



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

Company		Noble Energy	
Well		ROHN State LD04-65-1HN	
Field		Wattenberg	
County		Weld	
State		Colorado	
Company		Noble Energy	
Well		ROHN State LD04-65-1HN	
Field		Wattenberg	
County		Weld	
State		Colorado	
Location:		API # : 05-123-33087	
SEC 4		TWP 9 N RGE 58 W	
2310' FSL & 660' FWL			
Permanent Datum		Ground Level	
Log Measured From		Kelly Bushing	
Drilling Measured From		Kelly Bushing	
Elevation		4704'	
Other Services			
Date		10th October, 2013	
Run Number		One	
Depth Driller		9563'	
Depth Logger		5892'	
Bottom Logged Interval		5872'	
Top Log Interval		Surface	
Open Hole Size		8 3/4"	
Type Fluid		Fresh Water	
Density / Viscosity		8.34	
Max. Recorded Temp.		207 °F	
Estimated Cement Top		900'	
Time Well Ready		0830	
Time Logger on Bottom		0930	
Equipment Number		12029	
Location		Brighton, CO	
Recorded By		R.Grisson	
Witnessed By		Bill Mansfield	
Borehole Record		Tubing Record	
Run Number		Bit	
1		26"	
2		13.75"	
3		8.75"	
4		6.125"	
Casing Record		Size	
Surface String		9 5/8"	
Prot. String		7"	
Production String		4.5"	
Liner		26#	
Short Joint		11 6#	

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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

Well logged using 24' KB

Your Crew for Today. T.Canfarelli, M. Bingaman

Main Pass and Repeat Pass logged with zero pressure on surface

Stacked up on top of Liner on Repeat Pass- Went Through Liner on Main Pass

Thank You for using Allied Wireline

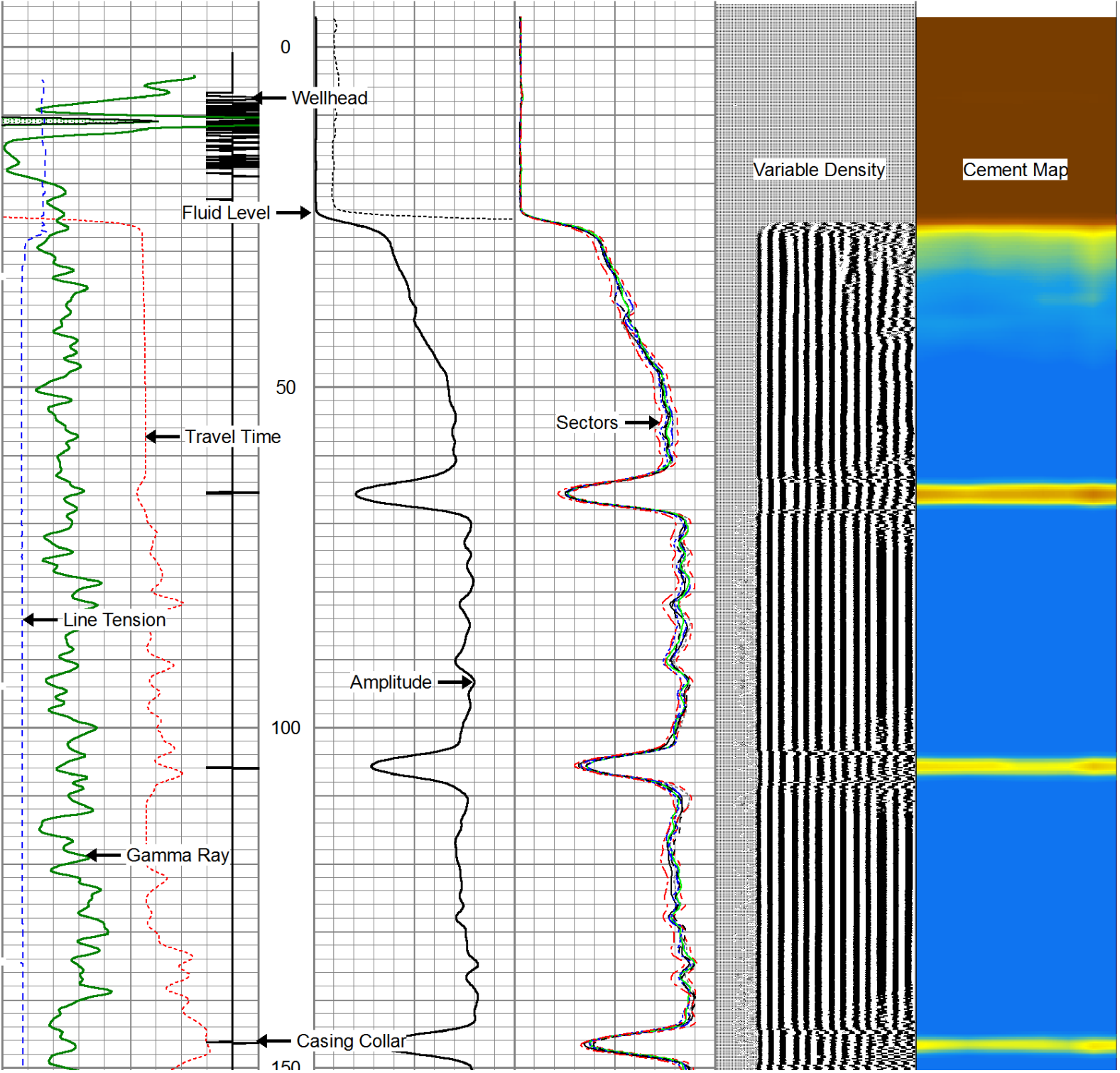
(303) 659-4609

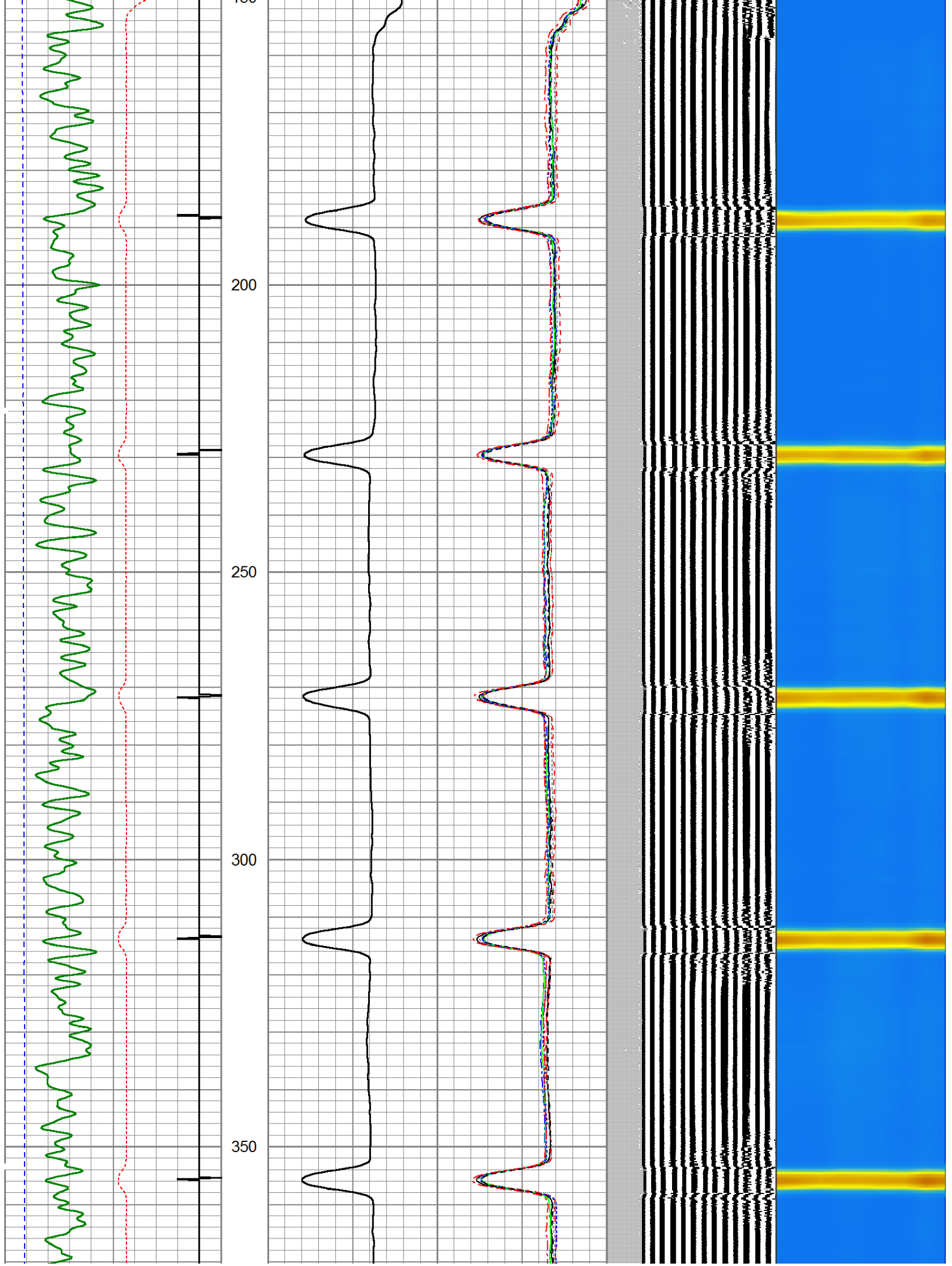


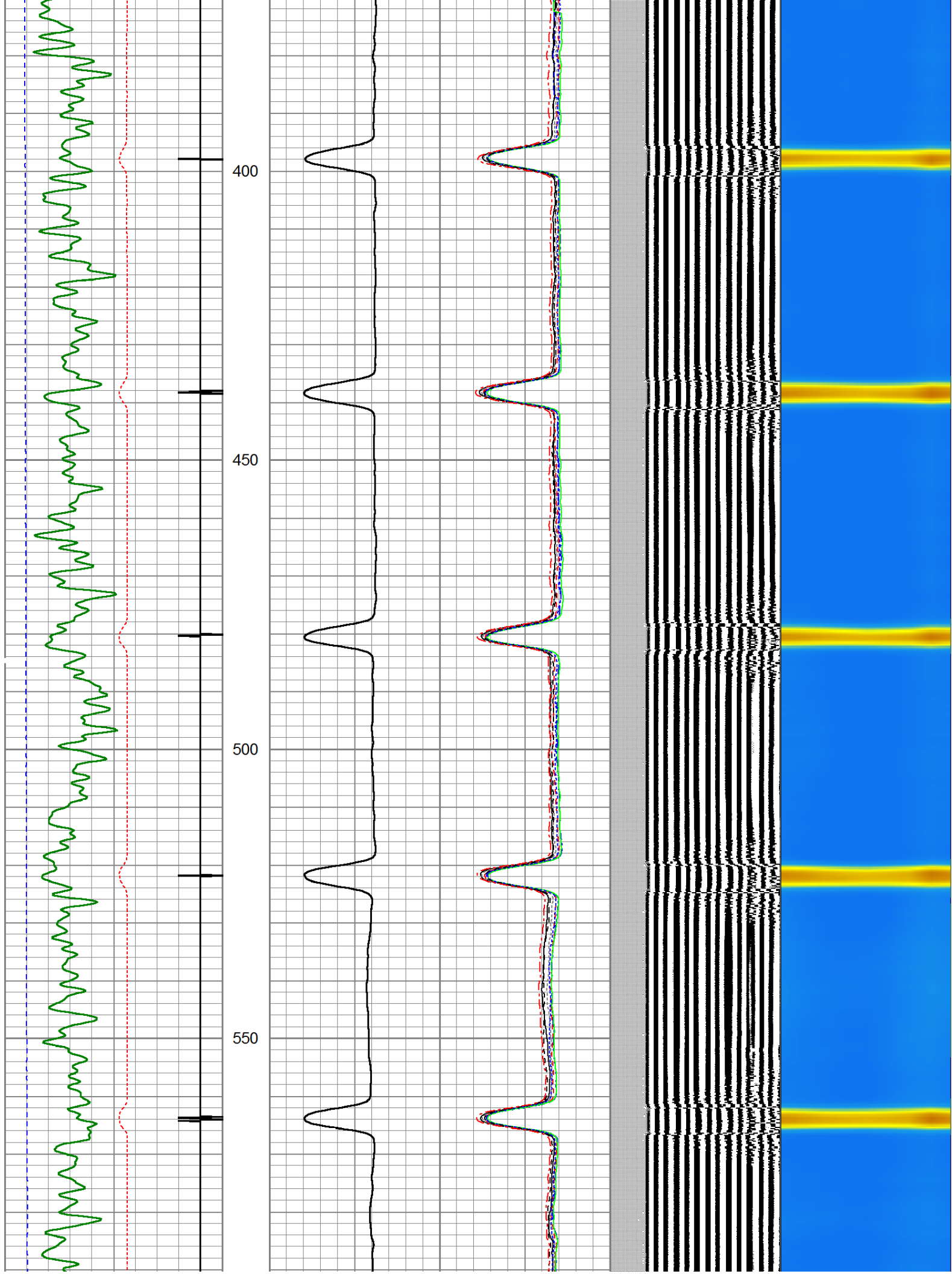
Main Pass (0 PSI)

Database File: noble energy rohn state ld04-65-1hn\_cbl.db  
Dataset Pathname: pass6  
Presentation Format: scbl03  
Dataset Creation: Thu Oct 10 09:29:22 2013 by Log SCH 120126  
Charted by: Depth in Feet scaled 1:240

