



Radial Cement Bond  
Gamma Ray CCL  
Log

Company	Petroshare Corp	Country	
Well	SHOOK 3-10-2NBH		
Field	WATTENBERG		
County	ADAMS		
State	COLORADO		
Company	Petroshare Corp	Country	
Well	SHOOK 3-10-2NBH		
Field	WATTENBERG		
County	ADAMS		
State	COLORADO	Country	
Location:	API # : 05-001-09971	Other Services	
	NWSE SEC.03-T1S-R67W 2058' FSL & 2214' FEL	N/A	
SEC	TWP	RGE	
Permanent Datum	G.L.	Elevation	5098'
Log Measured From	K.B.		
Drilling Measured From	K.B.	Elevation	K.B. 5111' D.F. N/A G.L. 5098'
Date	MARCH 4, 2018		
Run Number	ONE		
Depth Driller	12838'		
Depth Logger	8045'		
Bottom Logged Interval	8033		
Top Log Interval	46'		
Open Hole Size	N/A		
Type Fluid	H2O		
Density / Viscosity	8.4		
Max. Recorded Temp.	N/A		
Estimated Cement Top	110'		
Time Well Ready	4:45		
Time Logger on Bottom	5:20		
Equipment Number	200121		
Location	GREENEY CO		
Recorded By	MIKE NOWICKI		
Witnessed By	HAROLD POWELL		
Borehole Record			
Run Number	Bit	From	To
		Size	Weight
		From	To
Casing Record	Size	Wgt/Ft	Top
Surface String	9-5/8"	36 PPF	SURFACE
Prot. String	5-1/2	20 PPF	SURFACE
Production String			
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

Depth correlated to marker joint  
Marker joint at 7260' - 7282'

THANK YOU FOR USING C&J CASEDHOLE SOLUTIONS

M. NOWICKI, B. SISSON, S. BARNETT



Main Pass (0) PSI

Database File g:\petroshare corp shook pad\db\s\fs0210 ps shook 3-10-2nbh cbl.db  
Dataset Pathname Shook3-10-2NBH/run1/pass4  
Presentation Format scbl5\_5  
Dataset Creation Sun Mar 04 05:32:59 2018  
Charted by Depth in Feet scaled 1:240

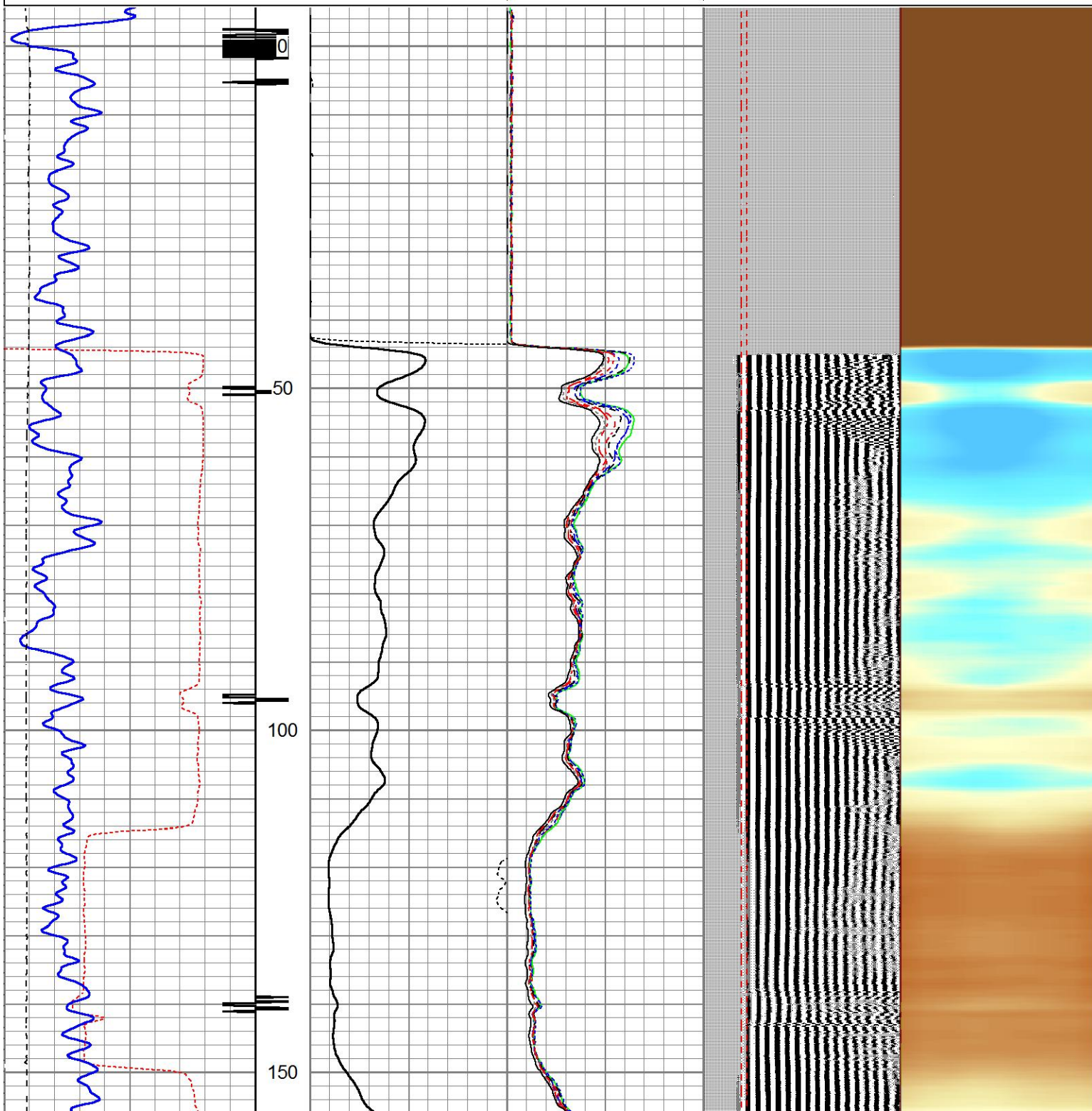
341 Travel Time (usec) 241  
0 Gamma Ray (GAPI) 200  
0 Line Tension (lb) 4000

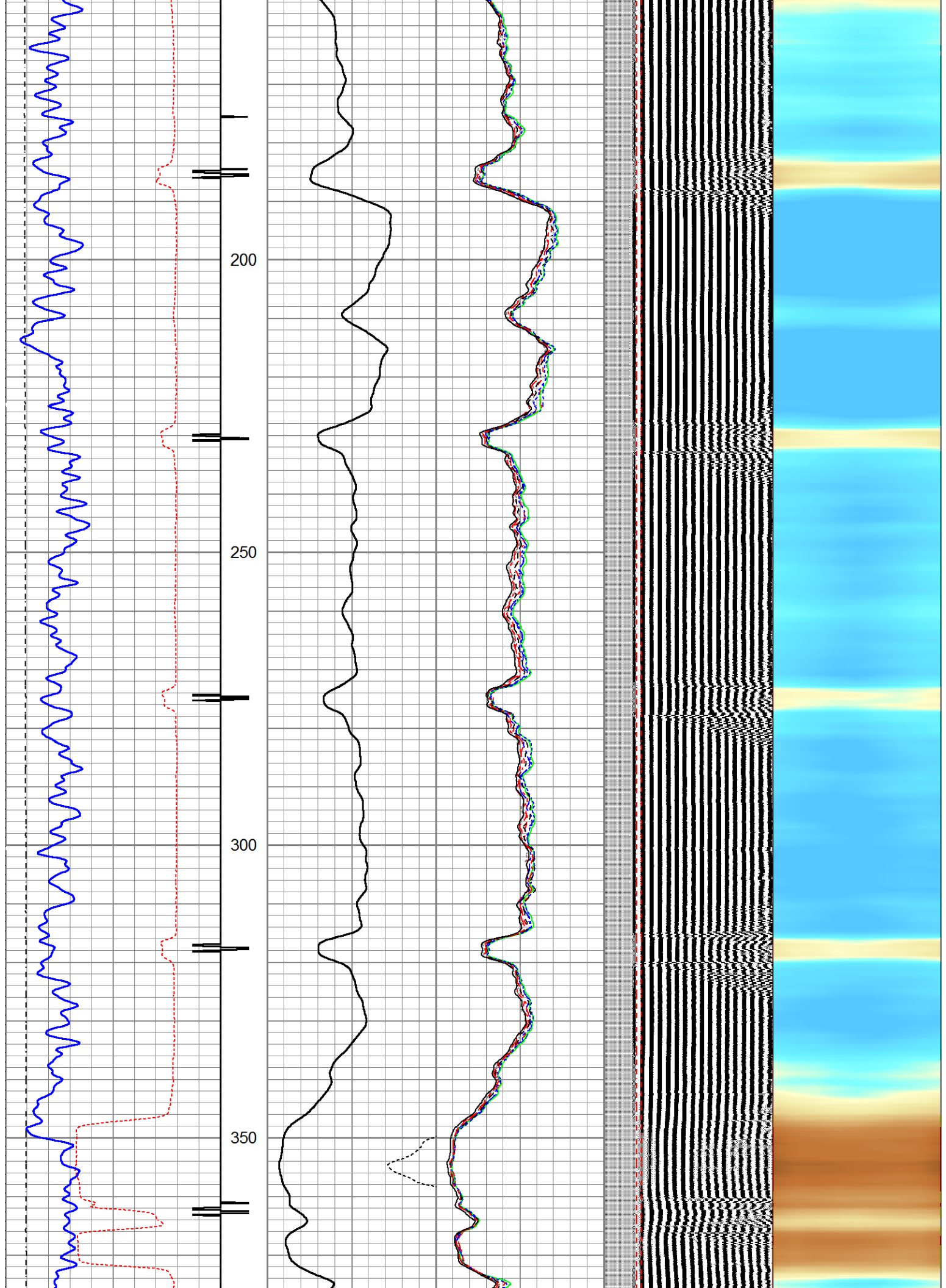
CCL

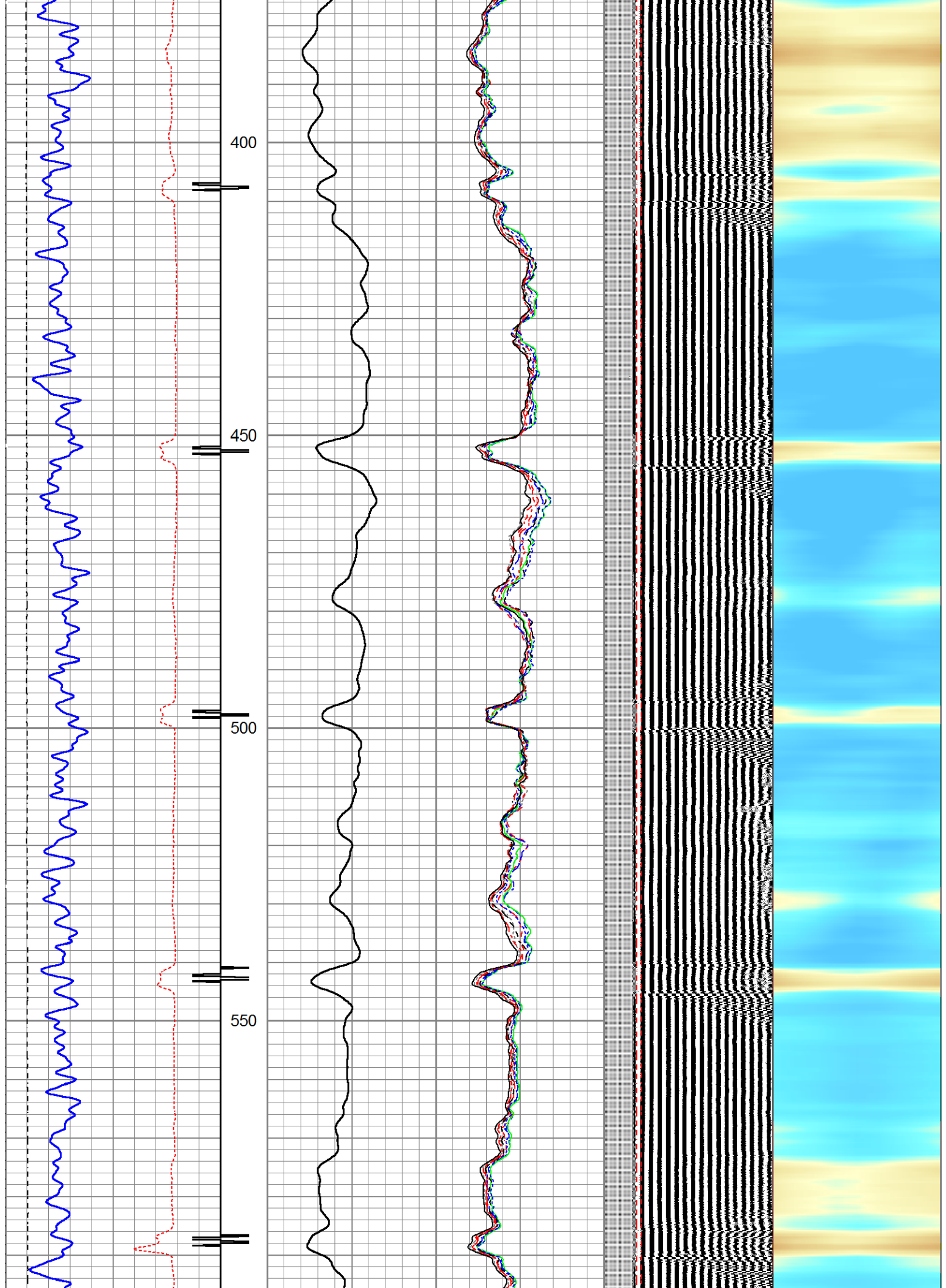
0	Amplitude (mV)	100	-5	AMPS8	150
	Amplified Amplitude		-5	AMPS7	150
0	(mV)	10	-5	AMPS6	150
			-5	AMPS5	150
			-5	AMPS4	150
			-5	AMPS3	150
			-5	AMPS2	150
			-5	AMPS1	150

