


<div><div>Weatherford[®]</div><div>SECTOR BOND LOG</div></div>									
COMPANY WELL FIELD COUNTY STATE/COUNTRY LOCATION				CAERUS PUCKETT_21D-26_SBT GRAND VALLEY GARFIELD COLORADO NORTH PARACHUTE					
SEC	26	TWP	6S	RGE	97W	Other Services			
Latitude		39.498870							
Longitude		-108.182429							
API Number		05-045-23354							
Permanent Datum		GL		Elevation 8396		Elevations: K.B. 8426 D.F. 8426 G.L. 8396			
Log Measured From		KB							
Drilling Measured From		KB							
Date				14 MAY 17					
Run Number				1					
Service Order				TBD					
Type Log				SBT					
Depth Driller				8993					
Depth Logger				8920					
Top Log Interval				0					
Bottom Log Interval				8920					
Hole Fluid Type				H2O					
Hole Fluid Level				166					
Restriction ID				N/A					
Max. Recorded Temp.				N/A					
Well Head Pressure				N/A					
Well Head Equipment				N/A					
Time Well Ready				ON ARRIVAL					
Time Logger on Bottom				SEE LOG					
Unit Number				14166					
Acquisition System				WARRIOR					
Location				CASPER					
Recorded By				N. SOUTHAM					
Witnessed By									

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In interpreting, communicating or providing information and/or making recommendations, either written or oral, as to logs or test or other data, type or amount of material, or Work or other service to be furnished, or manner of performance, or in predicting results to be obtained, the Contractor will give the Company the benefit of the Contractor's best judgment based on its experience and will perform all such Work in a good and workmanlike manner. Any interpretation of test or other data, and any recommendation or reservoir description based upon such interpretations, are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and assumptions are not infallible, and with respect to which professional engineers and analysts may differ. ACCORDINGLY ANY INTERPRETATION OR RECOMMENDATION RESULTING FROM THE SERVICES WILL BE AT THE SOLE RISK OF THE COMPANY, AND THE CONTRACTOR CANNOT AND DOES NOT WARRANT THE ACCURACY, CORRECTNESS OR COMPLETENESS OF ANY SUCH INTERPRETATION OR RECOMMENDATION, WHICH INTERPRETATIONS AND RECOMMENDATIONS SHOULD NOT, THEREFORE, UNDER ANY CIRCUMSTANCES BE RELIED UPON AS THE SOLE OR MAIN BASIS FOR ANY DRILLING, COMPLETION, WELL TREATMENT, PRODUCTION OR FINANCIAL DECISION, OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY DRILLING ACTIVITY, DRILLING RIG OR ITS CREW OR ANY OTHER INDIVIDUAL. THE COMPANY HAS FULL RESPONSIBILITY FOR ALL DECISIONS CONCERNING THE SER

Comments	
<div>Rig Name:</div> <div>THANK YOU FOR CHOOSING WEATHERFORD WIRELINE FOR THIS JOB. YOUR CREW FOR THIS LOG WAS N. SOUTHAM AND B. ENSLEY. THIS LOG WAS RAN AT CUSTOMER REQUEST FROM TD TO SURFACE TO VERIFY CEMENT AND WILL BE USED AS MAIN CORRELATION LOG.</div>	

Database Fileg:\puckett pad day 2\puckett_21d-26_sbt\puckett_21d-26_sbt.db

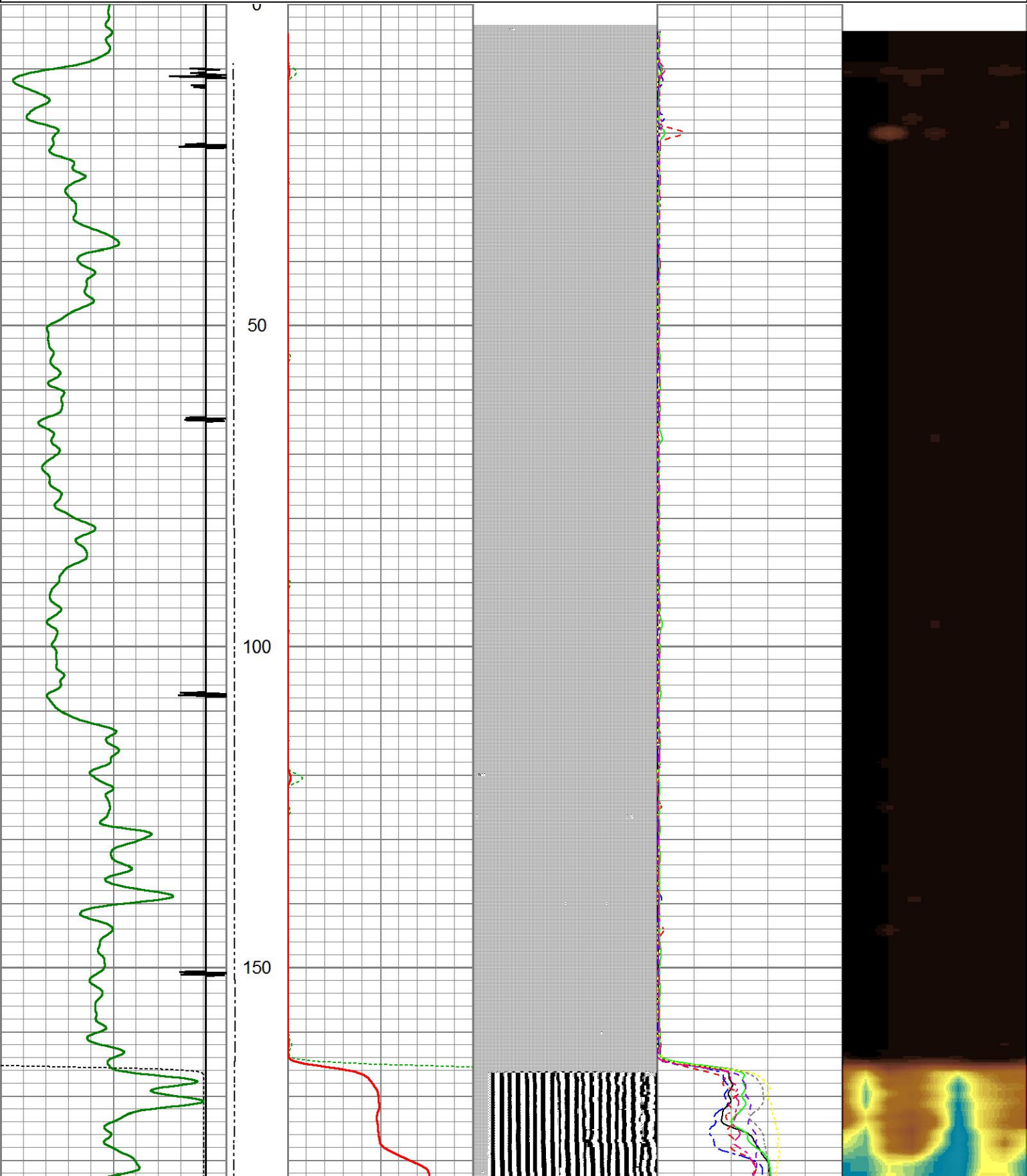
Dataset Pathnamepass11

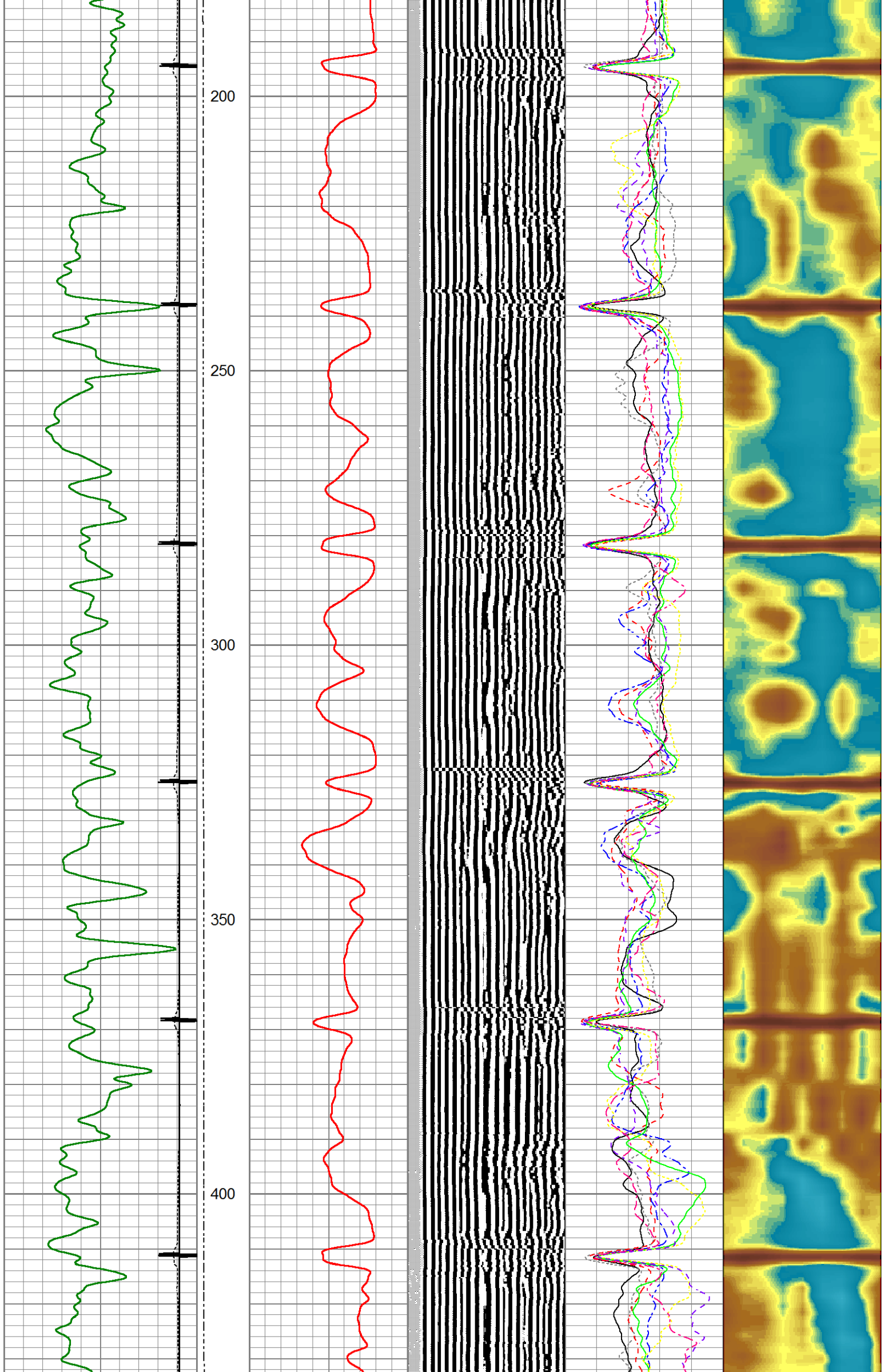
Presentation Formatsectors2

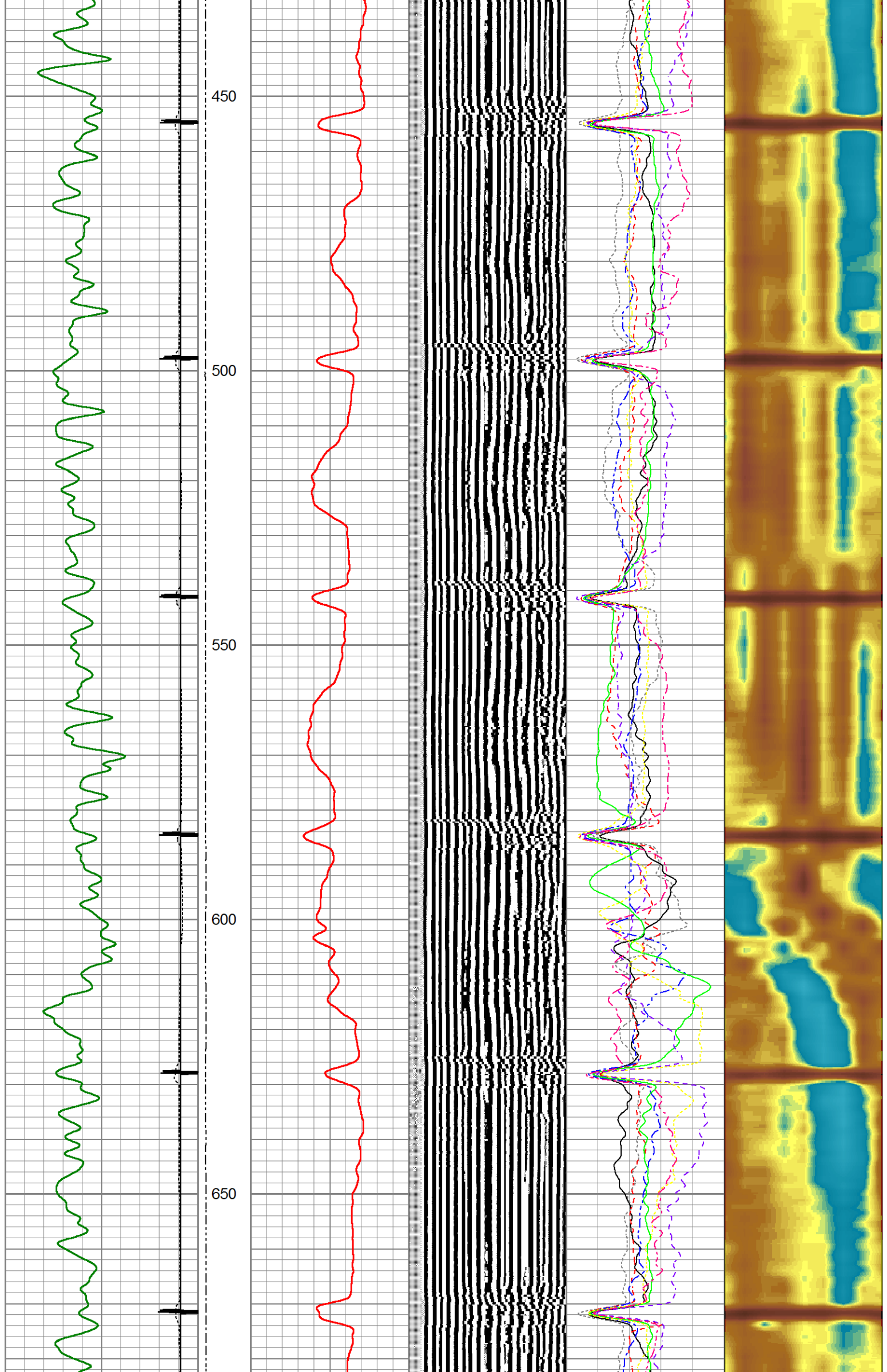
Dataset CreationSun May 14 22:17:06 2017

