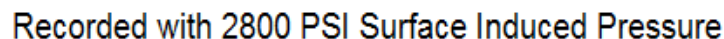


<<< Fold Here >>>

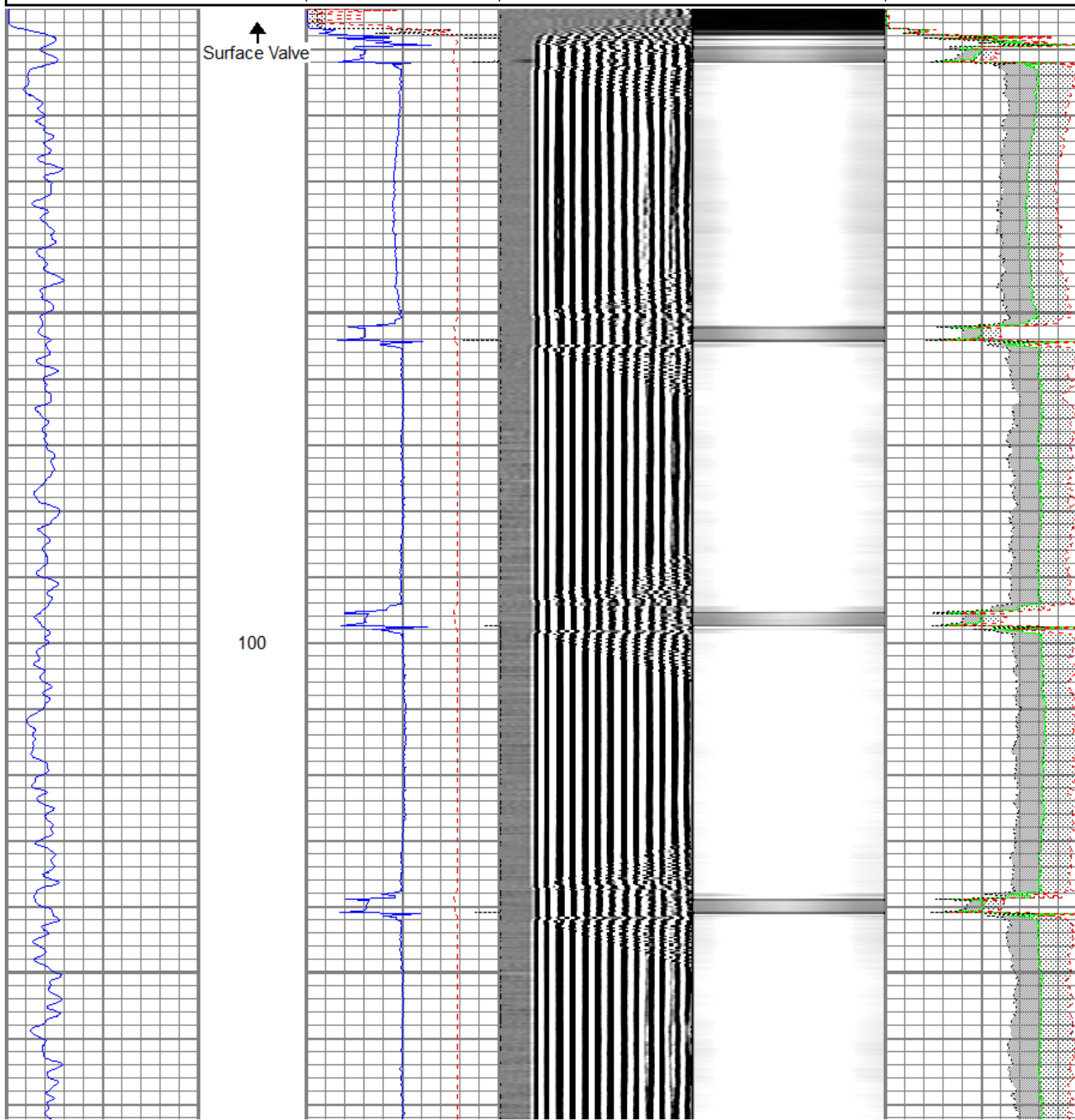
	Comments

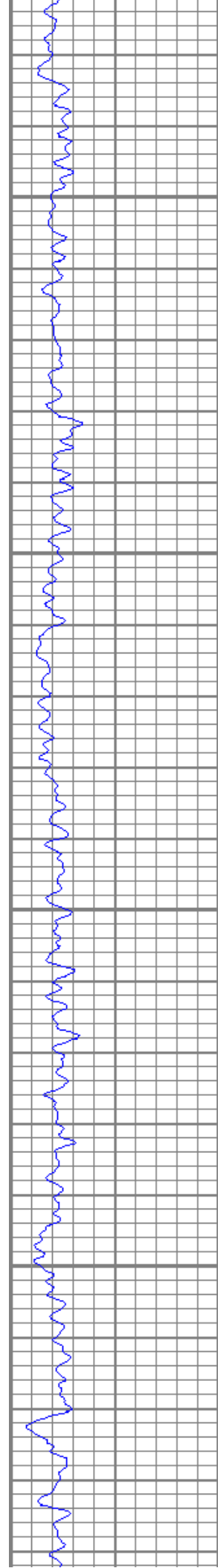
Thank you for choosing FMC Technologies Completion Services!!



Database File: anadarko_howard 29c-28hz_21-nov-2013_rcbl cil (2).db
 Dataset Pathname: pass5
 Presentation Format: rib
 Dataset Creation: Thu Nov 21 08:41:03 2013 by Log Sondex V7.03
 Charted by: Depth in Feet scaled 1:240

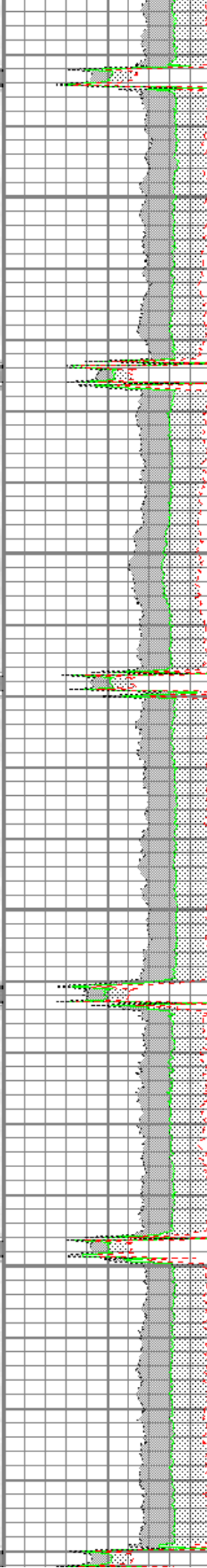
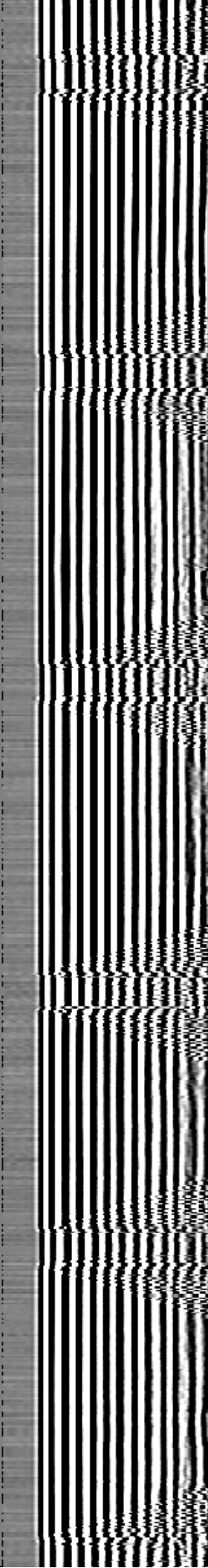
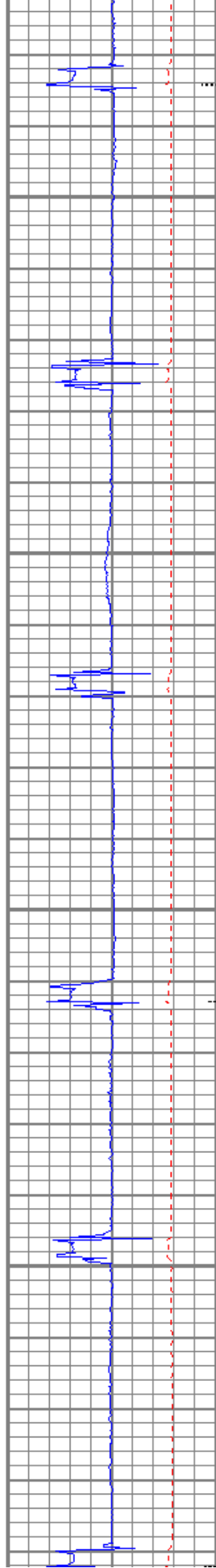
Gamma Ray			3' Amplitude		5' Variable Density Log		Sector Map		Average Amplitude	
0	(GAPI)	150	0	(mV)	100	200	1200		0	100
			3' Amplitude x 5						Minimum Amplitude	
			0	(mV)	20				0	100
			3' Travel Time						Maximum Amplitude	
			650	(usec)	150				0	100

