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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 liner top at 6914 FT. Adjusted log +22 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:0512339944_anadarko_como 13n-14hz_12-29-14_mit_rbl.db

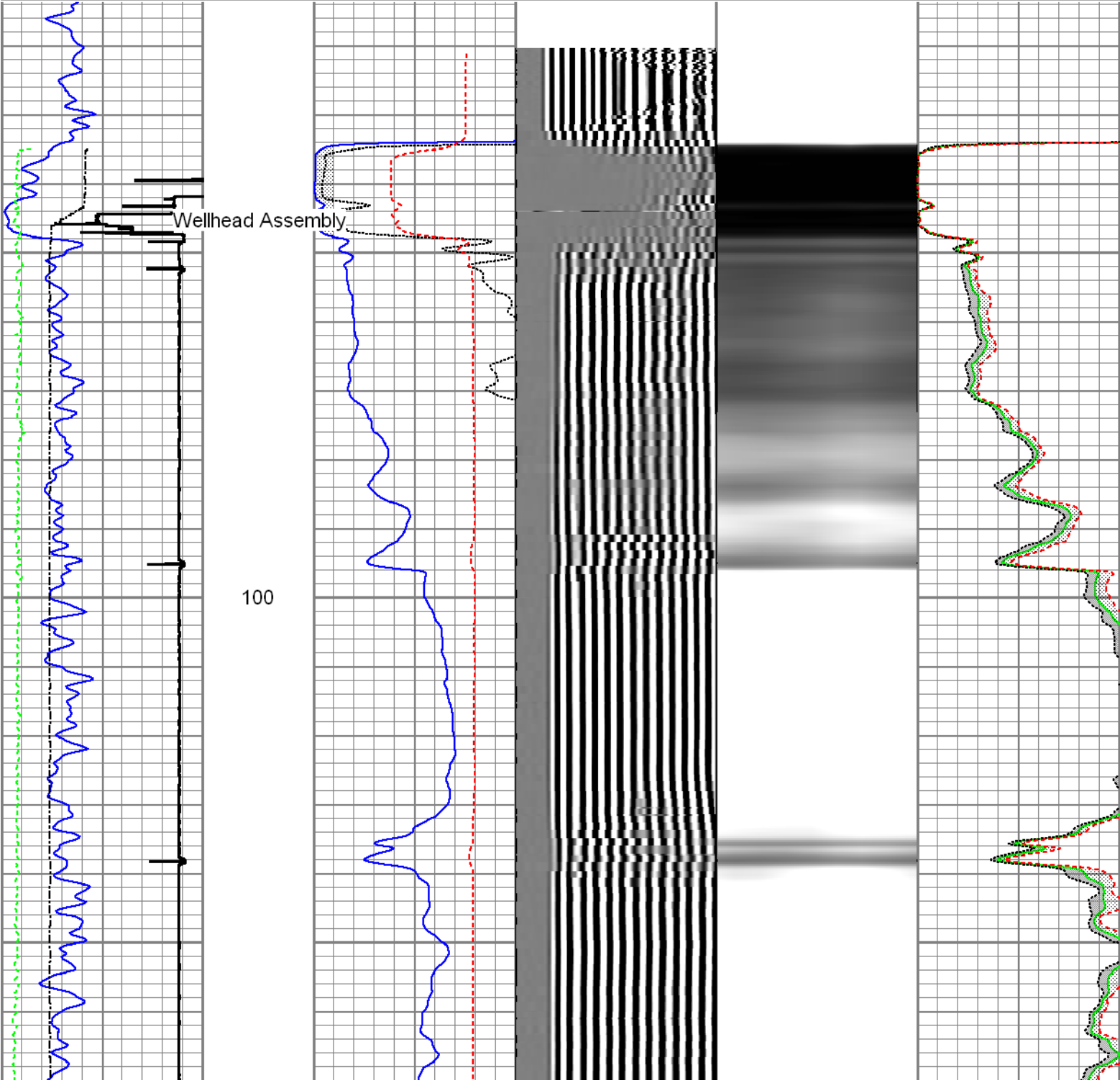
Dataset Pathname:pass8

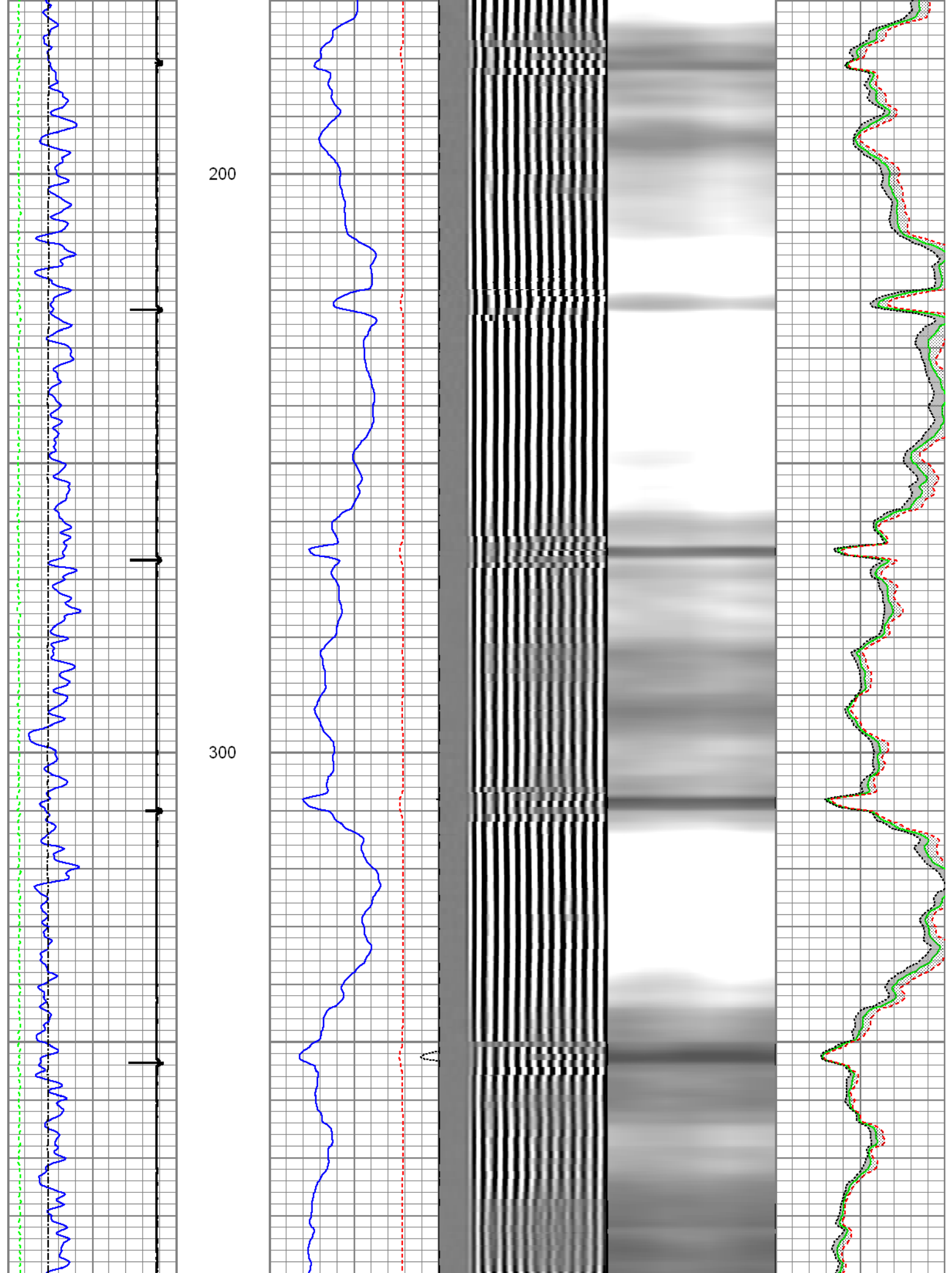
Presentation Format:rbt4_mit

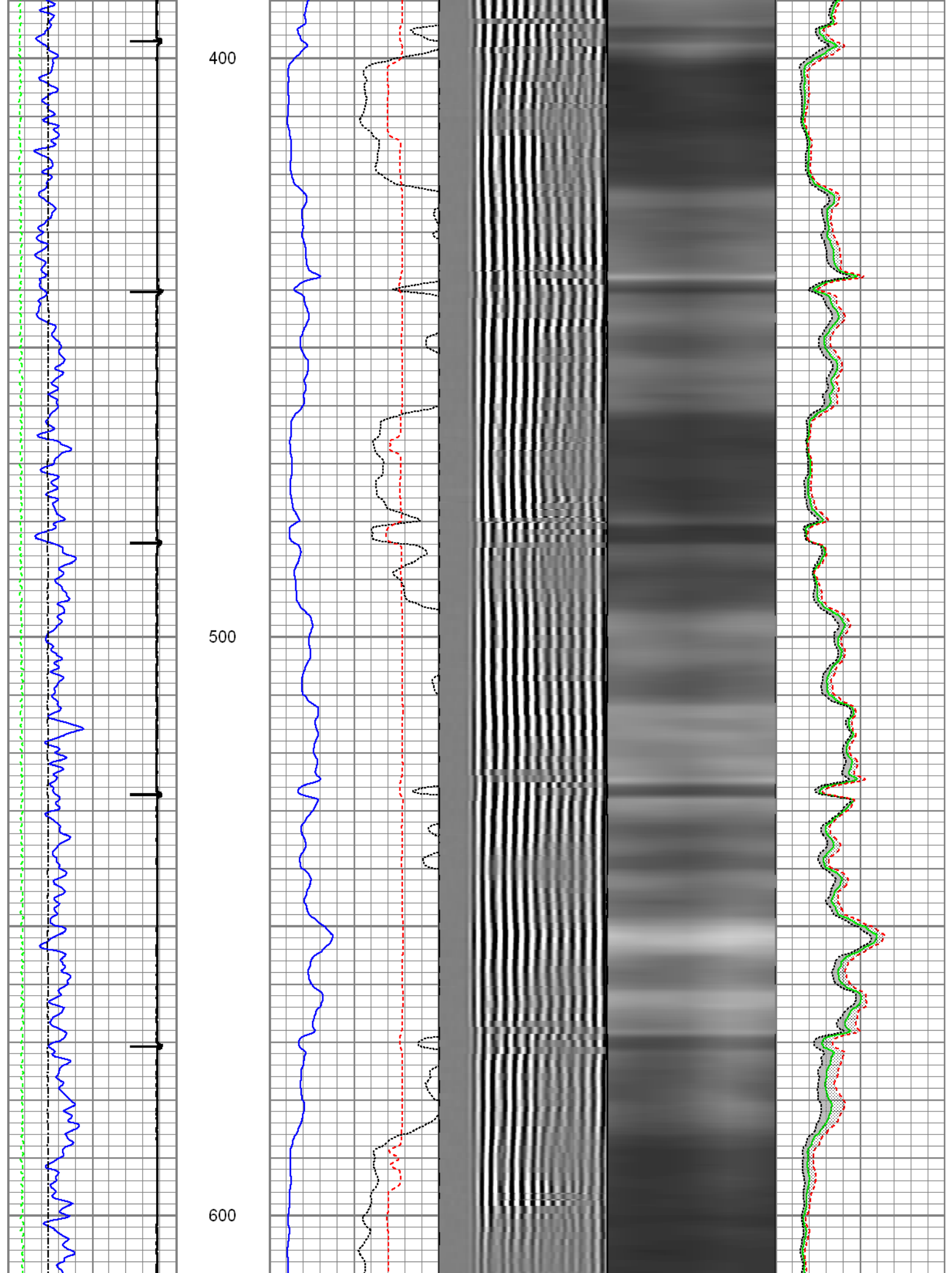
Dataset Creation:Fri Jan 02 10:48:54 2015

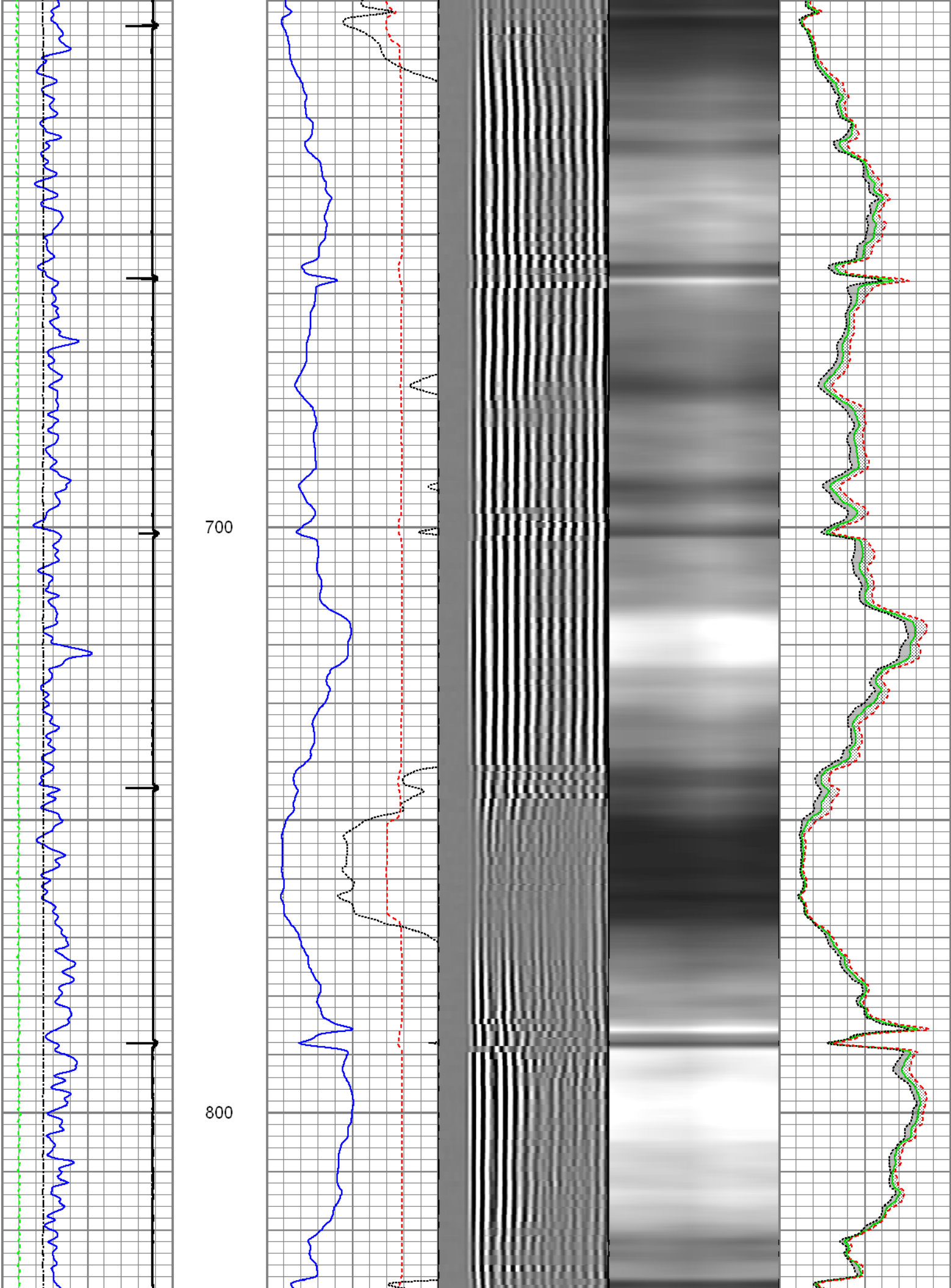
Charted by:Depth in Feet scaled 1:240

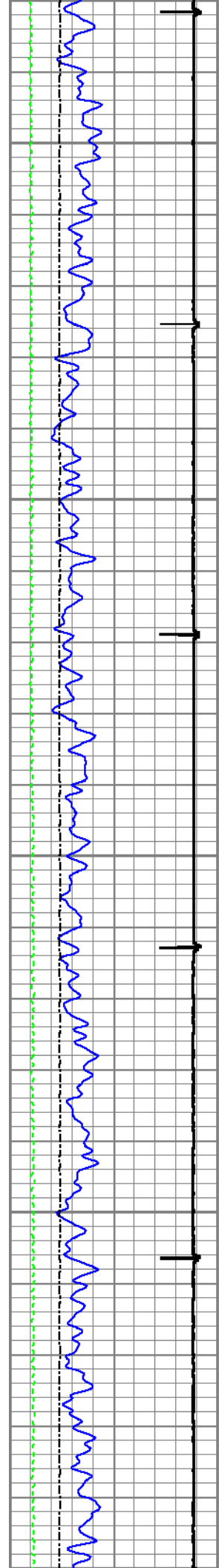
Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120	0 (mV) 100	200 1200		0 100
Line Speed	3' Amplitude x 5			Mimimum Amplitude
-100 (ft/min) 100	0 (mV) 20			0 100
Line Tension	3' Travel Time			Maximum Amplitude
0 (lb) 2000	650 (usec) 150			0 100
Casing Collar Locator				