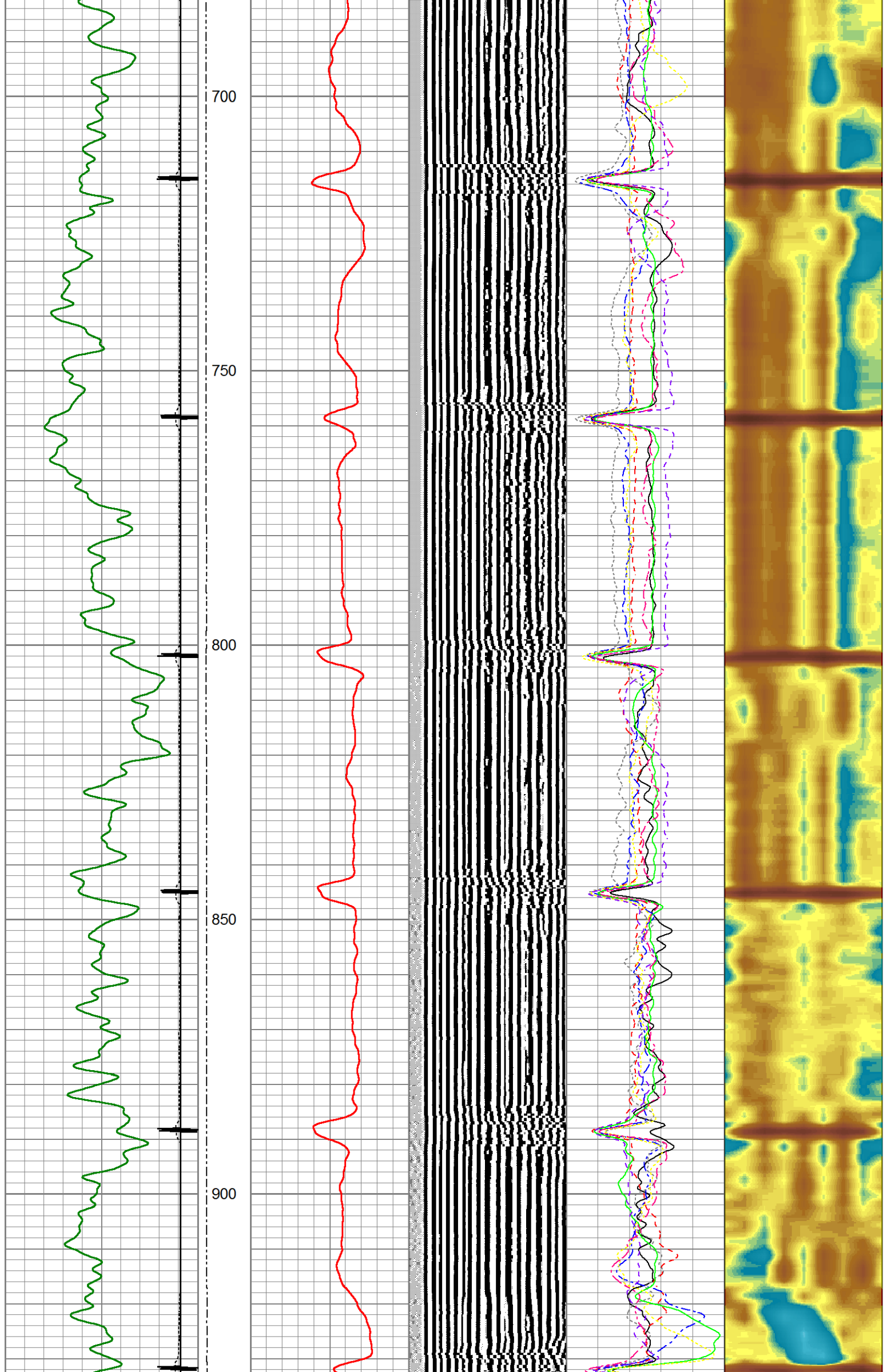
Charted byDepth in Feet scaled 1:240

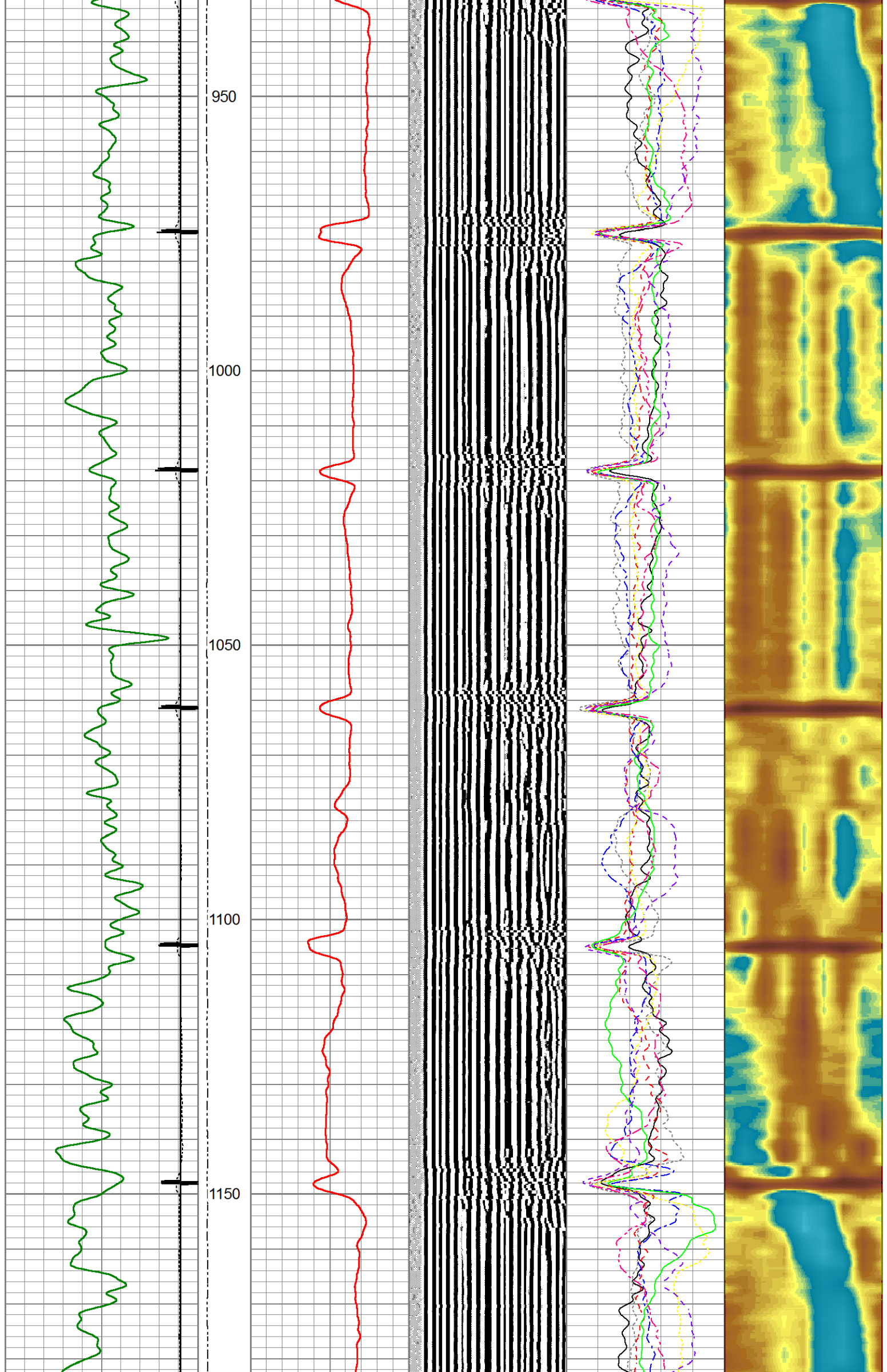
450	TT (usec)	150	LTEN	Amplified Amplitude	200	VDL (V)	1200	0	AMPS1	100	1	Sector Map	8
20	Collars	-2	(lb)	(mV)	20	PPT (usec)	1200	0	AMPS2	100	0		100
0	Gamma Ray	200	0 3000	0 Amplitude (mV)100				0	AMPS3	100			
								0	AMPS4	100			
								0	AMPS5	100			
								0	AMPS6	100			
								0	AMPS7	100			
								0	AMPS8	100			

