



Radial Cement Bond  
Gamma Ray CCL  
Temperature Log

Company Antero Resources Corporation		Company Antero Resources Corporation	
Well Baldy Unit 3H	Field Marcellus	Well Baldy Unit 3H	Field Marcellus
County Wetzel	State WV	County Wetzel	State WV
API #: 47-103-03480-00-00	AFE #: A11834	Location (LAT,LON): 39.525927, -80.761999	Other Services None
Location (LAT,LON): 39.525927, -80.761999	Township: N/A	Permanent Datum Log Measured From Drilling Measured From	Elevation
		Ground Level KB = 26'	K.B. 1233'
			D.F. 1233'
			G.L. 1207'
Date 13 AUG 2022	Run Number One		
Depth Driller (ft) 27401	Depth Logger (ft) 7521		
Bottom Logged Interval (ft) 7513	Top Log Interval Surface		
Open Hole Size (in) 8.5	Type Fluid Water		
Density / Viscosity (lb/gal) 8.4	Max. Recorded Temp. (°F) 149.4		
Estimated Cement Top (ft) 6095	Time Well Ready 09:00 AM		
Equipment Number 8060	Location Delmont, PA		
Recorded By T. Trump	Witnessed By R. Thomas		
Casing Record	Size (in)	Weight (lb/ft)	Top (ft)
Conductor String 20		78.67	Surface
Surface String 13.375		54.5	Surface
Intermediate String 9.625		36	Surface
Production String 5.5		23	Surface
			Bottom (ft)
			126
			932
			3534
			27339
Inclination Information (Approximated Values from Directional Survey)			
KOP 30°	60°	90°	
1480'	6880'	7270'	7690'
THANK YOU FOR USING GR ENERGY SERVICES			

08/11/2023

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, 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. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

Log Correlated to KB = 26'  
Log Adjusted +5'

Marker Joint Located @ 6240' - 6252'  
Marker Joint Located 45' Below Casing Tally Value

Maximum Temperature Recorded was 149.4°F  
Maximum Tension was 1050 lbs

Estimated Top of Cement @ 6095'

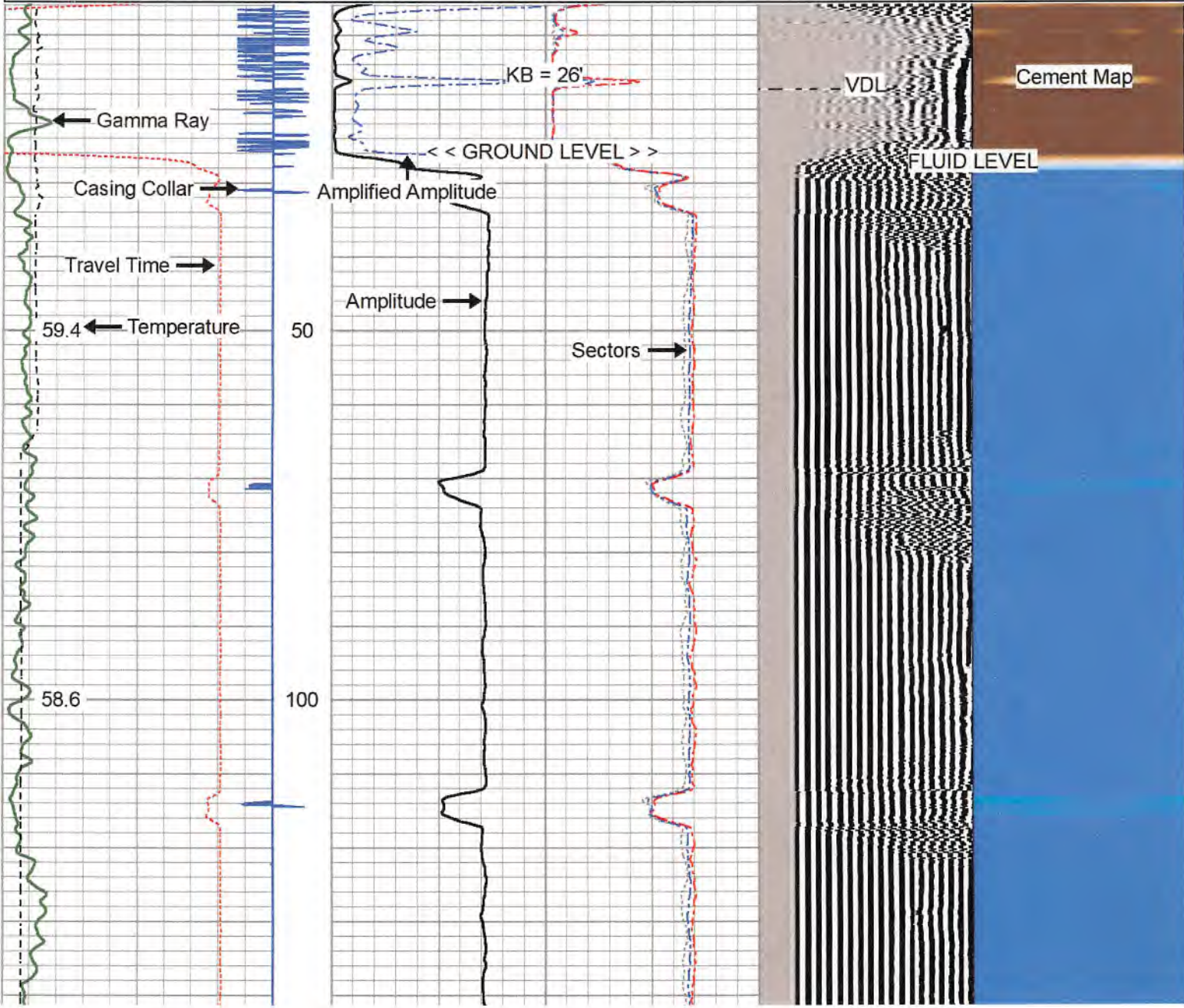
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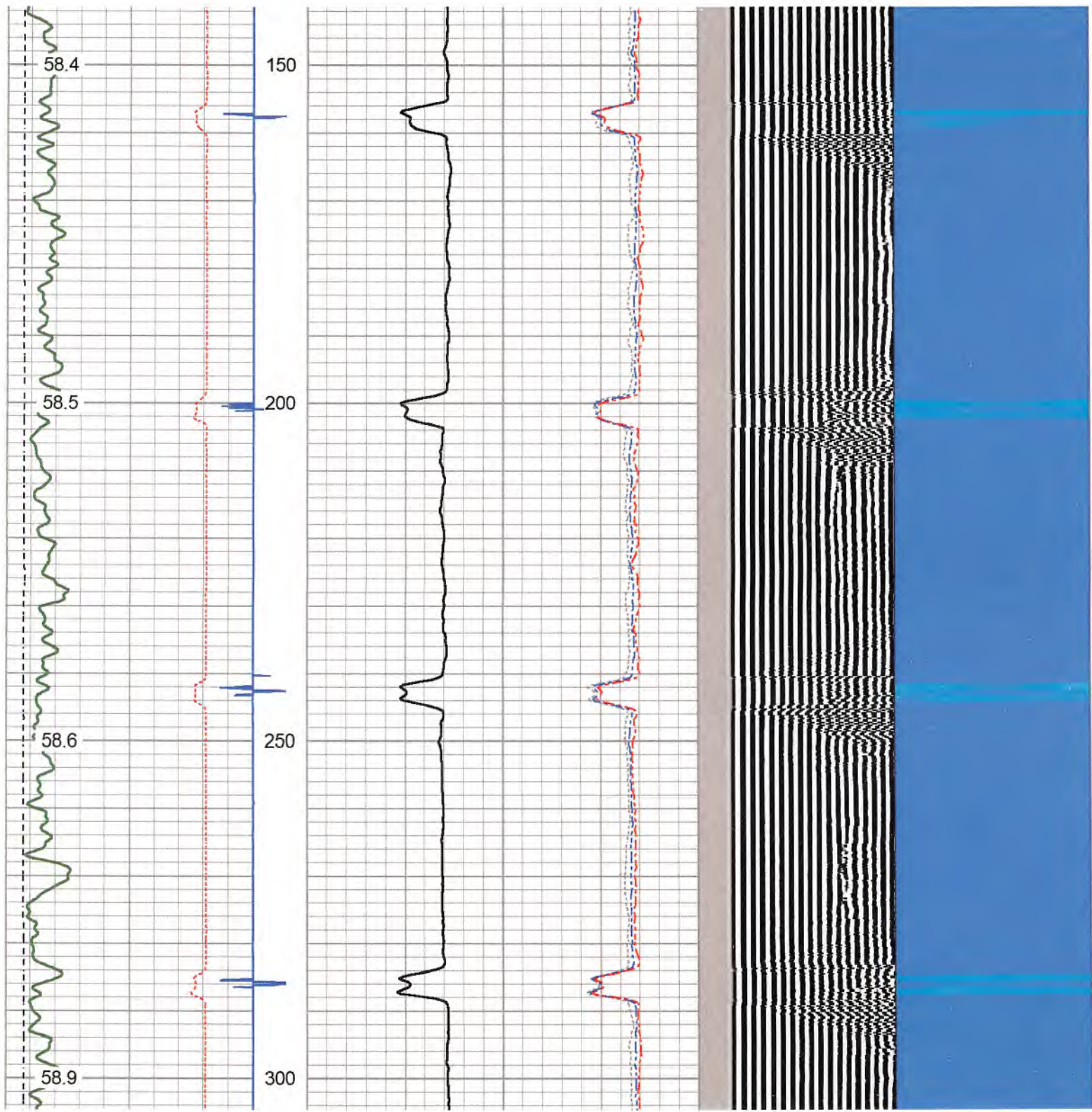


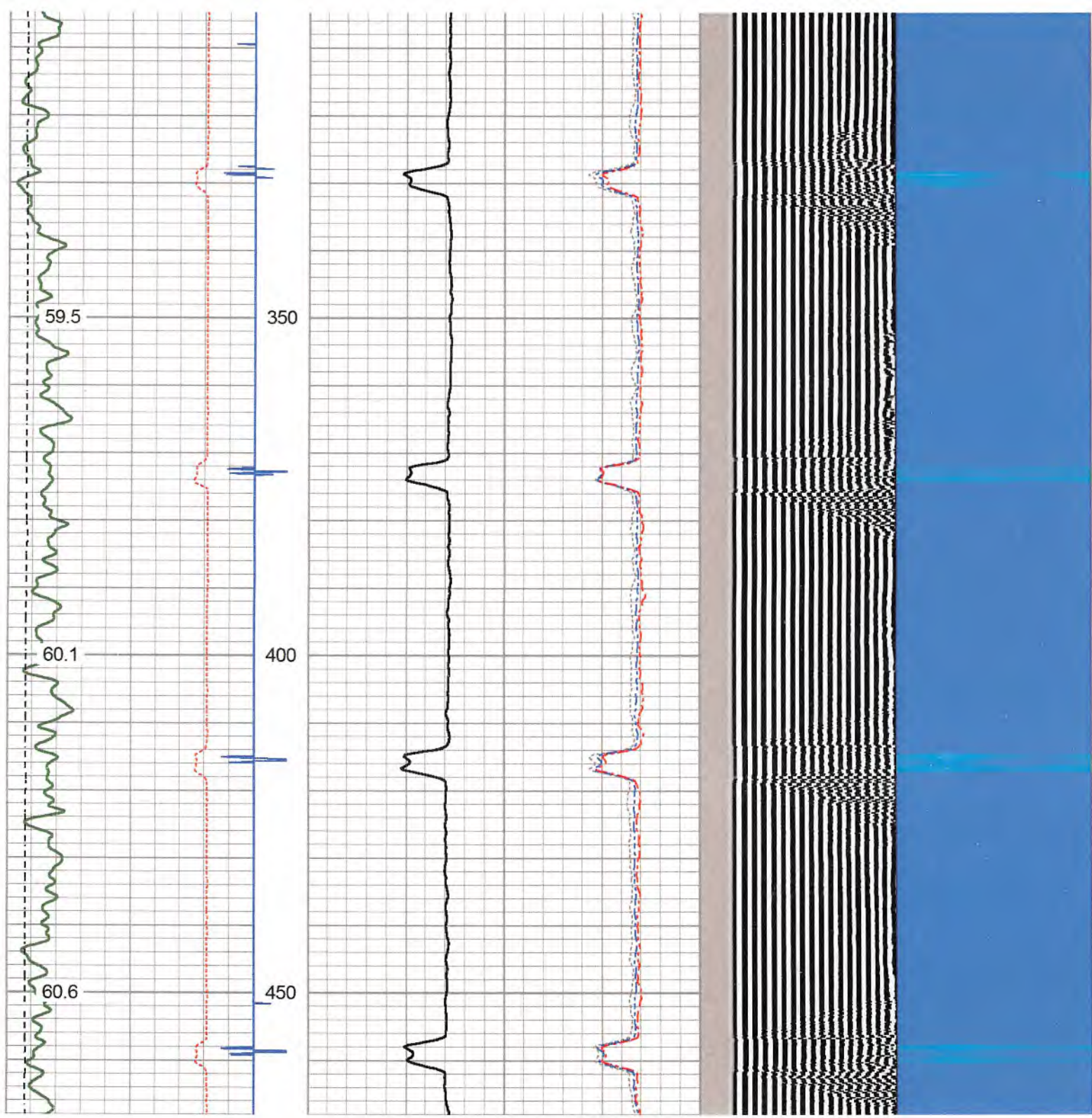
# Main Pass (1500 PSI)

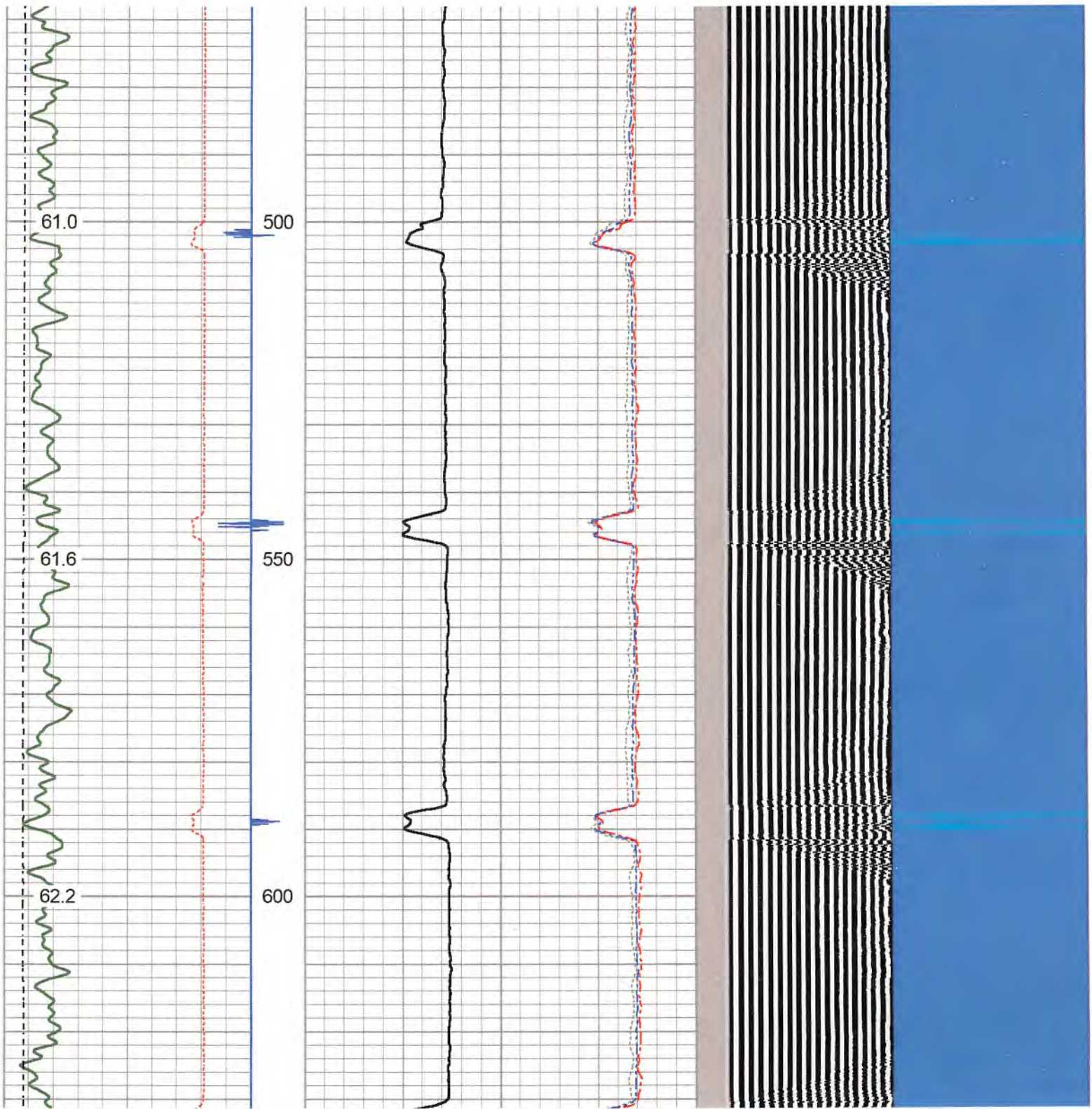
Database File	c:\users\logbox\desktop\antero red lady\antero_rlp_baldy_3h.db
Dataset Pathname	rcbl/pass4
Presentation Format	tt_rcbl_std_bw
Dataset Creation	Sat Aug 13 10:41:25 2022
Charted by	Depth in Feet scaled 1:240

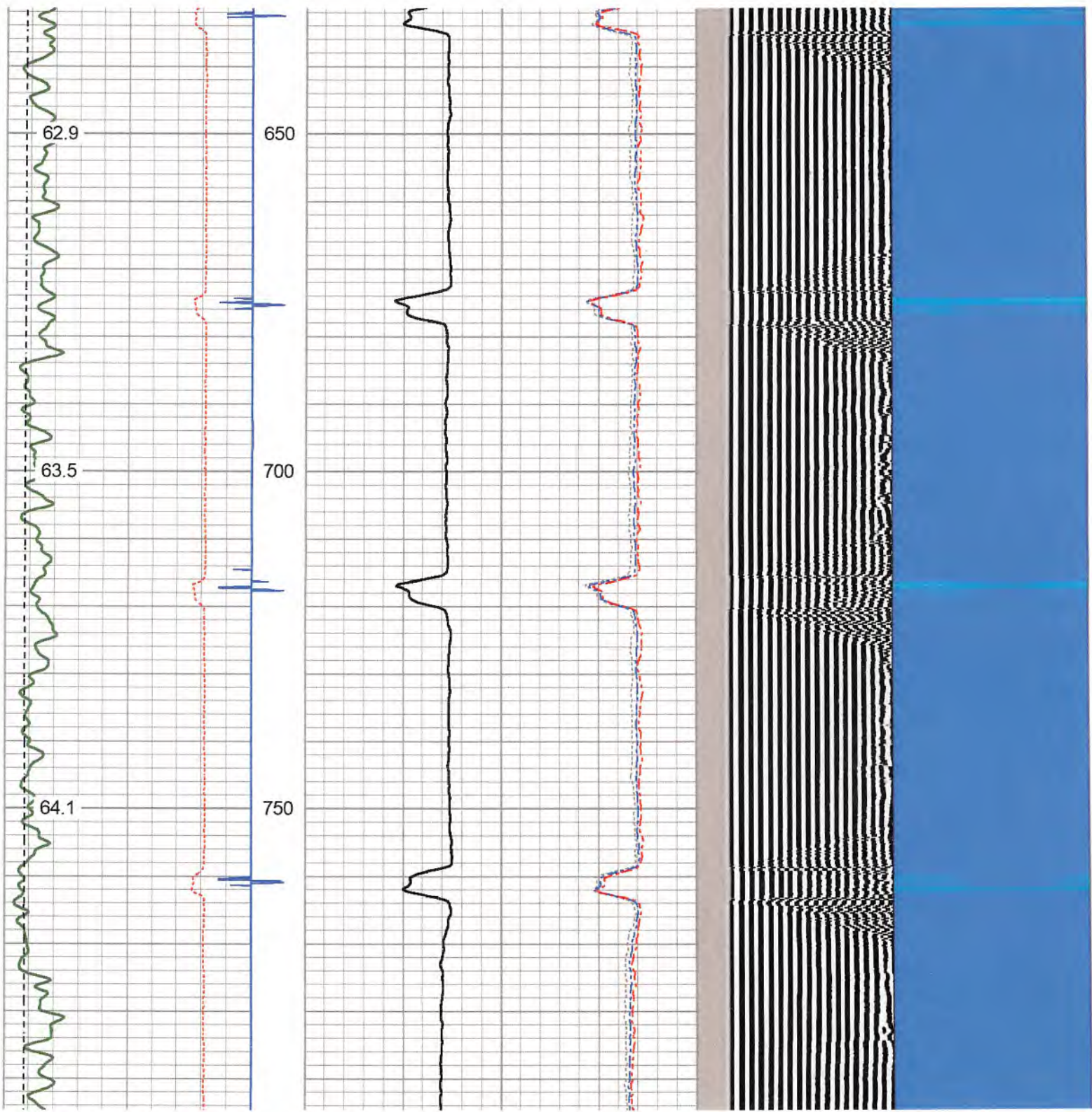
340	Travel Time (usec)	240	0	Amplitude (mV)	100	-5	AMPMin	150	200	VDL (usec)	1200	Cement Map
0	Gamma Ray (GAPI)	150		Amplified Amplitude		-5	AMPAvg	150				
0	Line Tension (lb)	3000	0	(mV)	10	-5	AMPMax	150				
TEMP (degF)		CCL										

