



Radial Cement Bond
Gamma Ray
Casing Collar Log

Company Kerr-McGee Oil & Gas Onshore, L.P.				Company Kerr-McGee Oil & Gas Onshore, L.P.			
Well Ranchview 3N-11HZ				Well Ranchview 3N-11HZ			
Field Wattenberg				Field Wattenberg			
County Weld				County Weld			
State Colorado				State Colorado			
Location:				API # : 05-123-39972			
SEC 14 TWP 1N RGE 68W				Other Services Gauge Ring MIT			
Permanent Datum				Ground Level			
Log Measured From				Kelly Bushing			
Drilling Measured From				Kelly Bushing			
Elevation				5144'			
K.B. 5169 FT				D.F. 5168 FT			
G.L. 5144 FT							
Date				23-November-2014			
Run Number				Two			
Depth Driller				15450 FT			
Depth Logger				7840 FT			
Bottom Logged Interval				7544 FT			
Top Log Interval				Surface			
Open Hole Size				8.750"			
Type Fluid				Water			
Density / Viscosity				8.34 lbm/gal			
Max. Recorded Temp.				226°F			
Estimated Cement Top				Surface			
Time Well Ready				ROA			
Time Logger on Bottom				8:40 AM			
Equipment Number				HD-0324			
Location				Fort Lupton, CO			
Recorded By				R. Fogarty			
Witnessed By				Rick Dunford			
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							
Liner				4 1/2			
Wgt (lbs/ft)				36			
Grade				J-55 LTC			
Top				Surface			
Bottom				1290 FT			
HCP-110 LTC				8210 FT			
P-110 DOX/LTC				7138 FT			
15417 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 Liner Top at 7138 FT.
Adjusted log +5.4 FT from KB zero to correlate with Liner Top.
Gauge Ring/ Junk Basket ran to 7840 FT with no debris found
Log ran as deep as possible in heel to surface
Log ran with 2800 PSI surface induced pressure.
Tool string was covered in light grease upon completion of operations
Thank you for choosing FMC Technologies Completion Services, Inc.!!



7" Main Pass

Recorded with 2800 PSI Surface Induced Pressure

Database File:0512339972 anadarko ranchview 3n-11hz 11-23-14 mit rbl.db

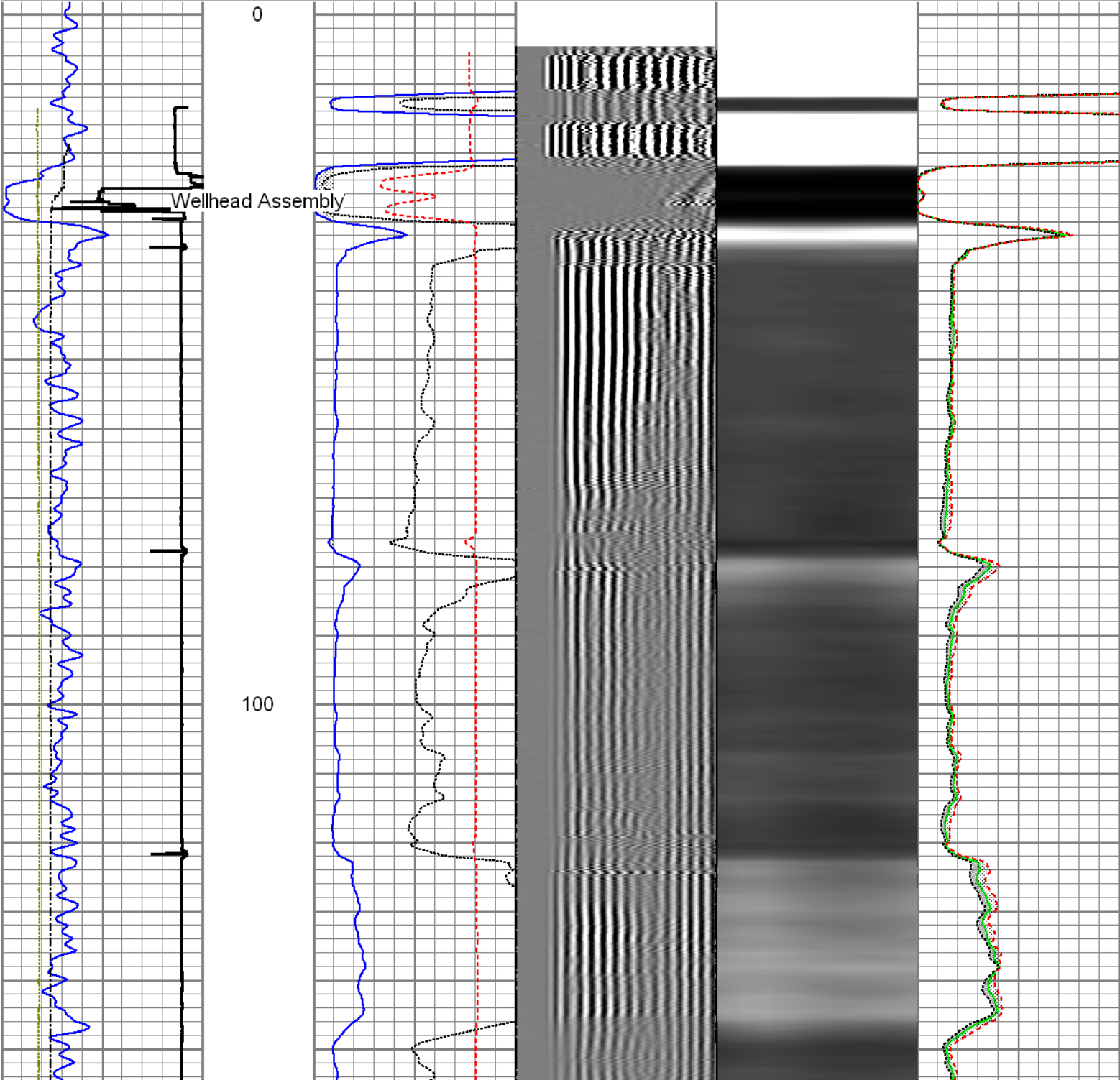
Dataset Pathname:merge1

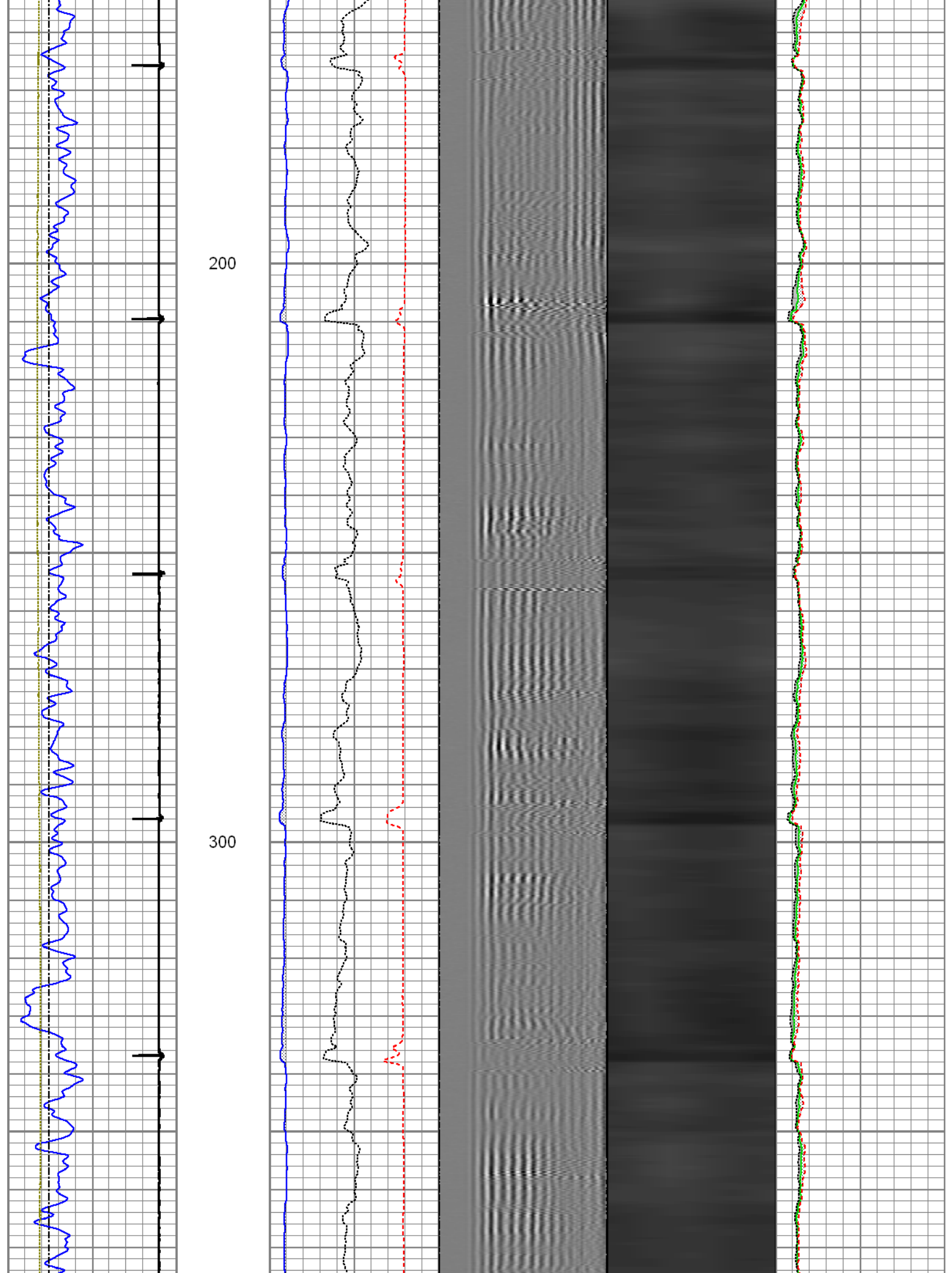
Presentation Format:rbt4_mit

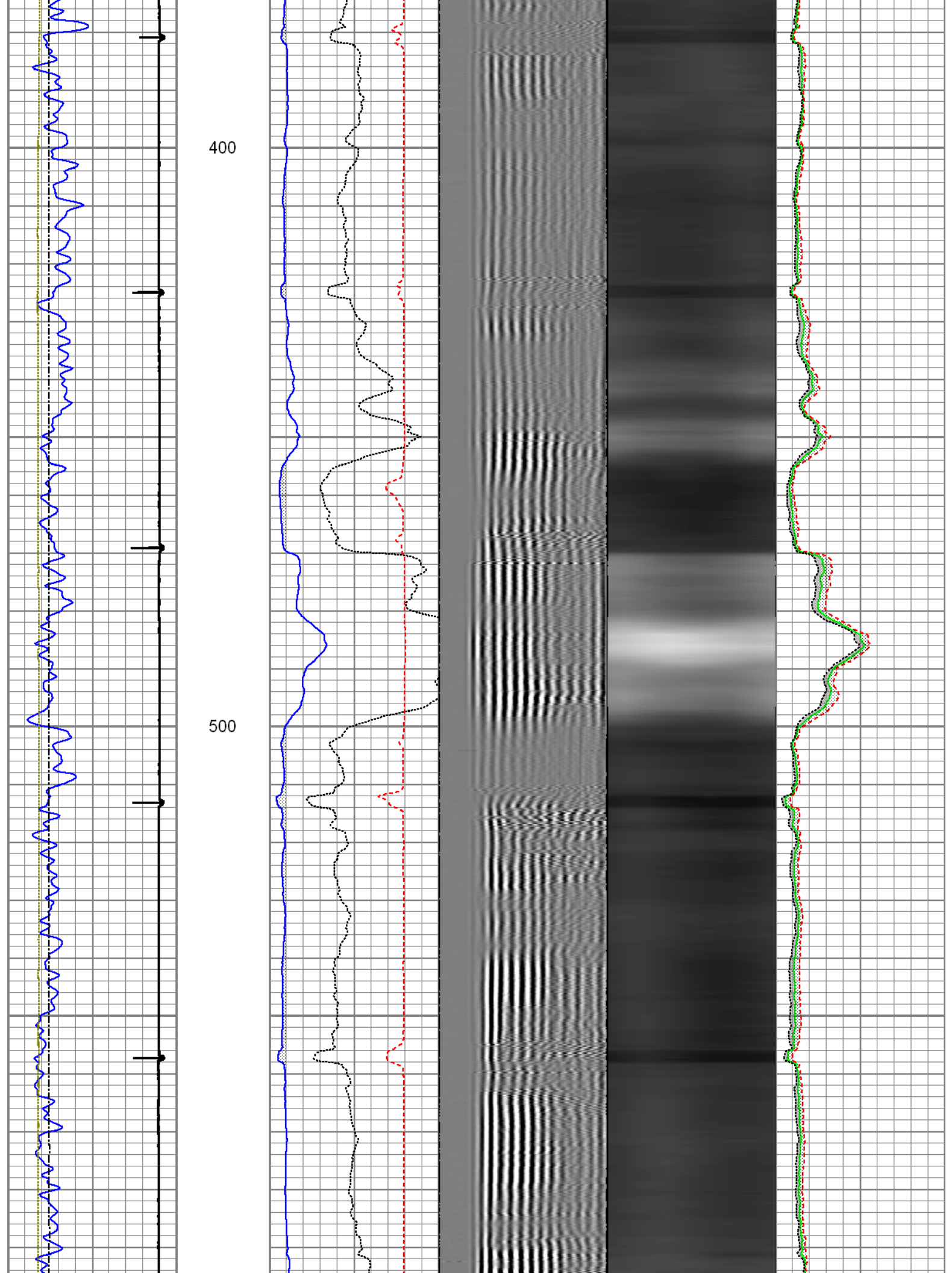
Dataset Creation:Sun Nov 23 14:21:07 2014

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
Wellbore Deviation	650 (usec) 150			0 100
-10 (°) 90				



