



PIONEER

Pioneer Energy Services

CEMENT BOND LOG WITH GAMMA RAY

Comp. ANADARKO PETROLEUM CORP.
Well UPRC 29-13K
Field WATTENBERG
Co. WELD
State COLORADO

Company **ANADARKO PETROLEUM CORP.**
Well **UPRC 29-13K**
Field **WATTENBERG**
County **WELD** State **COLORADO**

Location: API #: 05-123-16376
SW SW
LAT: 40.19010 LONG: -104.80890
SEC 29 TWP 3N RGE 66W
Permanent Datum GL Elevation 4895'
Log Measured From GL 14' Above Perm. Datum
Drilling Measured From KB
Other Services
CIBP
BAILER
SQZ GUNS
Elevation
K.B. 4909'
D.F. 4908'
G.L. 4895'

Date of Service	12/30/2019		
Run Number	ONE		
Depth Driller or PBTD	7985'		
Depth Logger	4100'		
Bottom Log Interval	4100'		
Top Log Interval	SURFACE		
Open Hole Size	7-7/8"		
Type Fluid	WATER		
Fluid Level	SURFACE		
Fluid Density	8.4		
Max. Recorded Temperature	N/A		
Max. Wellhead Pressure	ZERO		
Wellhead Connection	PACK OFF		
Estimated Cement Top	4047'		
Unit Number	P-133		
Wireline Size	9/32"		
Location	FORT MORGAN CO.		
Recorded By	P LOPEZ		
Witnessed By	MR. JEREMY DUTY		
	Size	Wt/Ft	Top
Tubing Record			Bottom
Surface Casing	8.63	23	SURFACE 705'
Production Casing	4.50	11.6	SURFACE 7983'
Liner Record			

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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.
ALL WIRELINE DEPTH
TOOL ZEROED AT GROUND LEVEL

THANK YOU FOR USING PIONEER ENERGY SERVICES!

Your Pioneer Energy Services Crew	Tool Data - Services	Serial Number
Engineer: P LOPEZ Operator: G SOTO Operator: M ODOHERTY Operator:	RBL-DC GR CCL	140141 110246

Top - Bottom

BOREID in 7.875	BOTTEMP degF 180	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 0	PPT usec 249	SRFTEMP degF 18	TDEPTH ft 4000		


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 Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
			PROBE-RBT-DIGITAL-RBL-DC (FW1401) Probe 2 3/4" Radii Bond-Corrosion Package	48.75	2.75	100.00
WVFS8	14.76					
WVFS7	14.76					
WVFS6	14.76					
WVFS5	14.76					
WVFS4	14.76					
WVFS3	14.76					
WVFS2	14.76					
WVFS1	14.76					
WVFCAL	14.76					
WV3FT	14.76					
WV5FT	13.76					
HEADVOLT	10.57					
			Centralizer-275 Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00

CCL	6.78		PROBE-GR/CCL-ANALOG-GR/CCL-A (1104.54 2 3/4" Gamma with CCL-Analog	104.54	2.75	60.00
GR	4.05		Centralizer-275 Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
			Bullnose-Titan GO Pin Pressure Cap	0.27	1.38	1.00
Dataset: anadarko_uprc 29-13k_0512316376_20191230_scbl.db: field/well/run1/pass9 Total length: 23.23 ft Total weight: 208.00 lb O.D.: 2.75 in						


PIONEER

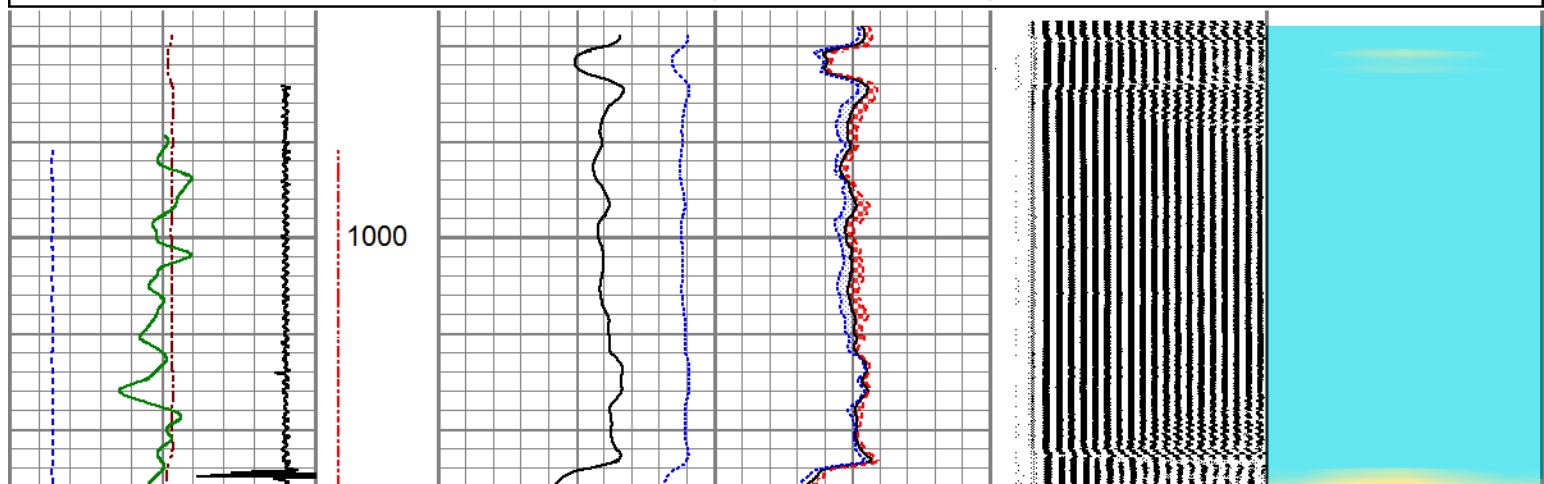
Pioneer Energy Services

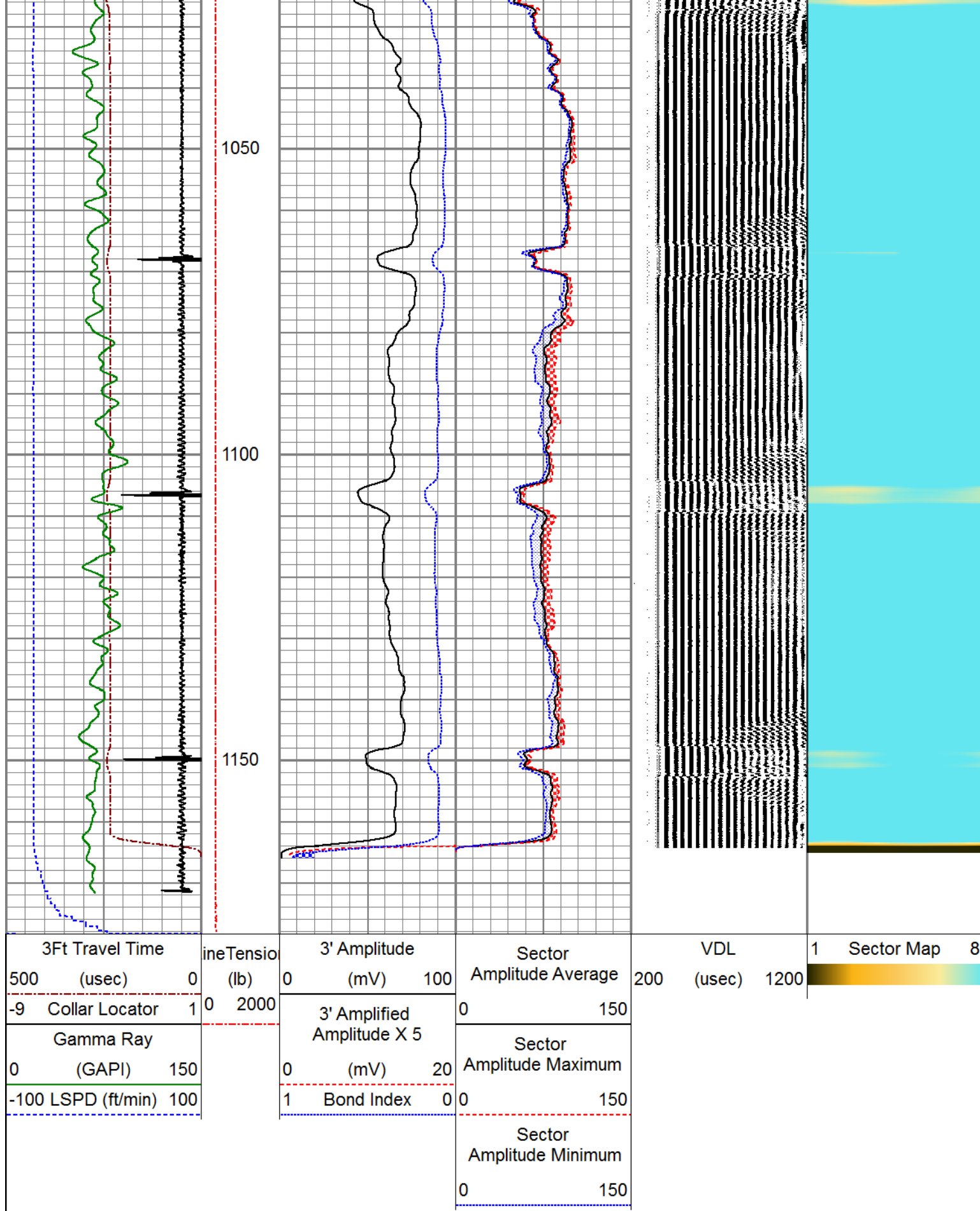
FREE PIPE SECTION

ZERO PSI APPLIED AT SURFACE

Database File anadarko_uprc 29-13k_0512316376_20191230_scbl.db
Dataset Pathname pass5
Presentation Format pinr_scbl
Dataset Creation Mon Dec 30 10:44:55 2019
Charted by Depth in Feet scaled 1:240

