



**SECTOR CEMENT BOND
GAMMA RAY
CCL LOG**

Comp. OCCIDENTAL PETROLEUM CORP.
Well COYLE 13-18A
Field WATTENBERG
Co. WELD
State COLORADO

Company **OCCIDENTAL PETROLEUM CORP.**
Well **COYLE 13-18A**
Field **WATTENBERG**
County **WELD** State **COLORADO**

Location: API #: 05-123-20312 Other Services
460' FSL & 830' FWL
SEC 18 TWP 2N RGE 66W
Permanent Datum GL Elevation 4855'
Log Measured From KB 12' Above Perm. Datum
Drilling Measured From KB
K.B. 4867'
D.F. N/A
G.L. 4855'

Date of Service	01-AUG-2023			
Run Number	ONE			
Depth Driller or PBTD	N/A			
Depth Logger	5010'			
Bottom Log Interval	5000'			
Top Log Interval	SURFACE			
Open Hole Size	7-7/8"			
Type Fluid	H2O			
Fluid Level	SURFACE			
Fluid Density	N/A			
Max. Recorded Temperature	171 DEG. F.			
Max. Wellhead Pressure	ZERO PSI			
Wellhead Connection	7-1/16" 5K			
Estimated Cement Top	SEE LOG			
Unit Number	1007			
Wireline Size	9/32"			
Location	BRIGHTON			
Recorded By	J. KOTT			
Witnessed By	MR. SHANE HART			
Surface Casing	8-5/8"	24#	SURFACE	643'
Production Casing	4-1/2"	11.6#	SURFACE	8073'
Liner Casing				
Tubing Record				

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All interpretations are opinions based on inferences from electrical or other measurements and Ranger Energy Services cannot and does not guarantee the accuracy or correctness of any interpretation, and Ranger Energy Services will not 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.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.
LOG CORRELATED TO KB

THANK YOU FOR USING RANGER ENERGY SERVICES! FIELD TICKET #007-575280

Your Ranger Energy Services Crew	Tool Data - Services	Serial Number
Engineer: J. KOTT Operator: C. PROPST Operator: Operator:		

Quantity	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
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Log Variables

DatabaseC:\ProgramData\Warrior\Data\1007-575280_oxy_hsr-coyle 13-18a_0512320312_20230801
 Dataset field/well/run1/pass4/_vars_

Top - Bottom

BOREID in 7.875	BOTTEMP degF 171	CASEOD in 4.5	CASETHCK in 0.25	CASEWGHT lb/ft 11.6	MAXAMPL mV 81.2	MINAMPL mV 0.7	MINATTN db/ft 0.8
PERFS No	PPT usec 249	SRFTEMP degF 65	TDEPTH ft 5000				