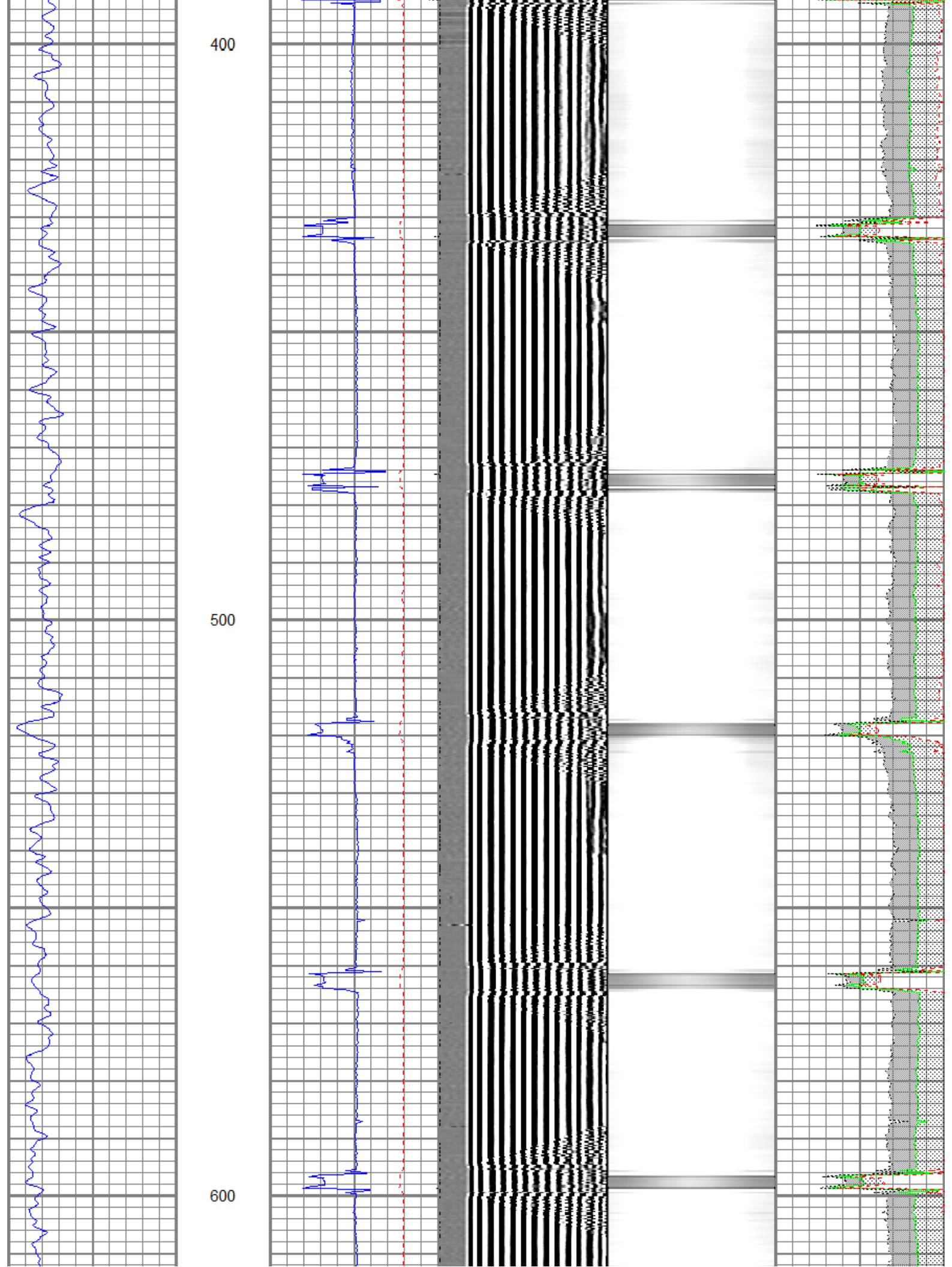


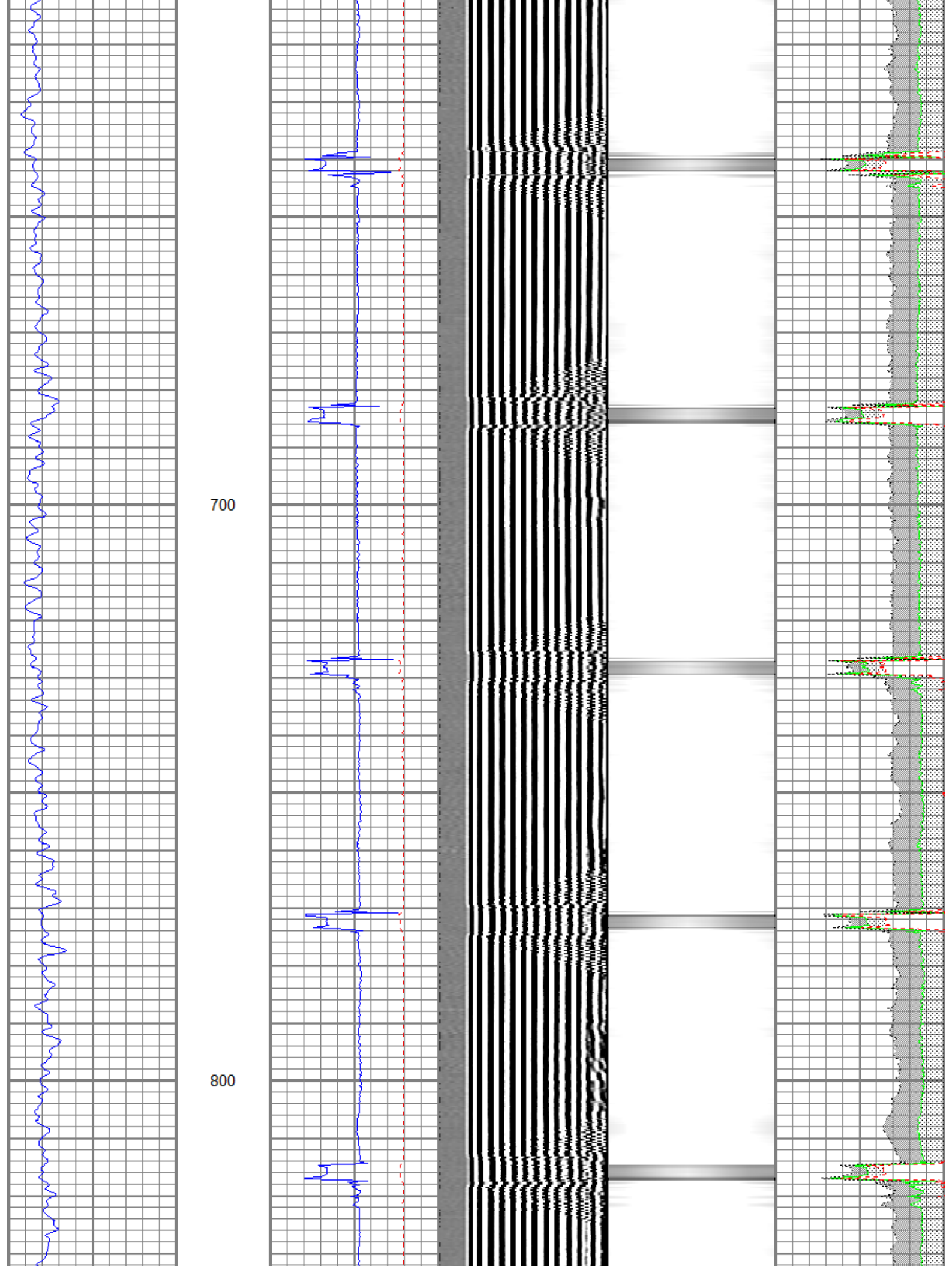


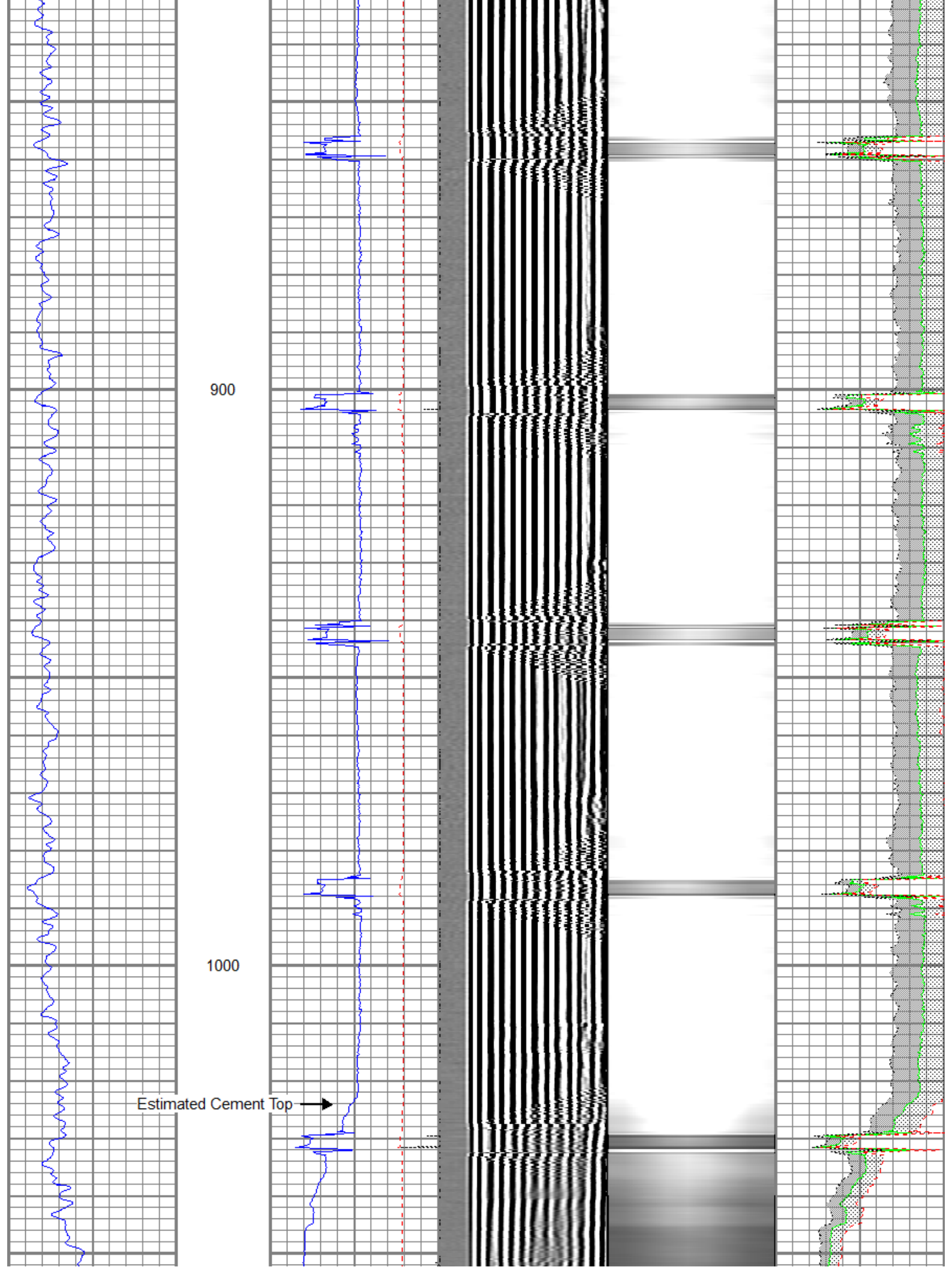
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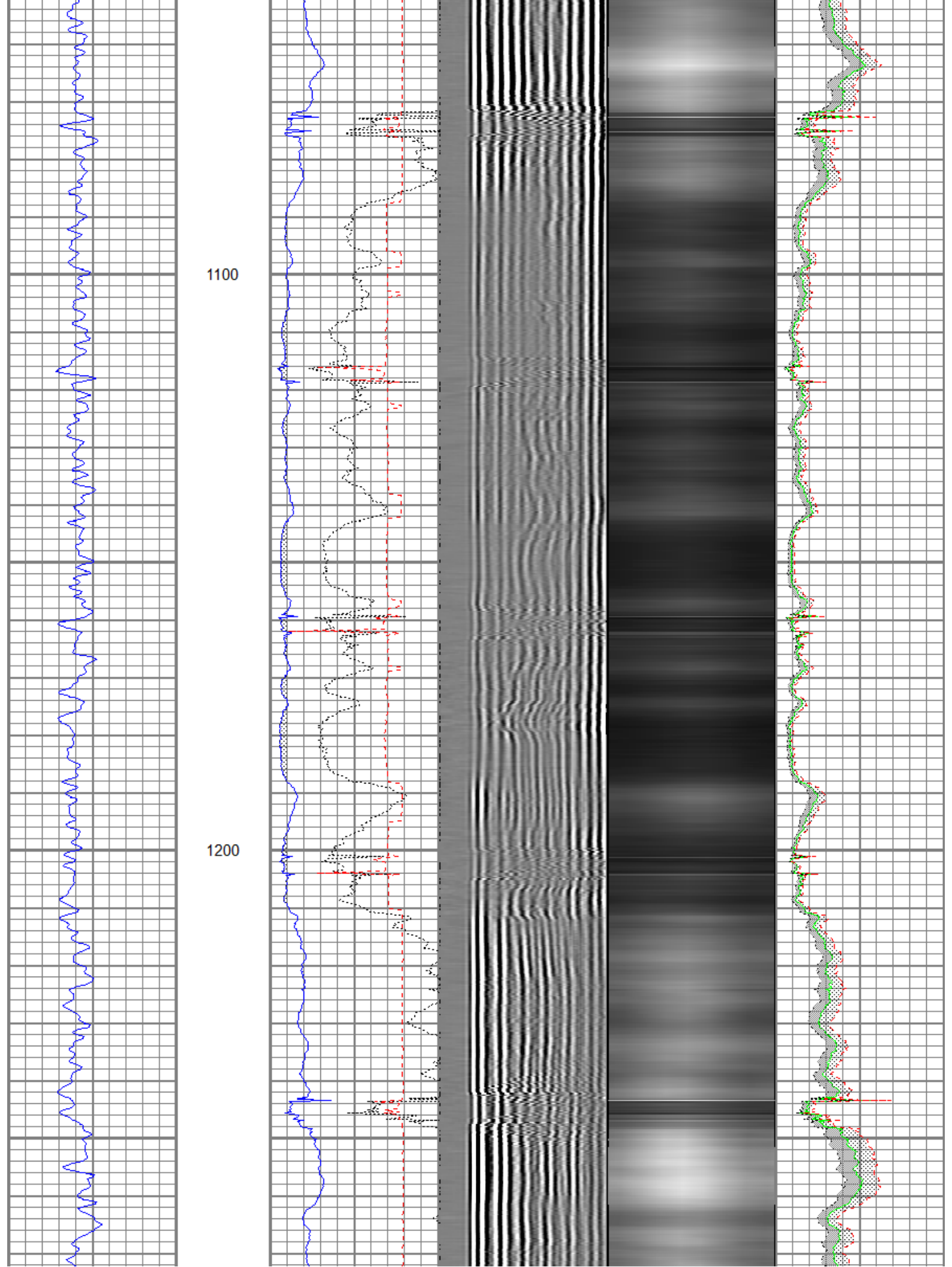
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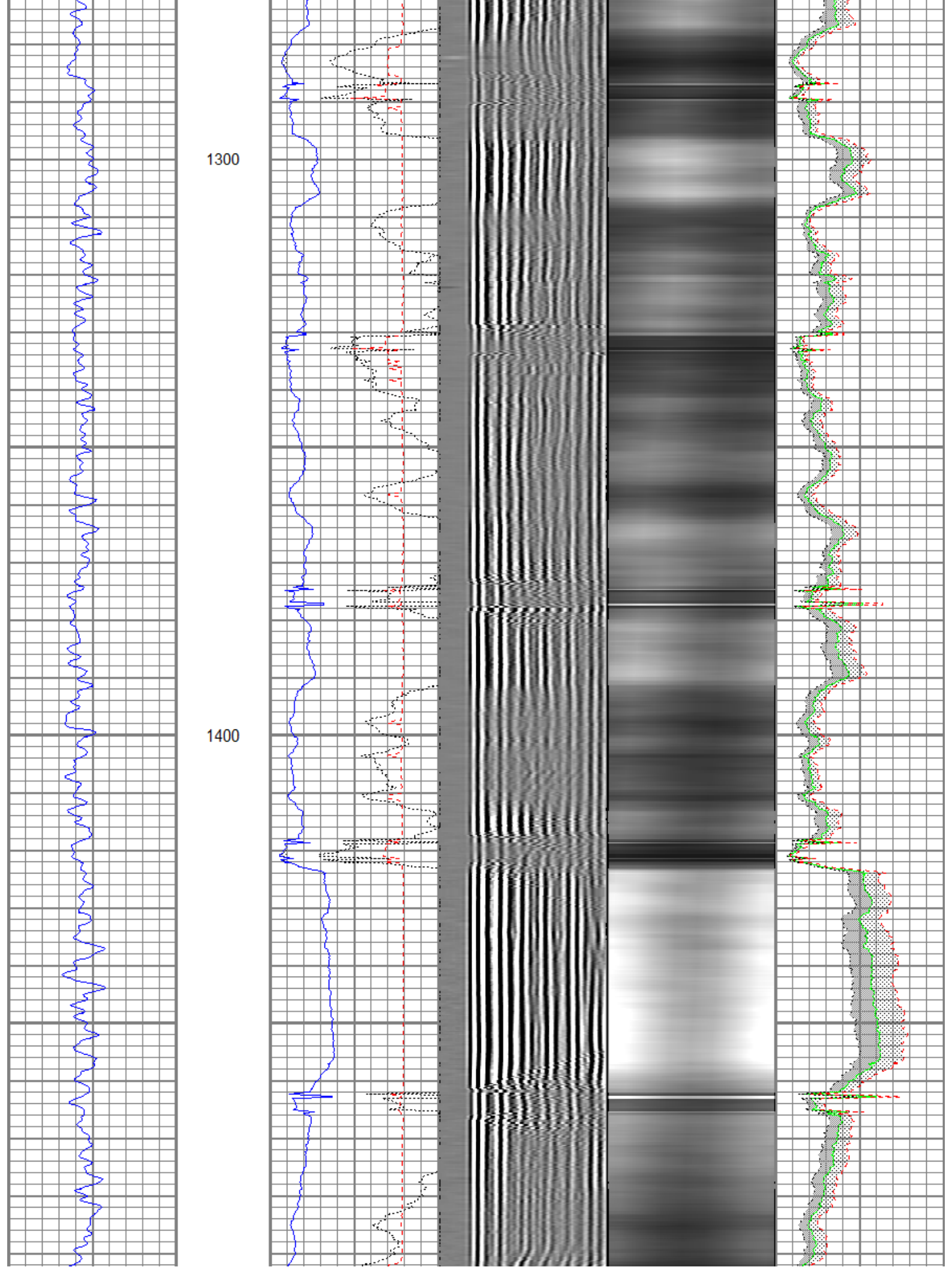


