



Radial Cement Bond  
Gamma Ray  
Casing Collar Log

Company Terra Energy Partners, LLC  
Well Federal NR 432-4  
Field Rulison  
County Garfield  
State Colorado

Company Terra Energy Partners, LLC  
Well Federal NR 432-4  
Field Rulison  
County Garfield  
State Colorado

Location: API # : 05-045-24465

SEC 3 TWP 6S RGE 94W

Permanent Datum Ground Level Elevation 6728'  
Log Measured From Kelly Bushing  
Drilling Measured From Kelly Bushing

Other Services  
---  
Elevation  
K.B. 6758'  
D.F. 6759'  
G.L. 6730'

Date

31-AUG-2022

Run Number

One

Depth Driller

11053 FT

Depth Logger

10989 FT

Bottom Logged Interval

10986 FT

Top Log Interval

Surface

Open Hole Size

8.75"

Type Fluid

Water

Density / Viscosity

8.34 lb/gal

Max. Recorded Temp.

261°F

Estimated Cement Top

See Log

Time Well Ready

ROA

Time Logger on Bottom

13:25

Equipment Number

8093

Location

Grand Junction, CO.

Recorded By

A. Ellsworth

Witnessed By

D. Welsh

Run Number

31-AUG-2022

Bit

From

To

Size

Weight

From

To

Casing Record

Size

Wgt/Ft

Top

Bottom

Surface String

9.625"

38 lb

Surface

1134 FT

Prot. String

4.5"

11.6 lb

Surface

11043 FT

Production String

4.5"

11.6 lb

Surface

11043 FT

Liner

4.5"

11.6 lb

Surface

11043 FT

Comments

Log is correlated to 30 K.B.  
Marker Joint Logged at 6417 FT - 6427 FT  
Log ran with 0 PSI at surface

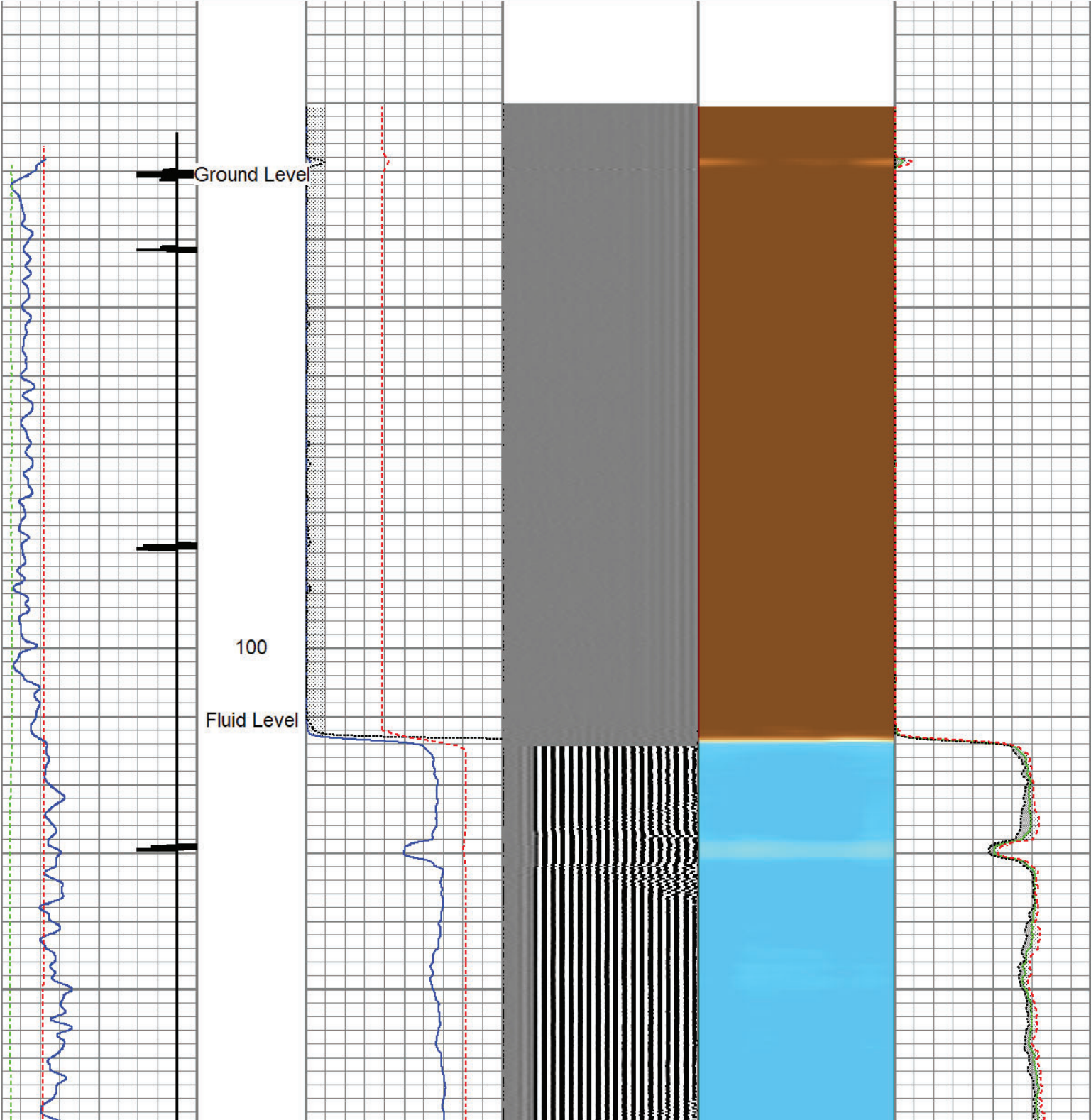
Thank you for choosing The Wireline Group.

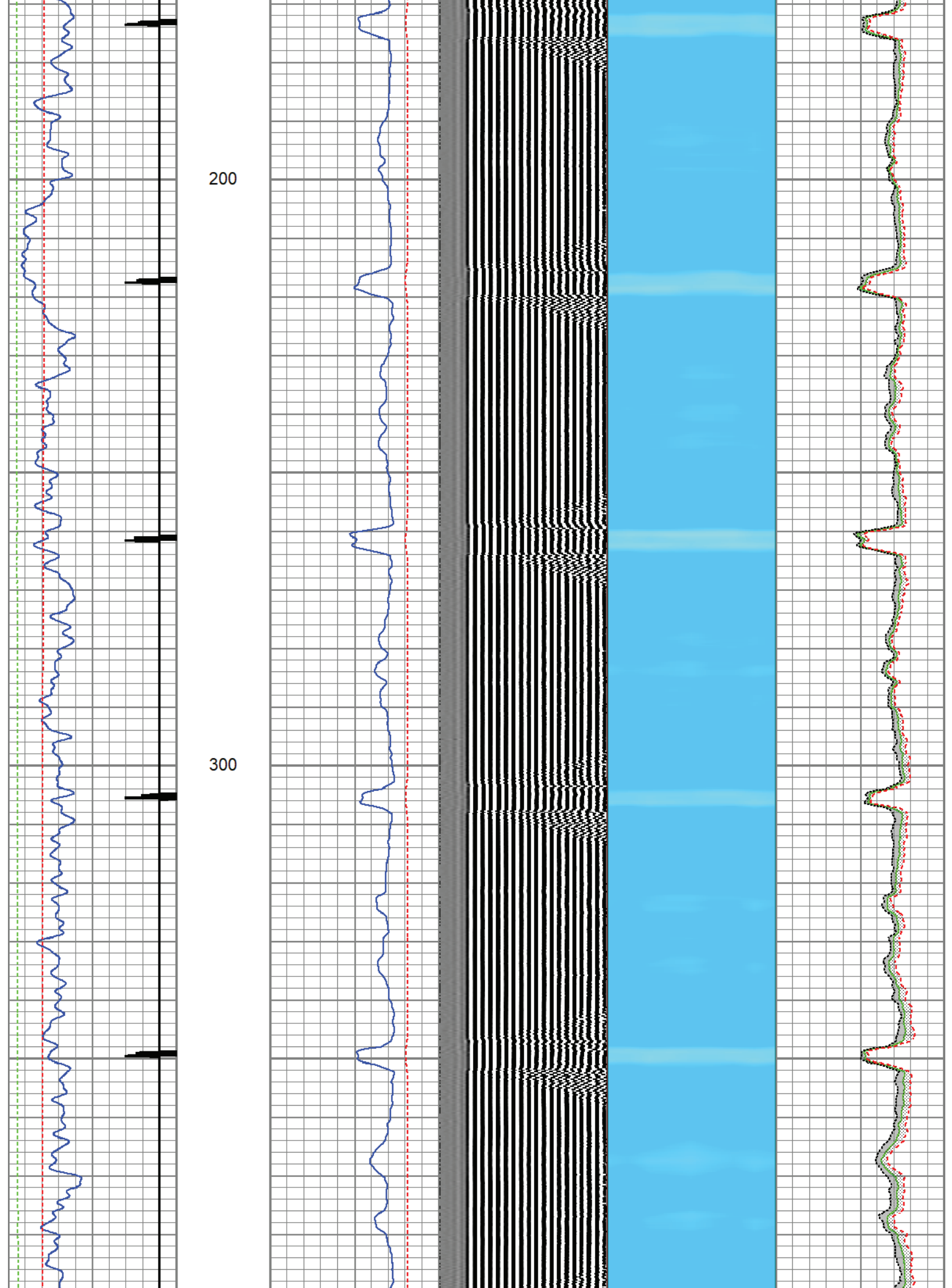


Main Pass 5" = 100'

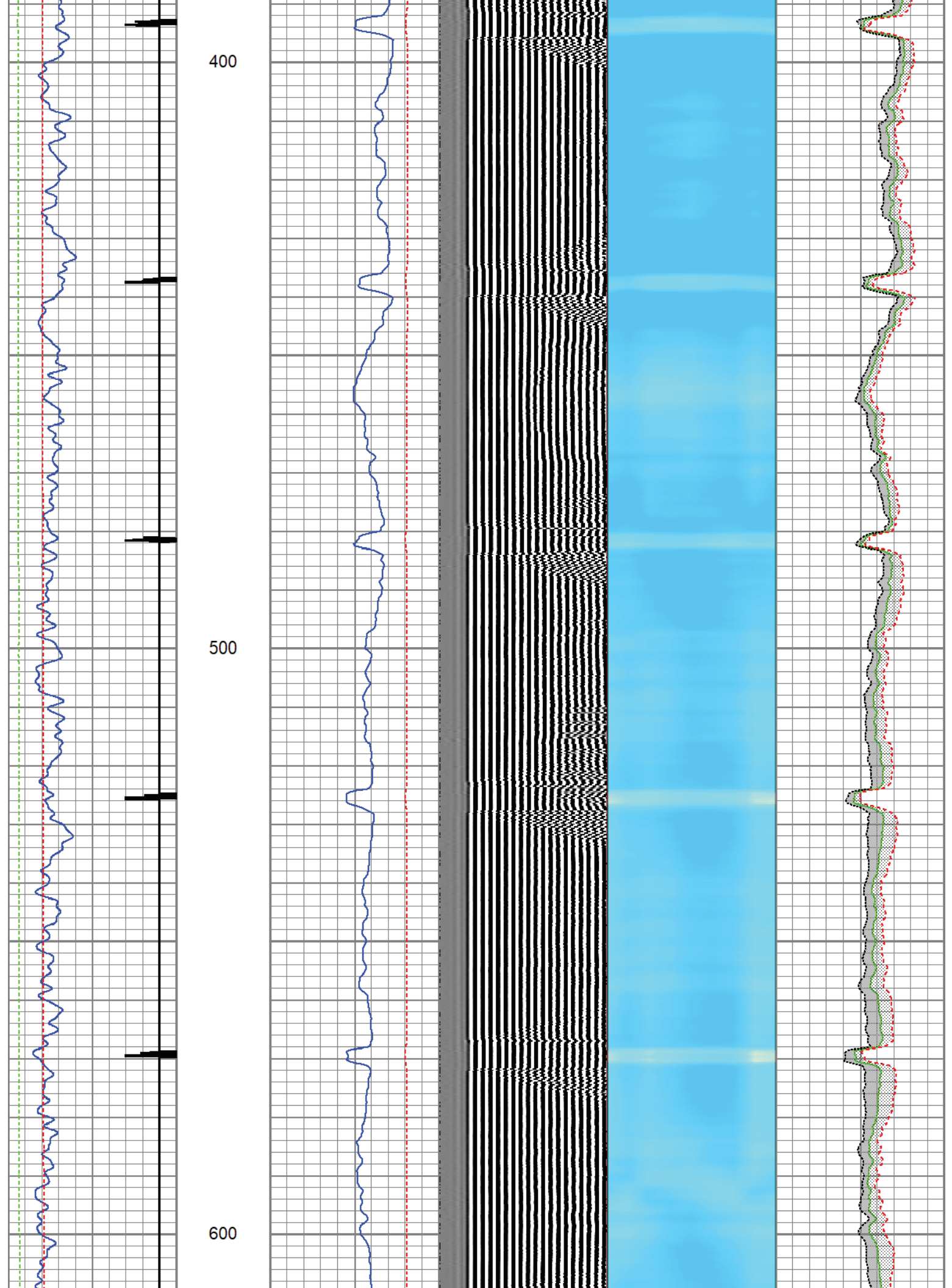
Database File      tep\_nr 432-4\_rcbl\_8-31-22.db  
Dataset Pathname    main  
Presentation Format   twgrcbl  
Dataset Creation    Wed Aug 31 13:27:26 2022  
Charted by          Depth in Feet scaled 1:240

Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 200	0 (mV) 100	200 (usec) 1200		0 120
CCL	3' Amplitude x 5			Minimum Amplitude
Line Tension	0 (mV) 20			0 120
0 (lb) 4000	3' Travel Time			Maximum Amplitude
0 Temp (degF) 300	650 (usec) 150			0 120

