



Radial Cement Bond
Variable Density Log
W/Gamma Ray/CCL

Company	Noble Energy	
Well	No Worries PC G14-64-1HN	
Field	Wattenberg	
County	Weld	State
State	Colorado	Colorado
Location:	API # : 05-123-36329	
Well	No Worries PC G14-64-1HN	
Field	Wattenberg	
County	Weld	State
State	Colorado	Colorado
Location:	BHL: 1500' FSL & 535' FEL	
SEC 14	TWP 4N	RGE 65W
Permanent Datum	Ground Level	Elevation
Log Measured From	24' Kelly Bushing	4695'
Drilling Measured From	Kelly Bushing	Elevation
		K.B. 4719'
		D.F. 4718'
		G.L. 4695'
Date	February 22, 2014	
Run Number	1	
Depth Driller	11209'	
Depth Logger	7139'	
Bottom Logged Interval	7126'	
Top Log Interval	Surface	
Open Hole Size	8.75	
Type Fluid	Fresh Water	
Density / Viscosity	8.33	
Max. Recorded Temp.	218 Deg F	
Estimated Cement Top	548'	
Time Well Ready	15:55	
Time Logger on Bottom	16:33	
Equipment Number	13033	
Location	Brighton	
Recorded By	Cody Rall	
Witnessed By	B. Mansfield	
Borehole Record		
Run Number	Bit	From
One	To	Size
Two	Weight	From
Three	To	Weight
Four	From	To
Casing Record	Size	Wgt/Ft
Surface String	9 5/8	36#
Prot. String		
Production String	7	26#
Liner	4 1/2	11 6#
Short Joint		5827'

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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

Primary Log on Well. Well Logged using 24' KB.

Main Pass logged w/2000 PSI
Repeat Pass logged w/0 PSI

Estimated Top Of Cement 548'
Short Joint @ 5827' To 5841'

Logging Speed Requested By Company Representative
Thank you for using Allied Wireline
(303)659-4609



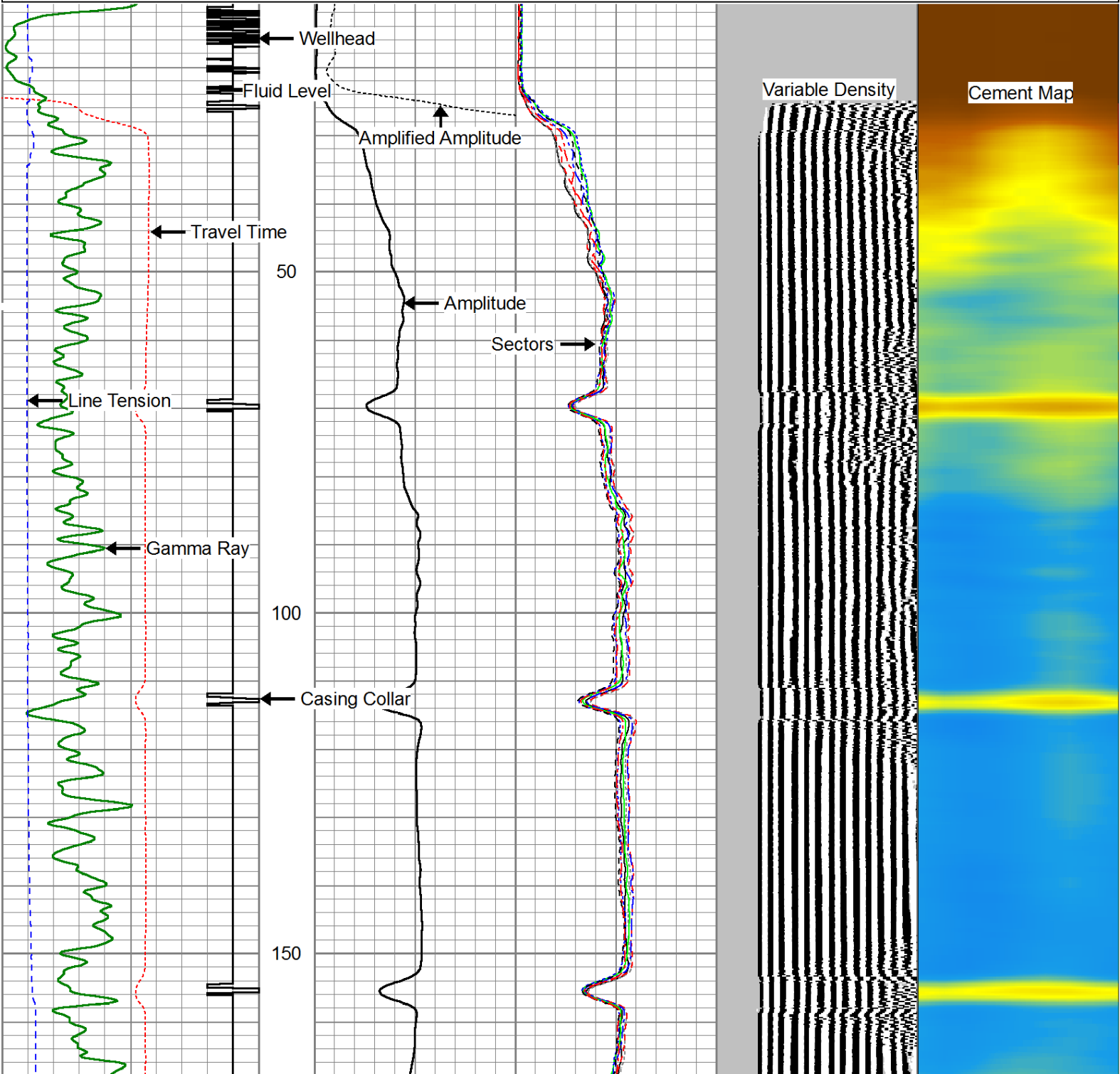
Main Pass (2000 PSI)

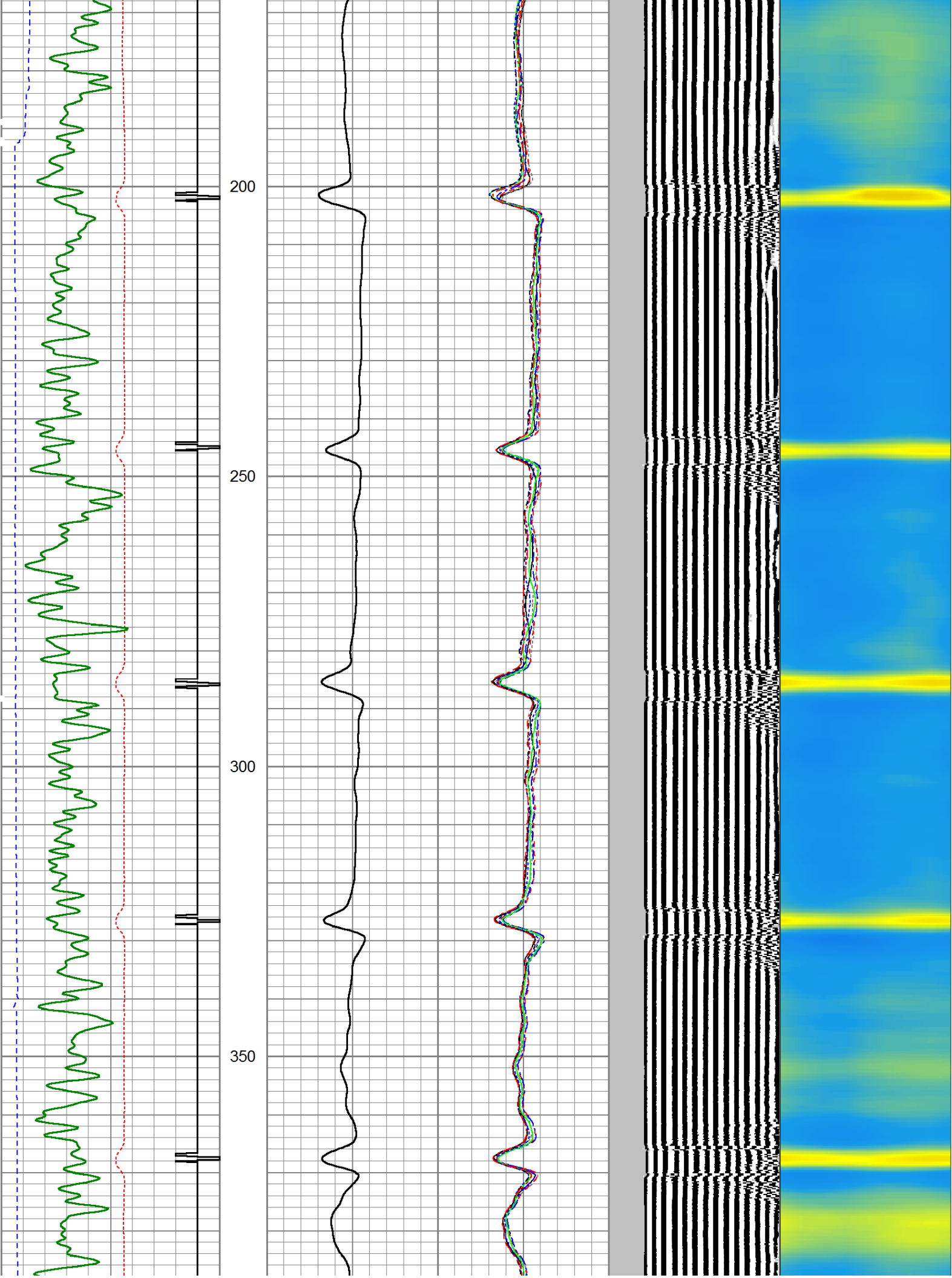
Database File: noble energy no worries g14-64-1hn_rcbl.db
Dataset Pathname: pass5
Presentation Format: scbl03
Dataset Creation: Sat Feb 22 16:39:44 2014 by Log 0
Charted by: Depth in Feet scaled 1:240

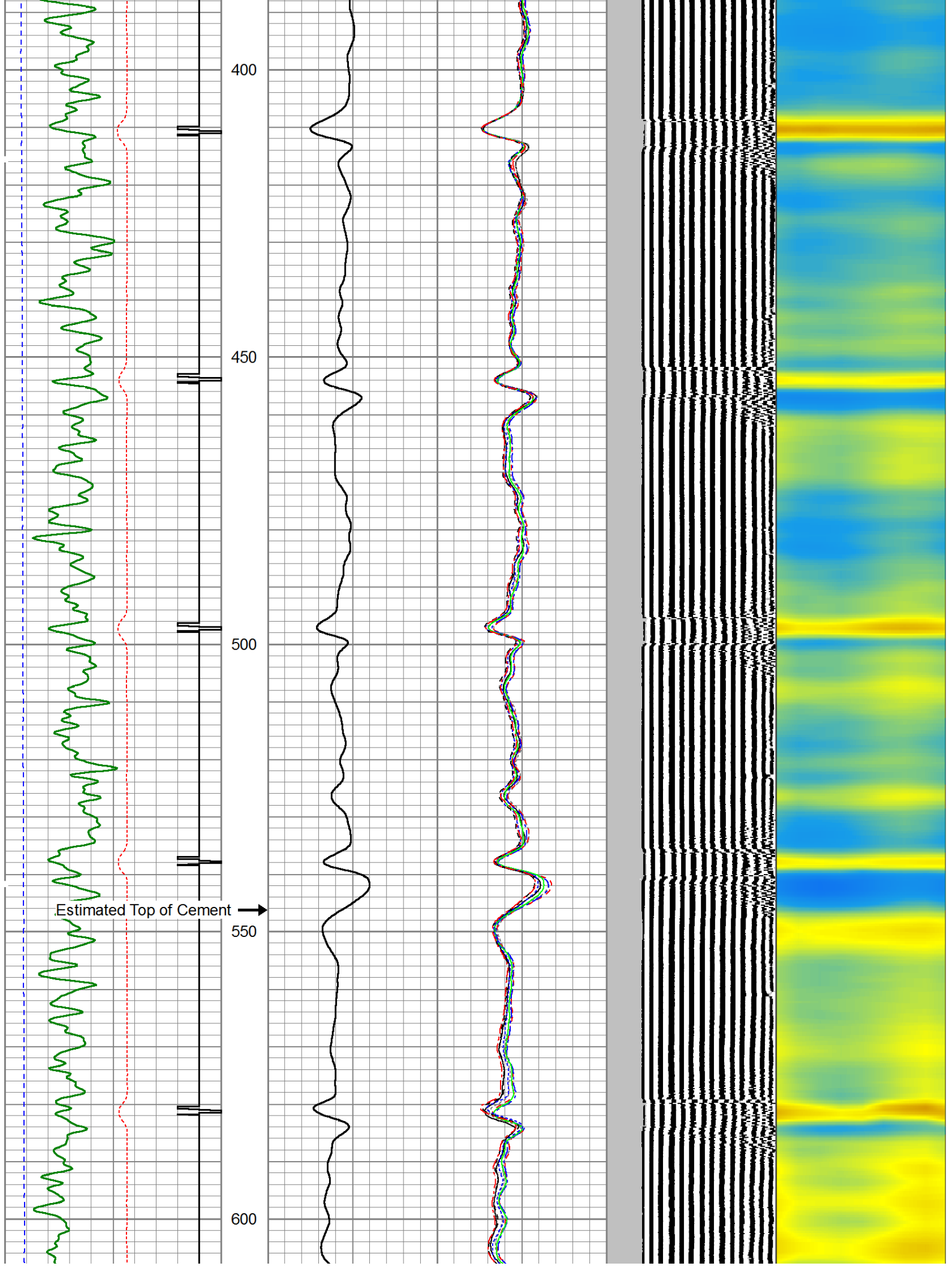
400	Travel Time (usec)	200
9	Casing Collar	-1
0	Gamma Ray (GAPI)	150
0	Line Tension (lb)	2000

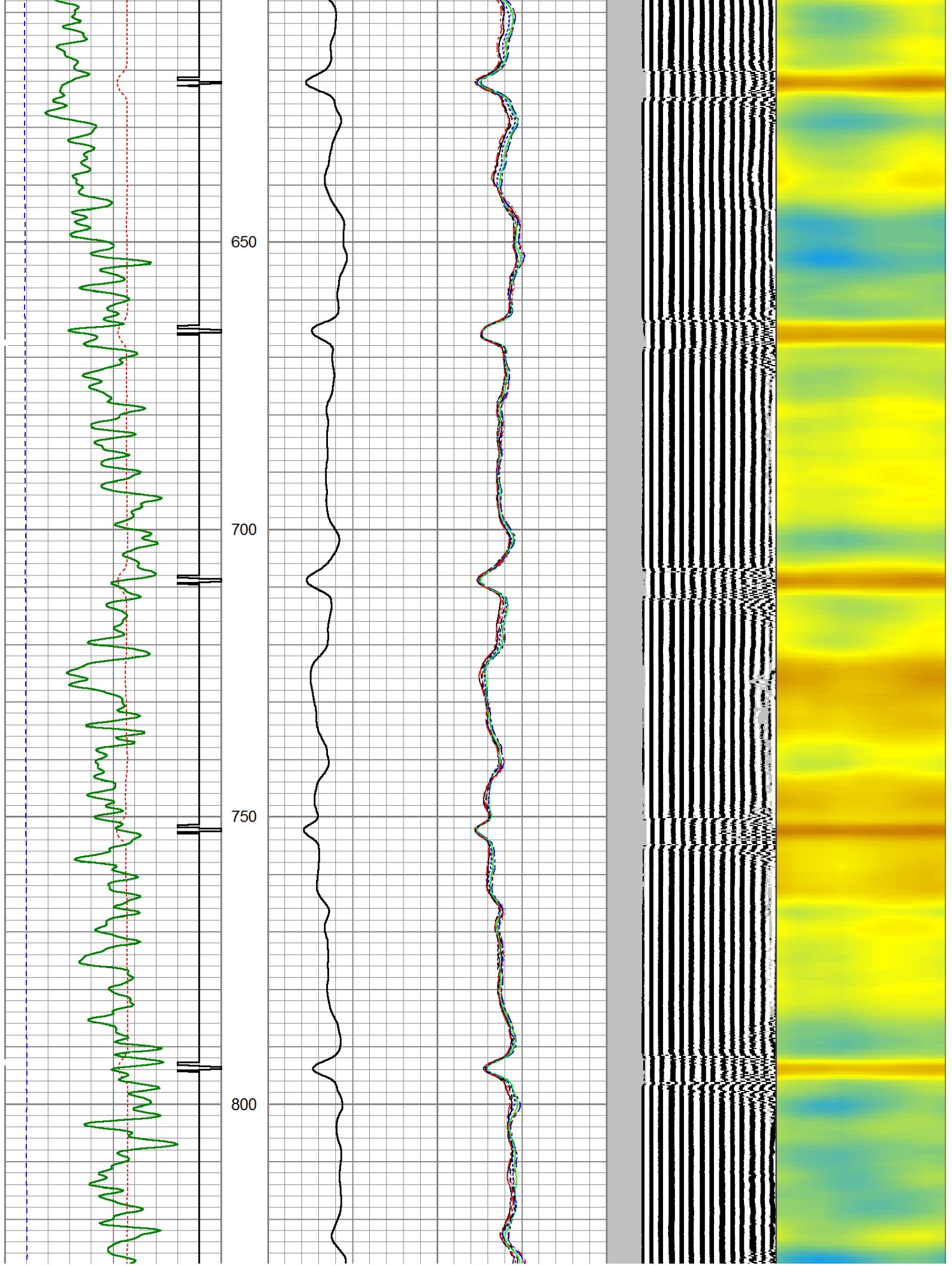
0	Amplitude (mV)	100	-5	AMPS1	150
	Amplified Amplitude		-5	AMPS2	150
0	(mV)	10	-5	AMPS3	150
			-5	AMPS4	150
			-5	AMPS5	150
			-5	AMPS6	150
			-5	AMPS7	150
			-5	AMPS8	150