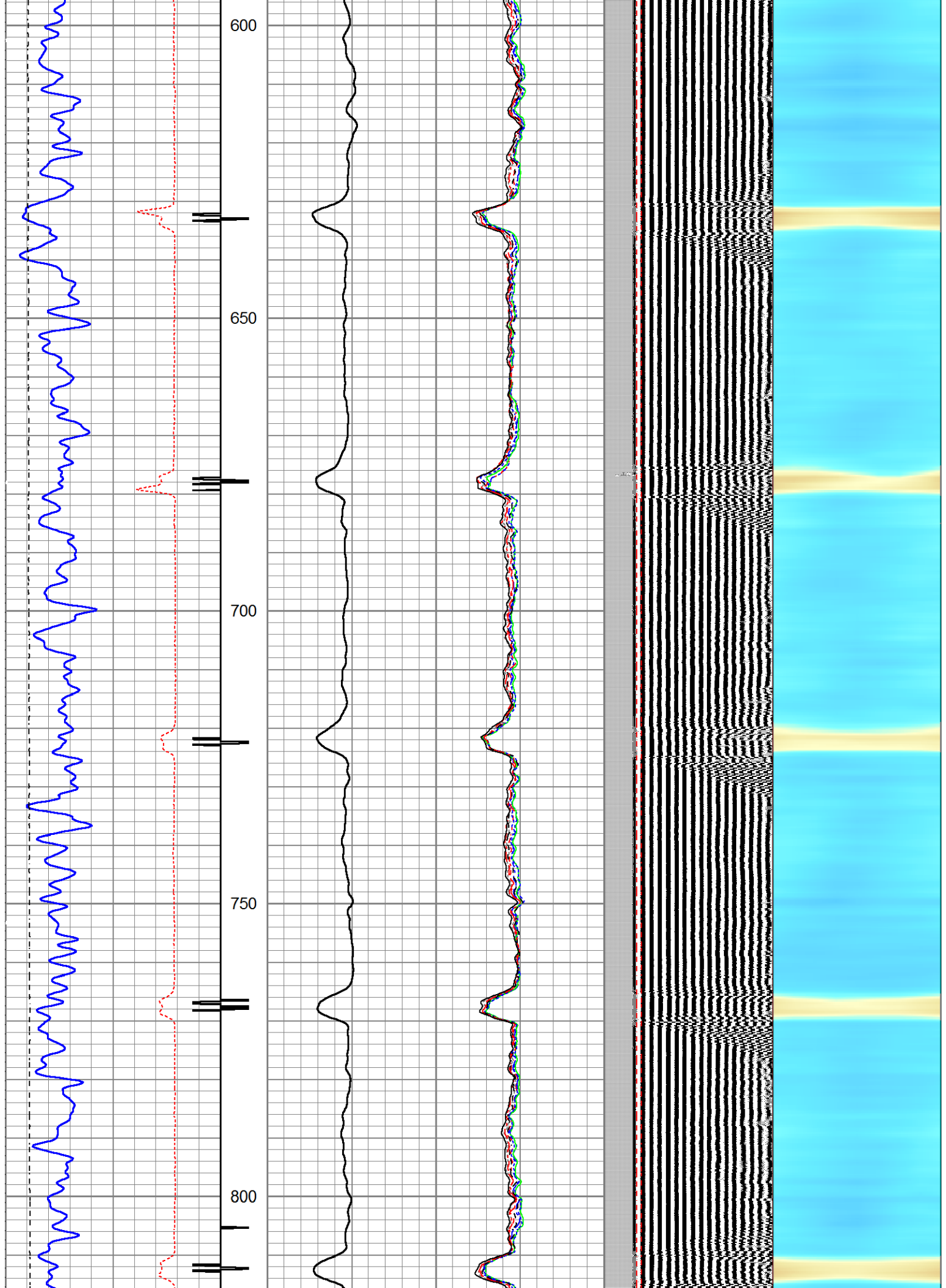
200 VDL (usec) 1200 Cement Map

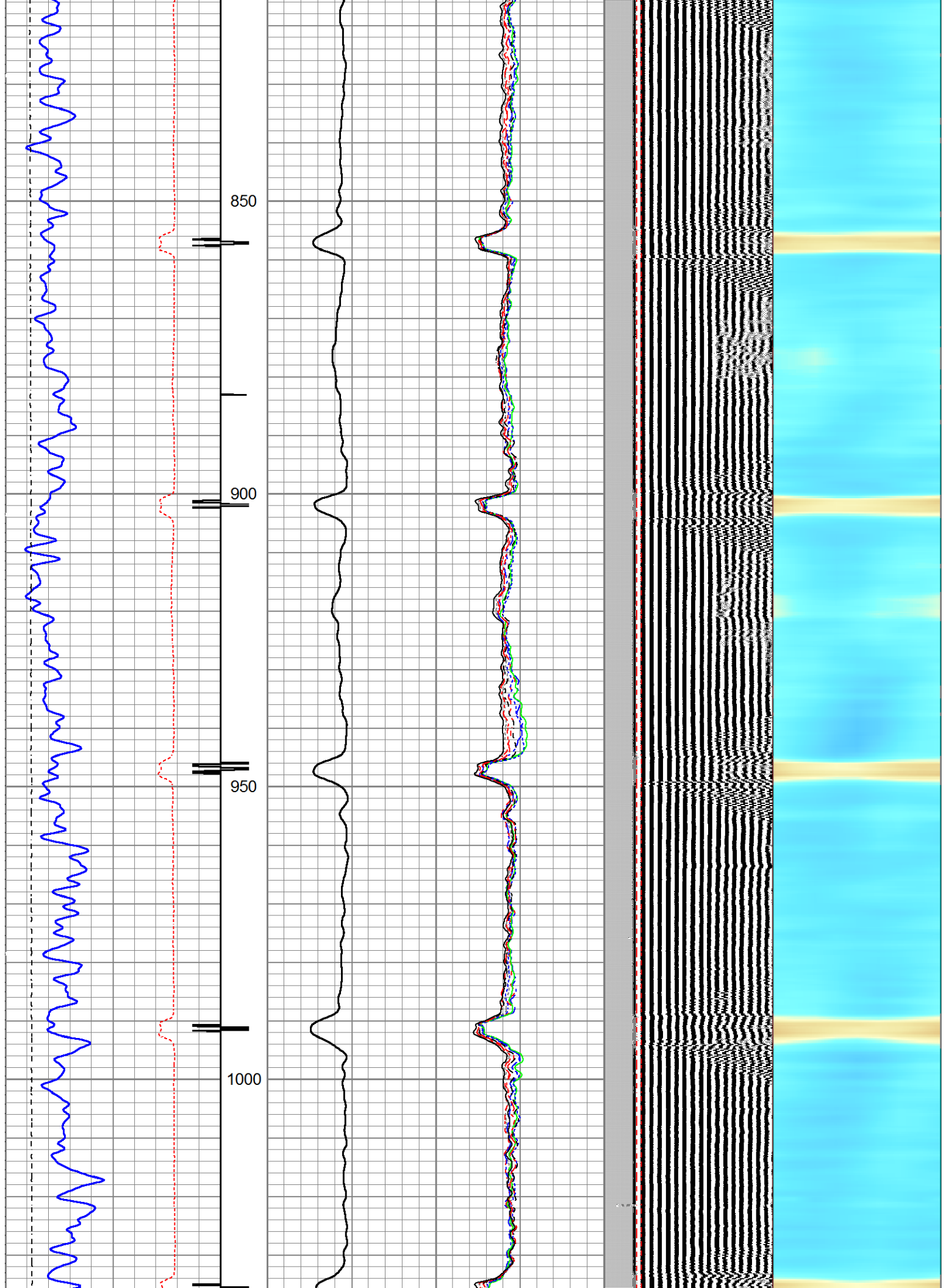
Free Pipe Gate

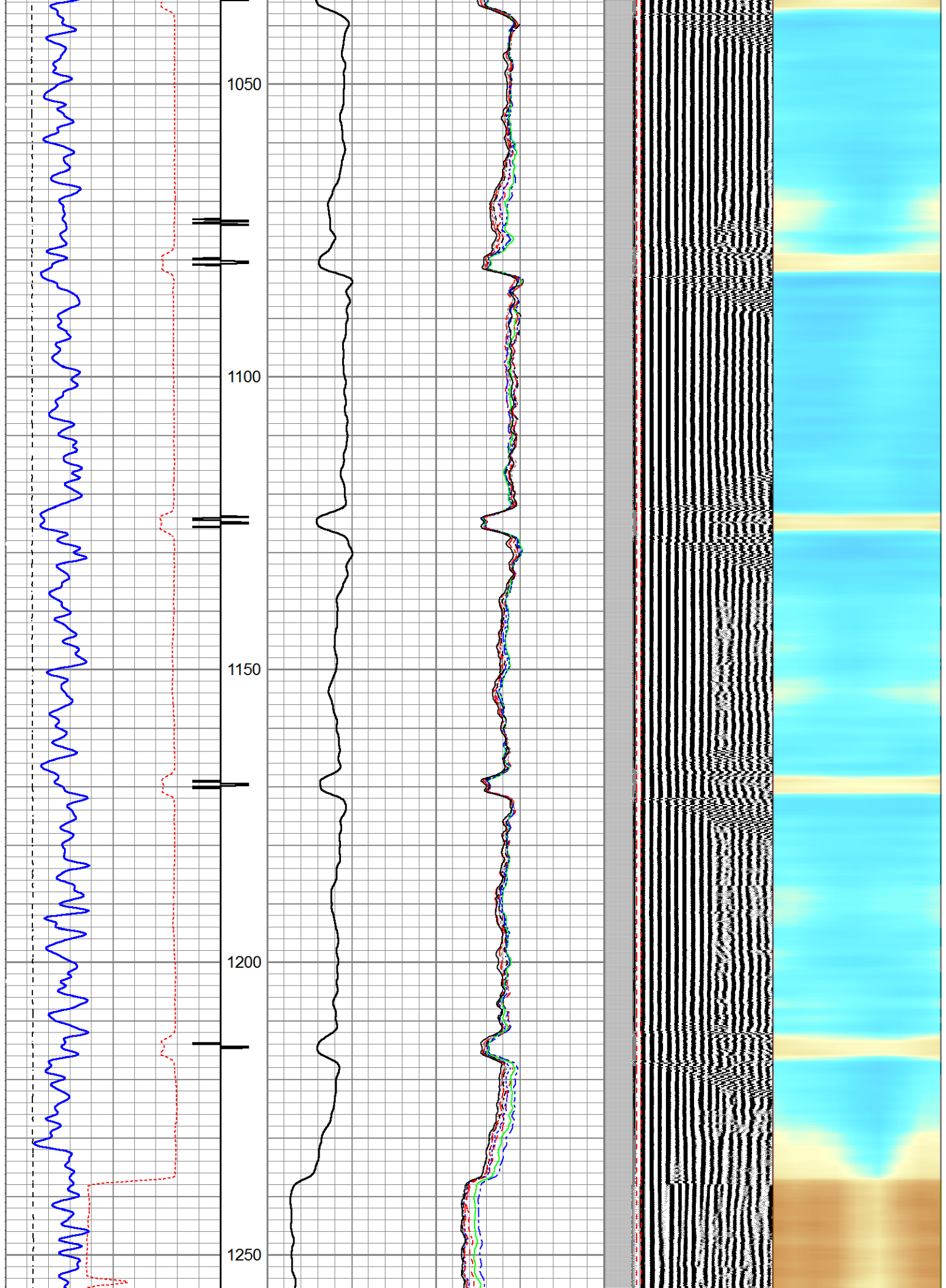


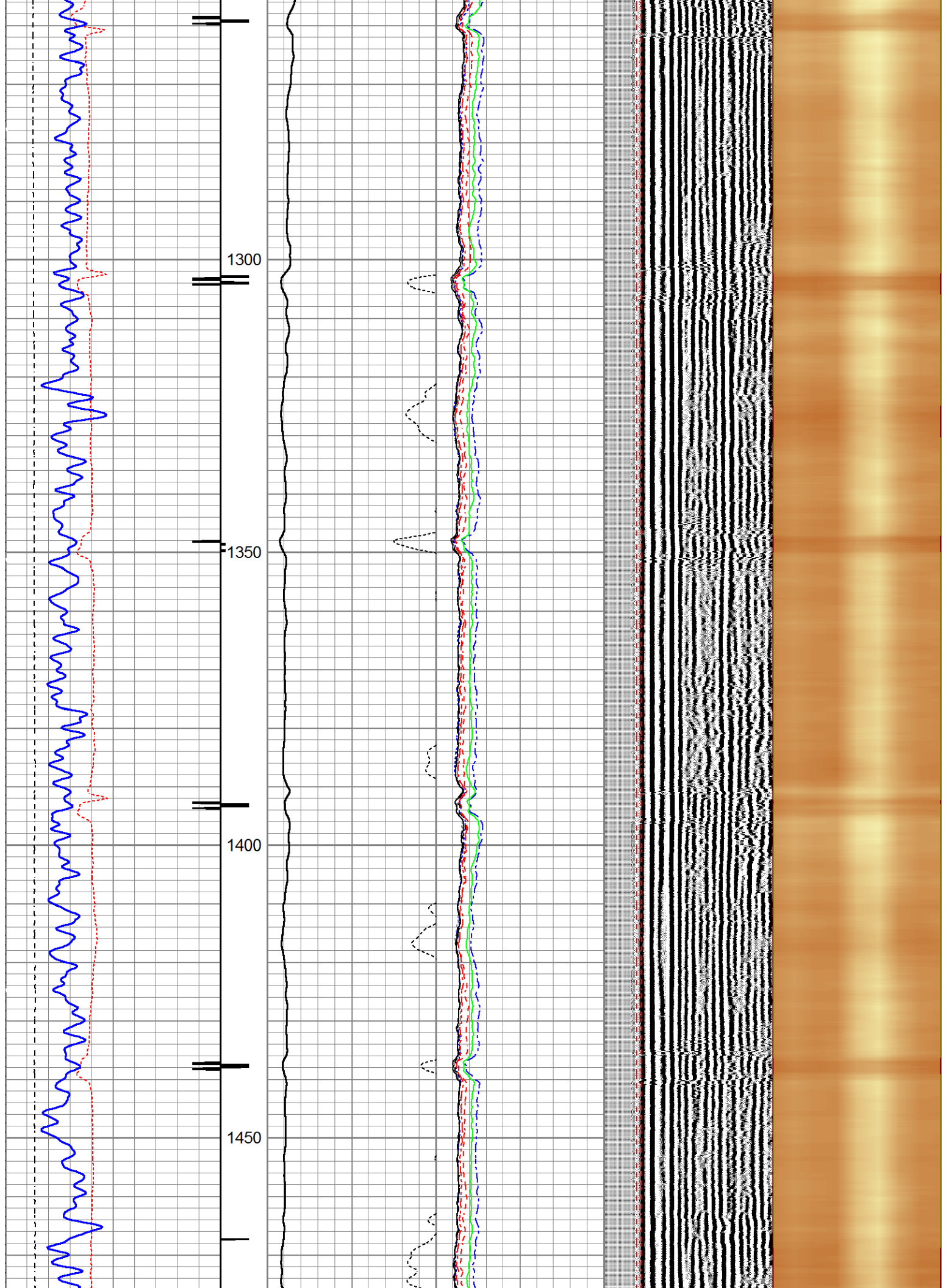


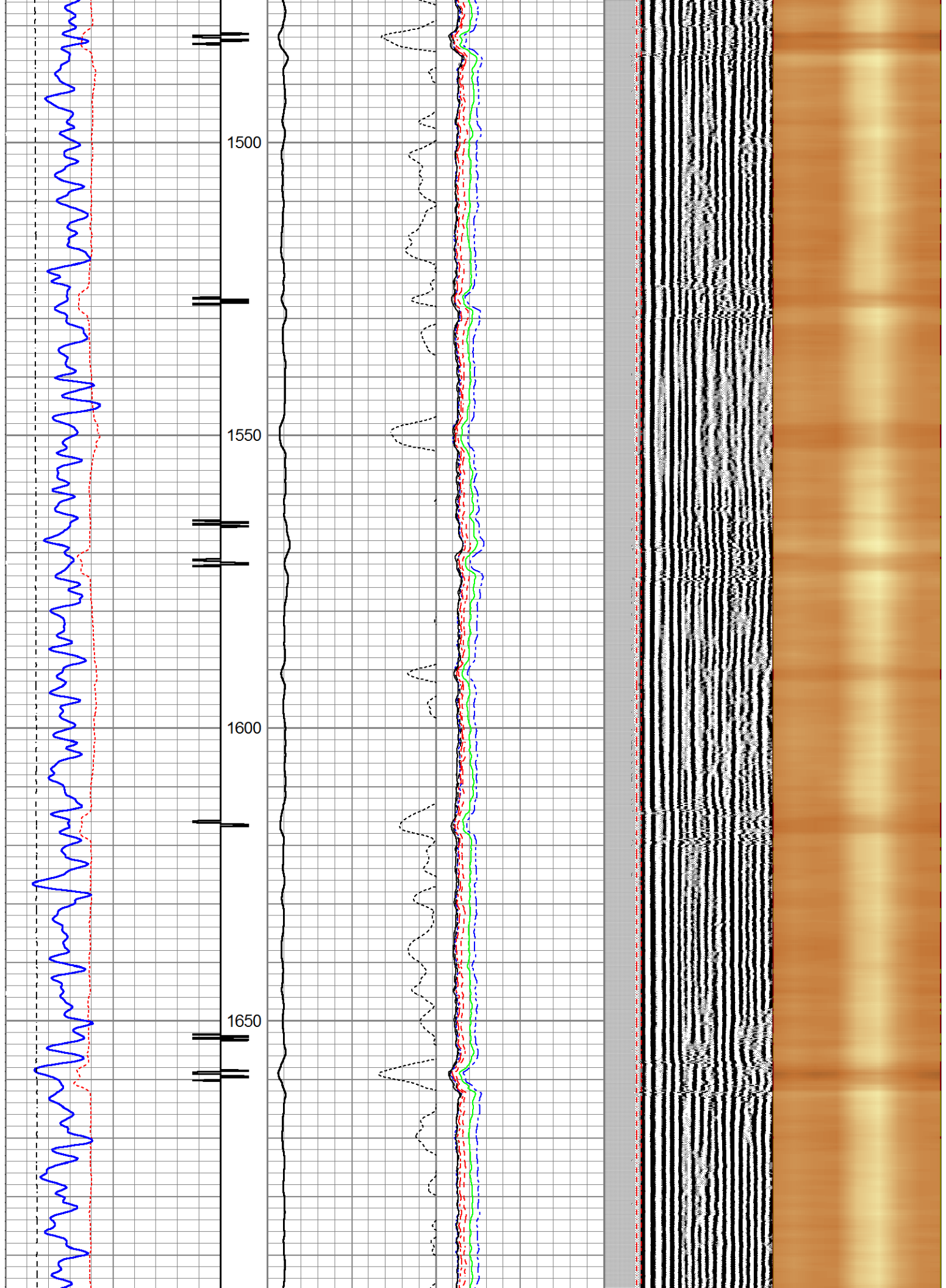


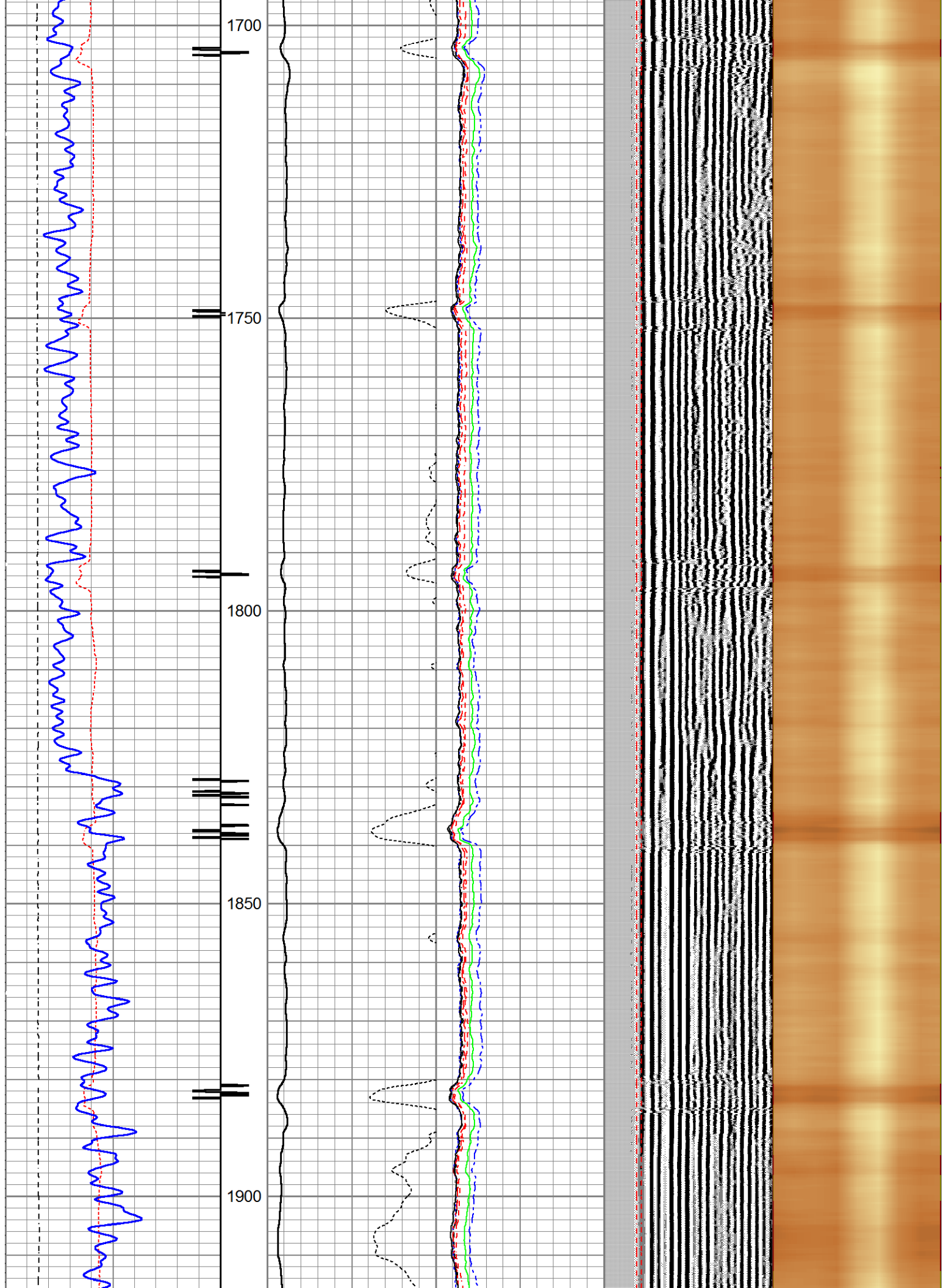


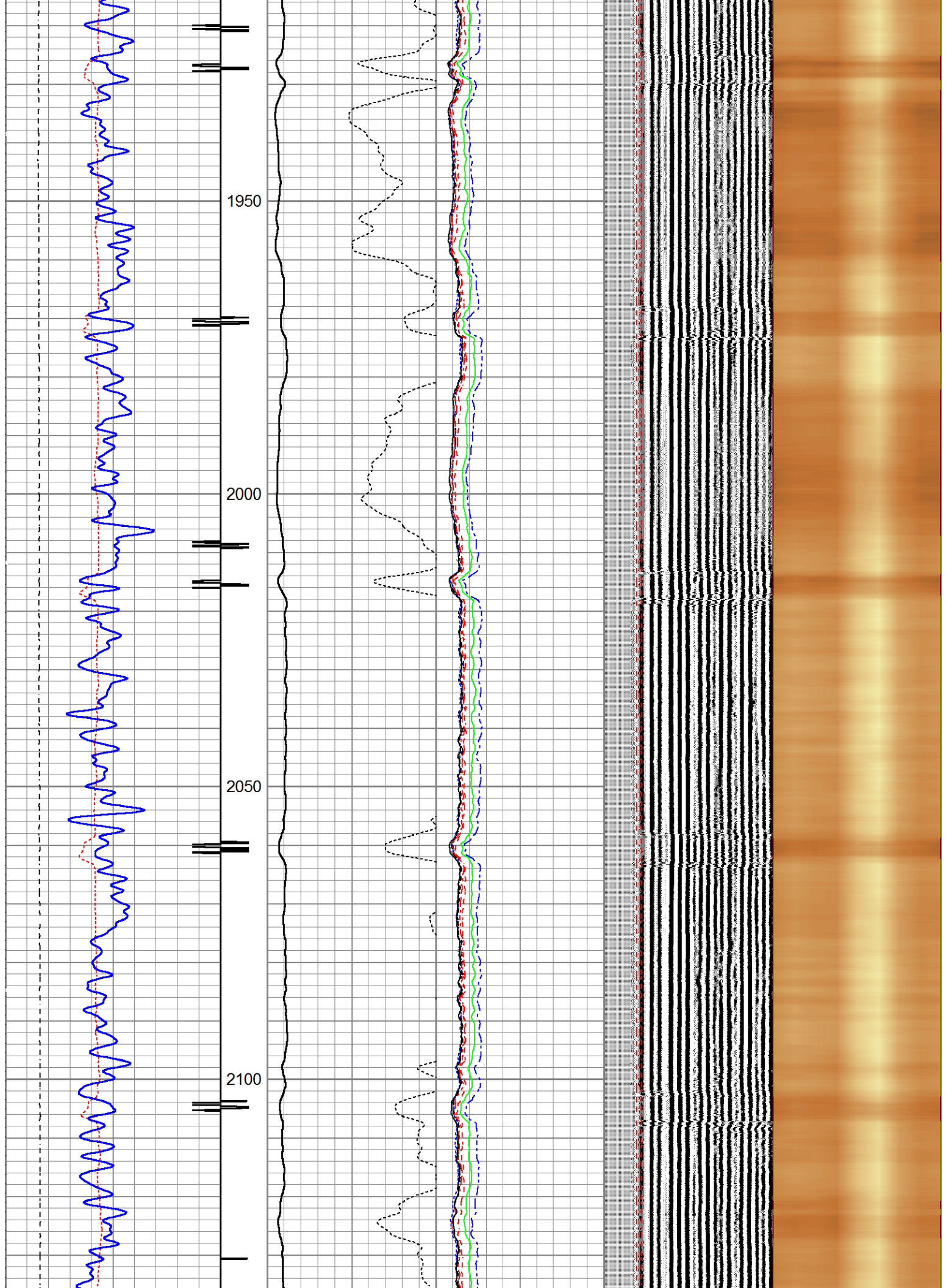


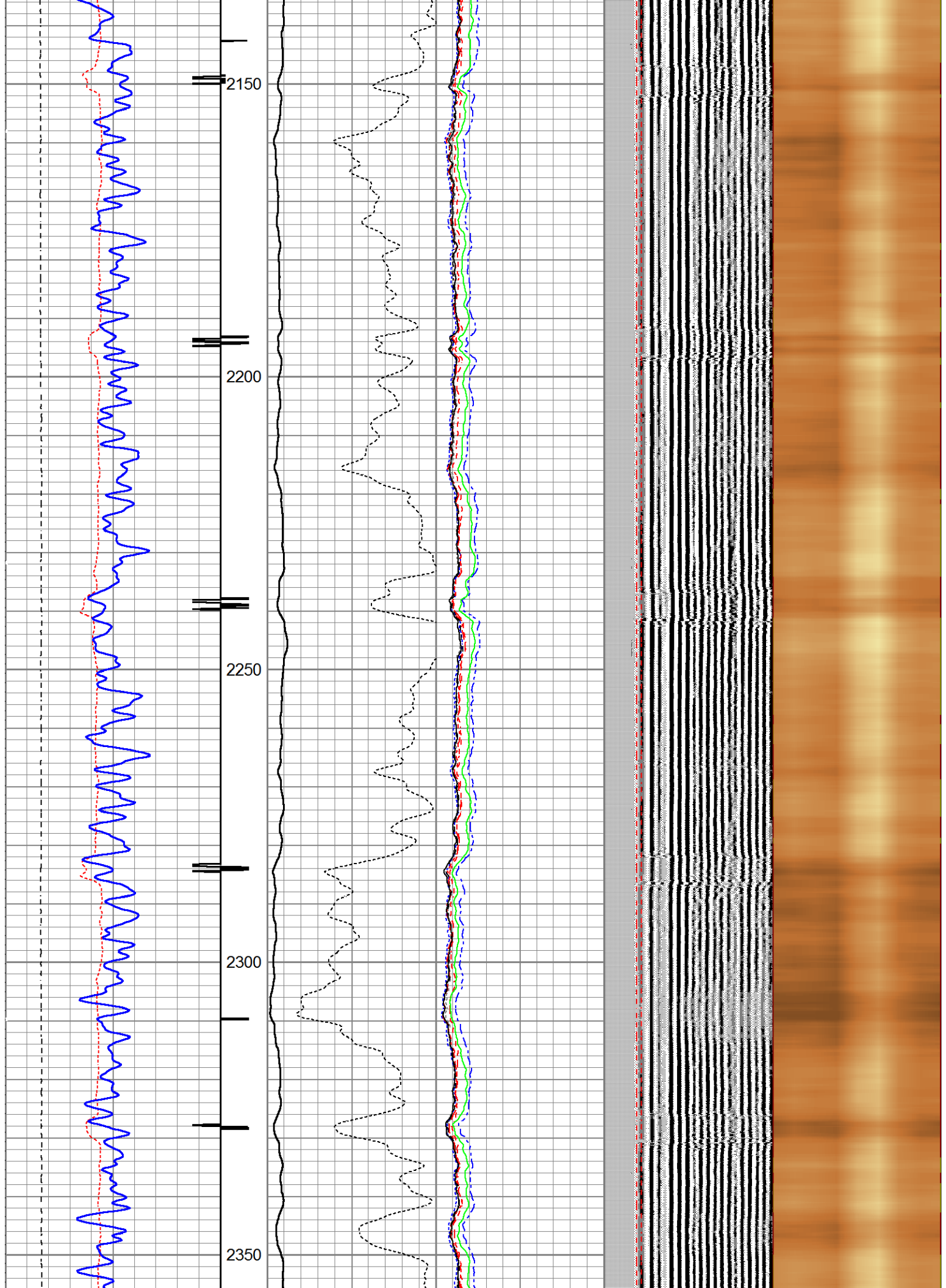


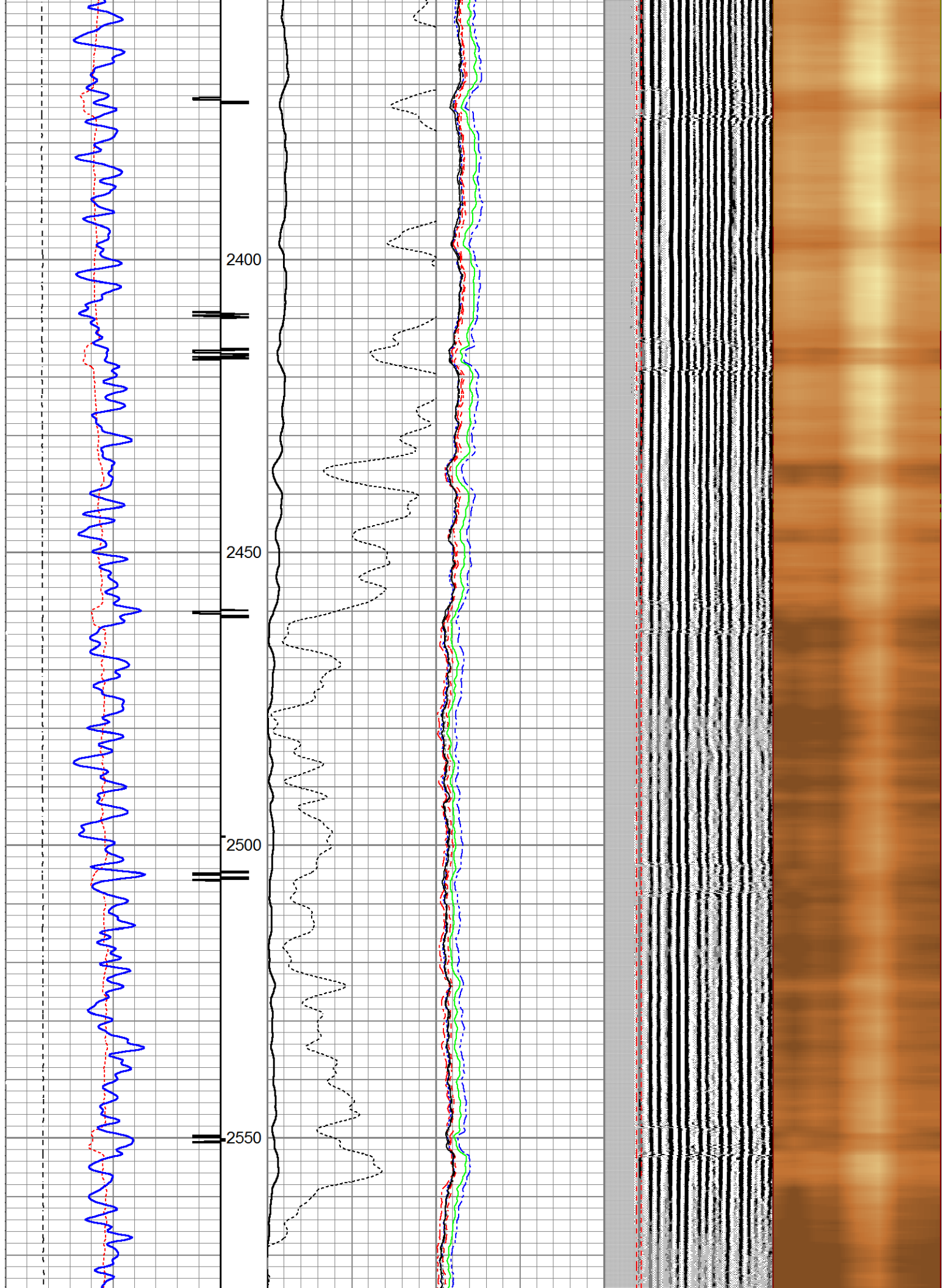


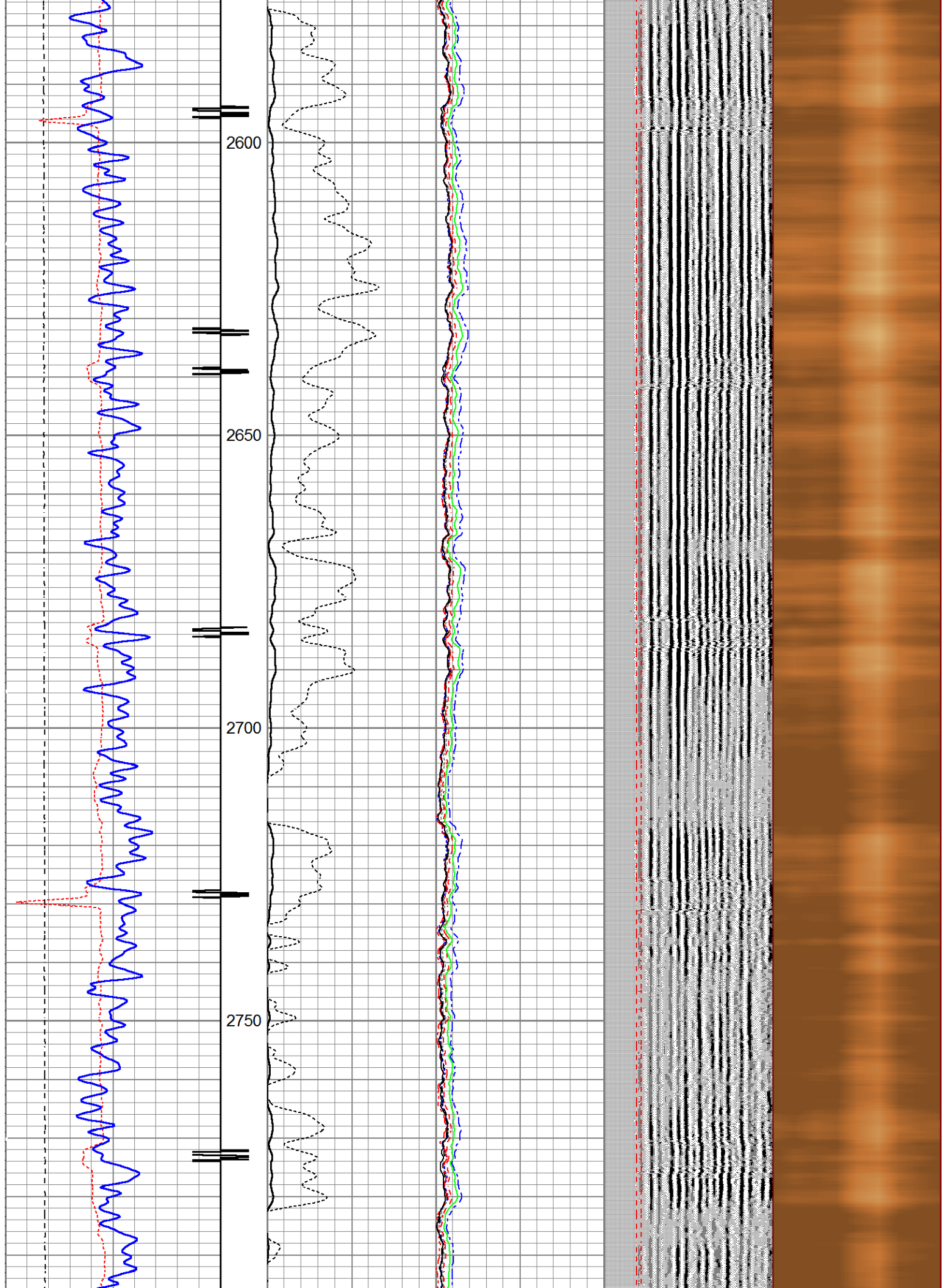


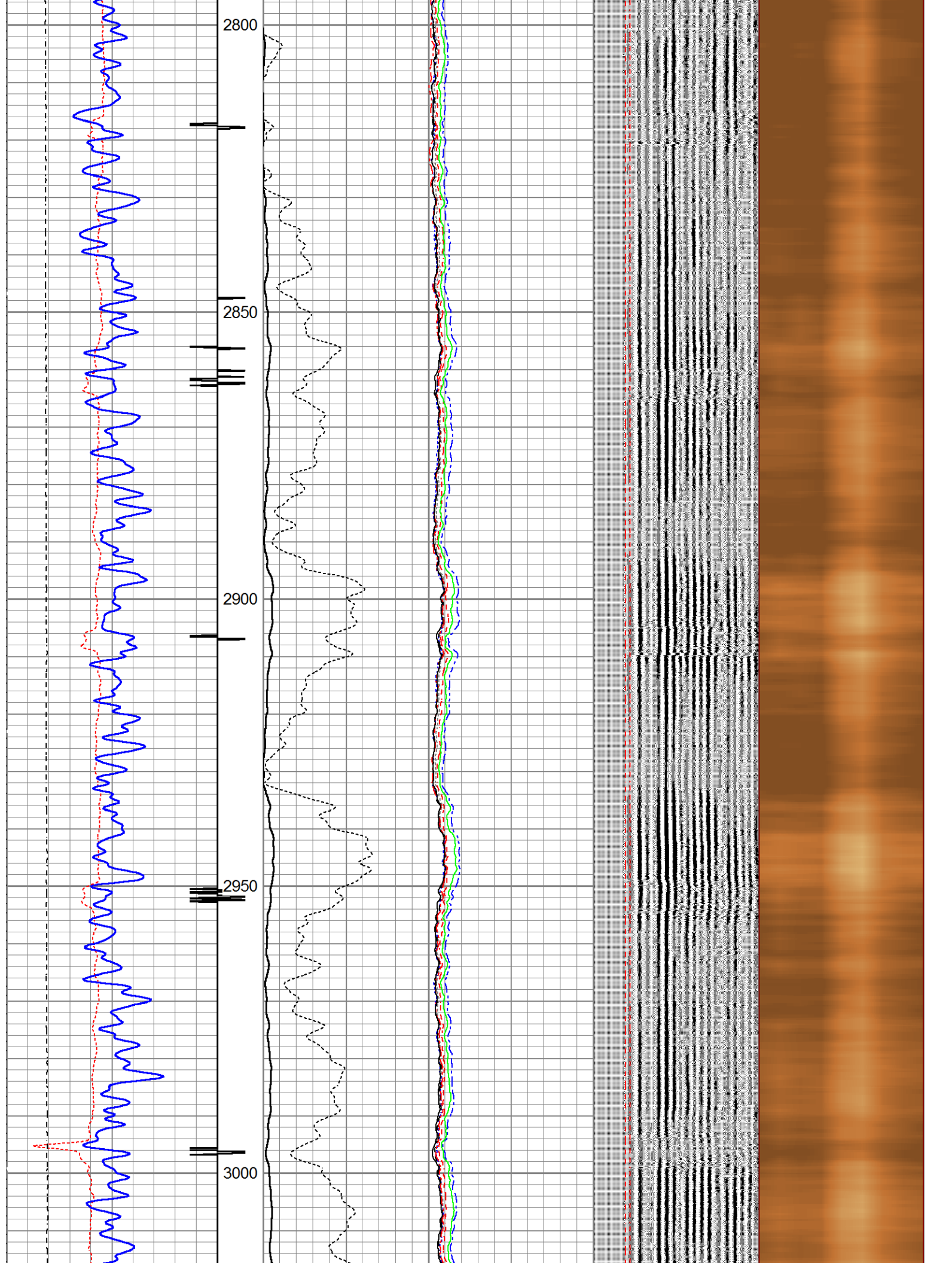


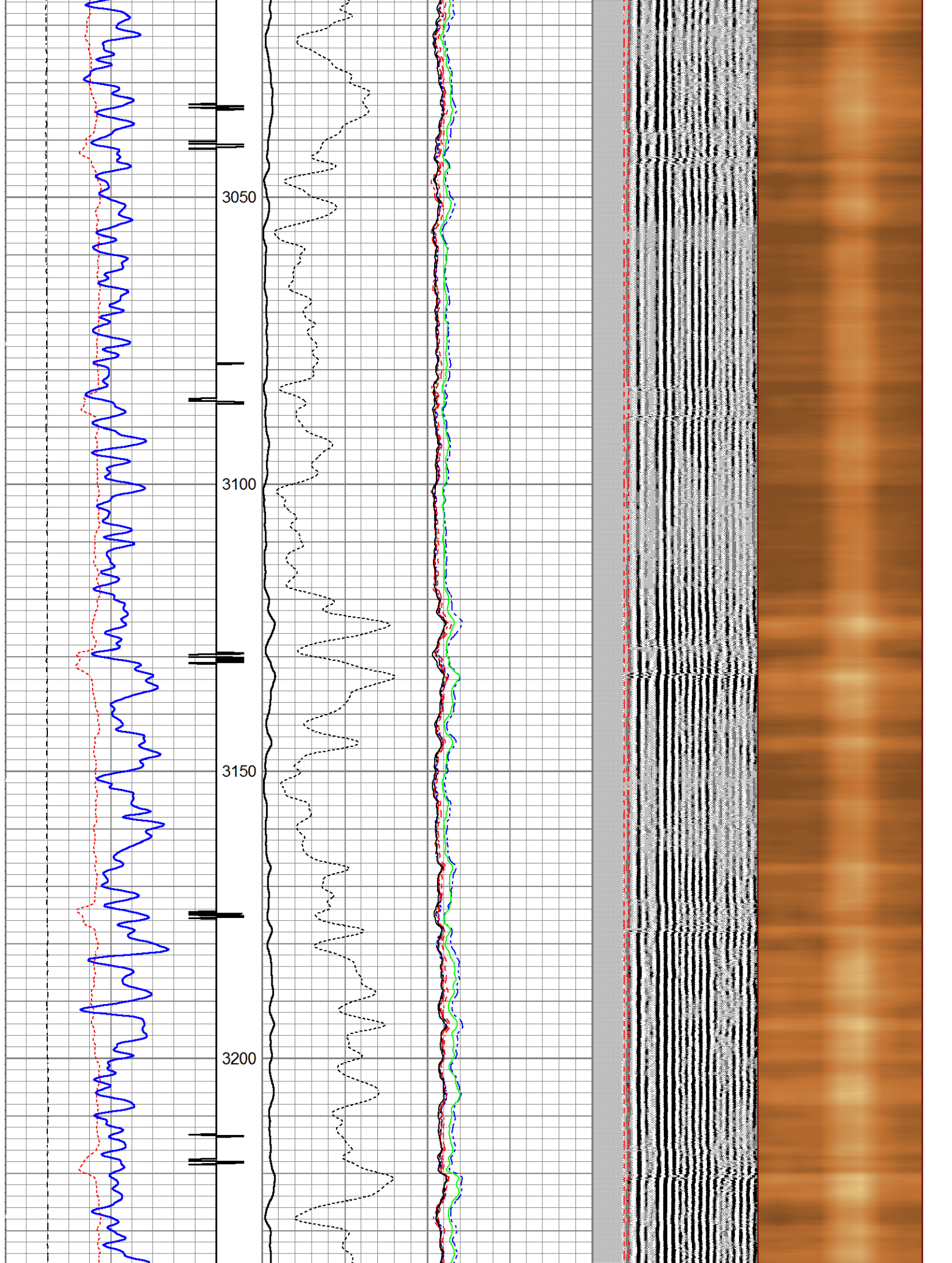


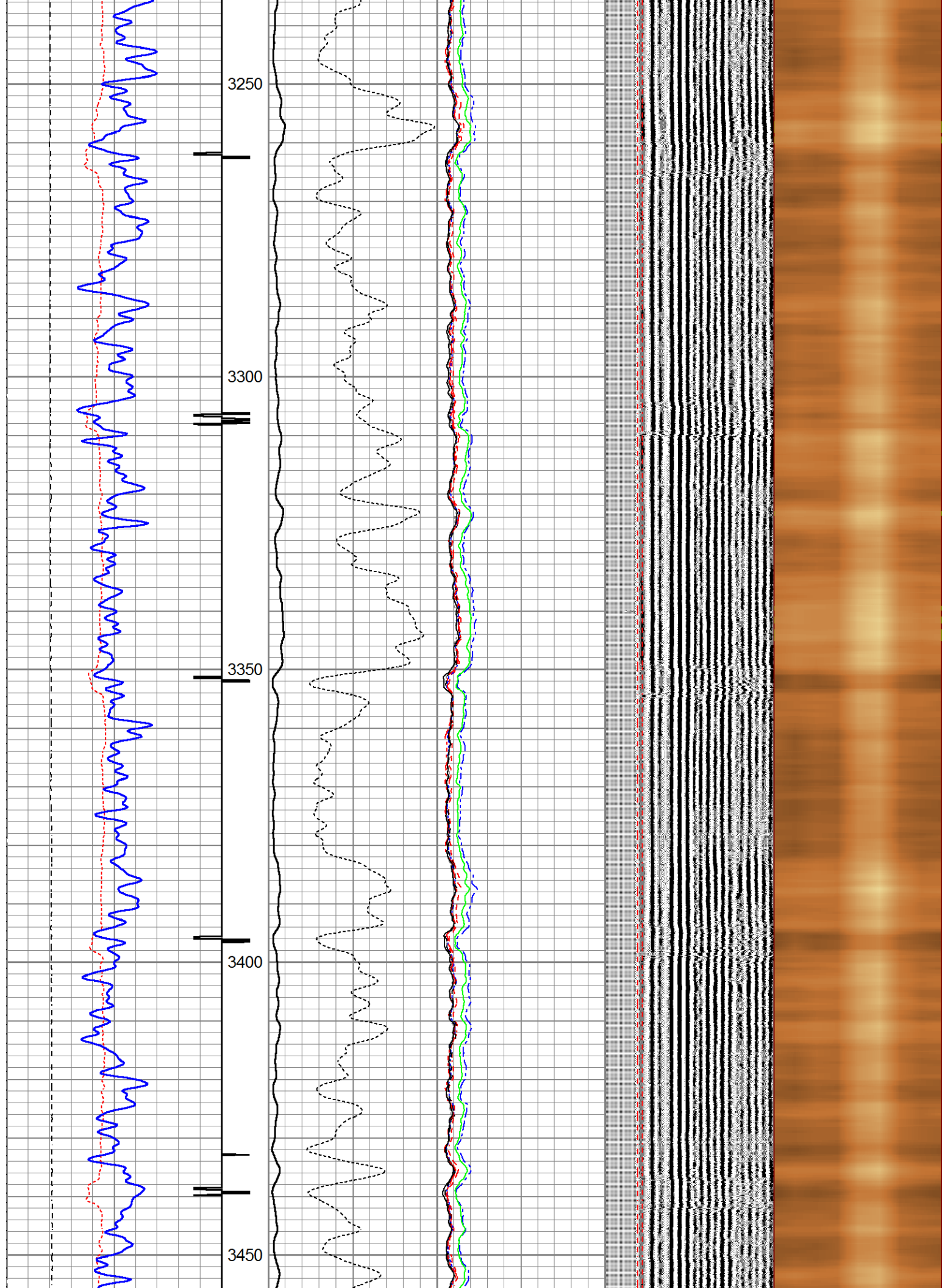


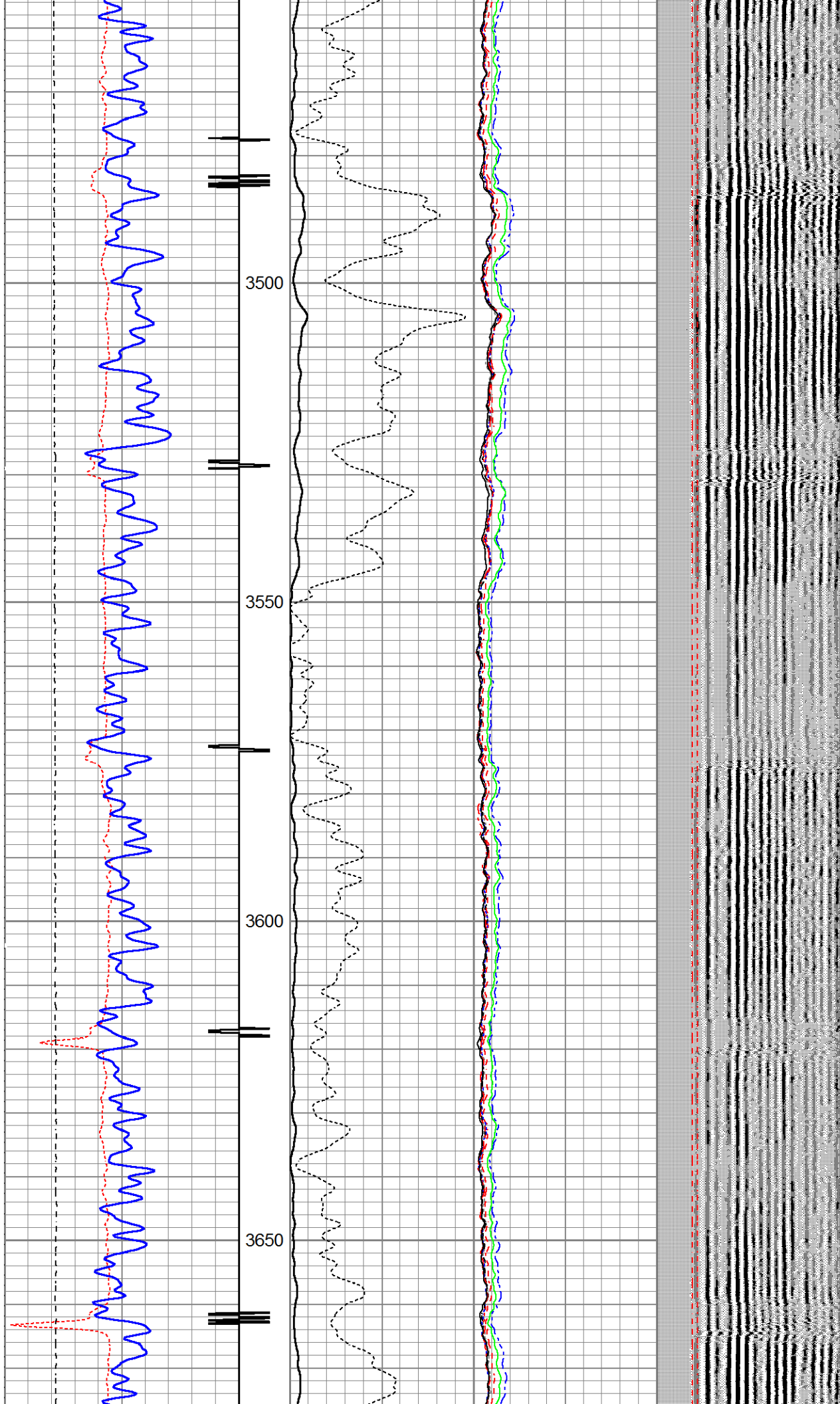