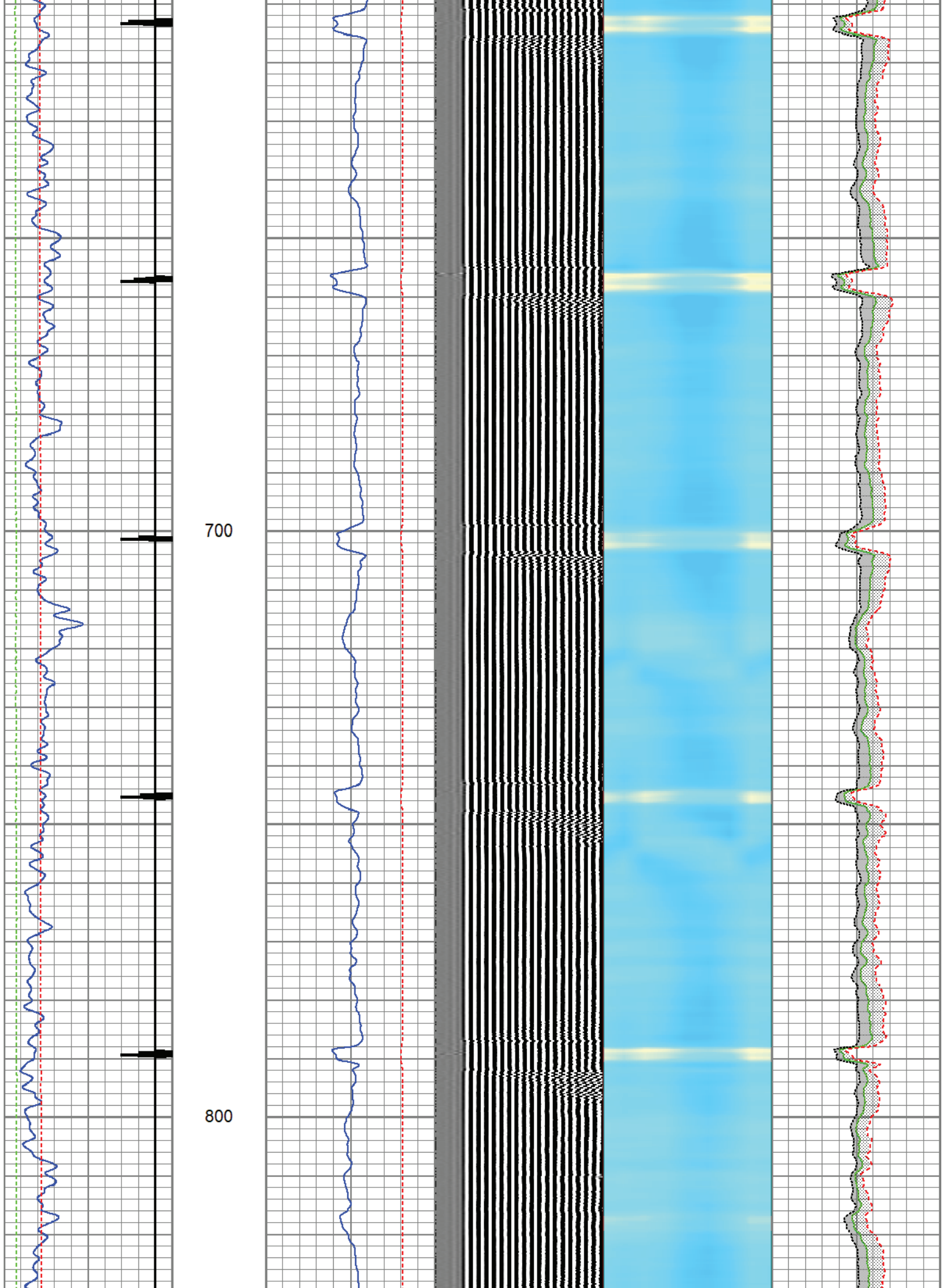


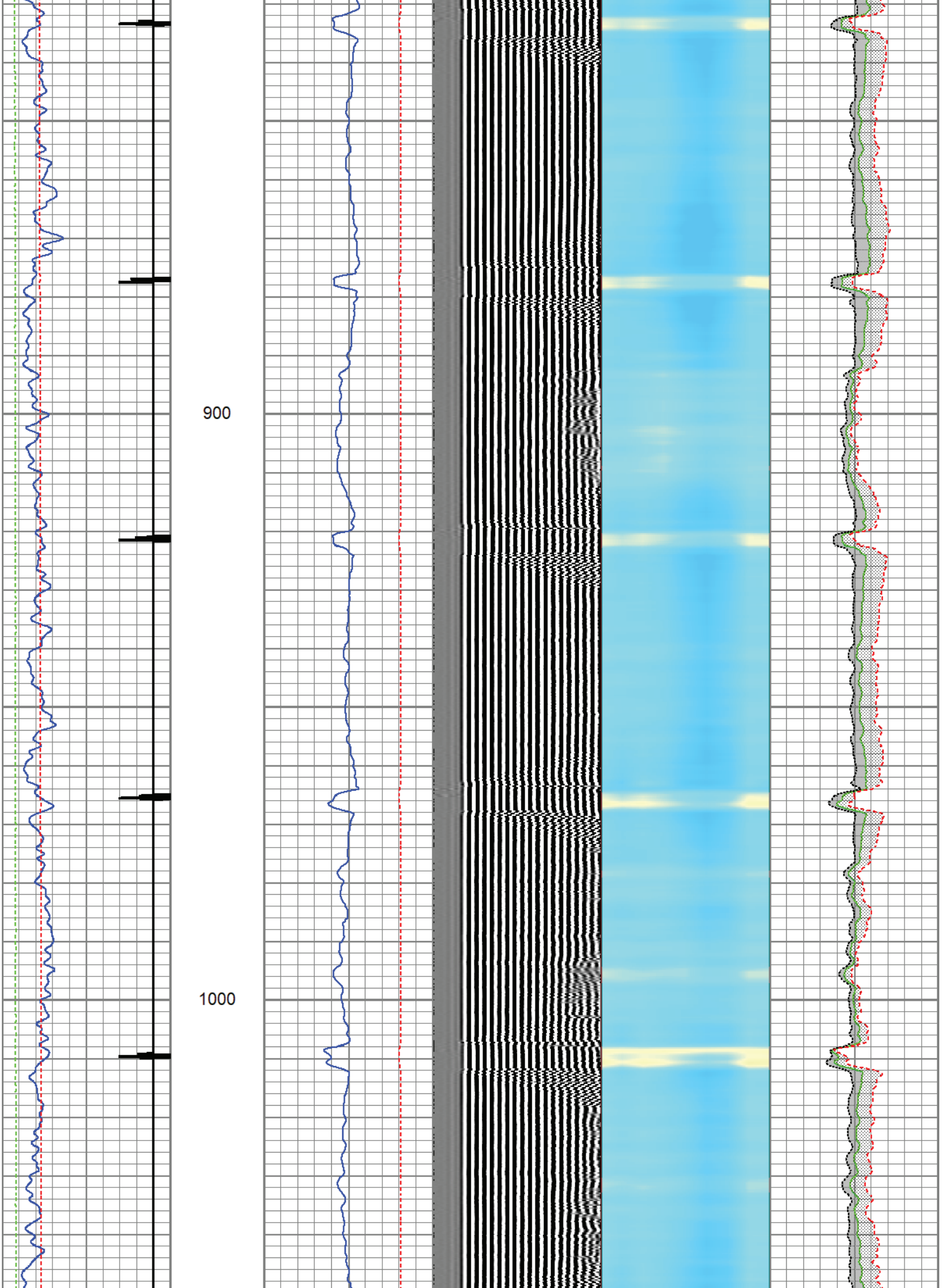


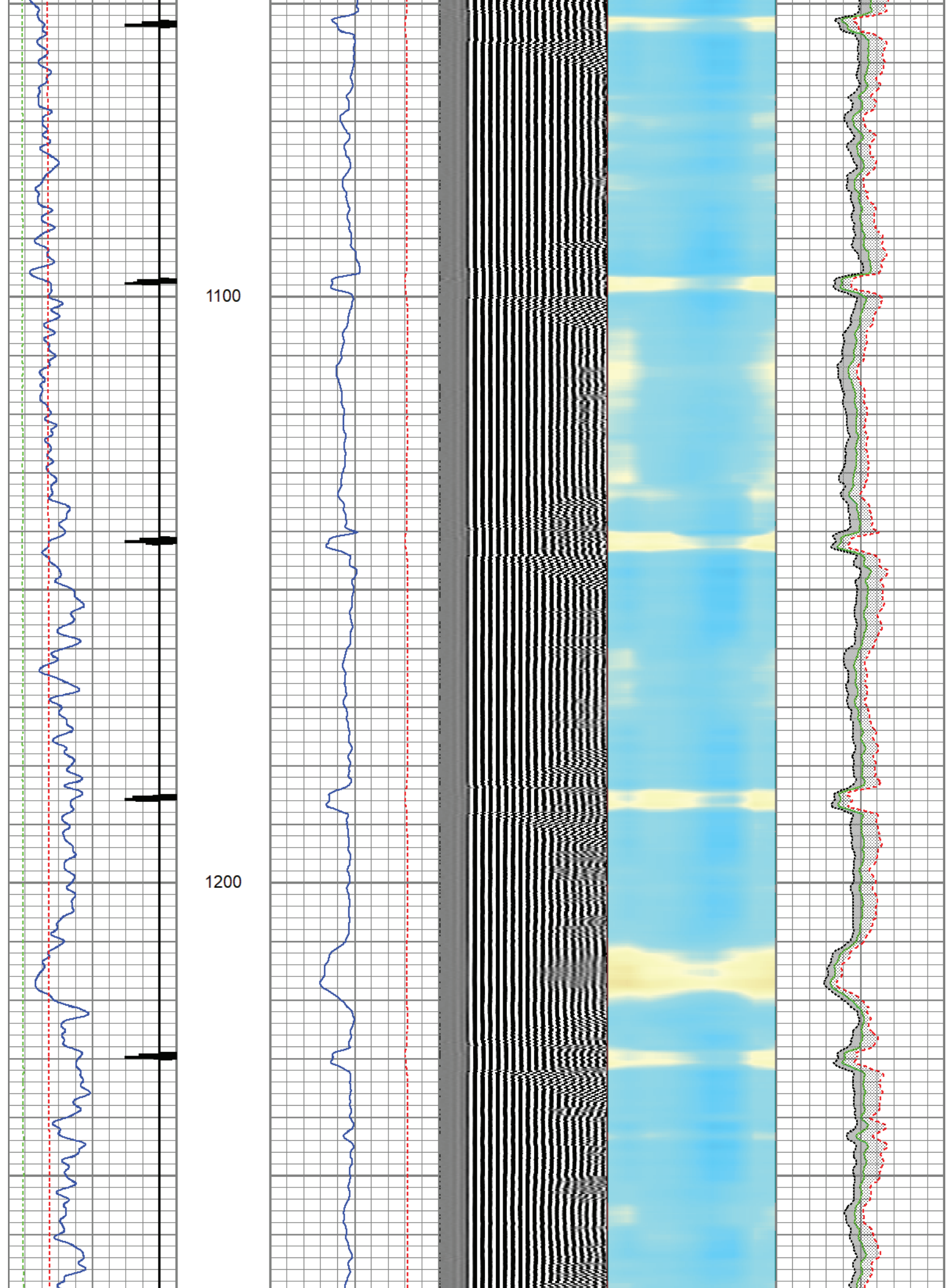




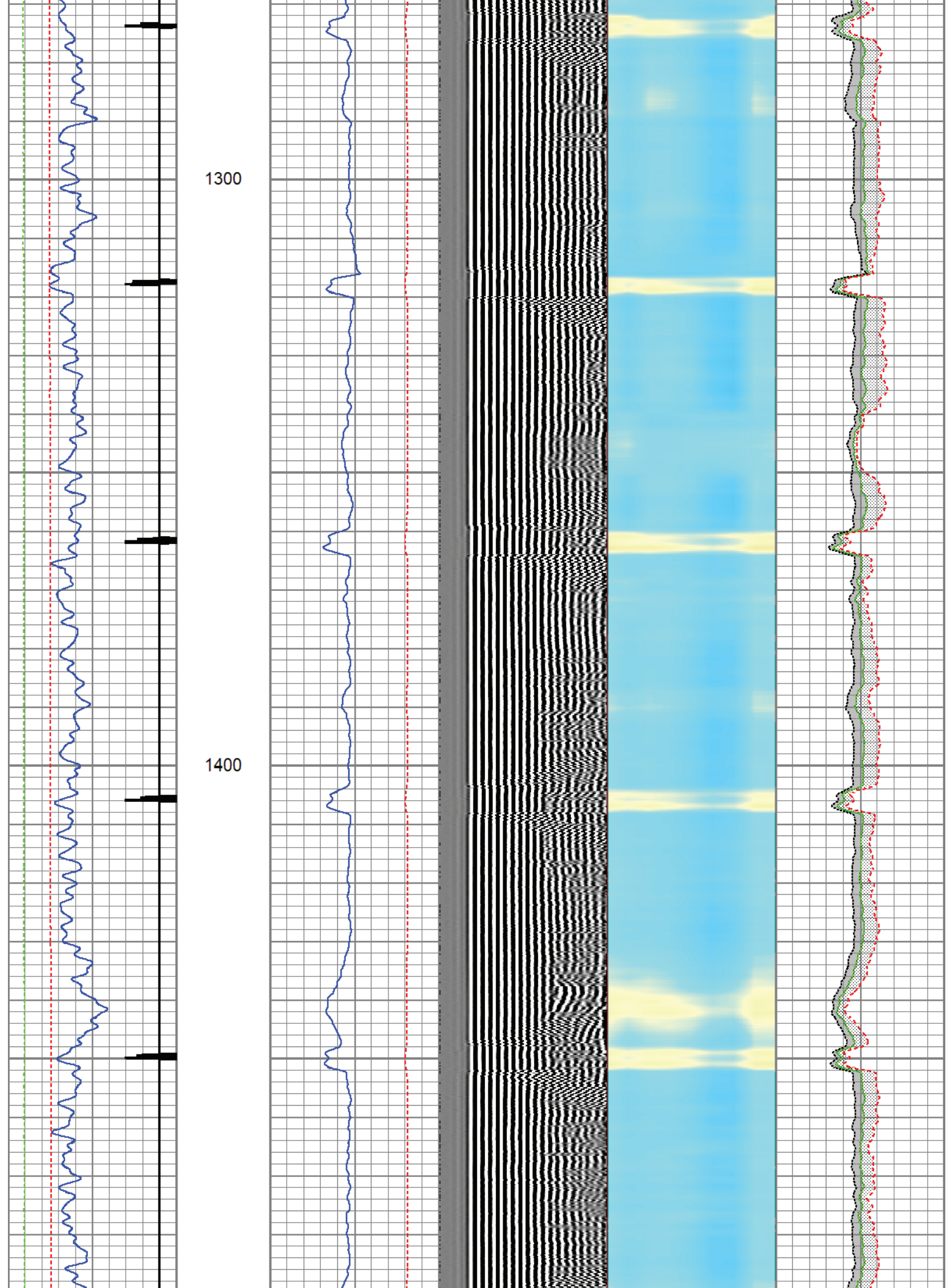


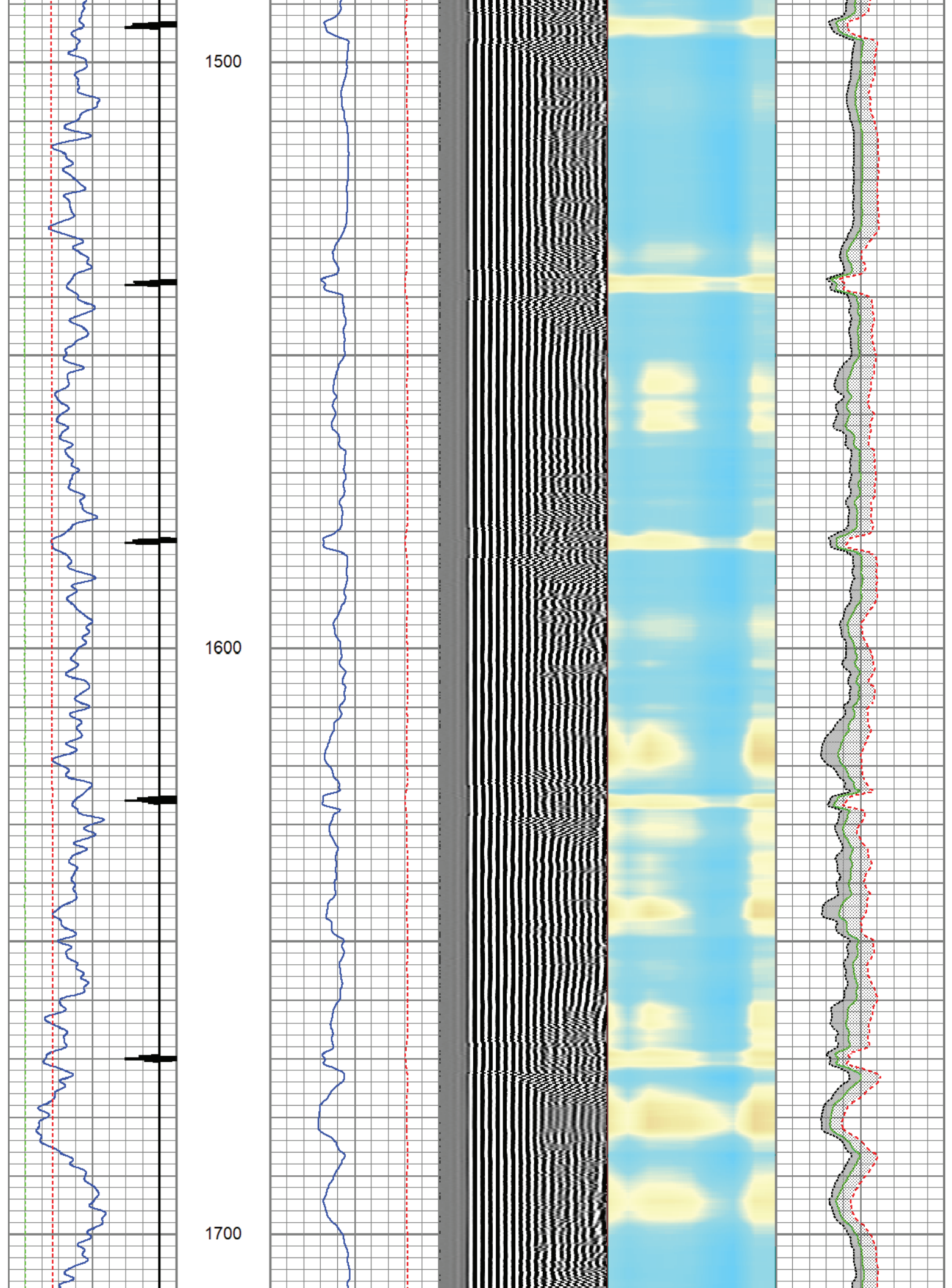




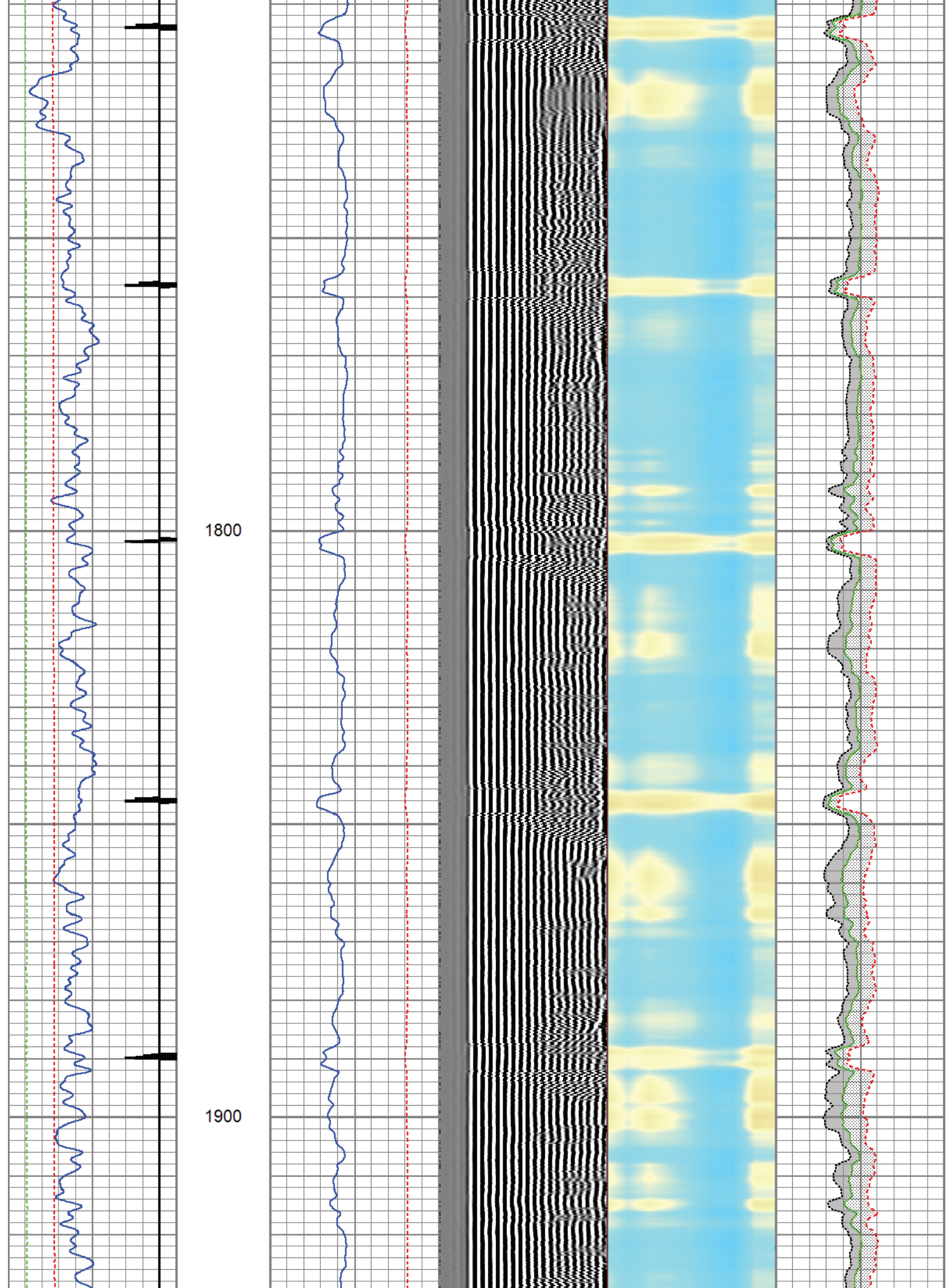




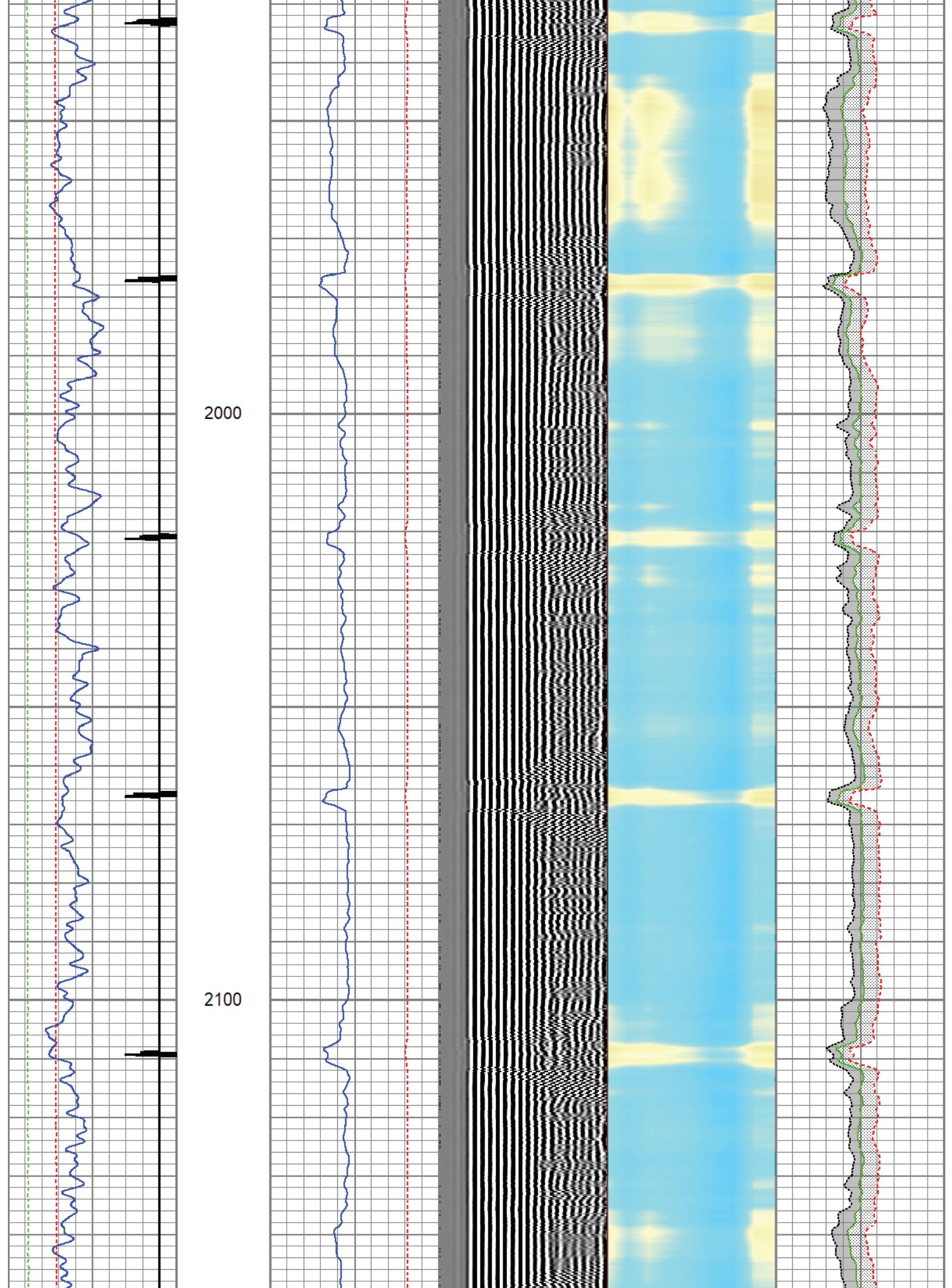


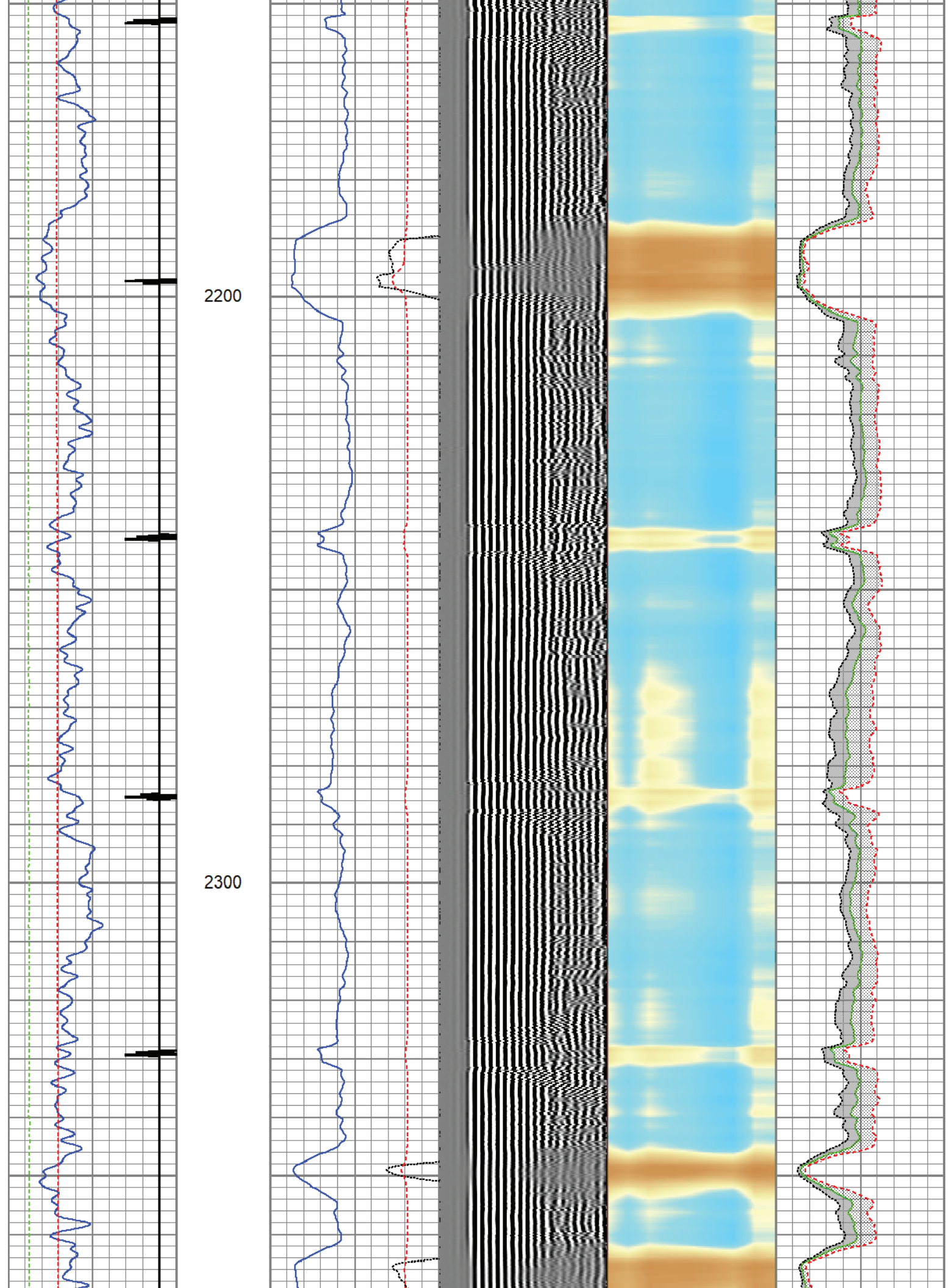




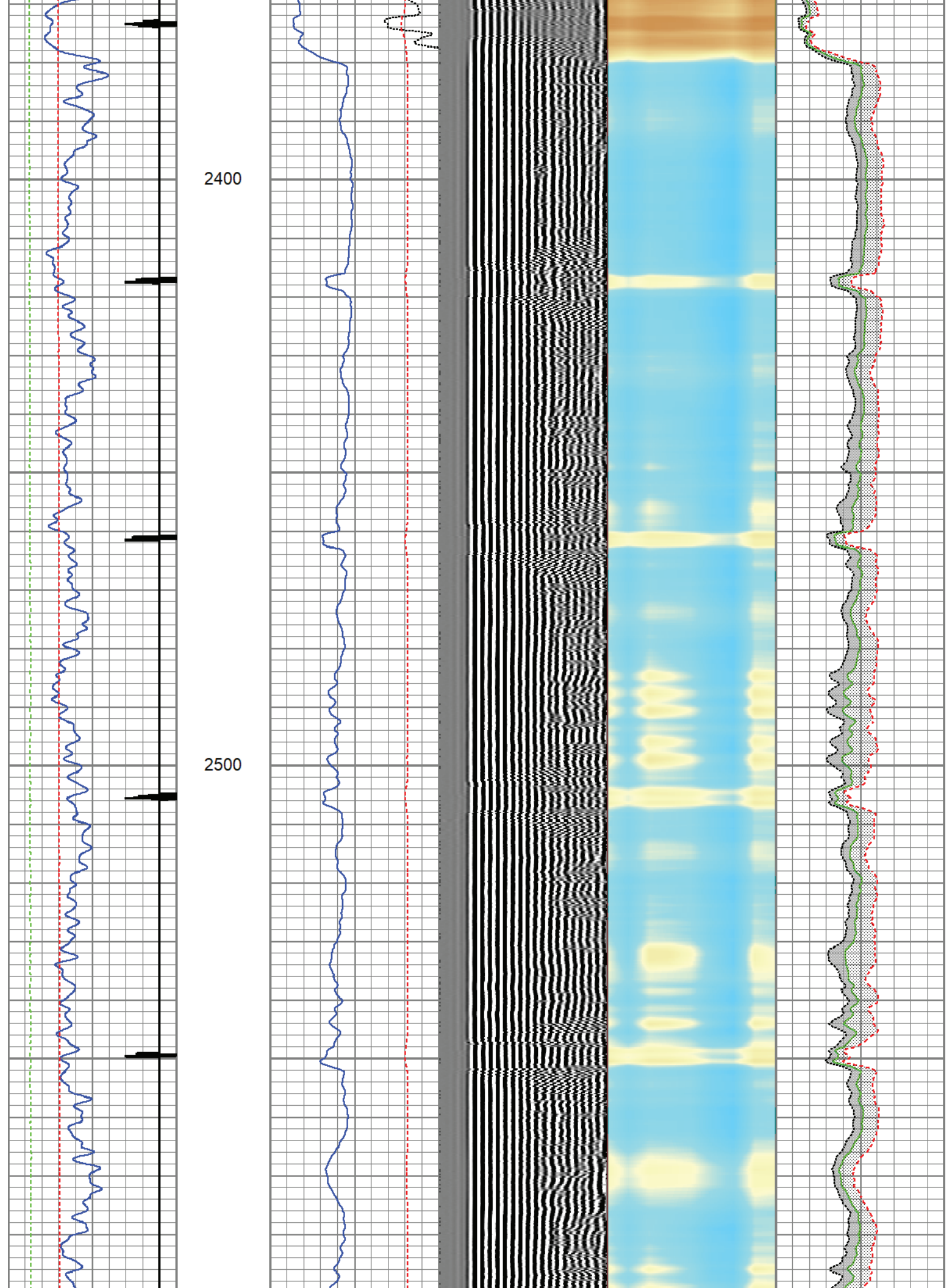




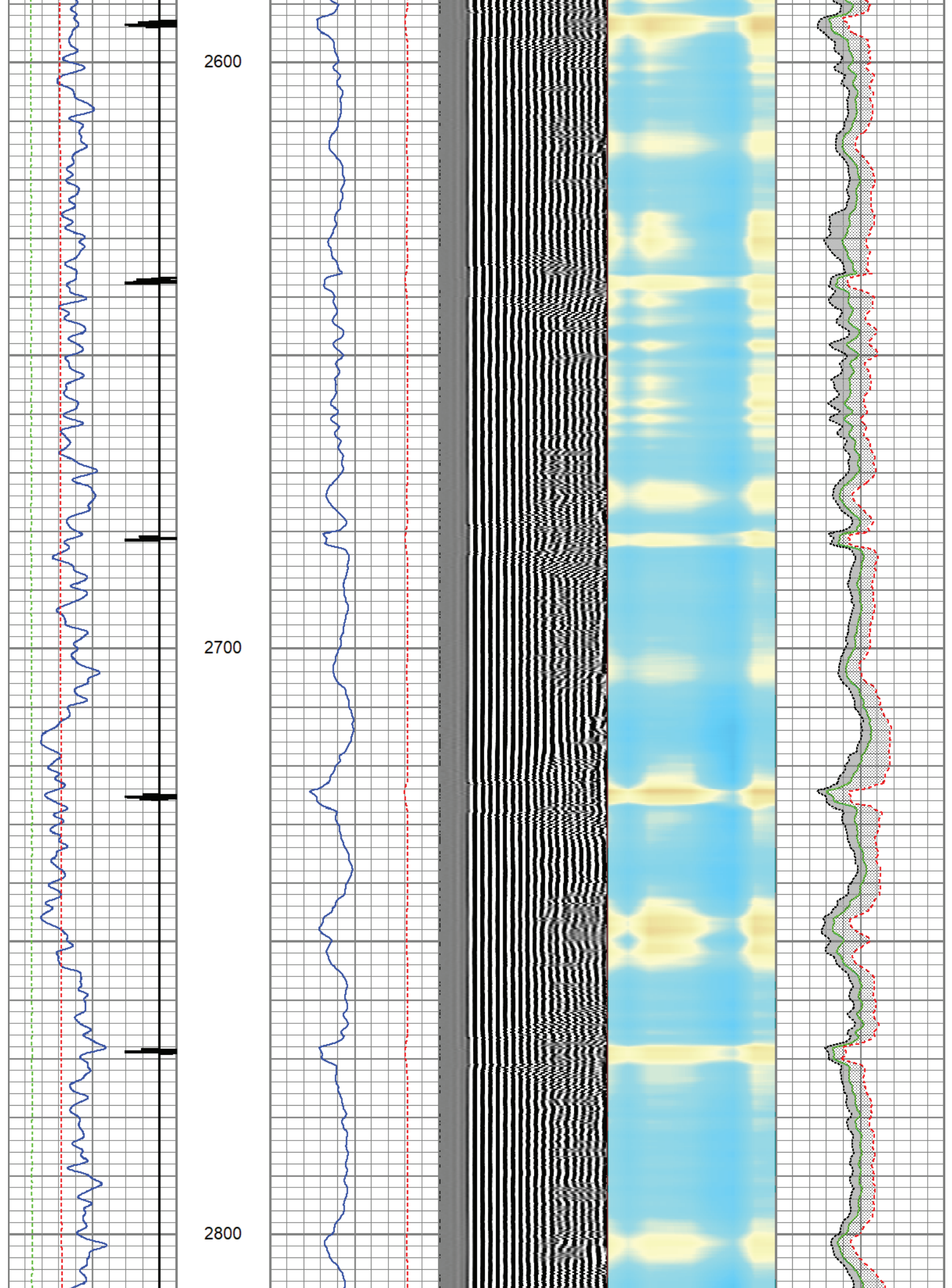


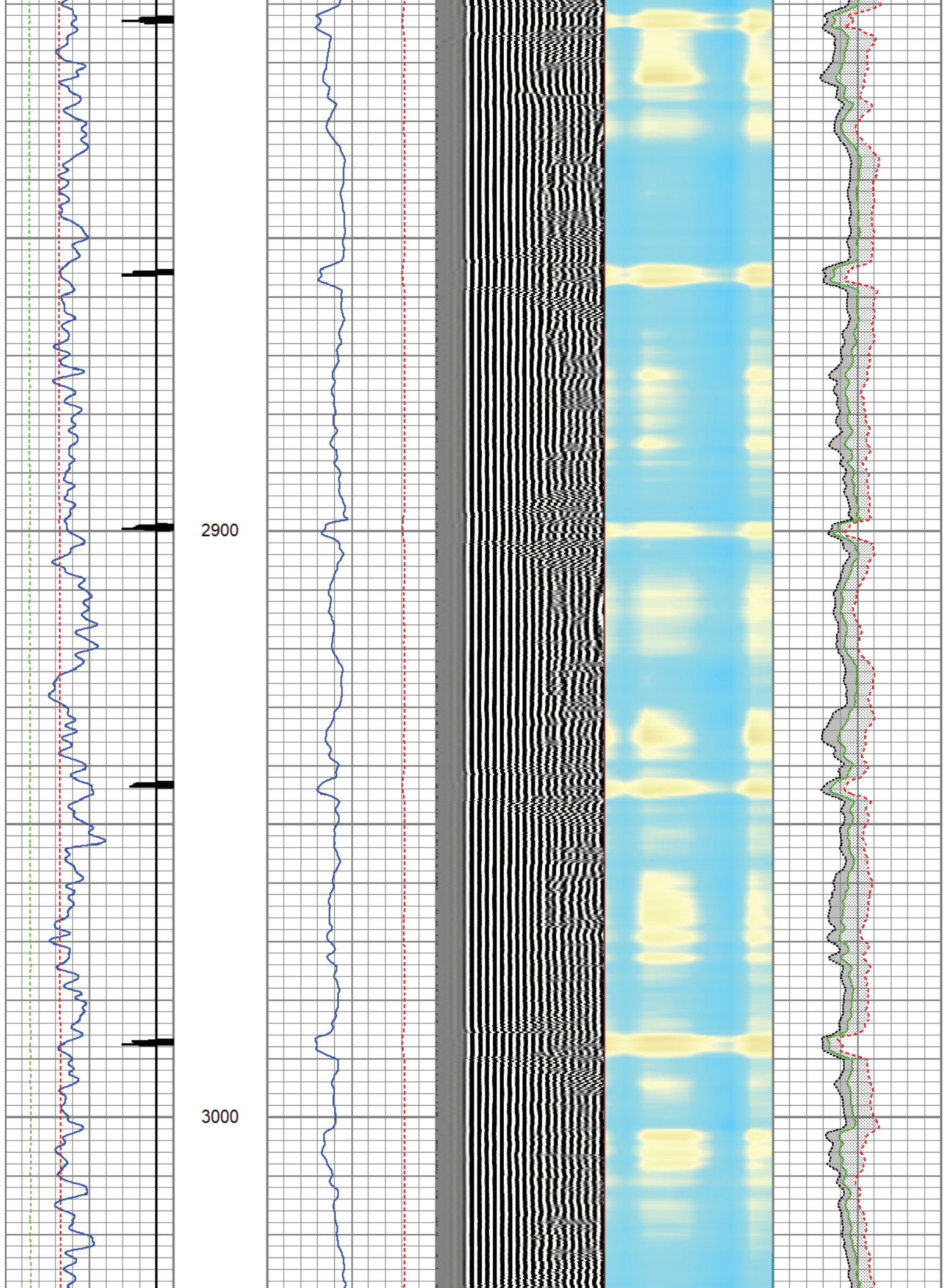




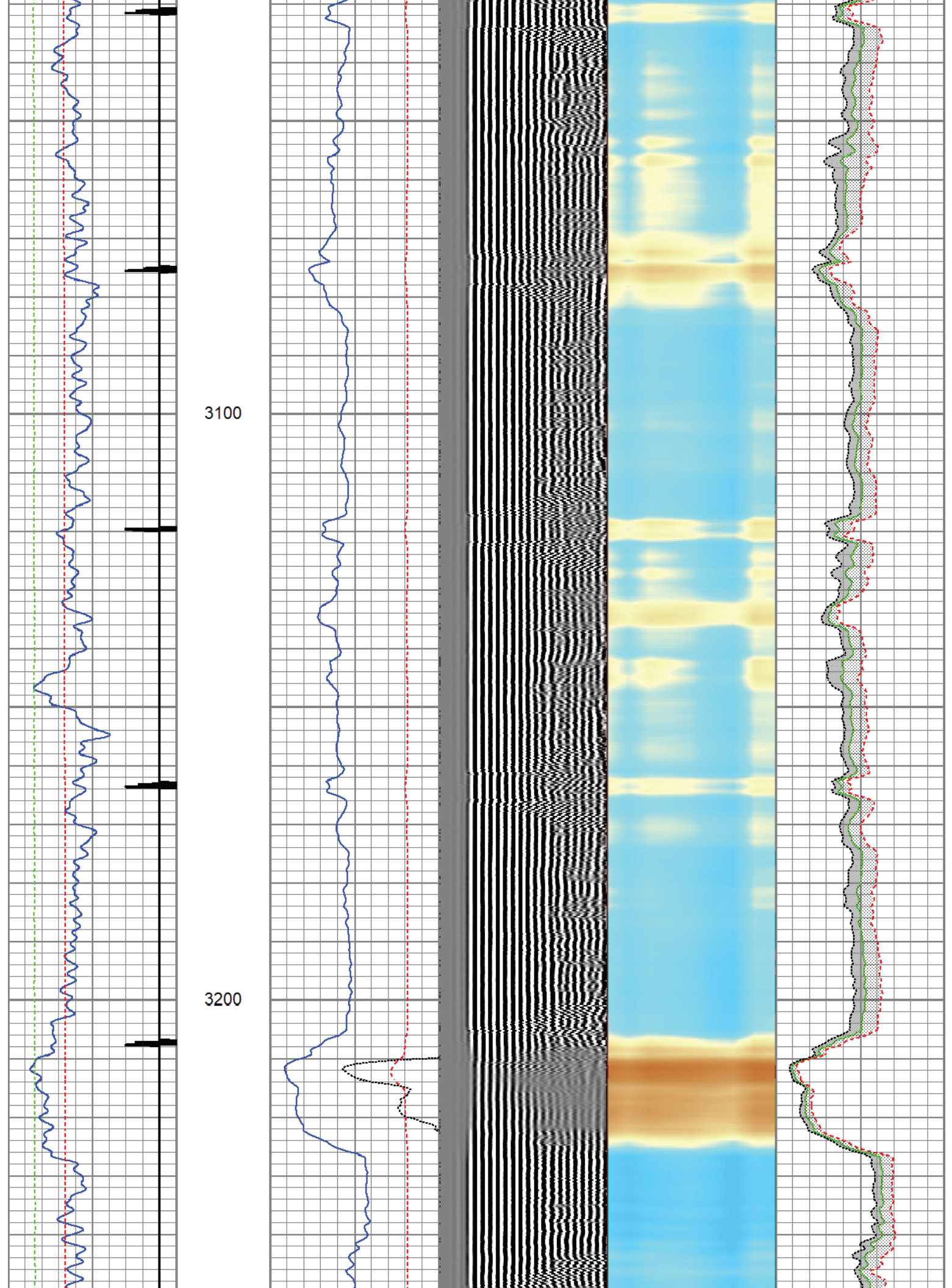




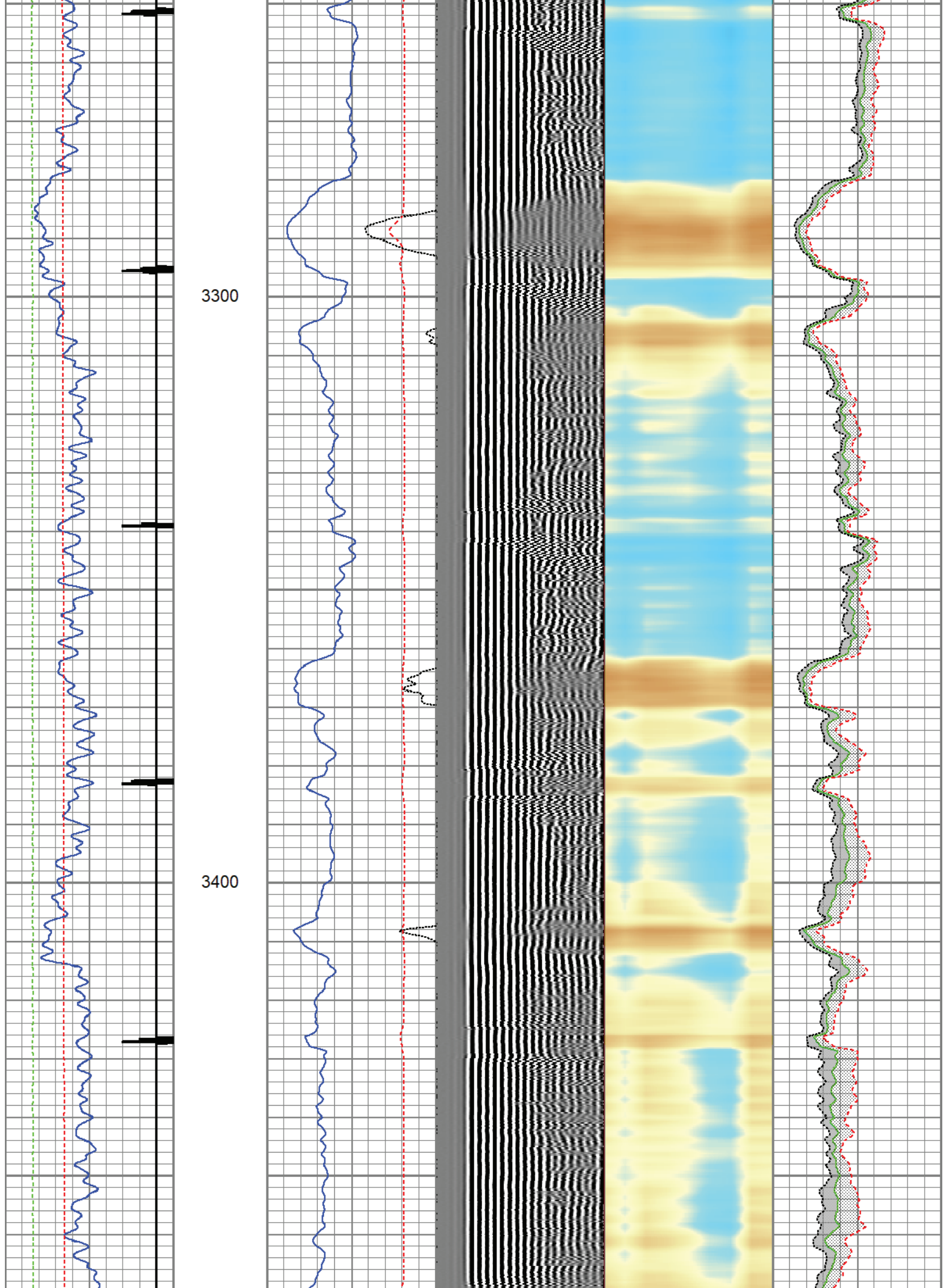






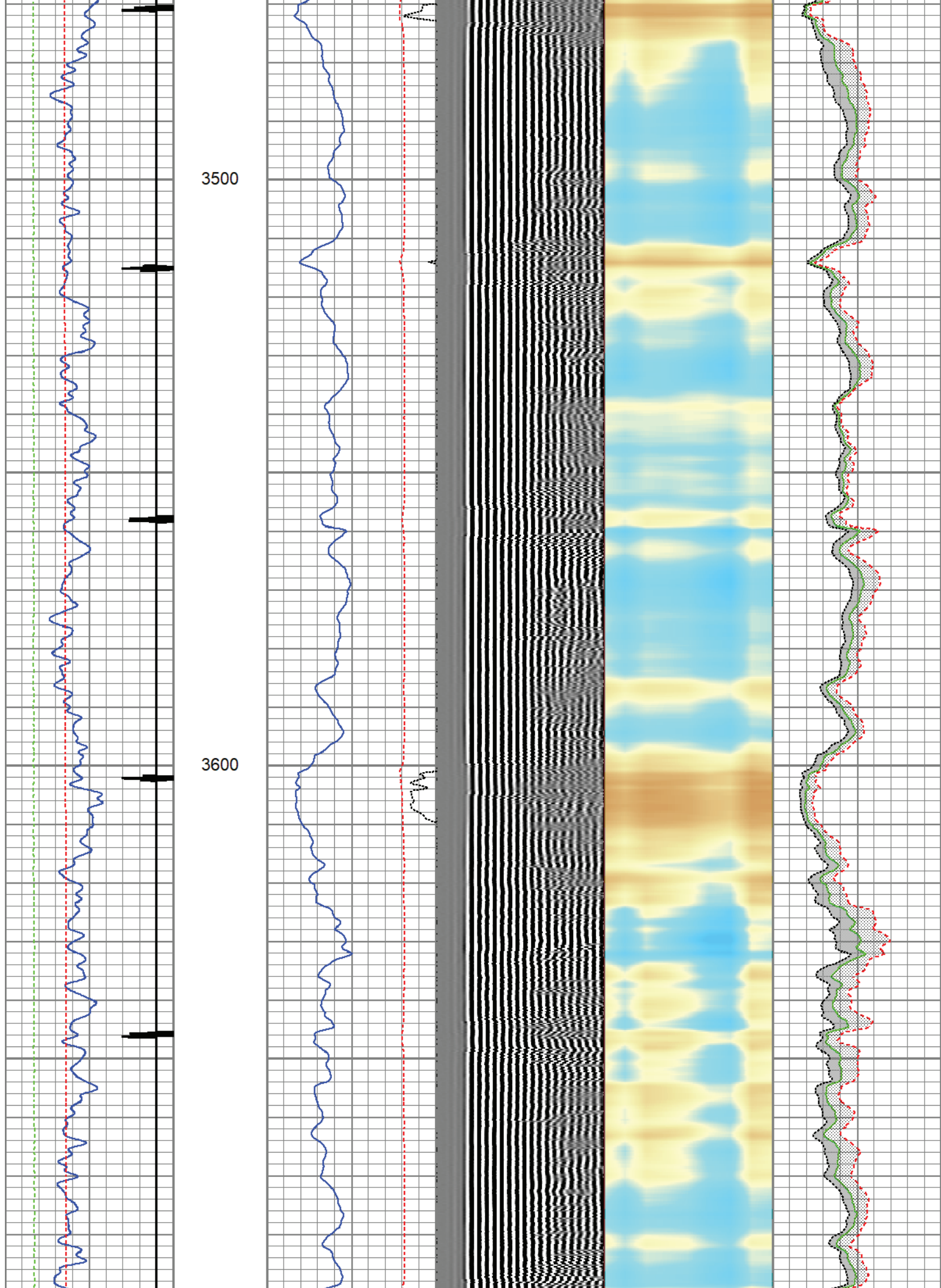






3500

3600

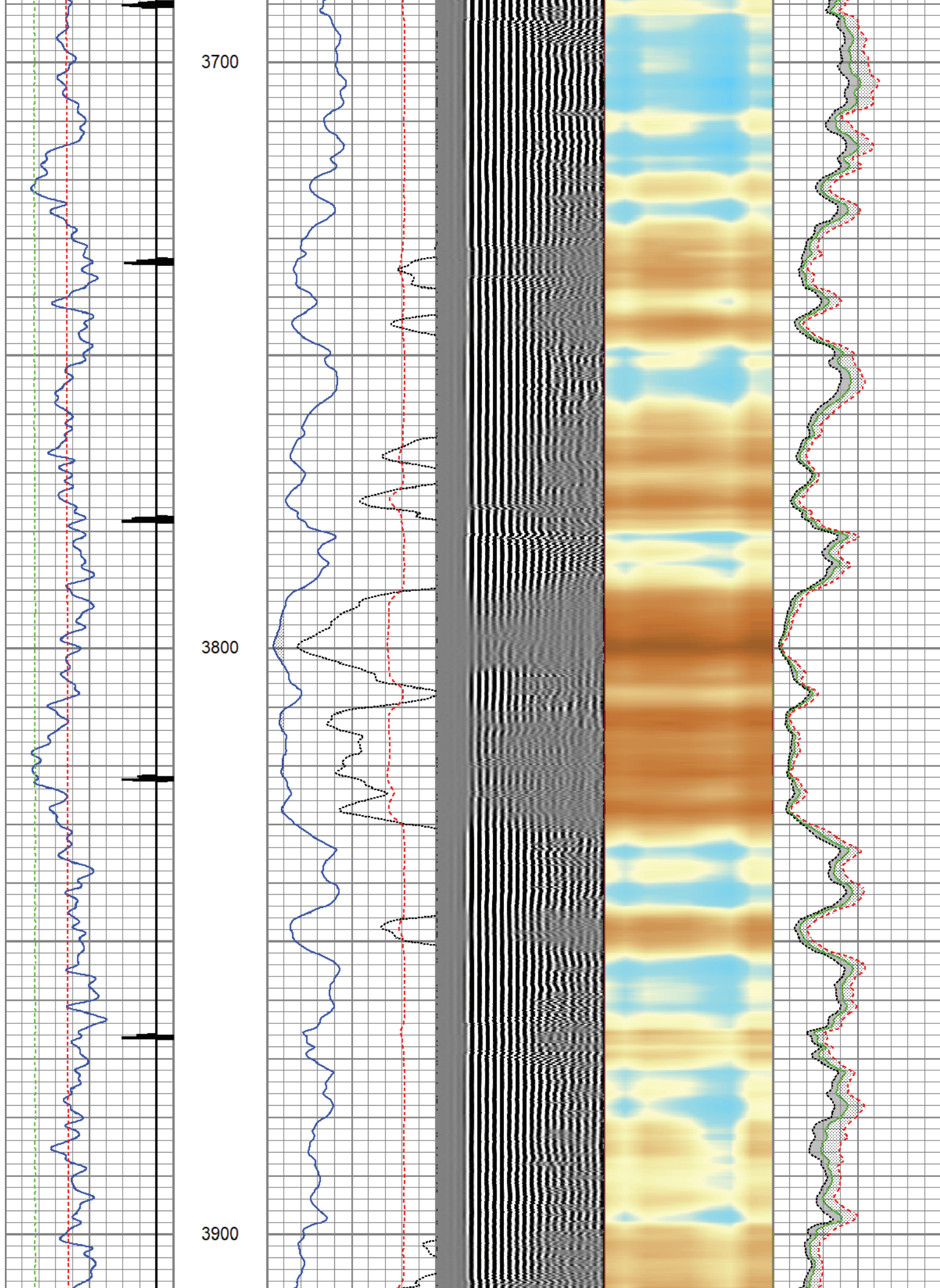




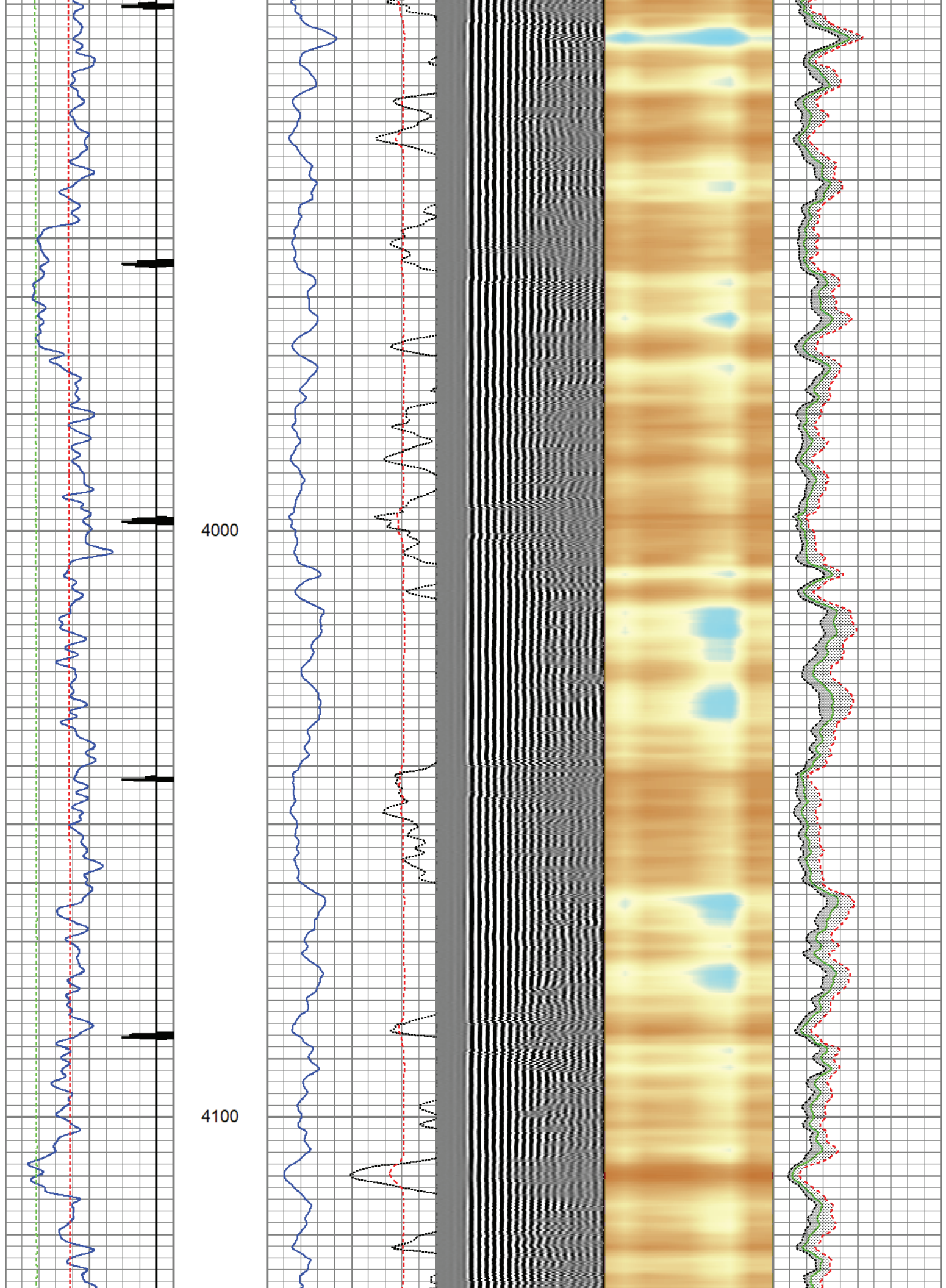
3700