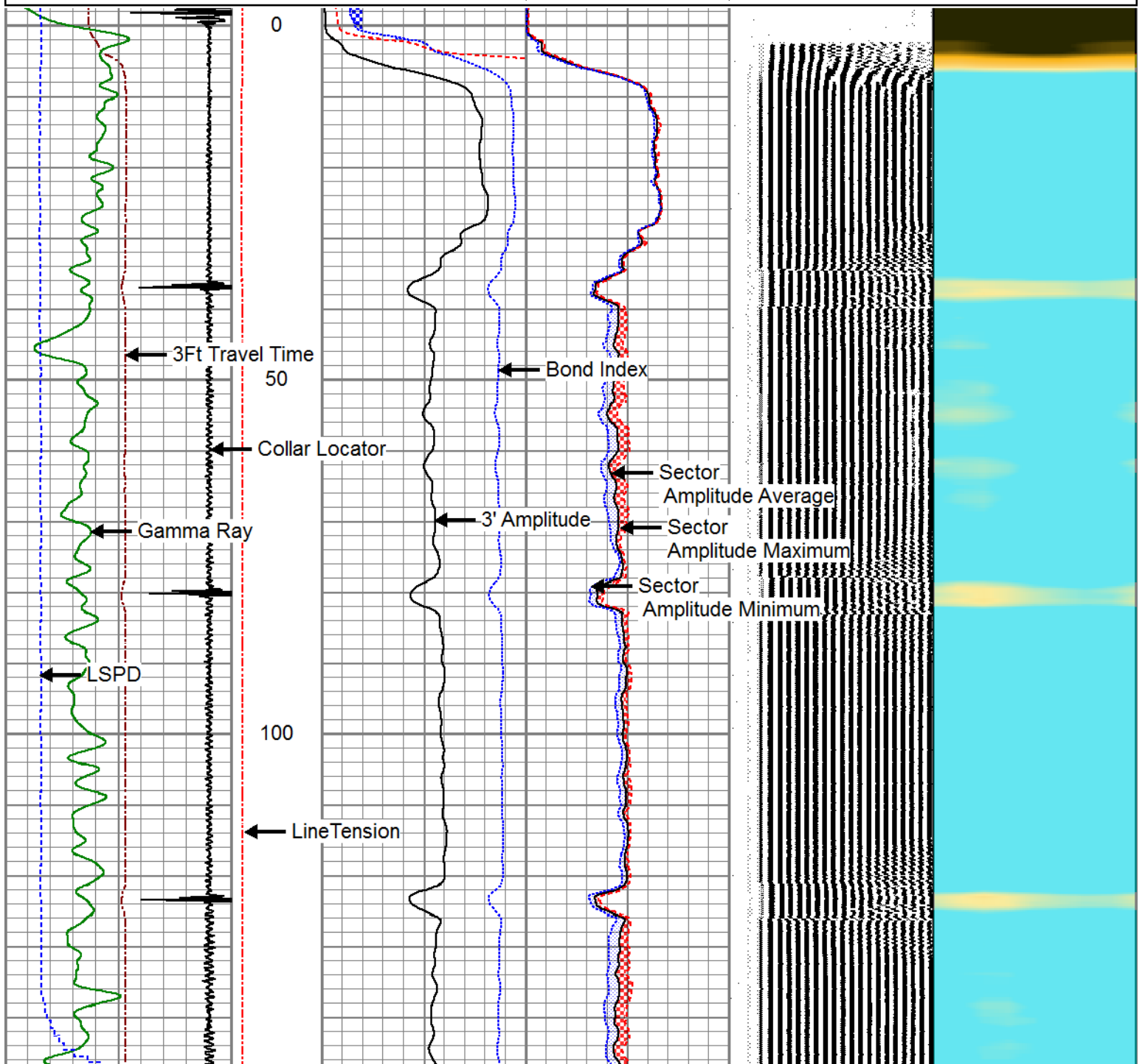
3Ft Travel Time	ineTensio	3' Amplitude	Sector	VDL	1	Sector Map	8
500 (usec)	0 (lb)	0 (mV) 100	Amplitude Average	200 (usec) 1200			
-9 Collar Locator	1 0 2000	3' Amplified Amplitude X 5	0 150				
Gamma Ray		0 (mV) 20	Sector Amplitude Maximum				
0 (GAPI) 150		1 Bond Index 0	0 150				
-100 LSPD (ft/min)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