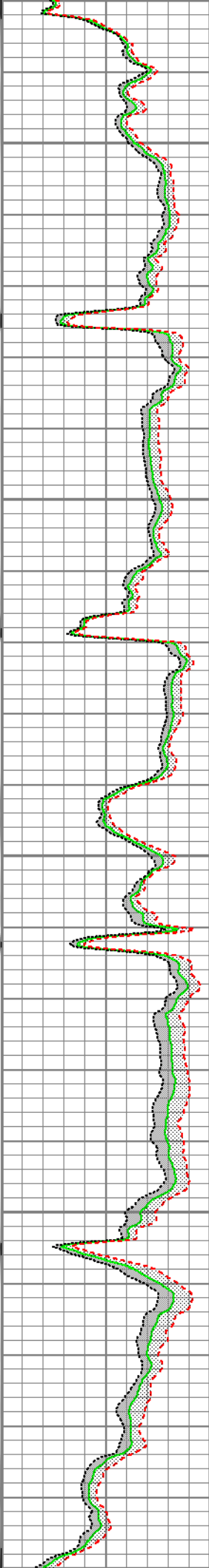
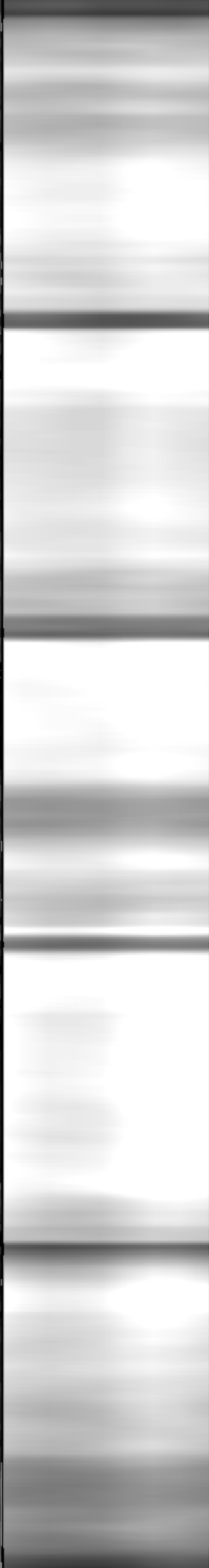
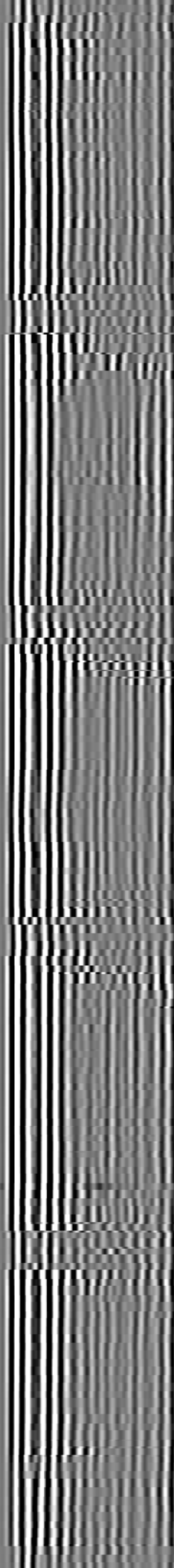
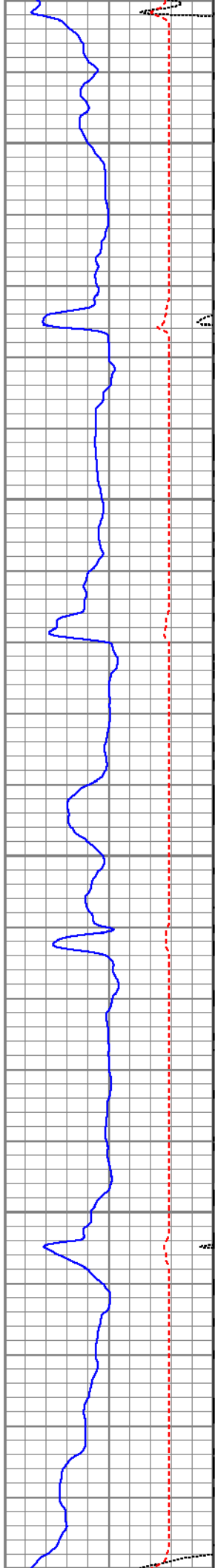


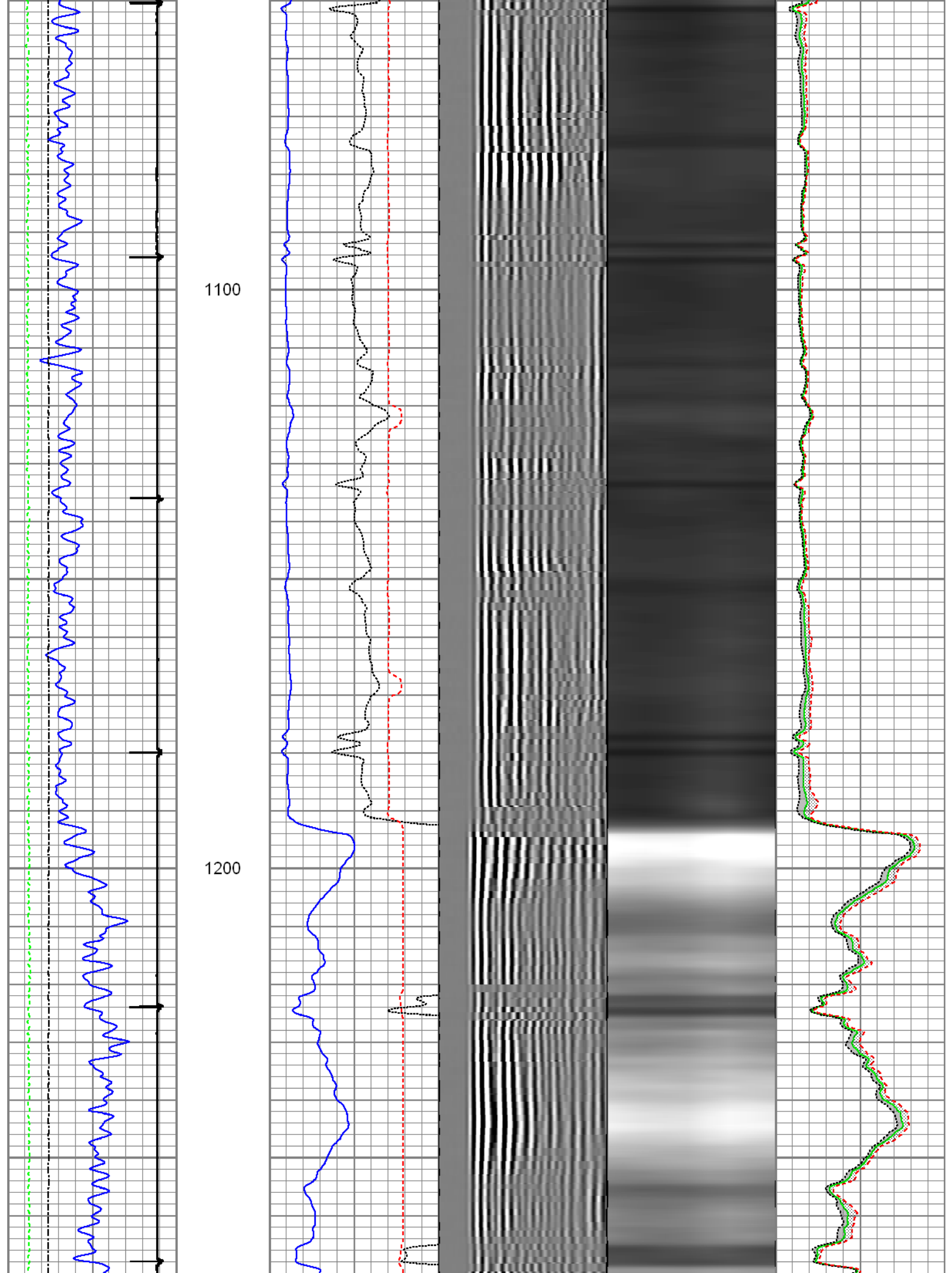


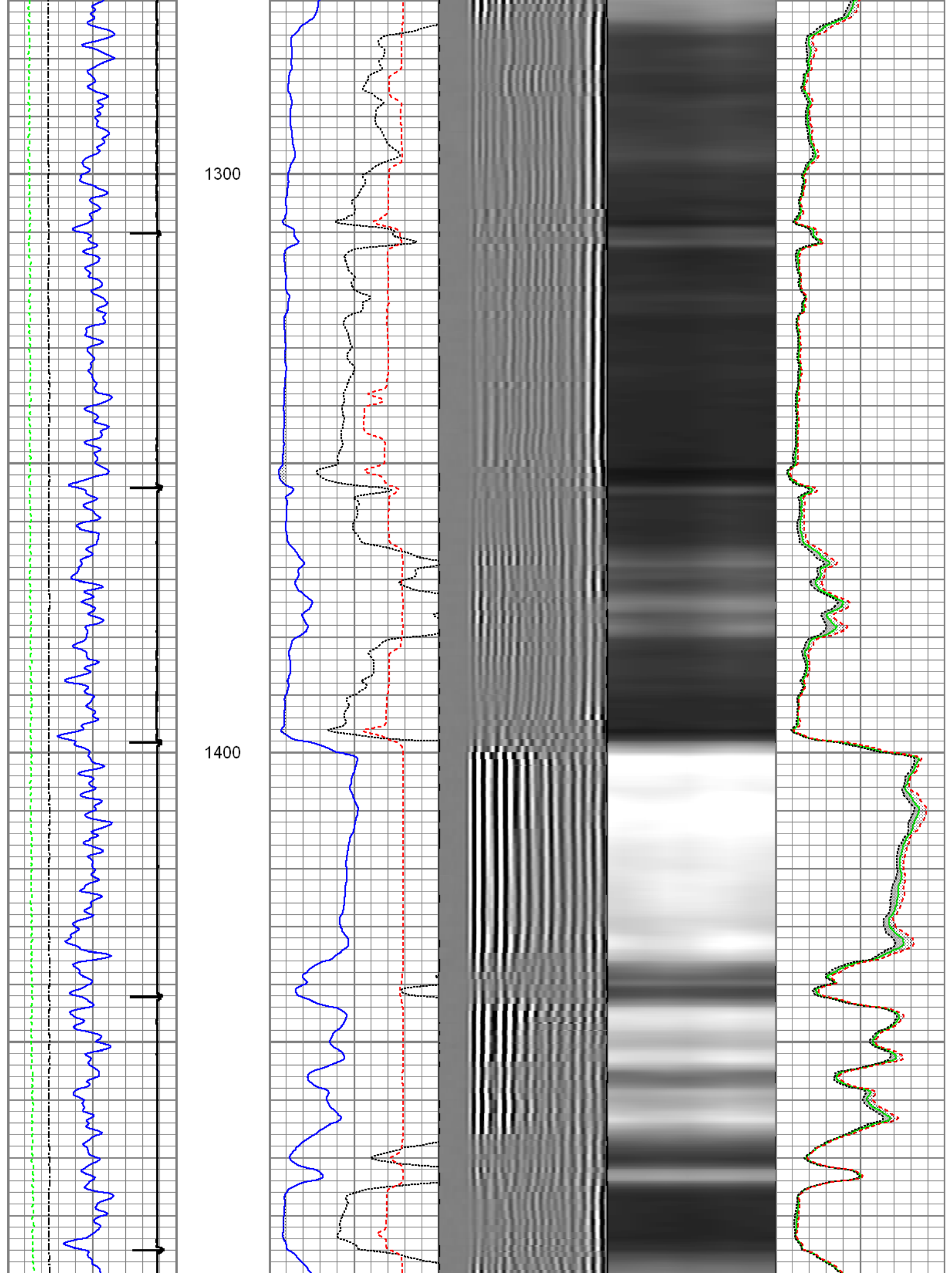


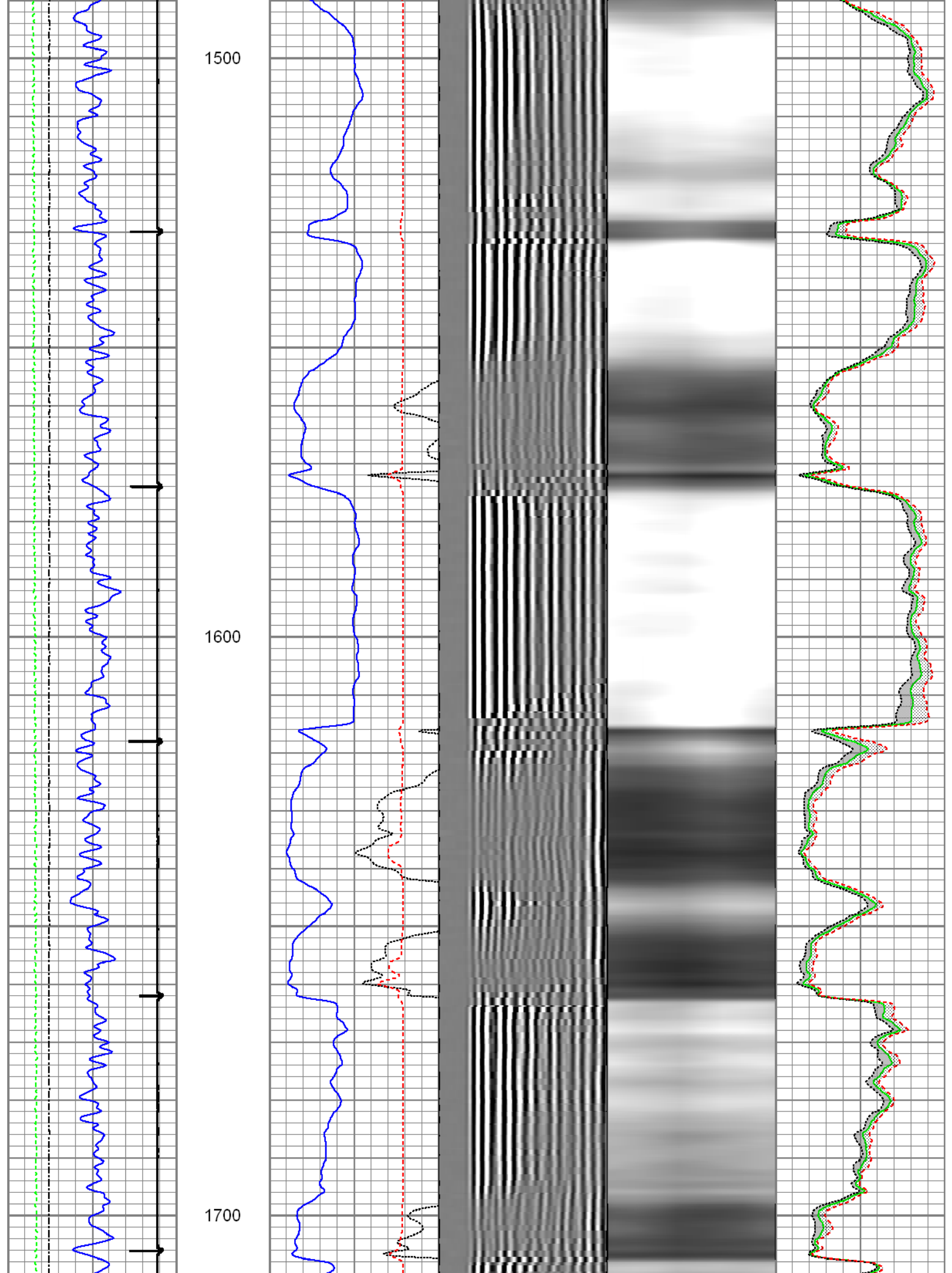
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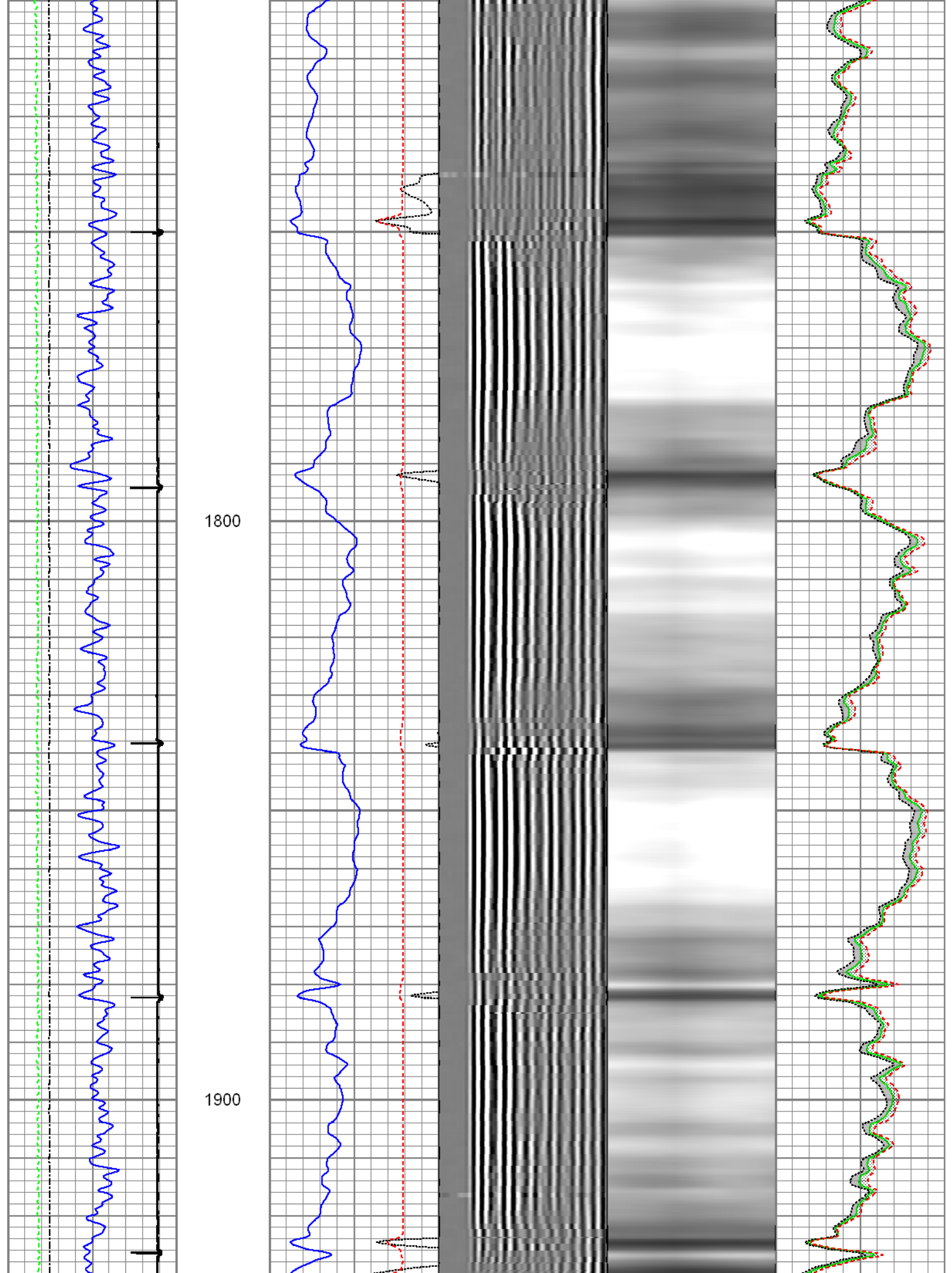
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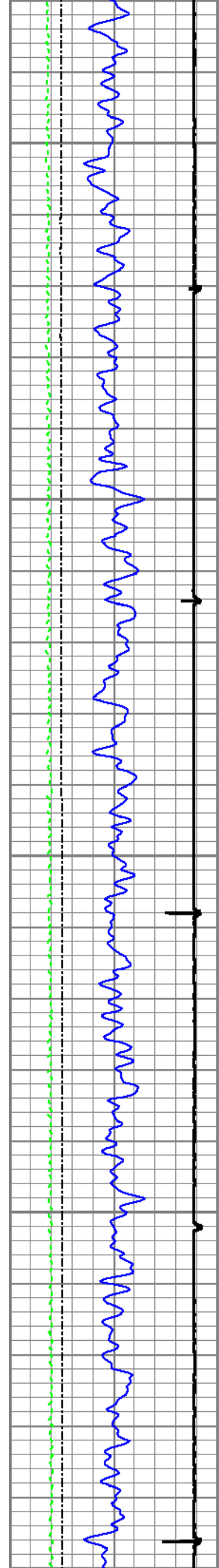






