



Radial Cement Bond  
Variable Density Log  
W/ Gamma/ CCL/ Temp

Company	Antero Resources		Location:	APL # : 47-095-02786		Other Services	
Well	Elden Phaeton 1H		SEC	TWP	RGE	Elevation	
Field	River Front		Permanent Datum	Ground Level	Elevation	K.B.	
County	Tyler		Log Measured From	Kelly Bushing 30' A.P.D.		D.F.	
State	WV		Drilling Measured From	Kelly Bushing		G.L.	
Date	16-Sep-2022						
Run Number	One						
Depth Driller	23,919'						
Depth Logger	6,415'						
Bottom Logged Interval	6,433'						
Top Log Interval	Surface						
Open Hole Size	8.75"						
Type Fluid	Water						
Density / Viscosity	8.3#						
Max. Recorded Temp.	139 Deg. F.						
Estimated Cement Top	3,458'						
Time Well Ready	18:10						
Time Logger on Bottom	18:40						
Equipment Number	104 P2 G2						
Location	Charleroi						
Recorded By	Matt McNally						
Witnessed By	Justin Deffie						
Borehole Record			Tubing Record				
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record	Size	Wgt/Ft		Top	Bottom		
Conductor String							
Surface String							
Intermediate String							
Intermediate String							
Production String	5 1/2"	23#		Surface	23,919'		

<<< Fold Here >>>

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

Primary Log on Well  
Log Correlated to Marker Joint at 5,097'-5,108'  
Depth Shift -29'  
Main Pass 1,500 PSI  
Repeat Pass 0 PSI  
100 % Free Pipe= 71.9mv  
100 % Bond=3.4mv

Thank You for Choosing Nine Energy of Charleroi, Pa.

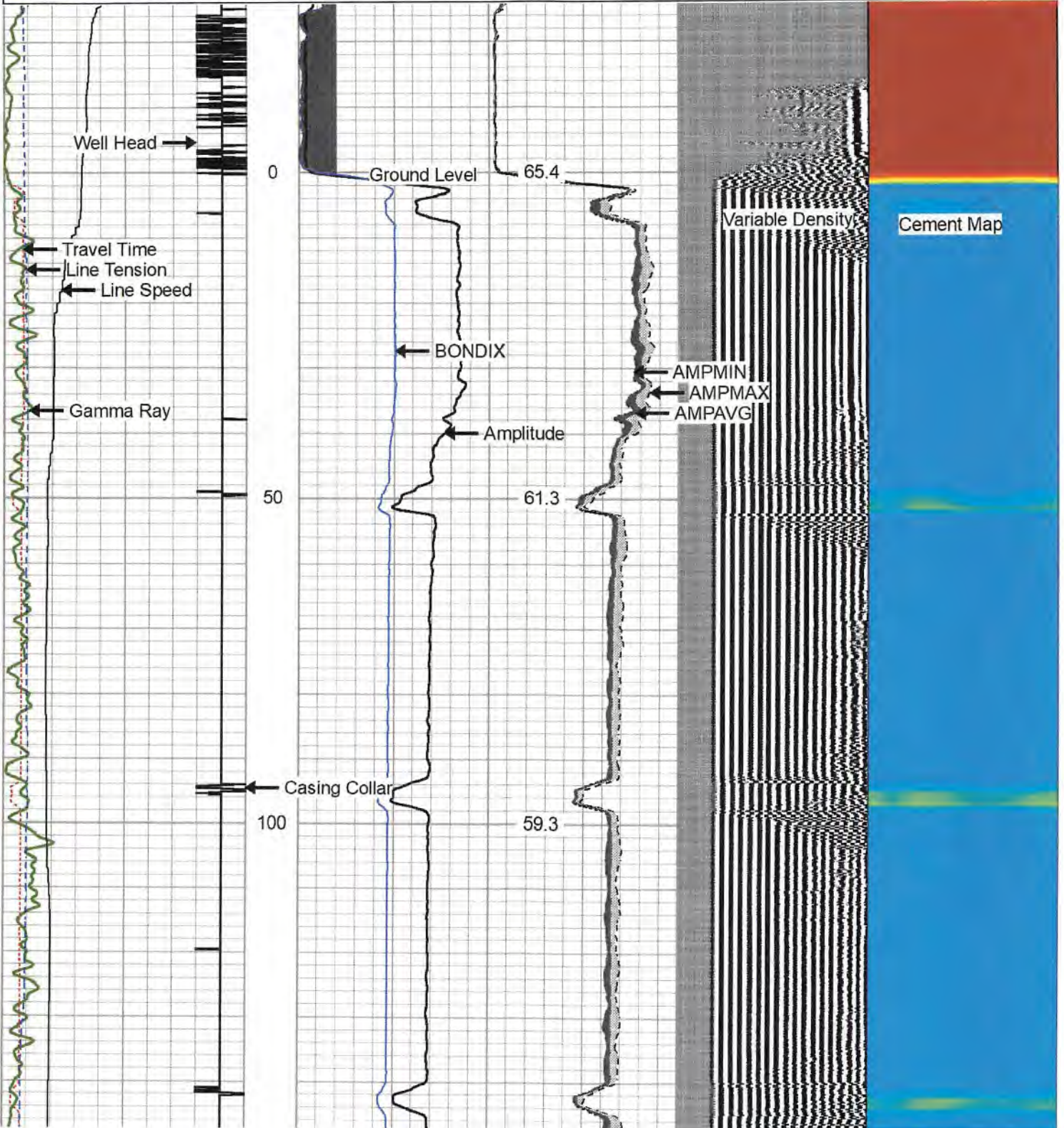


Main Pass 1,500 PSI

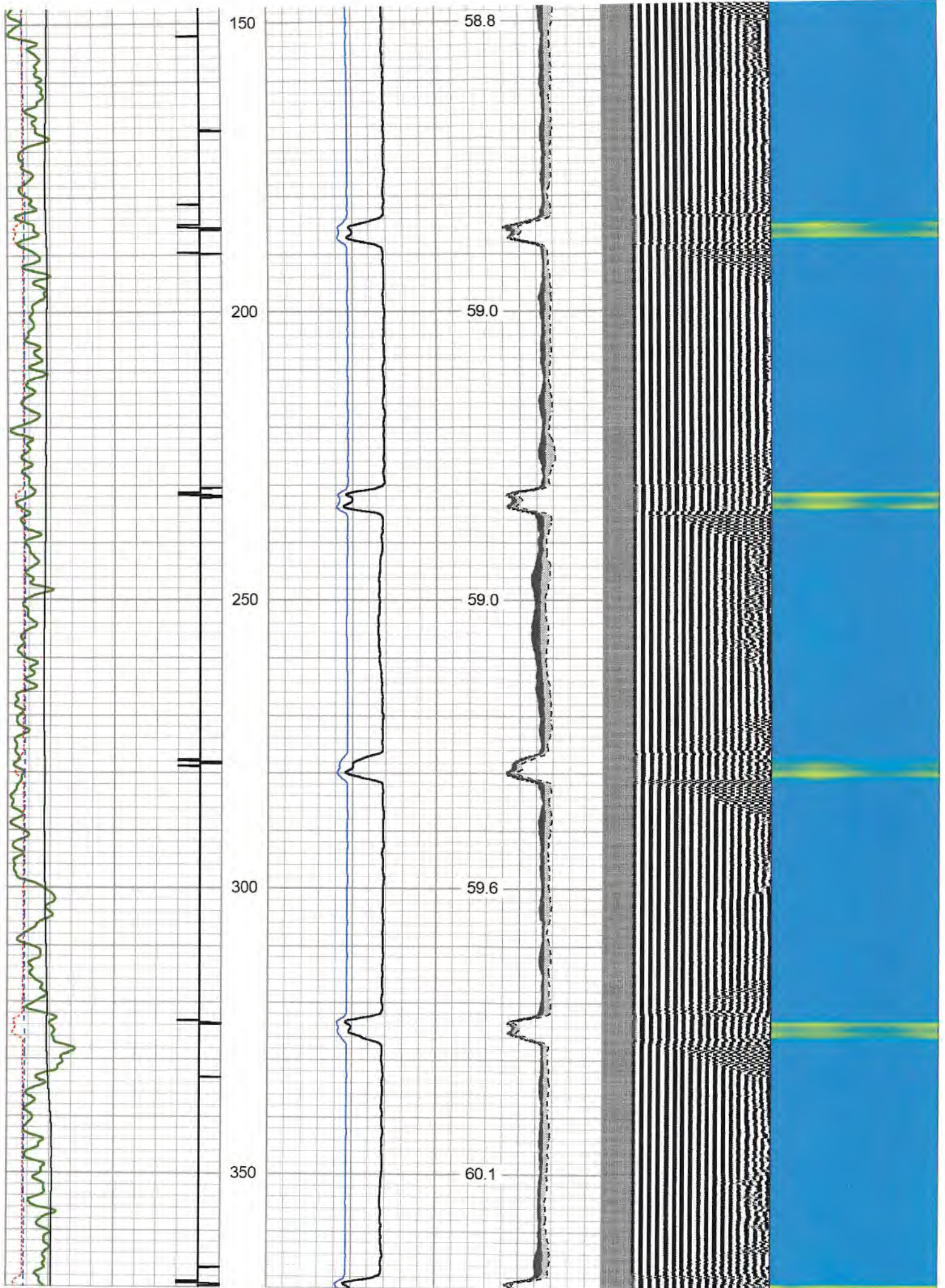


Database File antero\_phaeton\_1h\_rcbl\_15\_sep\_2022.db  
 Dataset Pathname river\_front/phaeton\_1h/run1/pass4  
 Presentation Format rcbl-bond index 1020  
 Dataset Creation Fri Sep 16 04:58:26 2022  
 Charted by Depth in Feet scaled 1:240

