



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

Company	Noble Energy						
Well	SLW Ranch B01-63-1HN						
Field	Wattenburg						
County	Weld	State					
State	Colorado	Colorado					
Location:	API # : 05-123-36259						
SEC 1 TWP 5N RGE 64W		Other Services					
1650' FSL & 535 FWL		None					
Permanent Datum	Ground Level	Elevation					
Log Measured From	Kelly Bushing	30' APD					
Drilling Measured From	Kelly Bushing	Elevation					
		K.B. 4634'					
		D.F. 4635'					
		G.L. 4604'					
Date	30-Apr-2013						
Run Number	1						
Depth Driller	11250'						
Depth Logger	6932'						
Bottom Logged Interval	6919'						
Top Log Interval	0'						
Open Hole Size	8.125"						
Type Fluid	Fresh Water						
Density / Viscosity	8.33						
Max. Recorded Temp.	229 Deg						
Estimated Cement Top	1600'						
Time Well Ready	0915						
Time Logger on Bottom	0940						
Equipment Number	Truck # 13033						
Location	Brighton, CO						
Recorded By	G.Lueck						
Witnessed By	B. Mansfield						
M. Schneider							
Borehole Record							
Run Number	Bit	From	To	Size	Weight	From	To
One	9.625"	30'	623'				
Two	7"	30'	7032'				
Three	4.5"	6930.1'	11235'				
Casing Record			Tubing Record				
Surface String	Size	9.625"	Wgt/Ft	36#	Top	30'	Bottom
Prot. String							
Production String	7"		26#		30'		7032'
Liner	4.5"		11.6#		6930.1'		11235'
	Short Joint		5642-5658				

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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 30' KB.

Main Pass and Repeat Pass logged under zero pressure on surface.

Estimated top of cement 1600'.

Unable to fall through liner top.

Thank You for using Allied Wireline.

(303) 659-4609



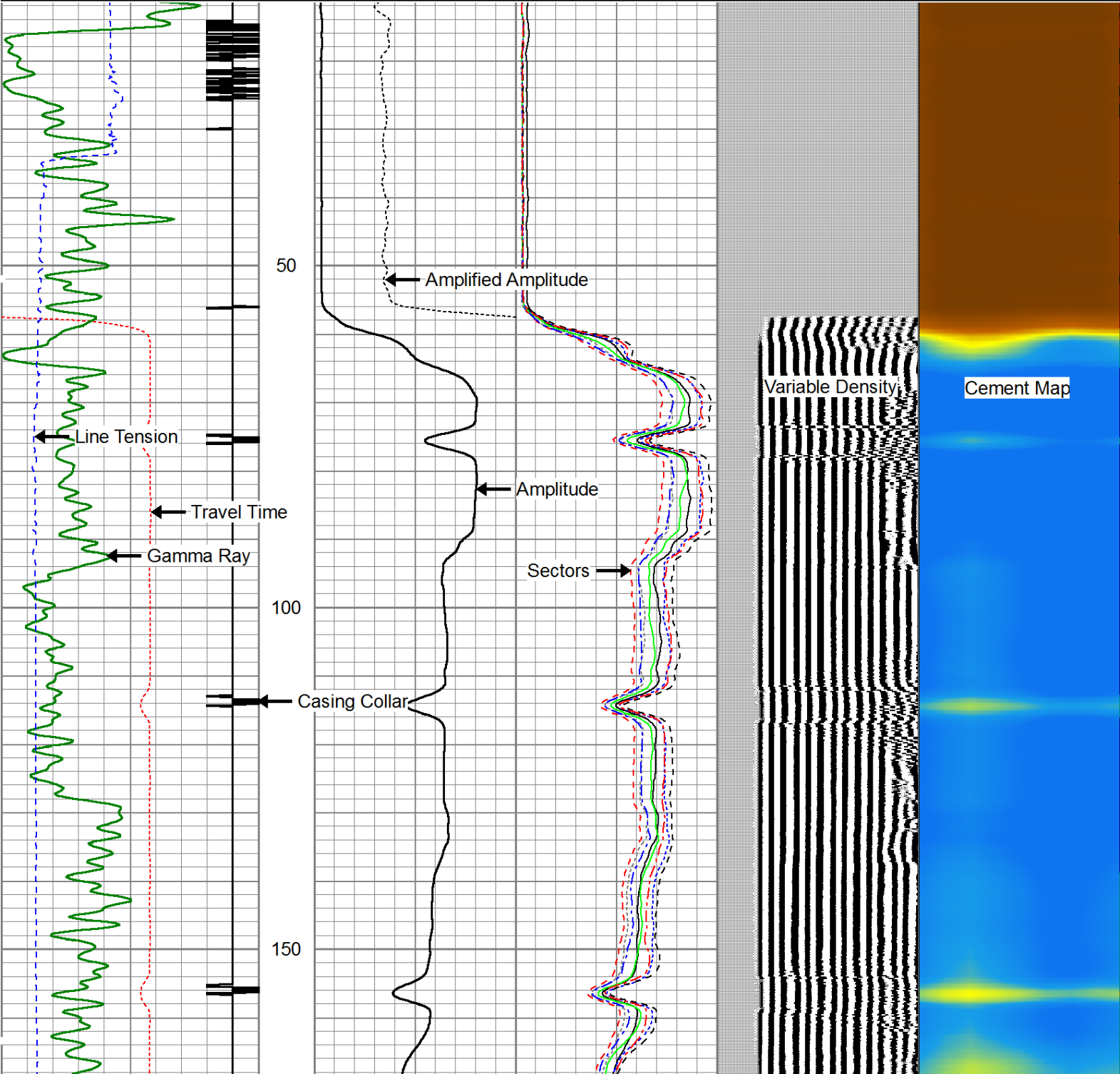
Main Pass (0 PSI)

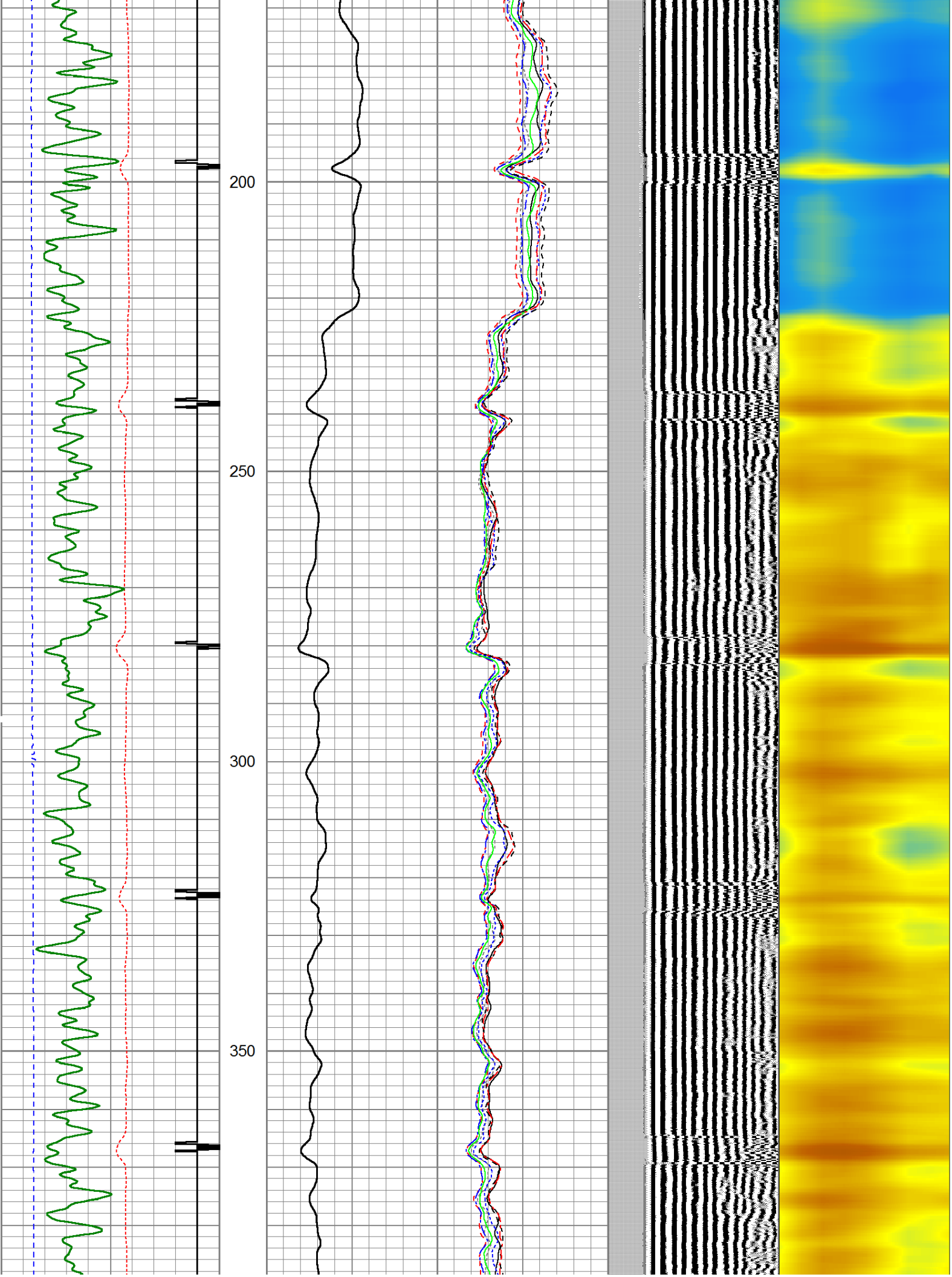
Database File: noble_slw_ranch_bo1_63_1hn.db
Dataset Pathname: pass16
Presentation Format: scbl03
Dataset Creation: Tue Apr 30 09:45:23 2013 by Log 0
Charted by: Depth in Feet scaled 1:240

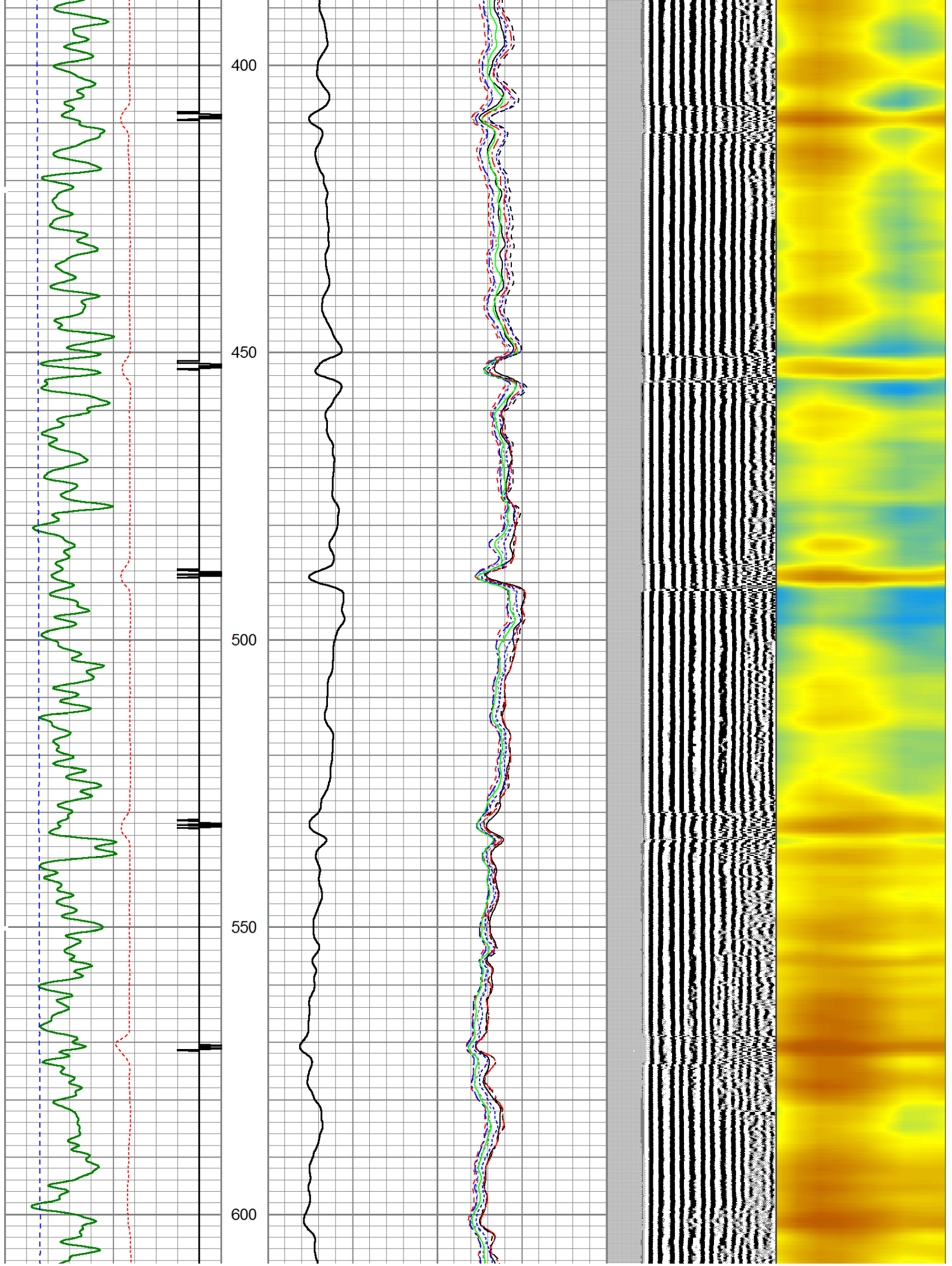
400	Travel Time (usec)	200
9	Casing Collar	-1
0	Gamma Ray (GAPI)	150
0	Line Tension (lb)	2000

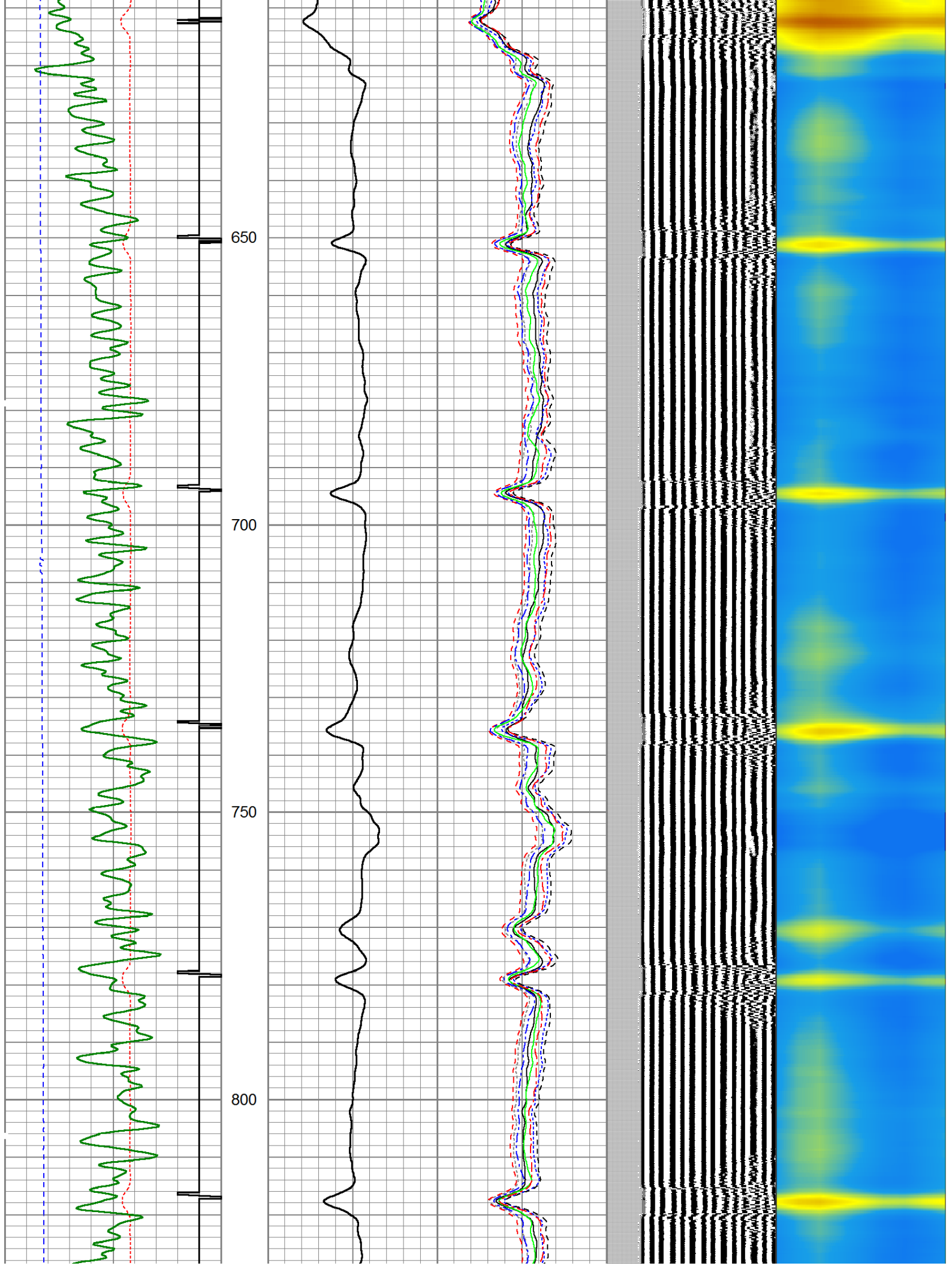
0	Amplitude (mV)	100	-5	AMPS1	150
	Amplified Amplitude		-5	AMPS2	150
0	(mV)	10	-5	AMPS3	150
			-5	AMPS4	150
			-5	AMPS5	150
			-5	AMPS6	150
			-5	AMPS7	150
			-5	AMPS8	150

