



Radial Cement Bond  
Gamma Ray  
Casing Collar Log

Company Kerr-McGee Oil & Gas Onshore, L.P.  
Well Green 5N-8HZ  
Field Wattenberg  
County Weld  
State Colorado

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Location: API #: 05-123-40840  
SEC 8 TWP 1N RGE 65W  
Permanent Datum Ground Level Elevation 4972'  
Log Measured From Kelly Bushing 16 FT  
Drilling Measured From Kelly Bushing  
Other Services  
Gauge Ring  
RBP  
Elevation  
K.B. 4988'  
D.F. 4987'  
G.L. 4972'

Date 28-JUL-2015

Run Number Three  
Depth Driller 13470 FT  
Depth Logger 6674 FT  
Bottom Logged Interval 6674 FT  
Top Log Interval Surface  
Open Hole Size 8.750"  
Type Fluid Water  
Density / Viscosity 8.34 lbm/gal  
Max. Recorded Temp. 210°F  
Estimated Cement Top 770 FT  
Time Well Ready ROA  
Time Logger on Bottom 15:40  
Equipment Number HD-0343  
Location Fort Lupton, CO  
Recorded By W.Wacker  
Witnessed By DJ Anderson

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	1557 FT		
Intermediate #1	5 1/2	17	HC-P110	Surface	13458 FT		
Intermediate #2							
Liner							

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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

Gauge Ring/Junk Basket ran to 7145 FT no debris was found after run

Log ran from 6674 FT to surface

Log ran with 2800 PSI surface induced pressure

Set RBP at 6700 FT

Thank you for choosing FMC Technologies Completion Services, Inc.!!

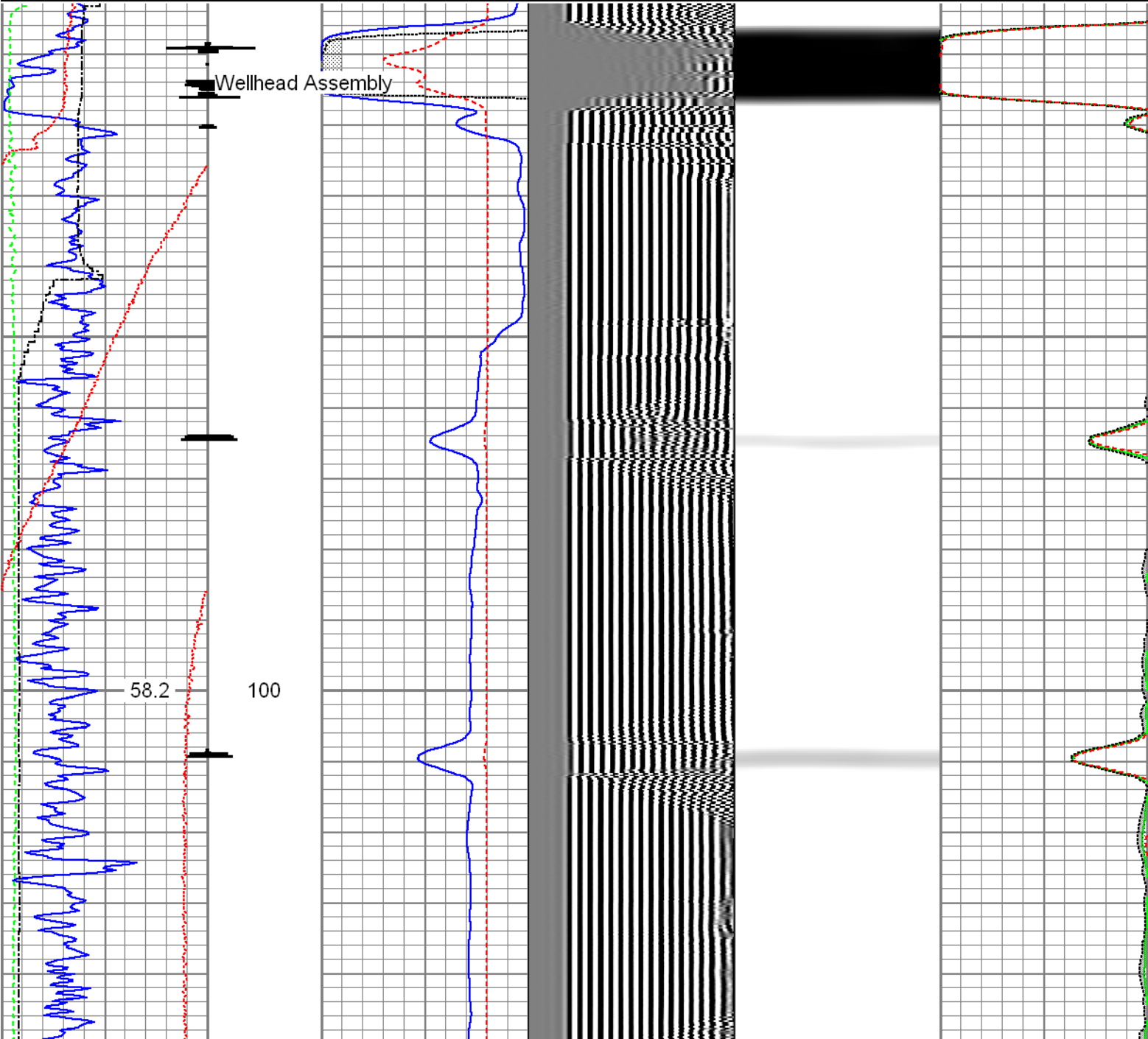


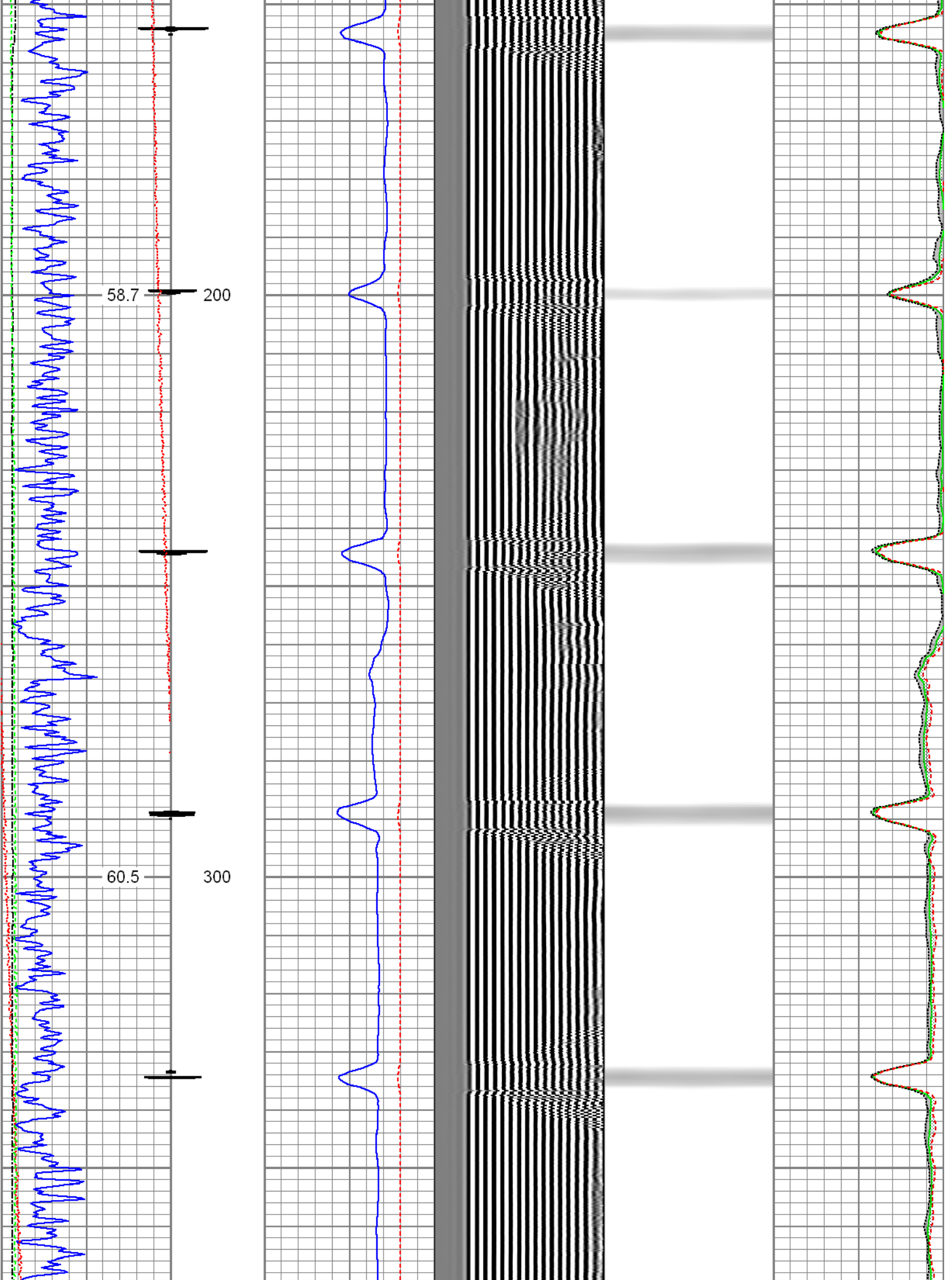
Main Pass

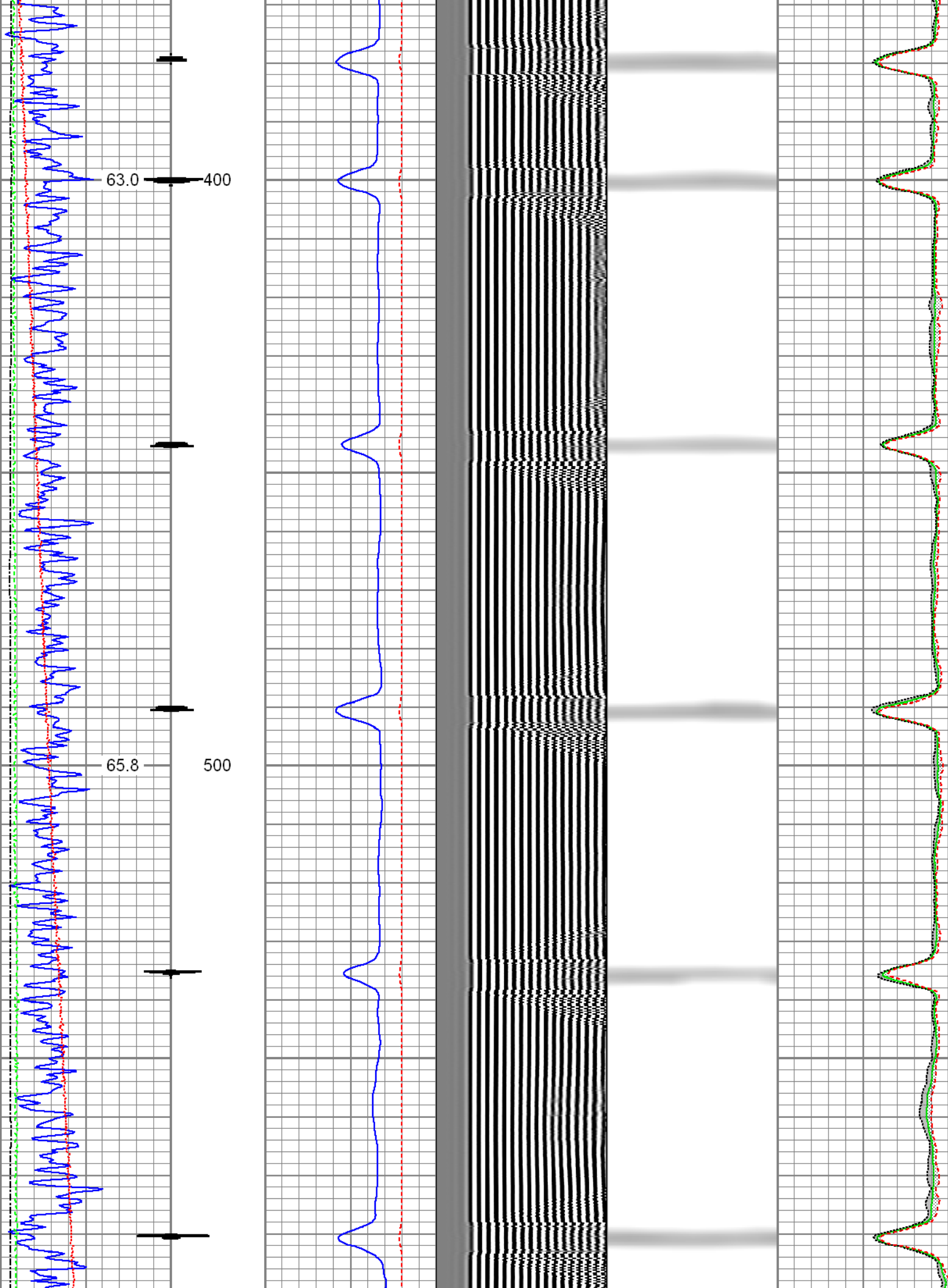
Recorded with 2800 PSI Surface Induced Pressure

Database File: 0512340840\_anadarko\_green 5n-8hz\_07-28-15\_rbl.db  
Dataset Pathname: mp  
Presentation Format: radii  
Dataset Creation: Thu Jul 30 10:53:27 2015 by Calc SCH 120430  
Charted by: Depth in Feet scaled 1:240

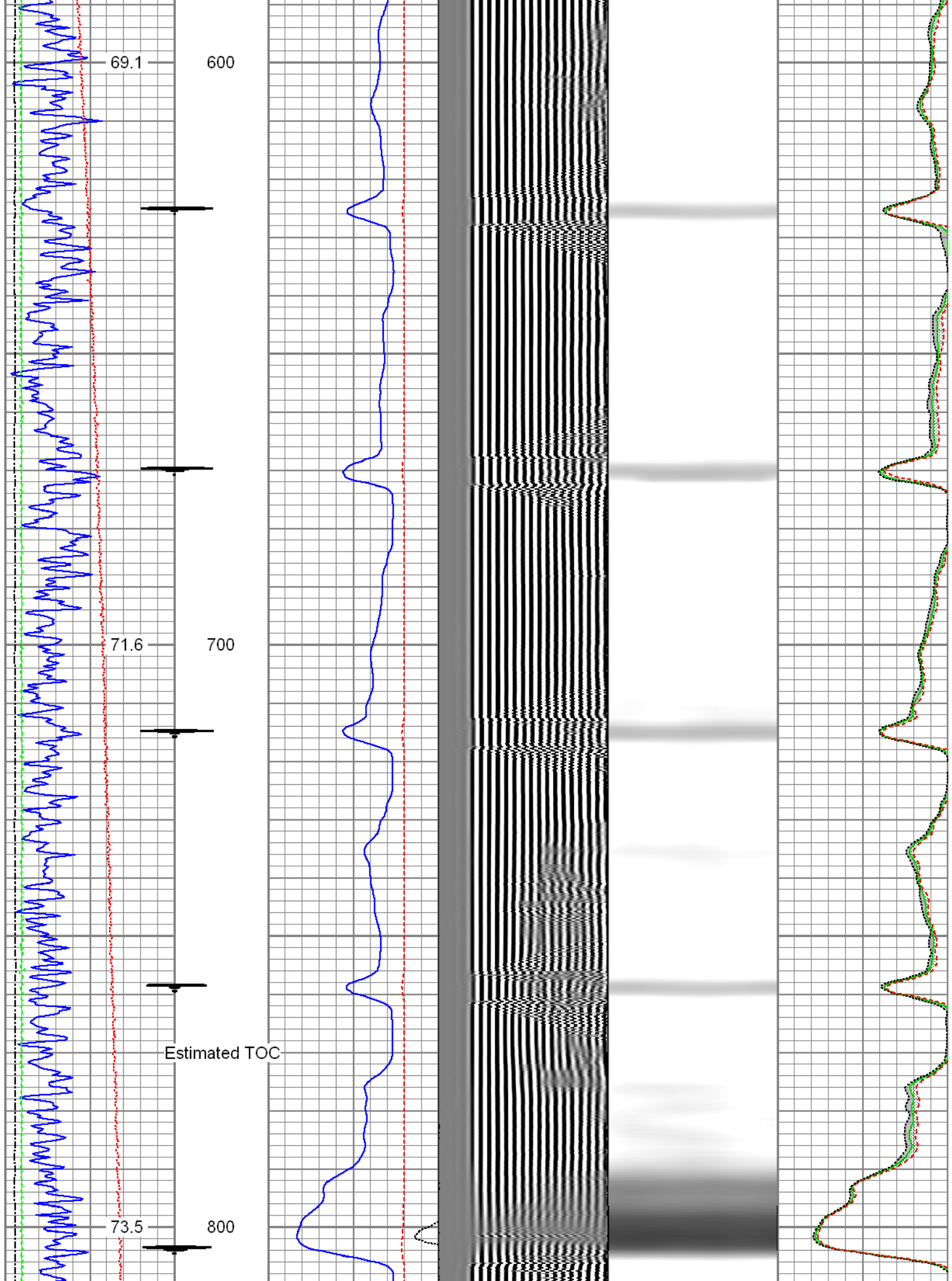
Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 120	0 (mV) 100	200 1200		0 100
Casing Collar Locator	3' Amplitude x 5			Mimimum Amplitude
Temperature	0 (mV) 20			0 100
0 (degF) 20	3' Travel Time			Maximum Amplitude
Line Speed	650 (usec) 150			0 100
-150 (ft/min) 150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