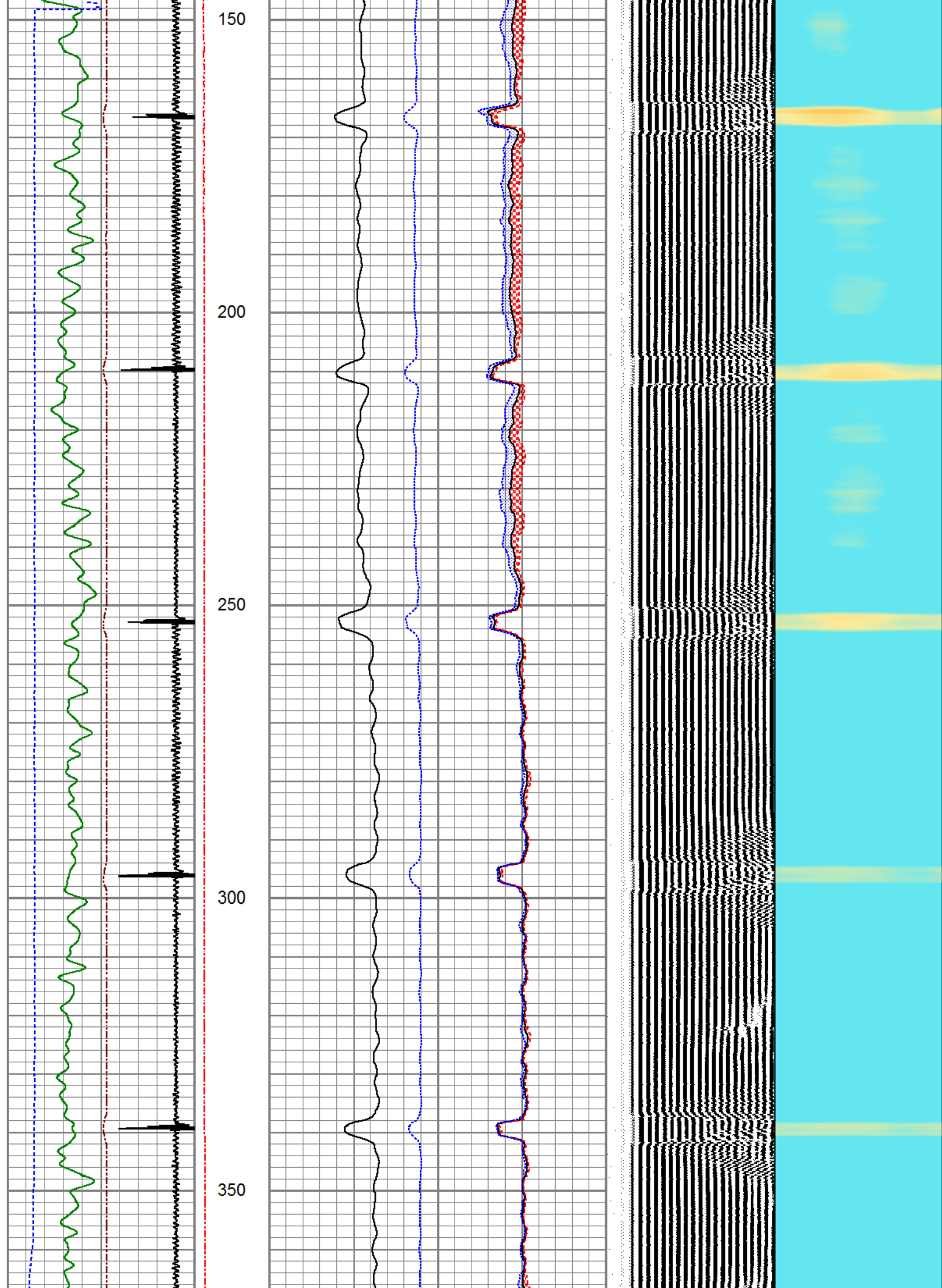


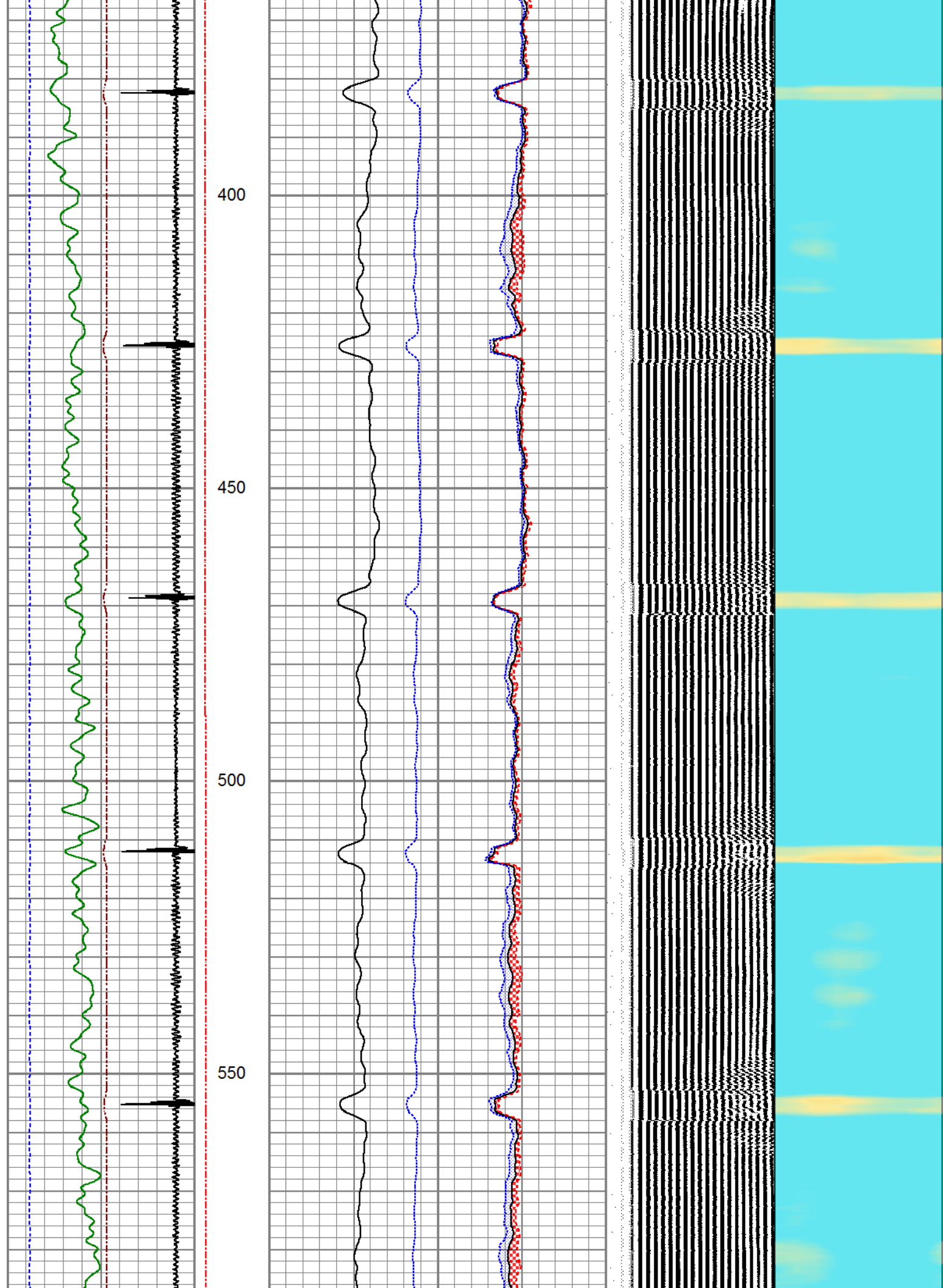


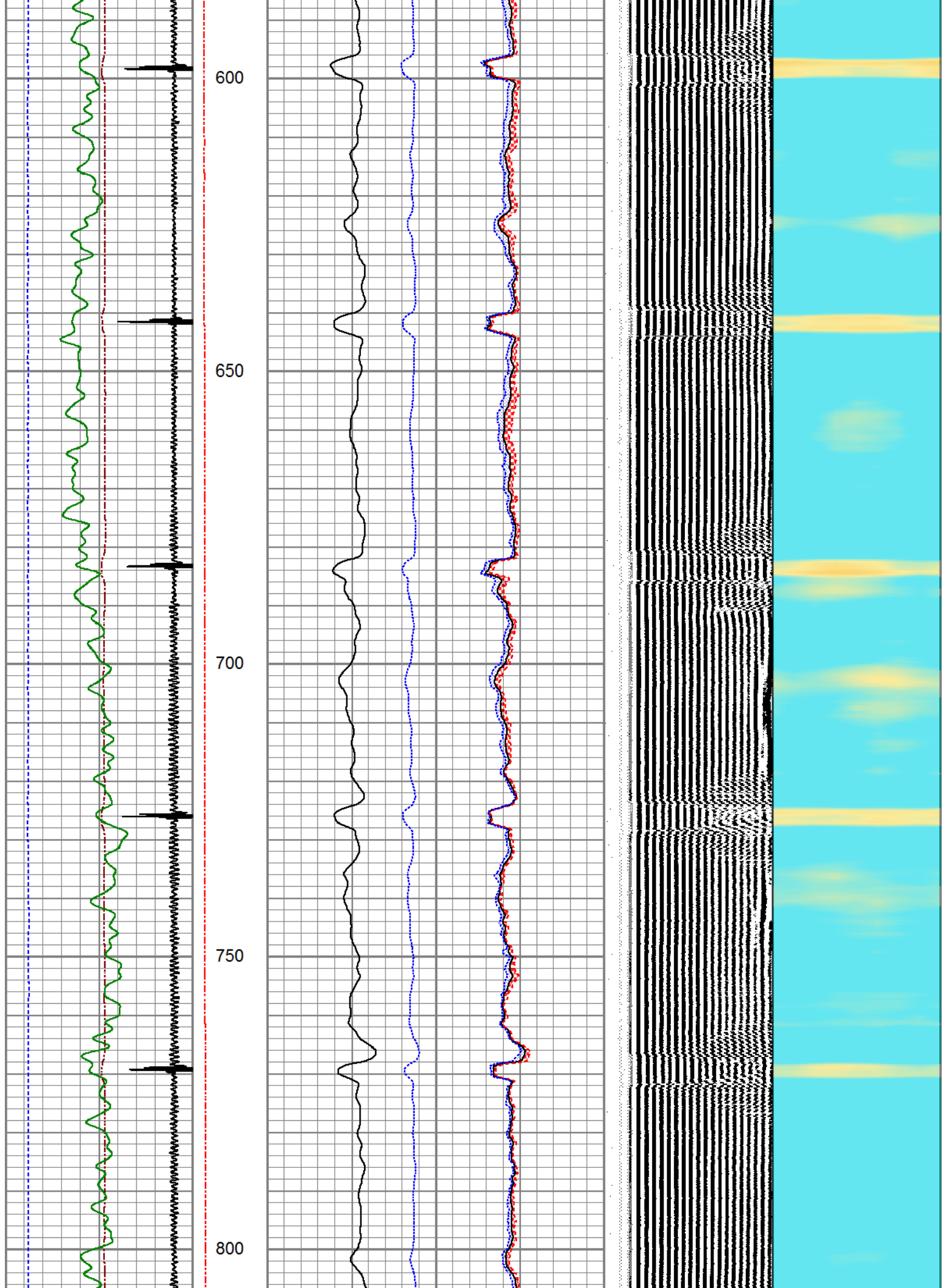
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 Dataset Pathname pass9.1
 Presentation Format pinr_scbl
 Dataset Creation Mon Dec 30 12:05:07 2019
 Charted by Depth in Feet scaled 1:240

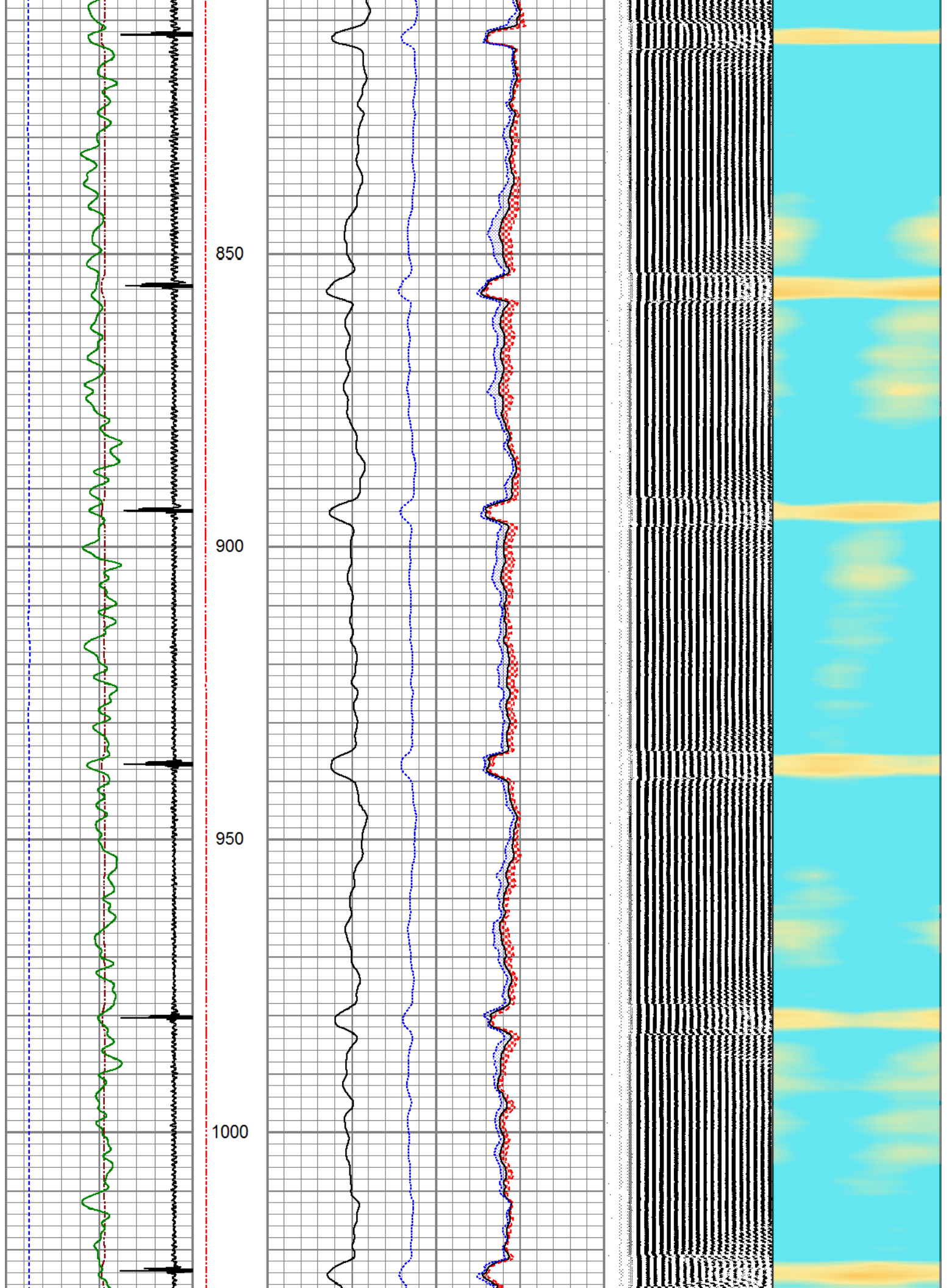
3Ft Travel Time			ineTensio (lb)	3' Amplitude		Sector		VDL		1	Sector Map	8		
500	(usec)	0		0	(mV)	100	Amplitude Average		200				(usec)	1200
-9	Collar Locator	1		0	2000	0		150						
Gamma Ray				3' Amplified		Sector								
0	(GAPI)	150		Amplitude X 5		Amplitude Maximum								
			0		0									
			0		0									
-100 LSPD (ft/min)			1		Bond Index		0		0		150			

