



Radial Cement
Gamma Ray
Casing Collar Log

Company		TEP Rocky Mountain LLC					
Well		Federal WMC 12-20					
Field		Rulison					
County		Garfield					
State		Colorado					
Company		TEP Rocky Mountain LLC					
Well		Federal WMC 12-20					
Field		Rulison					
County		Garfield					
State		Colorado					
Location:		API # : 05-045-24494					
SEC 17 TWP 7S RGE 93W		Other Services					
Permanent Datum		Ground Level		Elevation		8869 FT	
Log Measured From		Kelly Bushing		Elevation		K.B. 8899 FT	
Drilling Measured From		Kelly Bushing		Elevation		D.F. 8898 FT	
G.L. 8869 FT							
Date		14-DEC-2022					
Run Number		One					
Depth Driller		11177 FT					
Depth Logger		11080 FT					
Bottom Logged Interval		11071 FT					
Top Log Interval		Surface					
Open Hole Size		8.75"					
Type Fluid		Water					
Density / Viscosity		8.34 Lb/Gal					
Max. Recorded Temp.		264°F					
Estimated Cement Top		See Log					
Time Well Ready		ROA					
Time Logger on Bottom		11:37					
Equipment Number		8047					
Location		Grand Junction					
Recorded By		P. Edwards					
Witnessed By		C. Borgstede					
Borehole Record				Tubing Record			
Run Number		Bit		From		To	
Casing Record		Size		Wgt/Ft		Top	
Surface String		9-5/8"		36		Surface	
Prot. String						1163 FT	
Production String		4-1/2"		11.6		Surface	
Liner						11167 FT	

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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 is correlated to 30' K.B.
Marker joint logged @ 6950 FT - 6960 FT
Log ran with 0 PSI at surface

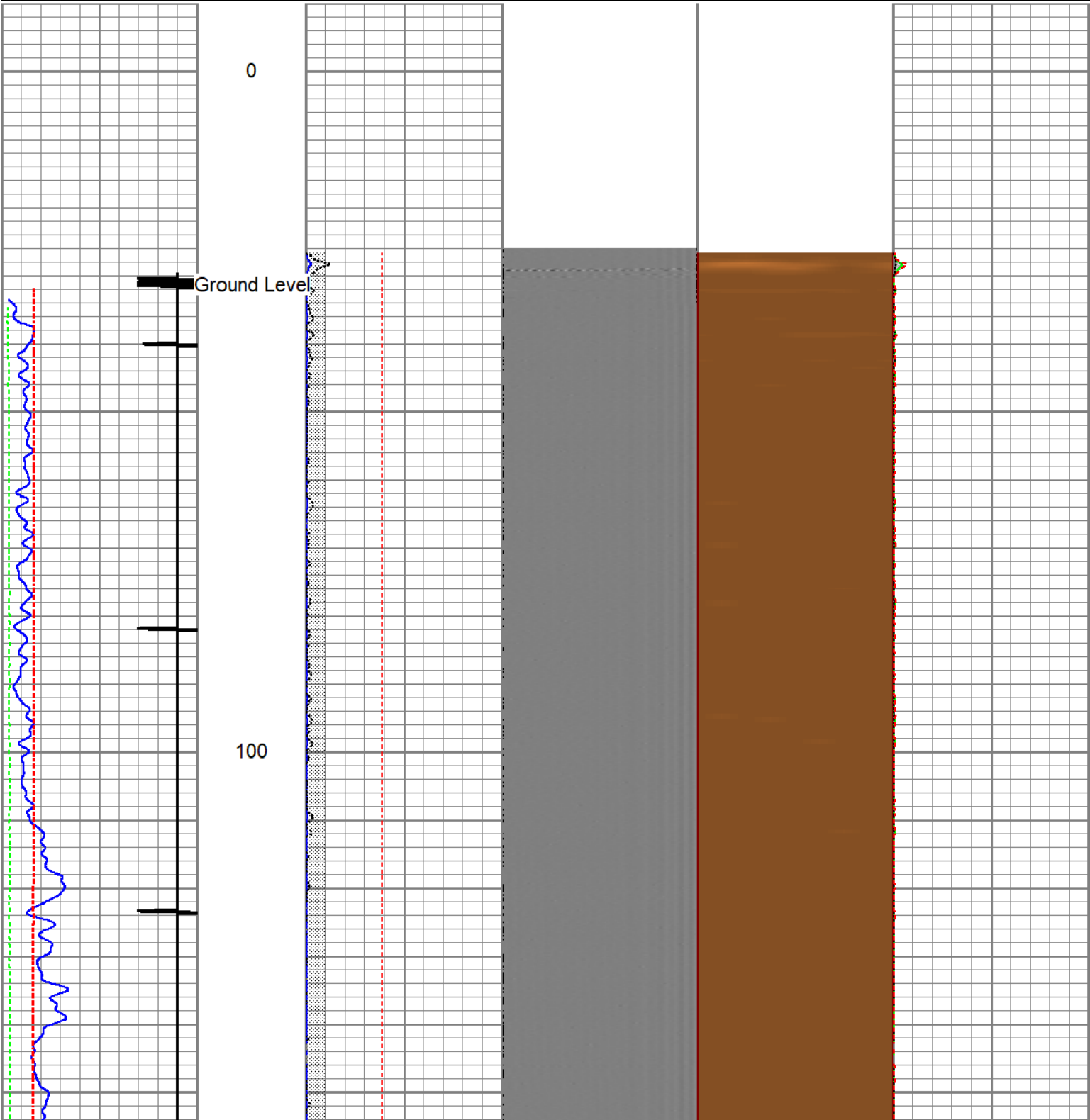
Thank you for choosing The Wireline Group!



Main Pass 5" = 100'

Database File	tep_fed wmc 12-20_rcbl_12-14-2022.db
Dataset Pathname	mainpass
Presentation Format	twgrcbl
Dataset Creation	Wed Dec 14 13:13:48 2022
Charted by	Depth in Feet scaled 1:240

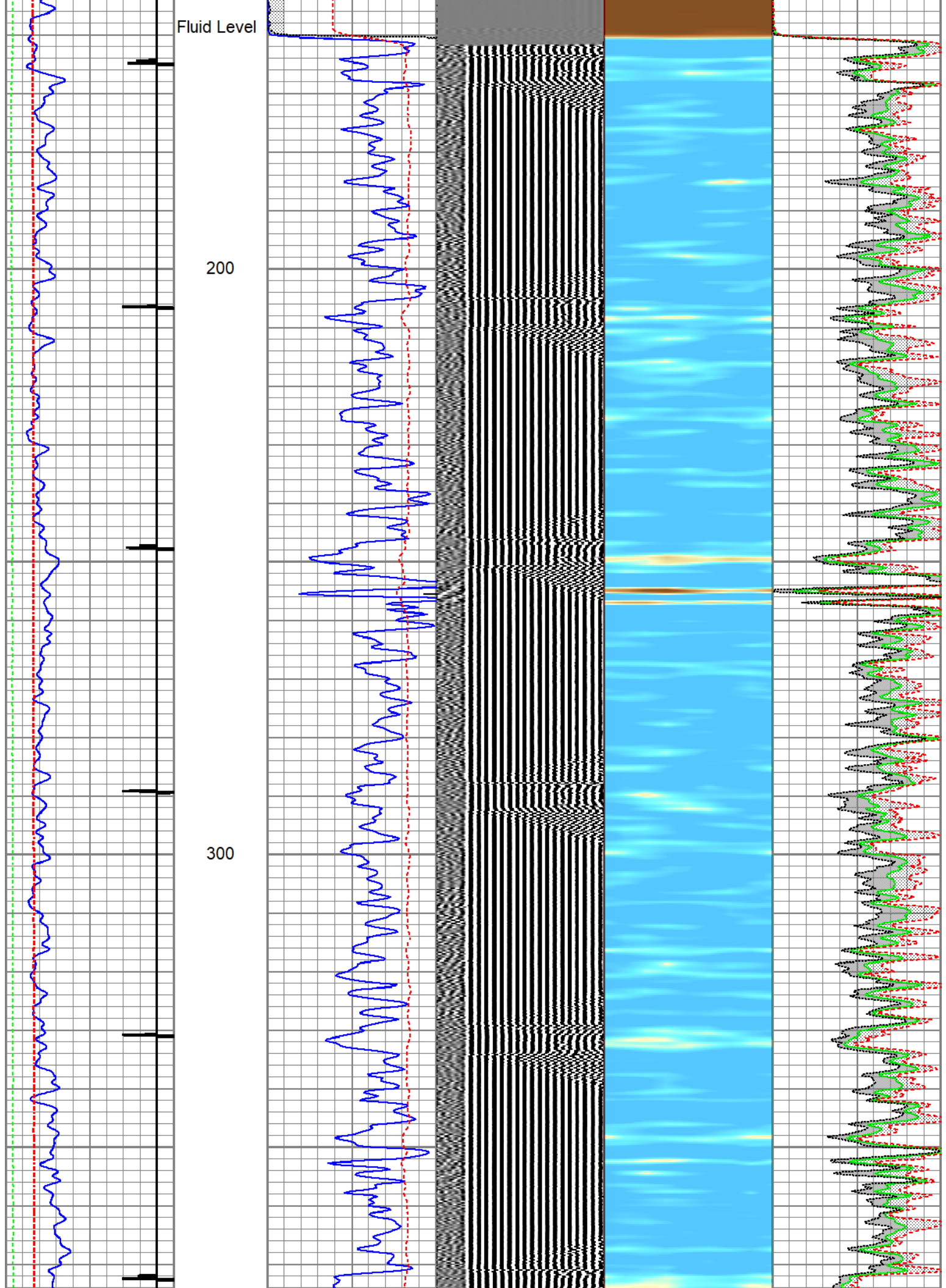
Gamma Ray		3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 200		0 (mV) 100	200 (usec) 1200		0 120
Line Tension		3' Amplitude x 5			Minimum Amplitude
0 (lb) 3000		0 (mV) 20			0 120
-9 CCL\$1 1		3' Travel Time			Maximum Amplitude
0 Temp (degF) 300		650 (usec) 150			0 120

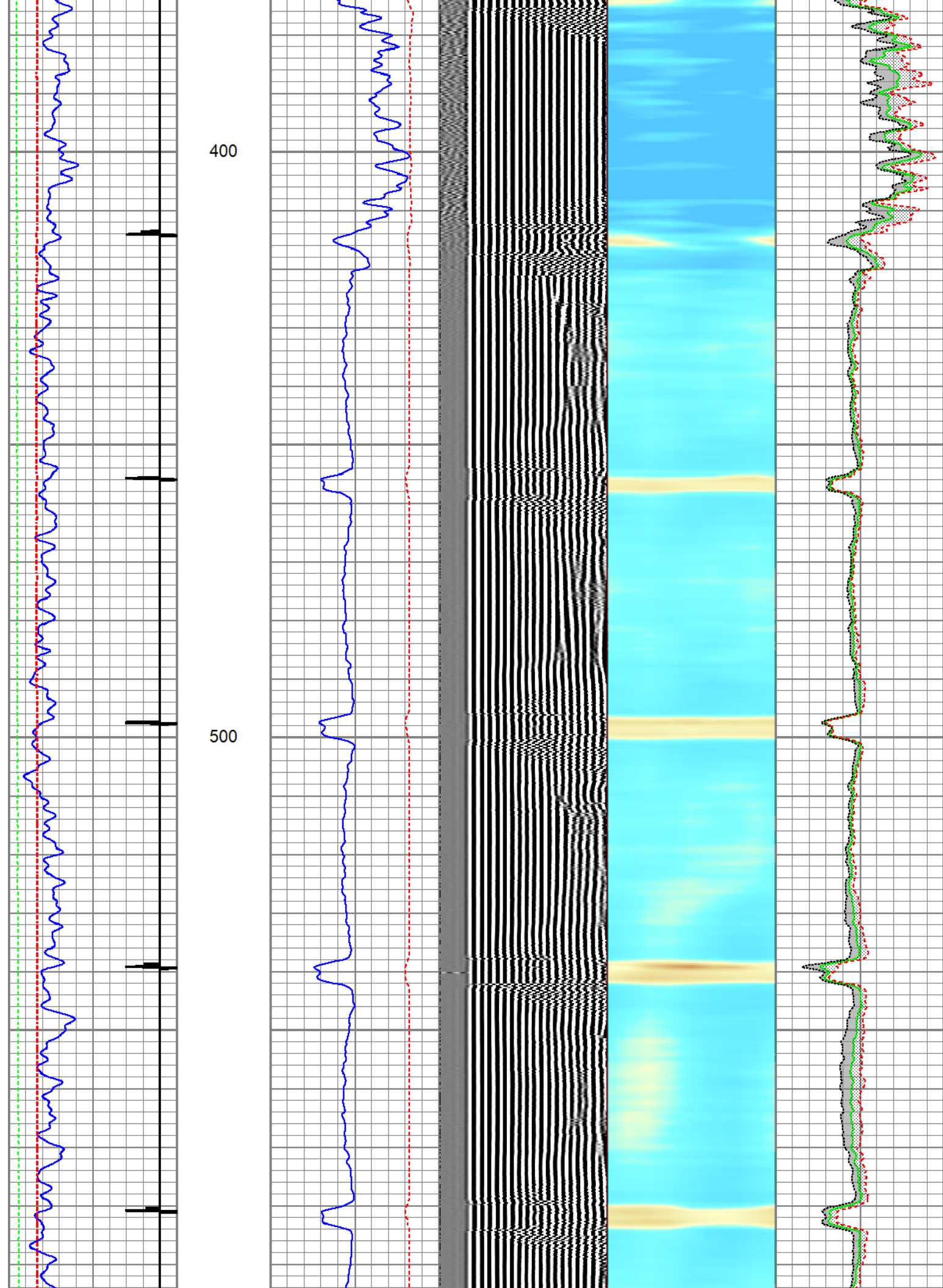


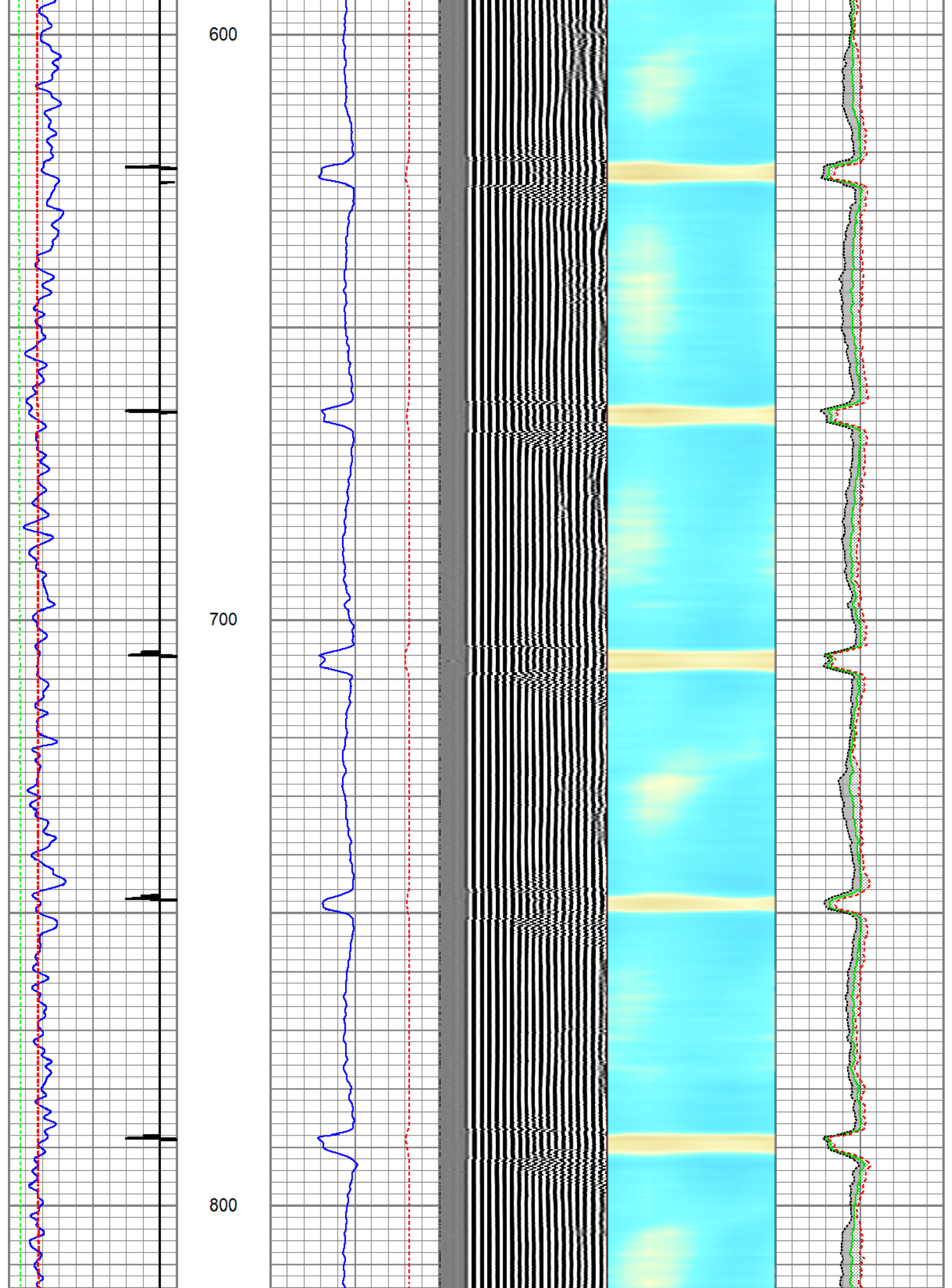
Fluid Level

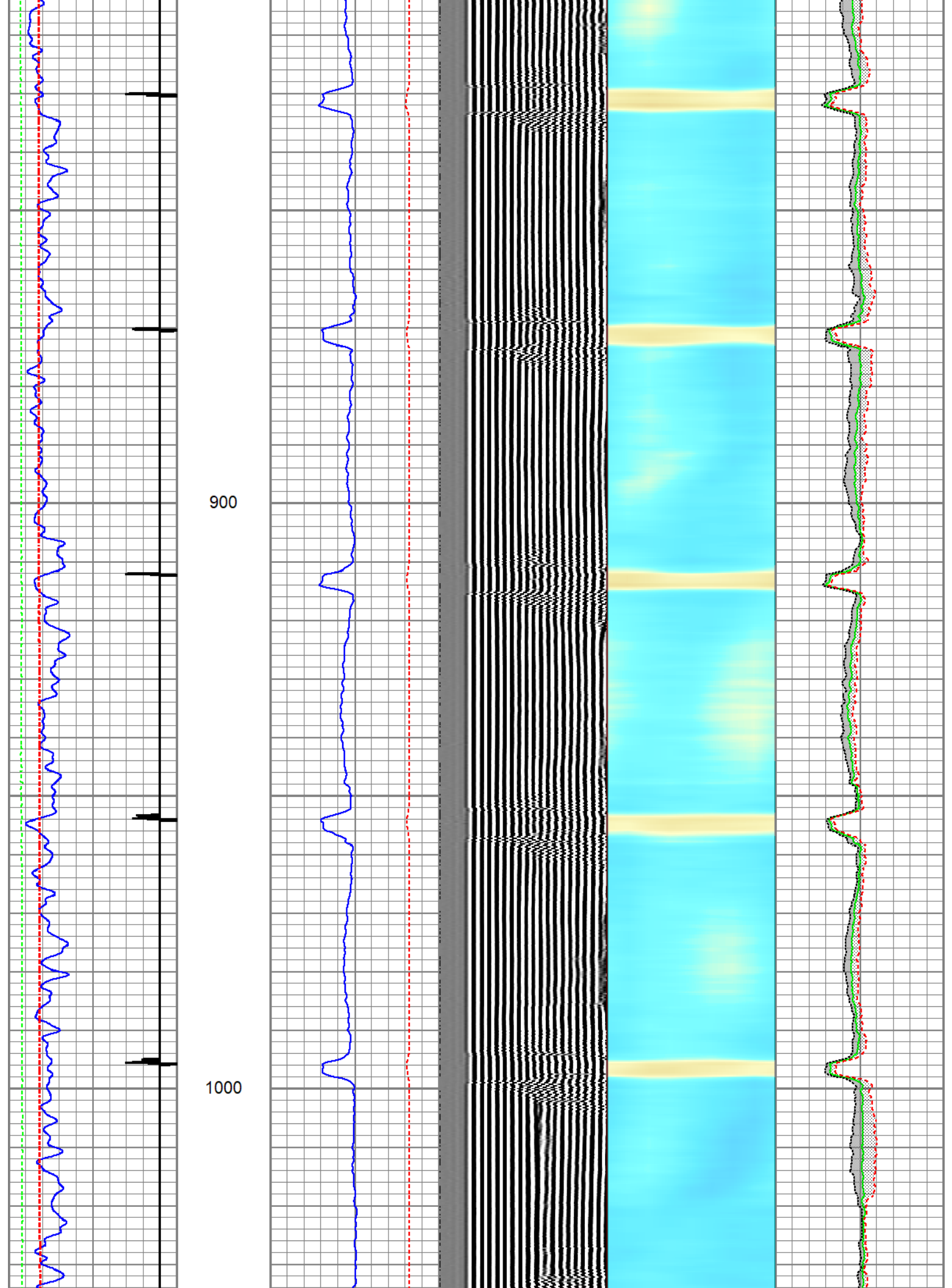
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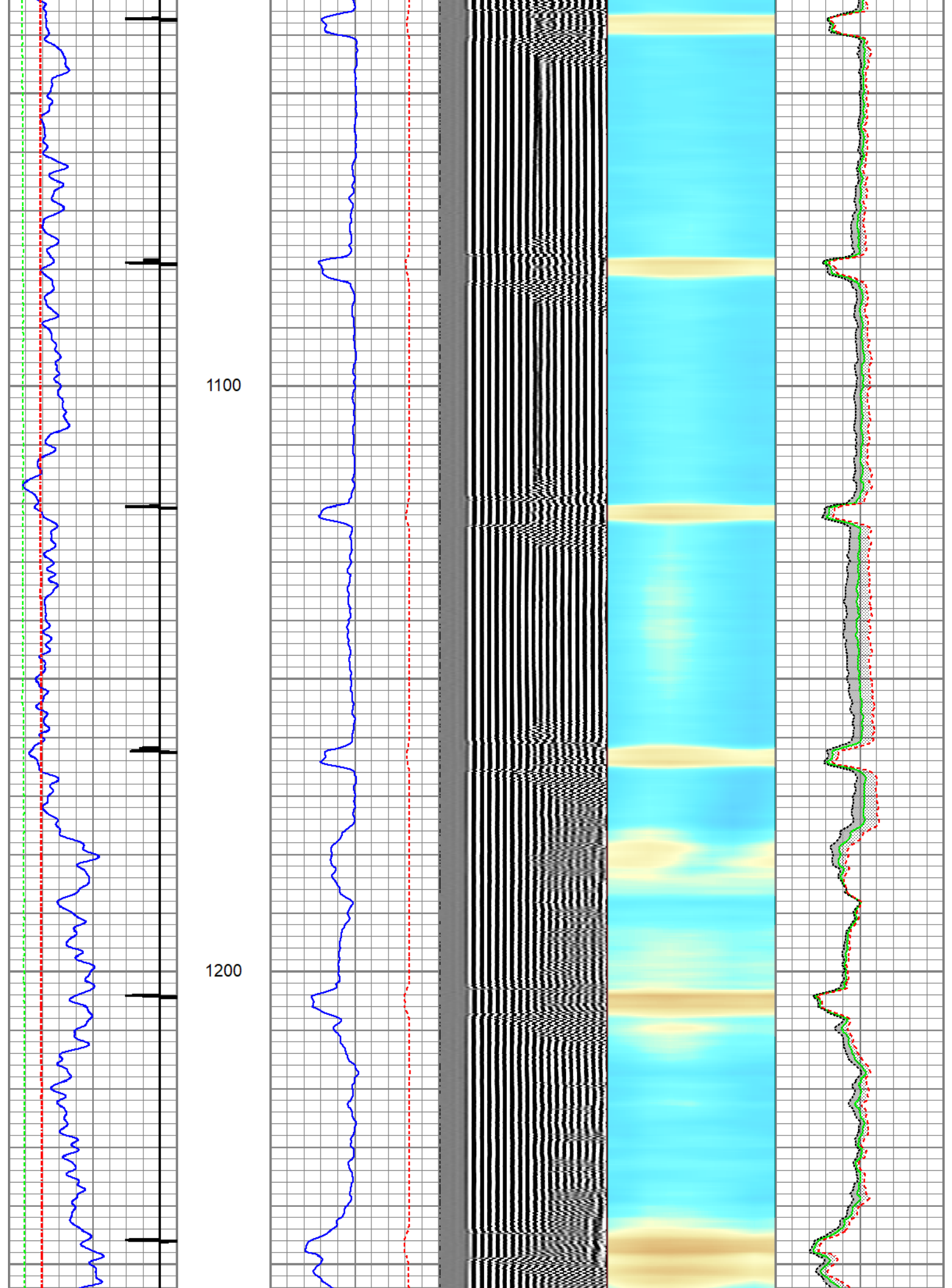
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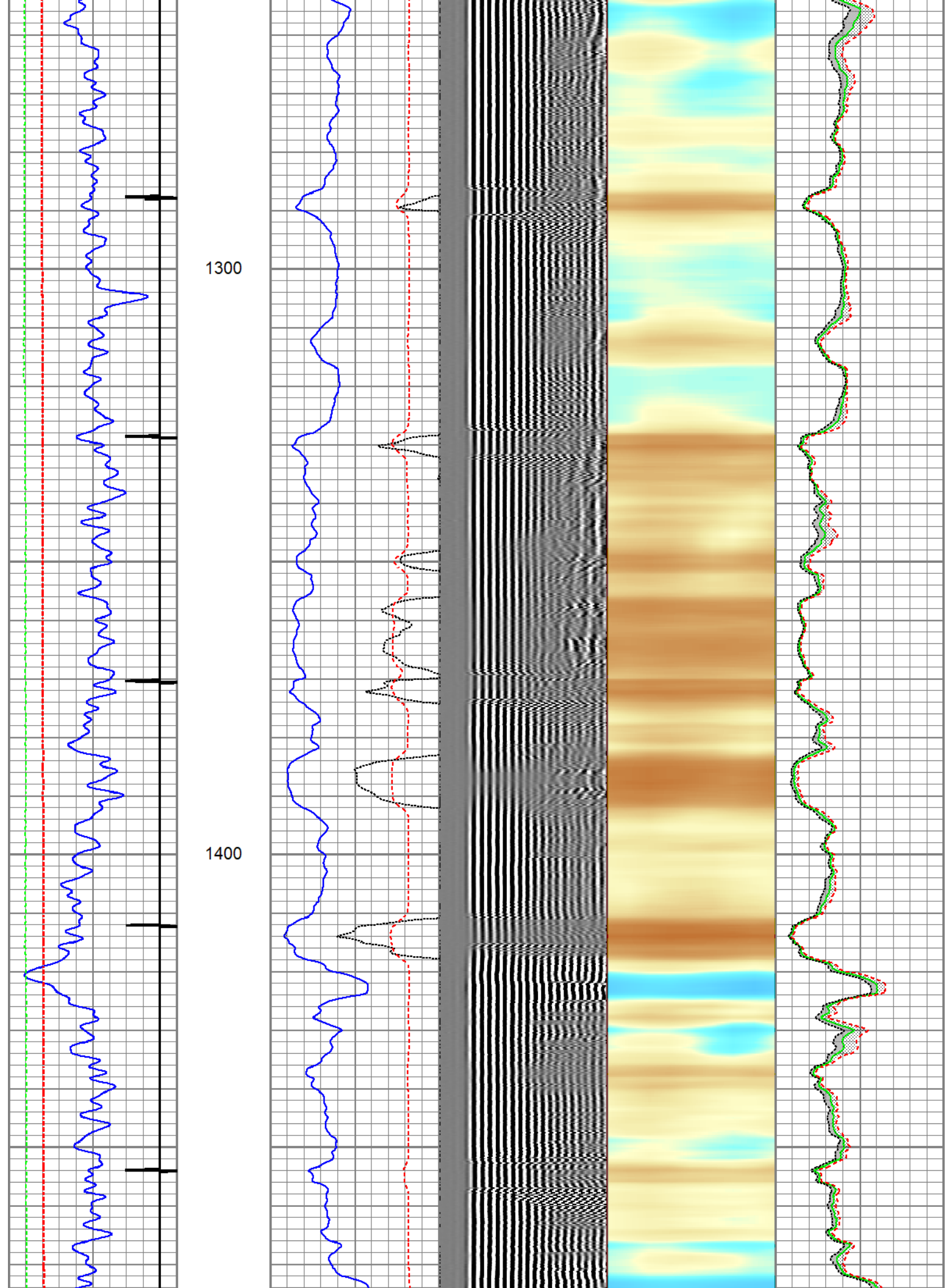