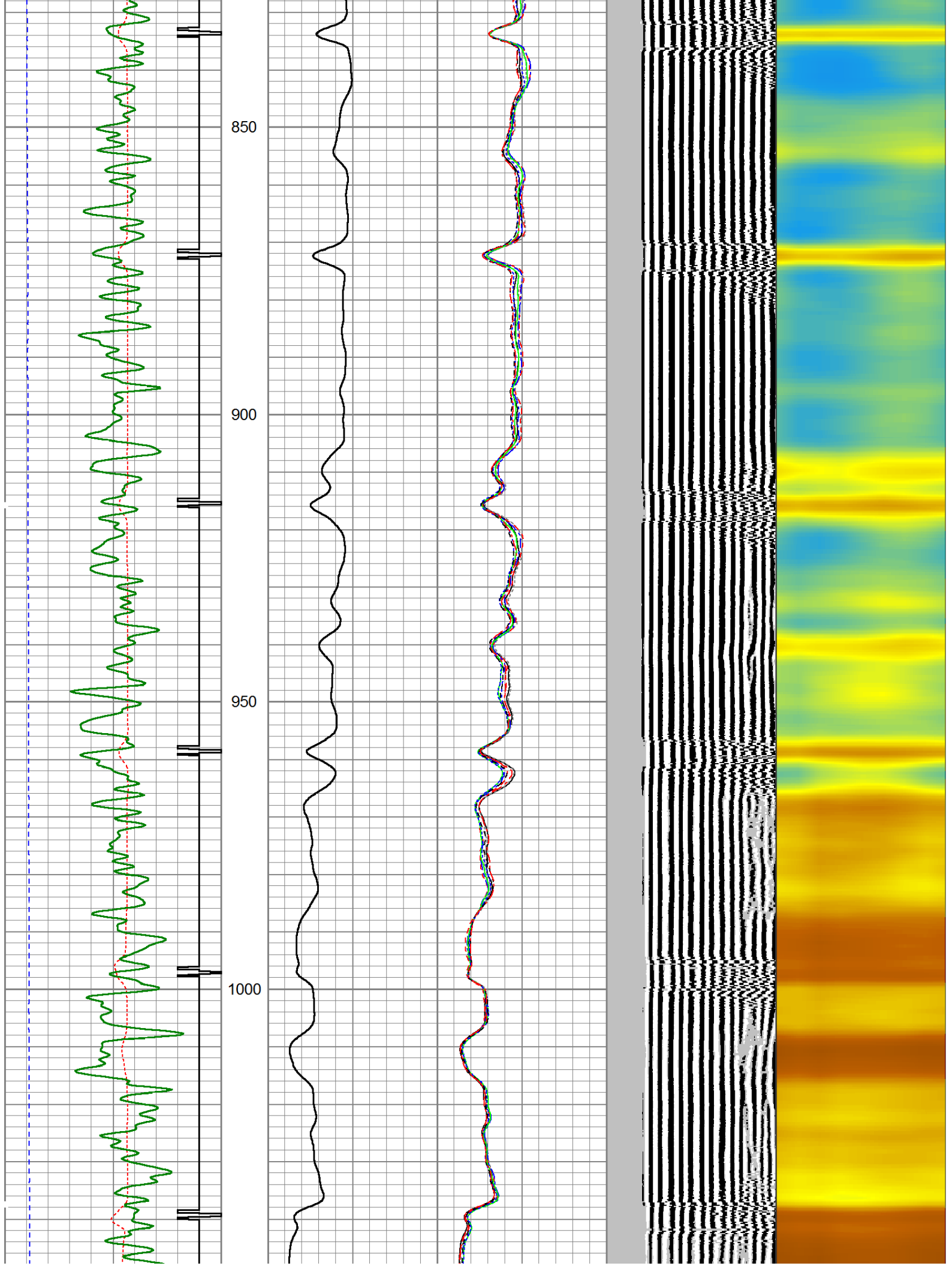
Variable Density	1	Cement Map	8
200	1200	0	100