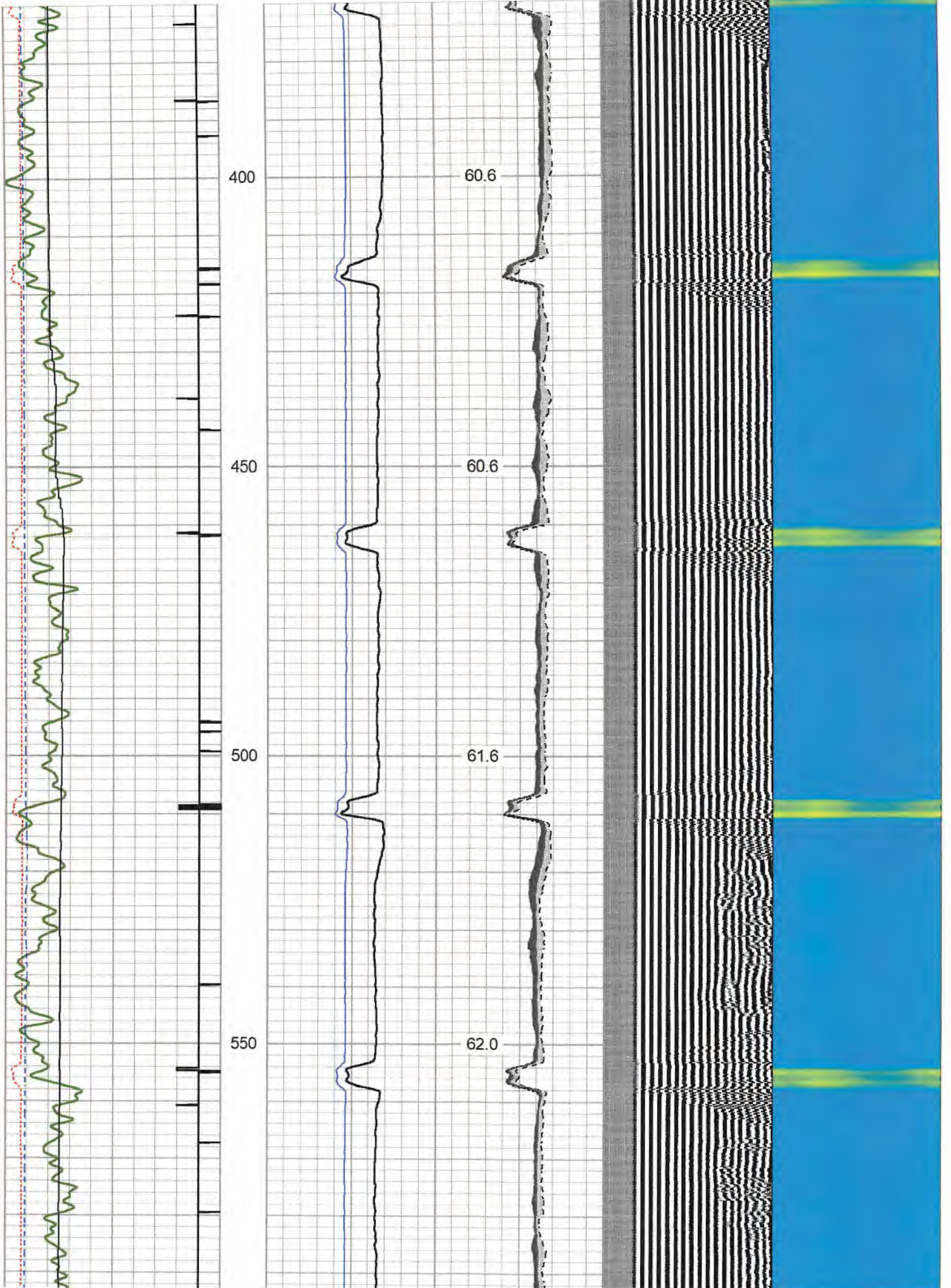
270	Travel Time (usec)	160	0	Amplitude (mV)	100	-5	AMPMIN	150	Variable Density	1	Cement Map	8
9	Casing Collar	-1	1	BONDIX	0	-5	AMPMAX	150	(usec)	1200		
0	Gamma Ray (GAPI)	150				-5	AMPAVG	150				
	Line Speed						TEMP					
-200	(ft/min)	200					(degF)					
0	Line Tension (lb)	3000										



