



Radial Cement Bond  
Gamma Ray  
Casing Collar Log

Company Kerr-McGee Oil and Gas Onshore LP		Company Kerr-McGee Oil and Gas Onshore LP	
Well Jester 41N-A14HZ		Well Jester 41N-A14HZ	
Field Wattenberg		Field Wattenberg	
County Weld		County Weld	
State Colorado		State Colorado	
Location:		API #: 05-123-41346	
SEC 15 TWP 3N RGE 67W		Other Services Gauge Ring MIT	
Permanent Datum		Ground Level	
Log Measured From		Kelly Bushing	
Drilling Measured From		Kelly Bushing	
Elevation 4793'		Elevation	
K.B. 4813'		D.F. 4812'	
G.L. 4793'			
Date		3-SEPT-2015	
Run Number		Two	
Depth Driller		17028 FT	
Depth Logger		6750 FT	
Bottom Logged Interval		6746 FT	
Top Log Interval		Surface	
Open Hole Size		8.75	
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-0255	
Location		Ft. Lupton, CO	
Recorded By		B. Kalkwarf	
Witnessed By		J. Gustafson	
Borehole Record		Tubing Record	
Run Number		Bit	
From		To	
Size		Weight	
From		To	
Casing Record		Size (in)	
Surface Casing		Wgt (lbs/ft)	
Intermediate #1		Grade	
Intermediate #2		Top	
Liner		Bottom	

<<<< 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 referenced to Casing Tally reported Liner Top at 6278 FT  
Adjusted log +5 FT to correlate with Liner Top  
Gauge Ring/Junk Basket ran to 6800 FT with no debris found  
Log ran from 6750 FT to surface  
Log ran with 2800 PSI surface induced pressure  
Logging tools were clean and free of any debris upon completion of operations  
  
Thank you for choosing FMC Technologies Completion Services, Inc.!!



Main Pass

Recorded With 2800 PSI Surface Induced Pressure

Database File: c:\warrior\data\0512341346\_anadarko\_jester 41n\_a14hz\_09-03-15\_mit\_rbl\0512341346\_anadarko\_je

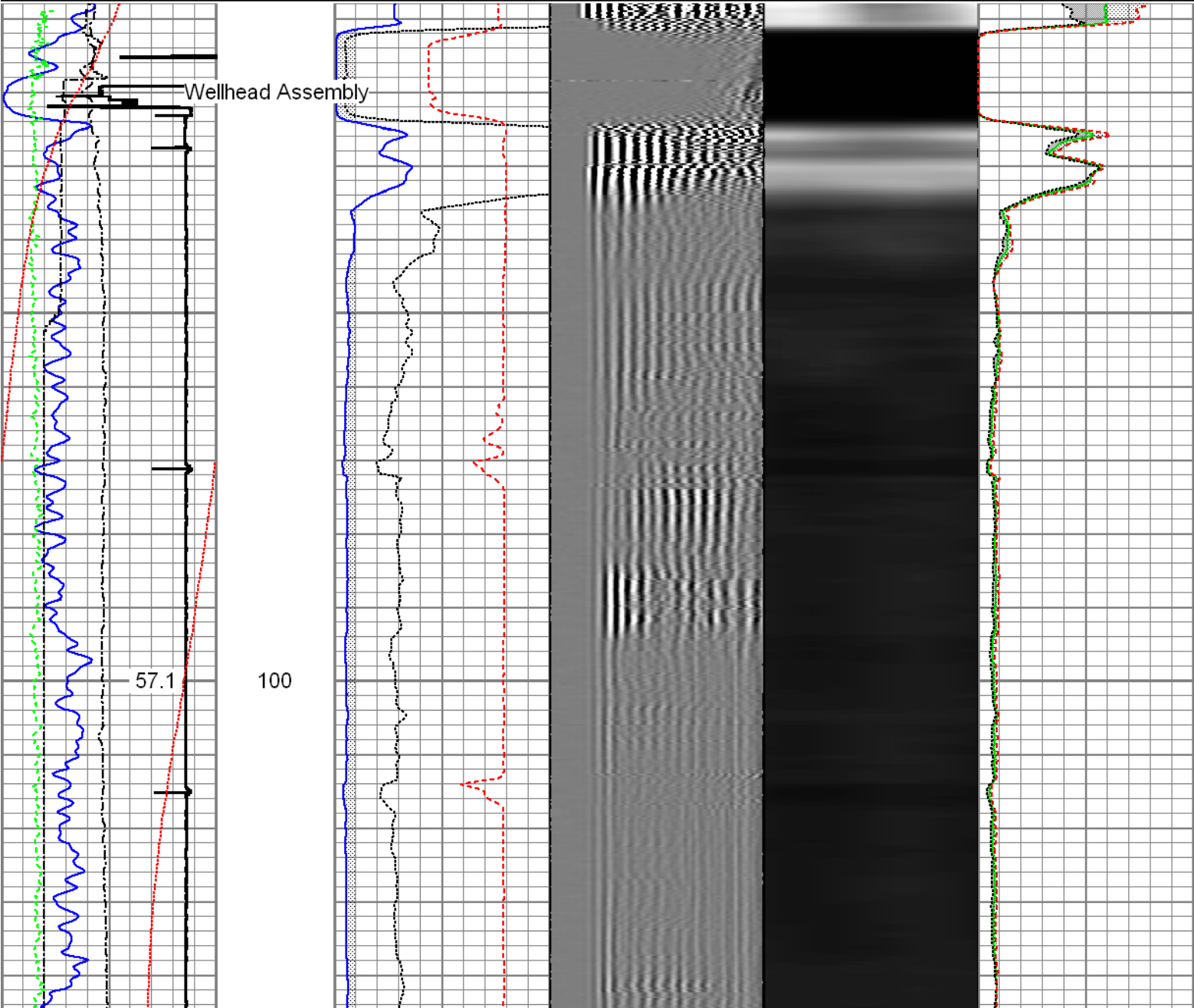
Dataset Pathname: pass5

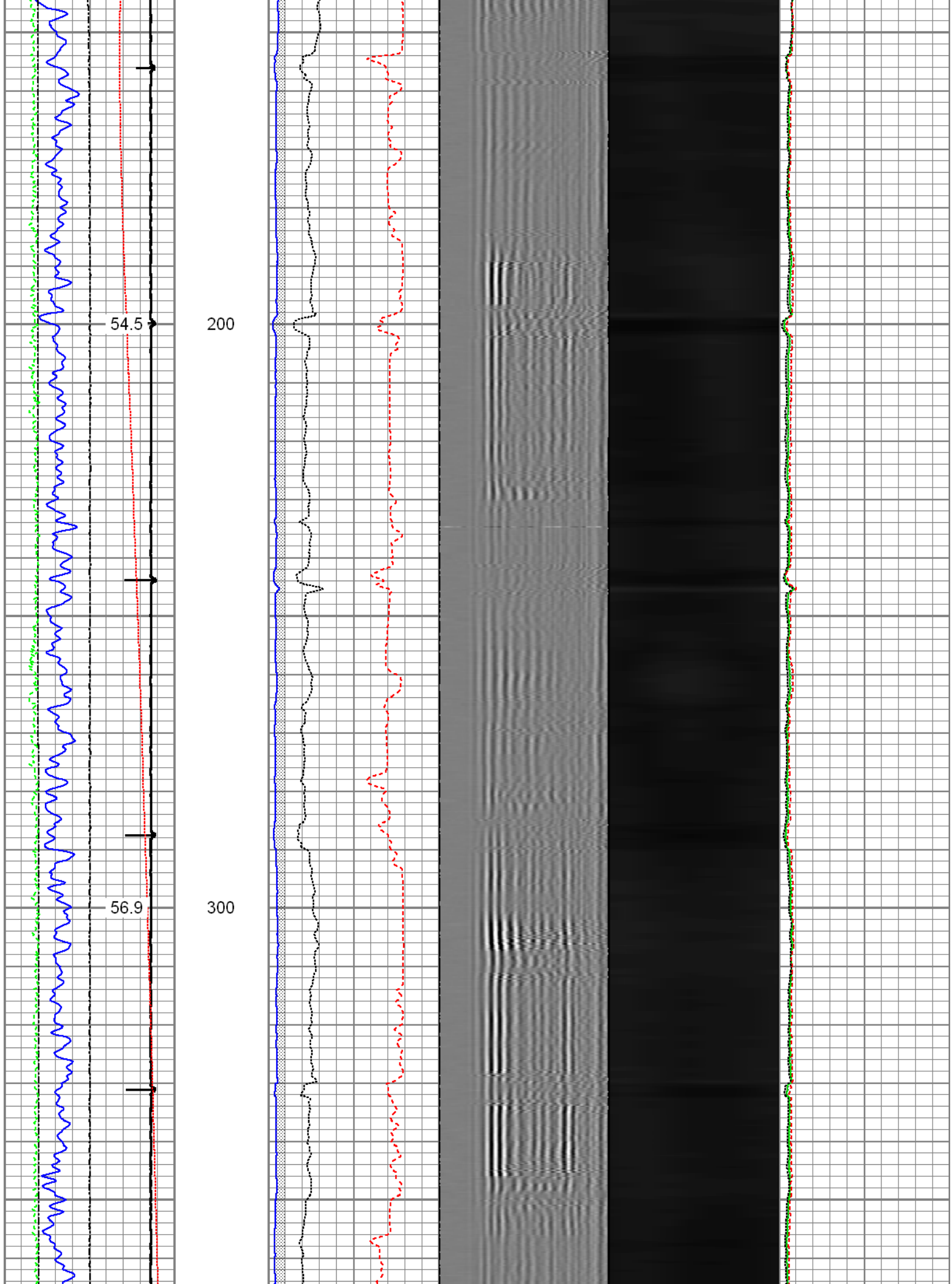
Presentation Format: rbt4\_mit

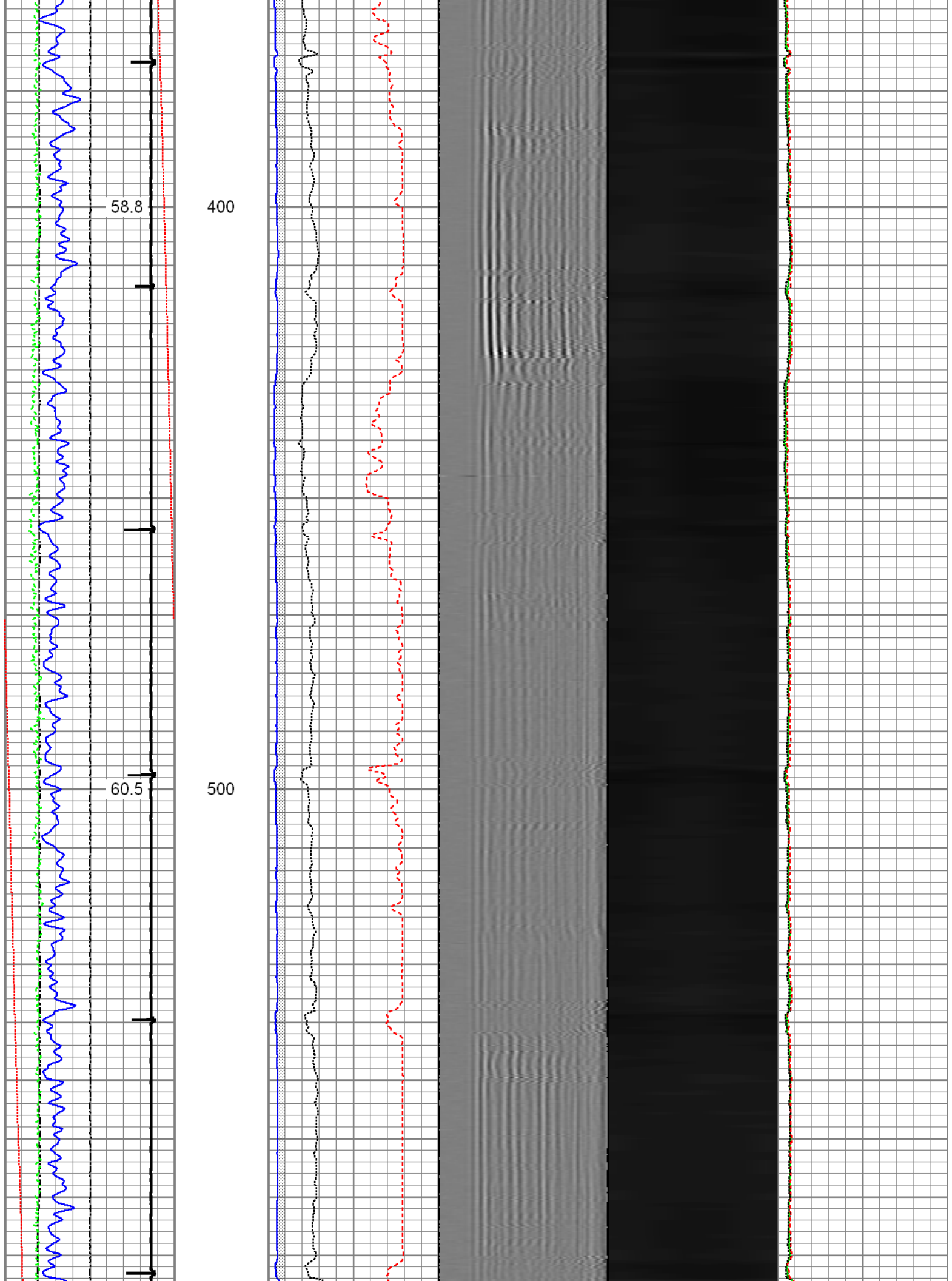
Dataset Creation: Thu Sep 03 08:43:47 2015 by Log 7.0 B1

Charted by: Depth in Feet scaled 1:240

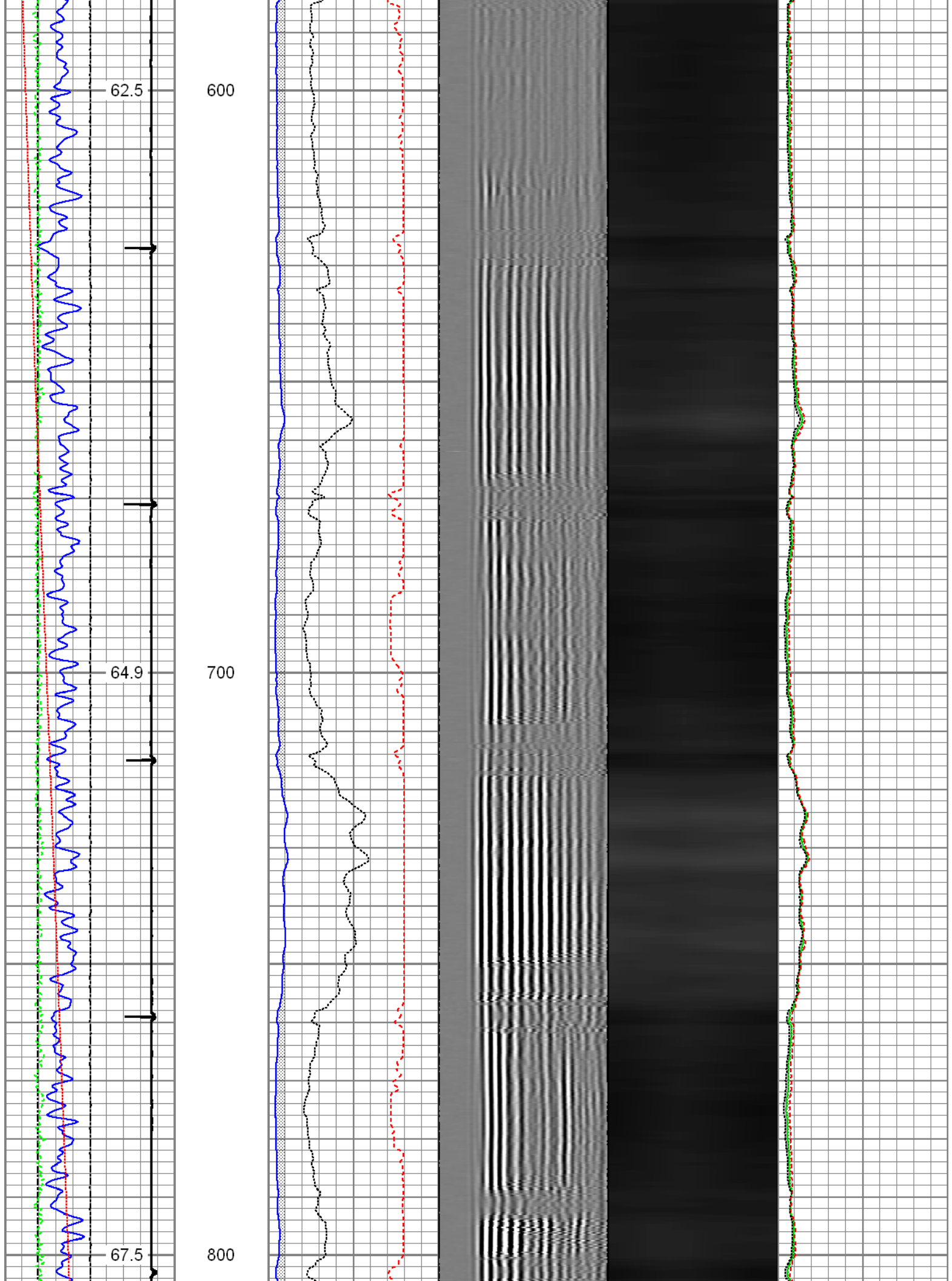
Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120	0 (mV) 100	200 1200		0 100
Casing Collar Locator	3' Amplitude x 5			Mimimum Amplitude
Line Speed	0 (mV) 20			0 100
-100 (ft/min) 100	3' Travel Time			Maximum Amplitude
Line Tension	650 (usec) 150			0 100
0 (lb) 2000				
Differential Temperature				
-2 (degF) 2				
Temperature				
0 (degF) 20				