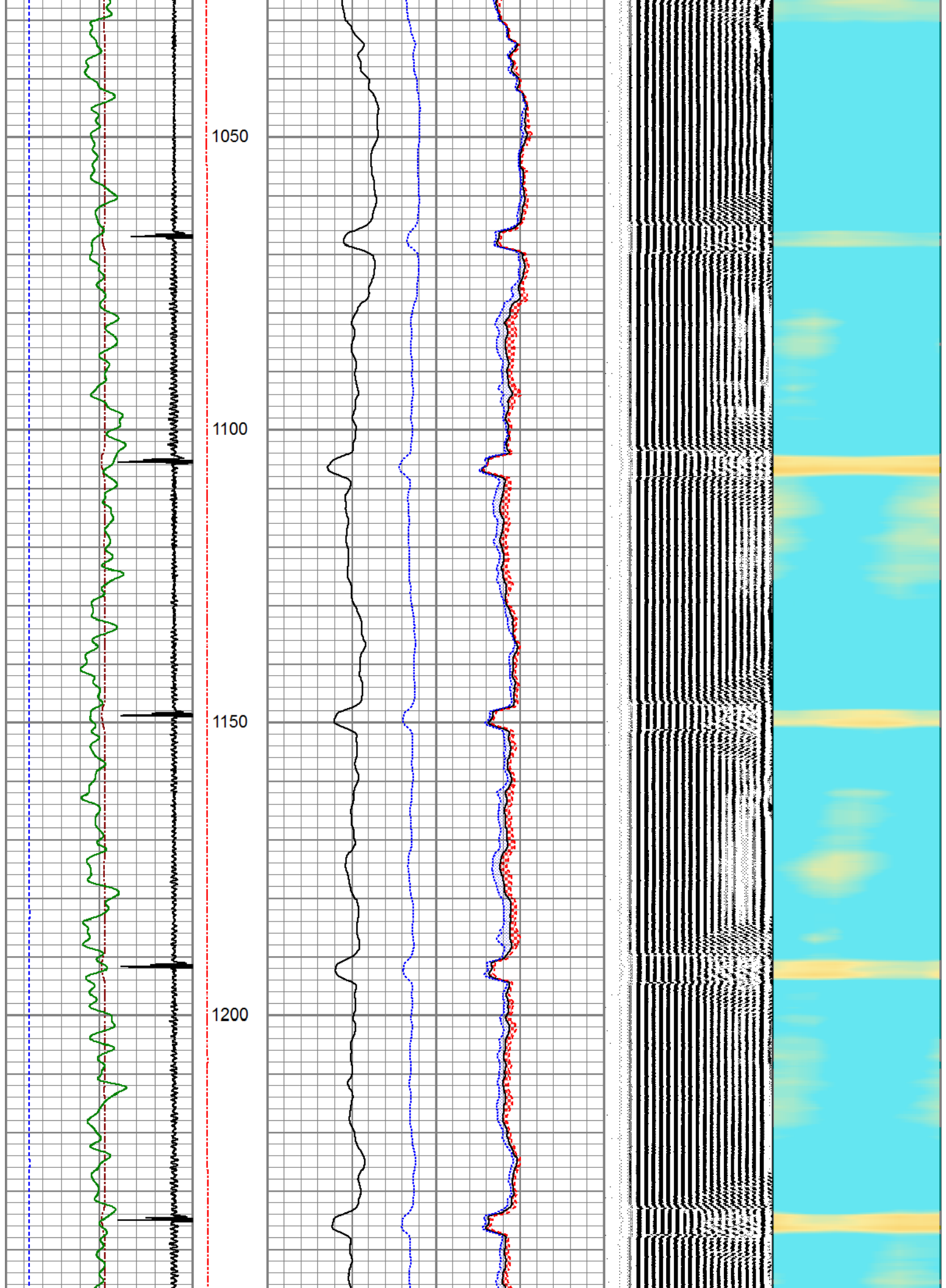


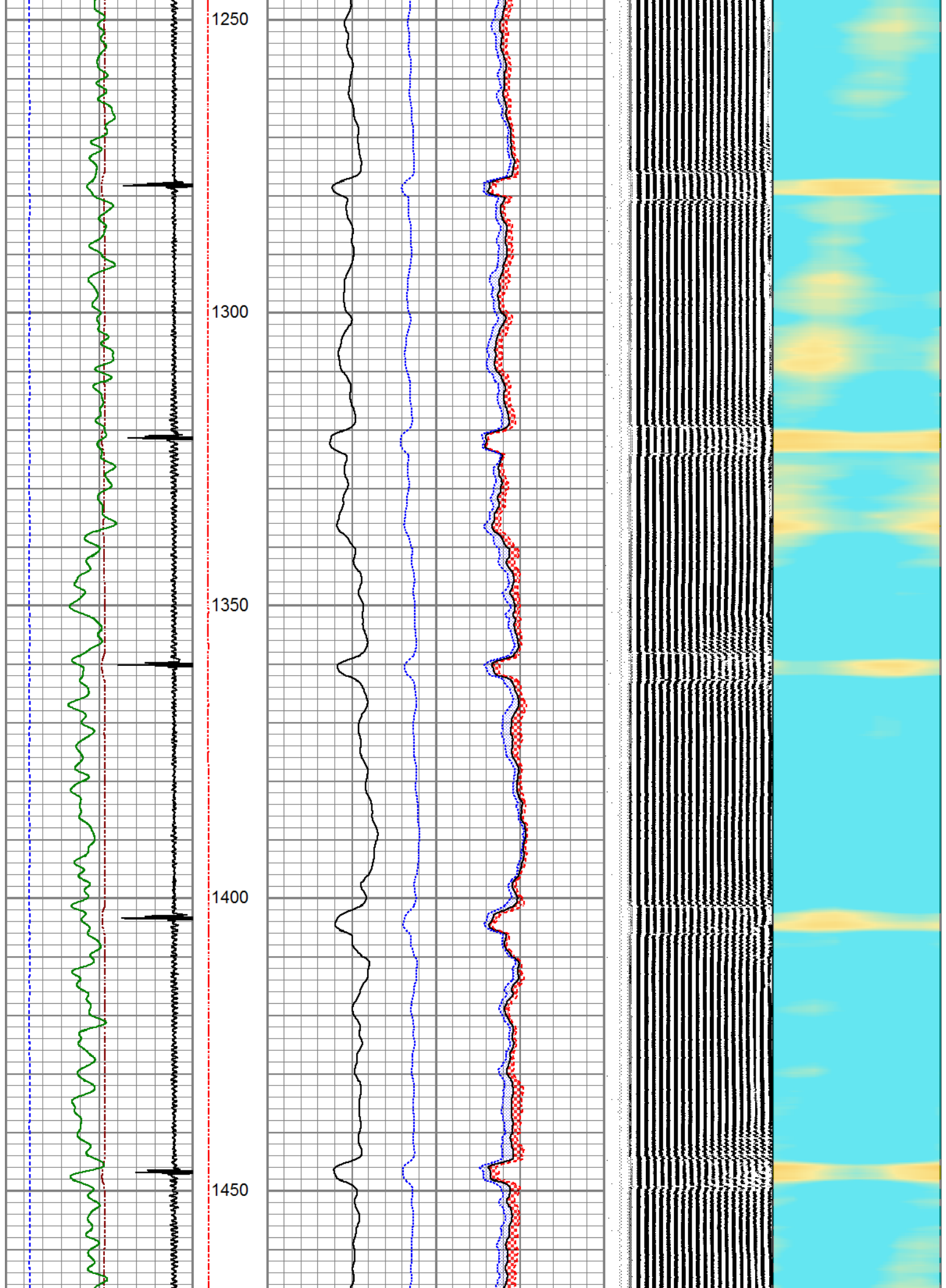


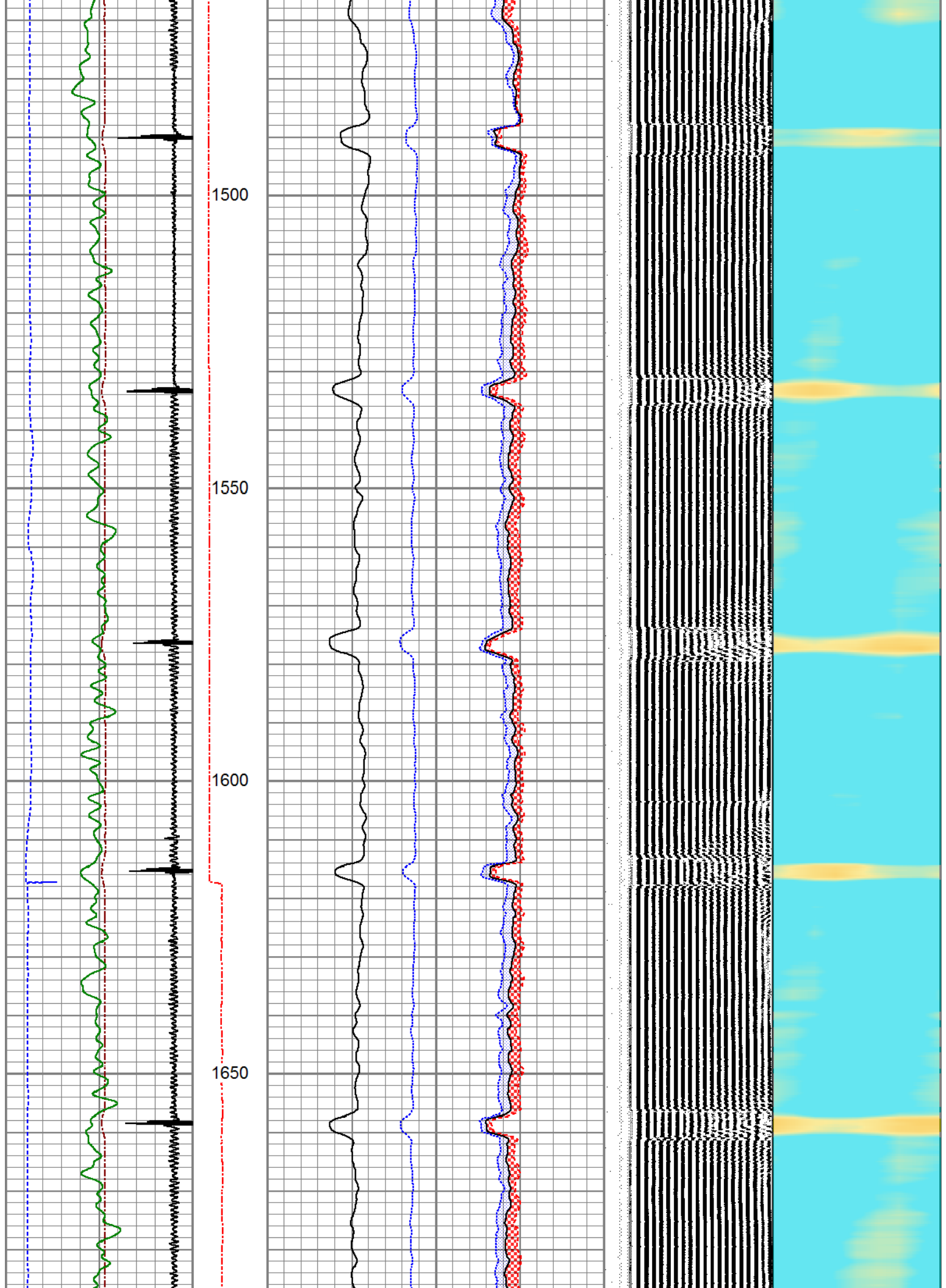


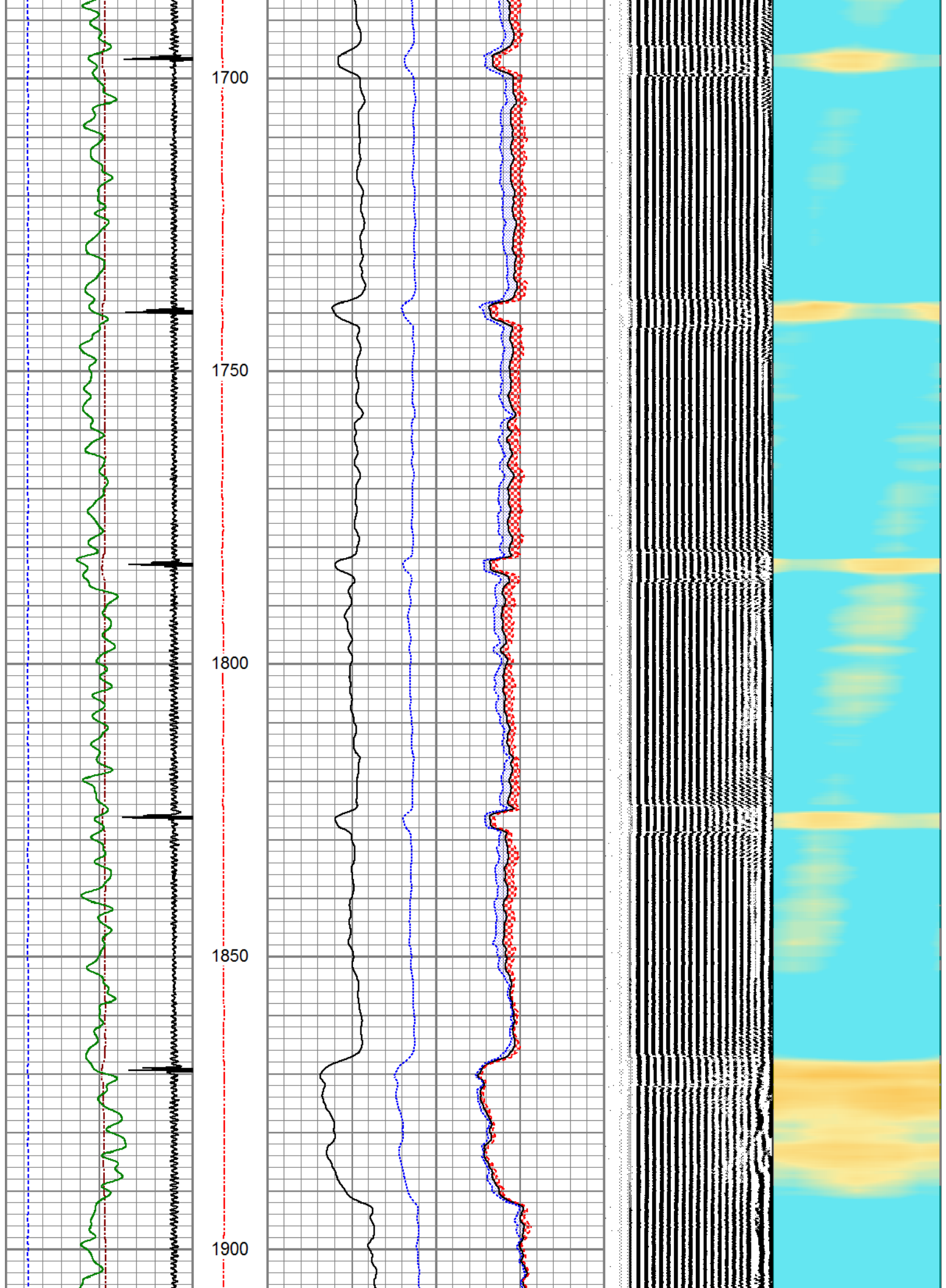


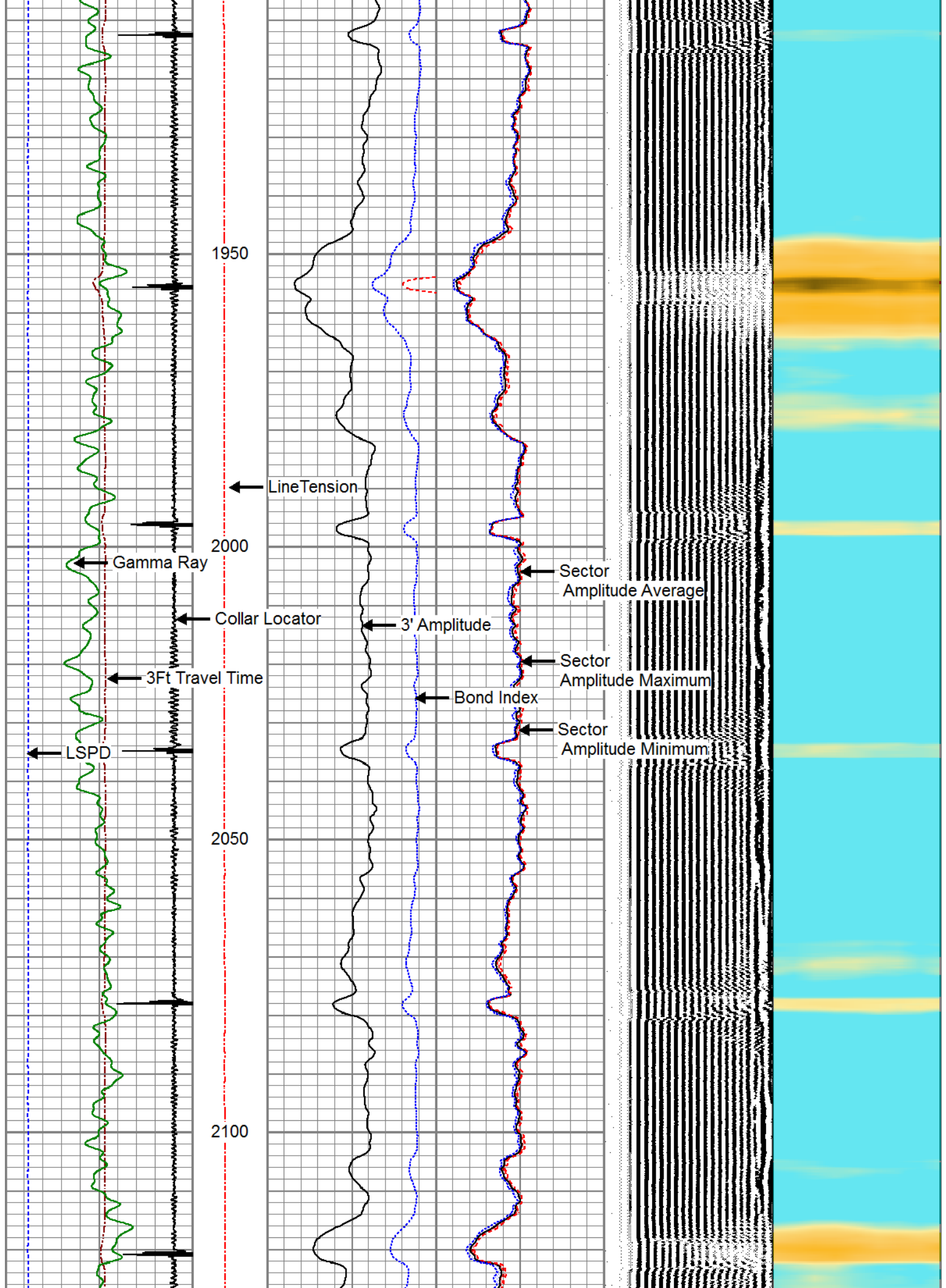


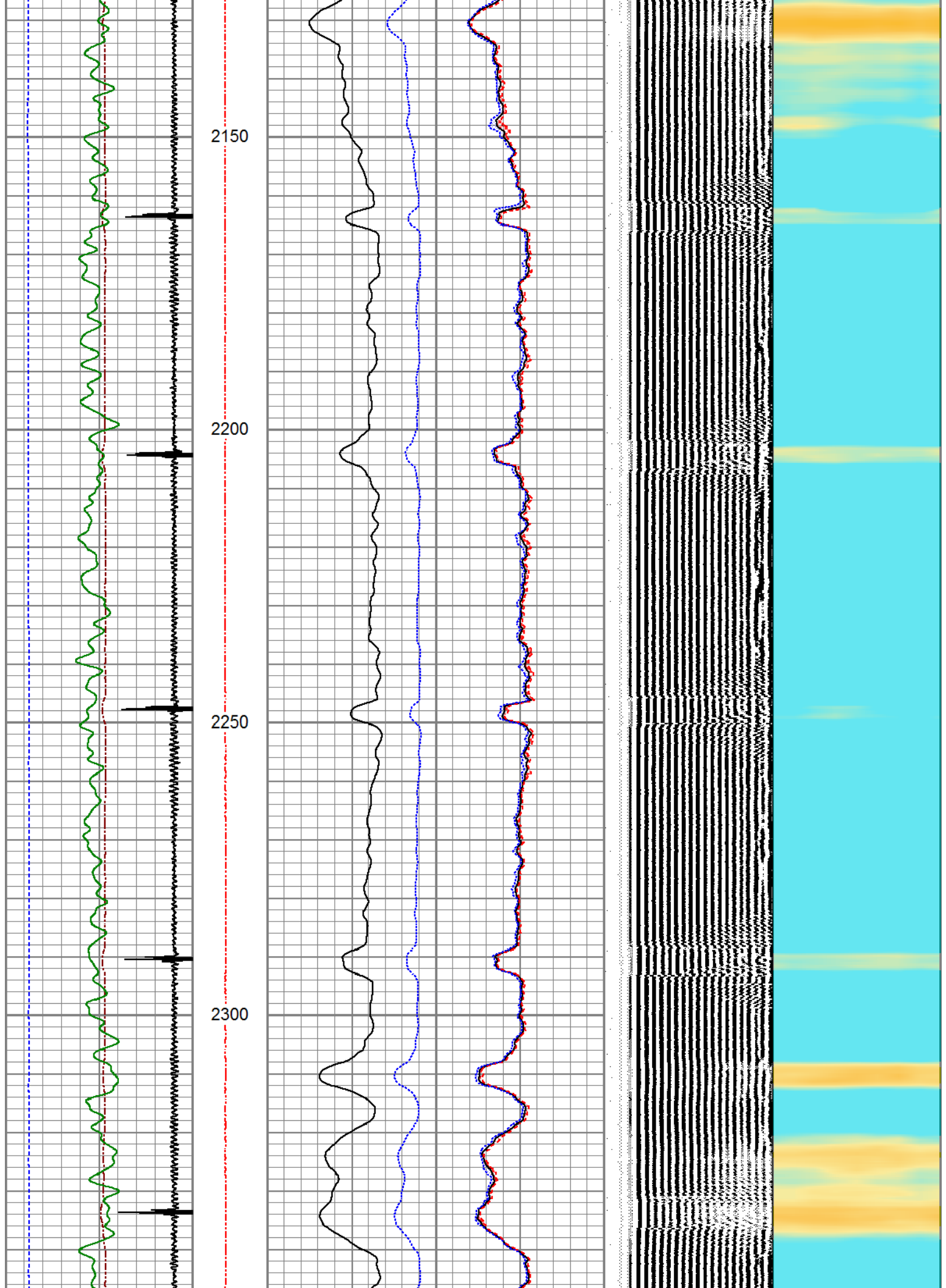


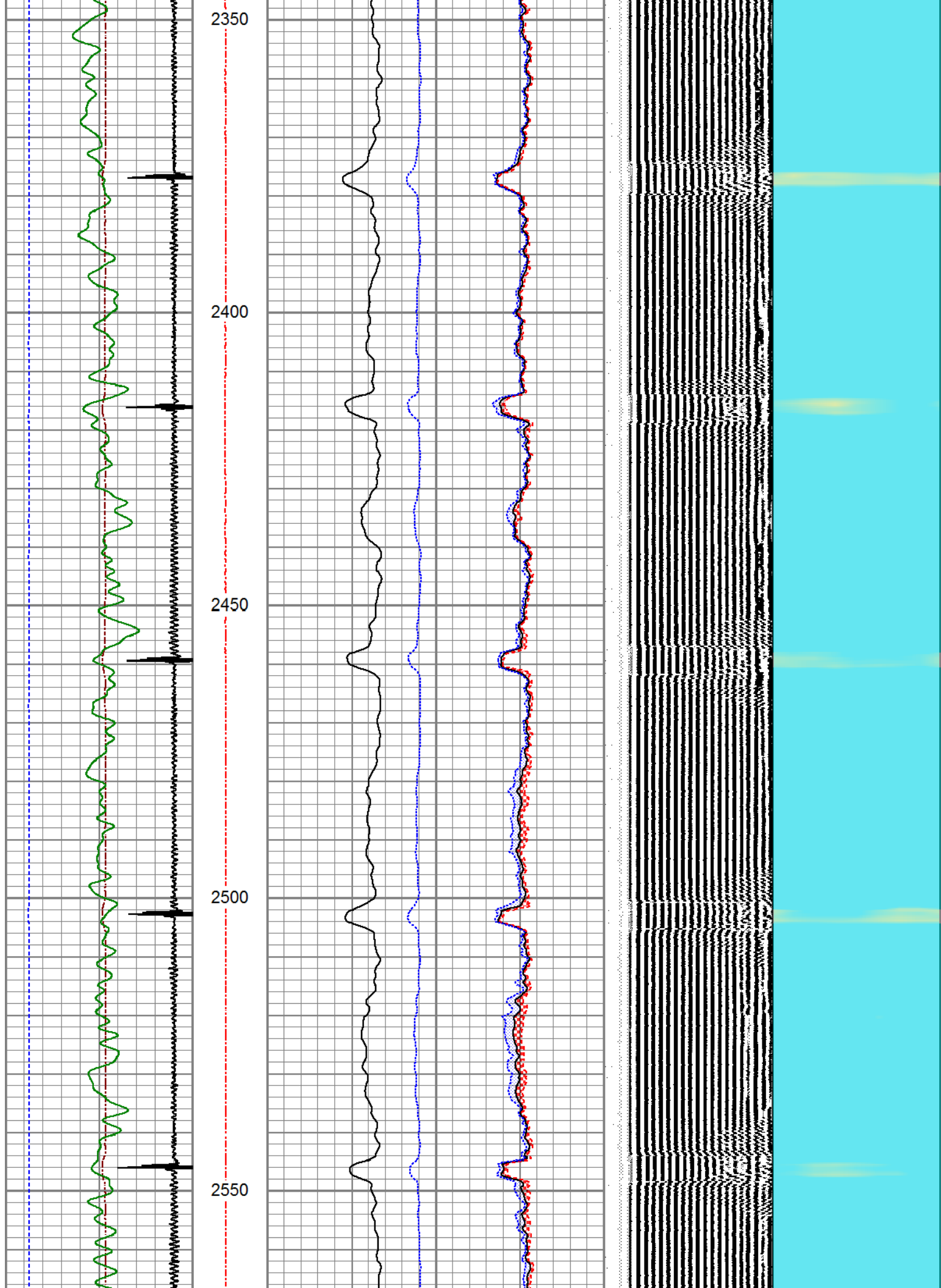


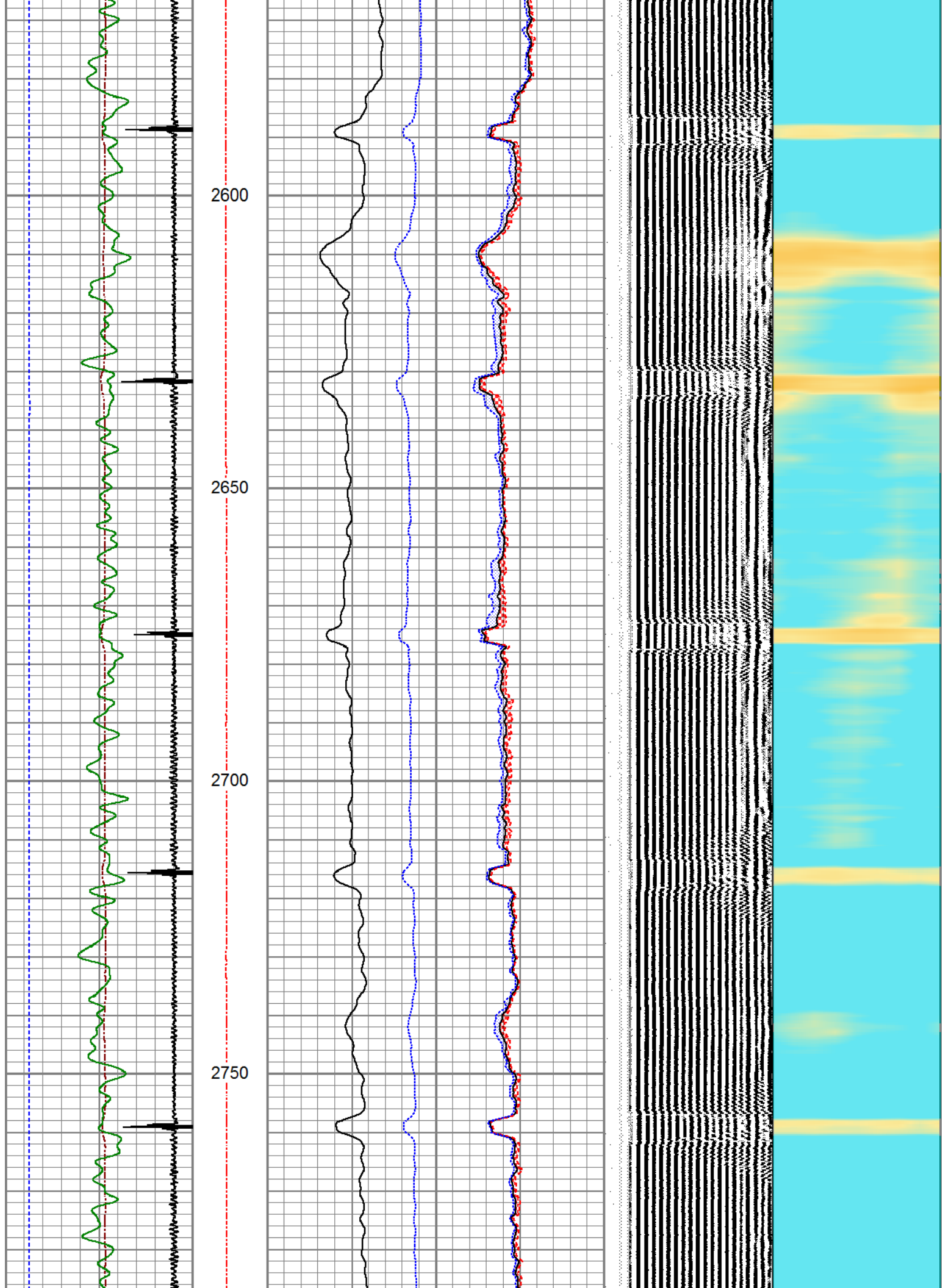


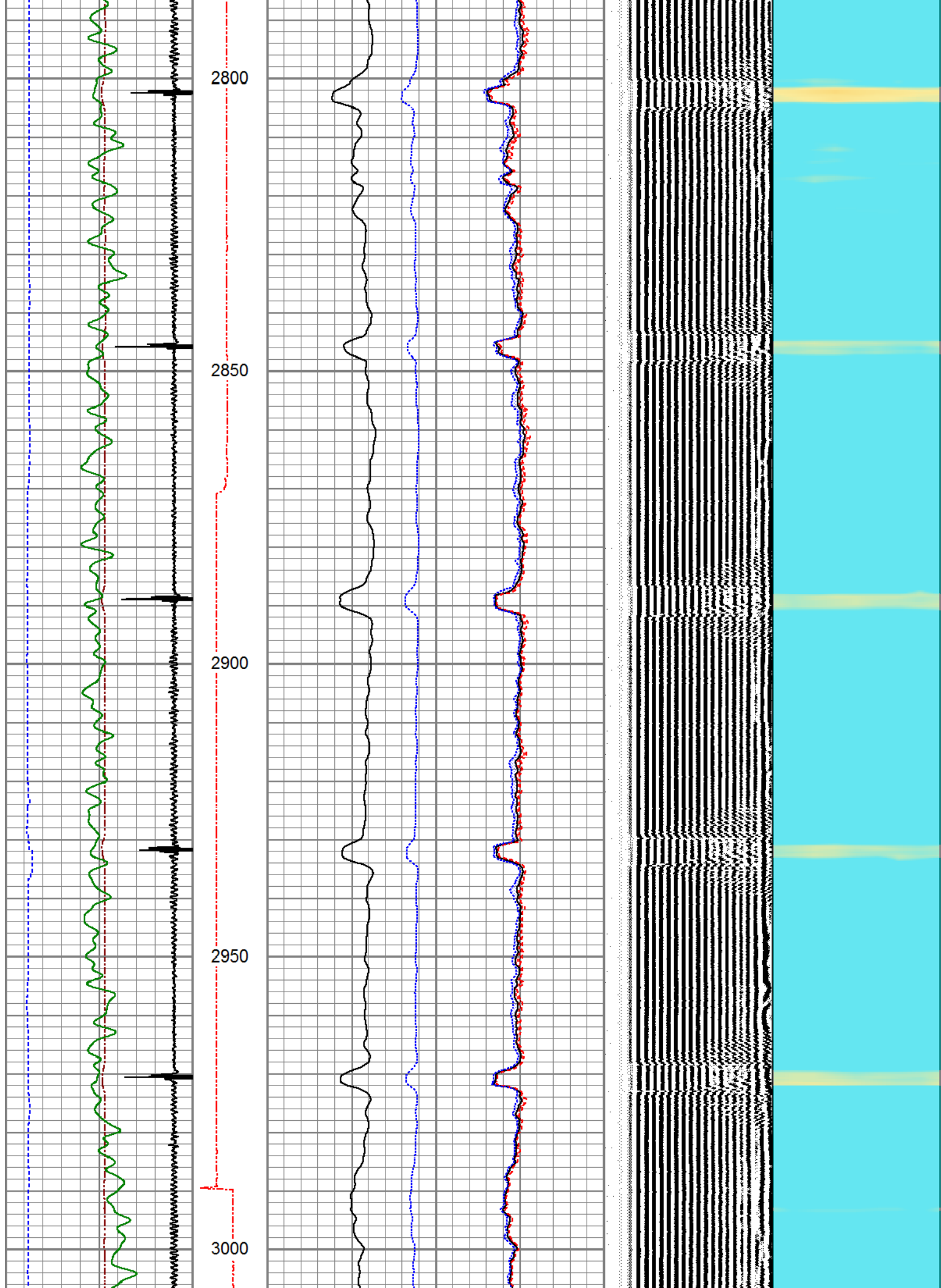


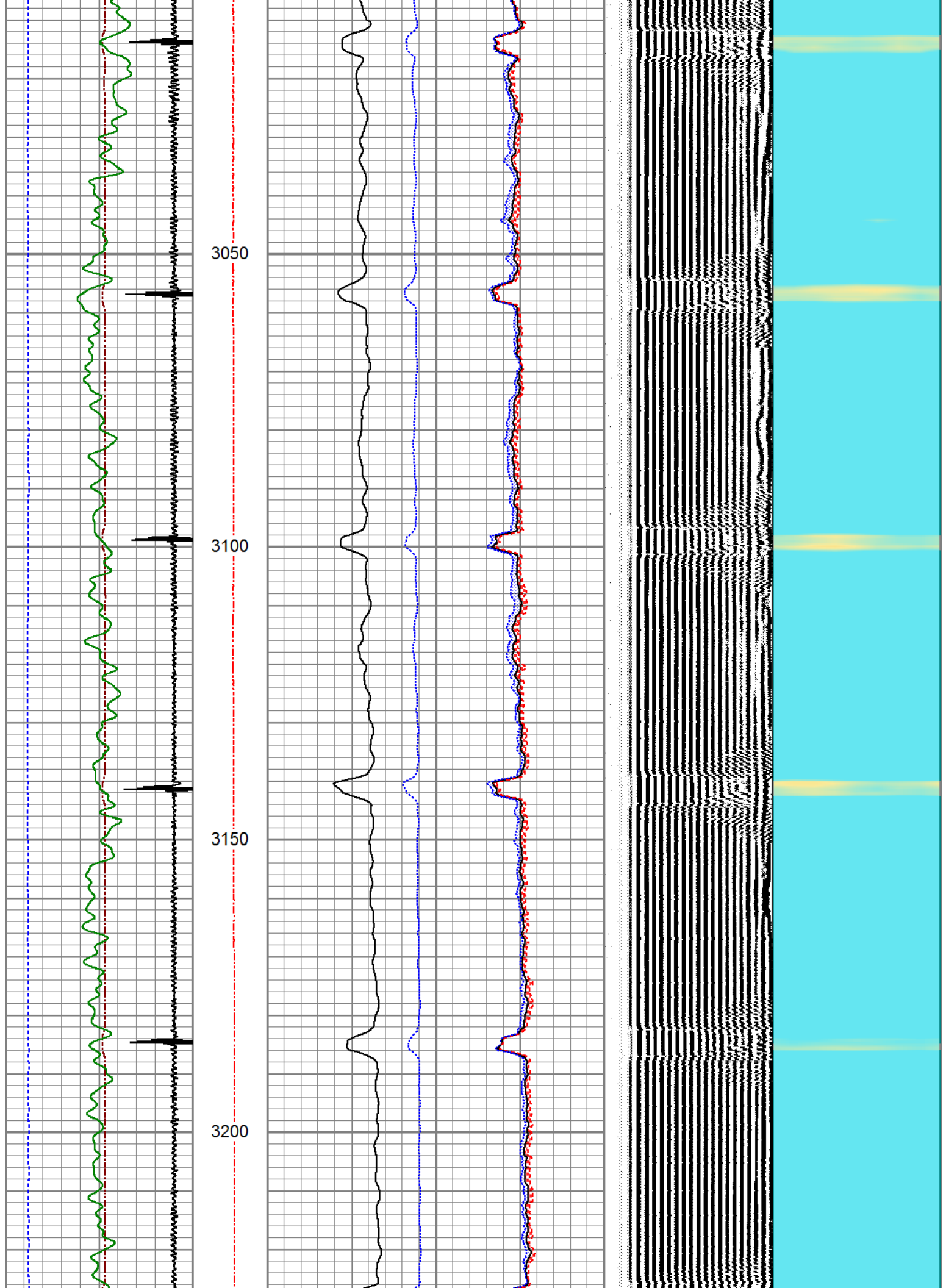


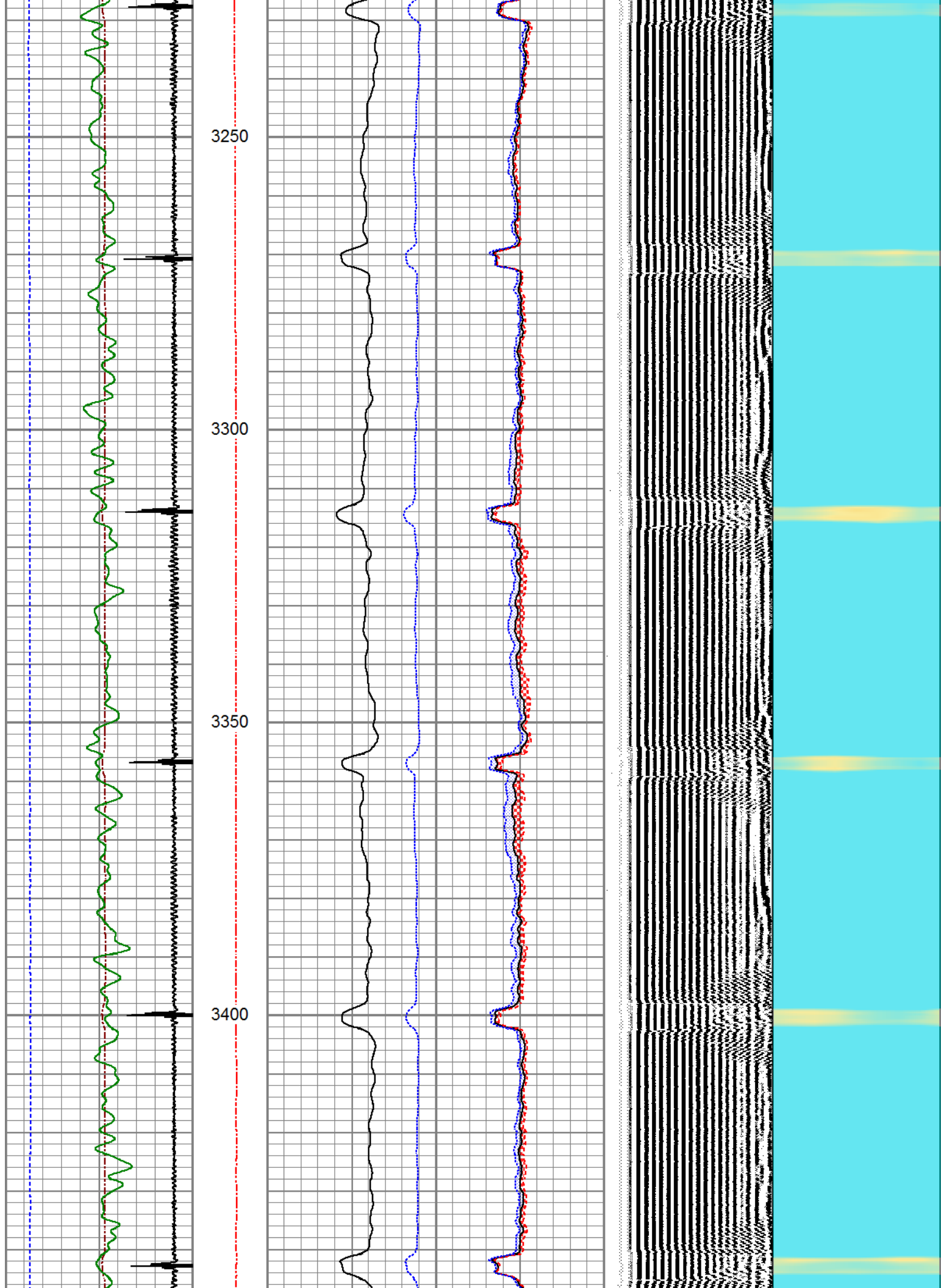




