



Radial Cement Bond
Gamma Ray CCL
Temperature Log

Company Antero Resources Corporation		Company Antero Resources Corporation	
Well Shays Unit 1H	Well Shays Unit 1H		
Field White Oak	Field White Oak		
County Ritchie	County Ritchie	State WV	
State WV			
API # : 47-085-10421-00-00	Permanent Datum	Ground Level	Elevation 1019'
AFE # : A11899-C	Log Measured From	KB = 30'	
Location (LAT, LON): 39.171388, -80.857967	Drilling Measured From	KB	
Township: West Union			
			Other Services None
			Elevation K.B. 1049' D.F. 1049' G.L. 1019'
Date 17 OCT 2022			
Run Number One			
Depth Driller (ft) 20682			
Depth Logger (ft) 7006			
Bottom Logged Interval (ft) 6994			
Top Log Interval Surface			
Open Hole Size (in) 6.75			
Type Fluid Water			
Density / Viscosity (lb/gal) 8.4			
Max. Recorded Temp. (°F) 145.4			
Estimated Cement Top (ft) 5998			
Time Well Ready 09:00 AM			
Time Logger on Bottom 11:30 AM			
Equipment Number 8018			
Location Delmont, PA			
Recorded By T. Trump			
Witnessed By R. Jones			
Casing Record	Size (in)	Weight (lb/ft)	Top (ft)
Conductor String	16	62.64	Surface
Surface String	10.75	40.5	Surface
Intermediate String	7.625	26.4	Surface
Production String	5	18	Surface
			Bottom (ft)
Inclination Information (Approximated Values from Directional Survey)			
KOP	30°	60°	90°
730'	6210'	6620'	7180'

THANK YOU FOR USING GR ENERGY SERVICES

05/11/2023

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 Bottom Log Marker Joint
Log Adjusted 0'
Marker Joint Located @ 5676' - 5686'

Maximum Temperature Recorded was 145.4°F
Maximum Tension was 1350 lbs

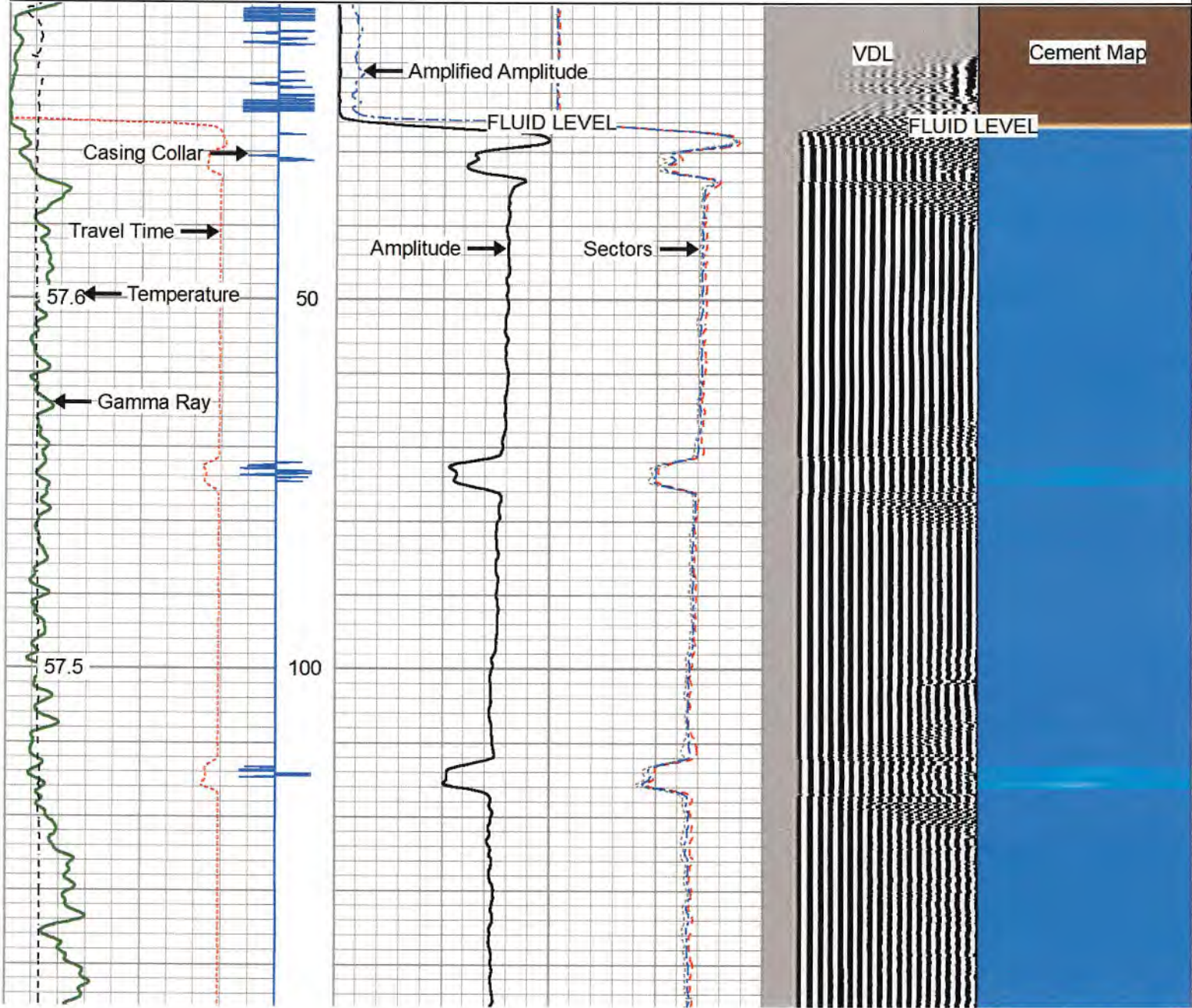
Estimated Top of Cement @ 5998'

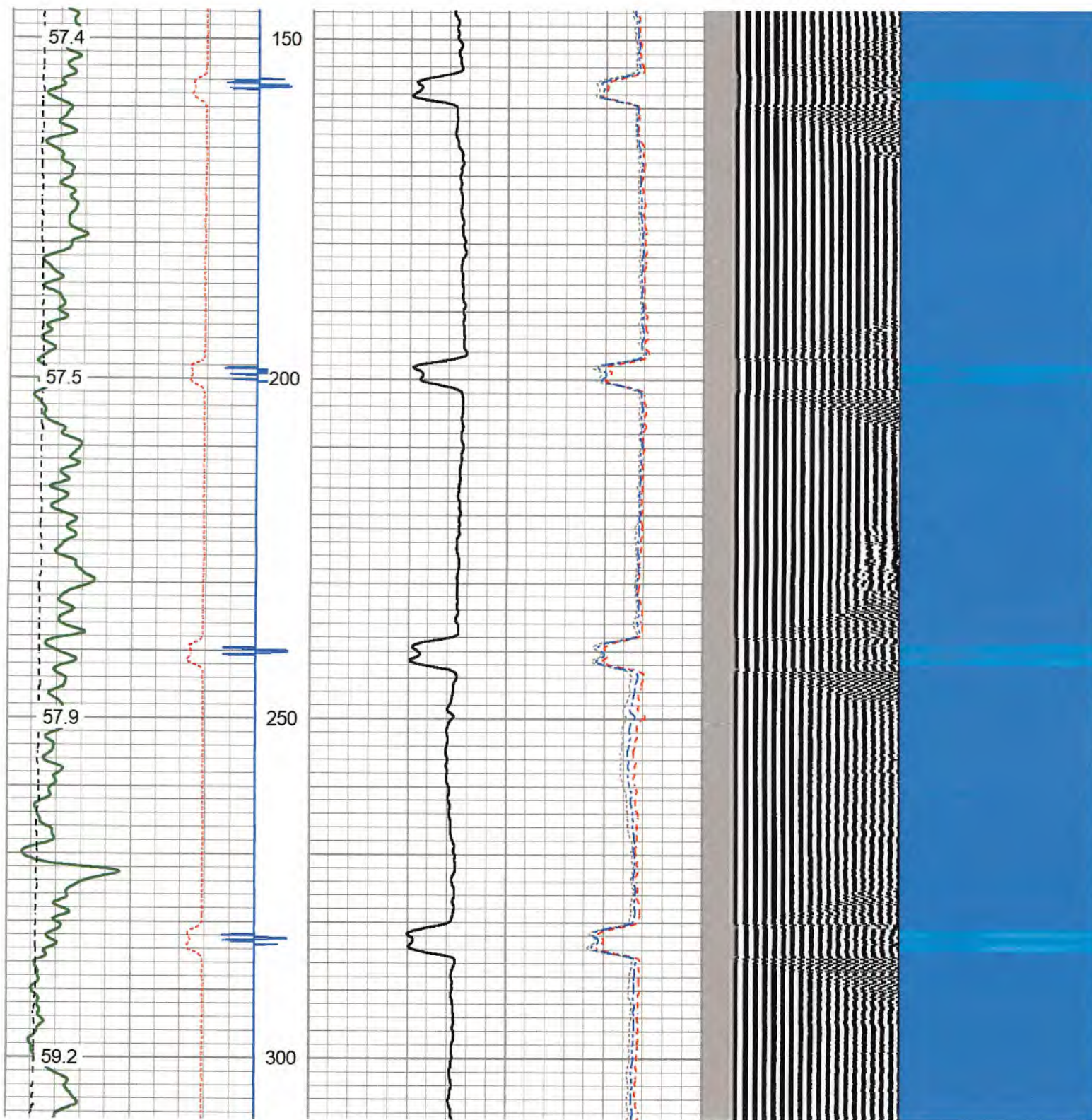


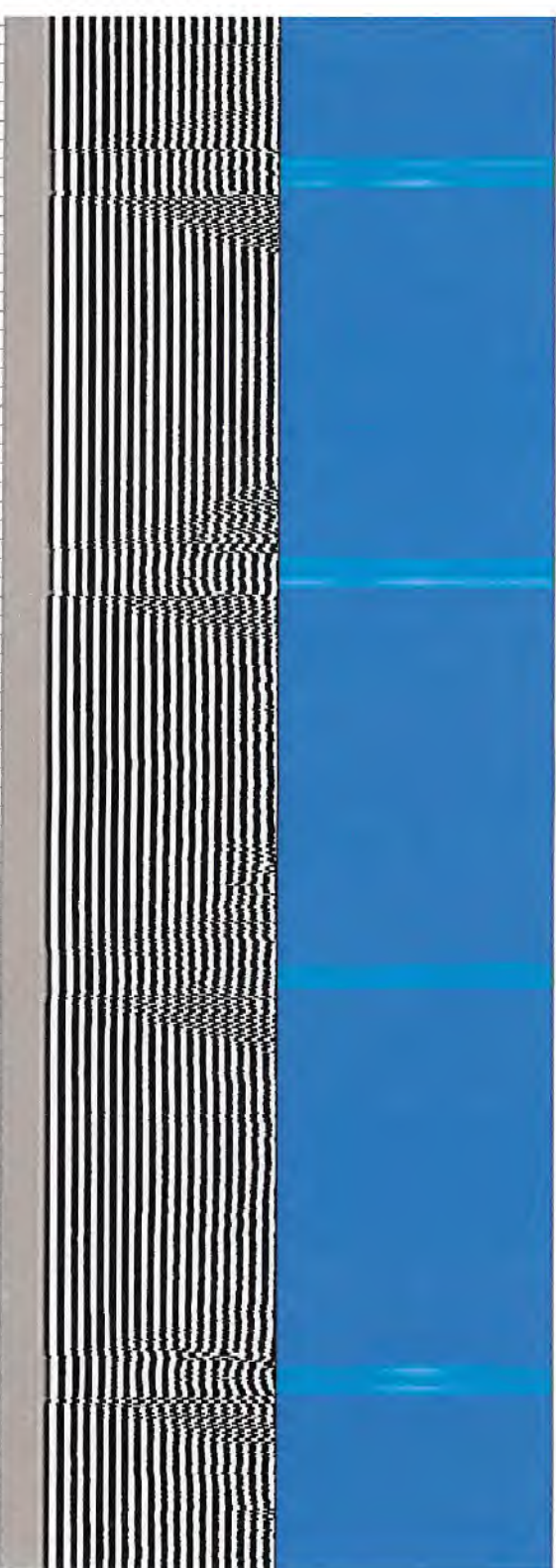
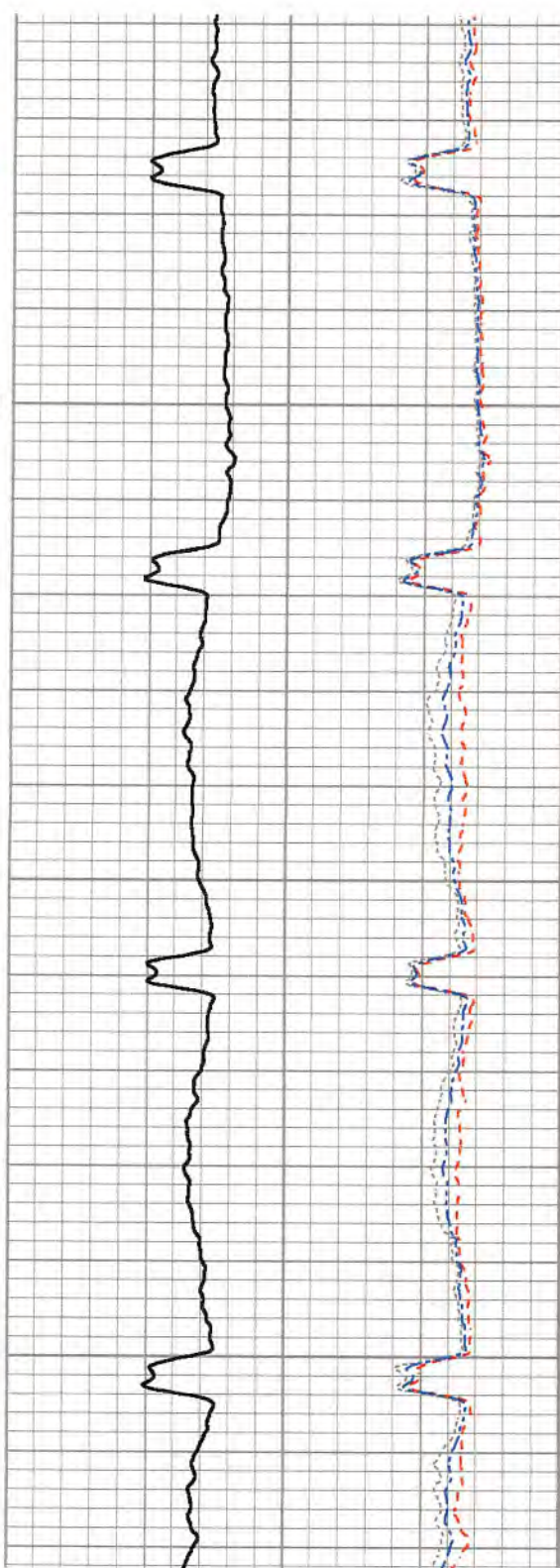
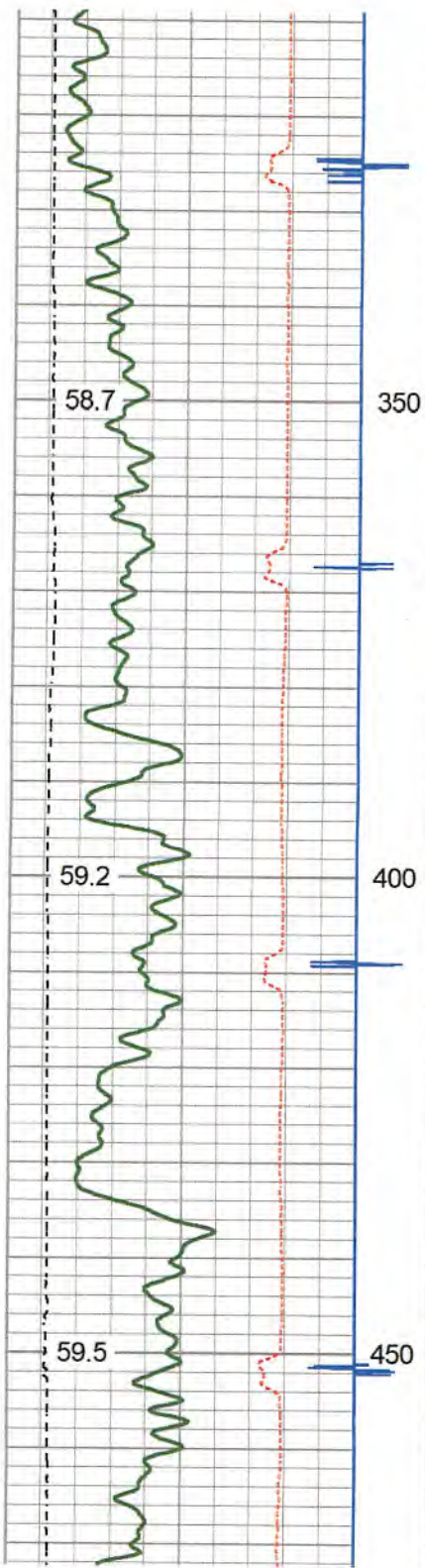
Main Pass (1500 PSI)

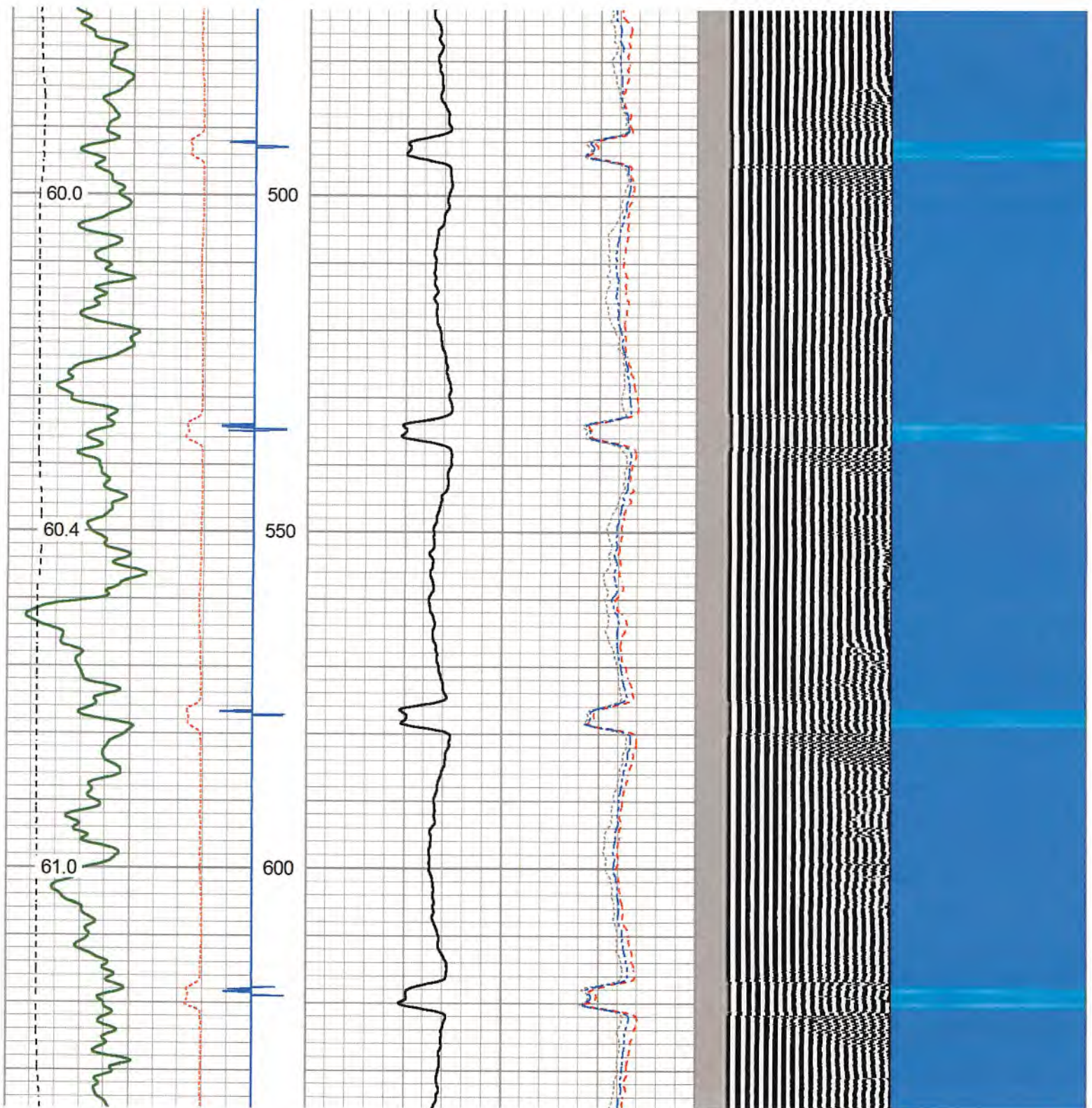
Database File	c:\users\logbox\desktop\cashew\antero_cashew_shays1h.db
Dataset Pathname	rcbl/pass5
Presentation Format	rcbl_std_bw_tt
Dataset Creation	Mon Oct 17 11:40:56 2022
Charted by	Depth in Feet scaled 1:240

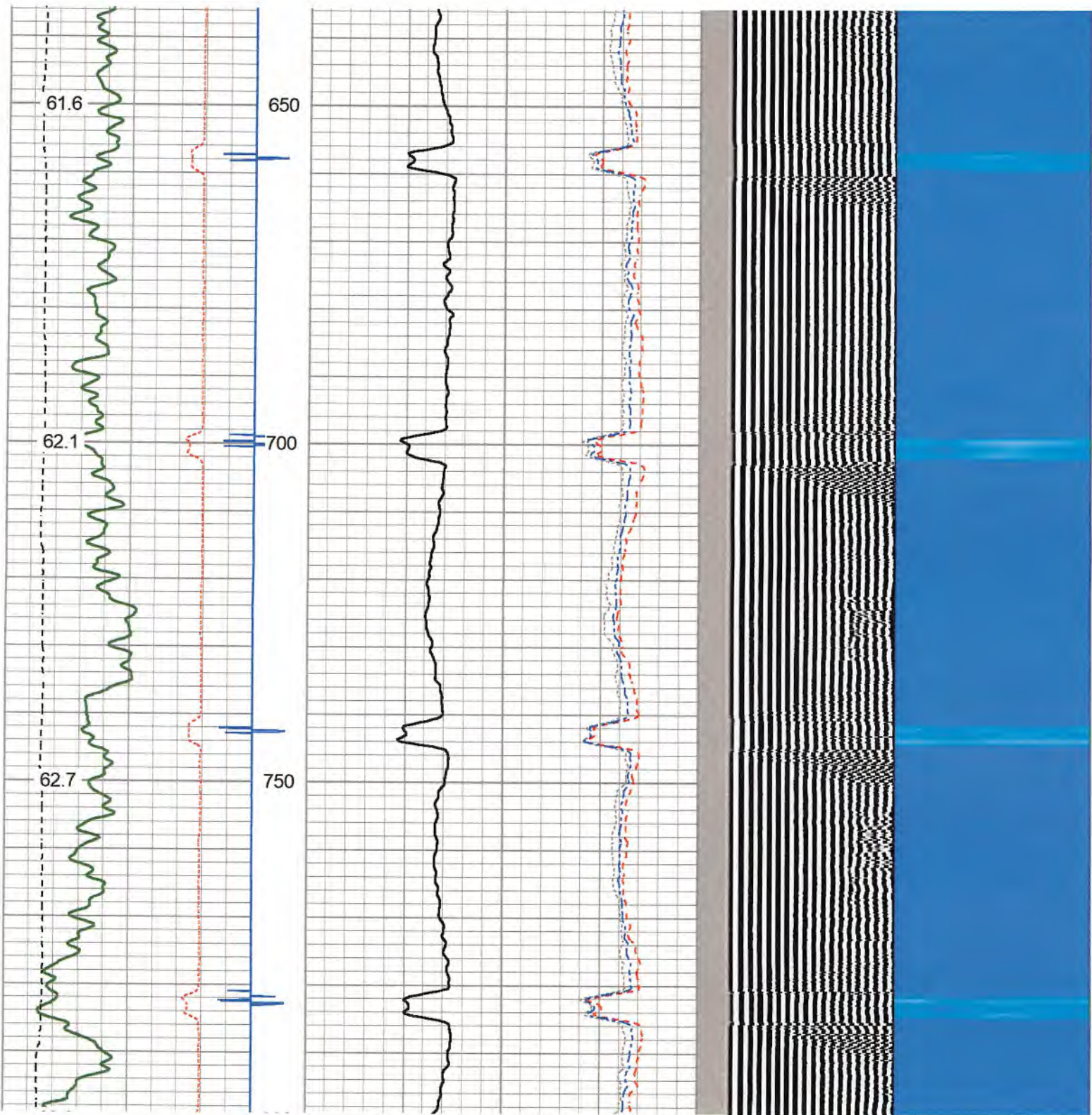
333	TT (usec)	233	0	Amplitude (mV)	100	-5	AMPMin	150	200	VDL (usec)	1200	Cement Map
0	GR (GAPI)	150	Amplified Amplitude			-5	AMPMax	150				
0	LTEN (lb)	3000	0	(mV)	10	-5	AMPAvg	150				
TEMP (degF)		CCL										