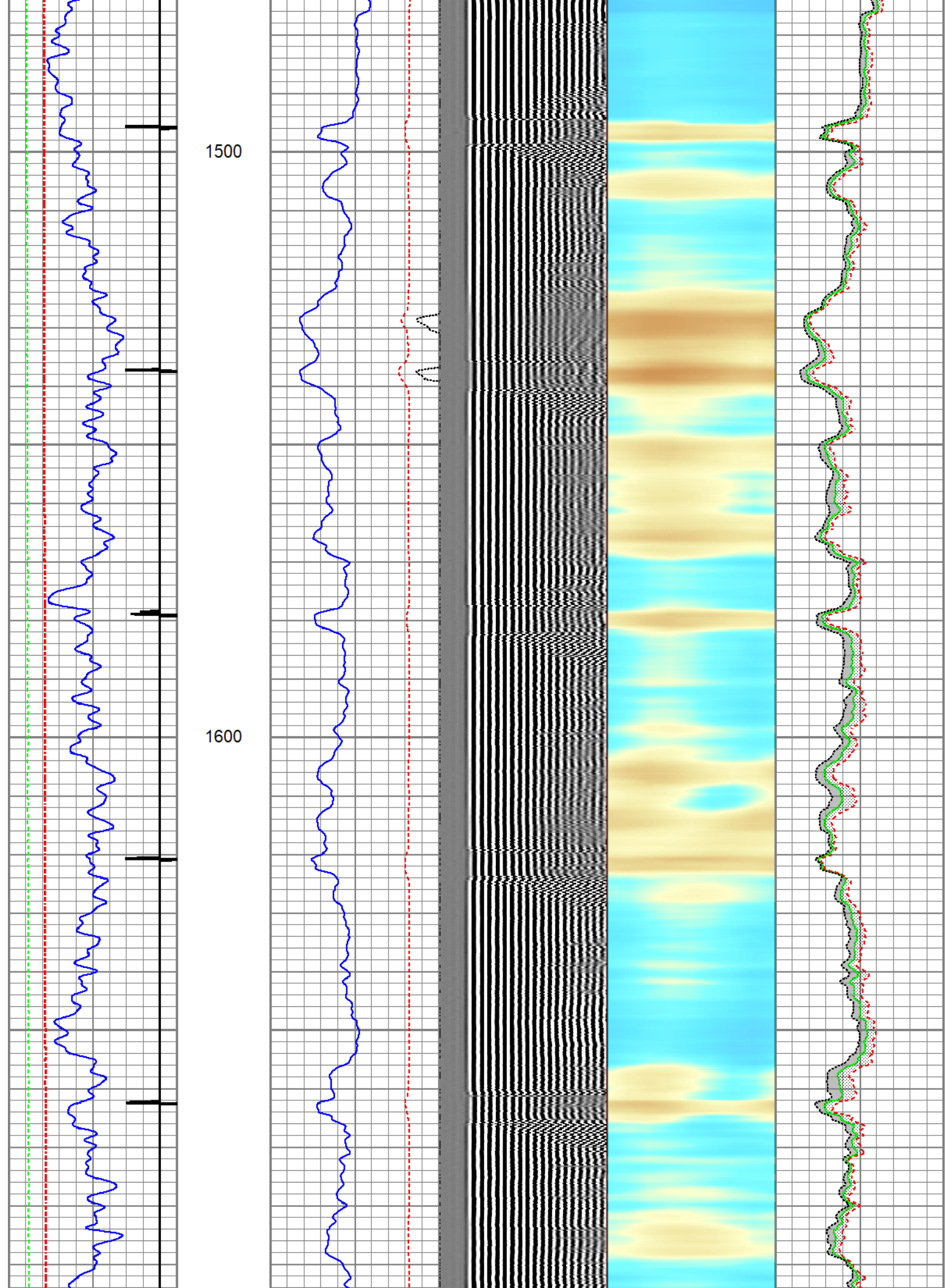


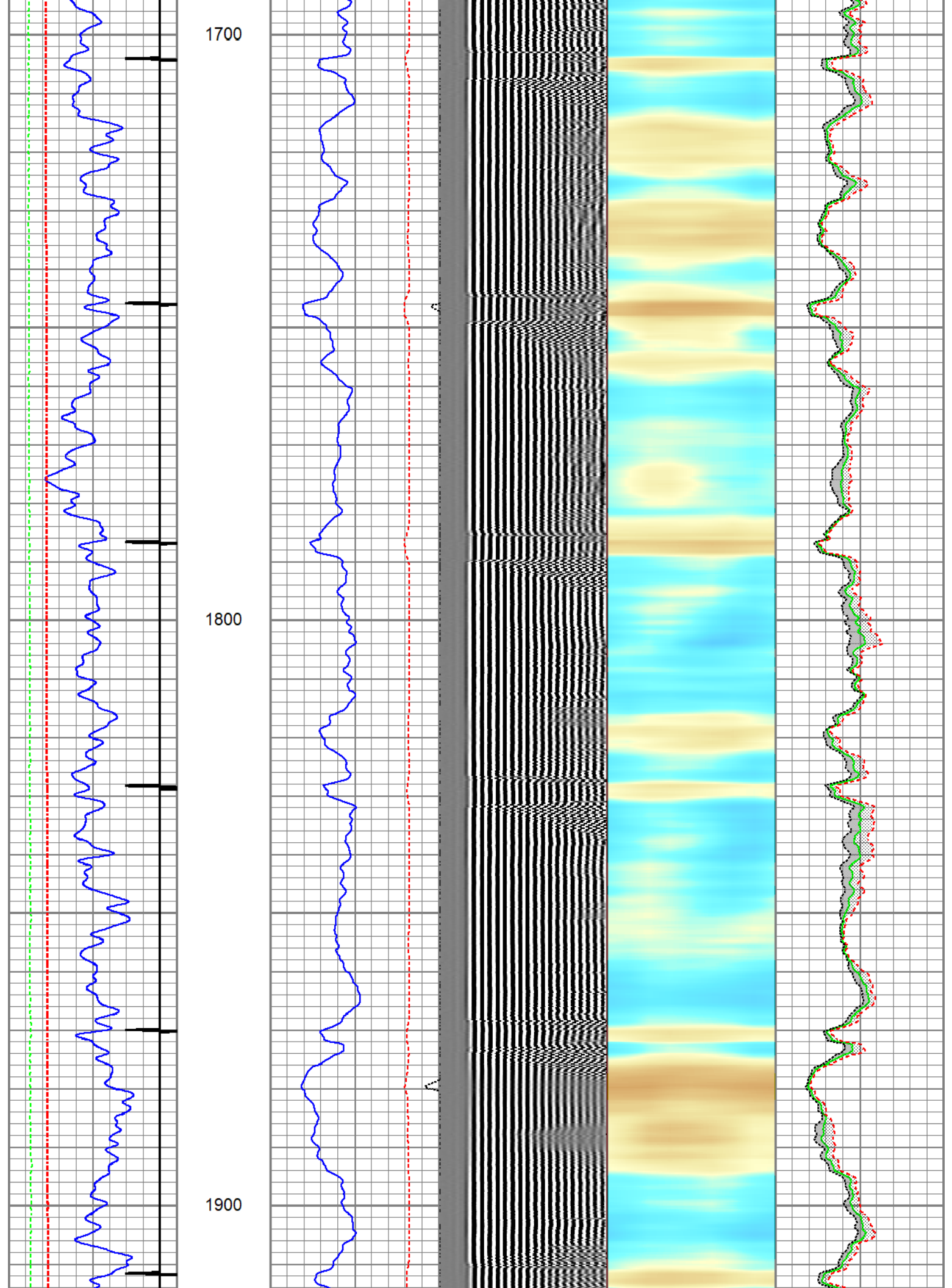


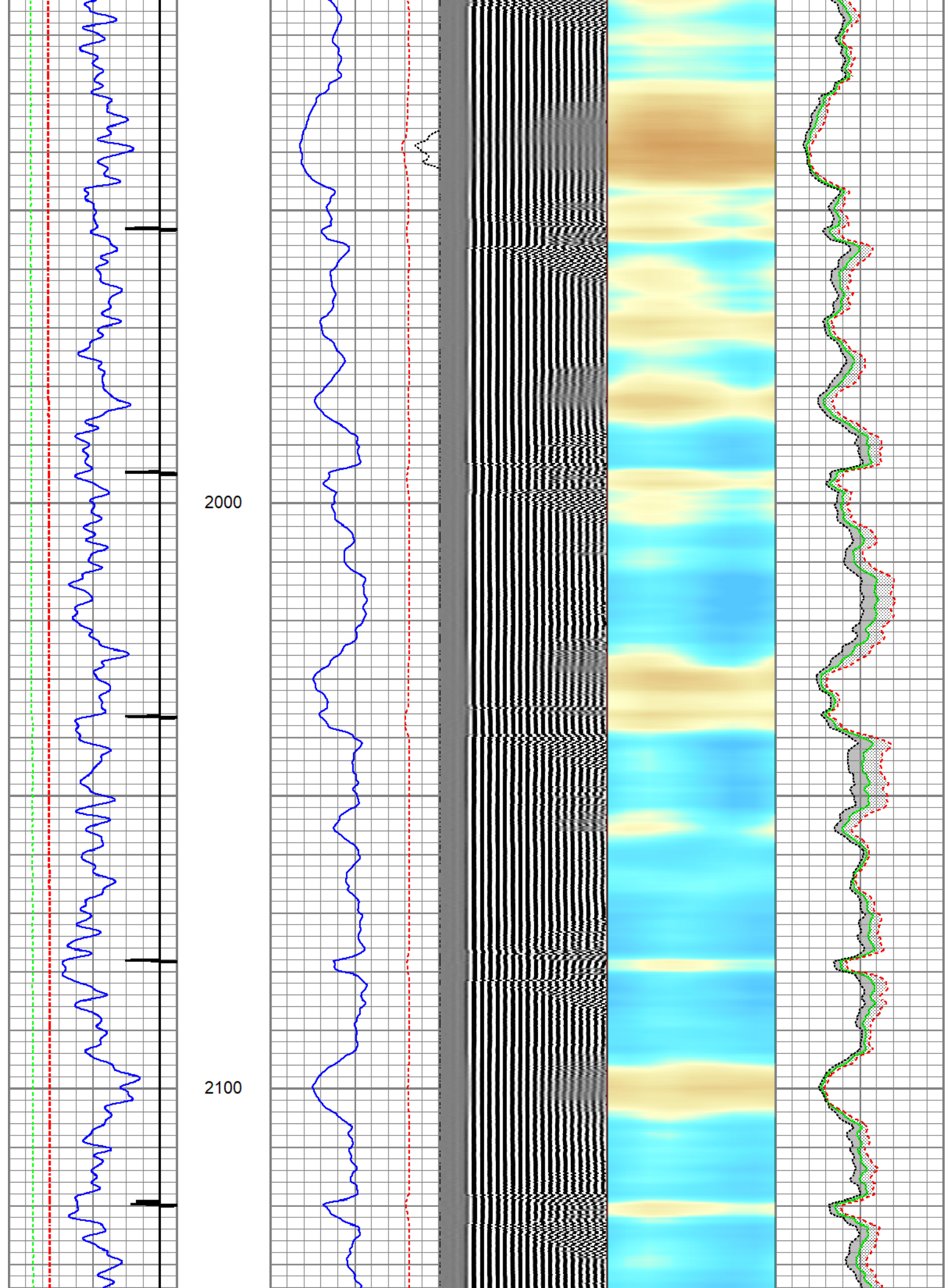






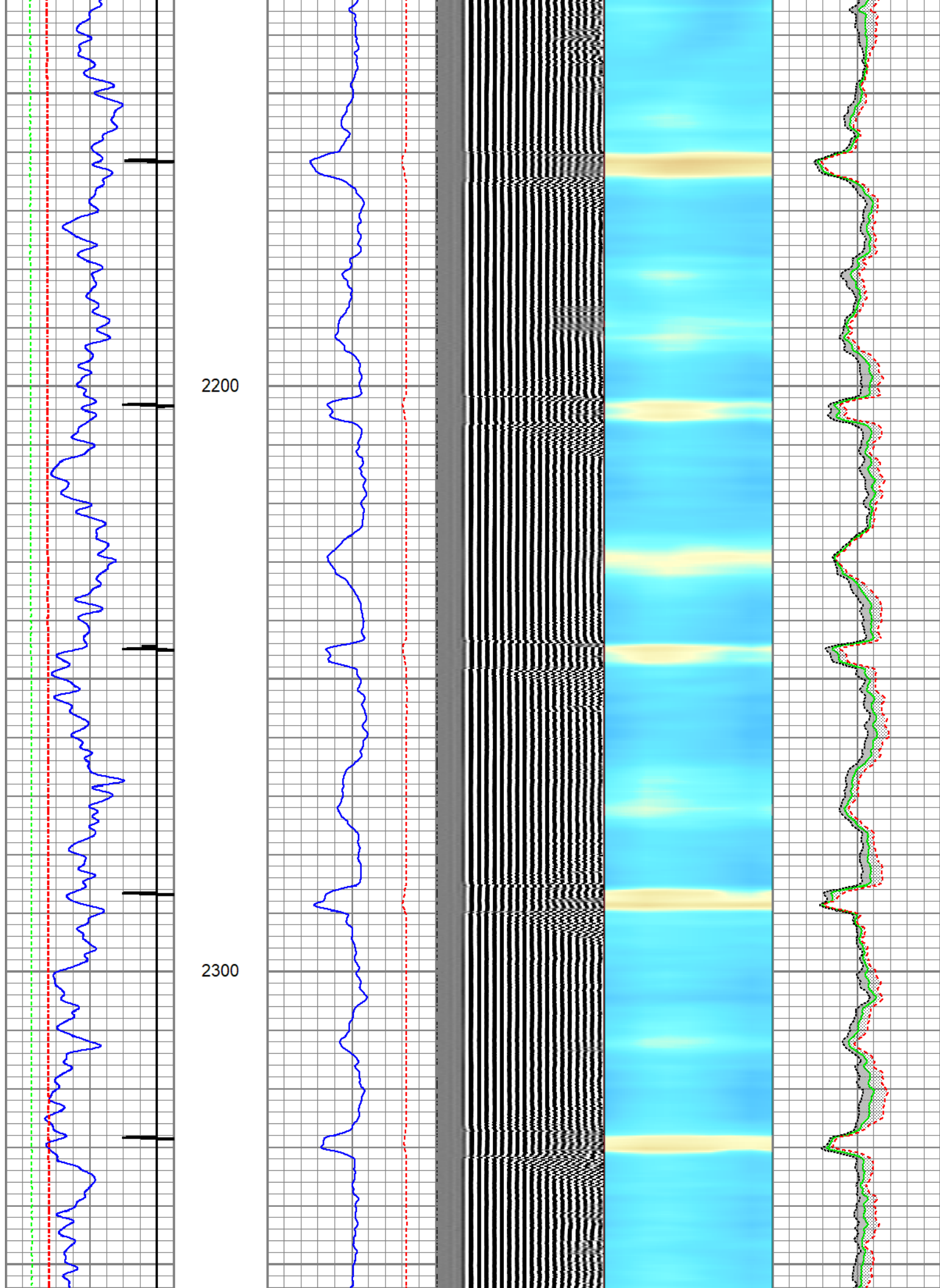


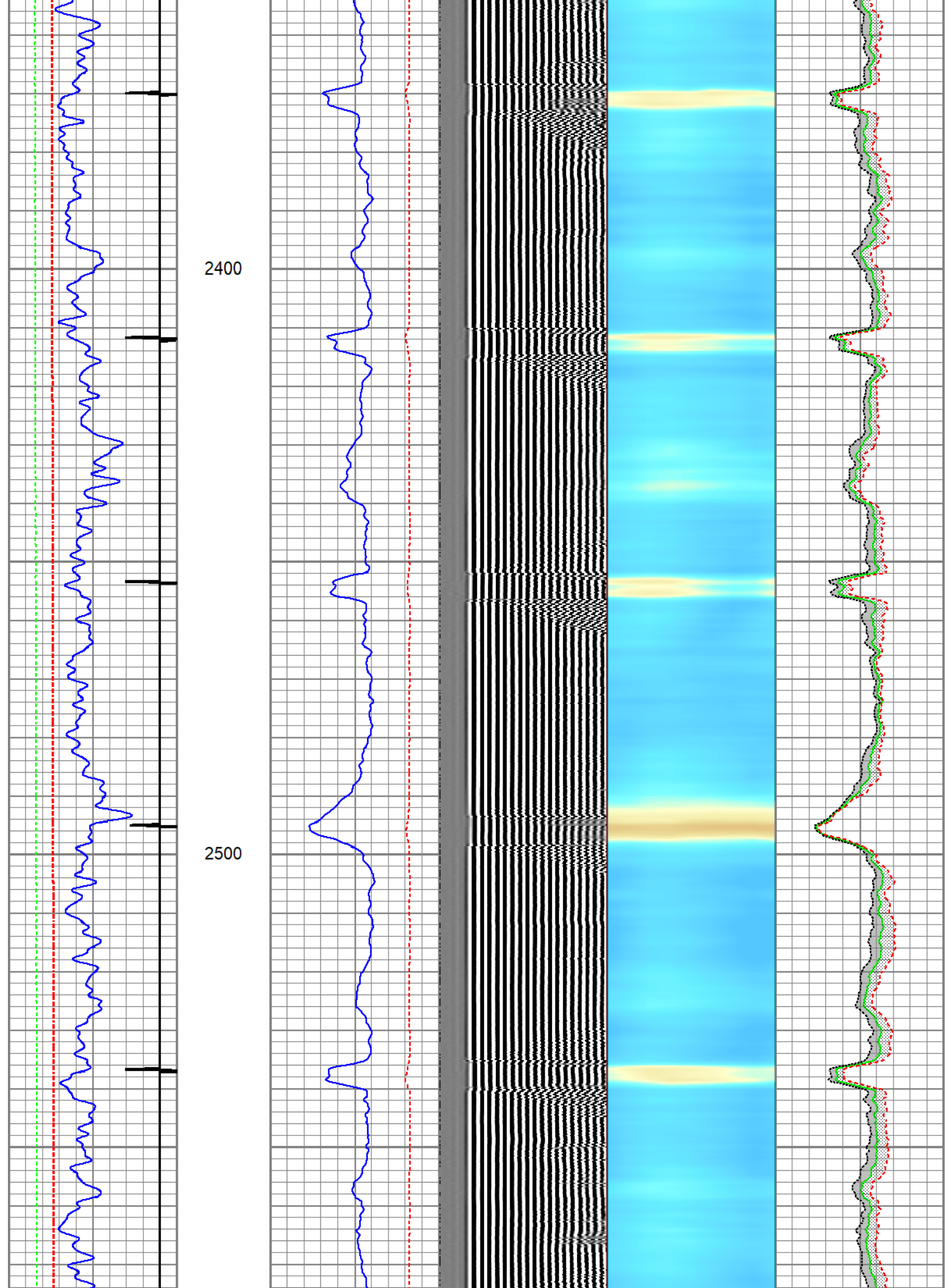




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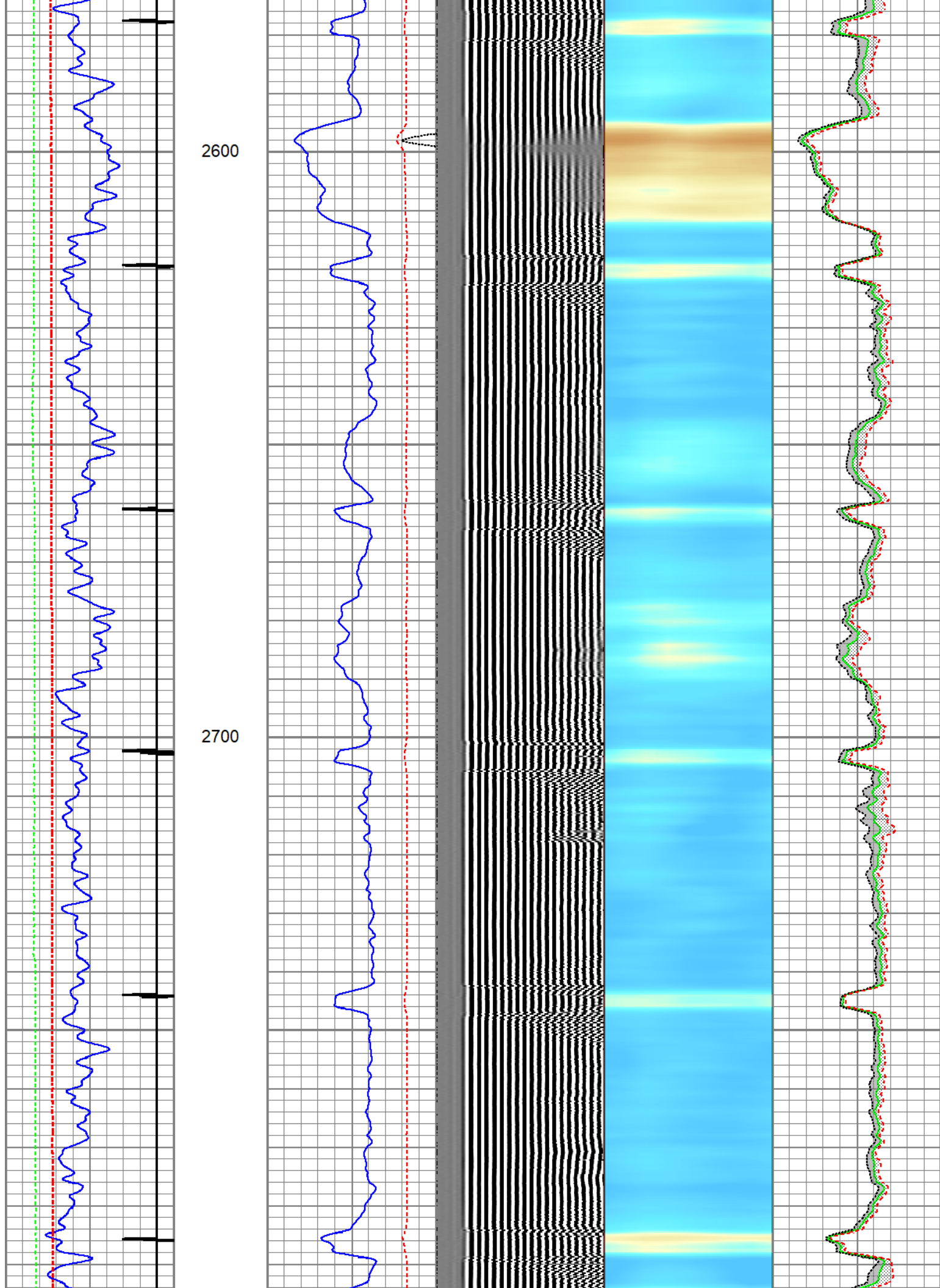
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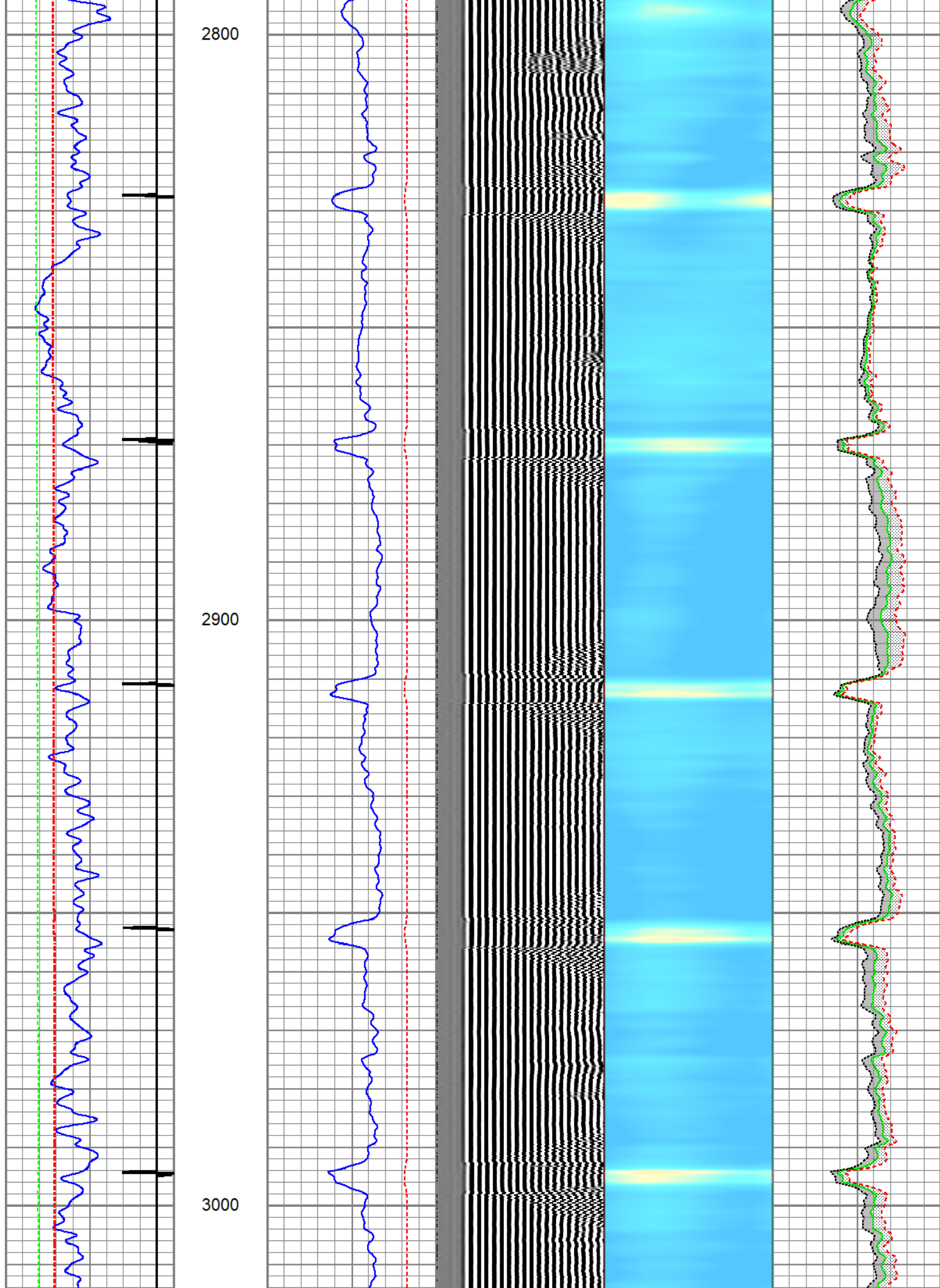
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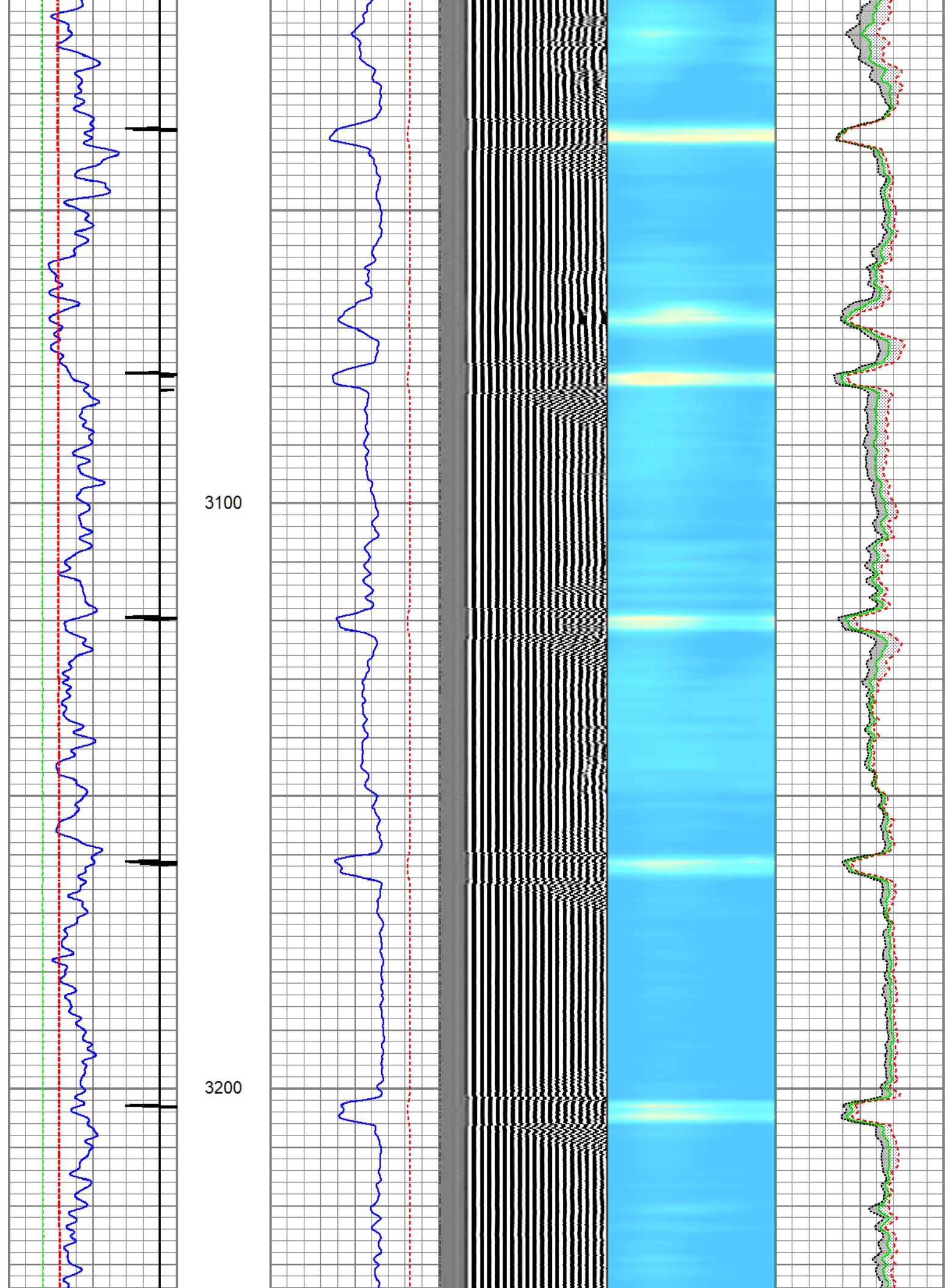