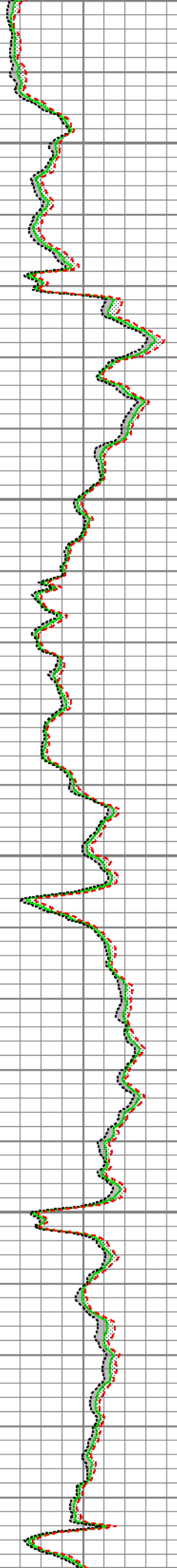
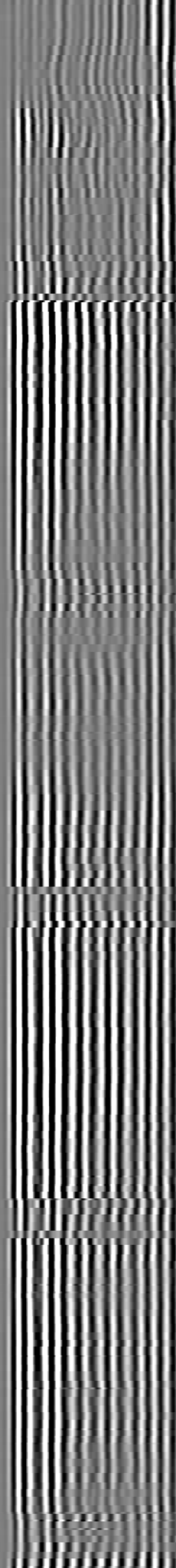
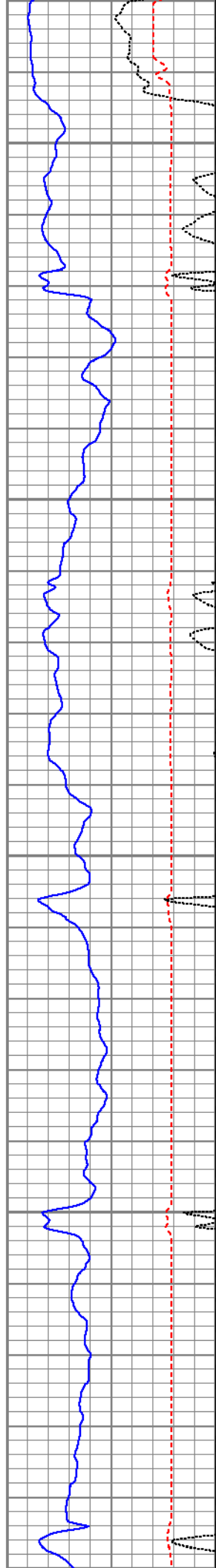






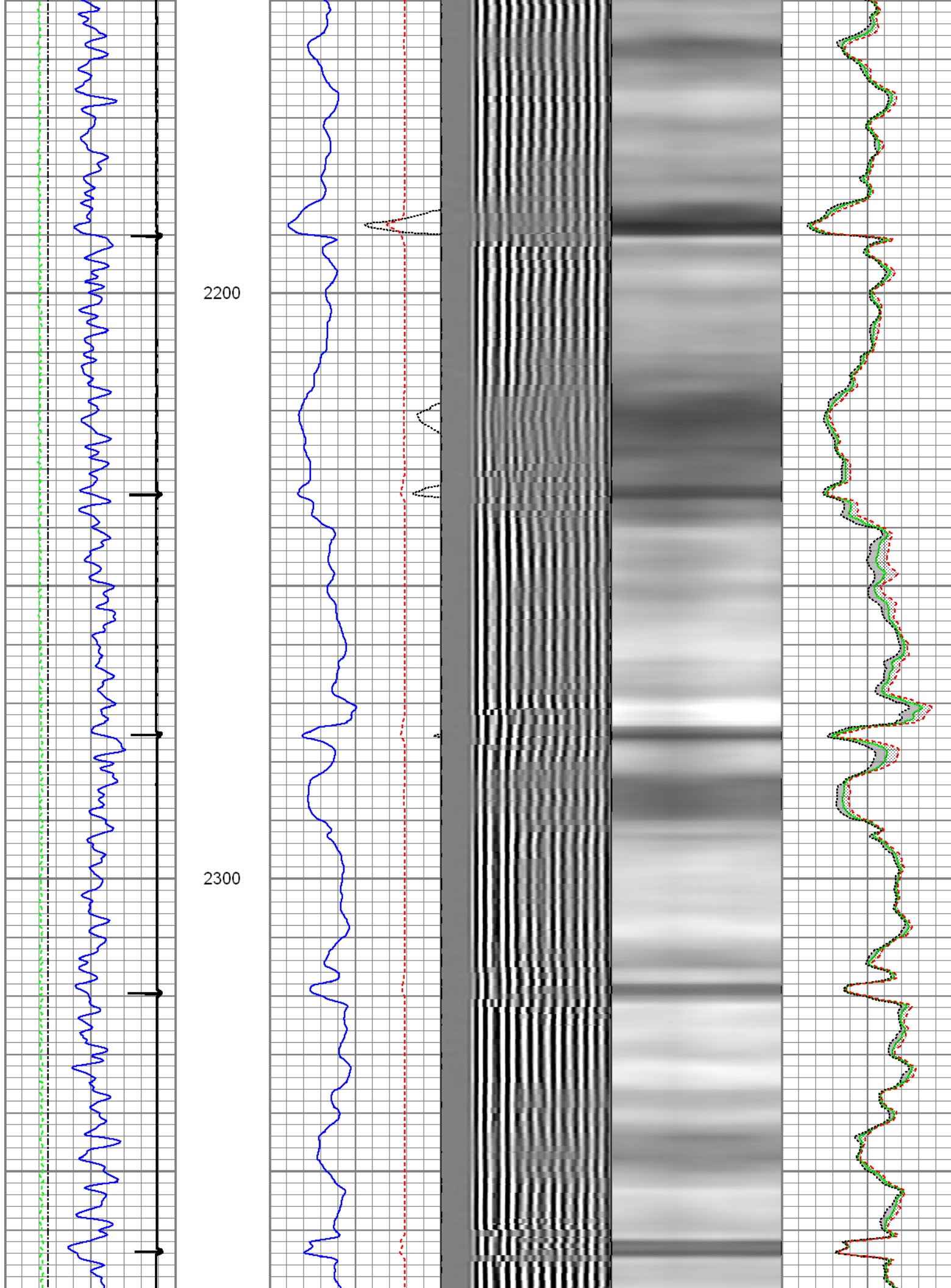
2000

2100



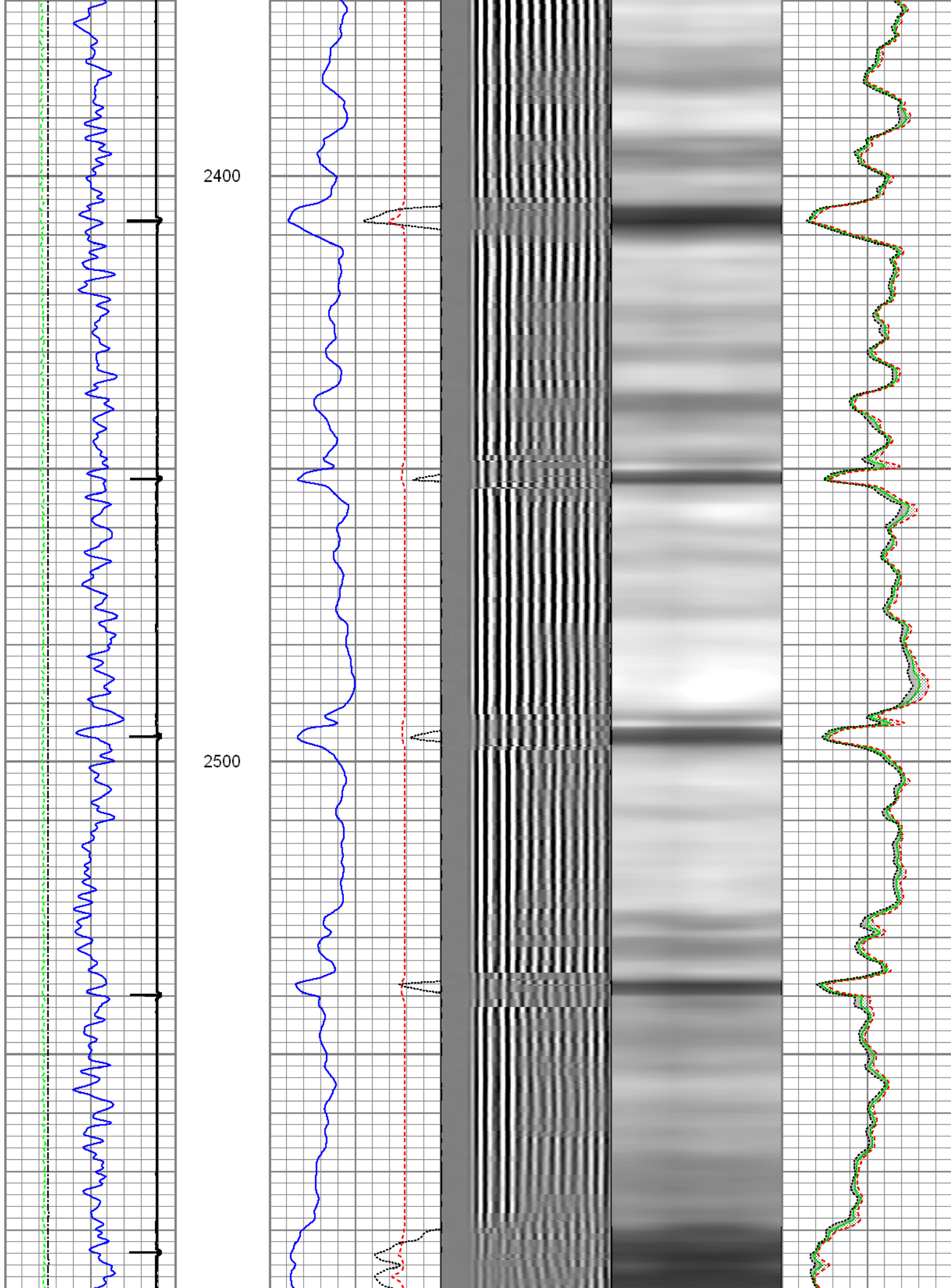
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2300



2400

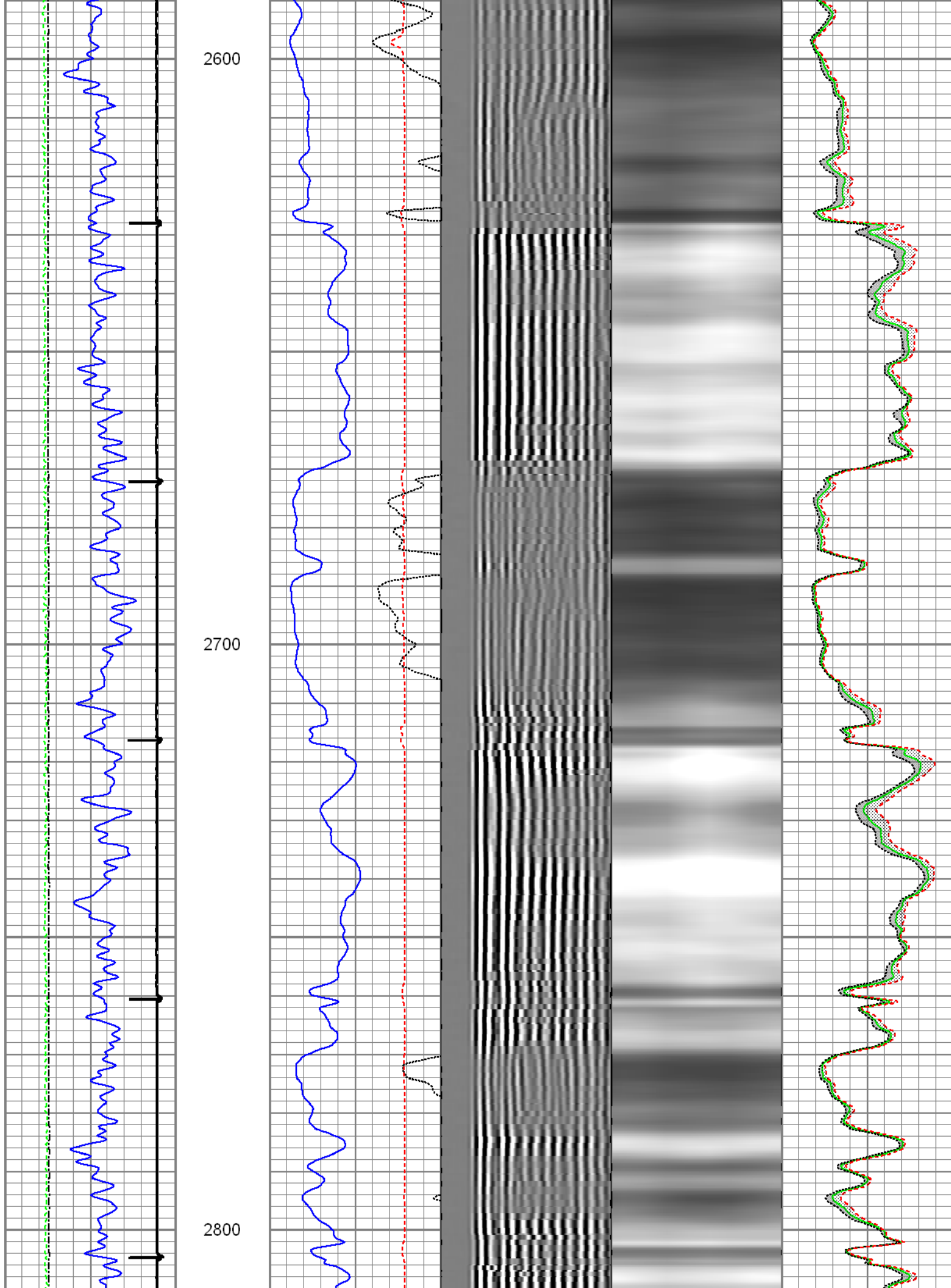
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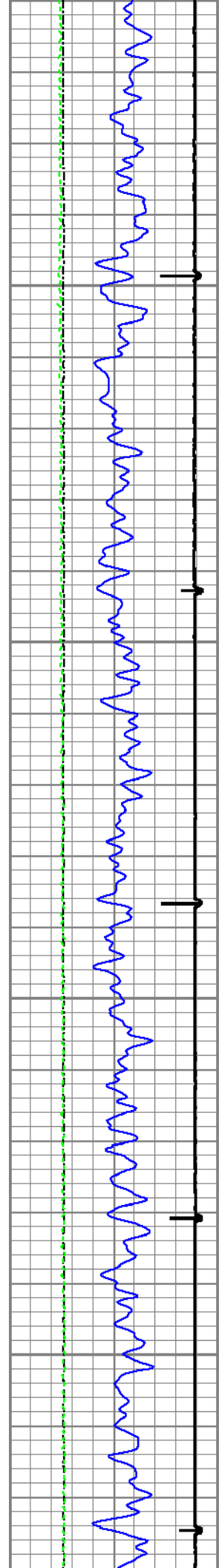


