



RADIAL CEMENT BOND LOG

Company KERR-MCGEE OIL AND GAS
Well ERIE ROAD USX UU 15-1
Field WATTENBERG
County WELD State COLORADO

Location: API #: 05123087410000
NE NE
990' FNL & 990' FEL
SEC 15 TWP 1N RGE 68W
Permanent Datum GROUND LEVEL Elevation 5071'
Log Measured From KELLY BUSHING = 11'
Drilling Measured From KELLY BUSHING
Other Services
NONE
Elevation
K.B. 5082'
D.F. 5081'
G.L. 5071'

Date 16 NOVEMBER 2015

Run Number	ONE
Depth Driller	8425'
Depth Logger	7537'
Bottom Logged Interval	7537'
Top Log Interval	SURFACE
Open Hole Size	
Type Fluid	WATER
Density / Viscosity	~8.3#
Max. Recorded Temp.	N/A
Estimated Cement Top	SEE LOG
Time Well Ready	N/A
Time Logger on Bottom	N/A
Equipment Number	W-202
Location	AULT. CO
Recorded By	Z. EMICK
Witnessed By	N. WINDHOLZ

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8-5/8"	24#	0'	855'
Prot. String				
Production String	4.5"	10.5#	0'	8425'
Liner				

<<< Fold Here >>>

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

FREE PIPE READING = 82mV

LOG RAN WITH 0 PSI ON WELL

THANK YOU FOR CHOOSING CUTTERS WIRELINE SERVICE

CREW: Z. EMICK, J. McCOLE, AJ MARTIN, V. LUALEMAGA

Calibration Report

Database File: erie road usx uu 15-1.db
Dataset Pathname: pass5
Dataset Creation: Mon Nov 16 08:03:28 2015 by Log 7.0 B1

Serial Number:	275D_with_INC	
Tool Model:	275D_INC	
Performed:	Tue Jan 15 11:42:10 2013	
Calibrator Value:	300.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	400.0	cps
Sensitivity:	0.7375	GAPI/cps

Inclinometer Calibration Report

Performed:	Fri Apr 04 16:42:15 2008				
	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	-3579.00	3617.00	-1.00	1.00	gee
Y Accelerometer	-3671.40	3529.80	-1.00	1.00	gee
Z Accelerometer	-20.40	3584.00	0.00	1.00	gee

Segmented Cement Bond Log Calibration Report

Serial Number:	110217	
Tool Model:	Probe	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	6193.347	ft

Master Calibration, performed Tue Sep 22 09:24:44 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.002	0.838	0.250	71.921	85.636	0.118
CAL	-0.001	0.802				
5'	0.003	0.877	0.250	71.921	81.926	0.036
SUM						
S1	0.001	0.797	0.250	100.000	125.297	0.122
S2	0.001	0.809	0.250	100.000	123.383	0.123
S3	0.002	0.822	0.250	100.000	121.596	0.059
S4	0.002	0.840	0.250	100.000	119.033	0.067
S5	0.002	0.840	0.250	100.000	119.032	-0.003
S6	0.002	0.847	0.250	100.000	118.046	0.050
S7	0.002	0.828	0.250	100.000	120.773	0.030
S8	0.001	0.815	0.250	100.000	122.614	0.096

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	-0.001	0.802	1.000	0.000

Air Zero Calibration, performed Mon Nov 16 06:54:36 2015:

	Raw (v)	Calibrated (v)	Results
--	---------	----------------	---------

	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.007	0.000	-0.006
5'	0.009	0.000	-0.006
SUM			
S1	0.010	0.000	-0.009
S2	0.006	0.000	-0.005
S3	0.008	0.000	-0.006
S4	0.008	0.000	-0.007
S5	0.008	0.000	-0.006
S6	0.008	0.000	-0.006
S7	0.006	0.000	-0.005
S8	0.007	0.000	-0.006

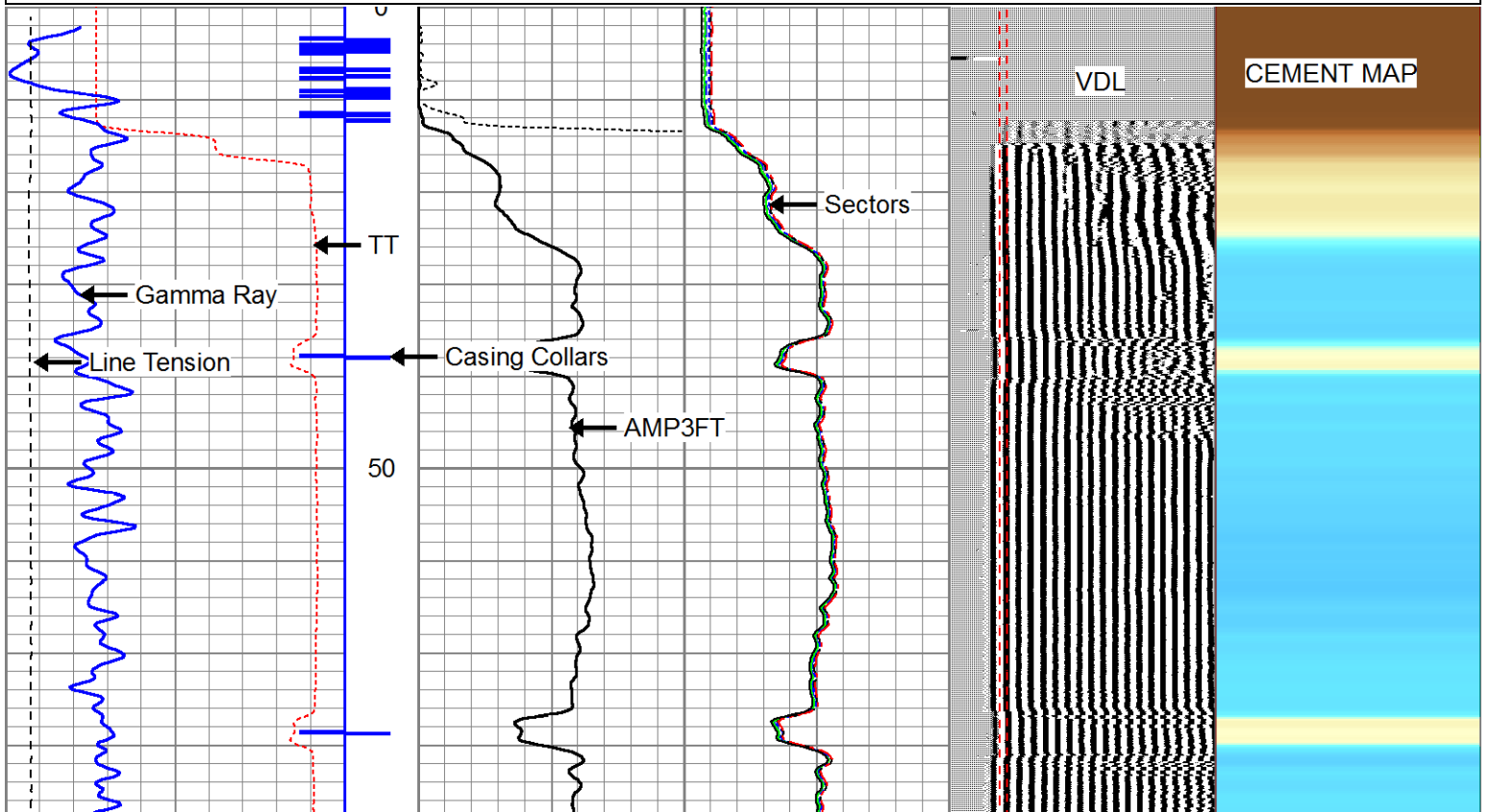


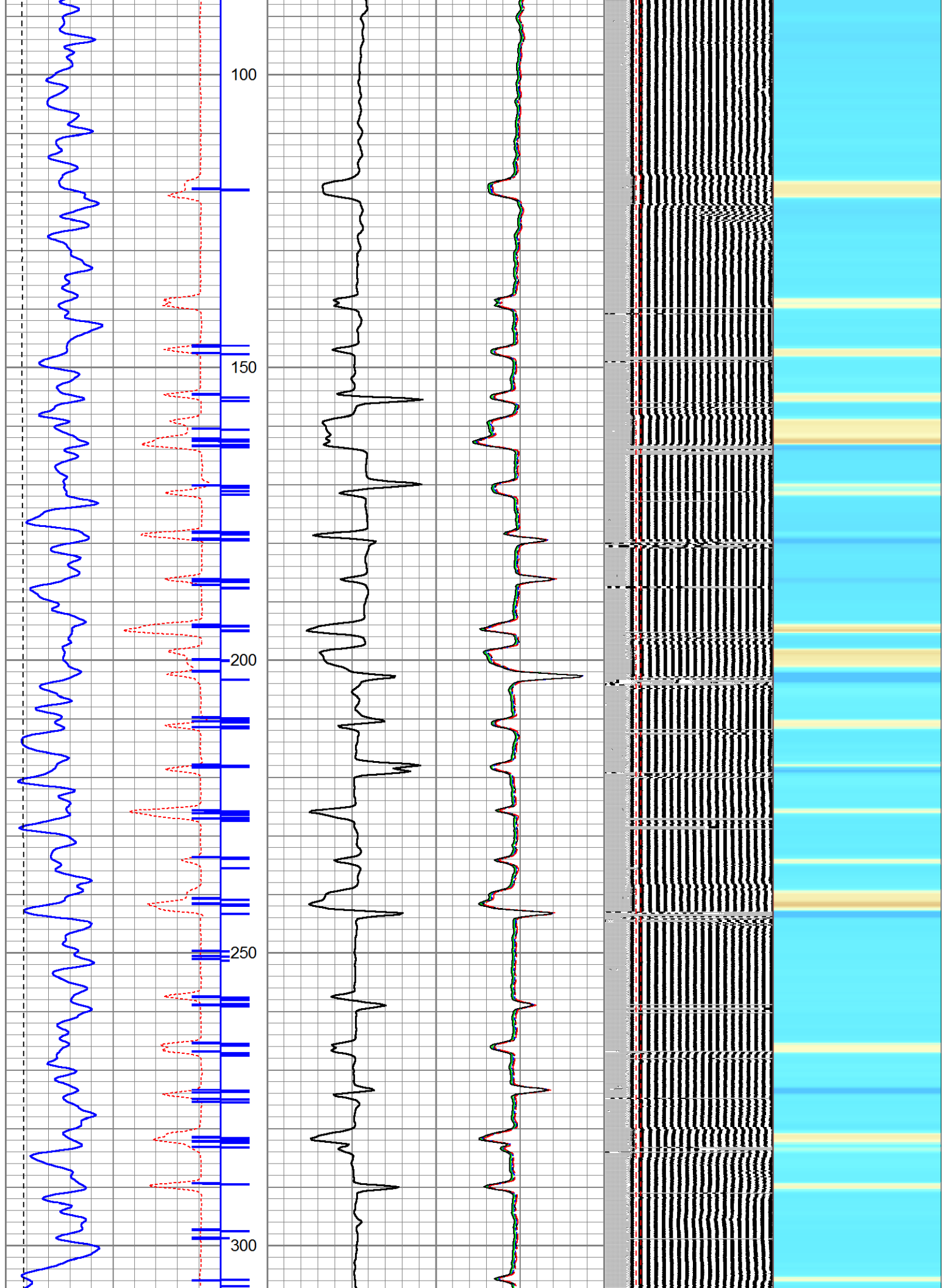
MAIN PASS

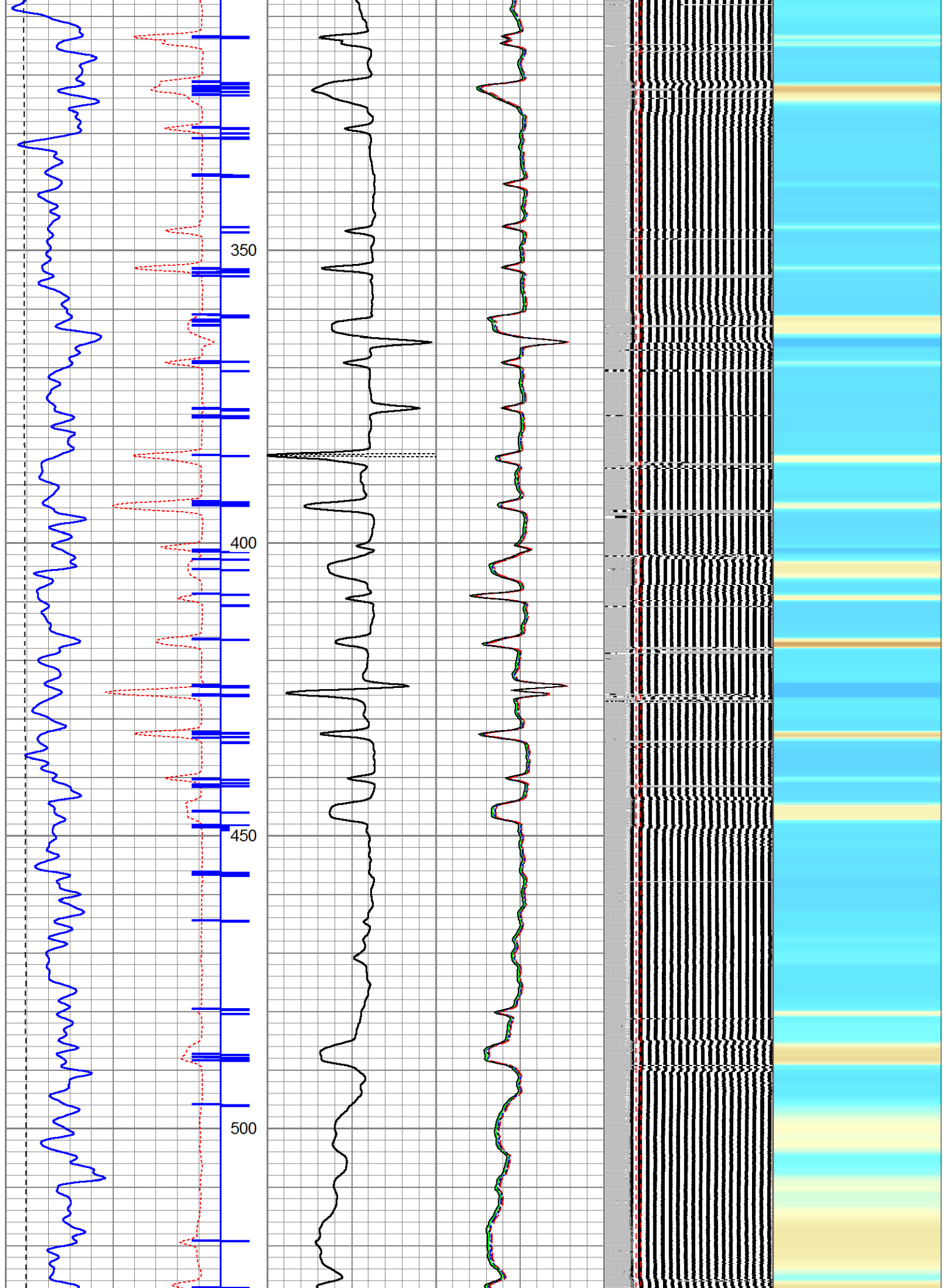
5" = 100'

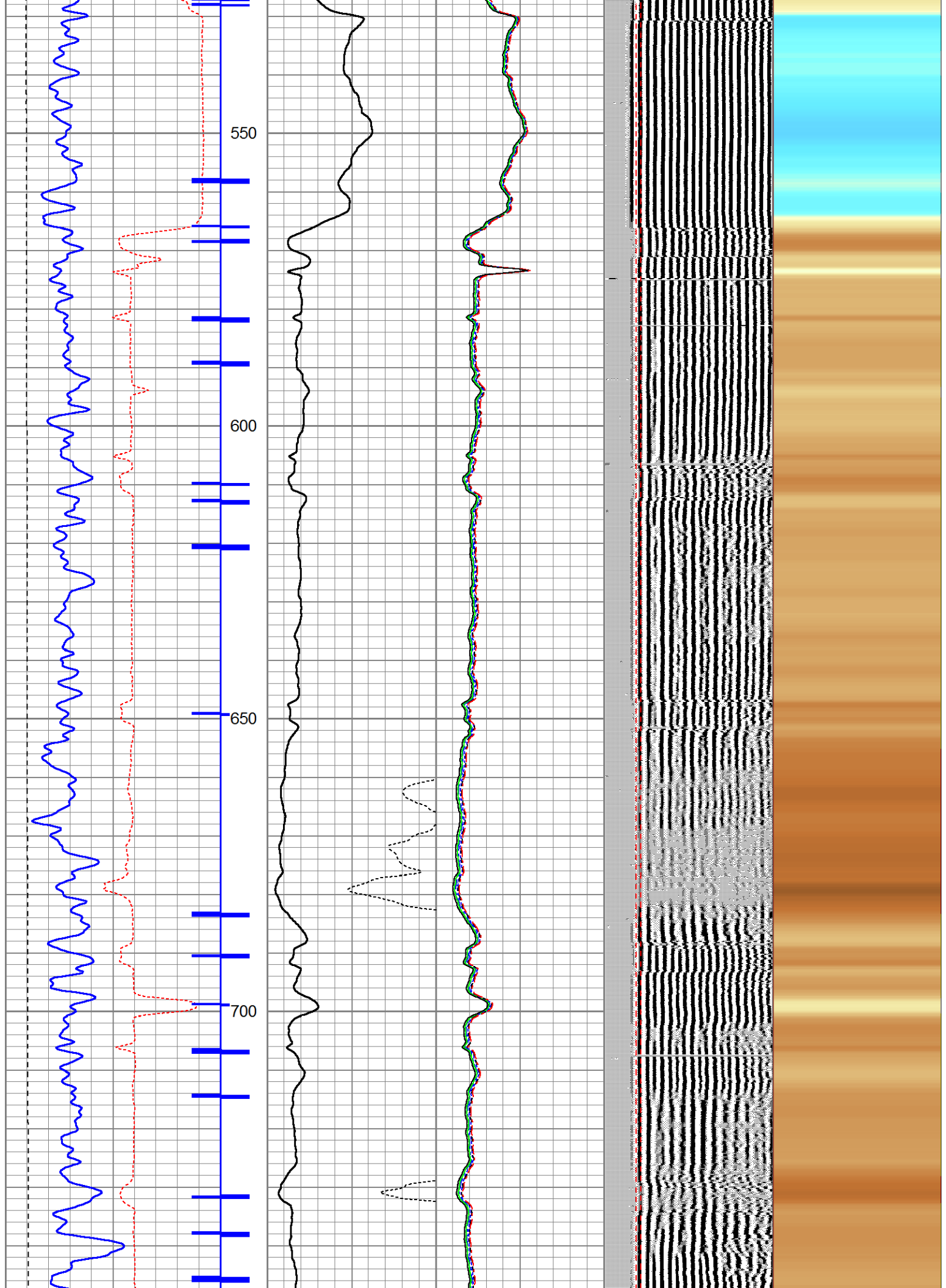
Database File: erie road usx uu 15-1.db
Dataset Pathname: pass5
Presentation Format: rbltadd
Dataset Creation: Mon Nov 16 08:03:28 2015 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

