



Radial Cement Bond
Gamma Ray
Casing Collar Log

Company	Kerr-McGee Oil & Gas Onshore, L.P.		
Well	Barefoot 31N-25HZ		
Field	Wattenberg		
County	Weld		
State	Colorado		
Company	Kerr-McGee Oil & Gas Onshore, L.P.	Well	Barefoot 31N-25HZ
Field	Wattenberg	County	Weld
County	Weld	State	Colorado
Location:	API # : 05-123-39229		
CIL	SHL: 2033' FNL, 663' FEL SENE		
	Lat / Long 40.198963 / -104.944148		
	SEC 25 TWP 3N RGE 68W		
Permanent Datum	Ground Level	Elevation	4887'
Log Measured From	Kelly Bushing	17 FT	
Drilling Measured From	Kelly Bushing		
		K.B. 4904'	
		D.F. 4903'	
		G.L. 4887'	

Date	09-July-2014
Run Number	One
Depth Driller	12757 FT
Depth Logger	6701 FT
Bottom Logged Interval	6996 FT
Top Log Interval	Surface
Open Hole Size	8.765"
Type Fluid	Water
Density / Viscosity	8.34 lbm/gal
Max. Recorded Temp.	208°F
Estimated Cement Top	Surface
Time Well Ready	ROA
Time Logger on Bottom	7:30
Equipment Number	HD-134
Location	Fort Lupton, CO.
Recorded By	H. Raby
Witnessed By	Donnie Fredrick

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record	Size (in)	Wgt (lbs/ft)	Grade	Top	Bottom		
Surface Casing	9-5/8"	36#	J-55 LTC	Surface	1572 FT		
Intermediate #1	7"	26#	HPC 110 LTC	Surface	7687 FT		
Intermediate #2							
Liner	4-1/2"	11.6#	P-110	6624 FT	12747 FT		

>>> 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 reference to Casing Tally reported Liner Top at 6624 FT.
Adjusted -25 FT from KB zero to correlate with Liner Top
Gauge Ring / Junk Basket run to 3 joints below liner top prior to log run.
Log ran from 6701 FT to surface.
Log ran with 2800 PSI surface induced pressure.

Thank you for choosing FMC Technologies Completion Services!!



Main Pass

Recorded with 2800 PSI surface induced pressure.

Database File: c:\documents and settings\administrator\desktop\data\anadarko_barefoot 31n-25hz_rcbl mit_09-july-2

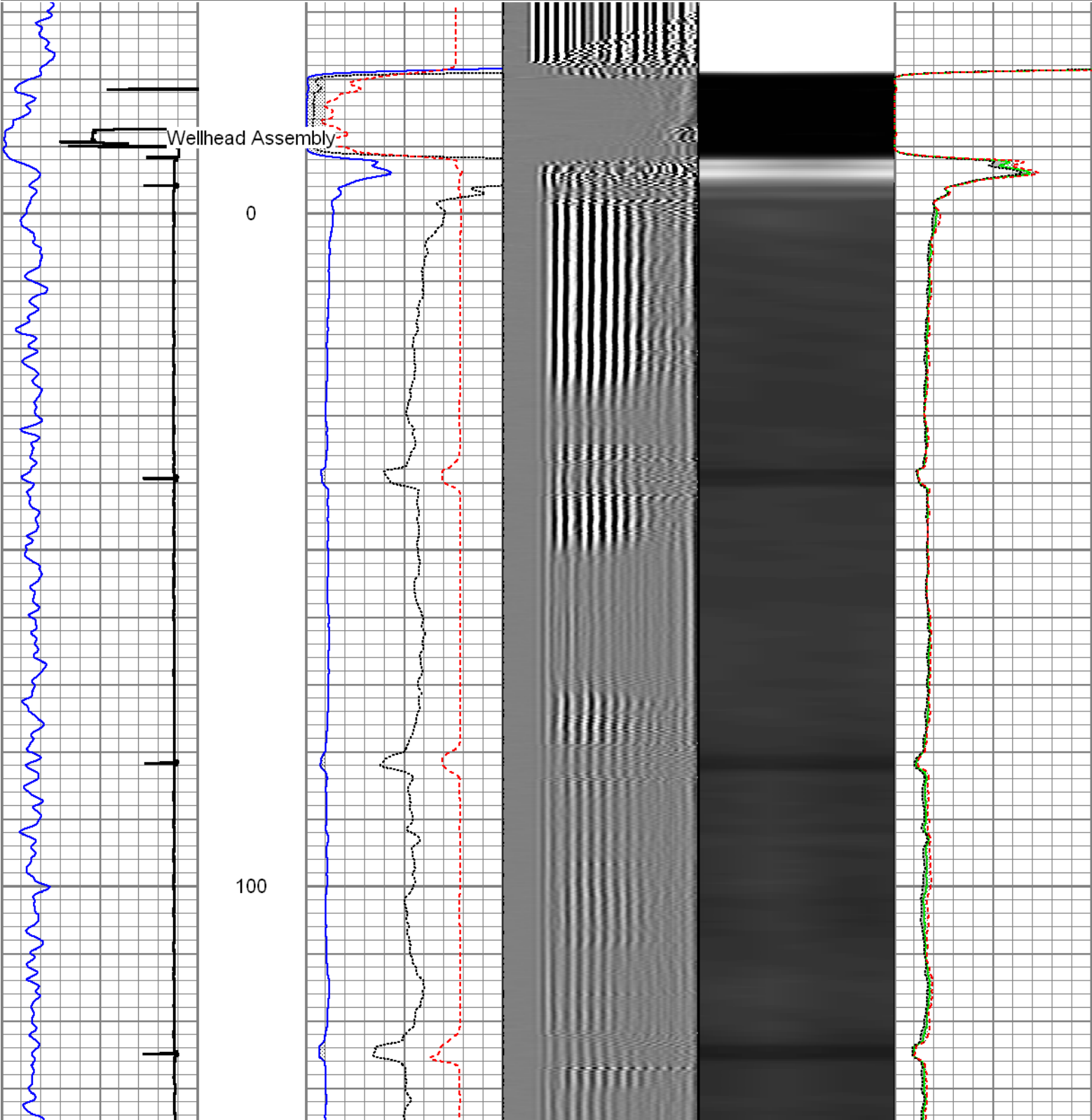
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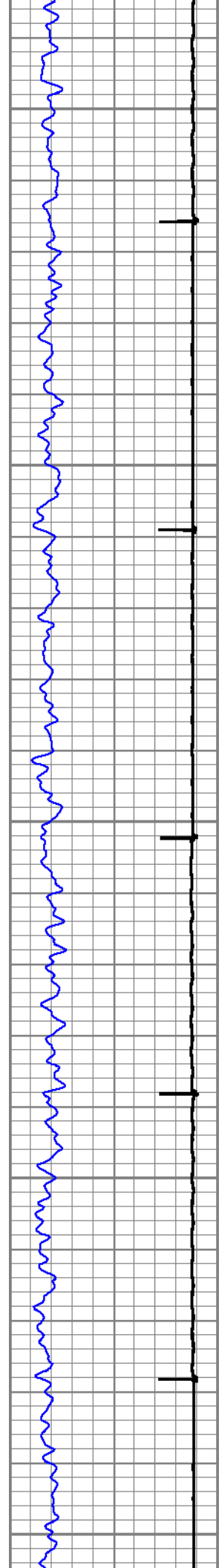
Presentation Format: rbt4_mit

Dataset Creation: Wed Jul 09 07:44:32 2014 by Log 7.0 B1

Charted by: Depth in Feet scaled 1:240

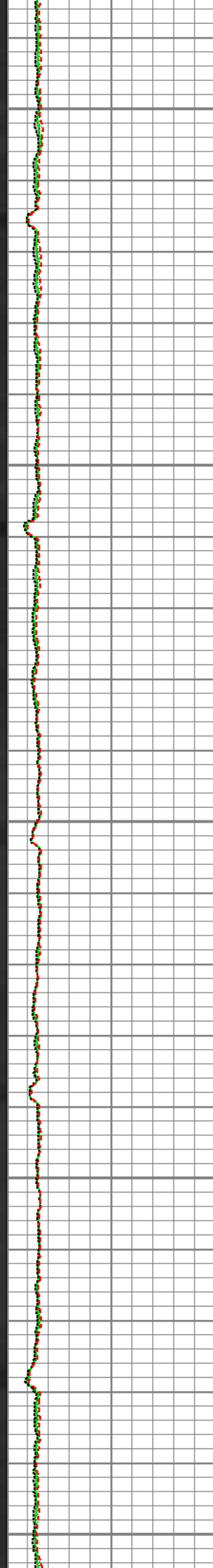
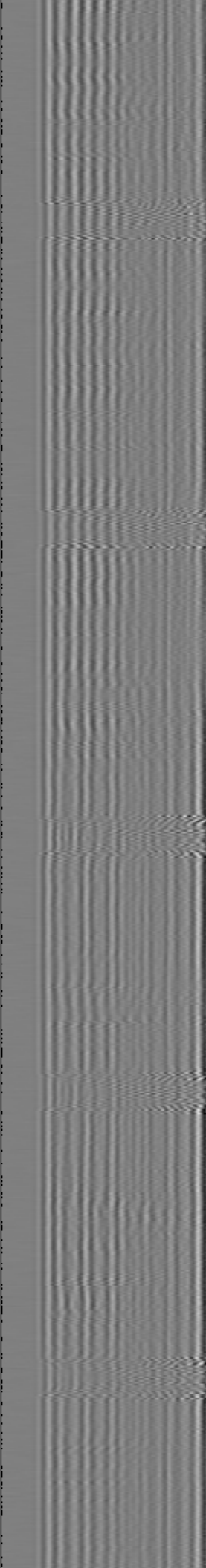
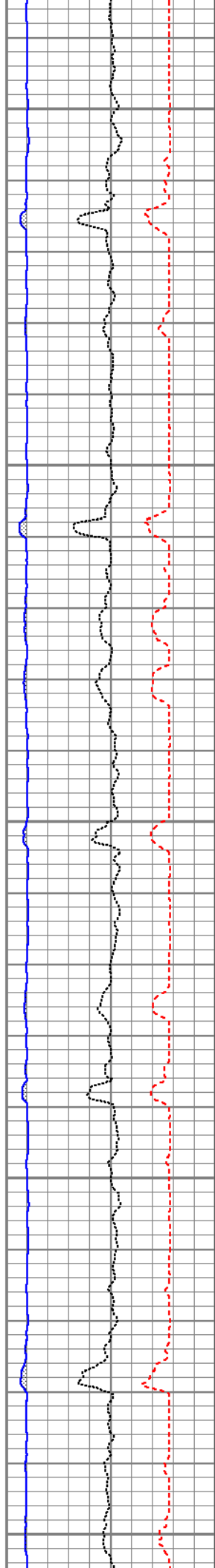
Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120	0 (mV) 100	200 1200		0 100
Casing Collar Locator	3' Amplitude x 5			Minimum Amplitude
	0 (mV) 20			0 100
	3' Travel Time			Maximum Amplitude
	650 (usec) 150			0 100

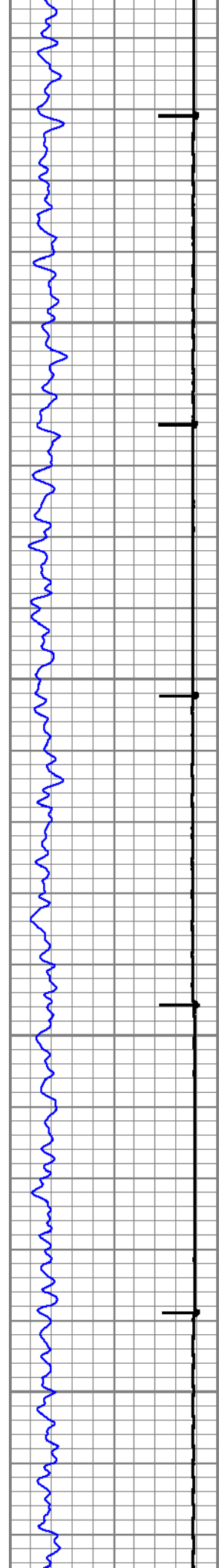




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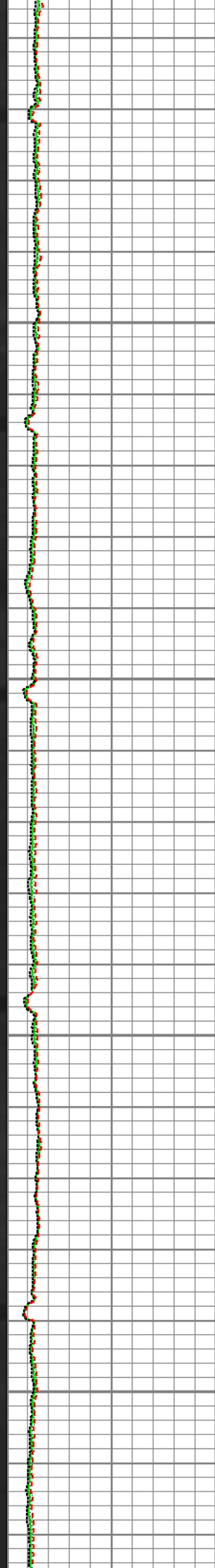
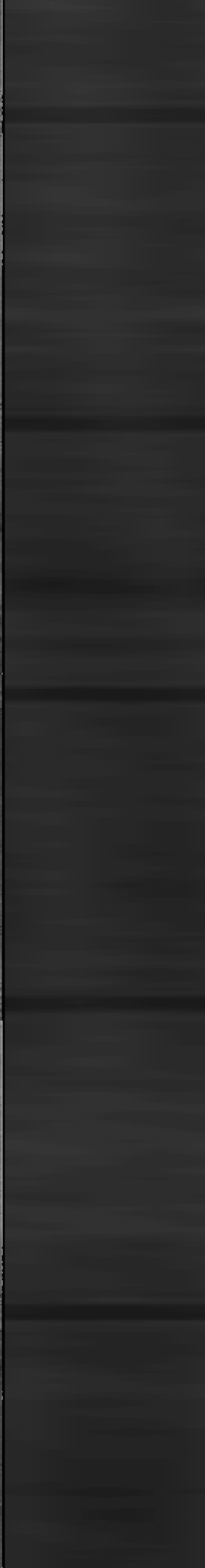
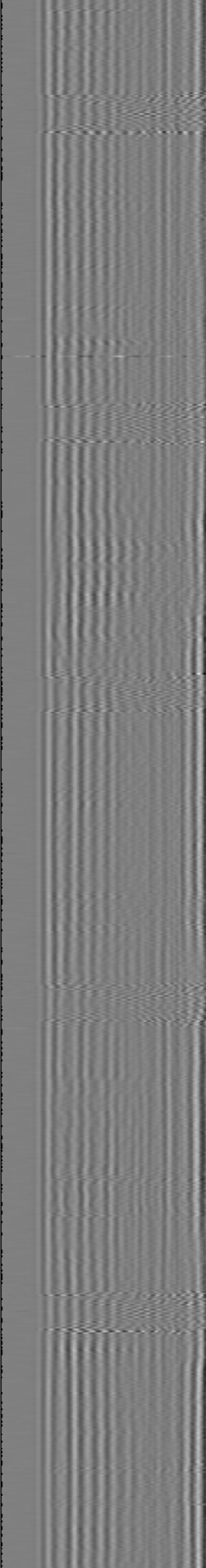
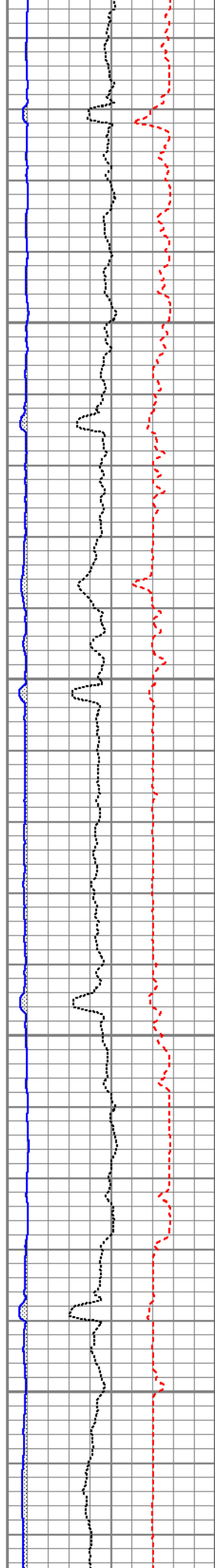
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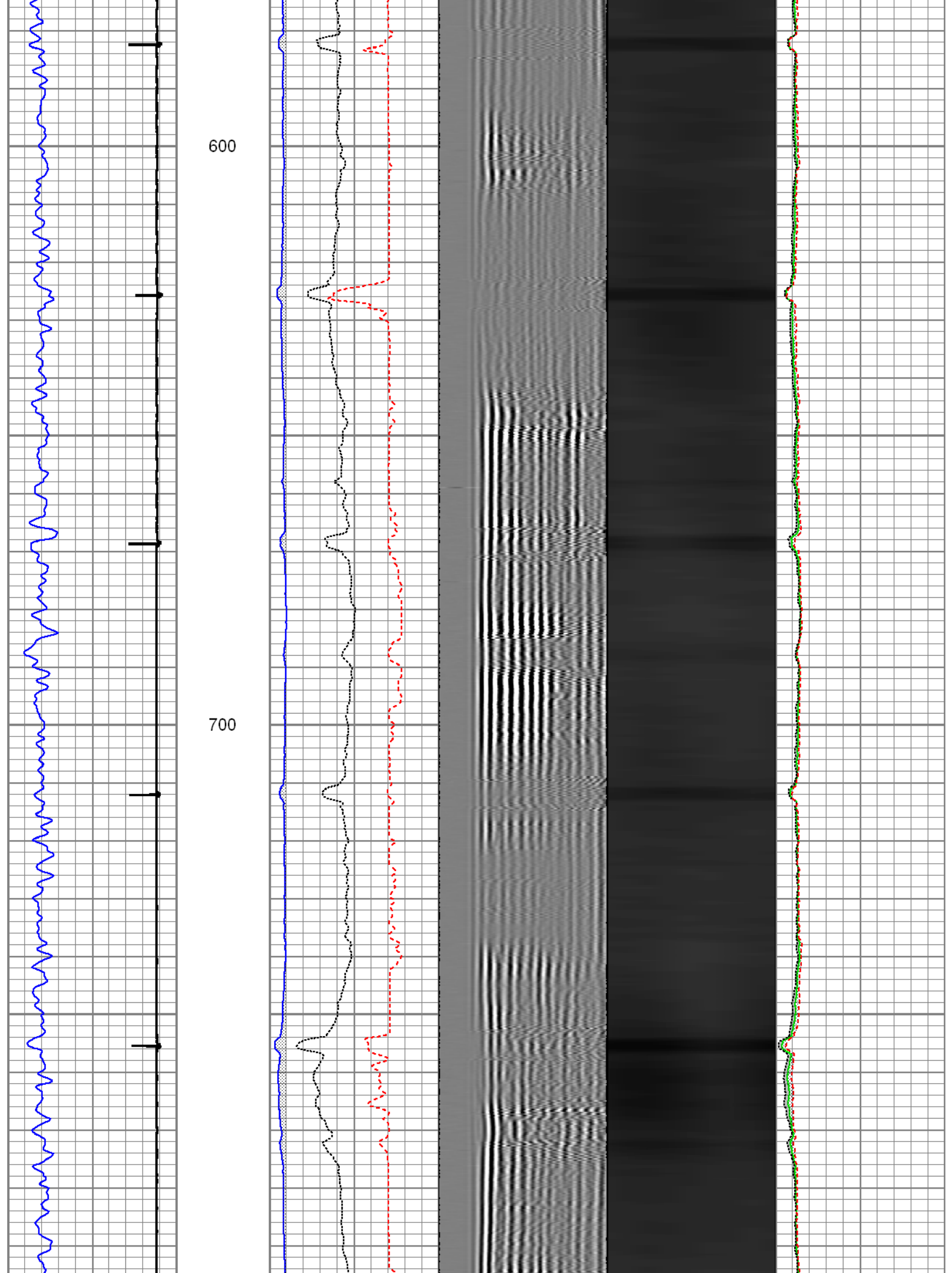


