



Radial Cement Bond
w/ Variable Density
Gamma Ray, CCL, Temp Log
Final Print 1700 PSI

Company Great Western Oil & Gas
Well Schneider HD 11-019HN
Field Wattenberg
County Weld State Colorado

Location: API #: 05-123-46404
NWSW
40.324027/-104.826850
SEC 7 TWP 4N RGE 66W
Permanent Datum GL Elevation 4,735'
Log Measured From KB
Drilling Measured From KB
Other Services
None
Elevation
K.B. 4,755'
D.F.
G.L. 4,735'

Company Great Western Oil & Gas
Well Schneider HD 11-019HN
Field Wattenberg
County Weld
State Colorado

Date 1 Dec 2019

Run Number ONE
Depth Driller 18,296'
Depth Logger 8369'
Bottom Logged Interval 8360'
Top Log Interval Surface
Open Hole Size 8 1/2"
Type Fluid Water
Density / Viscosity
Max. Recorded Temp. 250 Deg F
Estimated Cement Top
Time Well Ready 18:50
Time Logger on Bottom 19:20
Equipment Number 60
Location Plattville, CO
Recorded By S. Cornett
Witnessed By E. Savoya

Borehole Record
Run Number Bit From To Size Weight From To

Casing Record
Surface String Size 9 5/8" Wgt/Ft 36# Top Surface Bottom 1,574'
Prot. String
Production String 5 1/2" 17# Surface 18,296'
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 Correlated to Short Joint at 7,644'-7,654'

Thank You for using KLX Energy Services

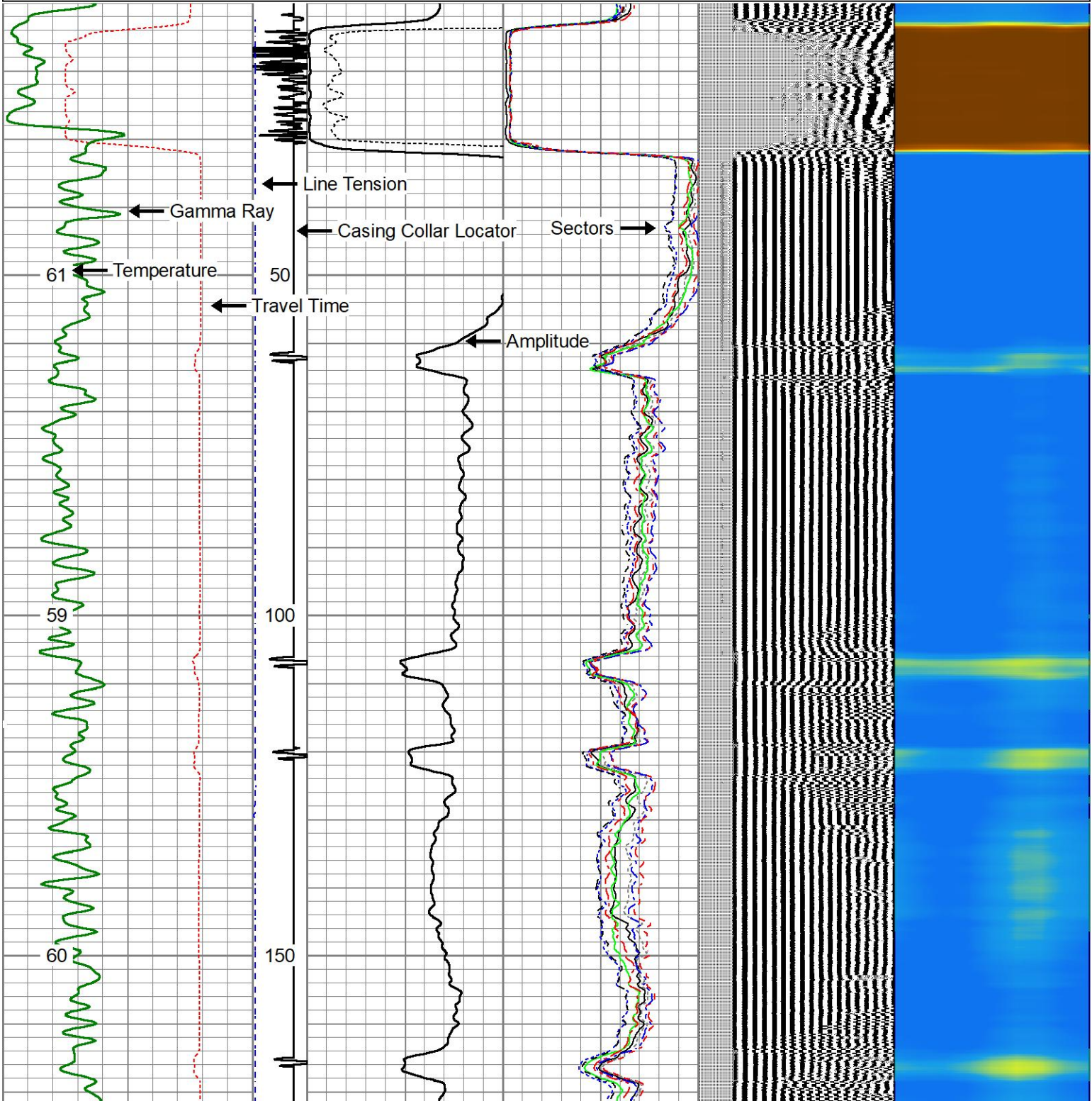


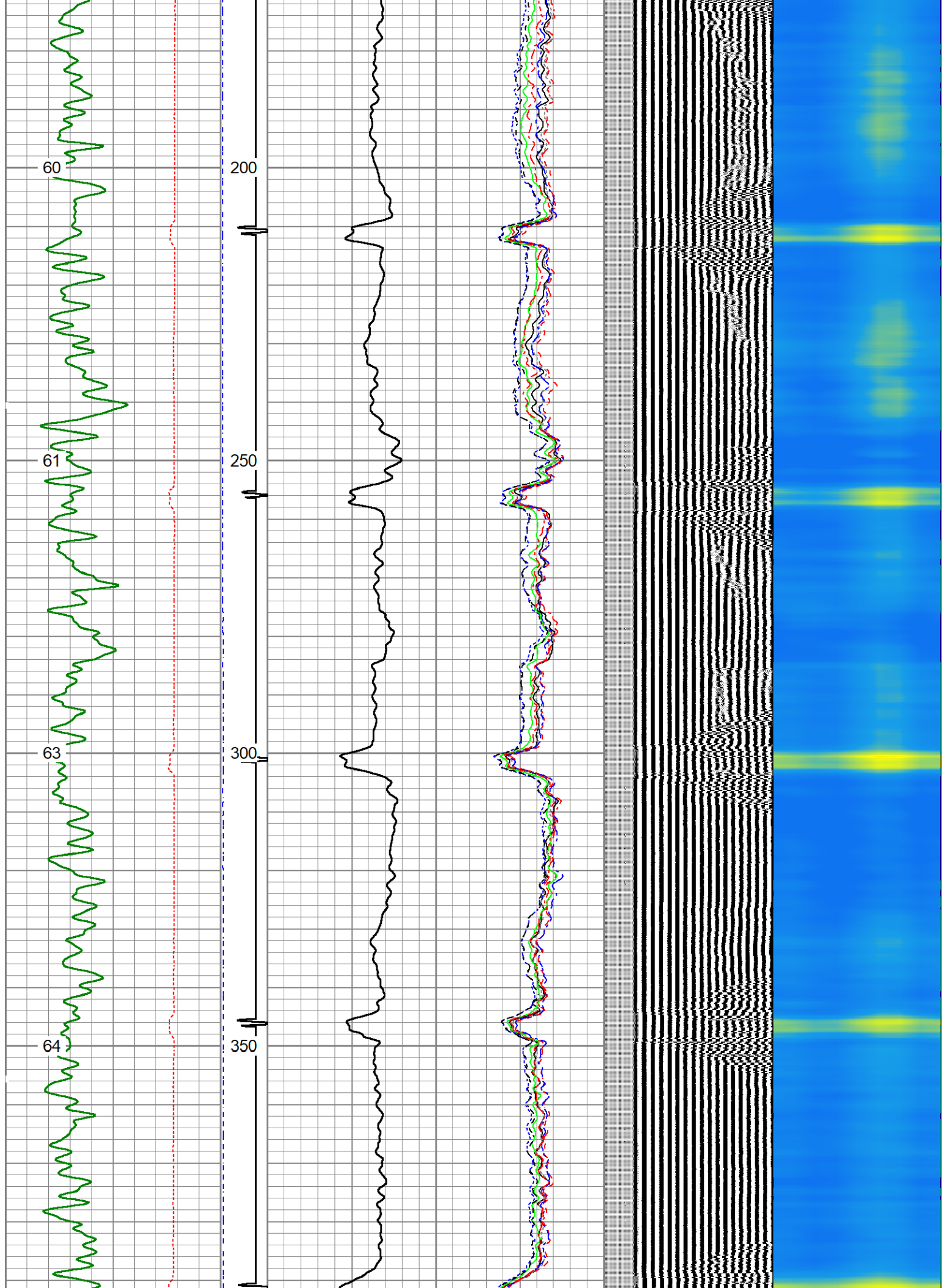
Main Pass

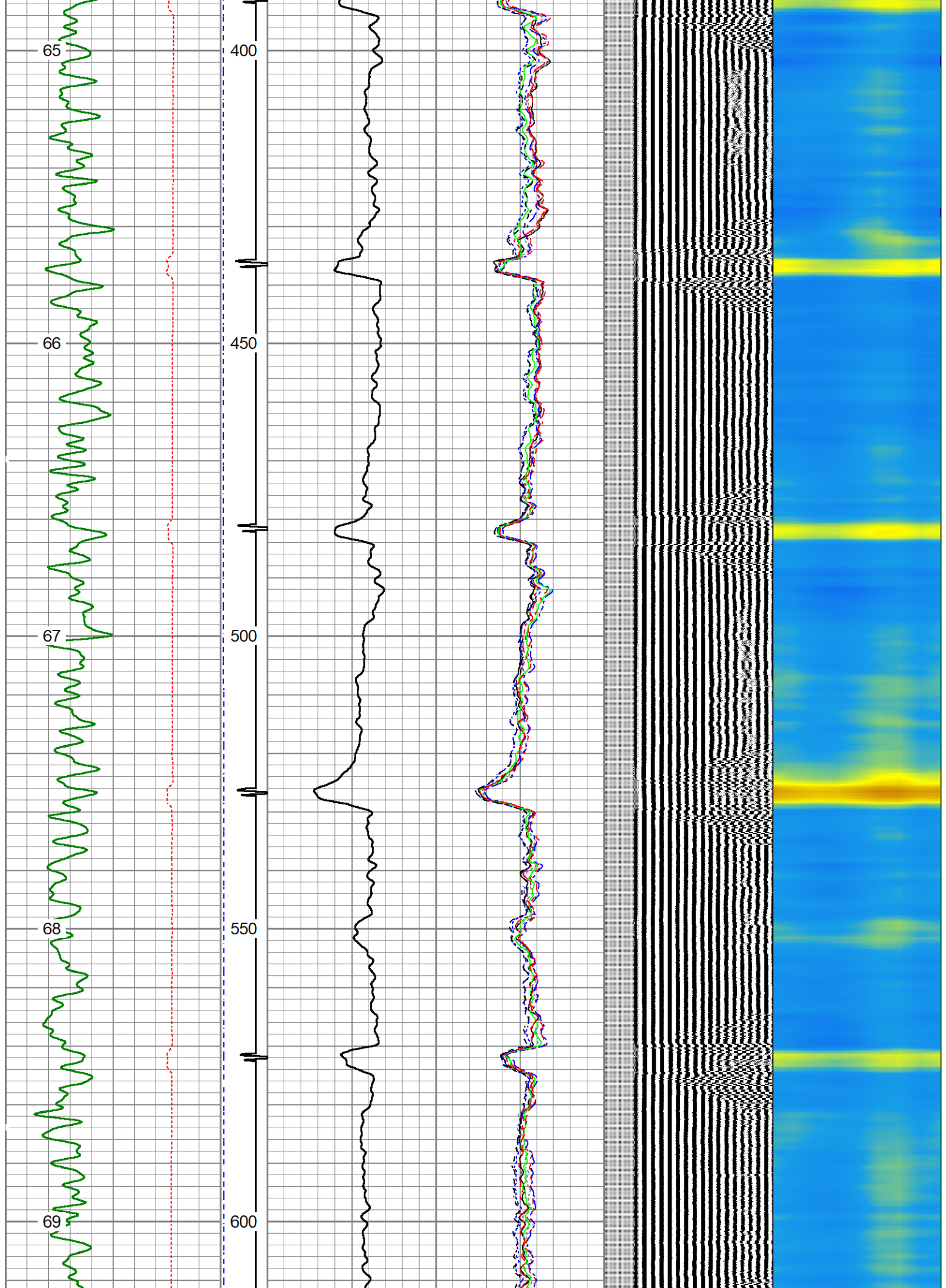
1700 PSI 5"=100'

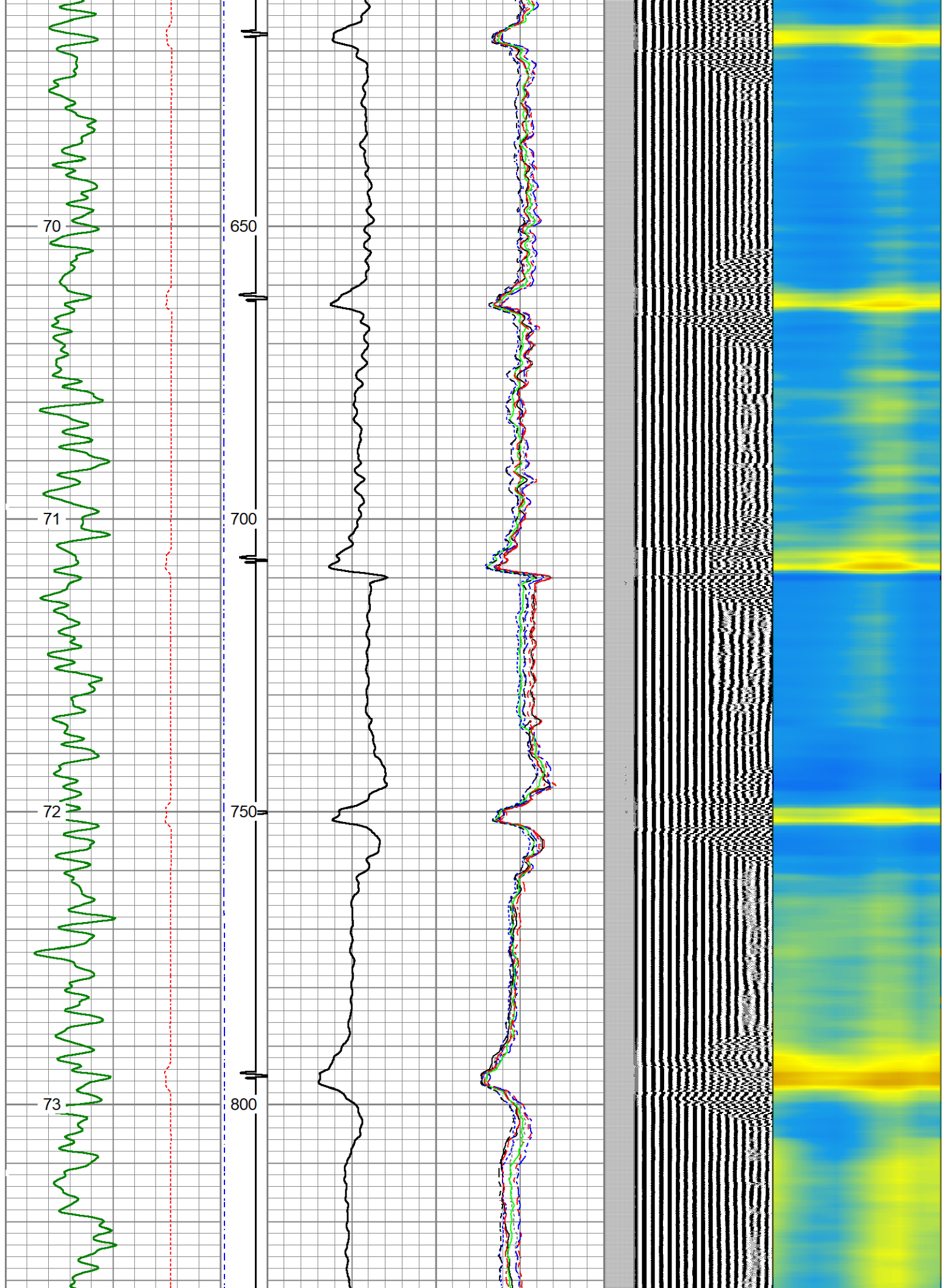
Database File	gw_schneider_hd_11_019hn_rcbl.db
Dataset Pathname	pass5
Presentation Format	scbl03
Dataset Creation	Sun Dec 01 19:30:30 2019
Charted by	Depth in Feet scaled 1:240

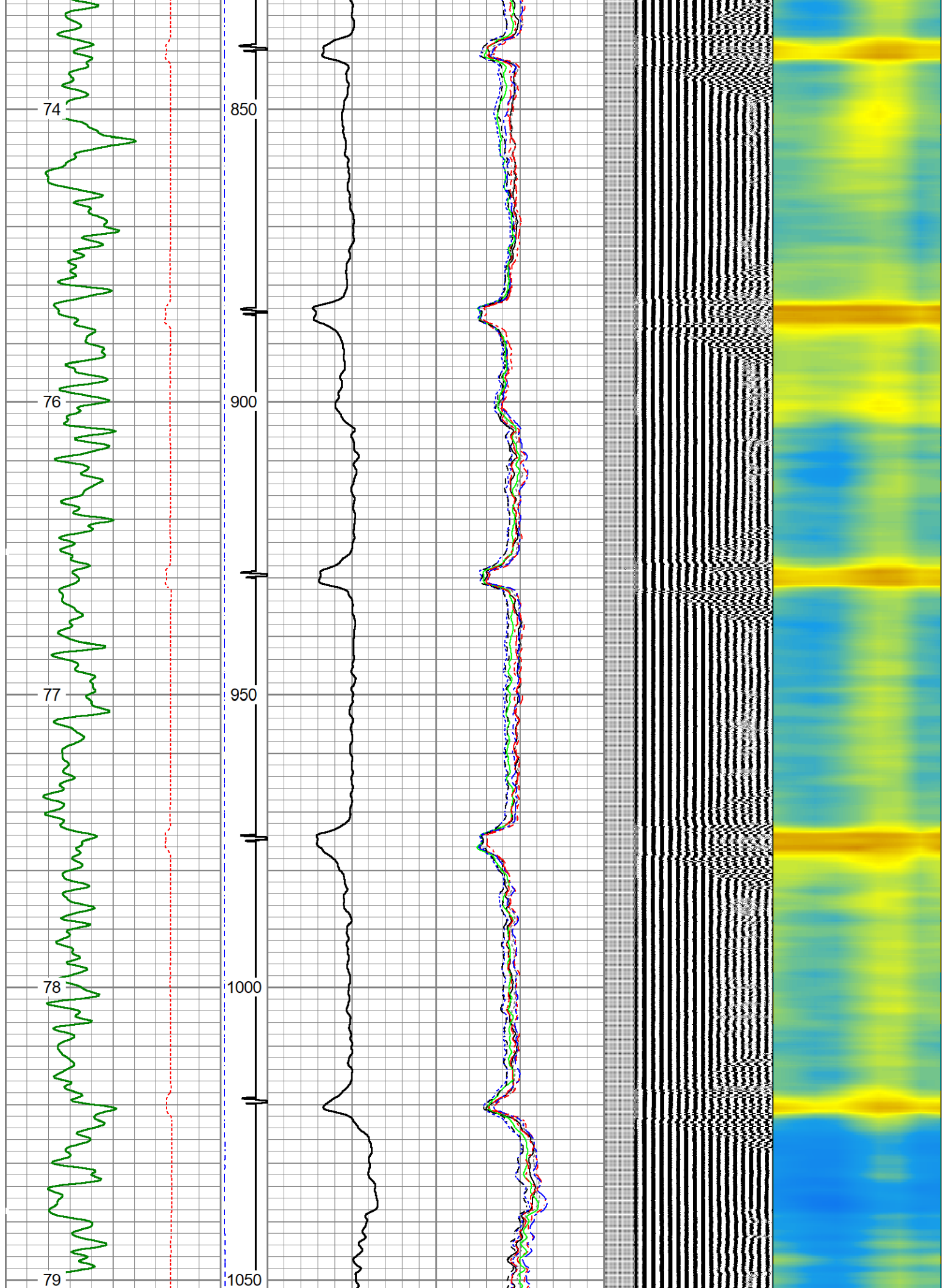
420	Travel Time (usec)	220	CCL	0	Amplitude (mV)	100	-5	Sector 1	150	Variable Density	1	Cement Map	8
0	Gamma Ray (GAPI)	150	3	-1	Amplified Amplitude		-5	Sector 2	150	200	(usec)	1200	
Temp			LTEN	0	(mV)	10	-5	Sector 3	150				
(degF)			(lb)				-5	Sector 4	150				
			(3000				-5	Sector 5	150				
							-5	Sector 6	150				
							-5	Sector 7	150				
							-5	Sector 8	150				