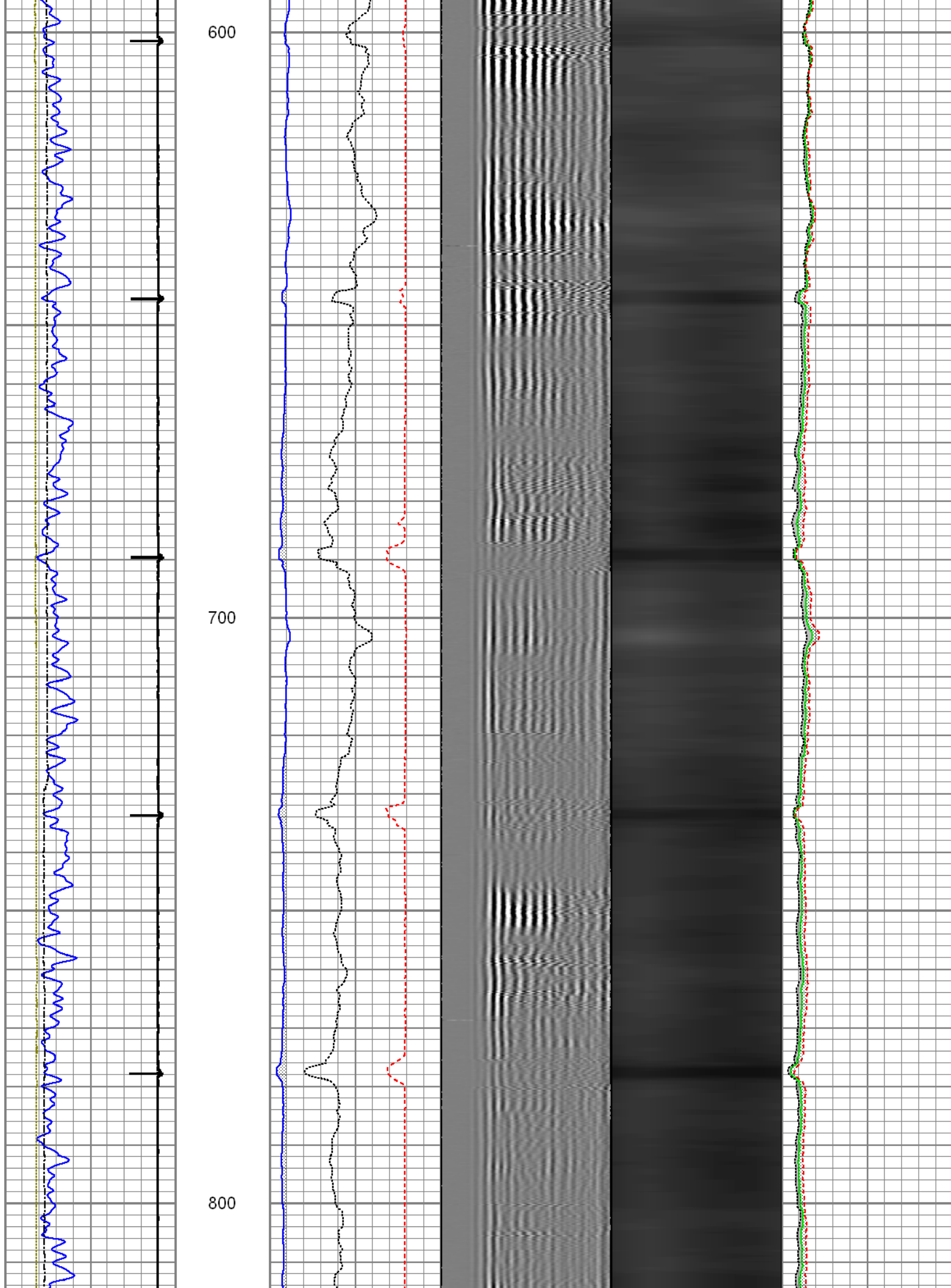


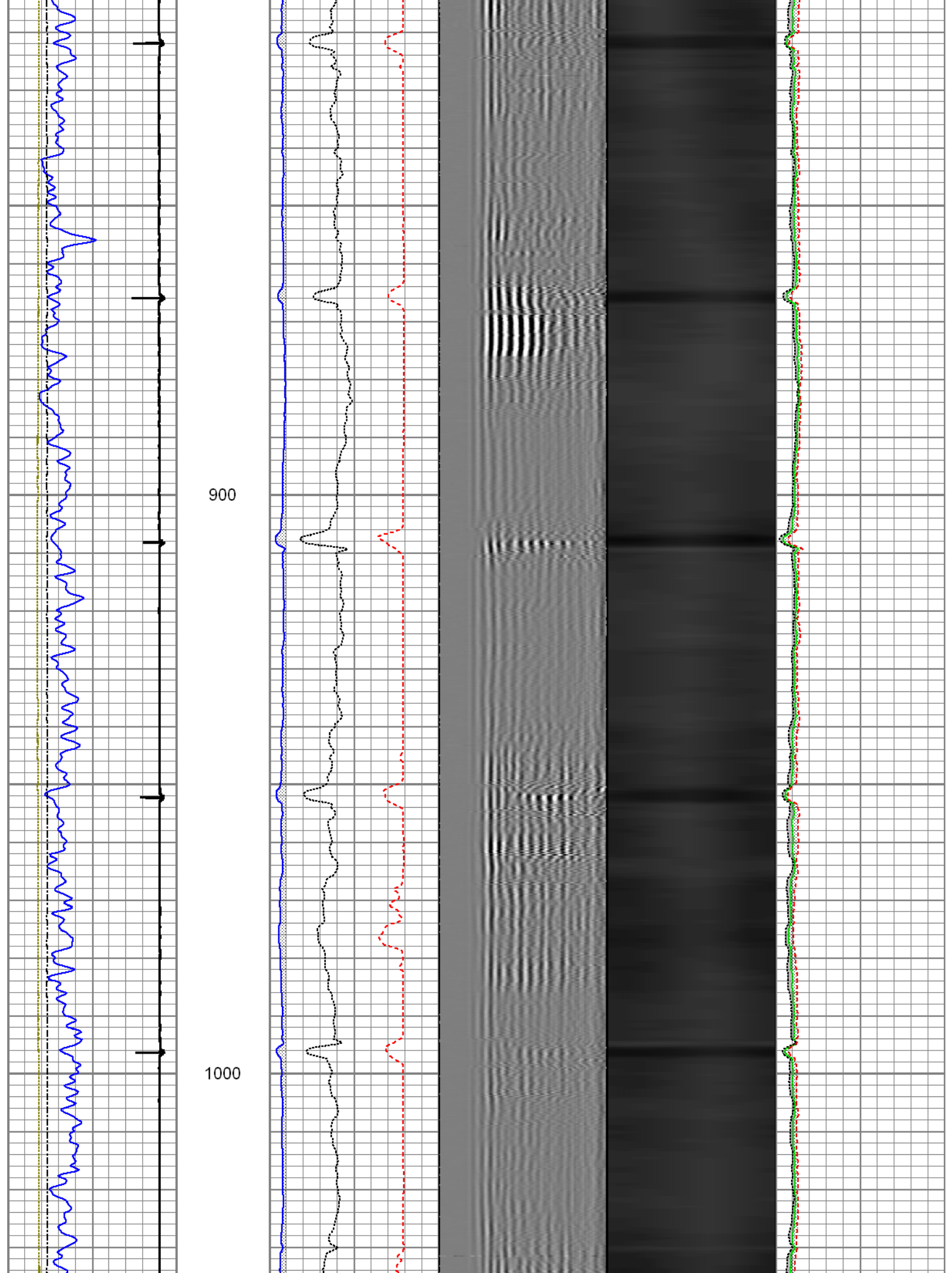


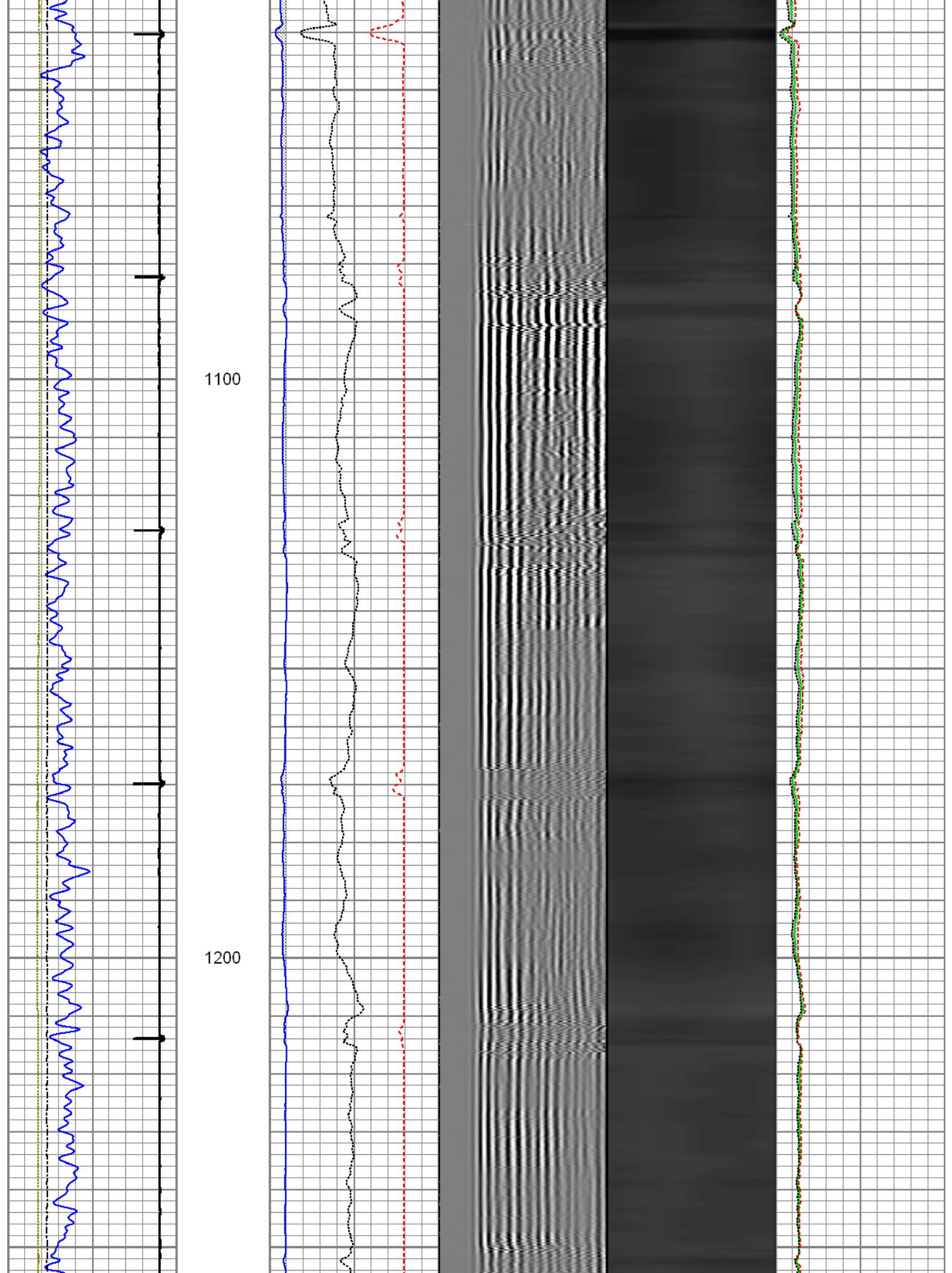
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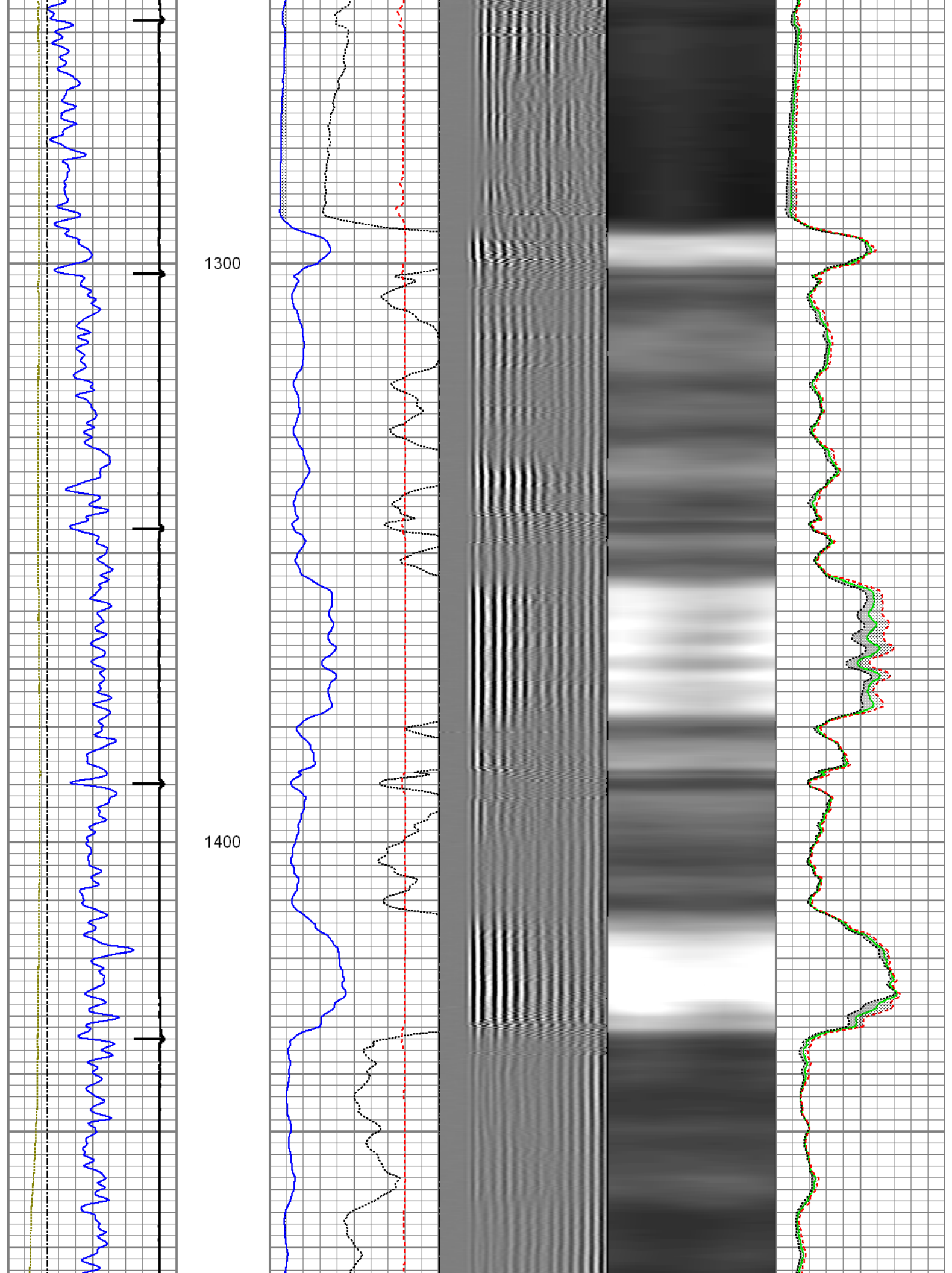
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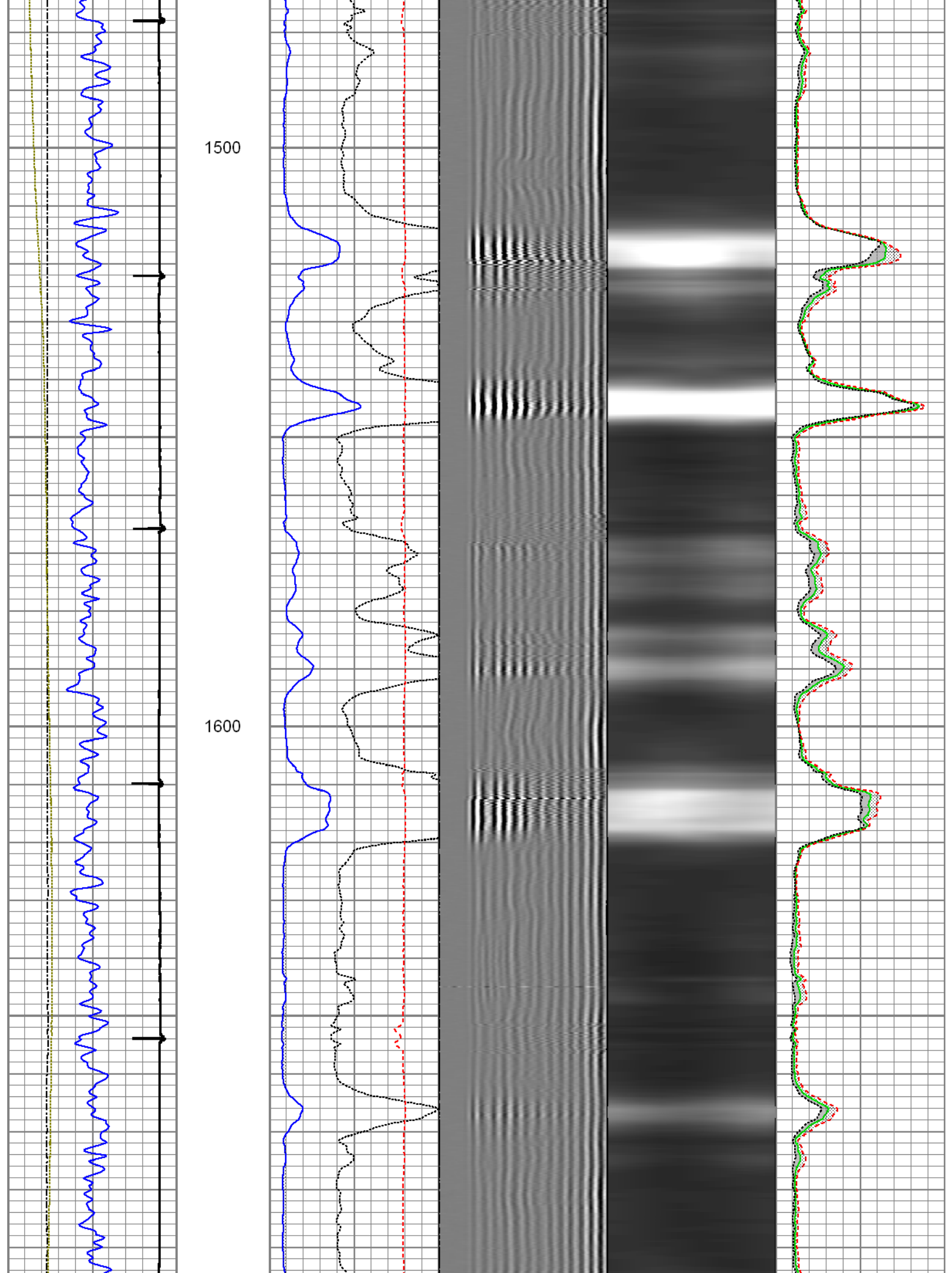
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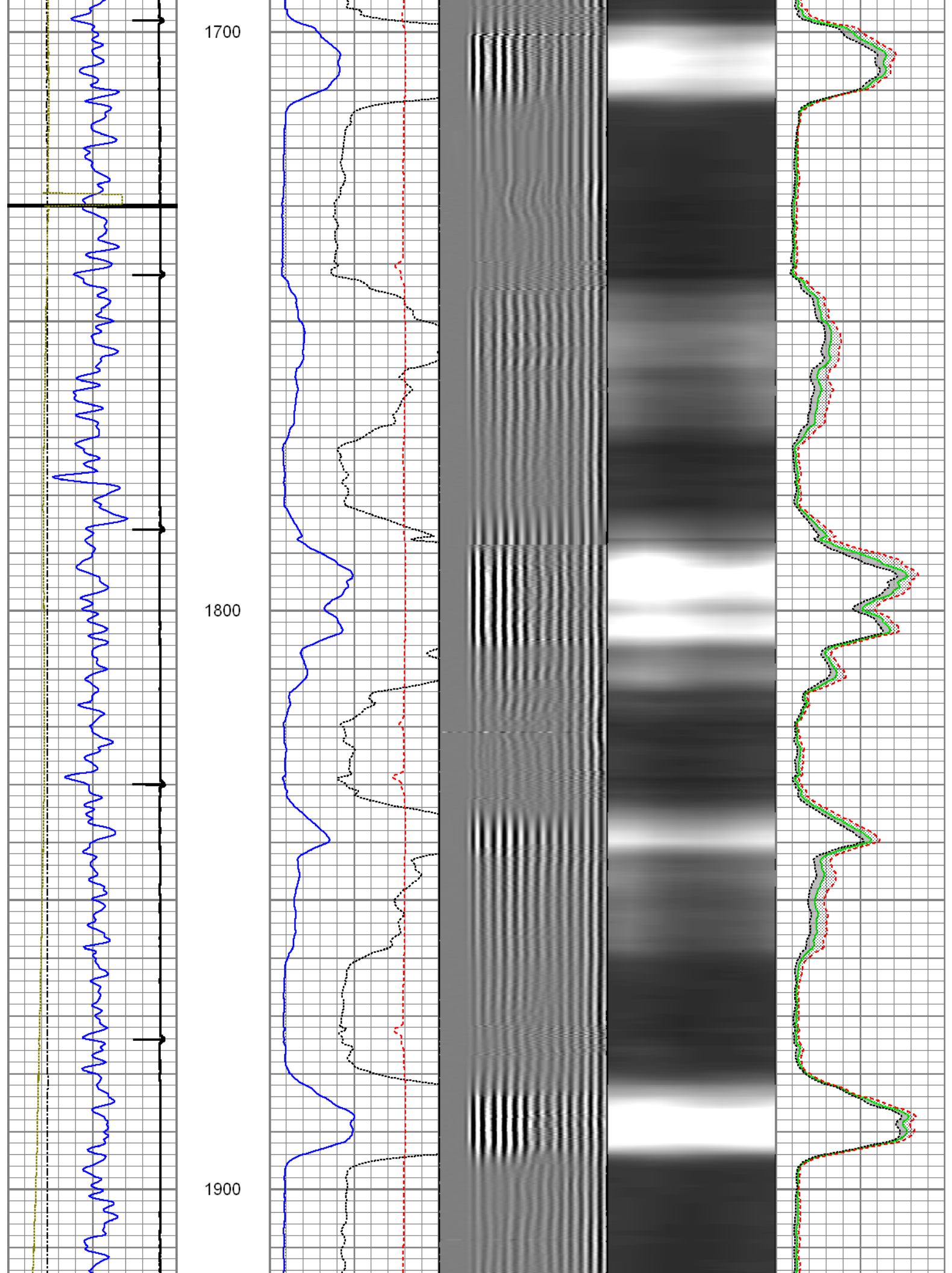