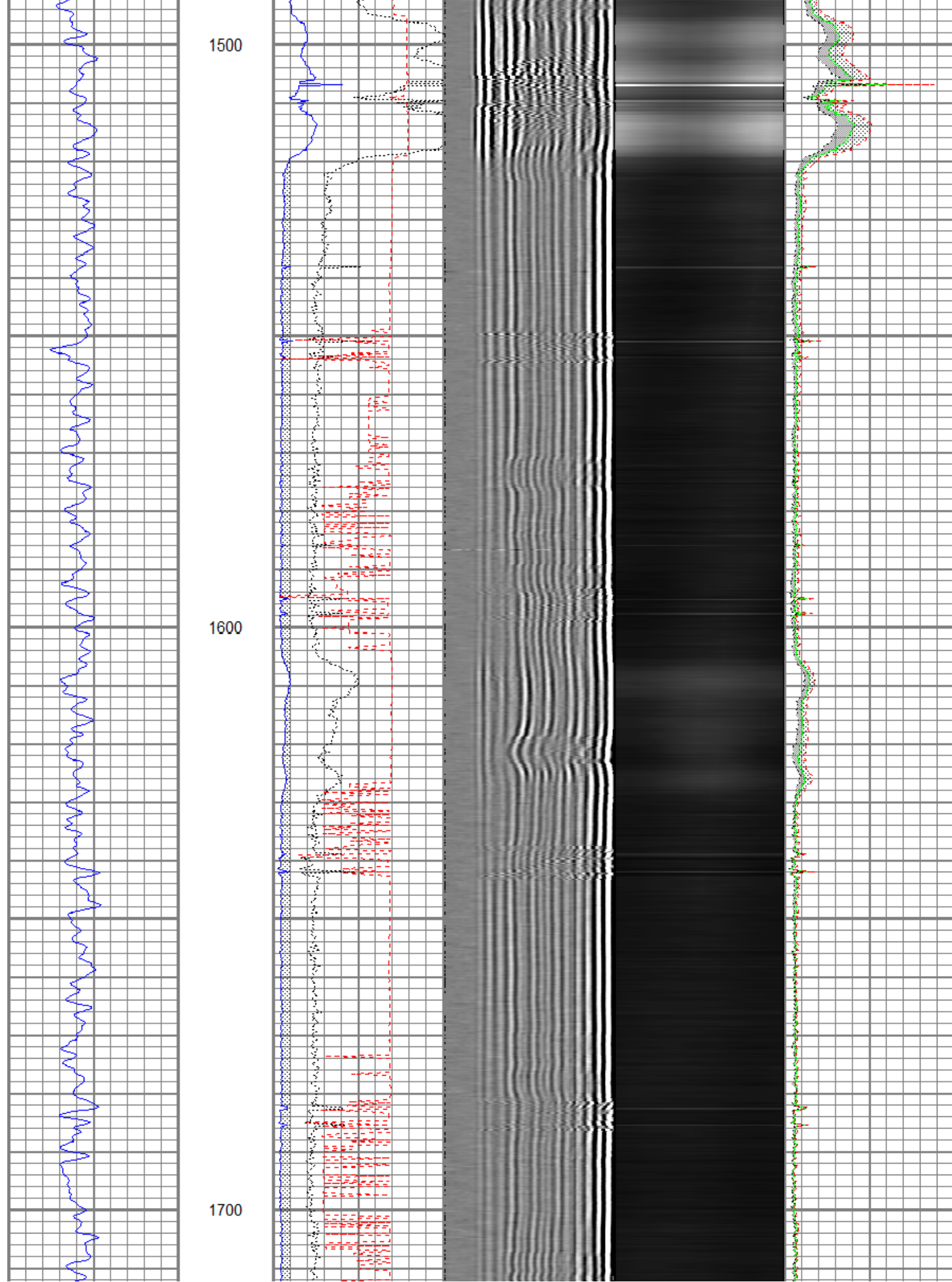


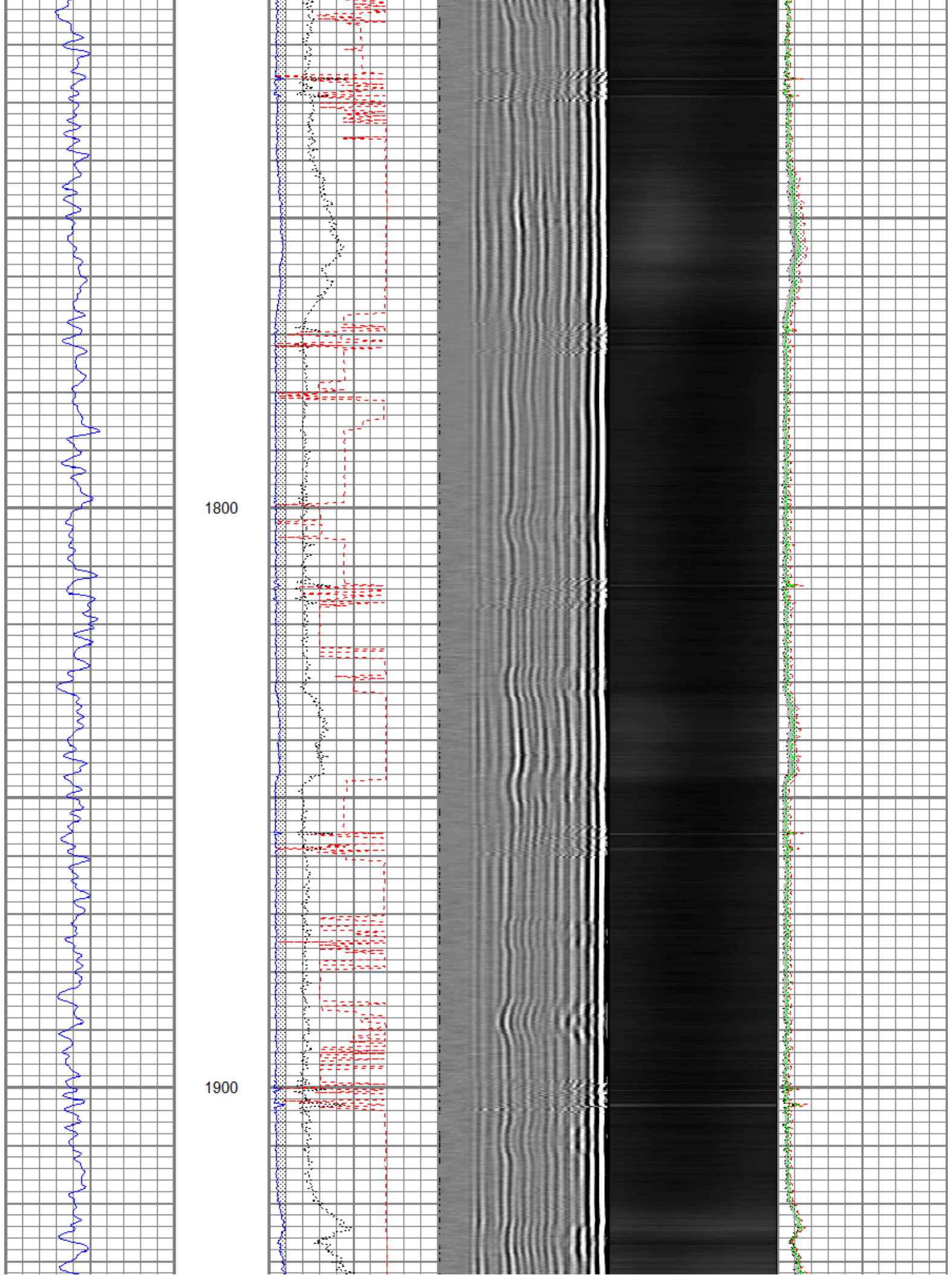


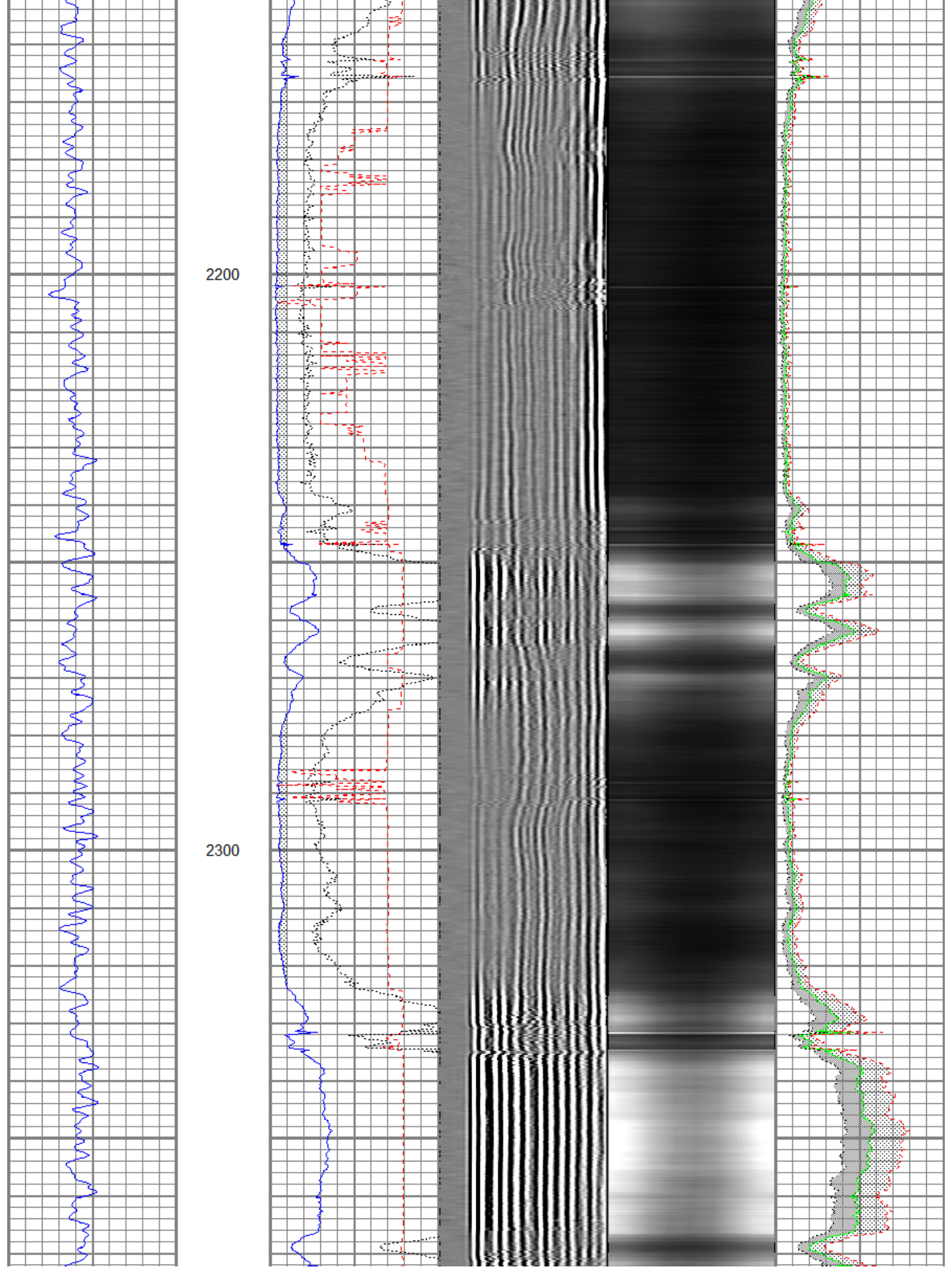


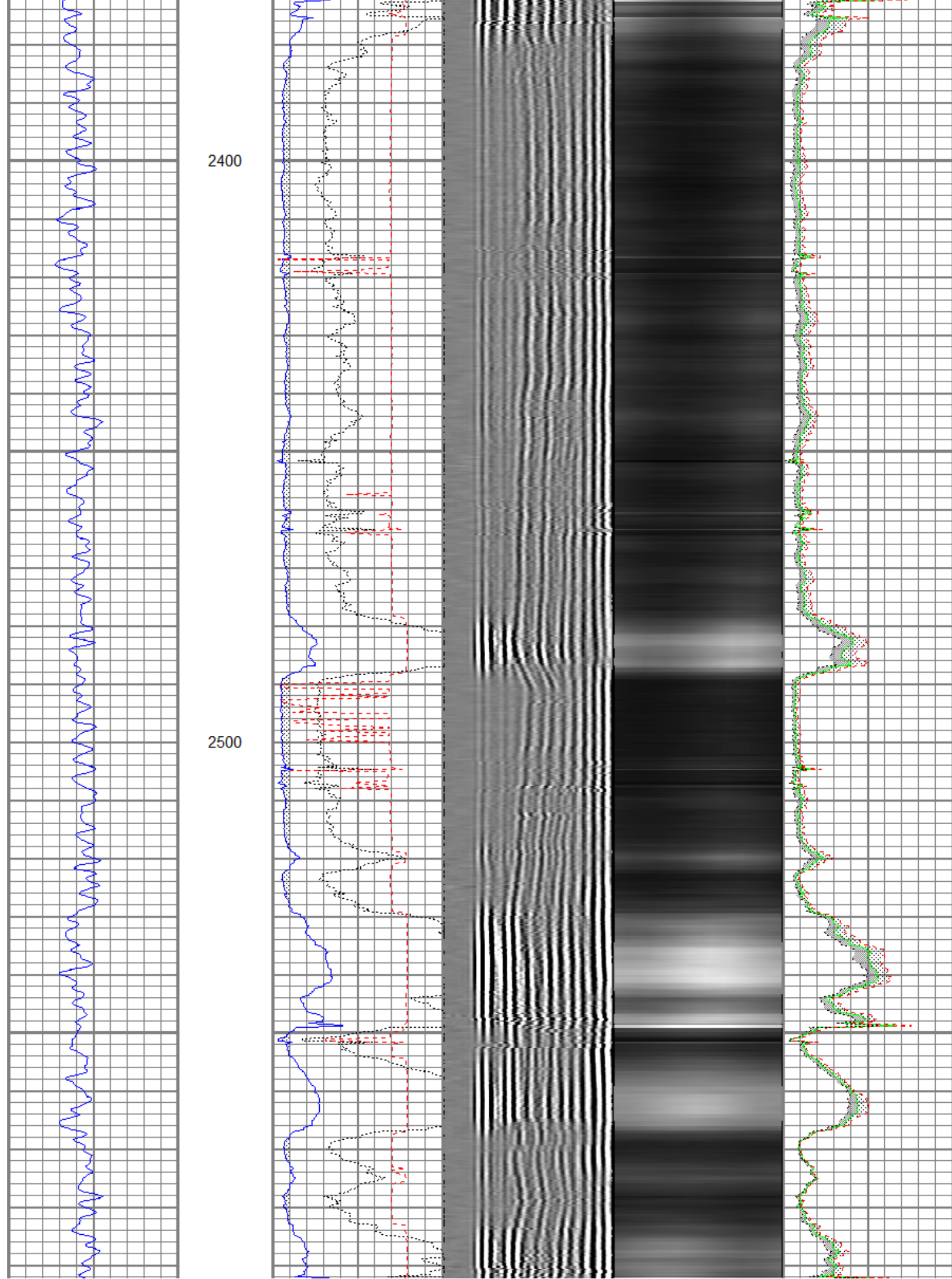


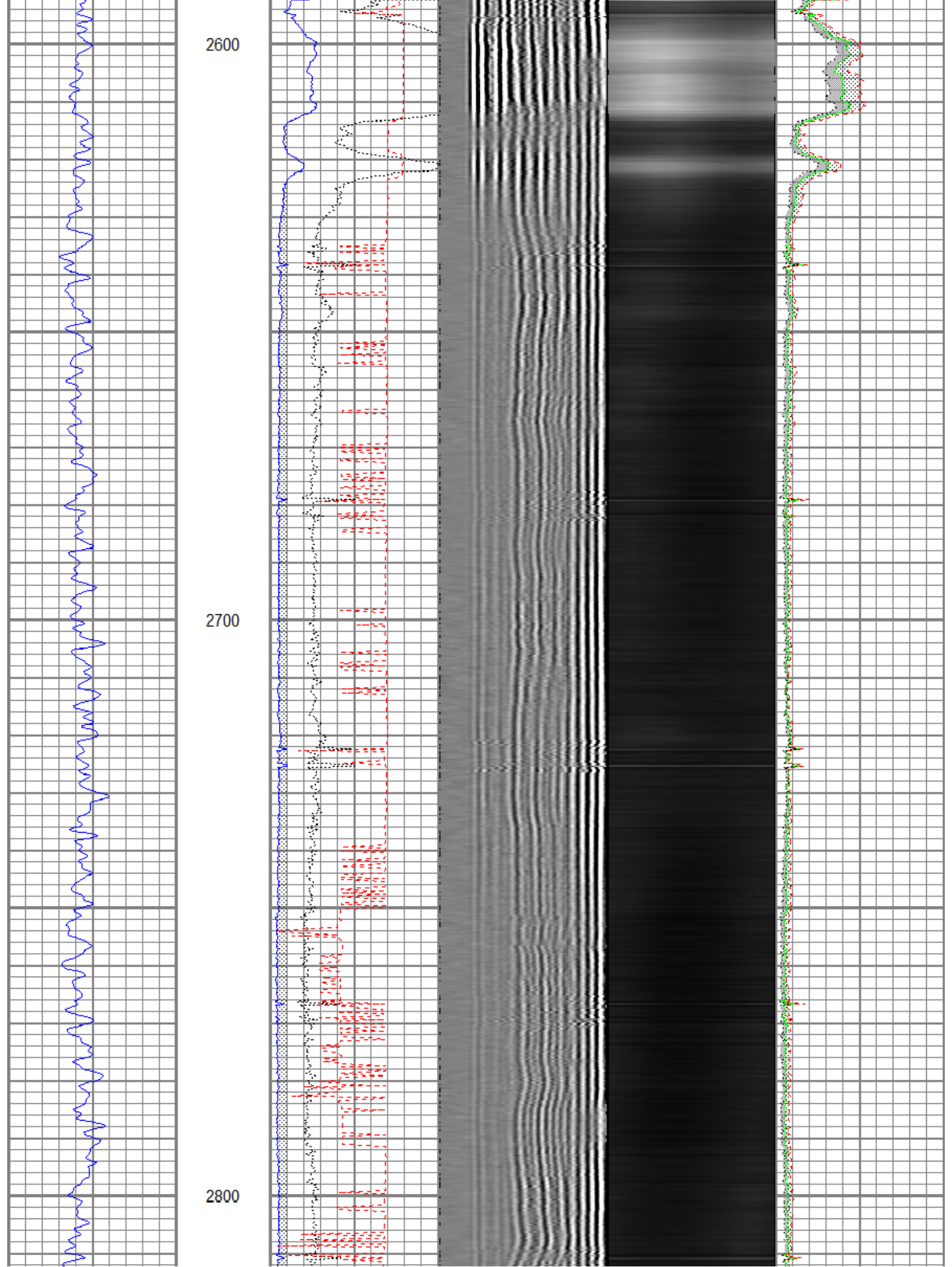


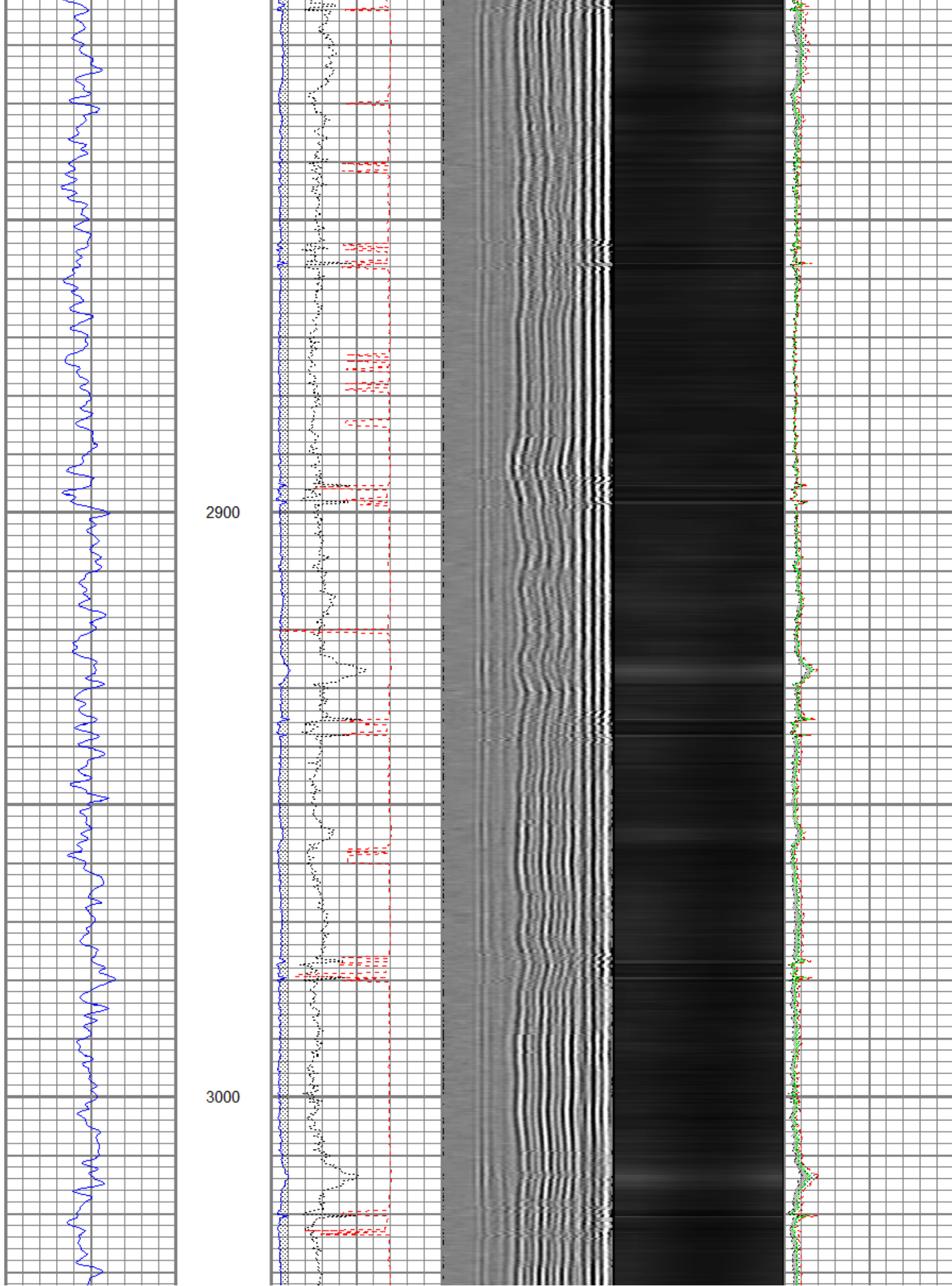


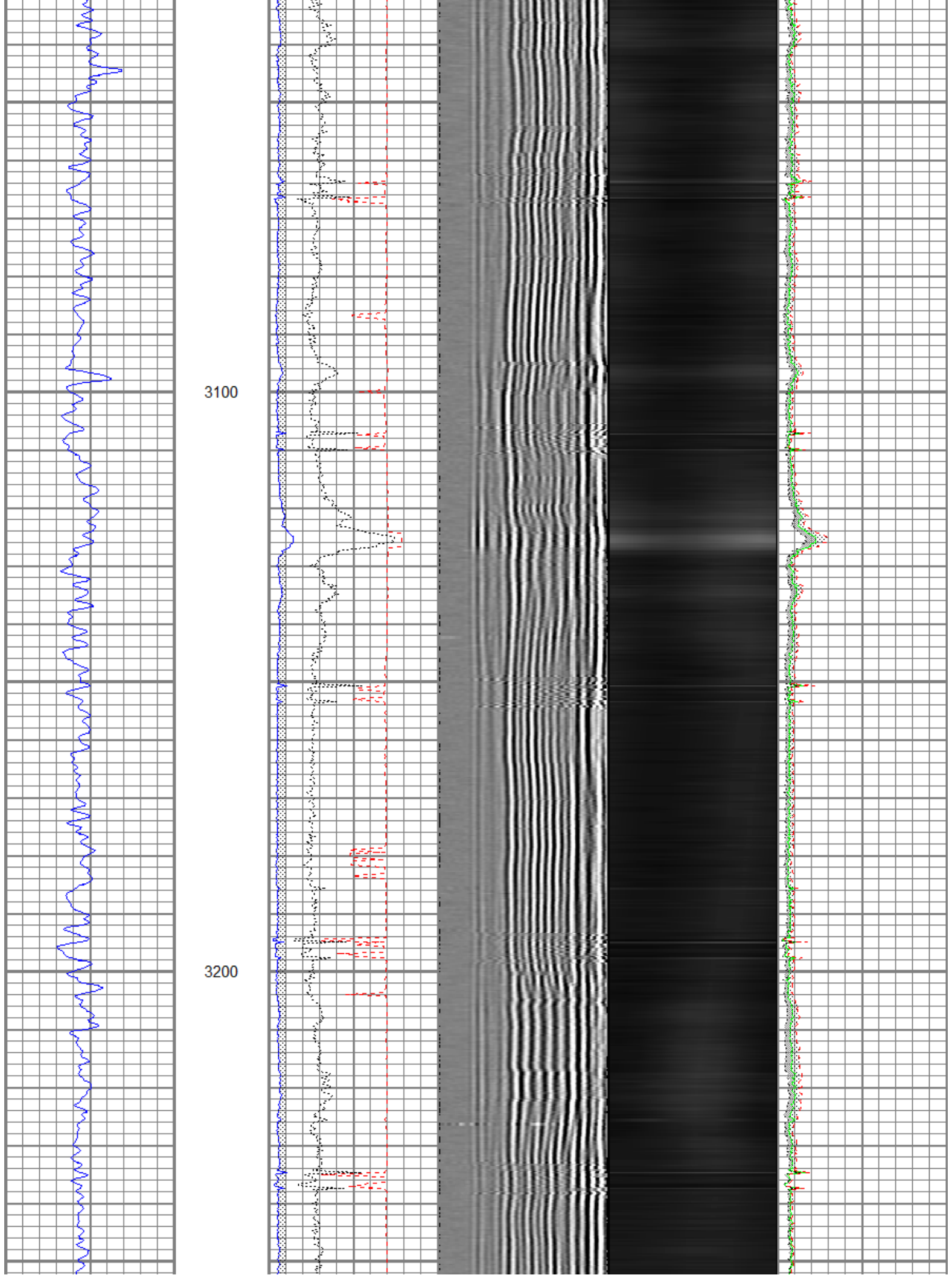


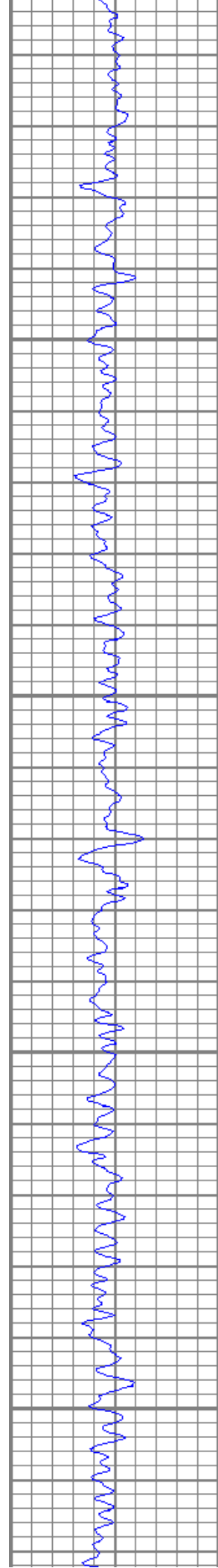






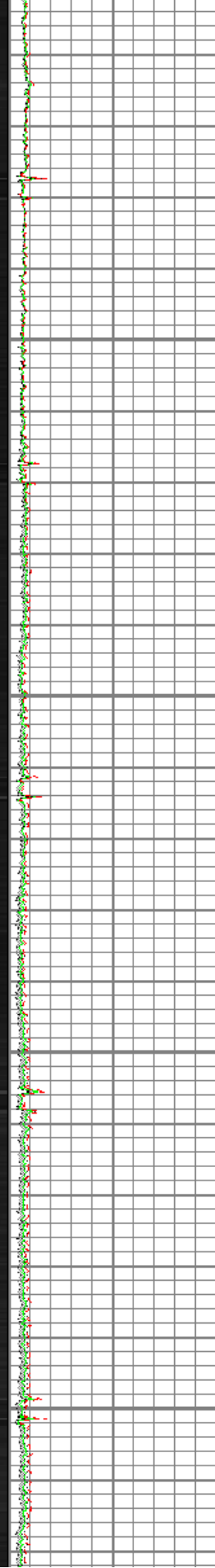
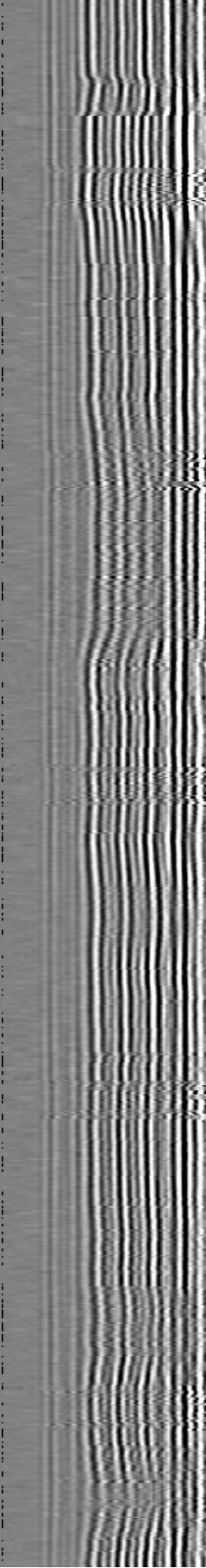
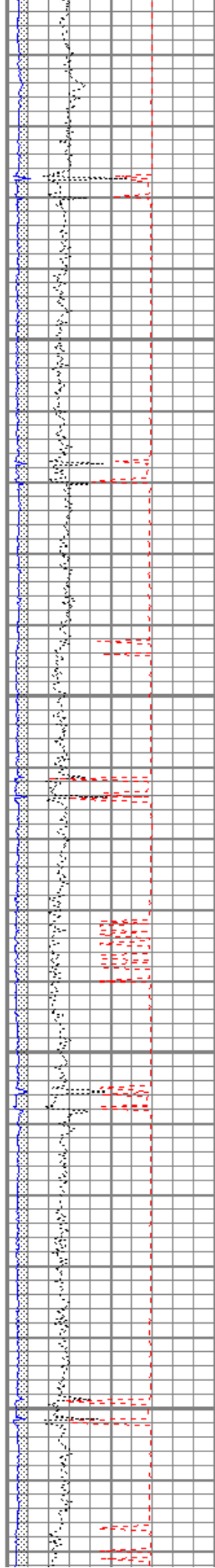