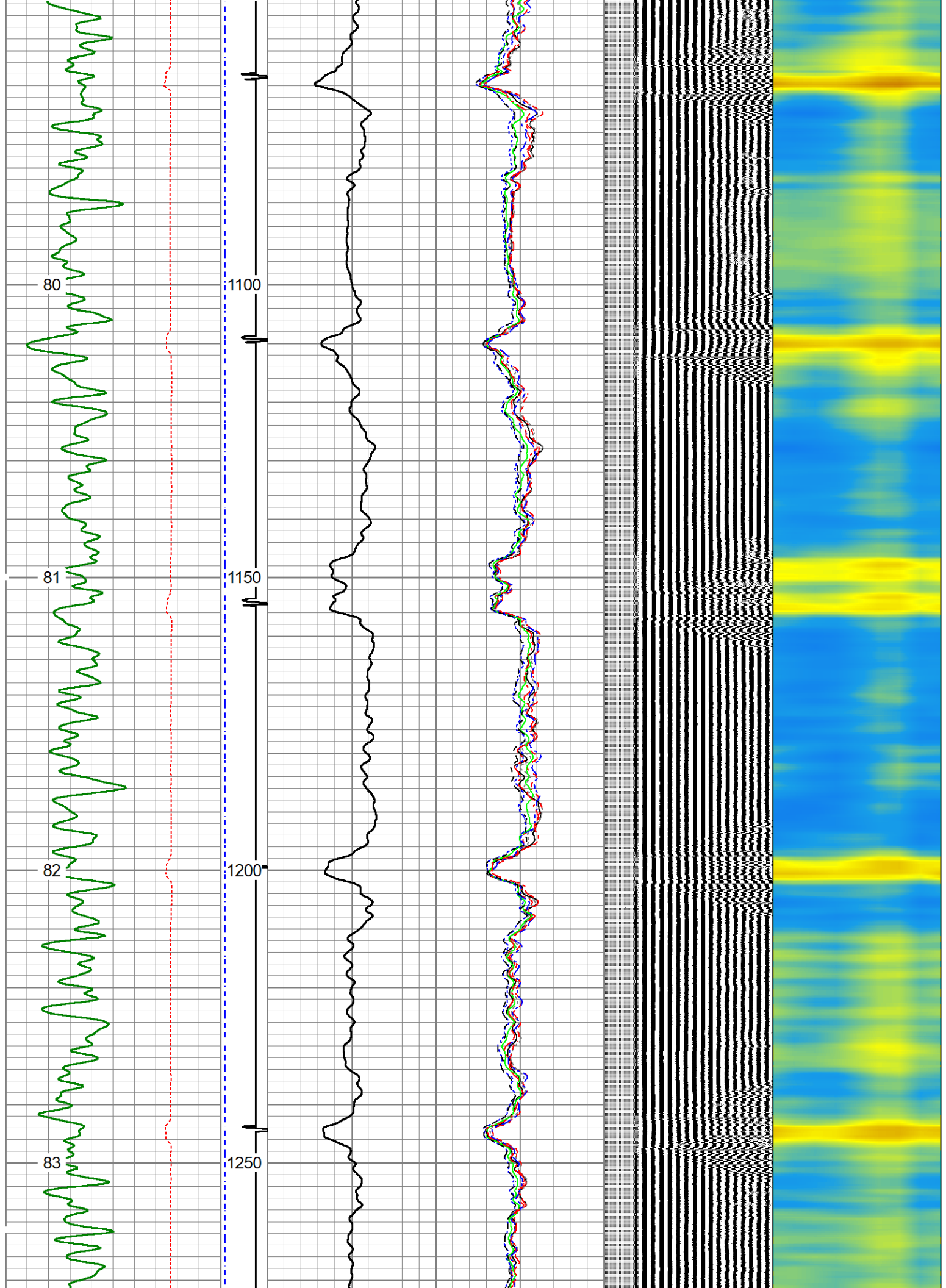


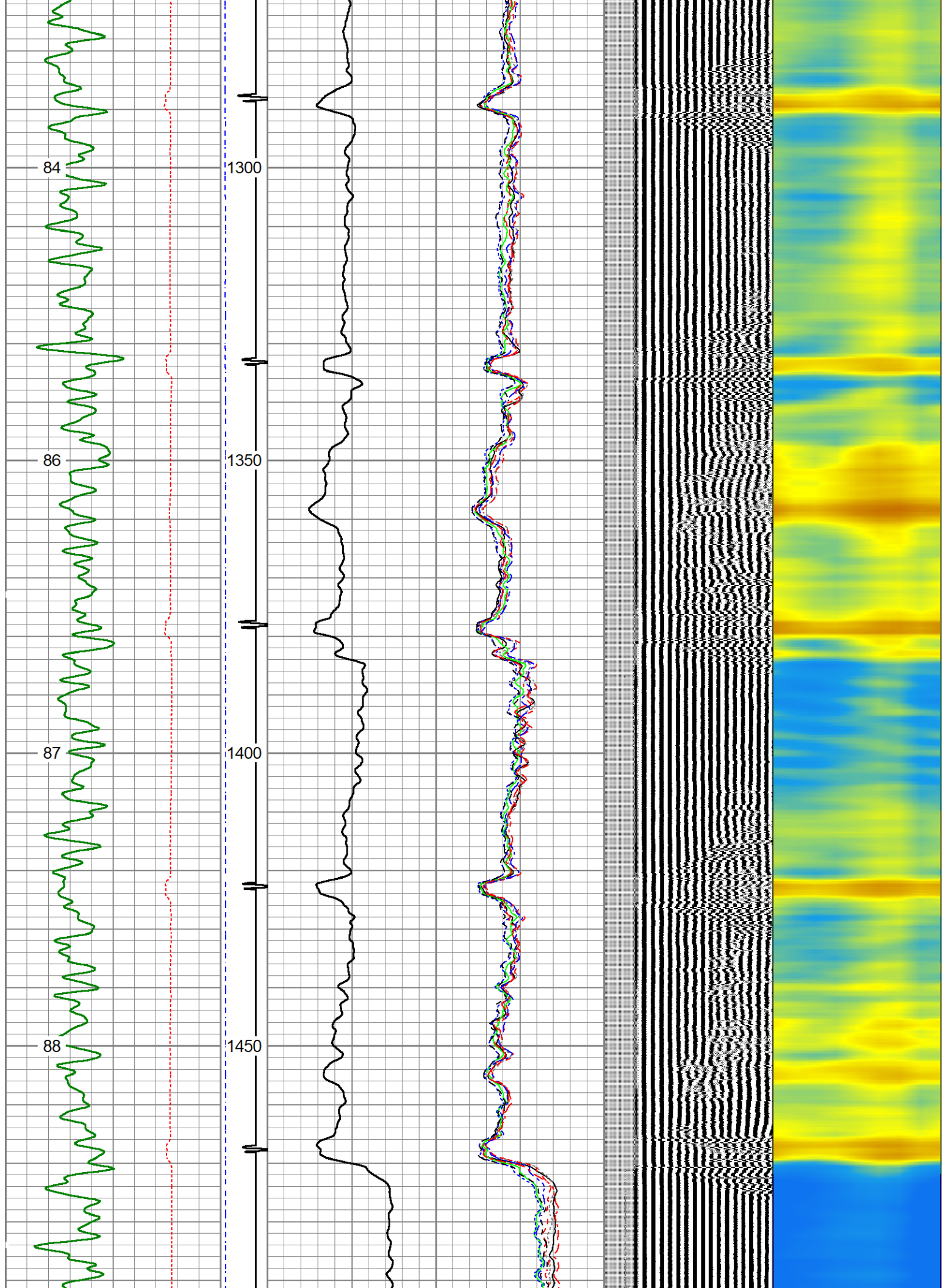


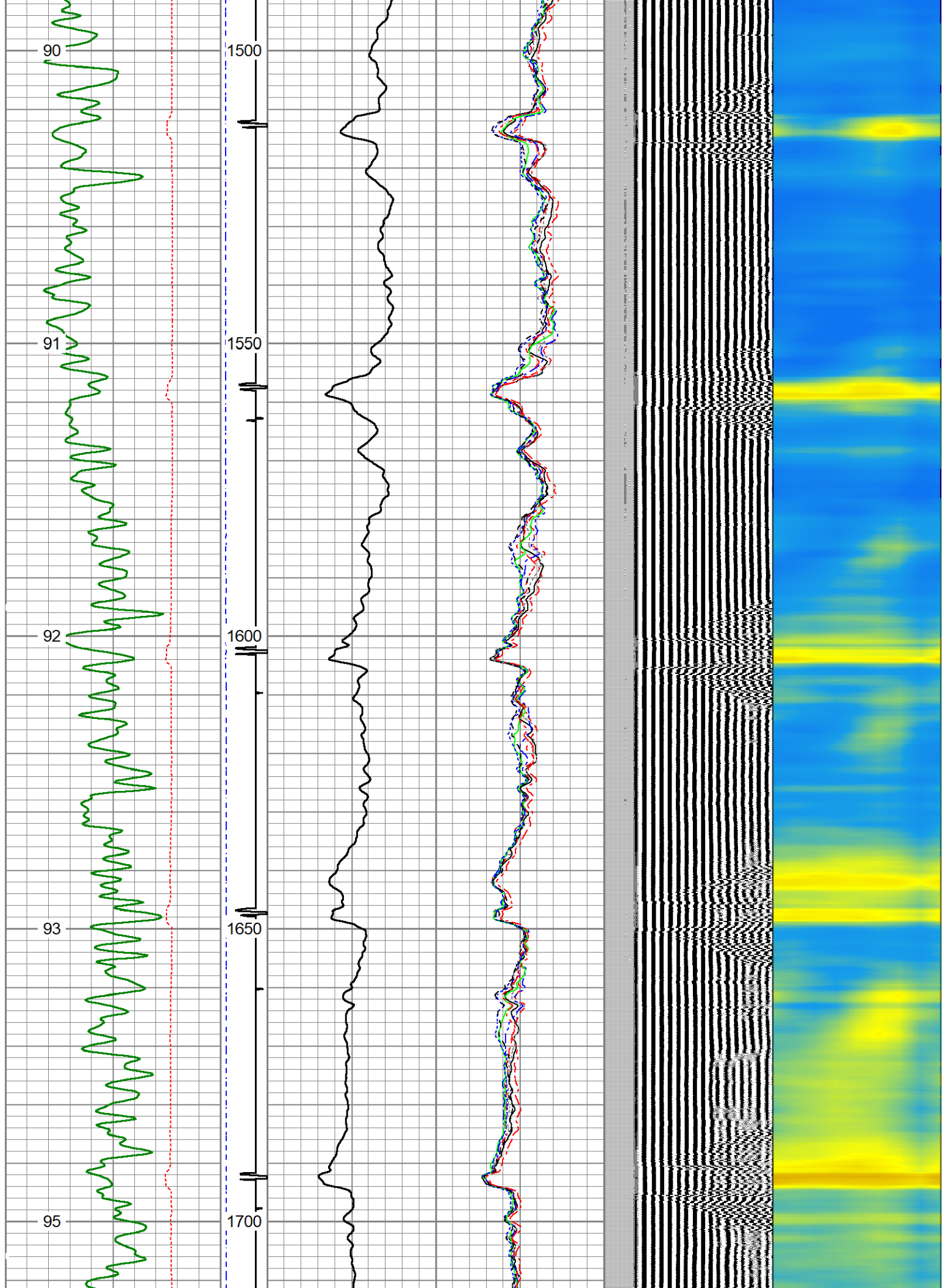


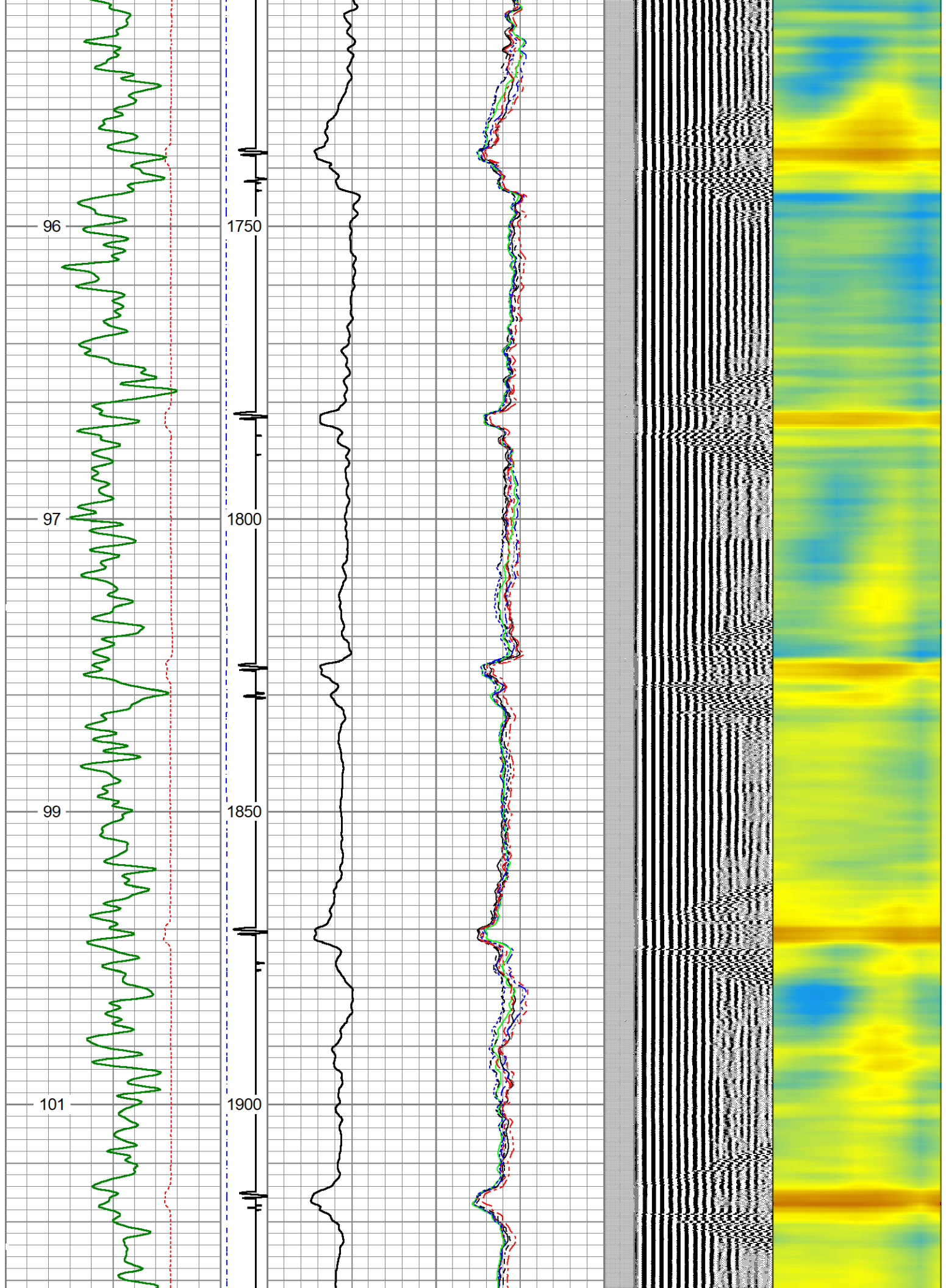


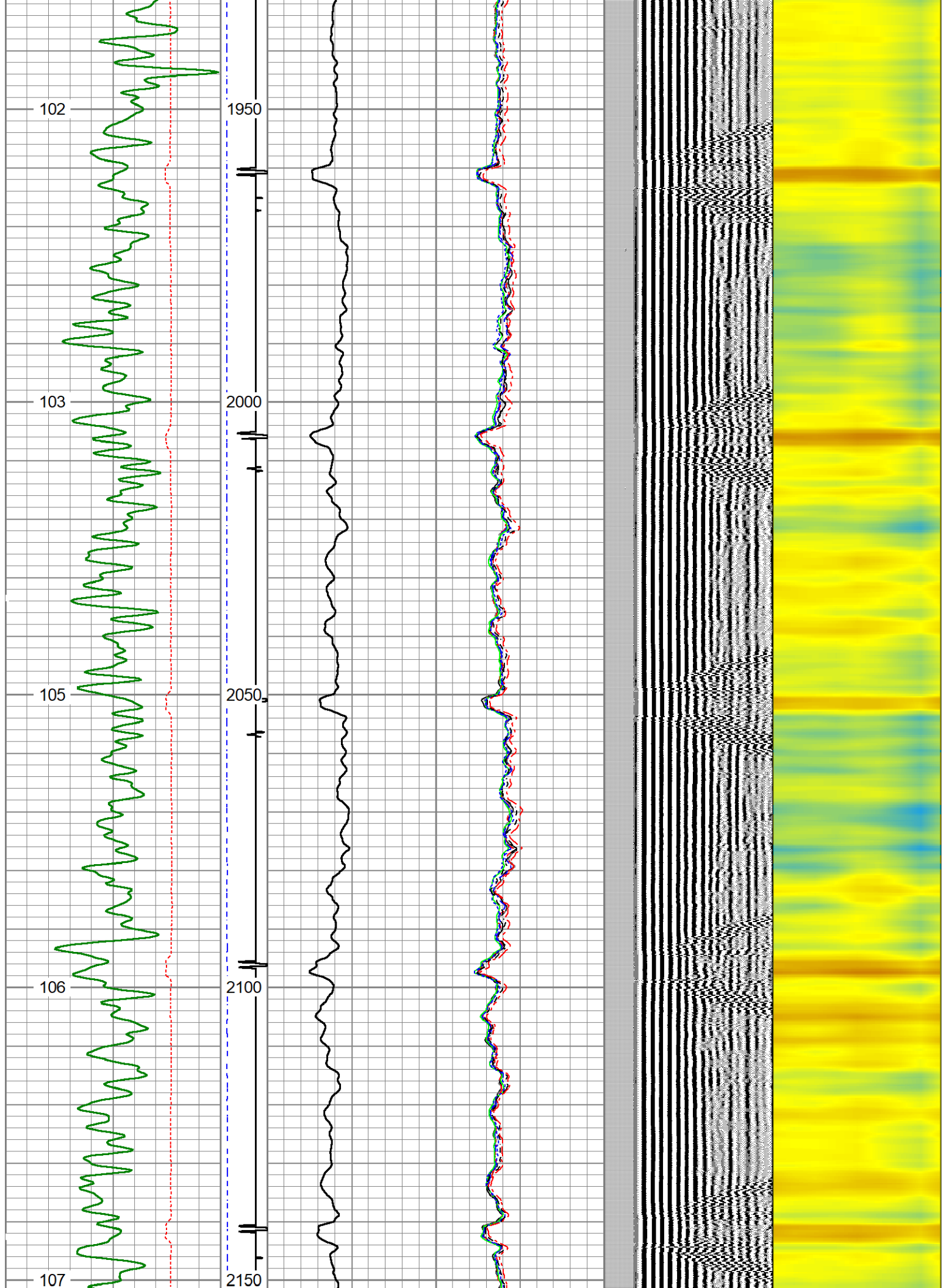


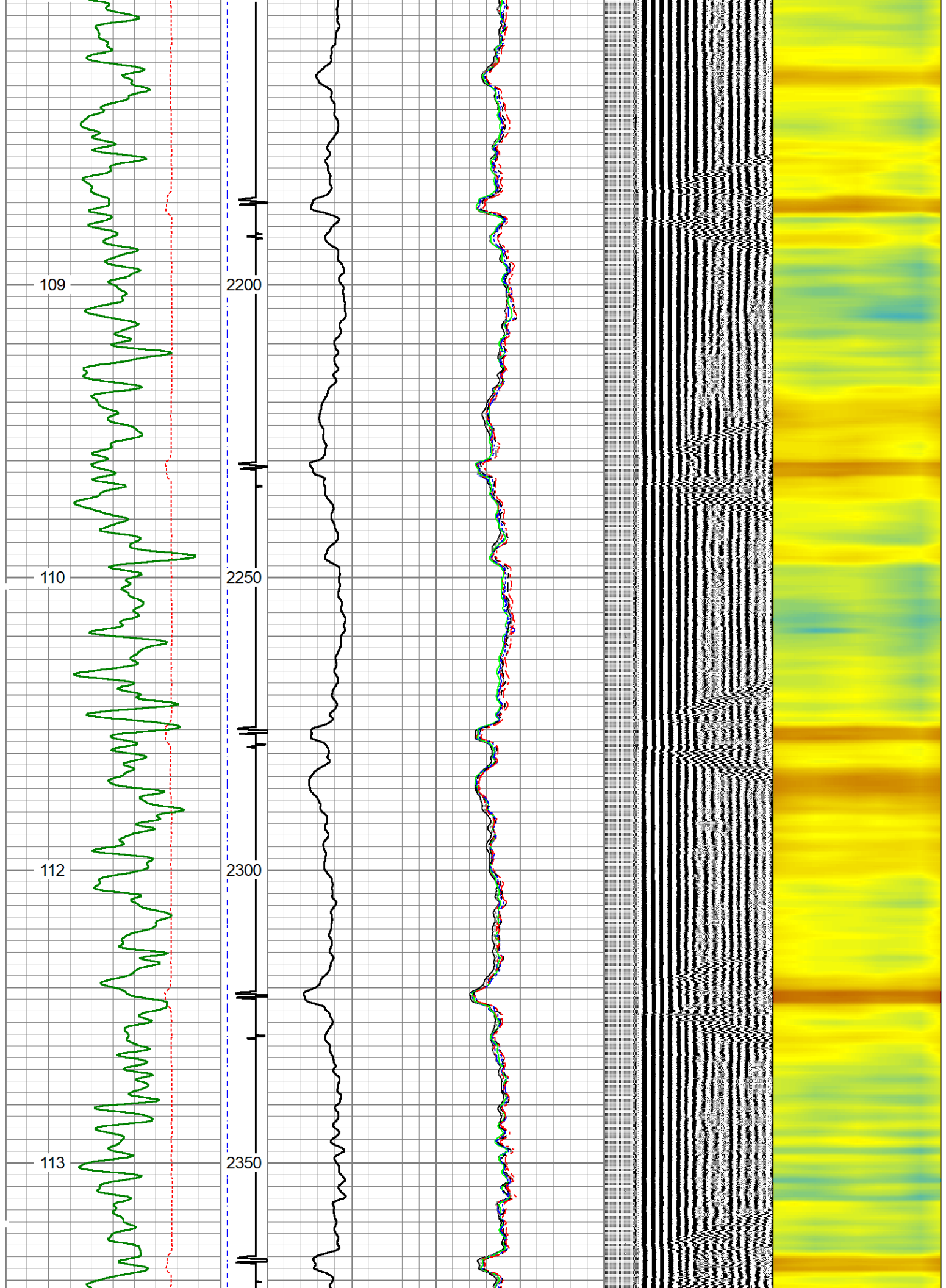


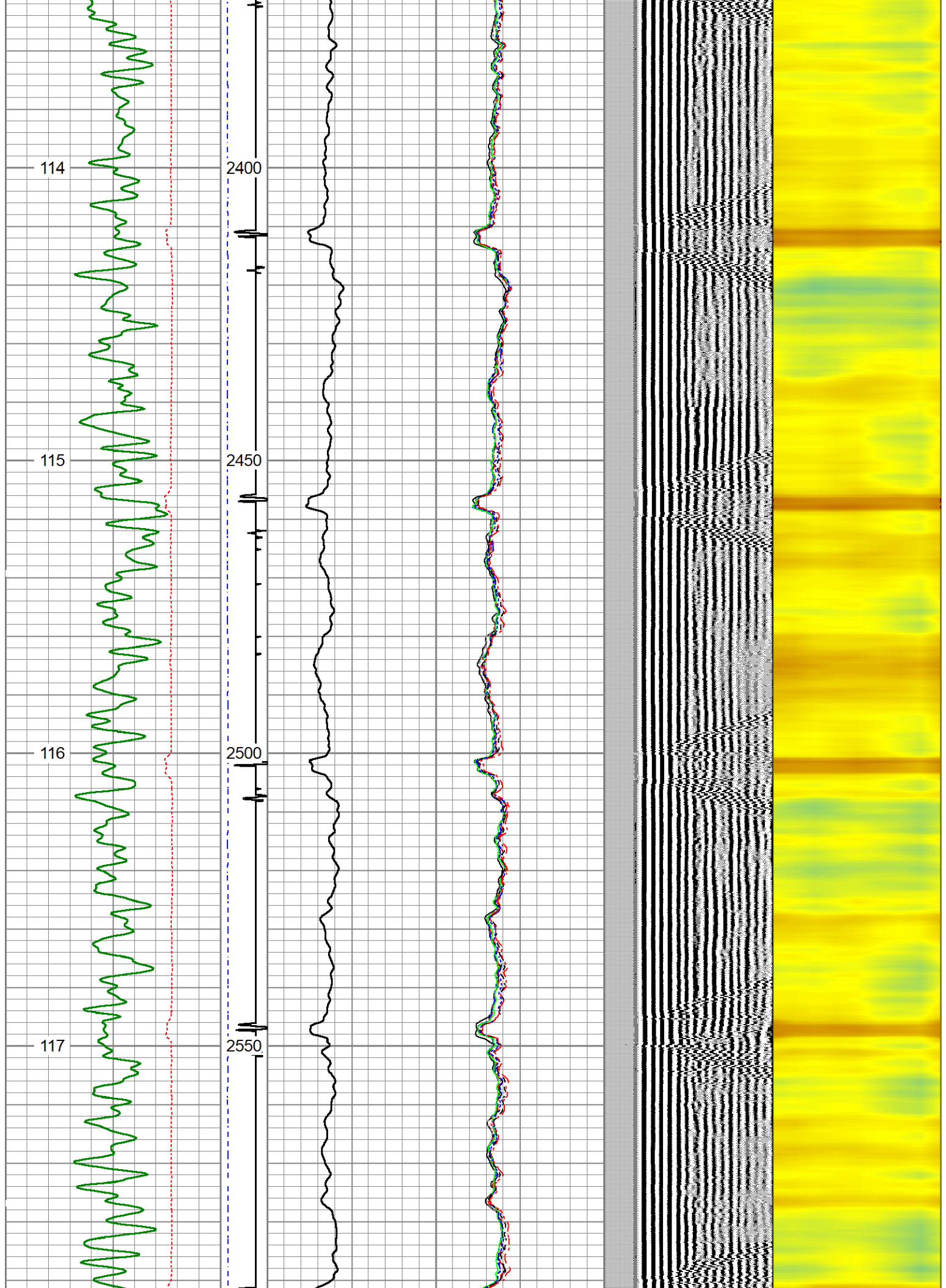


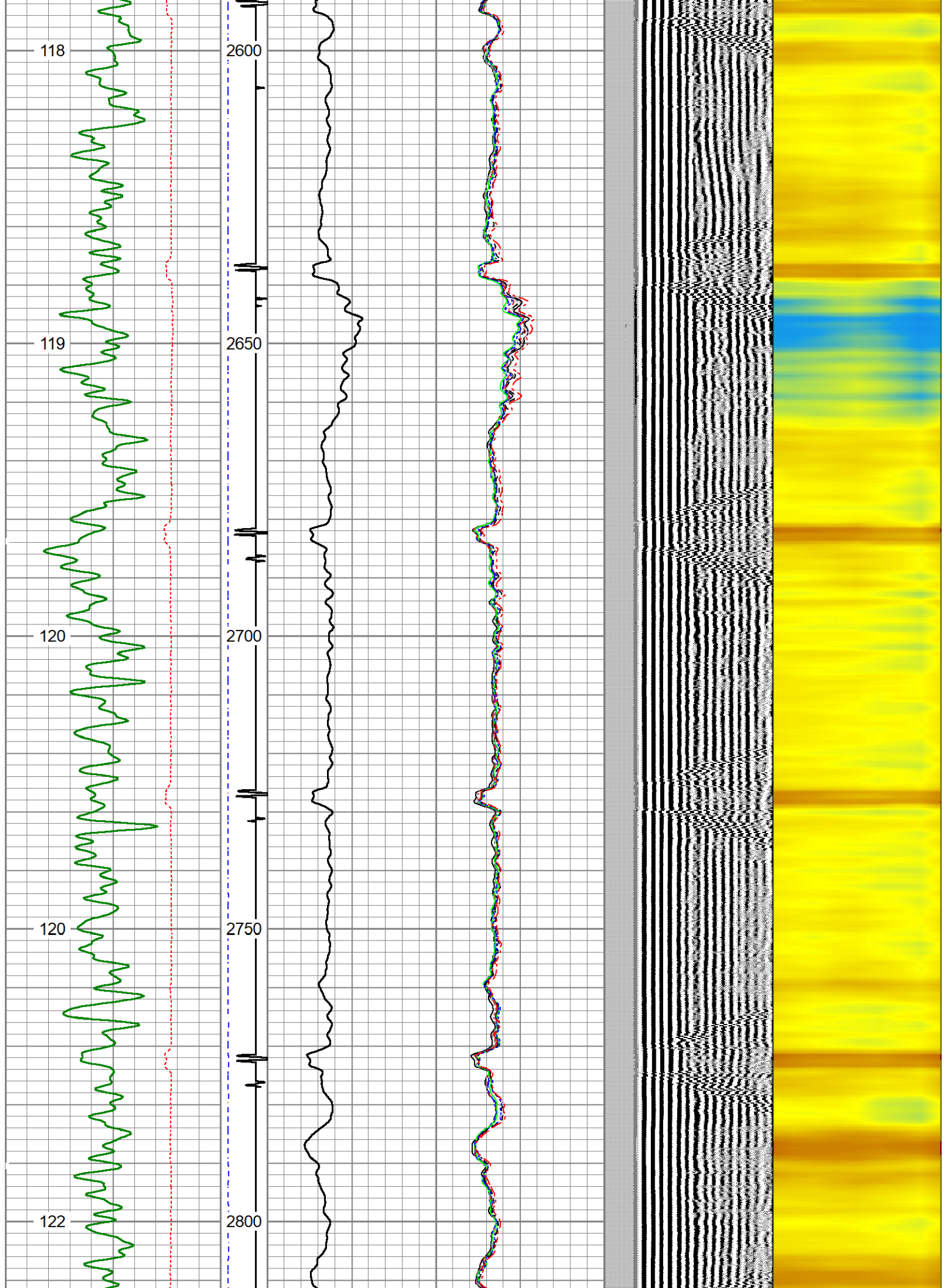


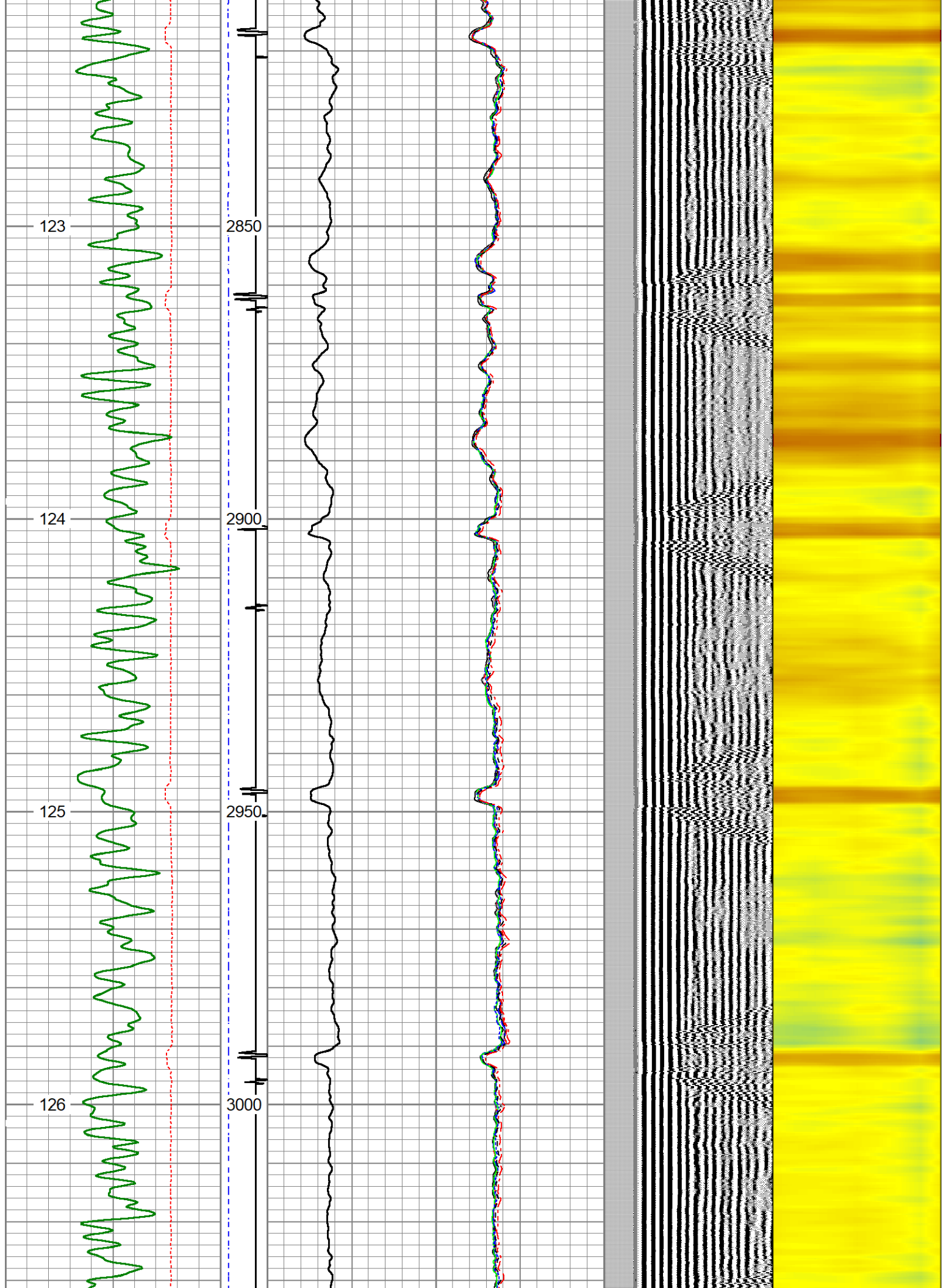


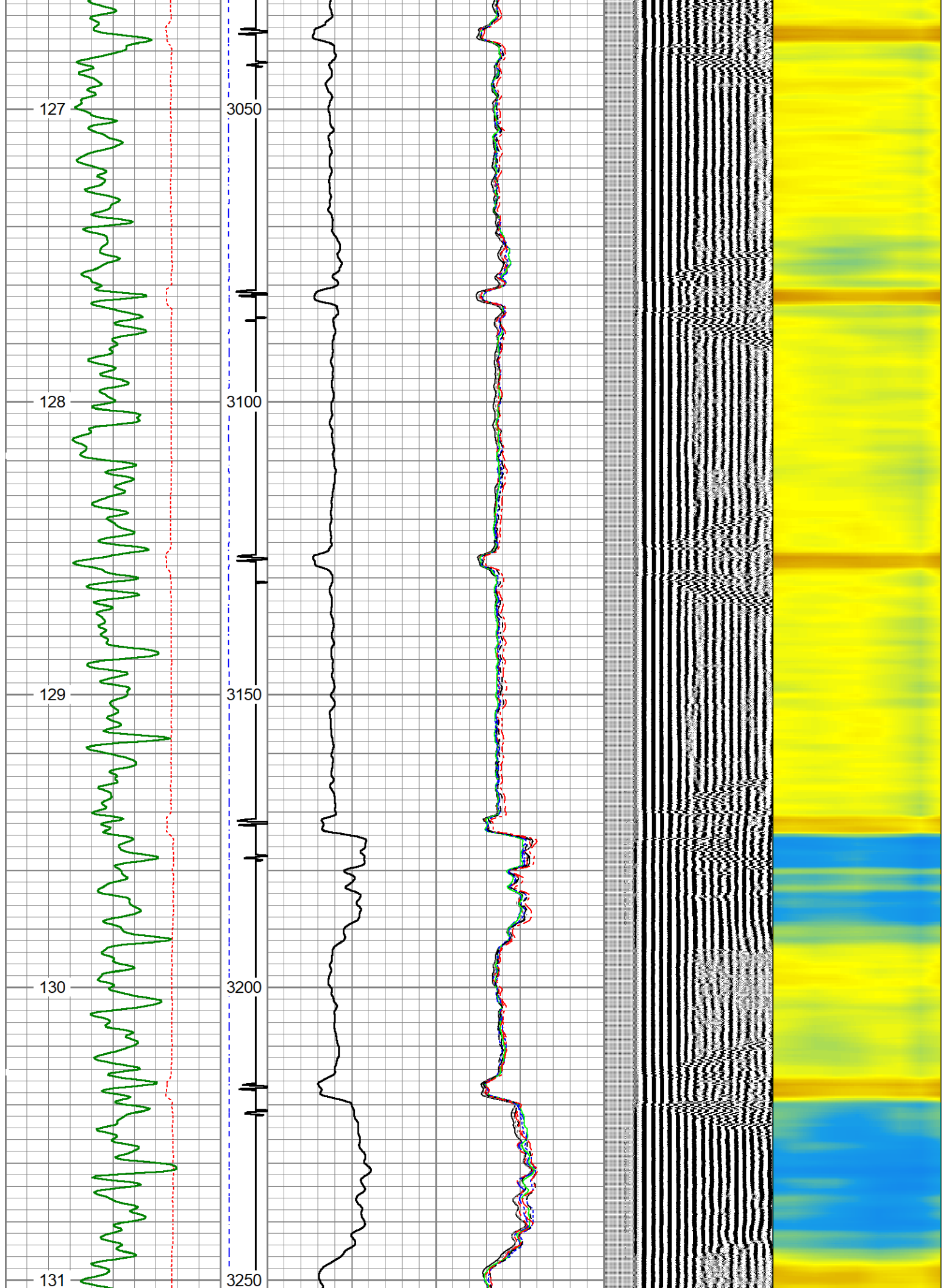


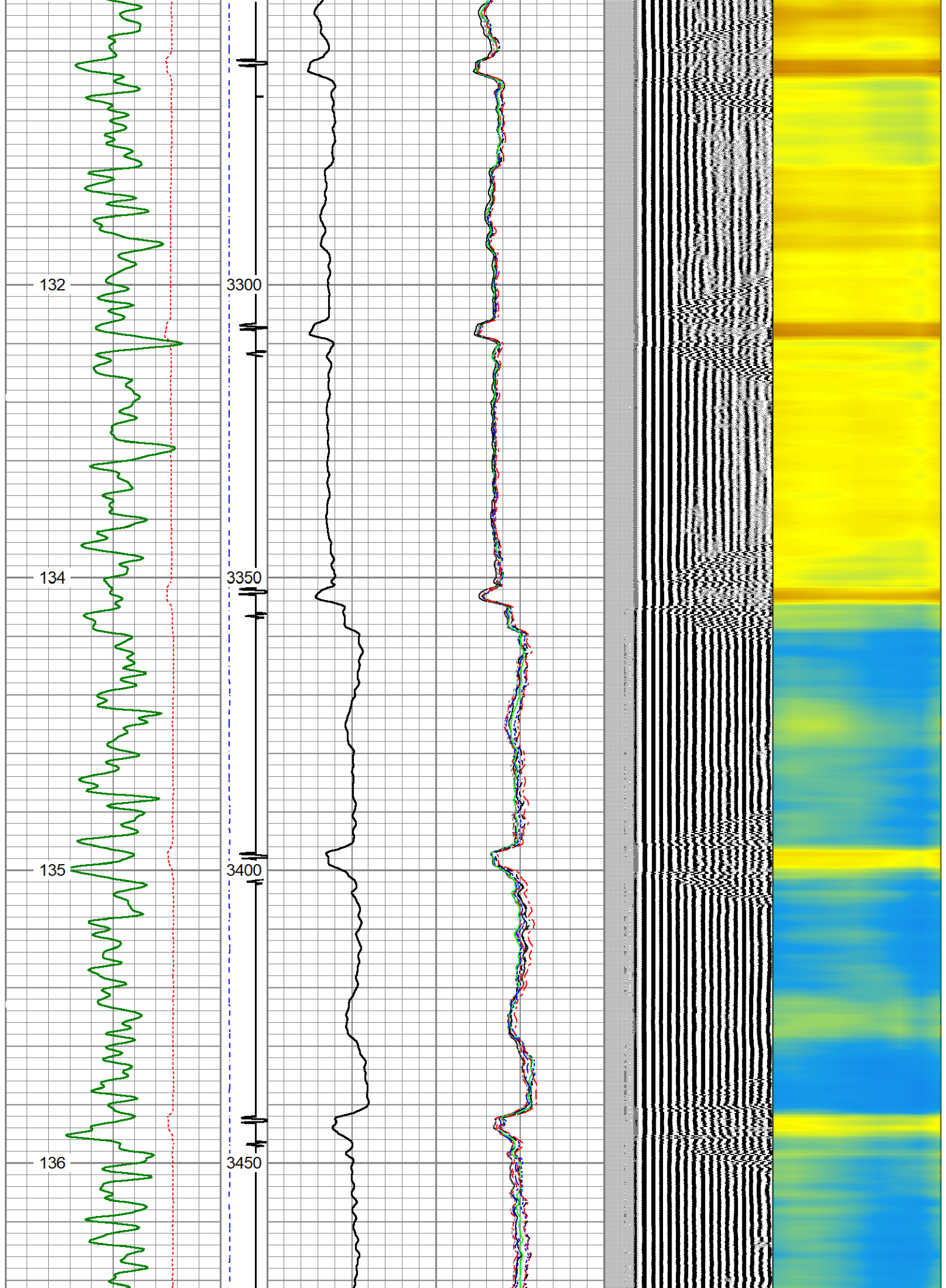


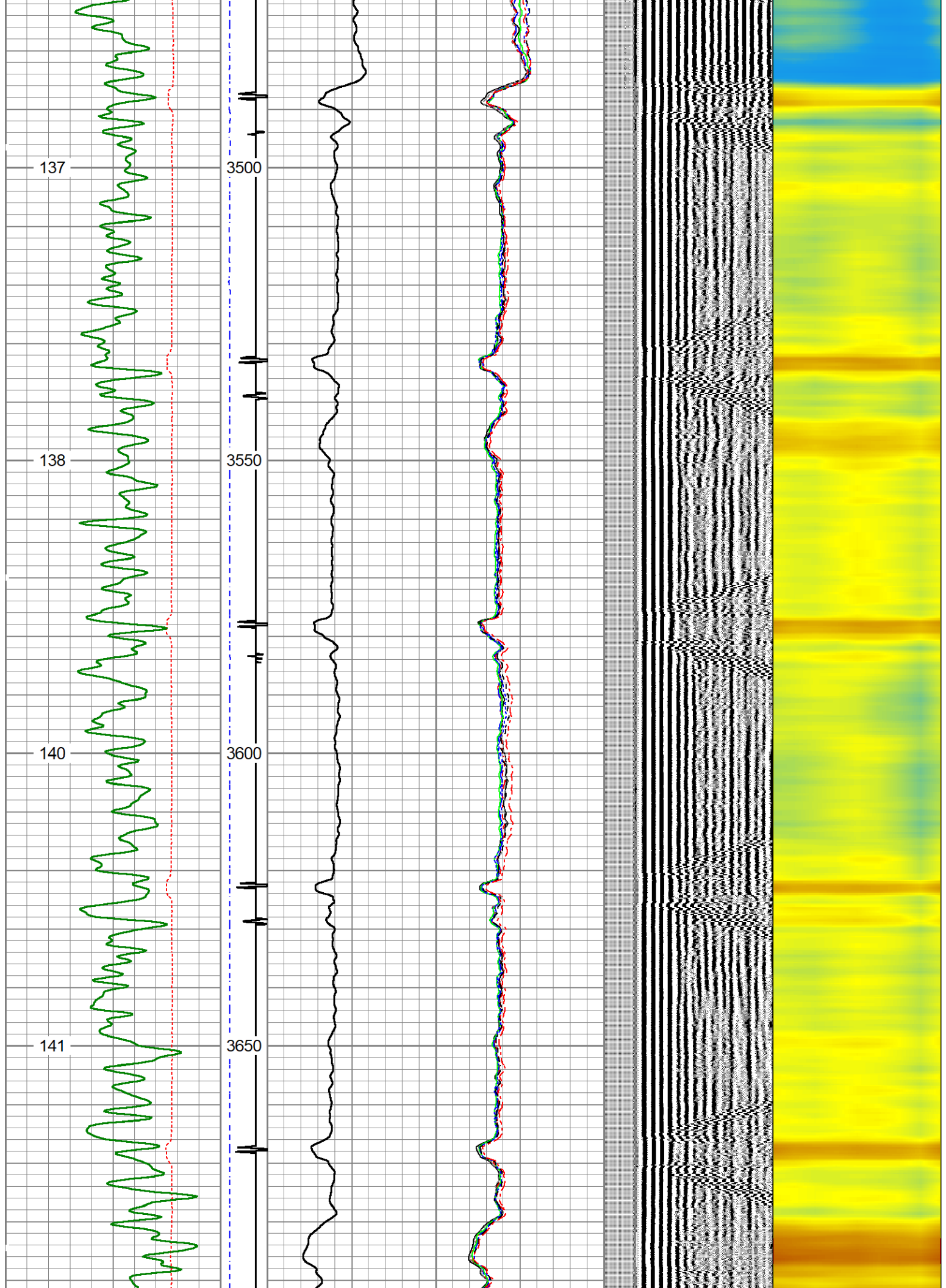


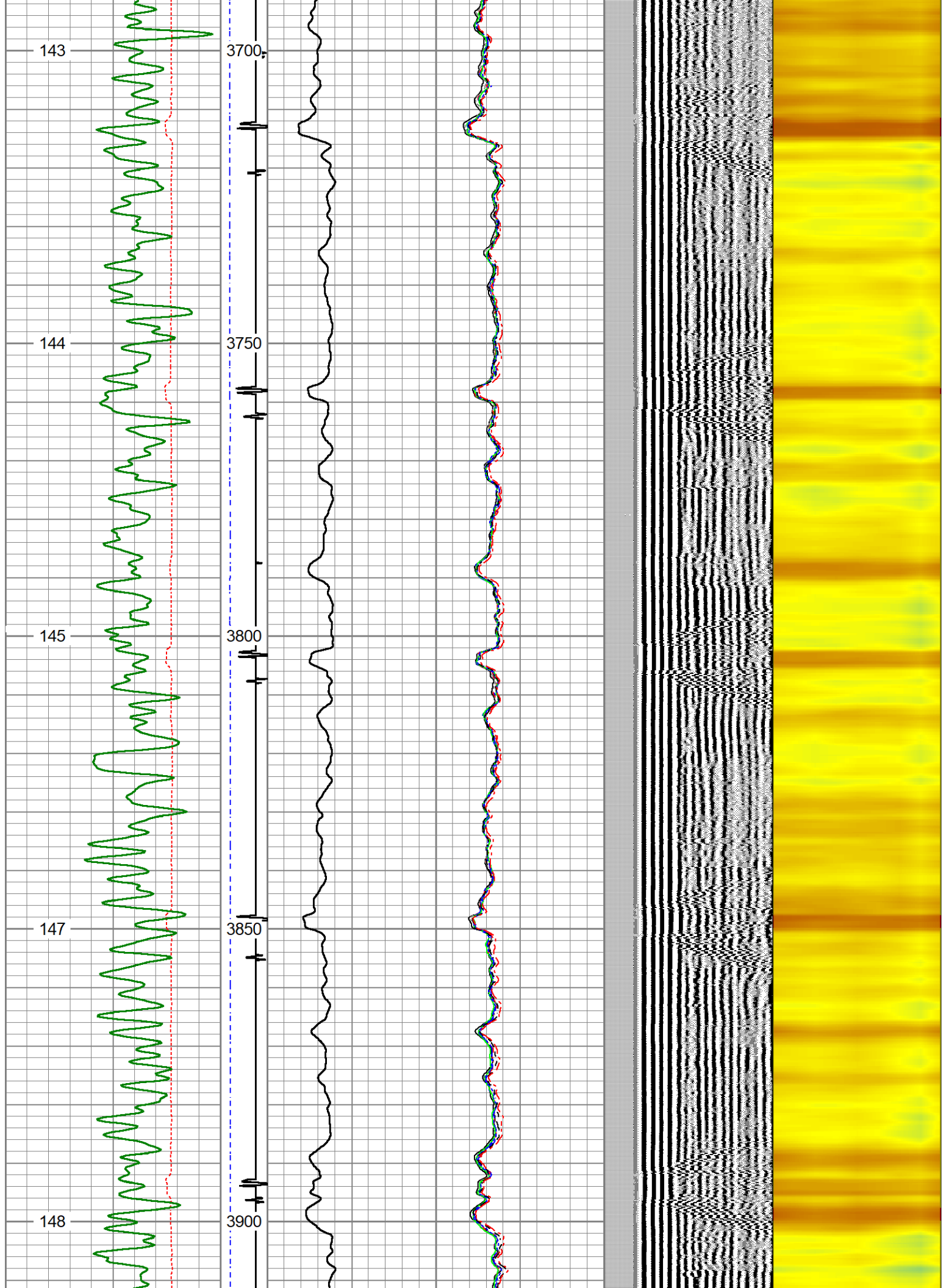


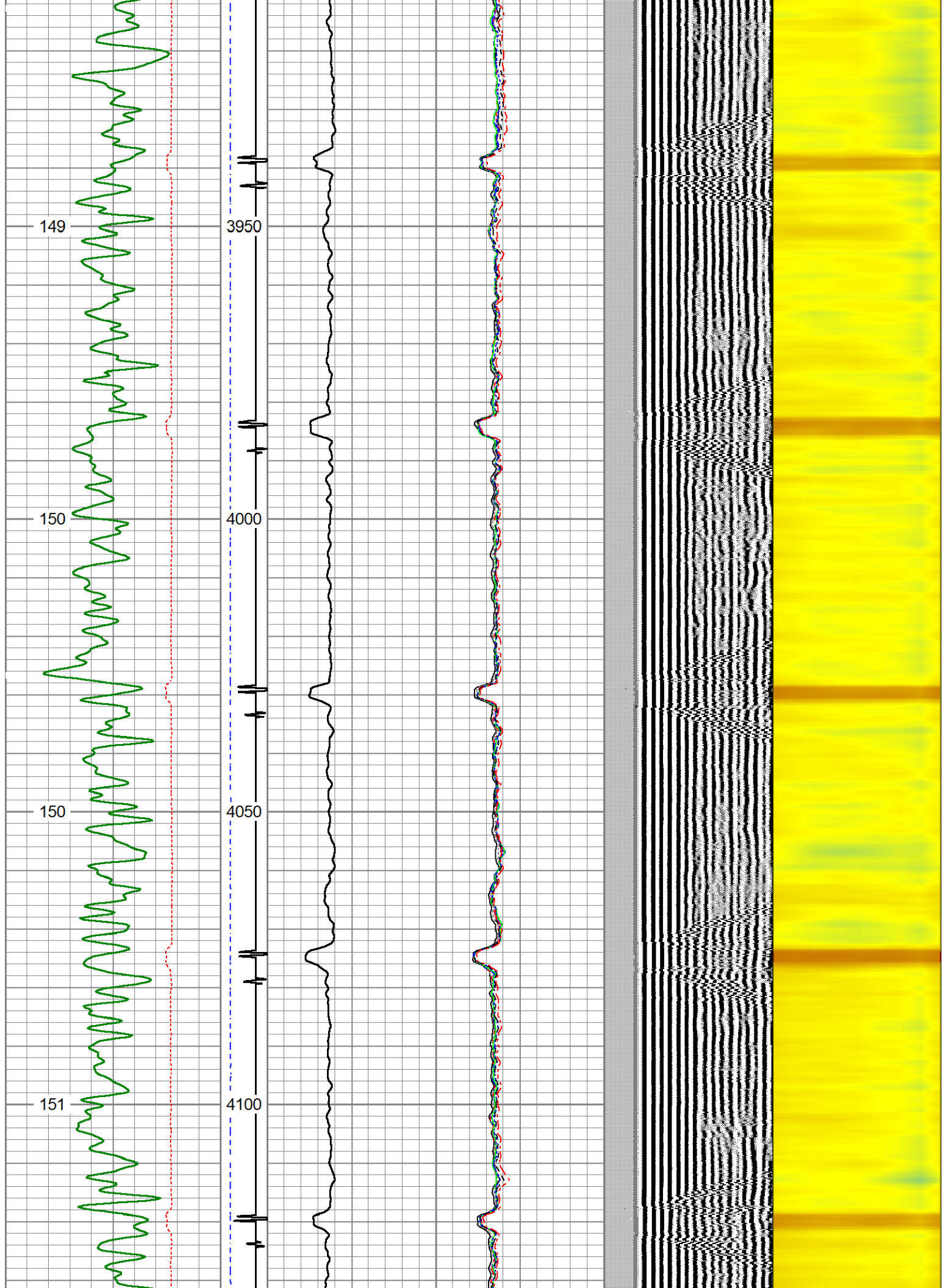


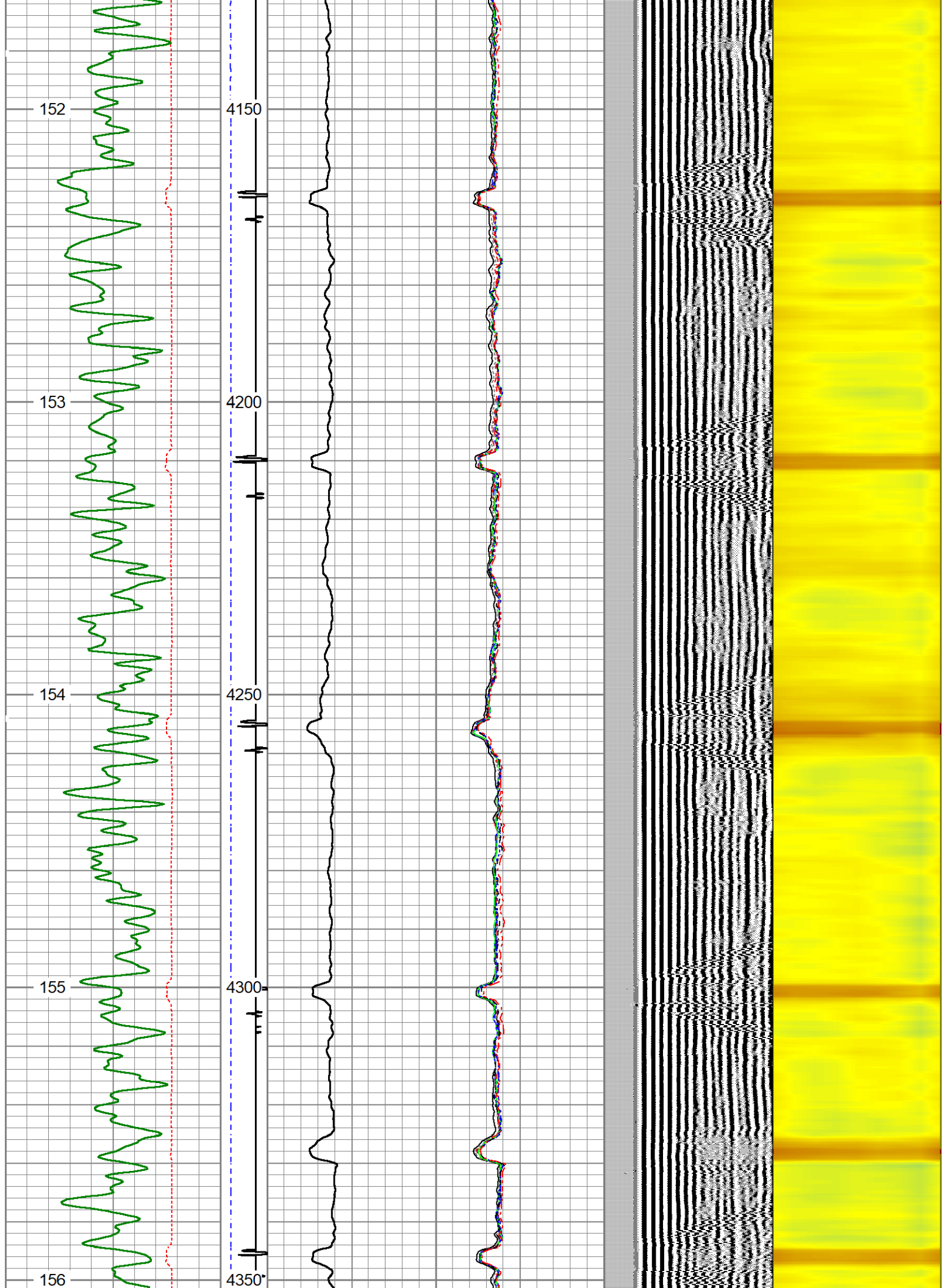


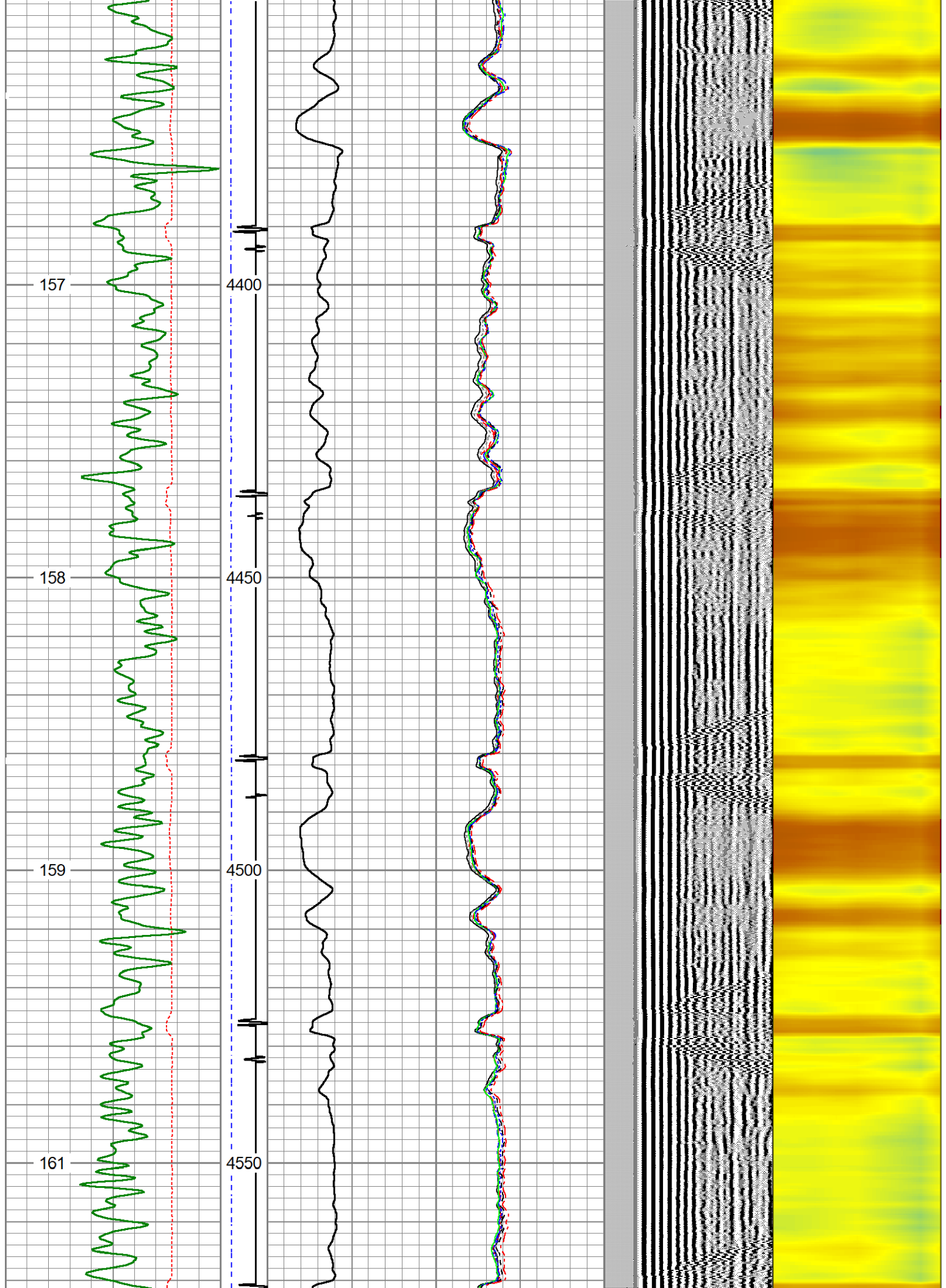


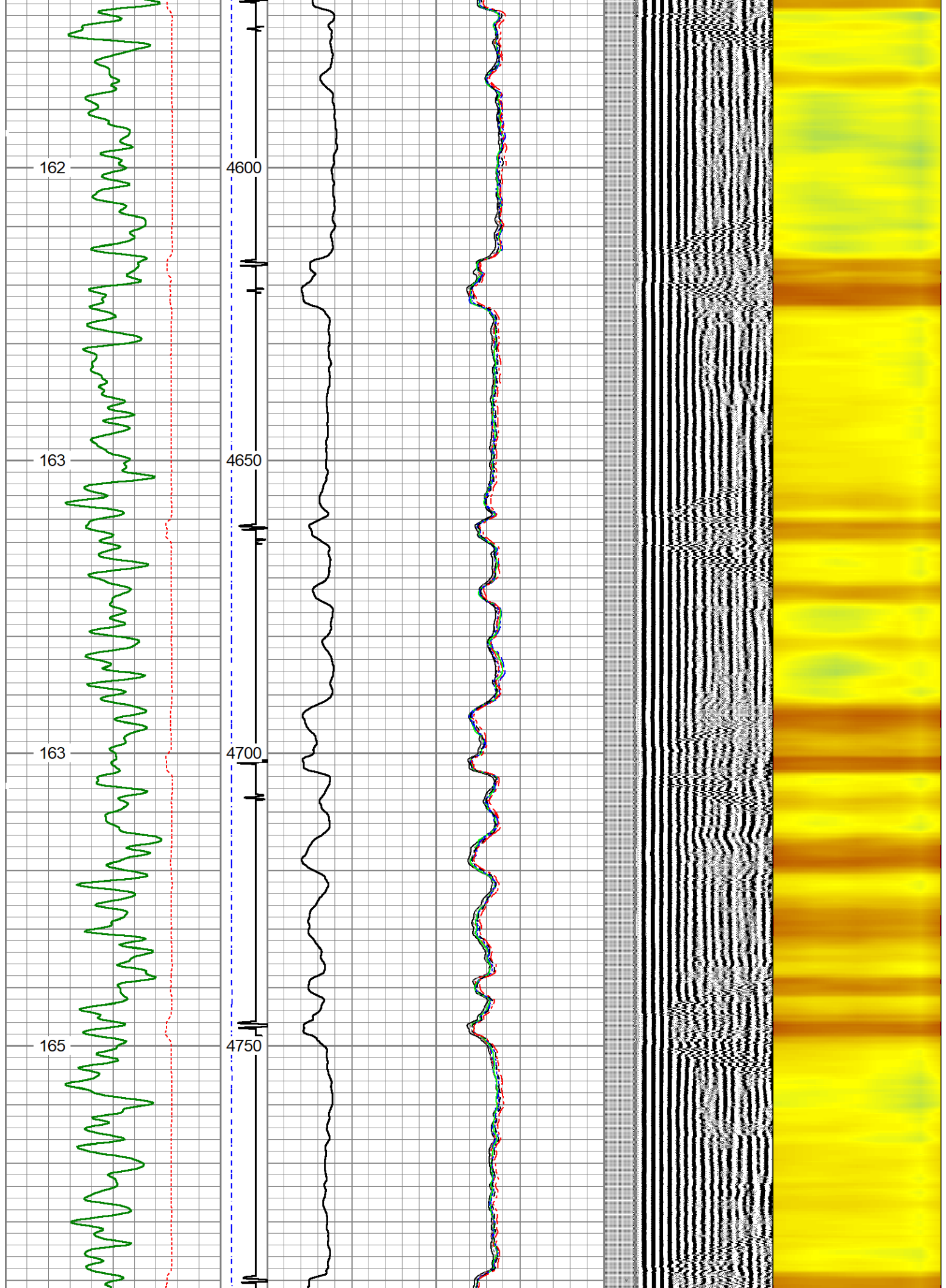