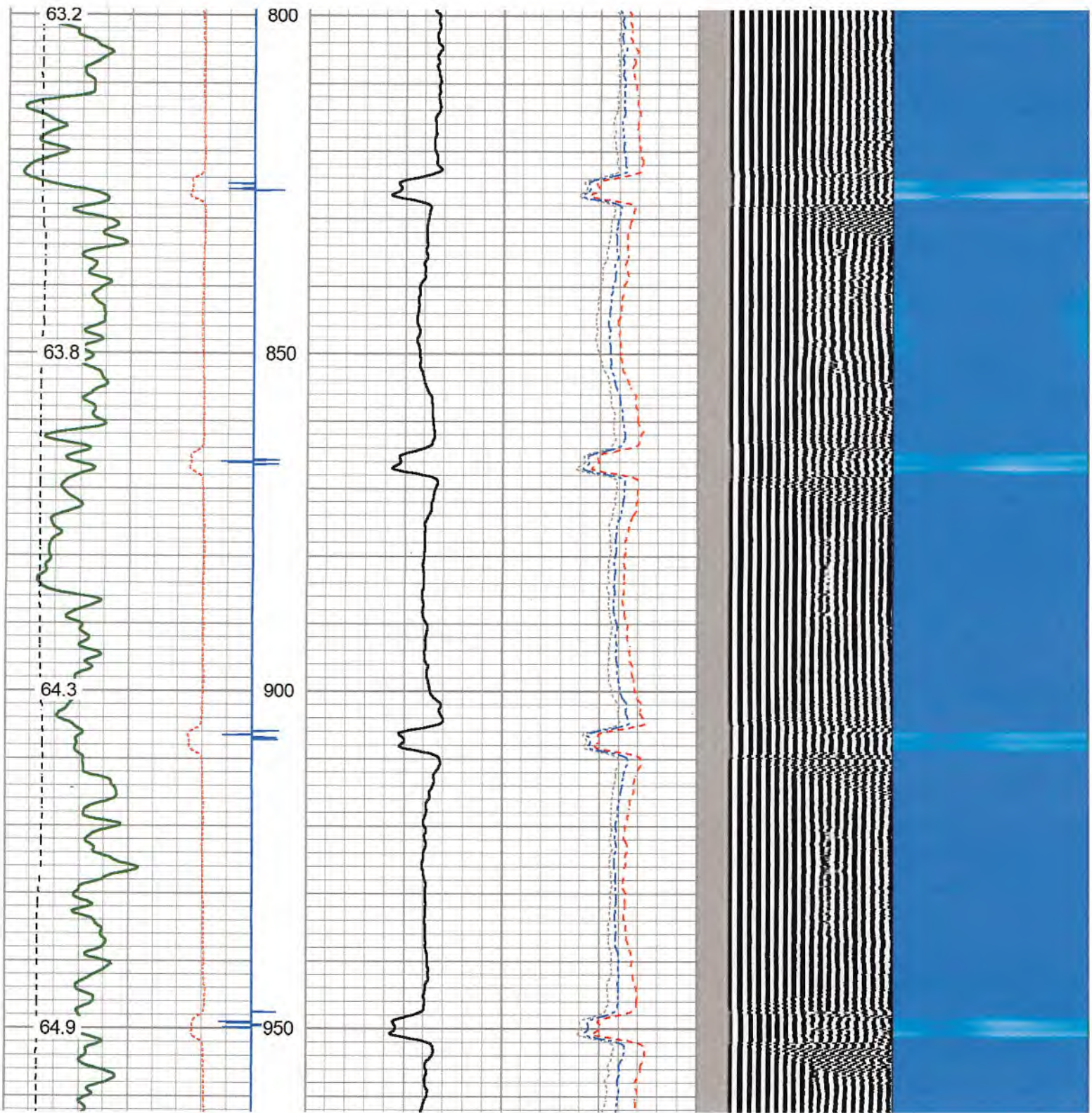


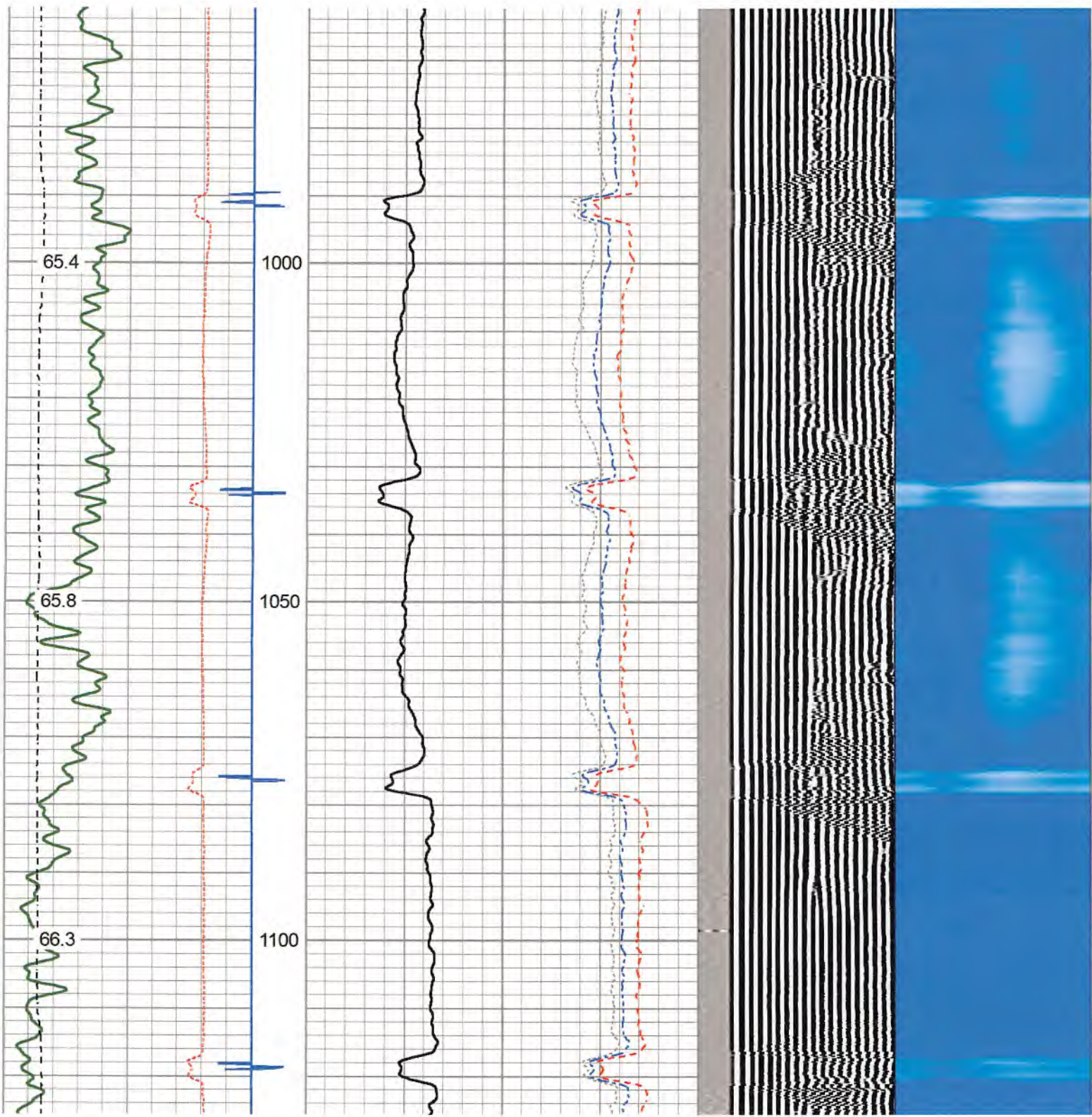


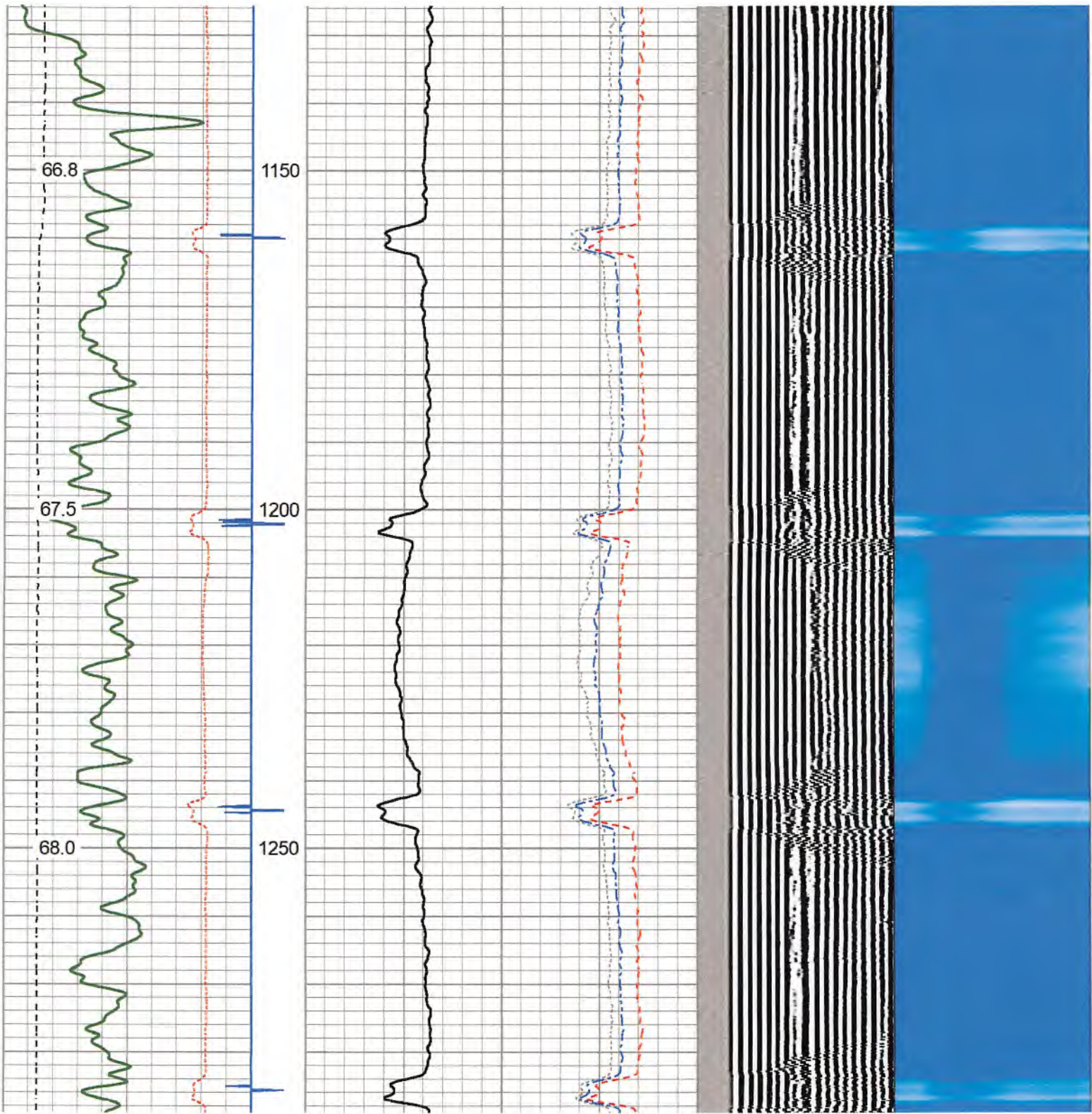


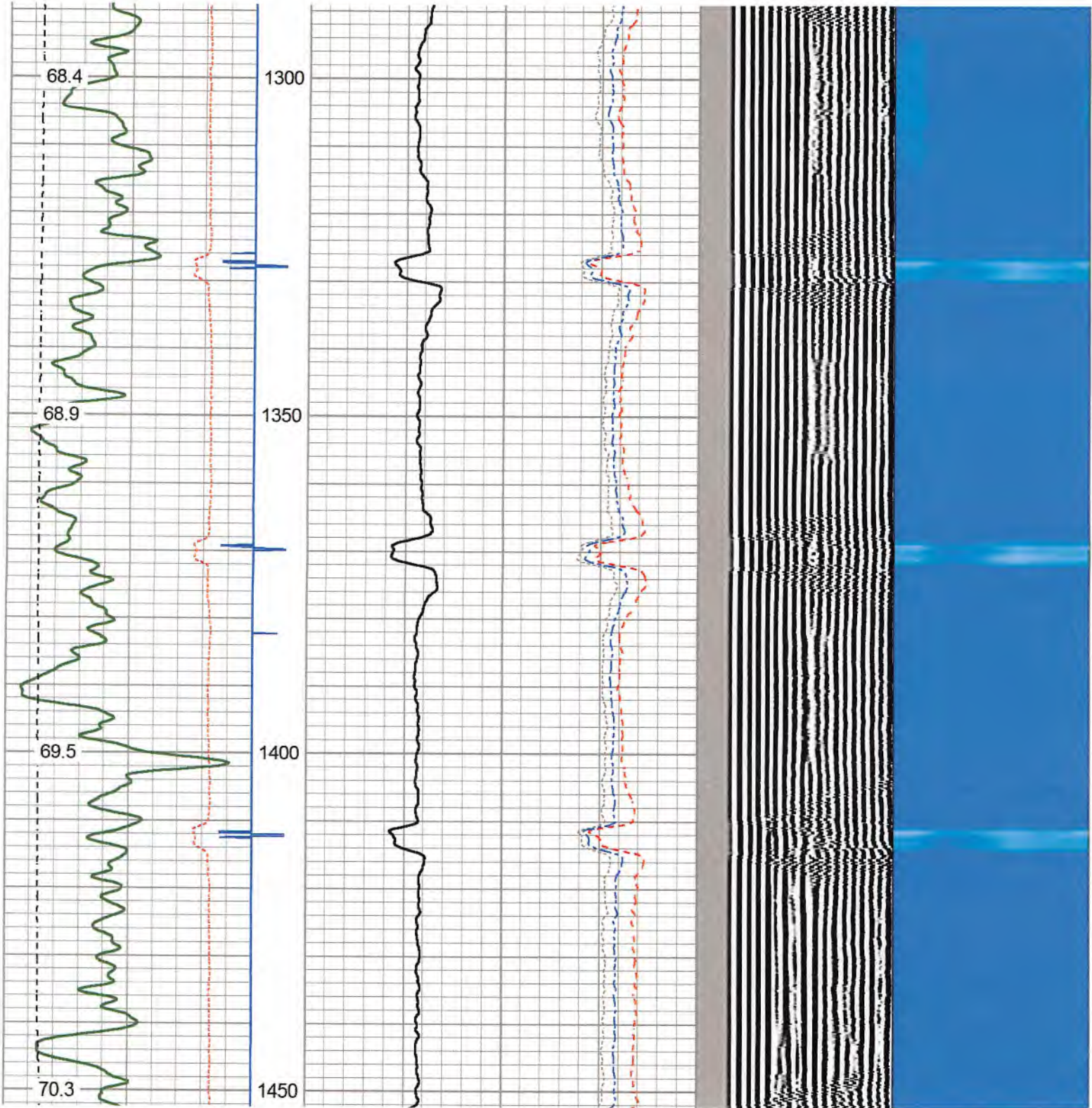


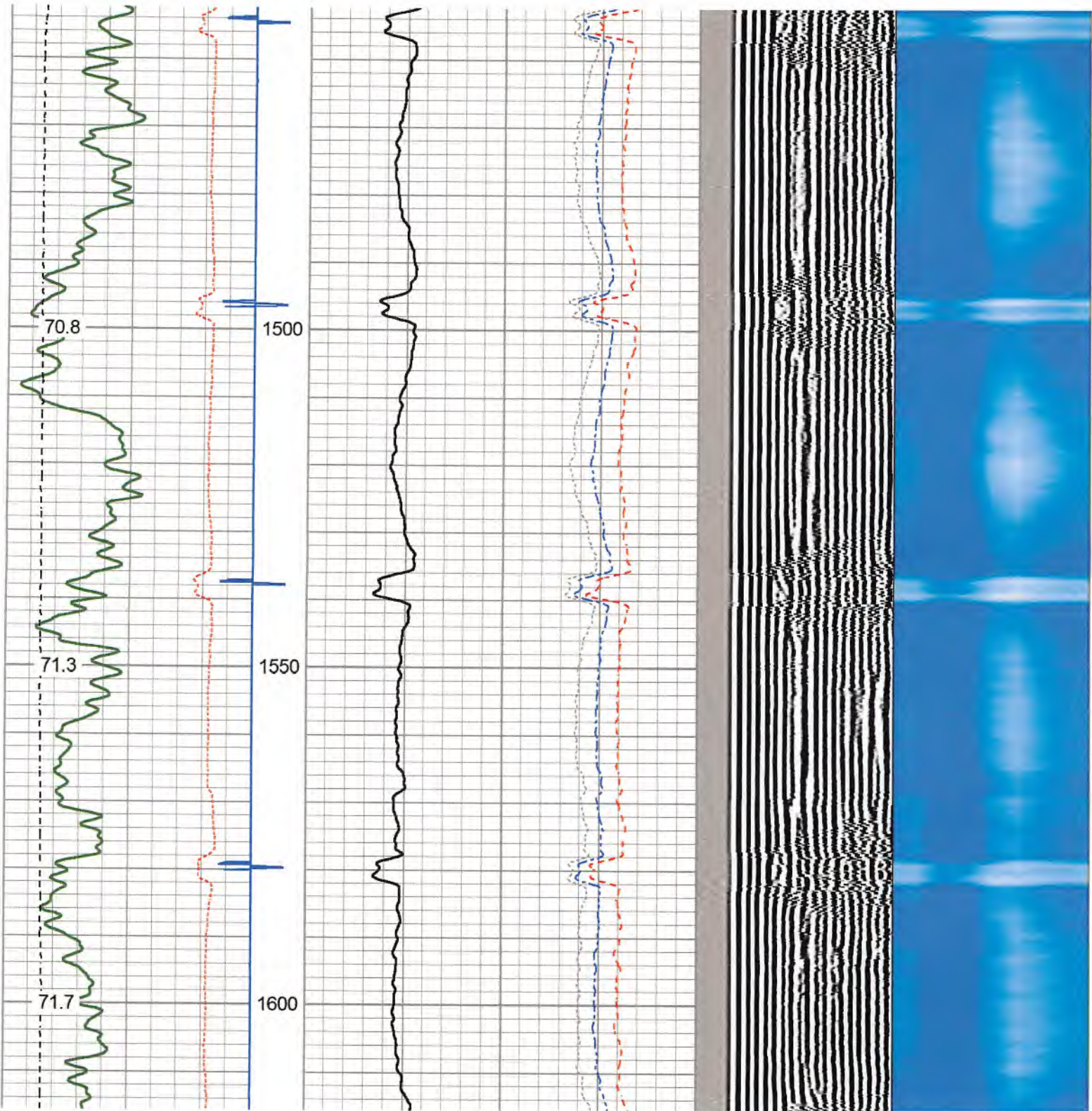


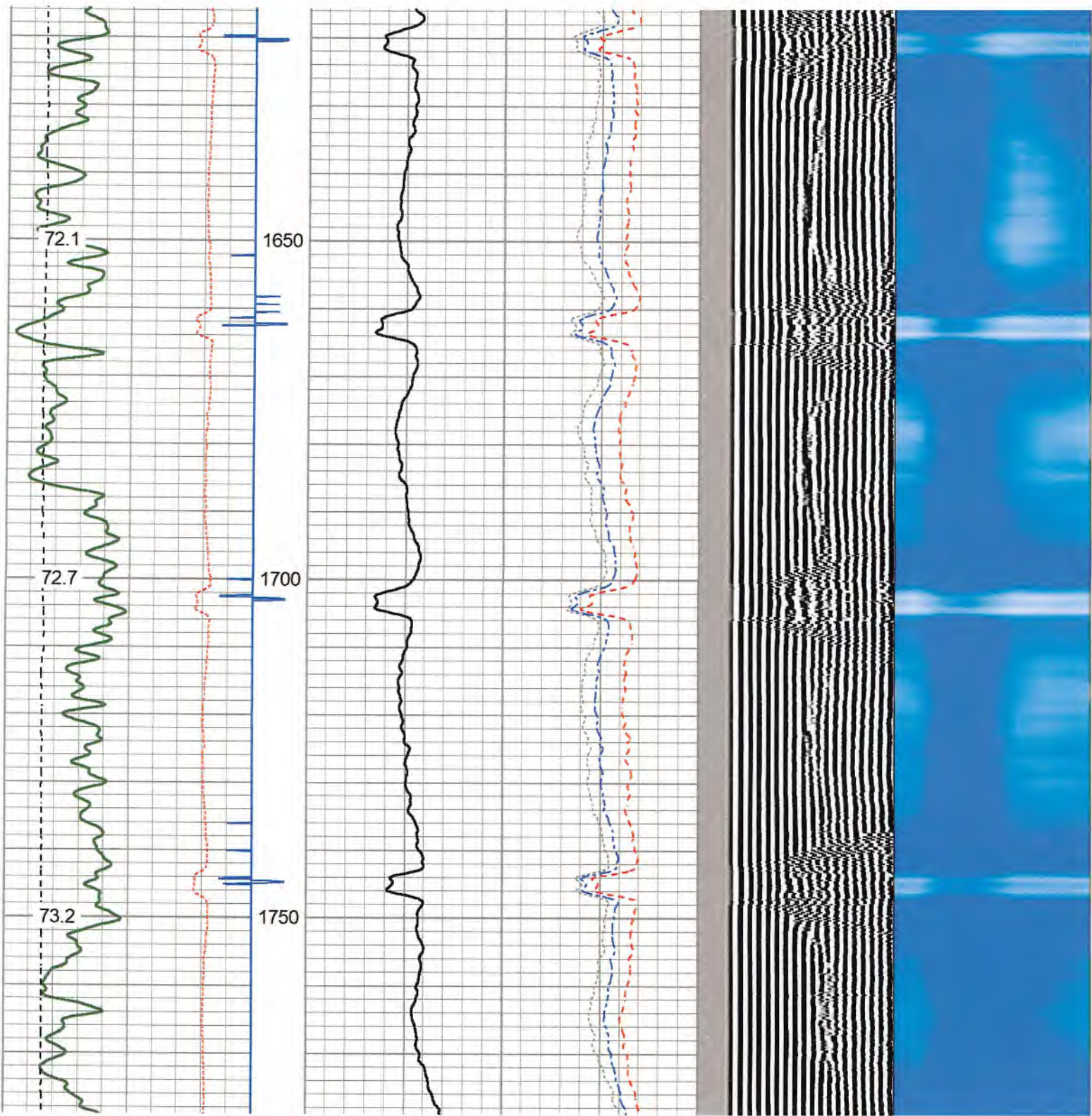


