



PIONEER

Pioneer Energy Services

RADIAL BOND LOG WITH GAMMA RAY

Comp. ANADARKO PETROLEUM CORP.
Well CAMP LEWIS C UT D 2
Field WATTENBERG
Co. WELD
State COLORADO

Company **ANADARKO PETROLEUM CORP.**
Well **CAMP LEWIS C UT D 2**
Field **WATTENBERG**
County **WELD** State **COLORADO**

Location: API # : 05-123-09822 Other Services
SHL: 1320' FSL & 1320' FEL
LAT: 40.206636/LONG: -104.815311
SEC 19 TWP 3N RGE 66W
Permanent Datum GL Elevation 4856
Log Measured From GL 0 FT Above Perm. Datum
Drilling Measured From KB
CCL
Elevation
K.B. 4868
D.F. 4868
G.L. 4856

Date of Service 12-DEC-2019

Run Number ONE

Depth Driller or PBTD 7952

Depth Logger 7000

Bottom Log Interval 7000

Top Log Interval 0

Open Hole Size 8 5/8

Type Fluid H2O

Fluid Level FULL

Fluid Density 8.4

Max. Recorded Temperature N/A

Max. Wellhead Pressure 0 PSI

Wellhead Connection TUBING HANGER

Estimated Cement Top N/A

Unit Number P-57

Wireline Size 9/32

Location FORT MORGAN

Recorded By MAX PACE

Witnessed By JEREMY DUTY

Size

W/Ft

Top

Bottom

8 5/8

24

0

511

4.5

11.6

0

7952

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC 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.
PROBE RBL-D 070132 CALIBRATED ON 12-3-2019
FREE PIPE CALIBRATION PERFORMED AT 6210 FEET

THANK YOU FOR USING PIONEER ENERGY SERVICES!

Your Pioneer Energy Services Crew

Tool Data - Services

Serial Number

Engineer:
Operator:
Operator:
Operator:

Top - Bottom

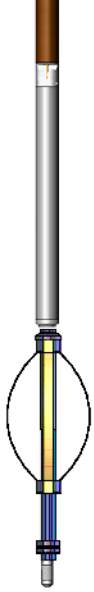
BOREID in 7.875	BOTTEMP degF 100	CASEOD in 4.5	CASETHCK in 0	CASEWGHT lb/ft 11.6	MAXAMPL mV 0	MINAMPL mV 1
MINATTN db/ft 0.08	PERFS 0	PPT usec 0	SRFTEMP degF 0	TDEPTH ft 0		


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

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Cable Head-Titan_144 1 7/16" Titan Cable Head	1.03	1.44	2.00
			Centralizer-275 TekCo 2 3/4" TekCo Centralizer	2.88	2.75	20.00
WVFS8	15.03		PROBE-RBT-DIGITAL-RBL-D (070132-T) Probe 2 3/4" Radii Bond-Digital	8.75	2.75	100.00
WVFS7	15.03					
WVFS6	15.03					
WVFS5	15.03					
WVFS4	15.03					
WVFS3	15.03					
WVFS2	15.03					
WVFS1	15.03					
WVFCAL	15.03					
WVF3FT	15.03					
WVF5FT	14.03					
HEADVOLT	10.84		Centralizer-275 TekCo 2 3/4" TekCo Centralizer	2.88	2.75	20.00

CCL	7.09					
GCT_TEMP	6.30					
GR	5.71					
			PROBE-GR/CCL-DIGITAL-275 Probe GCT 4.75608) 2.75	60.00		
			Probe 2 3/4" Gamma Ray/Temp/CCL			
			Centralizer-275 TekCo 2 3/4" TekCo Centralizer	2.88	2.75	20.00
			Bullnose-PROBE Probe Go Pin Pressure Cap	0.33	1.38	1.00
Dataset: 12-12-19-1.db: field/well/run1/pass11 Total length: 23.50 ft Total weight: 223.00 lb O.D.: 2.75 in						

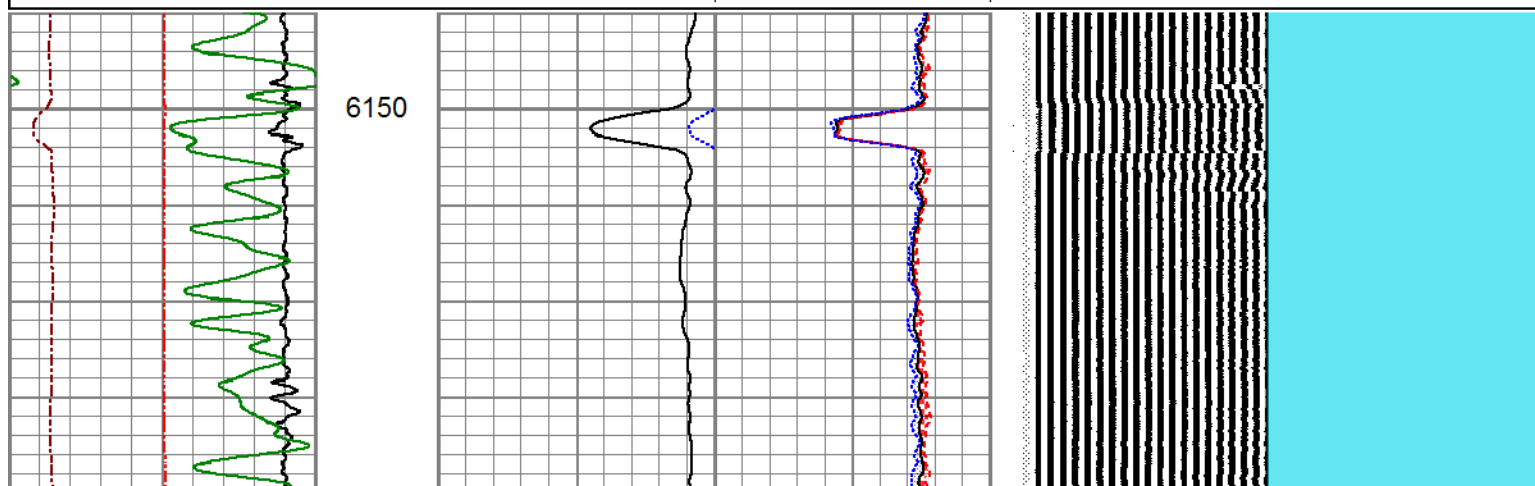


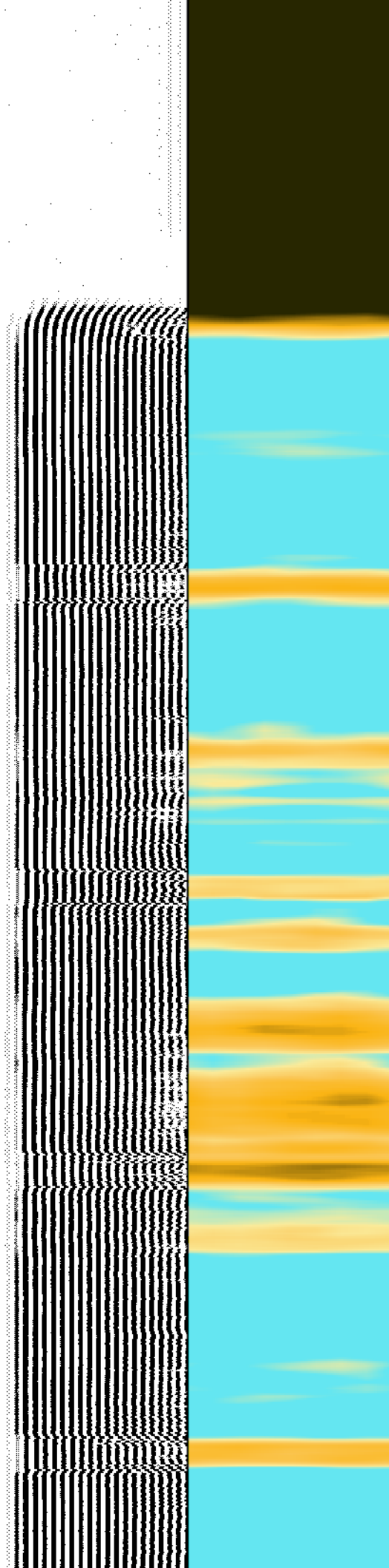
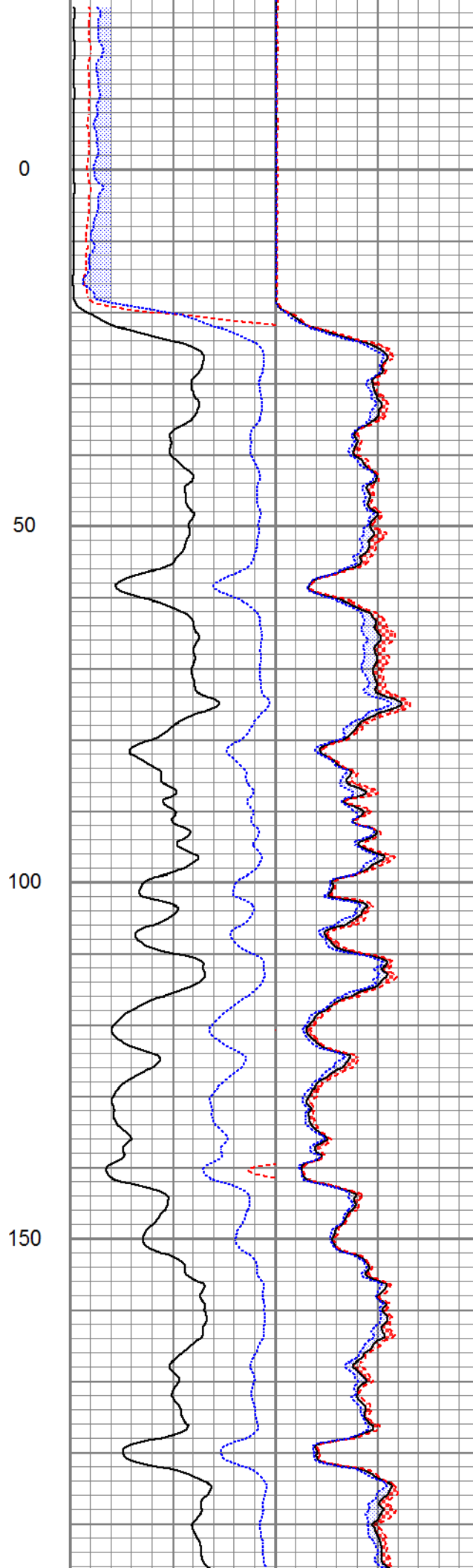
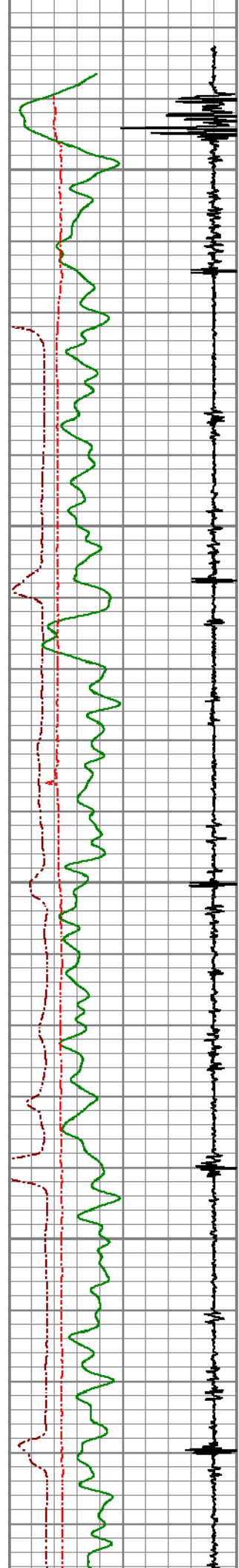
FREE PIPE SECTION

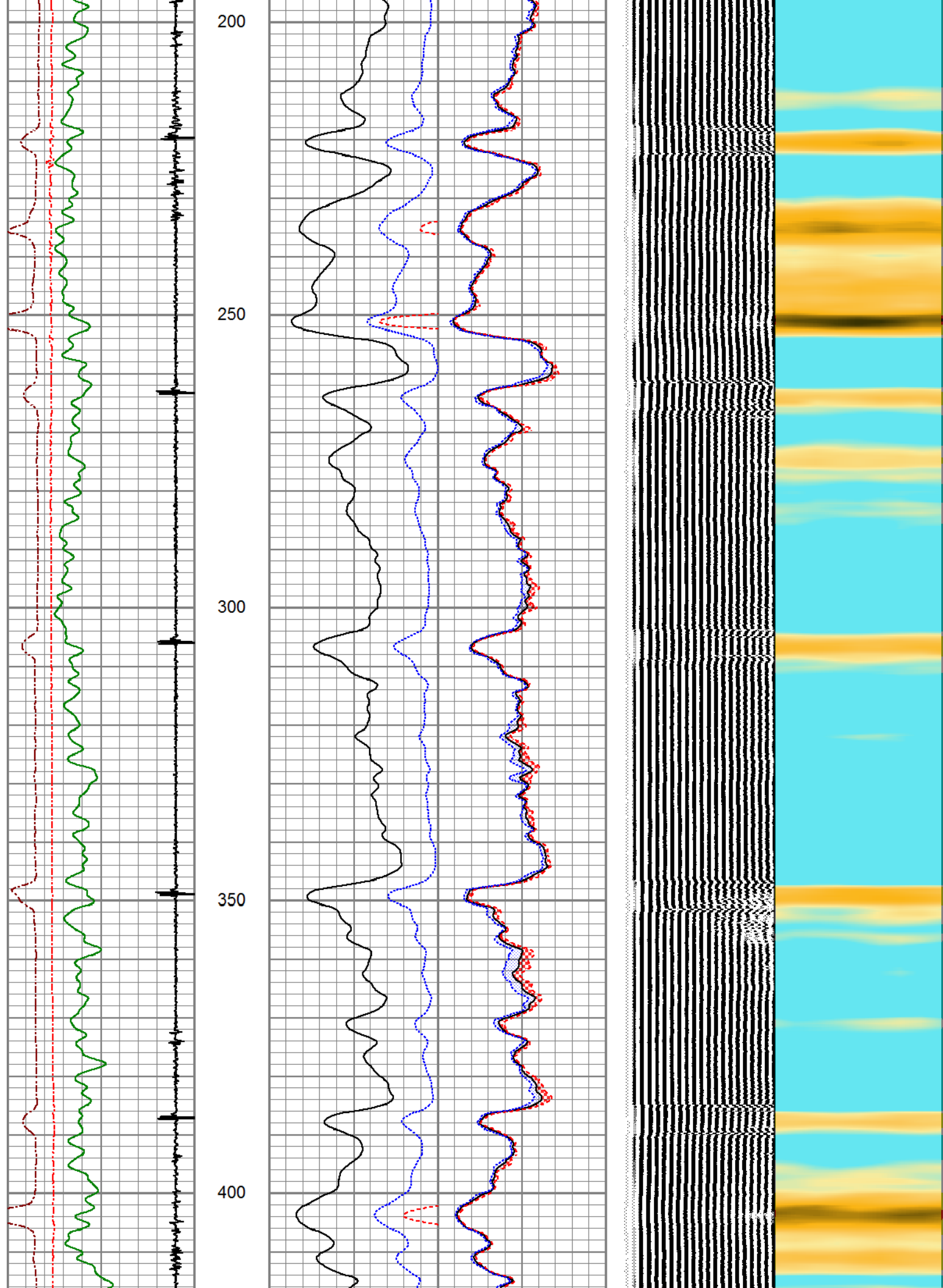
ZERO PSI APPLIED AT SURFACE

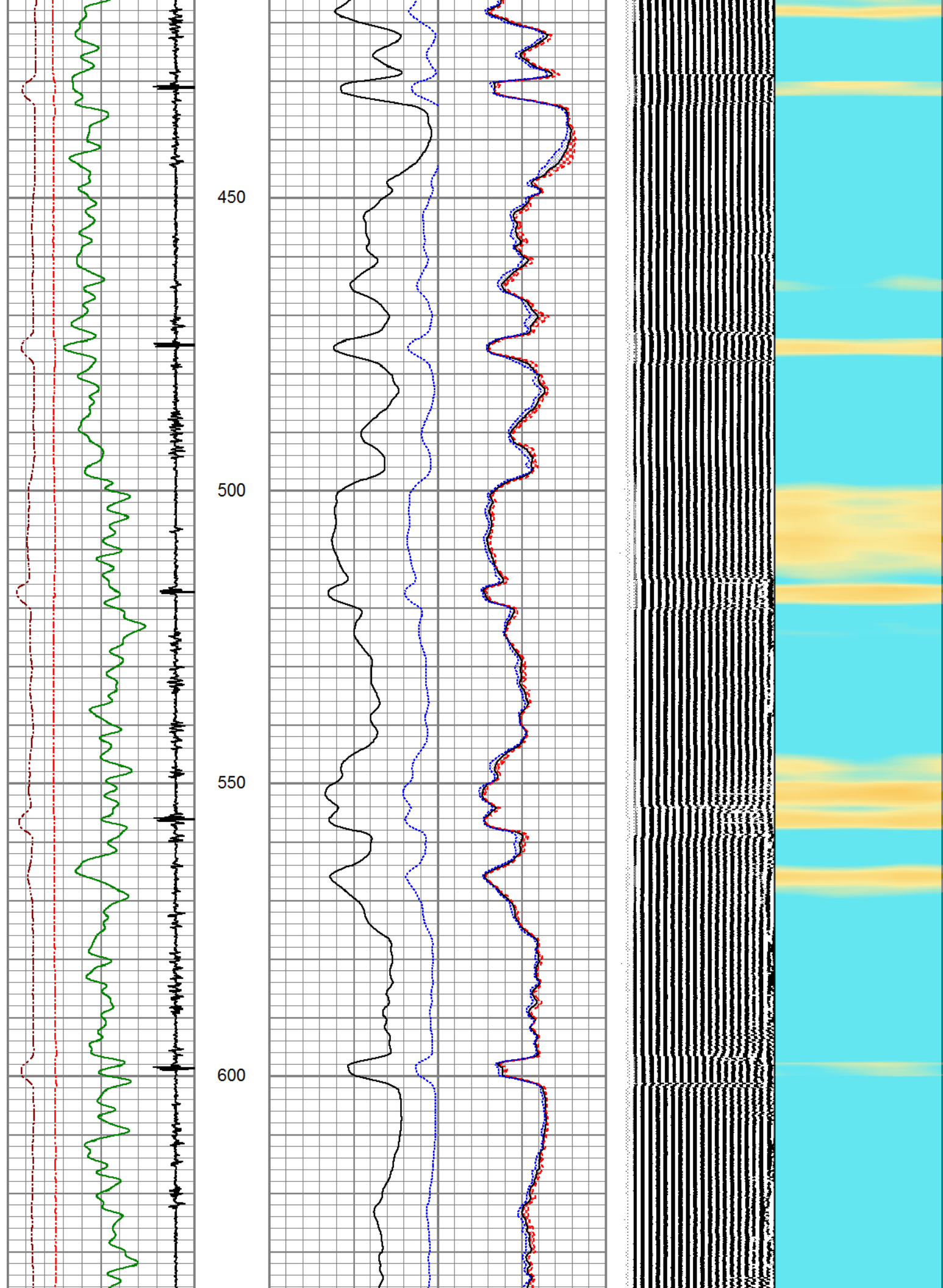
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Presentation Format	pinr_scbl
Dataset Creation	Thu Dec 12 14:02:52 2019
Charted by	Depth in Feet scaled 1:240