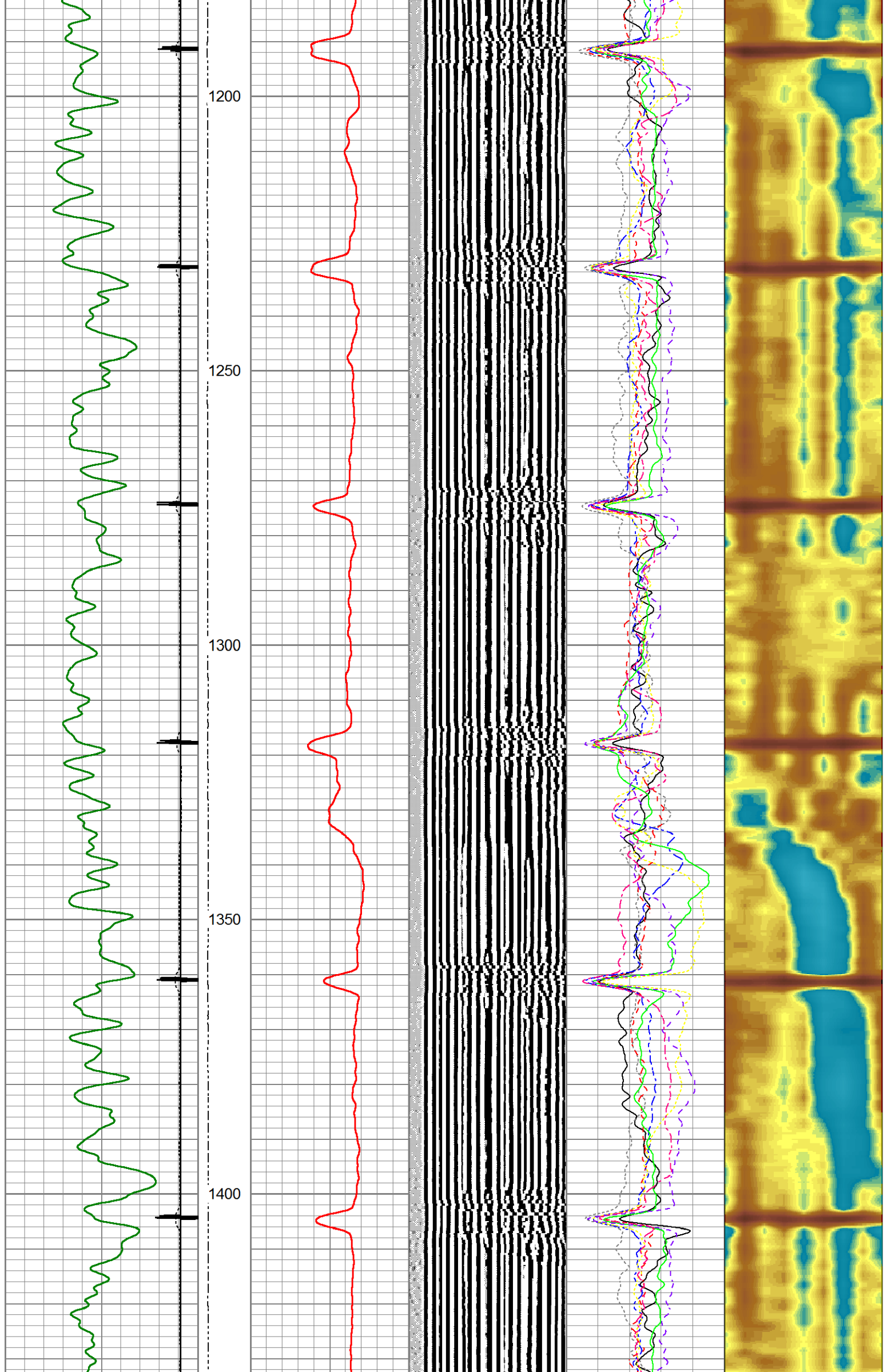


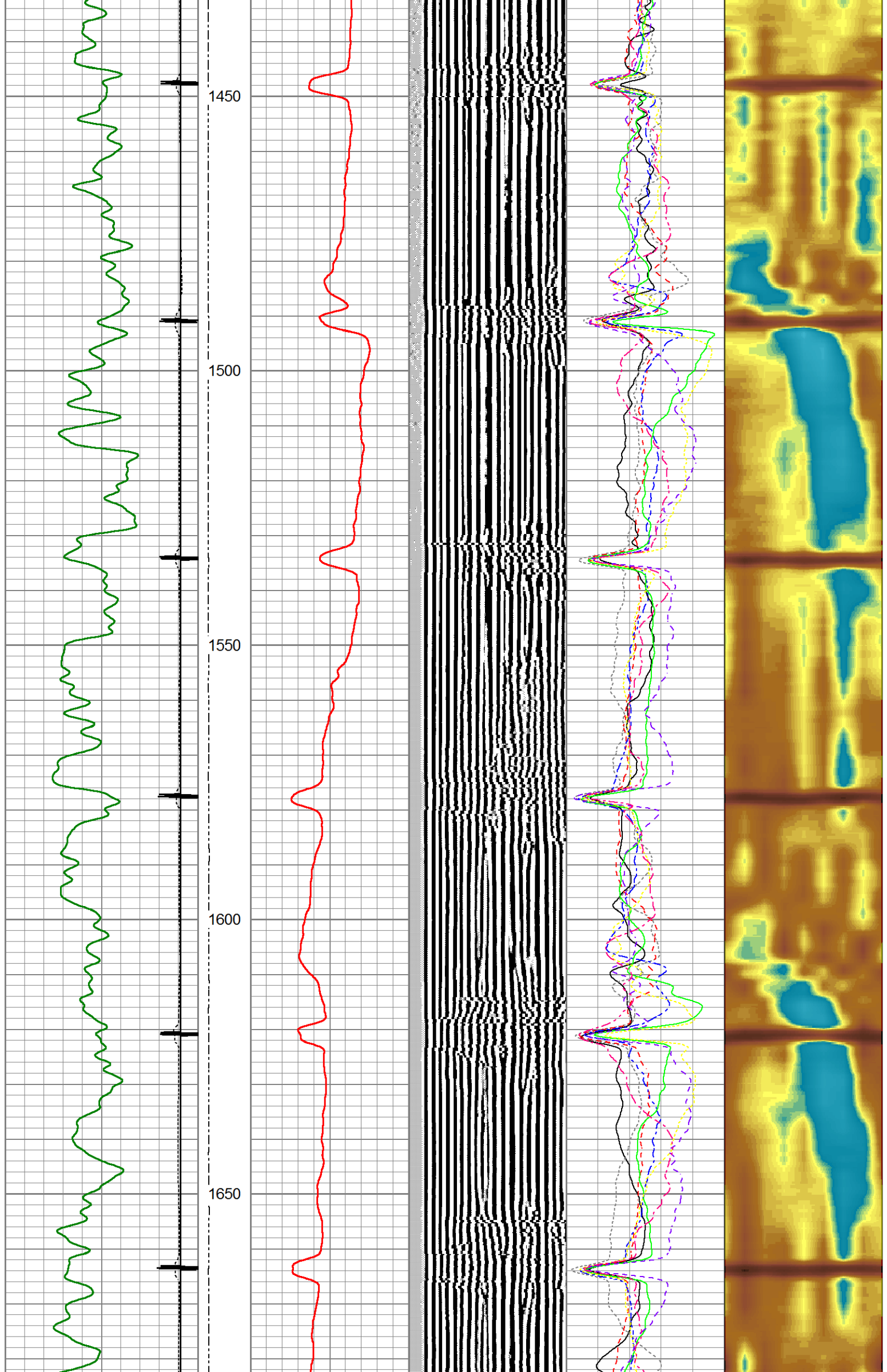


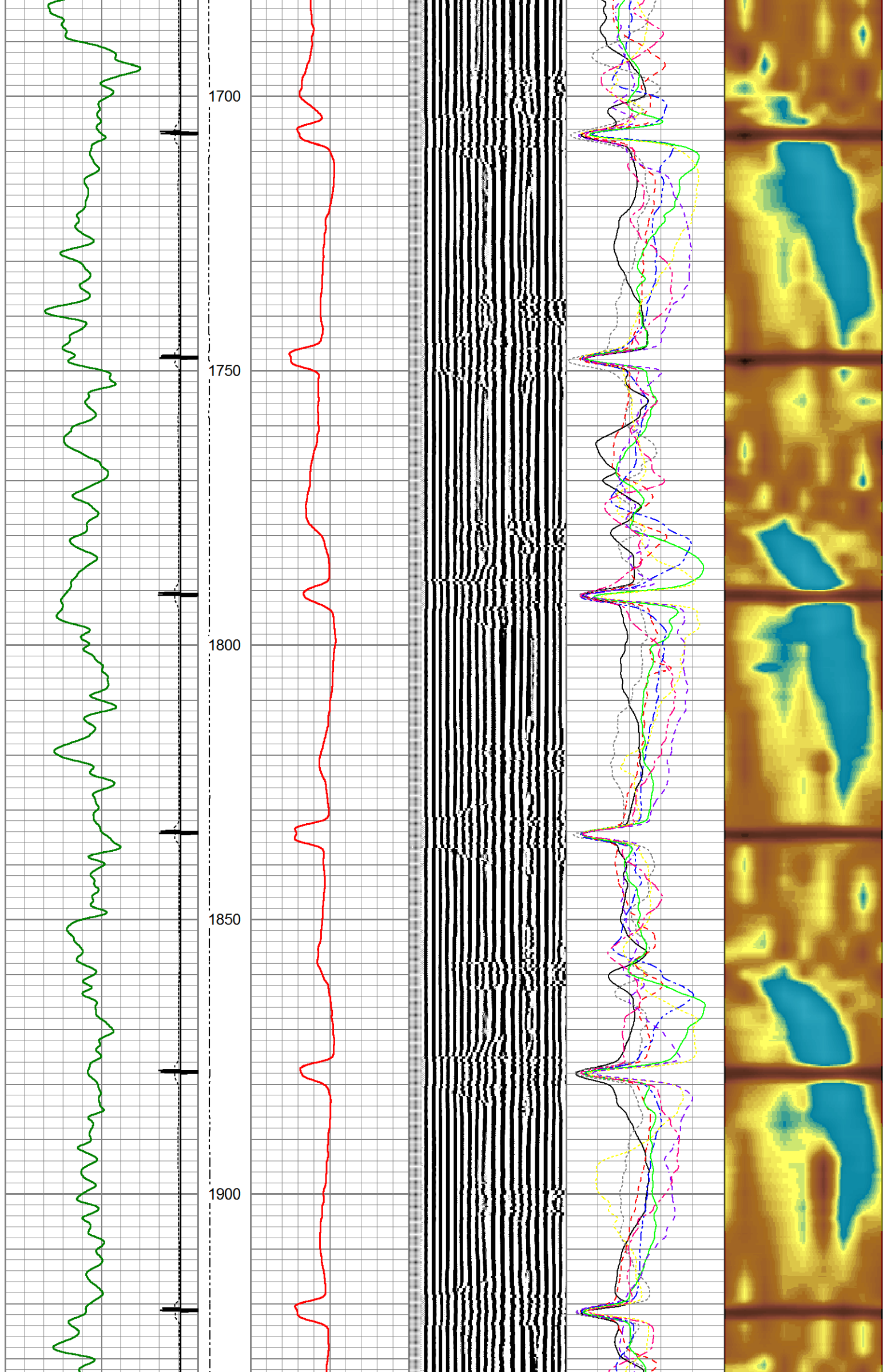


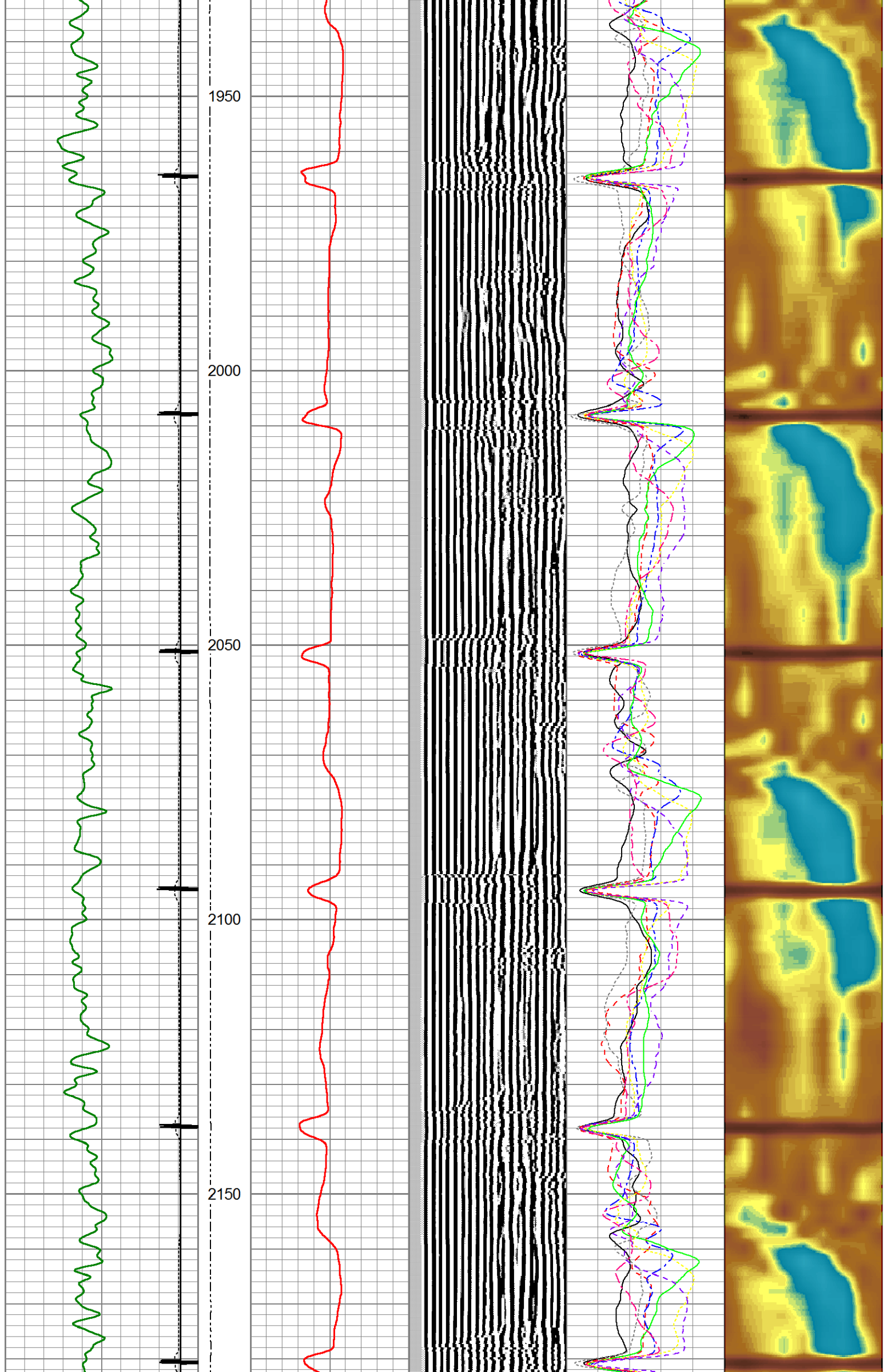


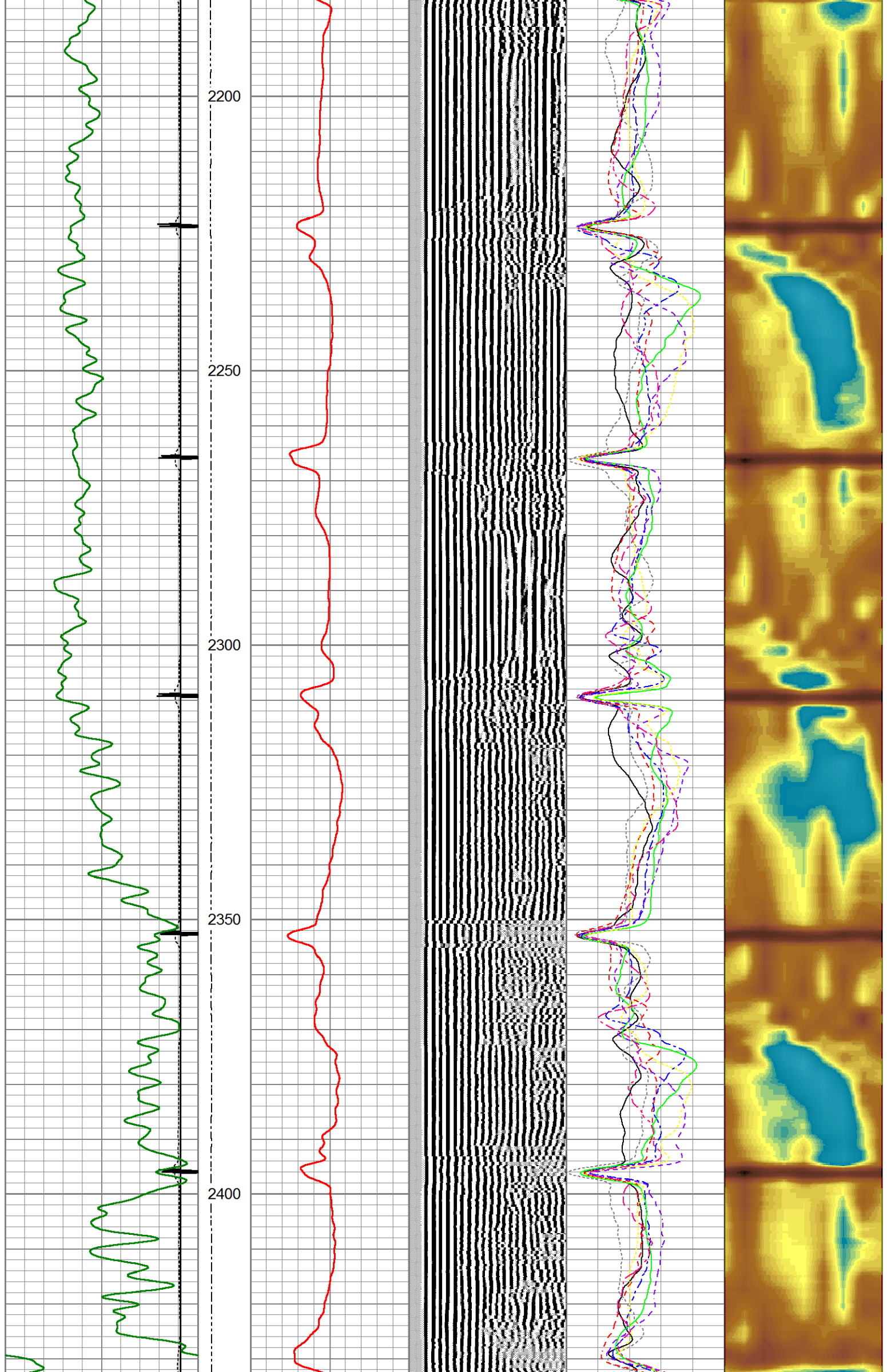


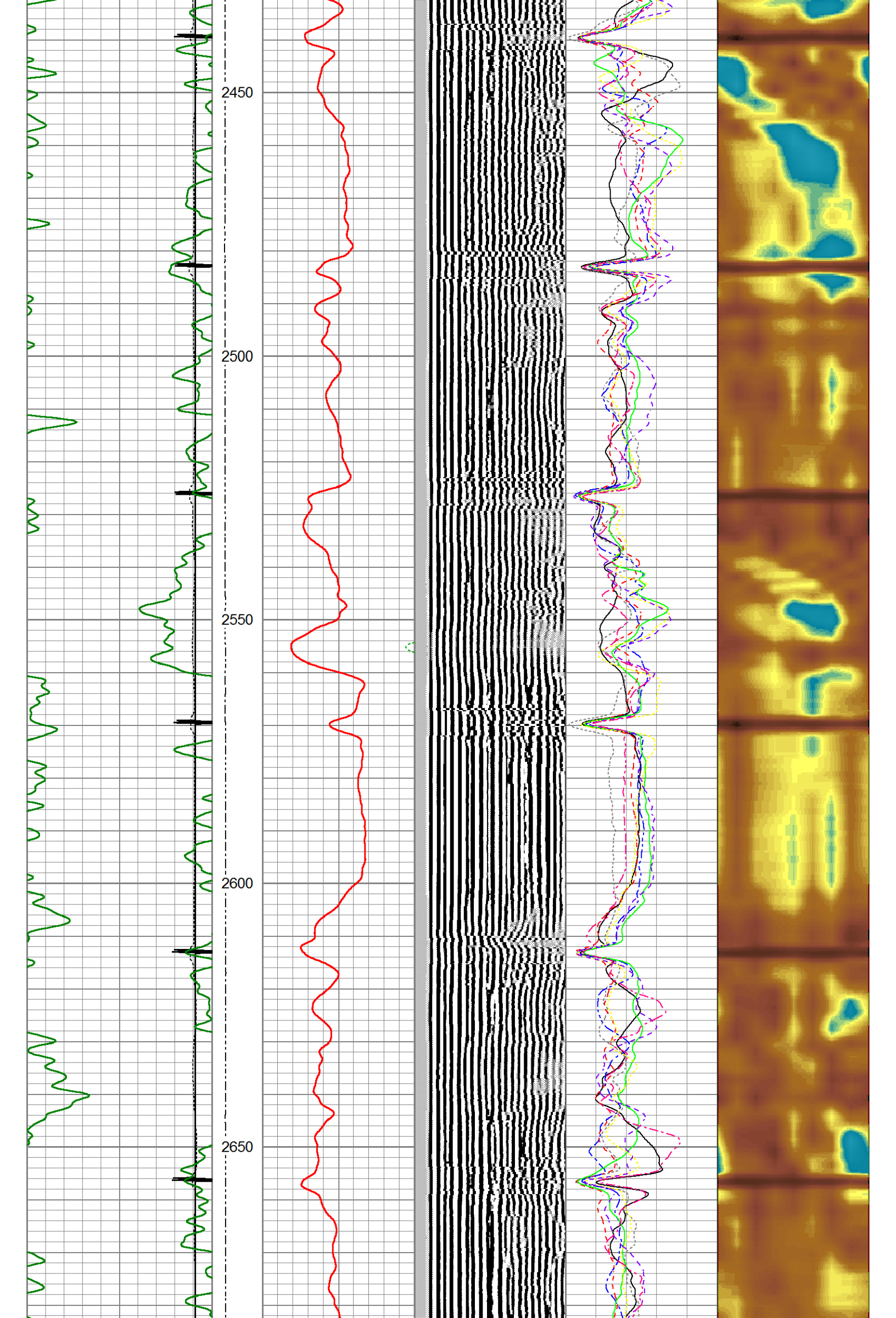


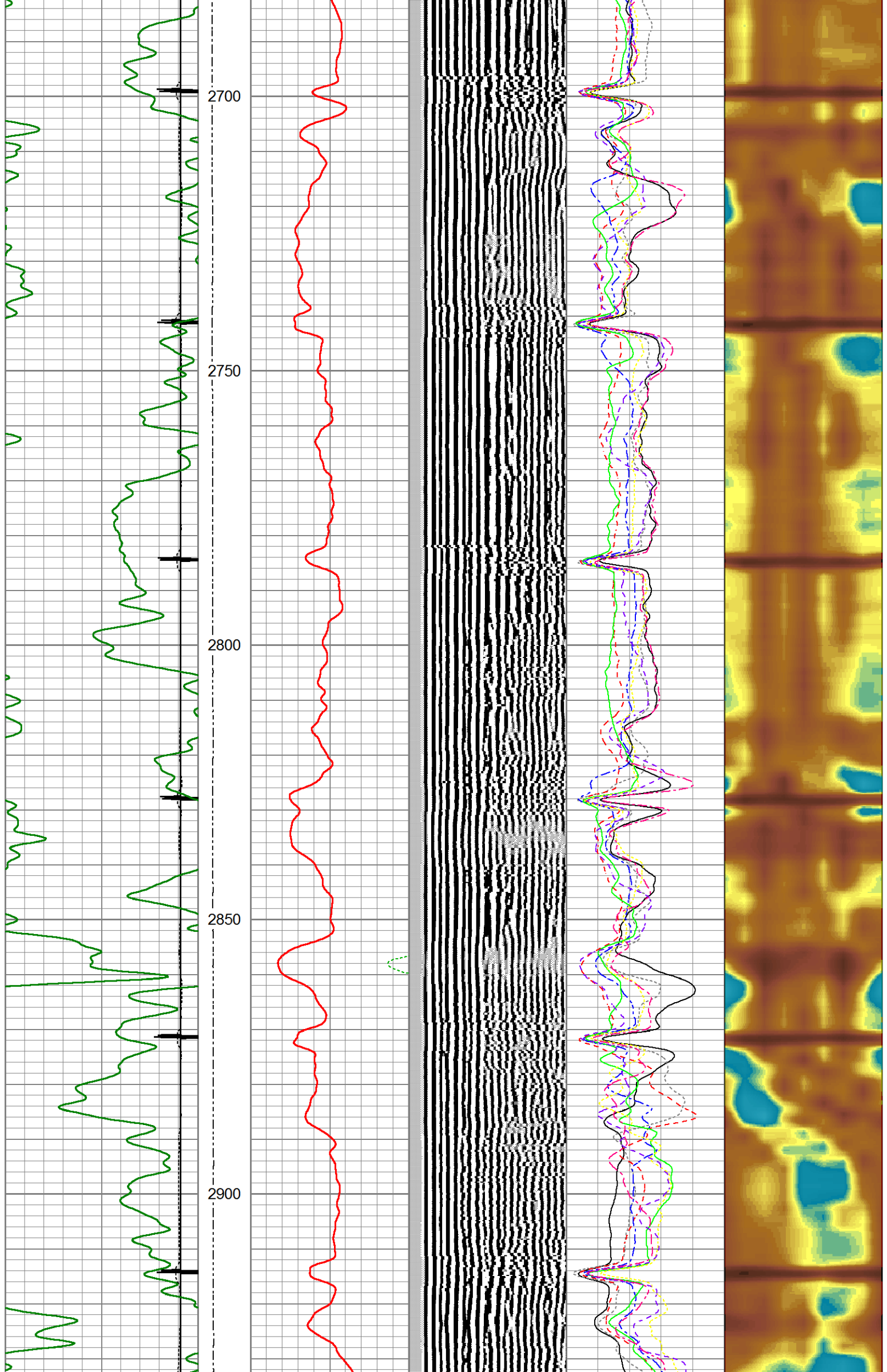


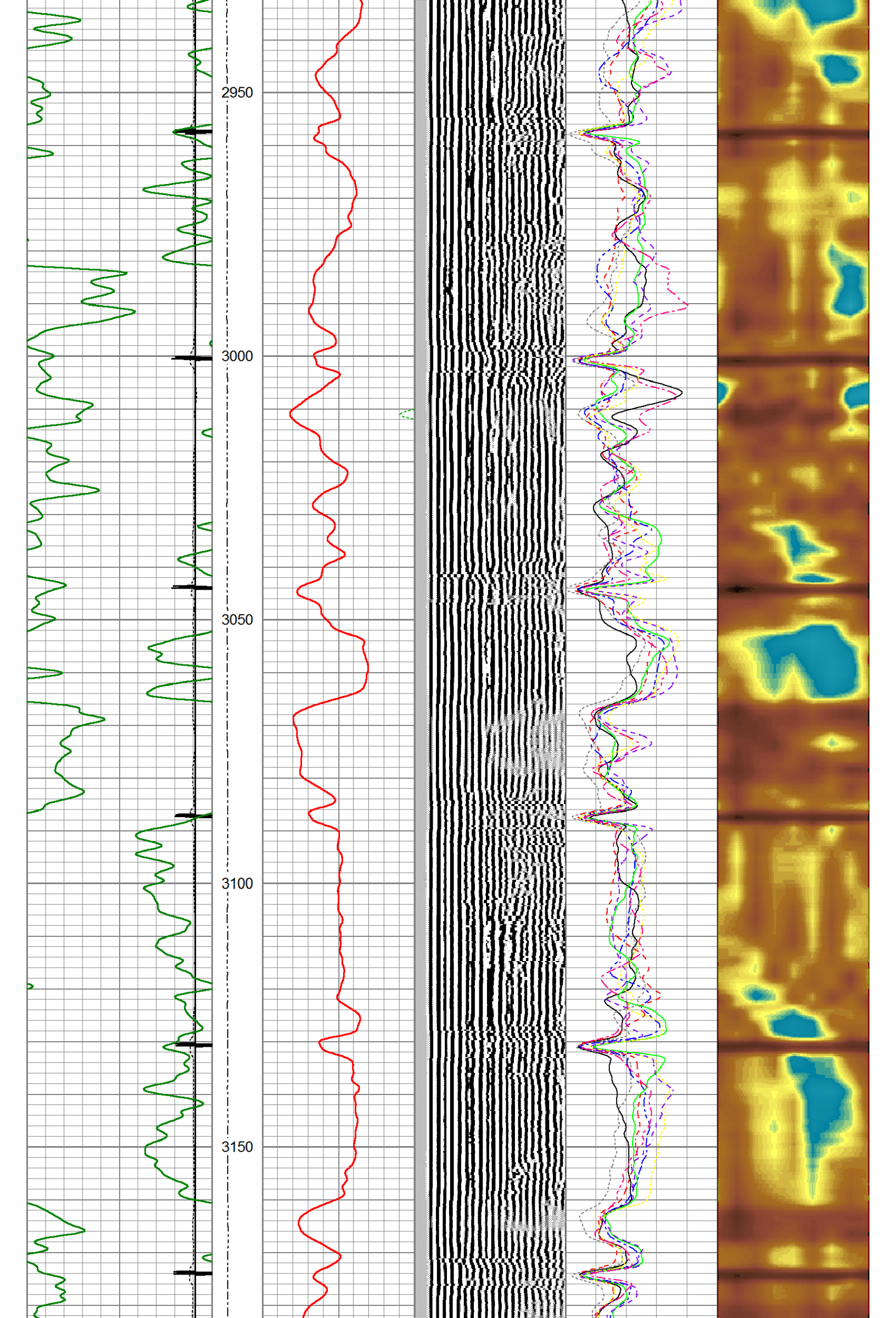


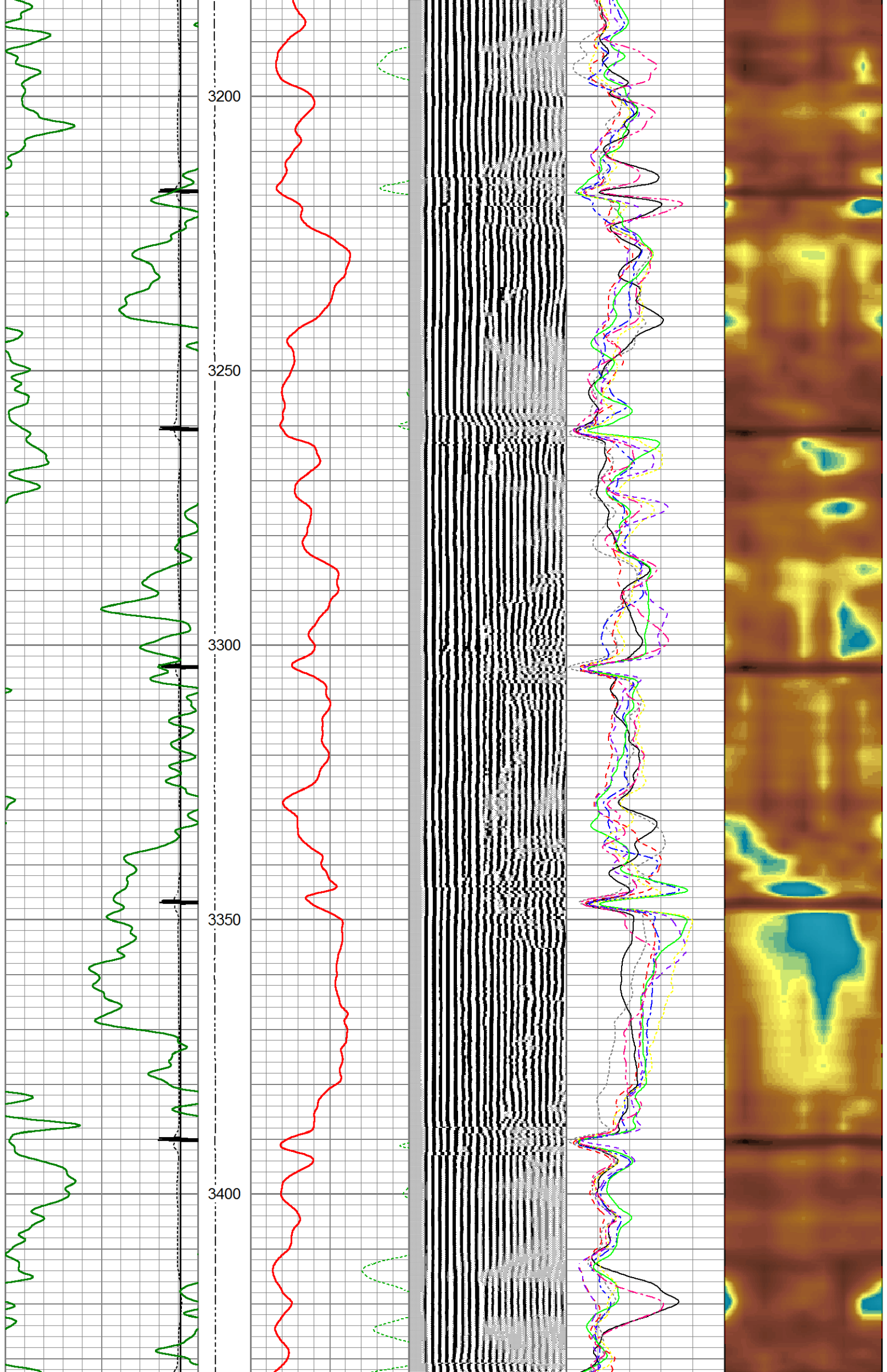


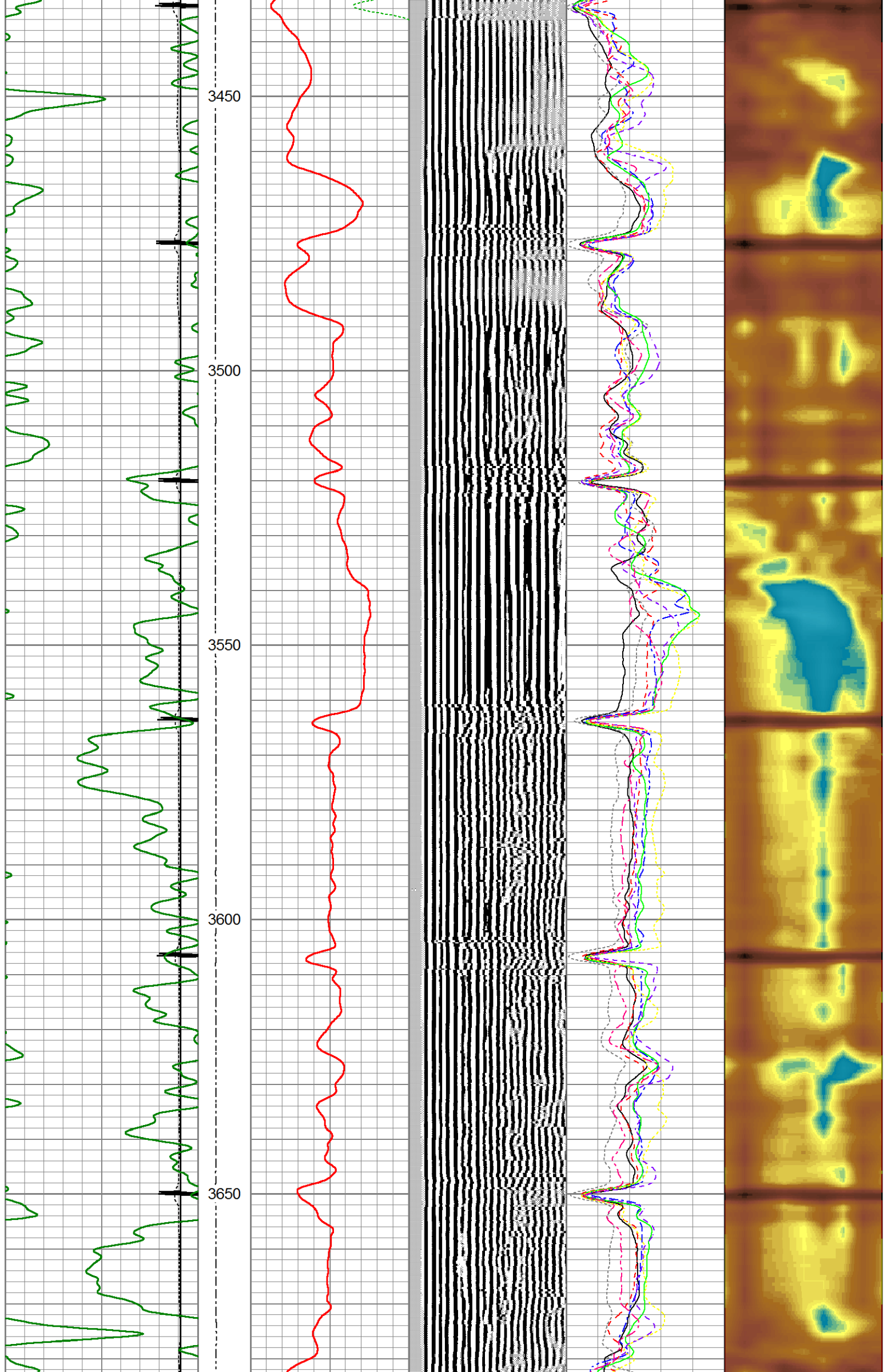


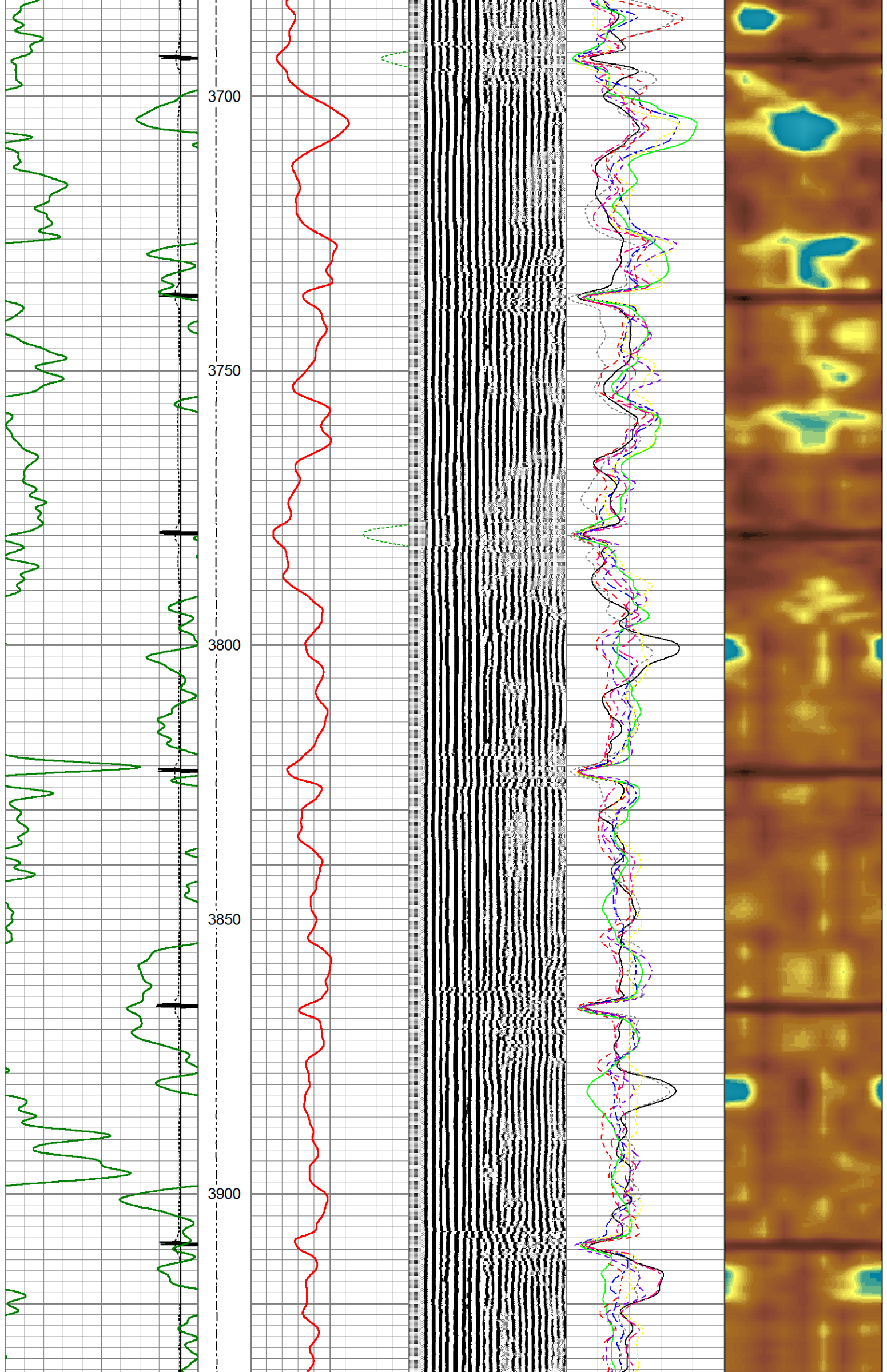


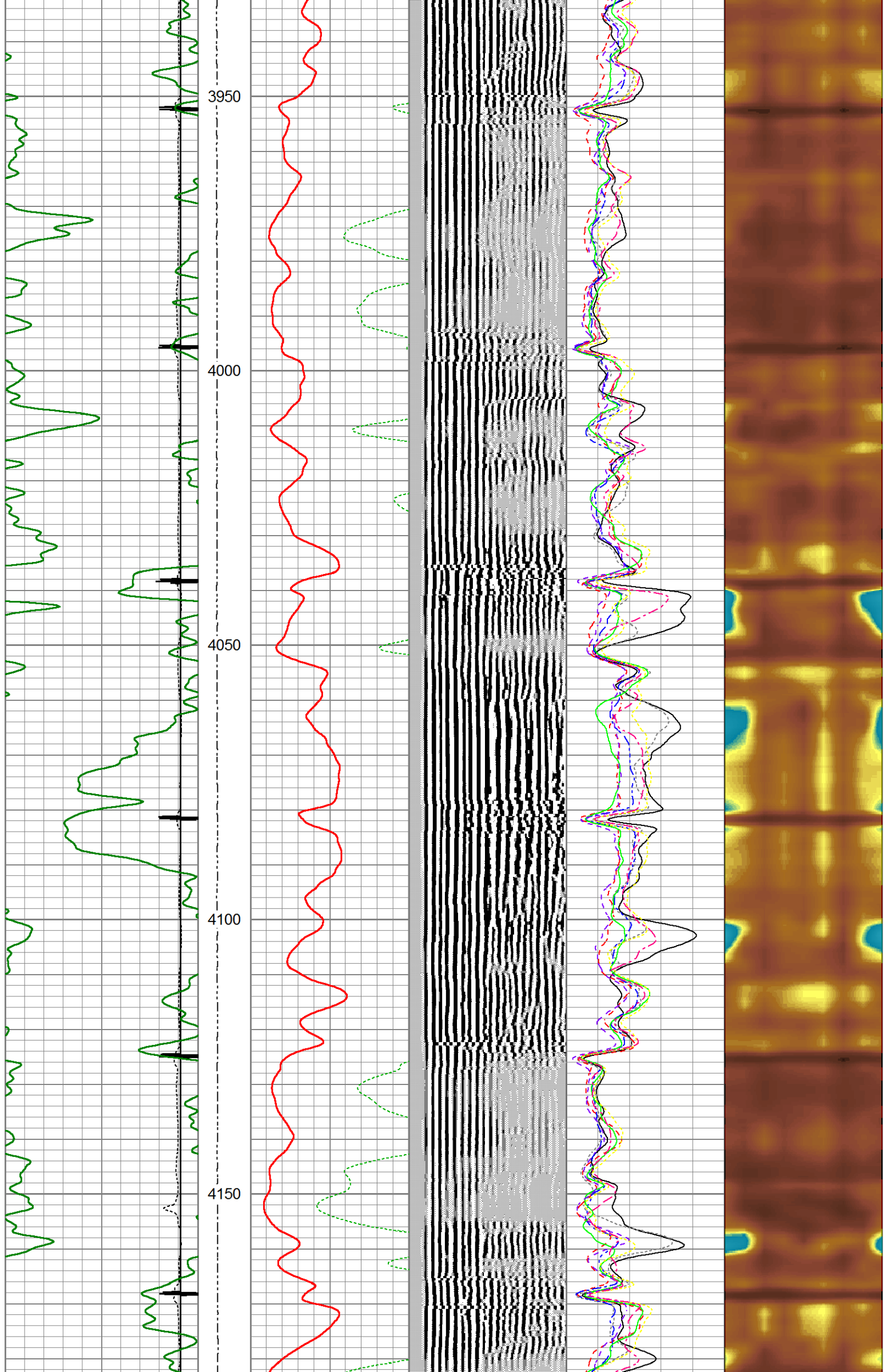


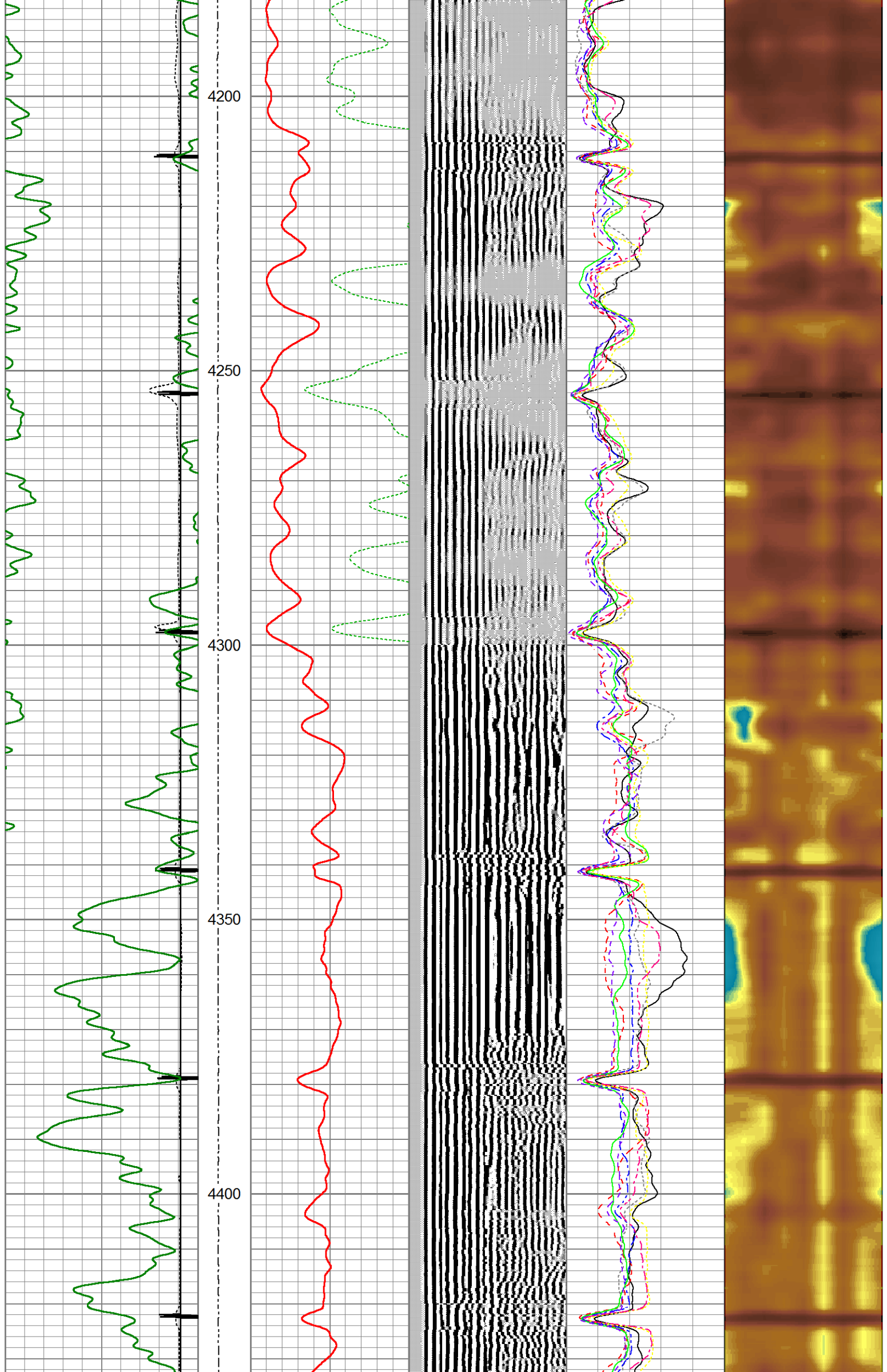


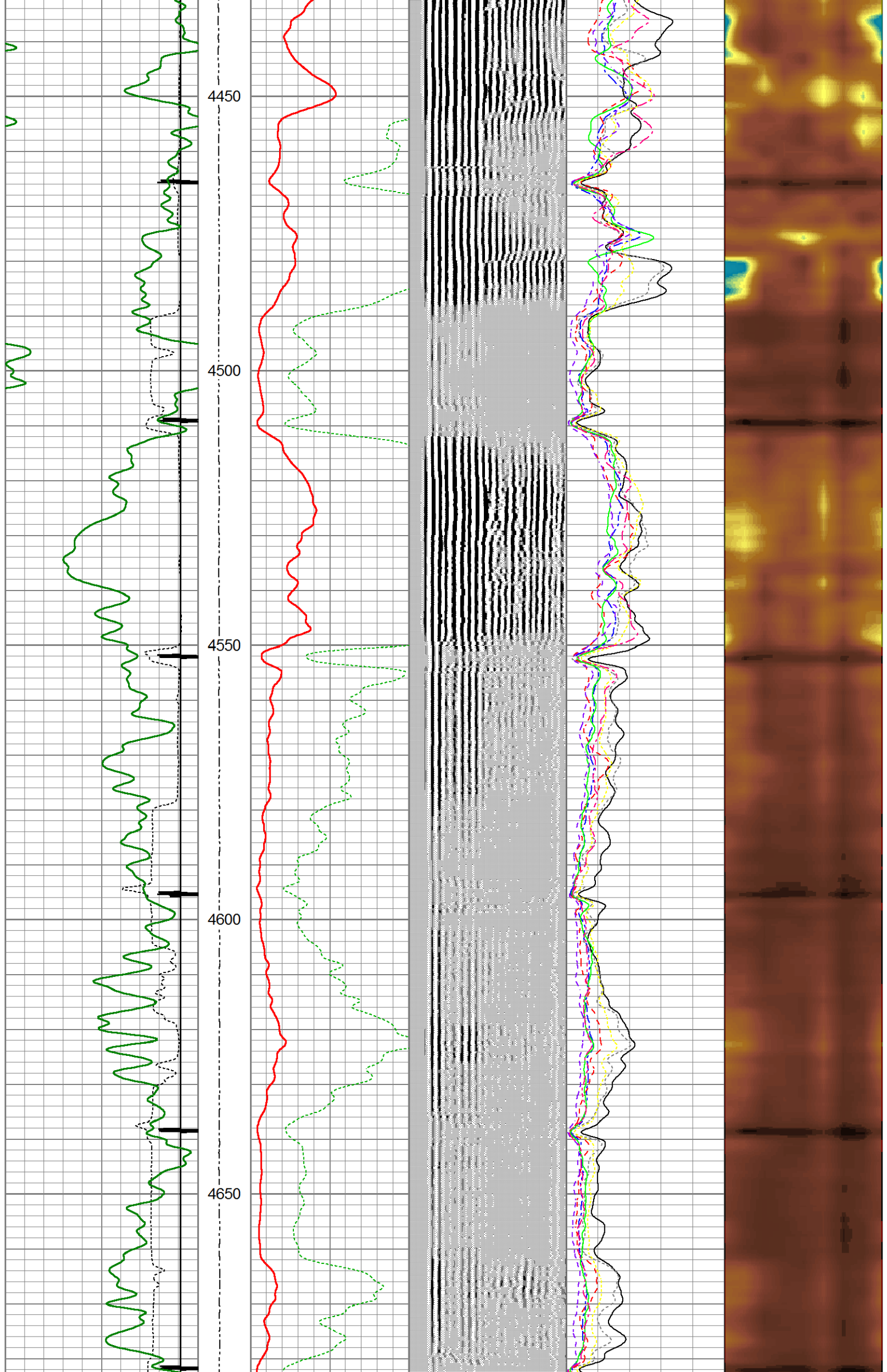


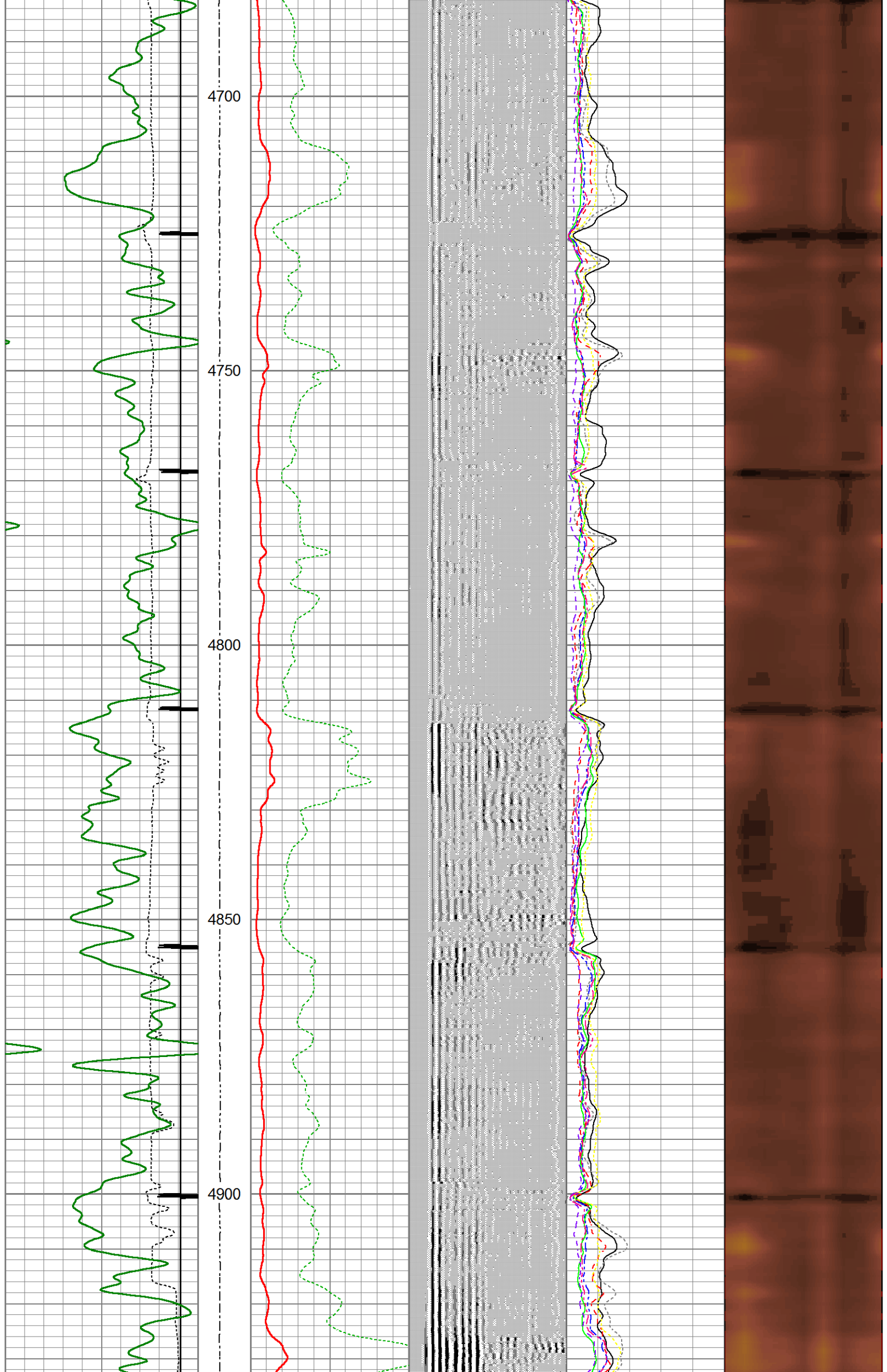


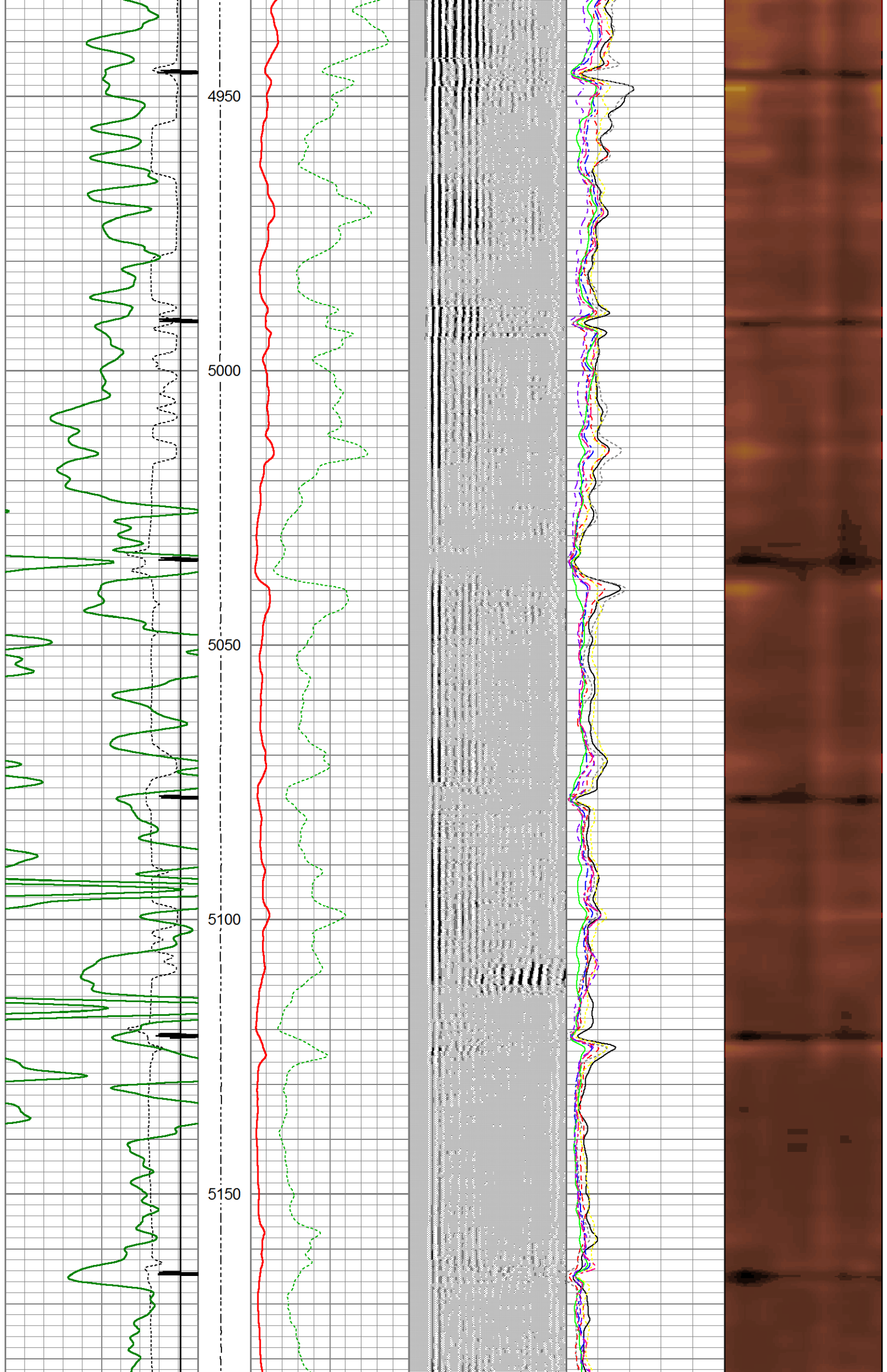


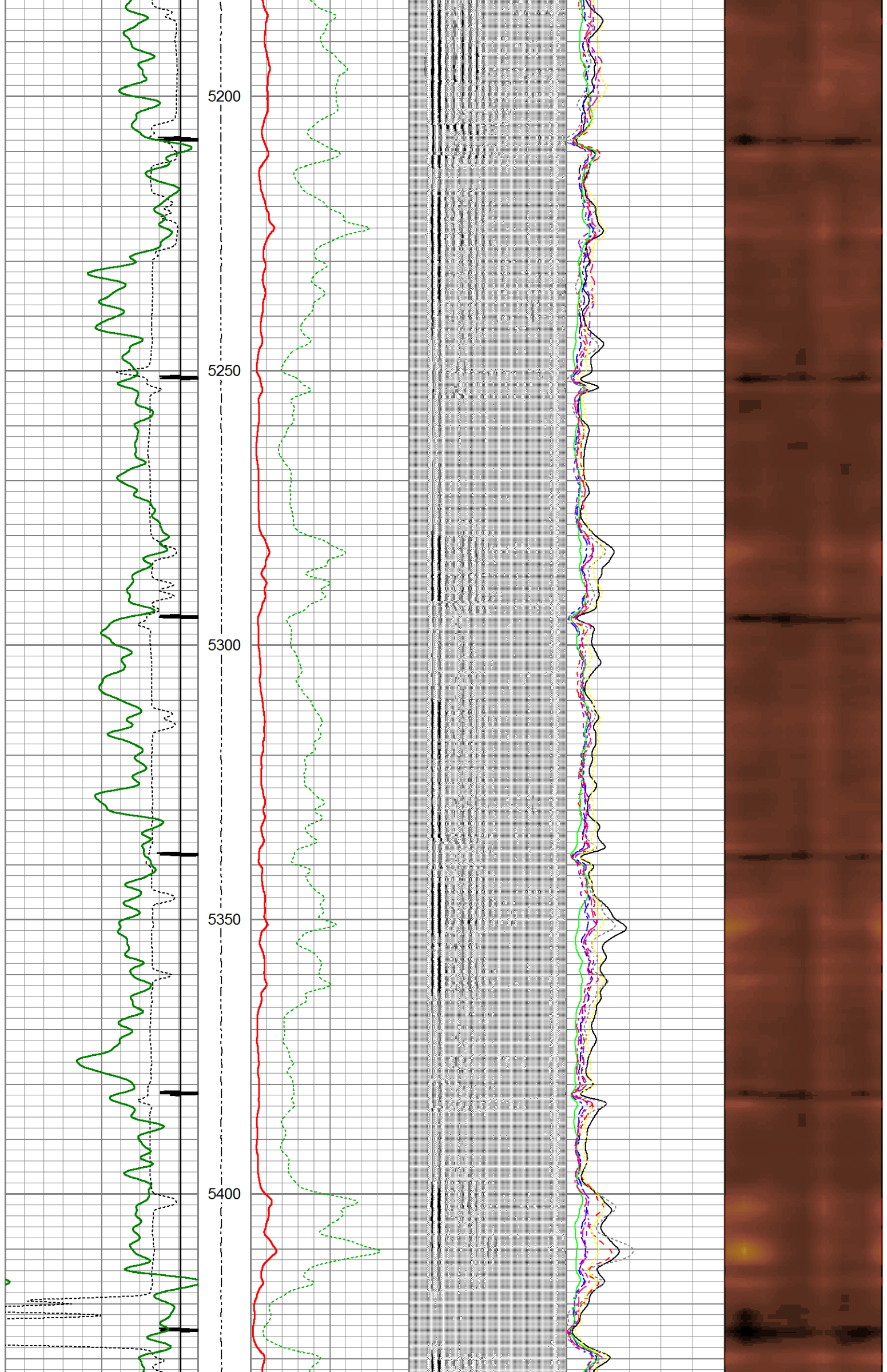