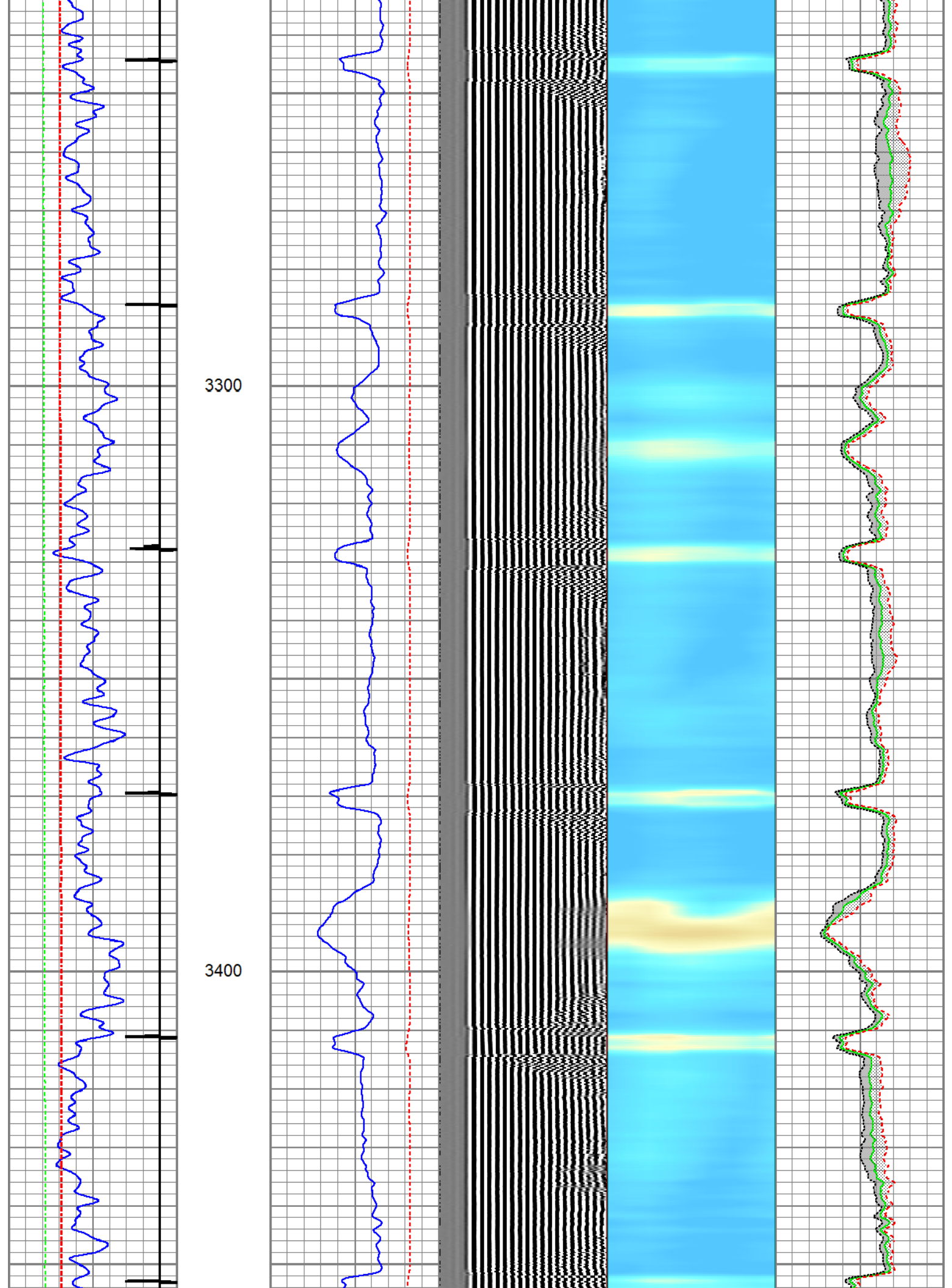
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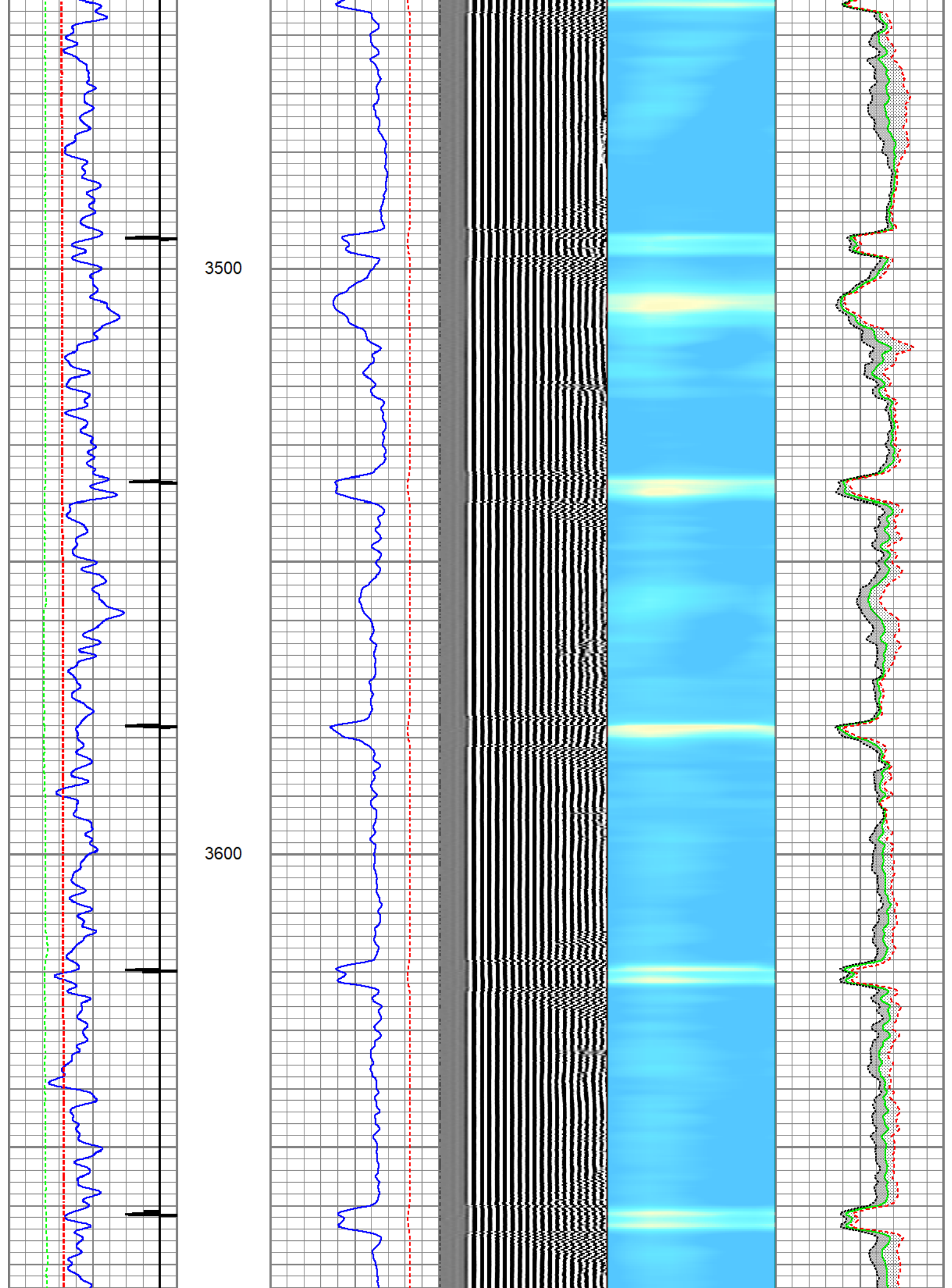
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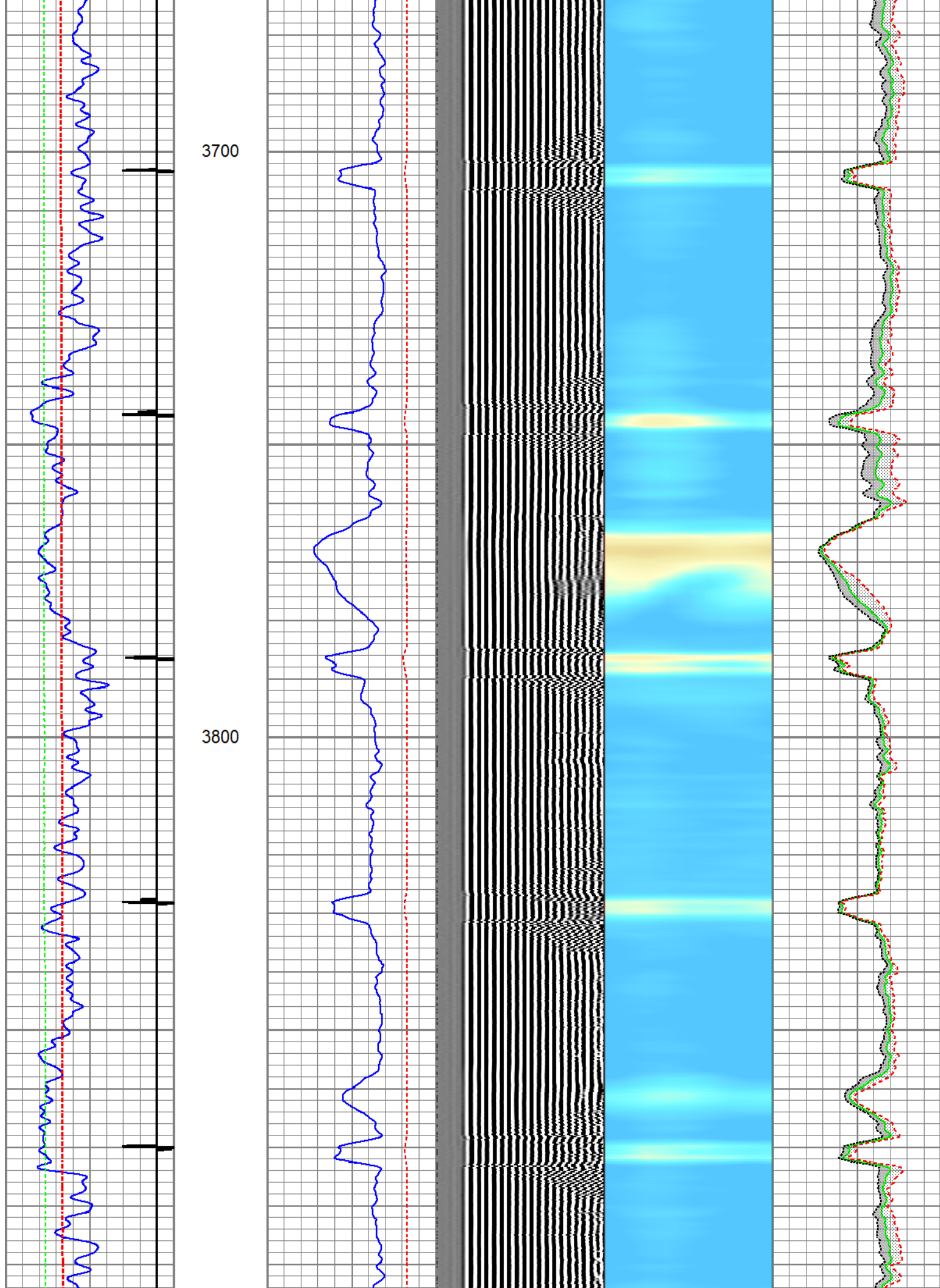






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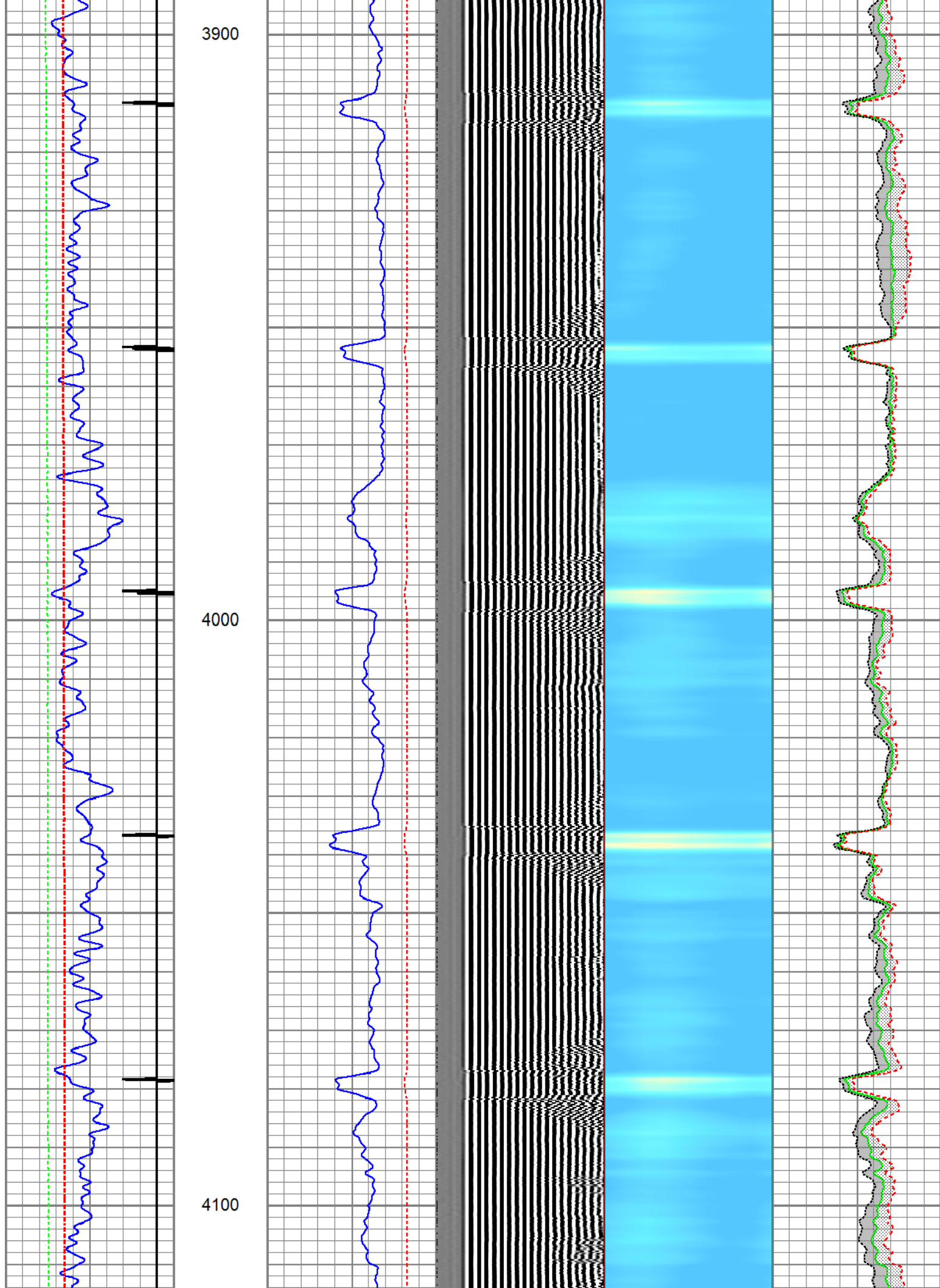
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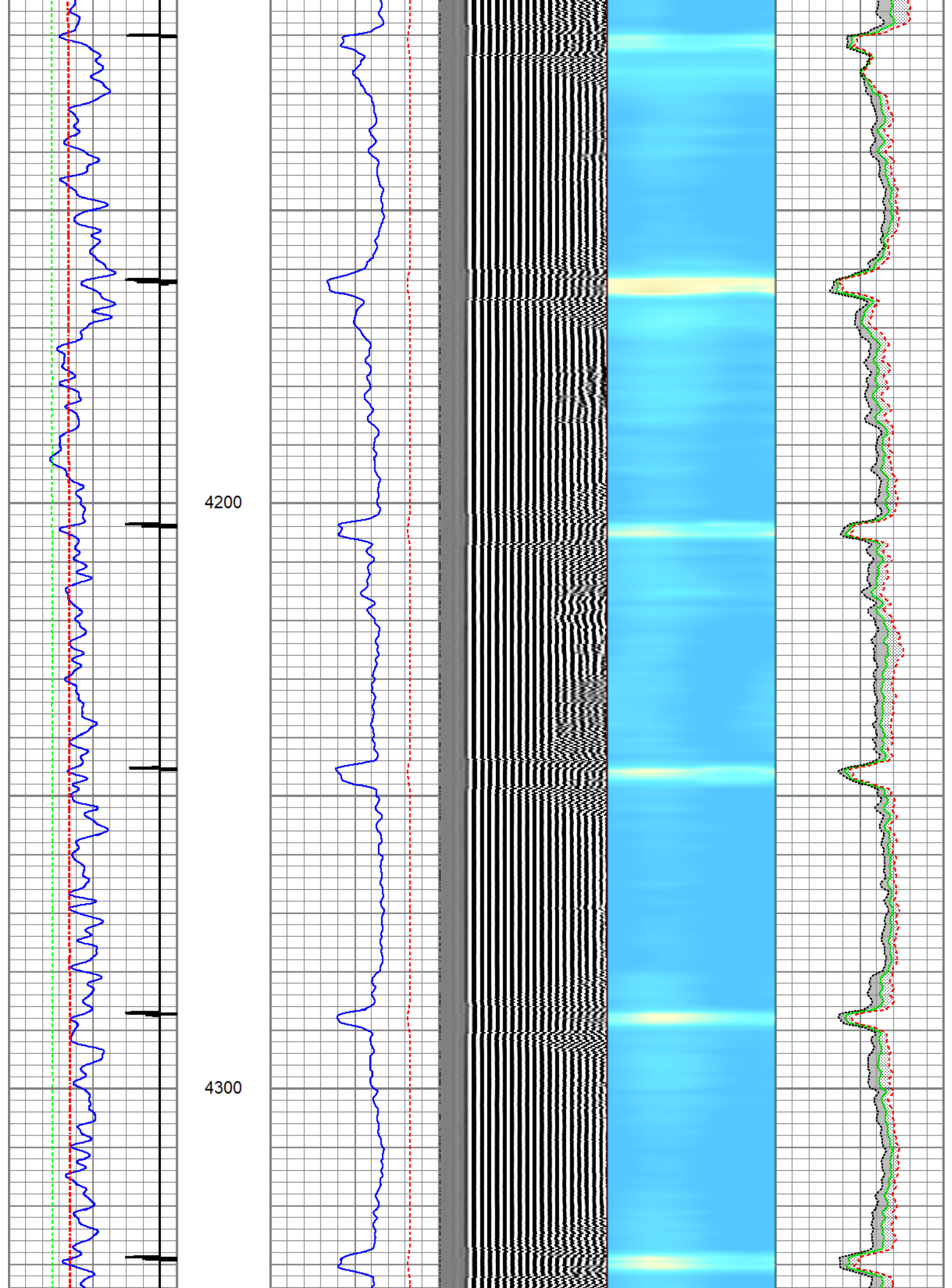


