



**SECTOR CEMENT BOND
GAMMA RAY
CCL LOG**

Comp. OCCIDENTAL PETROLEUM CORP.
Well BACKSTROM 18-9
Field WATTENBERG
Co. WELD
State COLORADO

Company **OCCIDENTAL PETROLEUM CORP.**
Well **BACKSTROM 18-9**
Field **WATTENBERG**
County **WELD** State **COLORADO**

Location: API # : 05-123-21756
1065' FNL & 1567' FWL
SEC 9 TWP 3N RGE 66W
Permanent Datum GL Elevation 4817'
Log Measured From KB 12' Above Perm. Datum
Drilling Measured From KB
Other Services
NONE
K.B. 4829'
D.F. N/A
G.L. 4817'

Date of Service	05-JUN-2025				
Run Number	ONE				
Depth Driller or PBTD	7490'				
Depth Logger	6290'				
Bottom Log Interval	6290'				
Top Log Interval	SURFACE				
Open Hole Size	7-7/8"				
Type Fluid	H2O				
Fluid Level	SURFACE				
Fluid Density	N/A				
Max. Recorded Temperature	228° F.				
Max. Wellhead Pressure	ZERO PSI				
Wellhead Connection	7-1/16" 5K				
Estimated Cement Top	SEE LOG				
Unit Number	L-05				
Wireline Size	9/32"				
Location	BRIGHTON				
Recorded By	J. KOTT				
Witnessed By	JOSE CASTILLO				
Surface Casing	8-5/8"	Size	WFt	Top	Bottom
Production Casing	4-1/2"		24#	SURFACE	620'
Liner Casing			11.6#	SURFACE	7490'
Tubing Record					

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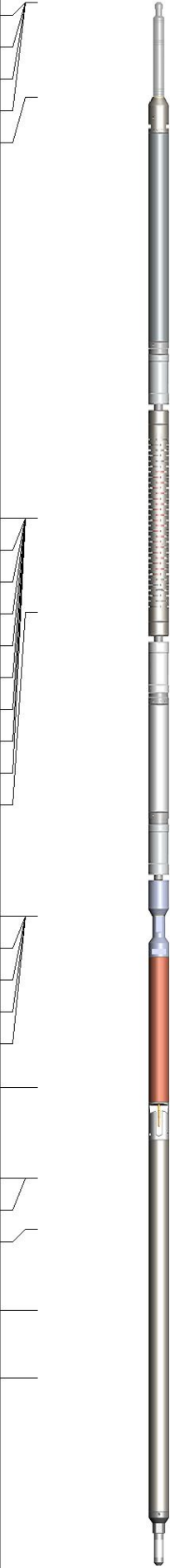
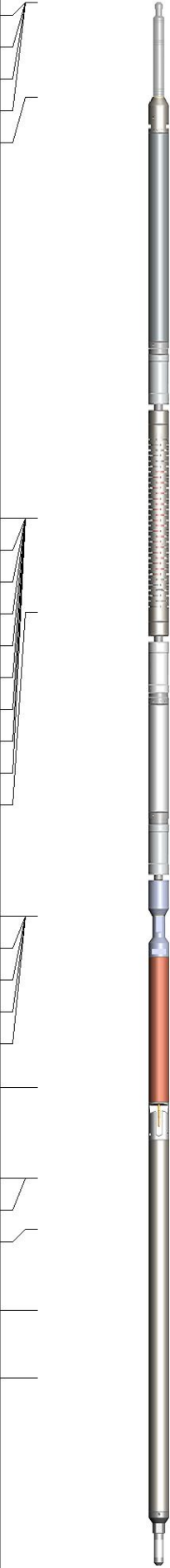
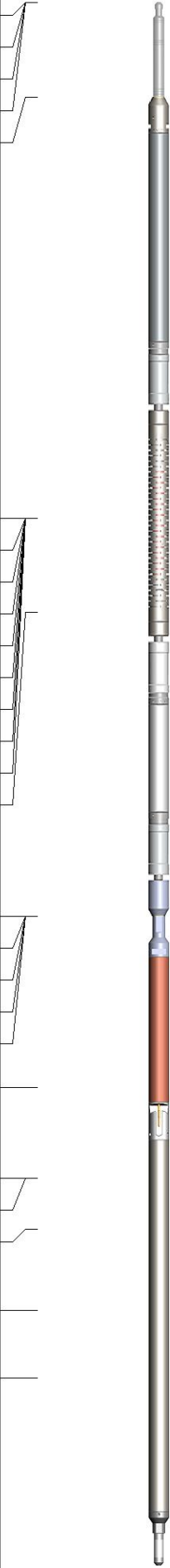
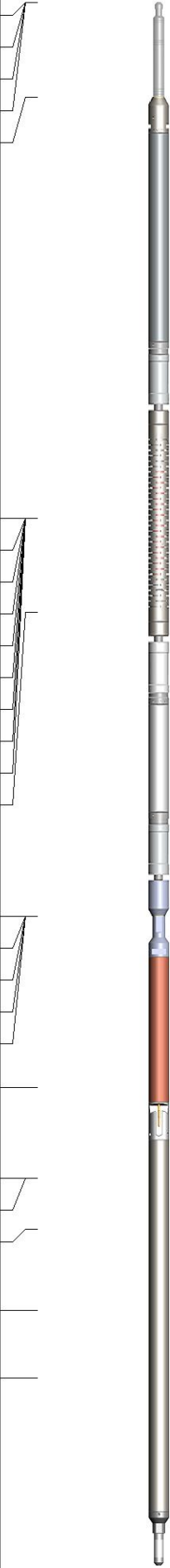
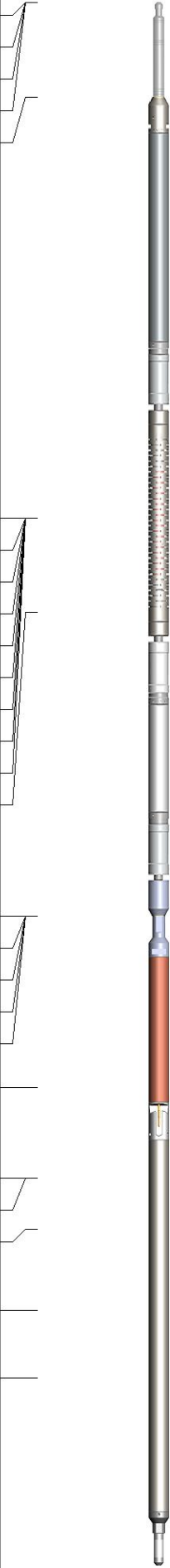
All interpretations are opinions based on inferences from electrical or other measurements and Ranger Energy Services cannot and does not guarantee the accuracy or correctness of any interpretation, and Ranger Energy Services will not be liable or responsible for any loss, costs, damages, or expenses 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 #05-1013694

Your Ranger Energy Services Crew	Tool Data - Services	Serial Number
Engineer: J. KOTT	PROBE 2-3/4" RBT	FW2208-107
Operator: C. MARCH	PROBE GR/CCL	FW2204-017
Operator: J. VINES		
Operator:		

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GCT_FMWR	16.71		Cable_Head-1_7/16 Titan 1 7/16" Cable Head	1.02	1.44	3.31
mSec_Count	16.71					
RBT_Status	16.71					
Error_Ct	16.71					
RBT_HV	15.69					
			RBT8-RADII-275C (RBT275C_Base) Probe 2.75" RADII 8 Sector Bond Tool	8.75	2.75	
WVFS8	11.19					
WVFS7	11.19					
WVFS6	11.19					
WVFS5	11.19					
WVFS4	11.19					
WVFS3	11.19					
WVFS2	11.19					
WVFS1	11.19					
WVF3FT	11.19					
WVF5FT	10.19					
						
RBT_ACCZ	6.94					
RBT_ACCY	6.94					
RBT_ACCX	6.94					
WVFSYNC	6.94					
WVFCAL	6.94					
GCT_HV	5.10					
			GCacc-GCT275-0000 (GCT275-0000_base) Probe 2.75" Gamma Ray - CCL w/ Temp	6.61	2.75	65.00
CCL\$2	4.14					
CCL\$1	4.14					
GCT_Temp	3.59					
			Plug-FA108-0000 1.38" Bull Plug	0.33	1.38	1.00

Dataset: 105-1013694_oxy_backstrom 18-9_0512321756_20250605_scbl-gr-ccl.db: field/well/run1/pass4
 Total length: 16.71 ft
 Total weight: 69.31 lb
 O.D.: 2.75 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\05-1013694_oxy_backstrom 18-9_0512321756_20250605
 Dataset field/well/run1/pass4/_vars_

Top - Bottom

BOREID in 7.875	BOTTEMP degF 228	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 75	TDEPTH ft 6290				