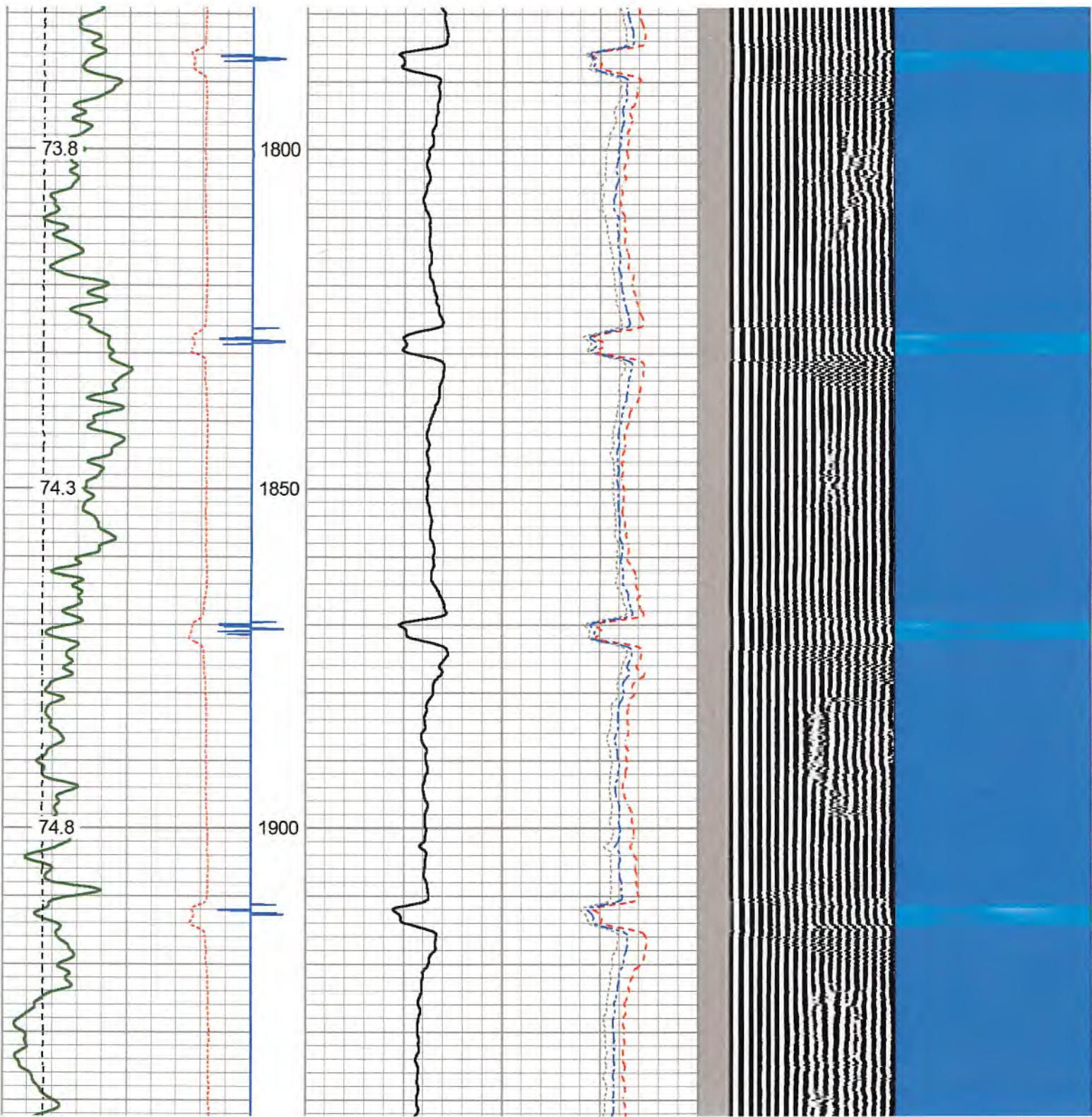


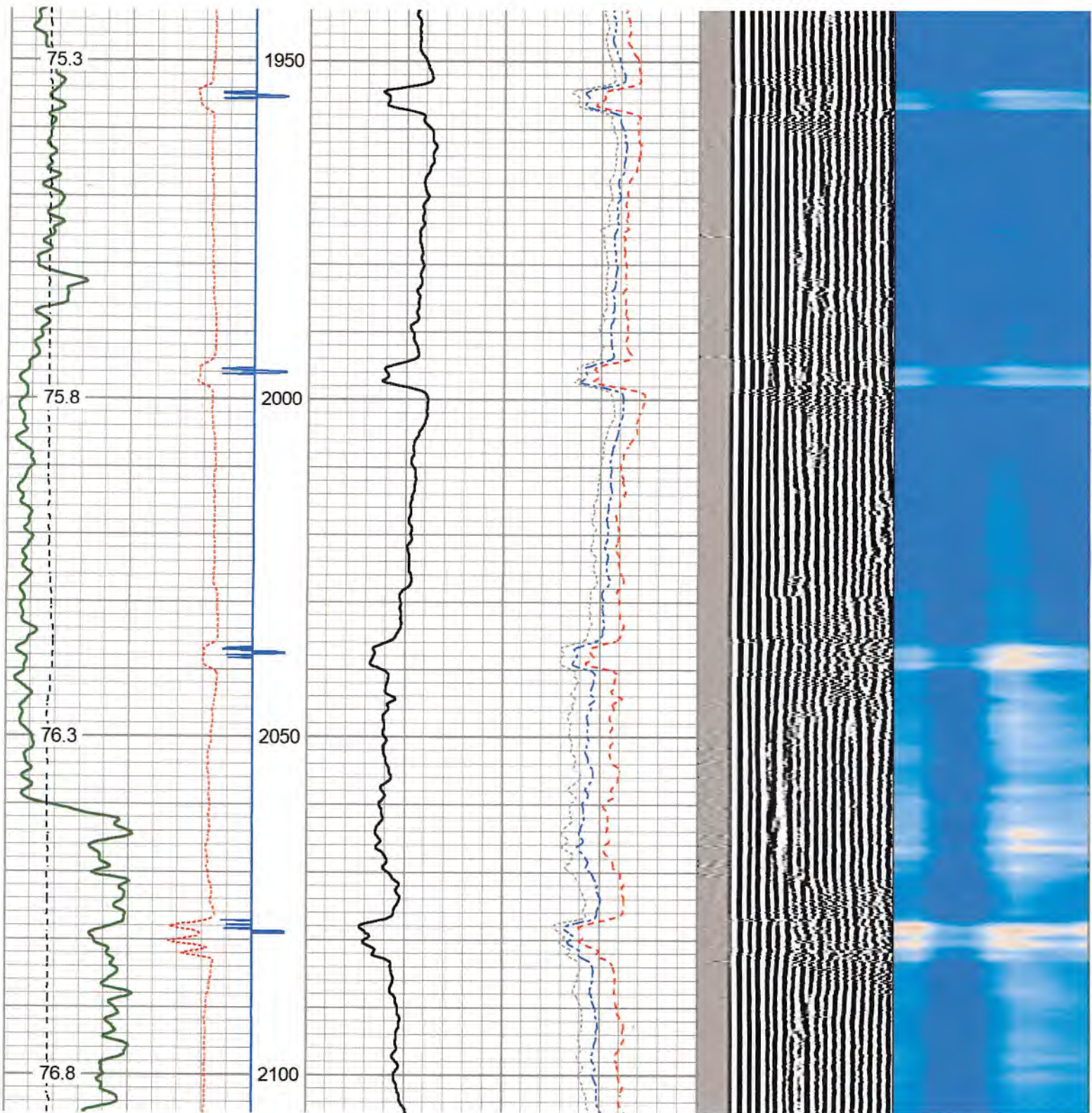


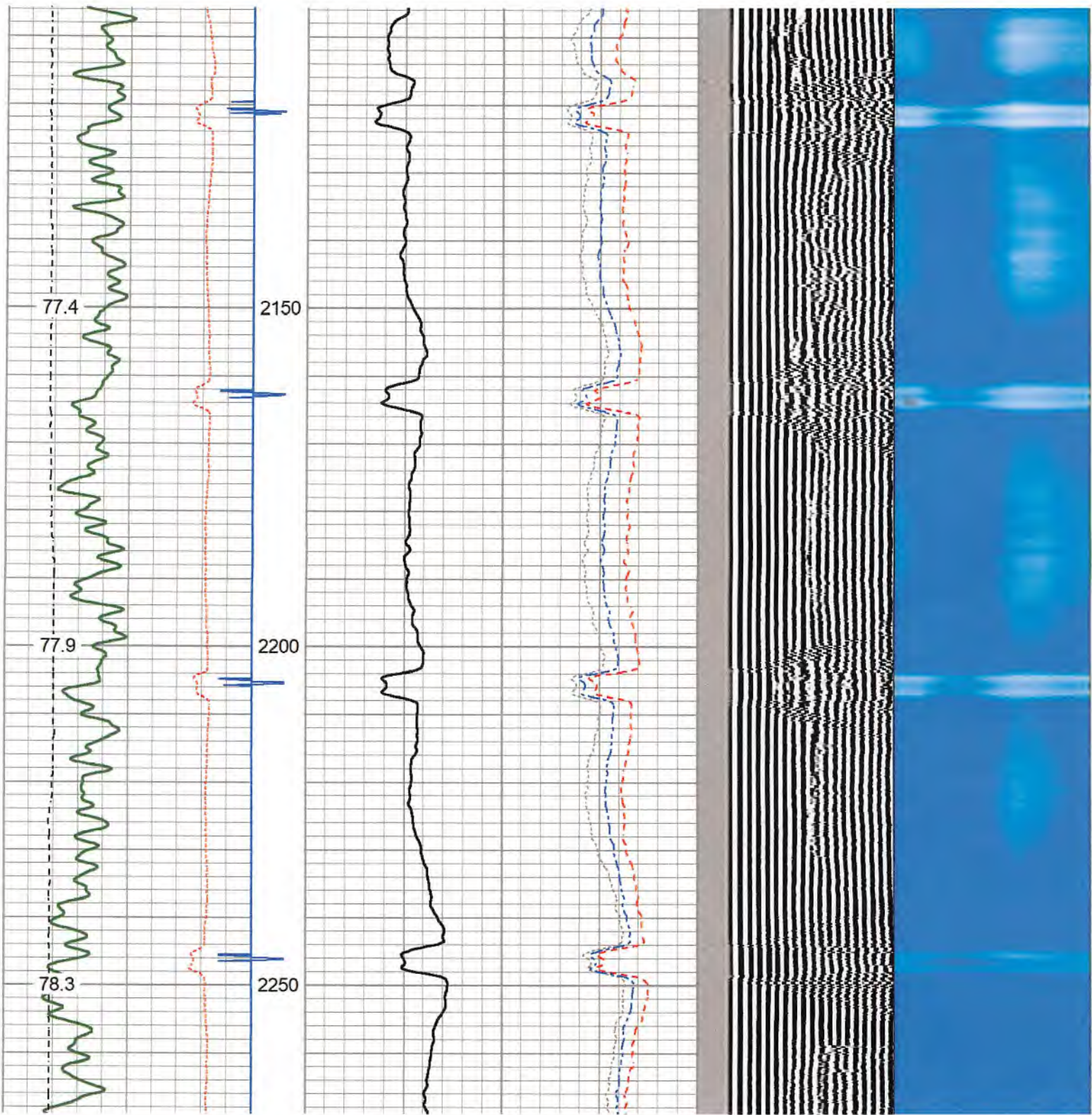


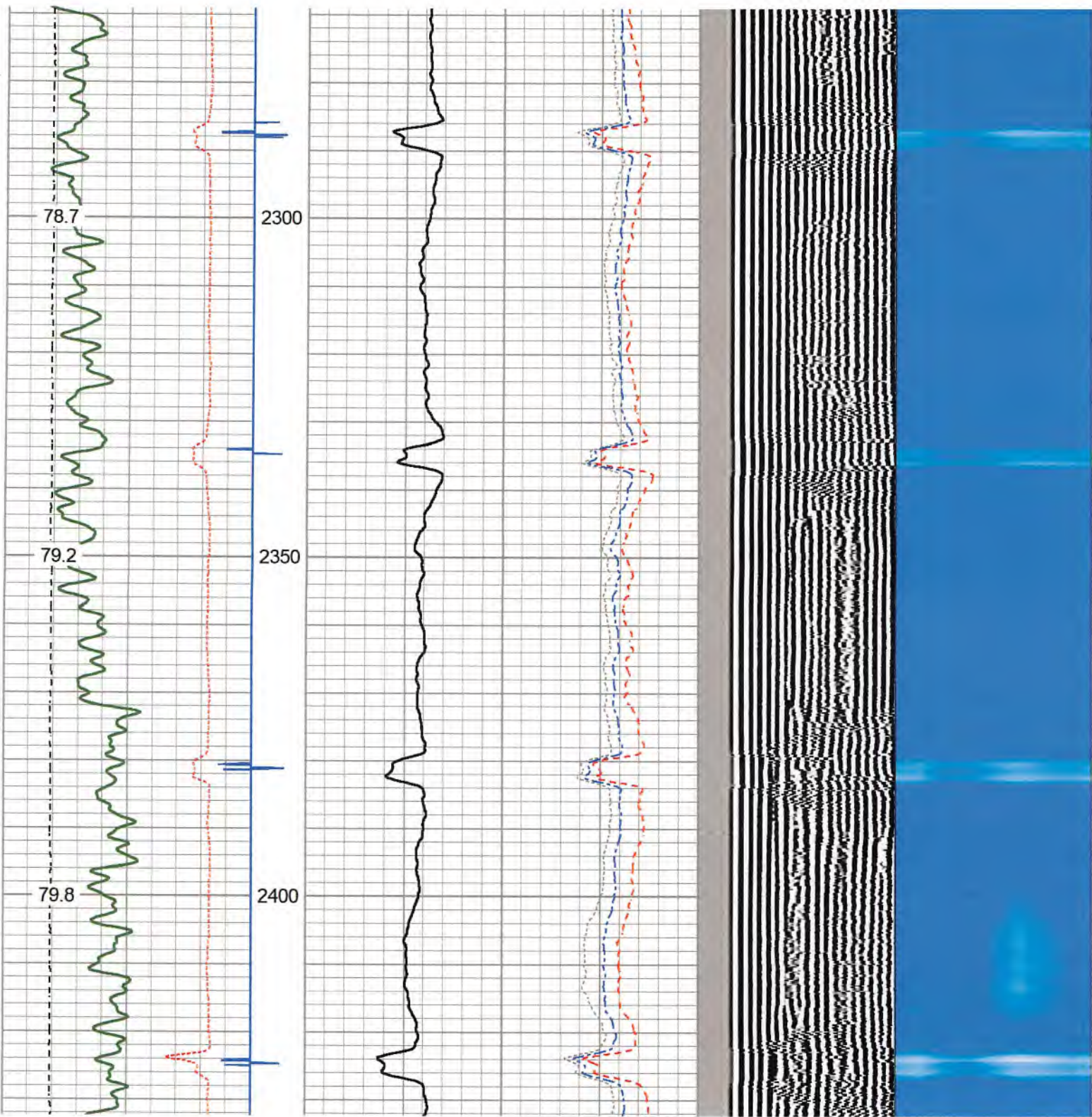


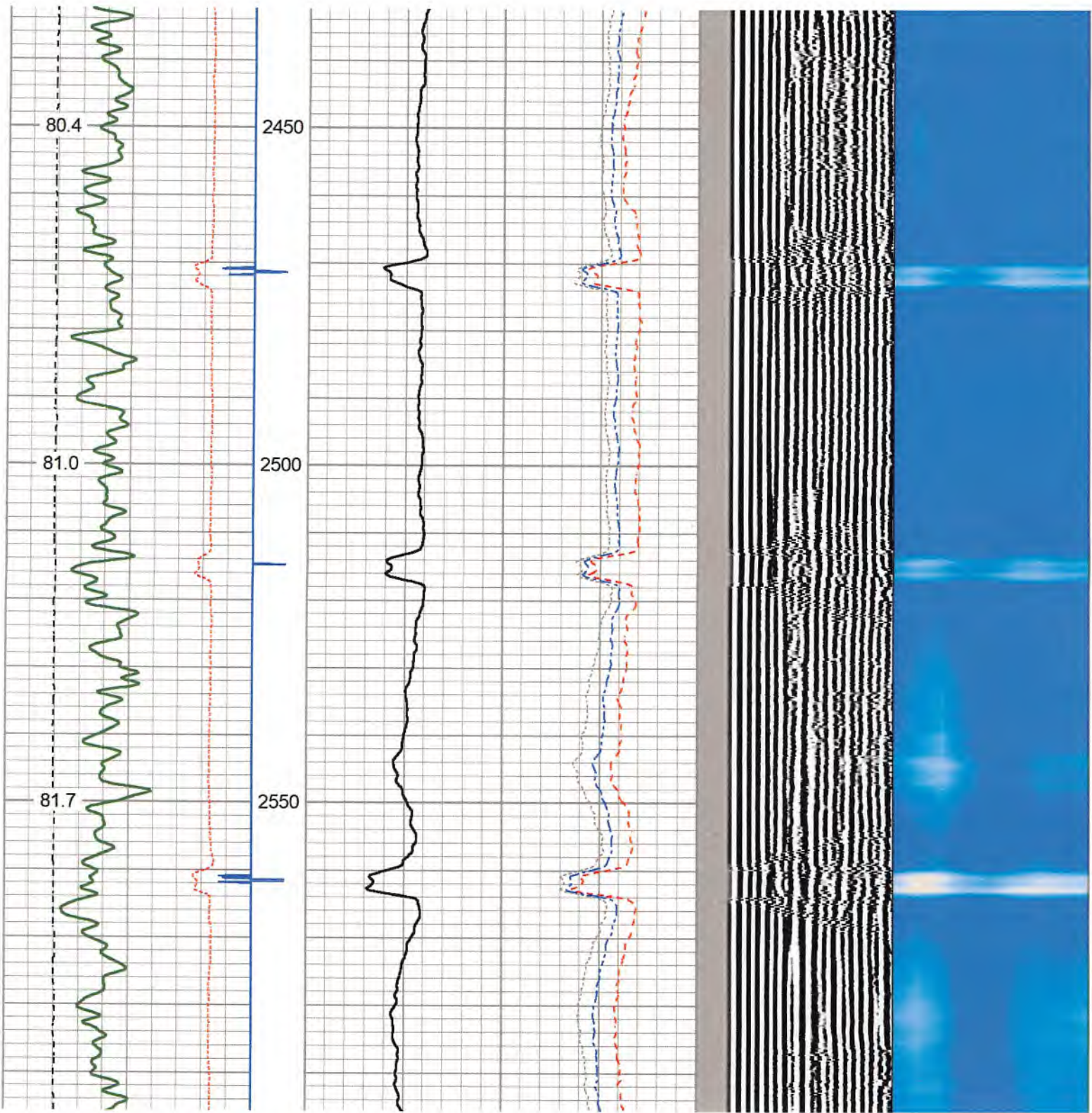


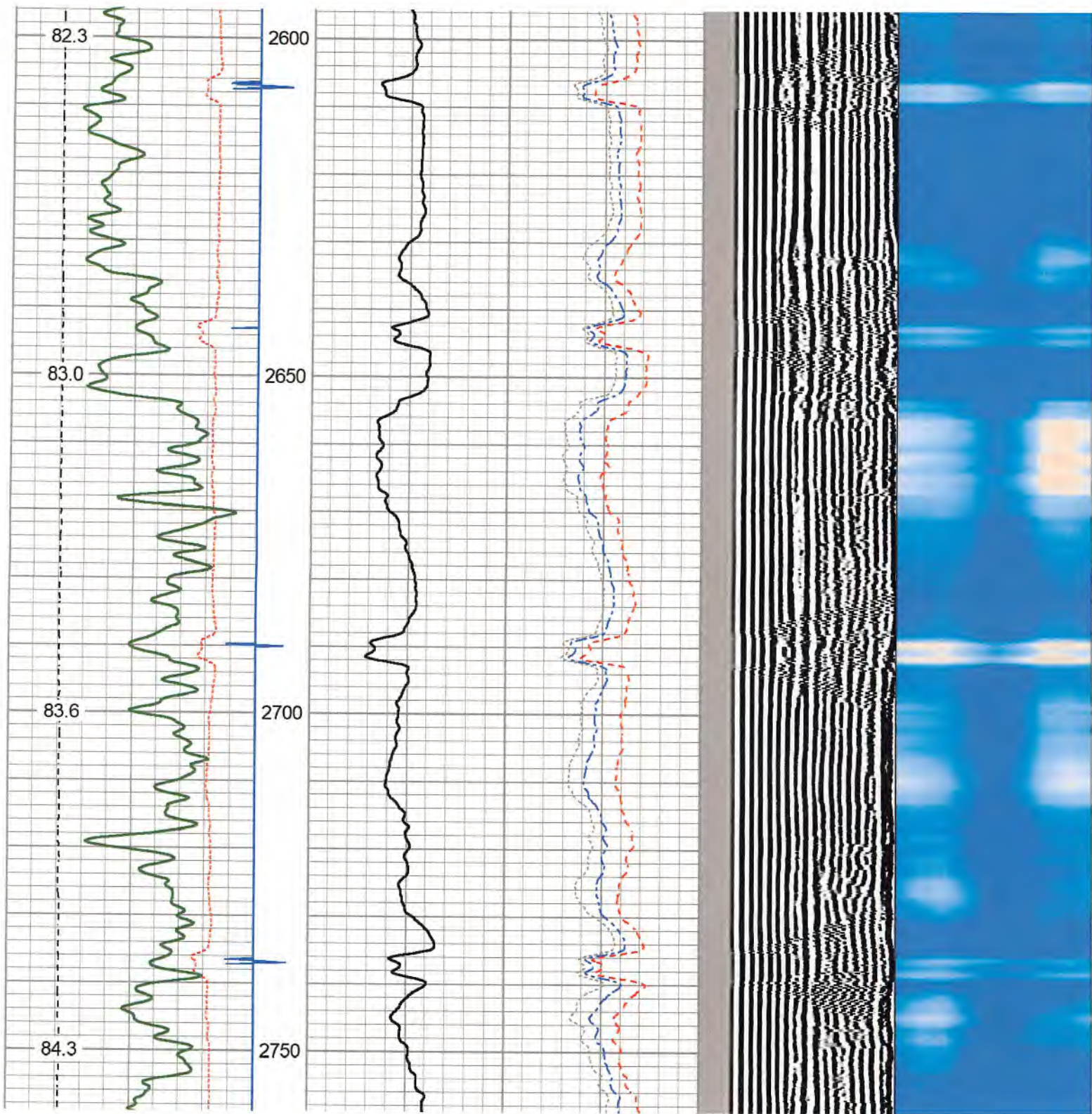


