



**RADIAL BOND LOG**  
**GAMMA RAY**  
**CCL / VDL / MAP**

**Company** CHEVRON  
**Well** BOHLENDER H14-09  
**Field** WATTENBERG  
**County** WELD  
**State** COLORADO  
**Country** USA

**Location:** API #: 05-123-15745  
SURFACE:  
2100' FSL & 500' FEL  
SEC 14 TWP 3N RGE 65W  
**Permanent Datum** G.L. Elevation 4821'  
**Log Measured From** K.B.  
**Drilling Measured From** K.B.  
**Other Services**  
K.B. 4833'  
D.F. 4832'  
G.L. 4821'

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**Date** 4/10/2023

<b>Run Number</b>	1
<b>Depth Driller</b>	7278'
<b>Depth Logger</b>	3580'
<b>Bottom Logged Interval</b>	3570'
<b>Top Log Interval</b>	SURFACE
<b>Open Hole Size</b>	12-1/4"
<b>Type Fluid</b>	WATER
<b>Density / Viscosity</b>	8.3#
<b>Max. Recorded Temp.</b>	N/A
<b>Estimated Cement Top</b>	N/A
<b>Time Well Ready</b>	N/A
<b>Time Logger on Bottom</b>	N/A
<b>Equipment Number</b>	DSSHSR10
<b>location</b>	MILLIKEN, CO
<b>Recorded By</b>	Garrett Graham
<b>Witnessed By</b>	Bobby Espinosa

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
<b>Casing Record</b>	<b>Size</b>	<b>Wgt/Ft</b>	<b>Top</b>	<b>Bottom</b>			
Surface String	8 5/8"	24#	SURFACE	450'			
Prot. String							
Production String	3 1/2"	9.2#	SURFACE	7263'			
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.

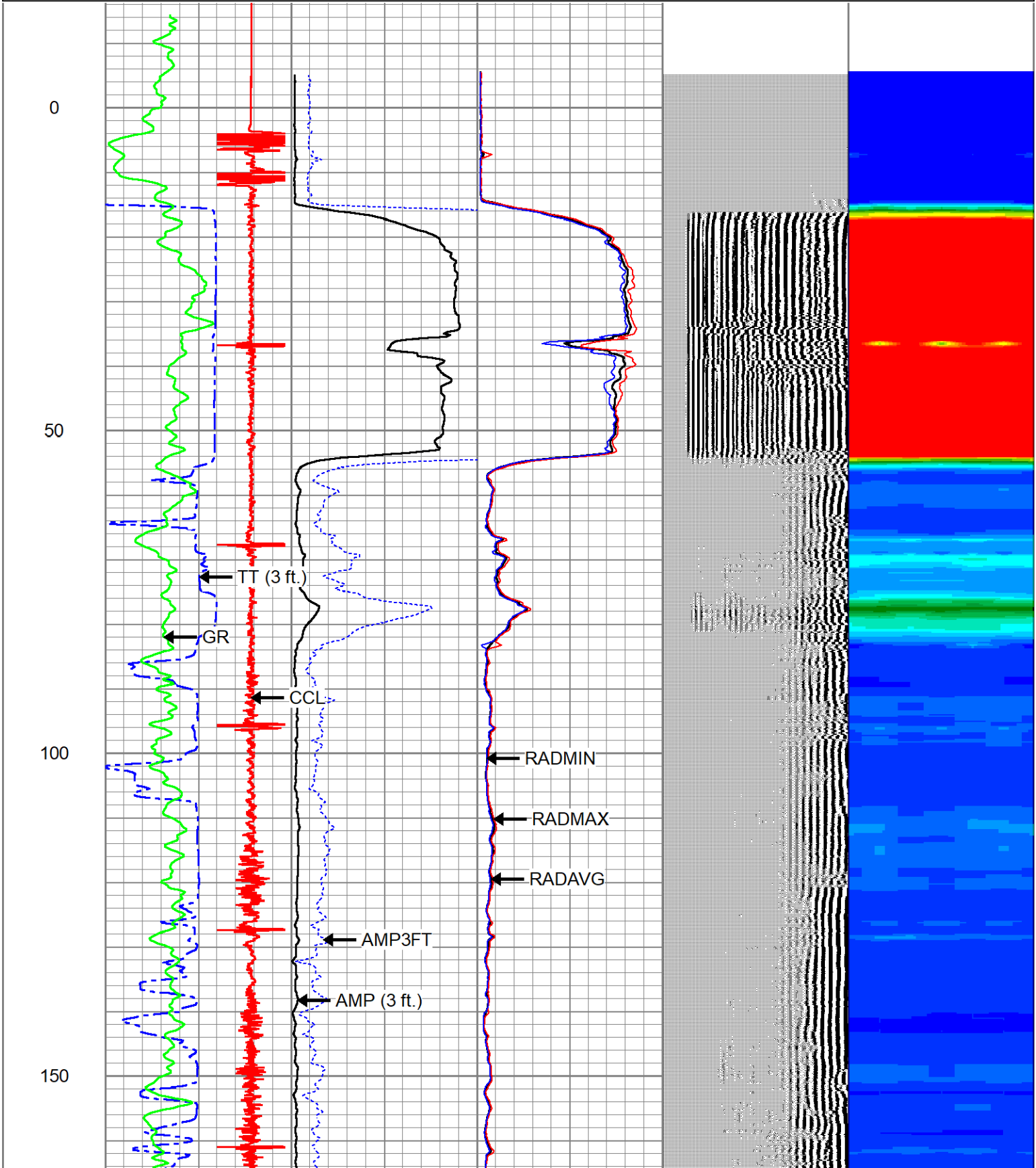
**Comments**

NO CORRELATION LOG AVAILABLE



**MAIN PASS**

TT (3 ft.)			AMP (3 ft.)			0	RADAVG	100	VDL (5 ft.)			1	RADIAL MAP	6
350	(usec)	120	0	(mV)	100	0	RADMAX	100	200	(usec)	1200	4		50
-20000	CCL	20000	0	AMP3FT (mV)	20	0	RADMIN	100						
0	GR (GAPI)	150												