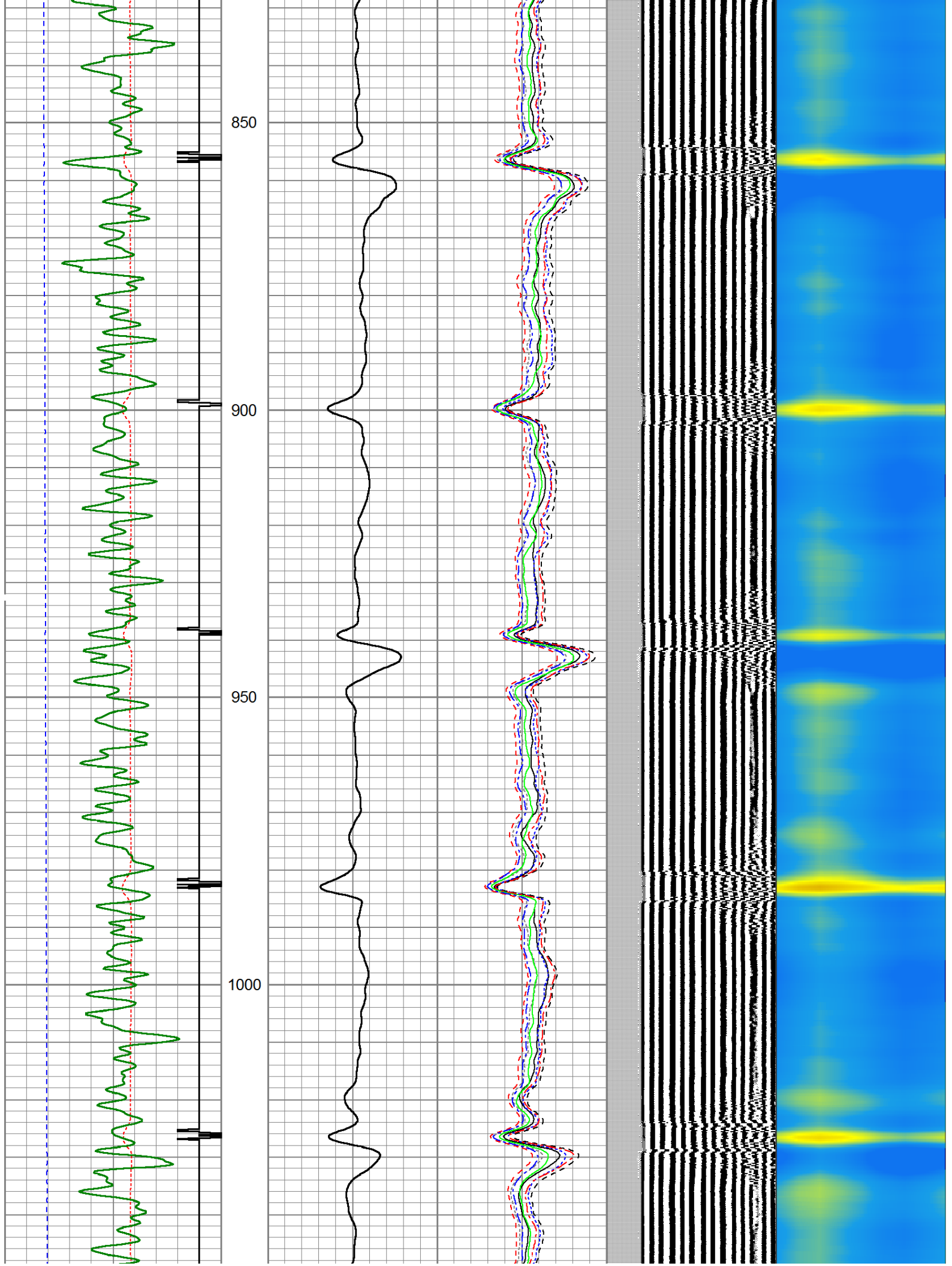
Variable Density	1	Cement Map	8
200	1200	0	100