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

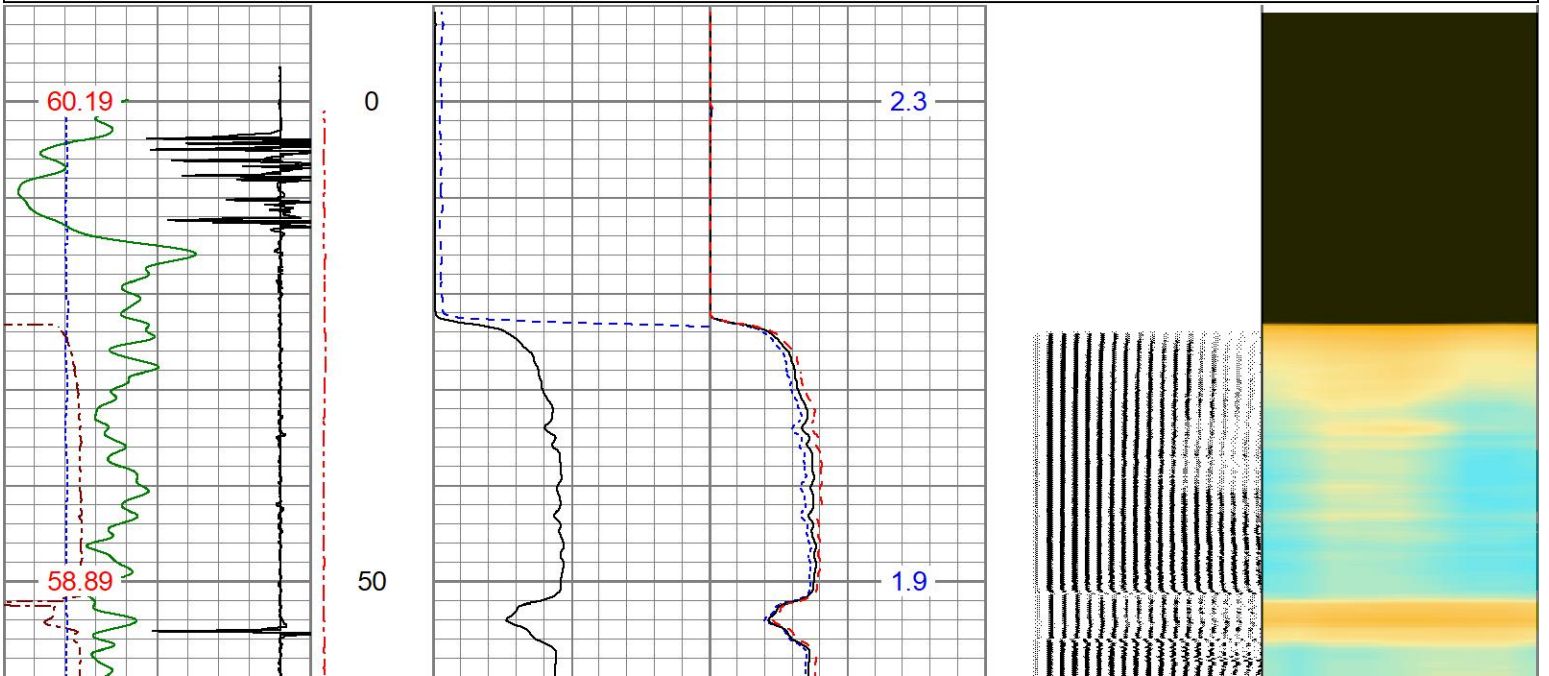


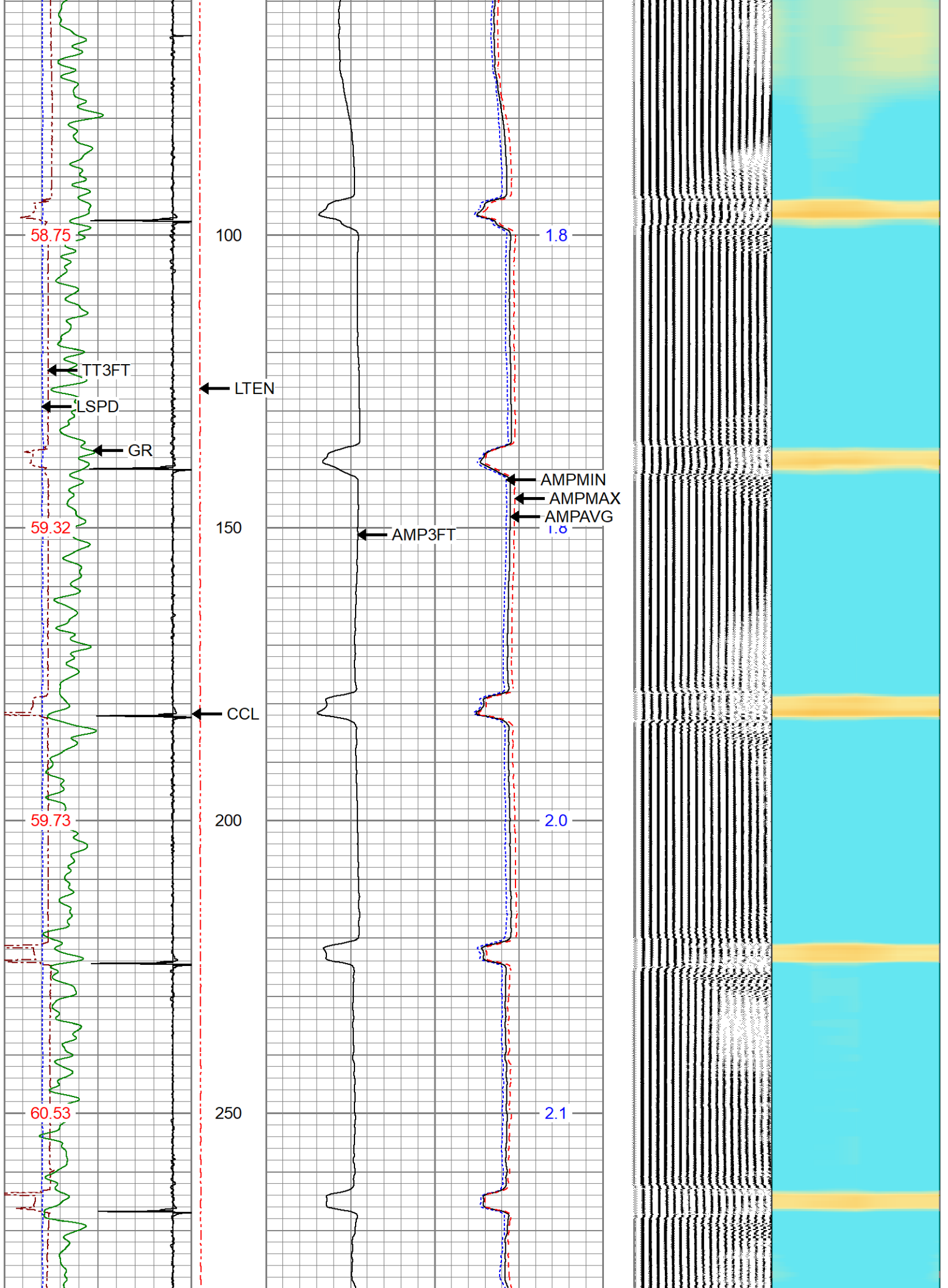
MAIN PASS

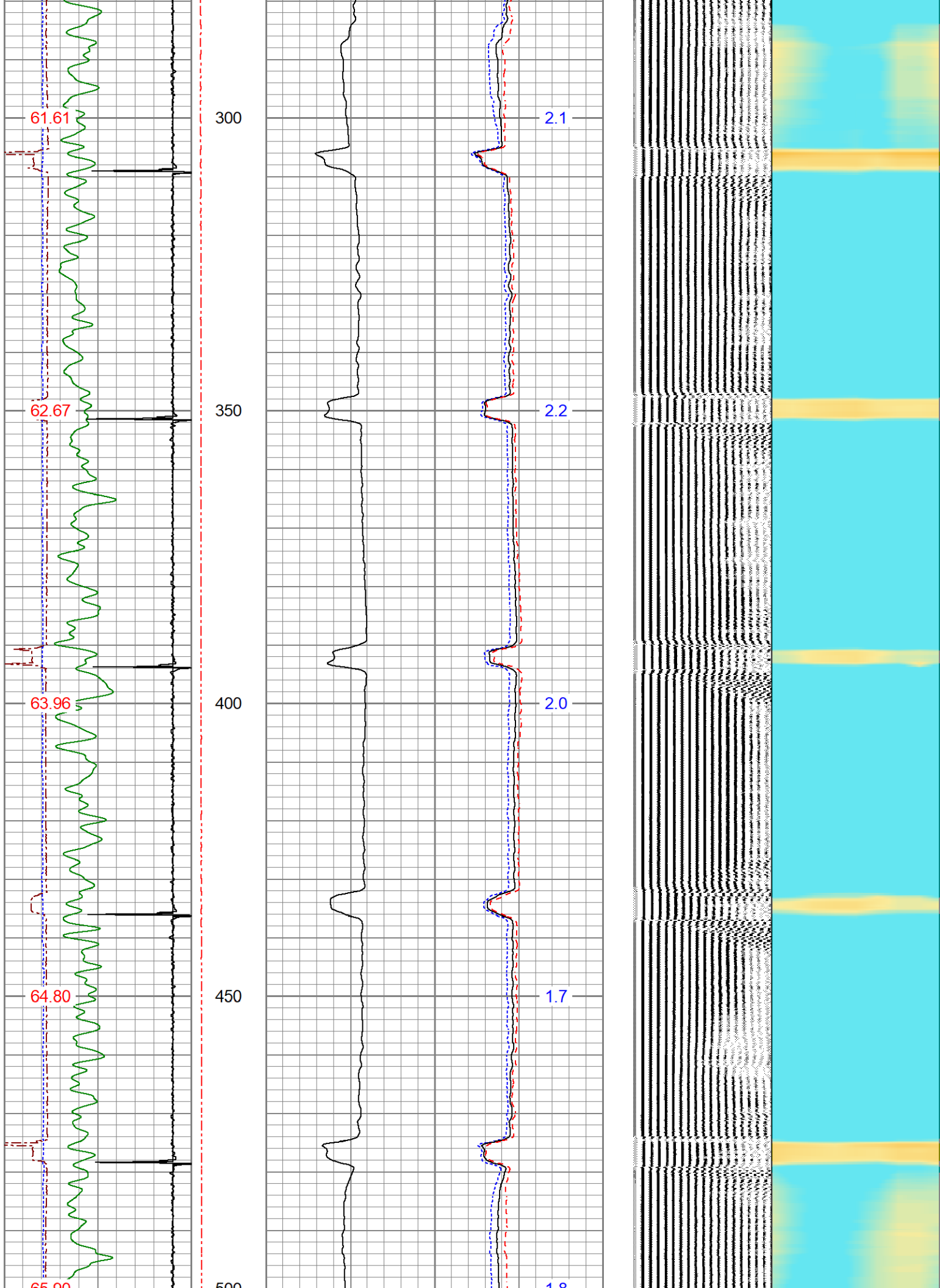
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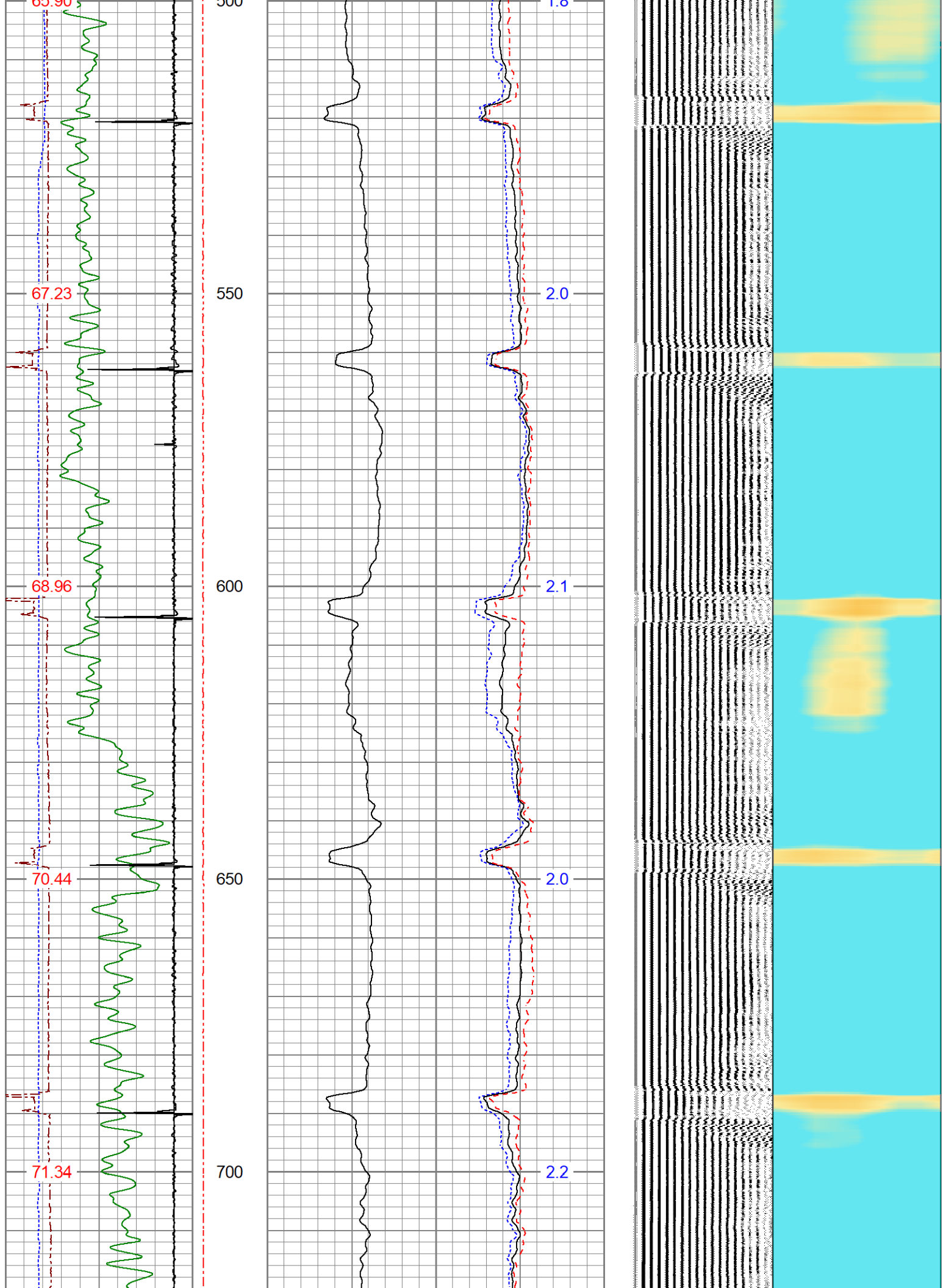
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 Presentation Format res_scbl 8sec-gr-ccl
 Dataset Creation Thu Jun 05 14:11:11 2025
 Charted by Depth in Feet scaled 1:240

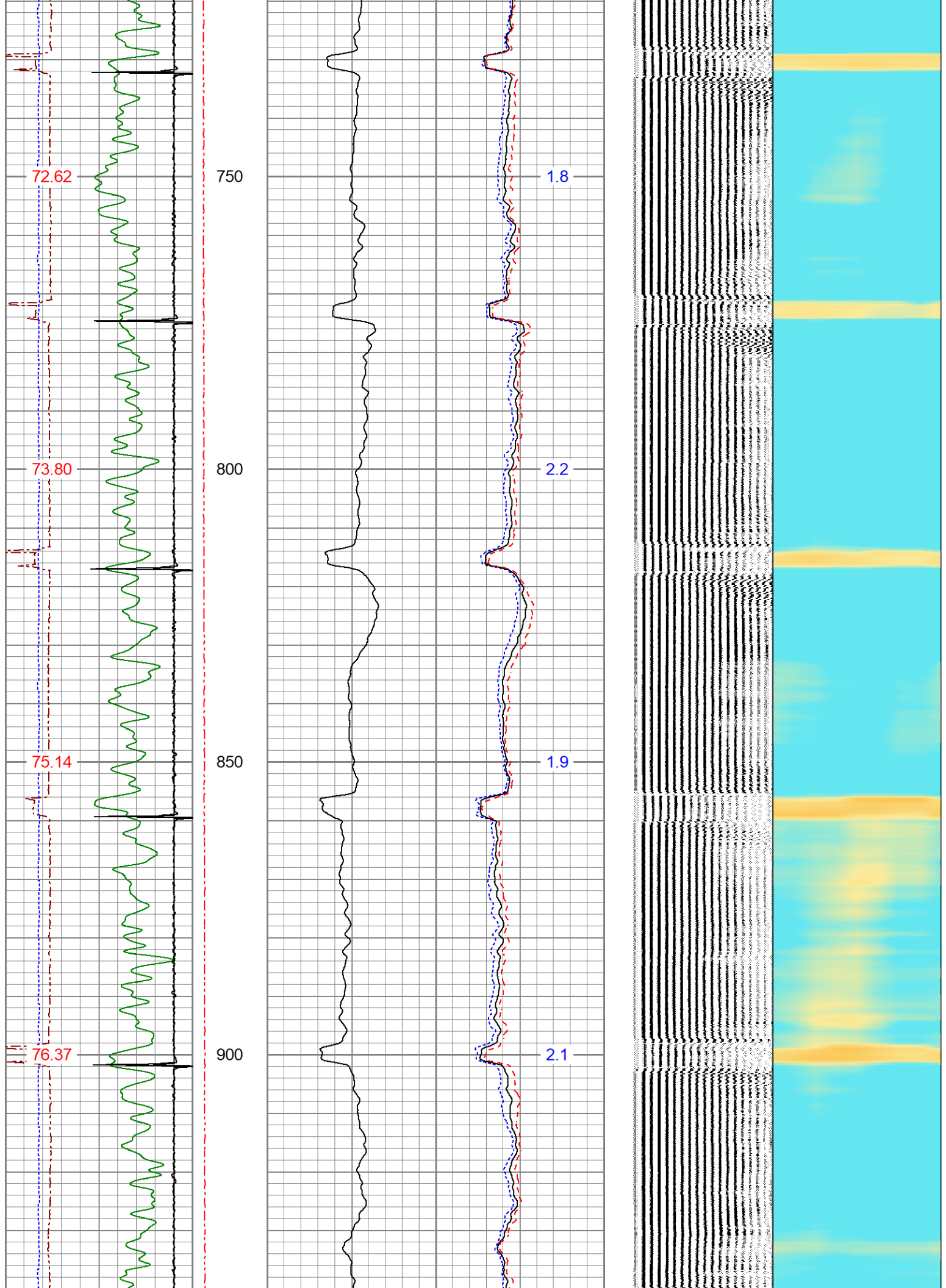
290 3FT TT (usec) 190	LTEN	3' Amplitude	0 Sector Min Amp150	200 VDL (usec) 1200	1 Sector Map 8
0 GR (GAPI) 150	(lb)	(mV) 100	Sector Avg Amp		
-150 LSPD (ft/min) 150	0 2000	3' Amplified	0 150		
-9 CCL\$1 1		Amplitude X 5	Sector Max Amp		
GCT_Temp		(mV) 20	0 150		
(degF)			DEVIATION		
			(deg)		