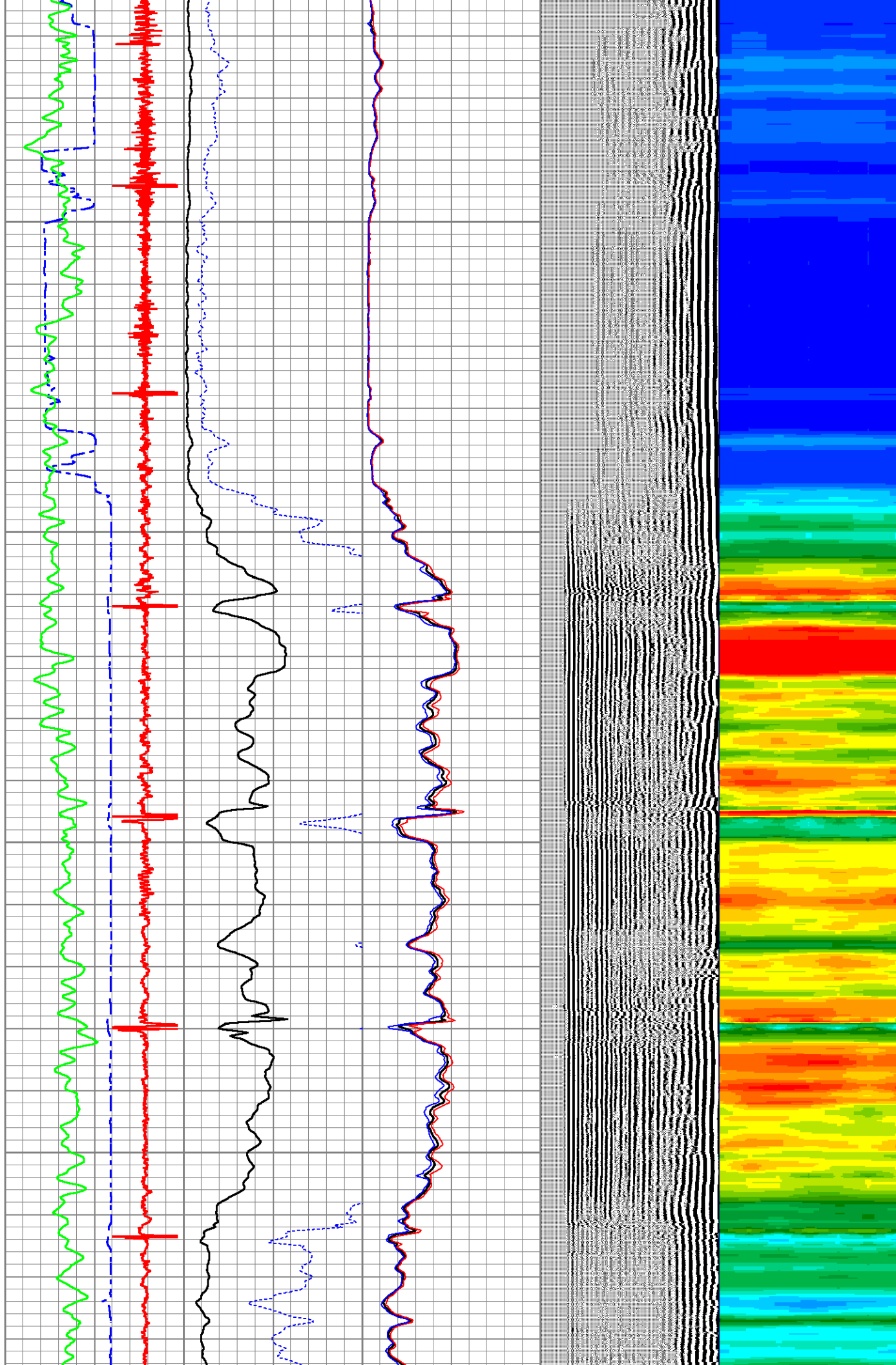


200

250

300

350





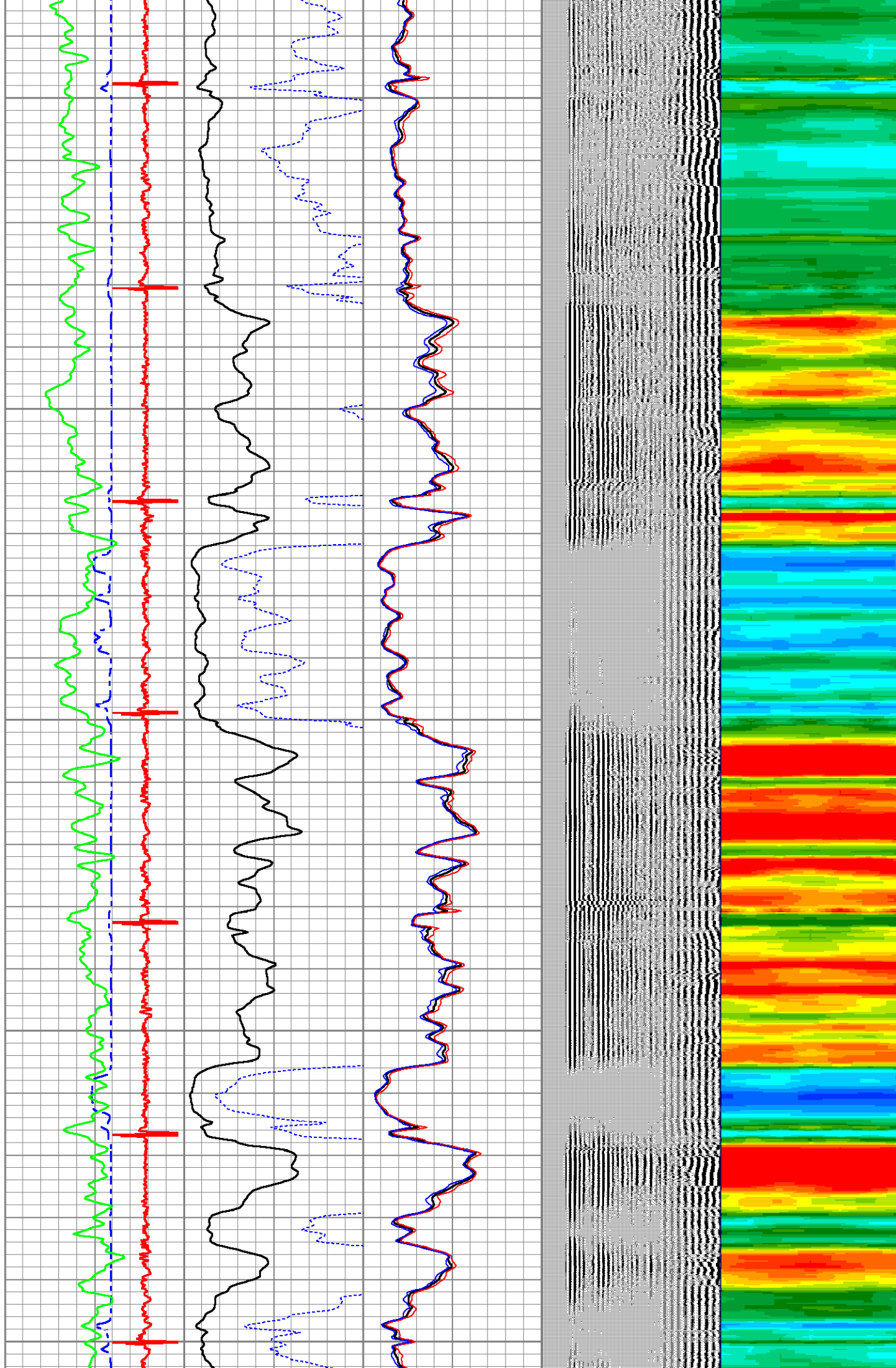
400

450

500

550

600

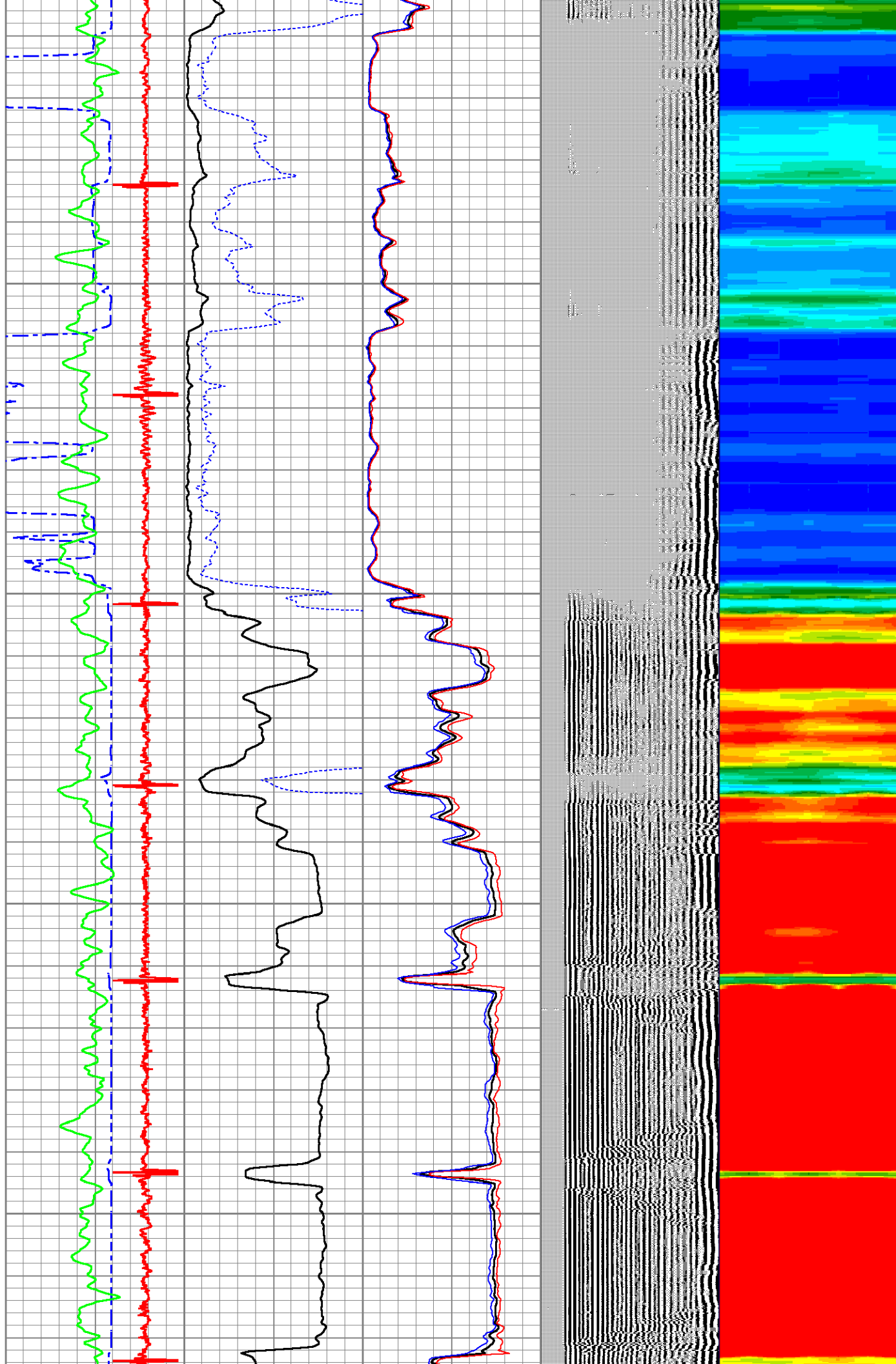


650

700

750

800

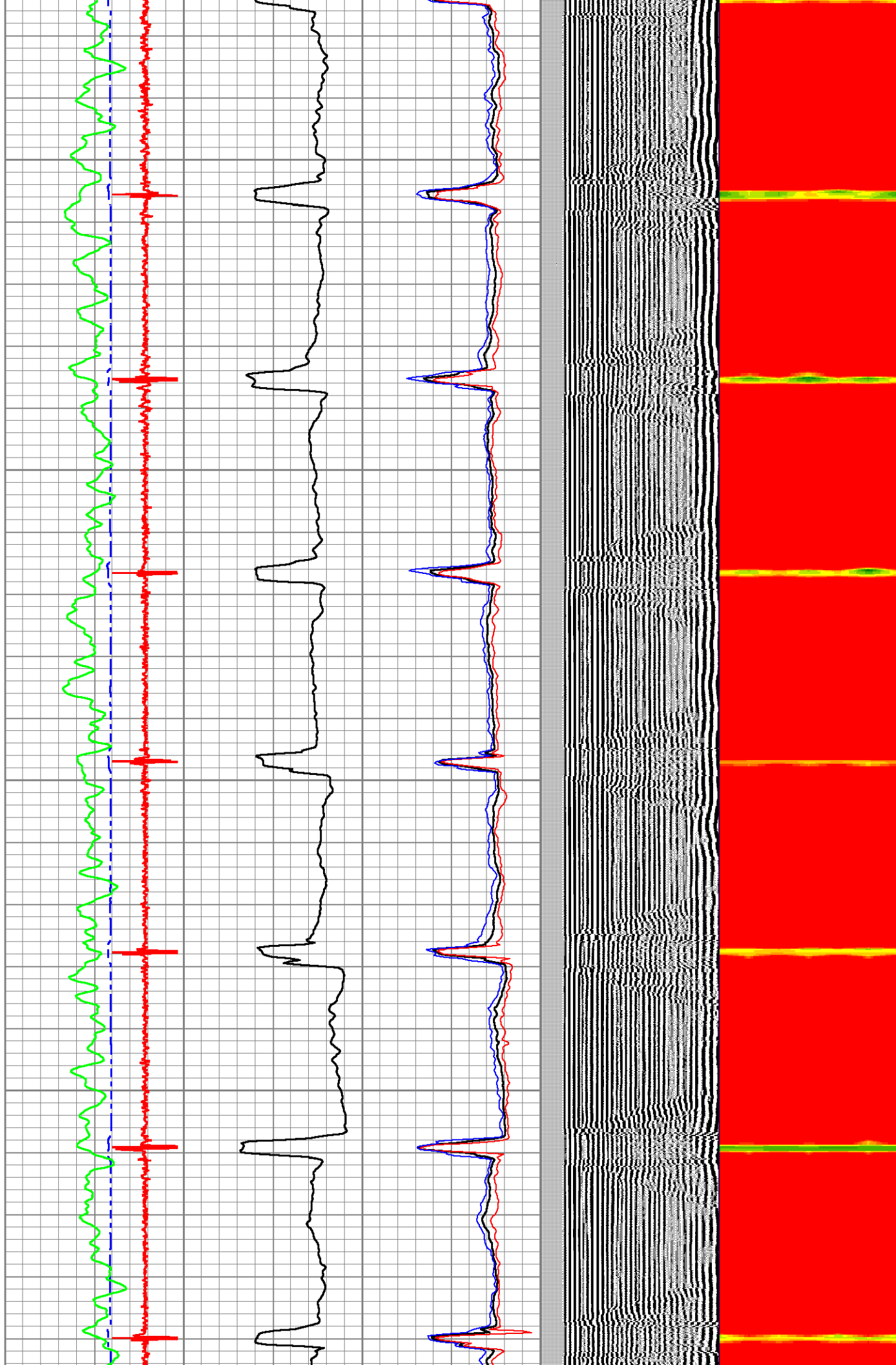


850

900

950

1000





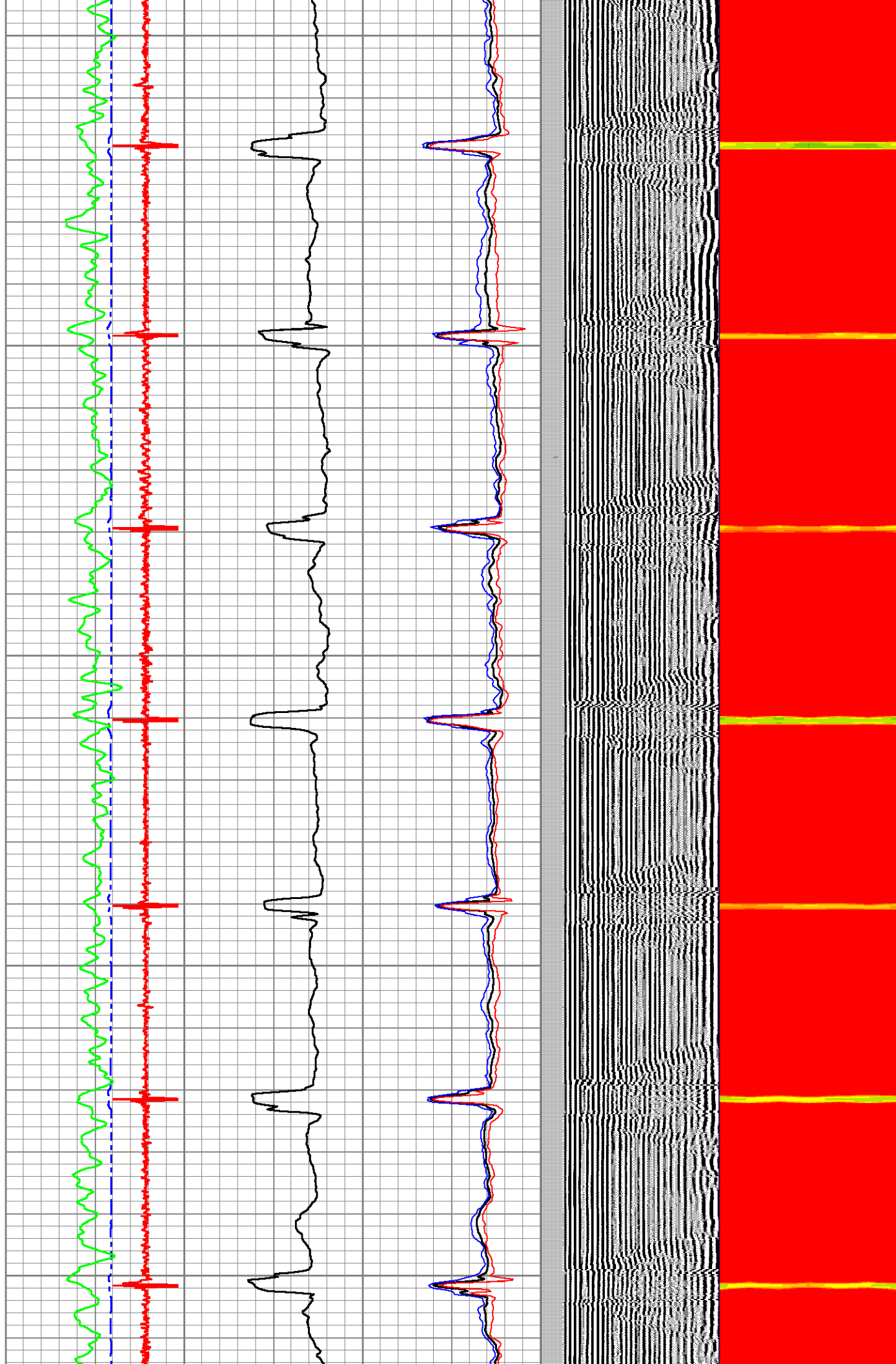
1050

1100

1150

1200

1250

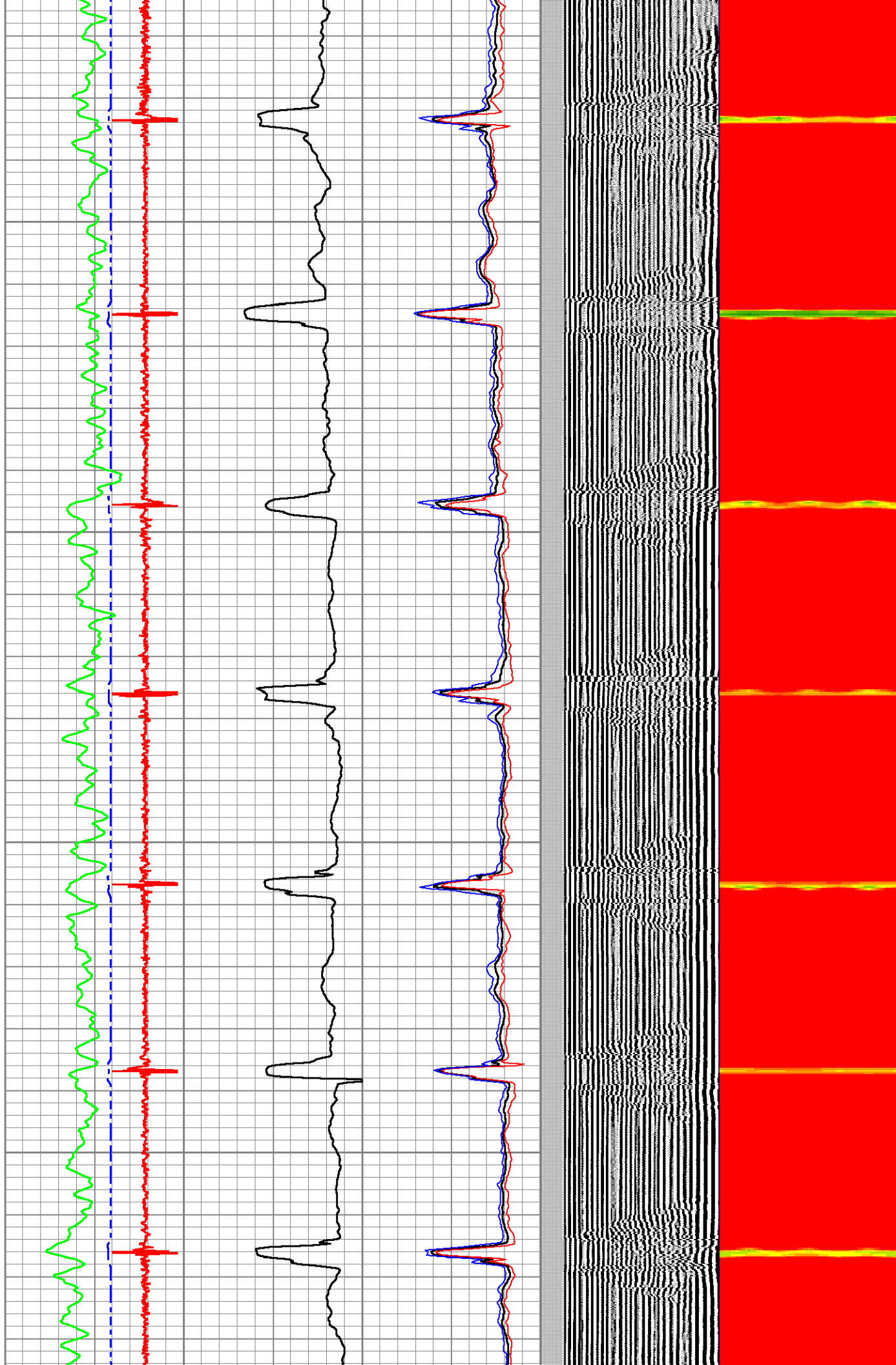


1300

1350

1400

1450





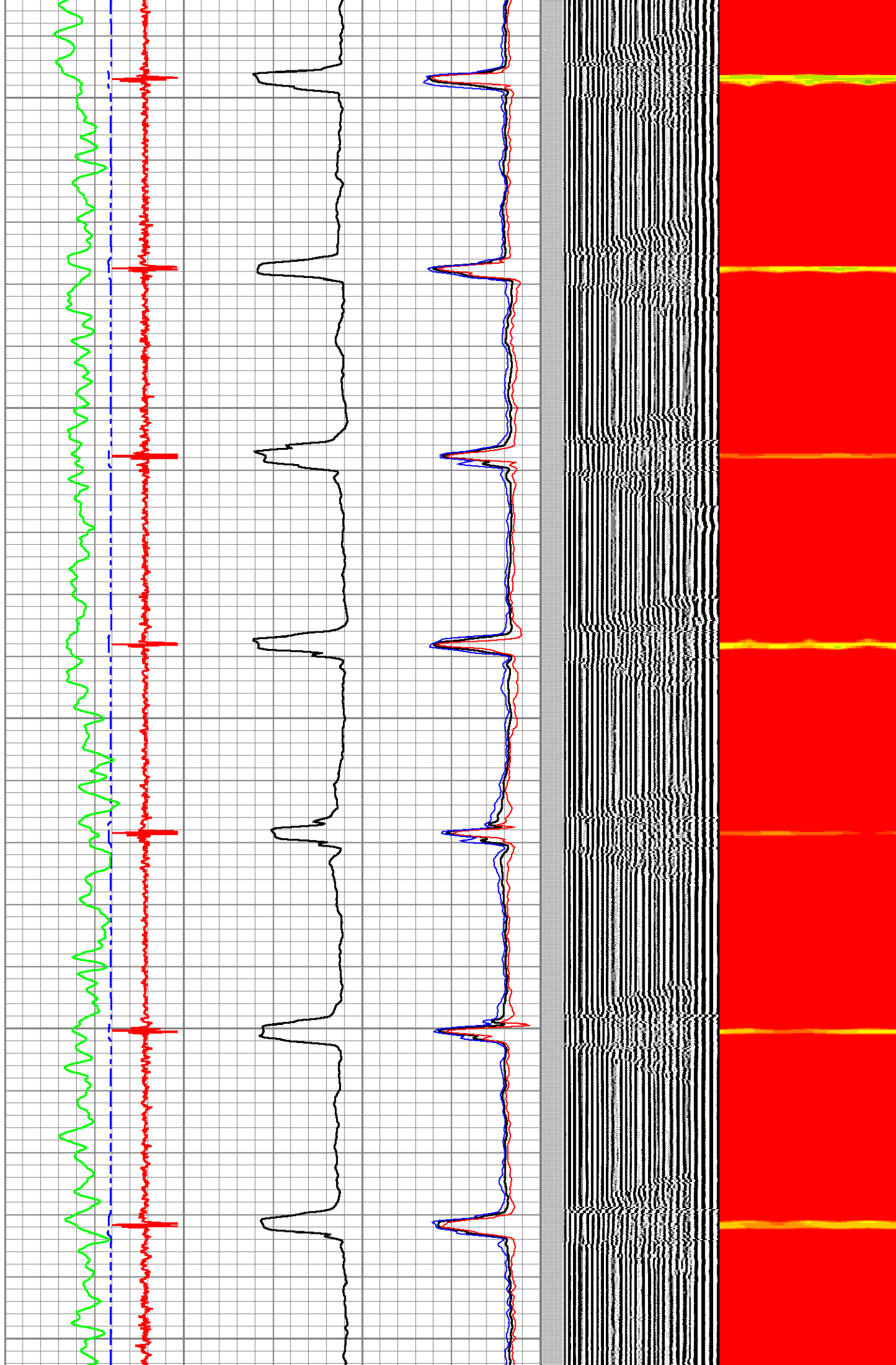
1500

1550

1600

1650

1700

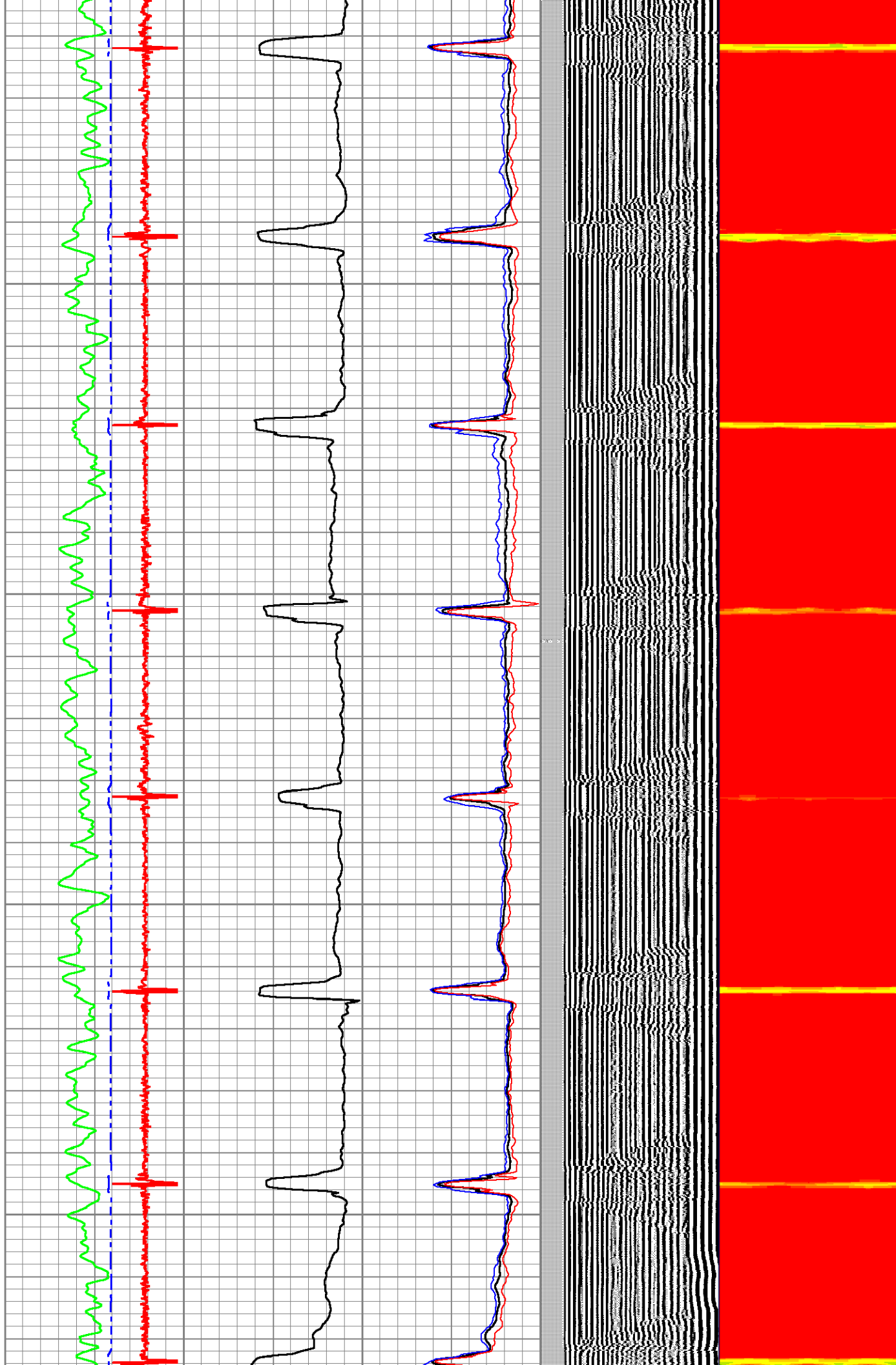


1750

1800

1850

1900

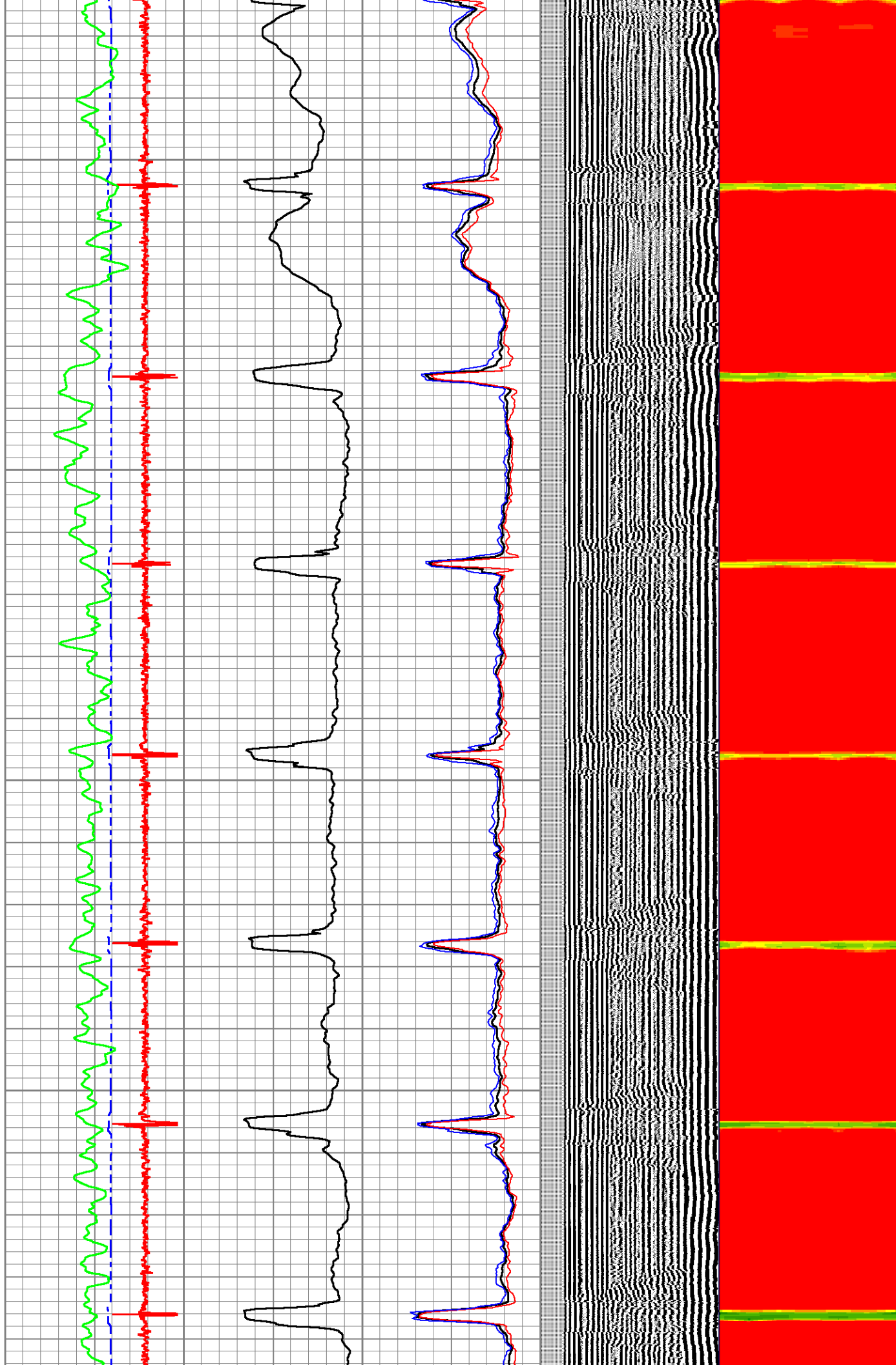


1950

2000

2050

2100





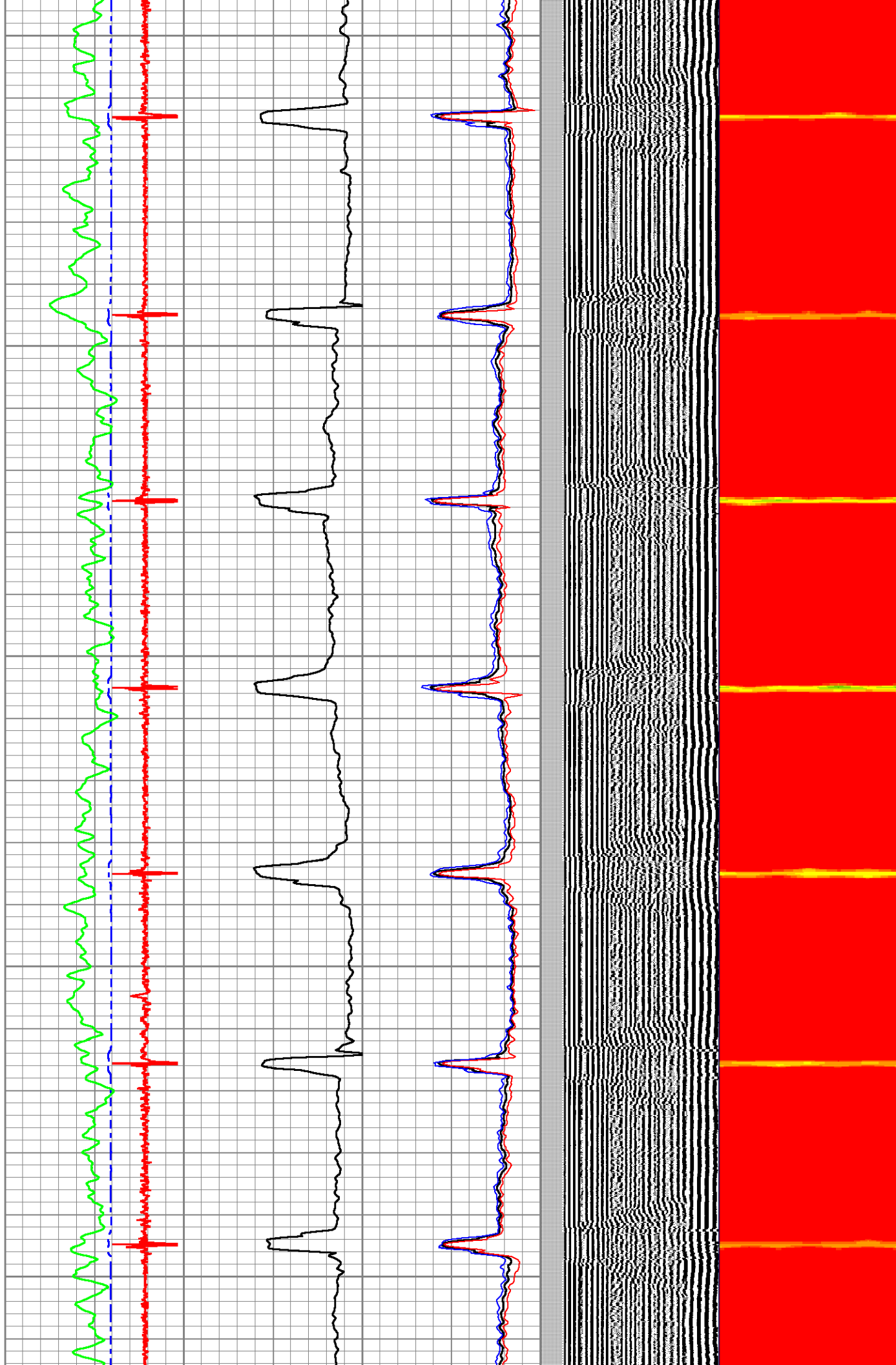