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

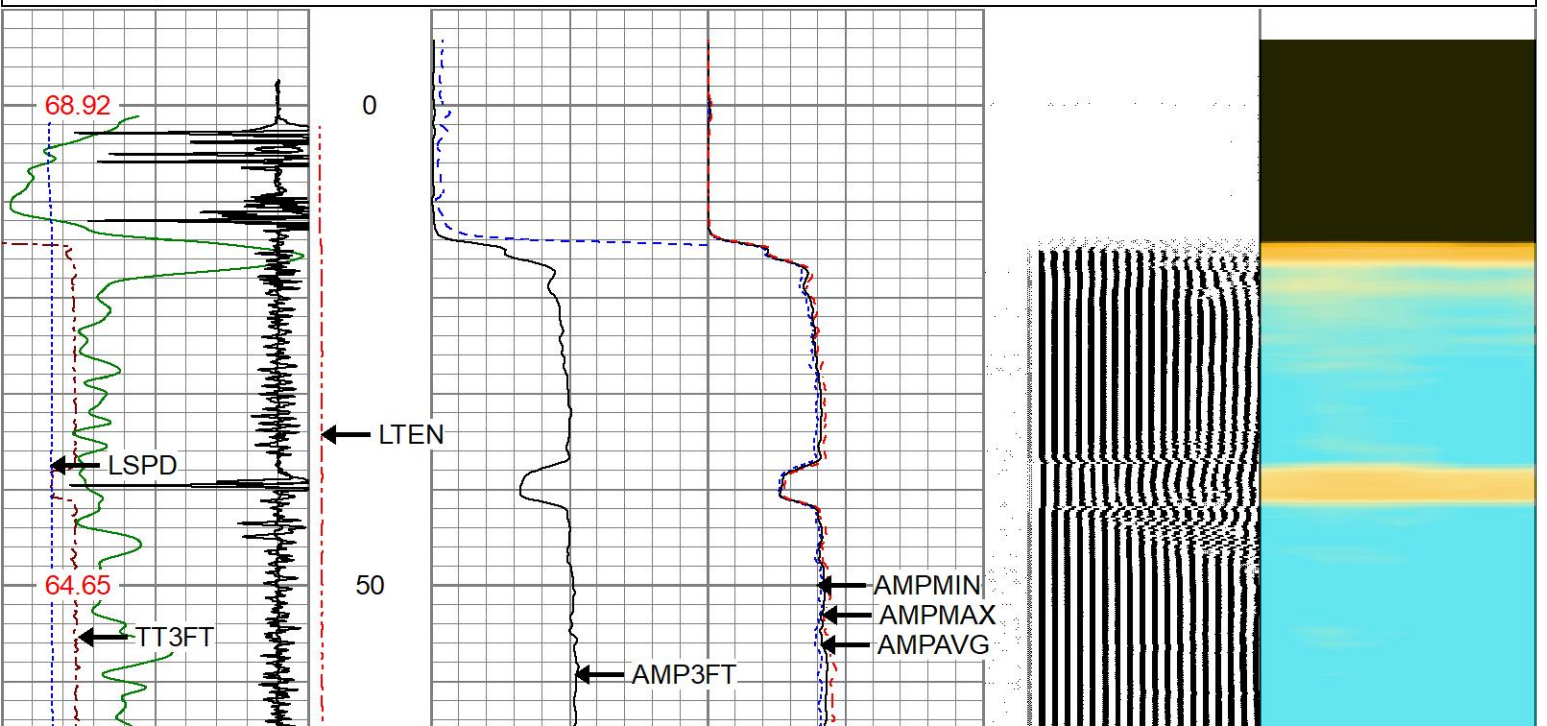


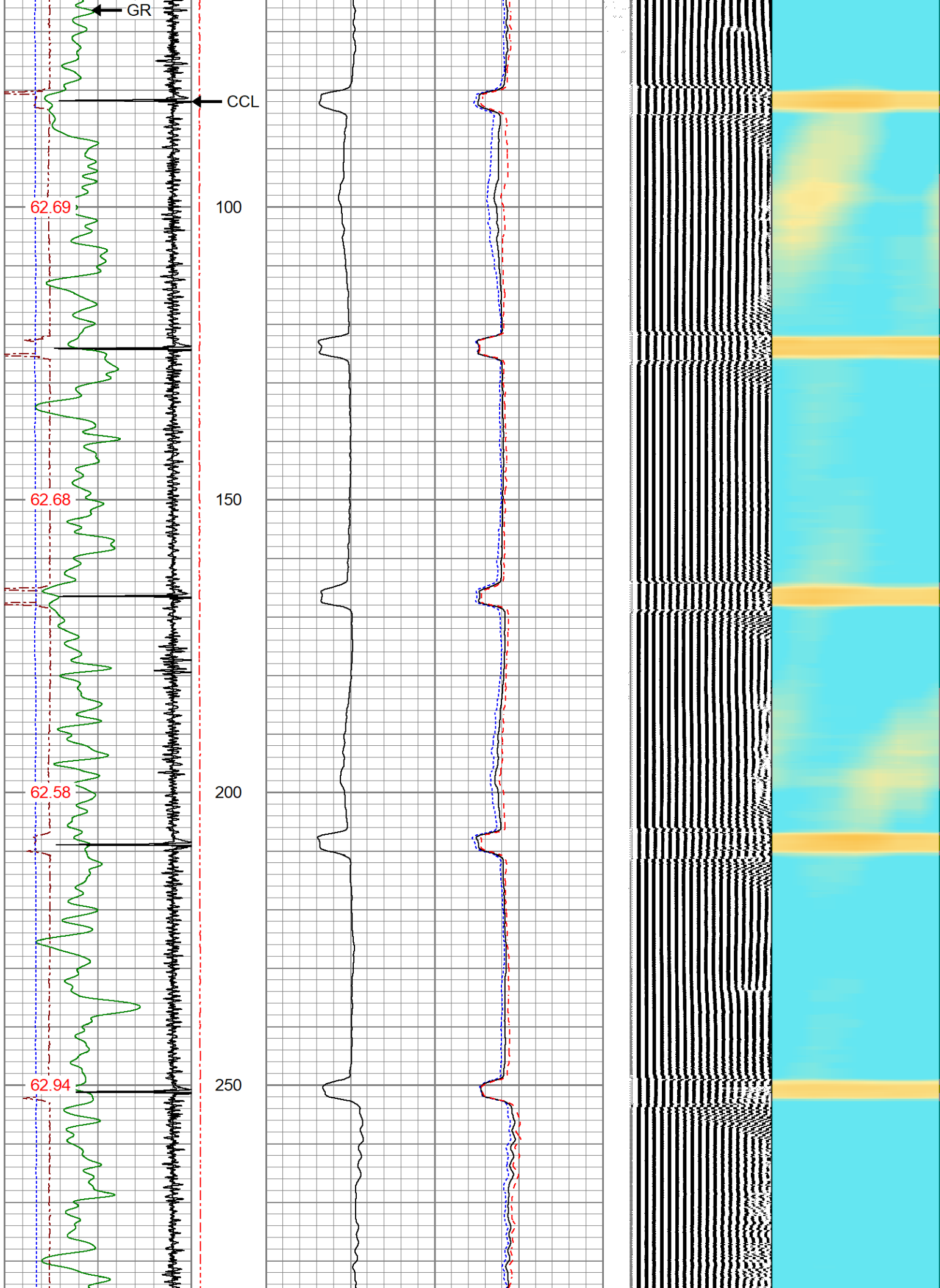
MAIN PASS

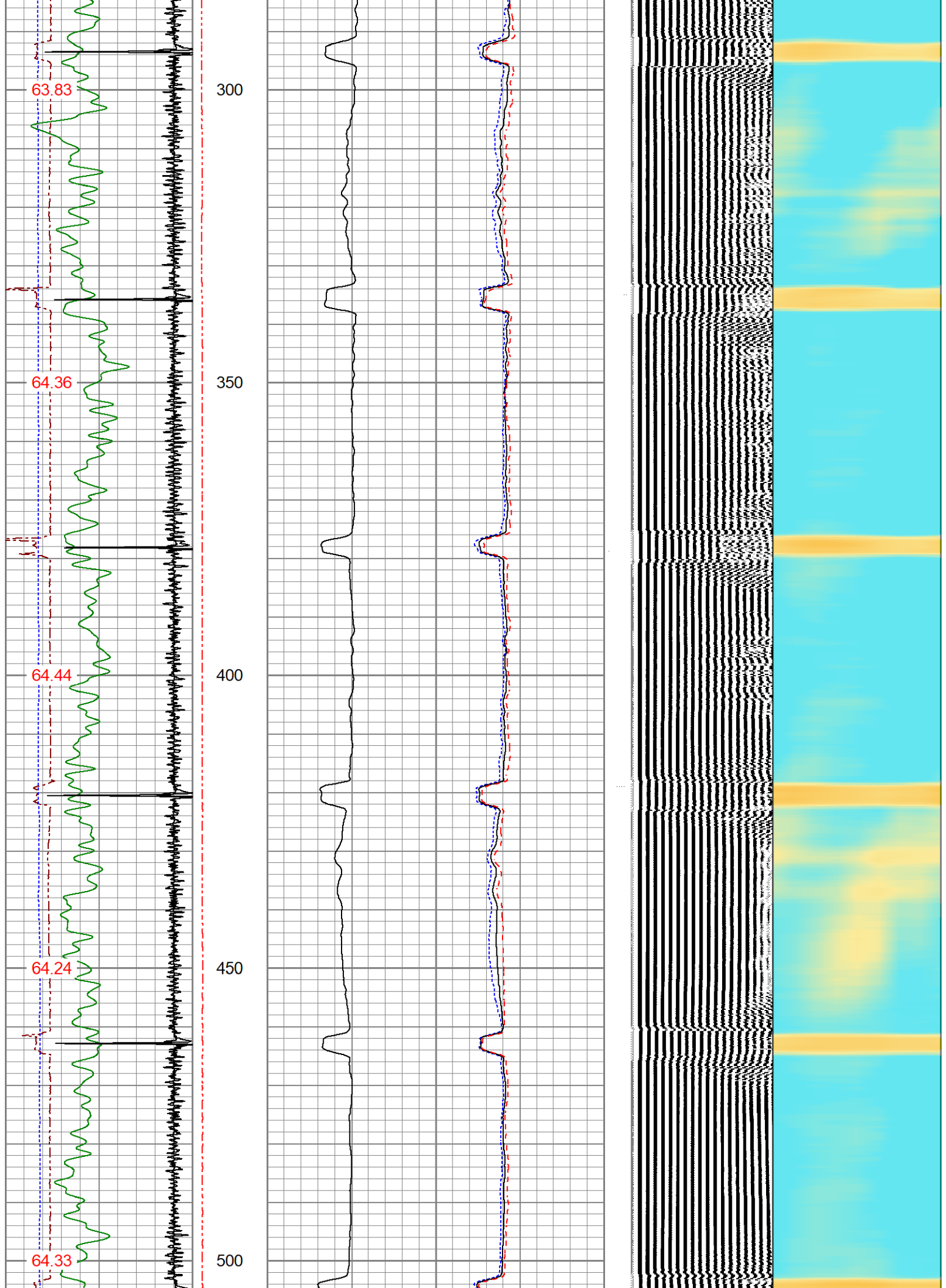
ZERO PSI APPLIED AT SURFACE

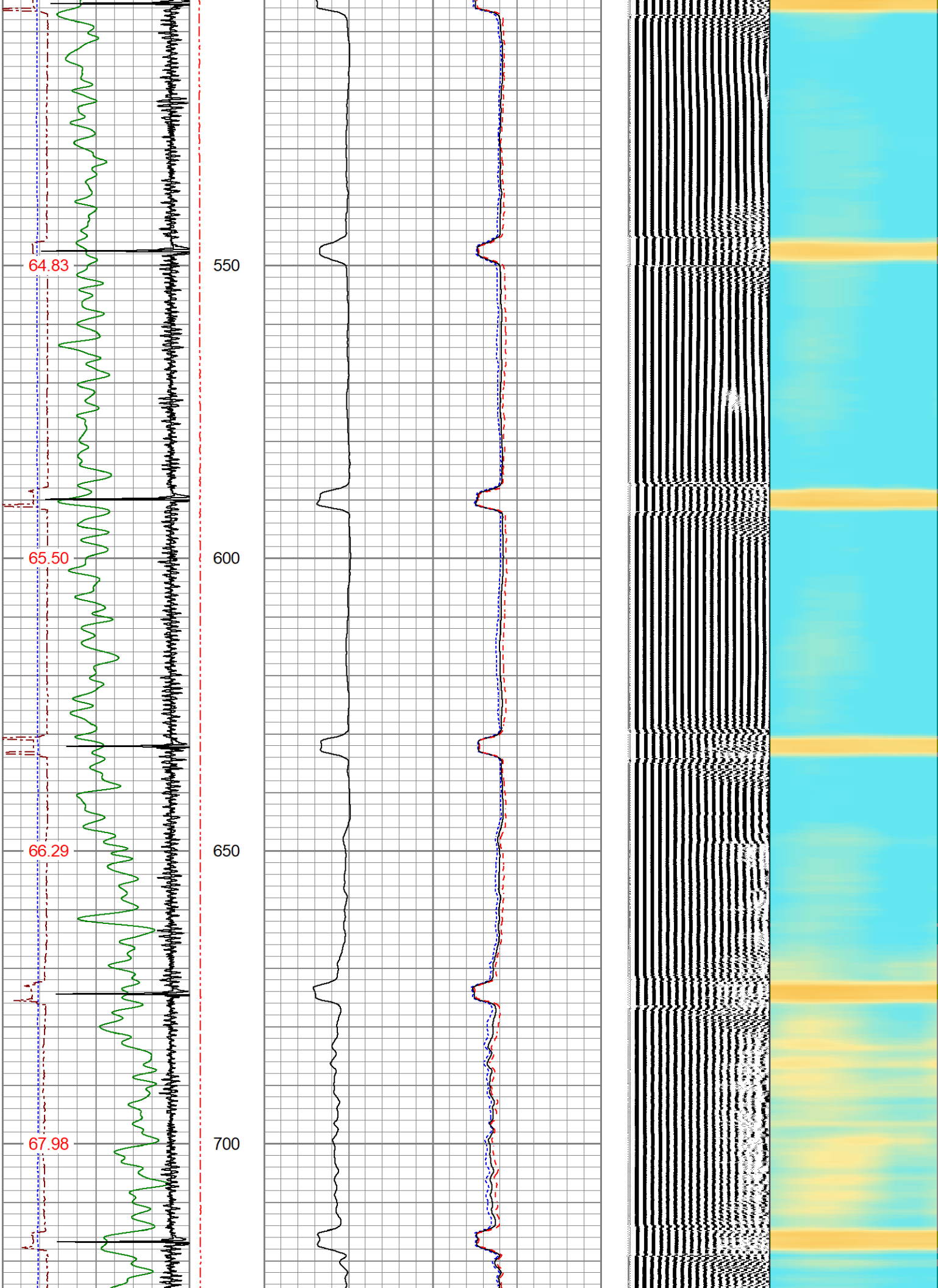
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 Dataset Pathname pass4
 Presentation Format res_scbl 8sec-gr-ccl
 Dataset Creation Tue Aug 01 07:37:51 2023
 Charted by Depth in Feet scaled 1:240

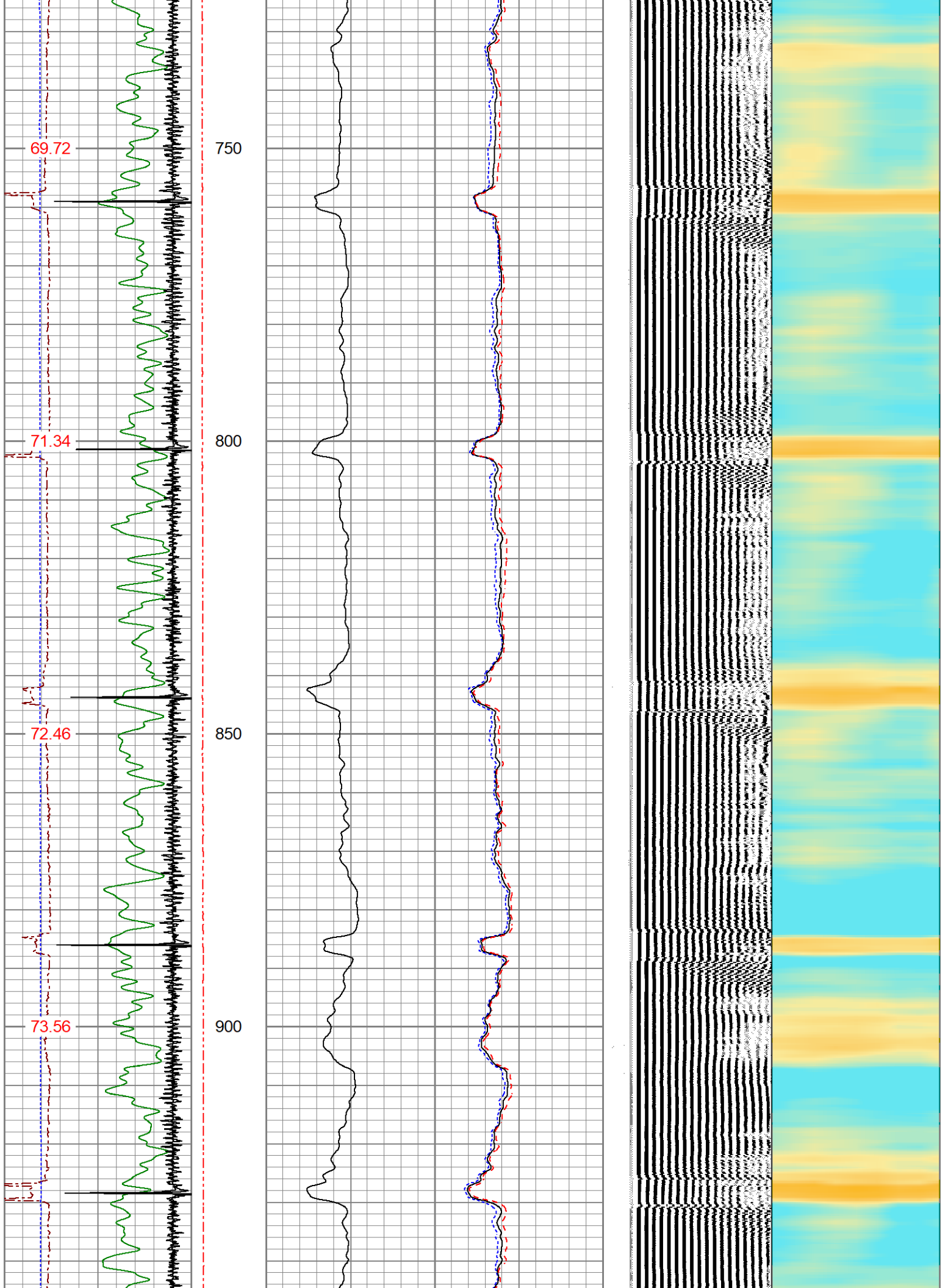
270 3FT TT (usec) 170	LTEN (lb)	0 3' Amplitude	0 Sector Min Amp	150	200 VDL (usec) 1200	1	Sector Map	8
0 GR (GAPI) 150		0 (mV) 100	Sector Avg Amp					
-150 LSPD (ft/min) 150		0 2000	0 3' Amplified Amplitude X 5	Sector Max Amp				
-9 CCL\$1 1			0 (mV) 20	0	150			
GCT_Temp (degF)								