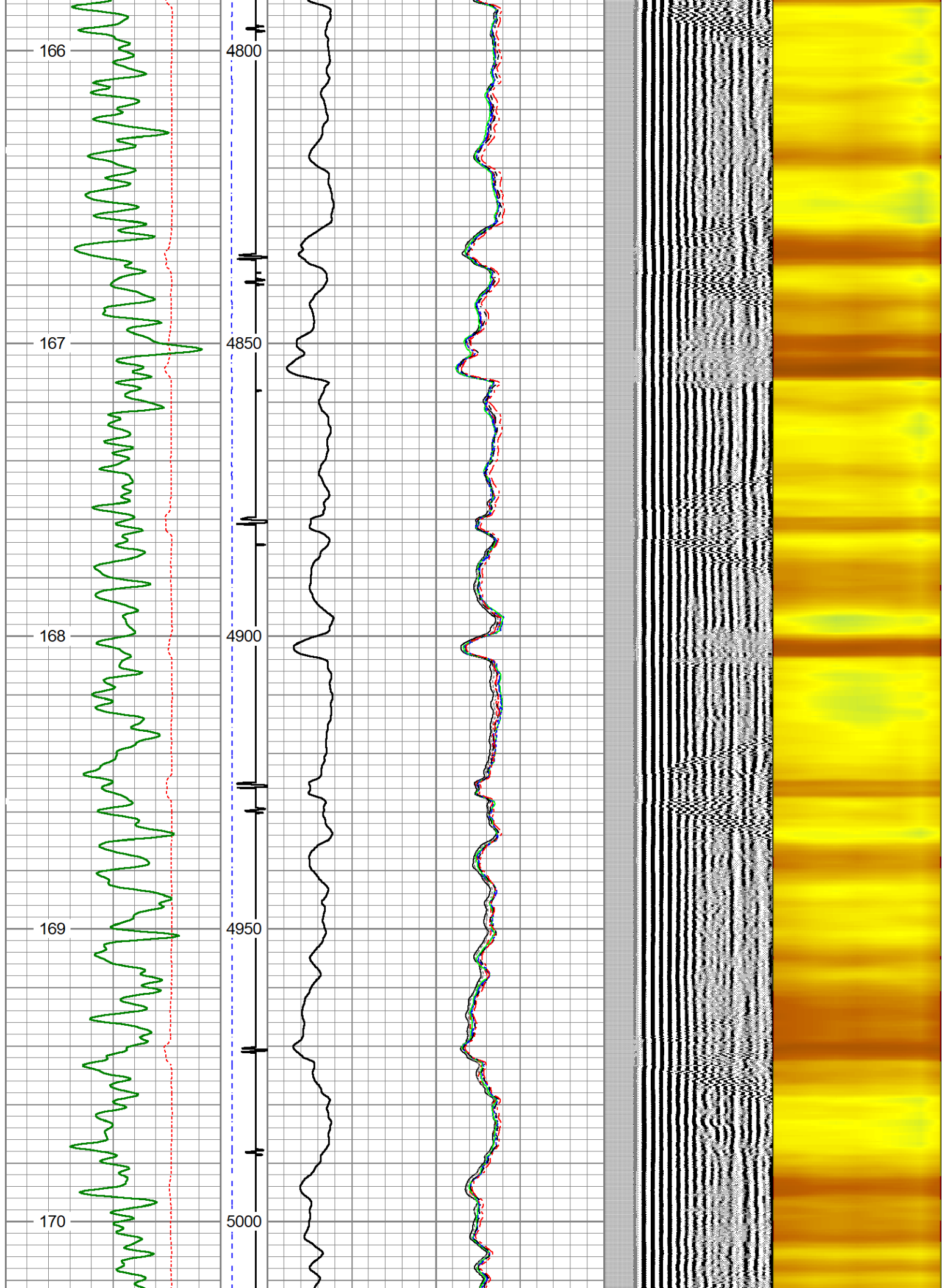


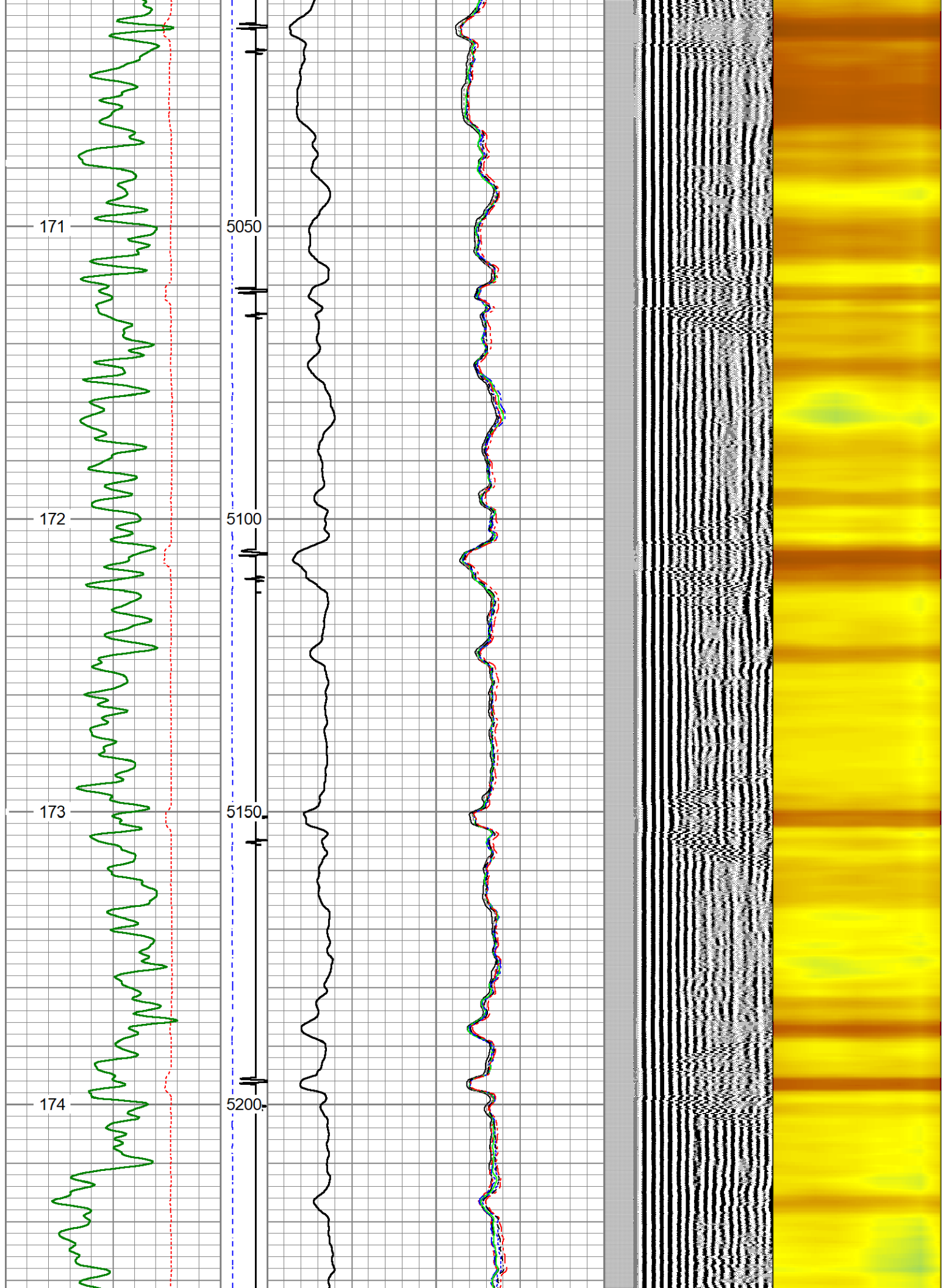


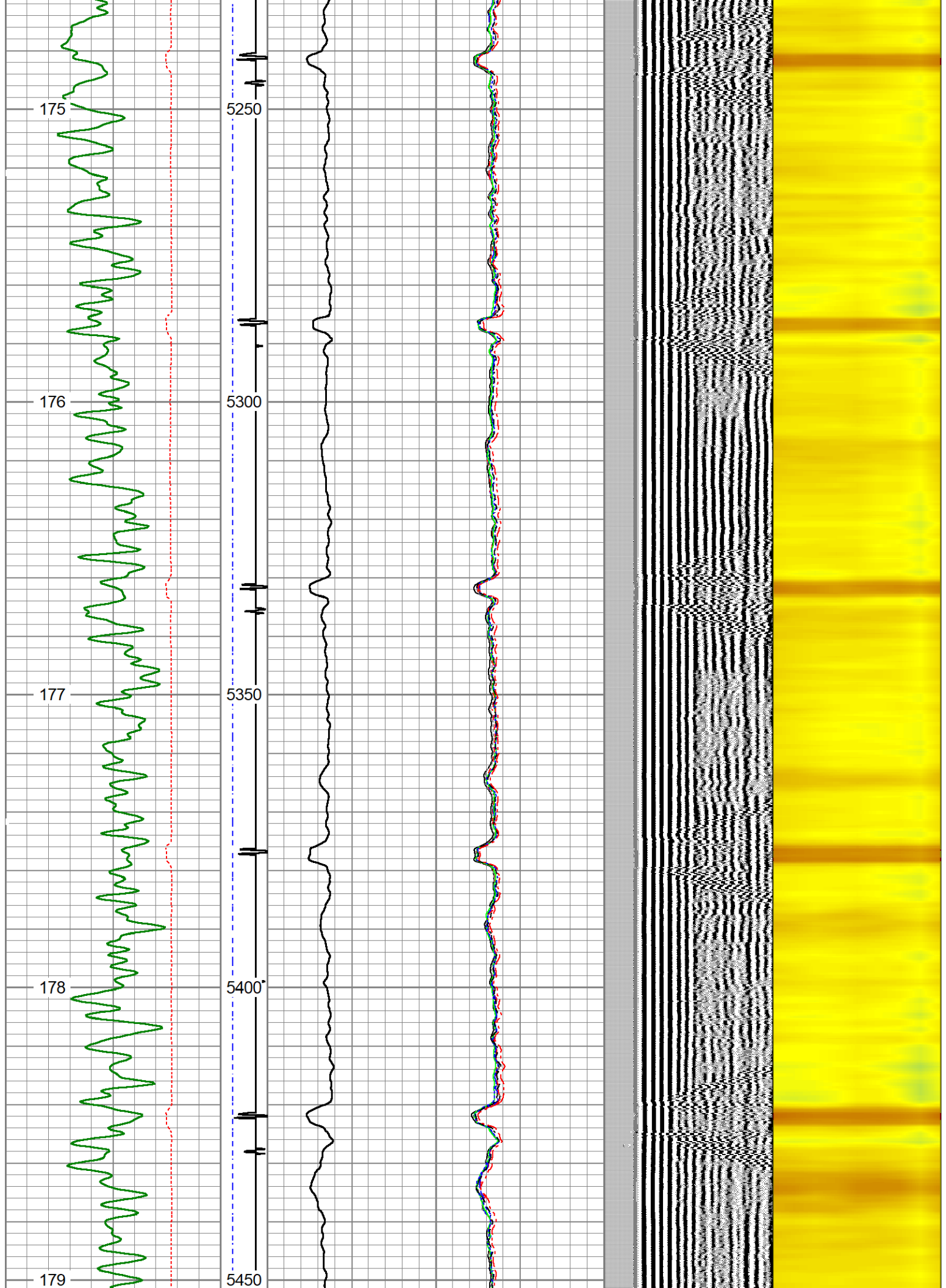


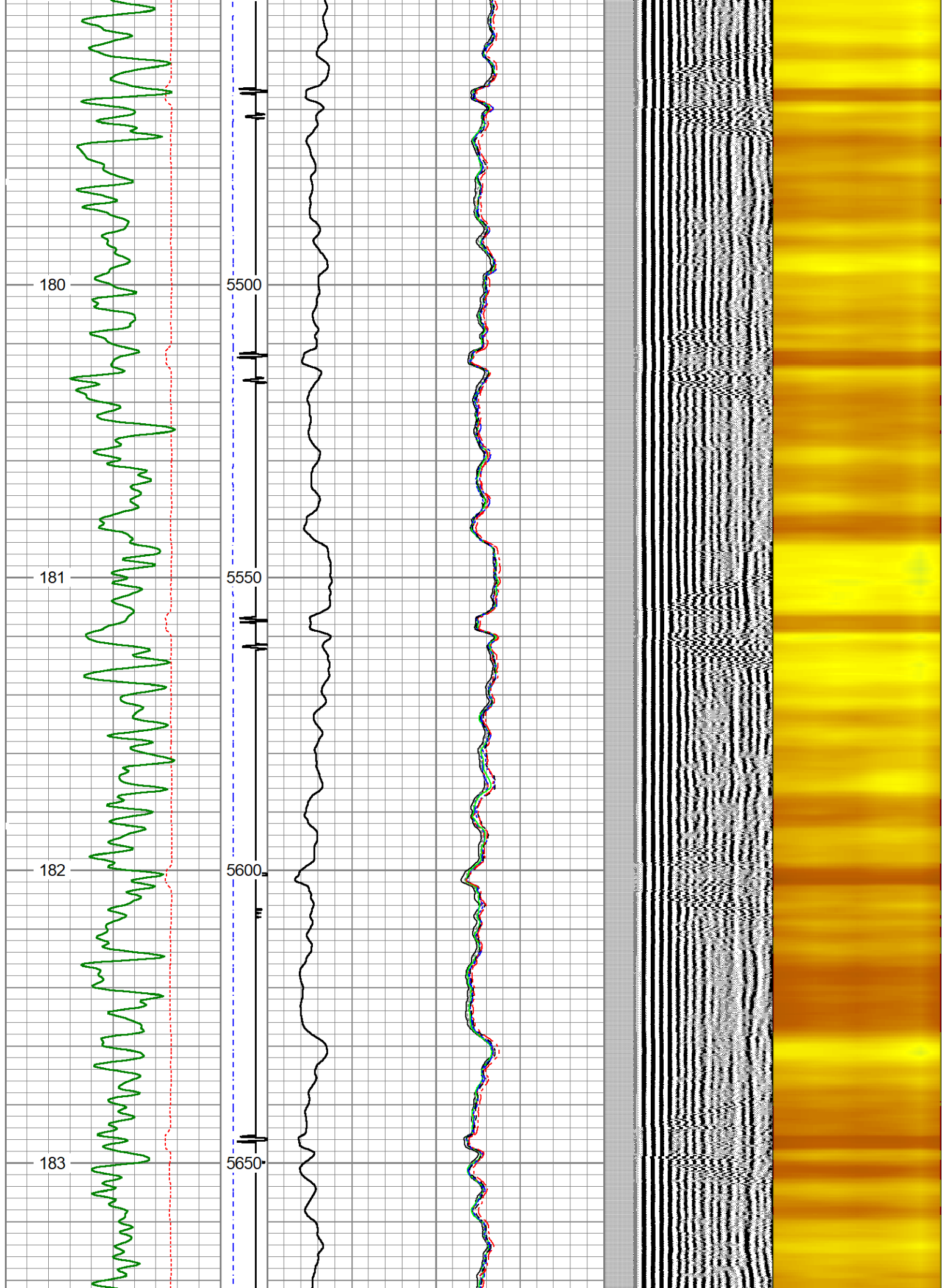


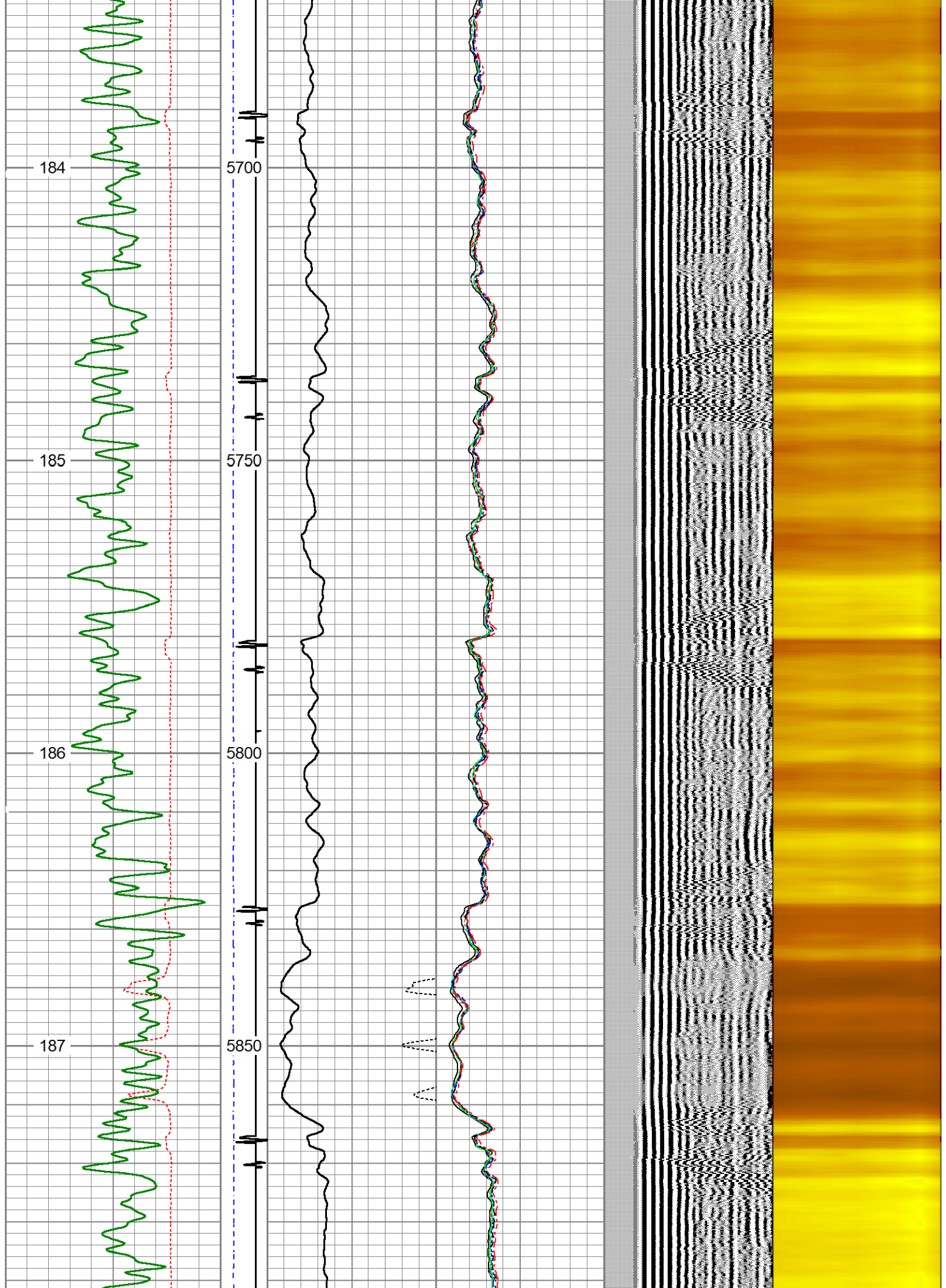


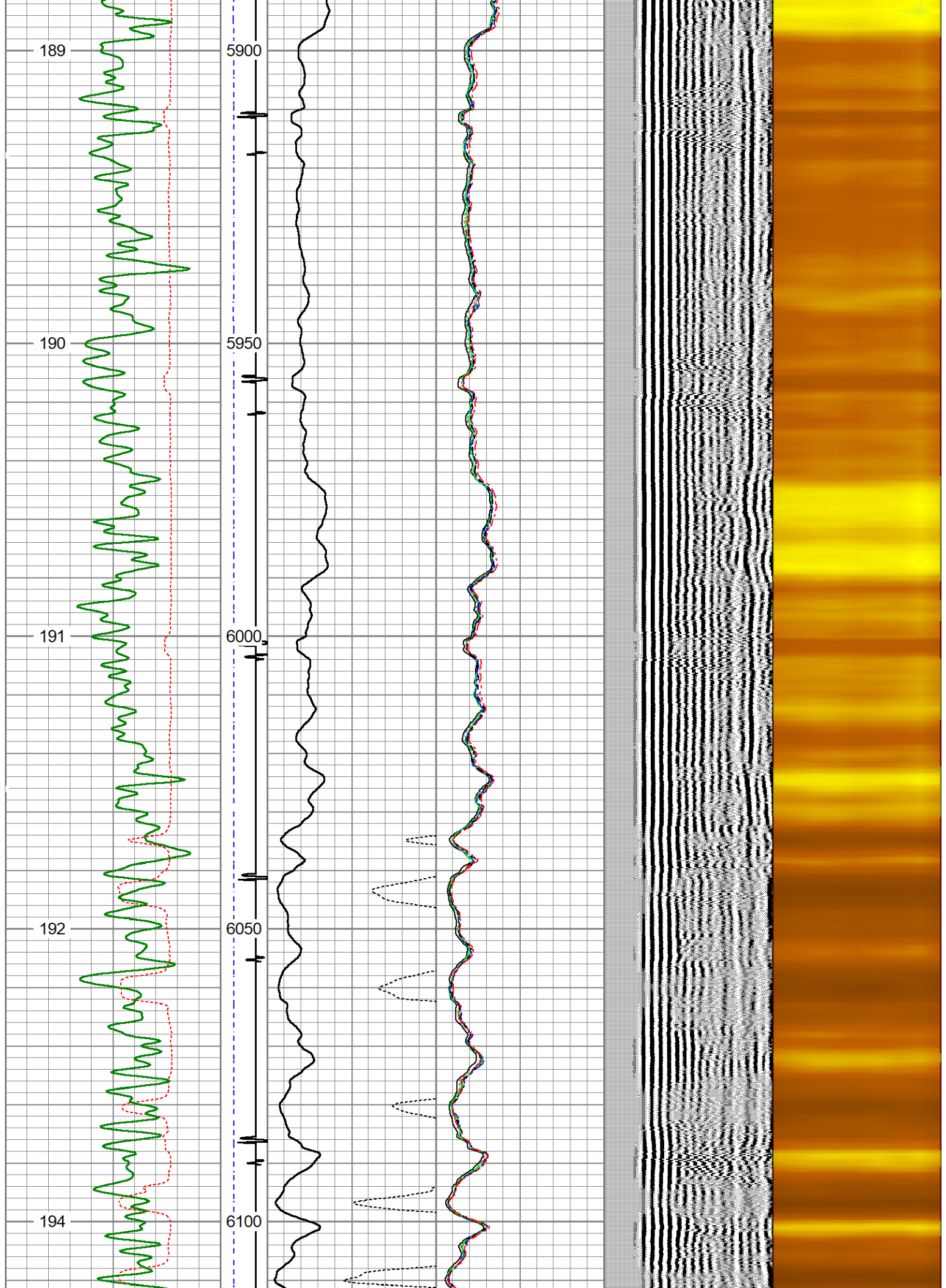


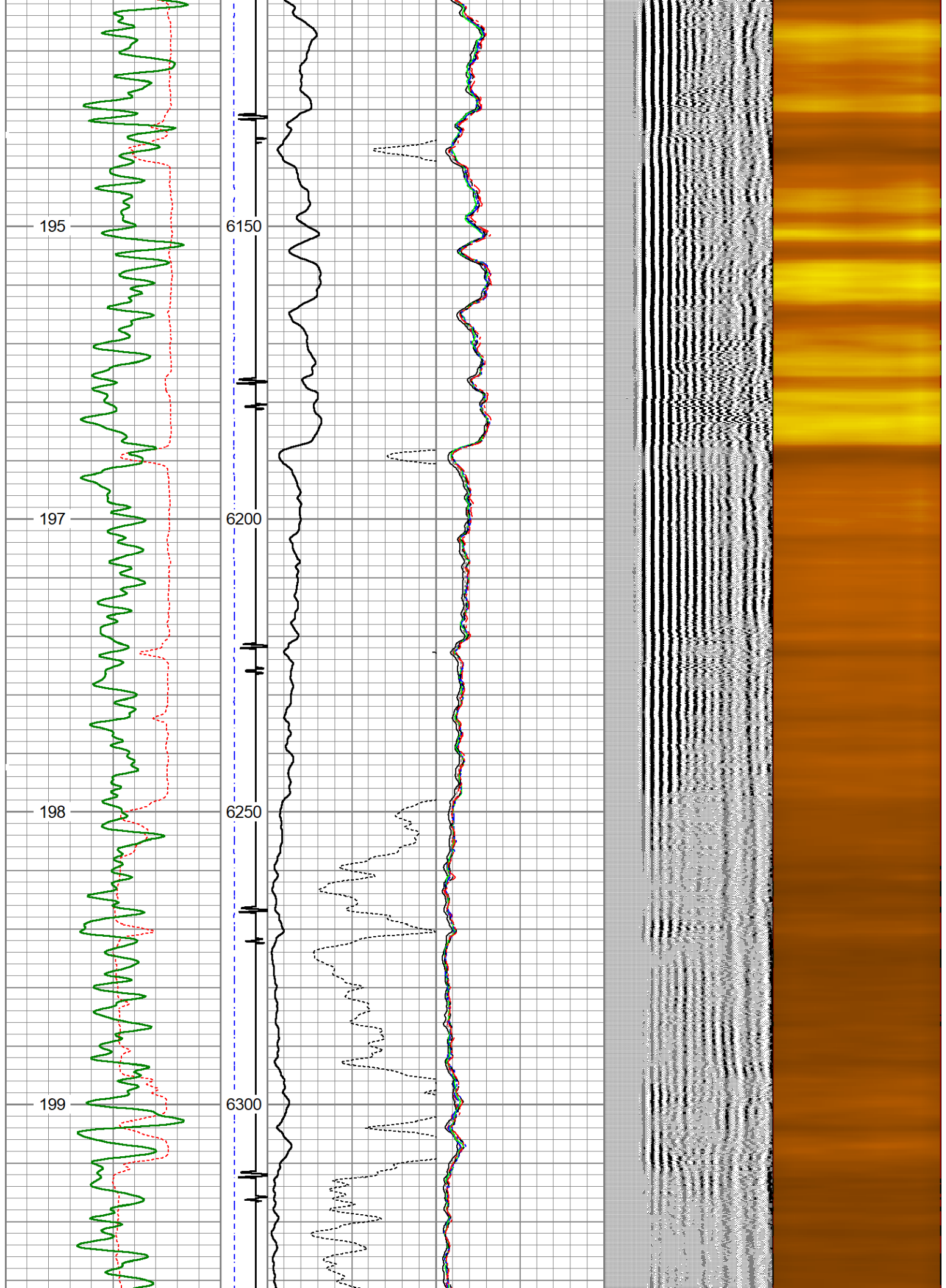


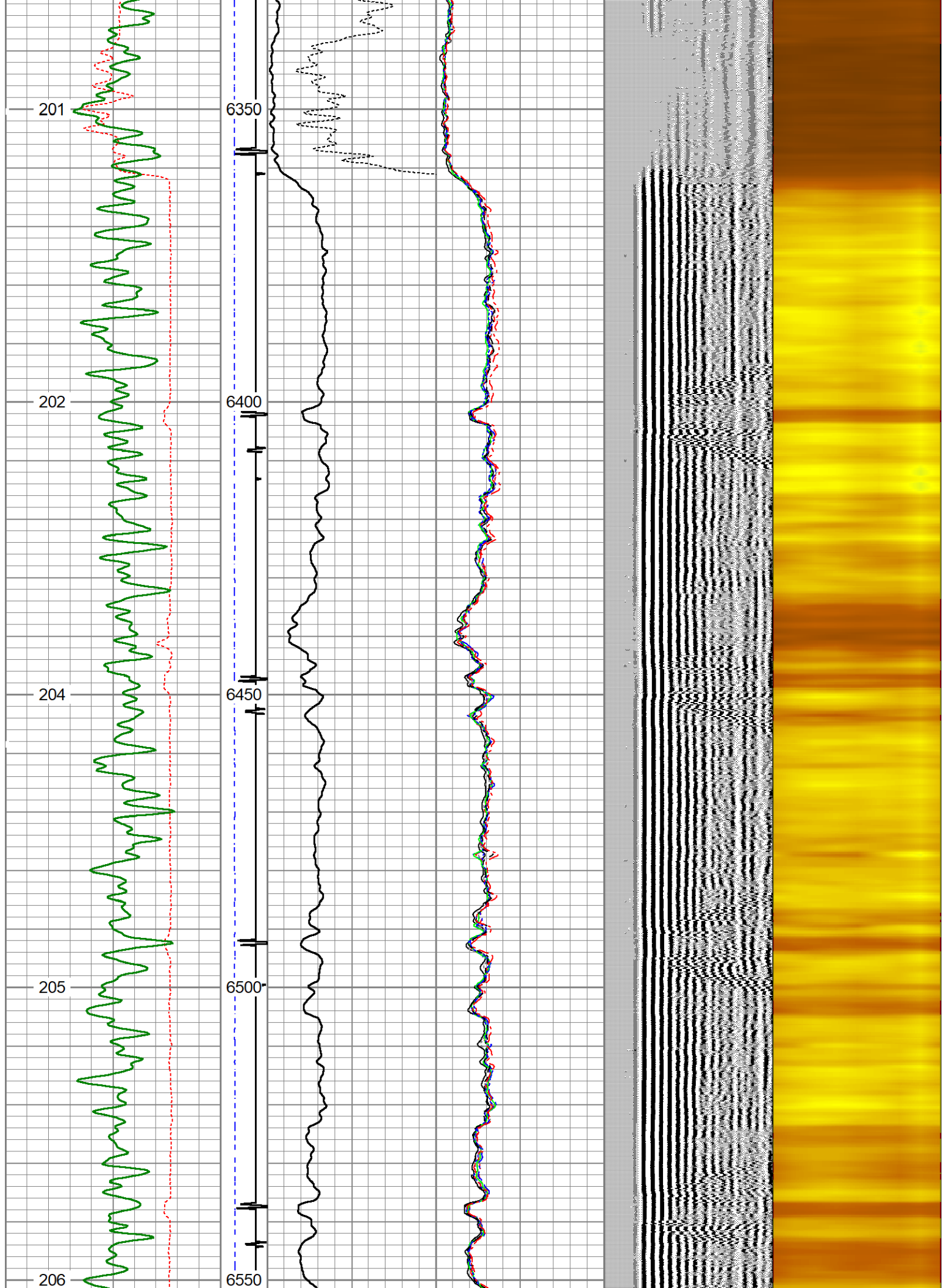


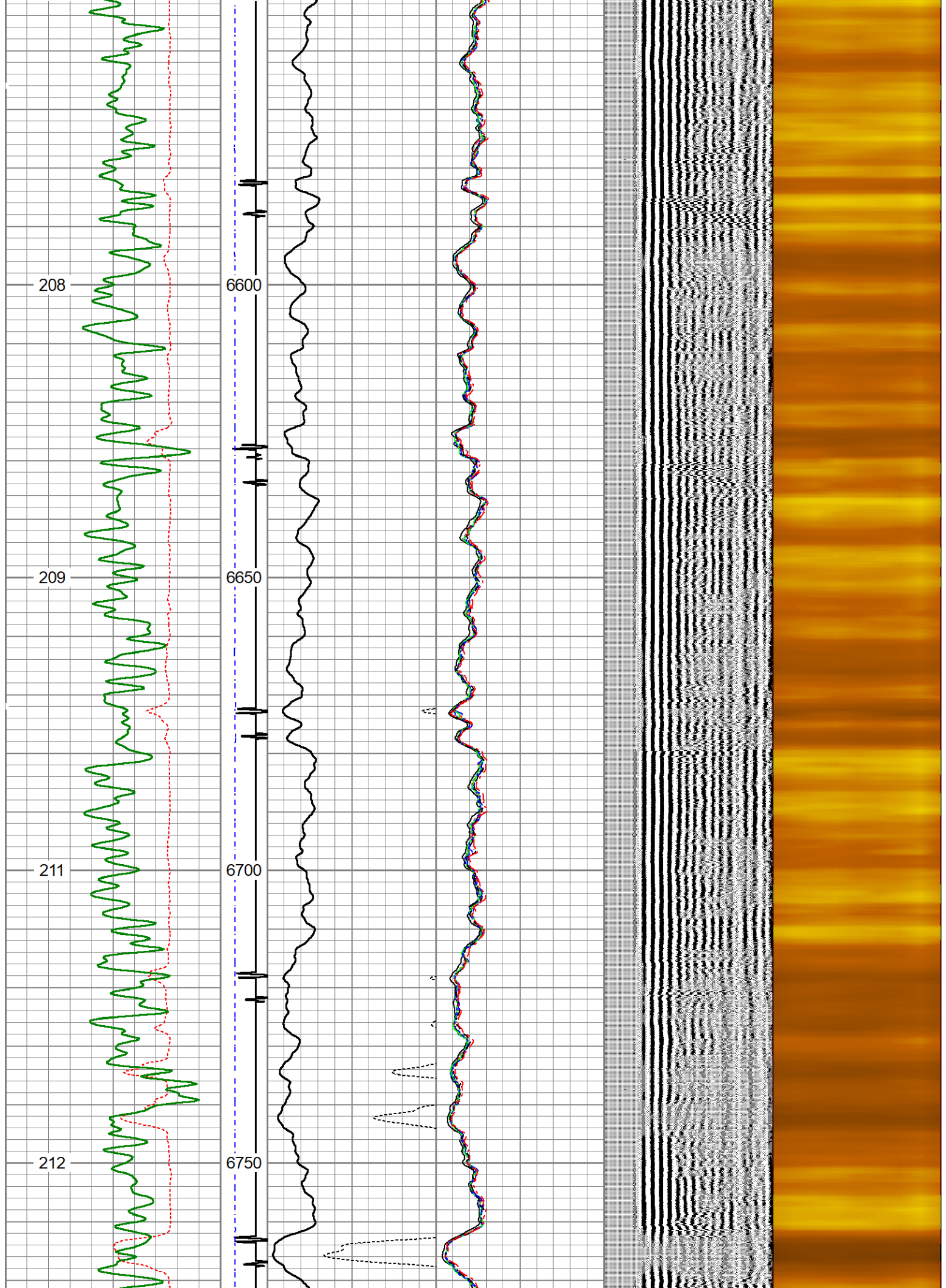


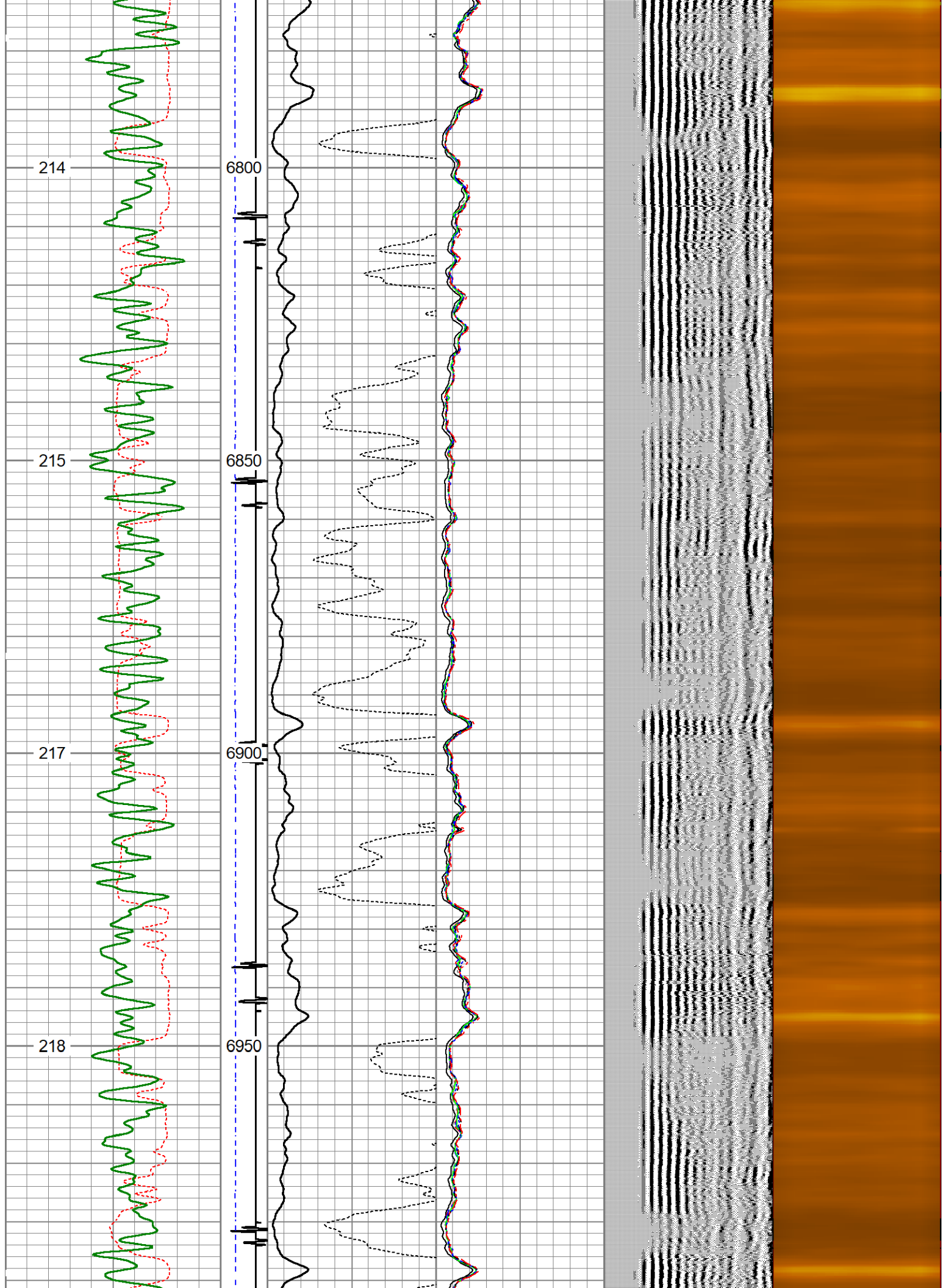


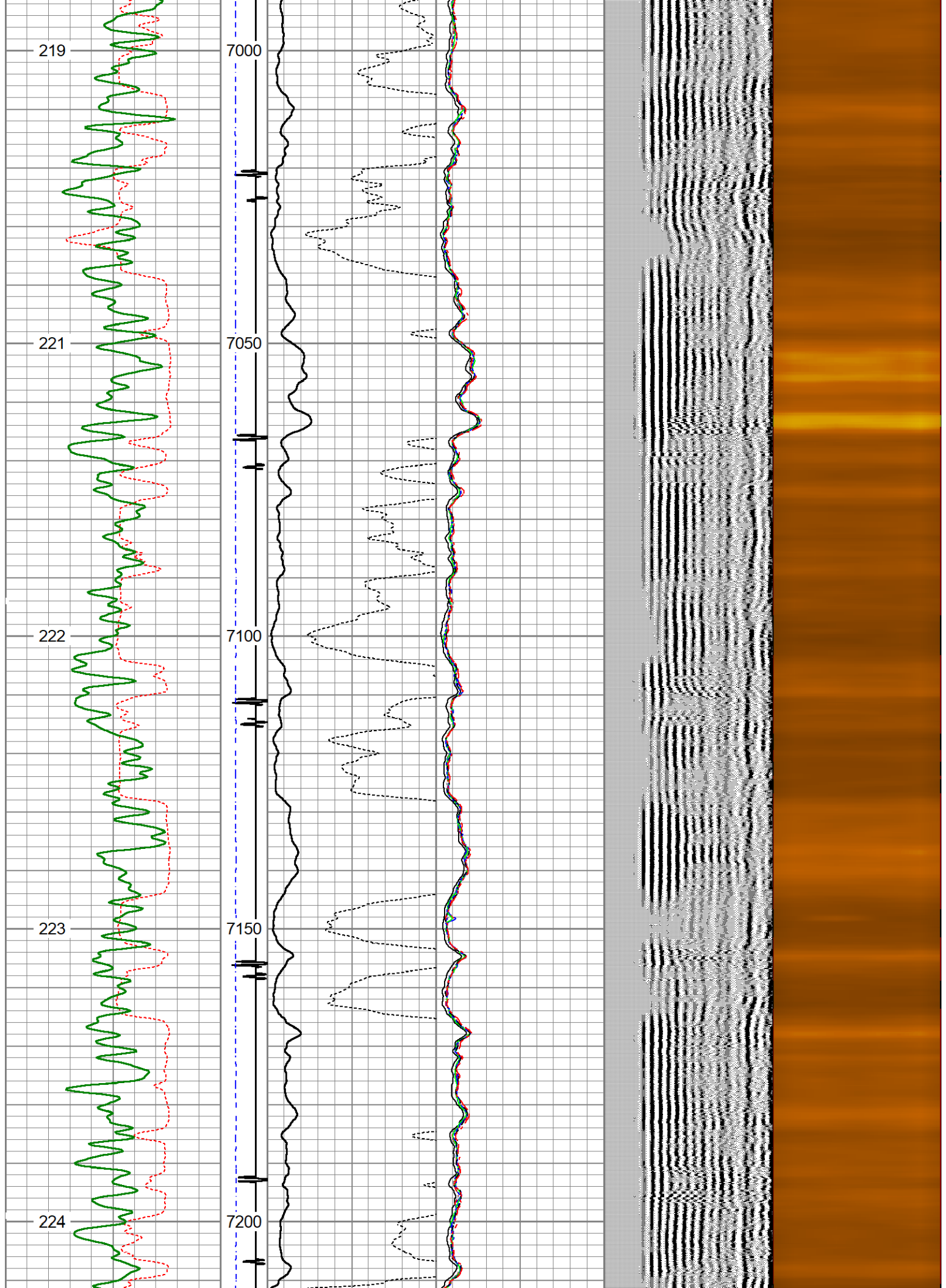


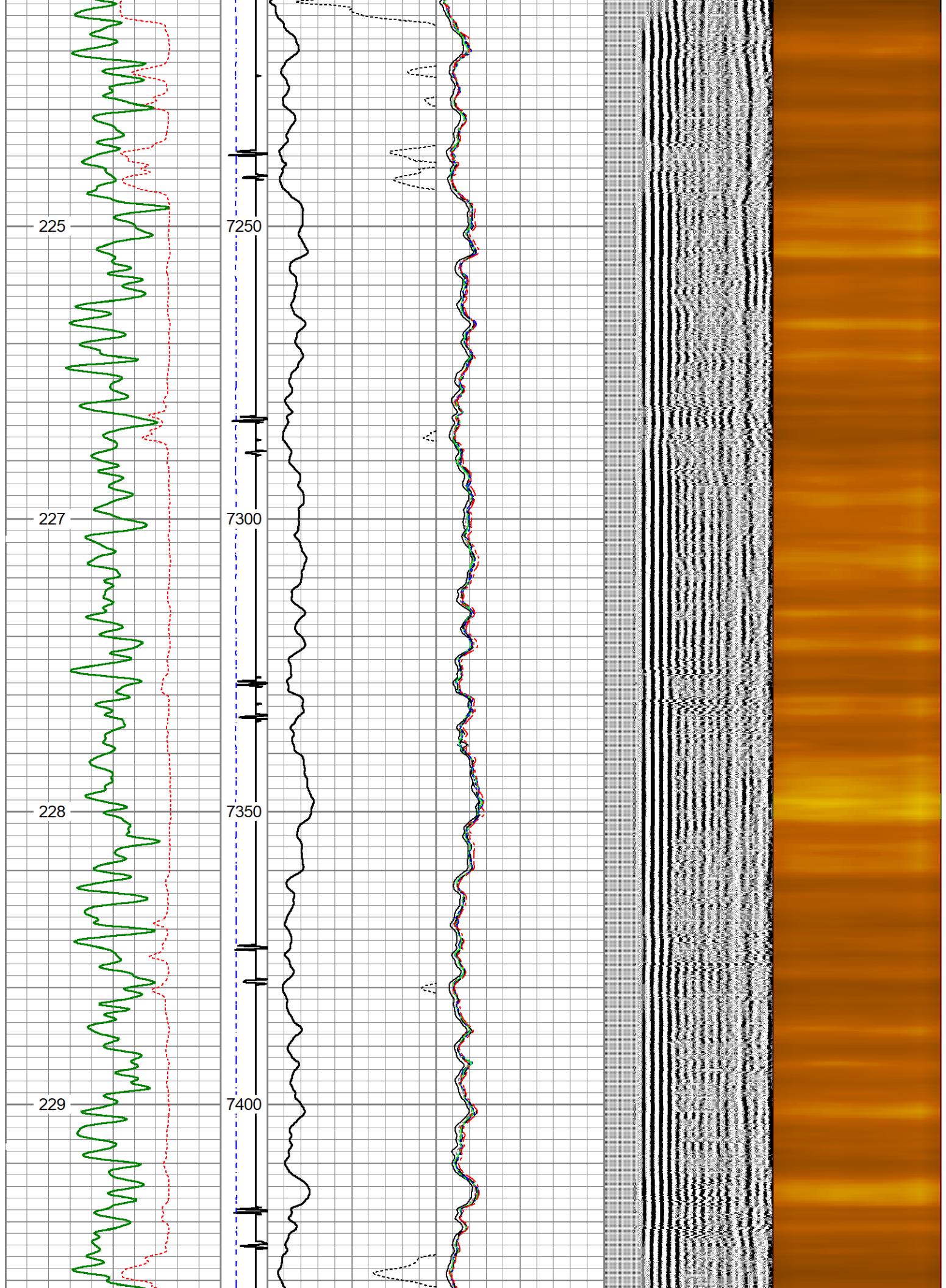


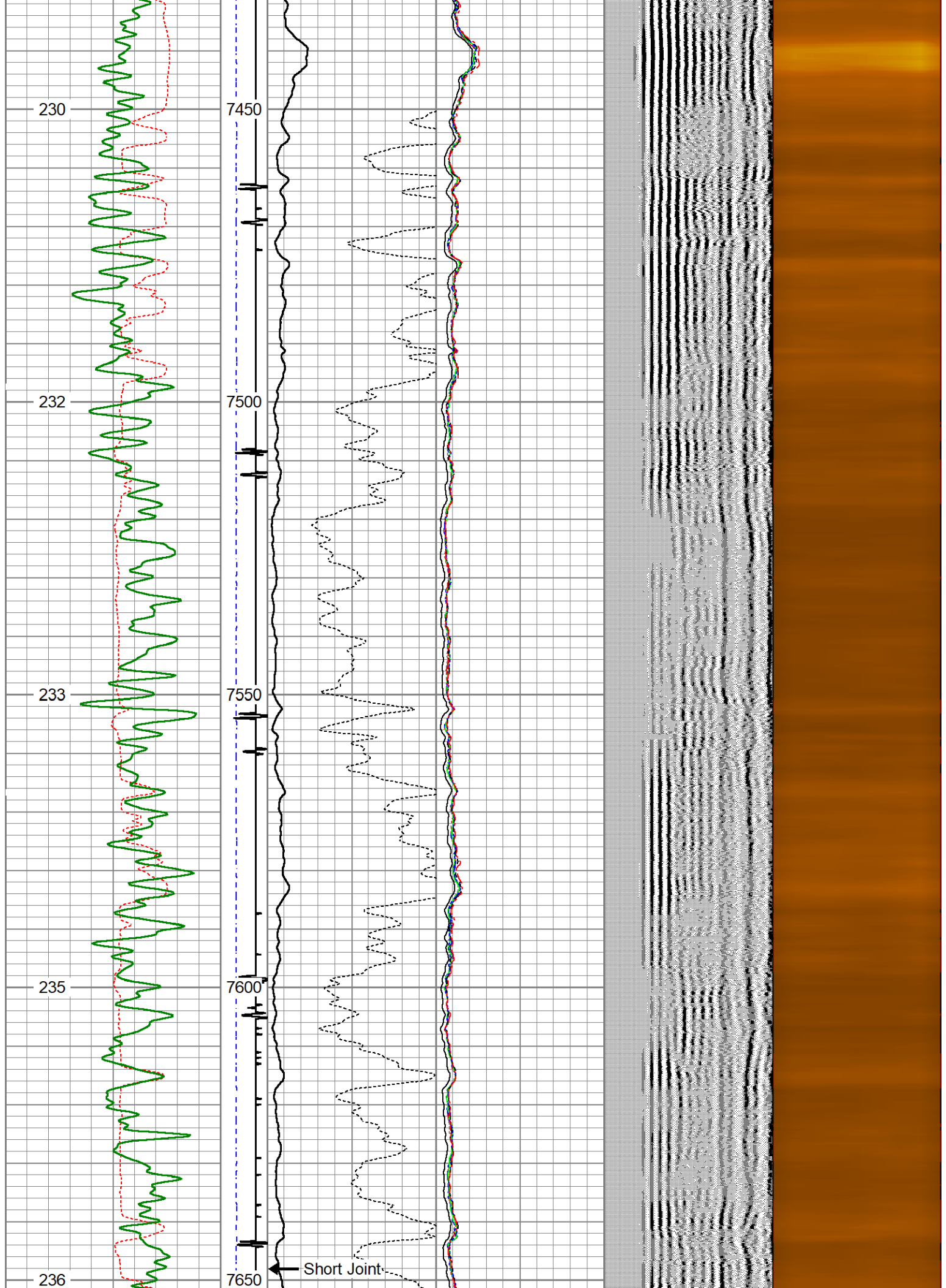


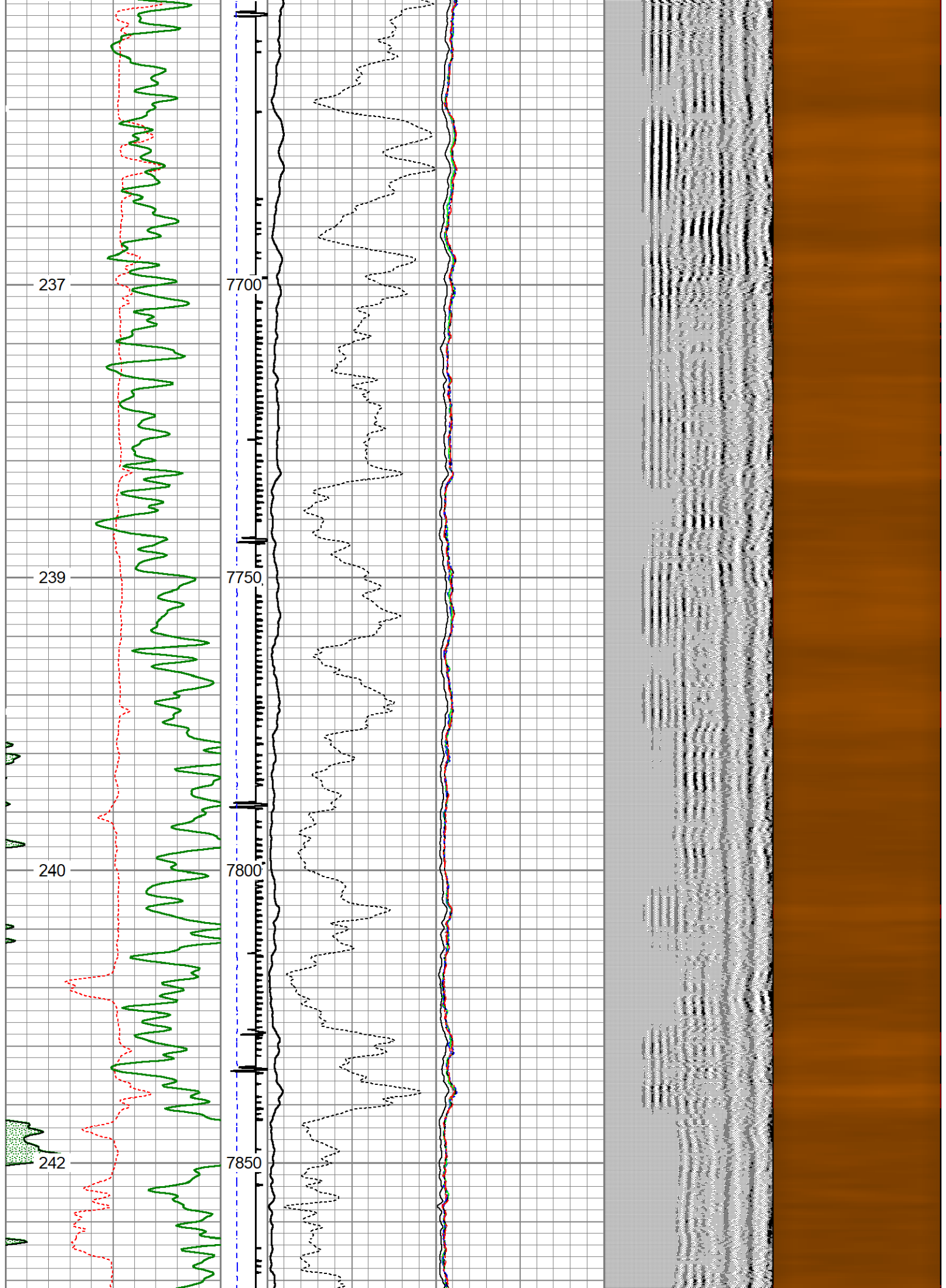


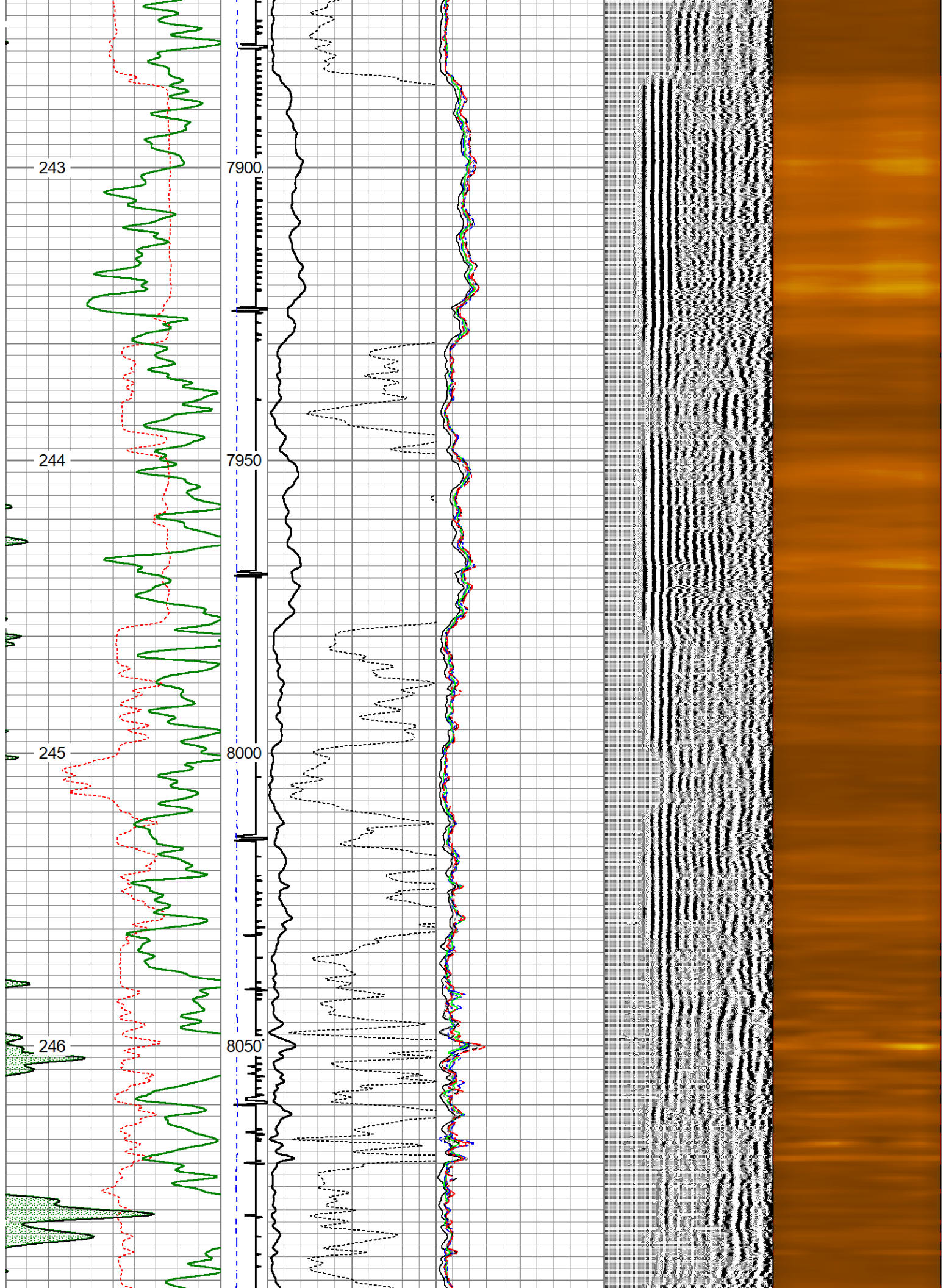




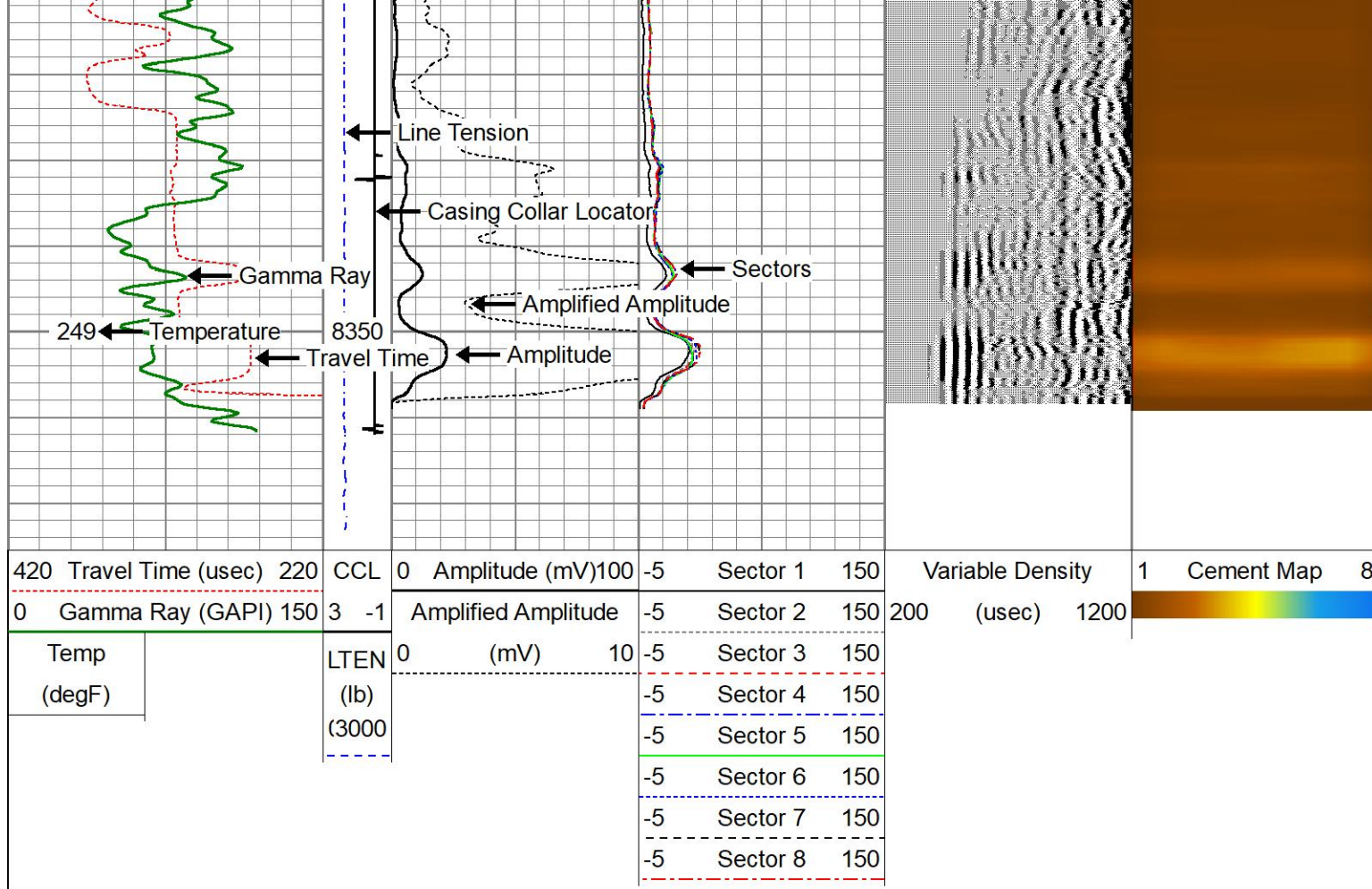








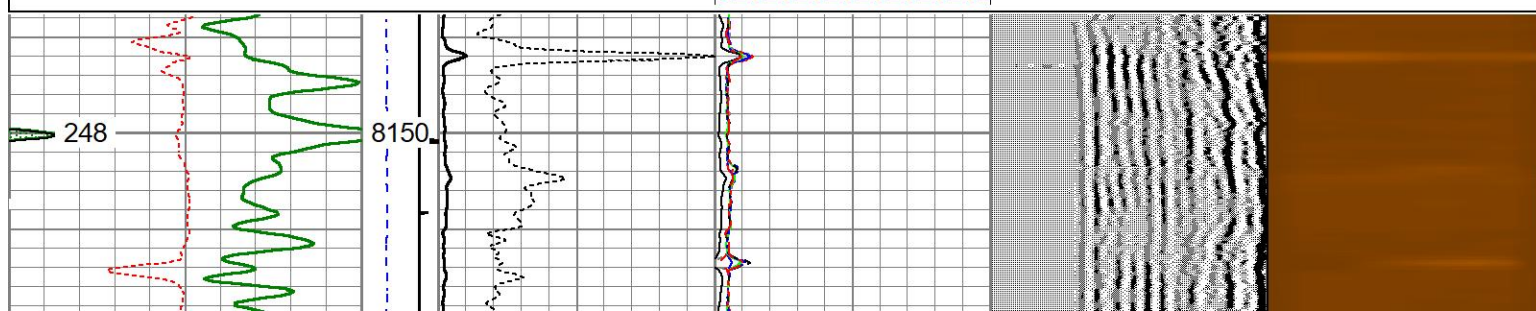