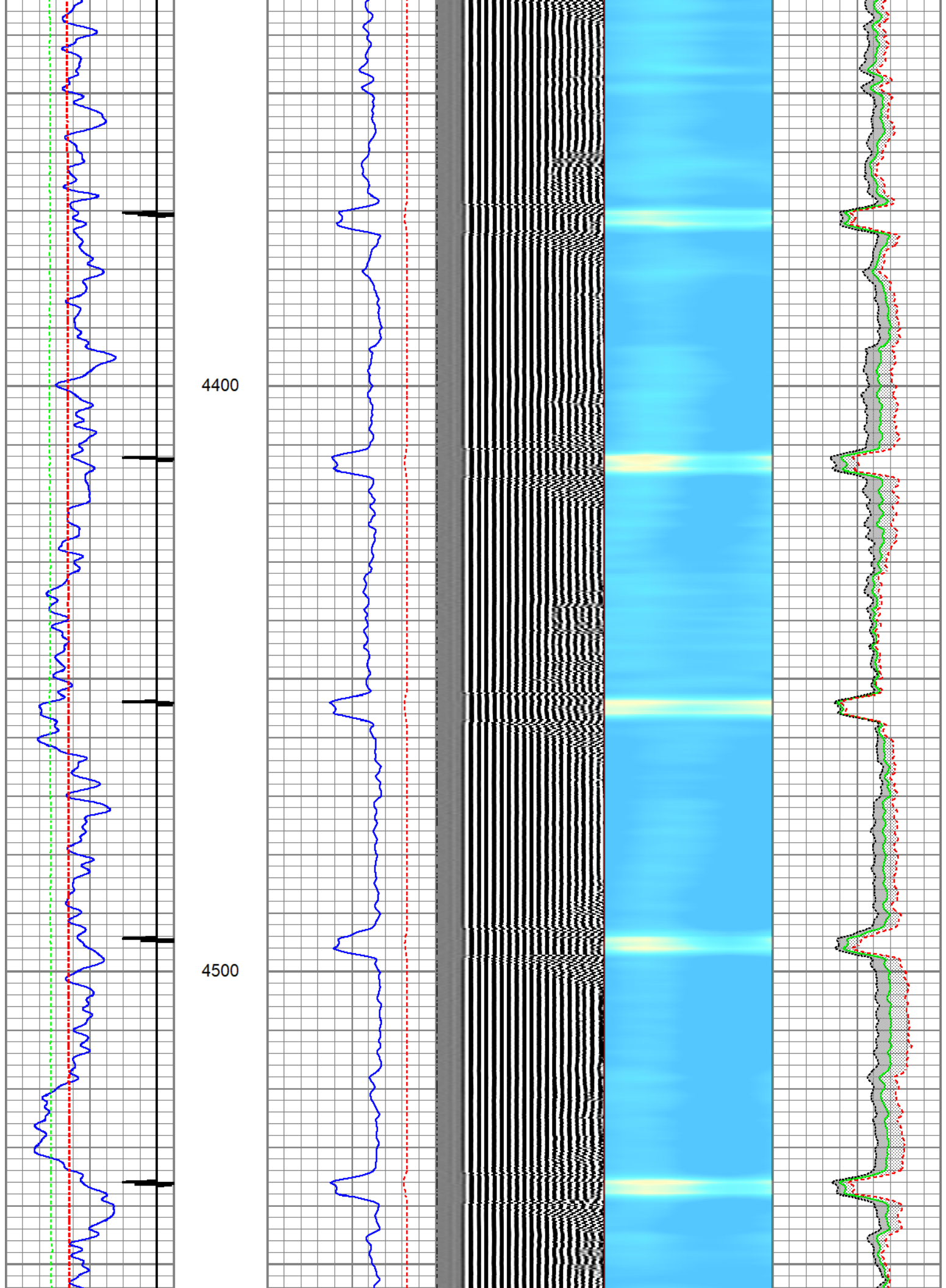
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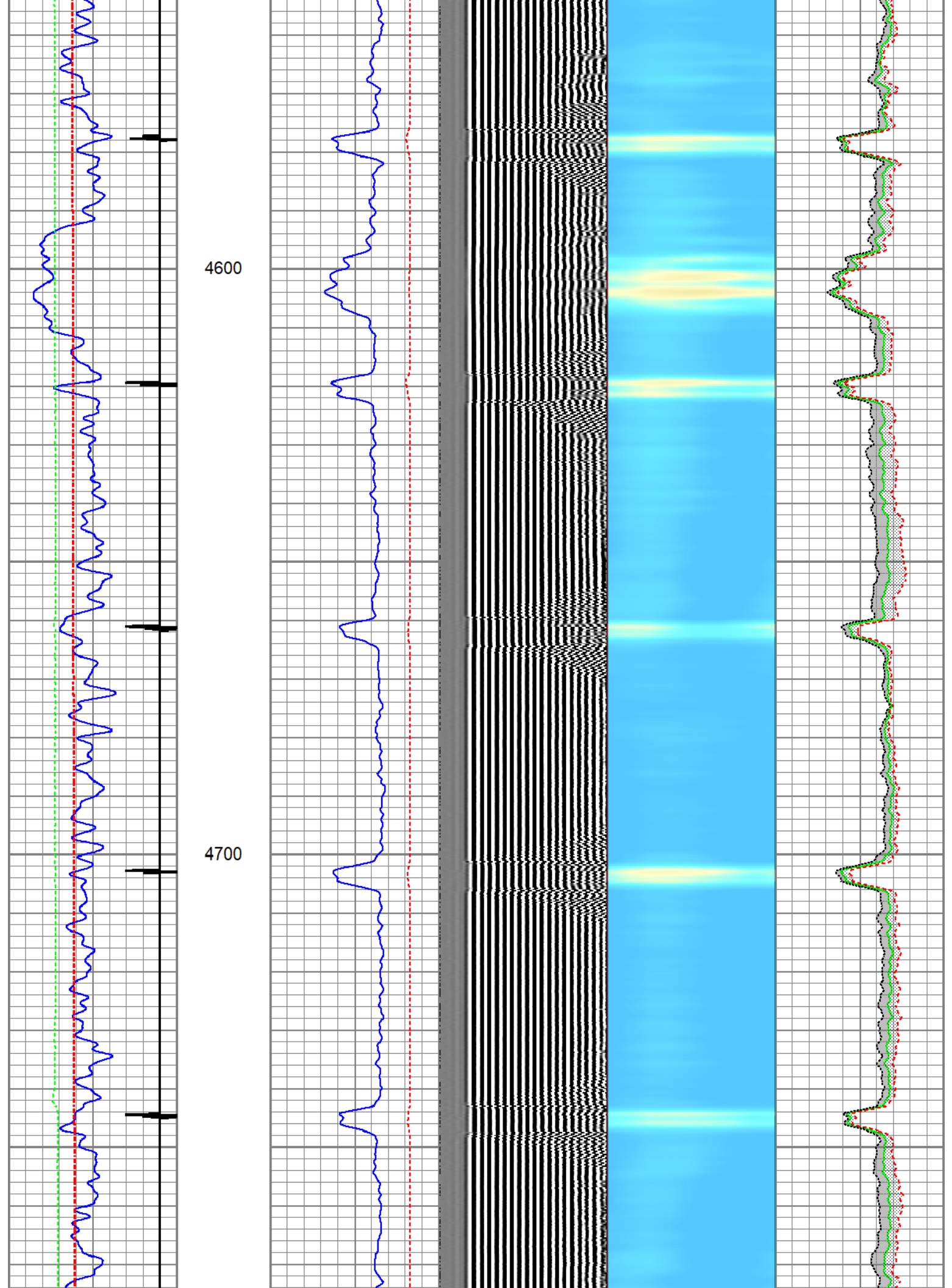
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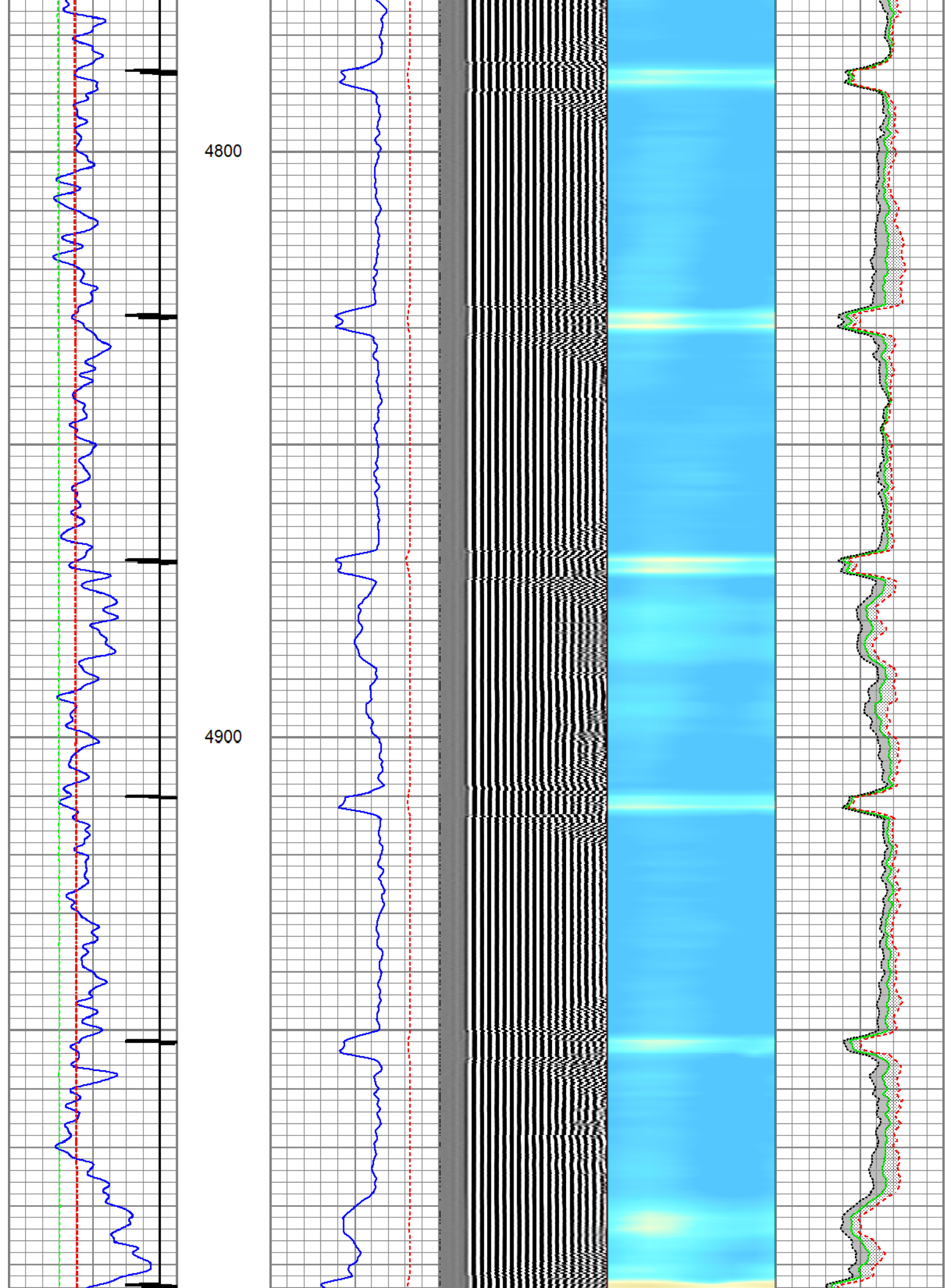
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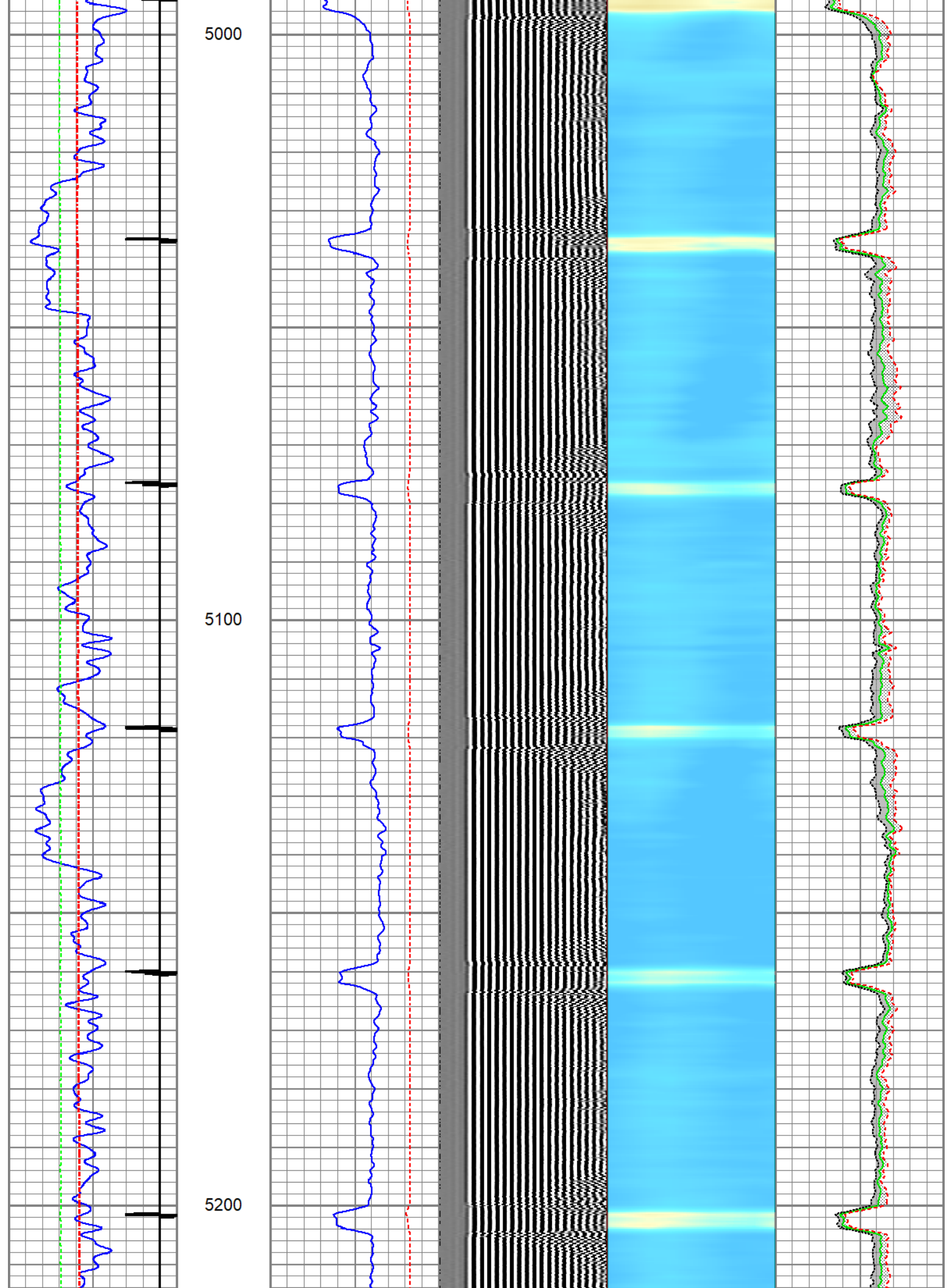


