



SECTOR CEMENT BOND
GAMMA RAY
CCL LOG

Comp. OCCIDENTAL PETROLEUM
Well THOMPSON 6-33
Field WATTENBERG
Co. WELD
State COLORADO

Company OCCIDENTAL PETROLEUM
Well THOMPSON 6-33
Field WATTENBERG
County WELD State COLORADO
Location: API # : 05-123-20646
Other Services

SEC 6 TWP 3N RGE 66W
Permanent Datum G.L. Elevation
Log Measured From G.L. 14 Above Perm. Datum
Drilling Measured From KELLY BUSHING
K.B. 4784'
D.F. N/A
G.L. 4770'

Date of Service	4-NOVEMBER-2022		
Run Number	ONE		
Depth Driller or PBTD	7120'		
Depth Logger	6391'		
Bottom Log Interval	6390'		
Top Log Interval	SURFACE		
Open Hole Size	N/A		
Type Fluid	WATER		
Fluid Level	SURFACE		
Fluid Density	N/A		
Max. Recorded Temperature	219 DEG. F.		
Max. Wellhead Pressure	0		
Wellhead Connection	7-1/16 5K		
Estimated Cement Top	900'		
Unit Number	1016		
Wireline Size	1/4"		
Location	BRIGHTON,CO		
Recorded By	HARPER		
Witnessed By	HART		
Size	Size	Wt/Ft	Top
Surface Casing	8-5/8"	N/A	SURFACE
Production Casing	4.5"	11.6#	SURFACE
Liner Casing	N/A	N/A	N/A
Tubing Record	N/A	N/A	N/A

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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.

THANK YOU FOR USING RANGER ENERGY SERVICES! FIELD TICKET #

Your Ranger Energy Services Crew	Tool Data - Services	Serial Number
Engineer: HARPER	SCBL TEKSECT-275	275001
Operator: HECHT	CCL-275TEKCO	111
Operator:	GR-TEK-CO 2 3/4	0111
Operator:		

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

DatabaseC:\ProgramData\Warrior\Data\occidental_thompson 6-33_05-123-20646_11-04-2022.db
Dataset field/well/run1/PASS 6/_vars_

Top - Bottom

BHTEMP_Src TEMP	BOREID in 8.75	BOTTEMP degF 100	CASEOD in 4.5	CASETHCK in 0.408	CASEWGHT lb/ft 11.6	MAXAMPL mV 81	MINAMPL mV 0.6
MINATTN db/ft 0.8	PERFS No	PPT usec 220	SRFTEMP degF 0	TDEPTH ft 6000			

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

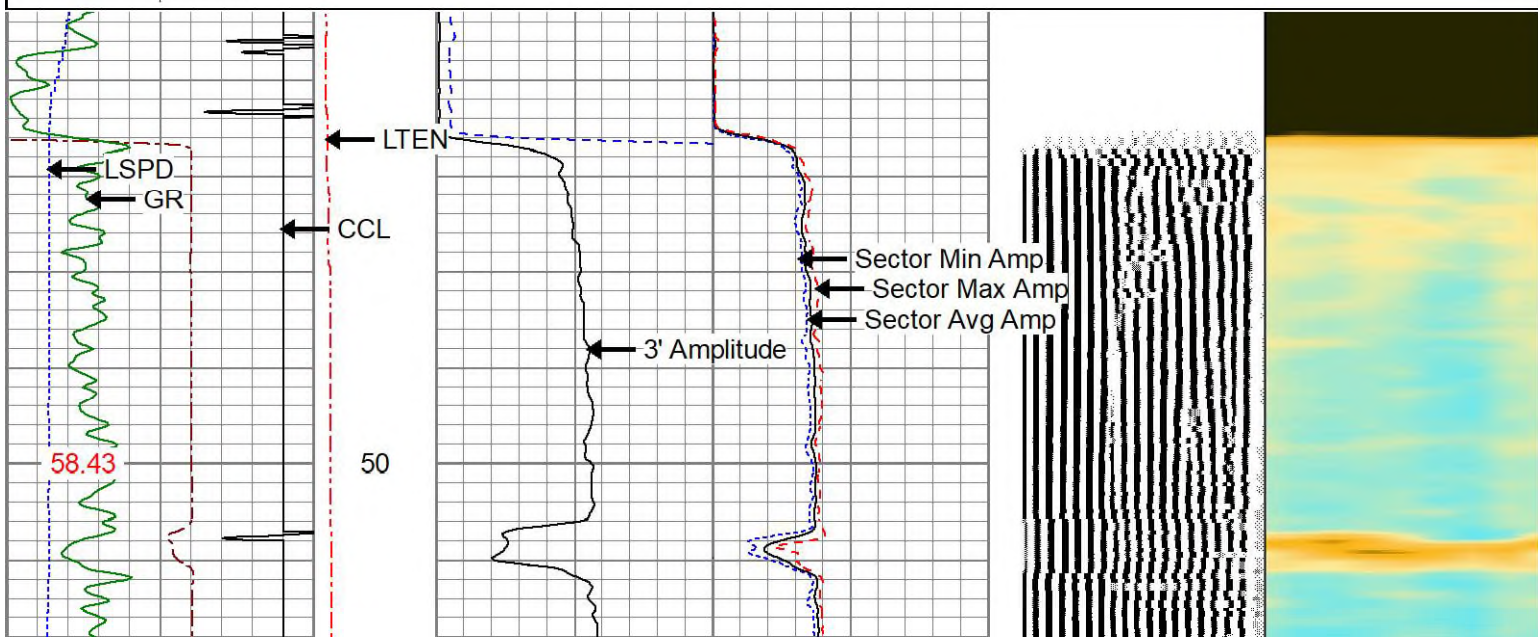


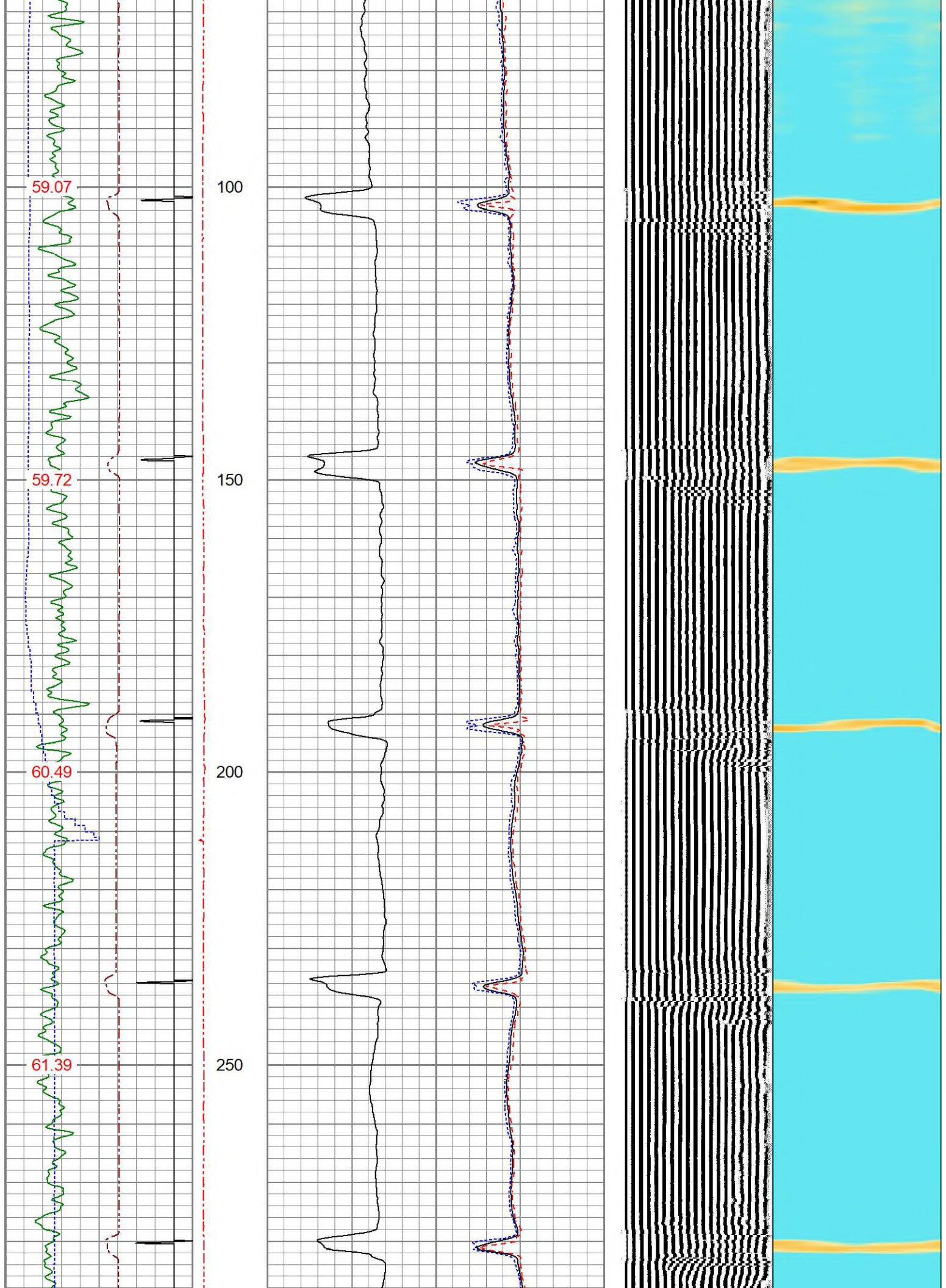
MAIN PASS

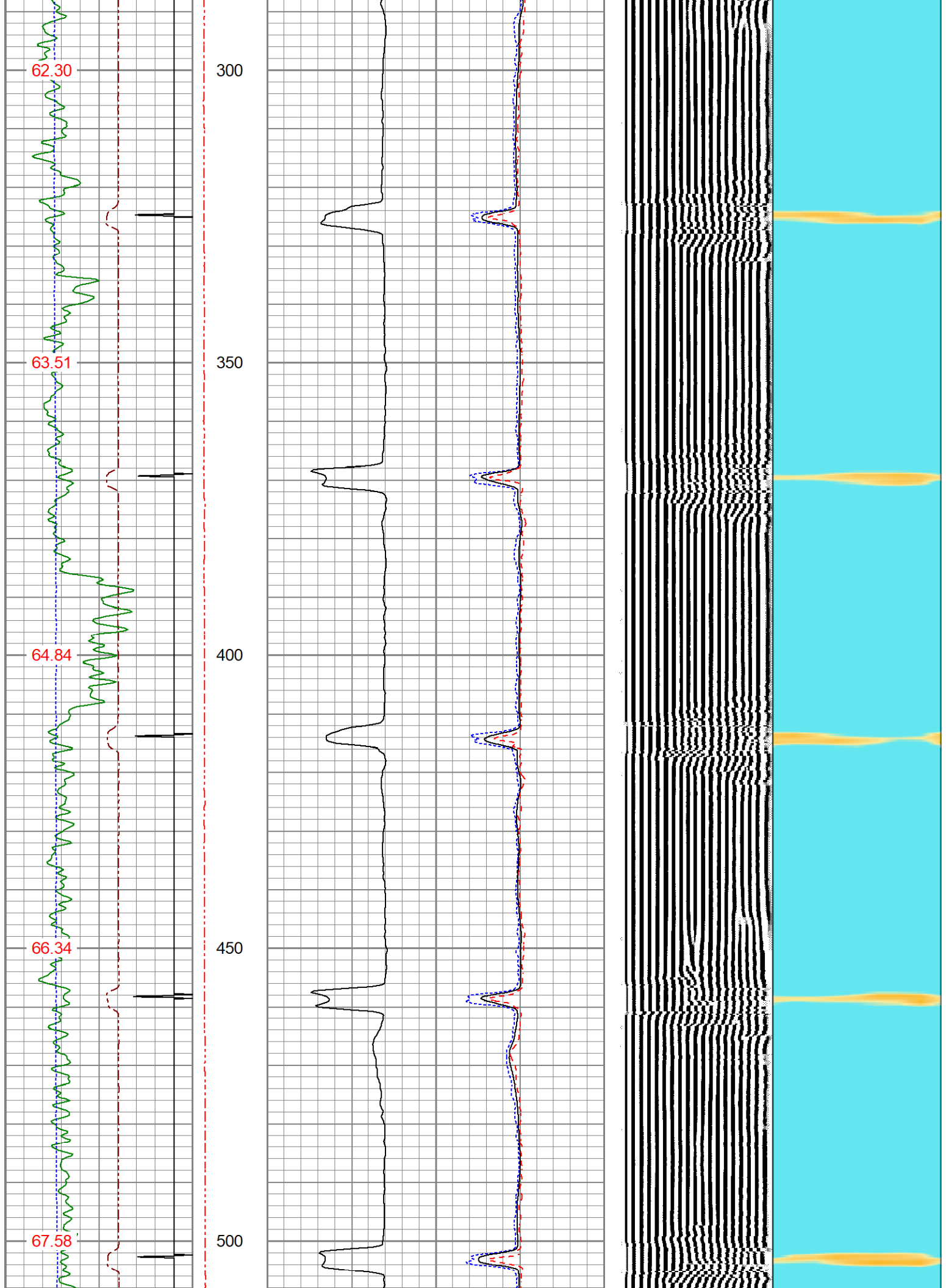
0 PSI APPLIED AT SURFACE

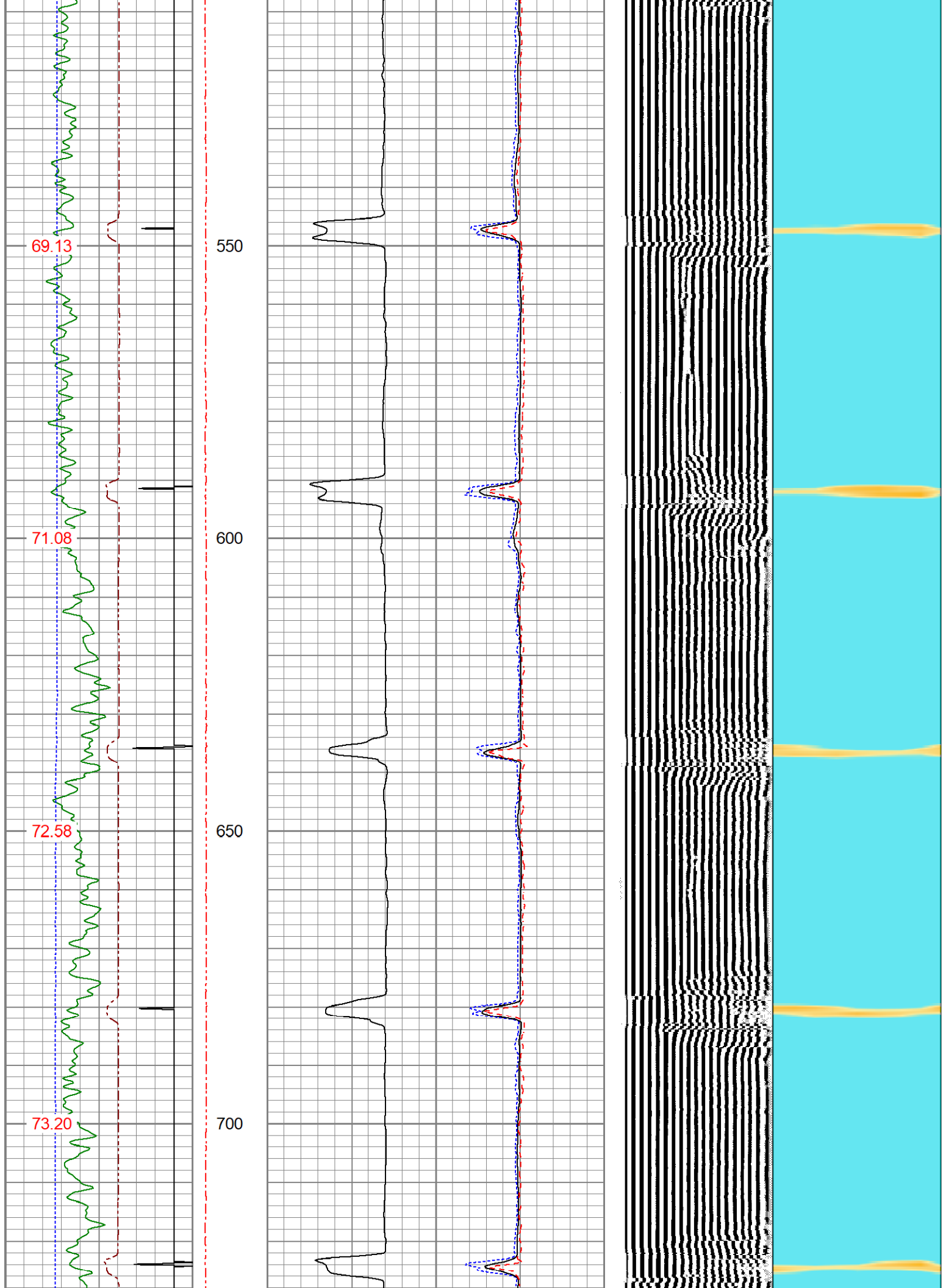
Database File occidental_thompson 6-33_05-123-20646_11-04-2022.db
Dataset Pathname PASS 7
Presentation Format res_scb1 8sec-gr-ccl
Dataset Creation Fri Nov 04 10:47:46 2022
Charted by Depth in Feet scaled 1:240