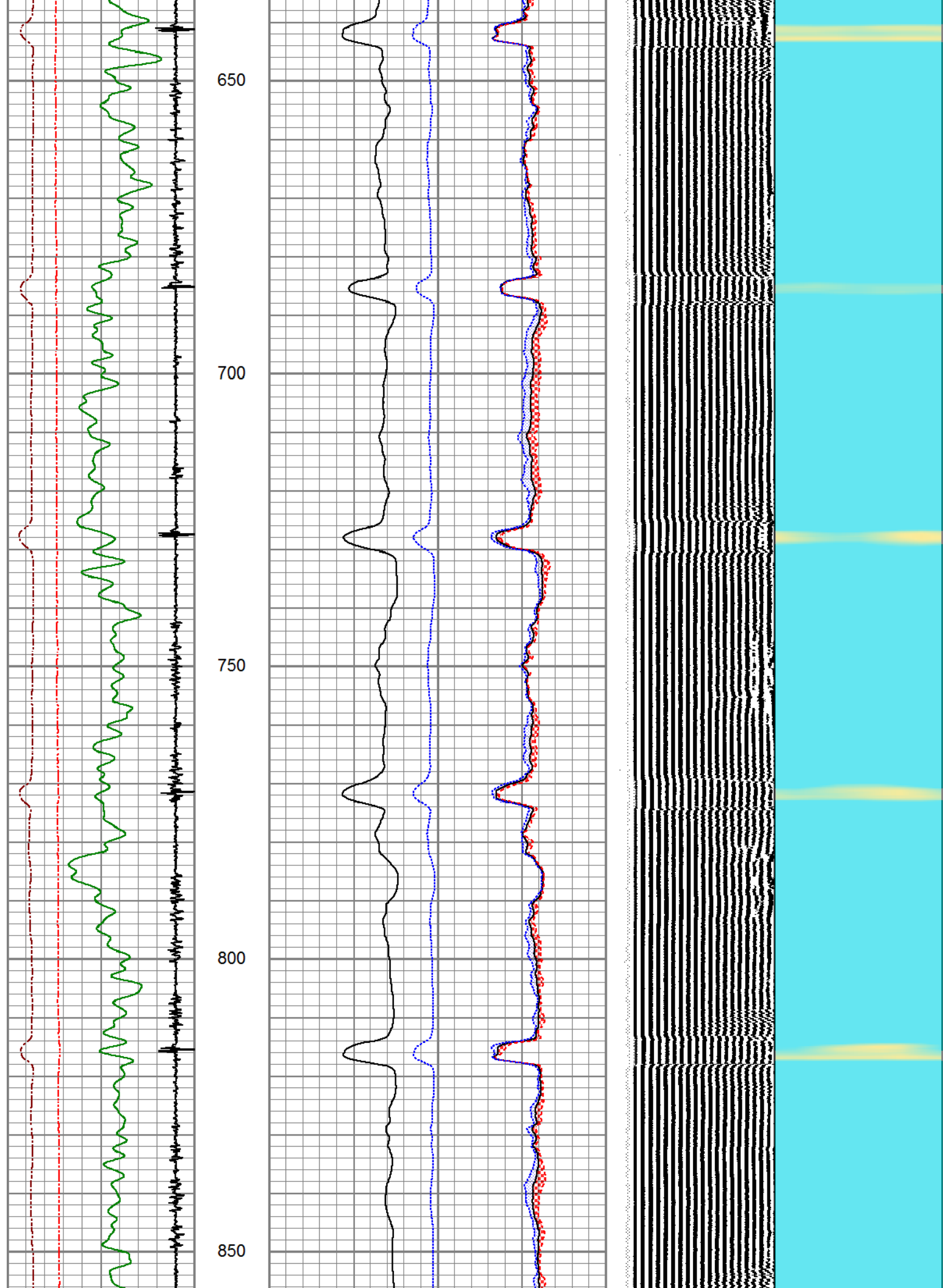
3Ft Travel Time	3' Amplitude	Sector	VDL	1	Sector Map	8
260 (usec) 160	0 (mV) 100	Amplitude Average	200 (usec) 1200			
-9 Collar Locator 1		0 150				
Gamma Ray	3' Amplified Amplitude X 5	Sector Amplitude Maximum				
0 (GAPI) 200	0 (mV) 20	0 150				
LineTension	1 Bond Index 0	Sector Amplitude Minimum				
0 (lb) 2000		0 150				