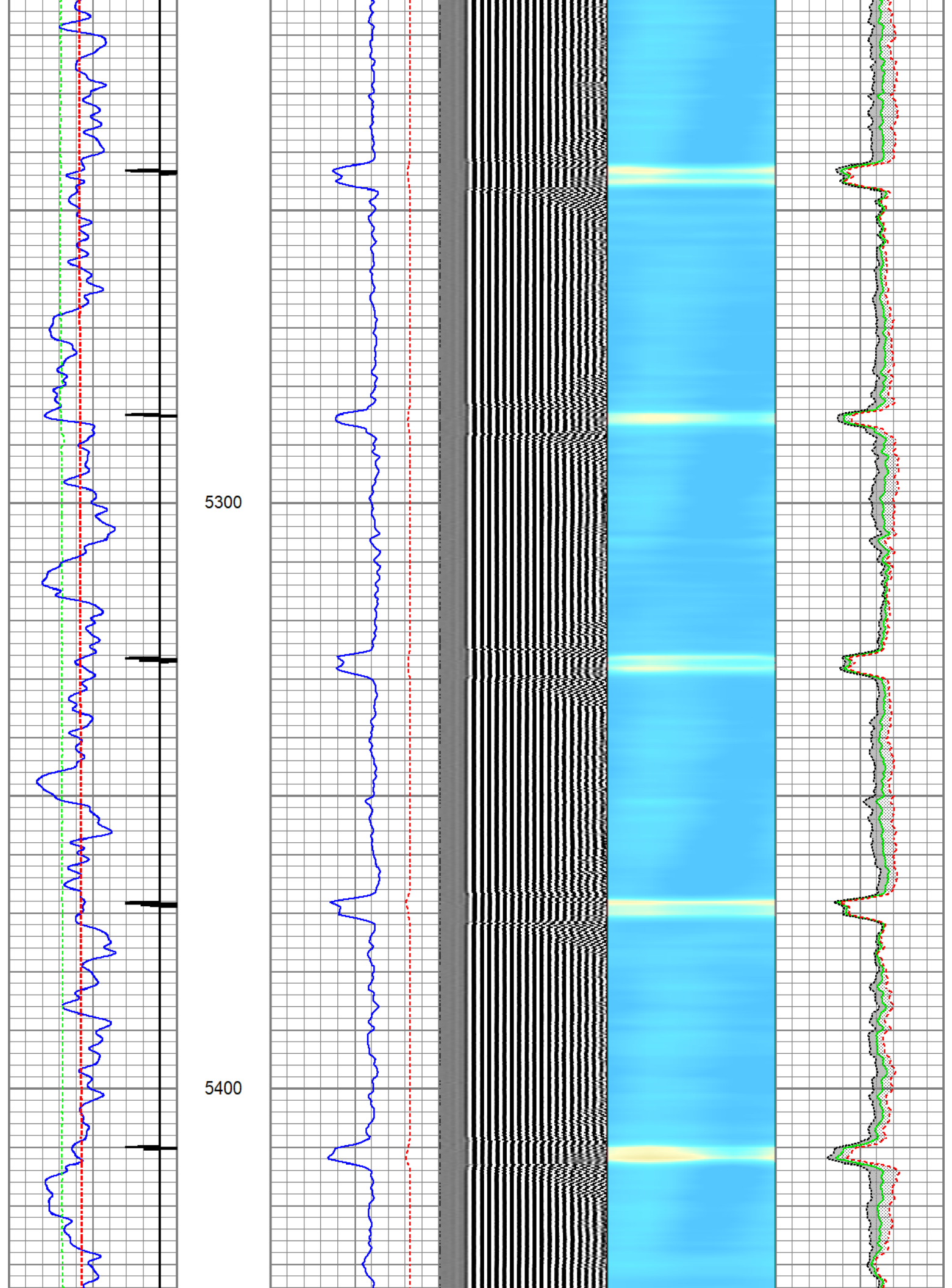


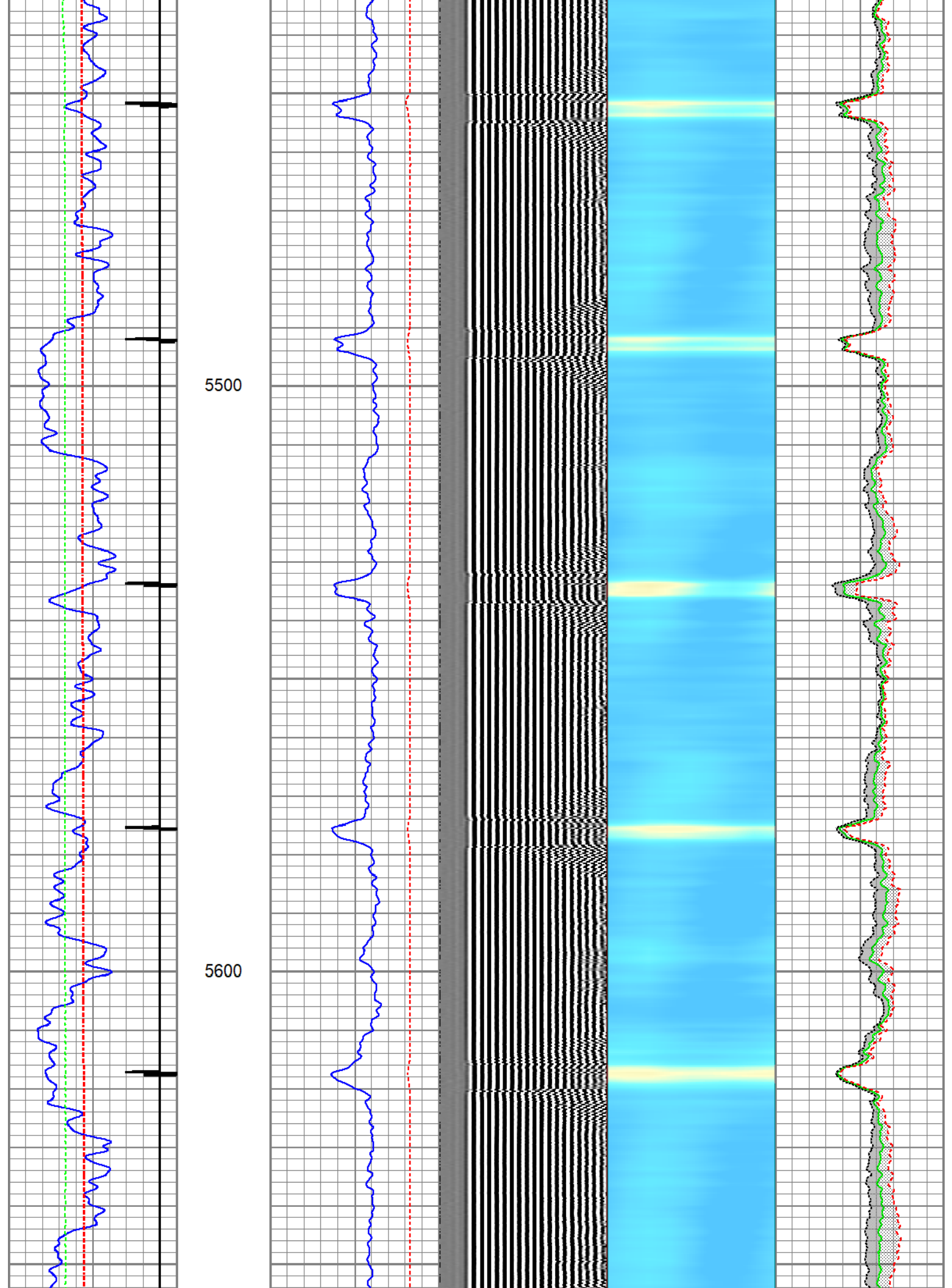


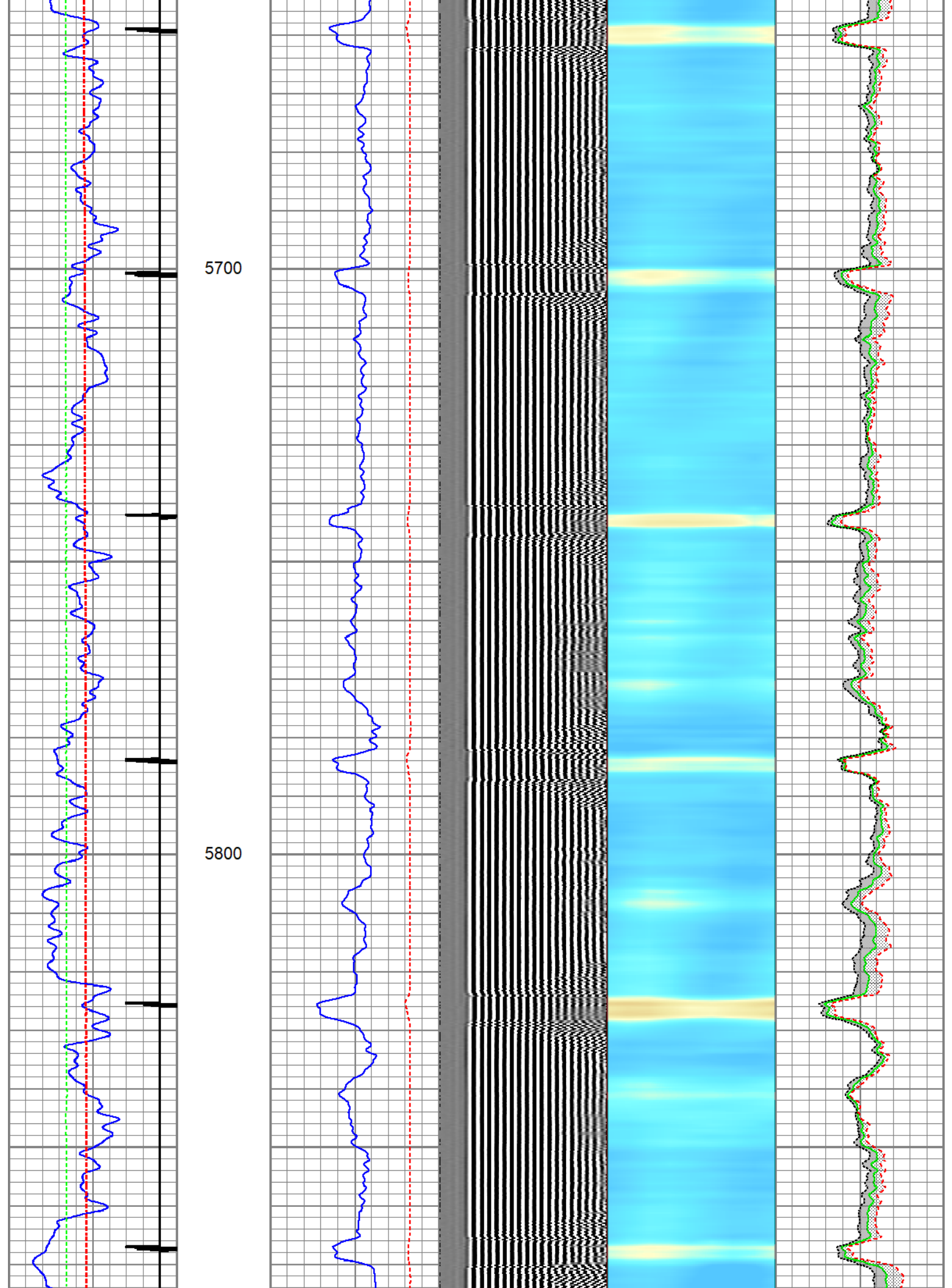


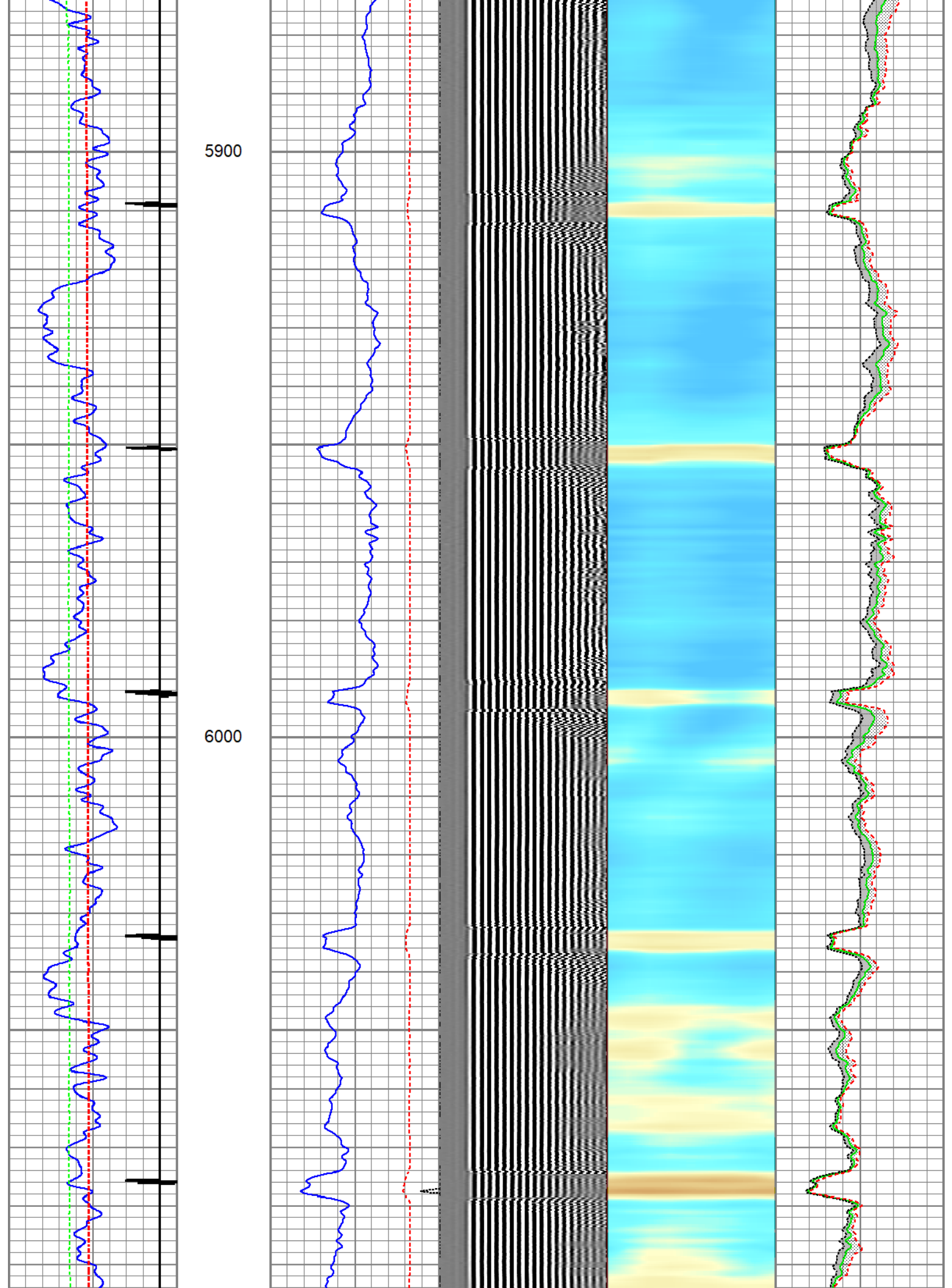








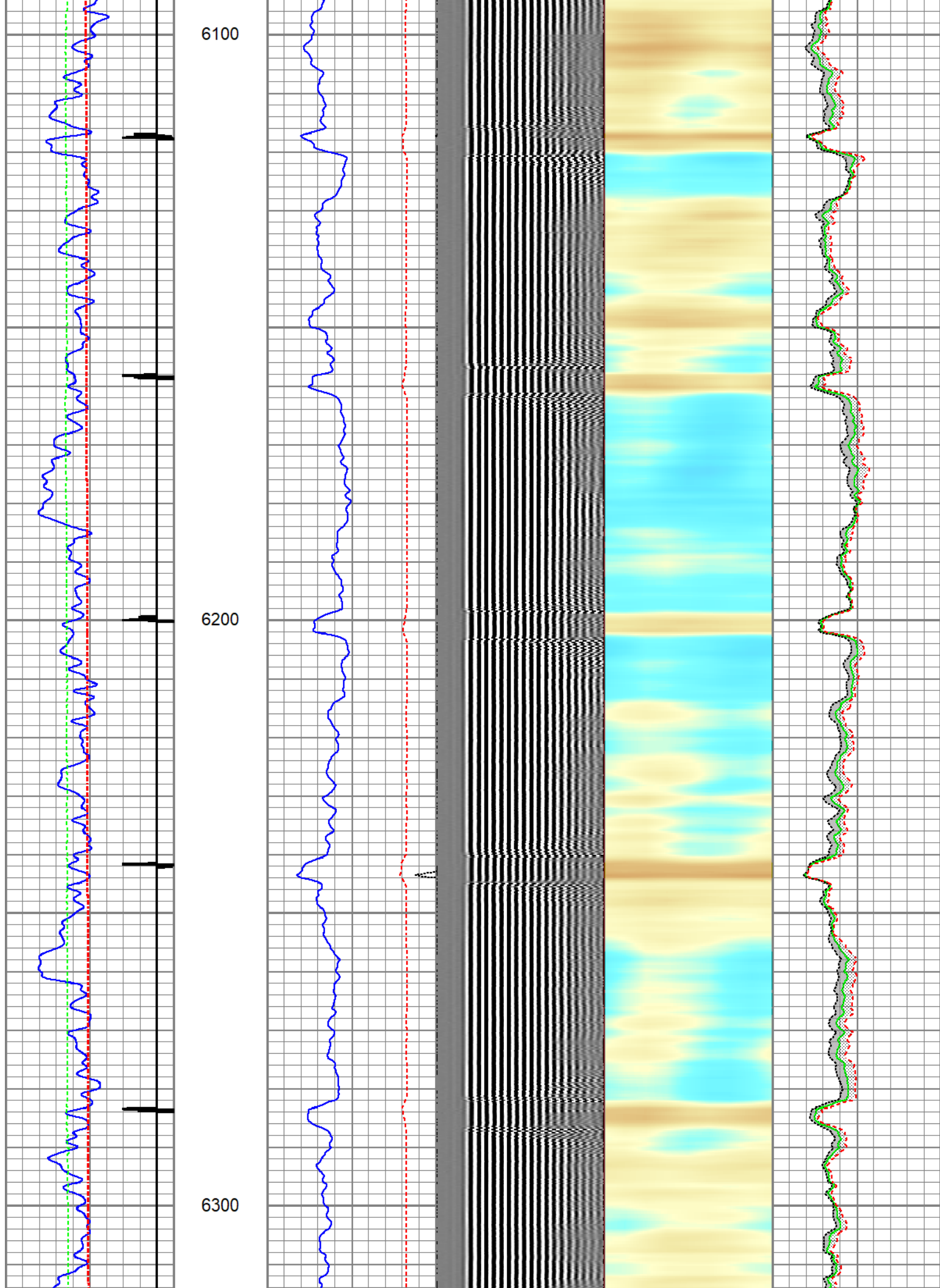


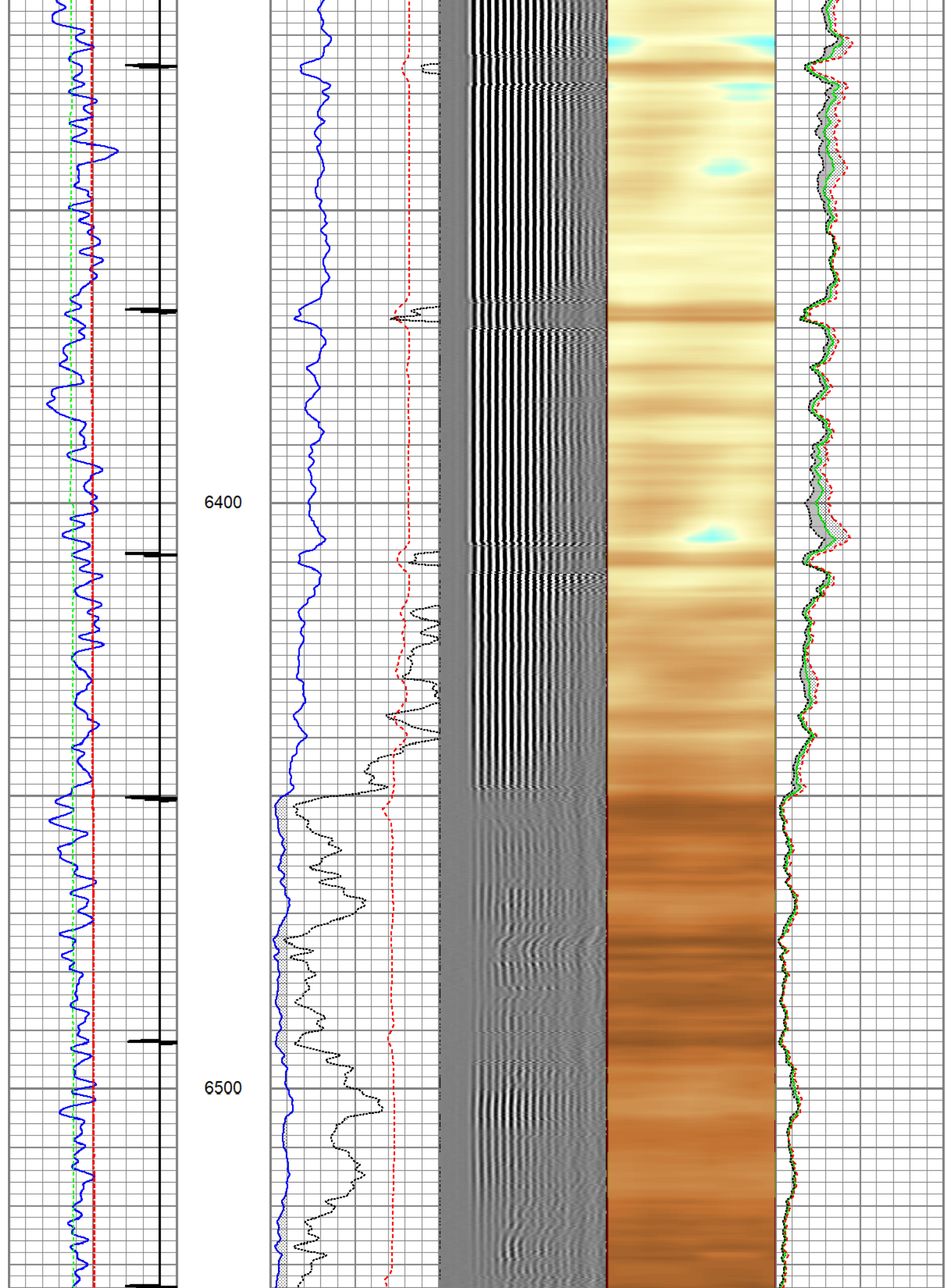


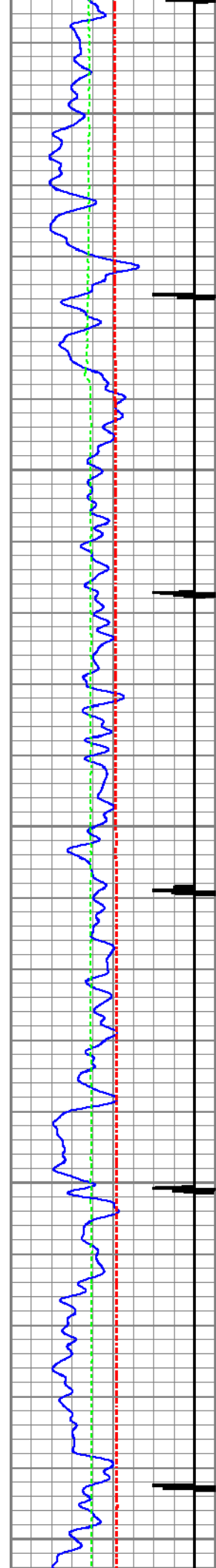
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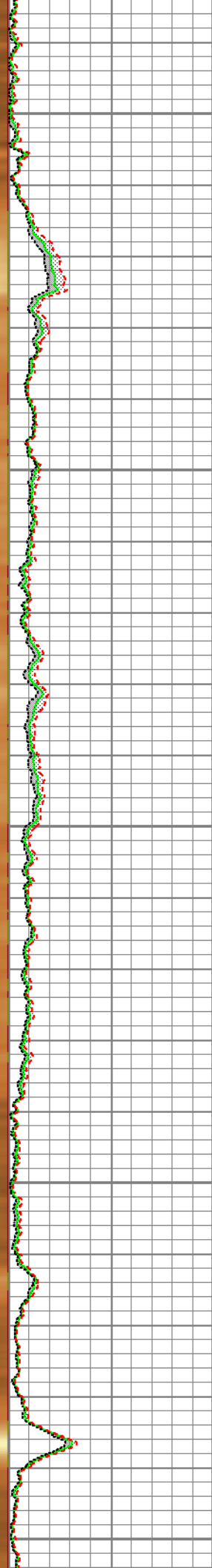
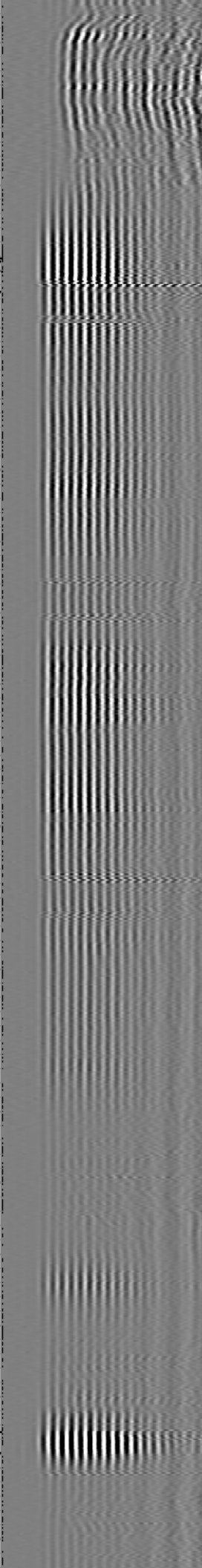
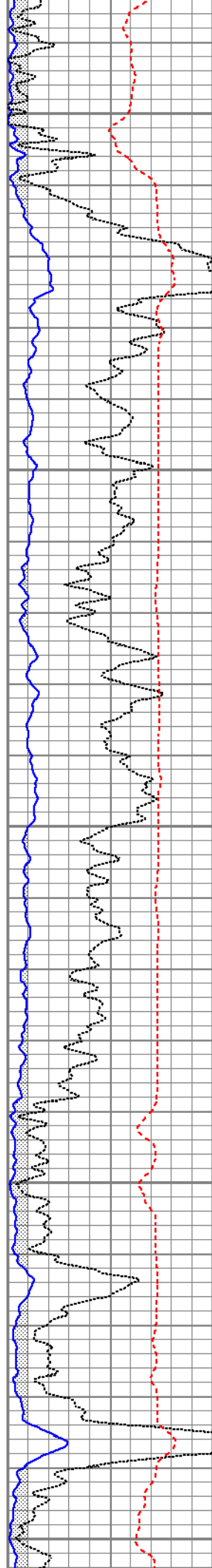


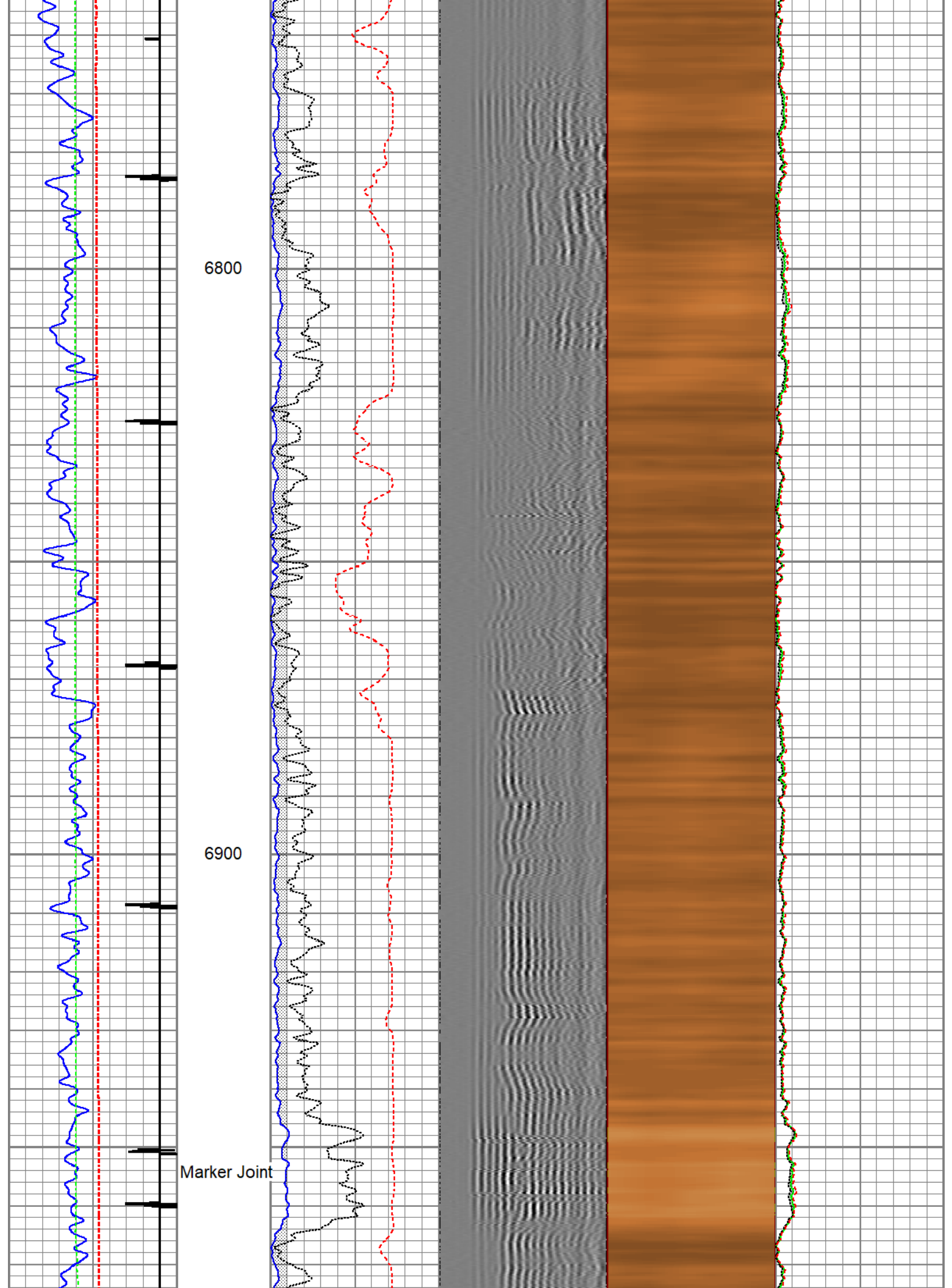


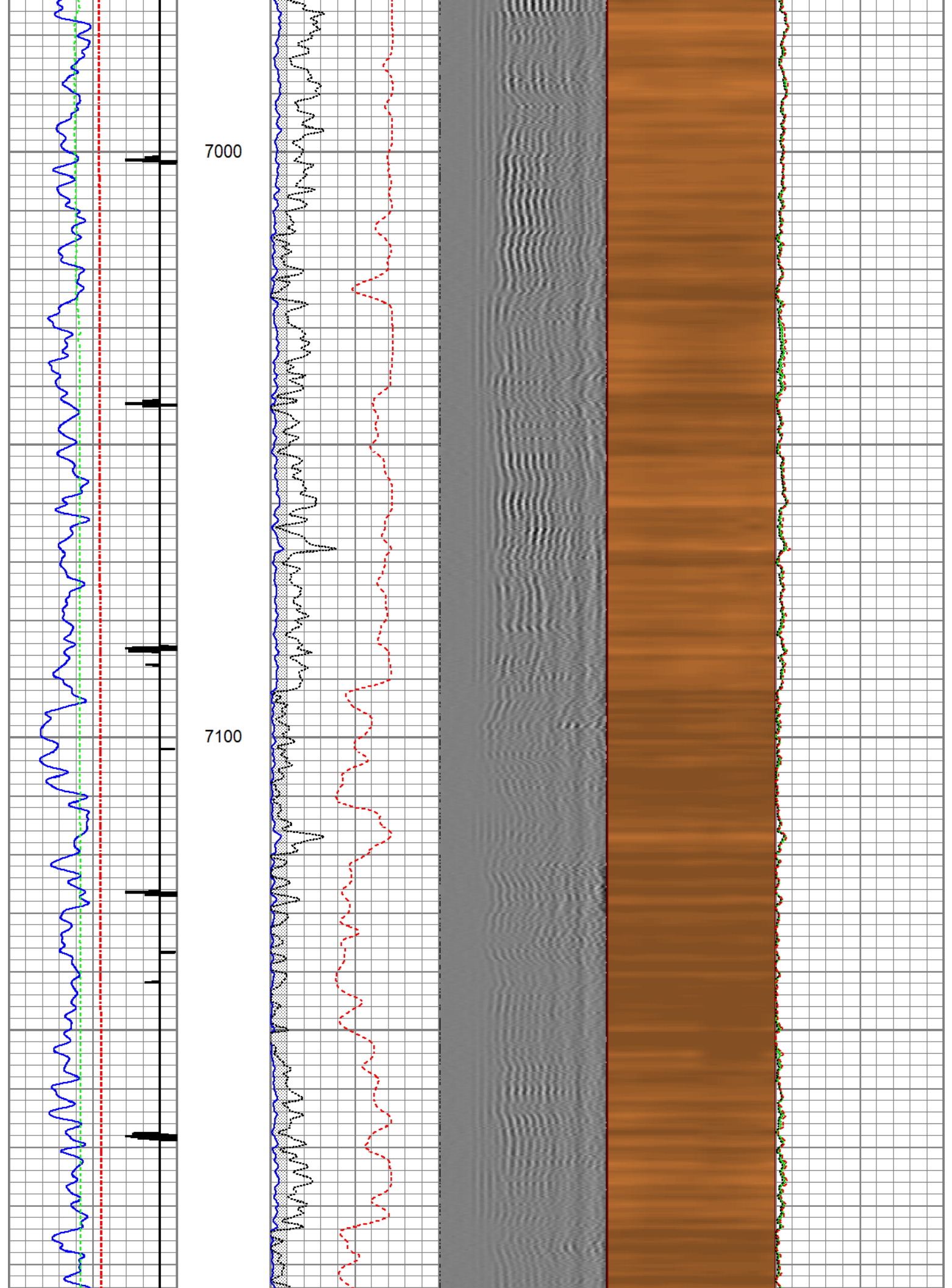


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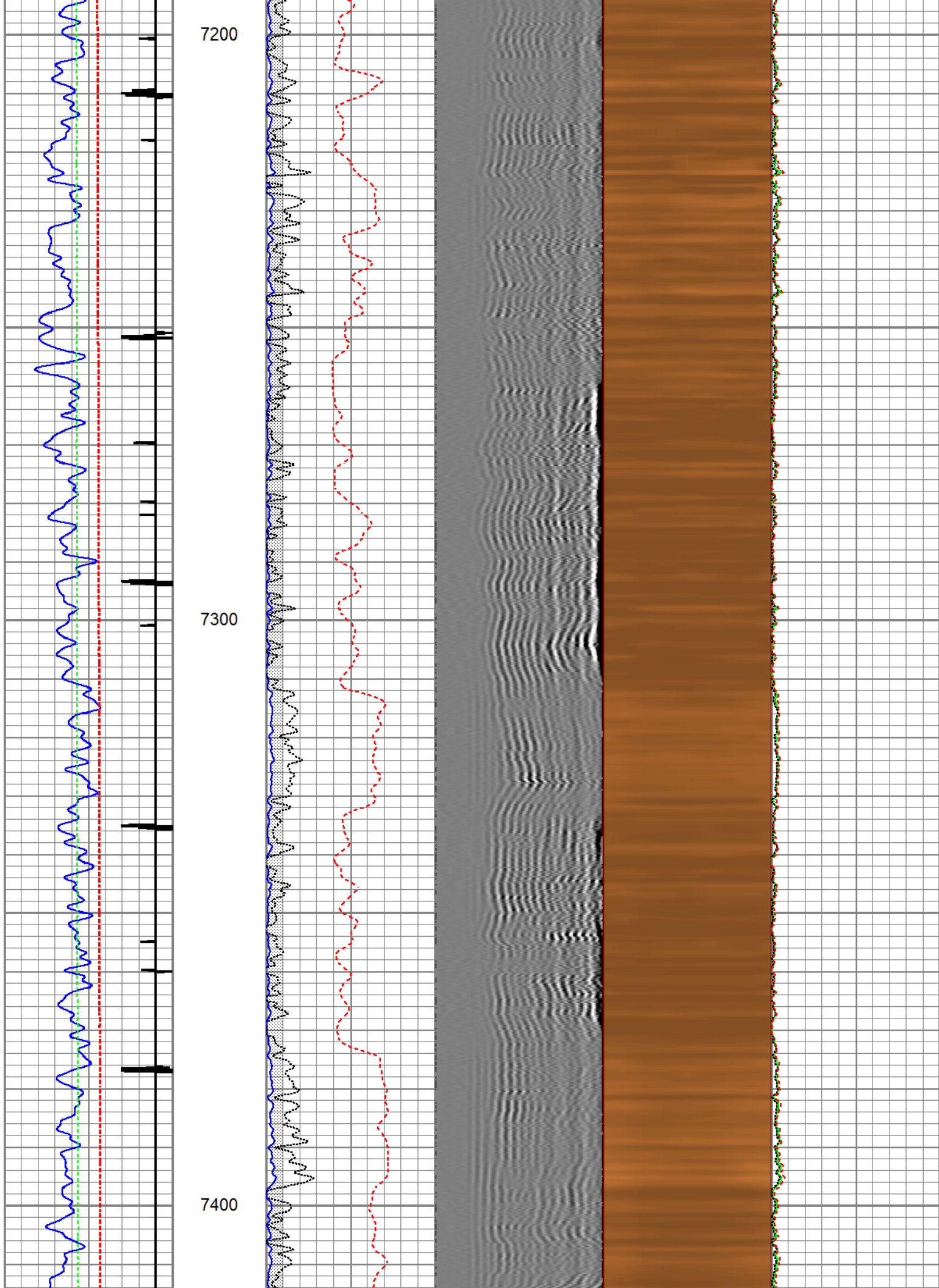