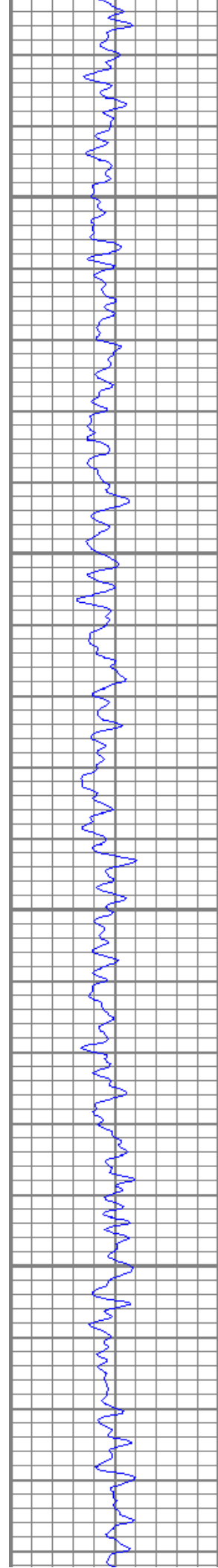




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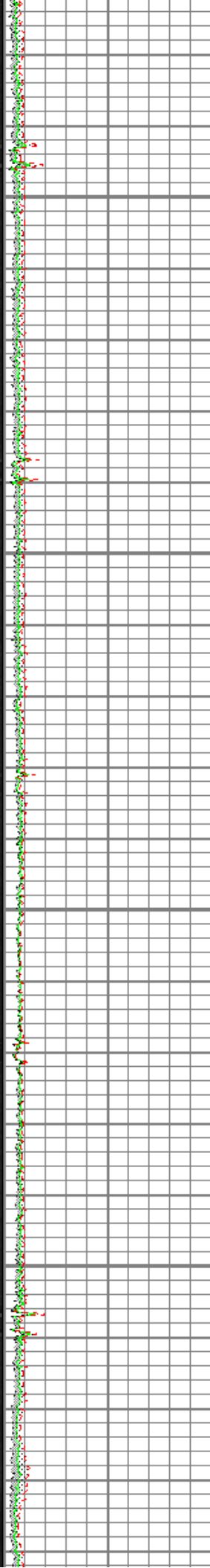
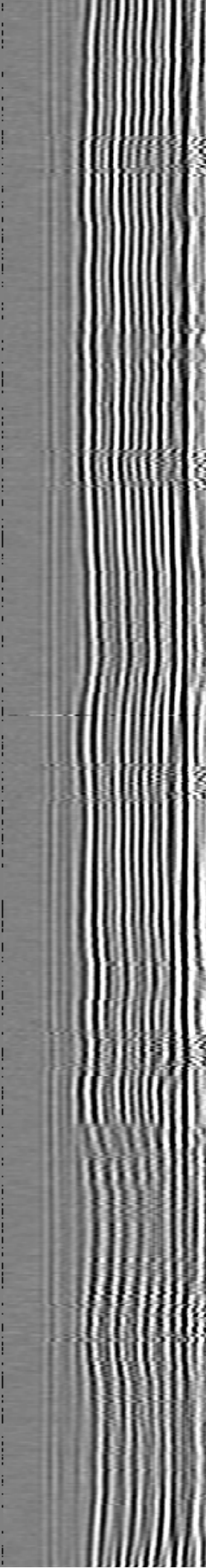
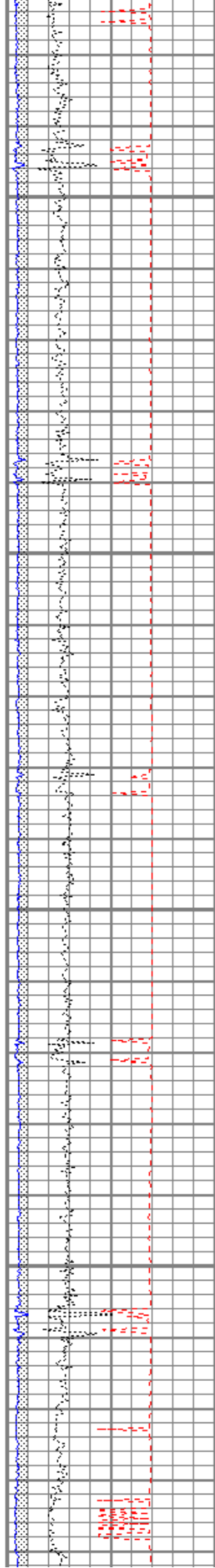
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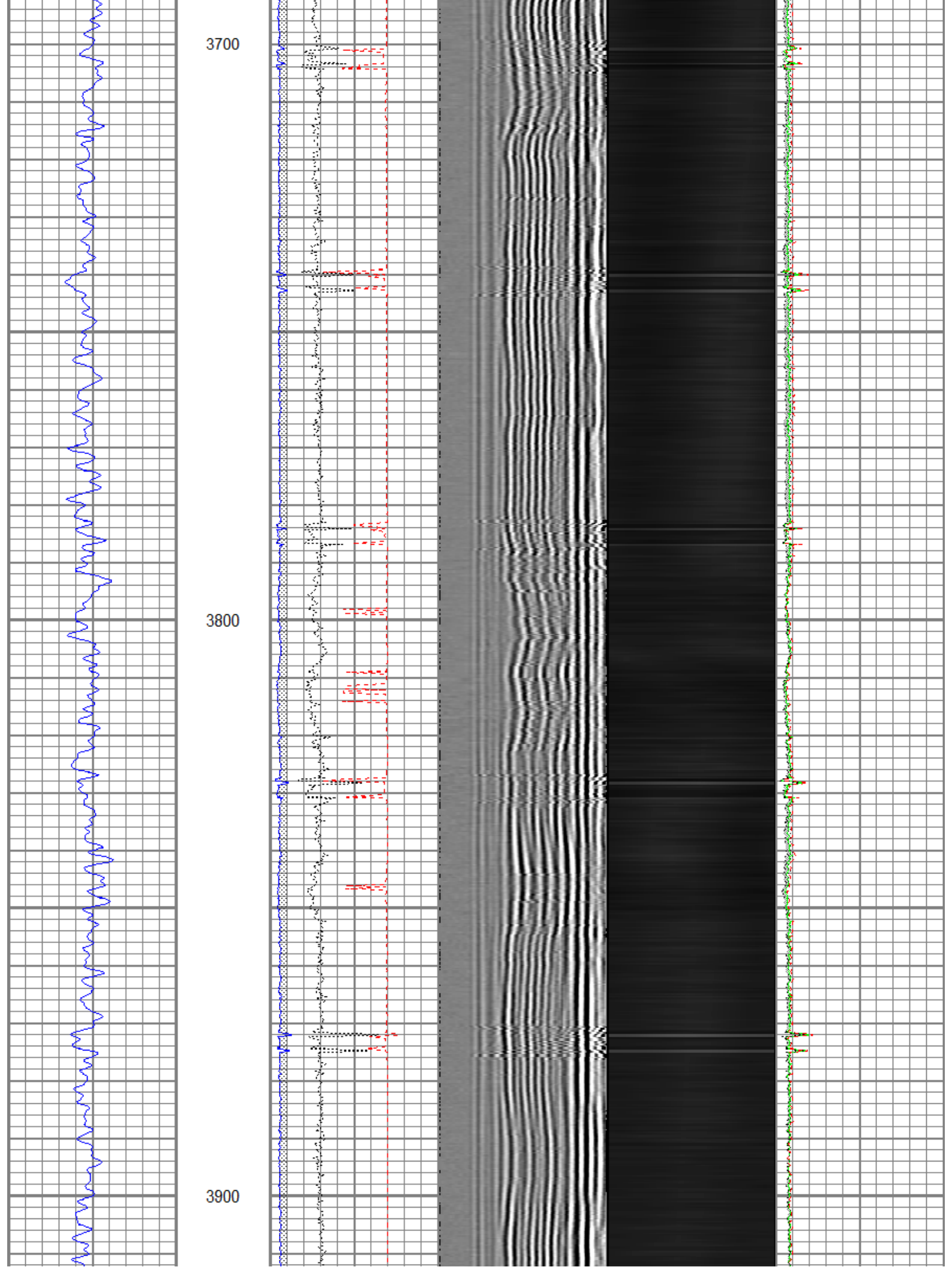


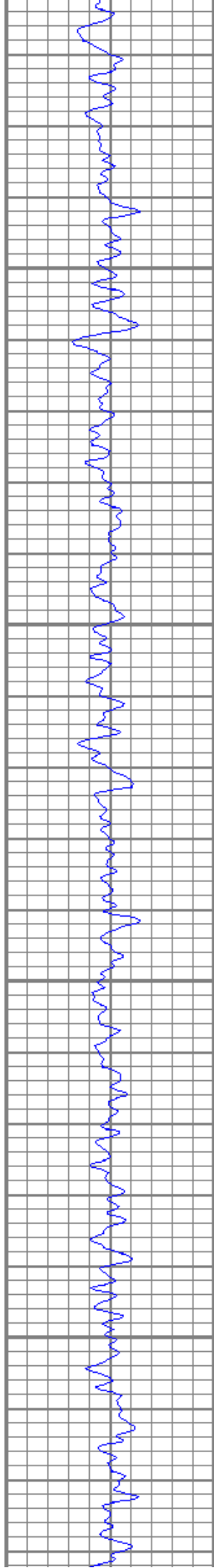


3500

3600

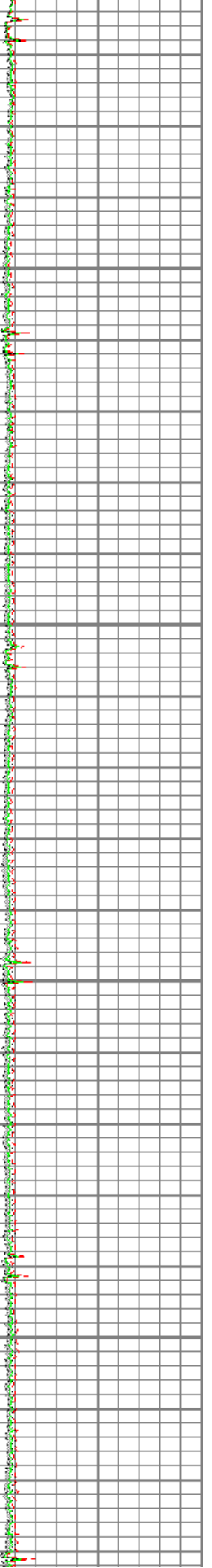
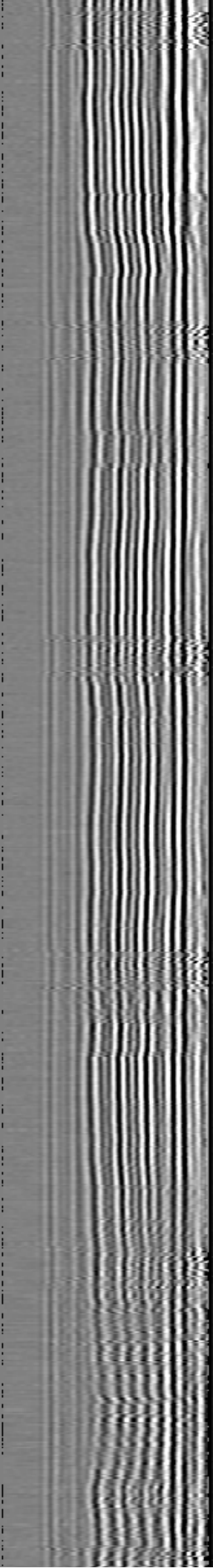
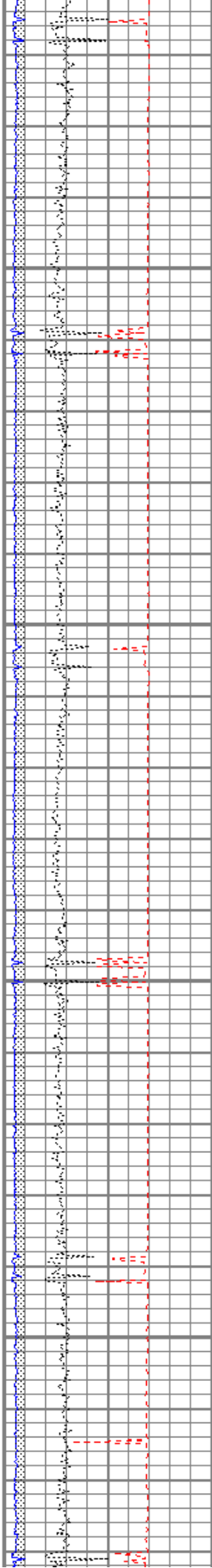