2600

2700

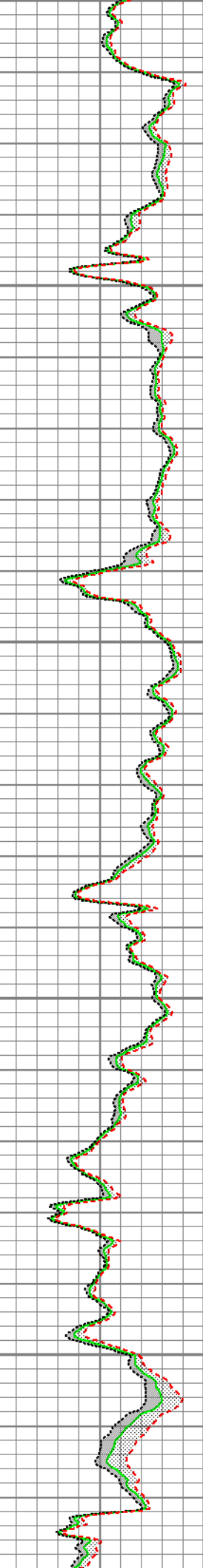
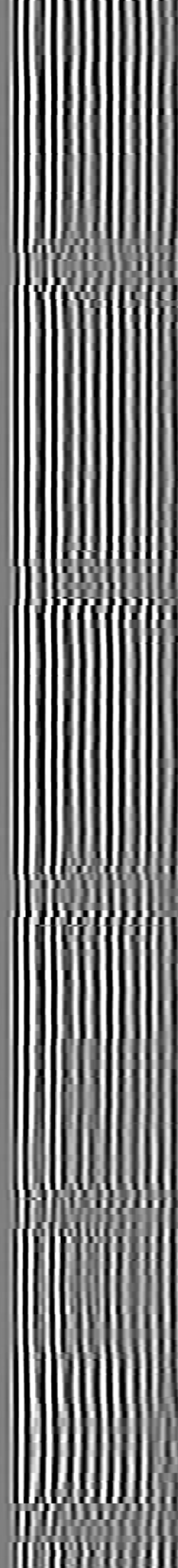
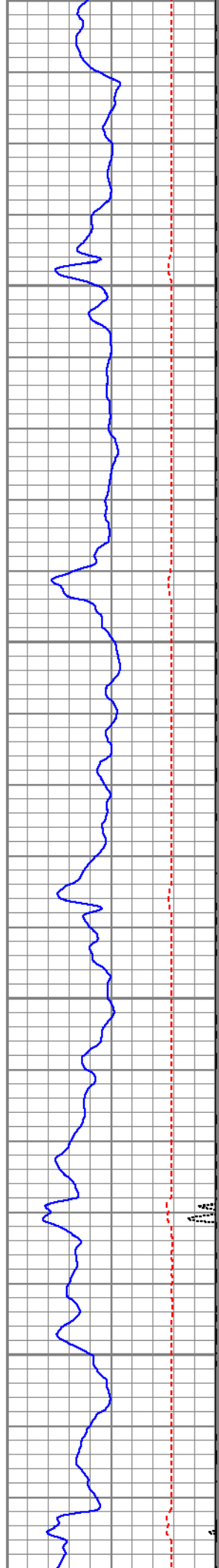
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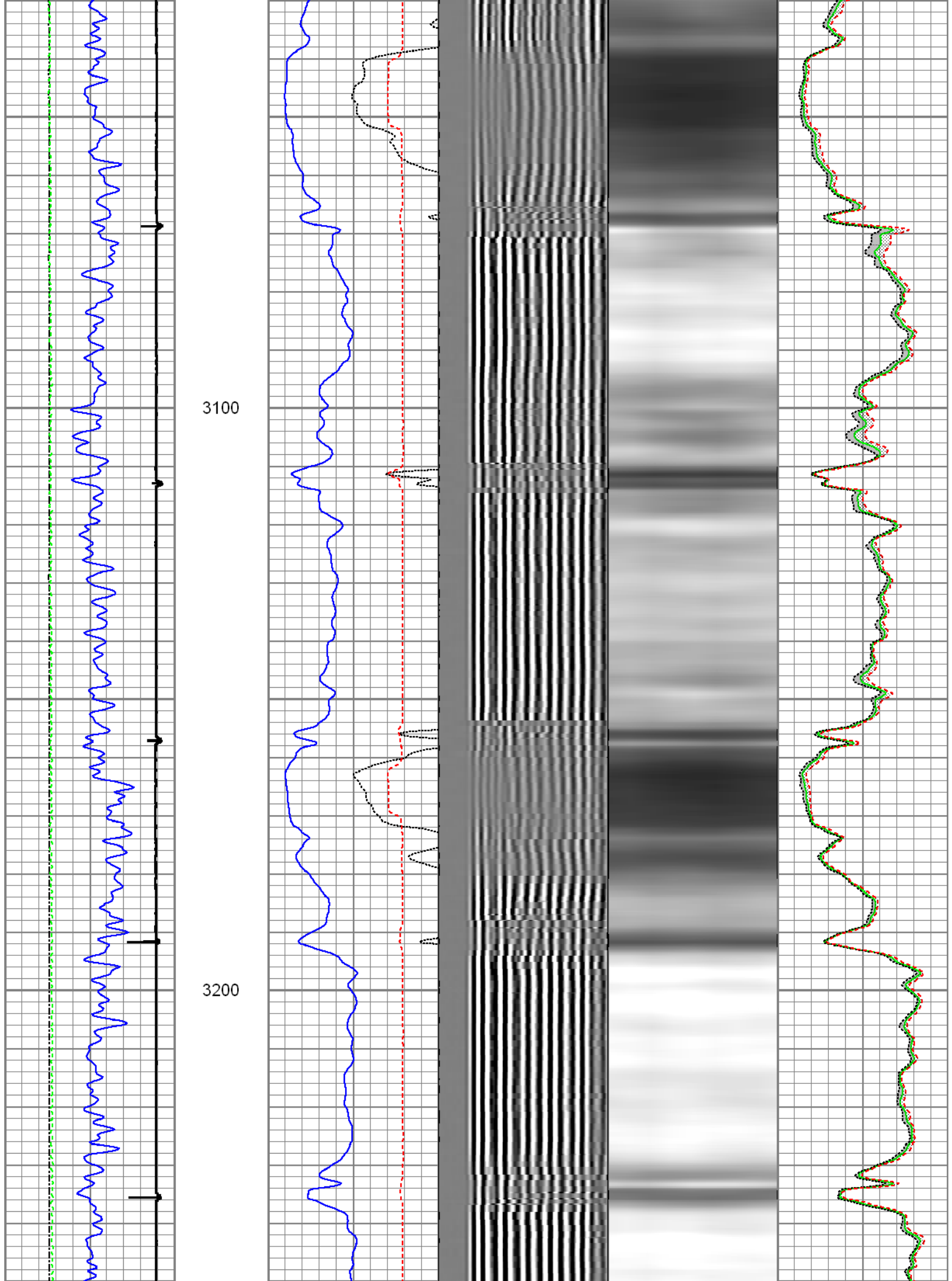


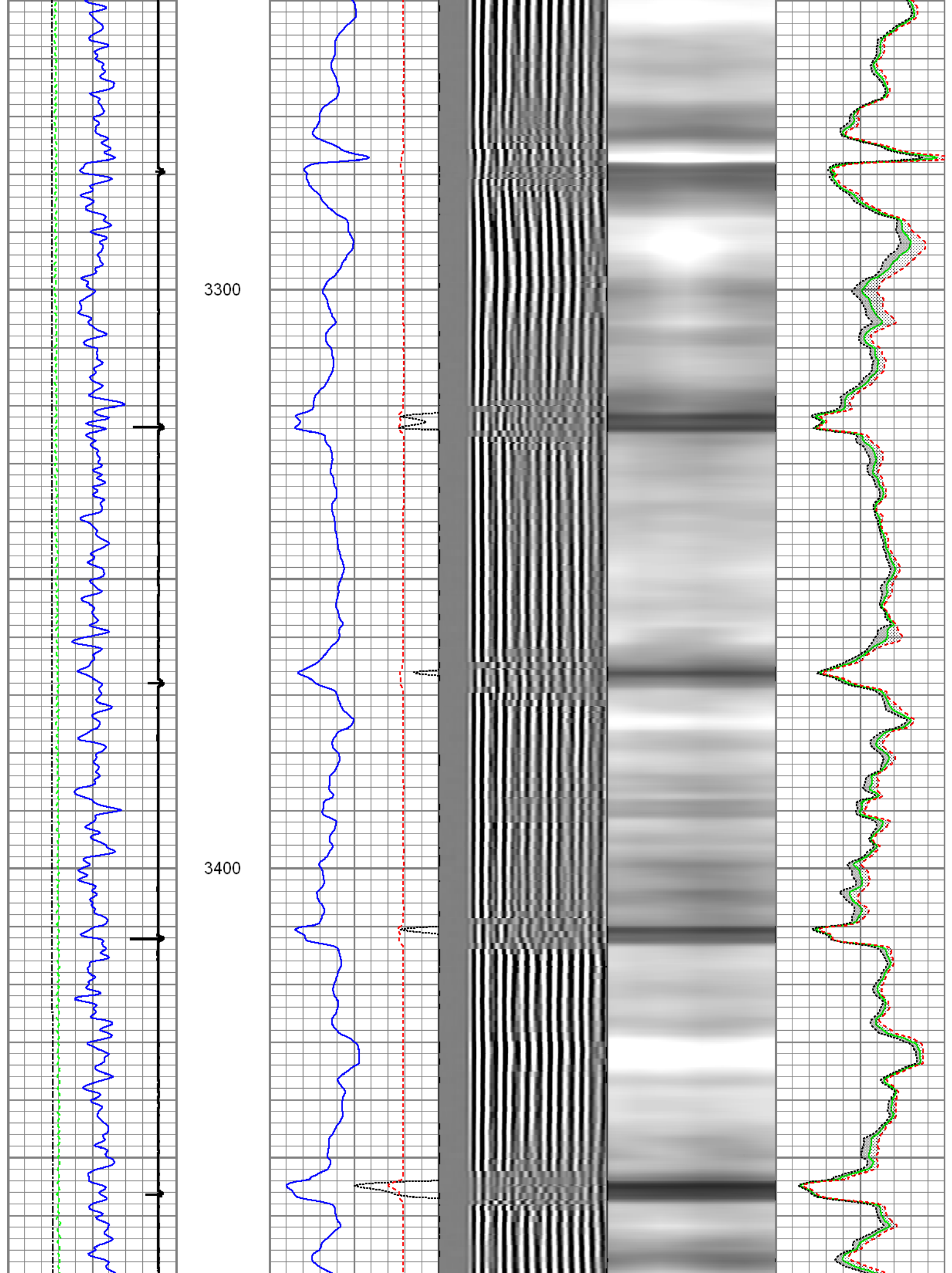


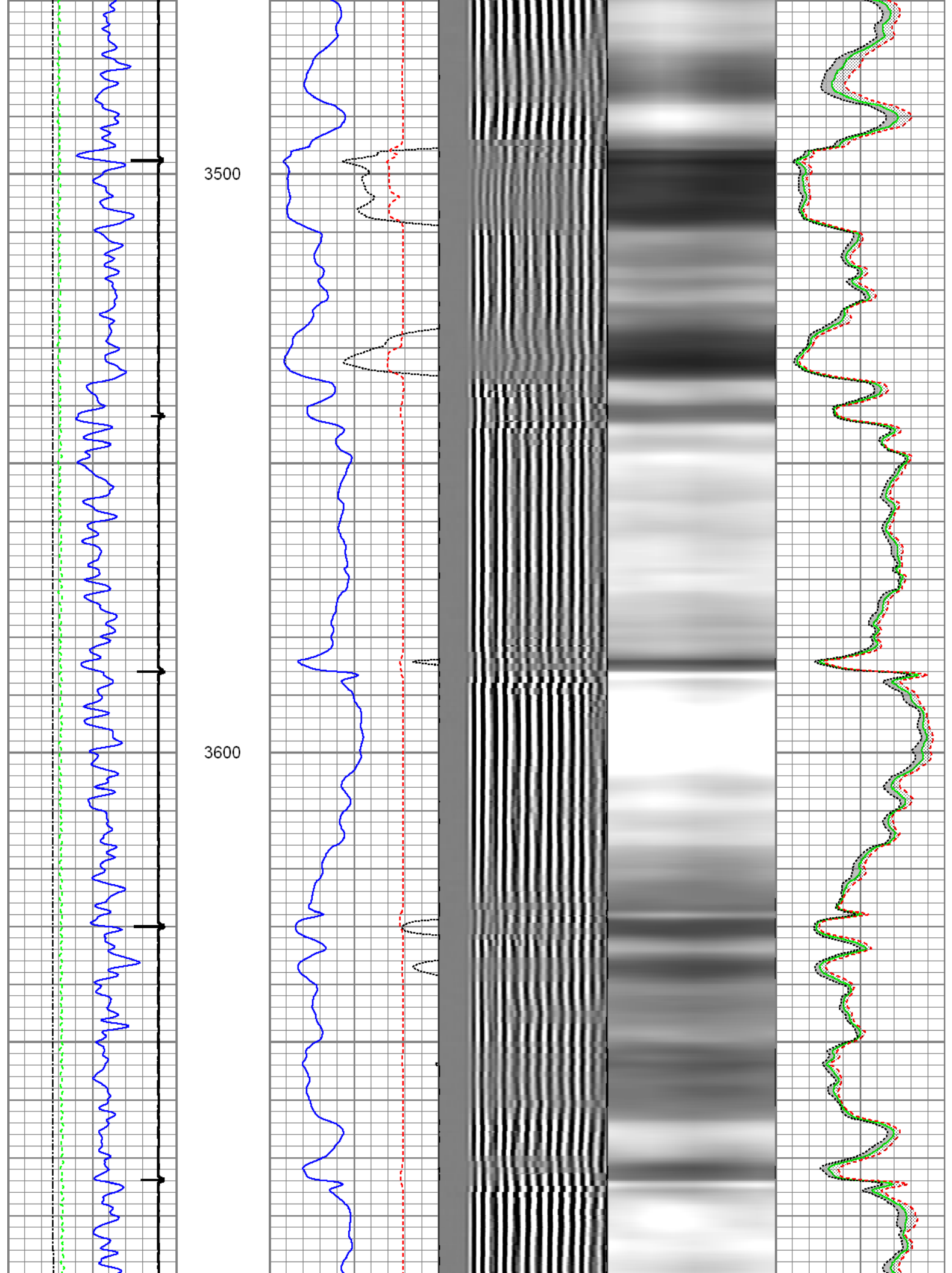
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3000