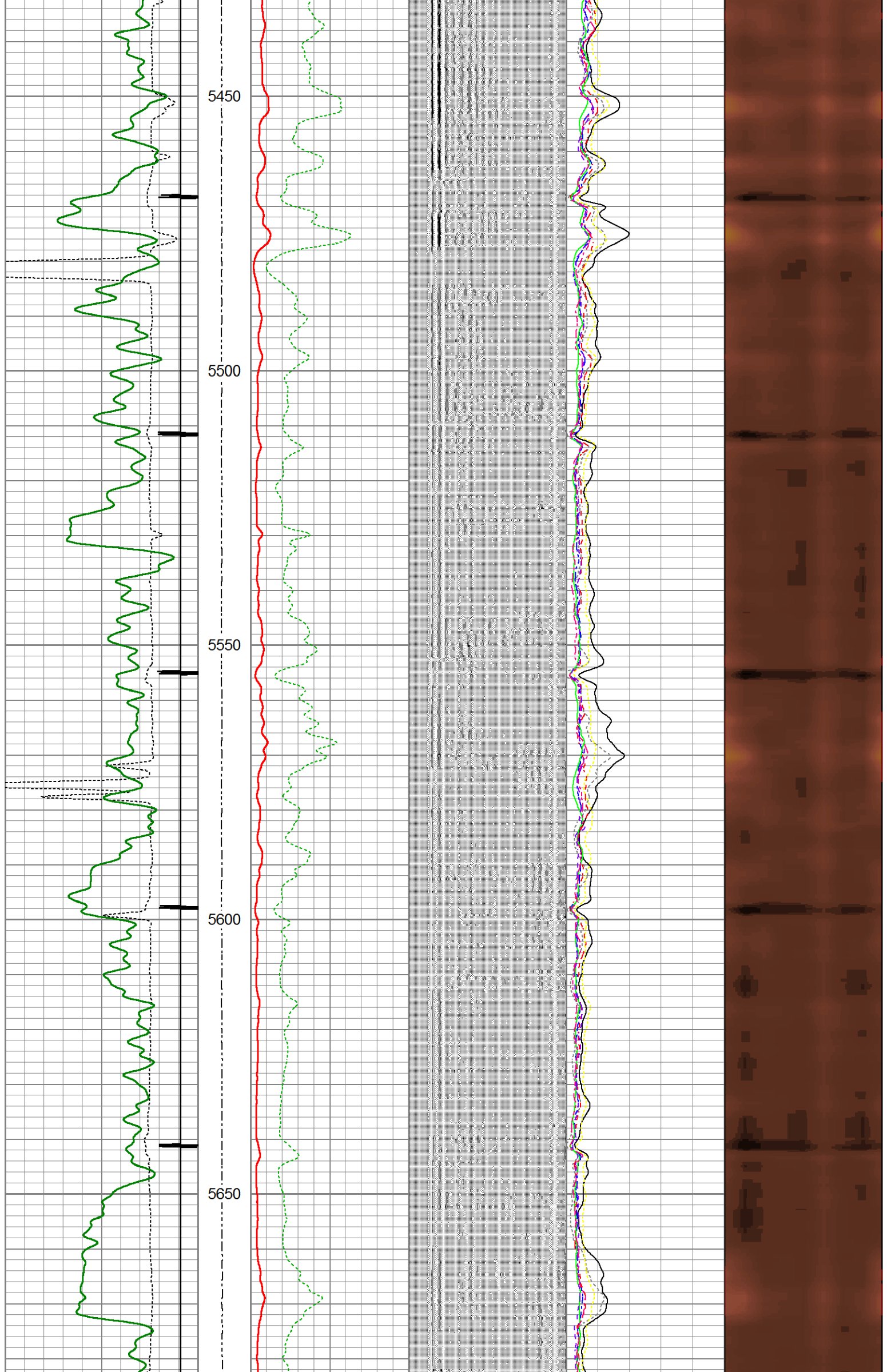


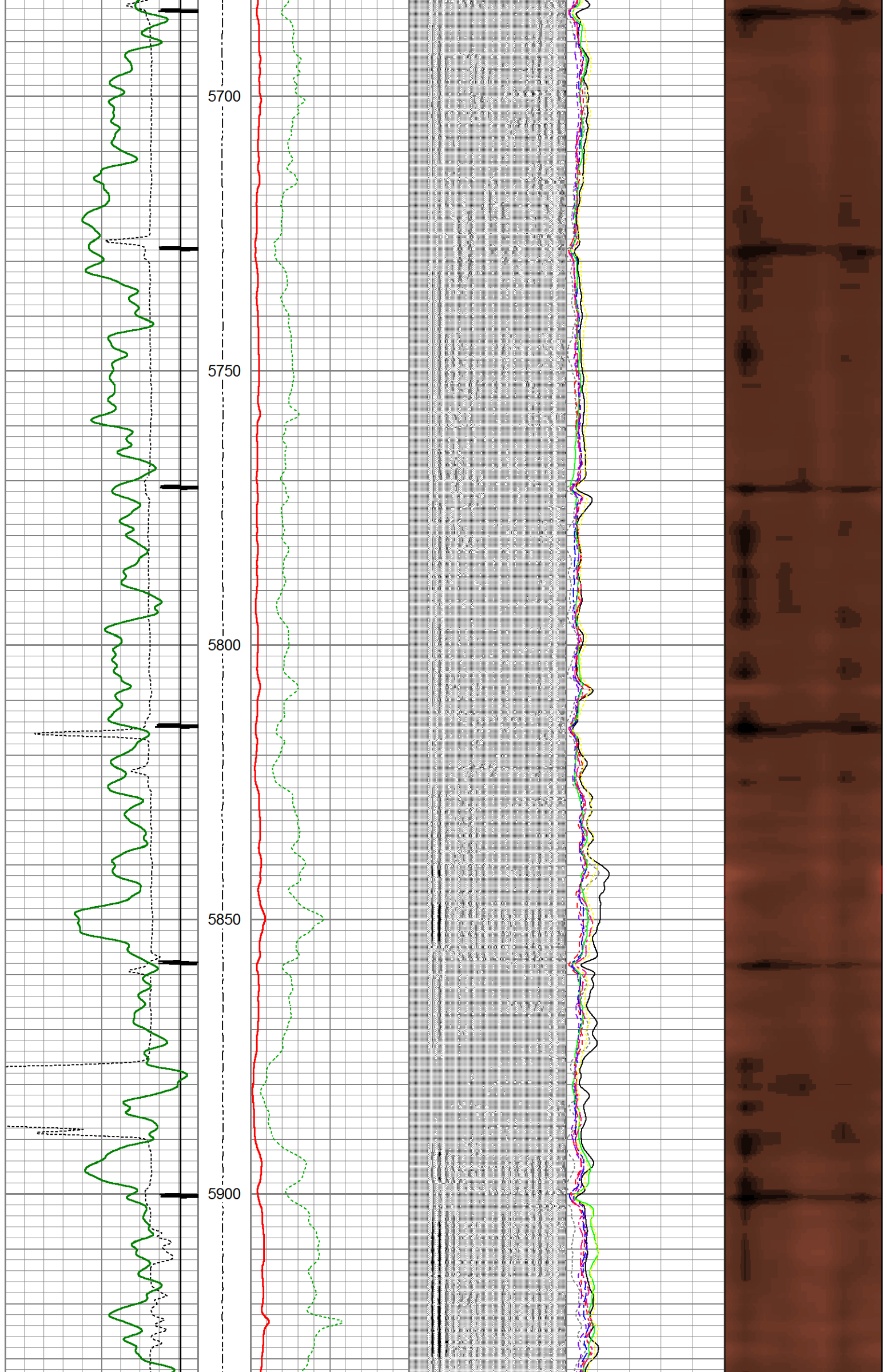


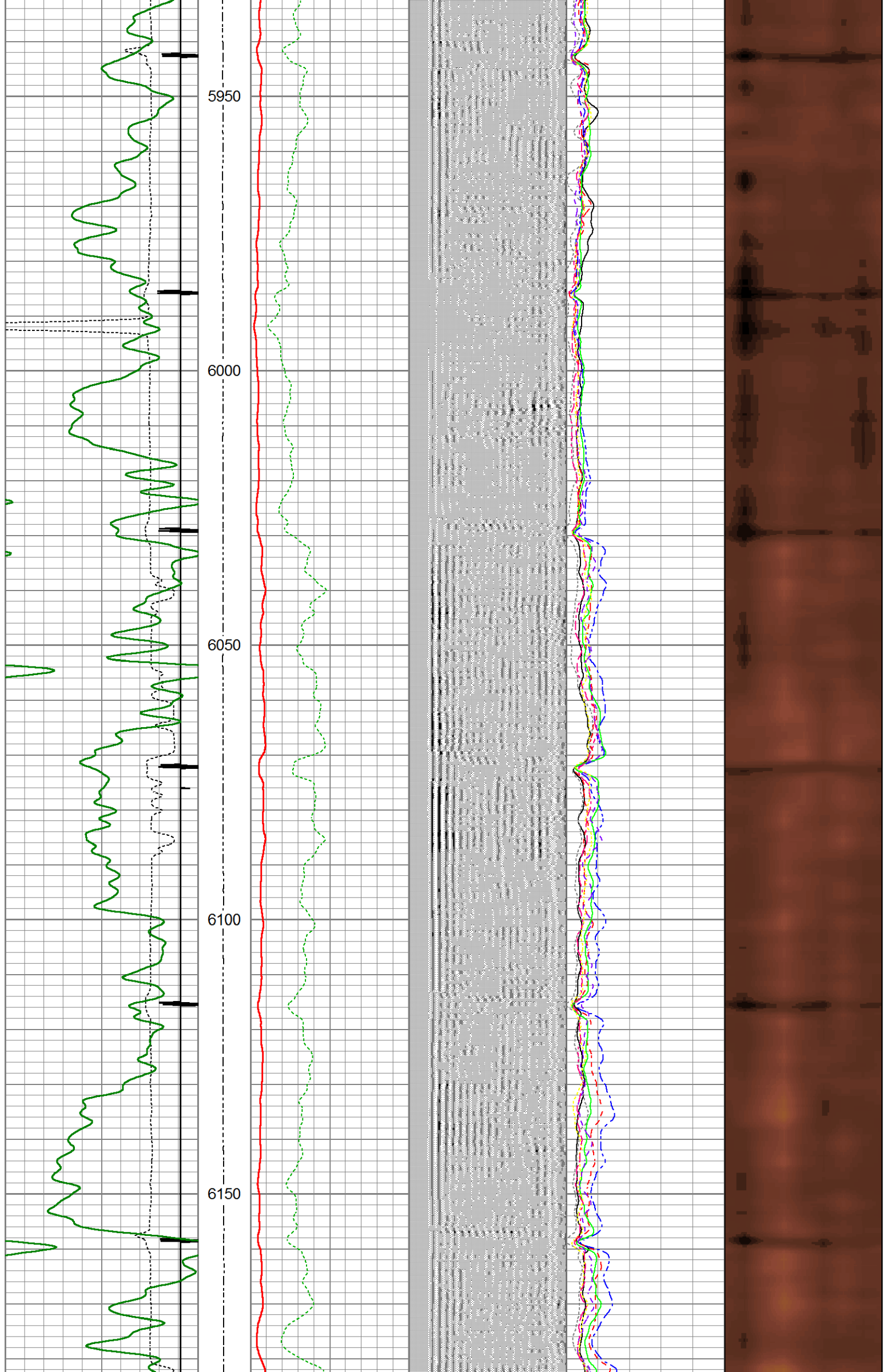


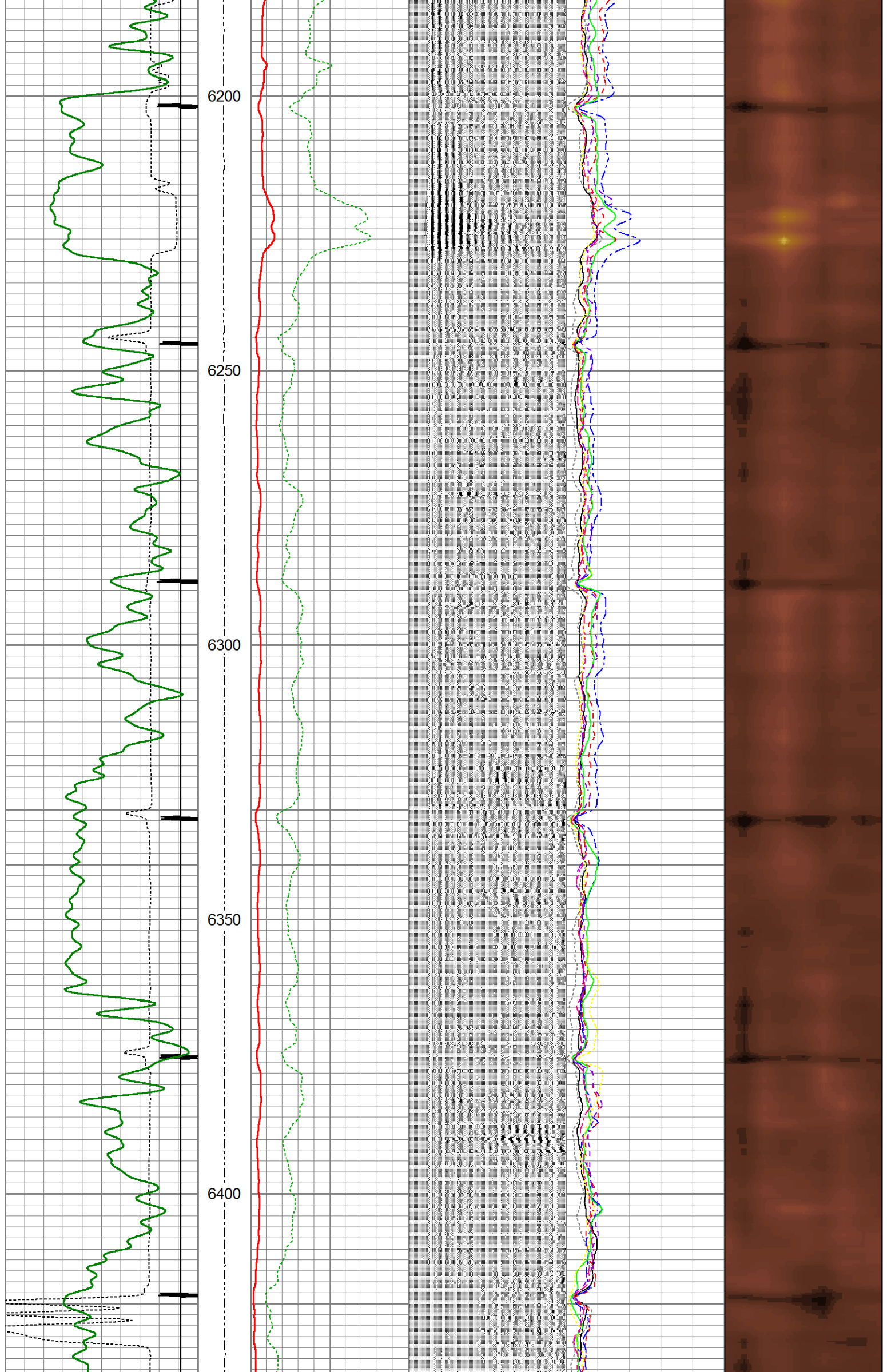


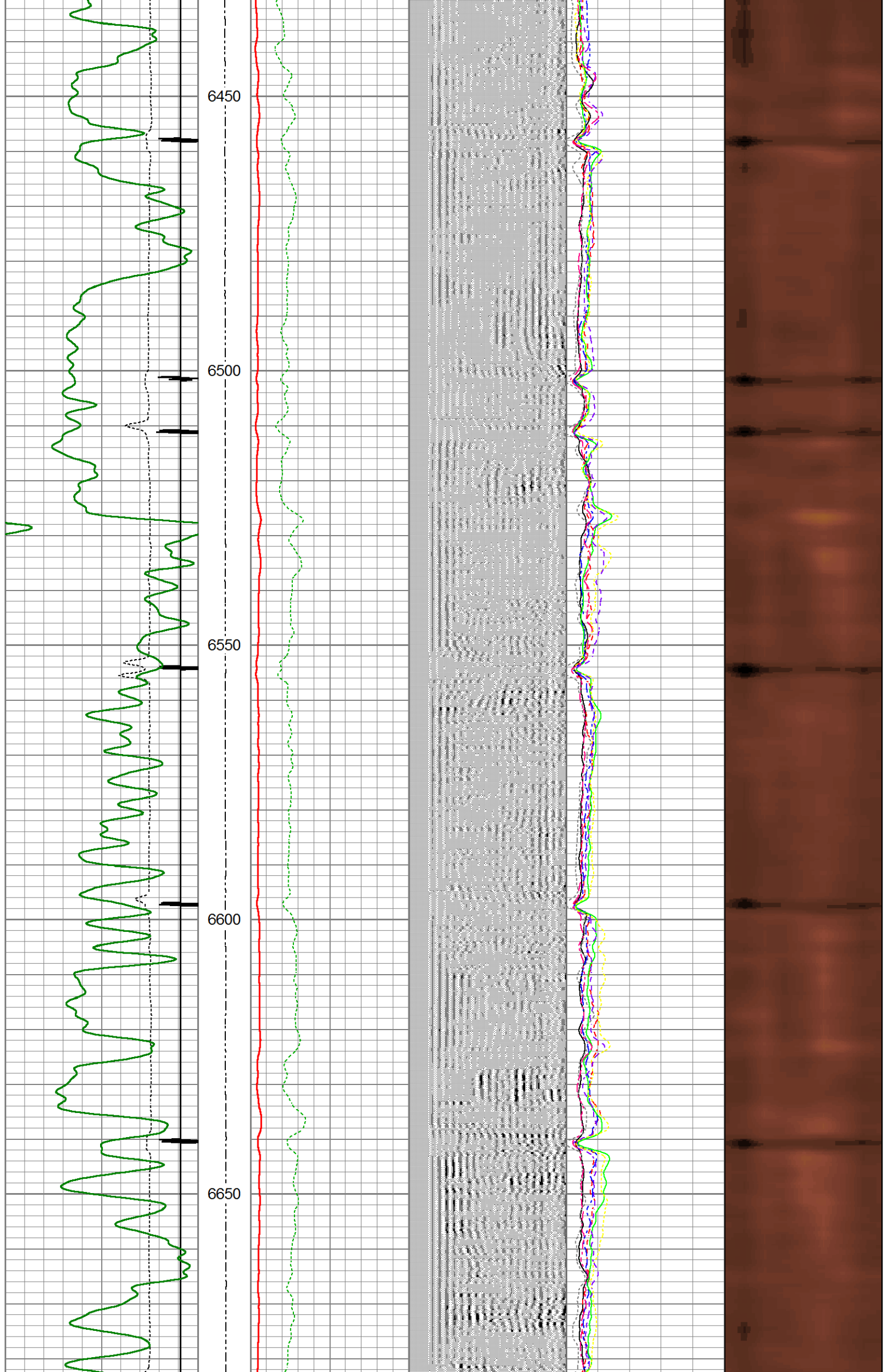


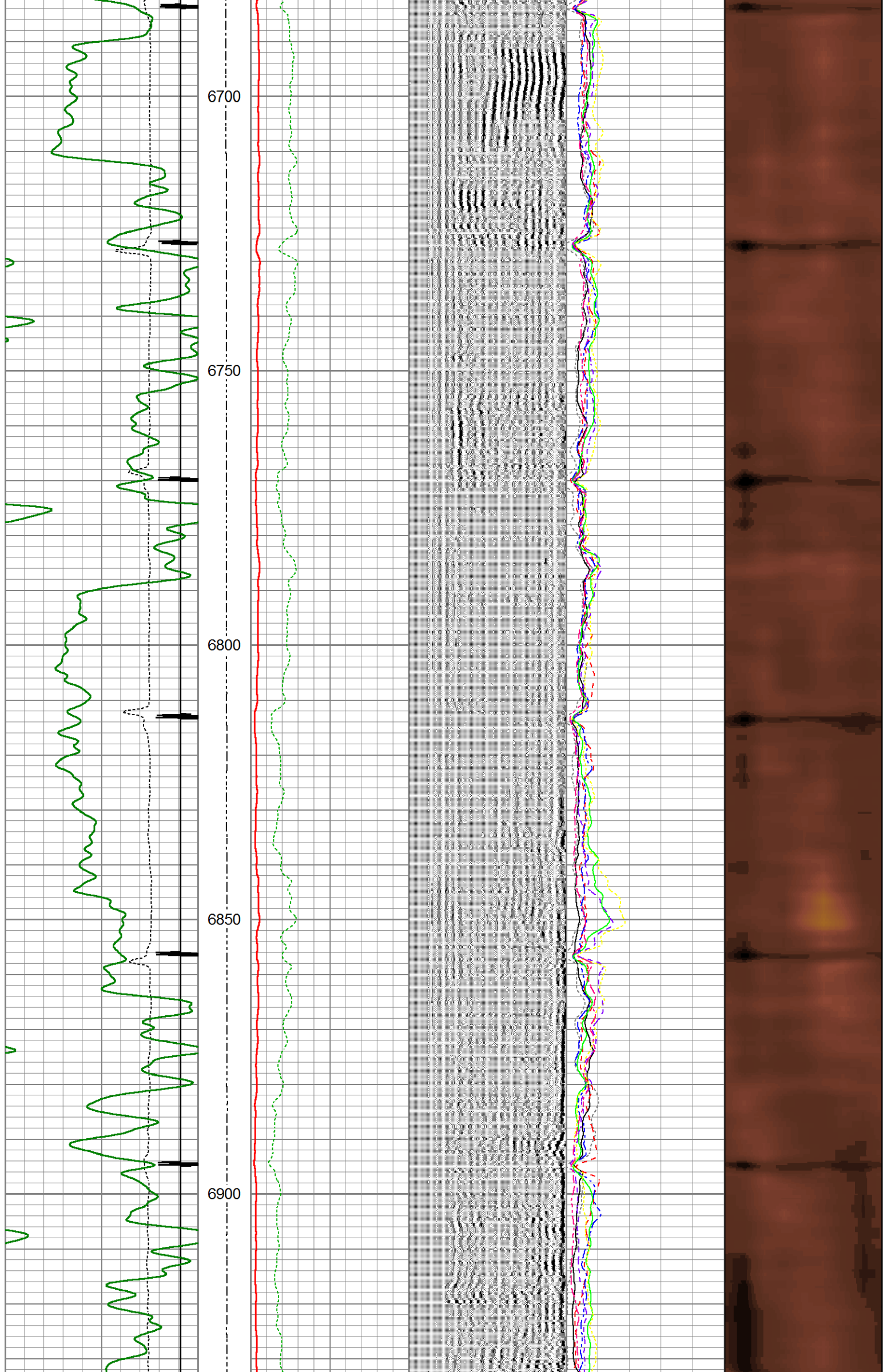


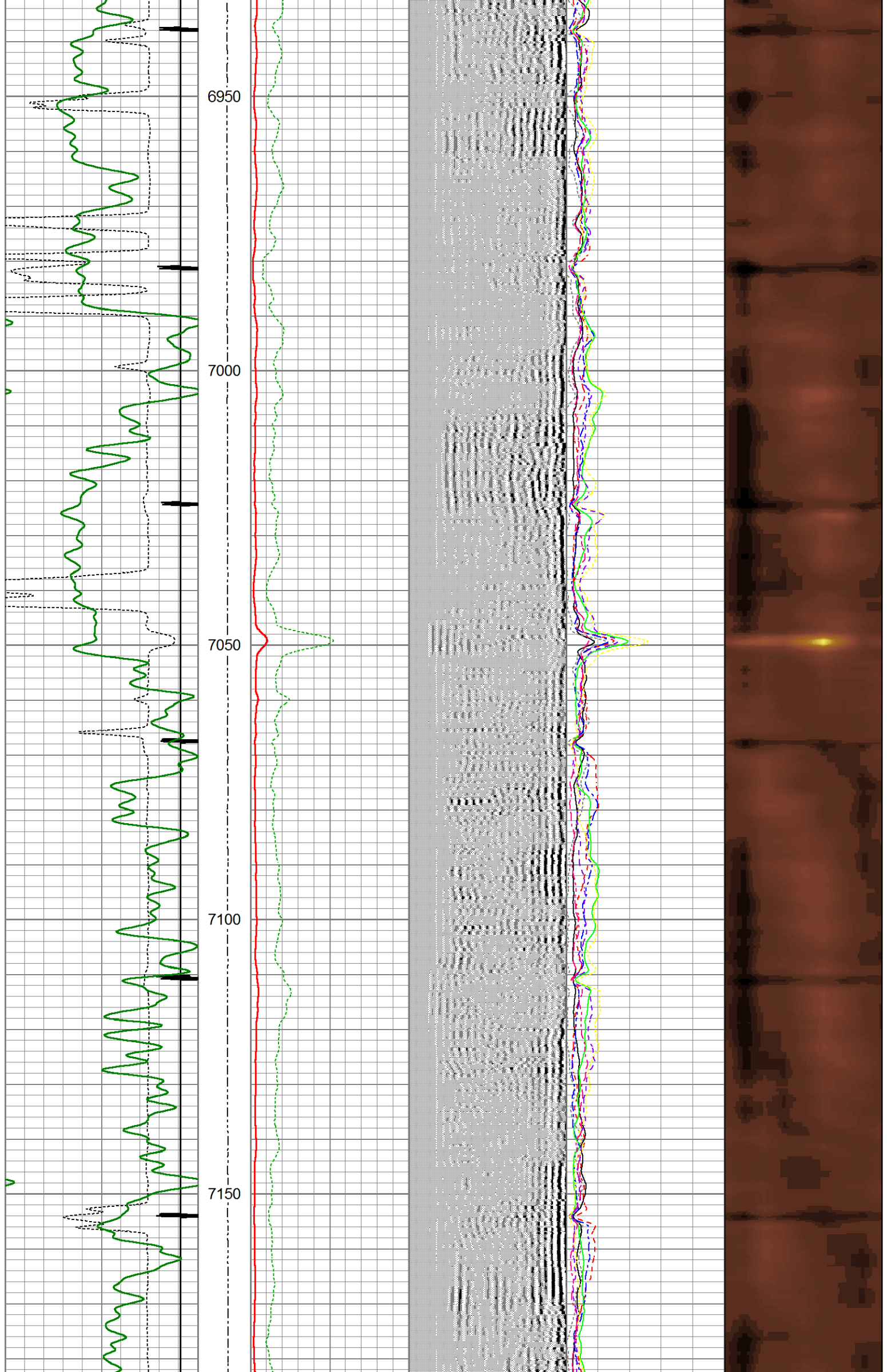


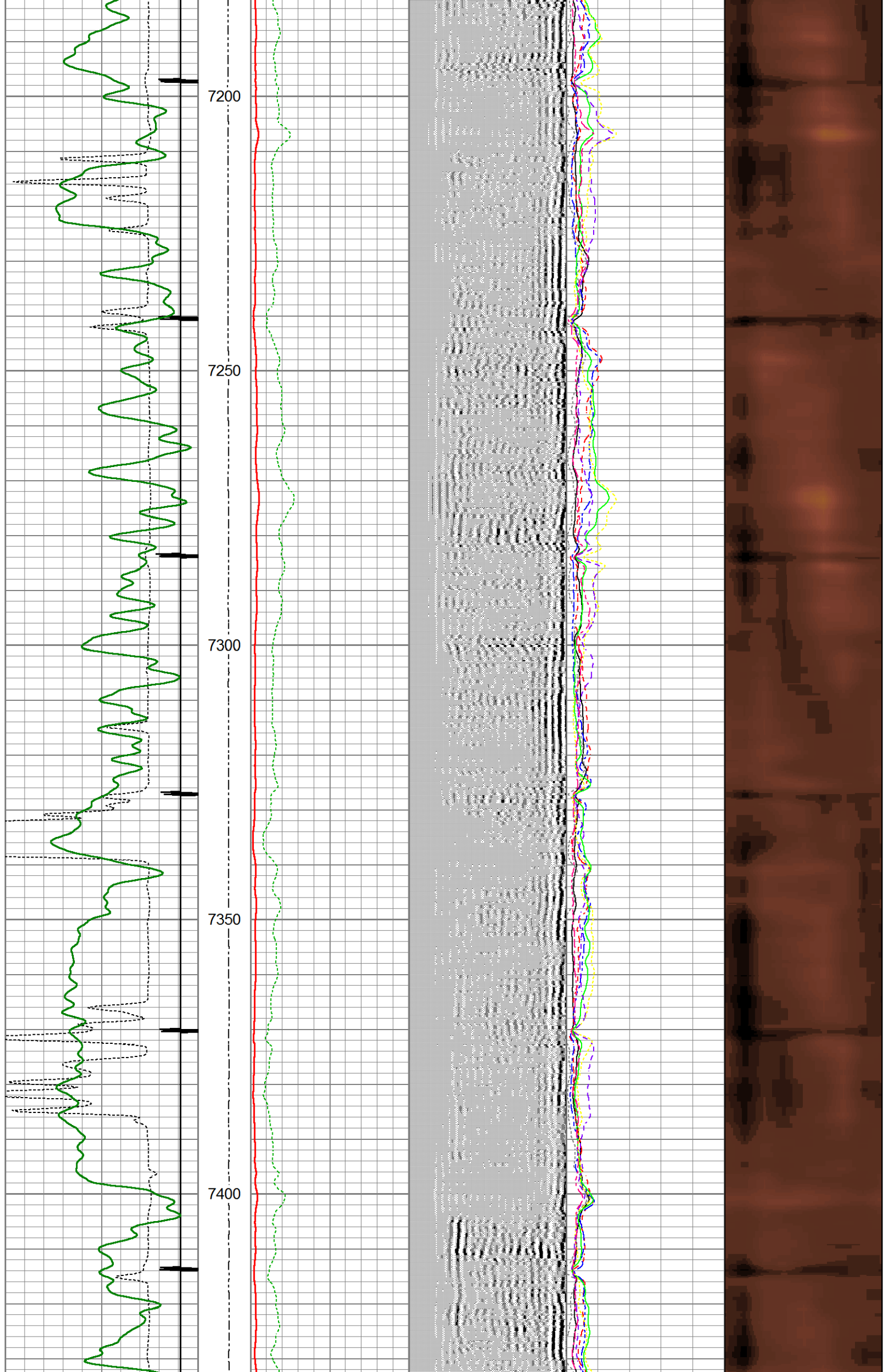


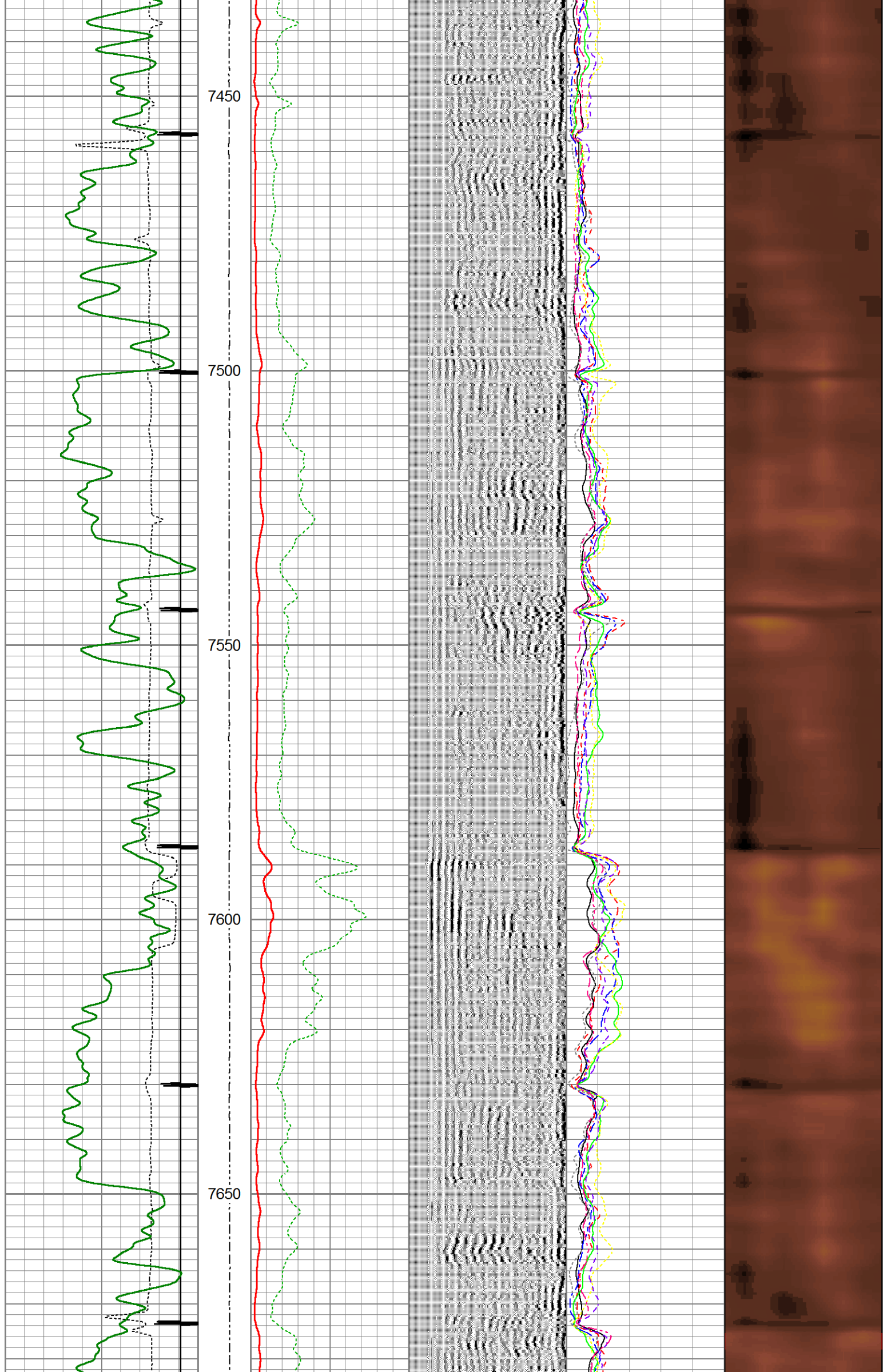


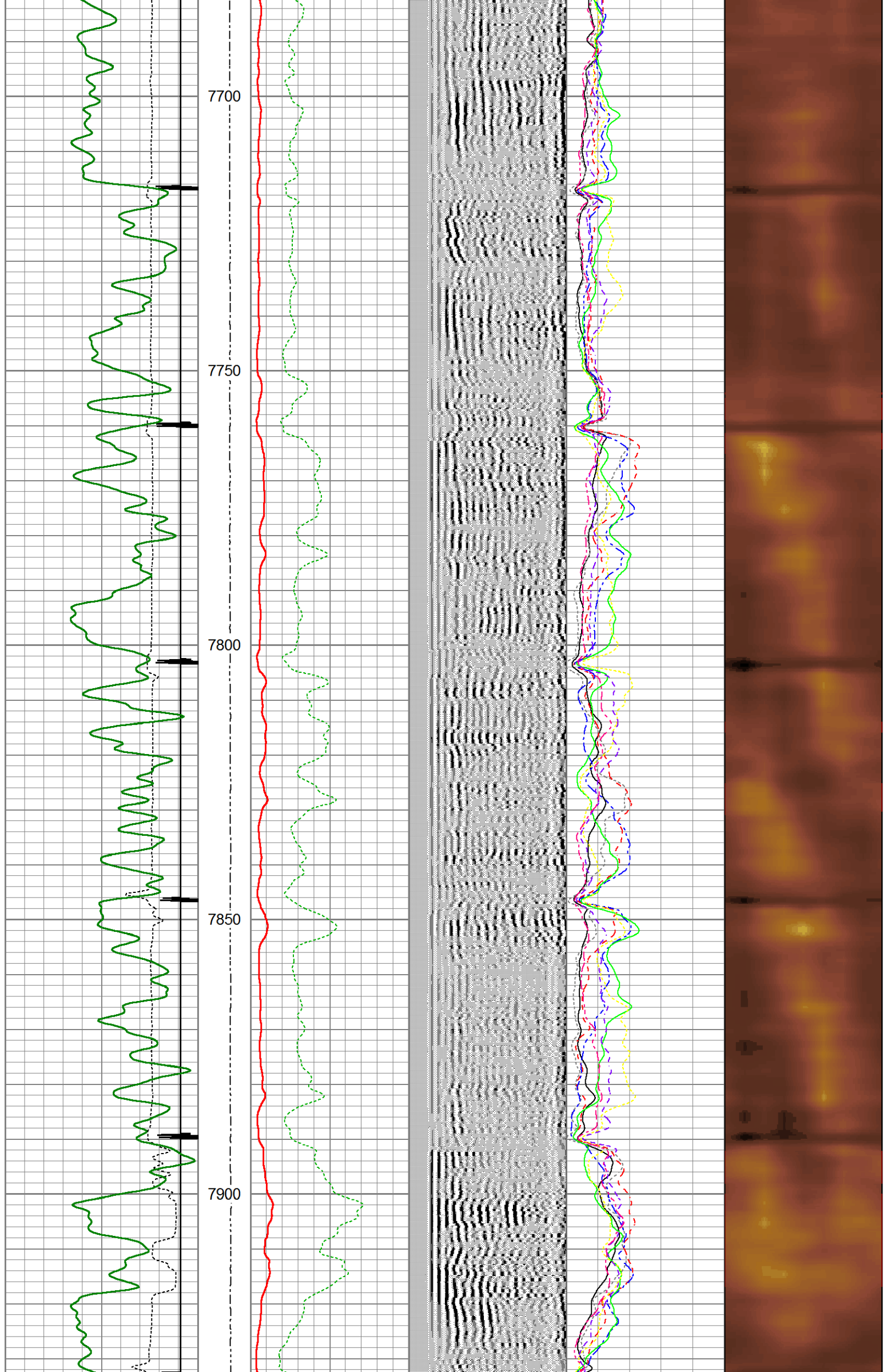


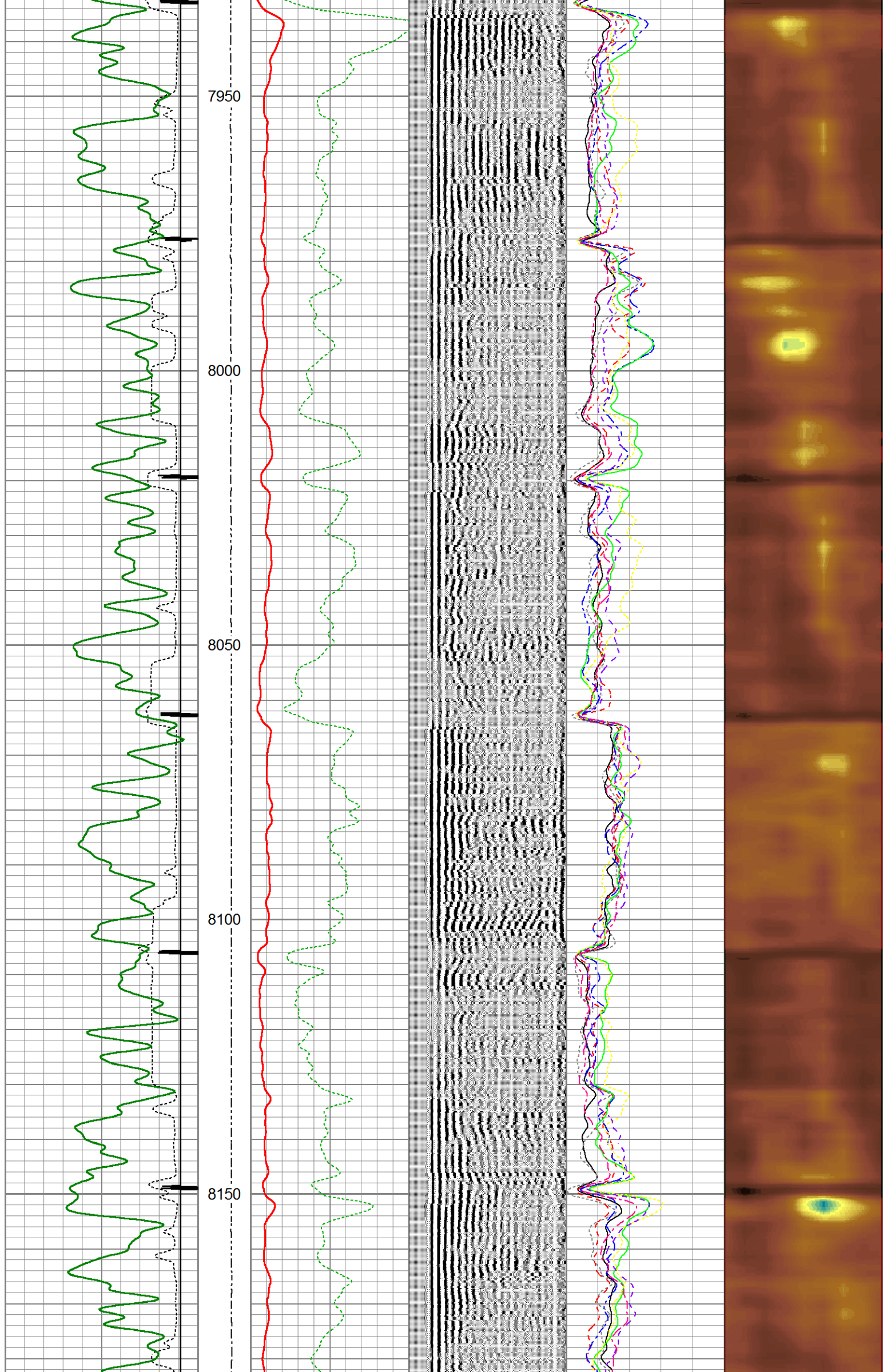


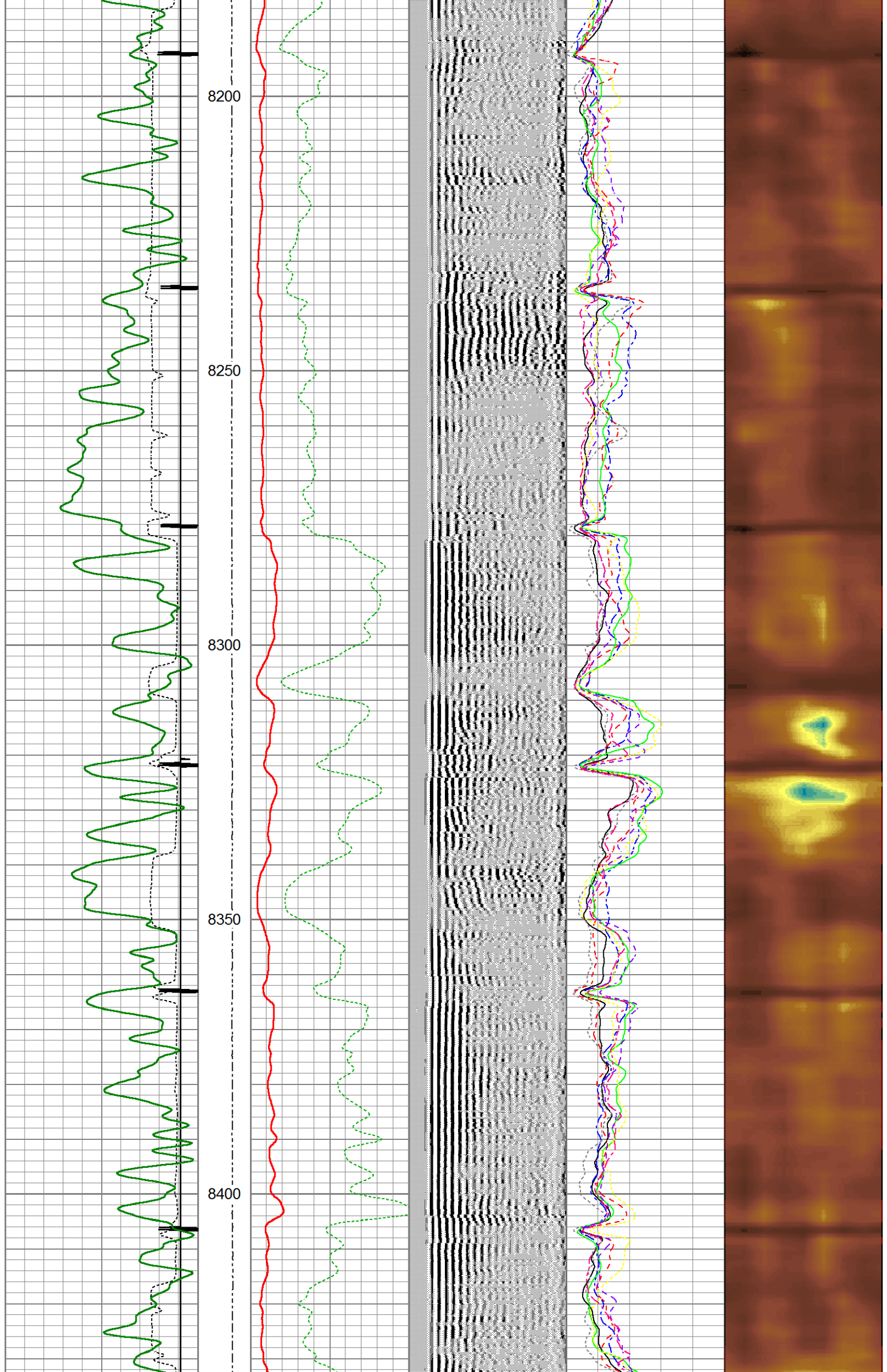


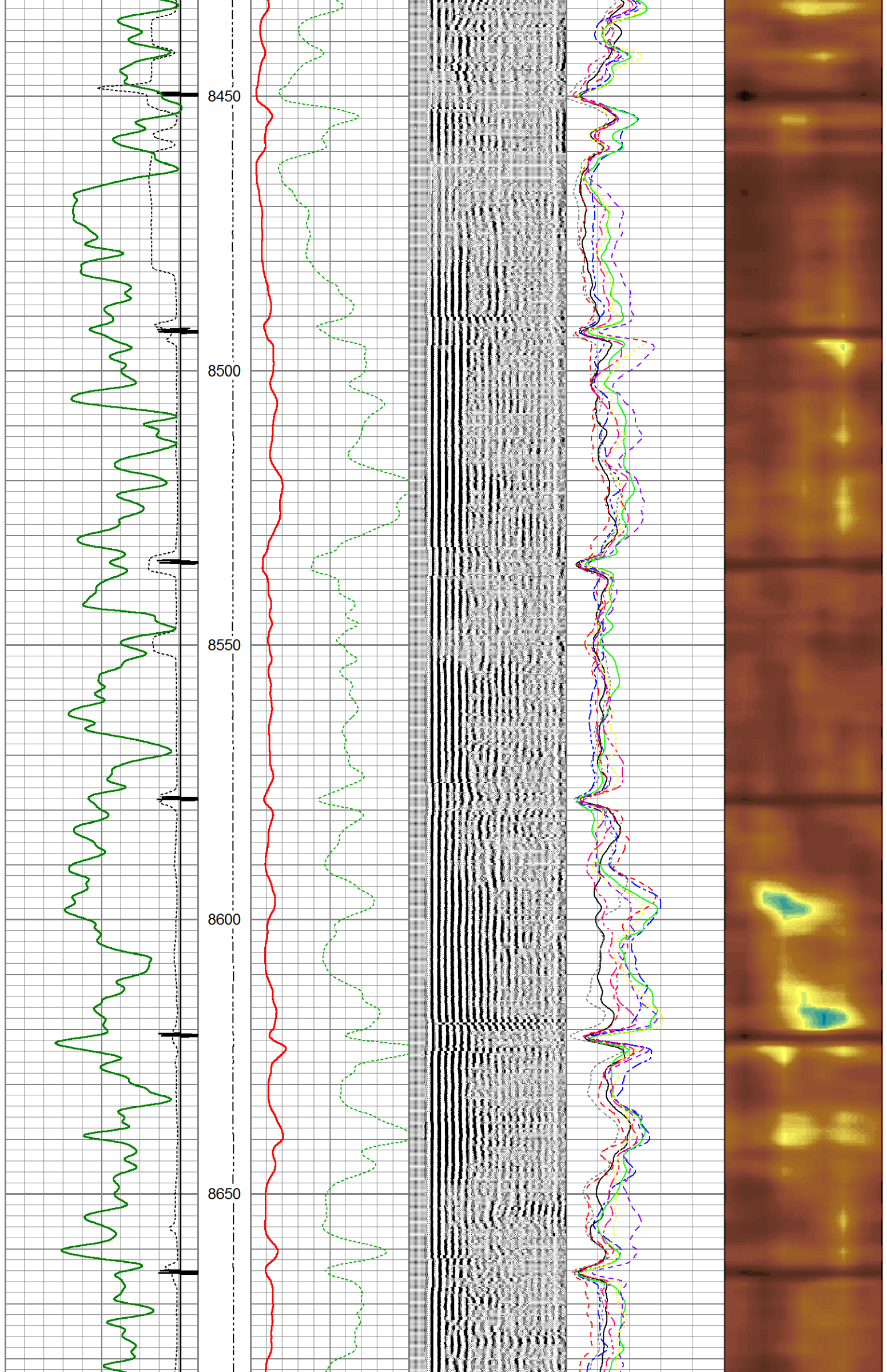


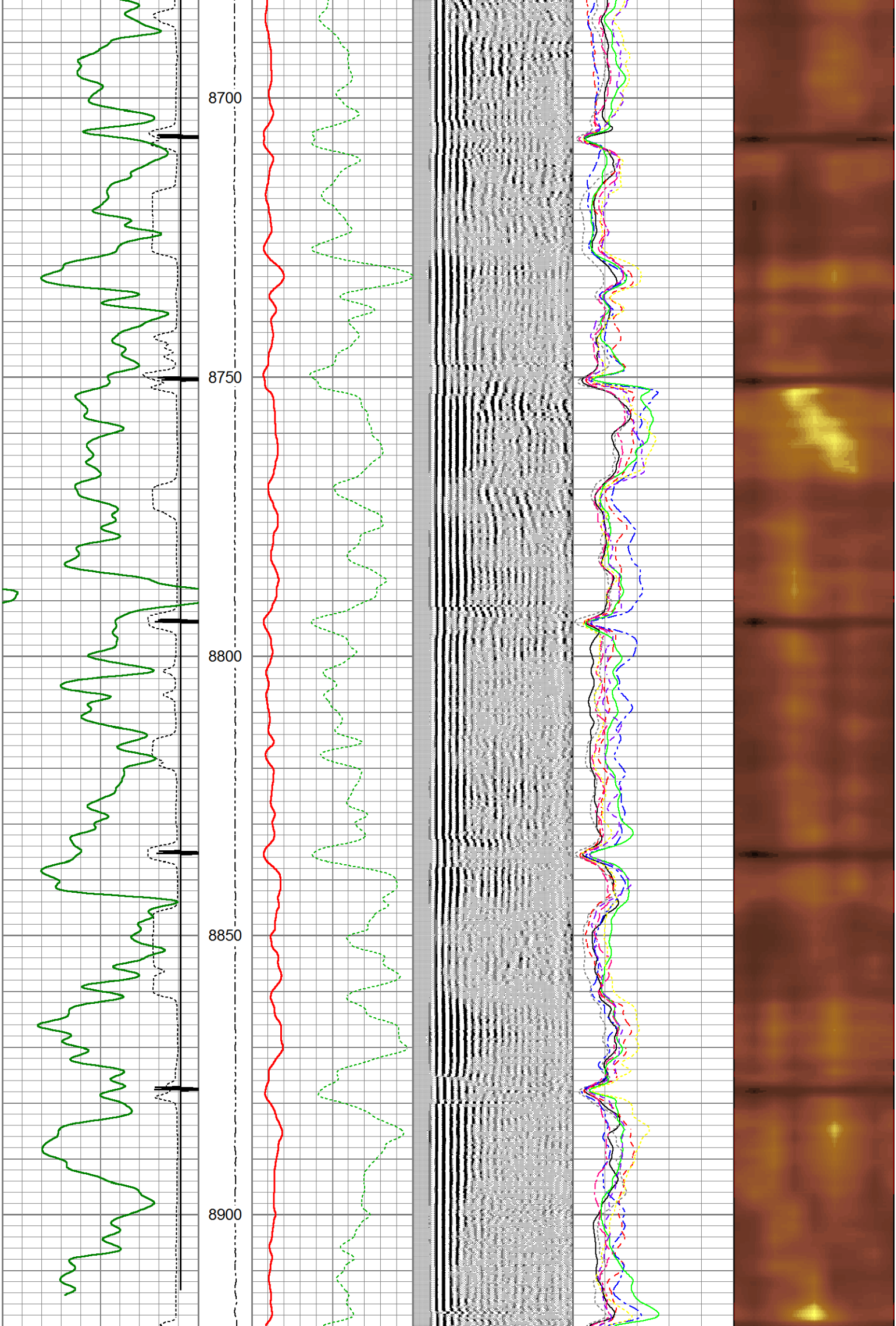












450	TT (usec)	150	LTEN	Amplified Amplitude	200	VDL (V)	1200	0	AMPS1	100	1	Sector Map	8