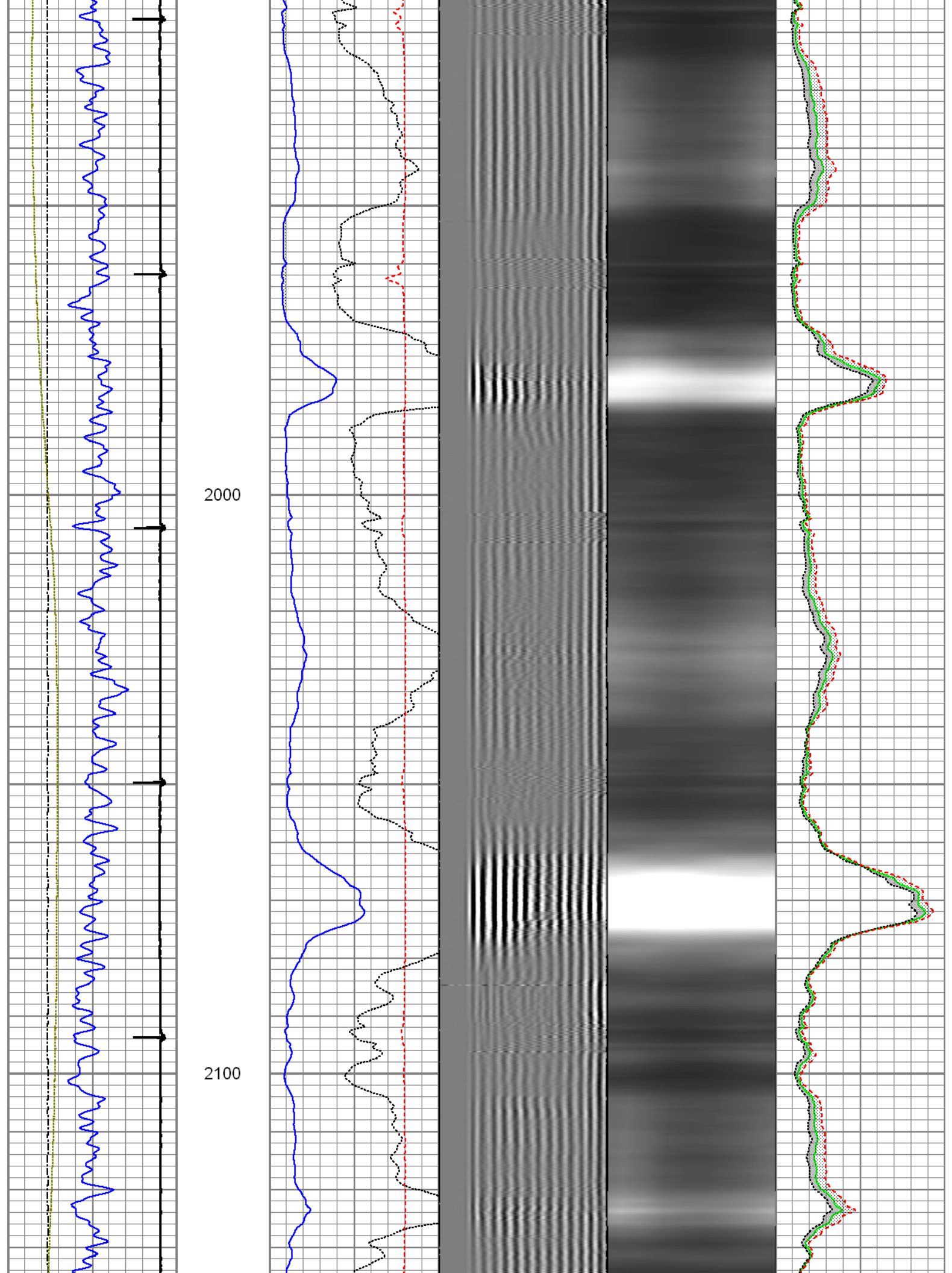


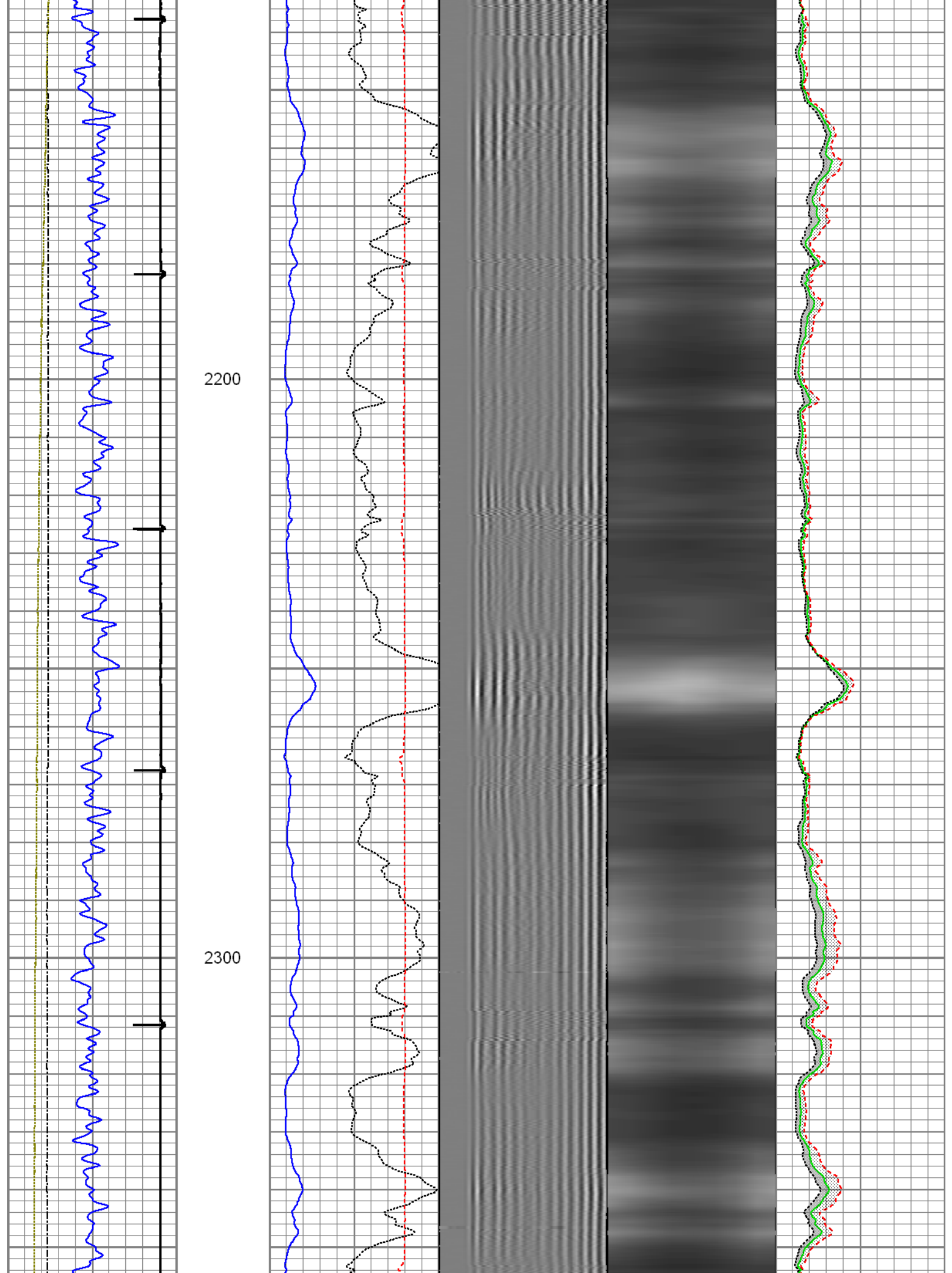


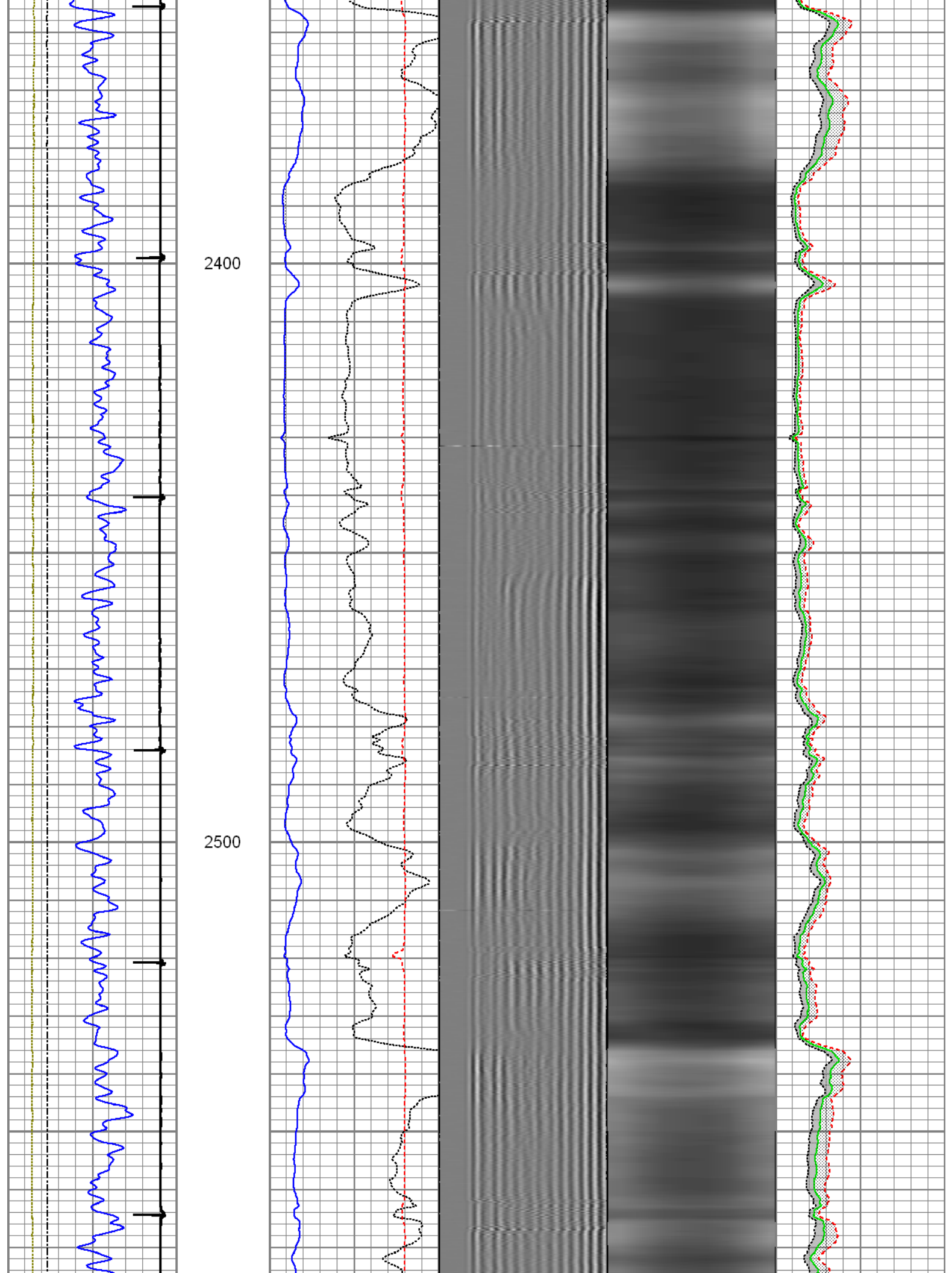


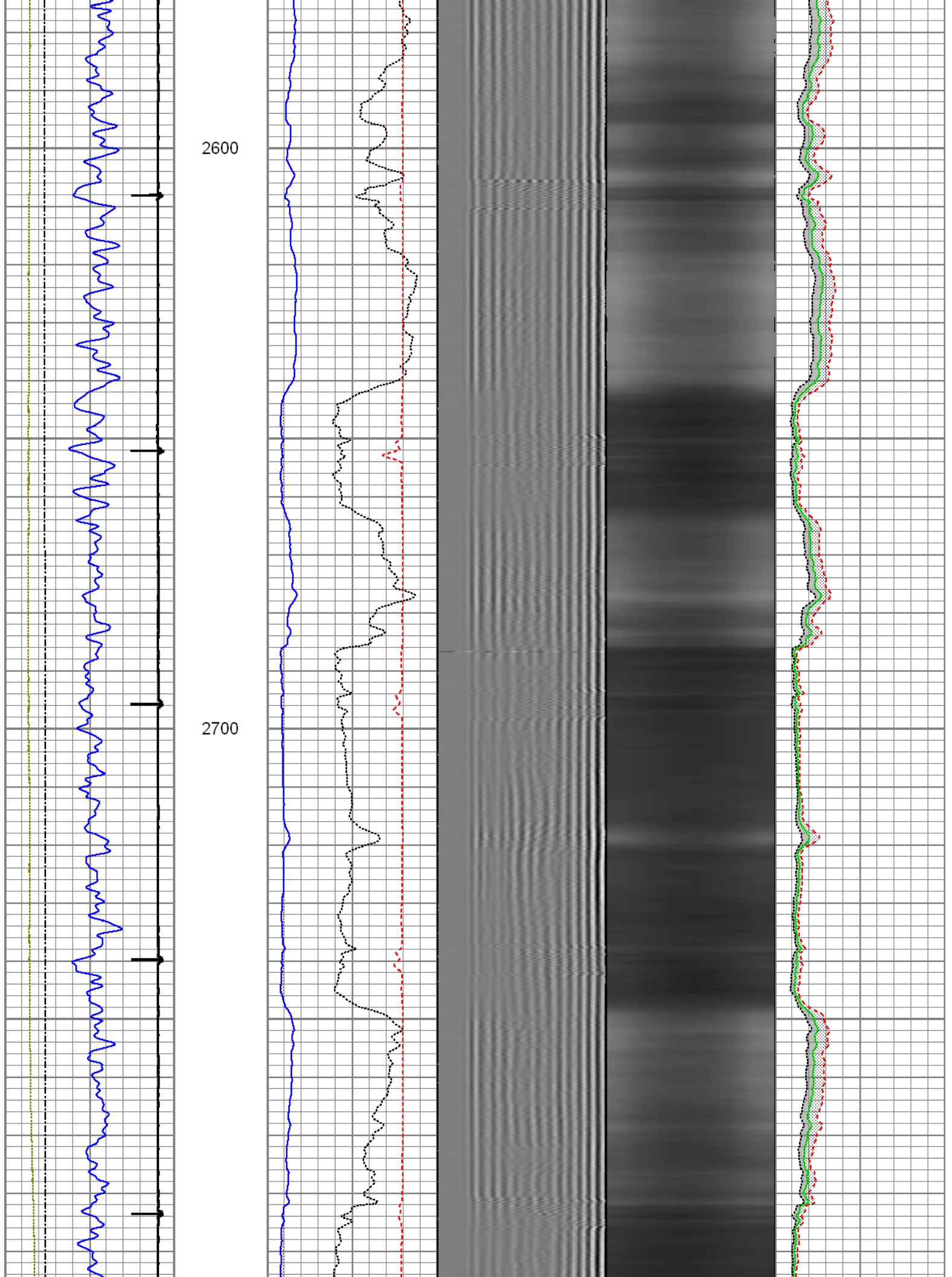








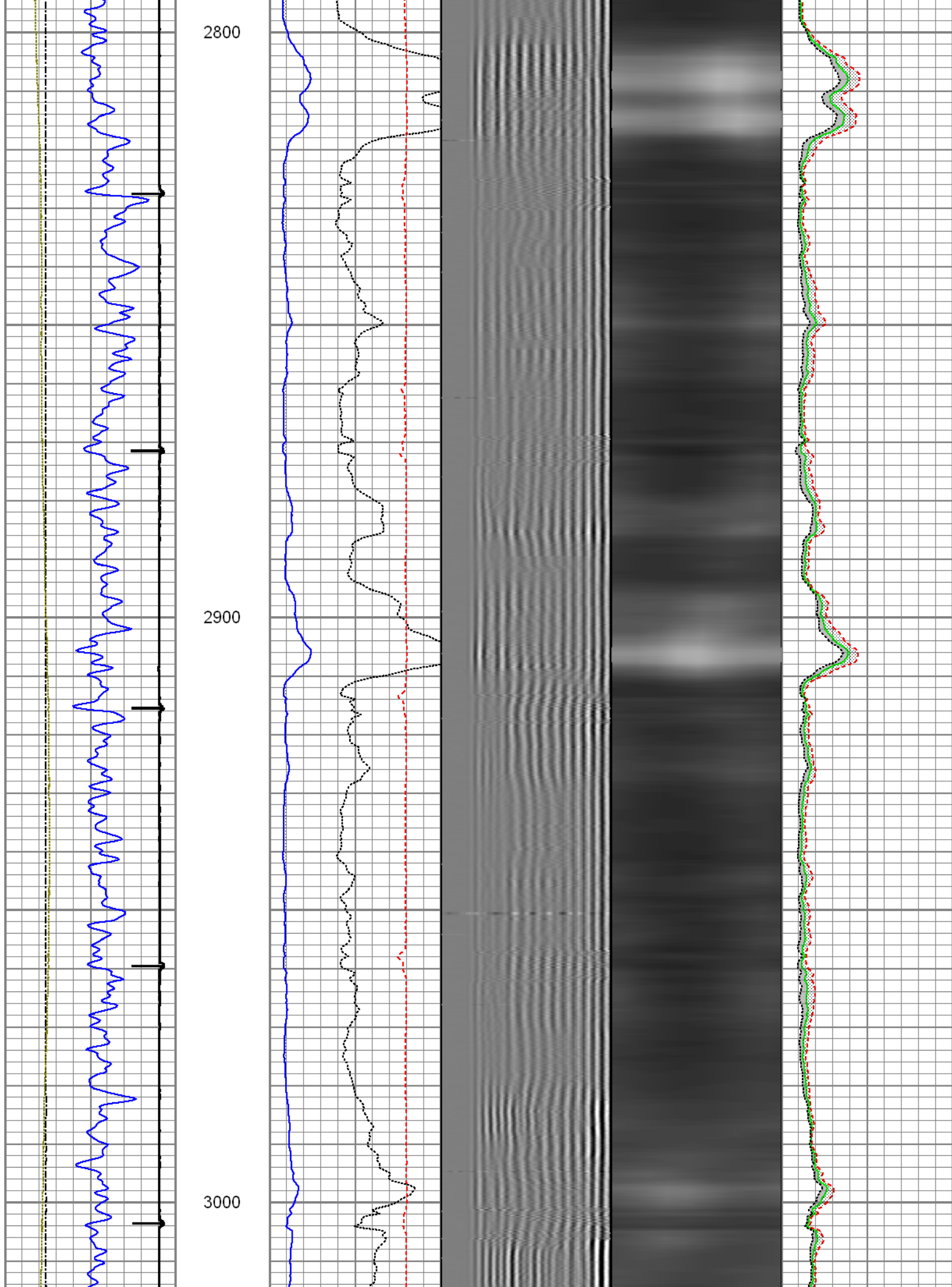




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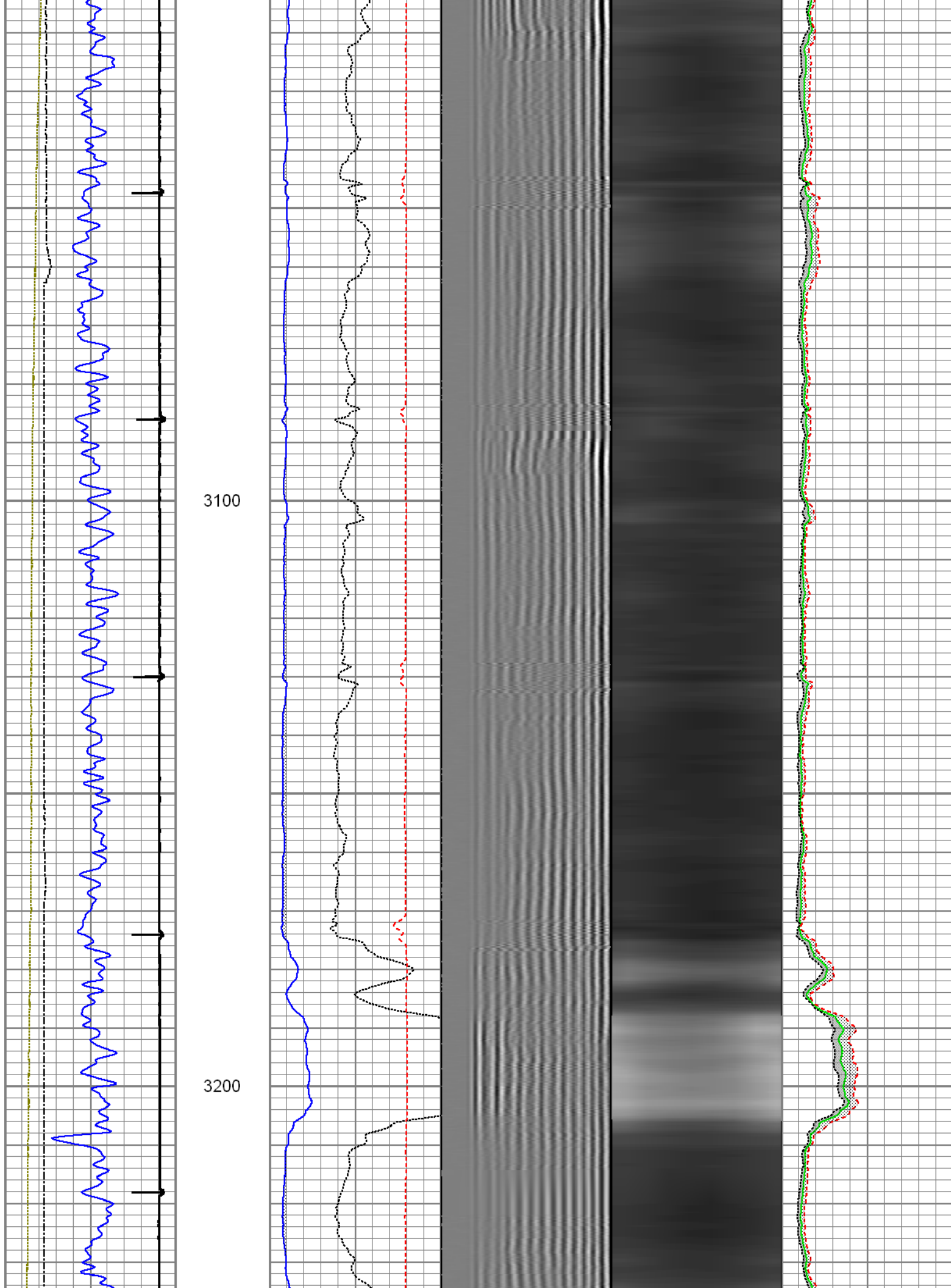
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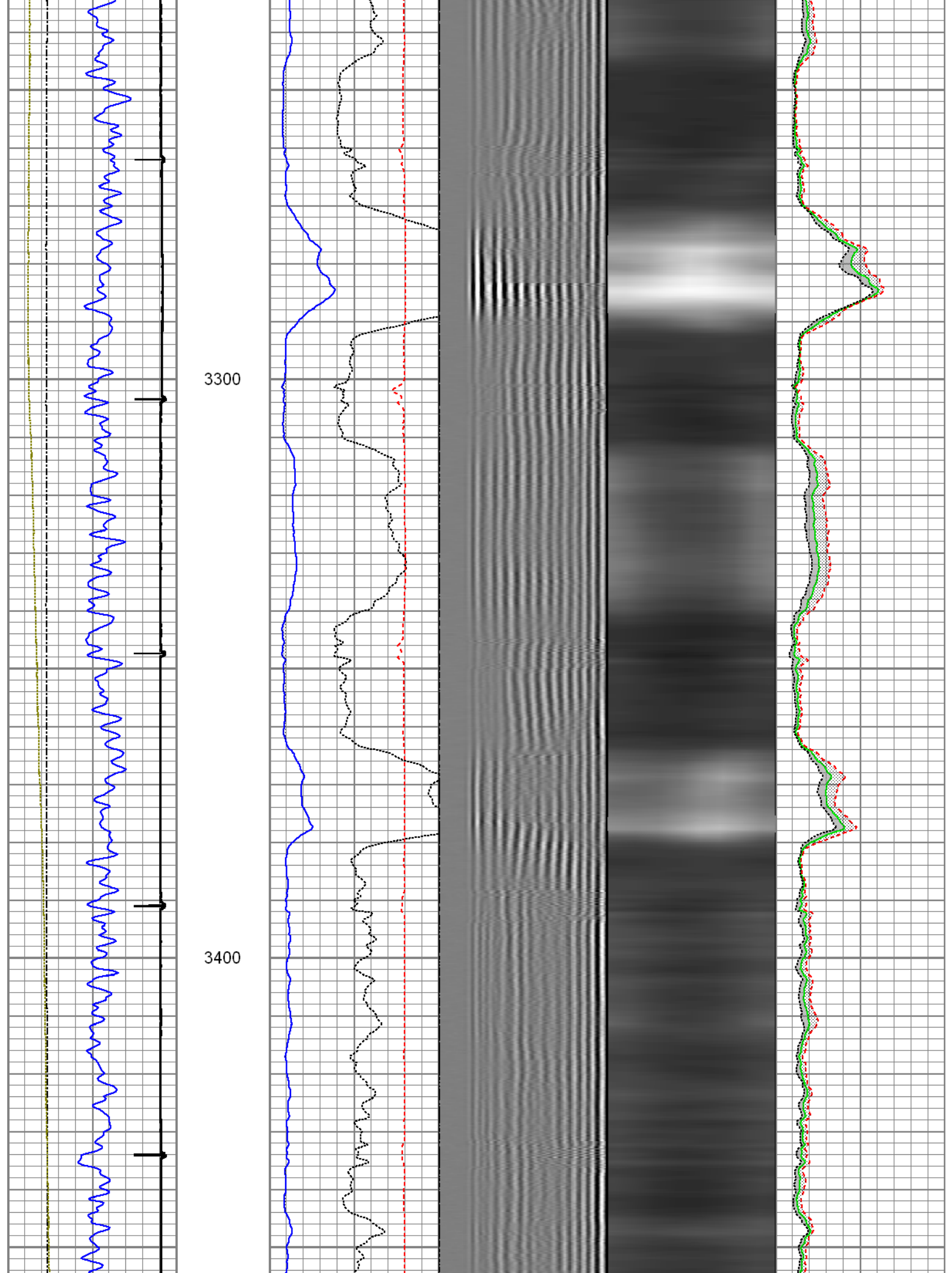