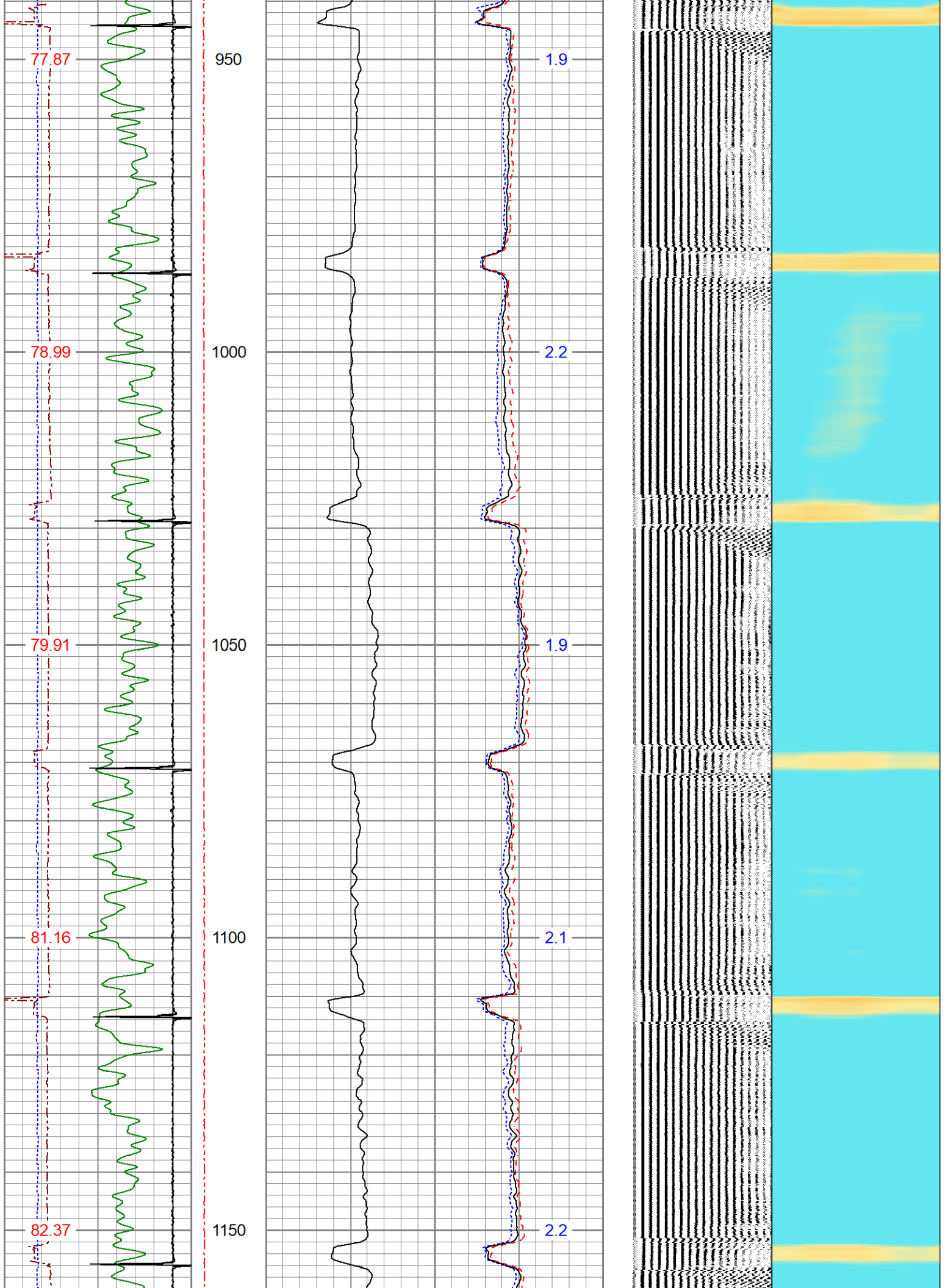


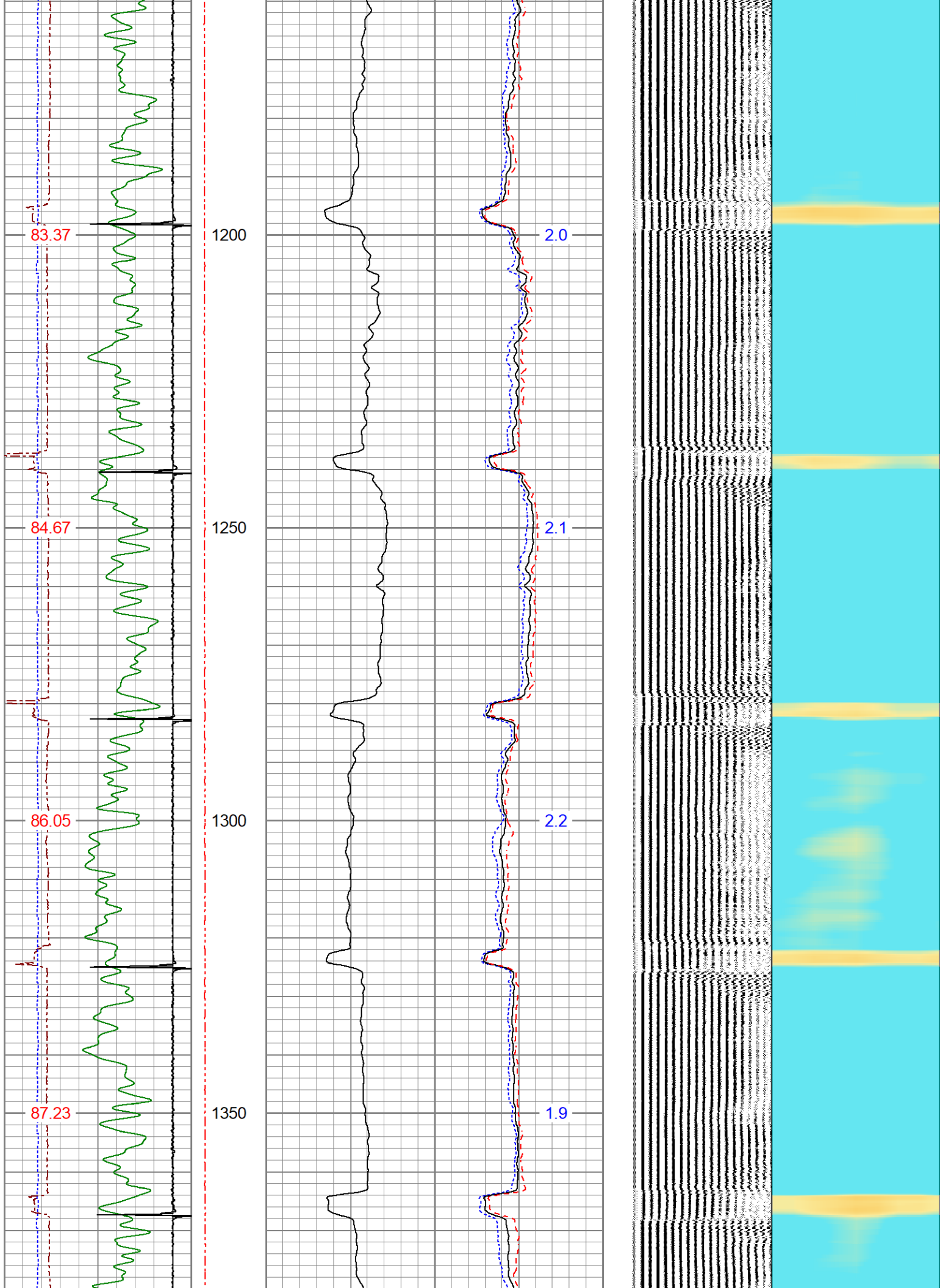


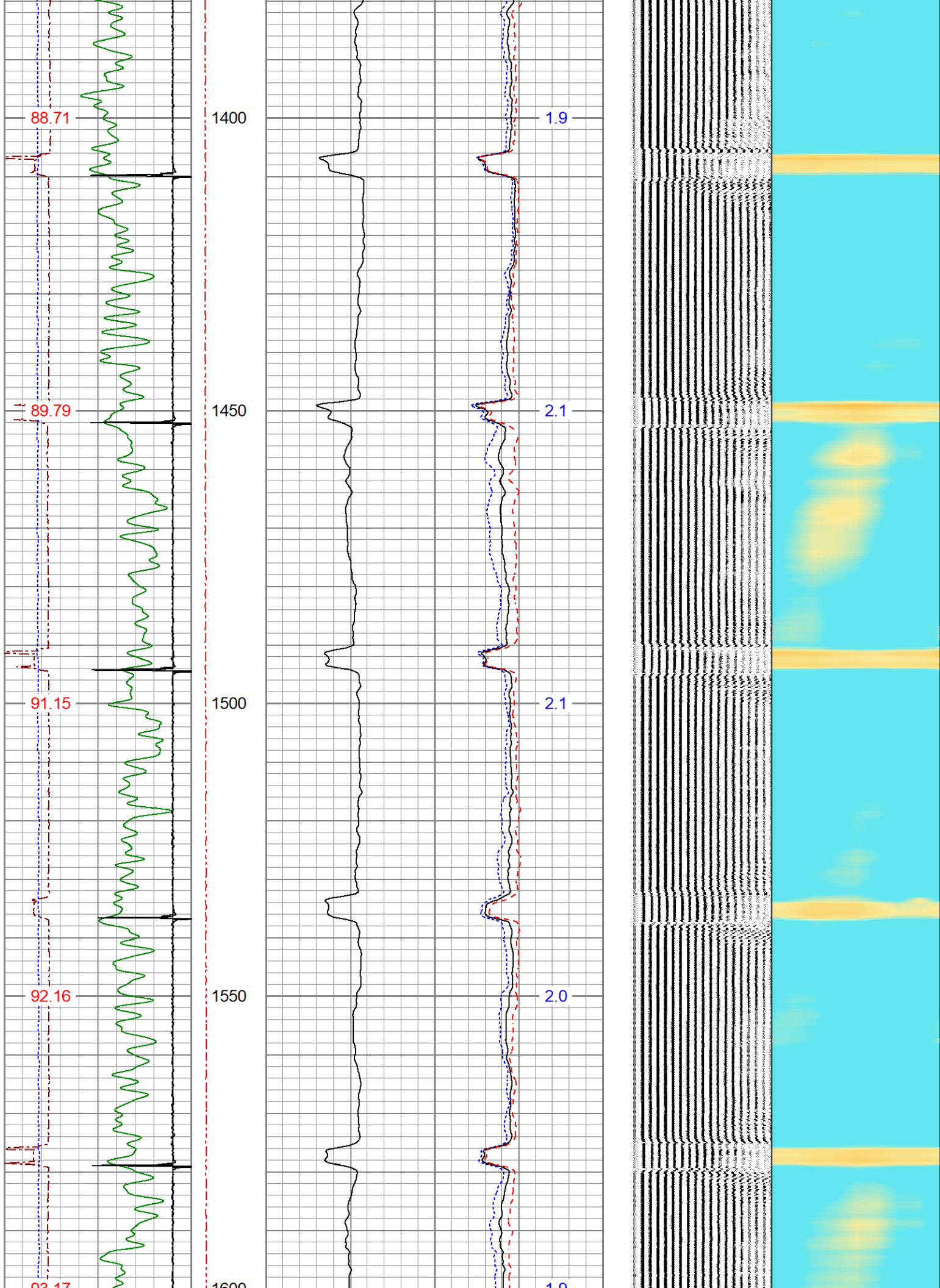


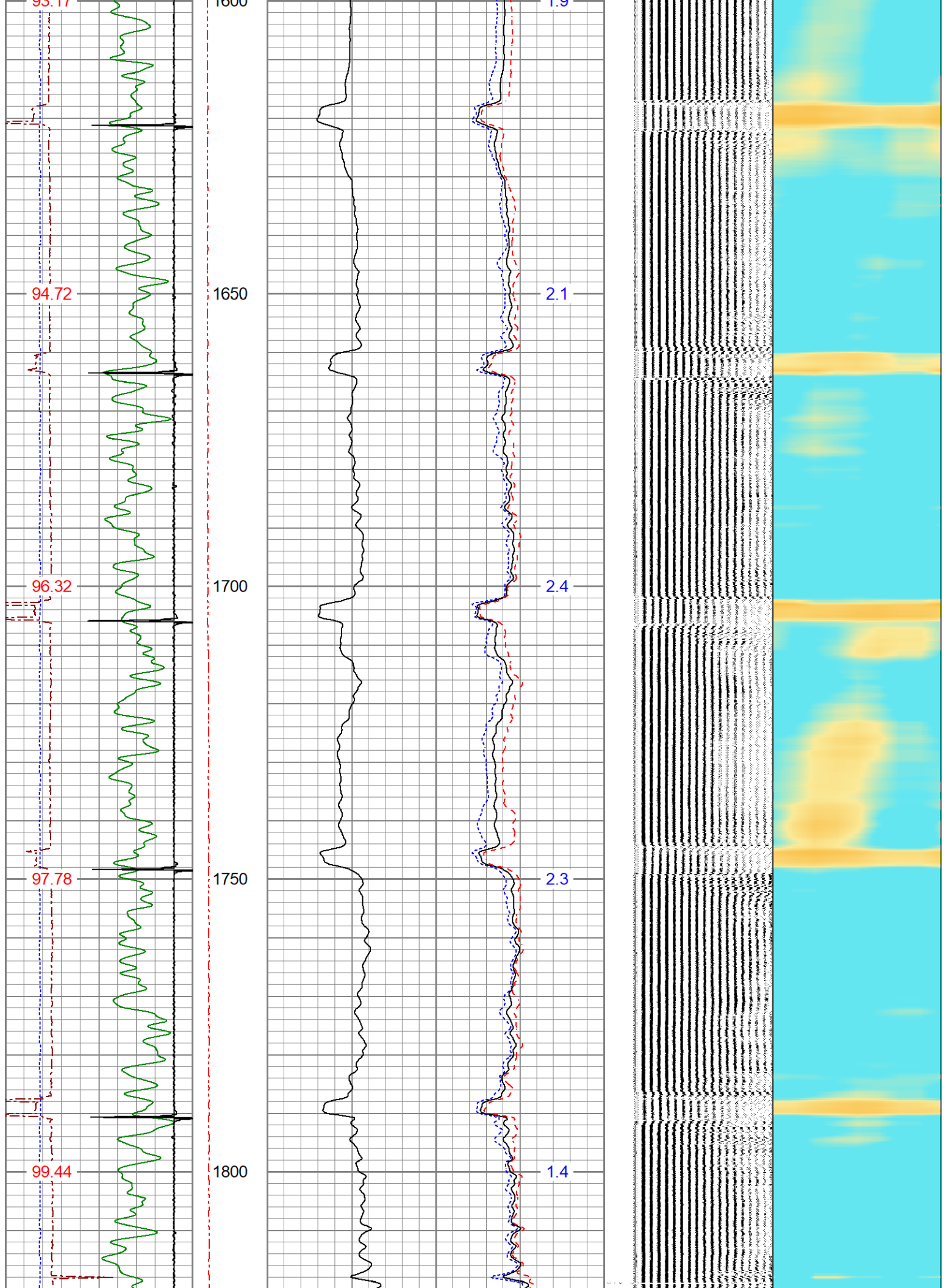


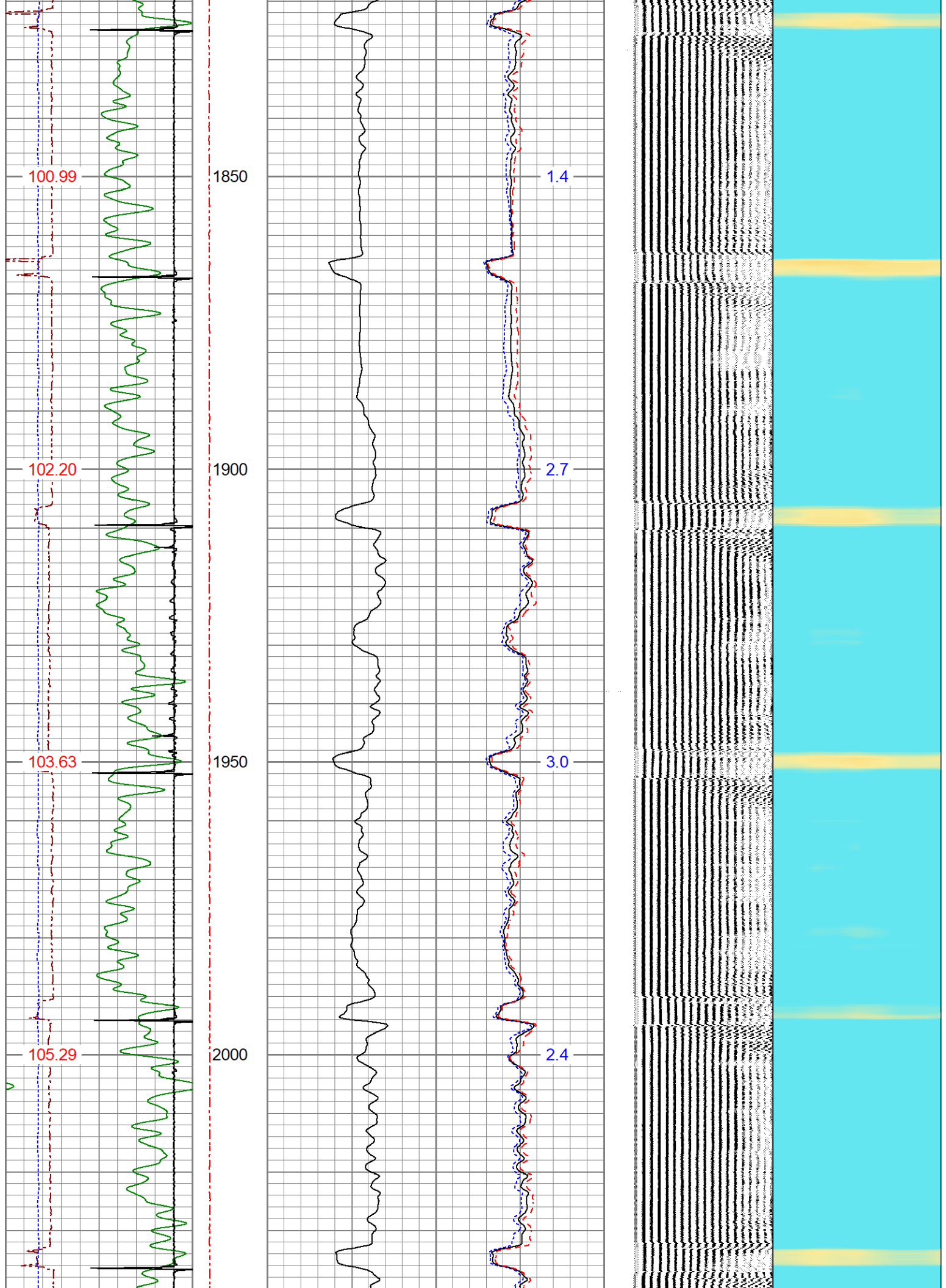


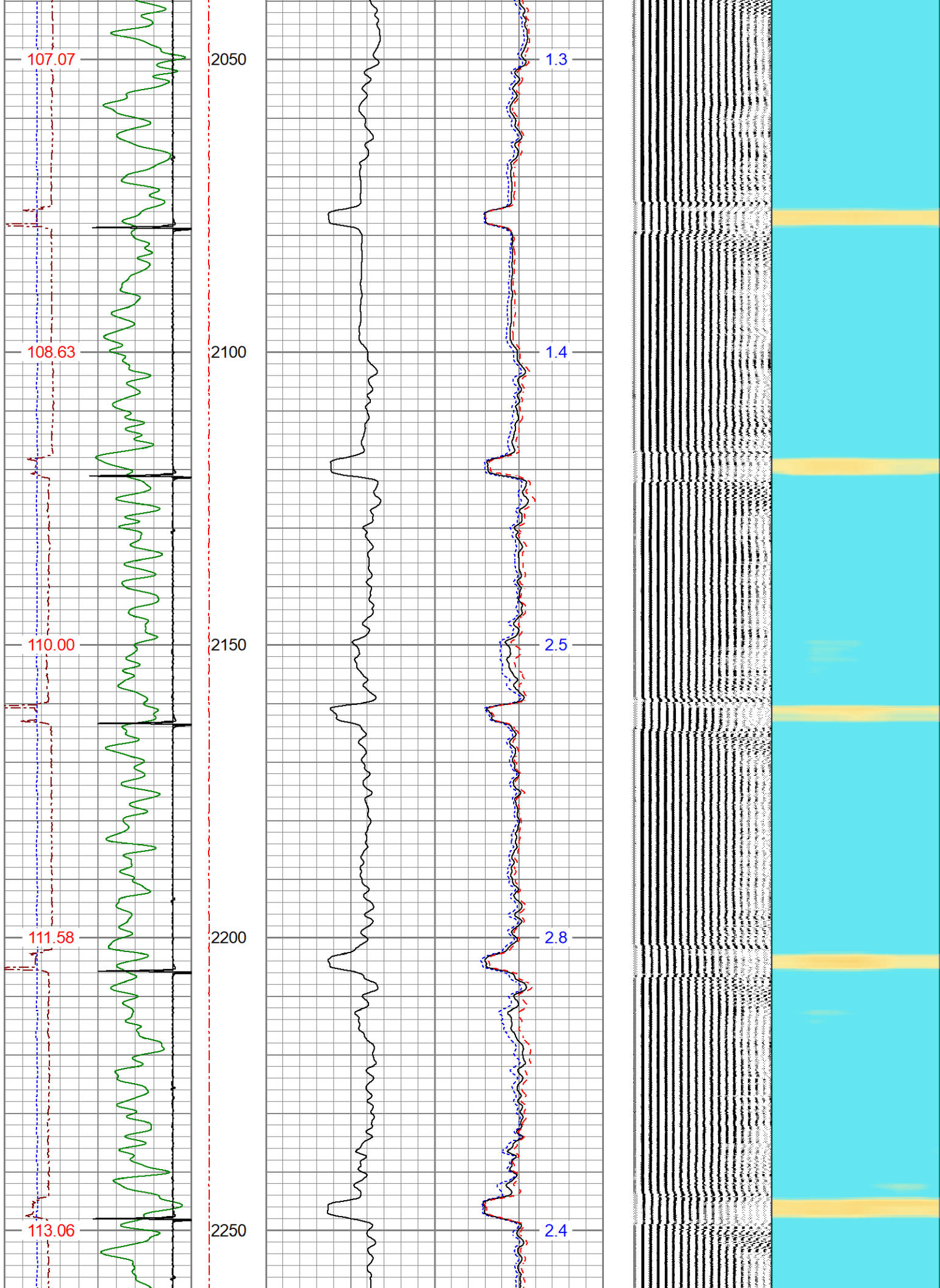


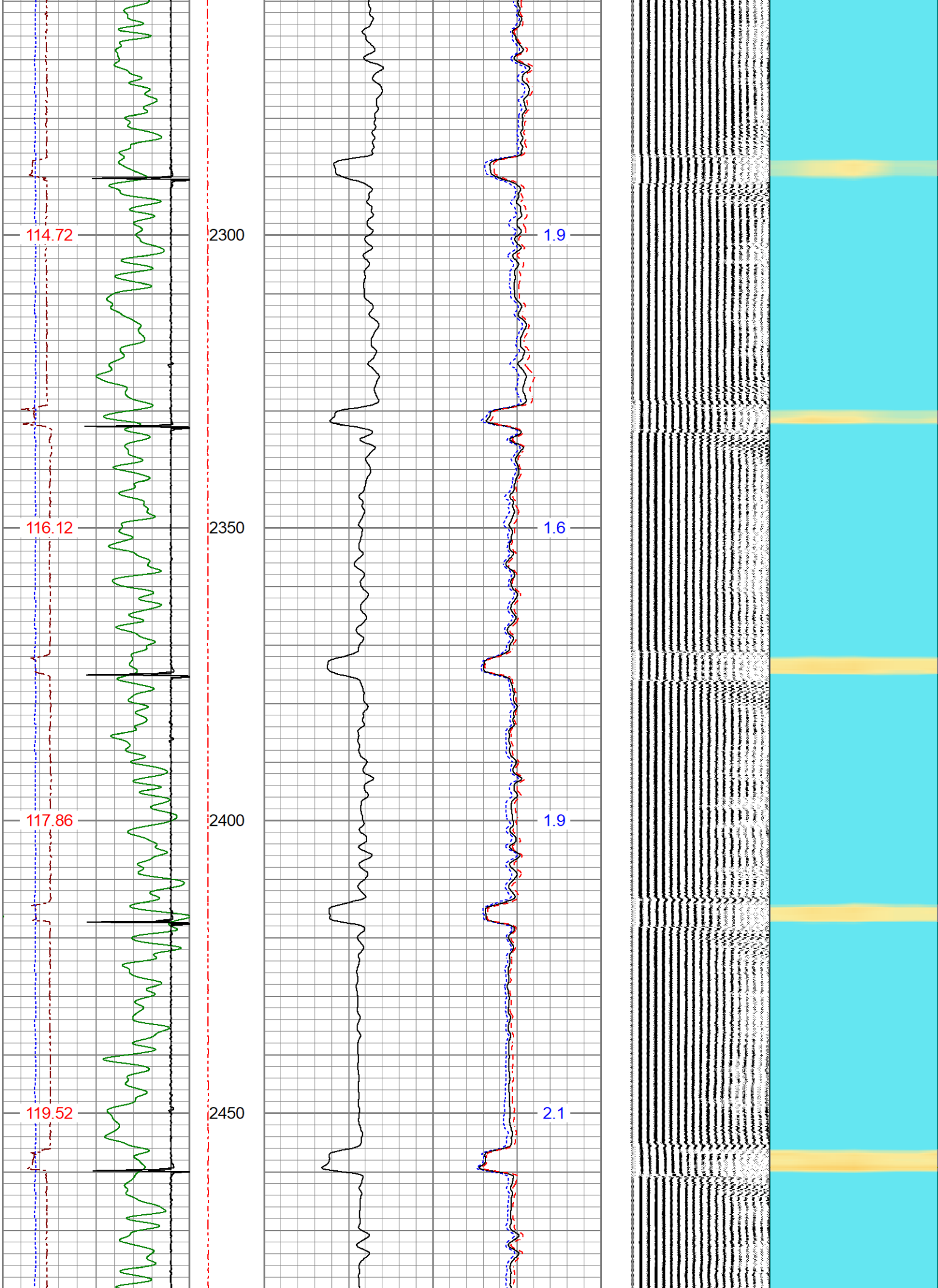


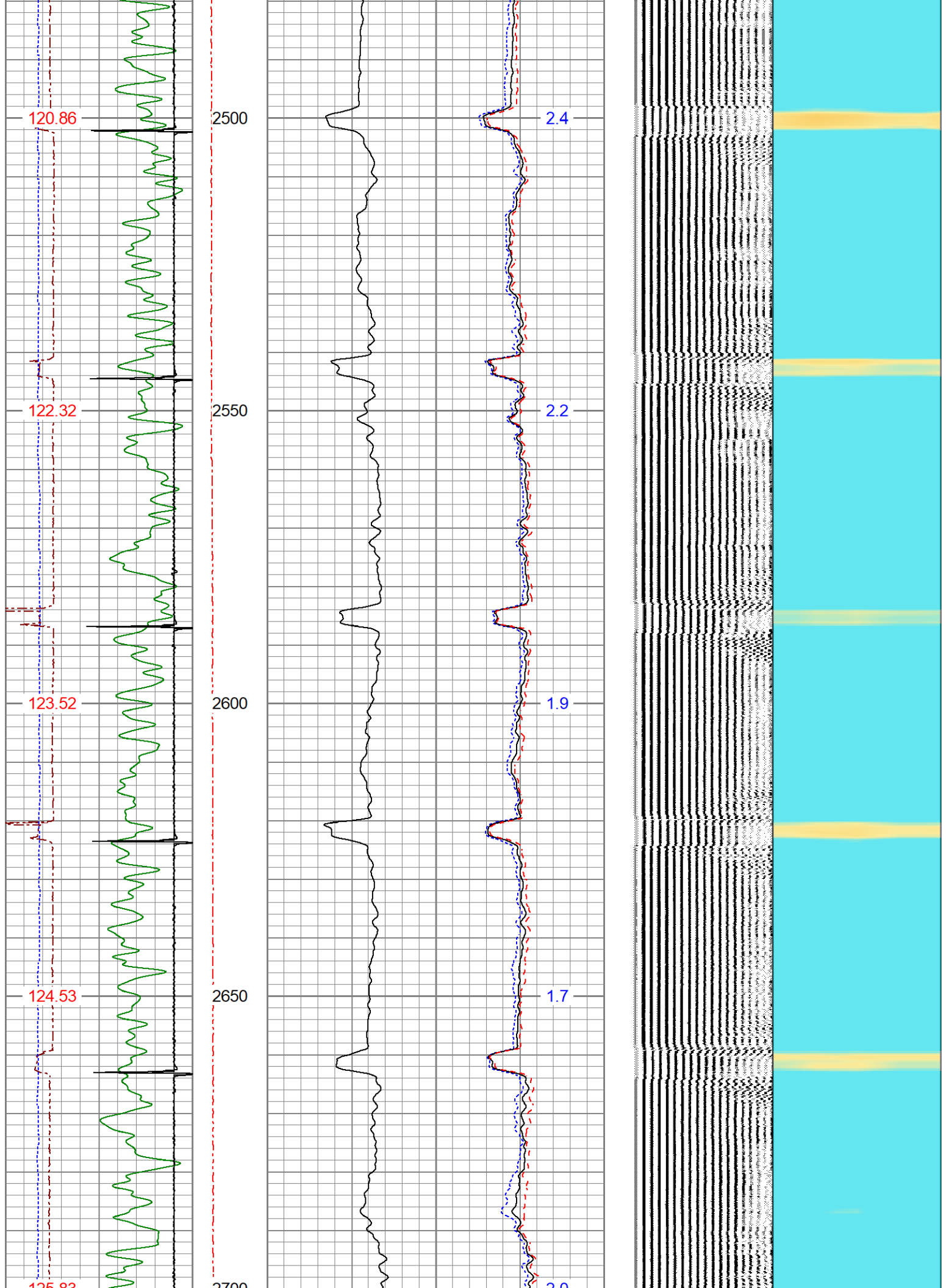


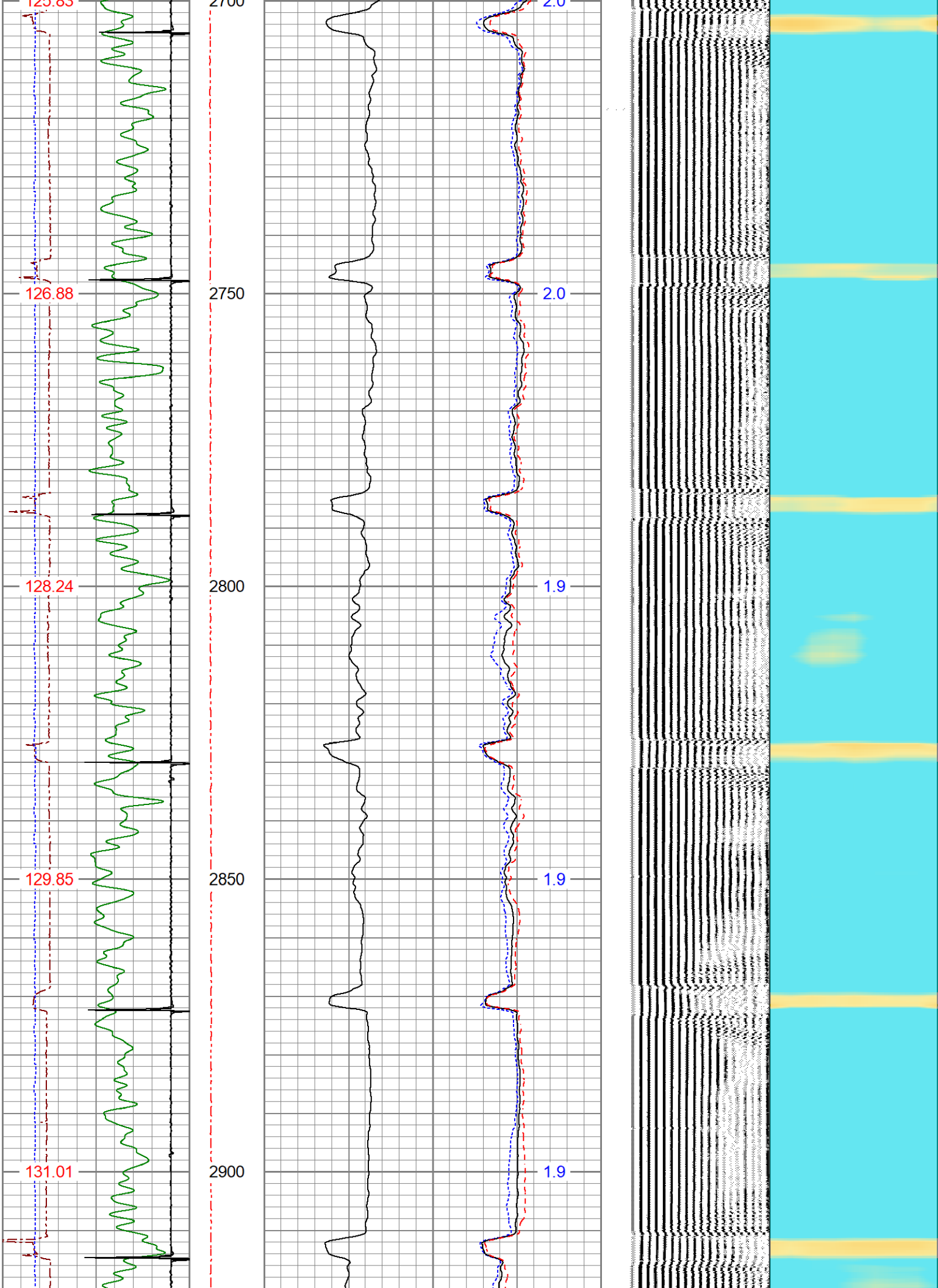


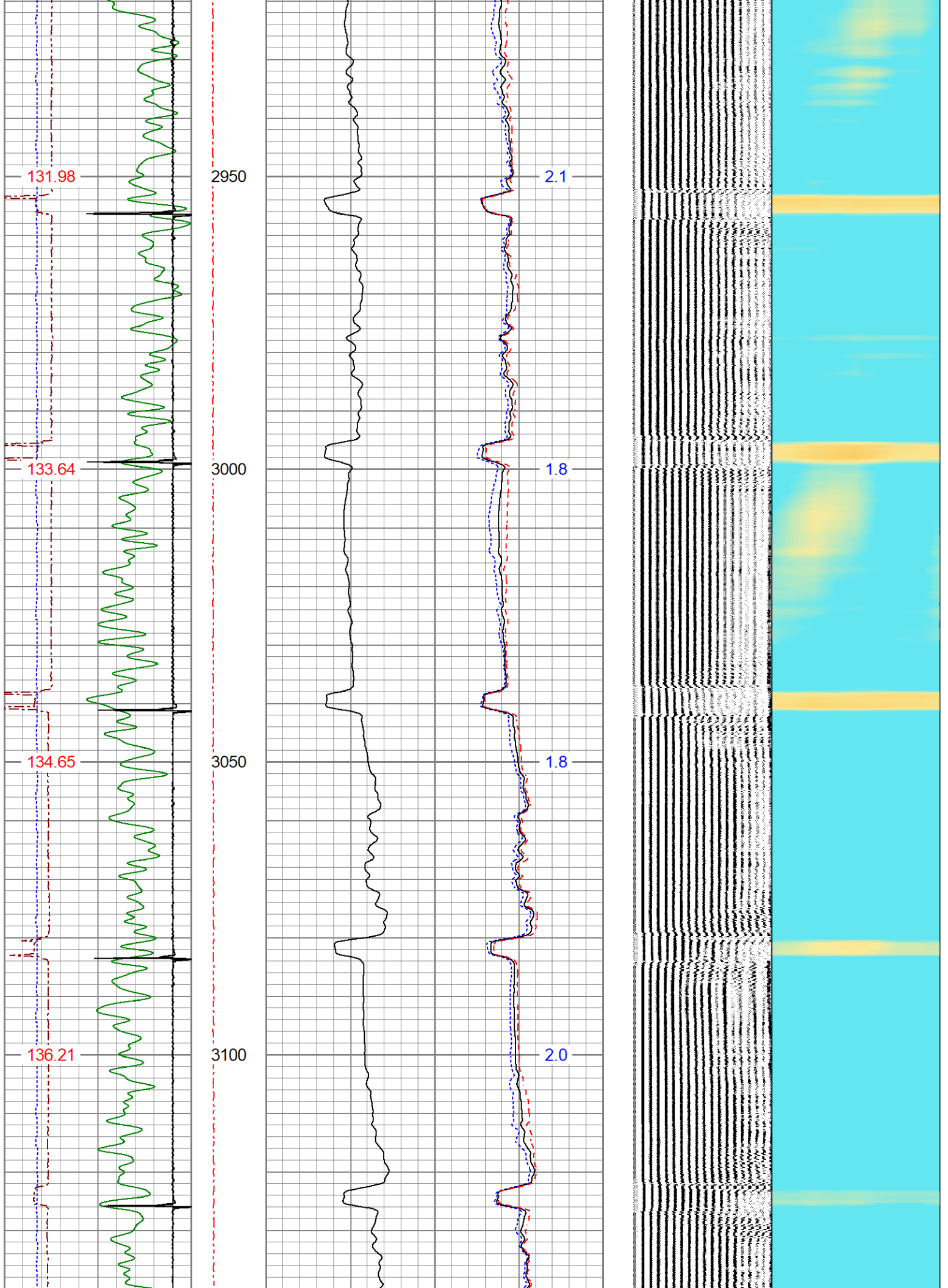


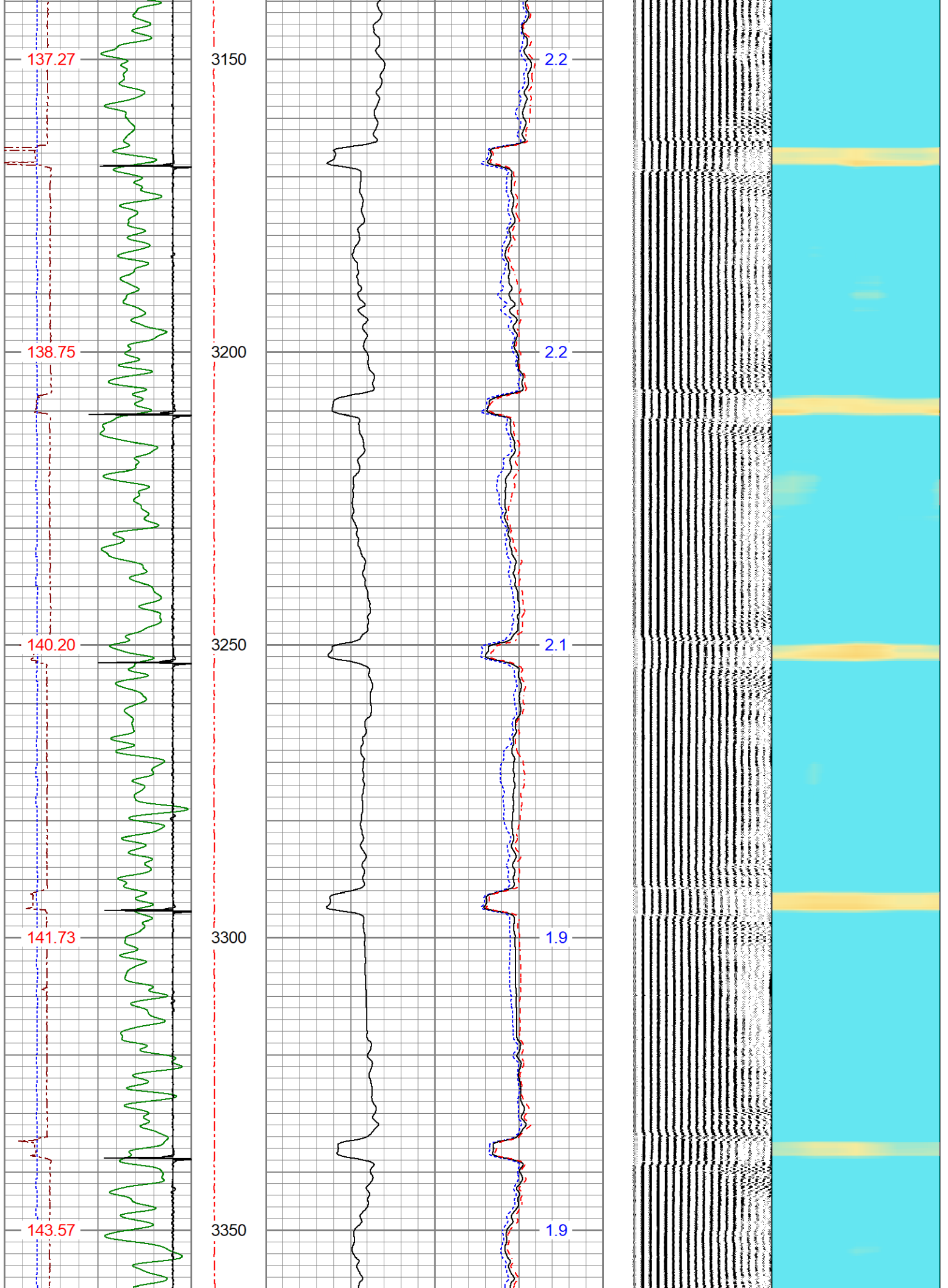