3800

3900

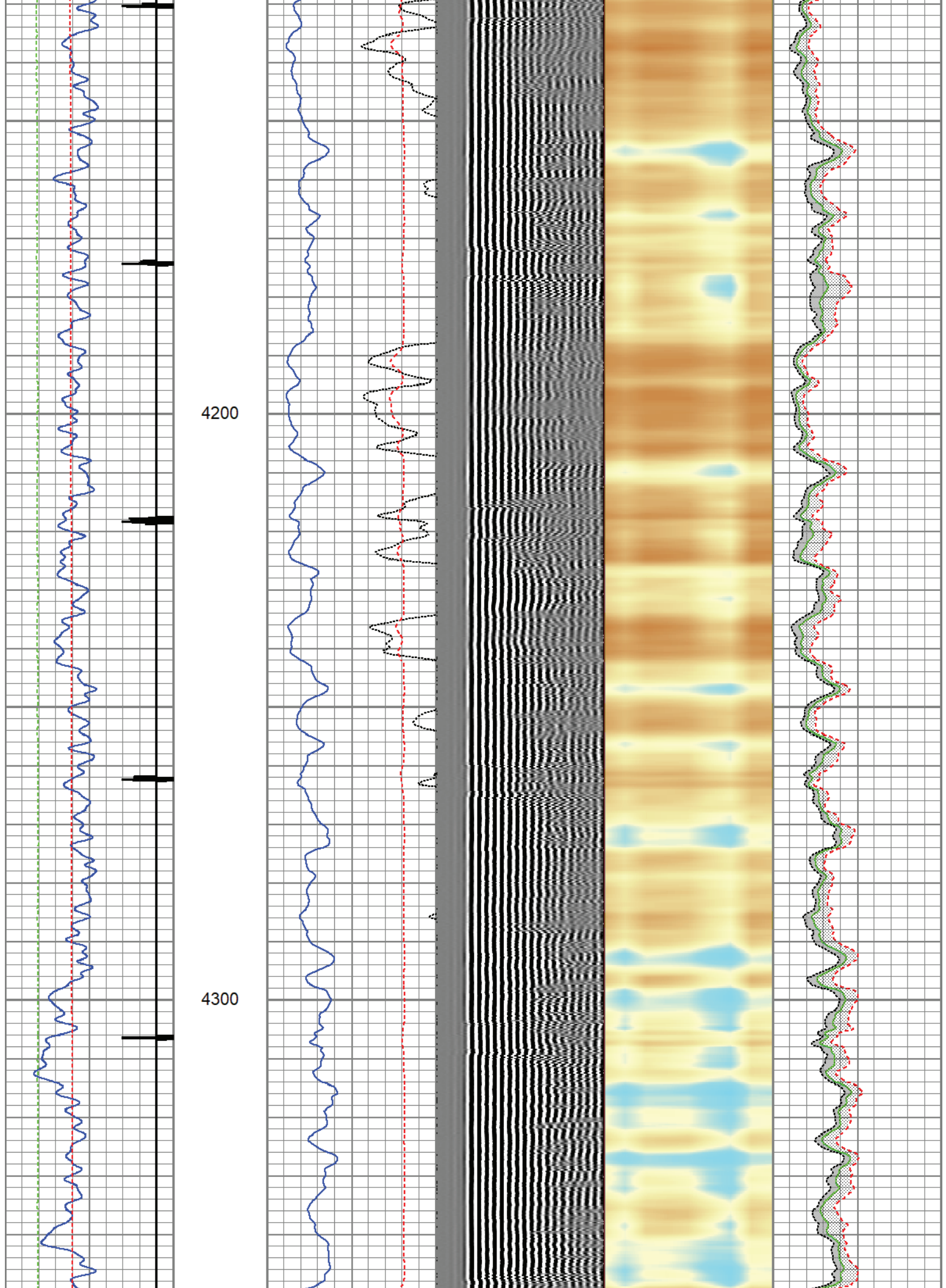




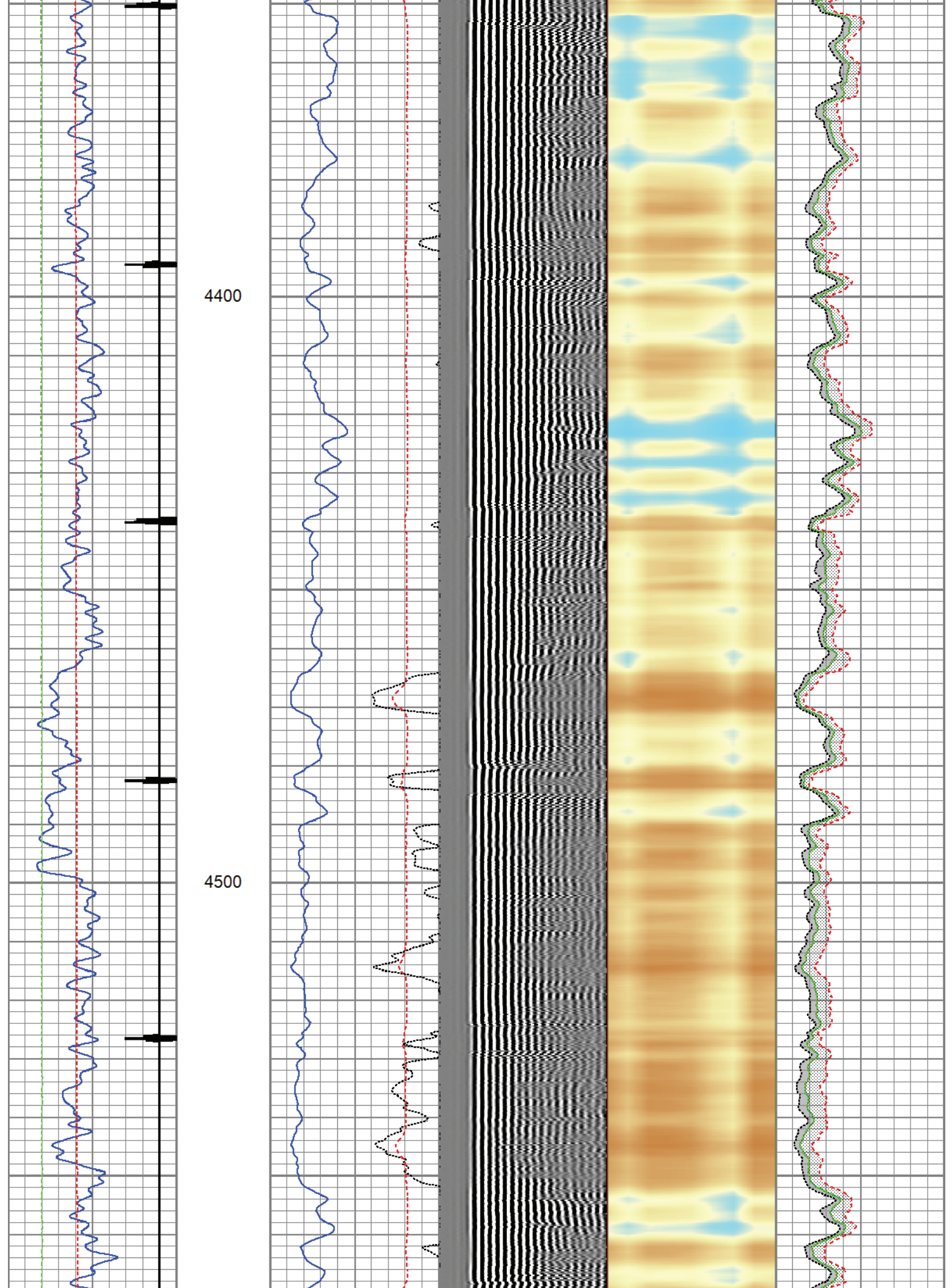


4200

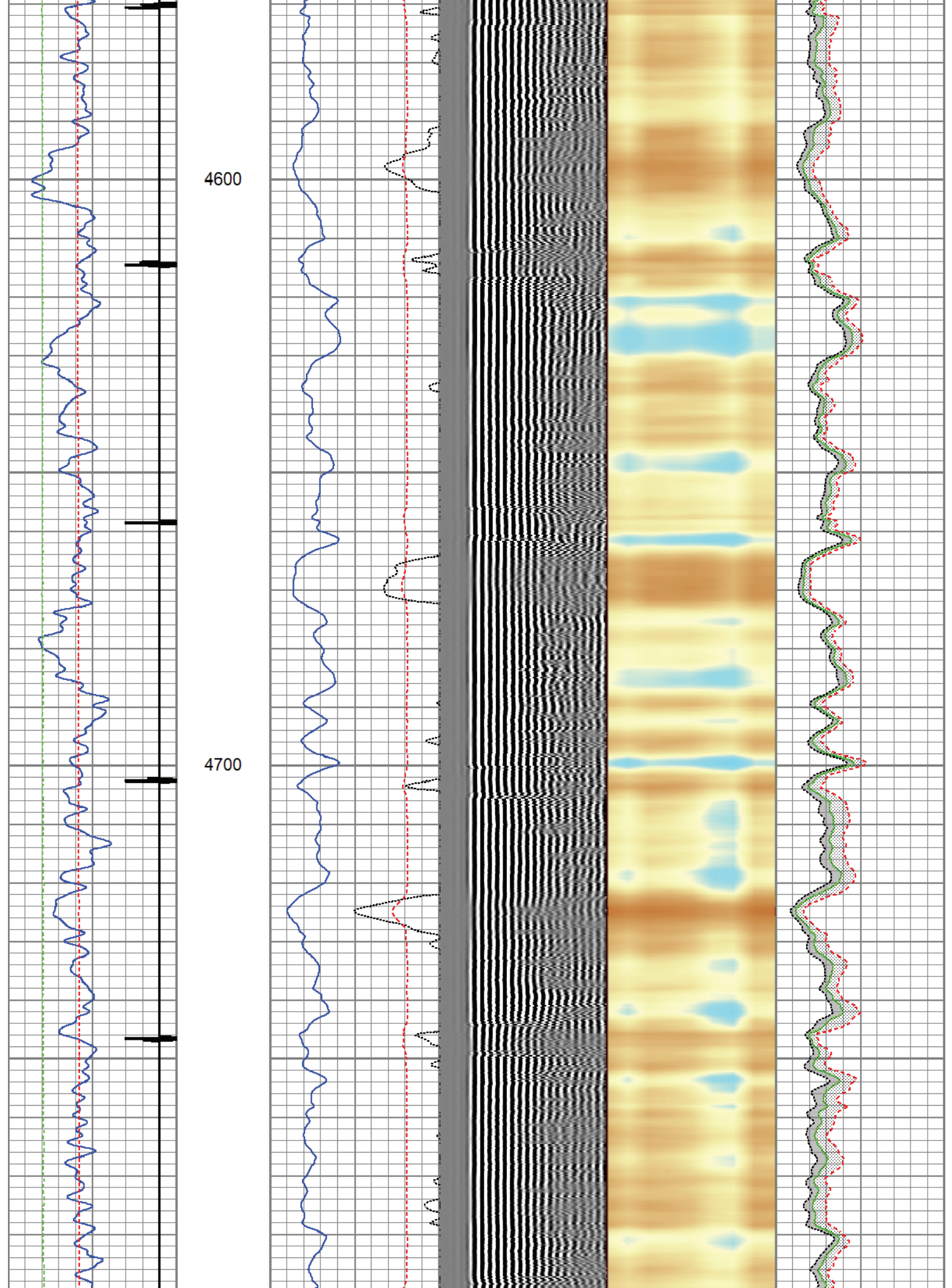
4300







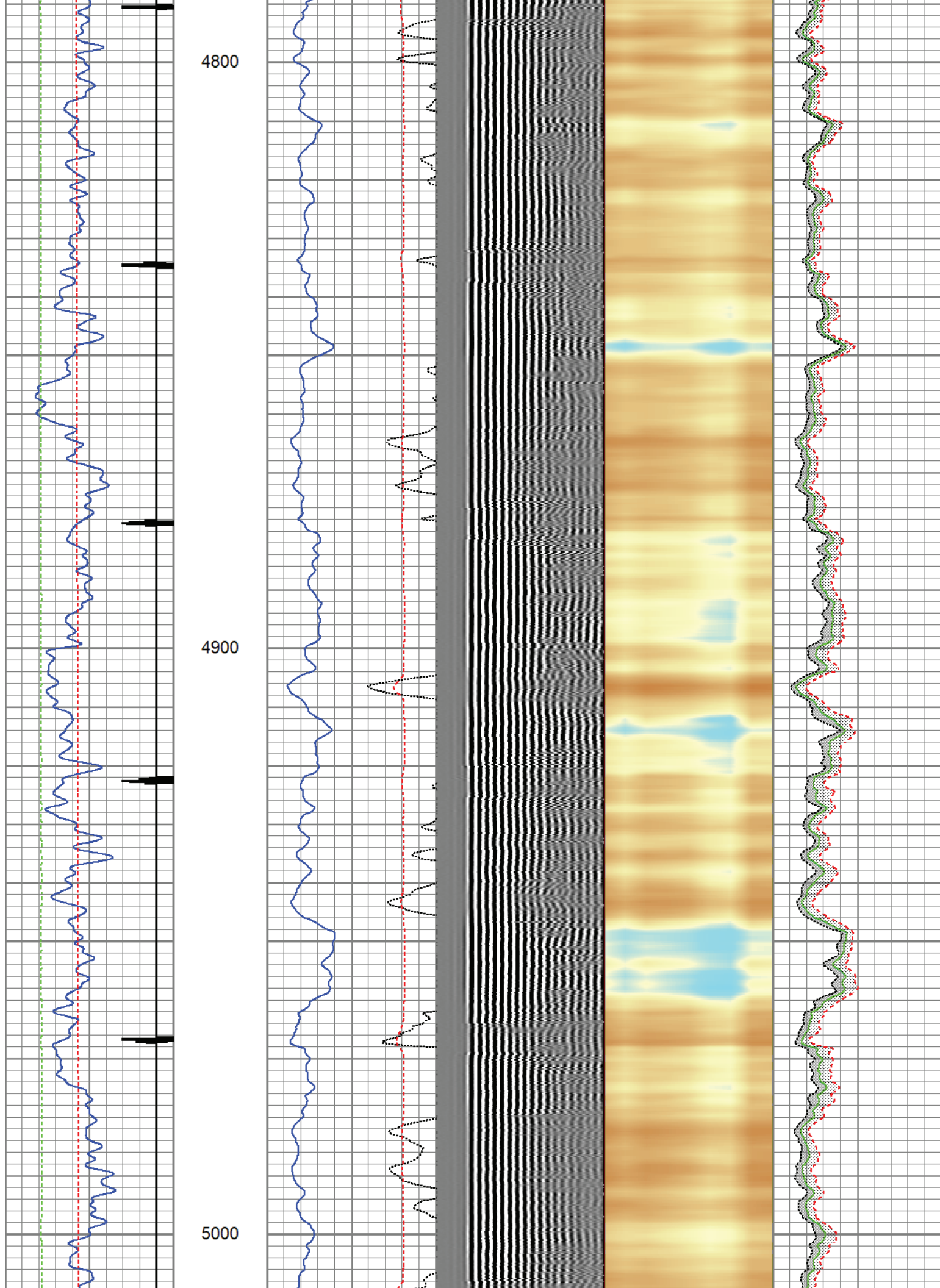




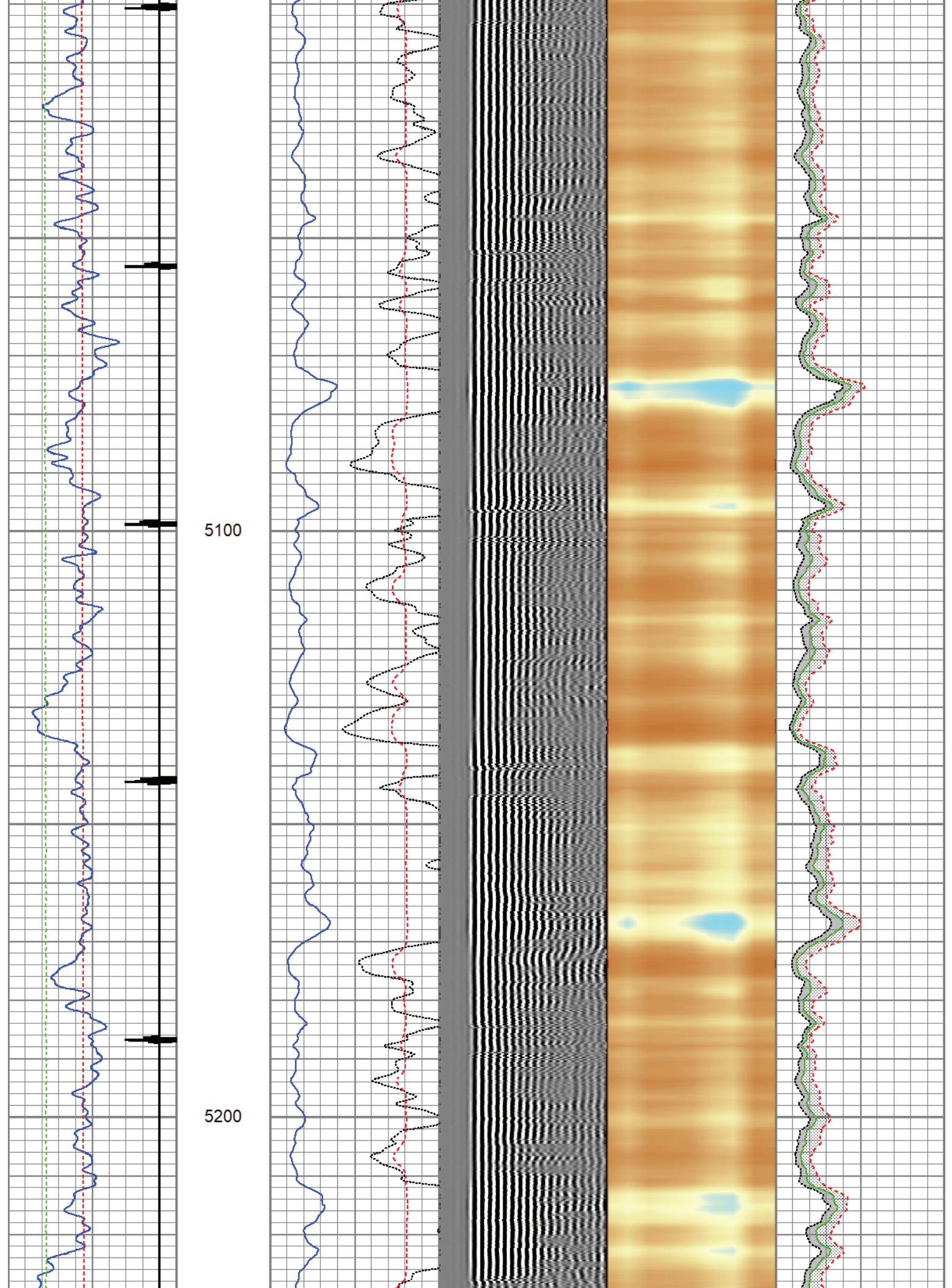
4800

4900

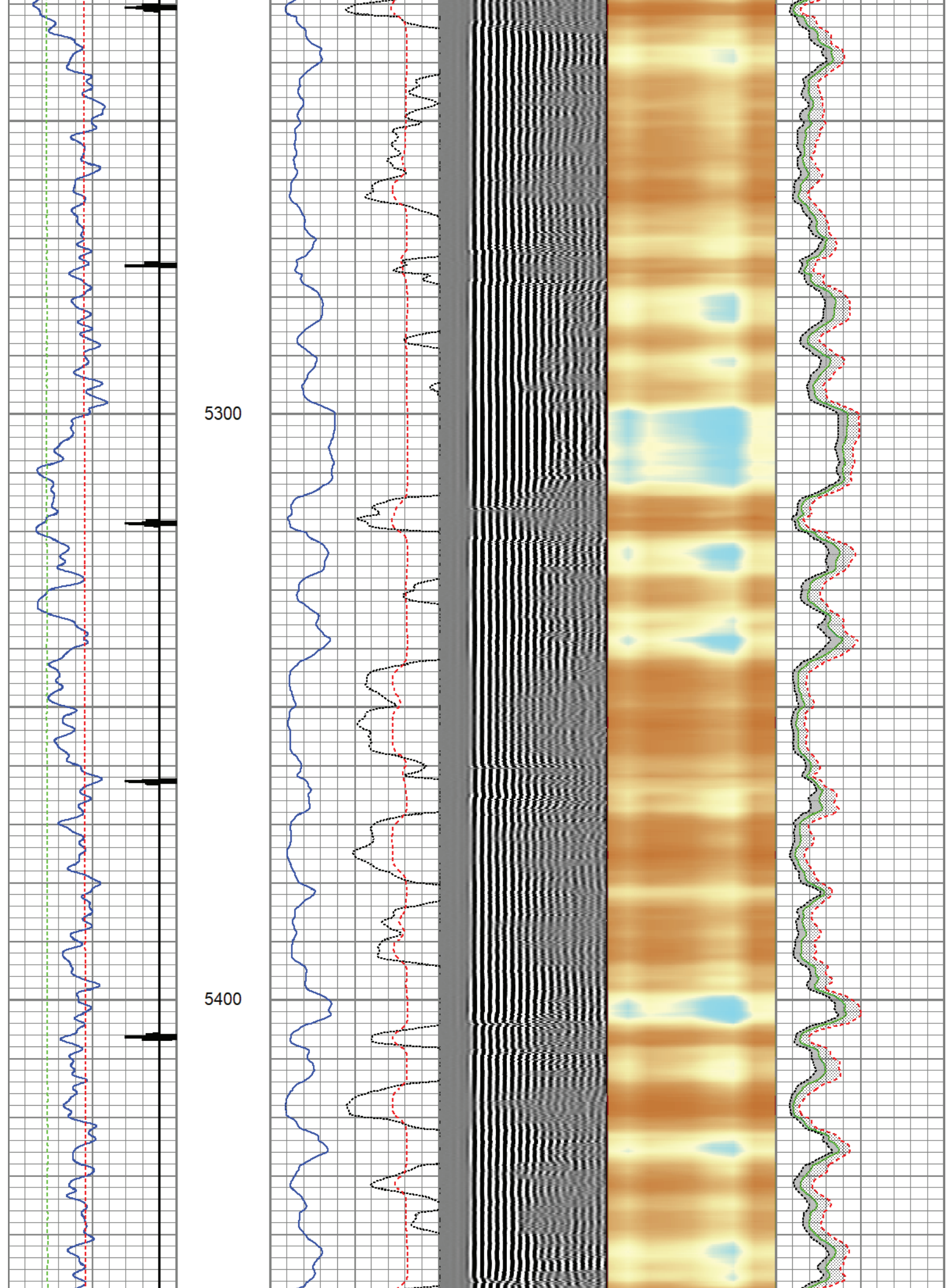
5000

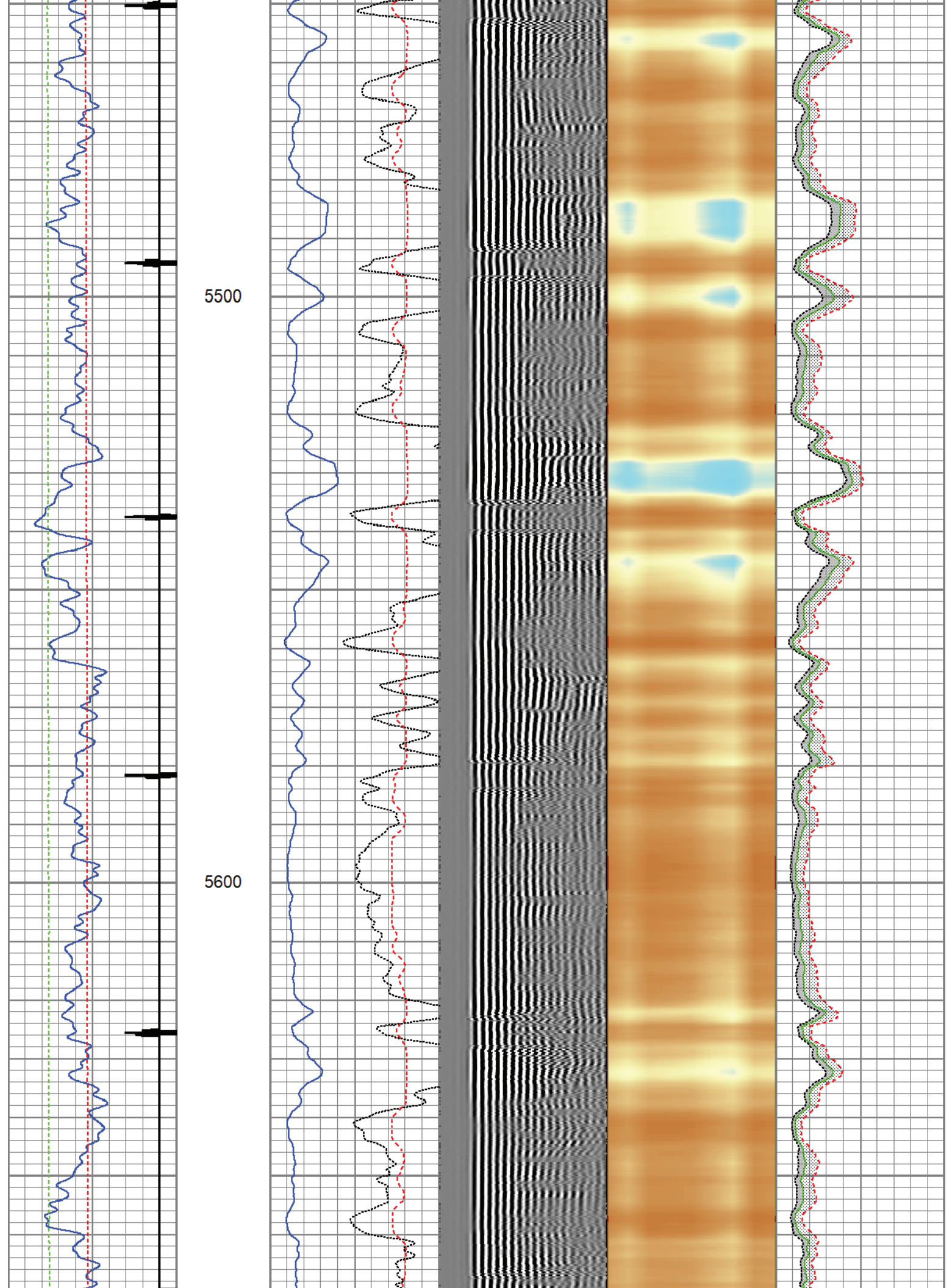








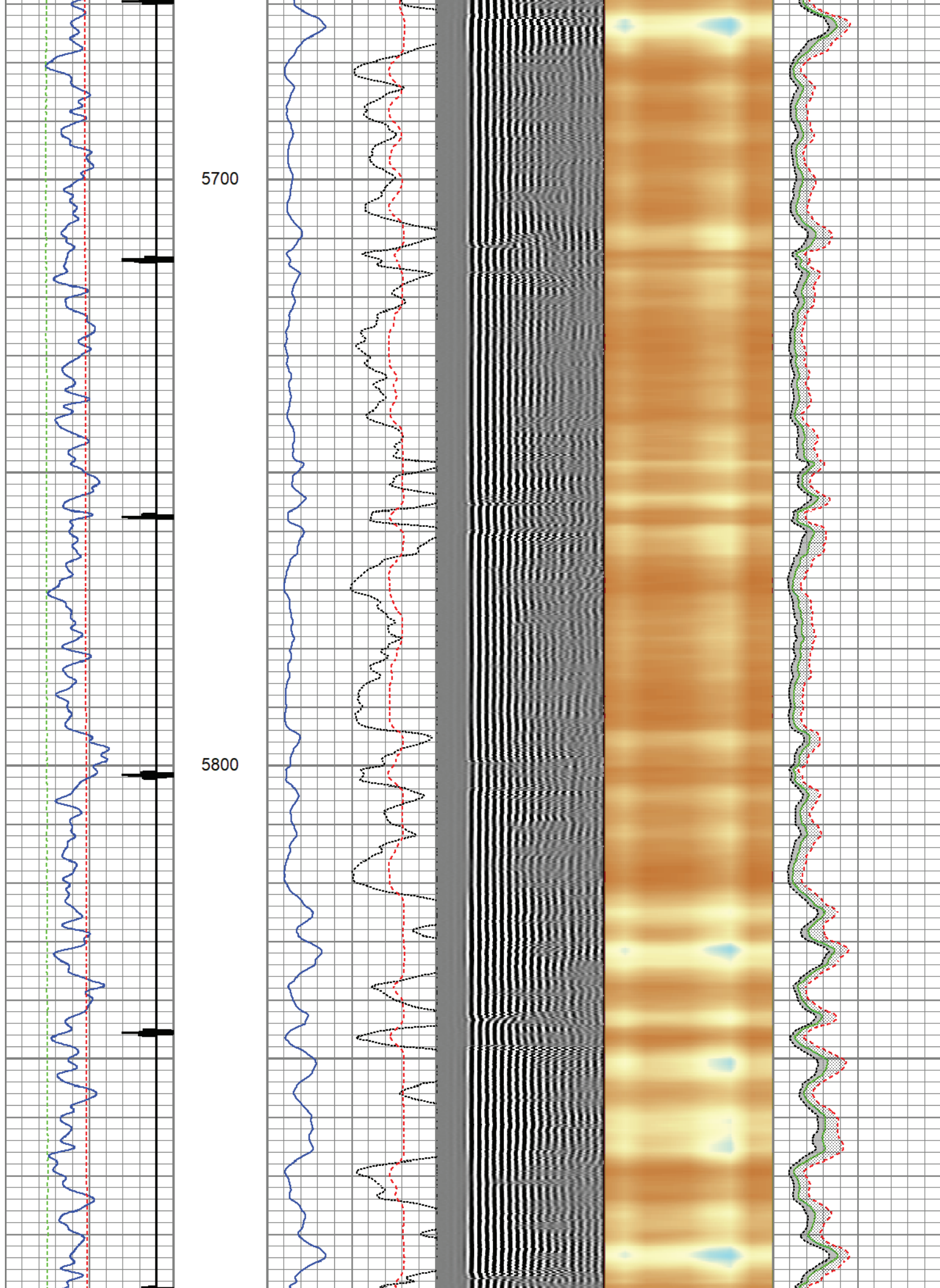




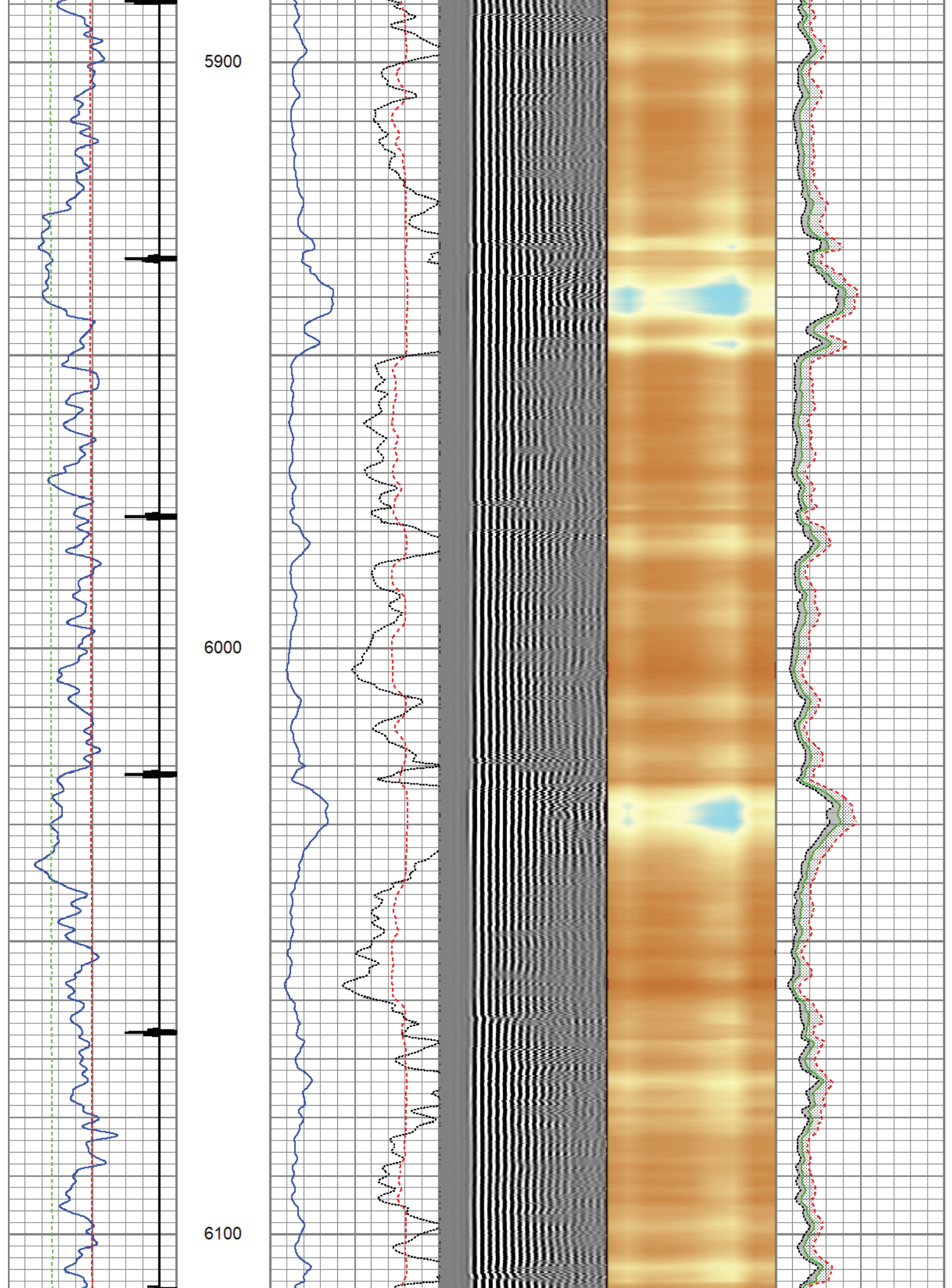


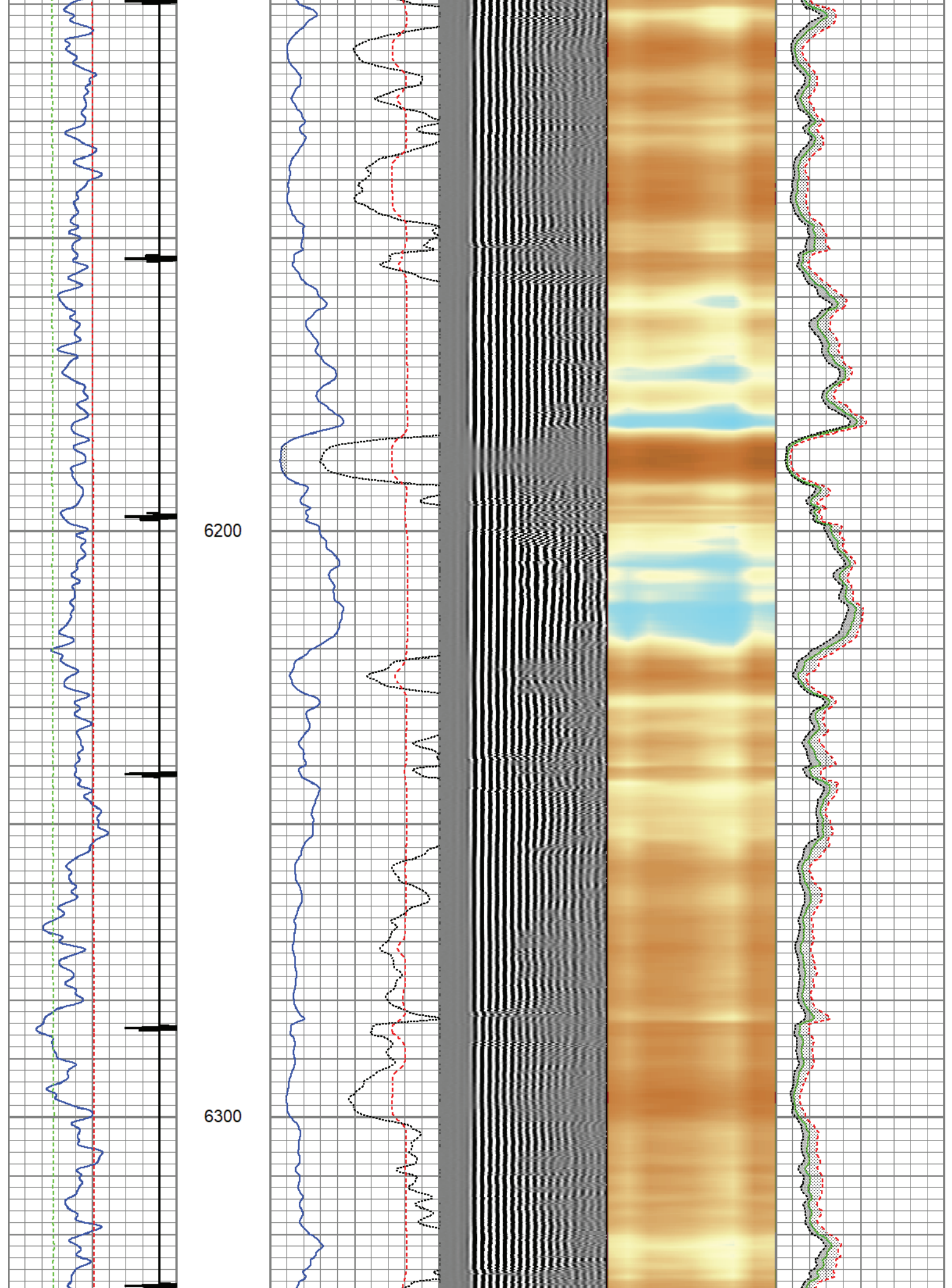
5700

5800

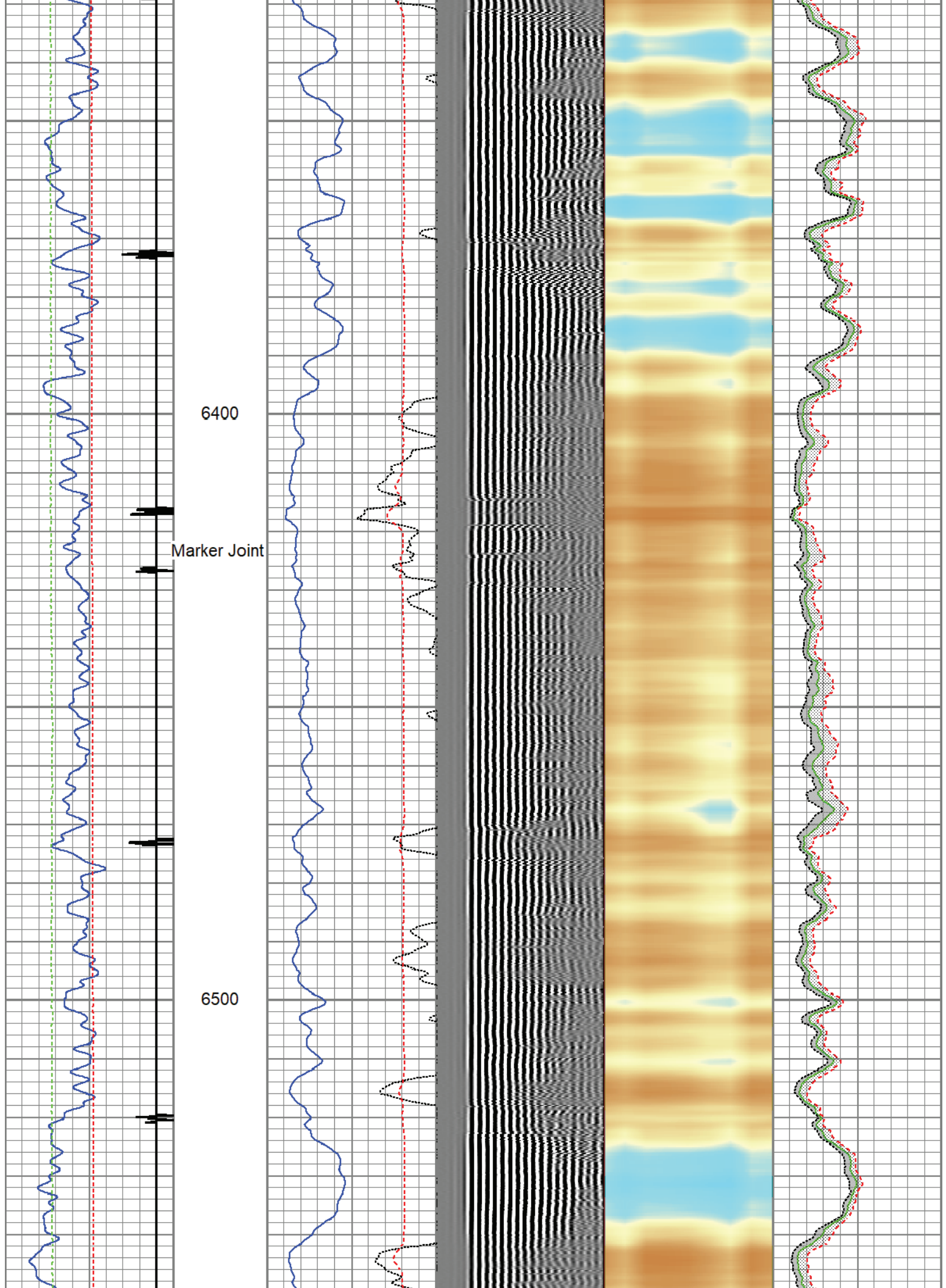






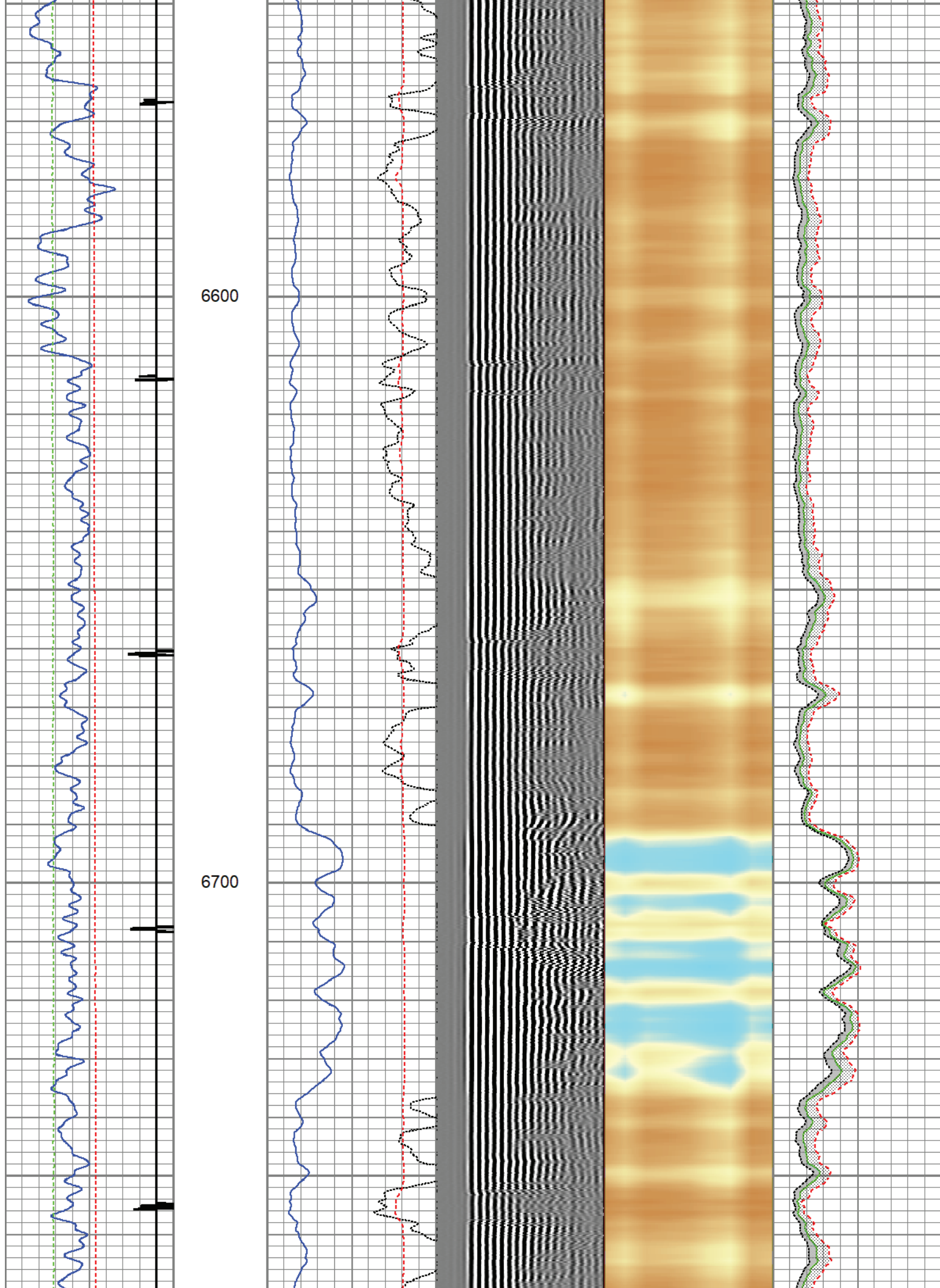




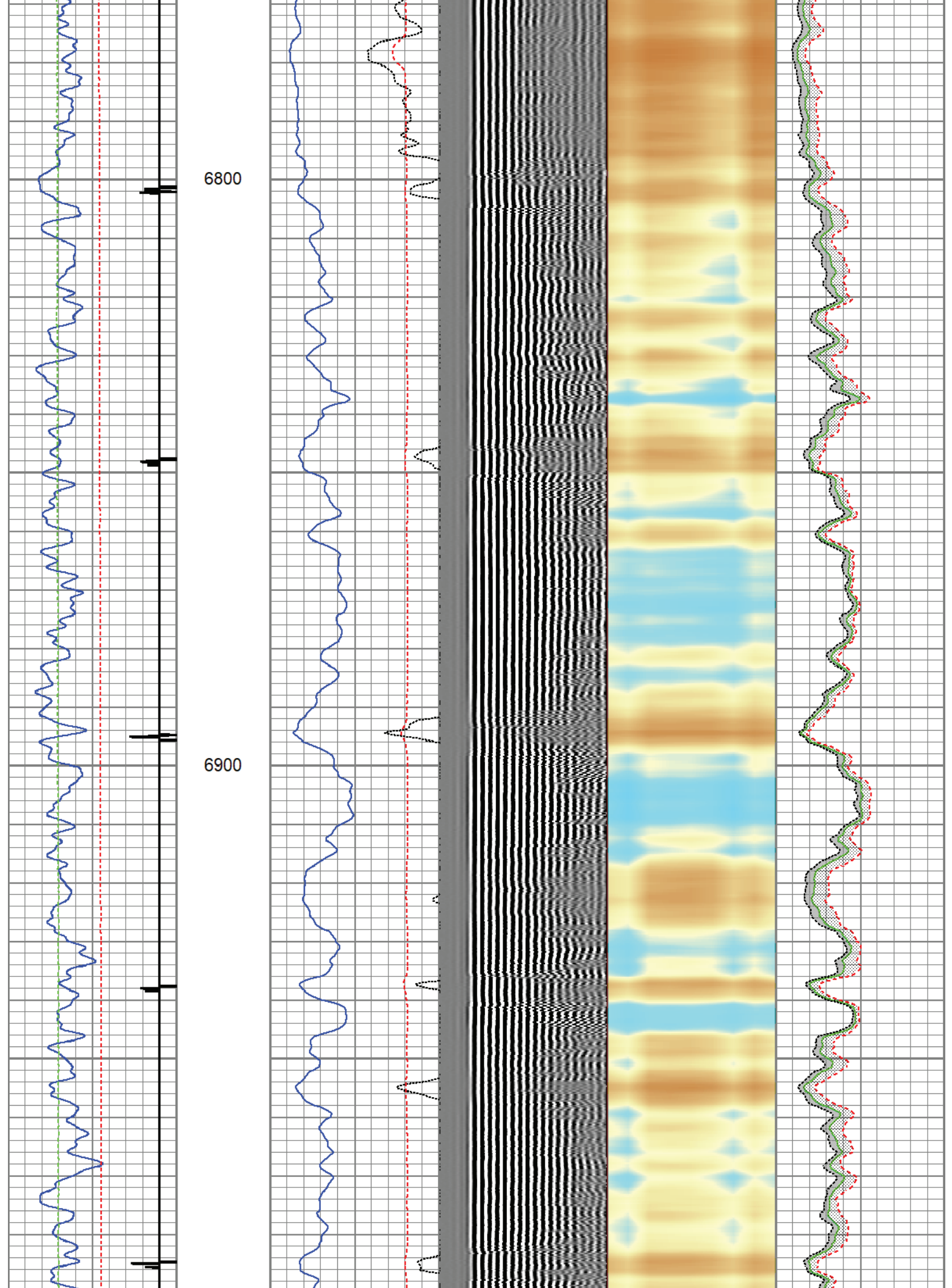


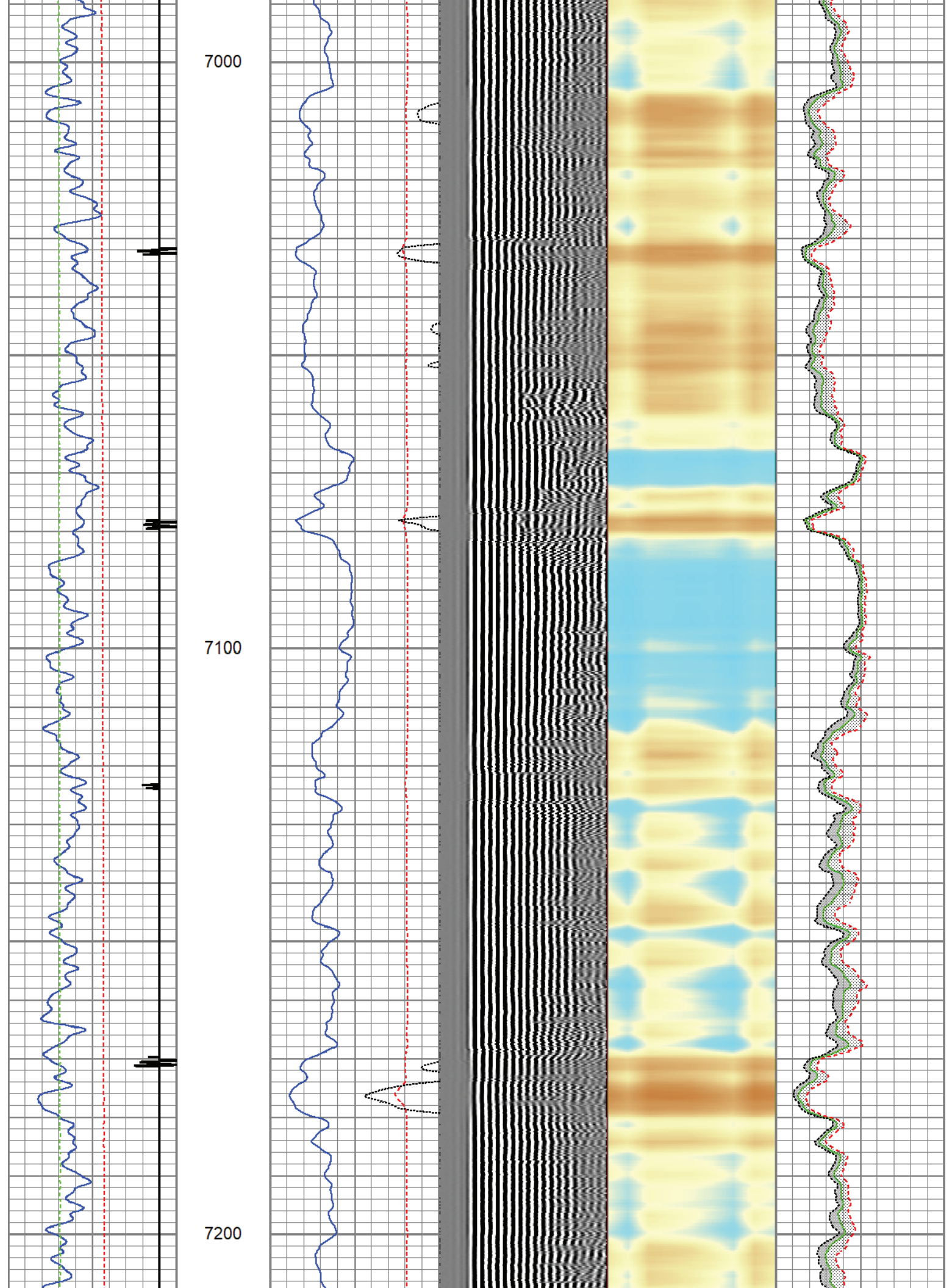
6600

6700

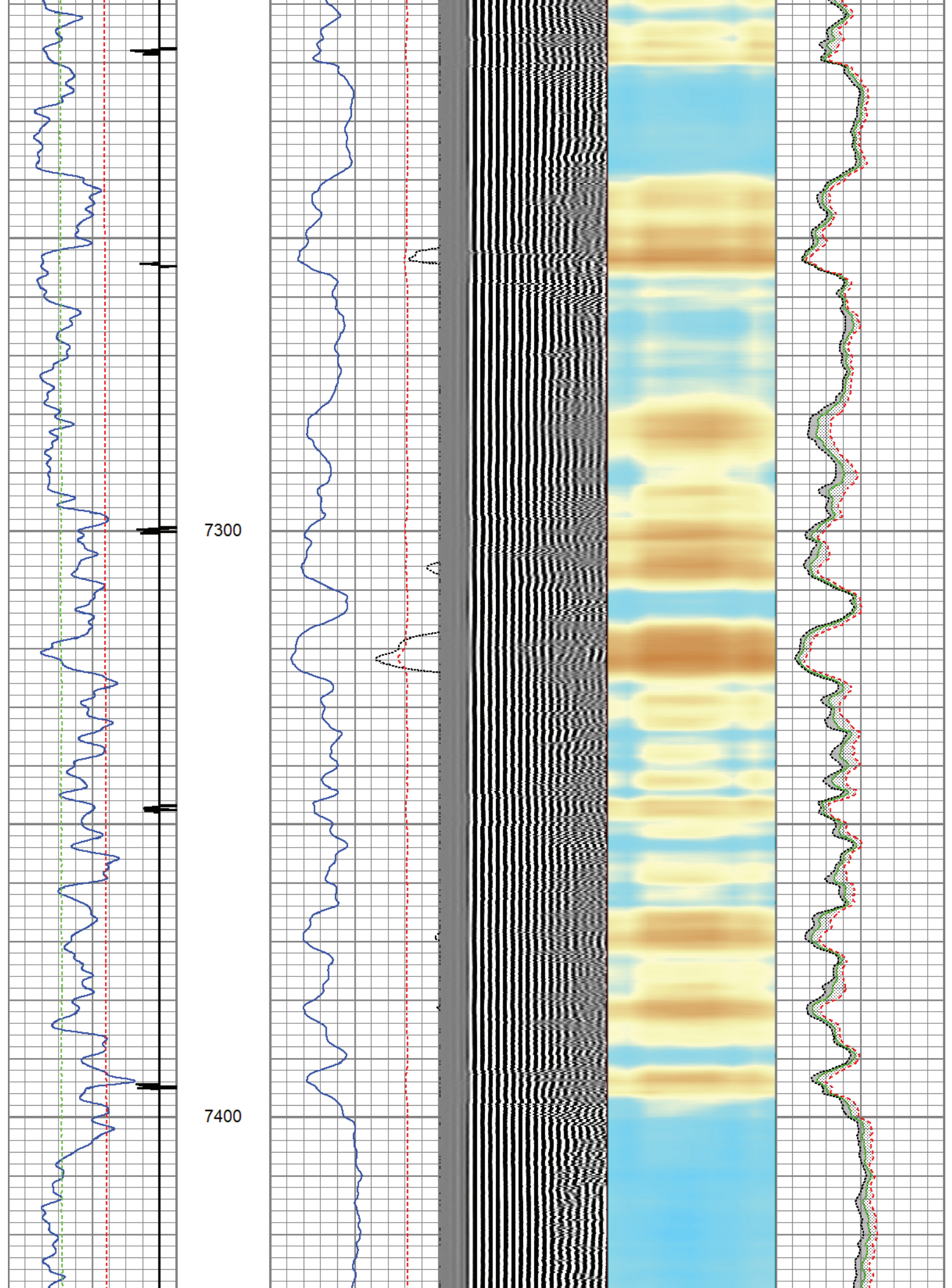