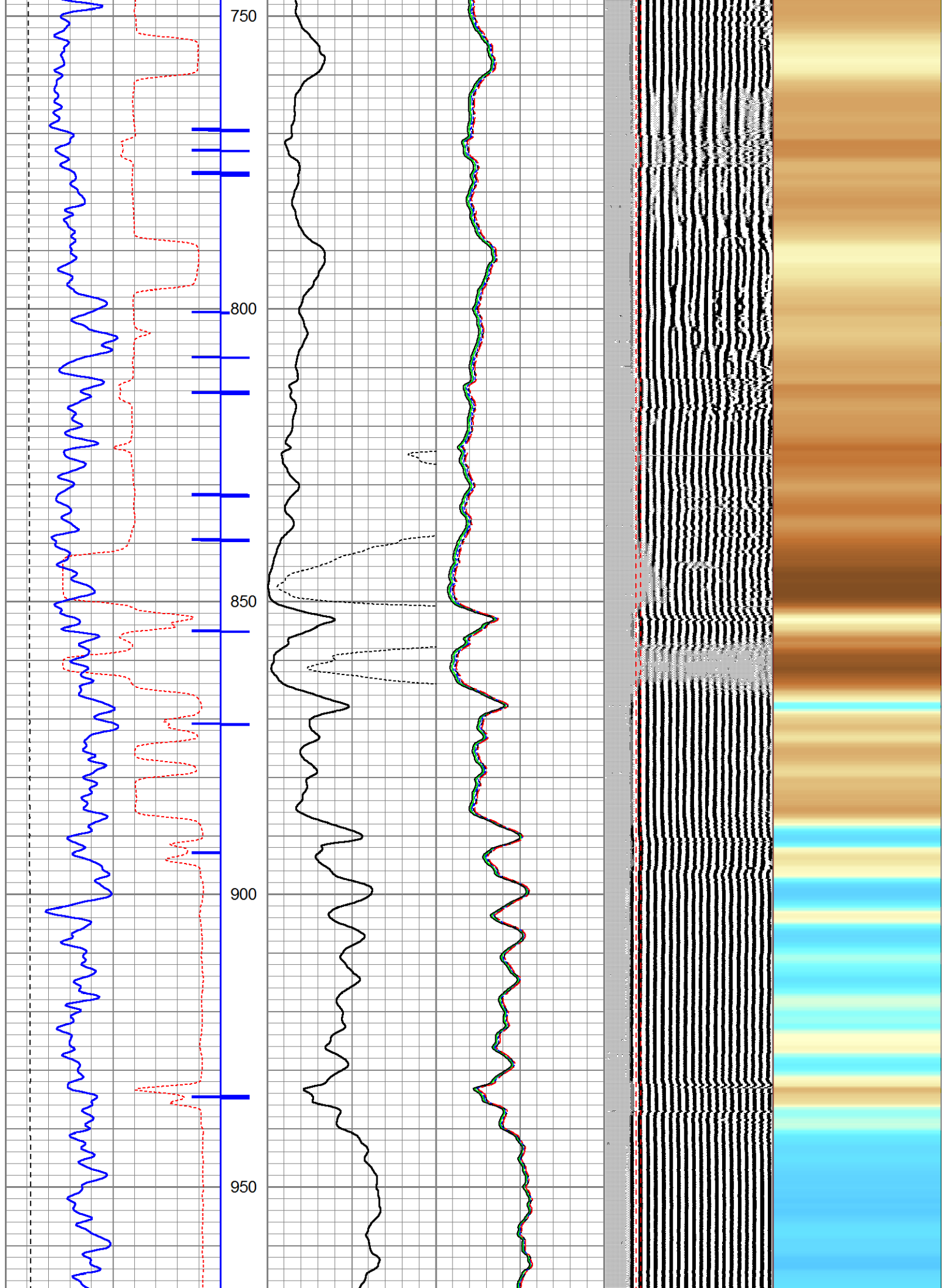
366	TT (usec)	225	0	Amplitude (mV)	100	AMPS2	200	VDL	1200	Cement Map
0	GR (GAPI)	200		Amplified Amplitude		AMPS3				
0	LTEN (lb)	3000	0	(mV)	10	AMPS4				
						AMPS5				
						AMPS6				
						AMPS7				
						AMPS8				
						AMPS1				