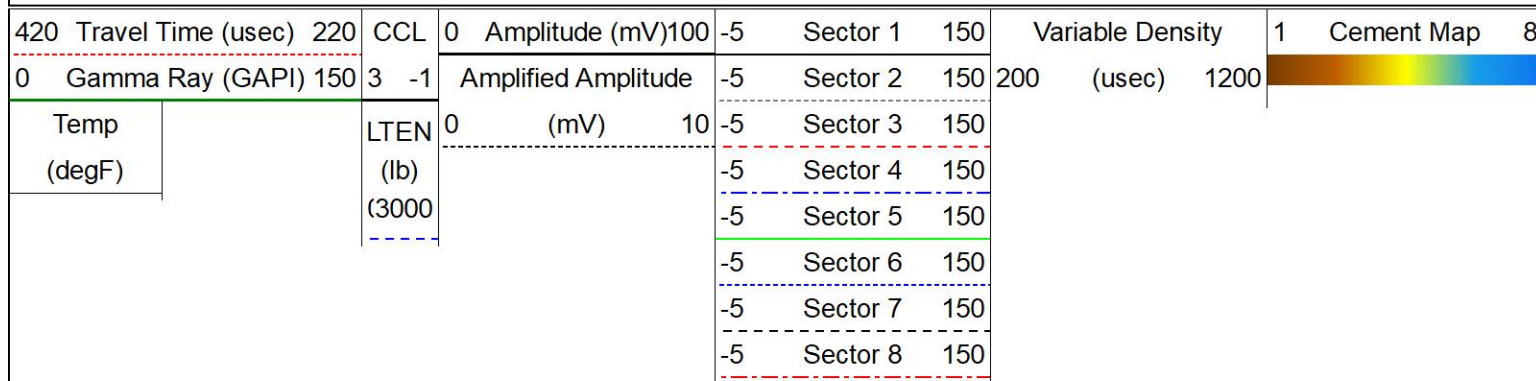


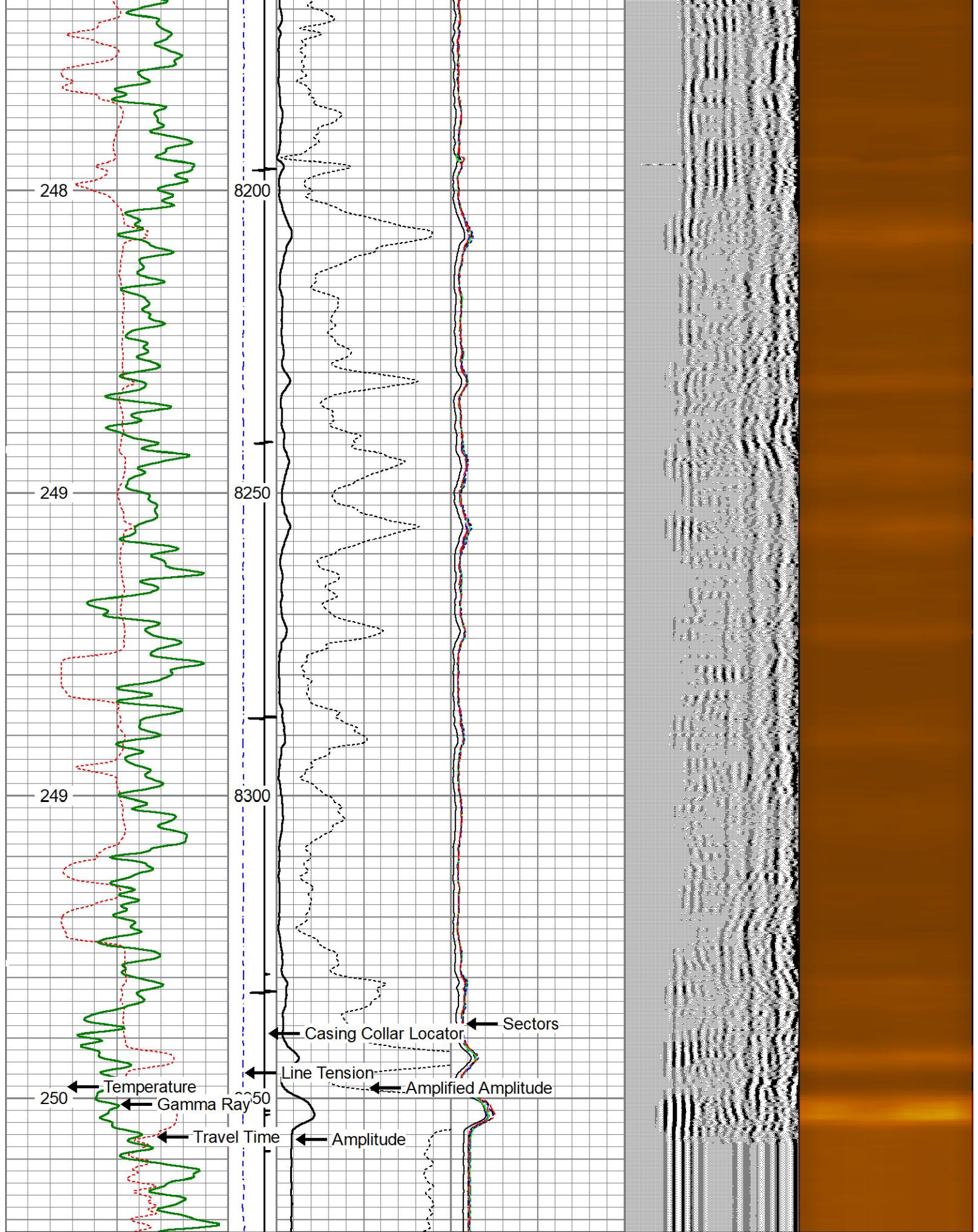


Repeat Pass

1700 PSI 5'=100'

Database File	gw_schneider_hd_11_019hn_rcbl.db
Dataset Pathname	pass4
Presentation Format	scbl03
Dataset Creation	Sun Dec 01 19:26:17 2019
Charted by	Depth in Feet scaled 1:240





420	Travel Time (usec)	220	CCL	0	Amplitude (mV)	100	-5	Sector 1	150	Variable Density	1	Cement Map	8
0	Gamma Ray (GAPI)	150	3	-1	Amplified Amplitude		-5	Sector 2	150	200	(usec)	1200	
Temp			LTEN	0	(mV)	10	-5	Sector 3	150				
(degF)			(lb)				5	Sector 4	150				

(degF)	(lb)	-5	Sector 4	150
	(3000)	-5	Sector 5	150
		-5	Sector 6	150
		-5	Sector 7	150
		-5	Sector 8	150

Log Variables

DatabaseC:\ProgramData\Warrior\Data\gw_schneider_hd_11_019hn_rcbl.db