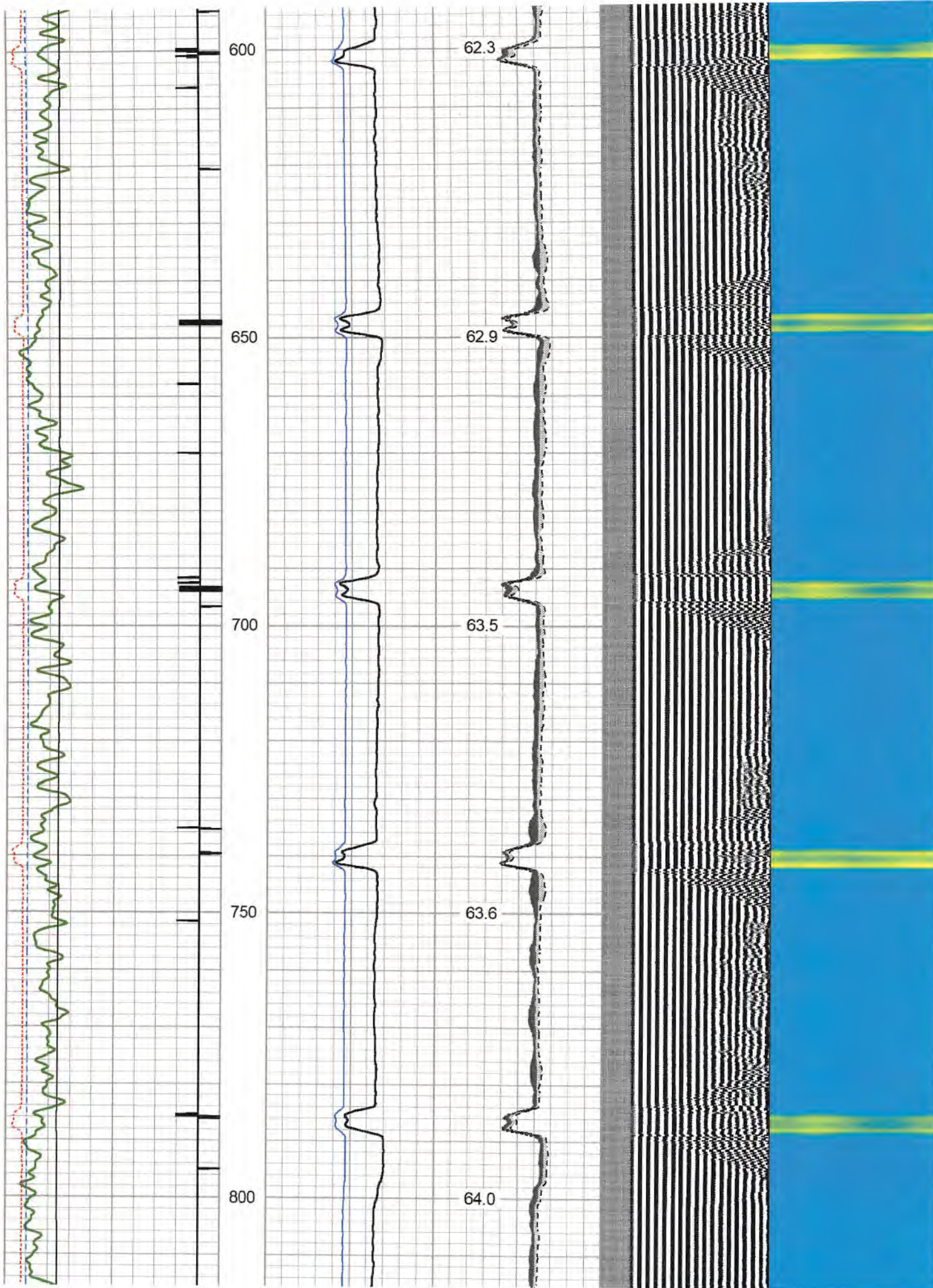




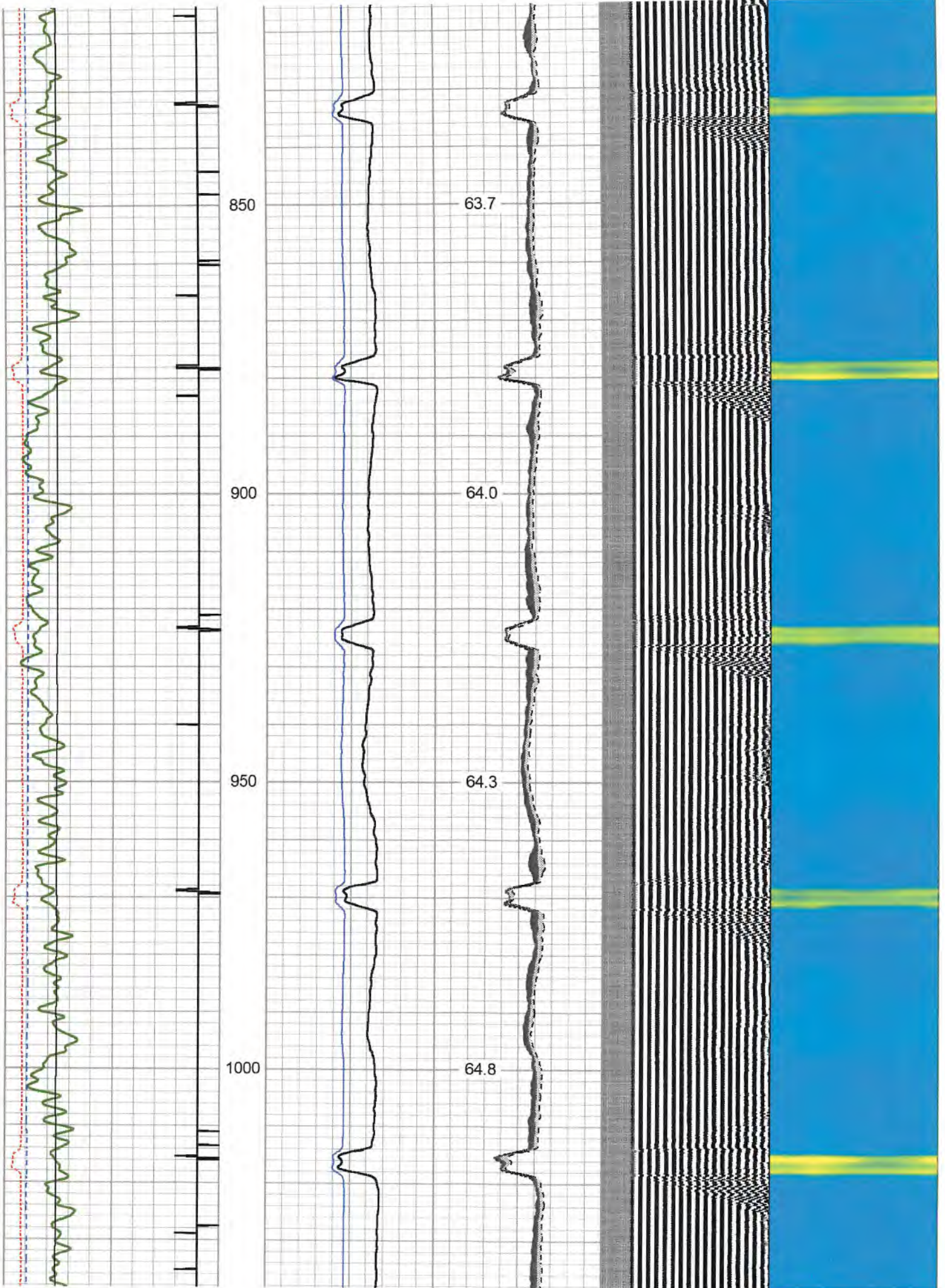




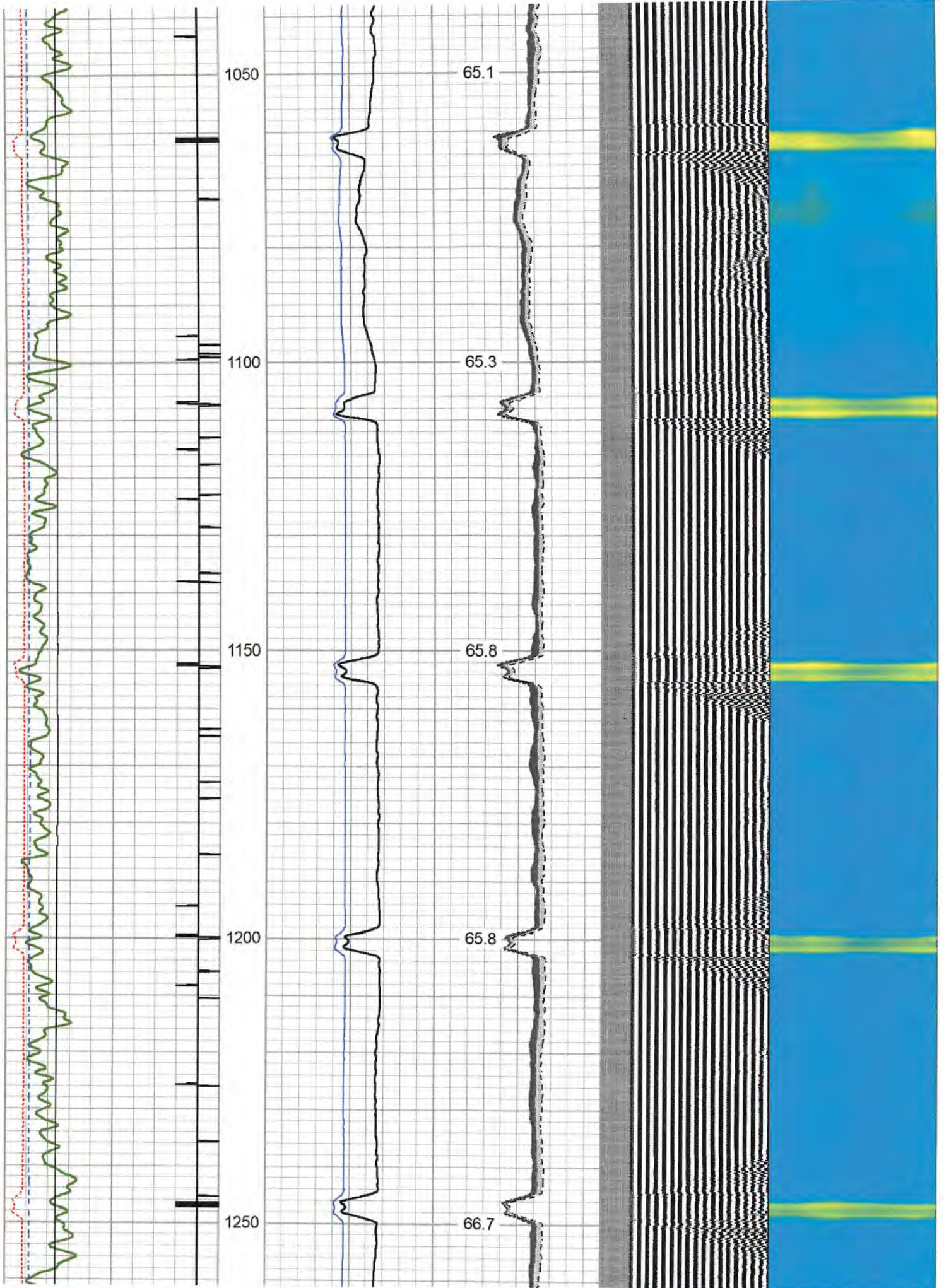