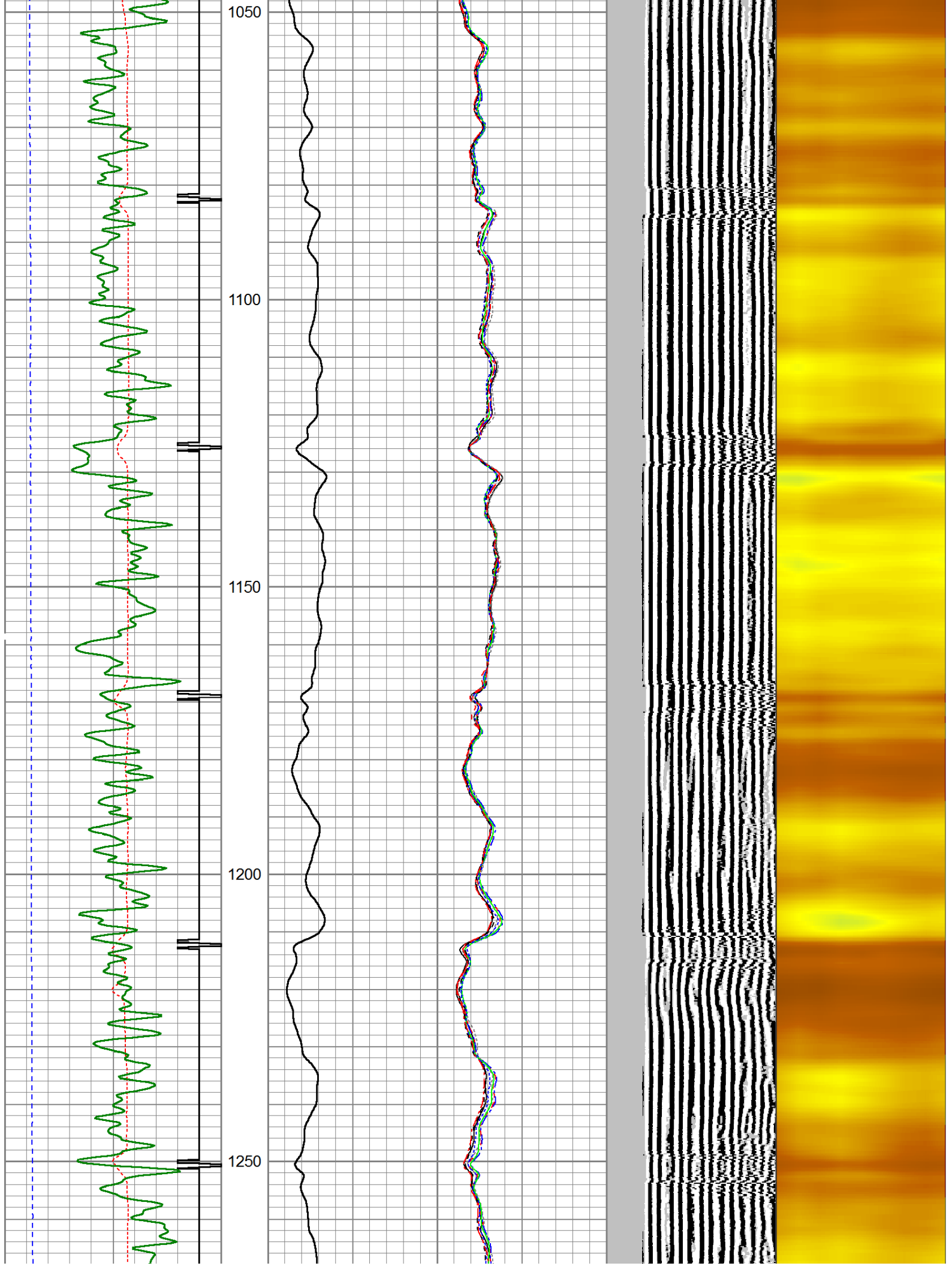


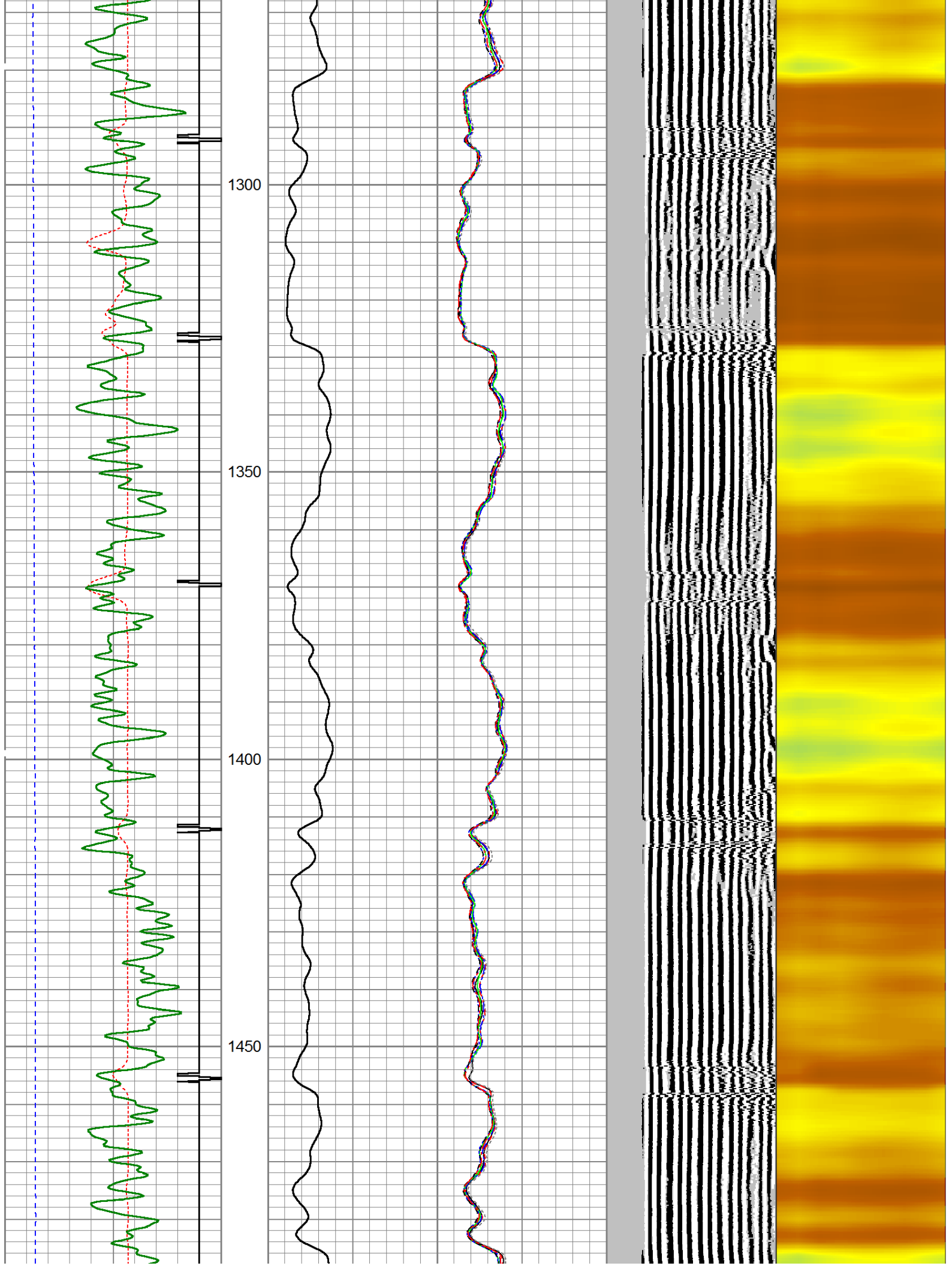


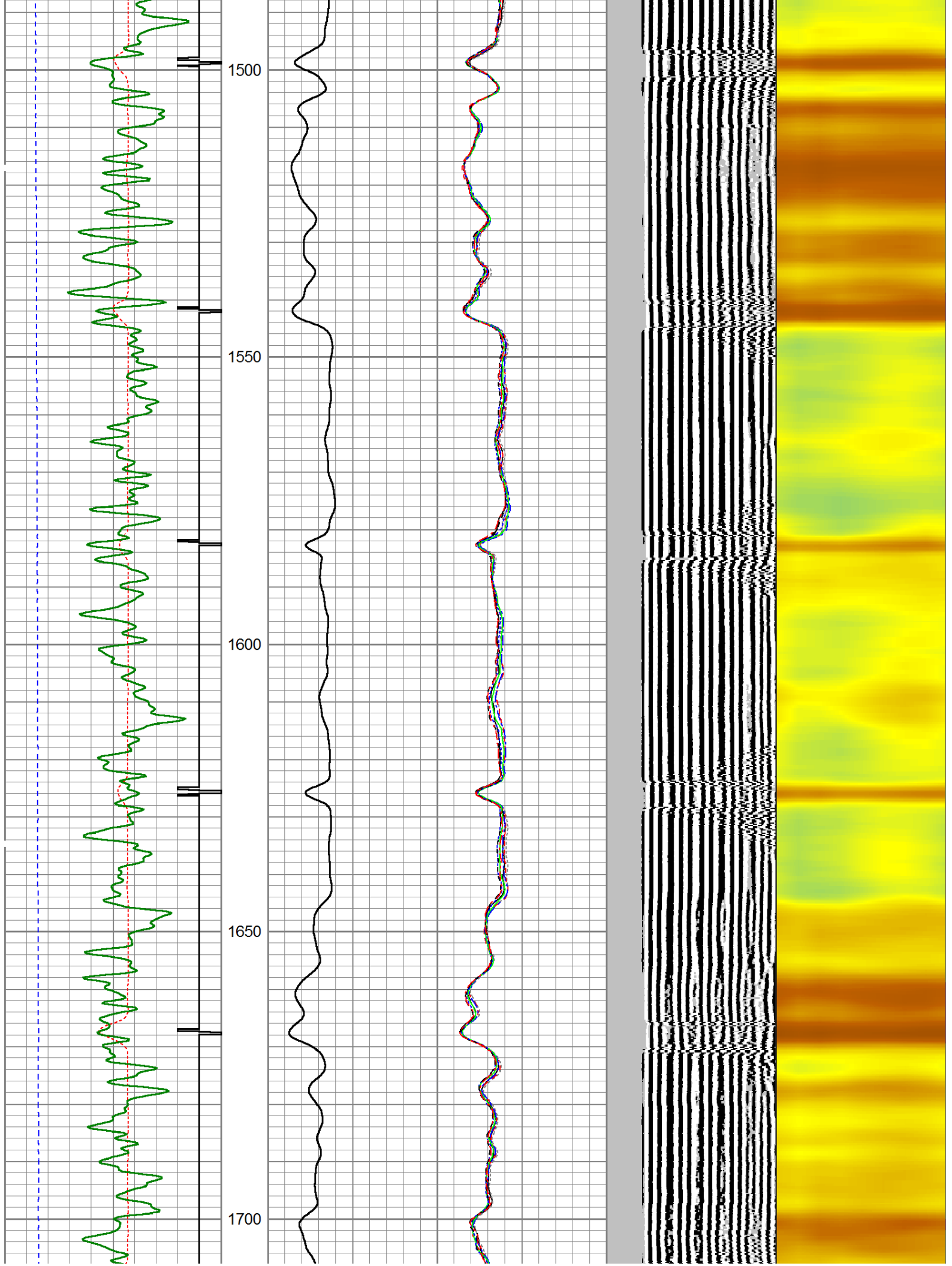


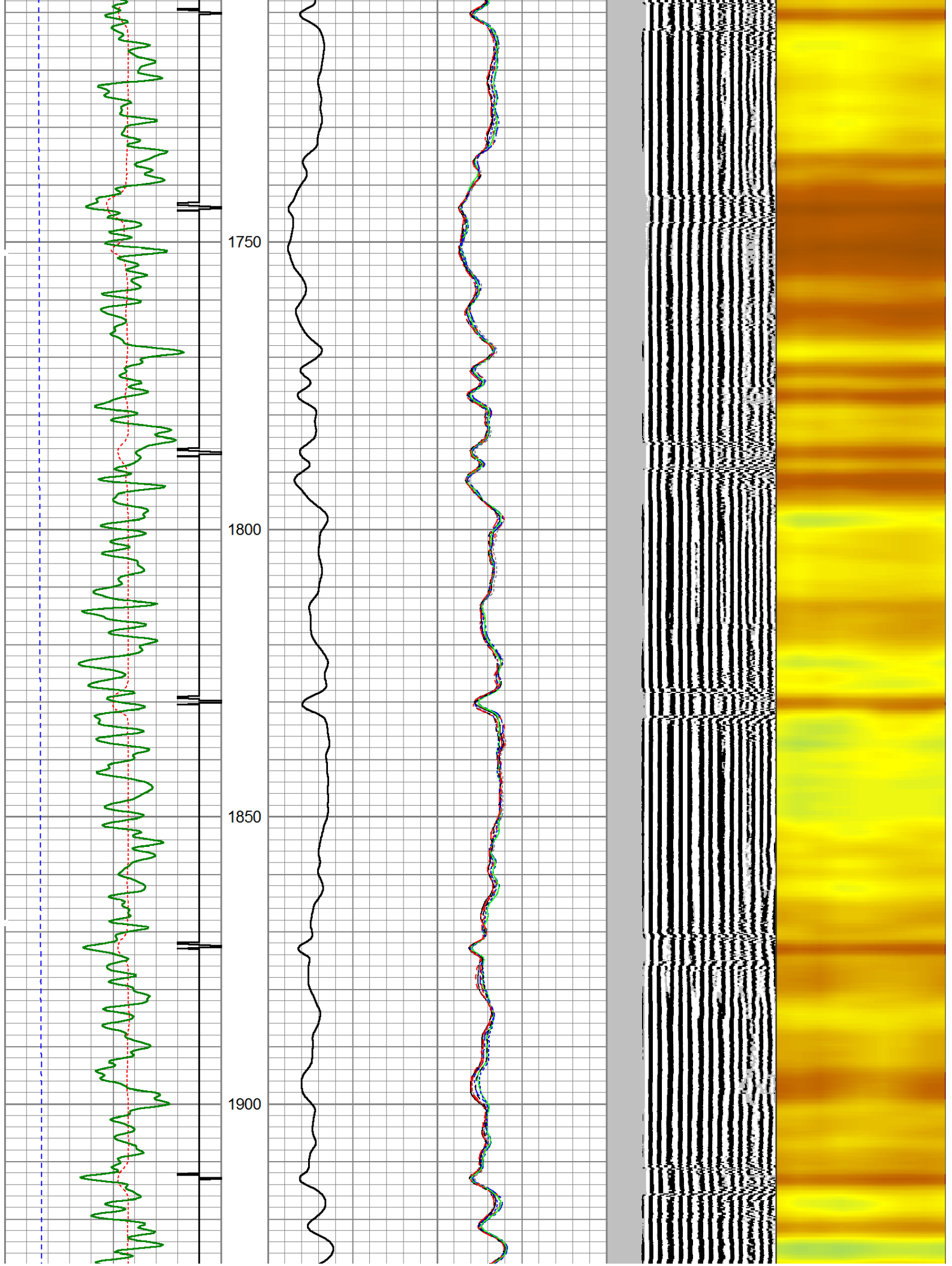


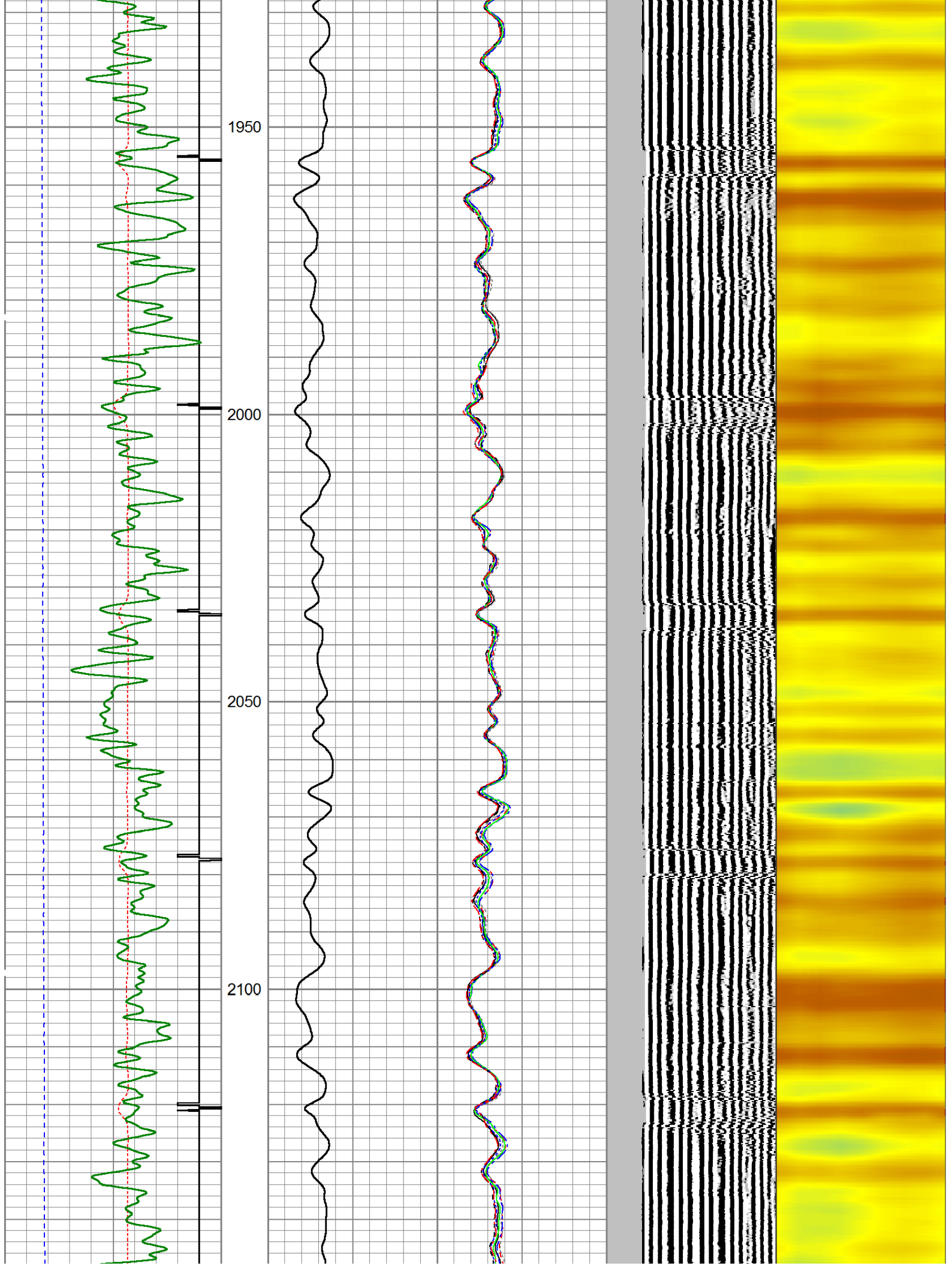


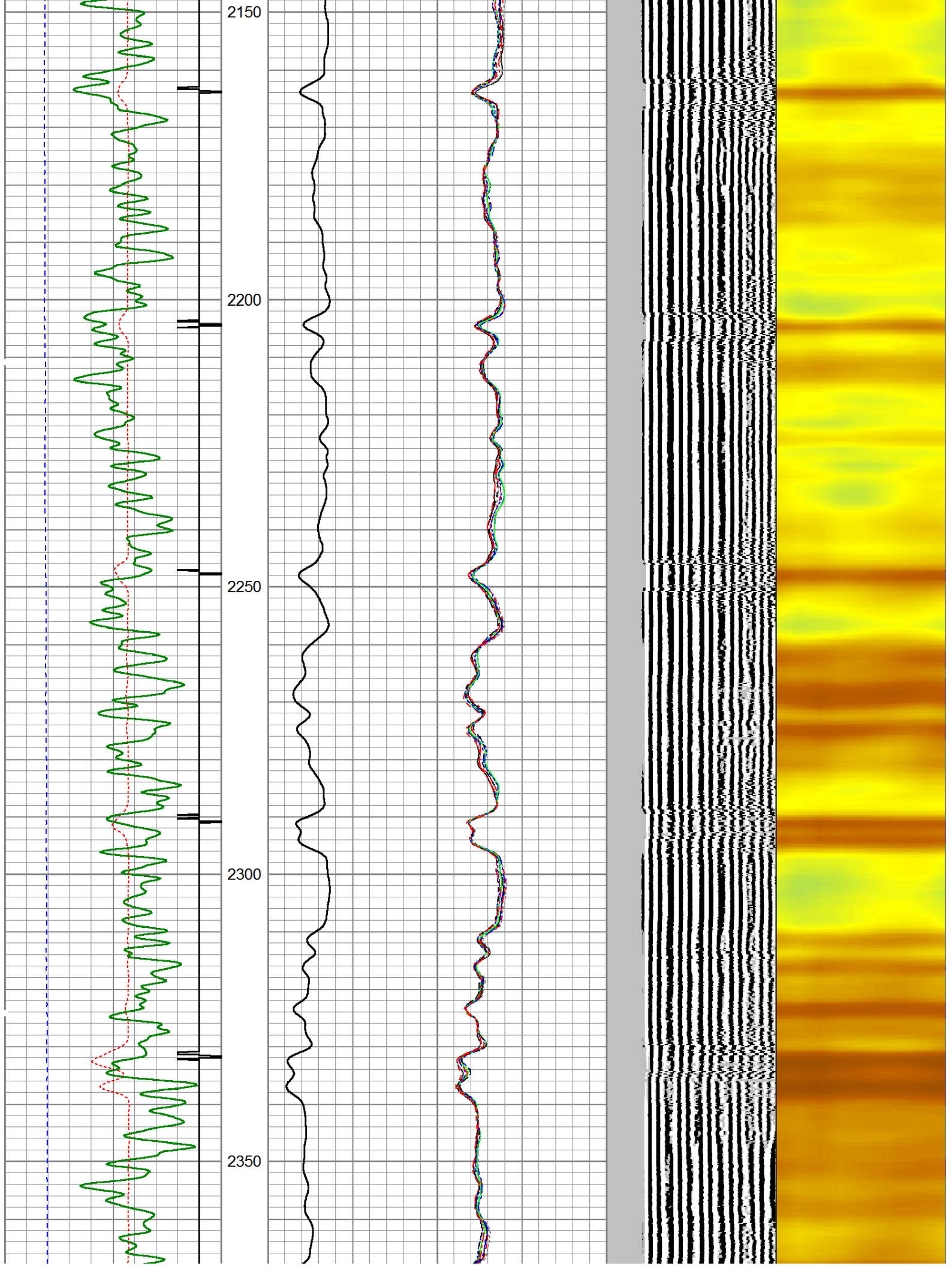


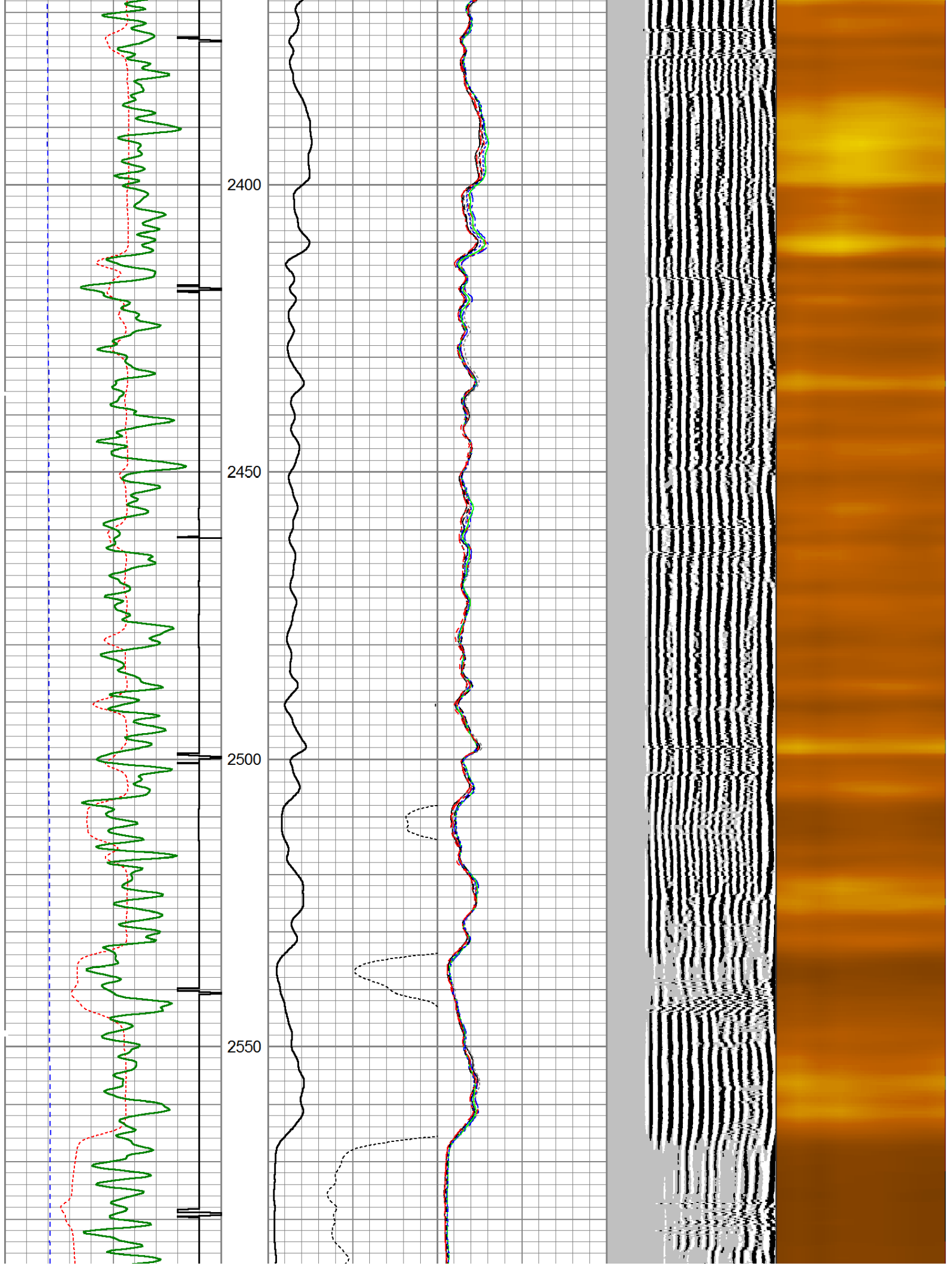


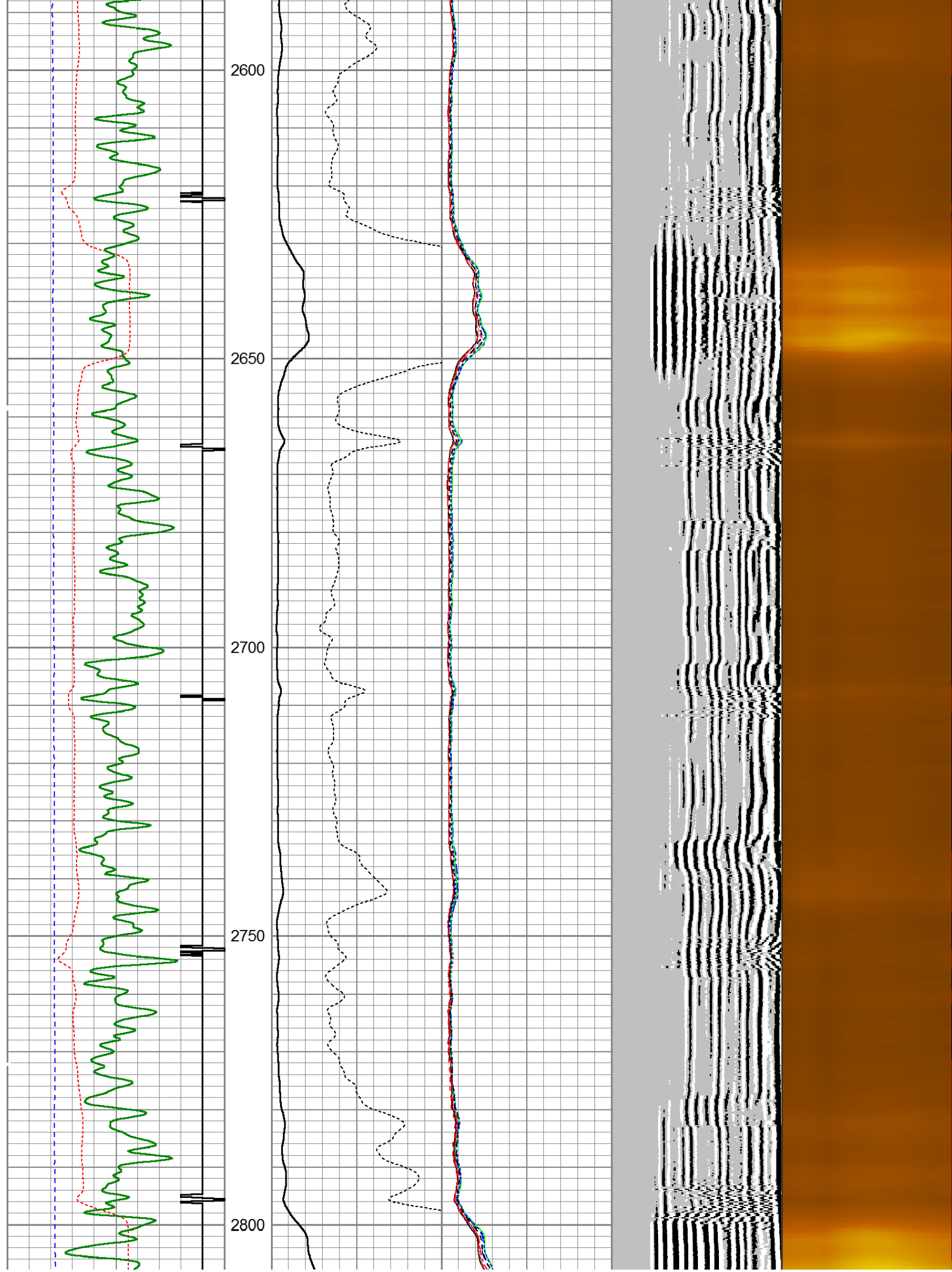


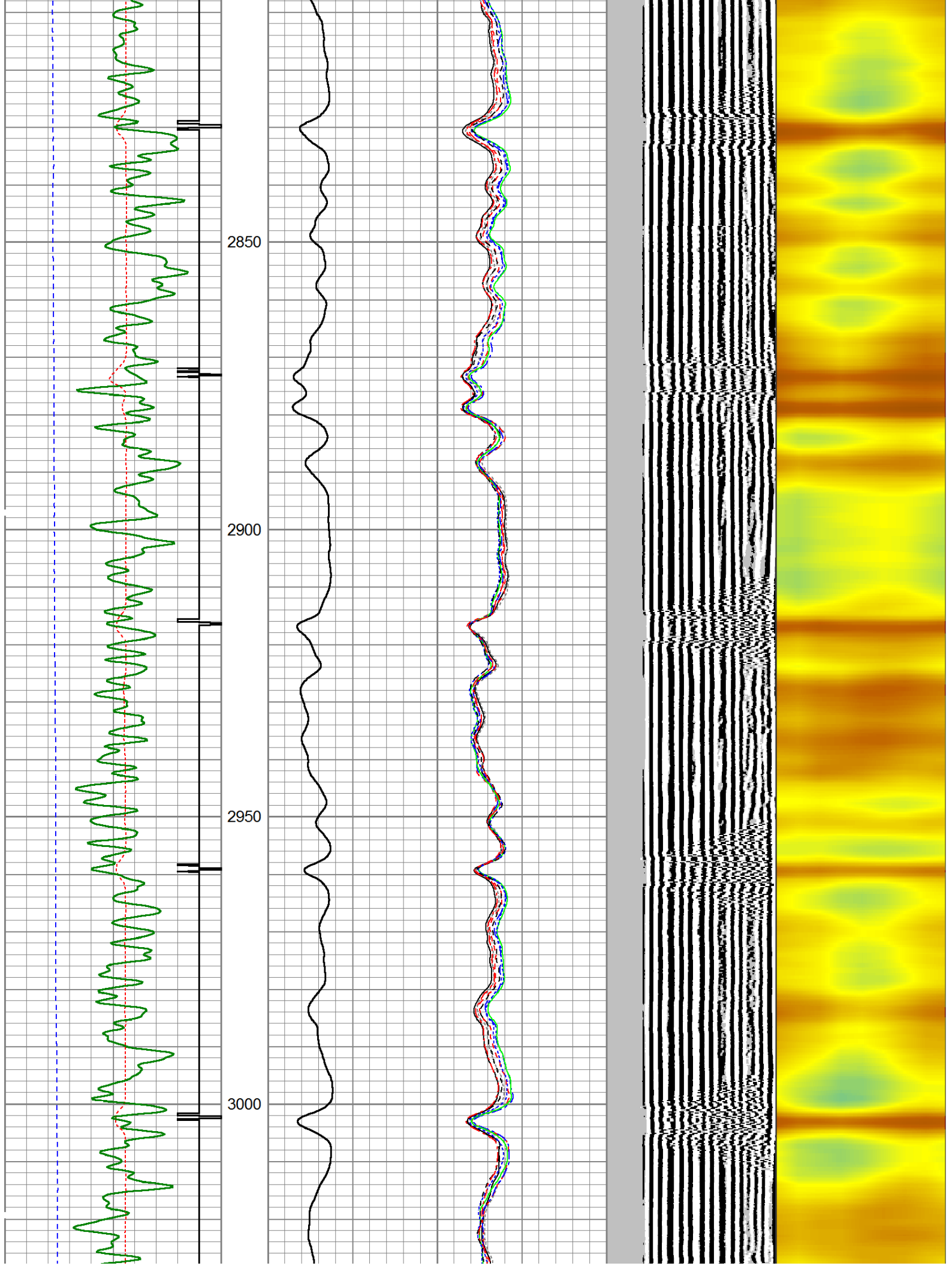


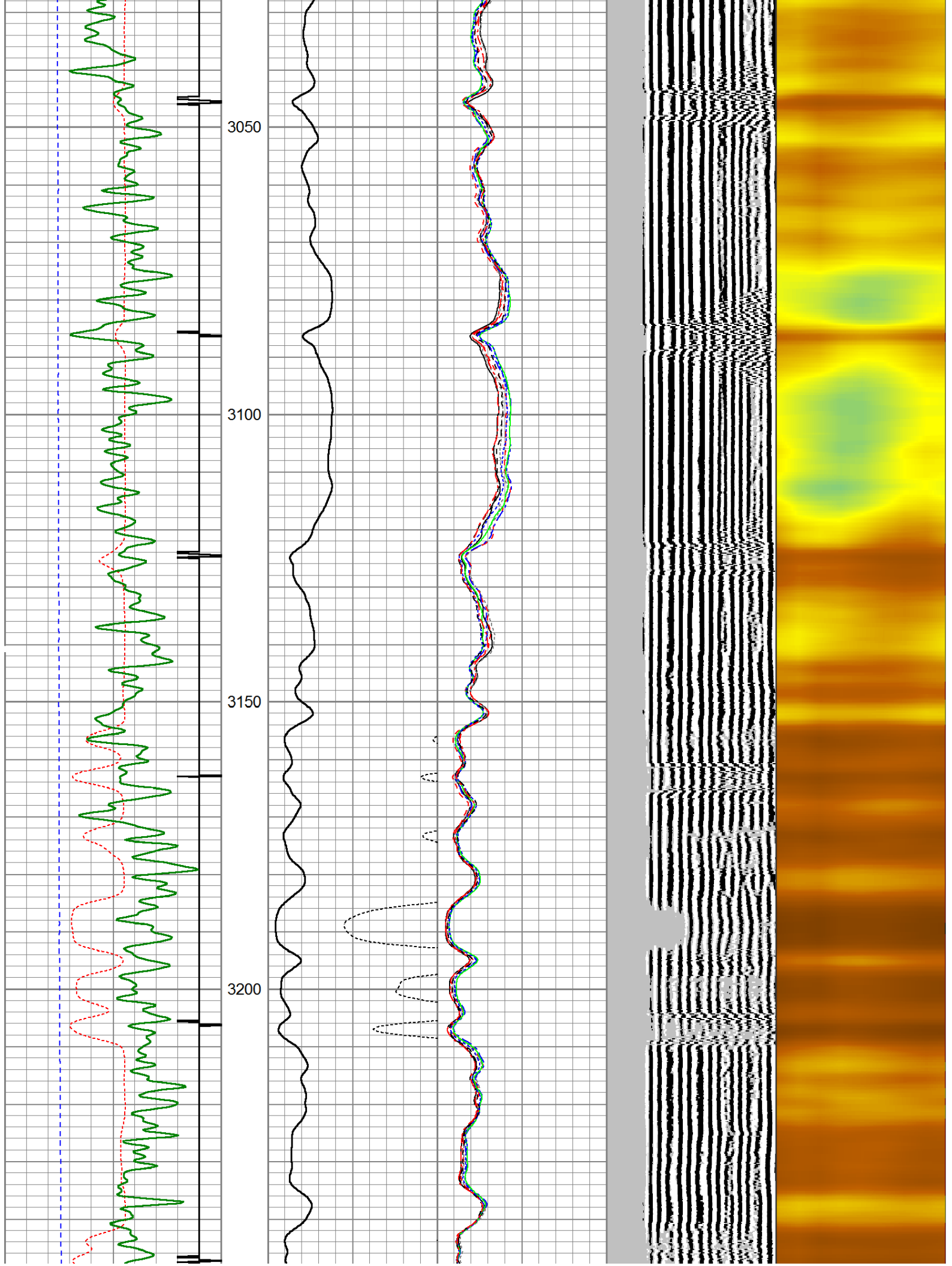


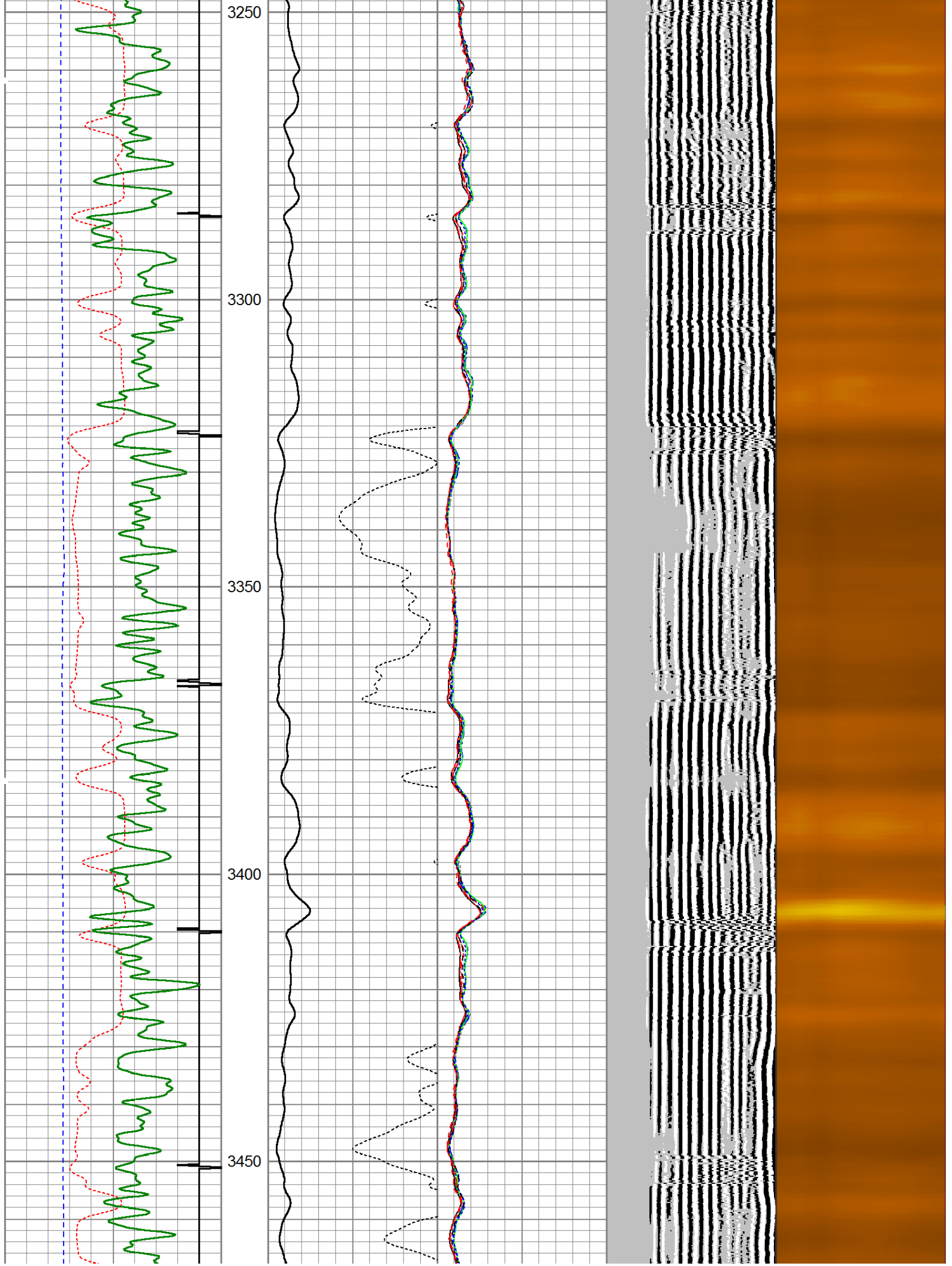


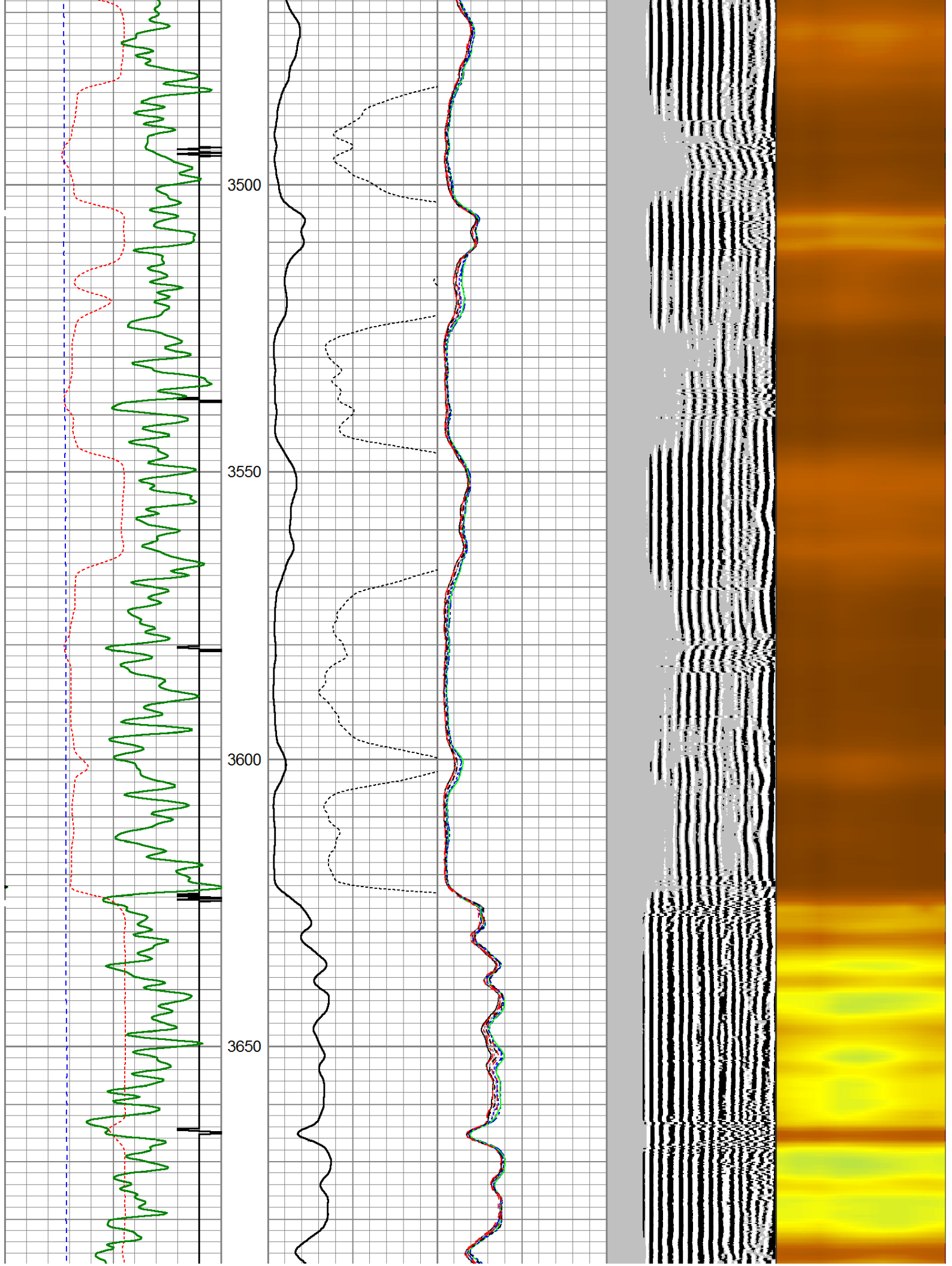


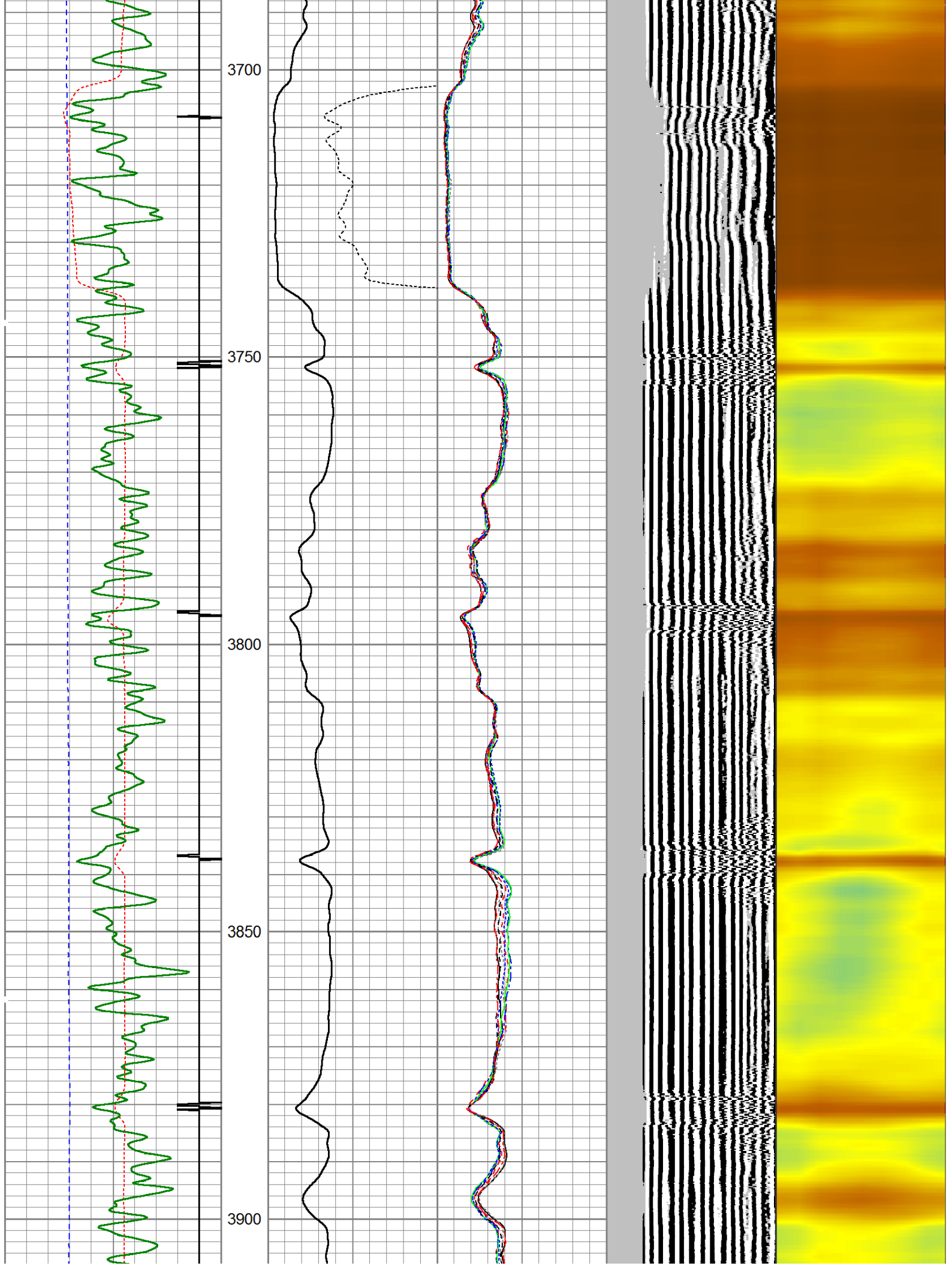


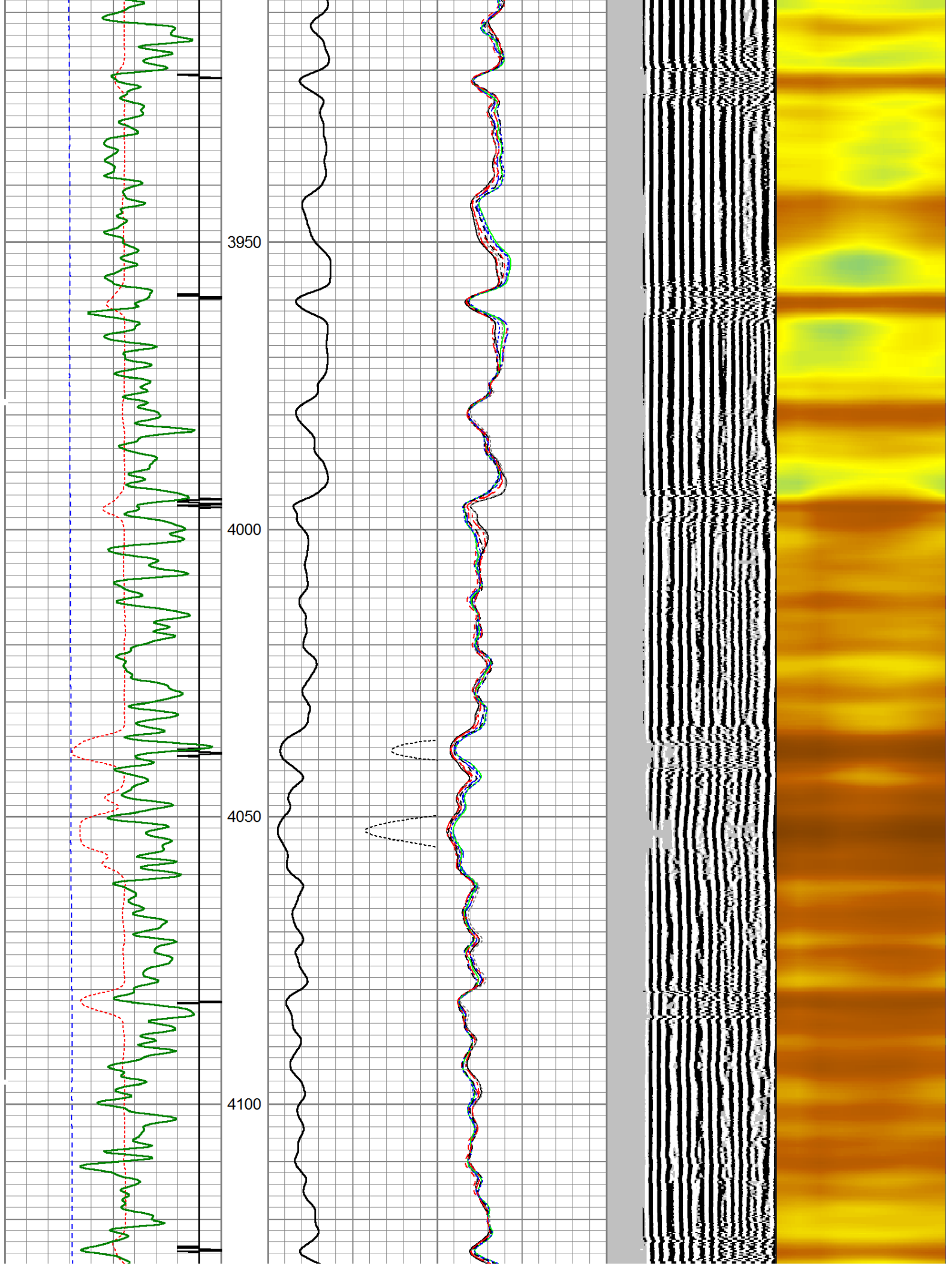


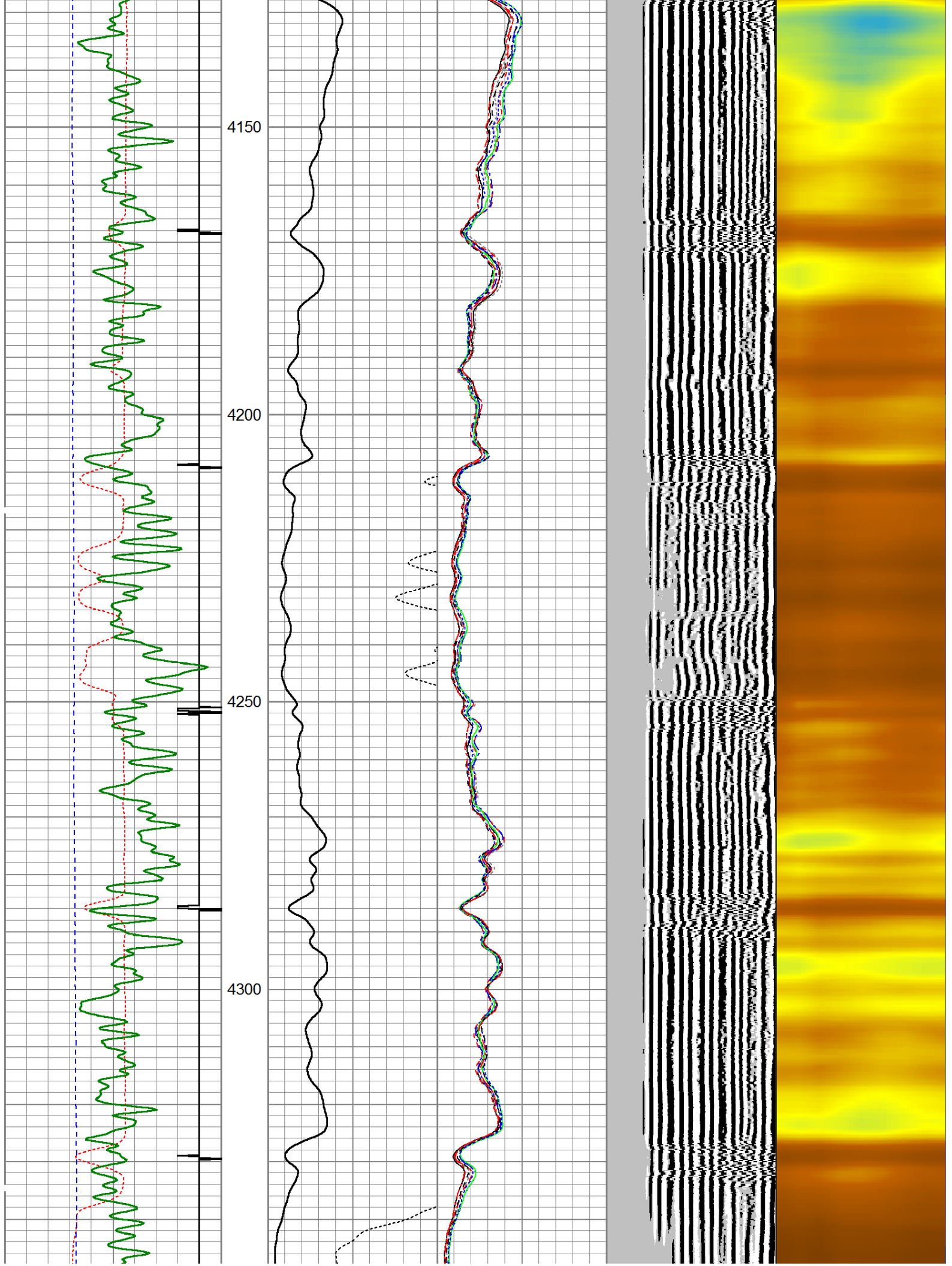


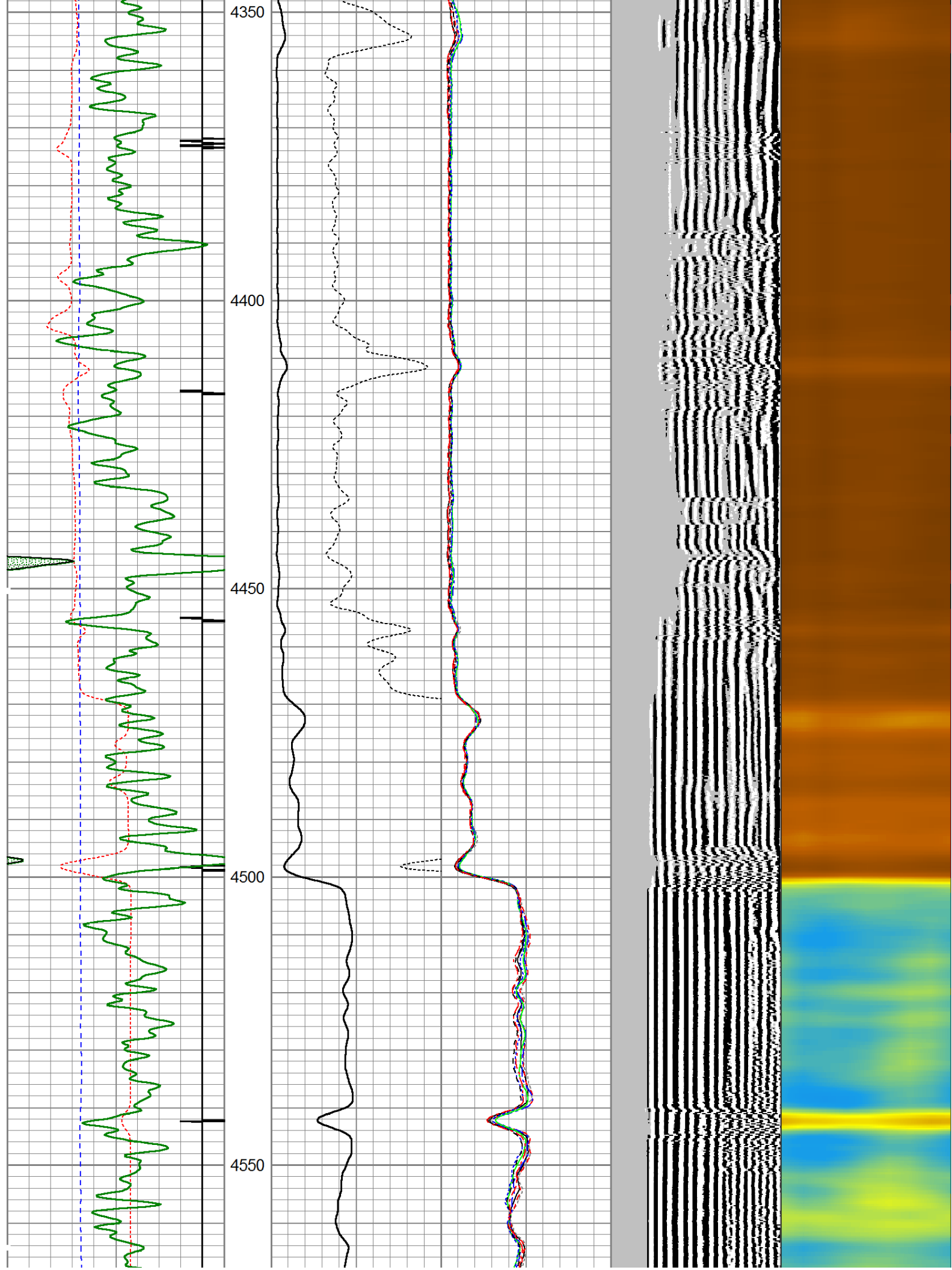