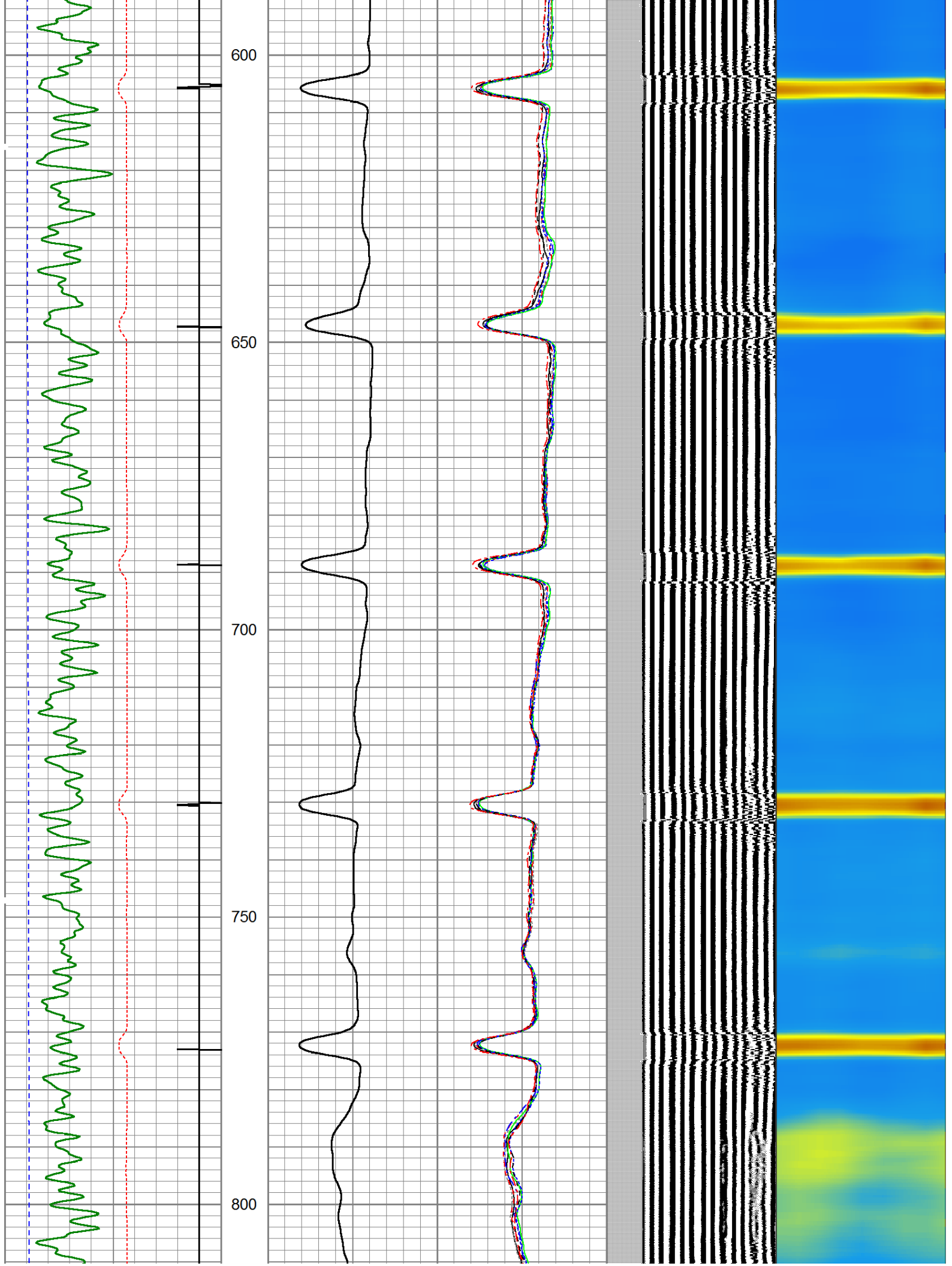
400	Travel Time (usec)	200	0	Amplitude (mV)	100	-5	AMPS1	150	Variable Density	1	Cement Map	8
9	Casing Collar	-1		Amplified Amplitude		-5	AMPS2	150	200	1200	0	100
0	Gamma Ray (GAPI)	150	0	(mV)	10	-5	AMPS3	150				
0	Line Tension (lb)	2500				-5	AMPS4	150				
						-5	AMPS5	150				
						-5	AMPS6	150				
						-5	AMPS7	150				
						-5	AMPS8	150				

