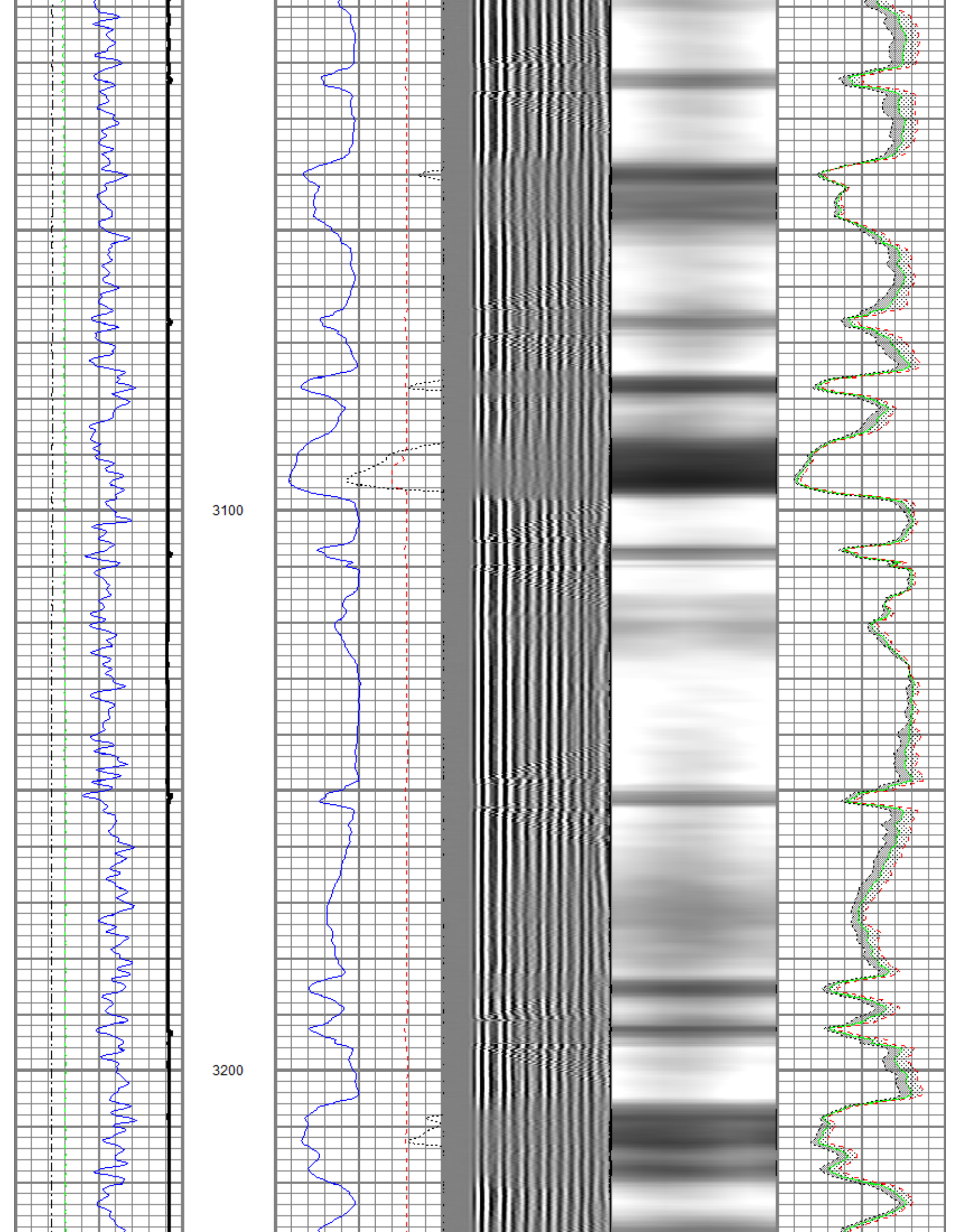


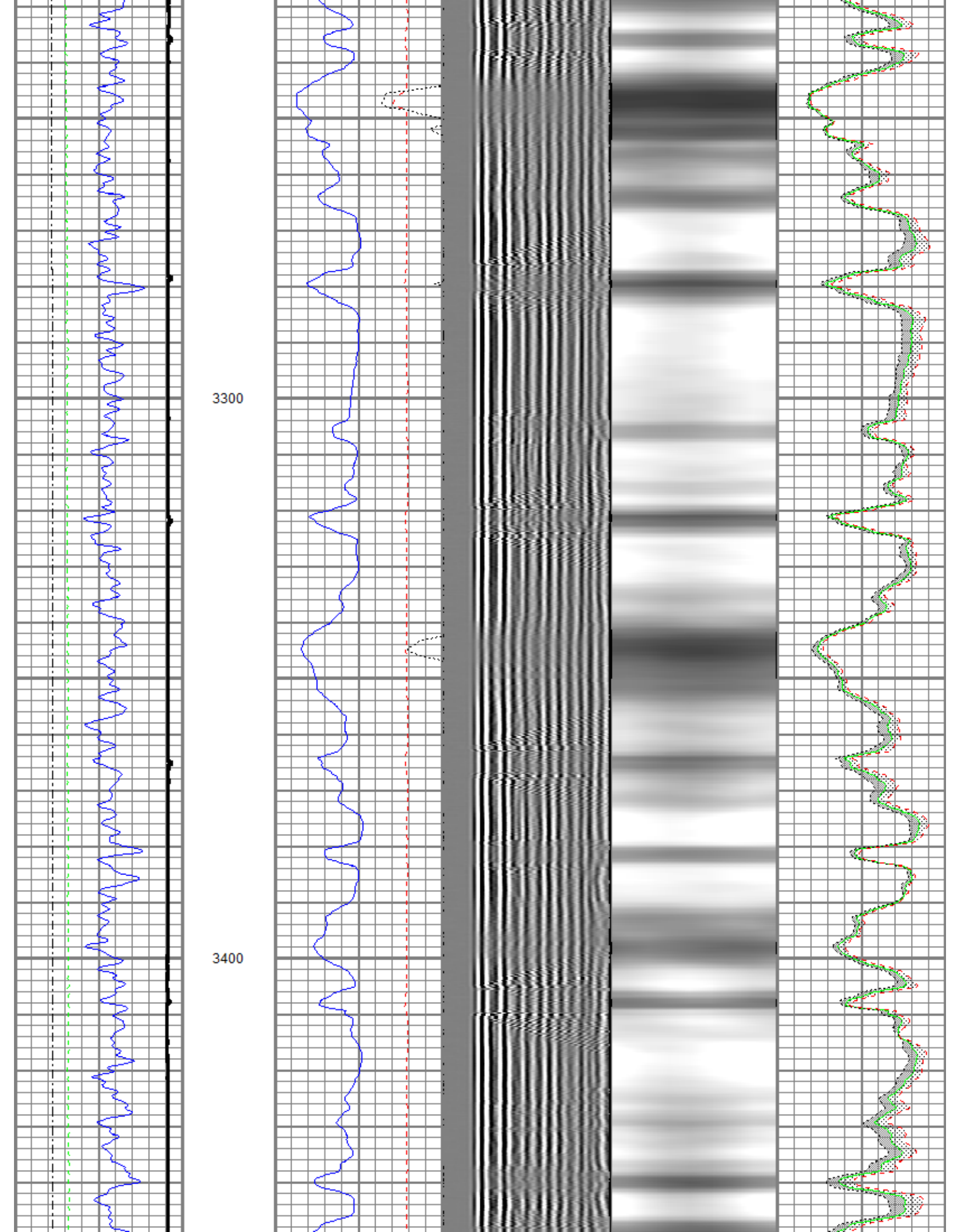


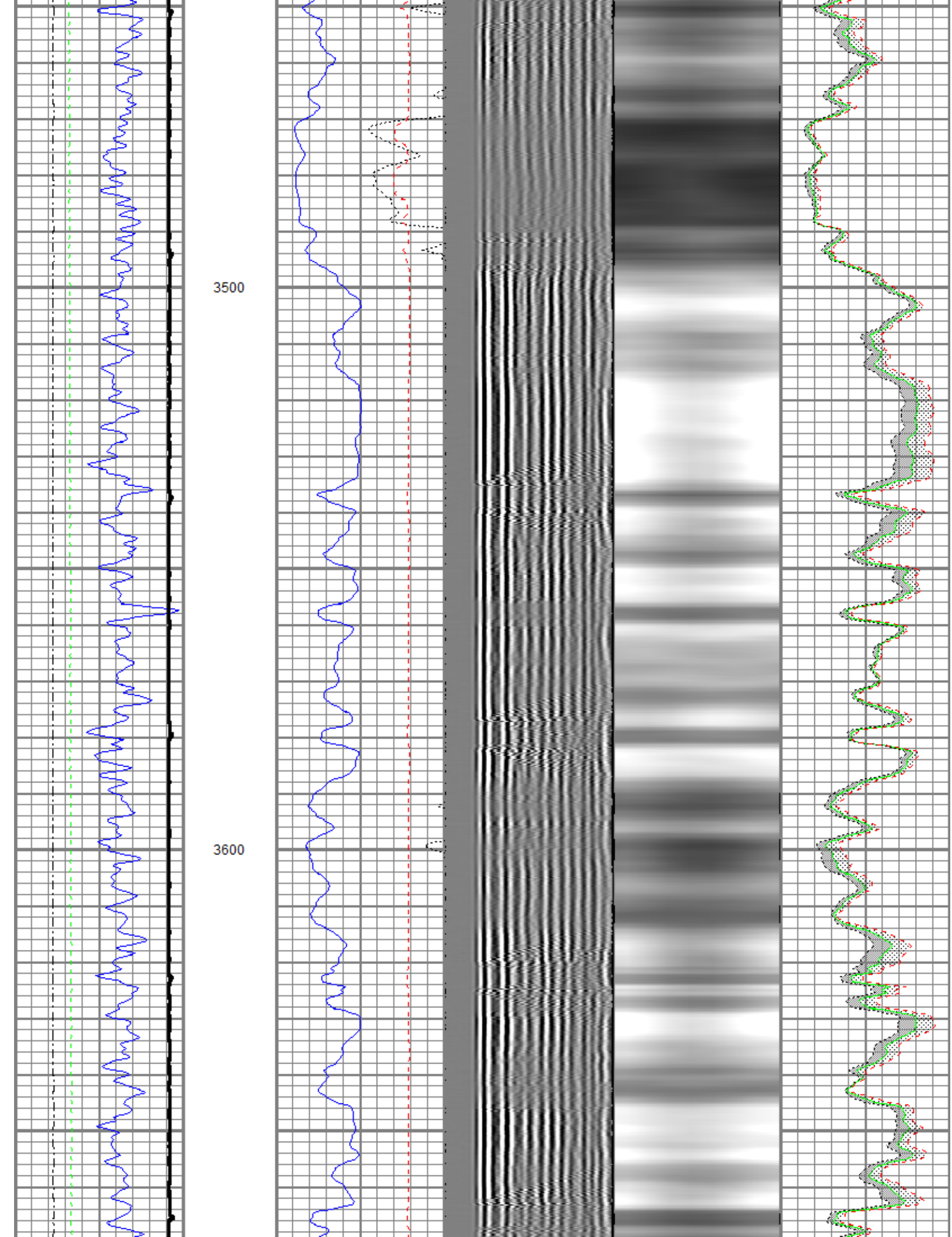


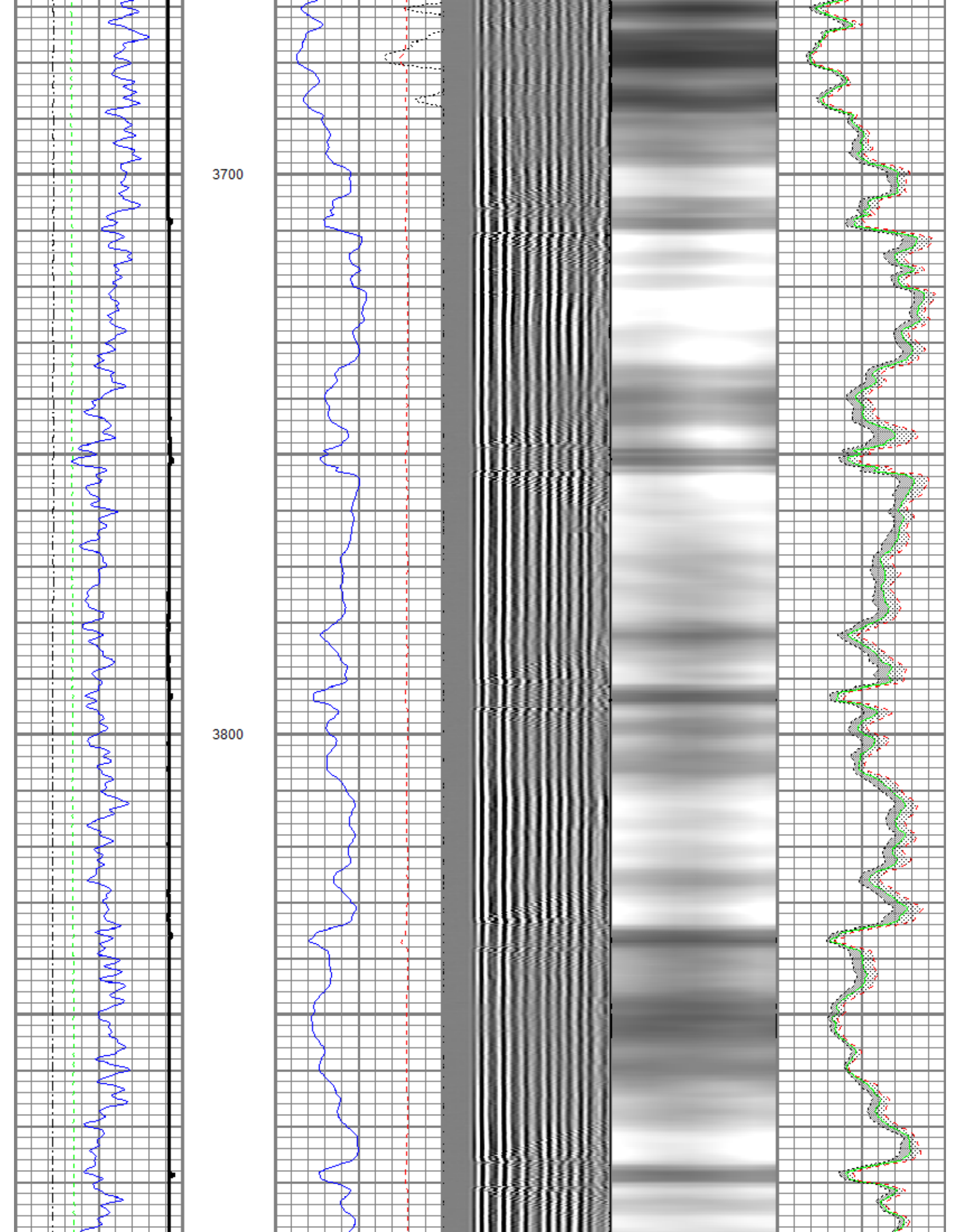