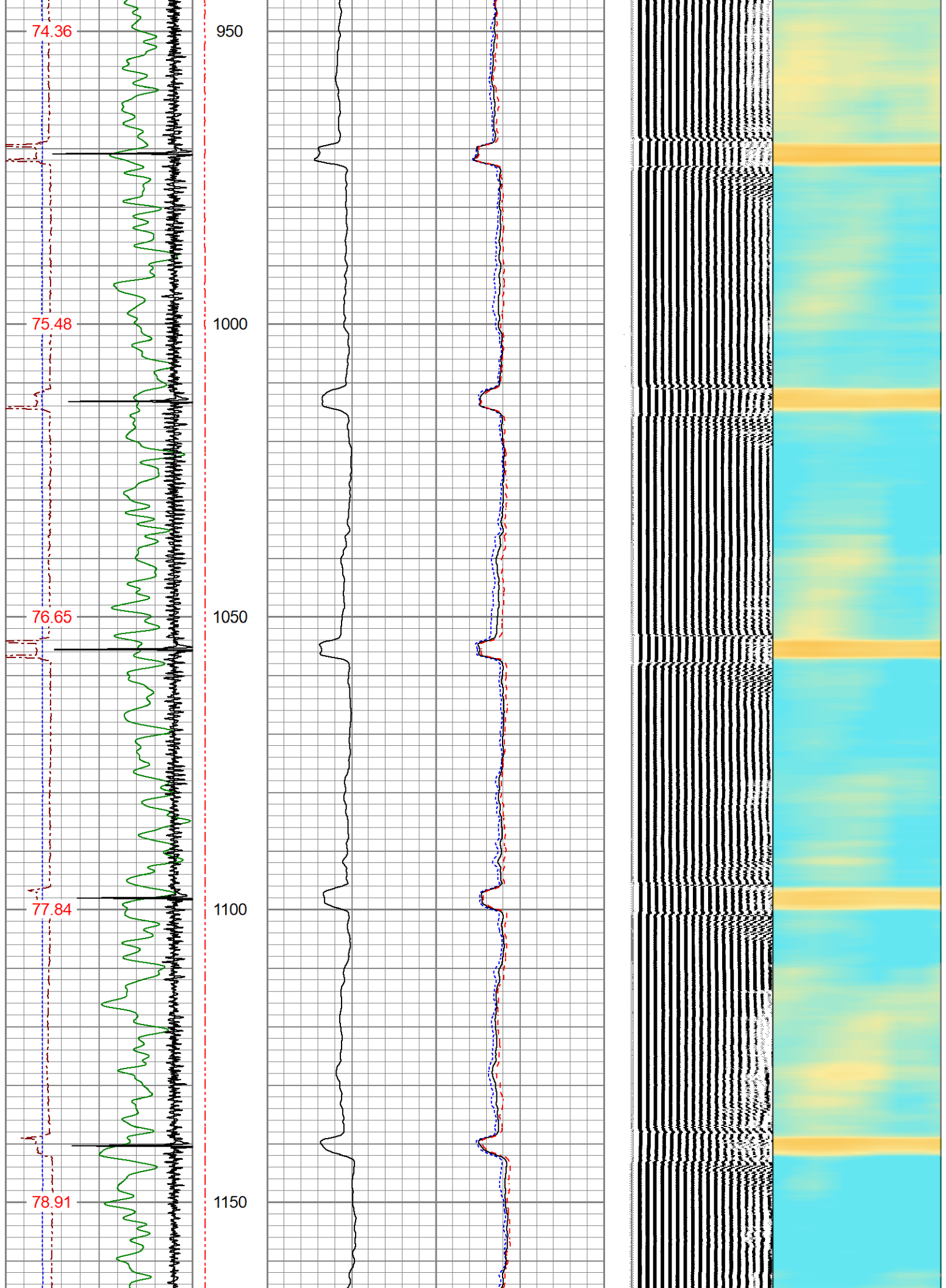


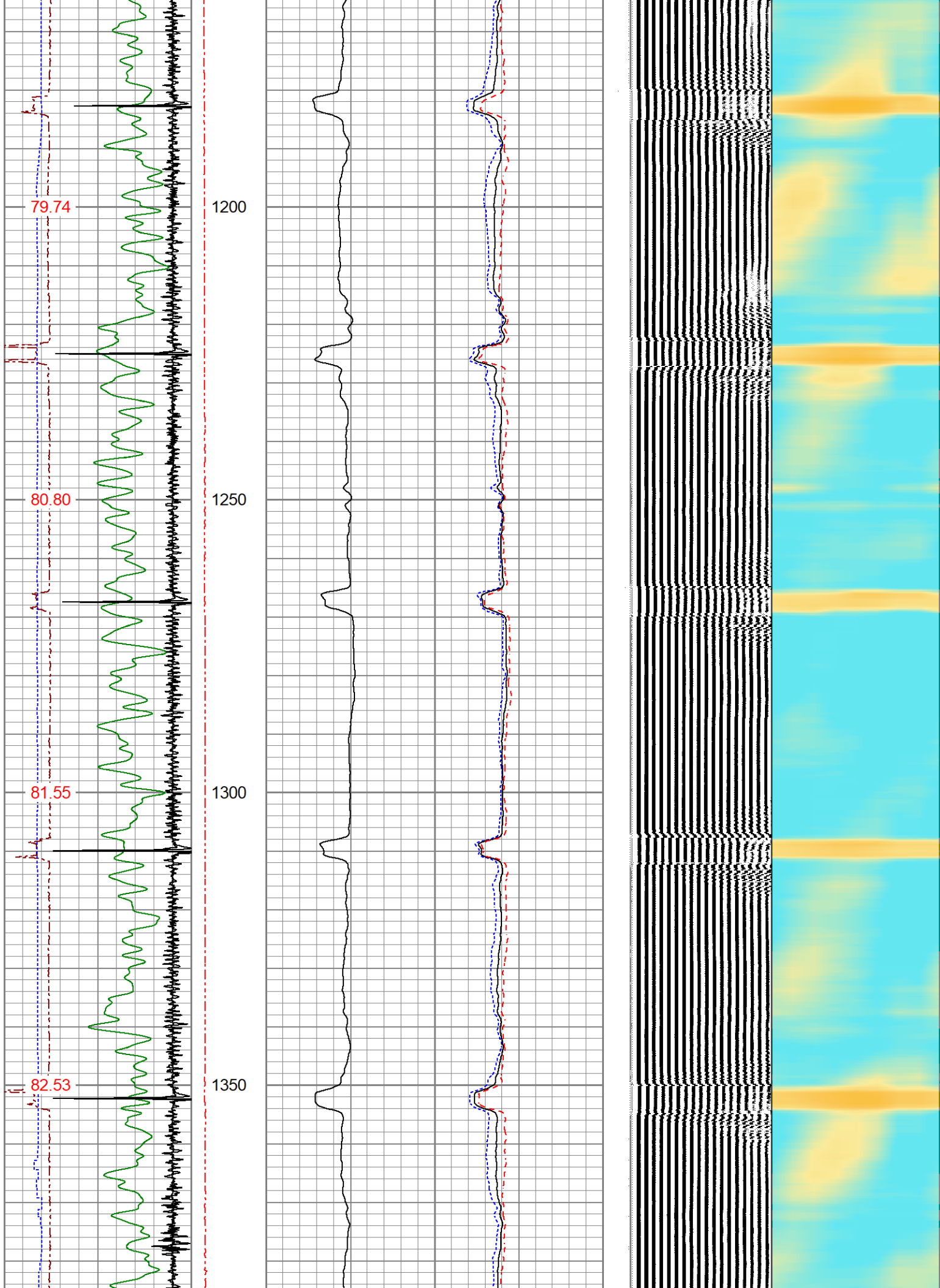


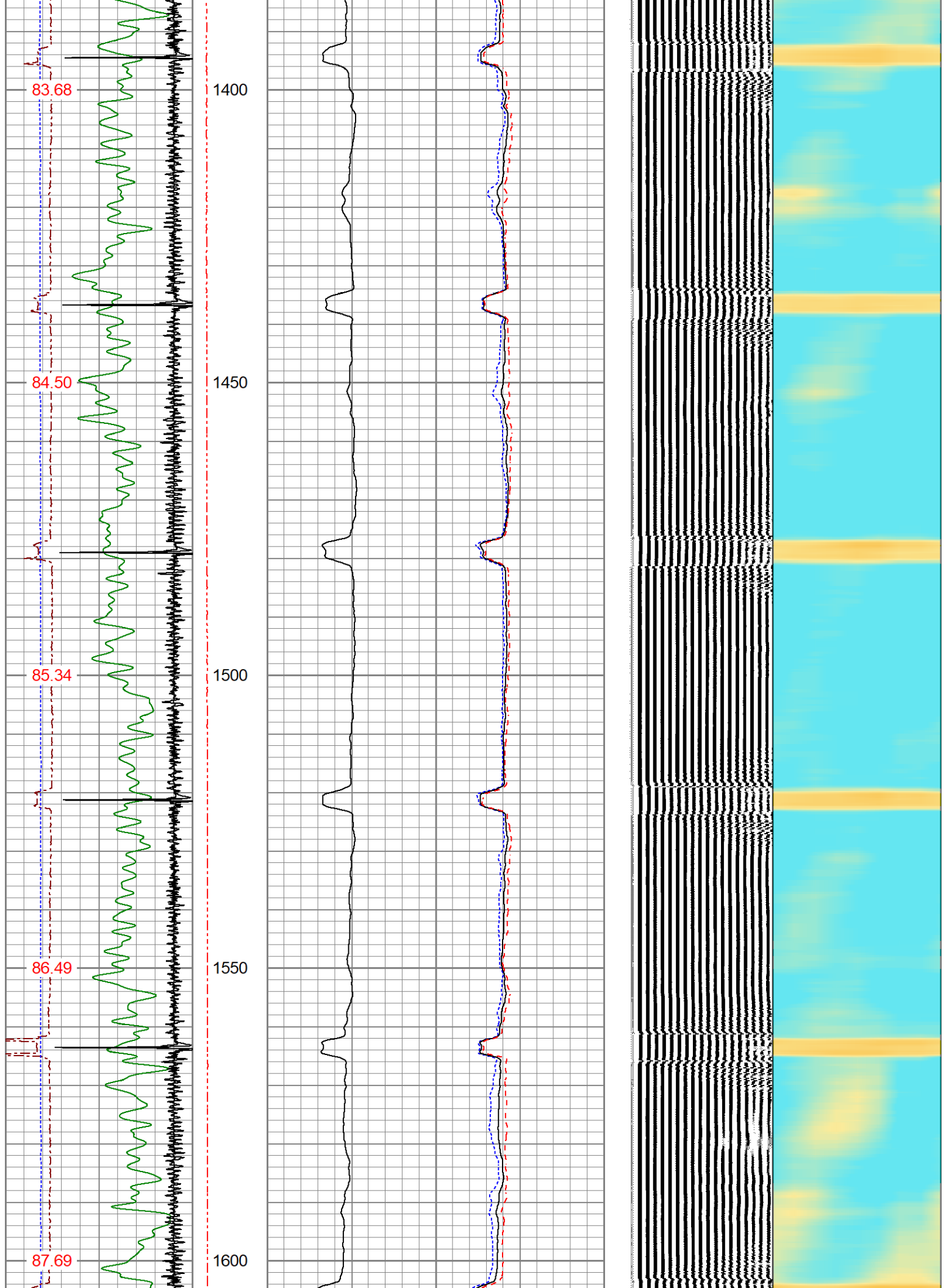


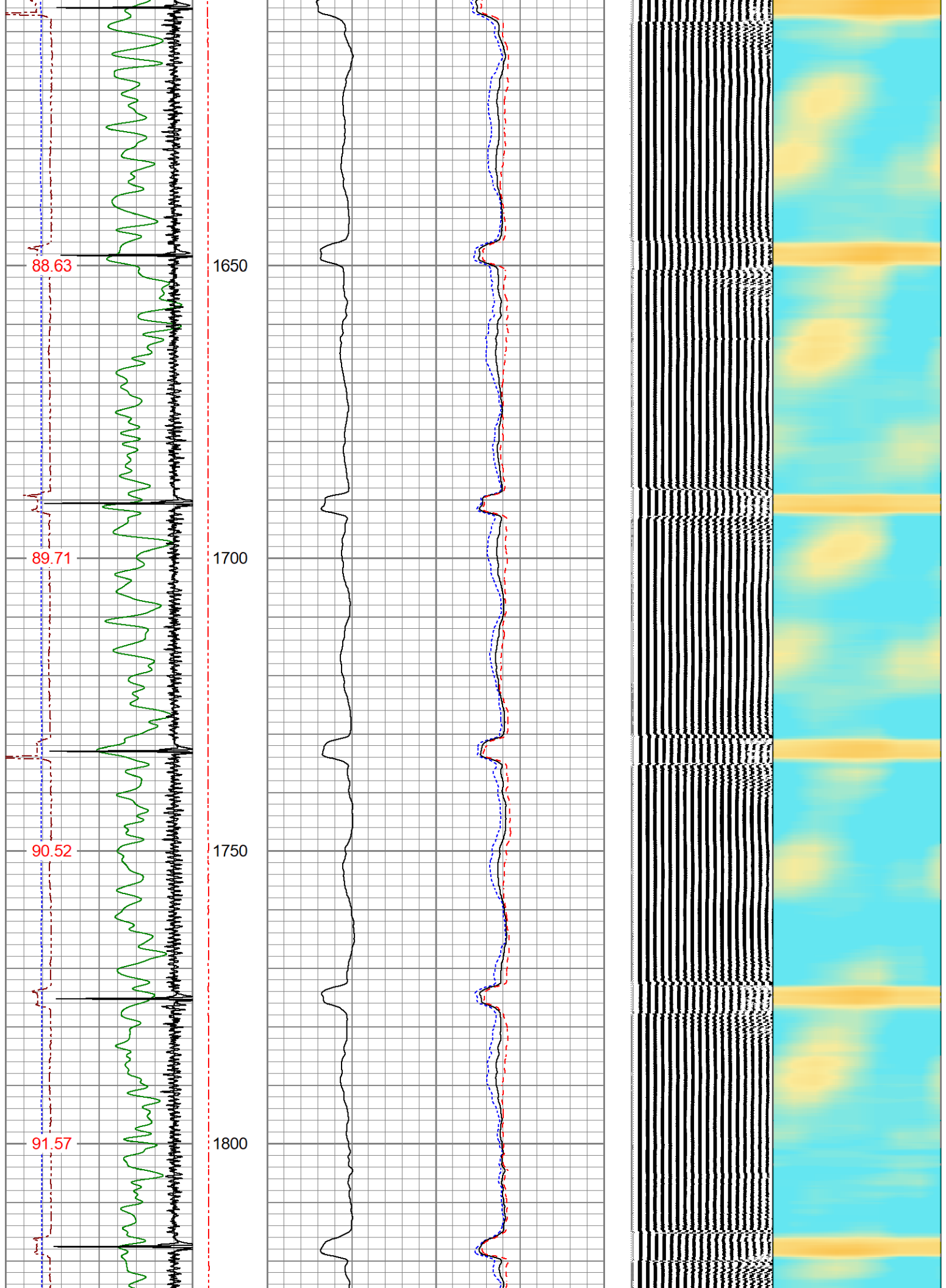