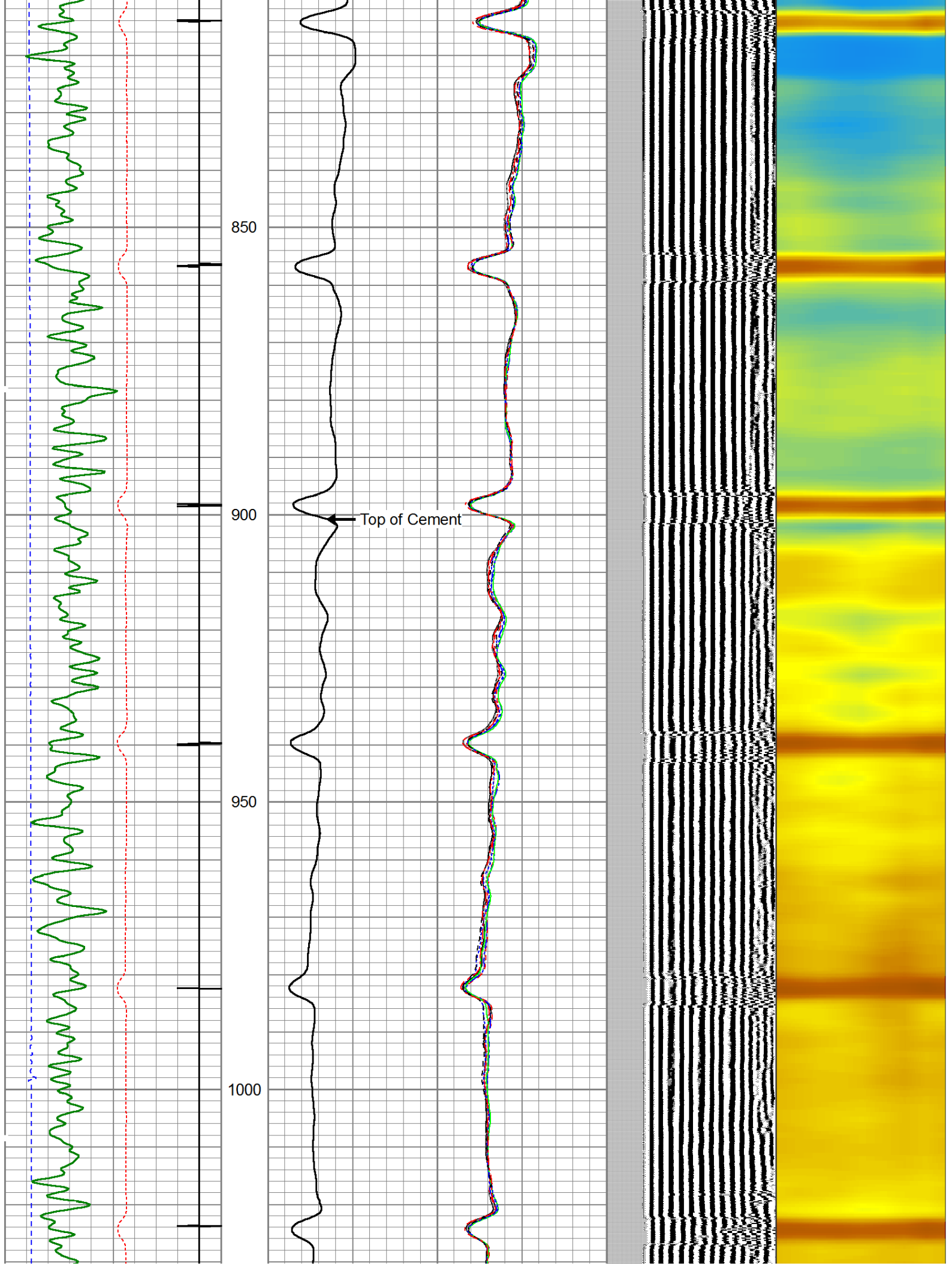


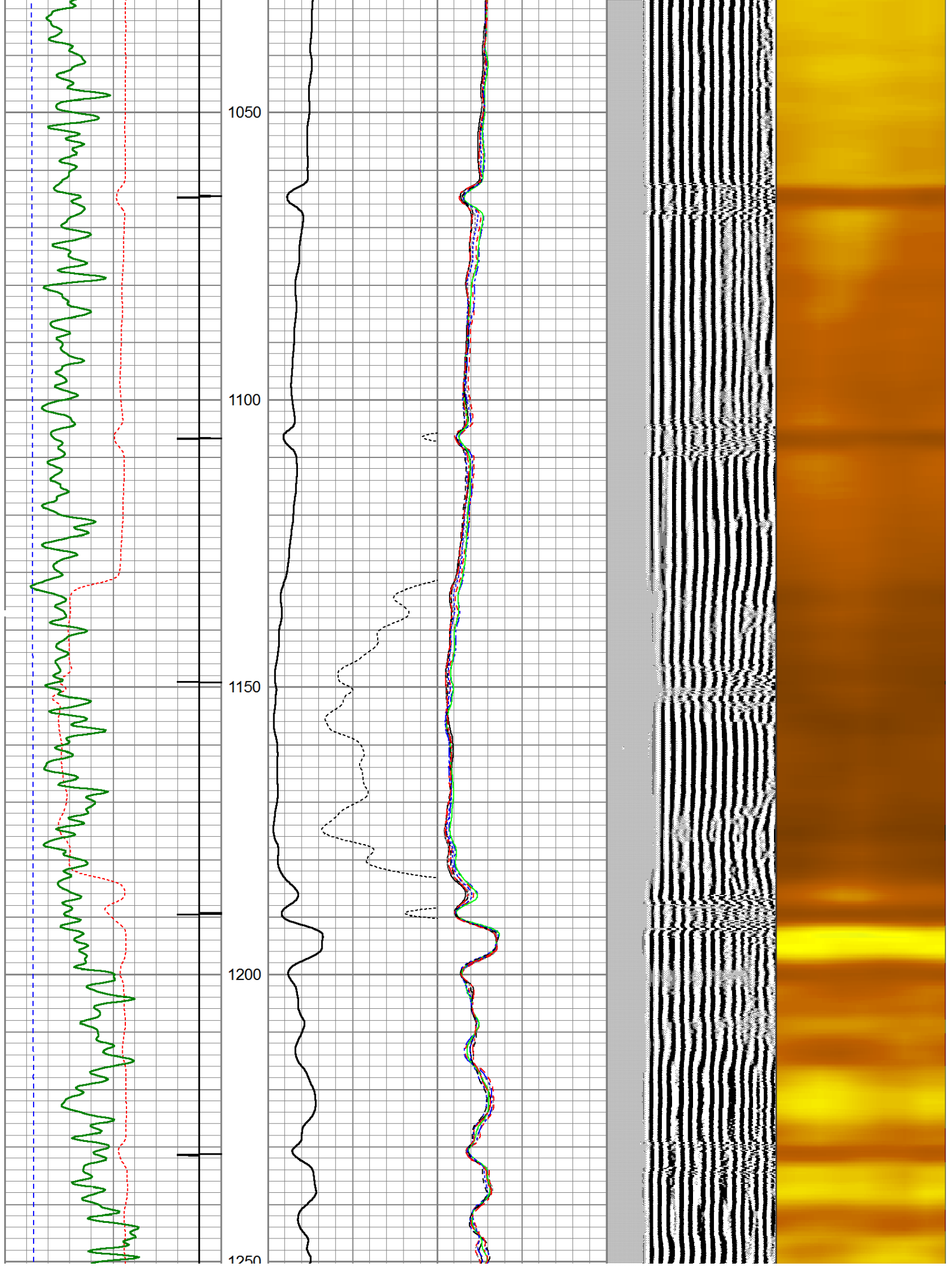




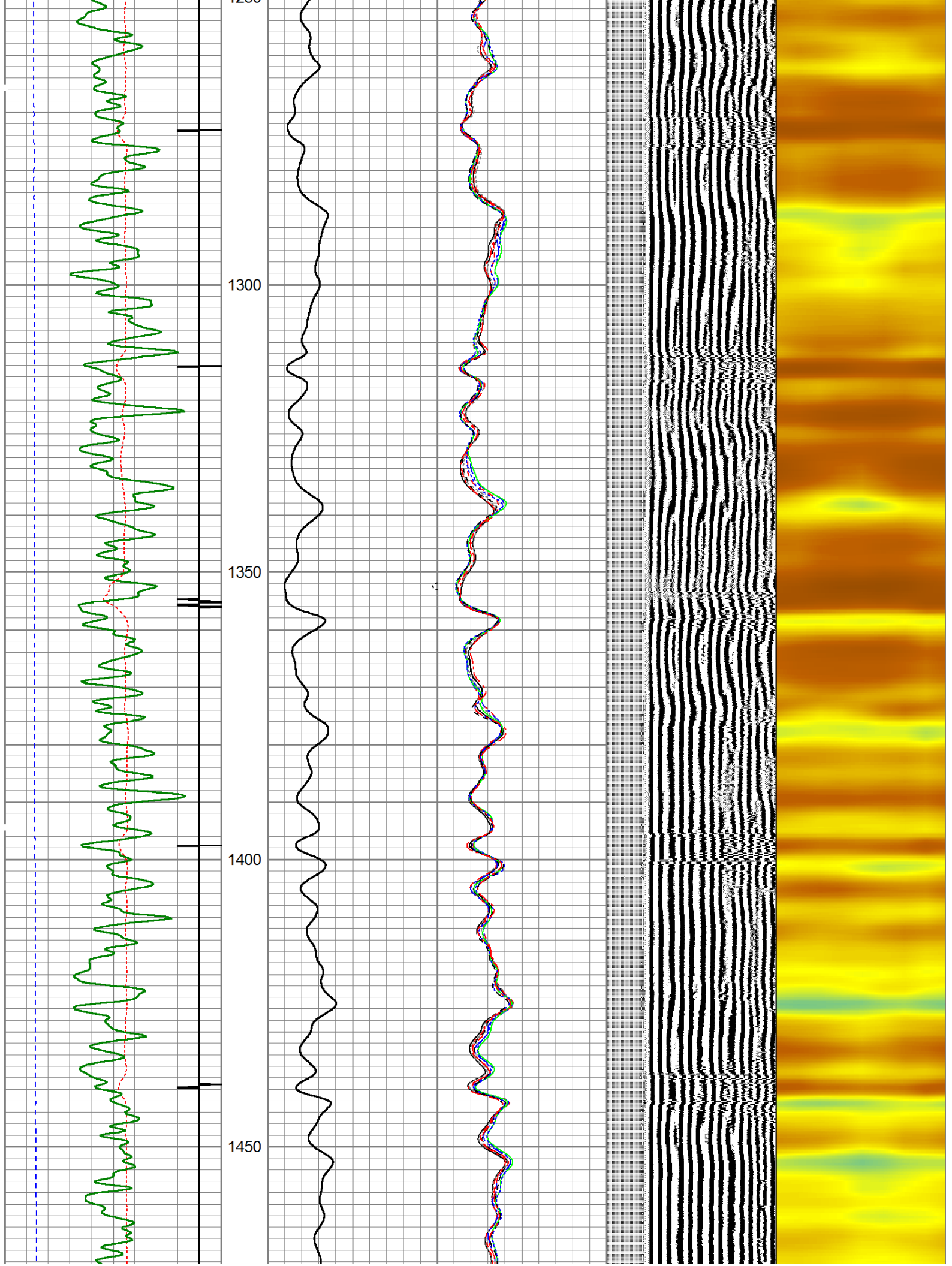




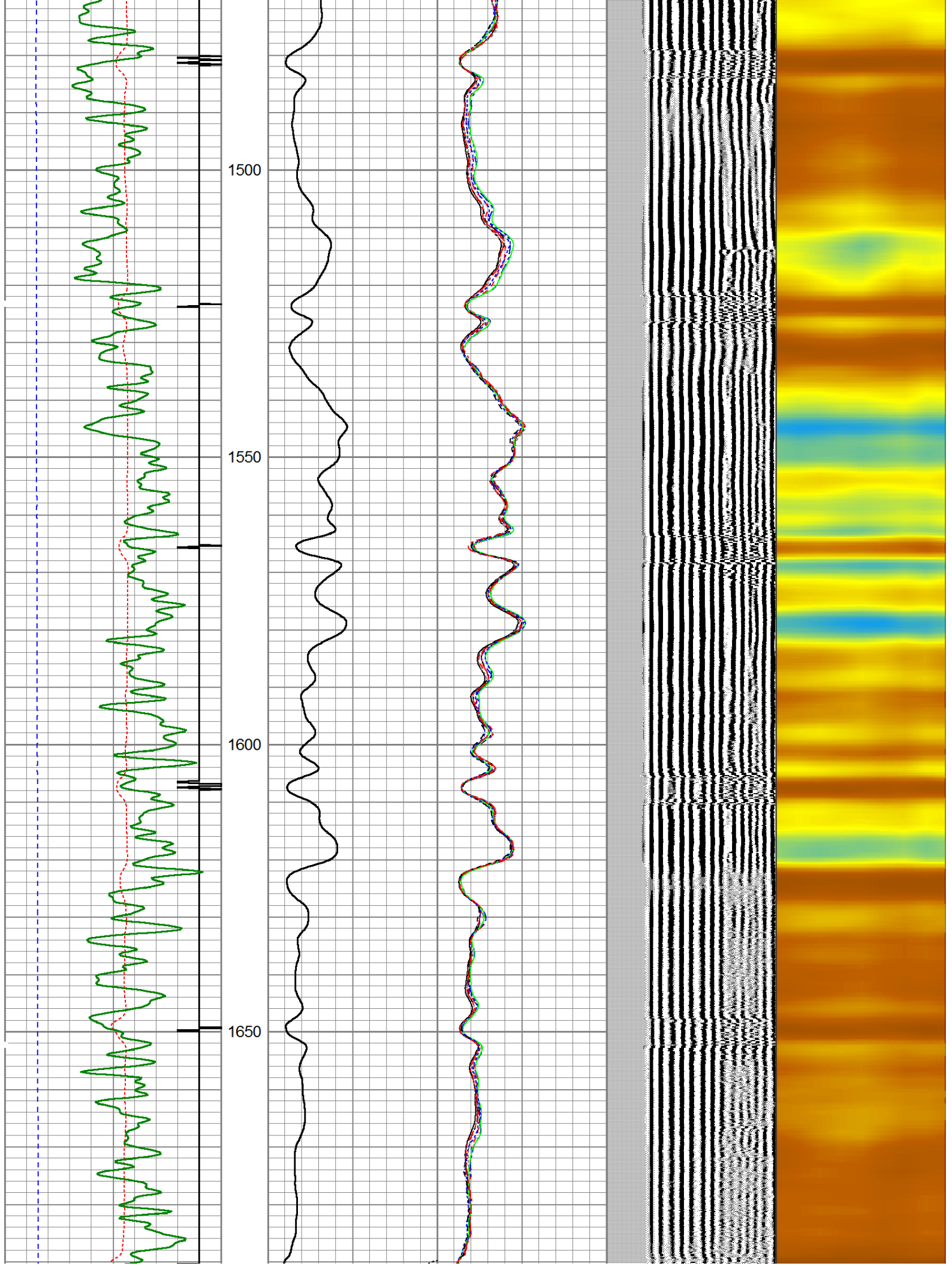


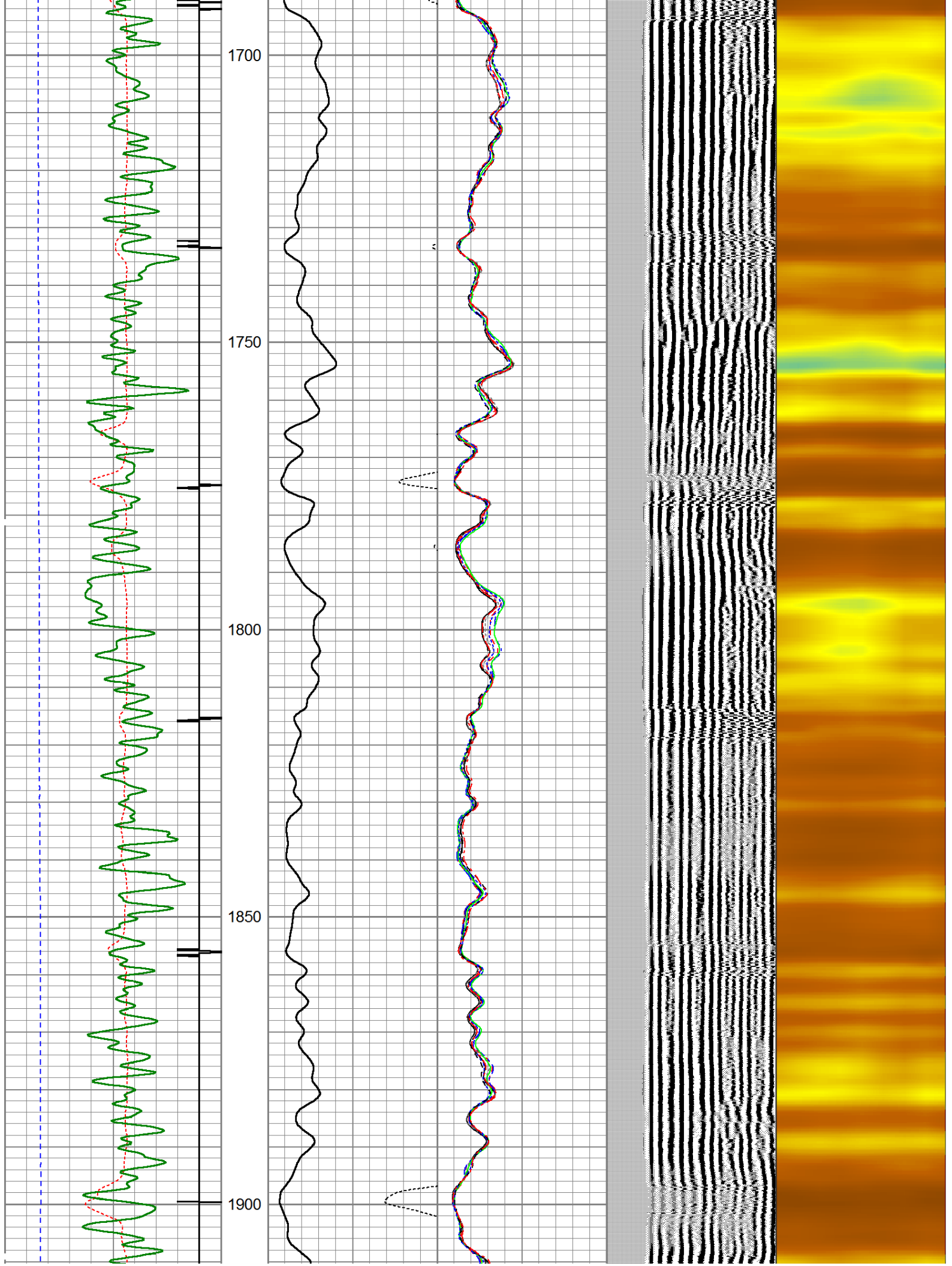


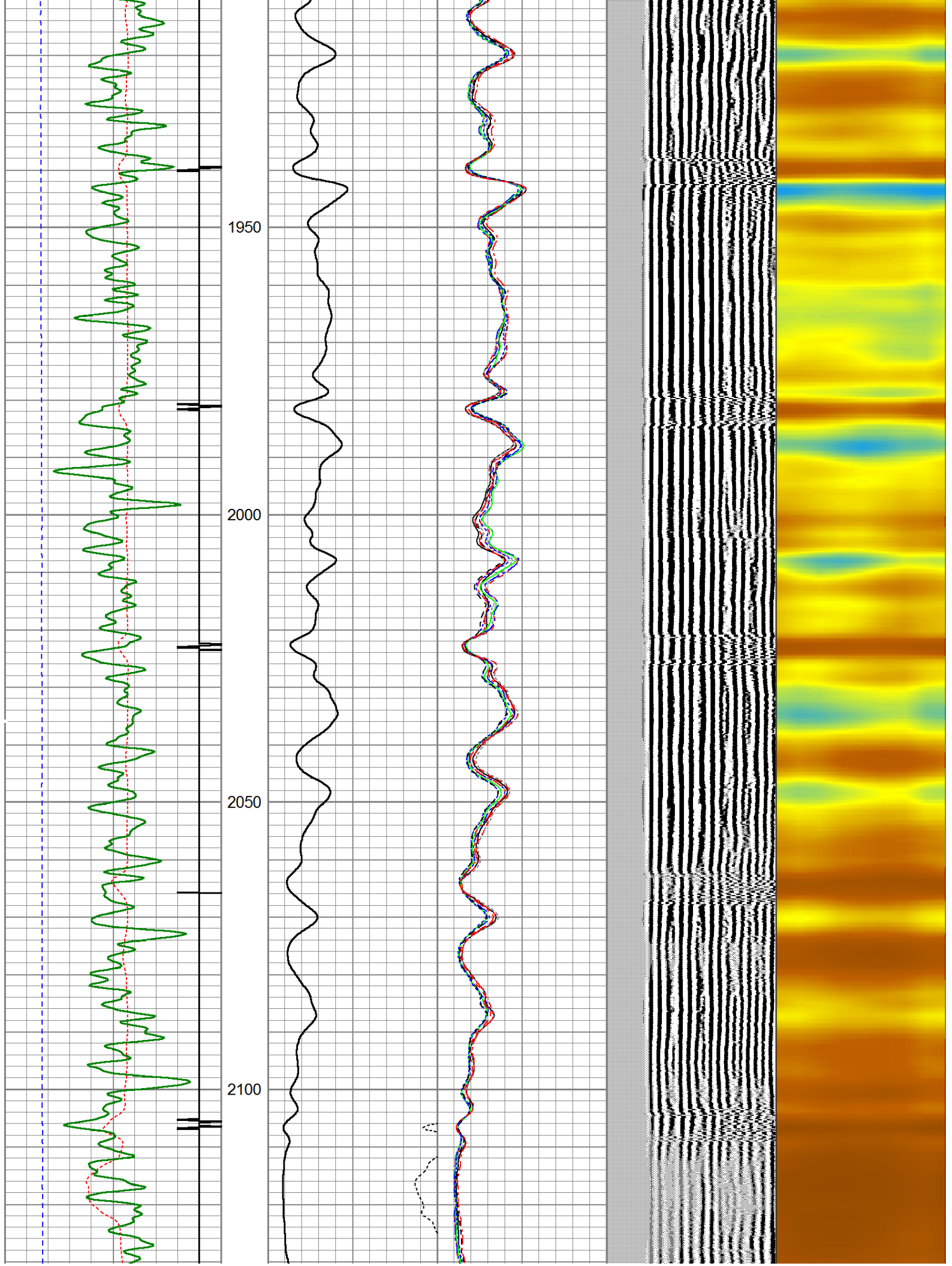




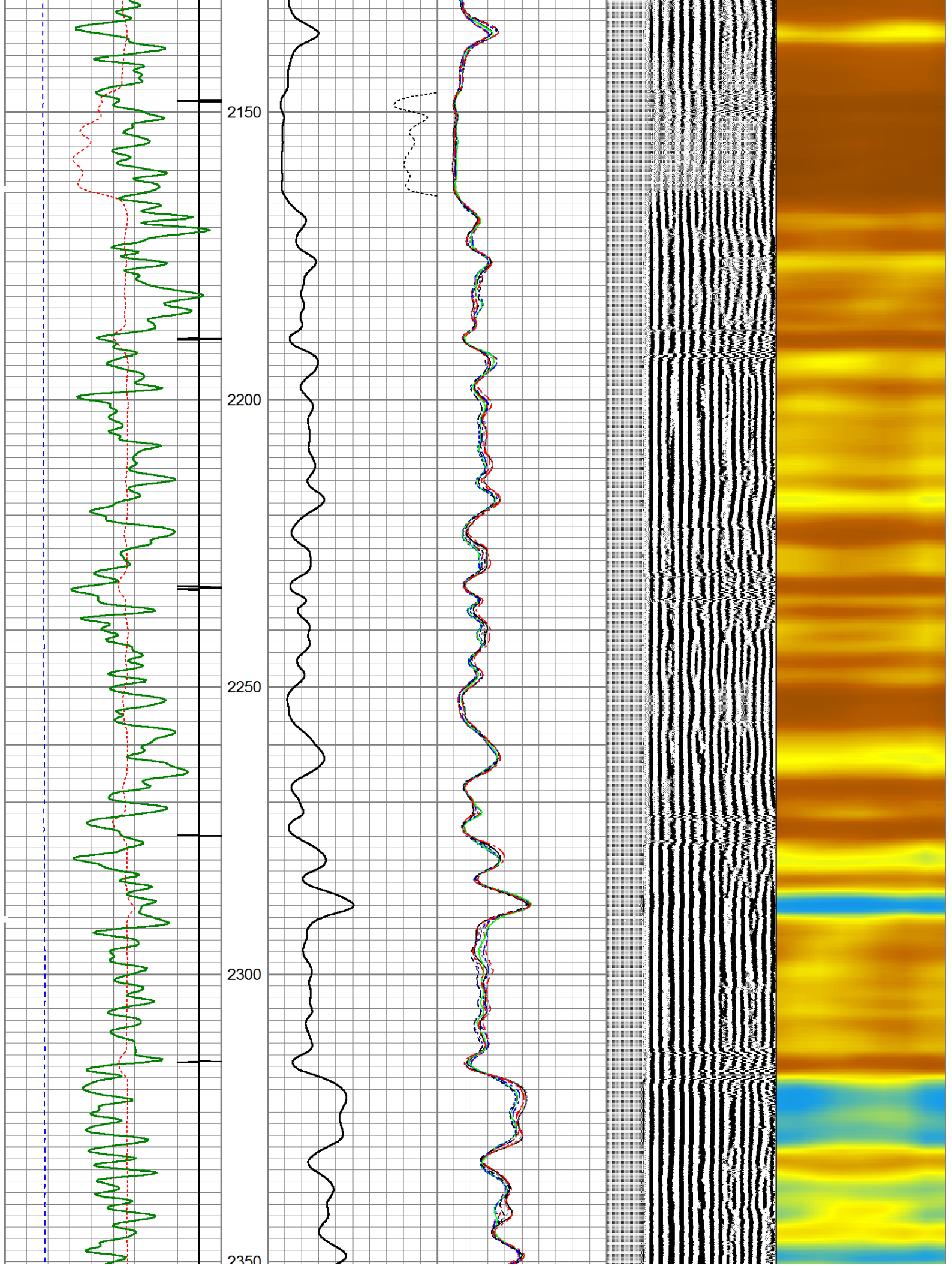




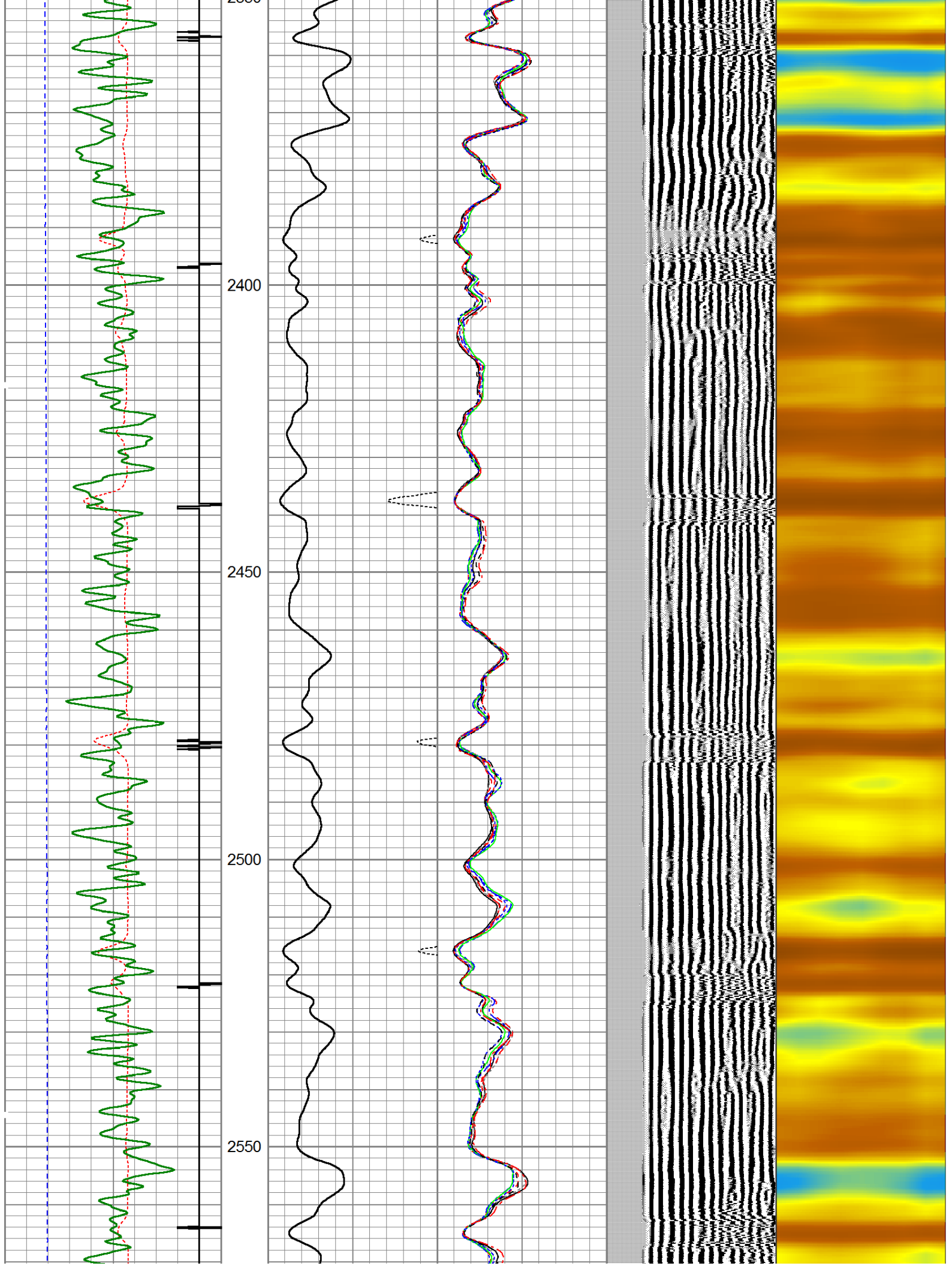


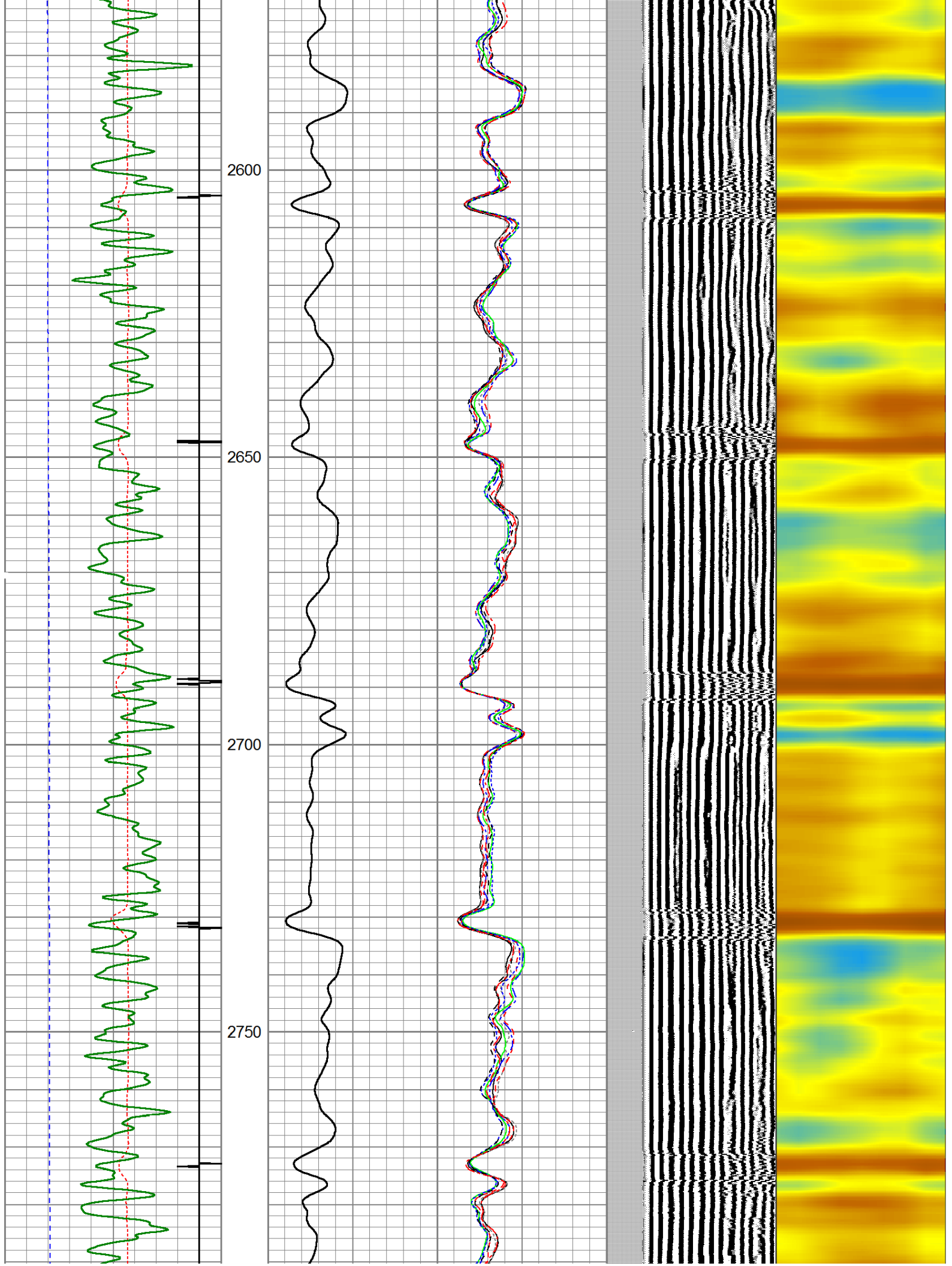


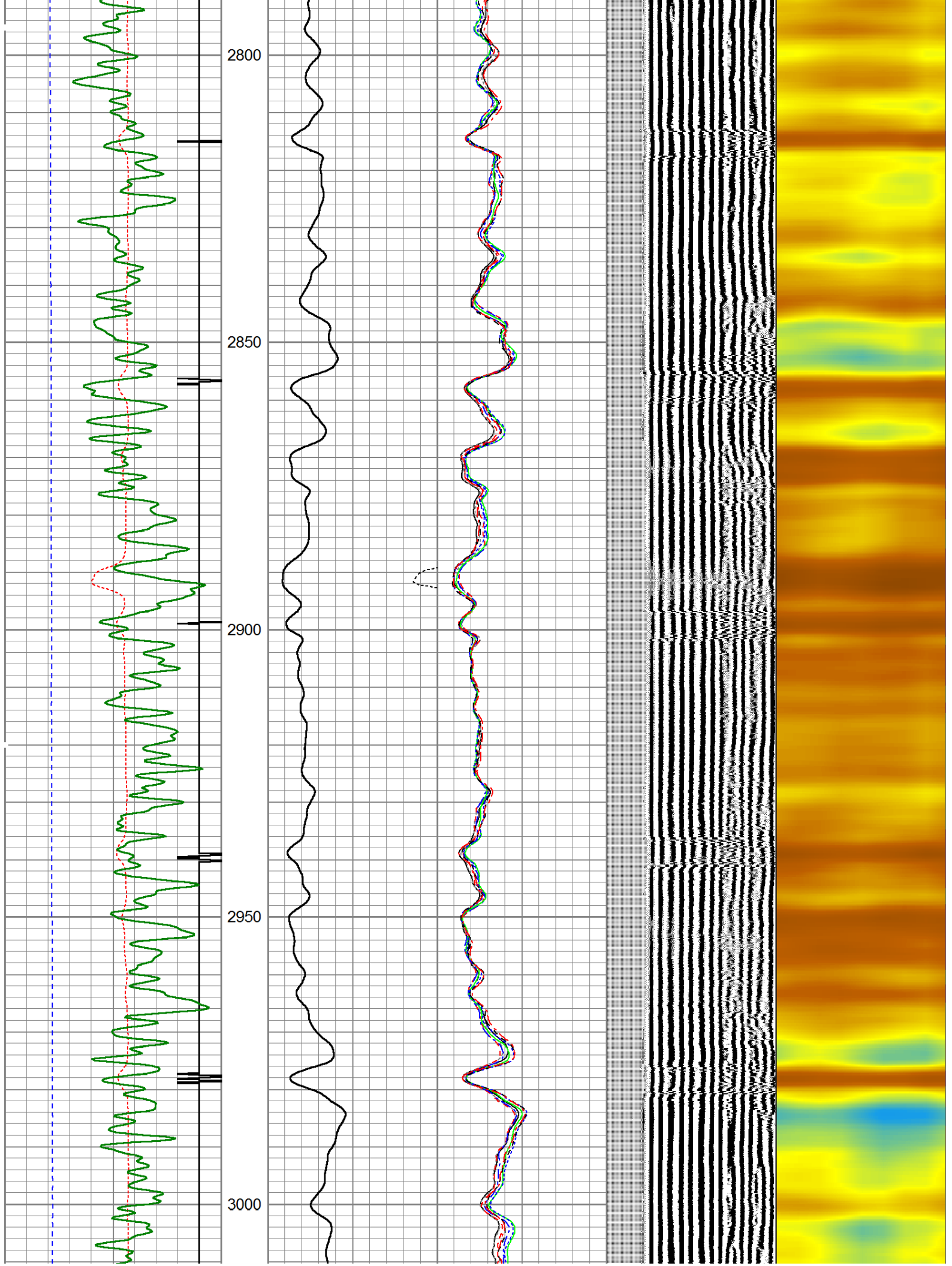




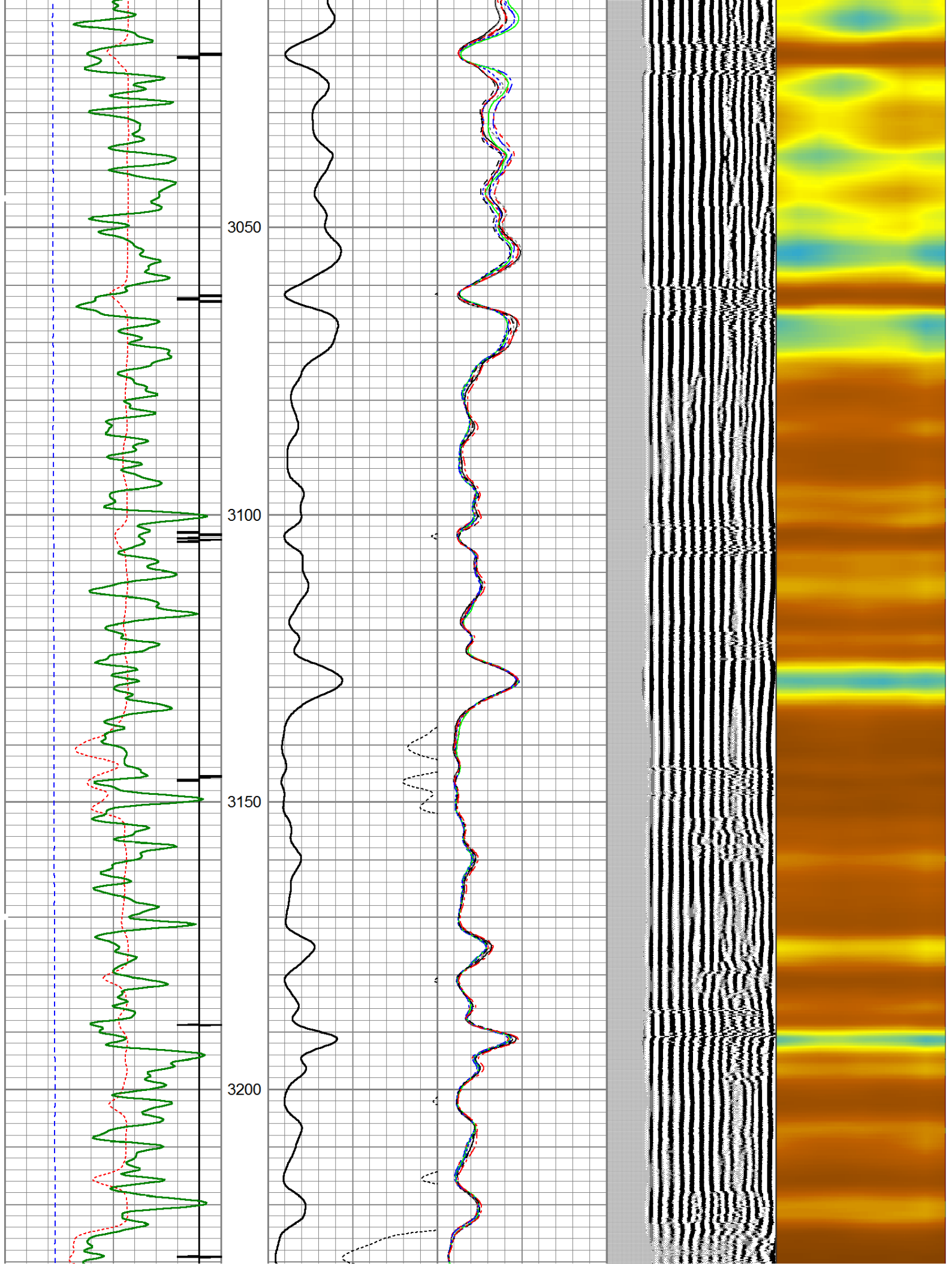




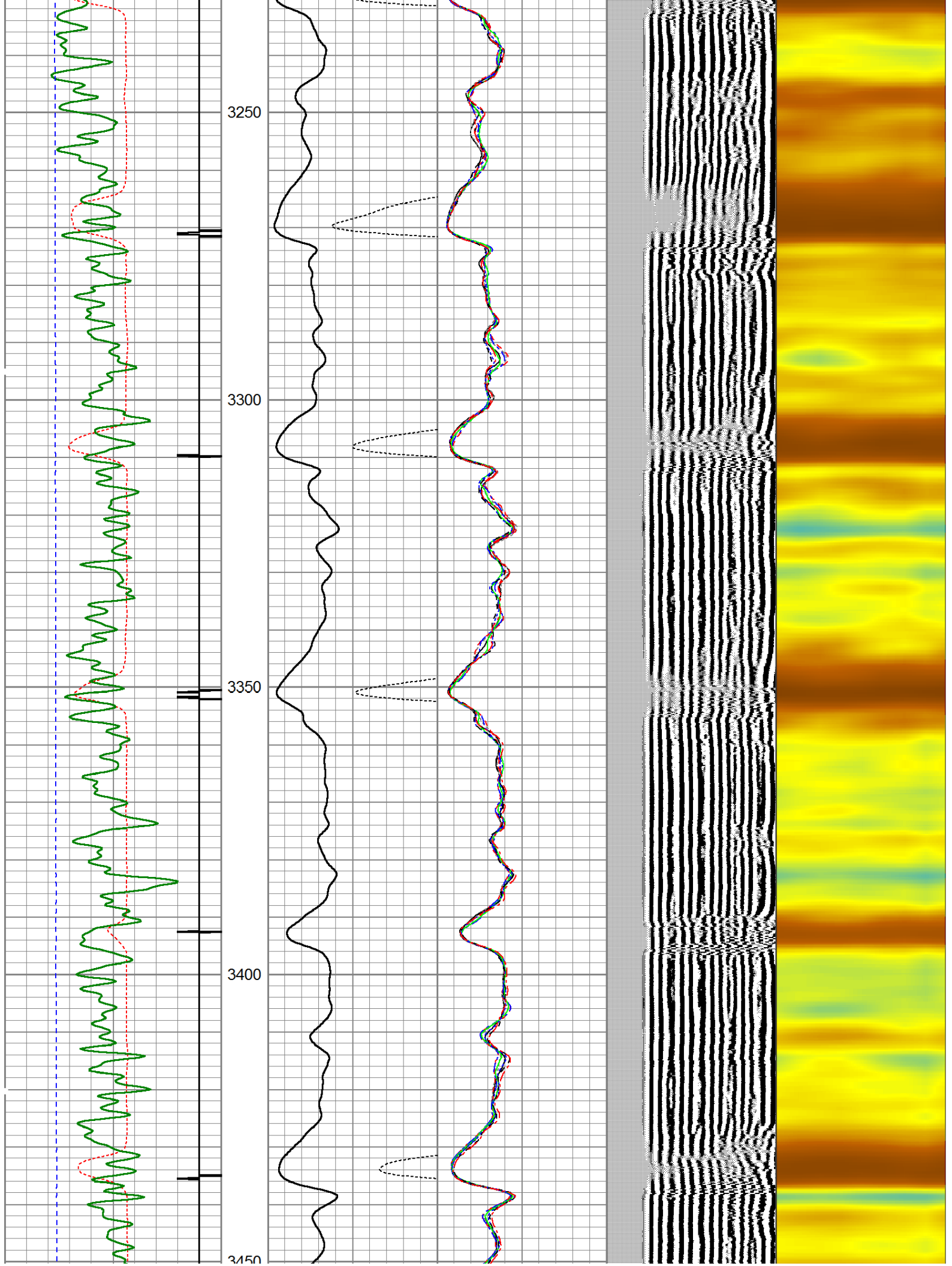


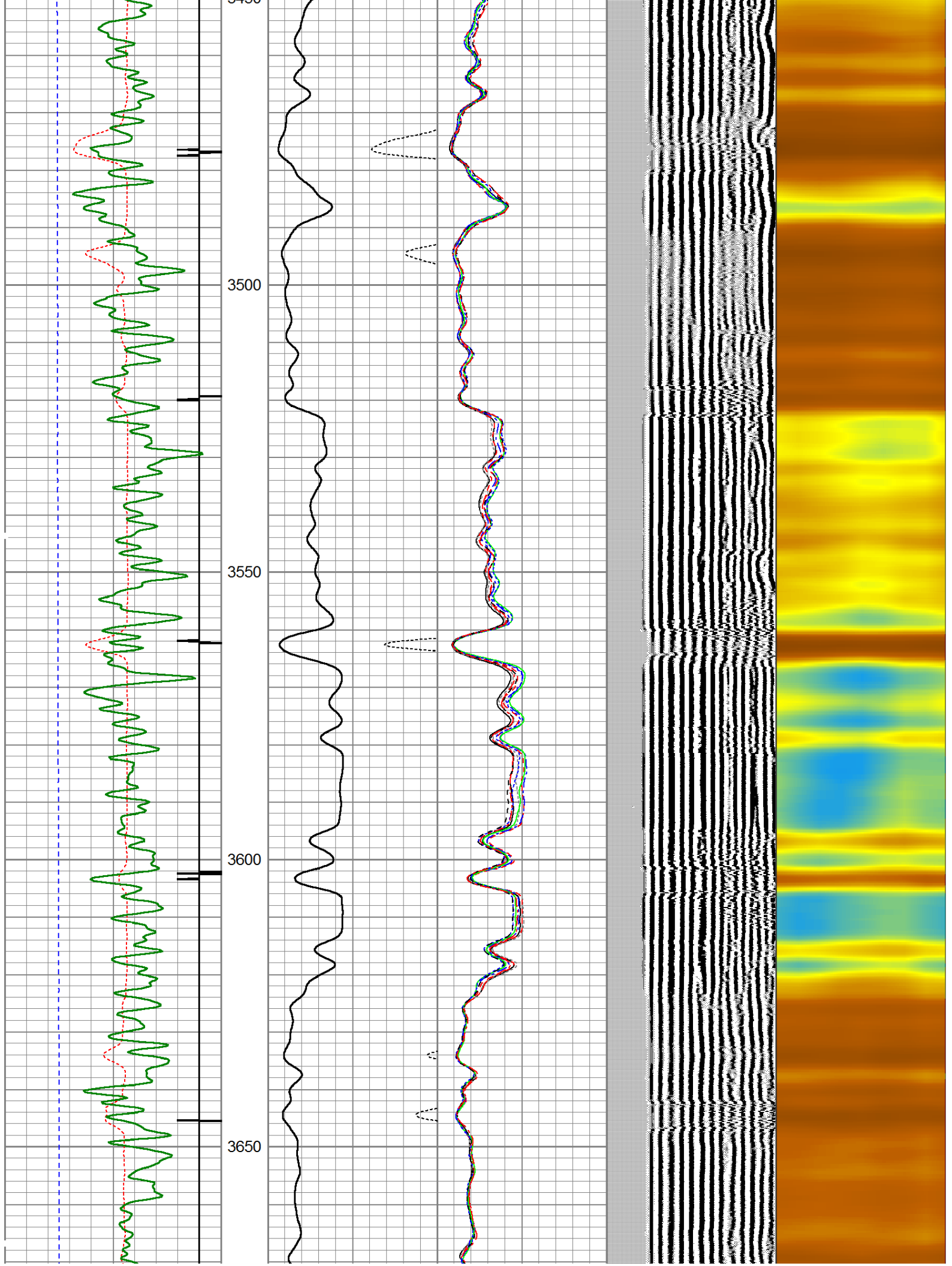


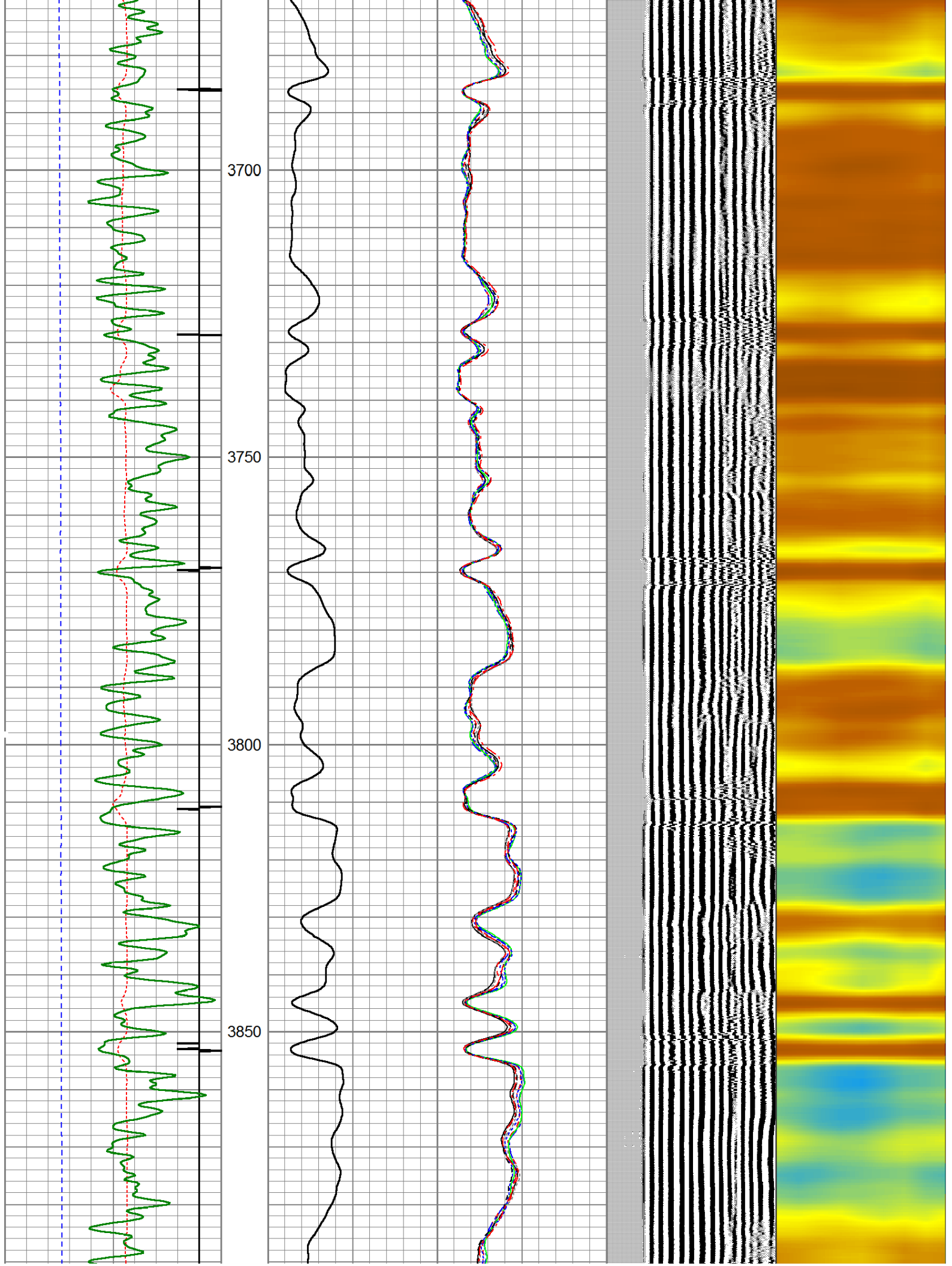




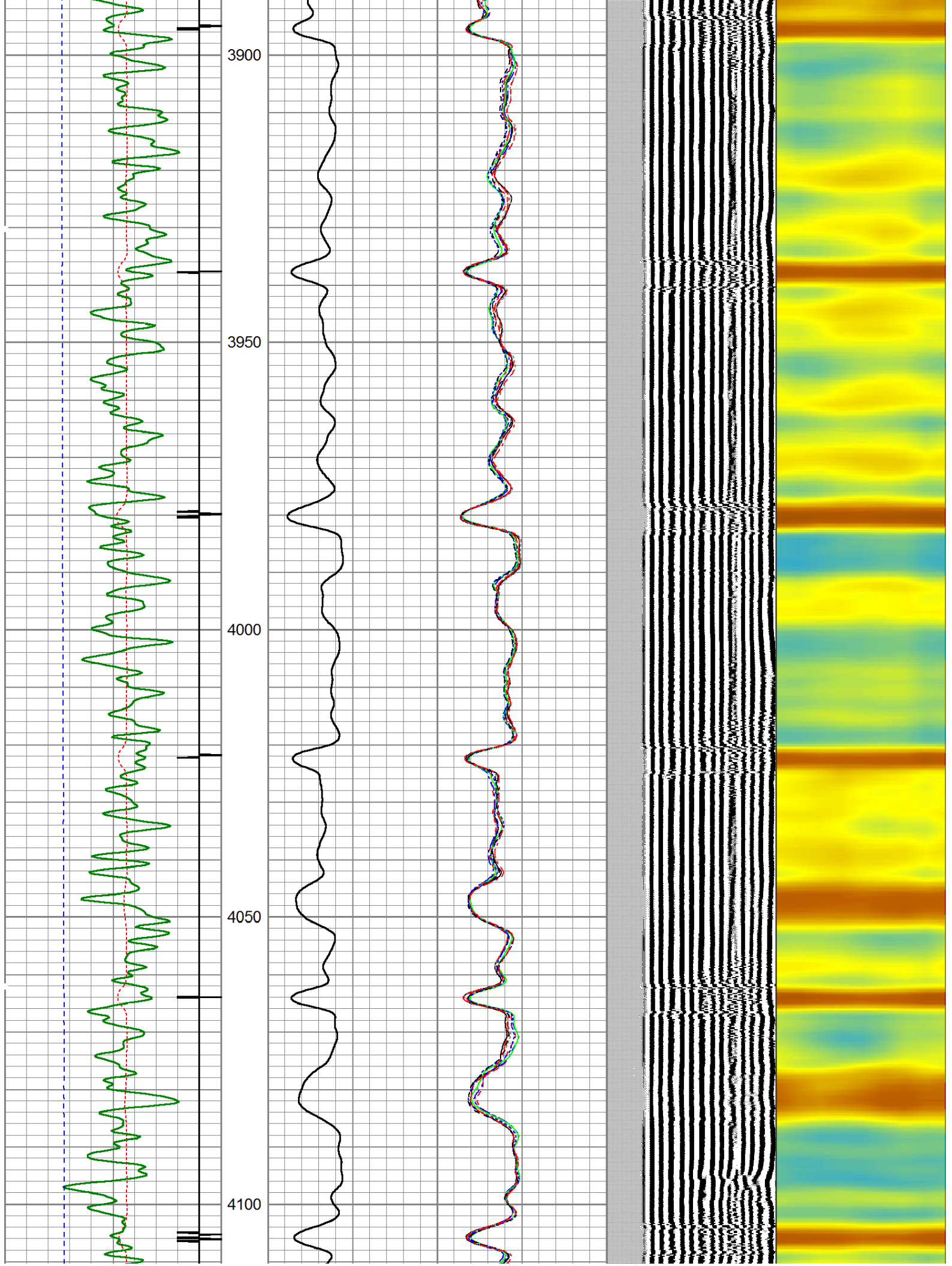