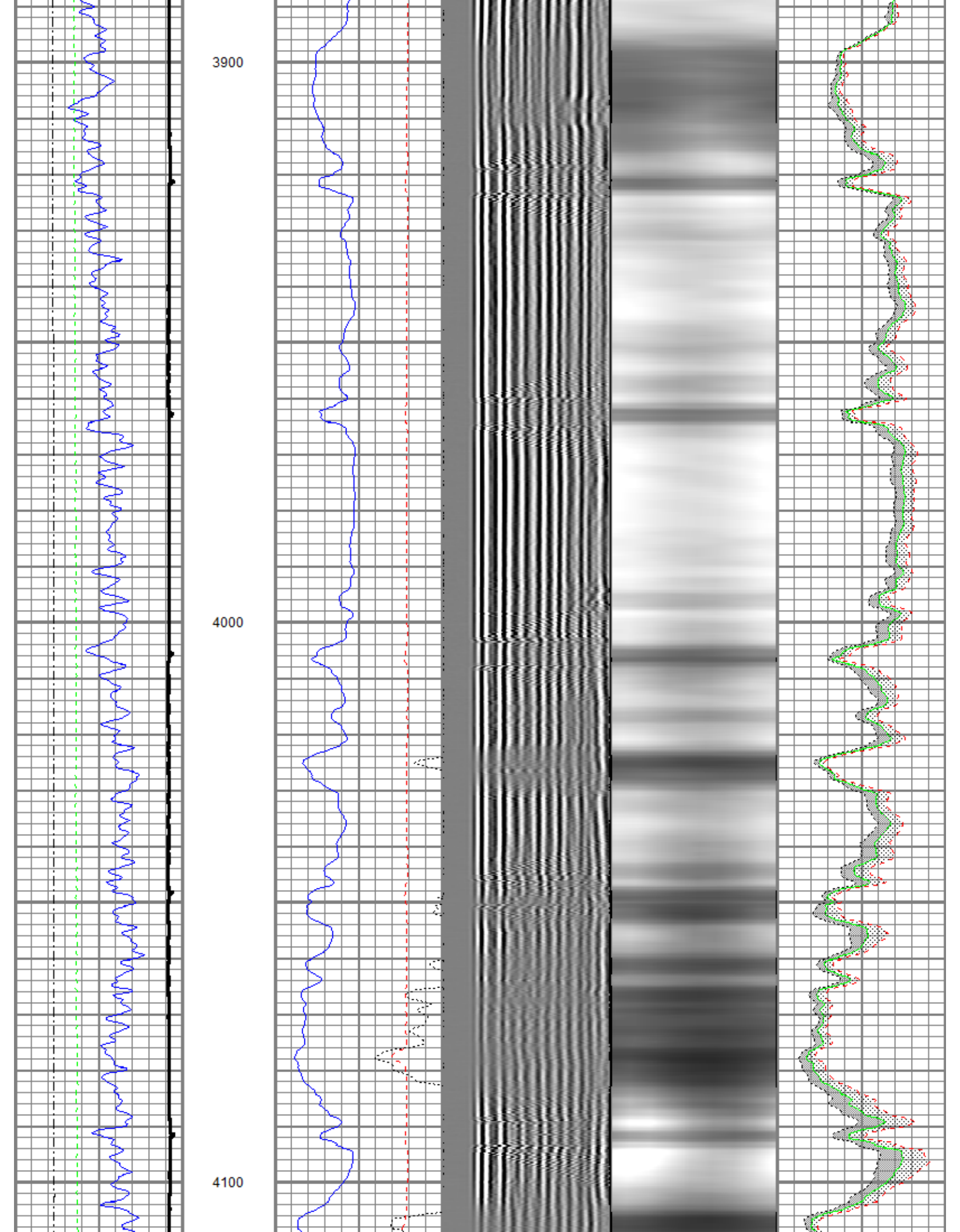


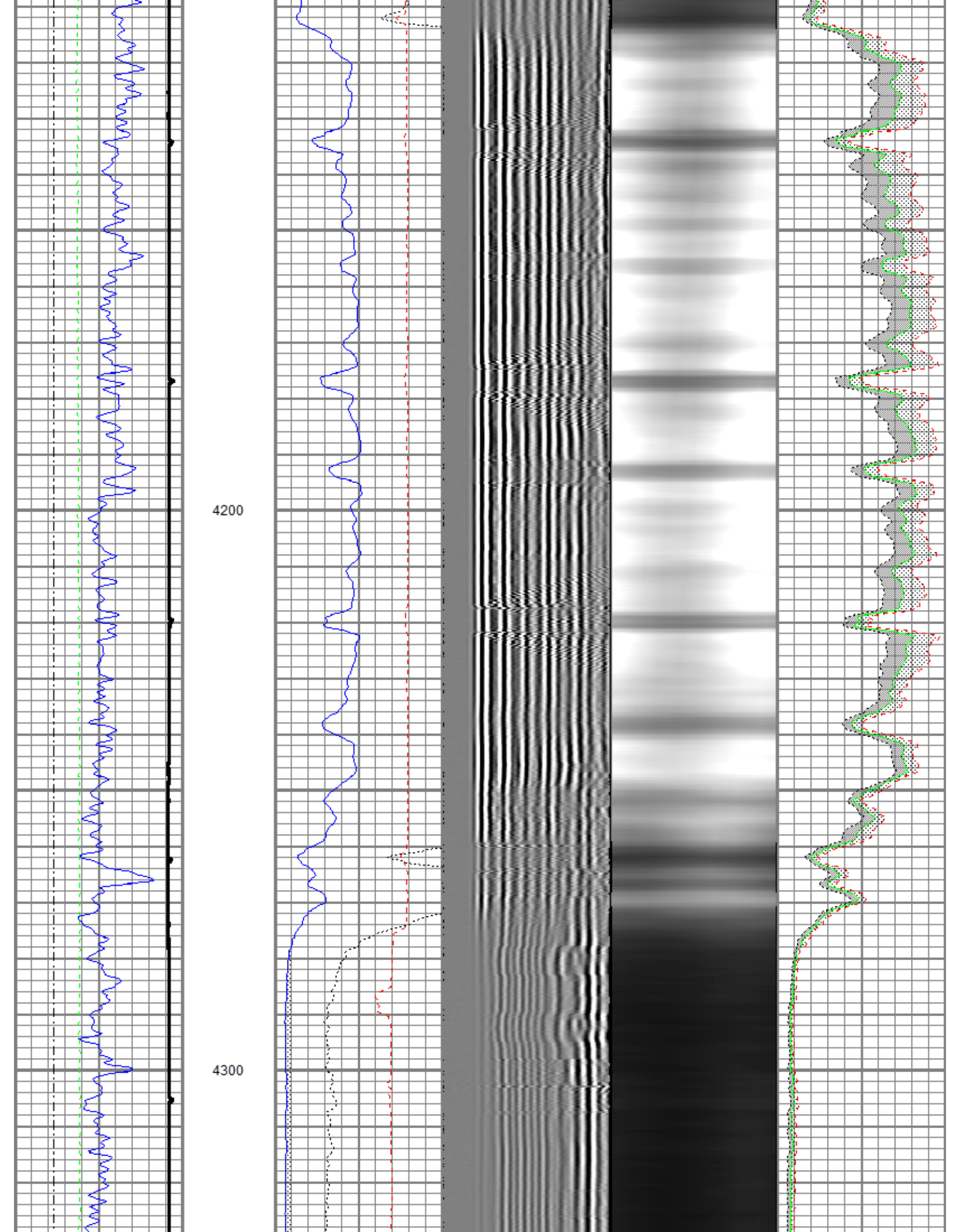


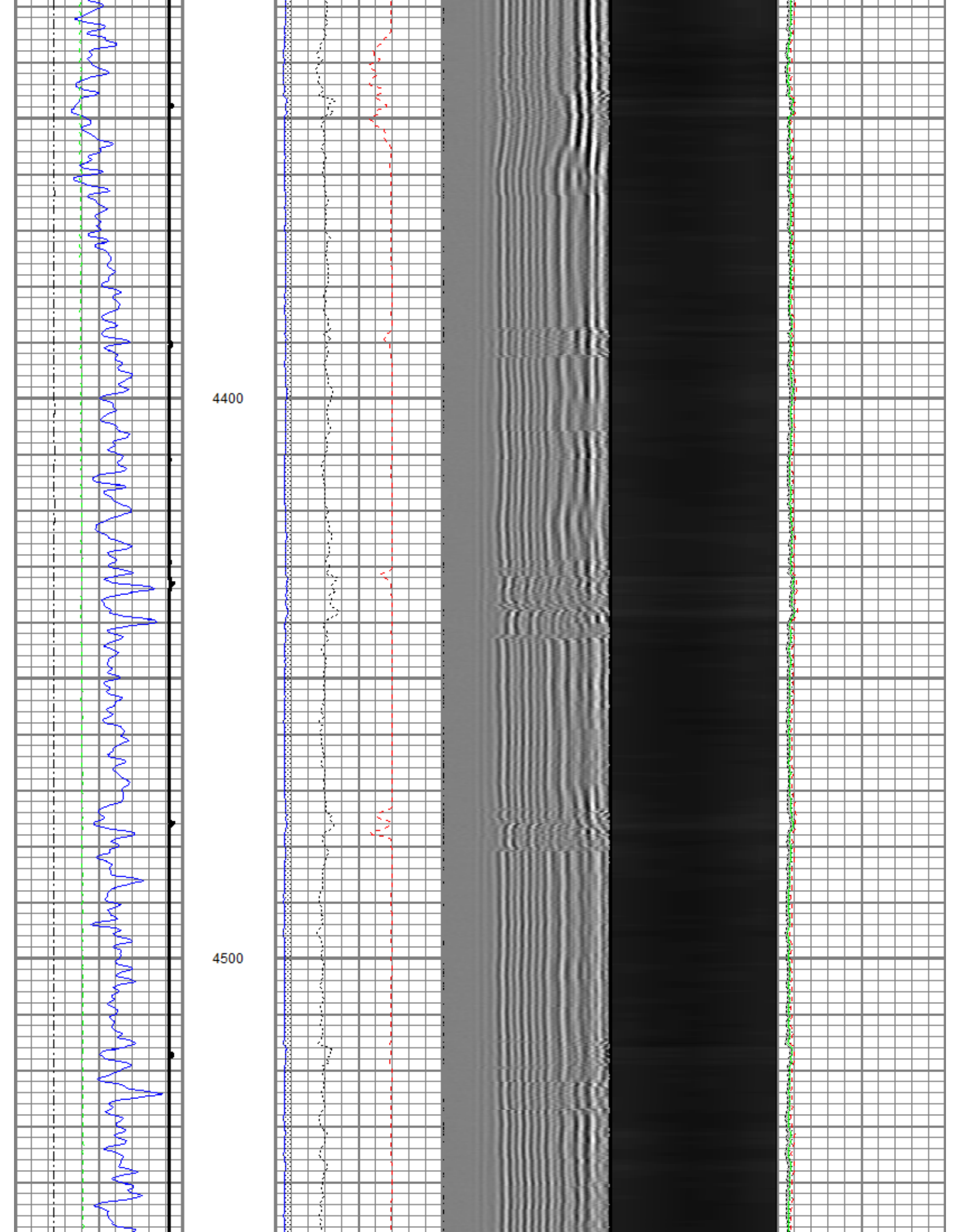


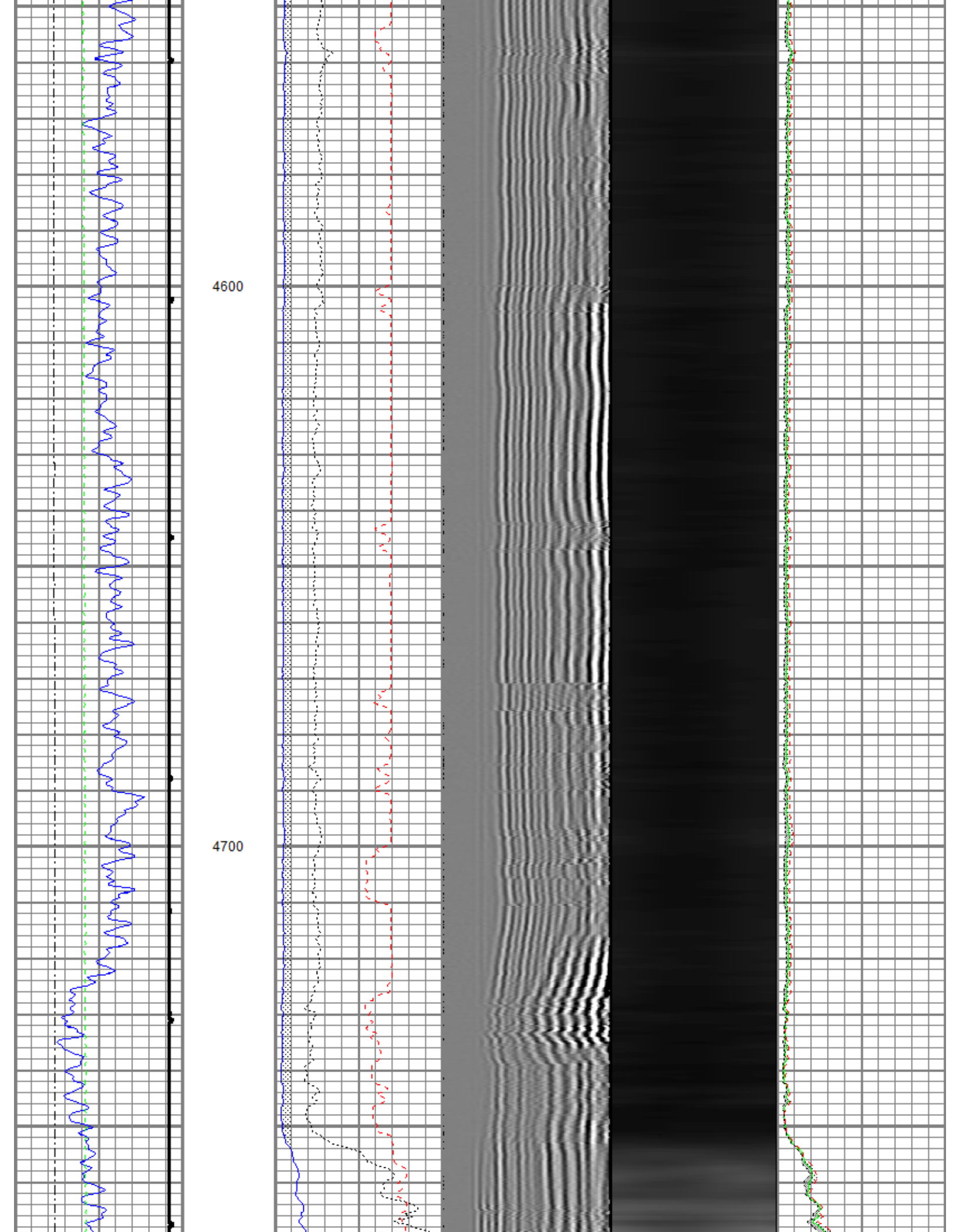


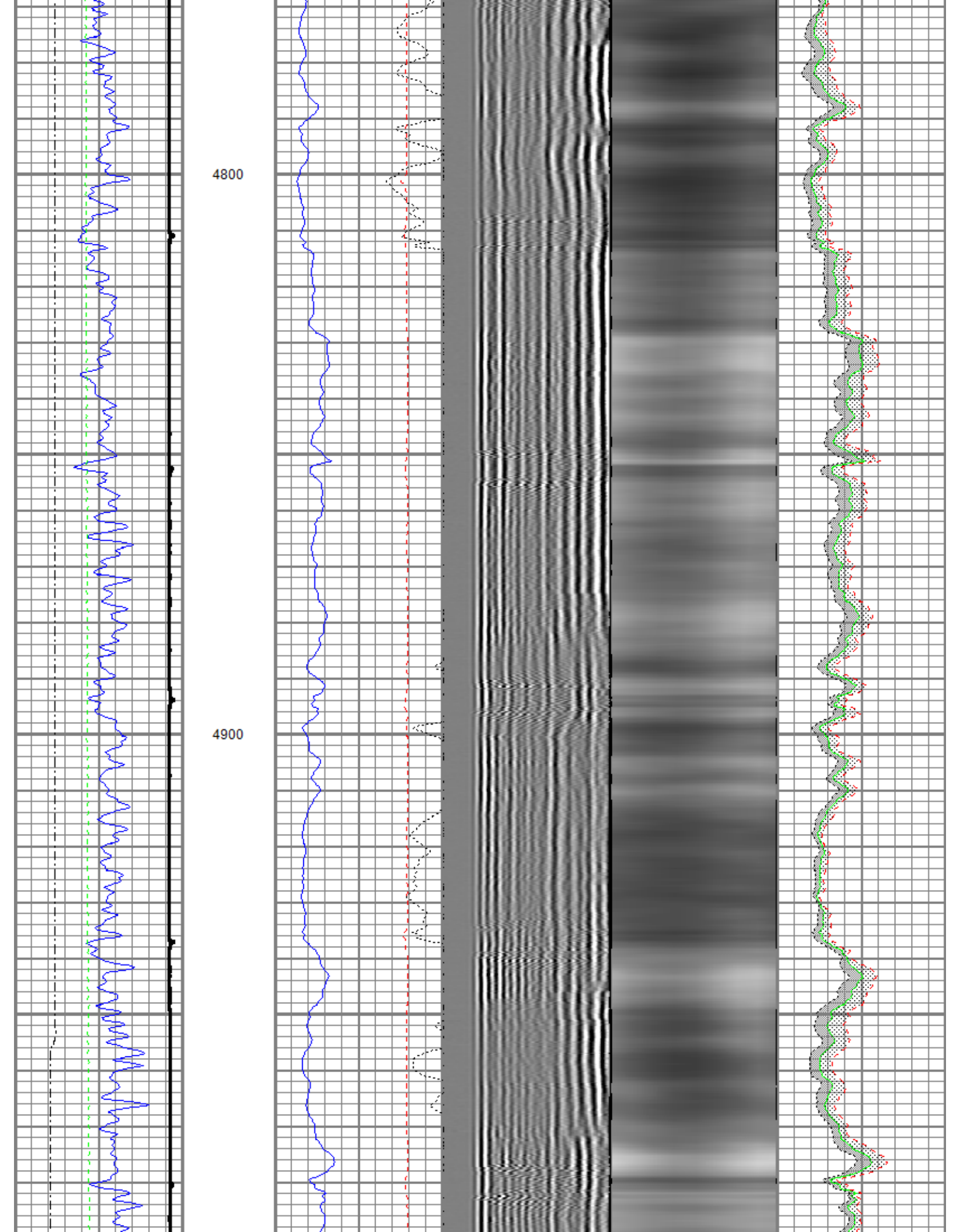