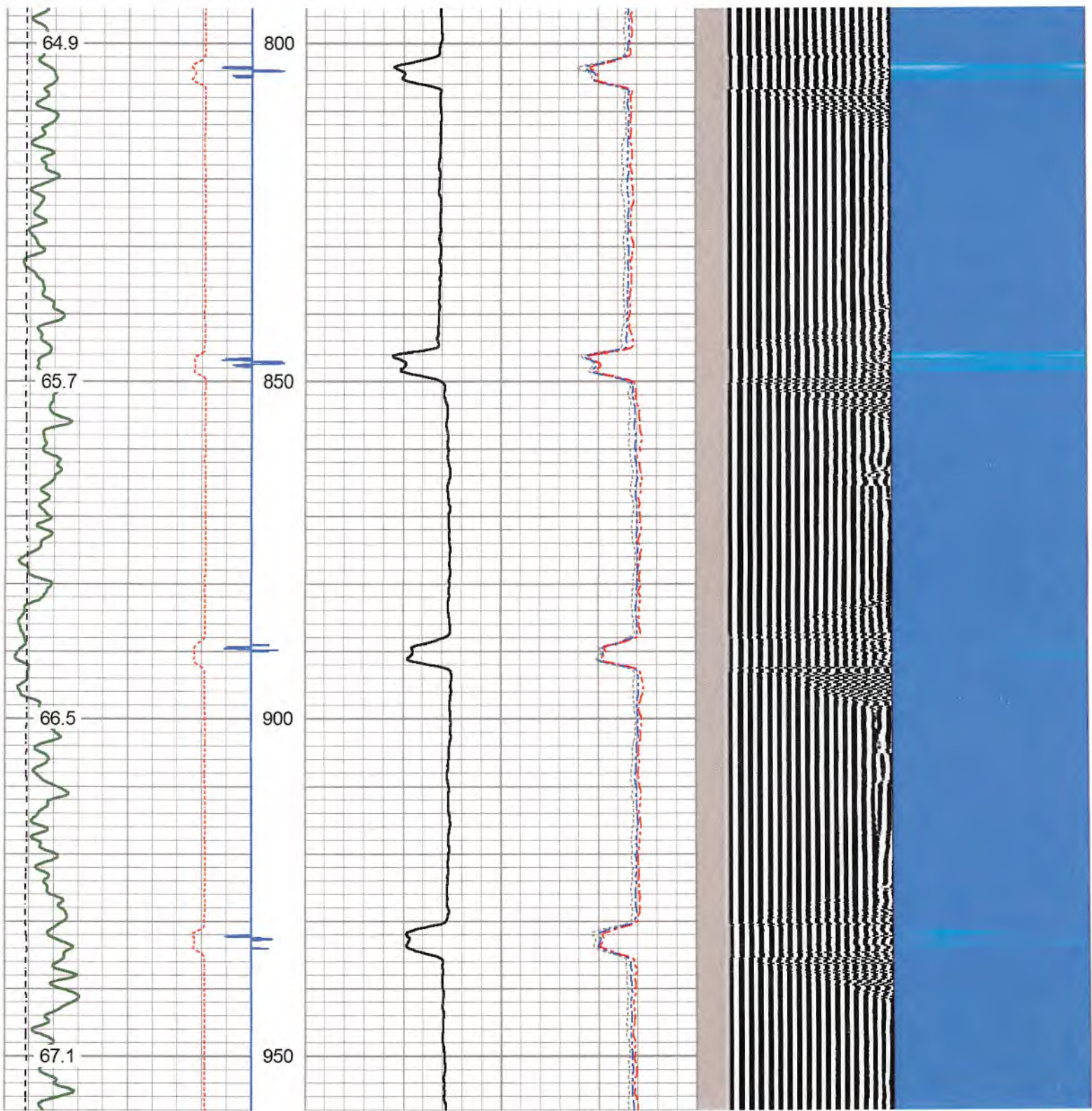




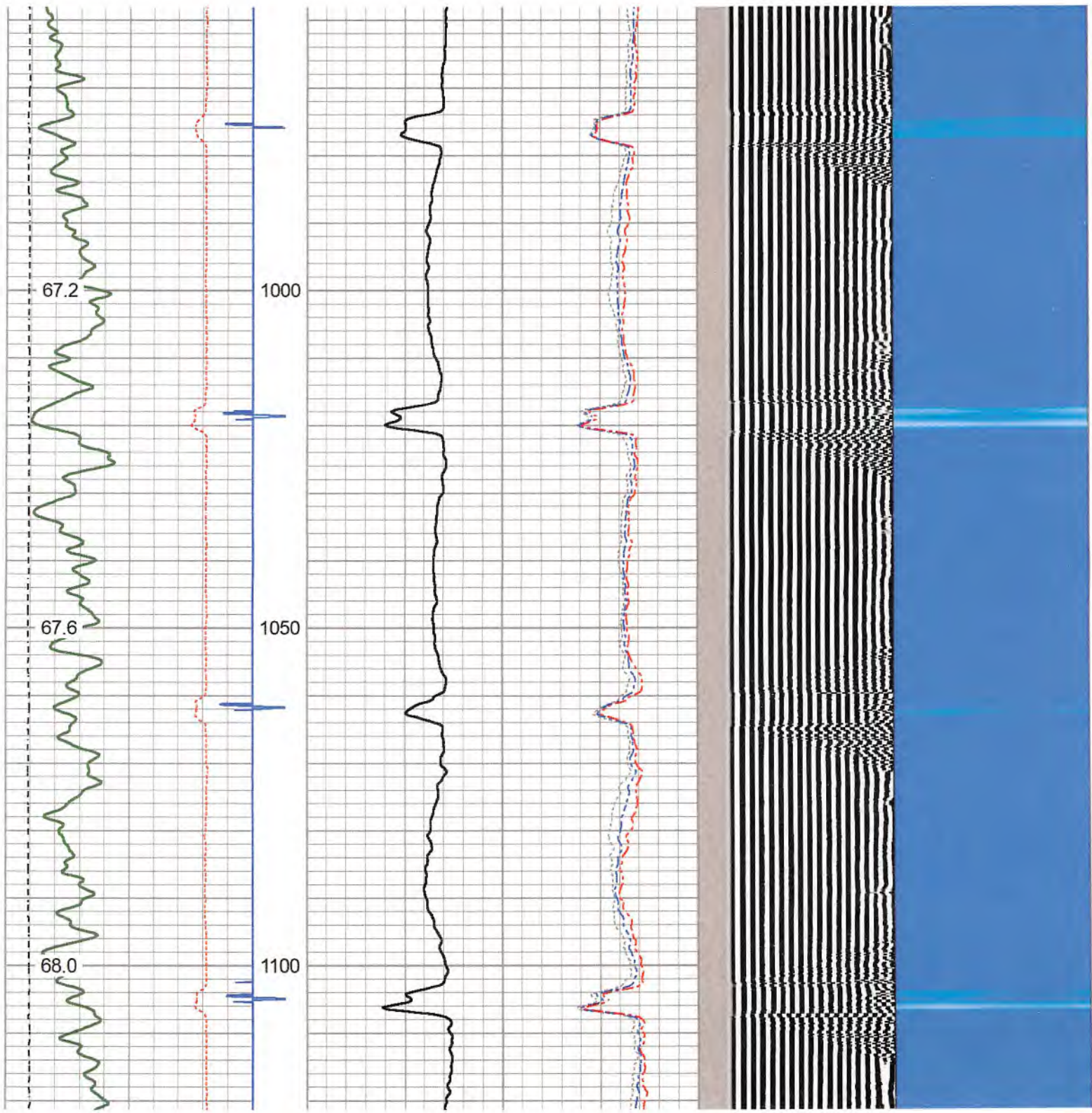


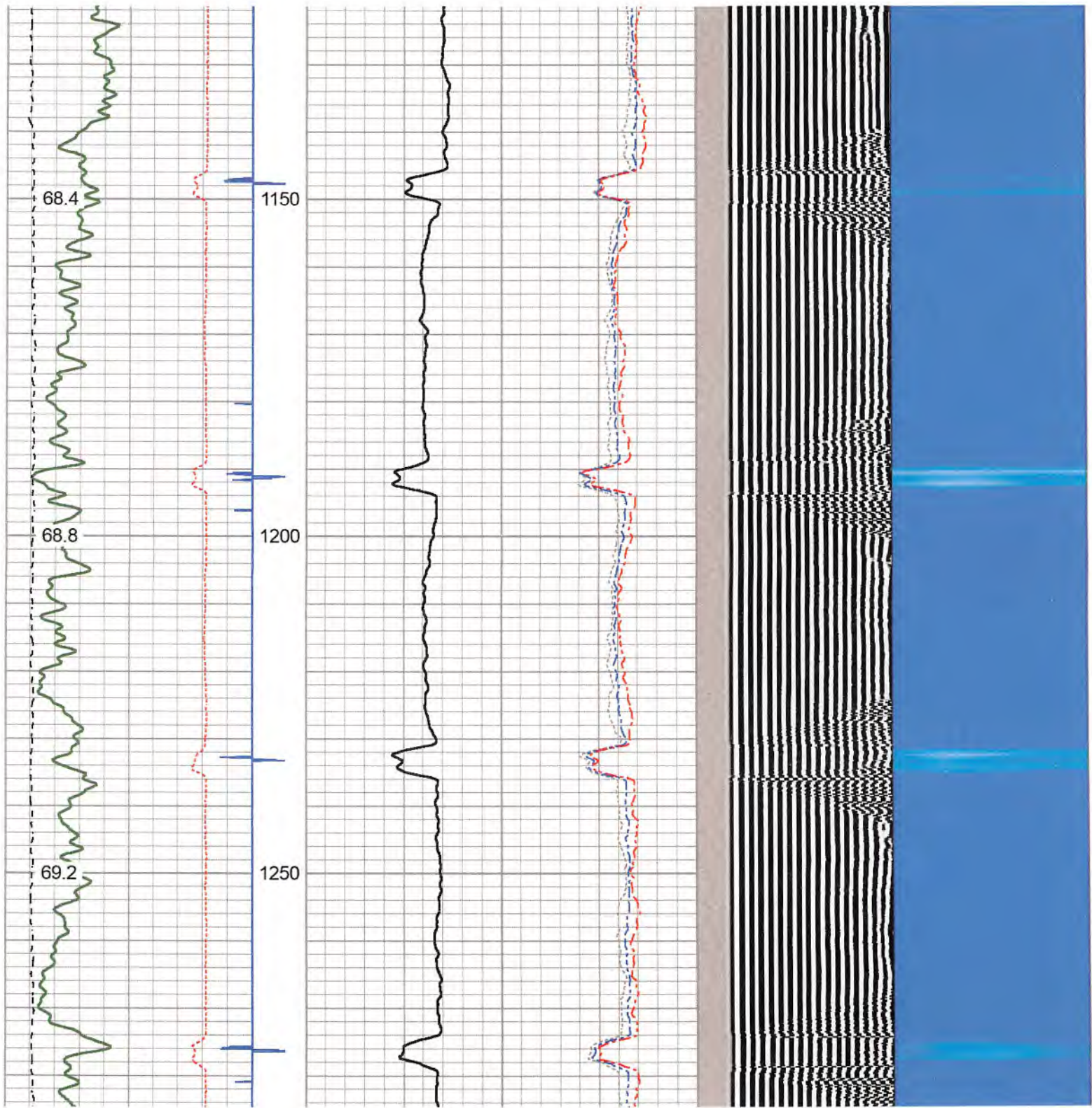


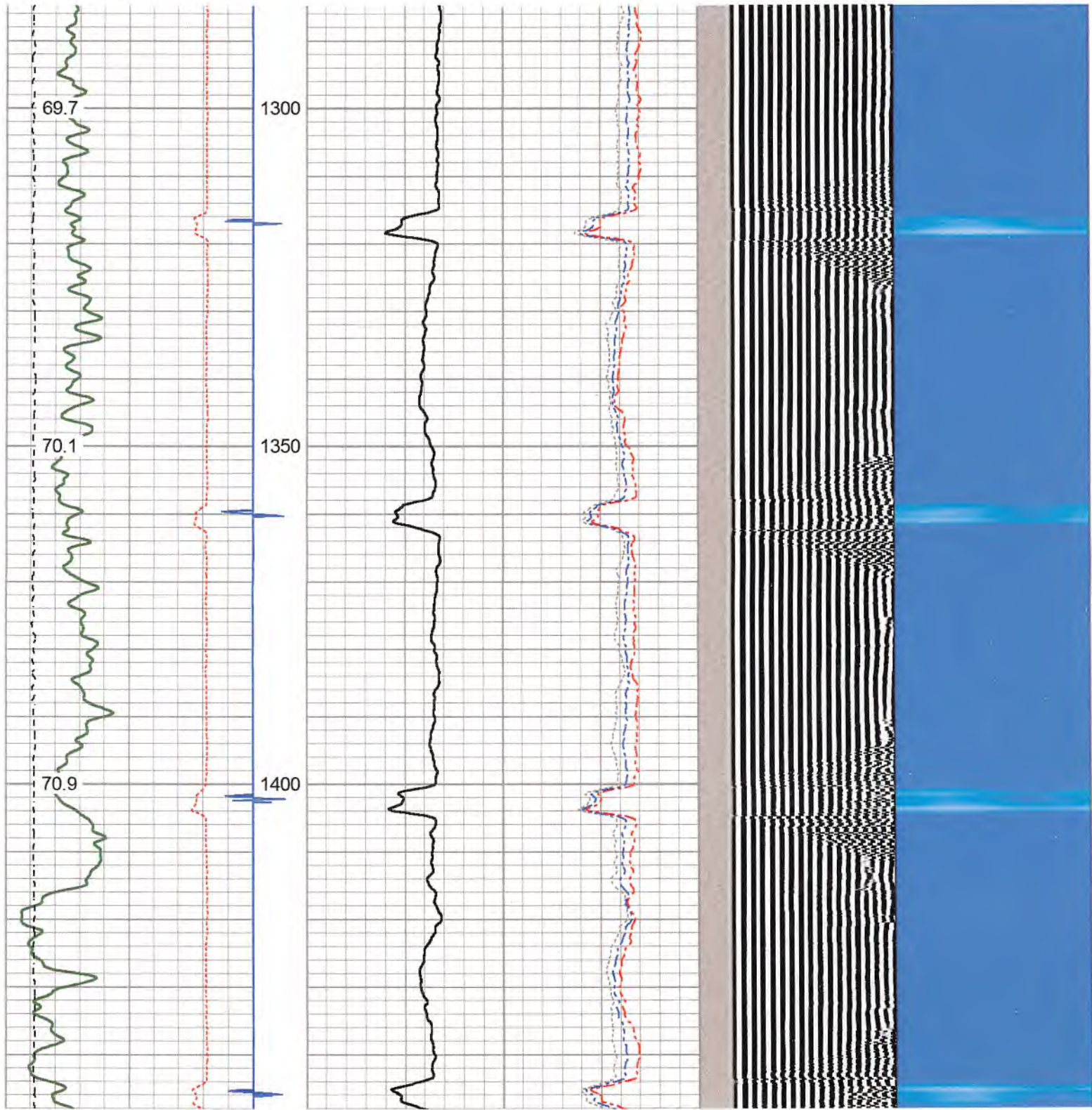


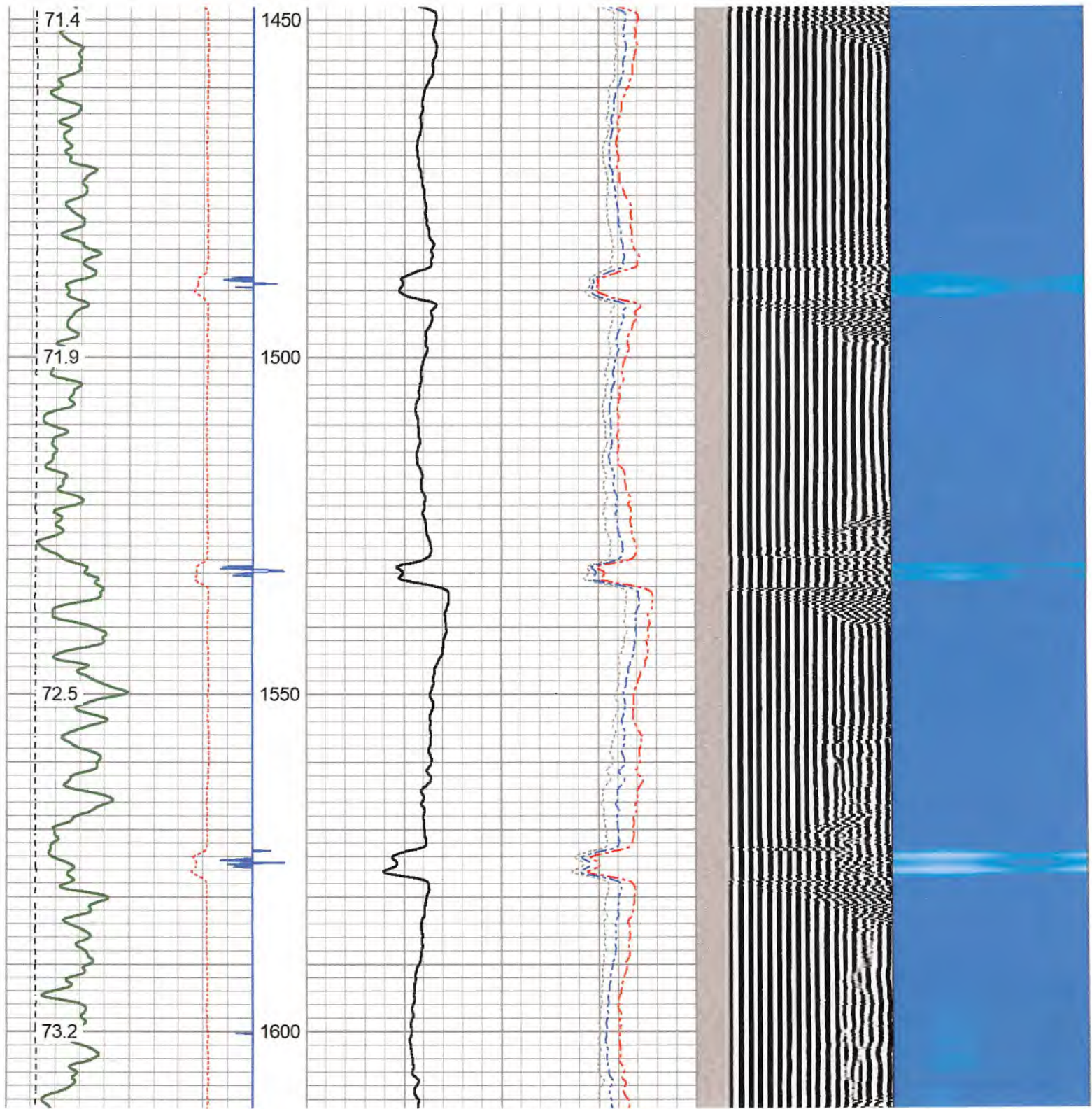


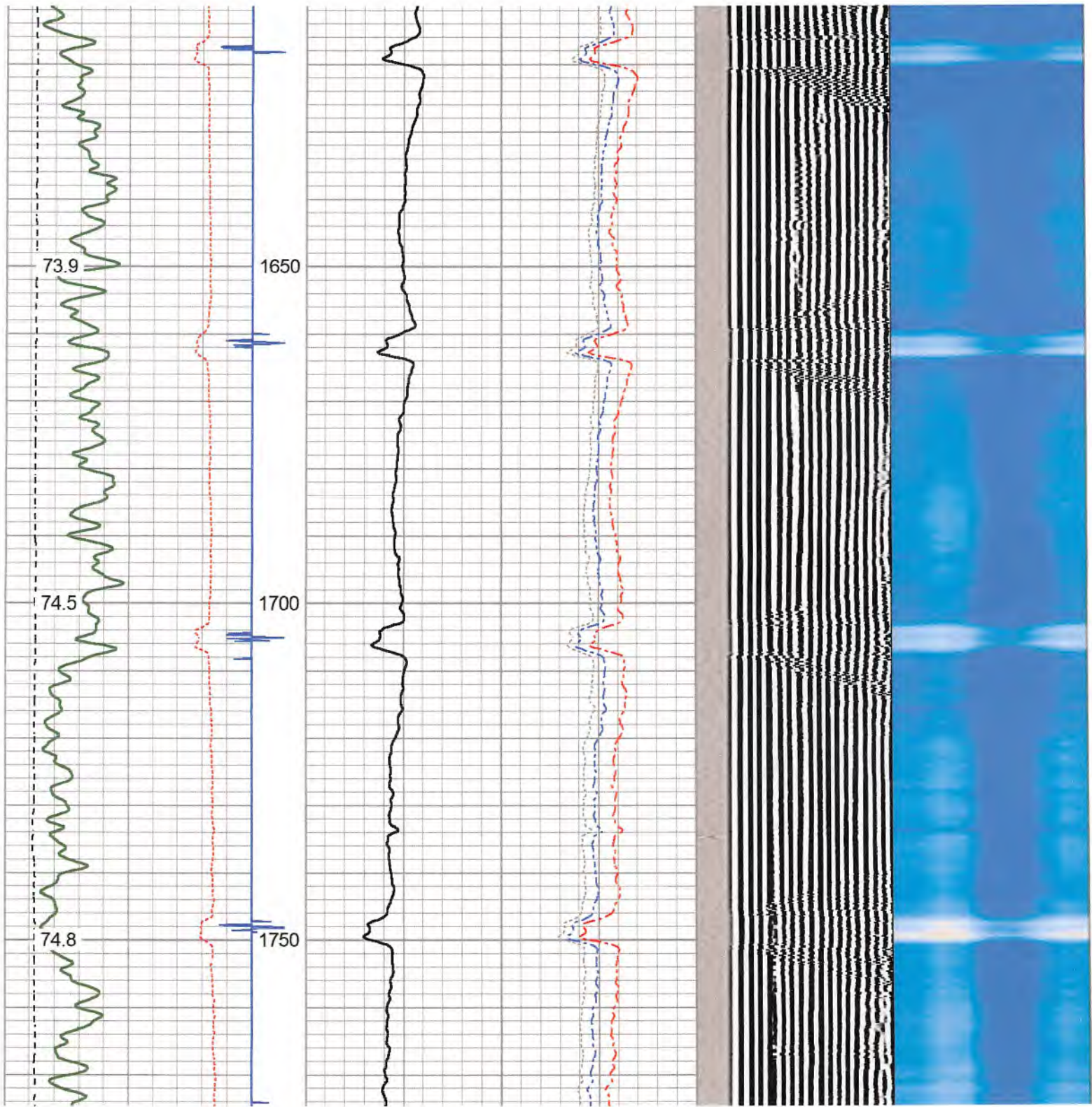


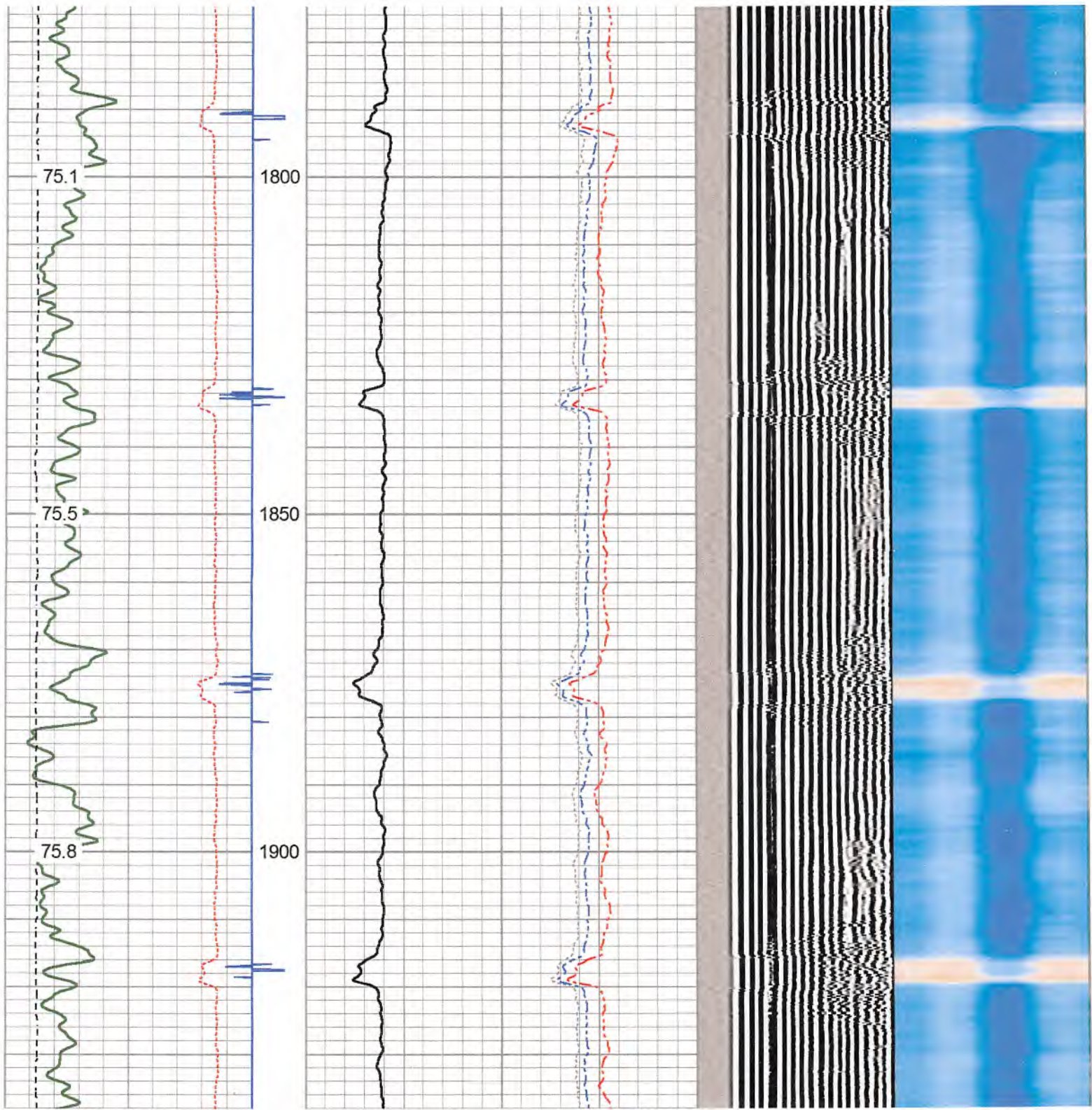