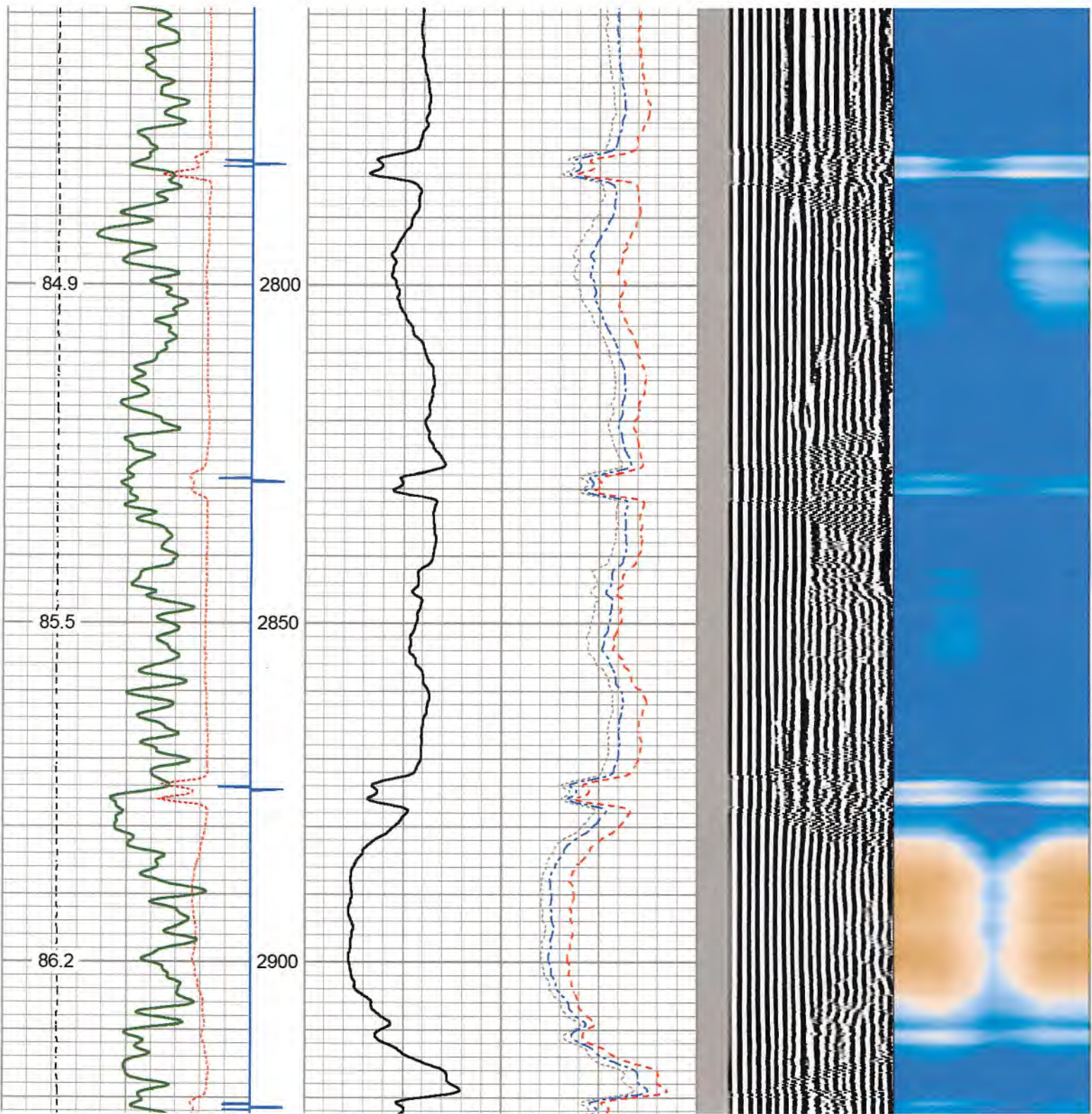


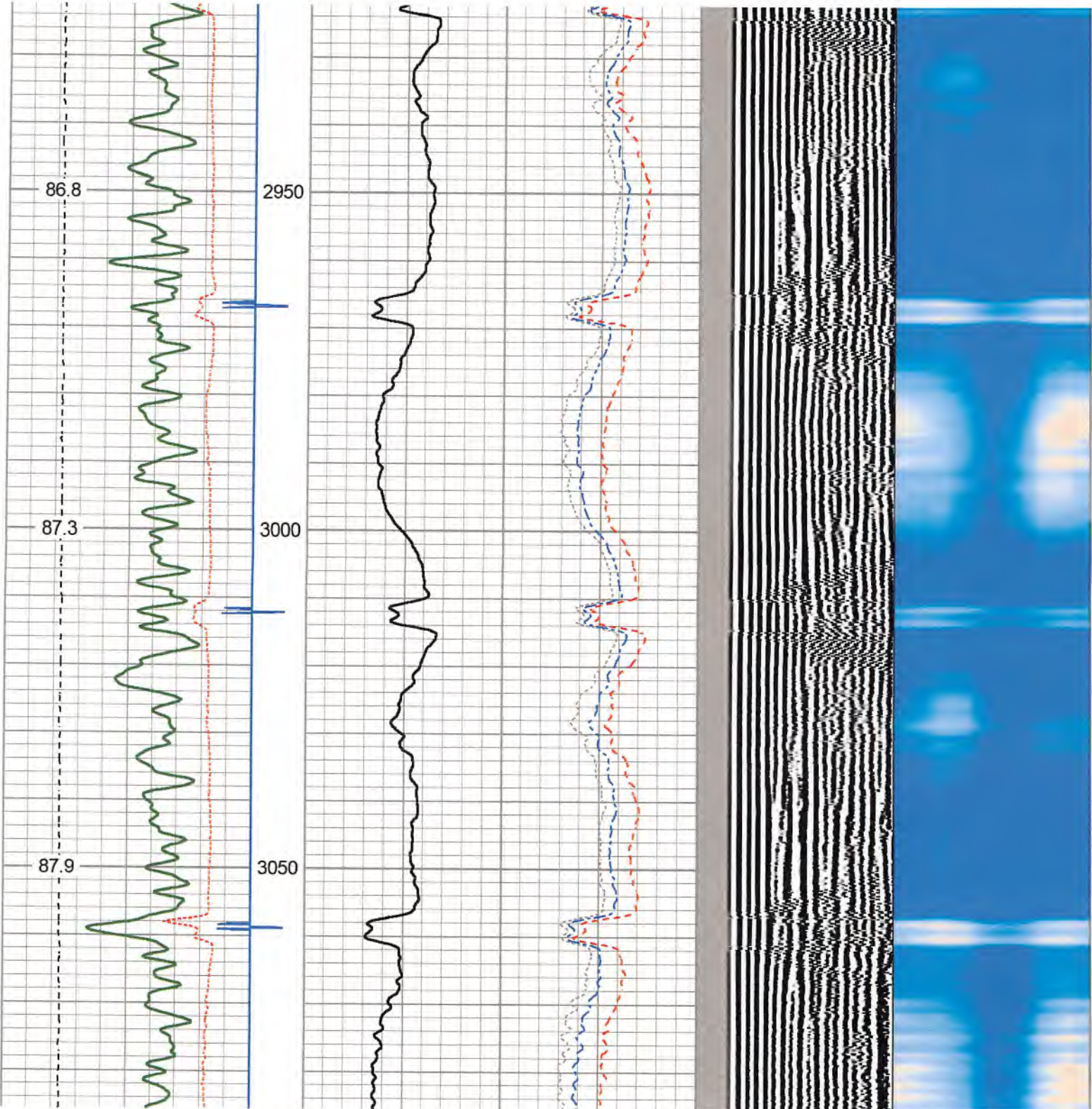


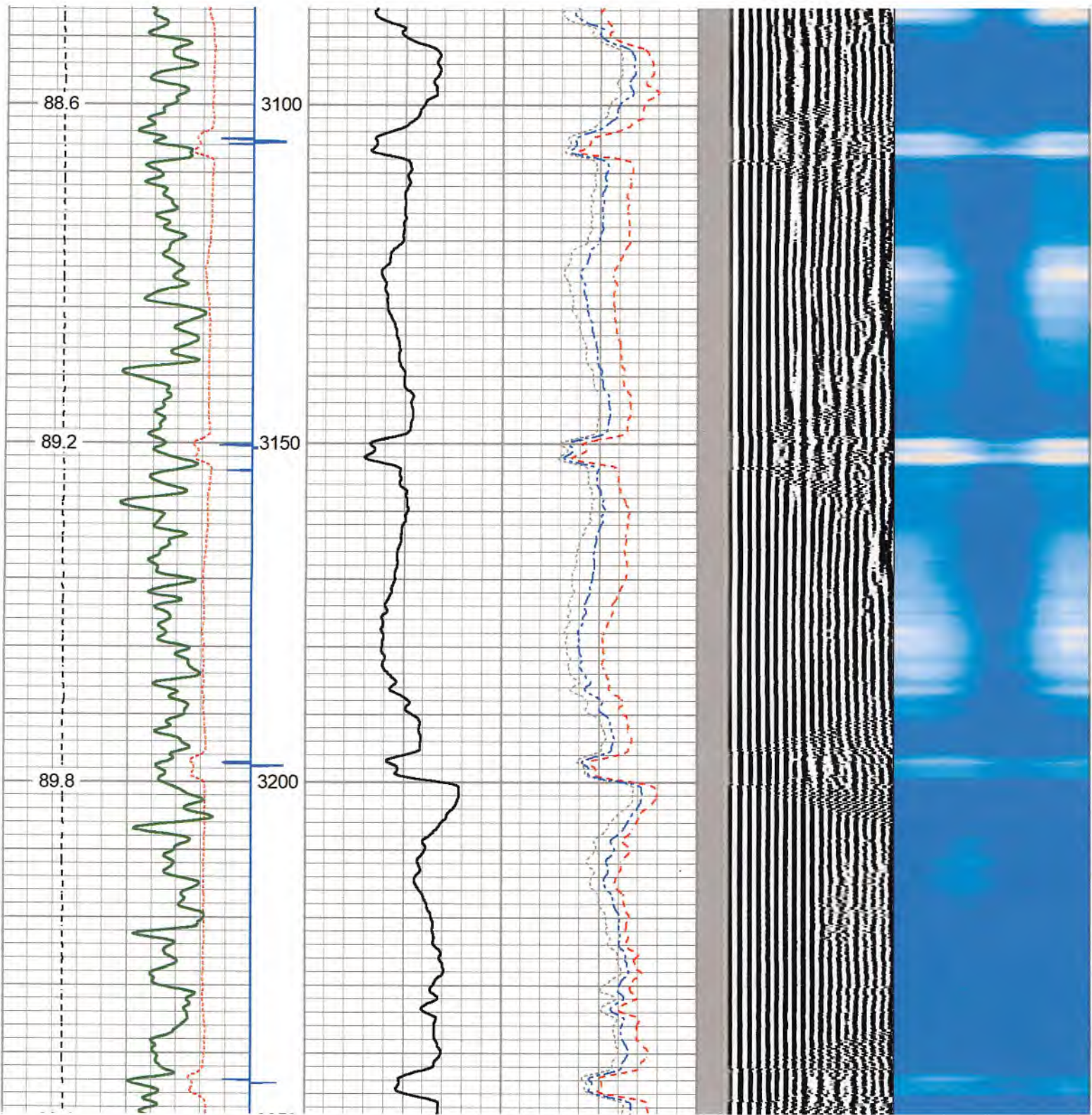


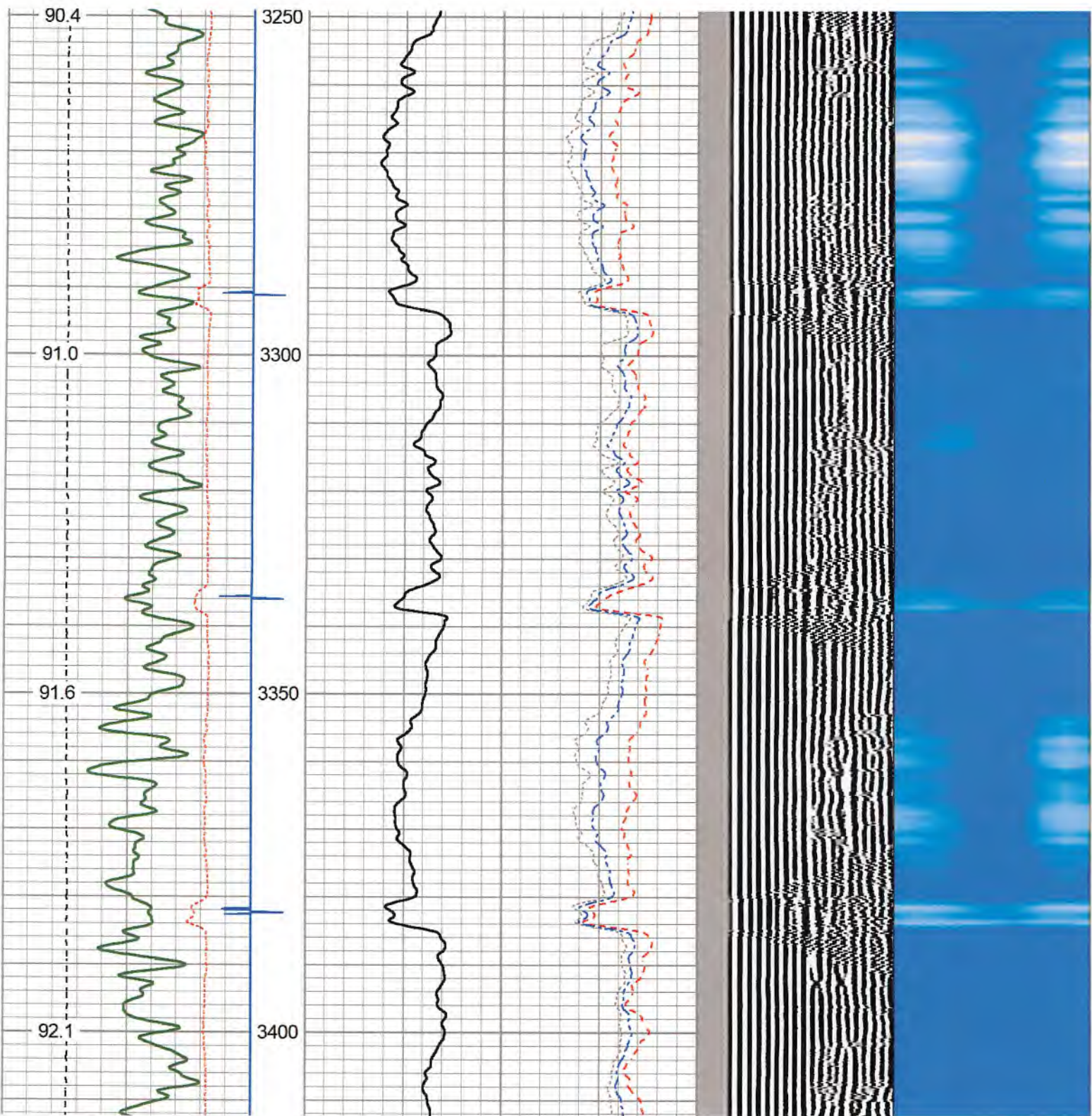


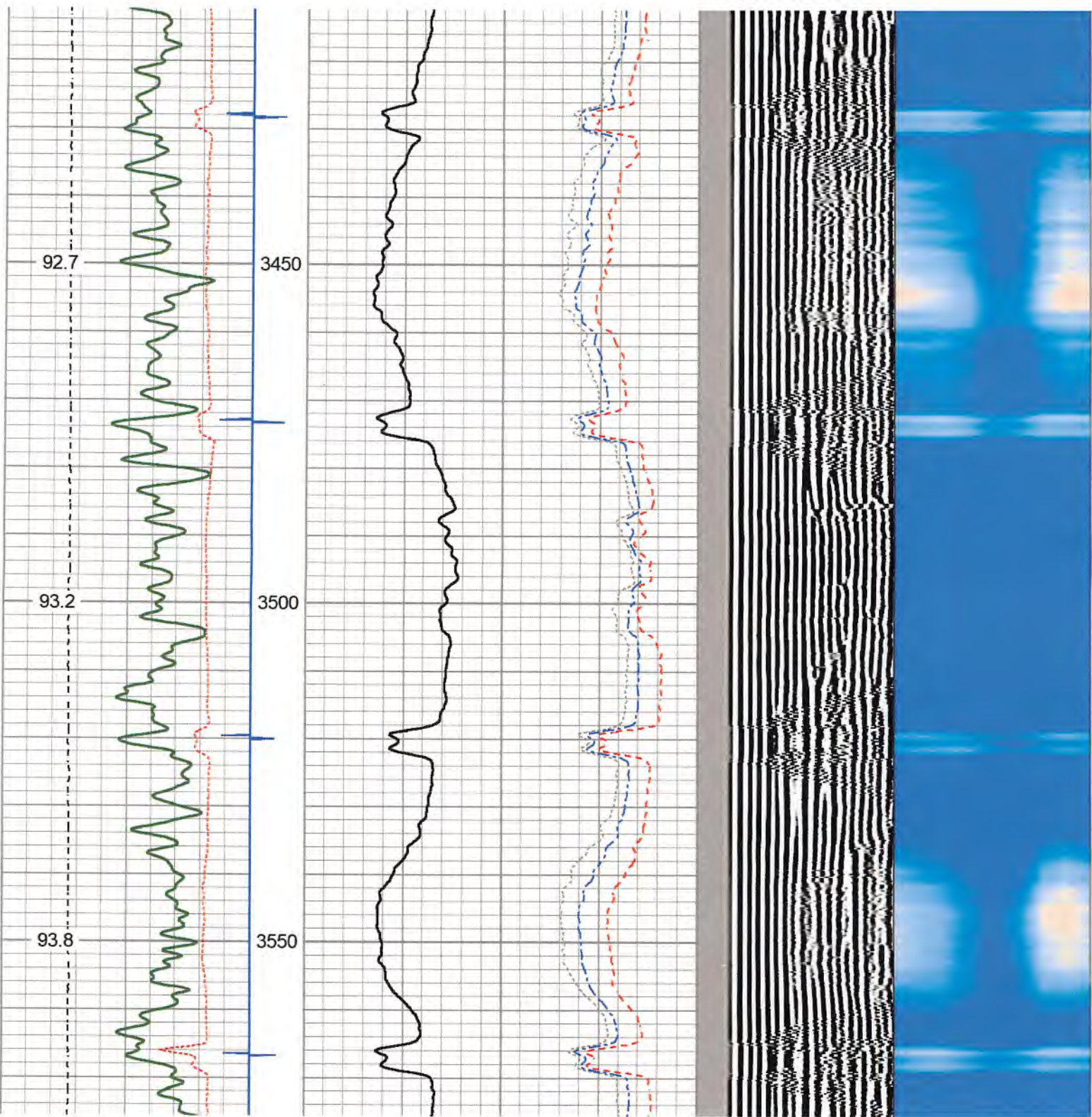


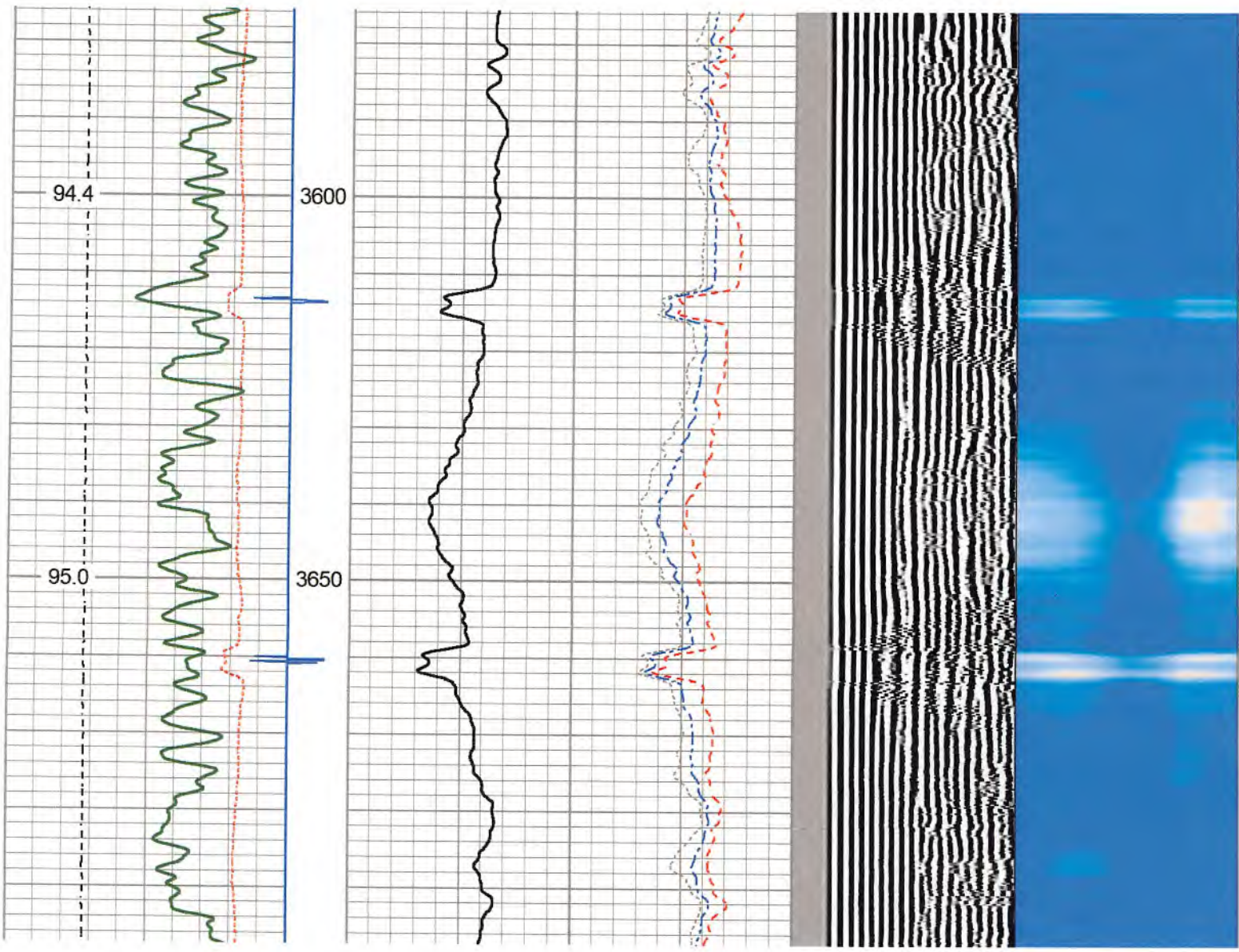


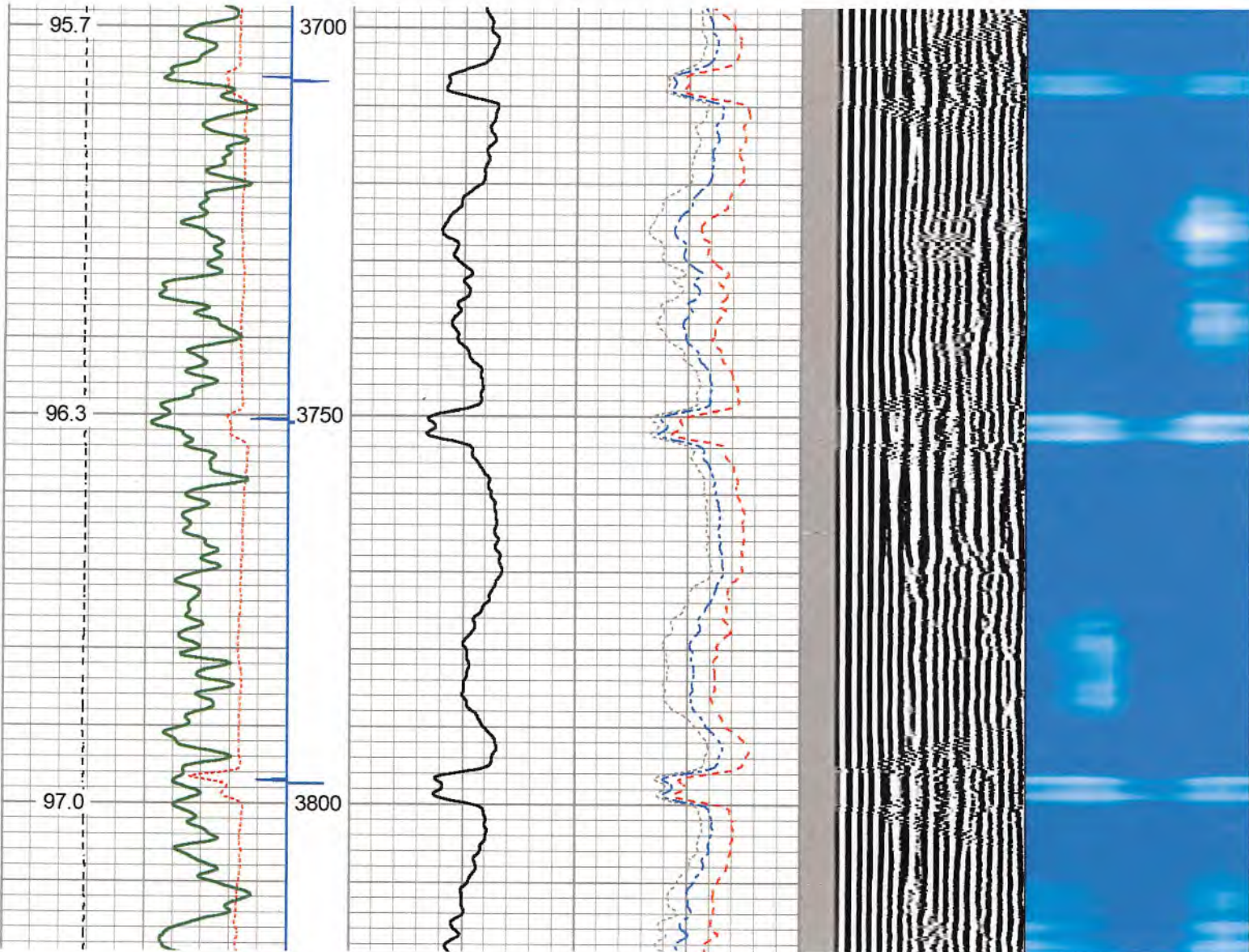