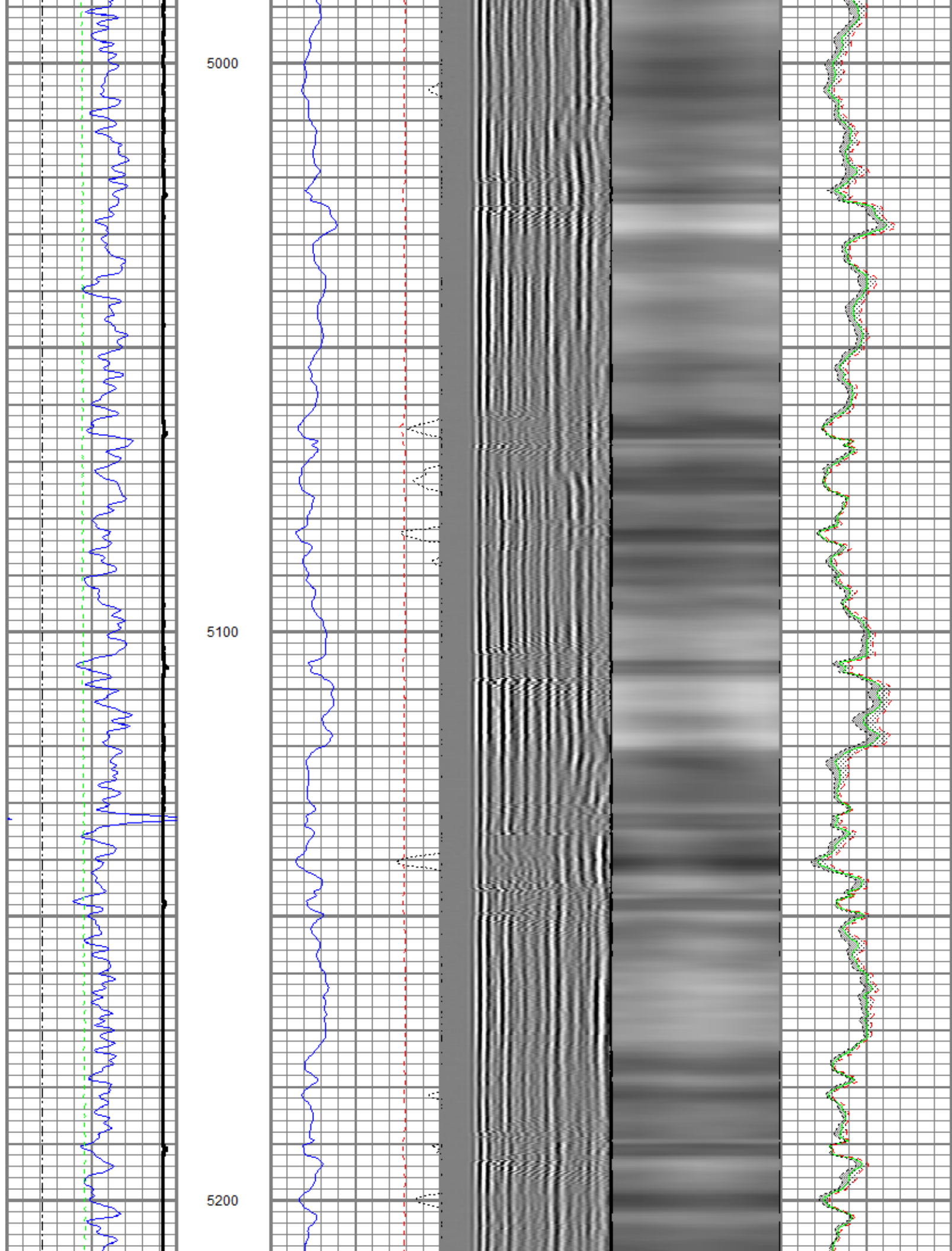


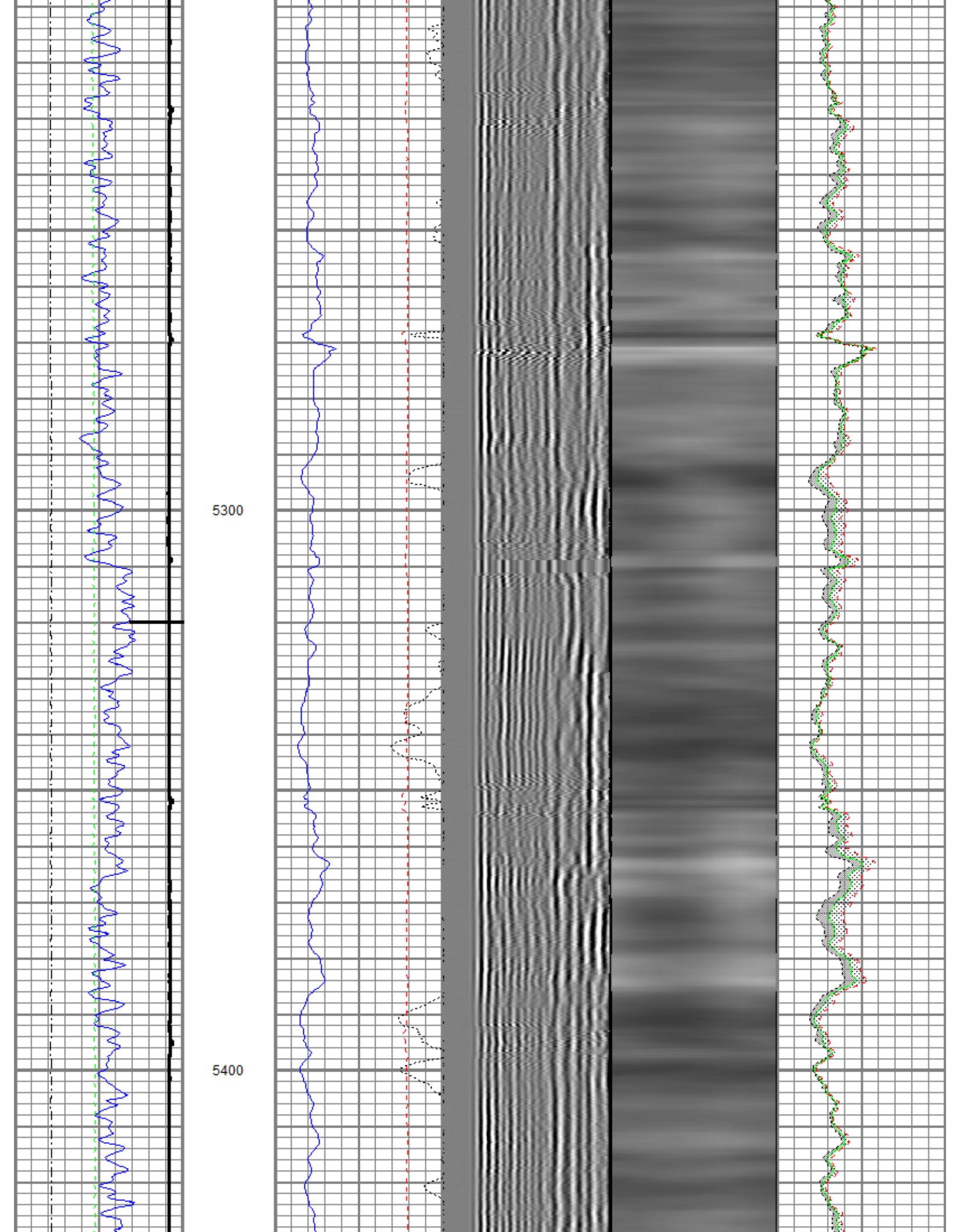


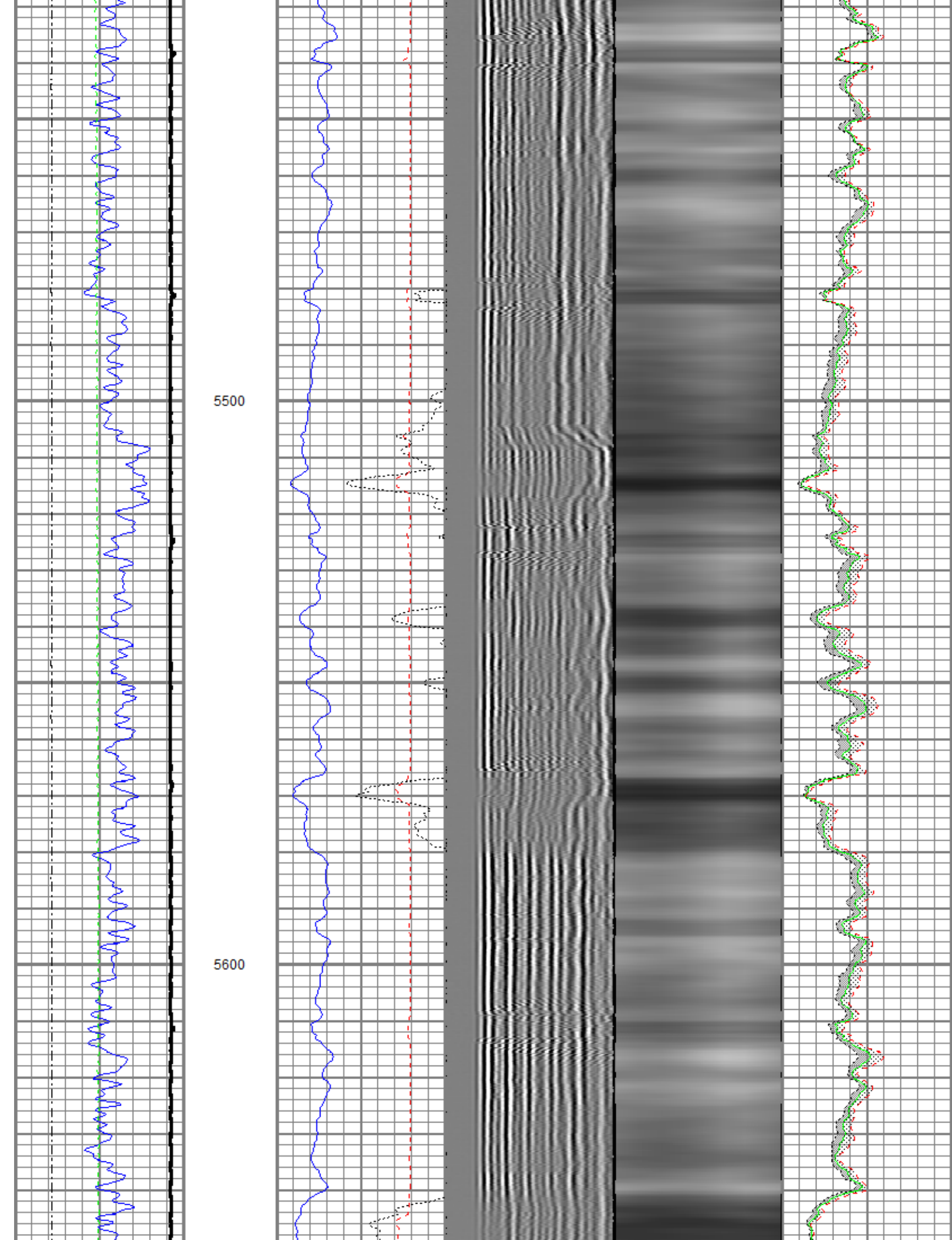


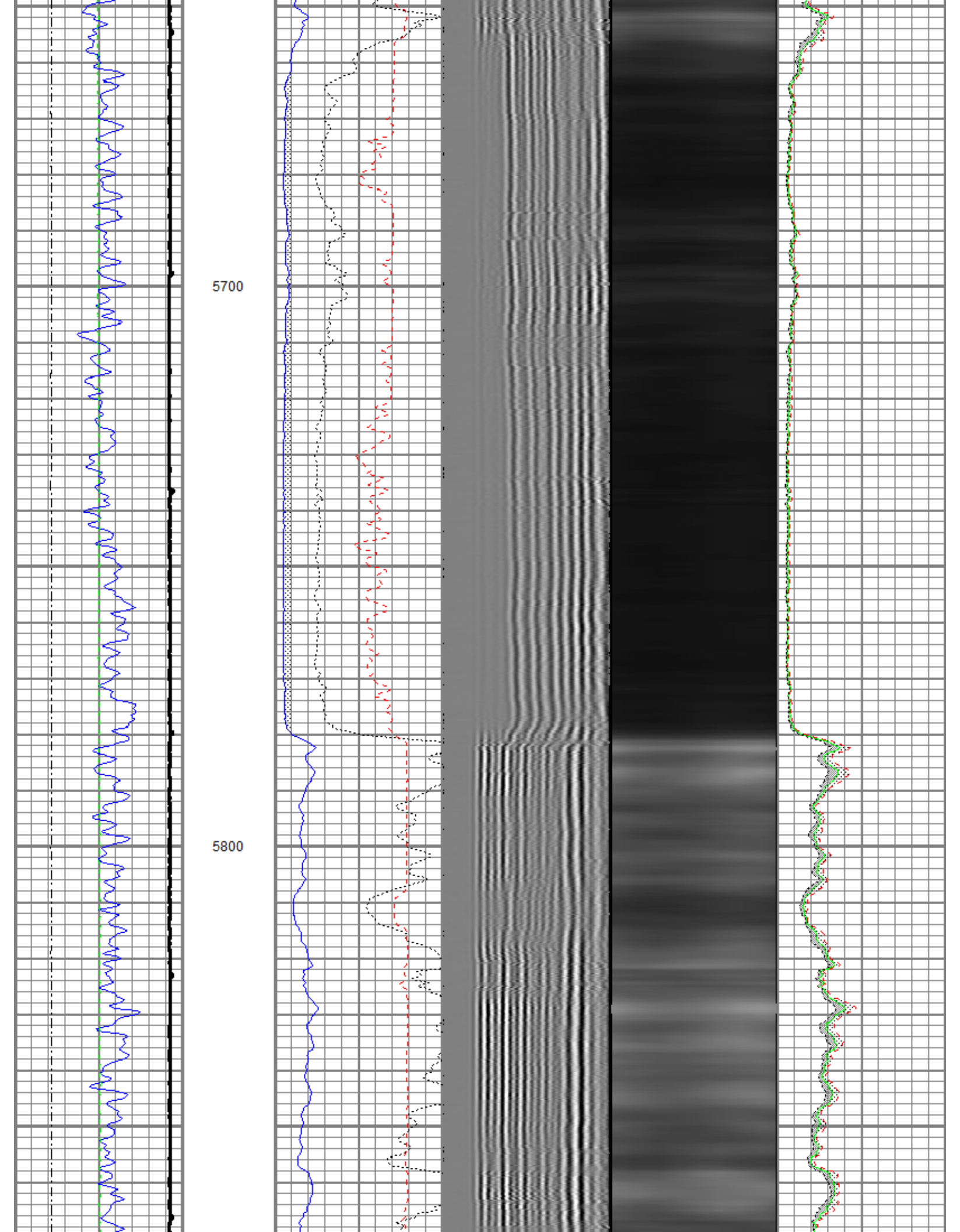