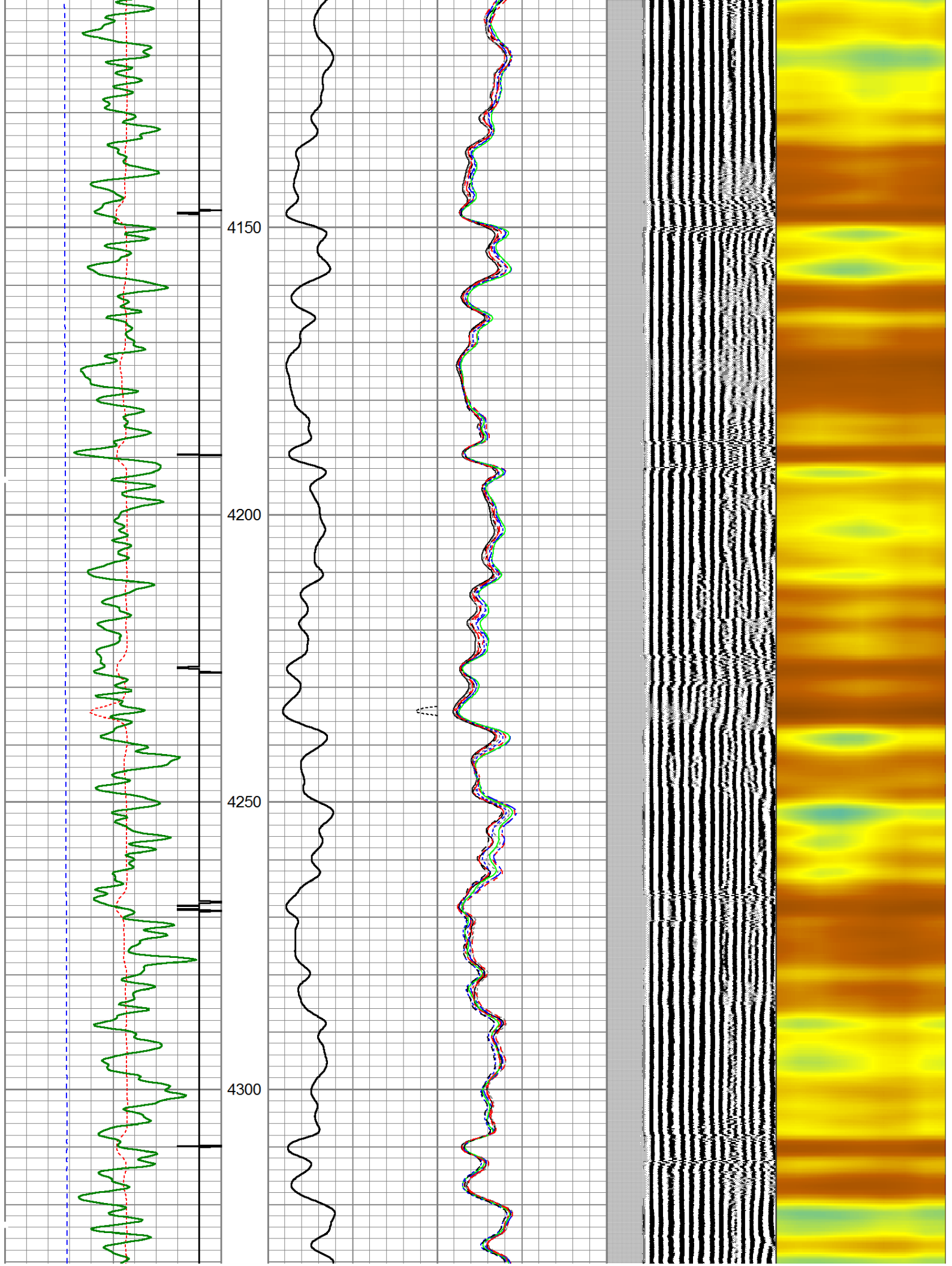


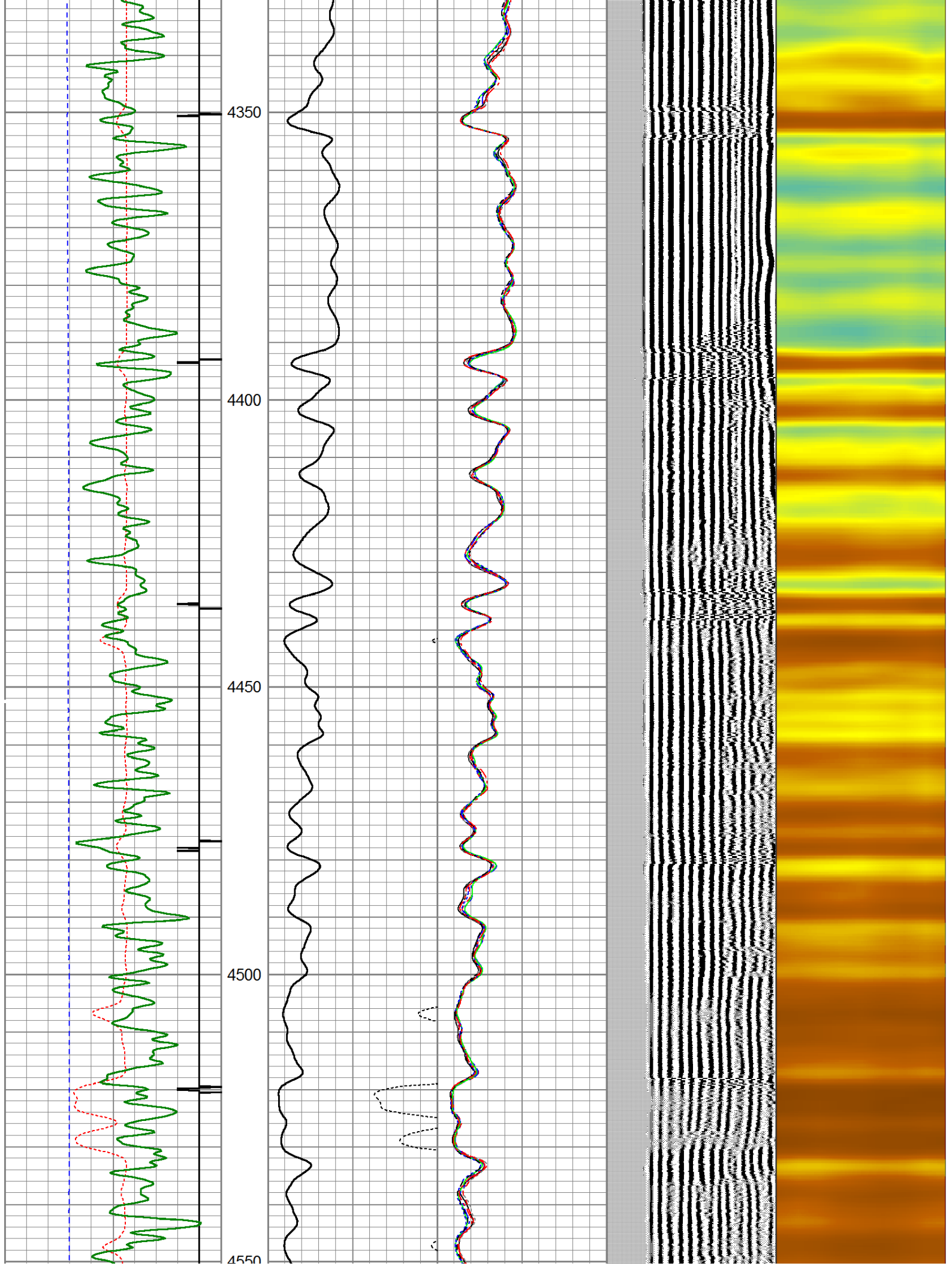




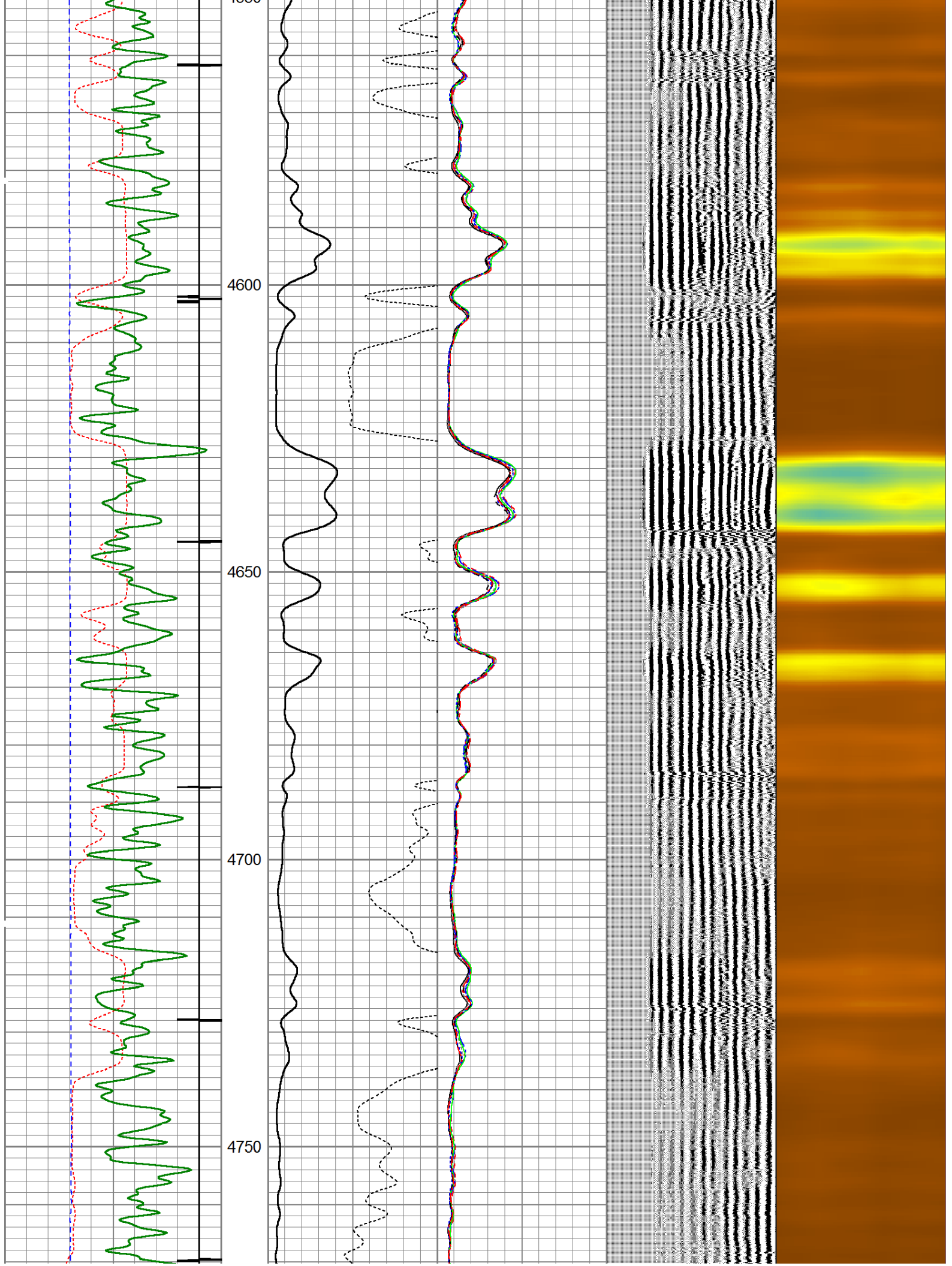


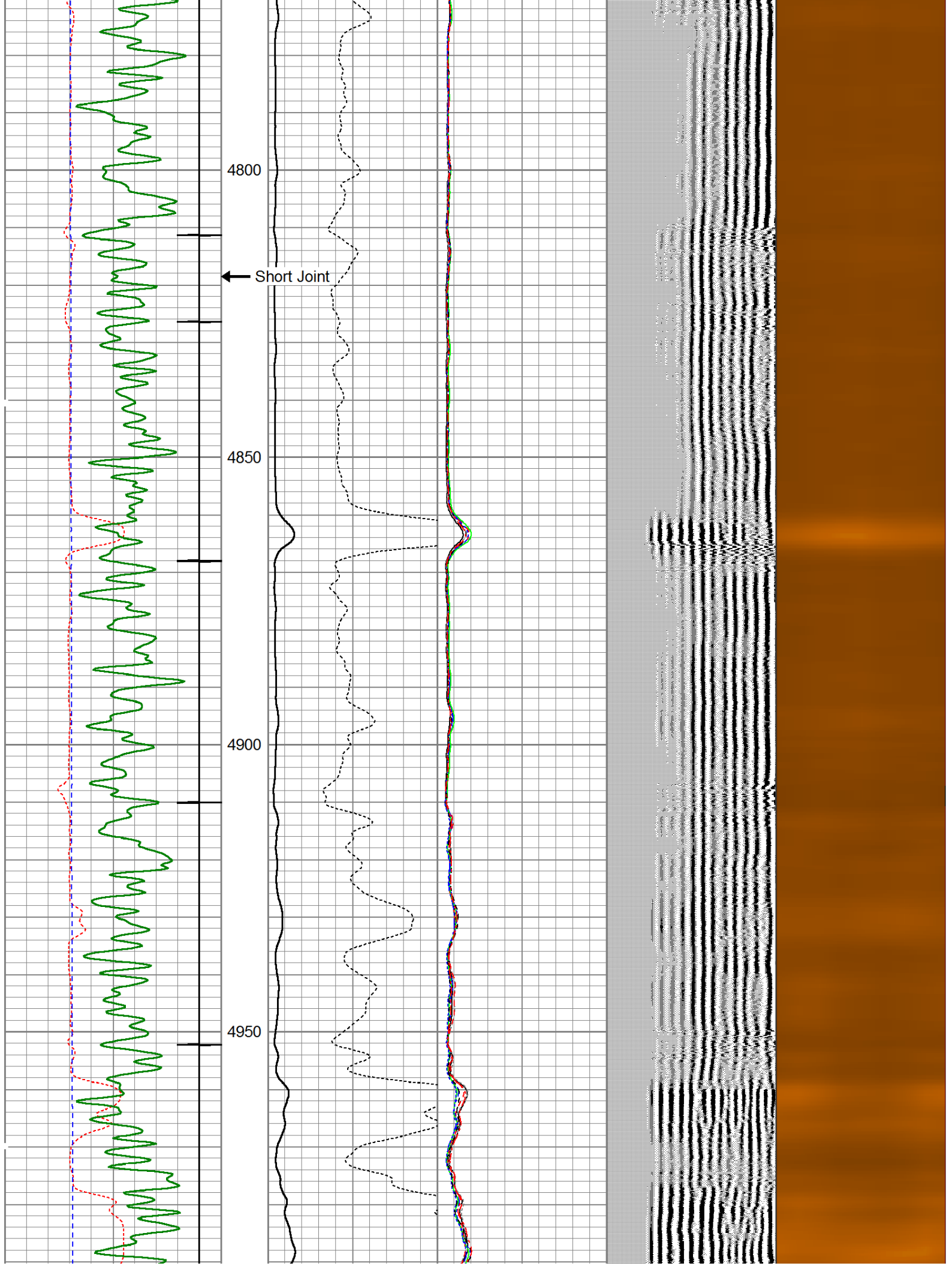




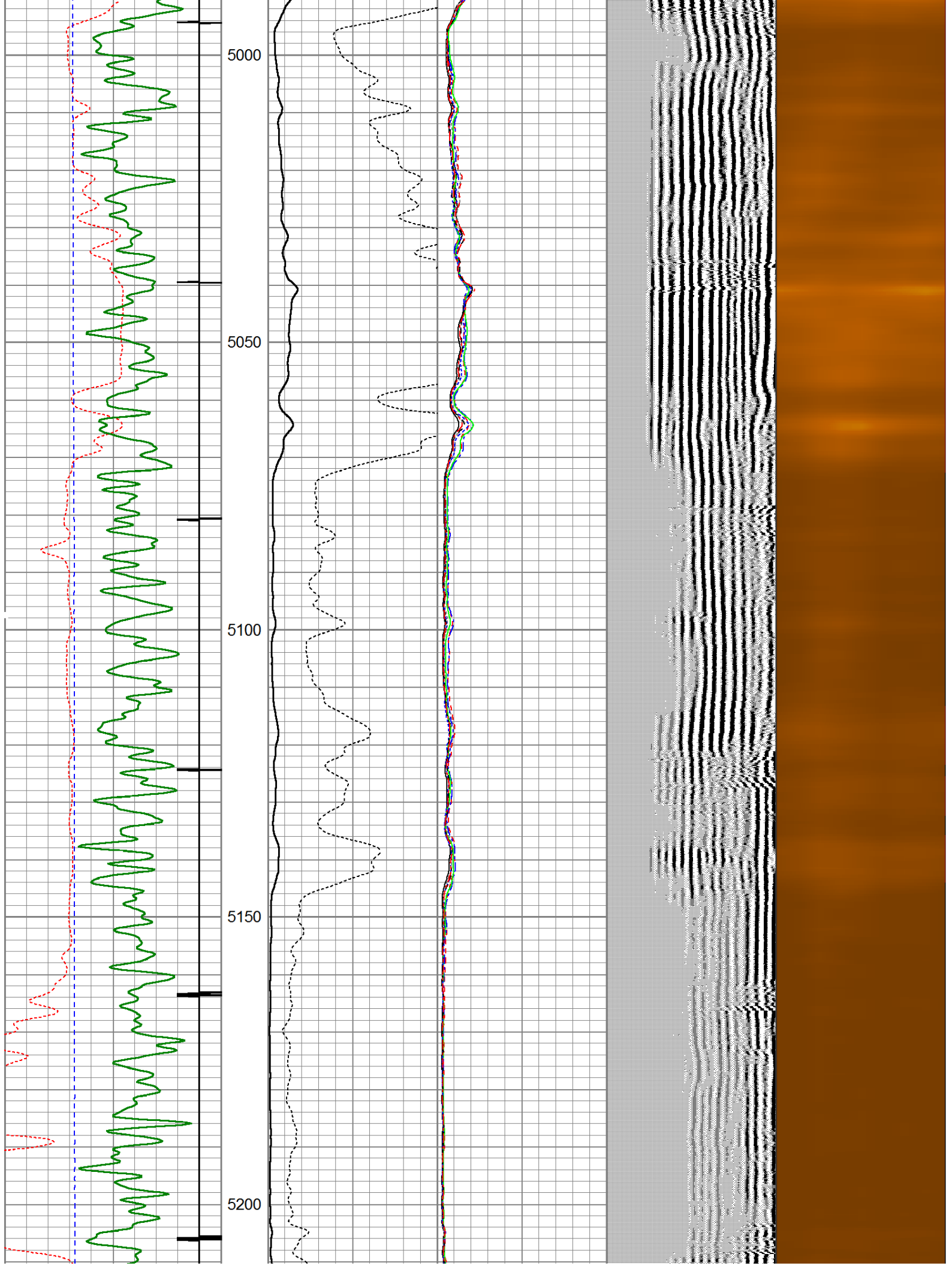


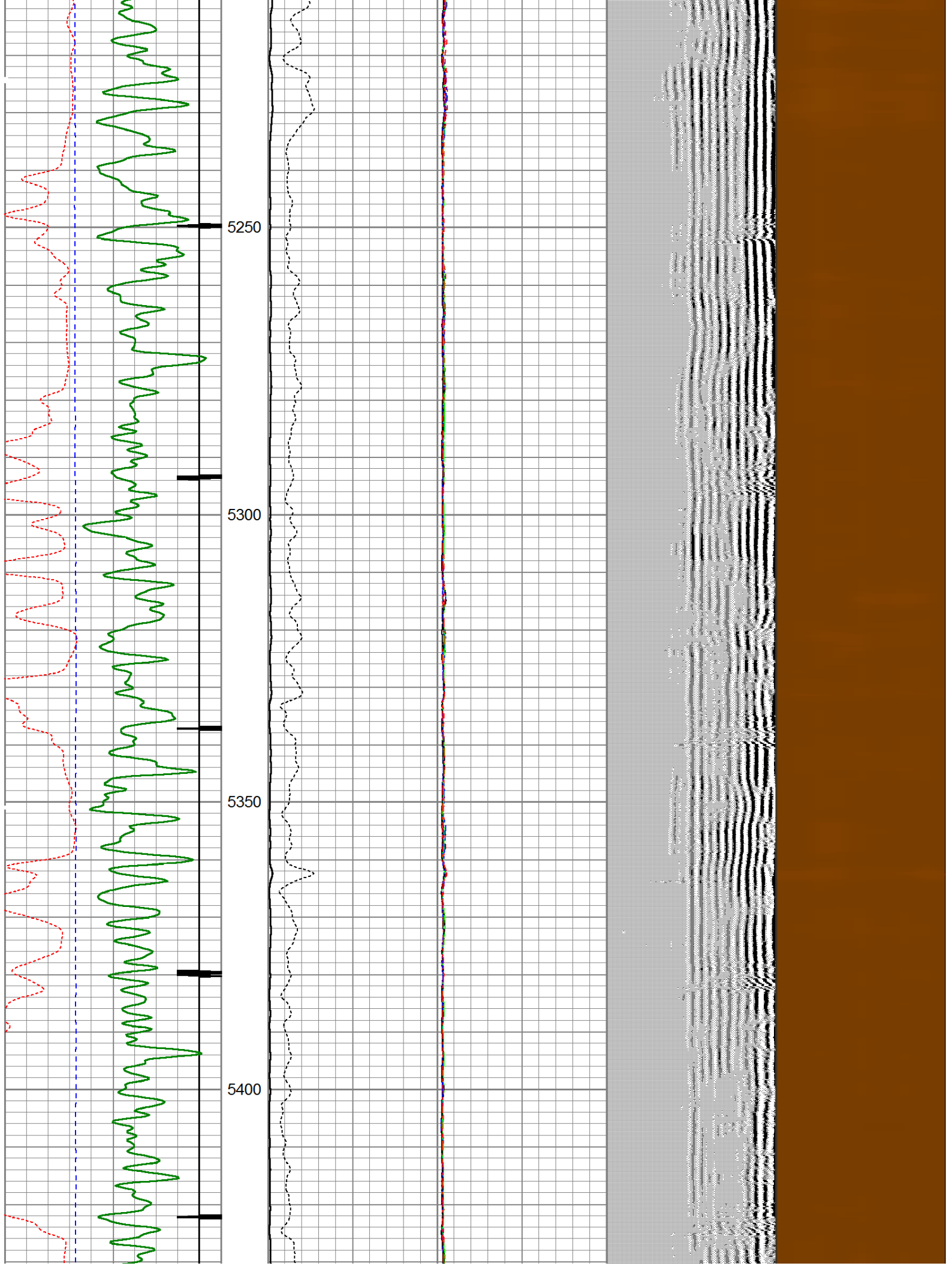




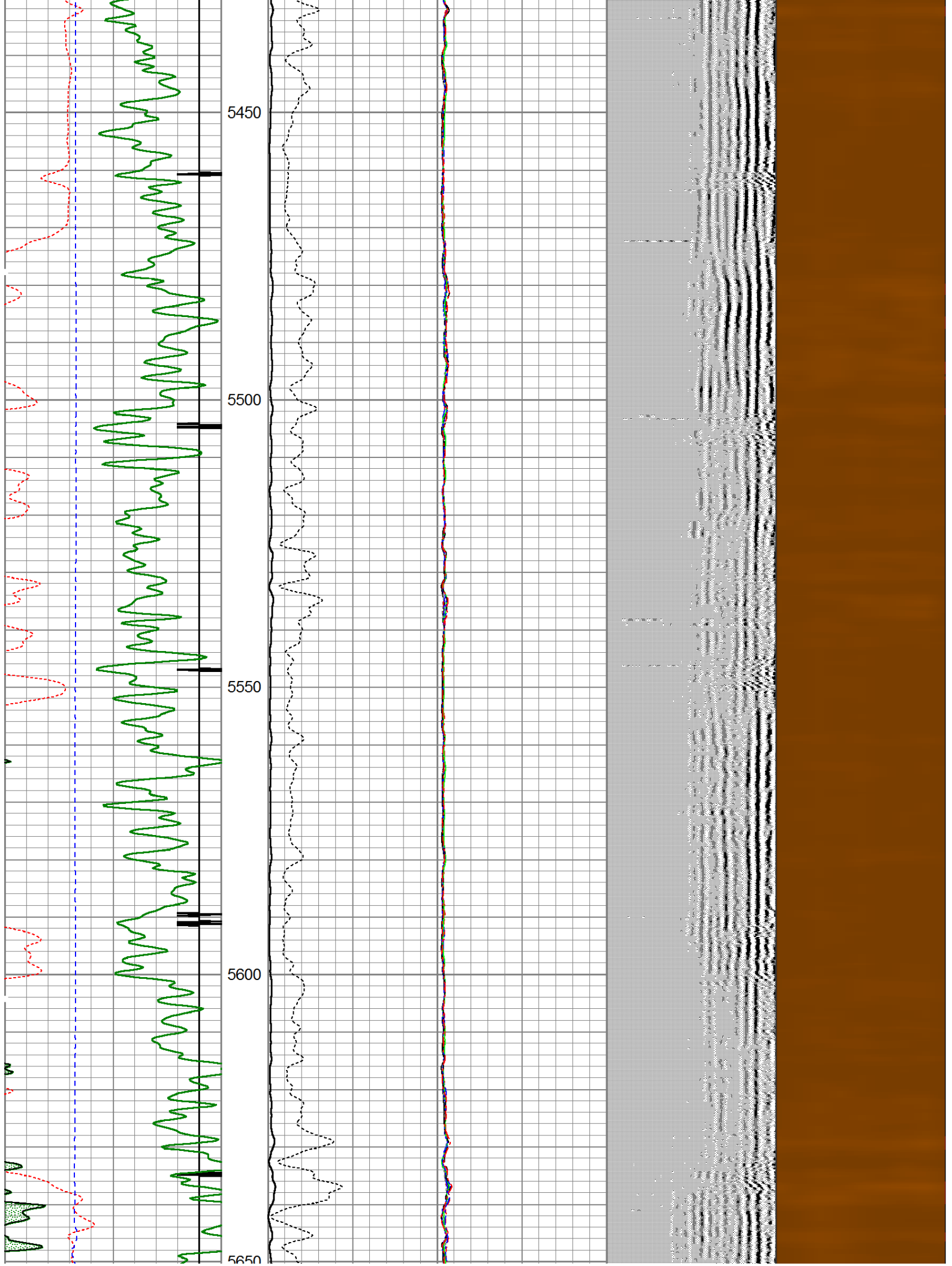




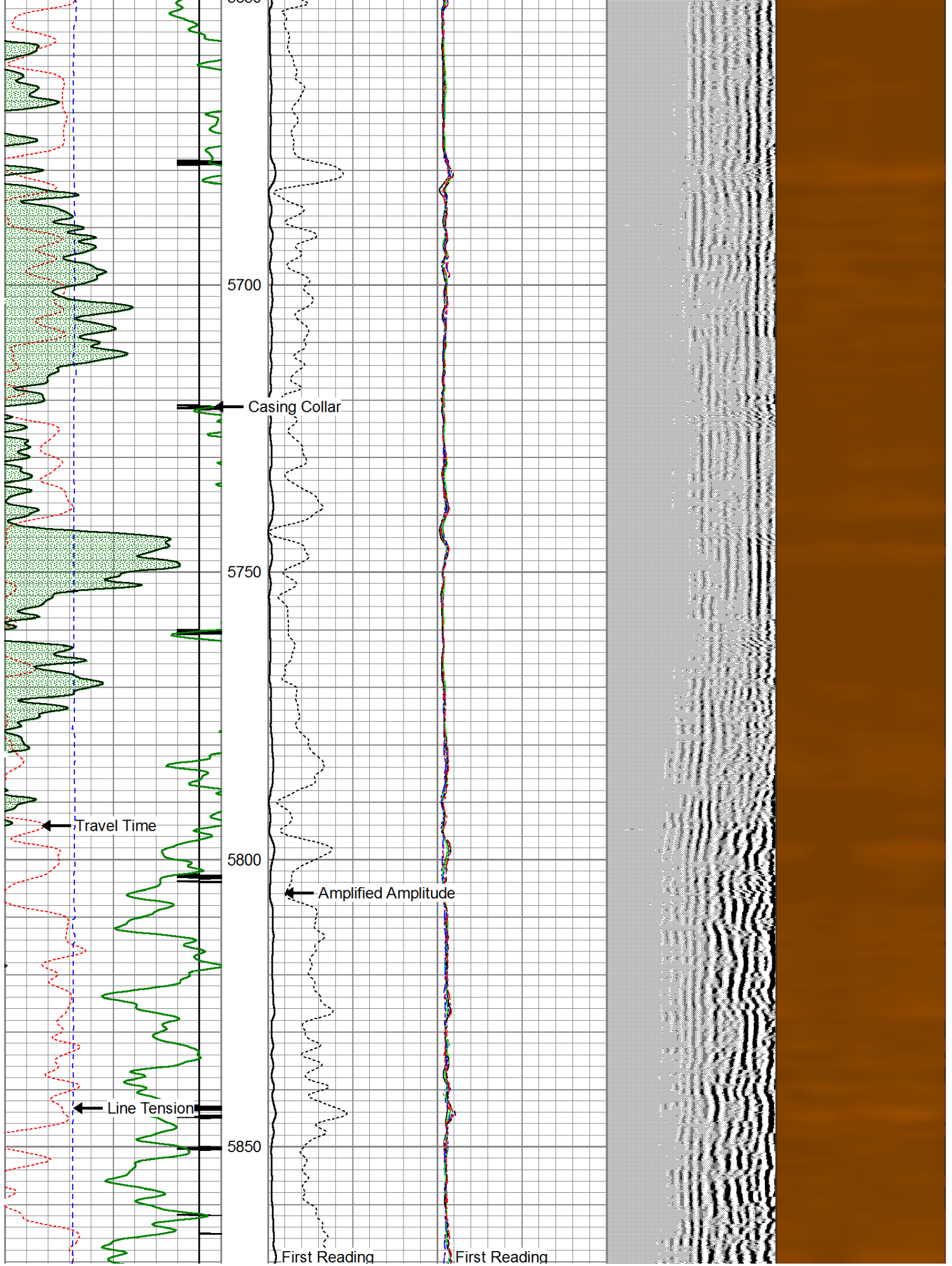


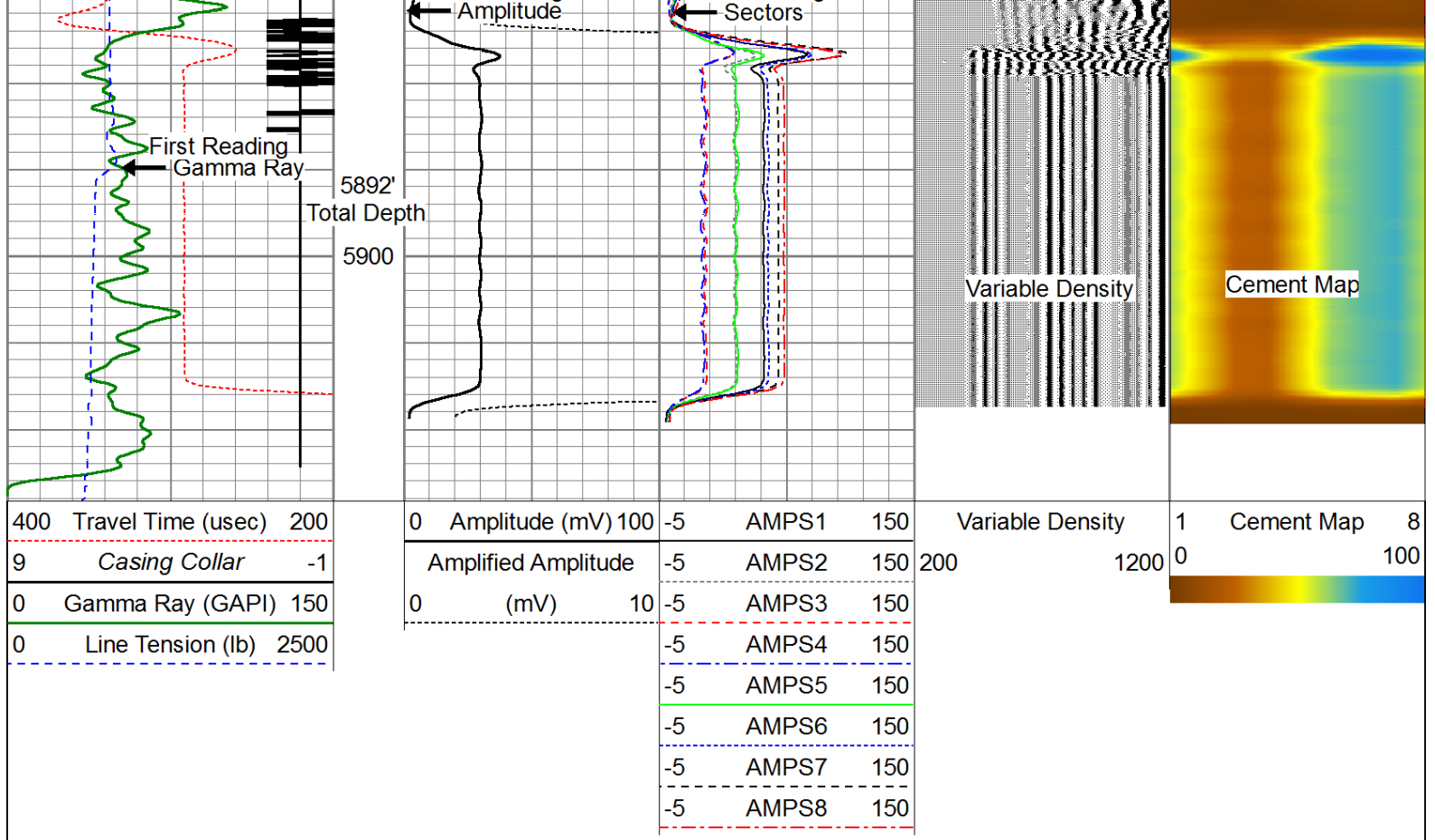






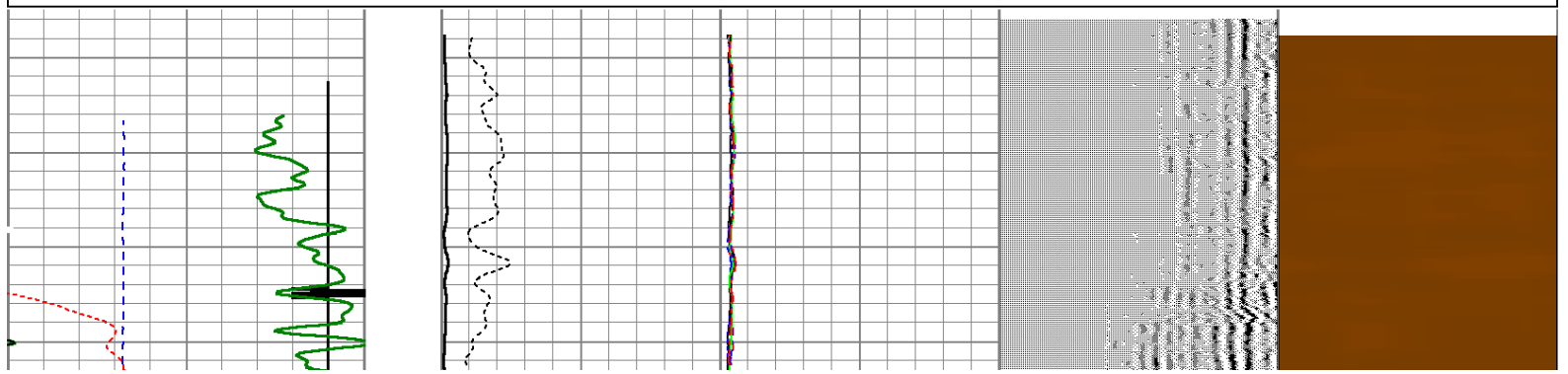
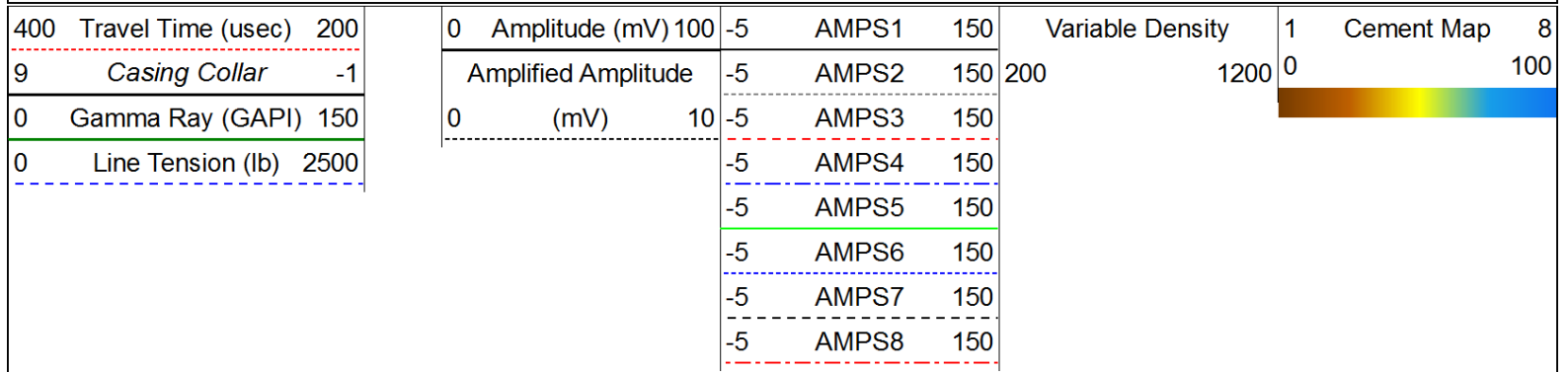




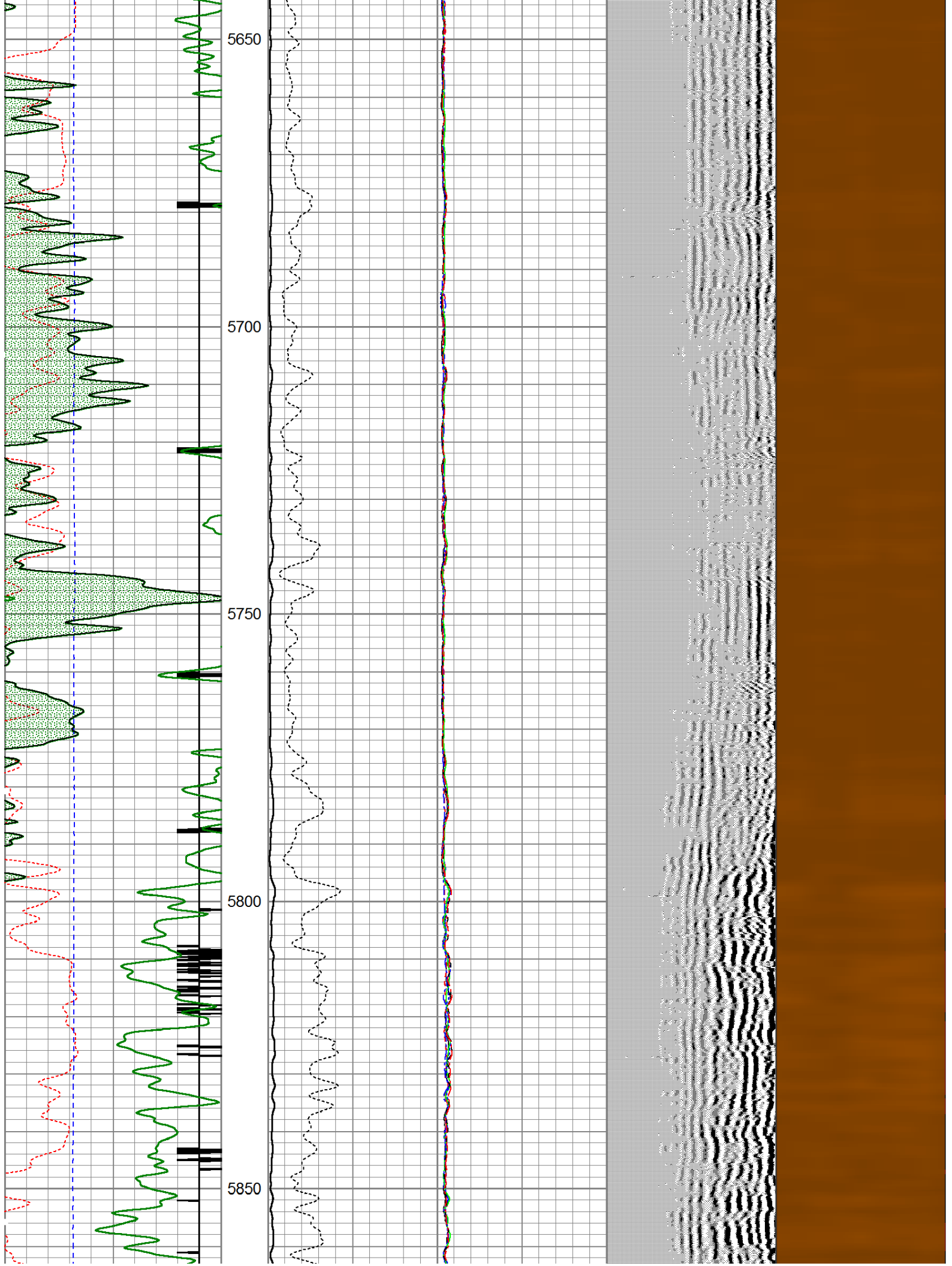


# Repeat Pass (0 PSI)

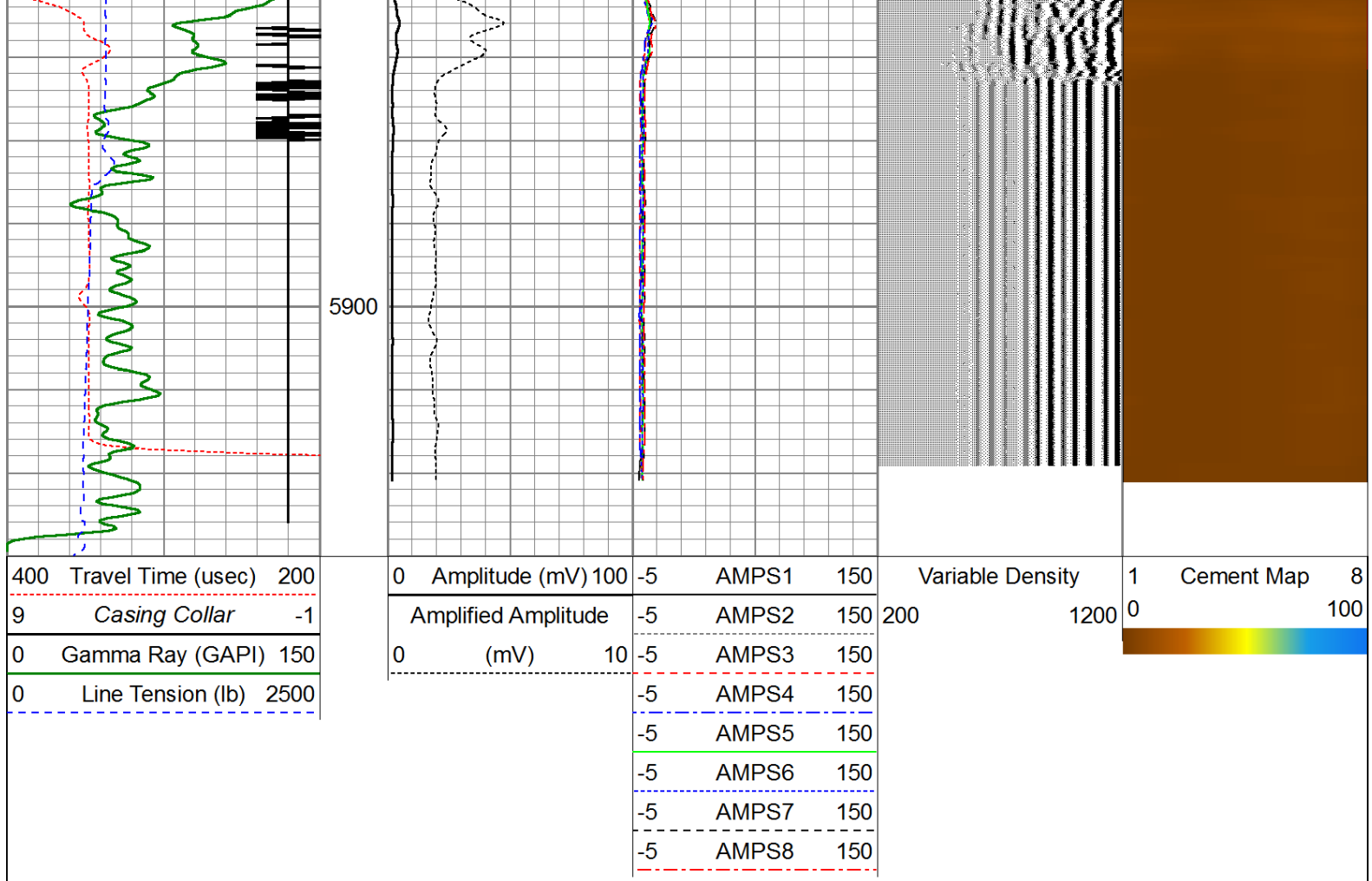
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 Dataset Pathname: pass4  
 Presentation Format: scbl03  