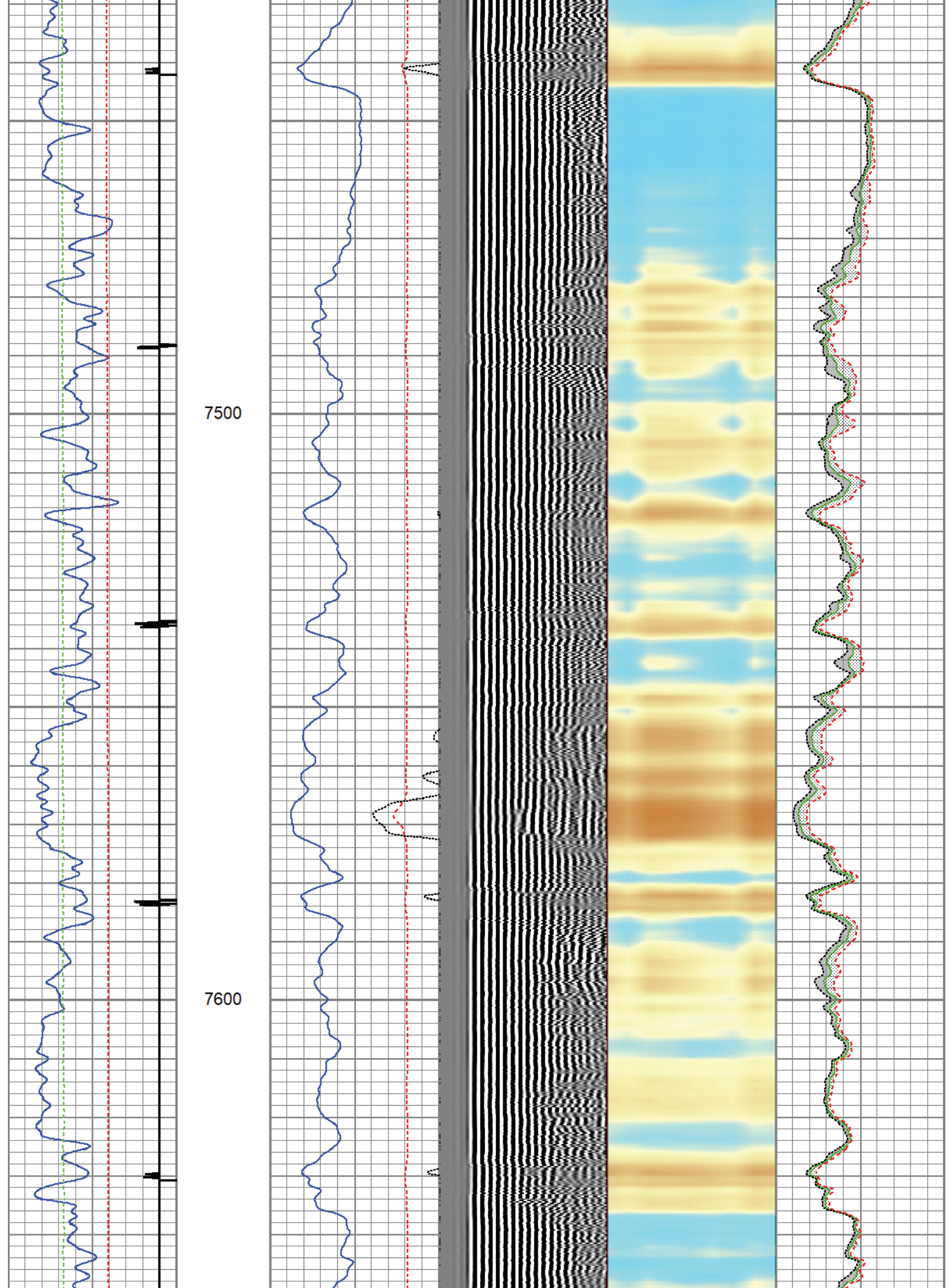




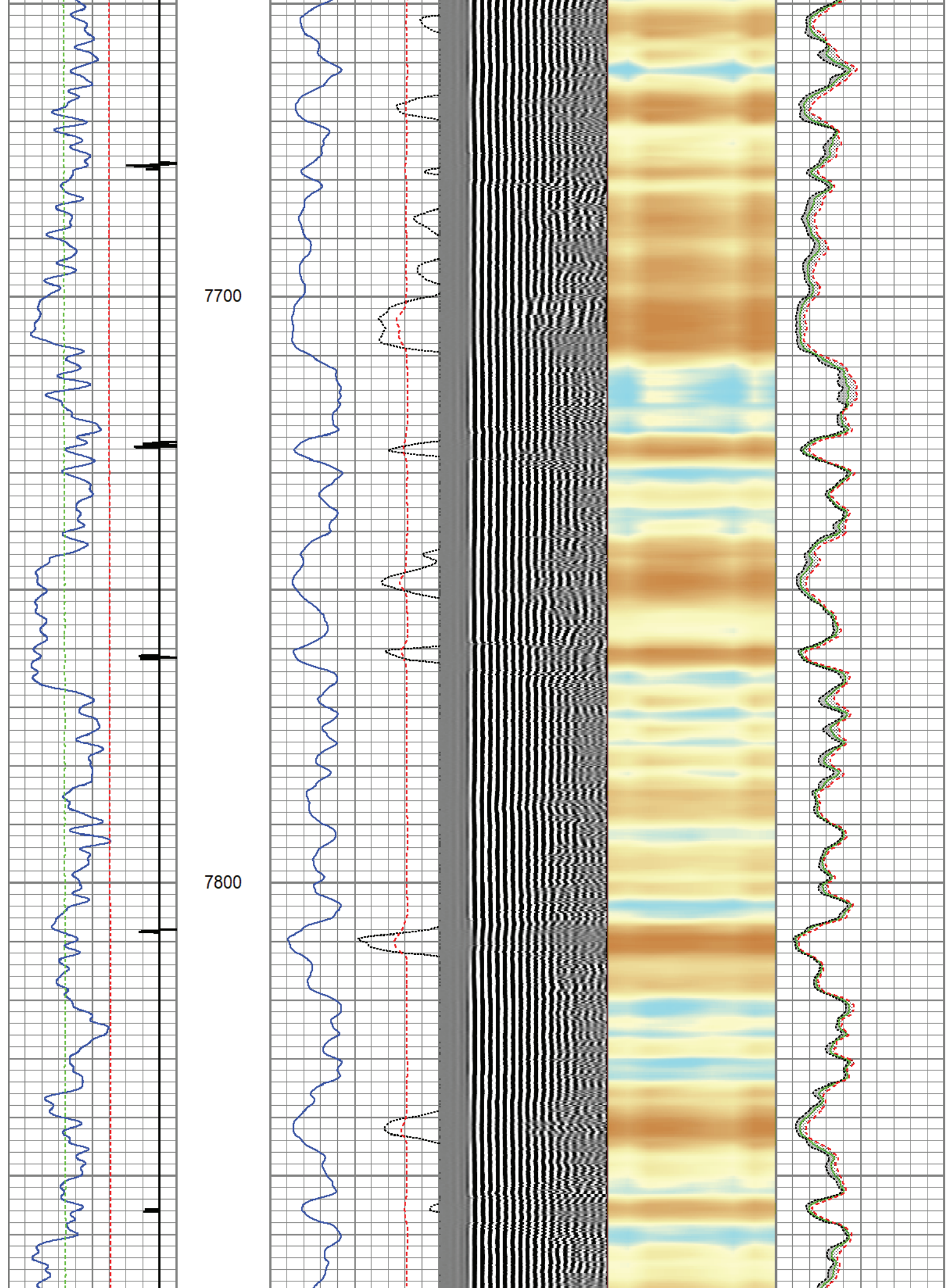


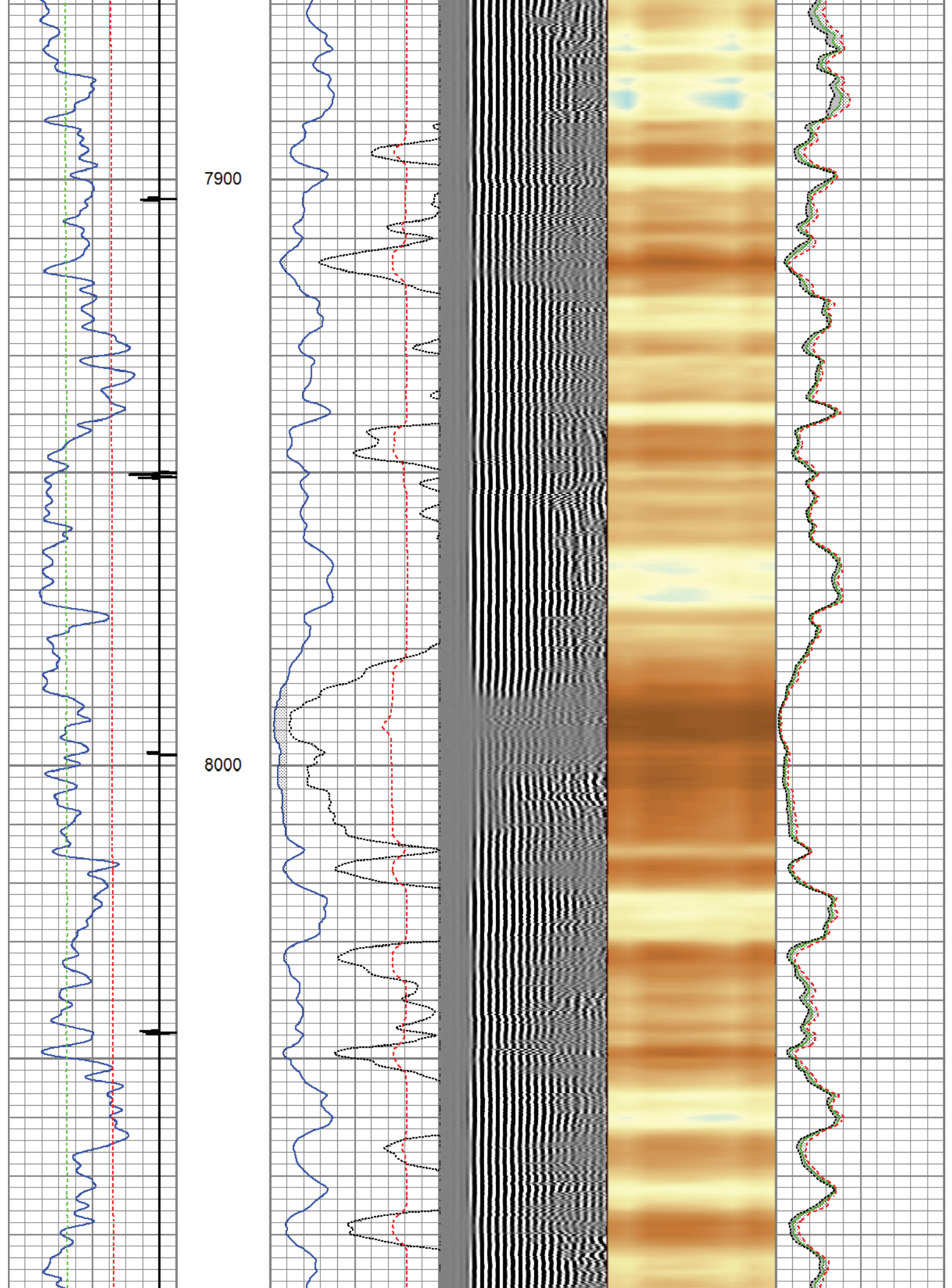




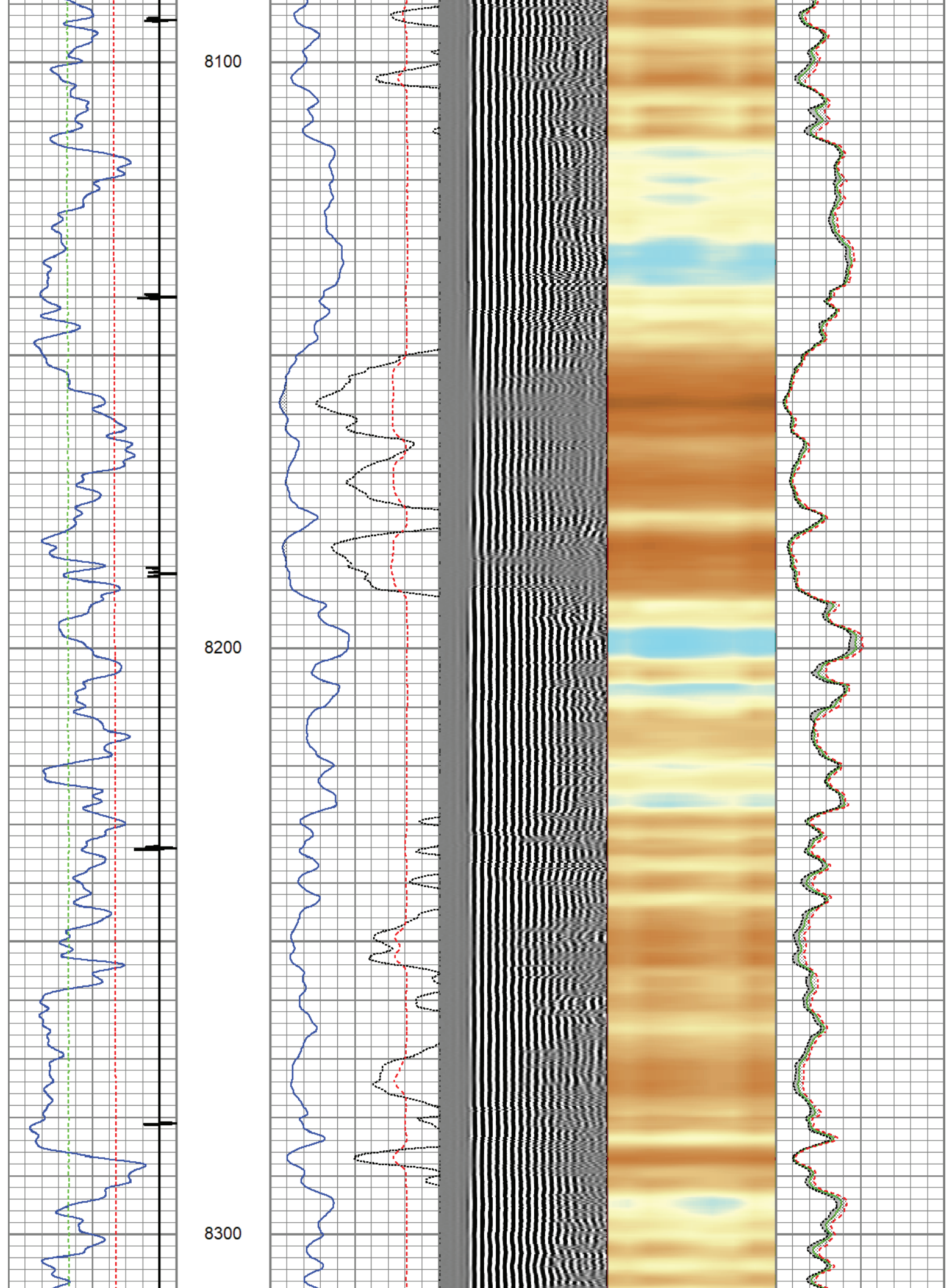


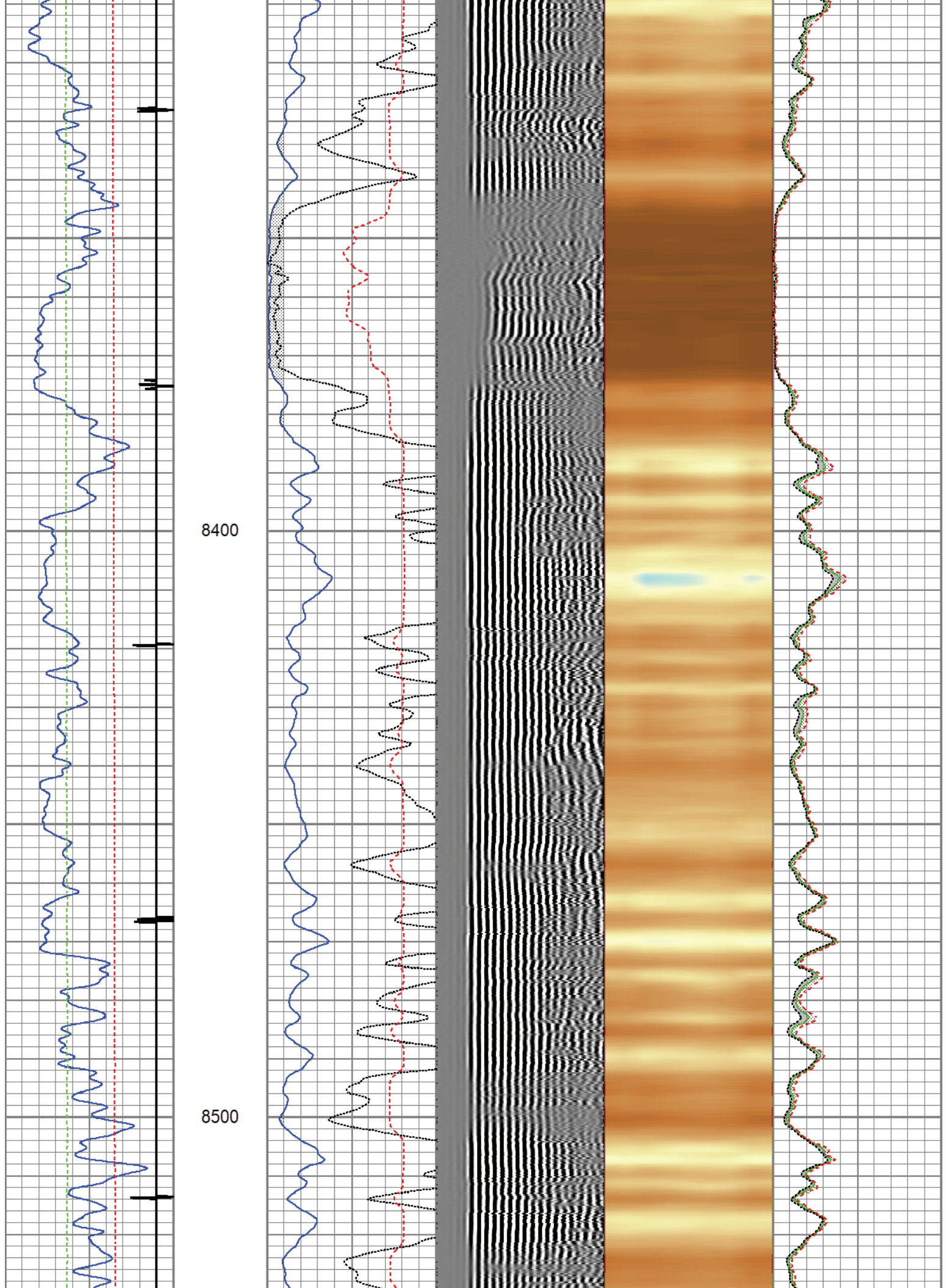




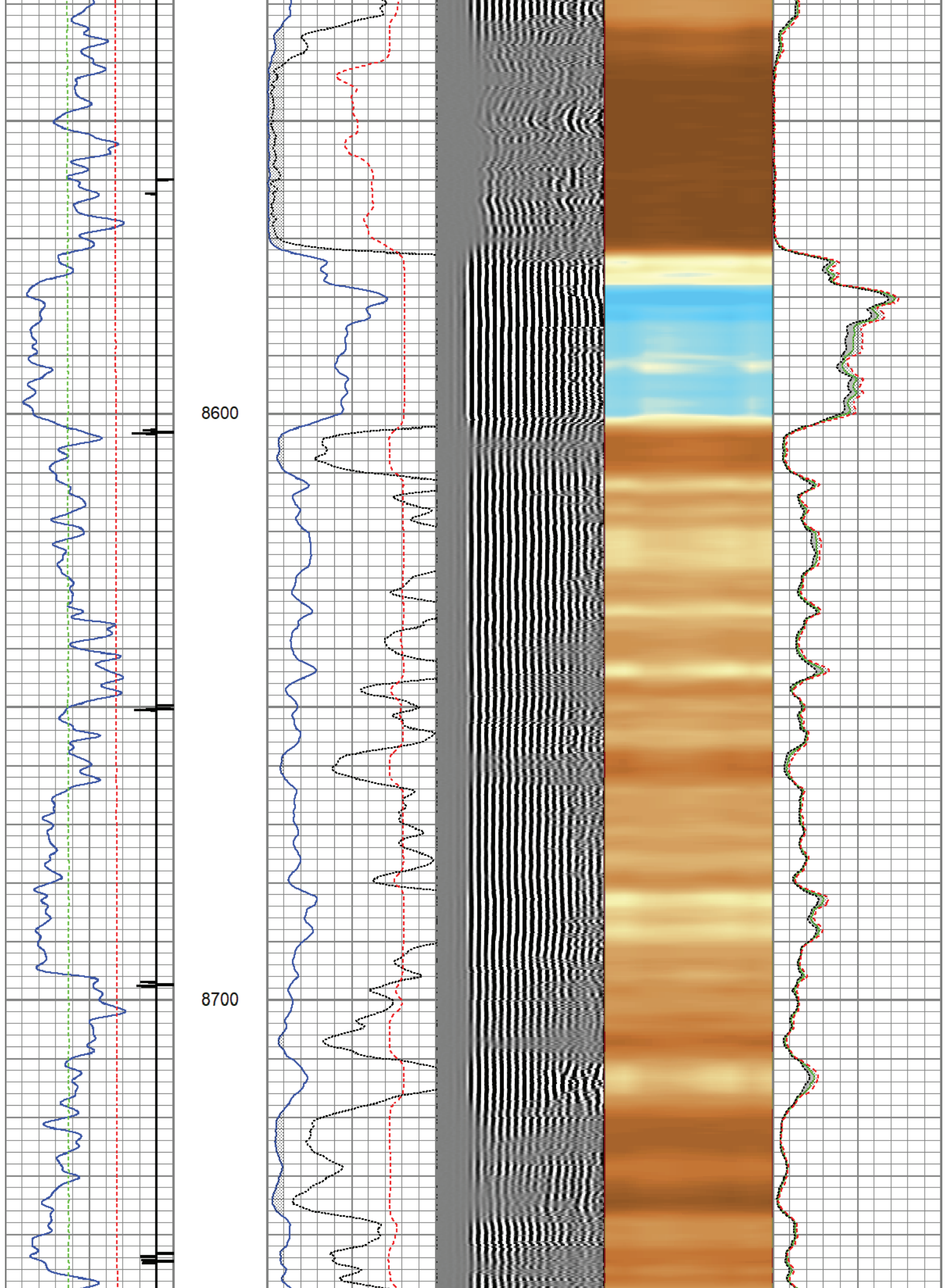


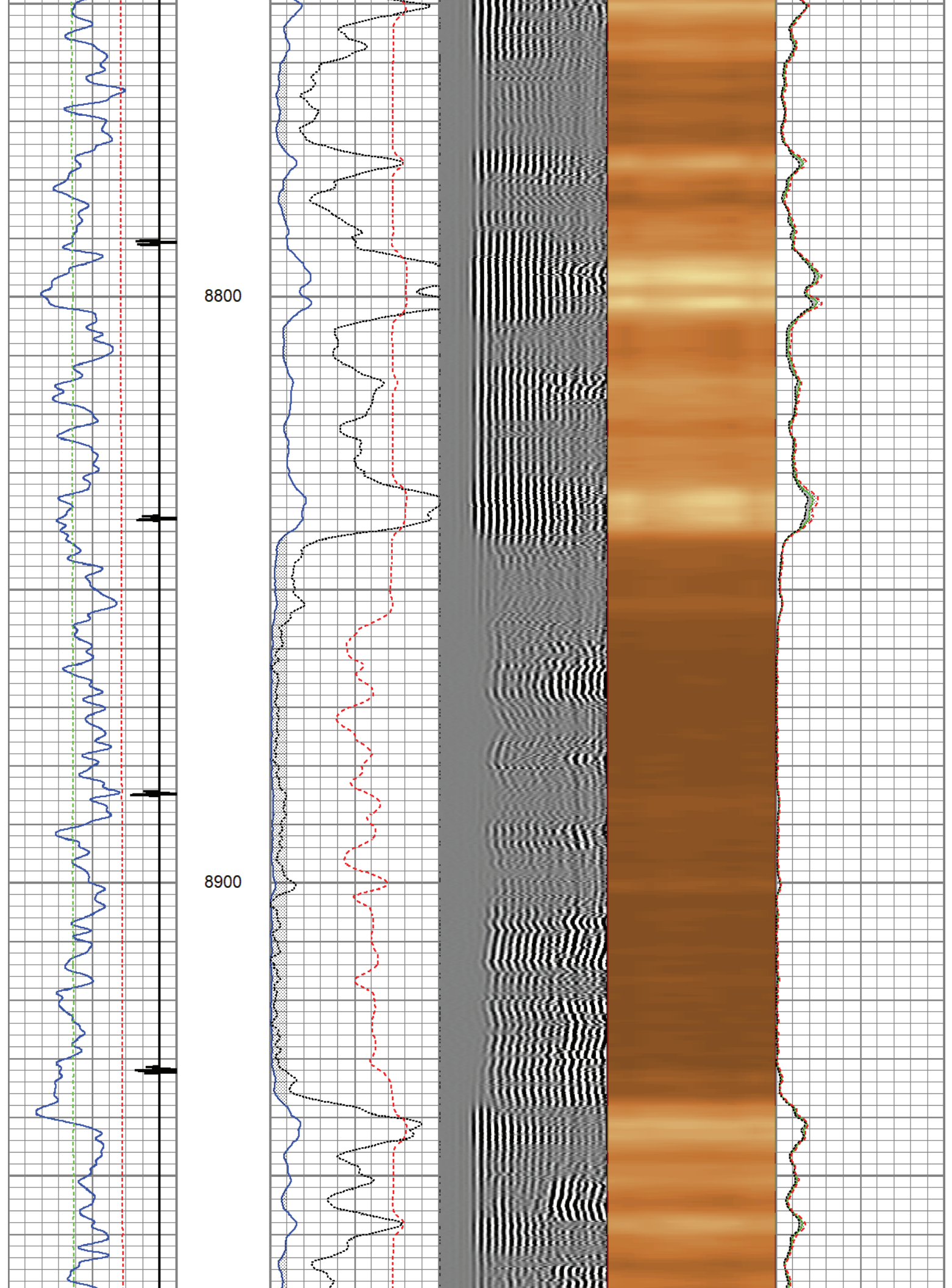




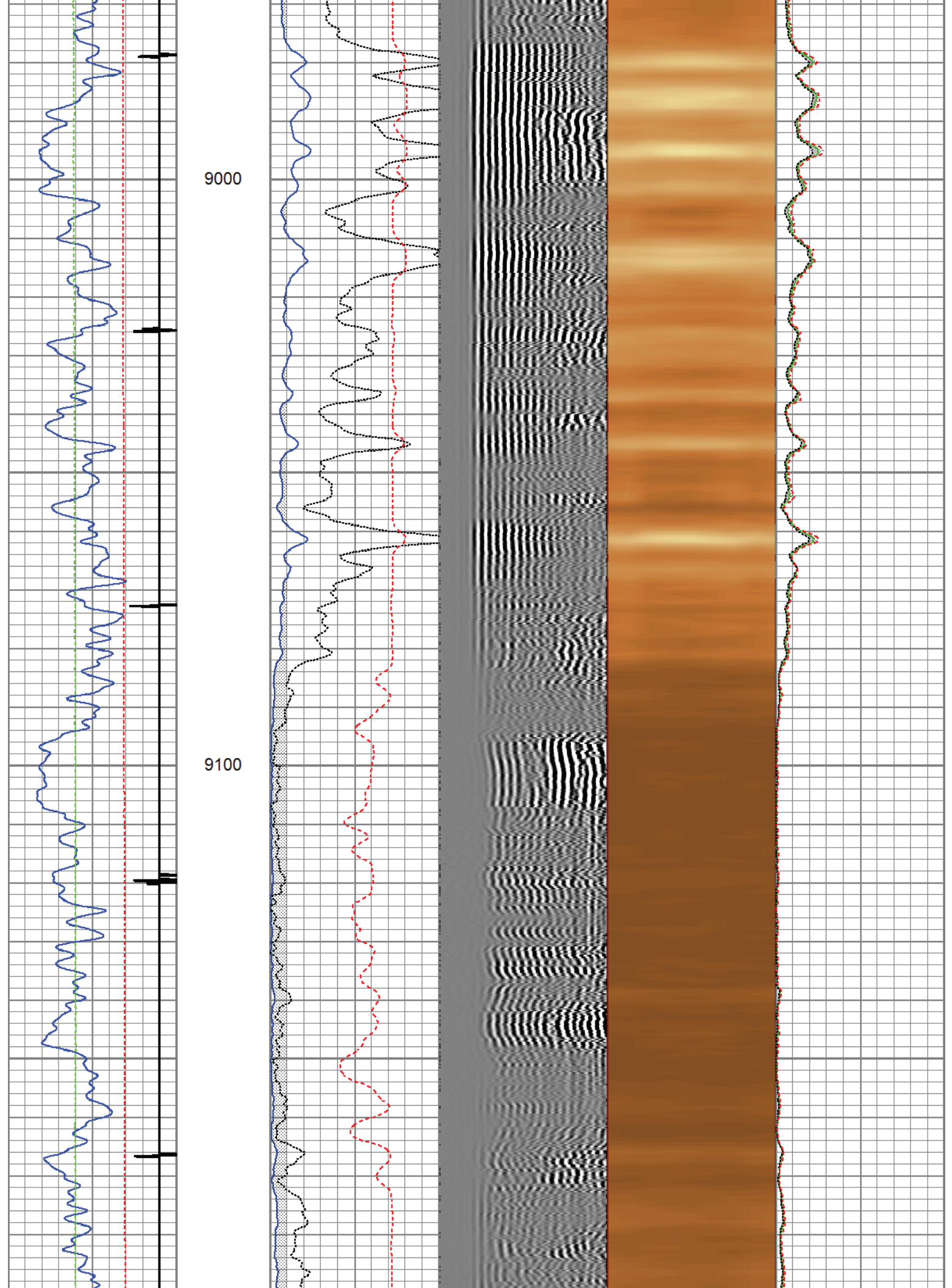


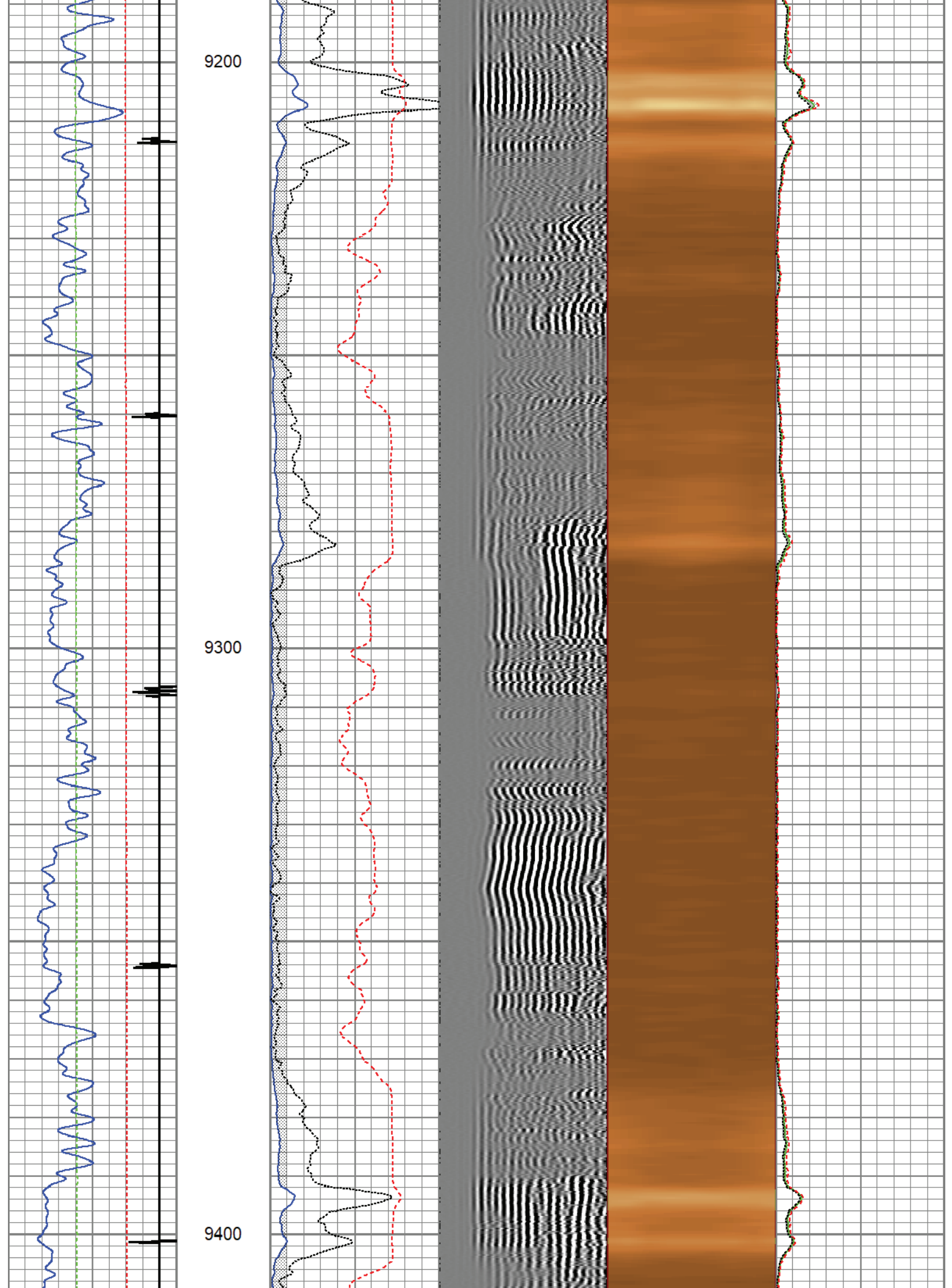




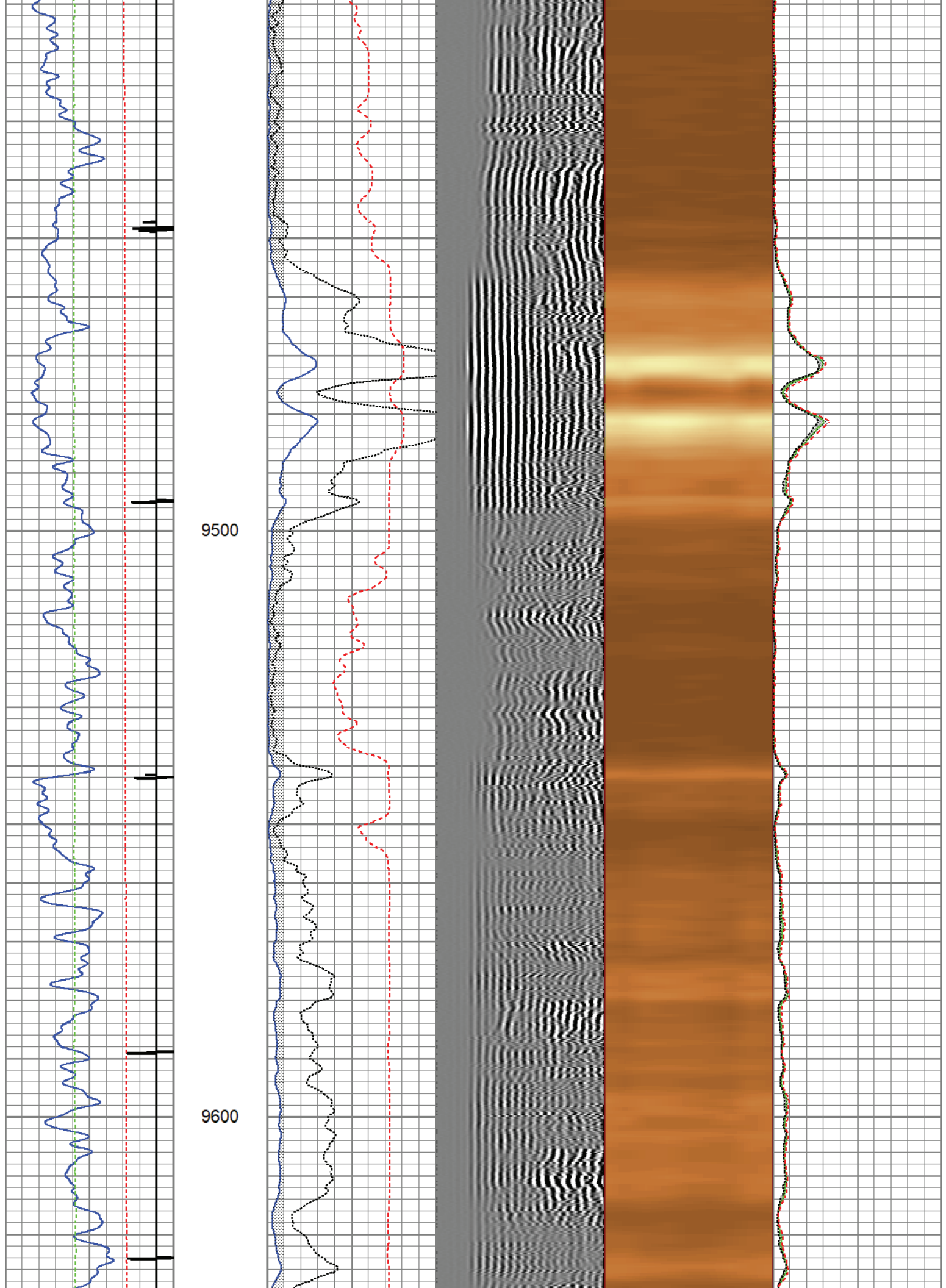


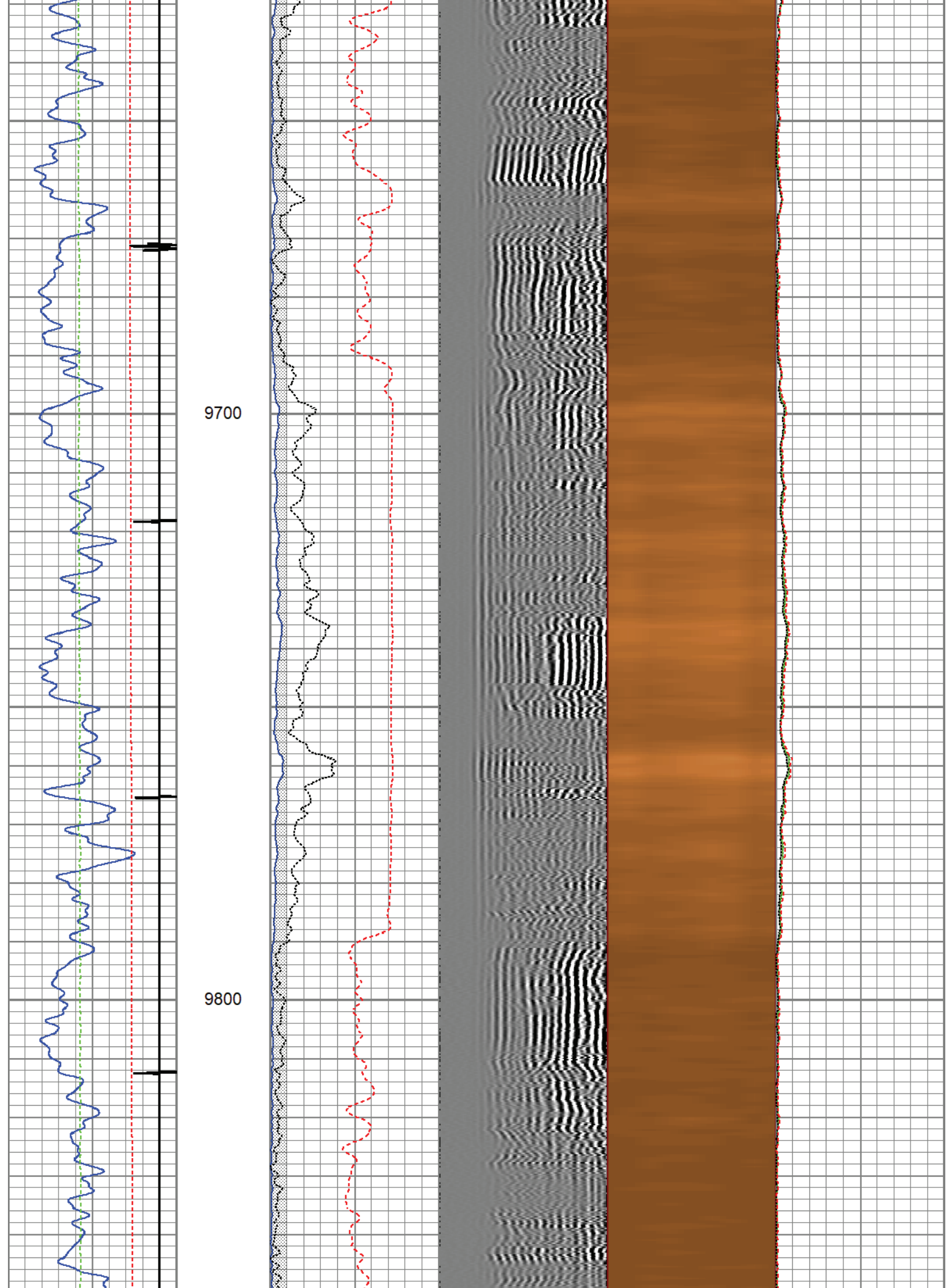




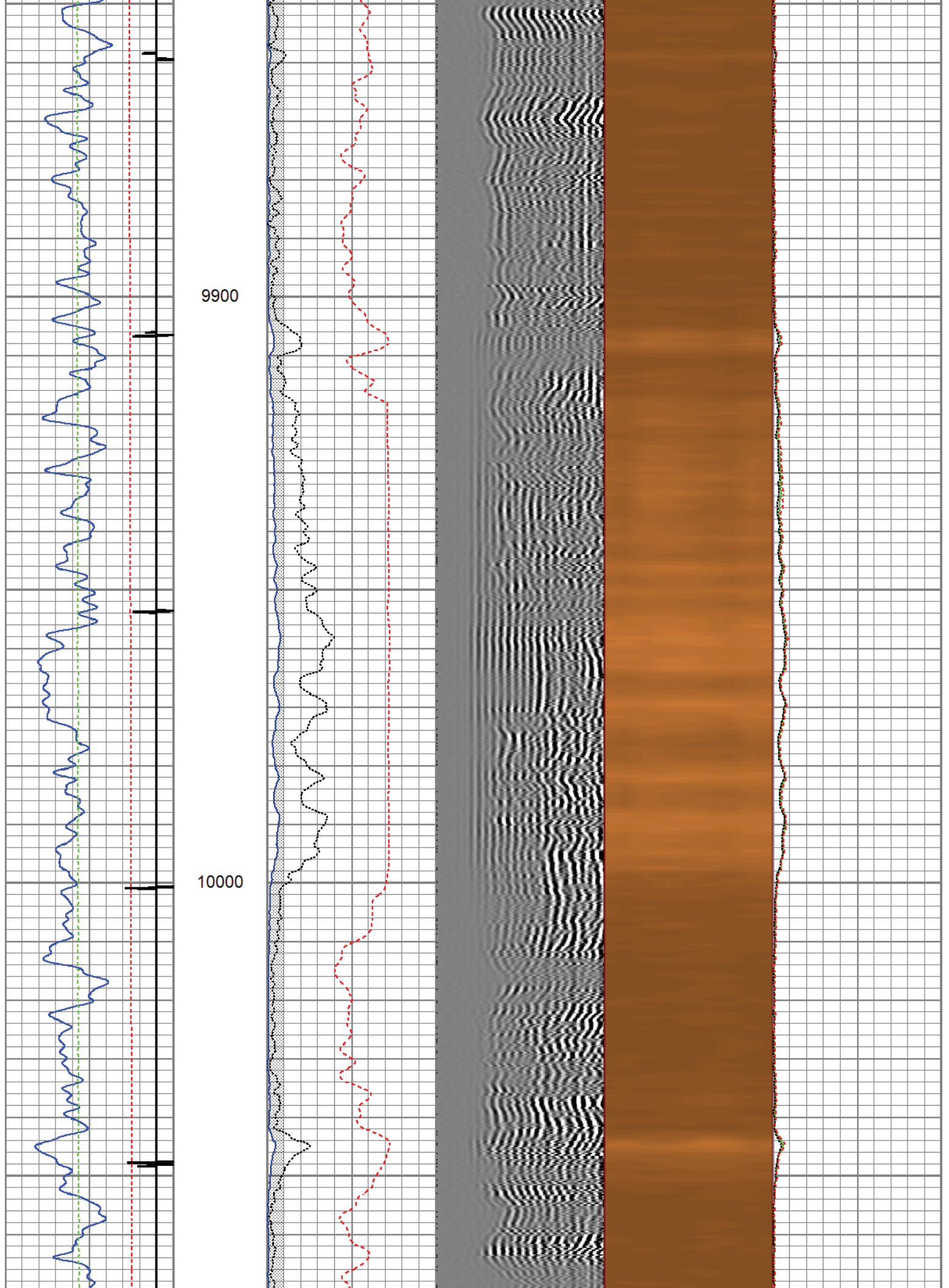






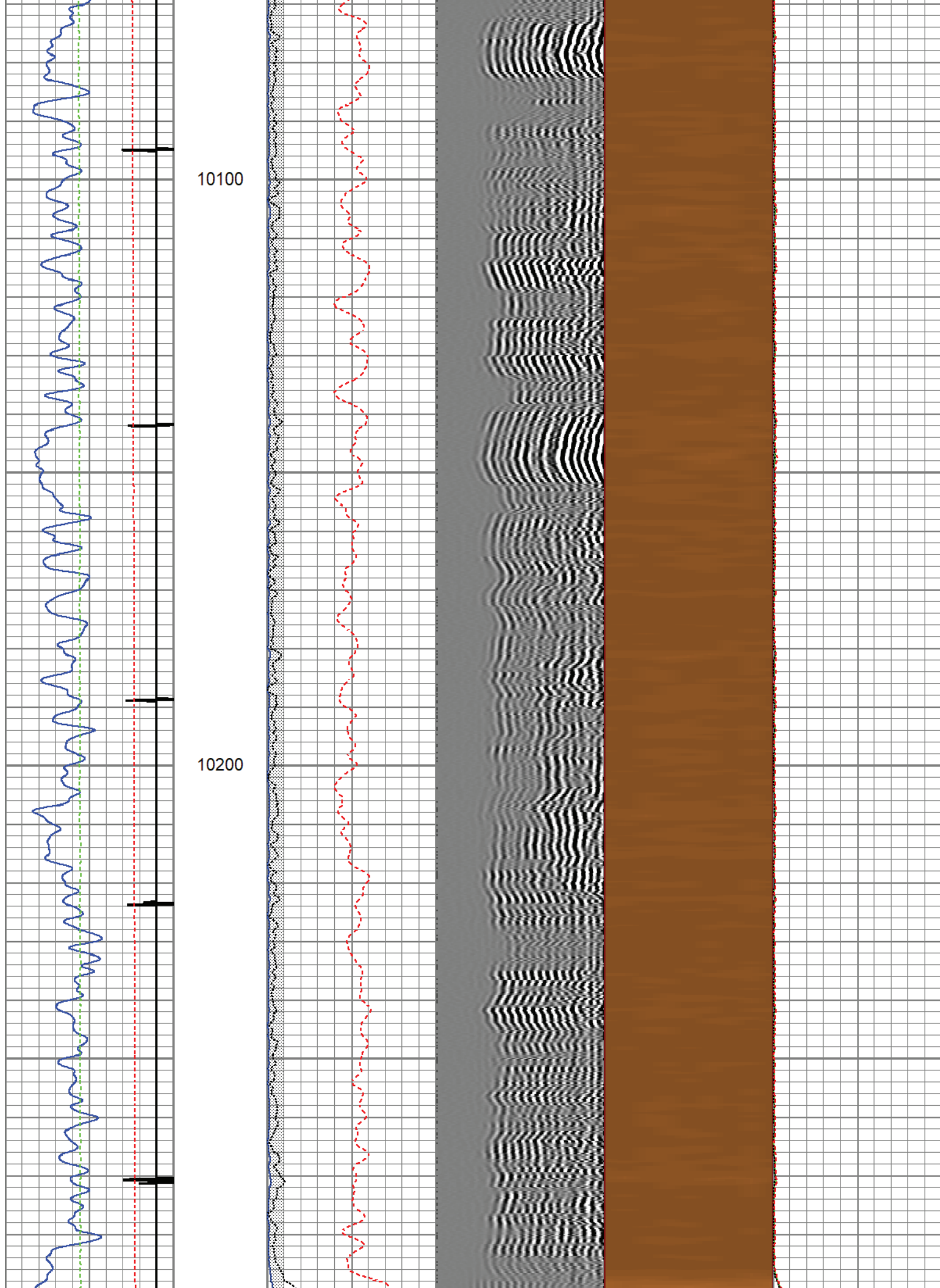






10100

10200

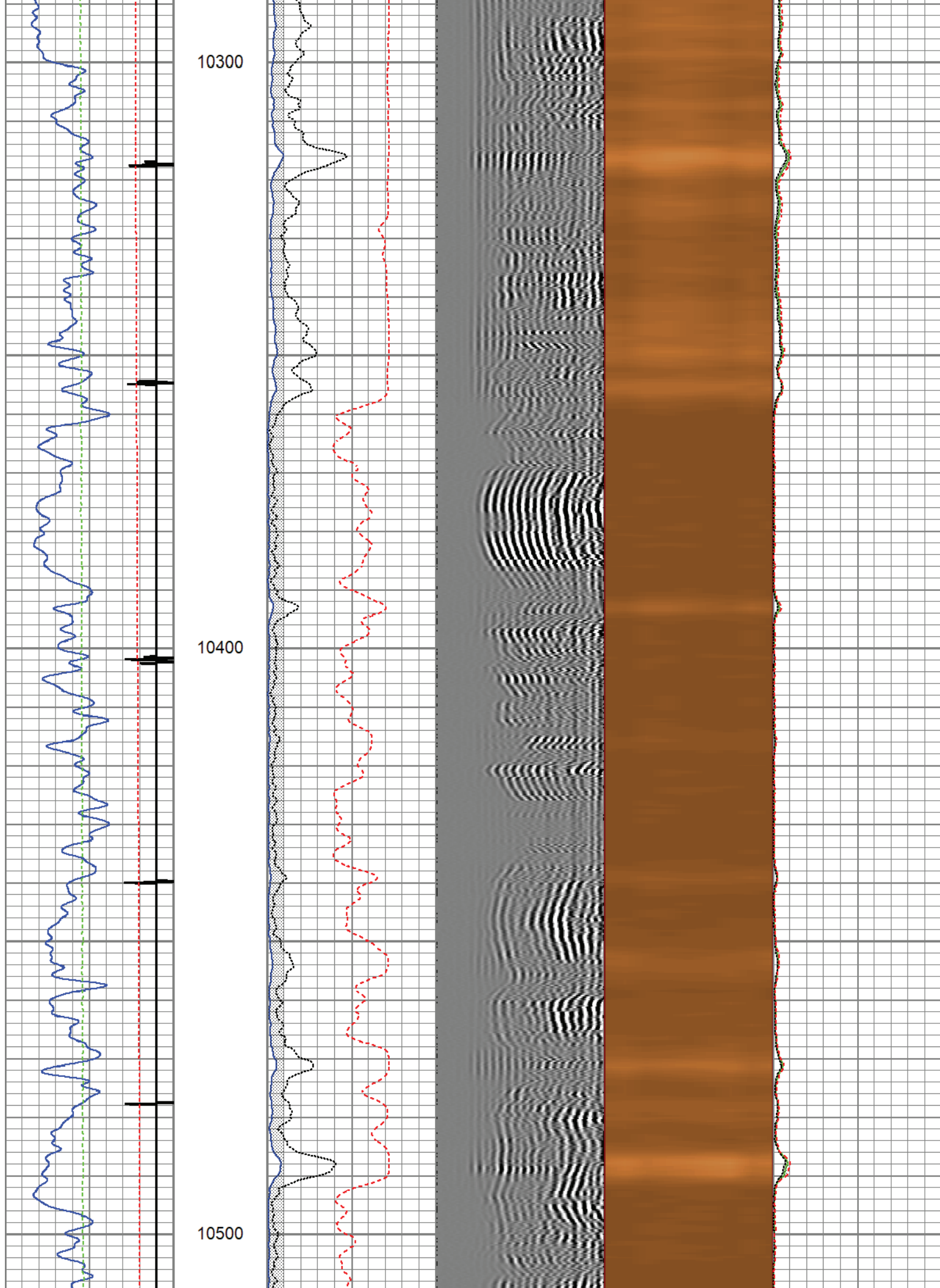


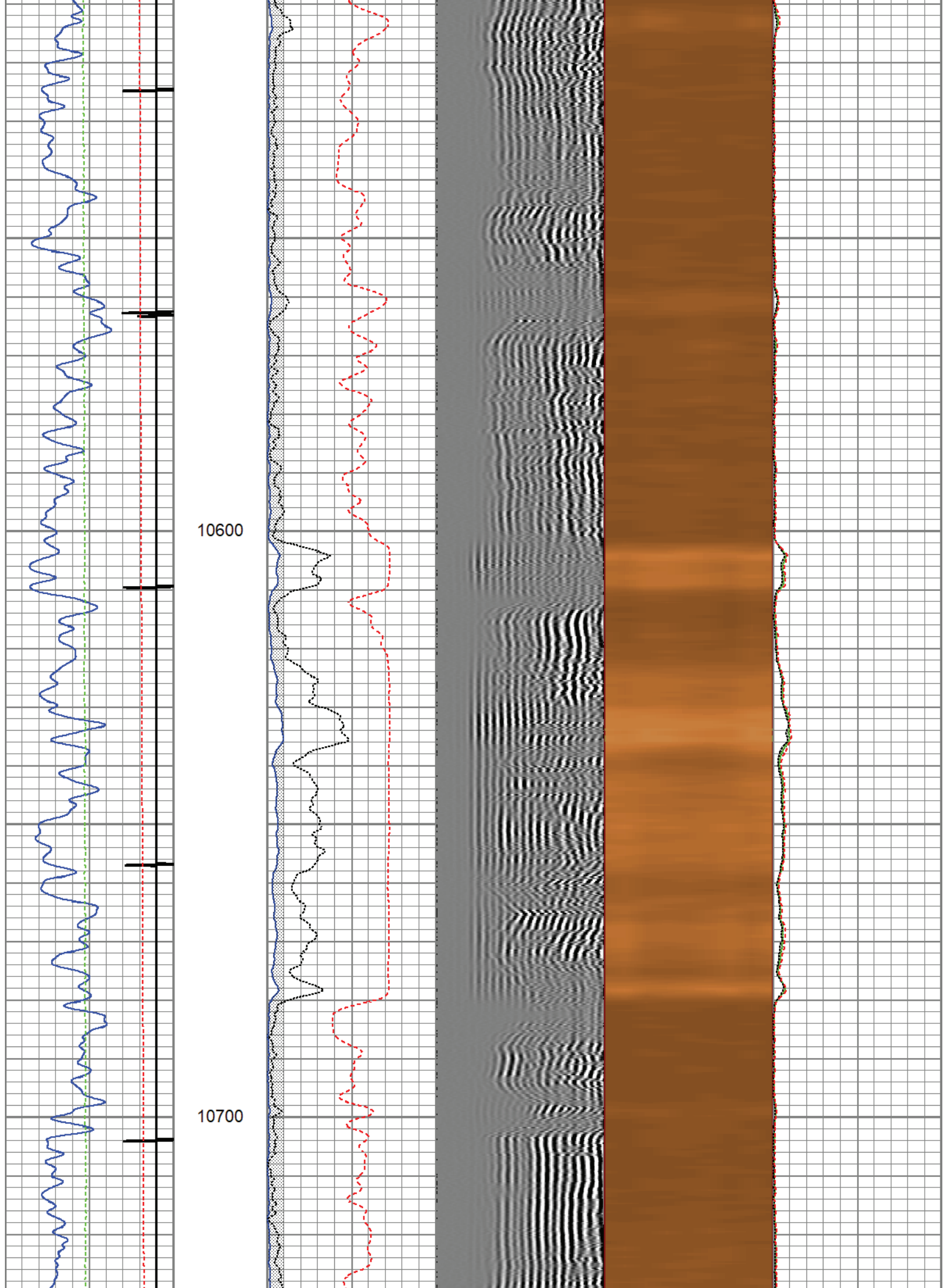


10300

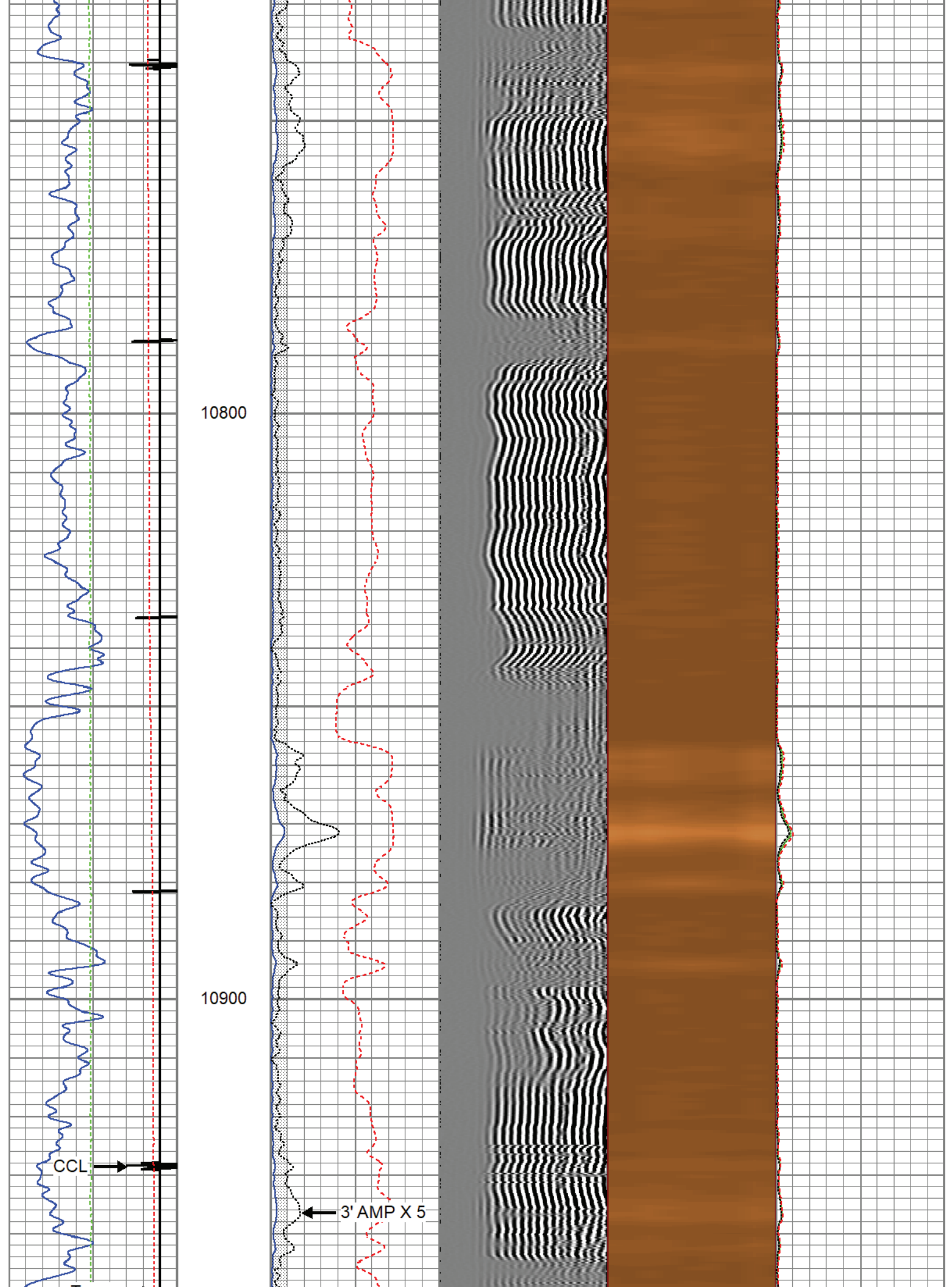