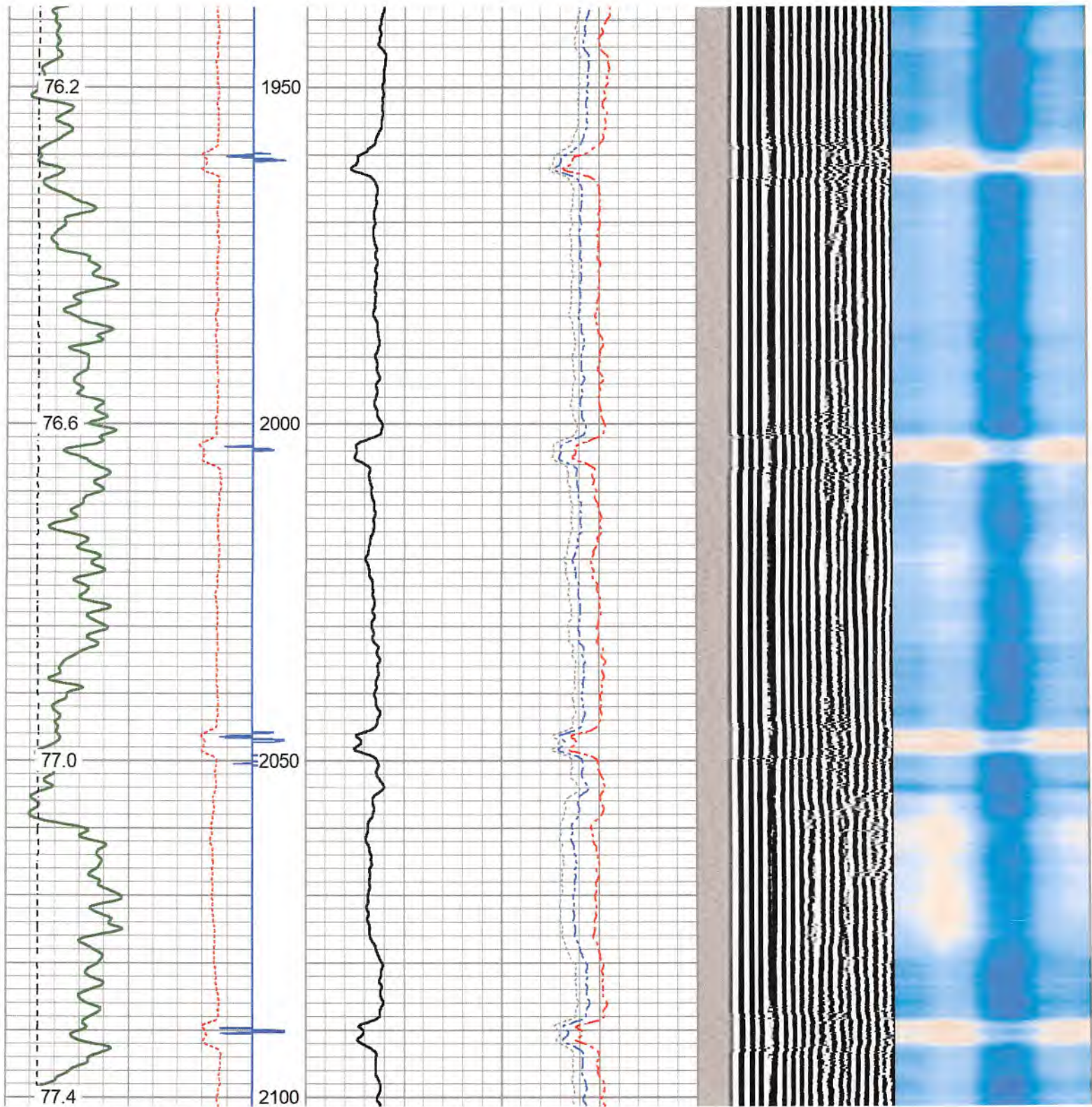


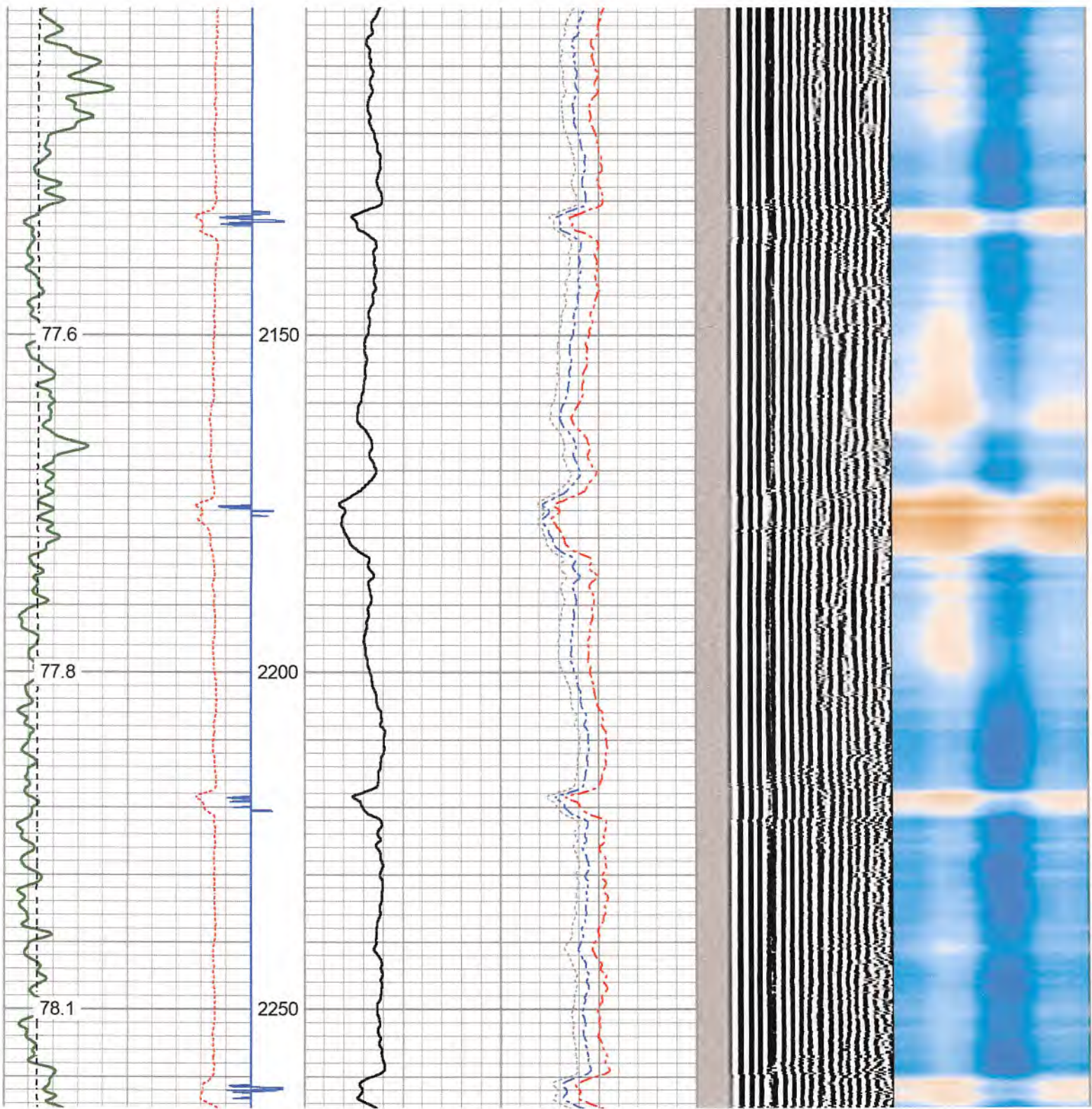




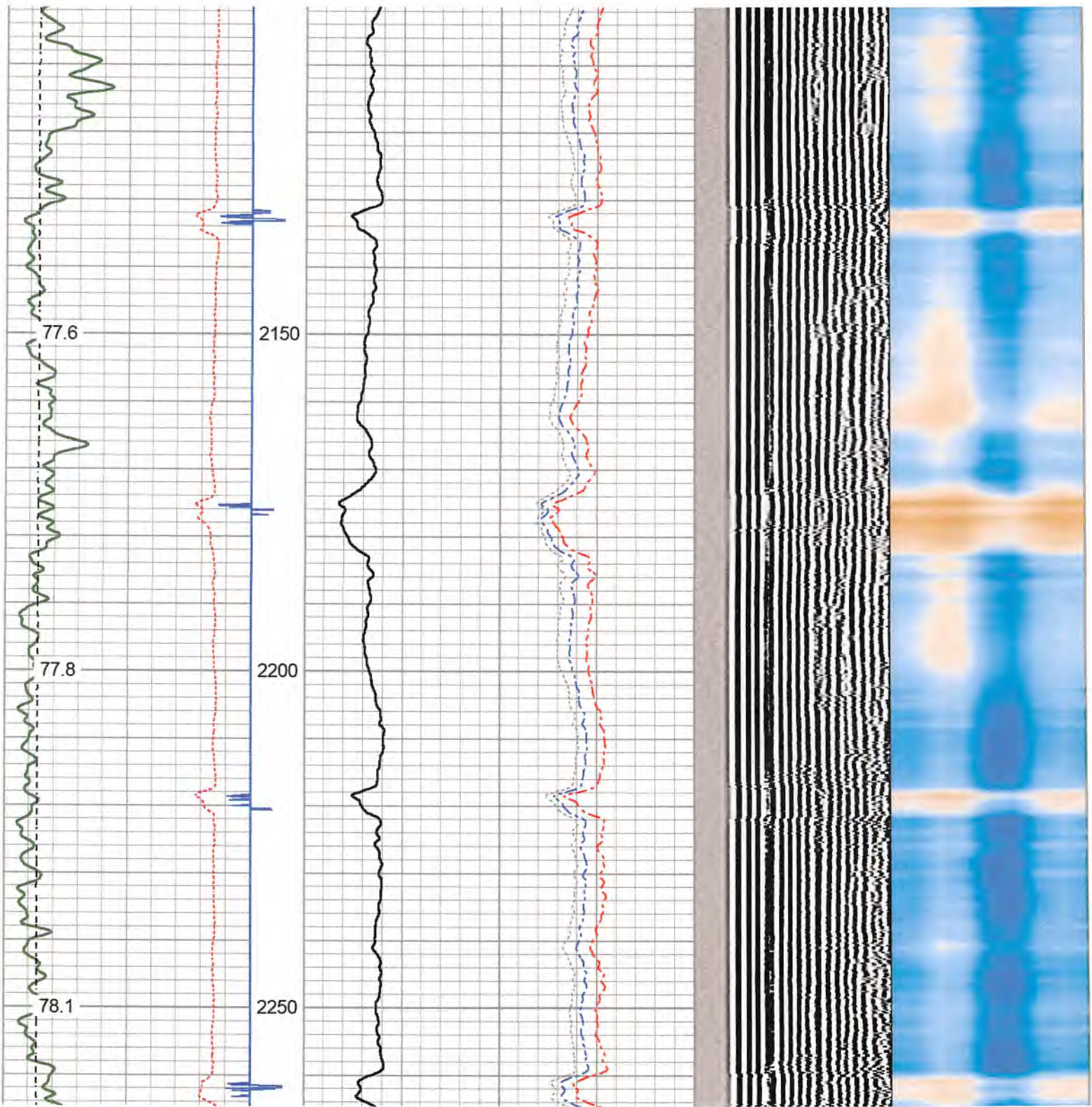


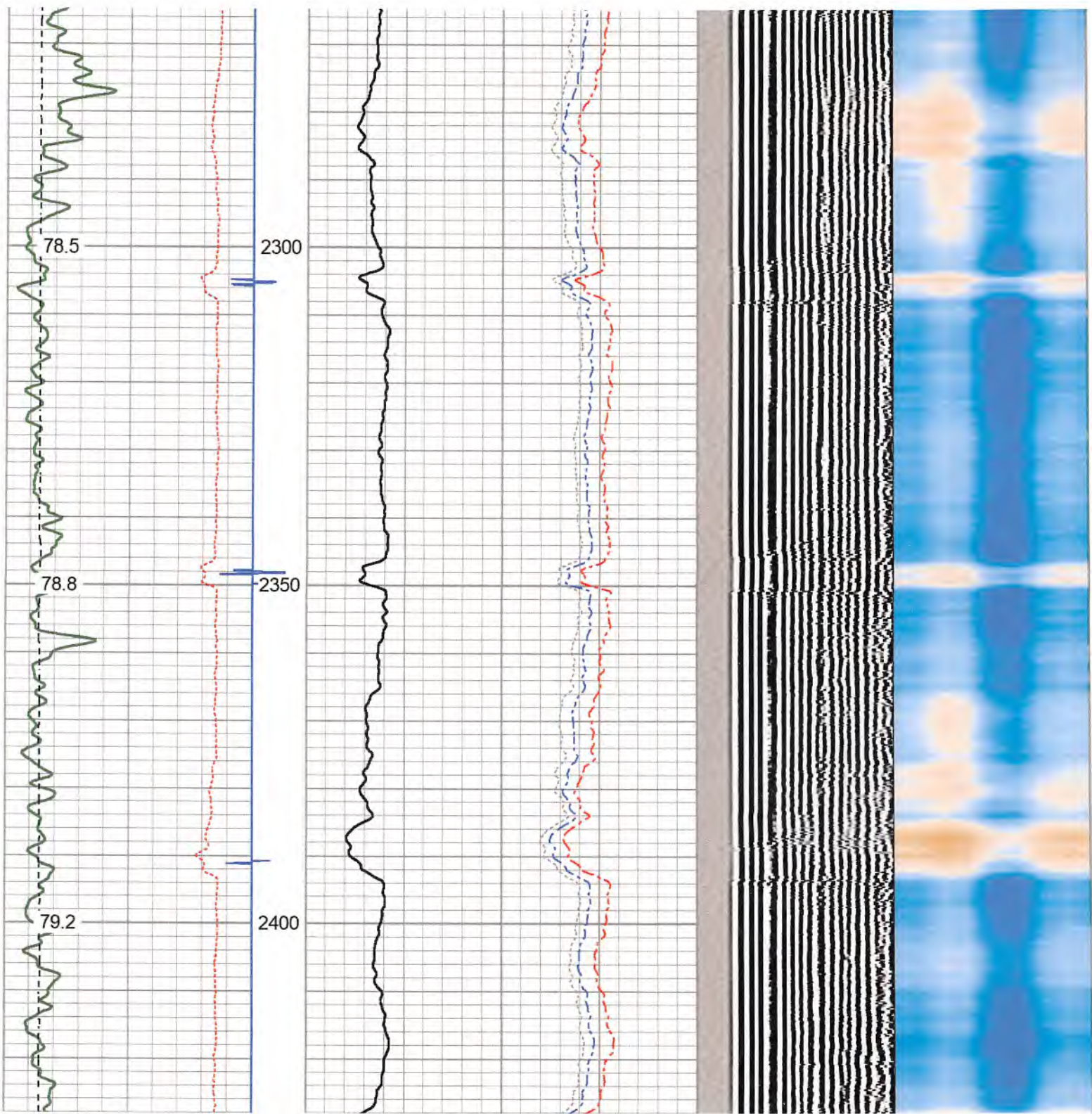


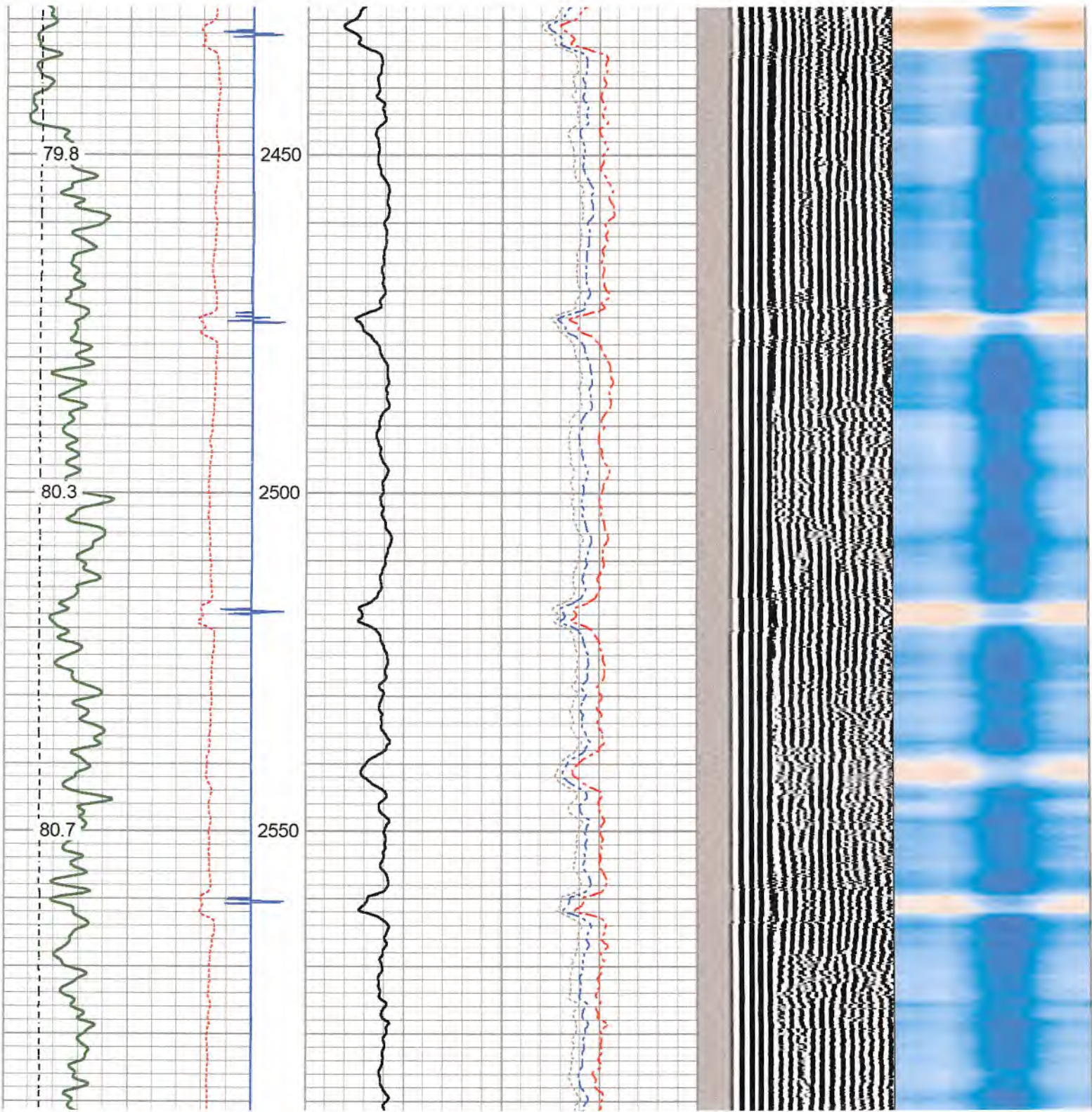


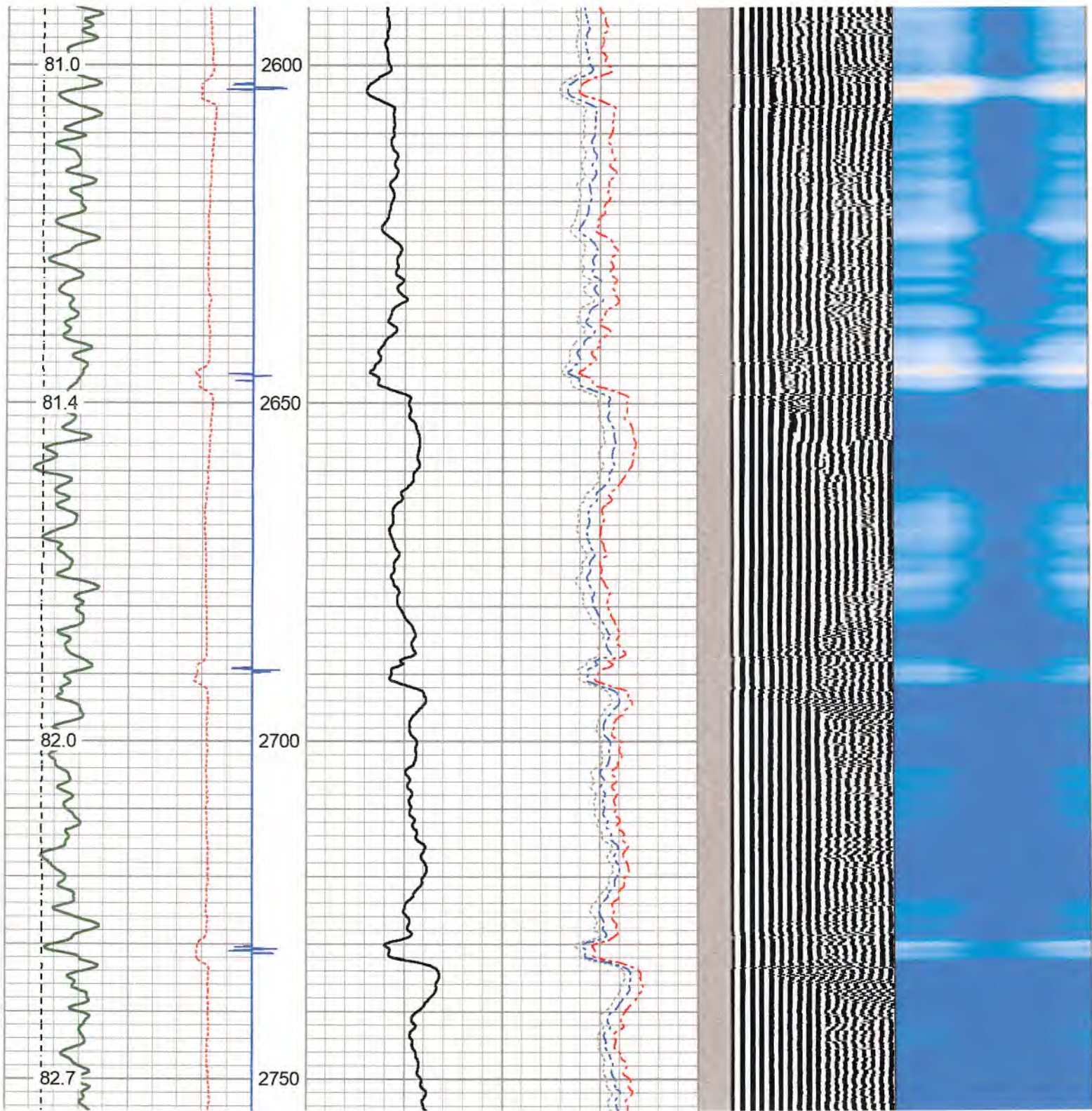


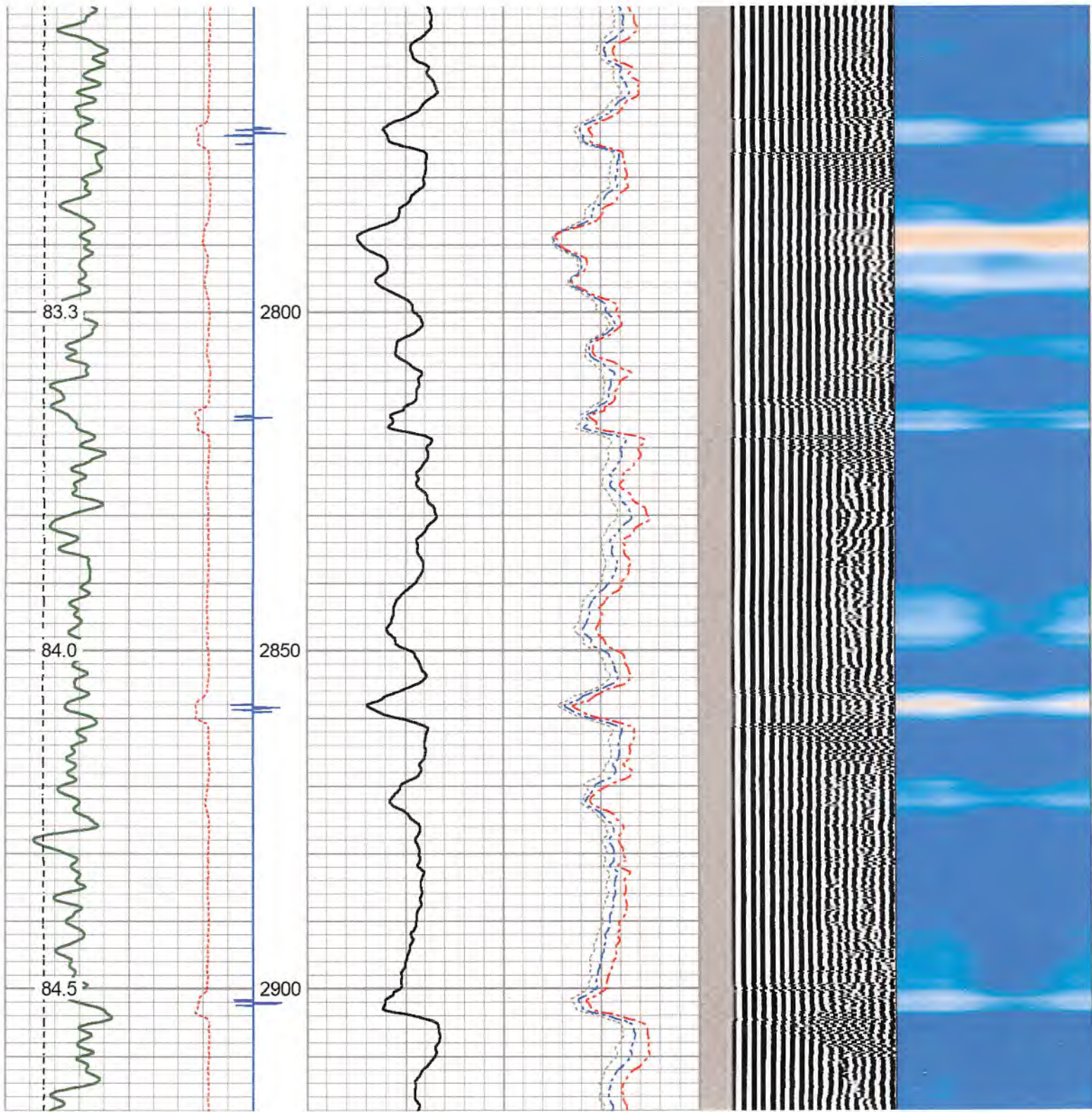


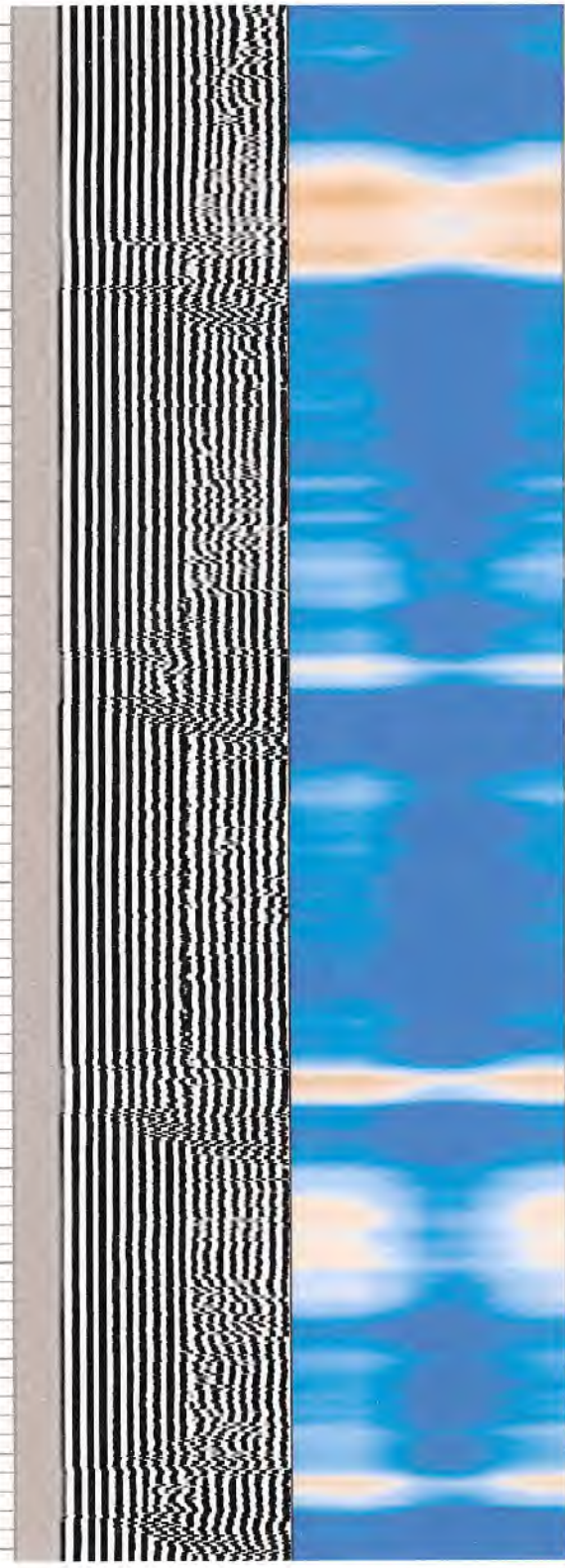