 Dataset Creation: Thu Oct 10 09:22:36 2013 by Log SCH 120126  
 Charted by: Depth in Feet scaled 1:240











Calibration Report					
Database File:	noble energy rohn state ld04-65-1hn_cbl.db				
Dataset Pathname:	pass6				
Dataset Creation:	Thu Oct 10 09:29:22 2013 by Log SCH 120126				
Gamma Ray Calibration Report					
Serial Number:	110108-Dig				
Tool Model:	Probe275				
Performed:	Wed Jul 10 19:14:22 2013				
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:	110108-Dig				
Tool Model:	Probe275				
Performed:	Sun Sep 29 11:21:21 2013				
	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	1				
Segmented Cement Bond Log Calibration Report					

Serial Number: 111107  
 Tool Model: Probe  
 Calibration Casing Diameter: 7.000 in  
 Calibration Depth: 607.379 ft

Master Calibration, performed Thu Oct 10 08:58:15 2013:

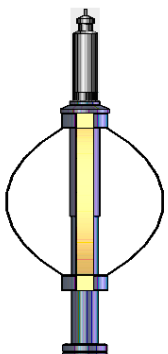
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.010	0.615	1.000	62.165	97.918	1.993
CAL	-0.017	0.861				
5'	-0.010	0.448	1.000	62.165	133.589	2.318
SUM						
S1	0.002	0.648	0.000	100.000	154.841	-0.363
S2	-0.004	0.696	0.000	100.000	142.875	0.624
S3	-0.009	0.696	0.000	100.000	141.887	1.247
S4	-0.008	0.664	0.000	100.000	140.640	1.230
S5	-0.010	0.610	0.000	100.000	151.203	1.637
S6	-0.010	0.571	0.000	100.000	162.322	1.639
S7	-0.011	0.555	0.000	100.000	176.693	1.900