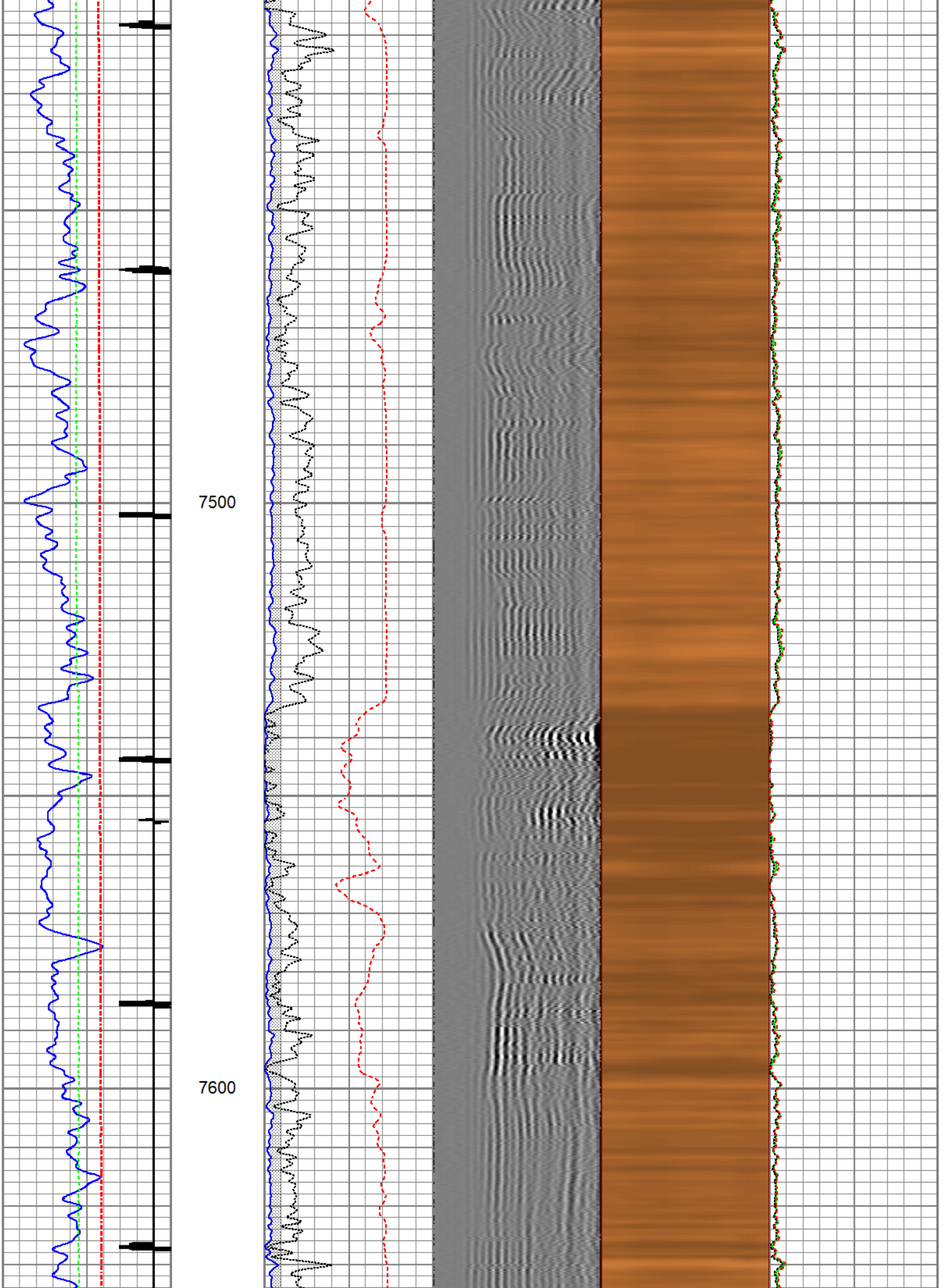


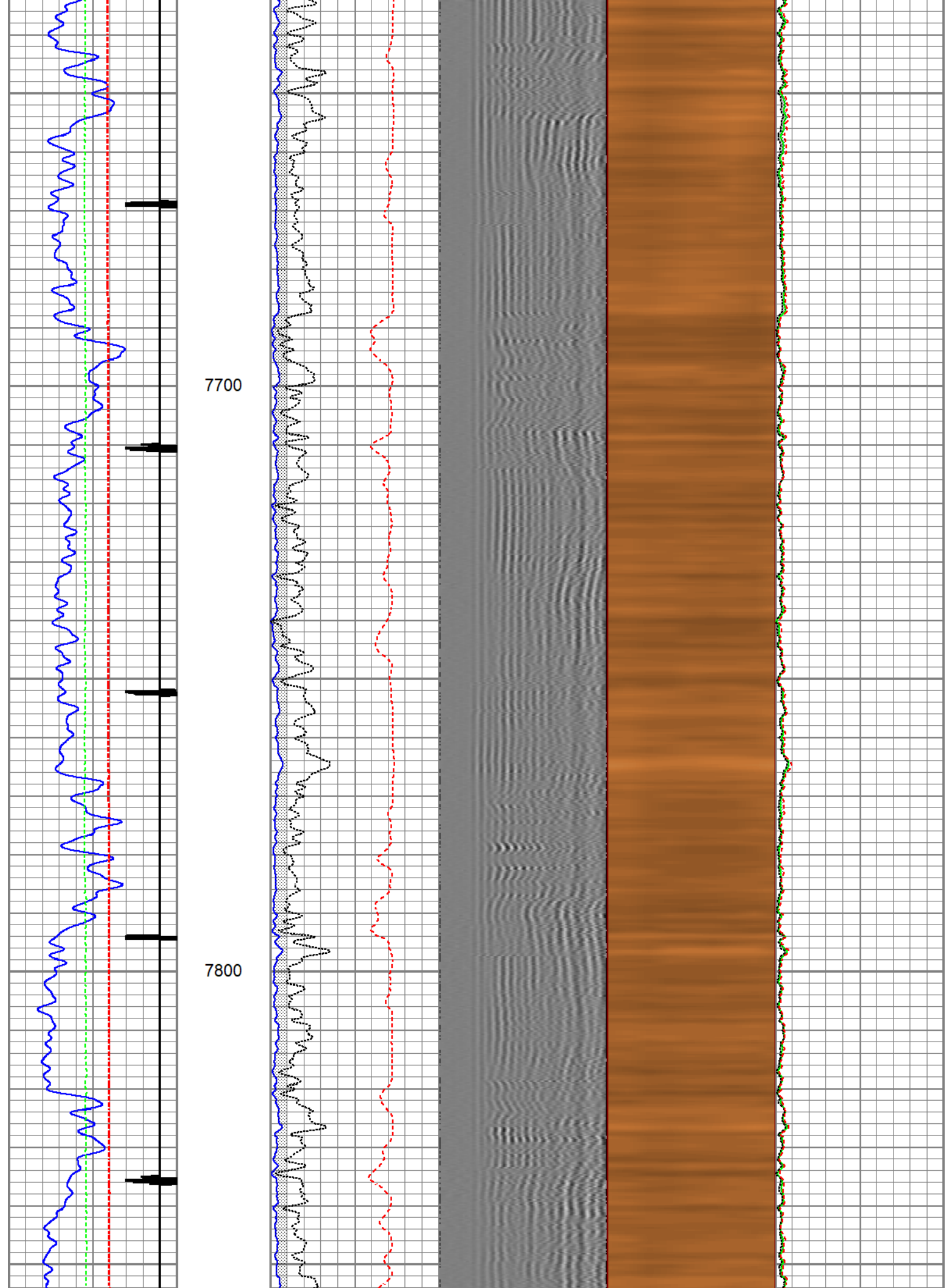
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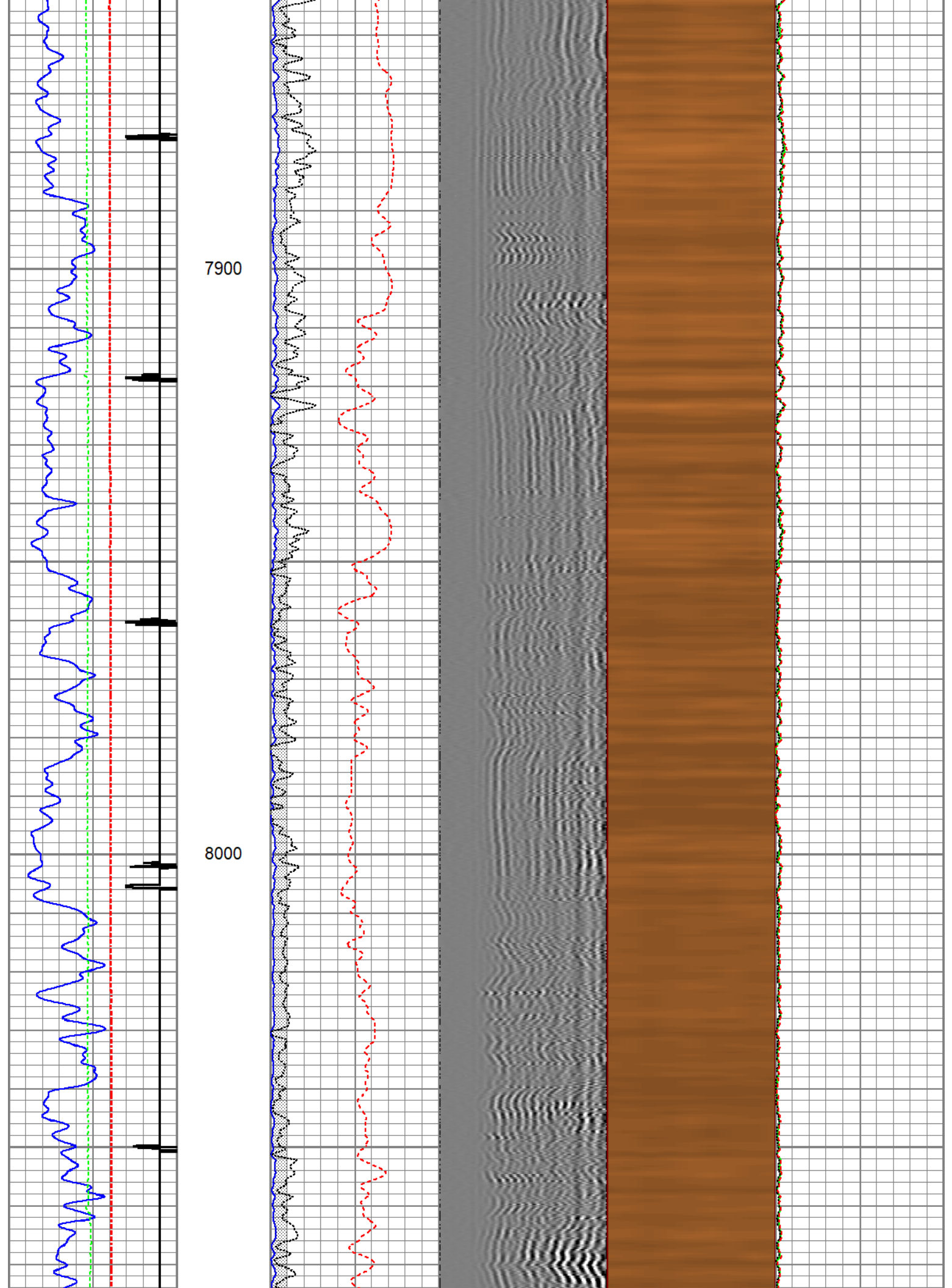
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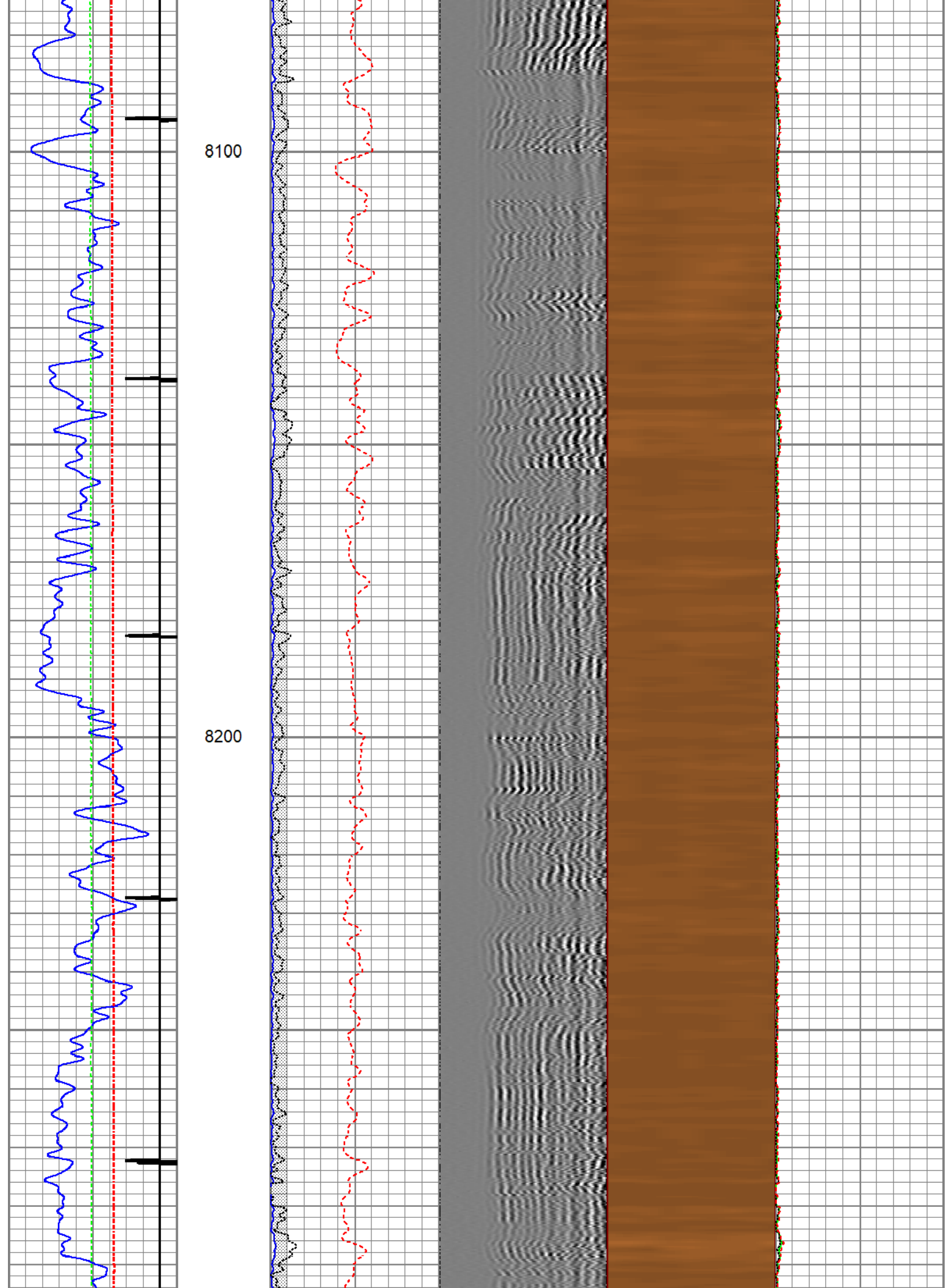
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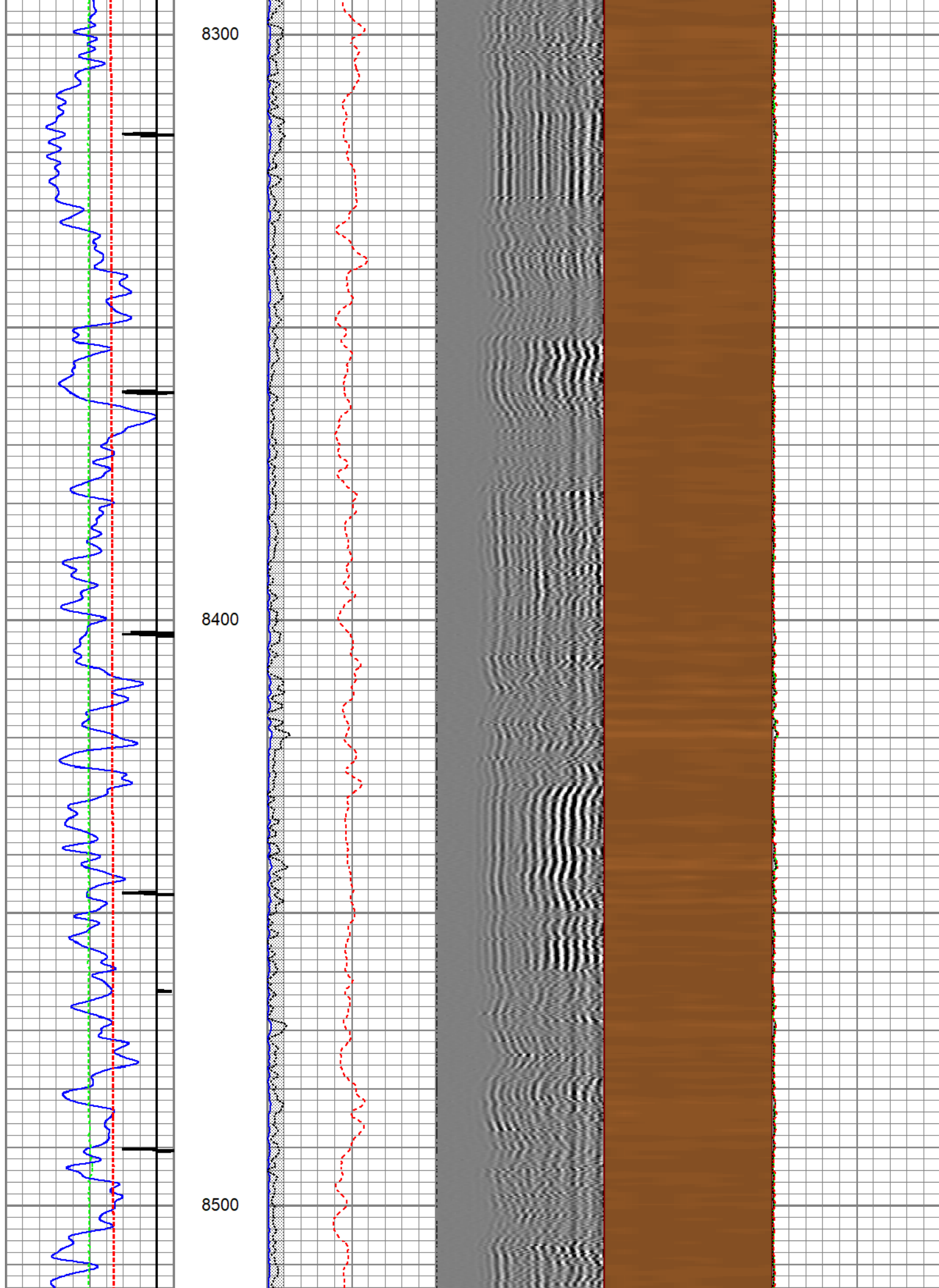


