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<p>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.</p>
Comments
<p>Log ran as per customer request. Depth referenced to casing tally reported liner top at 4396 FT. Adjusted log -19 FT to correlate with liner top. Gauge Ring/Junk Basket run to 5100 FT had no debris prior to log run. Log ran from 5100 FT to surface. Log ran with 2800 PSI surface induced pressure. Picked up debris at a couple of different spots in well.</p> <p>Thank you for choosing FMC Technologies Completion Services, Inc.</p>



Database File: c:\warrior\data\anadarko_griswold 29-11hz\0512341025_anadarko_griswold 29-11hz_04-16-15_mit_r

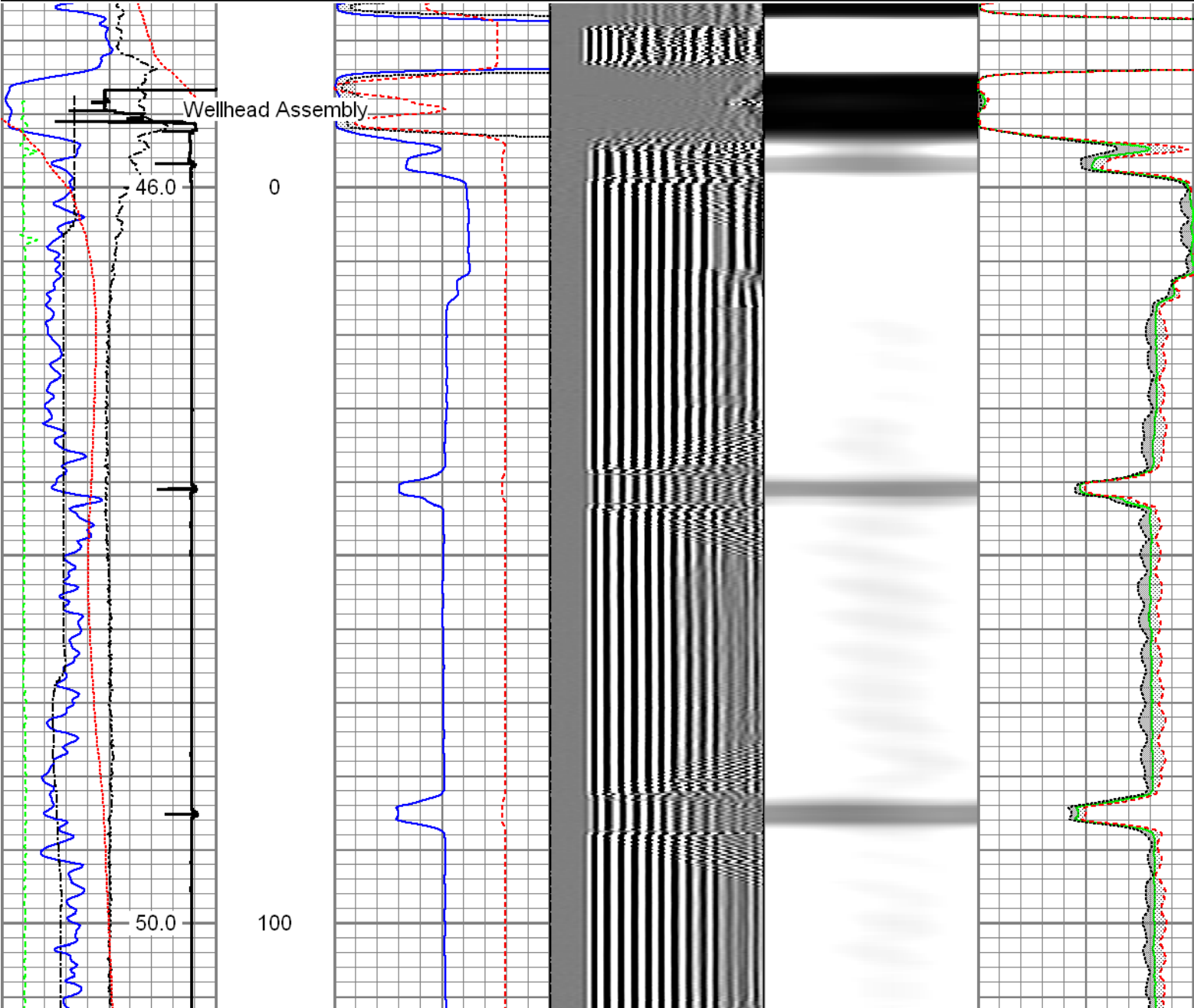
Dataset Pathname: MainPass1

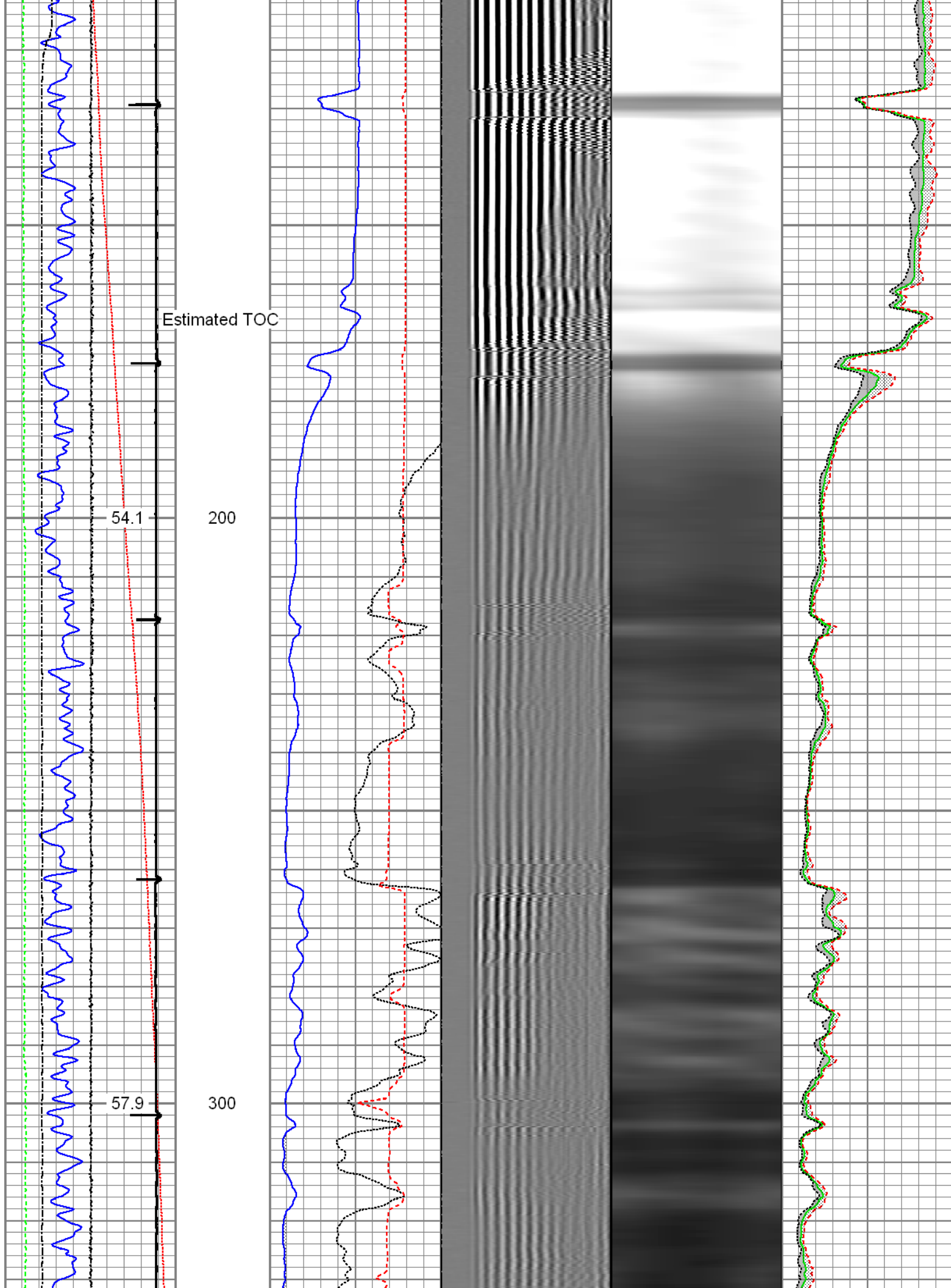
Presentation Format: rbt4_mit

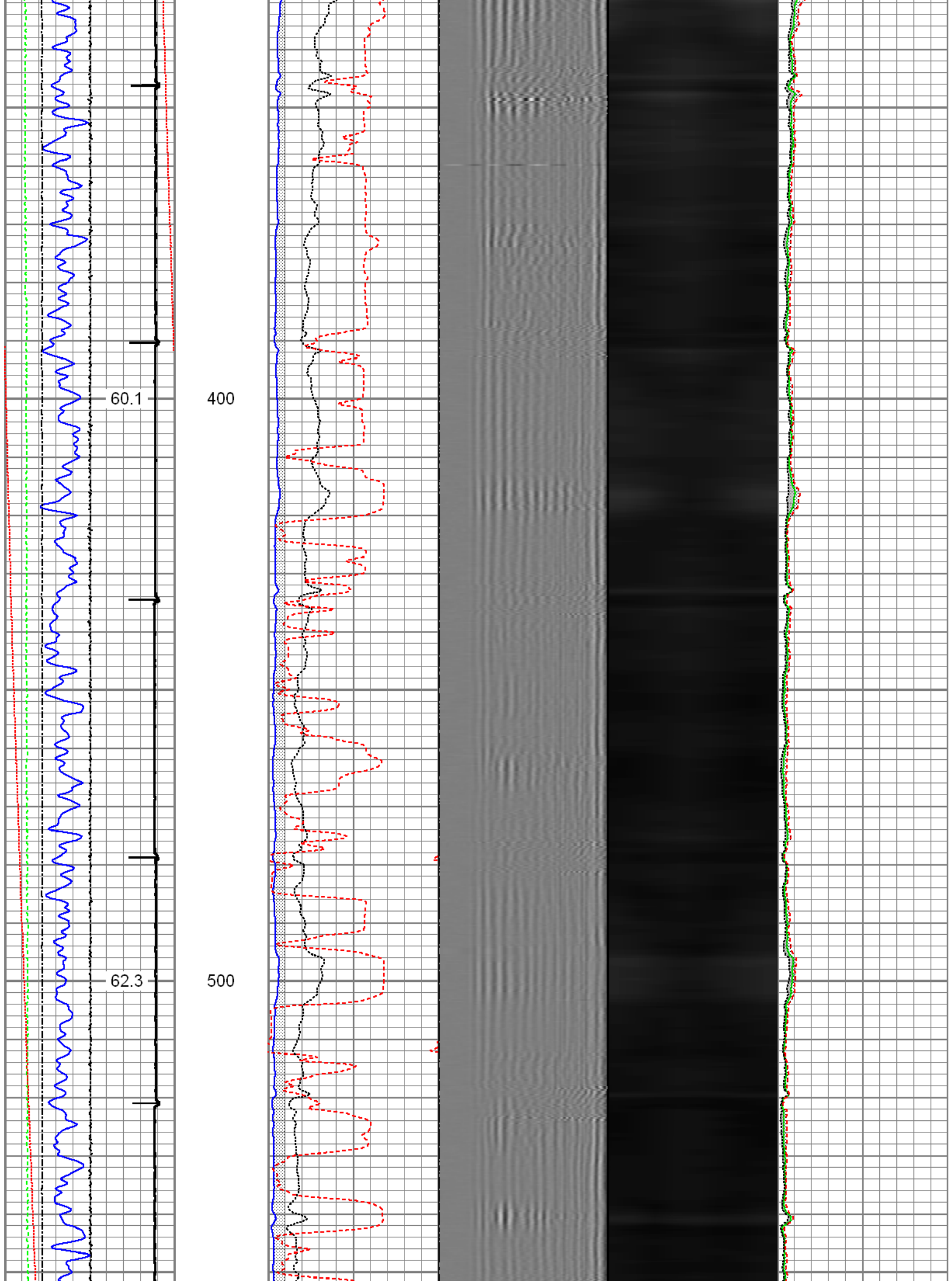
Dataset Creation: Thu Apr 16 12:03:03 2015 by Log 7.0 B1