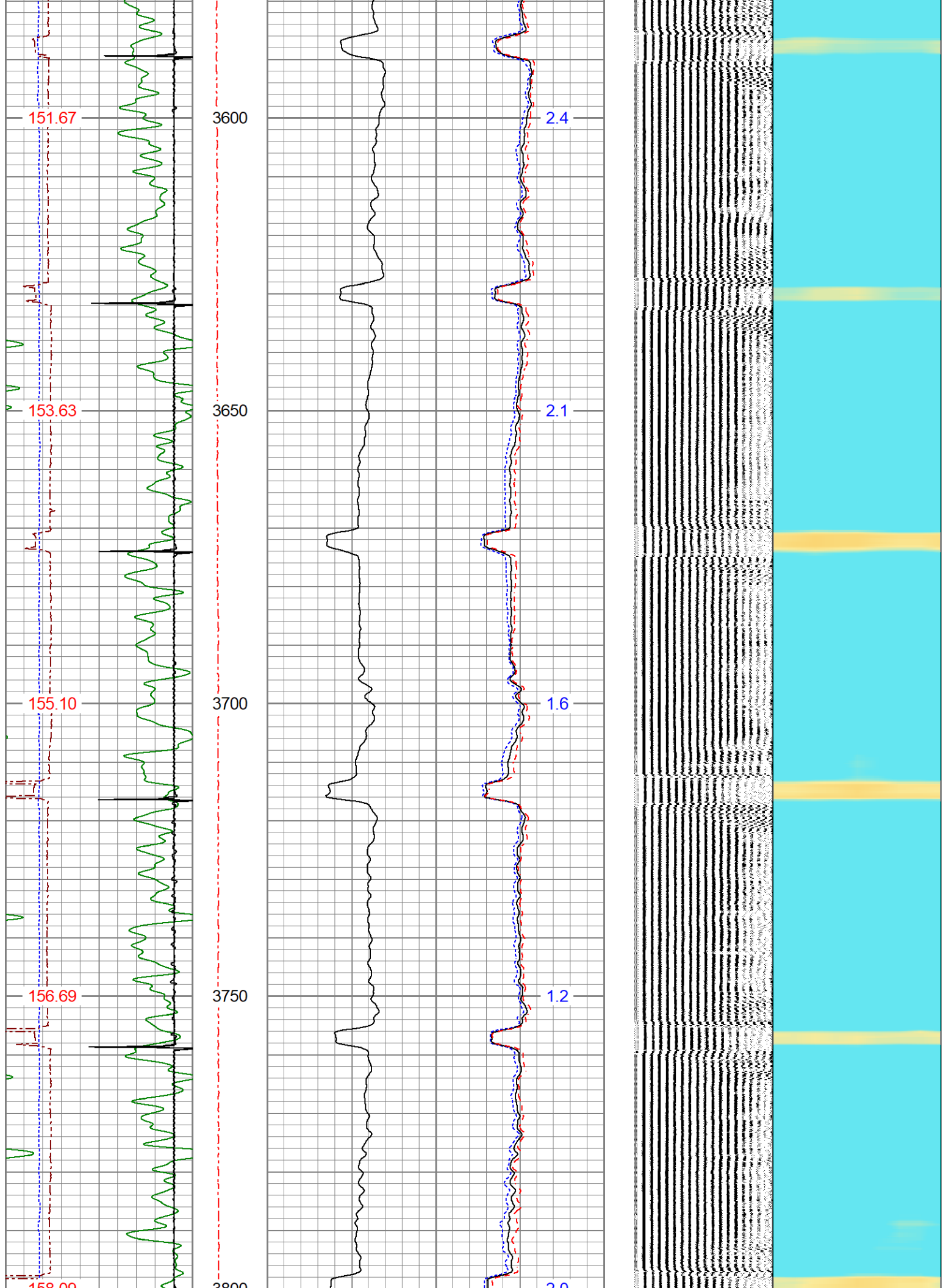


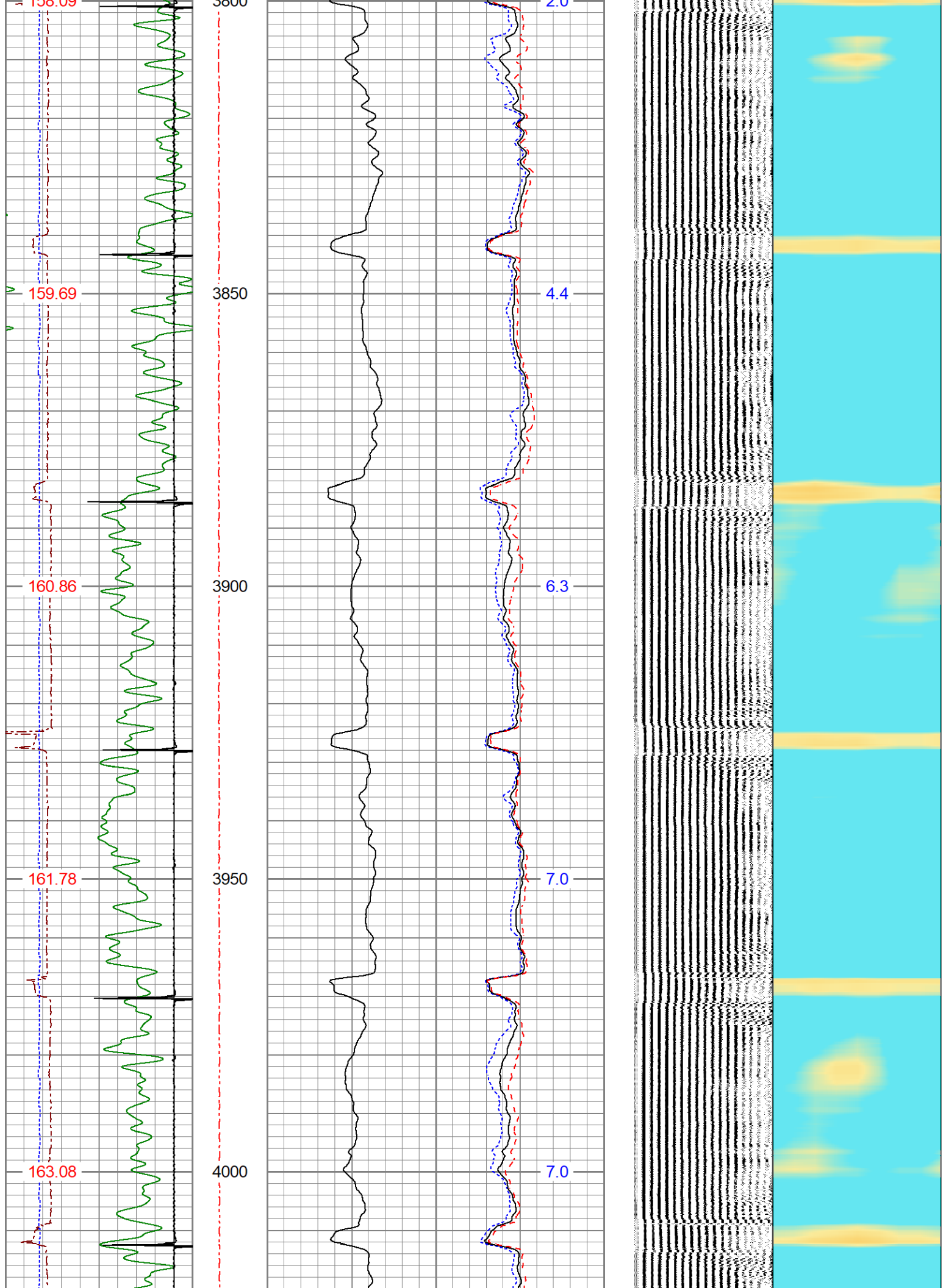


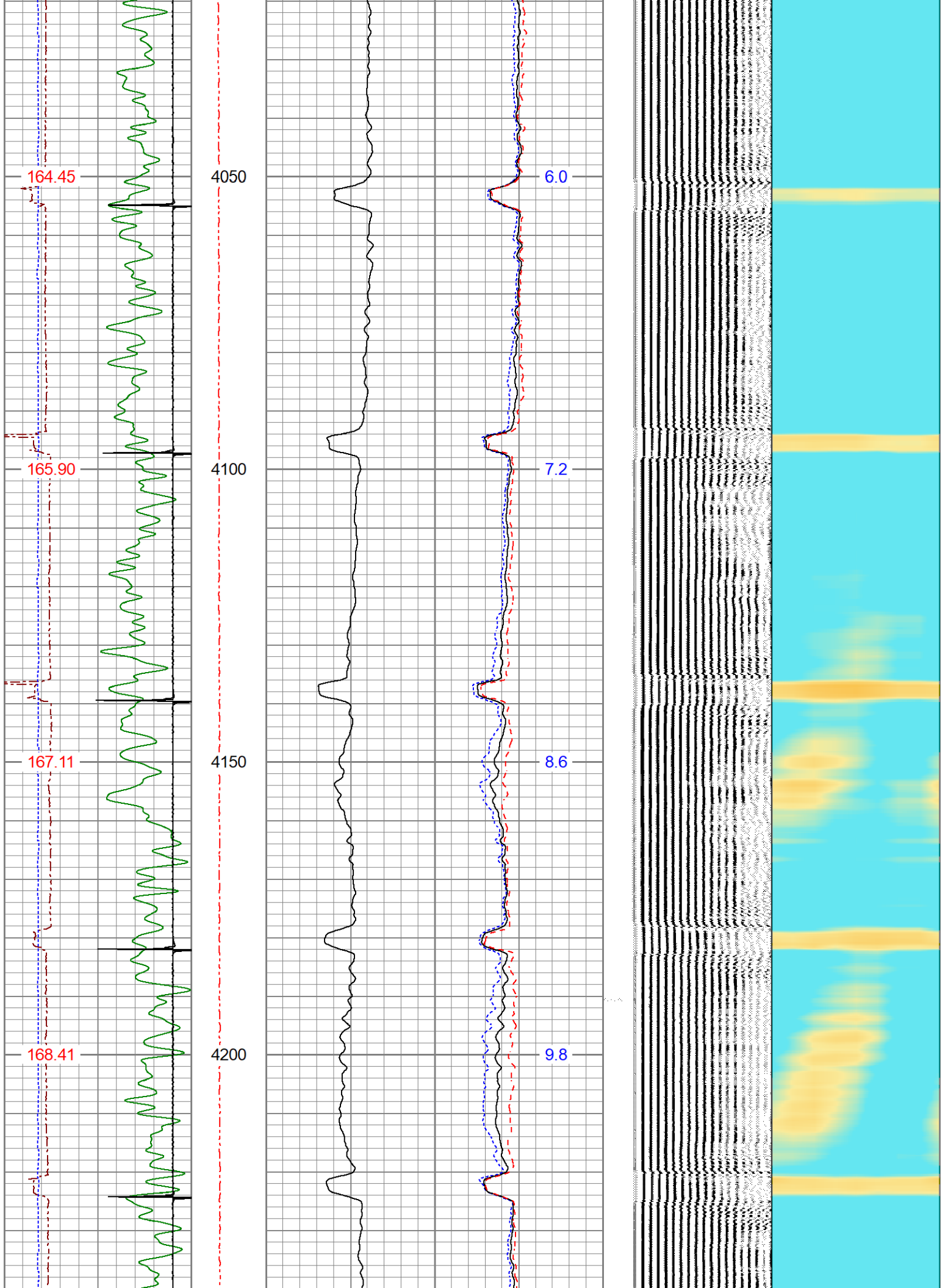


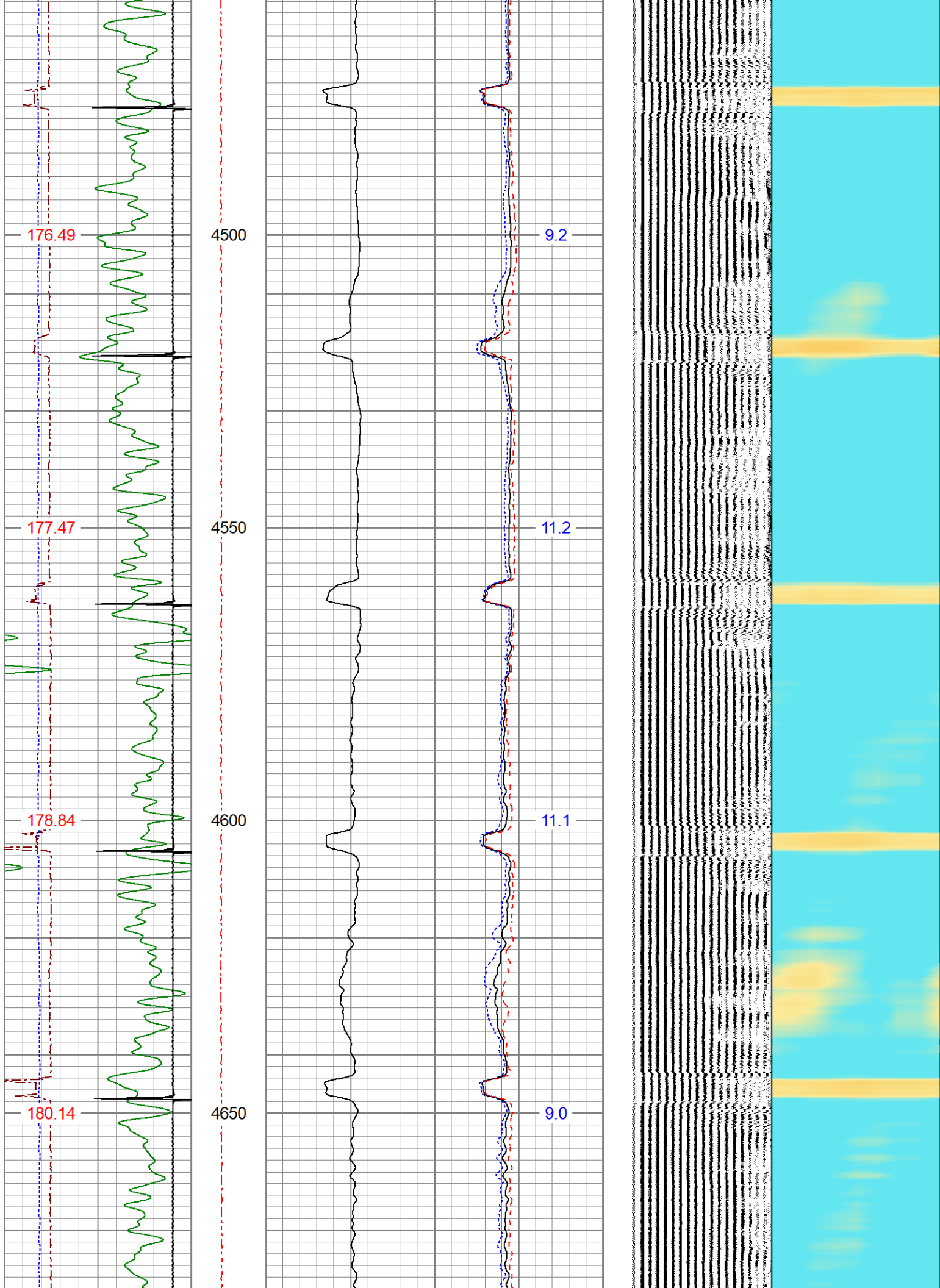


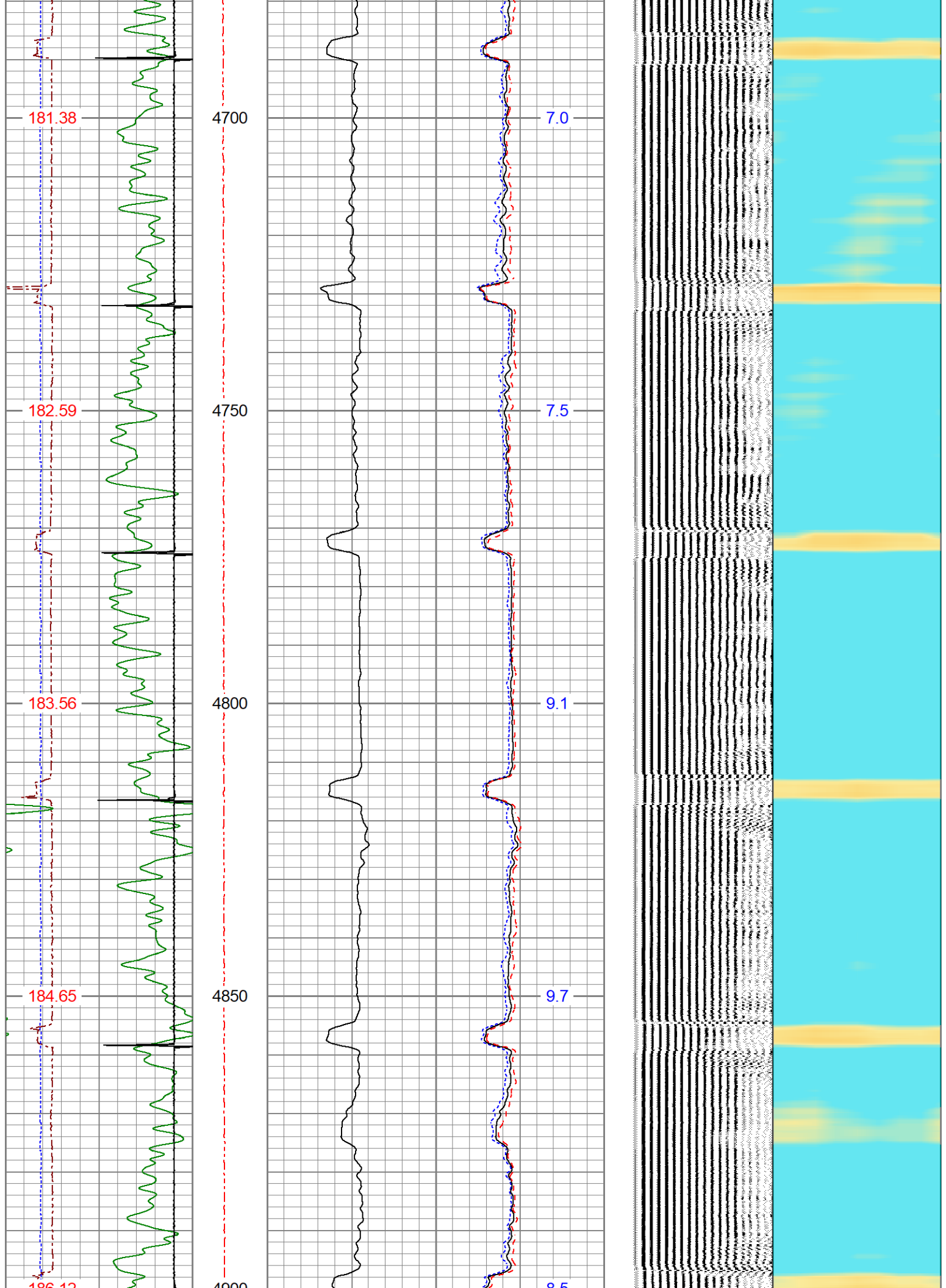


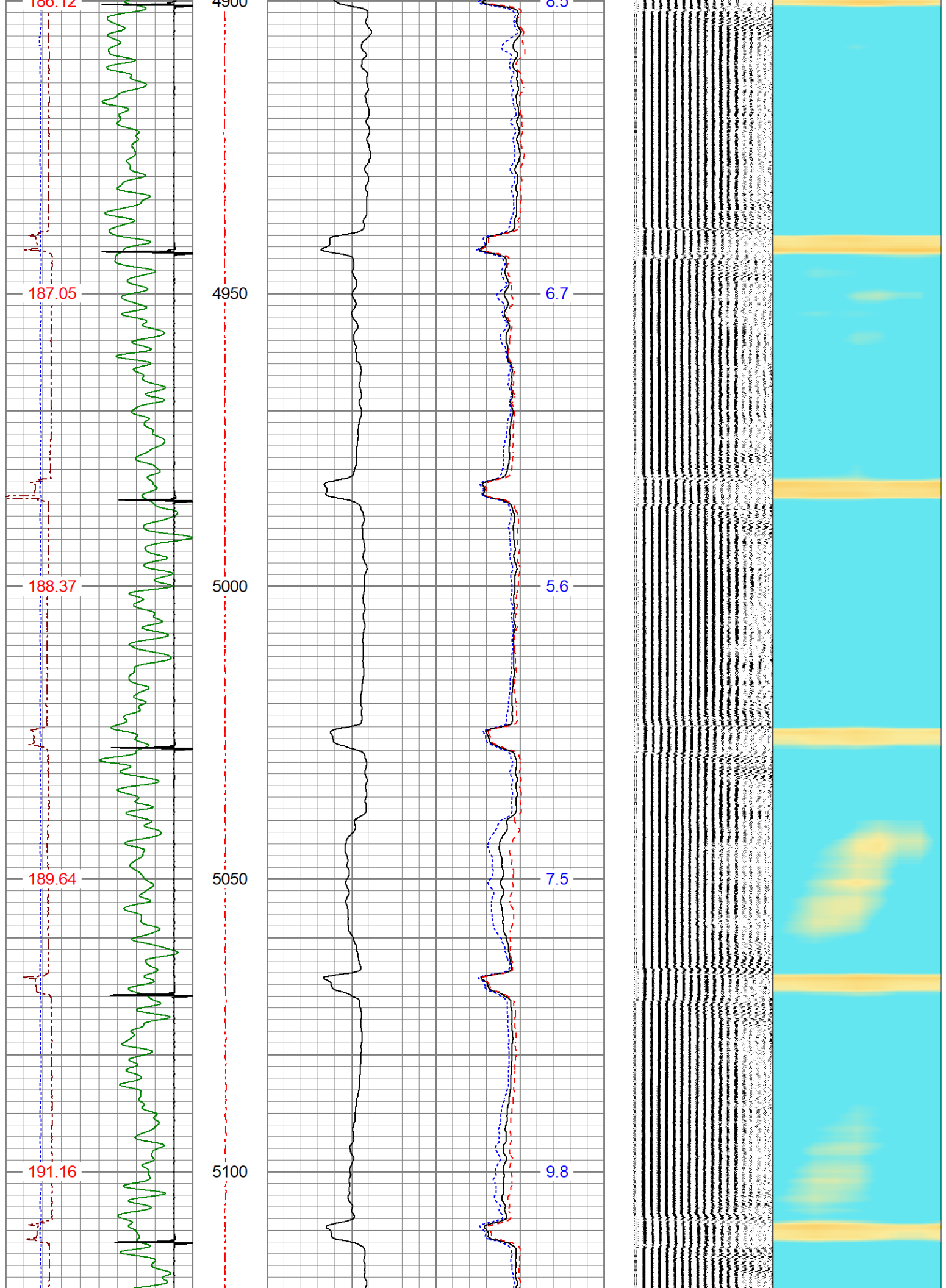


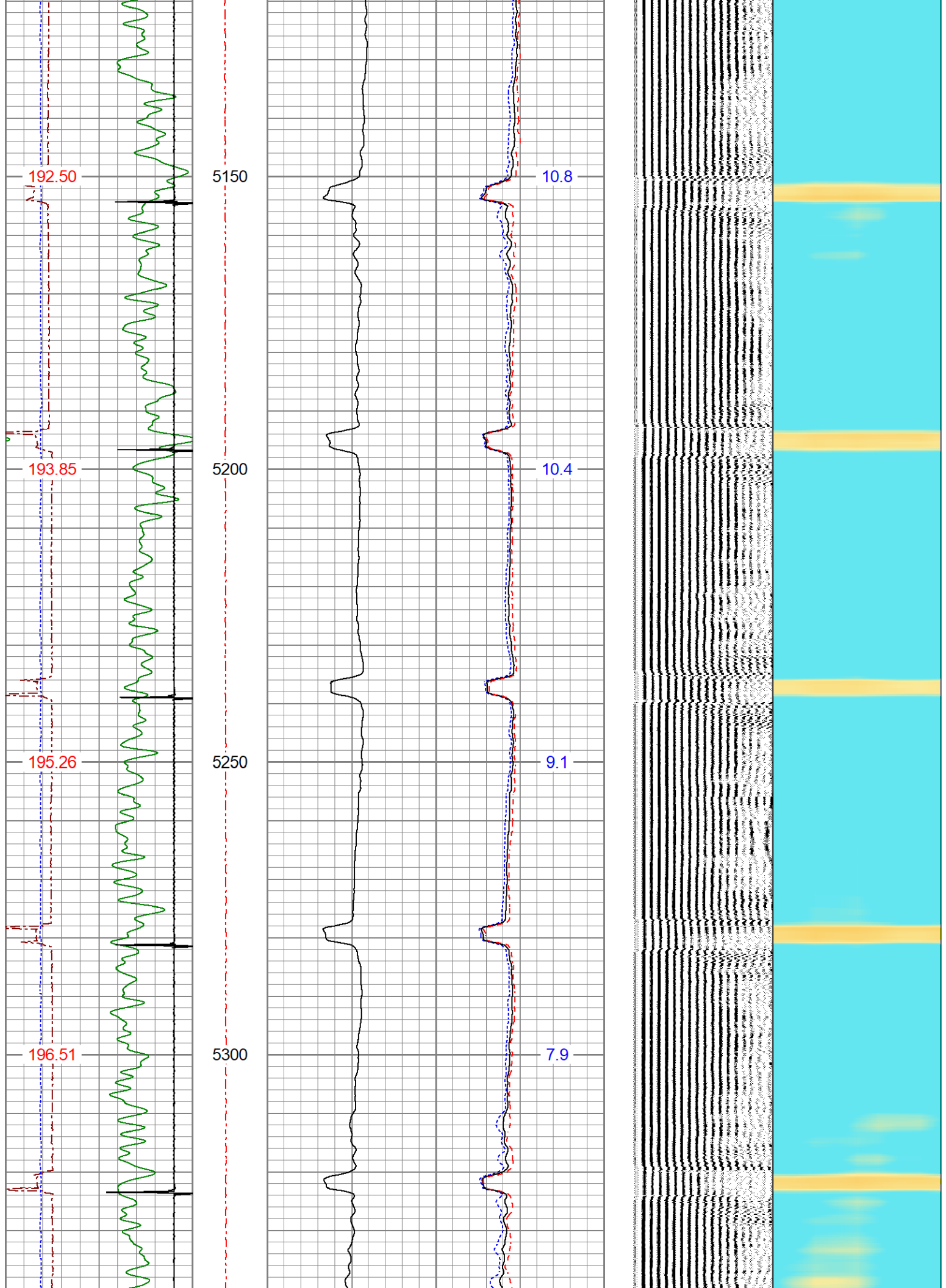


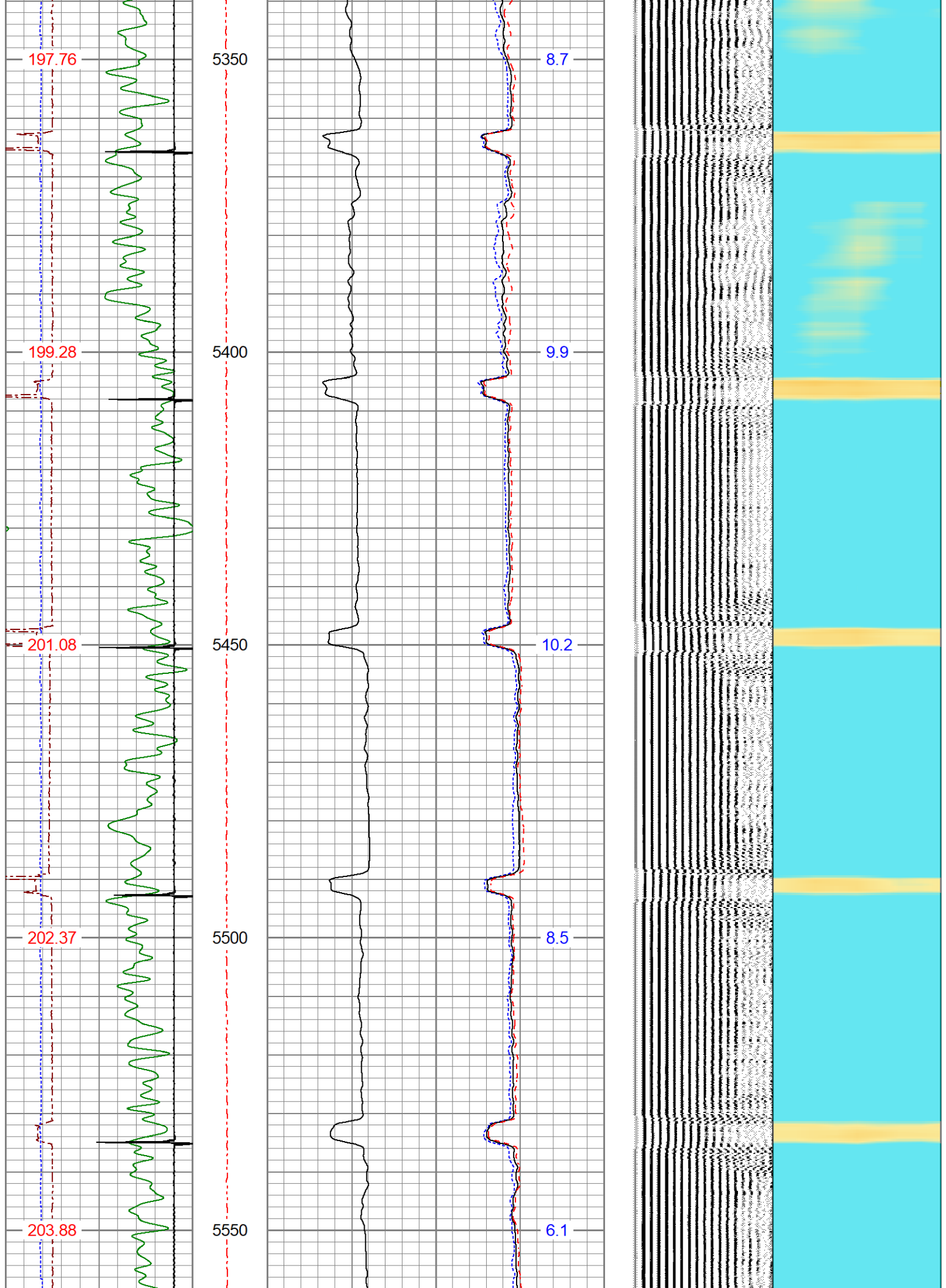


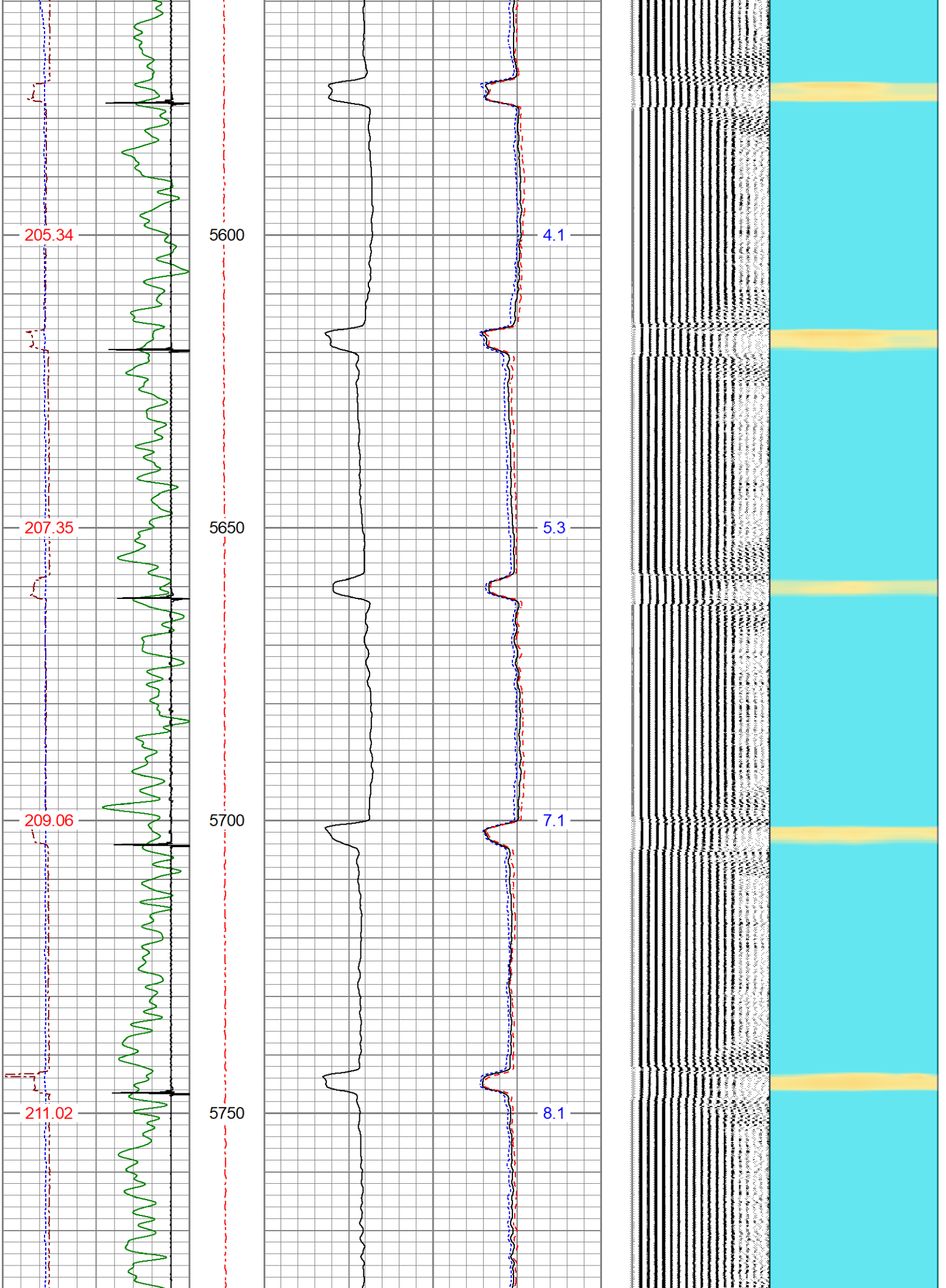


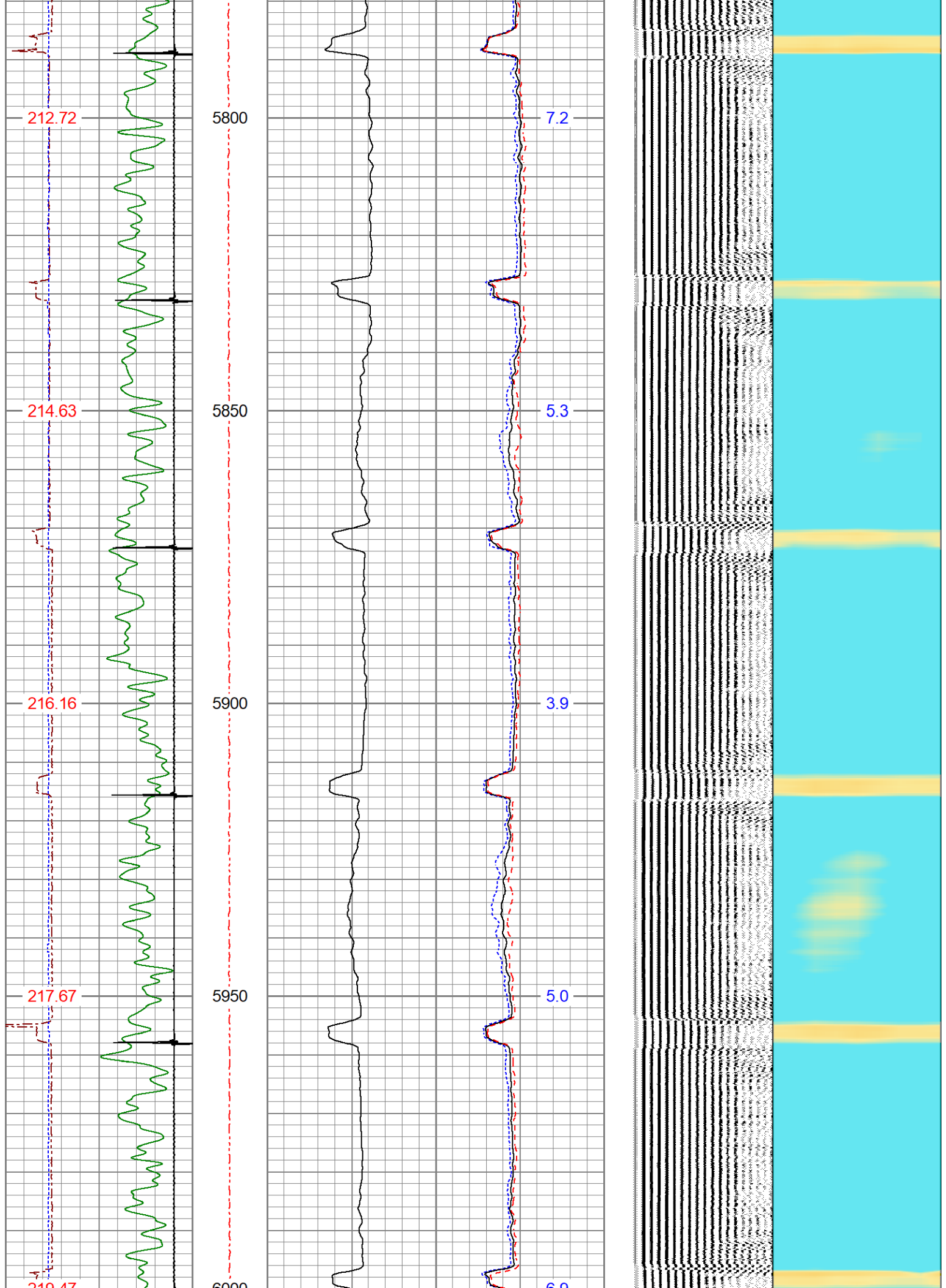