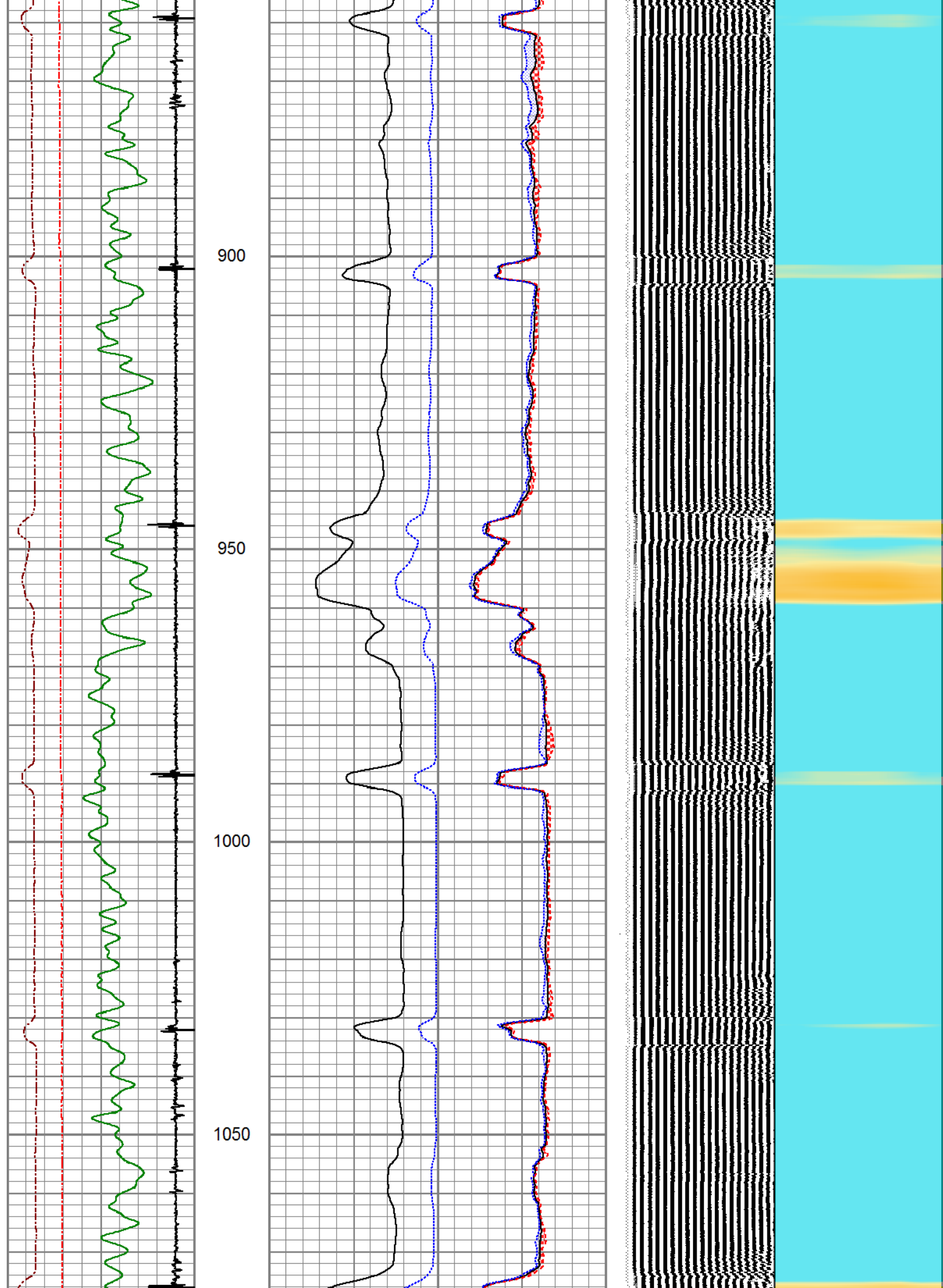


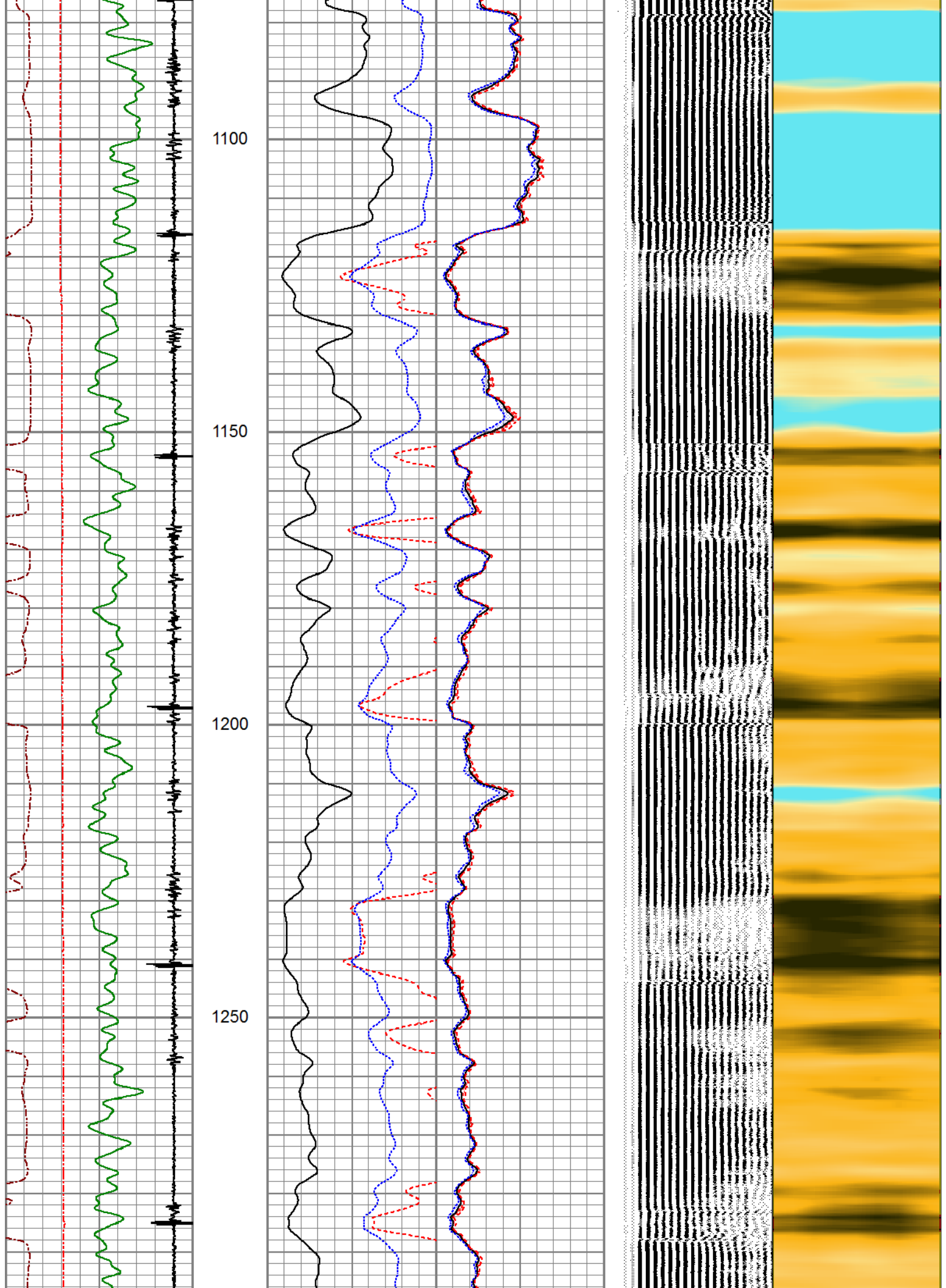


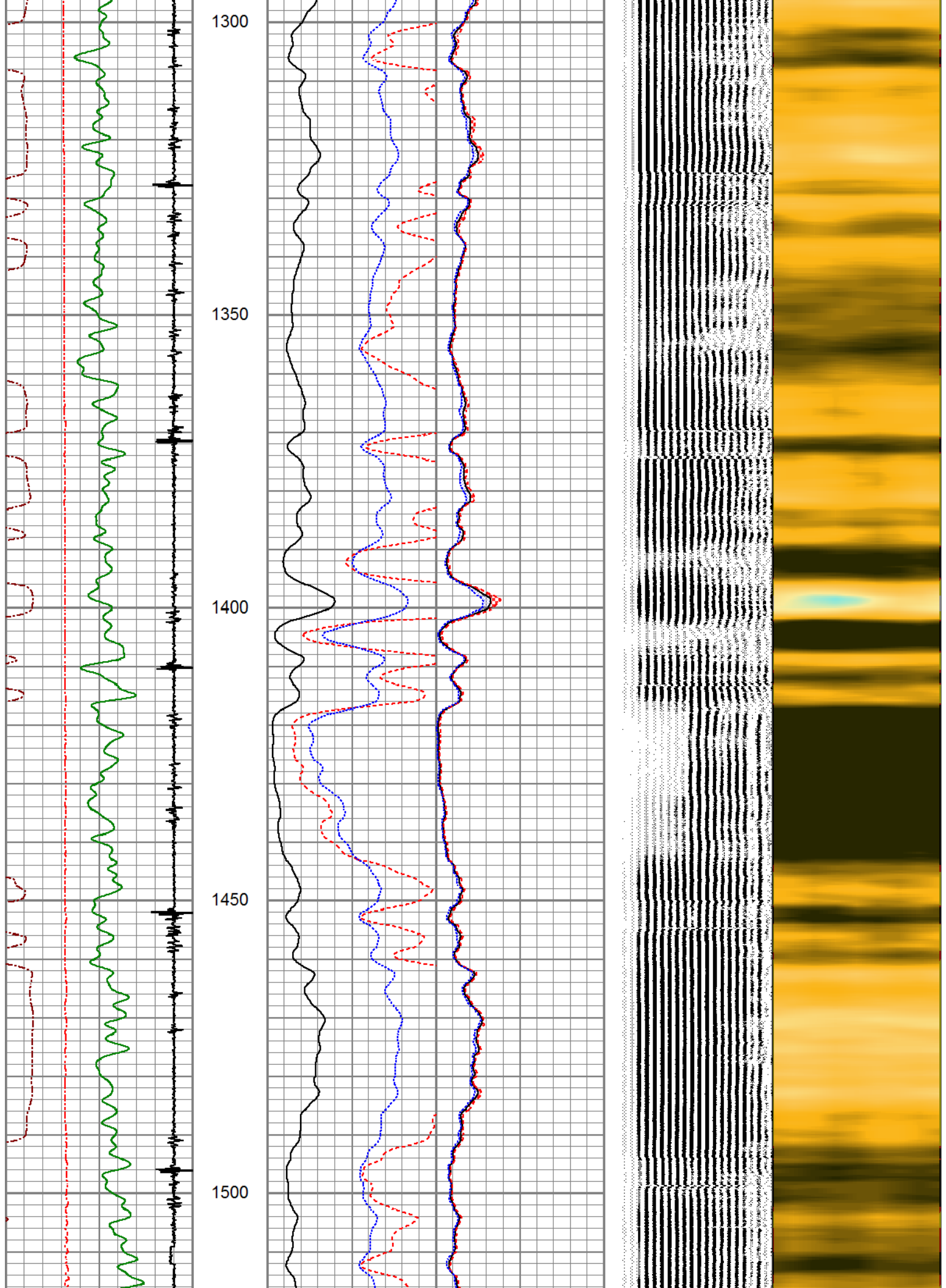


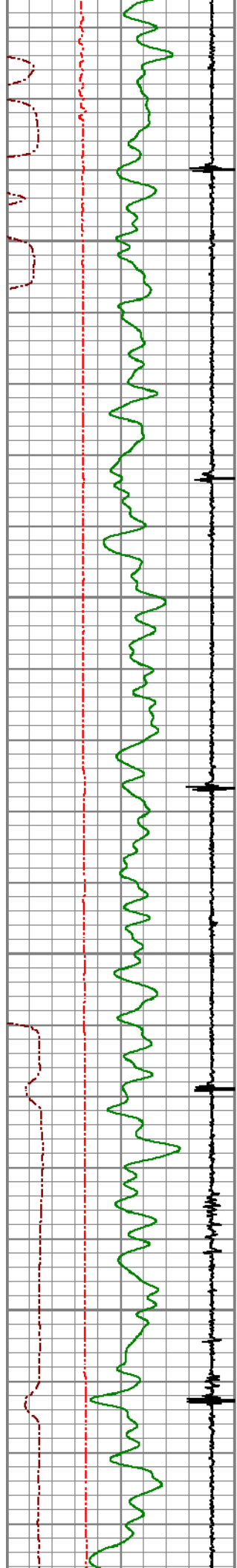










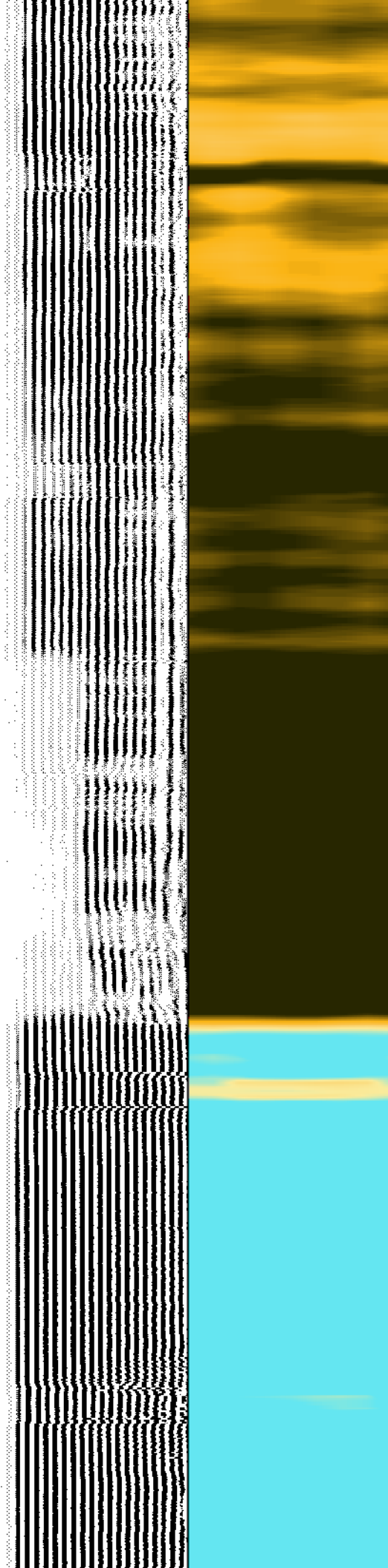
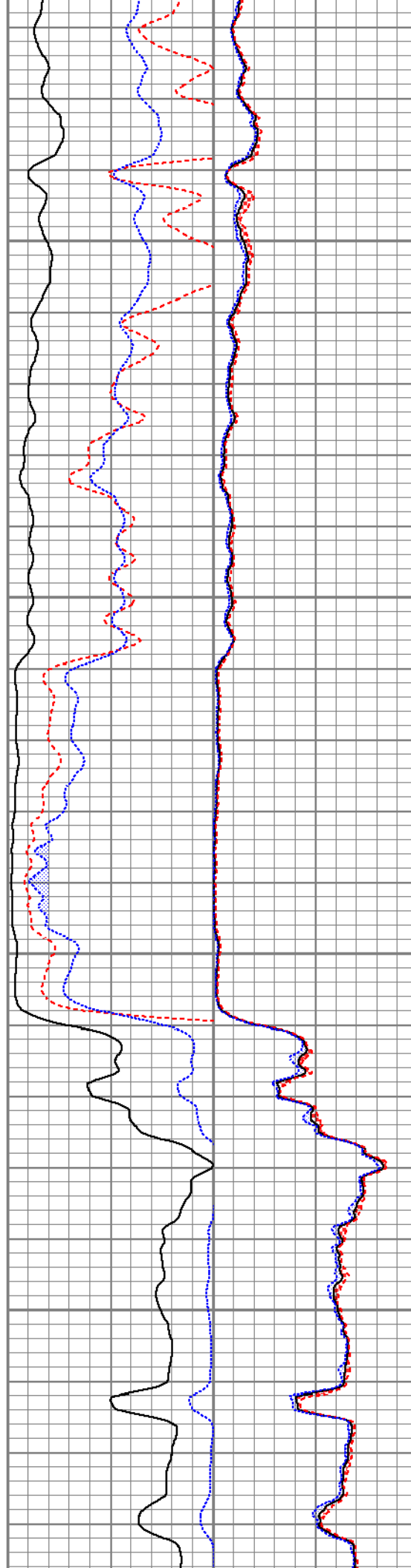


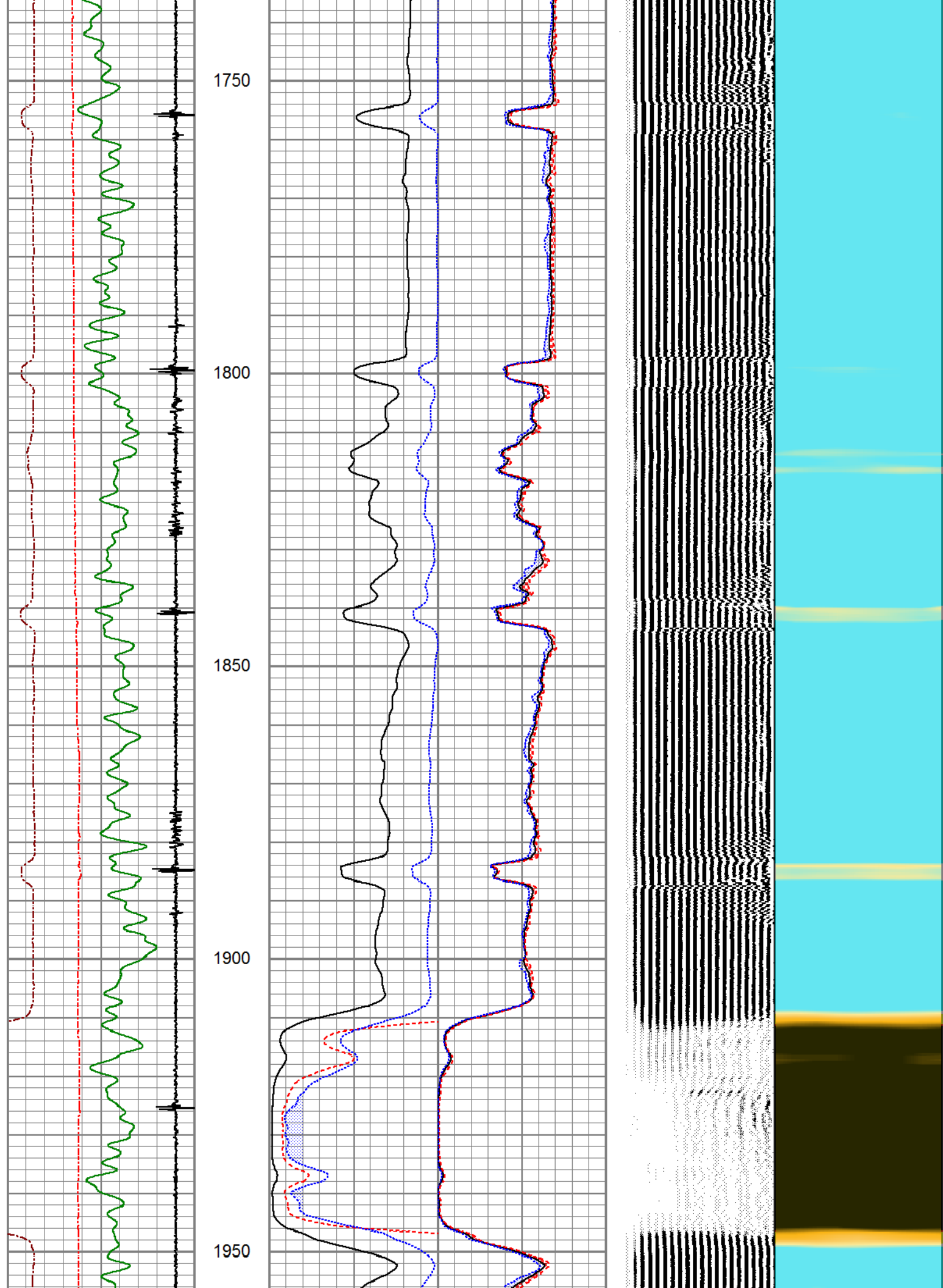
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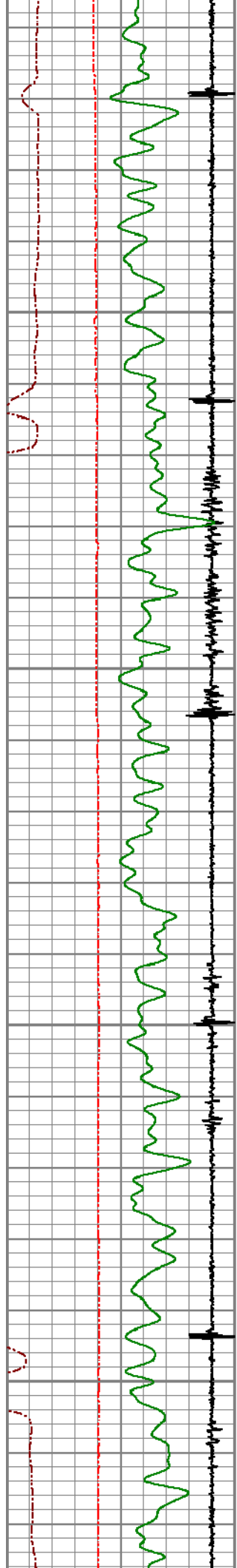
1600

1650

1700





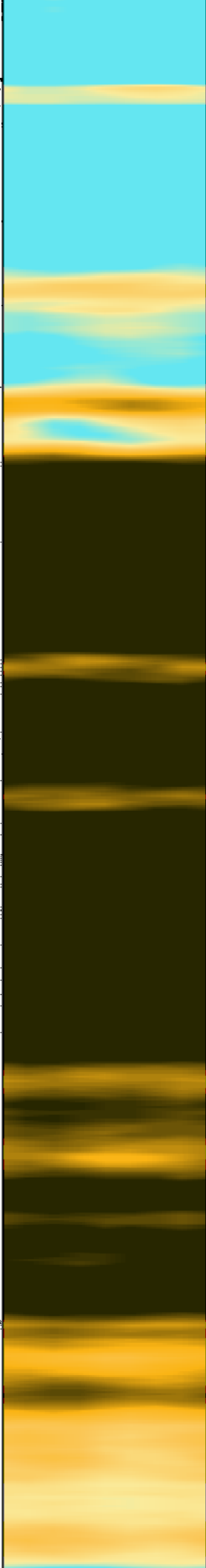
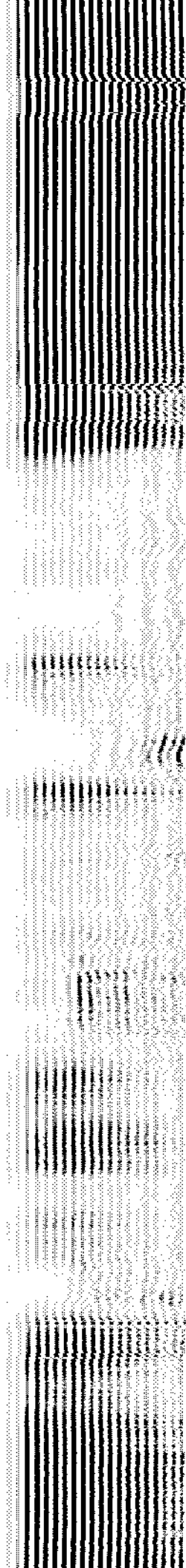
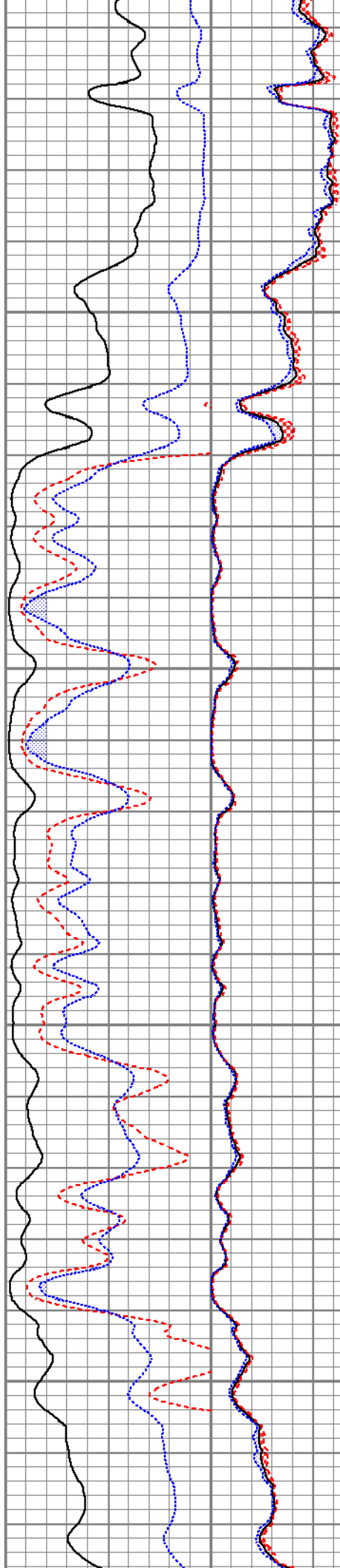