Dataset field/well/run1/pass5/_vars_

Top - Bottom

BHTEMP_Src TEMP	BOREID in 8.5	BOTTEMP degF 250	CASEOD in 5.5	CASETHCK in 0	CASEWGHT lb/ft 17	MAXAMPL mV 71	MINAMPL mV 1
MINATTN db/ft 0.8	PERFS No	PPT usec 0	SRFTEMP degF 0	TDEPTH ft 0			

Variable Description

BHTEMP_Src : BHTEMP Input Source Selector
BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
CASEWGHT : Casing Weight
MAXAMPL : Maximum Amplitude

MINAMPL : Minimum Amplitude
MINATTN : Minimum Attenuation
PERFS : Perforation Flag
PPT : Predicted Pipe Time
SRFTEMP : Surface Temperature
TDEPTH : Total Depth

Calibration Report

Database File gw_schneider_hd_11_019hn_rcbl.db
Dataset Pathname pass5
Dataset Creation Sun Dec 01 19:30:30 2019

Gamma Ray Calibration Report

Serial Number: FW1304-44
Tool Model: Probe275
Performed: Wed Nov 27 12:25:12 2019

Calibrator Value: 1036.2 GAPI

Background Reading: 64.0 cps
Calibrator Reading: 1252.4 cps

Sensitivity: 0.8719 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: FW1306-47
Tool Model: Probe 2.75 Radii W/Temp

Calibration Casing Diameter: 5.500 in
Calibration Depth: 1938.317 ft

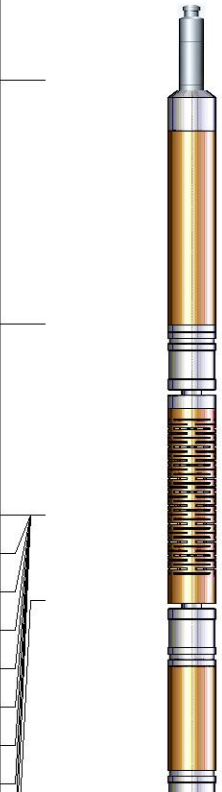
Master Calibration, performed Sun Dec 01 16:43:54 2019:


	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.009	0.519	1.000	71.921	138.972	-0.228

S	0.009	0.519	1.000	71.921	150.572	-0.228
CAL	0.009	0.714				
5'	0.009	0.448	1.000	71.921	161.510	-0.416
SUM						
S1	0.021	0.493	0.000	100.000	211.789	-4.411