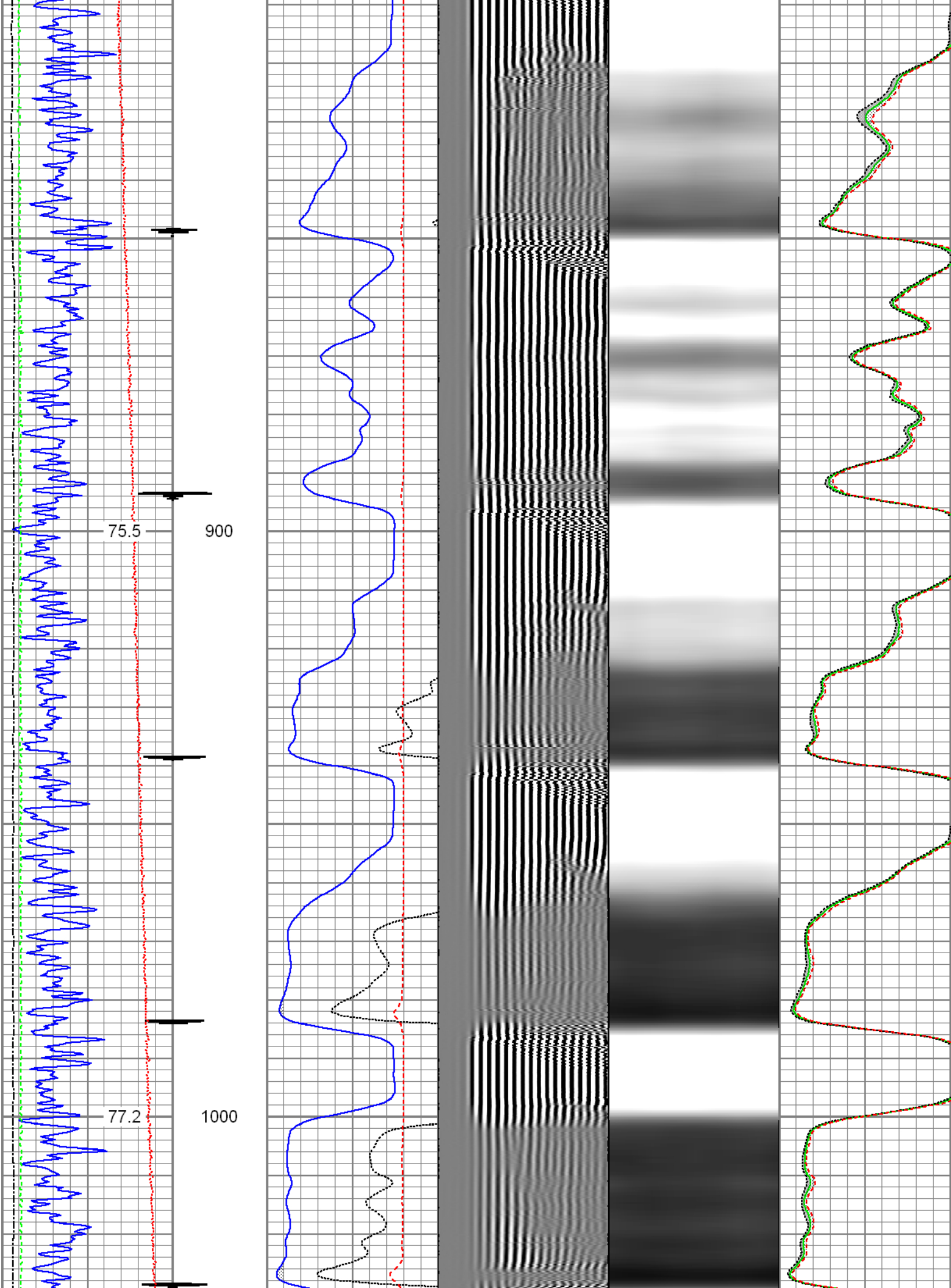


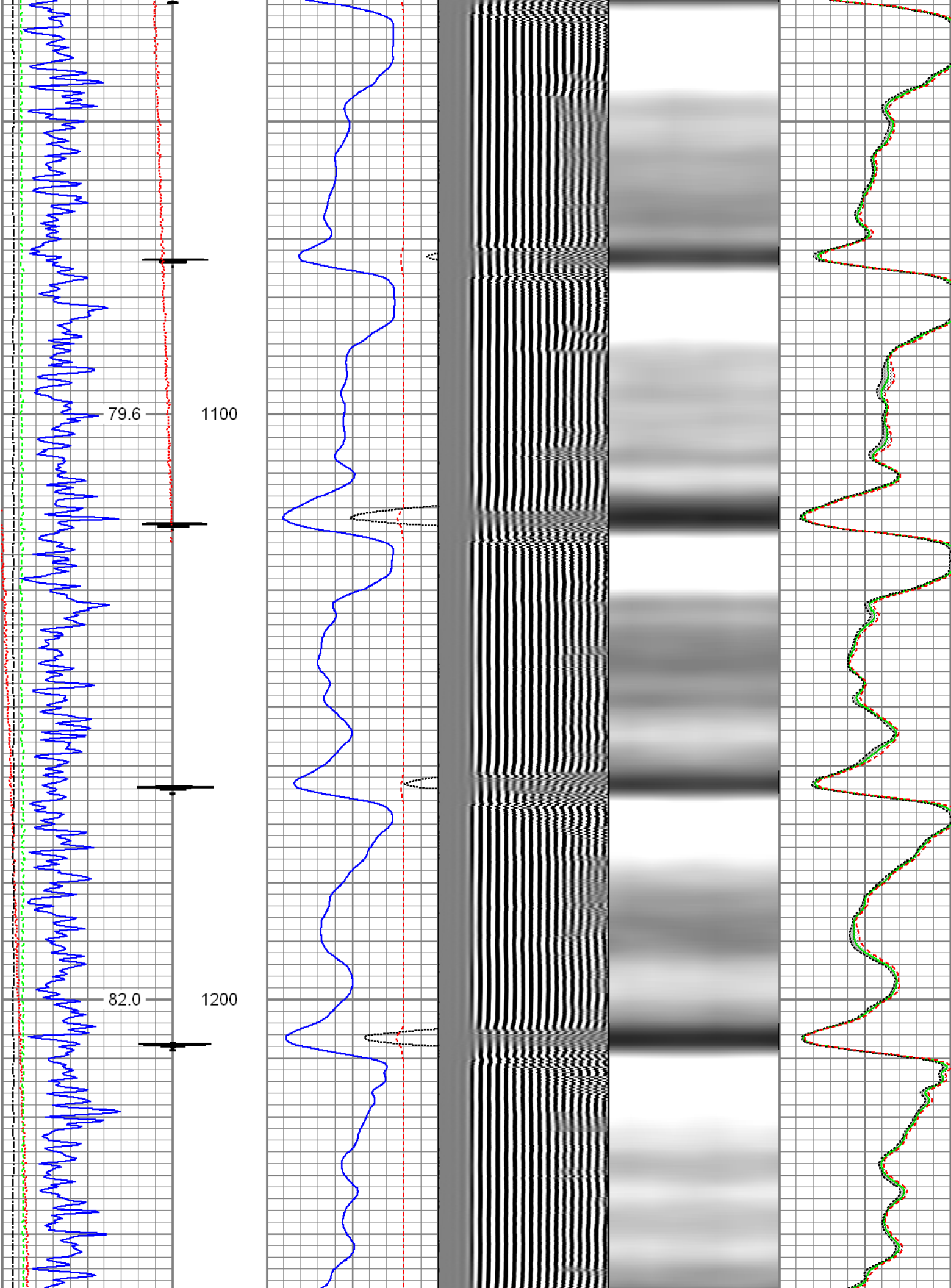


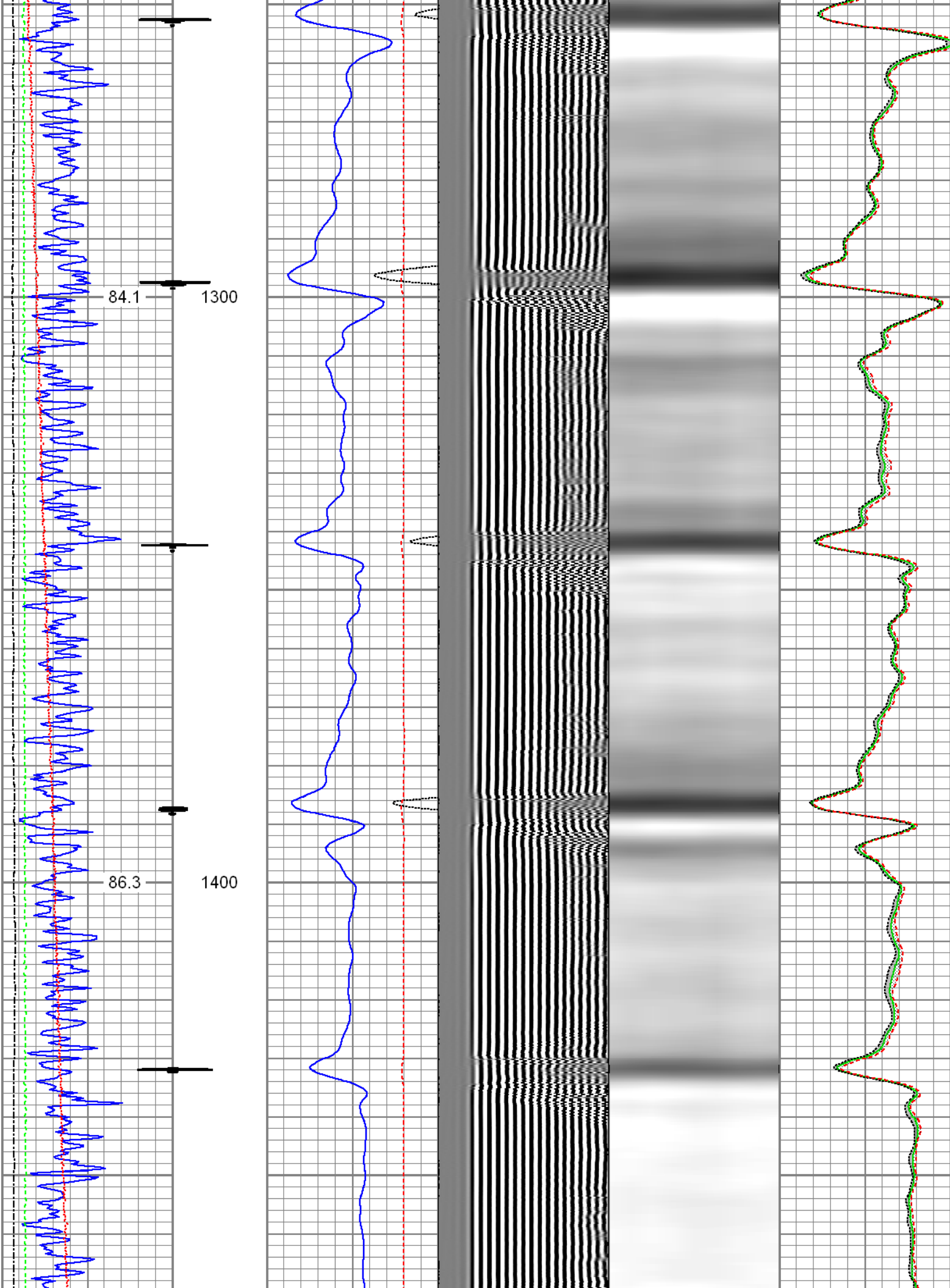




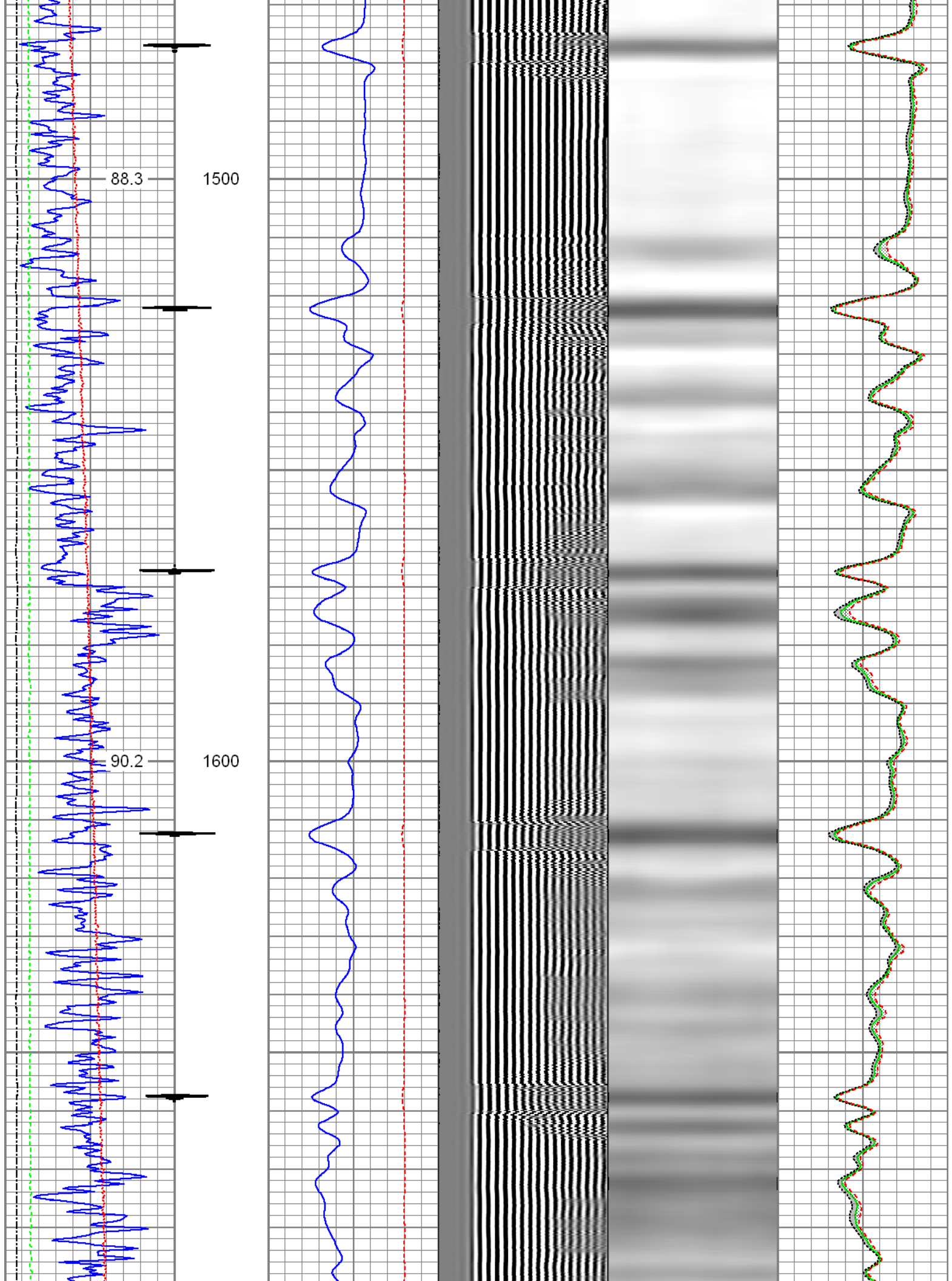




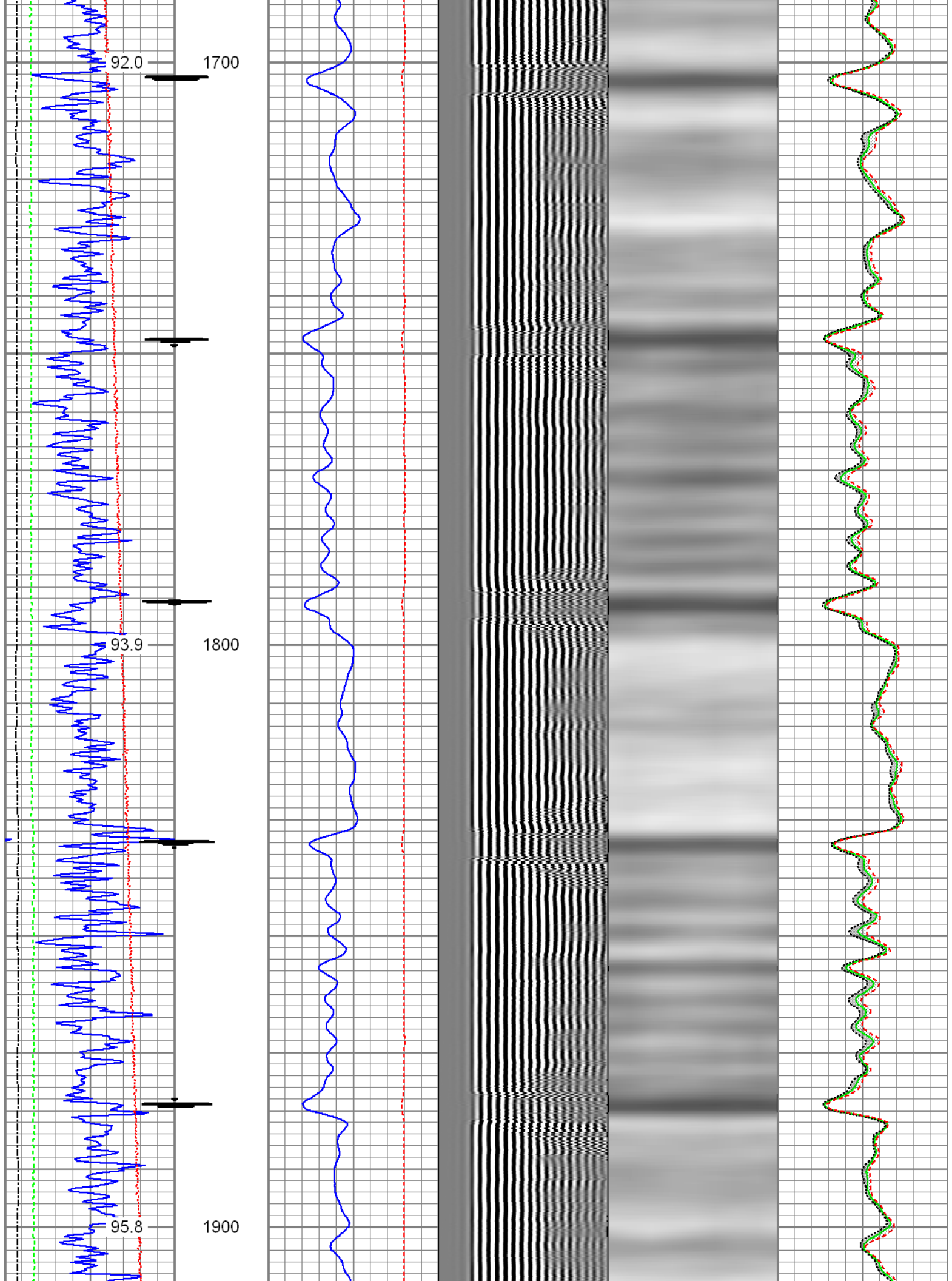


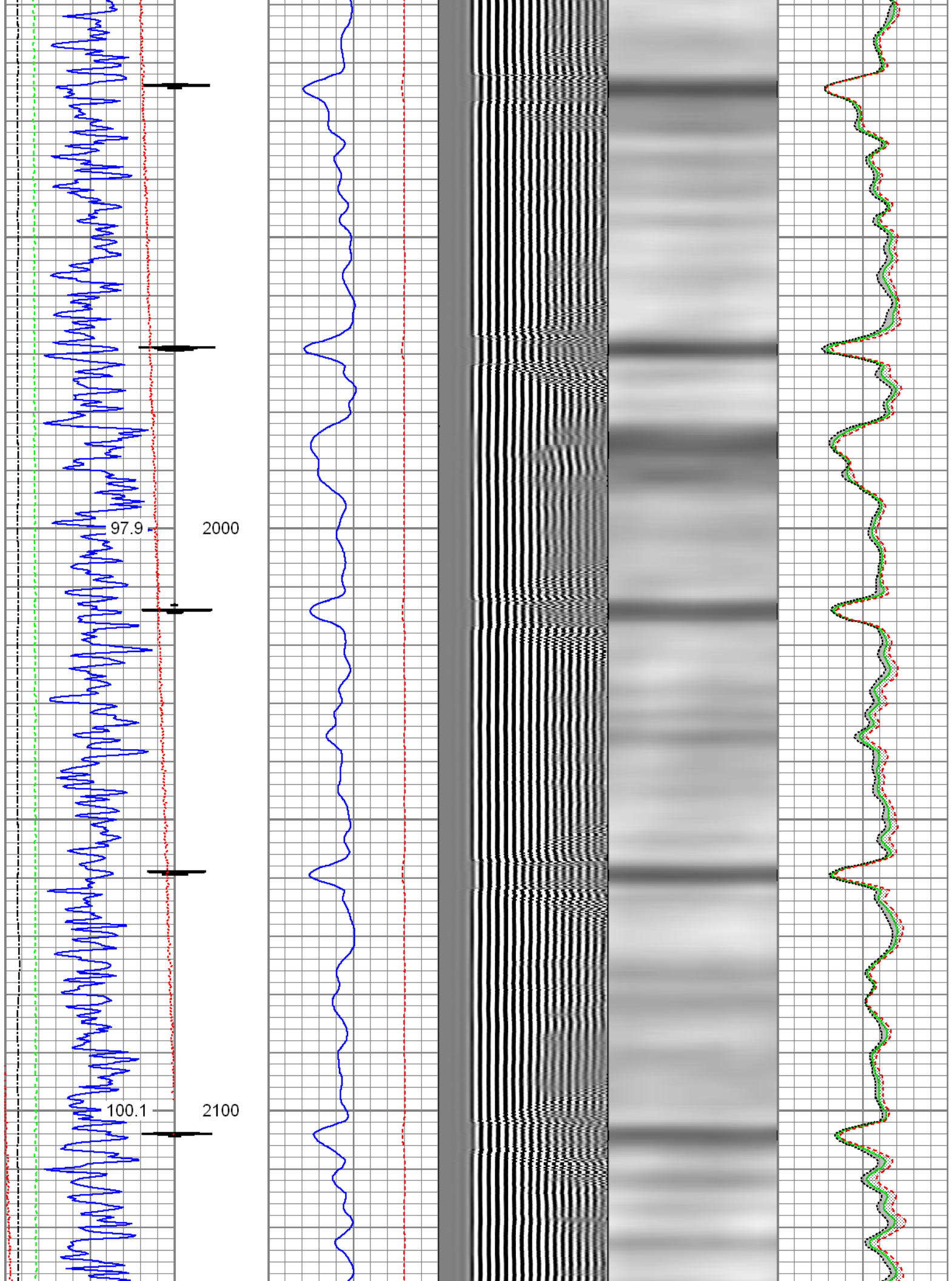


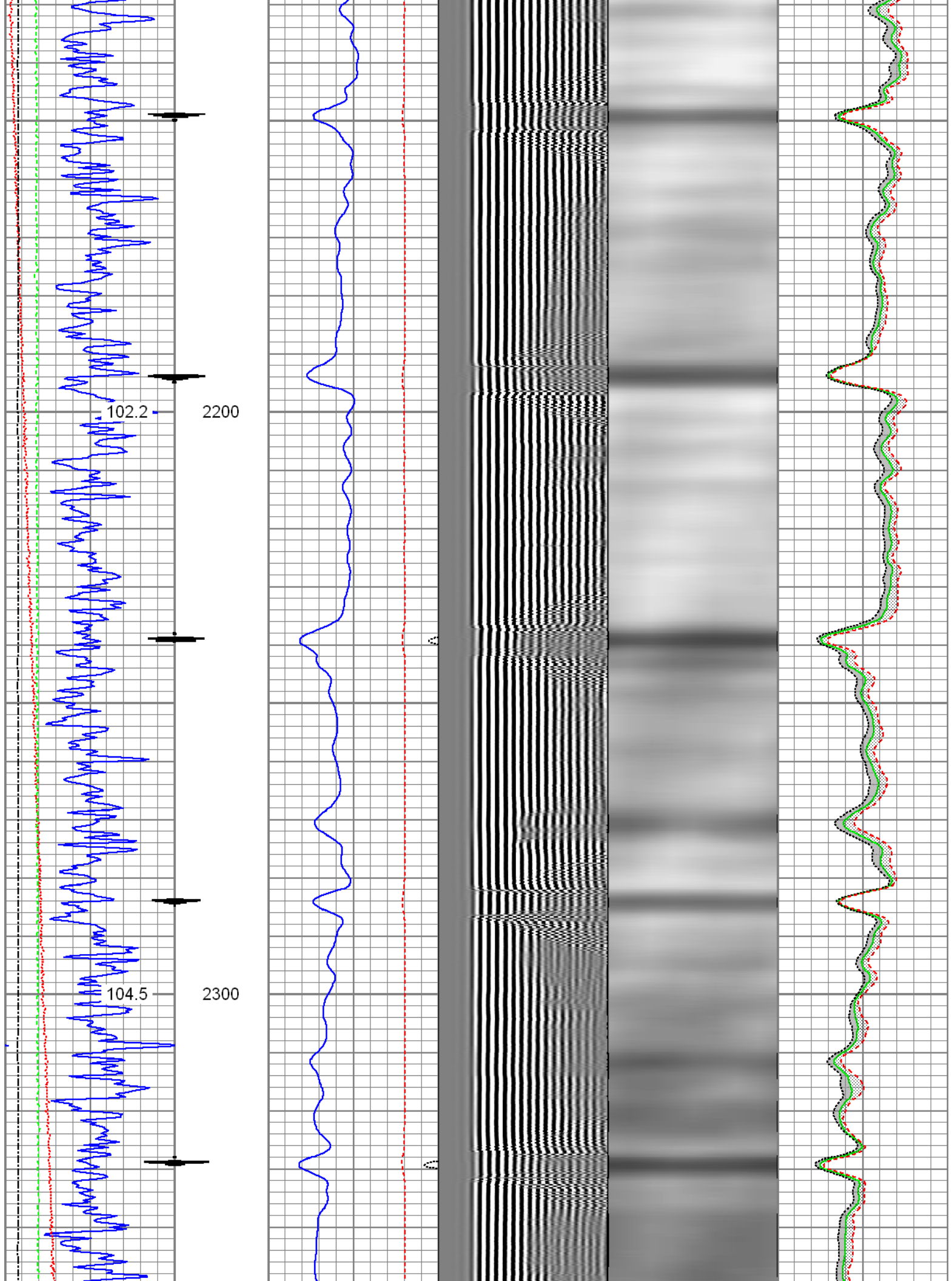




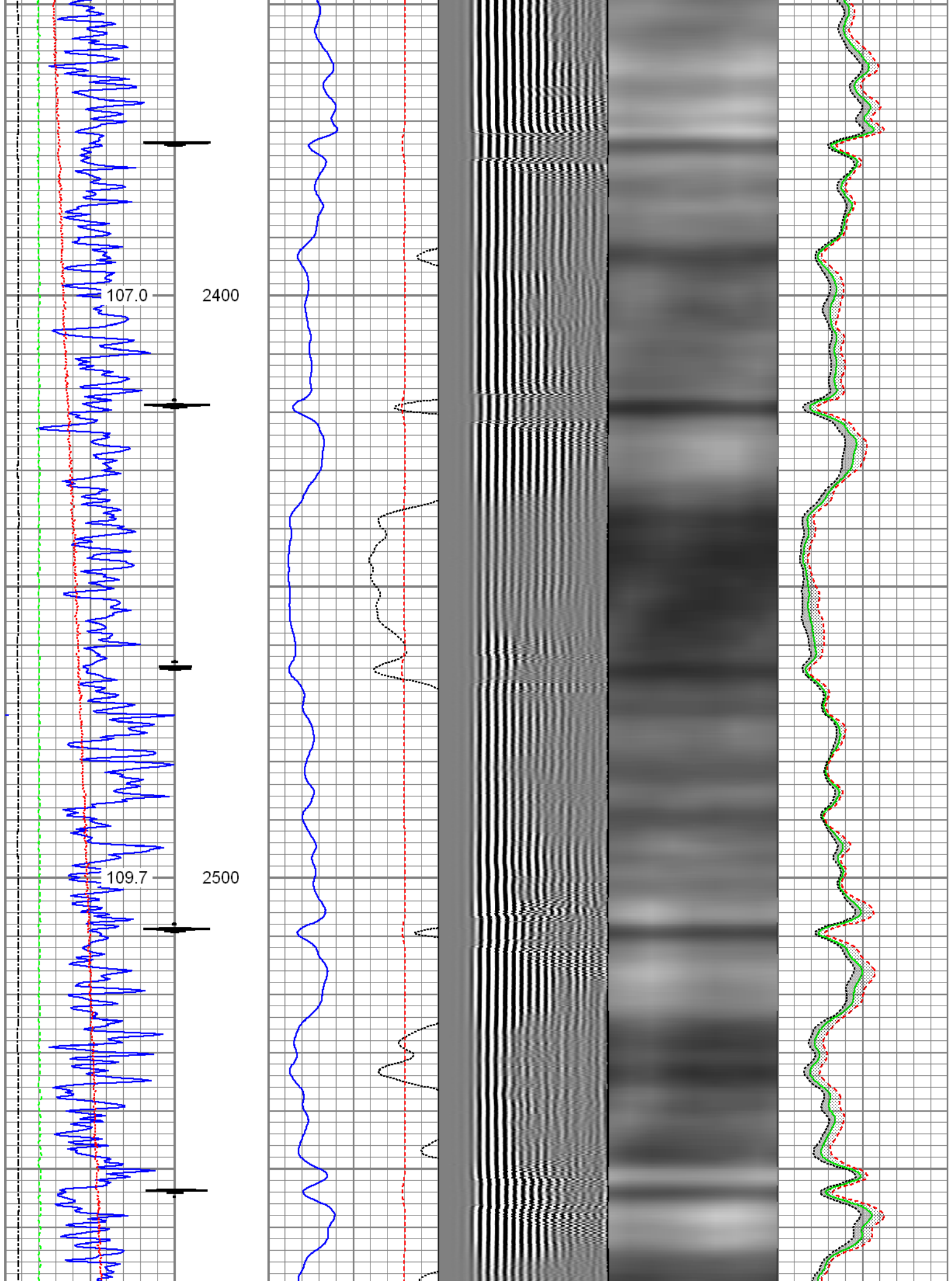


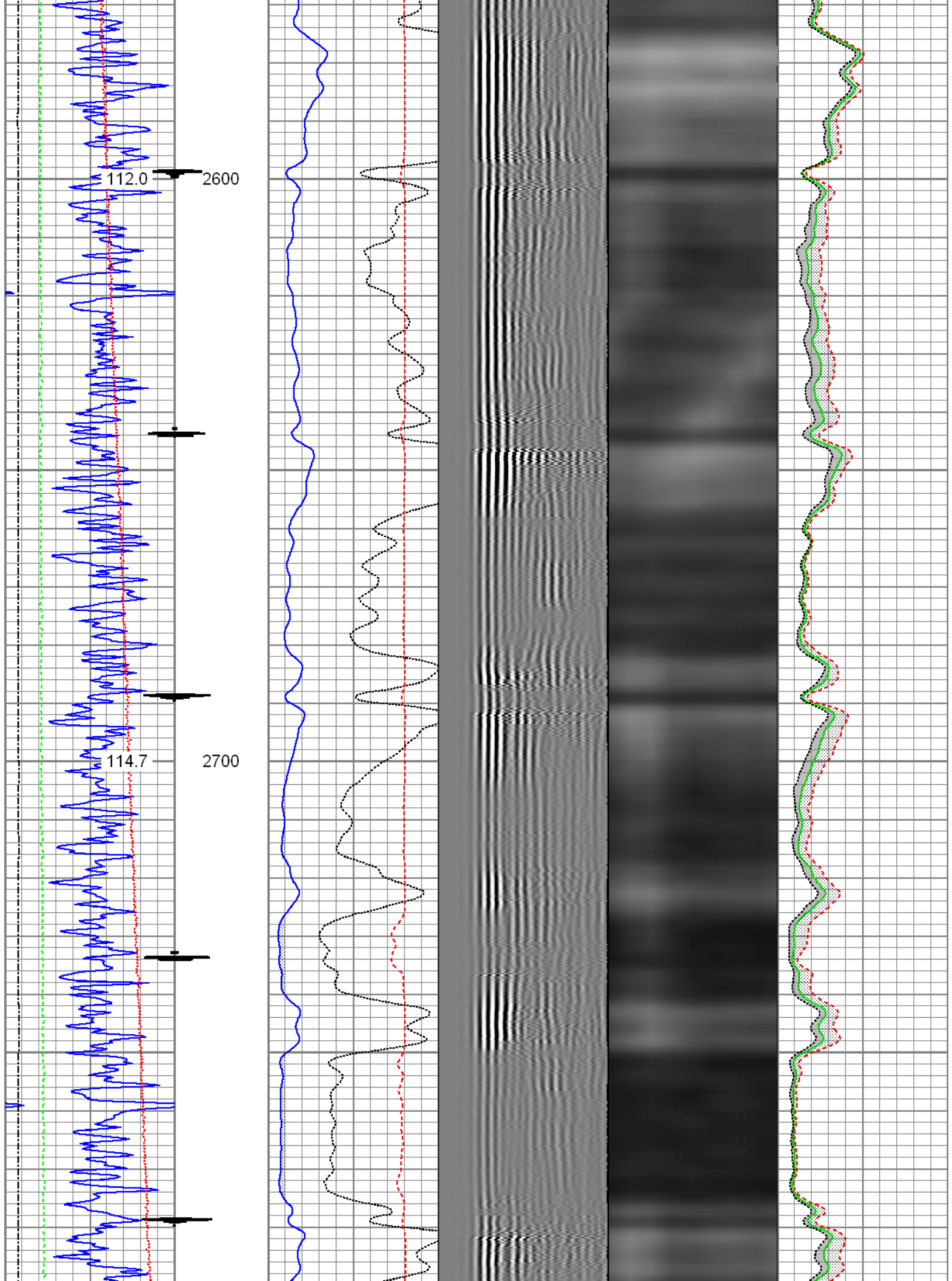




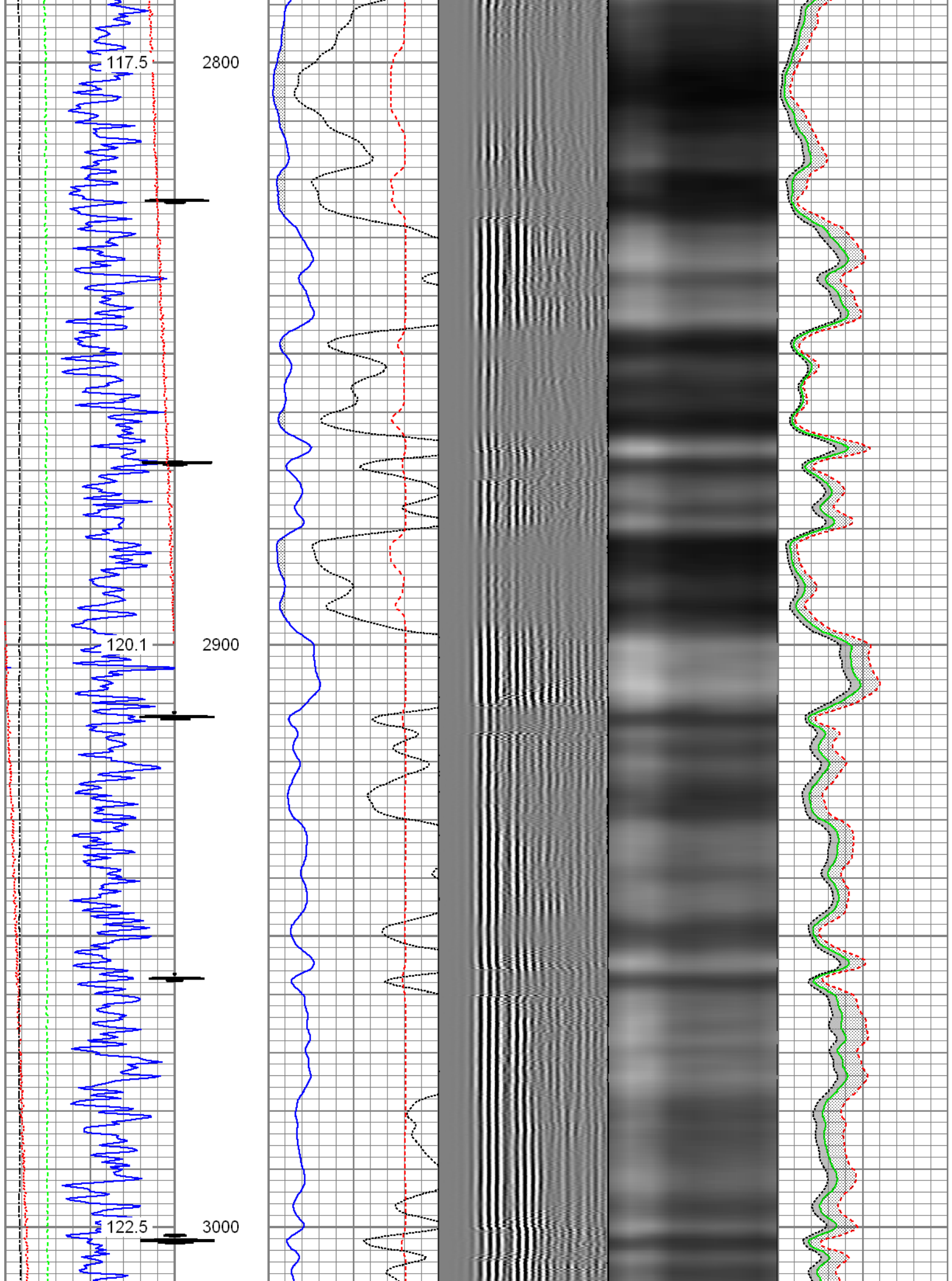


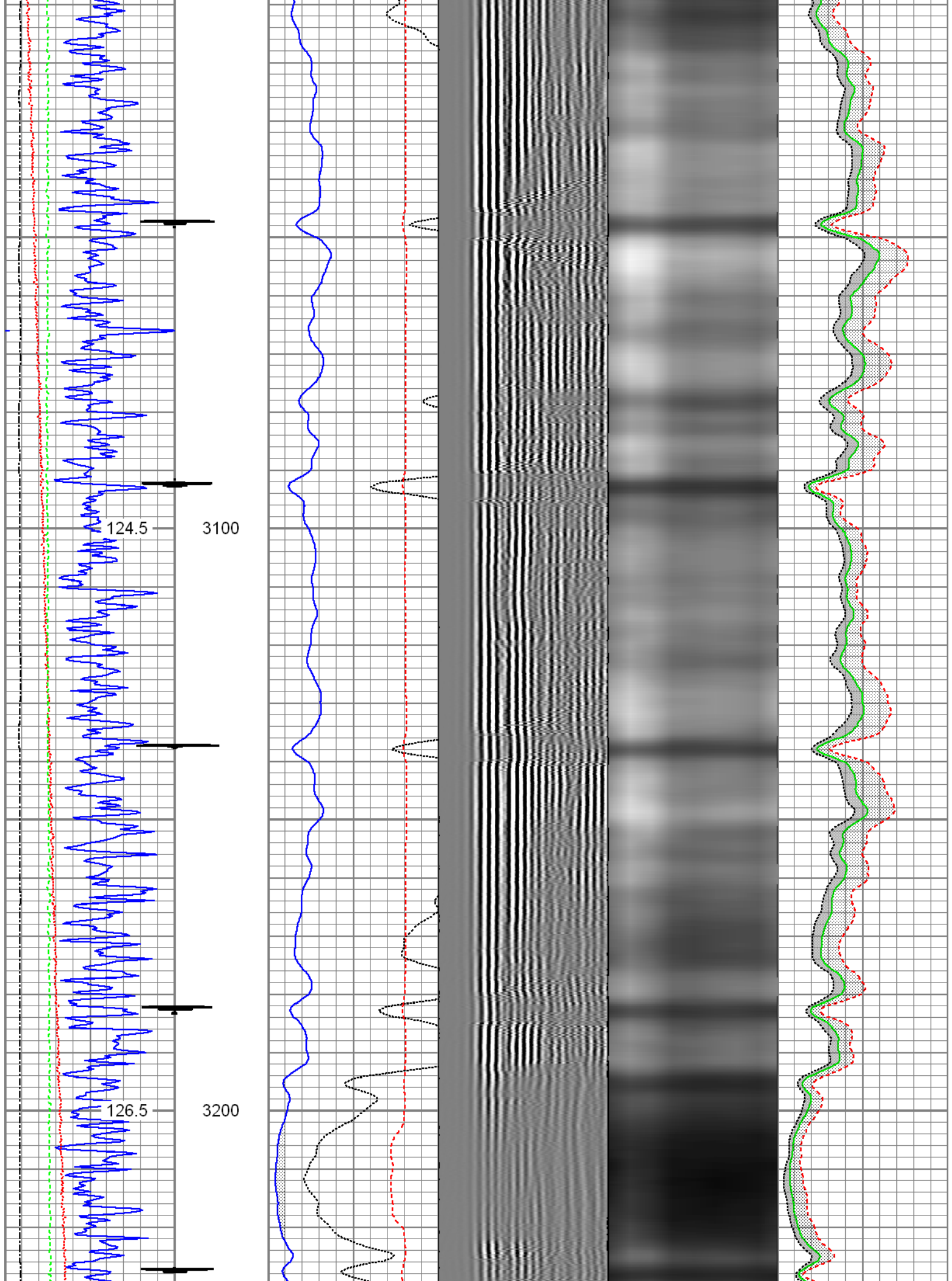


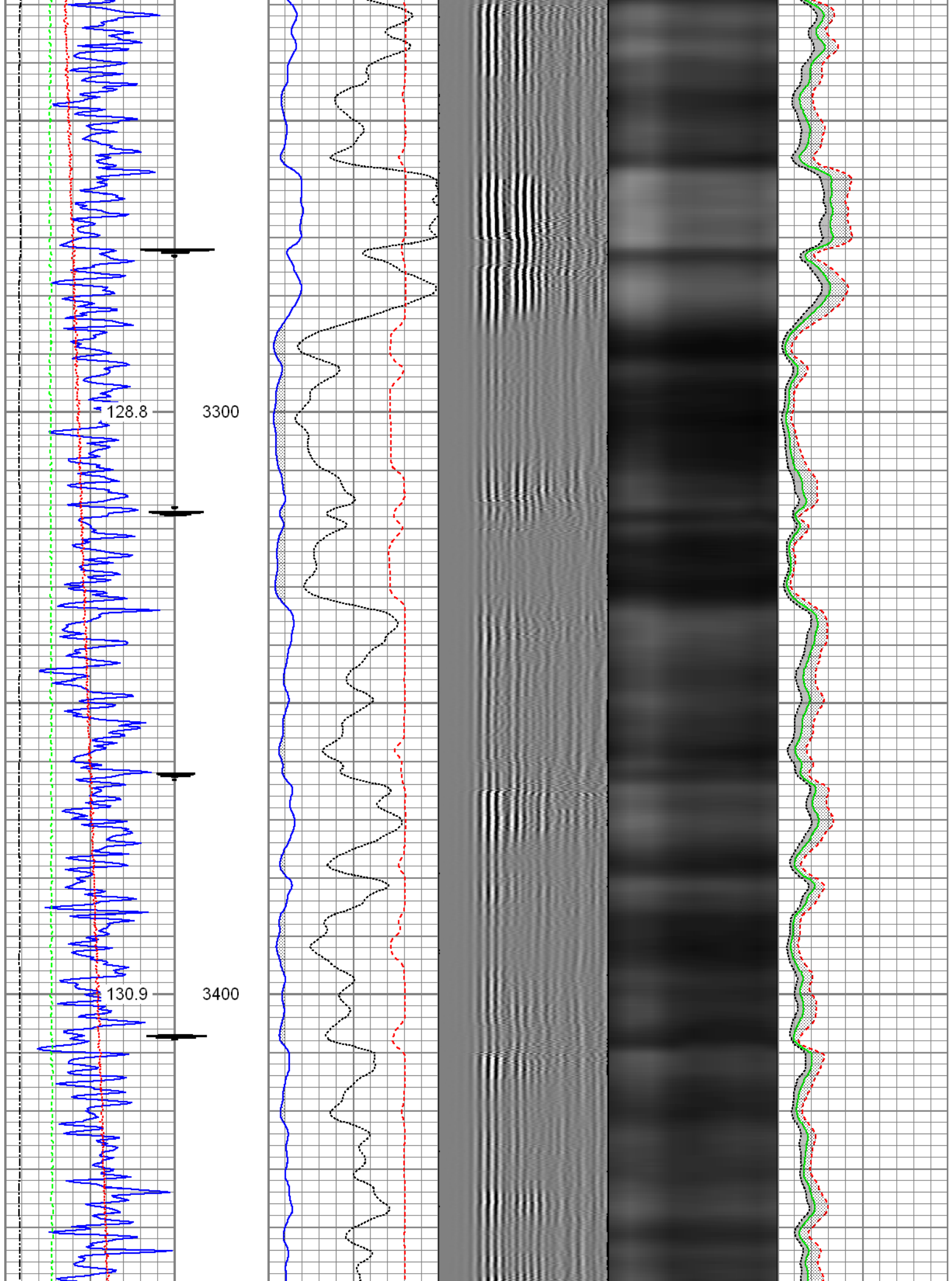




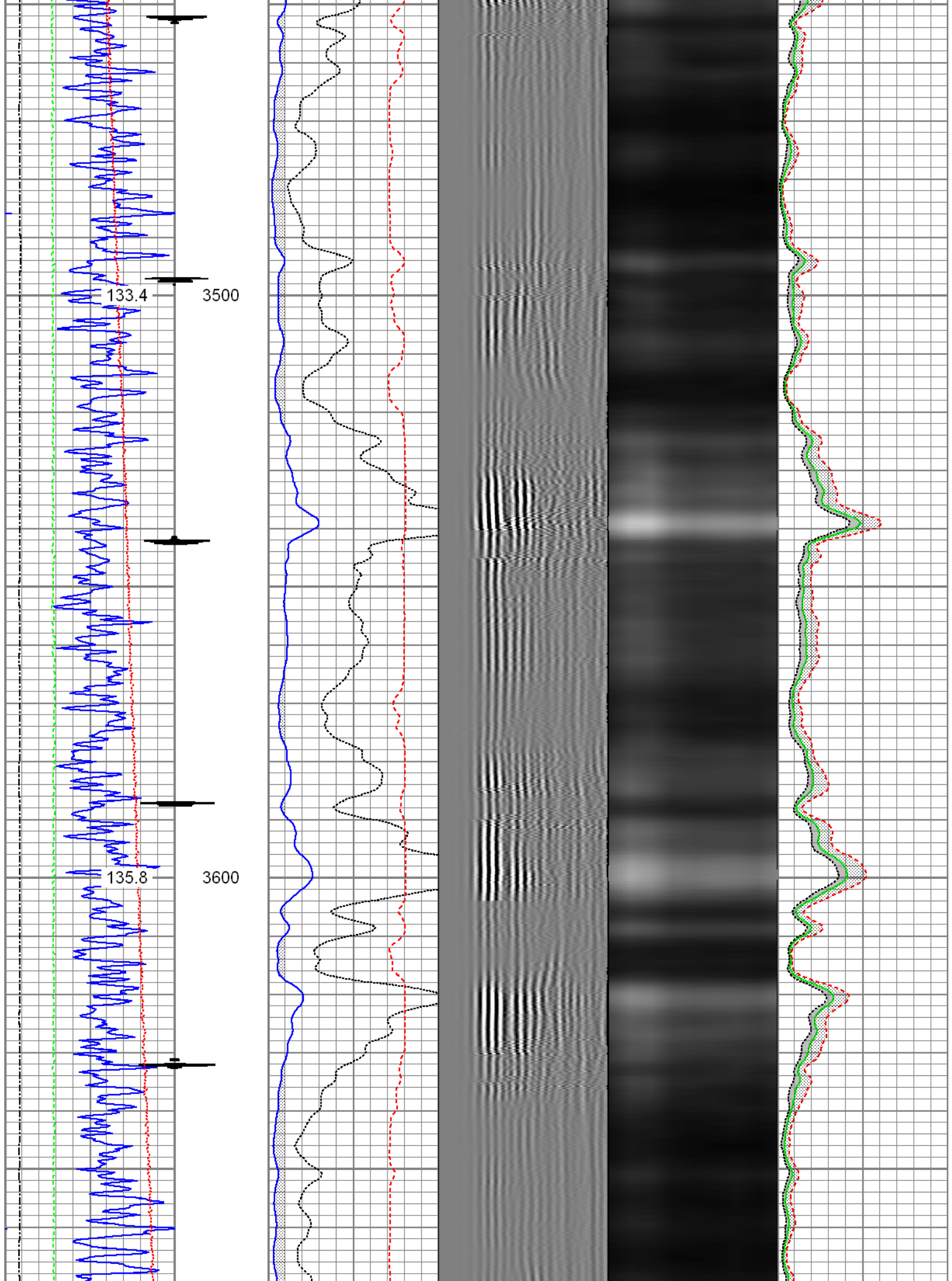


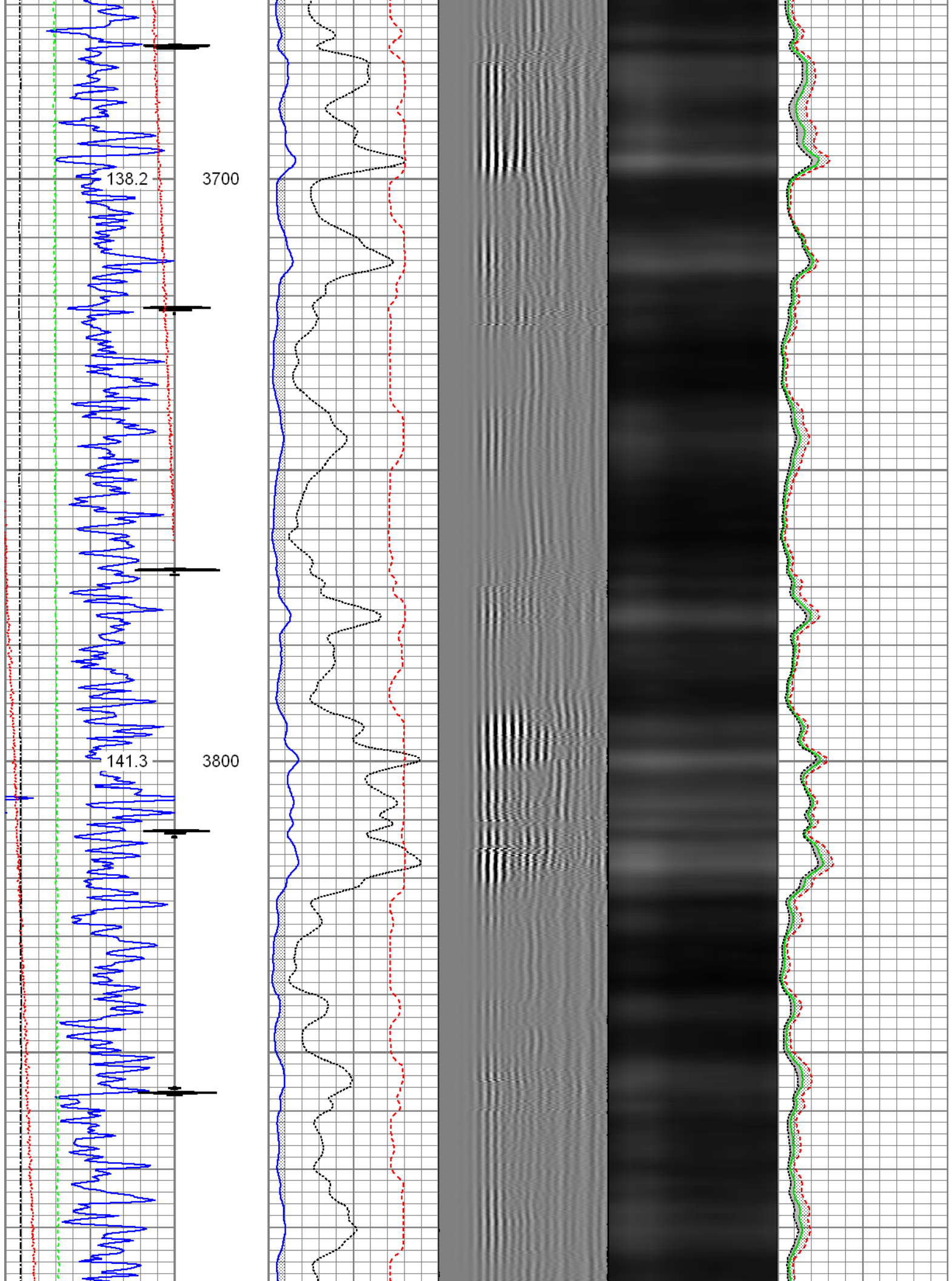




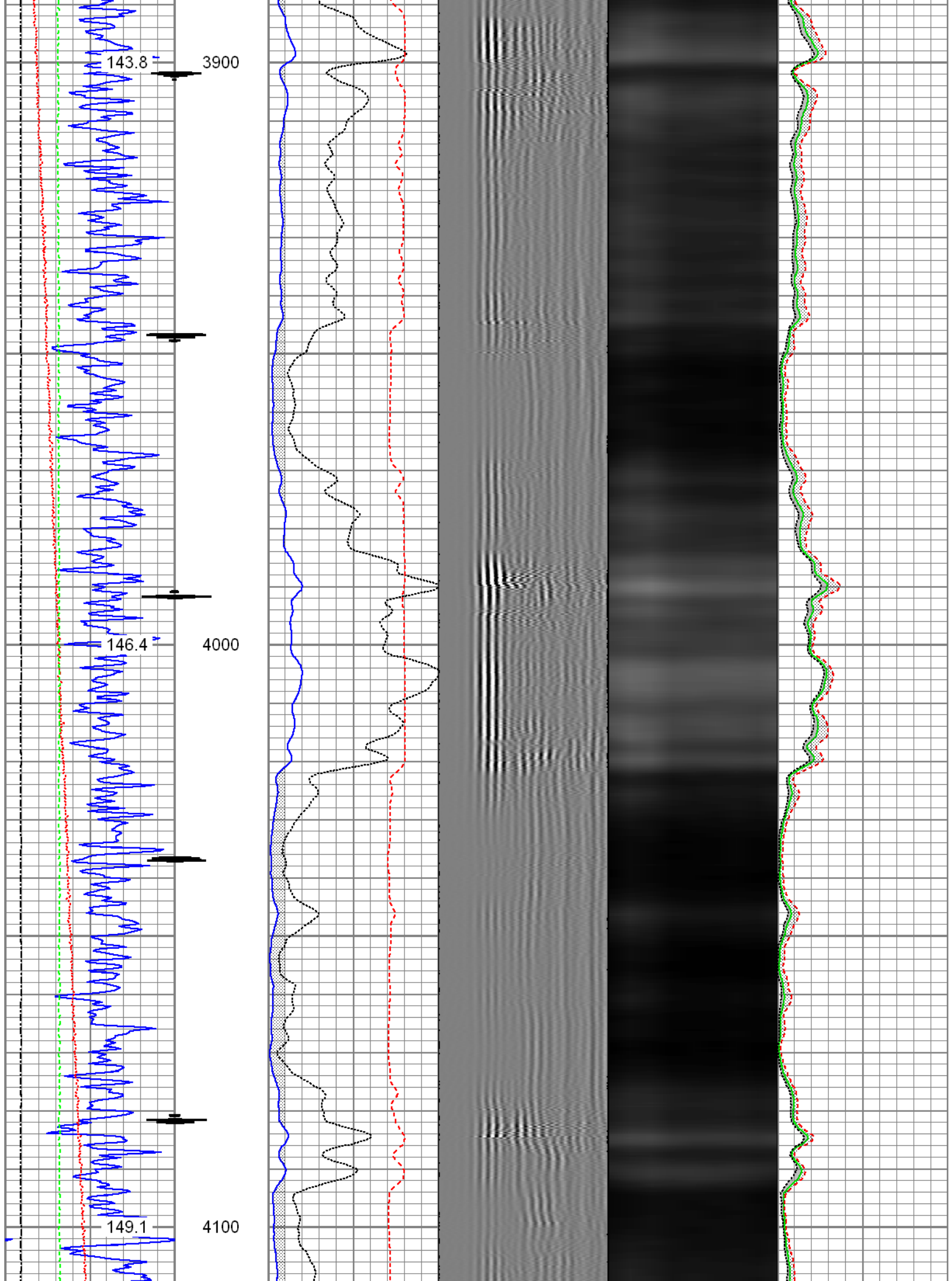