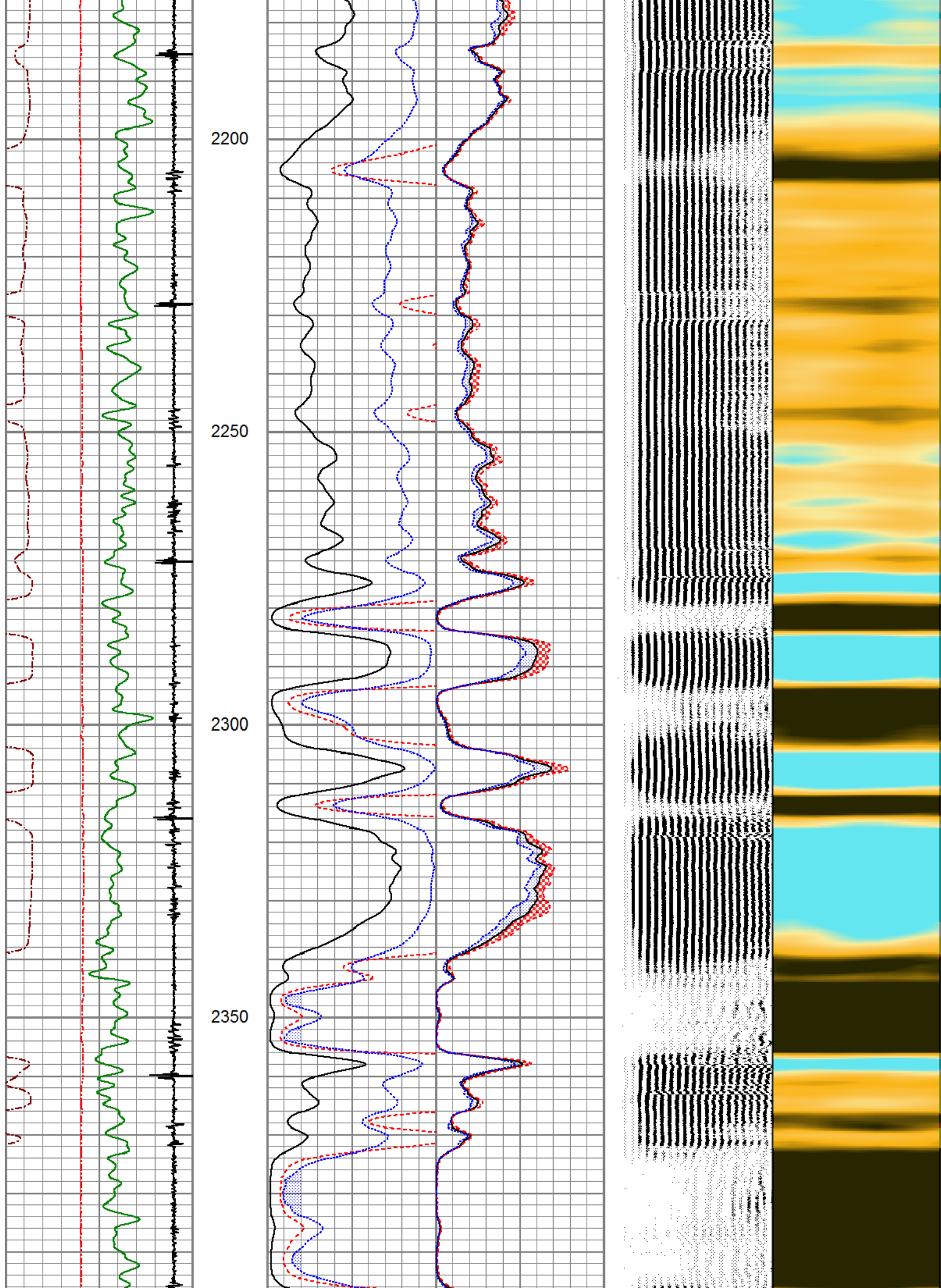
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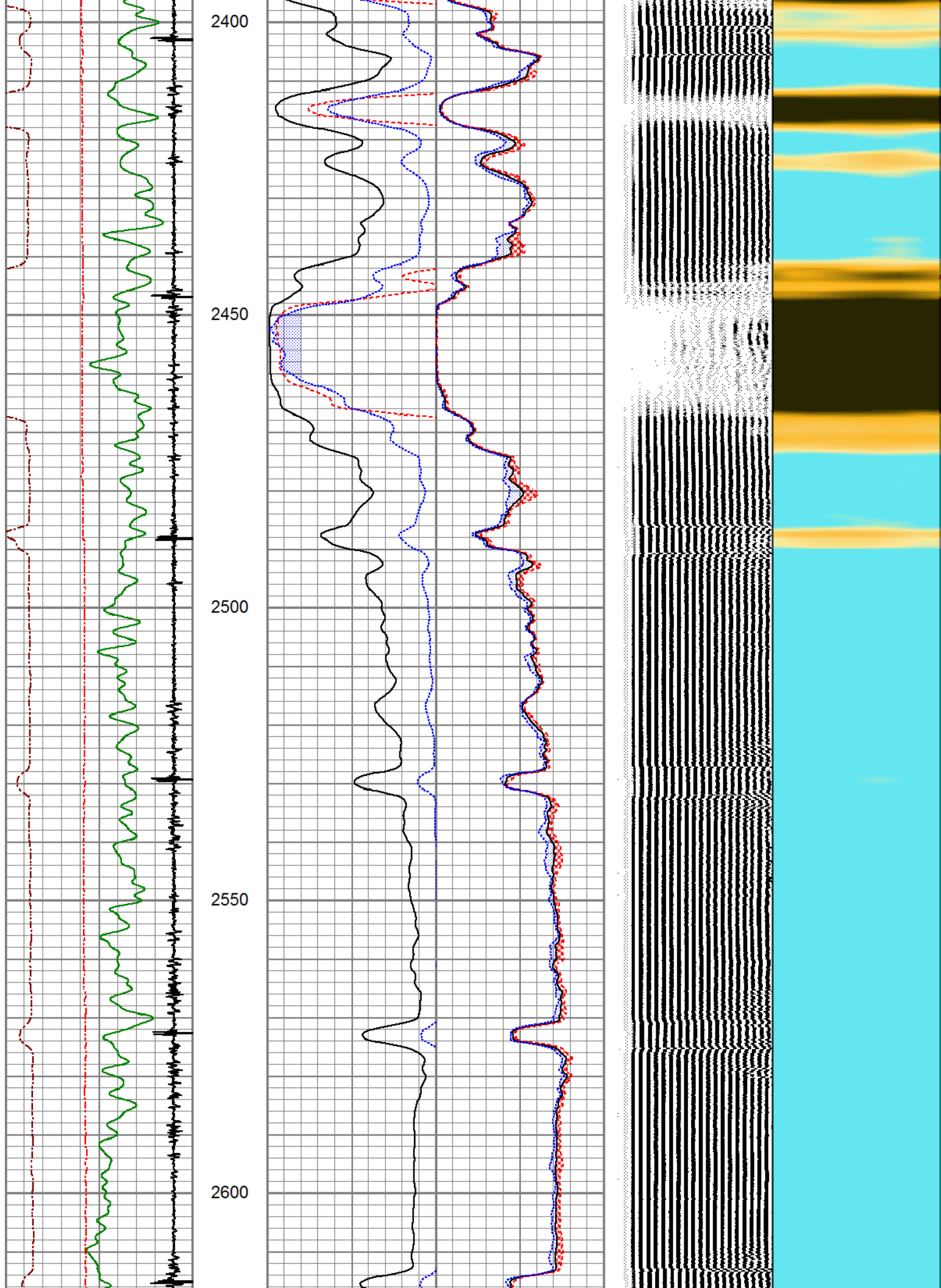
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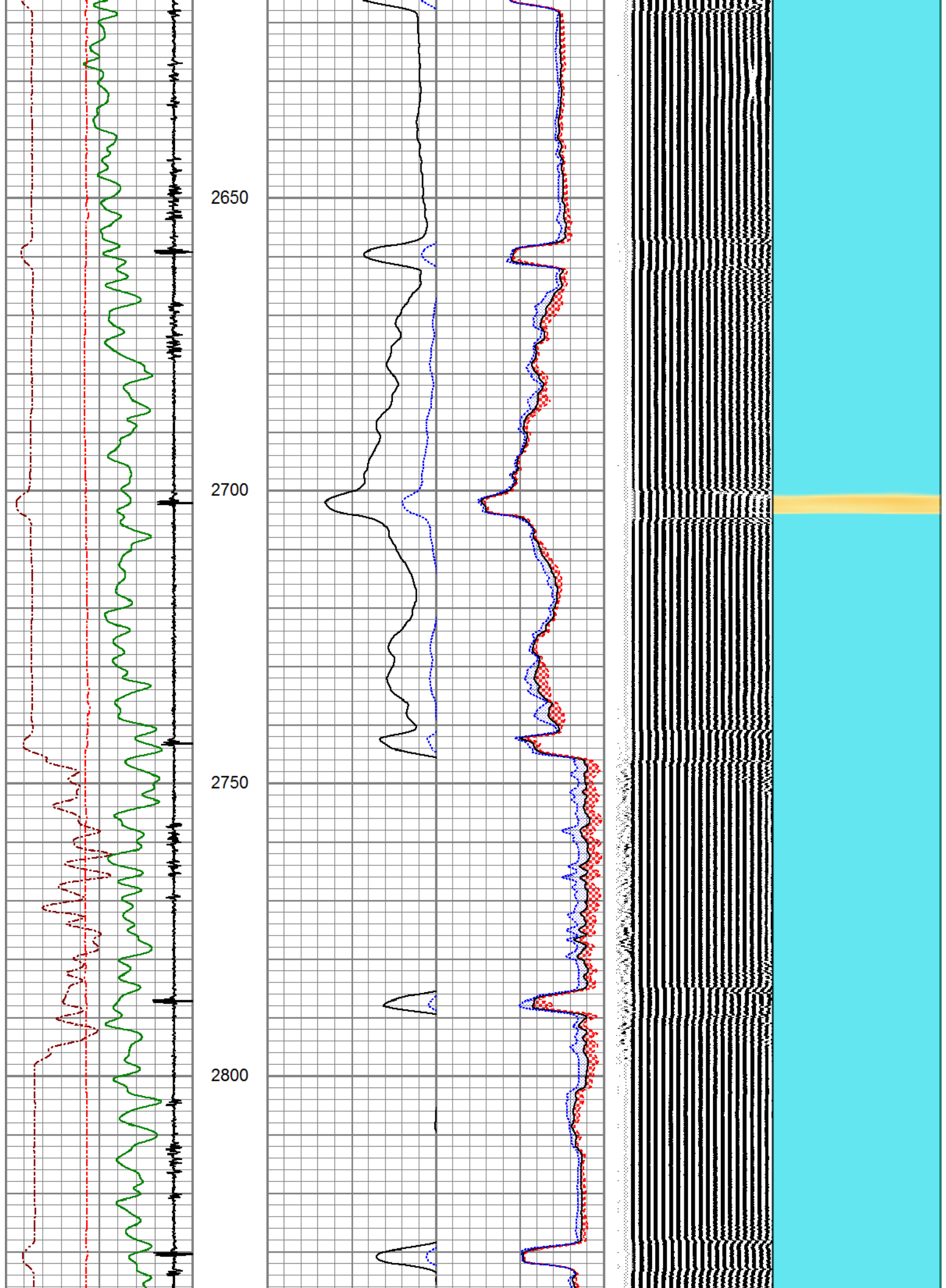
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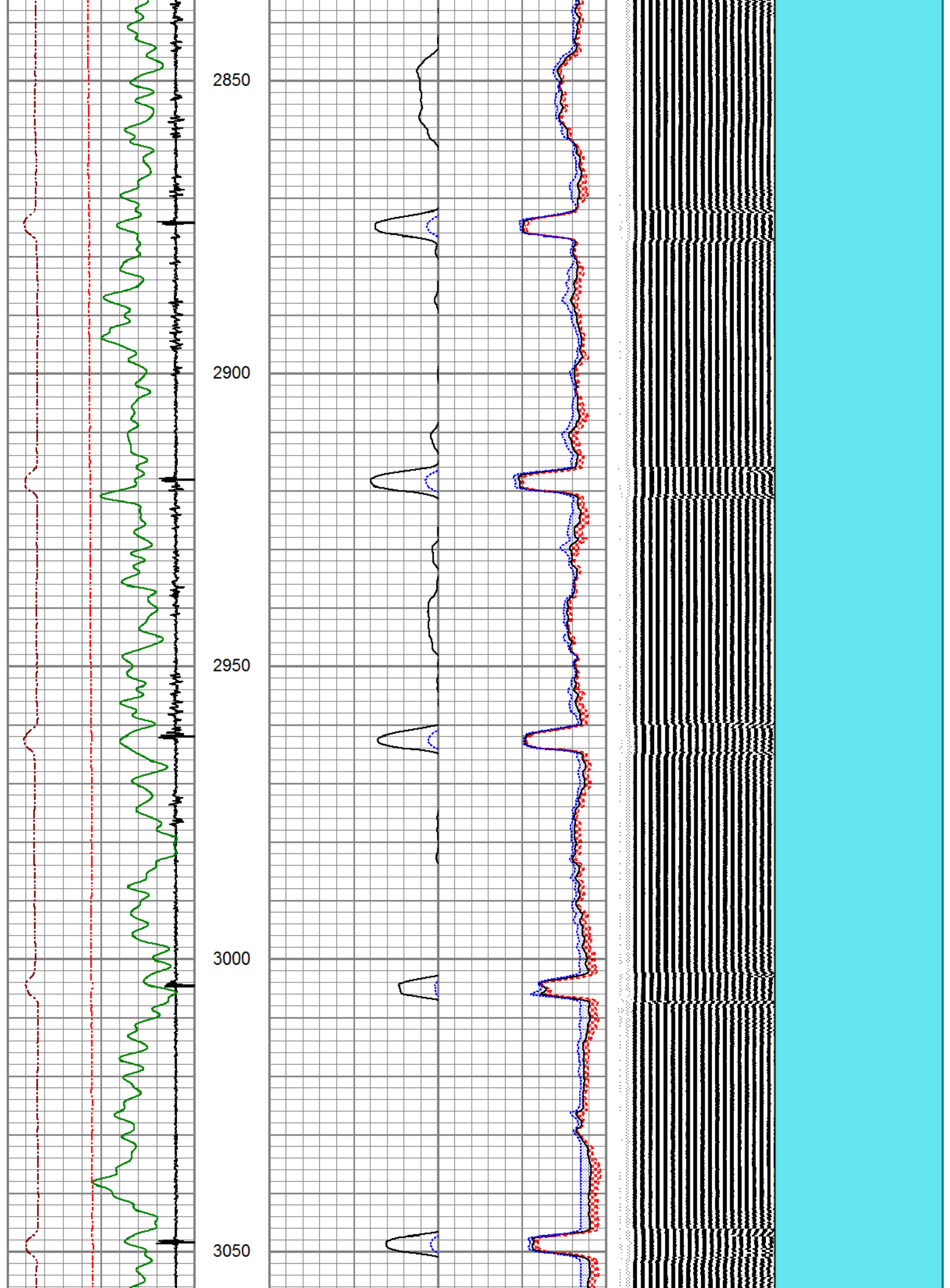
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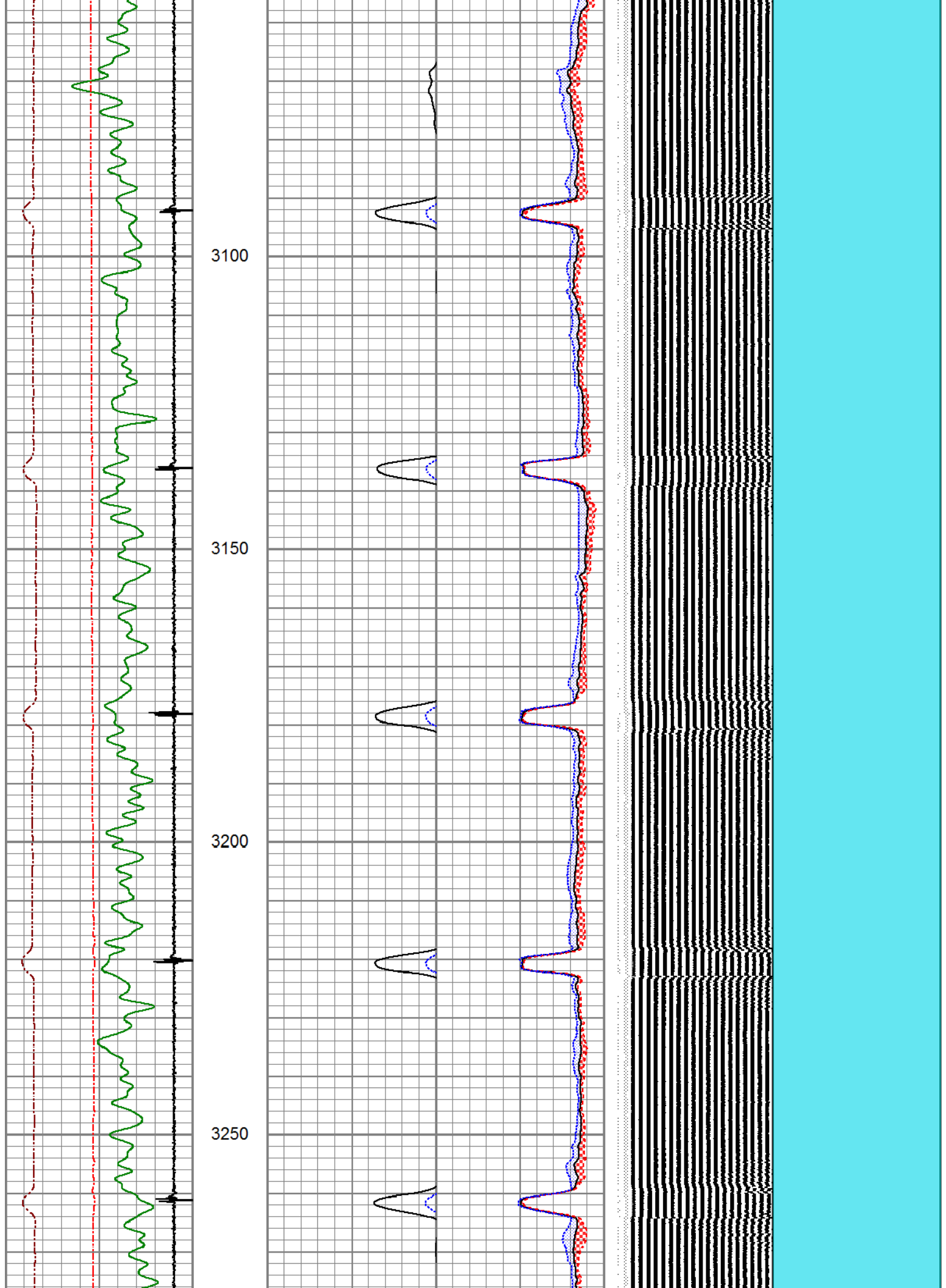