20	Collars	-2	(lb)	(mV)	200	PPT (usec)	1200	0	AMPS2	100	0		100
0	Gamma Ray	200	0 3000	0 Amplitude (mV)/100				0	AMPS3	100			

0	Gamma Ray	200	0	Amplitude (mV)100	0	AMPS1	100
0					0	AMPS4	100
0					0	AMPS5	100
0					0	AMPS6	100
0					0	AMPS7	100
0					0	AMPS8	100



Weatherford®

MAIN PASS

SECTOR BOND LOG



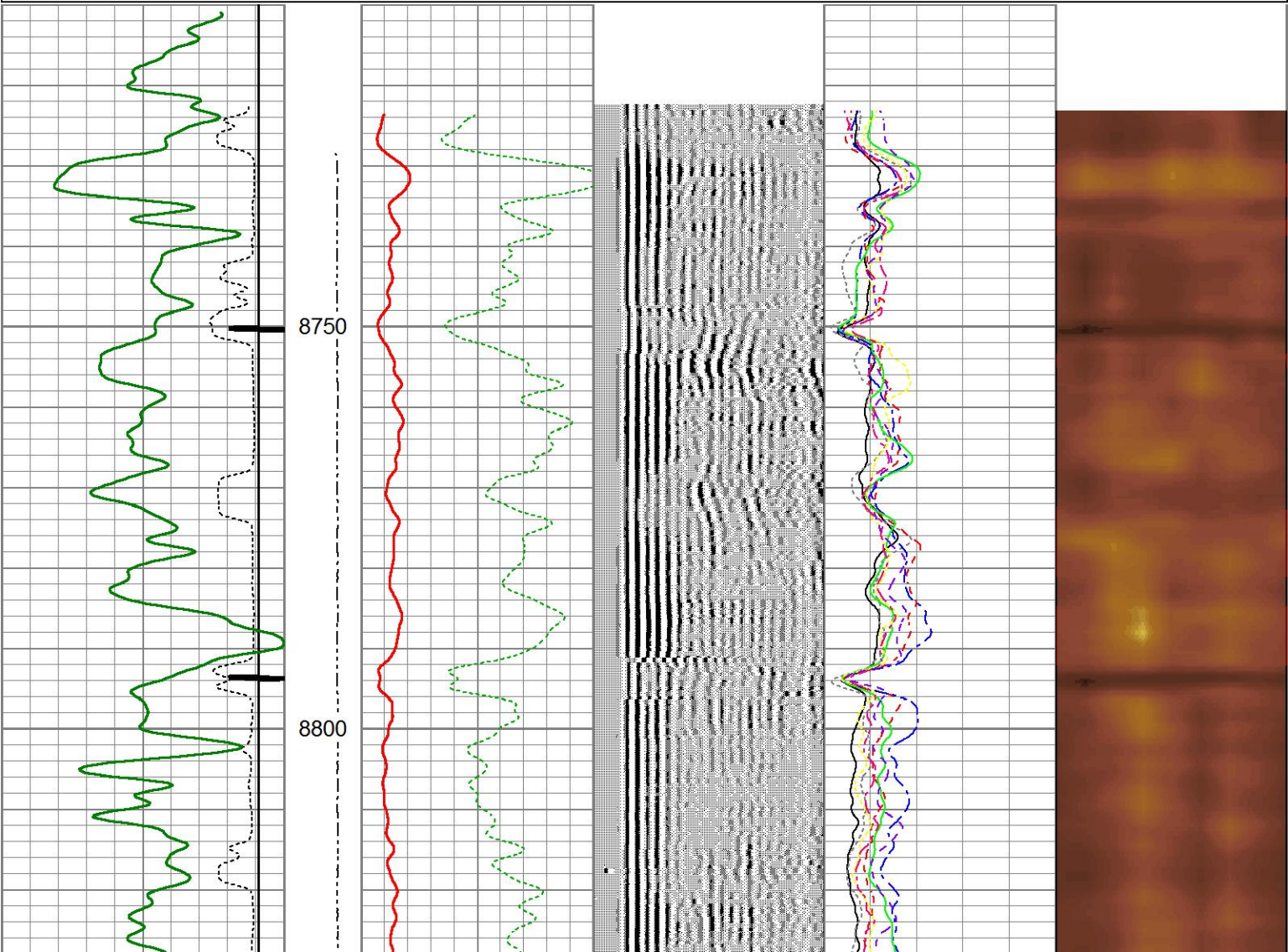
Weatherford®

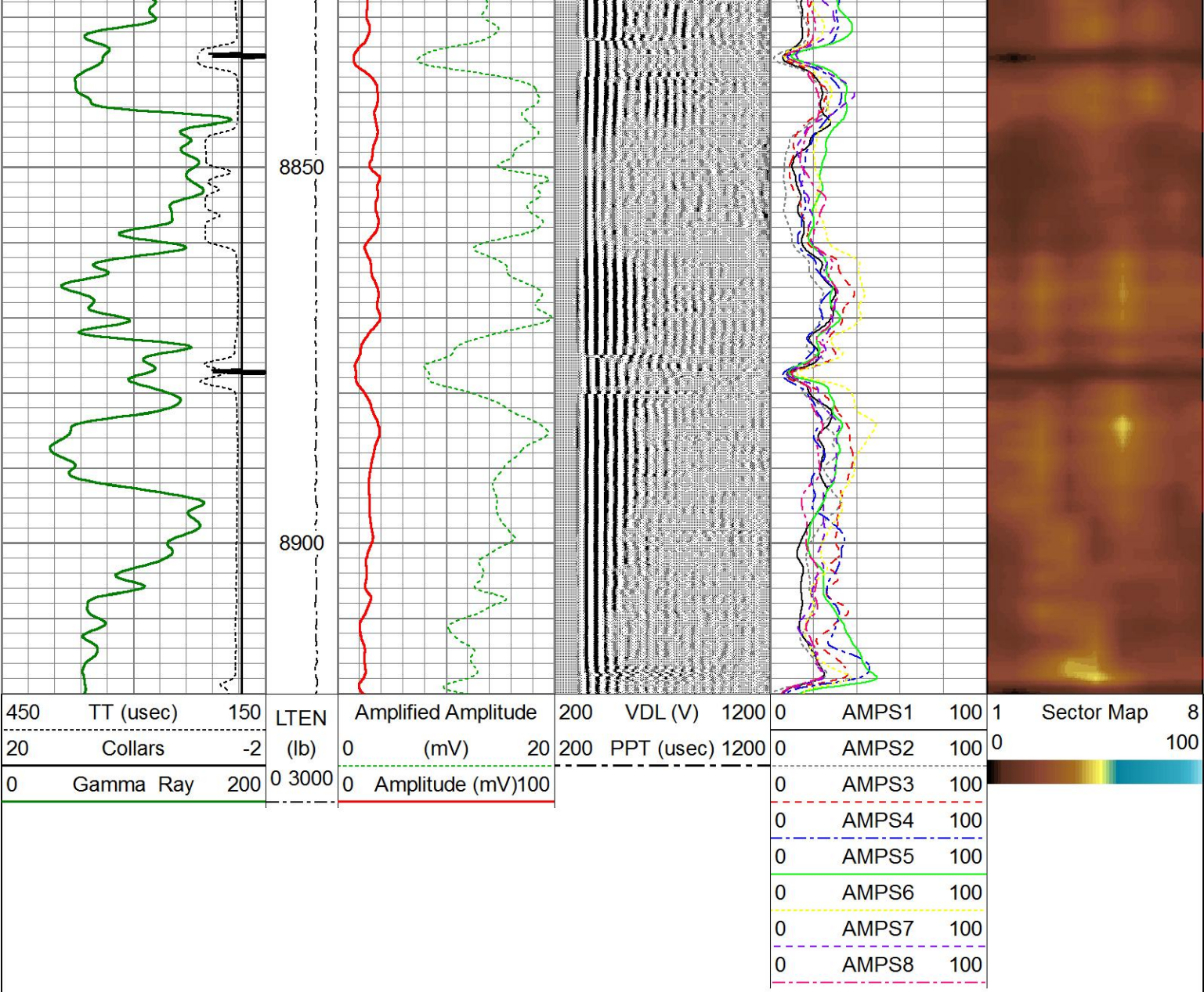
REPEAT PASS

SECTOR BOND LOG

Database File		g:\puckett pad day 2\puckett_21d-26_sbt\puckett_21d-26_sbt.db											
Dataset Pathname		pass10											
Presentation Format		sectors2											
Dataset Creation		Sun May 14 22:11:30 2017											
Charted by		Depth in Feet scaled 1:240											

450	TT (usec)	150	LTEN	Amplified Amplitude	200	VDL (V)	1200	0	AMPS1	100	1	Sector Map	8