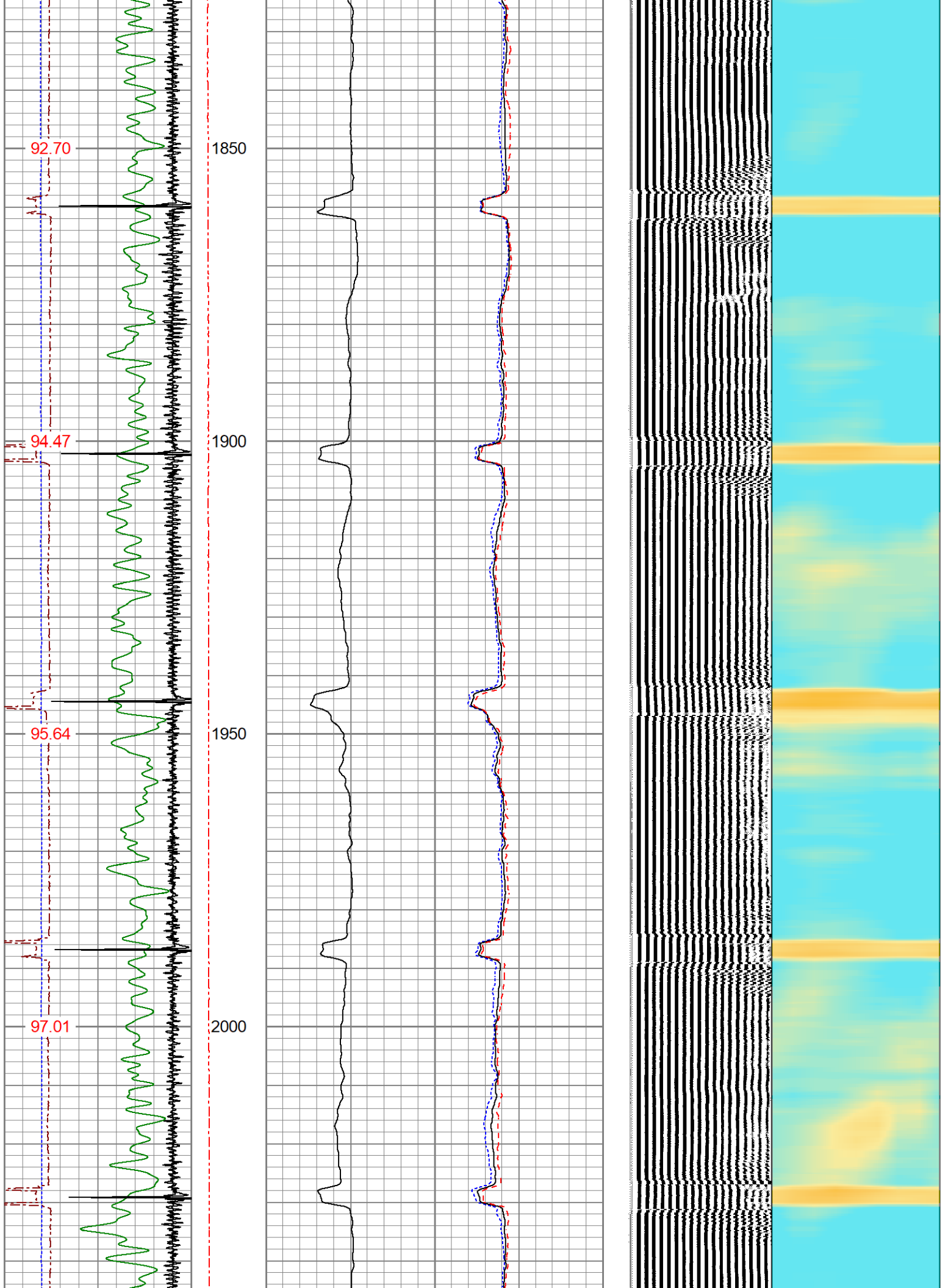


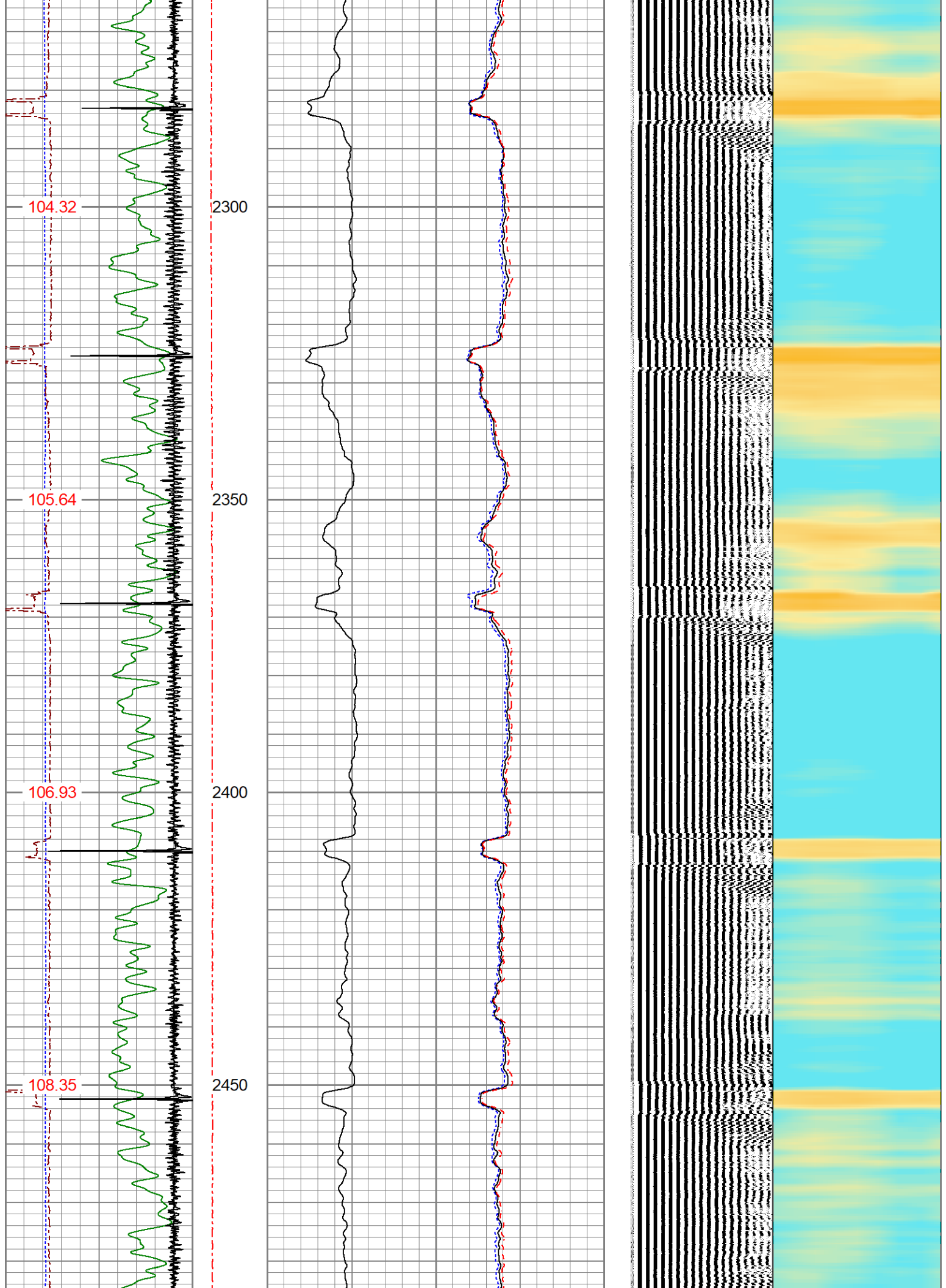


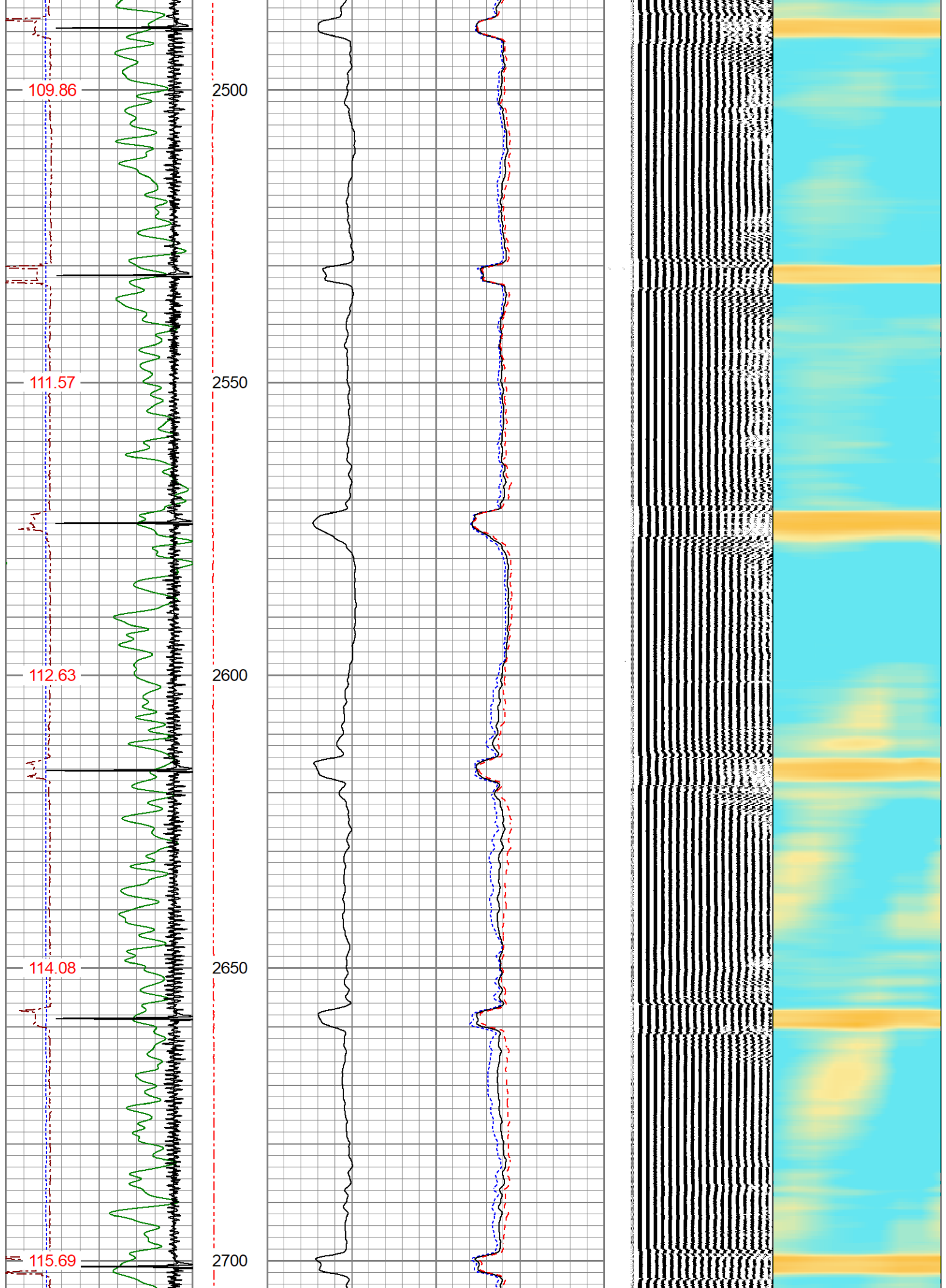


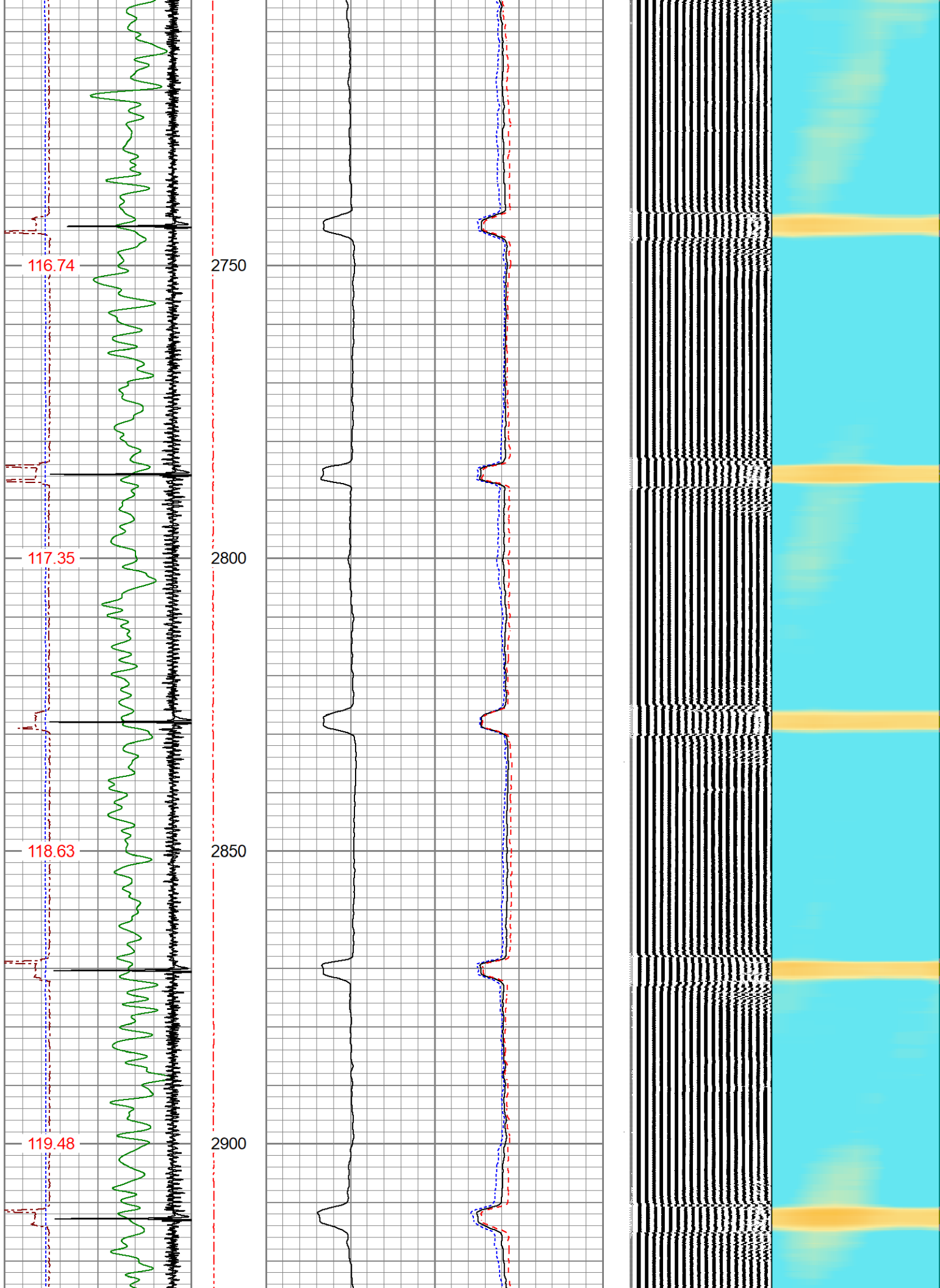