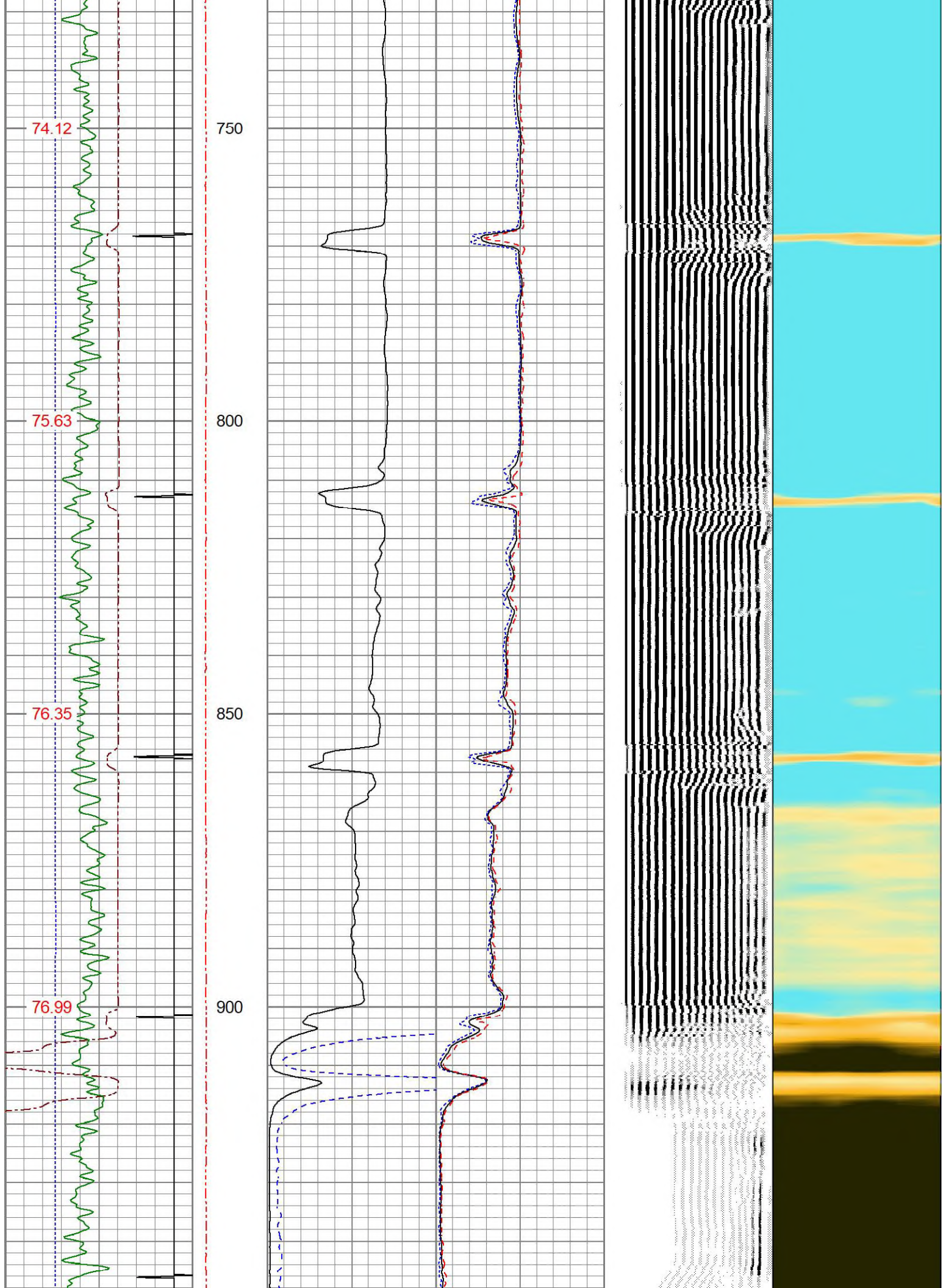
270 3FT TT (usec) 170	LTEN	3' Amplitude	0 Sector Min Amp 150	200 VDL (usec) 1200	1 Sector Map 8
-9 CCL 1	(lb)	(mV) 100	Sector Avg Amp		
0 GR 150	0 2000	3' Amplified Amplitude X 5	0 150		
-150 LSPD (ft/min) 150			Sector Max Amp		
TEMP		(mV) 20	0 150		
(degF)					

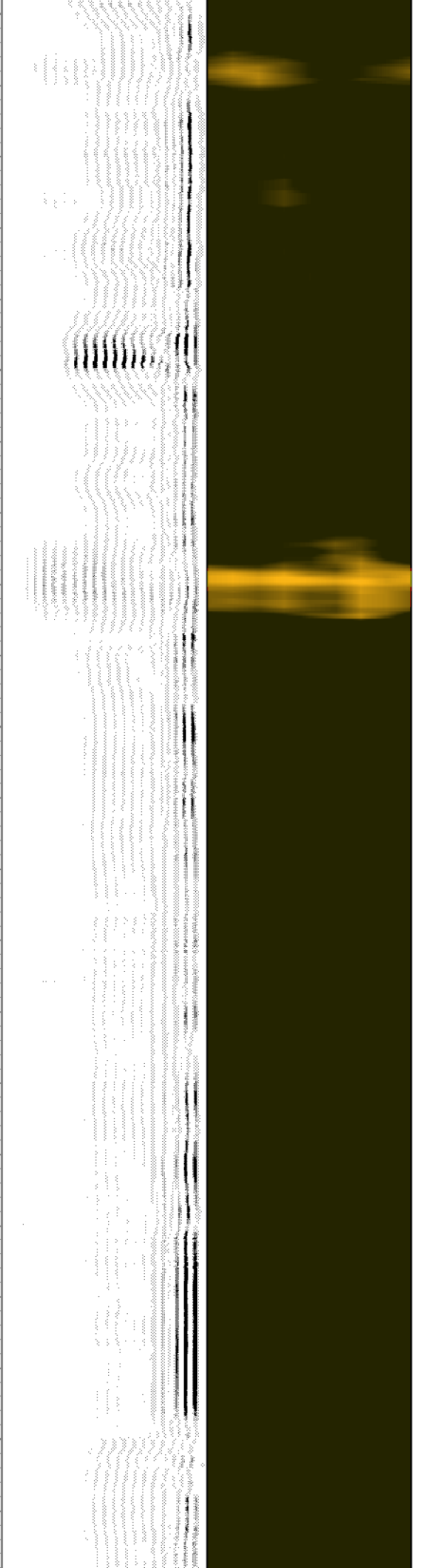
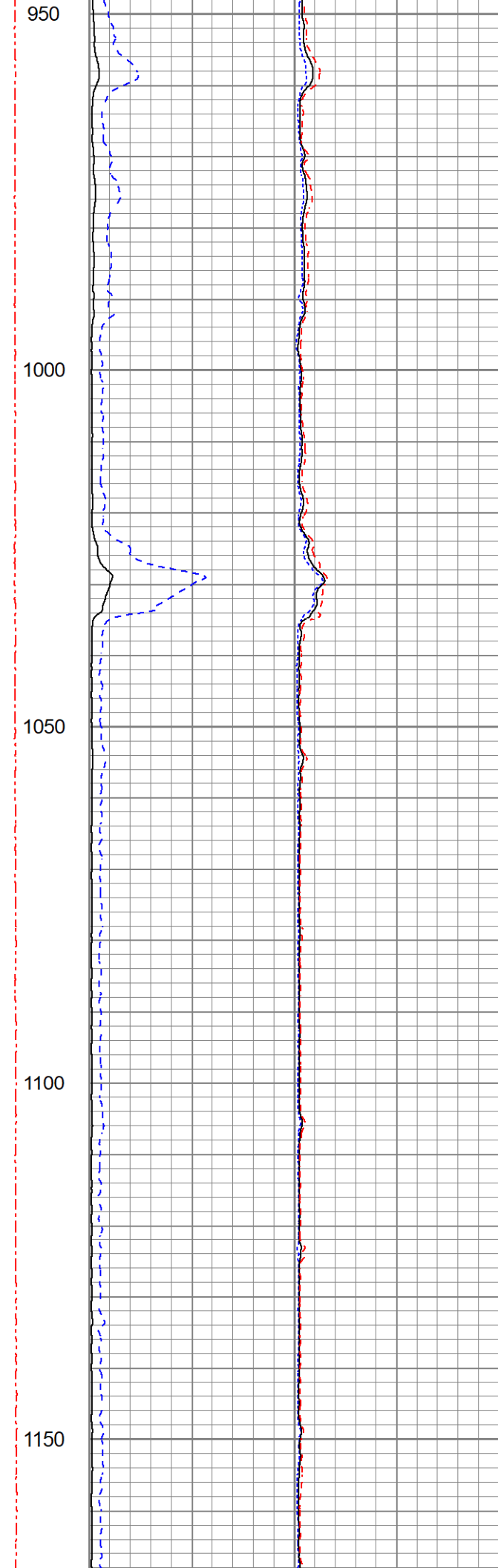
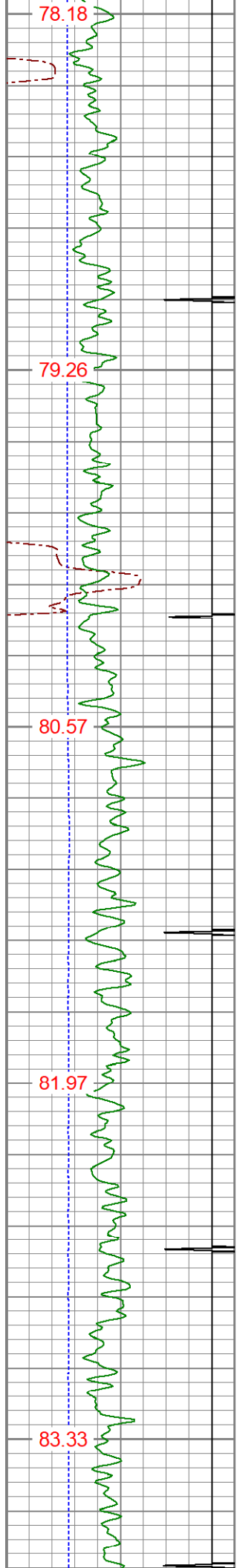