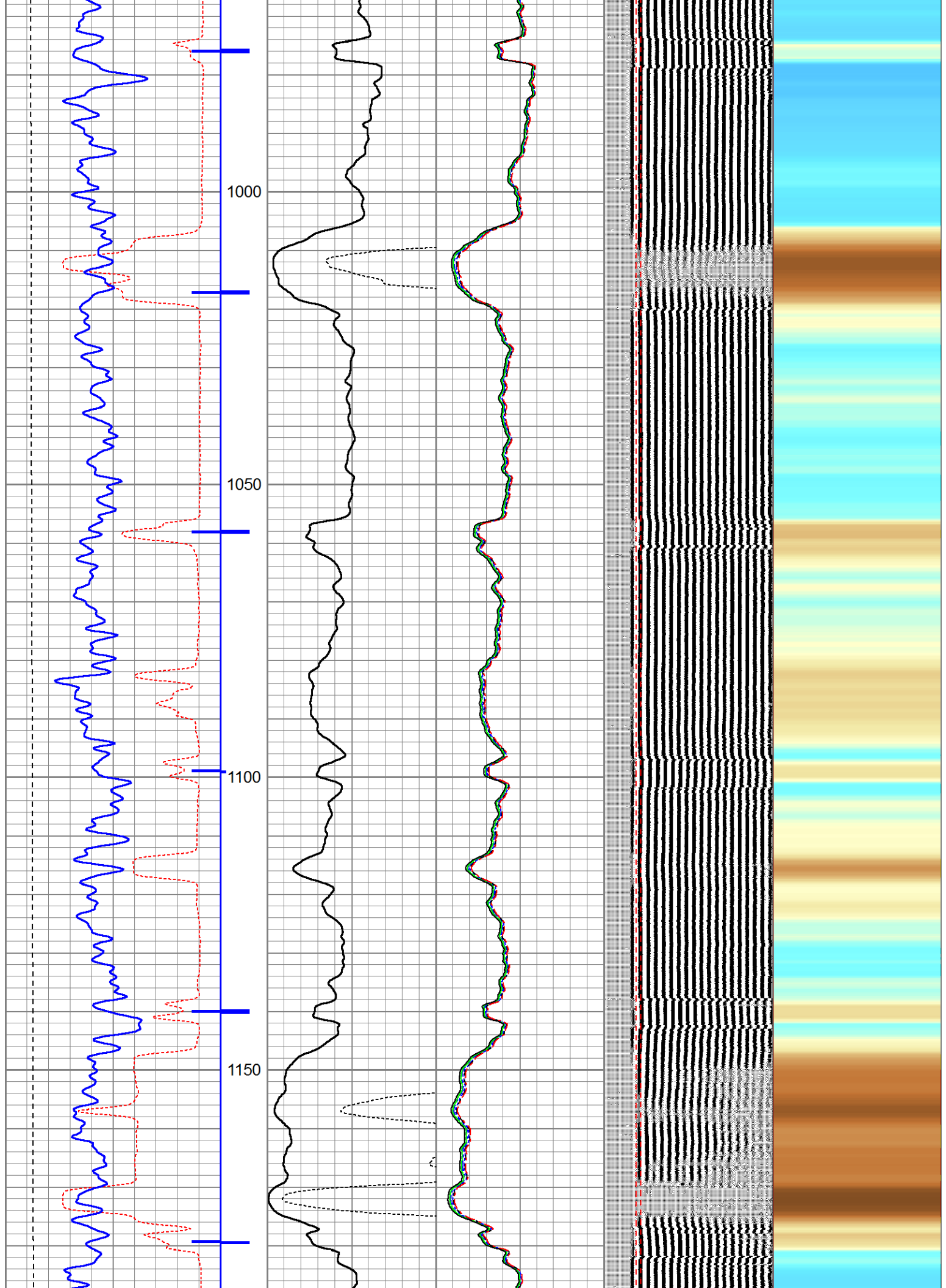


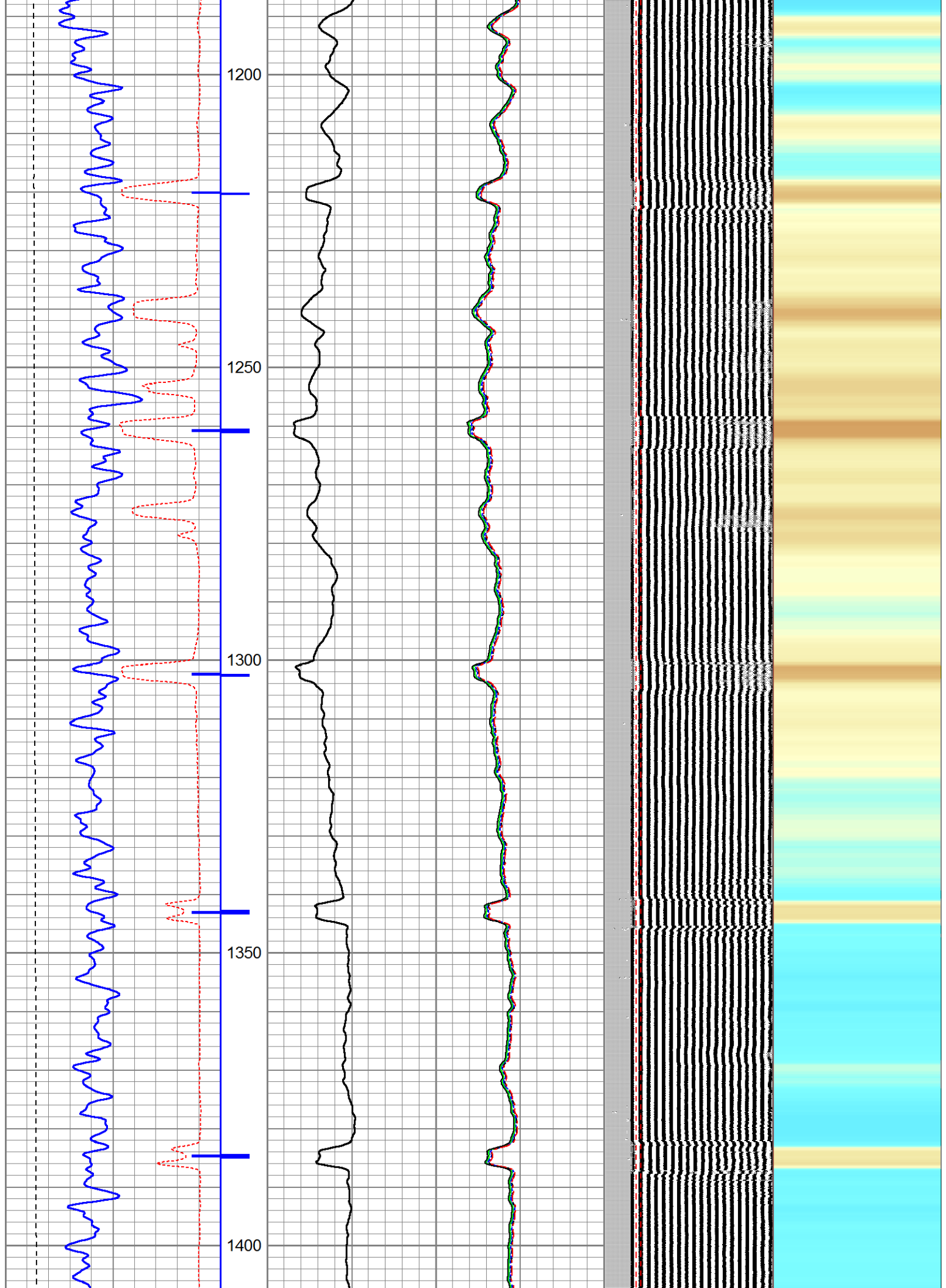


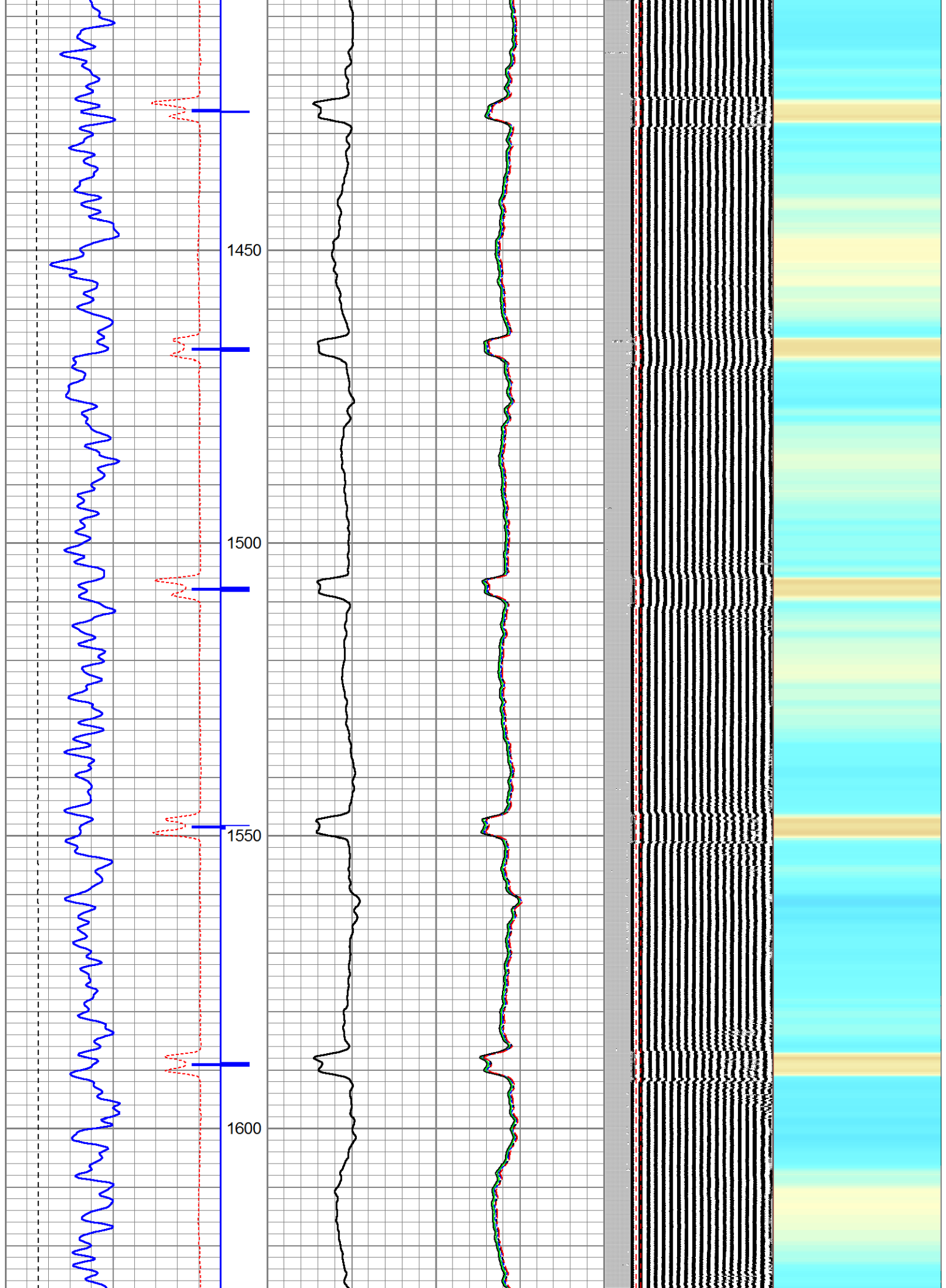


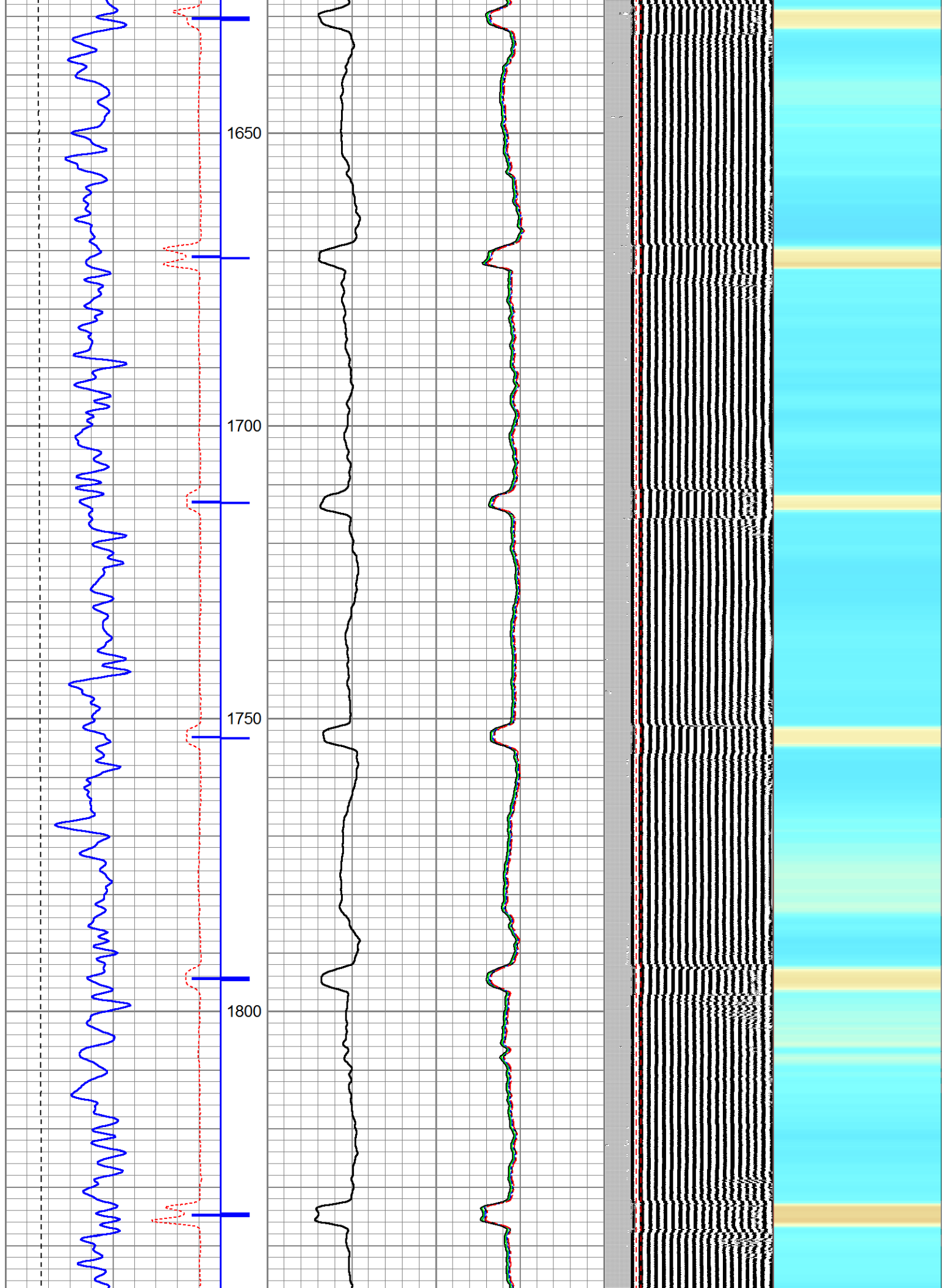


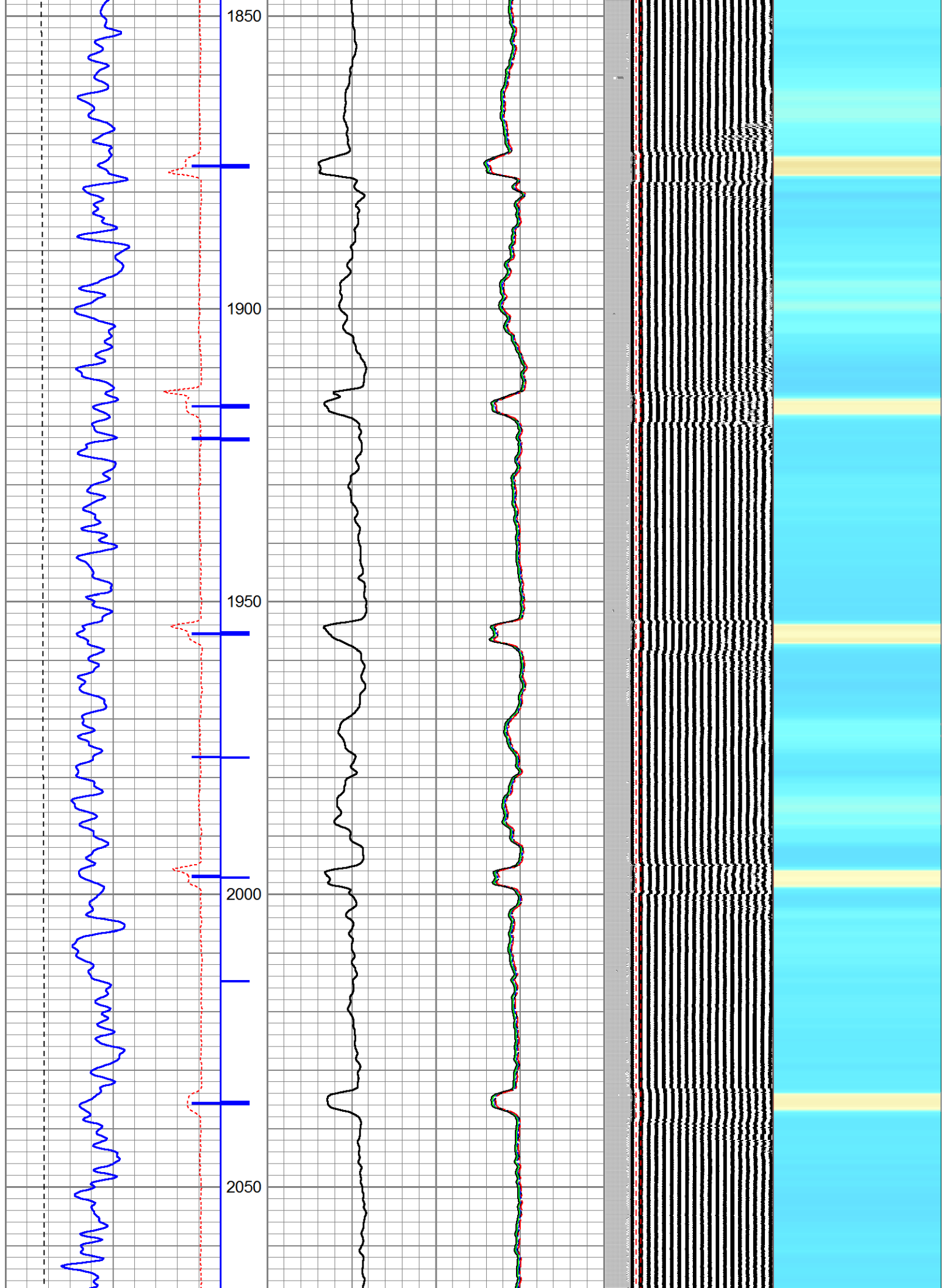


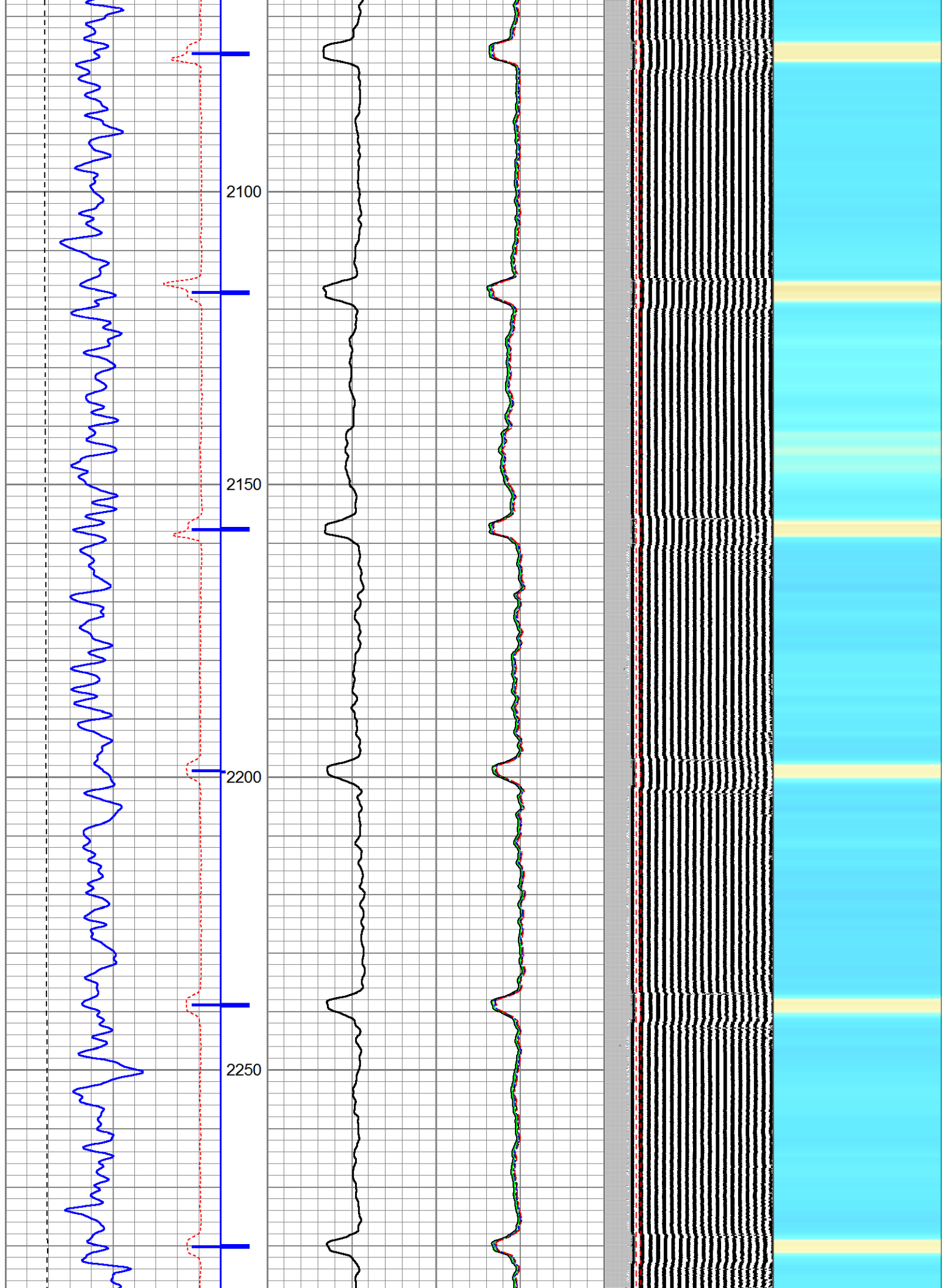


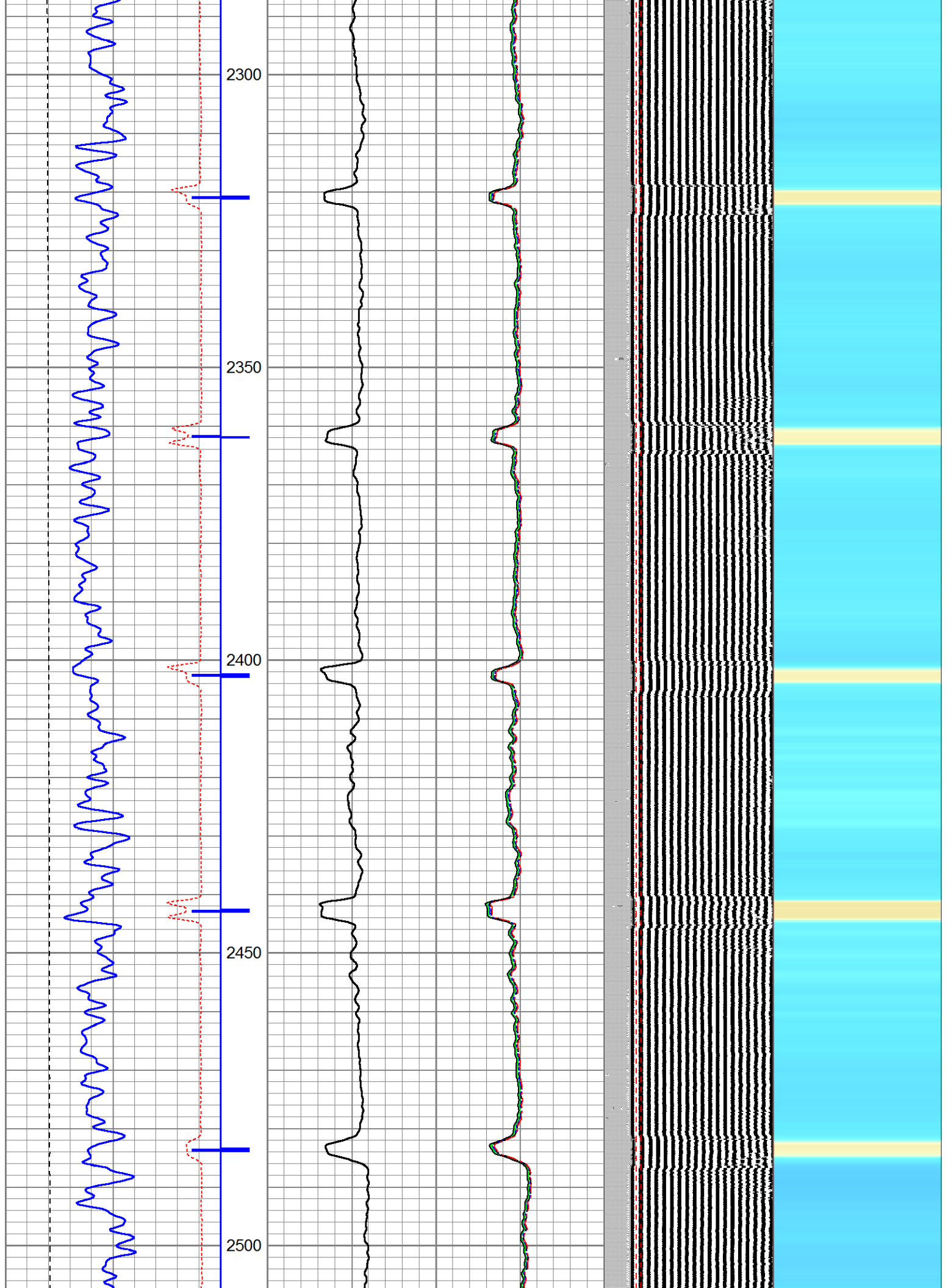


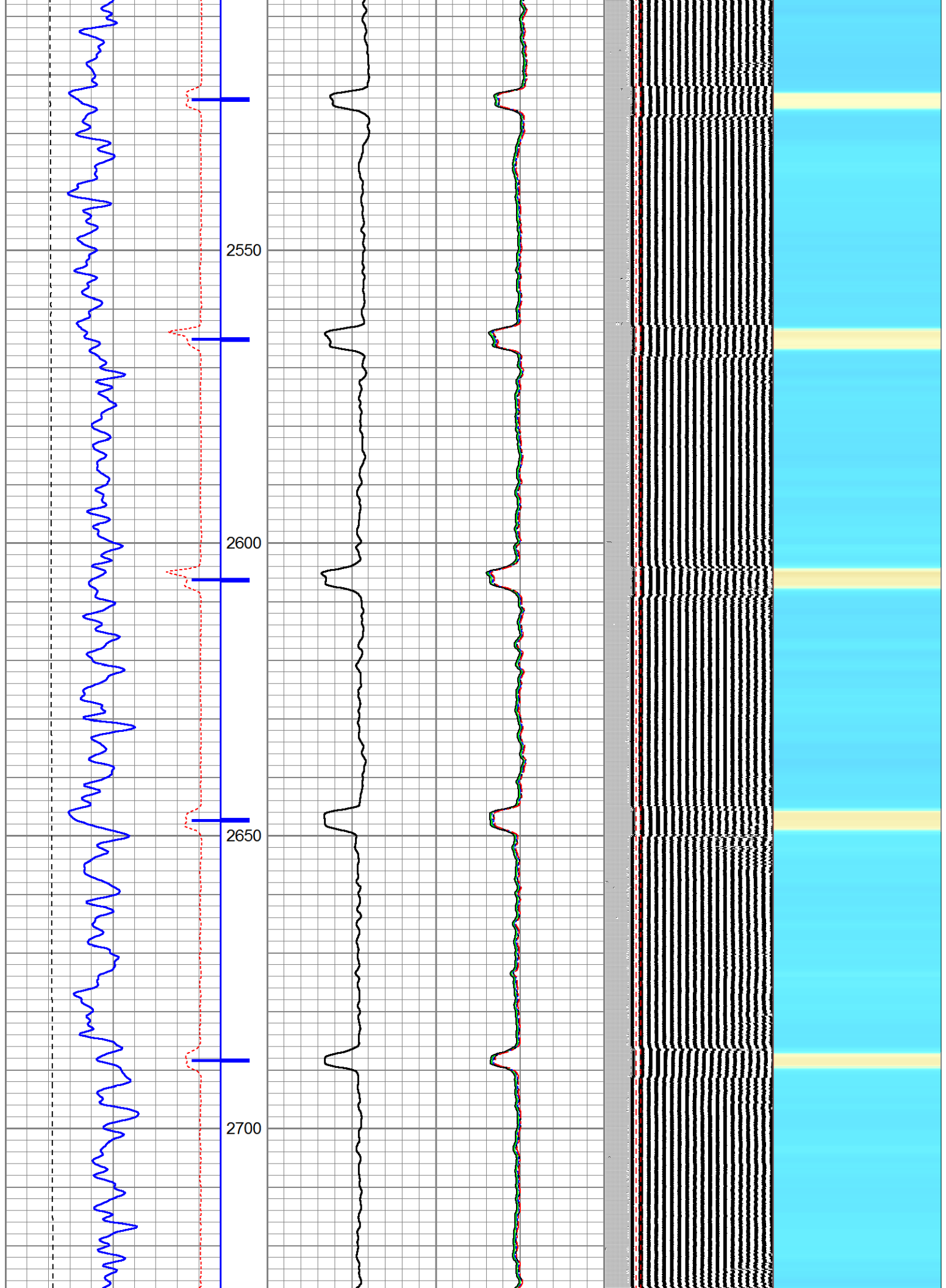


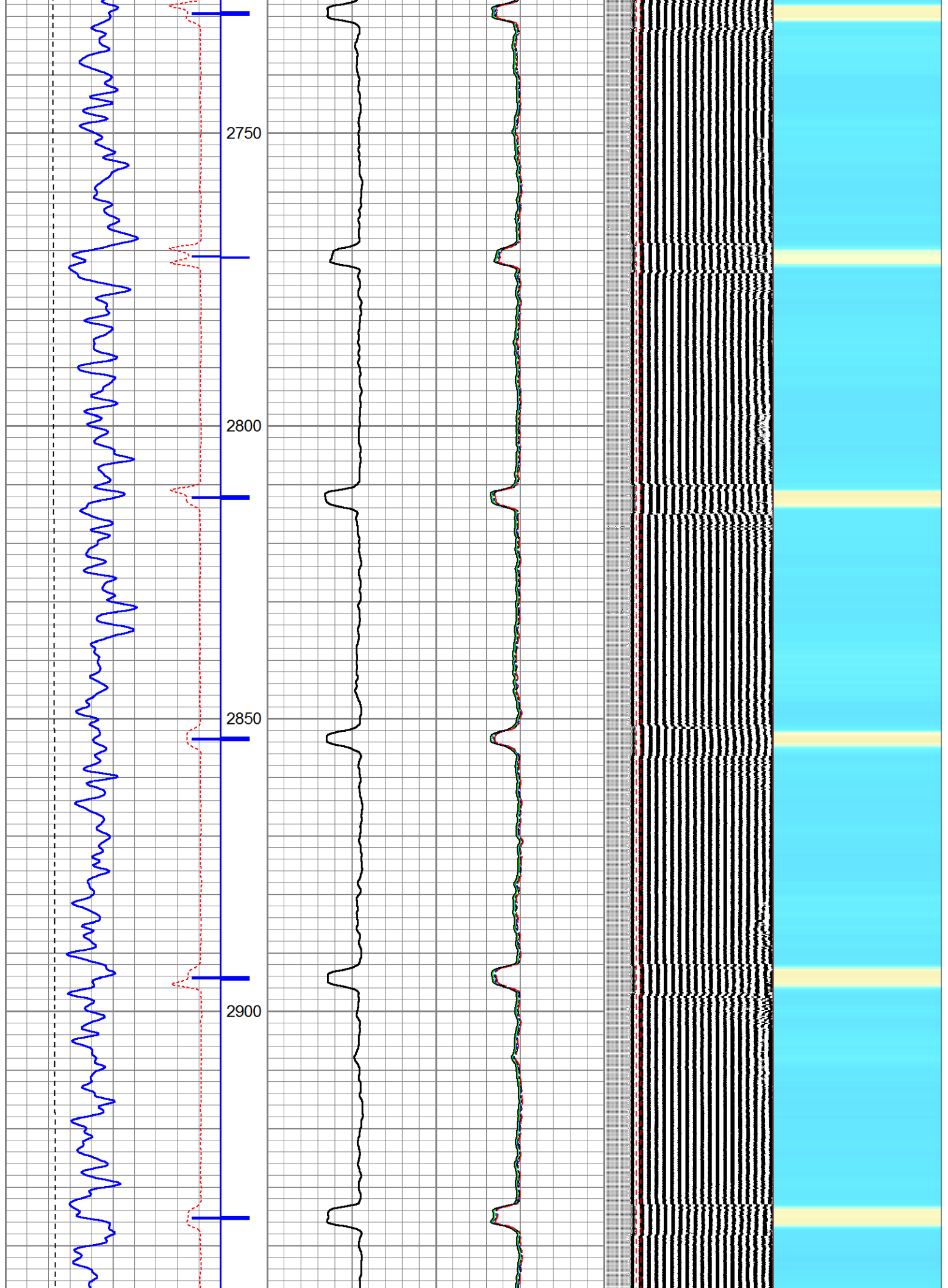


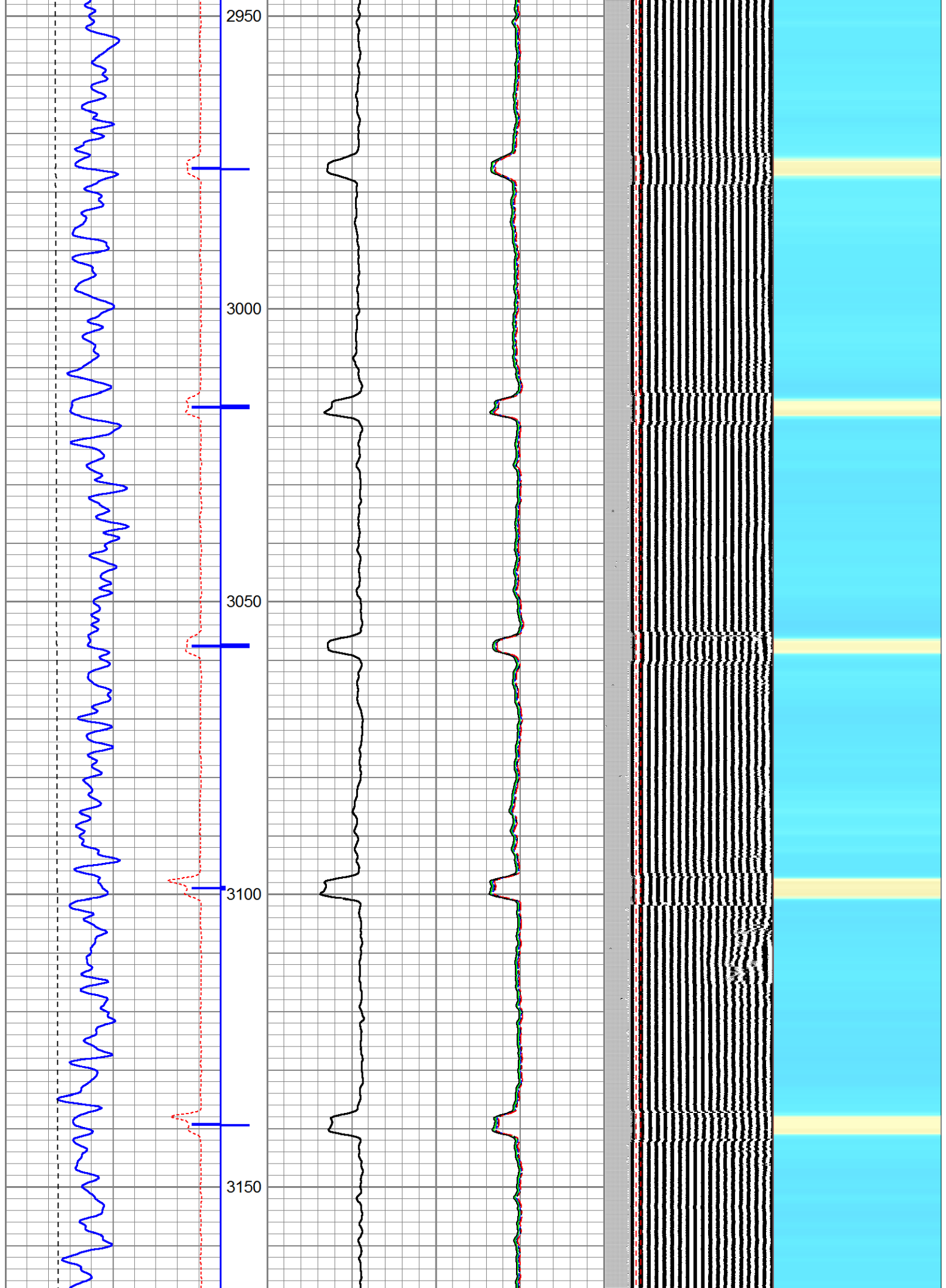