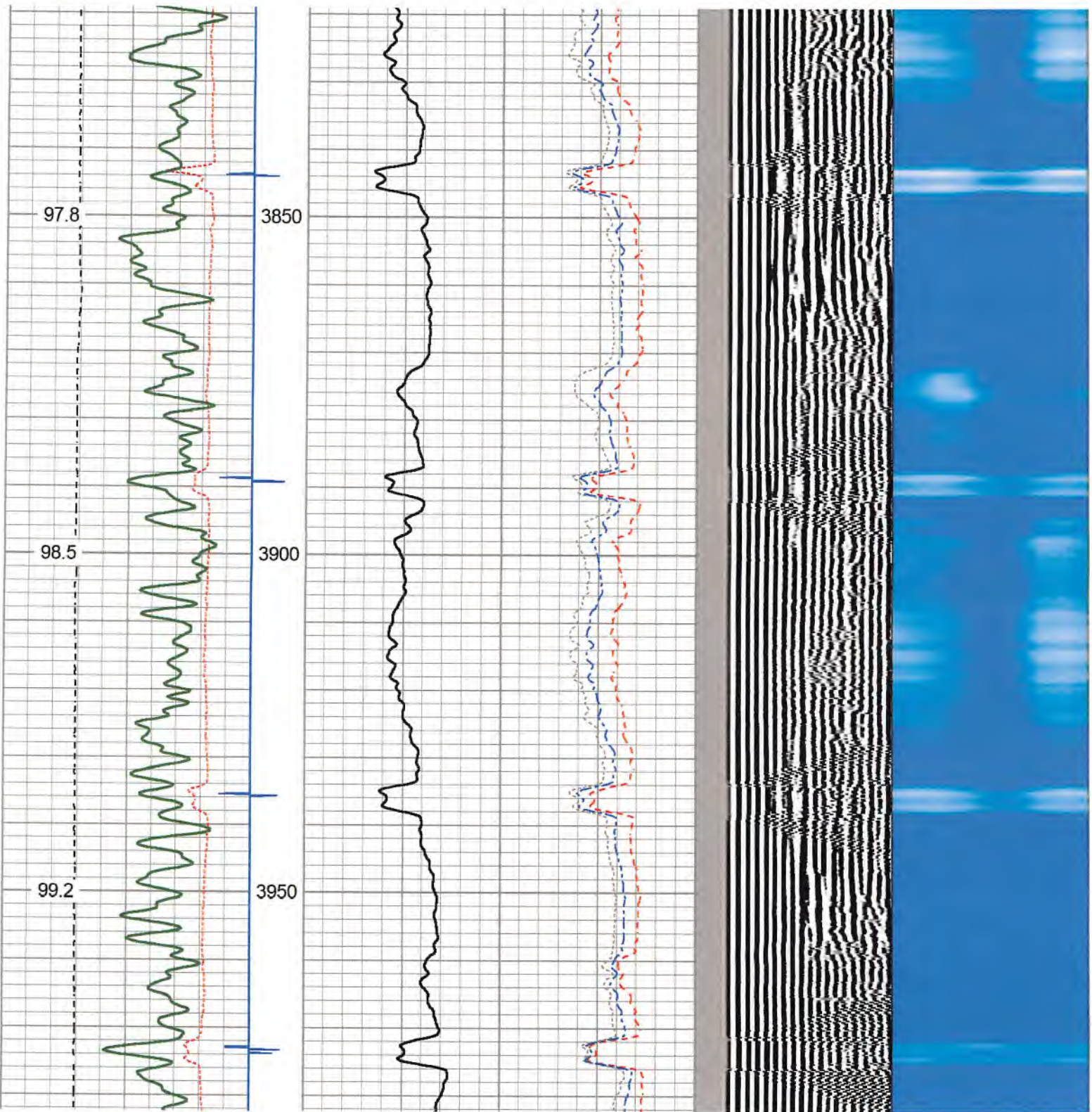


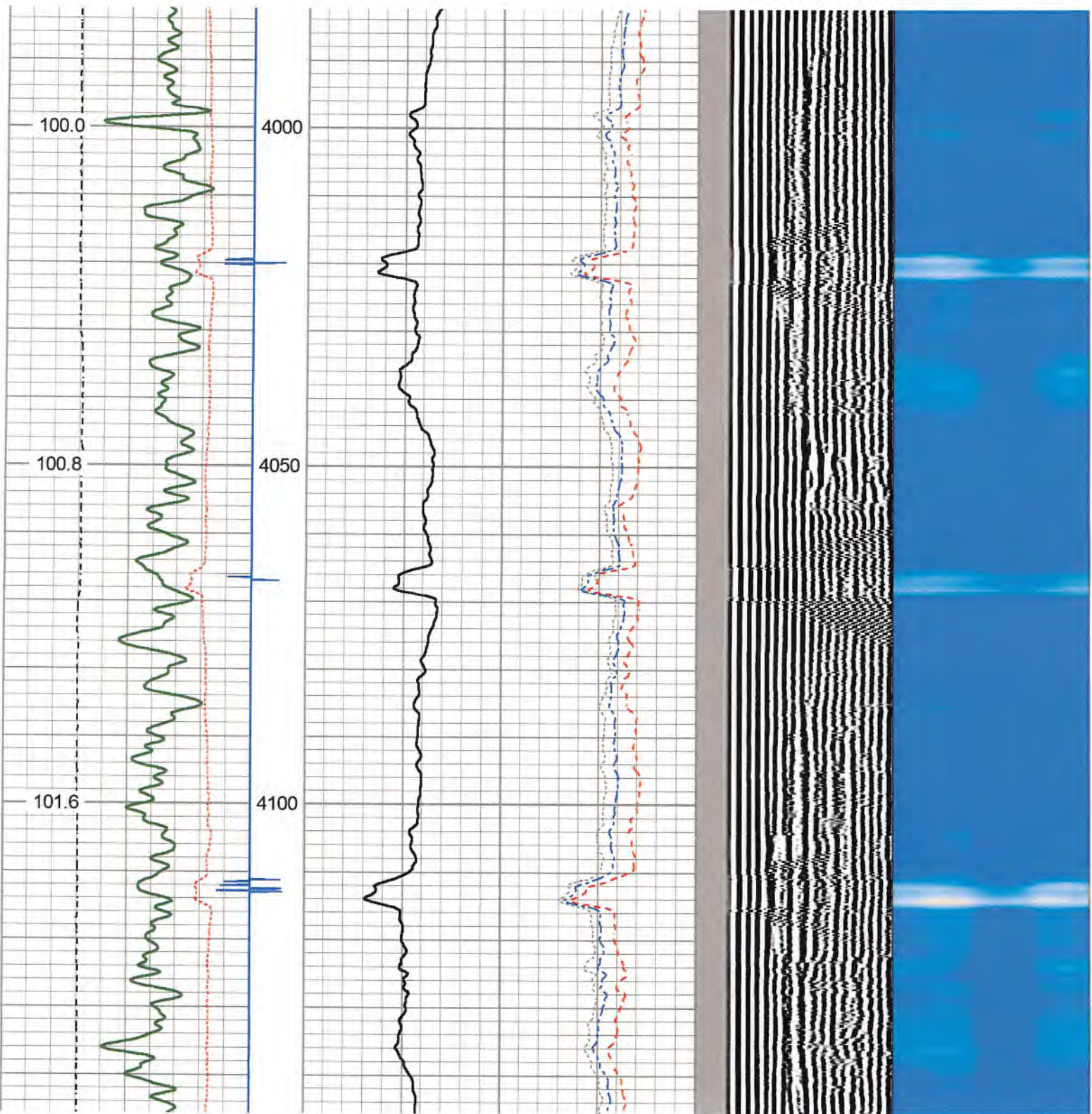


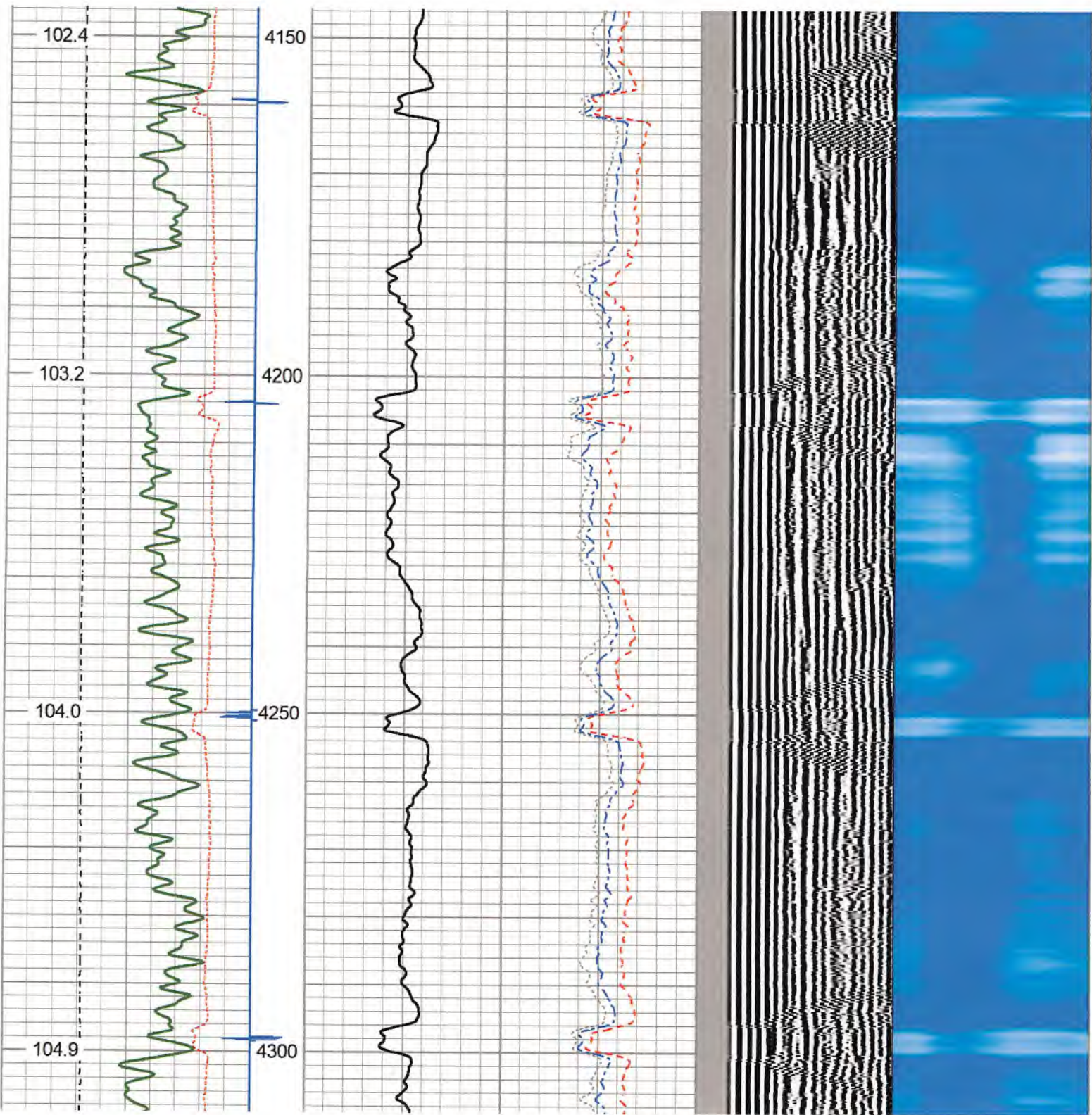


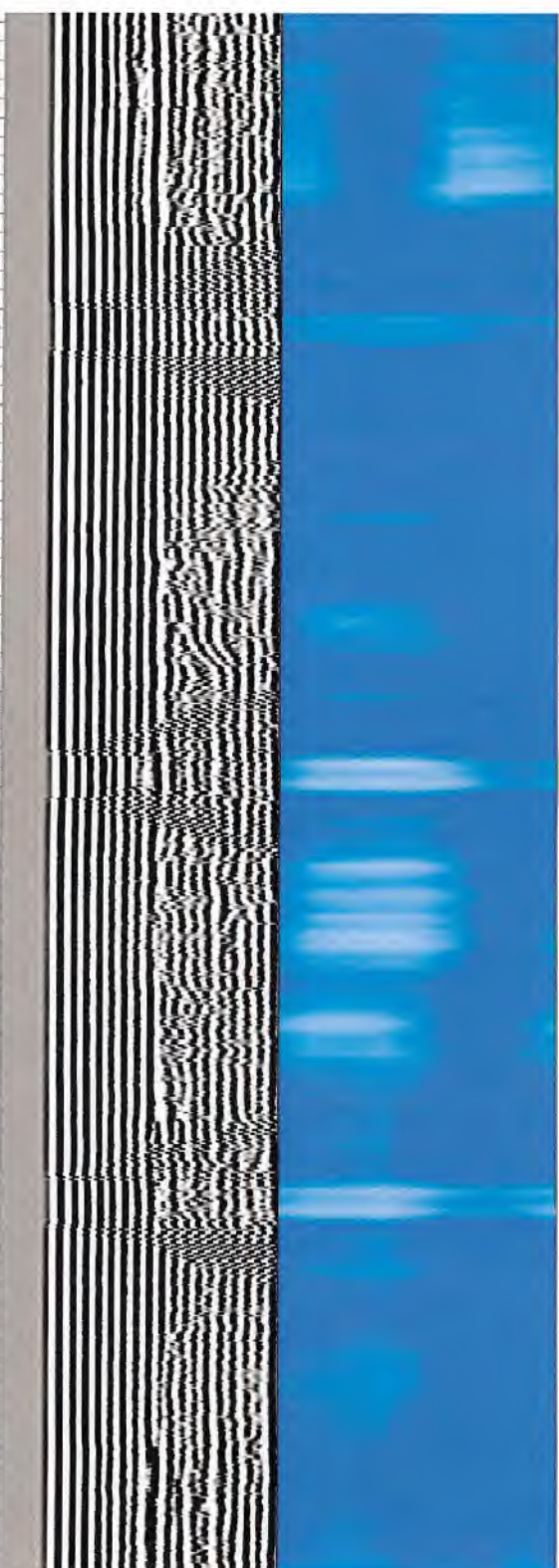
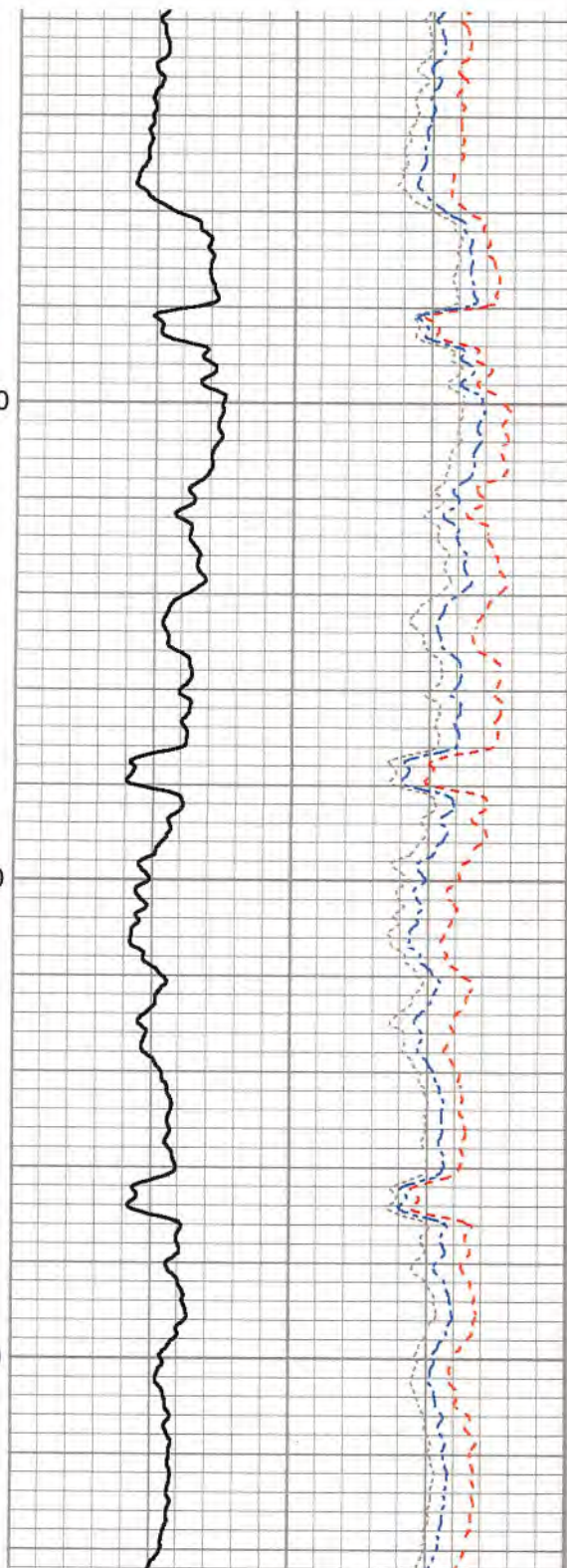
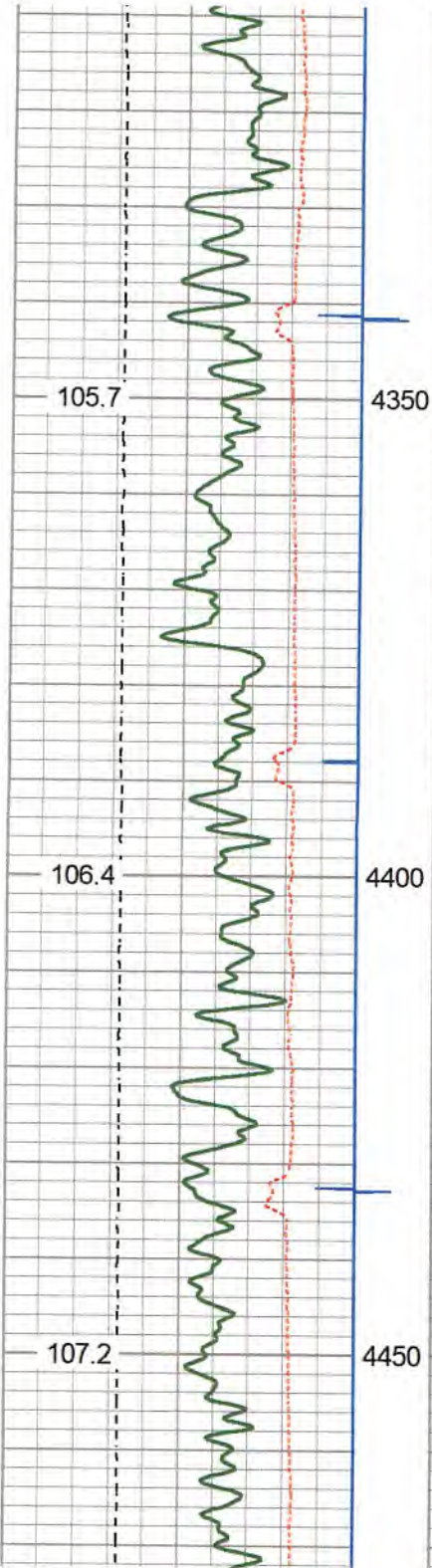