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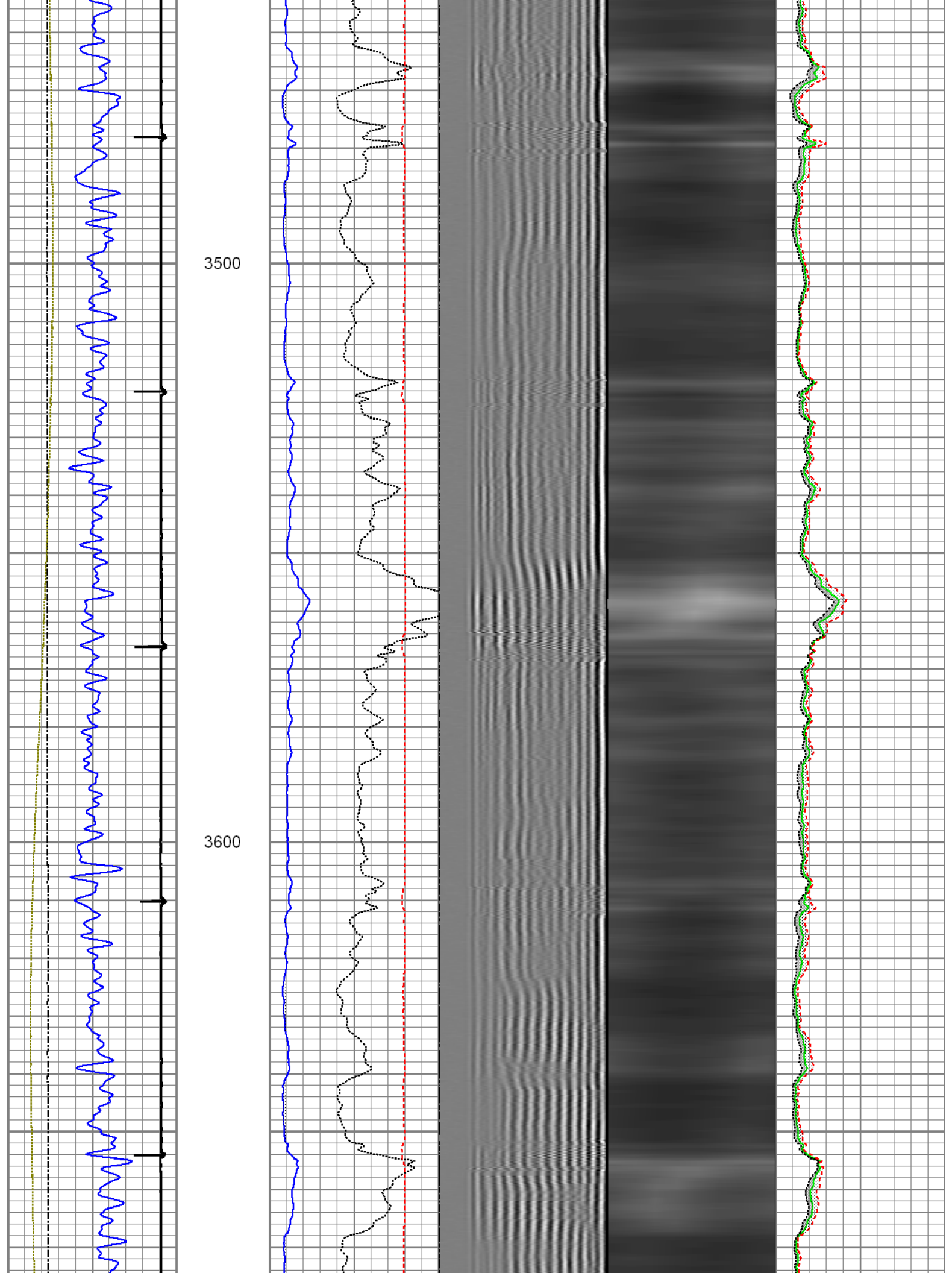


3100

3200

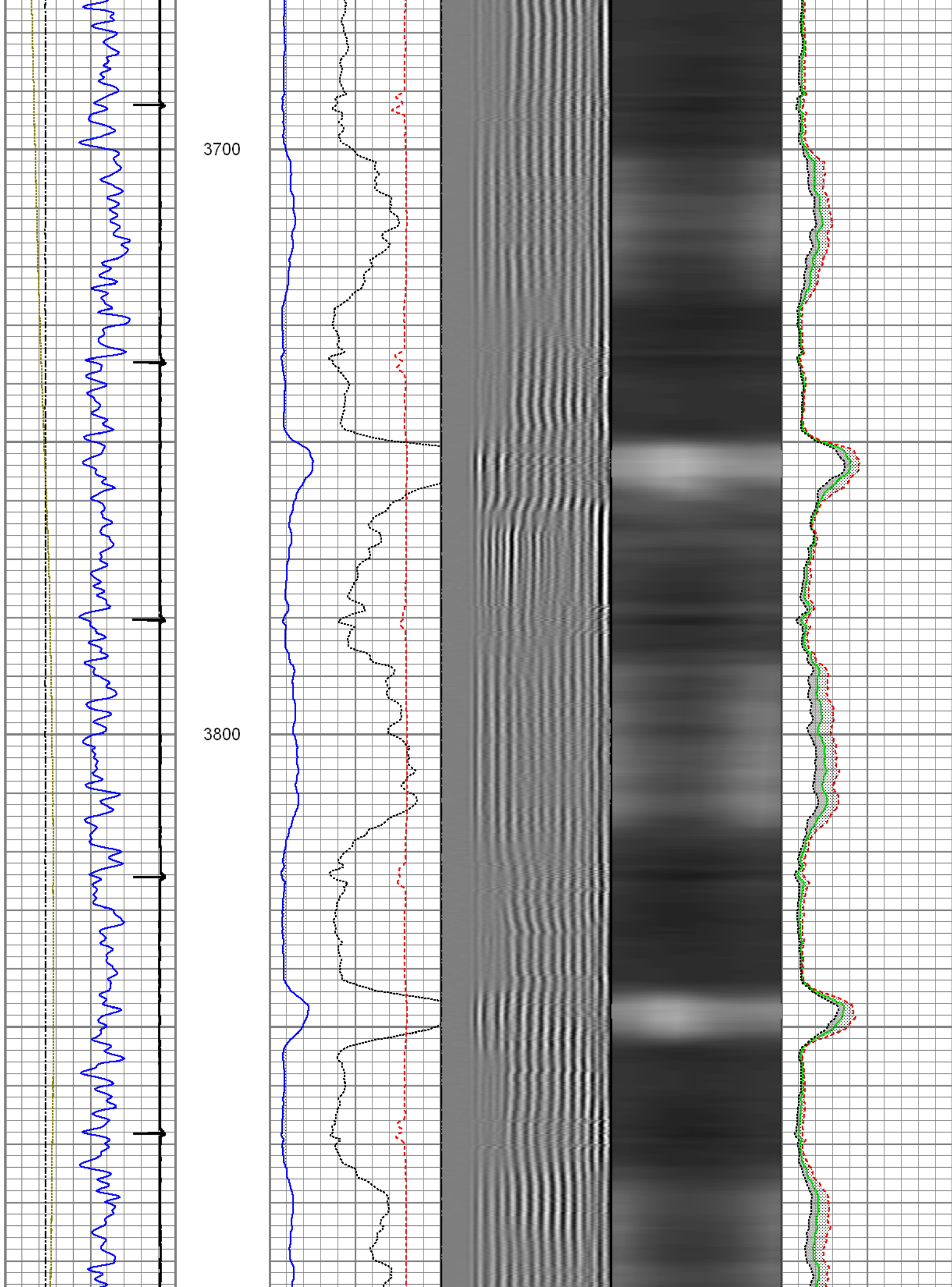






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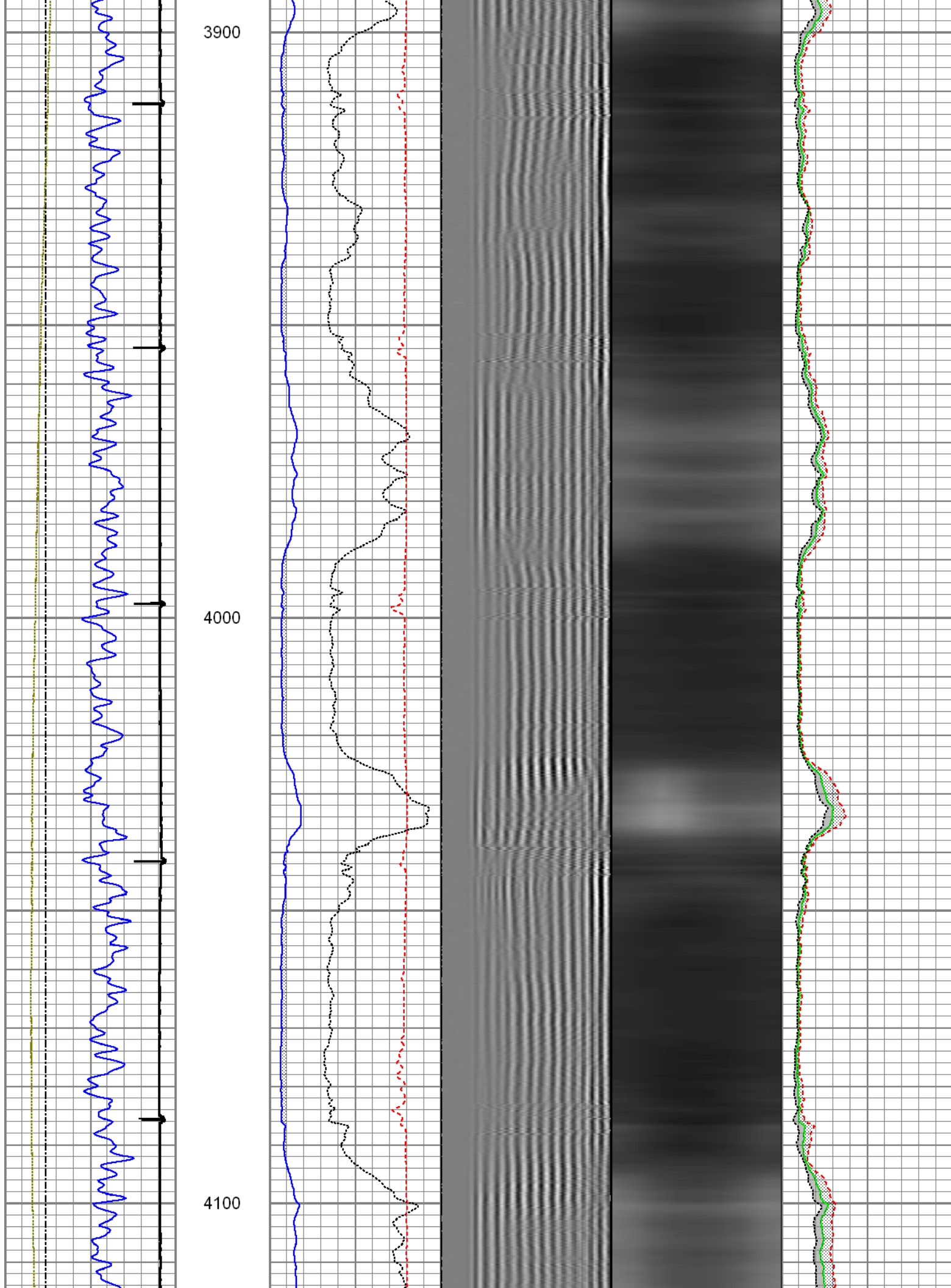
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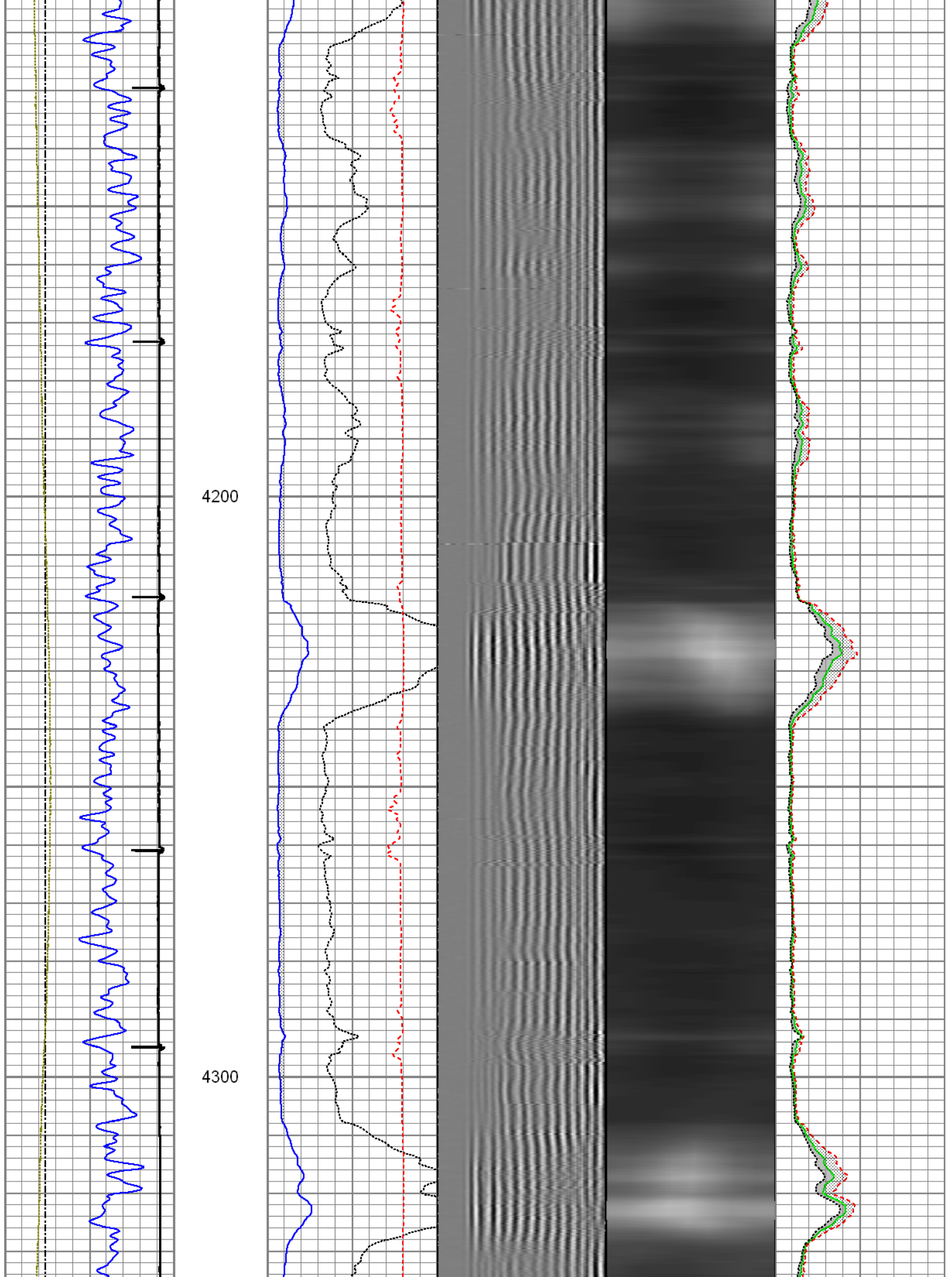