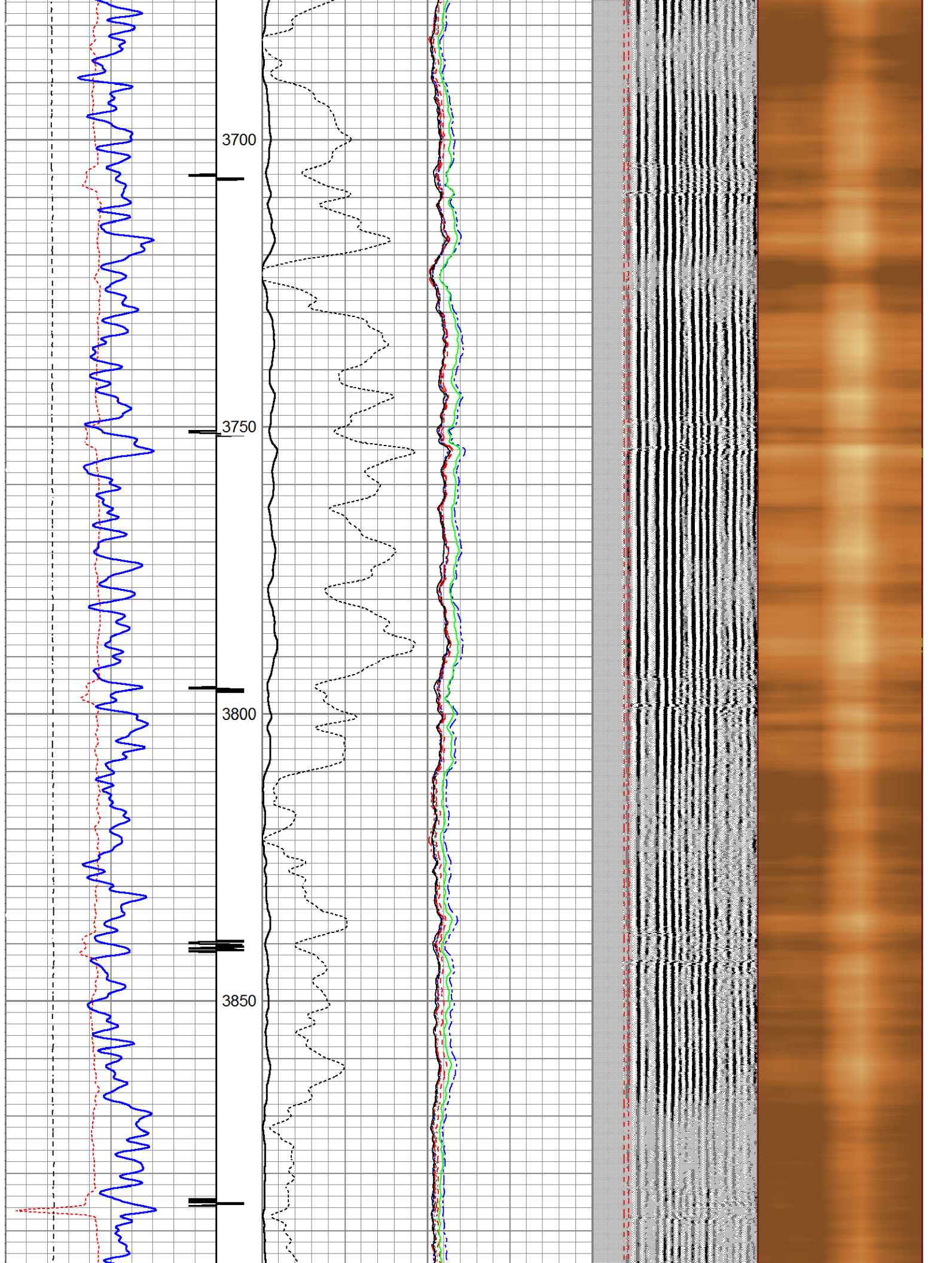


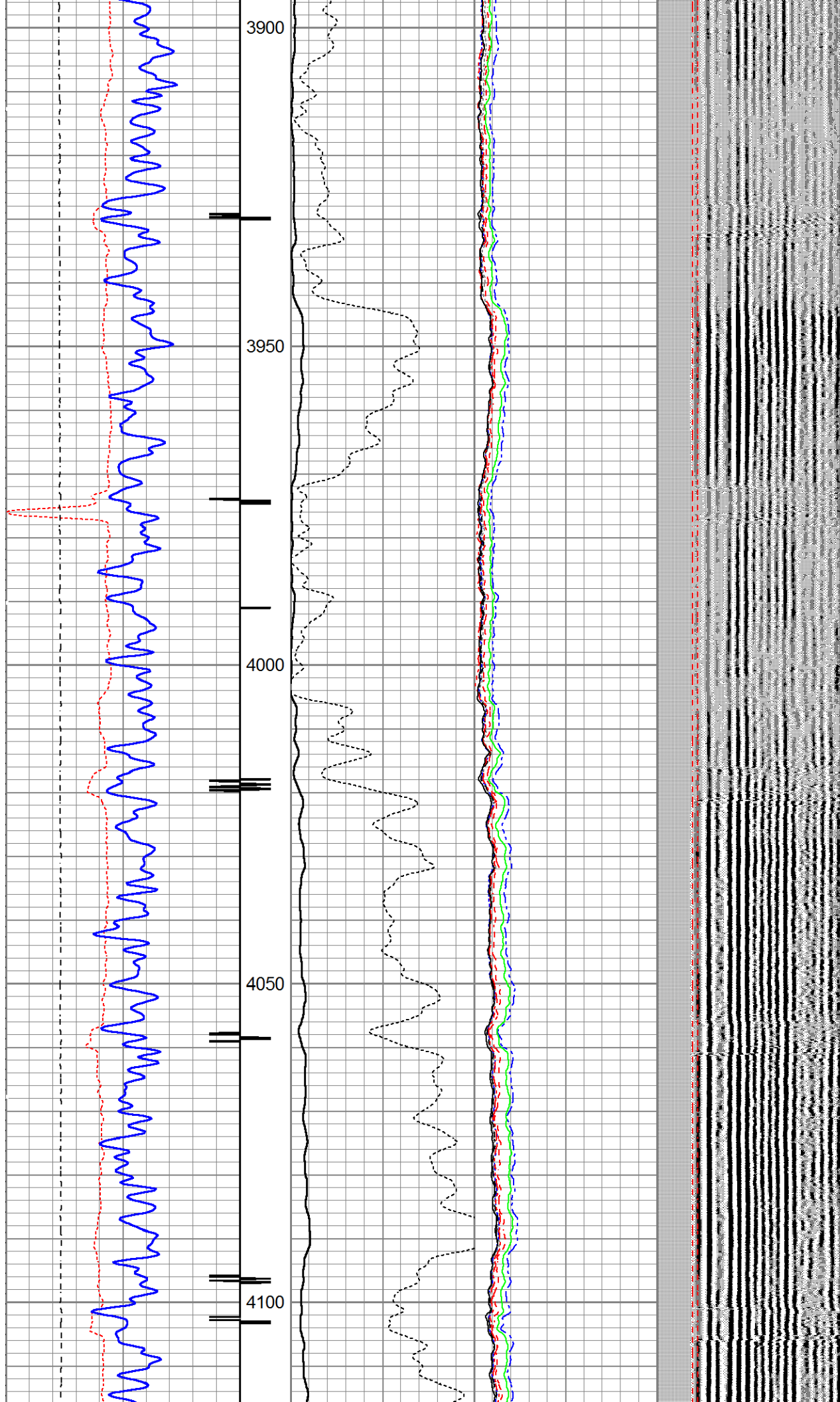


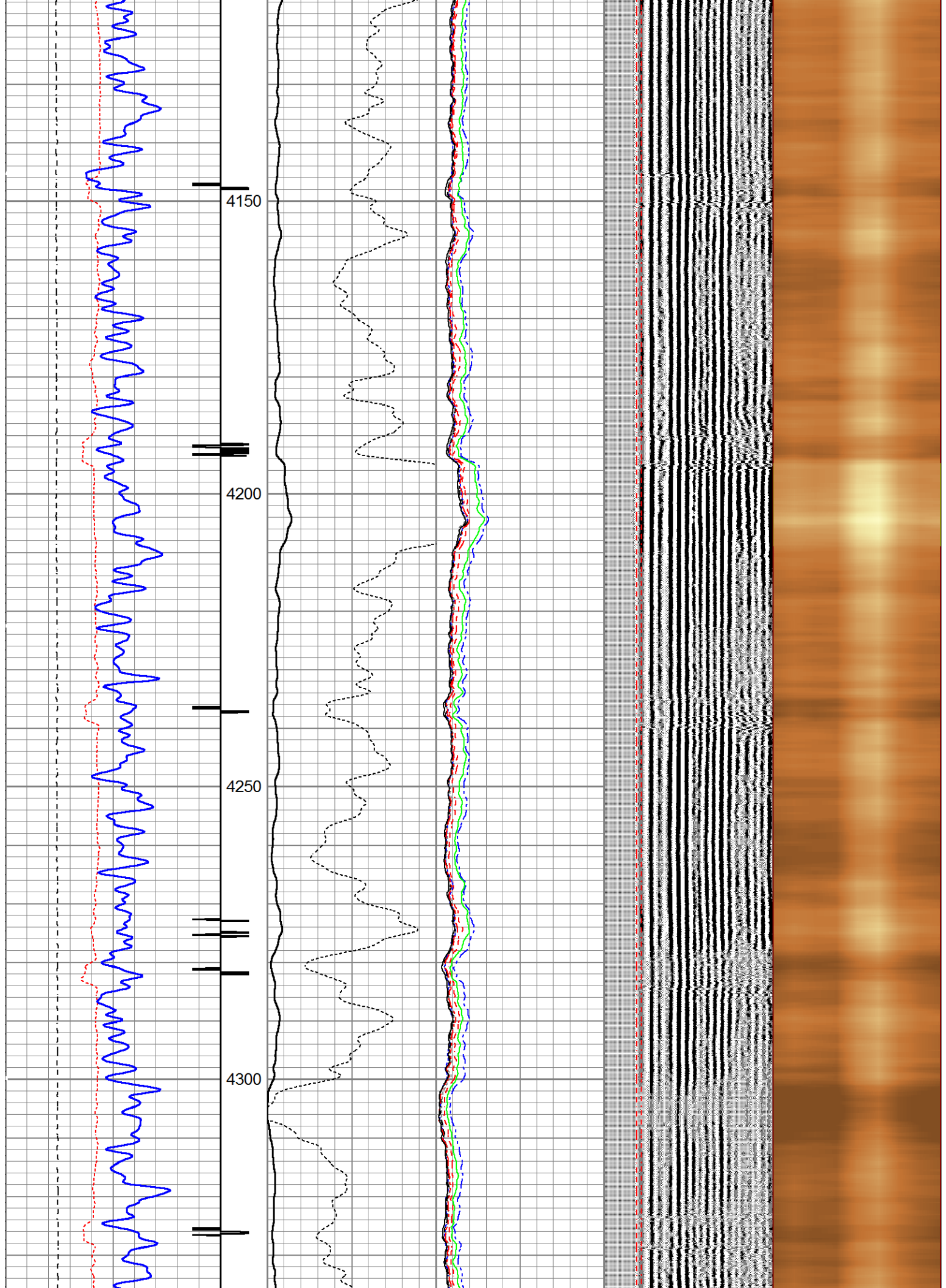


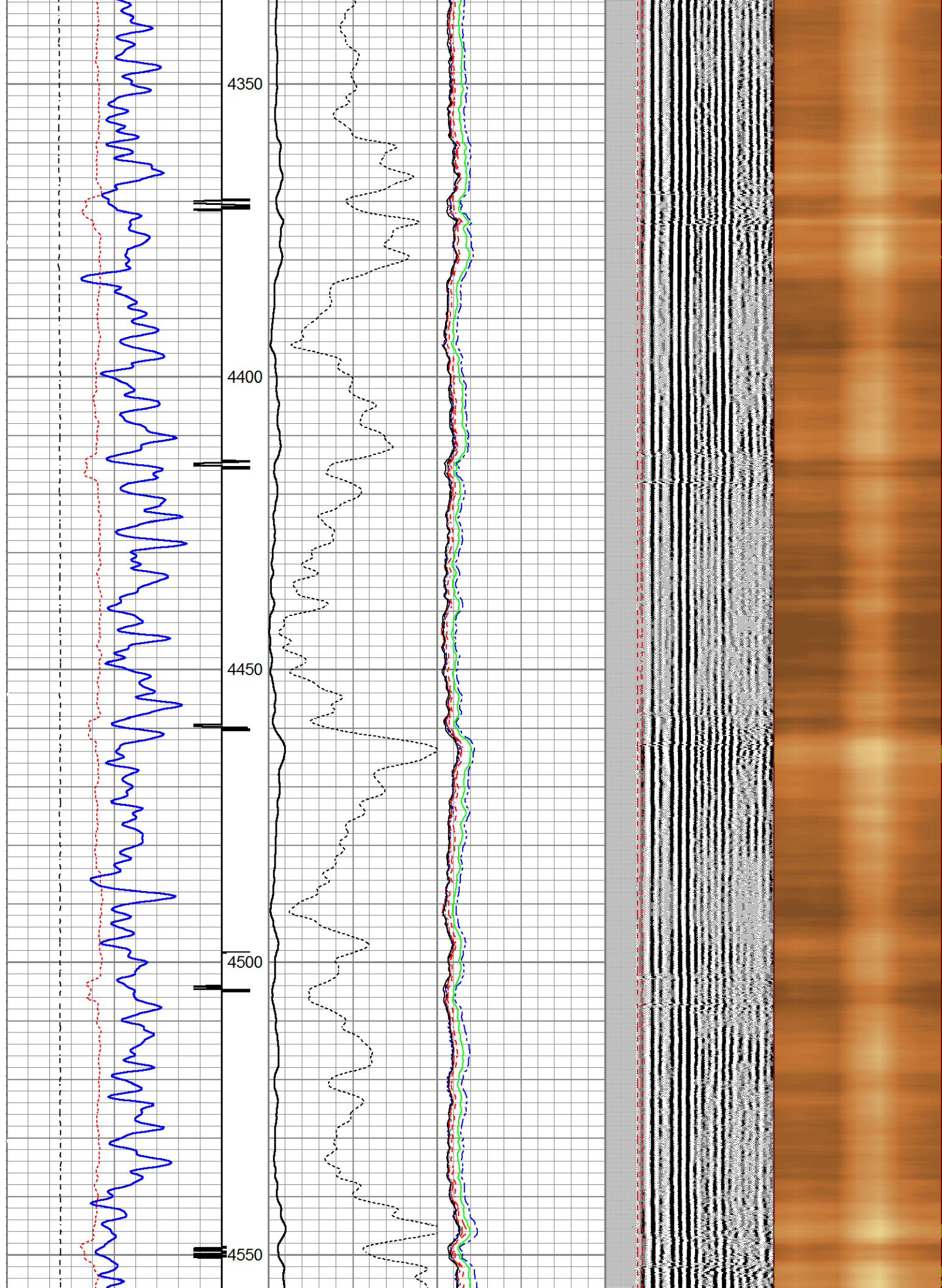


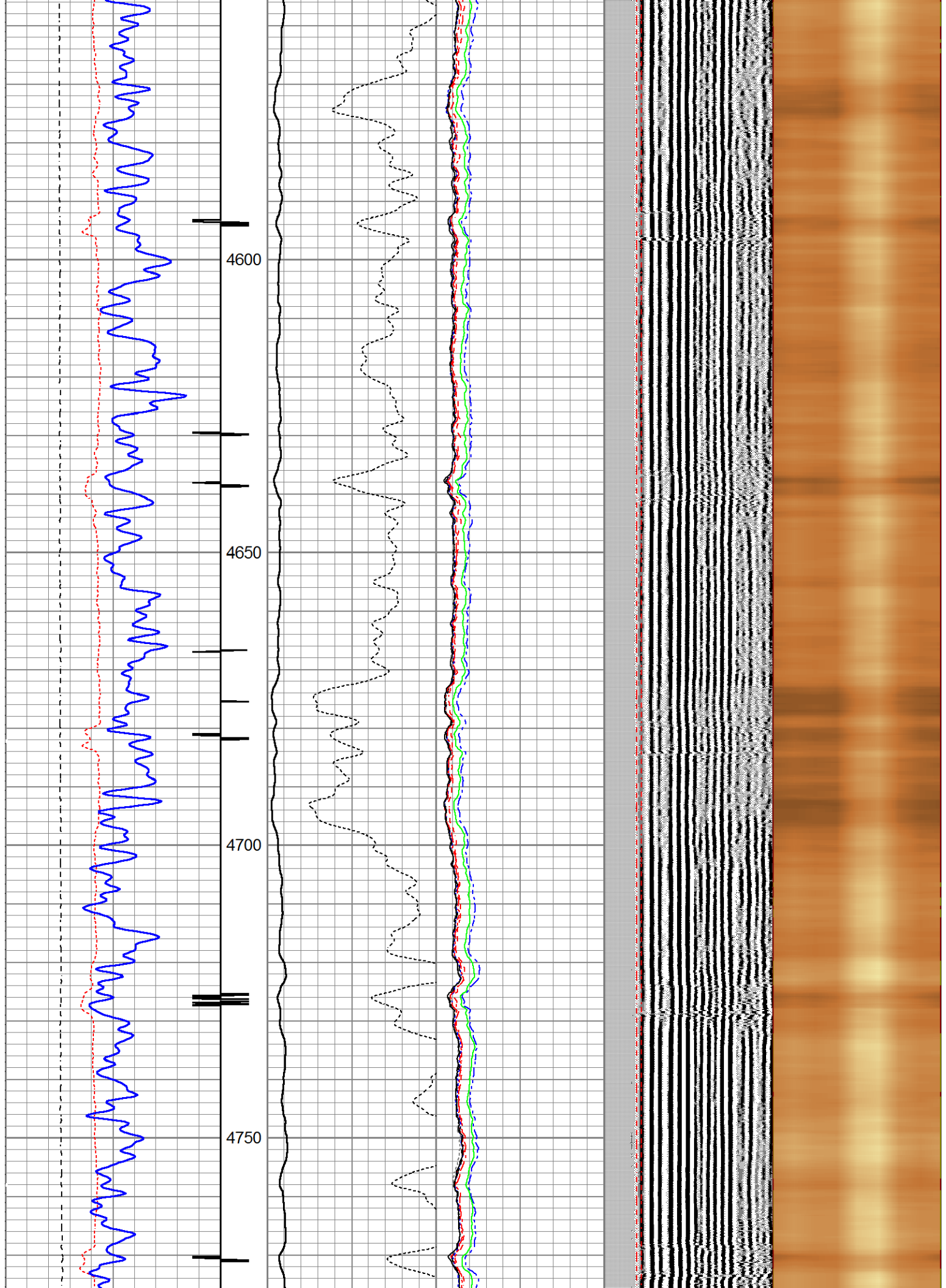


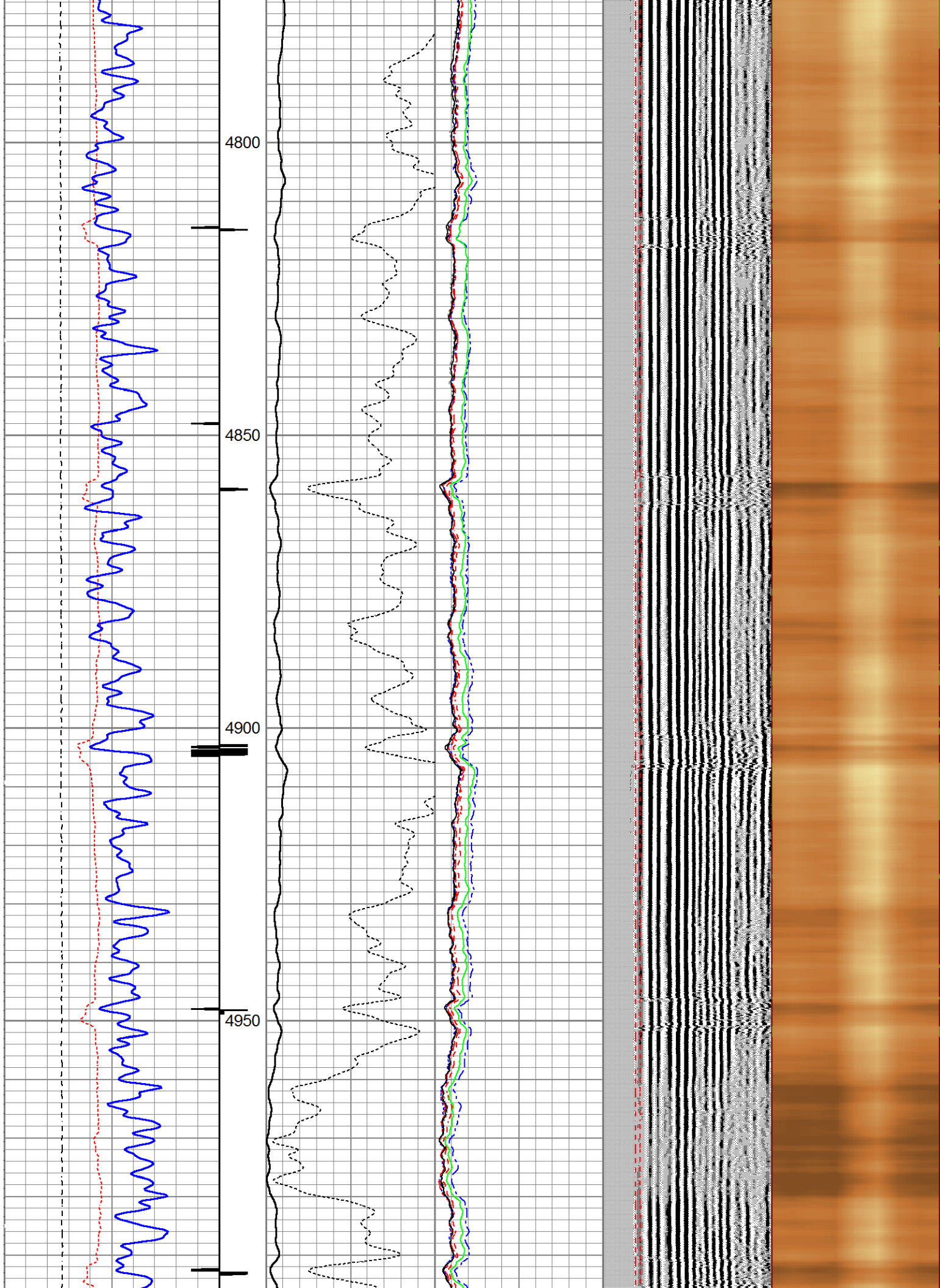


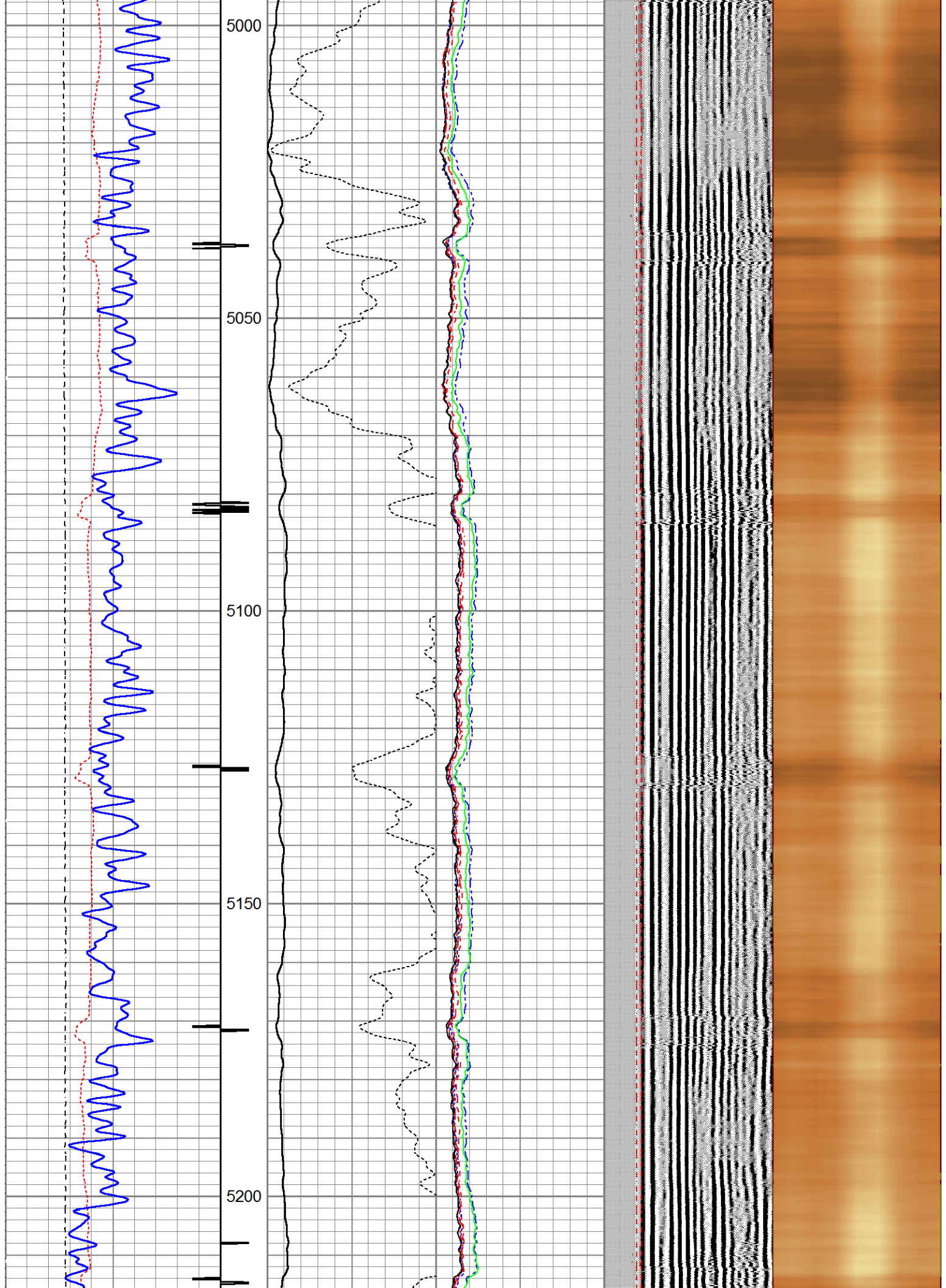


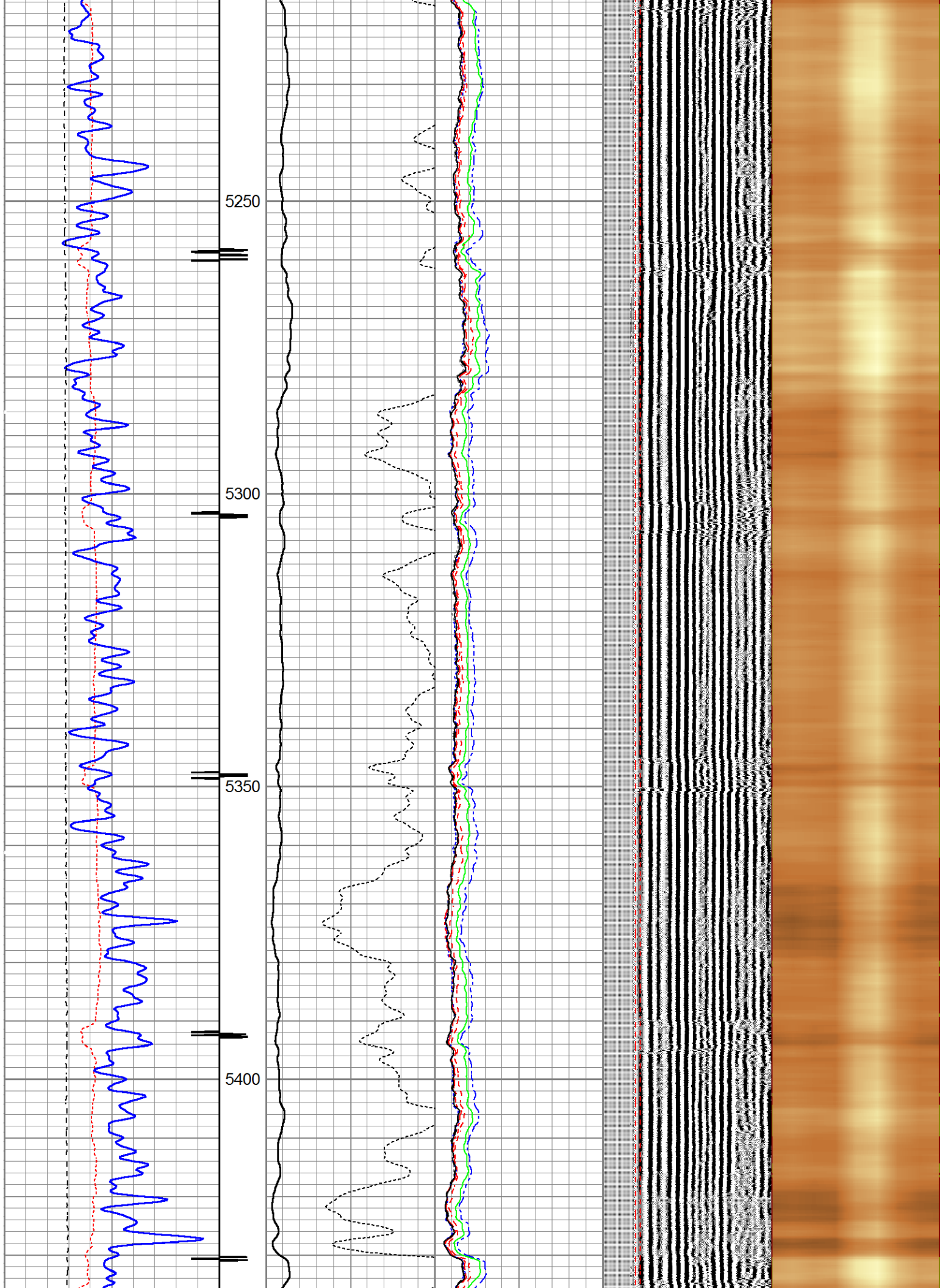


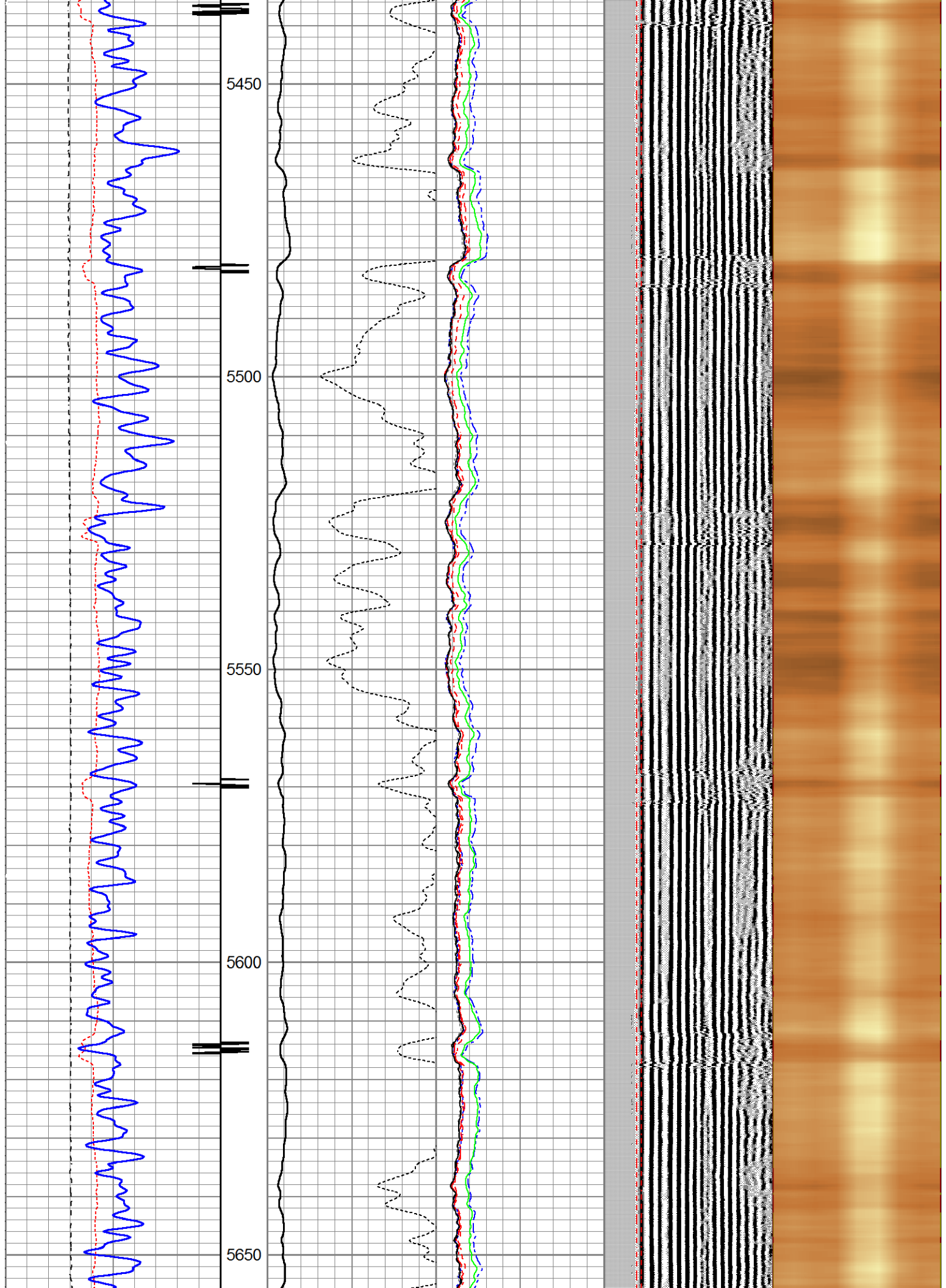


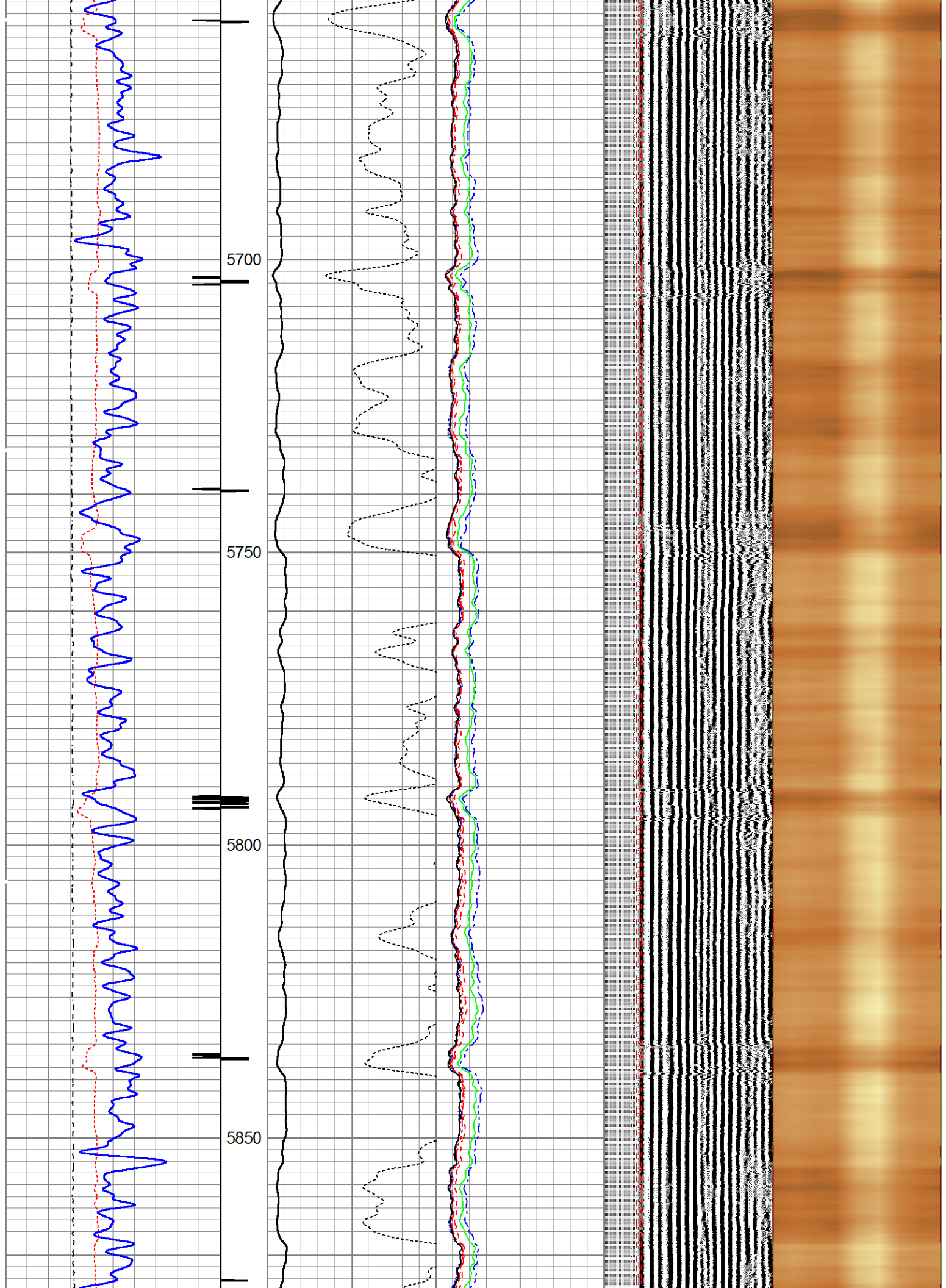


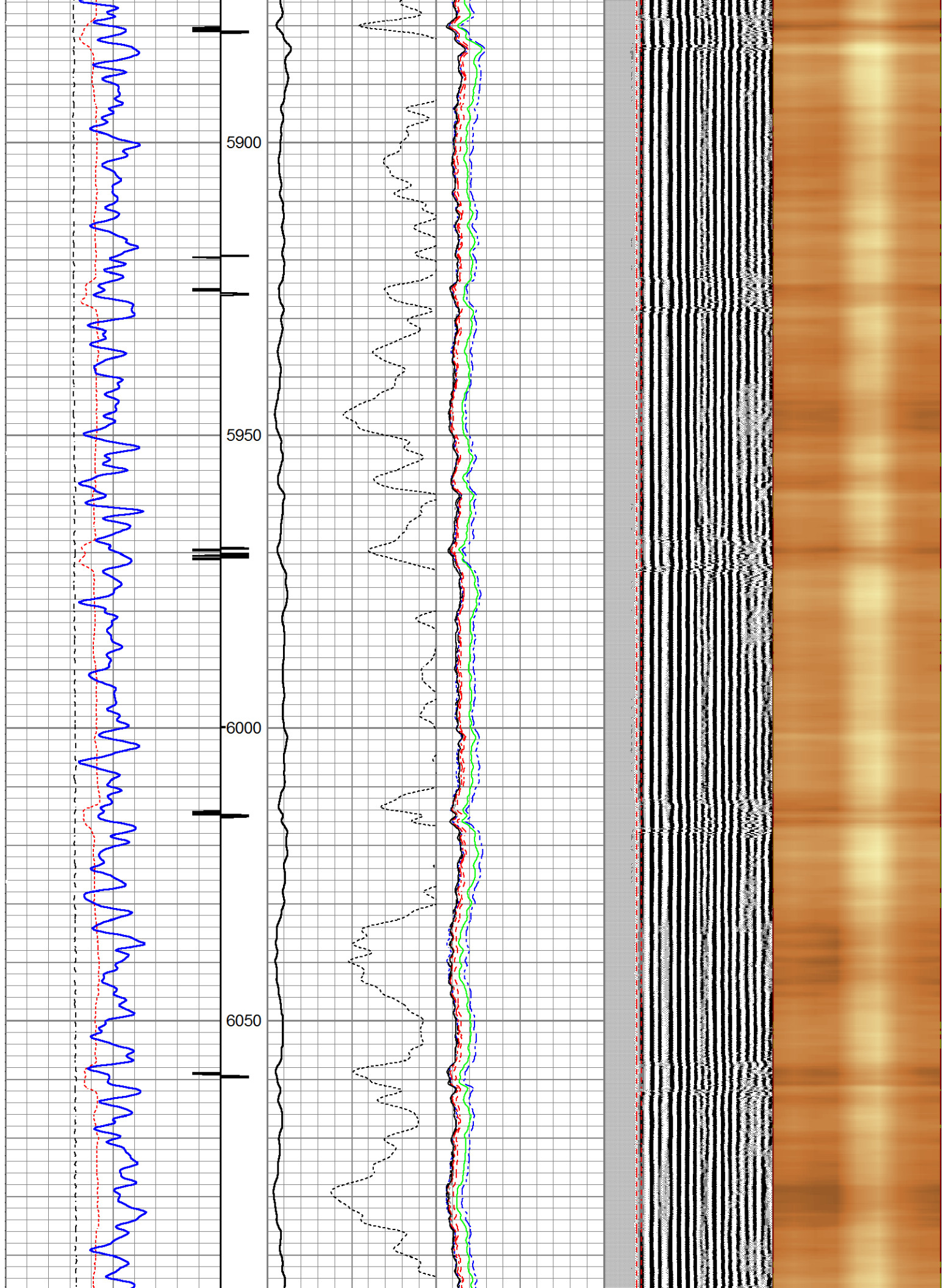


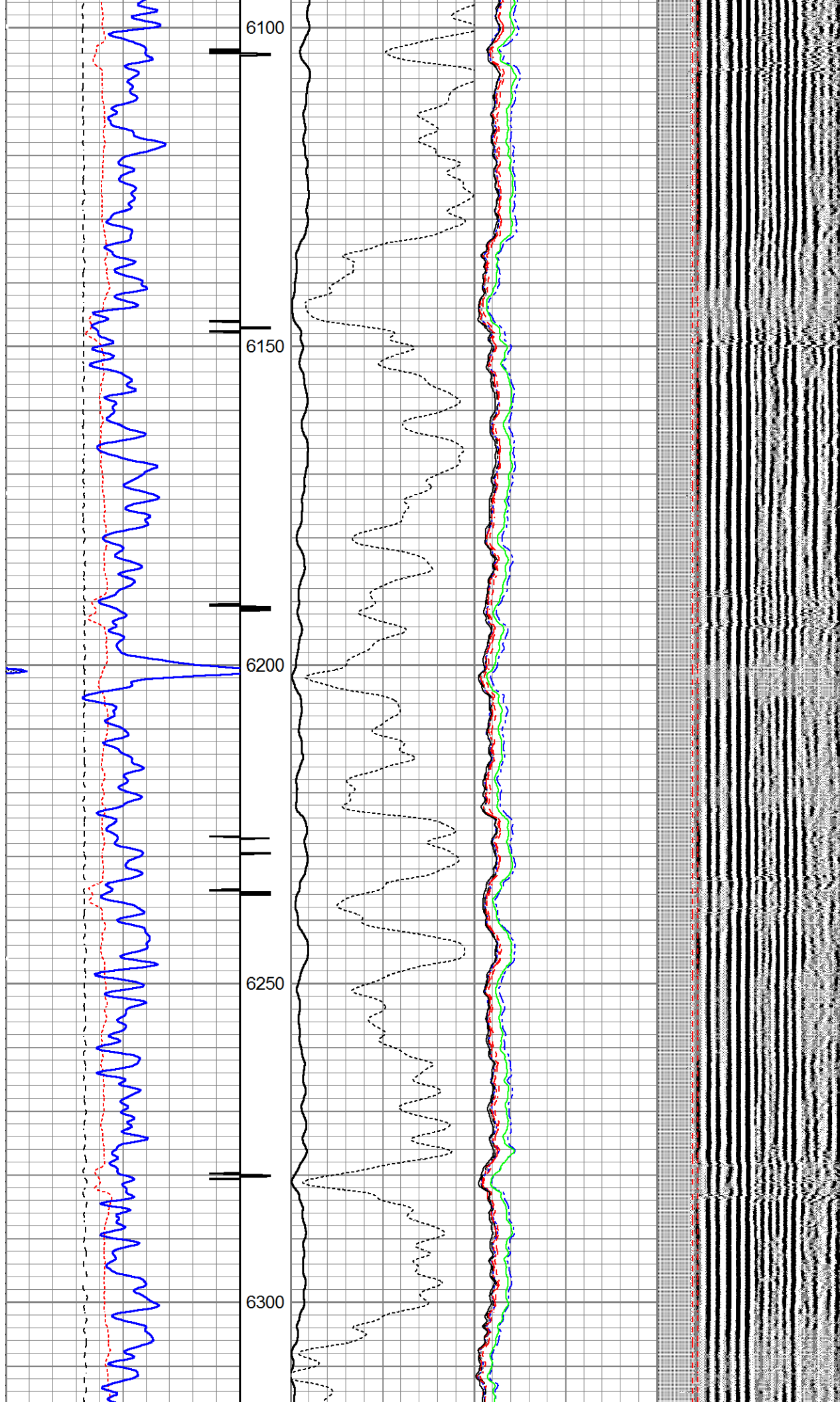


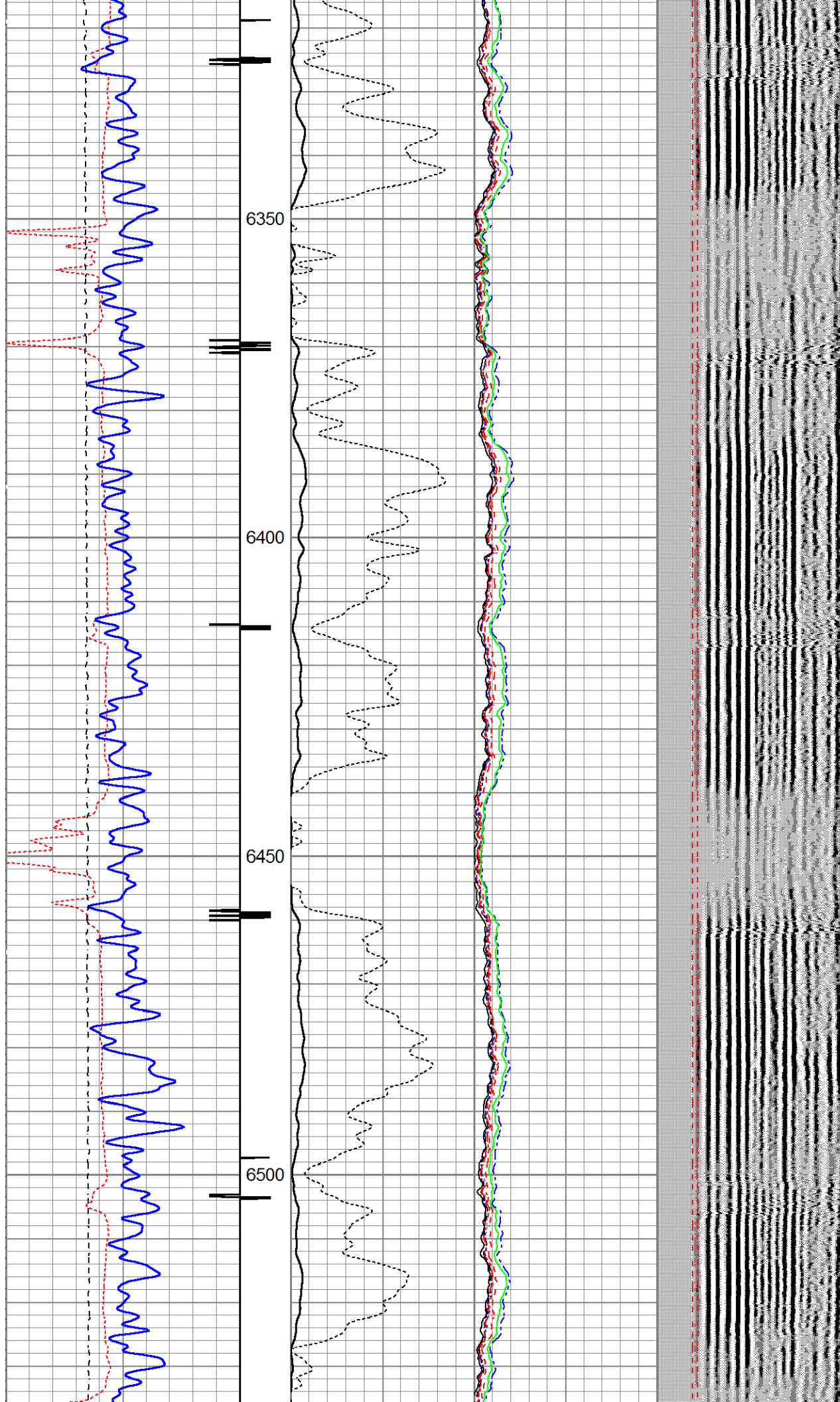


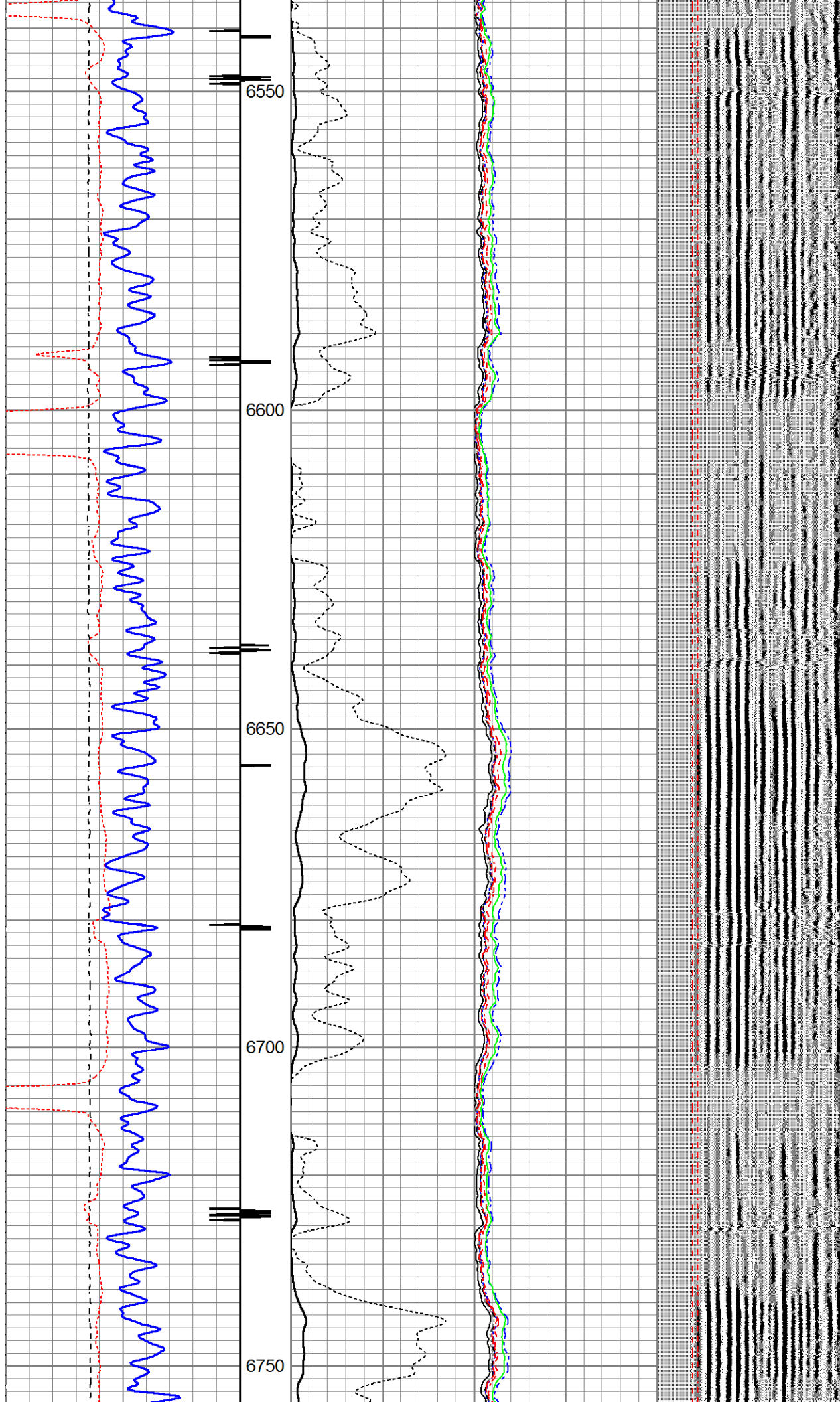