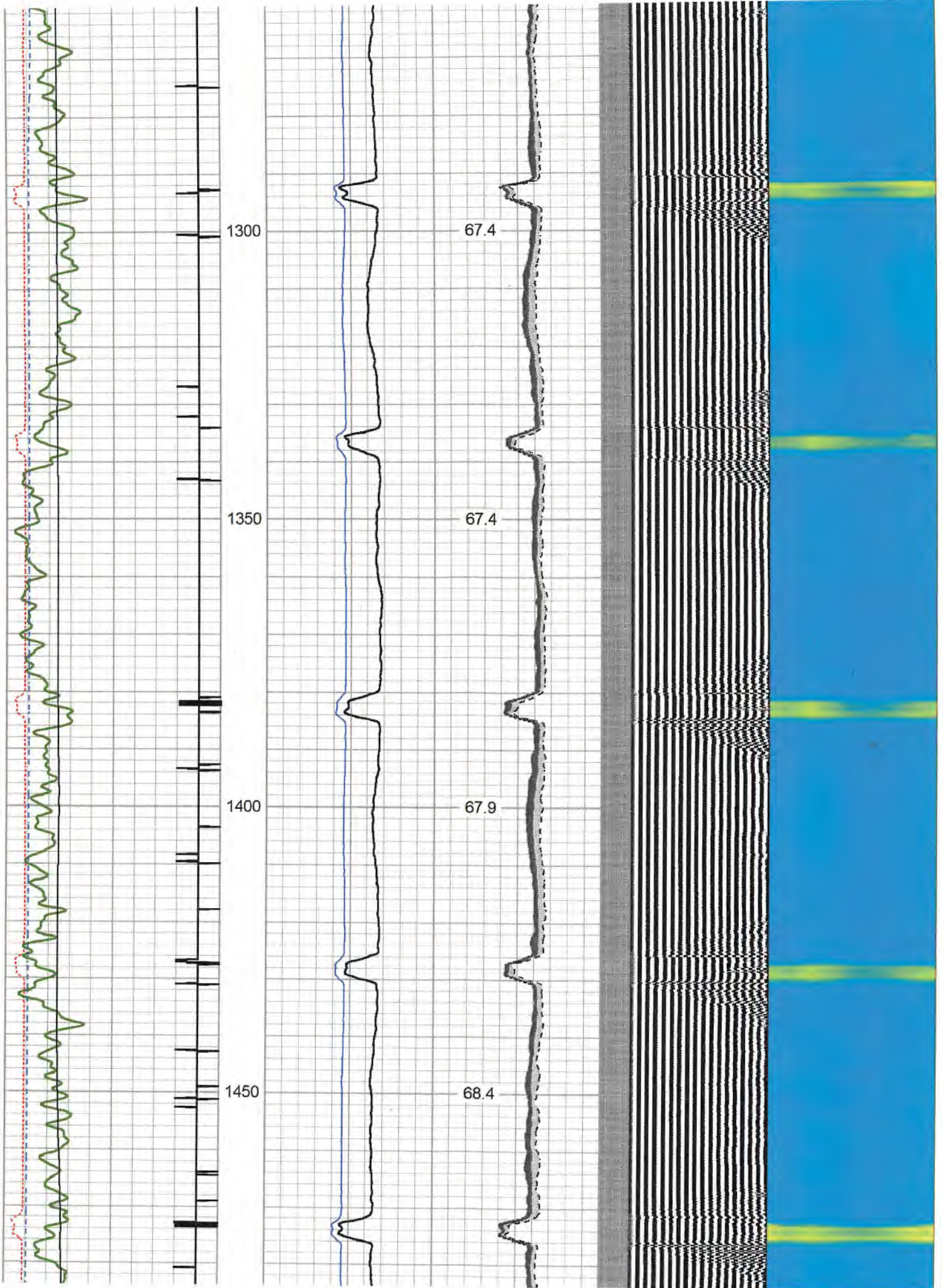




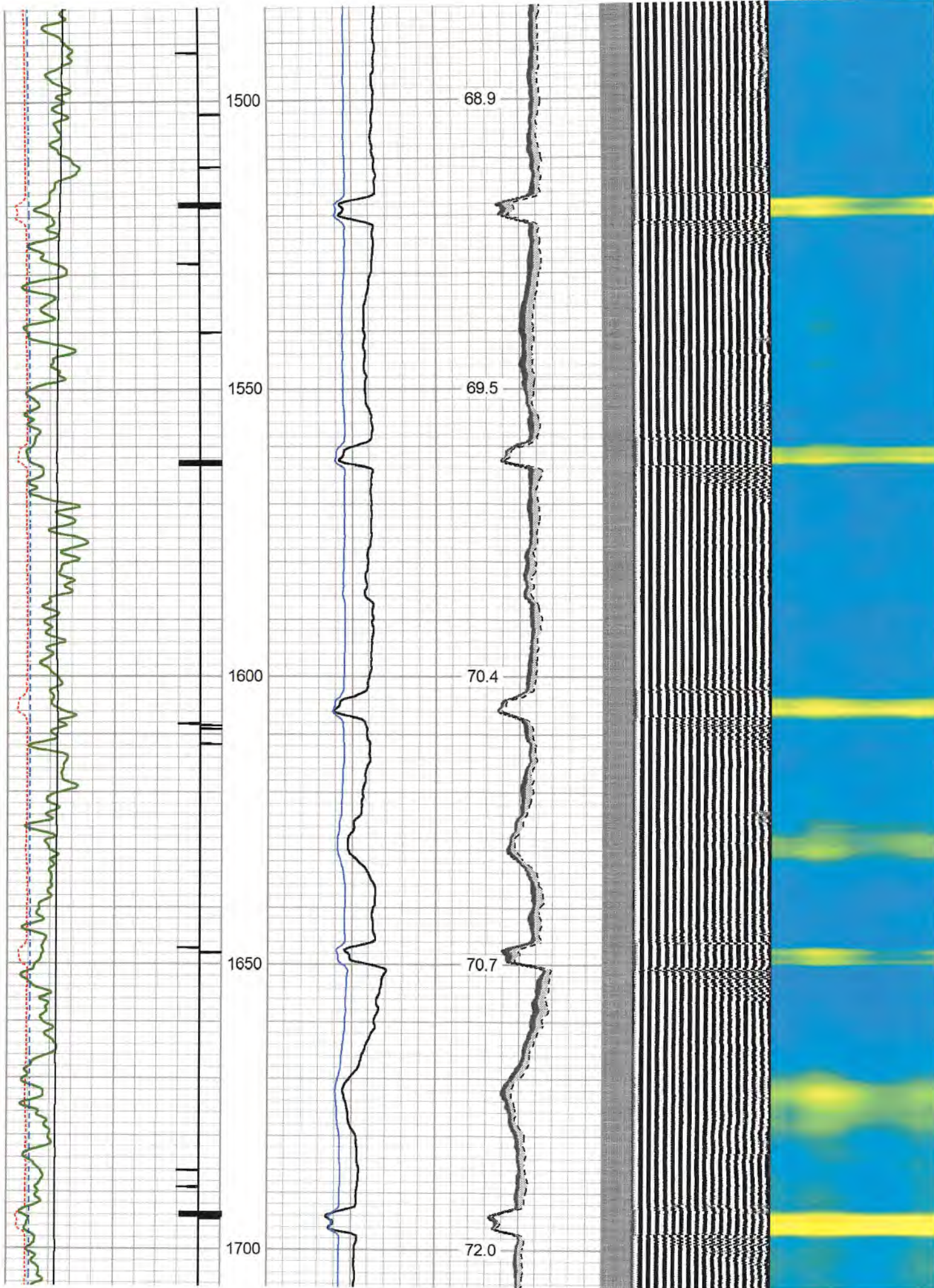




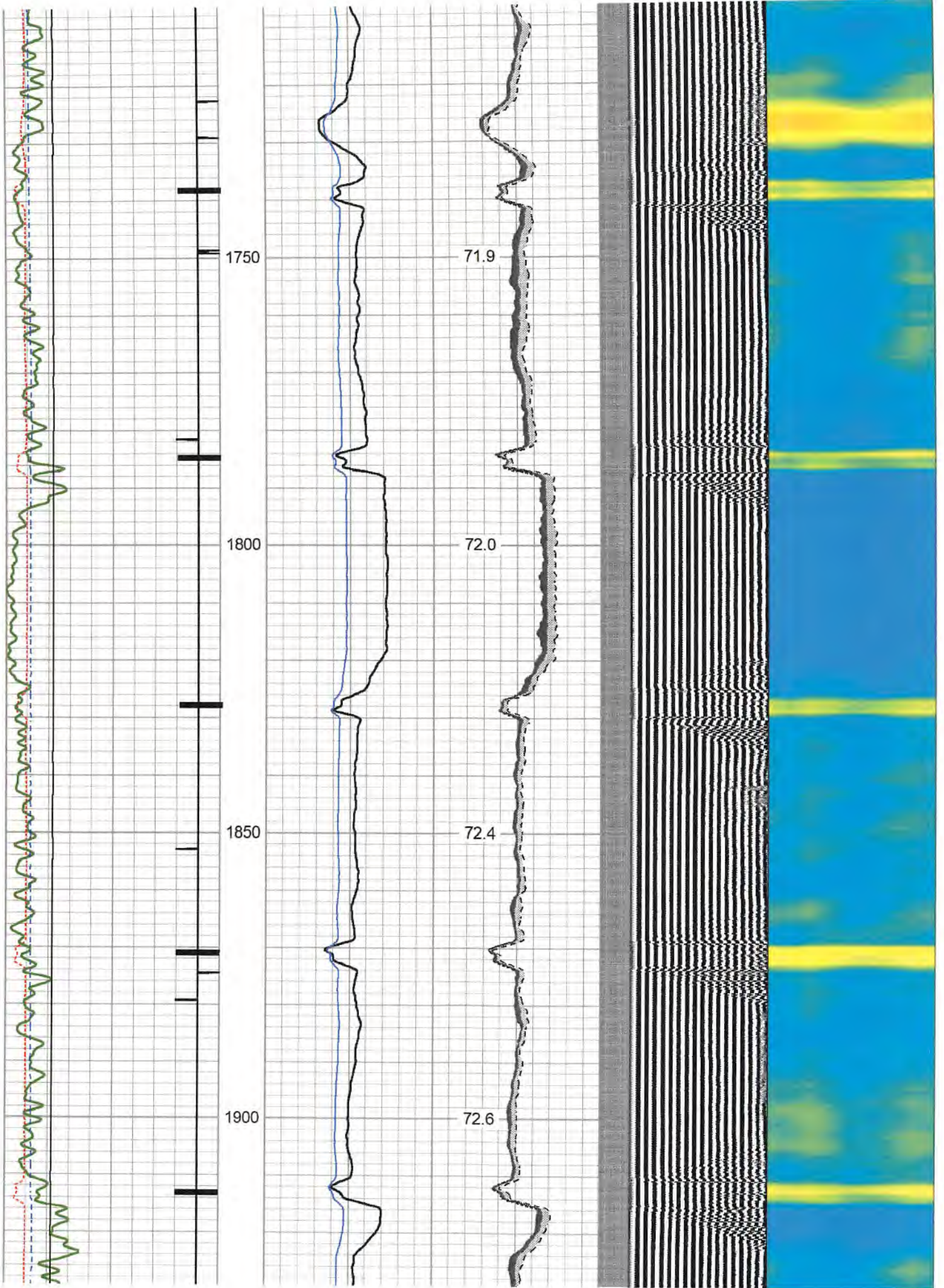




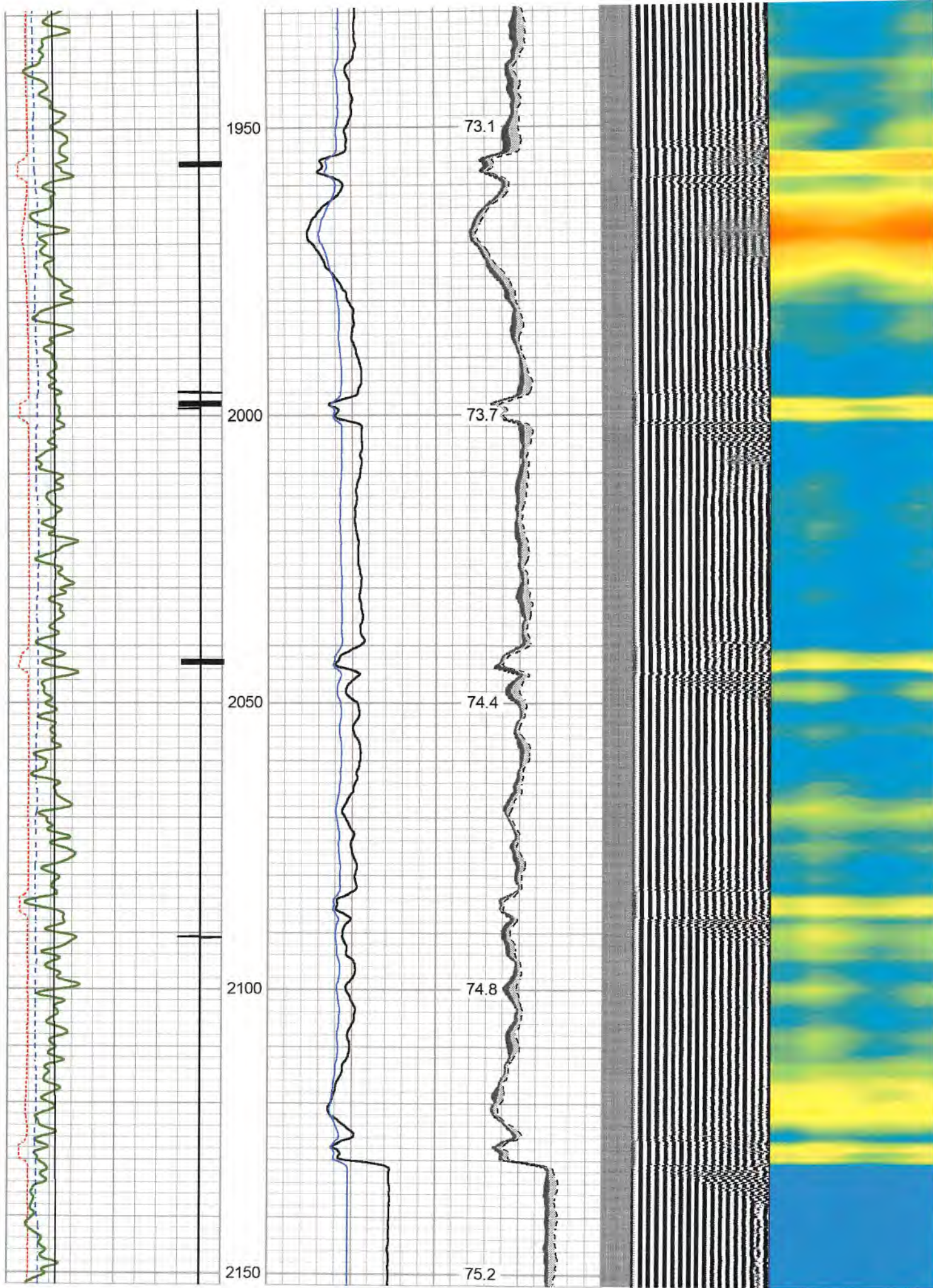