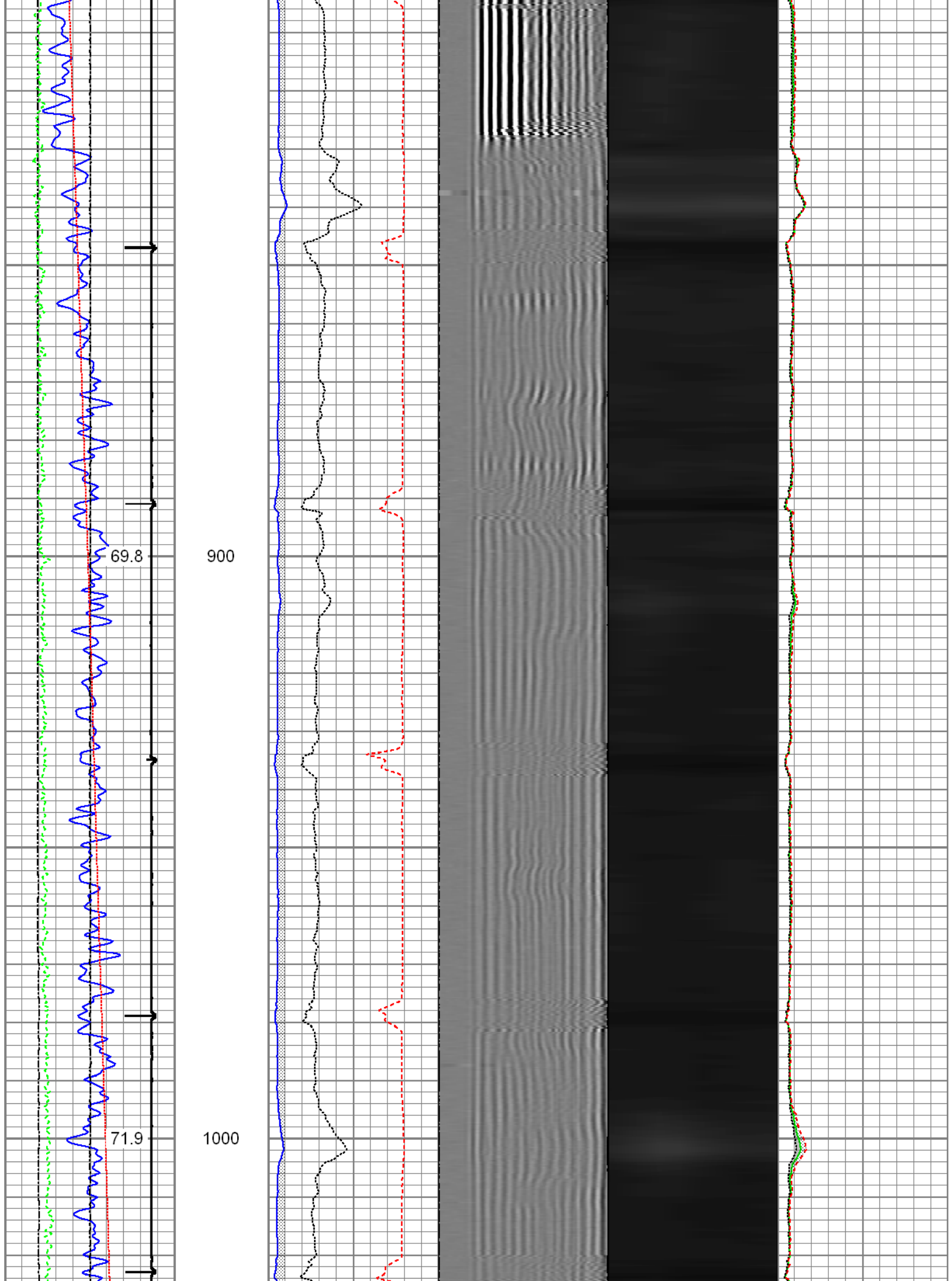


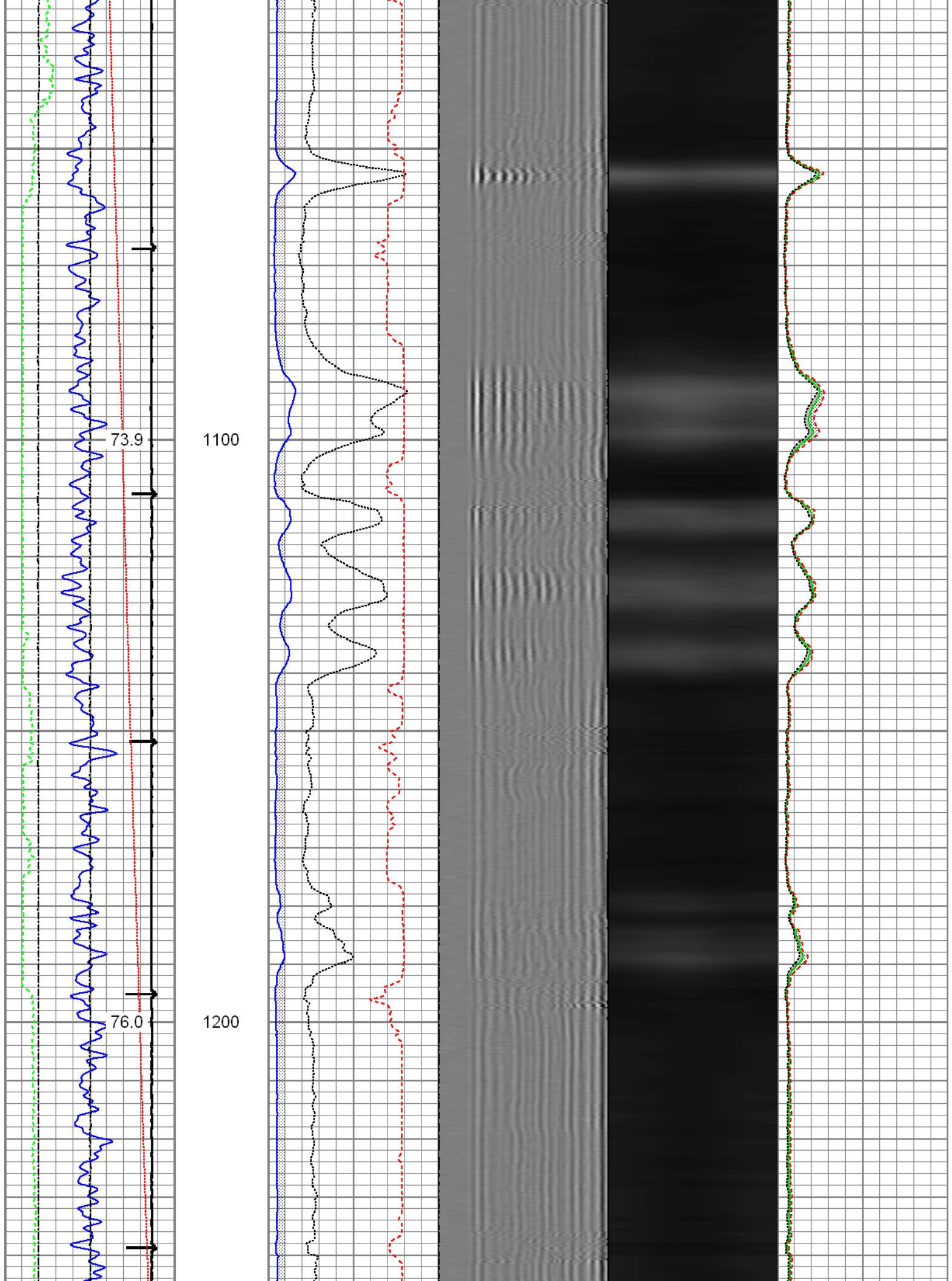


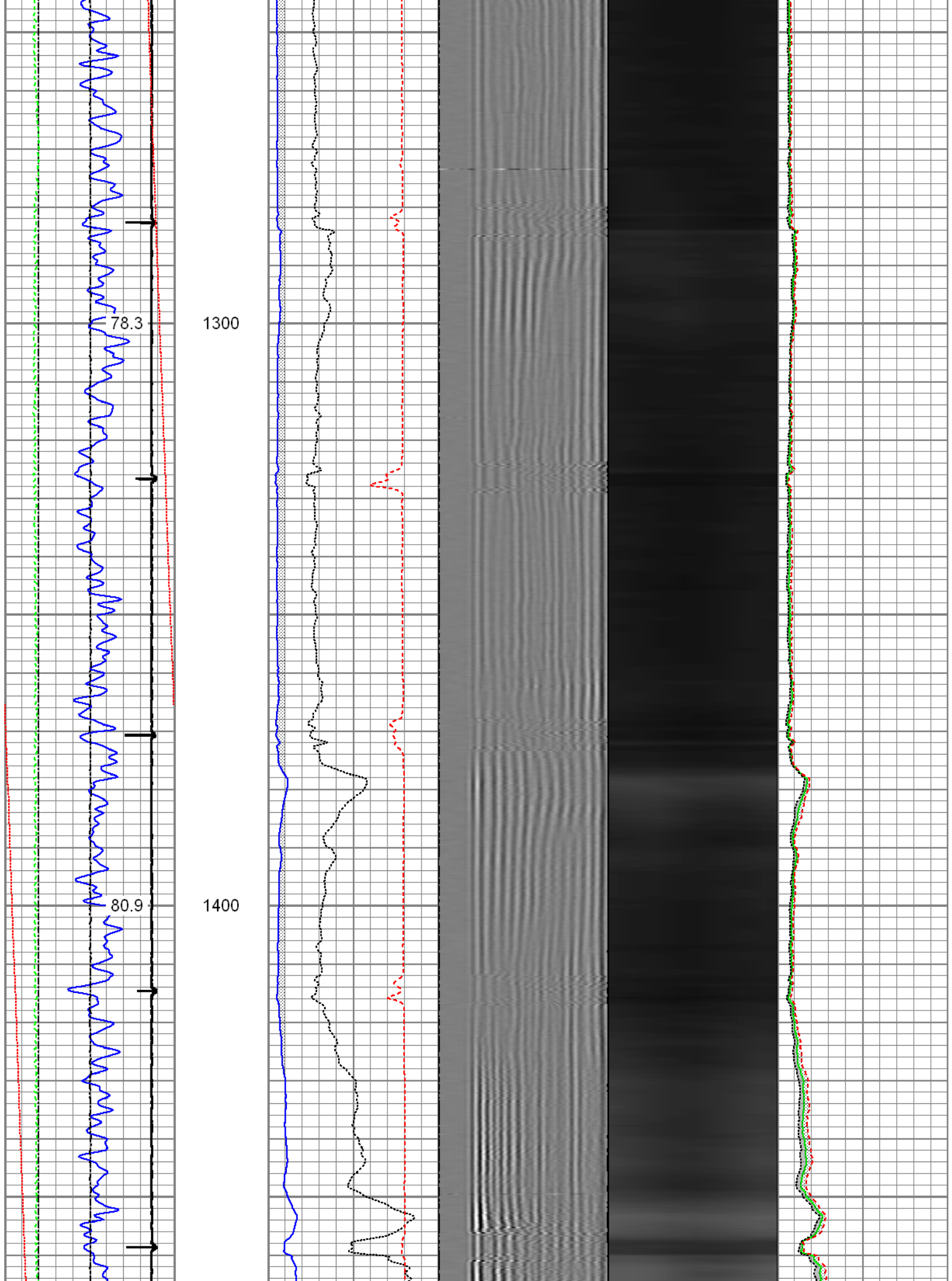


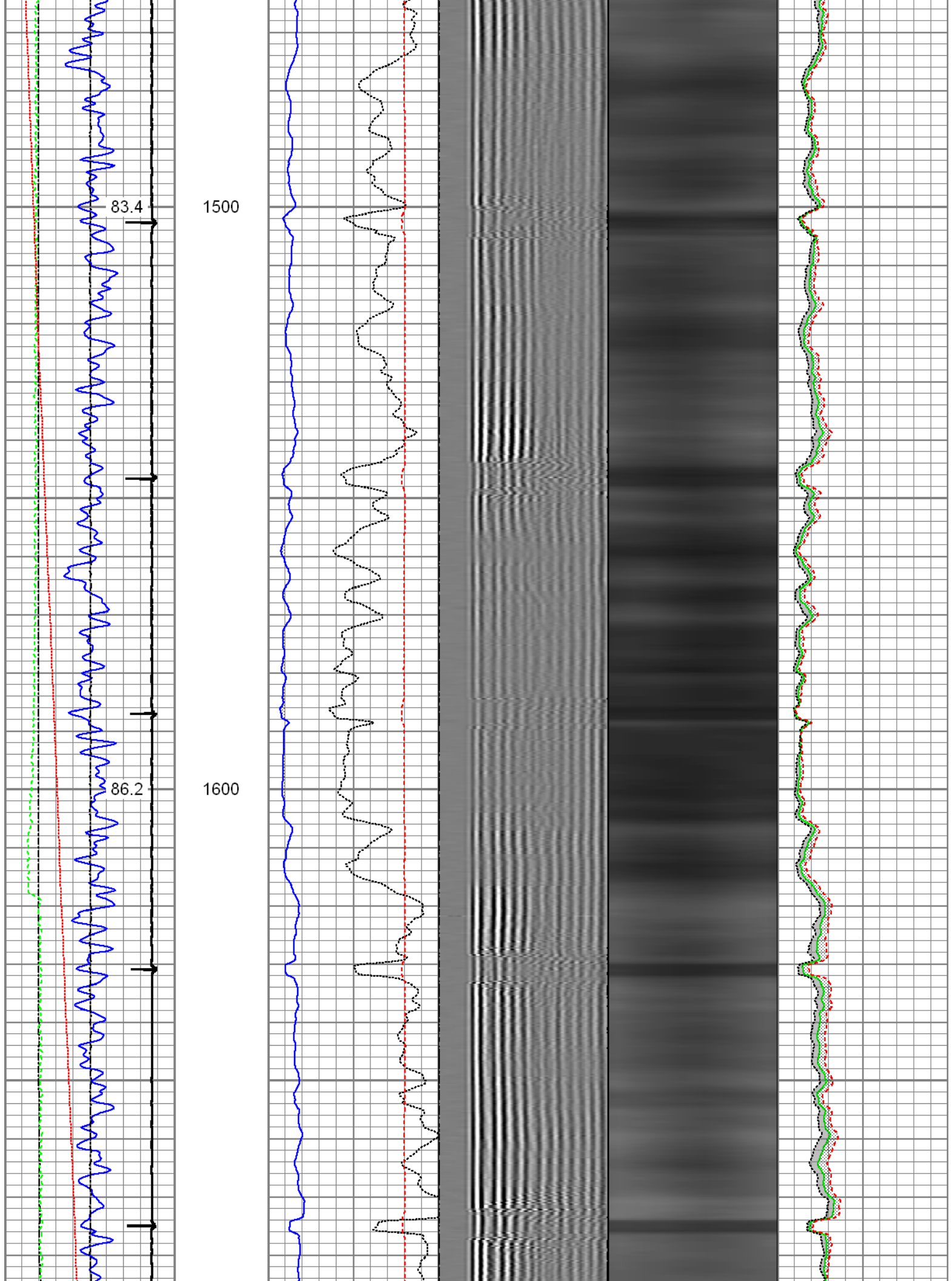




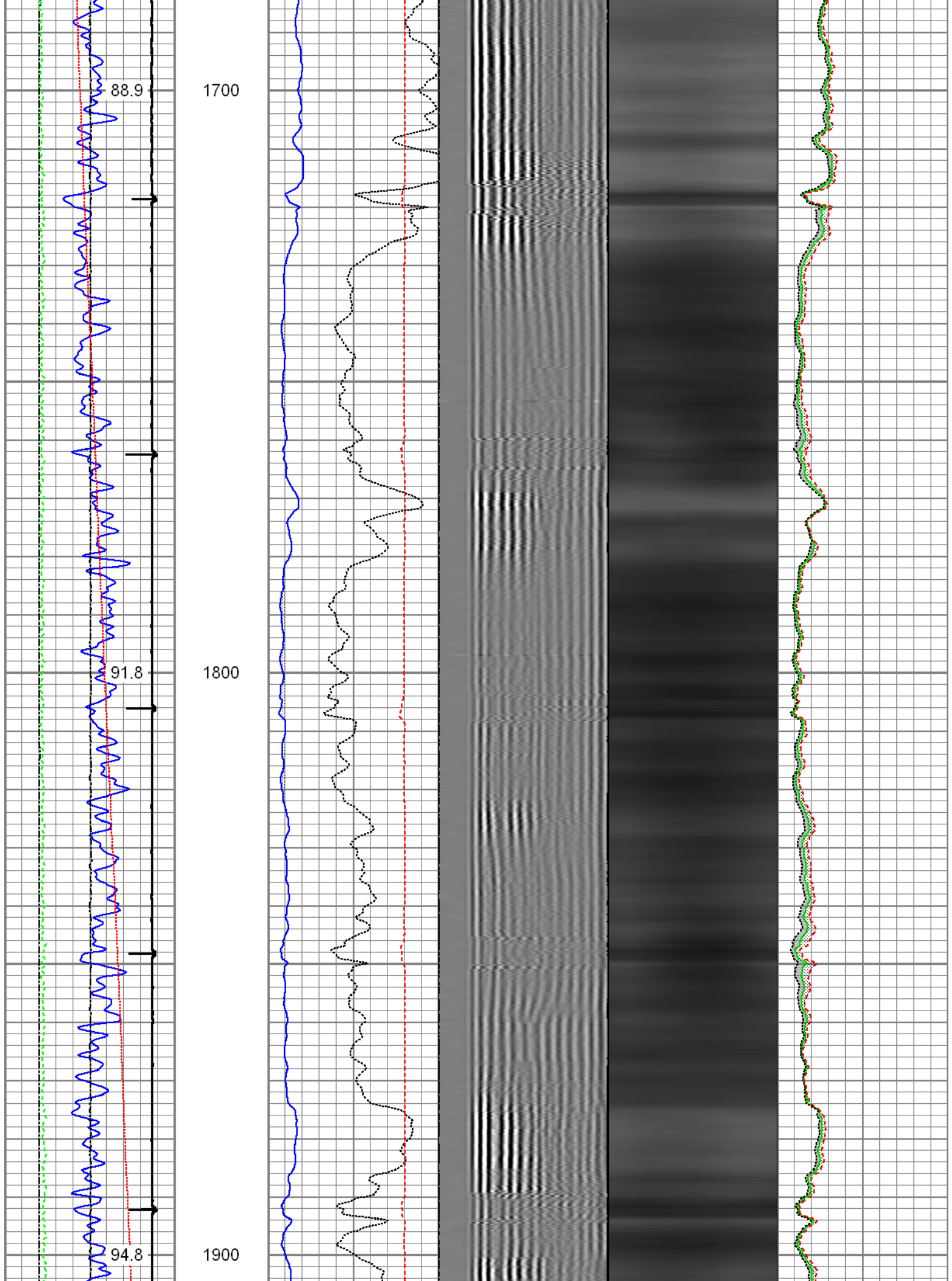


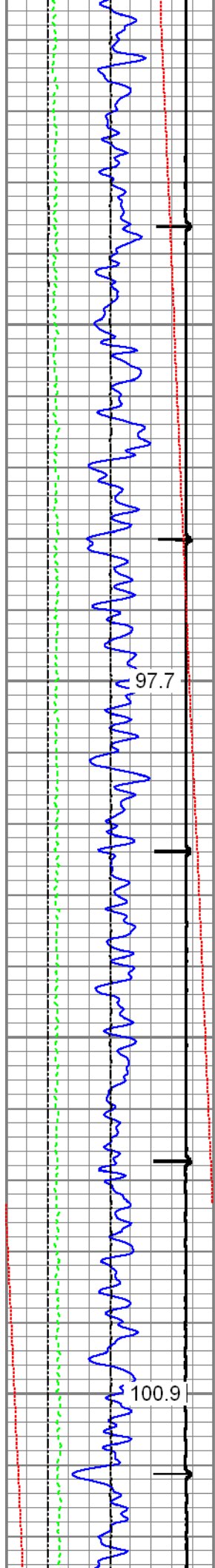






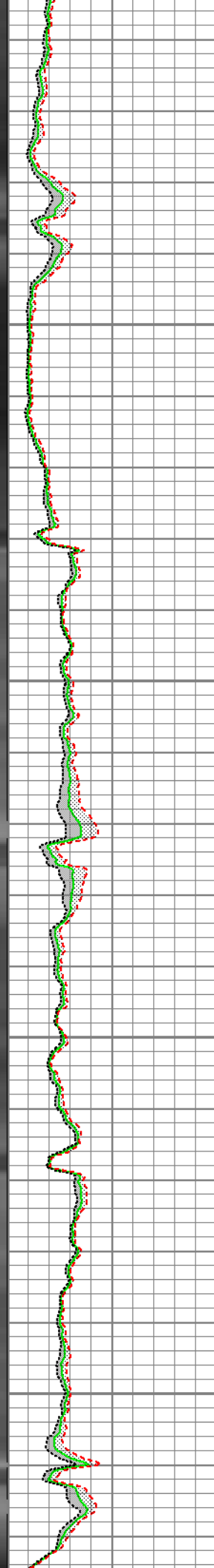
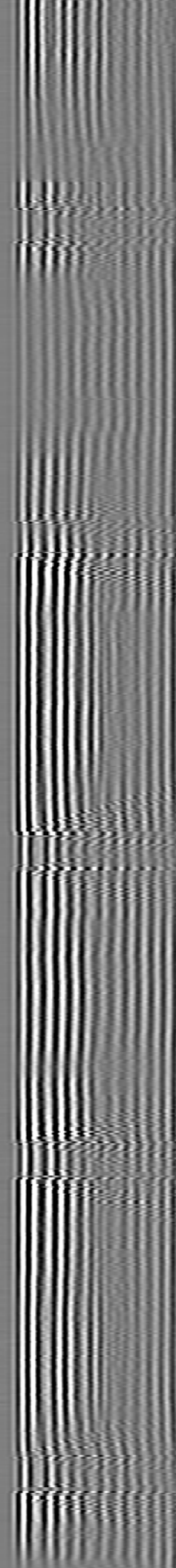
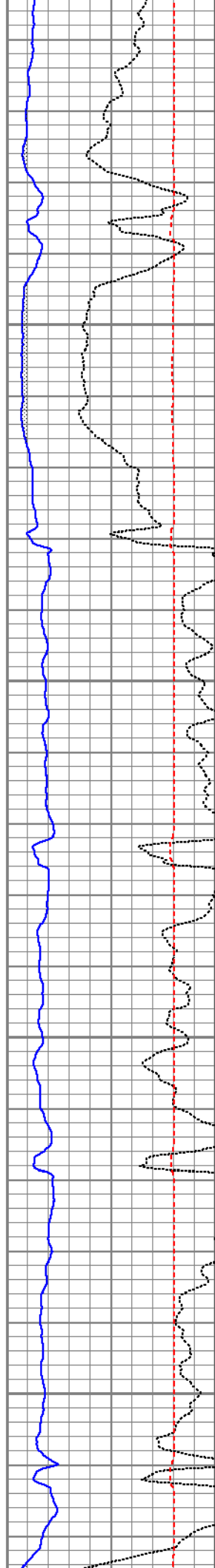