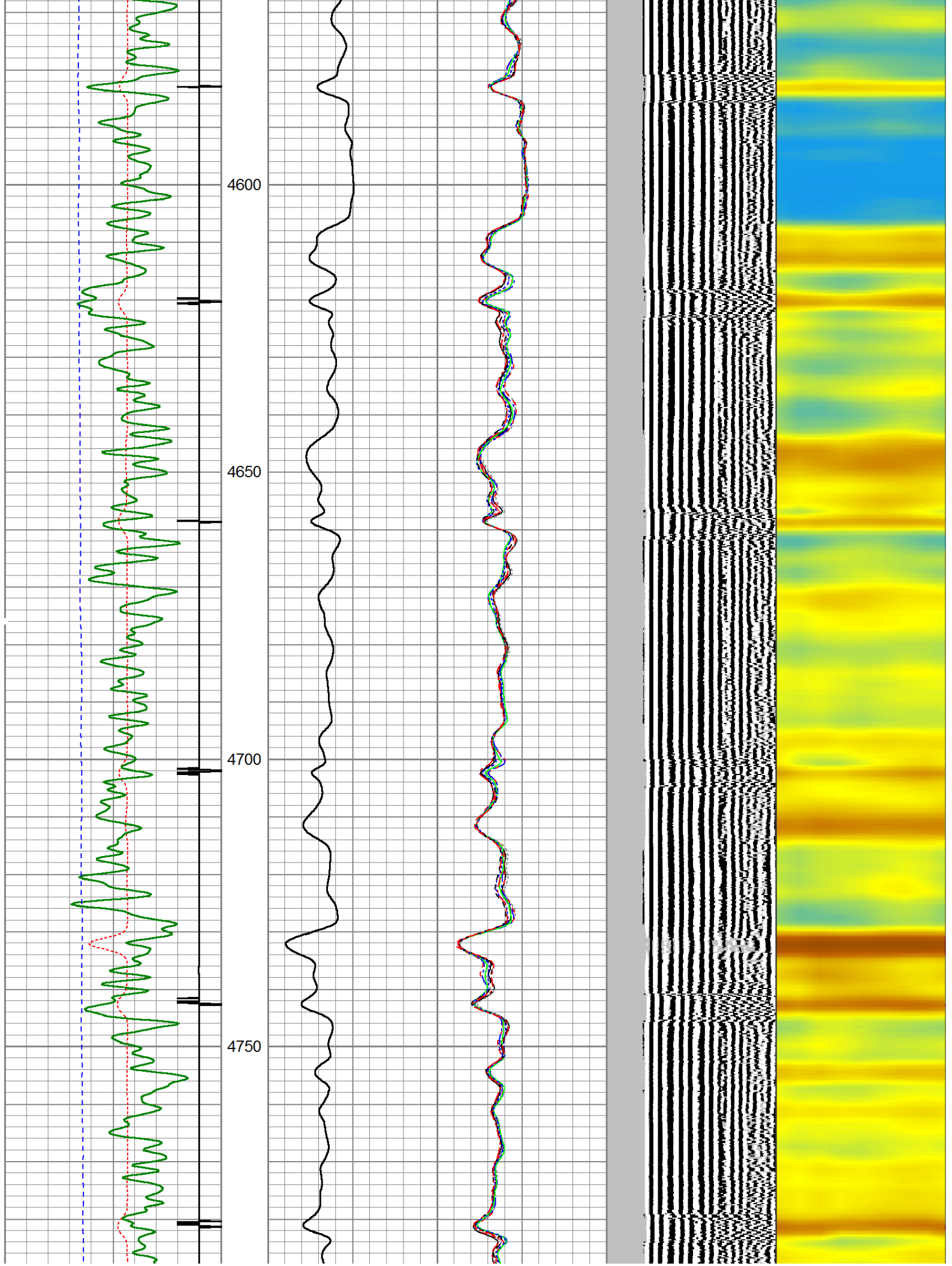


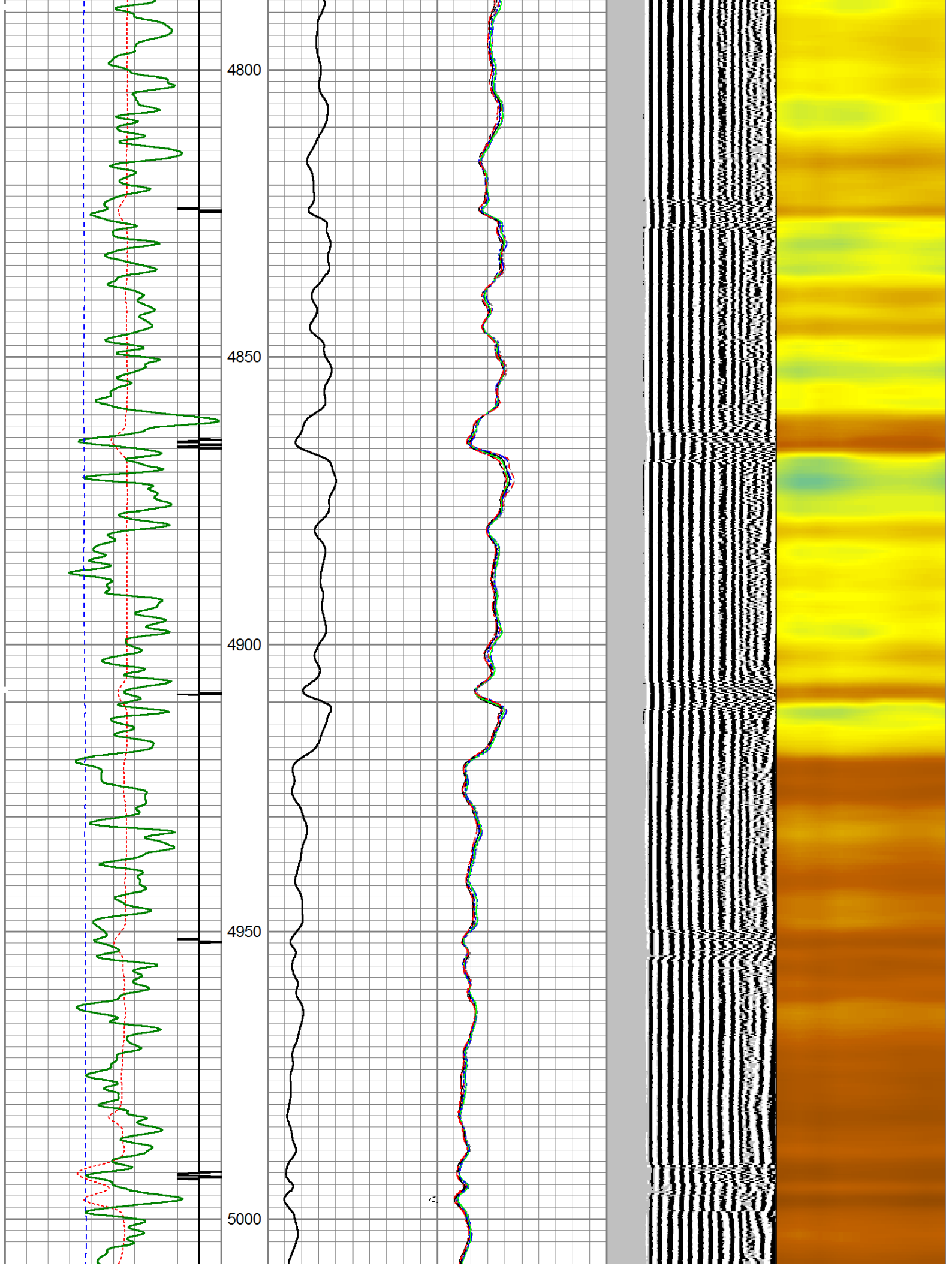


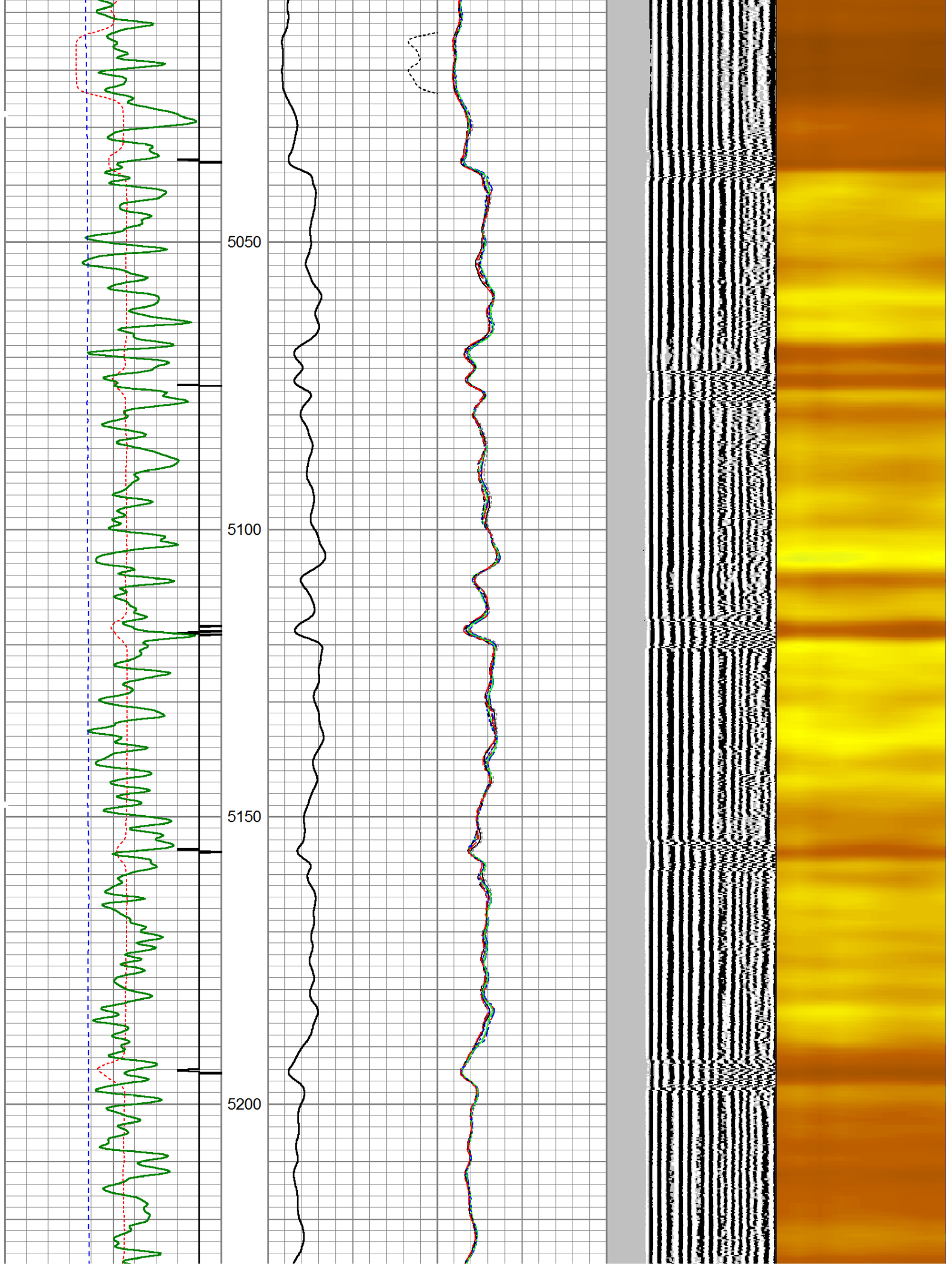


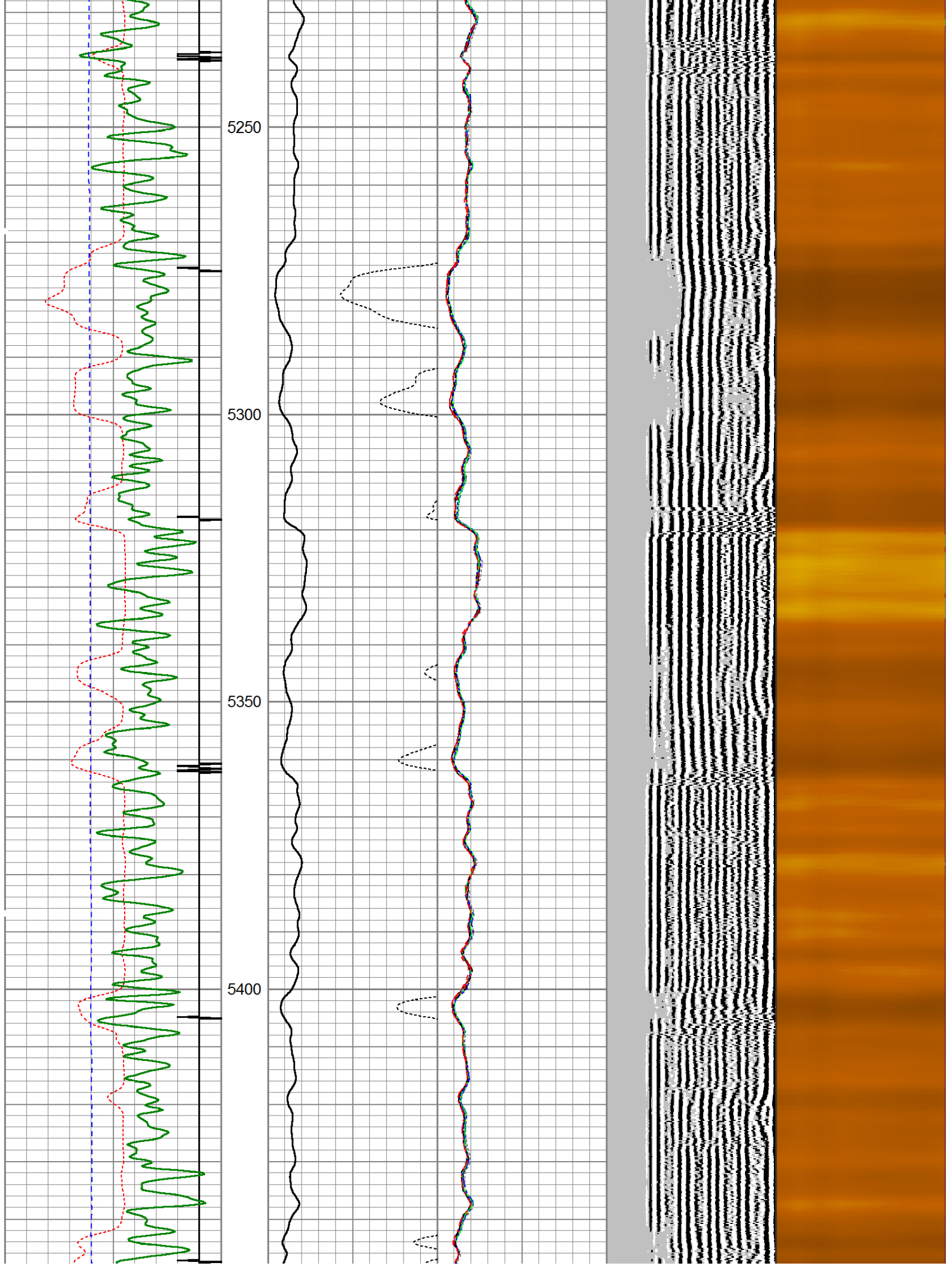


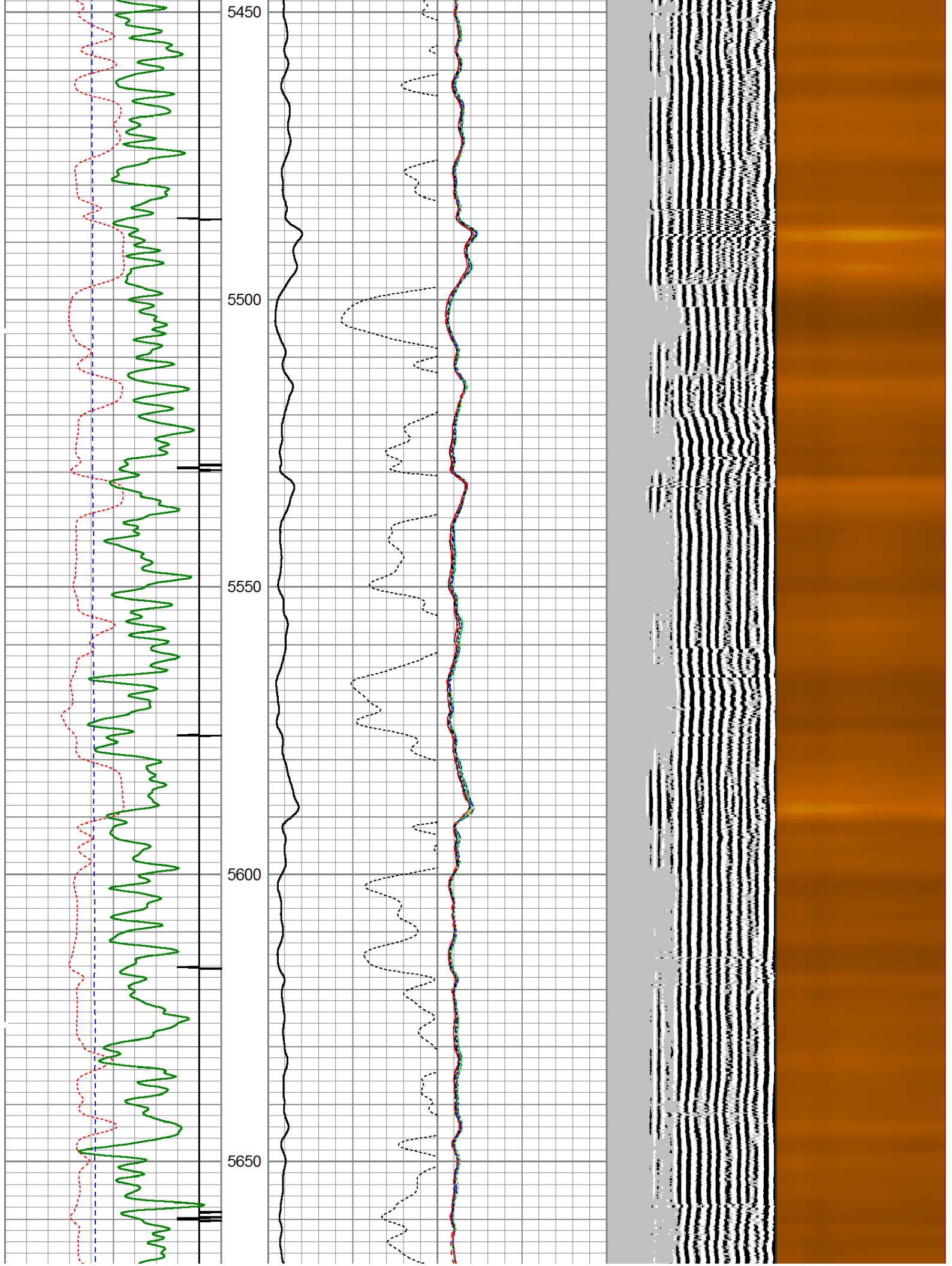


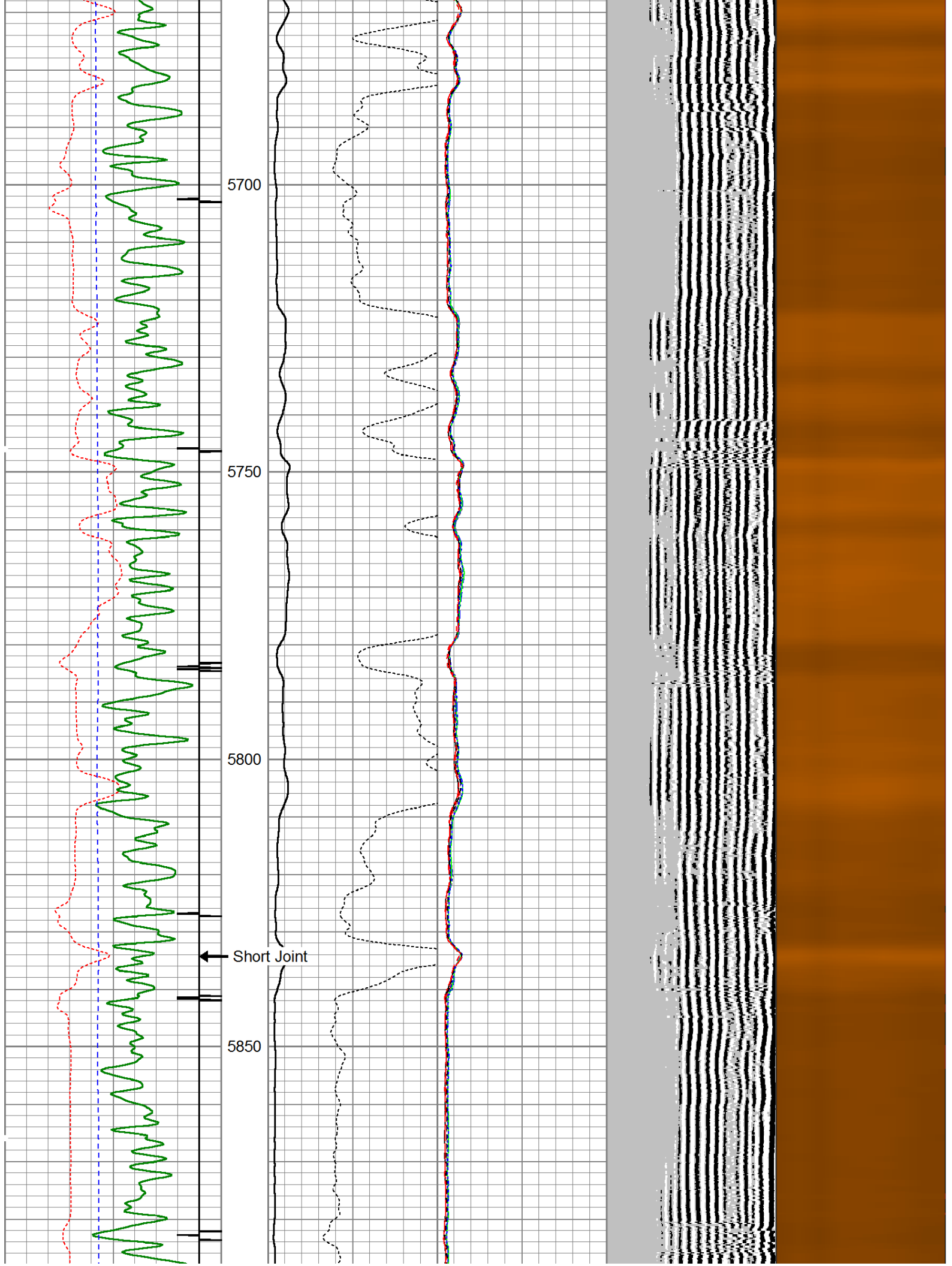


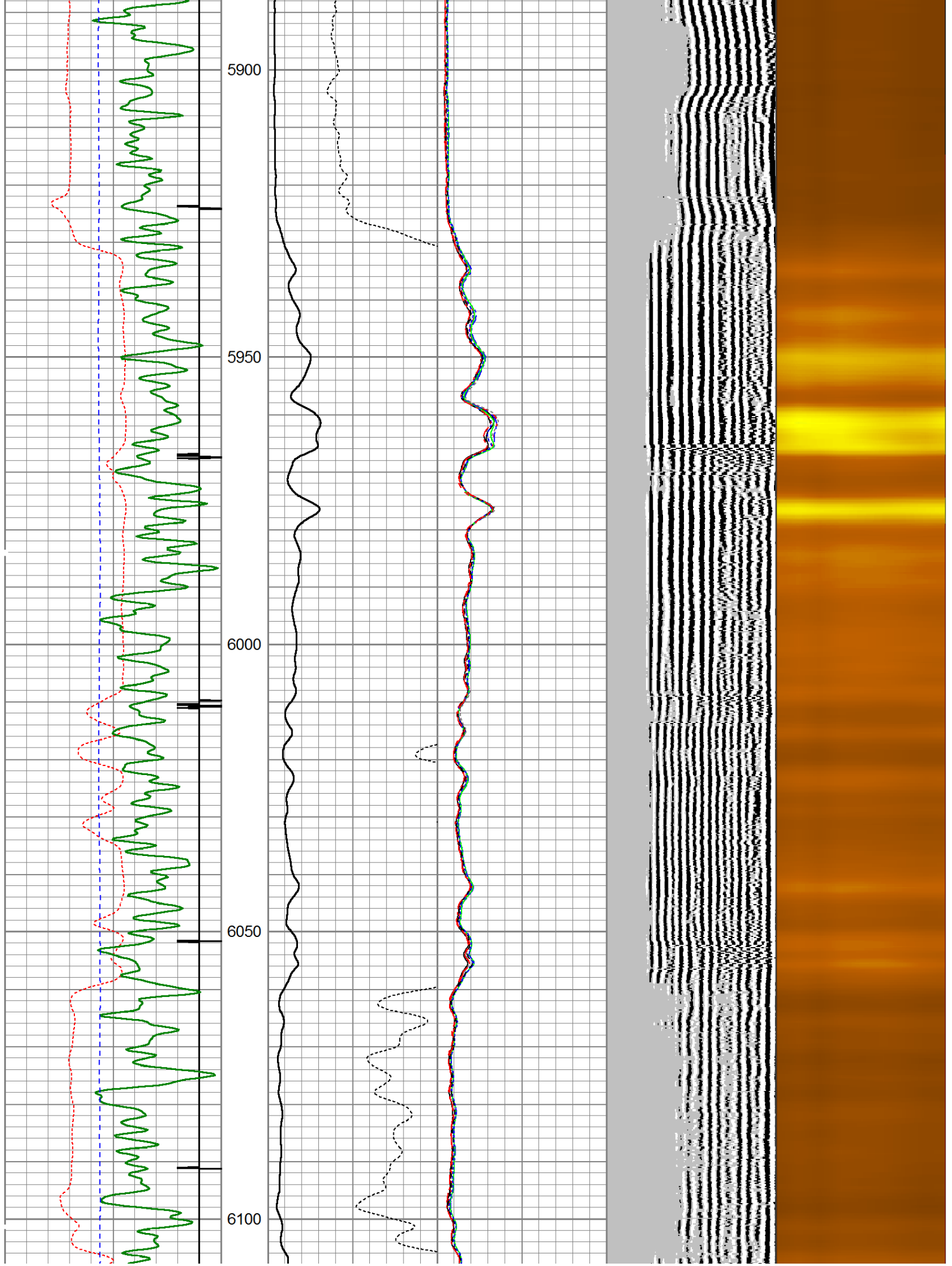


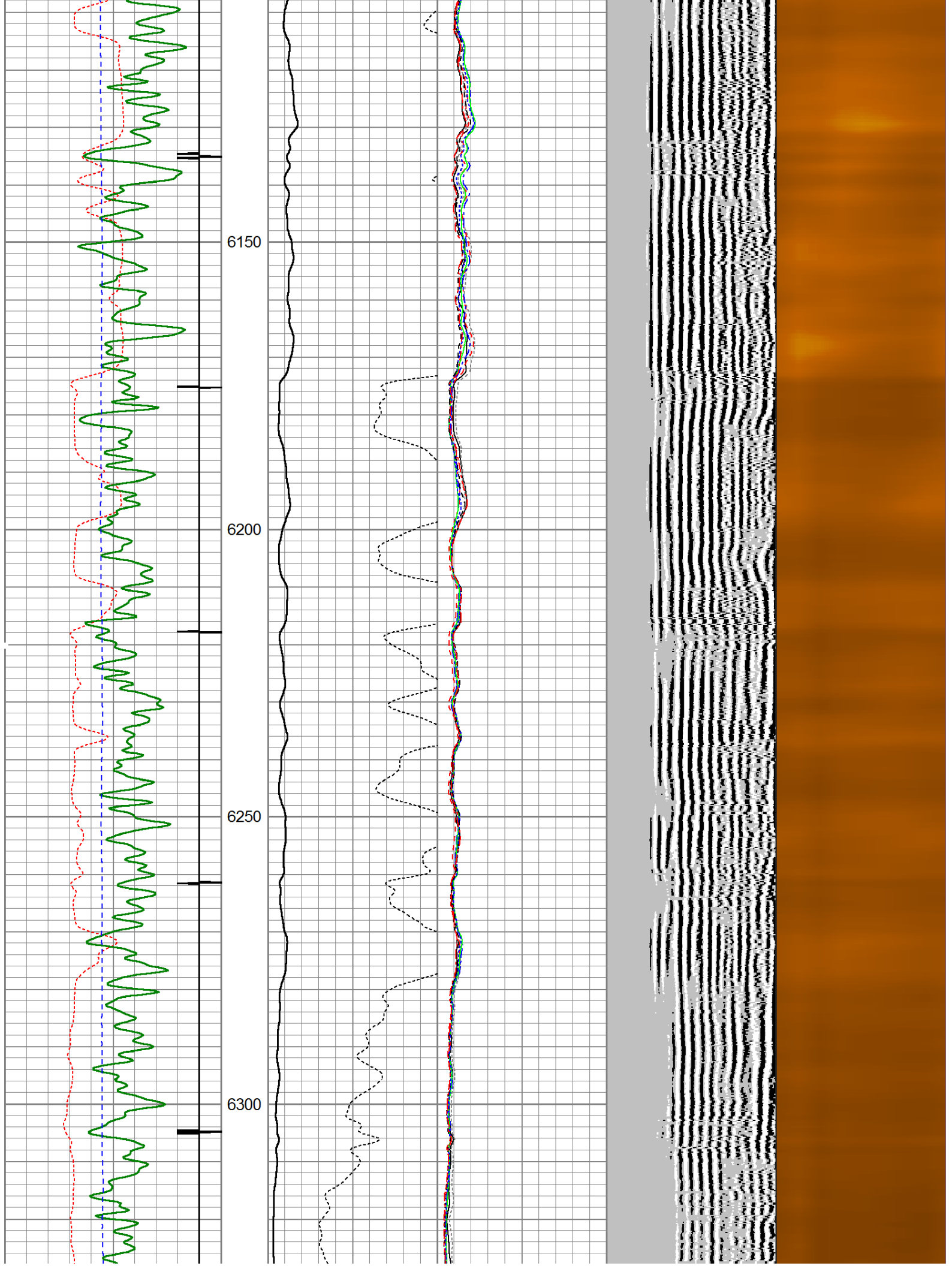


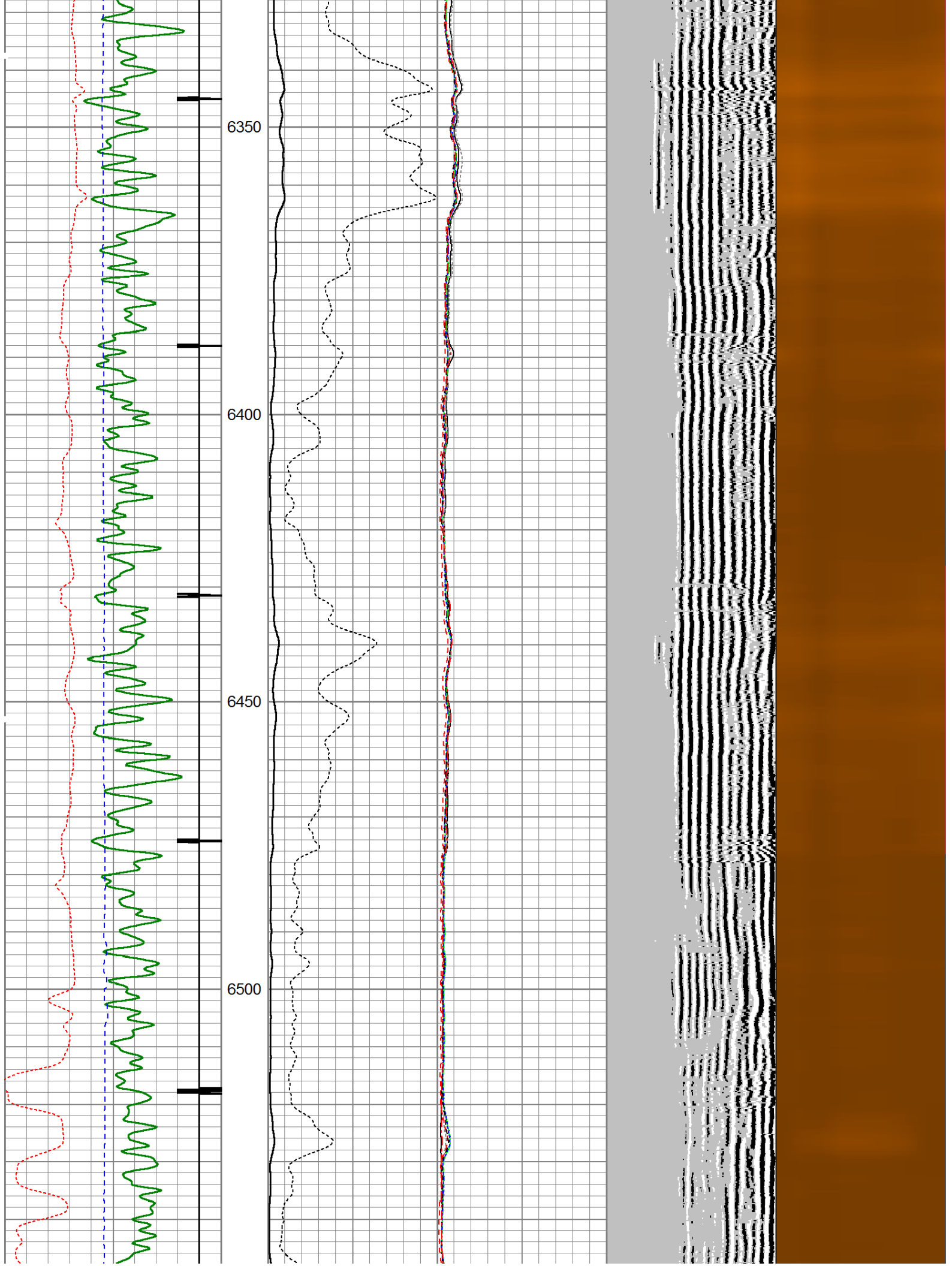


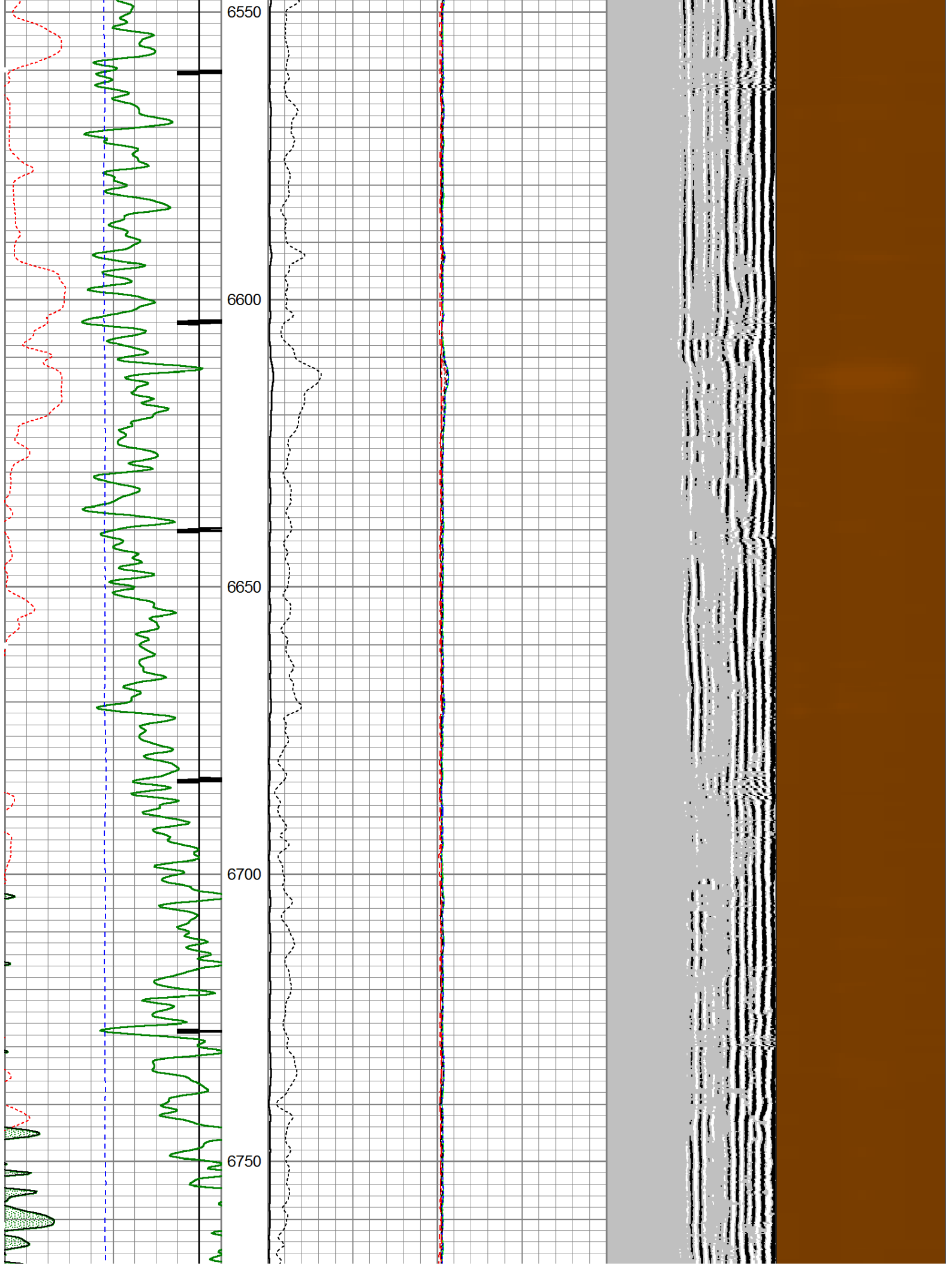


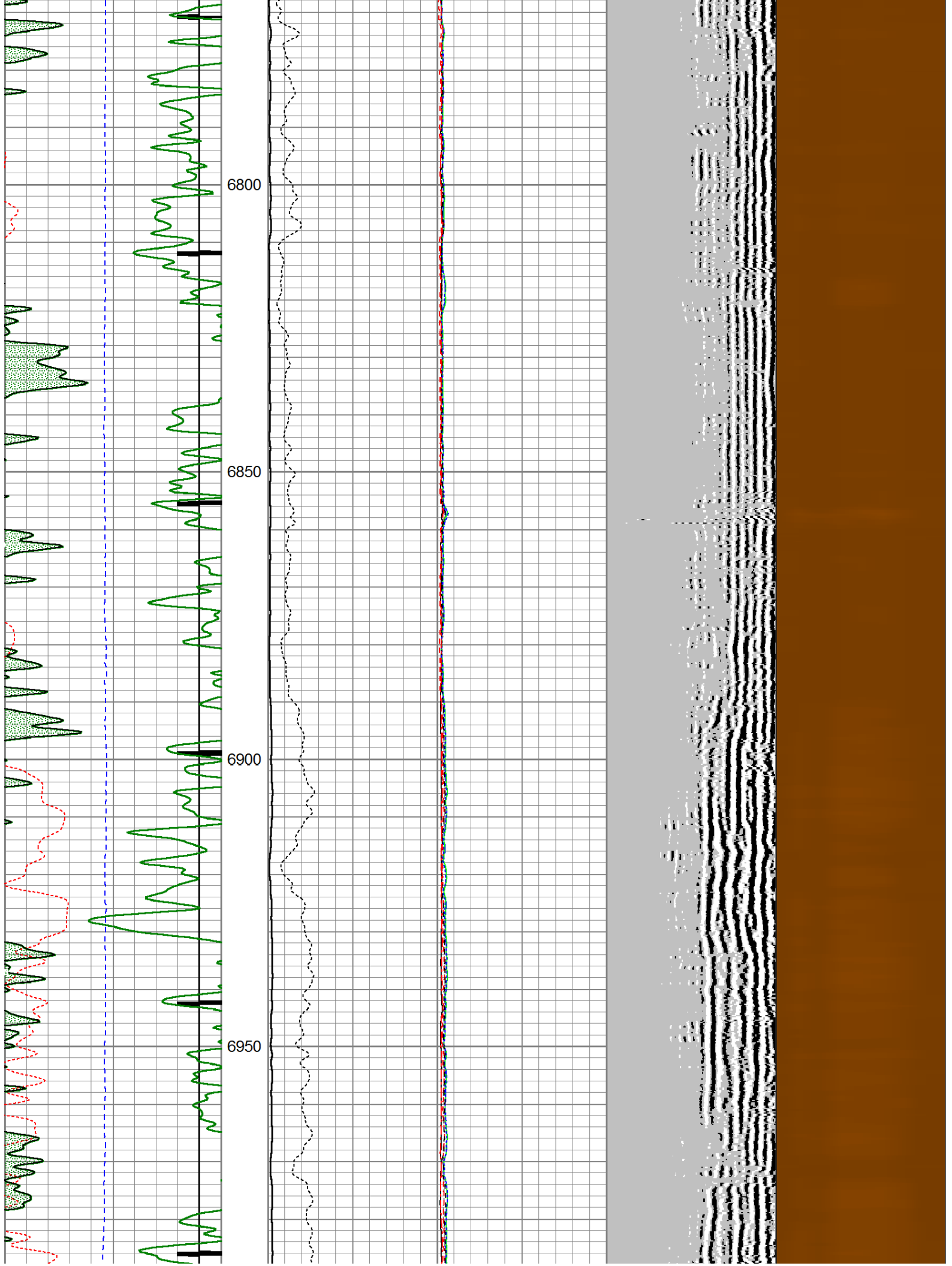


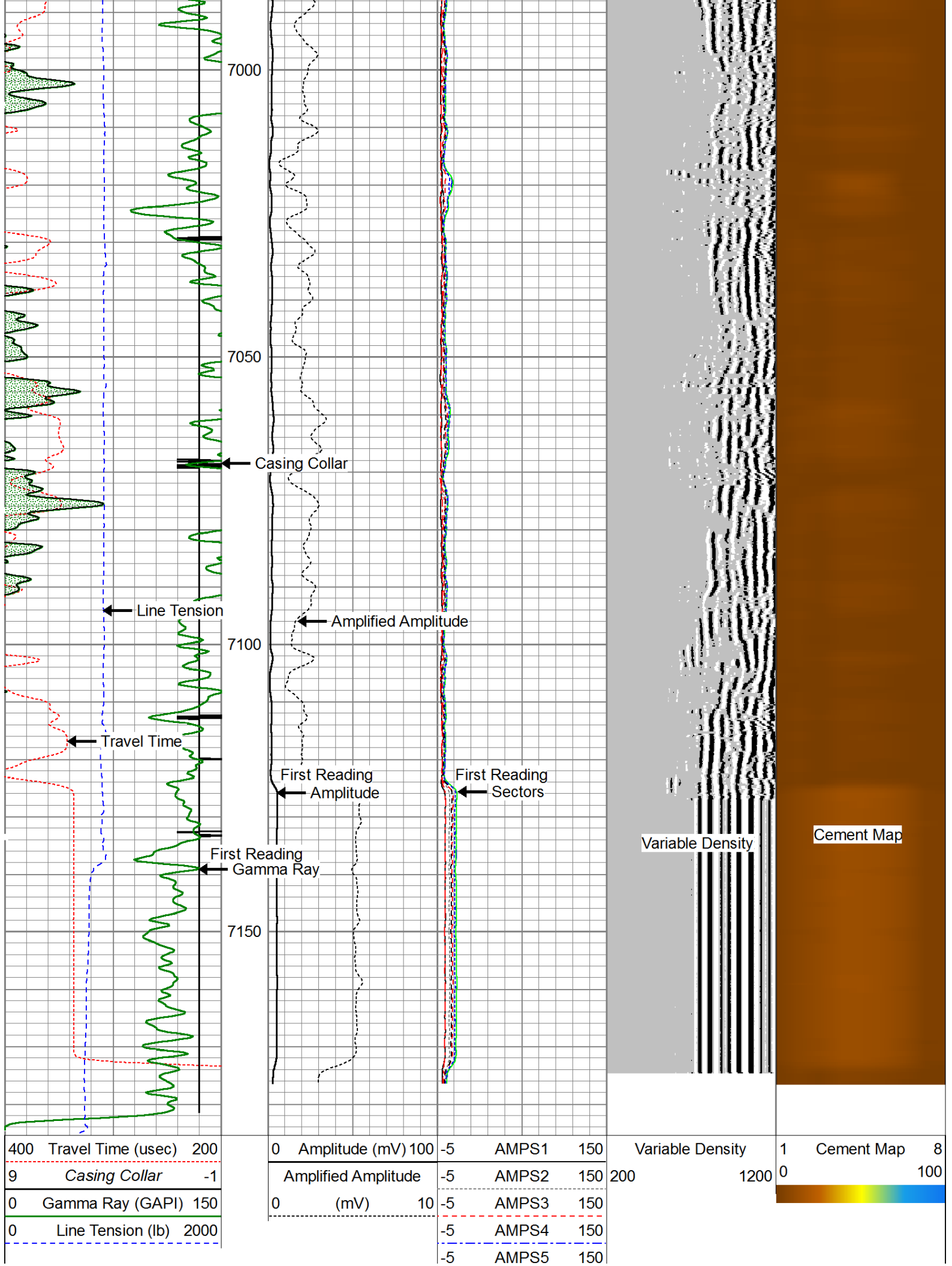












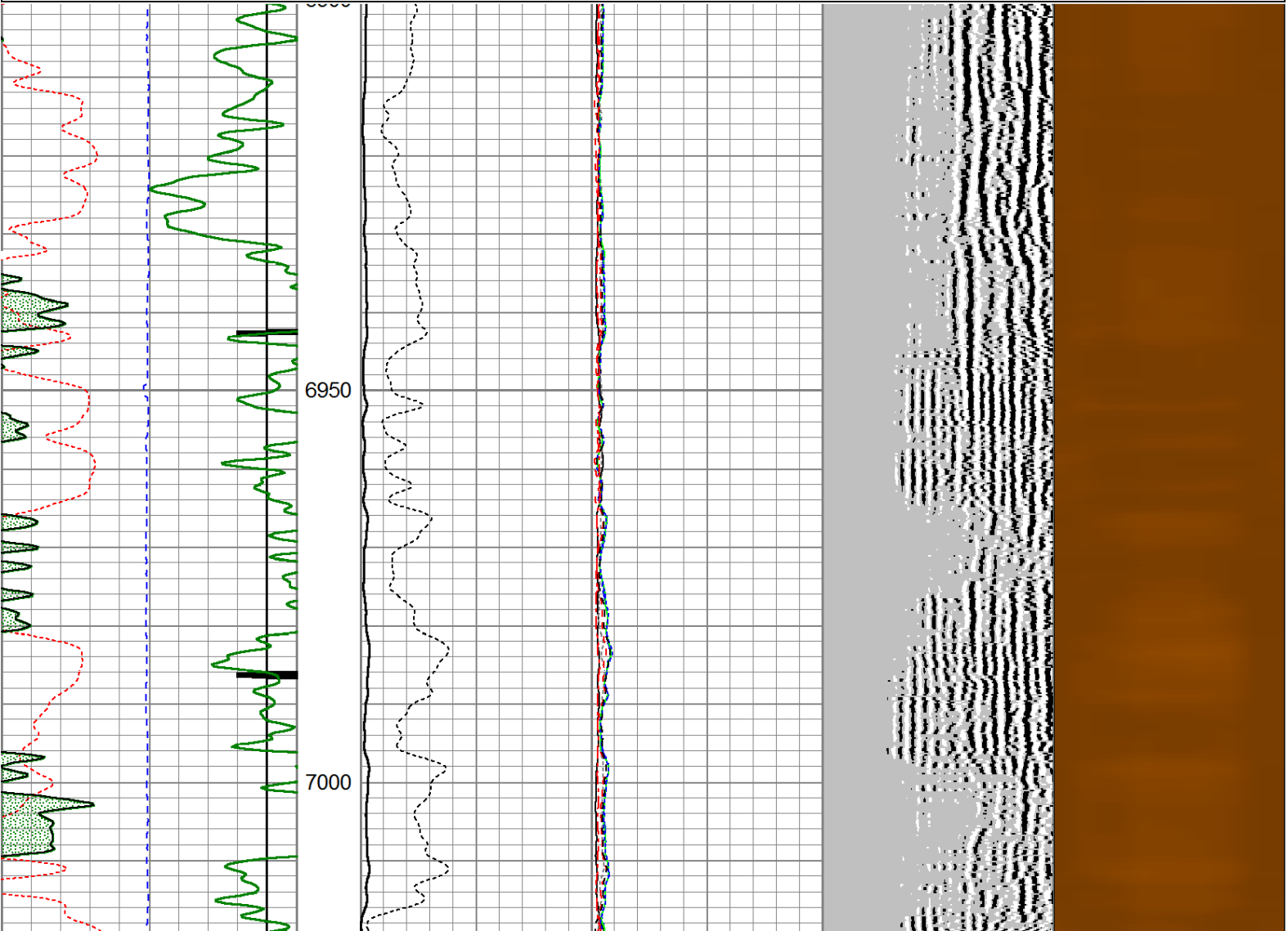
-5	AMPS6	150
-5	AMPS7	150
-5	AMPS8	150

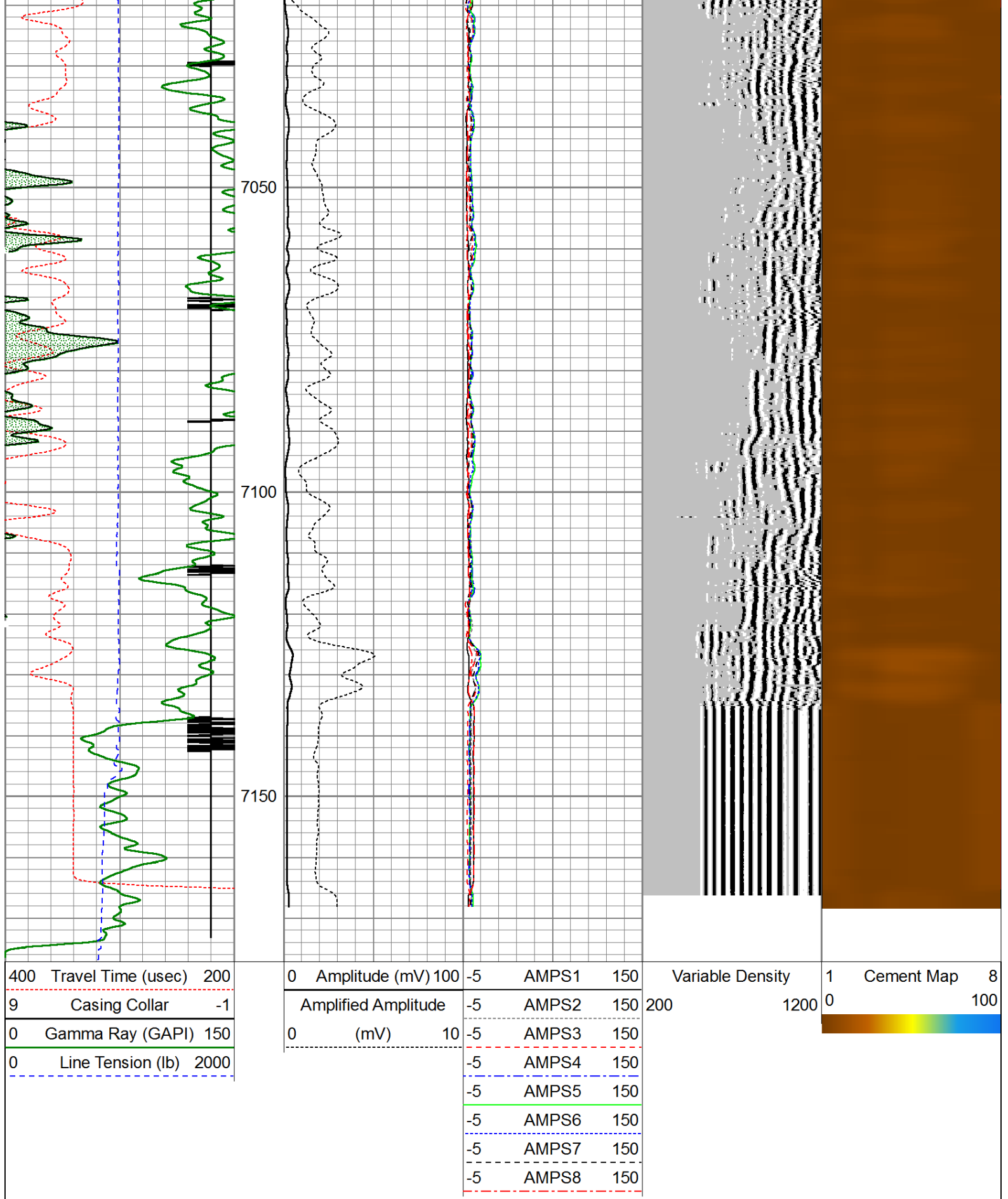


Repeat Pass (0 PSI)