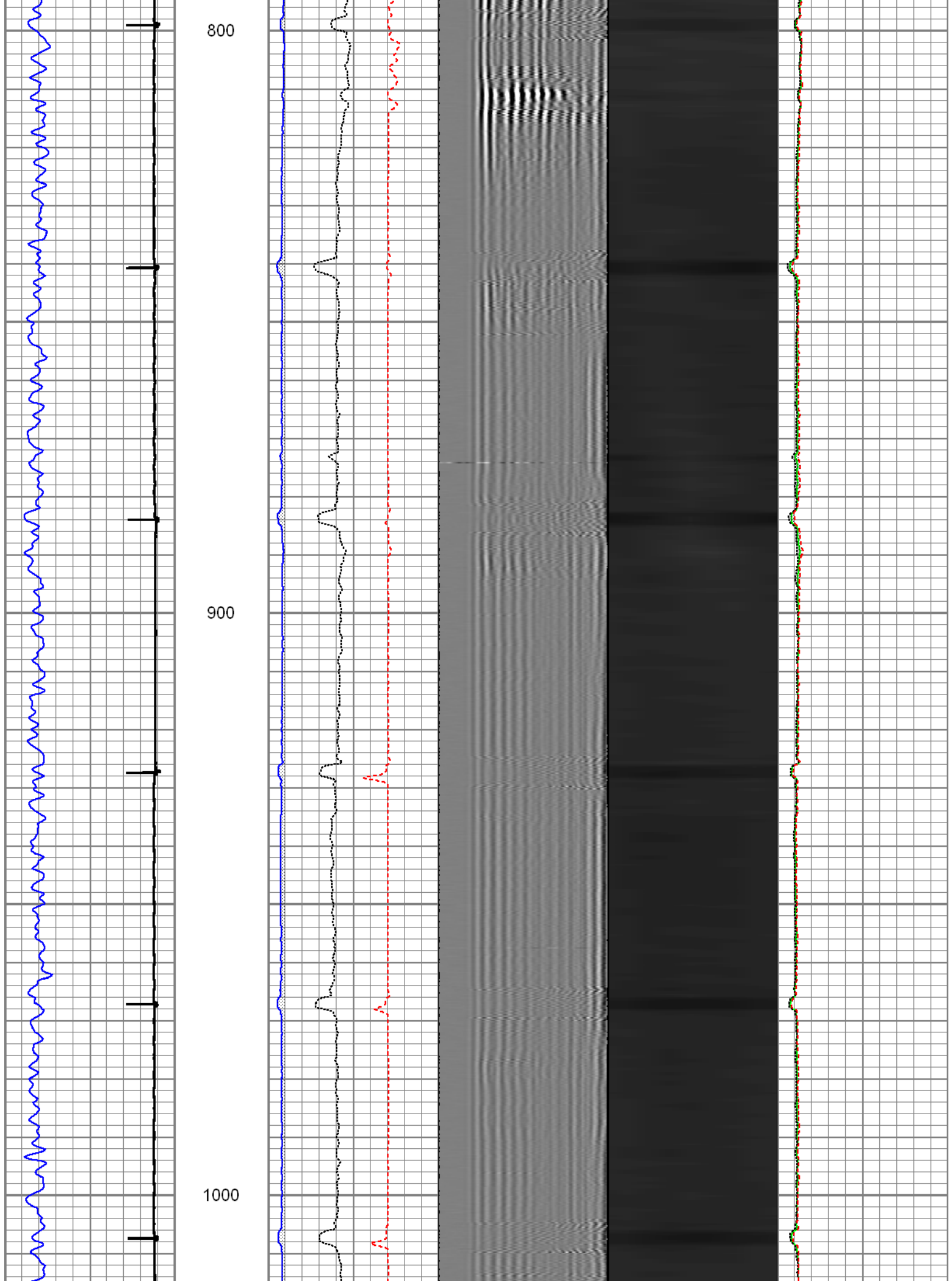


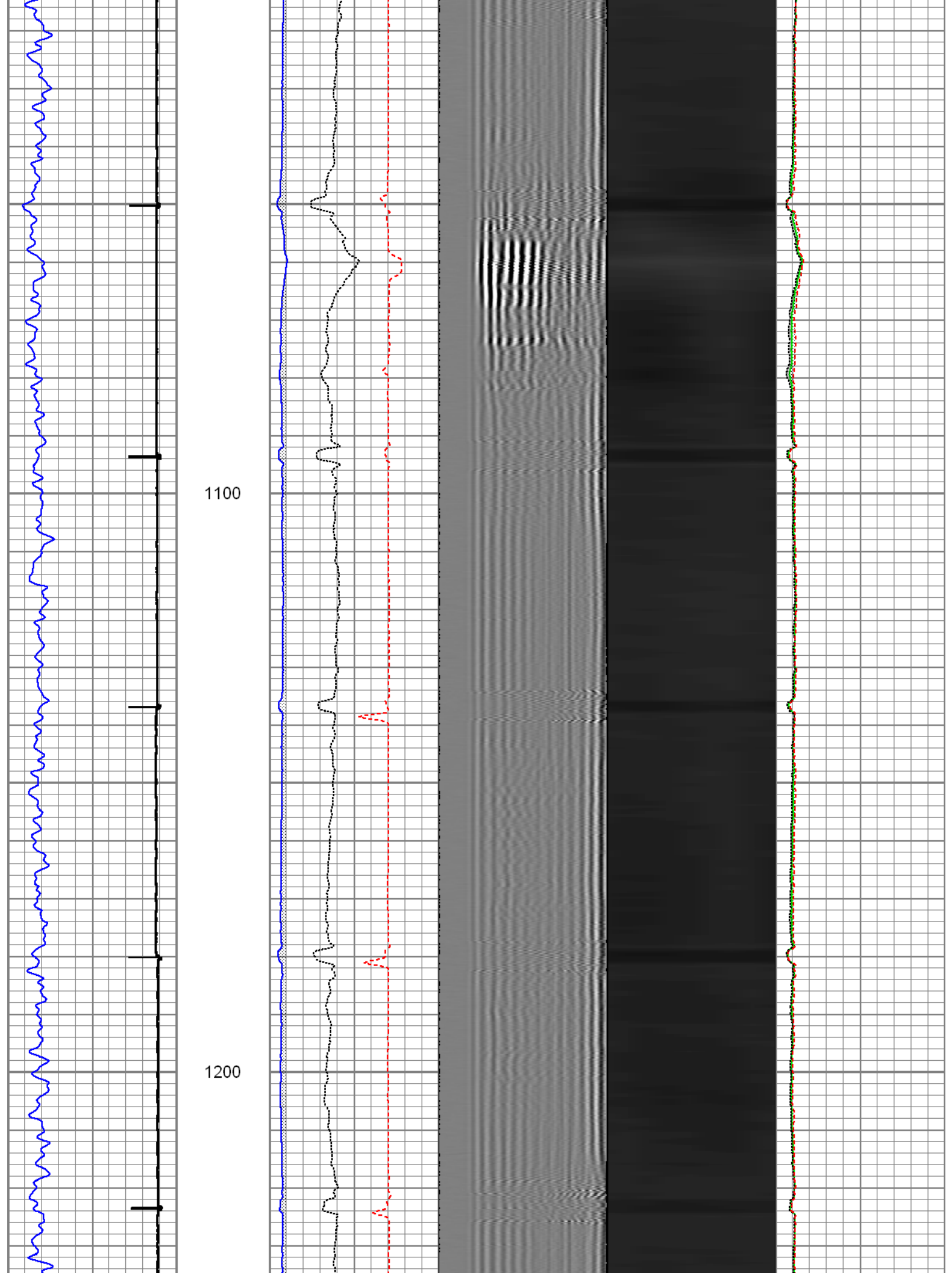
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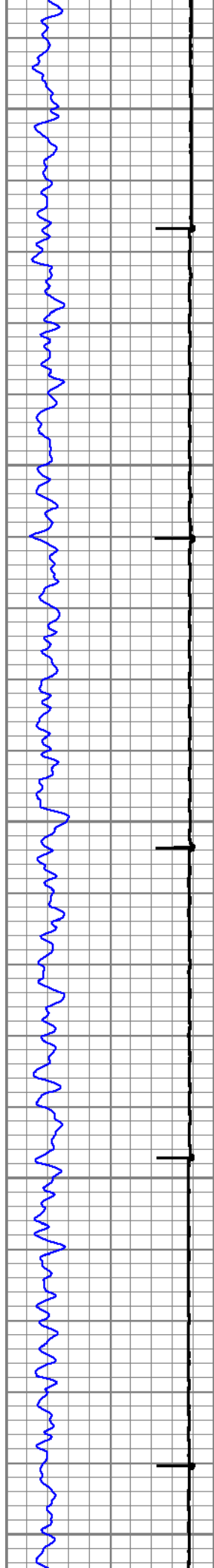
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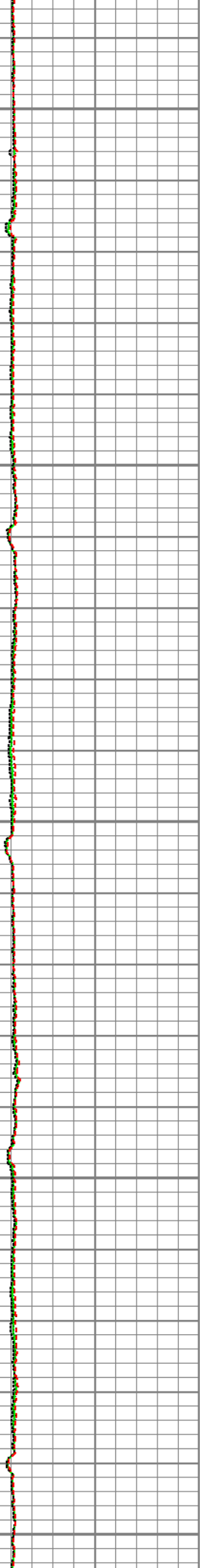
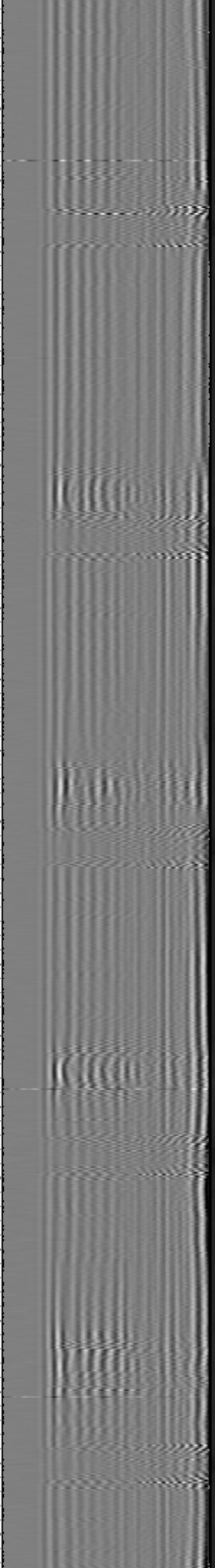
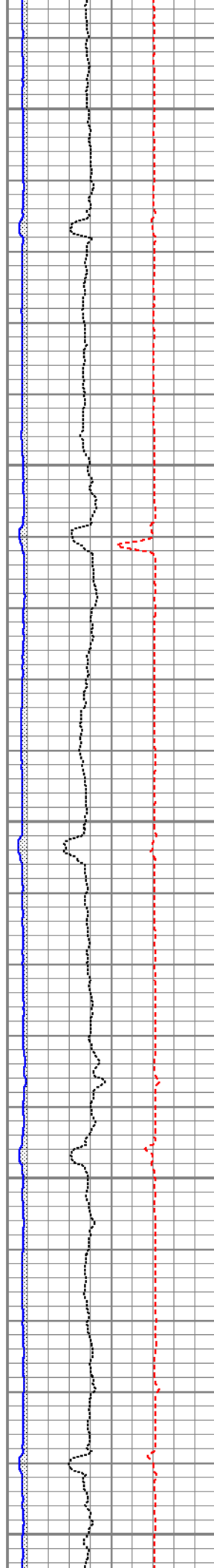