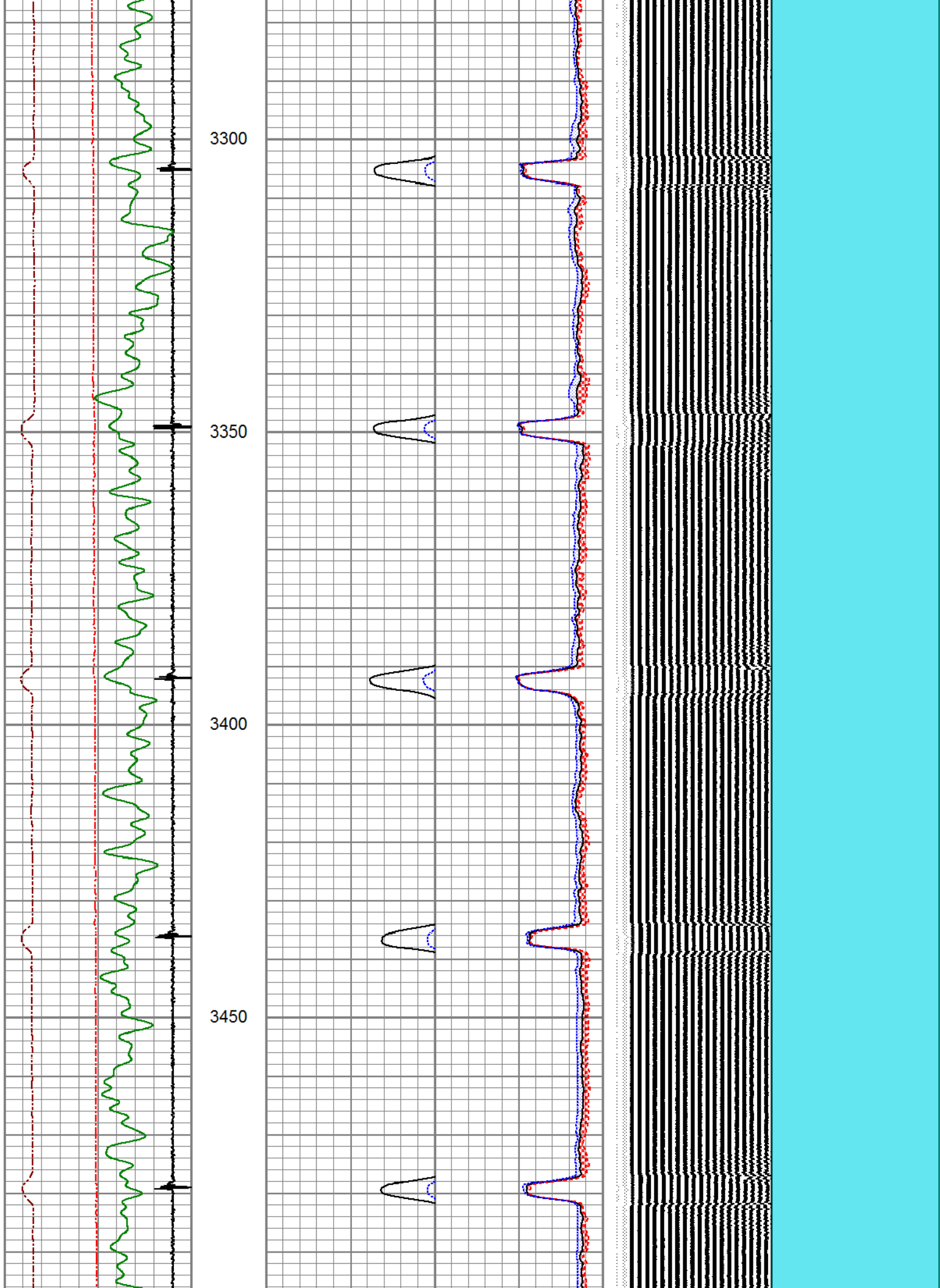


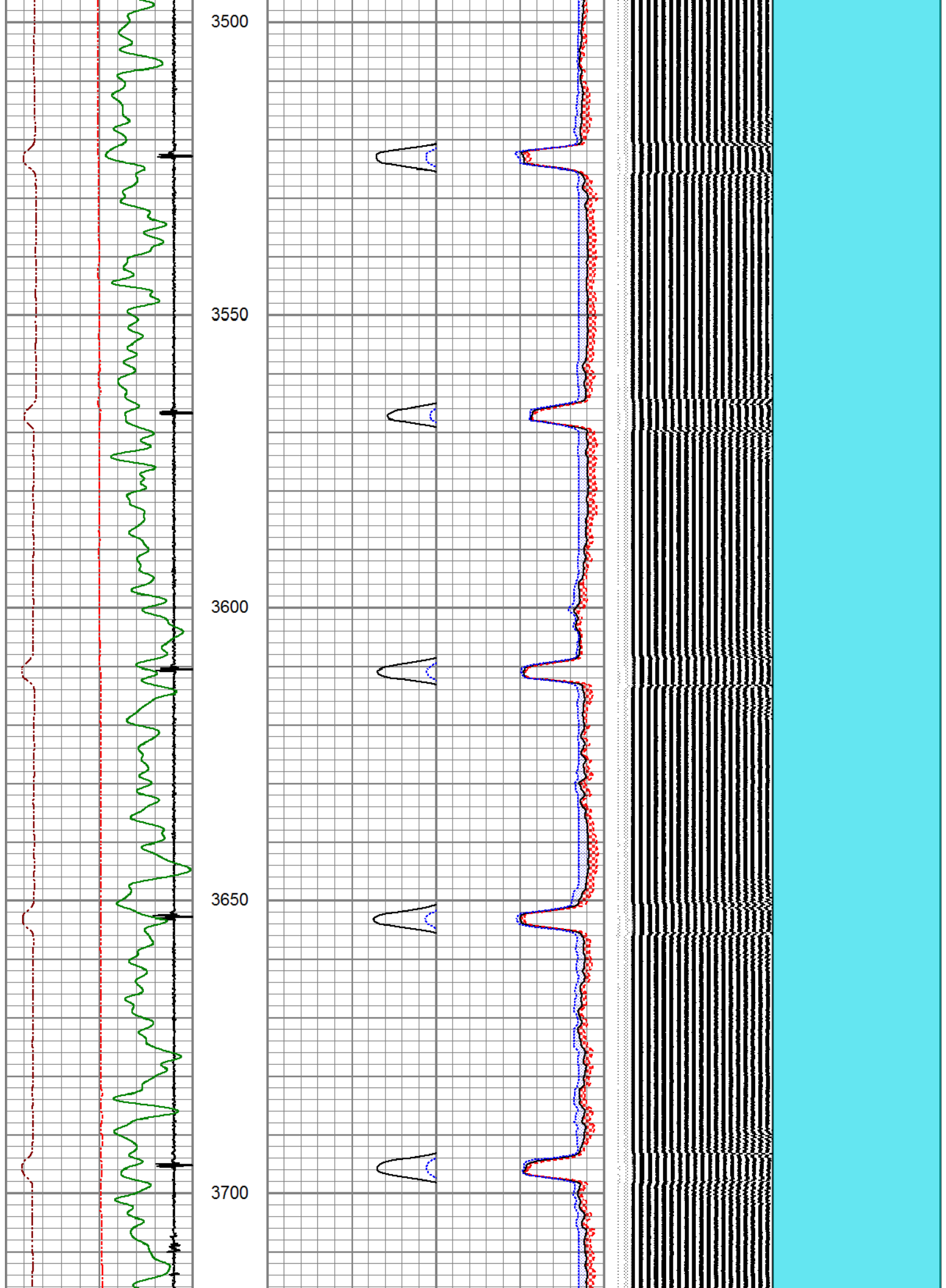


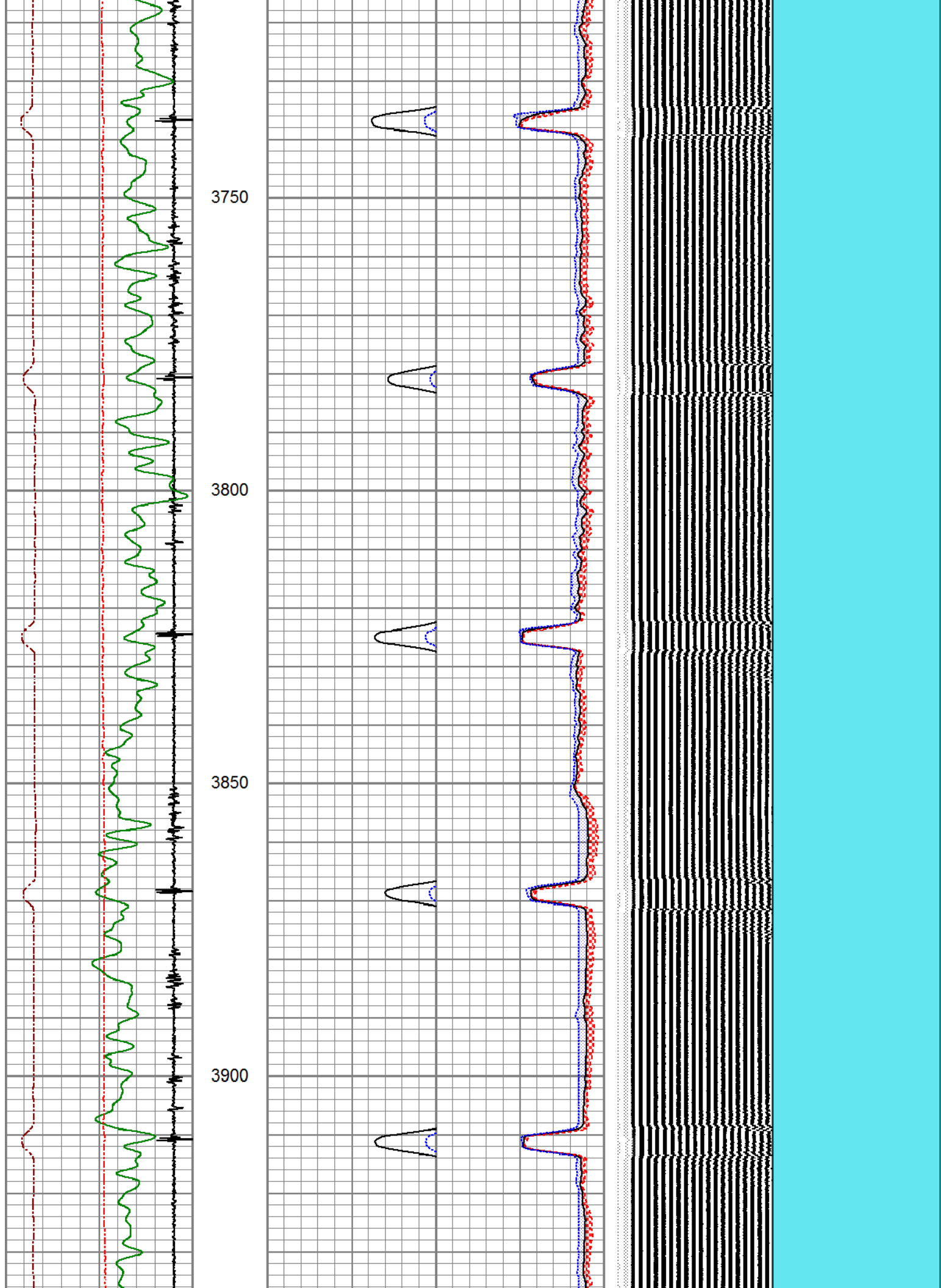


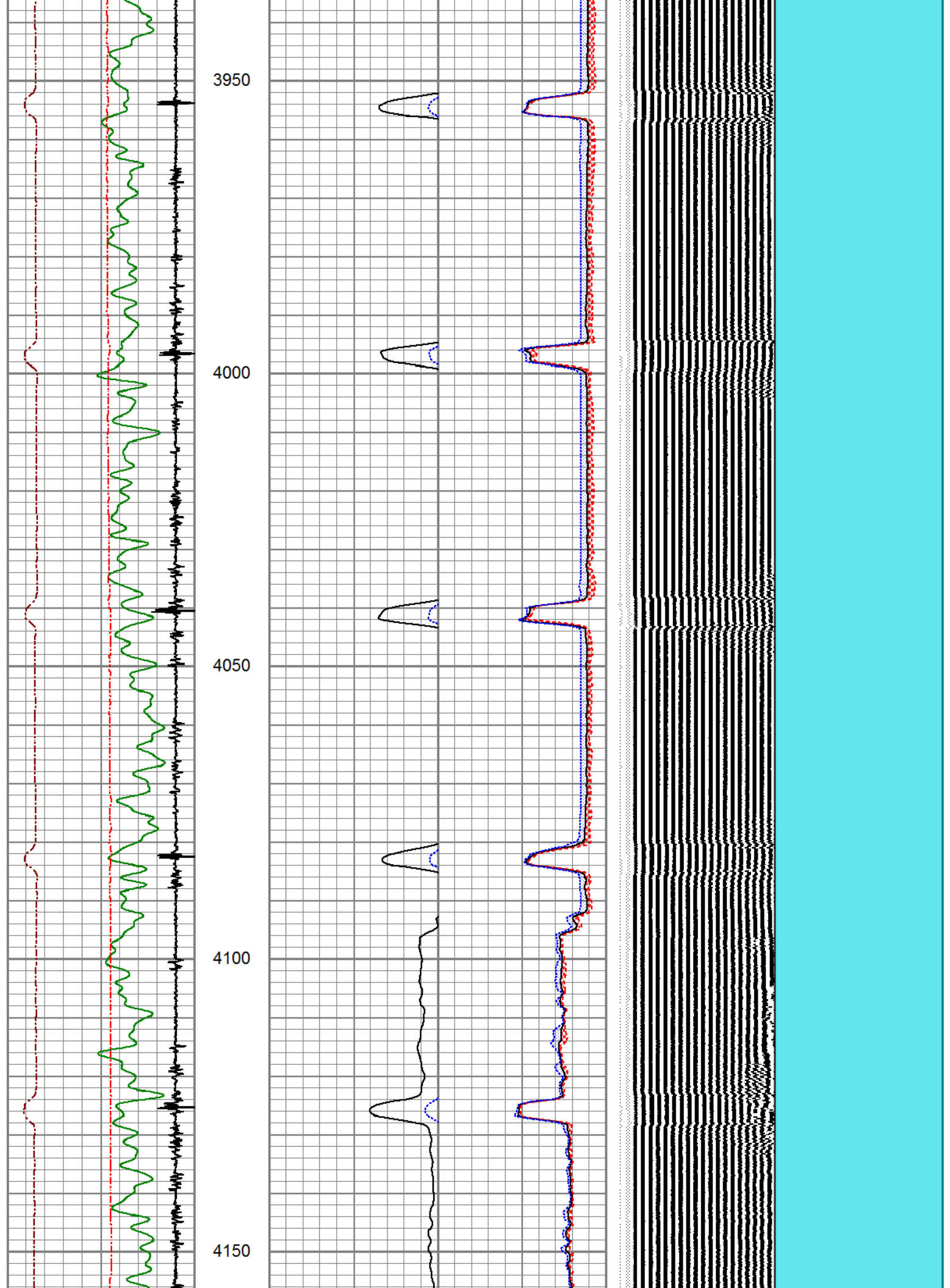


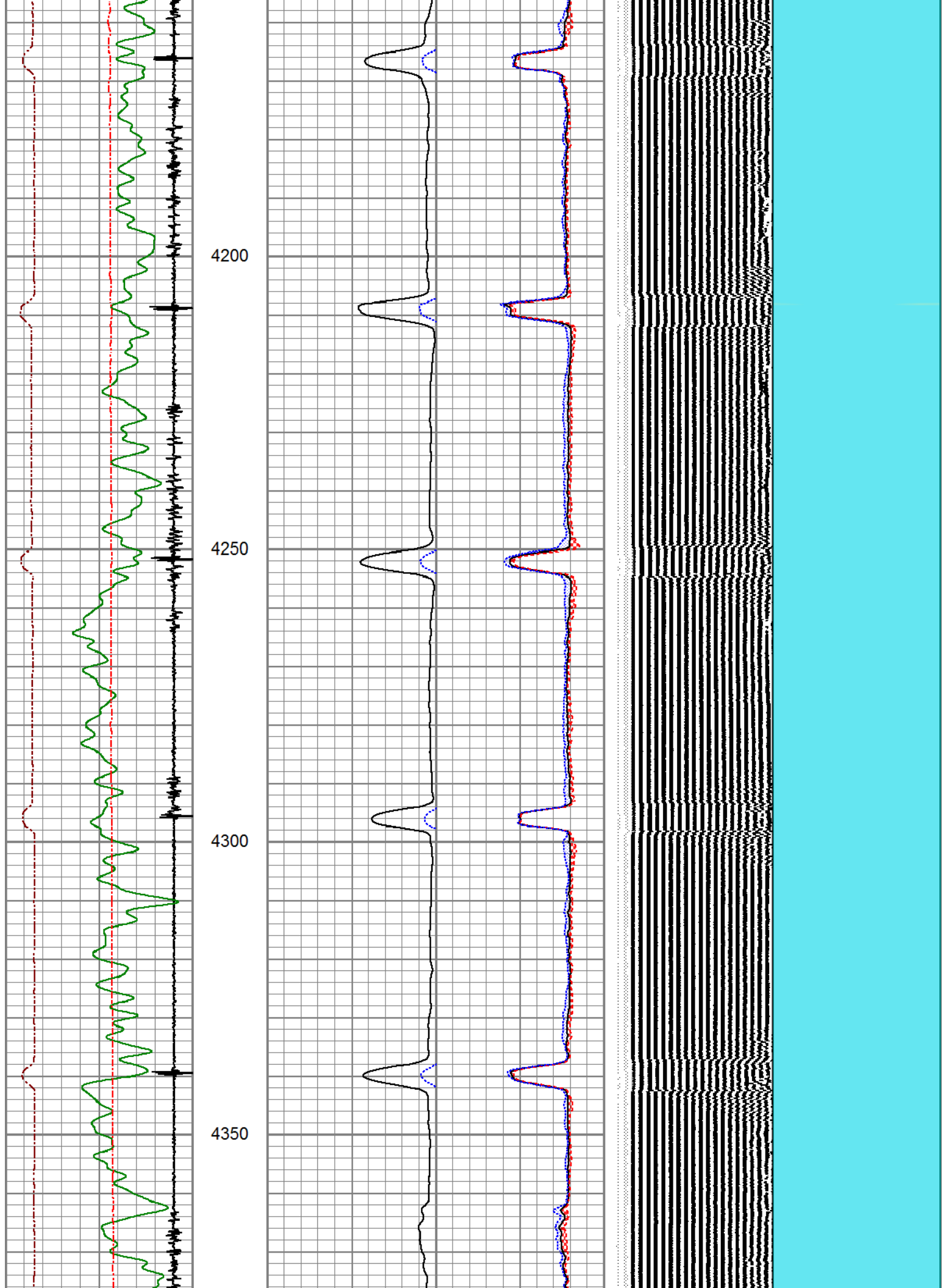


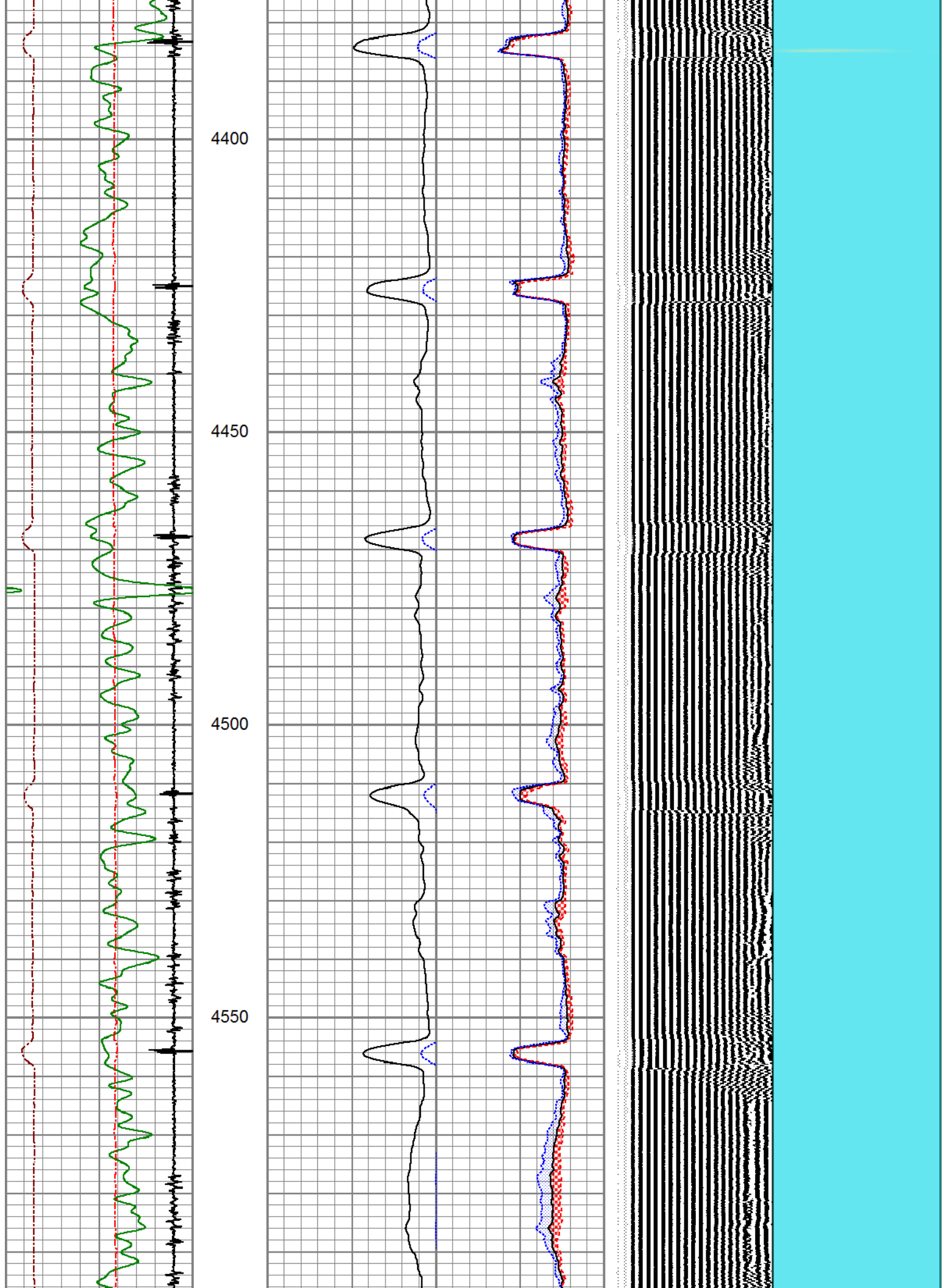


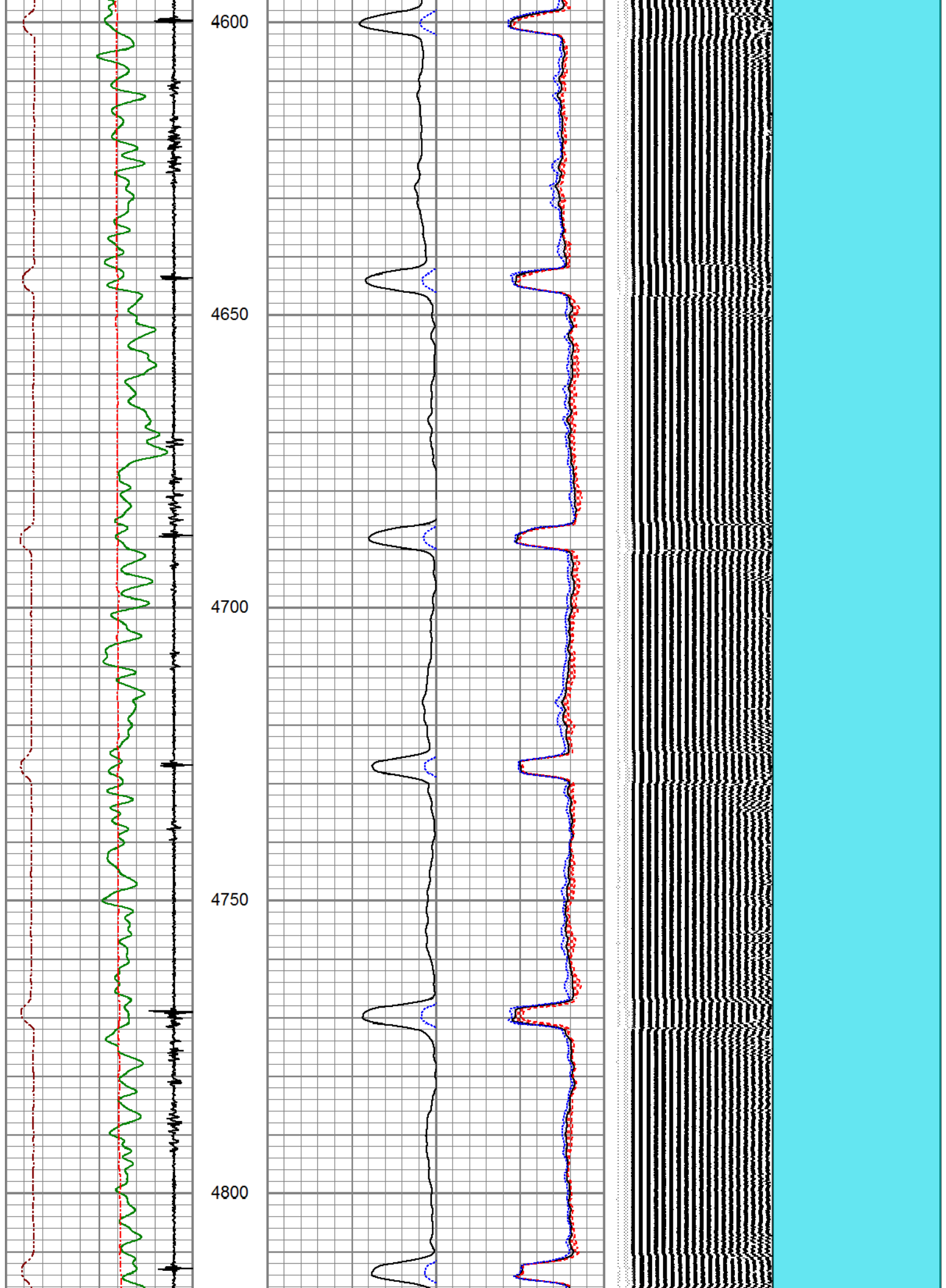


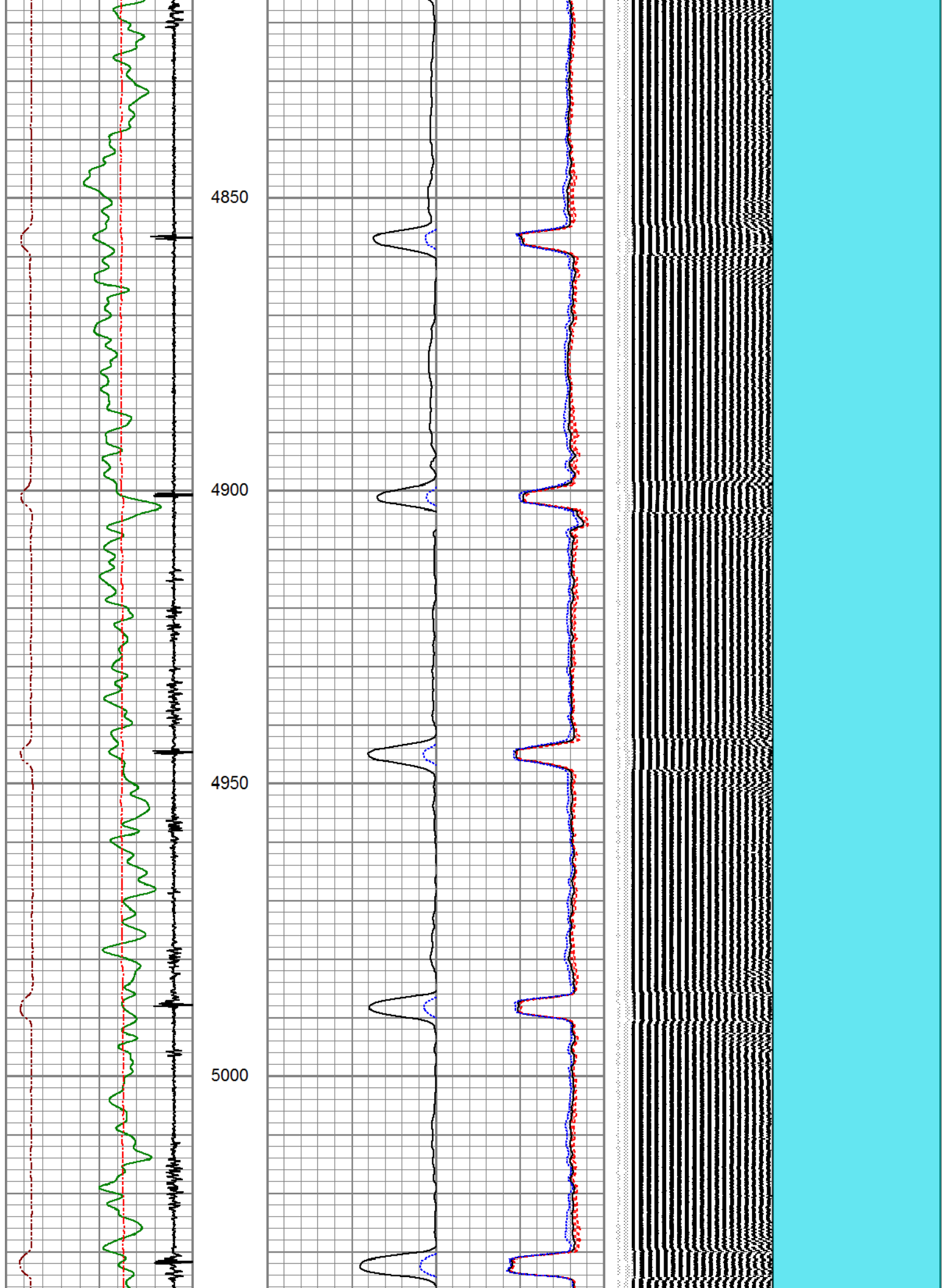


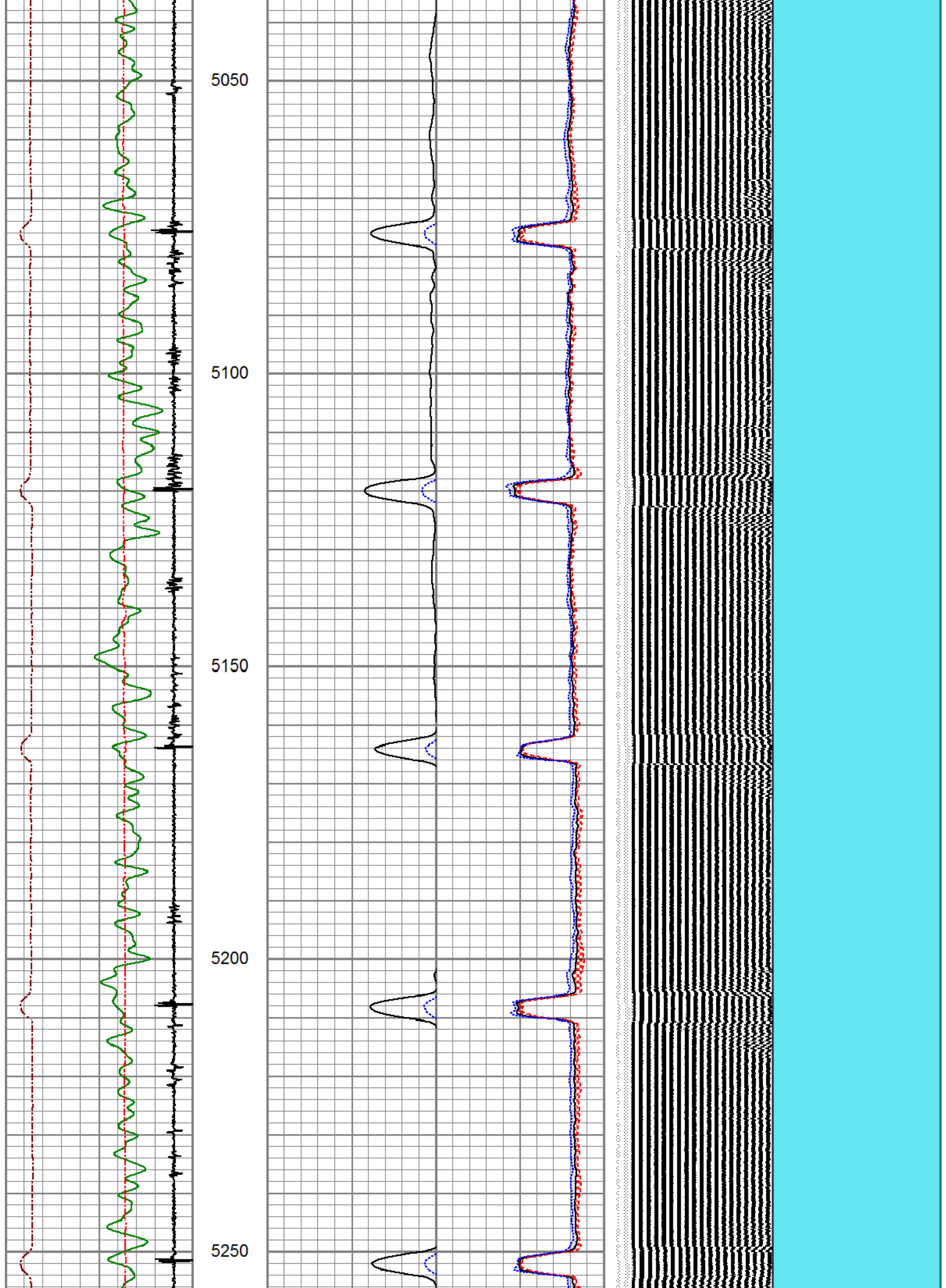


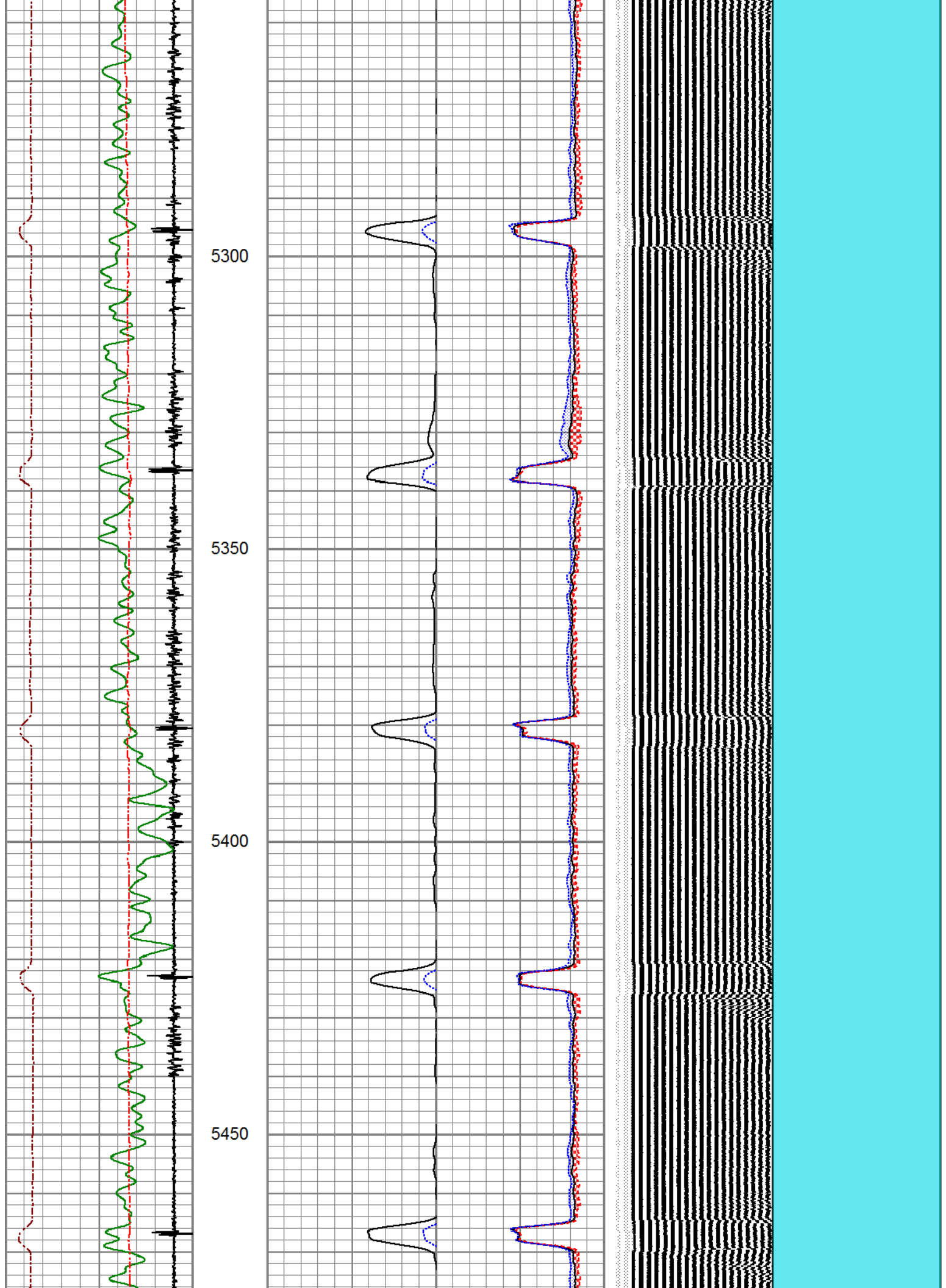


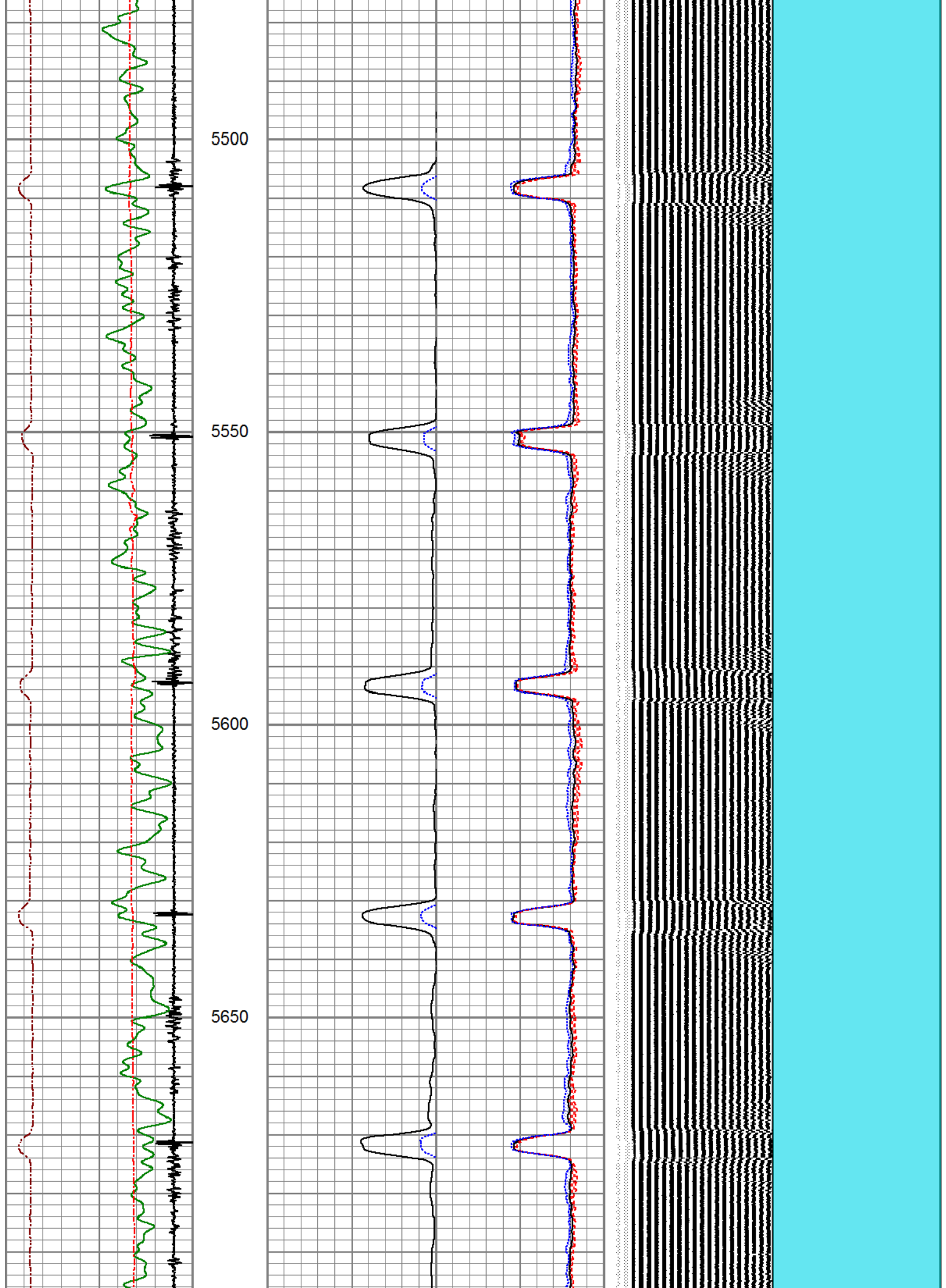


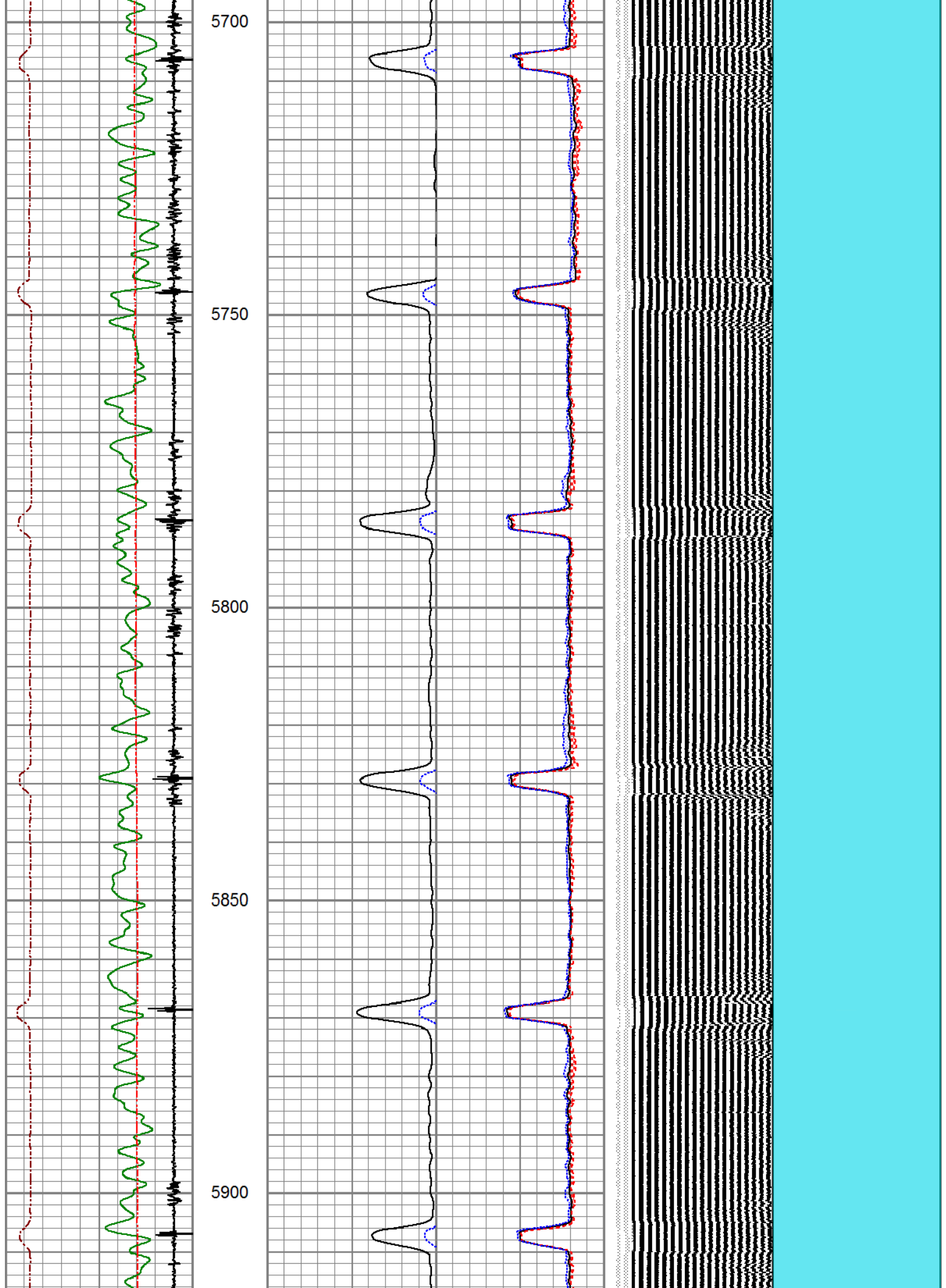


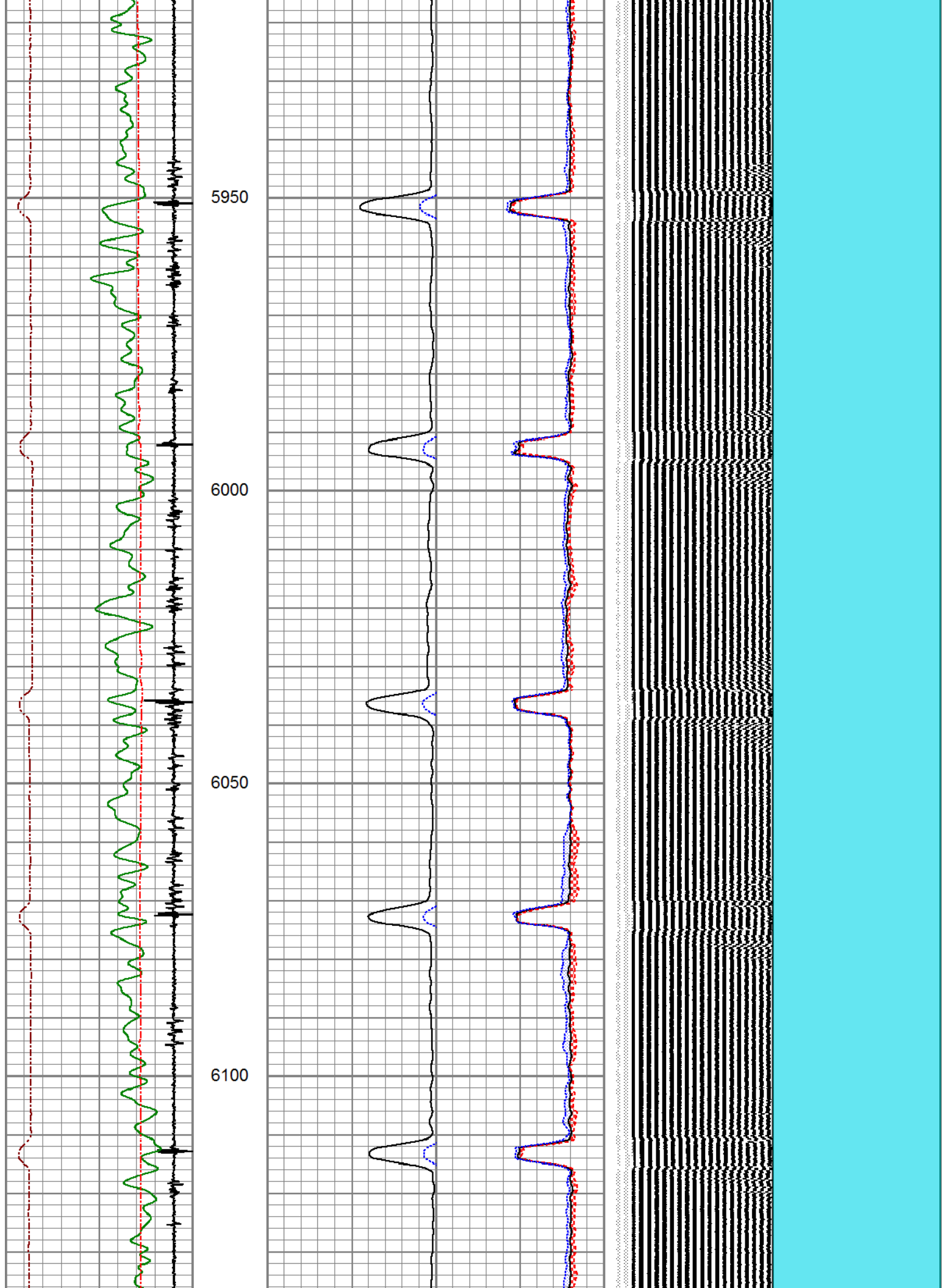


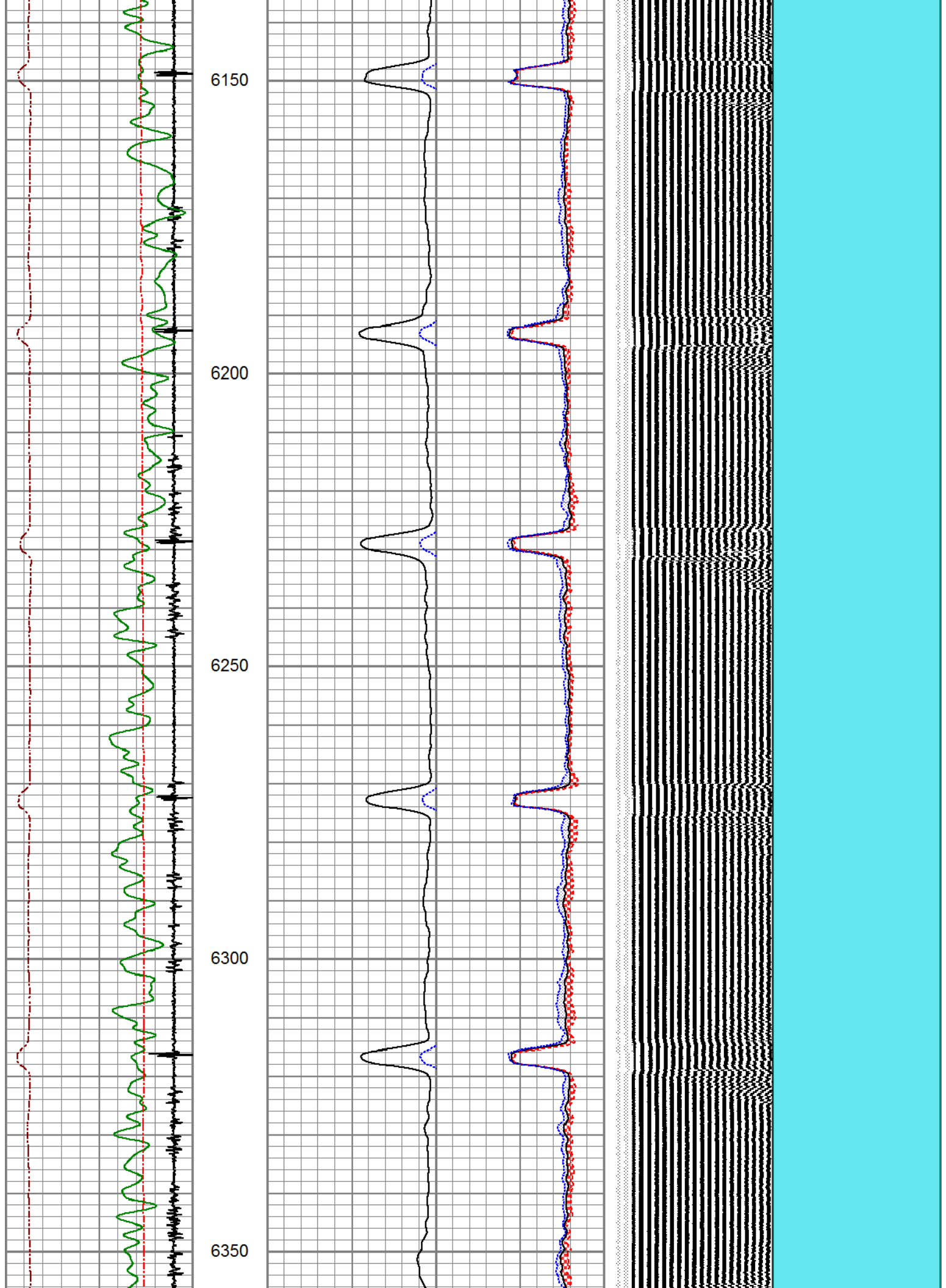


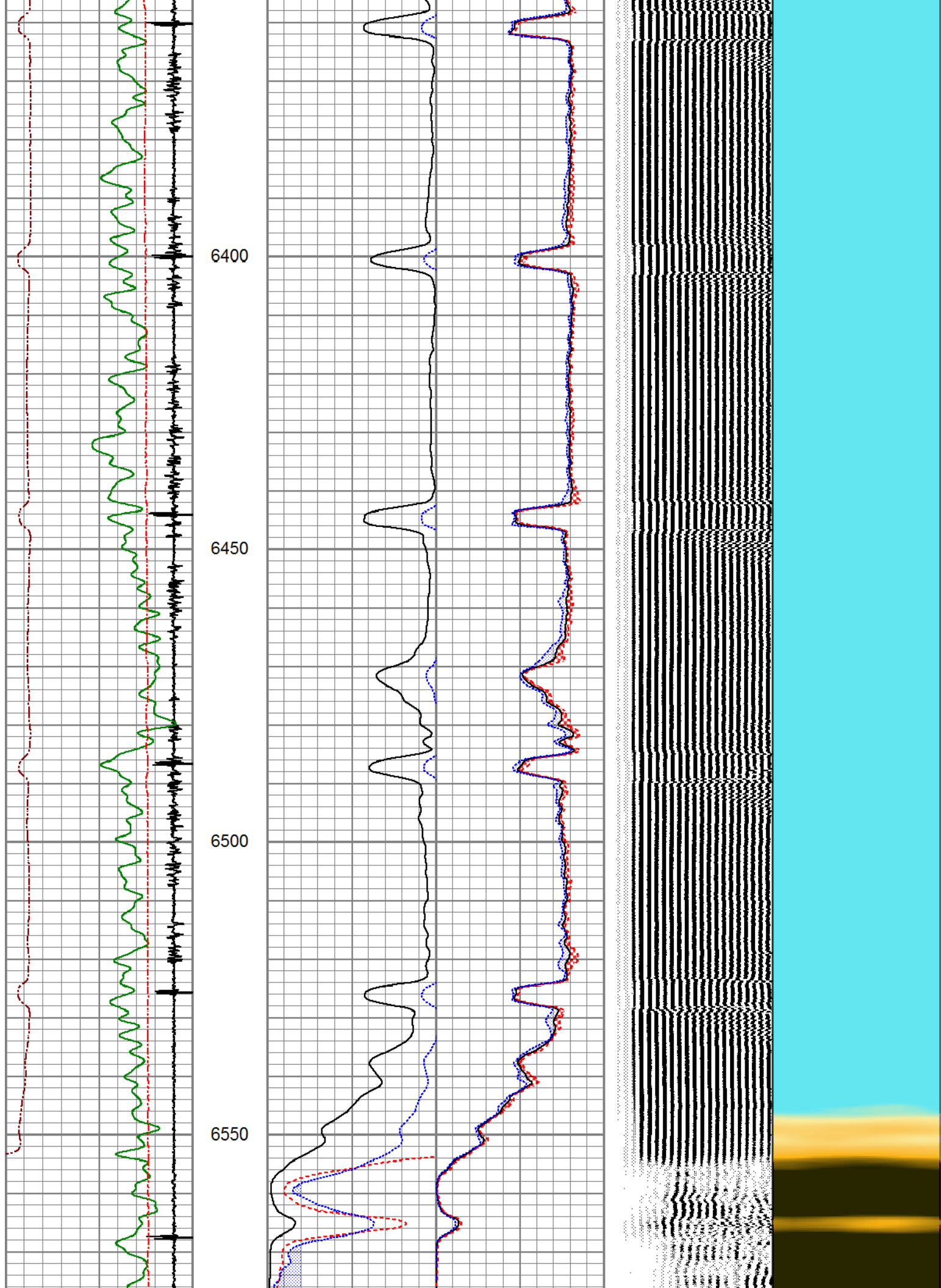


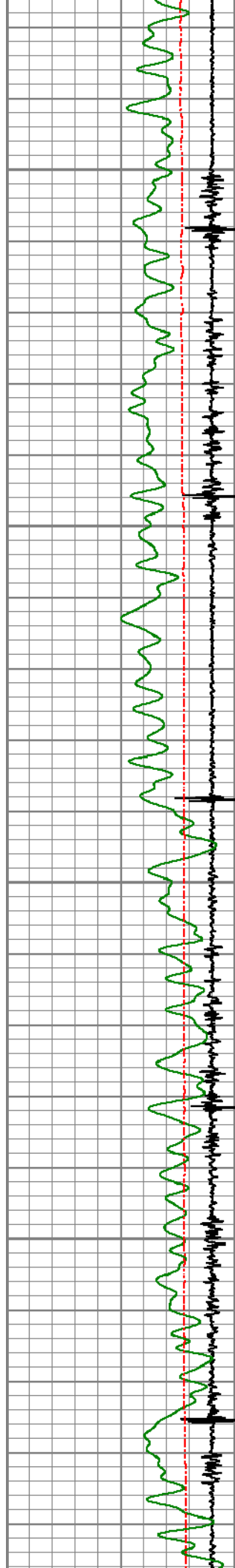










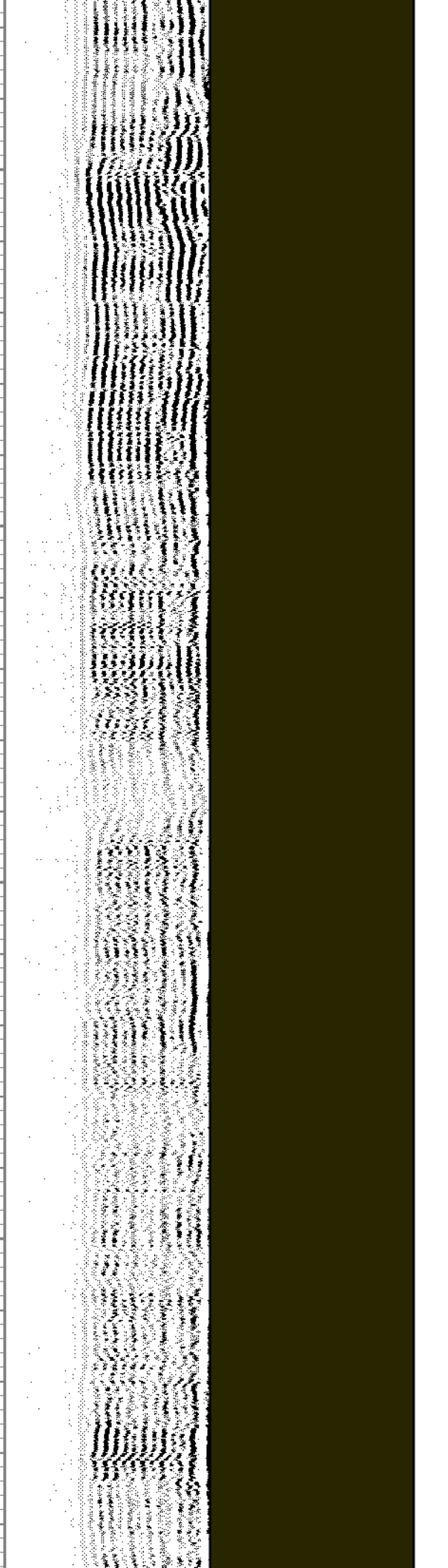