Database File: noble energy no worries g14-64-1hn_rcbl.db
 Dataset Pathname: pass3
 Presentation Format: scbl03
 Dataset Creation: Sat Feb 22 16:33:11 2014 by Log 0
 Charted by: Depth in Feet scaled 1:240

400	Travel Time (usec)	200	0	Amplitude (mV)	100	-5	AMPS1	150	Variable Density		1	Cement Map	8
9	Casing Collar	-1	Amplified Amplitude			-5	AMPS2	150	200	1200	0		100
0	Gamma Ray (GAPI)	150	0	(mV)	10	-5	AMPS3	150					
0	Line Tension (lb)	2000				-5	AMPS4	150					
						-5	AMPS5	150					
						-5	AMPS6	150					
						-5	AMPS7	150					
						-5	AMPS8	150					





Calibration Report

Database File: noble energy no worries g14-64-1hn_rcbl.db
 Dataset Pathname: pass5
 Dataset Creation: Sat Feb 22 16:39:44 2014 by Log 0

Gamma Ray Calibration Report

Serial Number: 111111
 Tool Model: Probe275
 Performed: Tue Feb 11 08:37:44 2014

 Calibrator Value: 1.0 GAPI

 Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

 Sensitivity: 0.8500 GAPI/cps

Temperature Calibration Report

Serial Number: 111111
 Tool Model: Probe275
 Performed: Sun Jun 13 13:33:21 1993

	Reference	Reading
Low Reference:	0.00 degF	0.00 cps
High Reference:	1.00 degF	1.00 cps
Gain:	1.00	
Offset:	0.00	
Delta Spacing	2	

Segmented Cement Bond Log Calibration Report

Serial Number: 101254
 Tool Model: Probe

 Calibration Casing Diameter: 7.000 in
 Calibration Depth: 4538.157 ft