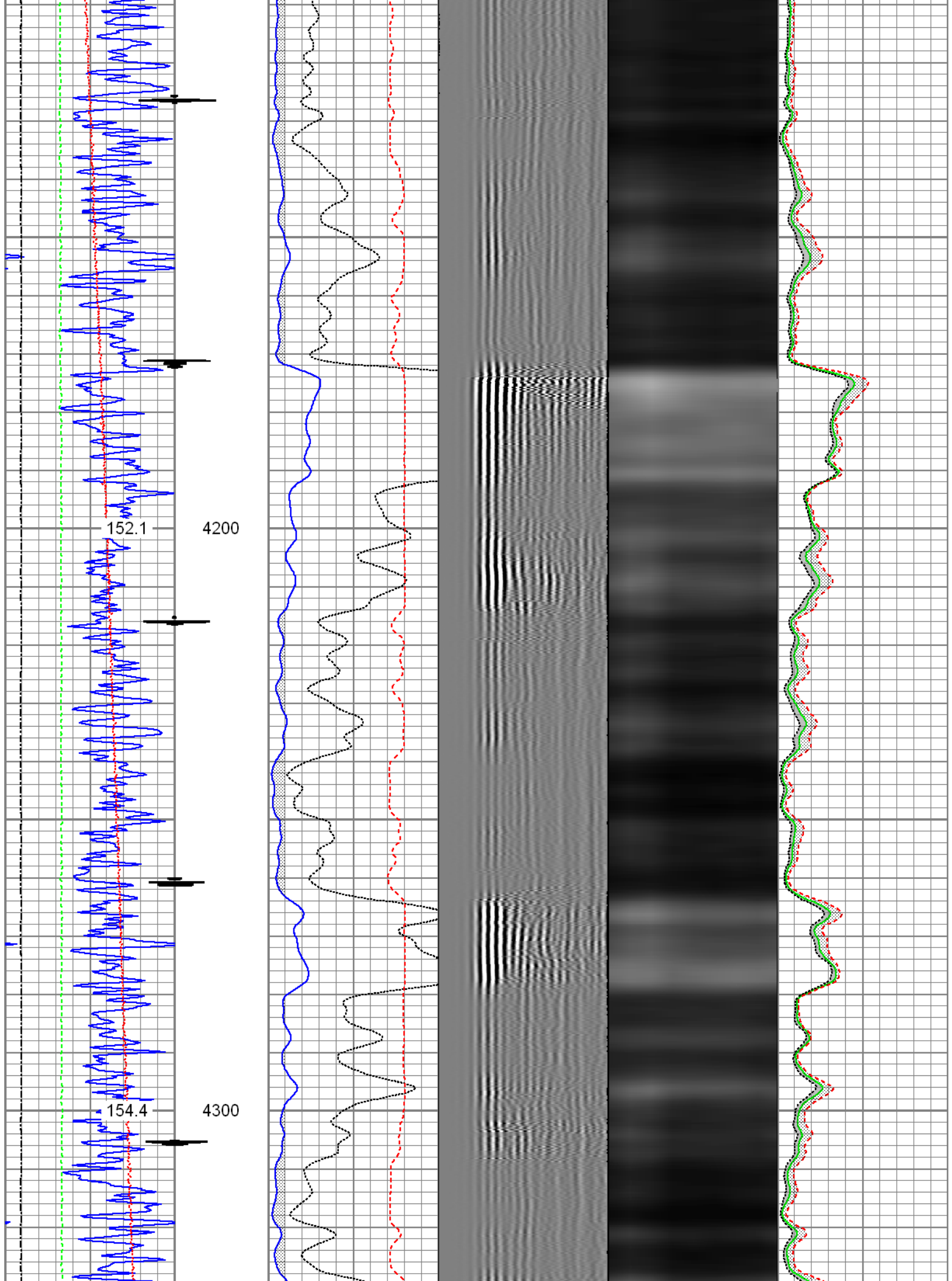


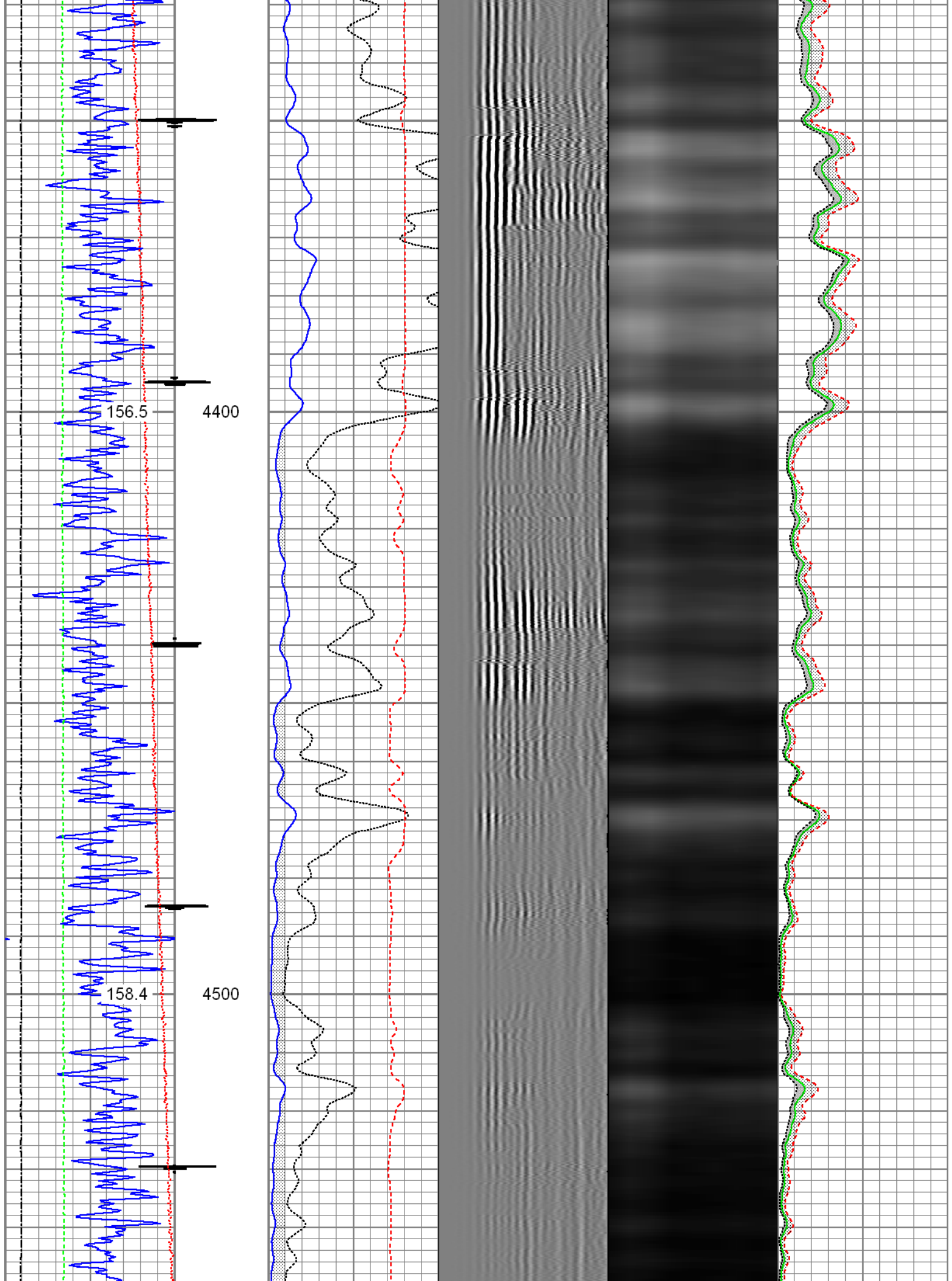


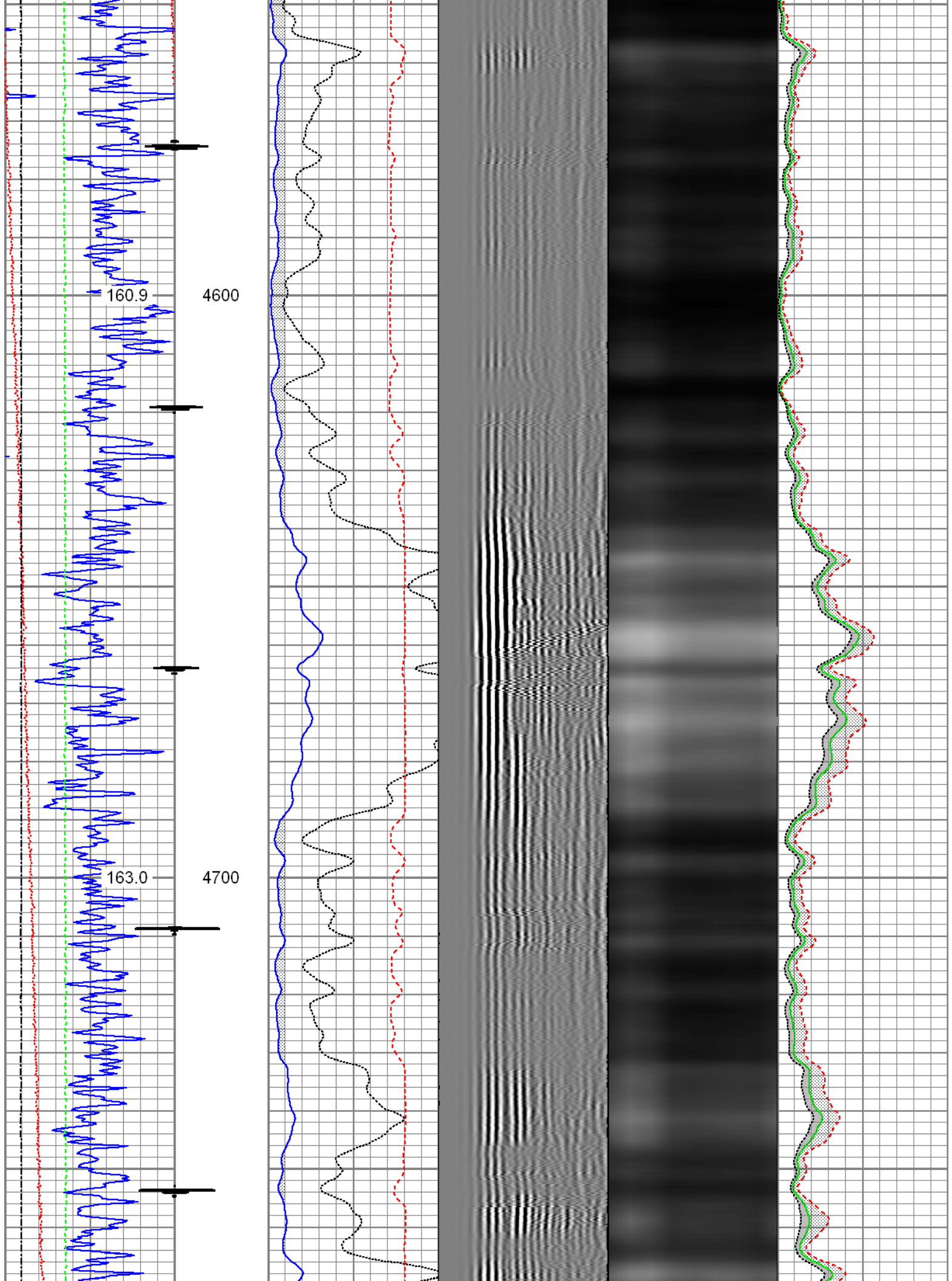




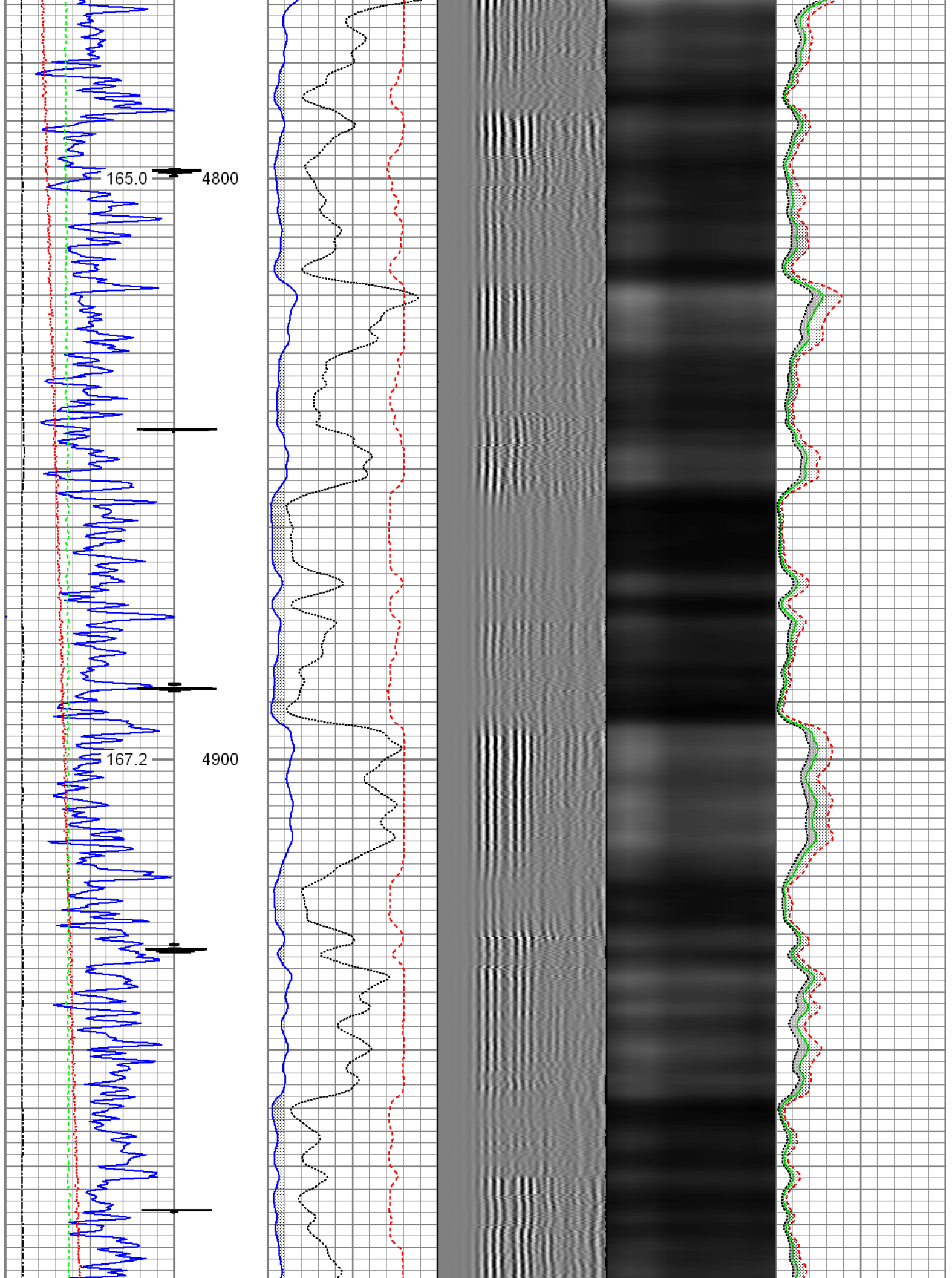




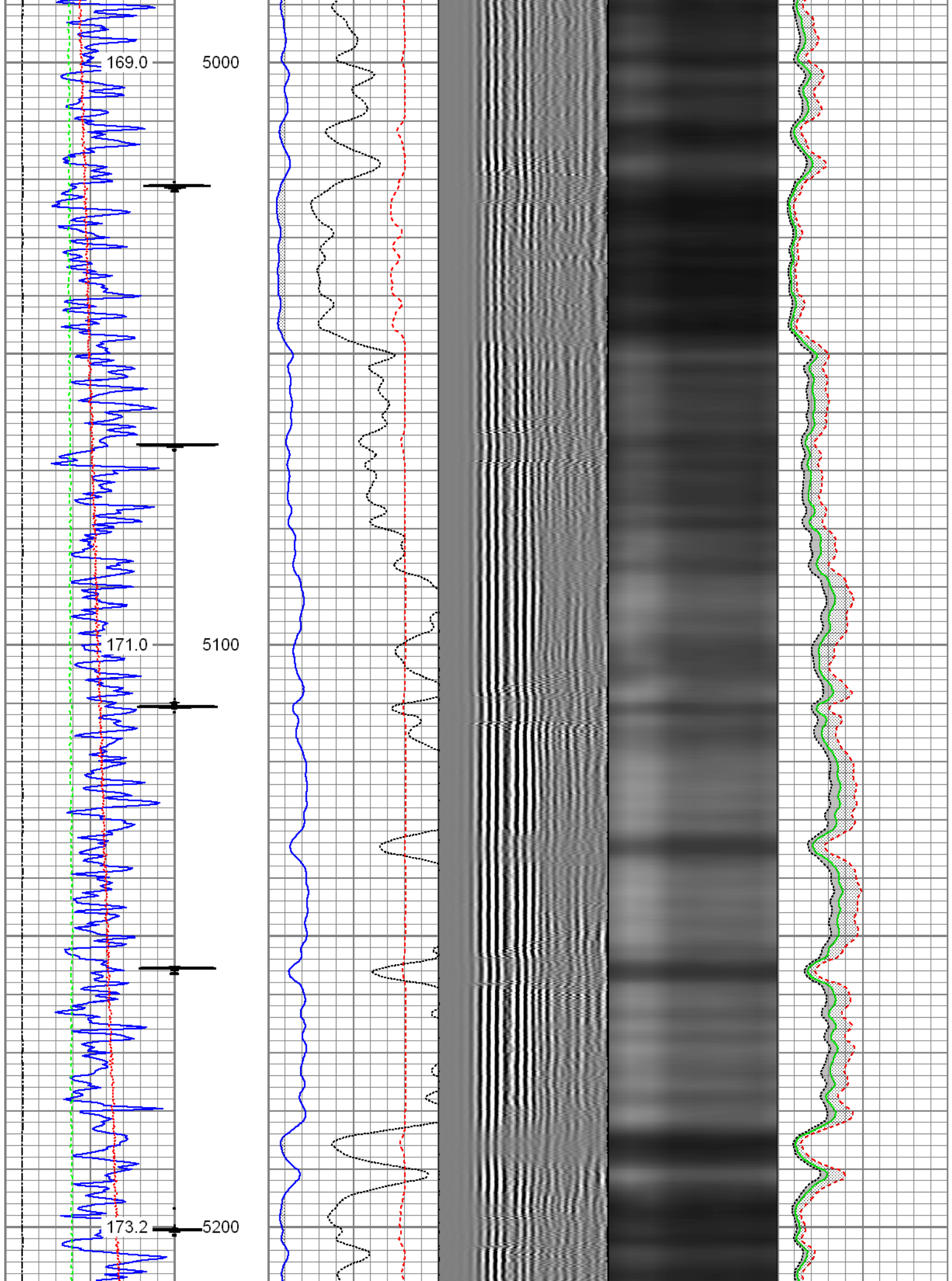


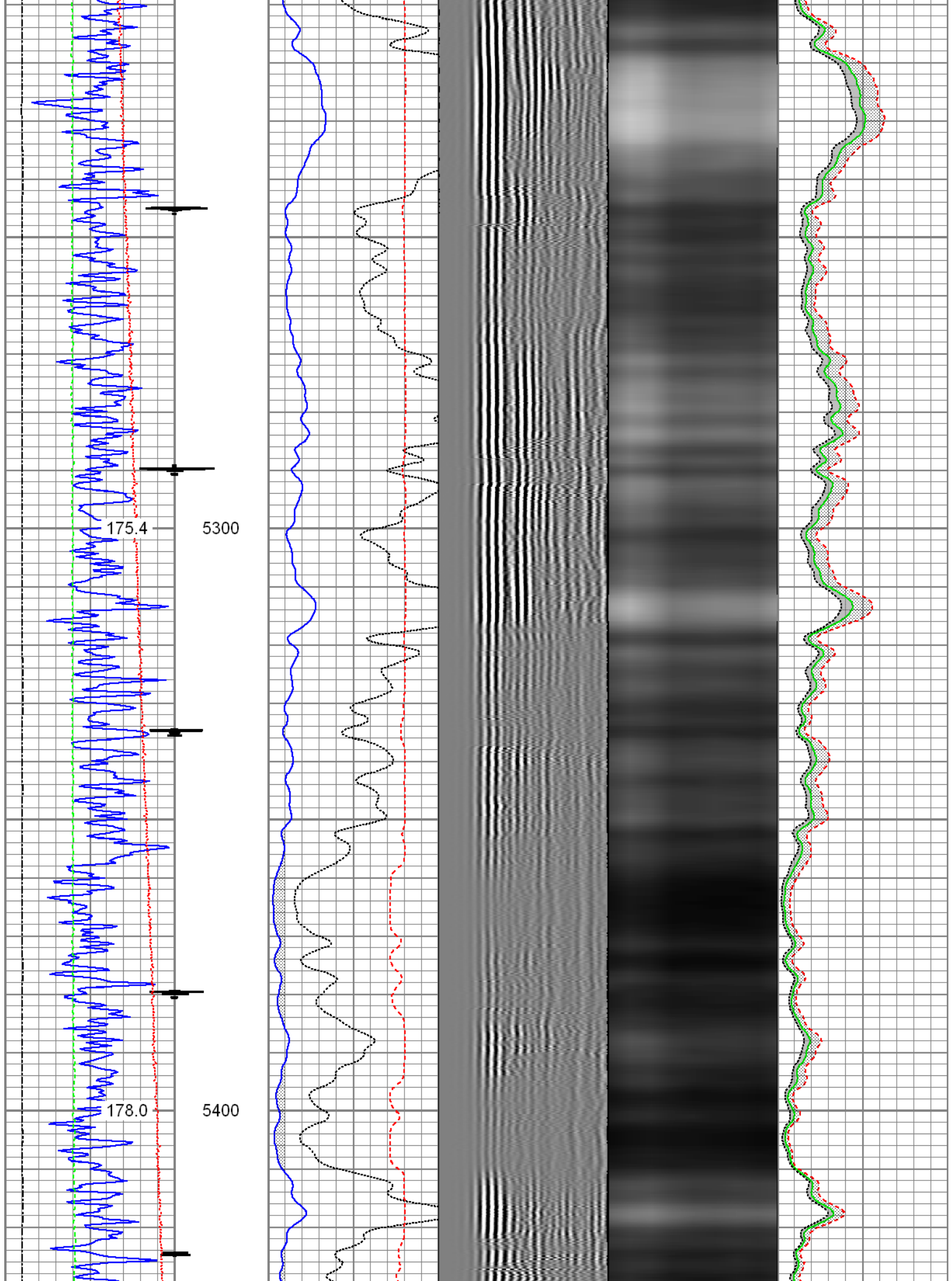


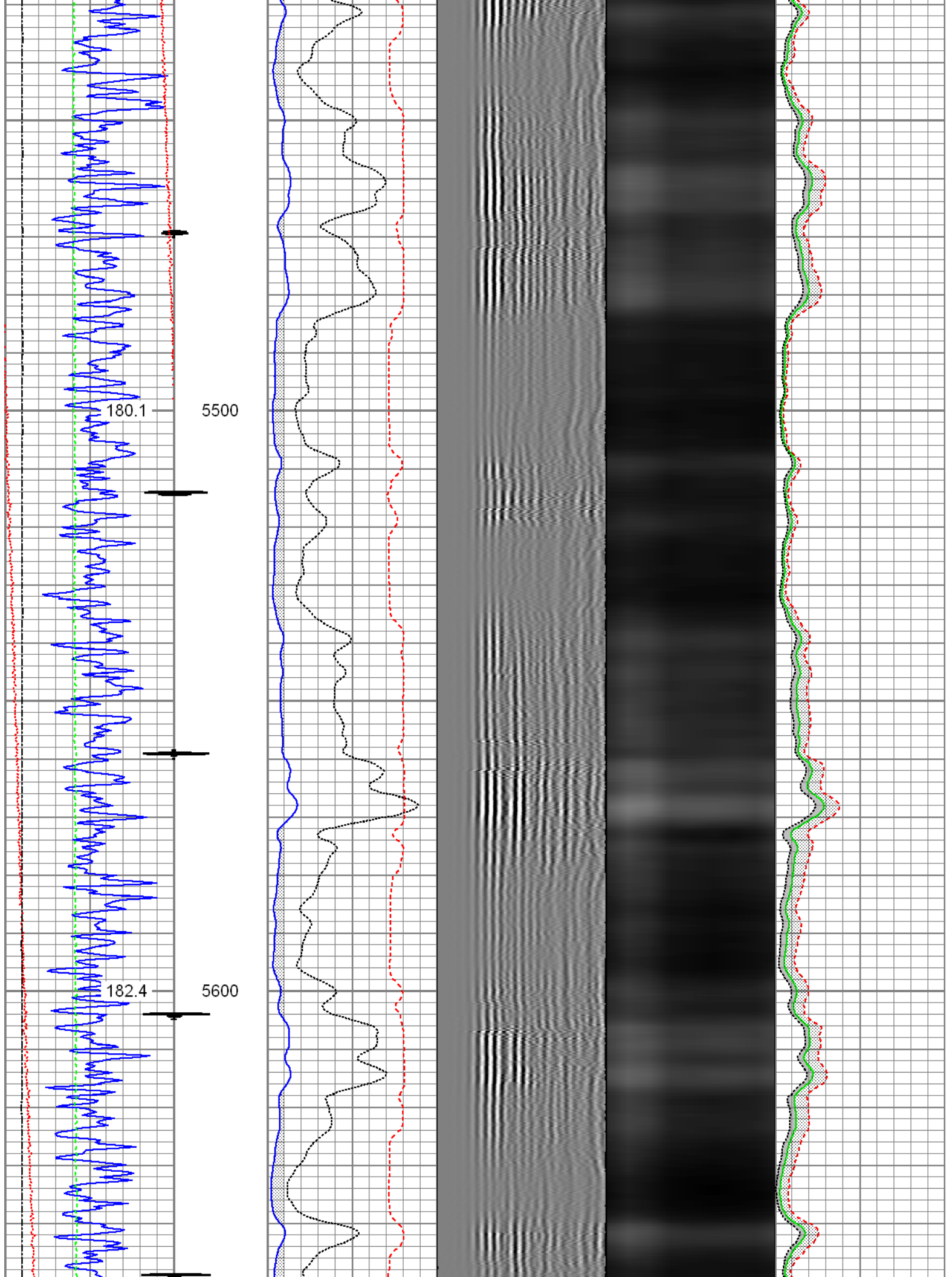




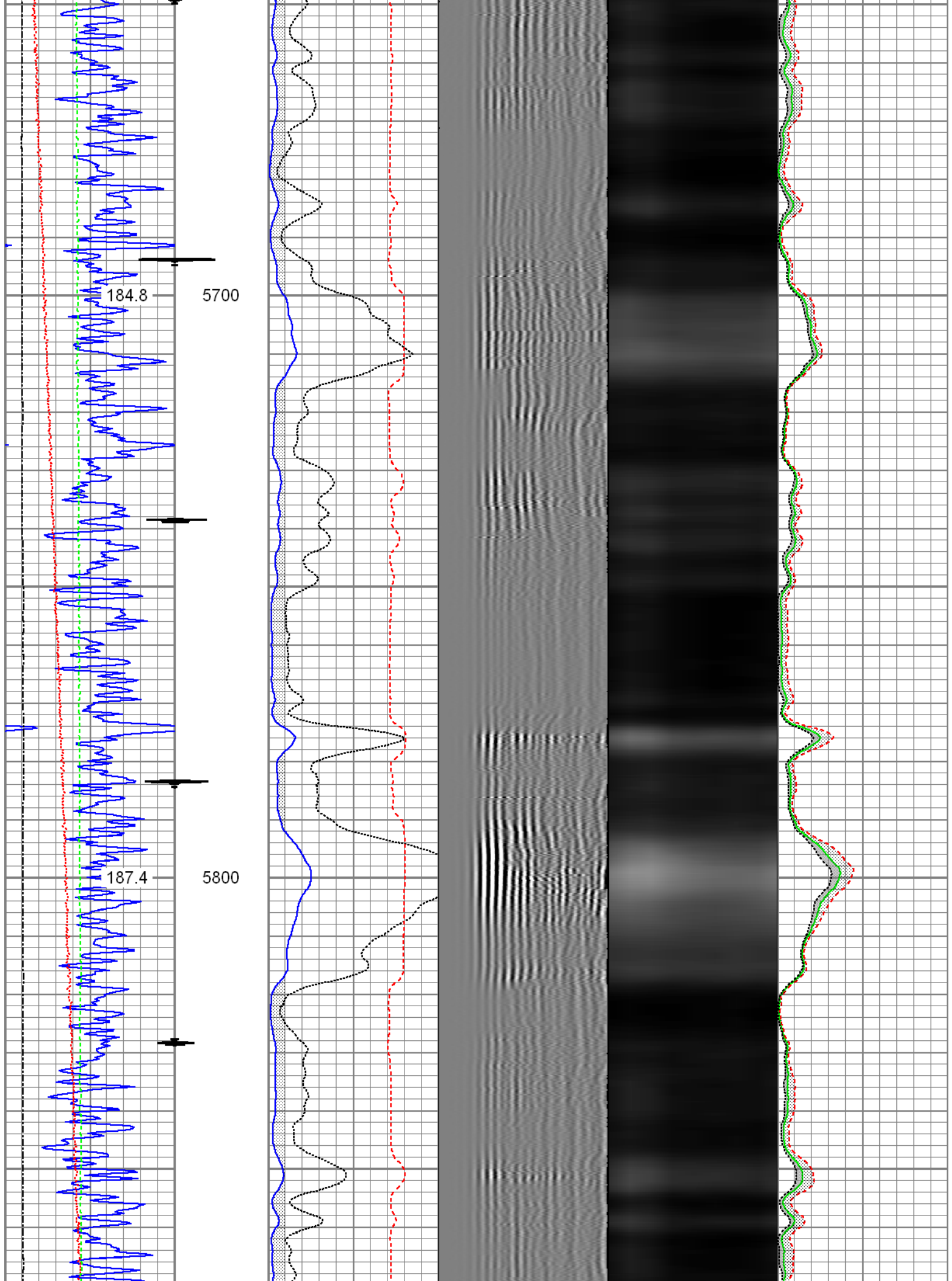




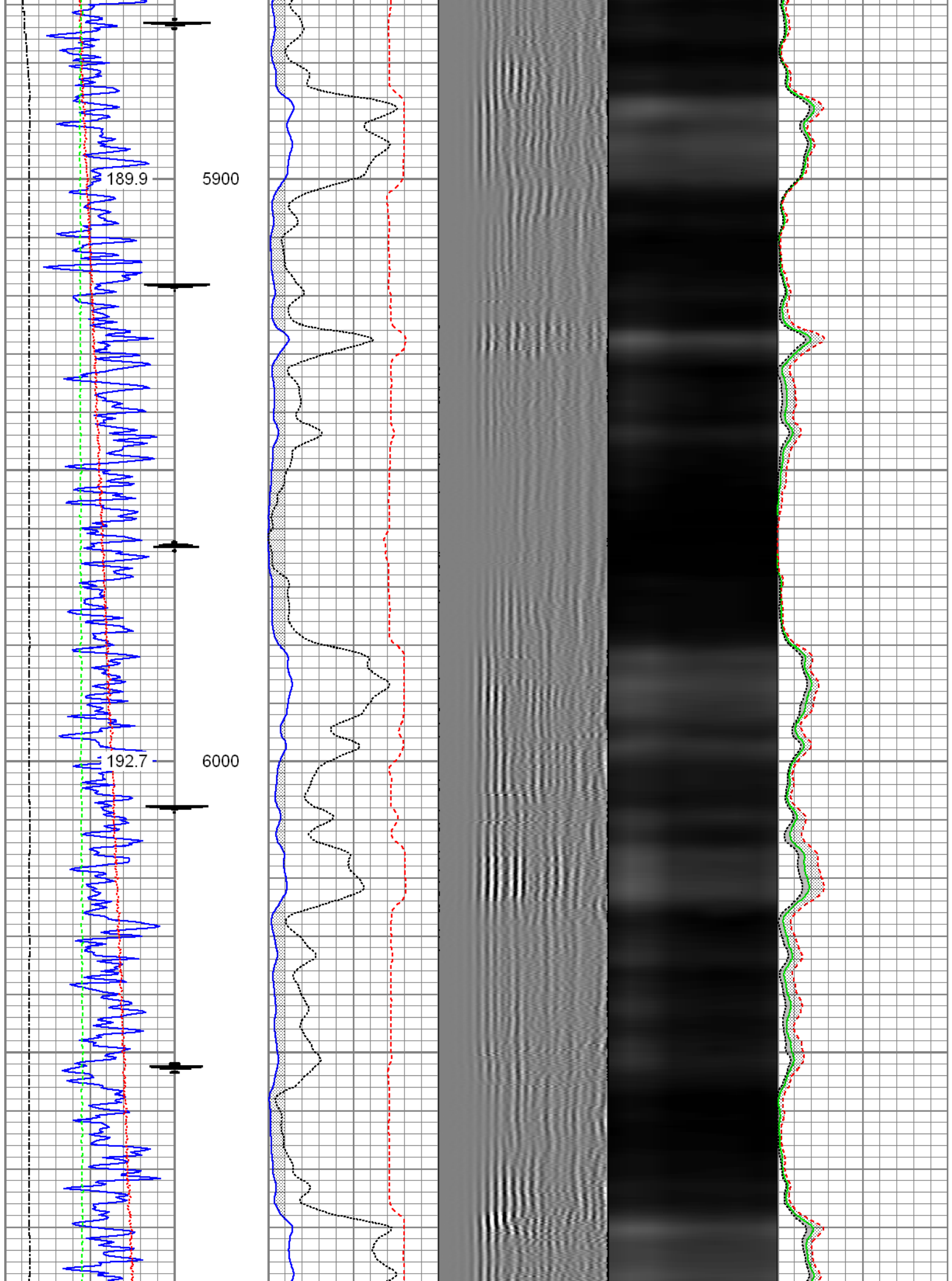


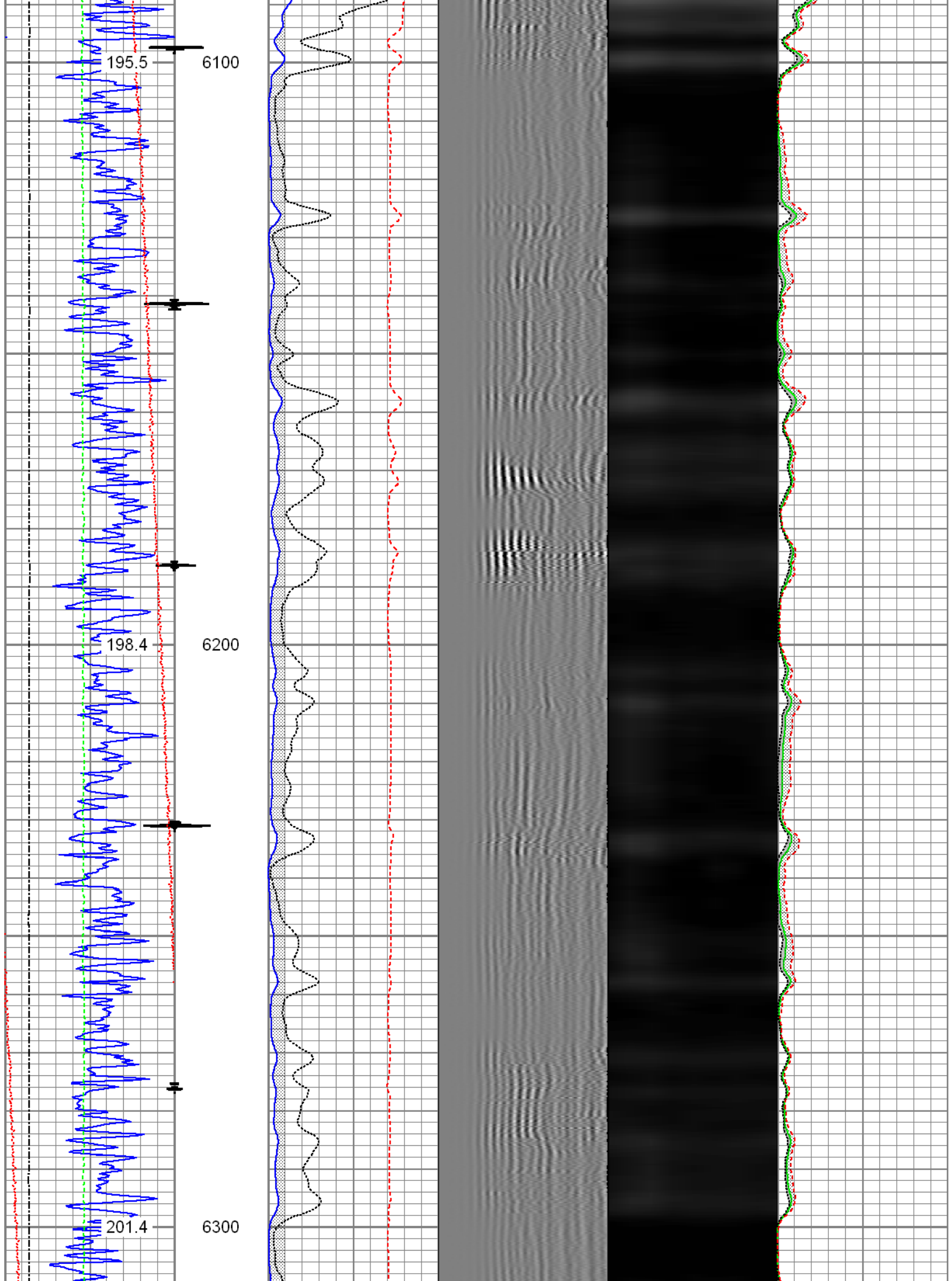


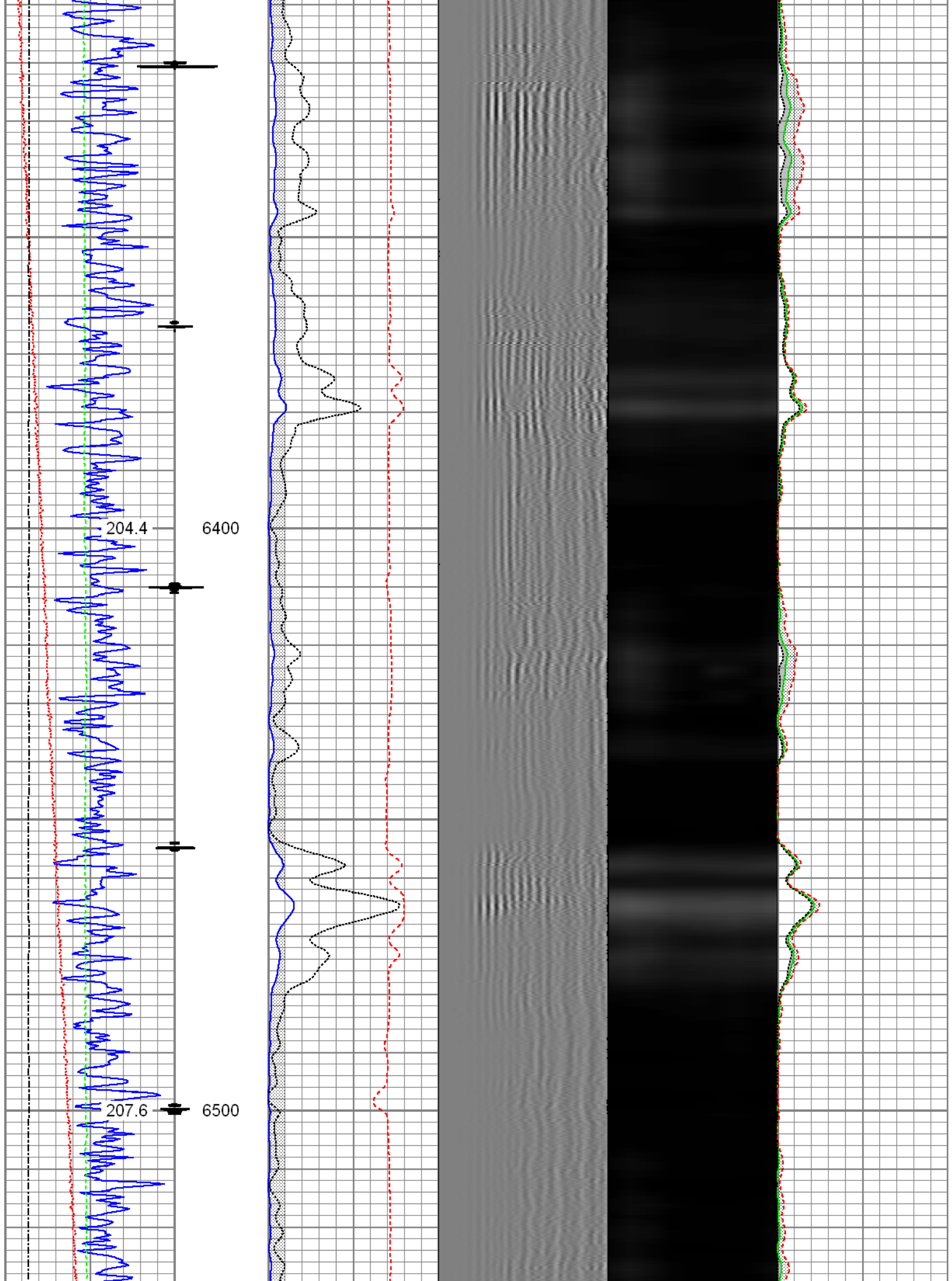










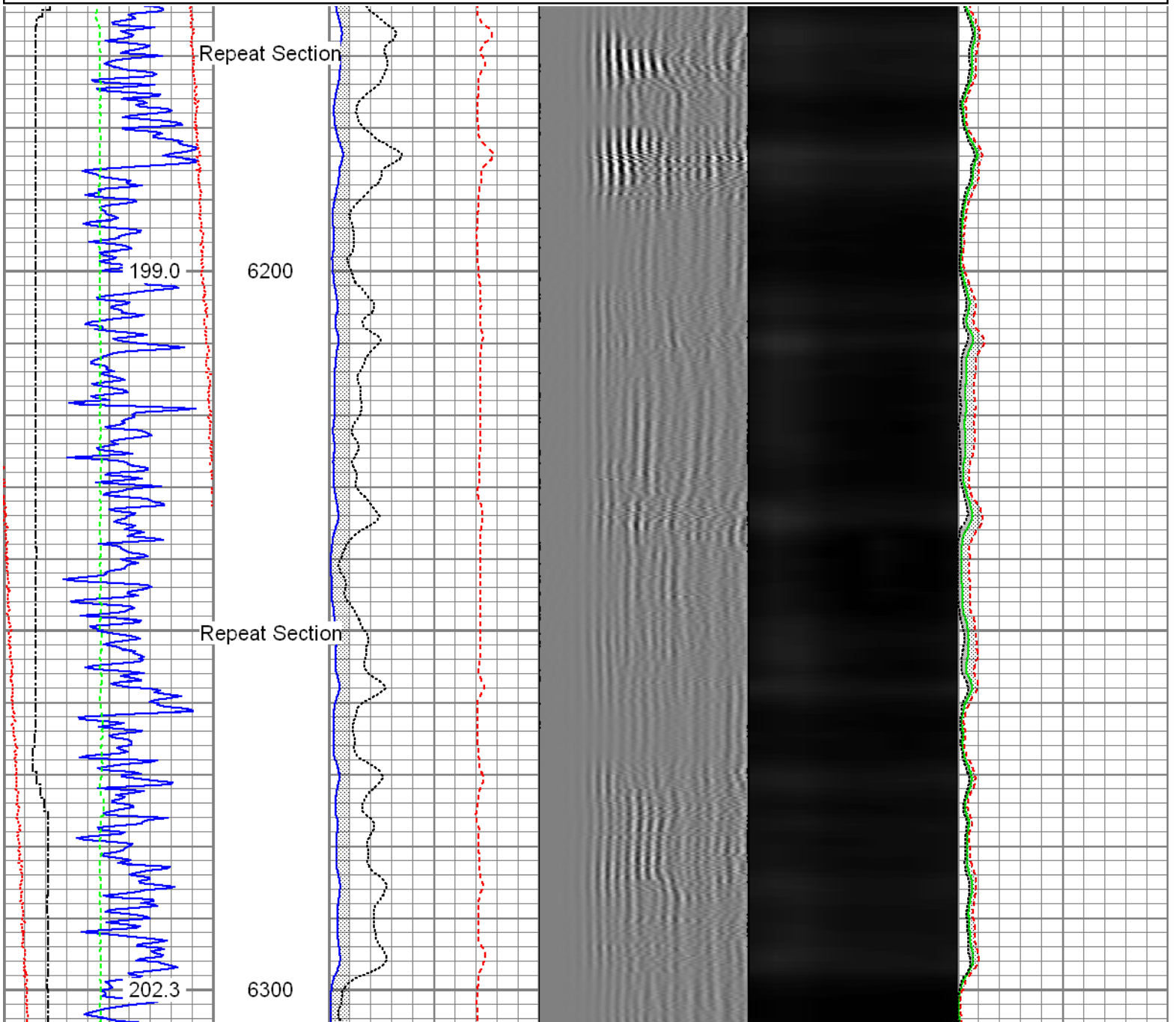


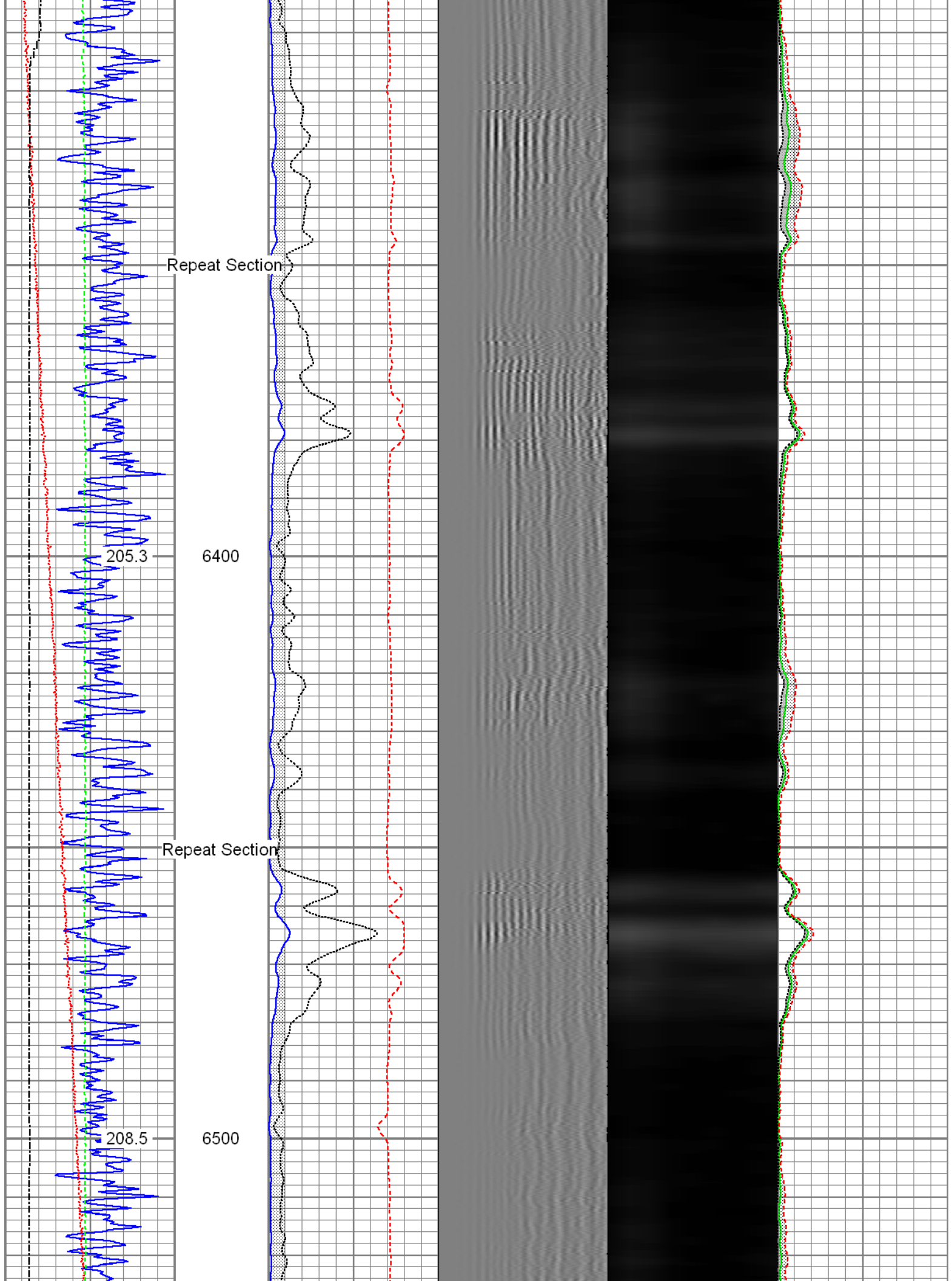


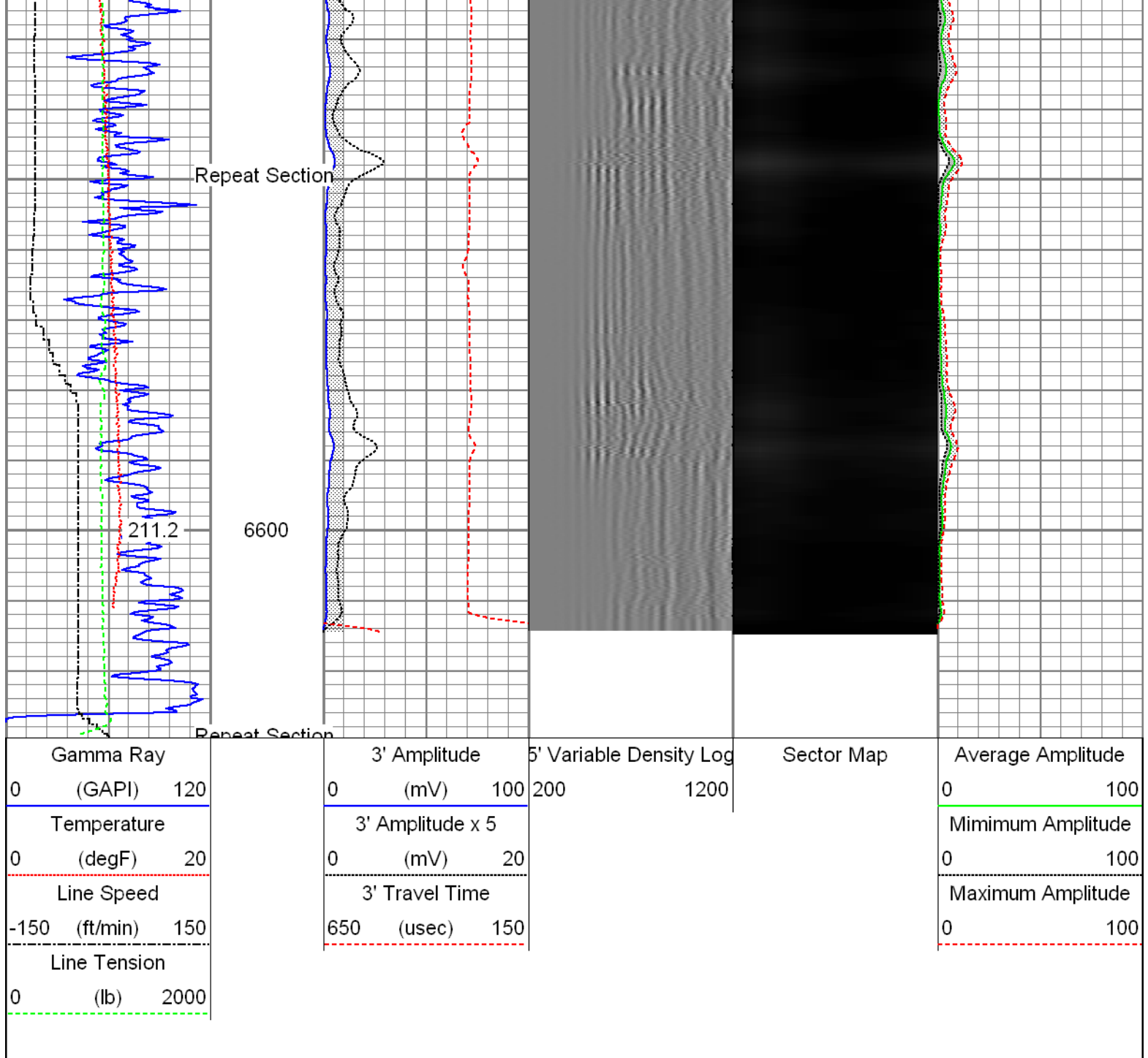