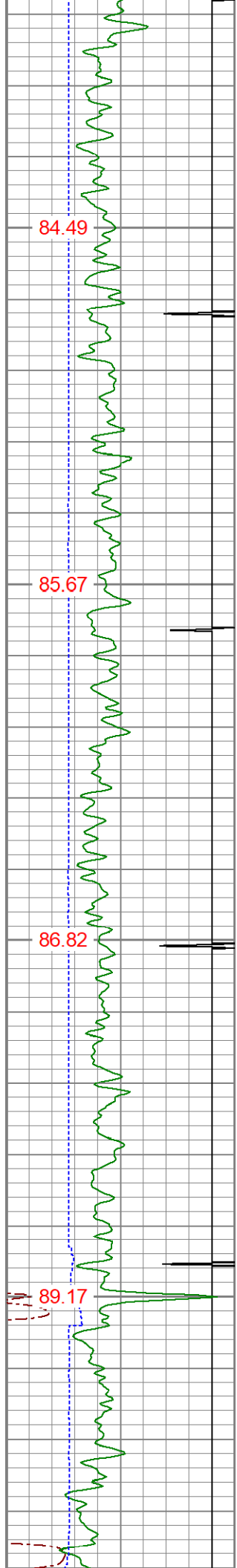












84.49

85.67

86.82

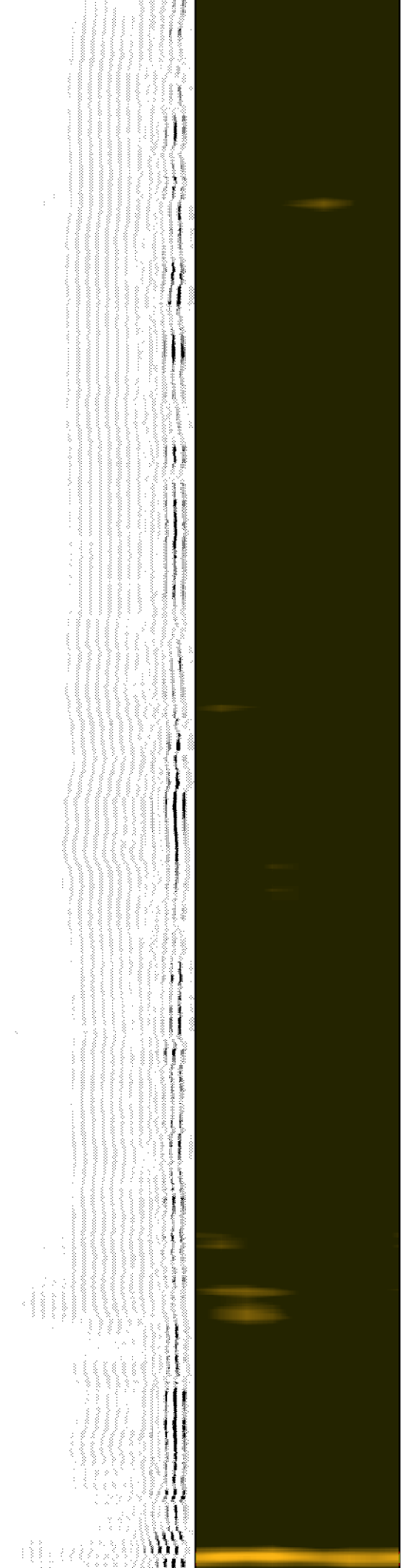
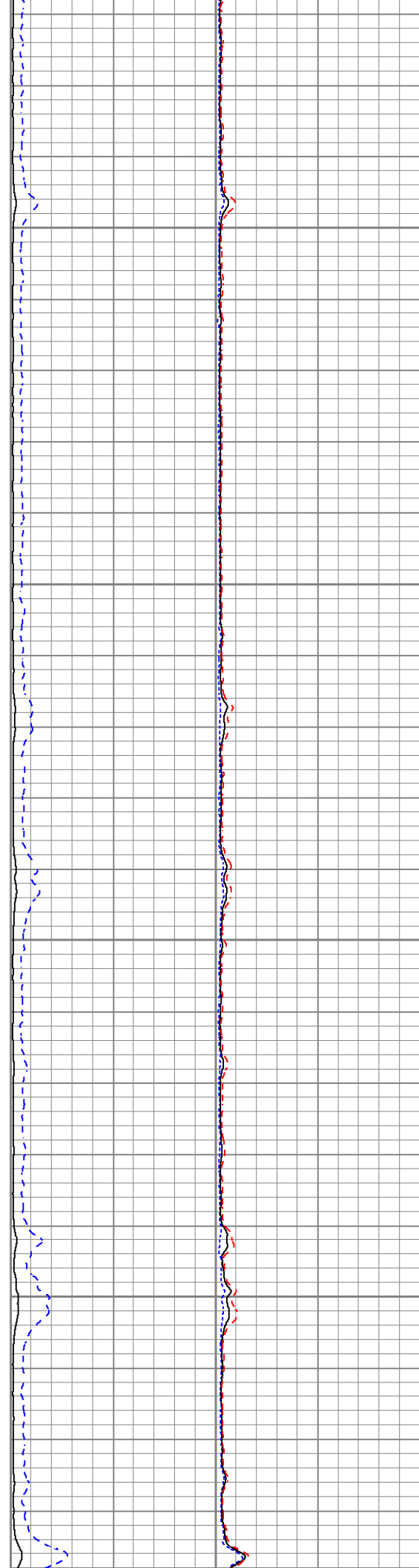
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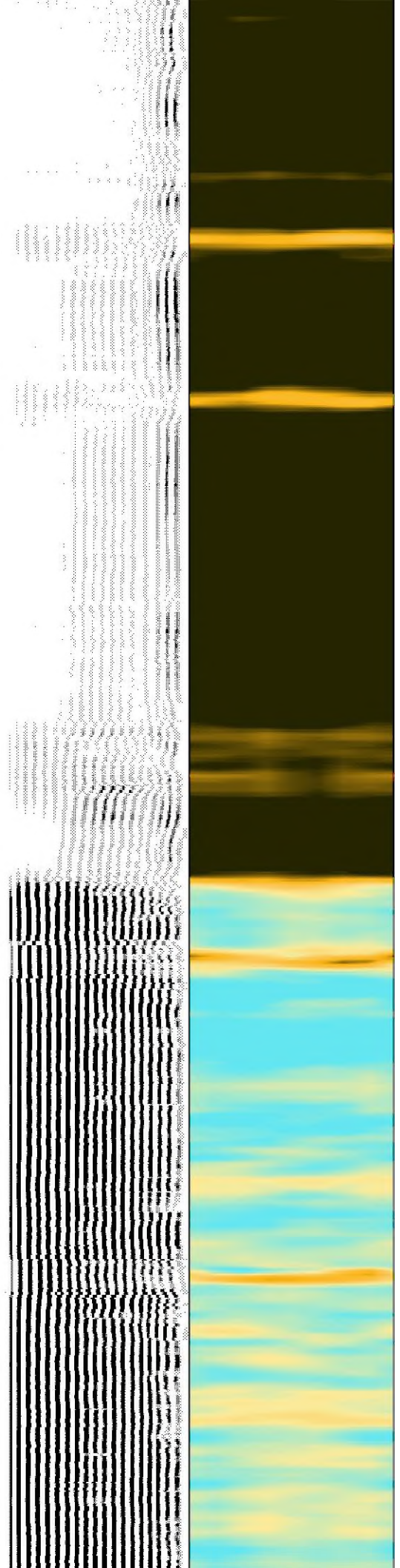
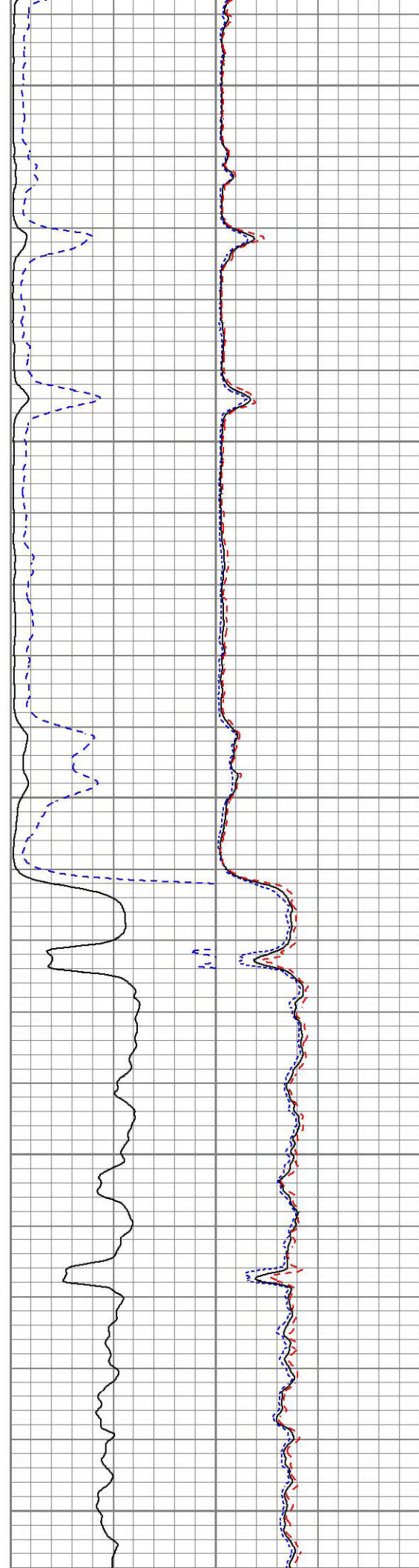
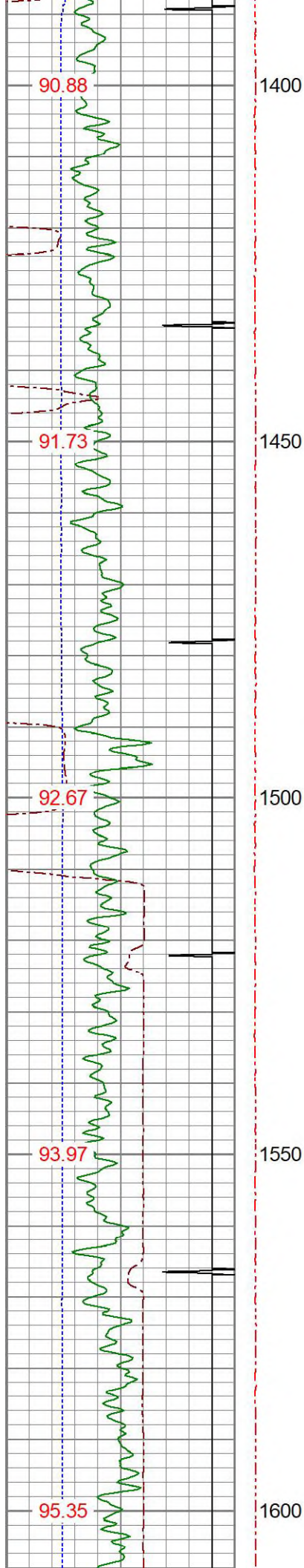
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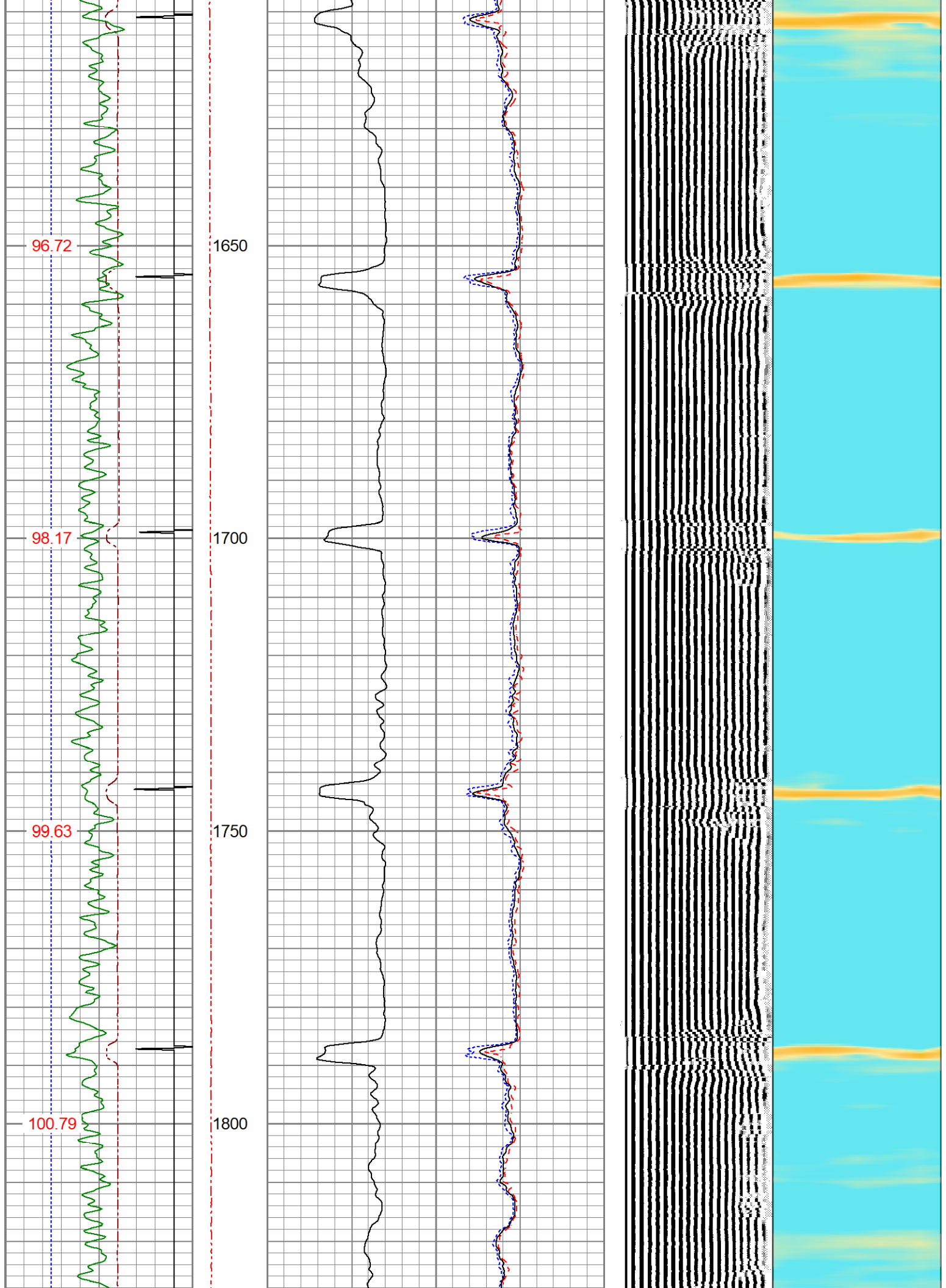
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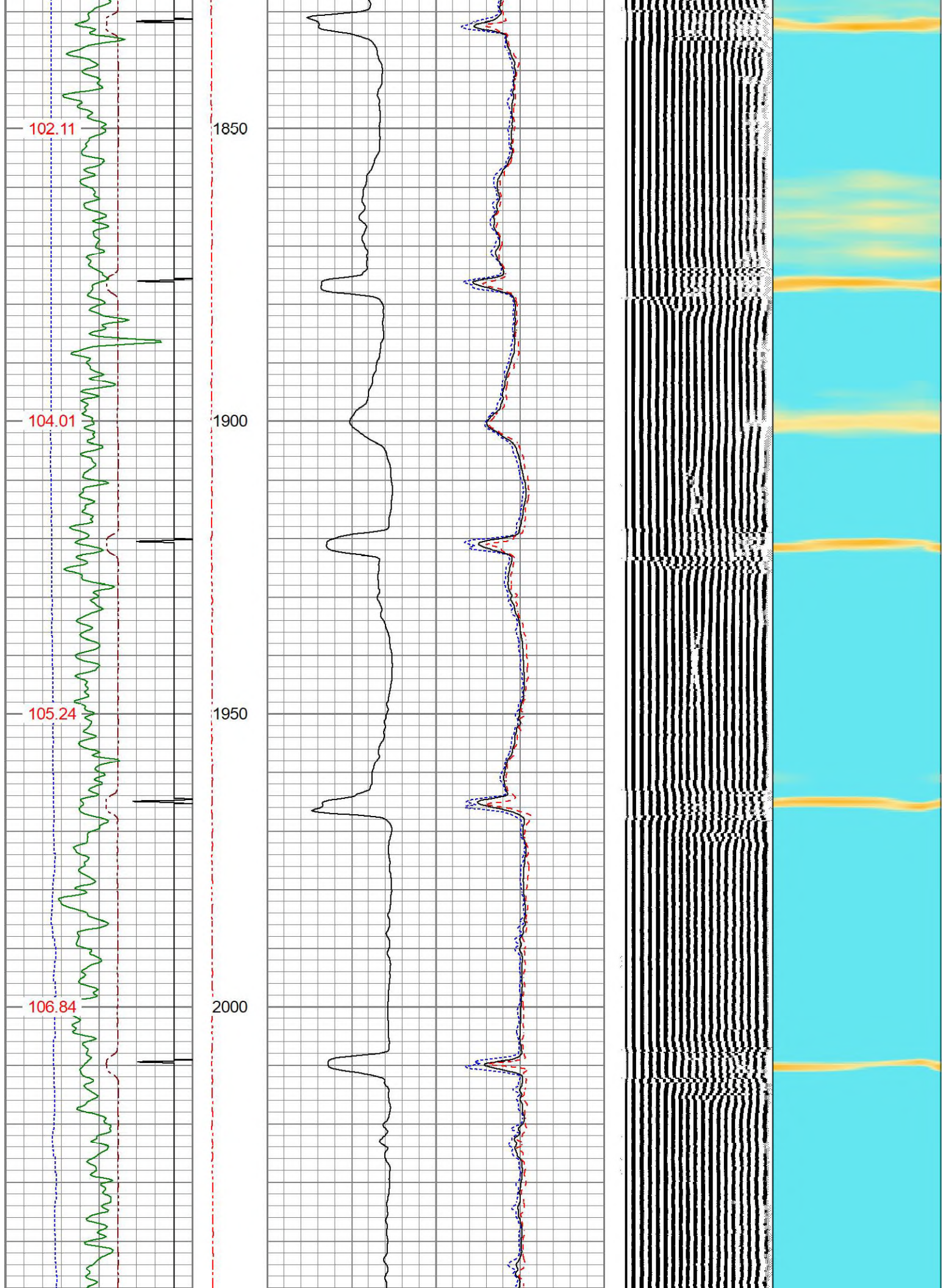
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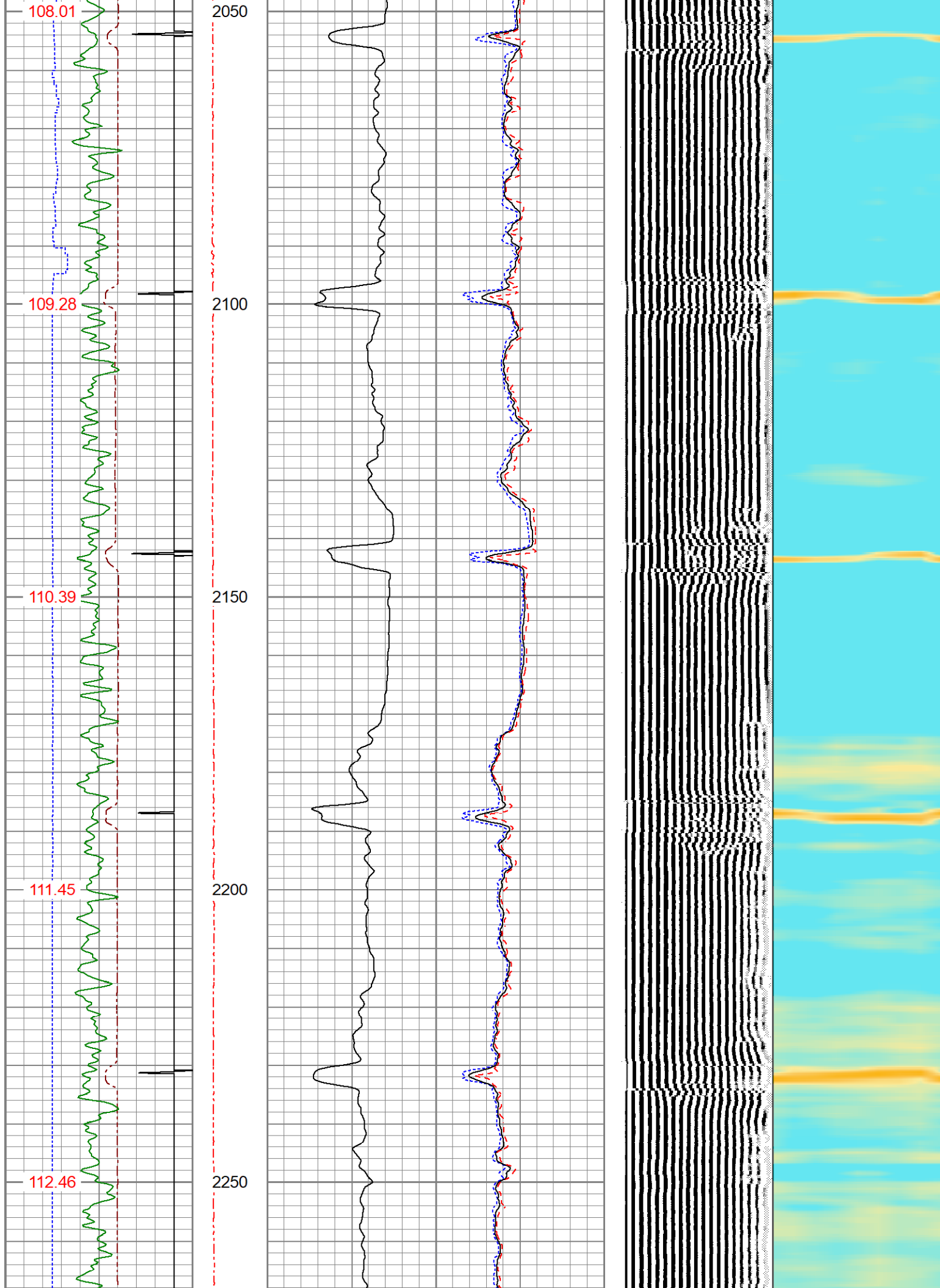
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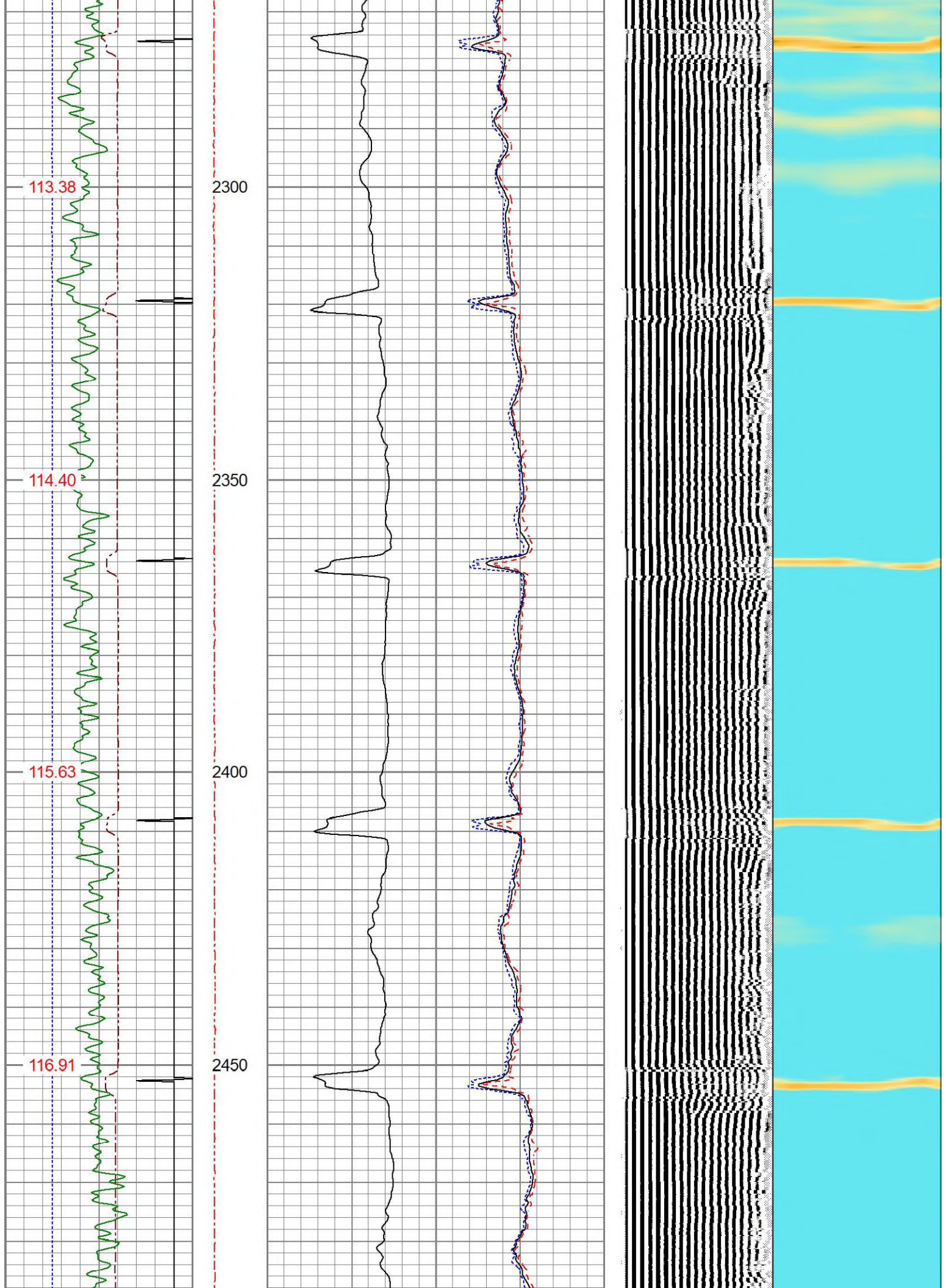