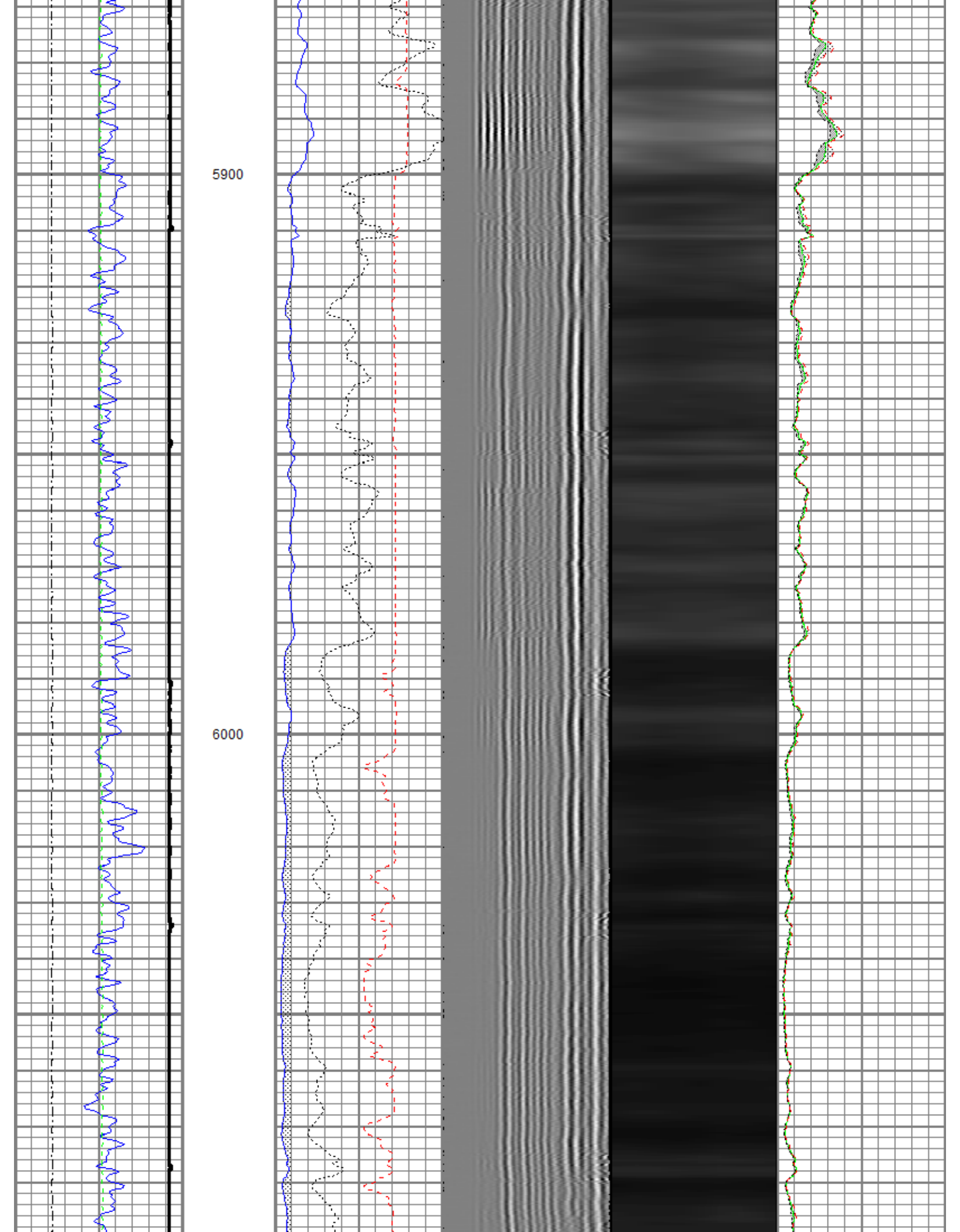


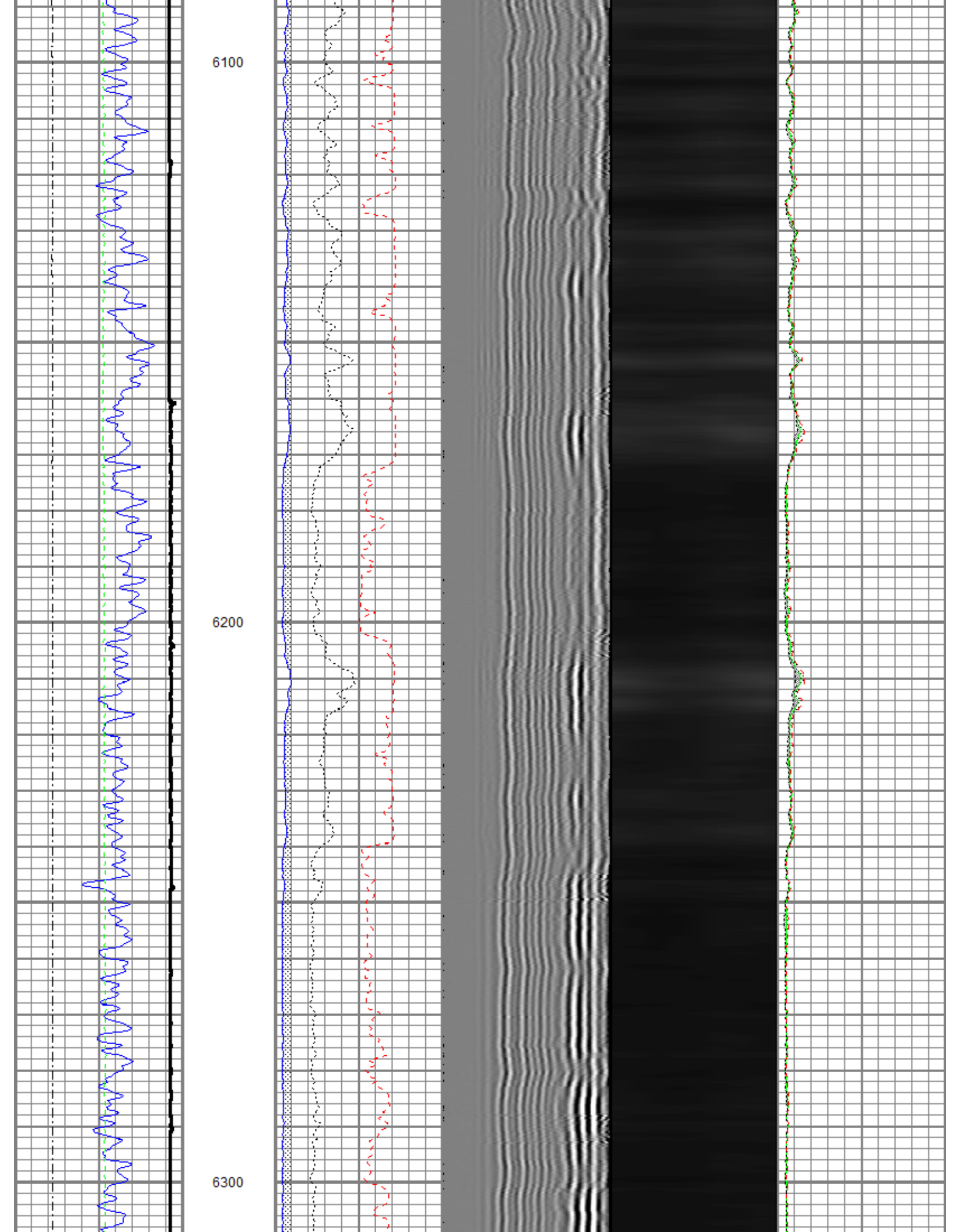


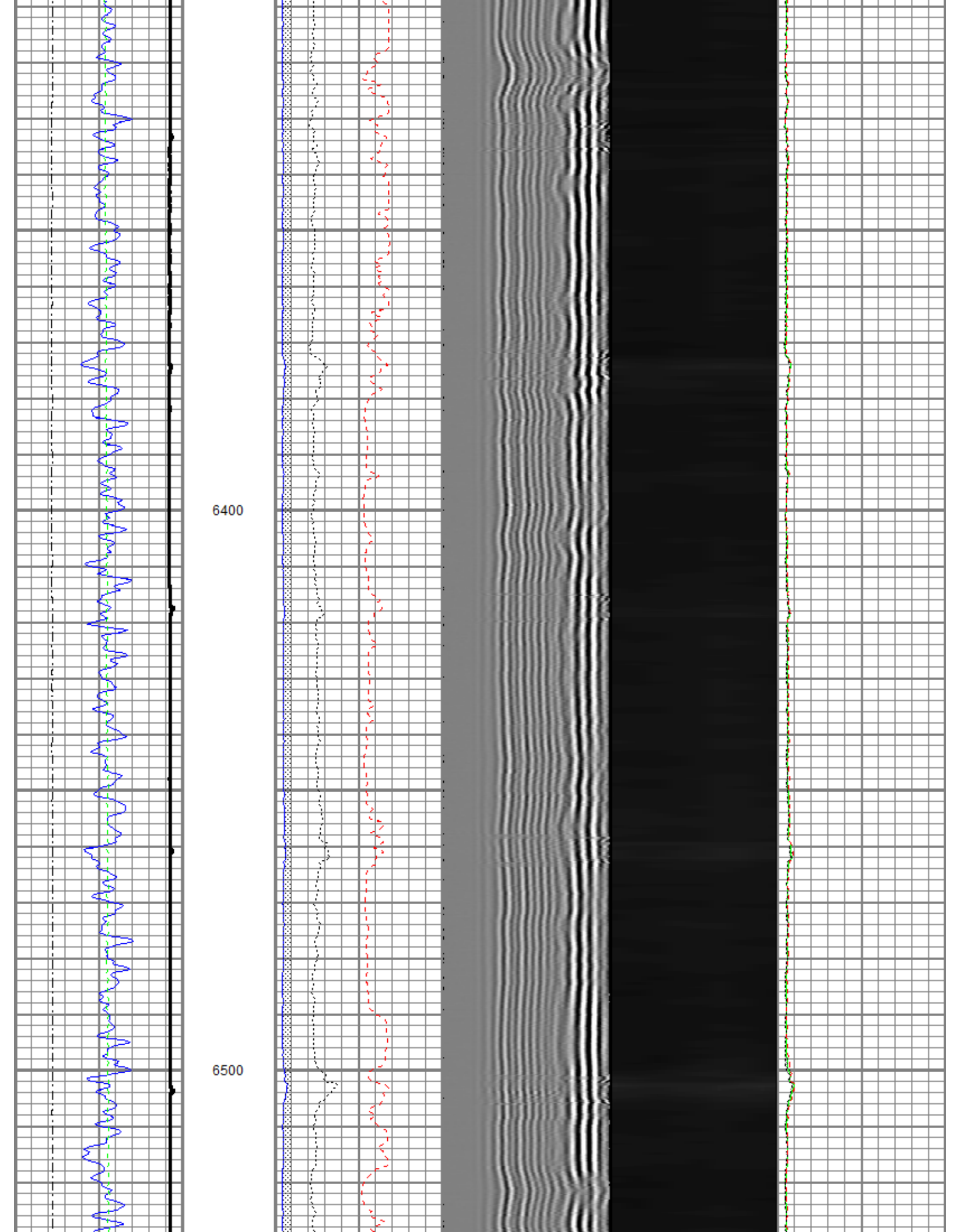


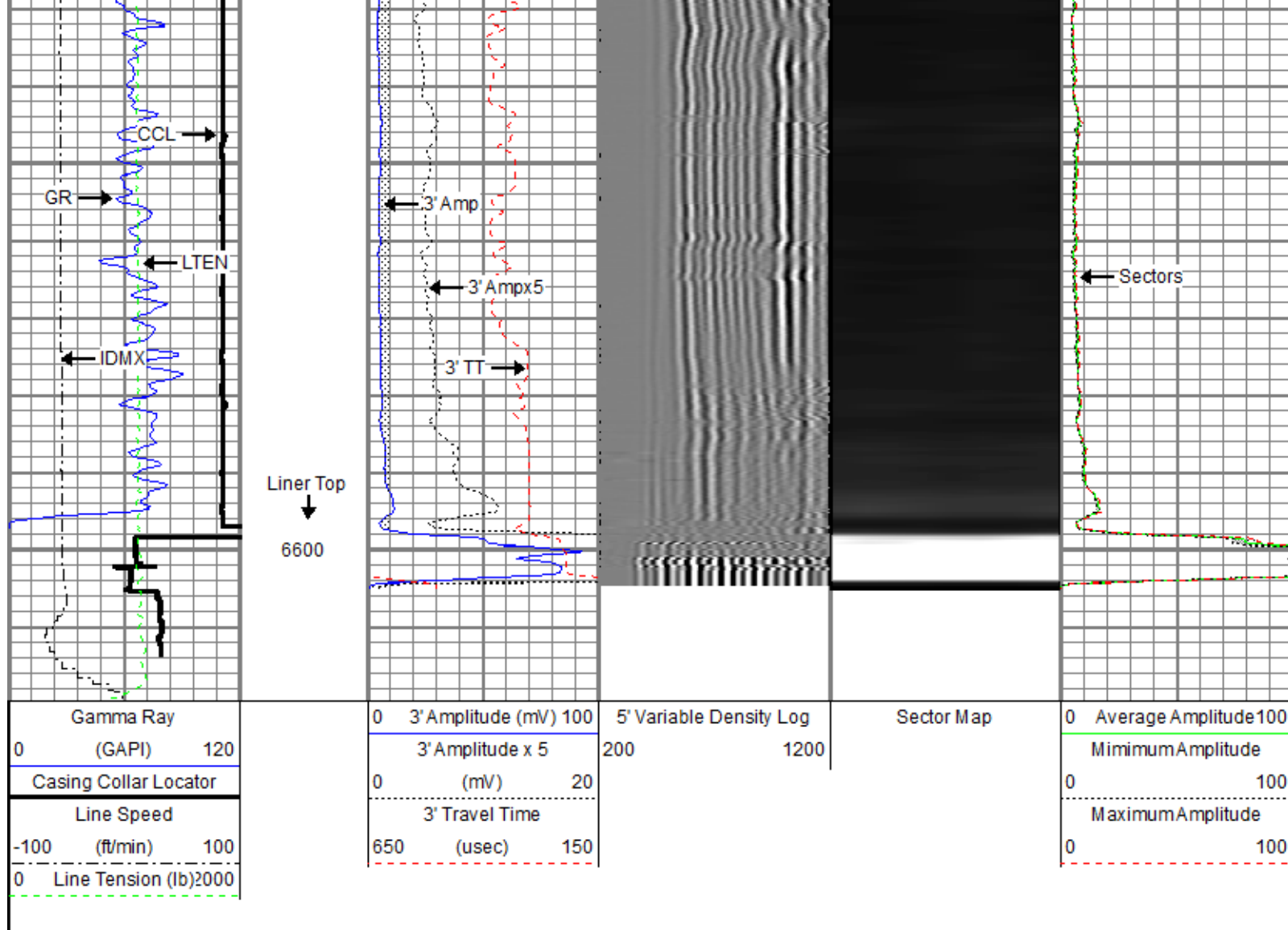