2150

2200

2250

2300

2350

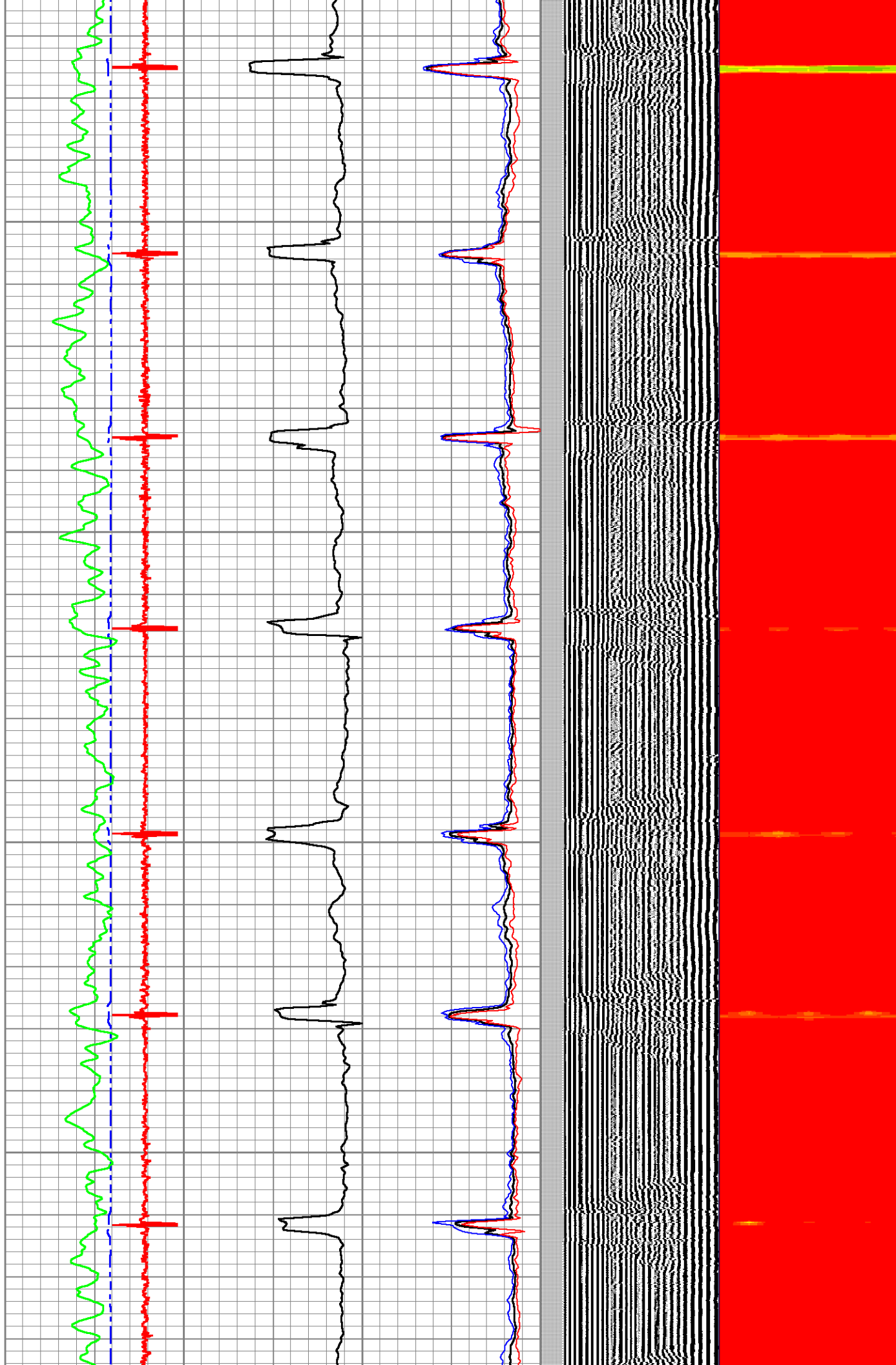


2400

2450

2500

2550



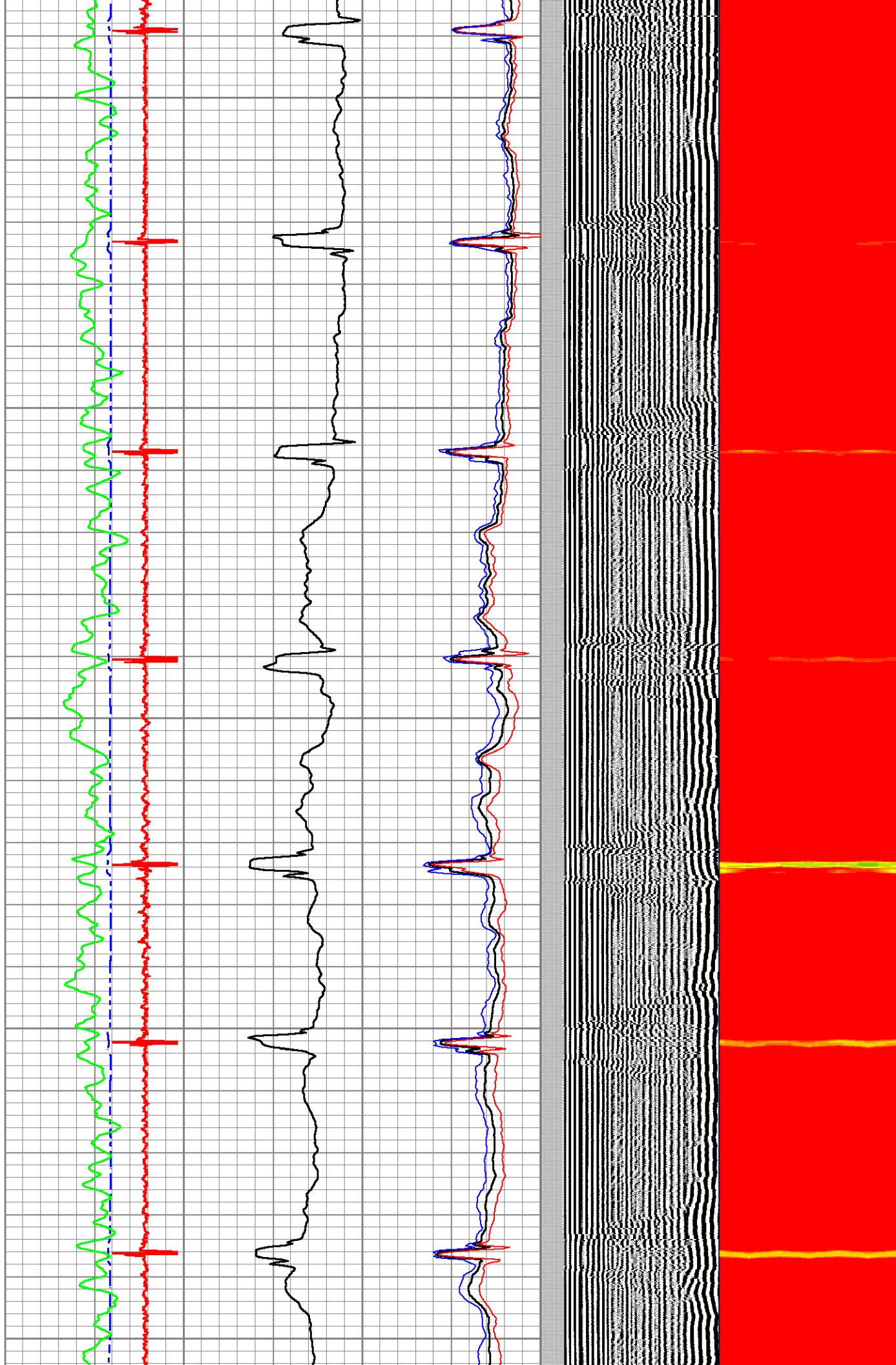
2600

2650

2700

2750

2800



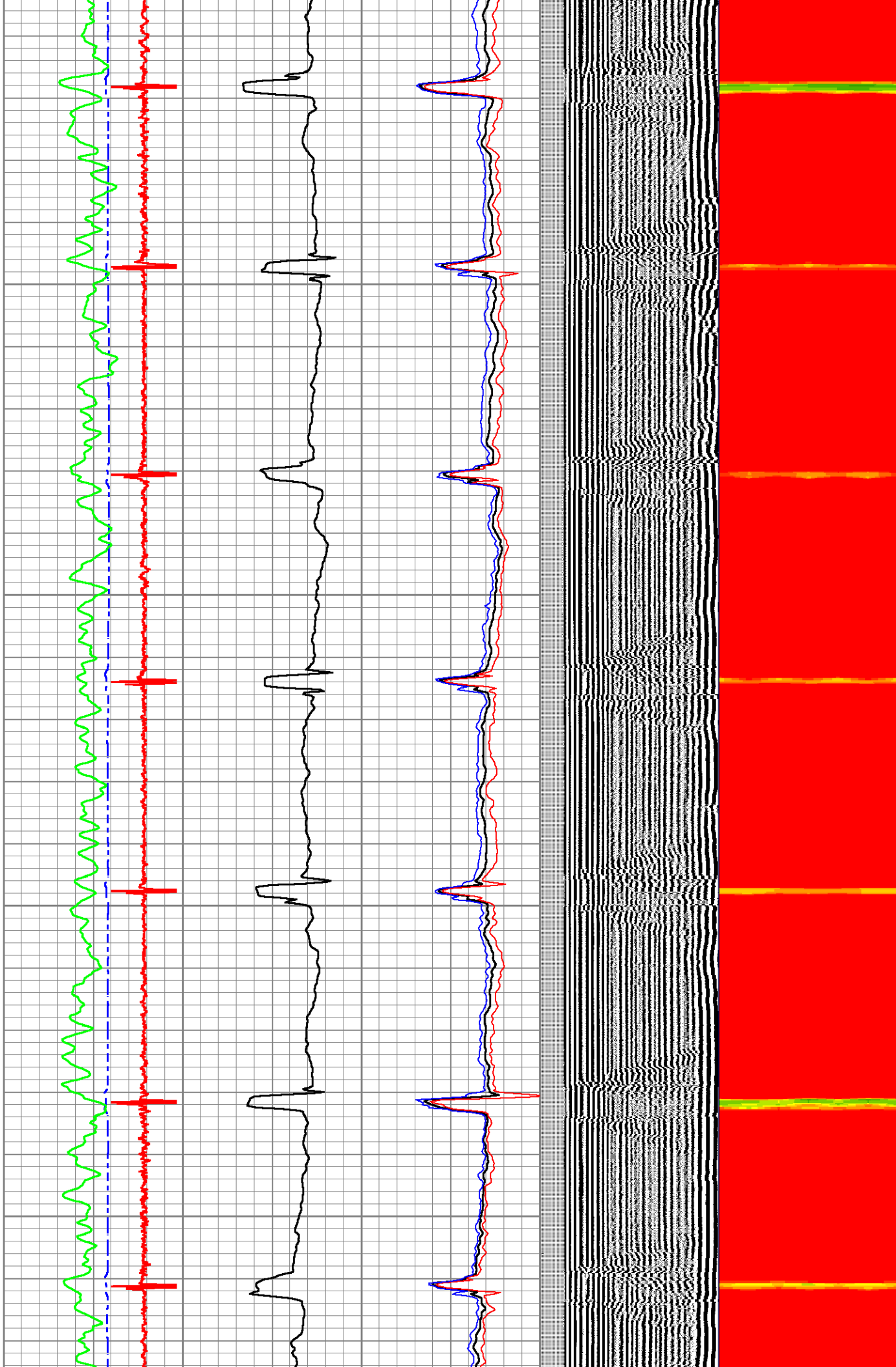


2850

2900

2950

3000

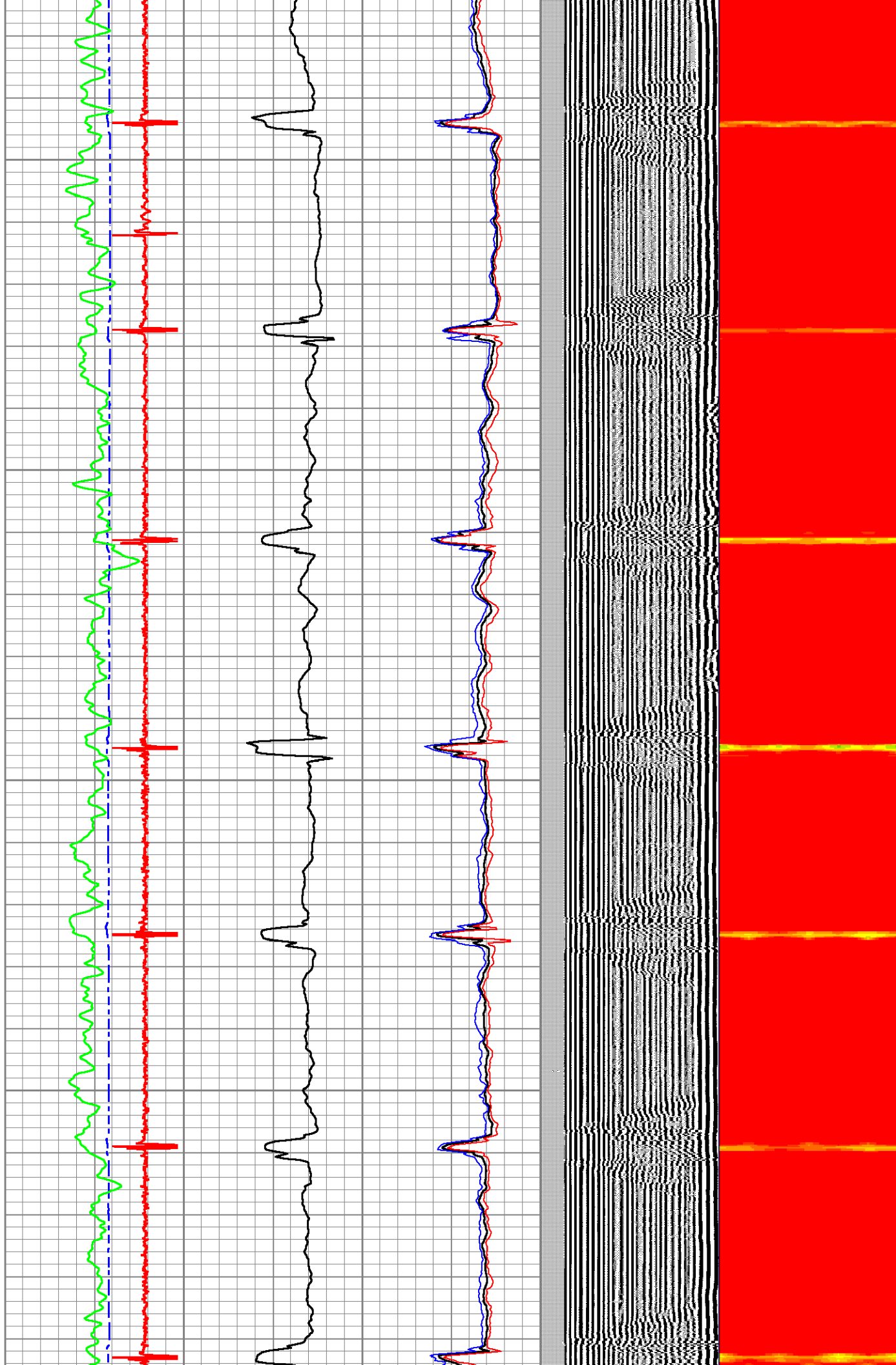


3050

3100

3150

3200



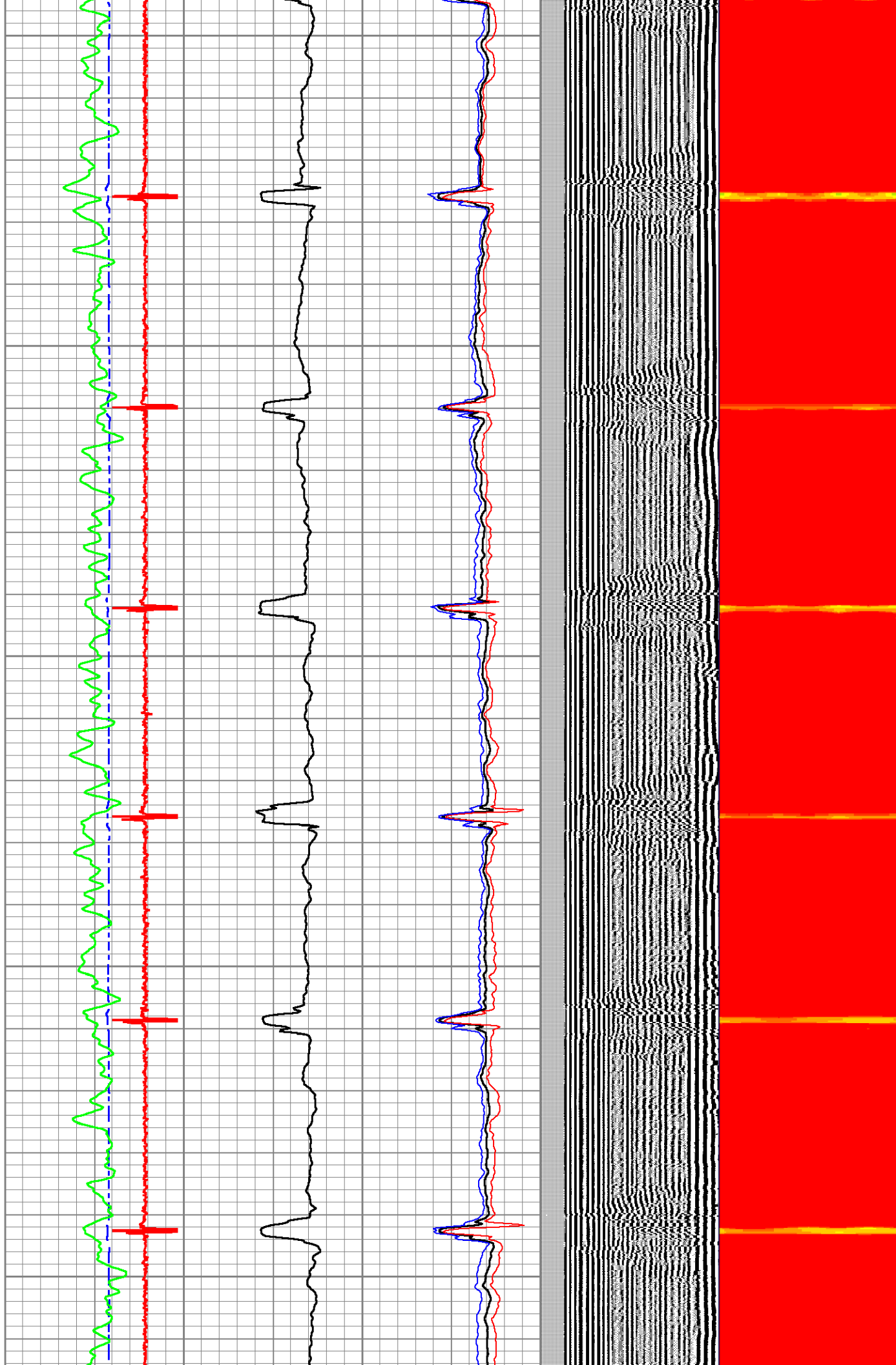
3250

3300

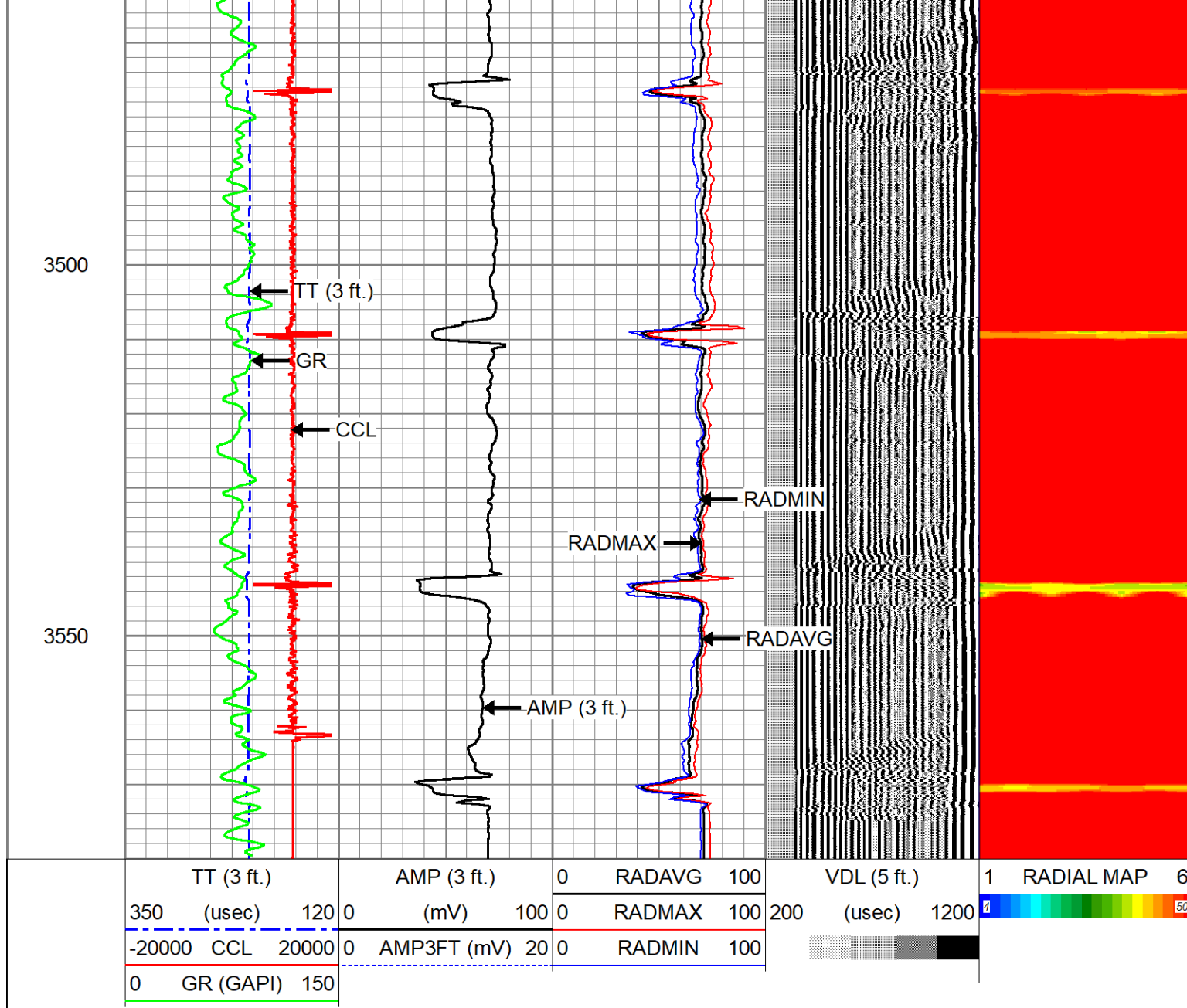
3350

3400

3450







## Log Variables

DatabaseC:\ProgramData\Warrior\Data\04102023\_chevron\_bohlender\_h14\_09.db  
Dataset field/well/rbl/pass3.2/\_vars\_

### Top - Bottom

BHTEMP_Src	BOREID	BOTTEMP	CASEOD	CASETHCK	CASEWGHT	MAXAMPL	MINAMPL