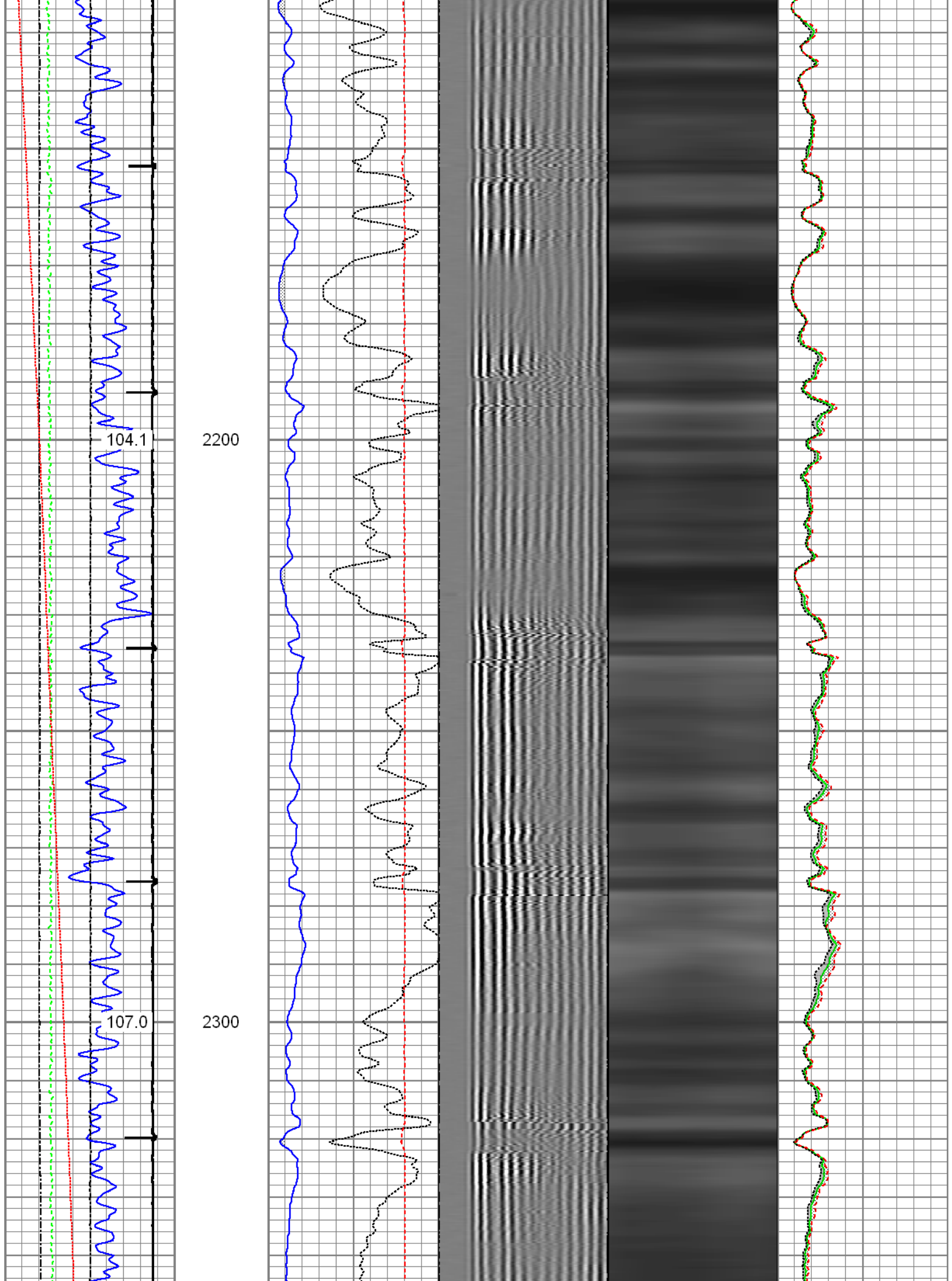


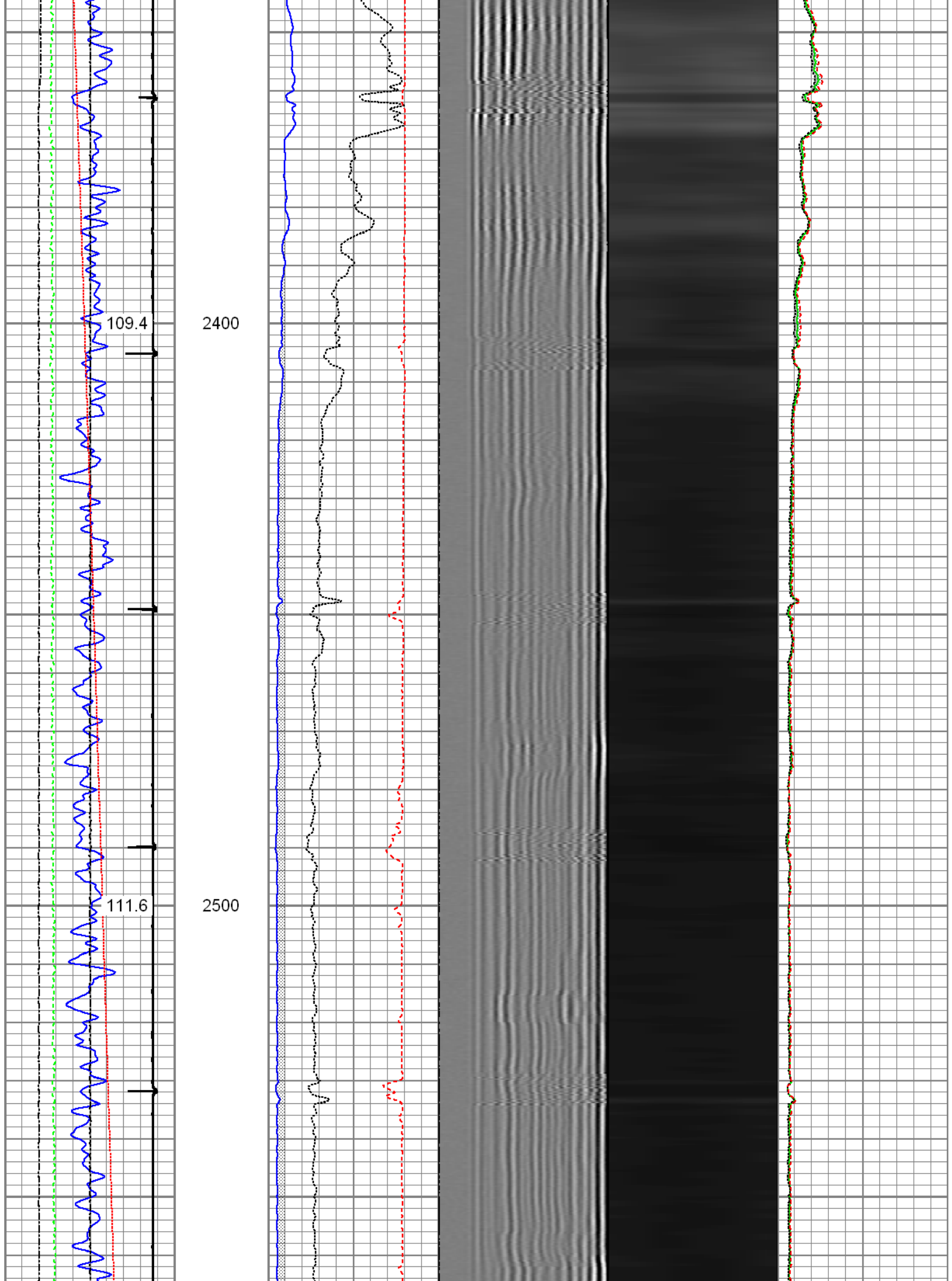


2000

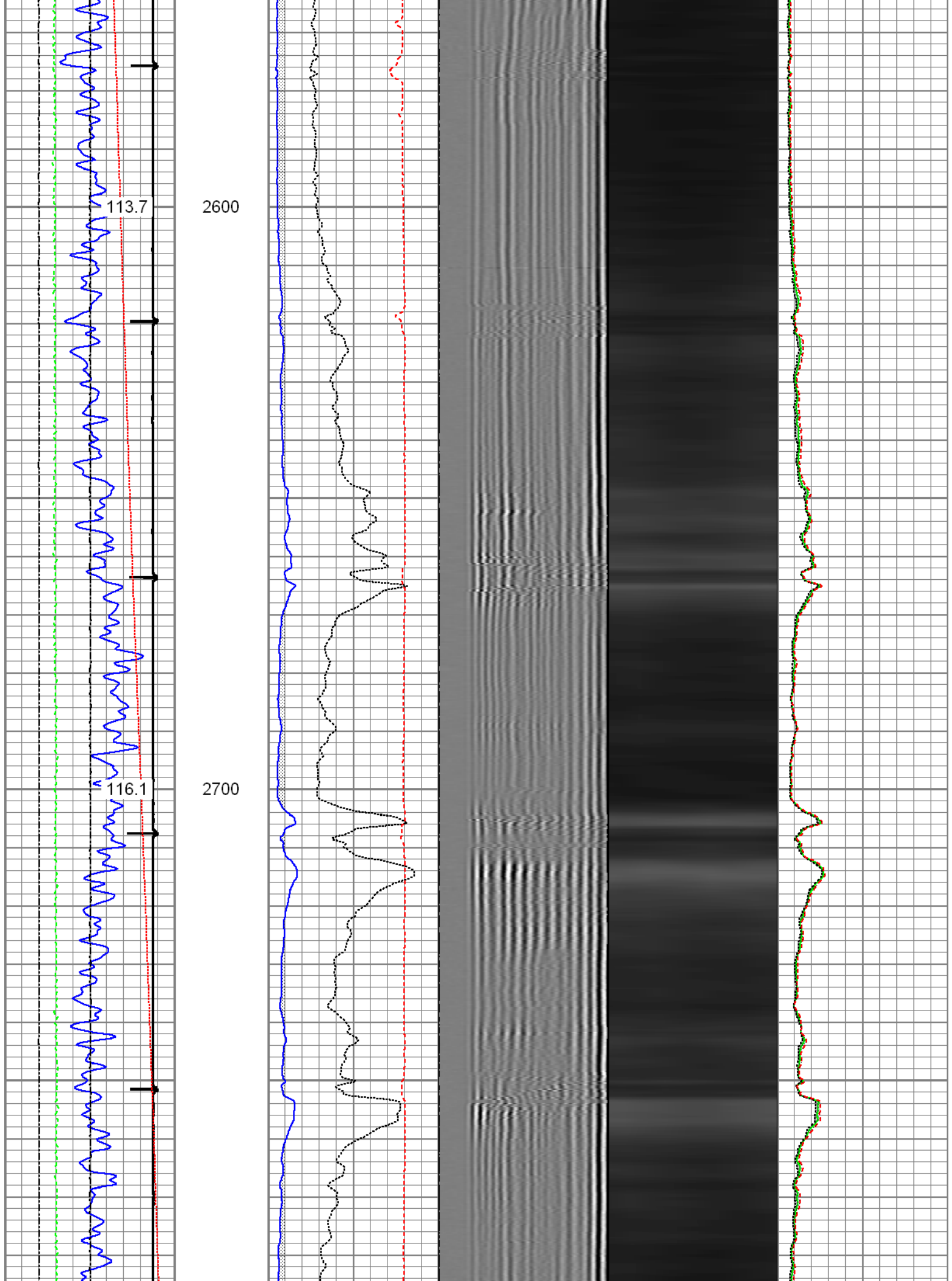
2100



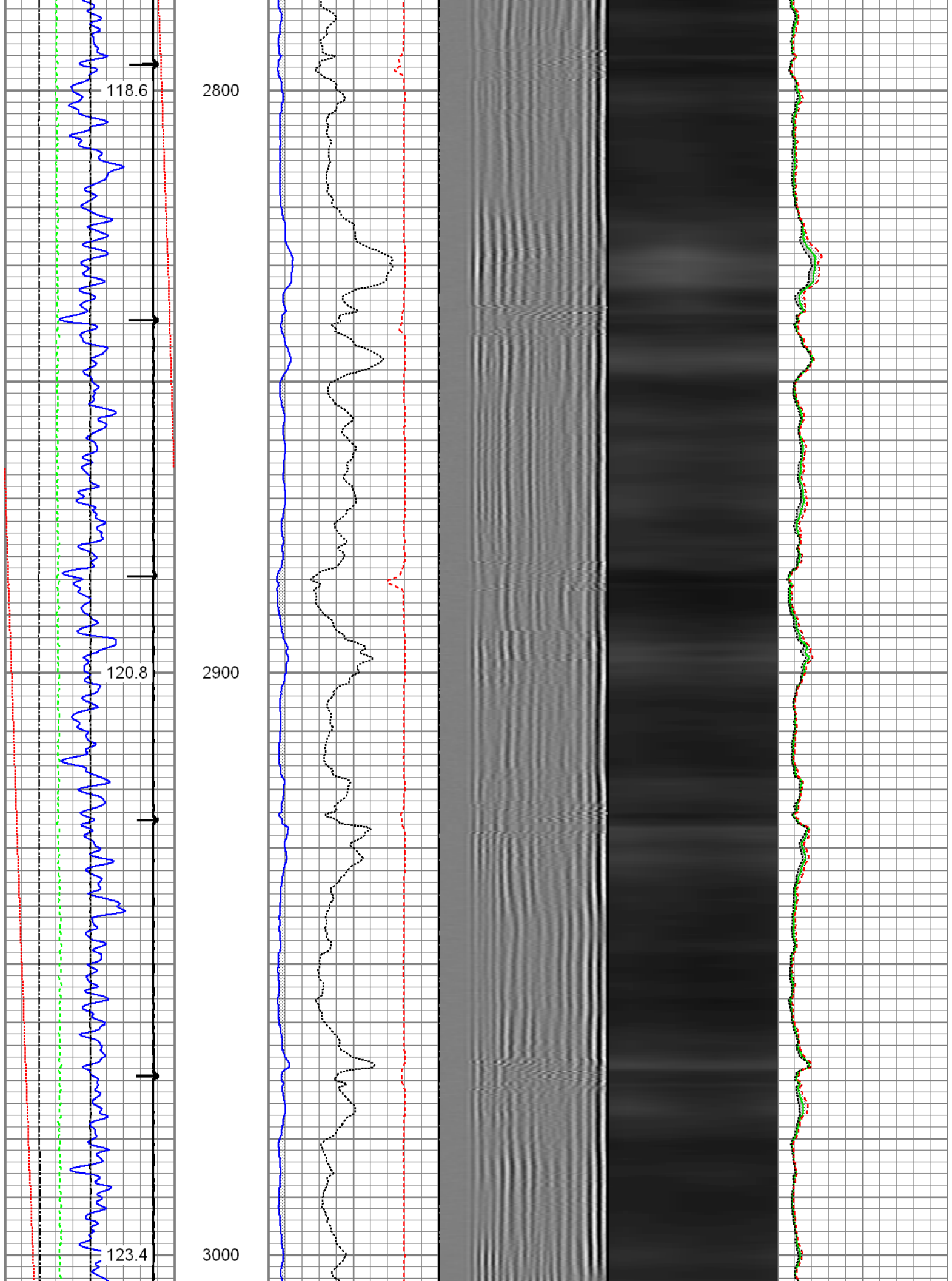


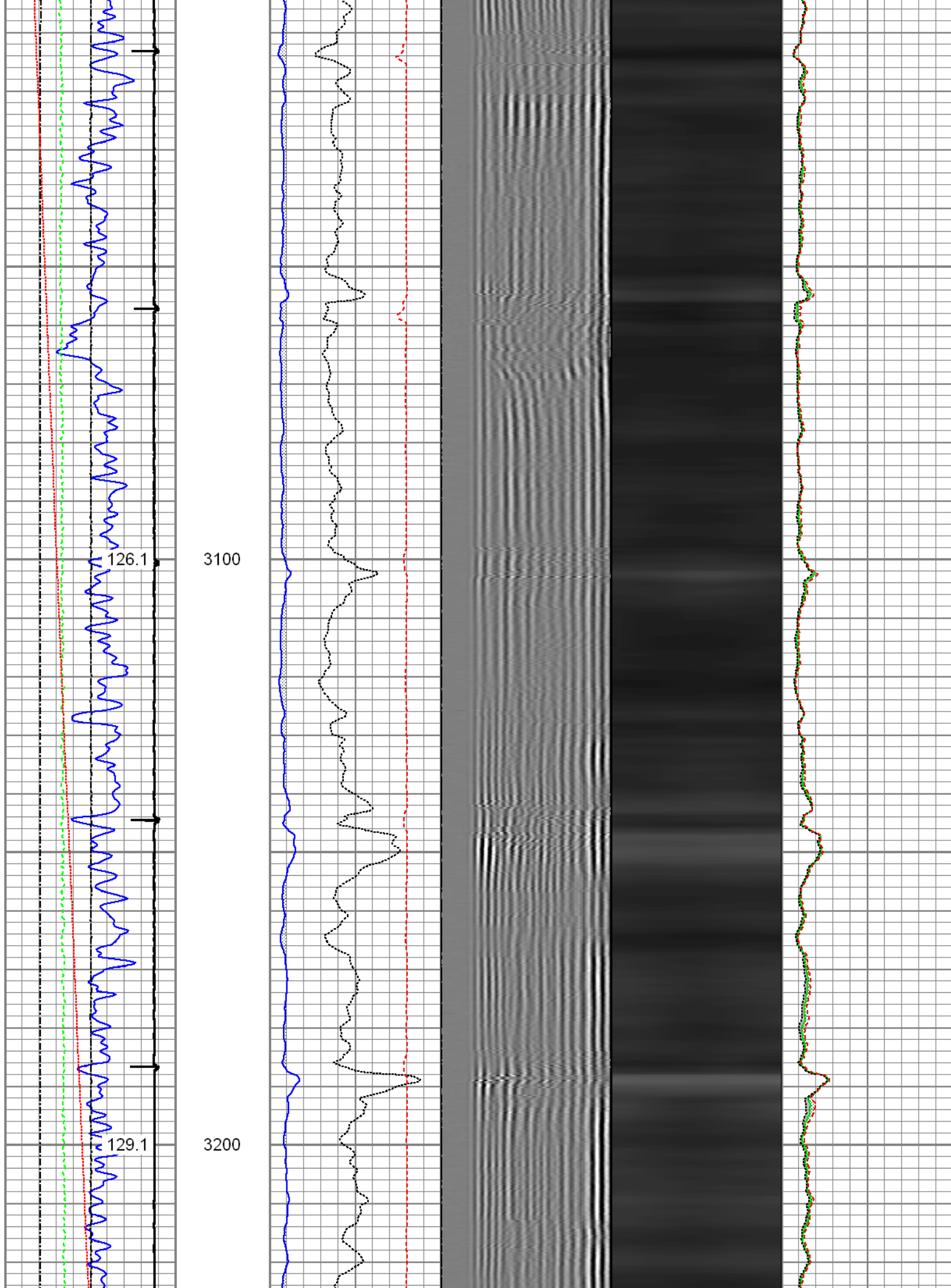