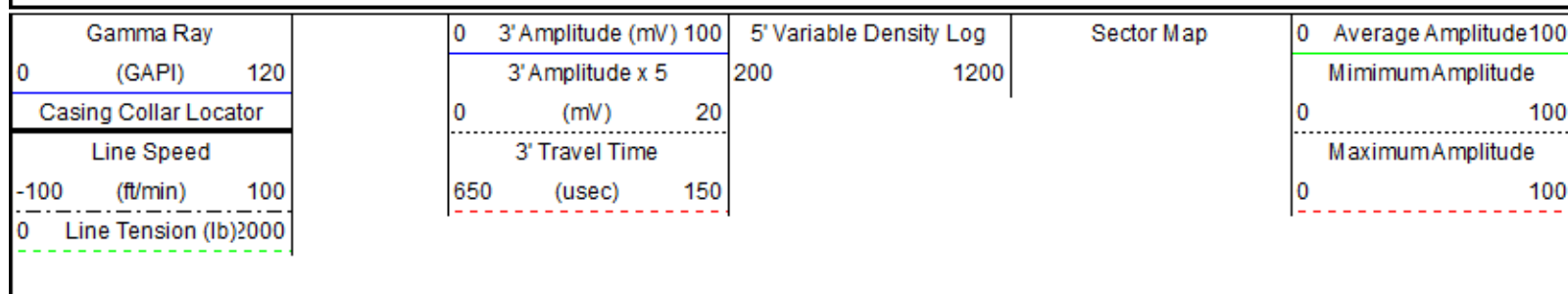




FMC Technologies

Repeat Pass

Database File: anadarko_douthit 8n-27hz_rcbl mit_11-nov-2014.db
 Dataset Pathname: pass4