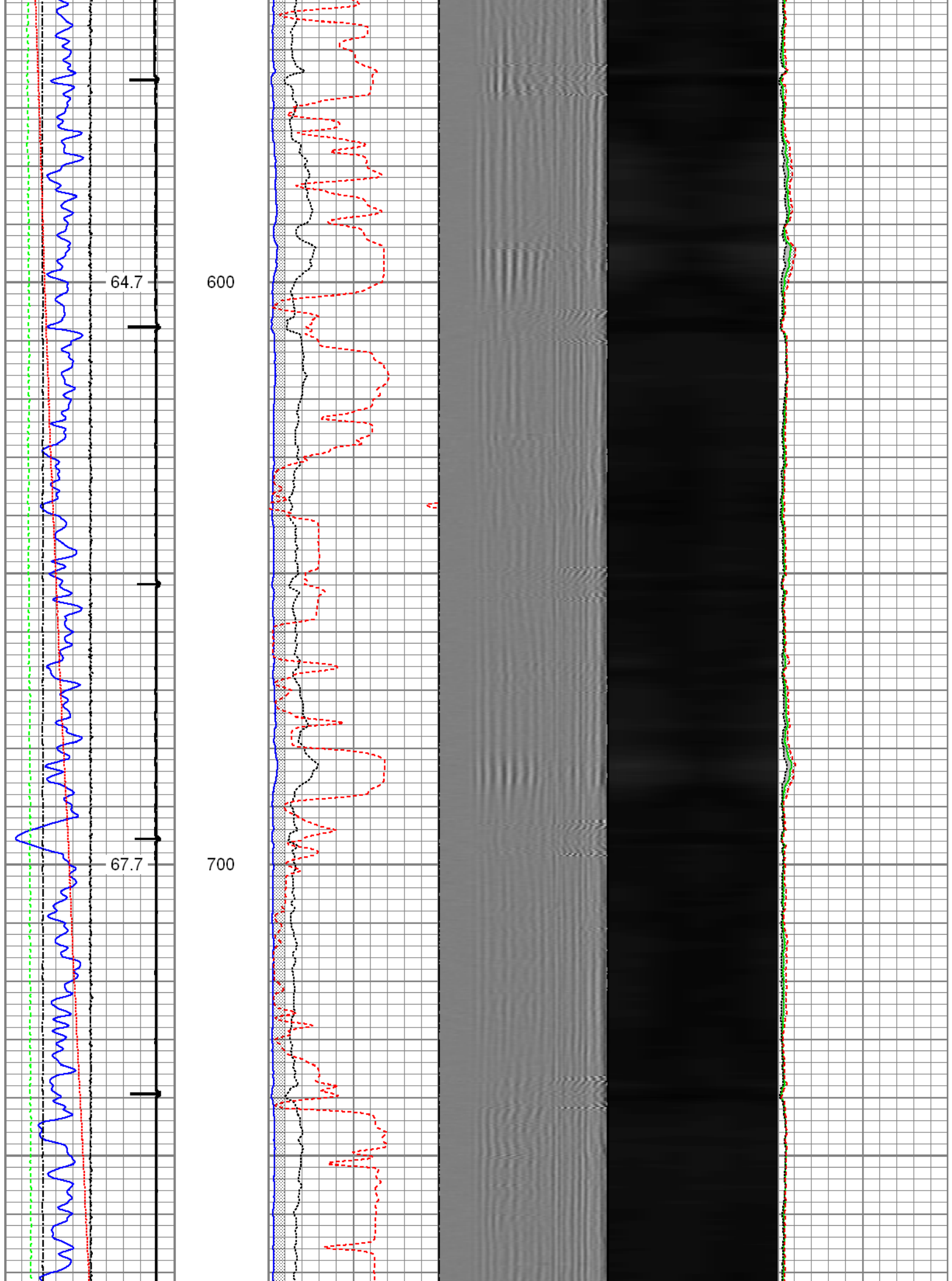
Charted by: Depth in Feet scaled 1:240

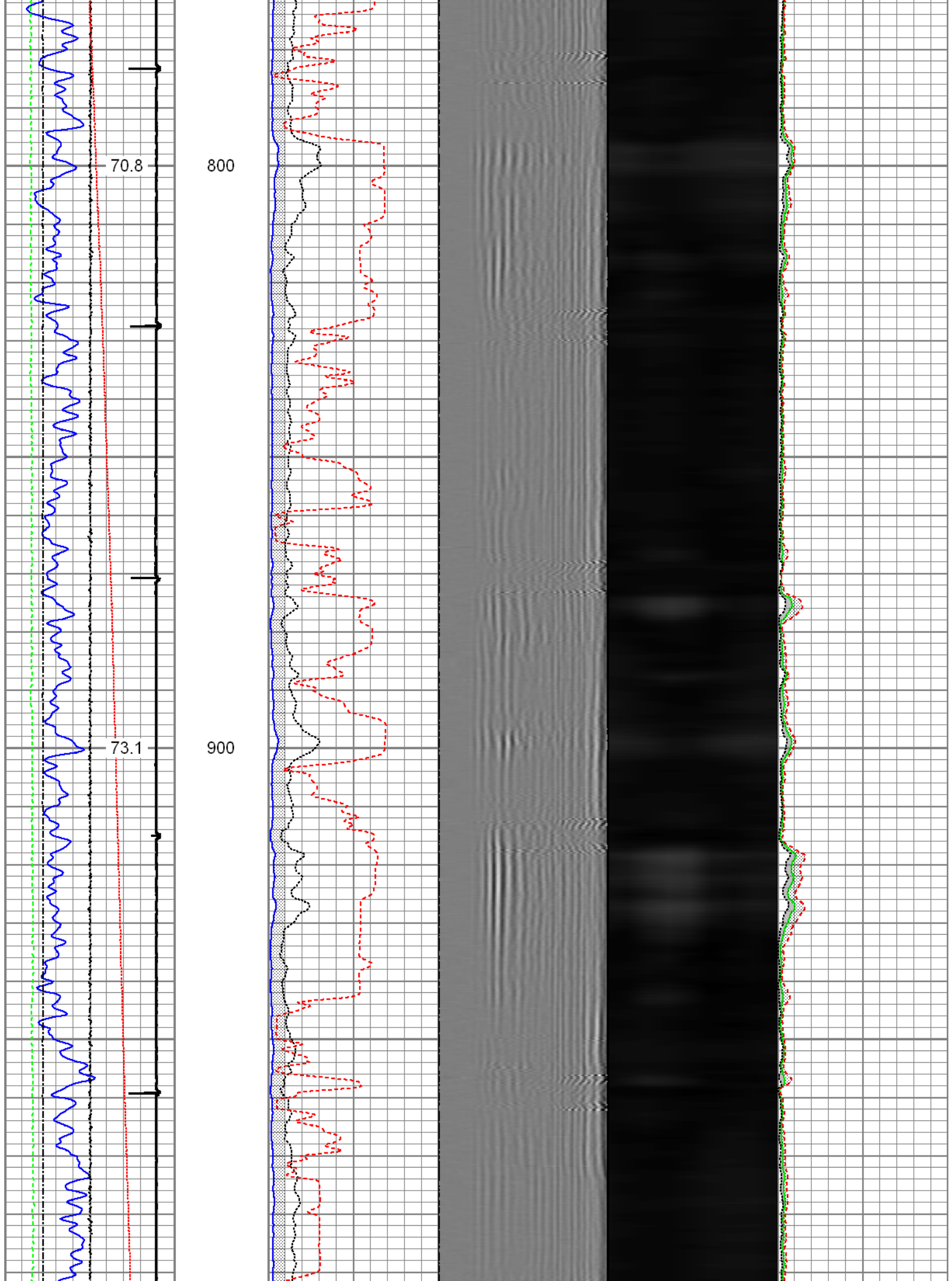
Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120	0 (mV) 100	200 1200		0 100
Line Speed	3' Amplitude x 5			Mimimum Amplitude
-100 (ft/min) 100	0 (mV) 20			0 100
Line Tension	3' Travel Time			Maximum Amplitude
0 (lb) 2000	650 (usec) 150			0 100
Differential Temperature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