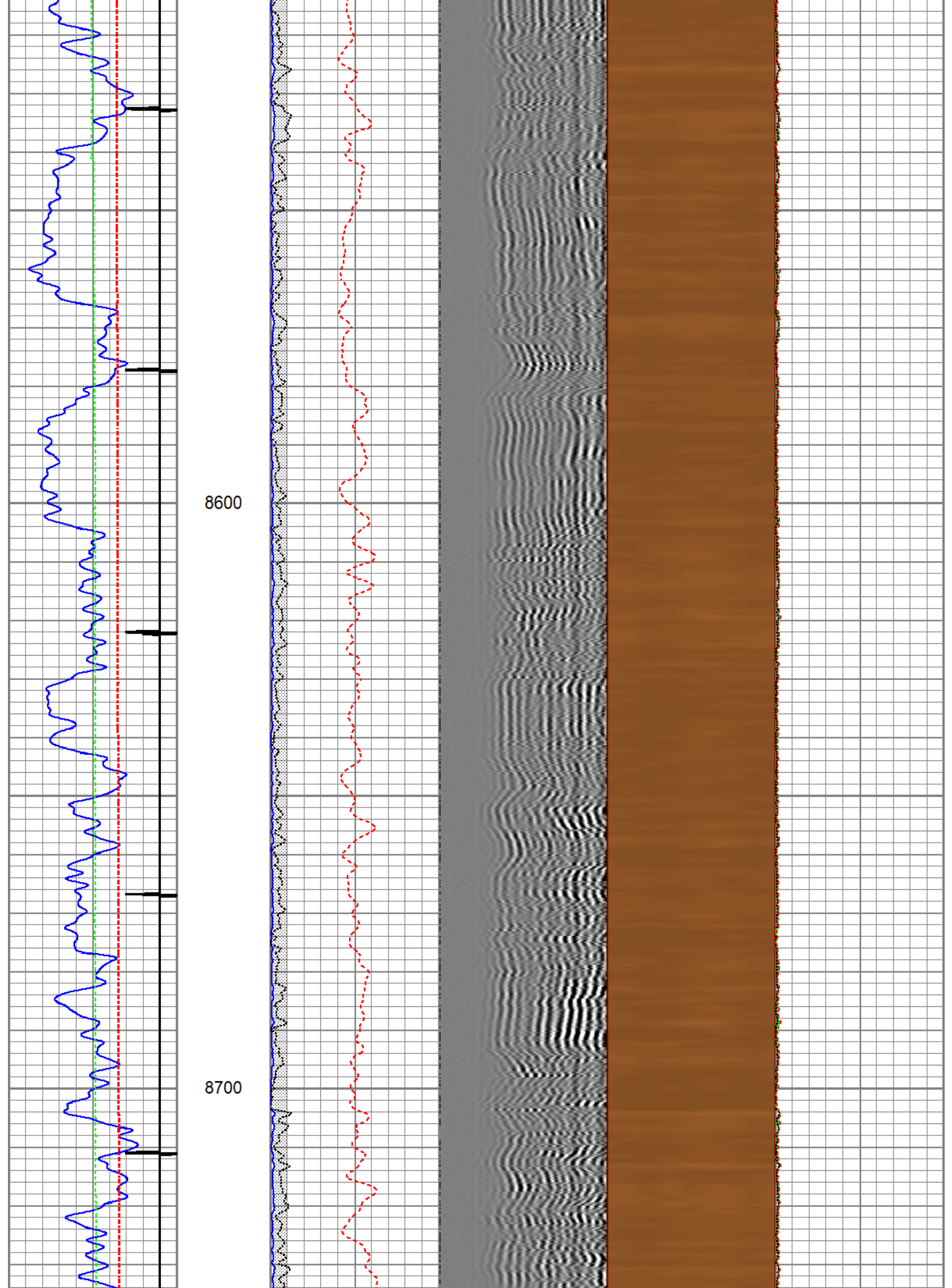


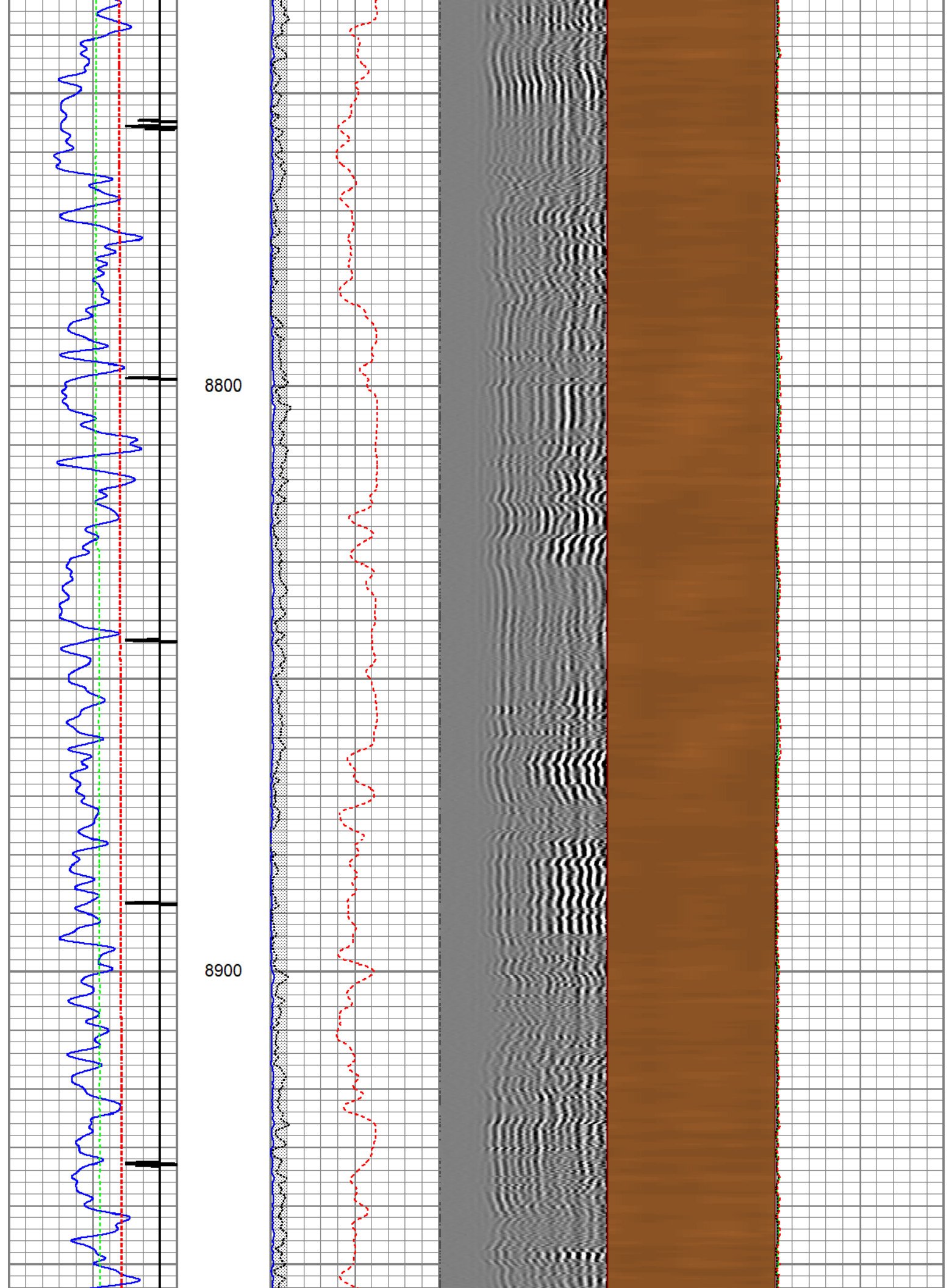
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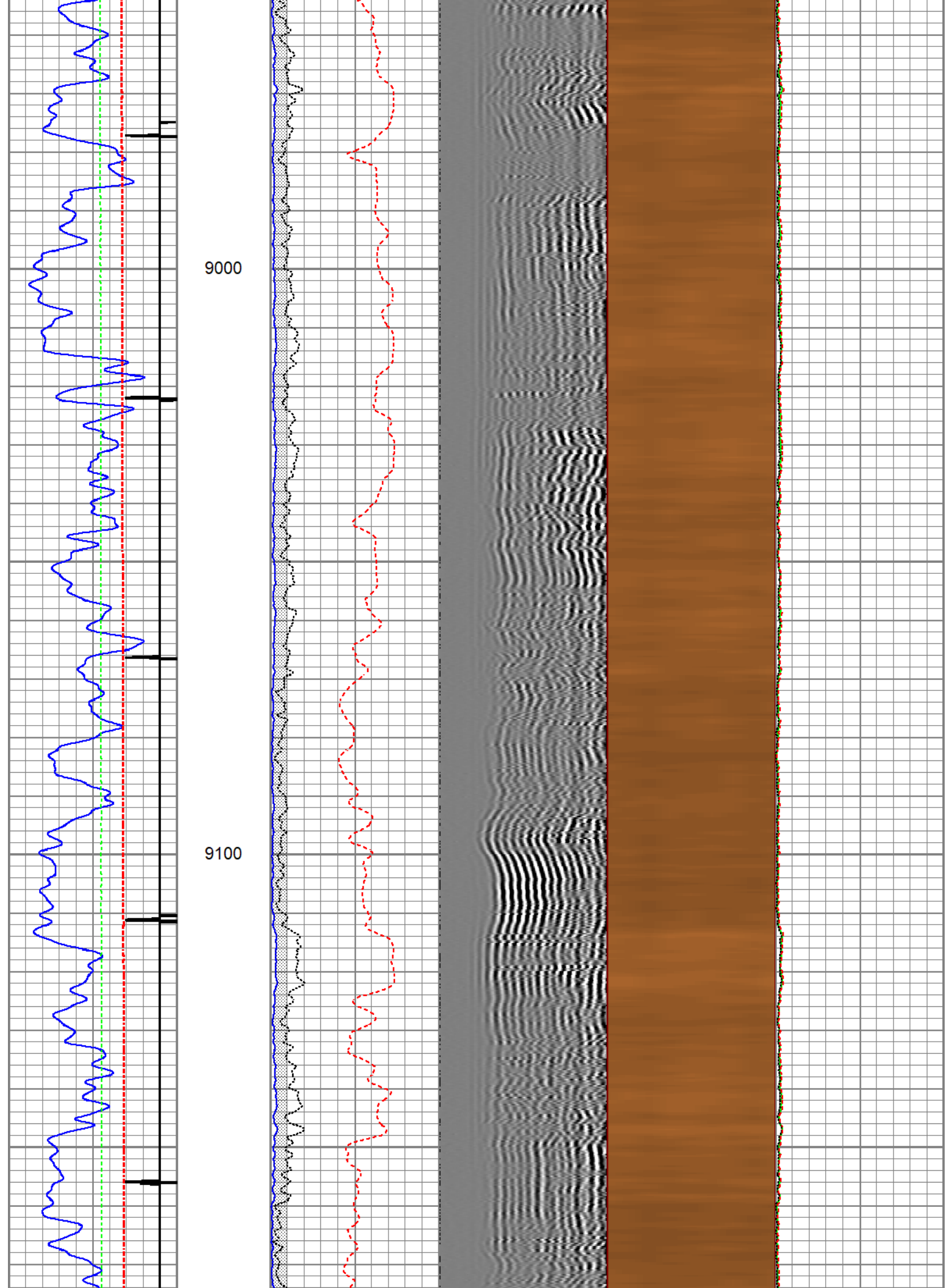
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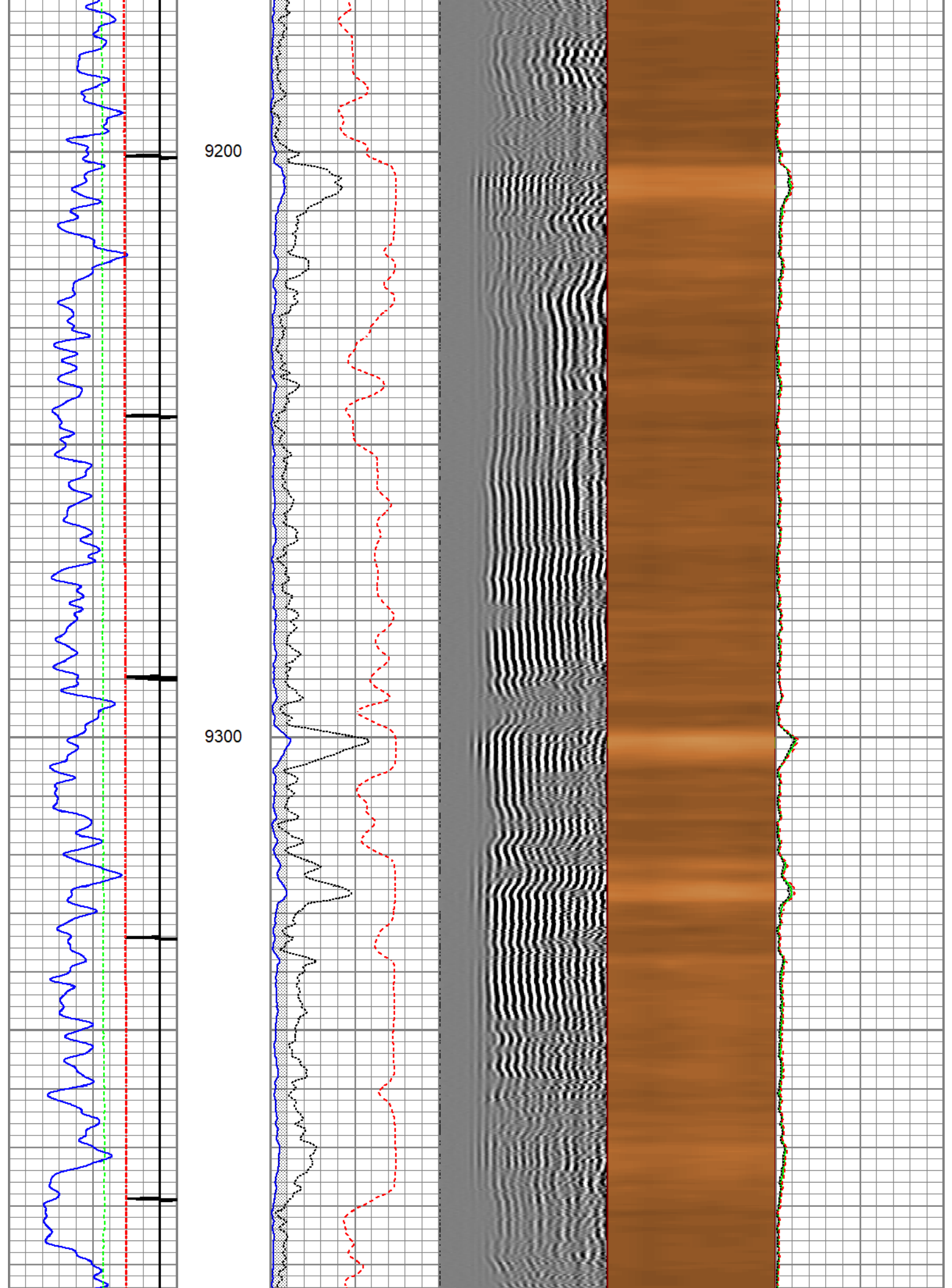
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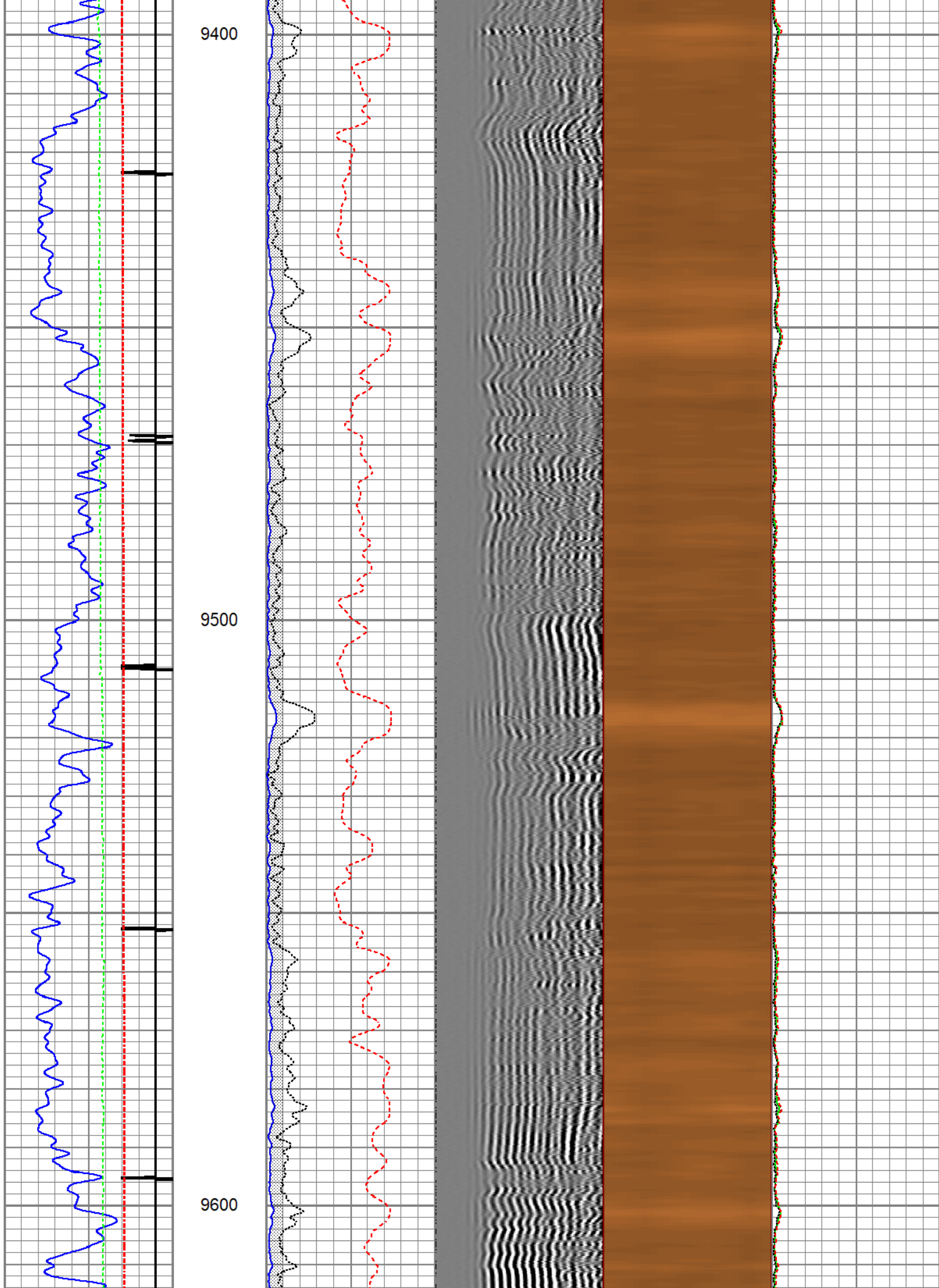




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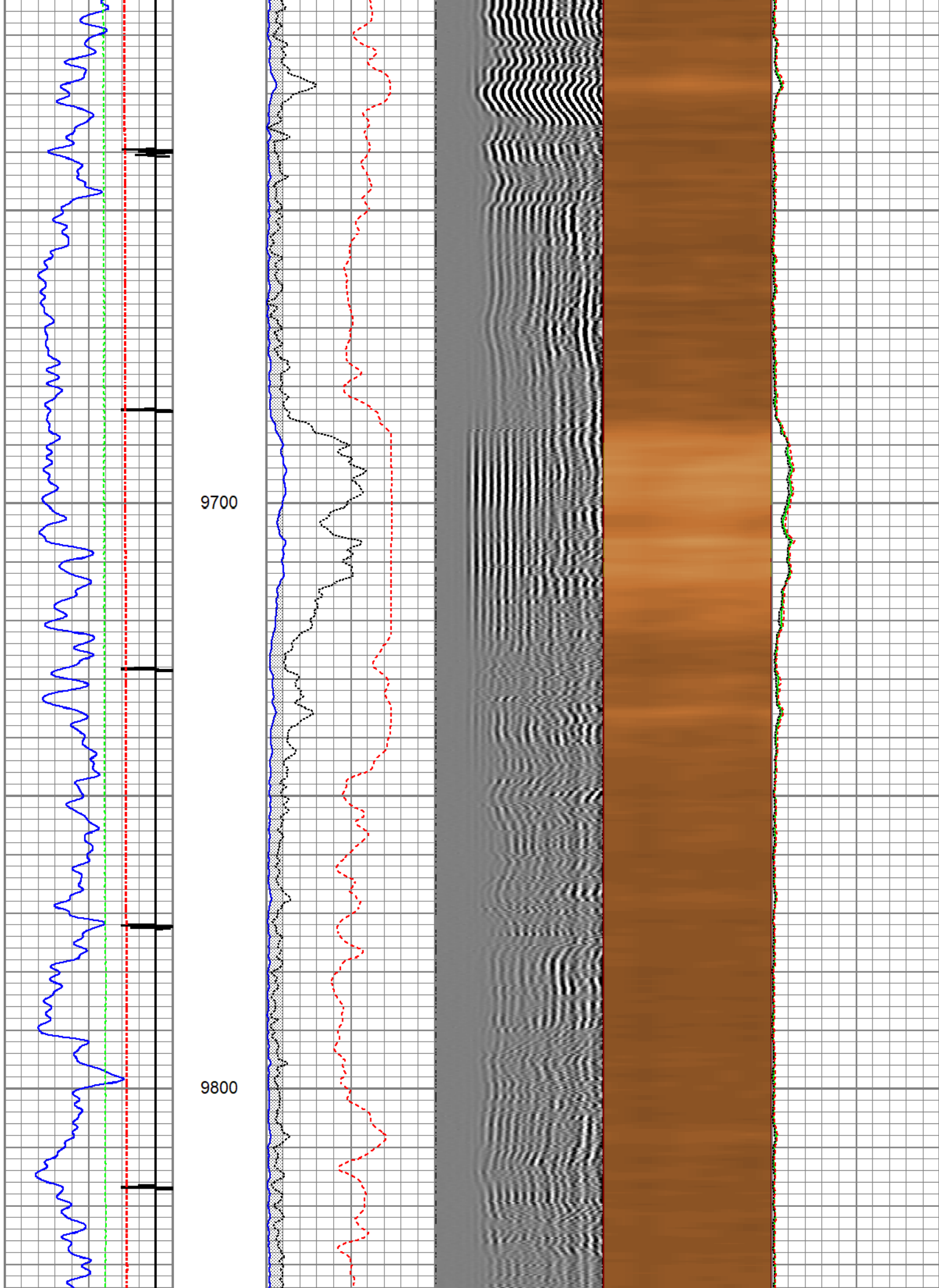
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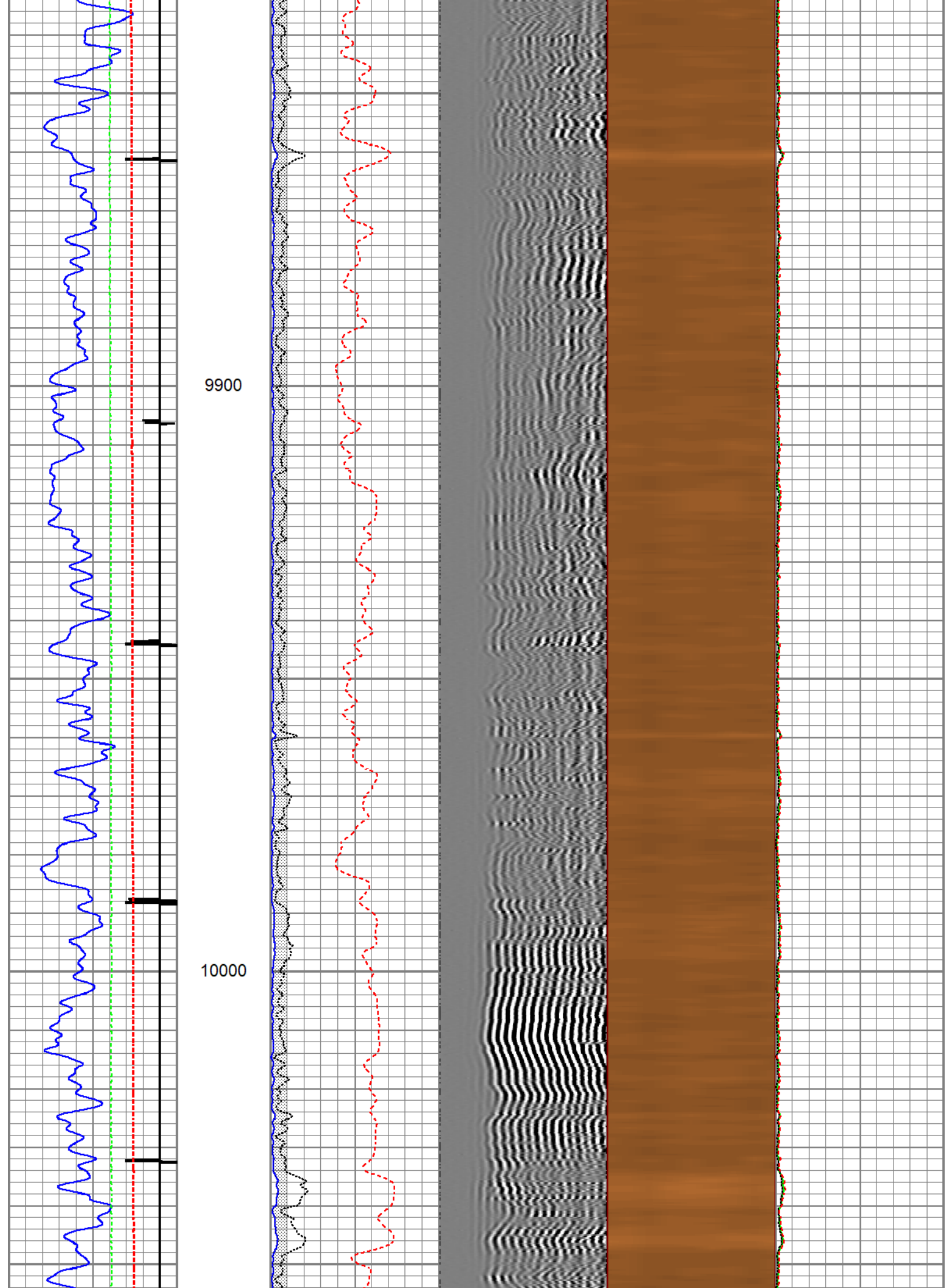
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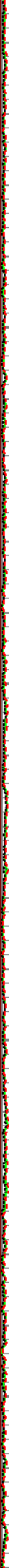
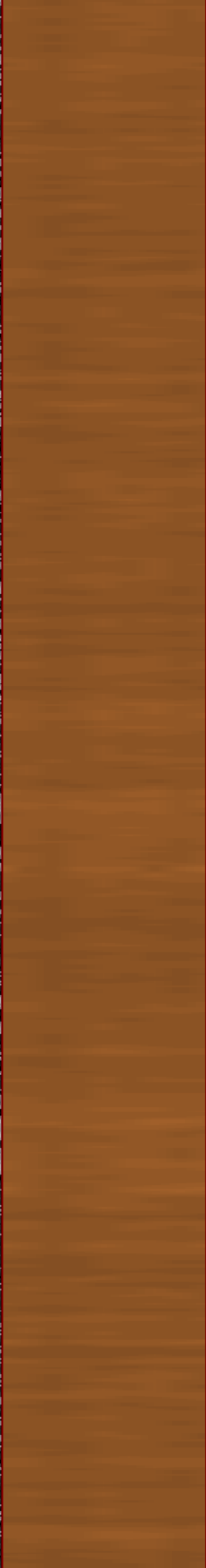
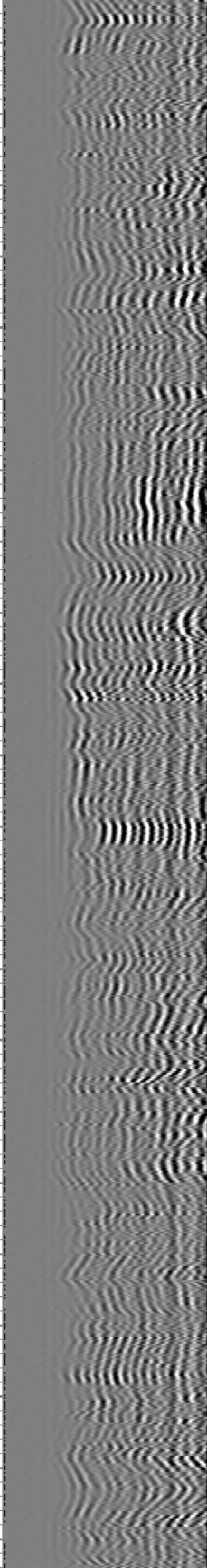
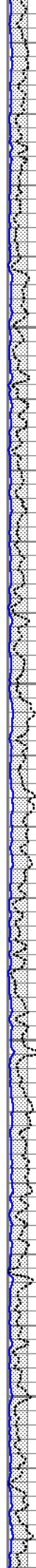
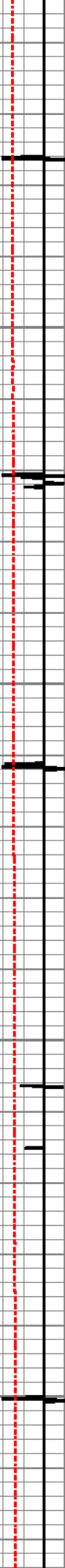
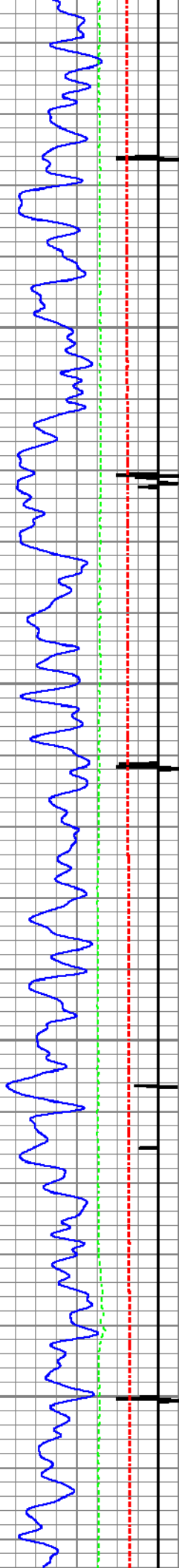
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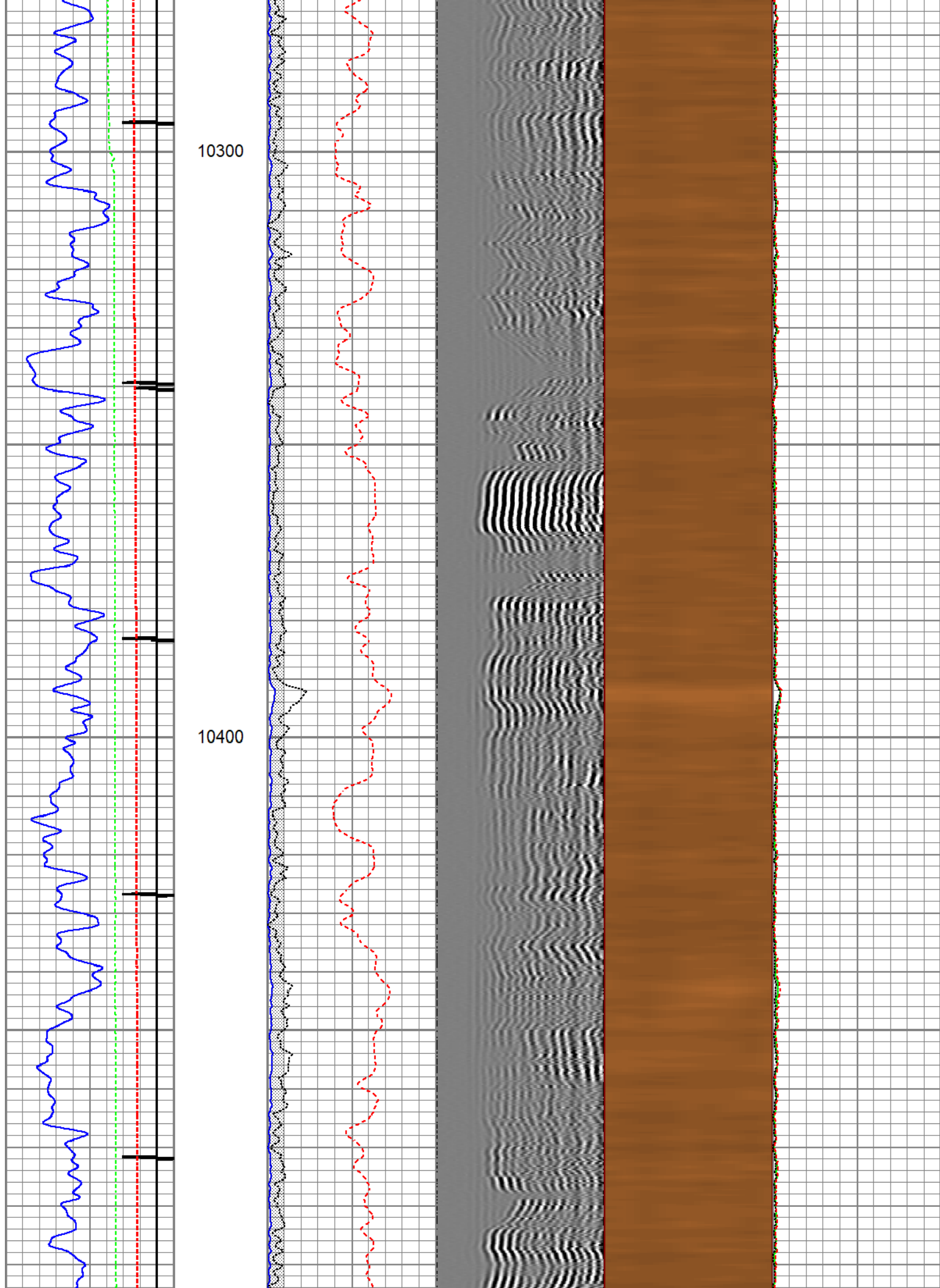
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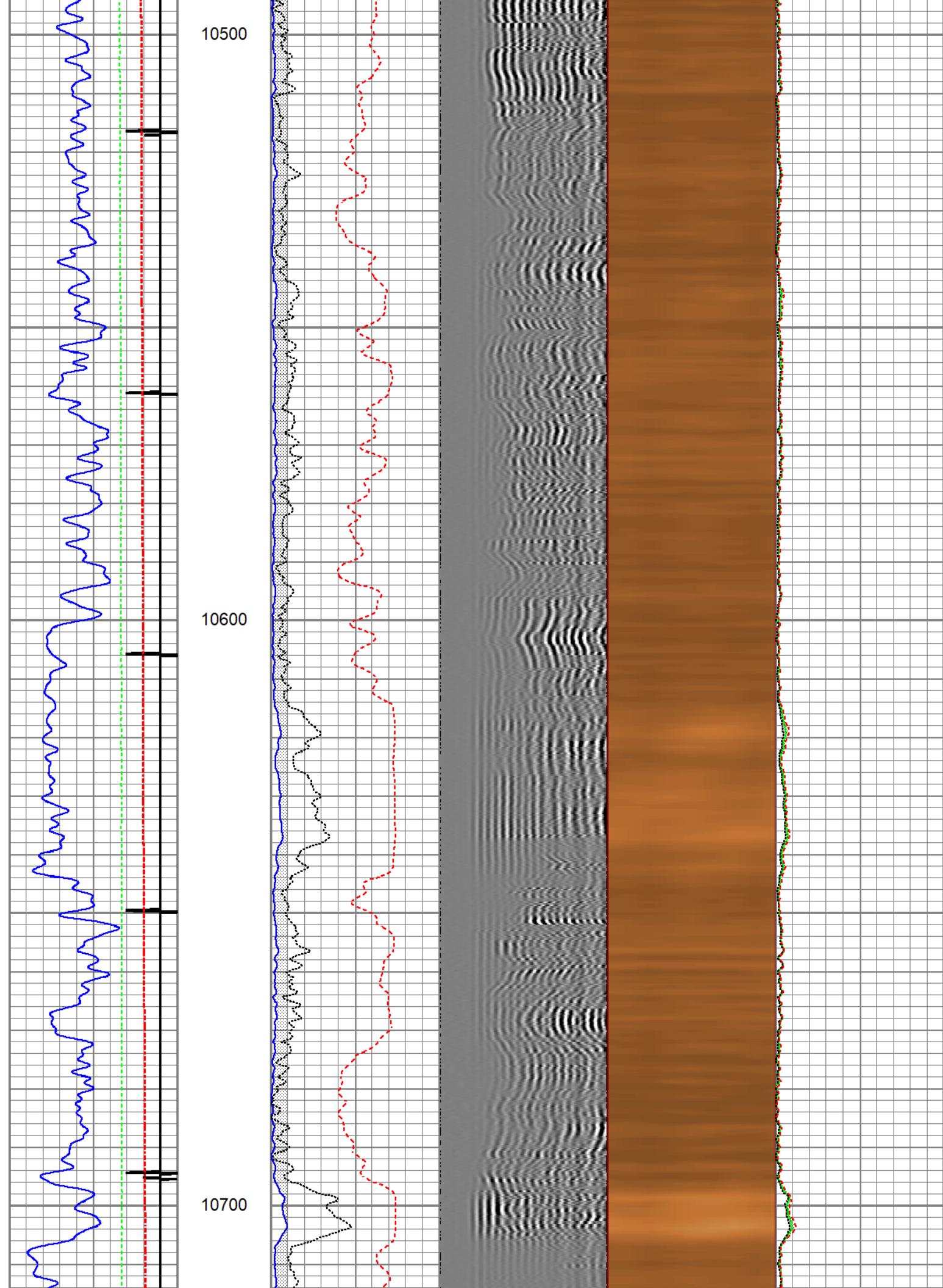
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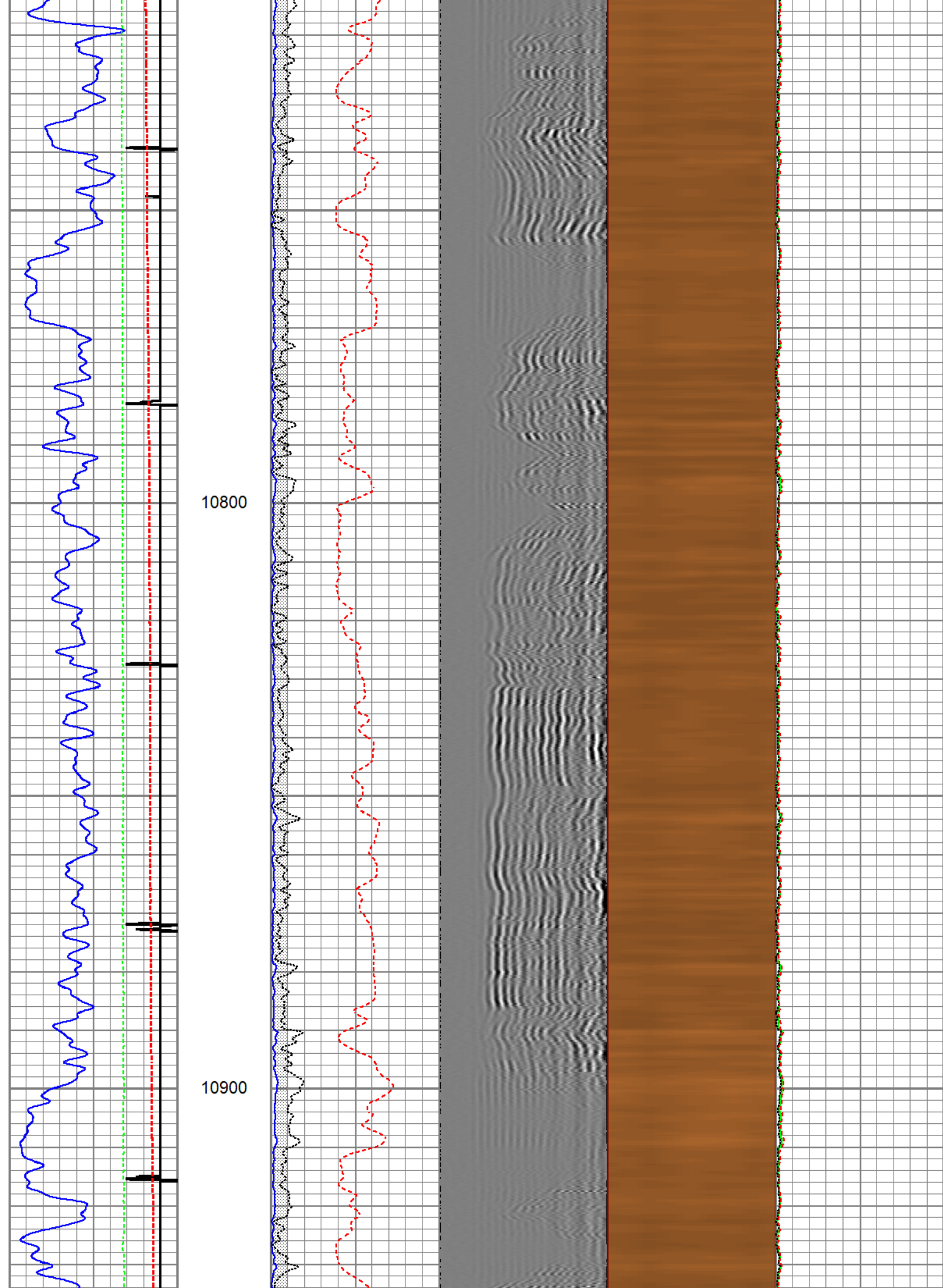