Master Calibration, performed Sat Feb 22 16:32:02 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.015	0.616	1.000	62.165	101.735	2.995
CAL	-0.023	0.731				
5'	-0.022	0.534	1.000	62.165	109.962	3.401
SUM						
S1	0.002	0.671	0.000	100.000	149.459	-0.232
S2	-0.016	0.602	0.000	100.000	161.856	2.610
S3	-0.008	0.520	0.000	100.000	189.235	1.548
S4	-0.022	0.483	0.000	100.000	198.023	4.264
S5	-0.022	0.529	0.000	100.000	181.484	3.985
S6	-0.021	0.626	0.000	100.000	154.484	3.285
S7	-0.014	0.702	0.000	100.000	139.669	1.976
S8	-0.005	0.708	0.000	100.000	140.363	0.692




Internal Reference Calibration, performed Mon Oct 10 09:42:03 2005:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.023	0.731	1.000	0.000

Air Zero Calibration, performed Sat Feb 22 08:53:18 2014:

	Raw (v)	Calibrated (v)	Results
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	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	Len (ft)	OD (in)	Wt (lb)
			Titan Cable_head	1.00	1.44	10.00
			Probe275 2.75" Centralizer	2.88	2.75	20.00
WVF3FT	11.84		RBT-Probe (101254) Probe Radii Bond Tool with Digital Telemetry	8.75	2.75	90.00
WVFCAL	11.84					
WVFS1	11.84					
WVFS2	11.84					
WVFS3	11.84					
WVFS4	11.84					
WVFS5	11.84					
WVFS6	11.84					
WVFS7	11.84					
WVFS8	11.84					
WVF5FT	10.84					
			Probe275 2.75" Centralizer	2.88	2.75	20.00
CCL	3.88	