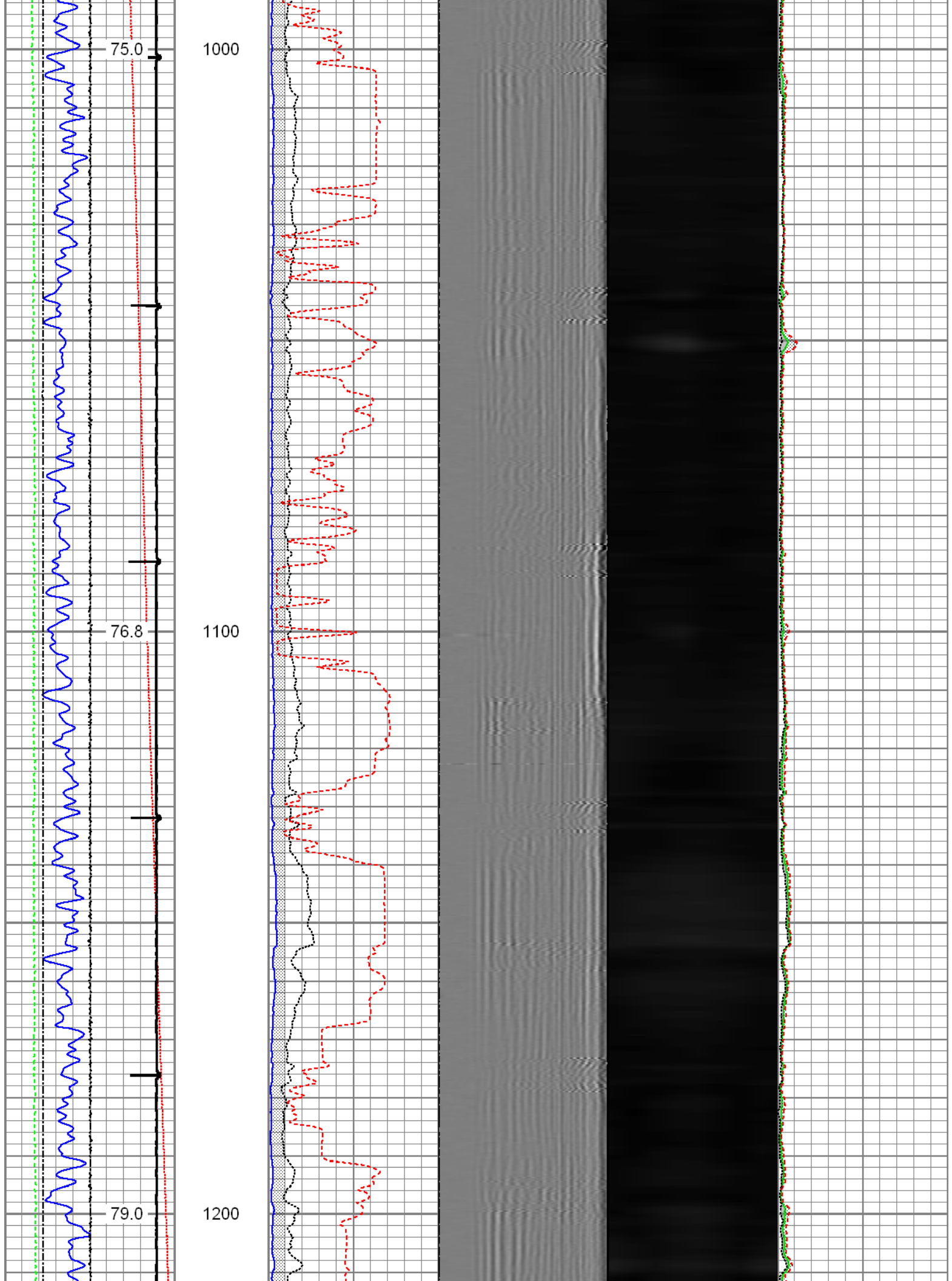


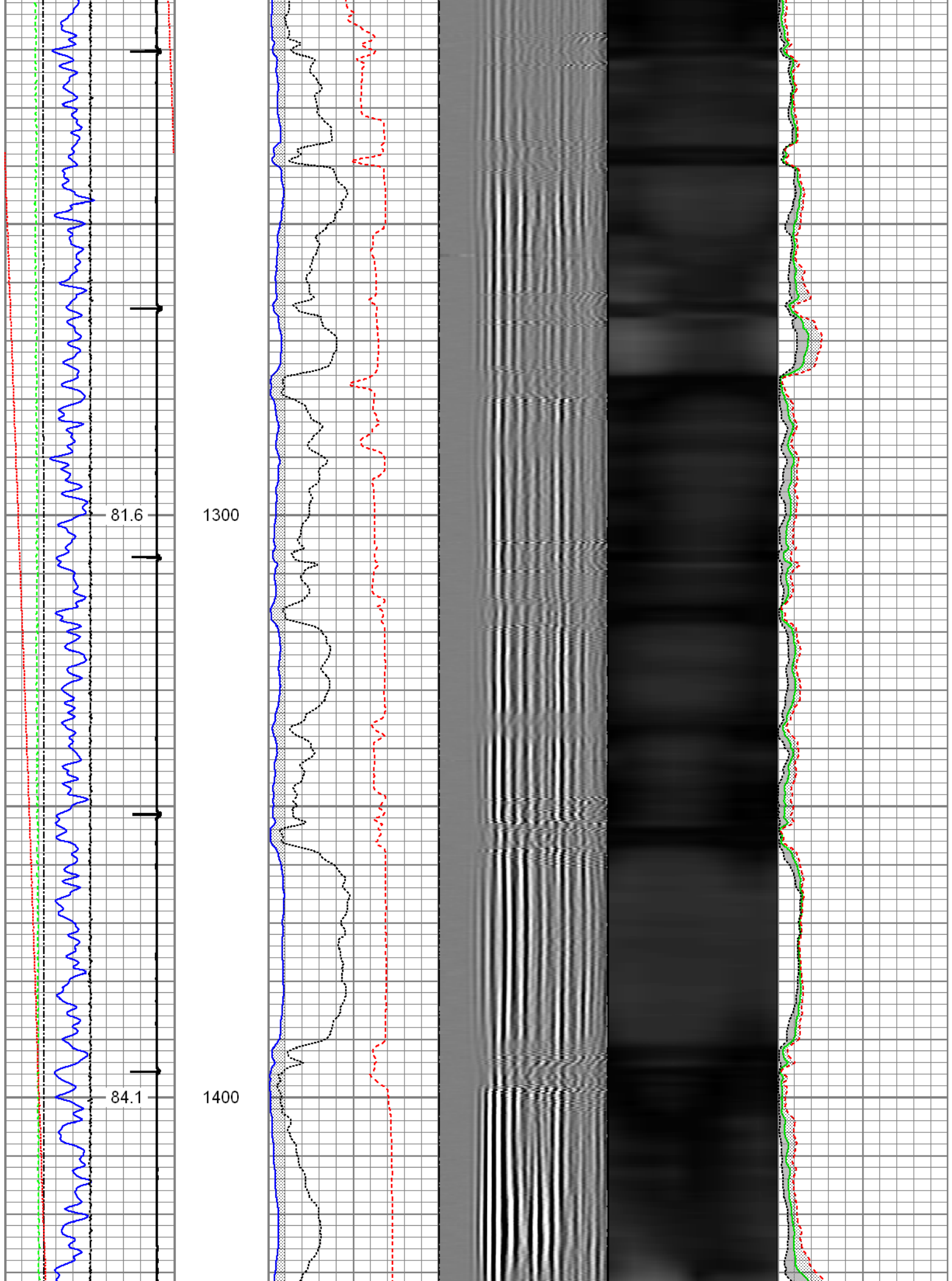


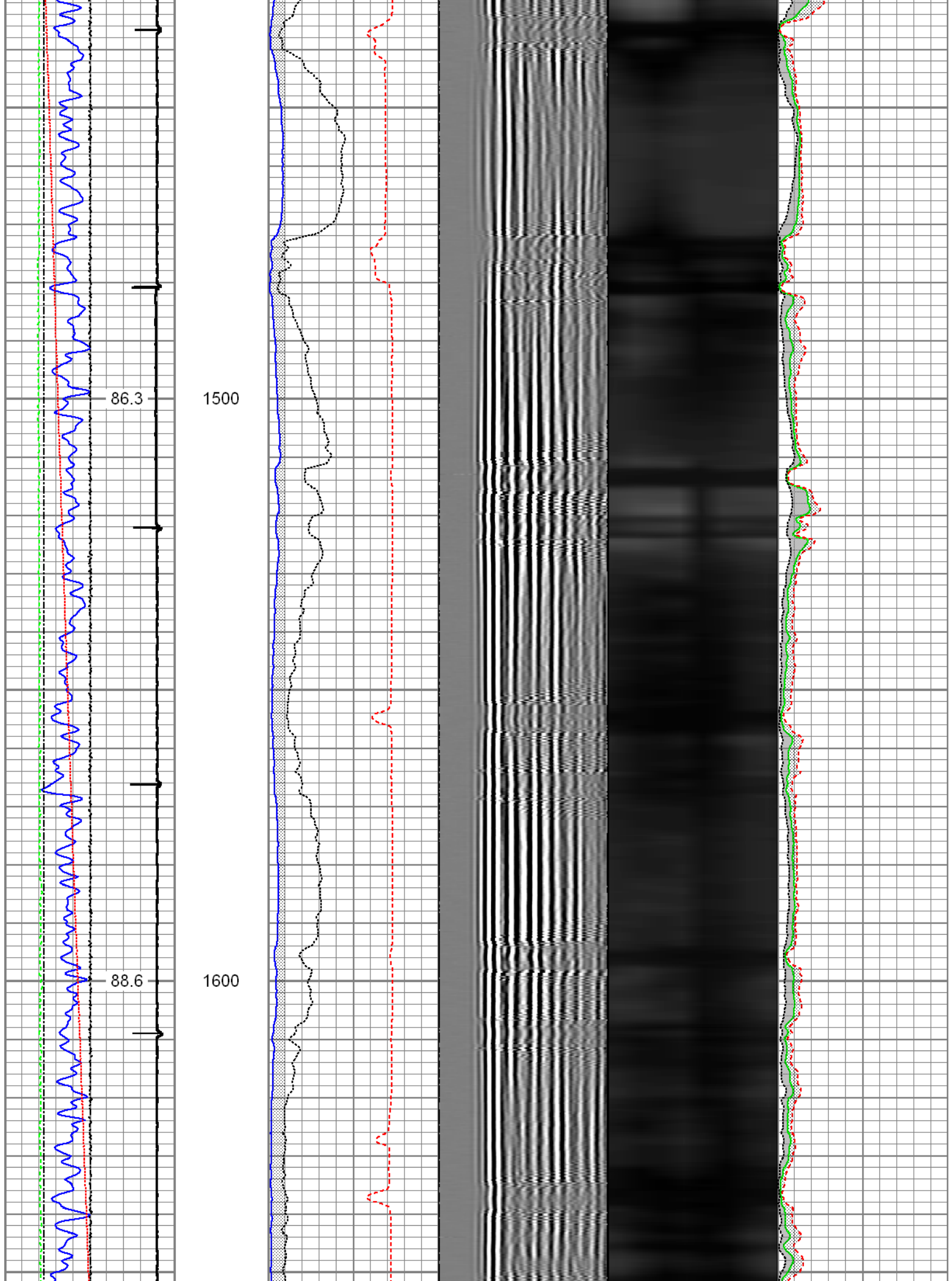


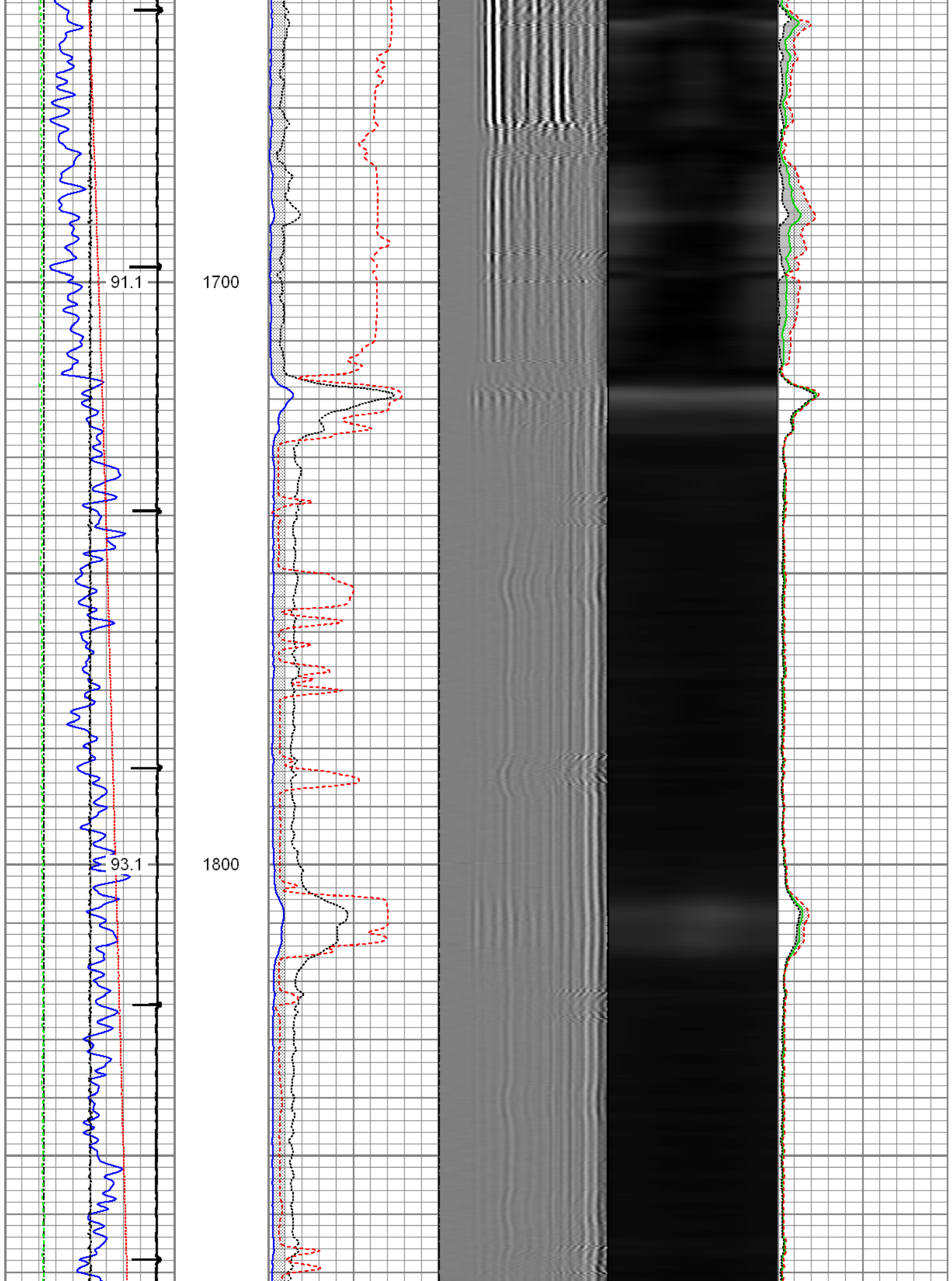


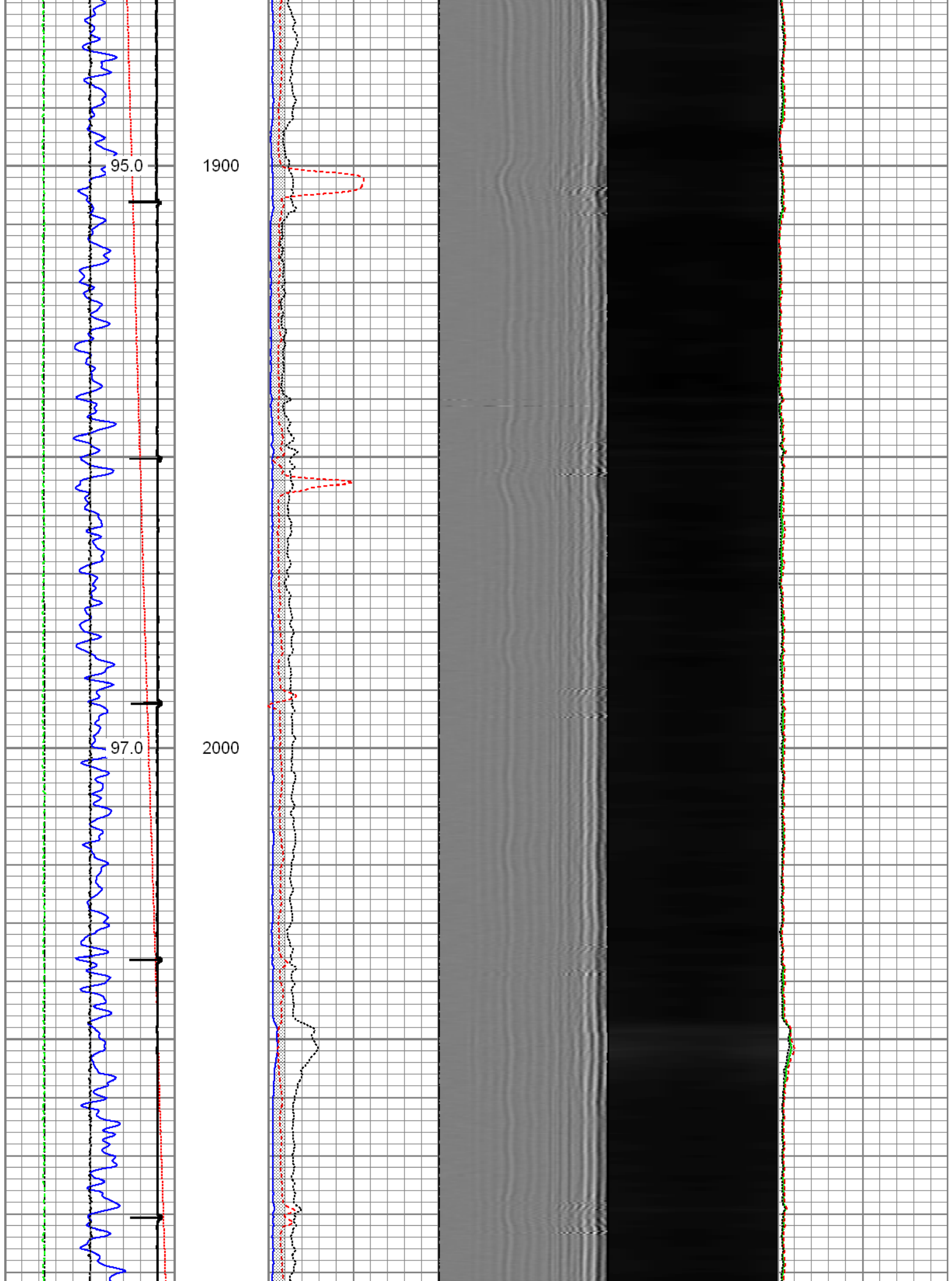


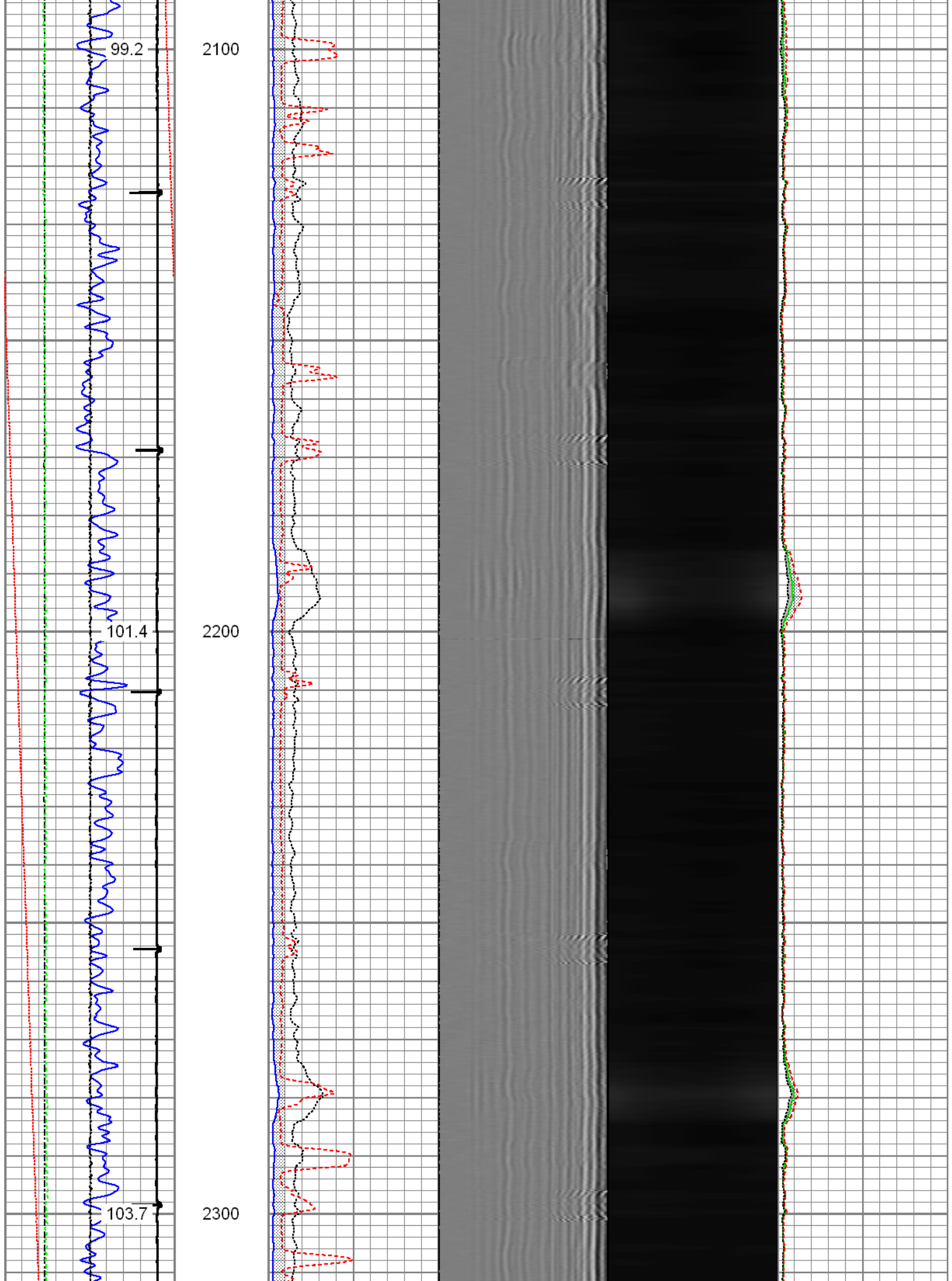


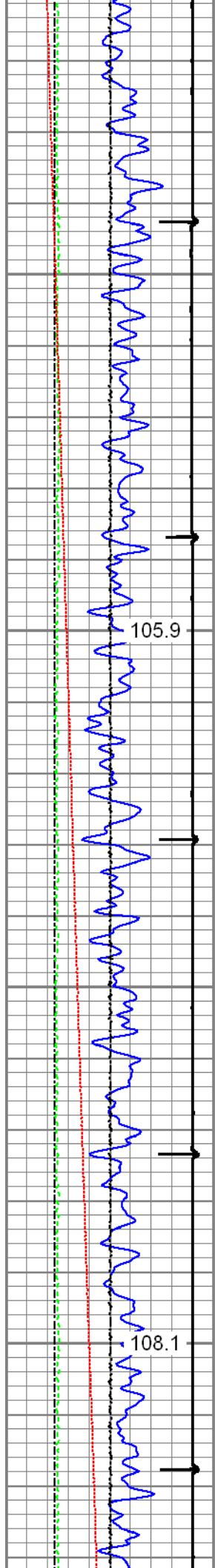






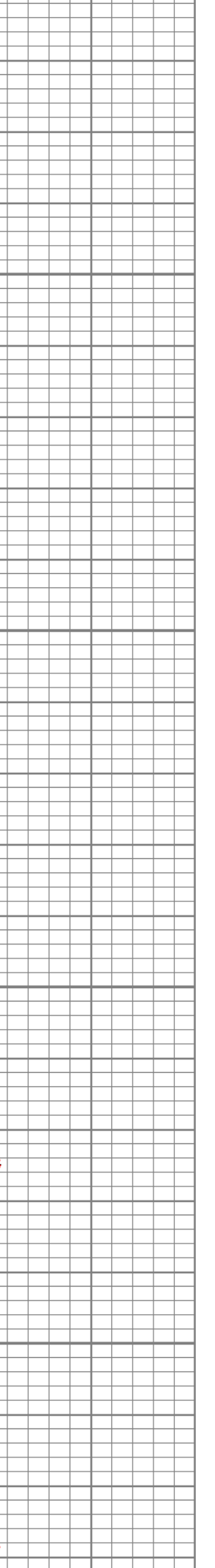
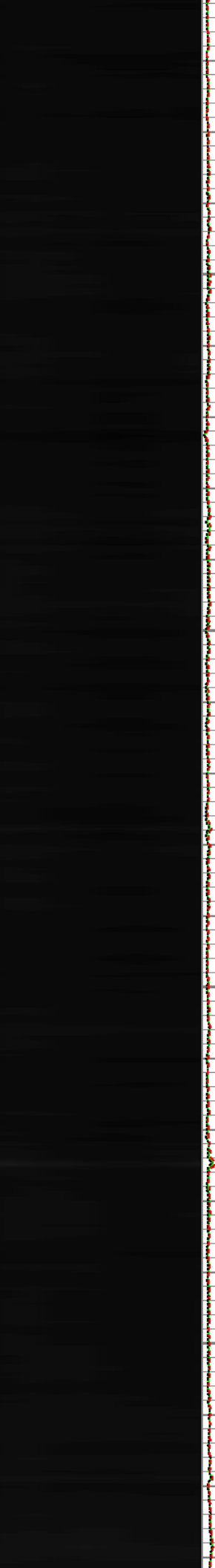