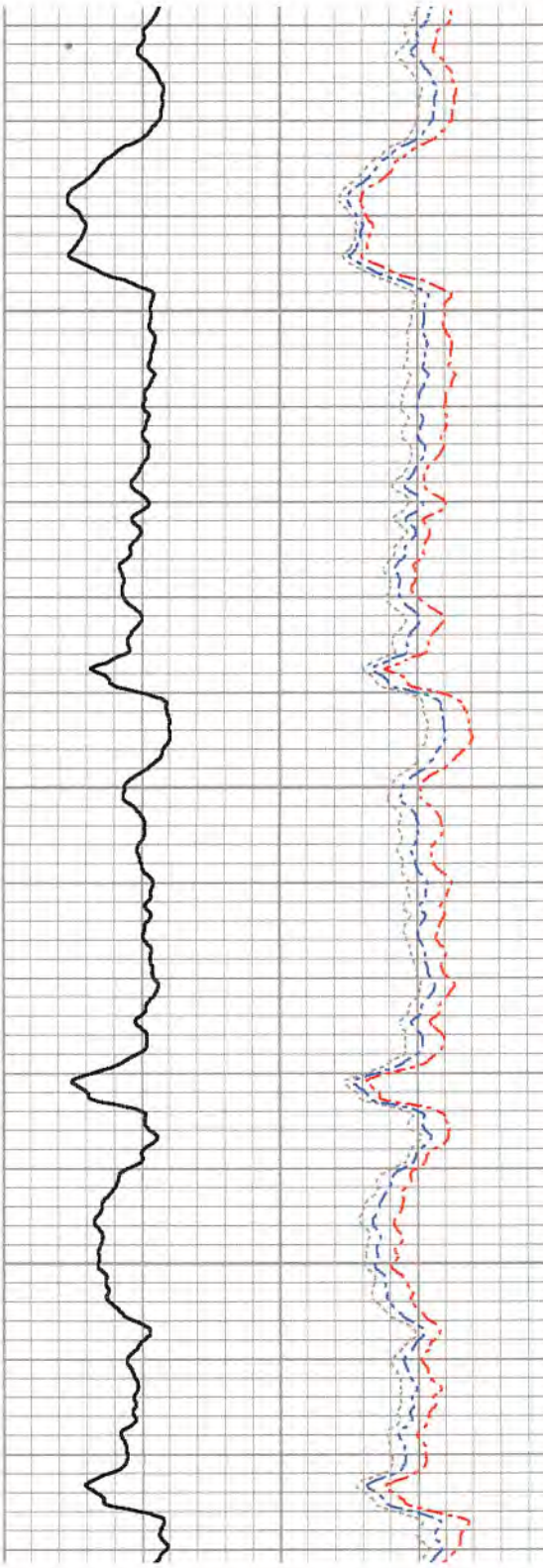
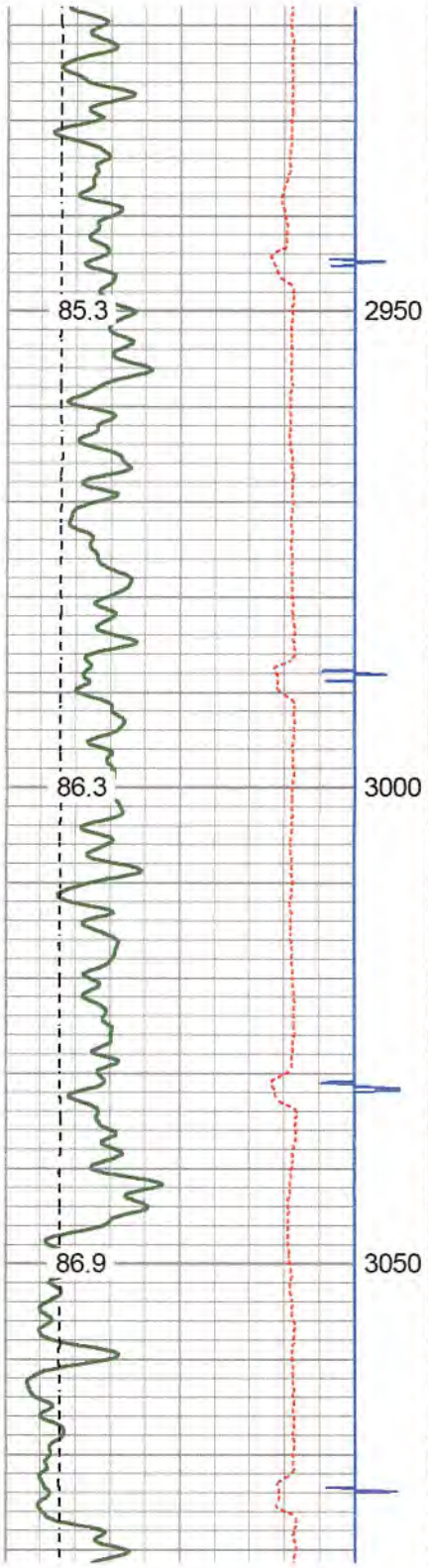


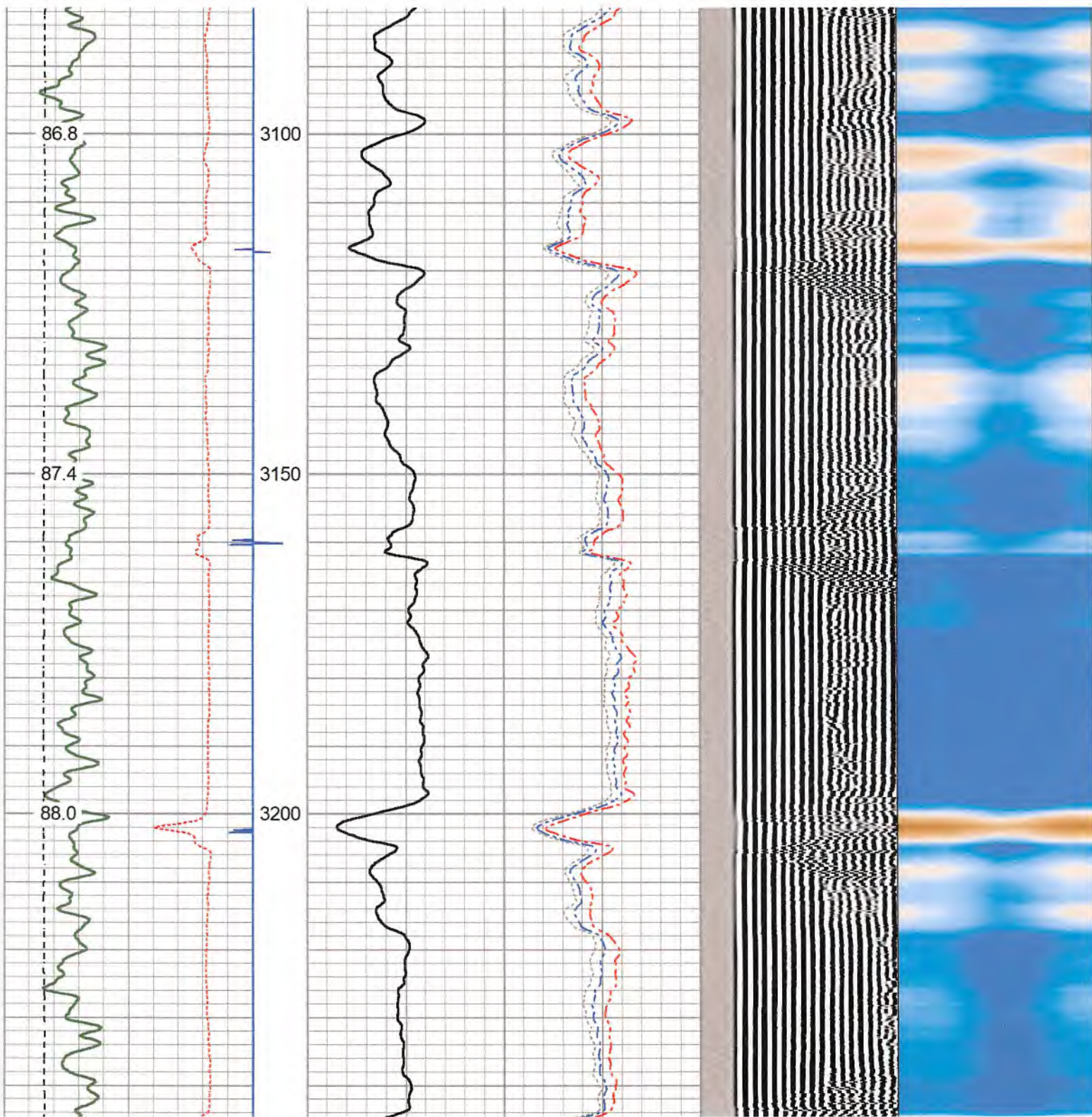


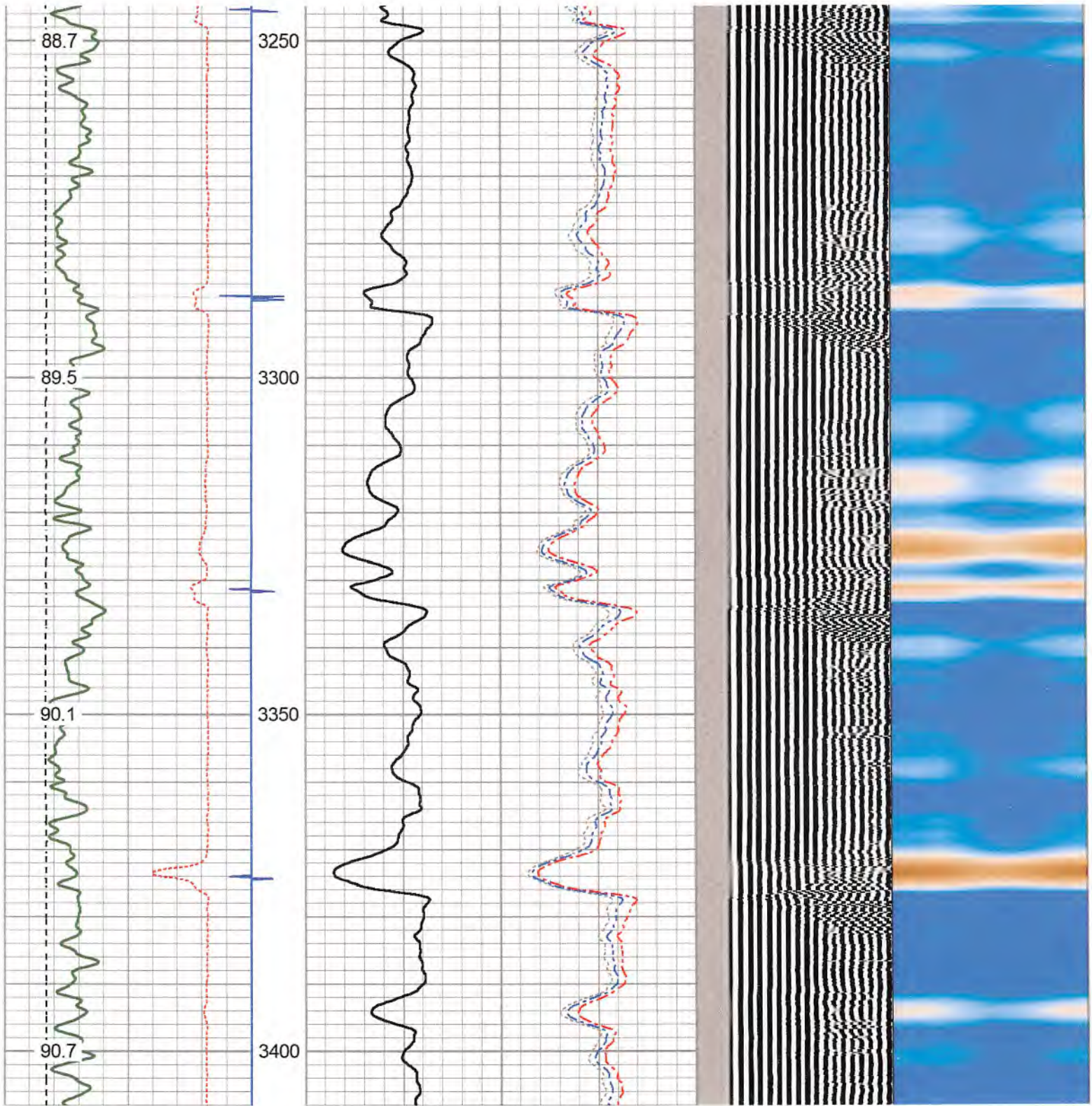




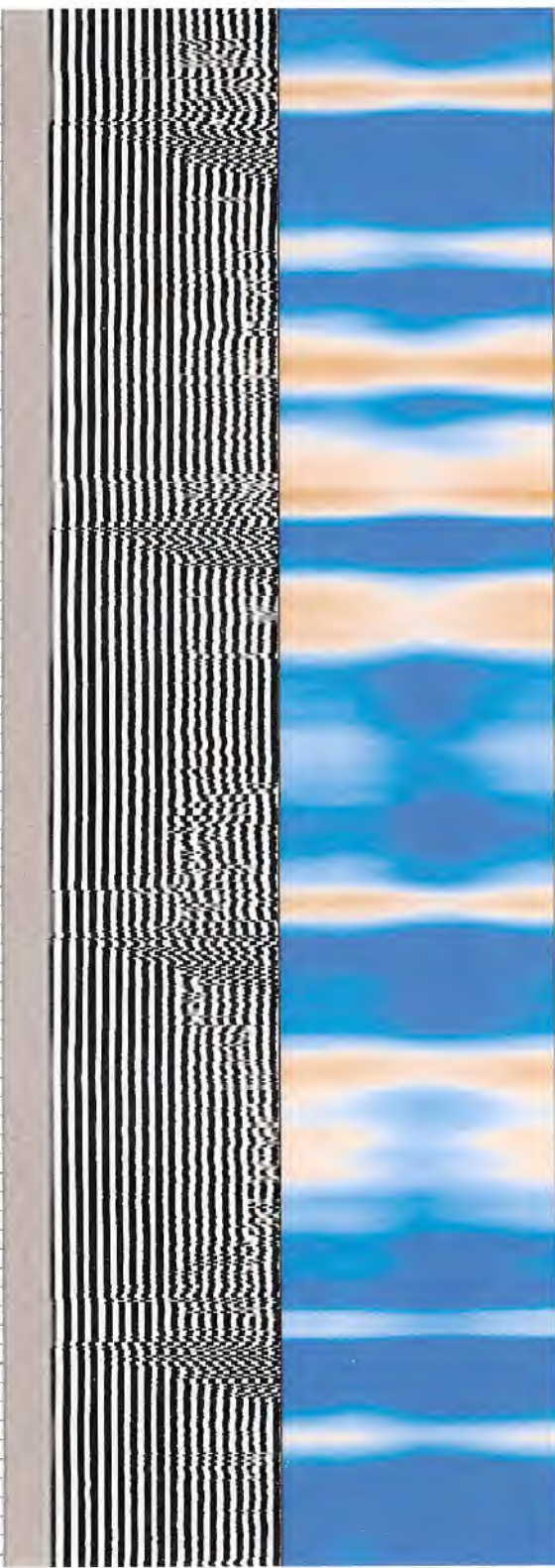
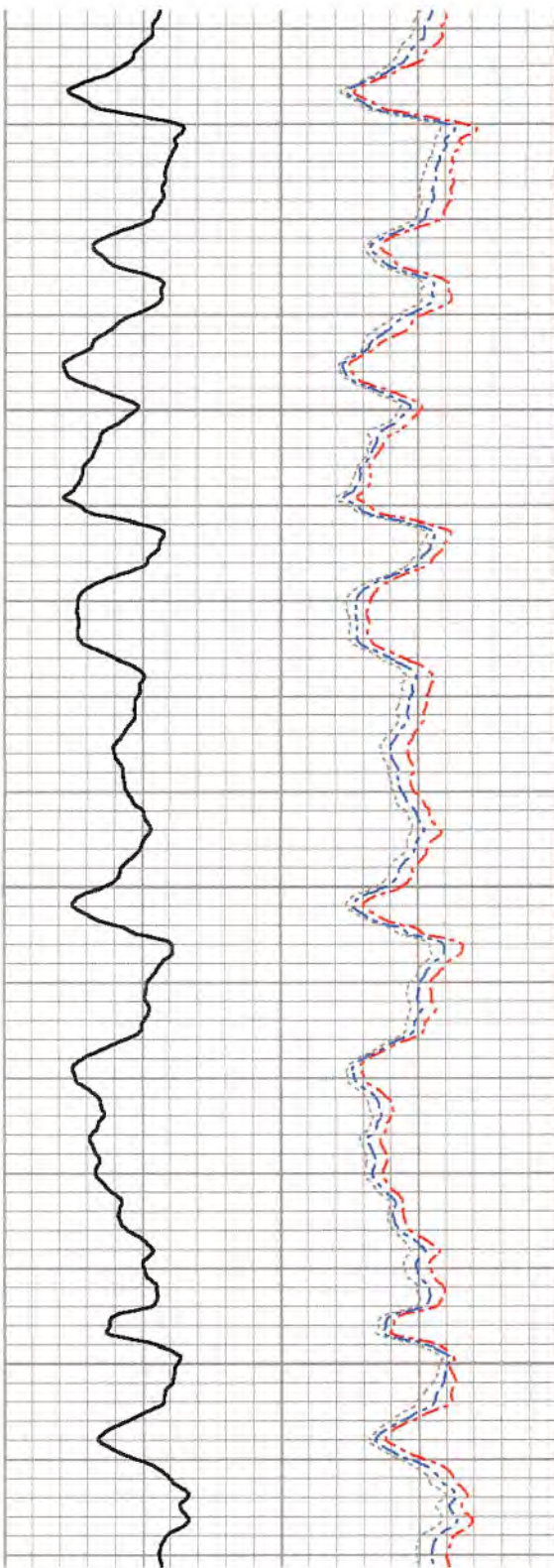
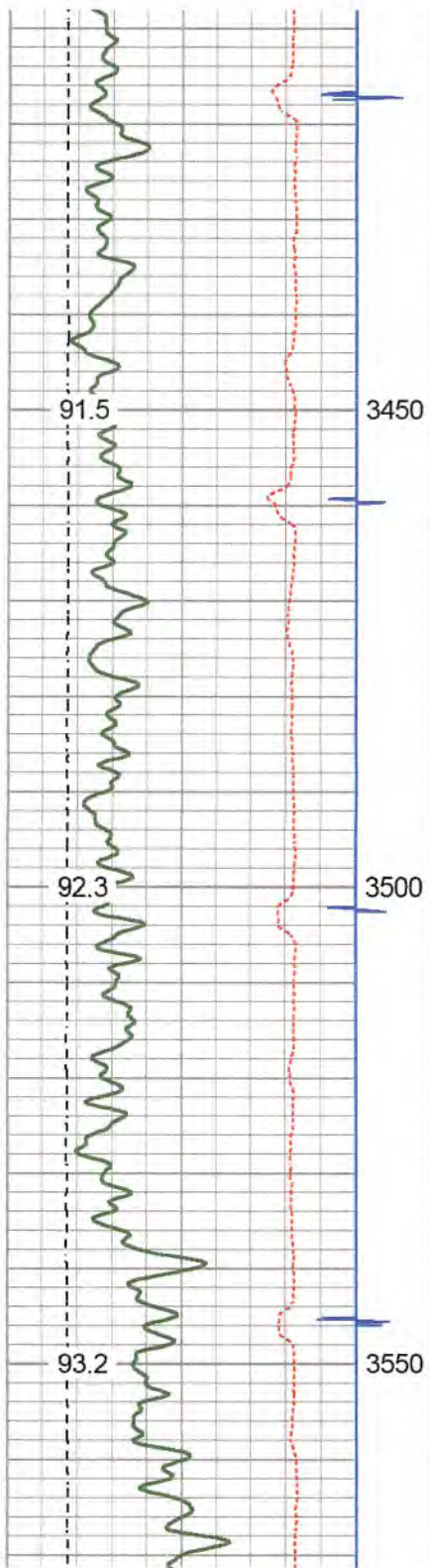