TEMP	in 8.75	degF 0	in 3.5	in 0.408	lb/ft 9.2	mV 93	mV 2
MINATTN	PERFS	PPT	SRFTEMP	TDEPTH			
db/ft 0.8	No	usec 0	degF 0	ft 3580			

### Variable Description

BHTEMP\_Src : BHTEMP Input Source Selector  
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 04102023\_chevron\_bohlender\_h14\_09.db  
Dataset Pathname rbl/pass3.2  
Dataset Creation Mon Apr 10 16:51:59 2023

## Segmented Cement Bond Log Calibration Report

Serial Number: HSR10-0000  
Tool Model: DSS\_HSR\_10\_SND

Calibration Casing Diameter: 0.000 in  
Calibration Depth: 0.000 ft

### Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.002	0.869	2.000	93.000	104.405	2.235
CAL	0.000	1.000				
5'	-0.004	0.743	2.000	93.000	121.763	2.517
SUM						
S1	-0.000	1.081	2.000	84.000	75.842	2.035
S2	-0.005	1.069	2.000	84.000	76.372	2.365
S3	-0.001	1.021	2.000	84.000	80.240	2.077
S4	-0.002	0.953	2.000	84.000	85.839	2.177
S5	-0.002	1.024	2.000	84.000	79.931	2.124
S6	-0.003	1.097	2.000	84.000	74.527	2.257
S7						
S8						

### Internal Reference Calibration, performed (Not Performed):

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

### Air Zero Calibration, performed (Not Performed):

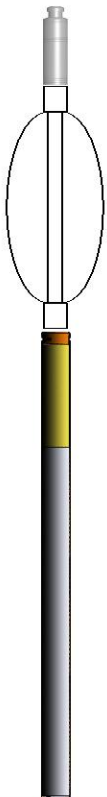
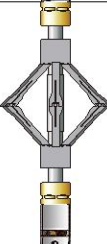