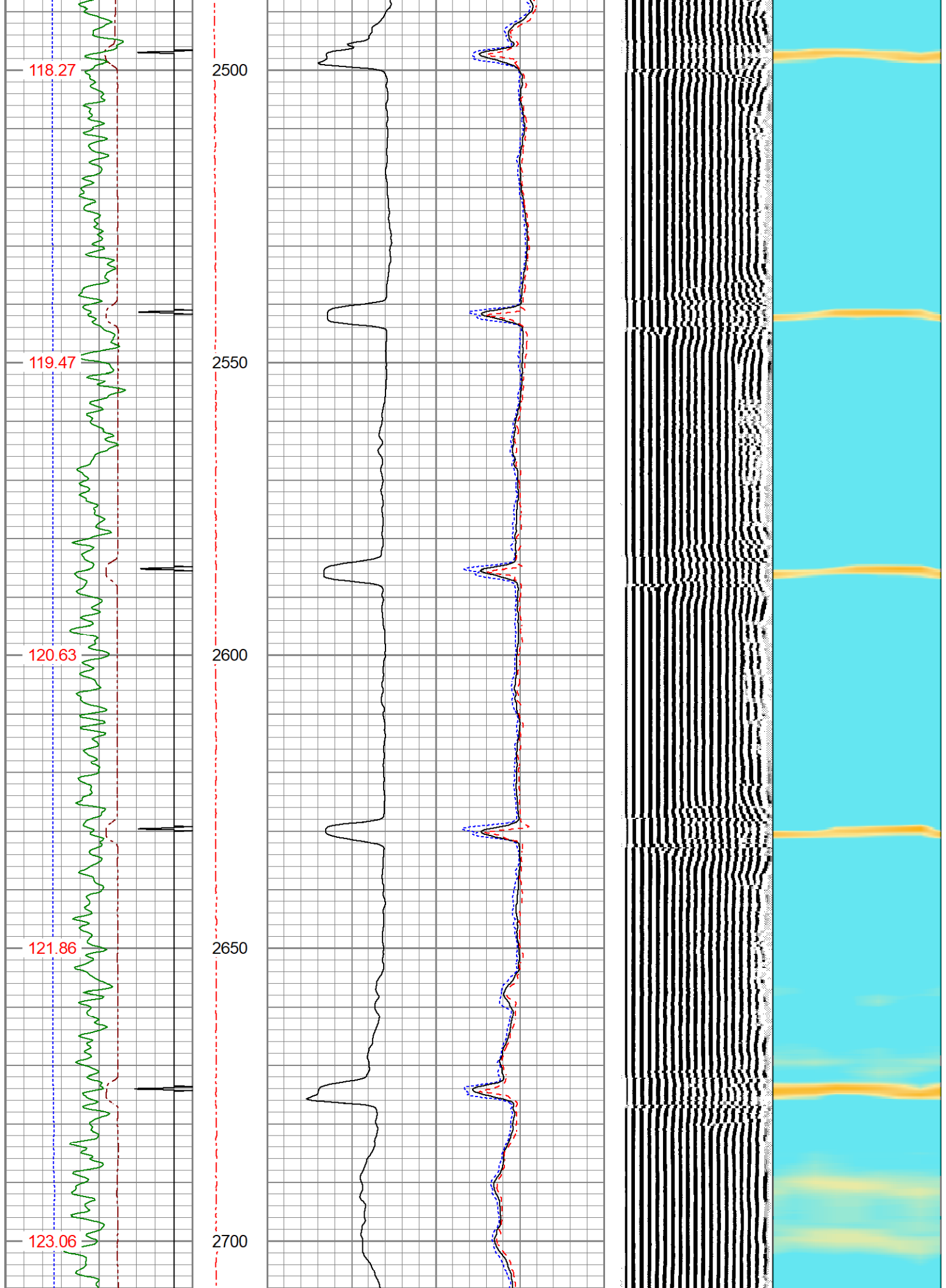


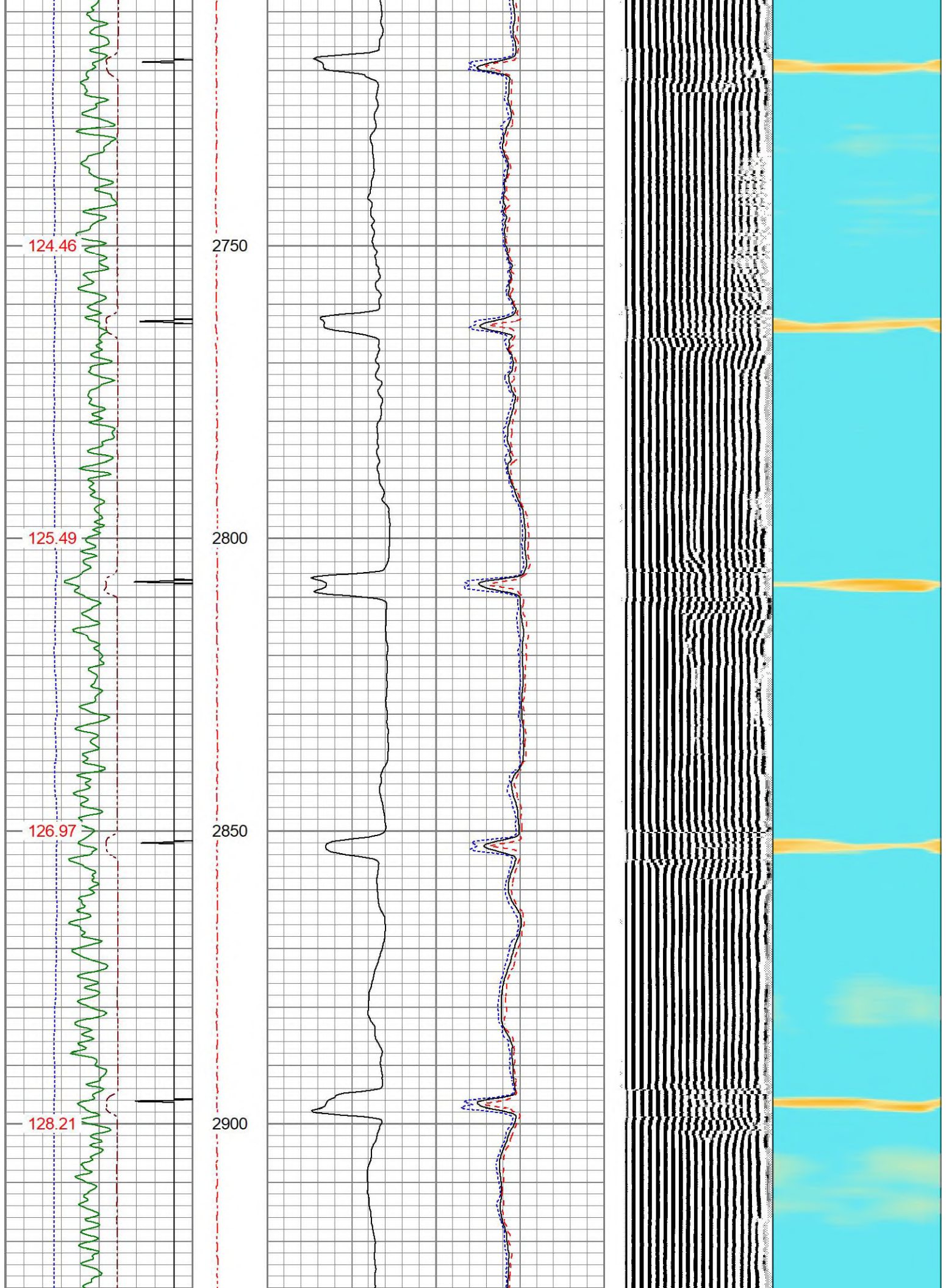


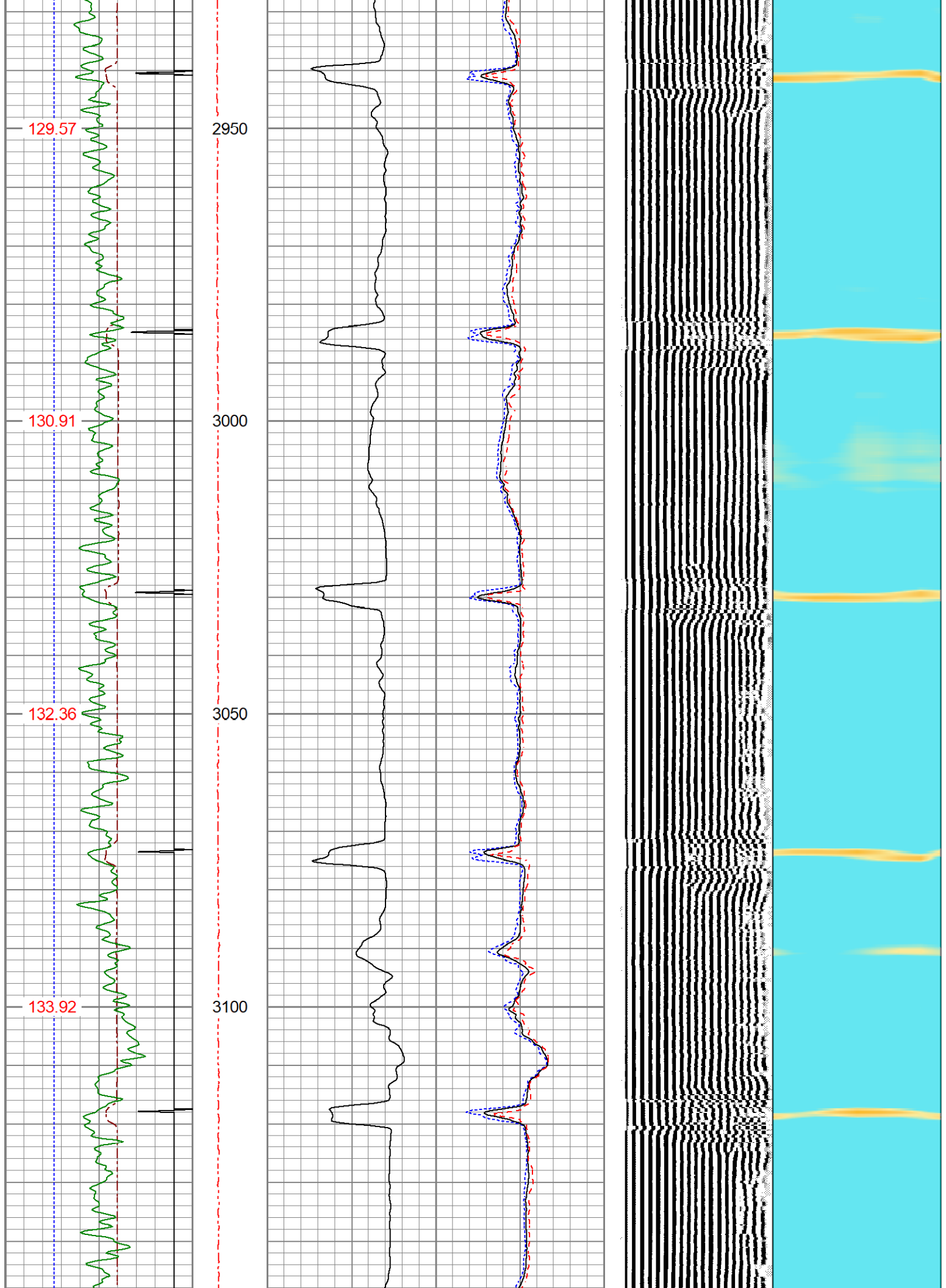


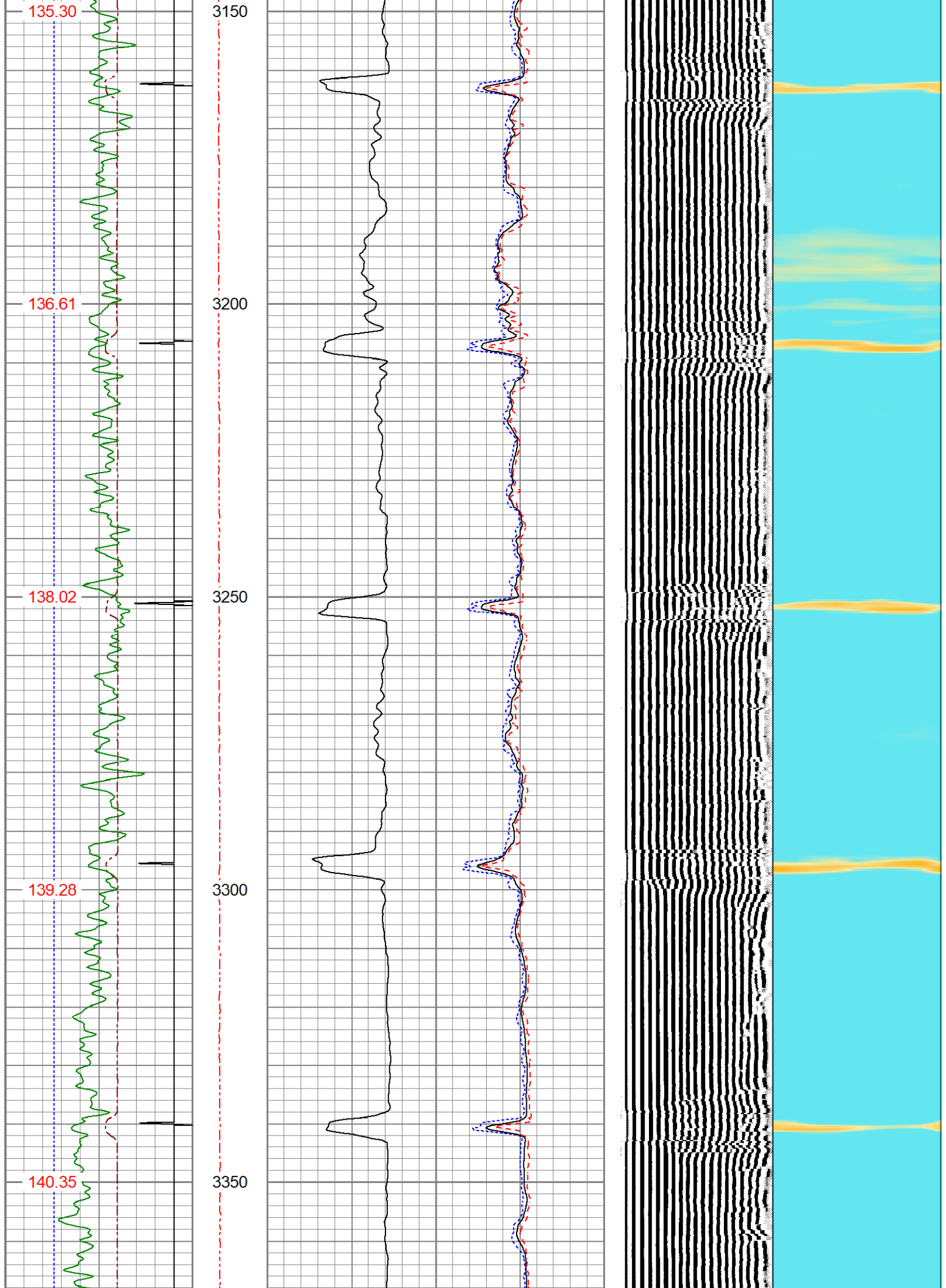


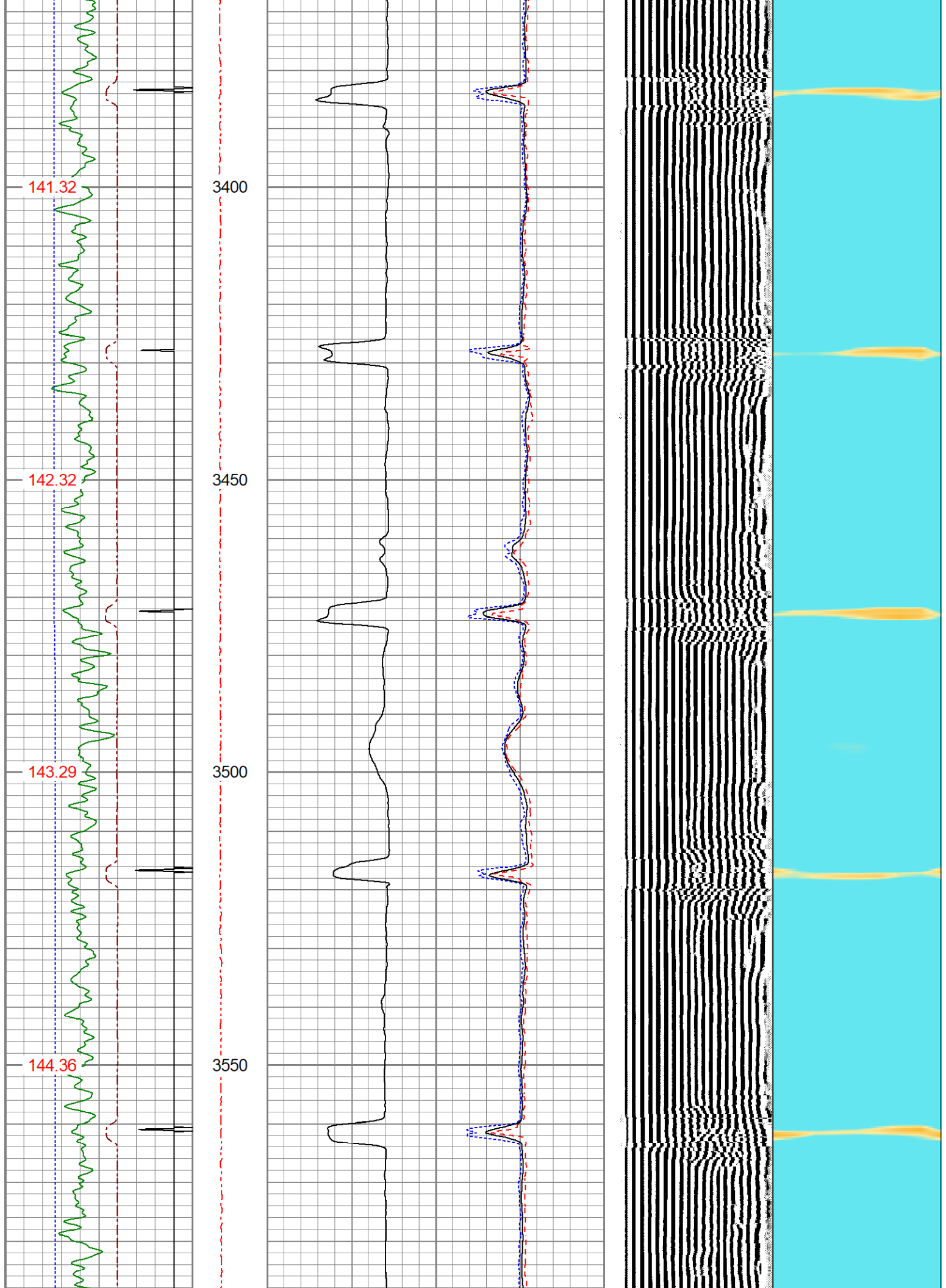