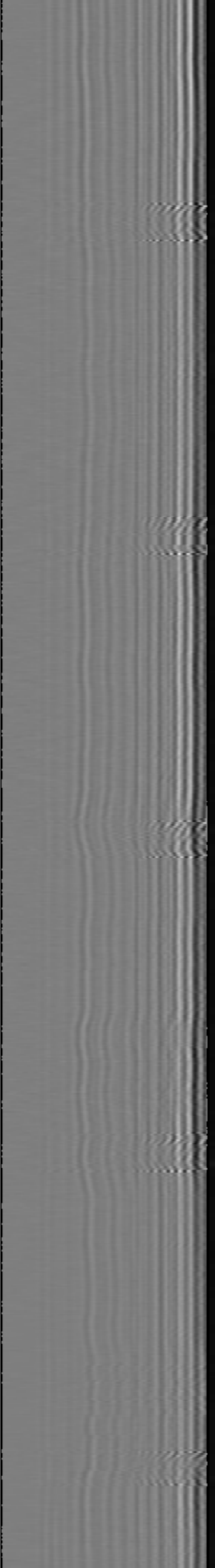
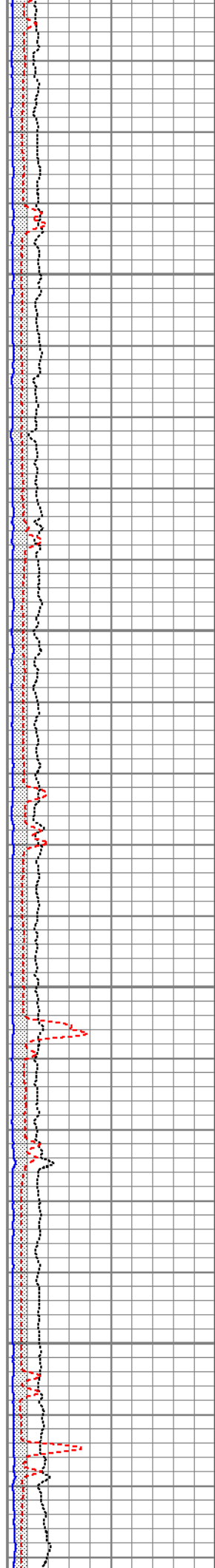


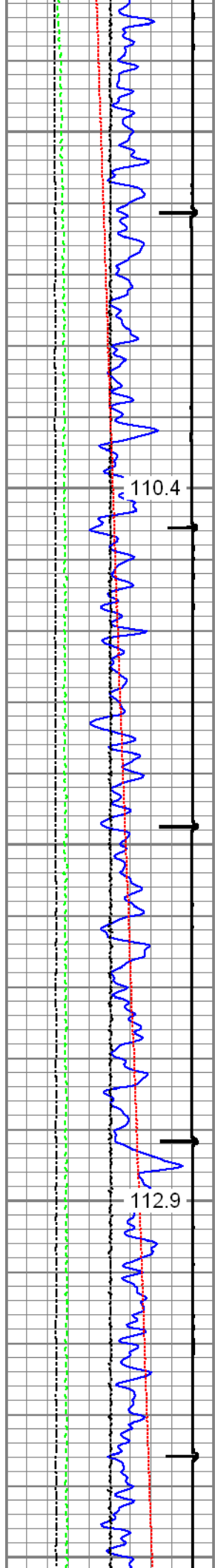




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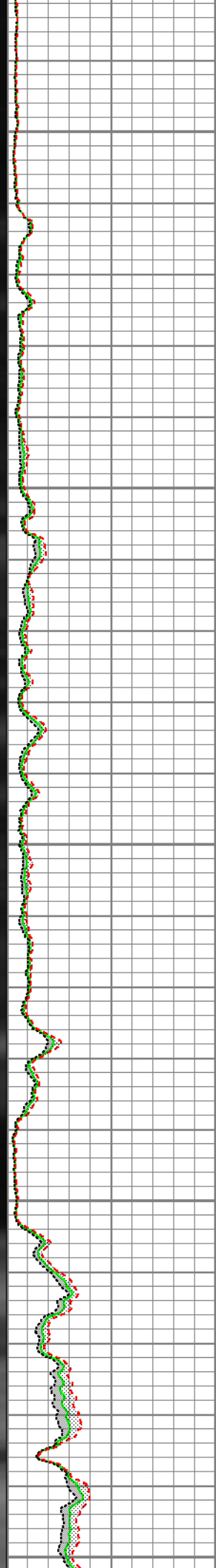
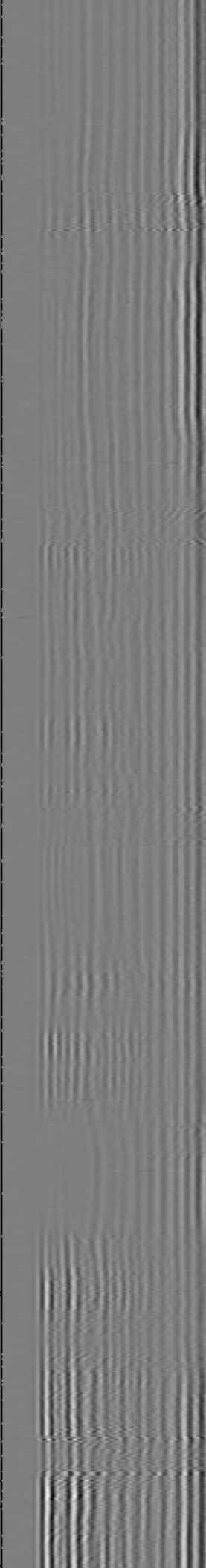
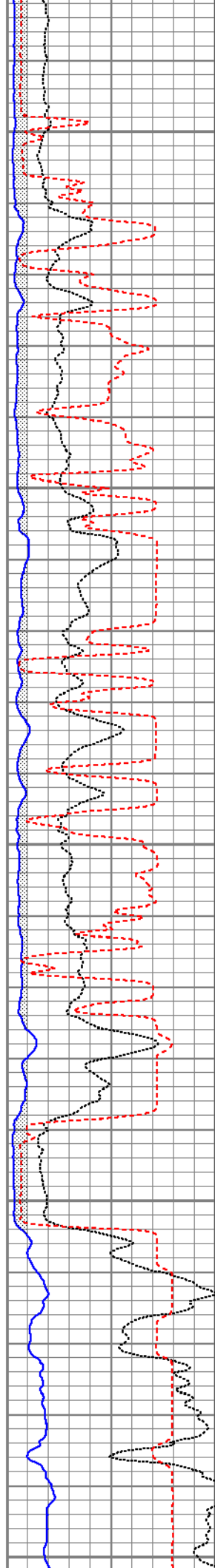
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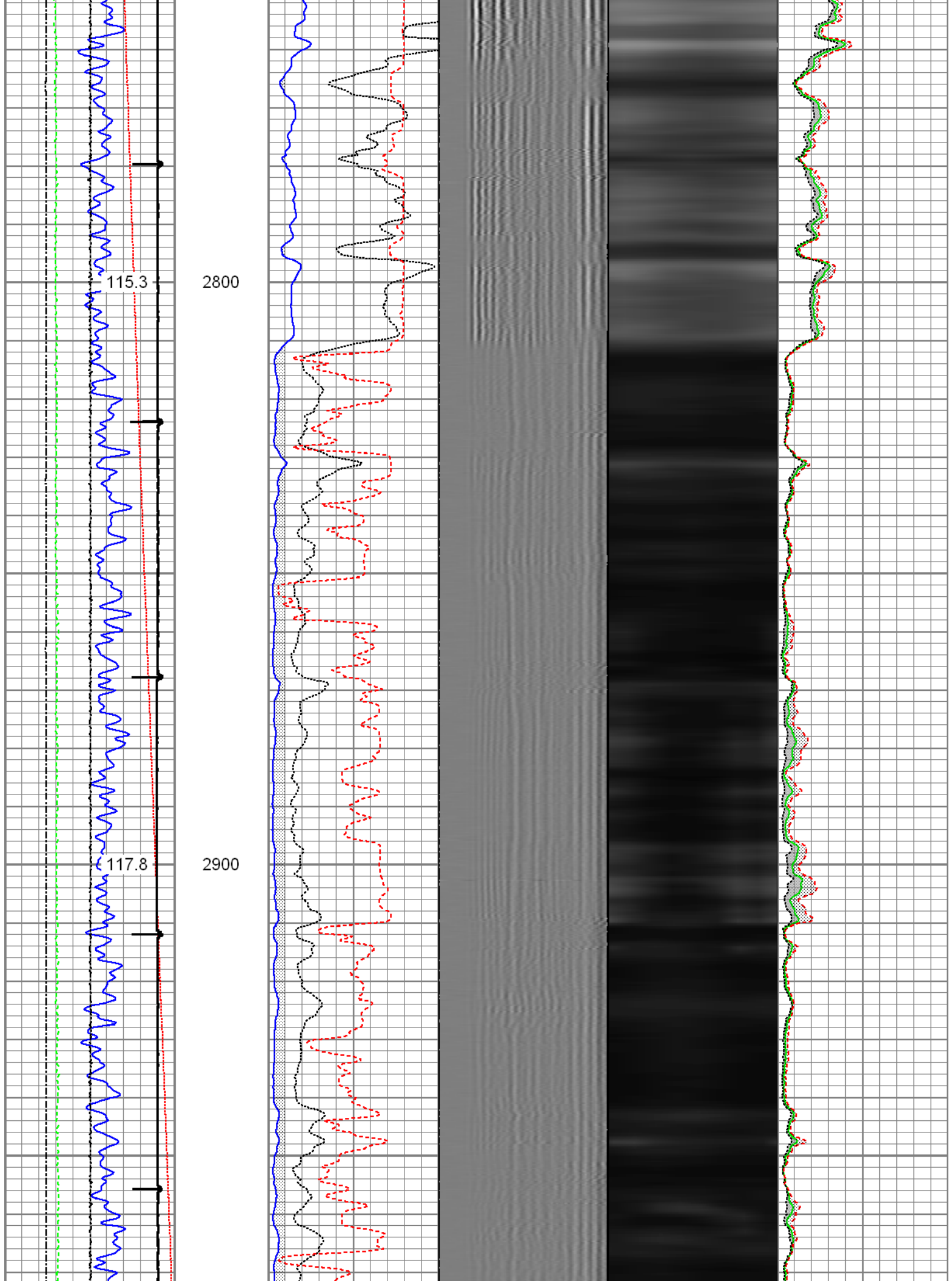