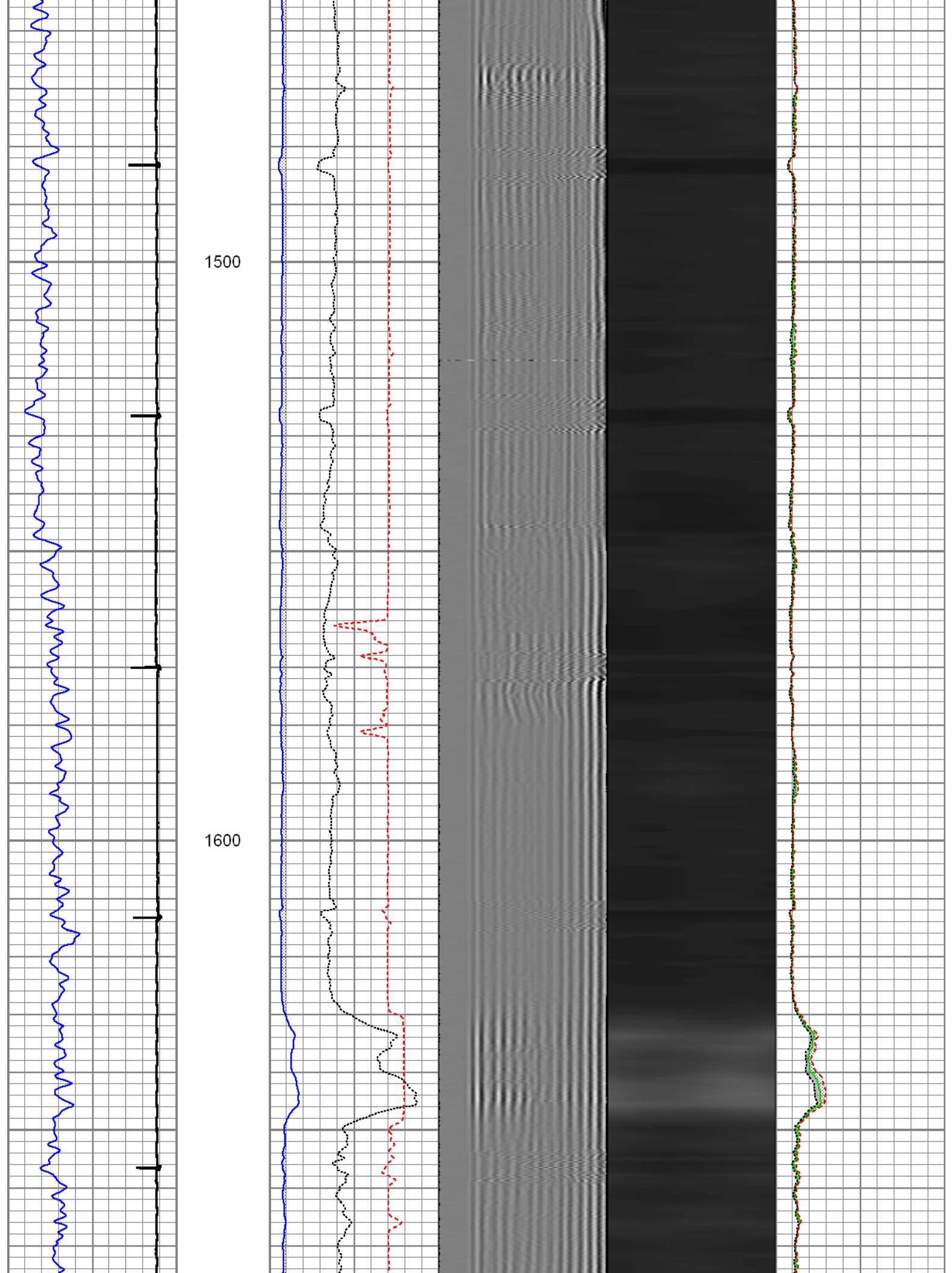


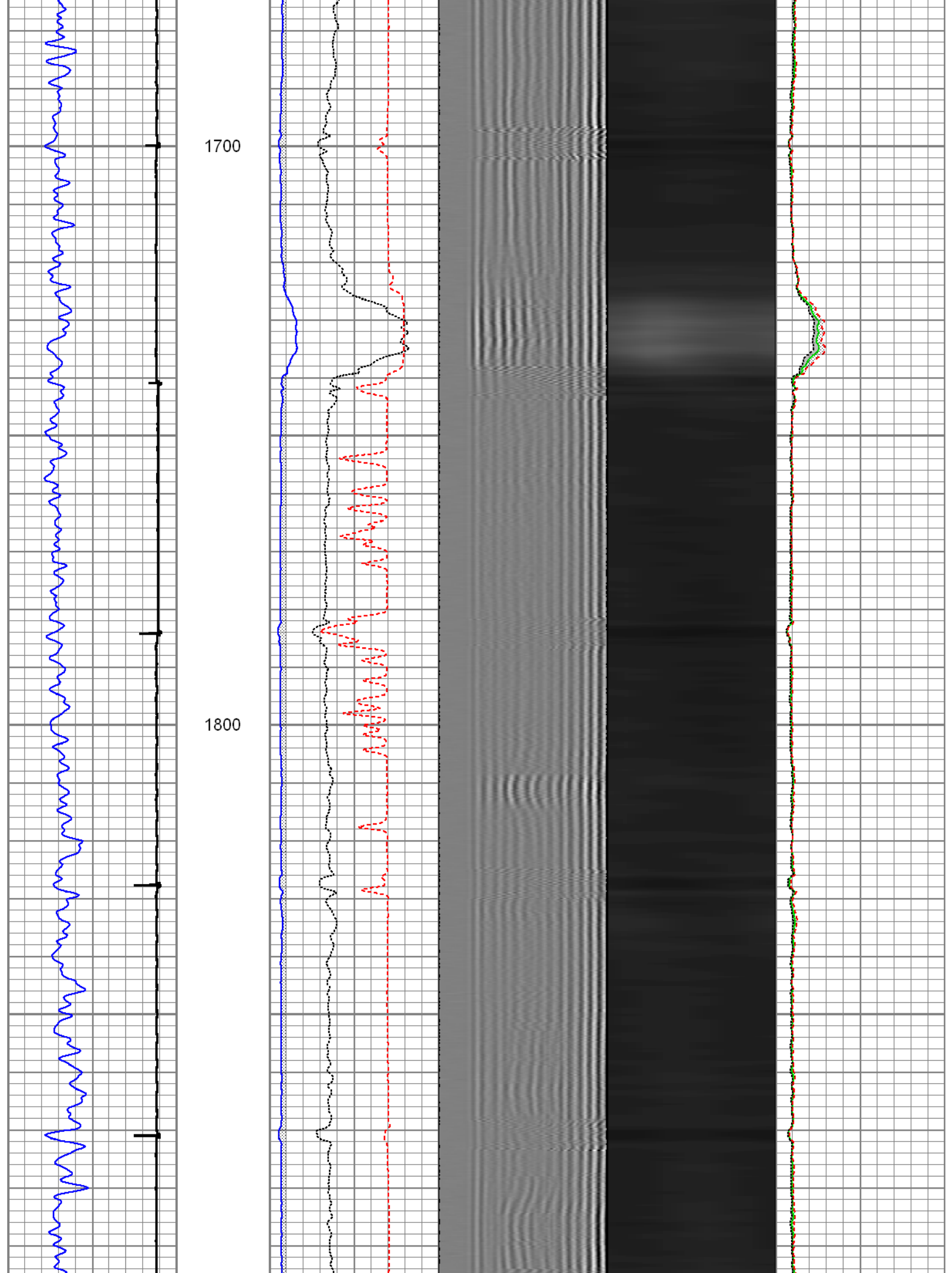


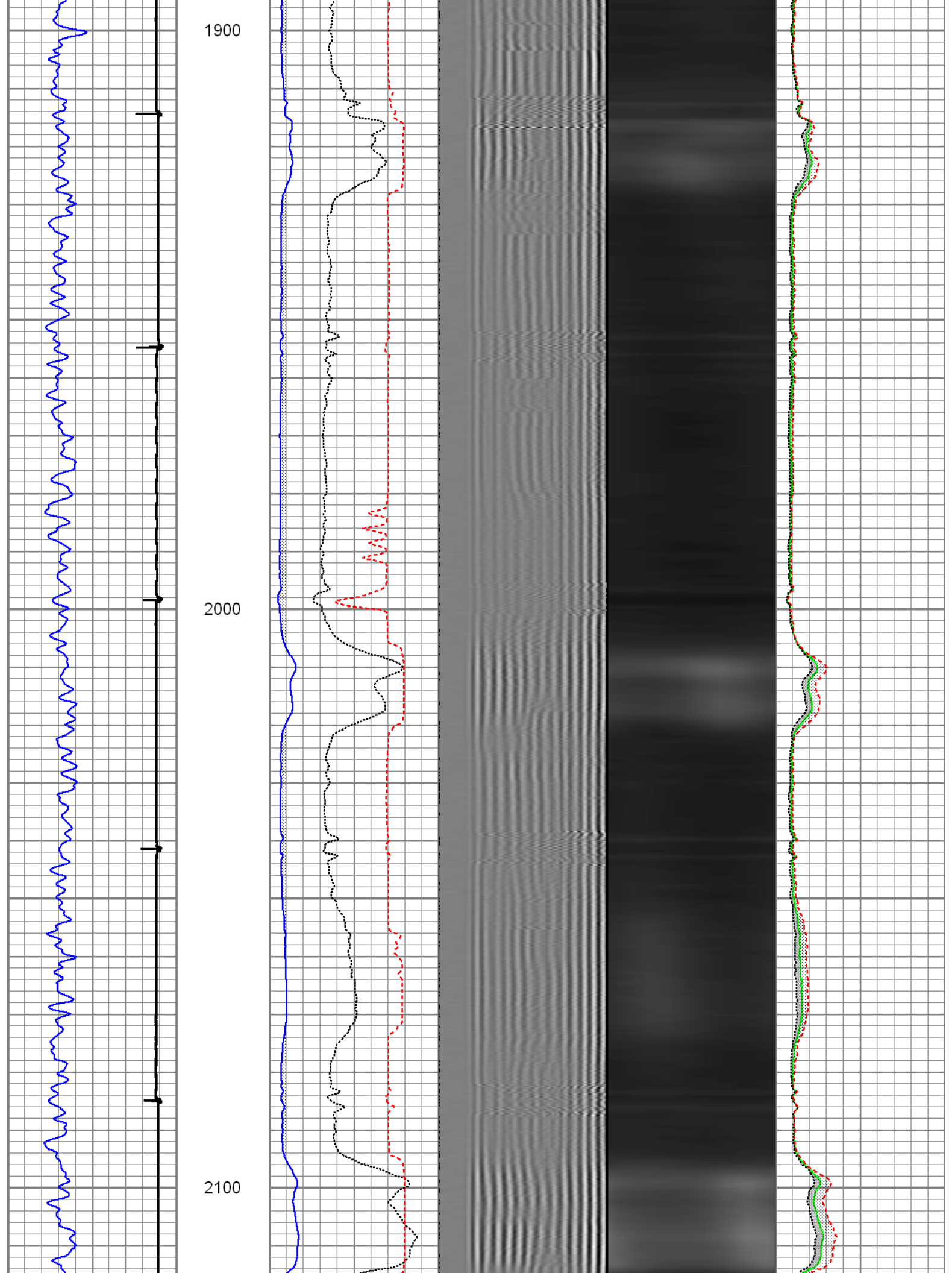
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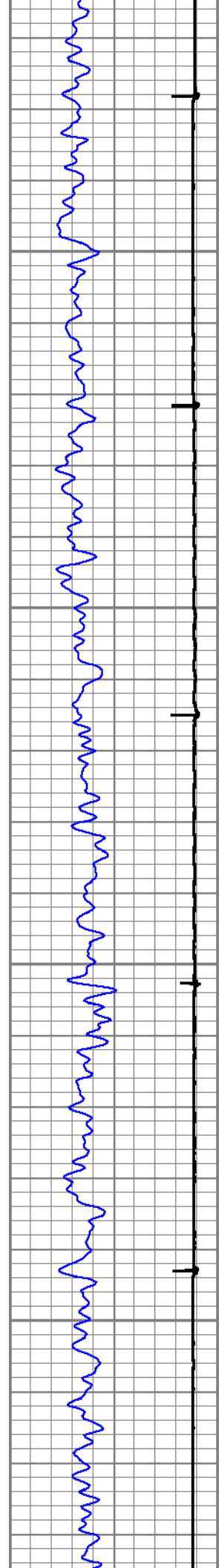
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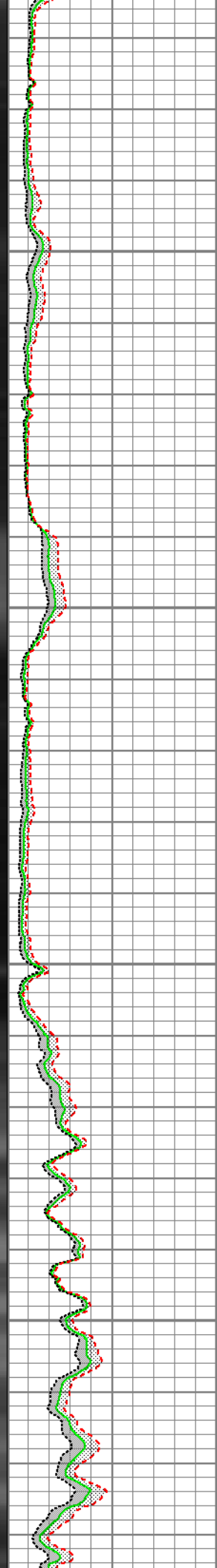
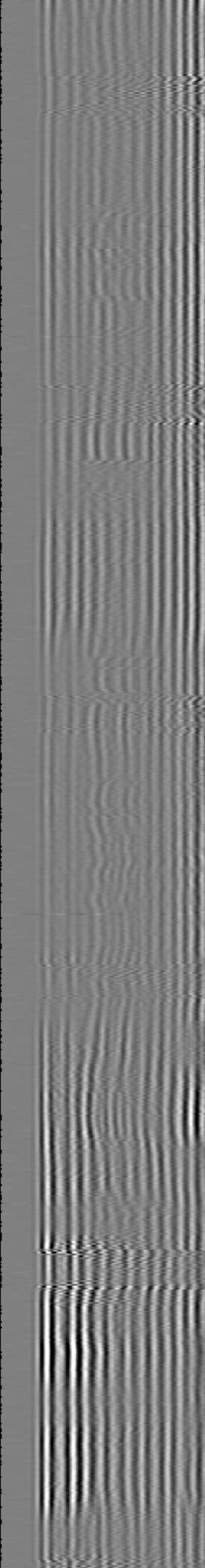
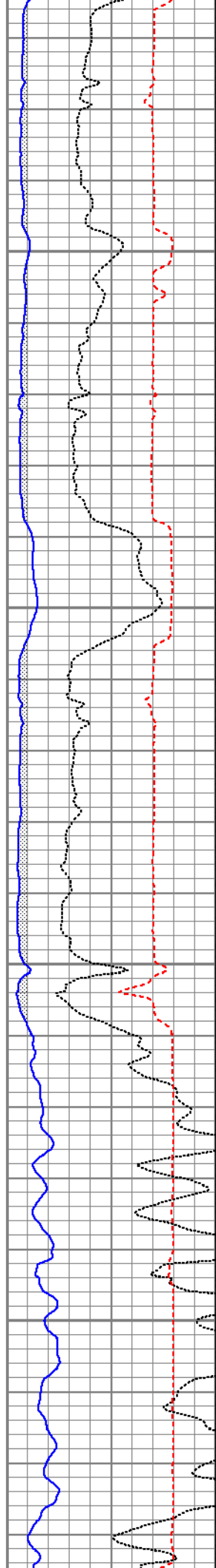