S2	0.009	0.509	0.000	100.000	200.103	-1.854
S3	0.009	0.522	0.000	100.000	194.946	-1.797
S4	0.009	0.540	0.000	100.000	188.188	-1.705
S5	0.009	0.574	0.000	100.000	176.887	-1.587
S6	0.009	0.596	0.000	100.000	170.443	-1.529
S7	0.009	0.565	0.000	100.000	180.107	-1.695
S8	0.009	0.508	0.000	100.000	200.274	-1.768

Internal Reference Calibration, performed (Not Performed):						
	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.009	0.714	1.000	0.000

Air Zero Calibration, performed Sun Dec 01 16:00:54 2019:						
	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	

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
HeadVolt	21.13		CHD-Titan Titan 1 7/16" GO Cablehead	1.00	1.44	5.00
Temp	18.28					
WVFS8	16.05		RBT-Probe 2.75 Radii W/Temp (FW1306-47) Probe 2.75" Radial with Integral Temperature Sub	9.21	2.75	90.00
WVFS7	16.05					
WVFS6	16.05					
WVFS5	16.05					
WVFS4	16.05					
WVFS3	16.05					
WVFS2	16.05					
WVFS1	16.05					

WVFCAL	16.05							
WVF3FT	16.05							
WVF5FT	15.05							
HEADVOLT	11.80							
CCL	10.92							
GR	9.58		GR-Probe275 (FW1304-44) Probe 2 3/4" Logging Gamma Ray 6 Pin	4.80	2.75	57.00		
			WeightBar-7ft313inlineS 3 1/8" Steel 7' In Line Weight Bar	7.00	3.13	149.00		

Dataset: gw_schneider_hd_11_019hn_rcbl.db: field/well/run1/pass5
 Total length: 22.01 ft
 Total weight: 301.00 lb
 O.D.: 3.13 in



Company Great Western Oil & Gas
 Well Schneider HD 11-019HN
 Field Wattenberg
 County Weld
 State Colorado

Country