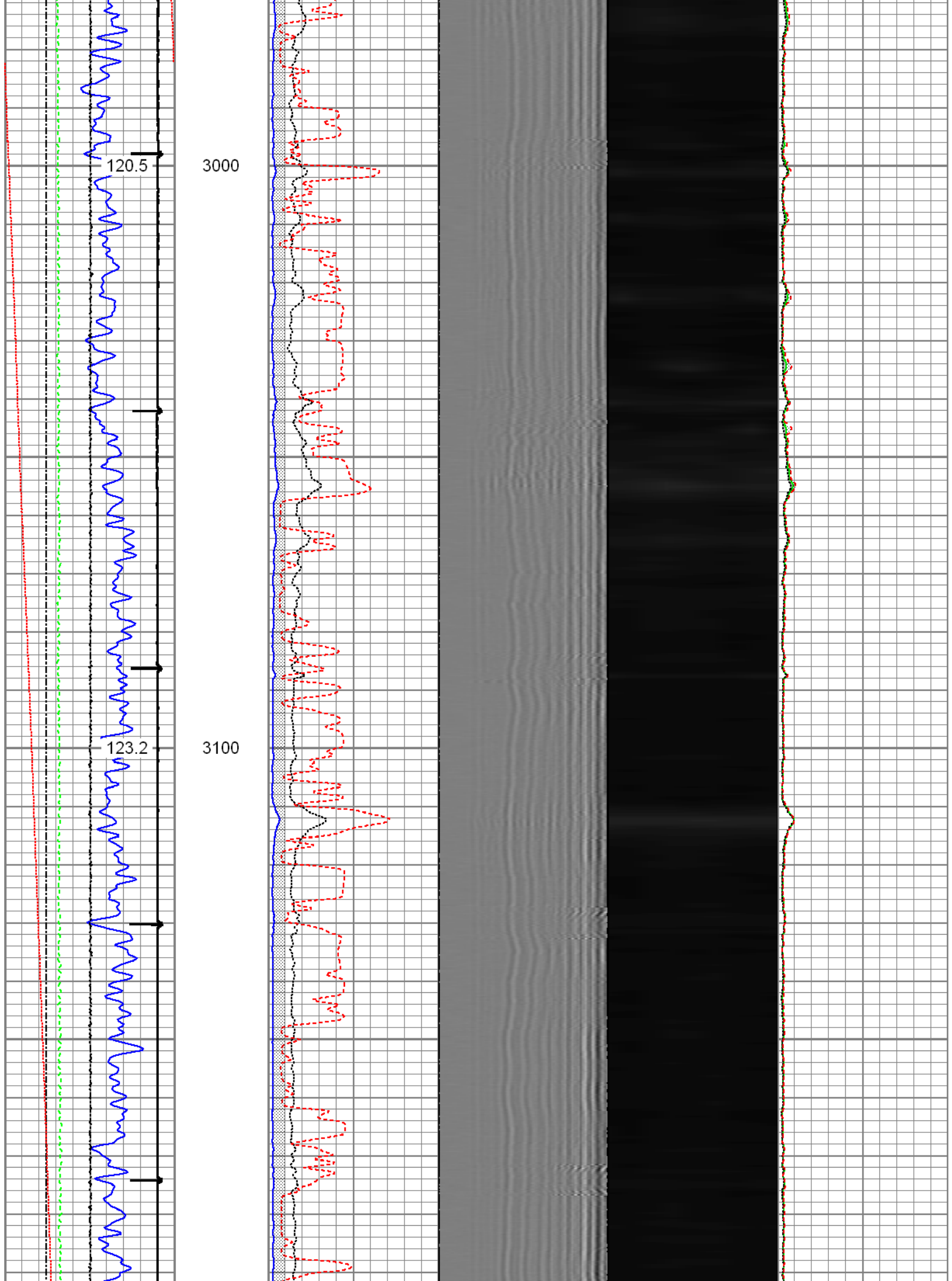


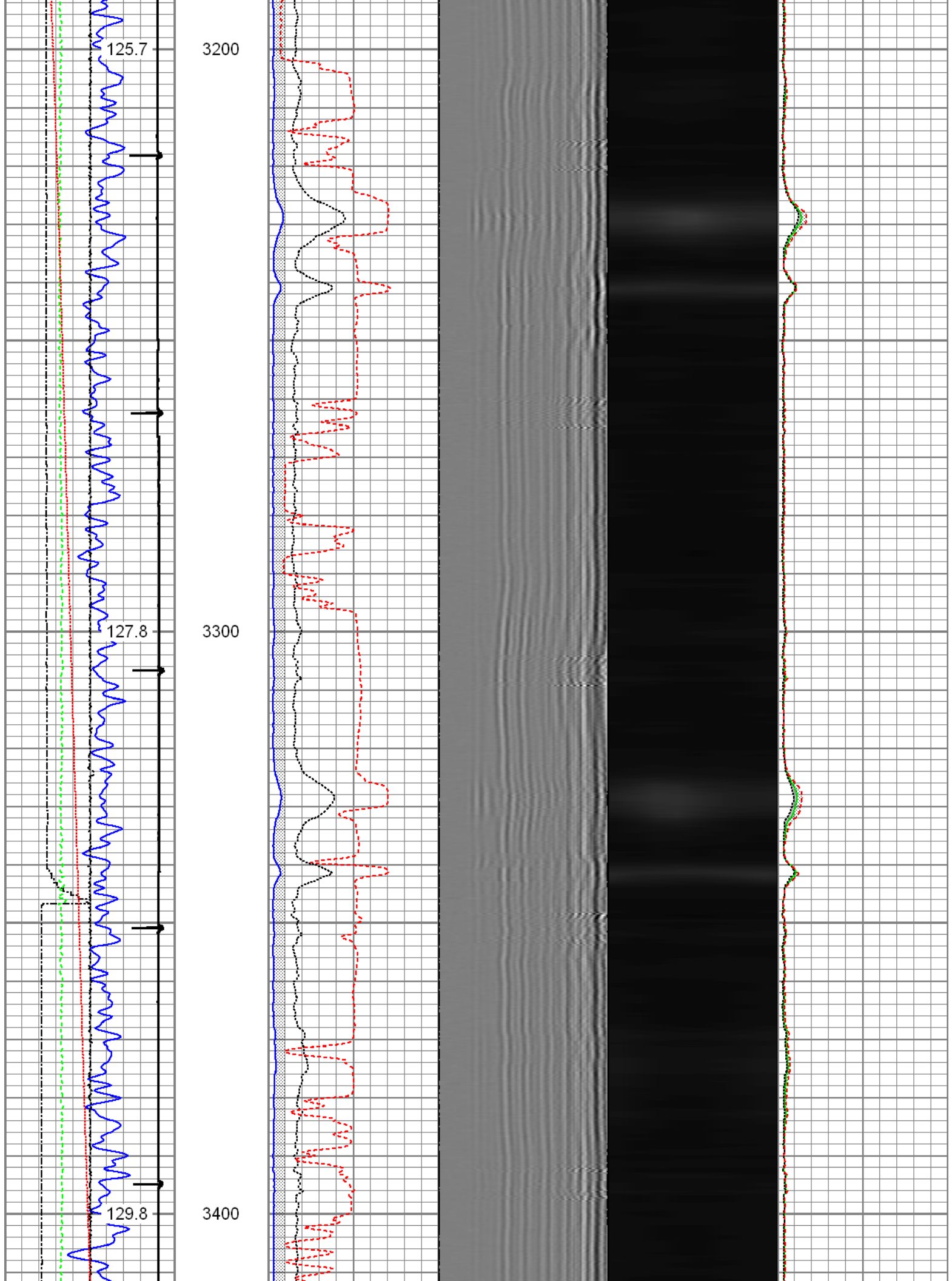
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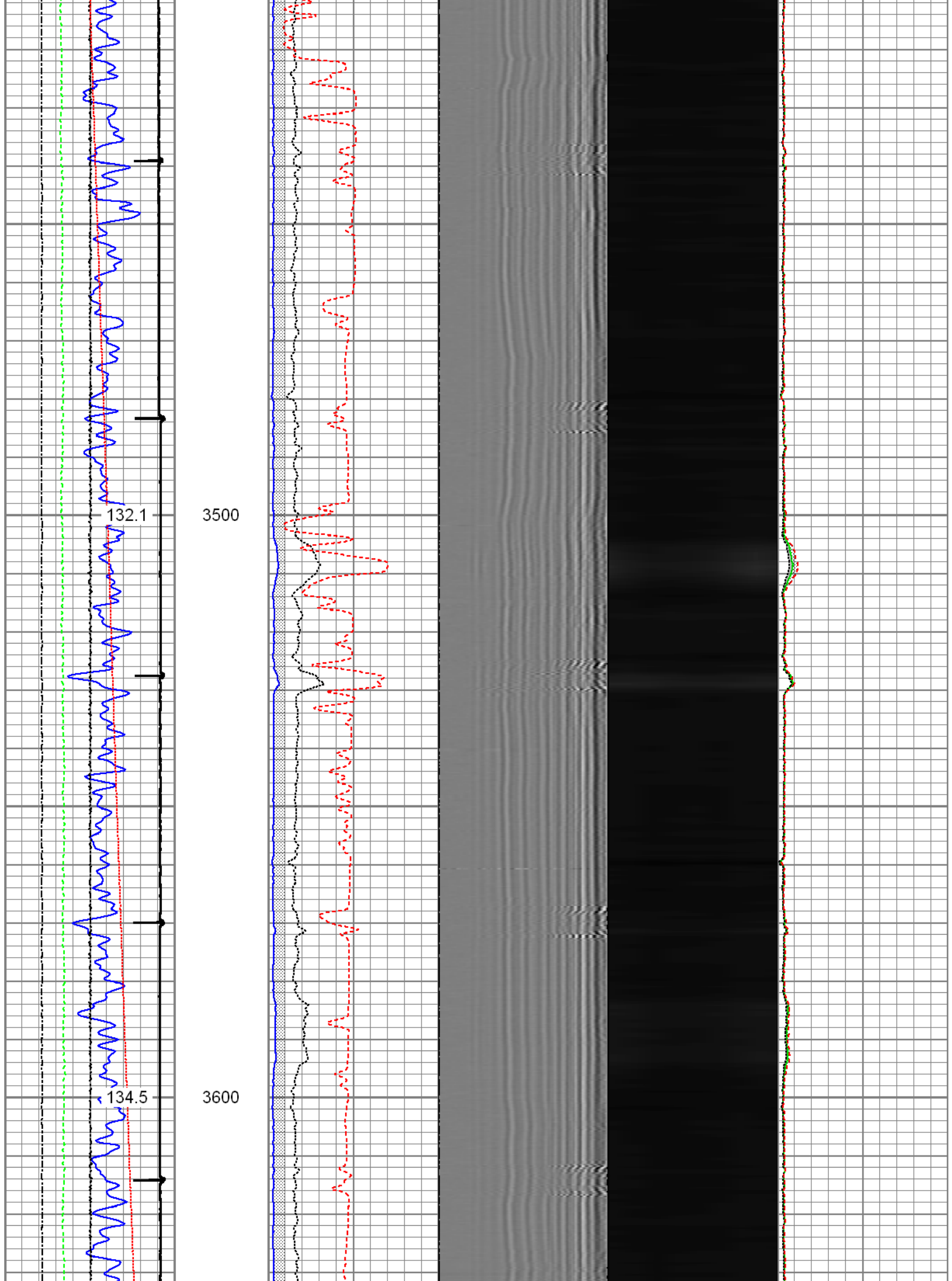
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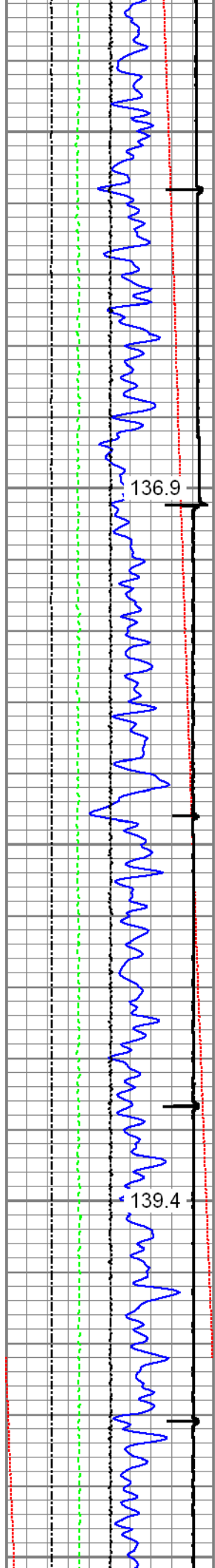