20	Collars	-2	(lb)	0 (mV) 20	200	PPT (usec)	1200	0	AMPS2	100	0		100
0	Gamma Ray	200	0 3000	0 Amplitude (mV)100				0	AMPS3	100			
								0	AMPS4	100			
								0	AMPS5	100			
								0	AMPS6	100			
								0	AMPS7	100			
								0	AMPS8	100			








REPEAT PASS

SECTOR BOND LOG

Calibration Report						
Database File	G:\PUCKETT PAD DAY 2\PUCKETT_21D-26_SBT\PUCKETT_21D-26_SBT.db					
Dataset Pathname	pass11					
Dataset Creation	Sun May 14 22:17:06 2017					
Segmented Cement Bond Log Calibration Report						
Serial Number:	SBTA330					
Tool Model:	SCBT2.7H					
Performed:	Sat May 13 05:22:03 2017					
Depth:	590.340	ft				
Casing Diameter:	5.500	in				
	References (mv)		Readings (v)		Results	
	Zero	Reference	Zero	Reference	m	b
3'	0.600	80.000	-0.003	0.271	278.000	1.000
5'	0.600	80.000	-0.003	0.640	123.438	1.023
S1	0.000	85.000	-0.004	0.283	188.182	1.098
S2	0.000	85.000	-0.004	0.300	208.421	1.210
S3	0.000	85.000	-0.005	0.276	204.300	1.386
S4	0.000	85.000	-0.005	0.277	227.143	1.437
S5	0.000	85.000	-0.005	0.258	251.053	1.546
S6	0.000	85.000	-0.005	0.280	251.053	1.455
S7	0.000	85.000	-0.005	0.286	227.143	1.406
S8	0.000	85.000	-0.004	0.260	207.000	1.240

S8 0.000 85.000 -0.004 0.269 207.000 1.349

Gamma Ray Calibration Report				
Serial Number:		GRBA 160		
Tool Model:		GRBA2.7H		
Performed:		Thu Mar 09 10:01:02 2017		
Calibrator Value:		140.0		
Background Reading:		20.0	cps	
Calibrator Reading:		280.0	cps	
Sensitivity:		0.7000	/cps	

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
CCL	23.43		CablHD-Weatherford 1 7/16 Cable Head	1.00	1.44	5.00
			CENT-CEN-A SBT Centralizer 2-3/4" Single Pin (4 Bowspring)	2.50	2.75	11.90
			CCLL-CTBA2.7H (CTBA 224) 2-3/4" 350F/20K PSI Weatherford Logging CCL/Telemetry (6Pin Bottom)	3.40	2.75	
GR	19.82		GR-GRBA2.7H (GRBA 160) 2 3/4" 350F/20K PSI Weatherford Gamma Ray (6Pin)	4.76	2.75	40.00
			CENT-CEN-B SBT Centralizer 2-3/4" 6Pin (4 Bowspring)	3.08	2.75	23.80
			SCBT-SCBT2.7H (SBTA330) 2 3/4" 350F/20K PSI Weatherford Sector Bond Tool	10.29	2.75	90.00
WVFS8	7.70					
WVFS7	7.70					
WVFS6	7.70					
WVFS5	7.70					
WVFS4	7.70					
WVFS3	7.70					
WVFS2	7.70					
WVFS1	7.70					

[illegible]