S8	-0.011	0.550	0.000	100.000	178.133	1.944

Internal Reference Calibration, performed Wed Dec 31 17:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.017	0.861	1.000	0.000

Air Zero Calibration, performed Wed Oct 09 08:37:09 2013:

	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	Len (ft)	OD (in)	Wt (lb)
CHD	20.28		Titan Cable_head	1.00	1.44	10.00
CENT	19.28		Probe275 2.75" Centralizer	2.88	2.75	20.00

Tool Name	Start Depth (ft)	End Depth (ft)	Length (ft)	Weight (lb)	O.D. (in)
WVF3FT	11.84	11.84	0.00	0.00	0.00
WVFCAL	11.84	11.84	0.00	0.00	0.00
WVFS1	11.84	11.84	0.00	0.00	0.00
WVFS2	11.84	11.84	0.00	0.00	0.00
WVFS3	11.84	11.84	0.00	0.00	0.00
WVFS4	11.84	11.84	0.00	0.00	0.00
WVFS5	11.84	11.84	0.00	0.00	0.00
WVFS6	11.84	11.84	0.00	0.00	0.00
WVFS7	11.84	11.84	0.00	0.00	0.00
WVFS8	11.84	11.84	0.00	0.00	0.00
WVF5FT	10.84	11.84	1.00	0.00	0.00
CENT	7.66	11.84	4.18	0.00	0.00
RBT-Probe (111107)	8.75	11.84	3.09	90.00	2.75
Probe Radii Bond Tool with Digital Telemetry					
Probe275	2.88	5.63	2.75	20.00	2.75
2.75" Centralizer					
GR	4.78	9.56	4.78	57.00	2.75
TEMP	4.00	4.00	0.00	0.00	0.00
CCL	3.88	4.00	0.12	0.00	0.00
GR	2.54	7.32	4.78	57.00	2.75
GR-Probe275 (110108-Dig)					
Probe 2 3/4" Logging Gamma Ray					

Dataset: noble energy rohn state ld04-65-1hn\_cbl.db: field/well/run1/pass6

Total Length: 20.28 ft

Total Weight: 197.00 lb

O.D. 2.75 in