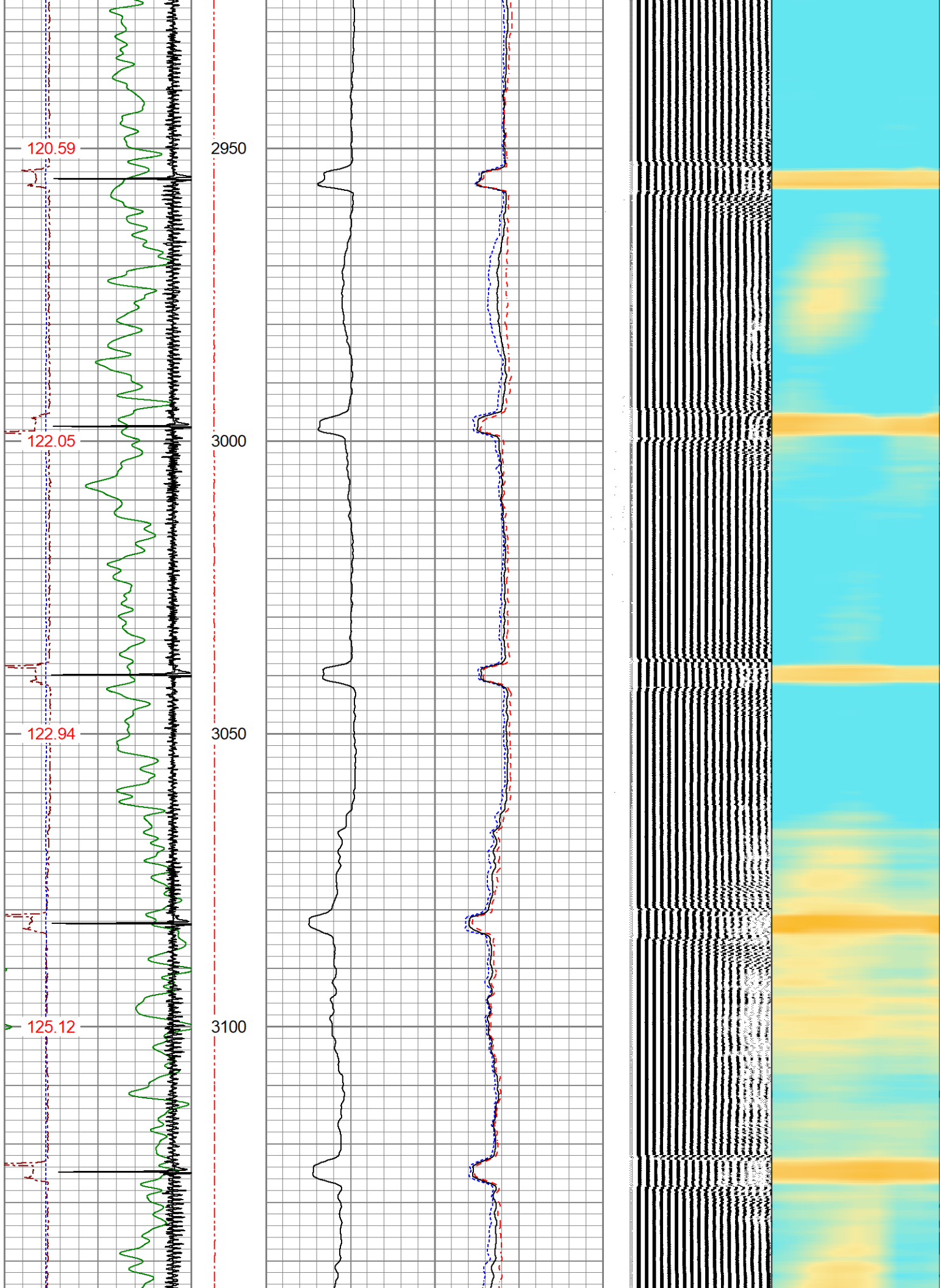


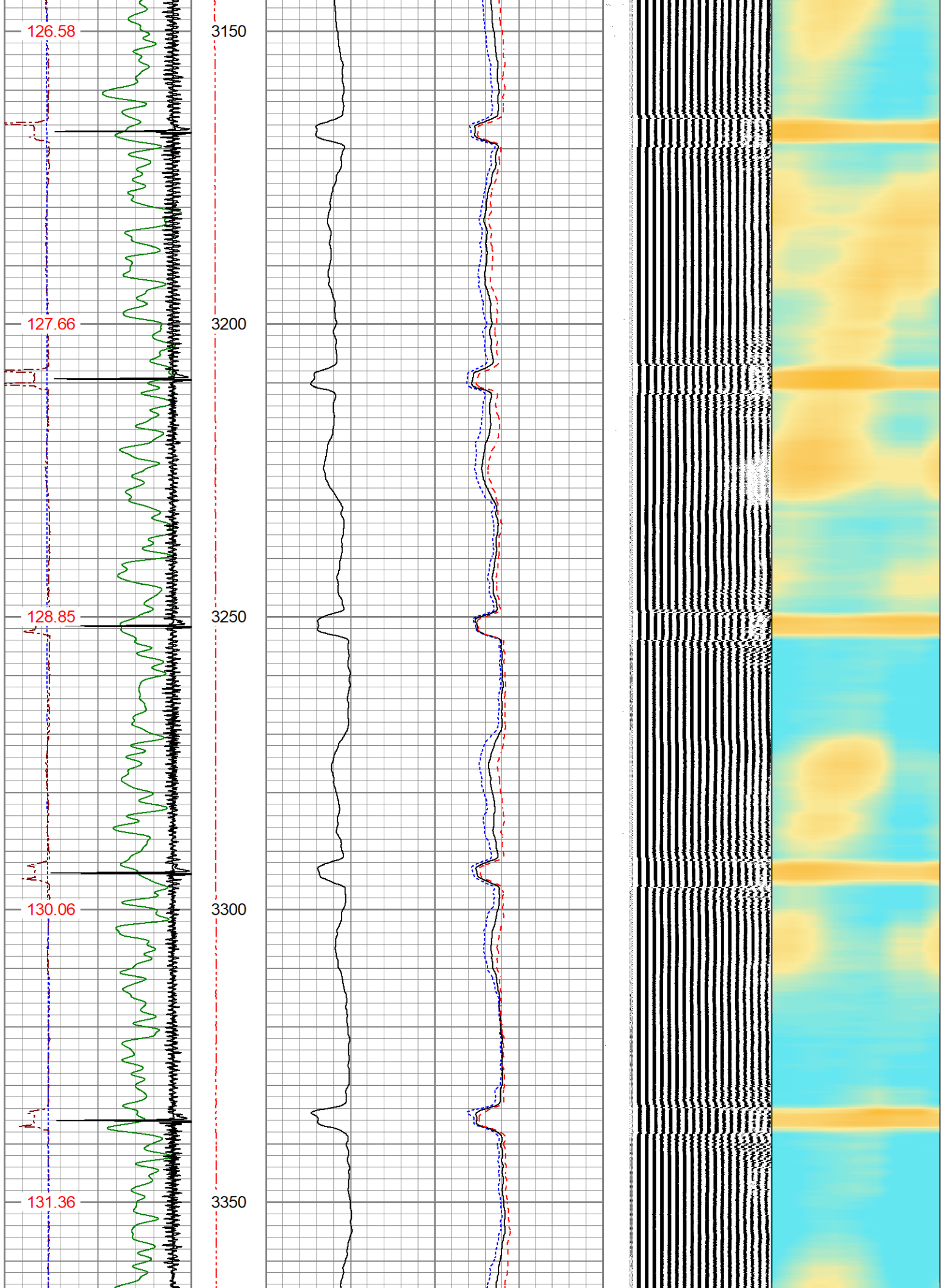


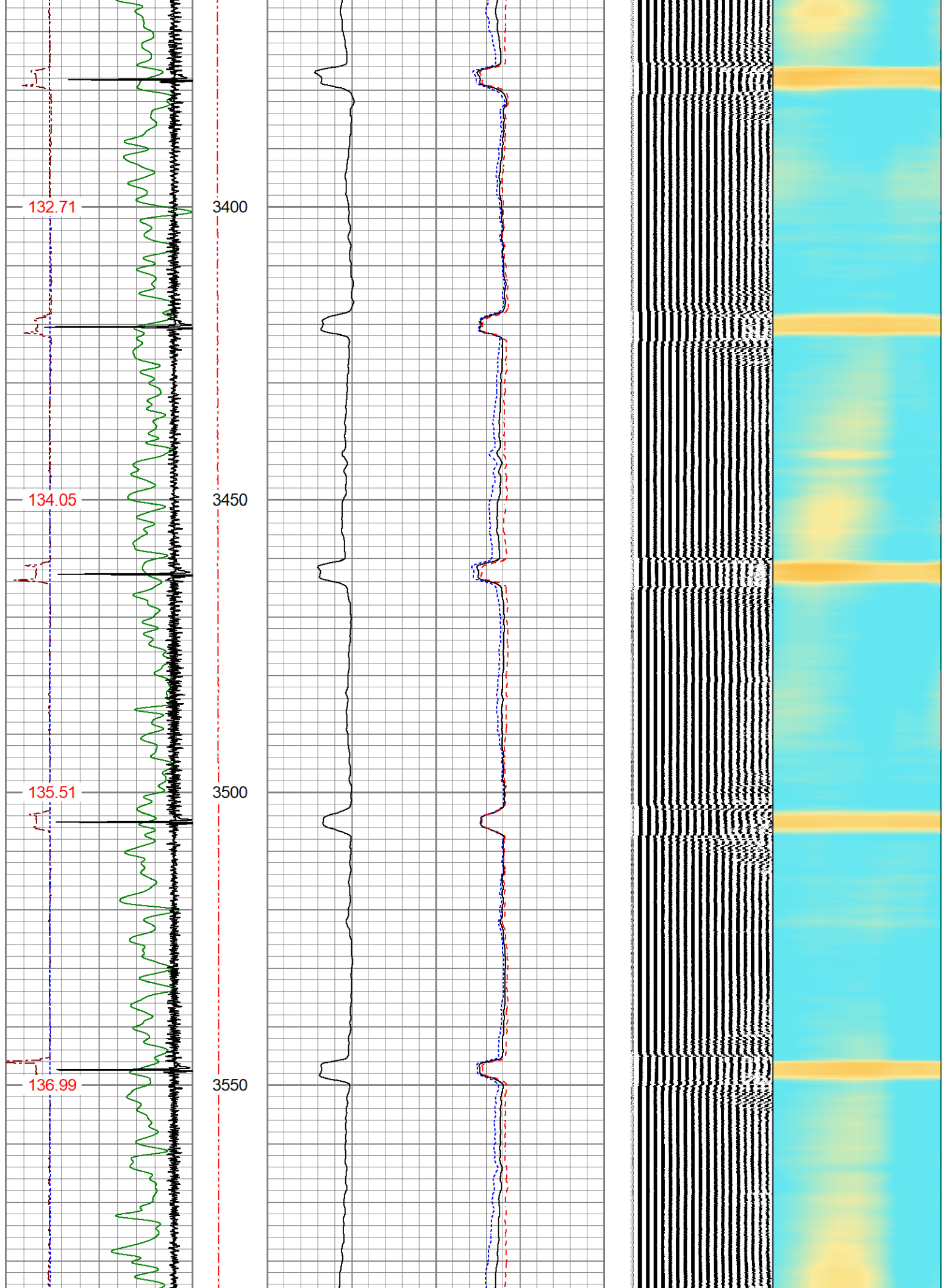