 Presentation Format: rbt4_mit
 Dataset Creation: Wed Nov 12 12:57:12 2014 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240



Wellhead Assembly

Wellhead Assembly

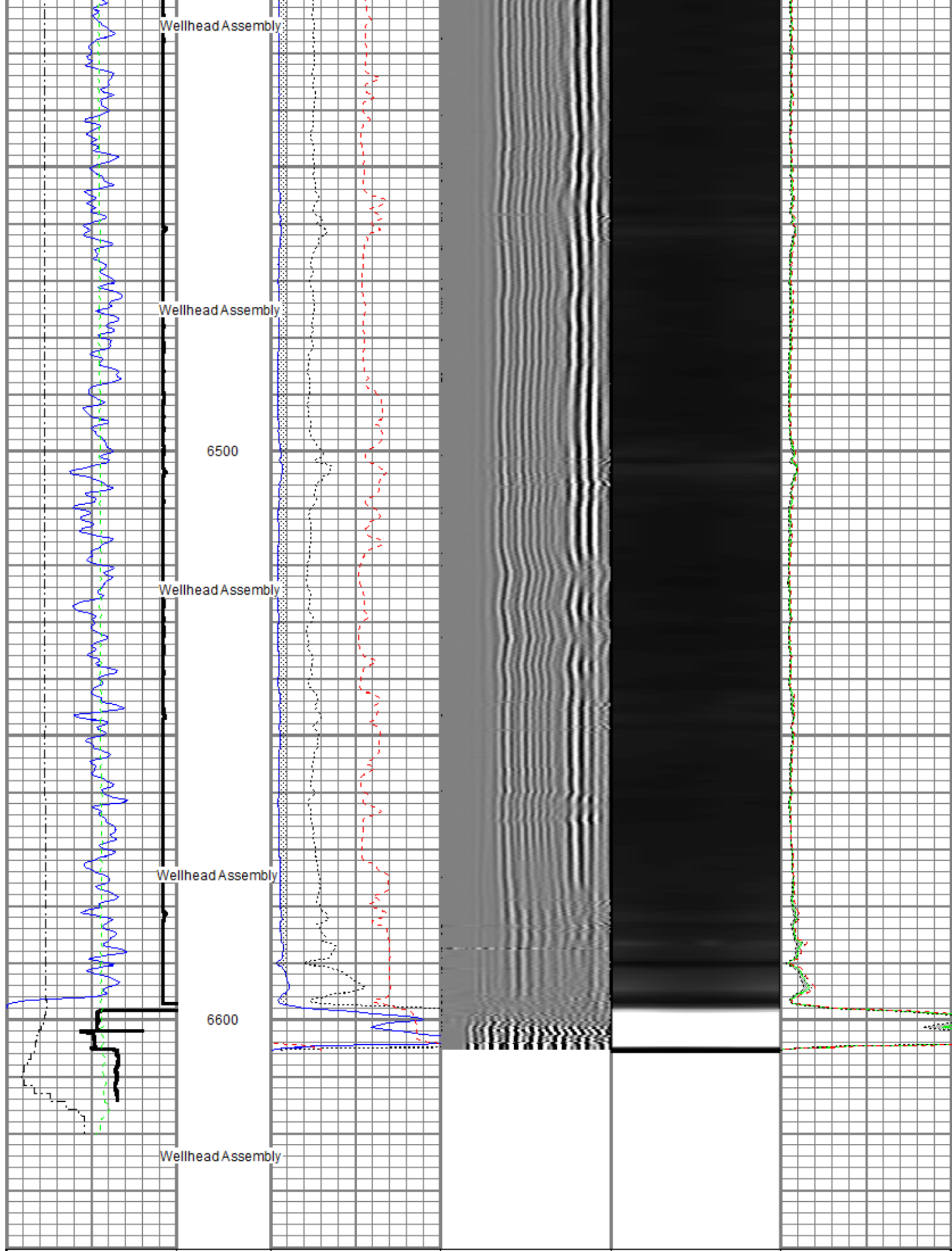
6500

Wellhead Assembly

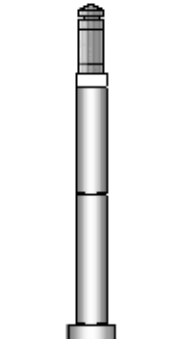
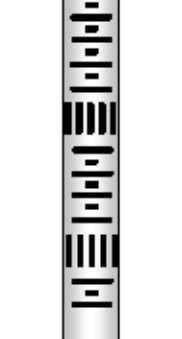
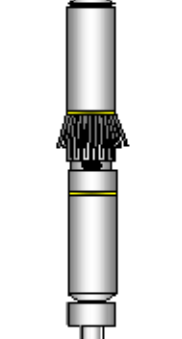
Wellhead Assembly