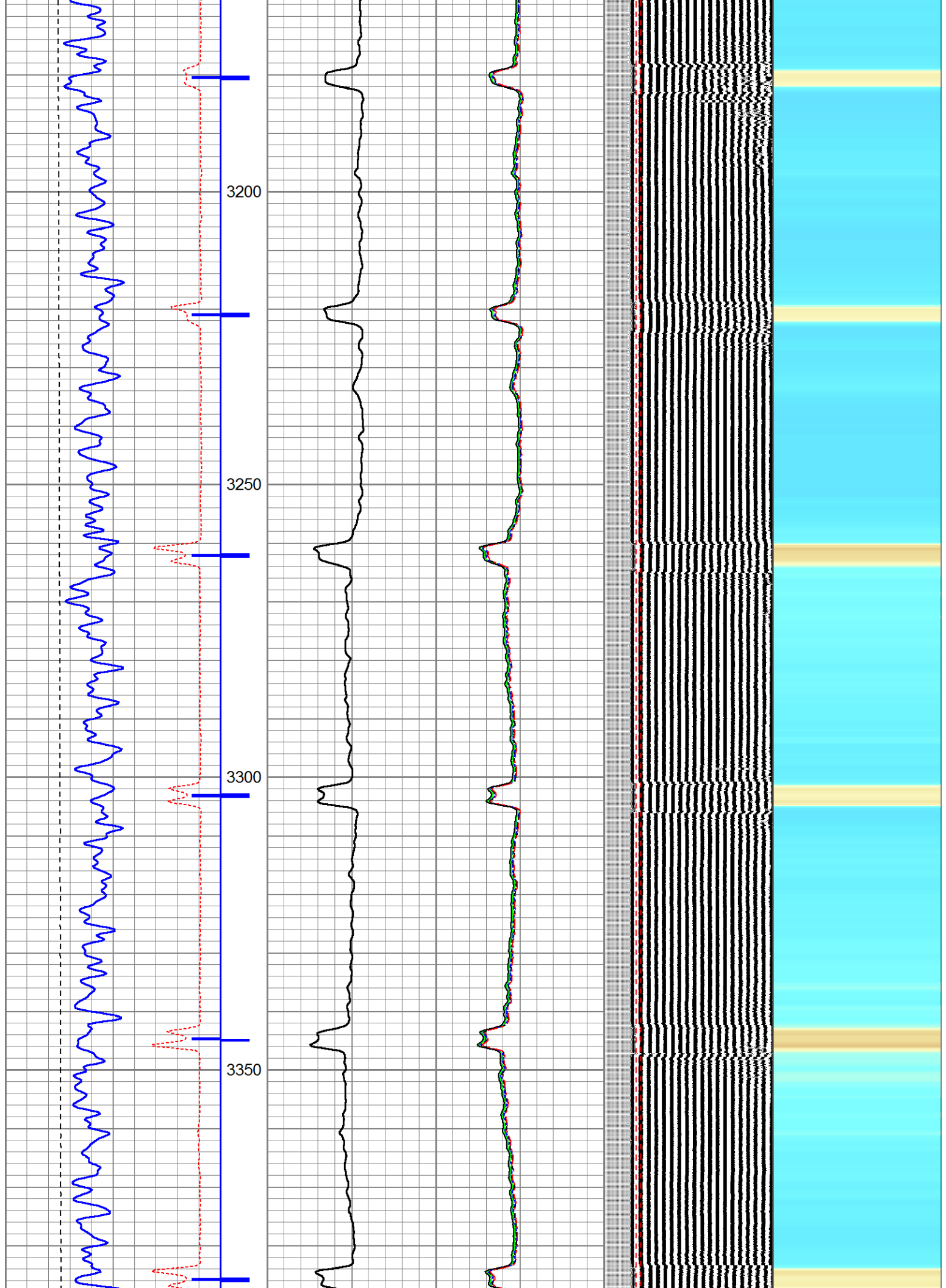


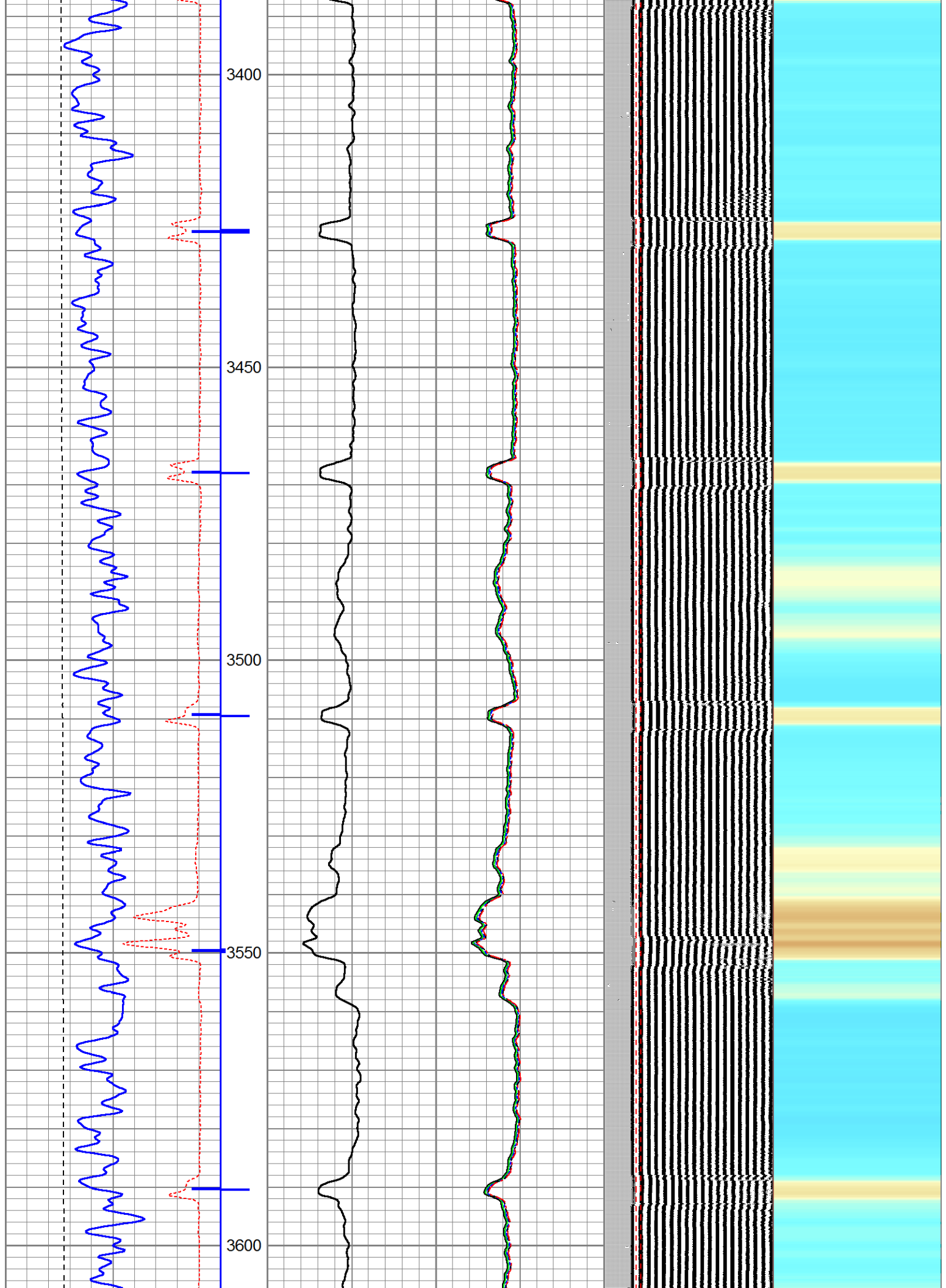


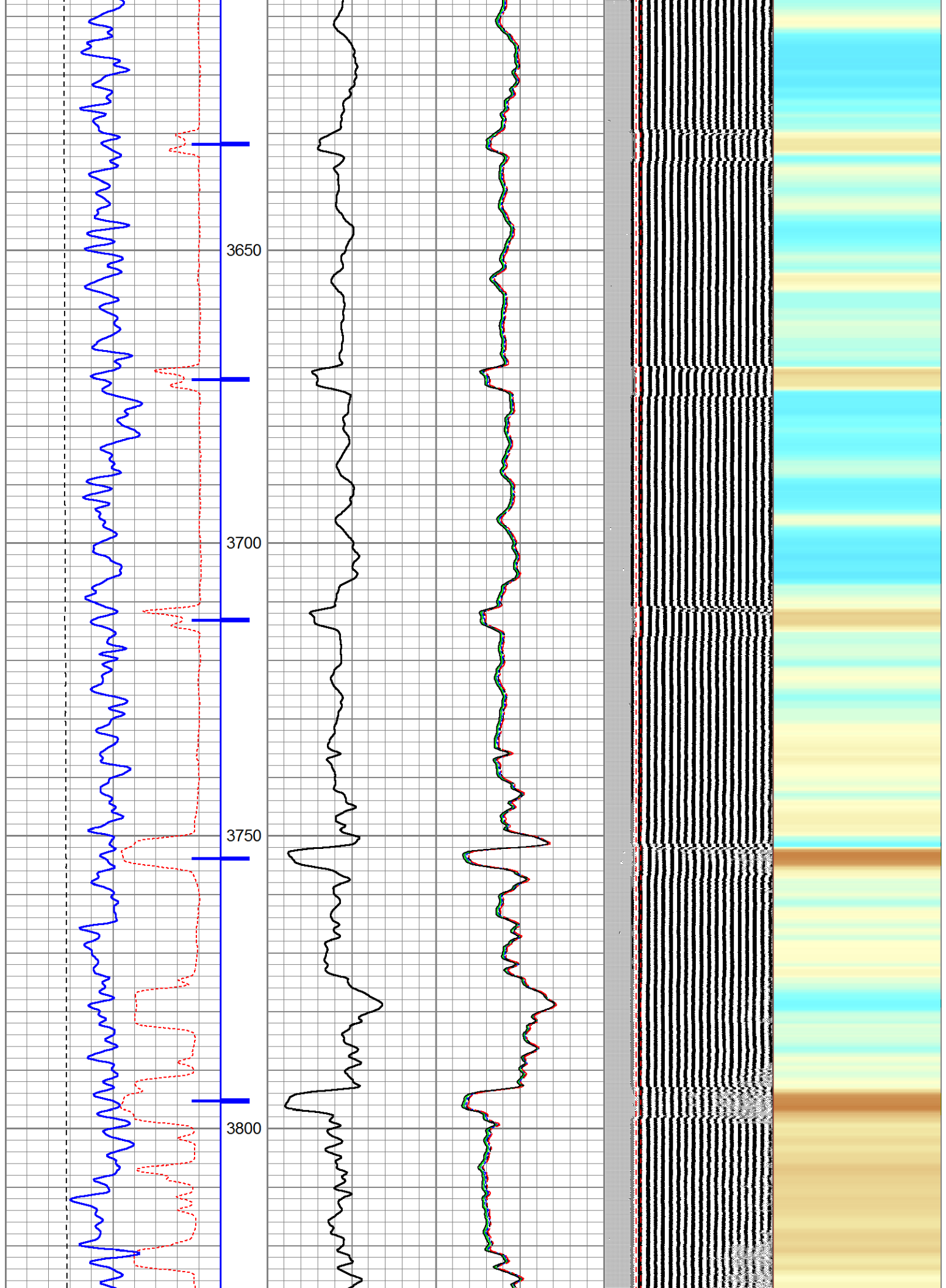


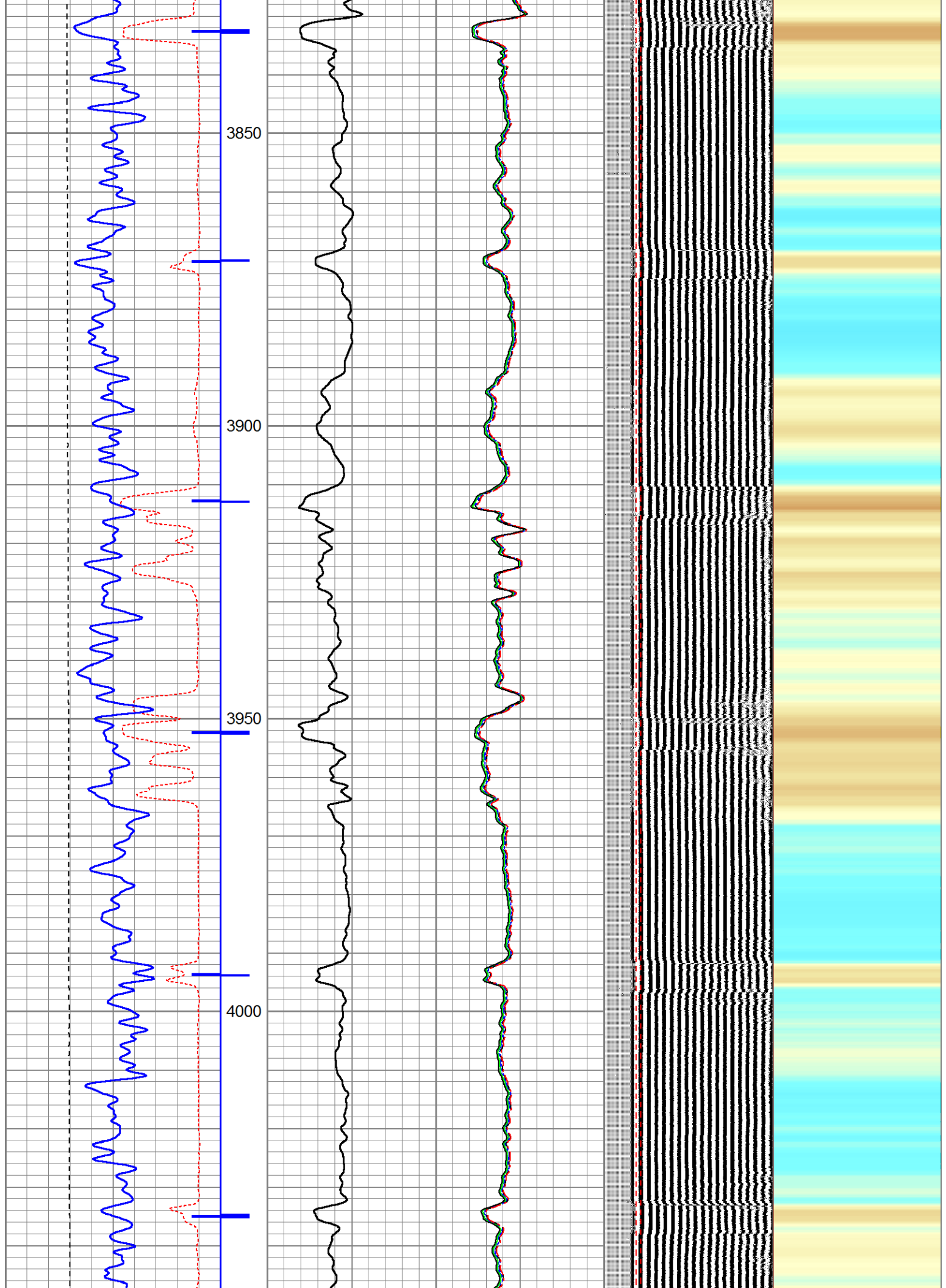


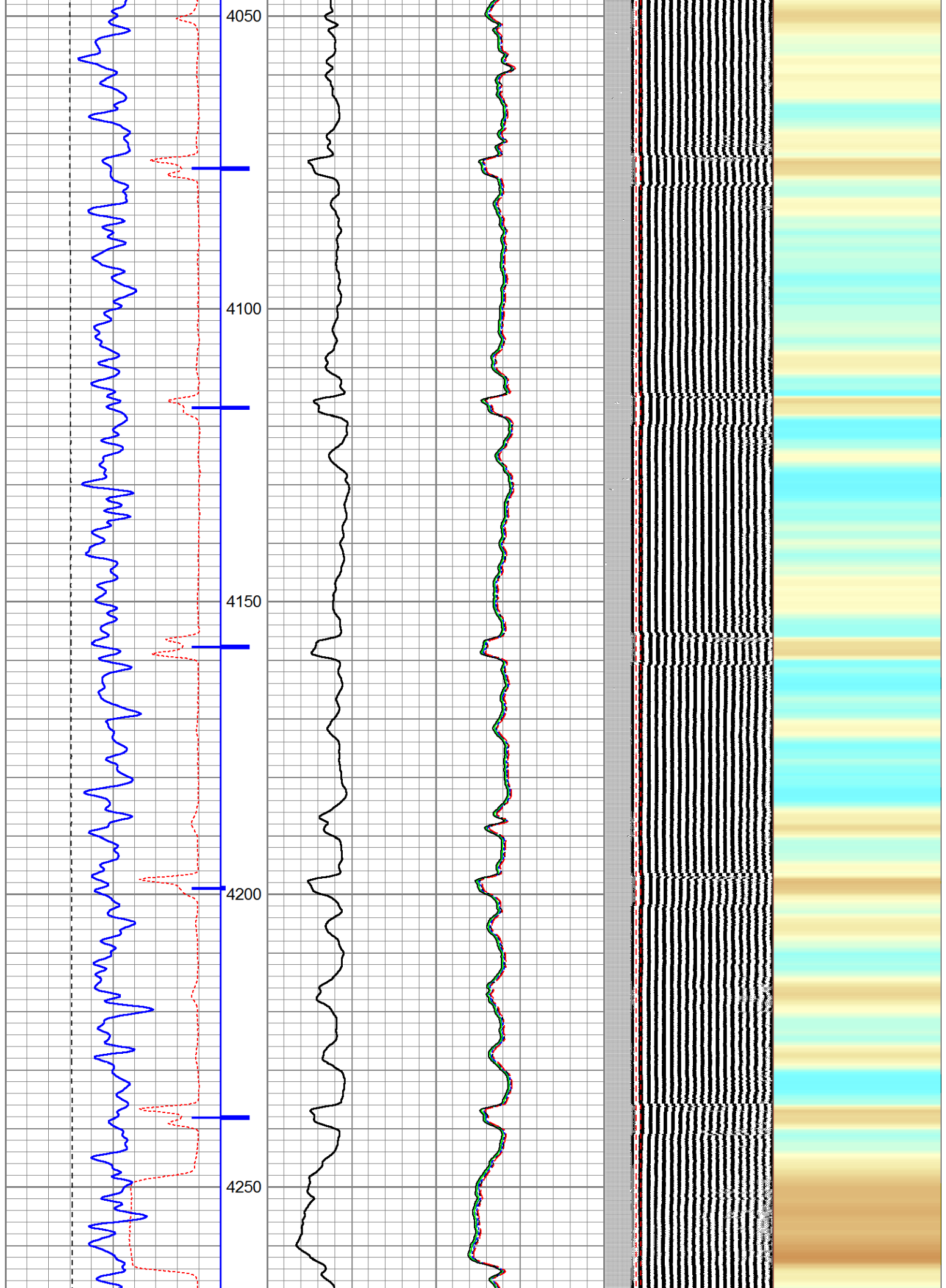


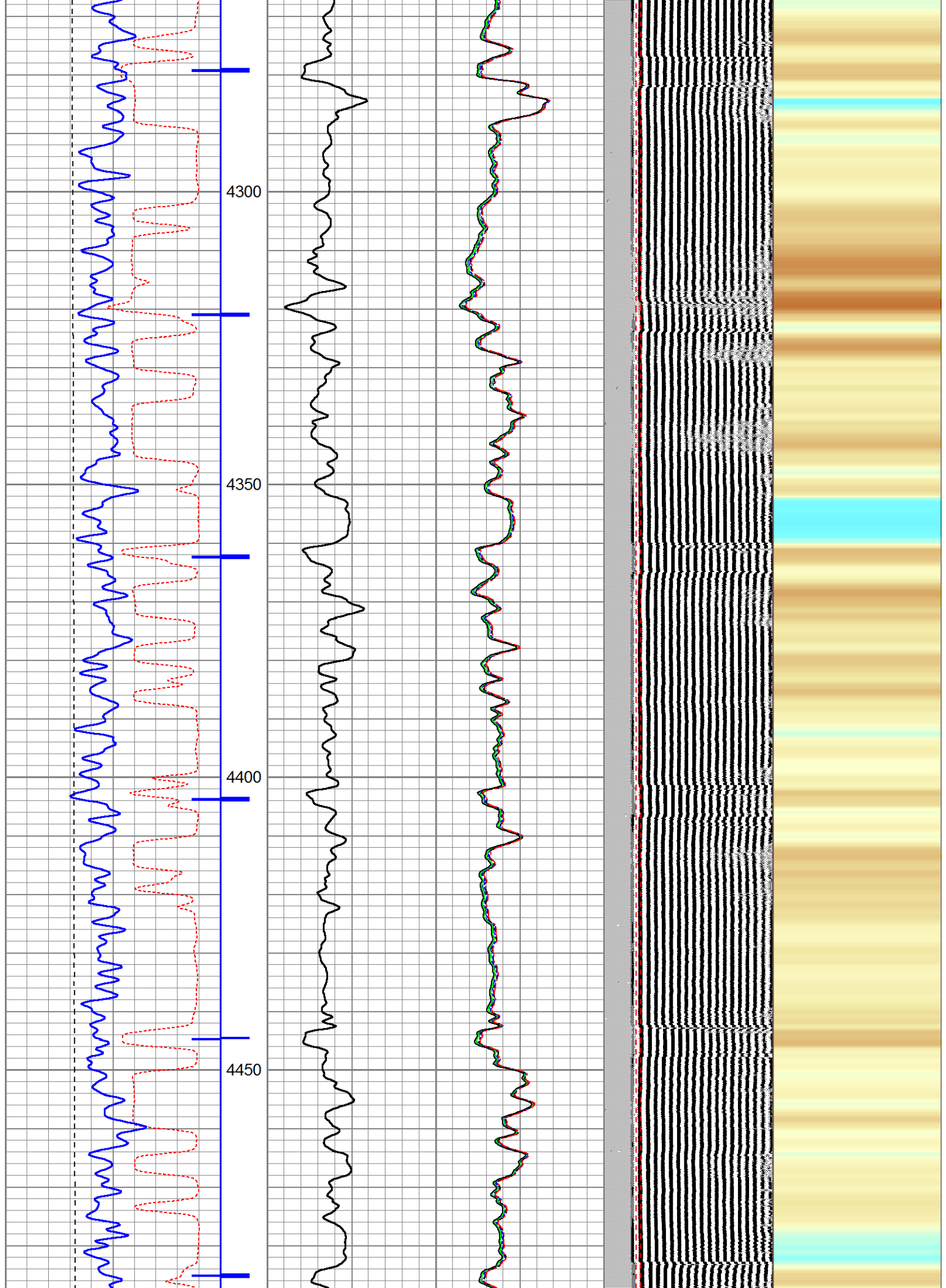


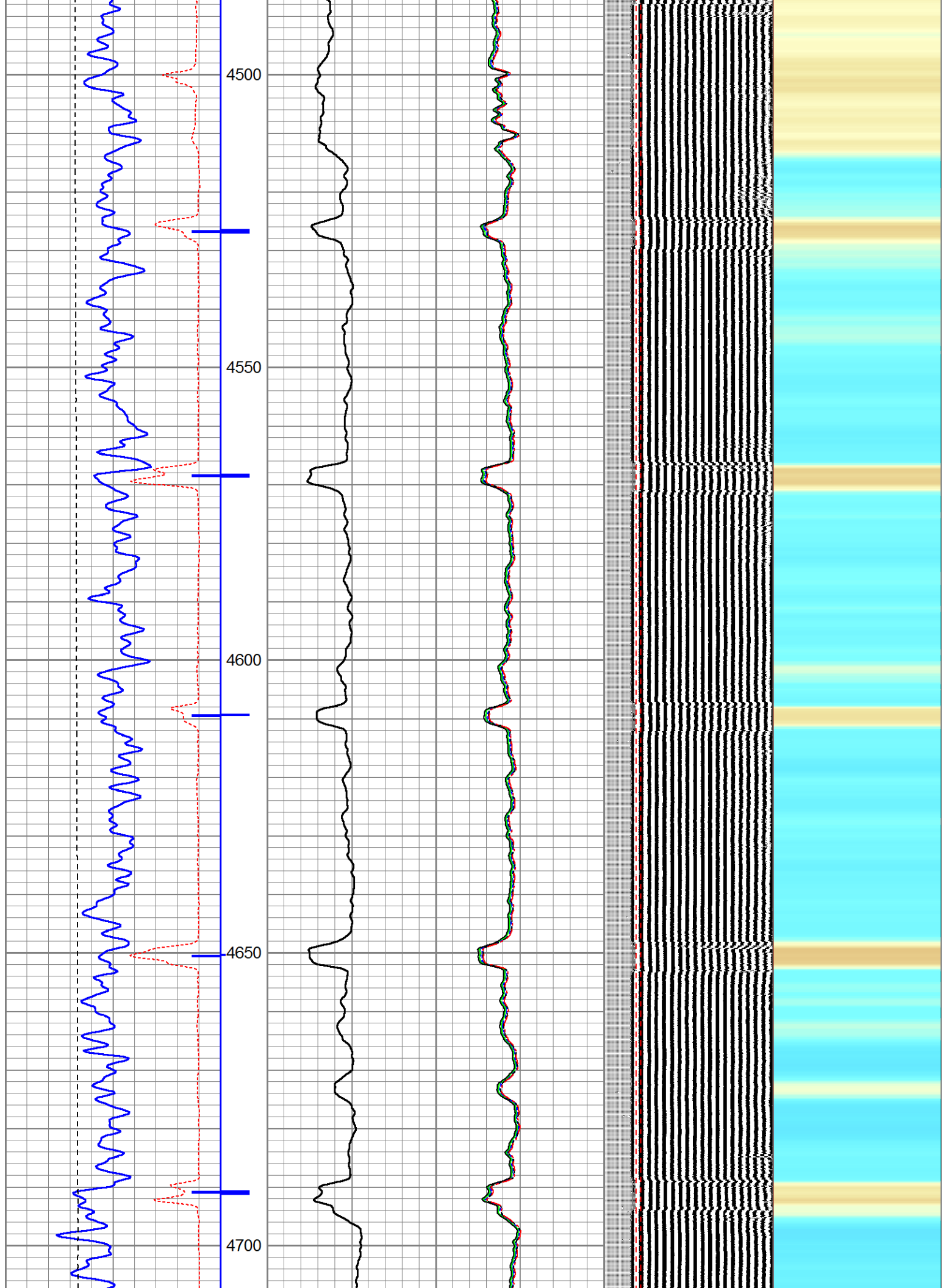


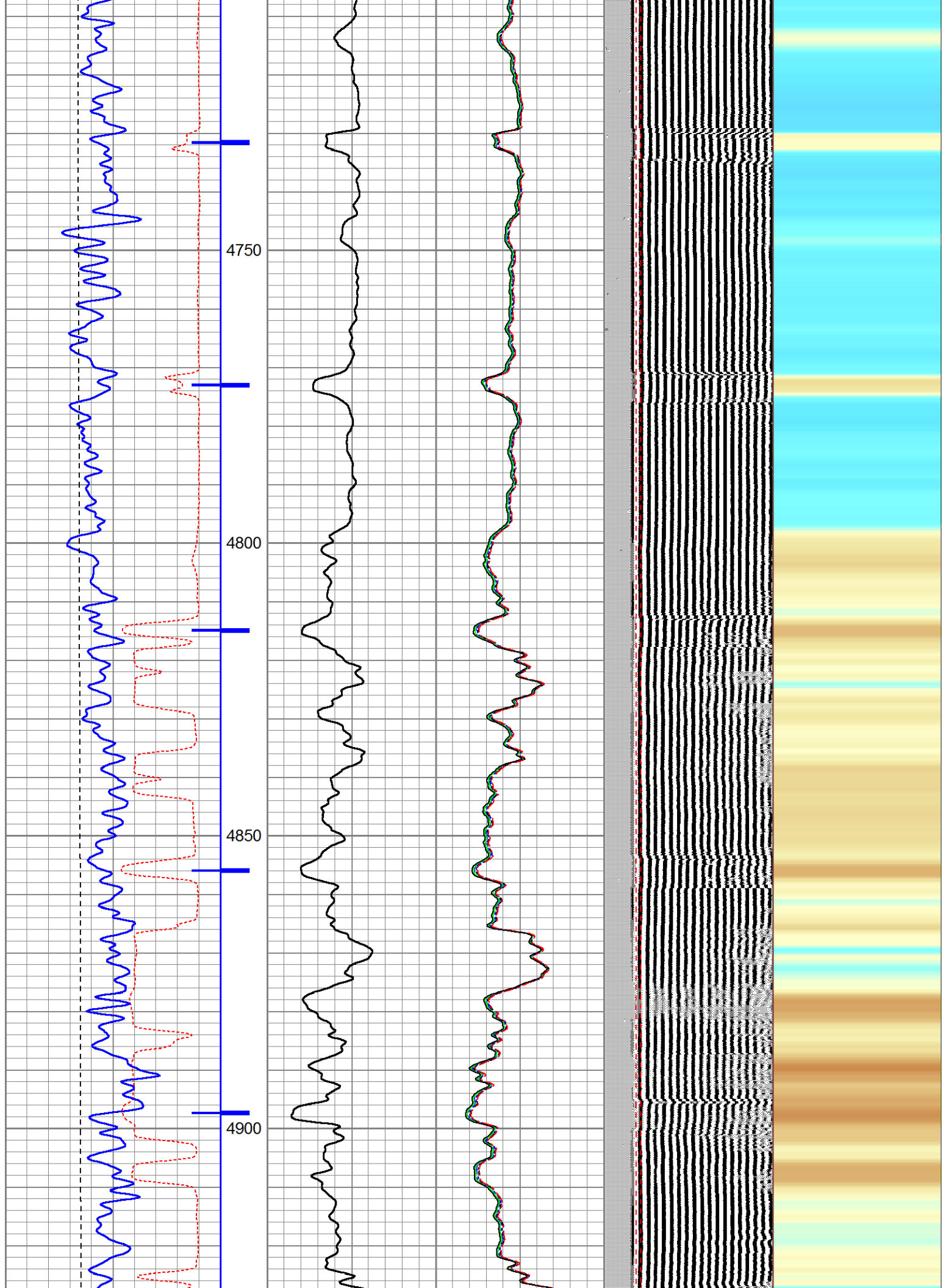


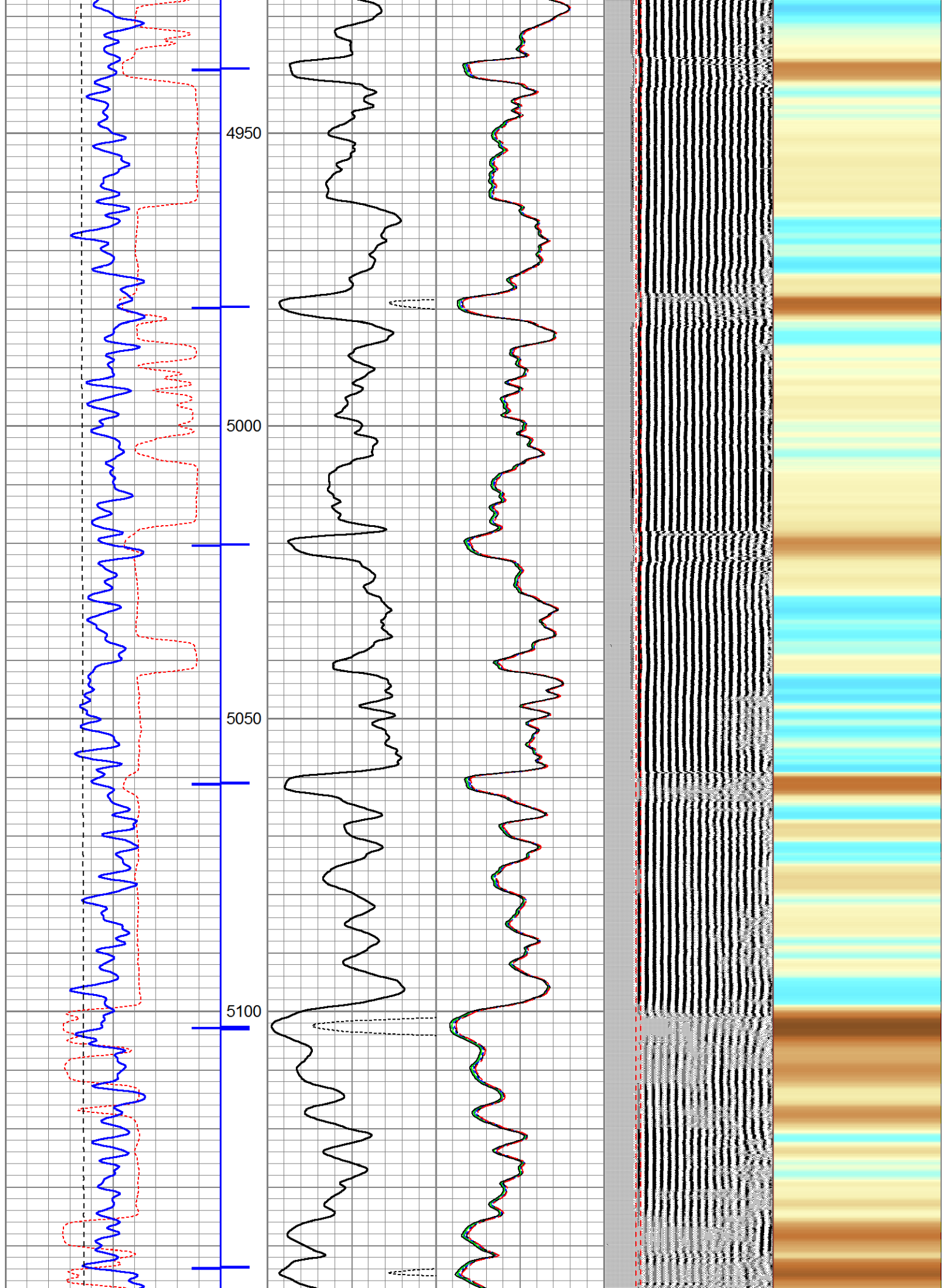


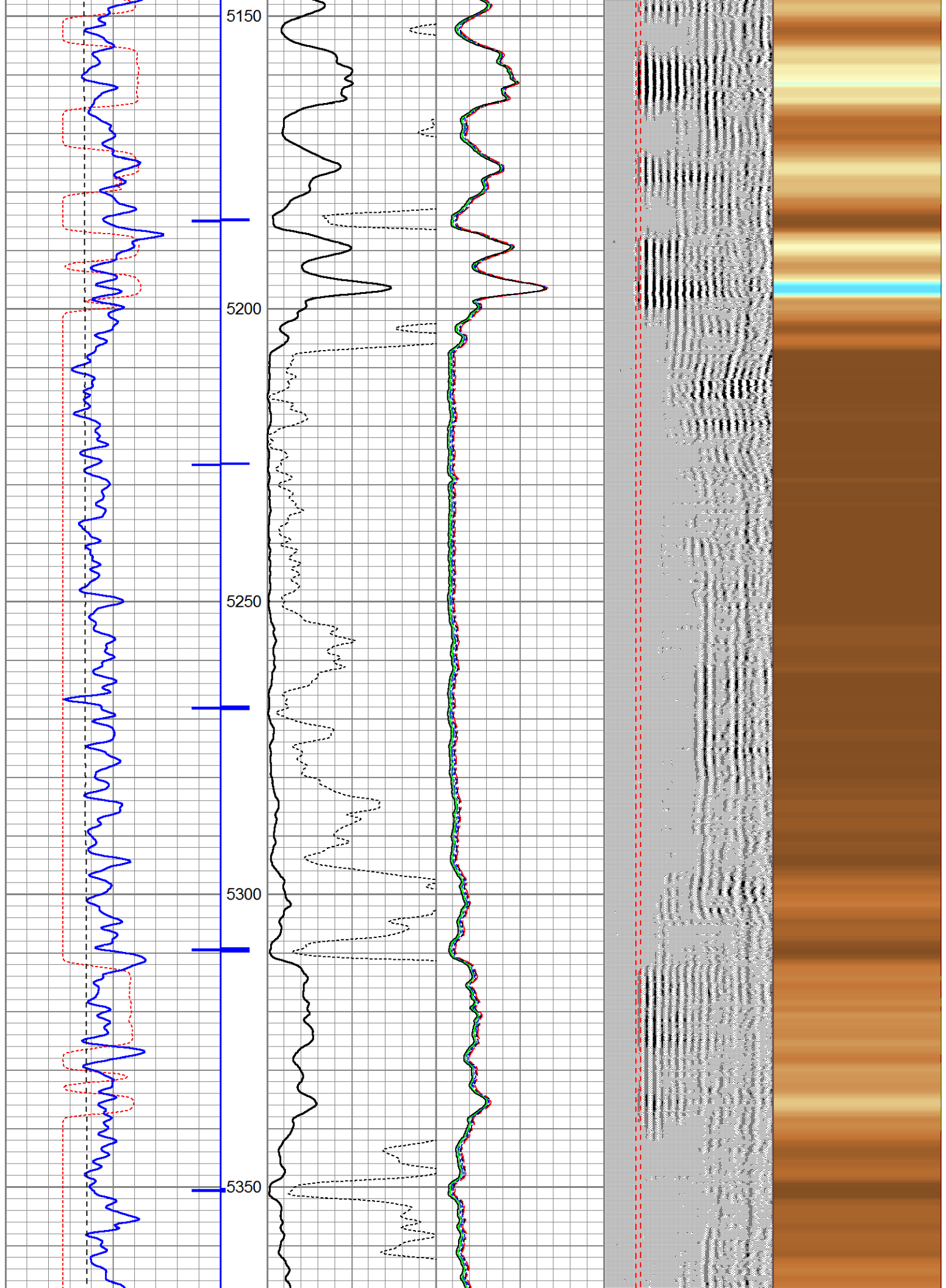