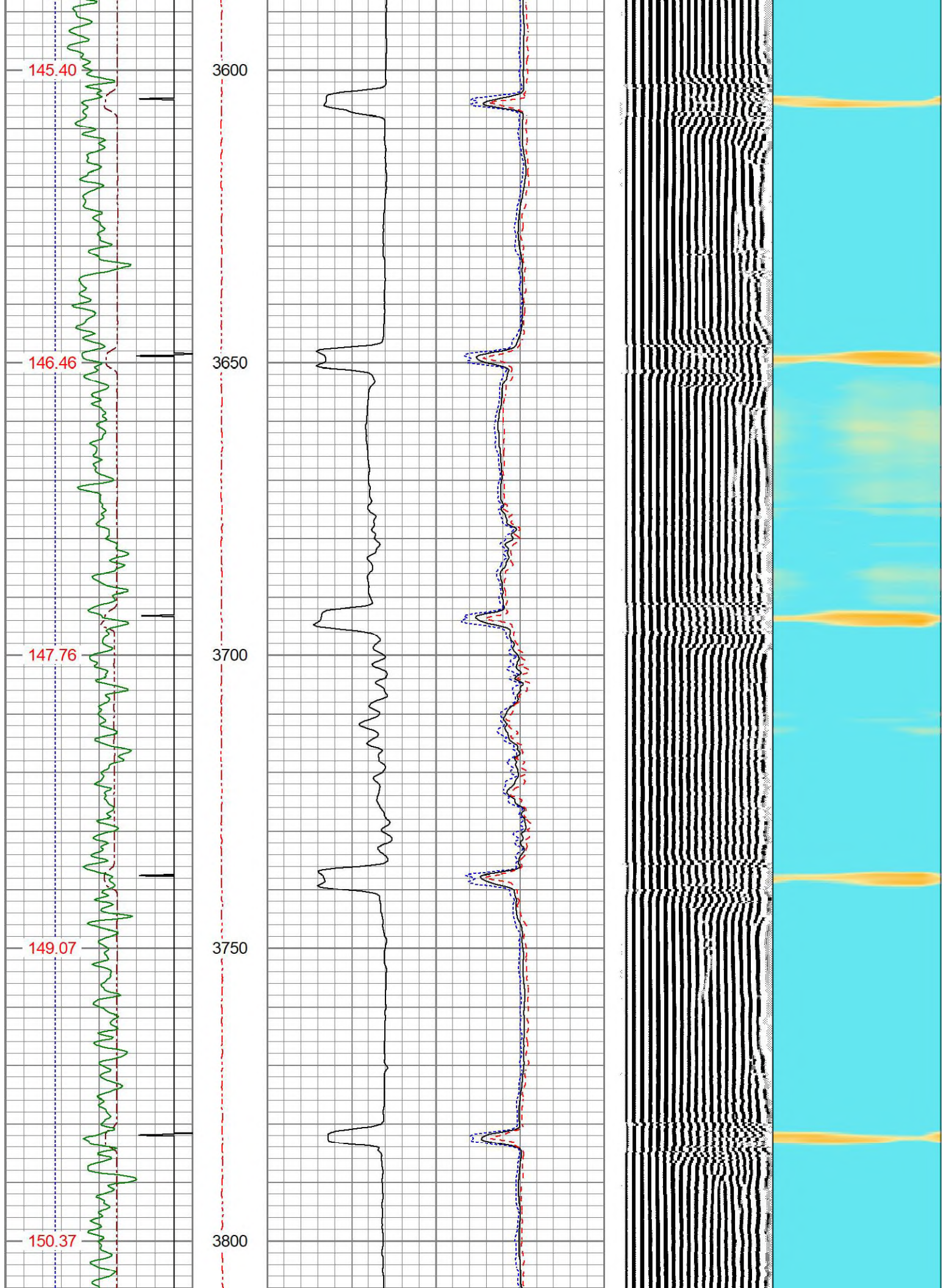


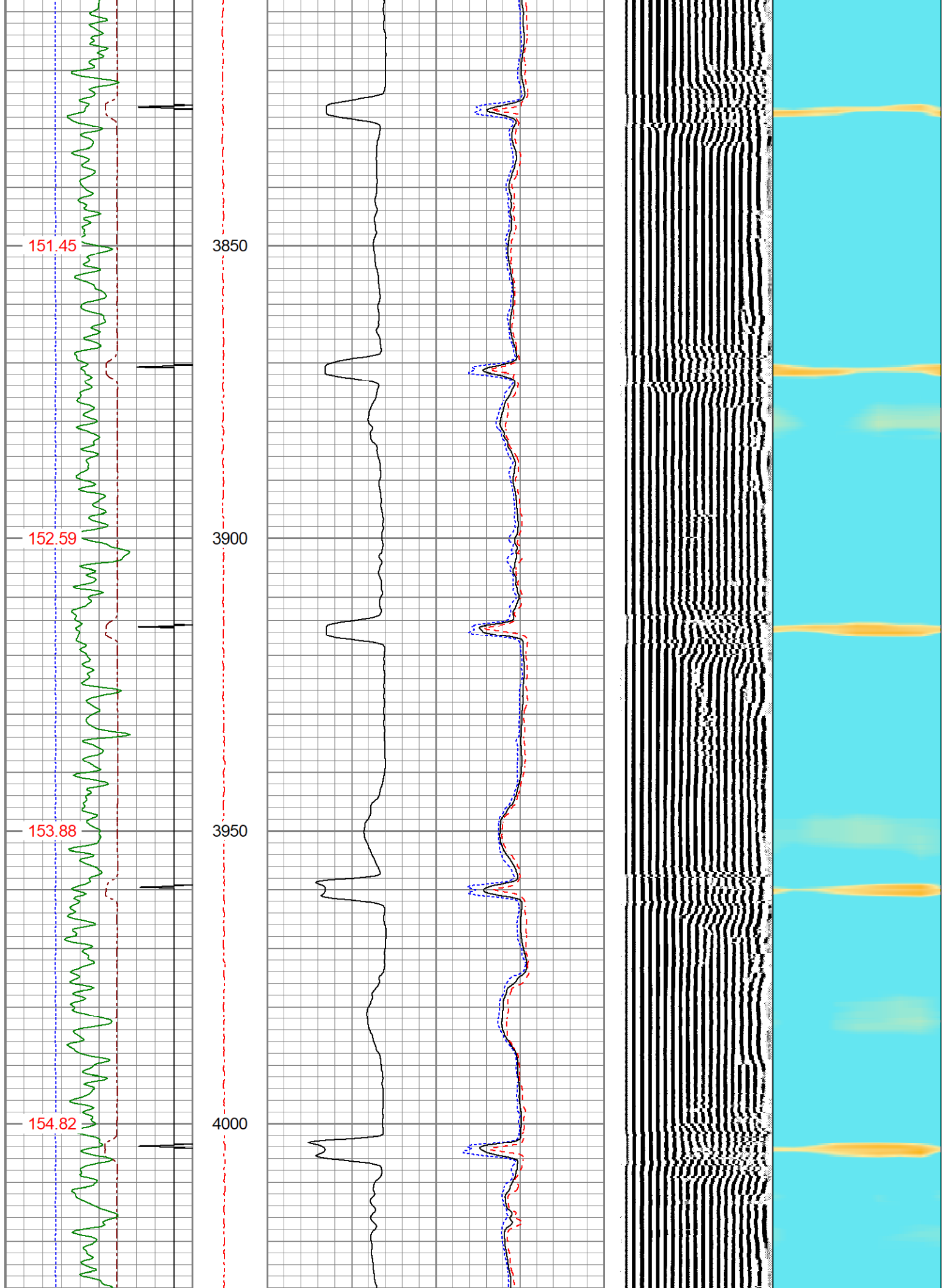


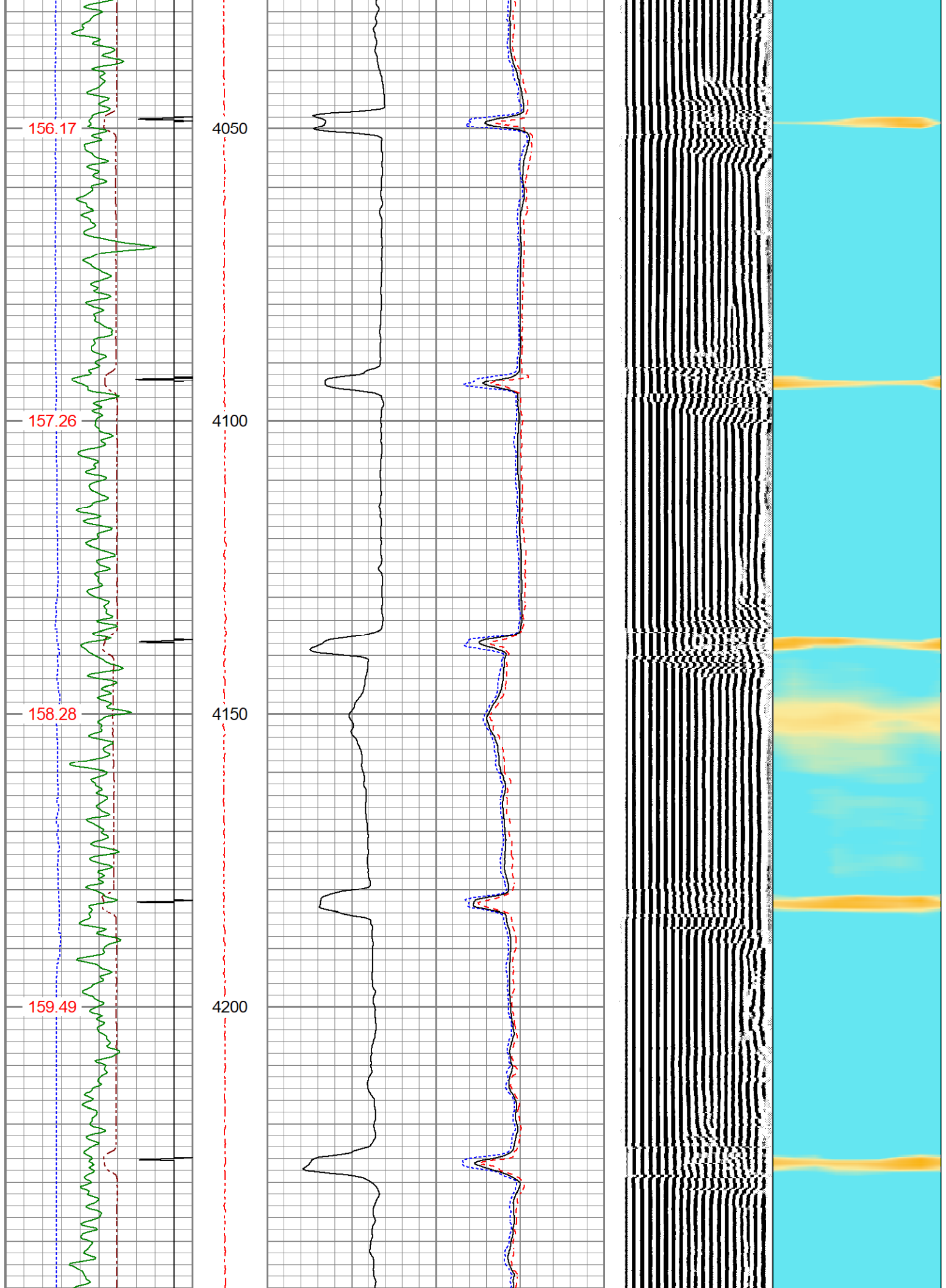


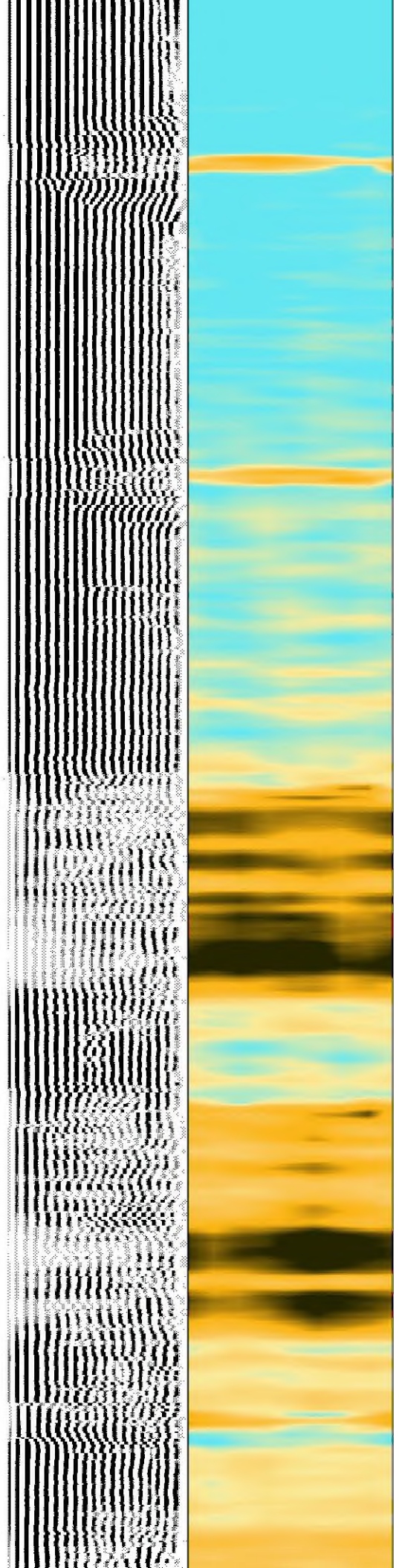
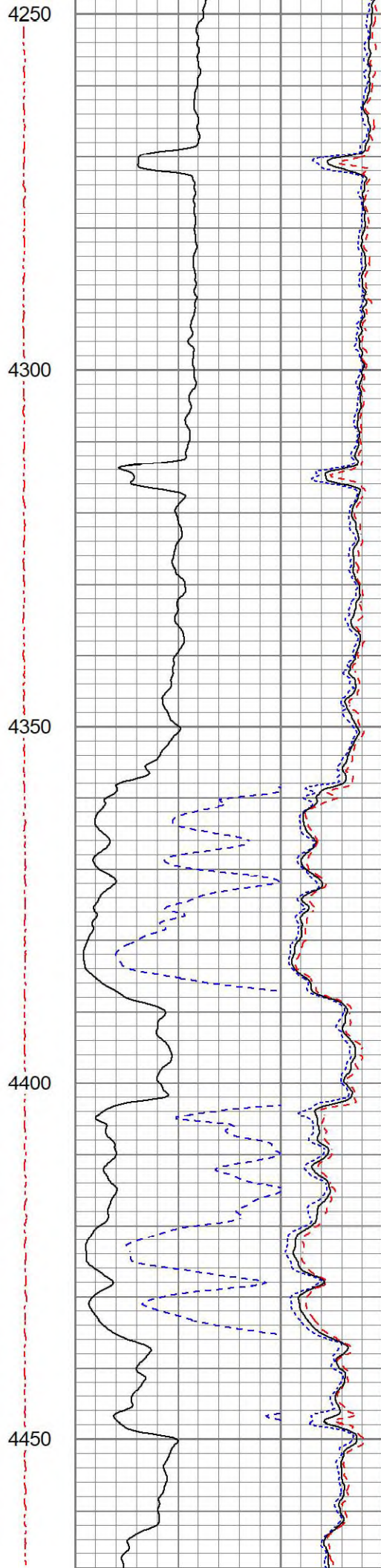
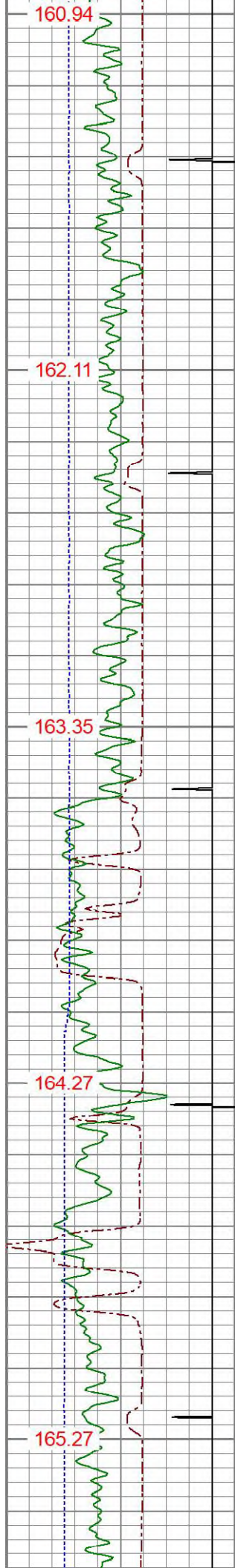