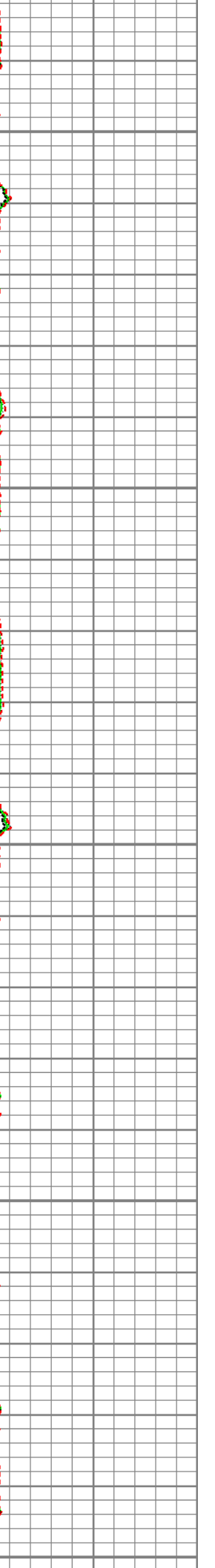
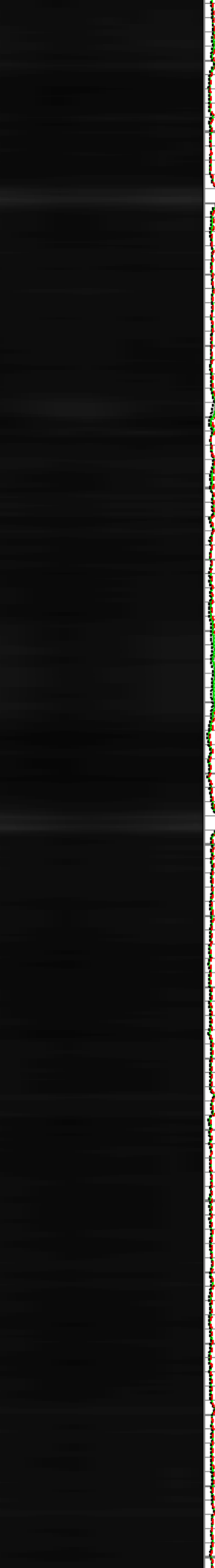
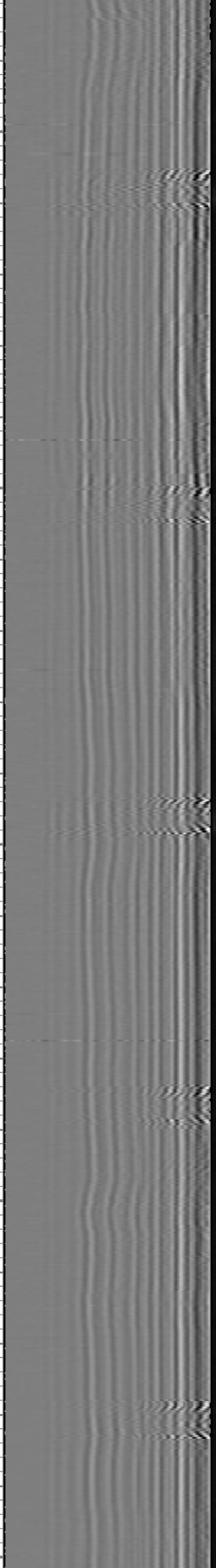
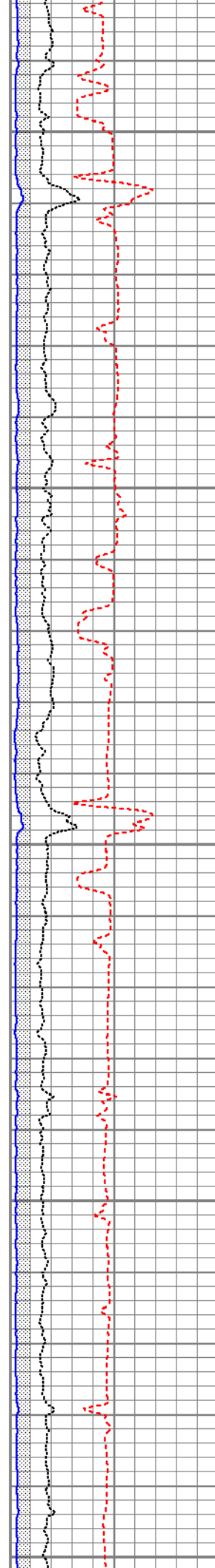