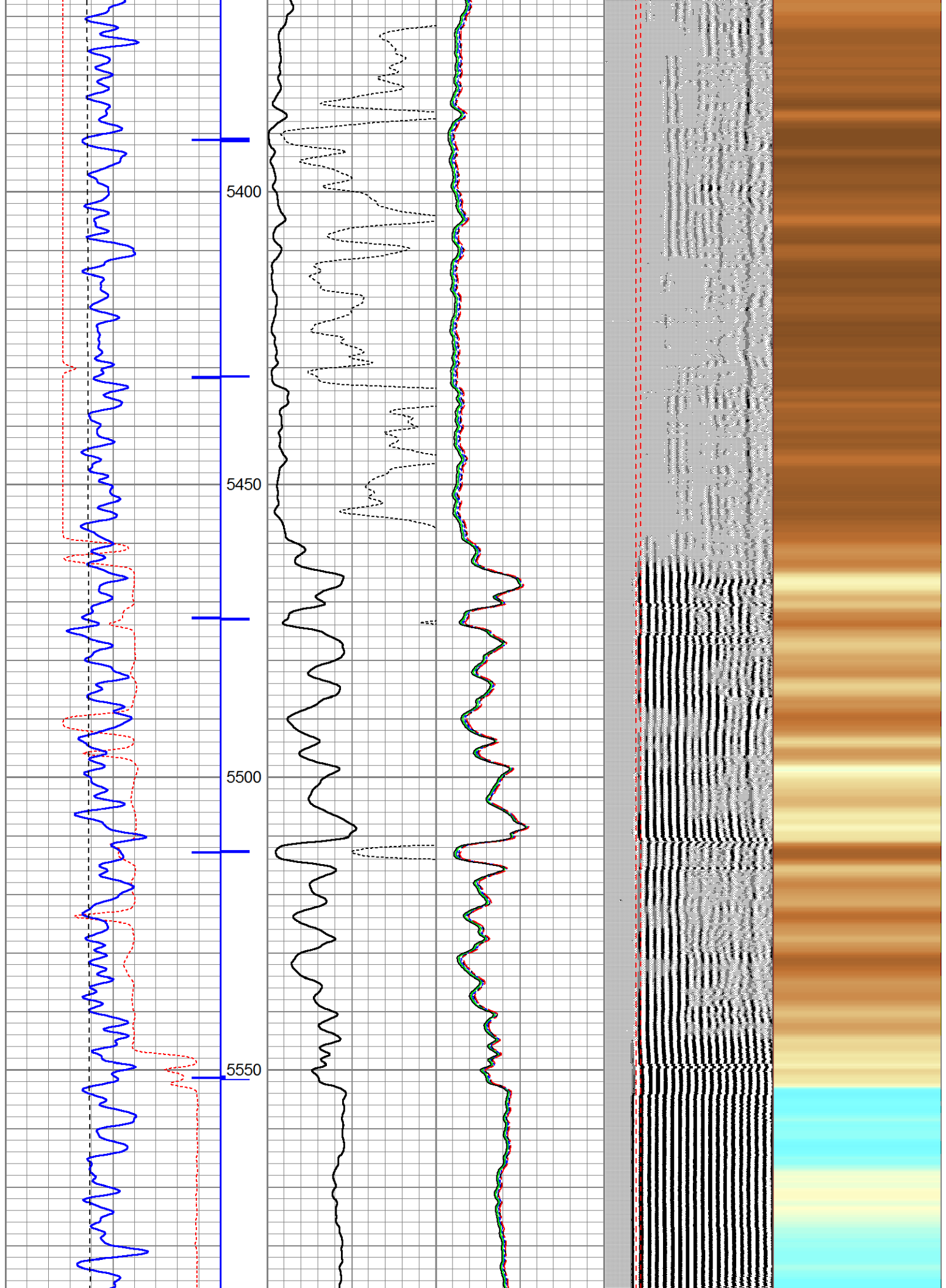


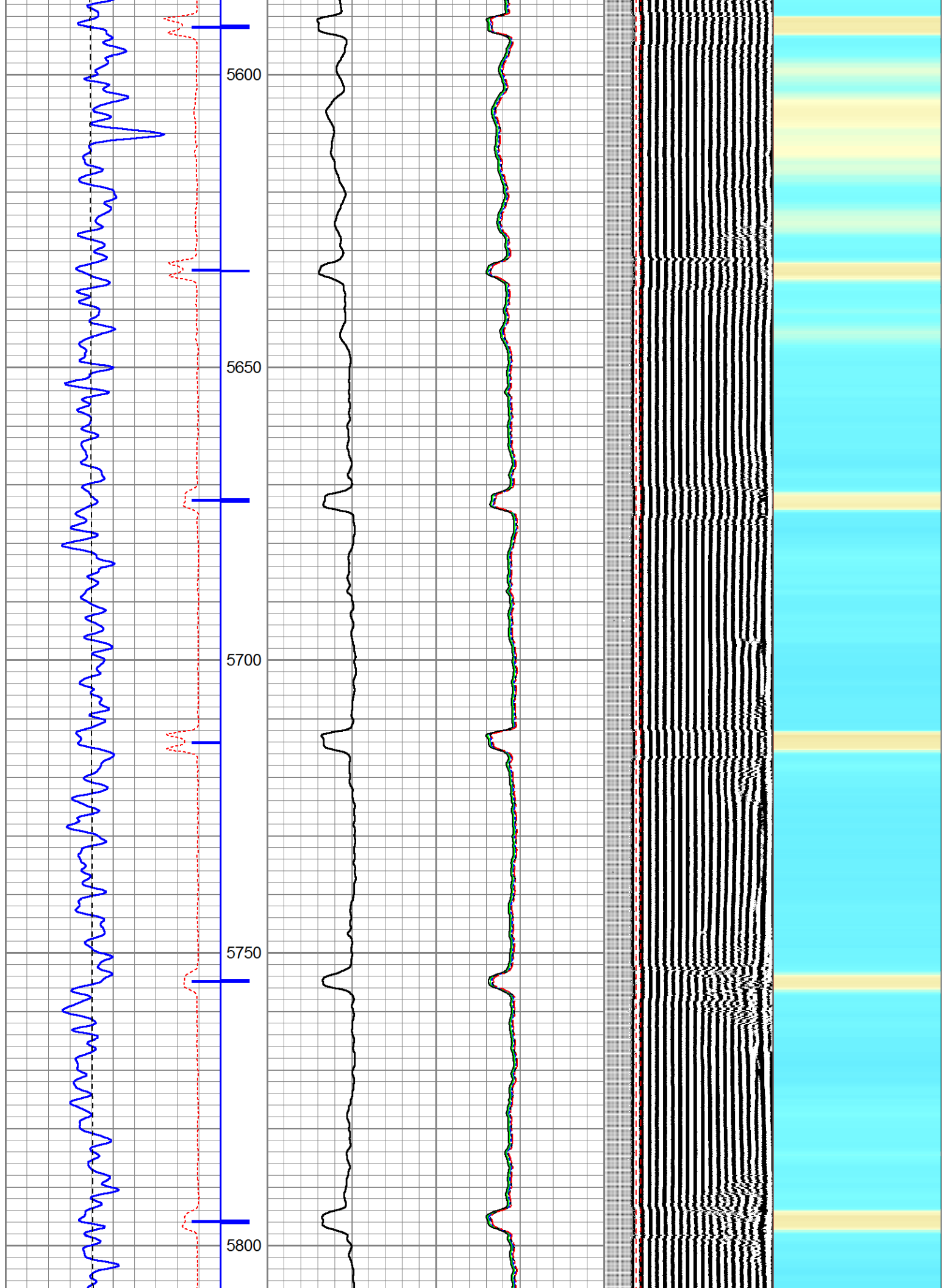


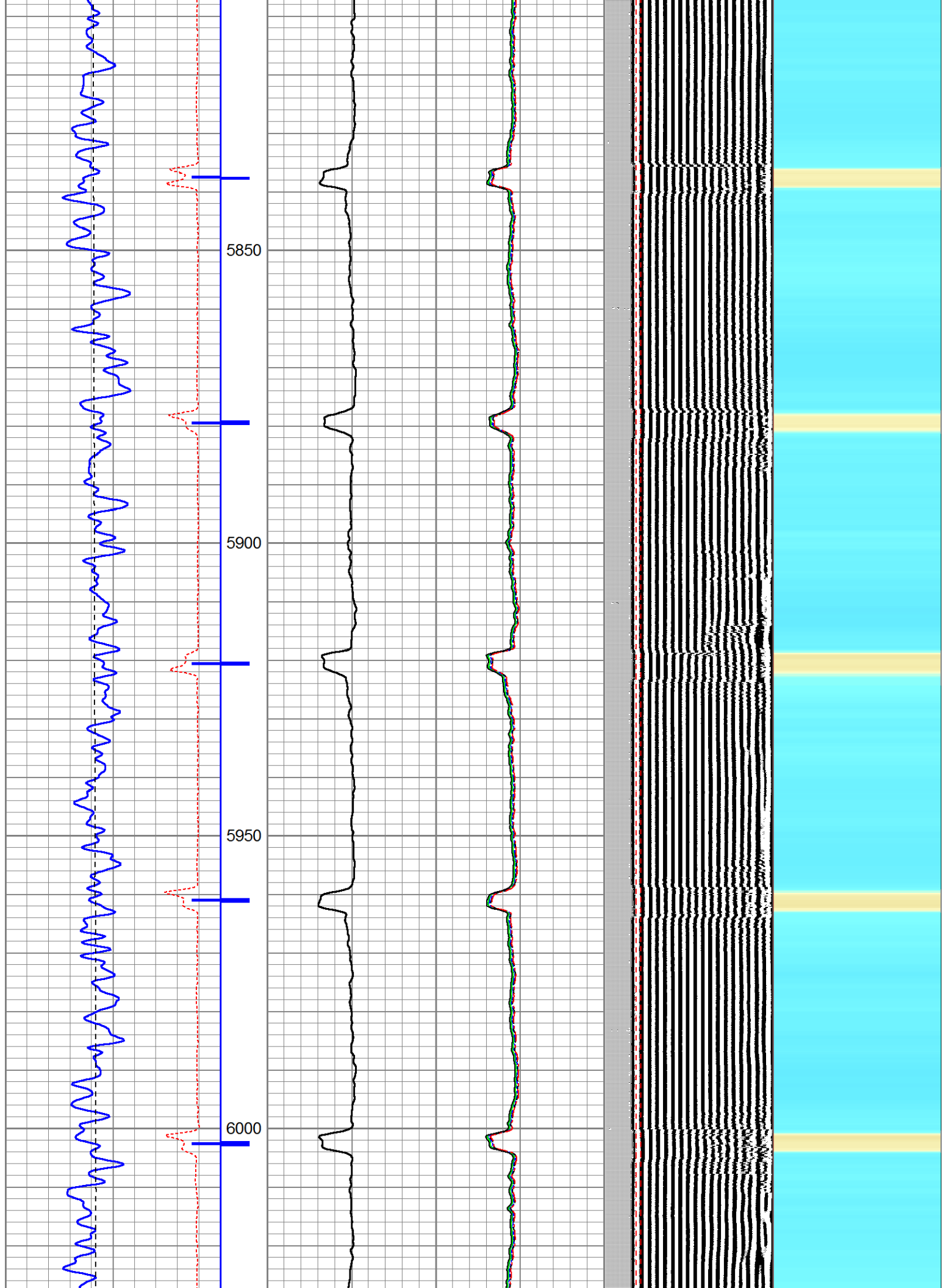


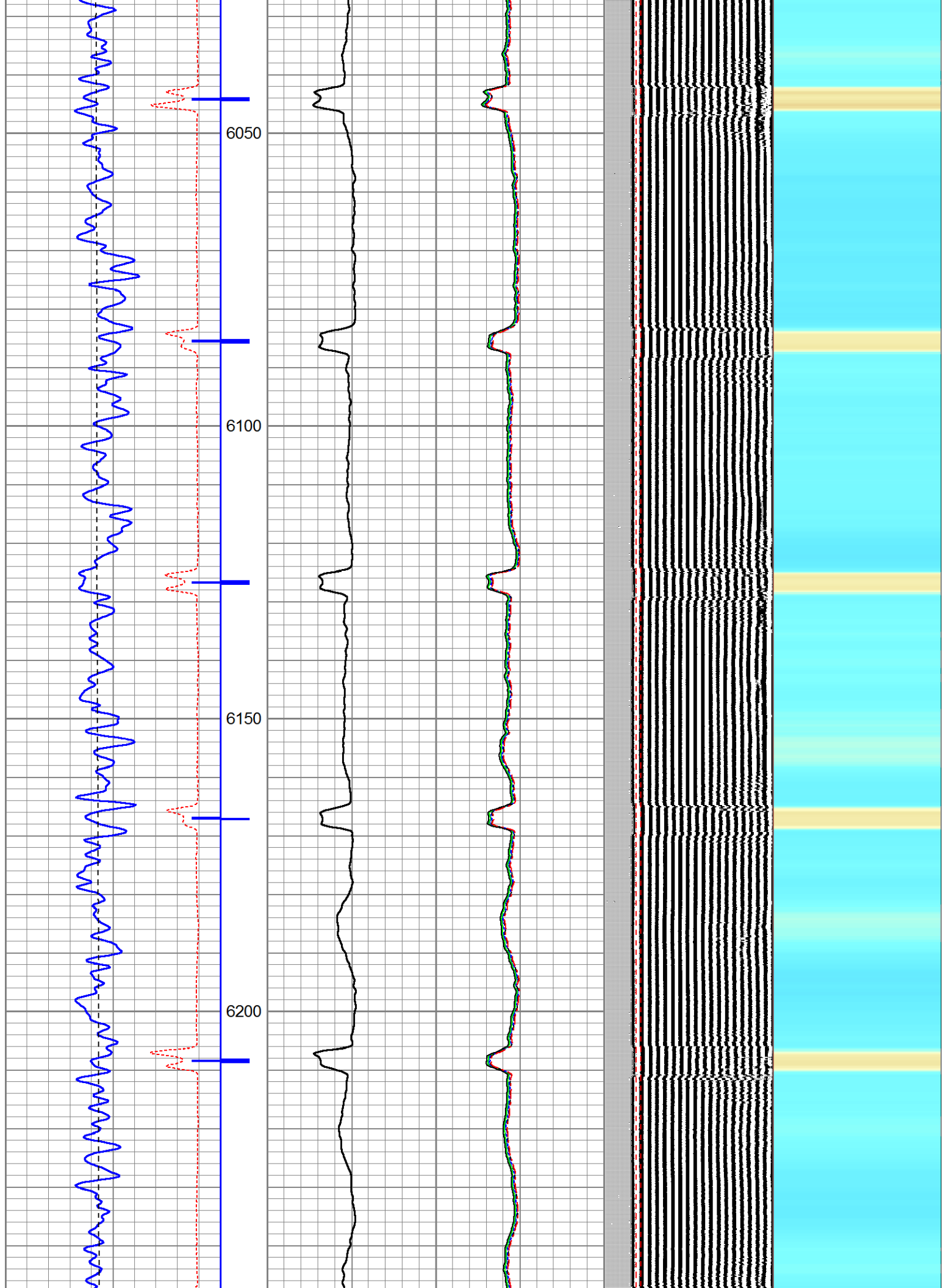


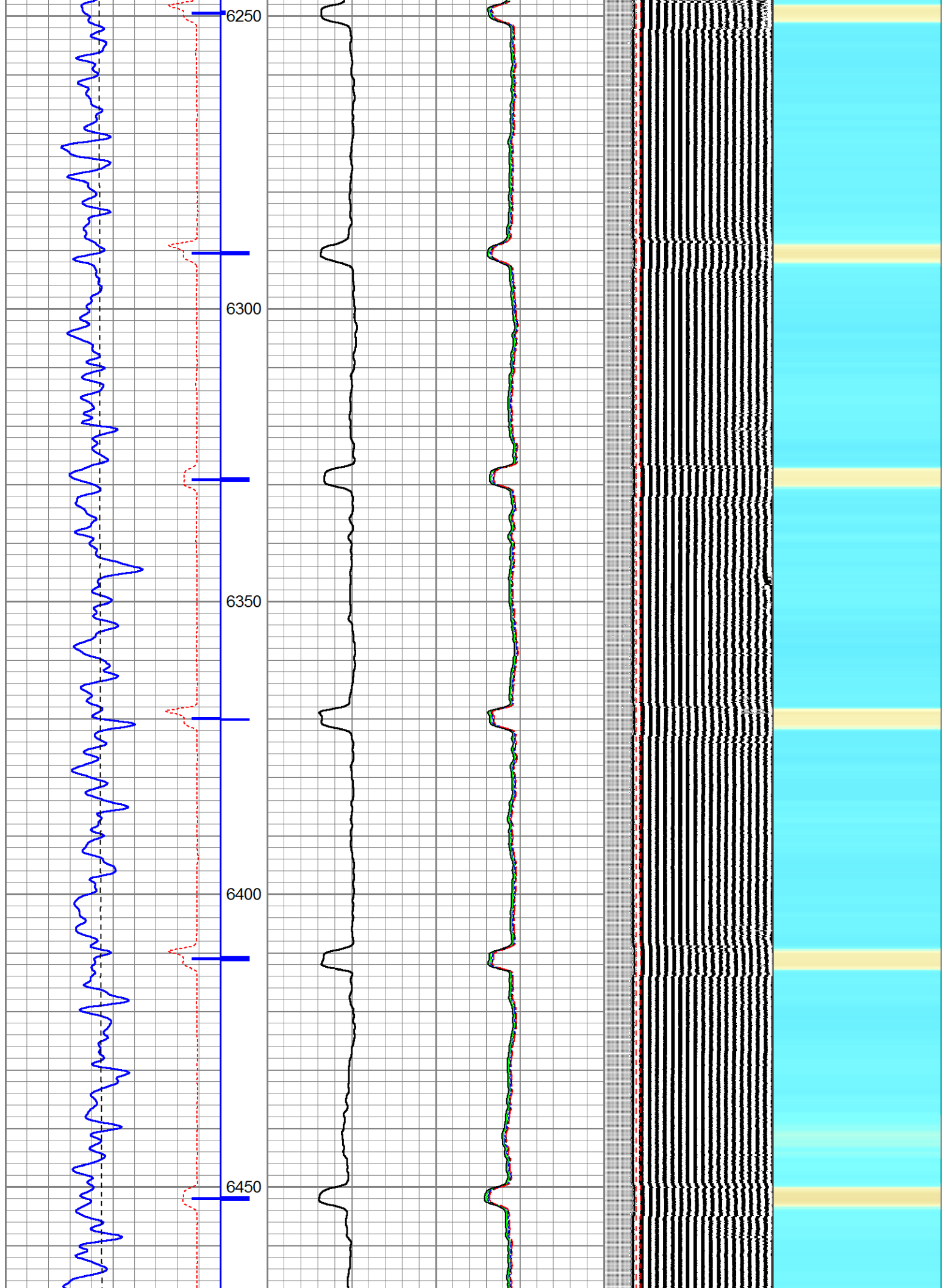


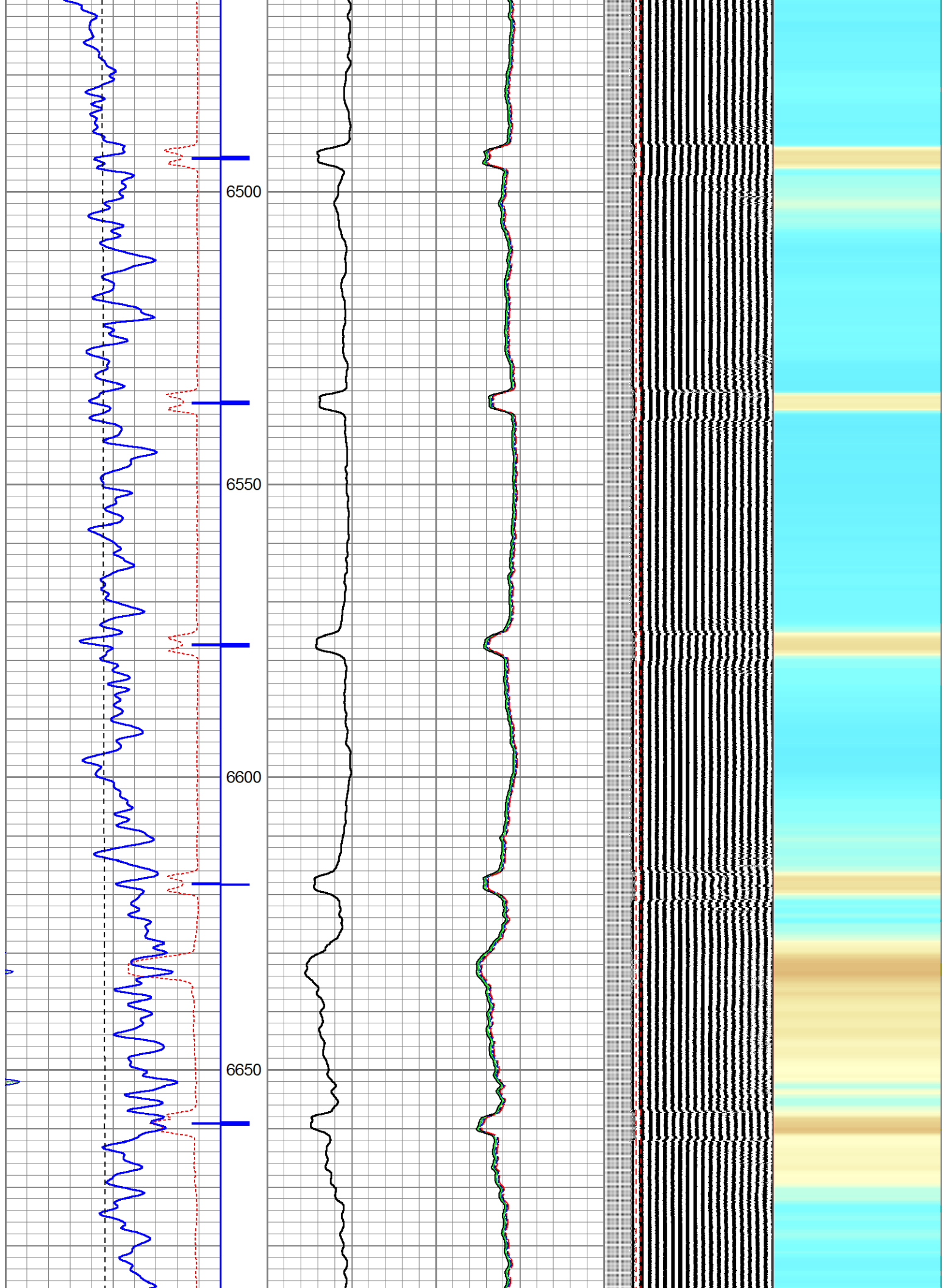


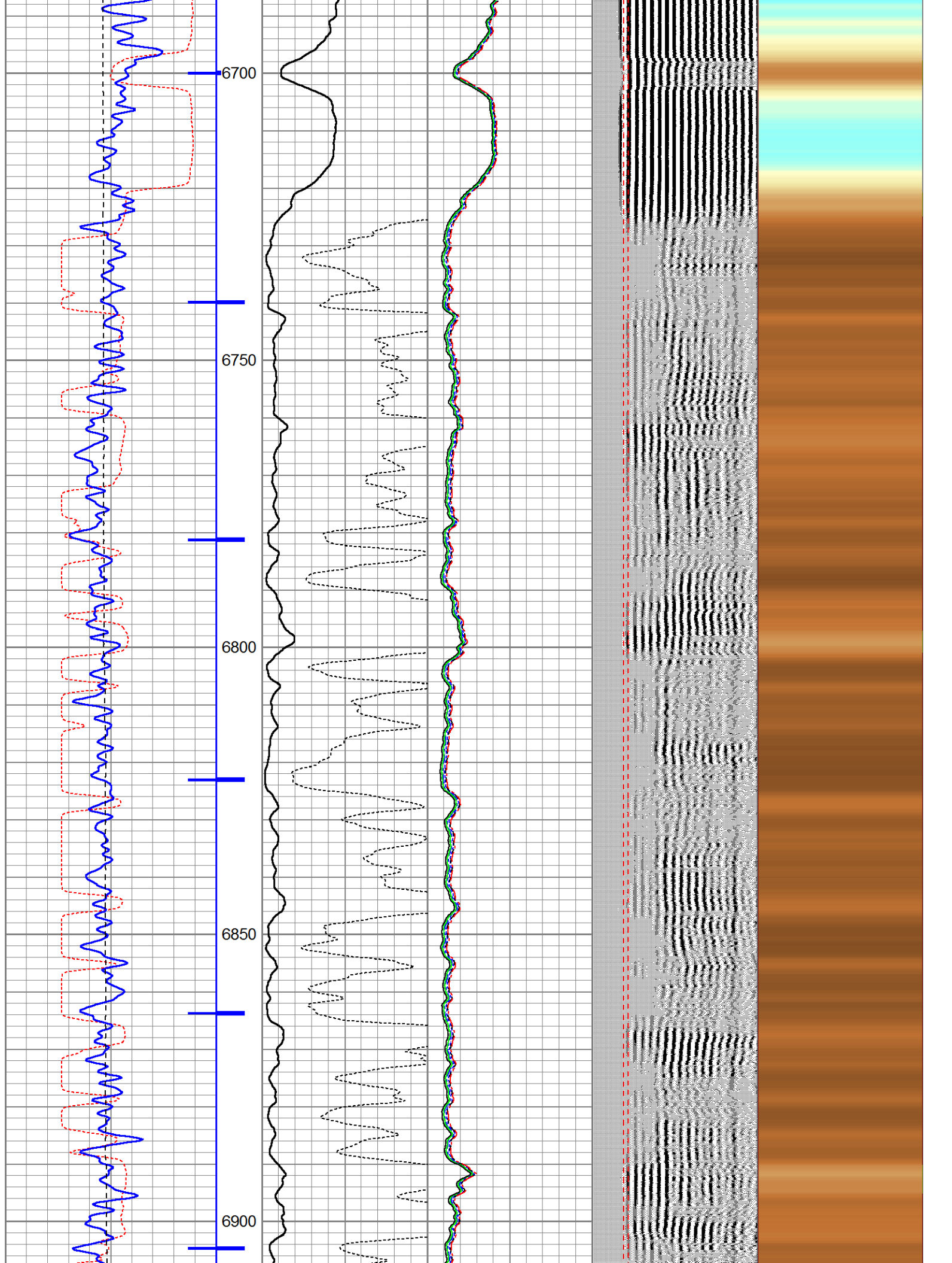


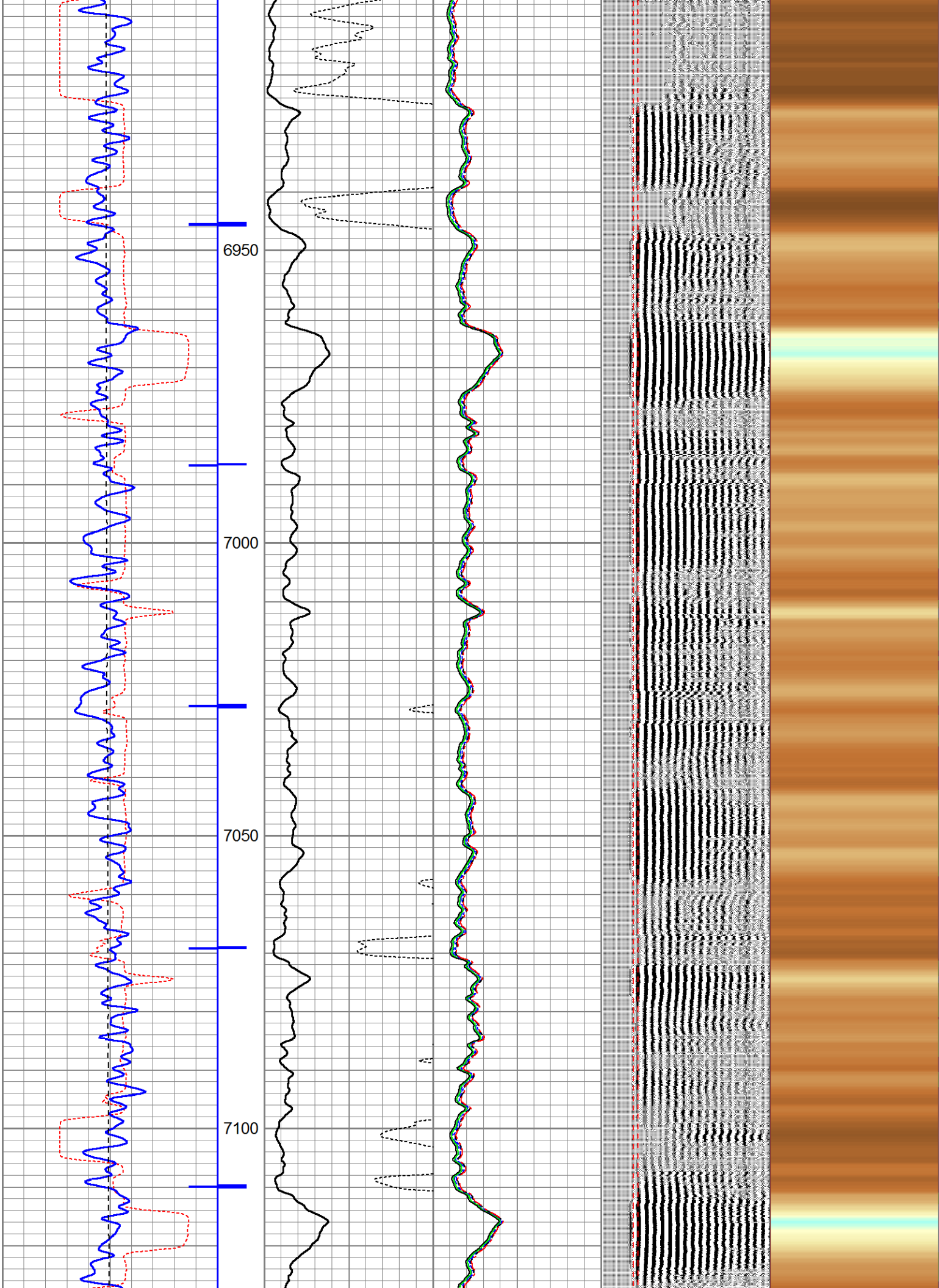


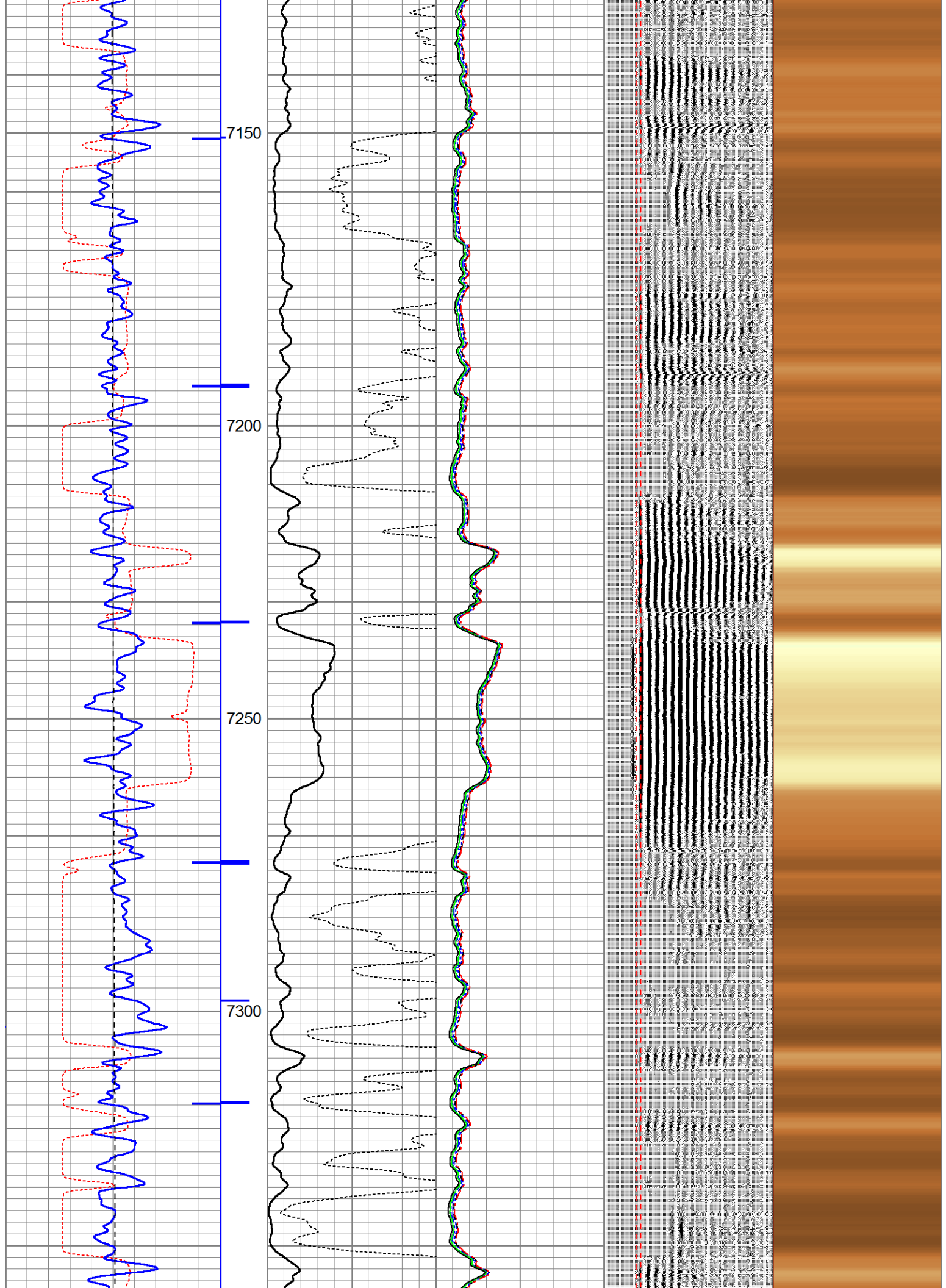


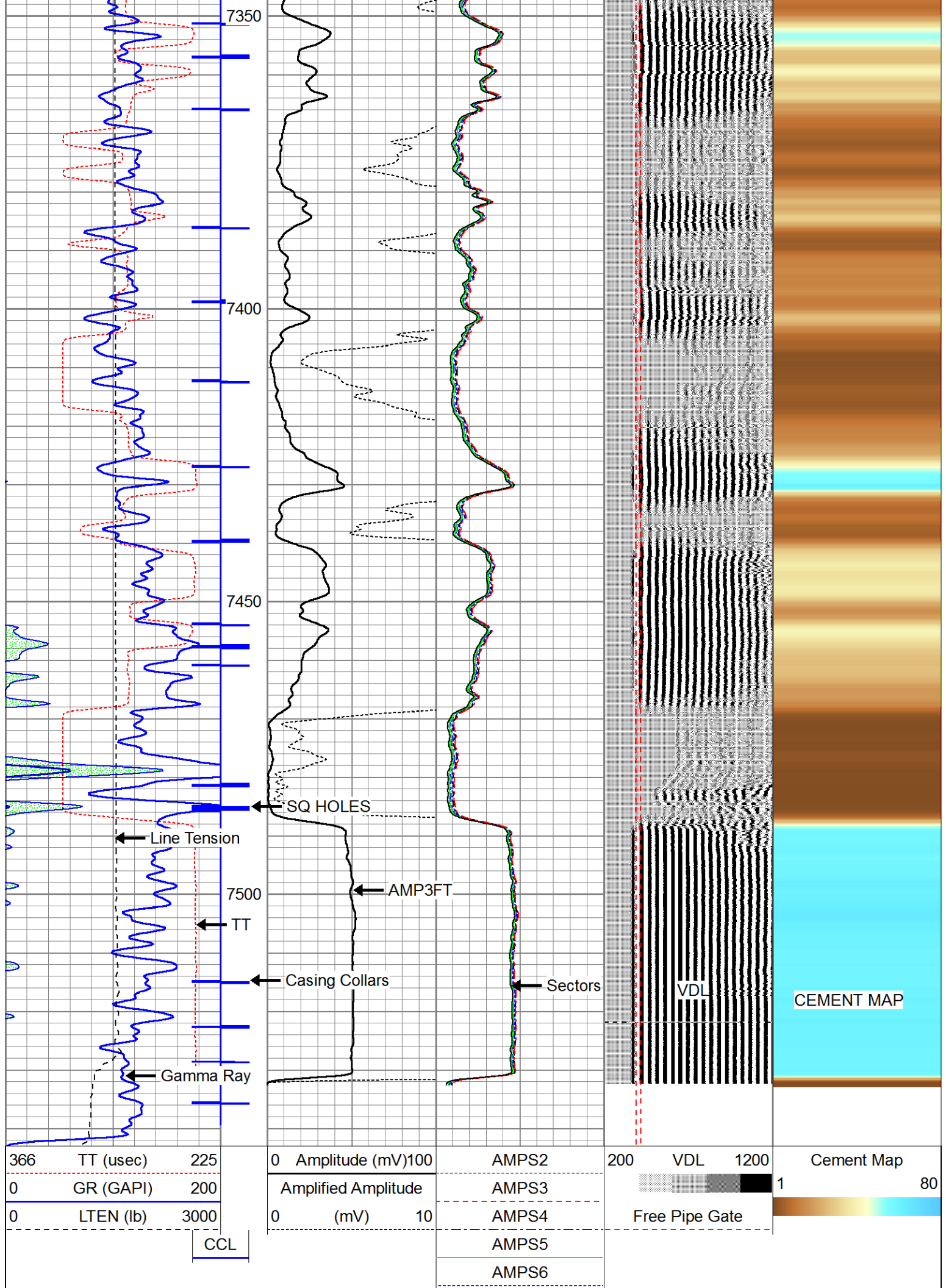












AMPS7

AMPS8

AMPS1