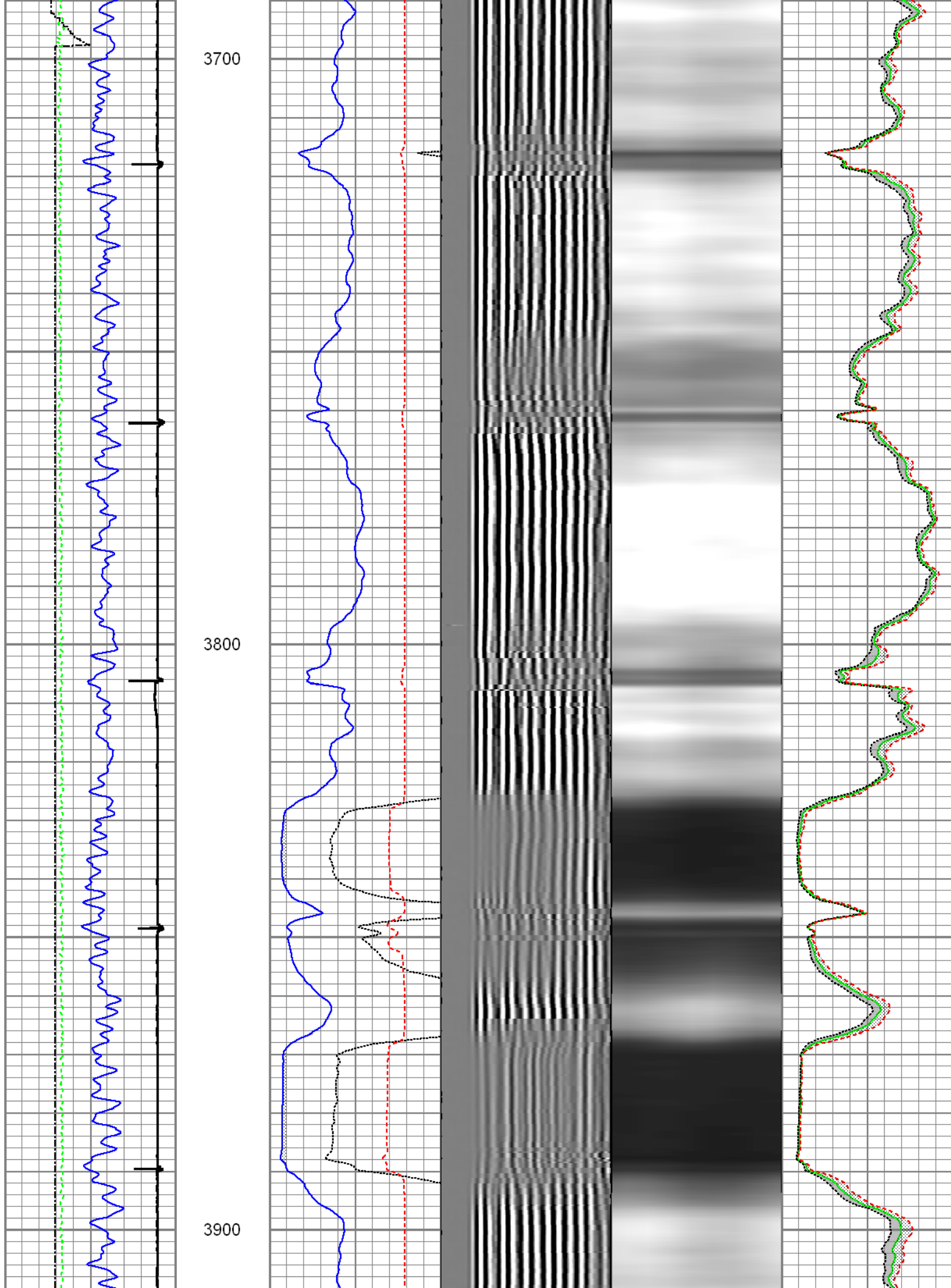


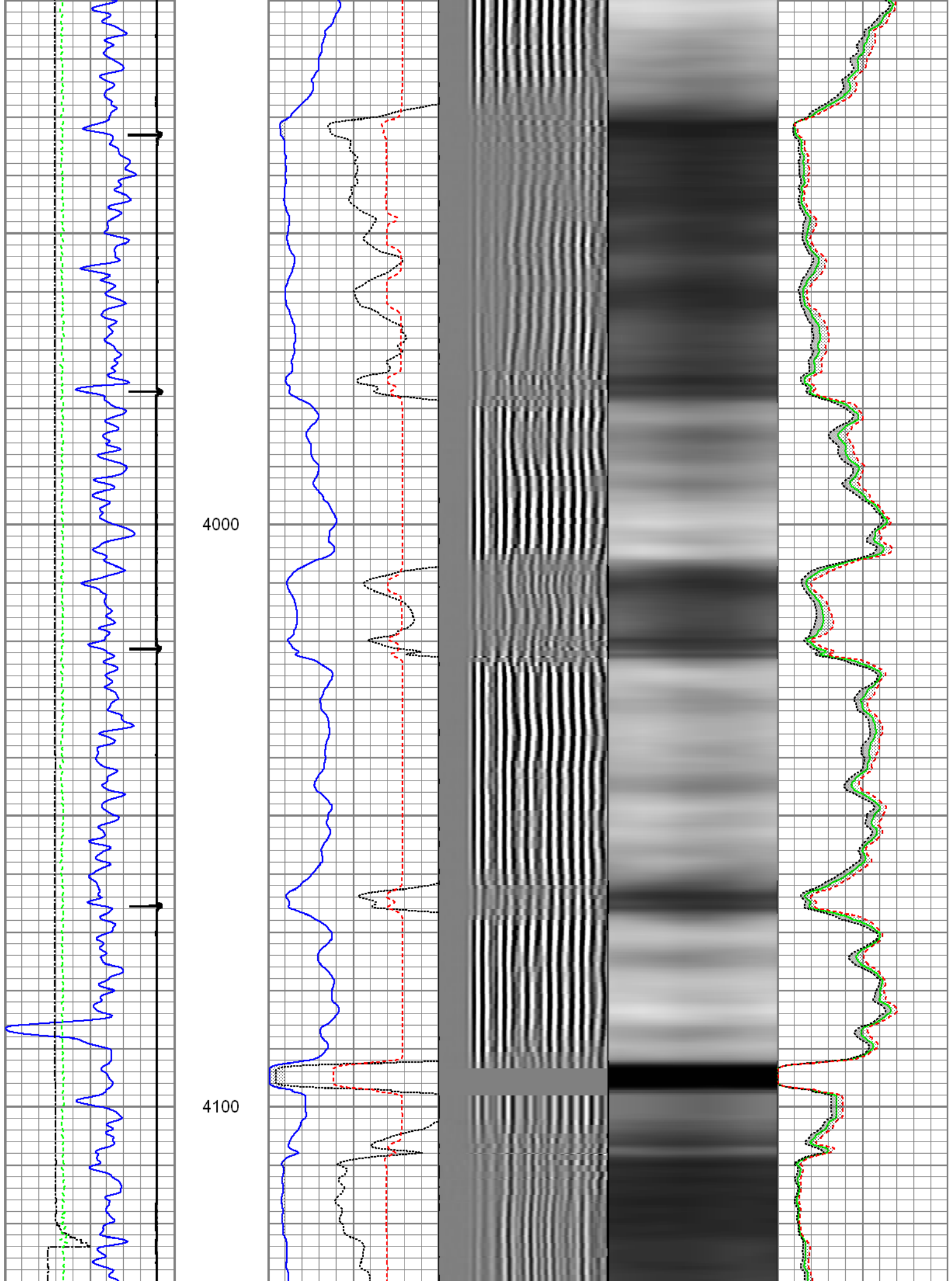


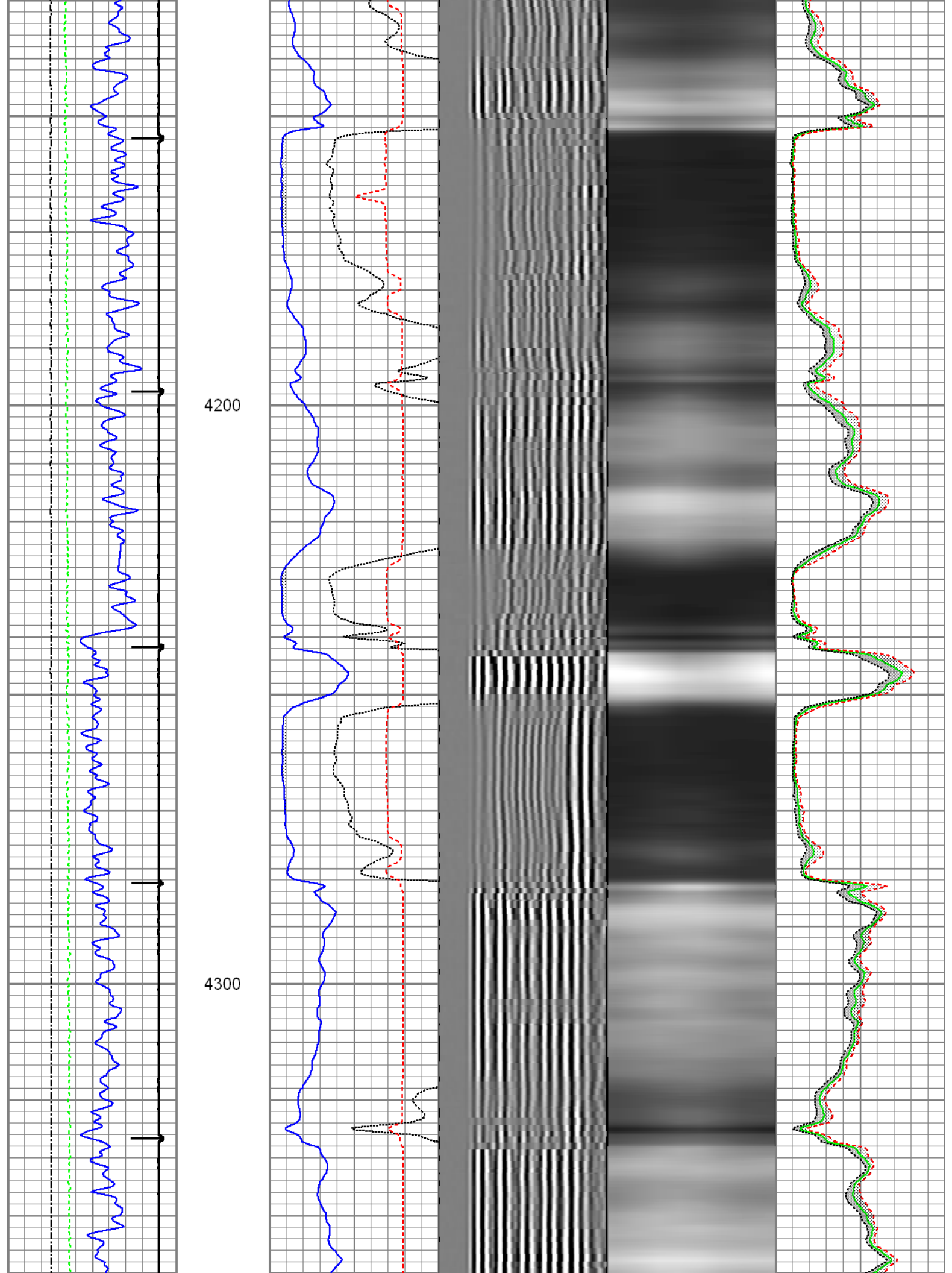
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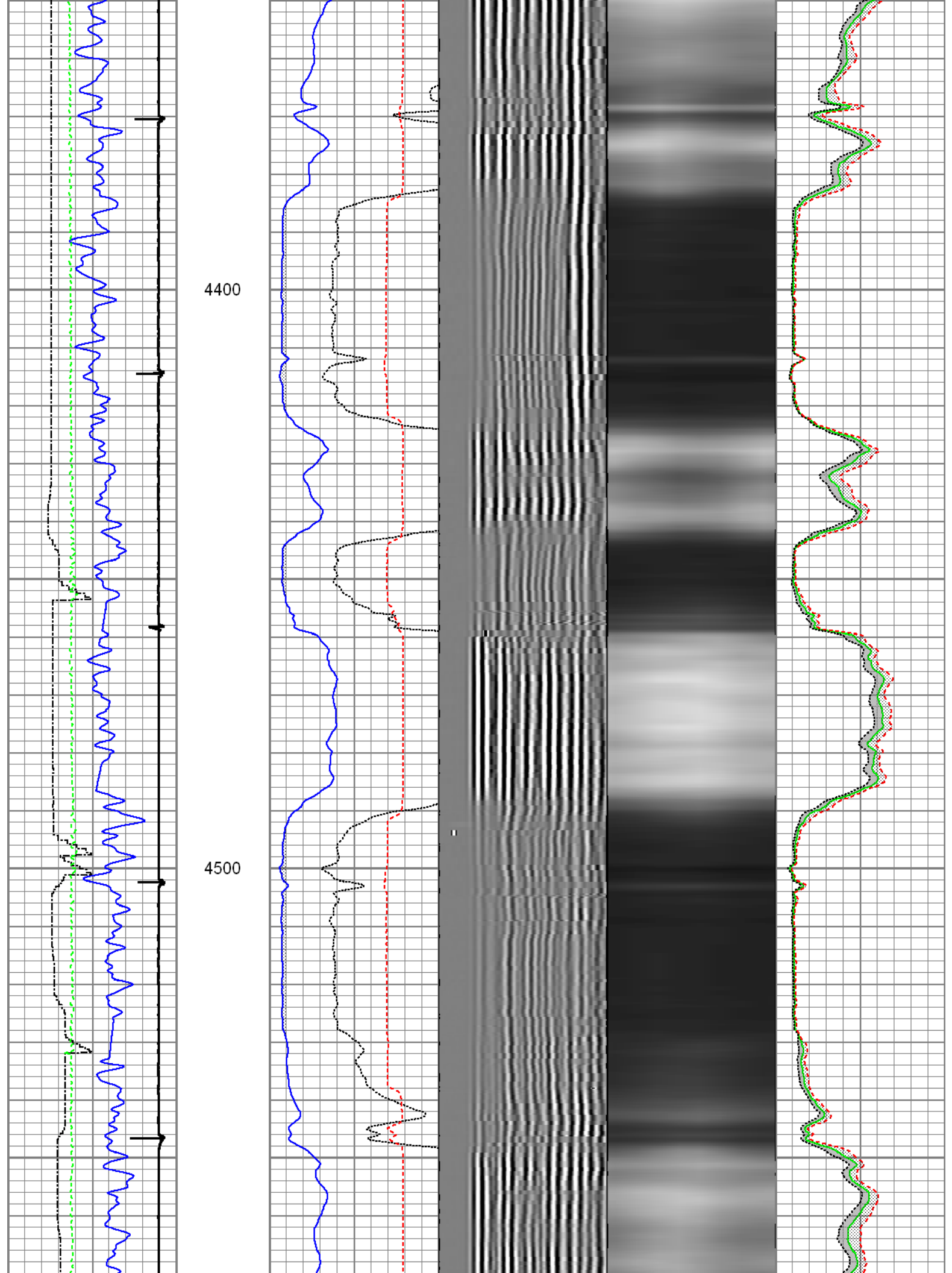
3800