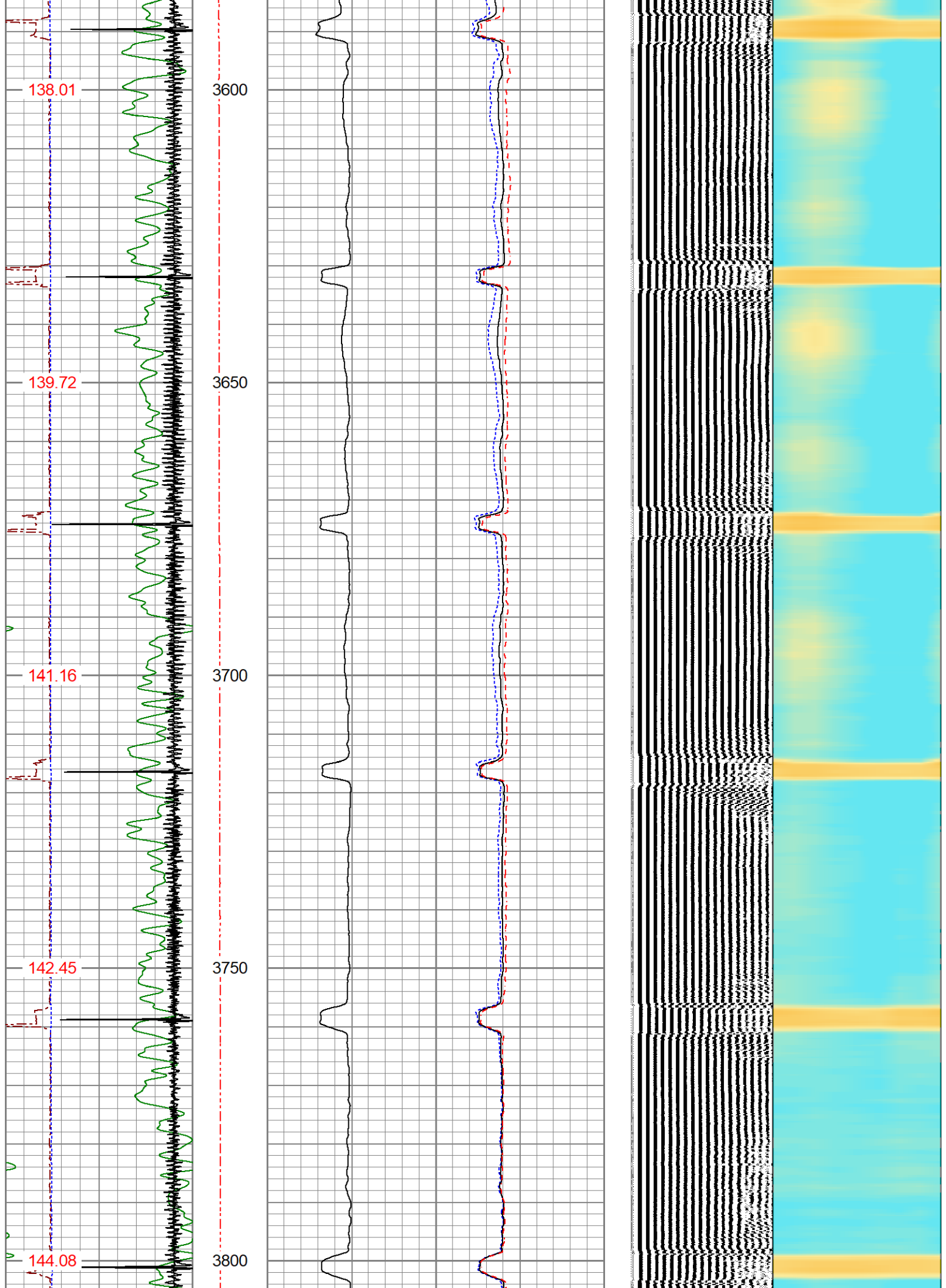


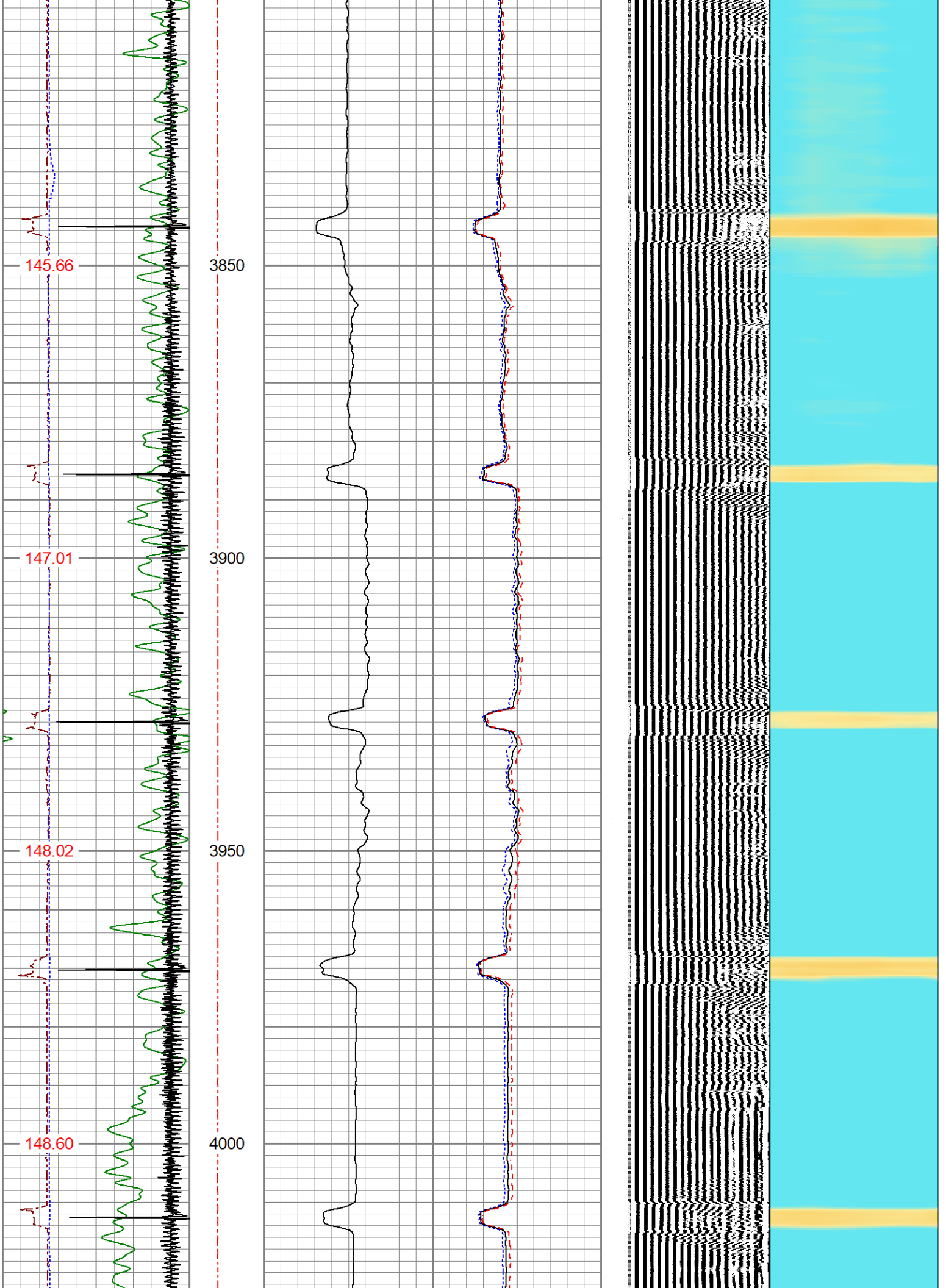


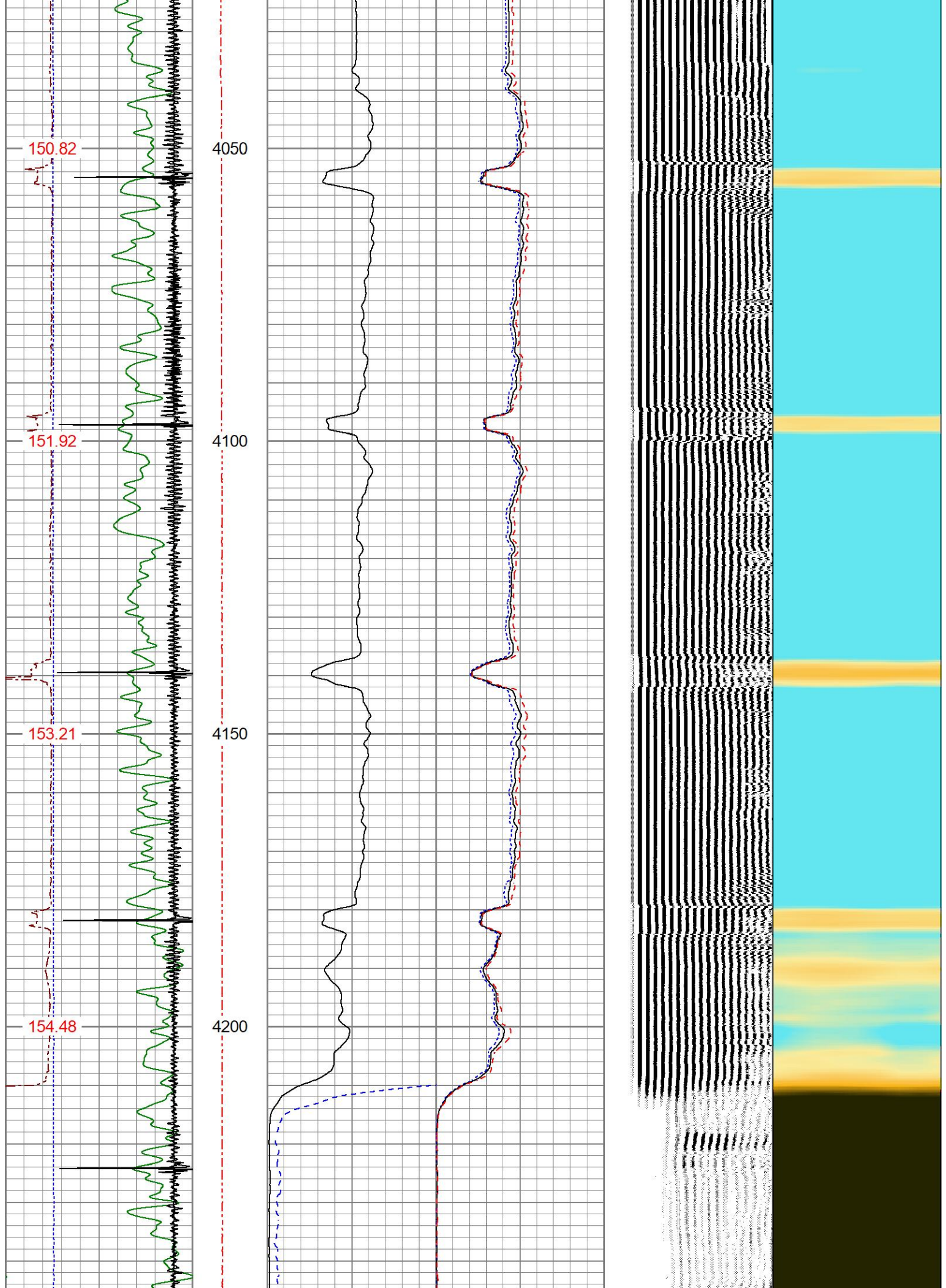


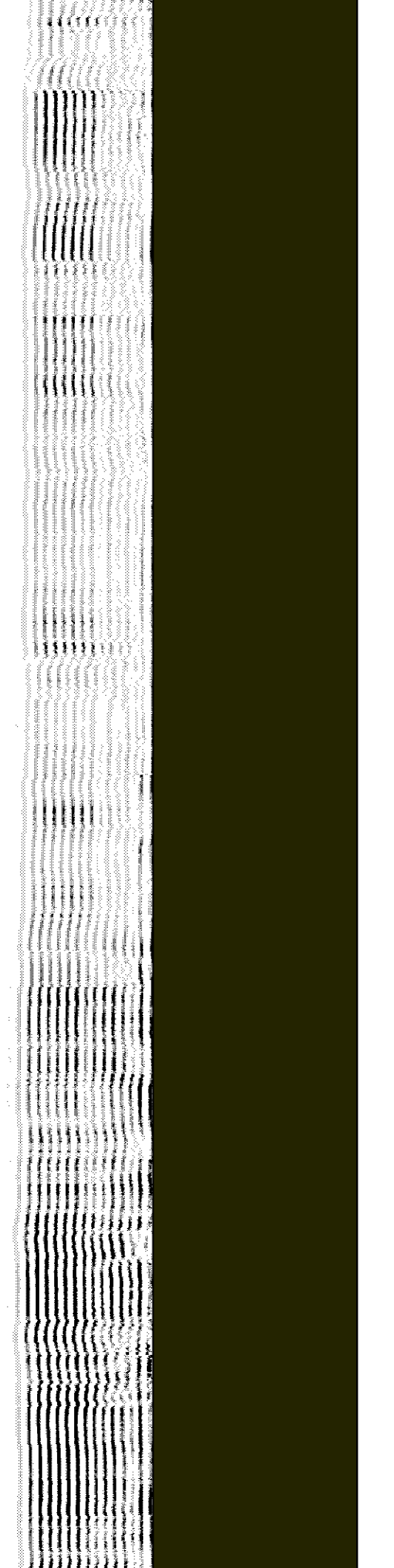