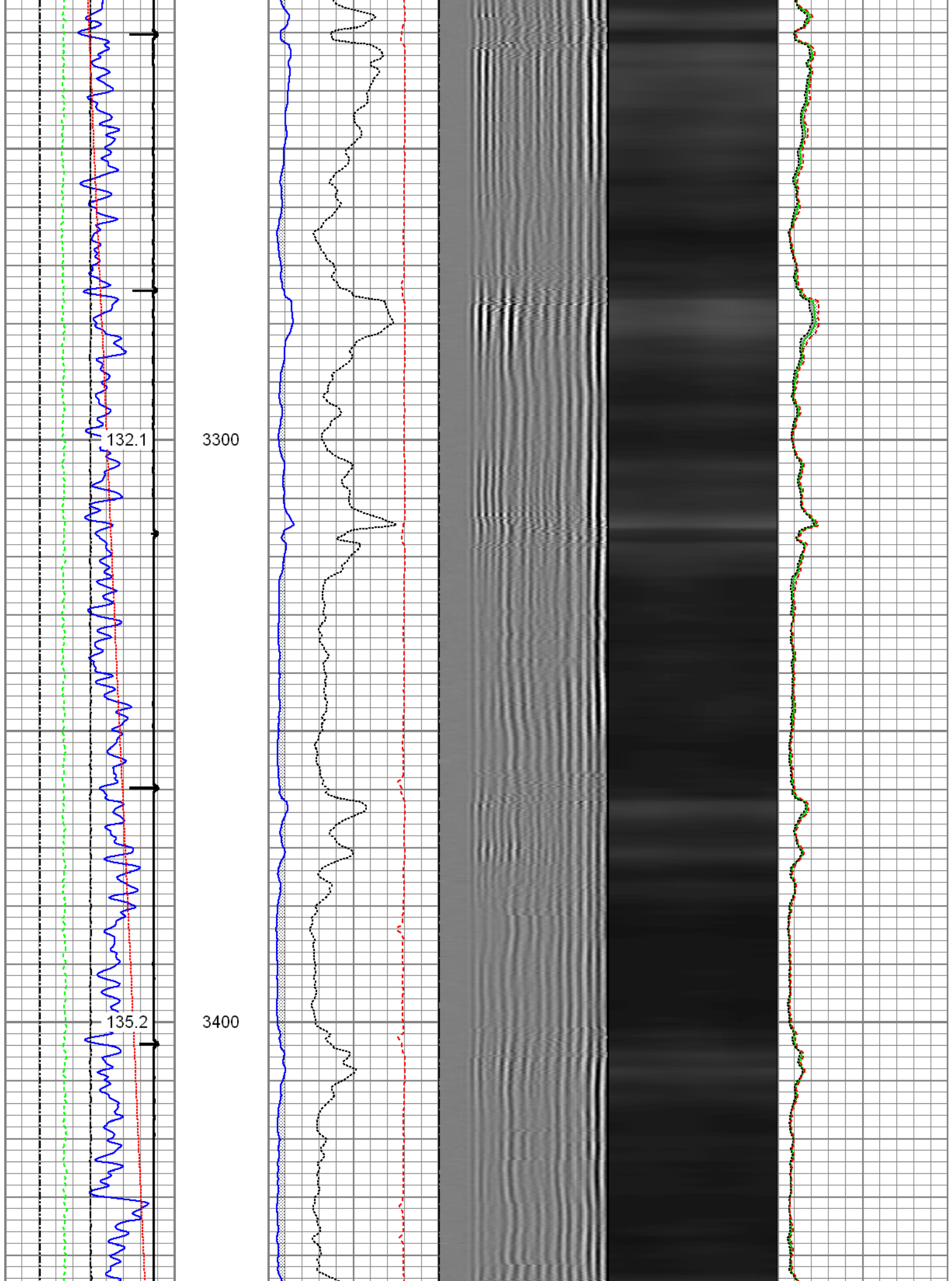


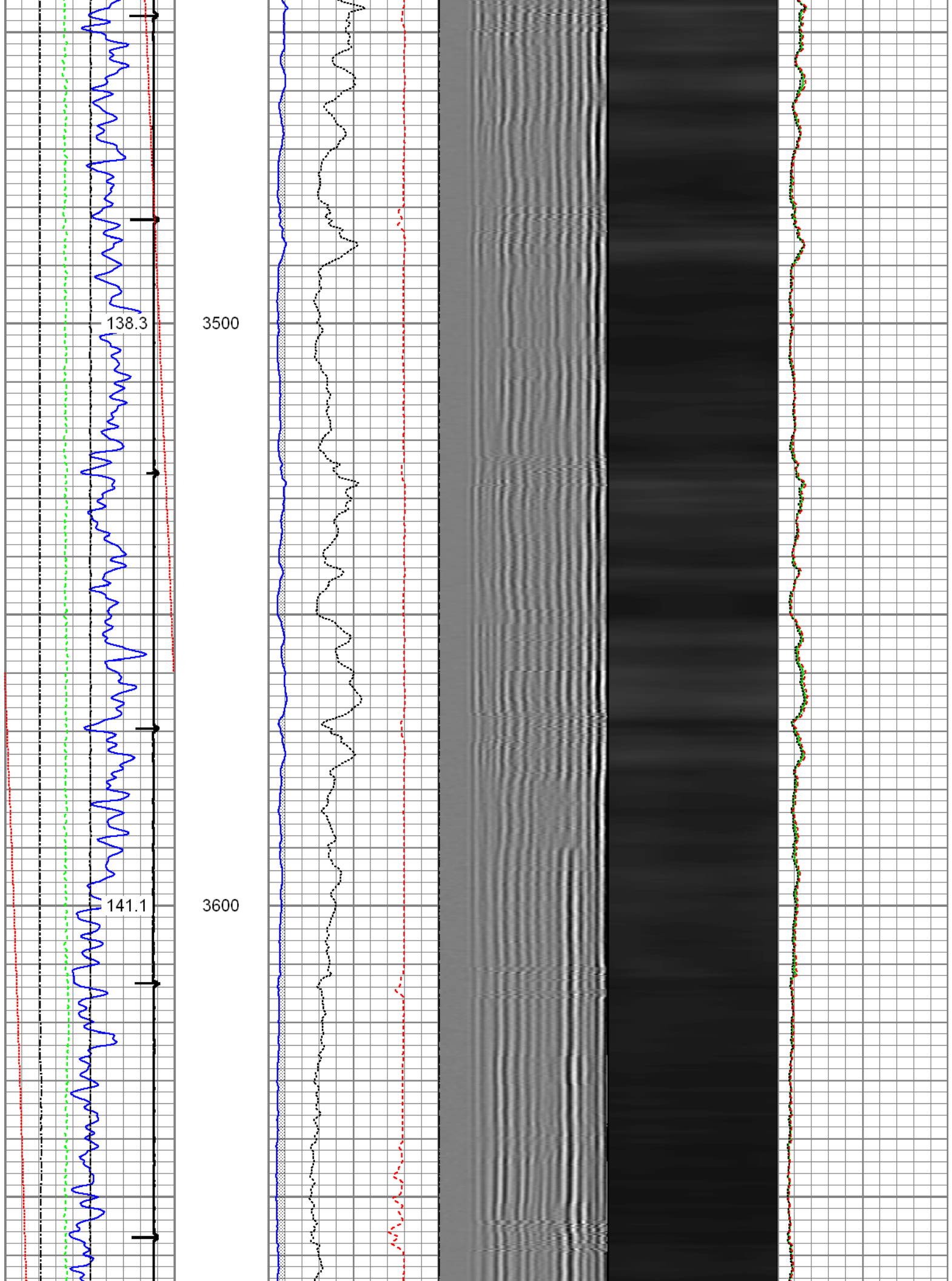


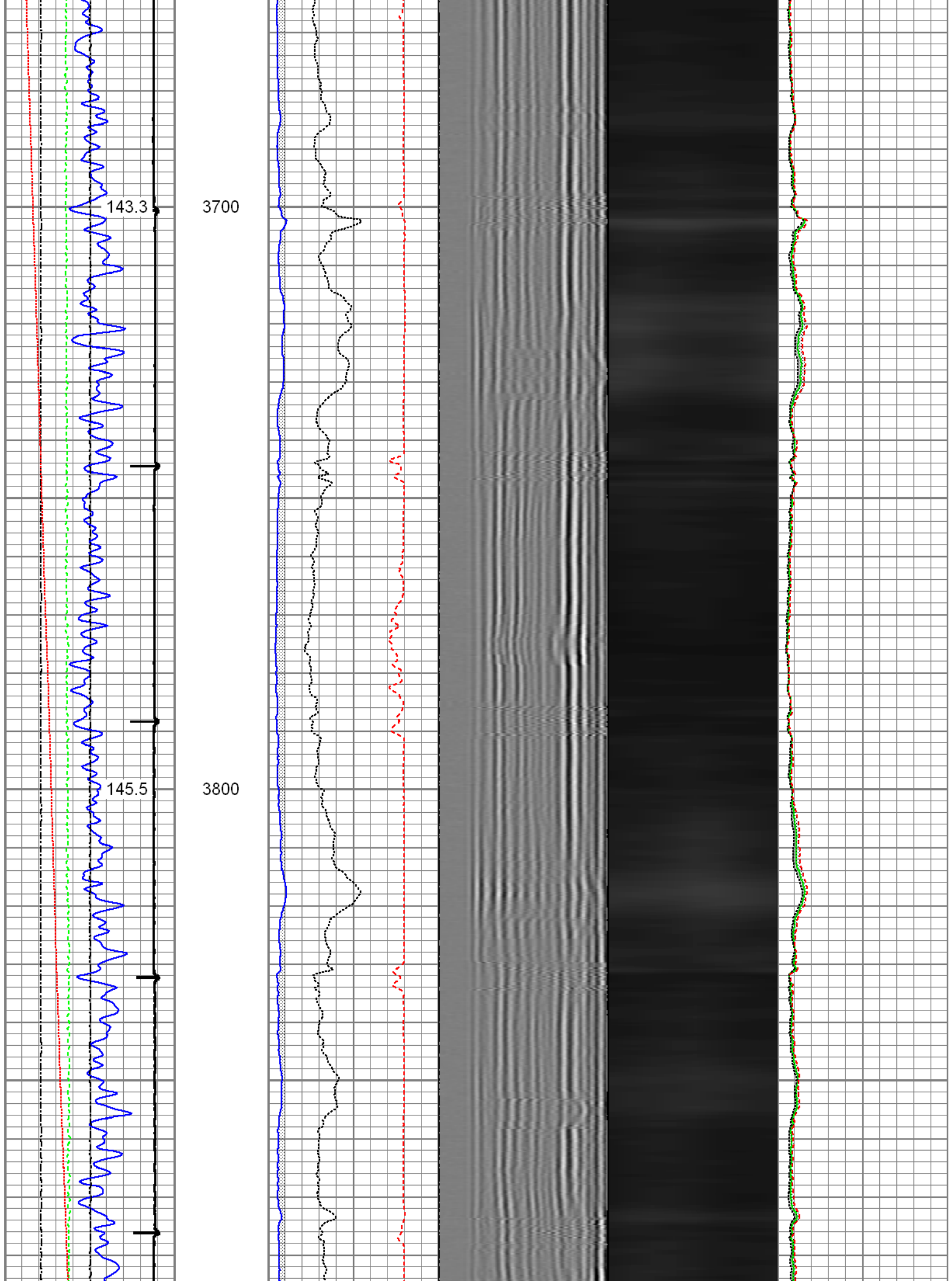




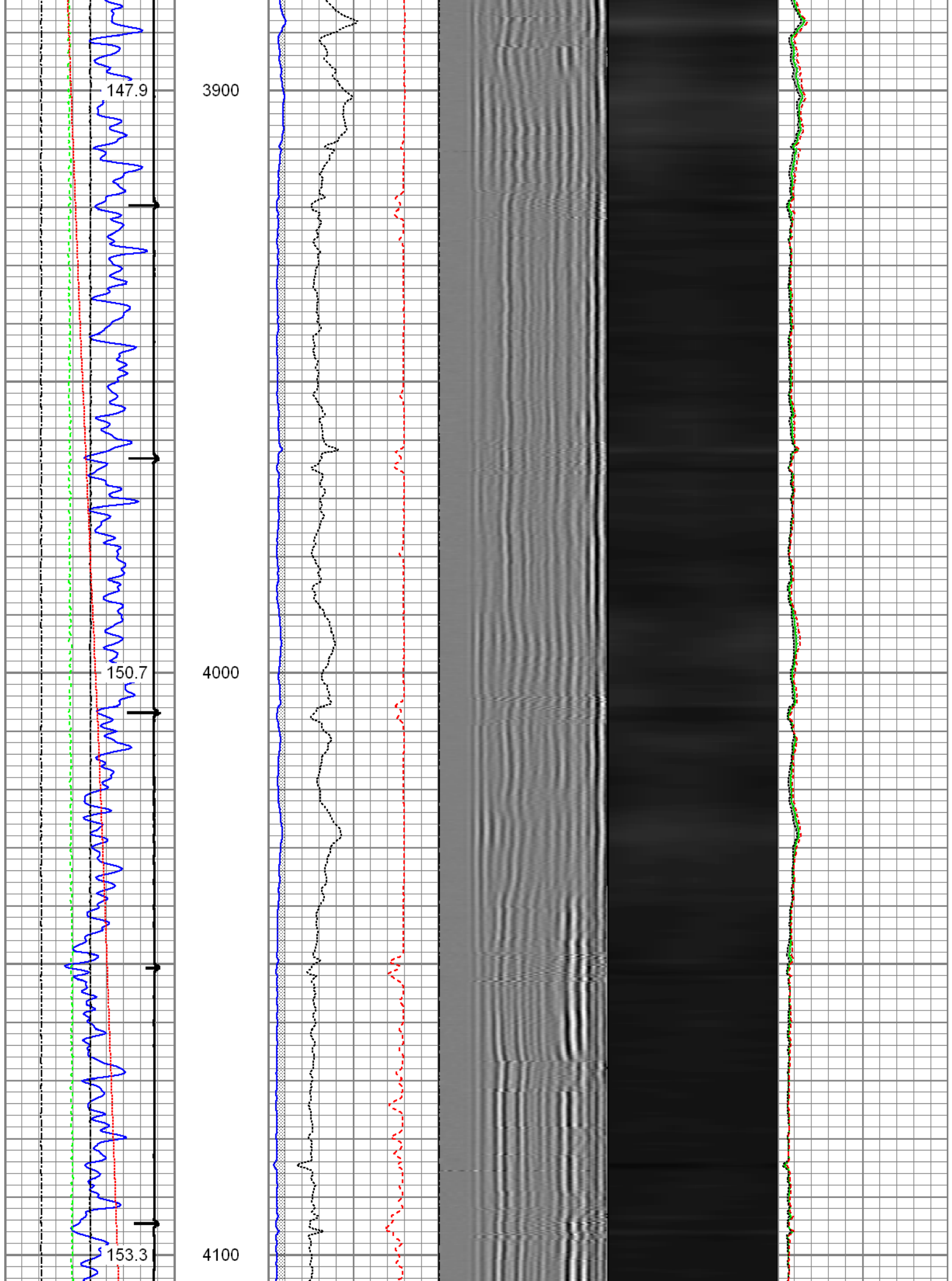


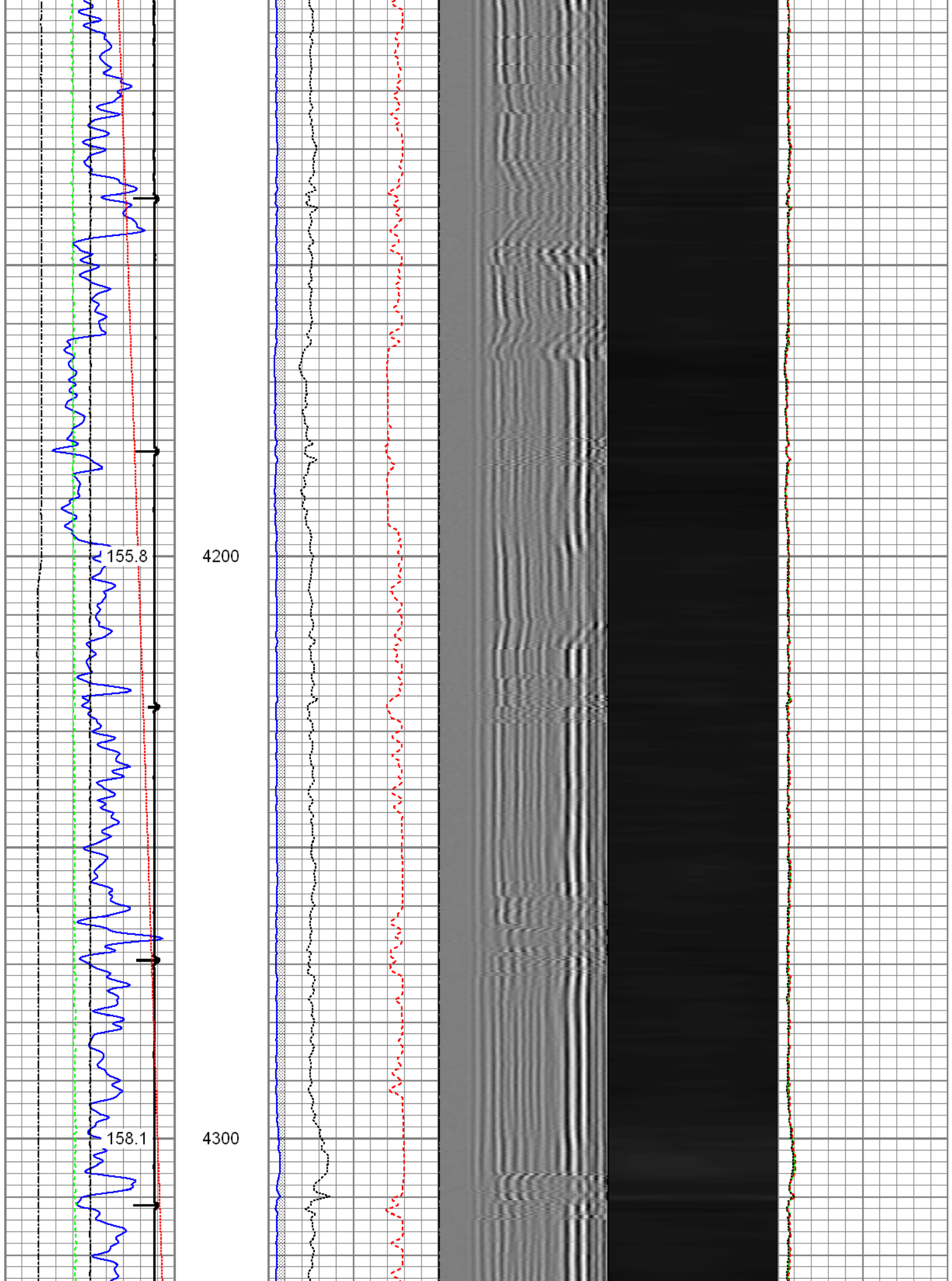