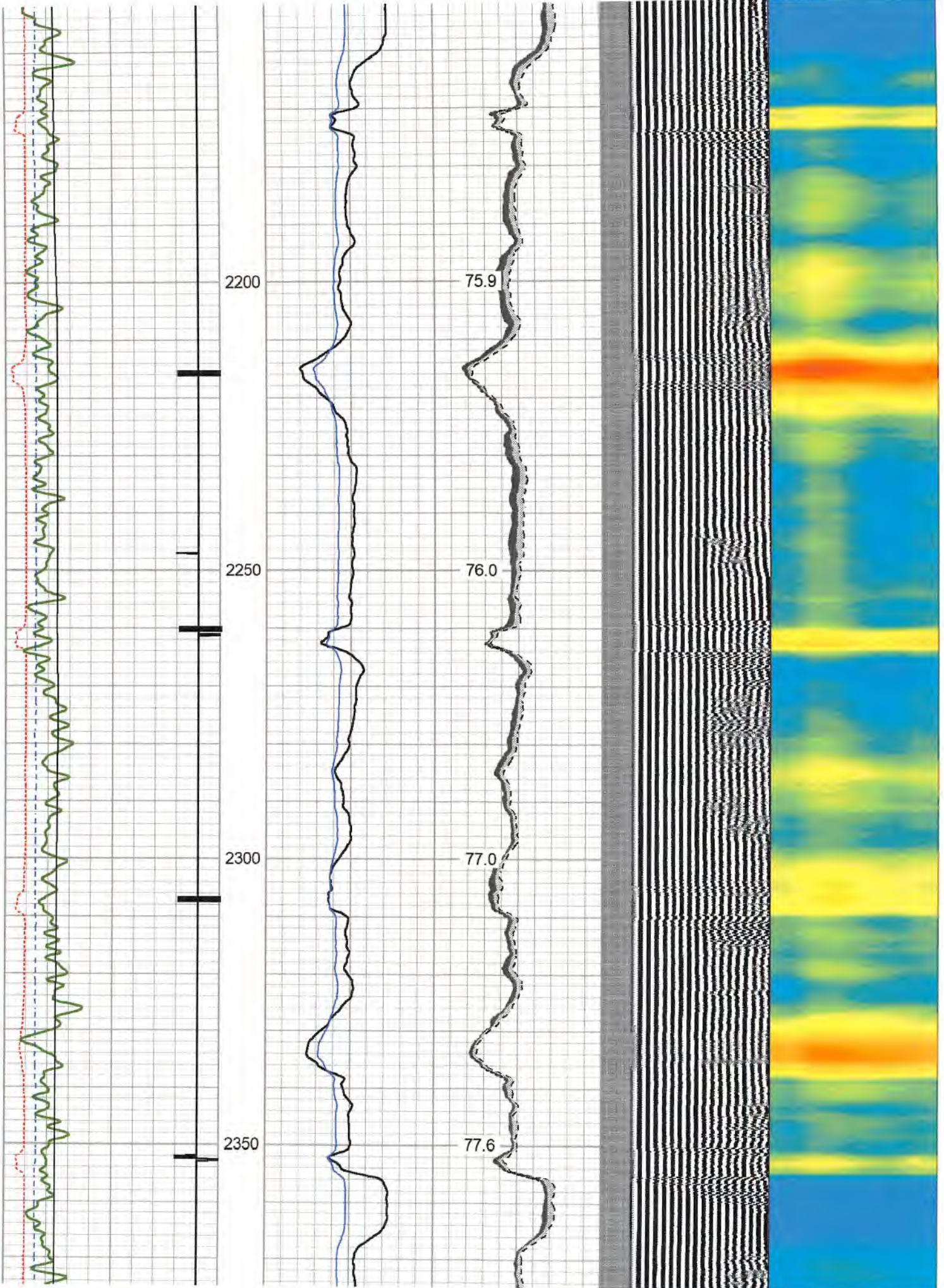




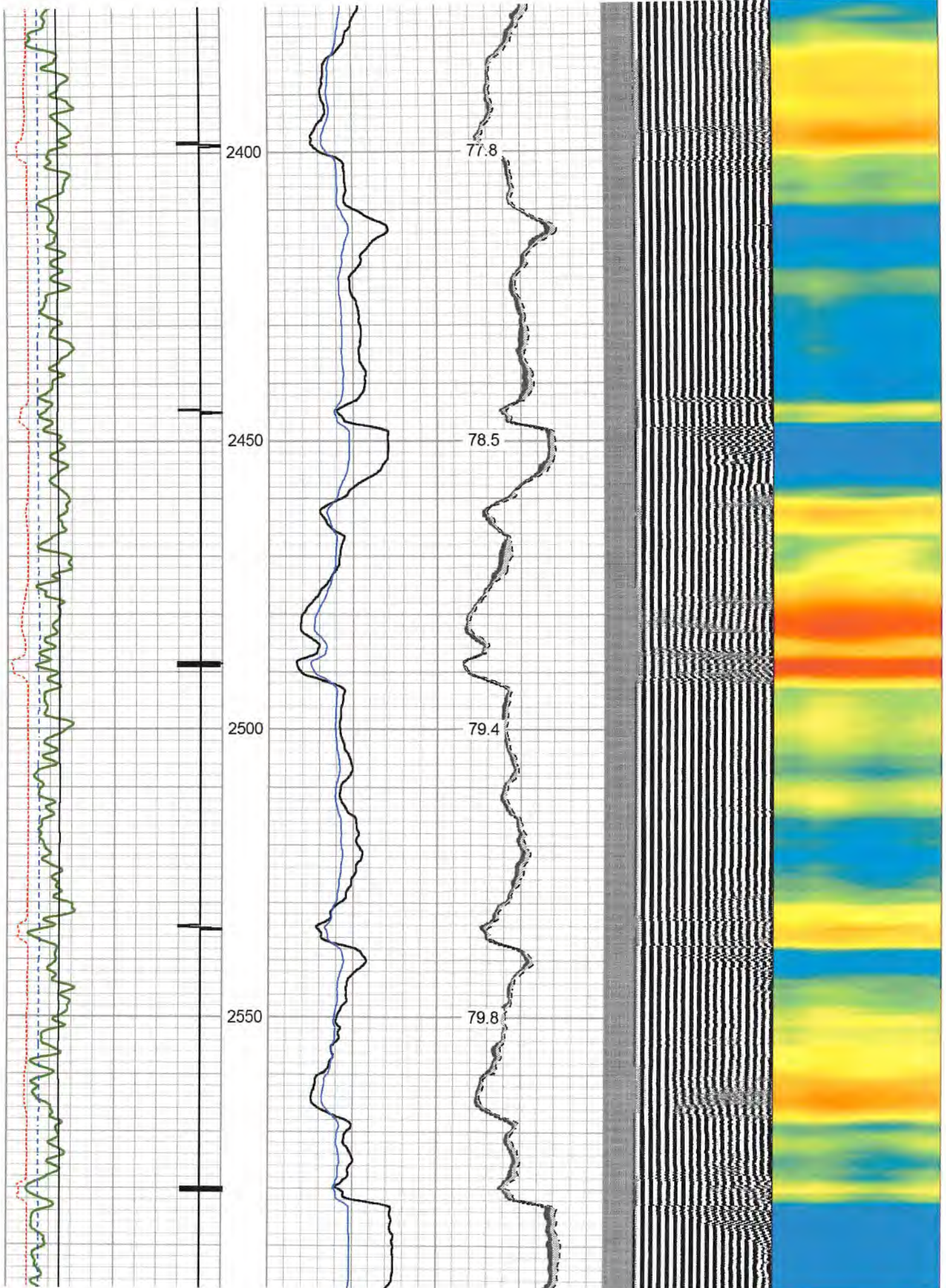




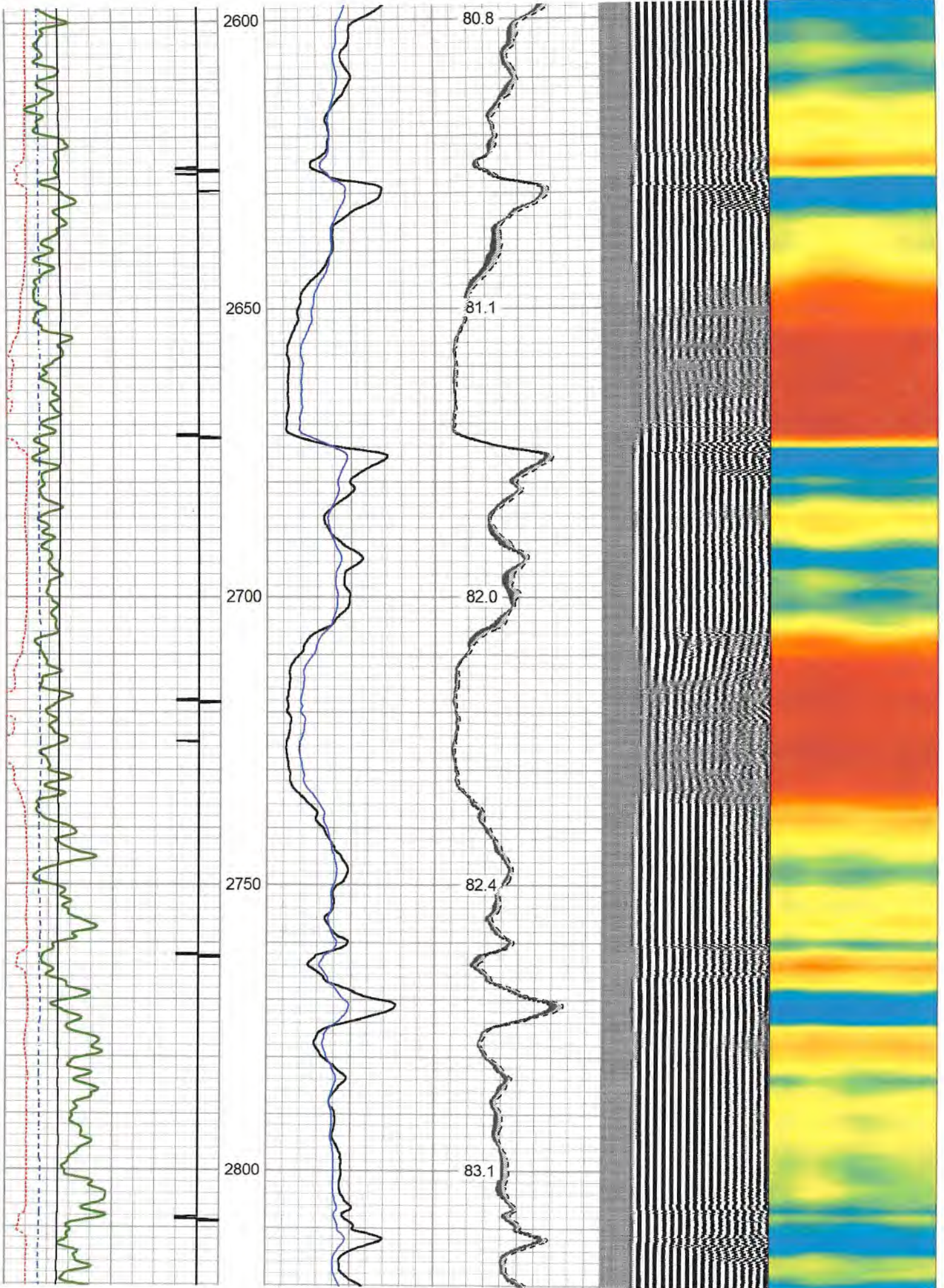