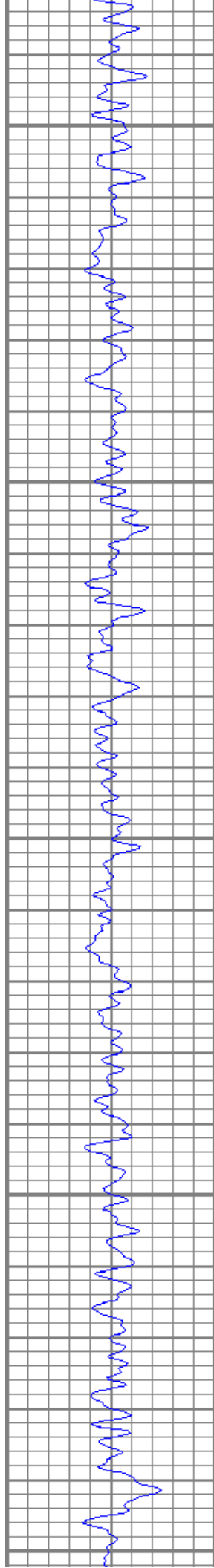




4000

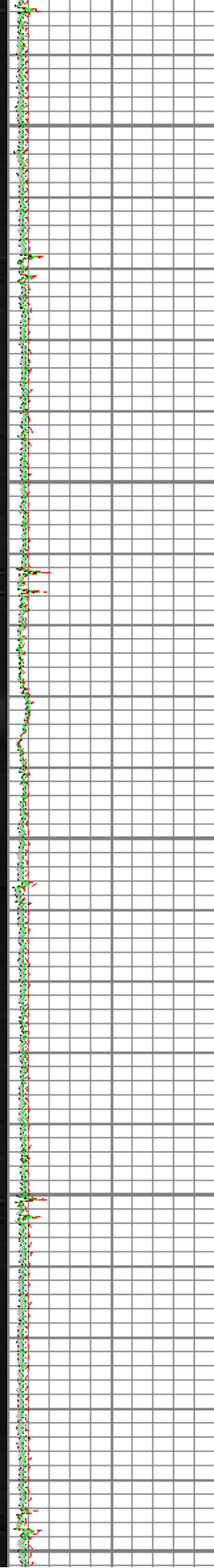
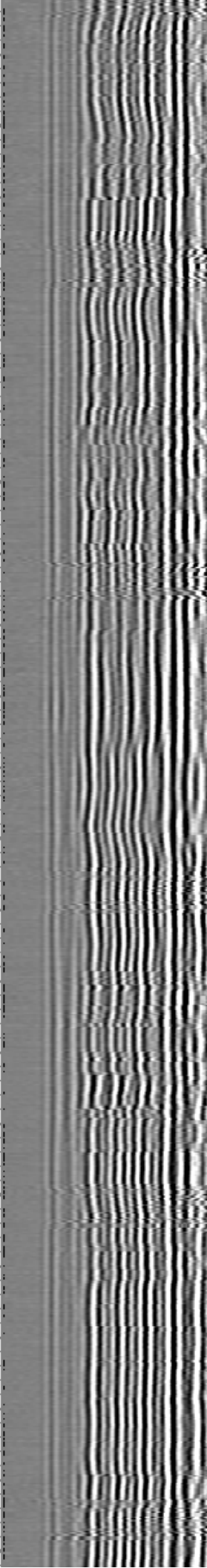
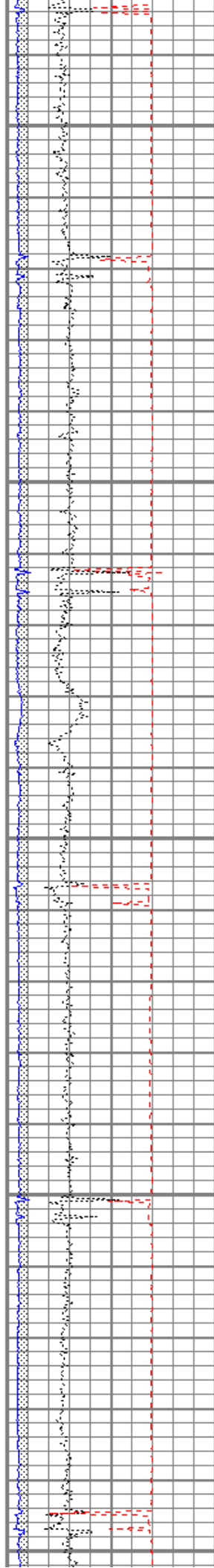
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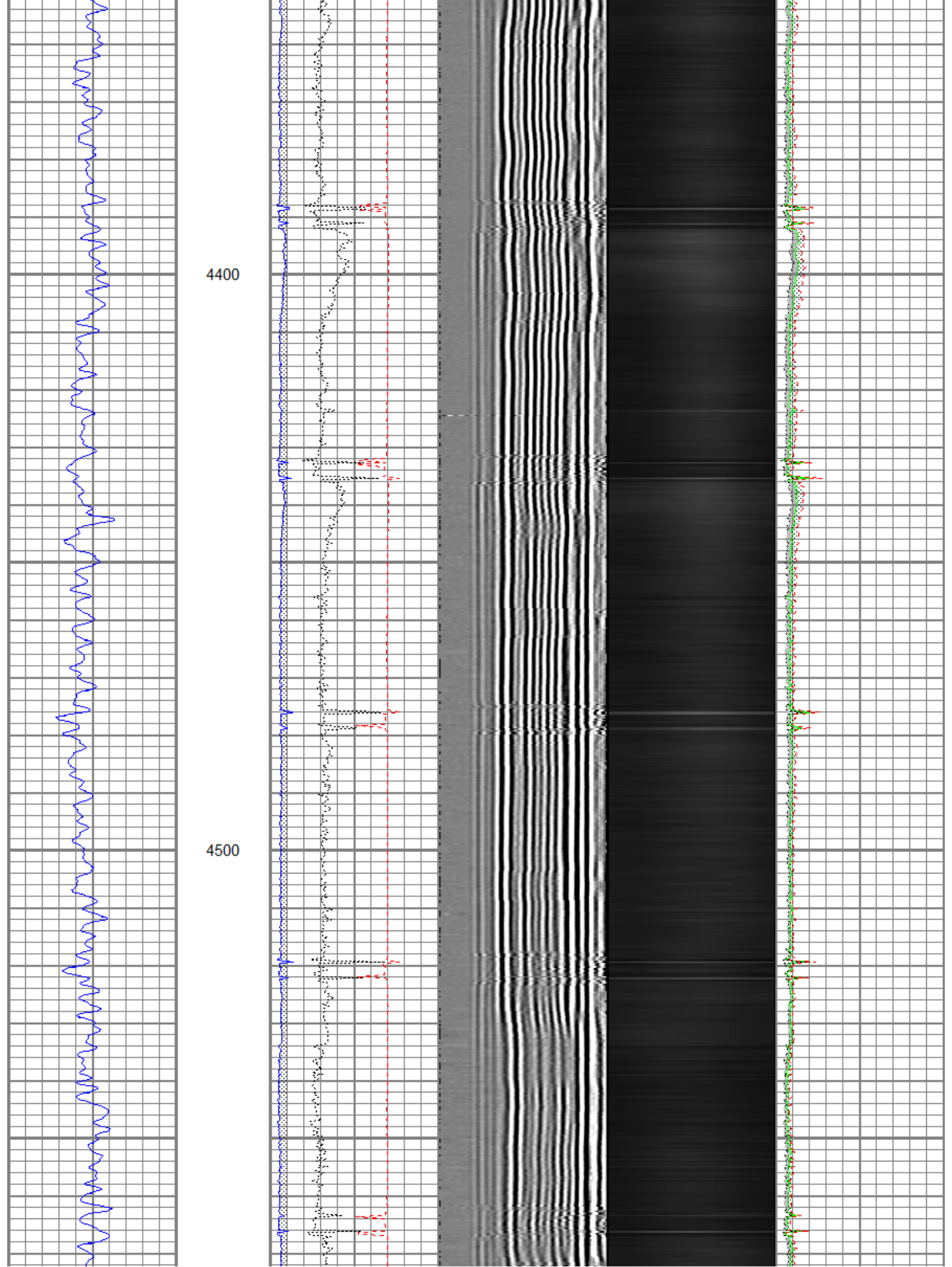


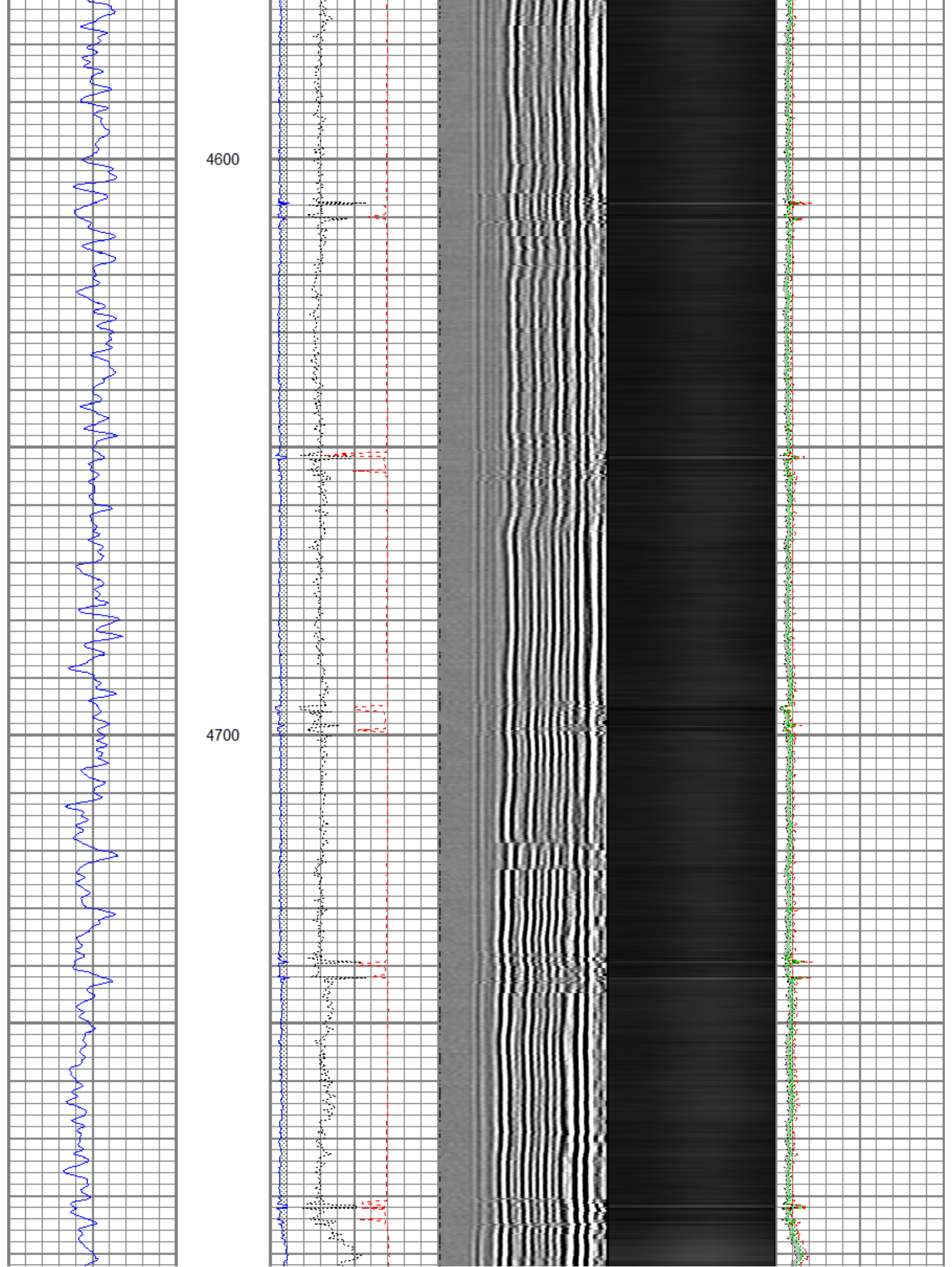


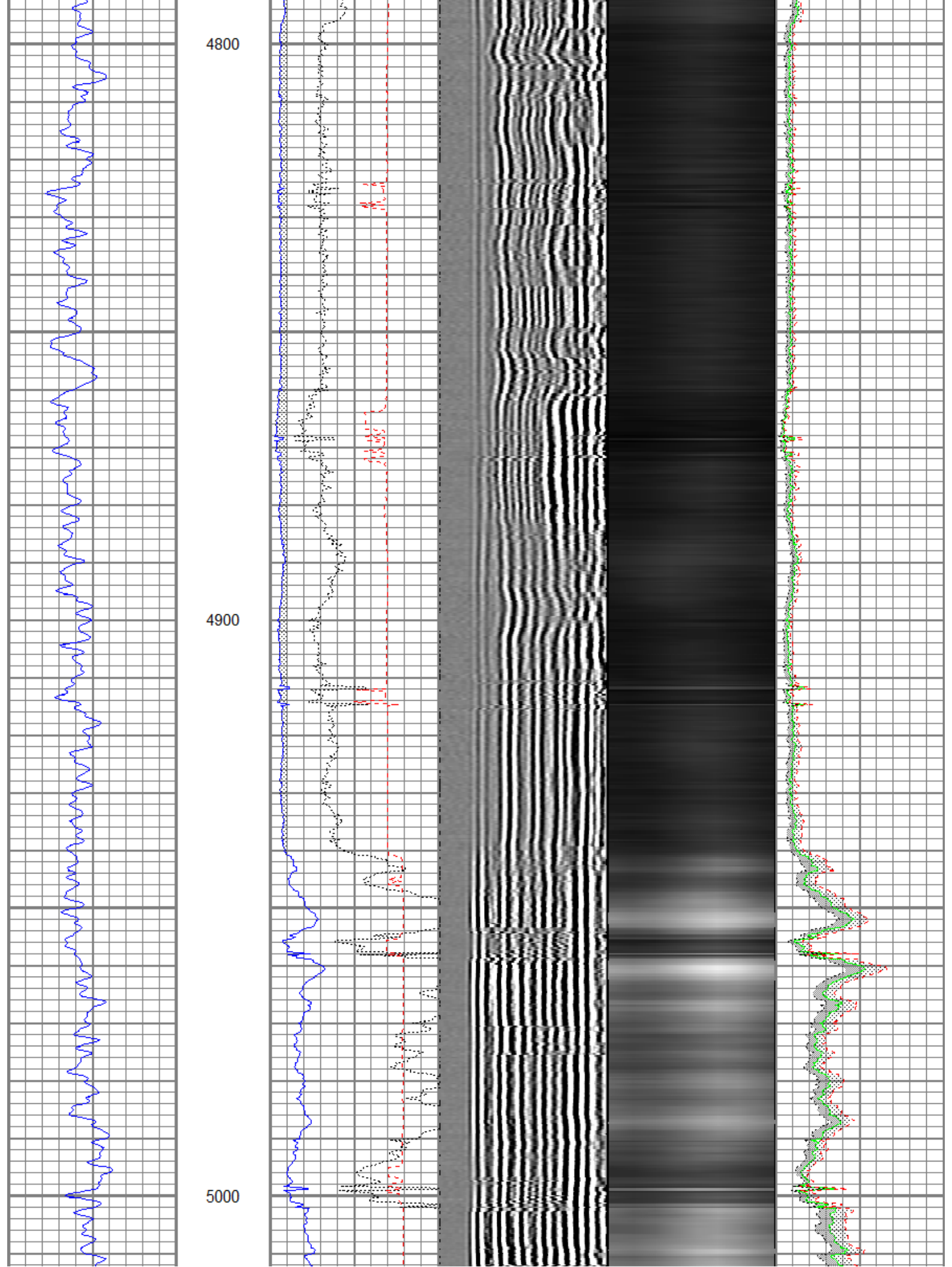
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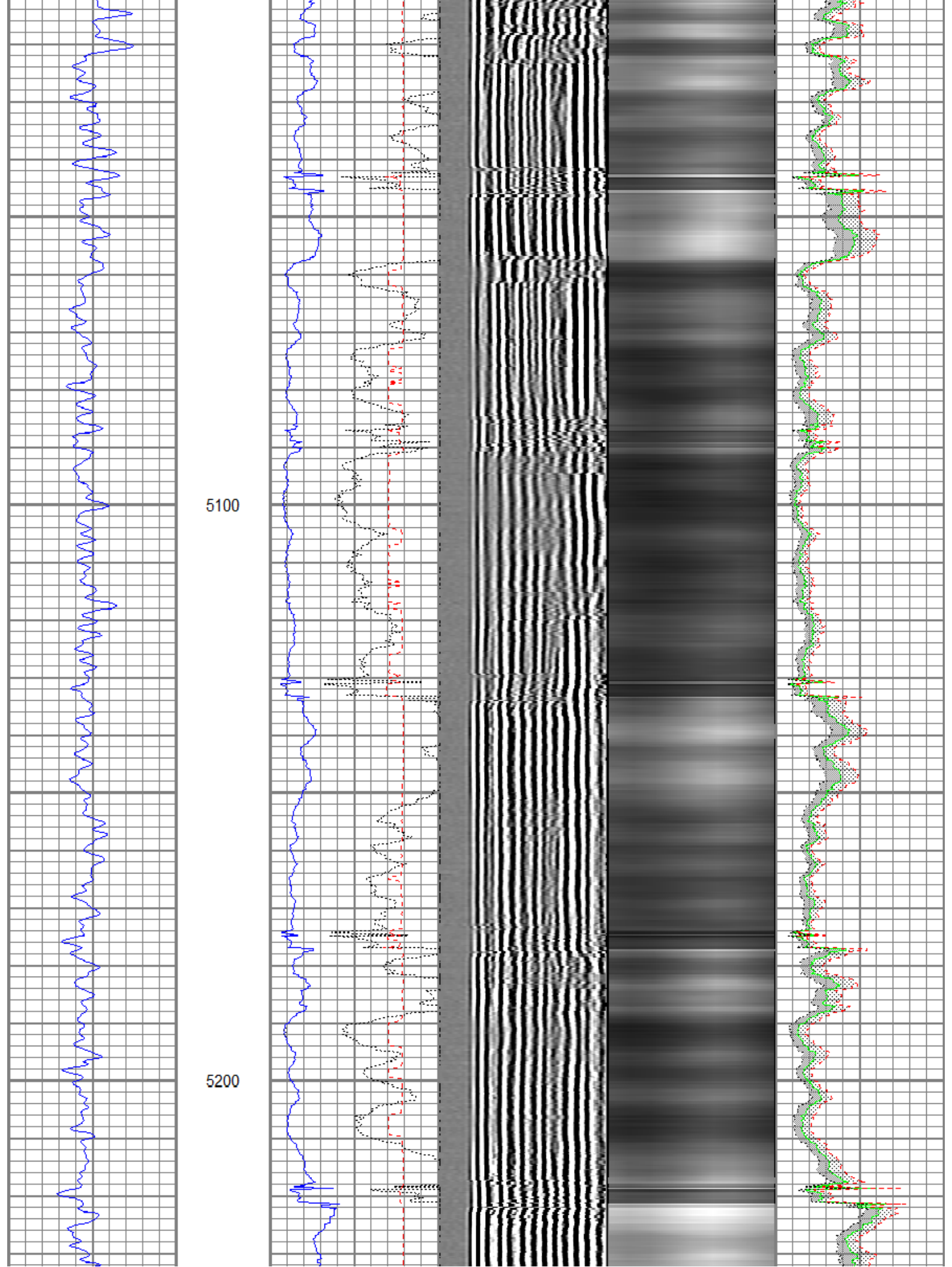
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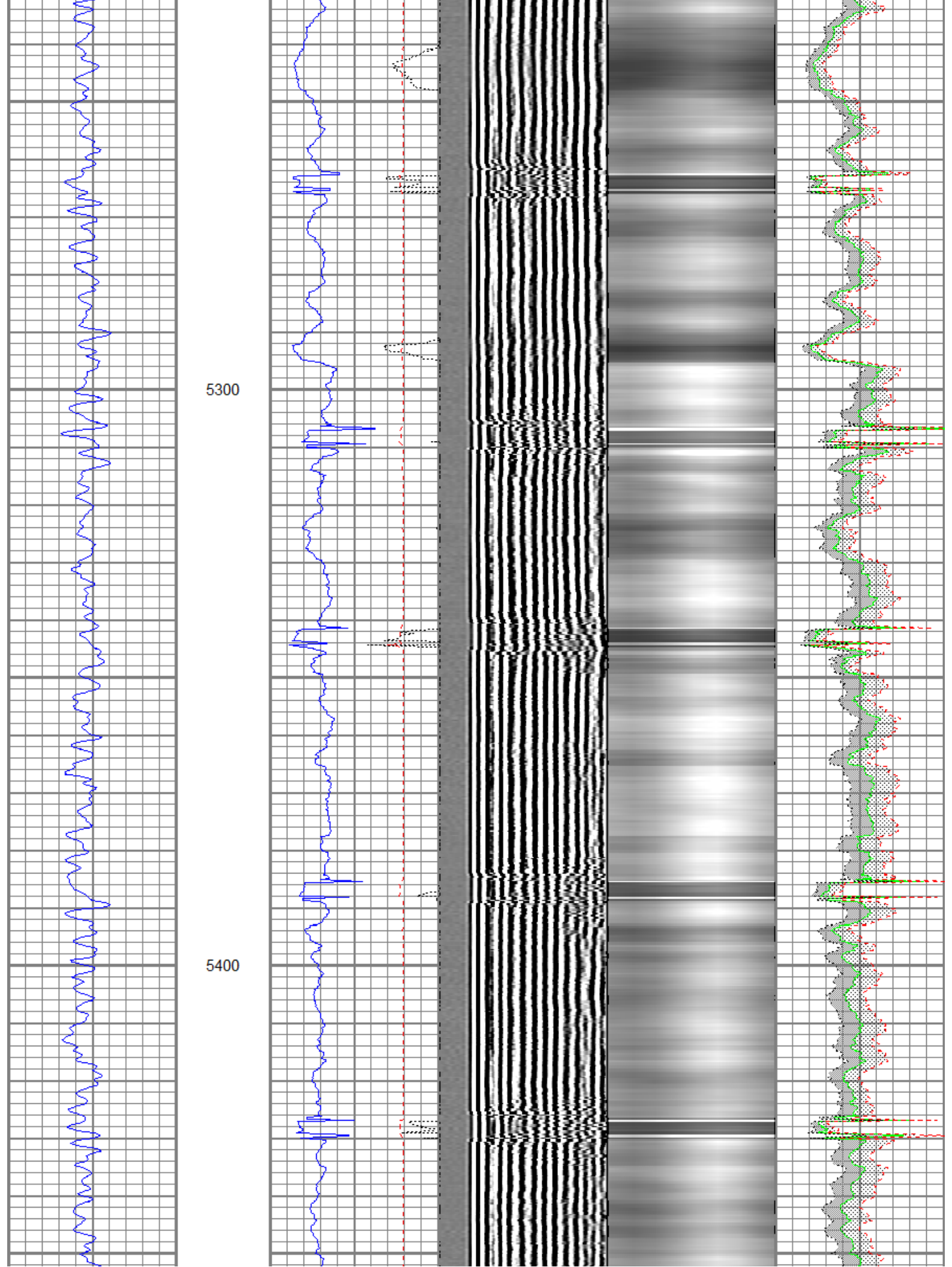