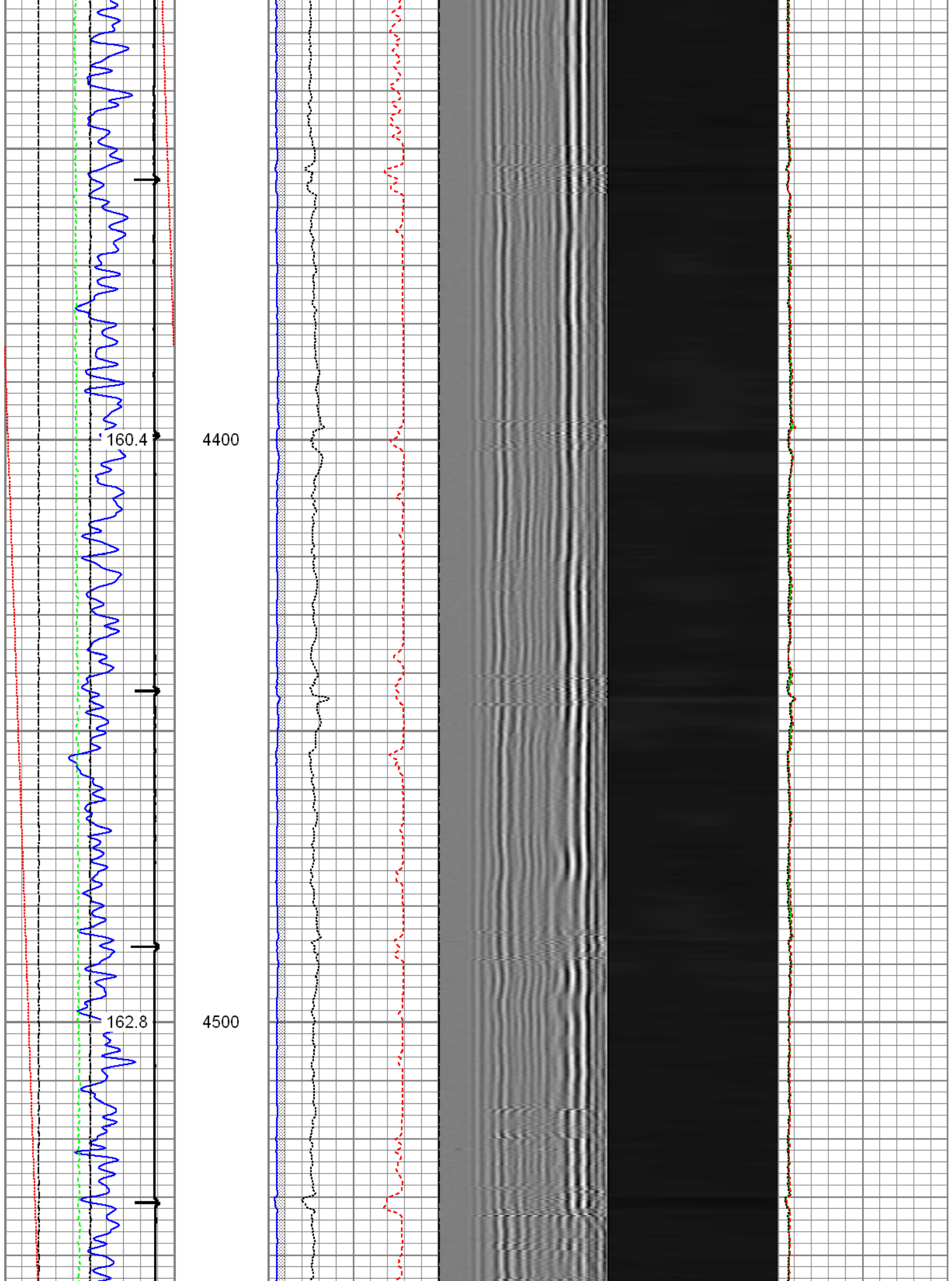


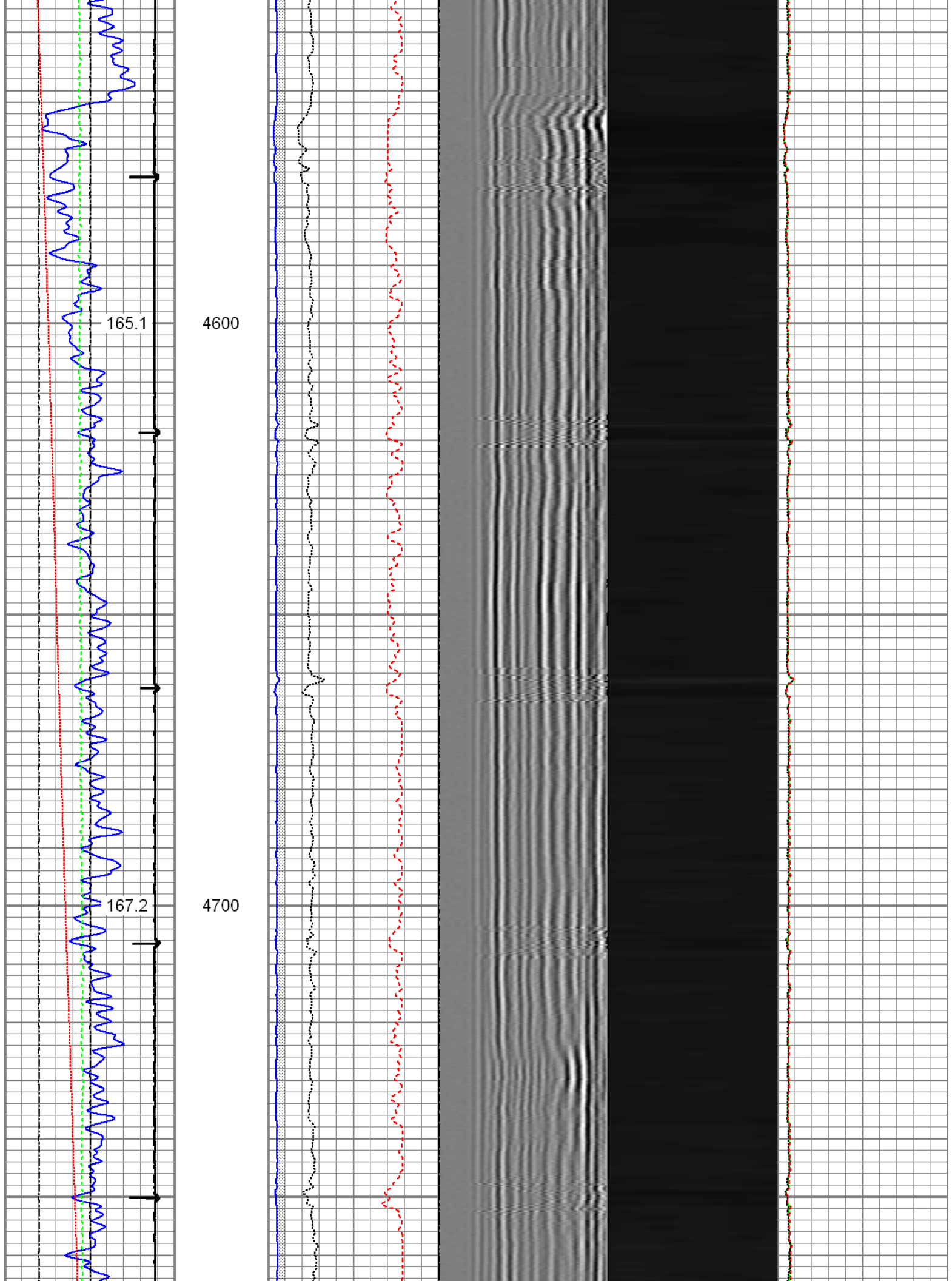


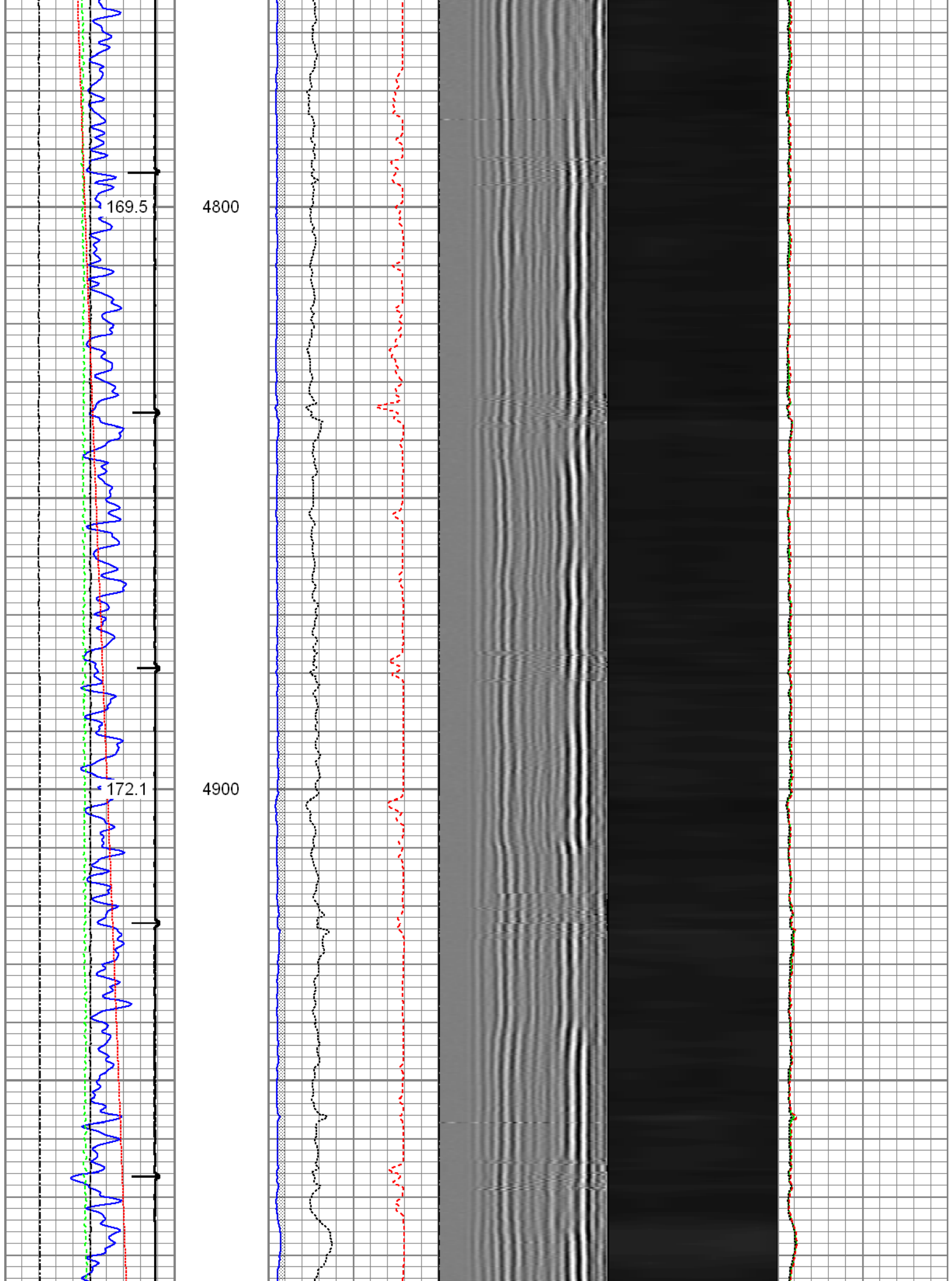




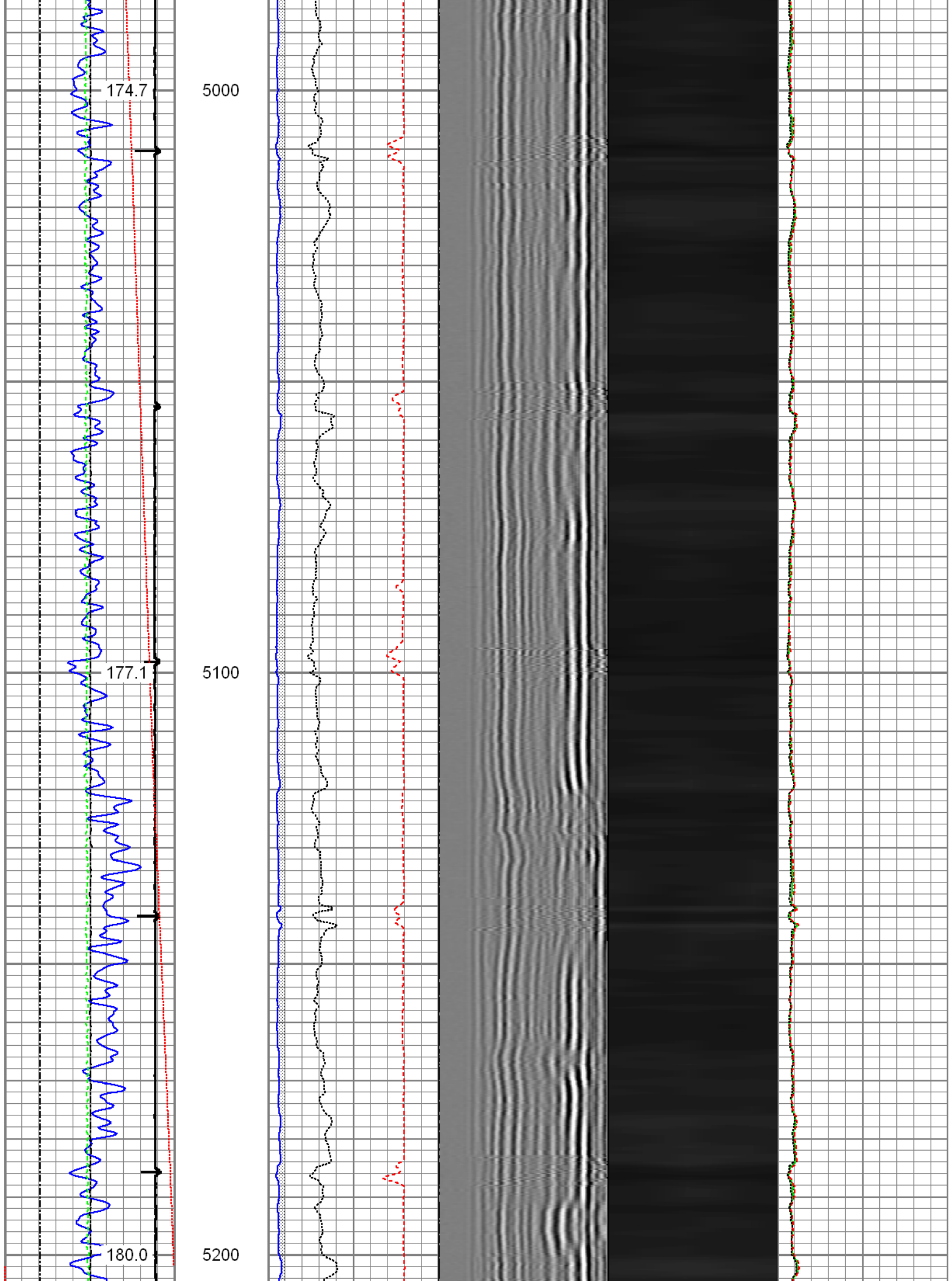


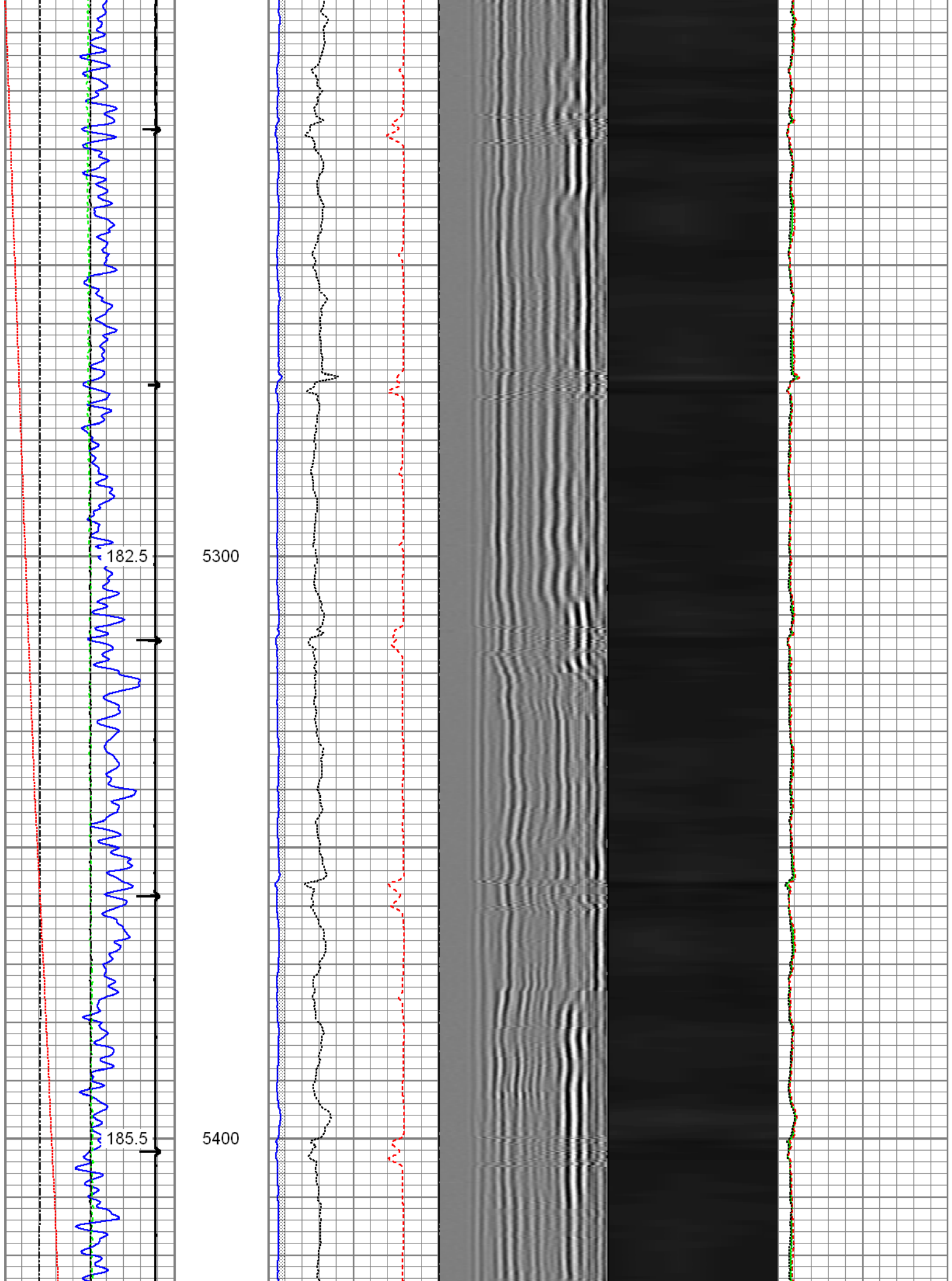


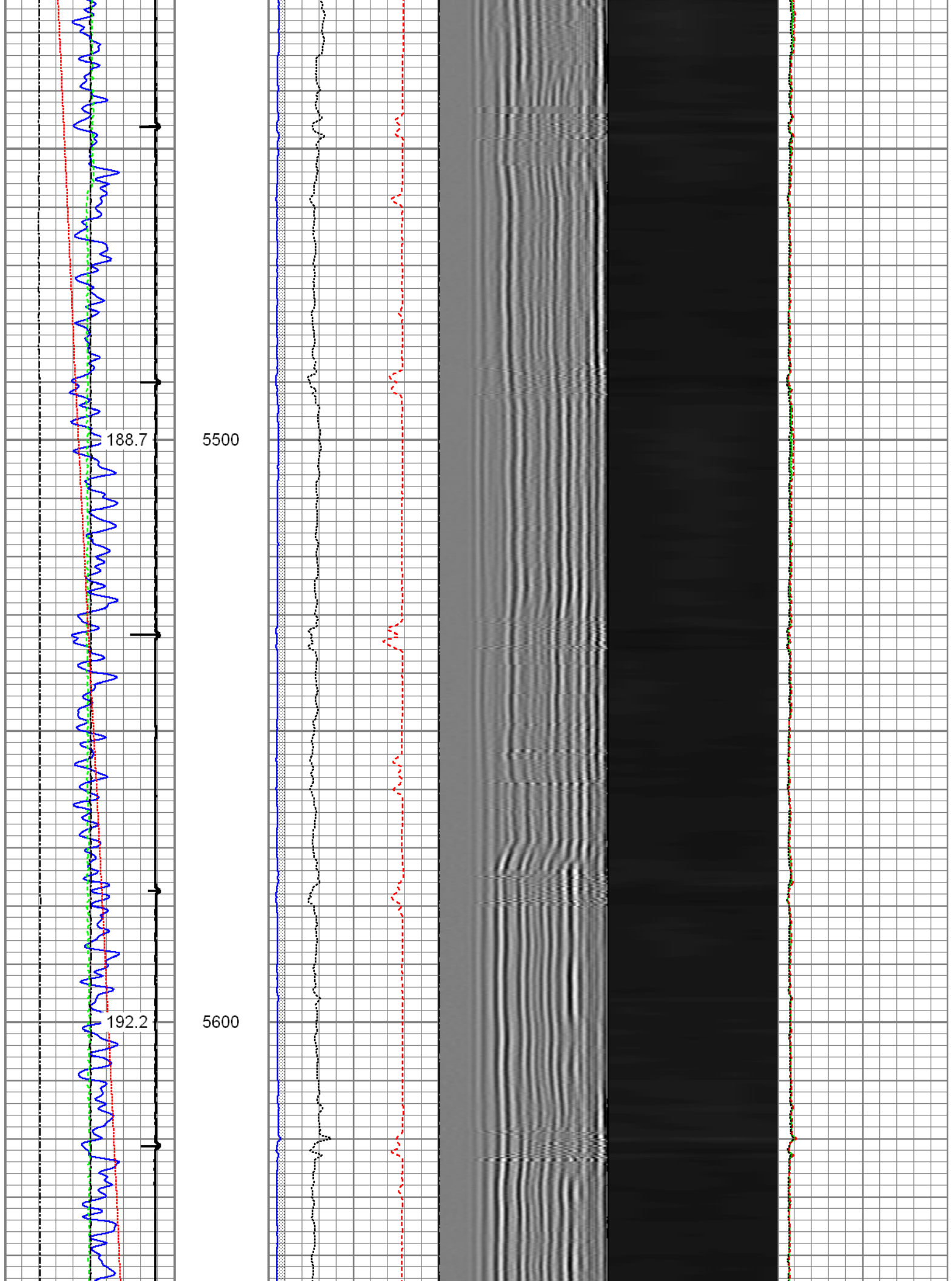