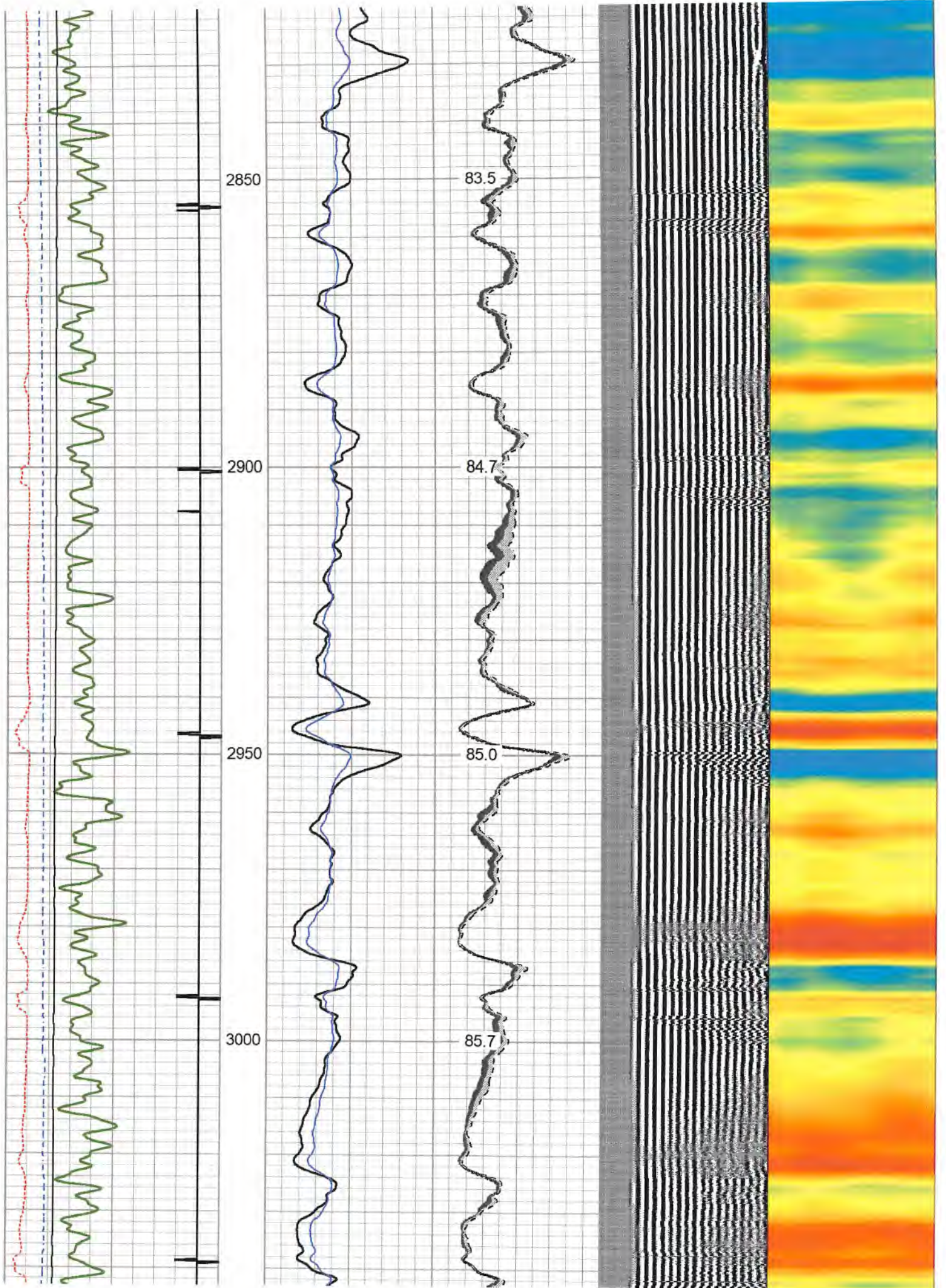




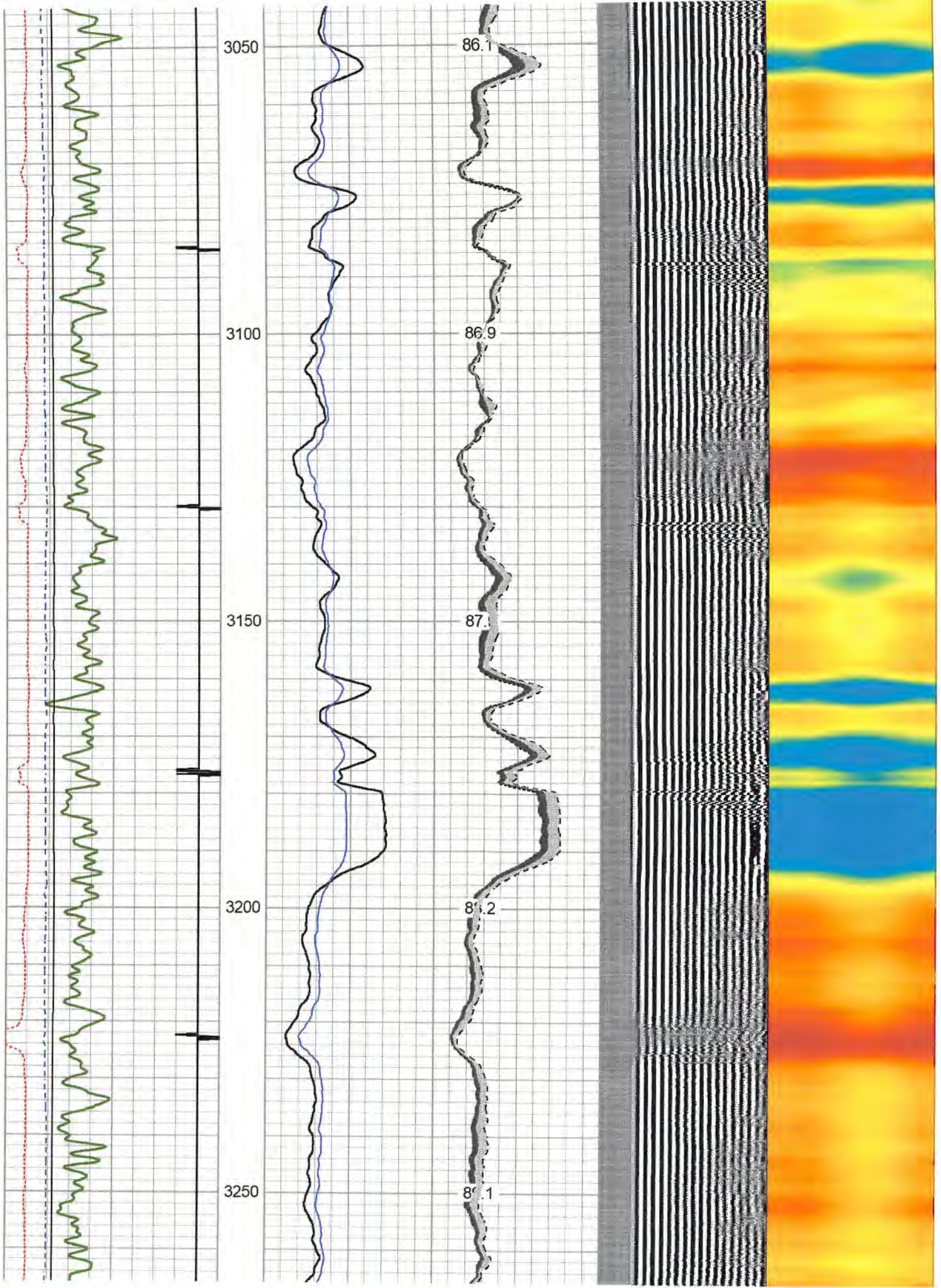




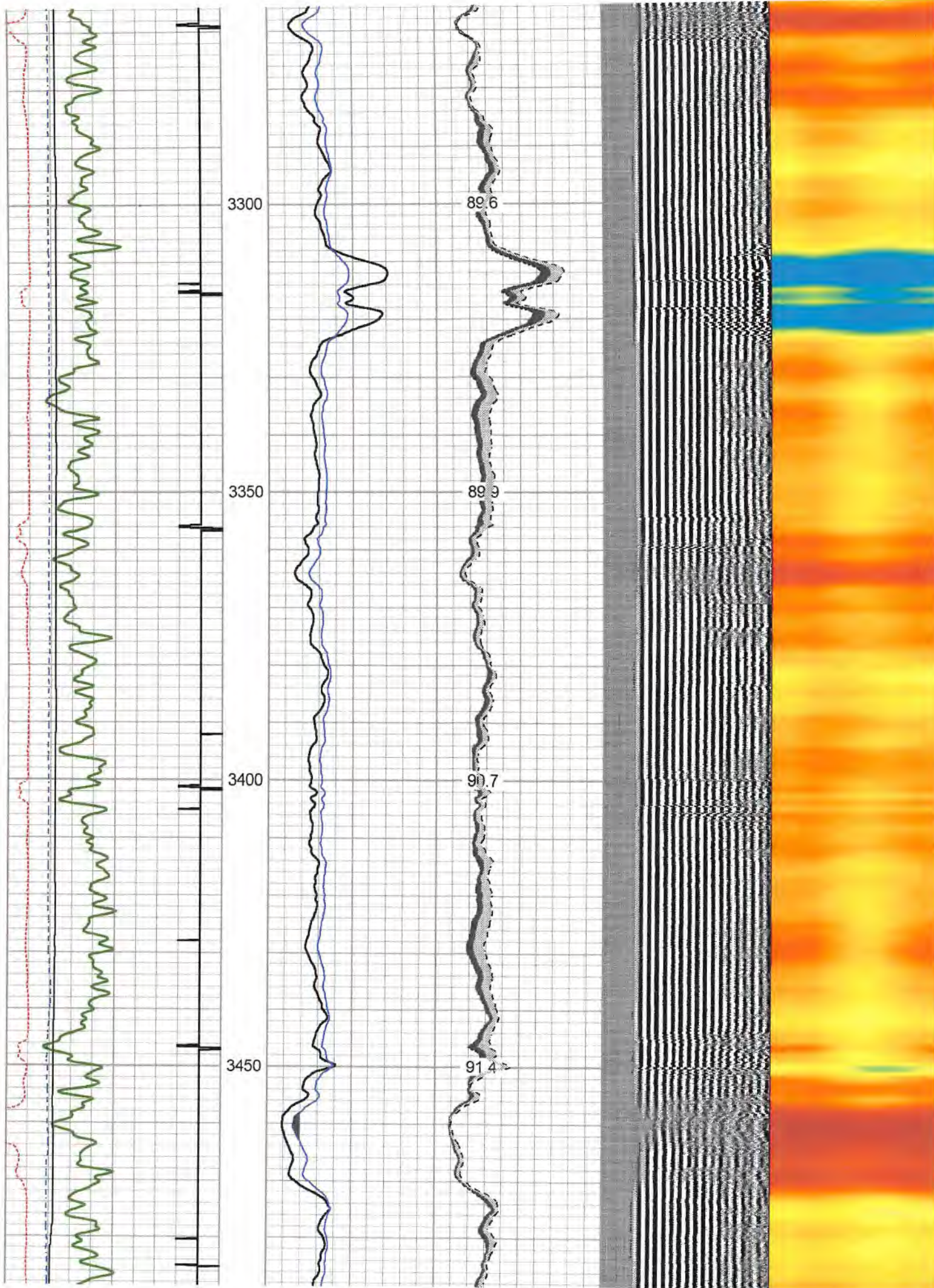