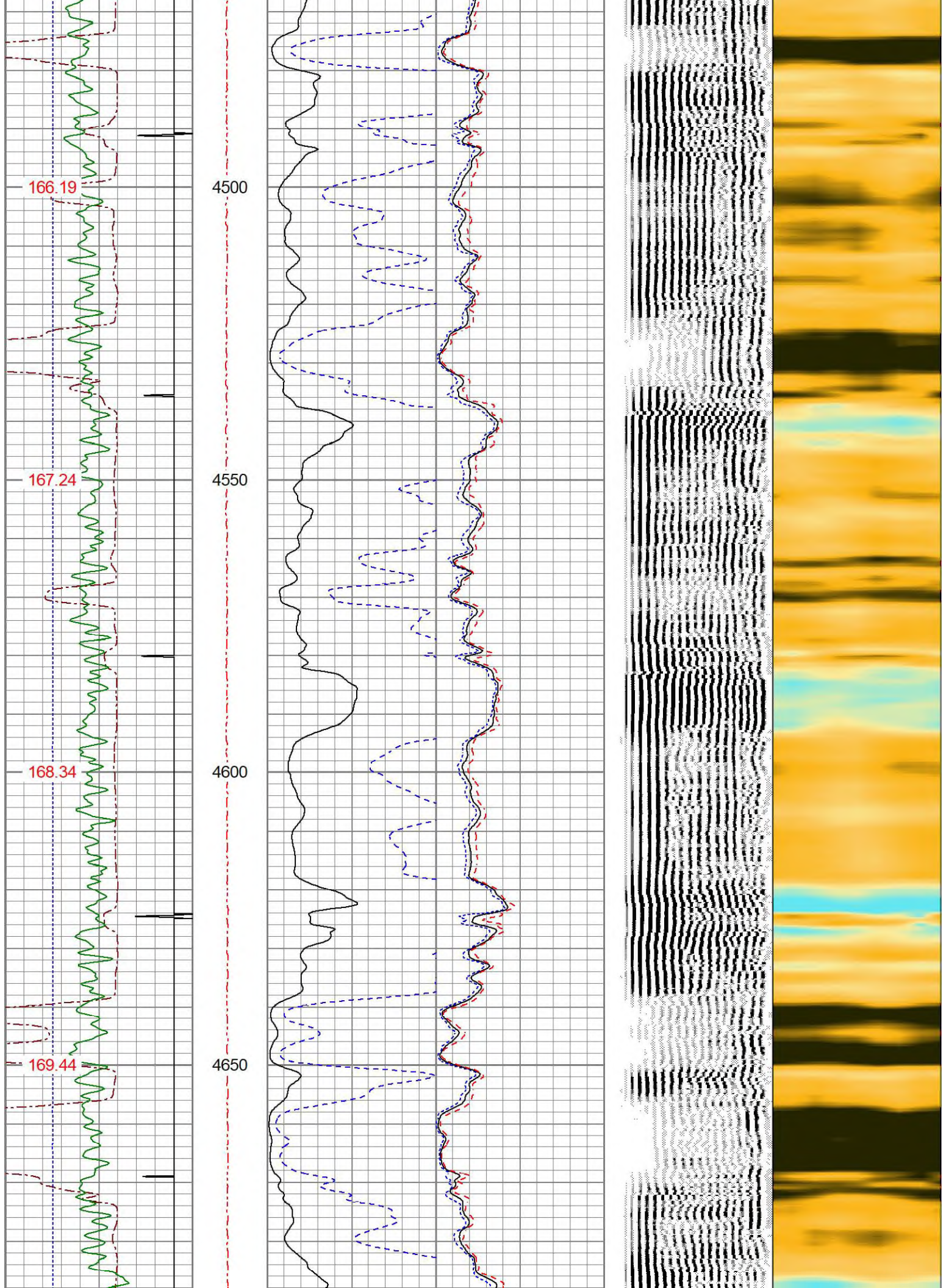


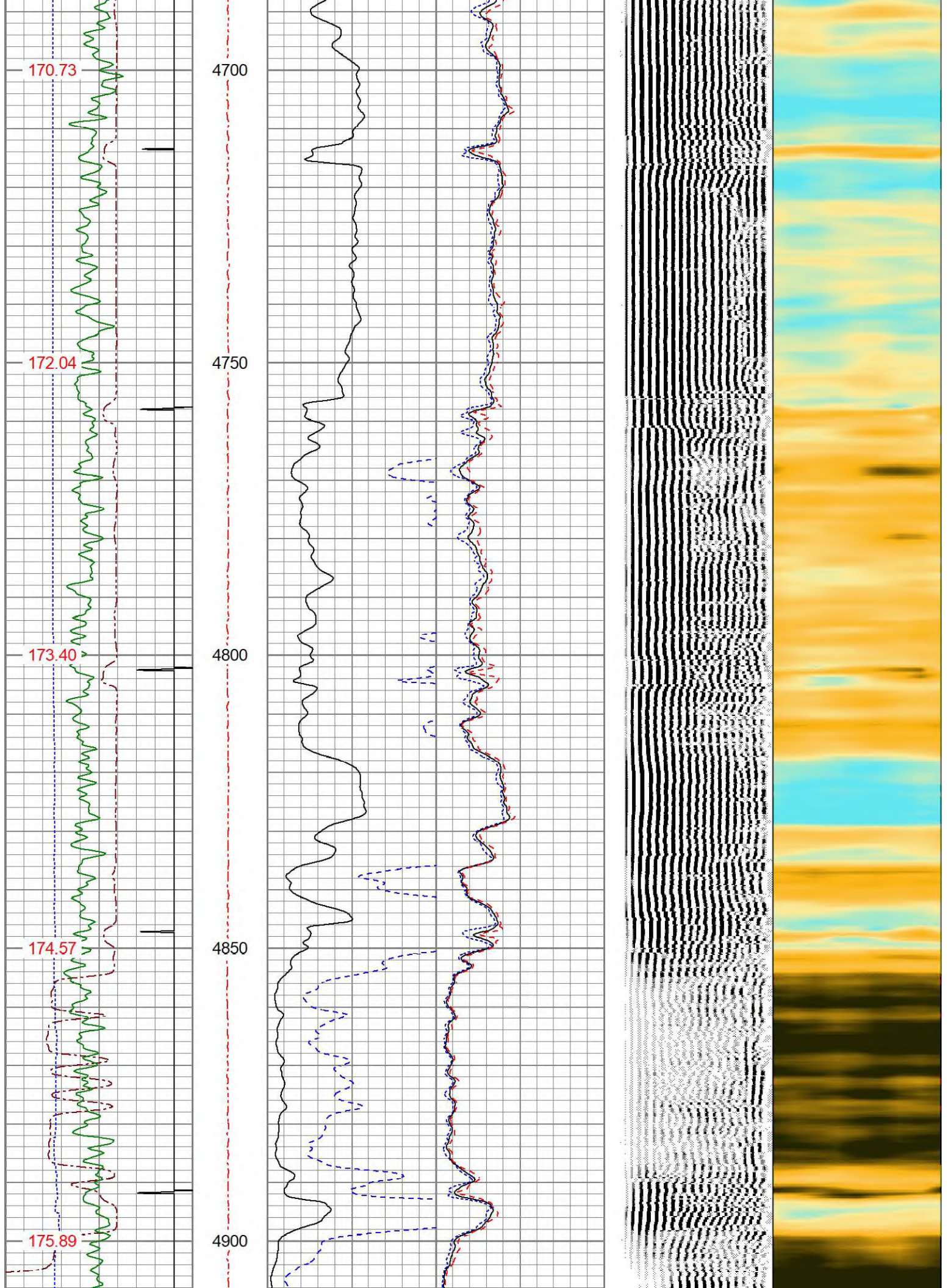


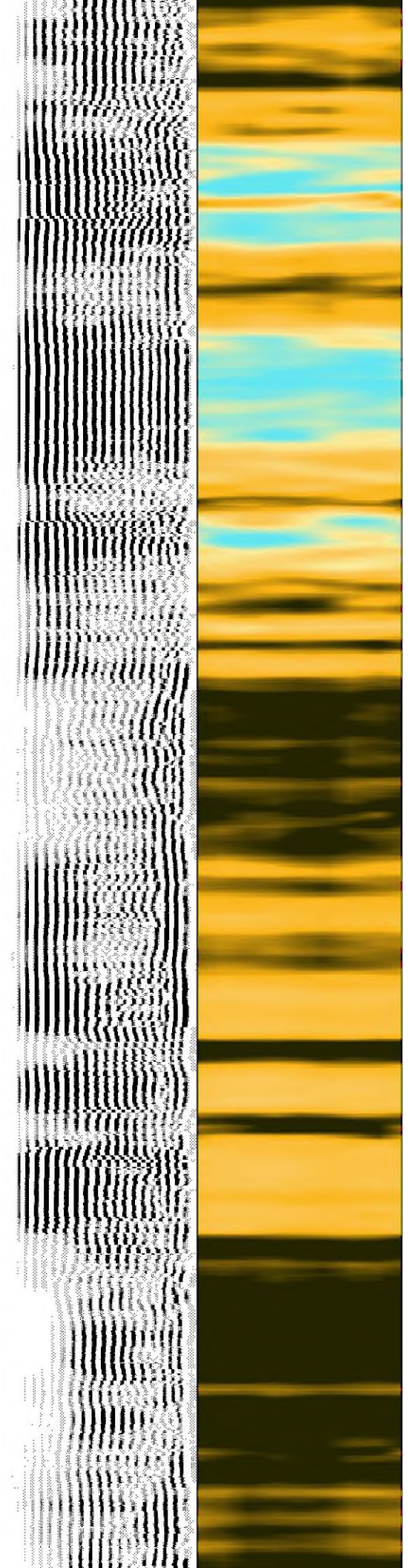
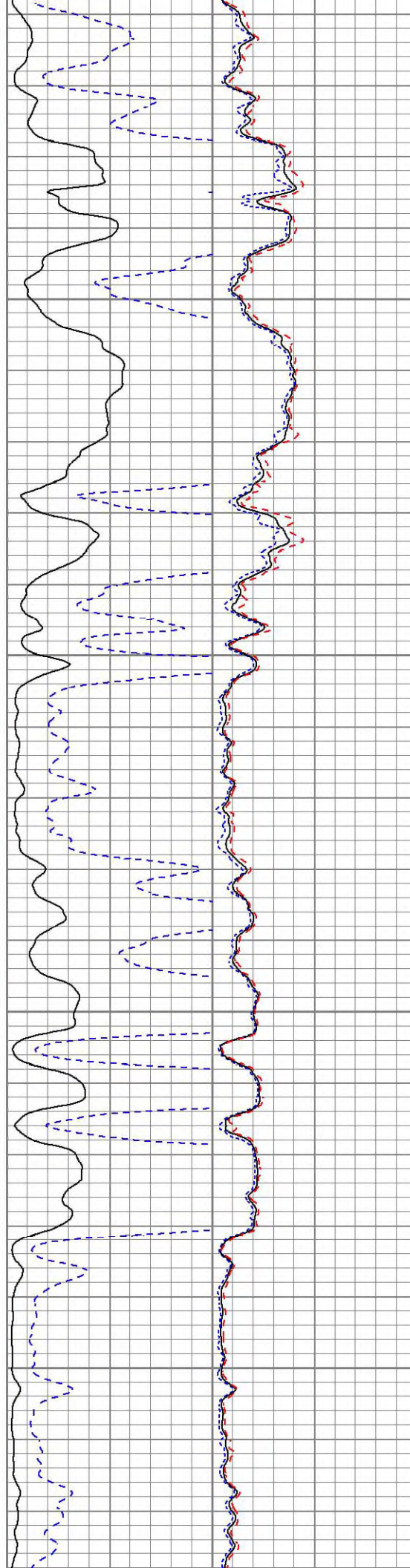
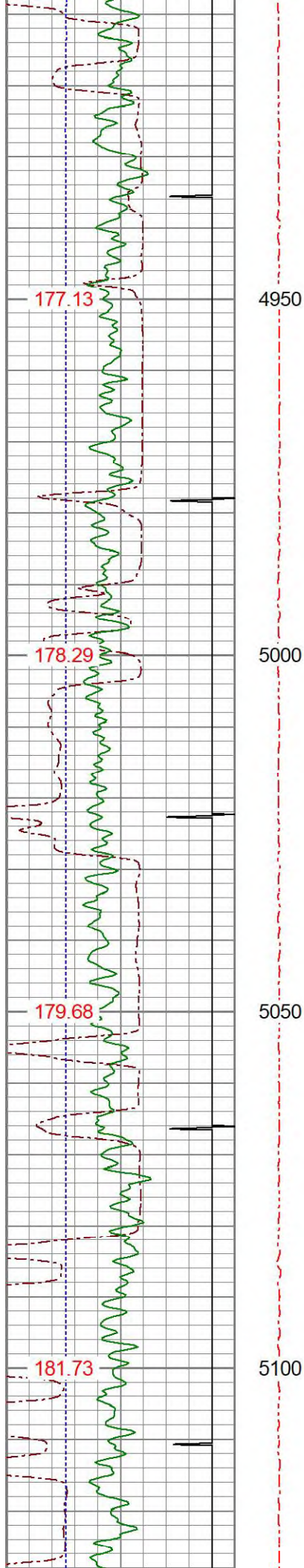