REPEAT PASS

5" = 100'

Database File: erie road usx uu 15-1.db
Dataset Pathname: pass4
Presentation Format: rbltadd
Dataset Creation: Mon Nov 16 07:58:52 2015 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

366	TT (usec)	225
0	GR (GAPI)	150
0	LTEN (lb)	3000

CCL

0	Amplitude (mV)	100
Amplified Amplitude		
0	(mV)	10

AMPS2

AMPS3

AMPS4

AMPS5

AMPS6

AMPS7

AMPS8

AMPS1

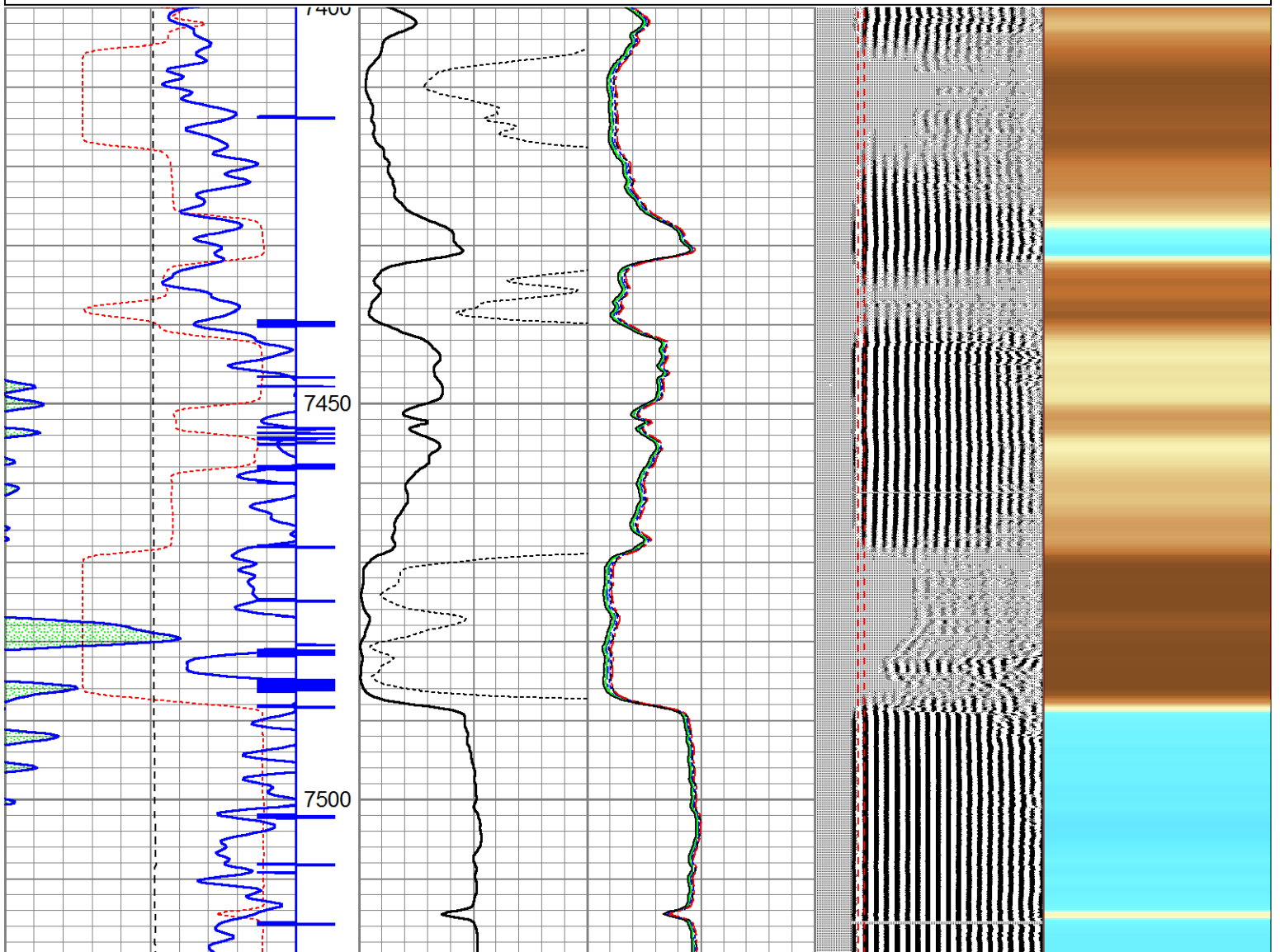
200 VDL 1200