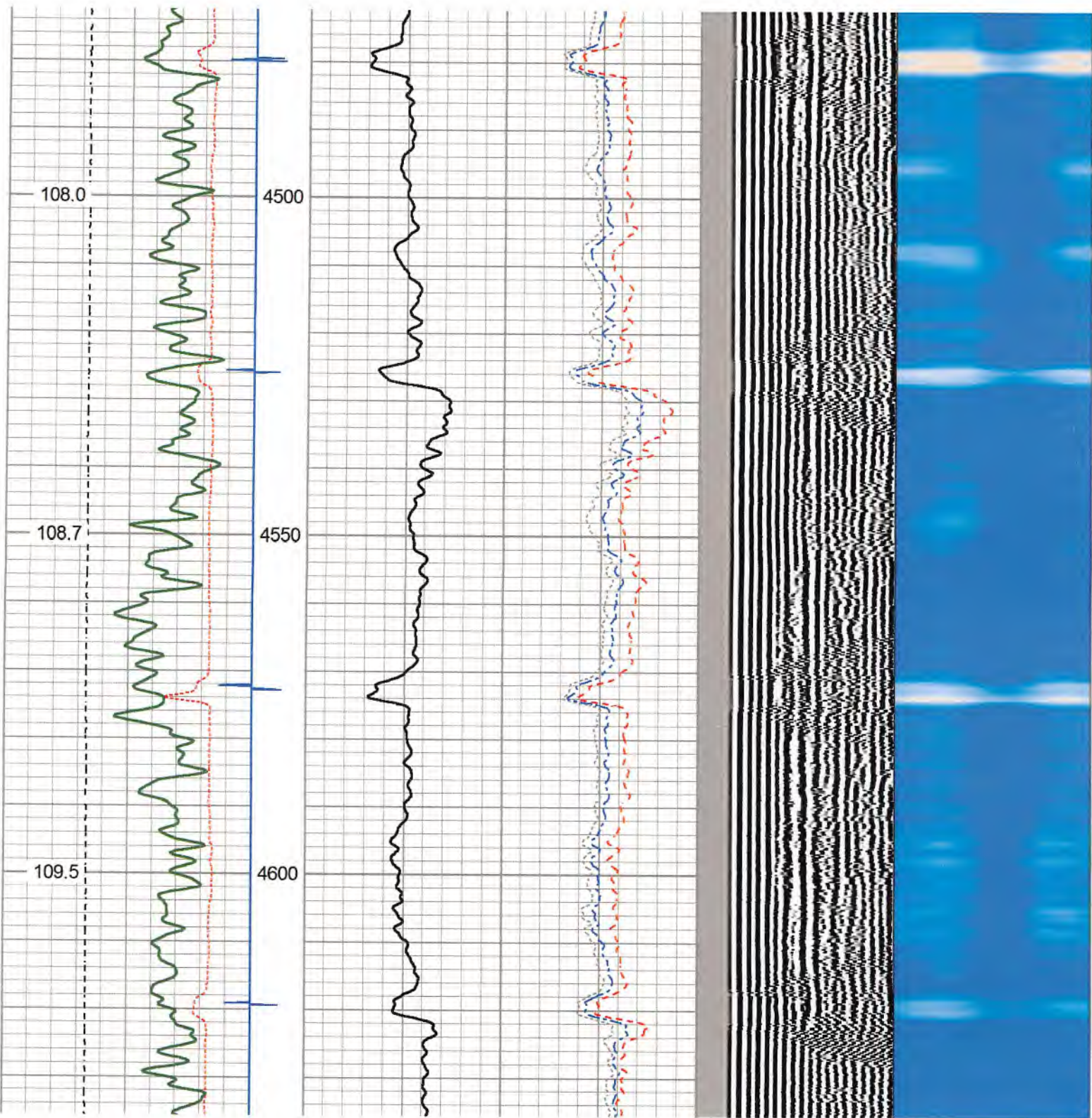


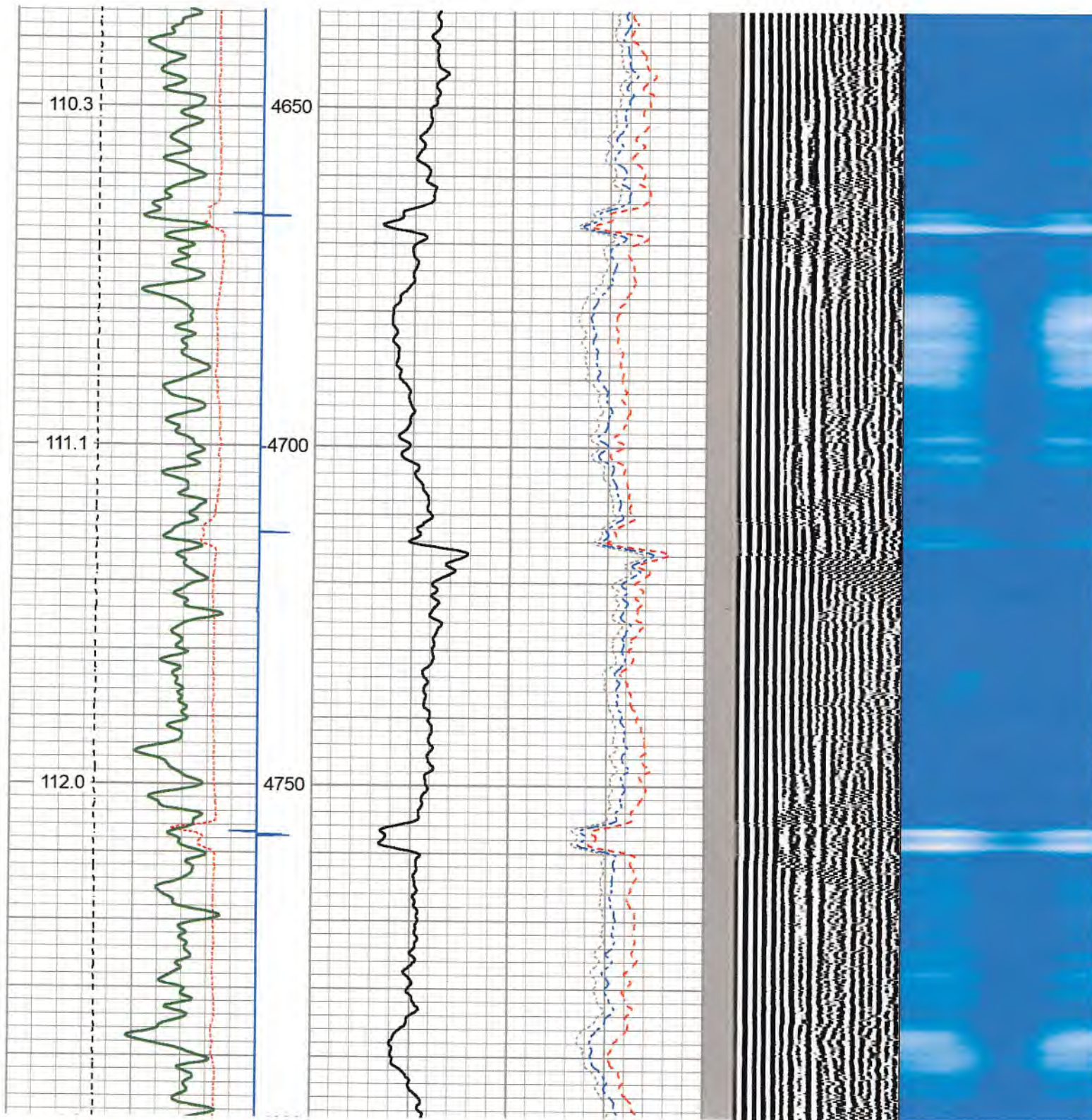


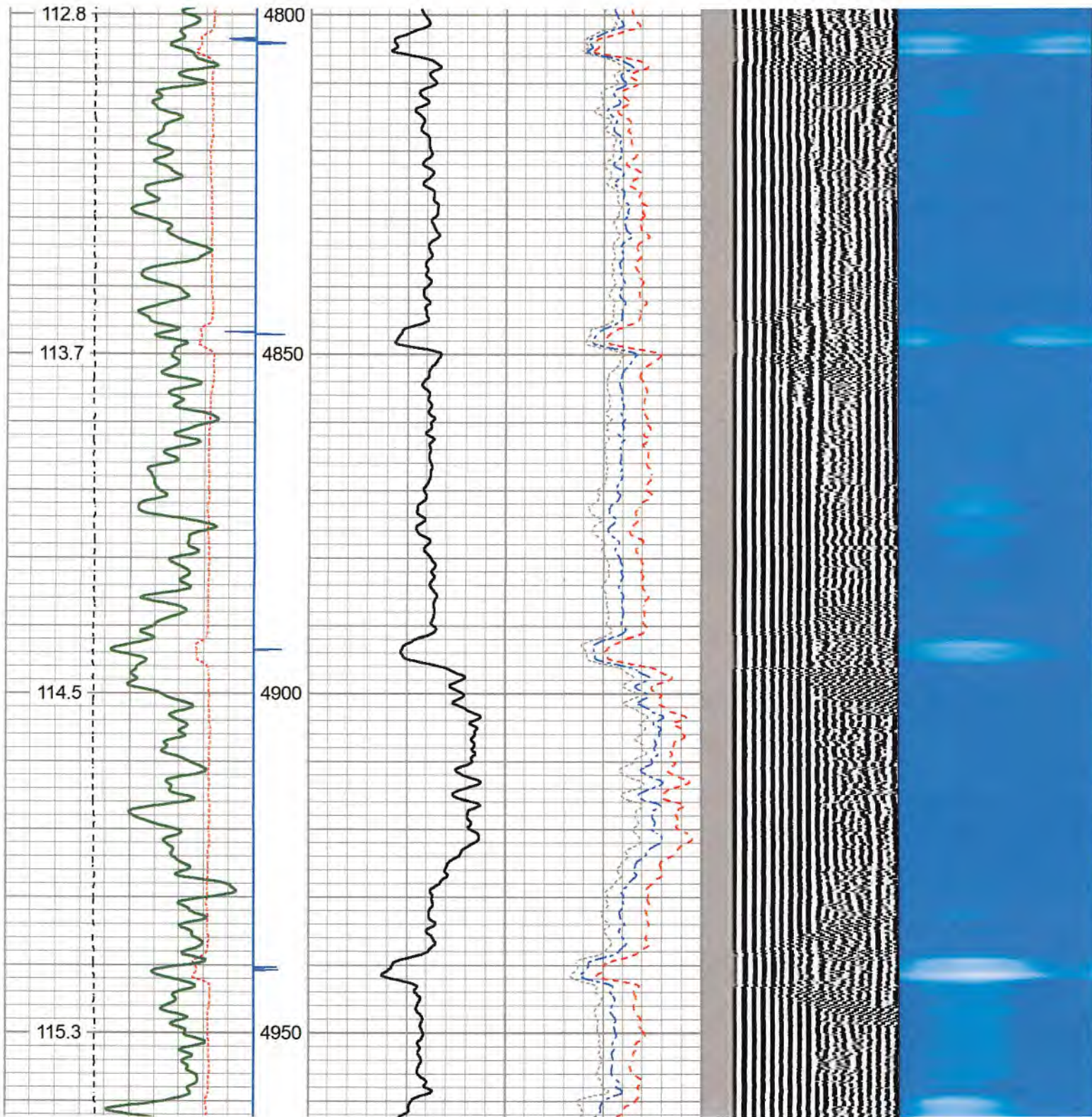


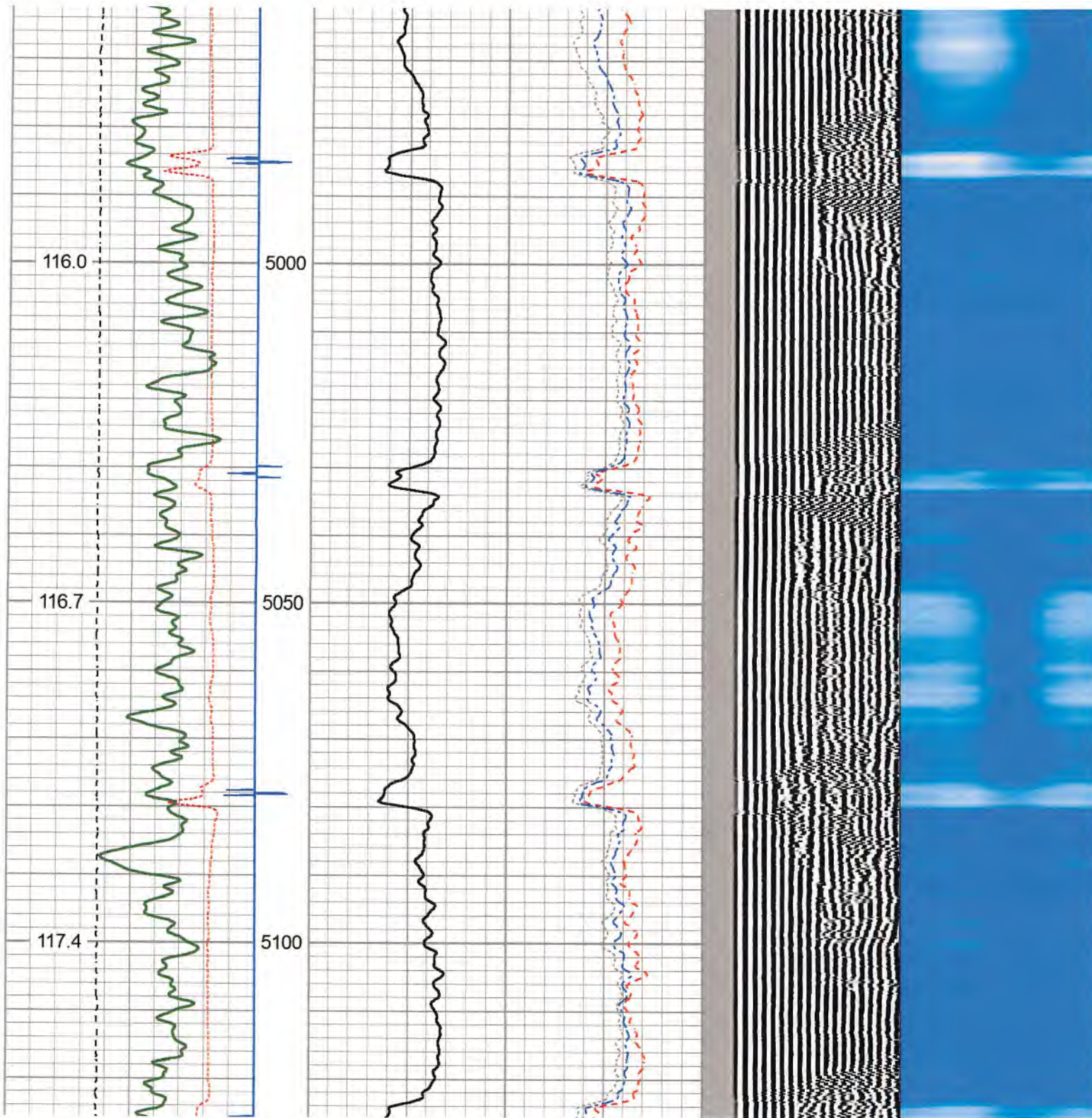


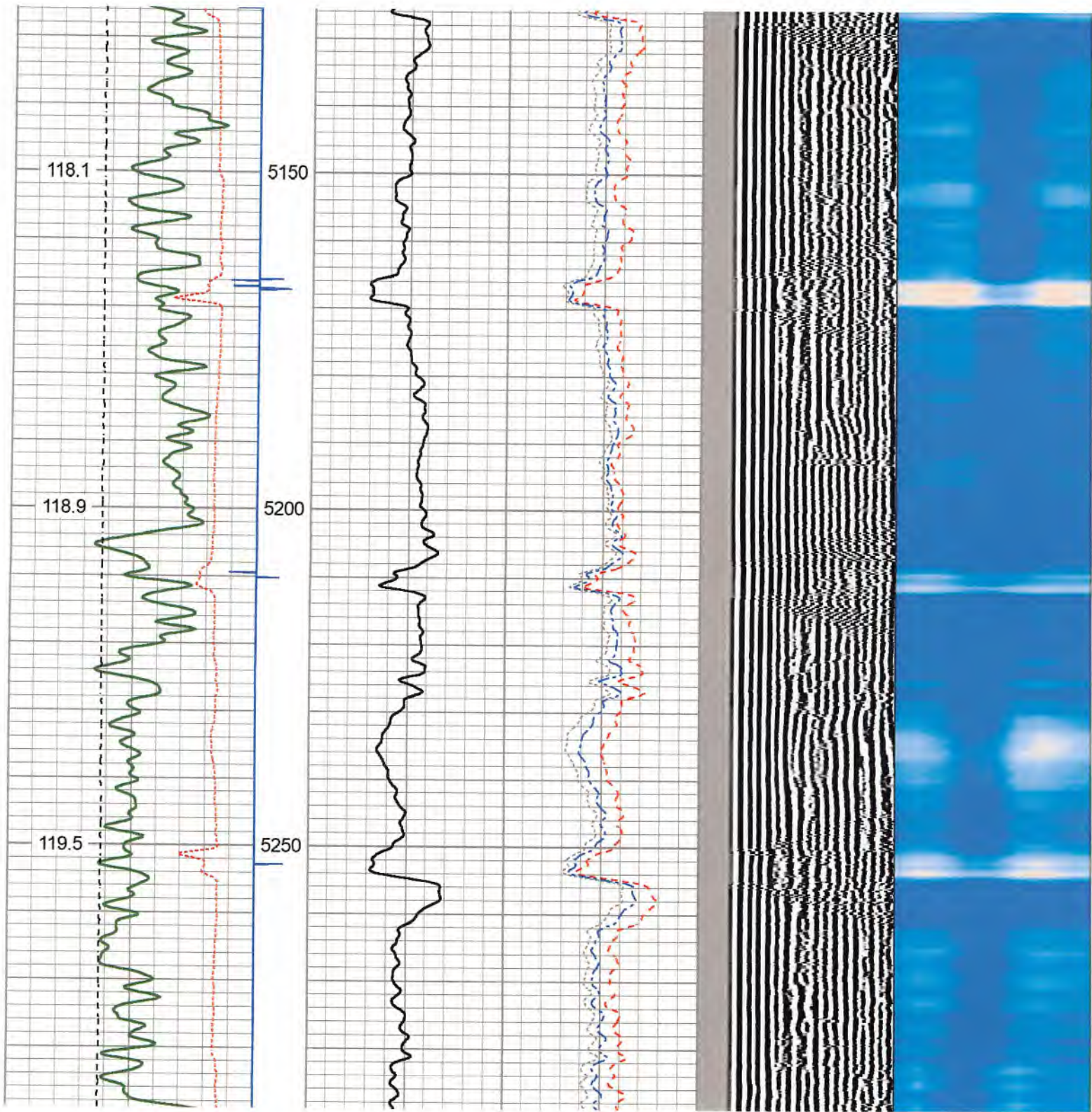


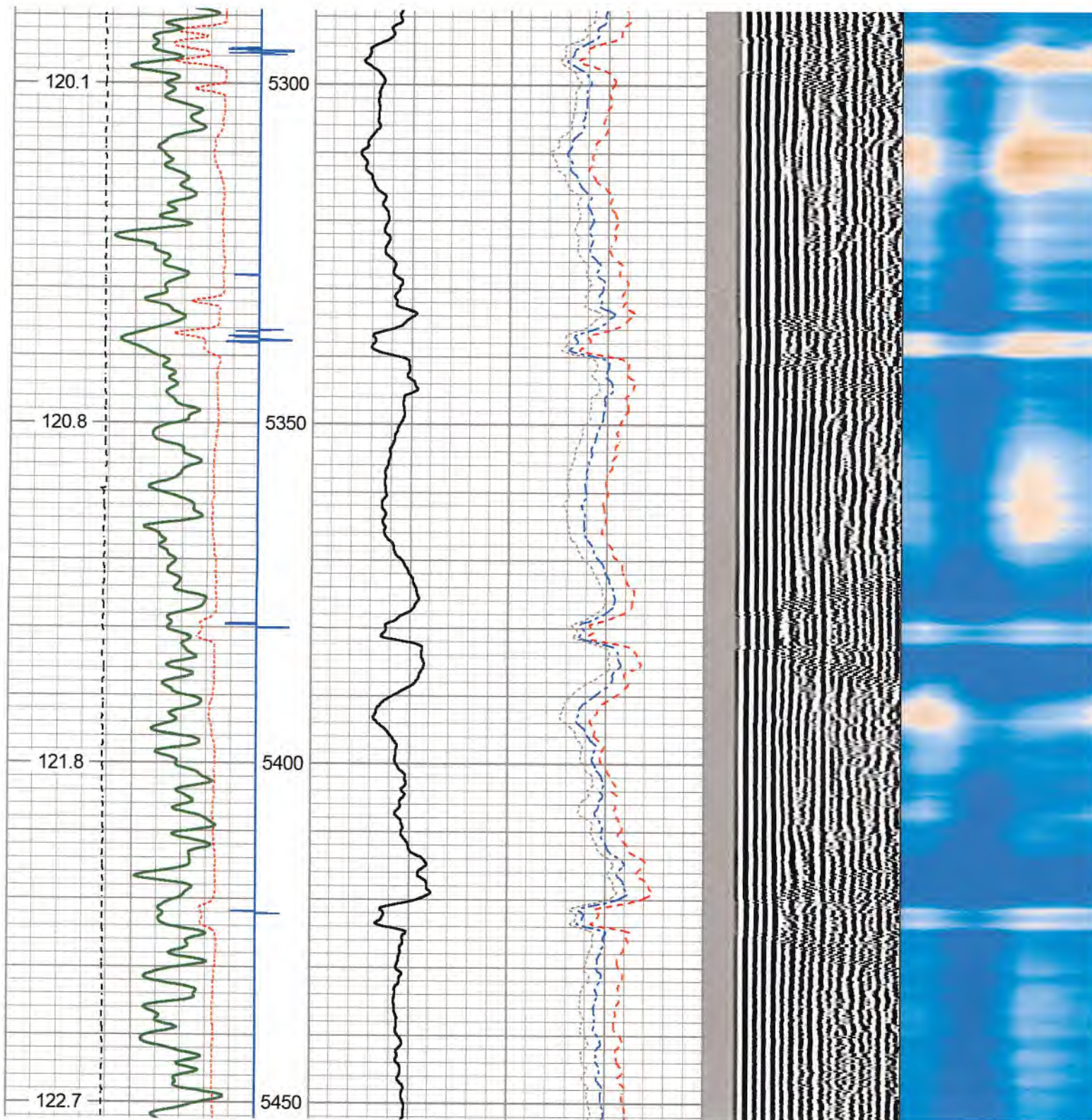


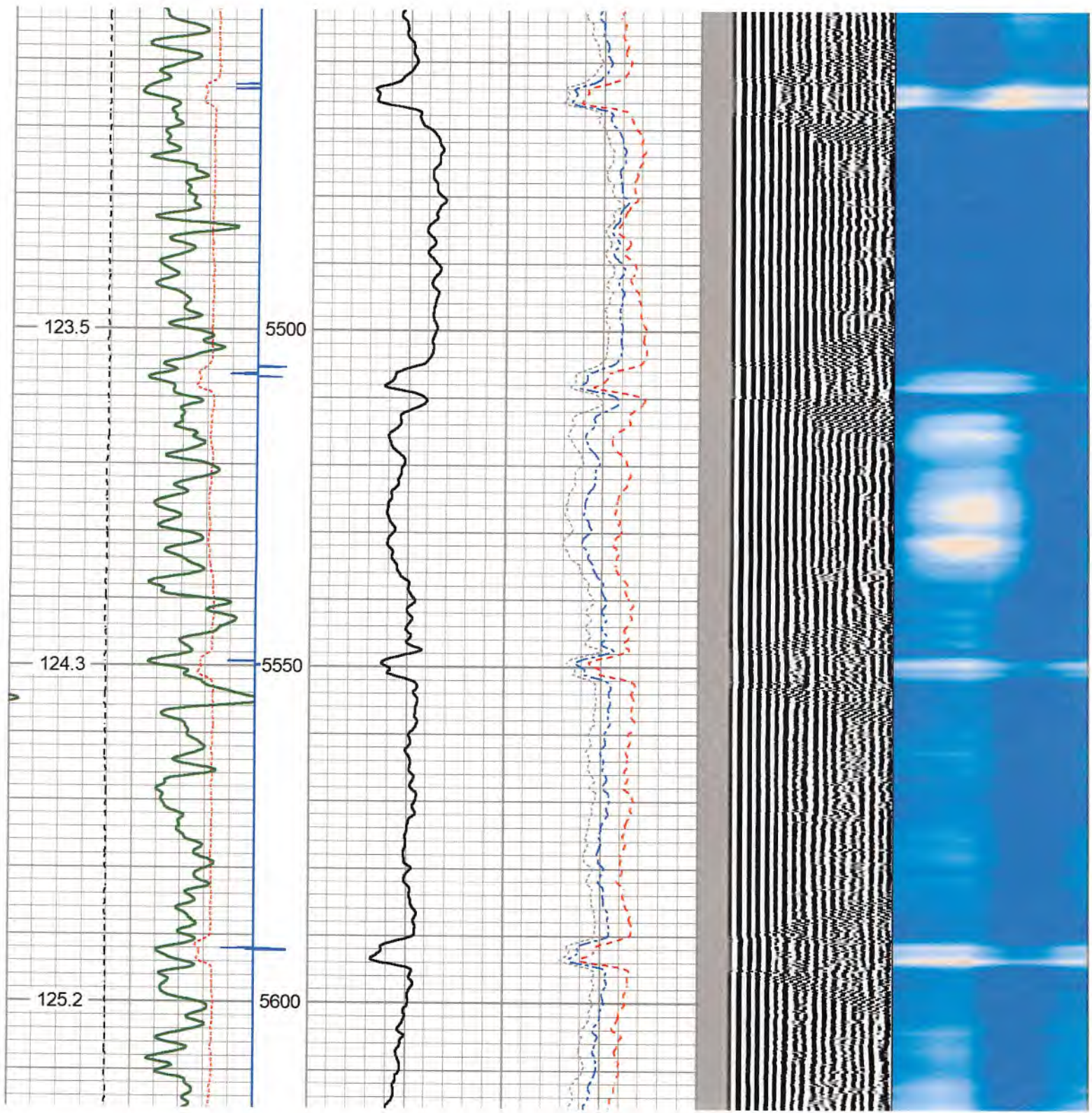


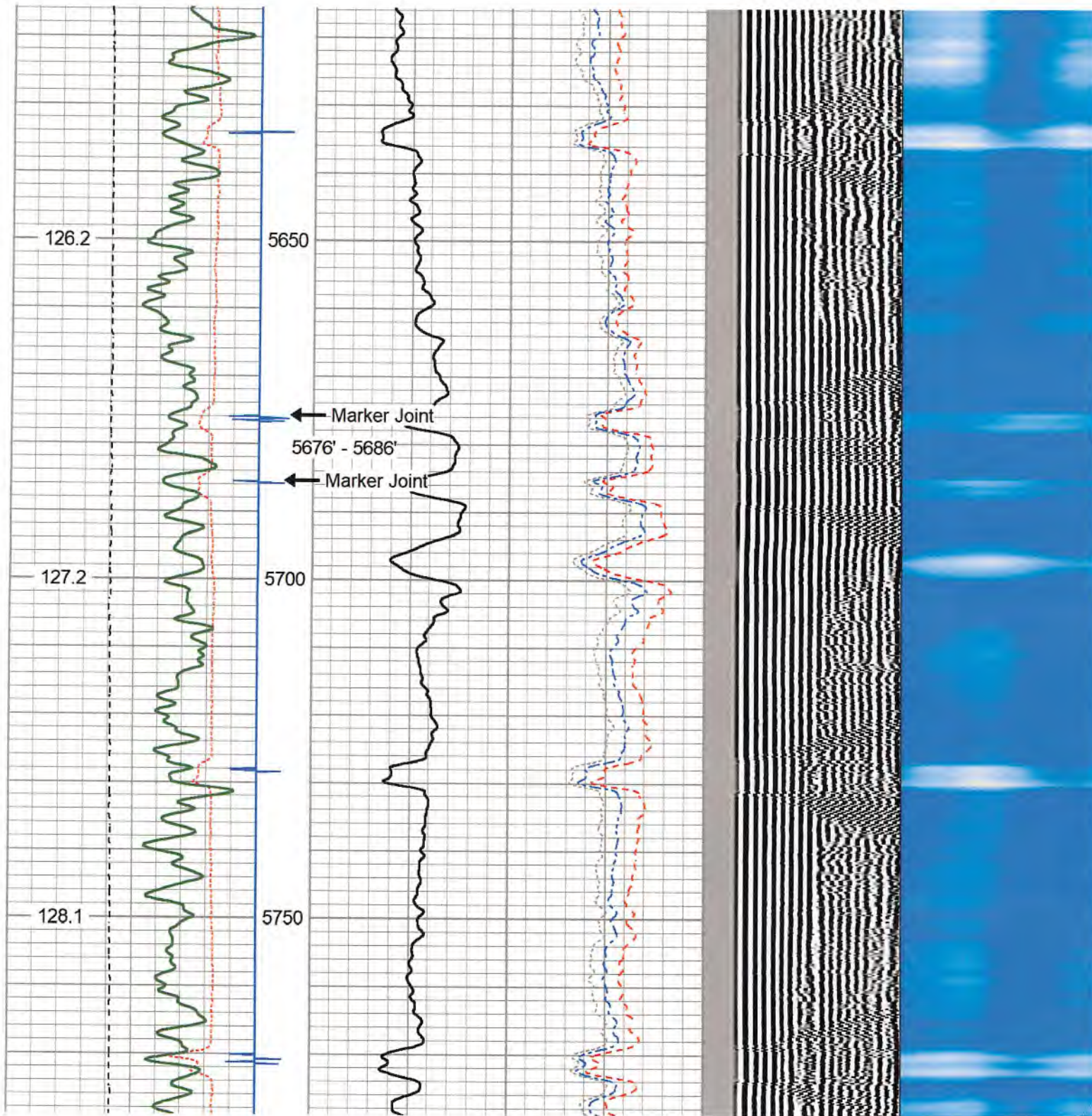


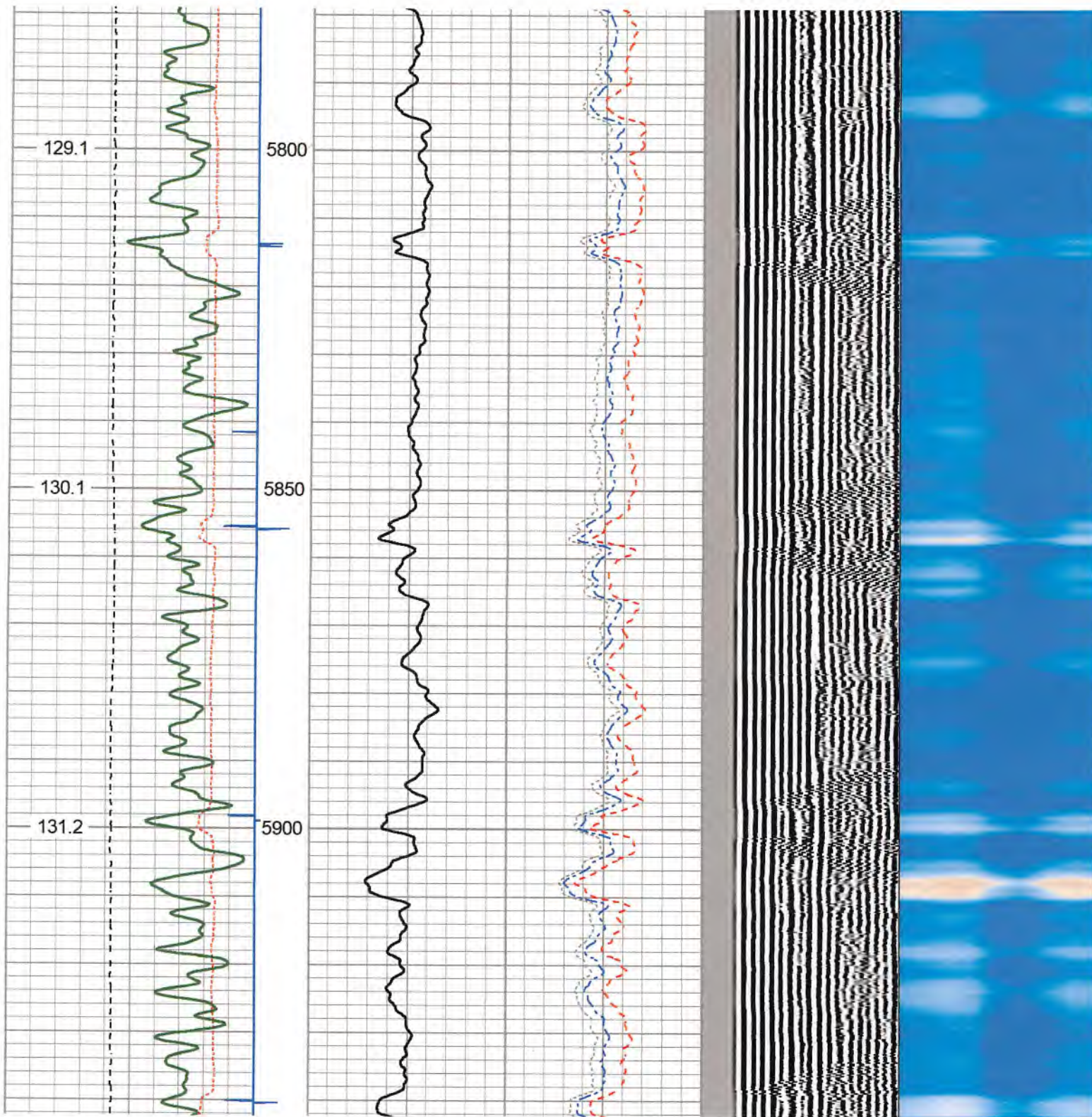


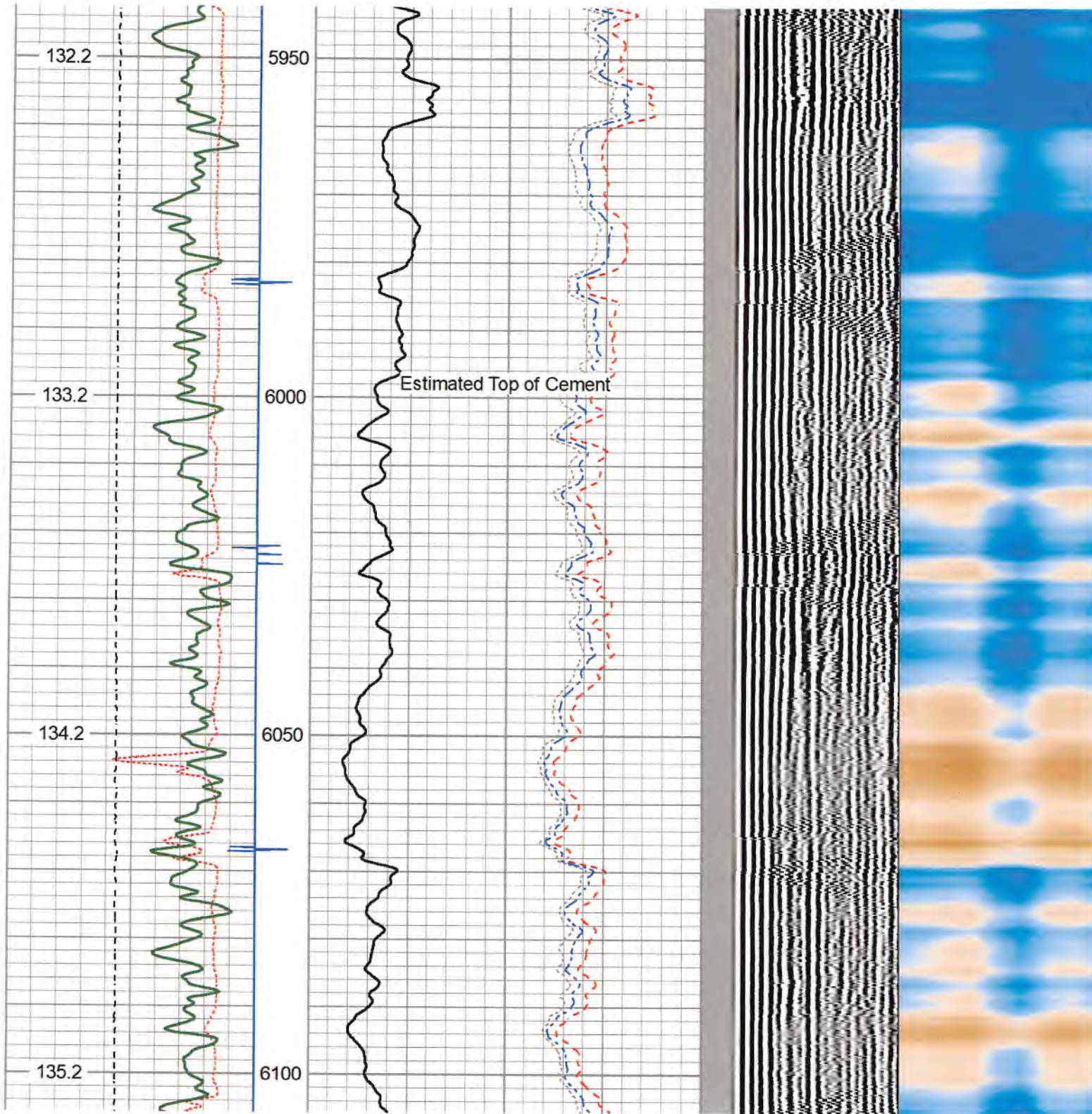


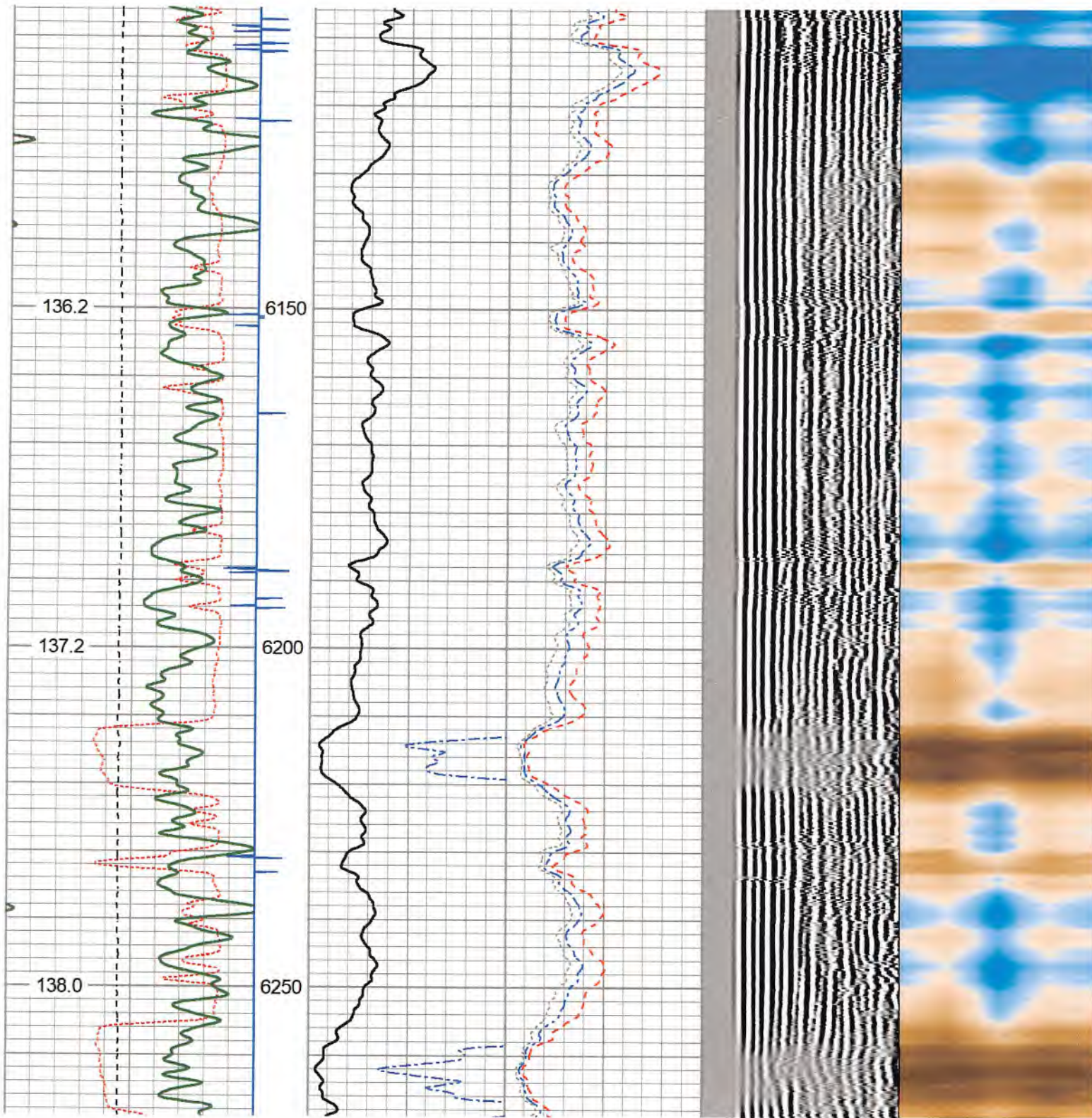


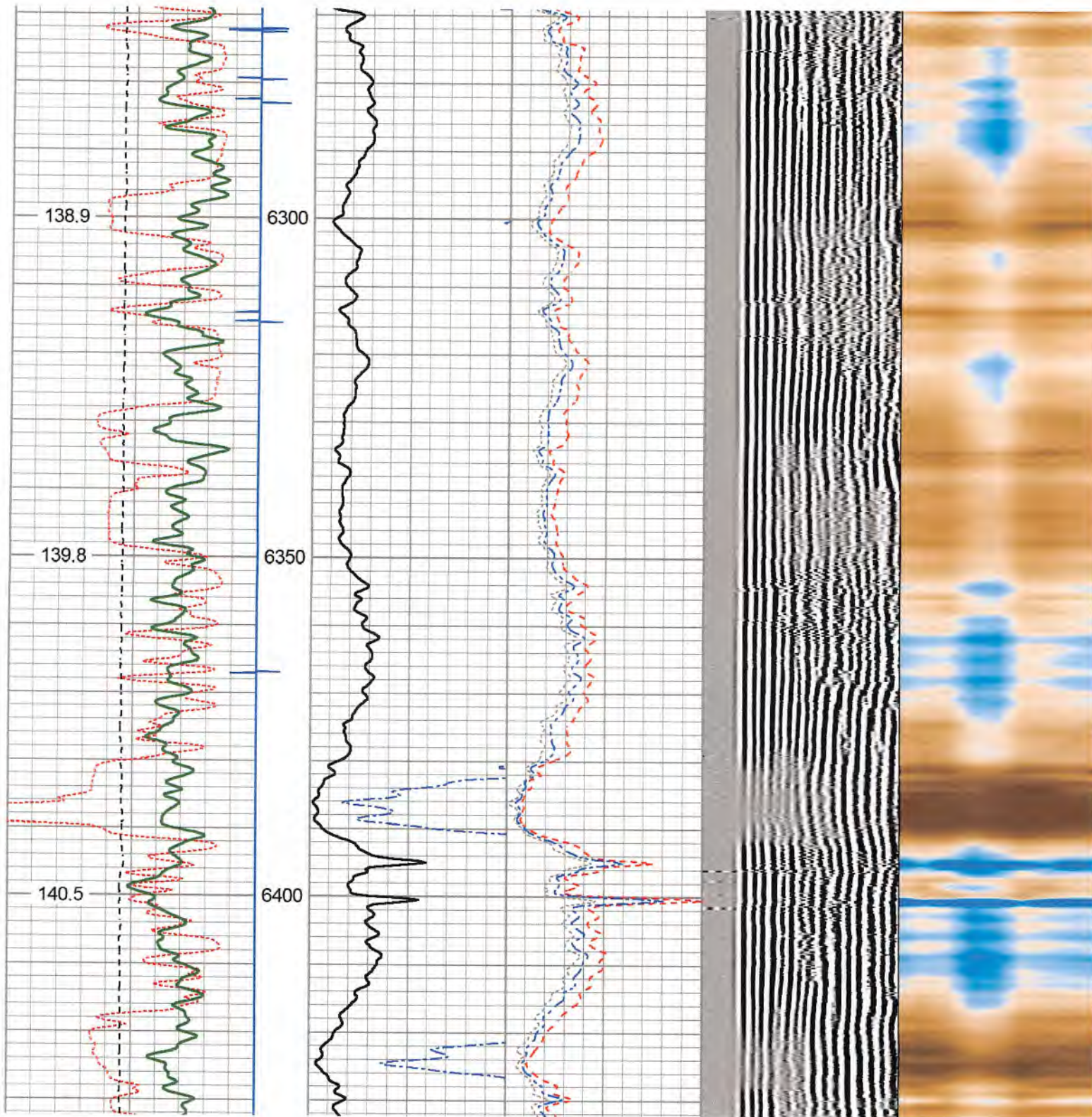


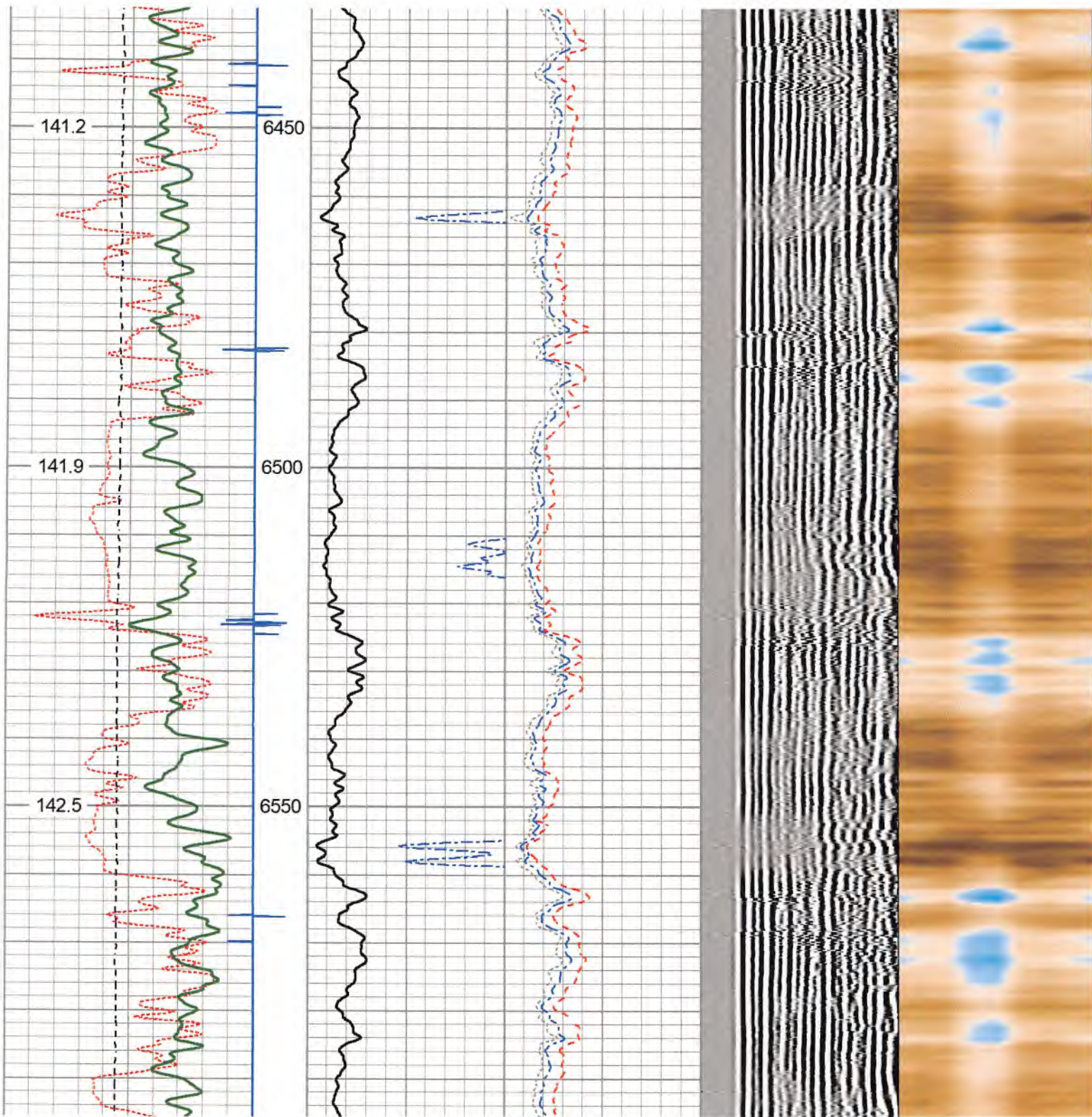


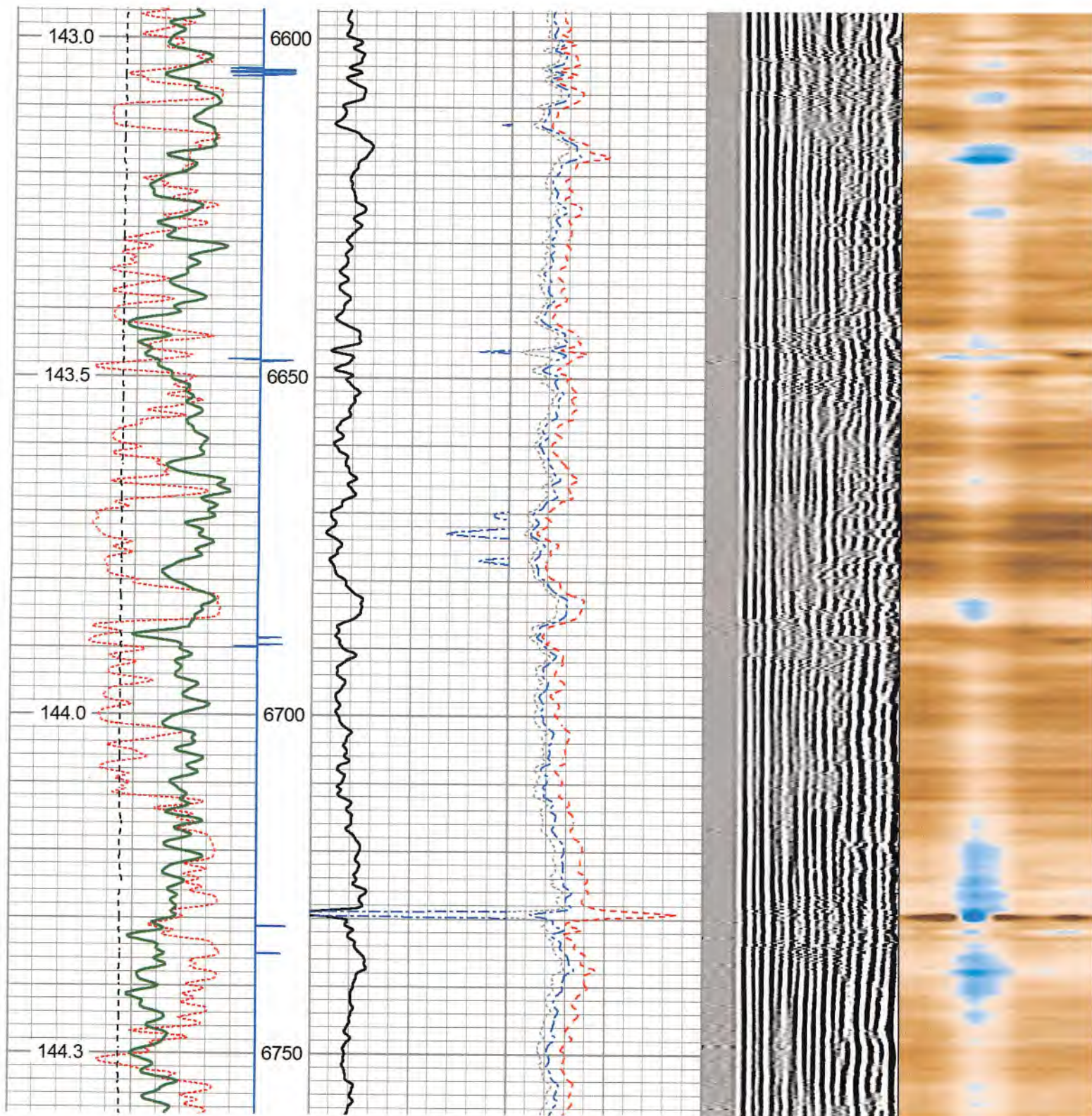


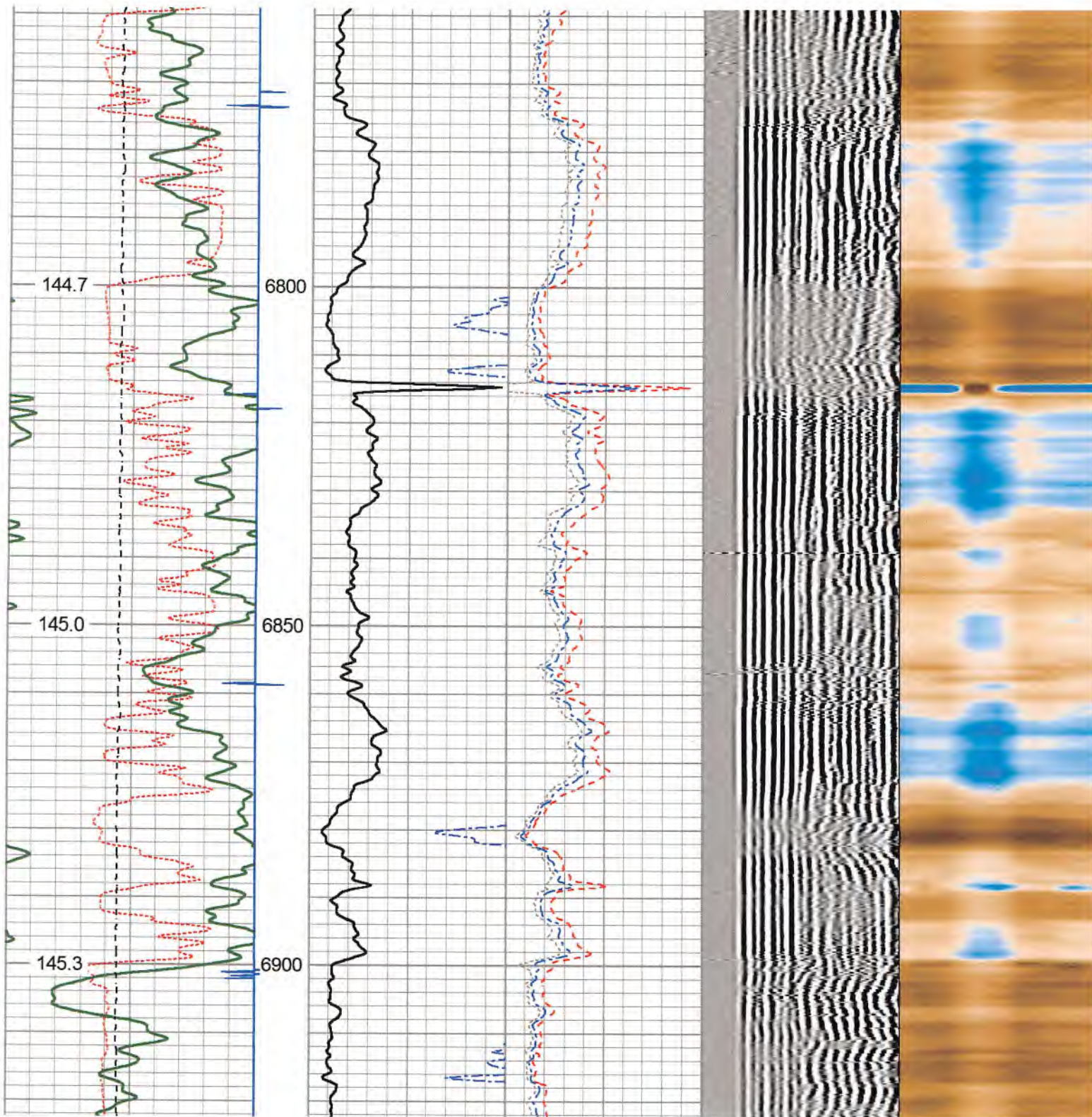


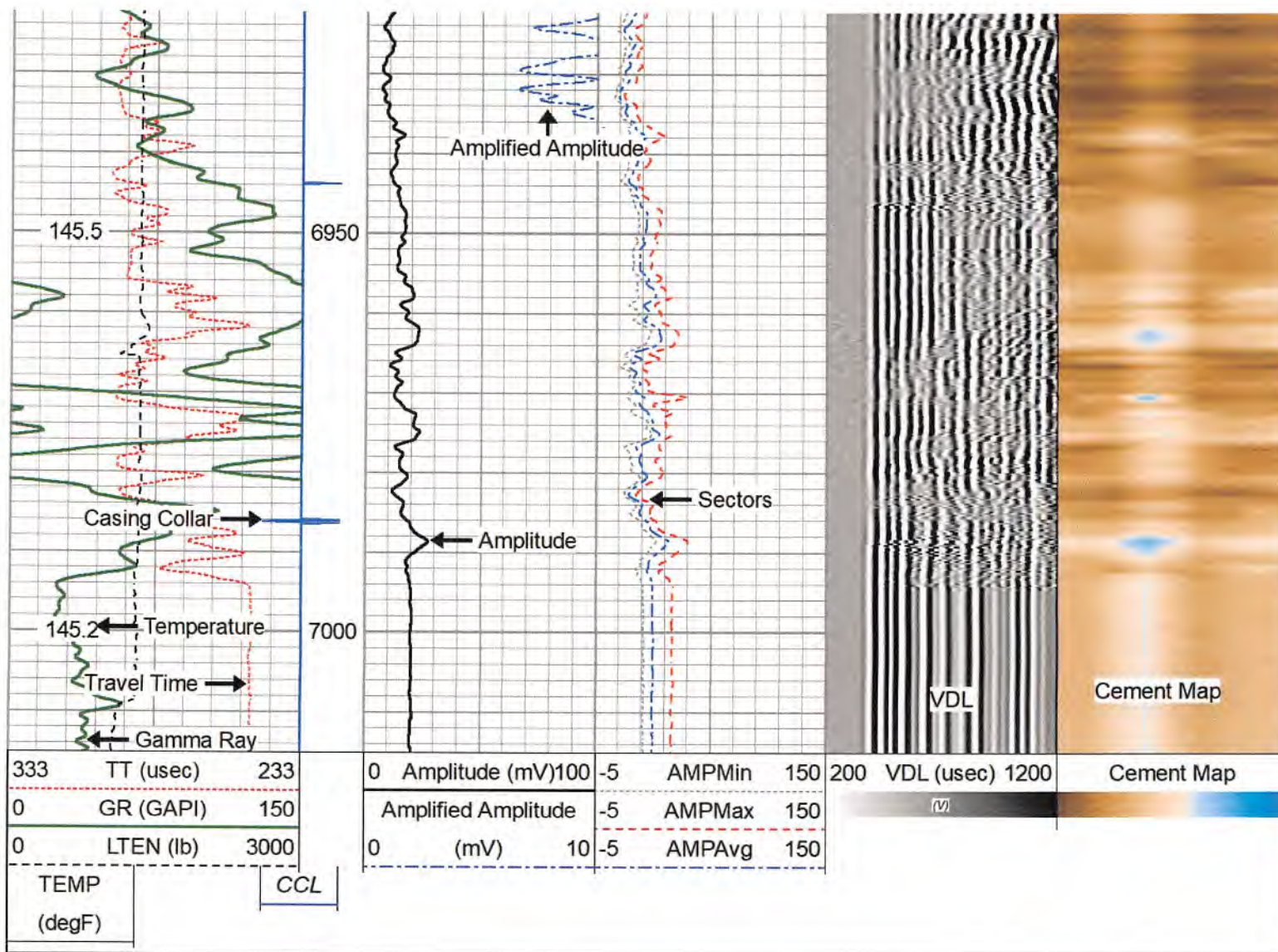








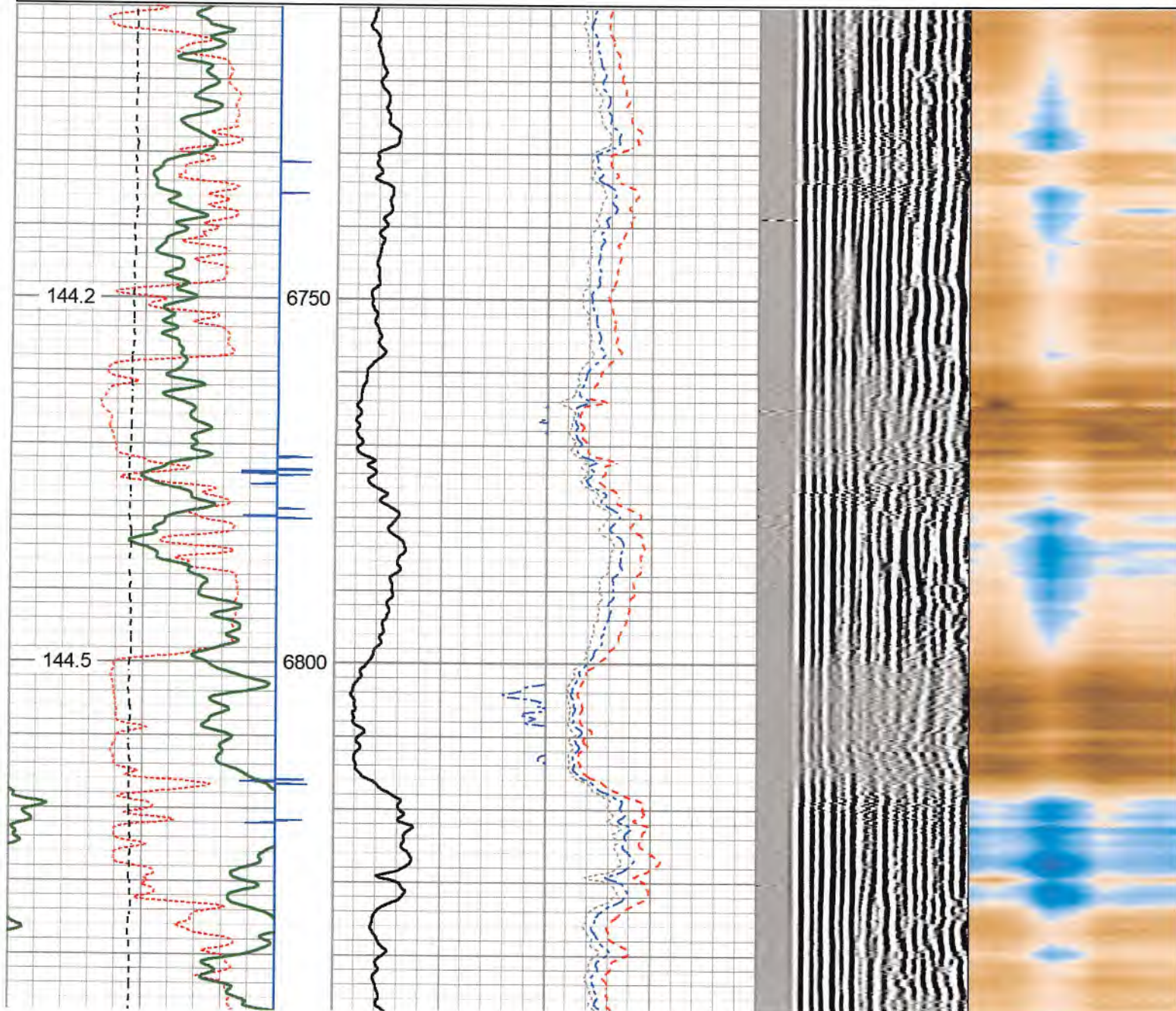


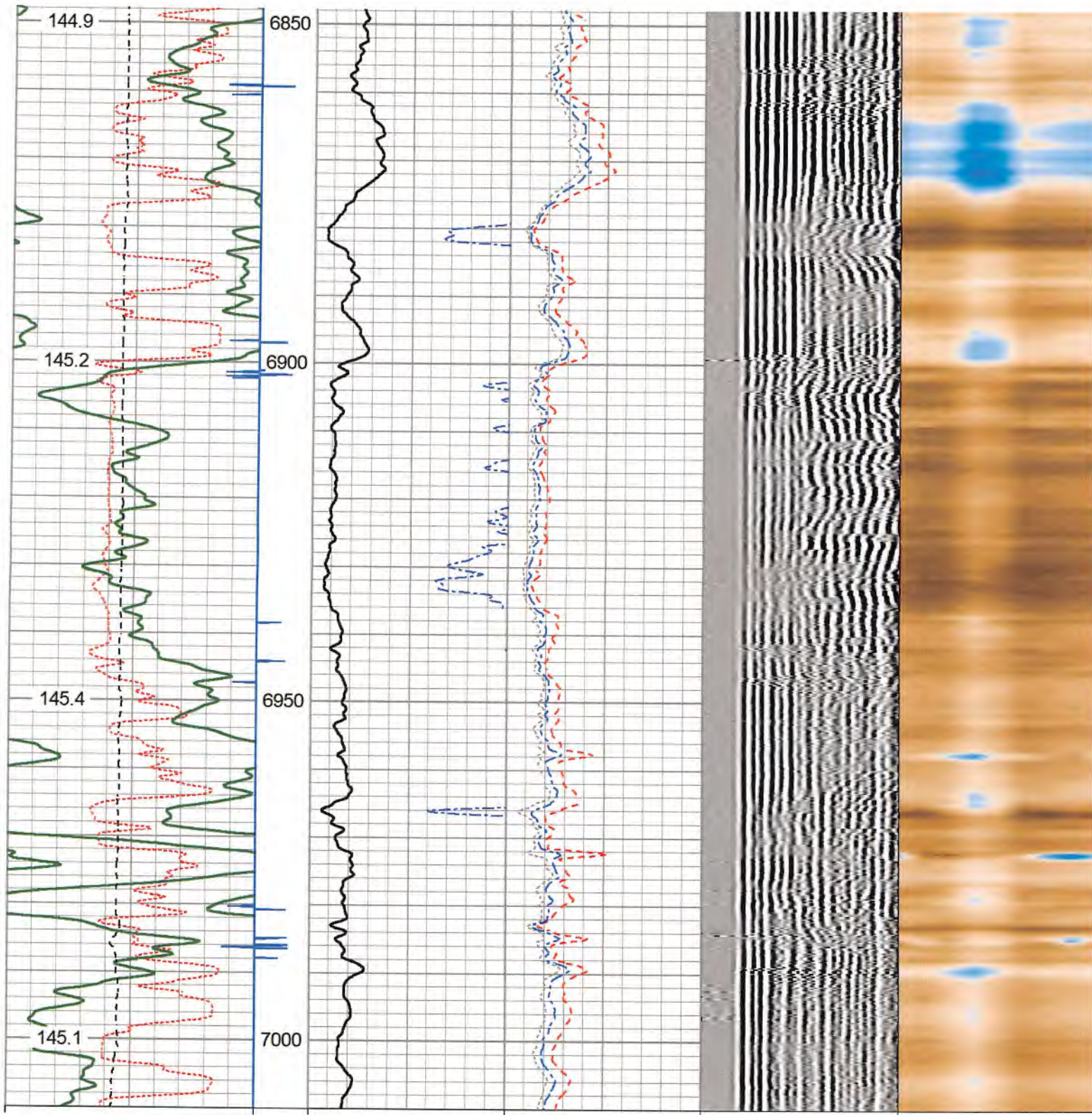


Repeat Pass (1500 PSI)

Database File c:\users\logbox\desktop\cashew\antero_cashew_shays1h.db
 Dataset Pathname rcb/pass3
 Presentation Format rcb_std_bw_tt
 Dataset Creation Mon Oct 17 11:31:15 2022
 Charted by Depth in Feet scaled 1:240

333	TT (usec)	233	0	Amplitude (mV)	100	-5	AMPMin	150	200	VDL (usec)	1200	Cement Map
0	GR (GAPI)	150	Amplified Amplitude		-5	AMPMax	150					
0	LTEN (lb)	3000	0	(mV)	10	-5	AMPAvg	150				
TEMP (degF)		CCL										





333	TT (usec)	233	0	Amplitude (mV)	100	-5	AMPMin	150	200	VDL (usec)	1200	Cement Map
0	GR (GAPI)	150		Amplified Amplitude		-5	AMPMax	150				