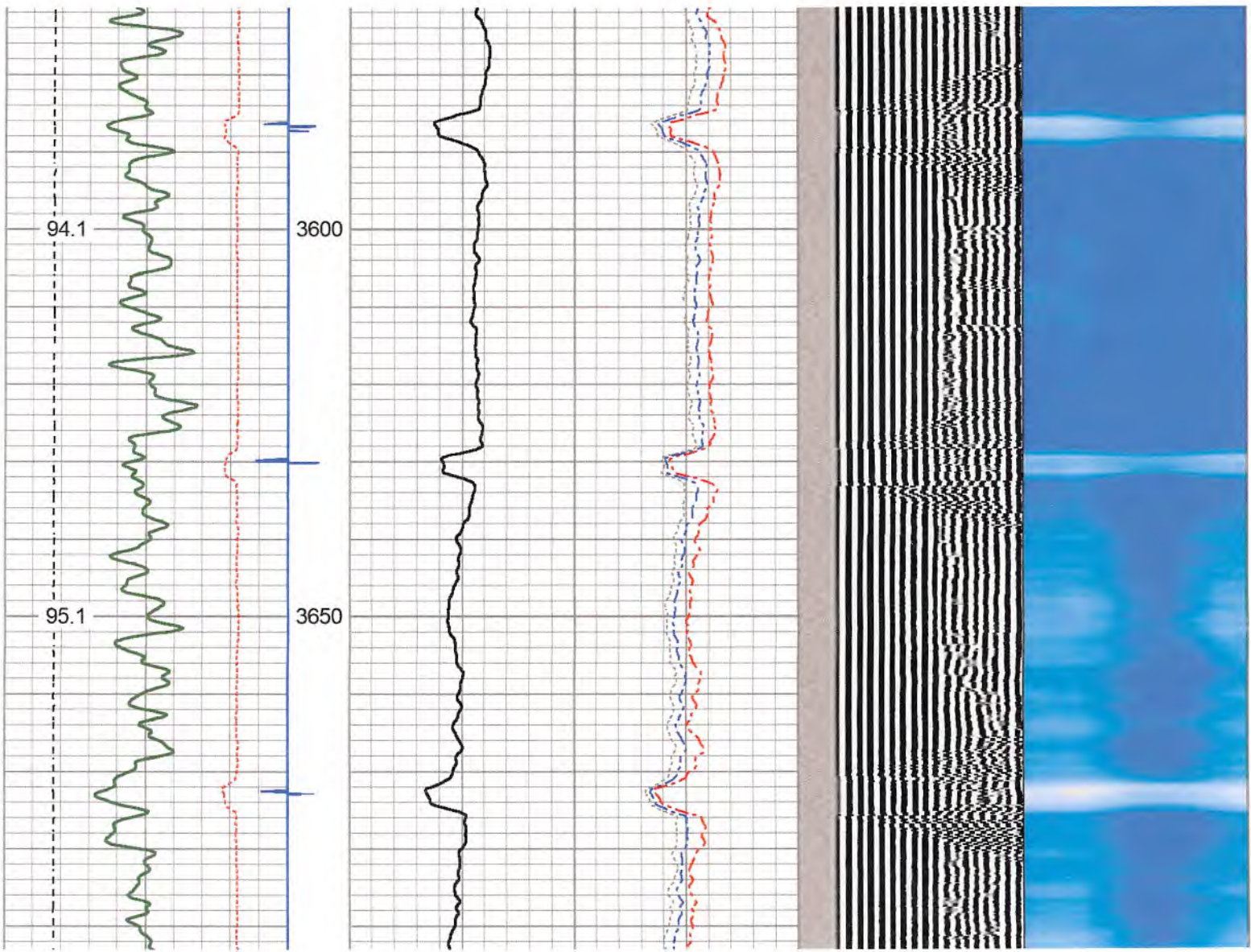


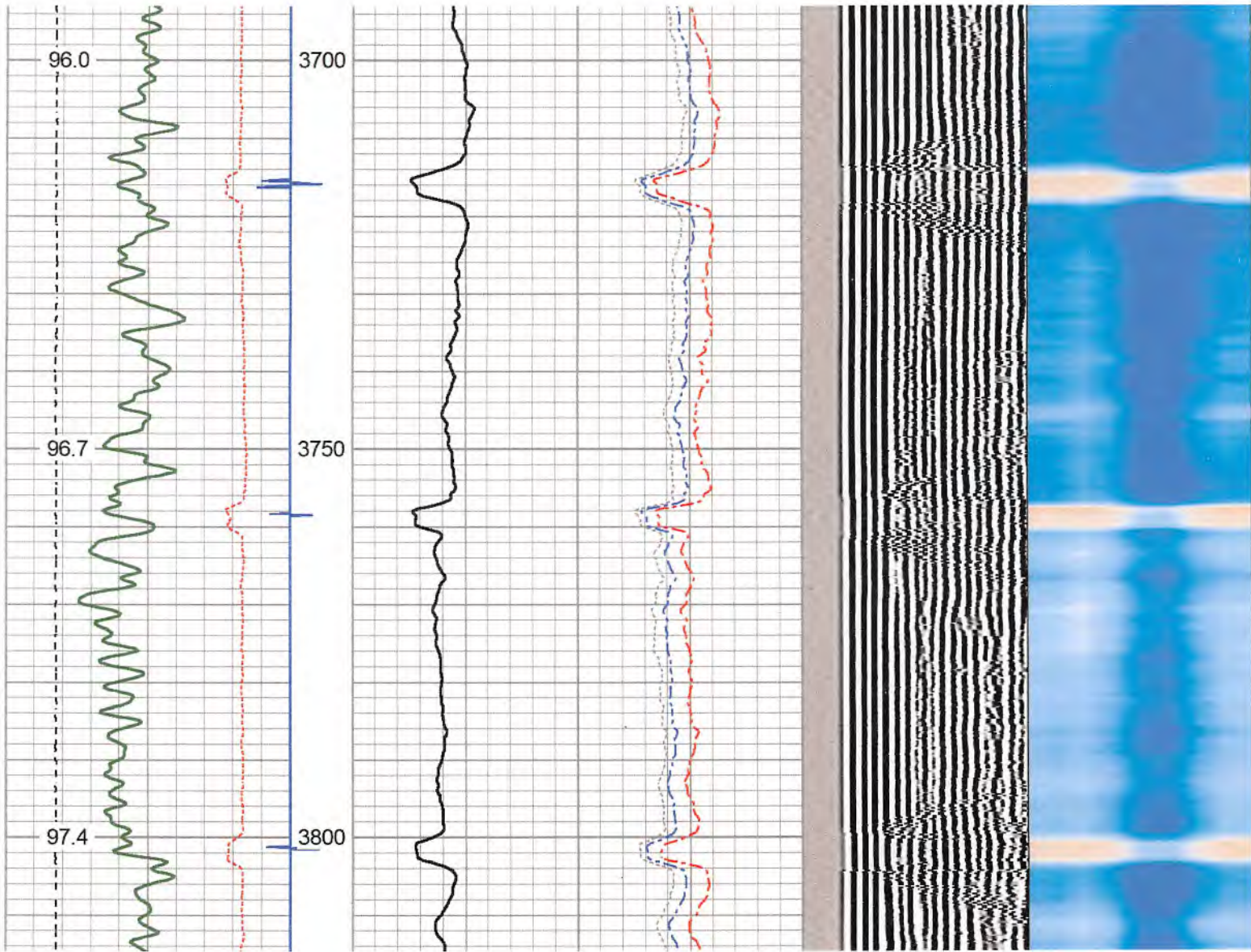


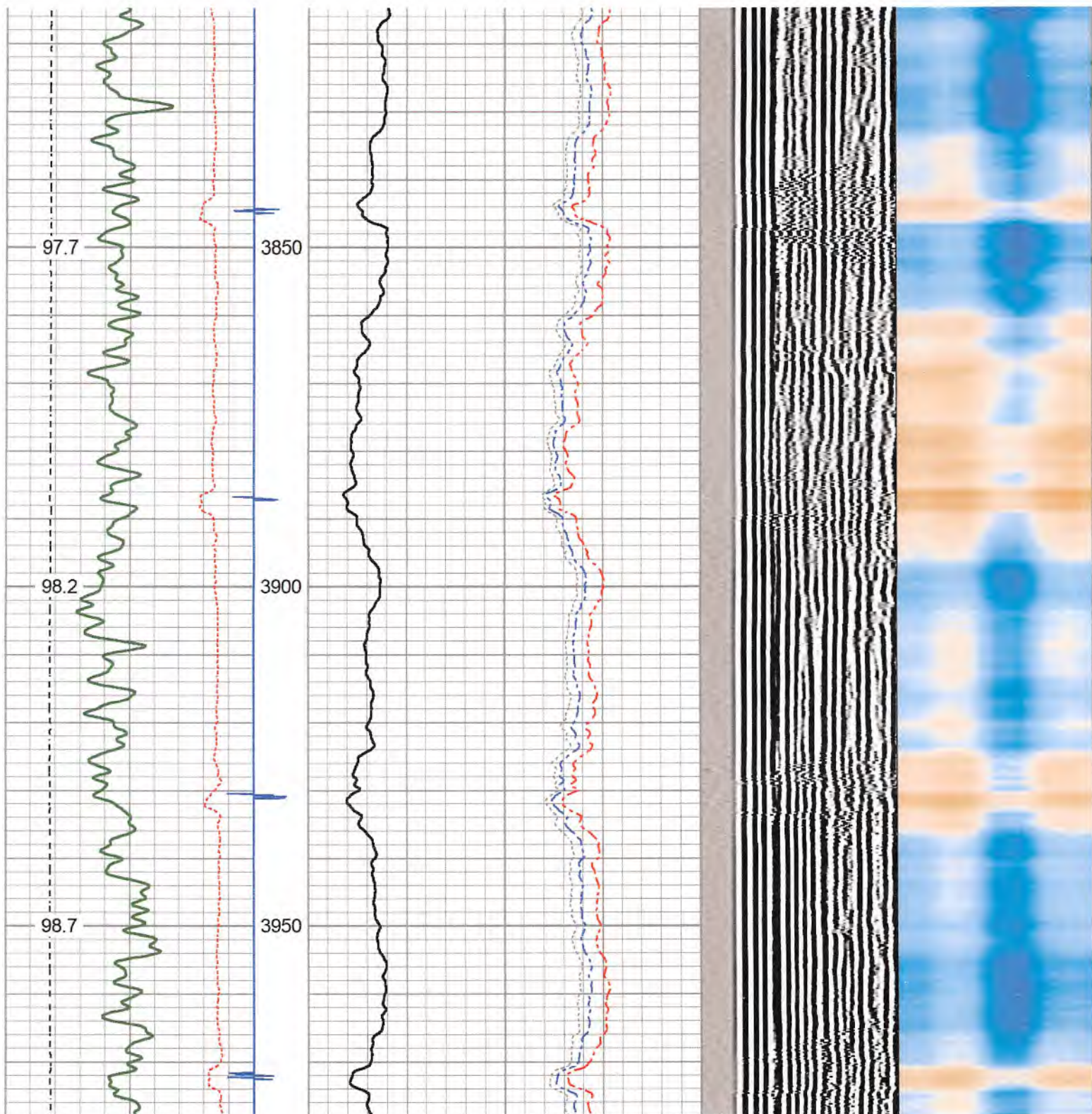


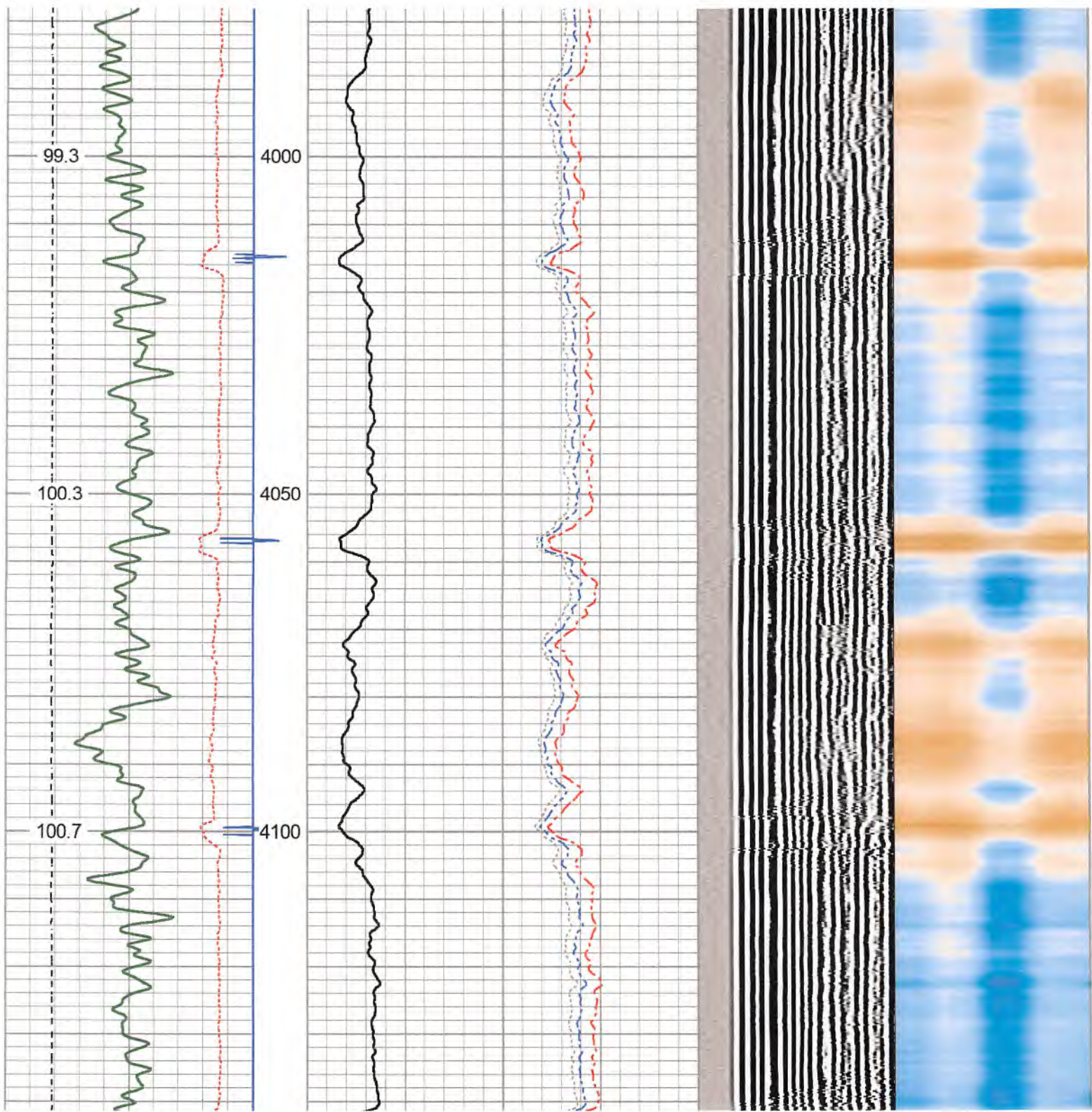


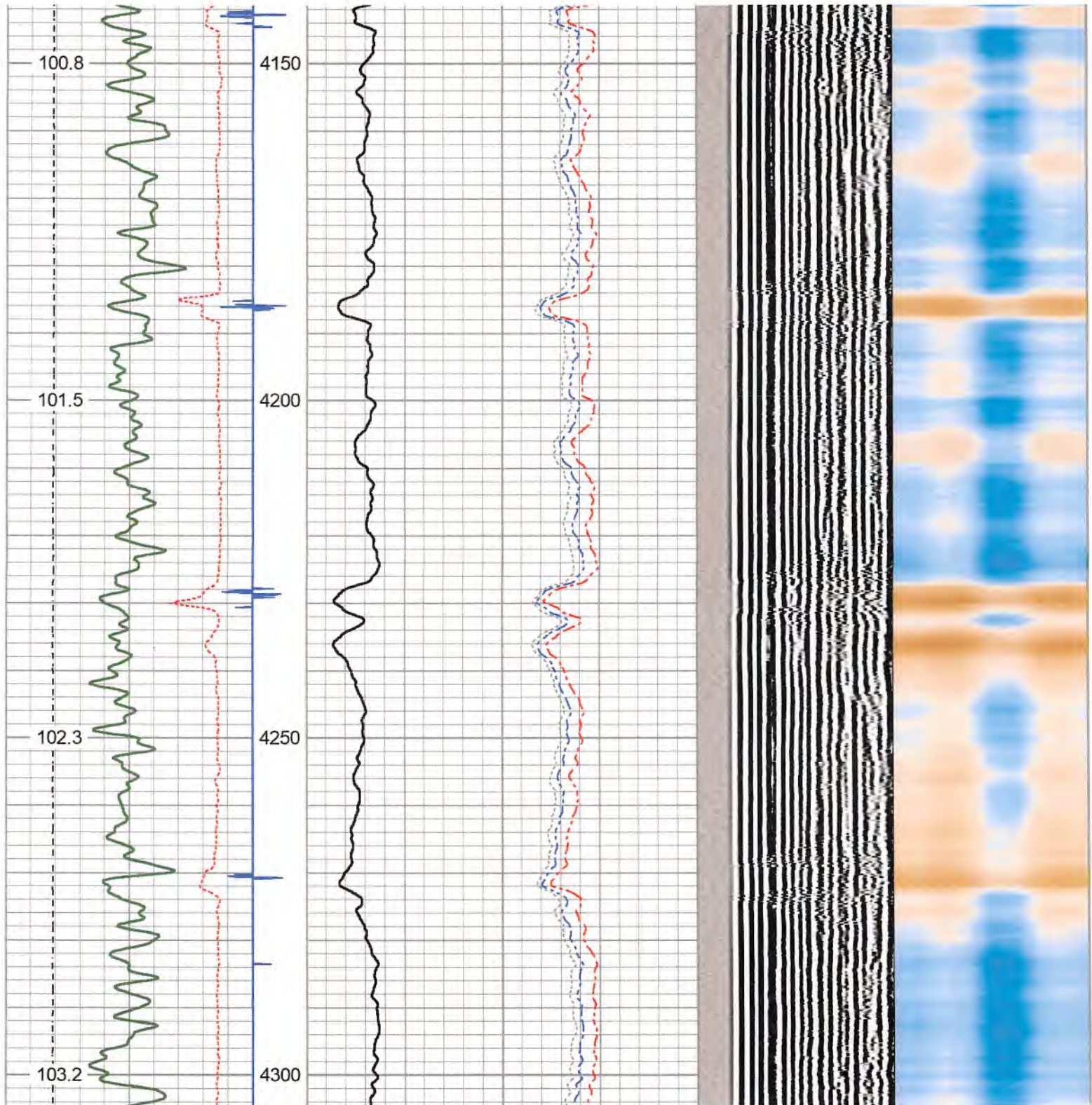


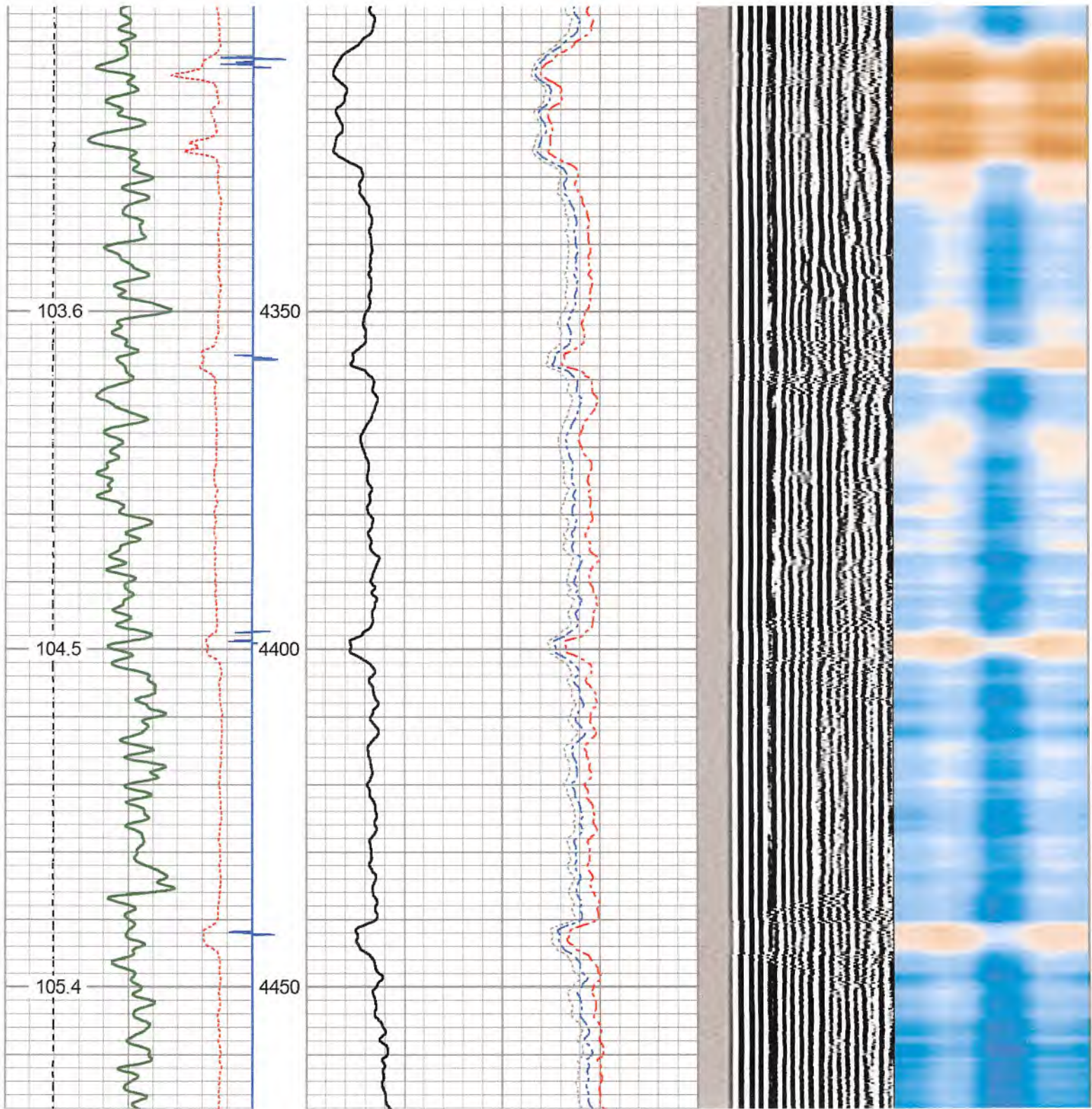


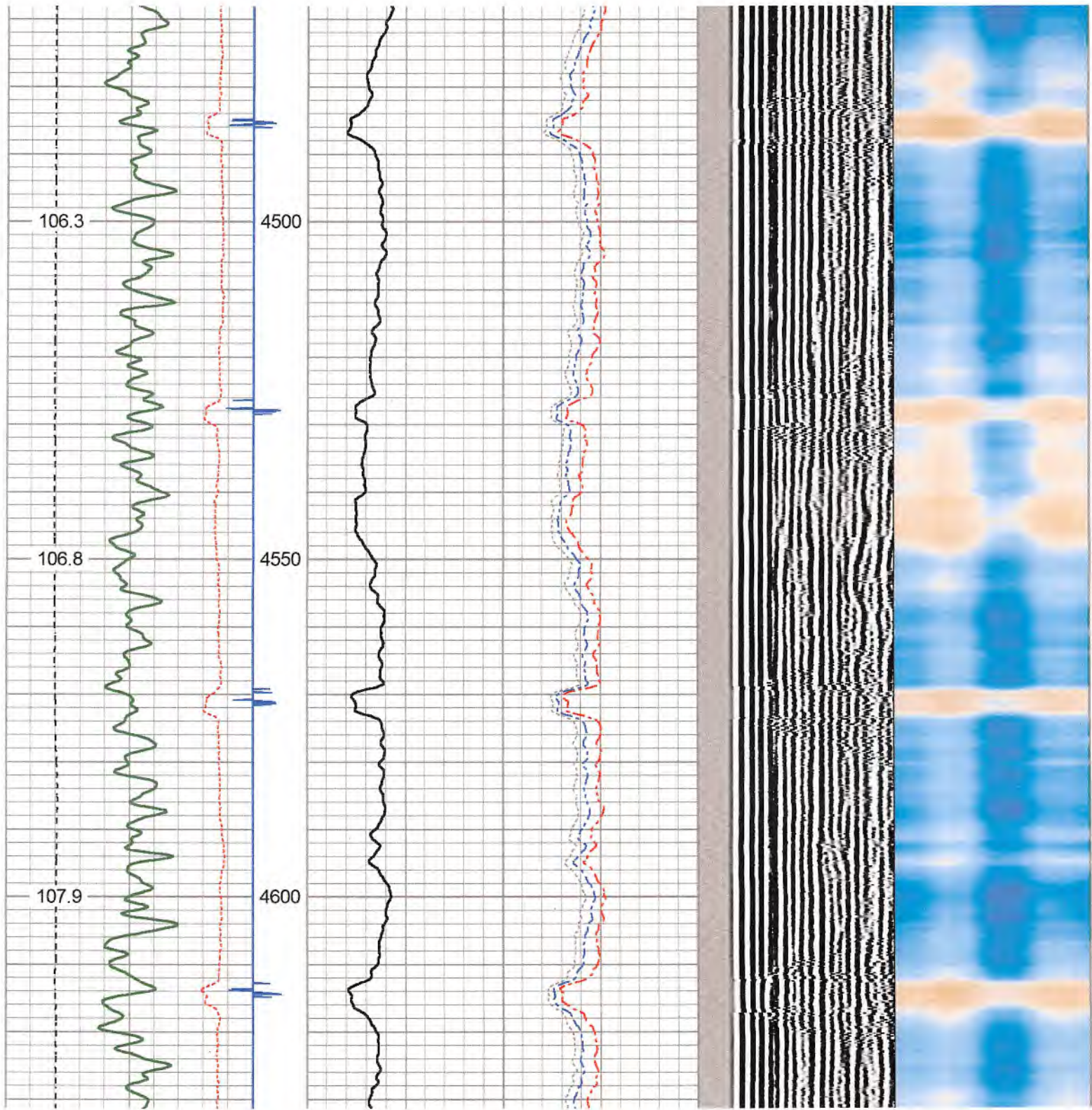




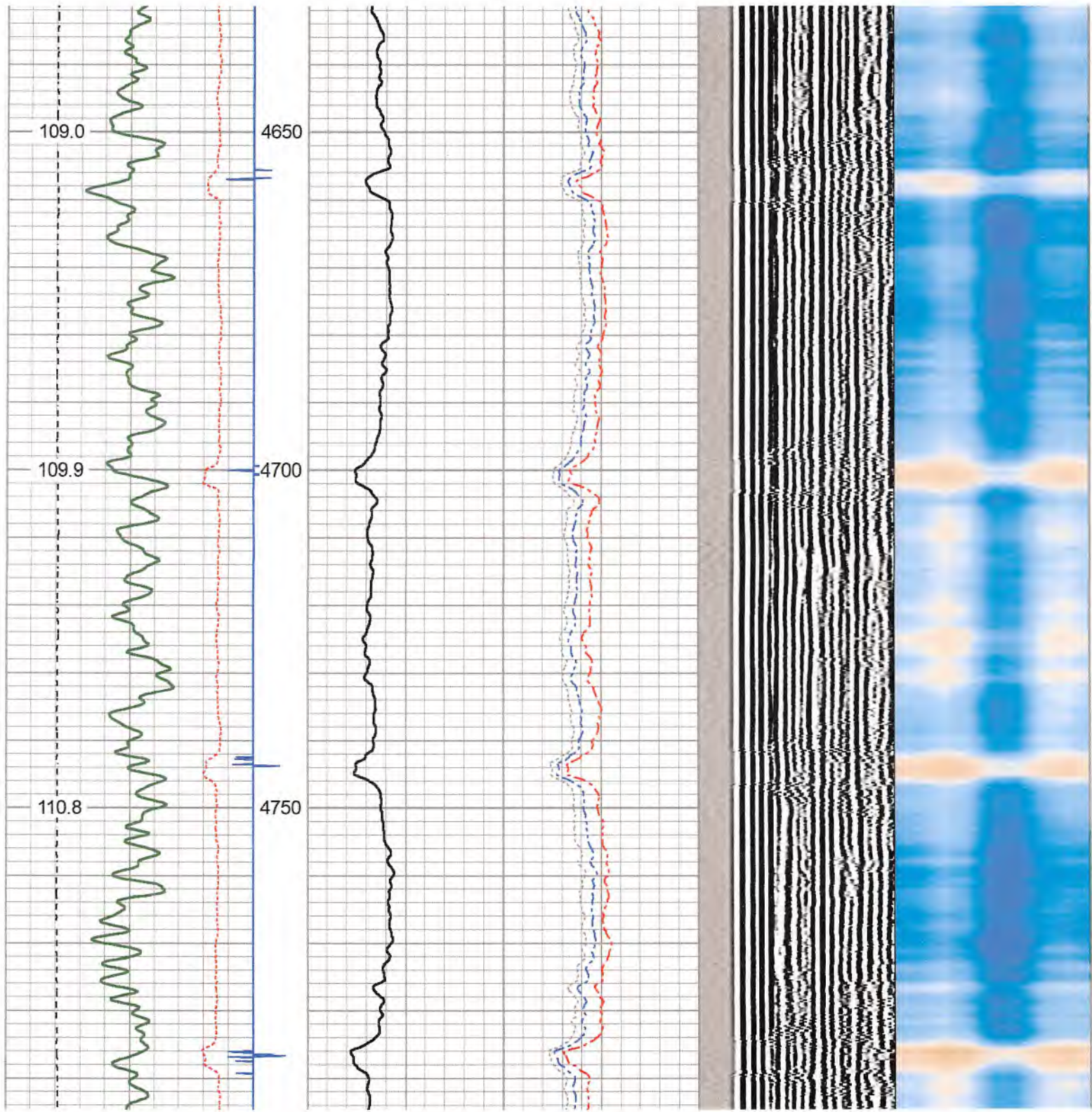


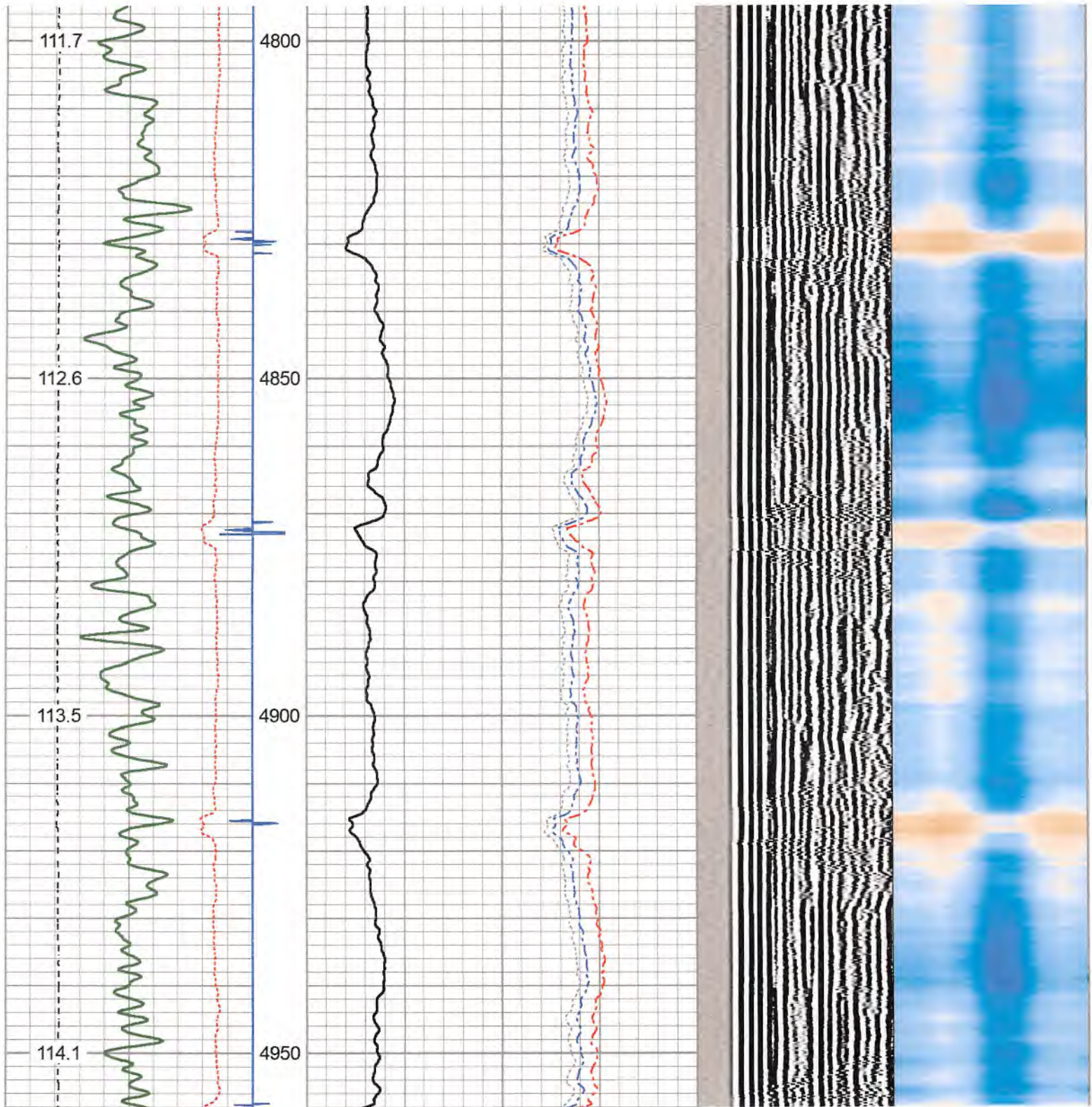


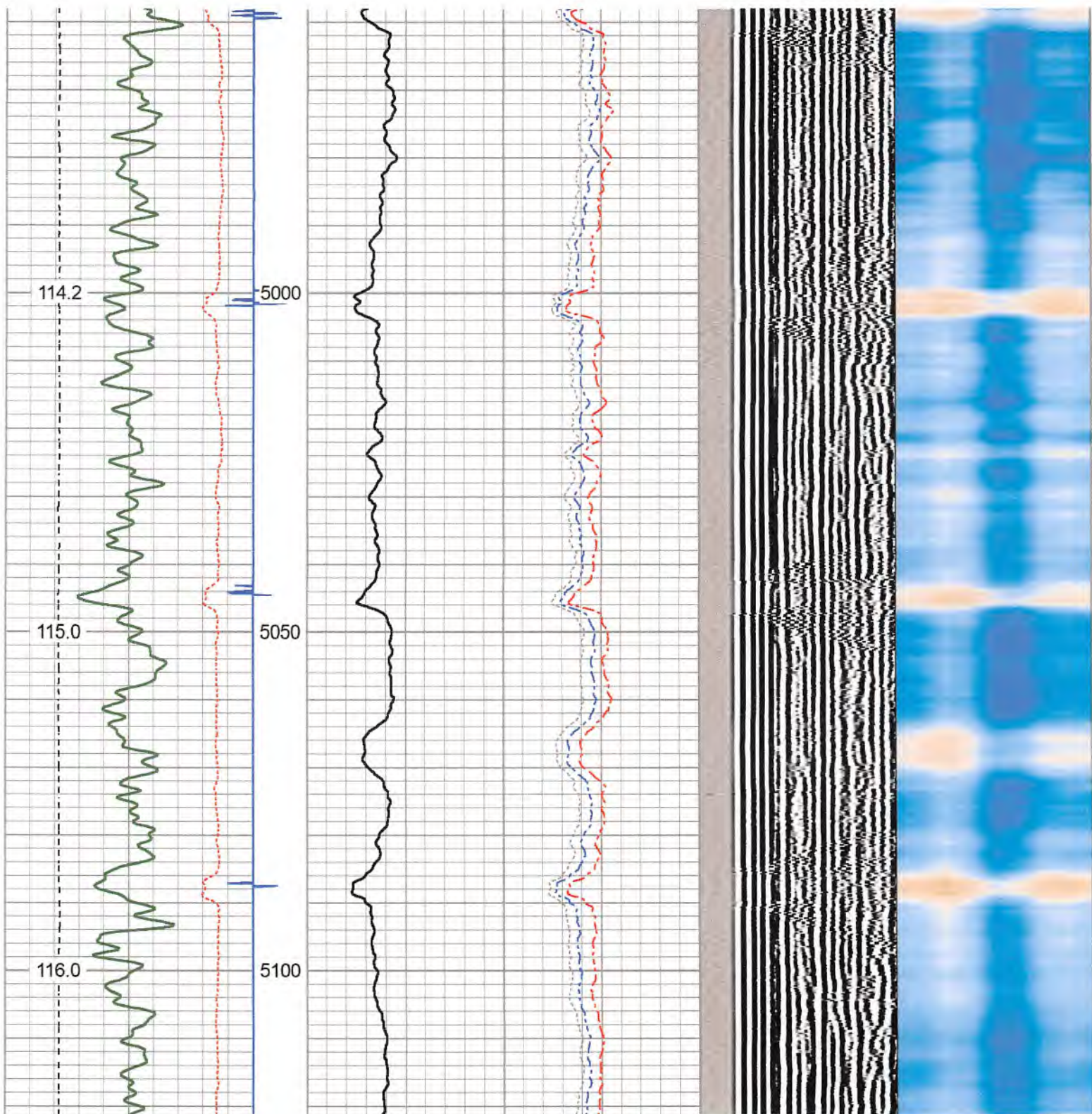


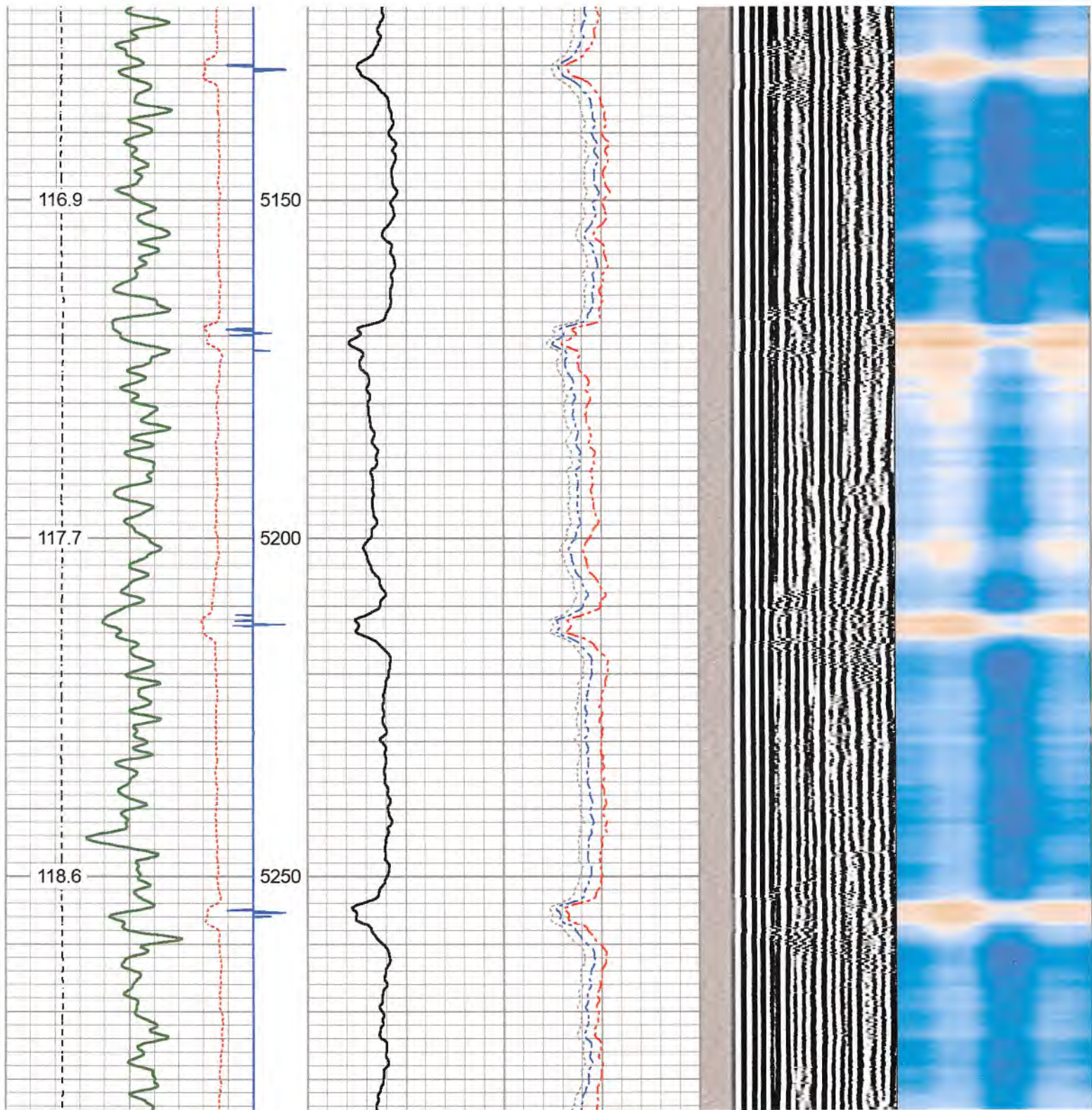


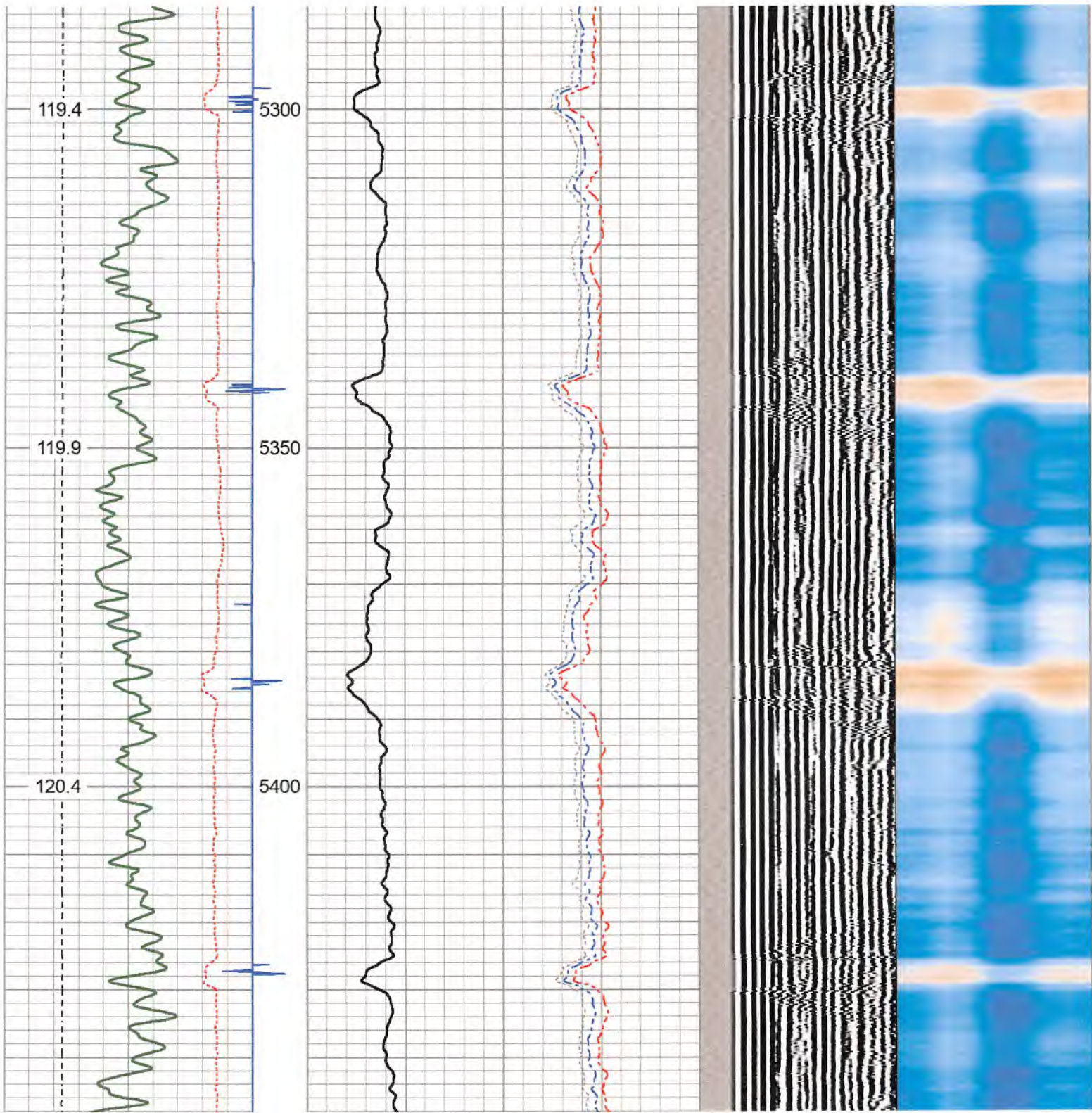


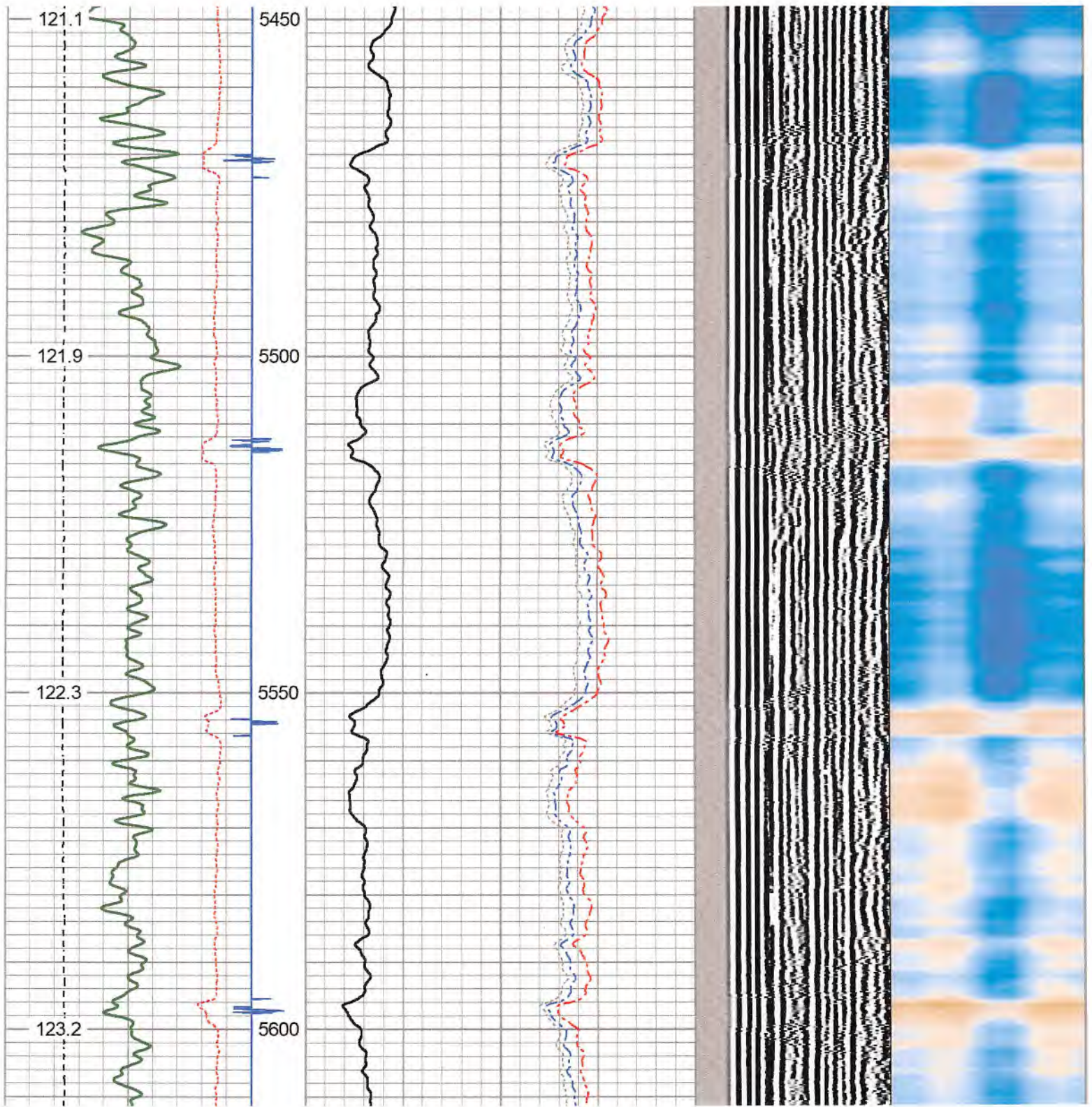


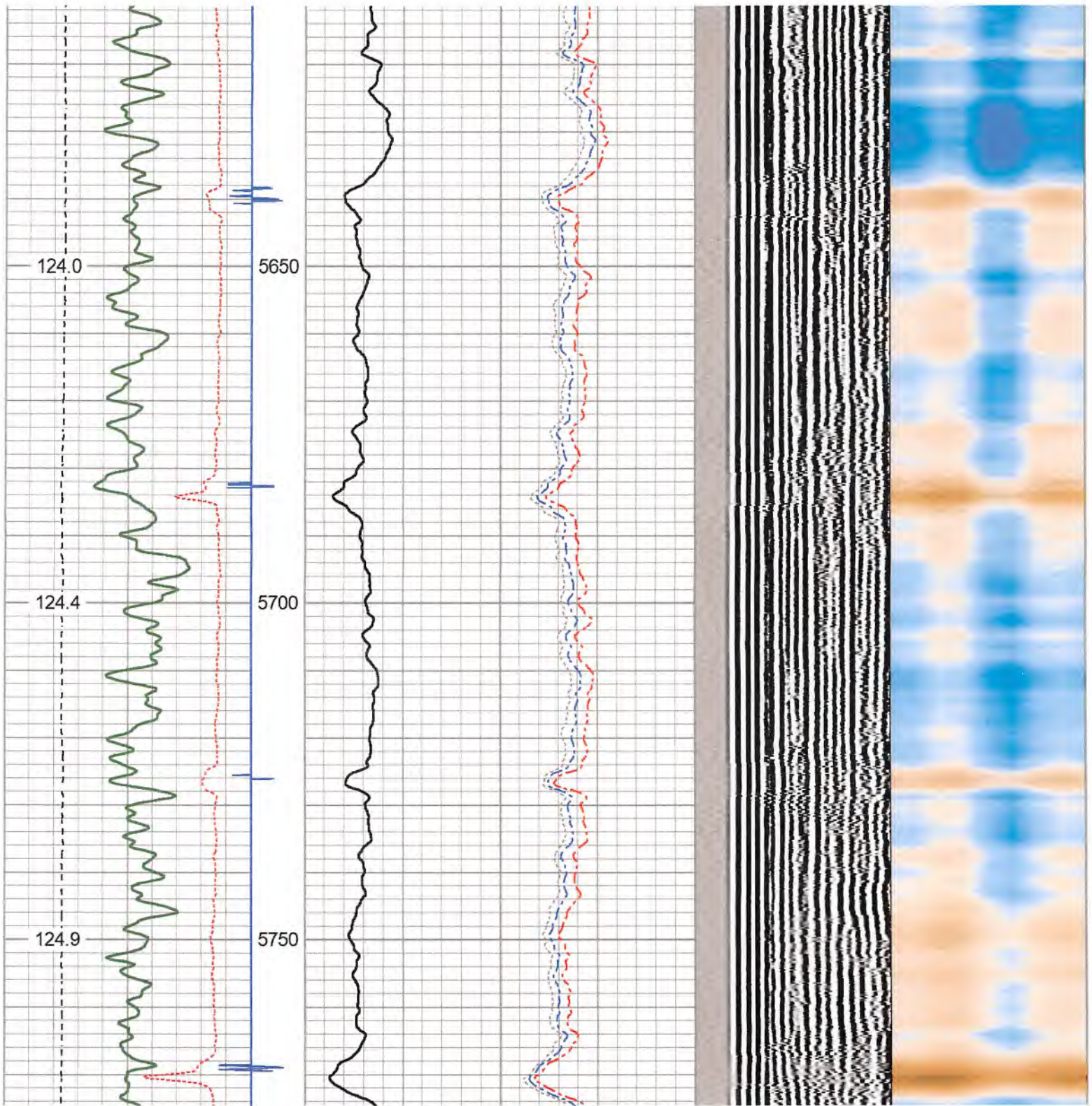


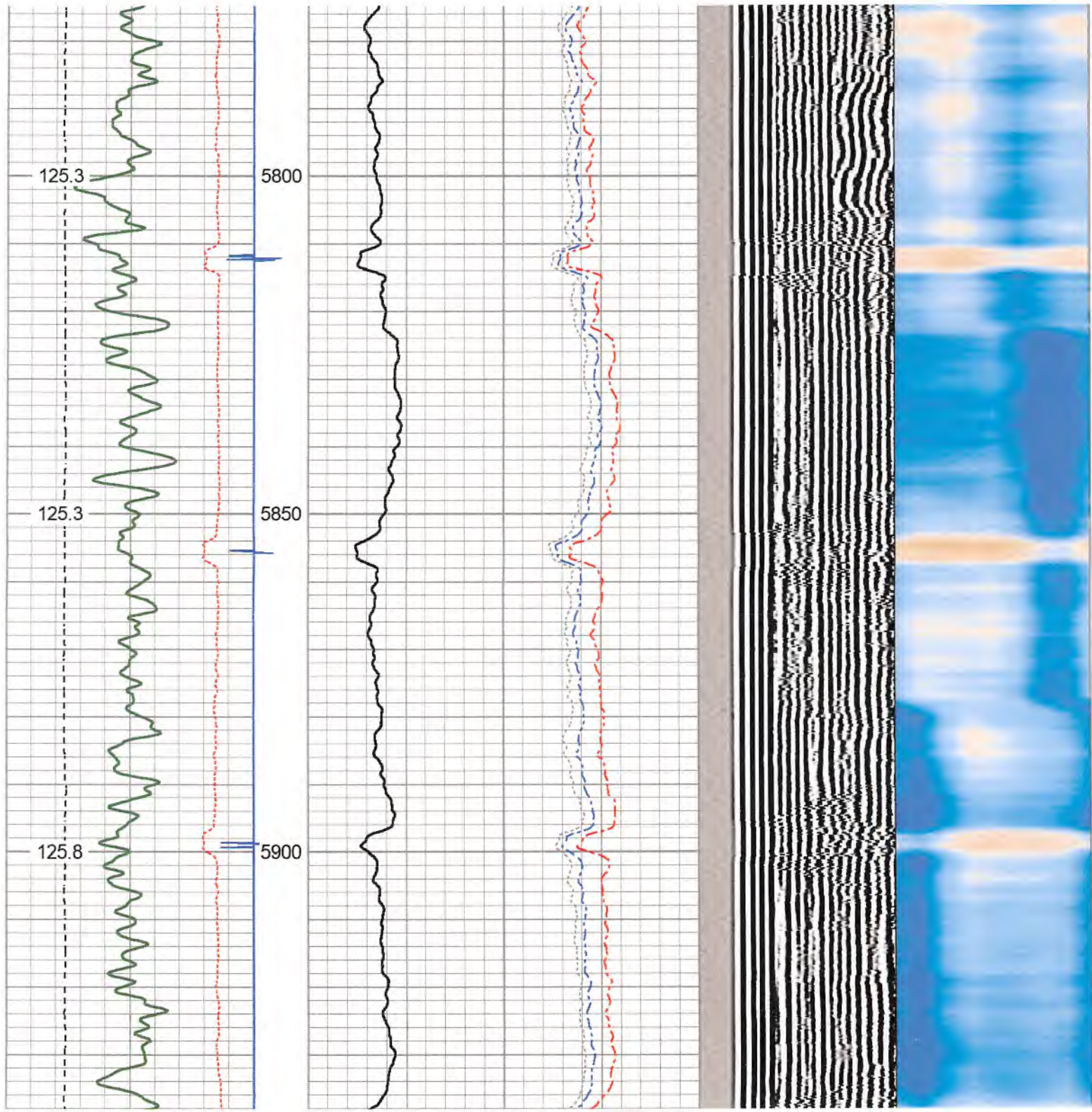




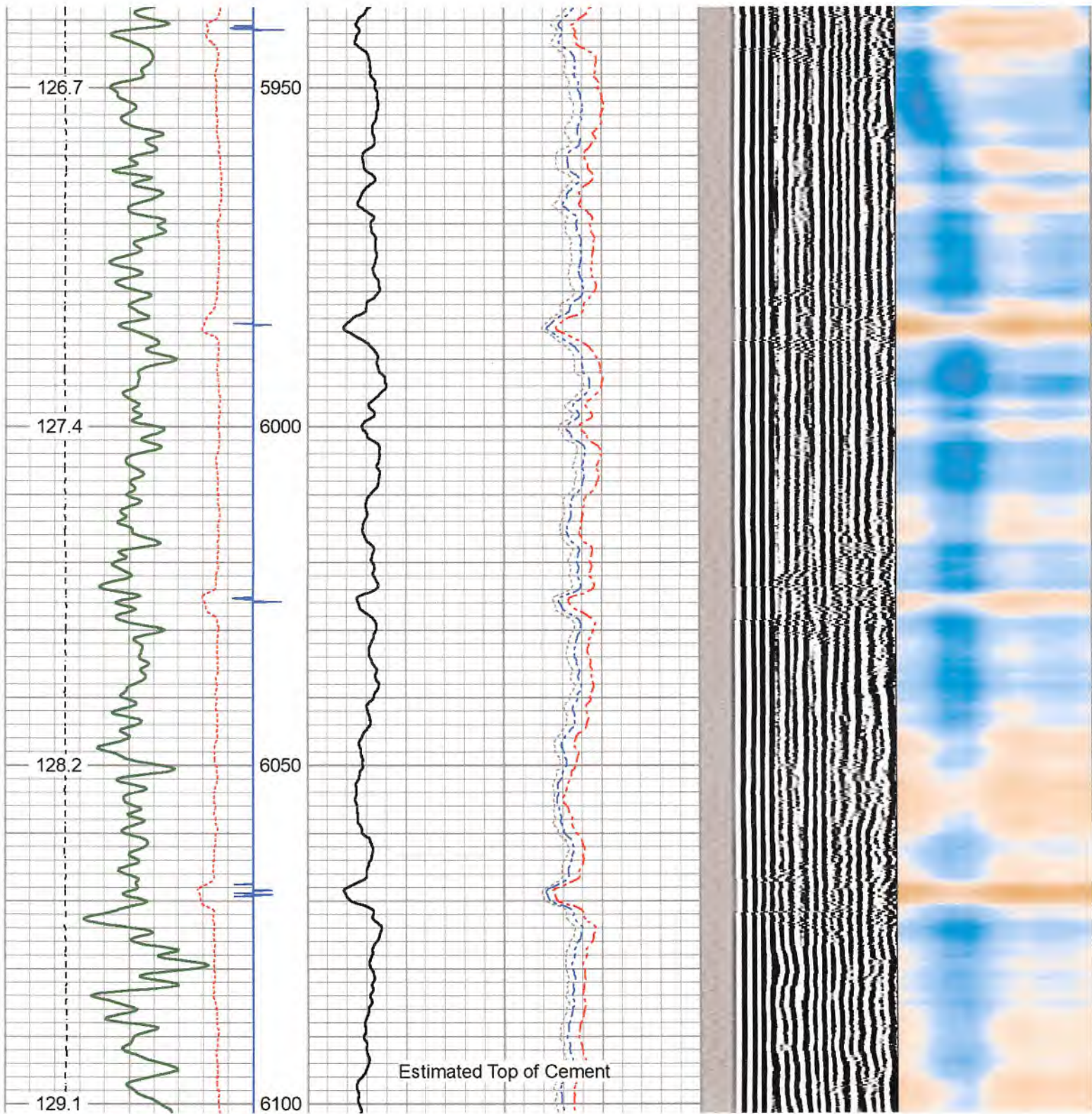


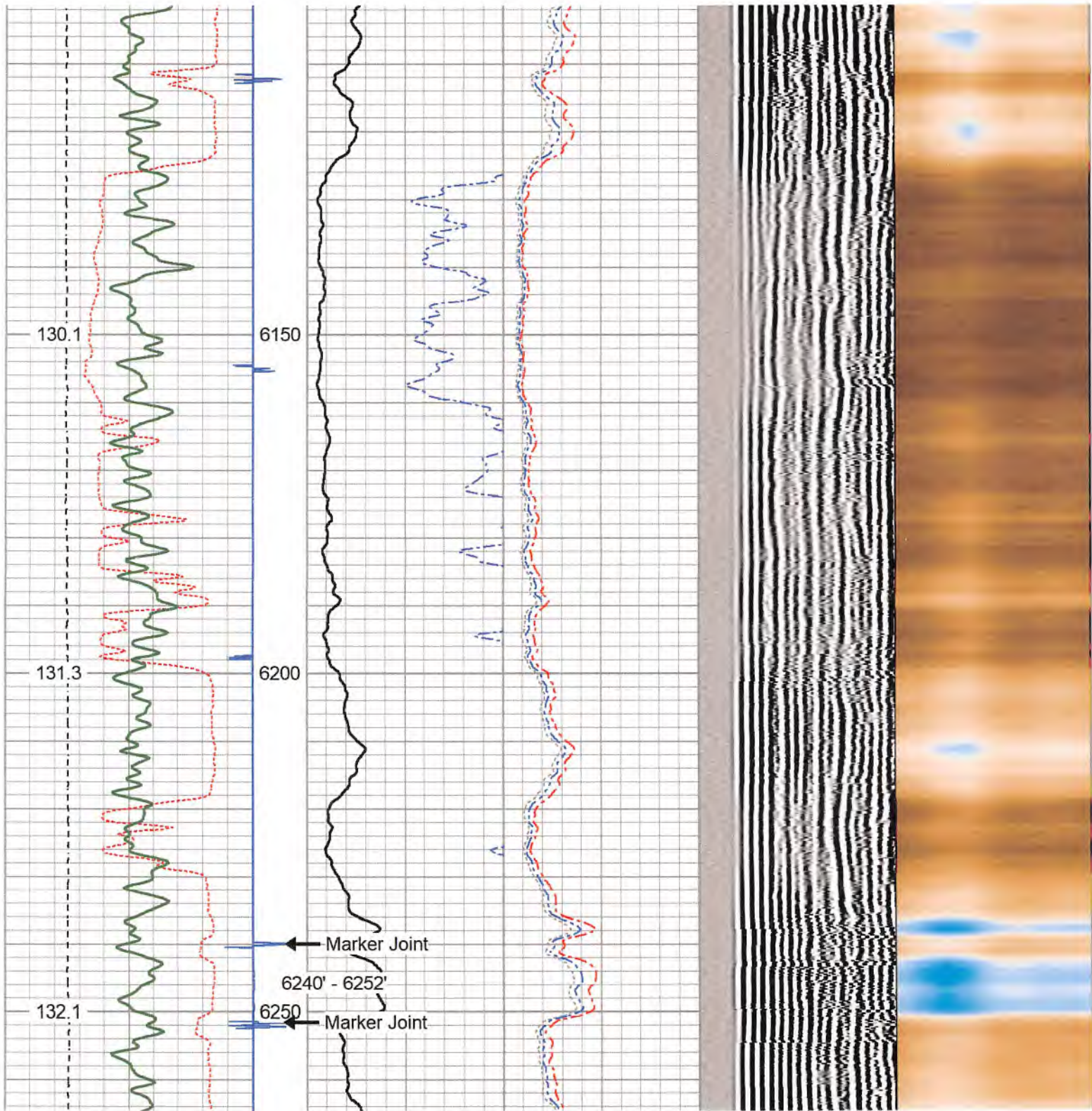


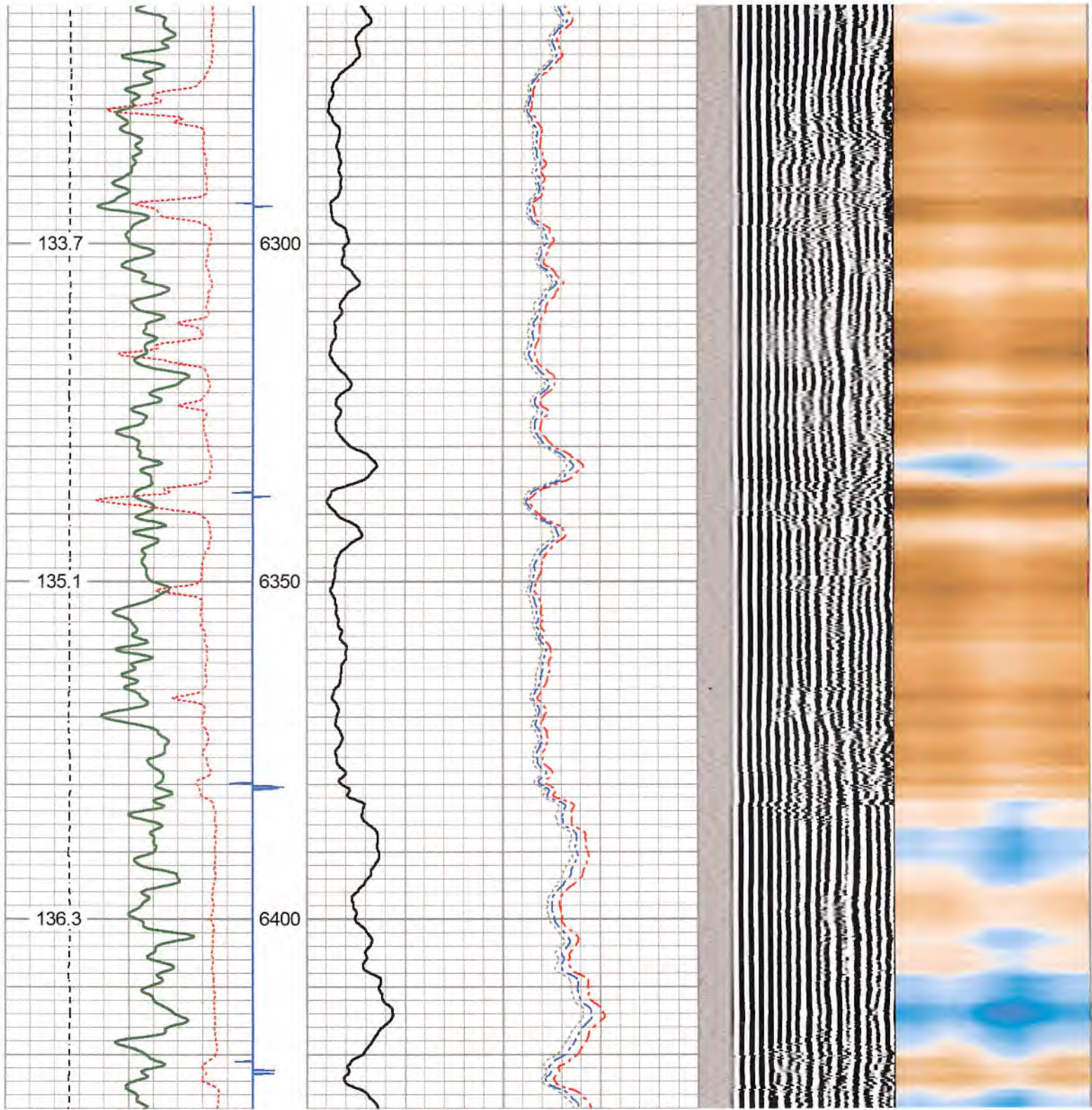


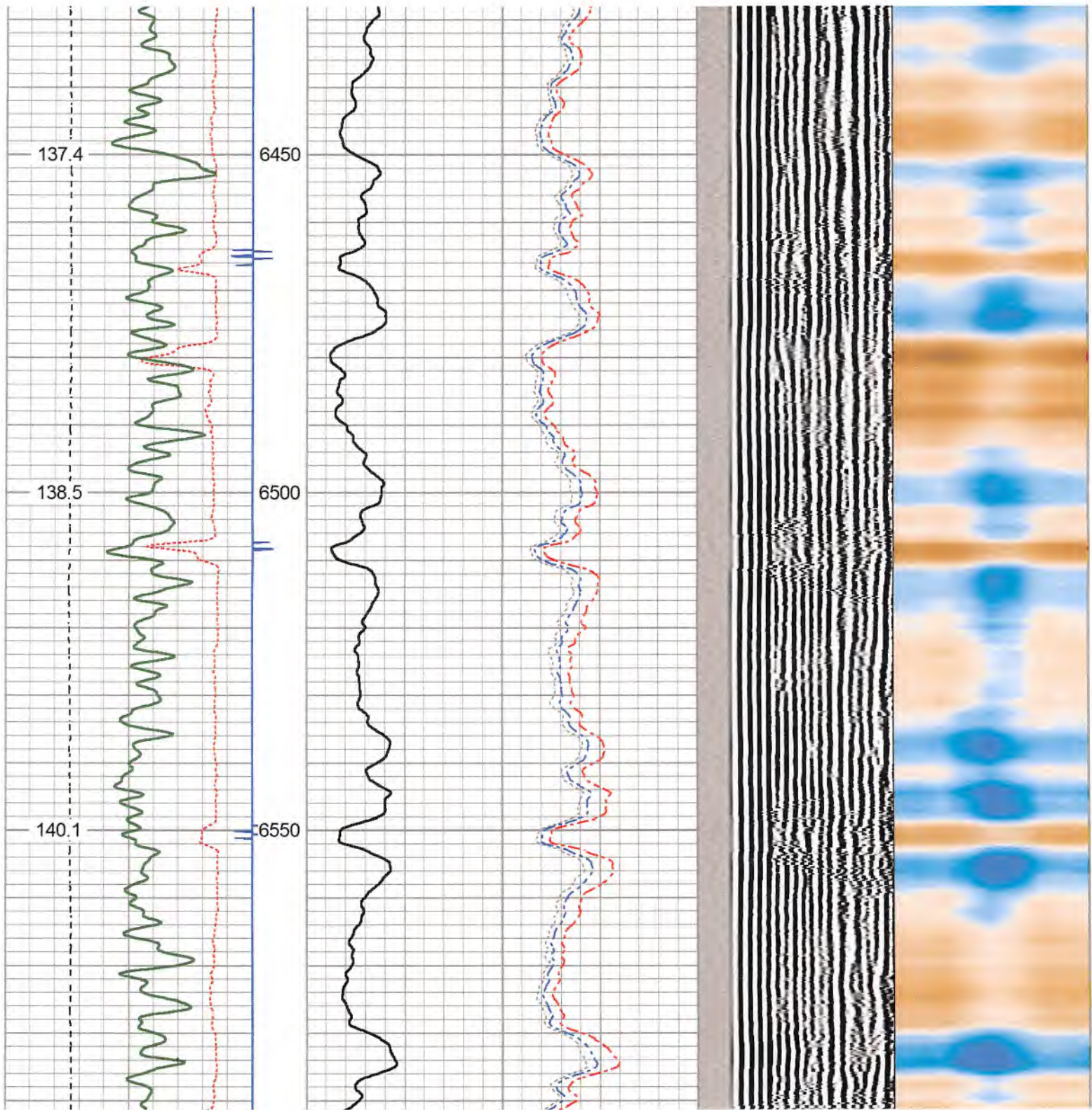


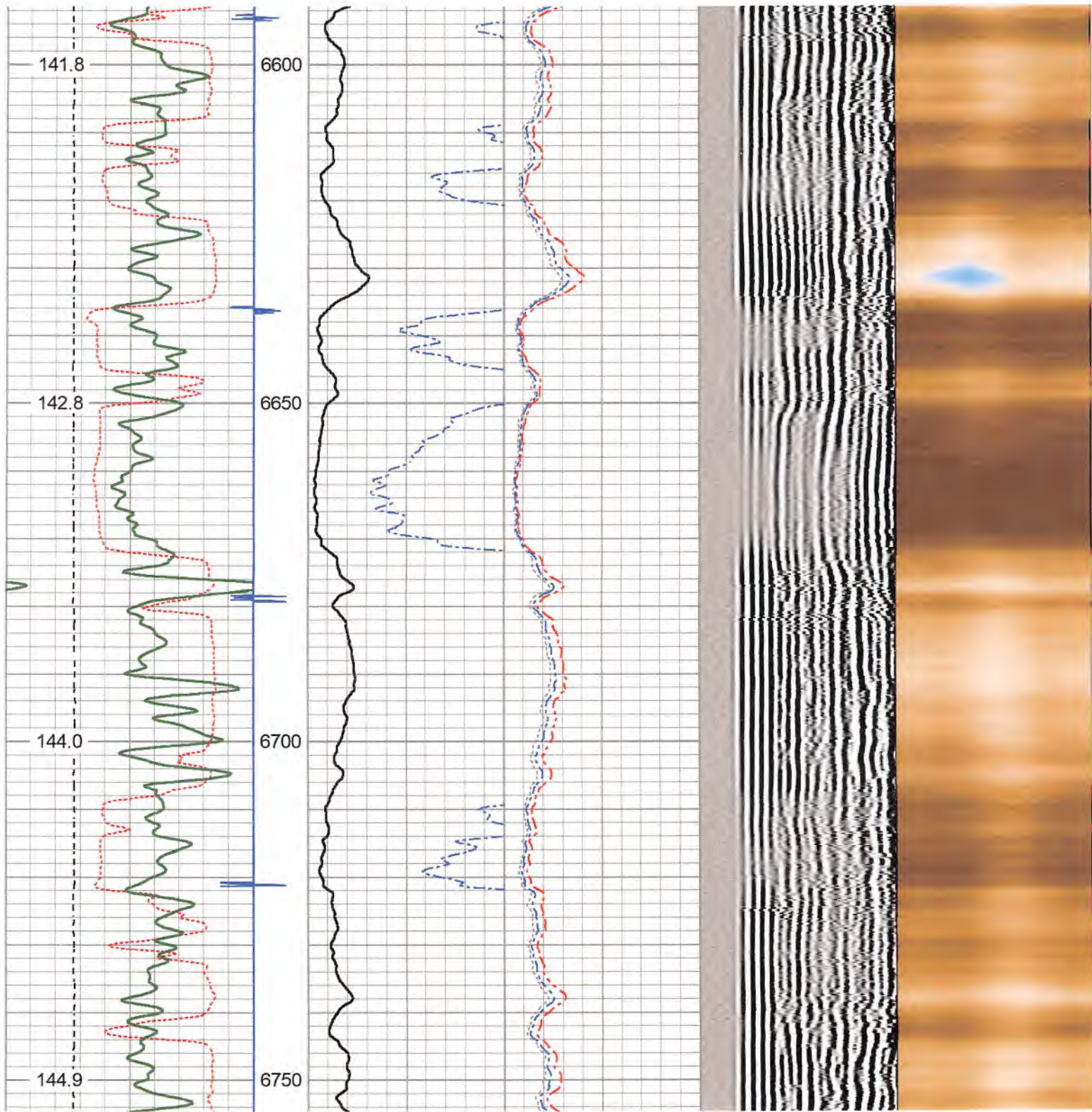


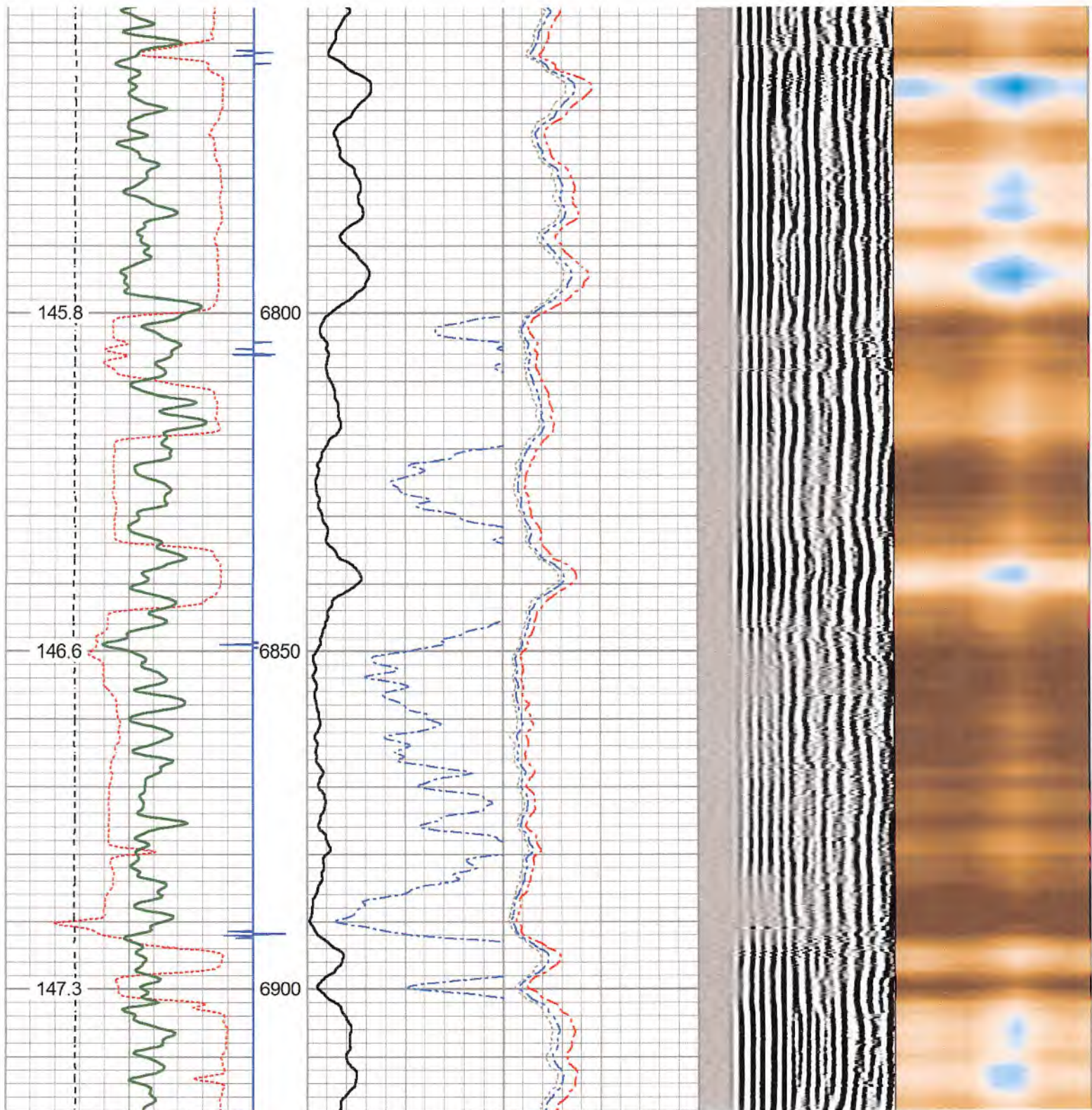


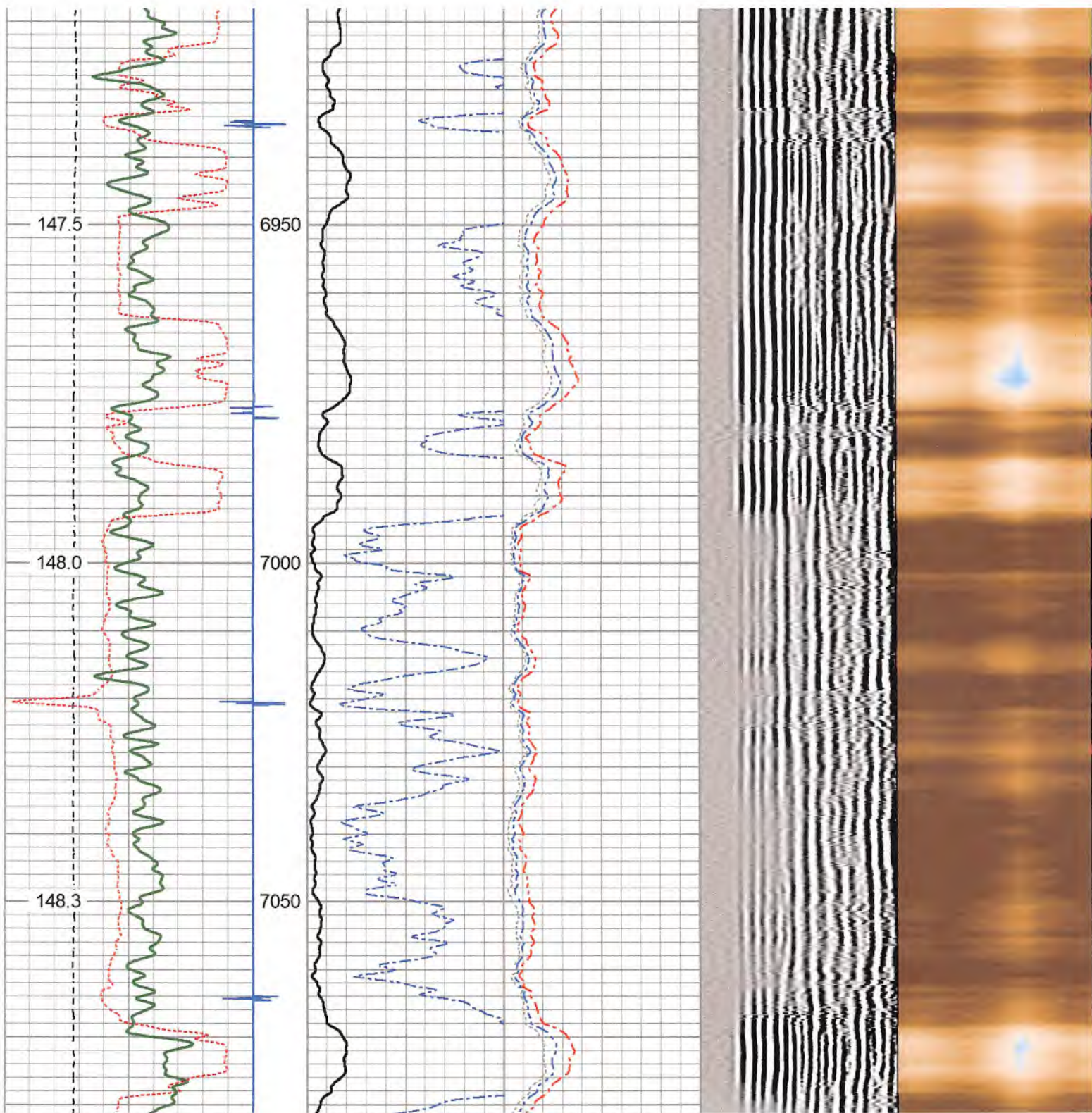


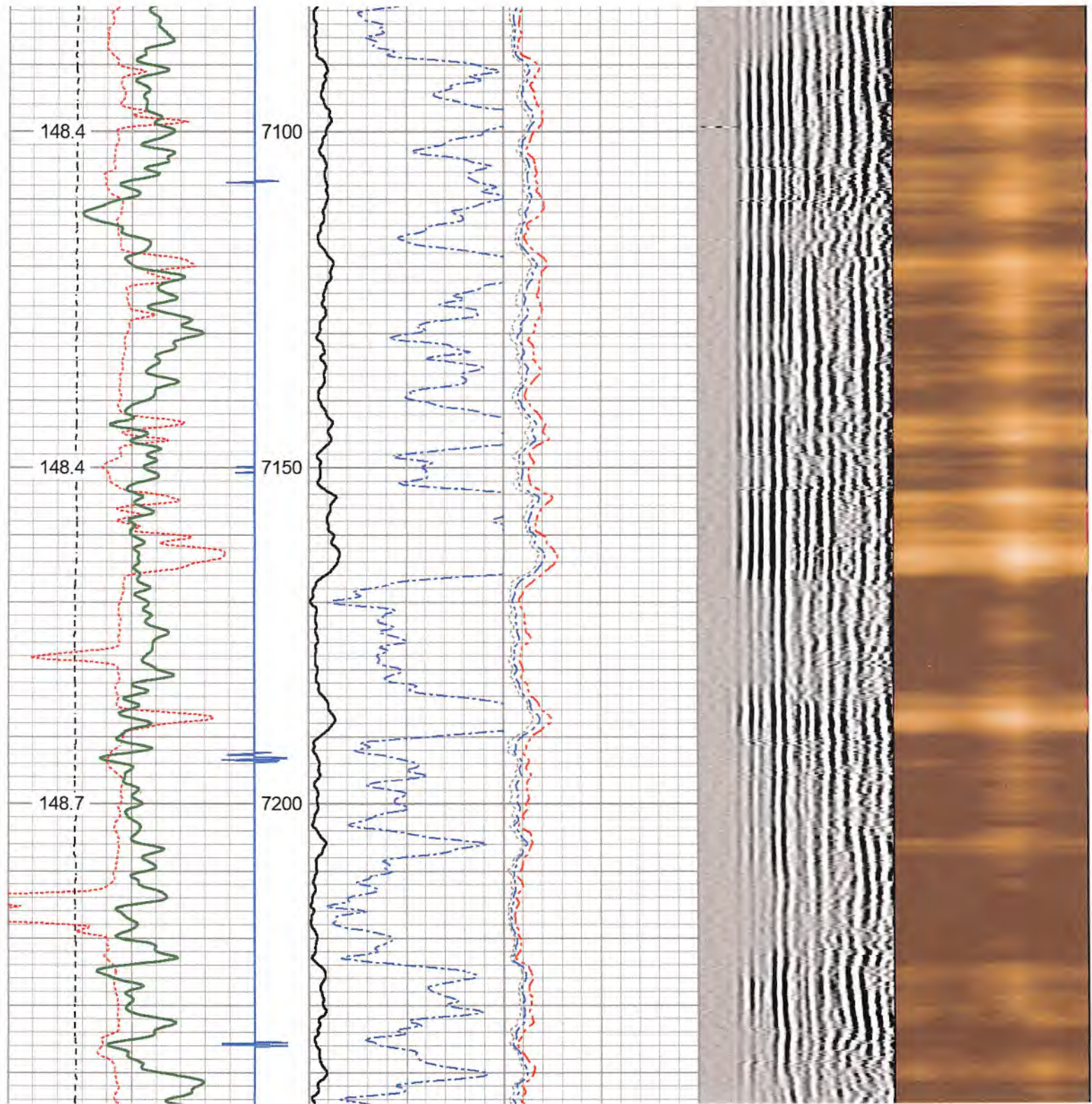




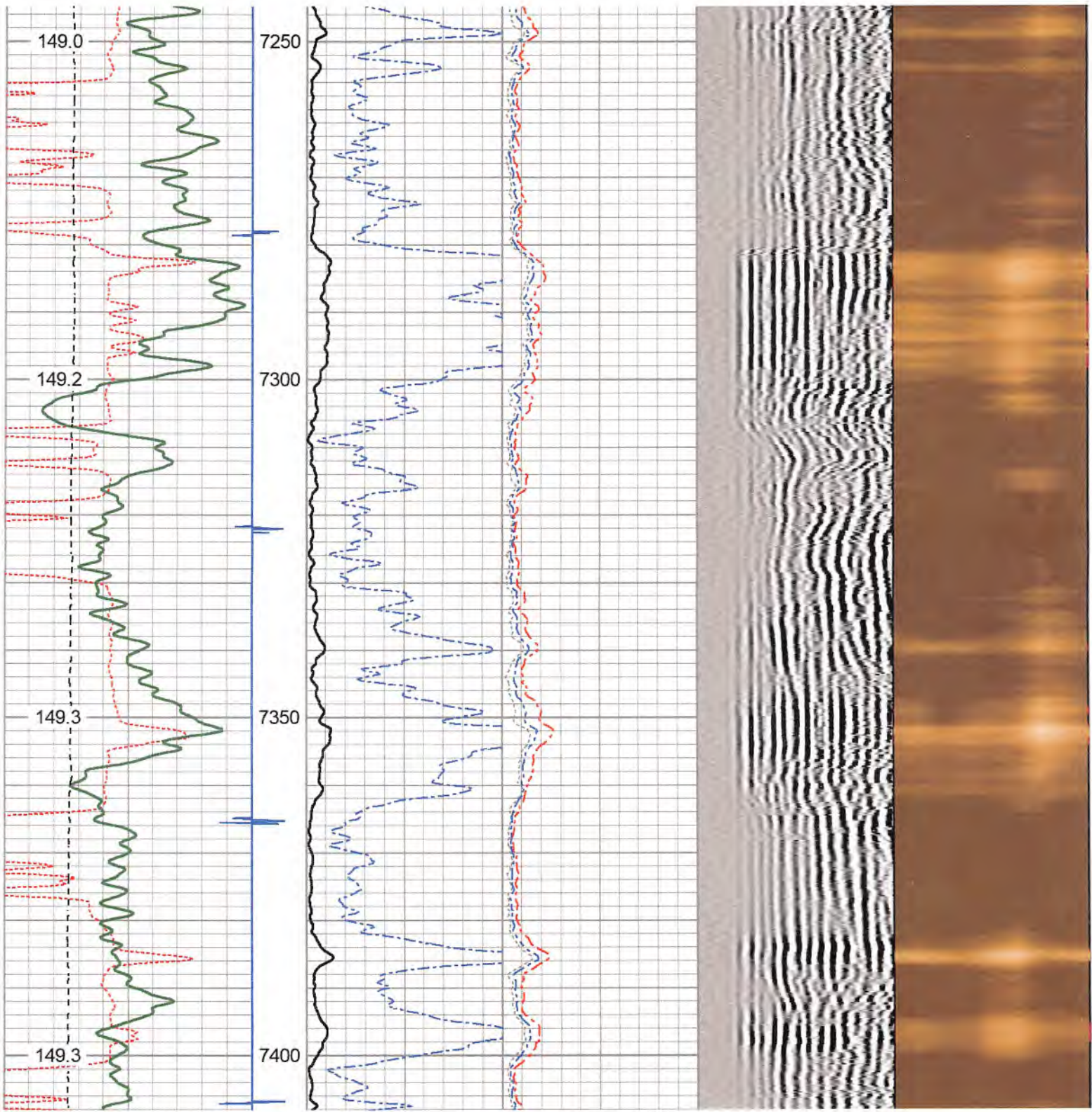


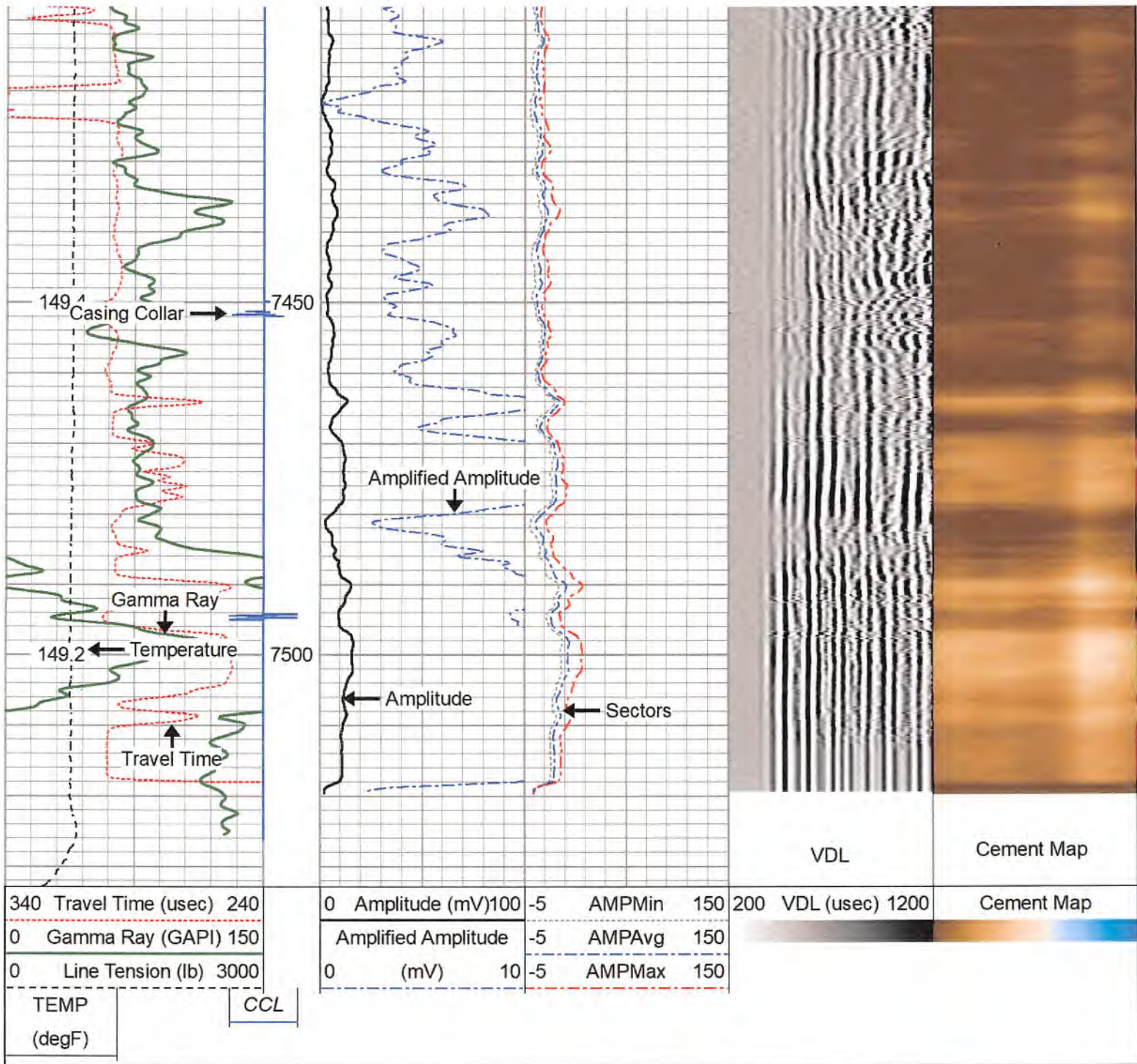








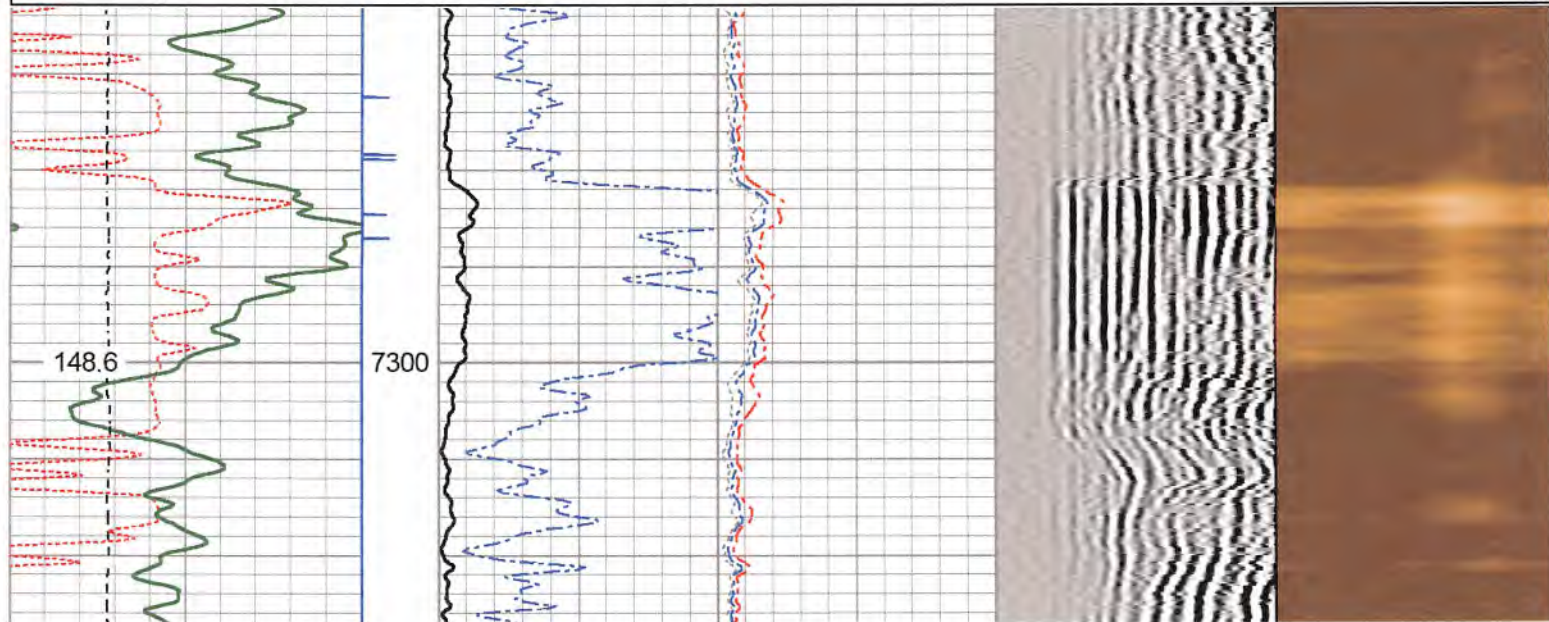


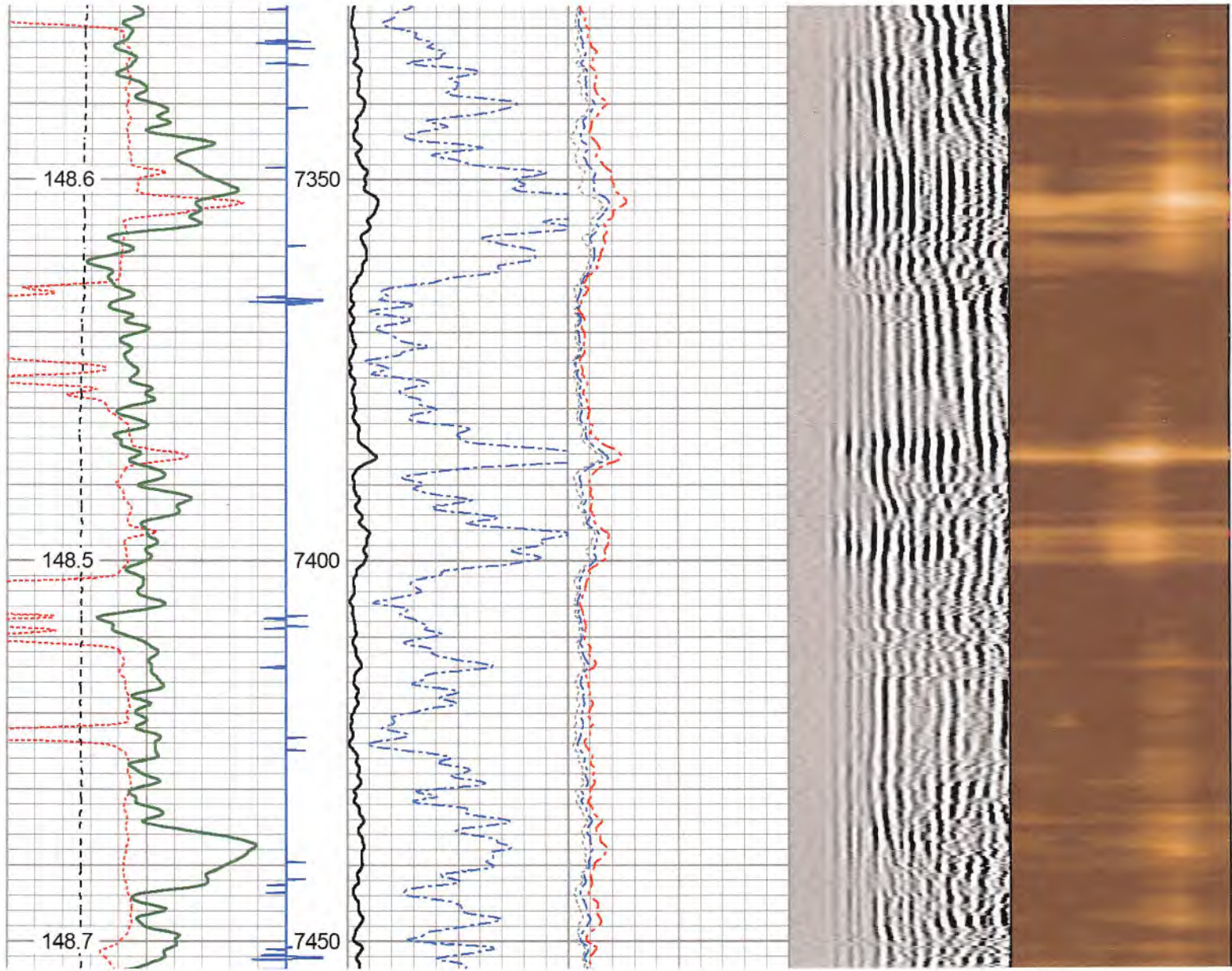


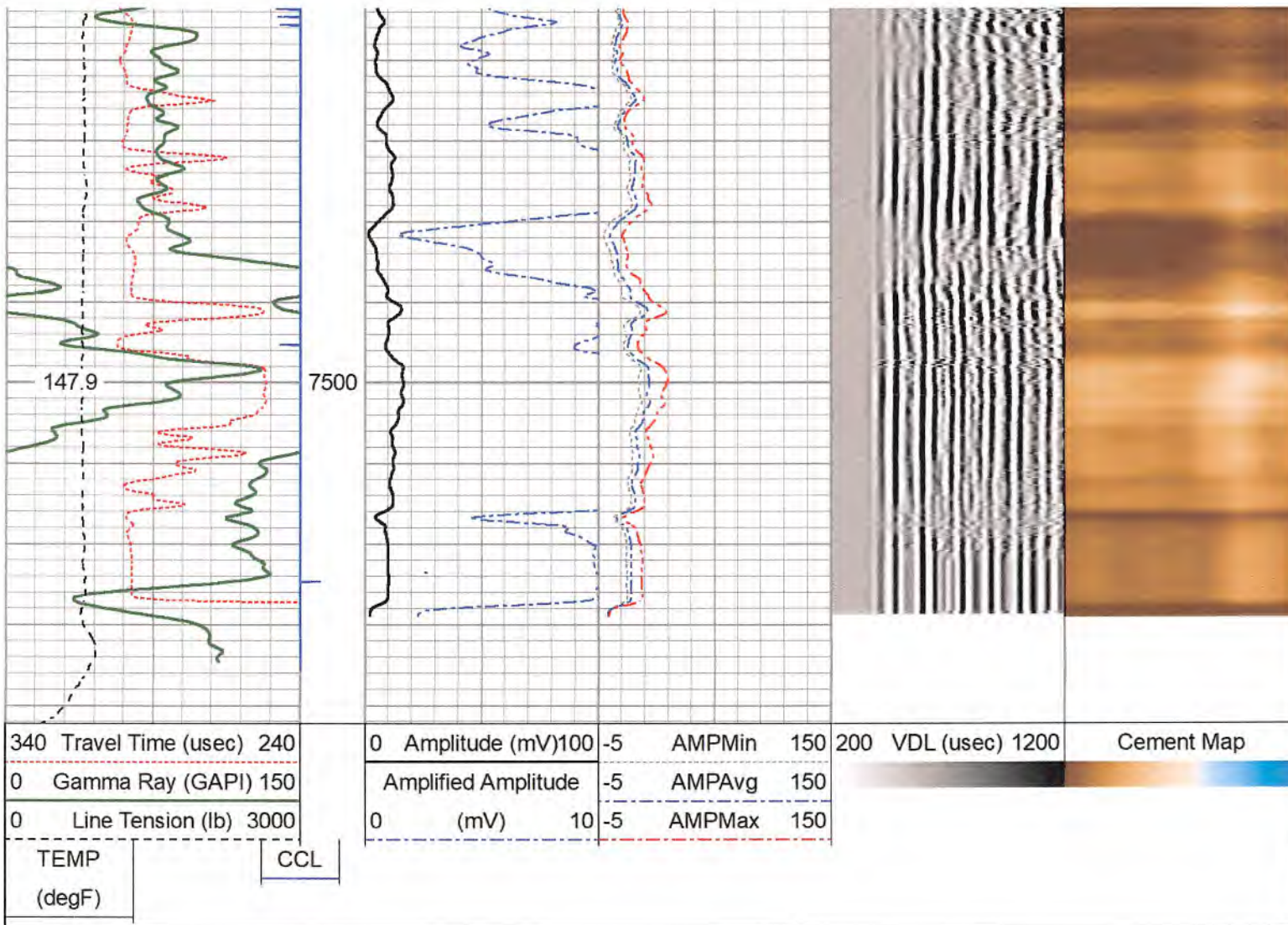