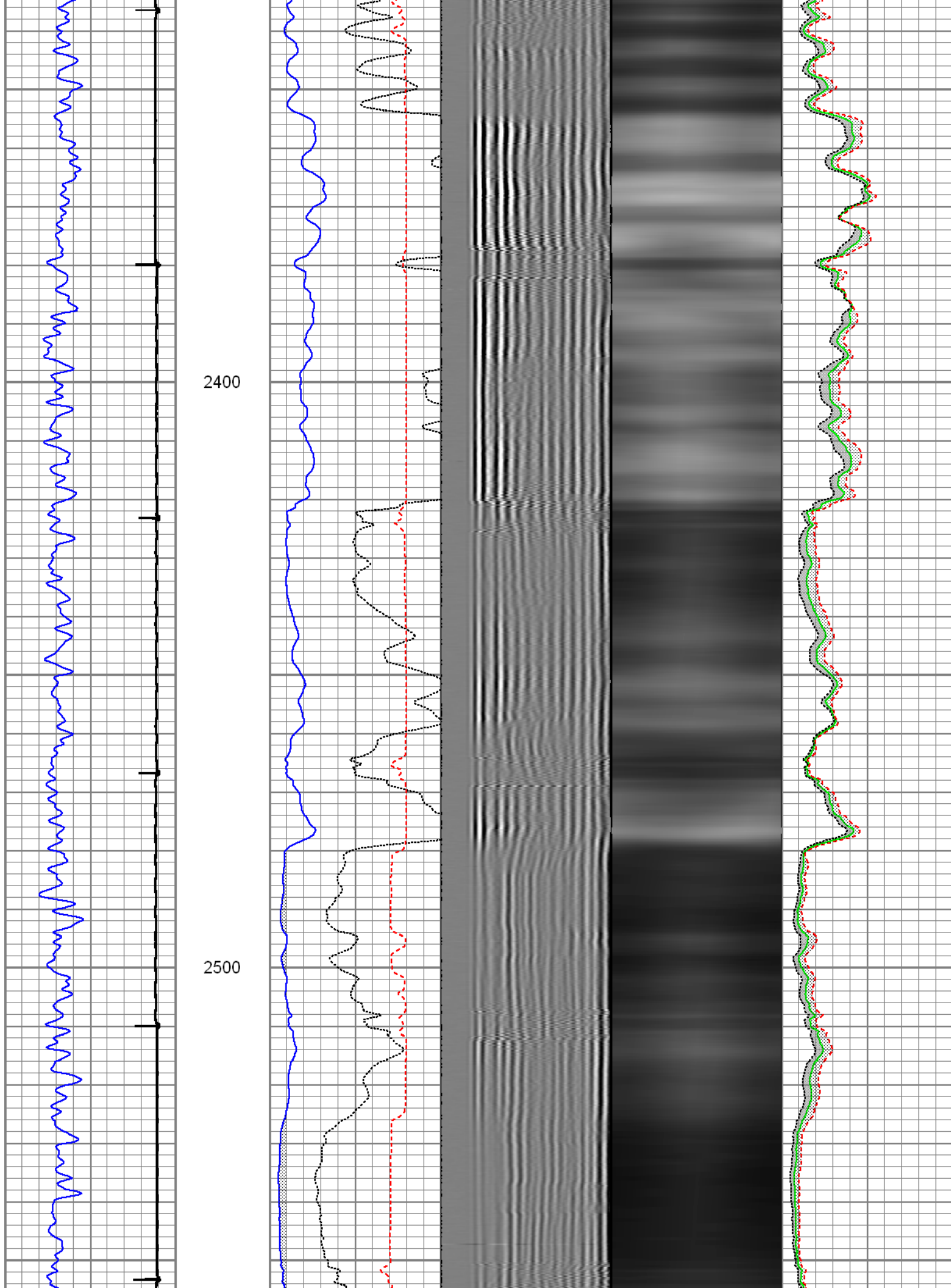
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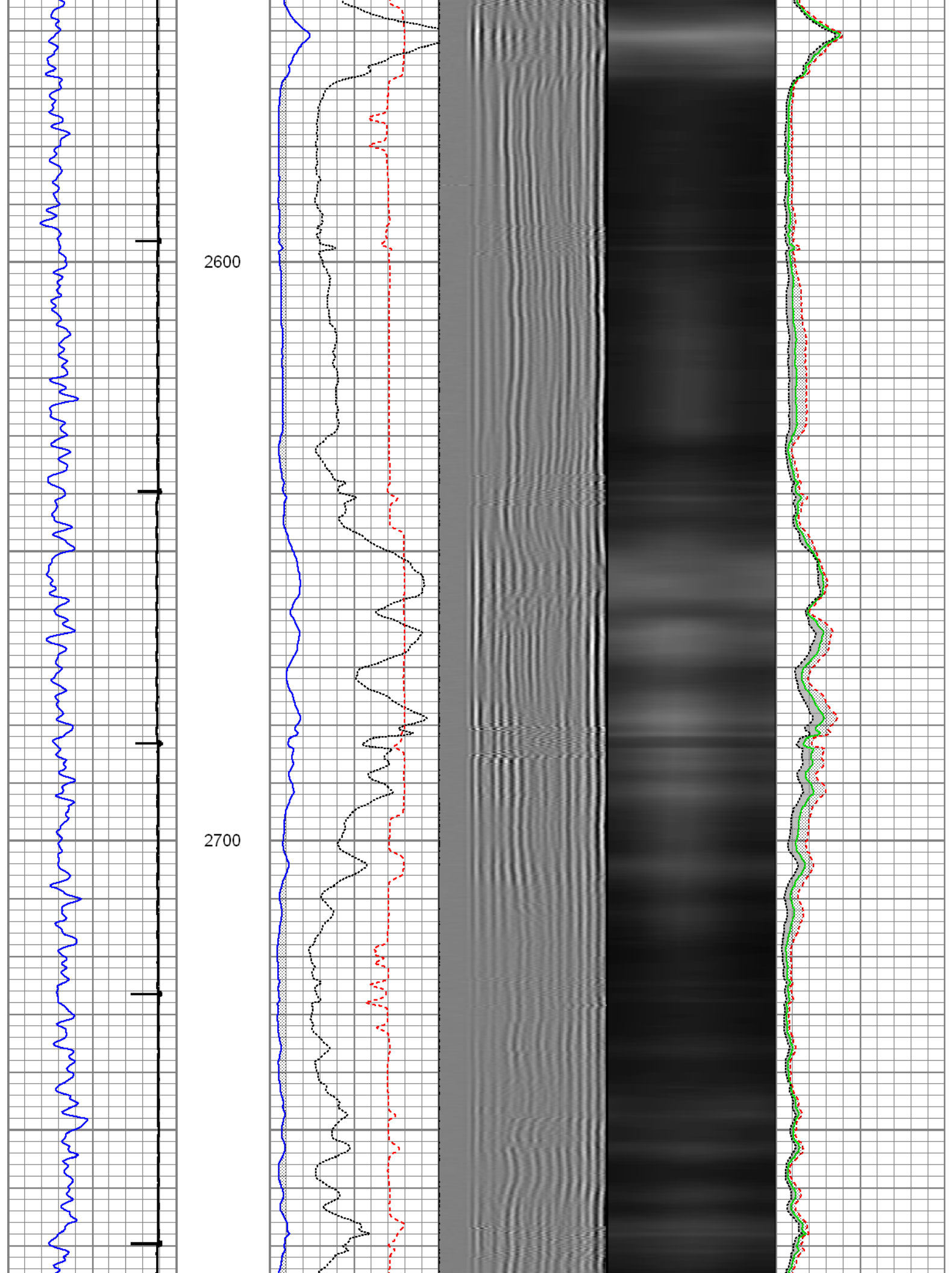
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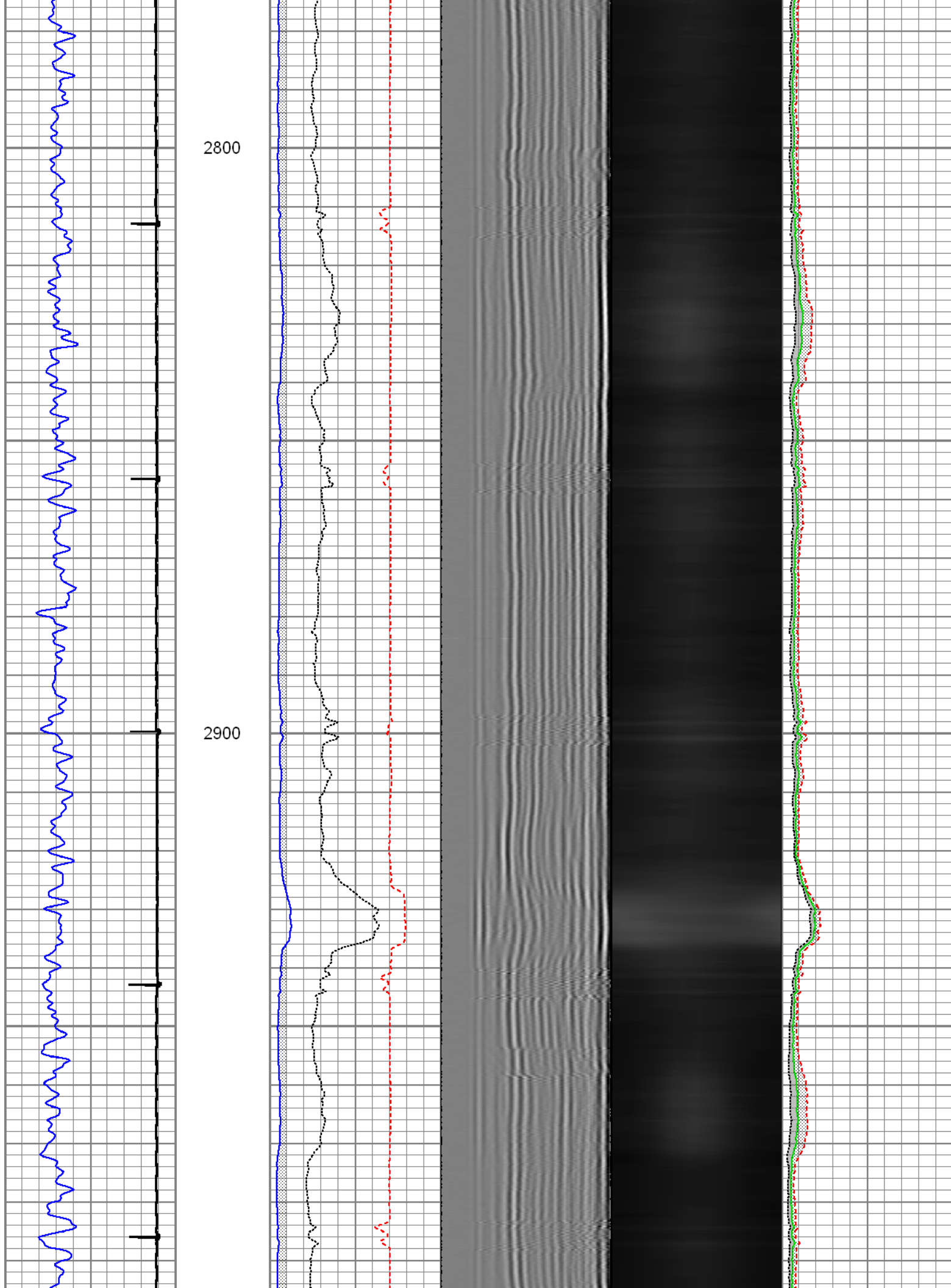
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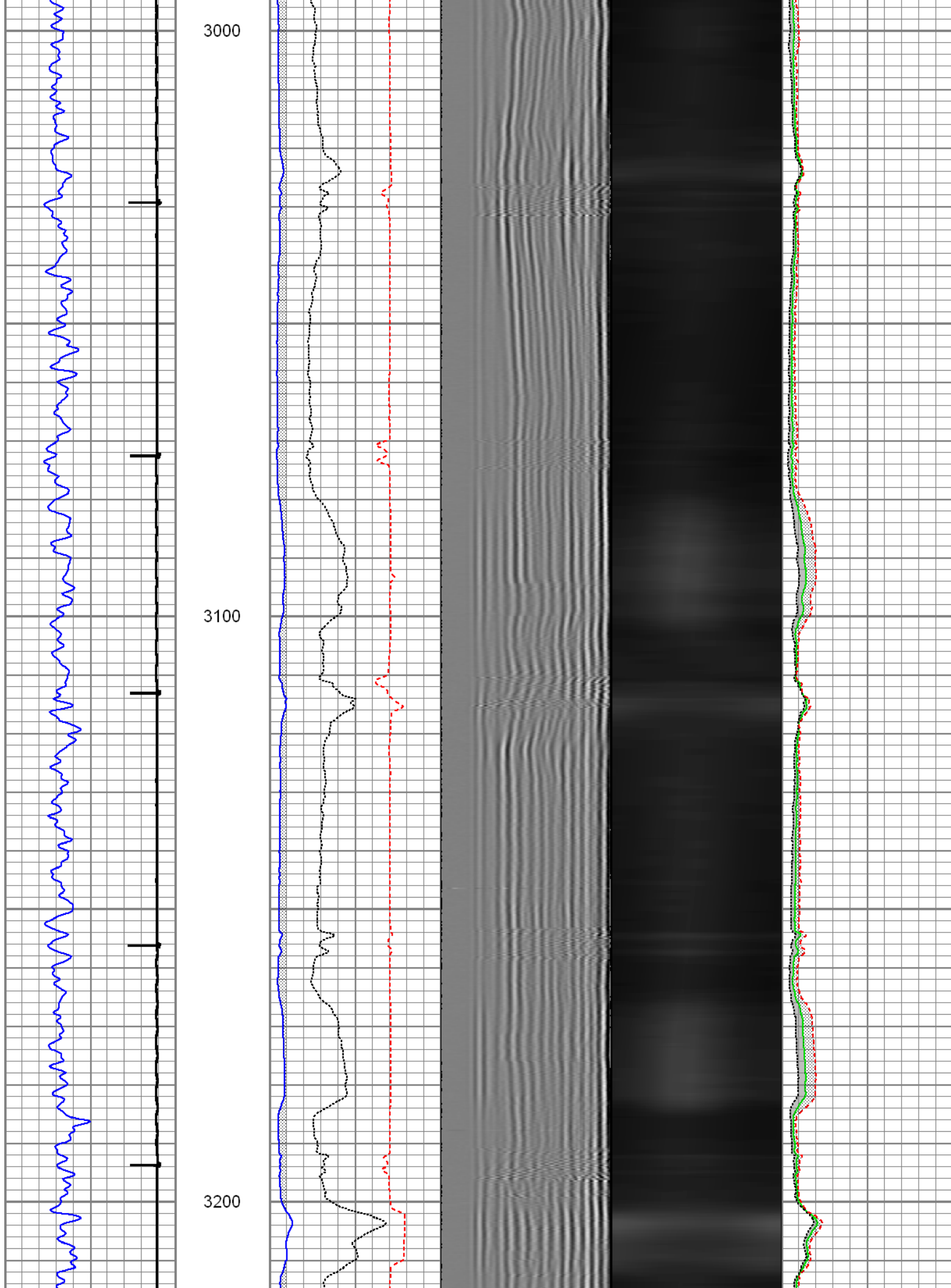
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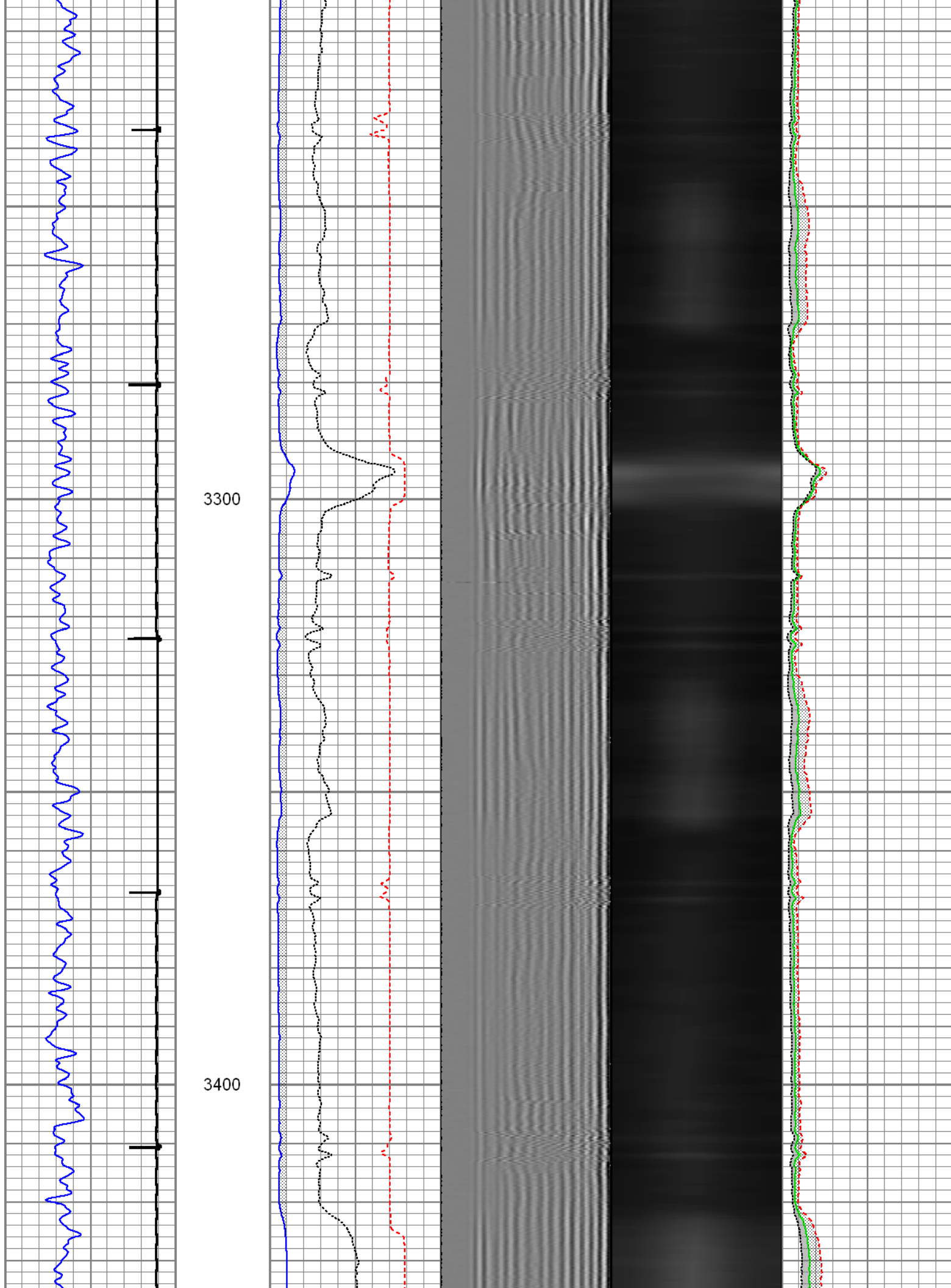
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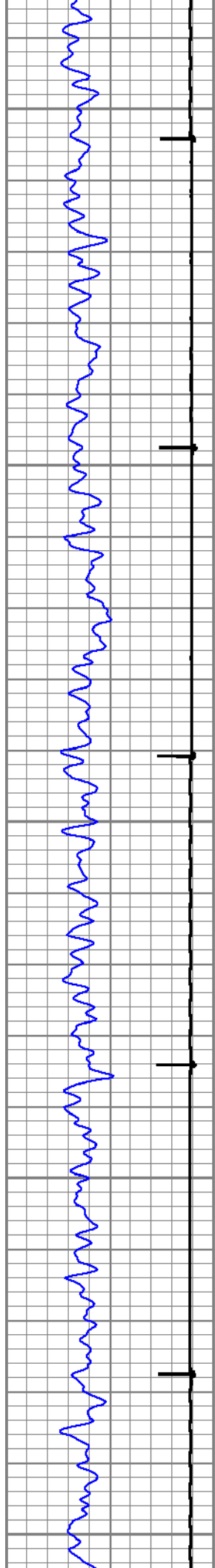
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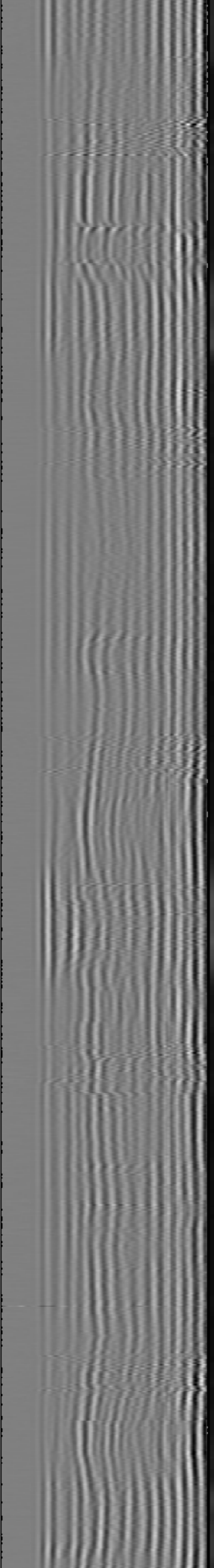
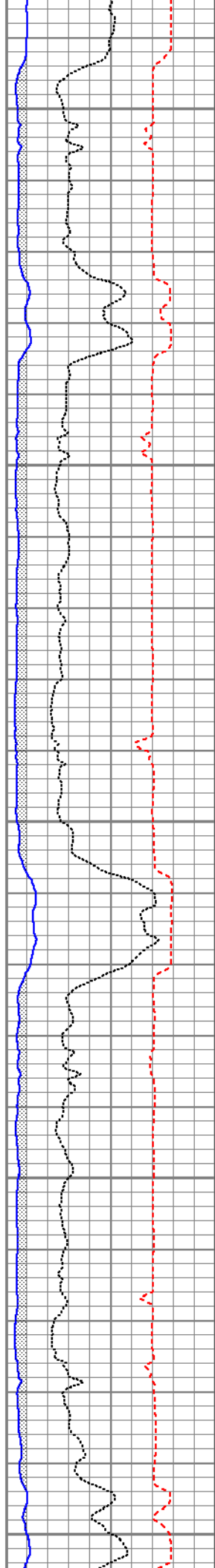
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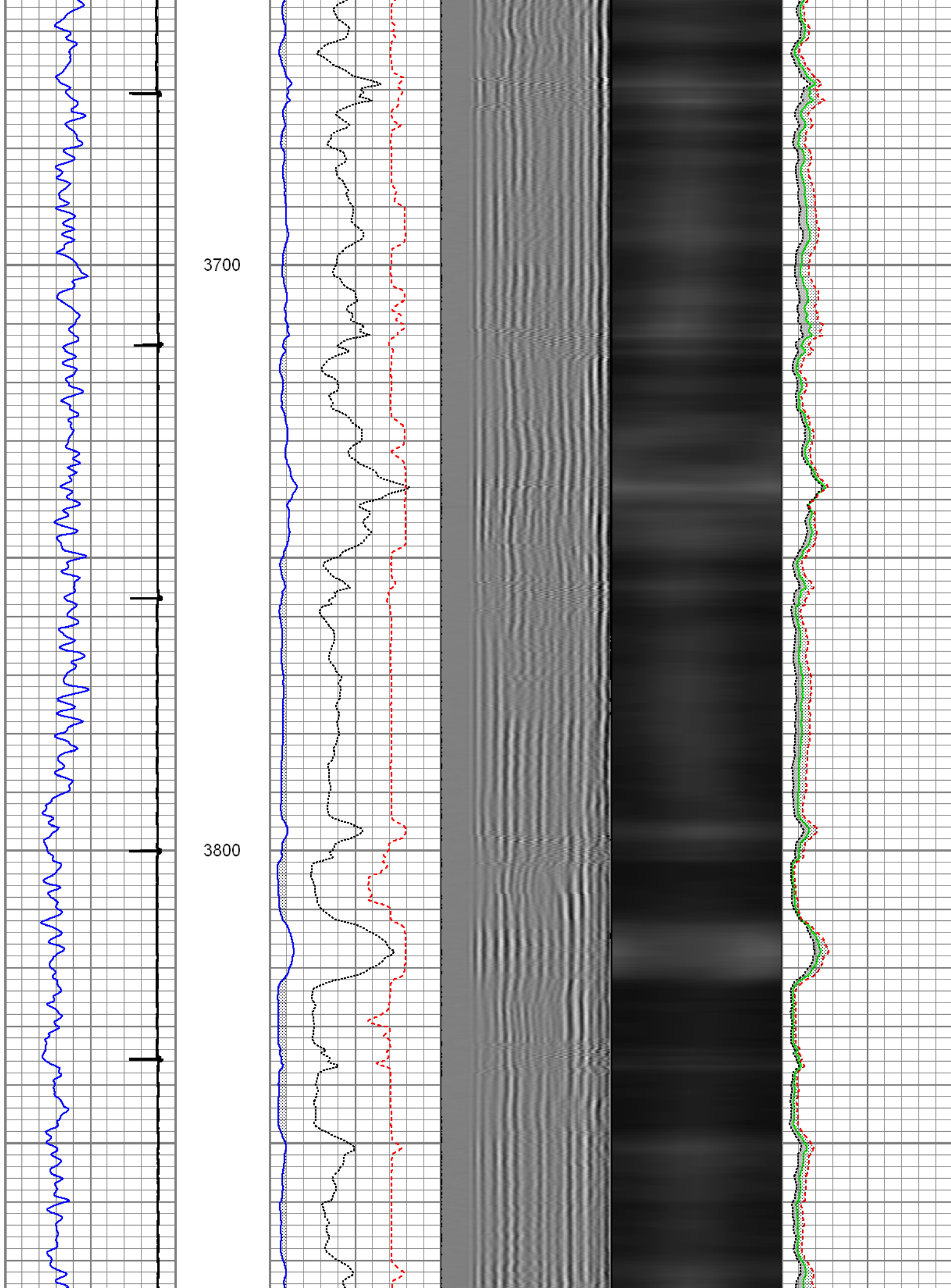
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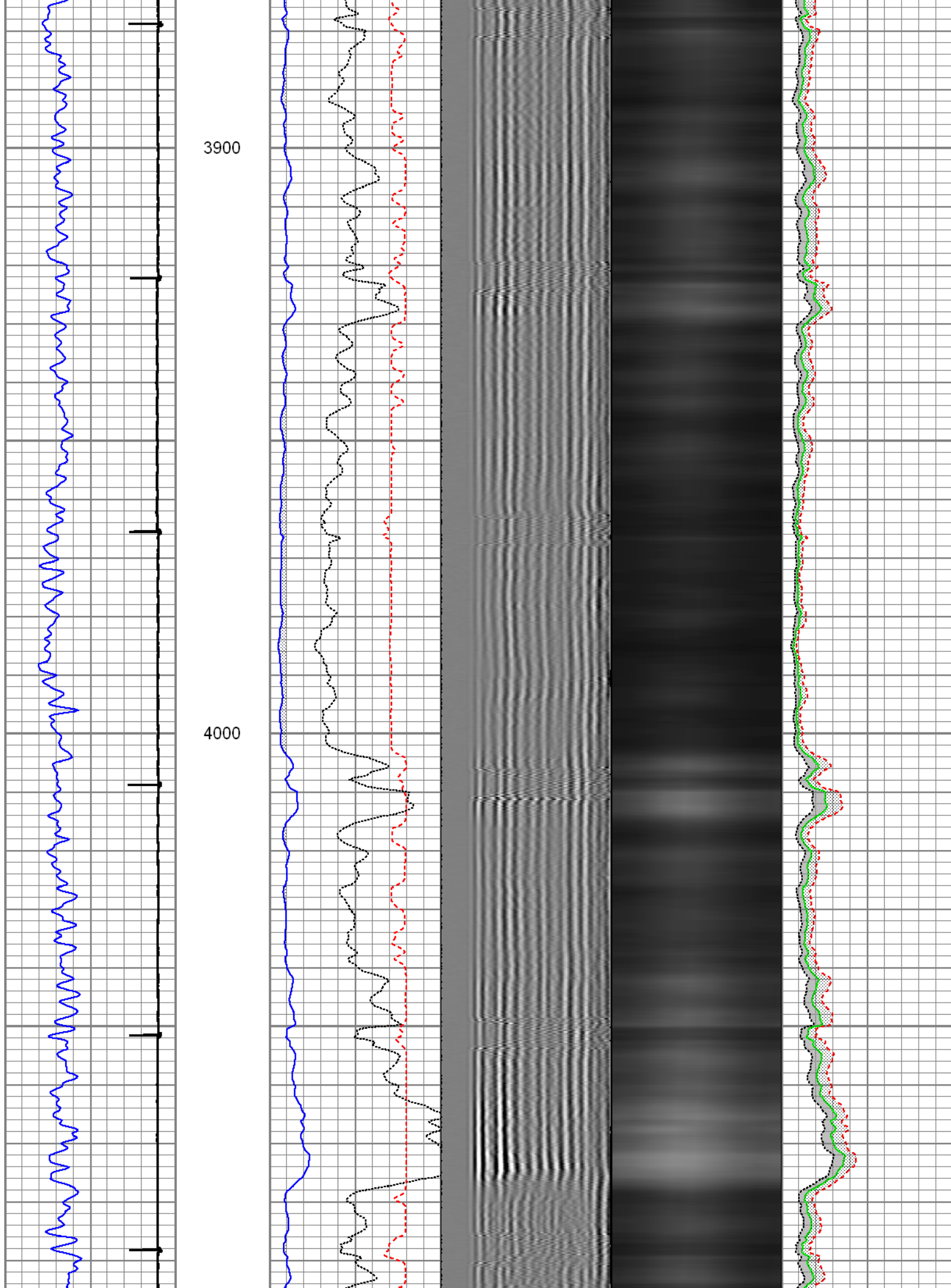
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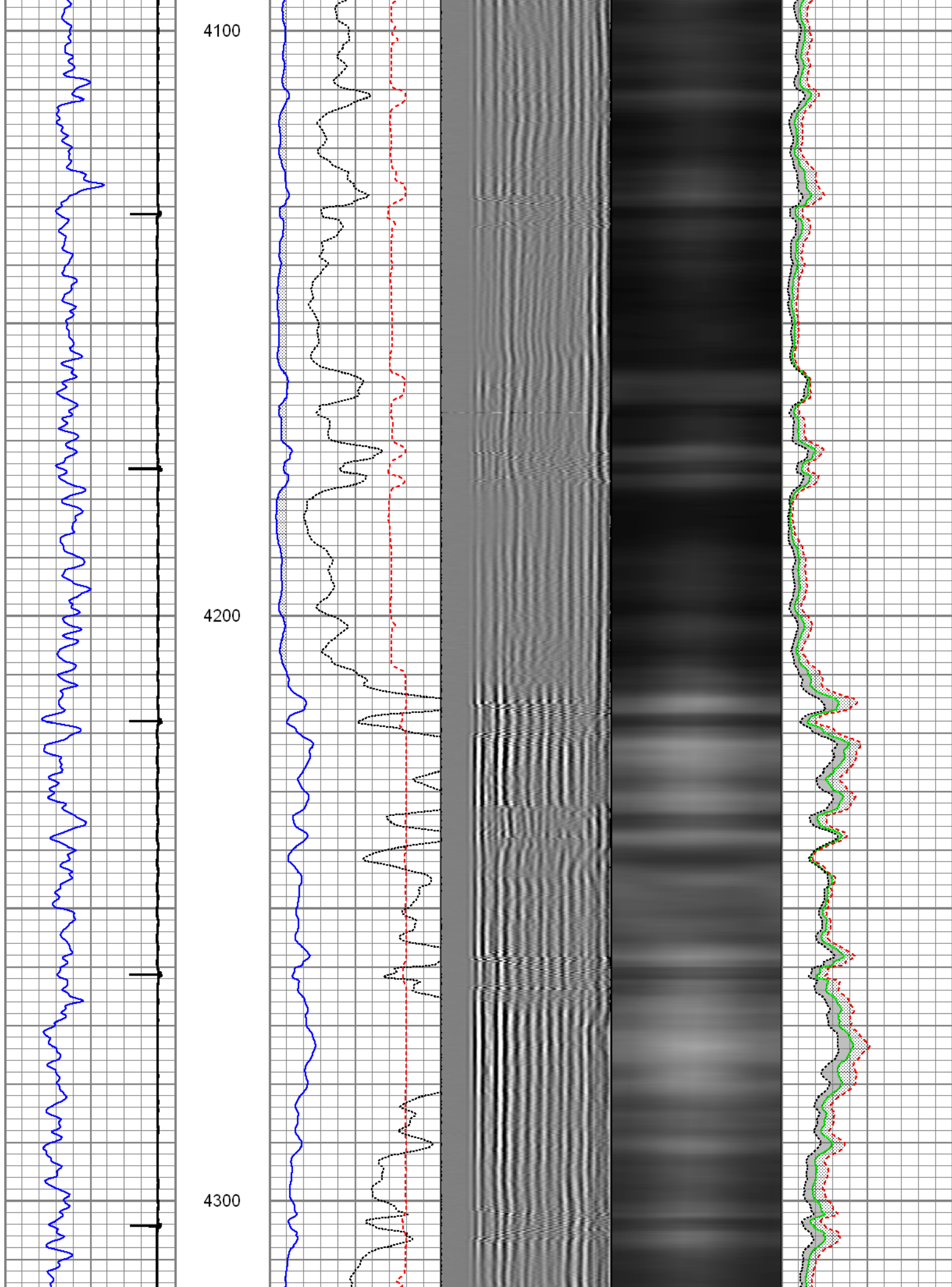
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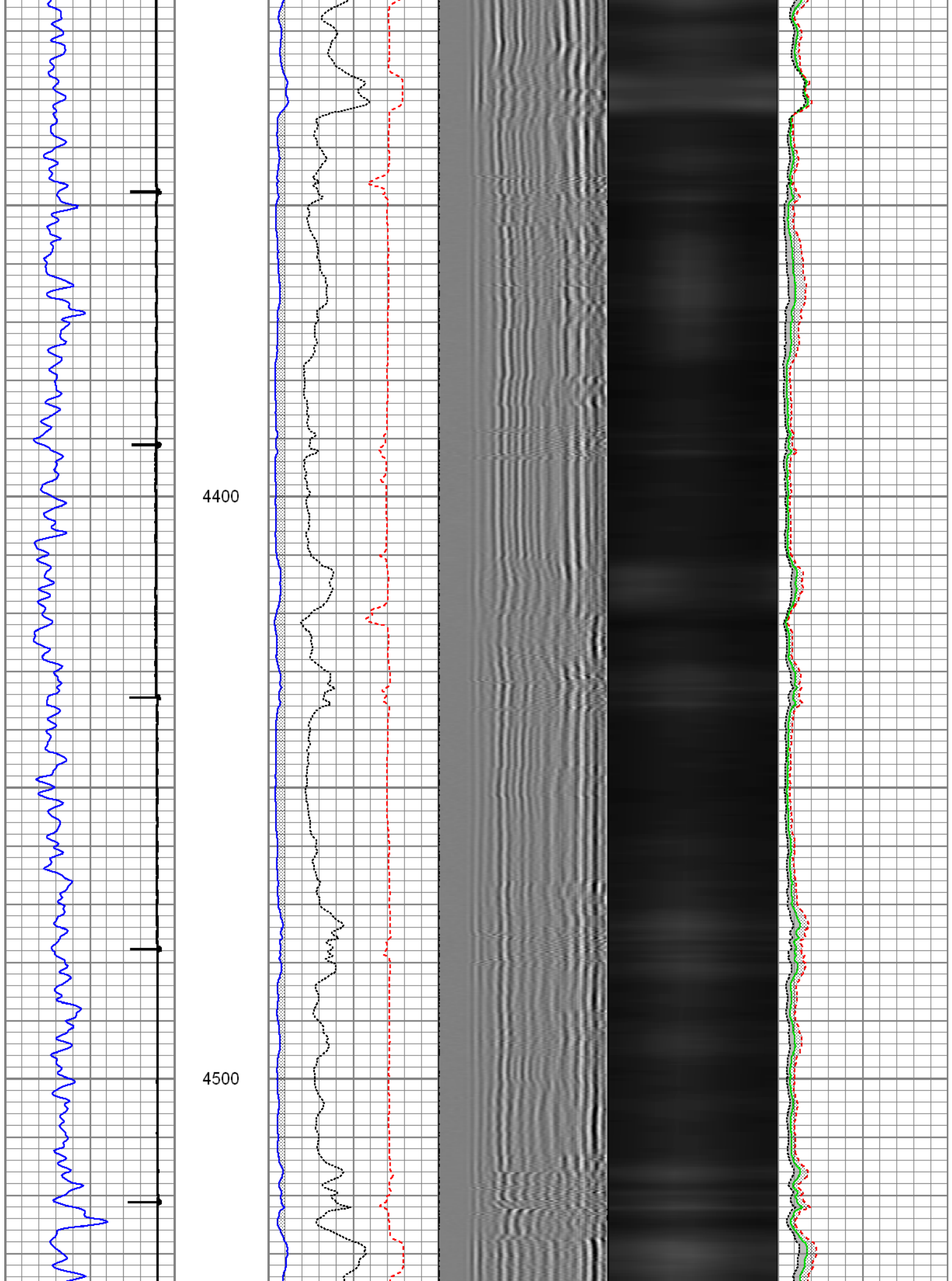