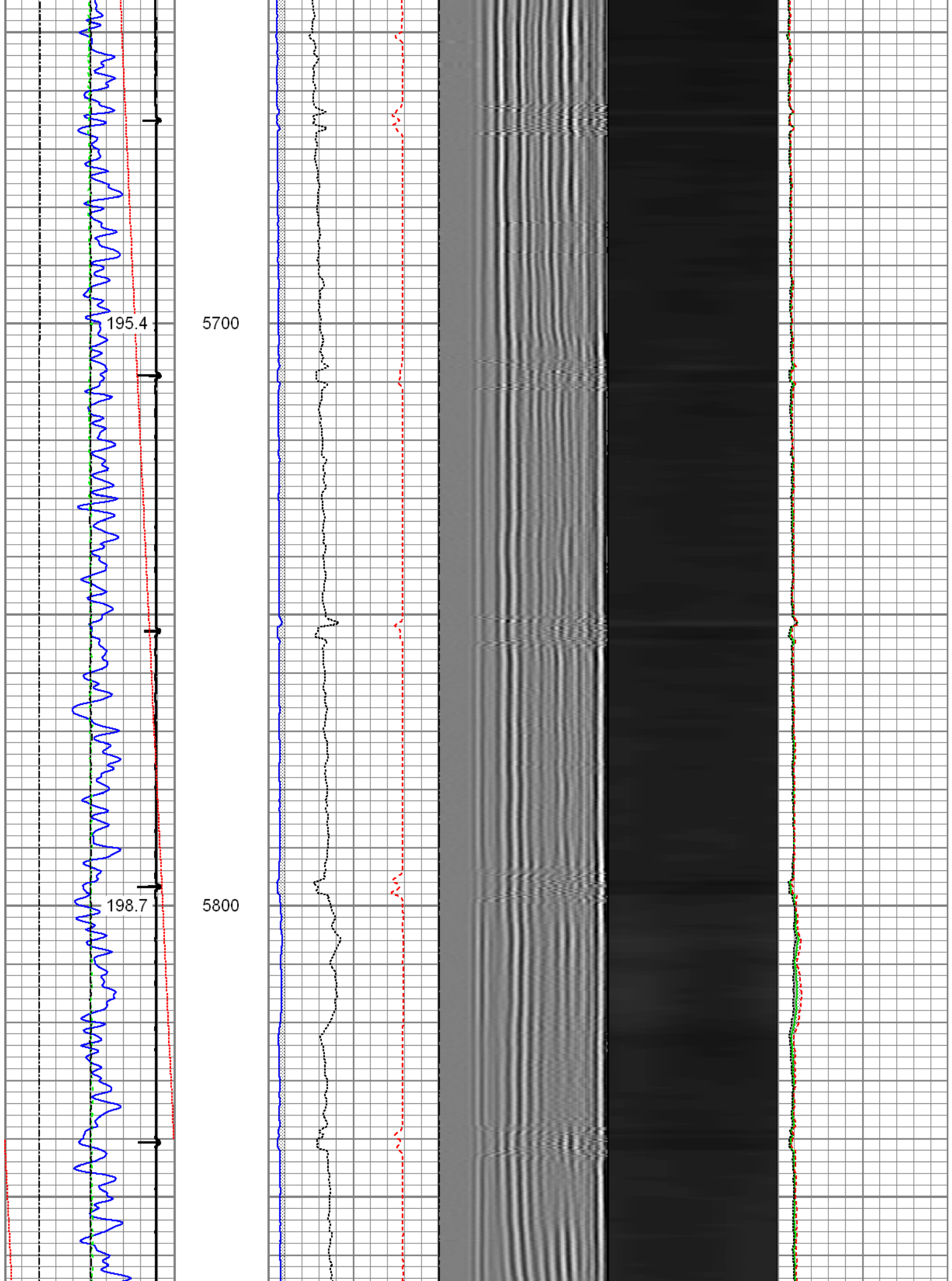


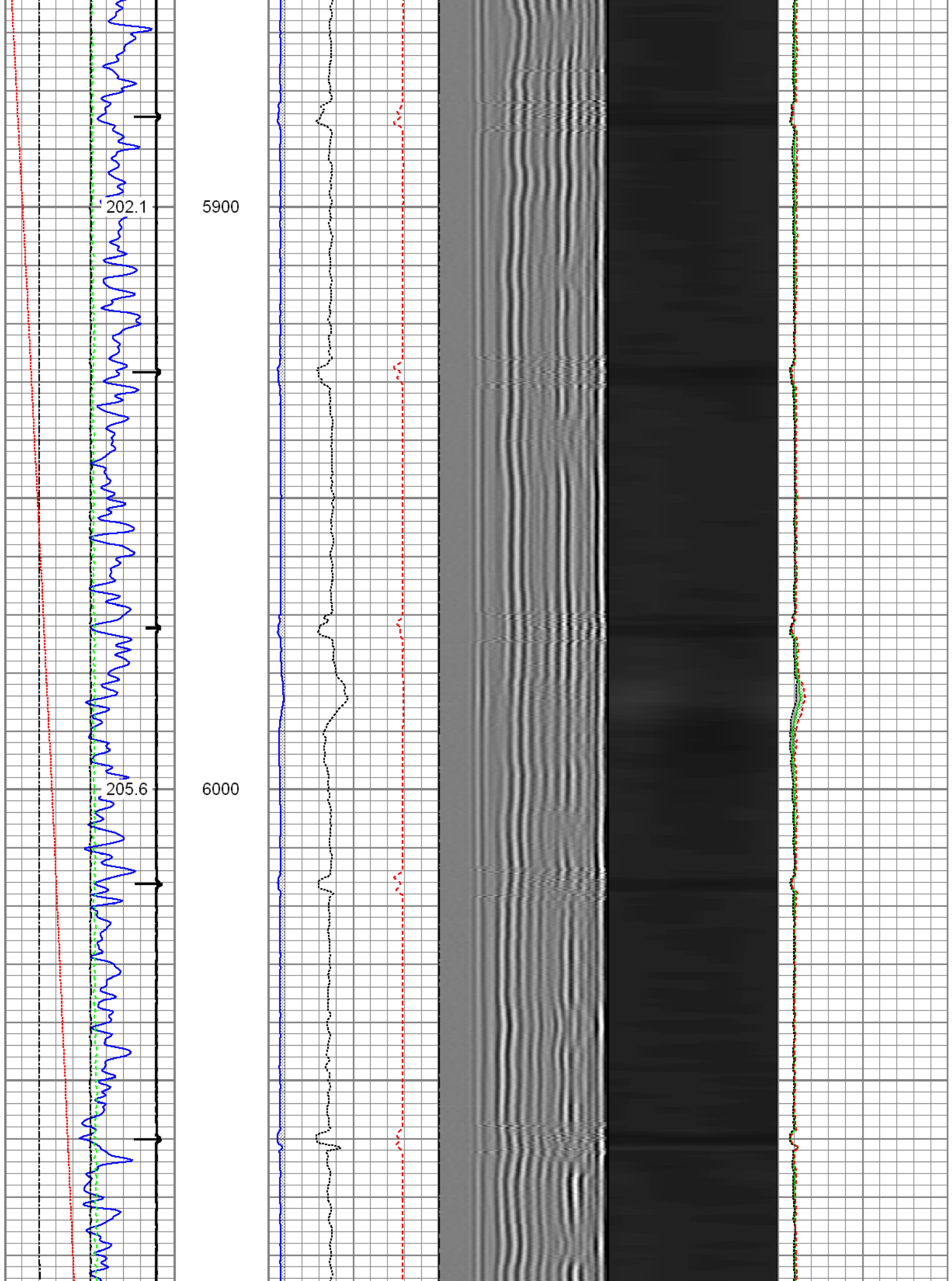




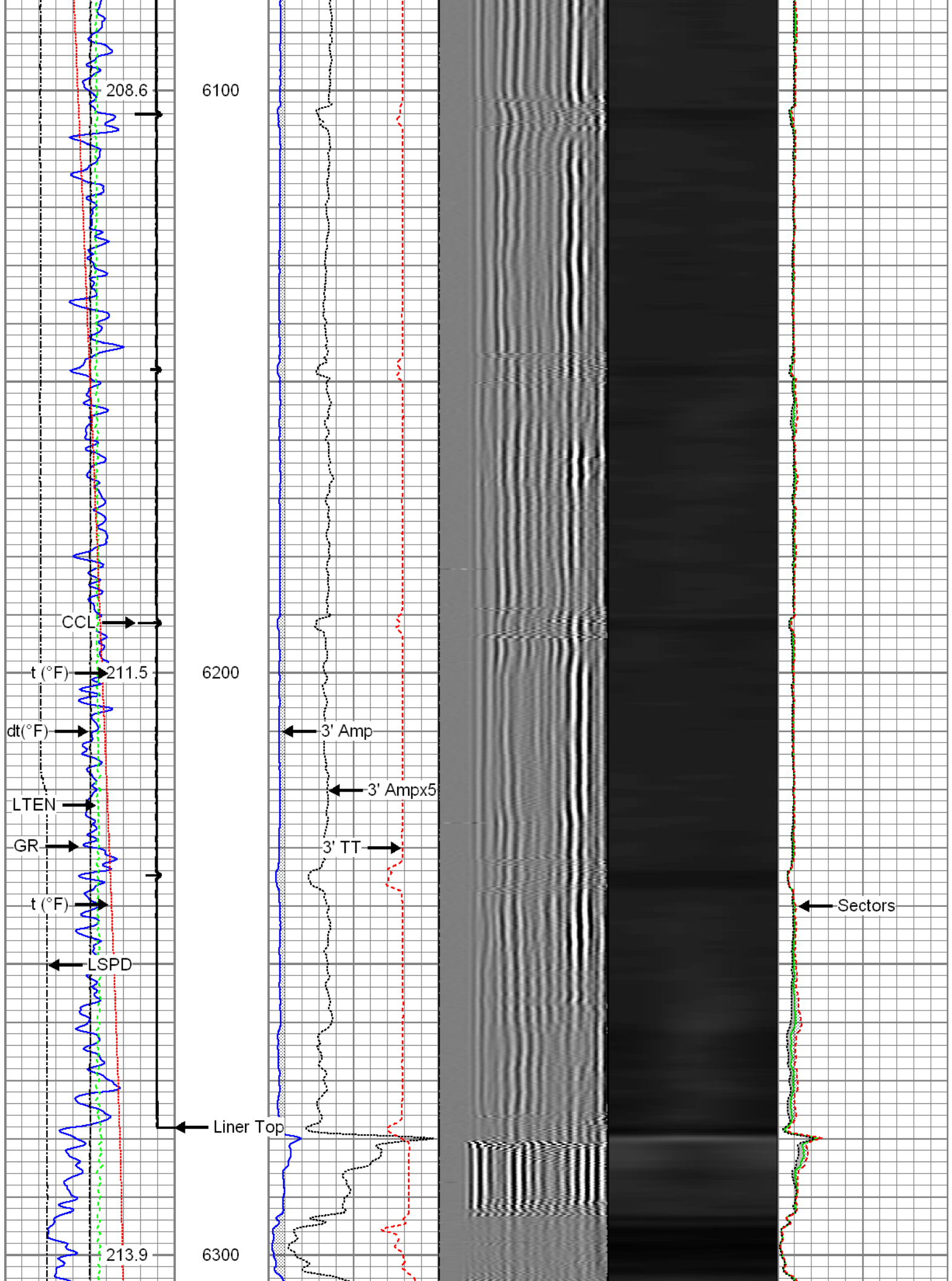


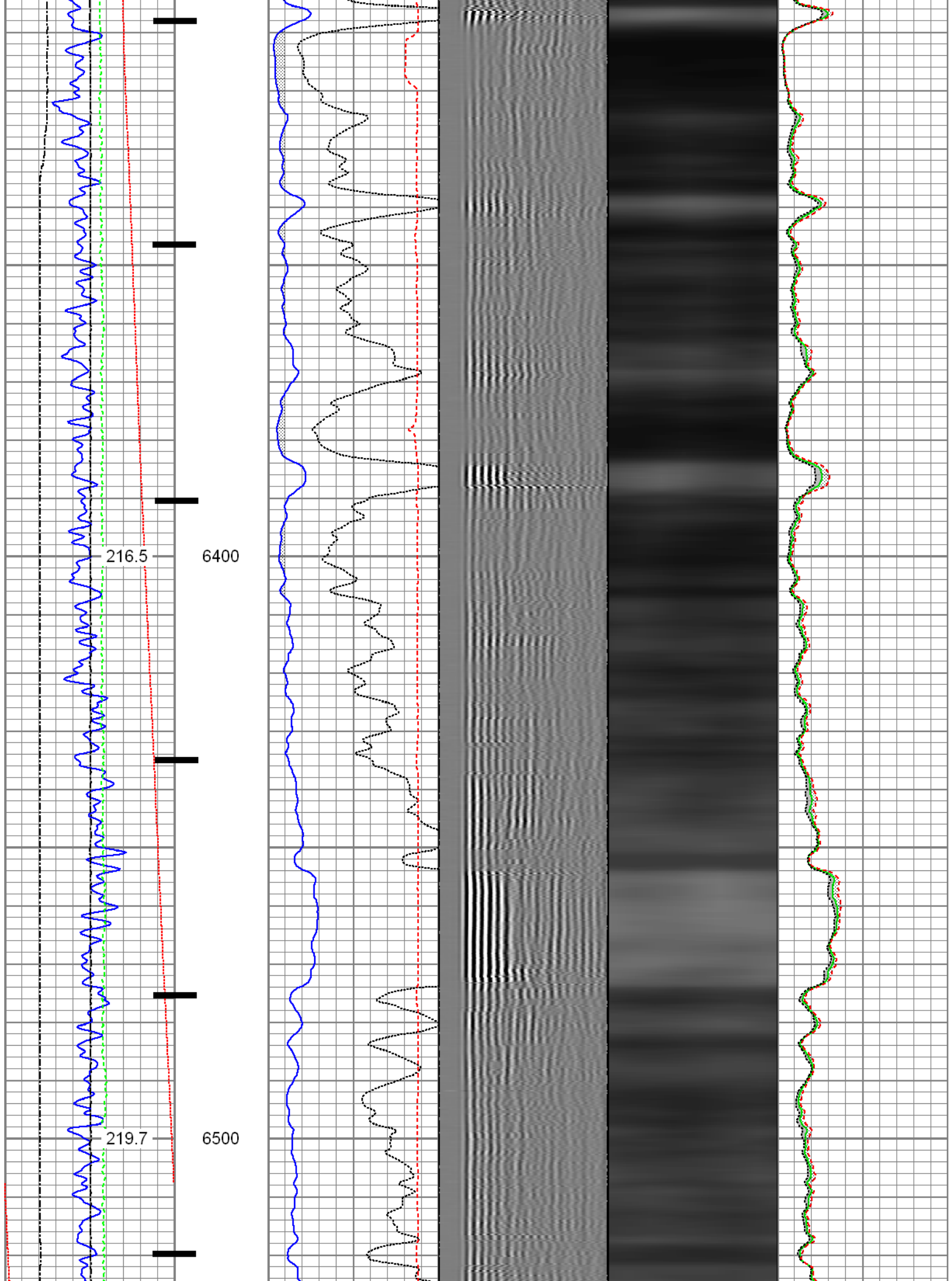


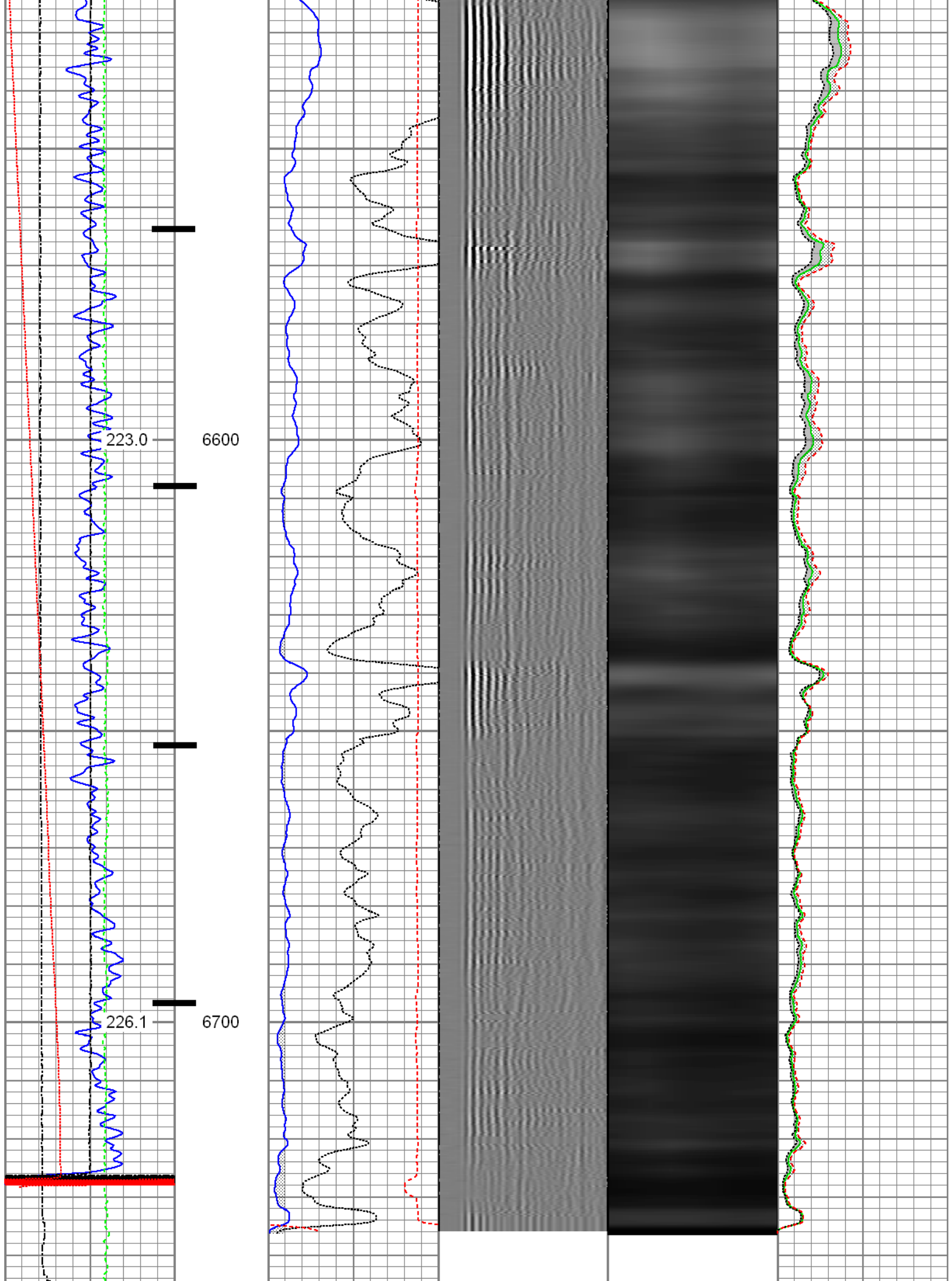



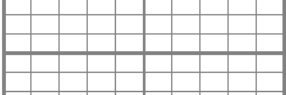








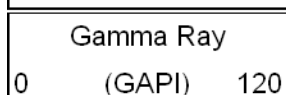
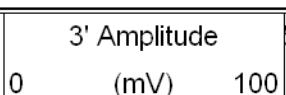
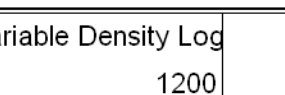
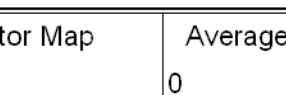