# Repeat Pass (1500 PSI)

Database File c:\users\logbox\desktop\antero red lady\antero\_rlp\_baldy\_3h.db  
 Dataset Pathname rcb/pass2  
 Presentation Format tt\_rcbl\_std\_bw  
 Dataset Creation Sat Aug 13 10:32:43 2022  
 Charted by Depth in Feet scaled 1:240

340	Travel Time (usec)	240	0	Amplitude (mV)	100	-5	AMPMin	150	200	VDL (usec)	1200	Cement Map
0	Gamma Ray (GAPI)	150	Amplified Amplitude			-5	AMPAvg	150				
0	Line Tension (lb)	3000	0	(mV)	10	-5	AMPMax	150				
TEMP (degF)		CCL										







**Log Variables** Database: \users\logbox\desktop\antero red lady\antero\_rlp\_baldy\_3h.db  
Dataset field/well/rcbl/pass4/\_vars\_

**Top - Bottom**

BOREID in 8.5	BOTTEMP degF 149.4	CASEOD in 5.5	CASETHCK in 0.42	CASEWGHT lb/ft 23	MAXAMPL mV 72	MINAMPL mV 1	MINATTN db/ft 0.8
PERFS No	PPT usec 368	SRFTEMP degF 62	TDEPTH ft 7521				

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**Variable Description**

BOREID : Borehole I.D.	CASEWGHT : Casing Weight	PERFS : Perforation Flag
BOTTEMP : Bottom Hole Temperature	MAXAMPL : Maximum Amplitude	PPT : Predicted Pipe Time
CASEOD : Casing O.D.	MINAMPL : Minimum Amplitude	SRFTEMP : Surface Temperature
CASETHCK : Casing Thickness	MINATTN : Minimum Attenuation	TDEPTH : Total Depth

**Calibration Report**

Database File      c:\users\logbox\desktop\antero red lady\antero\_rlp\_baldy\_3h.db  