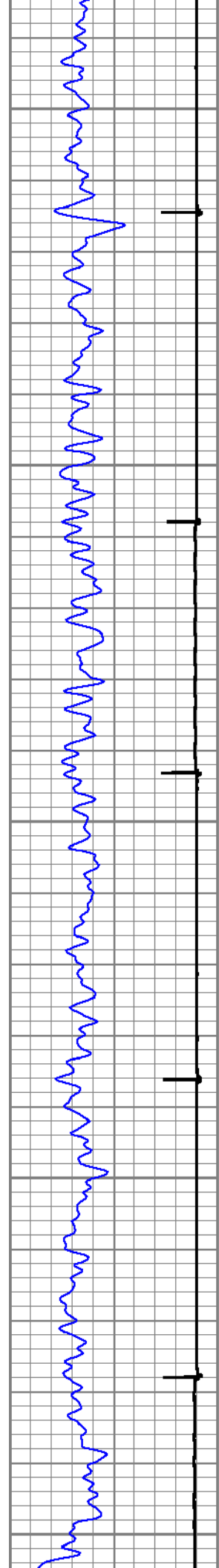
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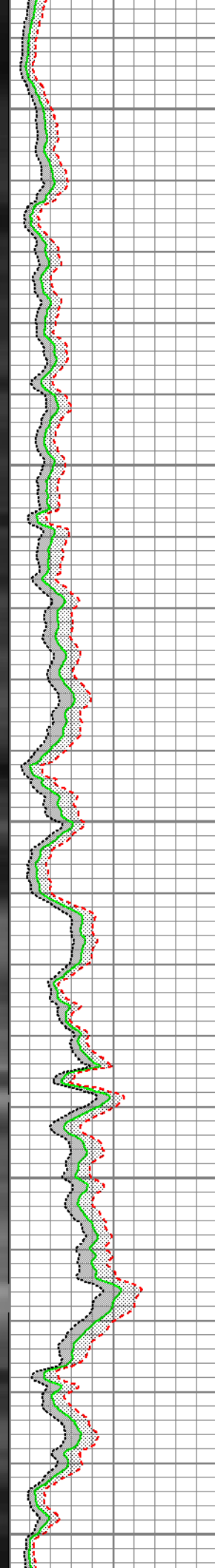
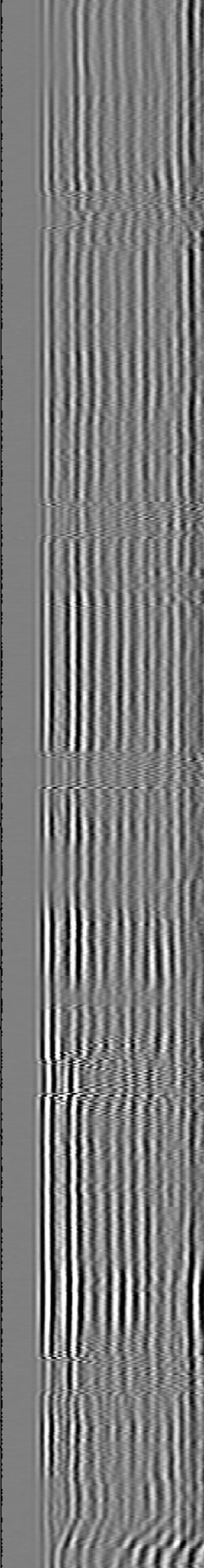
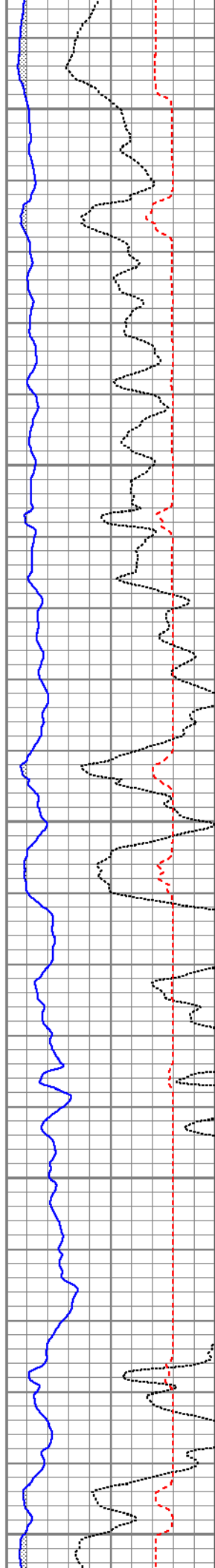