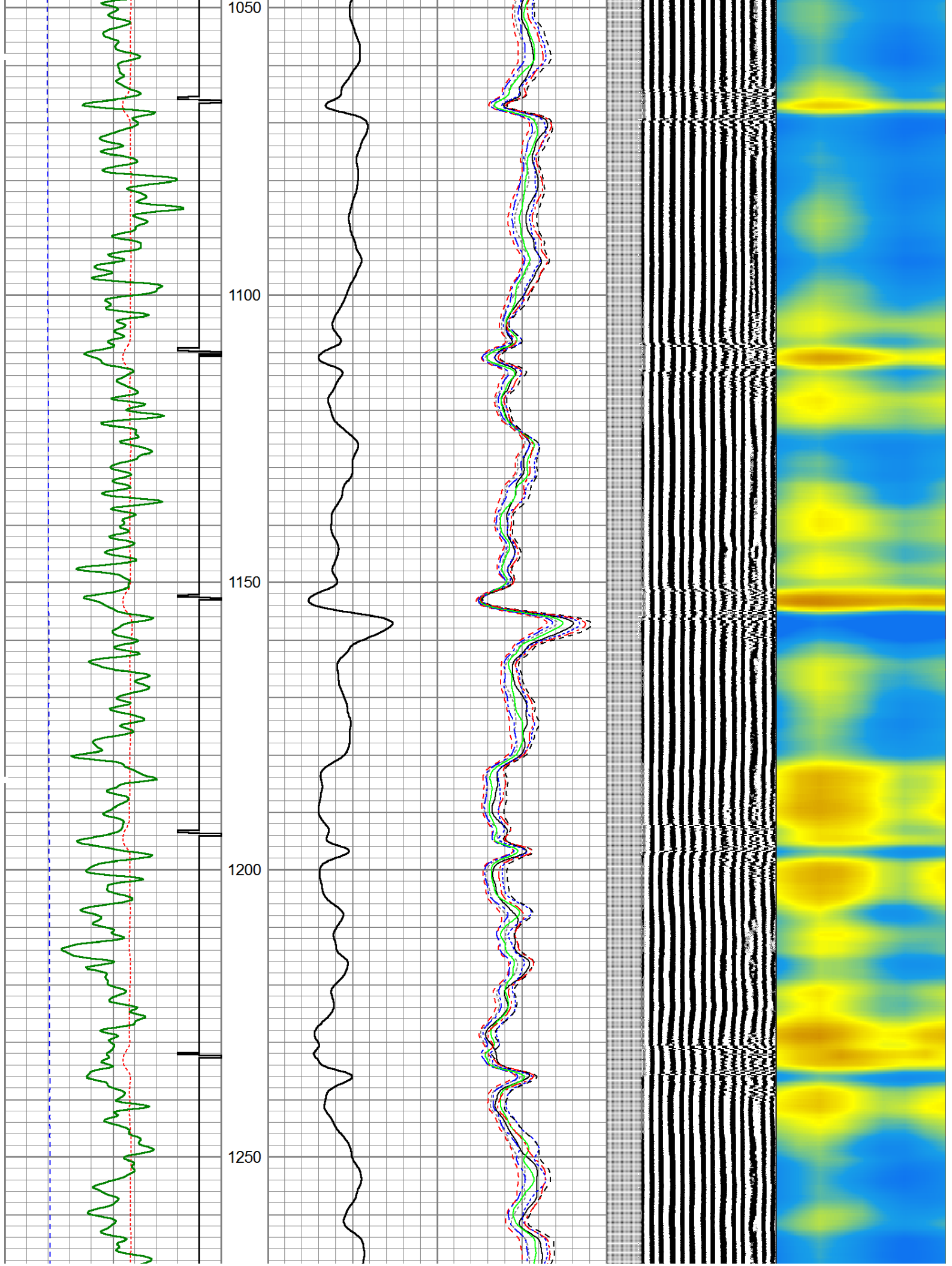


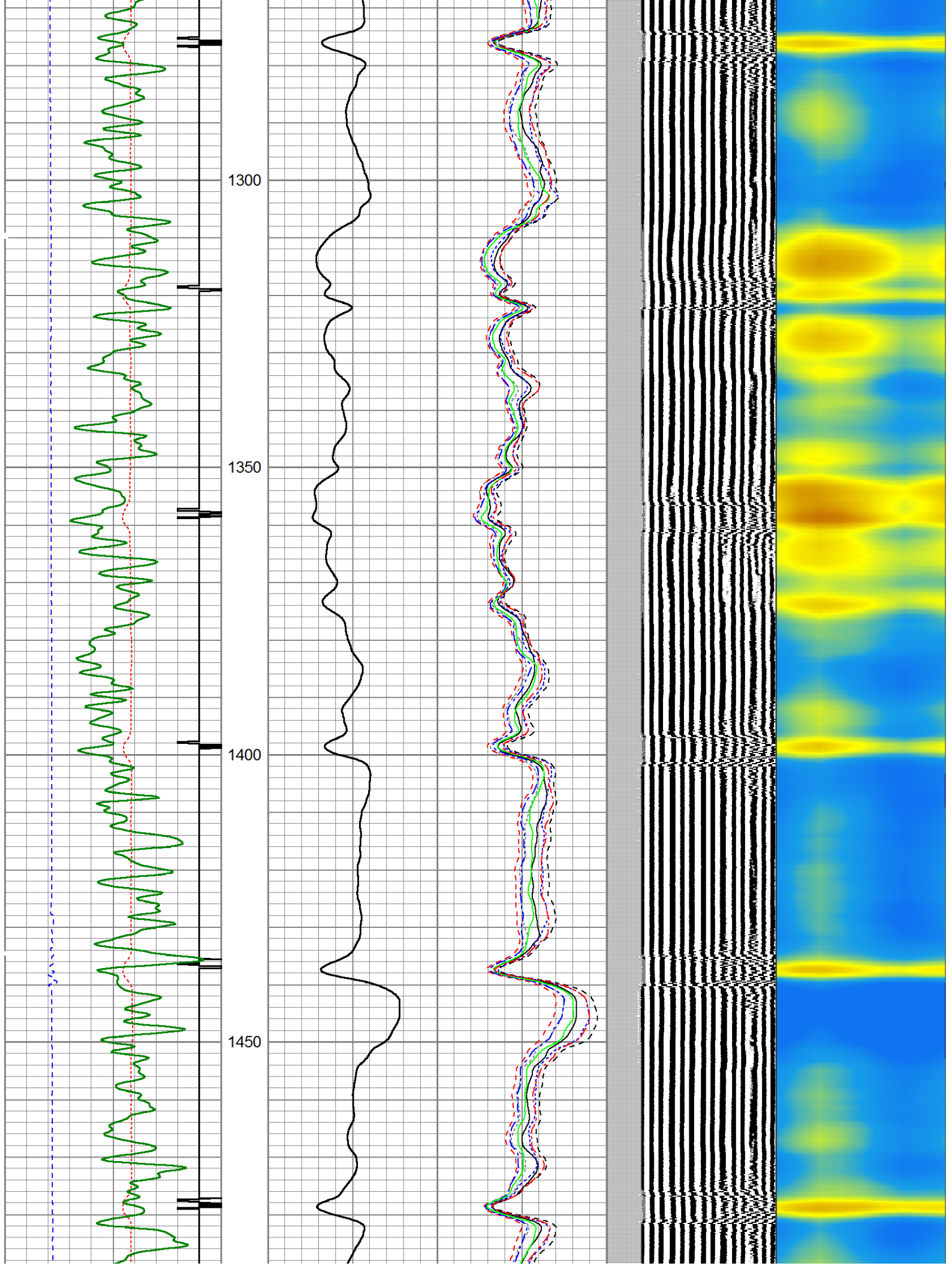


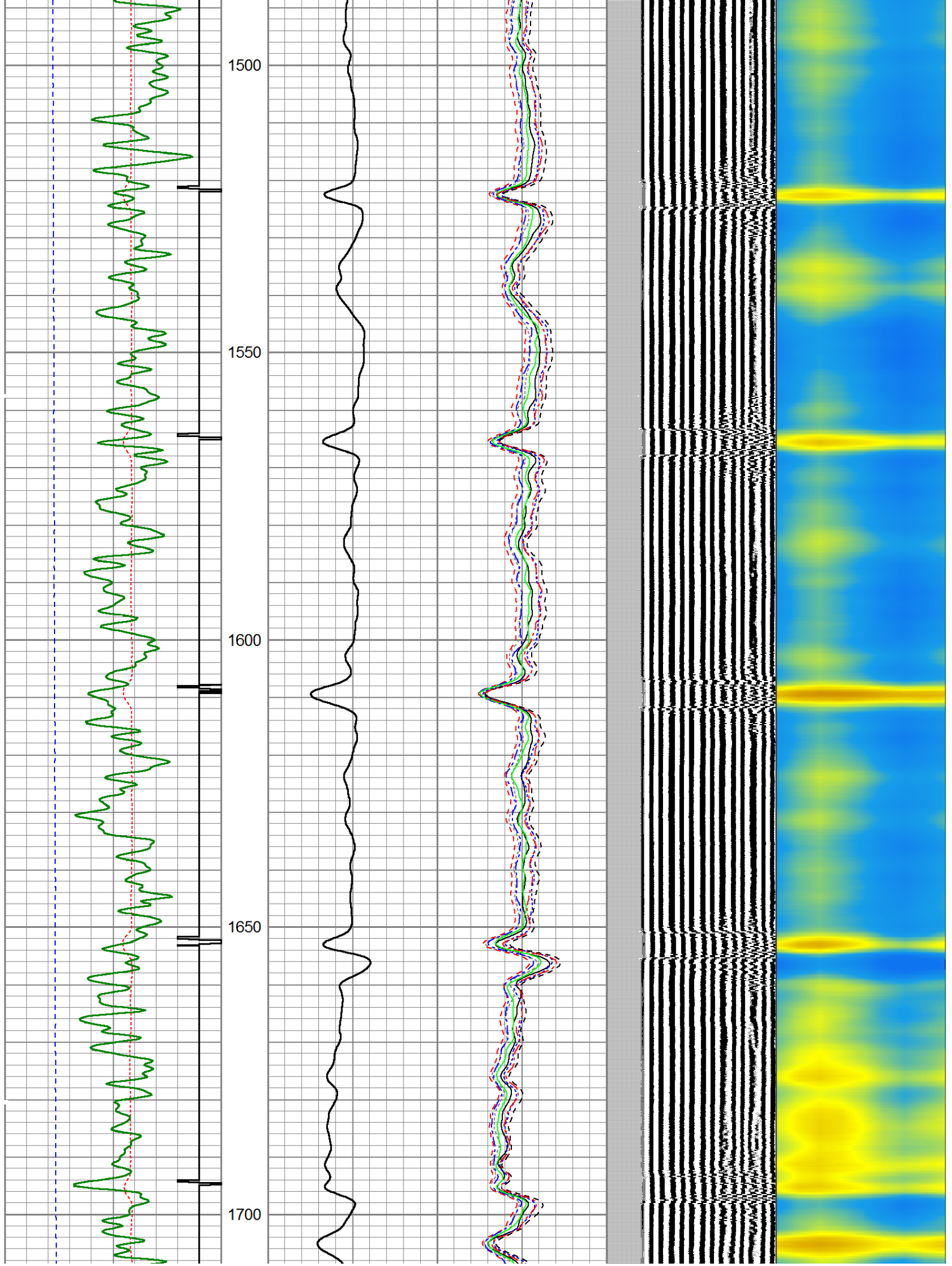


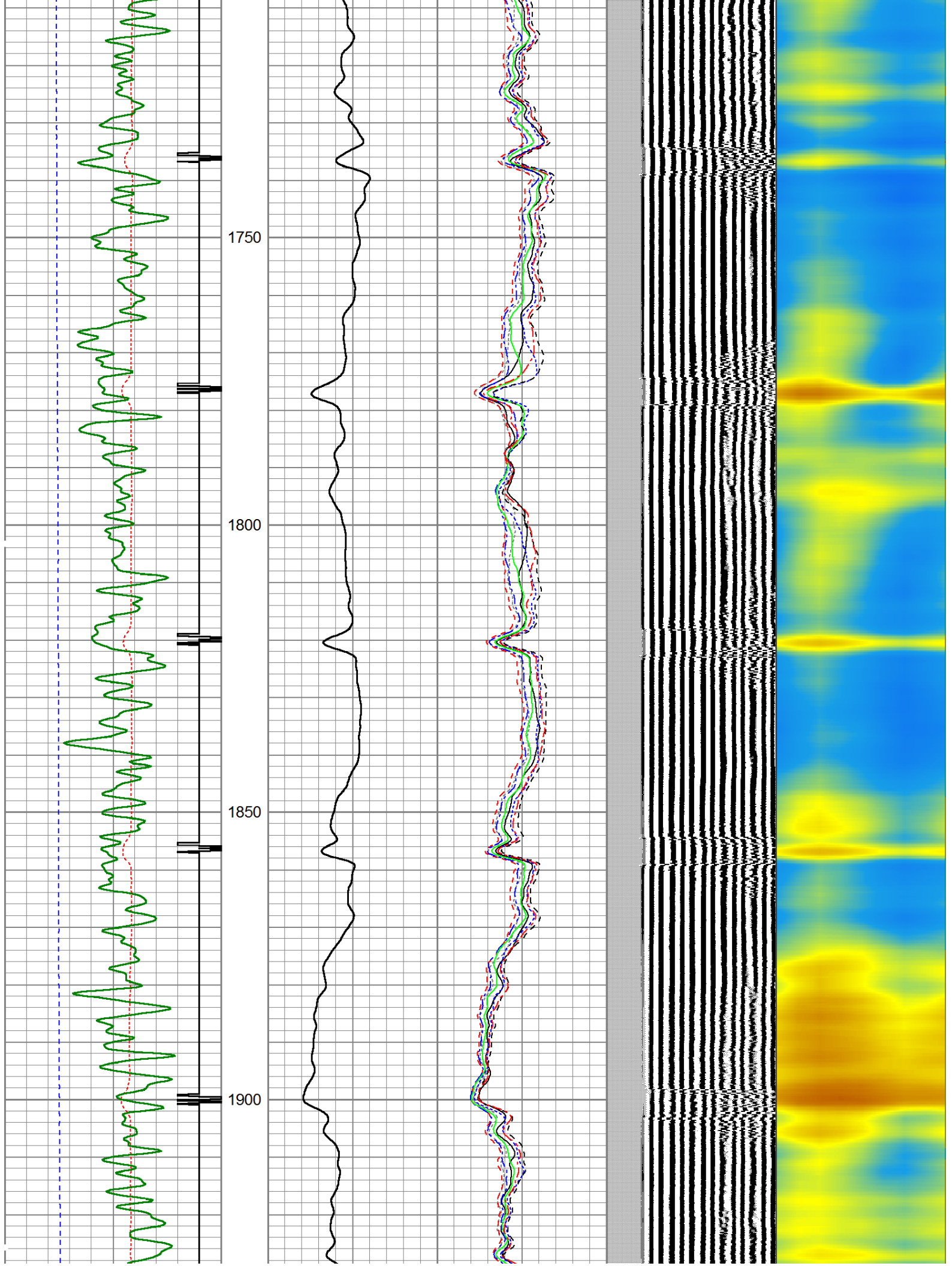


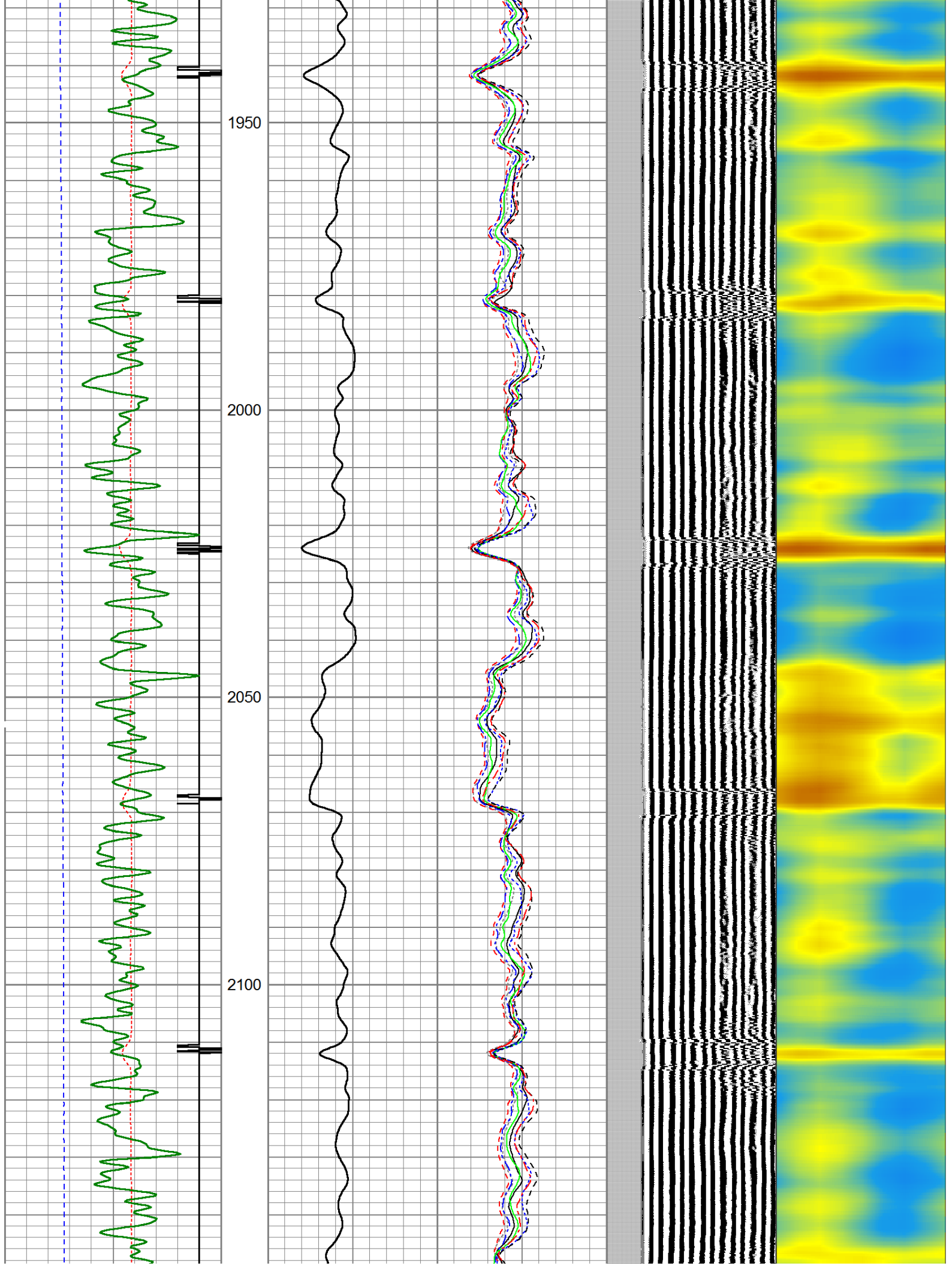


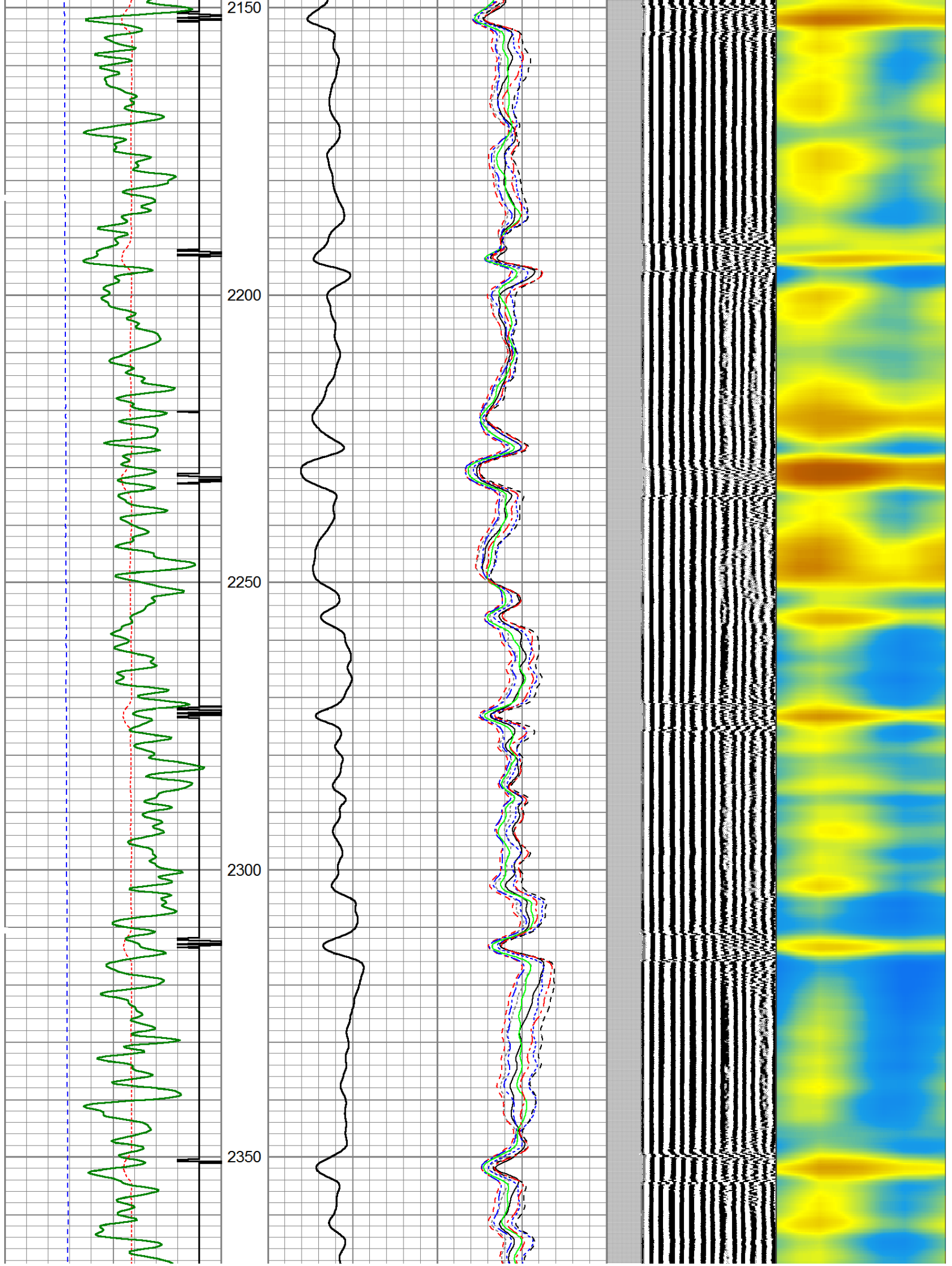


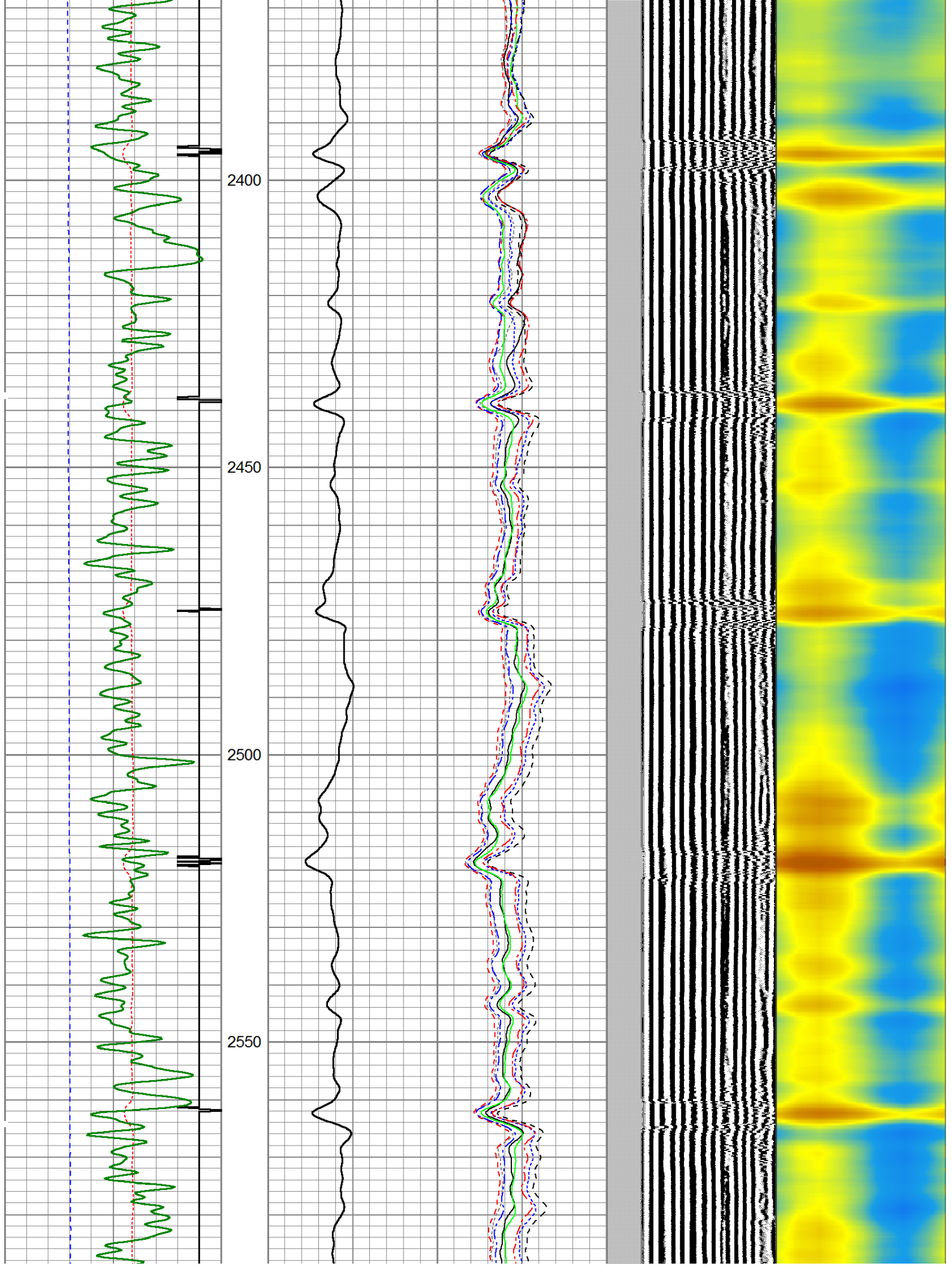


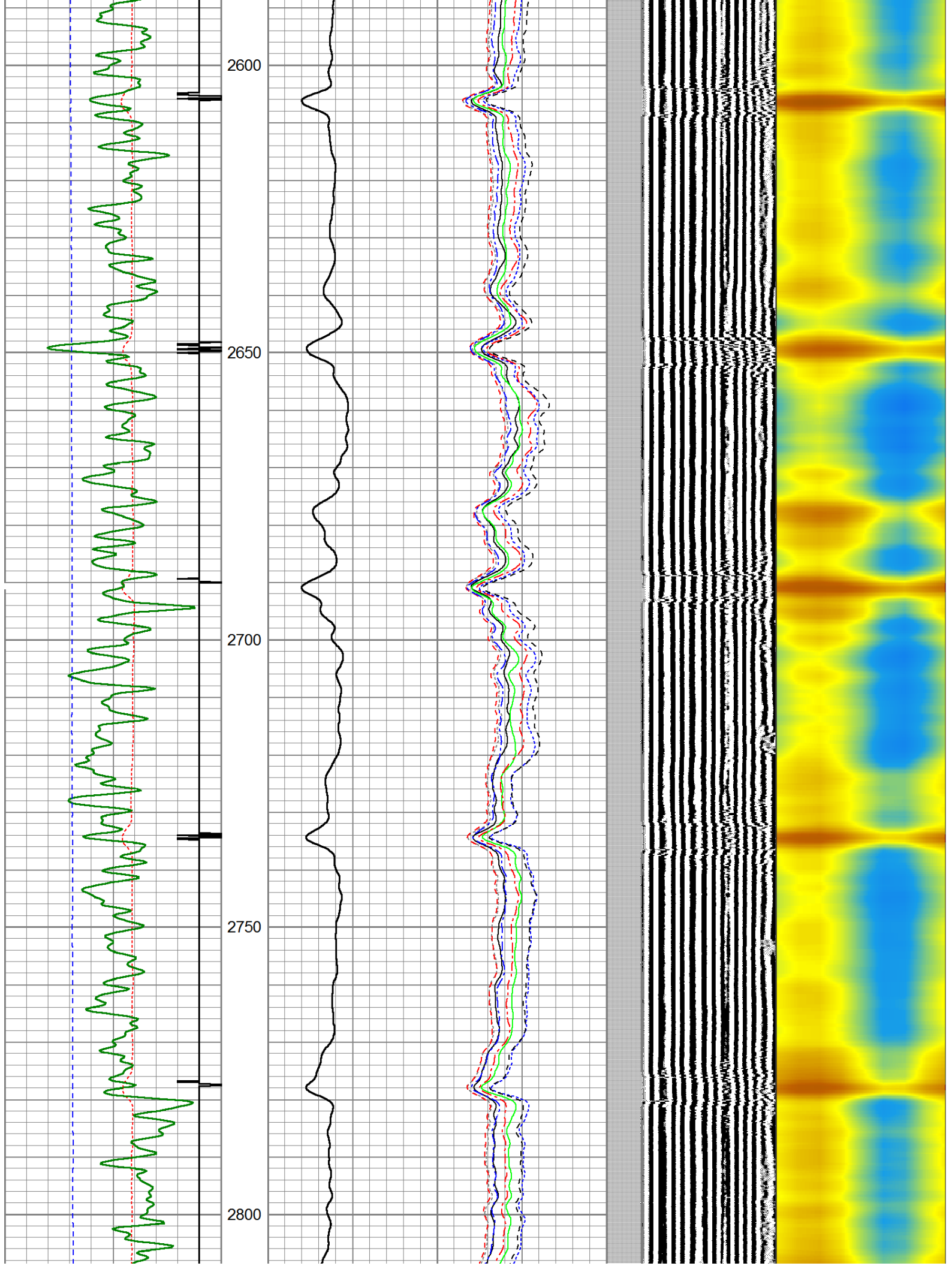


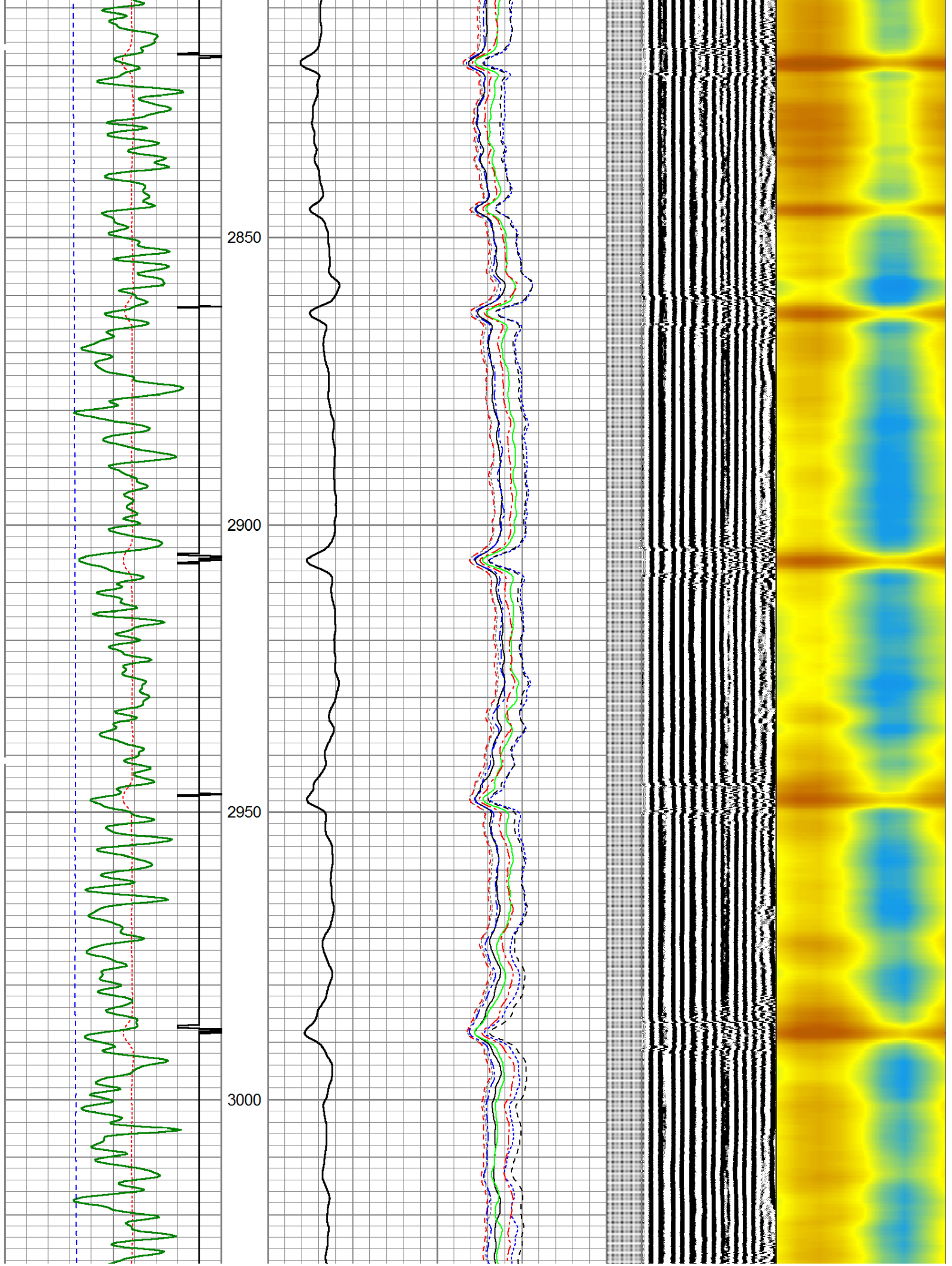


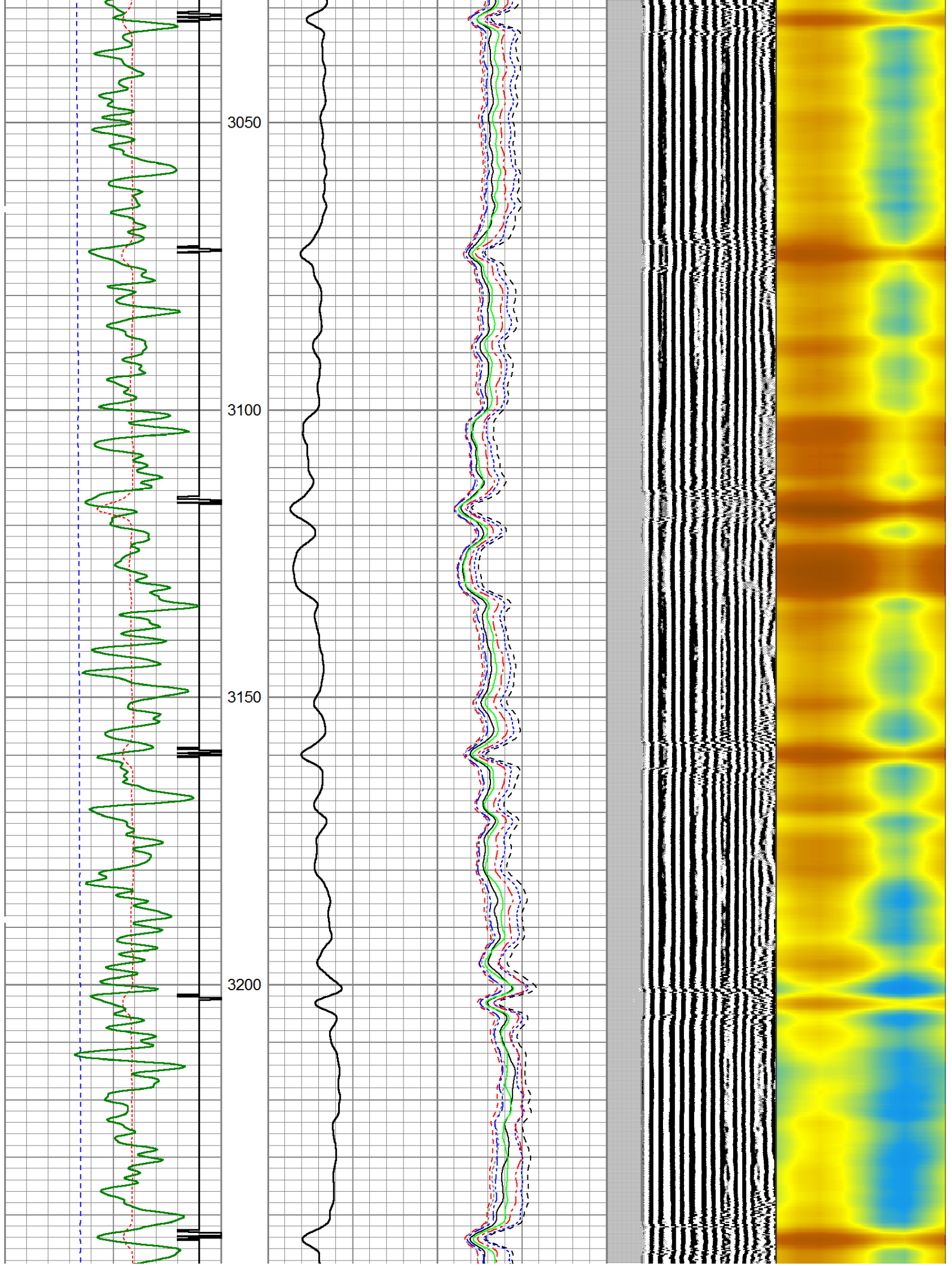


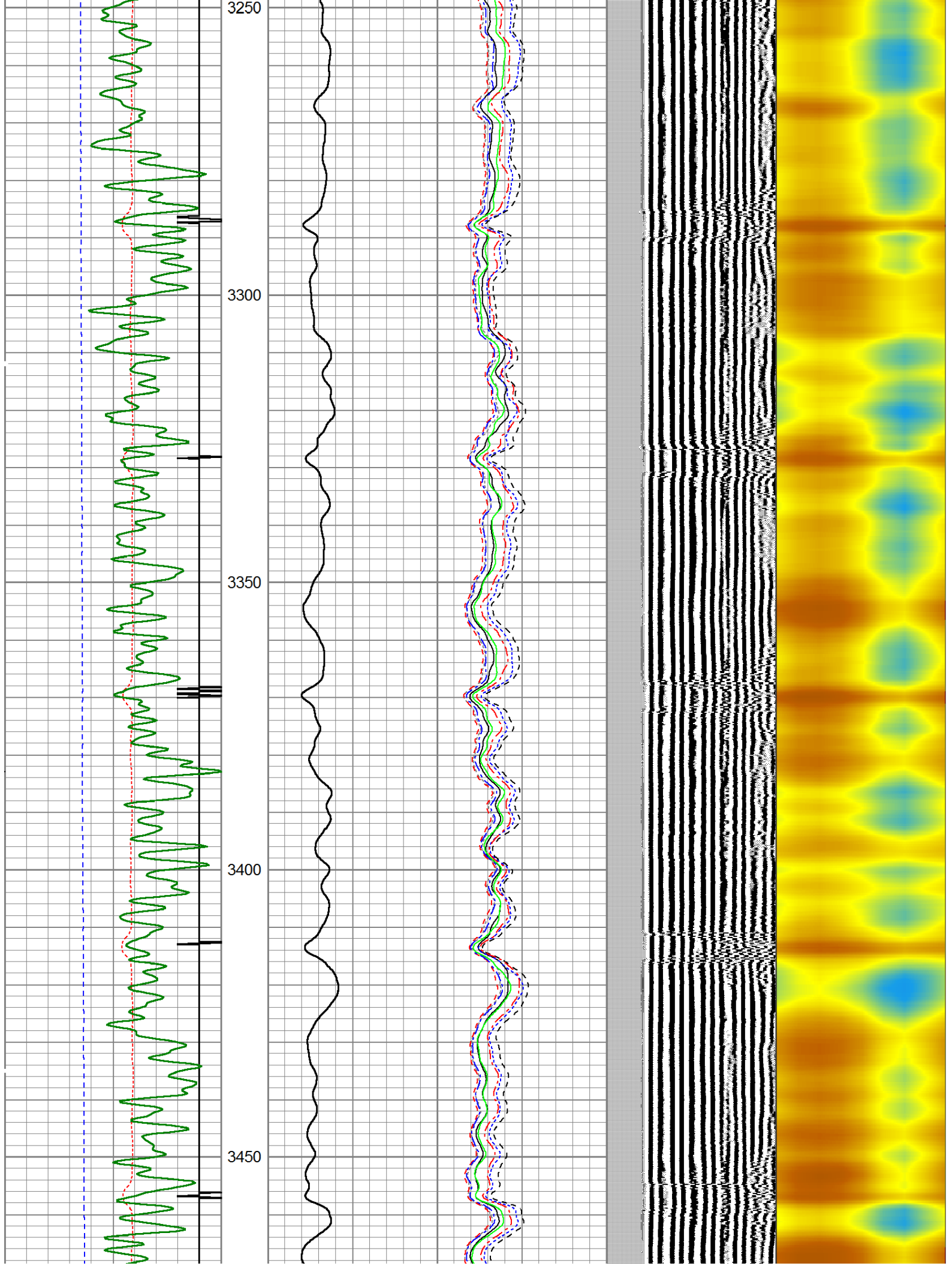


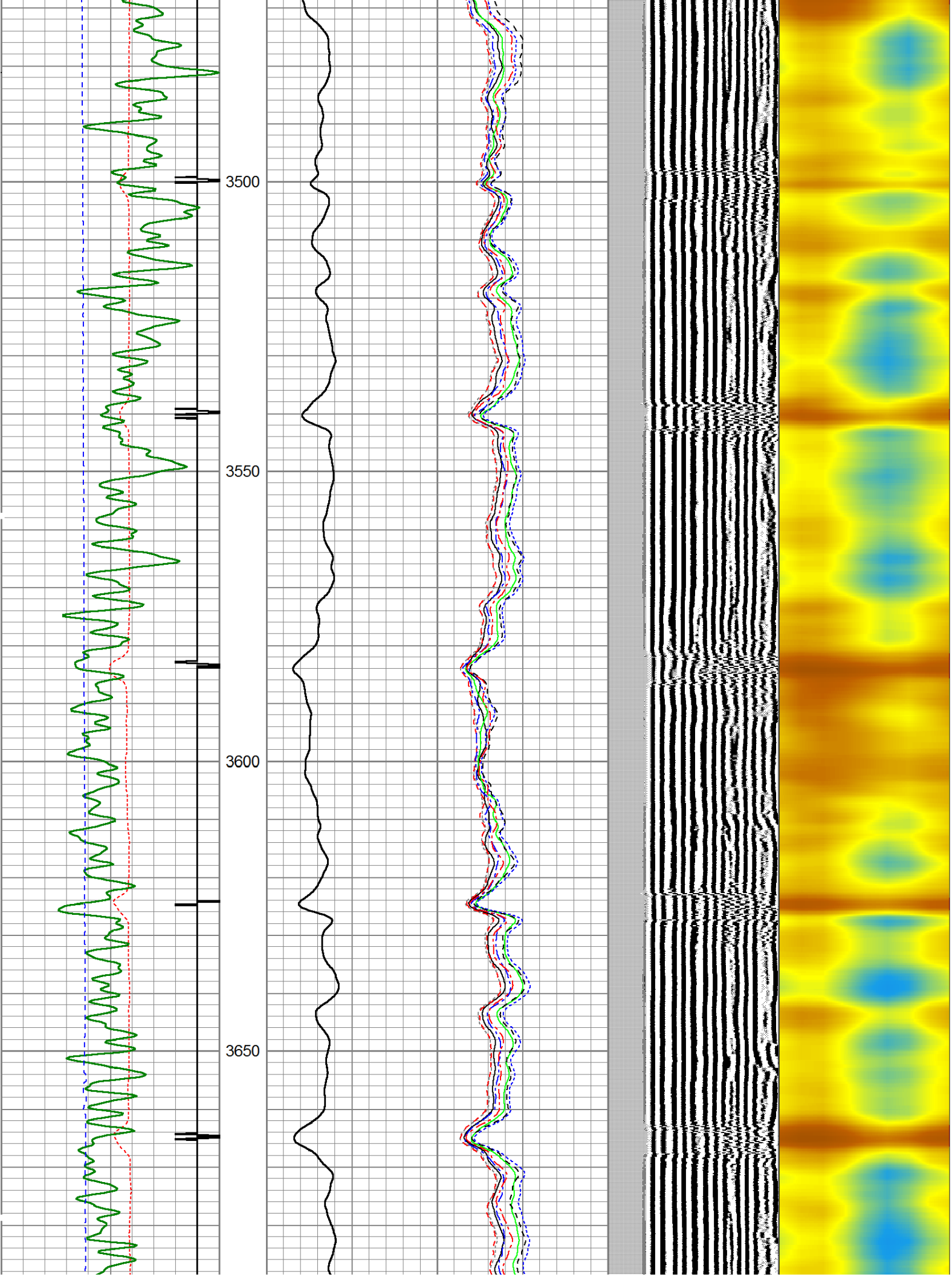


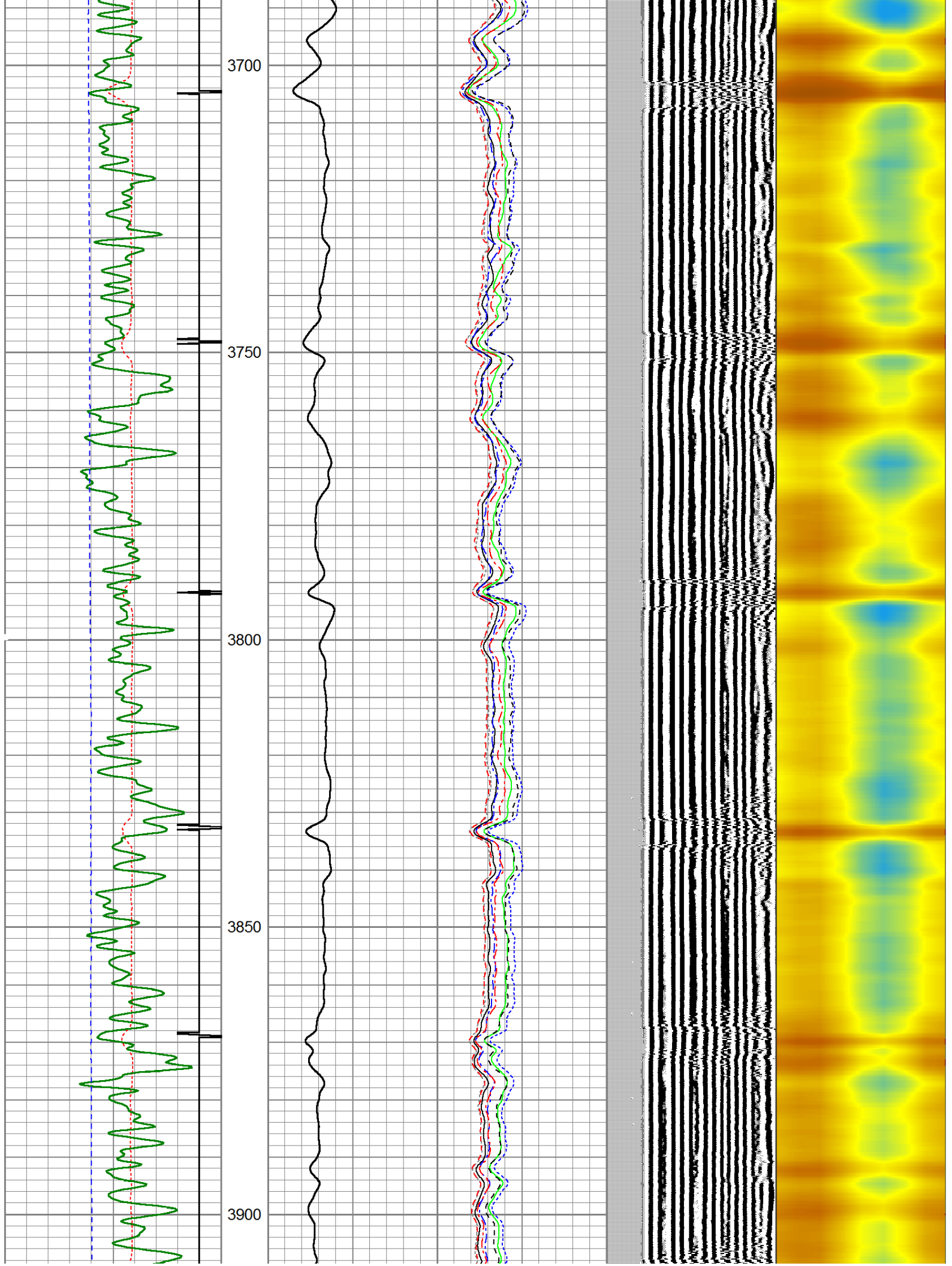


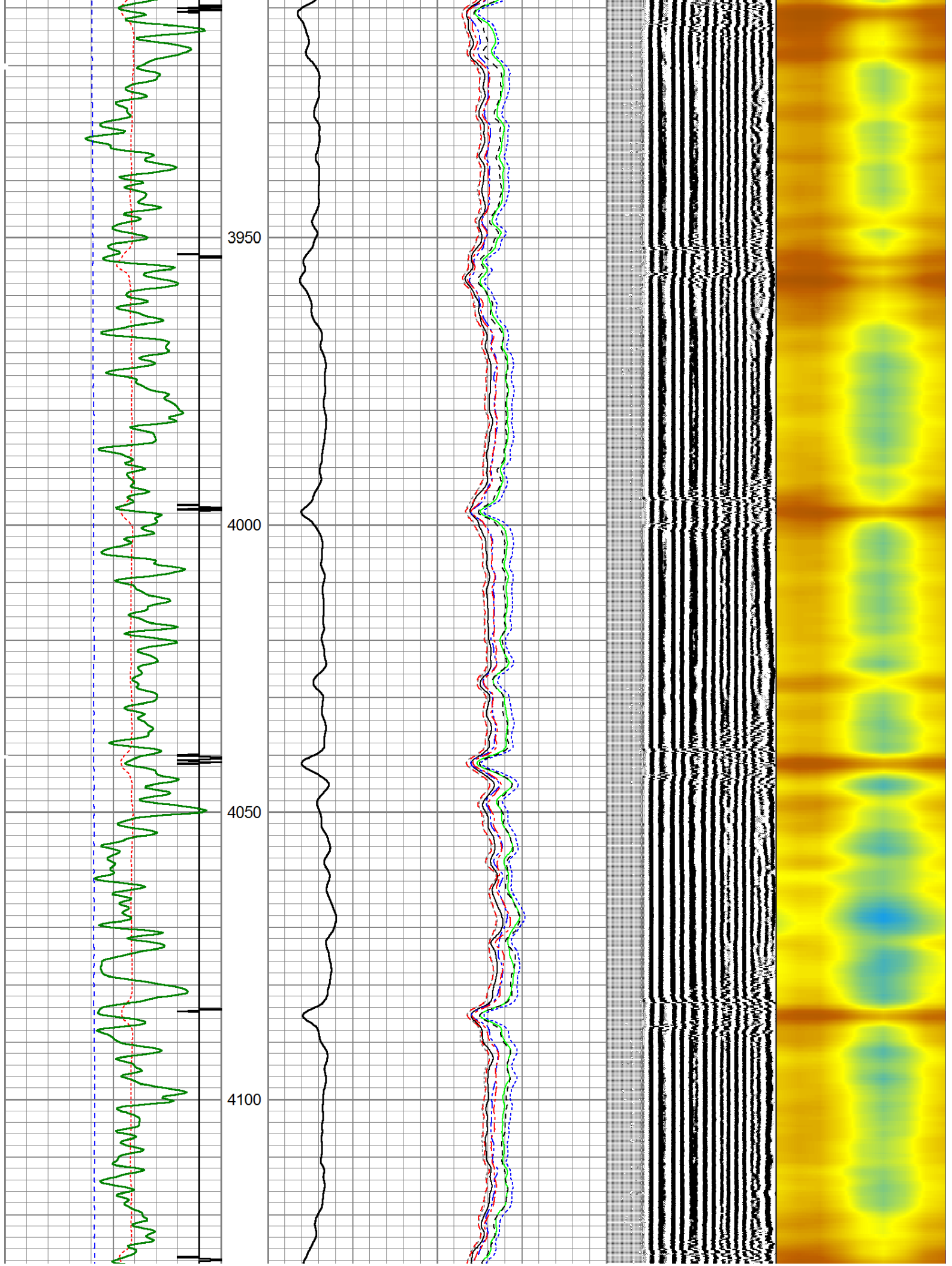