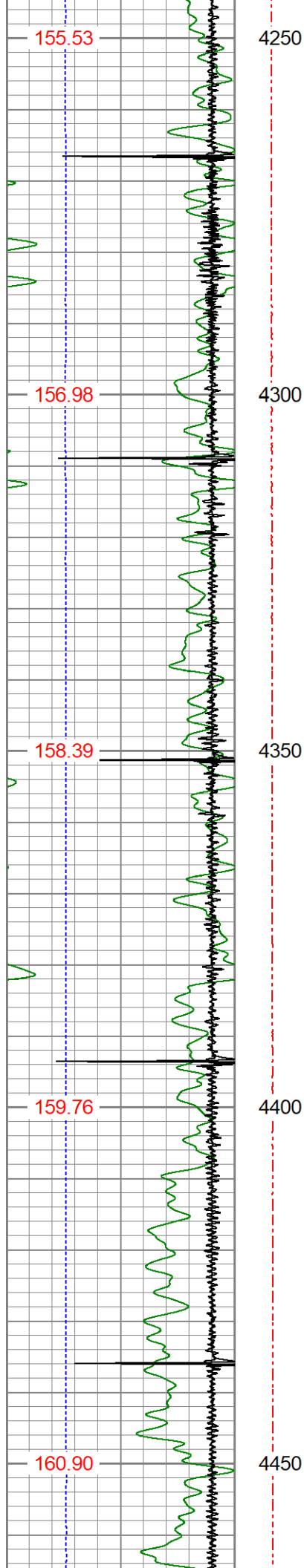


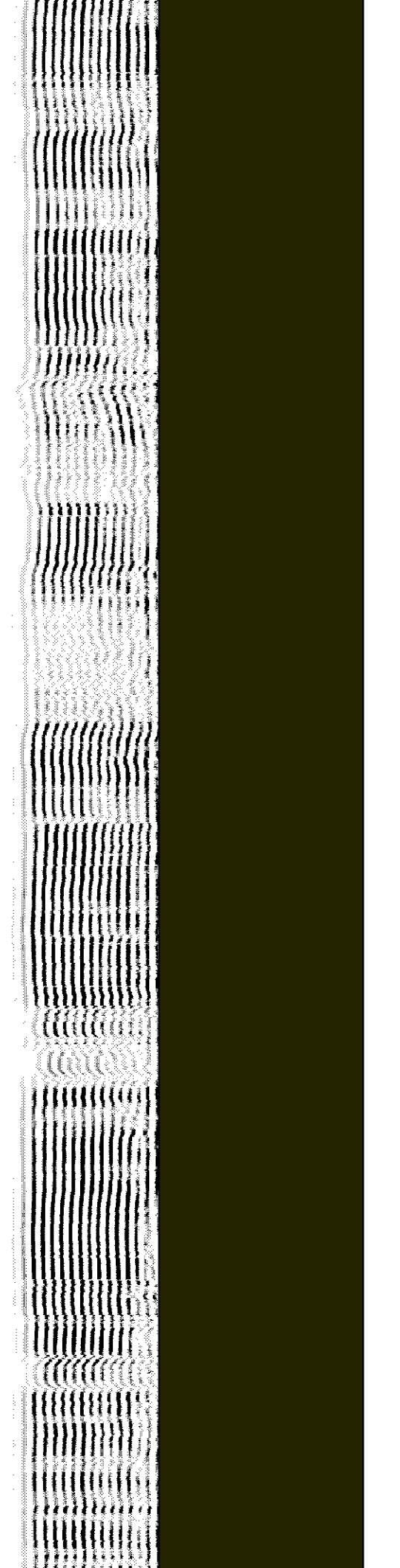
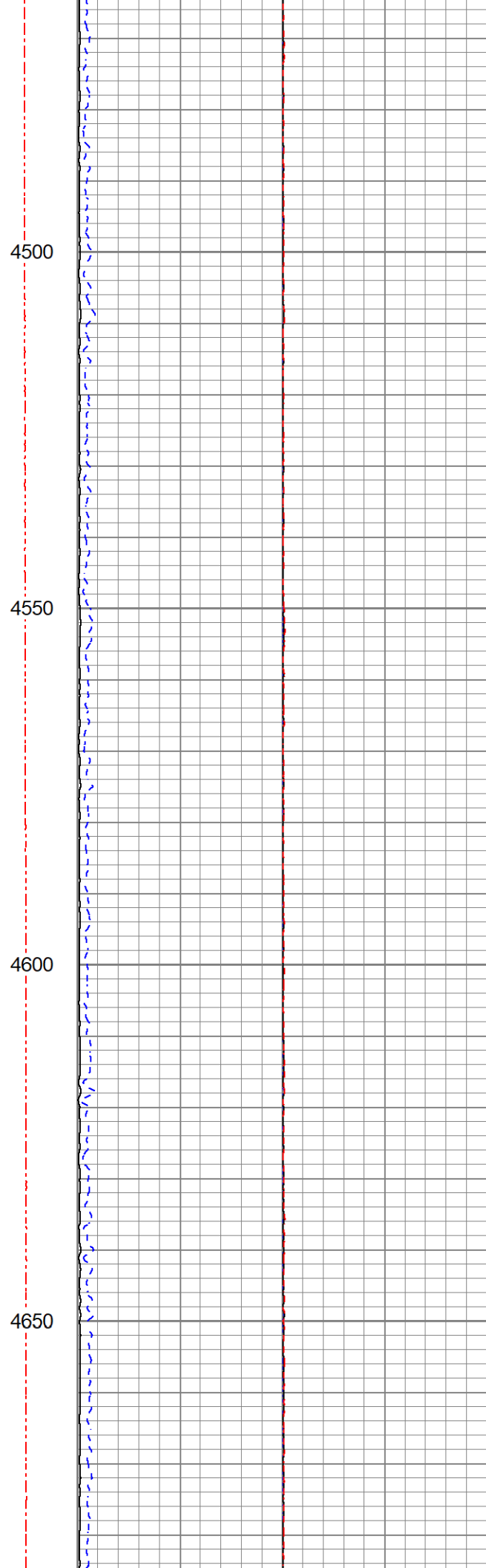
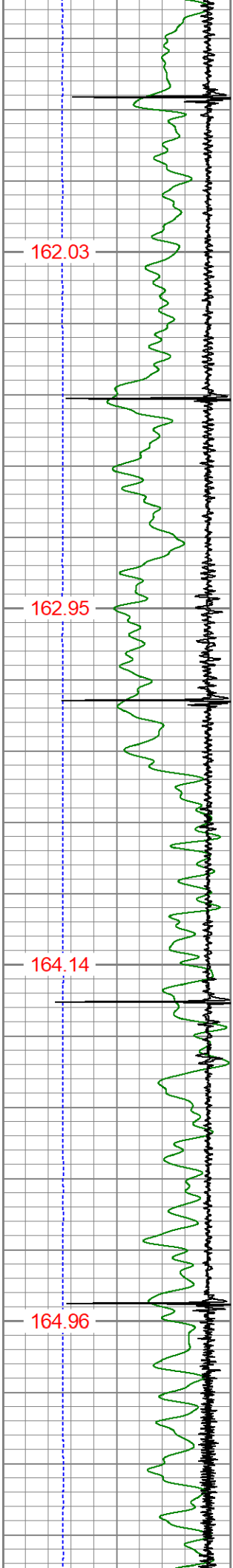