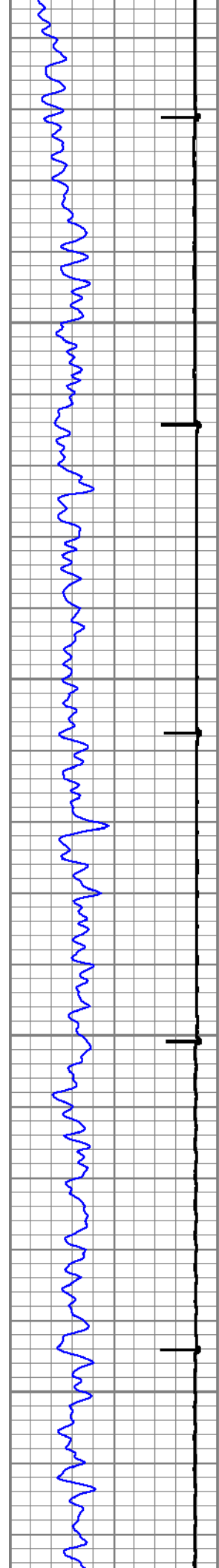




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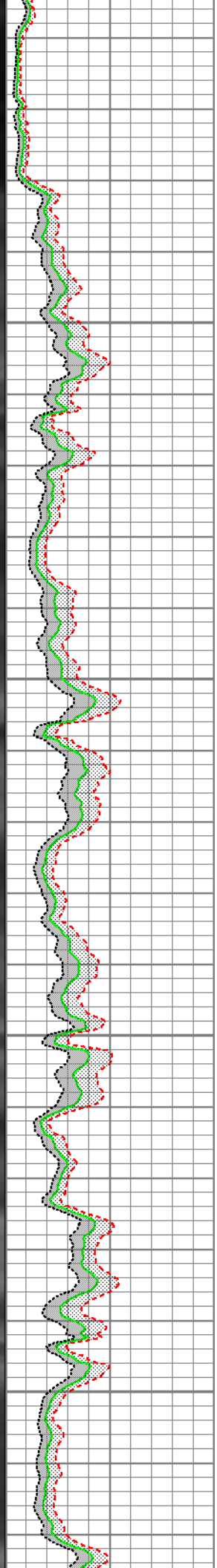
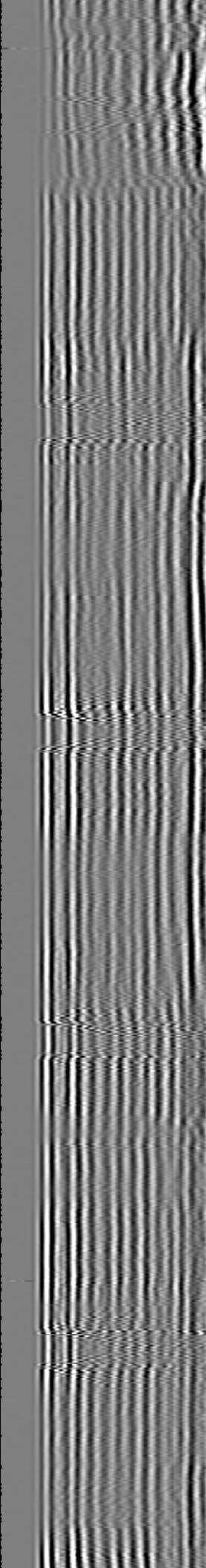
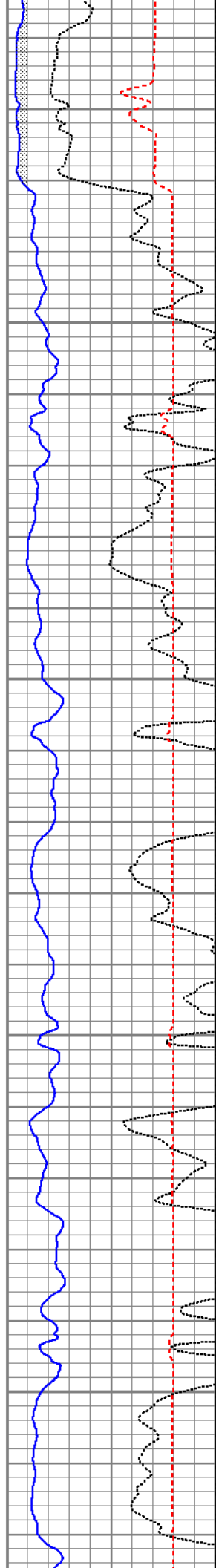
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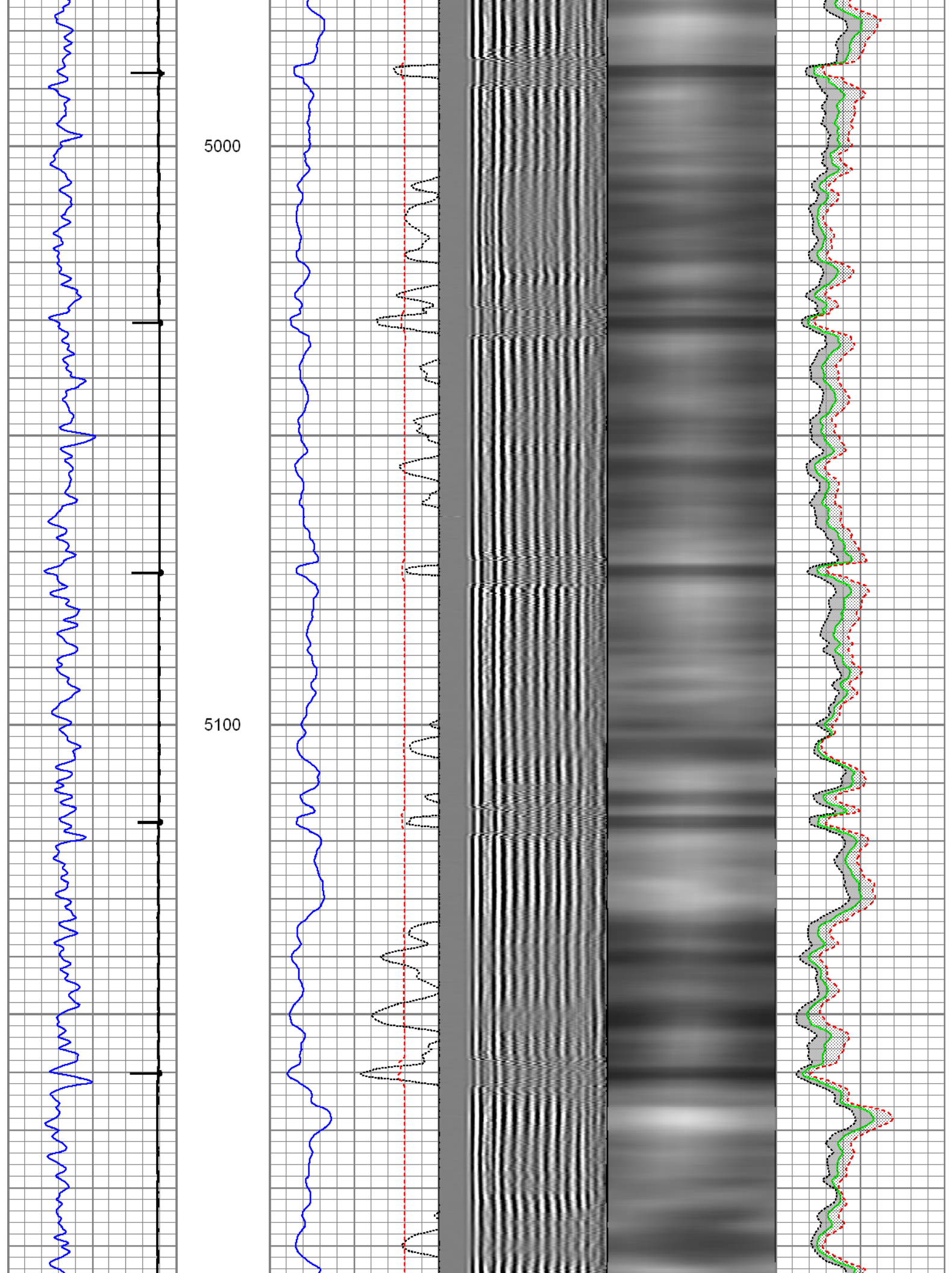




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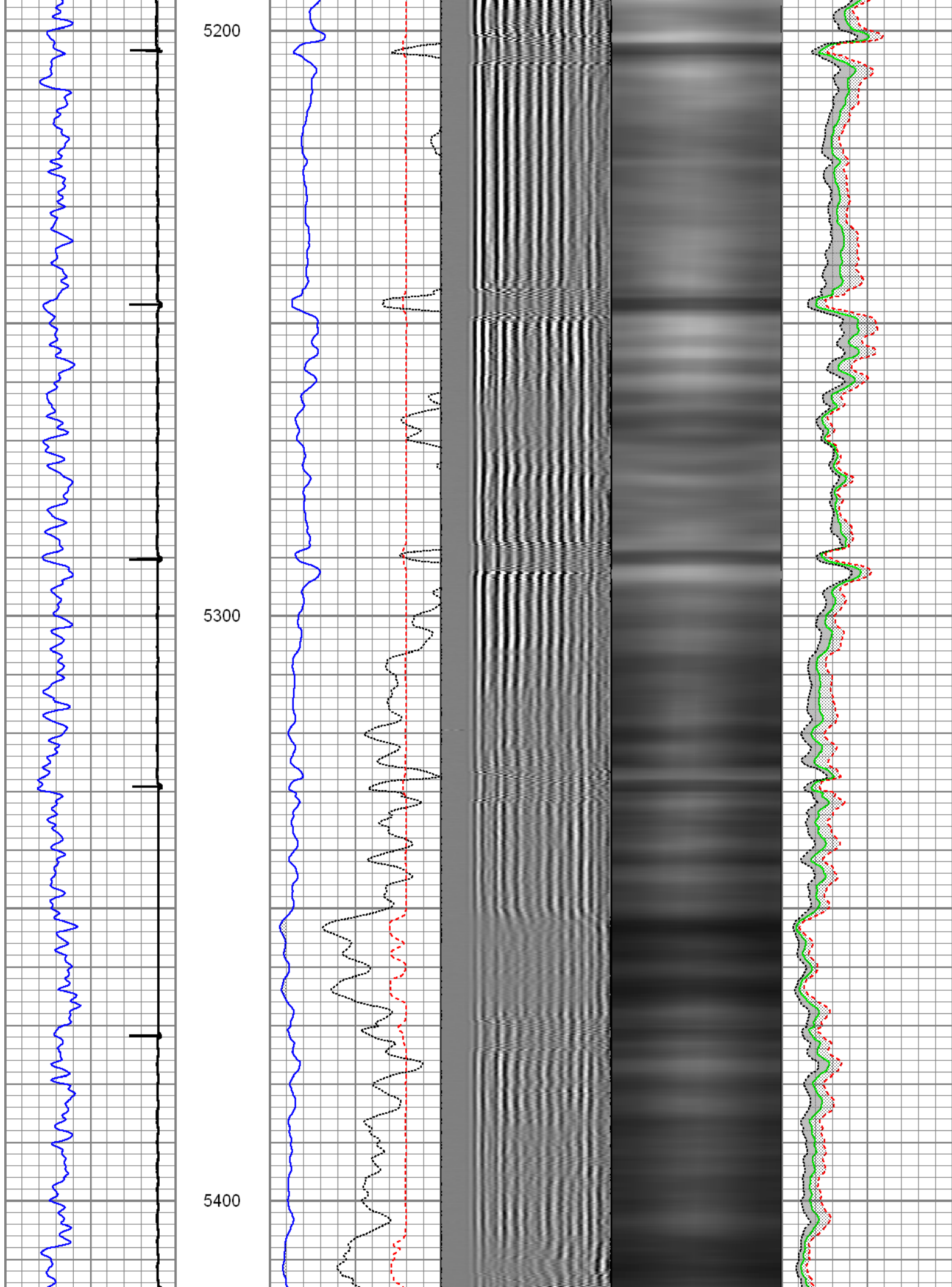