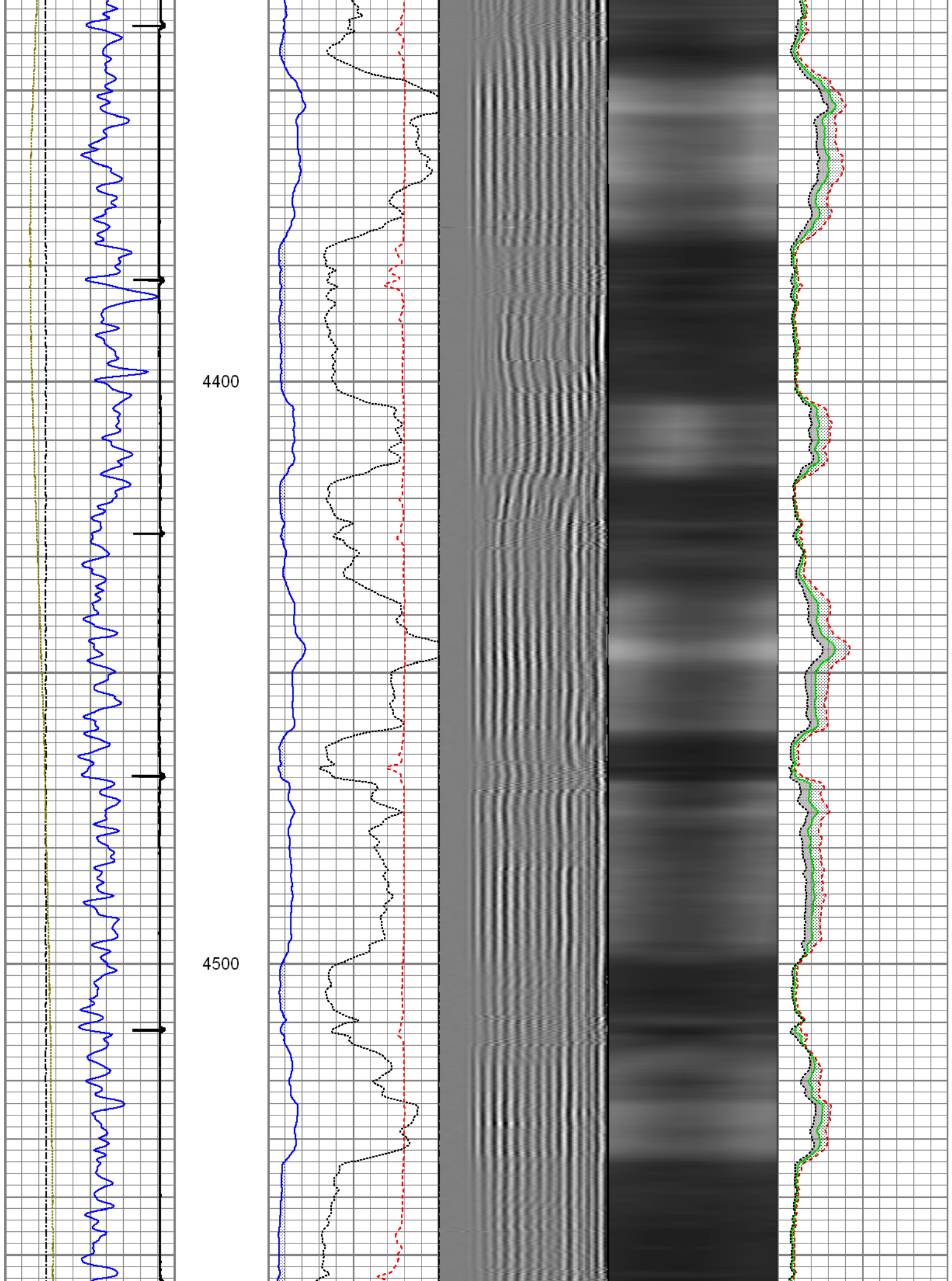
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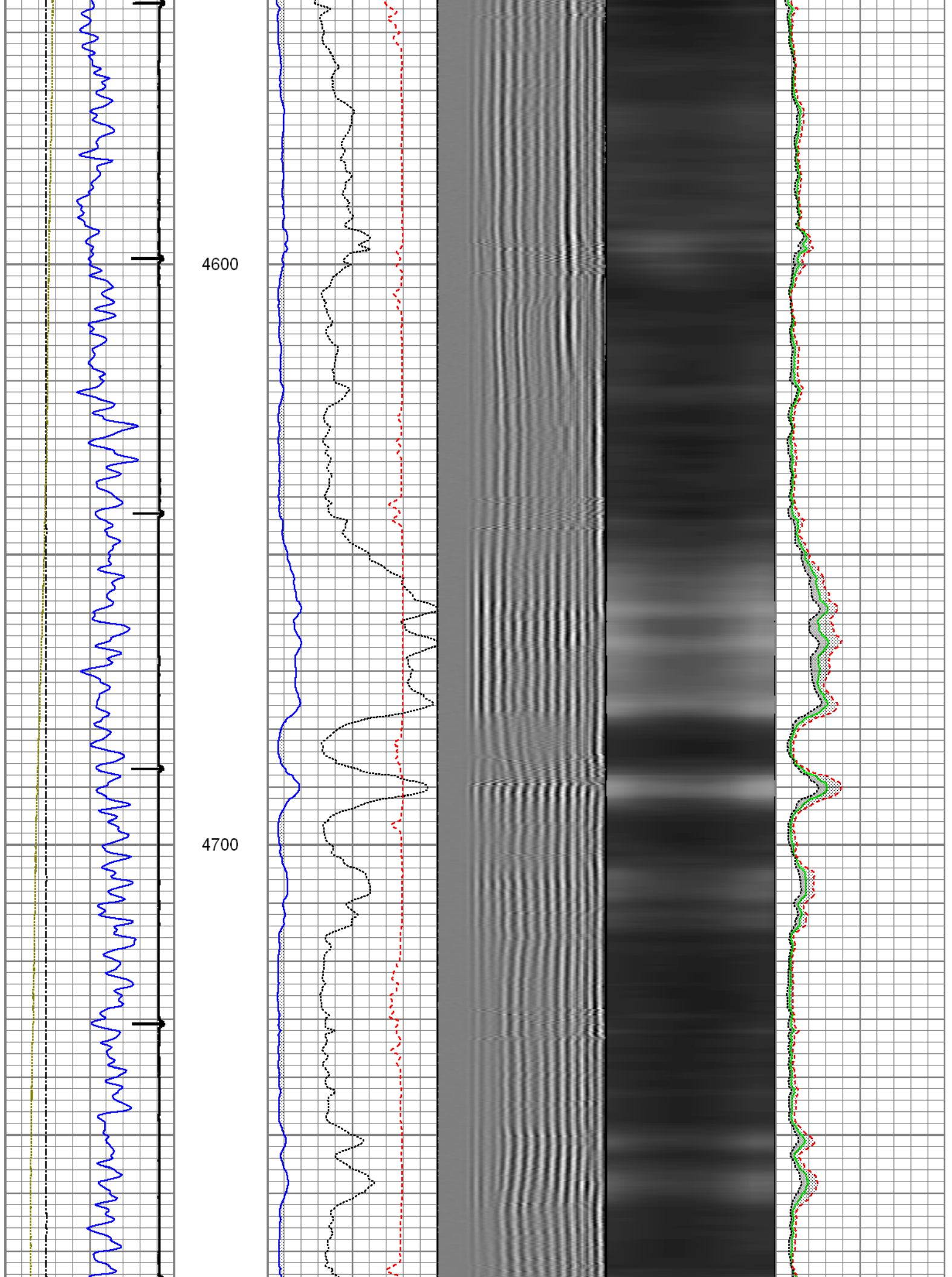
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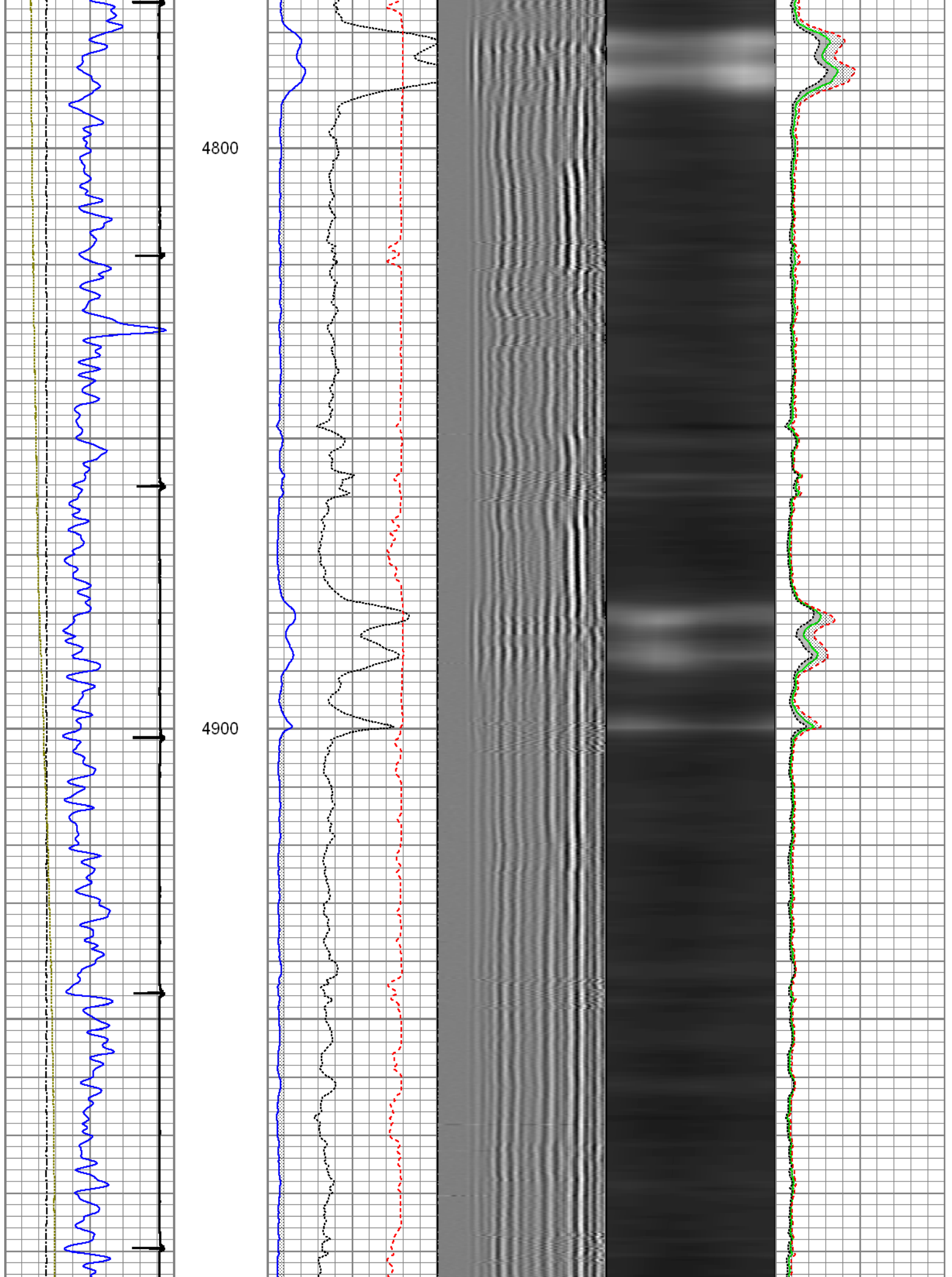
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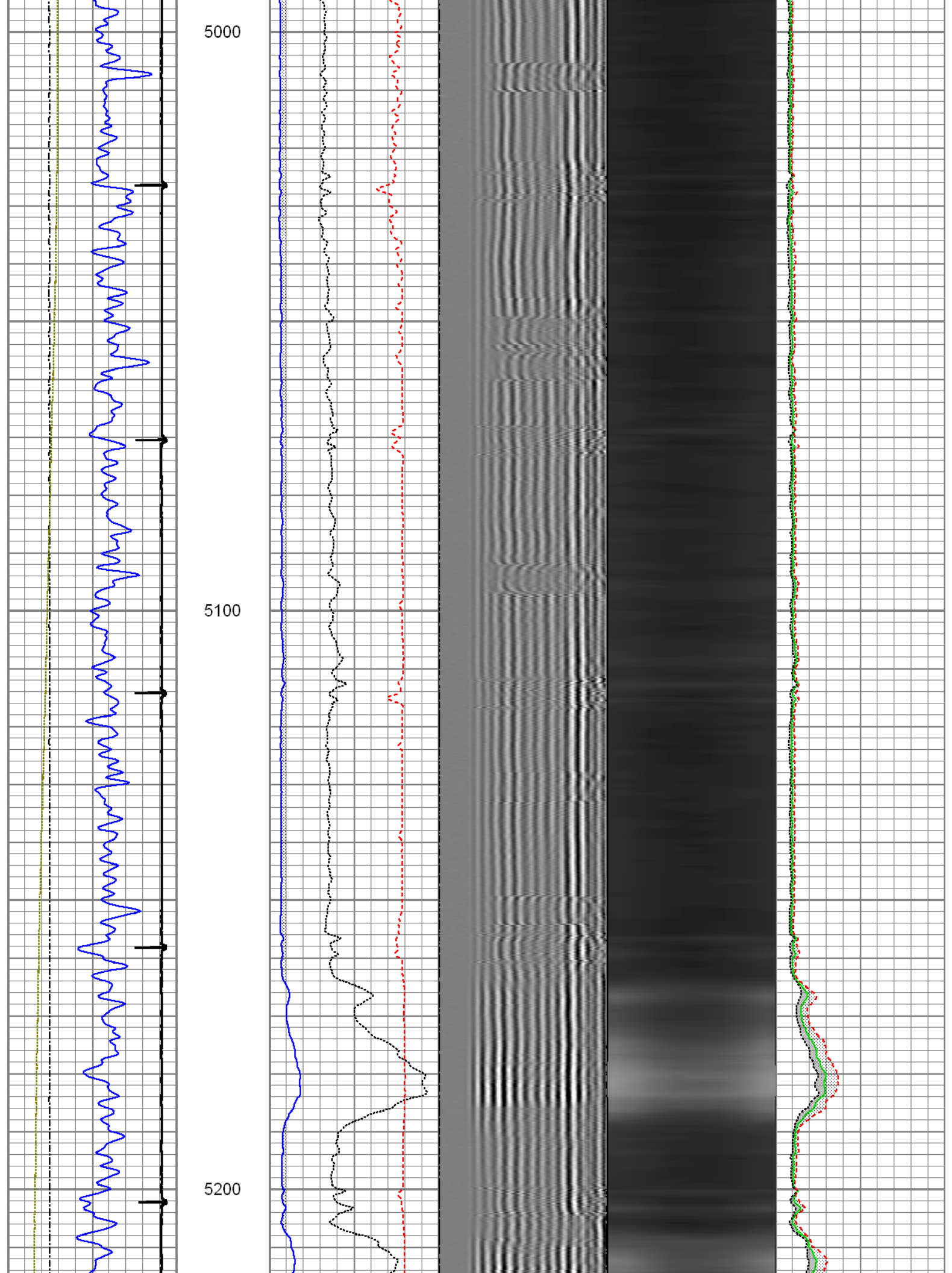