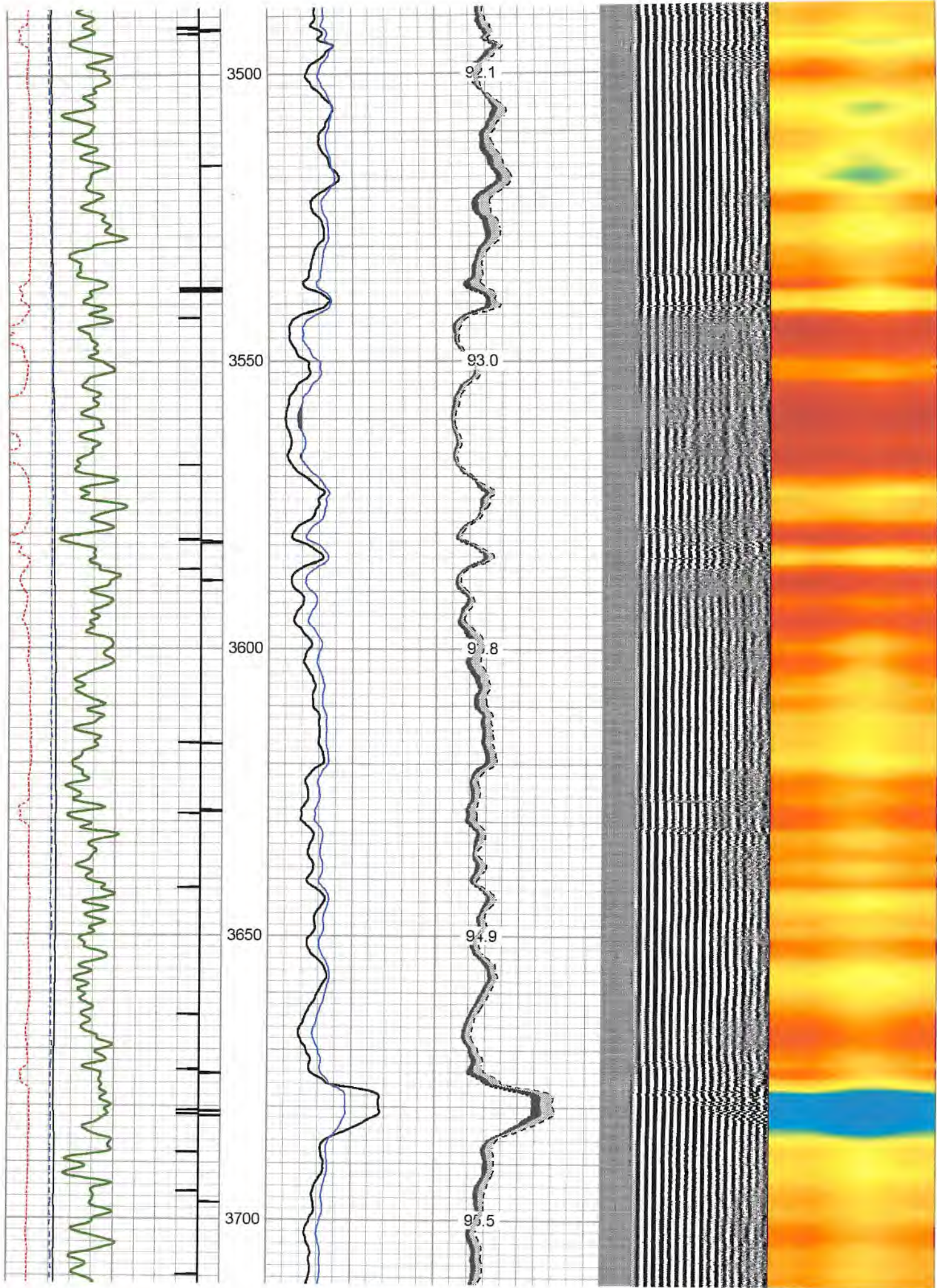




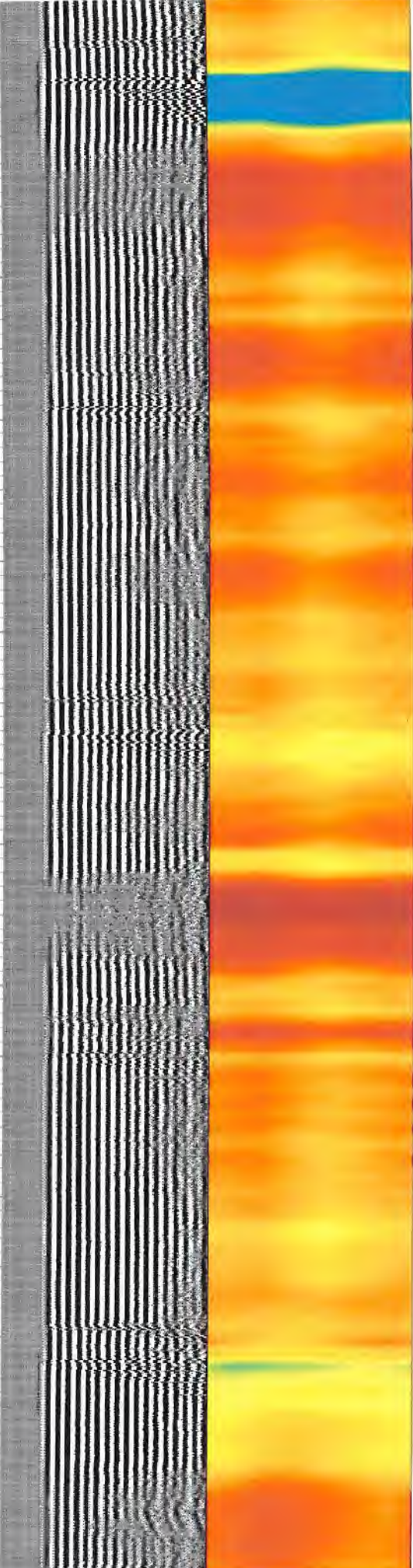
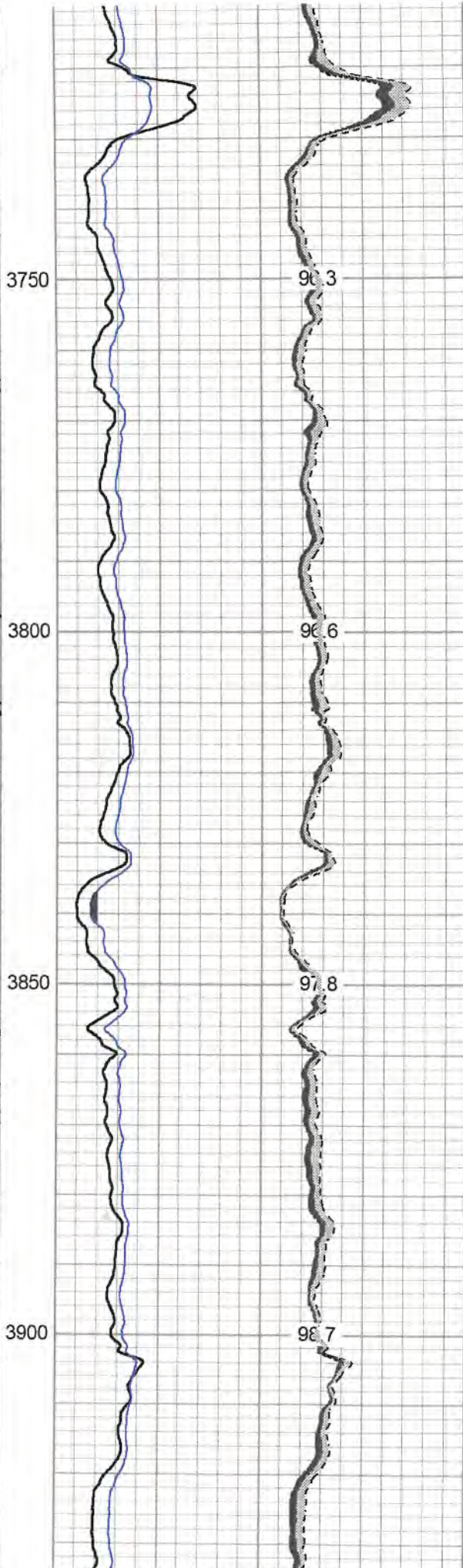
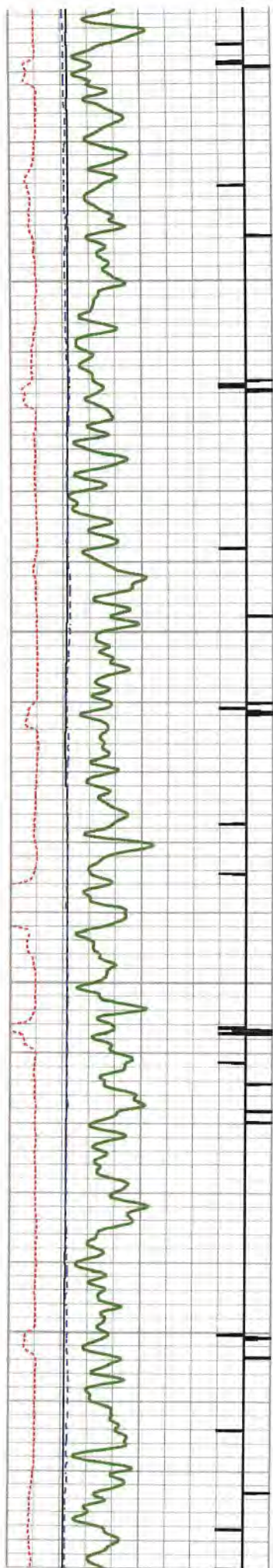