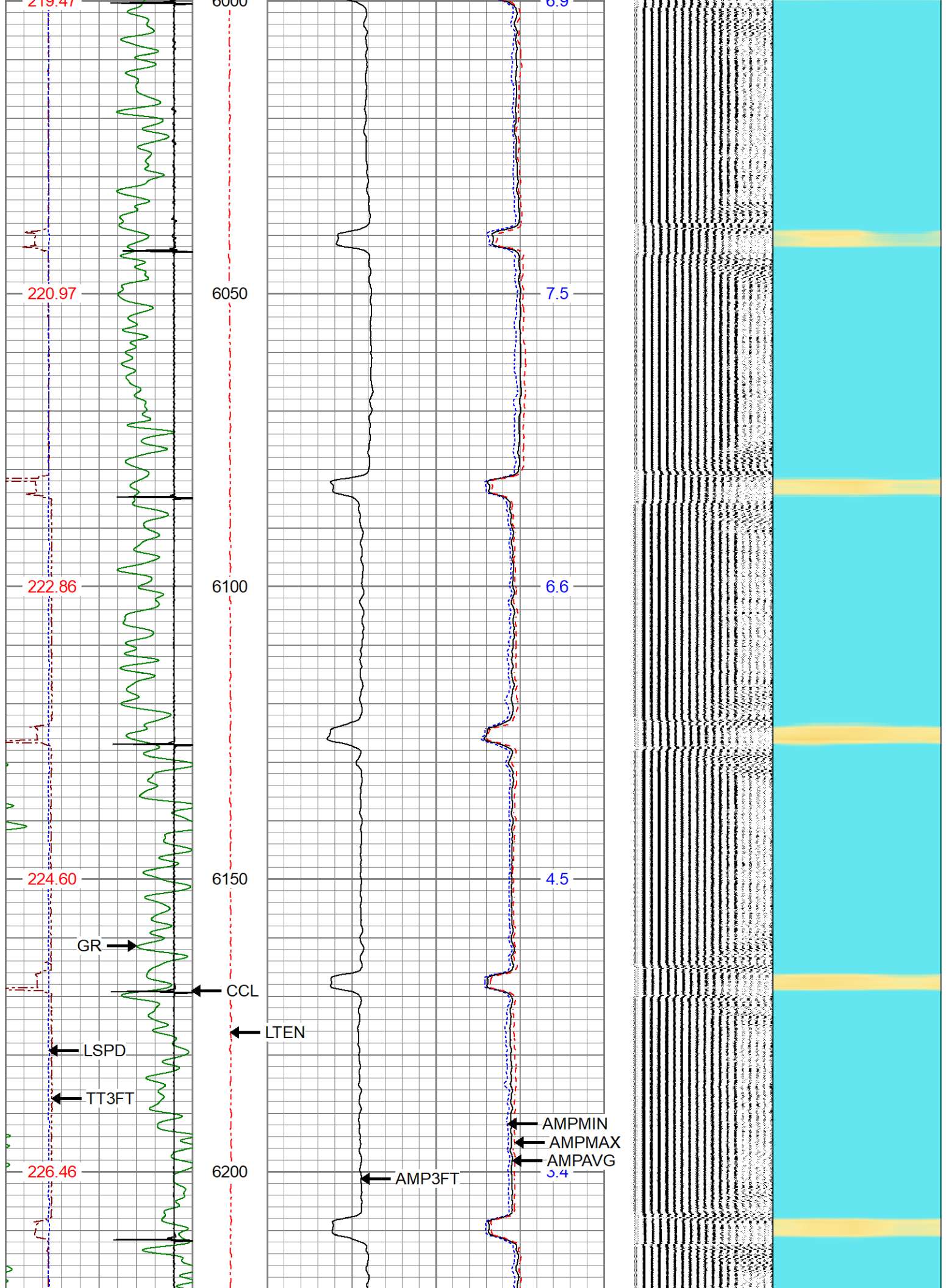


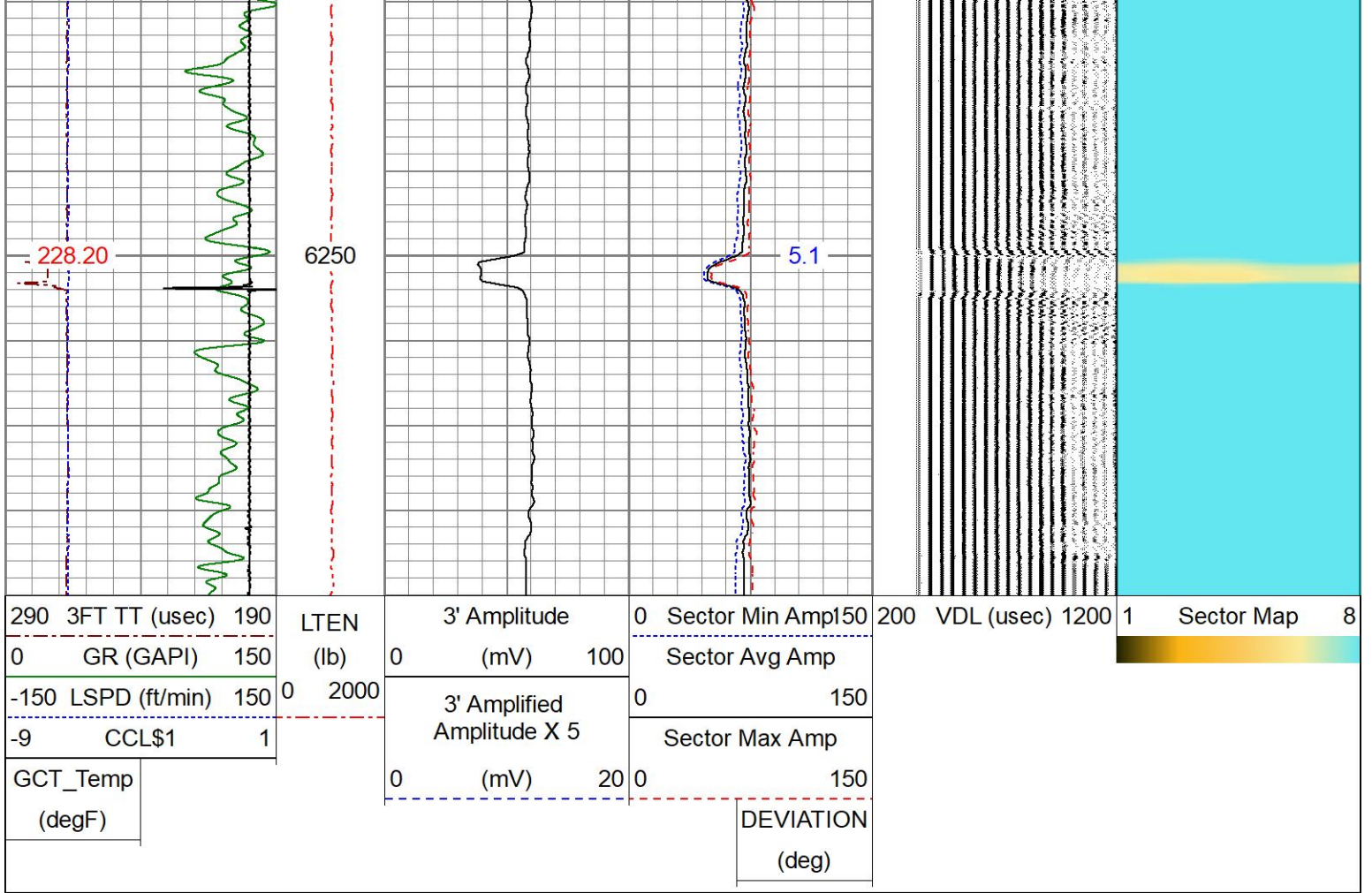








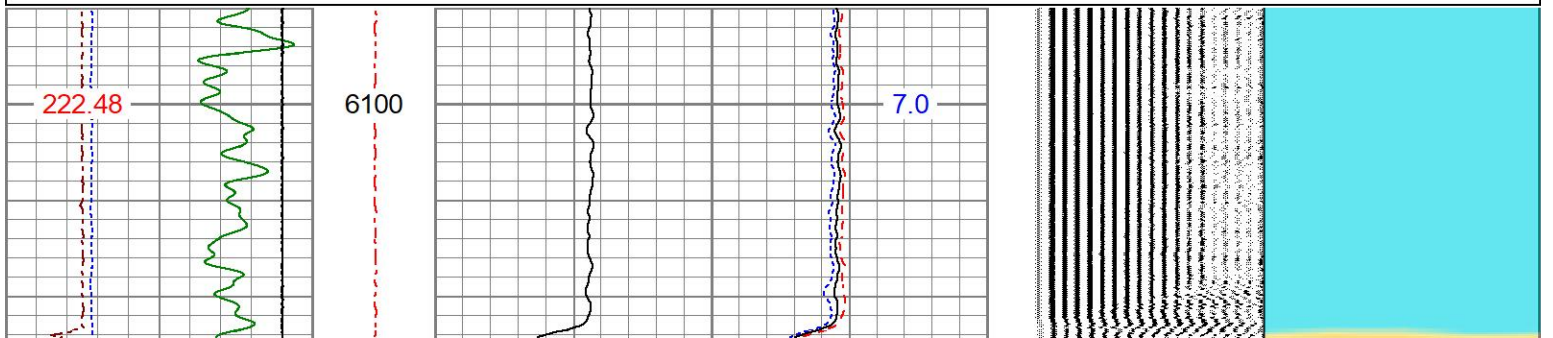
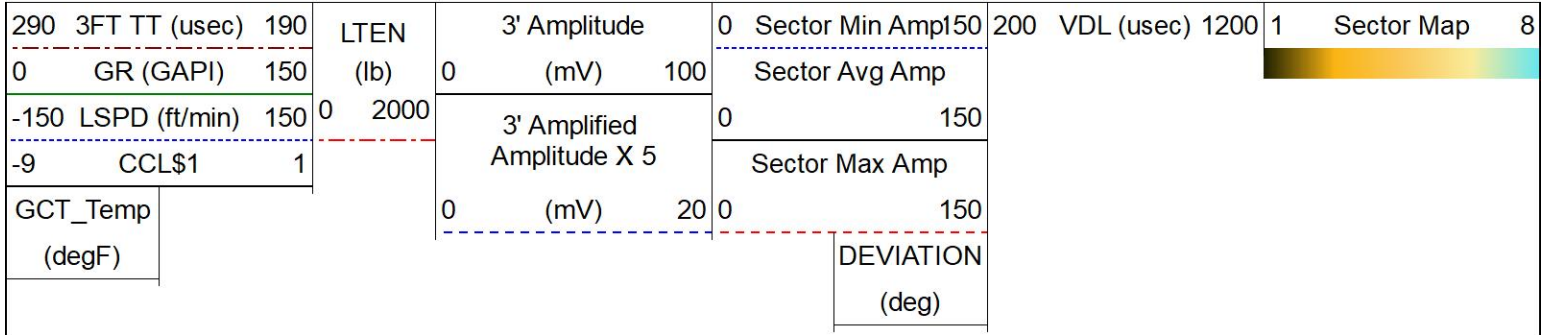


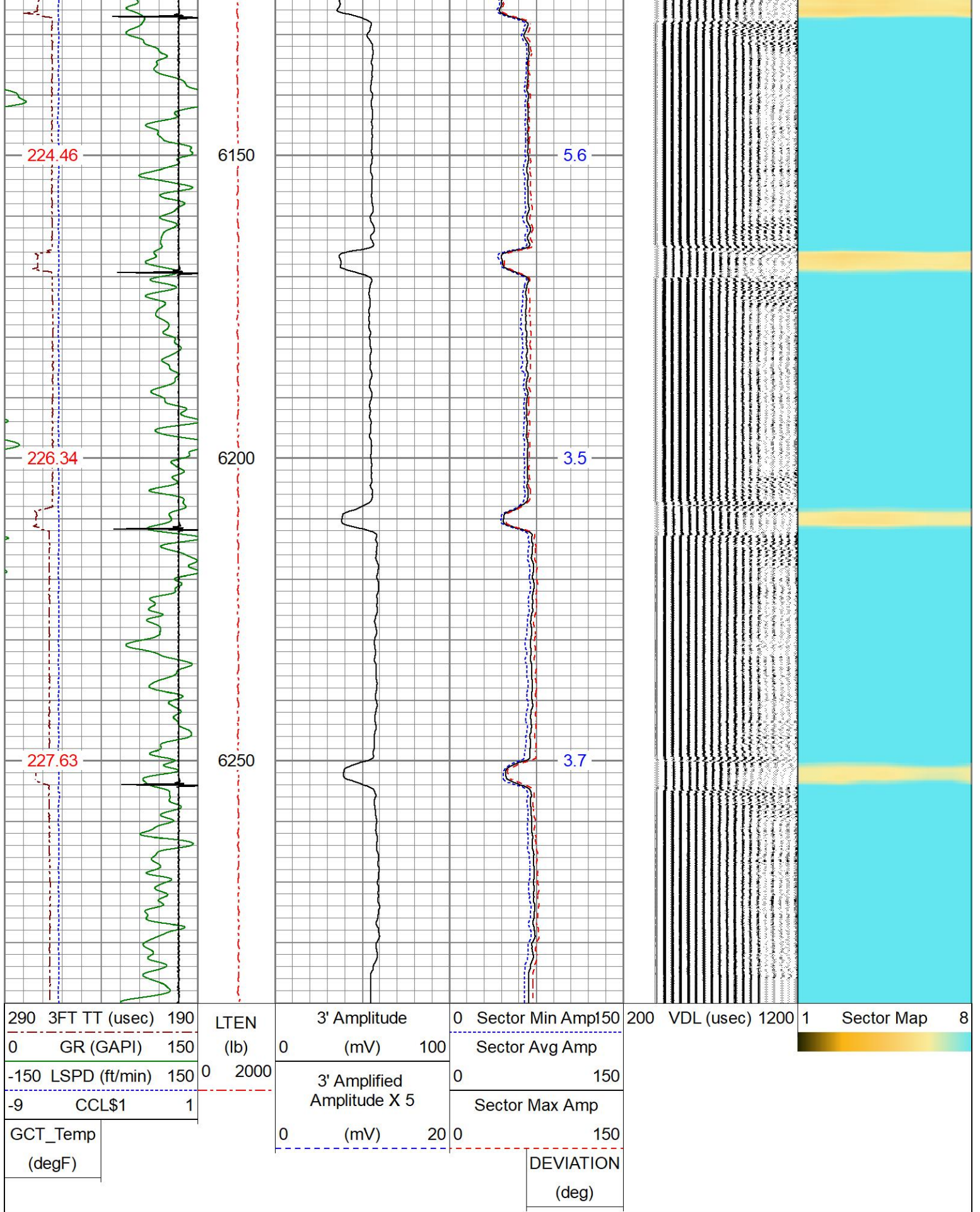


REPEAT PASS

ZERO PSI APPLIED AT SURFACE

Database File I05-1013694_oxy_backstrom 18-9_0512321756_20250605_scb1-gr-ccl.db
 Dataset Pathname pass2
 Presentation Format res_scb1 8sec-gr-ccl
 Dataset Creation Thu Jun 05 14:05:17 2025
 Charted by Depth in Feet scaled 1:240