10400

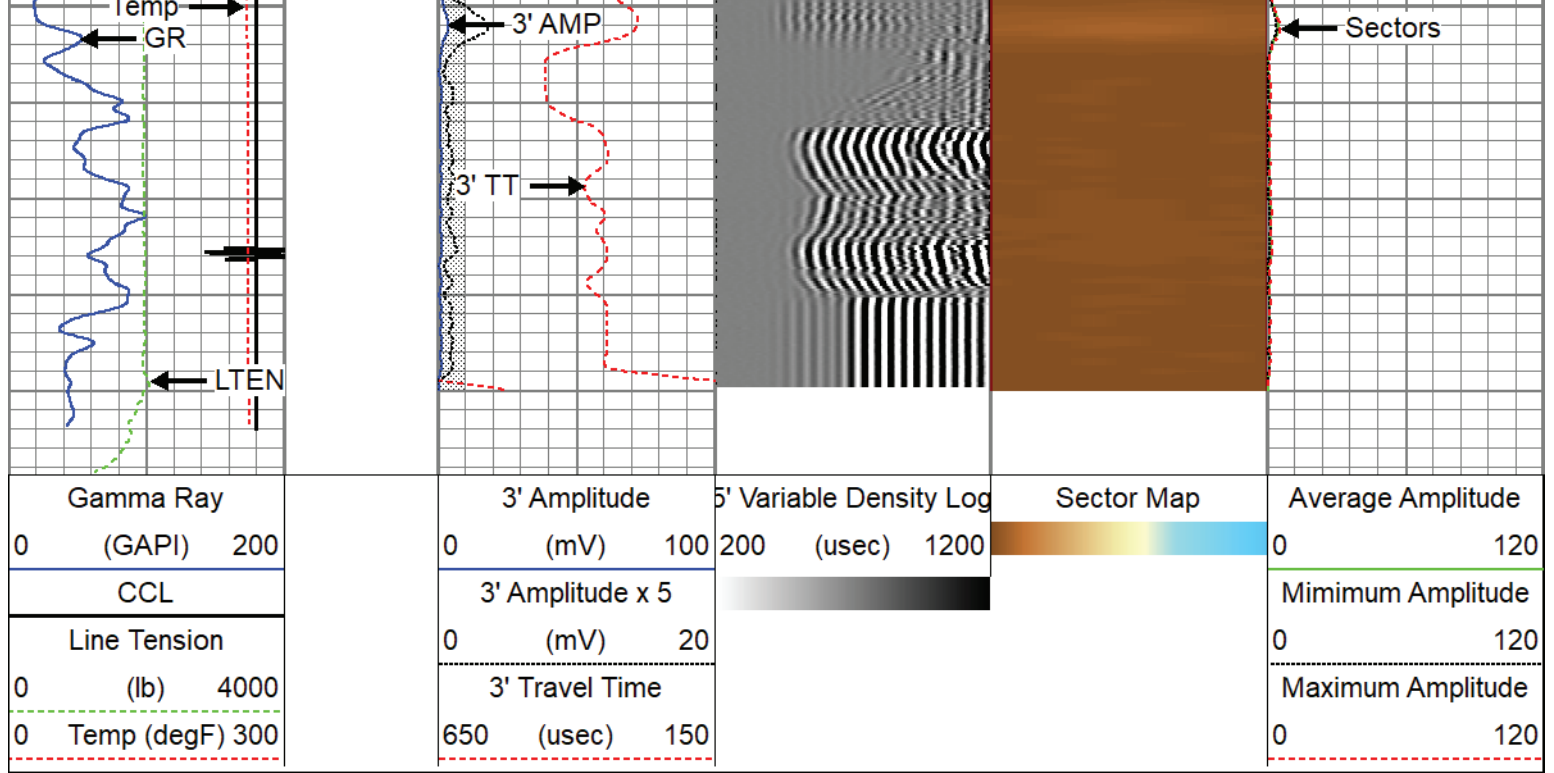
10500







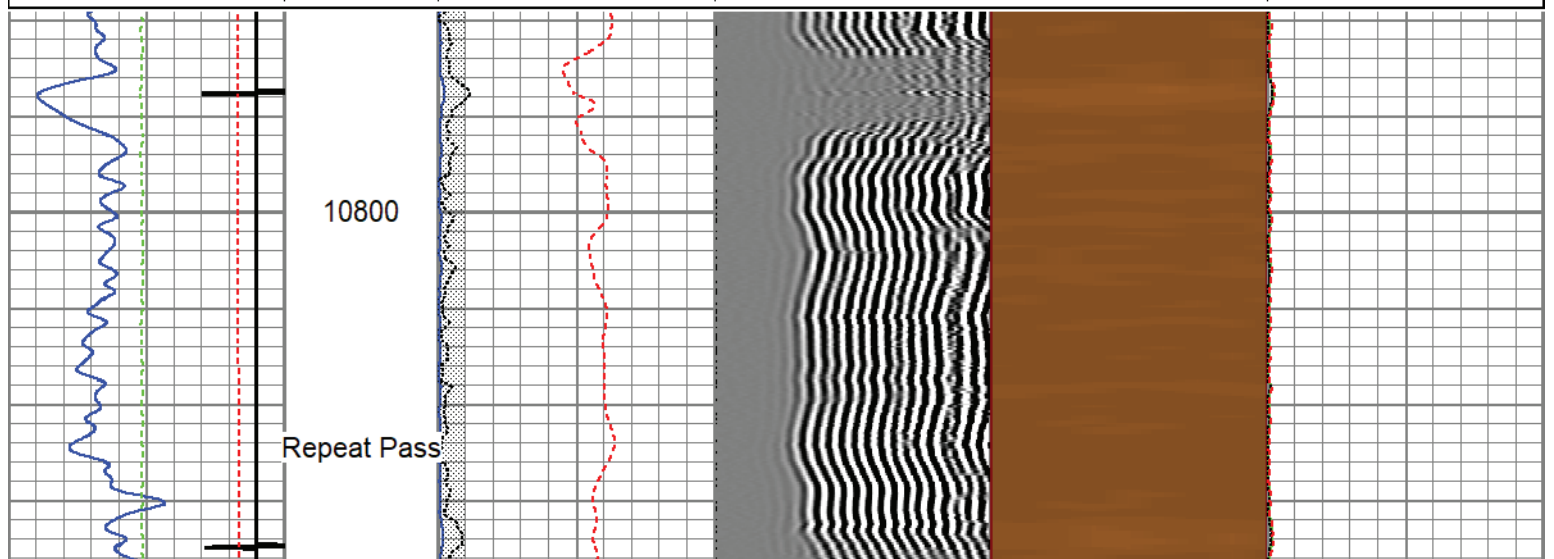
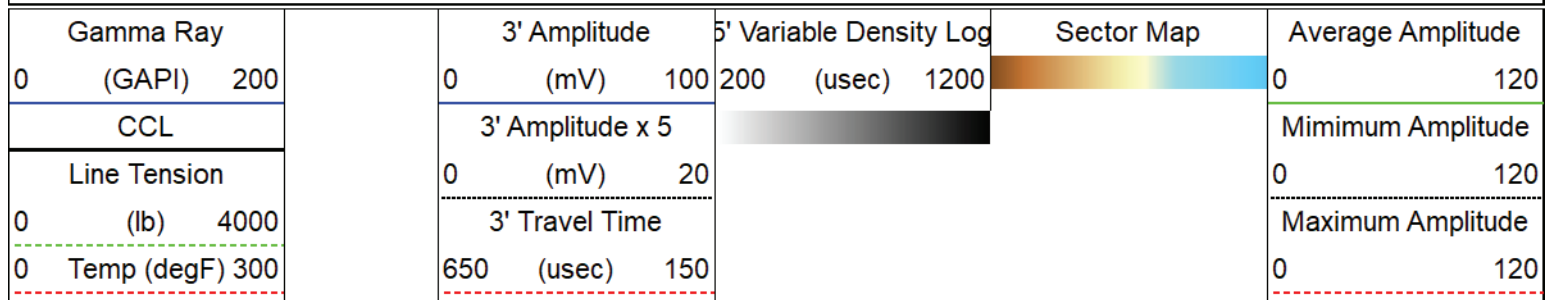




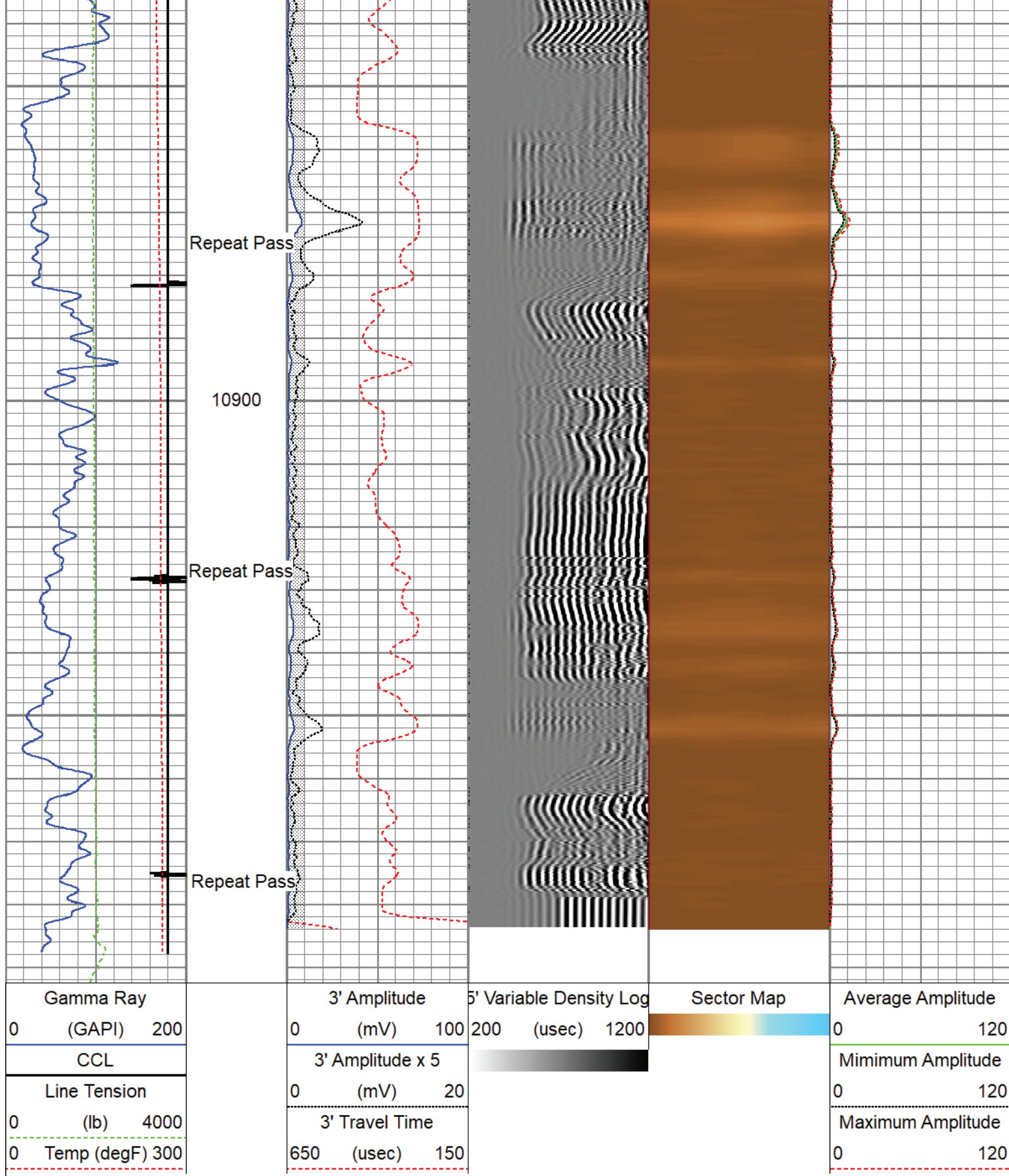


## Repeat Pass 5" = 100'

Database File	tep_nr 432-4_rcbl_8-31-22.db
Dataset Pathname	repeat
Presentation Format	twgrcbl
Dataset Creation	Wed Aug 31 13:23:04 2022
Charted by	Depth in Feet scaled 1:240







### Calibration Report

Database File tep\_nr 432-4\_rcbl\_8-31-22.db  
 Dataset Pathname main  
 Dataset Creation Wed Aug 31 13:27:26 2022

### Gamma Ray Calibration Report

Serial Number: 110255

Serial Number: 110200  
 Tool Model: GCT275-0BP0  