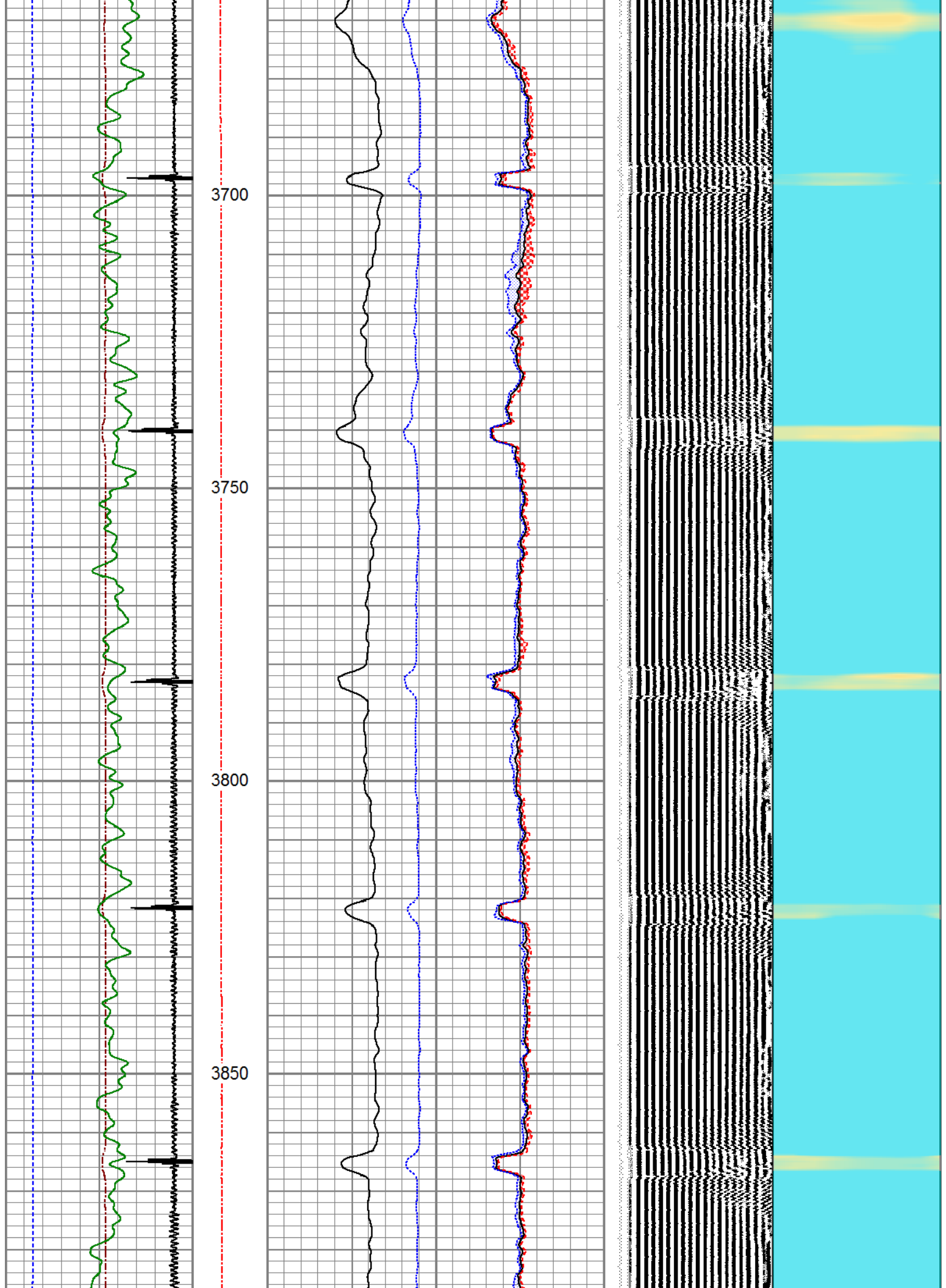


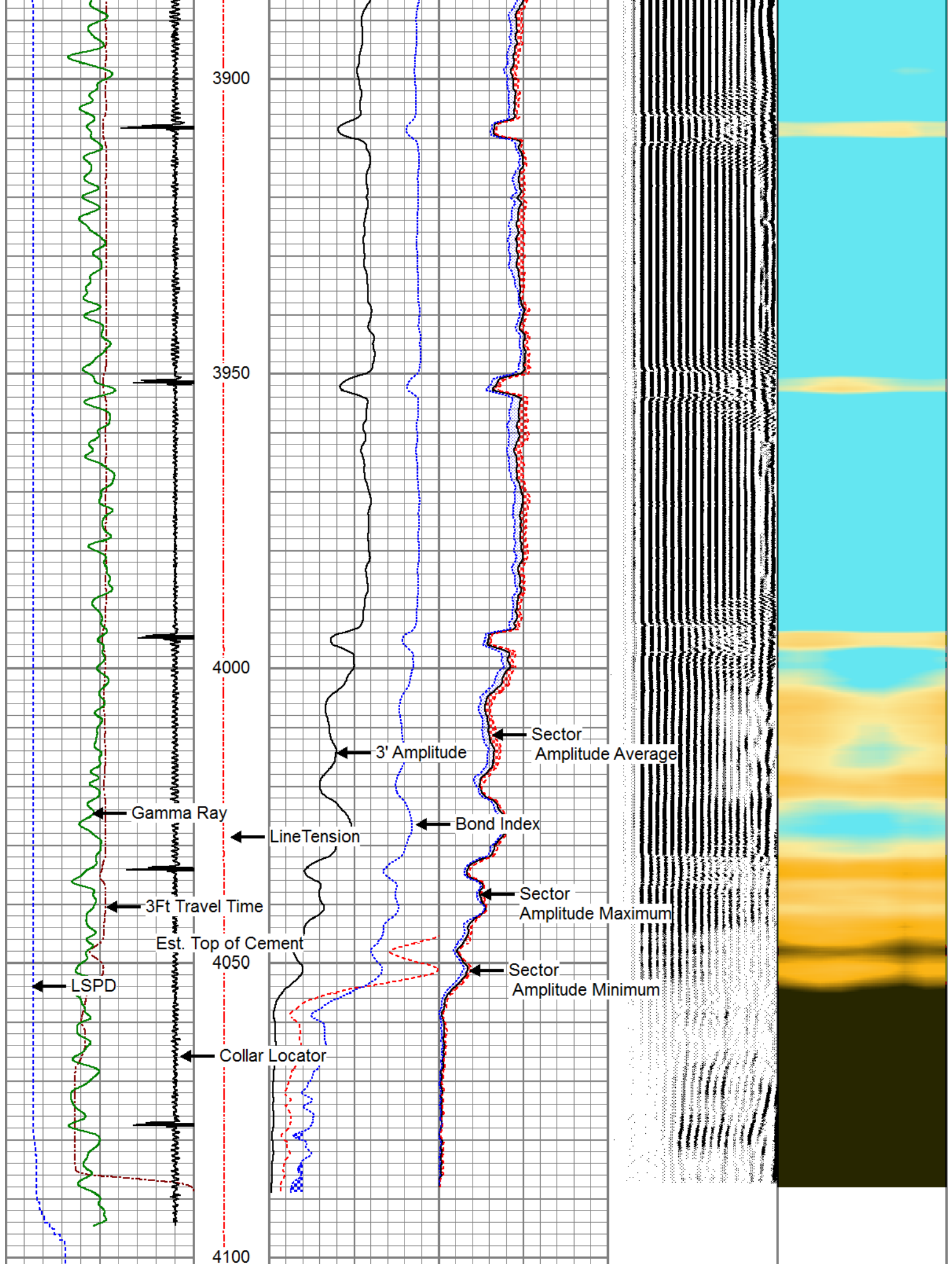













500	(usec)	0	0	(lb)	0	(mV)	100	Amplitude Average	200	(usec)	1200	
-9	Collar Locator	1	0	2000		3' Amplified Amplitude X 5	0	150				
	Gamma Ray											
0	(GAPI)	150			0	(mV)	20	Sector Amplitude Maximum				
-100	LSPD (ft/min)	100			1	Bond Index	0	150				
								Sector Amplitude Minimum				
								0	150			

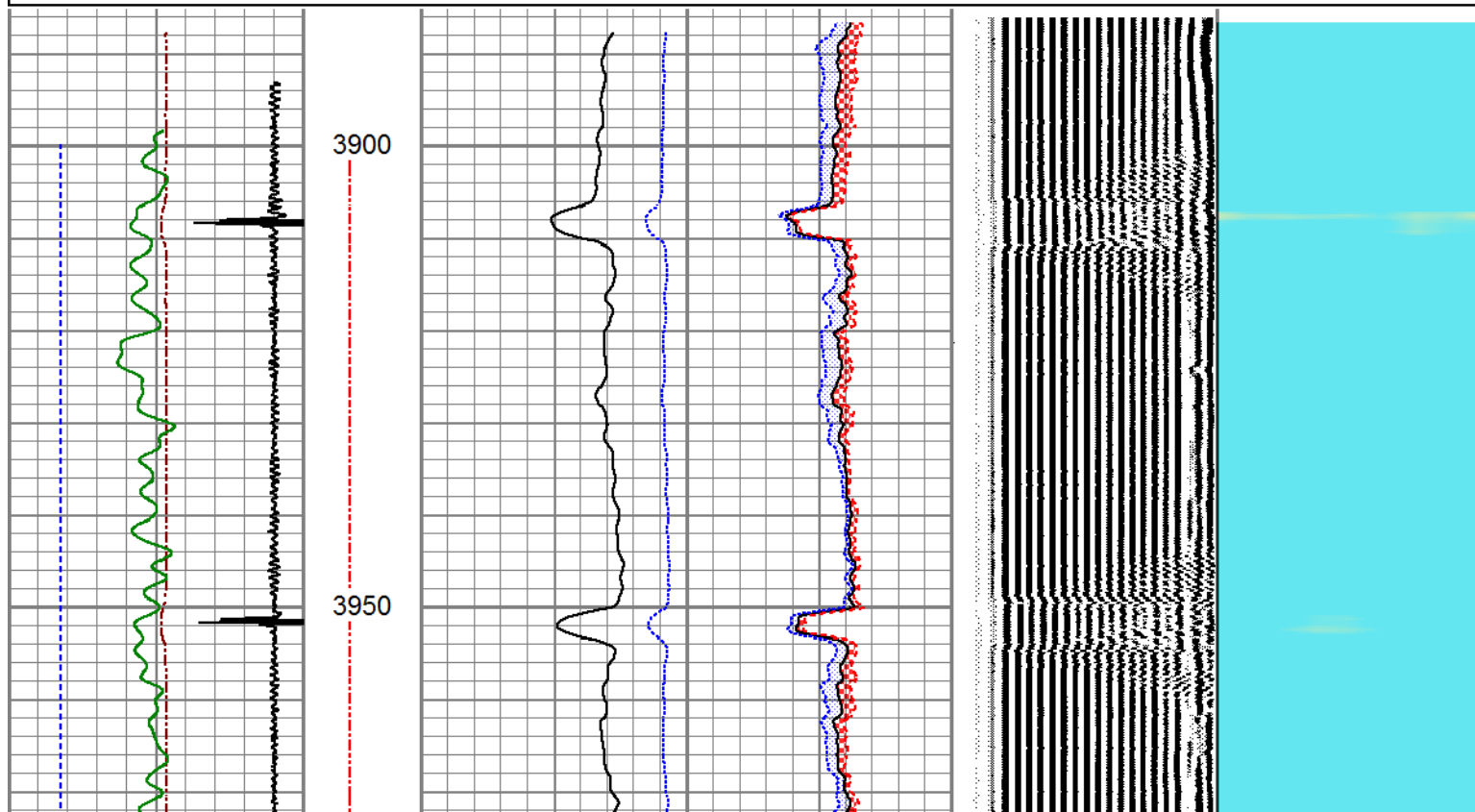


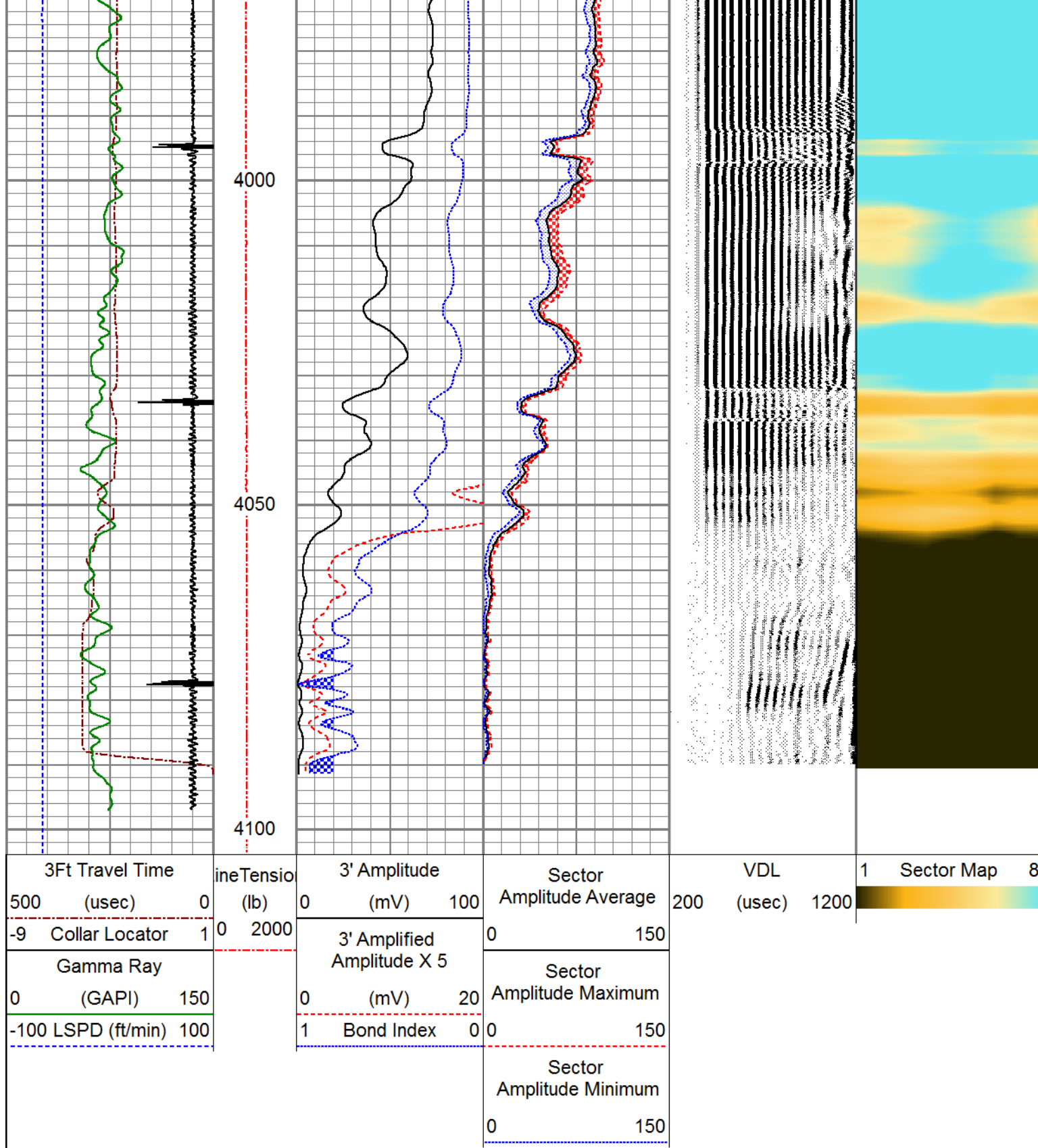