Calibration Report

Database File I05-1013694_oxy_backstrom 18-9_0512321756_20250605_scbl-gr-ccl.db
 Dataset Pathname pass4
 Dataset Creation Thu Jun 05 14:11:11 2025

Gamma Ray Calibration Report

Serial Number:	GCT275-0000_base	
Tool Model:	GCT275-0000	
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:	RBT275C_Base	
Tool Model:	RADII-275C	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	22.025	ft

Master Calibration, performed Thu Jun 5 13:36:11 2025:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	0.979	0.700	81.196	82.190	0.700
CAL	0.000	0.990				
5'	0.000	0.933	0.700	81.196	86.283	0.700
SUM						
S1	0.000	0.988	0.000	100.000	101.201	0.000
S2	0.000	0.963	0.000	100.000	103.895	0.000
S3	0.000	0.972	0.000	100.000	102.849	0.000
S4	0.000	0.960	0.000	100.000	104.158	0.000
S5	0.000	0.993	0.000	100.000	100.738	0.000
S6	0.000	0.988	0.000	100.000	101.253	0.000
S7	0.000	0.988	0.000	100.000	101.168	0.000
S8	0.000	0.994	0.000	100.000	100.613	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	0.990	1.000	0.000

Air Zero Calibration, performed Thu Jun 5 13:34:19 2025:

	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

S8

0.000

0.000

0.000

Inclinometer Calibration Report

Performed:	Mon Jan 24 10:23:58 2022				
	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

BACKSTROM 18-9

Field

WATTENBERG

County

WELD

State

COLORADO