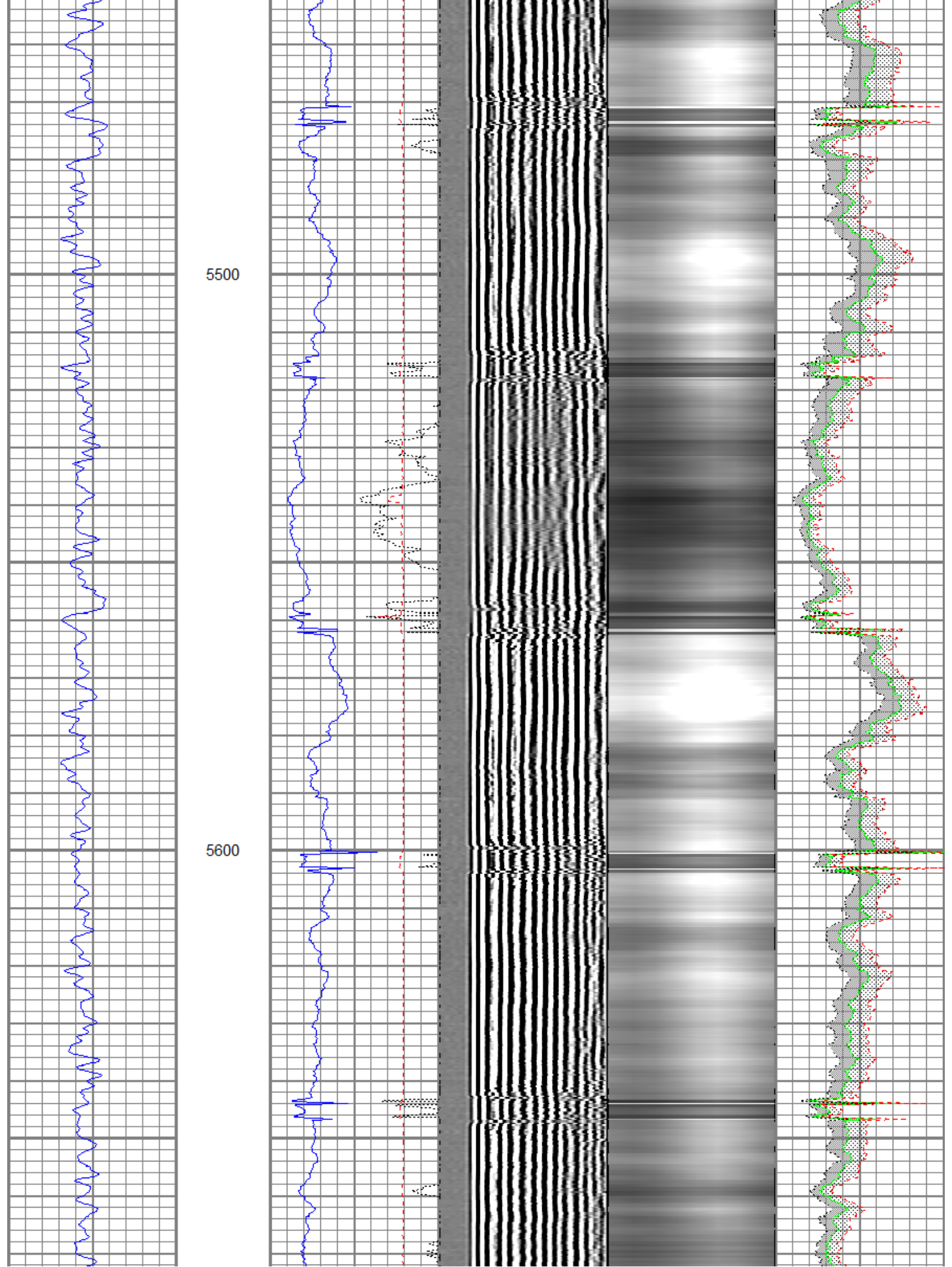


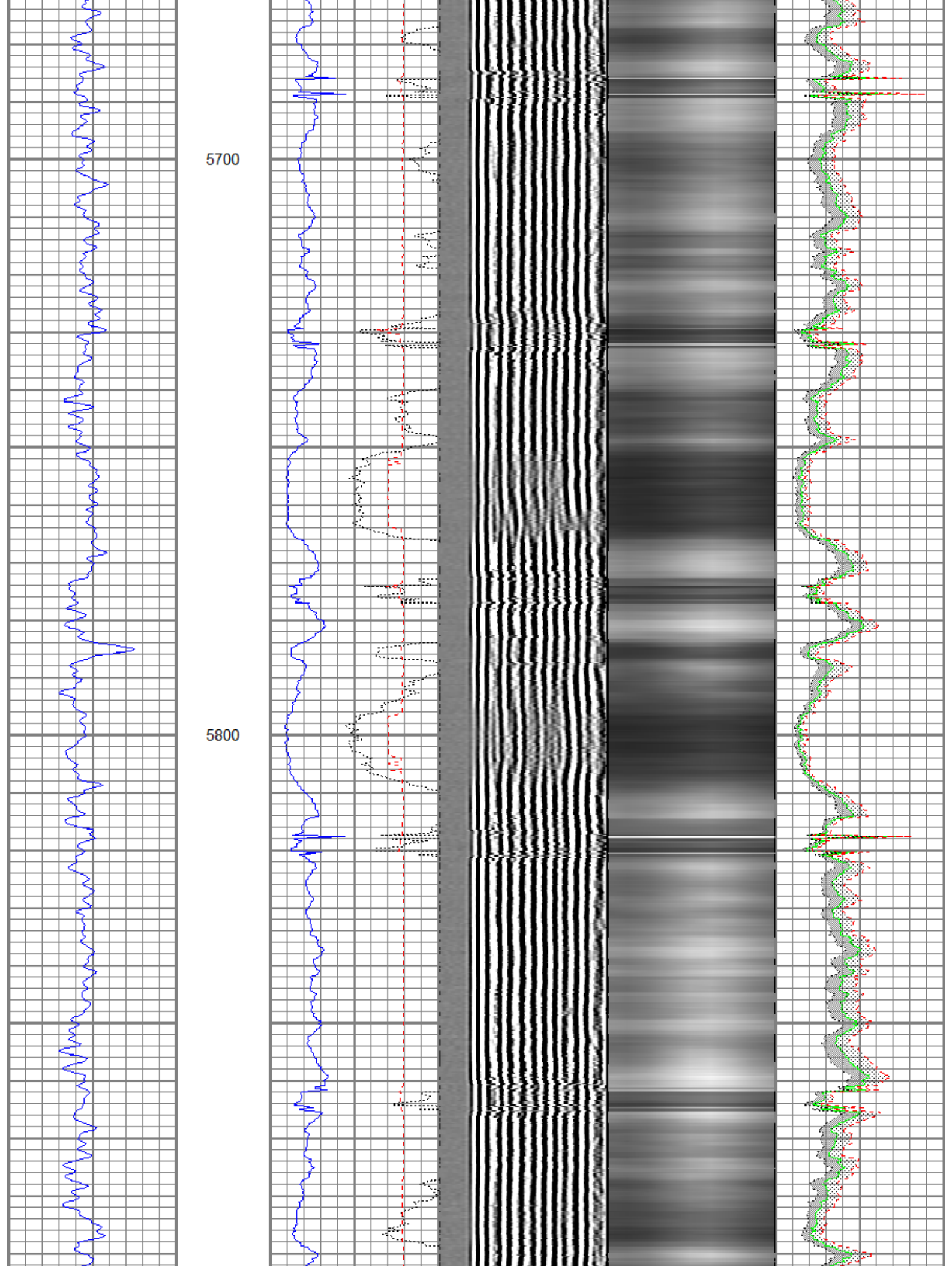


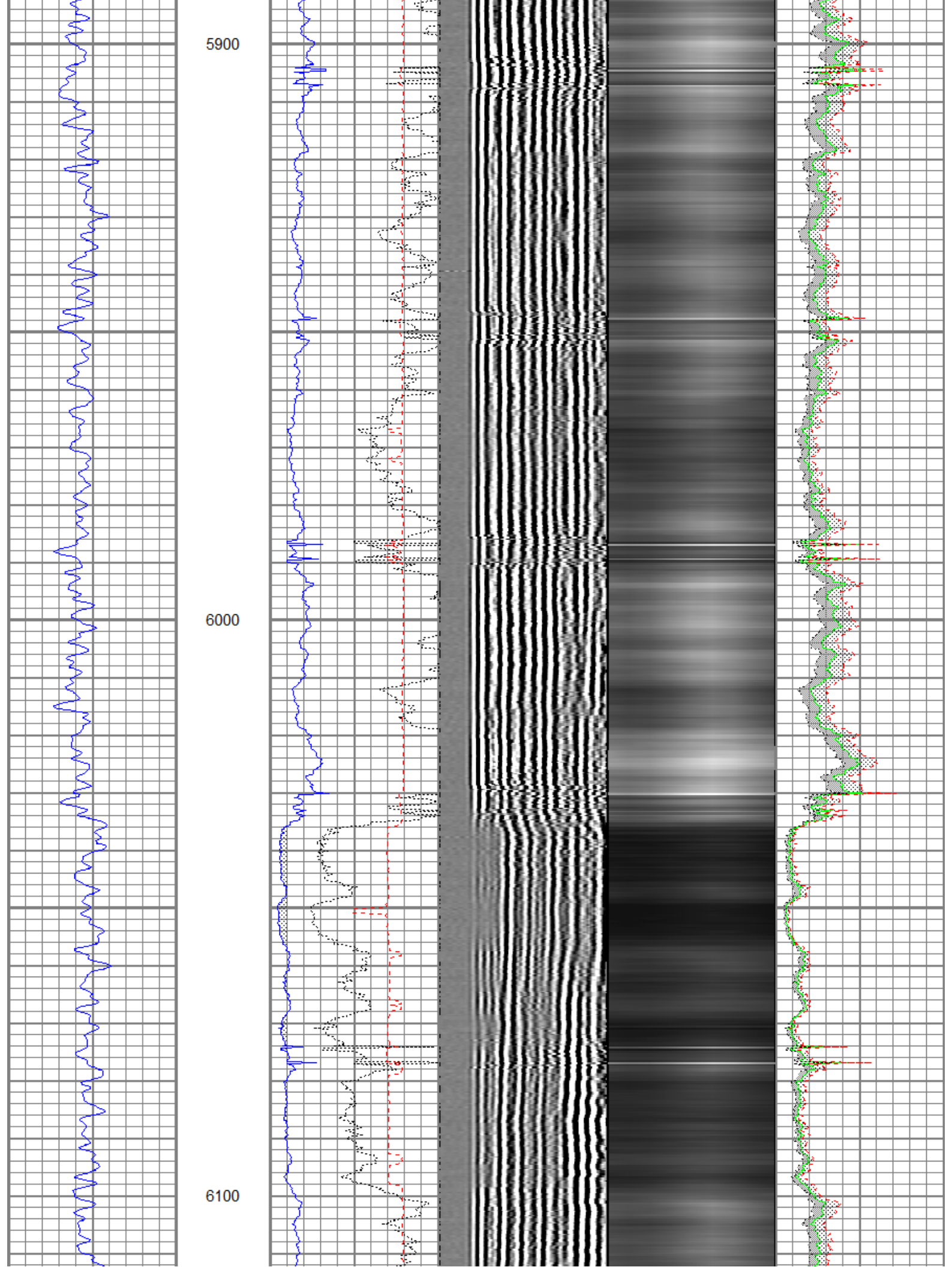


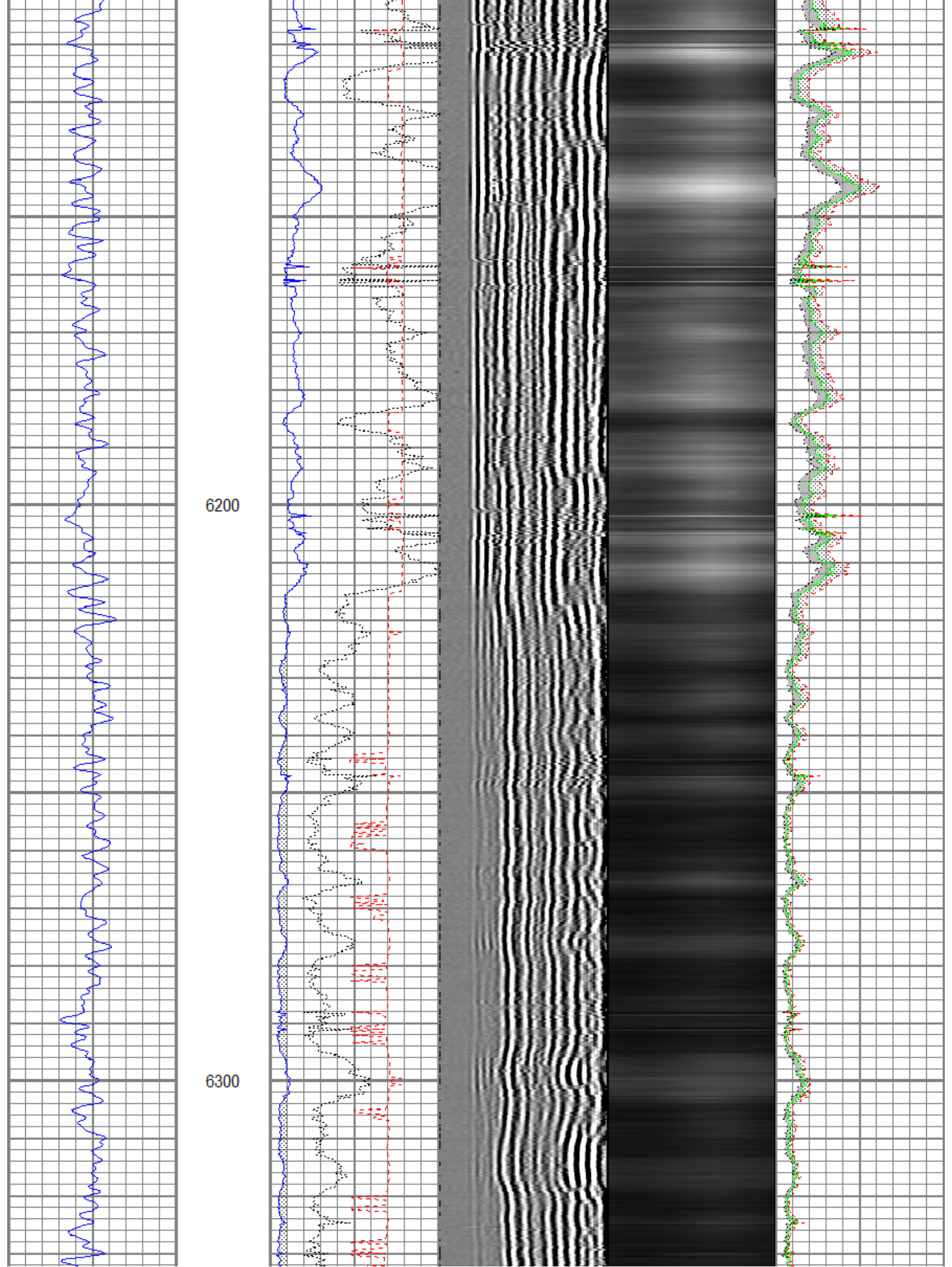


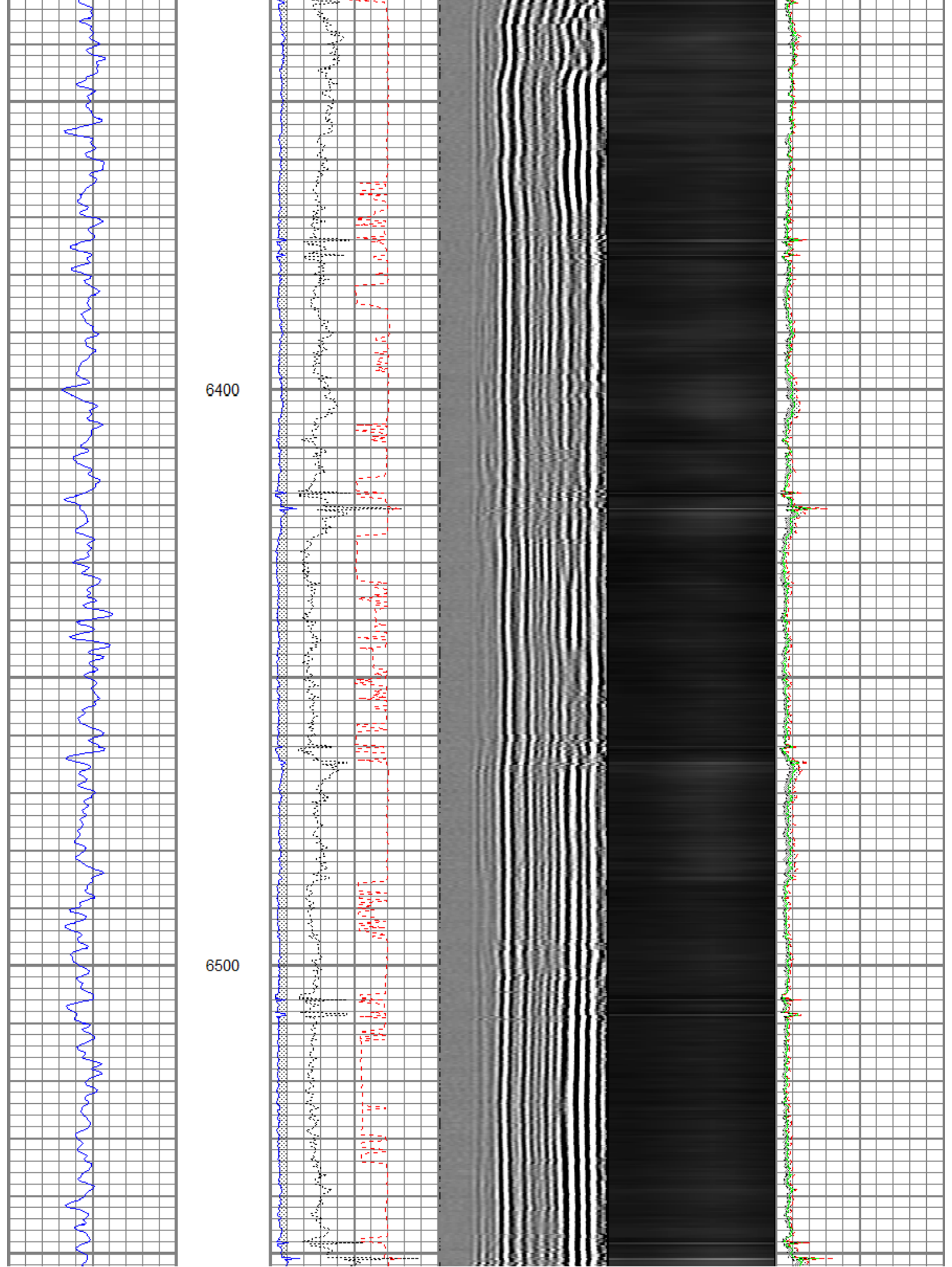


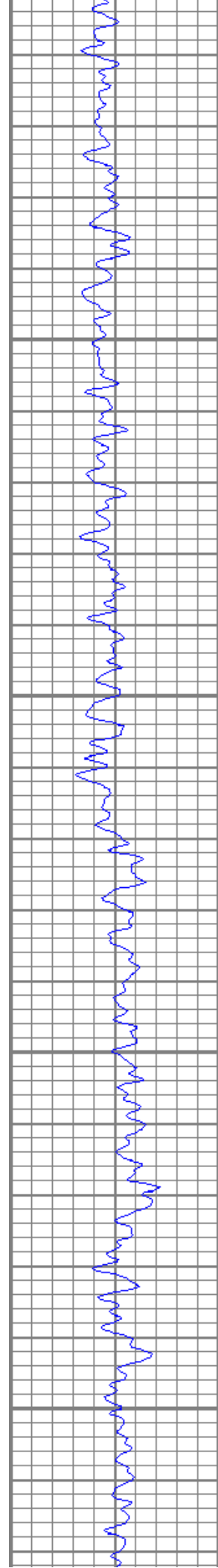