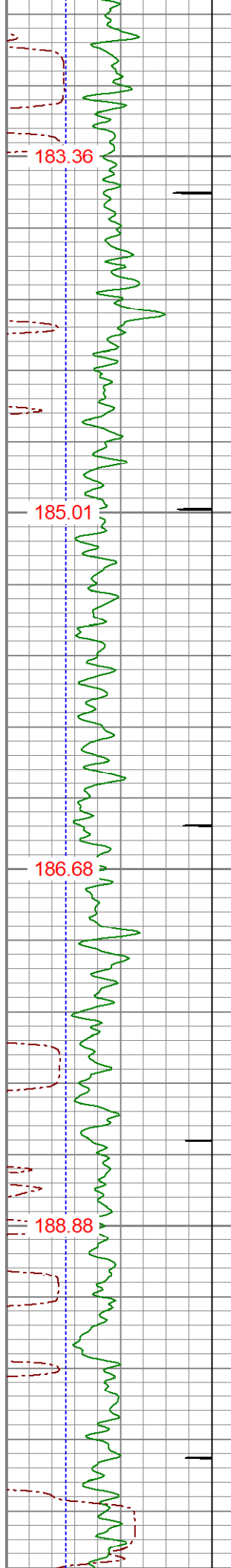










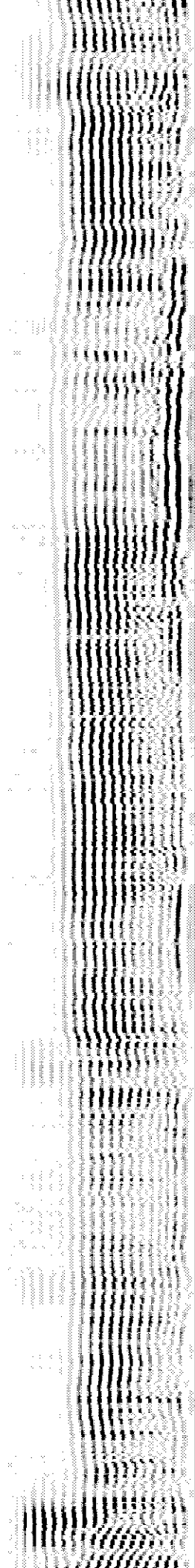
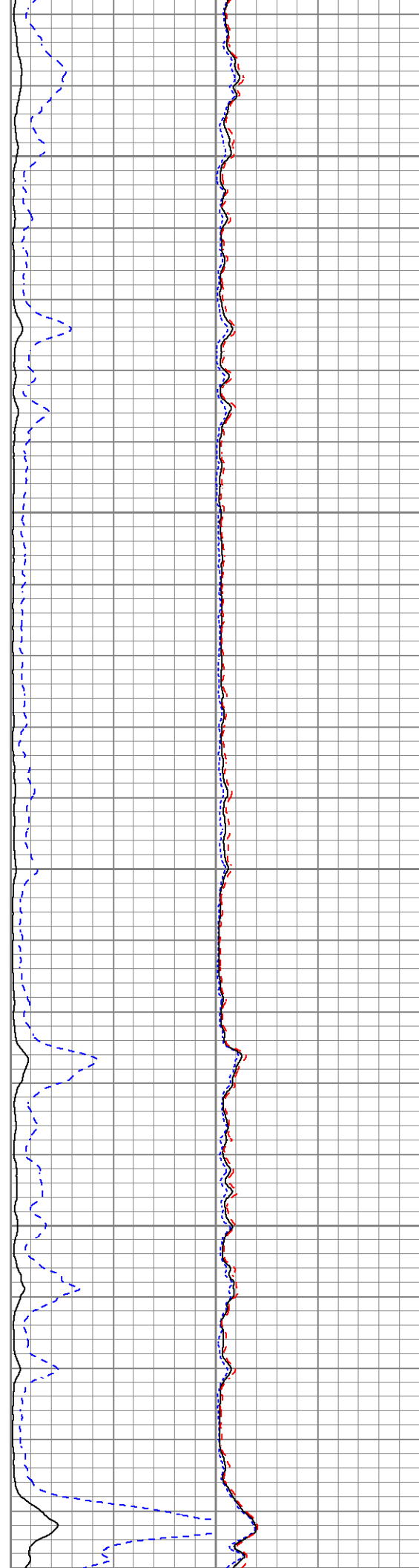


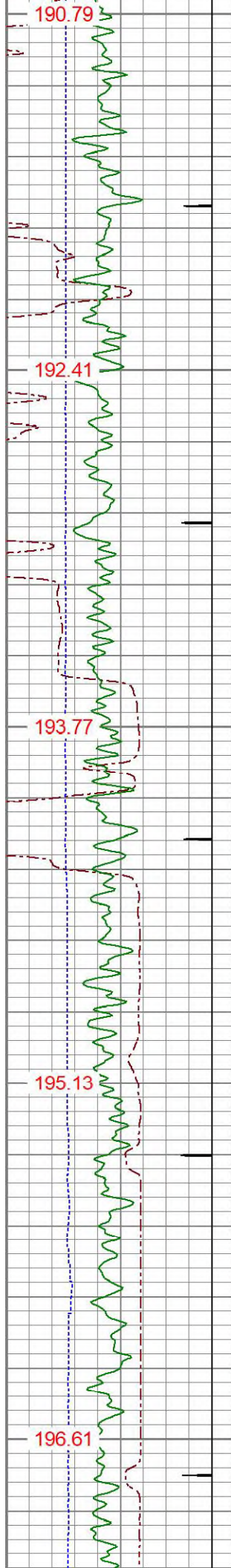
5150

5200

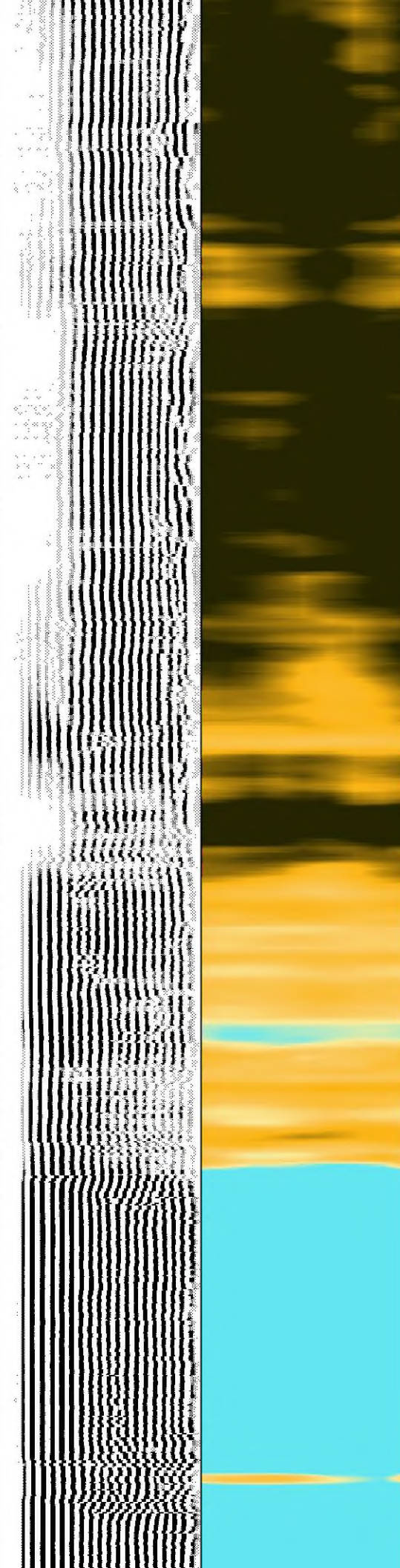
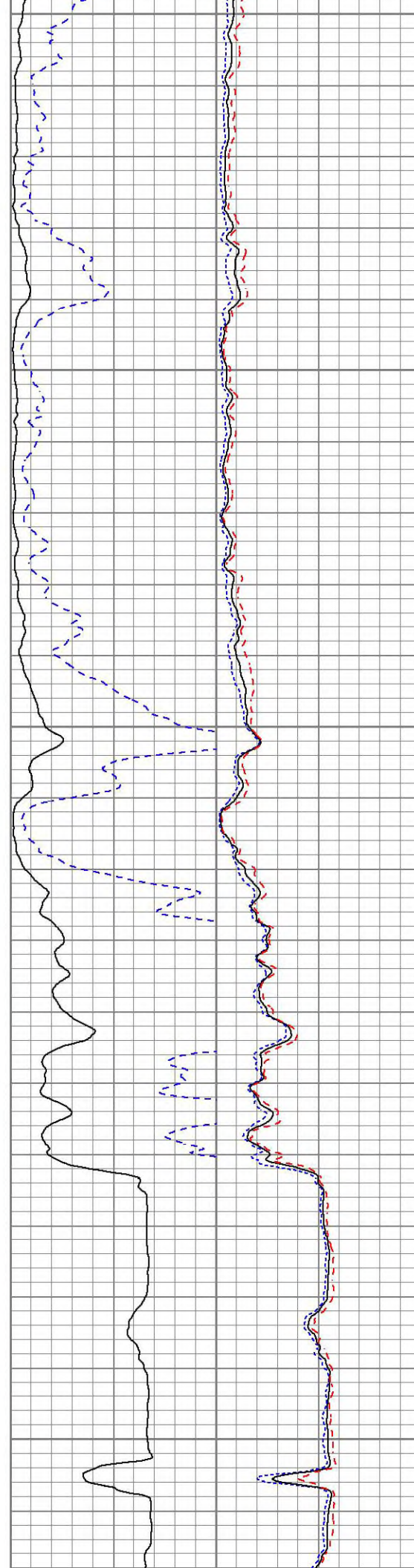
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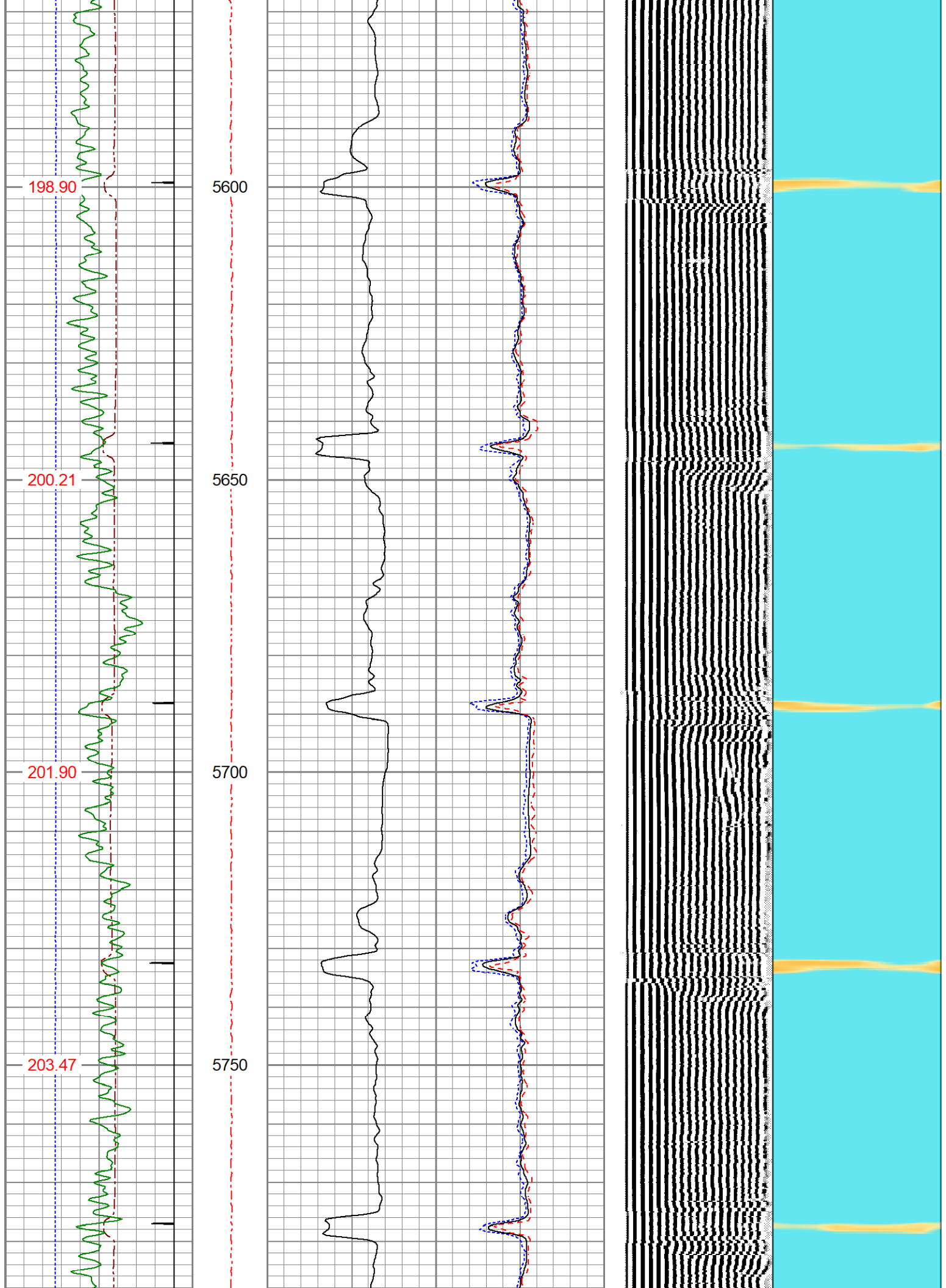
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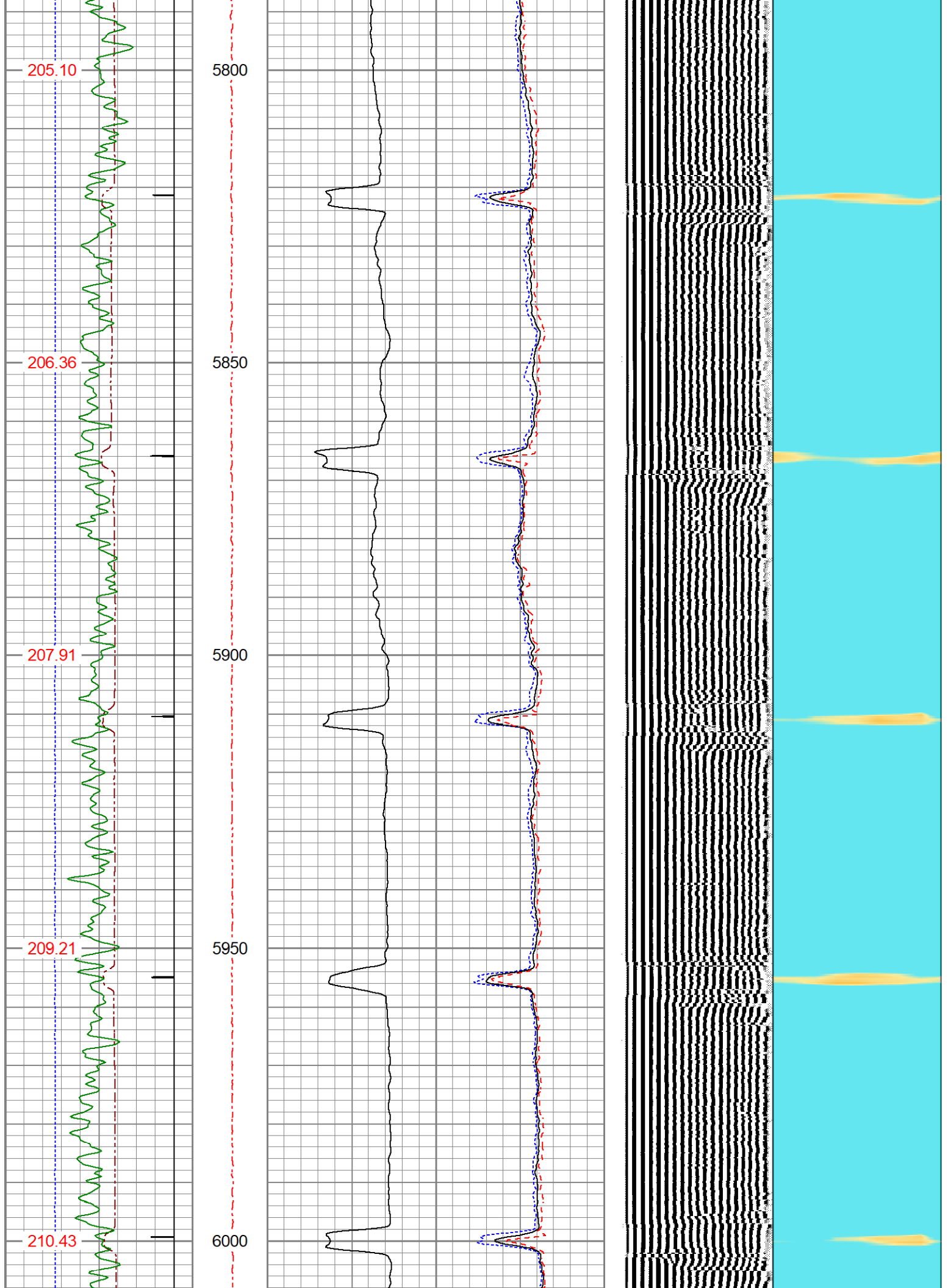