Database File: 0512340840\_anadarko\_green 5n-8hz\_07-28-15\_rbl.db  
 Dataset Pathname: repeat  
 Presentation Format: radii  
 Dataset Creation: Tue Jul 28 15:10:16 2015 by Log 7.0 B1  
 Charted by: Depth in Feet scaled 1:240

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







Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
HeadVolt	20.94		T_CH14375_1_GO Titan 1-7/16" Assembled Electric Cable Head with 1" Fishing Neck	1.03	1.44	4.00
			Probe_IL_BS_Cent Probe 2-3/4" Inline Electrical Inline Bowspring Centralizer	2.88	2.75	10.00
Temp	18.17					

WVF3FT	16.00		<b>Probe_RADII-C-2-3/4" (FW1302-001)</b> Probe 2-3/4" Sector Cement Bond Tool with Temperature Probe	9.19	2.75	105.00
WVFCAL	16.00					
WVFS1	16.00					
WVFS2	16.00					
WVFS3	16.00					
WVFS4	16.00					
WVFS5	16.00					
WVFS6	16.00					
WVFS7	16.00					
WVFS8	16.00					
WVF5FT	15.00					
			<b>Probe_IL_BS_Cent</b> Probe 2-3/4" Inline Electrical Inline Bowspring Centralizer	2.88	2.75	10.00
CCL	7.38		<b>CCL_LOG-Probe_SA_CCL (FW1307-076)</b> Probe 2-3/4" Digital Six Magnet Logging CCL	2.66	2.75	35.00
DCCL	7.38					
			<b>GR-Probe_SA_GR (FW1307-078)</b> Probe 2-3/4" Scintillating Gamma Ray	3.33	2.75	55.00
GR	2.88		<b>Probe_IL_BS_Cent</b> Probe 2-3/4" Inline Electrical Inline Bowspring Centralizer	2.88	2.75	10.00