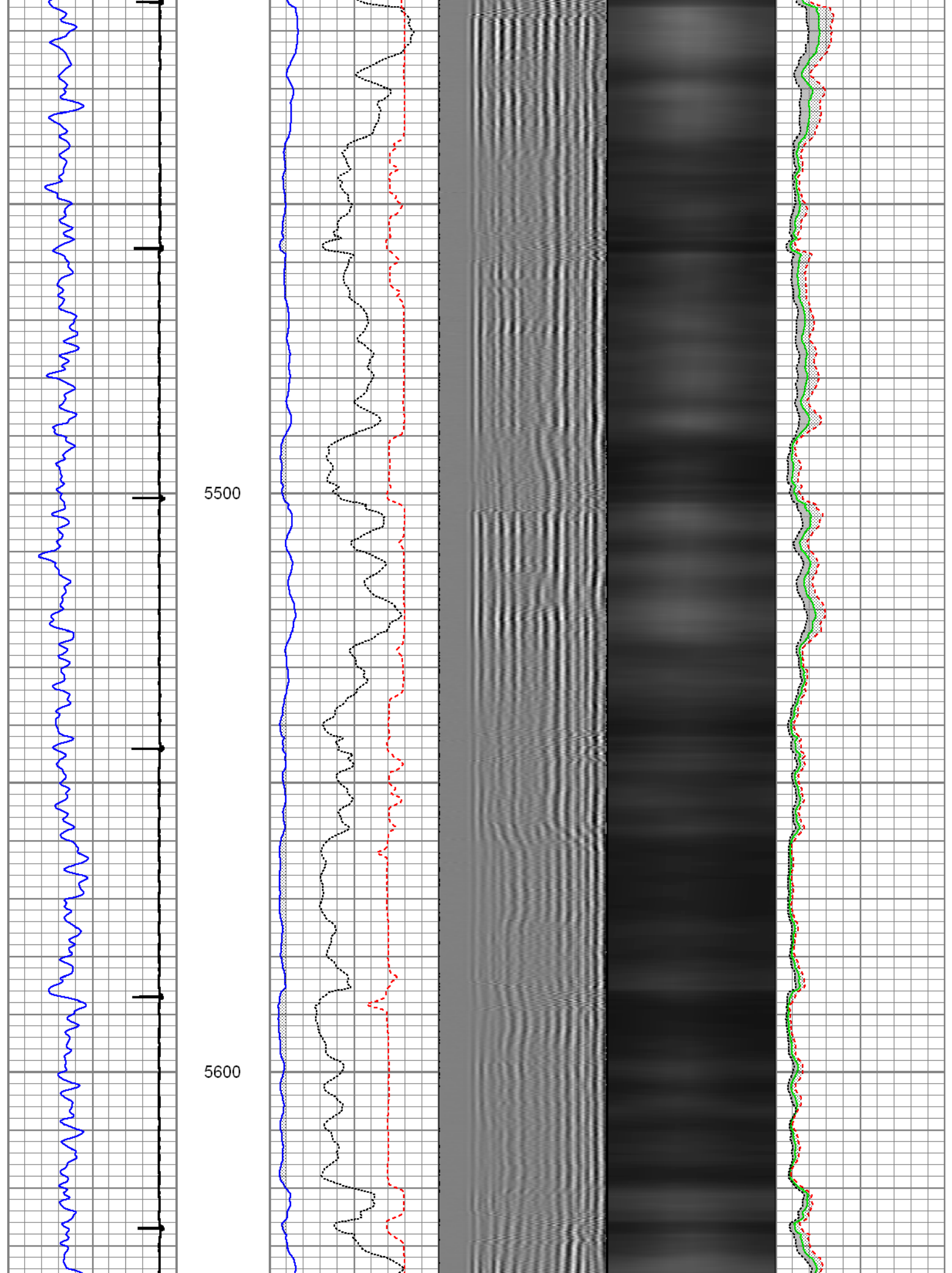


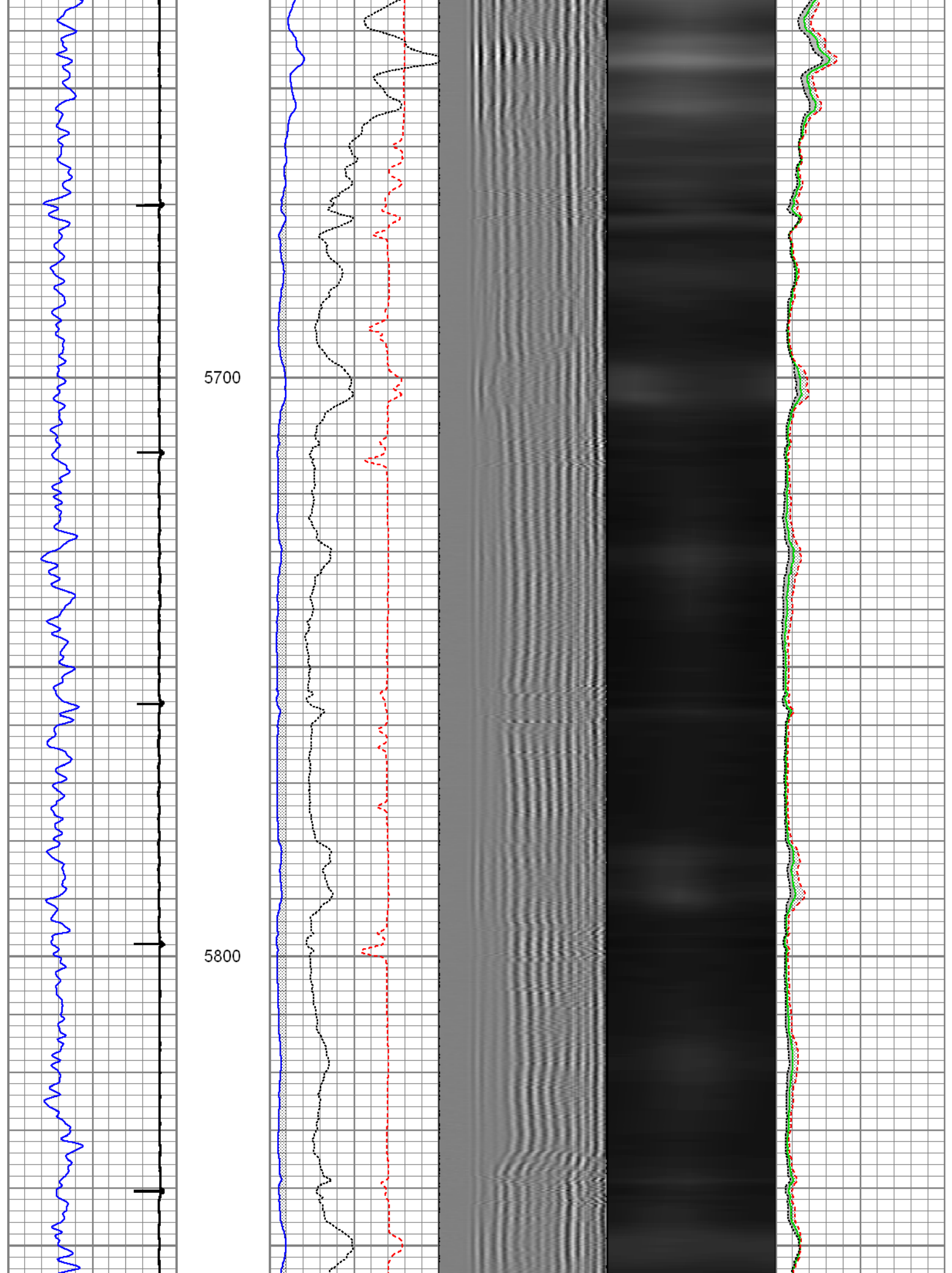
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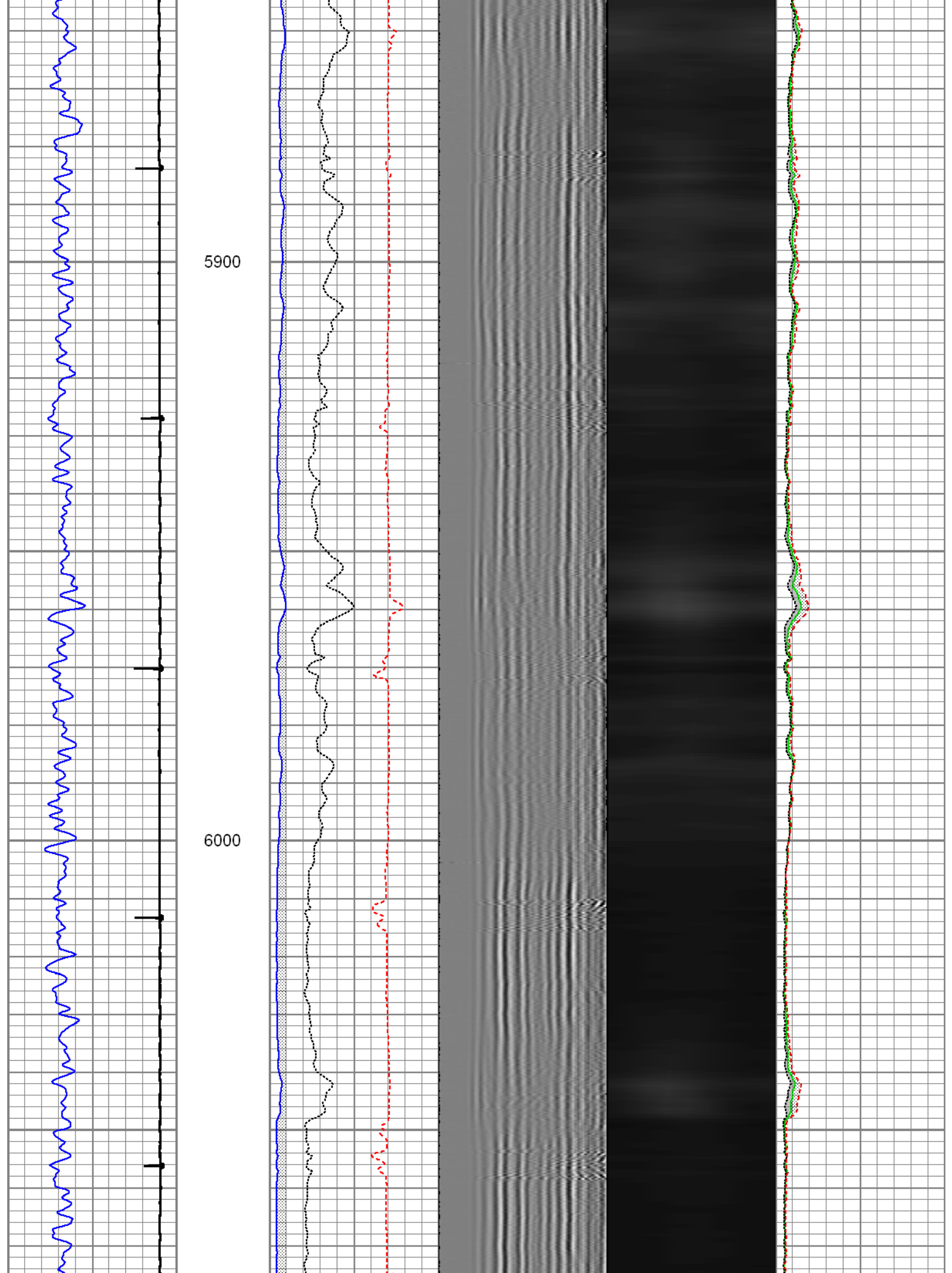
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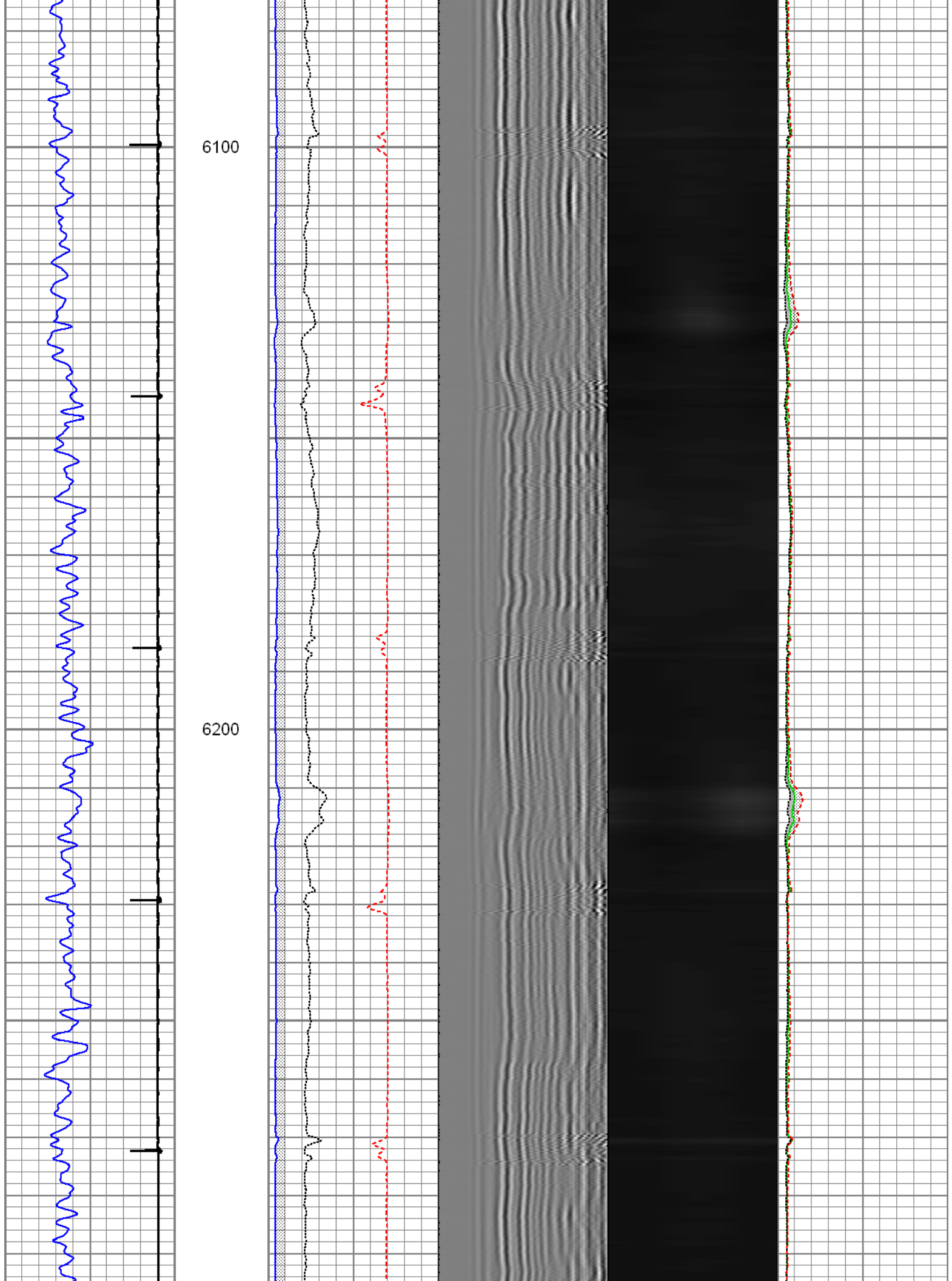
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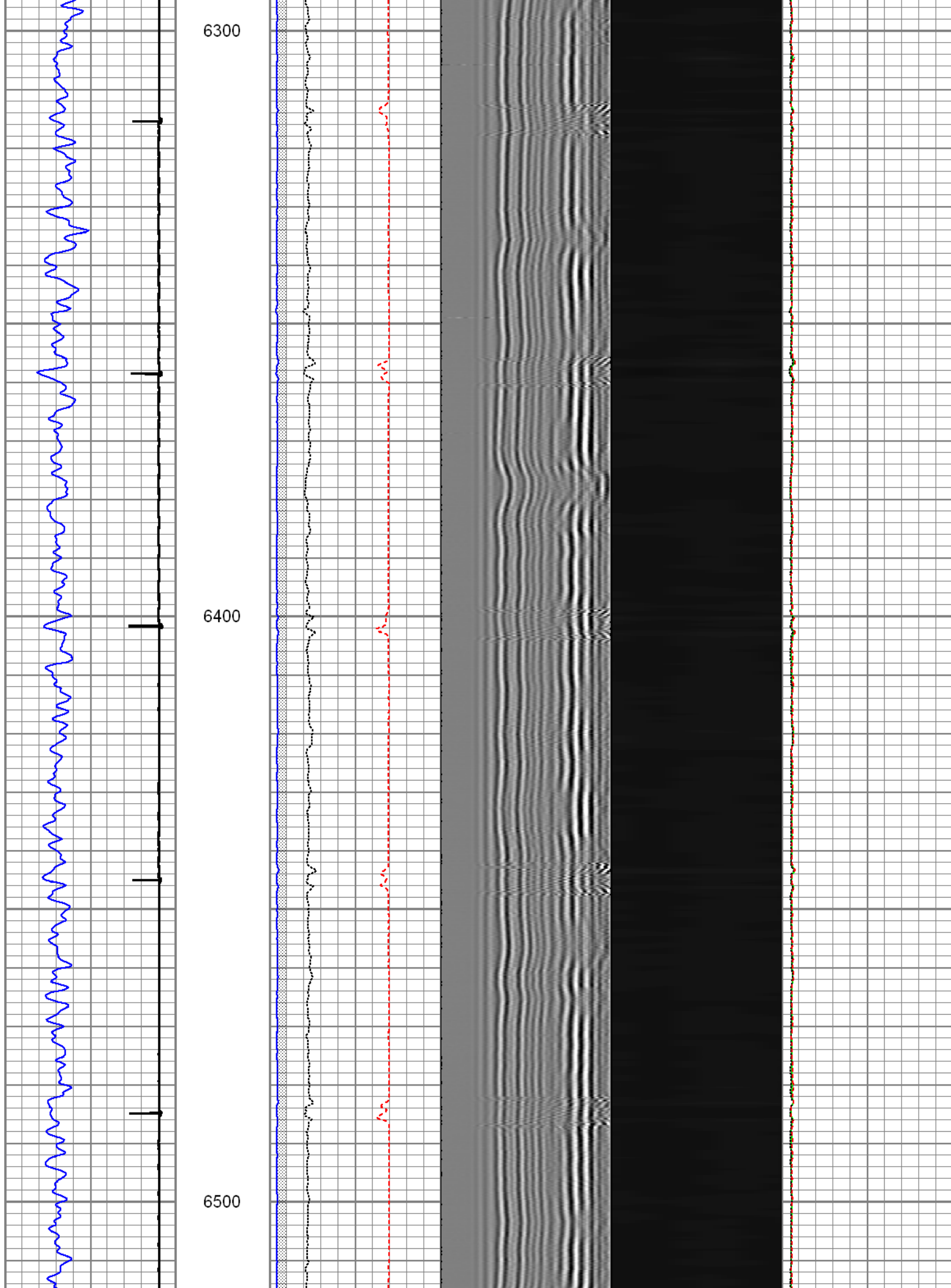