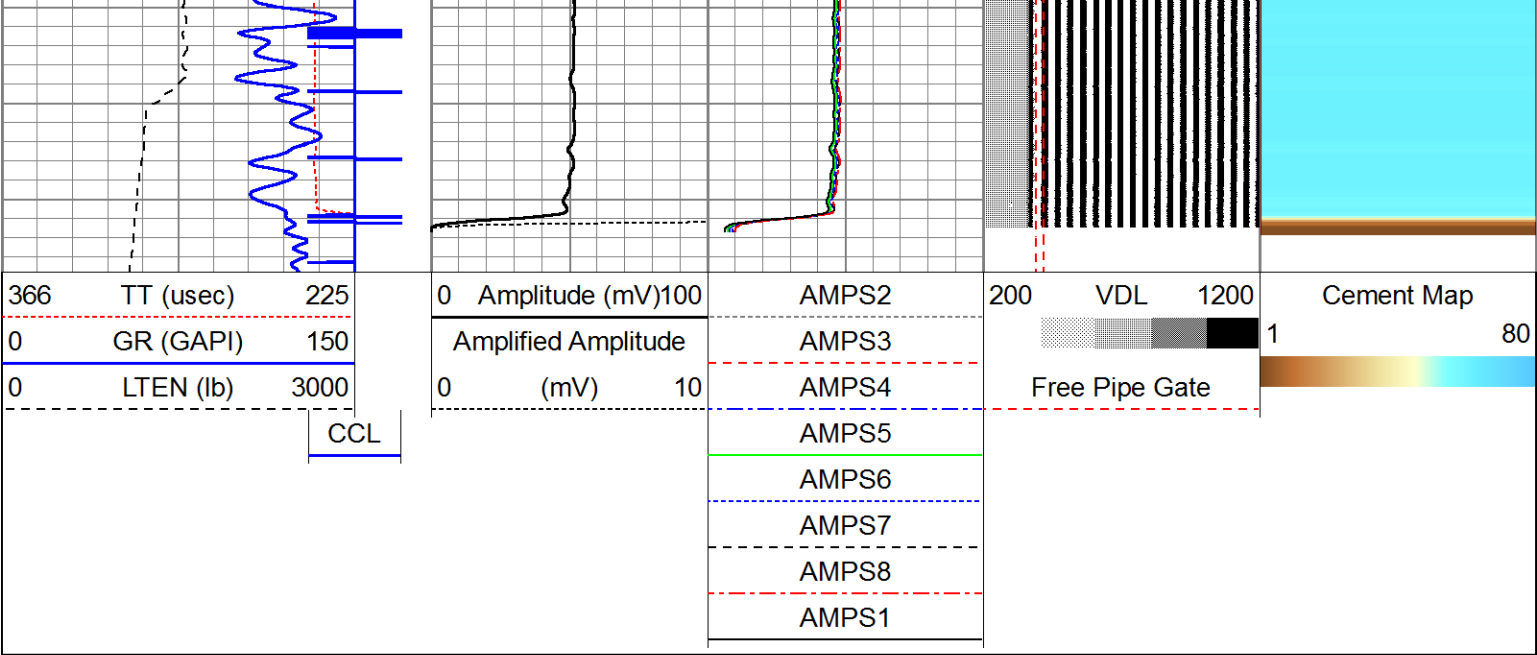
Free Pipe Gate

Cement Map


1


80





Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
HEADVOLT	16.25		Standard Standard Cable Head	1.00	1.69	1.00
			PTS275	2.83	2.75	
WV3FT	11.58		RBT-Probe (110217) Probe Radii Bond Tool with Digital Telemetry	8.92	2.75	90.00
WVFCAL	11.58					
WVFS1	11.58					
WVFS2	11.58					
WVFS3	11.58					
WVFS4	11.58					
WVFS5	11.58					
WVFS6	11.58					
WVFS7	11.58					
WVFS8	11.58					
WV5FT	10.58					
			PTS275	2.83	2.75	

CCL	3.50		GR-275D_INC (275D_with_INC) 2-3/4" GR-CCL with Inclination	4.50	2.75
IntTemp	2.00				
ACCX	1.83				
ACCY	1.83				
ACCZ	1.83				
GR	0.83				
Dataset: erie road usx uu 15-1.db: field/well/run1/pass5 Total Length: 20.08 ft Total Weight: 91.00 lb O.D. 2.75 in					

	Company	KERR-MCGEE OIL AND GAS
	Well	ERIE ROAD USX UU 15-1
	Field	WATTENBERG
	County	WELD
	State	COLORADO