 Dataset Pathname  rcbl/pass4  
 Dataset Creation   Sat Aug 13 10:41:25 2022

**Gamma Ray Calibration Report**

Serial Number:           GCT275-0000\_base  
 Tool Model:             GCT275-0000  
 Performed:             Wed May 29 12:12:35 2019

Calibrator Value:        1094.2            GAPI

Background Reading:     55.7                cps  
 Calibrator Reading:     1704.2            cps

Sensitivity:             0.6638            GAPI/cps

**Segmented Cement Bond Log Calibration Report**

Serial Number:           RBT275C\_Base  
 Tool Model:             RADII-275C

Calibration Casing Diameter:  5.500            in  
 Calibration Depth:       634.170           ft

**Master Calibration, performed Fri Aug 12 23:00:52 2022:**

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.011	0.603	1.000	71.921	115.587	2.273
CAL	-0.012	0.854				
5'	-0.011	0.560	1.000	71.921	124.073	2.398
SUM						
S1	-0.015	0.576	0.000	100.000	169.218	2.487
S2	-0.010	0.579	0.000	100.000	169.673	1.717
S3	-0.010	0.592	0.000	100.000	165.995	1.714
S4	-0.010	0.582	0.000	100.000	169.005	1.700
S5	-0.010	0.580	0.000	100.000	169.382	1.776

S6	-0.010	0.589	0.000	100.000	166.942	1.726
S7	-0.010	0.594	0.000	100.000	165.502	1.715