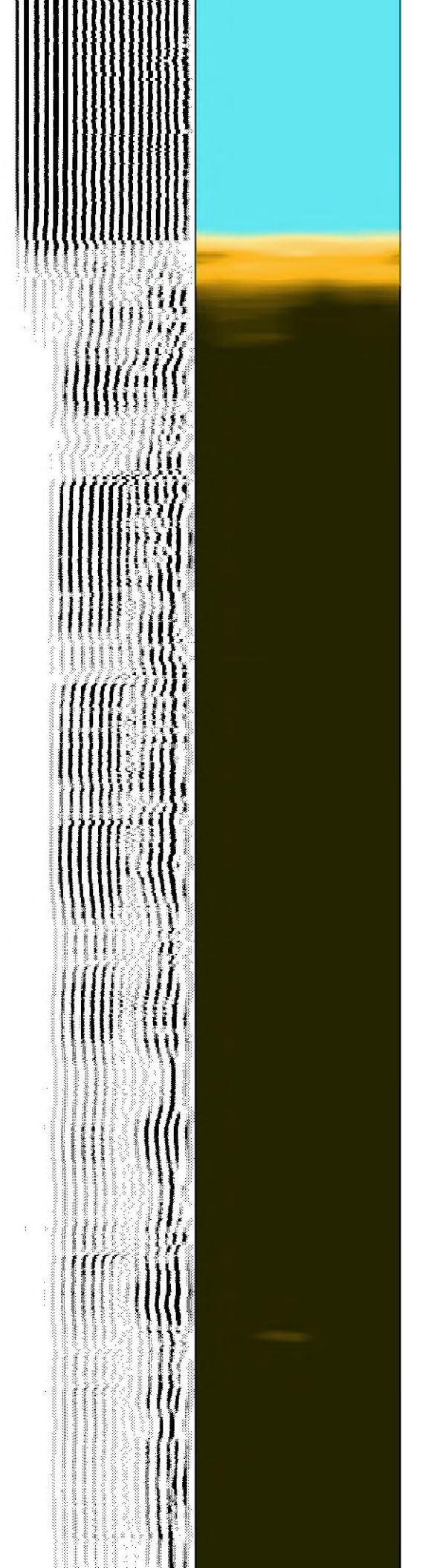
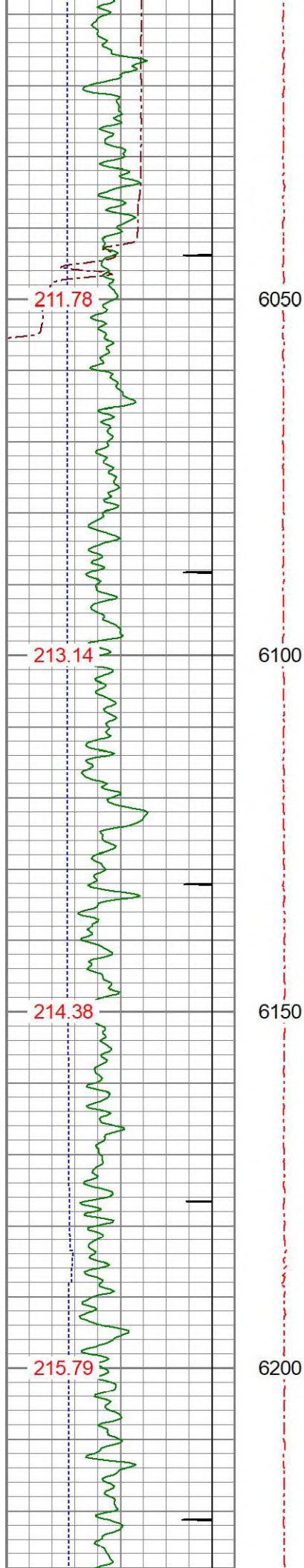


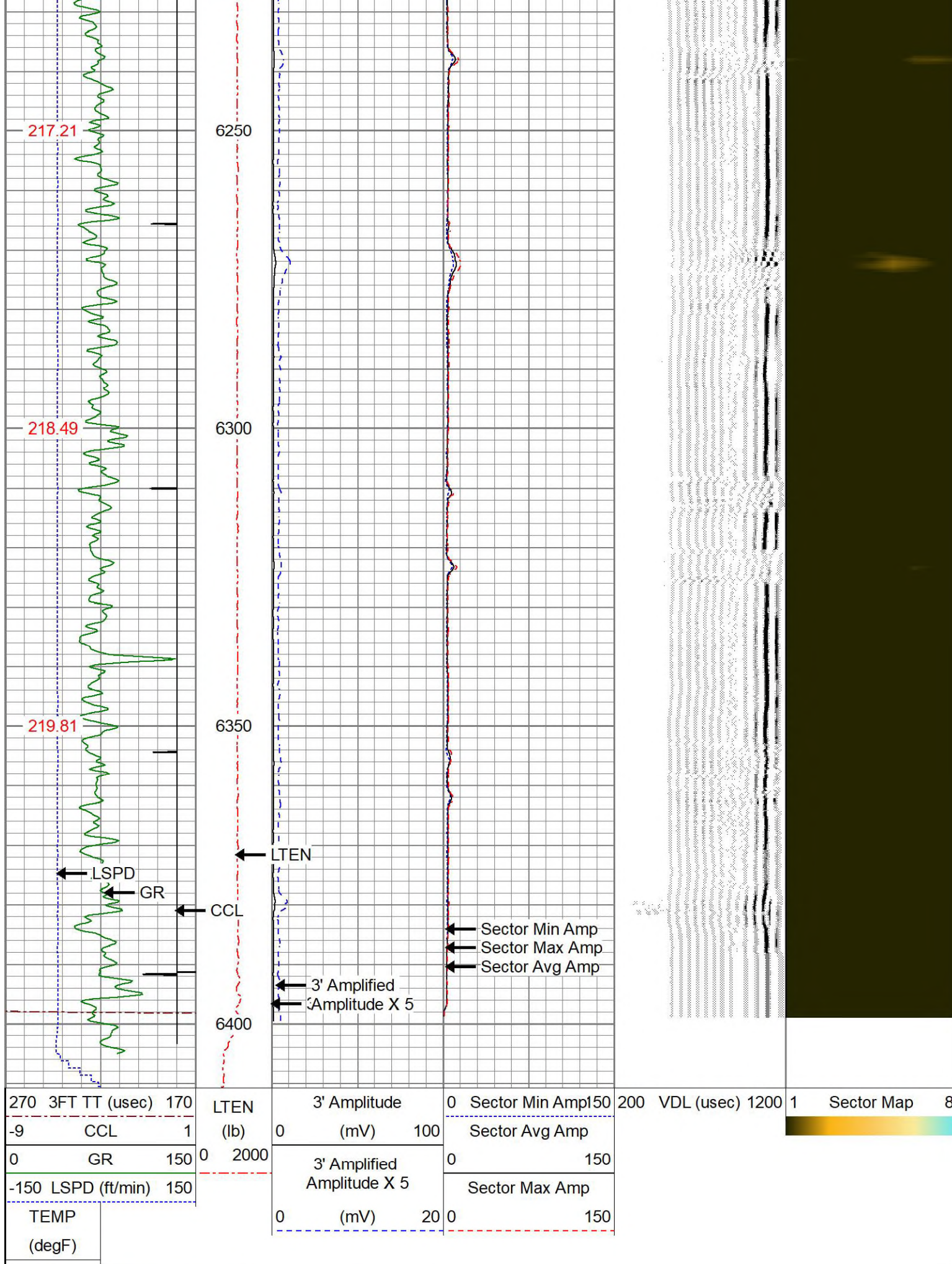
5350
5400
5450
5500
5550











MAIN PASS



0 PSI APPLIED AT SURFACE

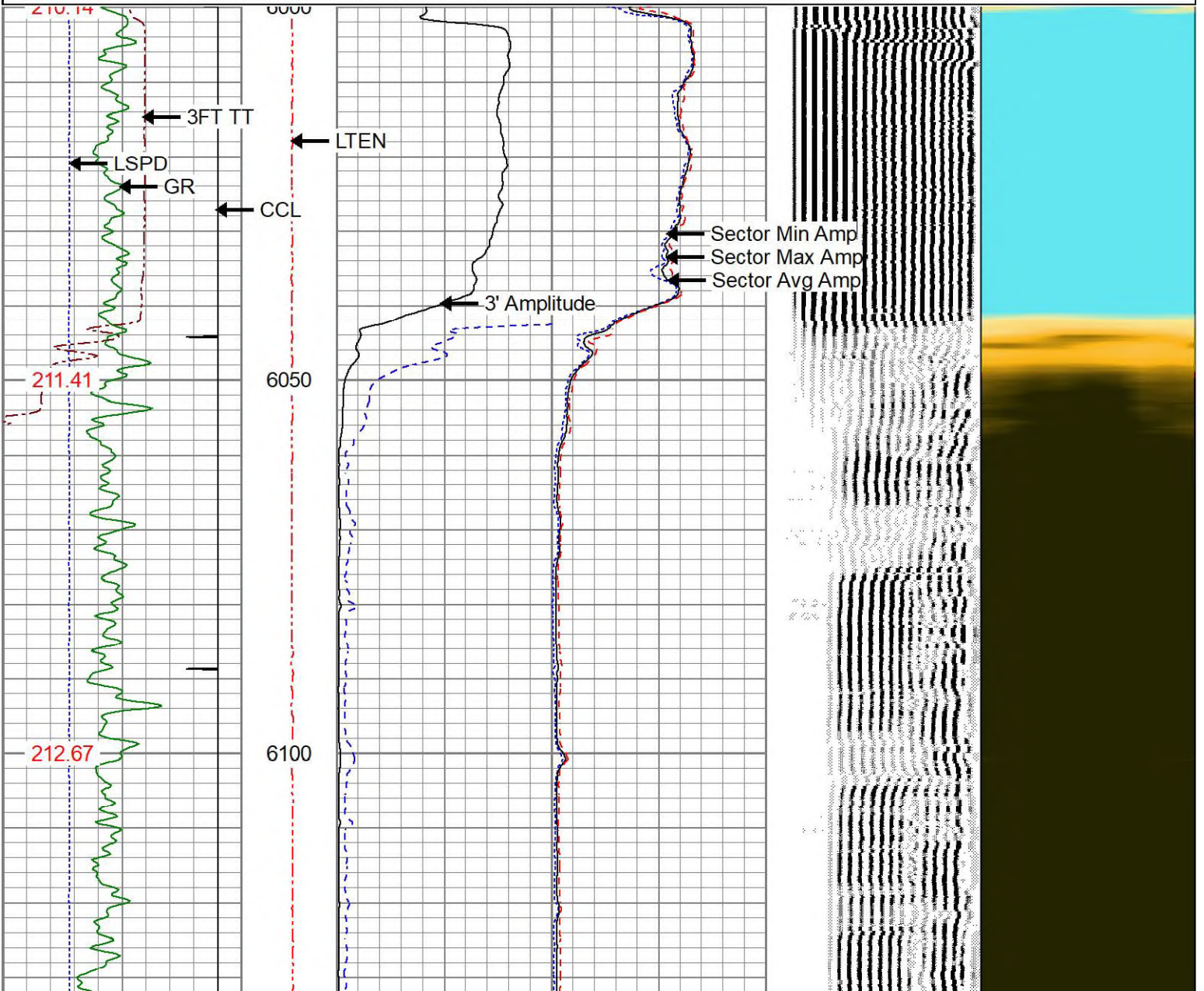


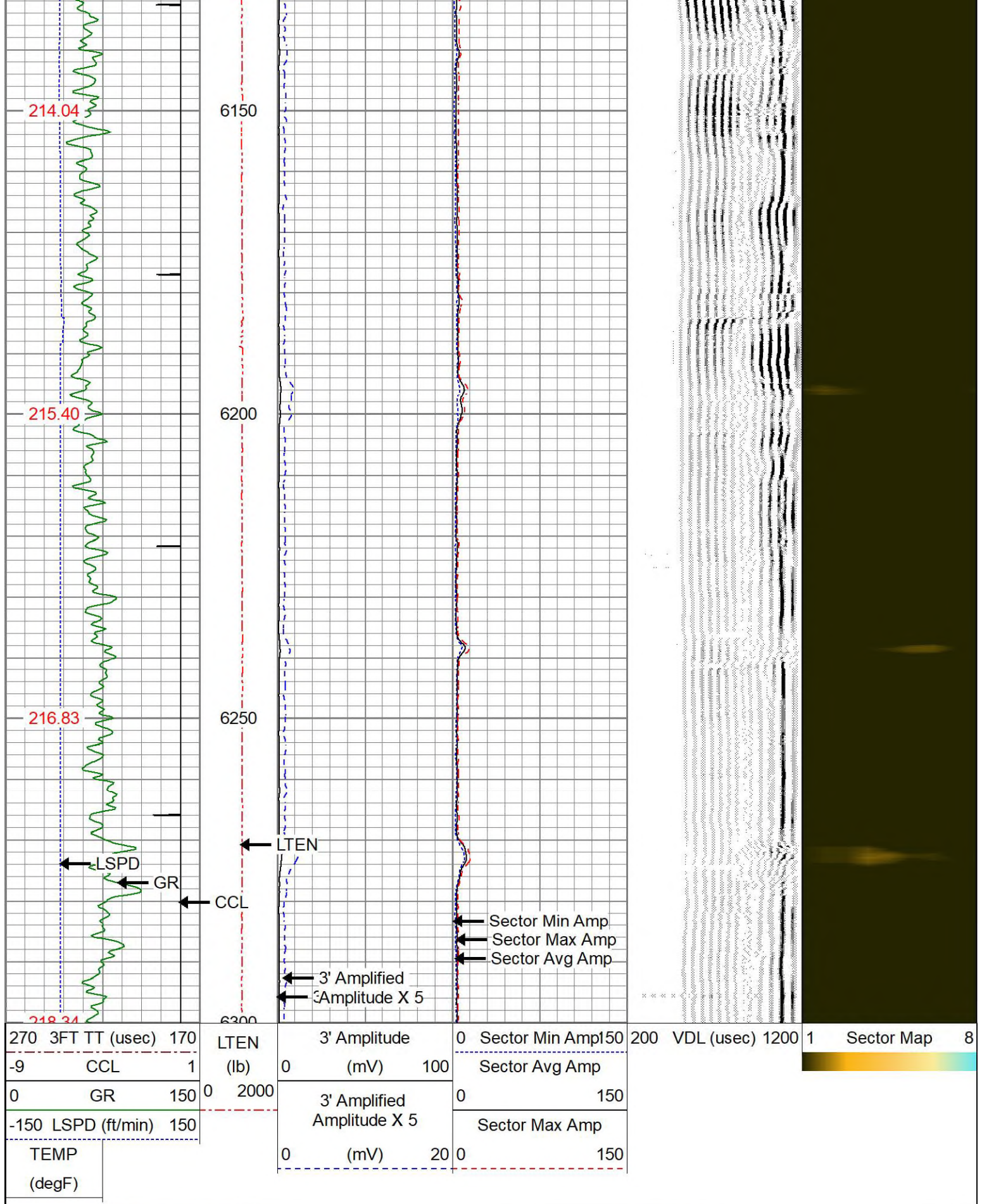
REPEAT PASS

0 PSI APPLIED AT SURFACE

Database File: occidental_thompson 6-33_05-123-20646_11-04-2022.db
Dataset Pathname: PASS 6
Presentation Format: res_scbl 8sec-gr-ccl
Dataset Creation: Fri Nov 04 10:50:53 2022
Charted by: Depth in Feet scaled 1:240

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





REPEAT PASS

0

PSI APPLIED AT SURFACE

Calibration Report						
Database File	occidental_thompson 6-33_05-123-20646_11-04-2022.db					
Dataset Pathname	PASS 6					
Dataset Creation	Fri Nov 04 10:50:53 2022					
Gamma Ray Calibration Report						
Serial Number:	0111					
Tool Model:	Tek-Co 2 3/4					
Performed:	Thu Oct 13 08:15:27 2022					
Calibrator Value:	1.0					
Background Reading:	0.0	cps				
Calibrator Reading:	1.0	cps				
Sensitivity:	0.6700	/cps				
Segmented Cement Bond Log Calibration Report						
Serial Number:	275001					
Tool Model:	275 Temp JS					
Calibration Casing Diameter:	4.500	in				
Calibration Depth:	2366.507	ft				
Master Calibration, performed (Derived):						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.007	1.335	0.600	81.196	60.072	1.002
CAL	0.003	1.015				
5'	-0.011	2.199	0.600	81.196	36.465	0.999
SUM						
S1	0.000	1.382	0.000	100.000	72.363	-0.000
S2	0.000	1.361	0.000	100.000	73.454	-0.000
S3	0.000	1.349	0.000	100.000	74.140	-0.000
S4	0.000	1.296	0.000	100.000	77.134	-0.000
S5	0.000	1.296	0.000	100.000	77.183	-0.000
S6	0.000	1.287	0.000	100.000	77.700	-0.000
S7	0.000	1.358	0.000	100.000	73.636	-0.000
S8	0.000	1.372	0.000	100.000	72.873	-0.000
Internal Reference Calibration, performed (Not Performed):						
	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.003	1.015	1.000	0.000
Air Zero Calibration, performed Mon Sep 19 09:55:20 2022:						
	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

Temperature Calibration Report

Serial Number: 275001
Tool Model: 275 Temp JS
Performed: Thu Oct 13 08:15:31 2022

	Reference	Reading
Low Reference:	0.00 degF	0.00 usec
High Reference:	1.00 degF	1.00 usec

Gain: 0.33
Offset: 0.00
Delta Spacing 1



Company	OCCIDENTAL PETROLEUM
Well	THOMPSON 6-33
Field	WATTENBERG
County	WELD
State	COLORADO