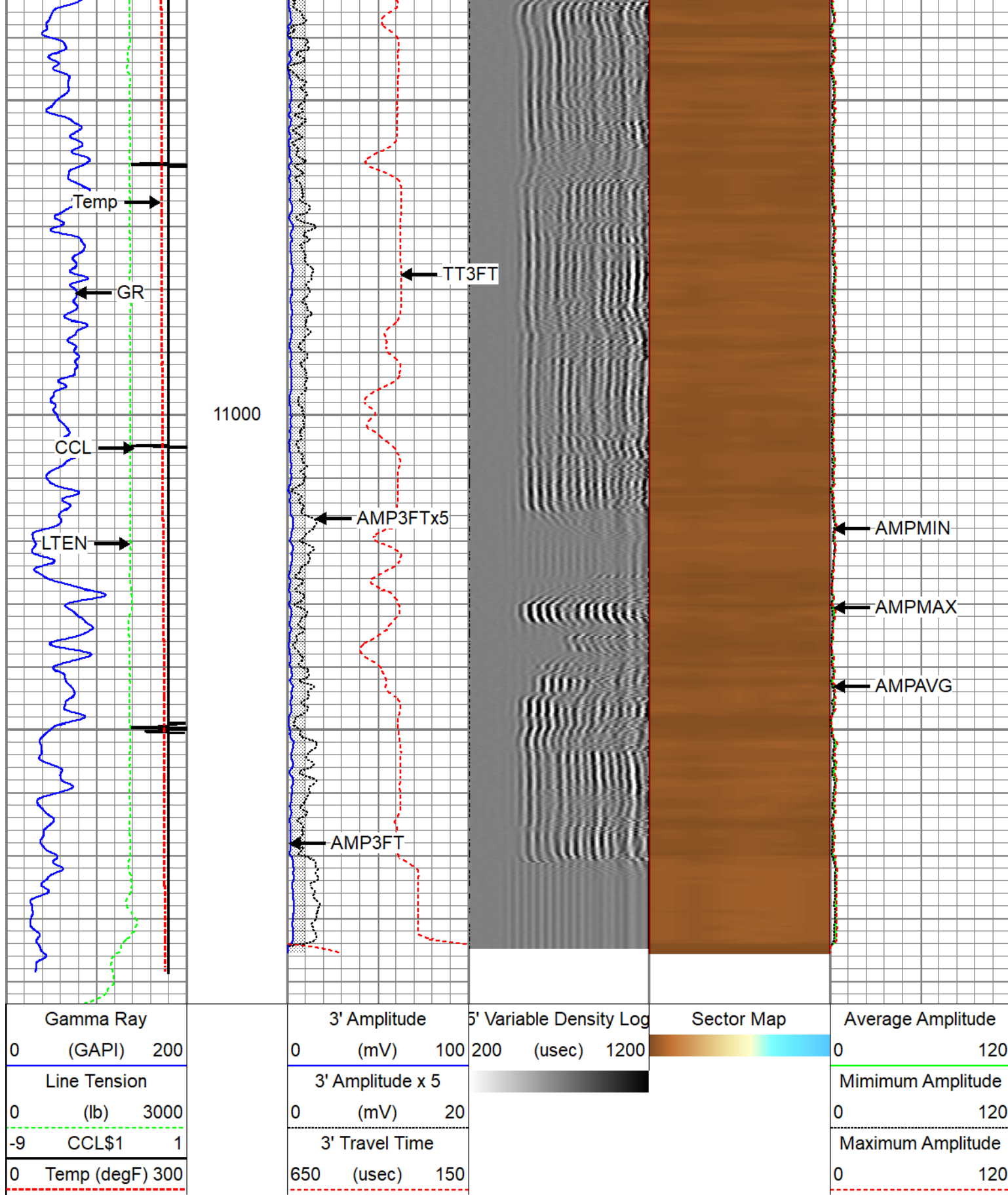
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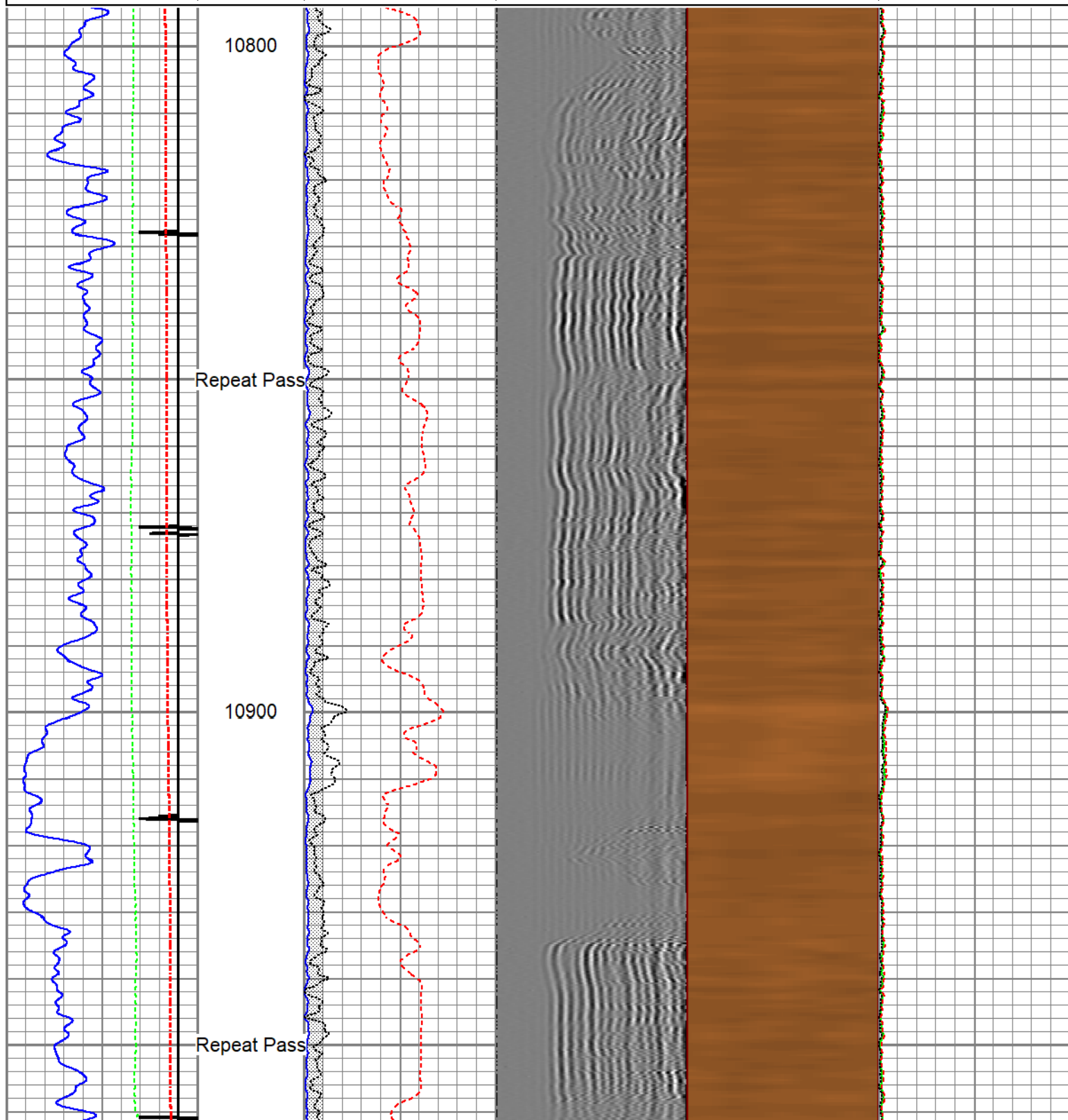


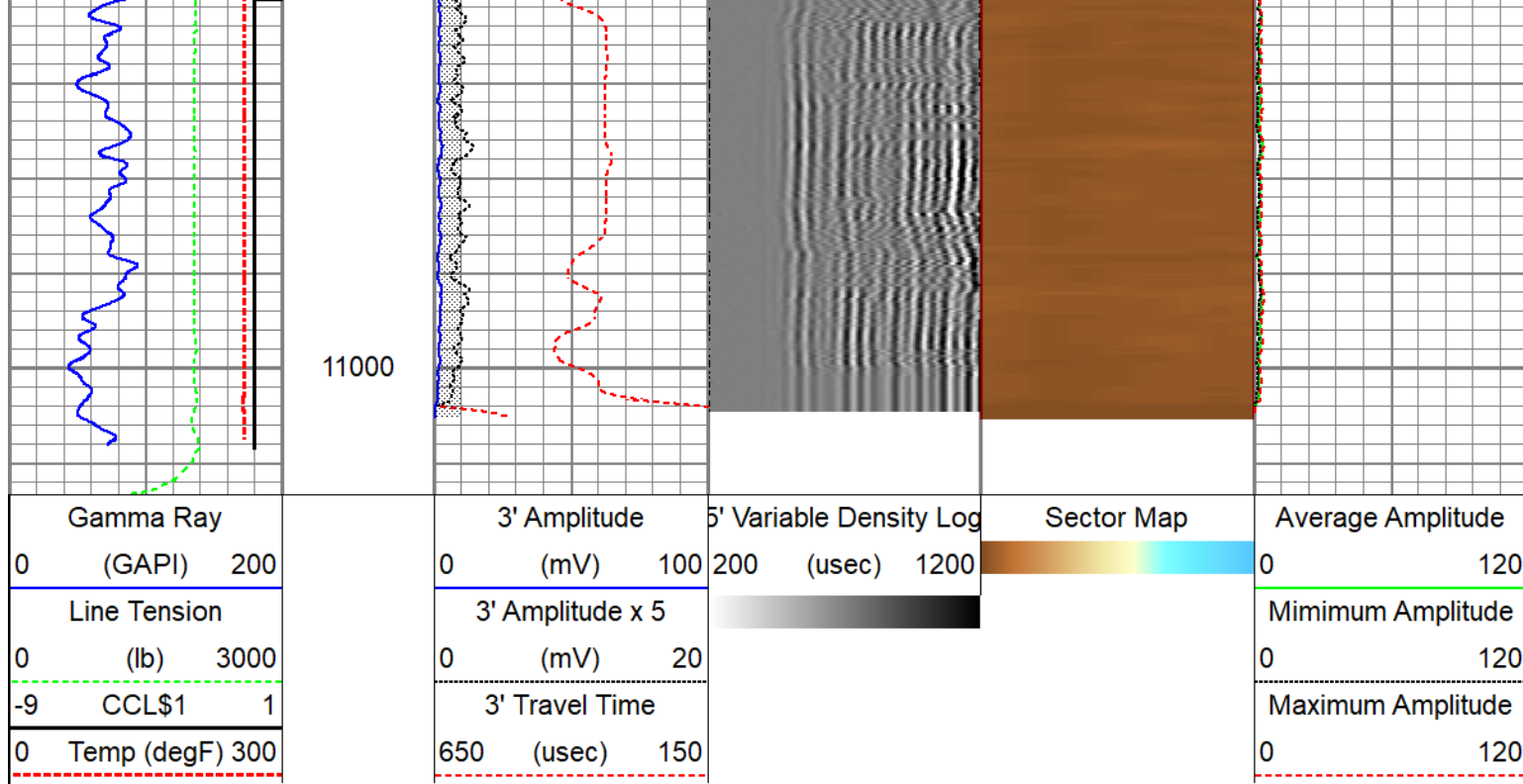




Database File tep_fed wmc 12-20_rcbl_12-14-2022.db
Dataset Pathname repeat1
Presentation Format twgrcbl
Dataset Creation Wed Dec 14 13:19:13 2022
Charted by Depth in Feet scaled 1:240

Gamma Ray			3' Amplitude		5' Variable Density Log		Average Amplitude		
0	(GAPI)	200	0	(mV)			100	0	120
Line Tension			3' Amplitude x 5				Minimum Amplitude		
0	(lb)	3000	0	(mV)			20	0	120
-9 CCL\$1 1			3' Travel Time				Maximum Amplitude		
0	Temp (degF)	300	650	(usec)			150	0	120





Calibration Report					
Database File	tep_fed wmc 12-20_rcbl_12-14-2022.db				
Dataset Pathname	mainpass				
Dataset Creation	Wed Dec 14 13:13:48 2022				
Gamma Ray Calibration Report					
Serial Number:	110255				
Tool Model:	GCTacc_6-Pin-Base				
Performed:	Thu Sep 22 15:12:49 2022				
Calibrator Value:	165.0	GAPI			
Background Reading:	72.3	cps			
Calibrator Reading:	300.9	cps			
Sensitivity:	0.7216	GAPI/cps			
Inclinometer Calibration Report					
Performed:	Thu Sep 22 15:14:31 2022				
	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	-910.00	1566.00	-1.00	1.00	gee
Y Accelerometer	-989.00	1748.00	-1.00	1.00	gee
Z Accelerometer	1.02	-895.47	0.00	1.00	gee
Segmented Cement Bond Log Calibration Report					
Serial Number:	FW1311-19				
Tool Model:	Probe275acc				

Calibration Casing Diameter:	4.500	in
Calibration Depth:	30.000	ft

Master Calibration, performed Wed Dec 14 10:51:59 2022:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.004	0.732	0.000	81.196	144.976	-0.413
CAL	0.004	0.754				
5'	0.005	0.670	0.000	81.196	158.560	-0.579
SUM						
S1	0.005	0.758	0.000	100.000	172.680	-0.650
S2	0.005	0.757	0.000	100.000	172.810	-0.646
S3	0.005	0.755	0.000	100.000	173.170	-0.626
S4	0.005	0.739	0.000	100.000	177.230	-0.692
S5	0.004	0.726	0.000	100.000	180.110	-0.565
S6	0.004	0.726	0.000	100.000	180.104	-0.565
S7	0.004	0.731	0.000	100.000	178.920	-0.590
S8	0.005	0.736	0.000	100.000	177.790	-0.648

Internal Reference Calibration, performed (Not Performed):

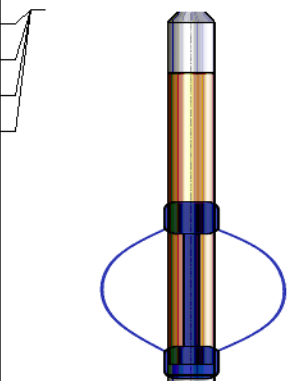
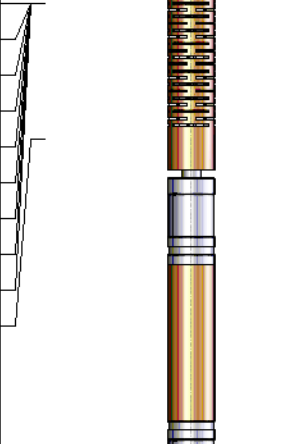
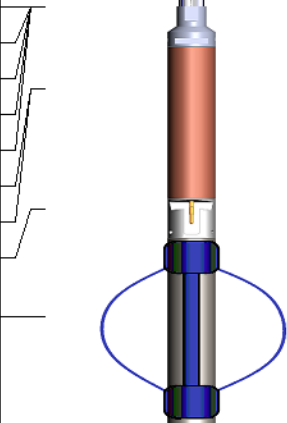
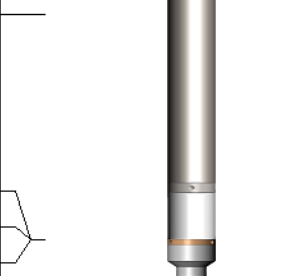
	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.004	0.754	1.000	0.000

Air Zero Calibration, performed Wed Dec 14 10:52:19 2022:

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.004		0.000		-0.000	
5'	0.005		0.000		0.000	
SUM						
S1	0.005		0.000		0.000	
S2	0.004		0.000		0.000	
S3	0.005		0.000		-0.000	
S4	0.005		0.000		-0.000	
S5	0.004		0.000		-0.000	
S6	0.004		0.000		0.000	
S7	0.004		0.000		-0.000	
S8	0.005		0.000		-0.000	

Inclinometer Calibration Report

Performed:	Thu Jul 28 15:55:38 2022				
	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	-914.00	901.00	-1.00	1.00	gee
Y Accelerometer	-903.00	898.00	-1.00	1.00	gee
Z Accelerometer	3.47	893.02	0.00	1.00	gee

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GCT_FMWR	14.03		SO BS CENT-2750-4500 Slip Over 2-3/4" I.D. for 4-1/2" O.D. Casing Bow Spring Centralizer	1.33	3.25	10.00
mSec_Count	14.03					
RBT_Status	14.03					
Error_Ct	14.03					
WVFS8	9.53		RBT8acc-Probe275acc (FW1311-19) 2.75" Radial Corrosion with accelerometer	8.75	2.75	110.00
WVFS7	9.53					
WVFS6	9.53					
WVFS5	9.53					
WVFS4	9.53					
WVFS3	9.53					
WVFS2	9.53					
WVFS1	9.53					
WVF3FT	9.53					
WVF5FT	8.53					
GCT_HV	5.67		SO BS CENT-2750-4500 Slip Over 2-3/4" I.D. for 4-1/2" O.D. Casing Bow Spring Centralizer	1.33	3.25	10.00
RBT_ACCZ	5.28					
RBT_ACCY	5.28					
RBT_ACCX	5.28					
WVFSYNC	5.28					
WVFCAL	5.28					
CCL\$2	4.68					
CCL\$1	4.68					
GCT_TEMP	3.79					
GR	2.99					
GCT_IntTemp	1.95		GCacc-GCTacc_6-Pin-Base (110255) Probe 2.75" Gamma Ray - CCL w/ Temp and 6 Pin Bottom	5.00	2.75	
GCT_ACCZ	0.28					
GCT_ACCY	0.28					
GCT_ACCX	0.28					
			Probe ADPT-6P-GO Probe 2-3/4" 6-Pin Top to GO Bottom Adaptor Sub	0.28	2.75	2.00

Dataset: tep_fed wmc 12-20_rcbl_12-14-2022.db: field/well/run1/mainpass
Total length: 14.03 ft

Total weight: 132.00 lb
O.D.: 3.25 in

Company	TEP Rocky Mountain LLC		
Well	Federal WMC 12-20		
Field	Rulison		
County	Garfield	State	Colorado



Radial Cement
Gamma Ray
Casing Collar Log