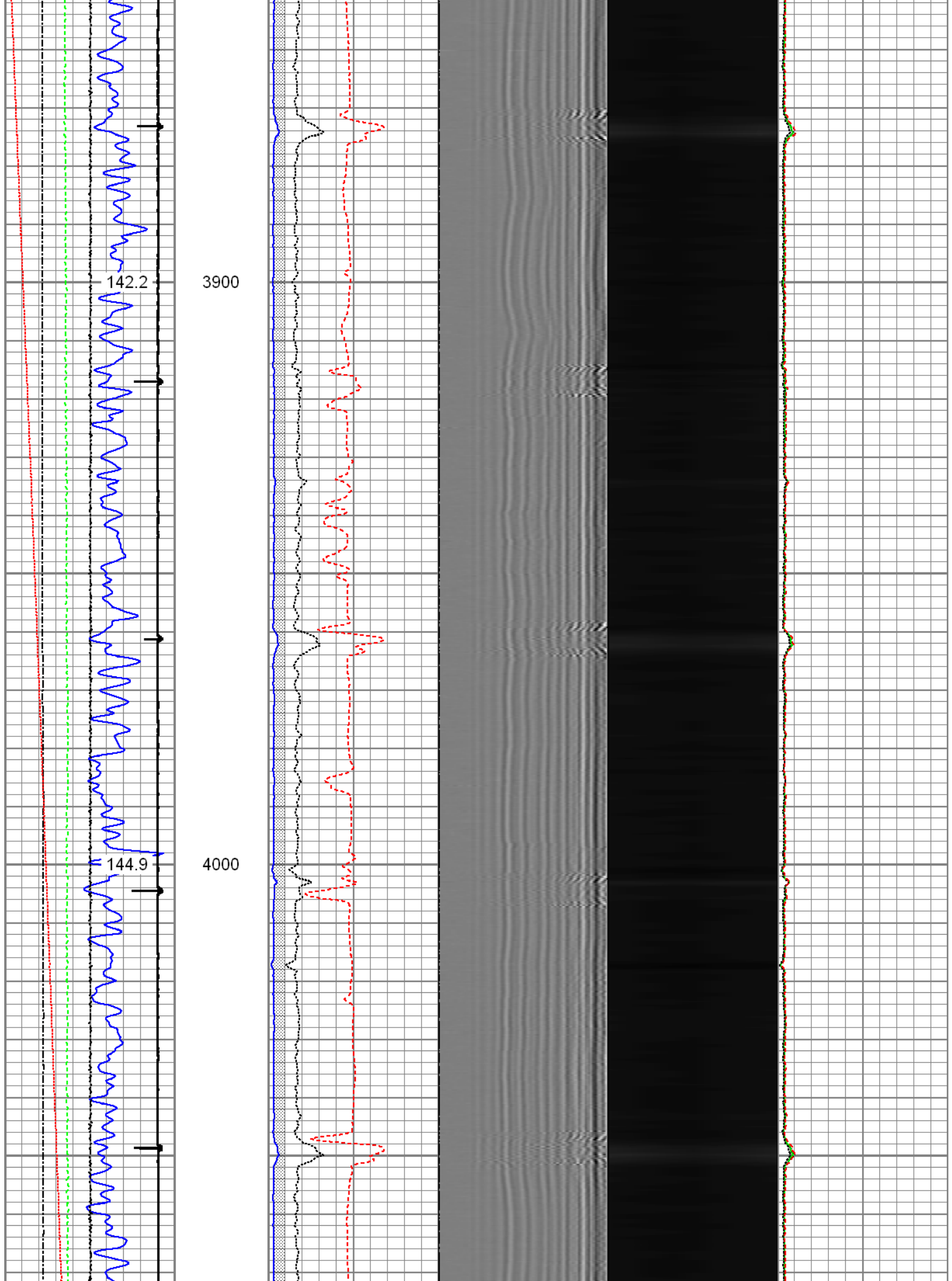
136.9

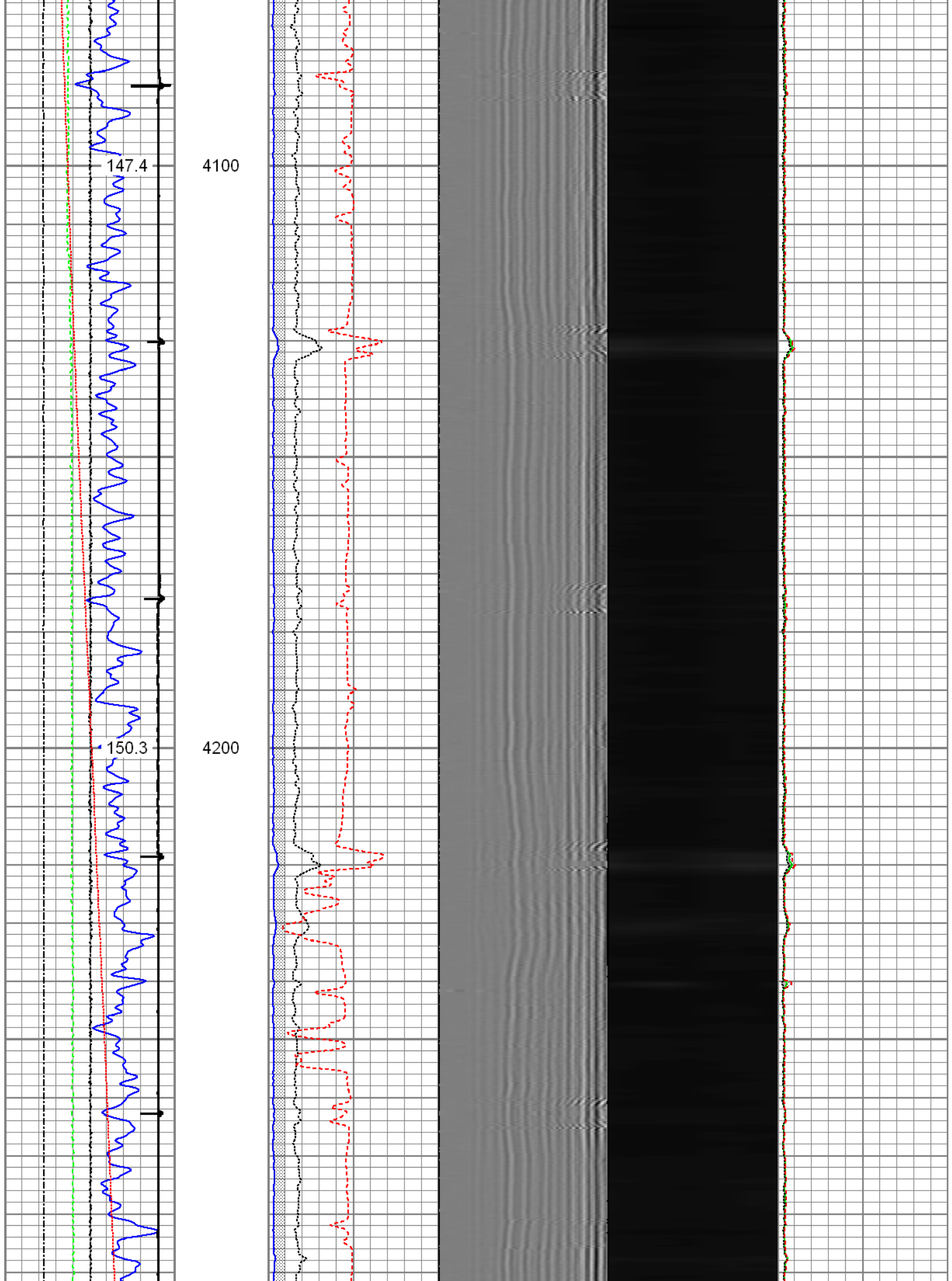
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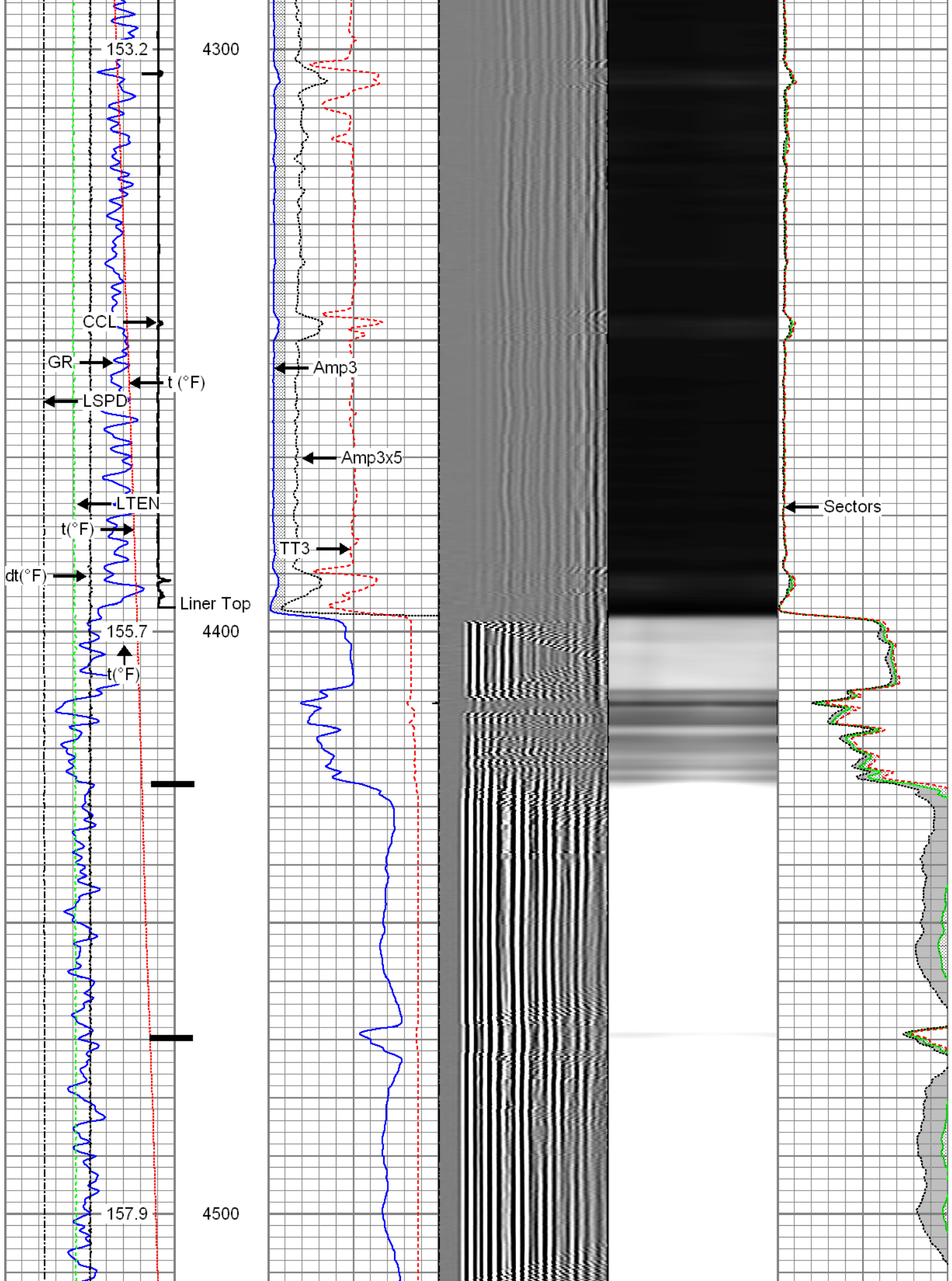
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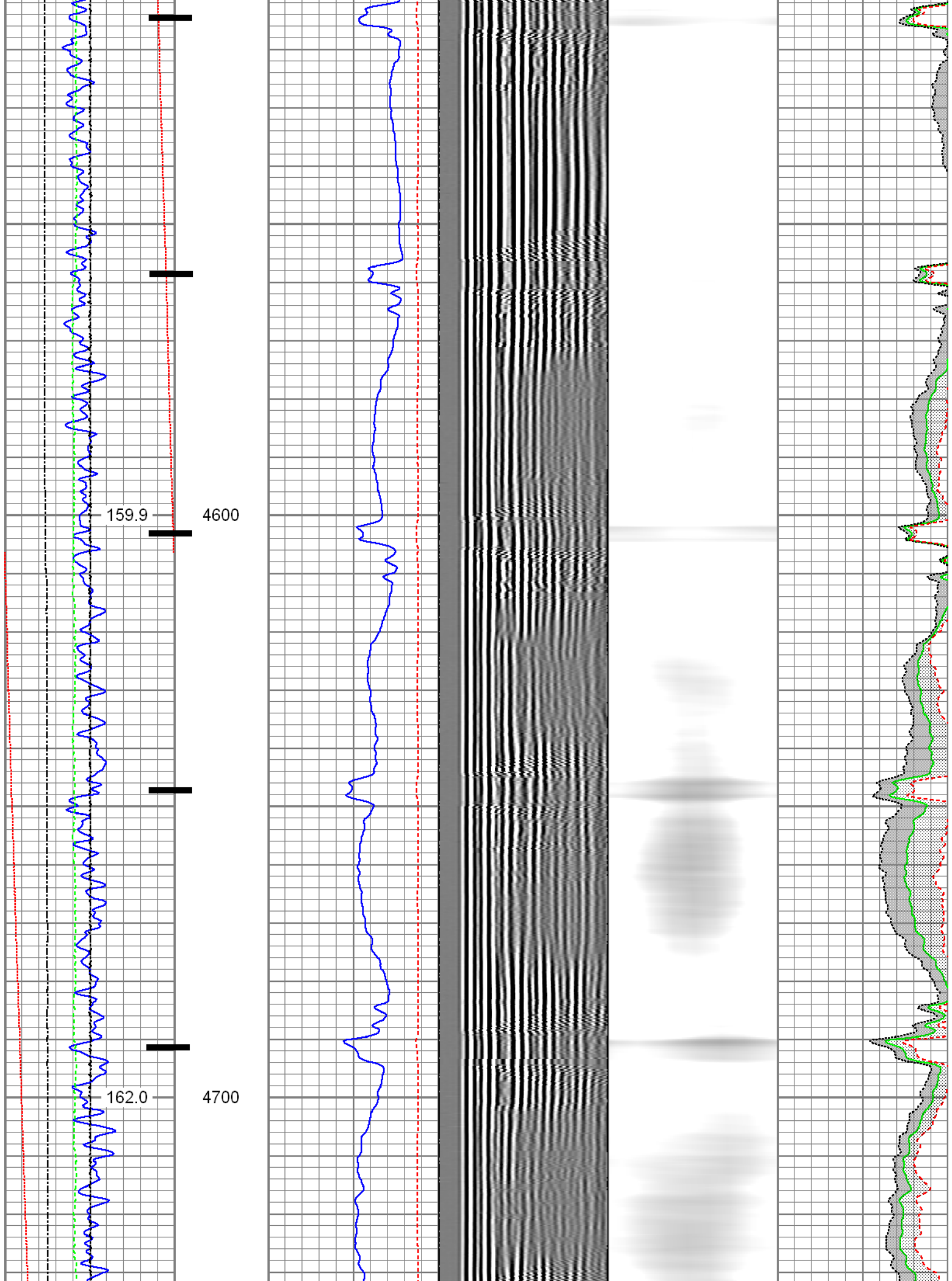
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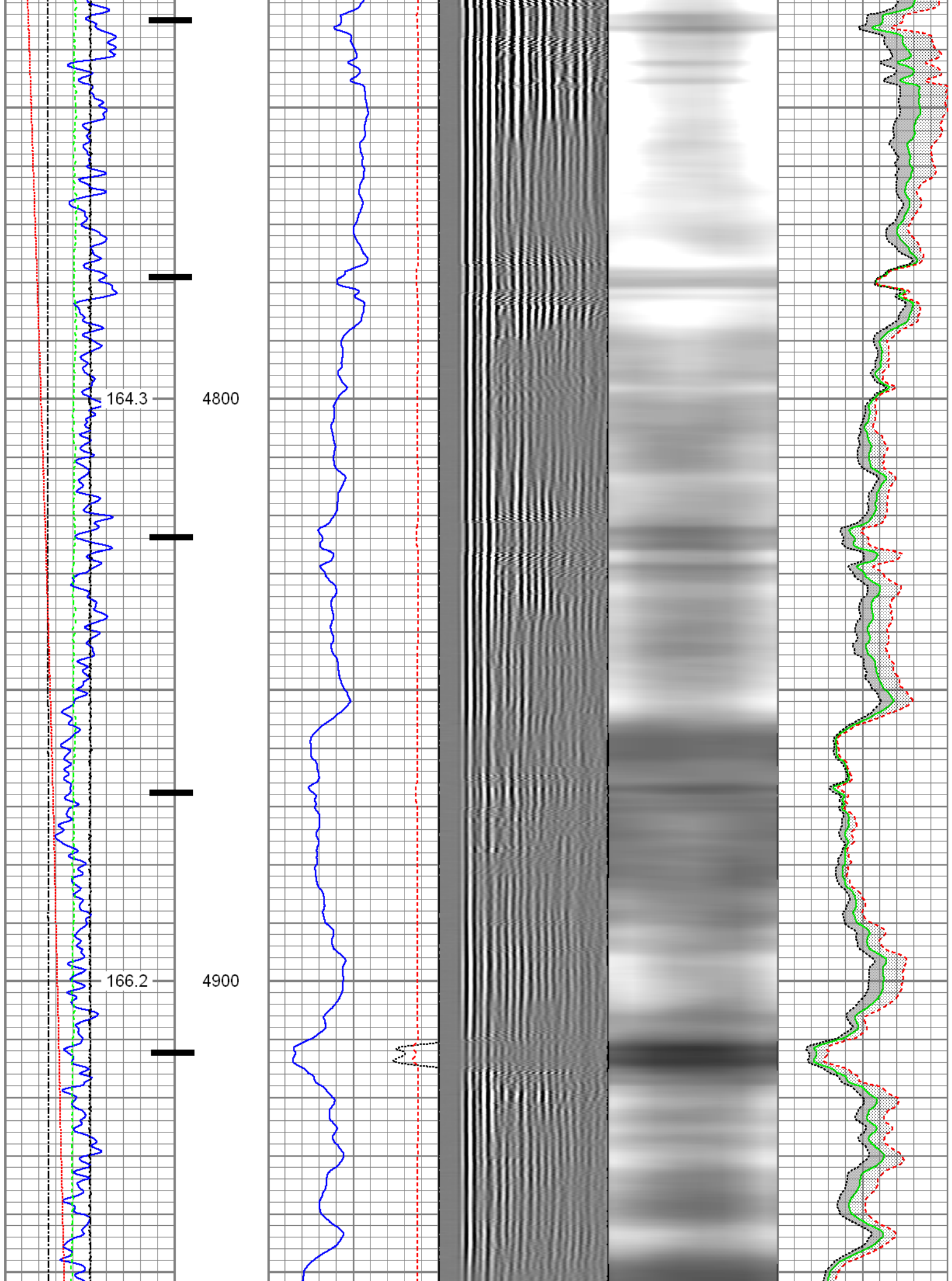