3900



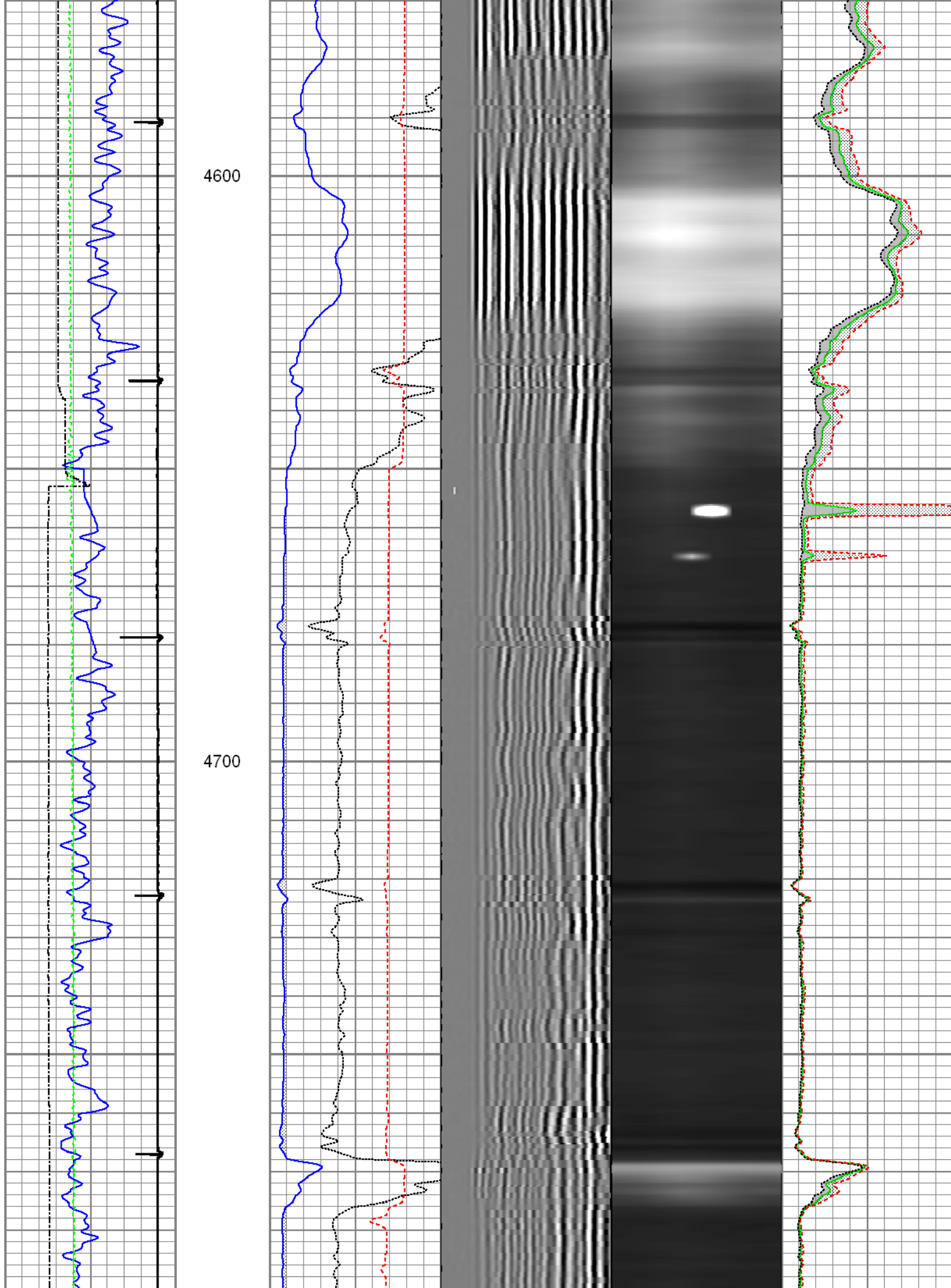


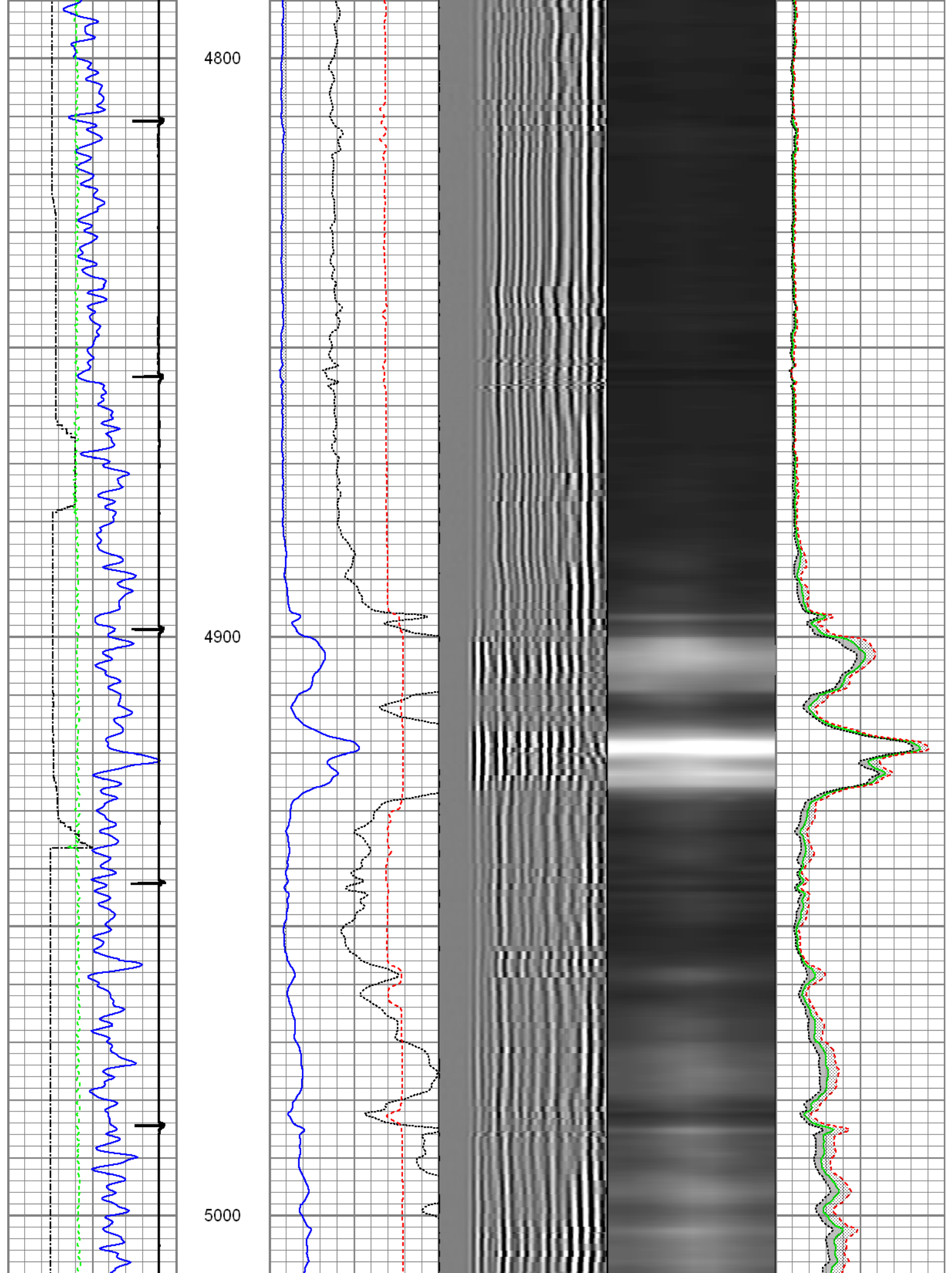


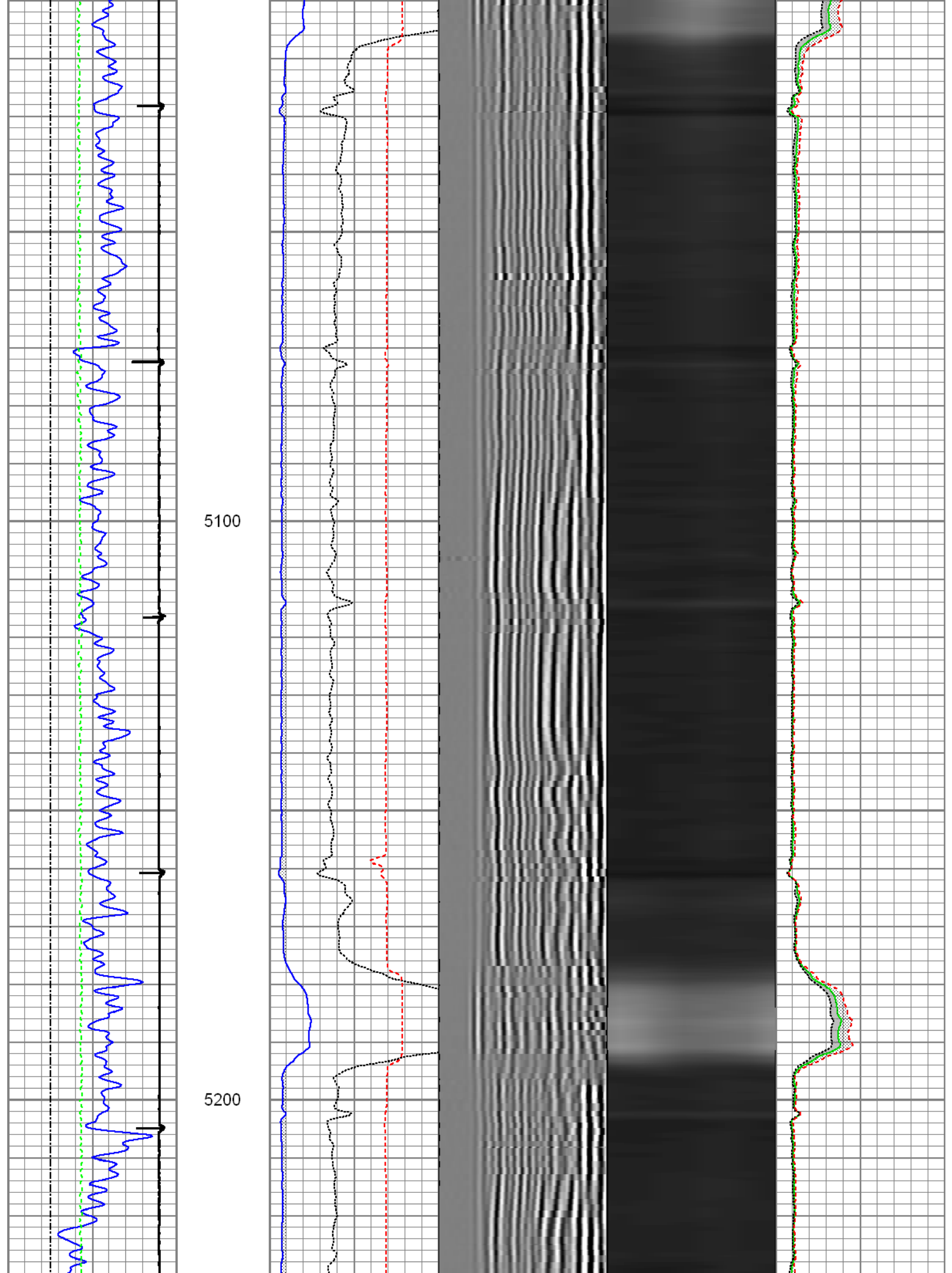


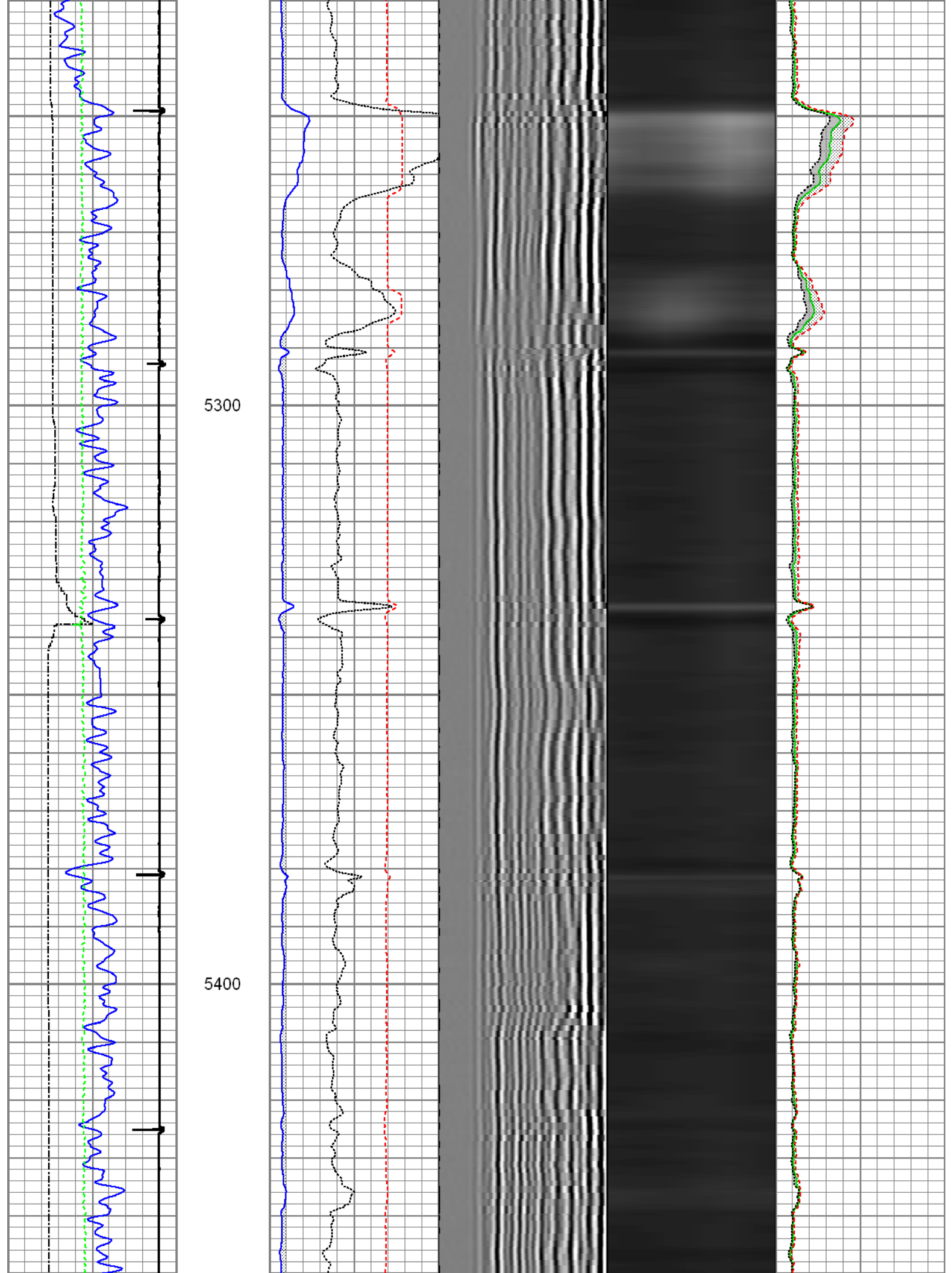
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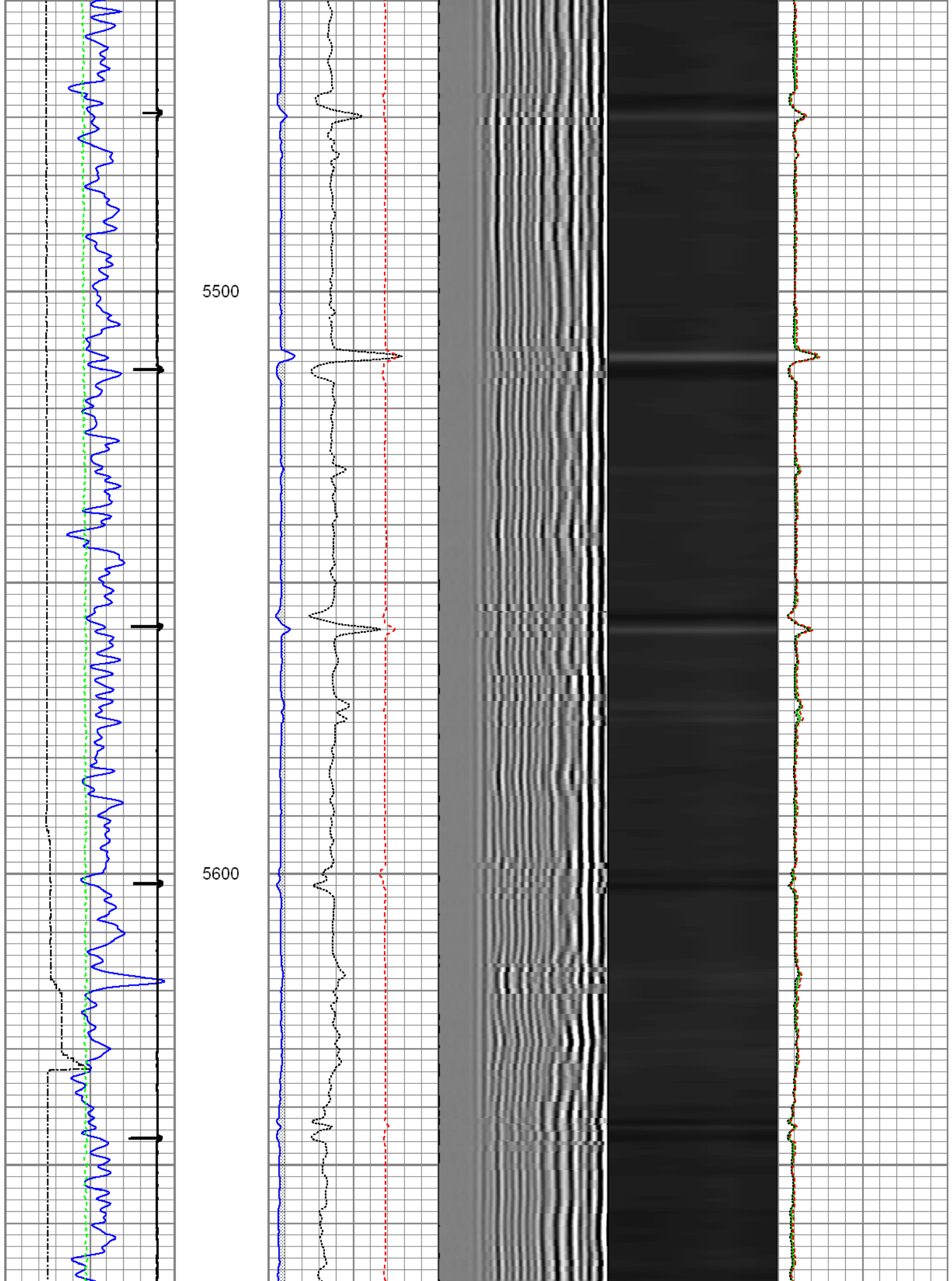
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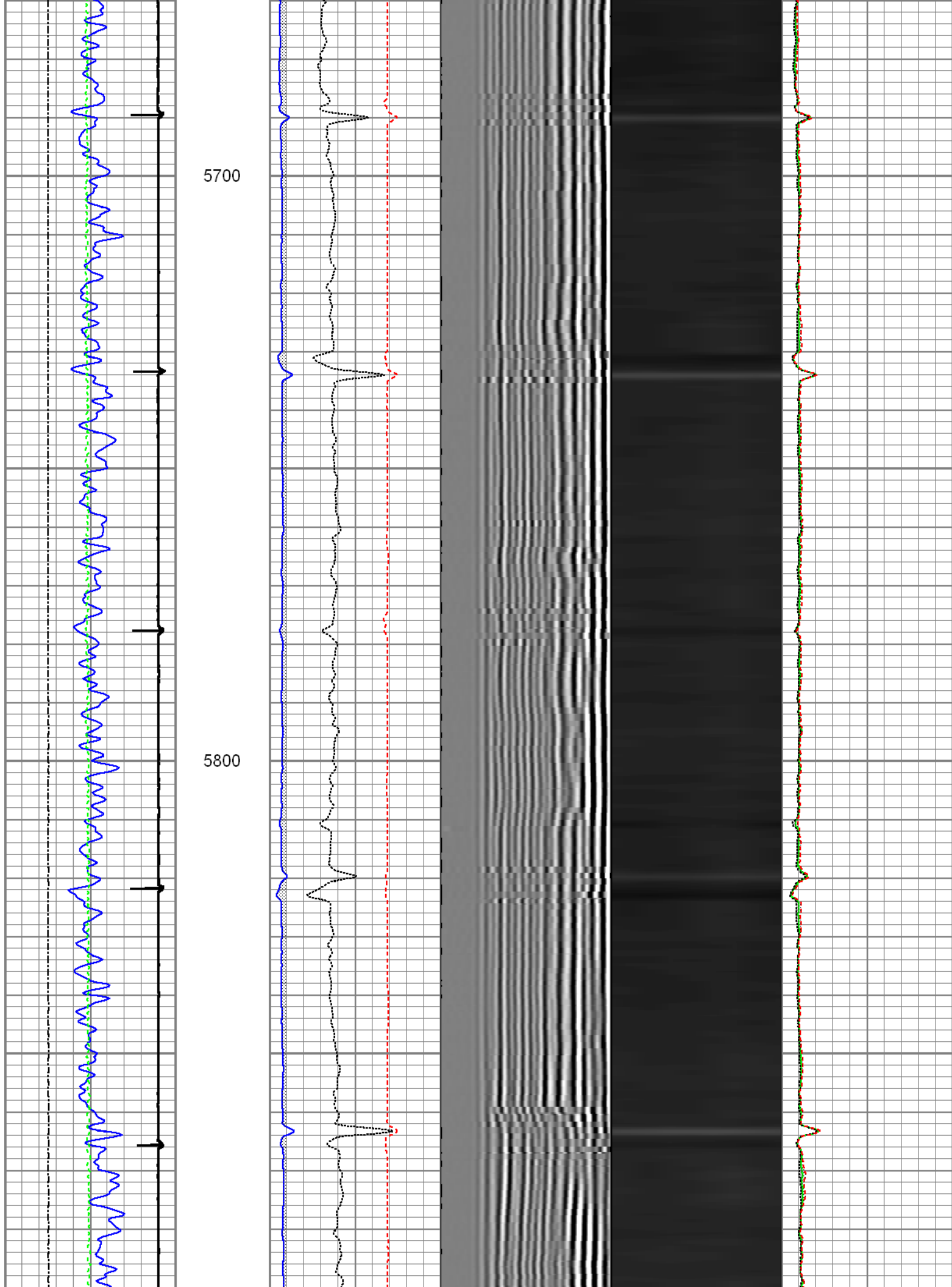