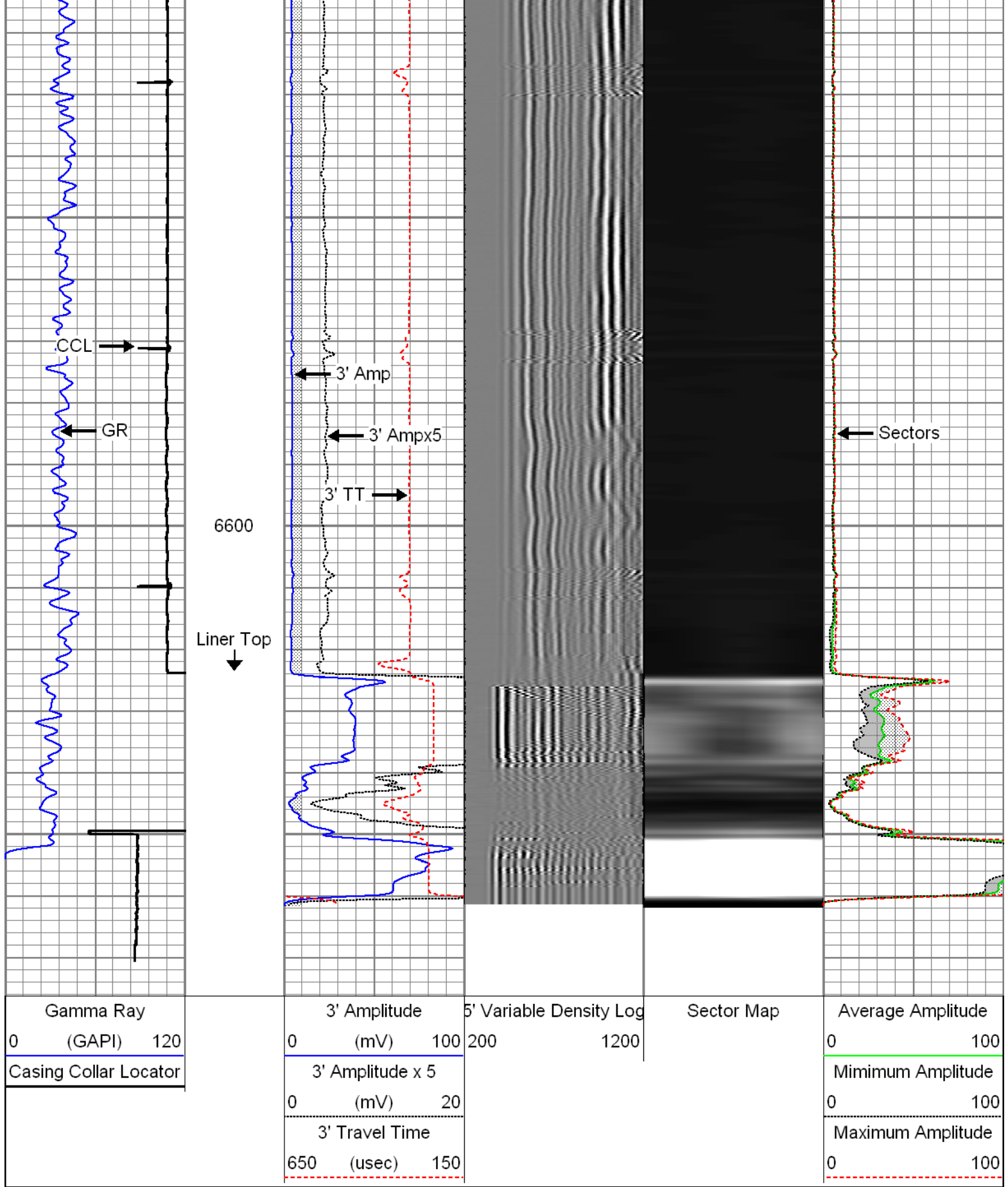


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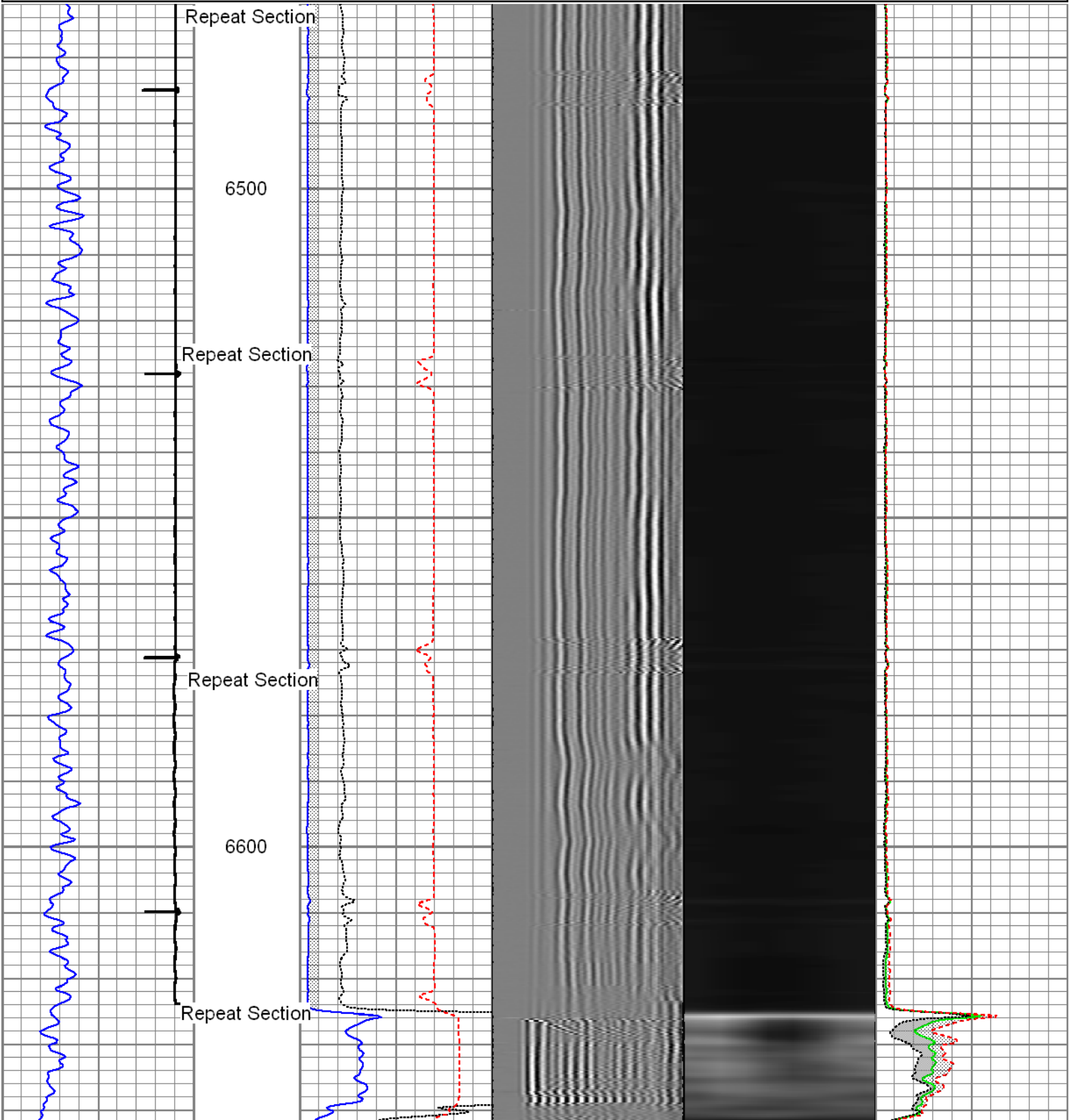
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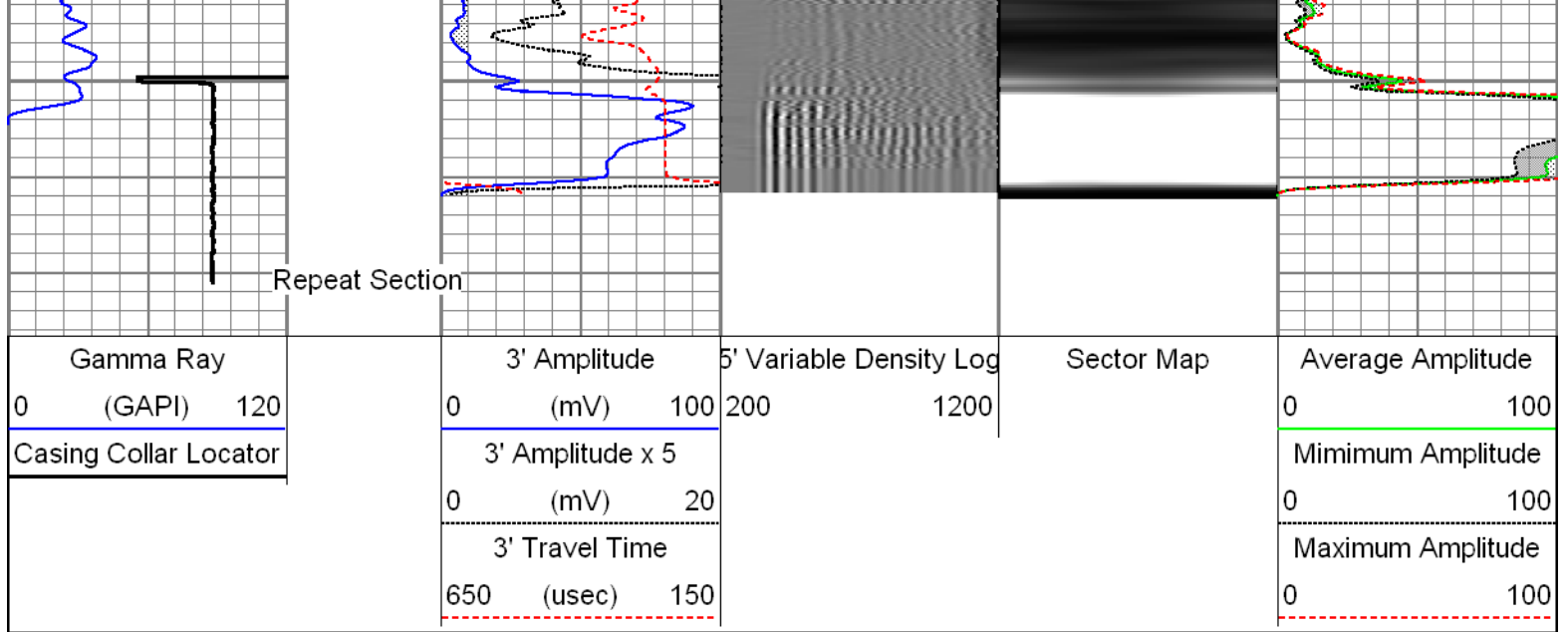
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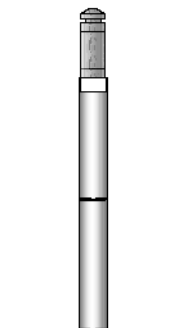
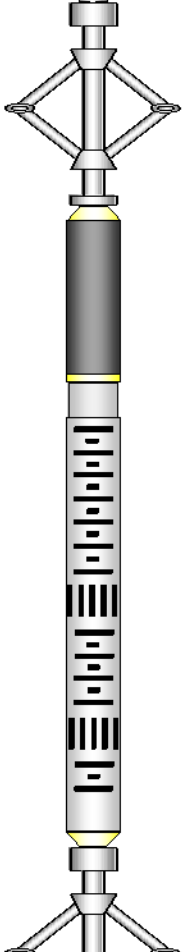


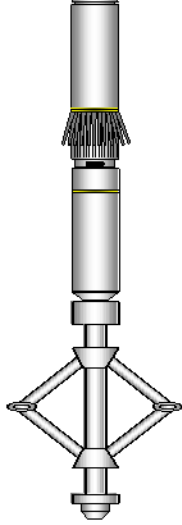


Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120	0 (mV) 100	200 1200		0 100
Casing Collar Locator	3' Amplitude x 5			Minimum Amplitude
	0 (mV) 20			0 100
	3' Travel Time			Maximum Amplitude
	650 (usec) 150			0 100





Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
GR	23.67		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 (211727) Production Gamma Ray	1.93	1.69	9.50
			UW_PRC #4 -UW_PRC_057 (1037) Sondex 2-3/4" 4-Arm Production Roller Centraliser	2.98	2.75	32.00
WVF3FT	15.85		UW_RBT-UW_RBT_004 (1066) Sondex Ultrawire 3-1/8" Radial Bond Tool	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					
			UW_PRC-UW_PRC_057 (1102) Sondex 2-3/4" 4-Arm Production Roller Centraliser	2.98	2.75	32.00

MIT	5.41		UW_MIT-UW_MIT40_027 (218950) 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: anadarko_barefoot 31n-25hz_rcbl mit_09-july-2014 - RBL.db: field/well/run1/pass5 Total Length: 27.92 ft Total Weight: 319.30 lb O.D. 3.13 in						

Calibration Report			
Database File:	C:\Documents and Settings\Administrator\Desktop\data\anadarko_barefoot 31n-25hz_rcbl mit_09-july-2014 - RBL.db: field/well/run1/pass5		
Dataset Pathname:	pass6		
Dataset Creation:	Wed Jul 09 10:24:37 2014 by Log 7.0 B1		
Multi-finger Imaging Tool Calibration Report			
Serial Number:	218950		
Number of Fingers:	40		
Tool Model:	UW_MIT40_027		
Inclinometer Calibration Report			
Performed:	Fri, Oct, 10 10:41:51 2008		
Calibration Angle:	45		
	Inc X	Inc Y	
Vertical:	1996	1975	
Finger 1 up:	2238	2226	
Finger 31 up:	1760	2216	
Finger 21 up:	1769	1745	
Finger 11 up:	2250	1738	
Sensitivity ratio:	1.00023		
X-axis angle:	314.283		
Deviation const.:	339.139		

Finger Calibration Report							
	Performed: Wed Jul 09 07:02:07 2014						
Ring size:	4	5	6	7			
(in)							
	Sens	Sens	Sens	Sens			
Finger 01:	1463 268.0	1731 293.0	2024 301.0	2325			
Finger 02:	1560 246.0	1806 257.0	2063 261.0	2324			
Finger 03:	1426 274.0	1700 295.0	1995 303.0	2298			
Finger 04:	1448 275.0	1723 296.0	2019 295.0	2314			
Finger 05:	1478 265.0	1743 283.0	2026 283.0	2309			
Finger 06:	1415 279.0	1694 299.0	1993 302.0	2295			
Finger 07:	1418 274.0	1692 295.0	1987 302.0	2289			
Finger 08:	1443 274.0	1717 290.0	2007 293.0	2300			
Finger 09:	1429 277.0	1706 297.0	2003 301.0	2304			
Finger 10:	1456 270.0	1726 288.0	2014 290.0	2304			
Finger 11:	1426 273.0	1699 293.0	1992 300.0	2292			
Finger 12:	1407 282.0	1689 299.0	1988 307.0	2295			
Finger 13:	1512 260.0	1772 272.0	2045 275.0	2320			

Finger 13:	1512	260.0	1772	273.0	2045	275.0	2320
Finger 14:	1452	268.0	1720	288.0	2008	294.0	2302
Finger 15:	1443	281.0	1724	294.0	2018	305.0	2323
Finger 16:	1467	273.0	1740	289.0	2029	297.0	2326
Finger 17:	1437	282.0	1719	294.0	2013	304.0	2317
Finger 18:	1477	271.0	1748	279.0	2027	288.0	2315
Finger 19:	1474	275.0	1749	287.0	2036	297.0	2333
Finger 20:	1471	272.0	1743	285.0	2028	300.0	2328
Finger 21:	1446	284.0	1730	300.0	2030	311.0	2341
Finger 22:	1481	266.0	1747	277.0	2024	288.0	2312
Finger 23:	1483	273.0	1756	282.0	2038	296.0	2334
Finger 24:	1486	273.0	1759	281.0	2040	290.0	2330
Finger 25:	1466	274.0	1740	284.0	2024	296.0	2320
Finger 26:	1465	278.0	1743	289.0	2032	301.0	2333
Finger 27:	1503	268.0	1771	280.0	2051	289.0	2340
Finger 28:	1489	275.0	1764	287.0	2051	294.0	2345
Finger 29:	1549	260.0	1809	272.0	2081	279.0	2360
Finger 30:	1453	274.0	1727	289.0	2016	305.0	2321
Finger 31:	1469	279.0	1748	295.0	2043	303.0	2346
Finger 32:	1527	263.0	1790	276.0	2066	280.0	2346
Finger 33:	1470	277.0	1747	298.0	2045	305.0	2350
Finger 34:	1451	273.0	1724	295.0	2019	306.0	2325
Finger 35:	1513	254.0	1767	271.0	2038	275.0	2313
Finger 36:	1497	262.0	1759	283.0	2042	292.0	2334
Finger 37:	1465	273.0	1738	295.0	2033	301.0	2334
Finger 38:	1531	247.0	1778	264.0	2042	272.0	2314
Finger 39:	1480	266.0	1746	285.0	2031	287.0	2318
Finger 40:	1417	278.0	1695	304.0	1999	311.0	2310

Post Survey Calibration Check
Performed: Wed Jul 09 10:24:28 2014

Ring size: (in)	4	Nom. wear	5	Nom. wear	6	Nom. wear	7	Nom. wear
Finger 01:	3.986	-0.007	4.994	-0.003	5.996	-0.002	6.995	-0.003
Finger 02:	4.000	-0.000	4.996	-0.002	6.003	0.001	7.004	0.002
Finger 03:	3.998	-0.001	4.998	-0.001	5.999	-0.000	6.995	-0.003
Finger 04:	3.997	-0.001	4.998	-0.001	5.997	-0.001	6.996	-0.002
Finger 05:	3.997	-0.001	4.997	-0.002	5.996	-0.002	7.002	0.001
Finger 06:	4.000	-0.000	4.994	-0.003	5.994	-0.003	7.000	0.000
Finger 07:	4.001	0.000	5.000	-0.000	5.996	-0.002	6.996	-0.002
Finger 08:	3.998	-0.001	4.993	-0.003	5.993	-0.004	6.992	-0.004
Finger 09:	3.999	-0.000	5.000	-0.000	5.992	-0.004	6.995	-0.002
Finger 10:	3.999	-0.000	4.998	-0.001	5.992	-0.004	6.995	-0.002
Finger 11:	3.991	-0.005	4.999	-0.001	5.999	-0.000	6.999	-0.001
Finger 12:	3.998	-0.001	4.993	-0.003	5.997	-0.002	6.992	-0.004
Finger 13:	3.993	-0.003	4.998	-0.001	6.000	0.000	7.004	0.002
Finger 14:	3.991	-0.005	4.996	-0.002	5.994	-0.003	6.998	-0.001
Finger 15:	3.996	-0.002	4.995	-0.003	6.001	0.001	6.999	-0.001
Finger 16:	3.985	-0.007	4.989	-0.006	5.994	-0.003	6.997	-0.002
Finger 17:	4.013	0.007	5.001	0.000	6.001	0.000	6.998	-0.001
Finger 18:	3.997	-0.002	4.997	-0.002	6.006	0.003	7.000	0.000
Finger 19:	3.997	-0.001	4.997	-0.001	5.998	-0.001	6.995	-0.002
Finger 20:	3.991	-0.004	4.989	-0.005	5.993	-0.004	6.997	-0.002
Finger 21:	3.996	-0.002	5.000	0.000	5.992	-0.004	6.999	-0.001
Finger 22:	3.993	-0.003	4.992	-0.004	5.989	-0.005	7.000	0.000
Finger 23:	3.995	-0.003	4.997	-0.002	5.997	-0.002	6.999	-0.001
Finger 24:	3.999	-0.000	4.997	-0.002	5.999	-0.001	7.000	0.000
Finger 25:	3.996	-0.002	4.993	-0.004	5.995	-0.003	6.991	-0.004
Finger 26:	4.000	0.000	4.998	-0.001	5.993	-0.003	6.996	-0.002
Finger 27:	3.995	-0.002	4.995	-0.002	6.000	-0.000	6.997	-0.002
Finger 28:	3.991	-0.004	5.000	-0.000	5.994	-0.003	6.994	-0.003
Finger 29:	3.995	-0.003	4.998	-0.001	6.000	0.000	7.001	0.000
Finger 30:	4.001	0.001	4.999	-0.000	6.001	0.001	6.995	-0.002
Finger 31:	4.002	0.001	4.998	-0.001	5.997	-0.001	6.998	-0.001
Finger 32:	3.996	-0.002	5.000	-0.000	5.997	-0.002	7.000	0.000
Finger 33:	3.994	-0.002	4.995	-0.002	5.999	-0.002	6.997	-0.001

Finger 33:	3.994	-0.003	4.995	-0.002	5.996	-0.002	6.997	-0.001
Finger 34:	4.002	0.001	4.997	-0.002	5.996	-0.002	6.999	-0.000
Finger 35:	3.998	-0.001	4.995	-0.002	5.993	-0.004	7.001	0.000
Finger 36:	3.996	-0.002	4.994	-0.003	5.996	-0.002	6.993	-0.004
Finger 37:	3.993	-0.004	4.989	-0.005	5.993	-0.003	6.995	-0.002
Finger 38:	3.990	-0.005	4.990	-0.005	5.995	-0.002	7.000	-0.000
Finger 39:	3.995	-0.003	4.999	-0.000	5.999	-0.000	7.002	0.001
Finger 40:	3.998	-0.001	4.998	-0.001	5.996	-0.002	6.993	-0.003
Average:	3.996	-0.002	4.996	-0.002	5.996	-0.002	6.998	-0.001

Segmented Cement Bond Log Calibration Report

Serial Number:	1066
Tool Model:	UW_RBT_004
Calibration Casing Diameter:	7.000 in
Calibration Depth:	160.105 ft

Master Calibration, performed Wed Jul 09 07:14:08 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	0.003	0.852	0.800	62.165	72.324	0.548
5FT	-0.002	0.904	0.800	62.165	67.702	0.965
S1	0.005	0.807	0.000	100.000	124.588	-0.590
S2	0.003	0.812	0.000	100.000	123.601	-0.364
S3	0.002	0.828	0.000	100.000	121.125	-0.300
S4	0.002	0.864	0.000	100.000	115.998	-0.255
S5	0.004	0.891	0.000	100.000	112.665	-0.413
S6	0.003	0.908	0.000	100.000	110.422	-0.278
S7	0.004	0.897	0.000	100.000	111.882	-0.410
S8	0.004	0.849	0.000	100.000	118.329	-0.448

Gamma Ray Calibration Report

Serial Number:	211727
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	Barefoot 31N-25HZ
Field	Wattenberg
County	Weld
State	Colorado