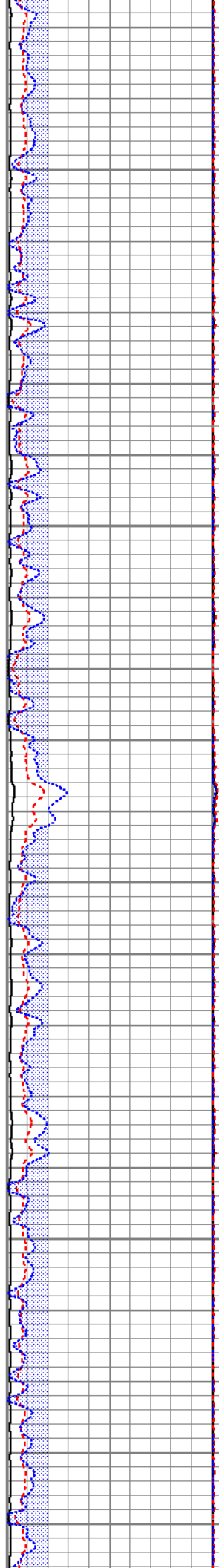


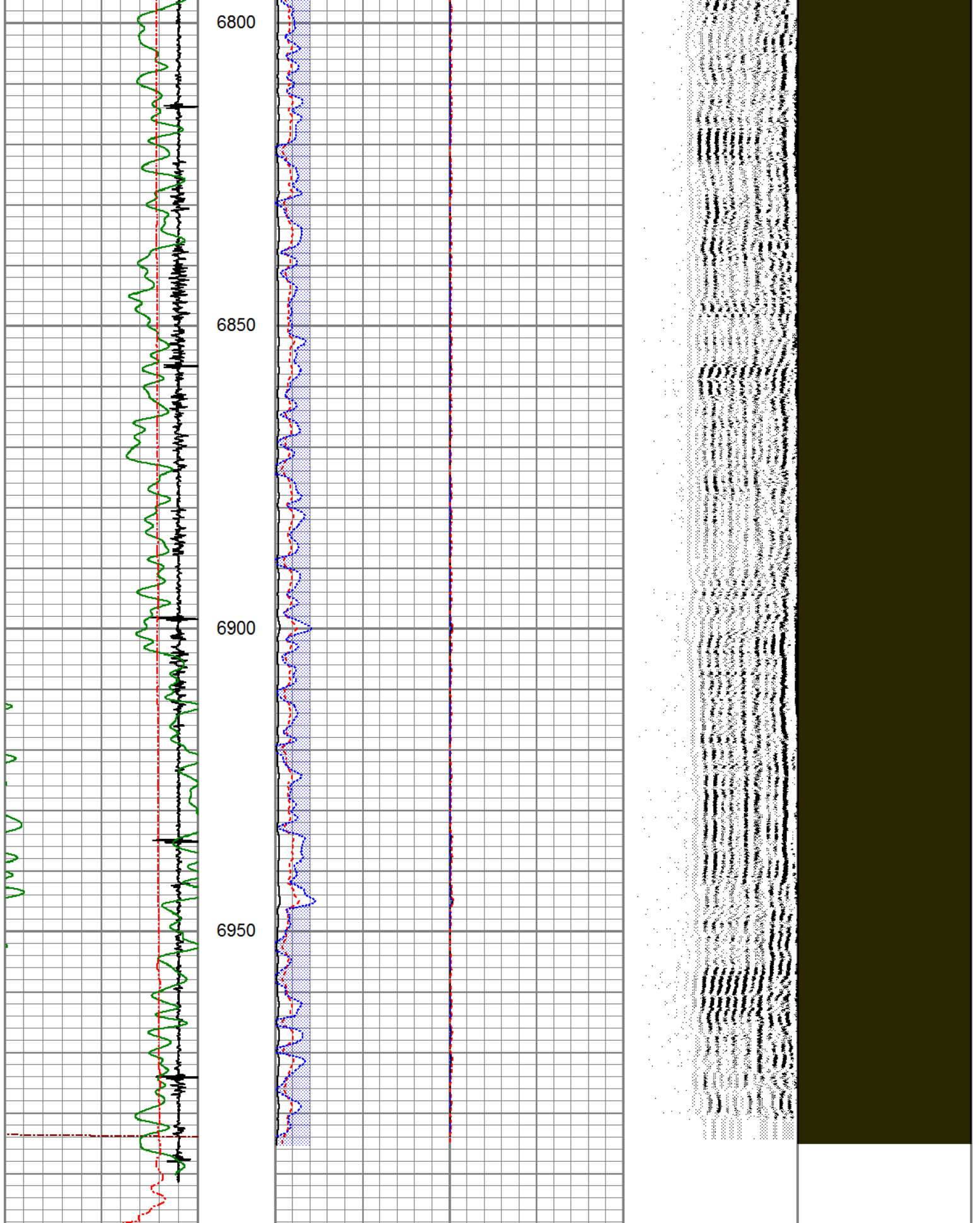
6600

6650

6700


6750






3Ft Travel Time	3' Amplitude	Sector	VDL	1	Sector Map	8
260 (usec) 160	0 (mV) 100	Amplitude Average	200 (usec) 1200			
-9 Collar Locator 1	3' Amplified Amplitude X 5	0 150				
Gamma Ray						

Gamma Ray			Sector	
0 (GAPI) 200	0 (mV) 20	Amplitude Maximum		
LineTension	1 Bond Index 0	0 150		
0 (lb) 2000		Sector Amplitude Minimum		
		0 150		



MAIN LOG

ZERO PSI APPLIED AT SURFACE

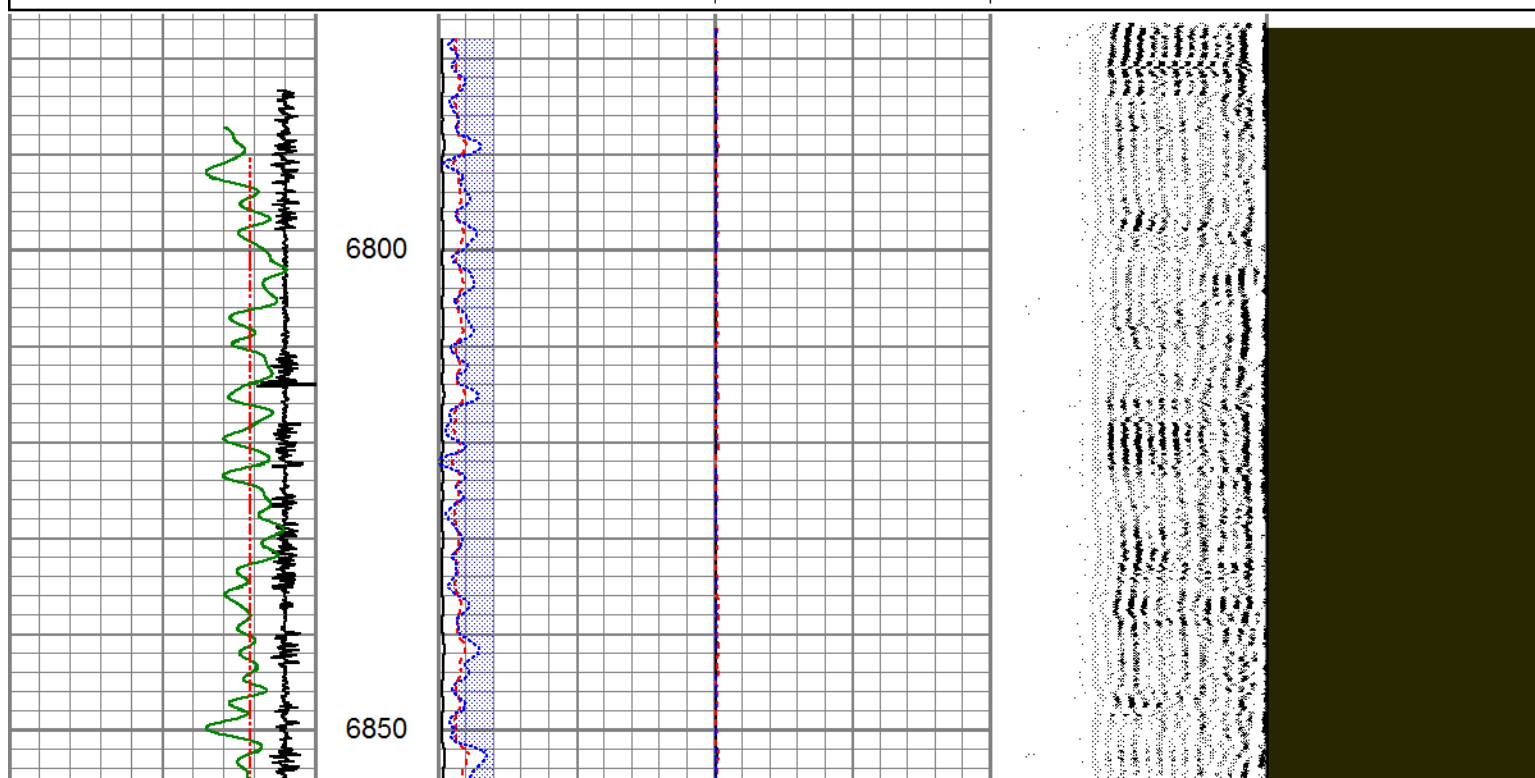


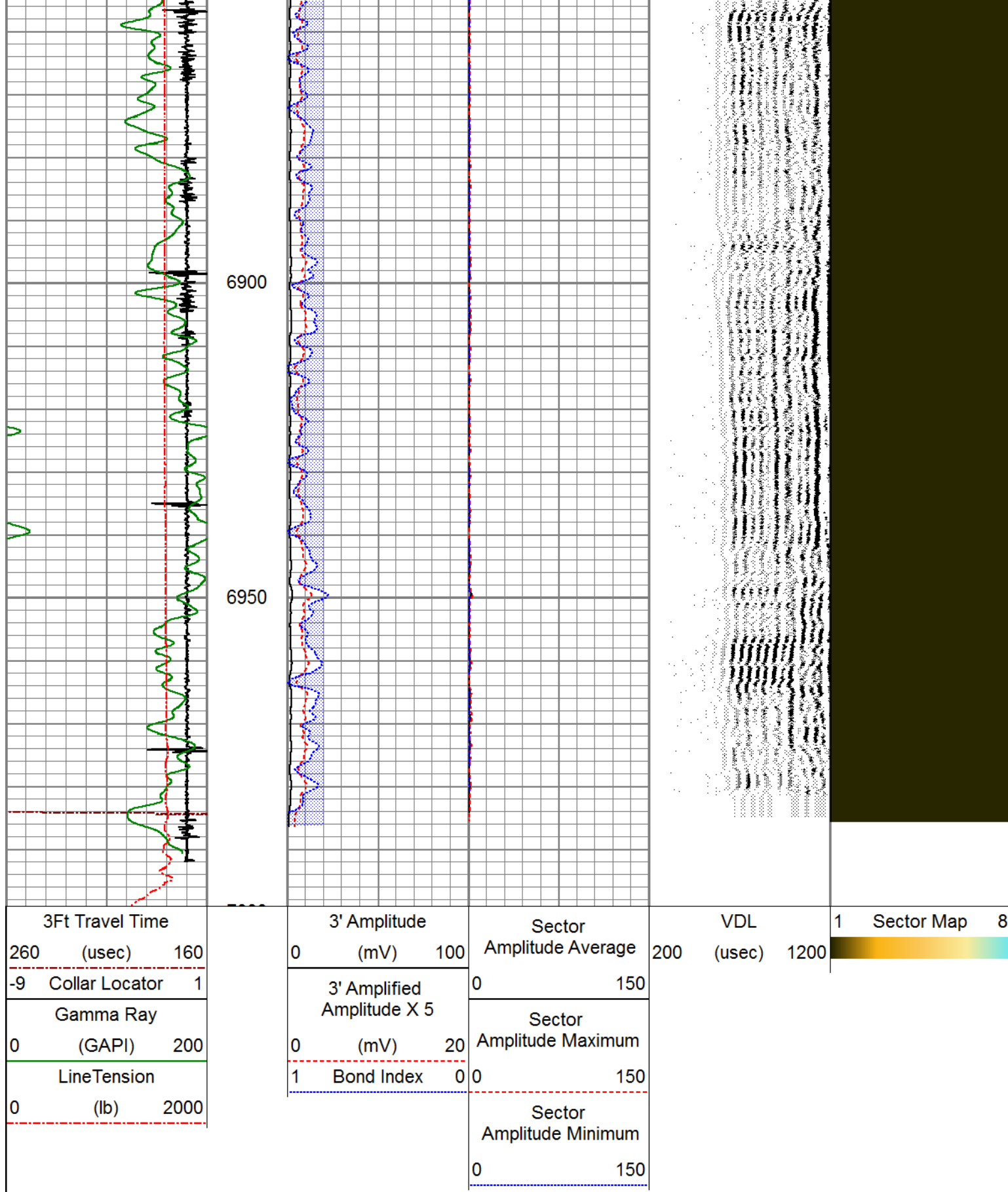
REPEAT SECTION

ZERO PSI APPLIED AT SURFACE

Database File	12-12-19-1.db
Dataset Pathname	pass10
Presentation Format	pinr_scbl
Dataset Creation	Thu Dec 12 14:23:00 2019
Charted by	Depth in Feet scaled 1:240