REPEAT SECTION

ZERO PSI APPLIED AT SURFACE

Database File	anadarko_uprc 29-13k_0512316376_20191230_scbl.db
Dataset Pathname	pass7
Presentation Format	pinr_scbl
Dataset Creation	Mon Dec 30 10:59:28 2019
Charted by	Depth in Feet scaled 1:240

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





Calibration Report

Database File anadarko_uprc 29-13k_0512316376_20191230_scbl.db
 Dataset Pathname pass9.1
 Dataset Creation Mon Dec 30 12:05:07 2019

Gamma Ray Calibration Report

Serial Number: 110246
 Tool Model: GR/CCL-A
 Performed: Mon Sep 09 12:21:39 2019

Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.6660	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	FW1401-41-T		
Tool Model:	RBL-DC		
Calibration Casing Diameter:	4.500	in	
Calibration Depth:	1059.684	ft	

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.005	1.130	1.000	81.196	70.666	1.338
CAL	0.000	1.513				
5'	0.000	1.115	1.000	81.196	71.946	1.000
SUM						
S1	0.000	1.126	0.000	100.000	88.808	-0.000
S2	0.000	1.195	0.000	100.000	83.709	-0.000
S3	-0.001	1.240	0.000	100.000	80.577	0.052
S4	0.000	1.238	0.000	100.000	80.775	-0.000
S5	-0.001	1.171	0.000	100.000	85.325	0.045
S6	0.000	1.125	0.000	100.000	88.856	-0.000
S7	-0.010	1.065	0.000	100.000	93.044	0.921
S8	0.000	1.091	0.000	100.000	91.697	-0.000

Air Zero Calibration, performed Thu Nov 29 15:24:07 2018:

	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	UPRC 29-13K
Field	WATTENBERG
County	WELD
State	COLORADO