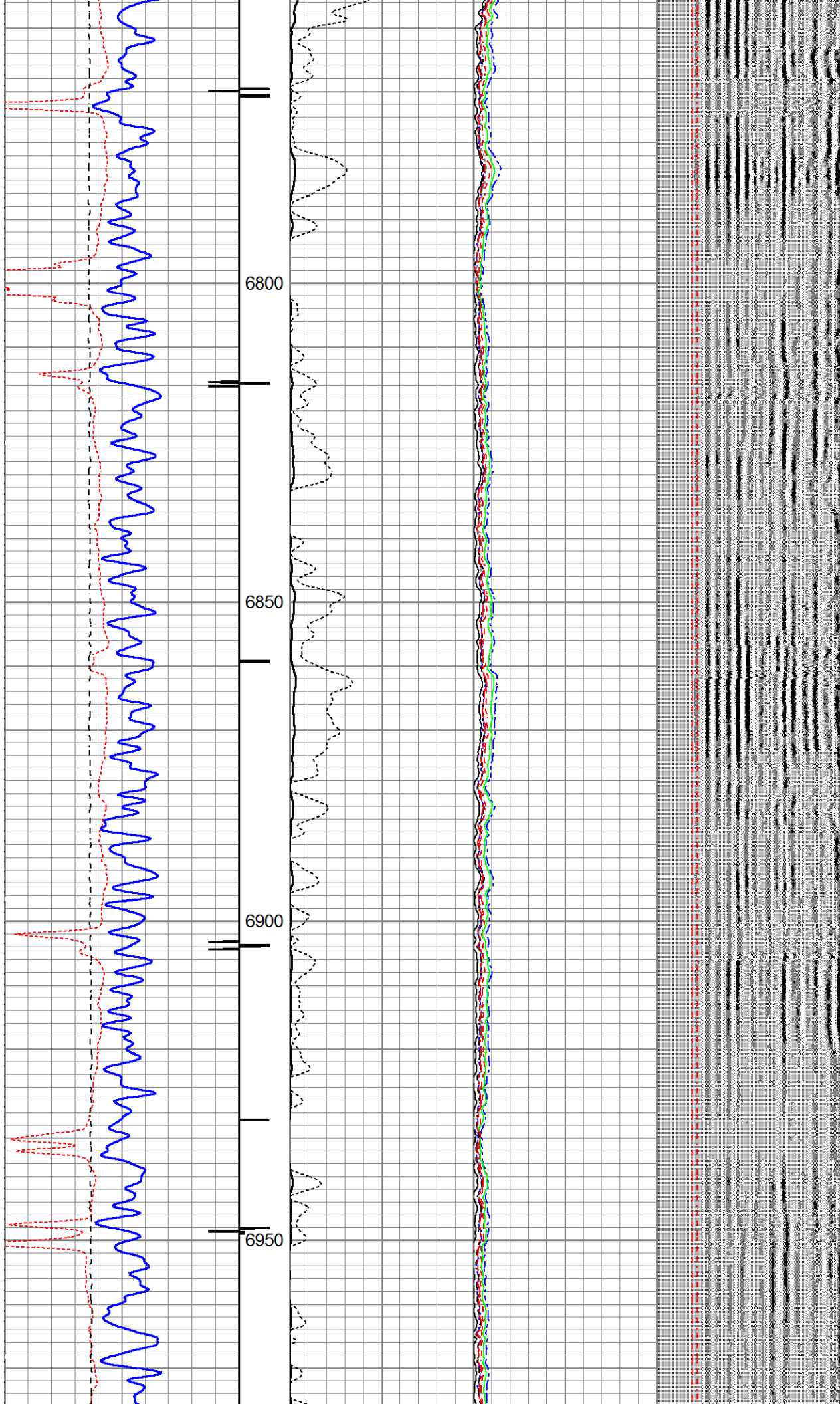


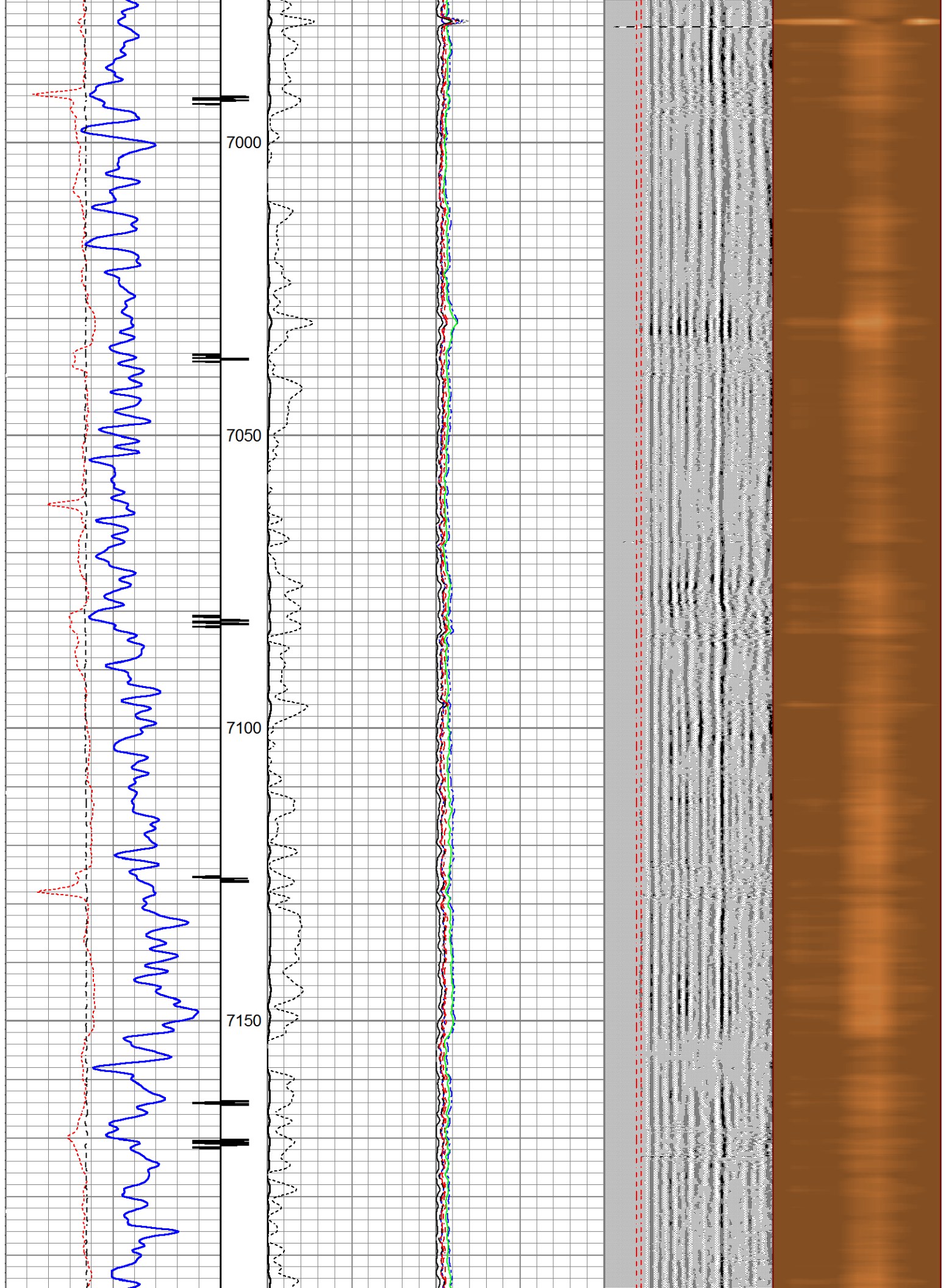


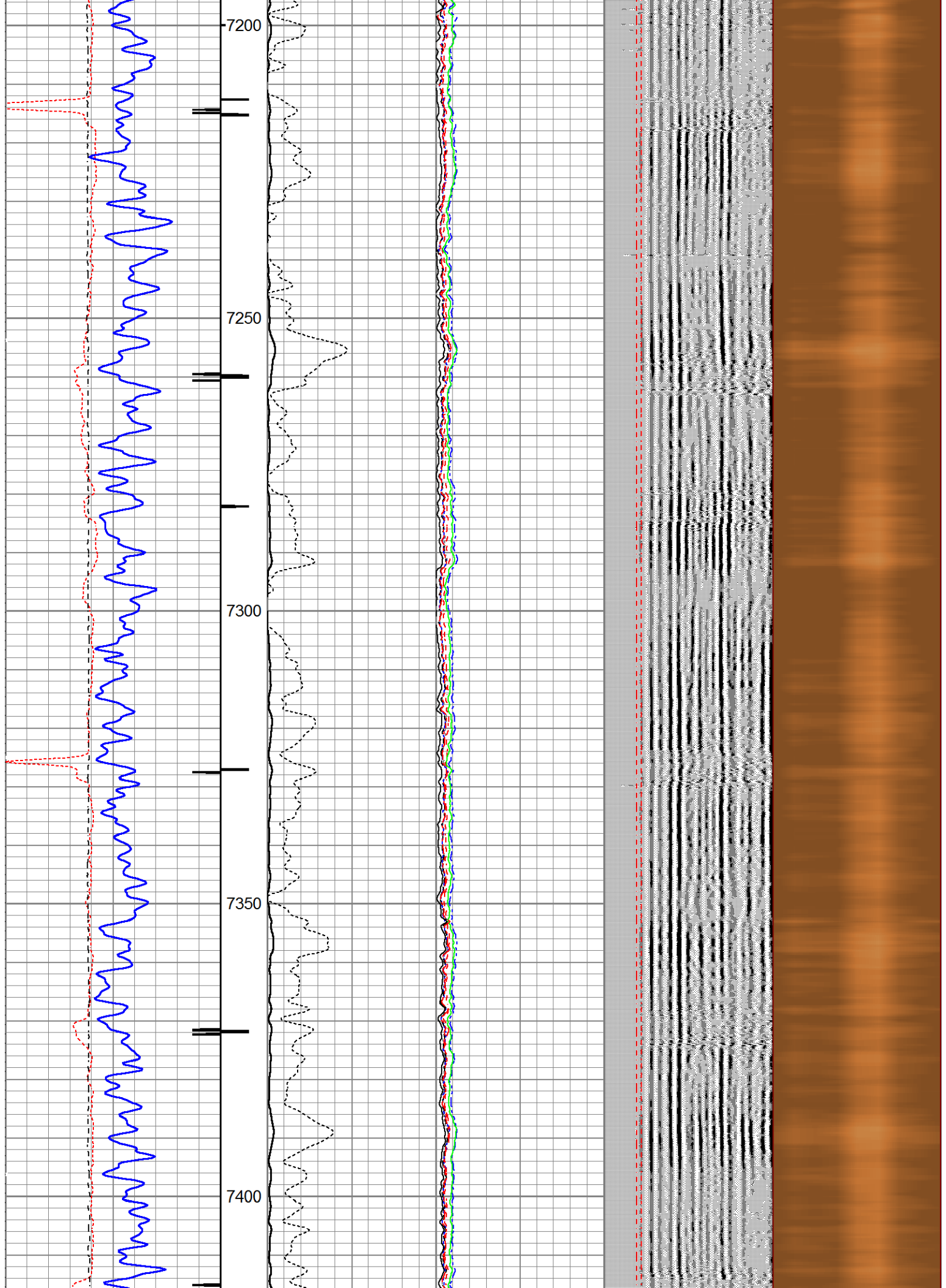


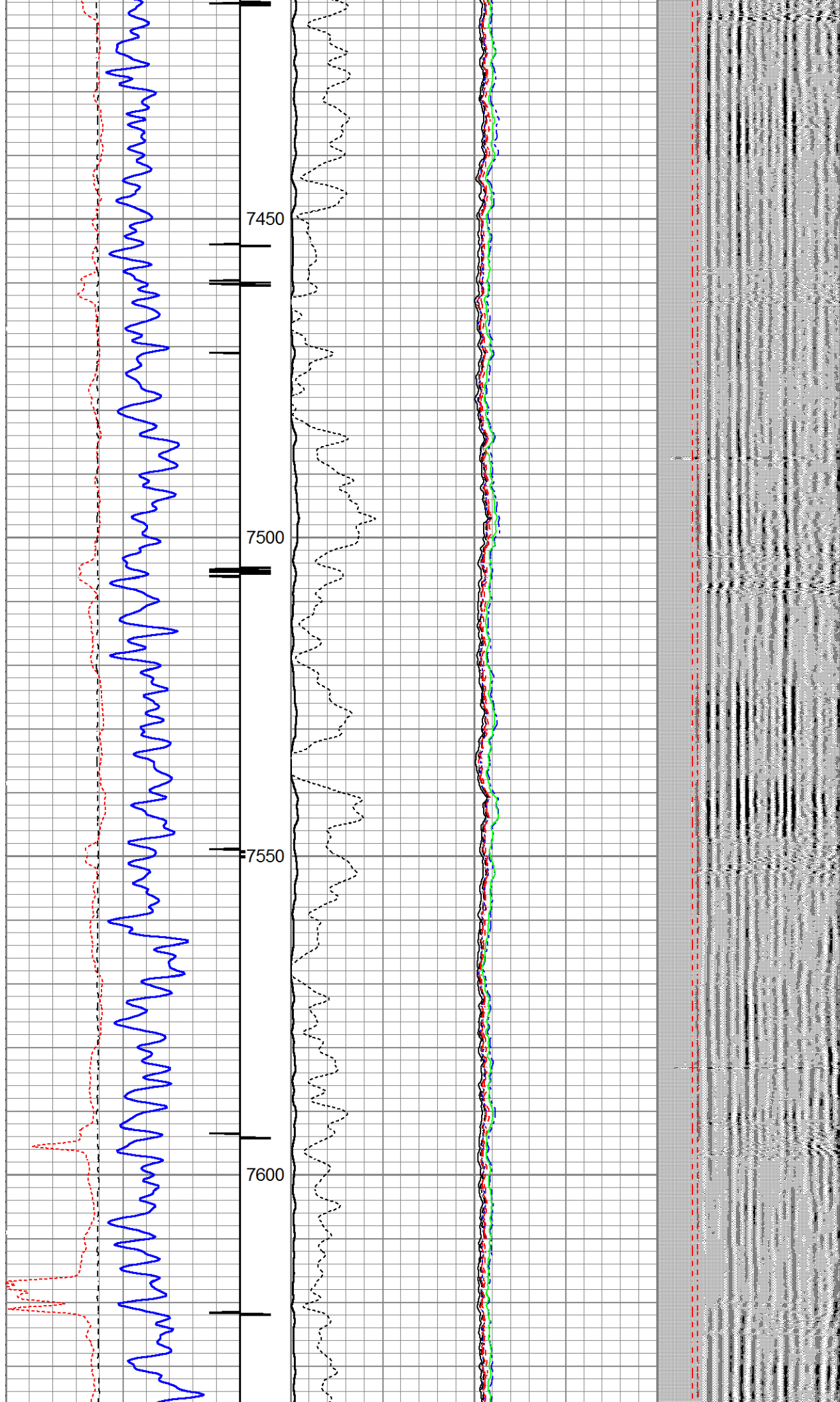


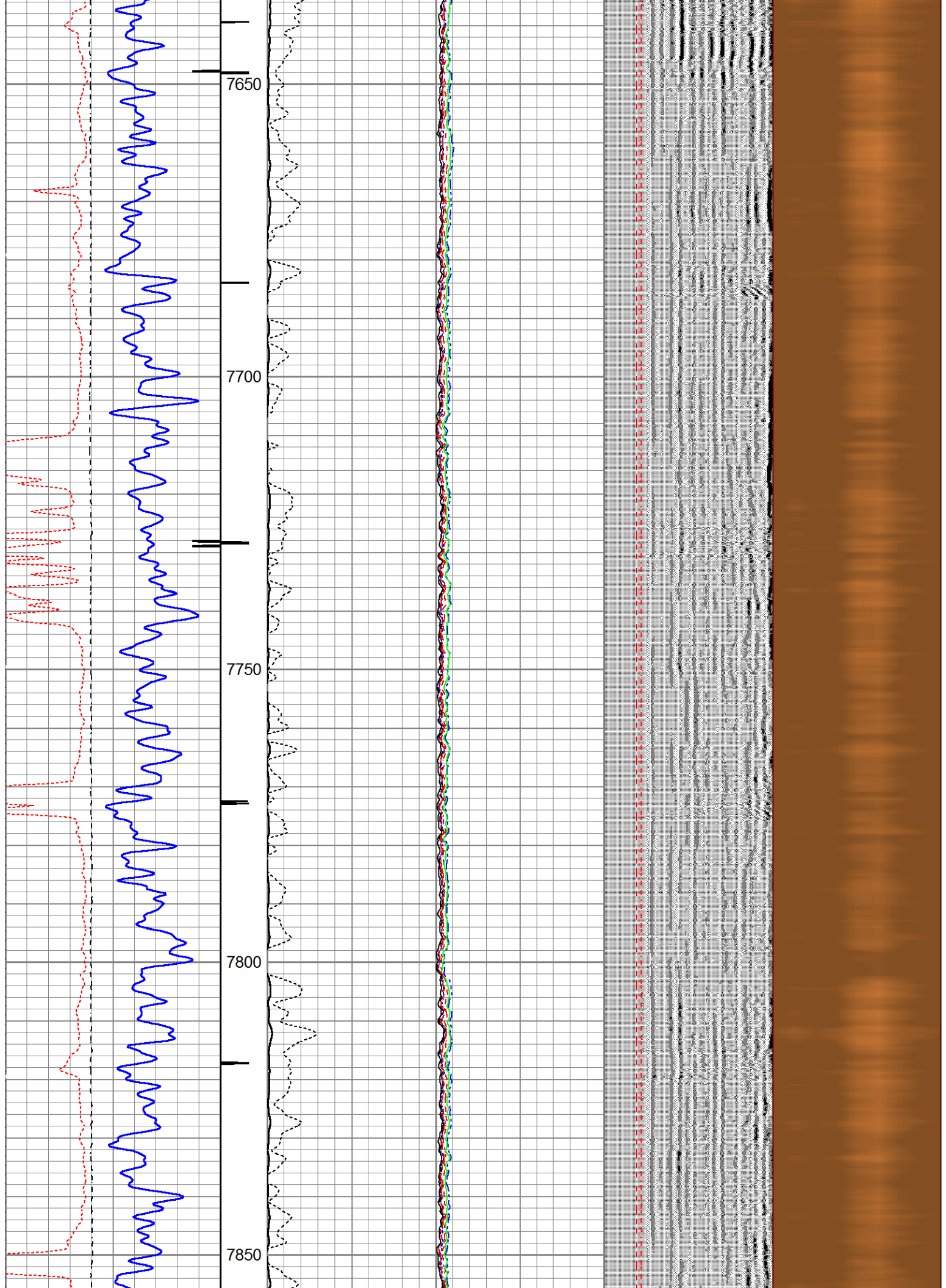


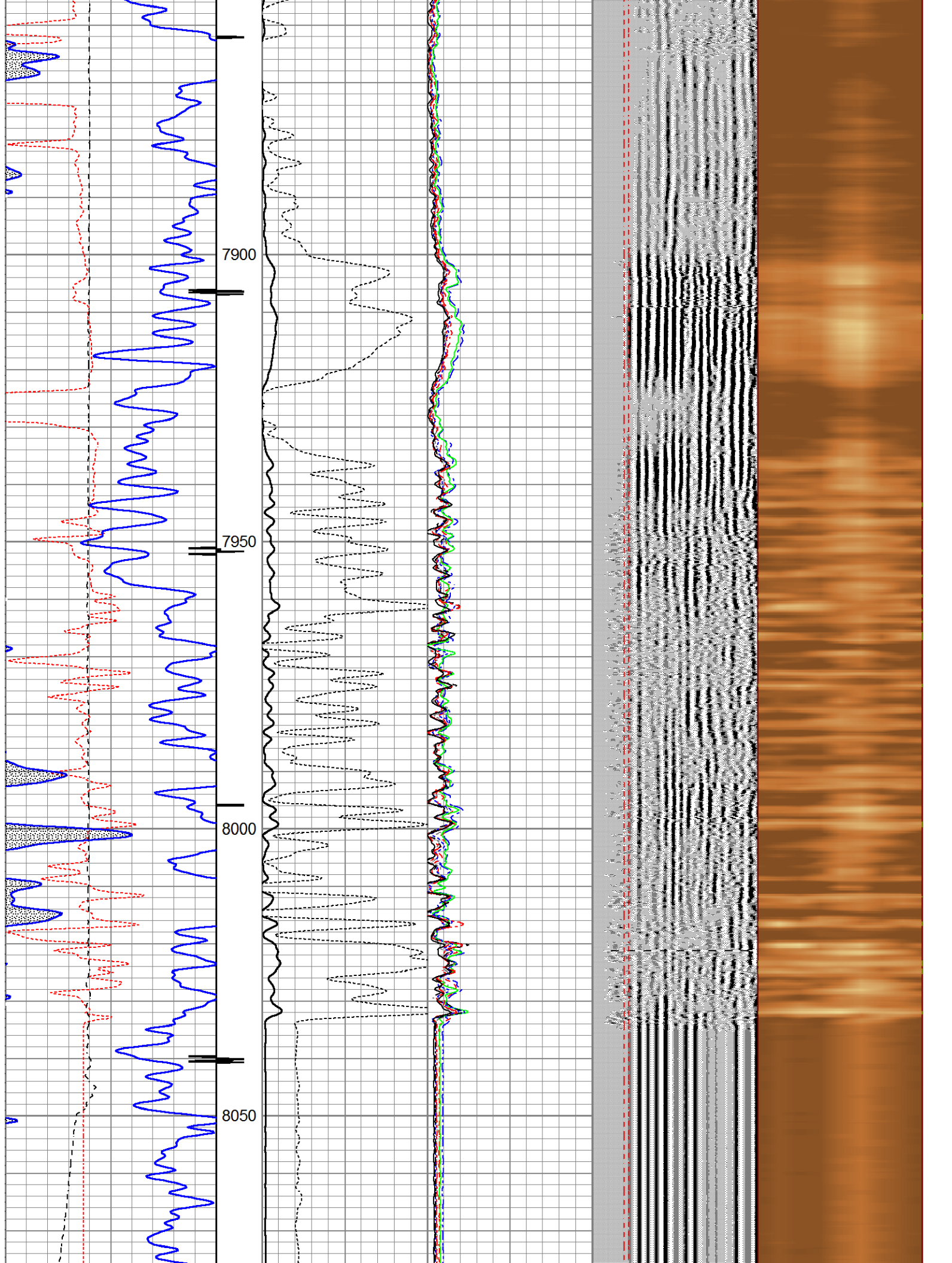


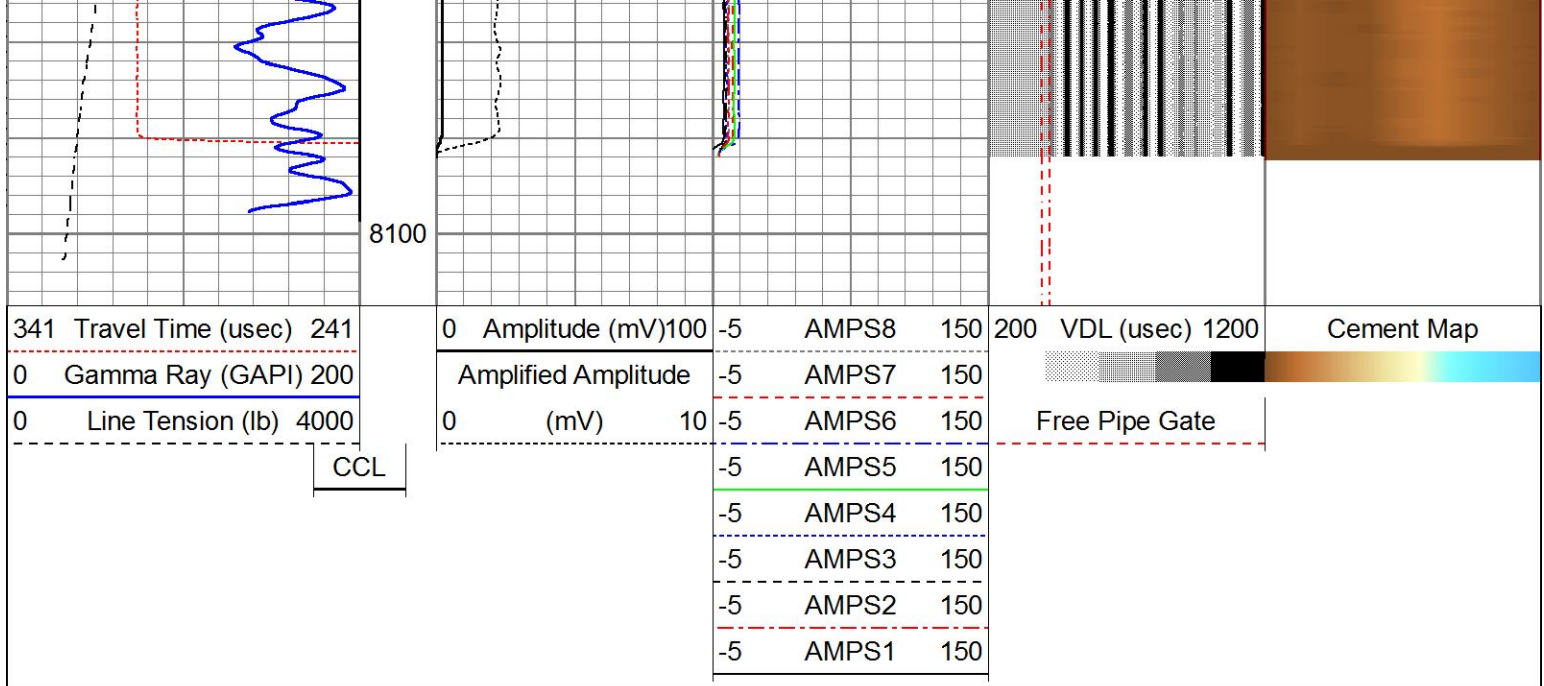












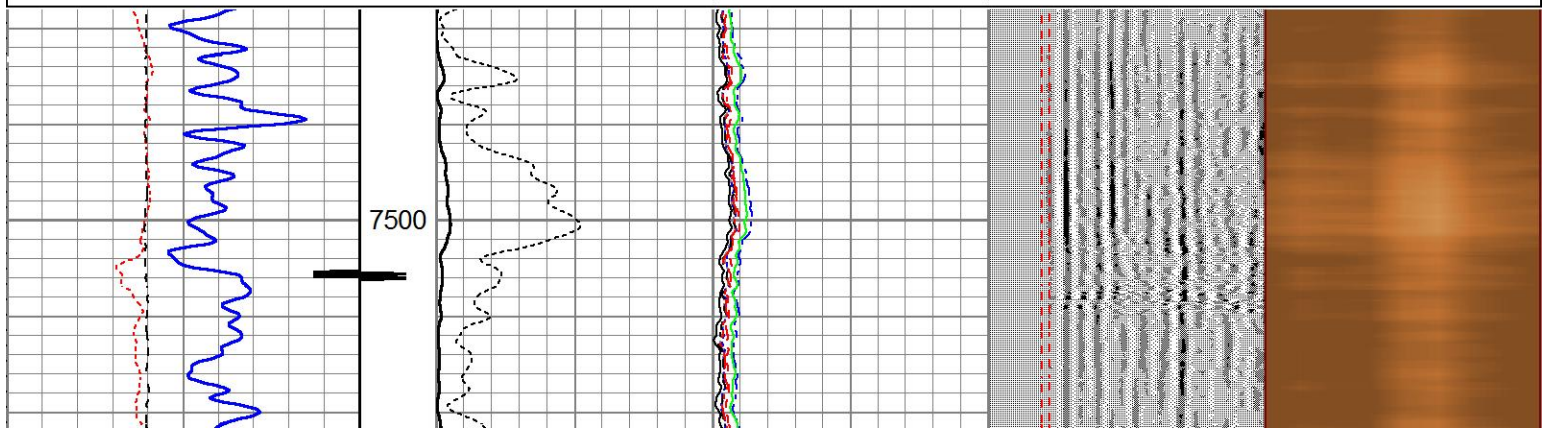
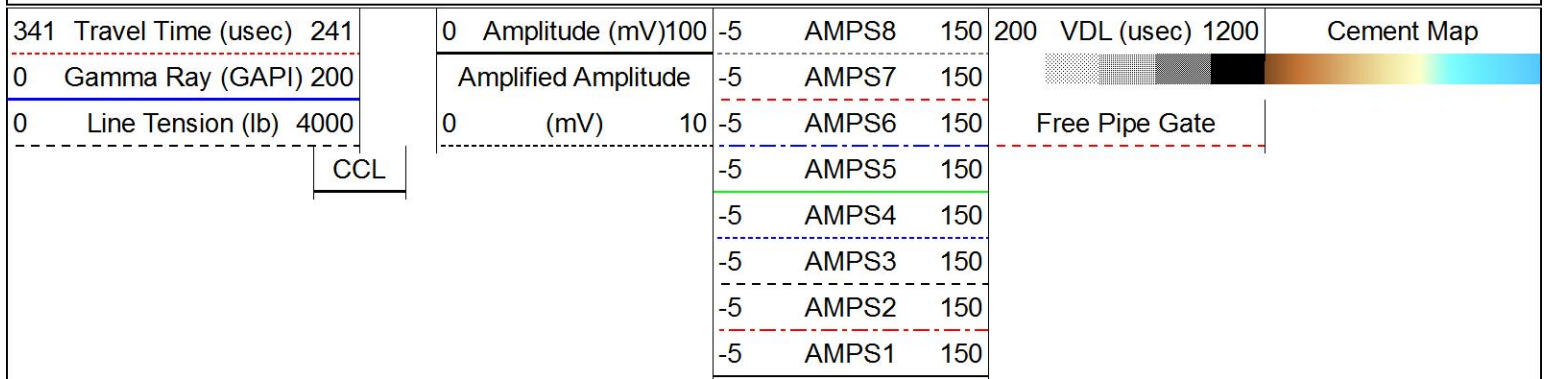
**C&J ENERGY SERVICES**

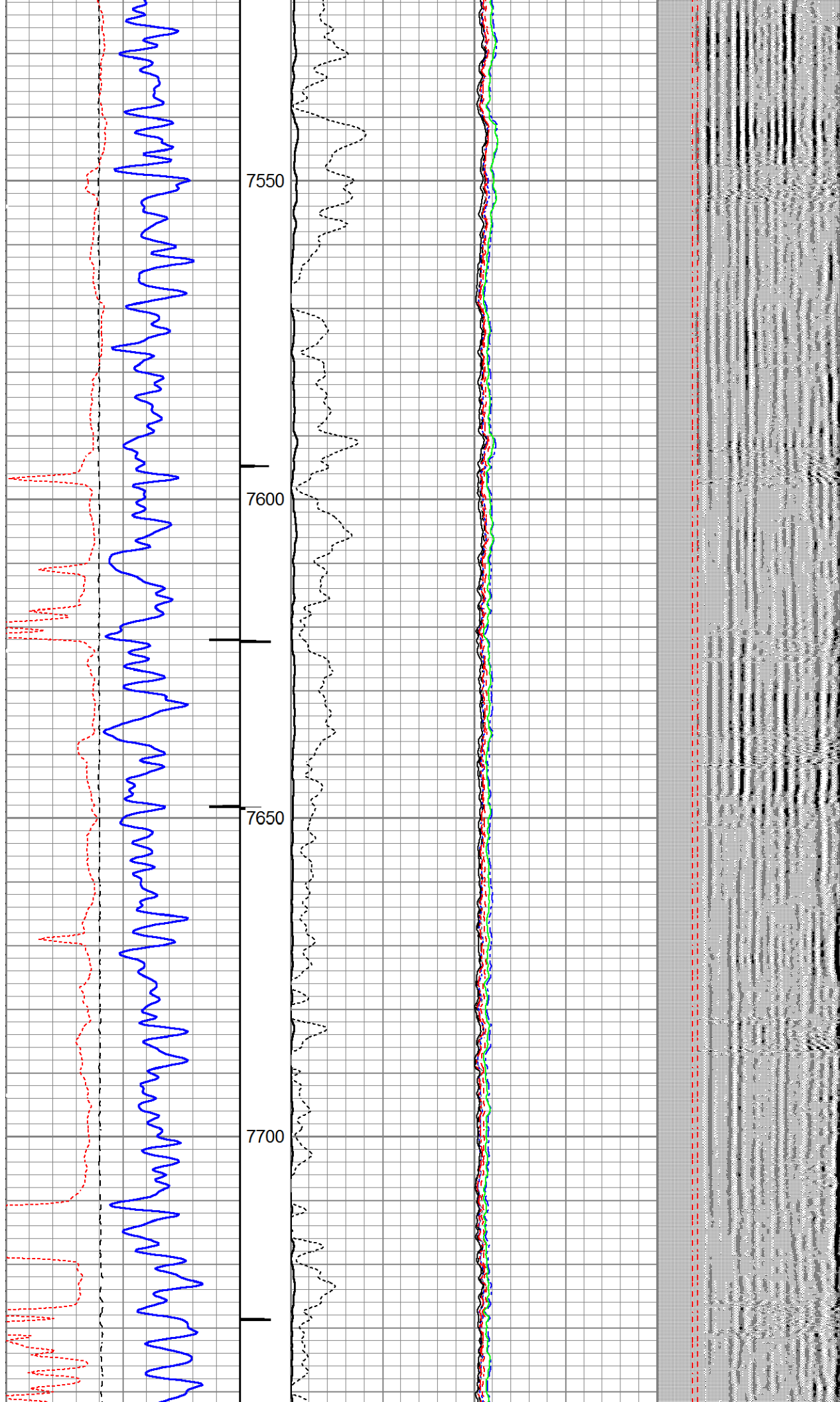
## Main Pass (0) PSI

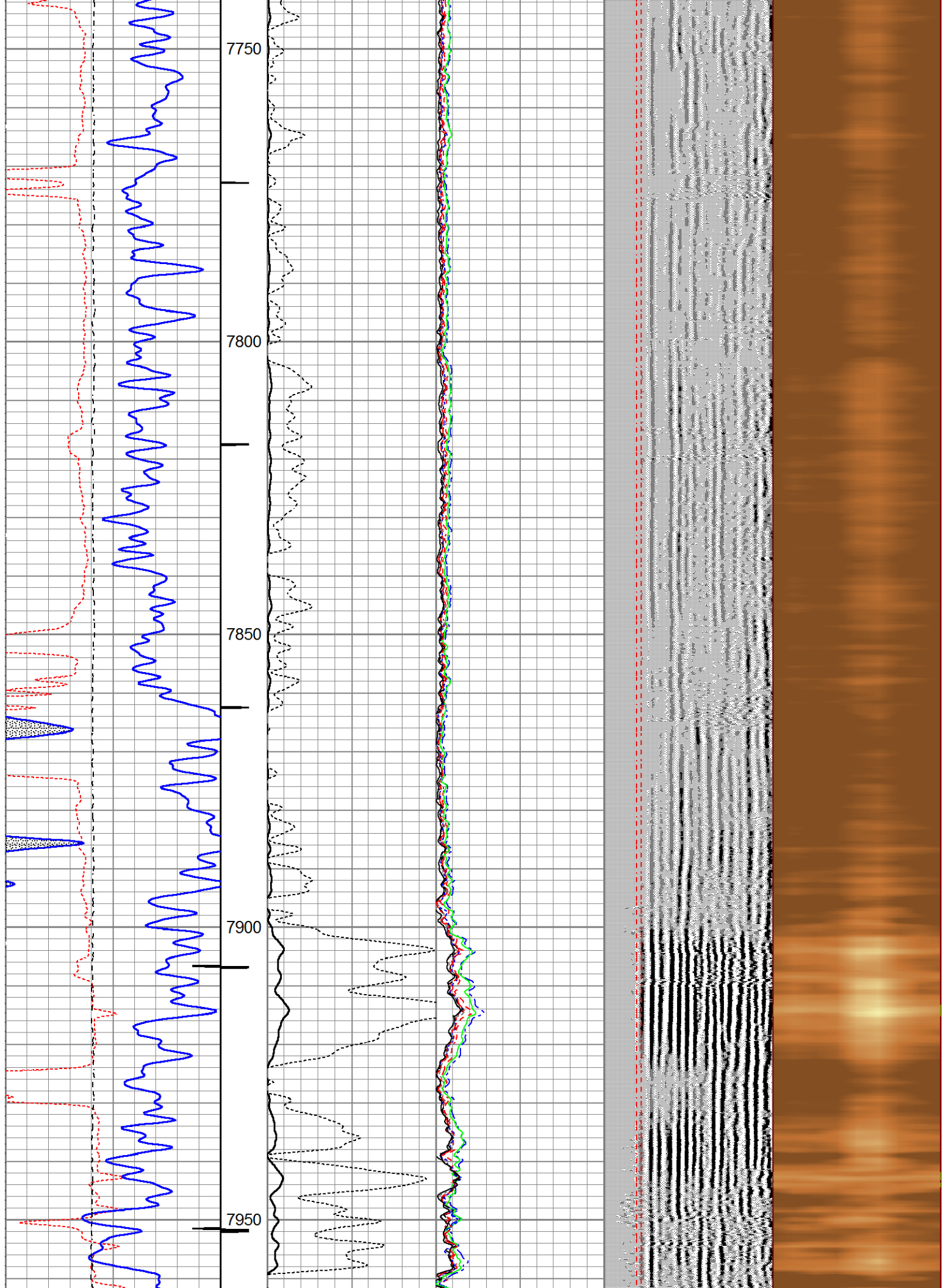
**C&J ENERGY SERVICES**

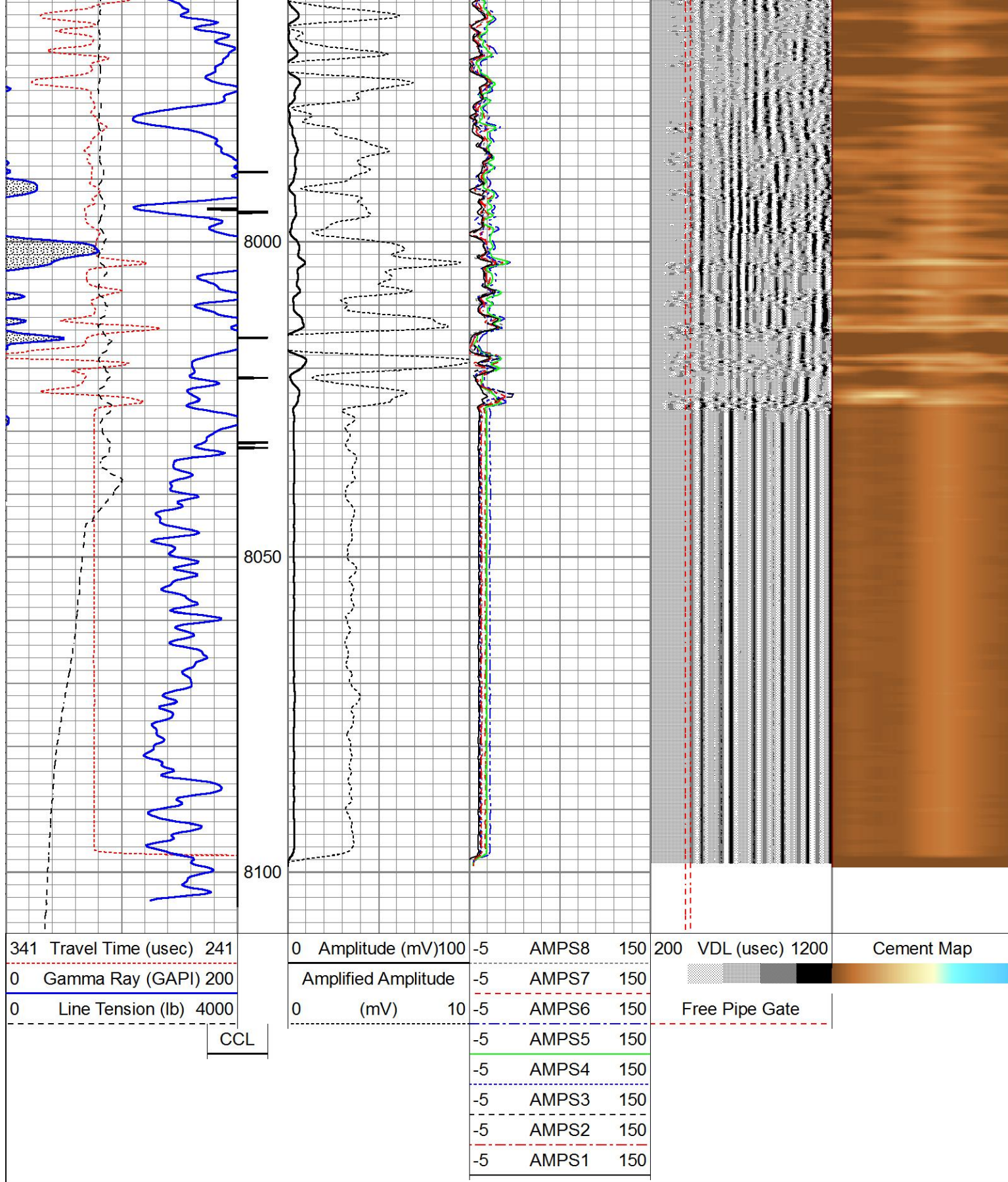