 Performed: Mon Jul 25 14:35:34 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 Jul 28 17:00:24 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: FW1312-30  
 Tool Model: Probe275acc  
  
 Calibration Casing Diameter: 4.500 in  
 Calibration Depth: 18.000 ft

Master Calibration, performed Tue Aug 30 07:42:36 2022:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.003	0.733	0.000	81.196	111.234	-0.329
CAL	0.001	0.743				
5'	0.008	0.701	0.000	81.196	117.161	-0.990
SUM						
S1	0.003	0.738	0.000	100.000	136.098	-0.472
S2	0.004	0.750	0.000	100.000	134.141	-0.549
S3	0.003	0.751	0.000	100.000	133.586	-0.349
S4	0.002	0.745	0.000	100.000	134.655	-0.286
S5	0.002	0.737	0.000	100.000	136.114	-0.332
S6	0.003	0.745	0.000	100.000	134.808	-0.375
S7	0.004	0.747	0.000	100.000	134.580	-0.550
S8	0.003	0.741	0.000	100.000	135.546	-0.429

Internal Reference Calibration, performed (Not Performed):

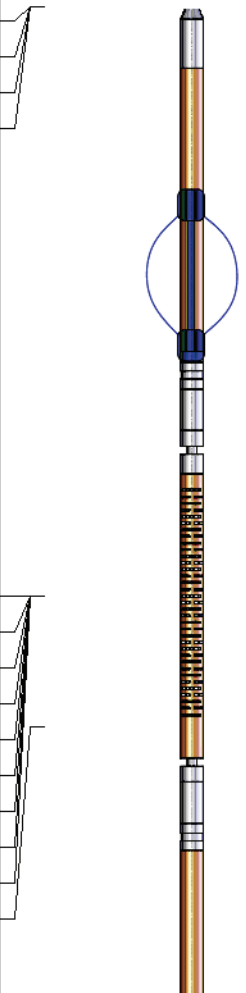
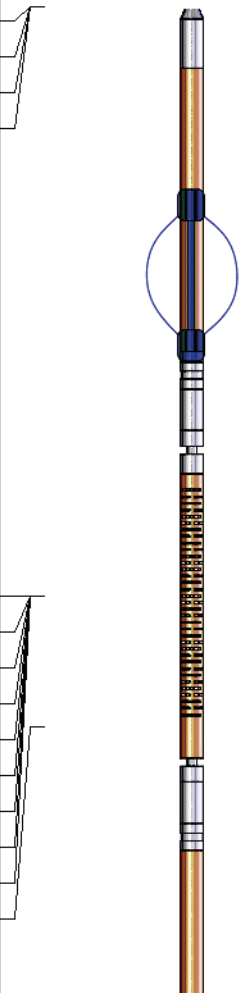
	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.001	0.743	1.000	0.000


Air Zero Calibration, performed Tue Aug 30 07:43:12 2022:



	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.003	0.000	0.000
5'	0.008	0.000	0.000
SUM			
S1	0.004	0.000	-0.001
S2	0.005	0.000	-0.001
S3	0.003	0.000	0.000
S4	0.002	0.000	-0.000
S5	0.003	0.000	-0.000
S6	0.003	0.000	-0.000
S7	0.004	0.000	-0.000
S8	0.003	0.000	0.000

Inclinometer Calibration Report					
Performed:	Thu Jul 28 15:46:49 2022				
	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	-931.00	904.00	-1.00	1.00	gee
Y Accelerometer	-899.00	884.00	-1.00	1.00	gee
Z Accelerometer	1.47	886.18	0.00	1.00	gee

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GCT_FMWR	14.47					
mSec_Count	14.47					
RBT_Status	14.47					
Error_Ct	14.47					
			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
			RBT8acc-Probe275acc (FW1312-30) 2.75" Radial Corrosion with accelerometer	8.75	2.75	110.00
WVFS8	9.97					
WVFS7	9.97					
WVFS6	9.97					
WVFS5	9.97					
WVFS4	9.97					
WVFS3	9.97					
WVFS2	9.97					
WVFS1	9.97					
WVF3FT	9.97					
WVF5FT	8.97					

Company	Terra Energy Partners, LLC		
Well	Federal NR 432-4		
Field	Rulison		
County	Garfield	State	Colorado
		Radial Cement Bond Gamma Ray Casing Collar Log	