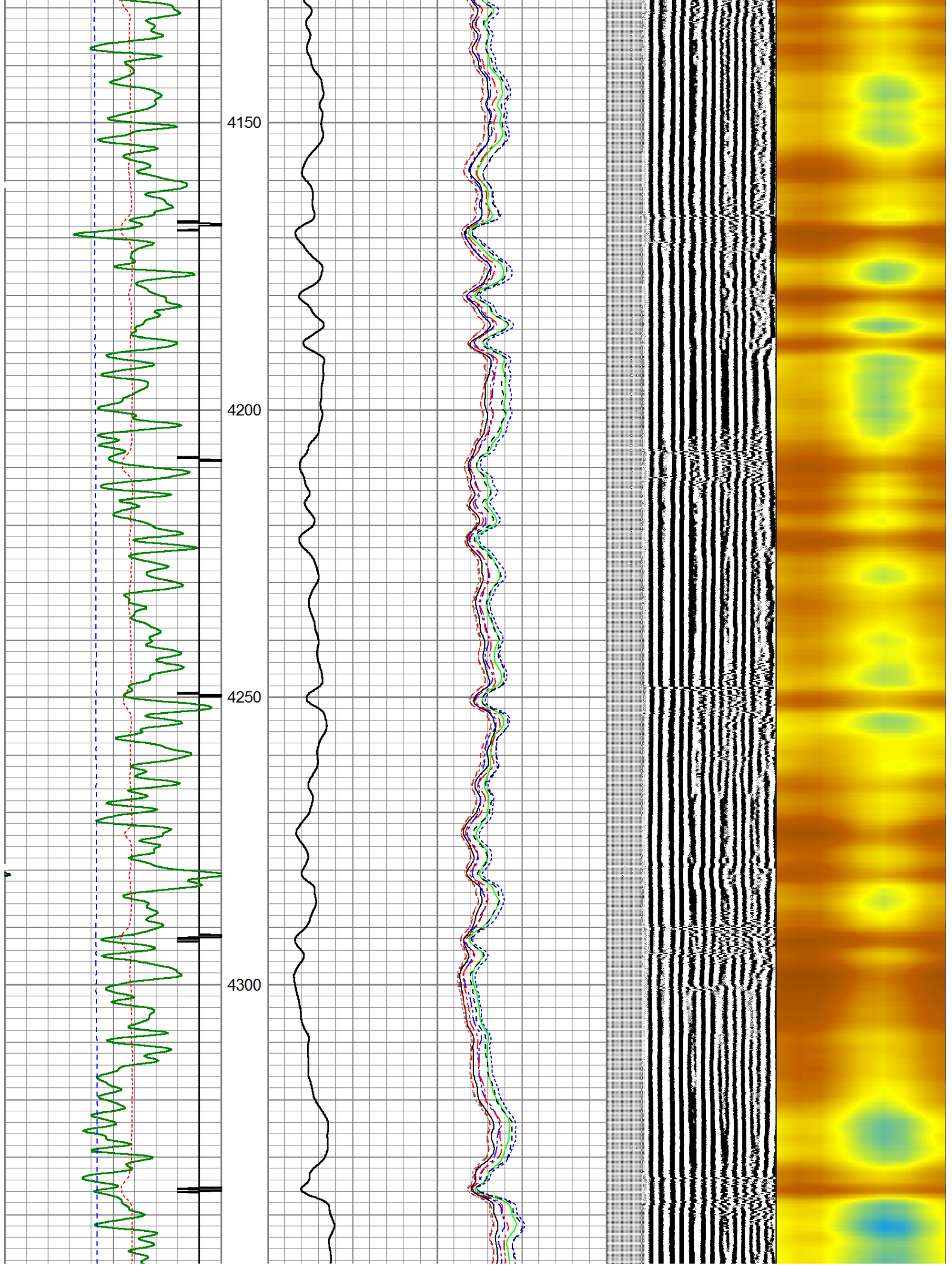


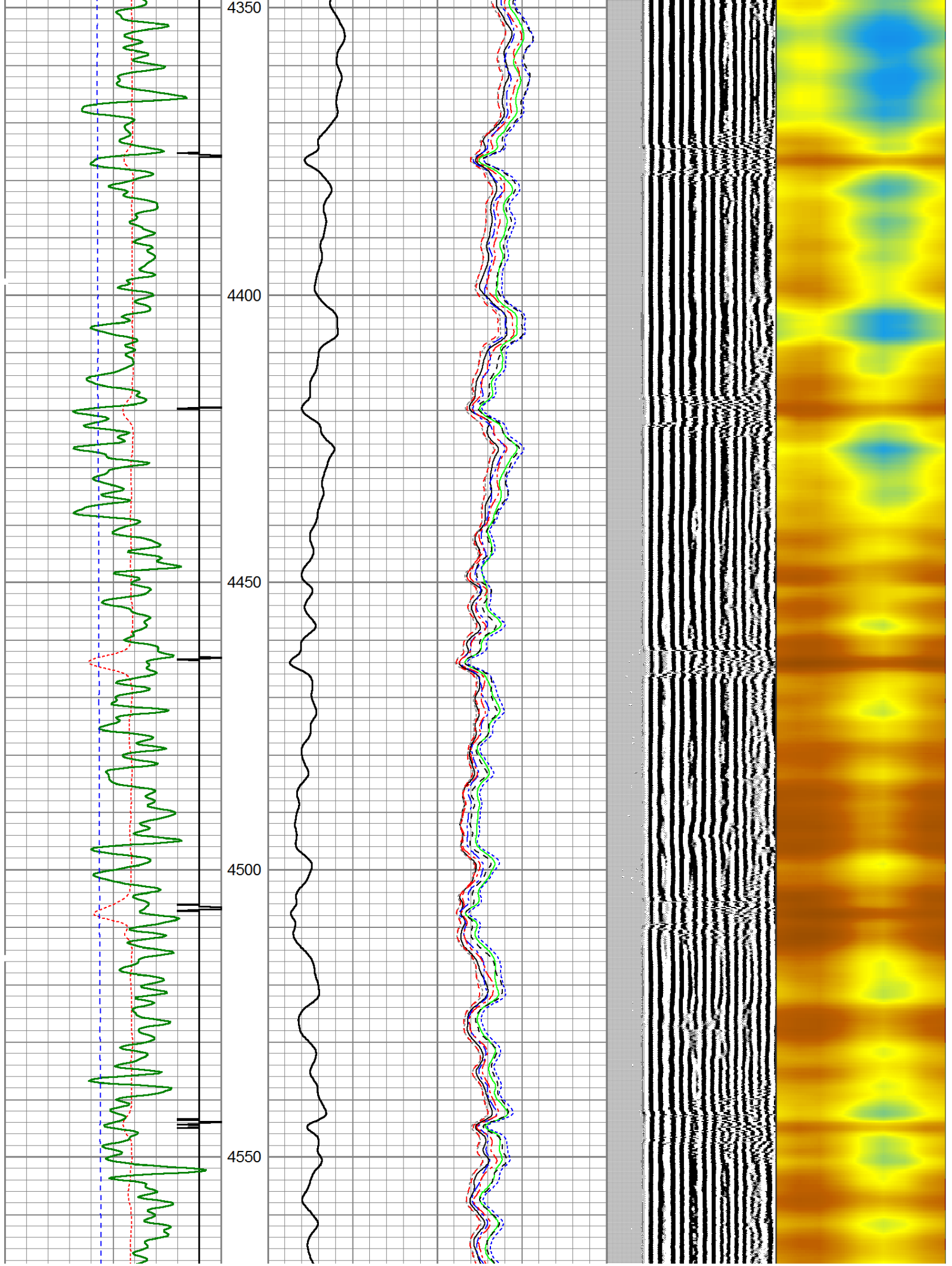


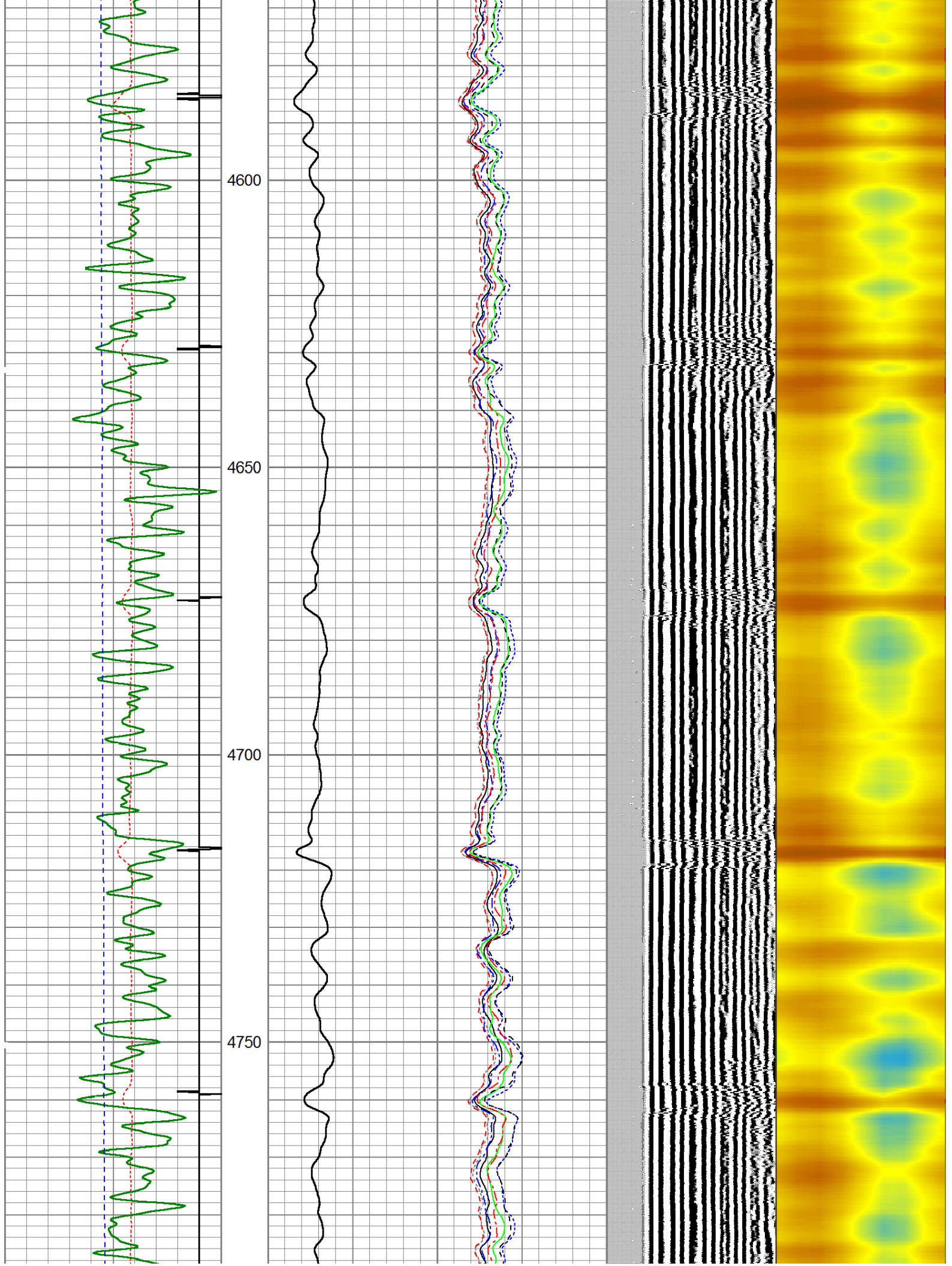


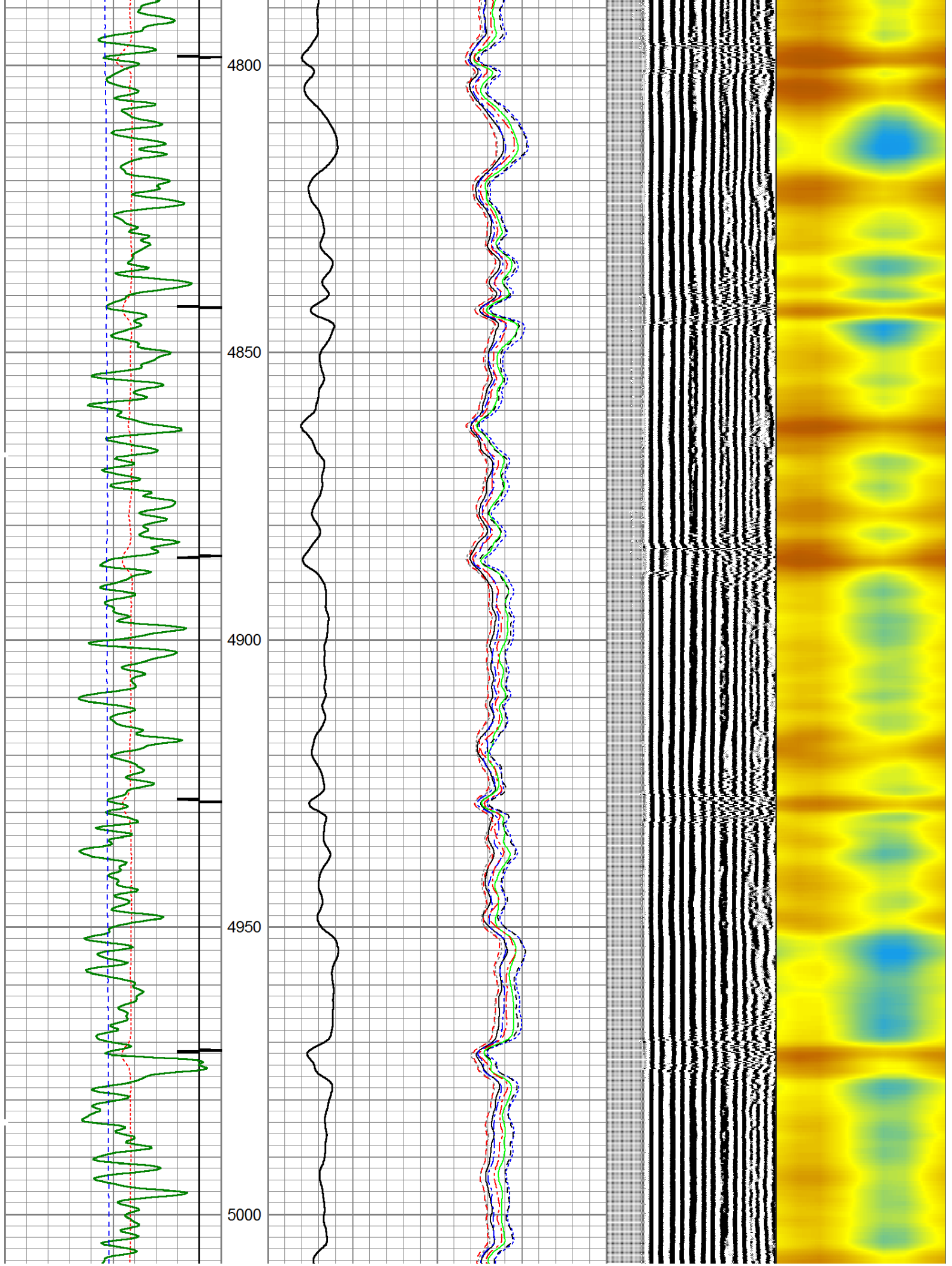


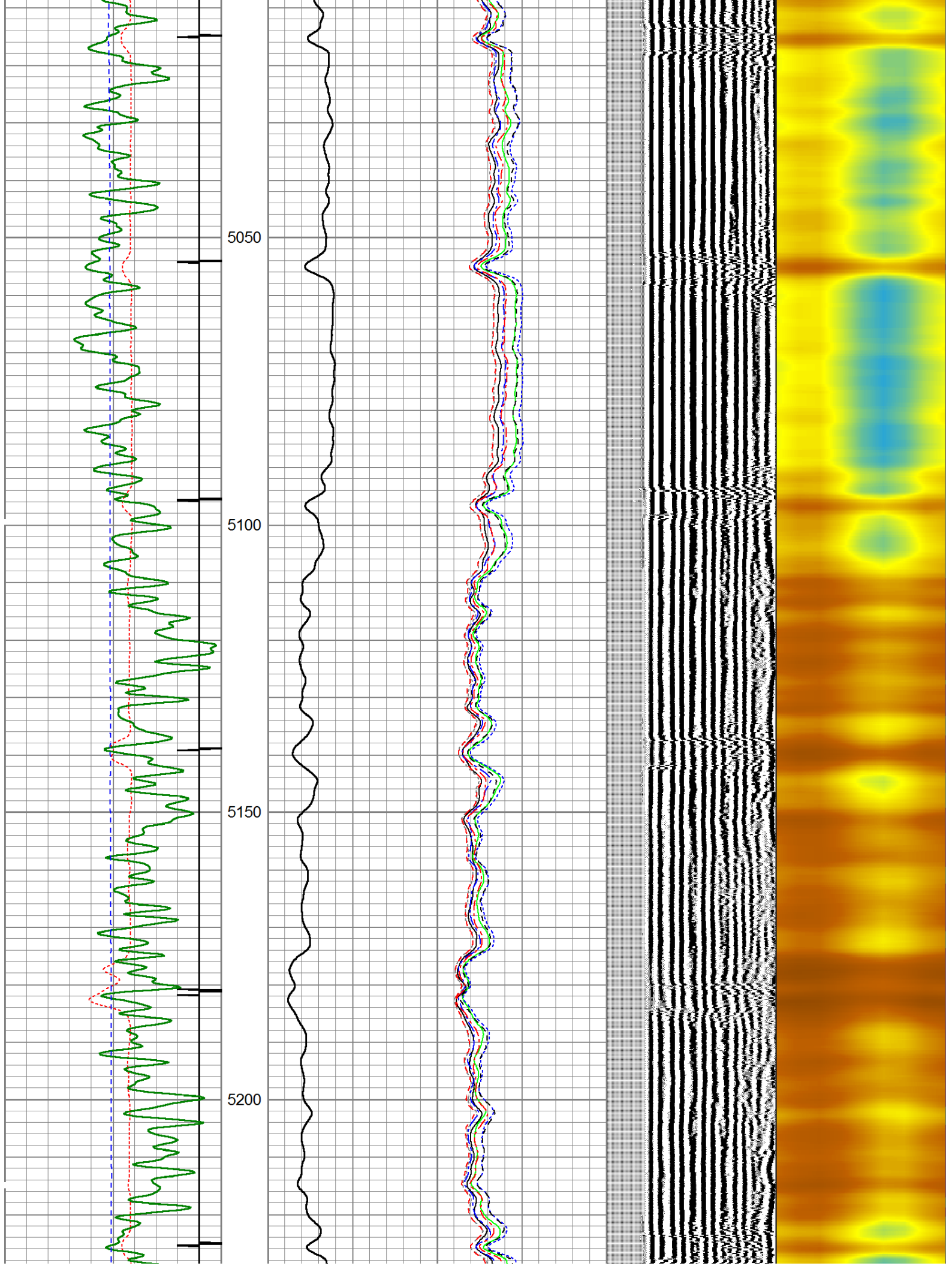


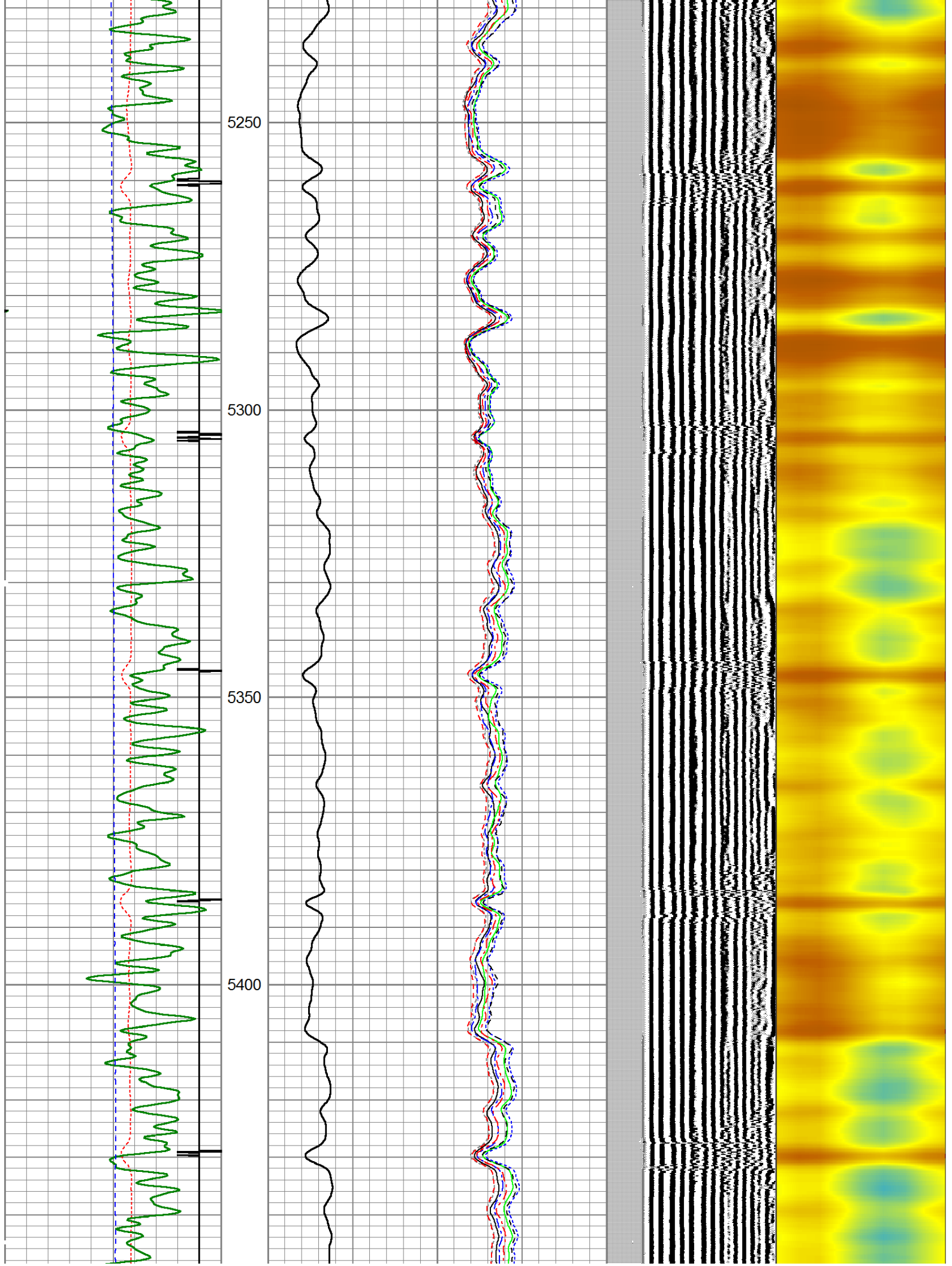


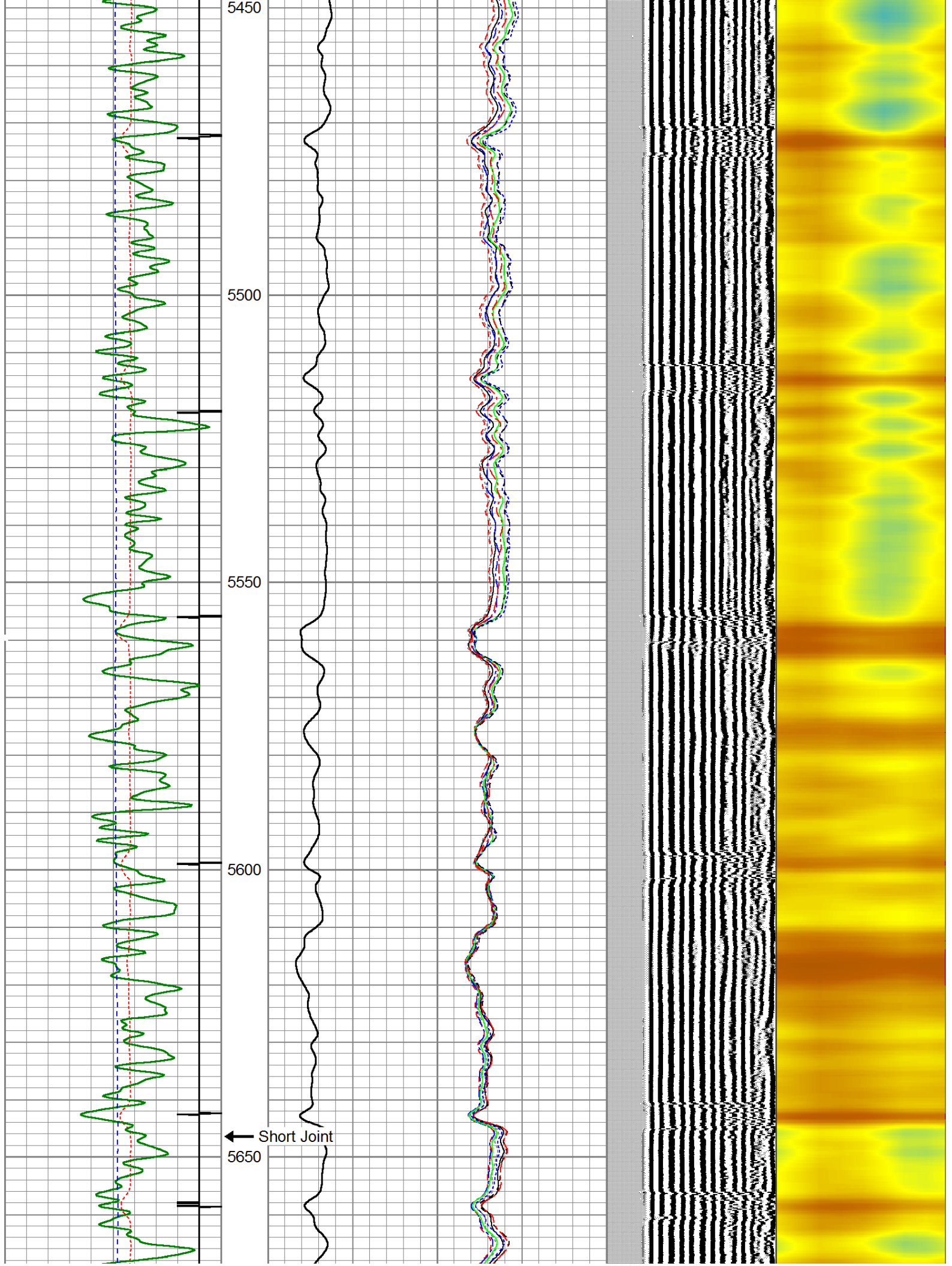


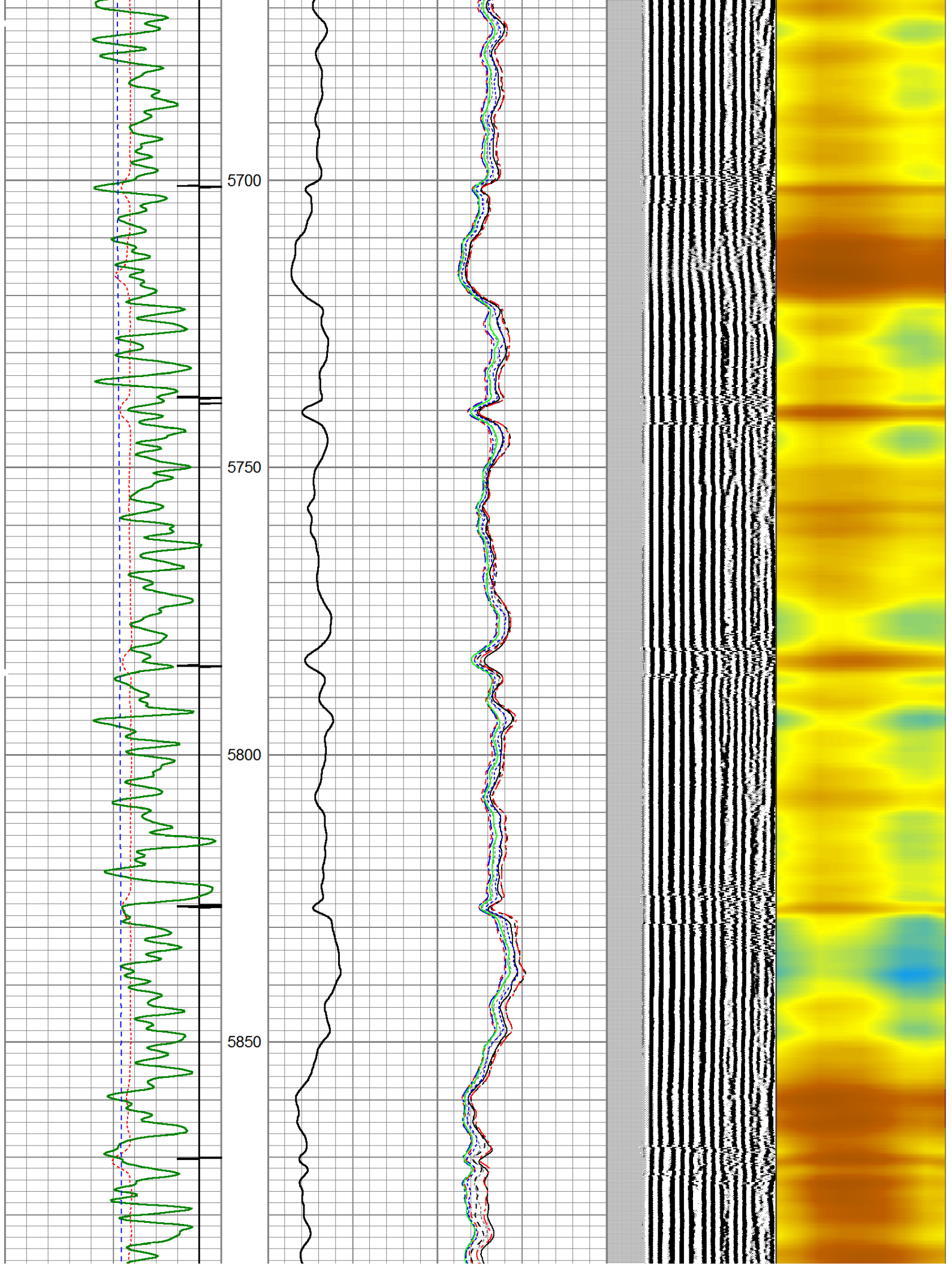


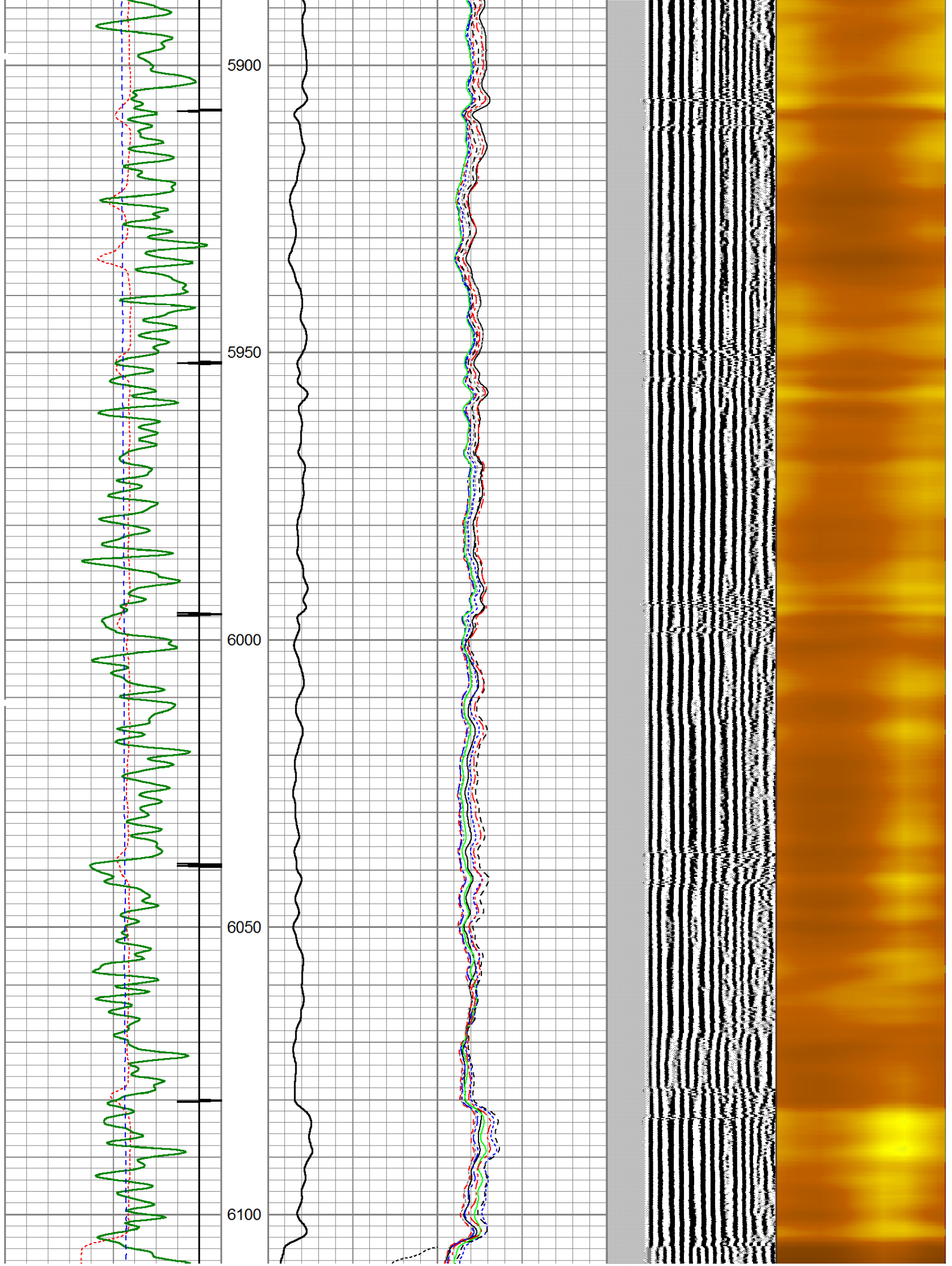


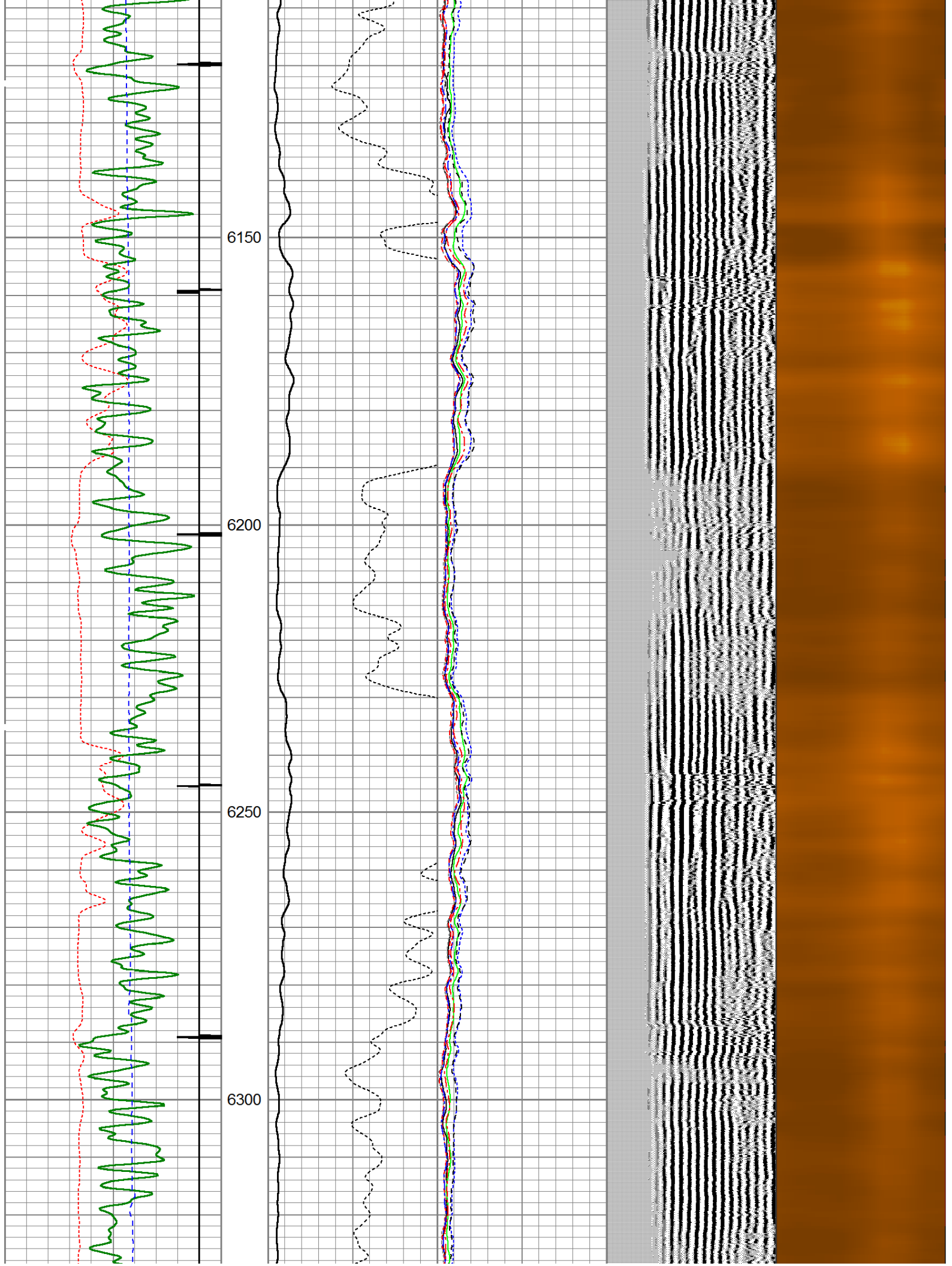


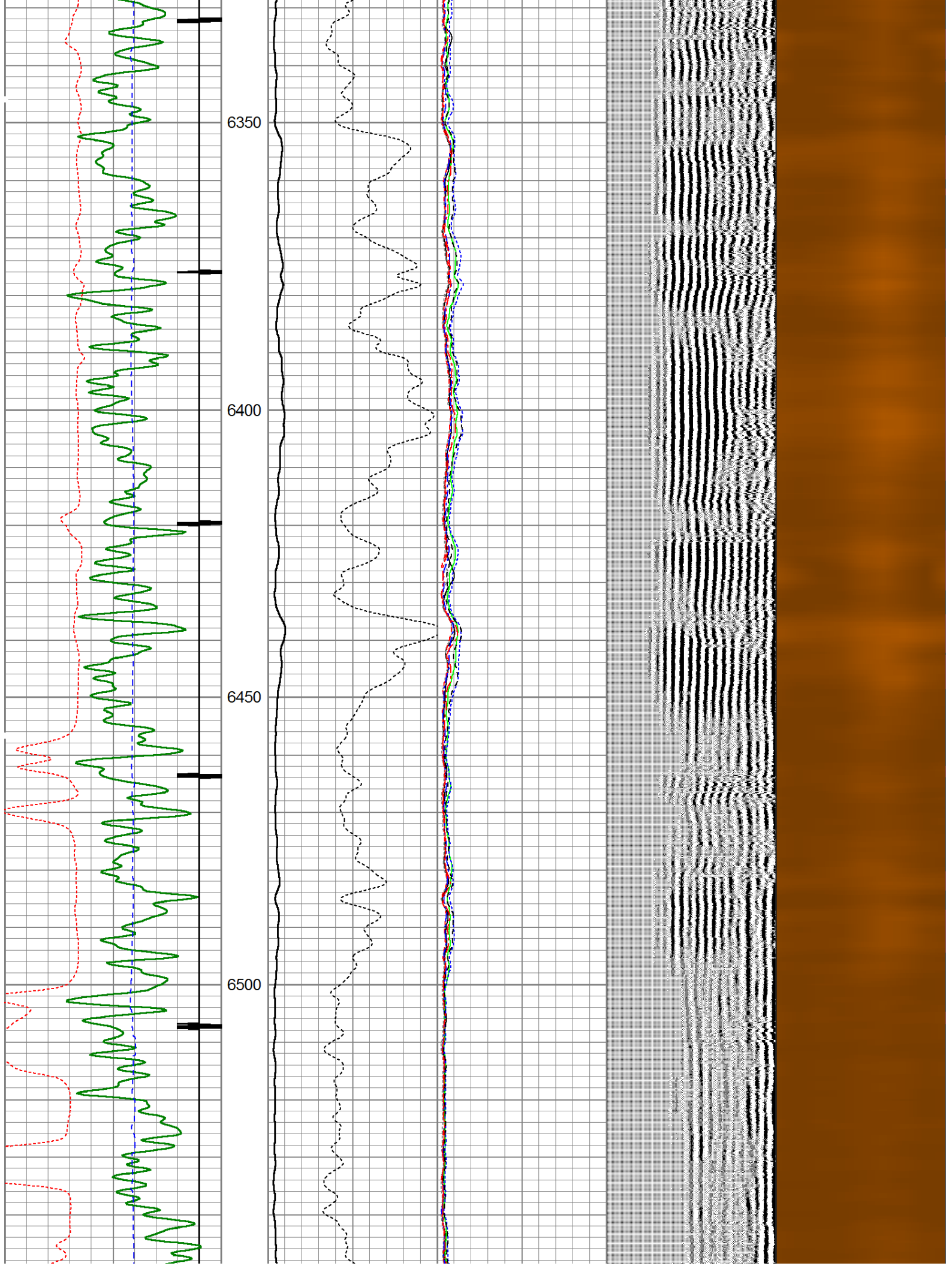


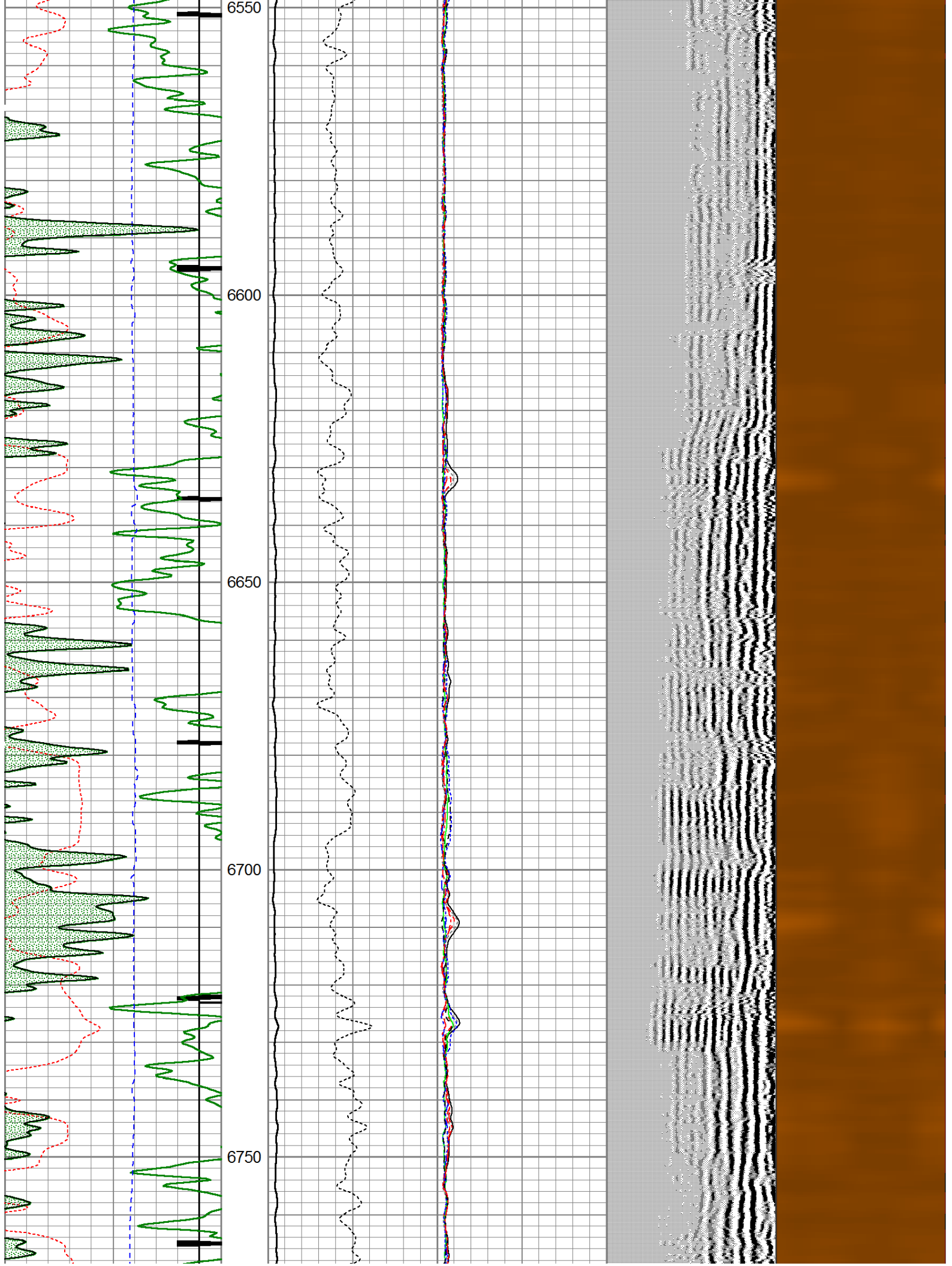


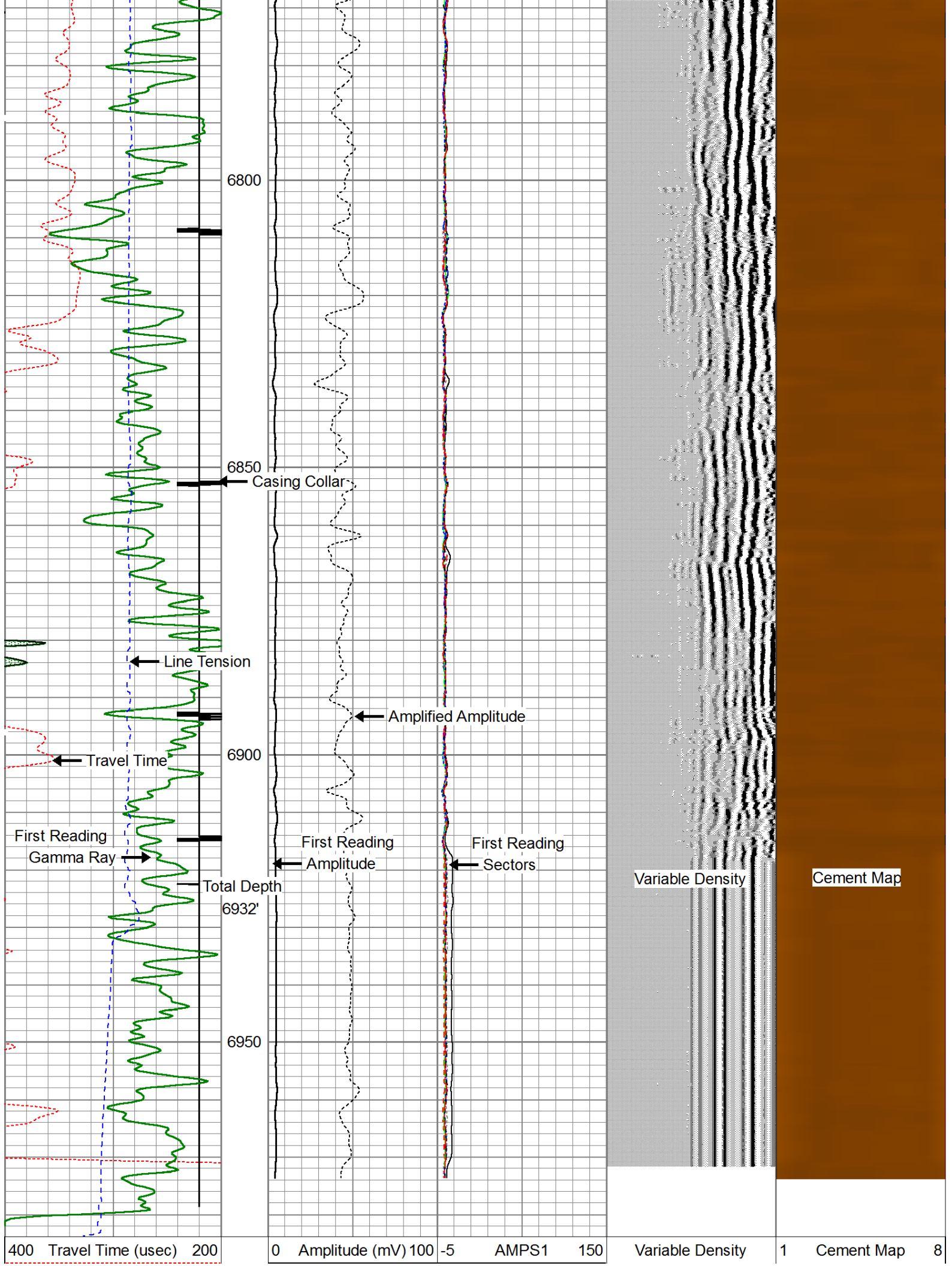


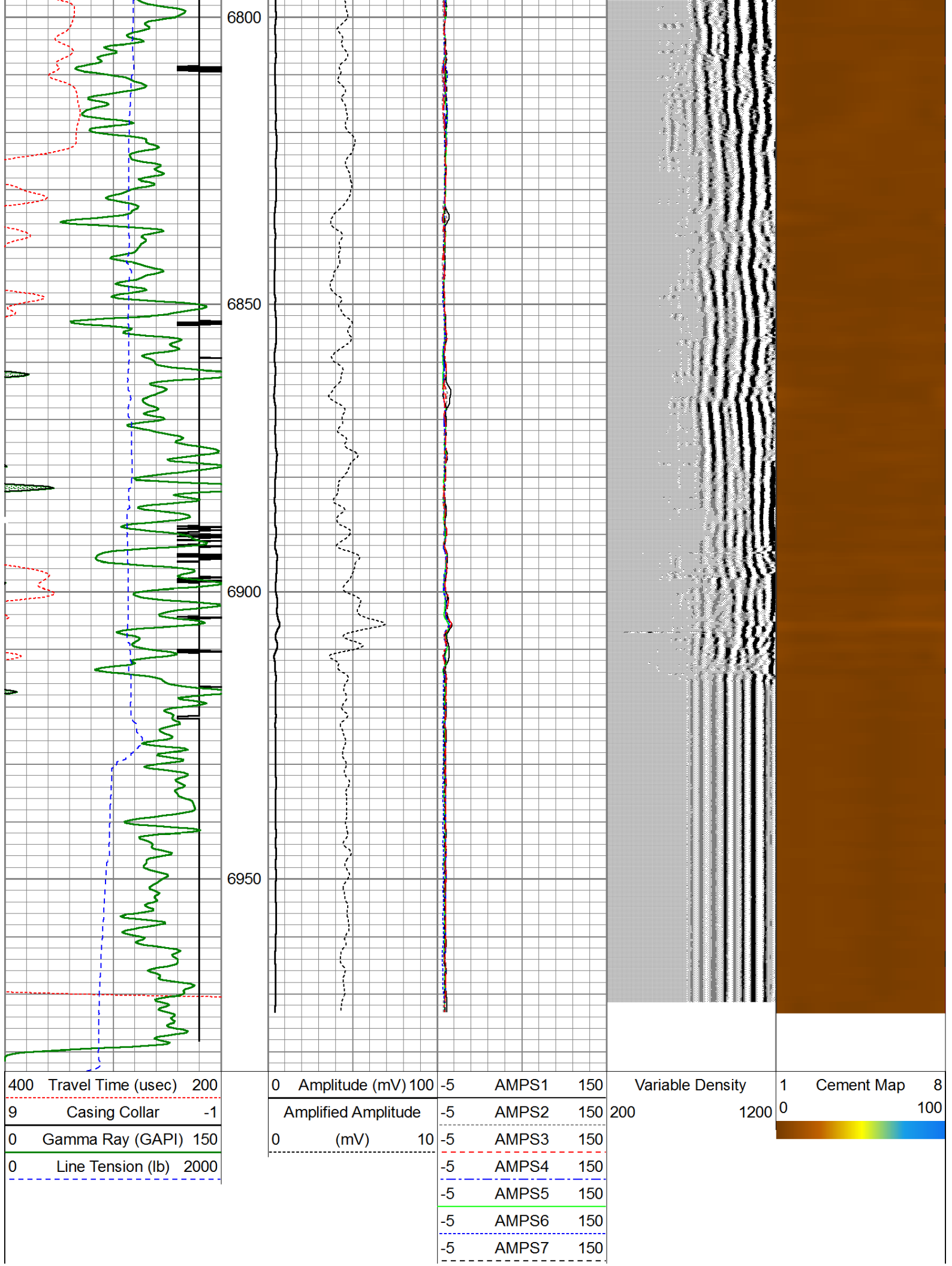