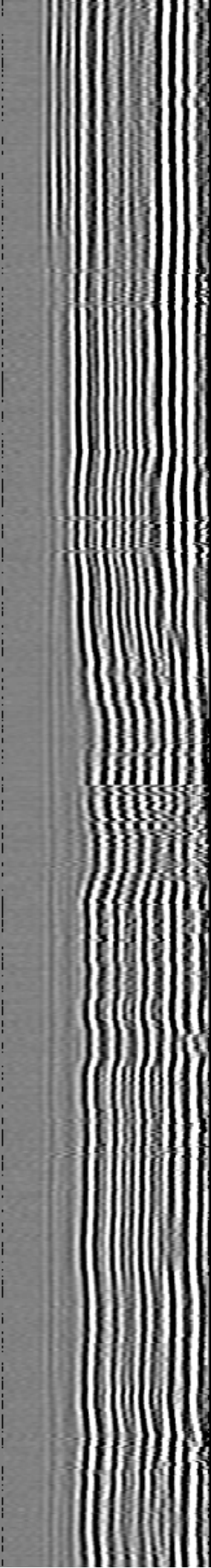
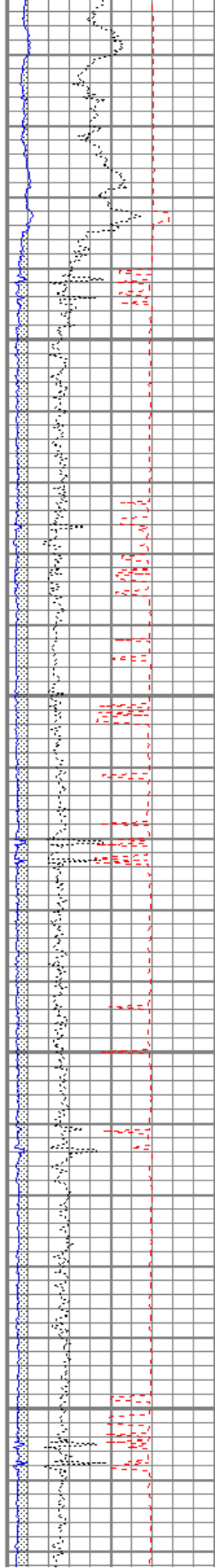


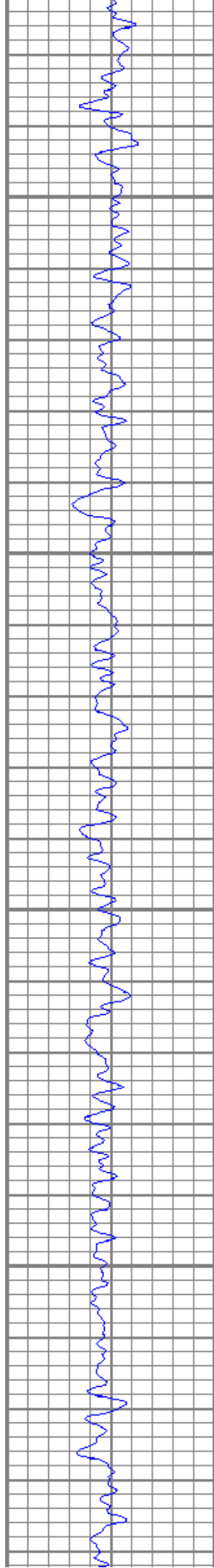




6600

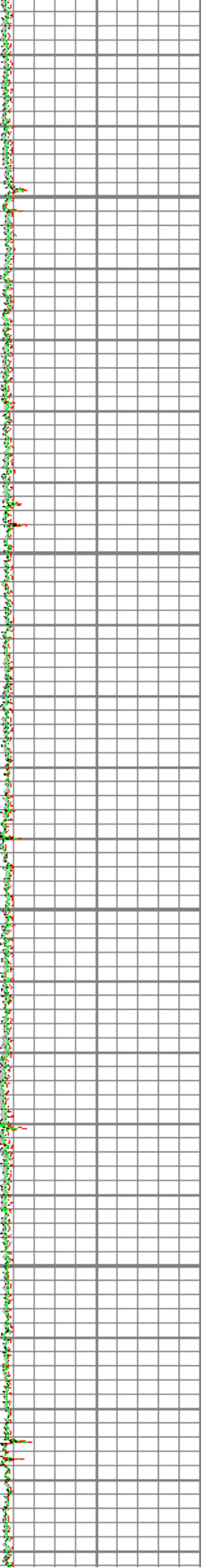
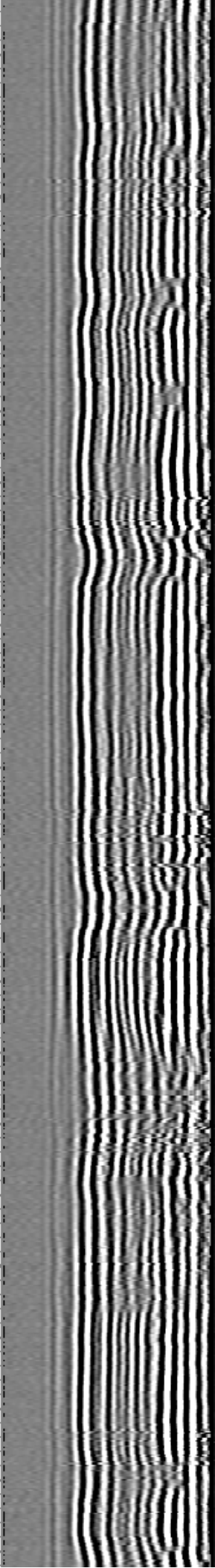
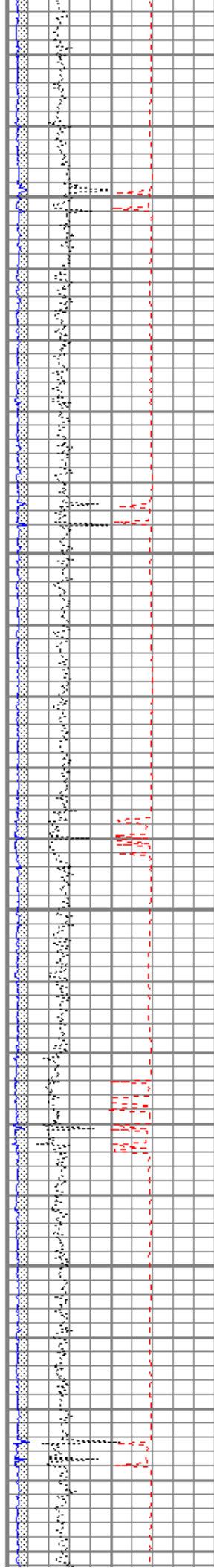
6700