0	LTEN (lb)	3000	0	(mV)	10	-5	AMPAvg	150				
TEMP (degF)		CCL										

Log Variables

Database: c:\users\logbox\Desktop\cashew\antero_cashew_shays1h.db
 Dataset: field/well/rcbl/pass5/_vars_

Top - Bottom

BOREID in 6.75	BOTTEMP degF 145	CASEOD in 5	CASETHCK in 0.362	CASEWGHT lb/ft 18	MAXAMPL mV 76	MINAMPL mV 1	MINATTN db/ft 0.8
PERFS No	PPT usec 362	SRFTEMP degF 58	TDEPTH ft 7006				

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\cashew\antero_cashew_shays1h.db
 Dataset Pathname: rcbl/pass5
 Dataset Creation: Mon Oct 17 11:40:56 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

Serial Number: RBT275C_Base
 Tool Model: RADII-275C
 Calibration Casing Diameter: 5.000 in
 Calibration Depth: 193.467 ft

Master Calibration, performed Mon Oct 17 10:54:16 2022:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.006	0.555	1.000	75.921	136.505	0.130
CAL	0.005	0.850				
5'	0.005	0.491	1.000	75.921	153.993	0.248
SUM						
S1	0.009	0.537	0.000	100.000	189.450	-1.755
S2	0.007	0.531	0.000	100.000	190.649	-1.250
S3	0.006	0.527	0.000	100.000	191.742	-1.126
S4	0.004	0.540	0.000	100.000	186.572	-0.824
S5	0.006	0.551	0.000	100.000	183.361	-1.115
S6	0.007	0.567	0.000	100.000	178.631	-1.324
S7	0.005	0.574	0.000	100.000	175.688	-0.901
S8	0.004	0.563	0.000	100.000	178.915	-0.775