## Repeat Pass (0) PSI

Database File g:\petroshare corp shook pad\db\s\fs0210 ps shook 3-10-2nbh cbl.db  
 Dataset Pathname Shook3-10-2NBH/run1/pass2  
 Presentation Format scbl5\_5  
 Dataset Creation Sun Mar 04 05:20:32 2018  
 Charted by Depth in Feet scaled 1:240









# Repeat Pass (0) PSI

Log Variables

DatabaseG:\Petroshare Corp Shook Pad\DB's\fs0210 ps shook 3-10-2nbh cbl.db  
Dataset field/Shook3-10-2NBH/run1/pass4/ vars\_

### Top - Bottom

BOREID in 7.875	BOTTEMP degF 100	CASEOD in 5.5	CASETHCK in 0	CASEWGHT lb/ft 20	MAXAMPL mV 72	MINAMPL mV 1	MINATTN db/ft 0.8
PERFS  0	PPT usec 0	SRFTEMP degF 0	TDEPTH ft 0				

### Variable Description

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 G:\Petroshare Corp Shook Pad\DB's\fs0210 ps shook 3-10-2nbh cbl.db  
 Dataset Pathname Shook3-10-2NBH/run1/pass4  
 Dataset Creation Sun Mar 04 05:32:59 2018

### Gamma Ray Calibration Report

Serial Number: pr120363  
 Tool Model: Probe275dig  
 Performed: (Not Performed)

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps  
 Calibrator Reading: 1.0 cps

Sensitivity: 1.0000 GAPI/cps

### Segmented Cement Bond Log Calibration Report

Serial Number: 120768C  
 Tool Model: Probe



Calibration Casing Diameter: 5.500 in  
 Calibration Depth: 236.863 ft