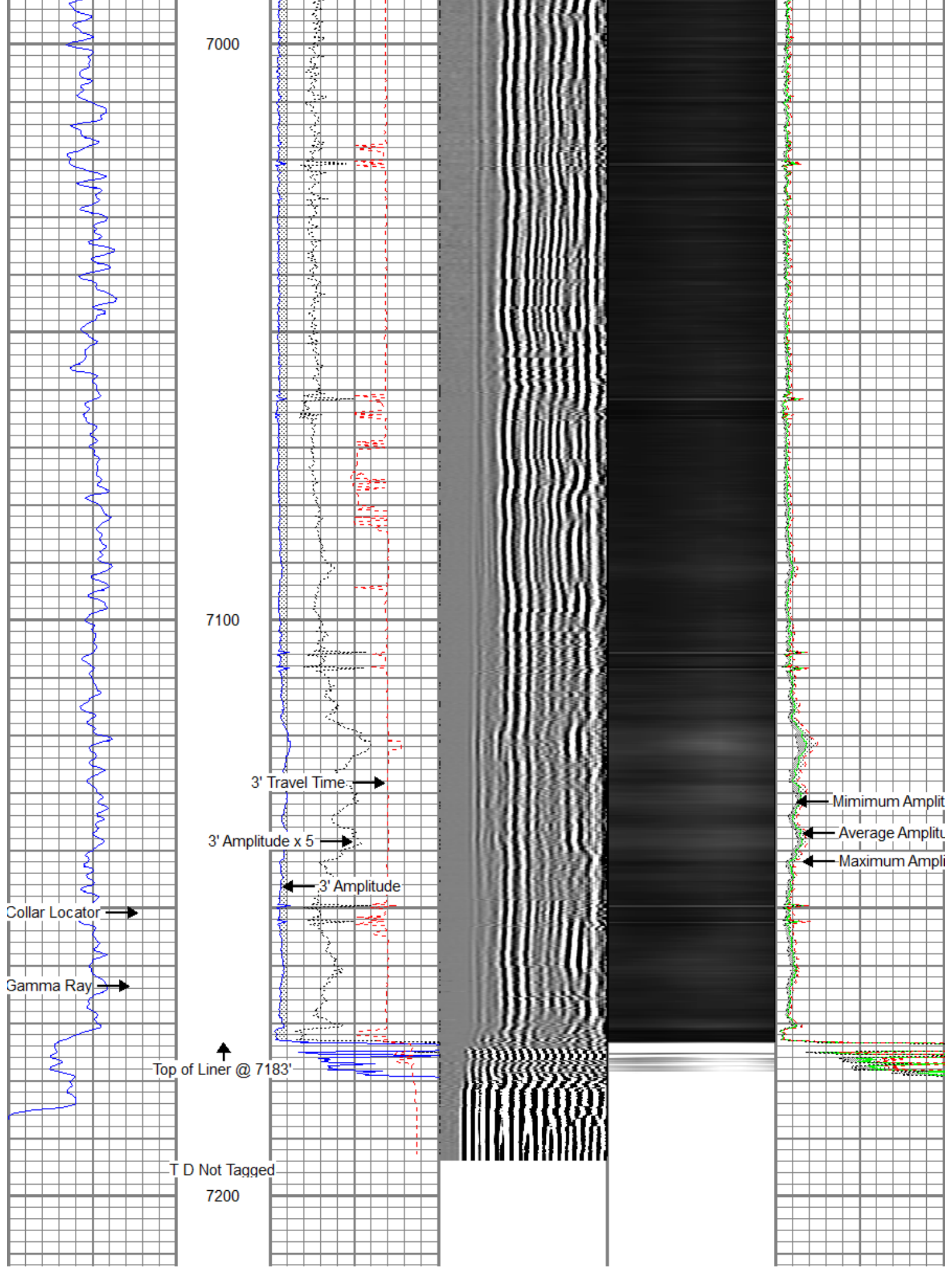




6800

6900





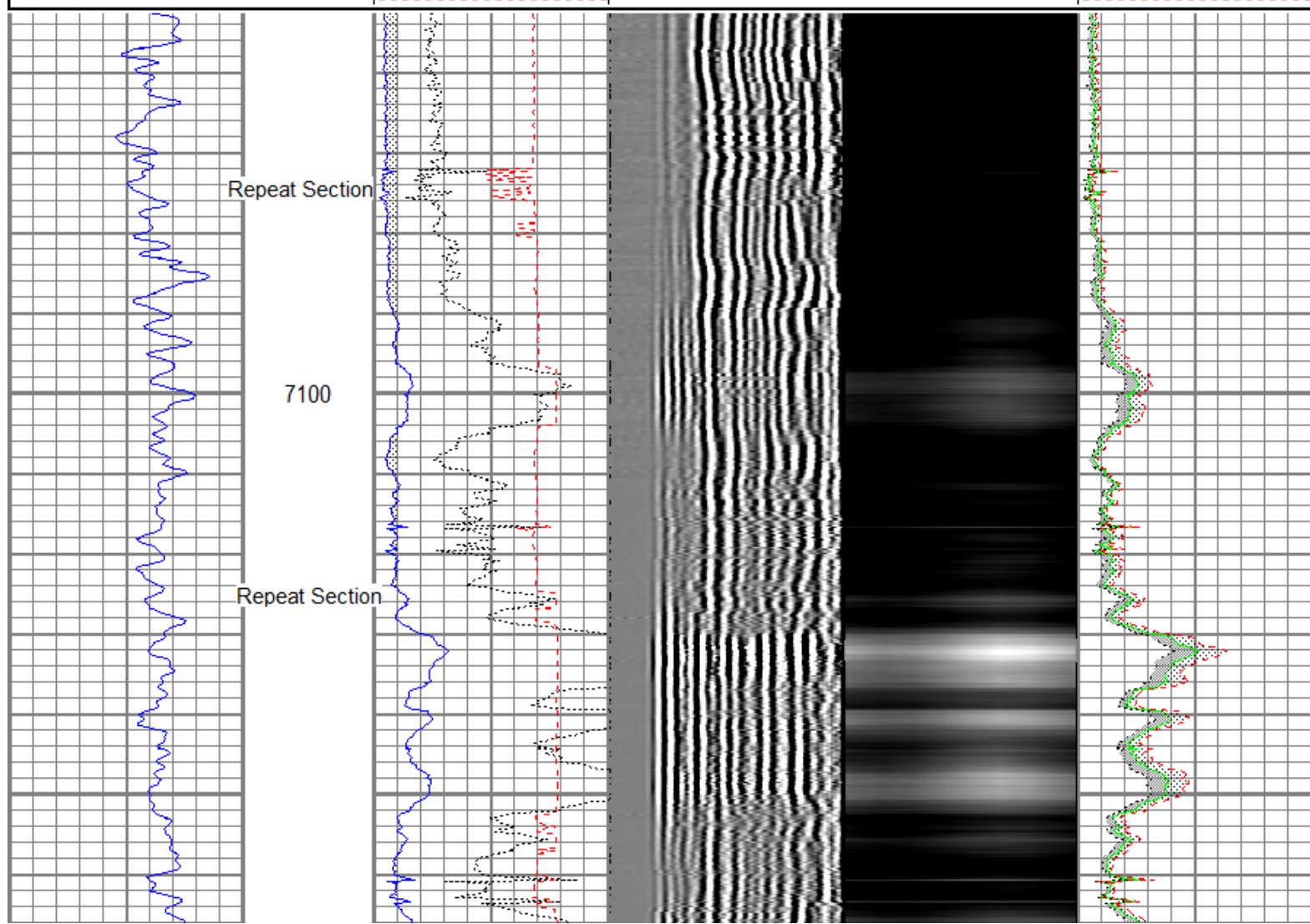
Gamma Ray (GAPI)	3' Amplitude (mV)	5' Variable Density Log	Sector Map	Average Amplitude
0 150	0 100	200 1200		0 100
	3' Amplitude x 5 (mV)			Minimum Amplitude
	0 20			0 100
	3' Travel Time (usec)			Maximum Amplitude
	650 150			0 100

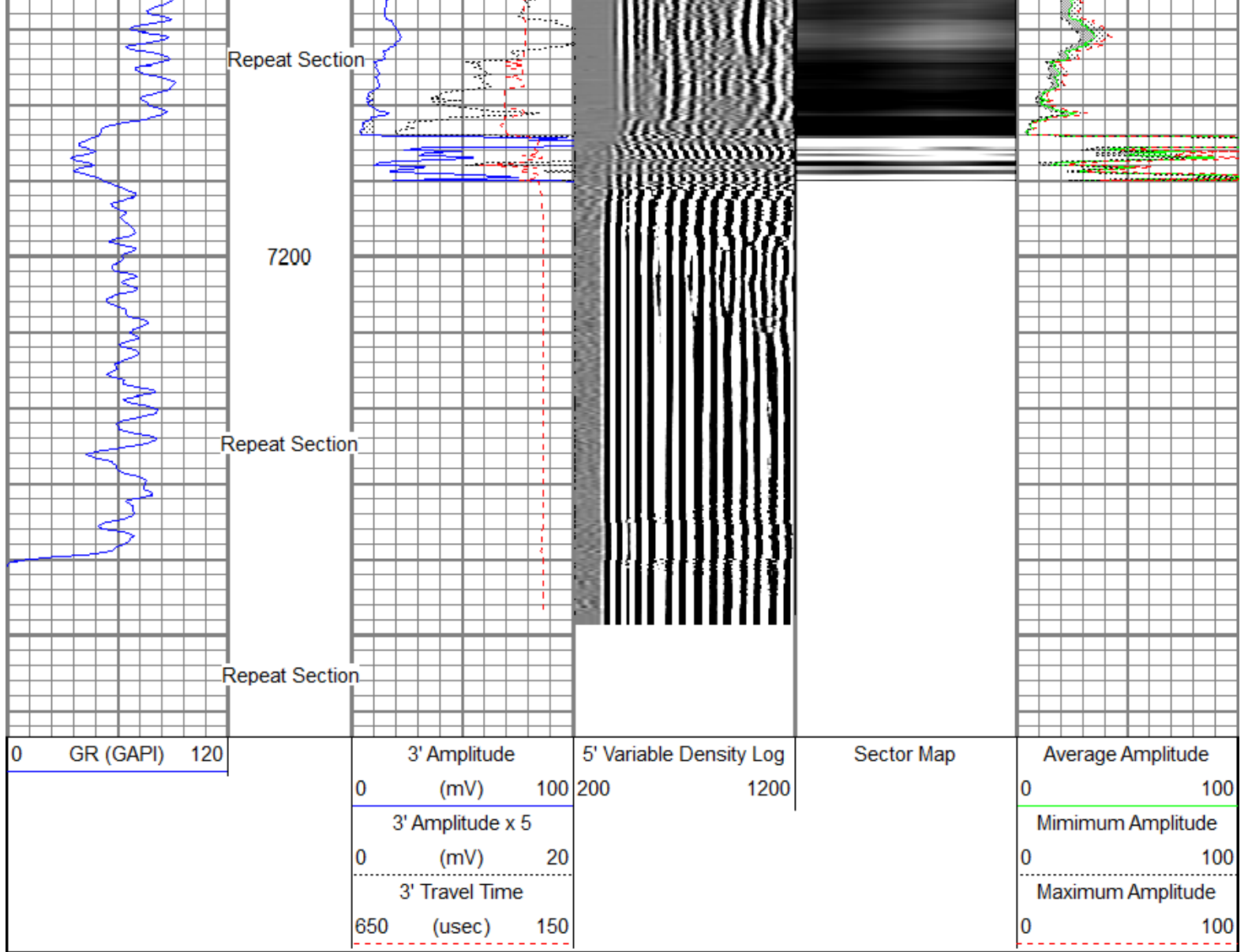


Repeat Pass 0 PSI

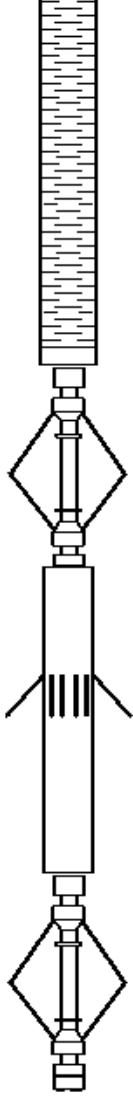
Database File: anadarko_howard 29c-28hz_21-nov-2013_rcbl cil (2).db
 Dataset Pathname: pass4
 Presentation Format: rib
 Dataset Creation: Thu Nov 21 08:32:25 2013 by Log Sondex V7.03
 Charted by: Depth in Feet scaled 1:240

GR (GAPI)	3' Amplitude (mV)	5' Variable Density Log	Sector Map	Average Amplitude
0 120	0 100	200 1200		0 100
	3' Amplitude x 5 (mV)			Minimum Amplitude
	0 20			0 100
	3' Travel Time (usec)			Maximum Amplitude
	650 150			0 100





Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
GR	23.67		AES 1-7/16" Cablehead	1.08	1.44	1.00
			AGS-001 (219135) Adaptor GO to Sondex	0.21	1.69	1.00
			XTU-002 (051219) Crossover Ultrawire Toolbus to Ultralink	1.58	1.69	6.50
			PGR-020 (10013899) Production Gamma Ray	1.93	1.69	9.50
			PRC-057 (1037) 2-3/4" 4-Arm Production Roller Centraliser	2.98	2.75	32.00

WVF3FT	15.85		RBT-004 (10013454in7) Radial Bond Tool (UW 3 1/8)	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					
			PRC-057 (1102) 2-3/4" 4-Arm Production Roller Centraliser	2.98	2.75	32.00
MIT	5.41		MIT-042 (10014703) 40 Multifinger Imaging Tool	4.54	2.75	61.10
			PRC-057 (1101) 2-3/4" 4-Arm Production Roller Centraliser	2.98	2.75	32.00
			BUL-006 (219228) Bullnose Terminator	0.22	1.69	1.20
Dataset: anadarko_howard 29c-28hz_21-nov-2013_rcbl cil (2).db: field/well/run1/pass5 Total Length: 27.97 ft Total Weight: 316.30 lb O.D.: 3.13 in						

Calibration Report			
Database File:	anadarko_howard 29c-28hz_21-nov-2013_rcbl cil (2).db		
Dataset Pathname:	pass6		
Dataset Creation:	Thu Nov 21 11:04:25 2013 by Log Sondex V7.03		
Multi-finger Imaging Tool Calibration Report			
Serial Number:		10014703	
Number of Fingers:		40	
Tool Model:		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			

Ring size: (in)	4	Sens	5	Sens	6	Sens	7
Finger 01:	1184	378.0	1562	344.0	1906	388.0	2294
Finger 02:	1116	390.0	1506	360.0	1866	403.0	2269
Finger 03:	1140	386.0	1526	350.0	1876	392.0	2268
Finger 04:	1073	422.0	1495	370.0	1865	402.0	2267
Finger 05:	899	358.0	1257	324.0	1581	374.0	1955
Finger 06:	1110	394.0	1504	375.0	1879	407.0	2286
Finger 07:	1128	391.0	1519	375.0	1894	397.0	2291
Finger 08:	1077	394.0	1471	393.0	1864	416.0	2280
Finger 09:	1150	392.0	1542	385.0	1927	392.0	2319
Finger 10:	1116	387.0	1503	394.0	1897	399.0	2296
Finger 11:	1089	380.0	1469	405.0	1874	412.0	2286
Finger 12:	1174	374.0	1548	389.0	1937	375.0	2312
Finger 13:	1096	365.0	1461	416.0	1877	419.0	2296
Finger 14:	1061	374.0	1435	435.0	1870	428.0	2298
Finger 15:	1038	367.0	1405	447.0	1852	436.0	2288
Finger 16:	1087	357.0	1444	437.0	1881	422.0	2303
Finger 17:	1123	345.0	1468	423.0	1891	404.0	2295
Finger 18:	1137	338.0	1475	420.0	1895	405.0	2300
Finger 19:	1109	342.0	1451	437.0	1888	419.0	2307
Finger 20:	980	311.0	1291	503.0	1794	423.0	2217
Finger 21:	1119	321.0	1440	425.0	1865	412.0	2277
Finger 22:	1113	327.0	1440	432.0	1872	418.0	2290
Finger 23:	1200	302.0	1502	397.0	1899	388.0	2287
Finger 24:	1104	322.0	1426	435.0	1861	423.0	2284
Finger 25:	1109	316.0	1425	422.0	1847	422.0	2269
Finger 26:	1145	220.0	1365	513.0	1878	408.0	2286
Finger 27:X	1148	220.0	1368	418.0	1786	482.0	2268
Finger 28:	1111	306.0	1417	344.0	1761	498.0	2259
Finger 29:	1105	322.0	1427	403.0	1830	426.0	2256
Finger 30:	1113	327.0	1440	395.0	1835	416.0	2251
Finger 31:	1141	325.0	1466	379.0	1845	406.0	2251
Finger 32:	1125	329.0	1454	383.0	1837	419.0	2256
Finger 33:	1122	338.0	1460	369.0	1829	409.0	2238
Finger 34:X	1092	347.0	1439	375.0	1814	421.0	2235
Finger 35:	1168	337.0	1505	339.0	1844	383.0	2227
Finger 36:	1113	359.0	1472	359.0	1831	406.0	2237
Finger 37:	1205	346.0	1551	330.0	1881	380.0	2261
Finger 38:	1163	362.0	1525	340.0	1865	394.0	2259
Finger 39:	1135	376.0	1511	349.0	1860	401.0	2261
Finger 40:	1068	389.0	1457	365.0	1822	423.0	2245

Post Survey Calibration Check

Performed:

Thu Nov 21 11:04:14 2013

Ring size: (in)	4	Nom. wear	5	Nom. wear	6	Nom. wear	7	Nom. wear
Finger 01:	4.088	0.044	5.102	0.051	6.091	0.046	7.069	0.035
Finger 02:	4.098	0.049	5.106	0.053	6.094	0.047	7.103	0.052
Finger 03:	4.098	0.049	5.110	0.055	6.104	0.052	7.106	0.053
Finger 04:	4.105	0.052	5.031	0.016	6.032	0.016	7.057	0.029
Finger 05:	4.118	0.059	5.109	0.054	6.117	0.059	7.113	0.056
Finger 06:	4.094	0.047	5.108	0.054	6.098	0.049	7.089	0.044
Finger 07:	4.102	0.051	5.112	0.056	6.098	0.049	7.098	0.049
Finger 08:	4.095	0.047	5.106	0.053	6.098	0.049	7.097	0.049
Finger 09:	4.101	0.051	5.109	0.054	6.095	0.047	7.090	0.045
Finger 10:	4.095	0.048	5.100	0.050	6.092	0.046	7.092	0.046
Finger 11:	4.096	0.048	5.105	0.053	6.095	0.047	7.097	0.048
Finger 12:	4.095	0.048	5.104	0.052	6.092	0.046	7.094	0.047
Finger 13:	4.105	0.053	5.110	0.055	6.104	0.052	7.084	0.042
Finger 14:	4.100	0.050	5.093	0.047	6.088	0.044	7.084	0.042
Finger 15:	4.102	0.051	5.101	0.051	6.091	0.046	7.087	0.044
Finger 16:	4.095	0.048	5.094	0.047	6.089	0.044	7.087	0.044
Finger 17:	4.090	0.045	5.091	0.045	6.092	0.046	7.100	0.050
Finger 18:	4.091	0.046	5.085	0.043	6.094	0.047	7.092	0.046
Finger 19:	4.096	0.048	5.088	0.044	6.094	0.047	7.092	0.046
Finger 20:	4.217	0.108	5.171	0.085	6.001	0.000	6.996	-0.002
Finger 21:	4.088	0.044	5.087	0.044	6.096	0.048	7.095	0.048
Finger 22:	4.087	0.044	5.084	0.044	6.096	0.048	7.095	0.048

Finger 22:	4.087	0.043	5.081	0.040	6.089	0.043	7.096	0.048
Finger 23:	4.082	0.041	5.083	0.042	6.093	0.046	7.100	0.050
Finger 24:	4.090	0.045	5.087	0.043	6.094	0.047	7.103	0.051
Finger 25:	4.091	0.045	5.081	0.040	6.093	0.046	7.107	0.054
Finger 26:	4.109	0.054	5.244	0.122	6.065	0.032	7.067	0.033
Finger 27:	-----	-----	-----	-----	-----	-----	-----	-----
Finger 28:	4.125	0.063	5.148	0.074	6.226	0.113	7.073	0.037
Finger 29:	4.084	0.042	5.079	0.040	6.093	0.046	7.101	0.050
Finger 30:	4.089	0.045	5.083	0.041	6.103	0.051	7.120	0.060
Finger 31:	4.128	0.064	5.113	0.057	6.109	0.054	7.094	0.047
Finger 32:	4.076	0.038	5.088	0.044	6.094	0.047	7.088	0.044
Finger 33:	4.038	0.019	5.080	0.040	6.093	0.046	7.095	0.048
Finger 34:	-----	-----	-----	-----	-----	-----	-----	-----
Finger 35:	4.050	0.025	4.801	-0.100	6.069	0.034	7.076	0.038
Finger 36:	4.100	0.050	4.816	-0.092	6.100	0.050	7.103	0.052
Finger 37:	4.104	0.052	5.109	0.054	6.103	0.051	7.094	0.047
Finger 38:	4.125	0.062	5.124	0.062	6.113	0.056	7.098	0.049
Finger 39:	4.098	0.049	5.093	0.046	6.092	0.046	7.089	0.044
Finger 40:	4.116	0.058	5.126	0.063	6.116	0.058	7.106	0.053
Average:	4.099	0.050	5.088	0.044	6.095	0.047	7.090	0.045

Segmented Cement Bond Log Calibration Report

Serial Number:	10013454in7
Tool Model:	004
Calibration Casing Diameter:	7.000 in
Calibration Depth:	3122.921 ft

Master Calibration, performed Sun Nov 03 08:37:59 2013:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	-0.003	0.732	0.800	62.165	83.579	1.024
5FT	-0.005	0.767	0.800	62.165	79.514	1.188
S1	-0.003	0.701	0.000	100.000	142.181	0.361
S2	-0.004	0.770	0.000	100.000	129.234	0.516
S3	-0.004	0.819	0.000	100.000	121.511	0.445
S4	-0.005	0.816	0.000	100.000	121.775	0.664
S5	-0.003	0.759	0.000	100.000	131.083	0.456
S6	-0.003	0.695	0.000	100.000	143.370	0.396
S7	-0.002	0.646	0.000	100.000	154.243	0.382
S8	-0.004	0.653	0.000	100.000	152.155	0.613

Gamma Ray Calibration Report

Serial Number:	10013899	
Tool Model:	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	Howard 29C-28HZ
Field	Wattenberg
County	Weld
State	Colorado