5700

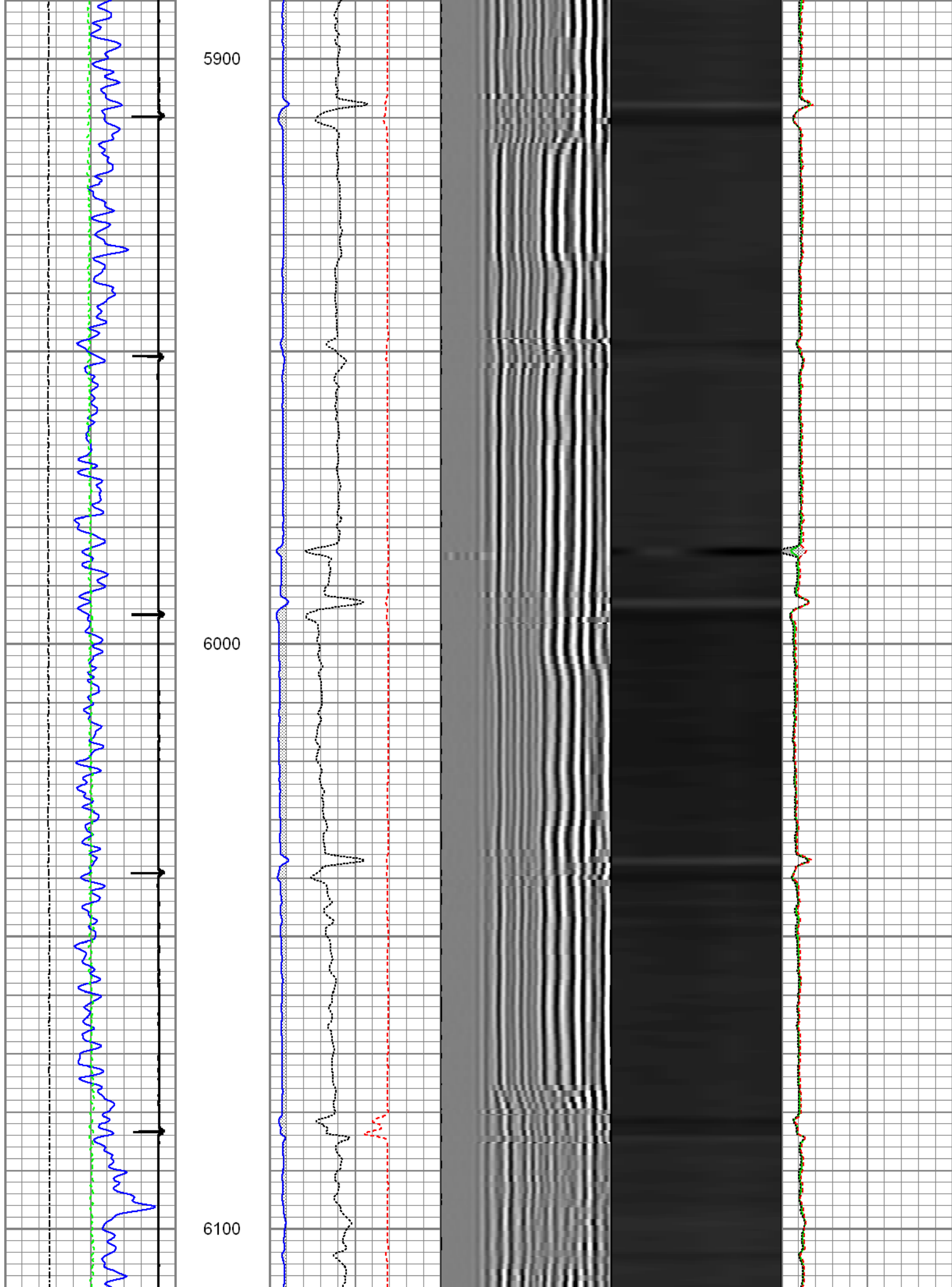
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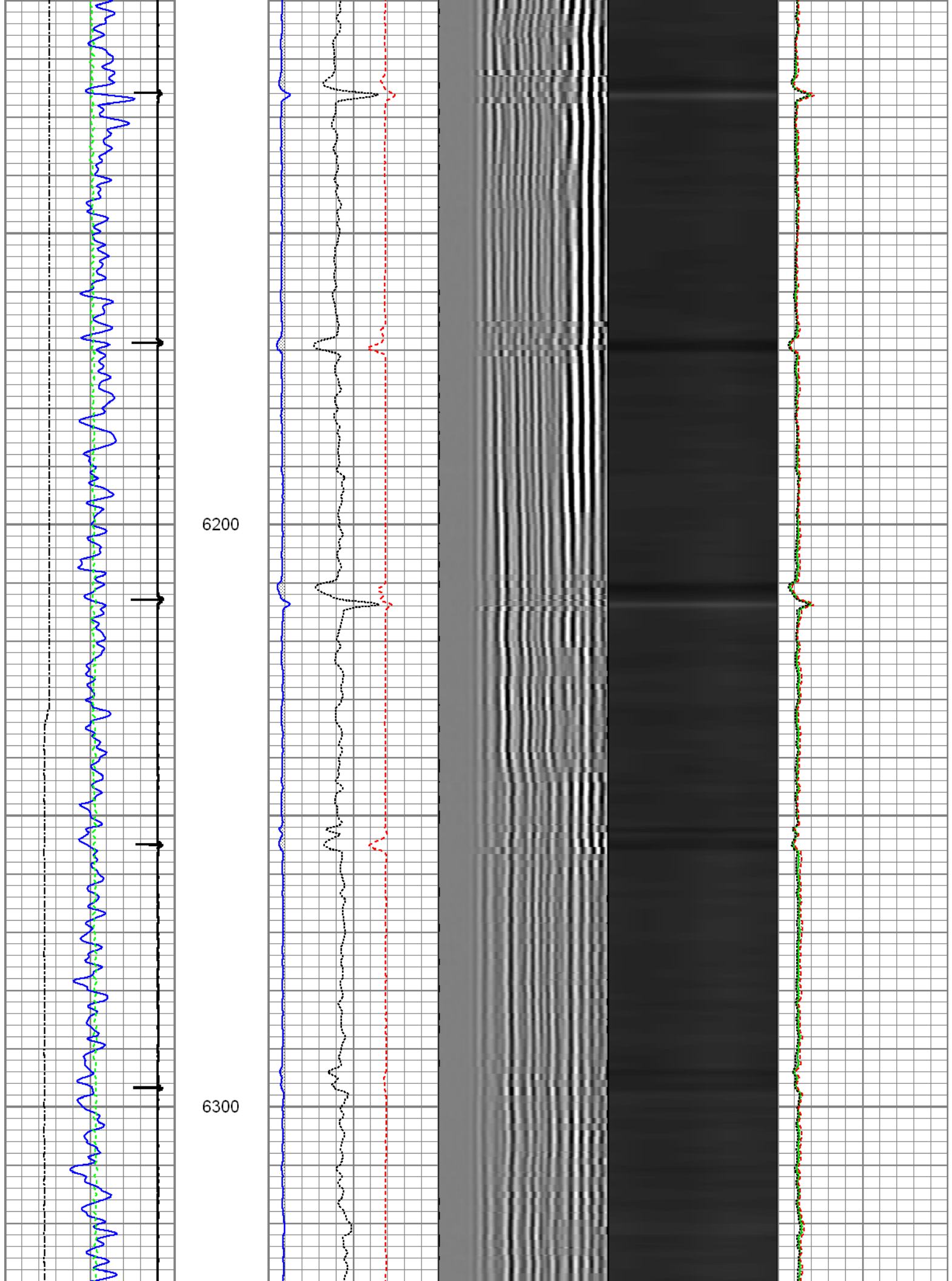


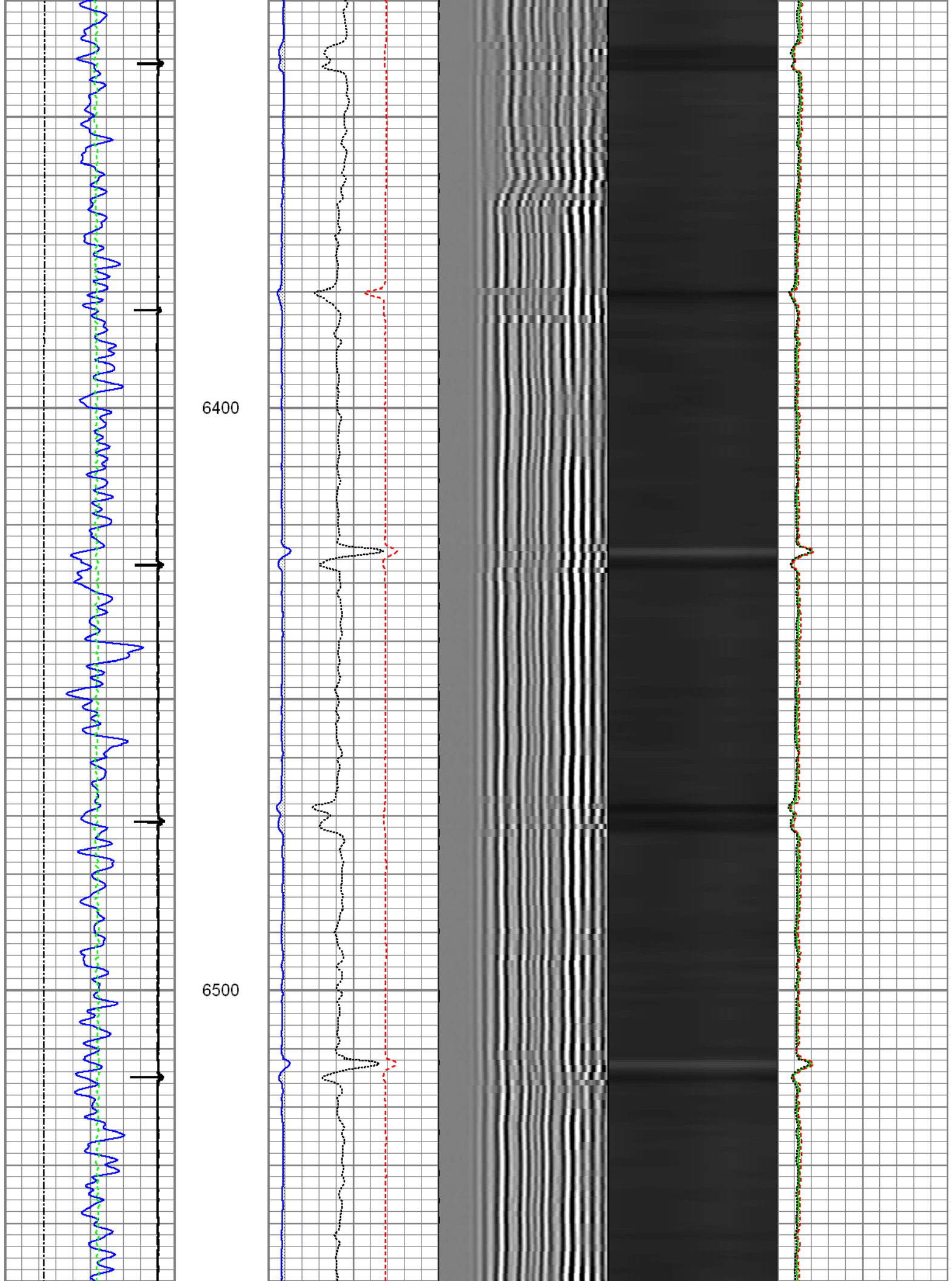
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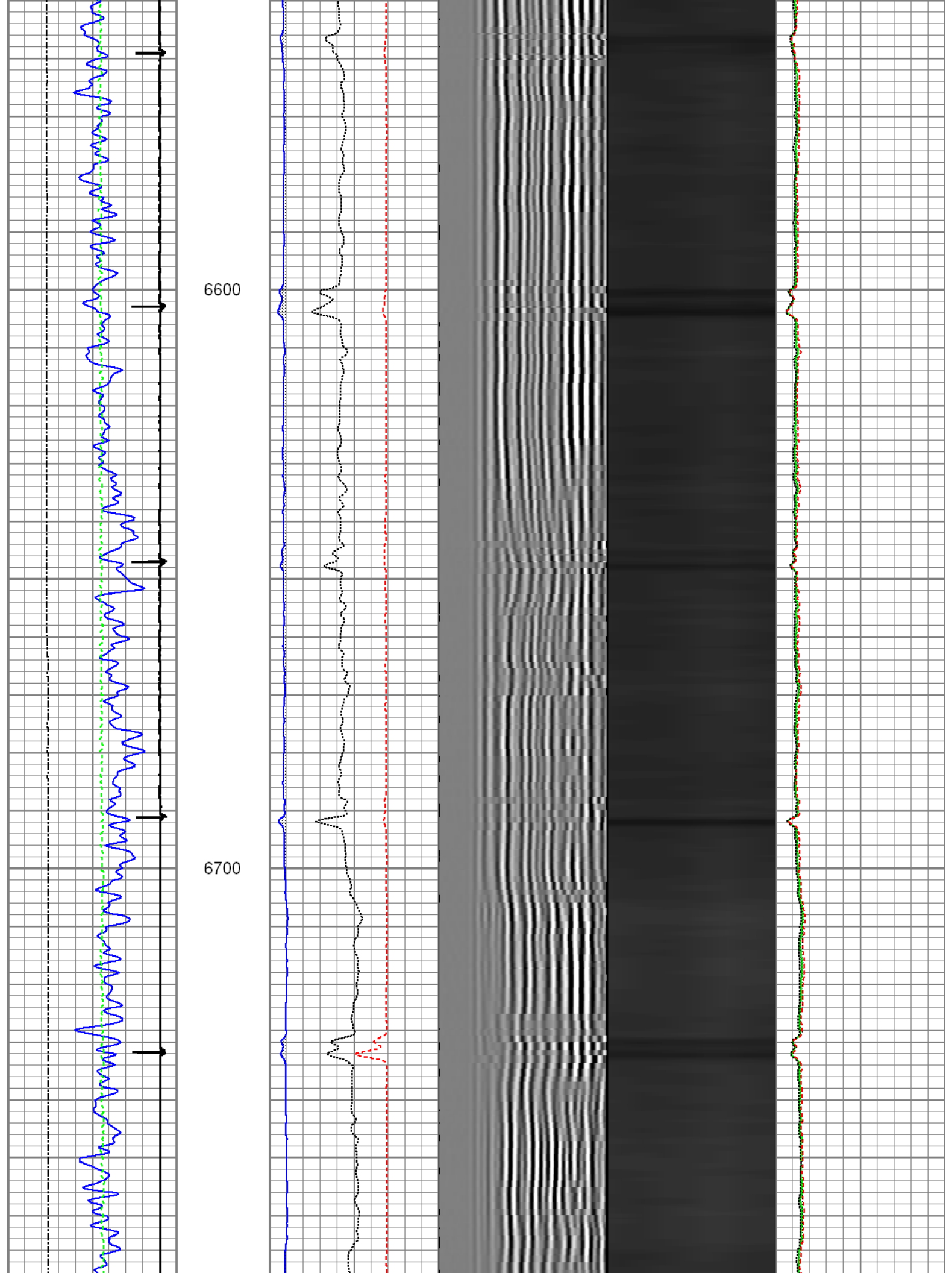
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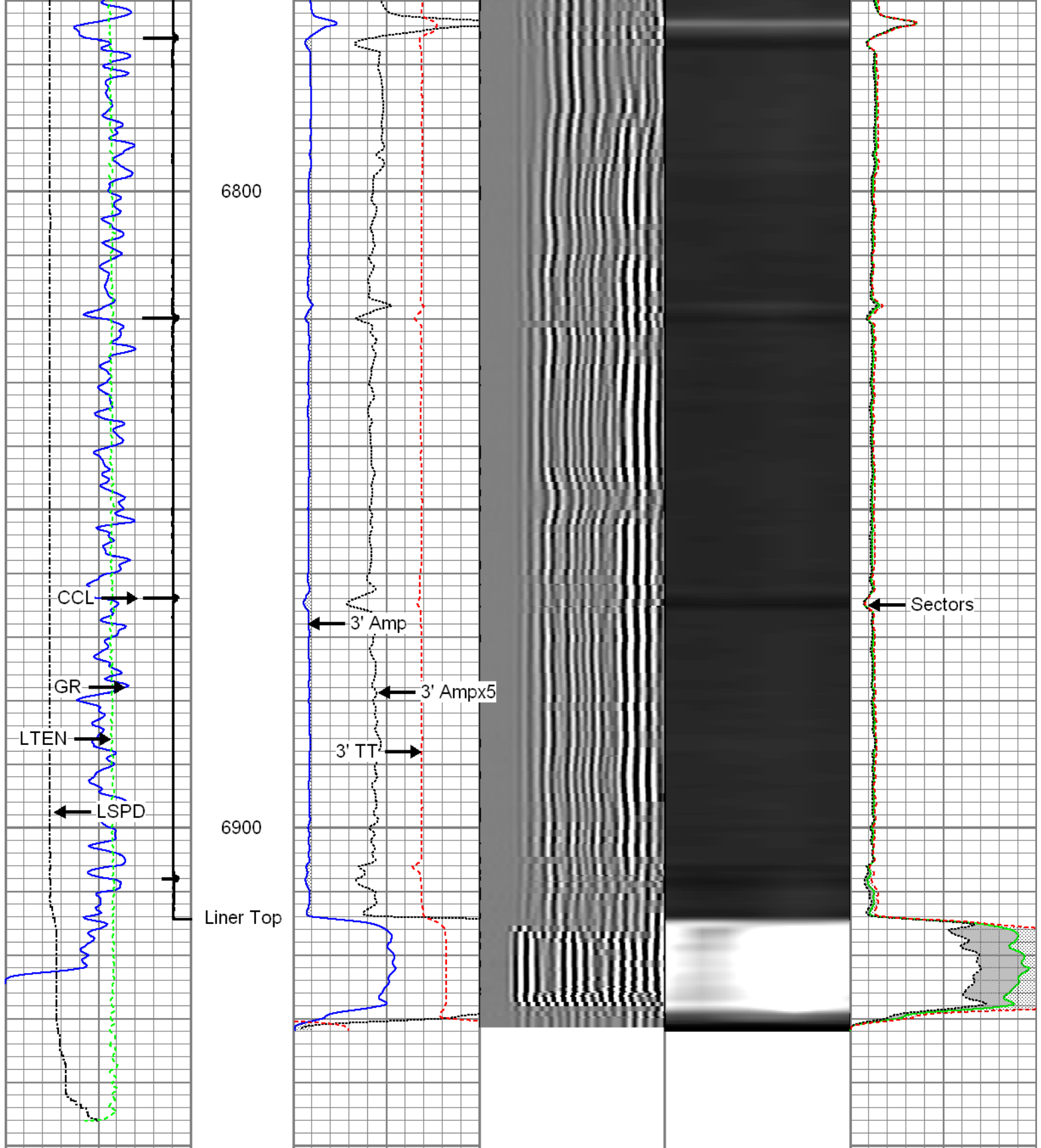
6100