Calibration Report

Database File: noble_slw_ranch_bo1_63_1hn.db
 Dataset Pathname: pass16
 Dataset Creation: Tue Apr 30 09:45:23 2013 by Log 0

Temperature Calibration Report

Serial Number: 101234
 Tool Model: 1.375TEMP
 Performed: Tue Apr 30 07:40:44 2013

	Reference	Reading
Low Reference:	1.00 degF	10.00 cps
High Reference:	1.00 degF	10.00 cps
Gain:	0.10	
Offset:	0.00	
Delta Spacing	2	

Gamma Ray Calibration Report

Serial Number: 110108-Dig
 Tool Model: Probe275
 Performed: Mon Apr 29 16:12:13 2013

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

Sensitivity: 0.8500 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: 101224
 Tool Model: Probe

Calibration Casing Diameter: 7.000 in
 Calibration Depth: 209.492 ft

Master Calibration, performed Tue Apr 30 07:15:05 2013:


	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.003	0.628	2.000	62.165	95.446	3.255
CAL	-0.019	0.645				
5'	-0.006	0.699	1.000	62.165	86.725	1.519
SUM						
S1	-0.010	0.644	0.000	100.000	152.770	-16.565
S2	0.008	0.640	0.000	100.000	158.373	-1.346
S3	-0.009	0.625	0.000	100.000	157.733	1.448
S4	-0.001	0.622	0.000	100.000	160.429	0.188
S5	0.002	0.632	0.000	100.000	158.671	-0.242
S6	0.001	0.623	0.000	100.000	160.776	-0.216