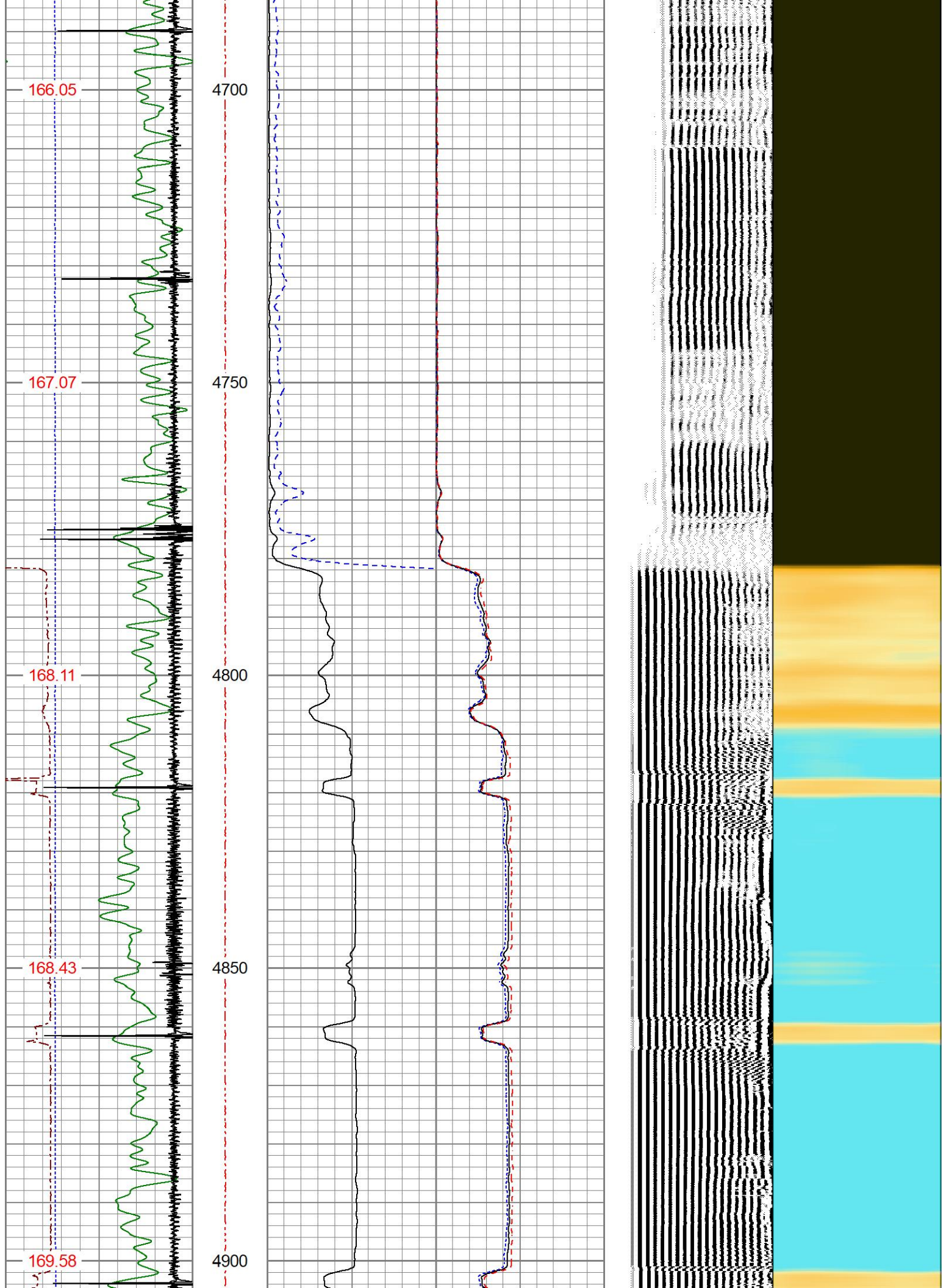


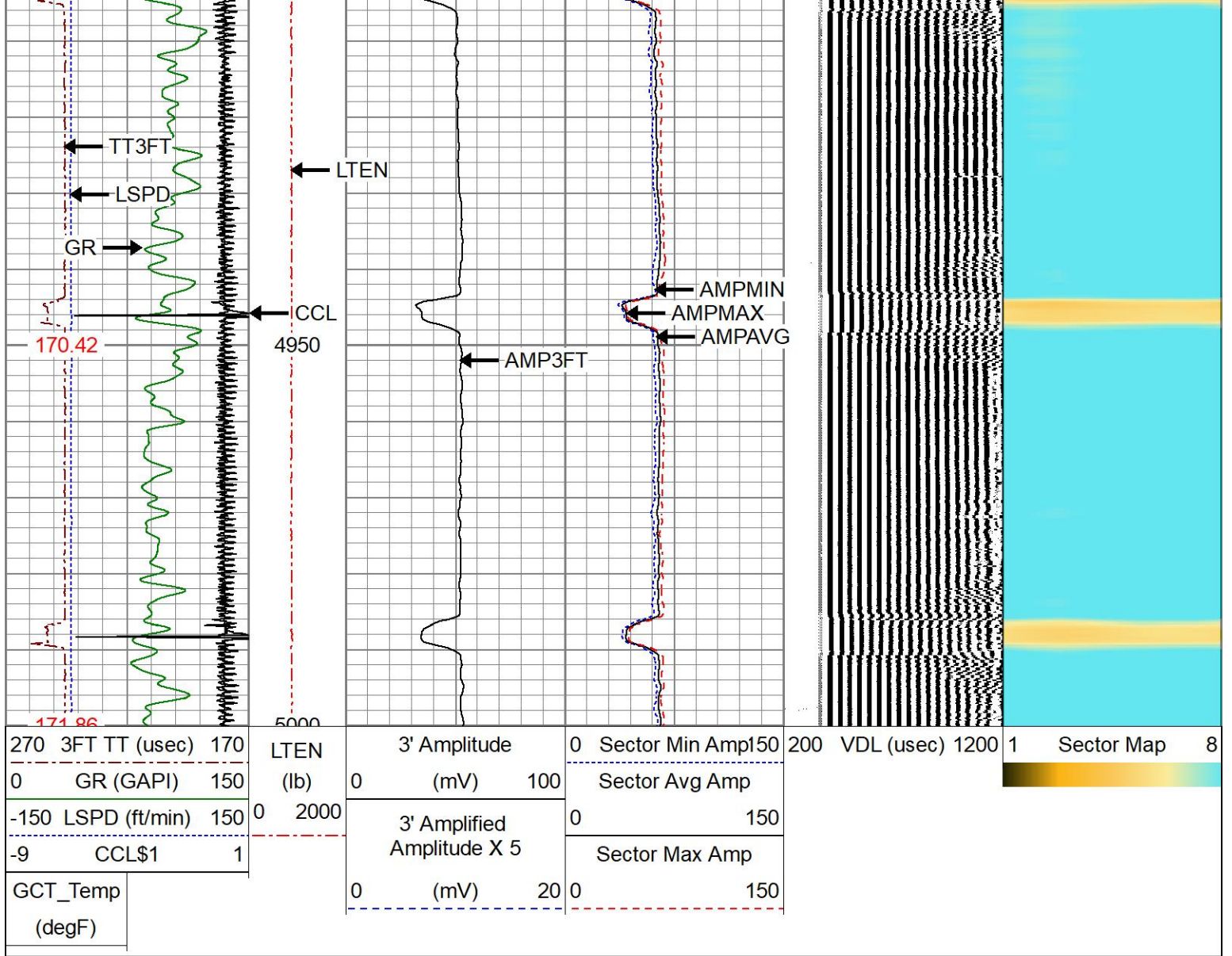








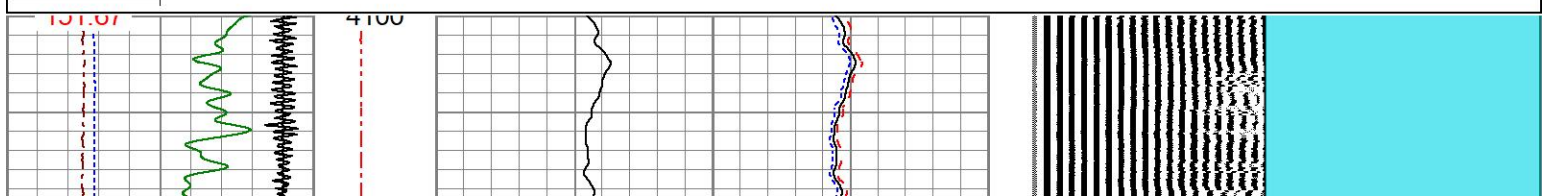
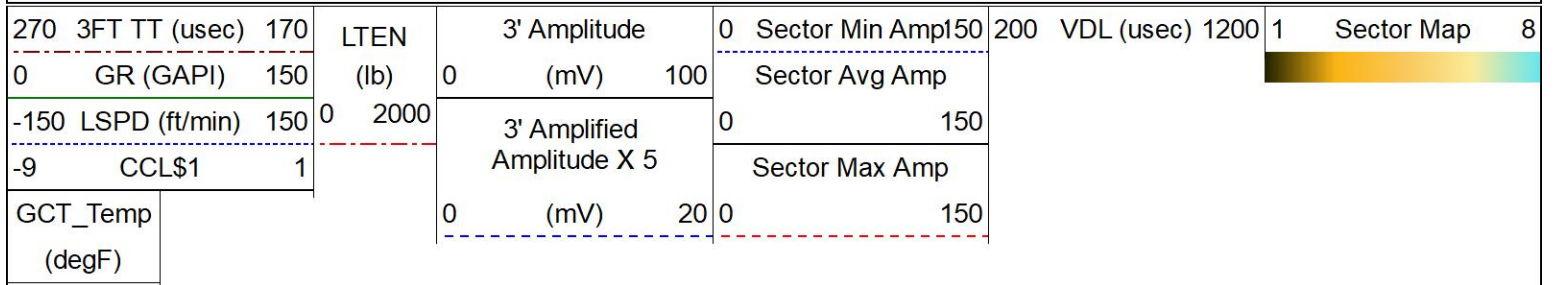


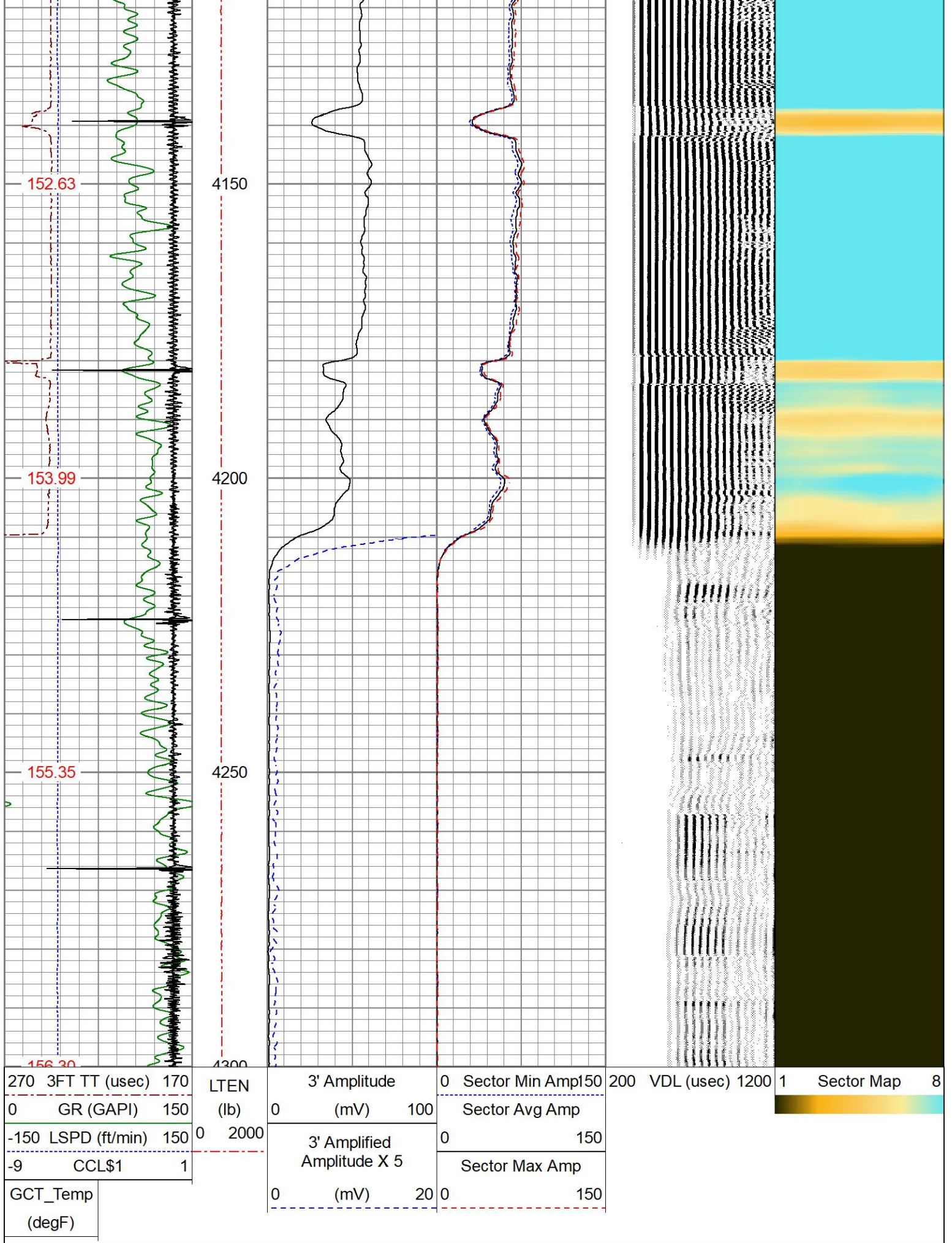


REPEAT PASS

ZERO PSI APPLIED AT SURFACE

Database File 1007-575280_oxy_hsr-coyle 13-18a_0512320312_20230801_scbl-gr-ccl.db
 Dataset Pathname pass2
 Presentation Format res_scbl 8sec-gr-ccl
 Dataset Creation Tue Aug 01 07:30:58 2023
 Charted by Depth in Feet scaled 1:240





Calibration Report

Database File 1007-575280_oxy_hsr-coyle 13-18a_0512320312_20230801_scbl-gr-ccl.db
 Dataset Pathname pass4
 Dataset Creation Tue Aug 01 07:37:51 2023

Gamma Ray Calibration Report

Serial Number: GCT275-0BP0_base
 Tool Model: GCT275-0BP0
 Performed: Wed Jul 5 12:09:16 2023

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

Sensitivity: 1.0000 GAPI/cps

Inclinometer Calibration Report

Performed: Mon Jan 9 07:52:31 2023

	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	-956.00	943.00	-1.00	1.00	gee
Y Accelerometer	-965.00	910.00	-1.00	1.00	gee
Z Accelerometer	19.11	-882.49	0.00	1.00	gee

Segmented Cement Bond Log Calibration Report

Serial Number: RBT275C_Base
 Tool Model: RADII-275C

Calibration Casing Diameter: 4.500 in
 Calibration Depth: 21.483 ft

Master Calibration, performed Tue Aug 1 07:09:53 2023:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	1.078	0.700	81.196	74.646	0.700
CAL	0.000	1.077				
5'	0.000	1.005	0.700	81.196	80.075	0.700
SUM						
S1	0.000	1.078	0.000	100.000	92.732	0.000
S2	0.000	1.082	0.000	100.000	92.379	0.000
S3	0.000	1.080	0.000	100.000	92.607	0.000
S4	0.000	1.065	0.000	100.000	93.922	0.000
S5	0.000	1.067	0.000	100.000	93.711	0.000
S6	0.000	1.067	0.000	100.000	93.720	0.000
S7	0.000	1.078	0.000	100.000	92.765	0.000
S8	0.000	1.086	0.000	100.000	92.107	0.000

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset

CAL 0.000 0.000 0.000 1.077 1.000 0.000

Air Zero Calibration, performed Tue Aug 1 07:08:28 2023:

	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

Inclinometer Calibration Report

Performed:	Mon Jan 9 07:52:41 2023				
	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	-918.00	908.00	-1.00	1.00	gee
Y Accelerometer	-941.00	887.00	-1.00	1.00	gee
Z Accelerometer	1.35	894.18	0.00	1.00	gee



Company **OCCIDENTAL PETROLEUM CORP.**
 Well **COYLE 13-18A**
 Field **WATTENBERG**
 County **WELD**
 State **COLORADO**