S8	-0.011	0.611	0.000	100.000	160.716	1.777

Internal Reference Calibration, performed Fri Aug 12 14:34:50 2022:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.012	0.854	1.000	0.000

Air Zero Calibration, performed Fri Aug 12 14:32:56 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	

Inclinometer Calibration Report

	Performed:	(Not Performed)		Low Ref.	High Ref.	
		Low Read.	High Read.			
X Accelerometer		0.00	1.00	0.00	1.00	gee
Y Accelerometer		0.00	1.00	0.00	1.00	gee
Z Accelerometer		0.00	1.00	0.00	1.00	gee

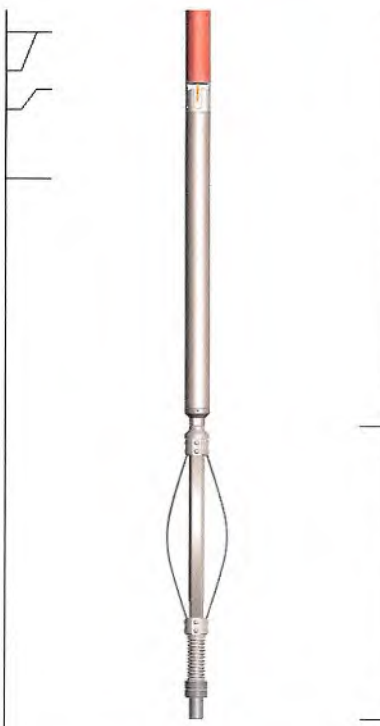
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 Environmental Protection

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
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CCL\$2	6.64					
CCL\$1	6.64					
GCT_Temp	6.09					
GR	5.22		GC-GCT275-0000 (GCT275-0000_base) Probe Gamma Ray - CCL w/ Temp	4.77	2.75	55.00
			CENT-BC275-0000 Probe 2.75" Bowspring Centralizer	2.83	2.75	24.00
Dataset: antero_rlp_baldy_3h.db: field/well/rcbl/pass4 Total length: 22.02 ft Total weight: 127.00 lb O.D.: 2.75 in						

	Company	Antero Resources Corporation		
	Well	Baldy Unit 3H		
	Field	Marcellus		
	County	Wetzel		
	State	WV	Country	USA

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