S7	0.001	0.613	0.000	100.000	163.598	-0.240
S8	-0.003	0.630	0.000	100.000	157.936	0.540

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

	Raw (v)	Calibrated (v)	Results
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	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.019	0.645	1.000	0.000
Air Zero Calibration, performed Tue Apr 30 06:30:27 2013:						
	Raw (v)	Calibrated (v)	Results			
	Zero	Zero	Offset			
3'	-0.014	0.000	0.011			
5'	-0.013	0.000	0.007			
SUM						
S1	-0.146	0.000	0.136			
S2	-0.006	0.000	0.014			
S3	-0.014	0.000	0.005			
S4	-0.011	0.000	0.010			
S5	-0.012	0.000	0.013			
S6	-0.013	0.000	0.015			
S7	-0.015	0.000	0.016			
S8	-0.014	0.000	0.010			

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	13.09		RBT-Probe (101224) Probe Radii Bond Tool with Digital Telemetry	8.75	2.75	90.00
WVFCAL	13.09					
WVFS1	13.09					
WVFS2	13.09					
WVFS3	13.09					
WVFS4	13.09					
WVFS5	13.09					
WVFS6	13.09					
WVFS7	13.09					
WVFS8	13.09					
WVF5FT	12.09		Probe275 2.75" Centralizer	2.88	2.75	20.00

CCL	5.13		4.78	2.75	57.00
GR	3.79				
TEMP	0.08		1.25	1.38	30.00
Dataset: noble_slw_ranch_bo1_63_1hn.db: field/well/run1/pass16 Total Length: 21.53 ft Total Weight: 227.00 lb O.D.: 2.75 in					