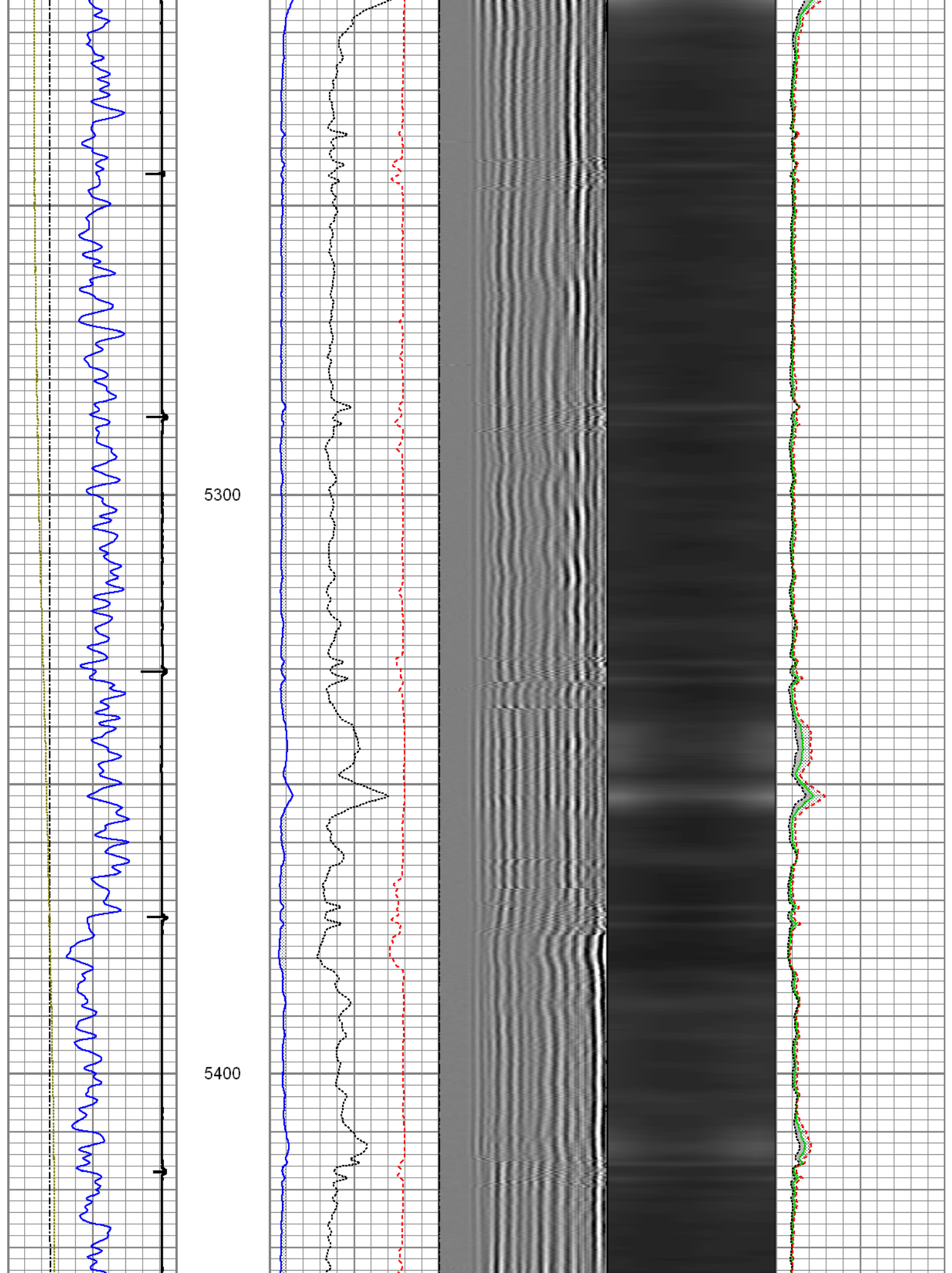


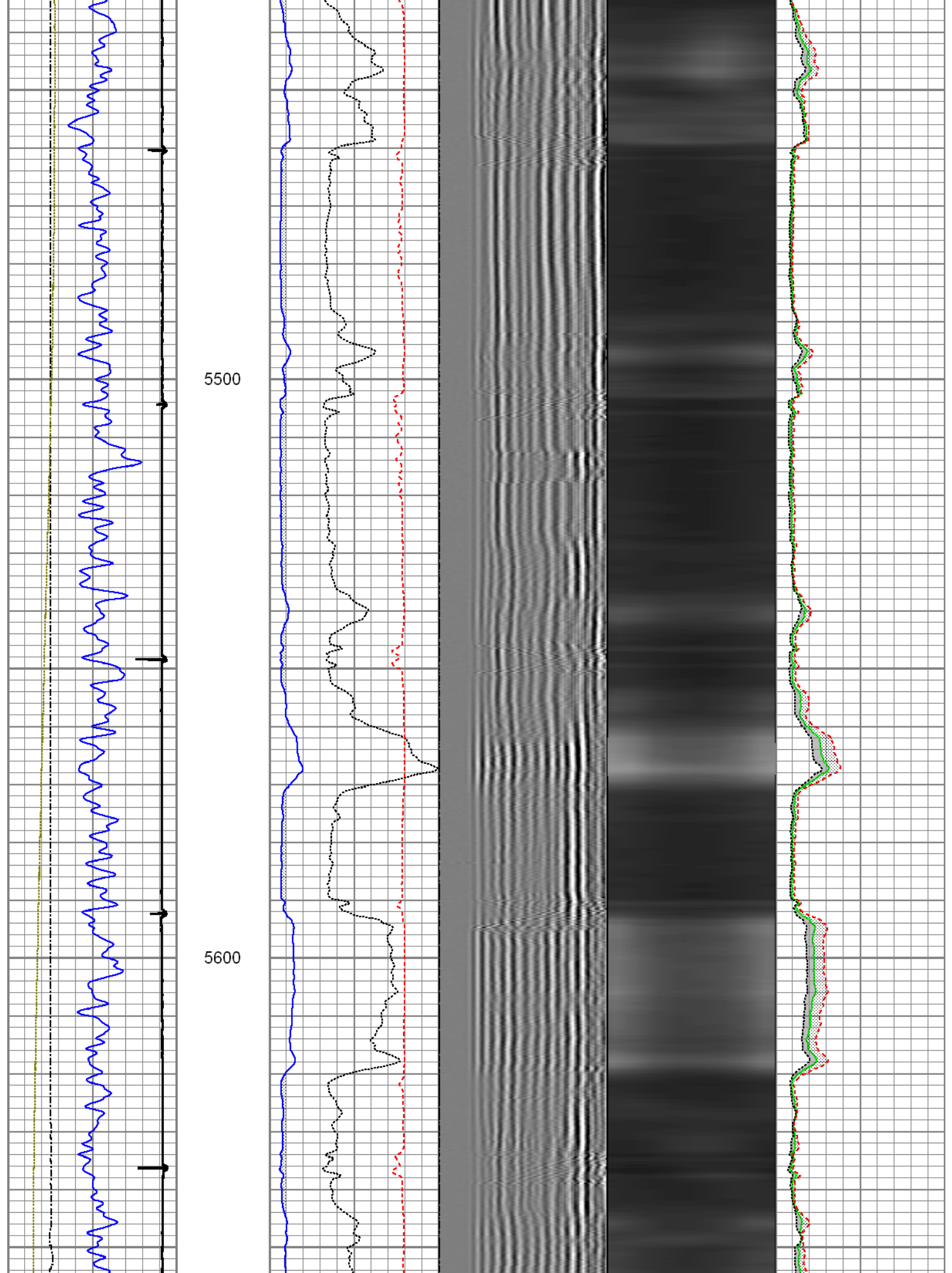






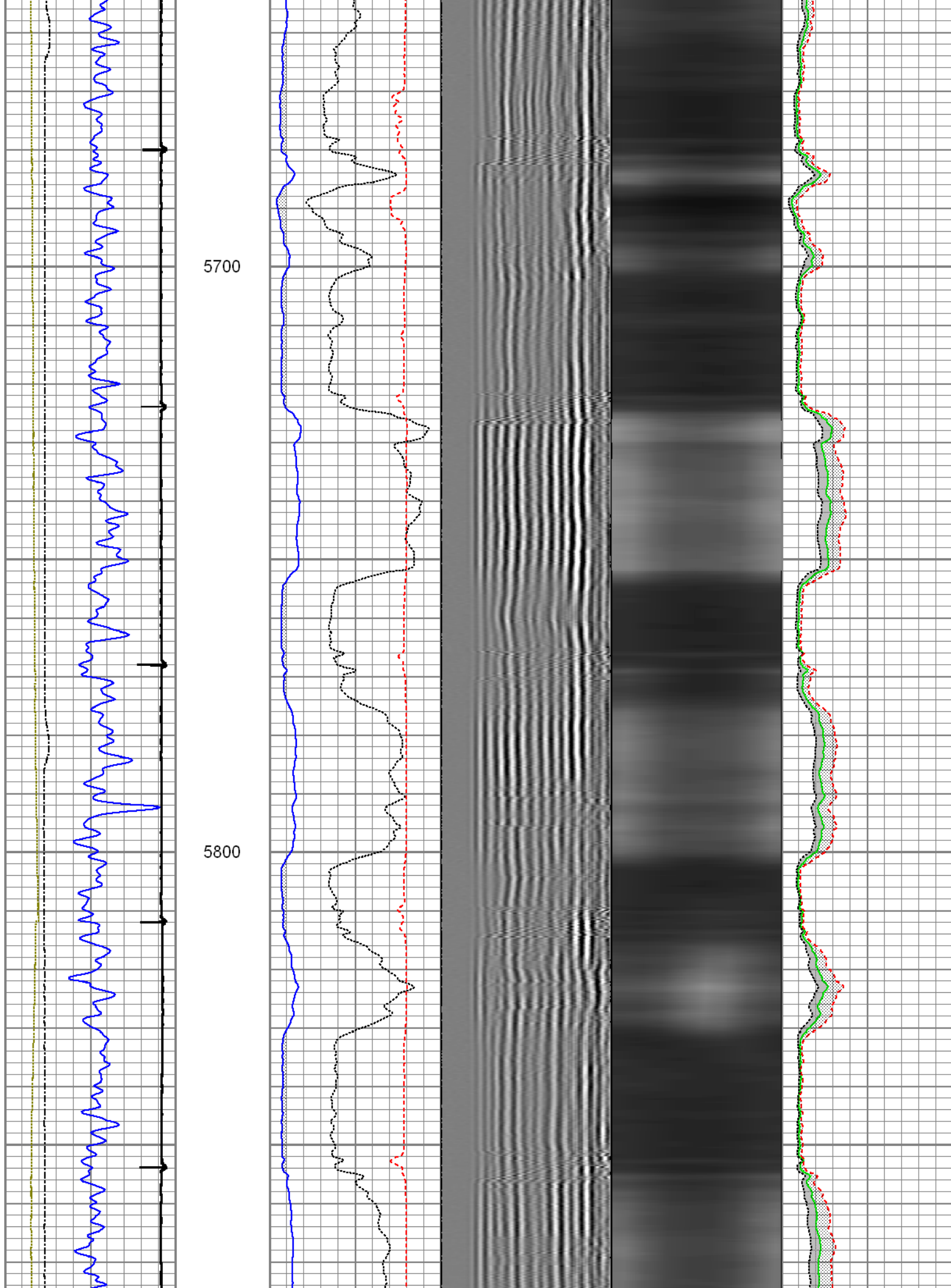






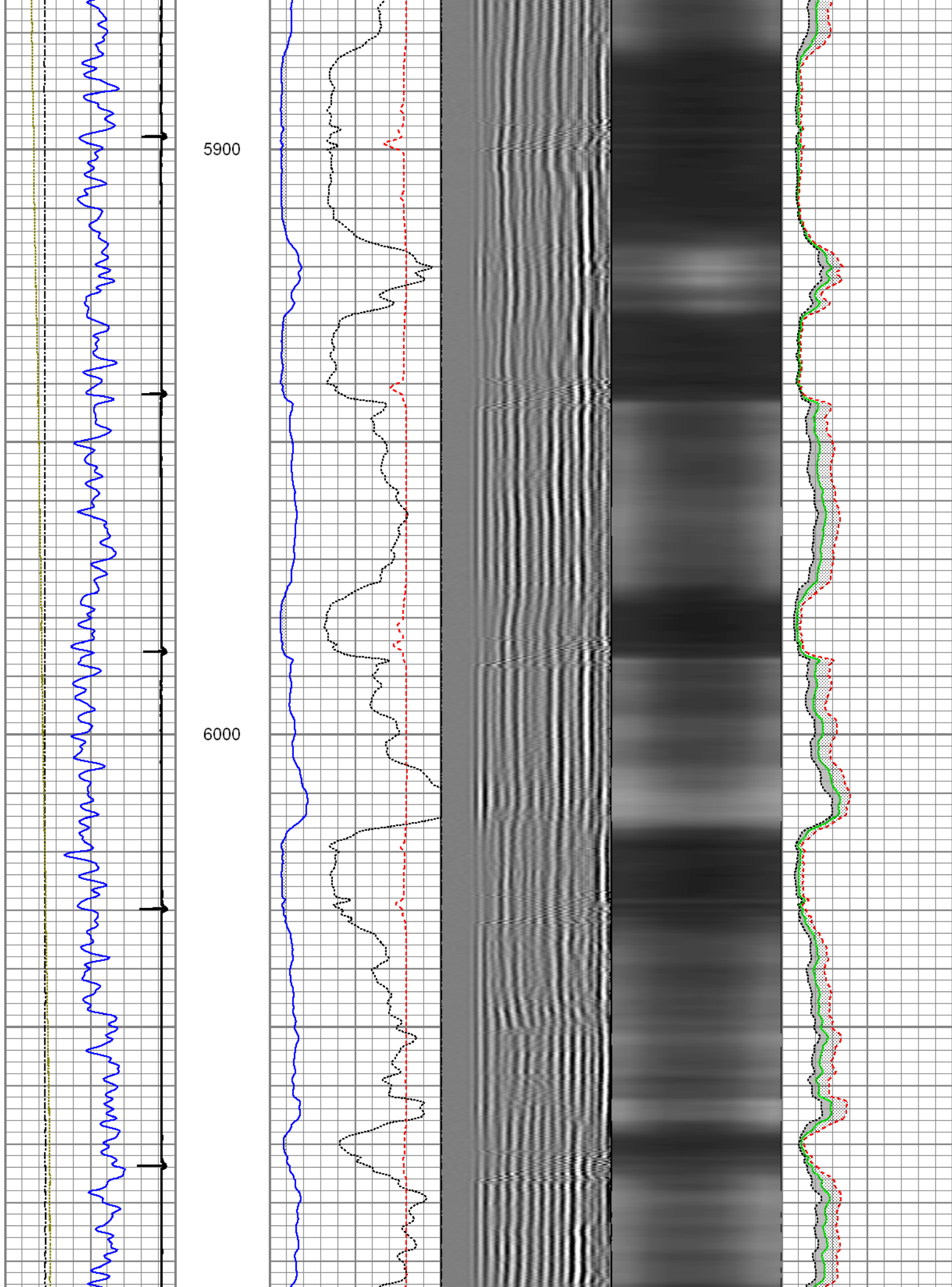
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5800



5900

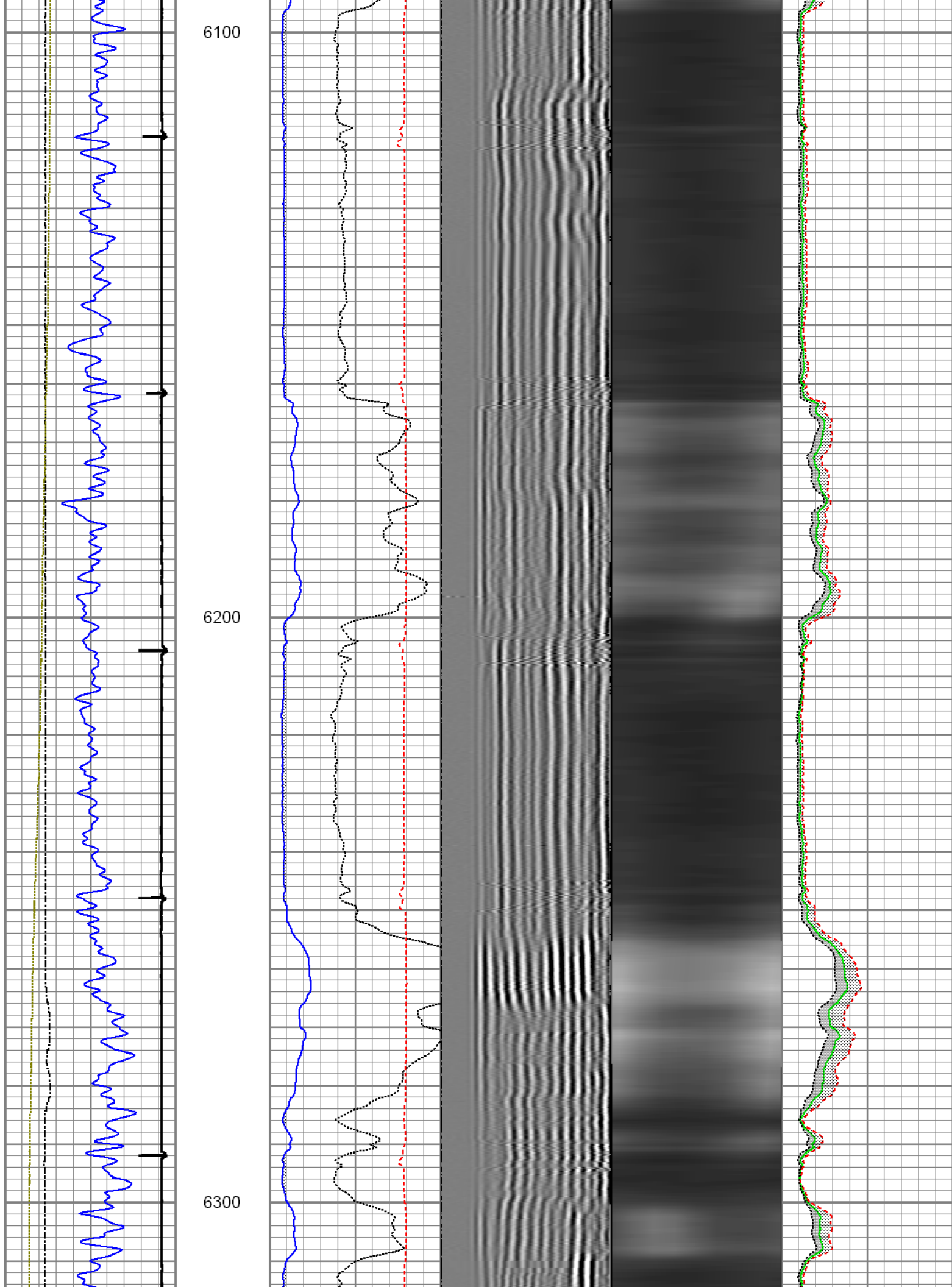
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6100

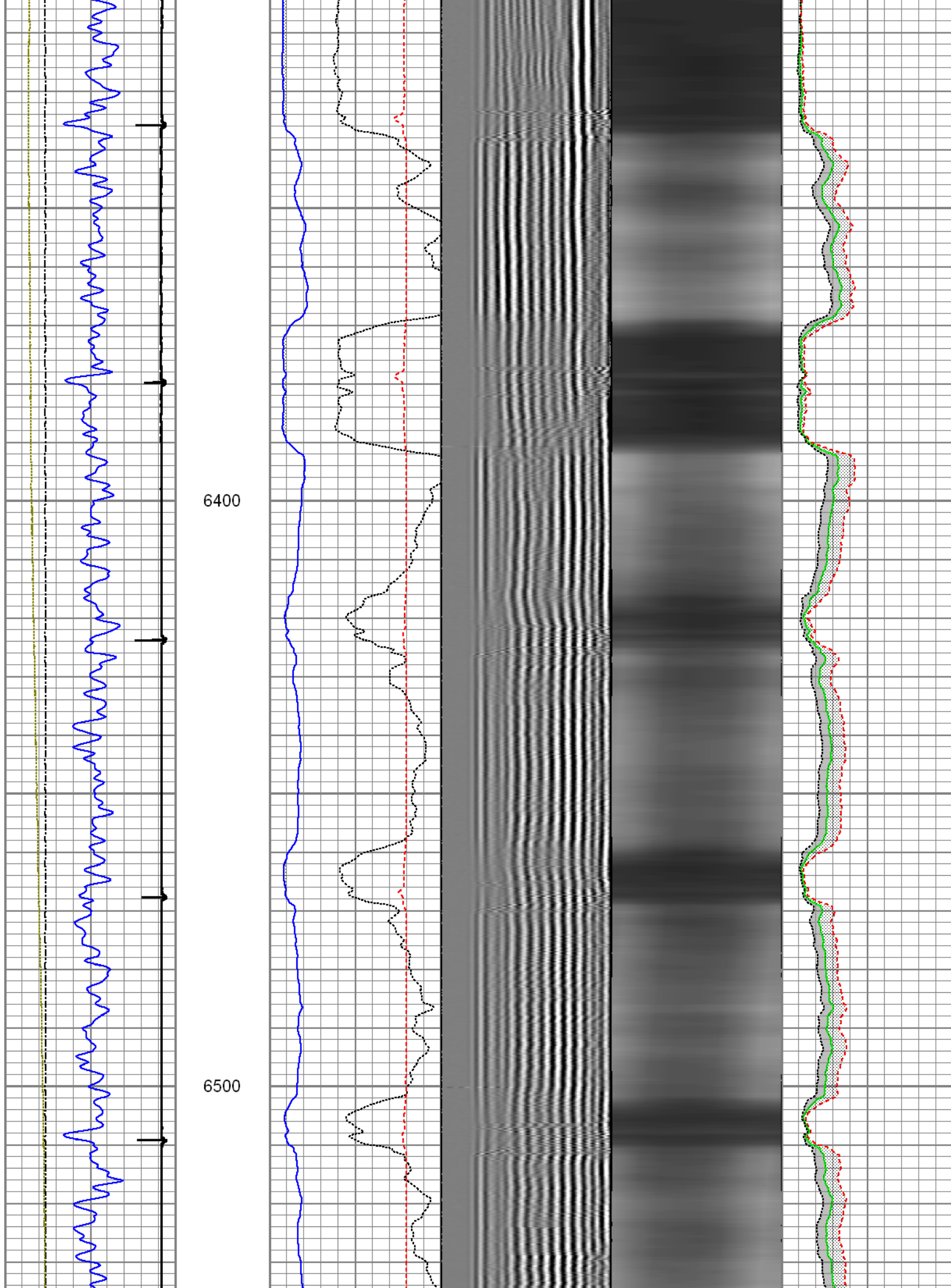
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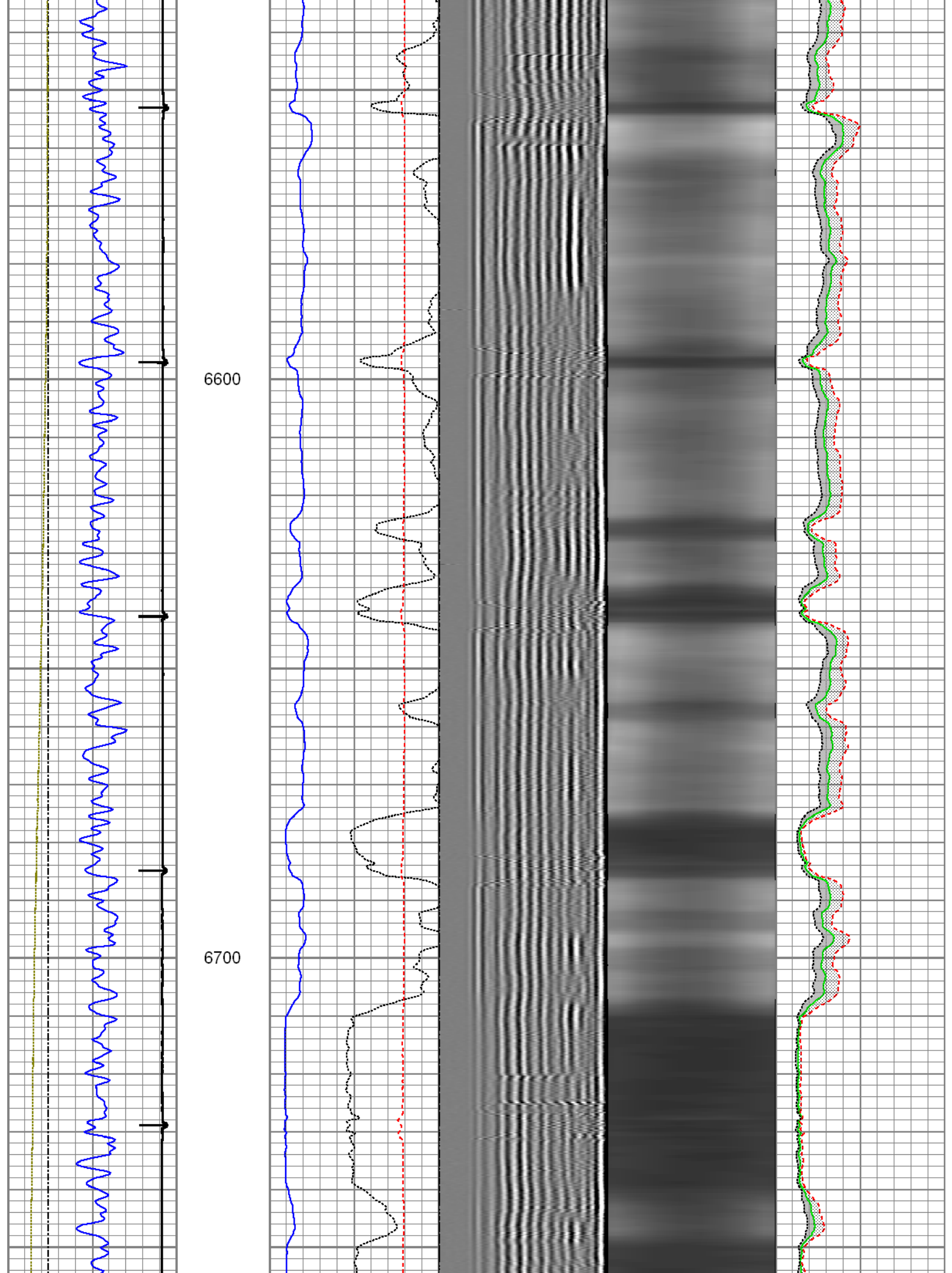
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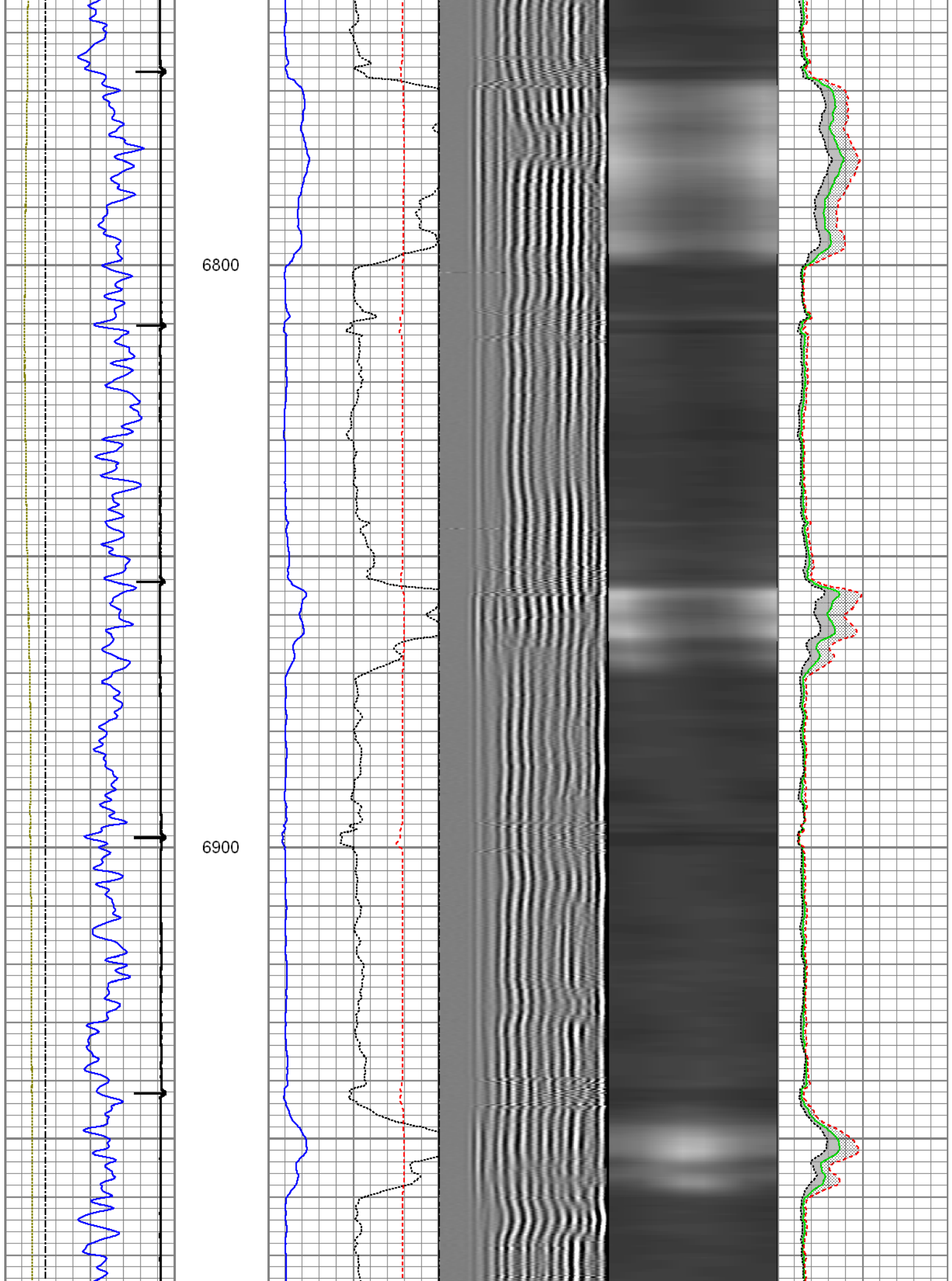