Dataset: 0512340840_anadarko_green 5n-8hz_07-28-15_rbl.db: field/well/run1/mp Total Length: 24.85 ft Total Weight: 229.00 lb O.D. 2.75 in						

Calibration Report		
Database File:	0512340840_anadarko_green 5n-8hz_07-28-15_rbl.db	
Dataset Pathname:	mp	
Dataset Creation:	Thu Jul 30 10:53:27 2015 by Calc SCH 120430	
Gamma Ray Calibration Report		
Serial Number:	FW1307-078	
Tool Model:	Probe_SA_GR	
Performed:	Mon Jul 27 15:01:42 2015	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.6000	GAPI/cps



# Segmented Cement Bond Log Calibration Report

Serial Number: FW1302-001  
 Tool Model: 2-3/4"  
 Calibration Casing Diameter: 5.500 in  
 Calibration Depth: 6690.955 ft

Master Calibration, performed Thu Jul 30 10:53:23 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.013	0.507	0.800	71.921	144.087	-1.117
CAL	0.002	0.730				
5'	0.006	0.459	0.800	71.921	156.864	-0.102
SUM						
S1	0.018	0.513	0.000	100.000	202.029	-3.626
S2	0.023	0.534	0.000	100.000	195.814	-4.515
S3	0.023	0.533	0.000	100.000	196.055	-4.465
S4	0.015	0.523	0.000	100.000	196.796	-3.007
S5	0.013	0.510	0.000	100.000	201.009	-2.556
S6	0.012	0.500	0.000	100.000	204.875	-2.402
S7	0.010	0.496	0.000	100.000	205.621	-2.082
S8	0.014	0.511	0.000	100.000	201.150	-2.739

Internal Reference Calibration, performed Wed Dec 31 17:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.002	0.730	1.000	0.000

Air Zero Calibration, performed Tue Jul 28 14:41:01 2015:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.000		0.000		0.000	
5'	0.000		0.000		0.000	
SUM						
S1	0.000		0.000		0.000	
S2	0.000		0.000		0.000	
S3	0.000		0.000		0.000	
S4	0.000		0.000		0.000	
S5	0.000		0.000		0.000	
S6	0.000		0.000		0.000	
S7	0.000		0.000		0.000	
S8	0.000		0.000		0.000	



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 Well Green 5N-8HZ  
 Field Wattenberg  
 County Weld  
 State Colorado

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525
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