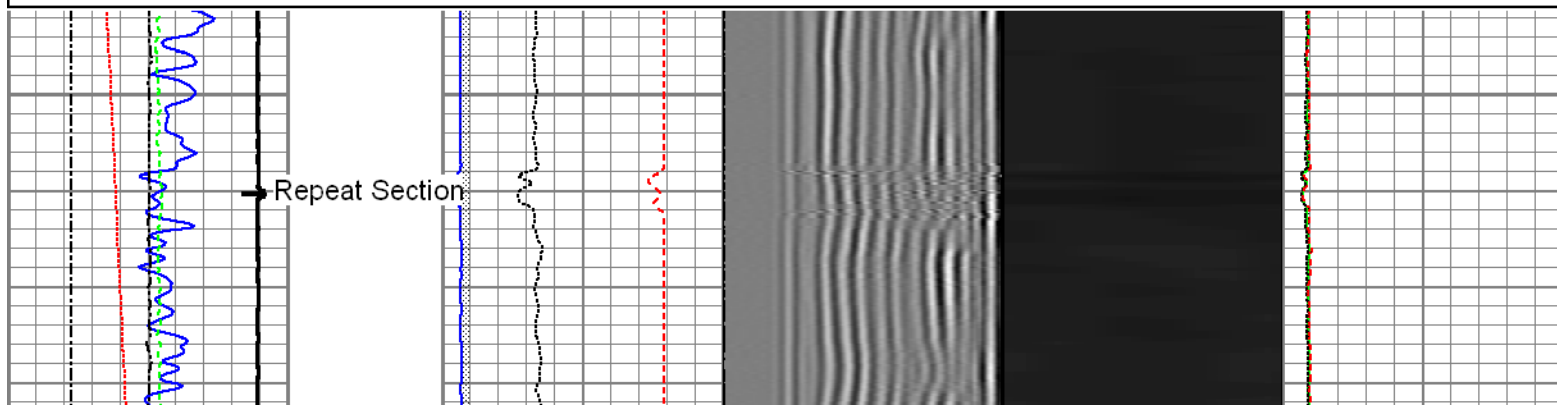


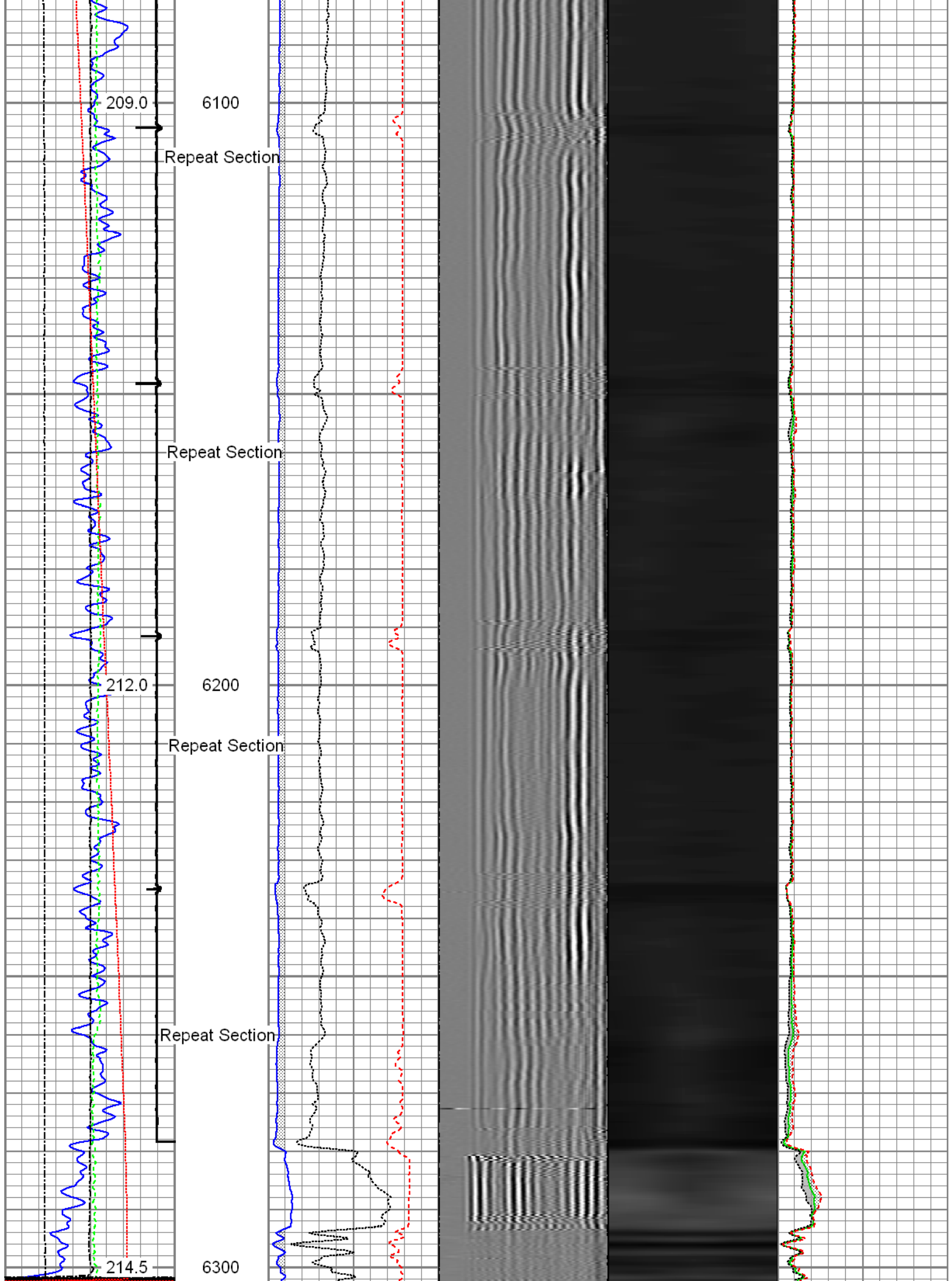


					
Gamma Ray 0 (GAPI) 120		3' Amplitude 0 (mV) 100	5' Variable Density Log 200 1200	Sector Map	Average Amplitude 0 100
Casing Collar Locator		3' Amplitude x 5			Minimum Amplitude
Line Speed -100 (ft/min) 100		0 (mV) 20			0 100
Line Tension 0 (lb) 2000		3' Travel Time 650 (usec) 150			Maximum Amplitude 0 100
Differential Temperature -2 (degF) 2					
Temperature 0 (degF) 20					

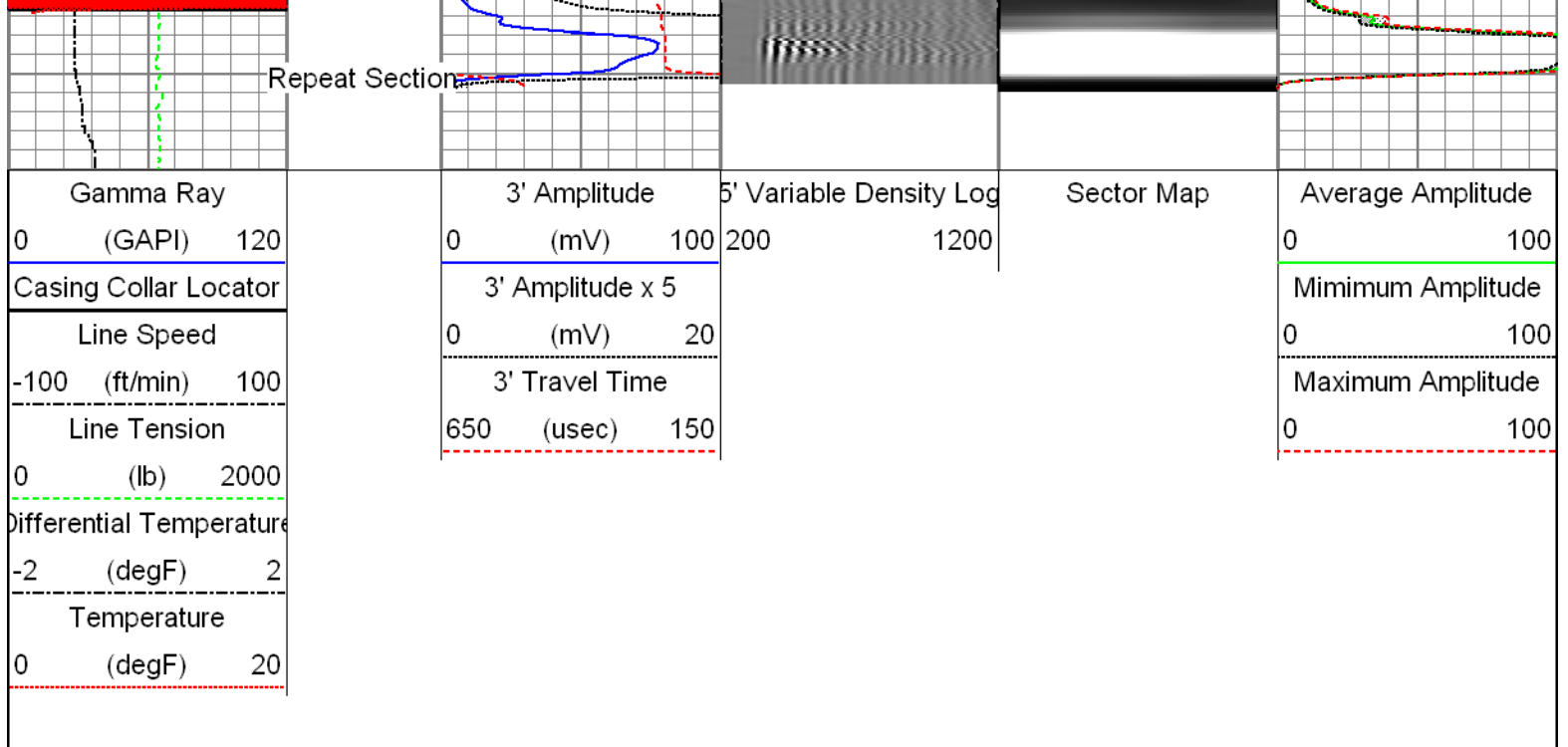
	<h1>Repeat Pass</h1> <p>Recorded With 2800 PSI Surface Induced Pressure</p>
Database File: c:\warrior\data\0512341346_anadarko_jester 41n_a14hz_09-03-15_mit_rbl\0512341346_anadarko_jester Dataset Pathname: pass2 Presentation Format: rbt4_mit Dataset Creation: Thu Sep 03 08:28:33 2015 by Log 7.0 B1 Charted by: Depth in Feet scaled 1:240	

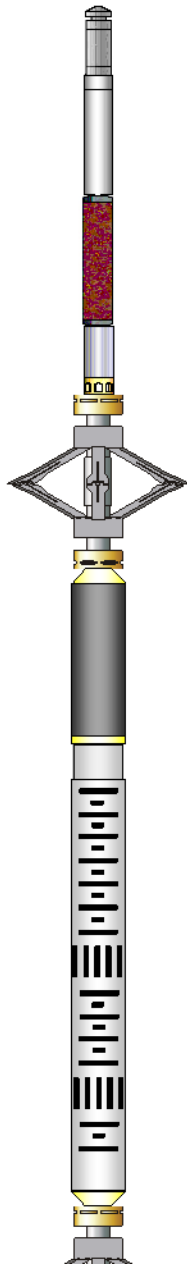
					
Gamma Ray 0 (GAPI) 120		3' Amplitude 0 (mV) 100	5' Variable Density Log 200 1200	Sector Map	Average Amplitude 0 100
Casing Collar Locator		3' Amplitude x 5			Minimum Amplitude
Line Speed -100 (ft/min) 100		0 (mV) 20			0 100
Line Tension 0 (lb) 2000		3' Travel Time 650 (usec) 150			Maximum Amplitude 0 100
Differential Temperature -2 (degF) 2					
Temperature 0 (degF) 20					

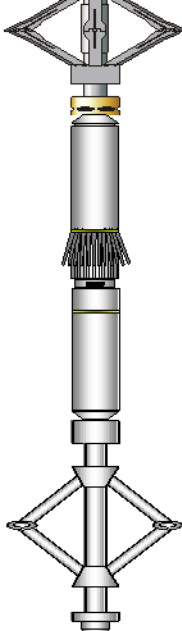








Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)	
GR	23.85		T_CH14375_1_GO Titan 1-7/16" Assembled Electric Cable Head with 1" Fishing Neck	1.03	1.44	4.00	
			UW_AGS-UW_AGS_001 (215017) Sondex Adapter - GO Box to Sondex Pin	0.21	1.69	1.00	
			UW_XTU-UW_XTU_002 (211461) Crossover Ultrawire Toolbus to Ultralink	1.58	1.69	6.50	
			UW_PGR-UW_PGR_020 (10024770) Production Gamma Ray	1.93	1.69	9.50	
TEMP	22.45		UW_PRT-UW_PRT_016 (10025095) Platinum Resistance Thermometer	1.04	1.69	5.20	
			UW_PRC #3 -DSSRAC (080) 2-3/4" DSS 5 Arm Roller Centralizer	2.55	2.75	32.00	
WVF3FT	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						
WVF5FT	14.42						

MIT	5.41		UW_PRC #4 -DSSRAC (081) 2-3/4" DSS 5 Arm Roller Centralizer	2.55	2.75	32.00
			UW_MIT-UW_MIT40_042 (10012912) 40 Multifinger Imaging Tool	4.54	2.75	61.10
TSTAMP	0.00		UW_PRC-UW_PRC_057 (1037) Sondex 2-3/4" 4-Arm Production Roller Centraliser	2.98	2.75	32.00
			UW_BUL-UW_BUL_006 (218707) Sondex Ultrawire Bullnose Terminator	0.22	1.69	1.20
Dataset: 0512341346_anadarko_jester 41n_a14hz_09-03-15_mit_rbl.db: field/well/run1/pass5 Total Length: 28.09 ft Total Weight: 324.50 lb O.D. 3.13 in						

Calibration Report			
Database File:	c:\warrior\data\0512341346_anadarko_jester 41n_a14hz_09-03-15_mit_rbl\0512341346_anadarko_jester		
Dataset Pathname:	pass5		
Dataset Creation:	Thu Sep 03 08:43:47 2015 by Log 7.0 B1		
Multi-finger Imaging Tool Calibration Report			
Serial Number:	10012912		
Number of Fingers:	40		
Tool Model:	UW_MIT40_042		
Inclinometer Calibration Report			
Performed:	Mon Jul 15 09:39:36 2013		
Calibration Angle:	45		
	Inc X	Inc Y	
Vertical:	1968	1974	
Finger 1 up:	1740	1744	
Finger 31 up:	2215	1741	
Finger 21 up:	2205	2224	
Finger 11 up:	1731	2217	
Sensitivity ratio:	0.992868		
X-axis angle:	134.307		
Deviation const.:	335.589		

Finger Calibration Report							
Performed: Thu Sep 03 08:05:42 2015							
Ring size:	4	5	6	7			
(in)							
		Sens	Sens	Sens			
Finger 01:	1024	389.0	1413	386.0	1799	413.0	2212
Finger 02:	1142	404.0	1546	386.0	1932	407.0	2339
Finger 03:	1015	410.0	1425	409.0	1834	438.0	2272
Finger 04:	1063	403.0	1466	398.0	1864	428.0	2292
Finger 05:	1072	414.0	1486	401.0	1887	429.0	2316
Finger 06:	1065	417.0	1482	403.0	1885	431.0	2316
Finger 07:	999	409.0	1408	403.0	1811	432.0	2243
Finger 08:	1072	413.0	1485	403.0	1888	432.0	2320
Finger 09:	1035	407.0	1442	401.0	1843	428.0	2271

Finger 10:	1021	402.0	1423	401.0	1824	427.0	2251
Finger 11:	1116	415.0	1531	405.0	1936	423.0	2359
Finger 12:	1013	389.0	1402	398.0	1800	424.0	2224
Finger 13:	1045	389.0	1434	393.0	1827	412.0	2239
Finger 14:	1030	387.0	1417	403.0	1820	423.0	2243
Finger 15:	978	401.0	1379	415.0	1794	433.0	2227
Finger 16:	1016	390.0	1406	416.0	1822	435.0	2257
Finger 17:	918	360.0	1278	395.0	1673	427.0	2100
Finger 18:	1051	365.0	1416	392.0	1808	406.0	2214
Finger 19:	1042	371.0	1413	400.0	1813	414.0	2227
Finger 20:	1005	364.0	1369	408.0	1777	424.0	2201
Finger 21:	1013	368.0	1381	407.0	1788	411.0	2199
Finger 22:	994	363.0	1357	408.0	1765	421.0	2186
Finger 23:	998	366.0	1364	417.0	1781	429.0	2210
Finger 24:	1050	358.0	1408	399.0	1807	396.0	2203
Finger 25:	980	360.0	1340	411.0	1751	424.0	2175
Finger 26:	1114	348.0	1462	385.0	1847	387.0	2234
Finger 27:	1053	354.0	1407	401.0	1808	409.0	2217
Finger 28:	1071	352.0	1423	385.0	1808	393.0	2201
Finger 29:	1015	364.0	1379	404.0	1783	419.0	2202
Finger 30:	1056	357.0	1413	399.0	1812	409.0	2221
Finger 31:	1101	365.0	1466	391.0	1857	401.0	2258
Finger 32:	1044	372.0	1416	404.0	1820	417.0	2237
Finger 33:	1184	369.0	1553	377.0	1930	378.0	2308
Finger 34:	1064	359.0	1423	384.0	1807	402.0	2209
Finger 35:	1051	379.0	1430	414.0	1844	430.0	2274
Finger 36:	1036	384.0	1420	399.0	1819	423.0	2242
Finger 37:	1116	393.0	1509	390.0	1899	409.0	2308
Finger 38:	1145	389.0	1534	383.0	1917	395.0	2312
Finger 39:	1138	395.0	1533	385.0	1918	403.0	2321
Finger 40:	1055	400.0	1455	397.0	1852	423.0	2275

Segmented Cement Bond Log Calibration Report						
Serial Number:		1063				
Tool Model:		UW_RBT_004				
Calibration Casing Diameter:		7.000	in			
Calibration Depth:		10.061	ft			
Master Calibration, performed Thu Sep 03 08:04:05 2015:						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	-0.003	1.000	1.000	62.165	61.007	1.158
5FT	-0.006	1.000	1.000	62.165	60.789	1.376
S1	-0.004	1.000	0.000	100.000	99.635	0.365
S2	-0.004	1.000	0.000	100.000	99.647	0.353
S3	-0.004	1.000	0.000	100.000	99.639	0.361
S4	-0.004	1.000	0.000	100.000	99.635	0.365
S5	-0.002	1.000	0.000	100.000	99.756	0.244
S6	-0.003	1.000	0.000	100.000	99.718	0.282
S7	-0.002	1.000	0.000	100.000	99.756	0.244
S8	-0.003	1.000	0.000	100.000	99.744	0.256
Temperature Calibration Report						

Temperature Calibration Report			
		Serial Number:	
		Tool Model:	
		Performed:	
		10025095	
		UW_PRT_016	
		Wed Feb 11 13:43:20 2015	
Point #	Reading	Reference	

1	12798.00	cps	68.00	degF
2	18136.00	cps	104.00	degF
3	29513.00	cps	176.00	degF
4	40905.00	cps	248.00	degF
5	52487.00	cps	320.00	degF
6	58362.00	cps	356.00	degF
7		cps		degF
8		cps		degF
9		cps		degF
10		cps		degF

Gamma Ray Calibration Report				
Serial Number:	10024770			
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	Jester 41N-A14HZ
	Field	Wattenberg
	County	Weld
	State	Colorado