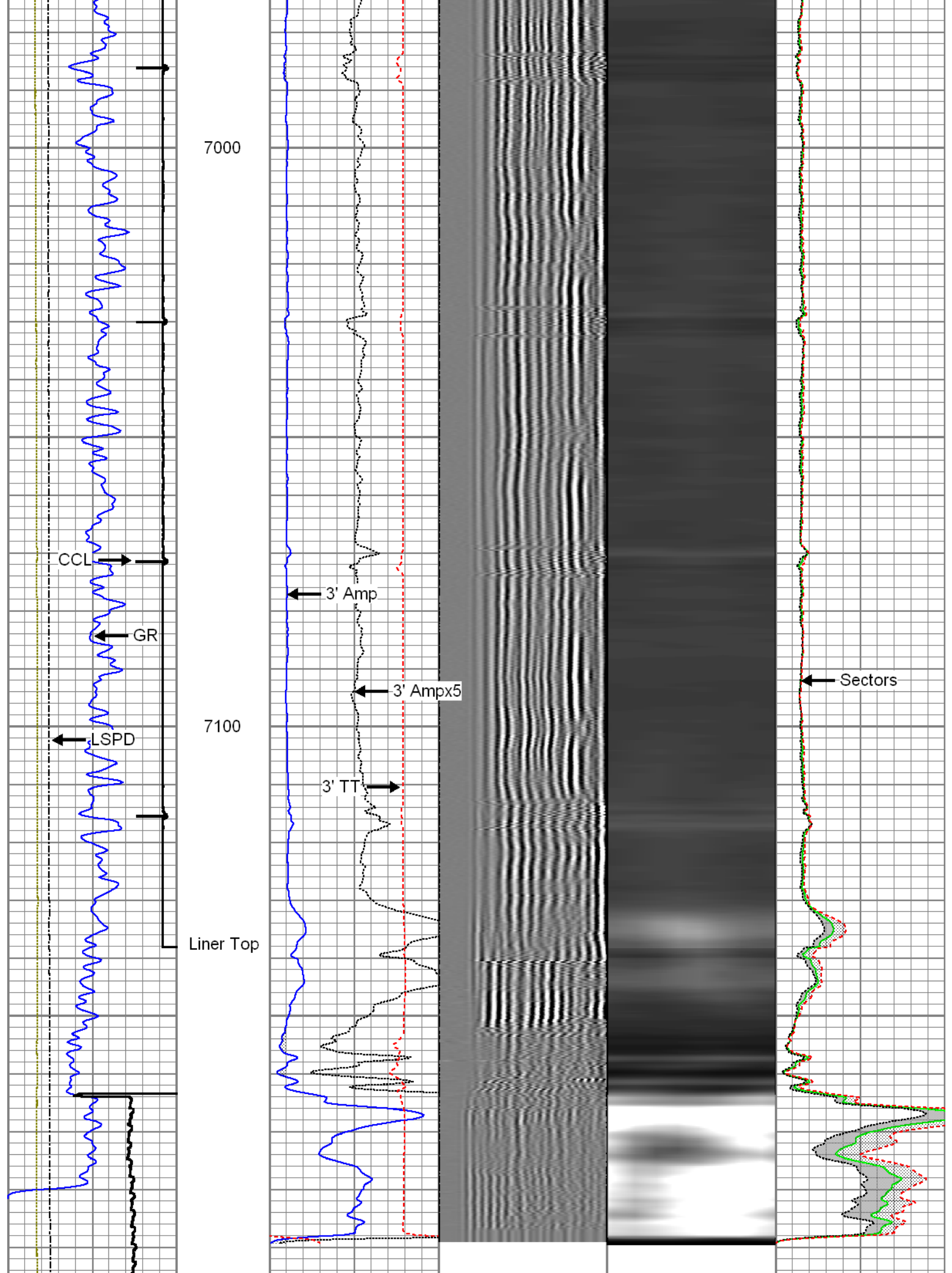
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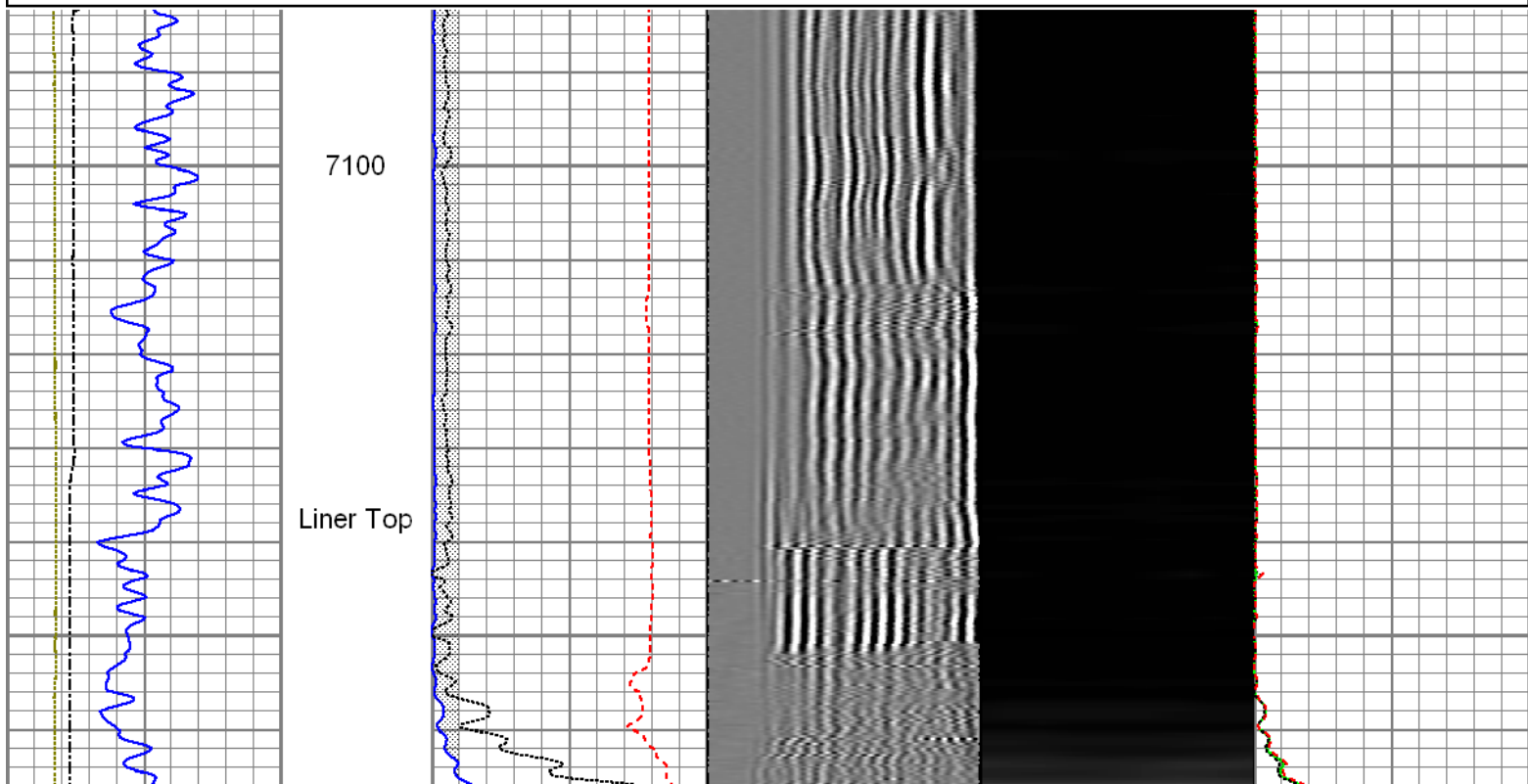
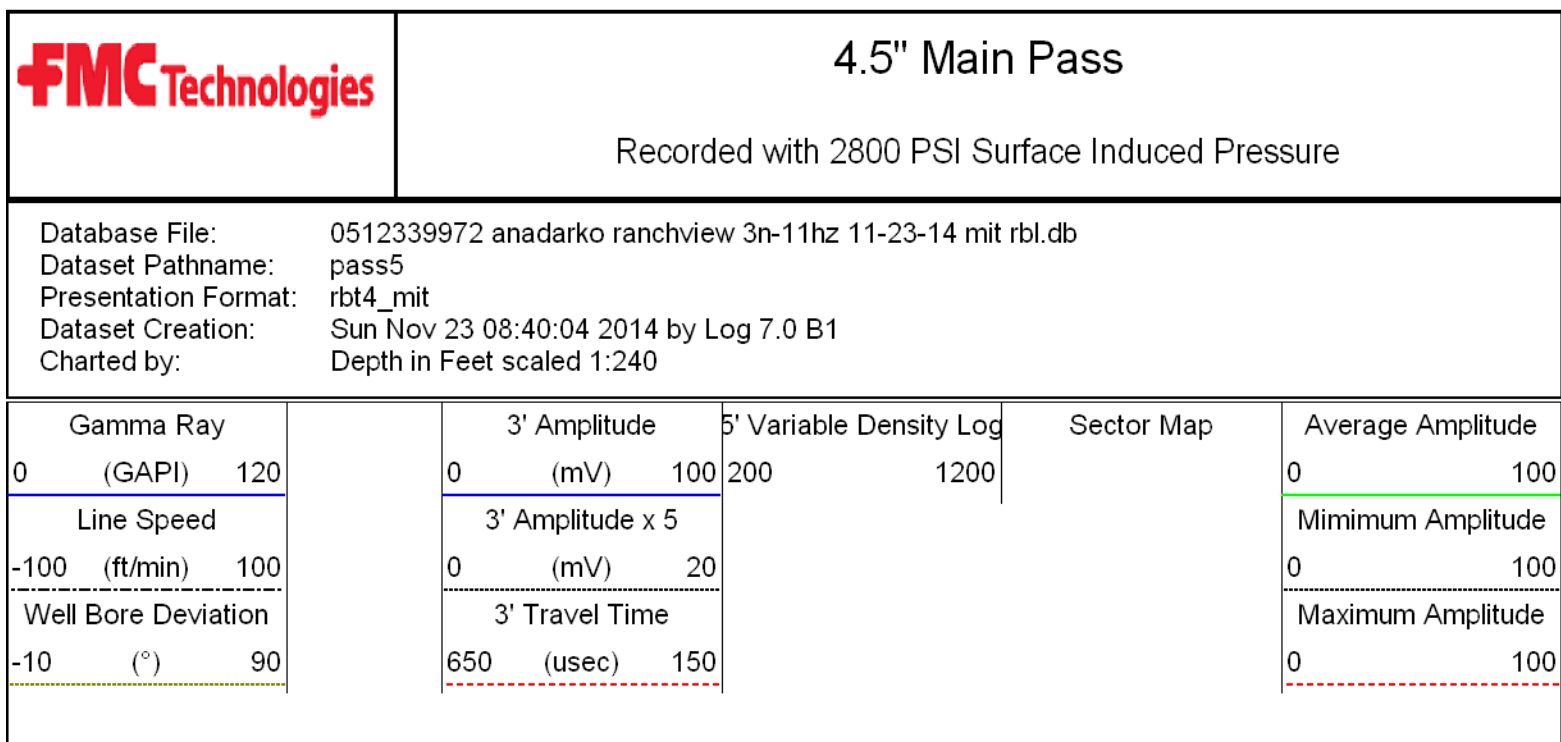
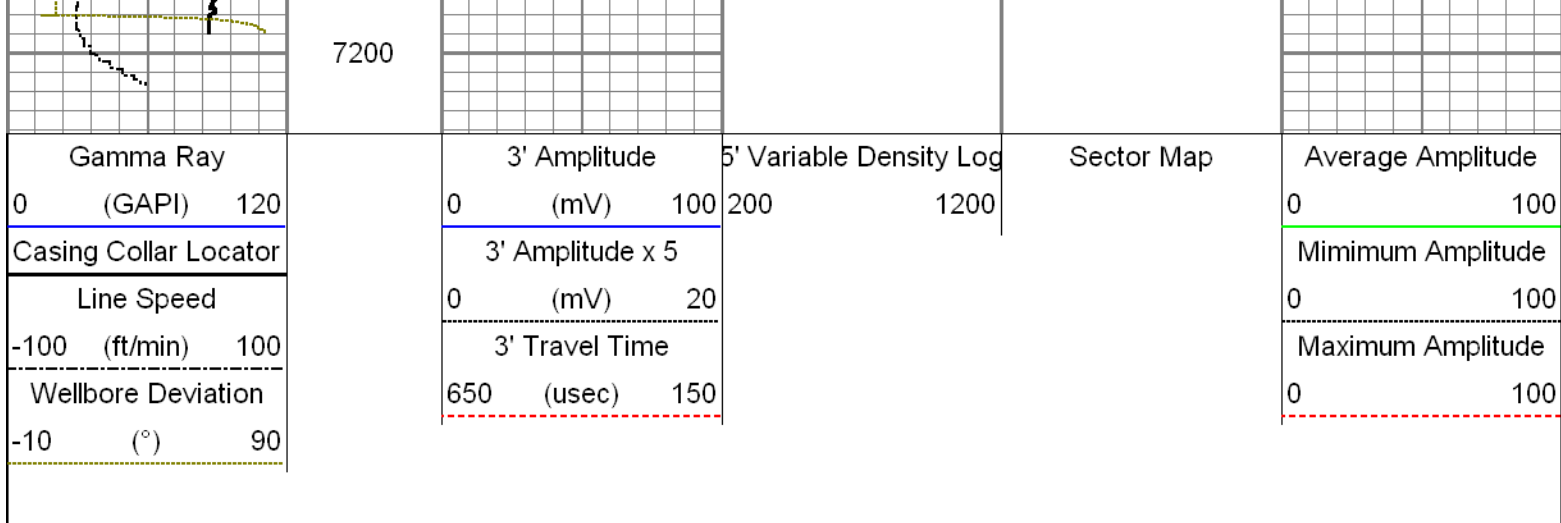
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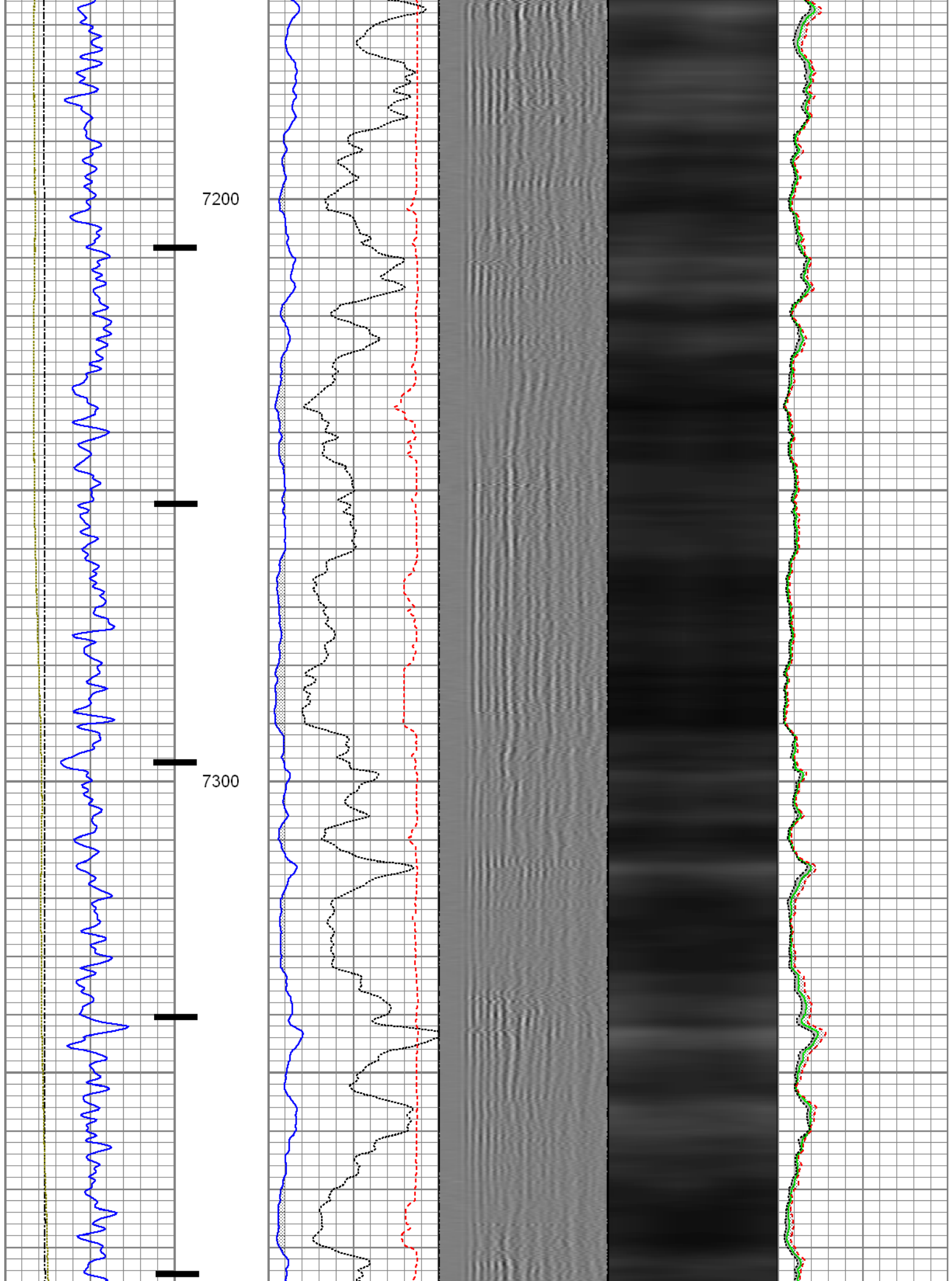