Internal Reference Calibration, performed Wed Aug 24 11:56:29 2022:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.005	0.850	1.000	0.000

Air Zero Calibration, performed Mon Oct 17 10:08:06 2022:

All Zero Calibration, performed from Oct 17 10:00:00 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 Read.	High Read.	Low Ref.	High Ref.	
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

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Cable Head 1 7/16	1.00	1.44	2.24

				1.02	1.44	3.31
			Titan 1 7/16" Cable Head			
			CENT-BC275-0000 Probe 2.75" Bowspring Centralizer	2.83	2.75	24.00
RBT_HV	19.19					
			RBT8-RADII-275C (RBT275C_Base) Probe 2.75" RADII 8 Sector Bond Tool	8.75	2.75	
WVFS8	14.69					
WVFS7	14.69					
WVFS6	14.69					
WVFS5	14.69					
WVFS4	14.69					
WVFS3	14.69					
WVFS2	14.69					
WVFS1	14.69					
WVF3FT	14.69					
WVF5FT	13.69					
RBT_ACCZ	10.44					
RBT_ACCY	10.44					
RBT_ACCX	10.44					
WVFSYNC	10.44					
WVFCAL	10.44					
			CENT-BC275-0000 Probe 2.75" Bowspring Centralizer	2.83	2.75	24.00
GCT_HV	7.60					
CCLES	6.64					

CCL\$2	0.04					
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_cashew_shays1h.db: field/well/rcbl/pass5
 Total length: 23.04 ft
 Total weight: 130.31 lb
 O.D.: 2.75 in

	Company	Antero Resources Corporation
	Well	Shays Unit 1H
	Field	White Oak
	County	Ritchie
	State	WV

FIELD COPY

Country USA