3Ft Travel Time		3' Amplitude	Sector	VDL	1 Sector Map 8
260 (usec) 160		0 (mV) 100	Amplitude Average	200 (usec) 1200	
-9 Collar Locator 1		3' Amplified Amplitude X 5	0 150		
Gamma Ray		0 (mV) 20	Sector Amplitude Maximum		
0 (GAPI) 200		1 Bond Index 0	0 150		
LineTension			Sector Amplitude Minimum		
0 (lb) 2000			0 150		





Calibration Report

Database File 12-12-19-1.db
 Dataset Pathname pass10
 Dataset Creation Thu Dec 12 14:23:00 2019

Gamma Ray Calibration Report

Serial Number: 130608
Tool Model: 275 Probe GCT
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: 070132-T
Tool Model: RBL-D

Calibration Casing Diameter: 4.500 in
Calibration Depth: 6225.139 ft

Master Calibration, performed Thu Dec 12 14:19:43 2019:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.001	1.819	0.700	81.196	44.223	0.742
CAL	1.519	1.501				
5'	-0.000	1.547	0.700	81.196	52.019	0.720
SUM						
S1	0.007	1.684	0.000	100.000	59.632	-0.431
S2	0.020	1.704	0.000	100.000	59.394	-1.206
S3	0.027	1.767	0.000	100.000	57.462	-1.526
S4	0.025	1.853	0.000	100.000	54.694	-1.373
S5	0.025	1.925	0.000	100.000	52.636	-1.338
S6	0.028	1.973	0.000	100.000	51.418	-1.443
S7	0.016	1.939	0.000	100.000	52.016	-0.835
S8	-0.001	1.771	0.000	100.000	56.422	0.064

Air Zero Calibration, performed Thu Dec 12 09:49:59 2019:

	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



Company ANADARKO PETROLEUM CORP.
Well CAMP LEWIS C UT D 2
Field WATTENBERG
County WELD

PIONEER
Pioneer Energy Services

State

COLORADO