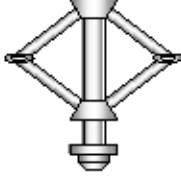
6600

Wellhead Assembly



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

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
GR	23.67		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
			UW_PGR-UW_PGR_020 (10013899) Production Gamma Ray	1.93	1.69	9.50
			UW_PRC #4 -UW_PRC_057 (1037) Sondex 2-3/4" 4-Arm Production Roller Centraliser	2.98	2.75	32.00
WVF3FT	15.85		UW_RBT-UW_RBT_004 (10013454) Sondex Ultrawire 3-1/8" Radial Bond Tool	9.47	3.13	140.00
WVFS1	15.85					
WVFS2	15.85					
WVFS3	15.85					
WVFS4	15.85					
WVFS5	15.85					
WVFS6	15.85					
WVFS7	15.85					
WVFS8	15.85					
CBLTEMP	15.85					
CBLROT	15.85					
WVF5FT	14.85		UW_PRC-UW_PRC_057 (1102) Sondex 2-3/4" 4-Arm Production Roller Centraliser	2.98	2.75	32.00
MIT	5.41		UW_MIT-UW_MIT40_027 (211111) 40 Multifinger Imaging Tool	4.54	2.75	61.10

TSTAMP	0.00		UW_PRC #3 -UW_PRC_057 (1038) Sondex 2-3/4" 4-Arm Production Roller Centraliser	2.98	2.75	32.00
ITEMPX	0.00		UW_BUL-UW_BUL_006 (218707) Sondex Ultrawire Bullnose Terminator	0.22	1.69	1.20
HVOLT	0.00					
Dataset: anadarko_douthit 8n-27hz_rcbl mit_11-nov-2014.db: field/well/run1/pass5 Total Length: 27.92 ft Total Weight: 319.30 lb O.D. 3.13 in						

Calibration Report			
Database File:	anadarko_douthit 8n-27hz_rcbl mit_11-nov-2014.db		
Dataset Pathname:	pass6		
Dataset Creation:	Wed Nov 12 15:26:37 2014 by Log 7.0 B1		
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:	Wed Nov 12 12:13:57 2014				
Ring size:	4		5		6		7
(in)		Sens		Sens		Sens	
Finger 01:	961	351.0	1312	432.0	1744	433.0	2177
Finger 02:	1059	346.0	1405	426.0	1831	421.0	2252
Finger 03:	1101	334.0	1435	423.0	1858	409.0	2267
Finger 04:	1051	334.0	1385	428.0	1813	418.0	2231
Finger 05:	1077	332.0	1409	425.0	1834	408.0	2242
Finger 06:	1070	335.0	1405	437.0	1842	421.0	2263
Finger 07:	1192	297.0	1489	392.0	1881	384.0	2265
Finger 08:	1110	314.0	1424	427.0	1851	416.0	2267
Finger 09:	1082	323.0	1405	428.0	1833	413.0	2246
Finger 10:	1131	279.0	1410	364.0	1774	352.0	2126
Finger 11:	1113	326.0	1439	423.0	1862	409.0	2271
Finger 12:	1252	338.0	1590	423.0	2013	410.0	2423
Finger 13:	1202	308.0	1510	394.0	1904	393.0	2297
Finger 14:	1282	297.0	1579	362.0	1941	354.0	2295
Finger 15:	1158	346.0	1504	424.0	1928	430.0	2358
Finger 16:	1221	332.0	1553	400.0	1953	387.0	2340
Finger 17:	1165	351.0	1516	414.0	1930	416.0	2346
Finger 18:	1128	368.0	1496	401.0	1897	424.0	2321
Finger 19:	1140	370.0	1510	414.0	1924	427.0	2351
Finger 20:	1193	359.0	1552	391.0	1943	405.0	2348
Finger 21:	1198	376.0	1574	403.0	1977	419.0	2396
Finger 22:	1124	382.0	1506	398.0	1904	425.0	2329
Finger 23:	919	361.0	1280	392.0	1672	434.0	2106
Finger 24:	1184	381.0	1565	387.0	1952	413.0	2365
Finger 25:	1407	408.0	1815	409.0	2224	427.0	2651
Finger 26:	1210	350.0	1560	354.0	1914	380.0	2294
Finger 27:	1301	383.0	1684	384.0	2068	392.0	2460
Finger 28:	1109	393.0	1502	393.0	1895	423.0	2318
Finger 29:	1354	367.0	1721	354.0	2075	368.0	2443

Finger 30:	1212	367.0	1579	371.0	1950	390.0	2340
Finger 31:	1256	368.0	1624	362.0	1986	380.0	2366
Finger 32:	1241	364.0	1605	362.0	1967	372.0	2339
Finger 33:	991	335.0	1326	356.0	1682	387.0	2069
Finger 34:	1108	359.0	1467	382.0	1849	395.0	2244
Finger 35:	1297	354.0	1651	367.0	2018	377.0	2395
Finger 36:	1405	412.0	1817	438.0	2255	433.0	2688
Finger 37:	1092	342.0	1434	383.0	1817	400.0	2217
Finger 38:	1419	375.0	1794	413.0	2207	403.0	2610
Finger 39:	1215	336.0	1551	379.0	1930	380.0	2310
Finger 40:	1040	354.0	1394	422.0	1816	418.0	2234


Post Survey Calibration Check								
Performed:				Wed Nov 12 15:26:30 2014				
Ring size: (in)	4	Nom. wear	5	Nom. wear	6	Nom. wear	7	Nom. wear
Finger 01:	3.992	-0.004	5.022	0.011	5.996	-0.002	7.008	0.004
Finger 02:	3.988	-0.006	5.023	0.011	5.997	-0.001	6.998	-0.001
Finger 03:	4.004	0.002	5.033	0.017	6.003	0.001	7.006	0.003
Finger 04:	3.979	-0.010	5.022	0.011	5.994	-0.003	7.002	0.001
Finger 05:	3.982	-0.009	5.024	0.012	5.994	-0.003	7.002	0.001
Finger 06:	3.981	-0.009	5.027	0.014	6.002	0.001	7.008	0.004
Finger 07:	4.000	-0.000	5.041	0.020	6.003	0.001	6.994	-0.003
Finger 08:	4.011	0.006	5.039	0.019	6.008	0.004	6.992	-0.004
Finger 09:	3.977	-0.011	5.030	0.015	5.997	-0.001	7.005	0.003
Finger 10:	3.987	-0.006	5.032	0.016	5.993	-0.004	6.999	-0.001
Finger 11:	3.987	-0.006	5.031	0.016	6.005	0.003	7.008	0.004
Finger 12:	3.985	-0.008	5.025	0.012	5.997	-0.002	6.998	-0.001
Finger 13:	4.003	0.002	5.038	0.019	6.006	0.003	6.999	-0.001
Finger 14:	3.988	-0.006	5.026	0.013	5.991	-0.005	6.994	-0.003
Finger 15:	3.988	-0.006	5.026	0.013	6.009	0.004	6.987	-0.007
Finger 16:	4.002	0.001	5.037	0.019	5.999	-0.001	6.998	-0.001
Finger 17:	3.986	-0.007	5.024	0.012	5.998	-0.001	7.006	0.003
Finger 18:	3.993	-0.004	5.012	0.006	6.003	0.002	7.000	-0.000
Finger 19:	3.999	-0.001	5.032	0.016	6.000	-0.000	7.006	0.003
Finger 20:	3.996	-0.002	5.033	0.017	6.008	0.004	7.012	0.006
Finger 21:	3.990	-0.005	5.029	0.014	6.000	-0.000	7.009	0.004
Finger 22:	3.995	-0.003	5.023	0.012	6.000	0.000	7.007	0.003
Finger 23:	3.986	-0.007	5.030	0.015	5.999	-0.001	6.999	-0.001
Finger 24:	3.986	-0.007	5.031	0.015	6.004	0.002	7.006	0.003
Finger 25:	3.992	-0.004	5.031	0.015	5.998	-0.001	6.995	-0.002
Finger 26:	3.995	-0.002	5.035	0.018	5.994	-0.003	6.994	-0.003
Finger 27:	3.992	-0.004	5.034	0.017	5.987	-0.007	6.986	-0.007
Finger 28:	3.981	-0.009	5.022	0.011	6.002	0.001	7.006	0.003
Finger 29:	3.991	-0.004	5.031	0.016	6.004	0.002	7.001	0.001
Finger 30:	3.990	-0.005	5.034	0.017	6.002	0.001	7.005	0.003
Finger 31:	3.988	-0.006	5.026	0.013	5.997	-0.001	7.003	0.002
Finger 32:	3.988	-0.006	5.025	0.012	5.995	-0.002	6.995	-0.002
Finger 33:	3.993	-0.003	5.032	0.016	6.001	0.001	6.998	-0.001
Finger 34:	3.991	-0.005	5.037	0.018	6.007	0.003	7.003	0.002
Finger 35:	4.000	-0.000	5.029	0.015	6.012	0.006	7.006	0.003
Finger 36:	3.985	-0.007	5.027	0.013	5.998	-0.001	7.000	-0.000
Finger 37:	3.997	-0.001	5.030	0.015	6.004	0.002	6.990	-0.005
Finger 38:	3.996	-0.002	5.030	0.015	5.998	-0.001	6.997	-0.002
Finger 39:	4.003	0.001	5.033	0.017	6.003	0.001	7.004	0.002
Finger 40:	3.985	-0.008	5.024	0.012	5.998	-0.001	7.006	0.003
Average:	3.991	-0.004	5.029	0.015	6.000	0.000	7.001	0.000

Segmented Cement Bond Log Calibration Report		
Serial Number:	10013454	
Tool Model:	UW_RBT_004	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	-0.735	ft

Master Calibration, performed Wed Nov 12 12:10:03 2014:		
Raw (v)	Calibrated (mv)	Results

	Zero	Cal	Zero	Cal	Gain	Offset
3FT	0.000	0.675	0.800	71.921	105.365	0.796
5FT	-0.002	0.721	0.800	71.921	98.333	1.040
S1	0.001	0.612	0.000	100.000	163.589	-0.166
S2	-0.001	0.623	0.000	100.000	160.176	0.196
S3	0.000	0.665	0.000	100.000	150.332	0.000
S4	-0.001	0.717	0.000	100.000	139.363	0.114
S5	0.000	0.752	0.000	100.000	132.994	-0.034
S6	-0.000	0.745	0.000	100.000	134.269	0.015
S7	0.000	0.690	0.000	100.000	144.971	-0.021
S8	0.000	0.639	0.000	100.000	156.483	-0.063

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	Kerr-McGee Oil and Gas Onshore LP
	Well	Douthit 8N-27HZ
	Field	Wattenberg
	County	Weld
	State	Colorado