	Raw (v)		Calibrated (v)		Results	
	Zero		Zero		Offset	
3'	0.000		1.000		0.000	
5'	0.000		1.000		0.000	
SUM						
S1	0.000		1.000		0.000	
S2	0.000		1.000		0.000	
S3	0.000		1.000		0.000	
S4	0.000		1.000		0.000	
S5	0.000		0.000		0.000	
S6	0.000		0.000		0.000	
S7						
S8						

## Temperature Calibration Report


Serial Number: HSR10-0000  
Tool Model: DSS\_HSR\_10\_SND  
Performed: Mon Dec 09 15:34:46 2013


		Reference	Reading
Low Reference:	0.00	degF	0.00
High Reference:	1.00	degF	1.00
Gain:	0.02		
Offset:	32.00		
Delta Spacing	1		

Gamma Ray Calibration Report			
Serial Number:	HSR10-0000		
Tool Model:	DSS_HSR_10_ELE		
Performed:	(Not Performed)		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0		
Calibrator Reading:	1.0		
Sensitivity:	1.0000	GAPI/	

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
CCL	0.00		Cable_Head-1_7/16 Titan 1 7/16" Cable Head	1.02	1.44	3.31
			PROBE-1.688_bow Bowspring centralizer for 1 11/16" Probe CBL	3.17	1.69	10.00
			DSS_HSR_ELE-DSS_HSR_10_ELE (HSR10 0000) DSS 1 11/16" HSR Bond tool - Electronics Module	5.99	1.69	27.50
GR	0.97					
ROTV	5.24		CENT-DSS-RAC11-MID (RAC11MID-0000) DSS 1 11/16" MID Roller Arm Centralizer	2.61	1.69	16.00
TCF	5.24					
THV	5.24					
INTEMP	5.24					
PNEG	5.24					
PPOS	5.24					
GRHV	5.24					
WVFS6	9.77		DSS_HSR_SND-DSS_HSR_10_SND (HSR10 0000)	8.26	1.69	41.50
WVFS5	9.77					
WVFS4	9.77					
WVFS3	9.77					
WVFS2	9.77					
WVFS1	9.77					



WVFCAL	10.27		DSS 1 11/16" HSR Bond tool - Sonde Module						
WVF3FT	10.27								
WVF5FT	11.27								
TEMP	15.77								
WVFSYNC	16.11		PROBE-1.688_bow Bowspring centralizer for 1 11/16" Probe CBL				3.17	1.69	10.00
Dataset:		04102023_chevron_bohlender_h14_09.db: field/well/rbl/pass3.2							
Total length:		24.21 ft							
Total weight:		108.31 lb							
O.D.:		1.69 in							

		Company	CHEVRON			
		Well	BOHLENDER H14-09			
		Field	WATTENBERG			
		County	WELD			
		State	COLORADO	Country	USA	