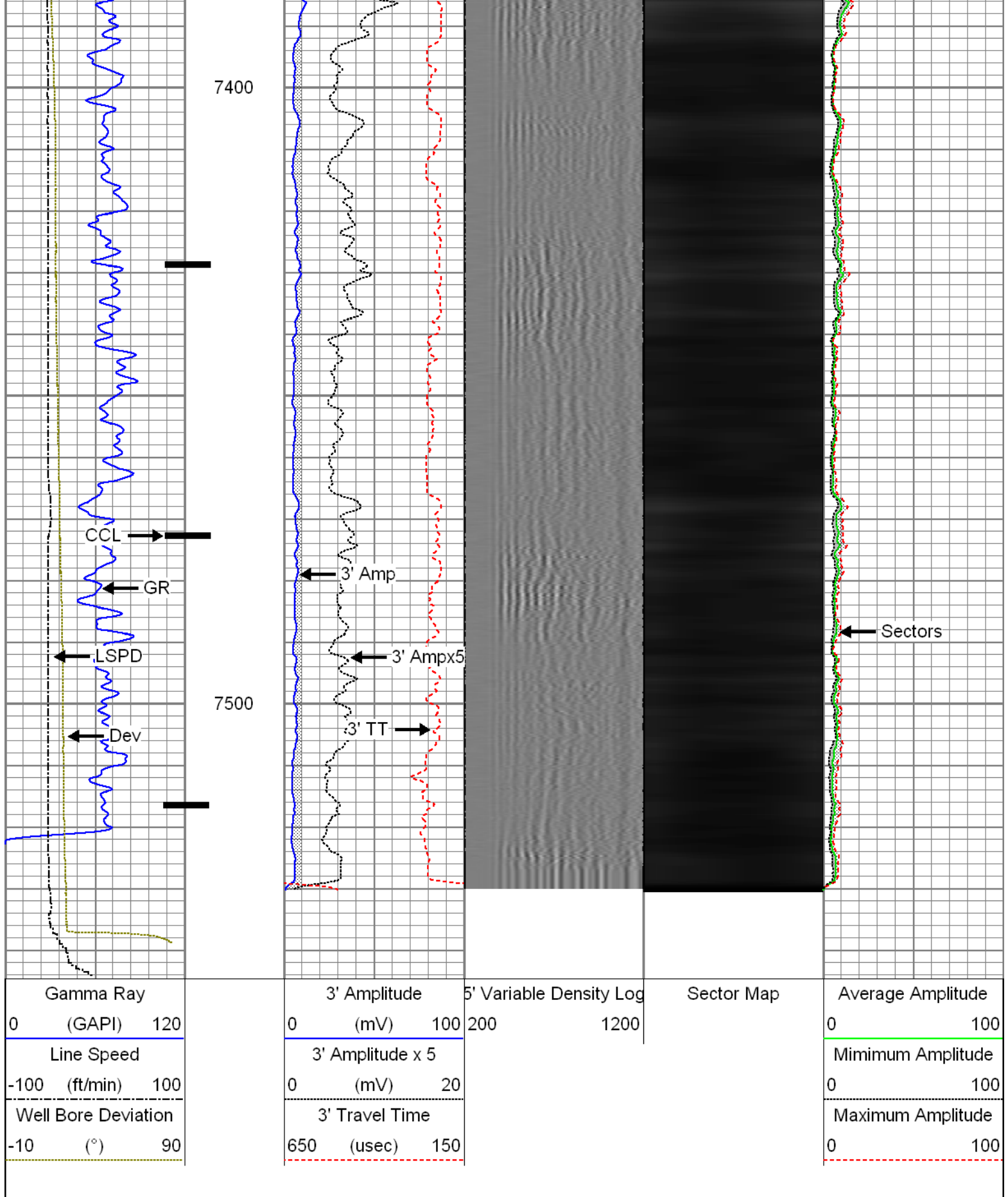






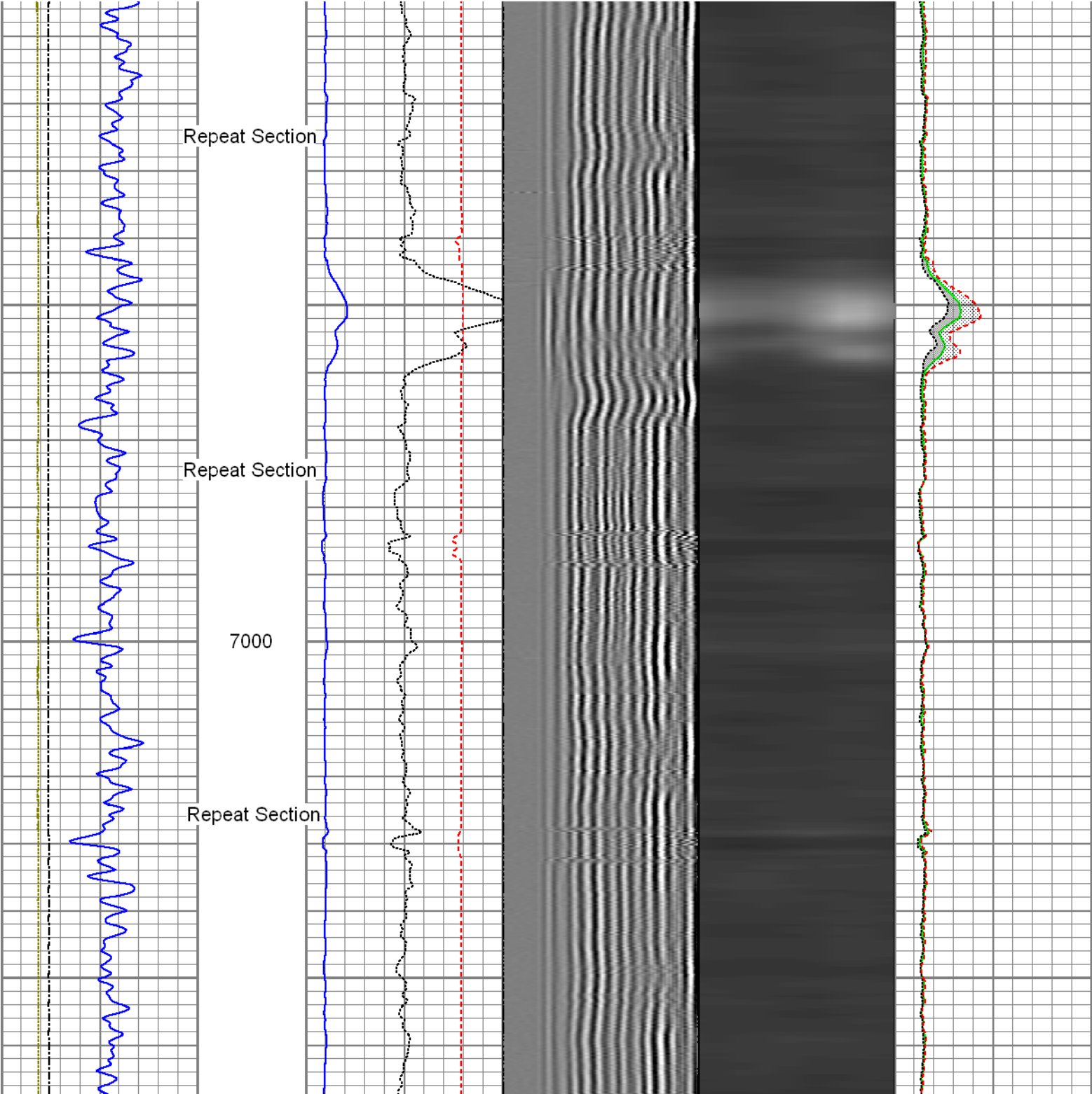


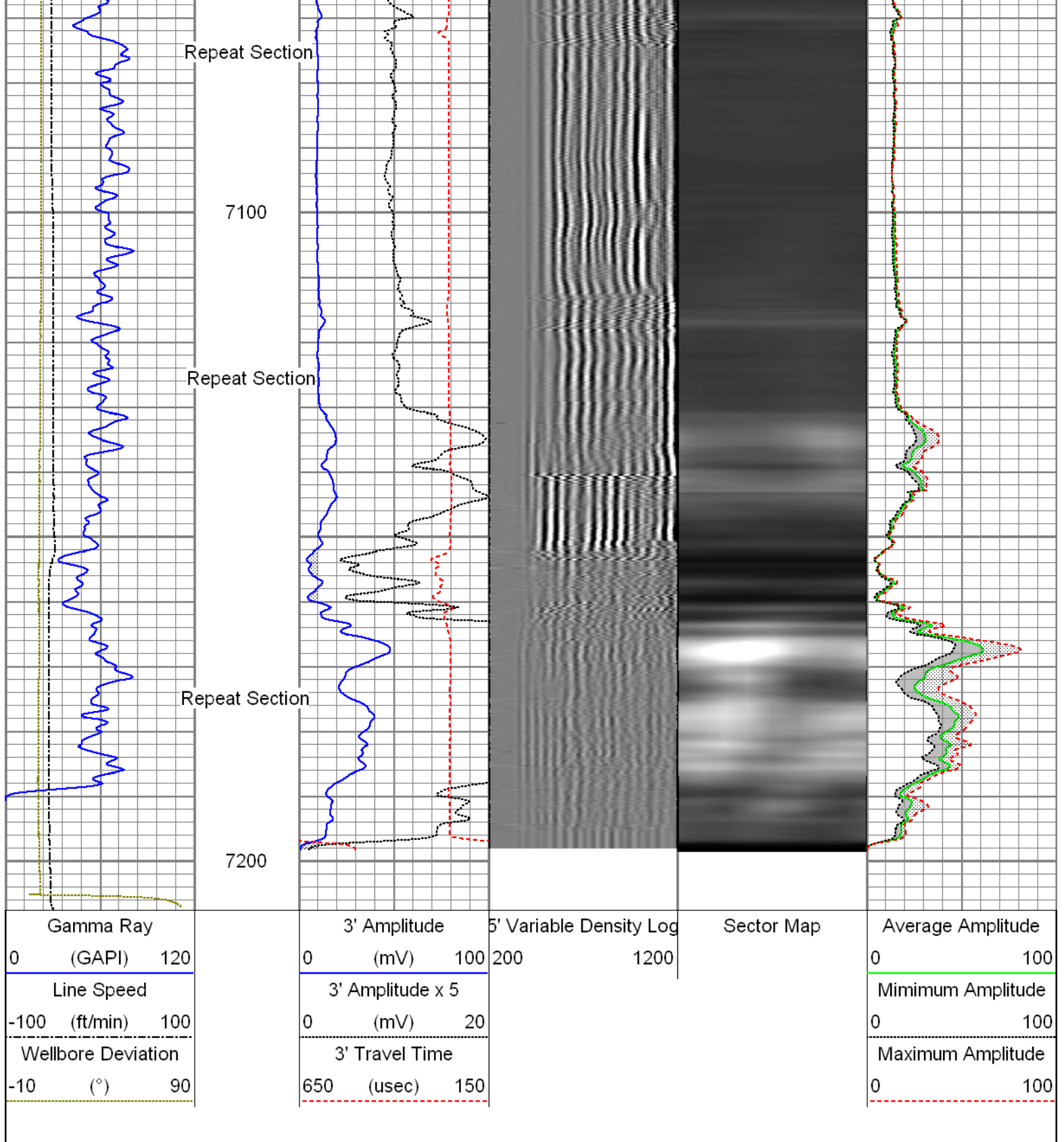






Database File: 0512339972 anadarko ranchview 3n-11hz 11-23-14 mit rbl.db
Dataset Pathname: pass3
Presentation Format: rbt4_mit
Dataset Creation: Sun Nov 23 08:25:23 2014 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

Gamma Ray			3' Amplitude		5' Variable Density Log	Sector Map	Average Amplitude		
0	(GAPI)	120	0	(mV)			100	0	100
Line Speed			3' Amplitude x 5				Minimum Amplitude		
-100	(ft/min)	100	0	(mV)			20	0	100
Wellbore Deviation			3' Travel Time				Maximum Amplitude		
-10	(°)	90	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 (215017) 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 #4 -UW_PRC_057 (1101) Sondex 2-3/4" 4-Arm Production Roller Centraliser	2.98	2.75	32.00
WVFS3FT	15.42		UW_RBT-UW_RBT_004 (1063) Sondex Ultrawire 3-1/8" Radial Bond Tool	9.47	3.13	140.00
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					
WVFS5FT	14.42		UW_PRC-DSSRAC (080) 2-3/4" DSS 5 Arm Roller Centralizer	2.55	2.75	32.00
MIT	5.41		UW_MIT-UW_MIT40_027 (211111) 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: 0512339972 Anadarko Ranchview 3n-11hz 11-23-14 MIT RBL.db: field/well/run1/merge1 Total Length: 27.49 ft Total Weight: 319.30 lb O.D. 3.13 in						

Calibration Report	
Database File:	0512339972 anadarko ranchview 3n-11hz 11-23-14 mit rbl.db
Dataset Pathname:	merge1
Dataset Creation:	Sun Nov 23 14:21:07 2014
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

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

Finger Calibration Report

Performed: Sun Nov 23 07:41:28 2014

Ring size:	4		5		6		7
(in)		Sens		Sens		Sens	
Finger 01:	967	370.0	1337	410.0	1747	440.0	2187
Finger 02:	1062	369.0	1431	402.0	1833	425.0	2258
Finger 03:	1104	360.0	1464	399.0	1863	418.0	2281
Finger 04:	1049	364.0	1413	403.0	1816	431.0	2247
Finger 05:	1074	363.0	1437	402.0	1839	419.0	2258
Finger 06:	1075	361.0	1436	411.0	1847	438.0	2285
Finger 07:	1193	328.0	1521	369.0	1890	396.0	2286
Finger 08:	1125	329.0	1454	417.0	1871	434.0	2305
Finger 09:	1072	364.0	1436	406.0	1842	425.0	2267
Finger 10:	1120	314.0	1434	346.0	1780	363.0	2143
Finger 11:	1117	349.0	1466	406.0	1872	419.0	2291
Finger 12:	1239	373.0	1612	408.0	2020	418.0	2438
Finger 13:	1191	340.0	1531	383.0	1914	404.0	2318
Finger 14:	1269	326.0	1595	352.0	1947	365.0	2312
Finger 15:	1148	380.0	1528	425.0	1953	437.0	2390
Finger 16:	1211	355.0	1566	391.0	1957	399.0	2356
Finger 17:	1154	368.0	1522	411.0	1933	420.0	2353
Finger 18:	1118	372.0	1490	409.0	1899	425.0	2324
Finger 19:	1134	377.0	1511	416.0	1927	426.0	2353
Finger 20:	1186	363.0	1549	394.0	1943	406.0	2349
Finger 21:	1192	375.0	1567	409.0	1976	420.0	2396
Finger 22:	1122	373.0	1495	407.0	1902	420.0	2322
Finger 23:	912	352.0	1264	398.0	1662	429.0	2091
Finger 24:	1184	369.0	1553	391.0	1944	408.0	2352
Finger 25:	1411	392.0	1803	415.0	2218	420.0	2638
Finger 26:	1215	337.0	1552	359.0	1911	375.0	2286
Finger 27:	1310	365.0	1675	387.0	2062	385.0	2447
Finger 28:	1119	371.0	1490	397.0	1887	416.0	2303
Finger 29:	1365	349.0	1714	356.0	2070	361.0	2431
Finger 30:	1223	350.0	1573	370.0	1943	382.0	2325
Finger 31:	1269	350.0	1619	360.0	1979	371.0	2350
Finger 32:	1254	347.0	1601	358.0	1959	368.0	2327
Finger 33:	1009	326.0	1335	353.0	1688	399.0	2087
Finger 34:	1117	353.0	1470	373.0	1843	389.0	2232
Finger 35:	1315	353.0	1668	360.0	2028	374.0	2402
Finger 36:	1419	411.0	1830	422.0	2252	430.0	2682
Finger 37:	1102	344.0	1446	372.0	1818	404.0	2222
Finger 38:	1429	382.0	1811	393.0	2204	404.0	2608
Finger 39:	1224	345.0	1569	360.0	1929	382.0	2311
Finger 40:	1047	370.0	1417	399.0	1816	424.0	2240

Segmented Cement Bond Log Calibration Report

Serial Number: 1063
Tool Model: UW_RBT_004

Calibration Casing Diameter:	7.000	in
Calibration Depth:	23.702	ft

Master Calibration, performed Sun Nov 23 07:43:45 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	-0.003	0.652	0.800	62.165	93.671	1.116
5FT	-0.006	0.701	0.800	62.165	86.814	1.330
S1	-0.004	0.649	0.000	100.000	153.282	0.561
S2	-0.005	0.672	0.000	100.000	147.876	0.679
S3	-0.004	0.681	0.000	100.000	146.109	0.530
S4	-0.005	0.696	0.000	100.000	142.810	0.666
S5	-0.003	0.677	0.000	100.000	146.950	0.488
S6	-0.003	0.646	0.000	100.000	153.899	0.530
S7	-0.003	0.632	0.000	100.000	157.630	0.448
S8	-0.003	0.627	0.000	100.000	158.880	0.454

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, L.P.
Well	Ranchview 3N-11HZ
Field	Wattenberg
County	Weld
State	Colorado