Master Calibration, performed Sun Mar 04 01:50:05 2018:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.011	0.571	1.000	71.921	126.557	-0.393
CAL	0.004	0.910				
5'	0.000	0.468	1.000	71.921	151.737	0.963
SUM						
S1	0.042	0.602	0.000	100.000	178.456	-7.476
S2	0.010	0.585	0.000	100.000	173.957	-1.720
S3	0.009	0.568	0.000	100.000	178.892	-1.616
S4	0.009	0.556	0.000	100.000	182.857	-1.692
S5	0.011	0.555	0.000	100.000	183.644	-2.002
S6	0.011	0.572	0.000	100.000	178.199	-2.003
S7	0.009	0.589	0.000	100.000	172.318	-1.538
S8	0.009	0.596	0.000	100.000	170.429	-1.556

Internal Reference Calibration, performed Sat Mar 03 18:58:32 2018:

Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain      Offset
CAL	0.000	0.000	0.004	0.910	1.000      0.000
Air Zero Calibration, performed Sat Mar 03 18:55:30 2018:					
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)
ExTemp	14.41		CHD-1.4375CHD Titan Cable Head 1 7/16	1.00	1.44	10.00
			CENT-Probe Probe 2 3/4 Centralizer	2.88	2.75	20.00
WVFS8	12.11		CLT-RBT-Probe (120768C) Probe 2.75" Radial Bond Tool w/Temperature	9.21	2.75	93.00
WVFS7	12.11					
WVFS6	12.11					
WVFS5	12.11					
WVFS4	12.11					
WVFS3	12.11					
WVFS2	12.11					
WVFS1	12.11					
WVFCAL	12.11					
WVF3FT	12.11					
WVF5FT	11.11					