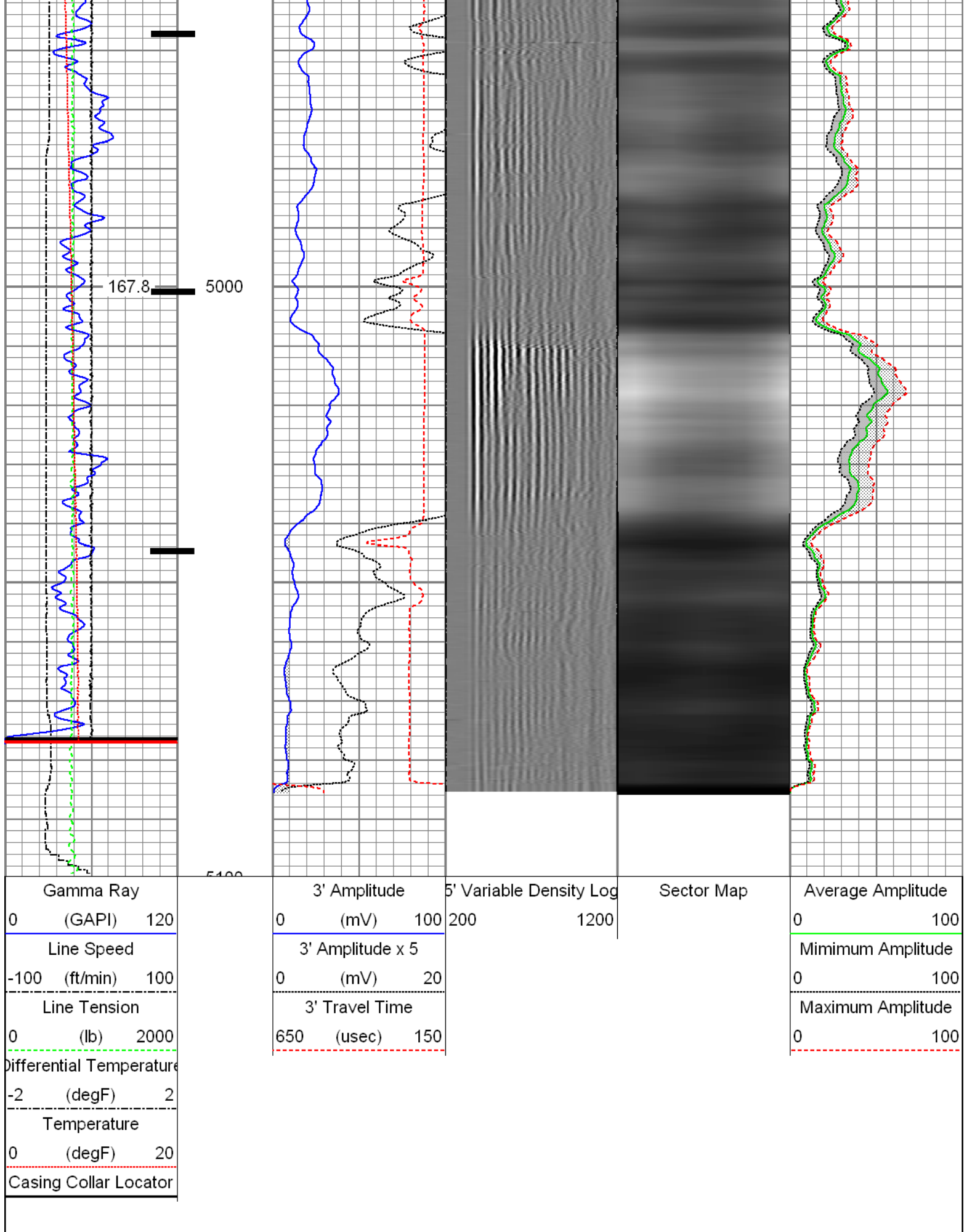








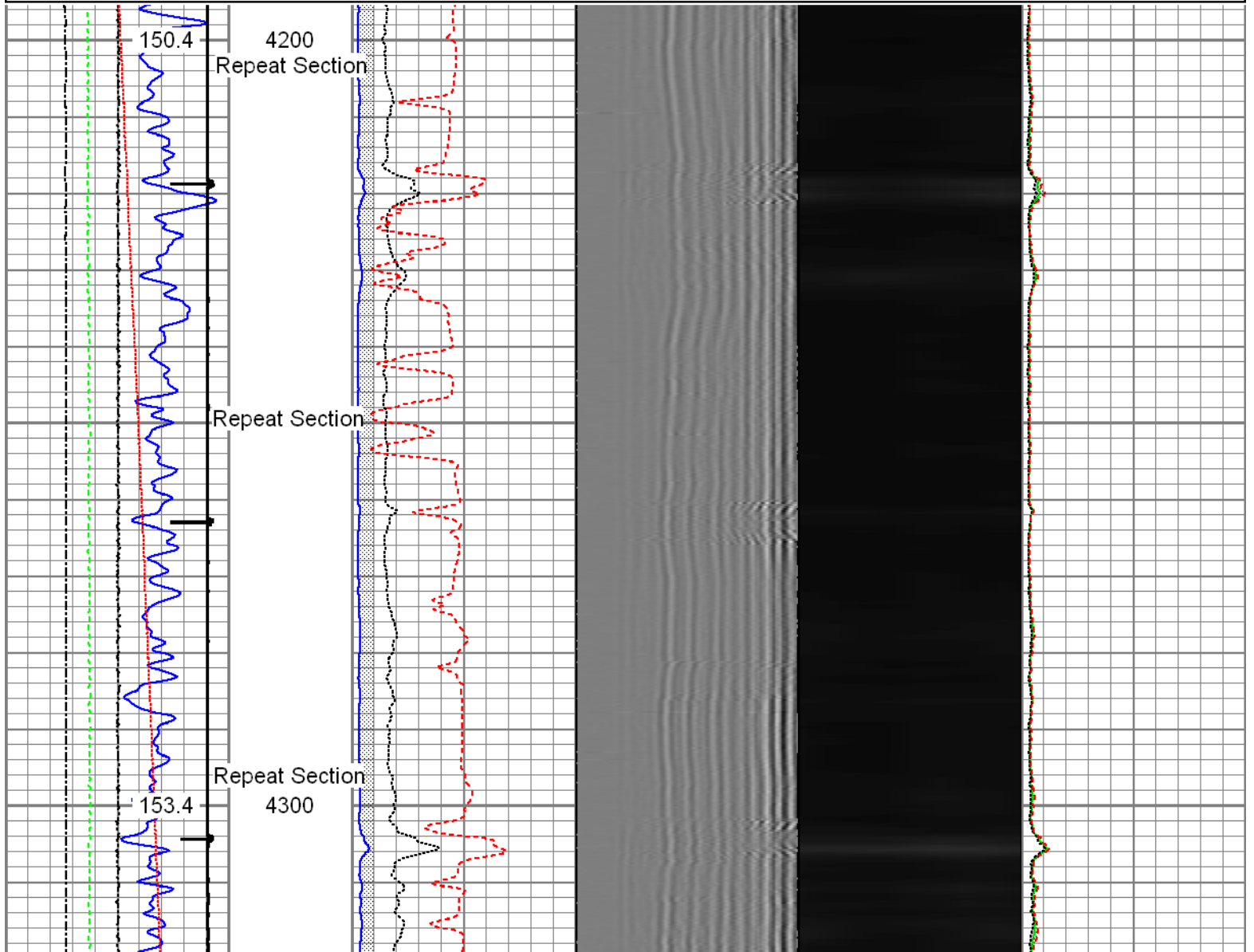


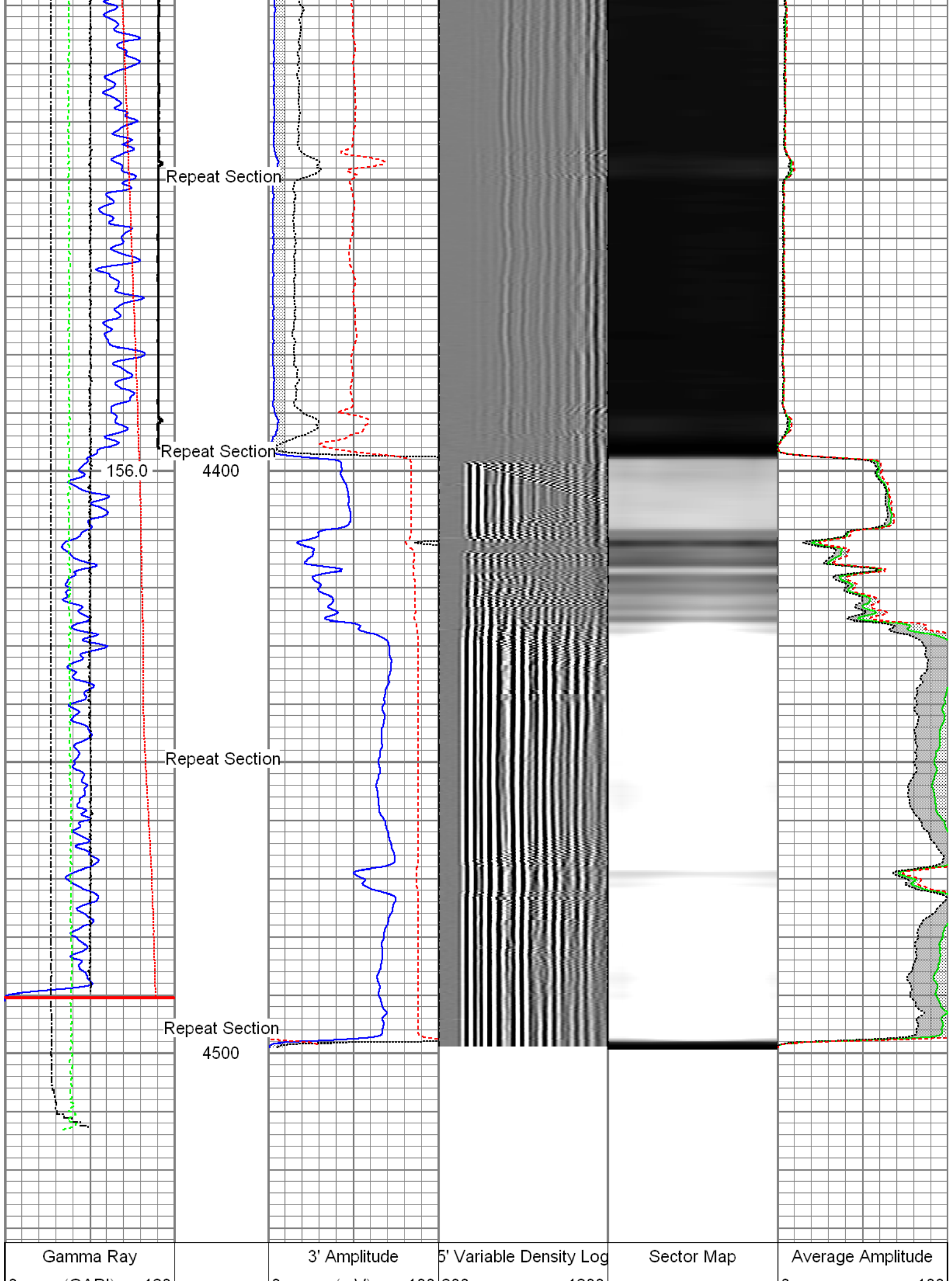


Recorded with 2800 PSI surface induced pressure.

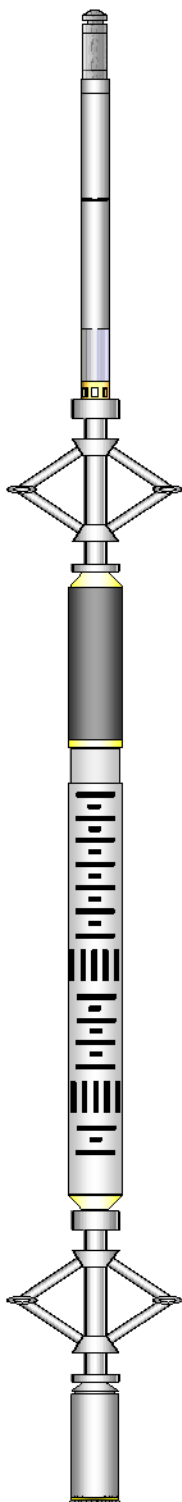
Database File: c:\warrior\data\anadarko_griswold 29-11hz\0512341025_anadarko_griswold 29-11hz_04-16-15_mit_r
 Dataset Pathname: RepeatPas
 Presentation Format: rbt4_mit
 Dataset Creation: Thu Apr 16 11:45:16 2015 by Log 7.0 B1
 Charted by: Depth in Feet scaled 1:240

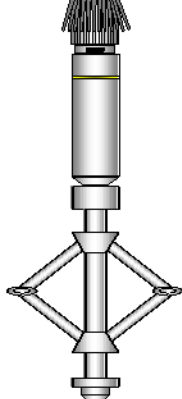
Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120	0 (mV) 100	200 1200		0 100
Line Speed	3' Amplitude x 5			Minimum Amplitude
-100 (ft/min) 100	0 (mV) 20			0 100
Line Tension	3' Travel Time			Maximum Amplitude
0 (lb) 2000	650 (usec) 150			0 100
Differential Temperature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





0 (GAPI) 120	0 (mV) 100 200	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
Differential Temperature		
-2 (degF) 2		
Temperature		
0 (degF) 20		
Casing Collar Locator		

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 (10025097) Platinum Resistance Thermometer	1.04	1.69	5.20	
			UW_PRC #4 -DSSRAC (081) 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		UW_PRC-DSSRAC (080) 2-3/4" DSS 5 Arm Roller Centralizer	2.55	2.75	32.00	
CBLROT	15.42						
WVF5FT	14.42						

MIT	5.41		UW_MIT-UW_MIT40_042 (10012912) 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: 0512341025_Anadarko_Griswold 29-11HZ_04-16-15_MIT_RBL.db: field/well/run1/MainPass1 Total Length: 28.09 ft Total Weight: 324.50 lb O.D. 3.13 in						

Calibration Report			
Database File:	C:\Warrior\Data\Anadarko_Griswold 29-11HZ\0512341025_Anadarko_Griswold 29-11HZ_04-16-15_M		
Dataset Pathname:	MainPass1		
Dataset Creation:	Thu Apr 16 12:03:03 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 Apr 16 10:39:49 2015							
Ring size:	4	5	6	7			
(in)							
	Sens	Sens	Sens				
Finger 01:	1060	403.0	1463	393.0	1856	404.0	2260
Finger 02:	1226	425.0	1651	396.0	2047	397.0	2444
Finger 03:	1072	424.0	1496	413.0	1909	421.0	2330
Finger 04:	1046	408.0	1454	399.0	1853	410.0	2263
Finger 05:	1083	423.0	1506	407.0	1913	411.0	2324
Finger 06:	1081	424.0	1505	405.0	1910	409.0	2319
Finger 07:	1066	427.0	1493	411.0	1904	408.0	2312
Finger 08:	1141	429.0	1570	409.0	1979	410.0	2389
Finger 09:	1064	420.0	1484	402.0	1886	402.0	2288
Finger 10:	1078	422.0	1500	402.0	1902	405.0	2307
Finger 11:	1119	424.0	1543	397.0	1940	398.0	2338
Finger 12:	1079	416.0	1495	394.0	1889	402.0	2291
Finger 13:	1102	416.0	1518	390.0	1908	393.0	2301
Finger 14:	1050	417.0	1467	395.0	1862	405.0	2267
Finger 15:	1038	424.0	1462	408.0	1870	420.0	2290
Finger 16:	1080	430.0	1510	403.0	1913	418.0	2331

Finger 17:	943	391.0	1334	388.0	1722	411.0	2133
Finger 18:	1140	416.0	1556	391.0	1947	407.0	2354
Finger 19:	1037	407.0	1444	376.0	1820	412.0	2232
Finger 20:	1033	401.0	1434	395.0	1829	423.0	2252
Finger 21:	1049	407.0	1456	387.0	1843	409.0	2252
Finger 22:	1015	405.0	1420	395.0	1815	429.0	2244
Finger 23:	953	393.0	1346	396.0	1742	440.0	2182
Finger 24:	1038	393.0	1431	378.0	1809	402.0	2211
Finger 25:	1003	399.0	1402	397.0	1799	436.0	2235
Finger 26:	1109	380.0	1489	366.0	1855	395.0	2250
Finger 27:	1103	397.0	1500	386.0	1886	421.0	2307
Finger 28:	1086	384.0	1470	375.0	1845	406.0	2251
Finger 29:	1019	391.0	1410	391.0	1801	431.0	2232
Finger 30:	1060	390.0	1450	385.0	1835	423.0	2258
Finger 31:	1112	391.0	1503	380.0	1883	416.0	2299
Finger 32:	1042	403.0	1445	394.0	1839	433.0	2272
Finger 33:	1154	390.0	1544	369.0	1913	392.0	2305
Finger 34:	1110	385.0	1495	379.0	1874	410.0	2284
Finger 35:	1058	410.0	1468	412.0	1880	440.0	2320
Finger 36:	1090	404.0	1494	398.0	1892	426.0	2318
Finger 37:	1078	400.0	1478	388.0	1866	413.0	2279
Finger 38:	1128	397.0	1525	383.0	1908	396.0	2304
Finger 39:X	1094	392.0	1486	383.0	1869	398.0	2267
Finger 40:X	1052	405.0	1457	398.0	1855	414.0	2269

Segmented Cement Bond Log Calibration Report						
Serial Number:		1063				
Tool Model:		UW_RBT_004				
Calibration Casing Diameter:		5.500	in			
Calibration Depth:		629.749	ft			
Master Calibration, performed Thu Apr 16 11:18:39 2015:						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	-0.004	0.672	0.800	62.200	90.942	1.126
5FT	-0.006	0.698	0.800	62.200	87.154	1.332
S1	-0.004	0.675	0.000	100.000	147.151	0.661
S2	-0.005	0.669	0.000	100.000	148.417	0.719
S3	-0.004	0.658	0.000	100.000	151.069	0.553
S4	-0.005	0.675	0.000	100.000	147.087	0.686
S5	-0.003	0.682	0.000	100.000	145.849	0.477
S6	-0.004	0.683	0.000	100.000	145.664	0.533
S7	-0.004	0.687	0.000	100.000	144.774	0.509
S8	-0.003	0.679	0.000	100.000	146.737	0.417

Temperature Calibration Report					
		Serial Number:		10025097	
		Tool Model:		UW_PRT_016	
		Performed:		Wed Feb 11 13:44:44 2015	
Point #	Reading		Reference		
1	13053.00	cps	68.00	degF	
2	18014.00	cps	104.00	degF	
3	29668.00	cps	176.00	degF	
4	41181.00	cps	248.00	degF	
5	52983.00	cps	320.00	degF	
6	58931.00	cps	356.00	degF	
7		cps		degF	

8
9
10

cps
cps
cps

degF
degF
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 & Gas Onshore, L.P.
Well	Griswold 29-11HZ
Field	Wattenberg
County	Weld
State	Colorado