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

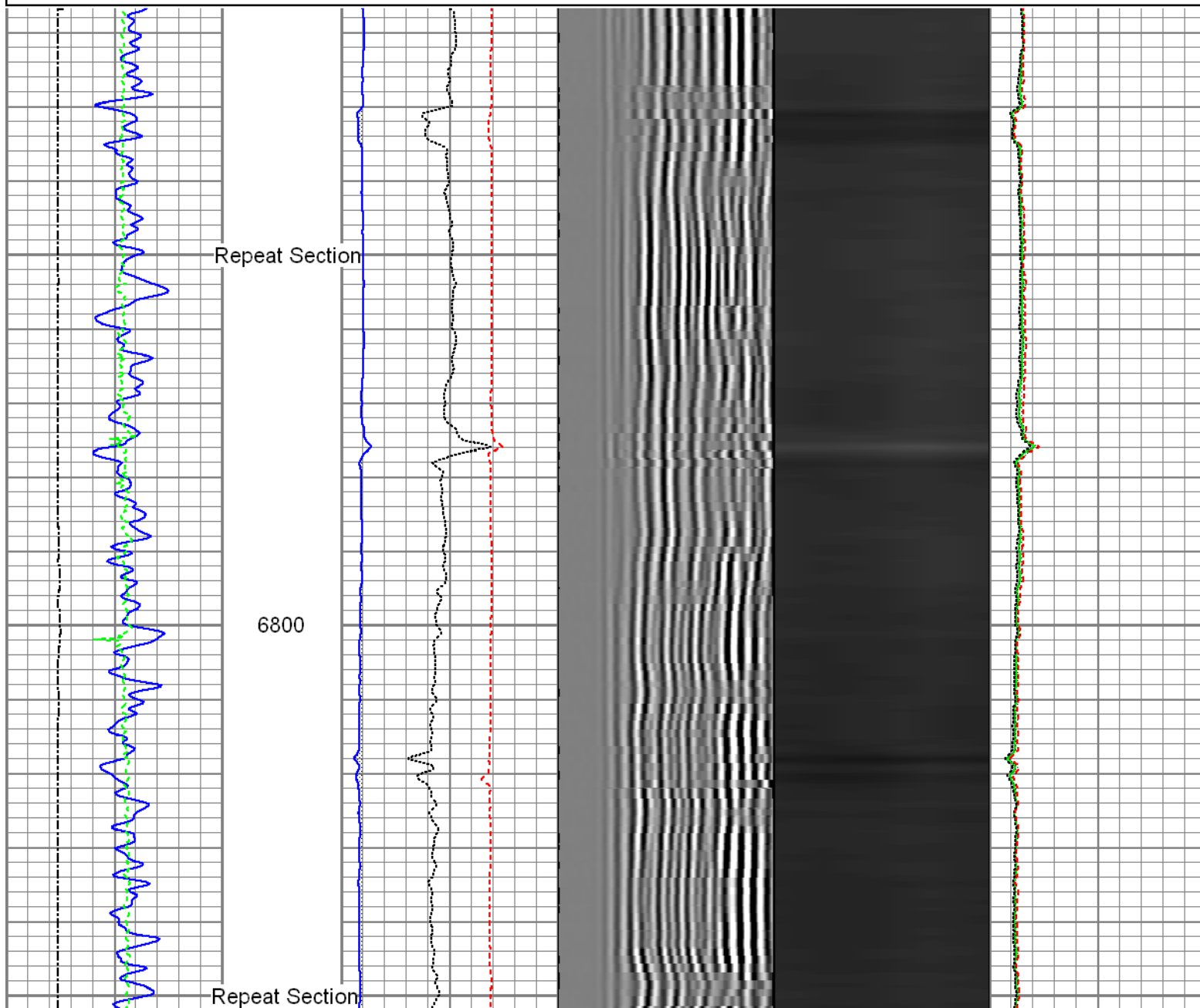


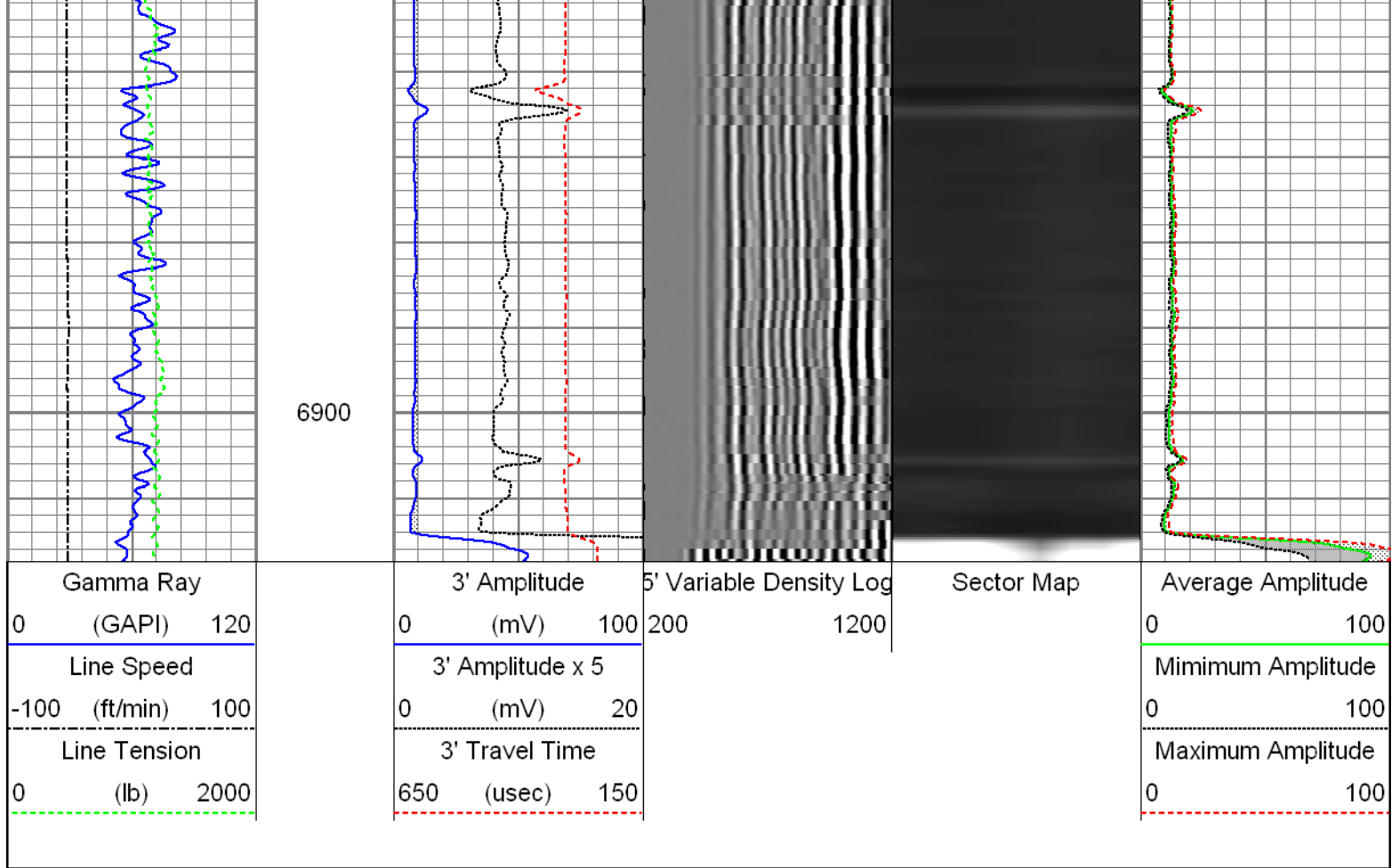
Repeat Pass

Logged with 2800 PSI Surface Induced Pressure

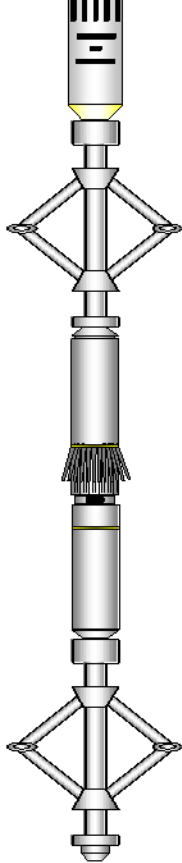
Database File: 0512339944_anadarko_como 13n-14hz_12-29-14_mit_rbl.db
Dataset Pathname: pass3
Presentation Format: rbt4_mit
Dataset Creation: Mon Dec 29 14:58:20 2014 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

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)
GR	23.24		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 (10024281) Sondex Adapter - GO Box to Sondex Pin	0.21	1.69	1.00
			UW_XTU-UW_XTU_002 (10010519) Crossover Ultrawire Toolbus to Ultralink	1.58	1.69	6.50
			UW_PGR-UW_PGR_020 (10013902) Production Gamma Ray	1.93	1.69	9.50
			UW_PRC-DSSRAC (084) 2-3/4" DSS 5 Arm Roller Centralizer	2.55	2.75	32.00
WVFS1	15.85		UW_RBT-UW_RBT_004 (10013454) Sondex Ultrawire 3-1/8" Radial Bond Tool	9.47	3.13	140.00
WVFS2	15.85					
WVFS3	15.85					
WVFS4	15.85					
WVFS5	15.85					
WVFS6	15.85					
WVFS7	15.85					

WVFS7	15.85					
WVFS8	15.85					
CBLTEMP	15.85					
CBLROT	15.85					
WVF5FT	14.85					
			UW_PRC-UW_PRC_057 (1037) Sondex 2-3/4" 4-Arm Production Roller Centraliser	2.98	2.75	32.00
MIT	5.41		UW_MIT-UW_MIT40_042 (10020664) 40 Multifinger Imaging Tool	4.54	2.75	61.10
			UW_PRC #4 -UW_PRC_057 (1102) 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: 0512339944_anadarko_como 13n-14hz_12-29-14_mit_rbl.db: field/well/run1/pass8 Total Length: 27.49 ft Total Weight: 319.30 lb O.D. 3.13 in						

Calibration Report			
Database File:	0512339944_anadarko_como 13n-14hz_12-29-14_mit_rbl.db		
Dataset Pathname:	pass8		
Dataset Creation:	Fri Jan 02 10:48:54 2015		
Multi-finger Imaging Tool Calibration Report			
Serial Number:		10020664	
Number of Fingers:		40	
Tool Model:		UW_MIT40_042	
Inclinometer Calibration Report			
Performed:		Wed Nov 26 12:28:41 2014	
Calibration Angle:		45	
		Inc X	Inc Y
Vertical:		1946	1932
Finger 1 up:		1712	1699
Finger 31 up:		2180	1700
Finger 21 up:		2165	2167
Finger 11 up:		1708	2156
Sensitivity ratio:	1.00121		
X-axis angle:	134.04		
Deviation const.:	327.106		

Finger Calibration Report						
	Performed:		Mon Dec 29 13:10:11 2014			
Ring size:	4	5	6	7		
(in)	Sens	Sens	Sens			
Finger 01:	1229 343.0	1572 367.0	1939 379.0	2318		
Finger 02:	1203 350.0	1553 372.0	1925 386.0	2311		

Finger 03:	1208	350.0	1558	372.0	1930	389.0	2319
Finger 04:	1173	362.0	1535	388.0	1923	402.0	2325
Finger 05:	1190	358.0	1548	381.0	1929	396.0	2325
Finger 06:	1227	354.0	1581	372.0	1953	378.0	2331
Finger 07:	1134	371.0	1505	398.0	1903	418.0	2321
Finger 08:	1196	357.0	1553	380.0	1933	399.0	2332
Finger 09:	1160	366.0	1526	389.0	1915	408.0	2323
Finger 10:	1109	373.0	1482	404.0	1886	428.0	2314
Finger 11:	1209	356.0	1565	372.0	1937	388.0	2325
Finger 12:	1177	362.0	1539	382.0	1921	404.0	2325
Finger 13:	1178	356.0	1534	379.0	1913	399.0	2312
Finger 14:	1174	359.0	1533	385.0	1918	402.0	2320
Finger 15:	1236	349.0	1585	363.0	1948	380.0	2328
Finger 16:	1199	352.0	1551	376.0	1927	398.0	2325
Finger 17:	1199	355.0	1554	378.0	1932	398.0	2330
Finger 18:	1165	358.0	1523	392.0	1915	413.0	2328
Finger 19:	1179	358.0	1537	386.0	1923	403.0	2326
Finger 20:	1196	356.0	1552	387.0	1939	402.0	2341
Finger 21:	1204	342.0	1546	376.0	1922	395.0	2317
Finger 22:	1204	348.0	1552	379.0	1931	395.0	2326
Finger 23:	1313	321.0	1634	342.0	1976	362.0	2338
Finger 24:	1194	353.0	1547	387.0	1934	401.0	2335
Finger 25:	1188	354.0	1542	391.0	1933	407.0	2340
Finger 26:	1220	343.0	1563	374.0	1937	394.0	2331
Finger 27:	1208	345.0	1553	381.0	1934	401.0	2335
Finger 28:	1215	346.0	1561	387.0	1948	402.0	2350
Finger 29:	1191	352.0	1543	396.0	1939	412.0	2351
Finger 30:	1235	339.0	1574	374.0	1948	386.0	2334
Finger 31:	1227	342.0	1569	378.0	1947	389.0	2336
Finger 32:	1257	334.0	1591	366.0	1957	377.0	2334
Finger 33:	1243	343.0	1586	374.0	1960	379.0	2339
Finger 34:	1215	346.0	1561	382.0	1943	395.0	2338
Finger 35:	1206	349.0	1555	386.0	1941	394.0	2335
Finger 36:	1252	340.0	1592	369.0	1961	380.0	2341
Finger 37:	1189	355.0	1544	390.0	1934	406.0	2340
Finger 38:	1149	361.0	1510	399.0	1909	413.0	2322
Finger 39:	1193	351.0	1544	383.0	1927	396.0	2323
Finger 40:	1206	352.0	1558	378.0	1936	392.0	2328

Segmented Cement Bond Log Calibration Report

Serial Number: 10013454
Tool Model: UW_RBT_004

Calibration Casing Diameter: 5.500 in
Calibration Depth: 32.380 ft

Master Calibration, performed Mon Dec 29 13:12:02 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	-0.001	0.746	0.800	71.921	95.177	0.916
5FT	-0.004	0.779	0.800	71.921	90.886	1.133
S1	-0.001	0.704	0.000	100.000	141.770	0.199
S2	-0.003	0.725	0.000	100.000	137.388	0.396
S3	-0.002	0.748	0.000	100.000	133.247	0.325
S4	-0.003	0.770	0.000	100.000	129.244	0.421
S5	-0.001	0.777	0.000	100.000	128.432	0.161
S6	-0.002	0.770	0.000	100.000	129.416	0.321
S7	-0.001	0.754	0.000	100.000	132.475	0.162
S8	-0.002	0.718	0.000	100.000	139.015	0.251

Gamma Ray Calibration Report

Gamma Ray Calibration Report

Serial Number:	10013902	
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	Como 13N-14HZ
Field	Wattenberg
County	Weld
State	Colorado