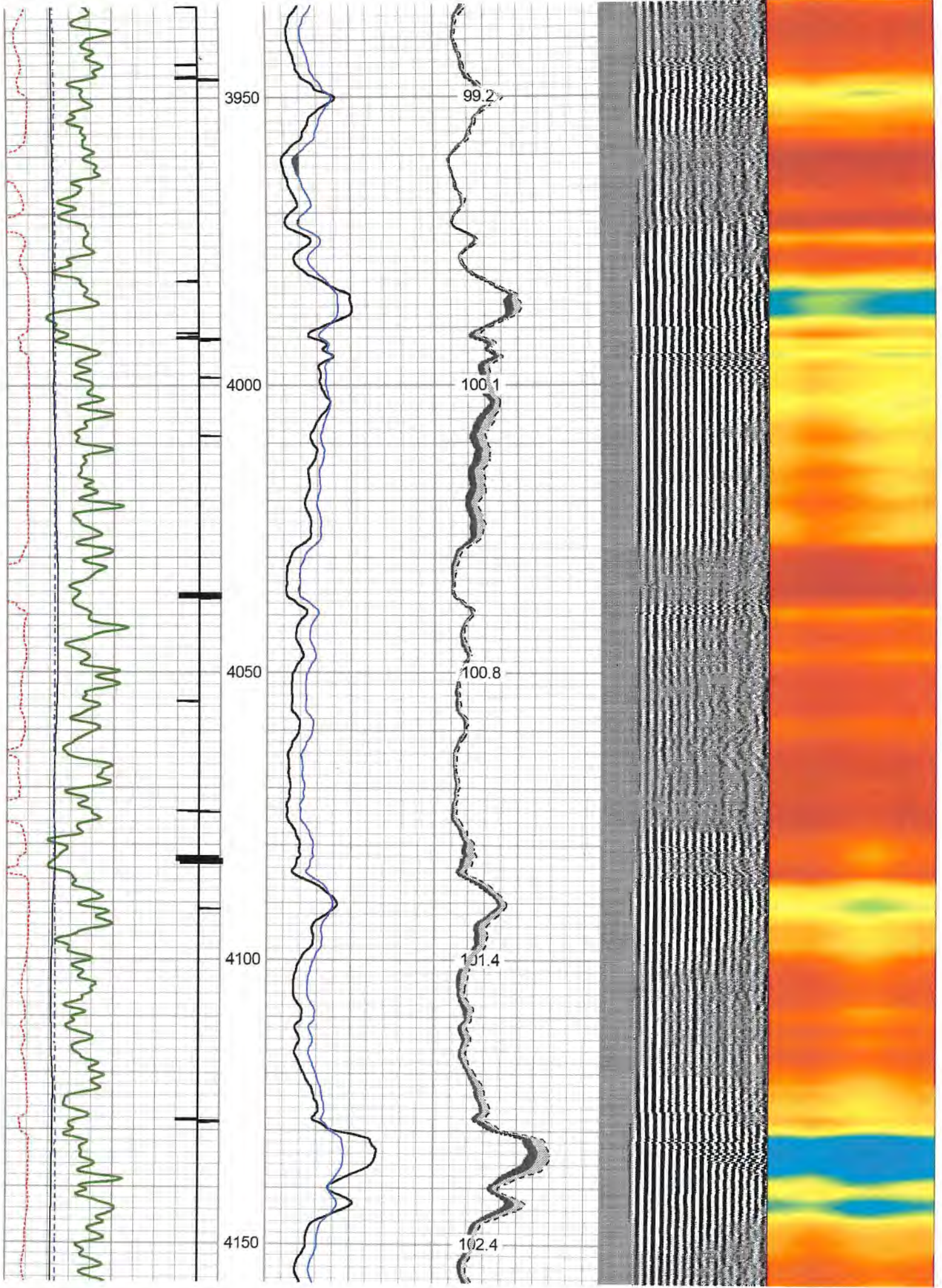




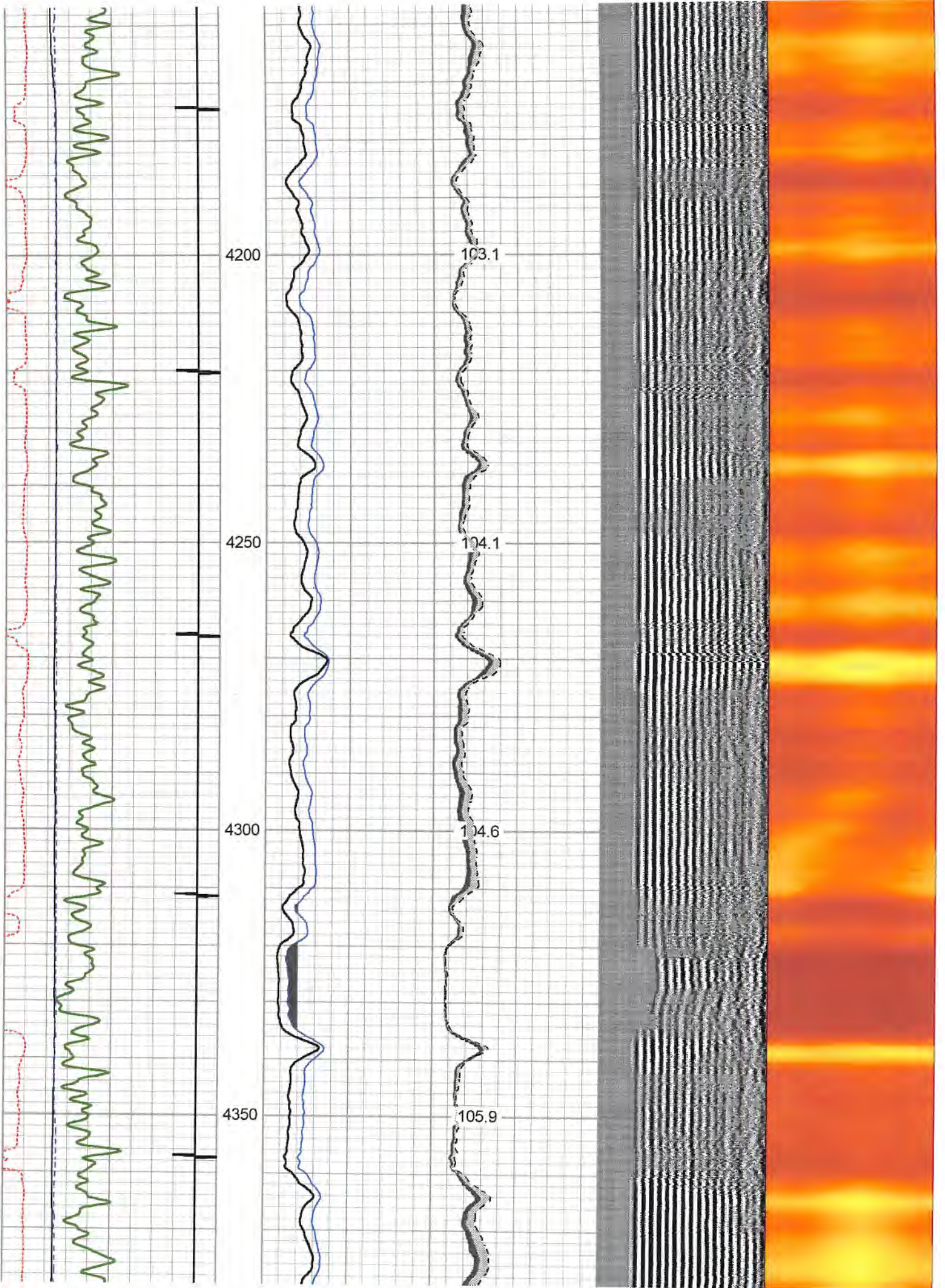




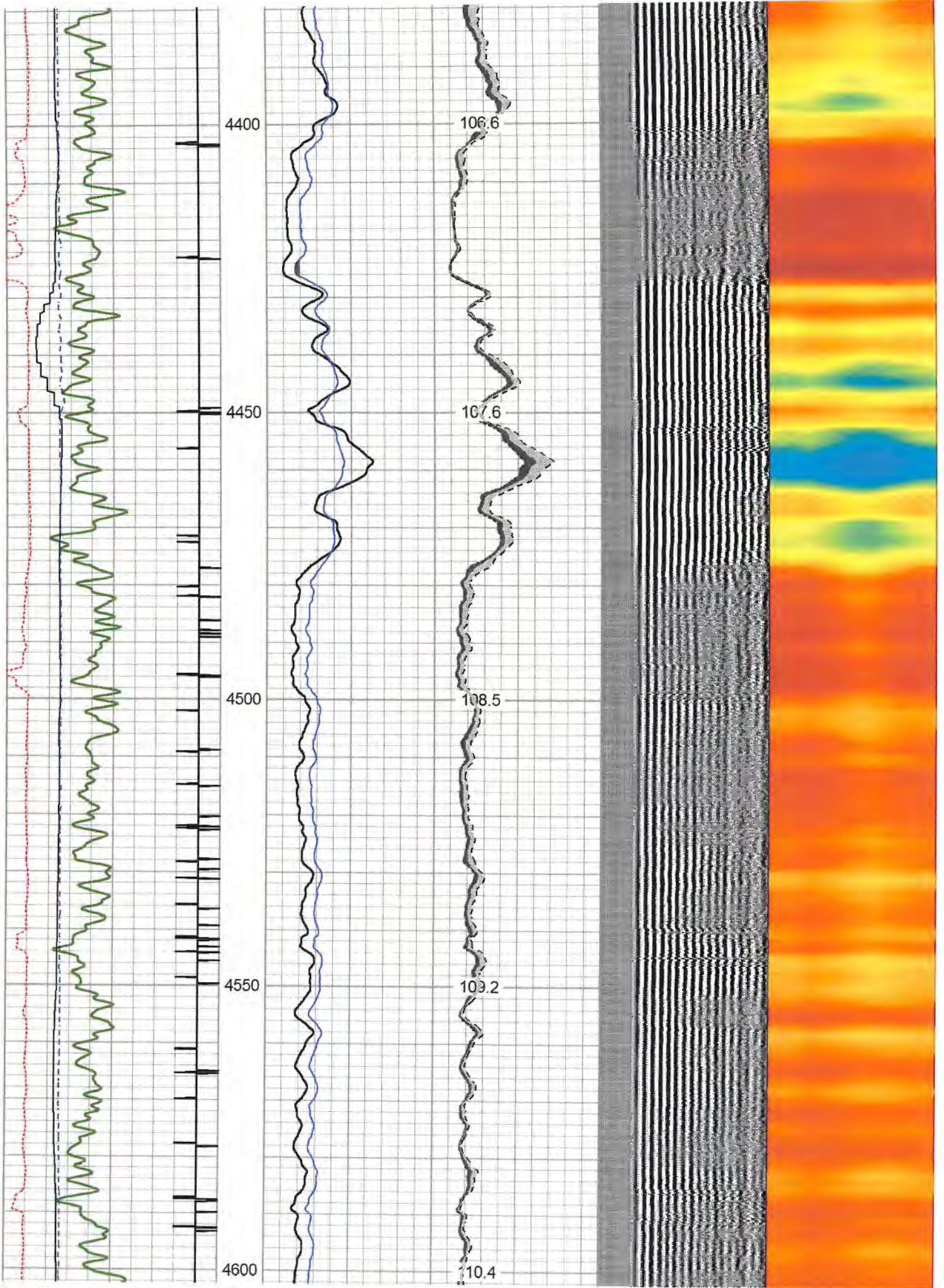




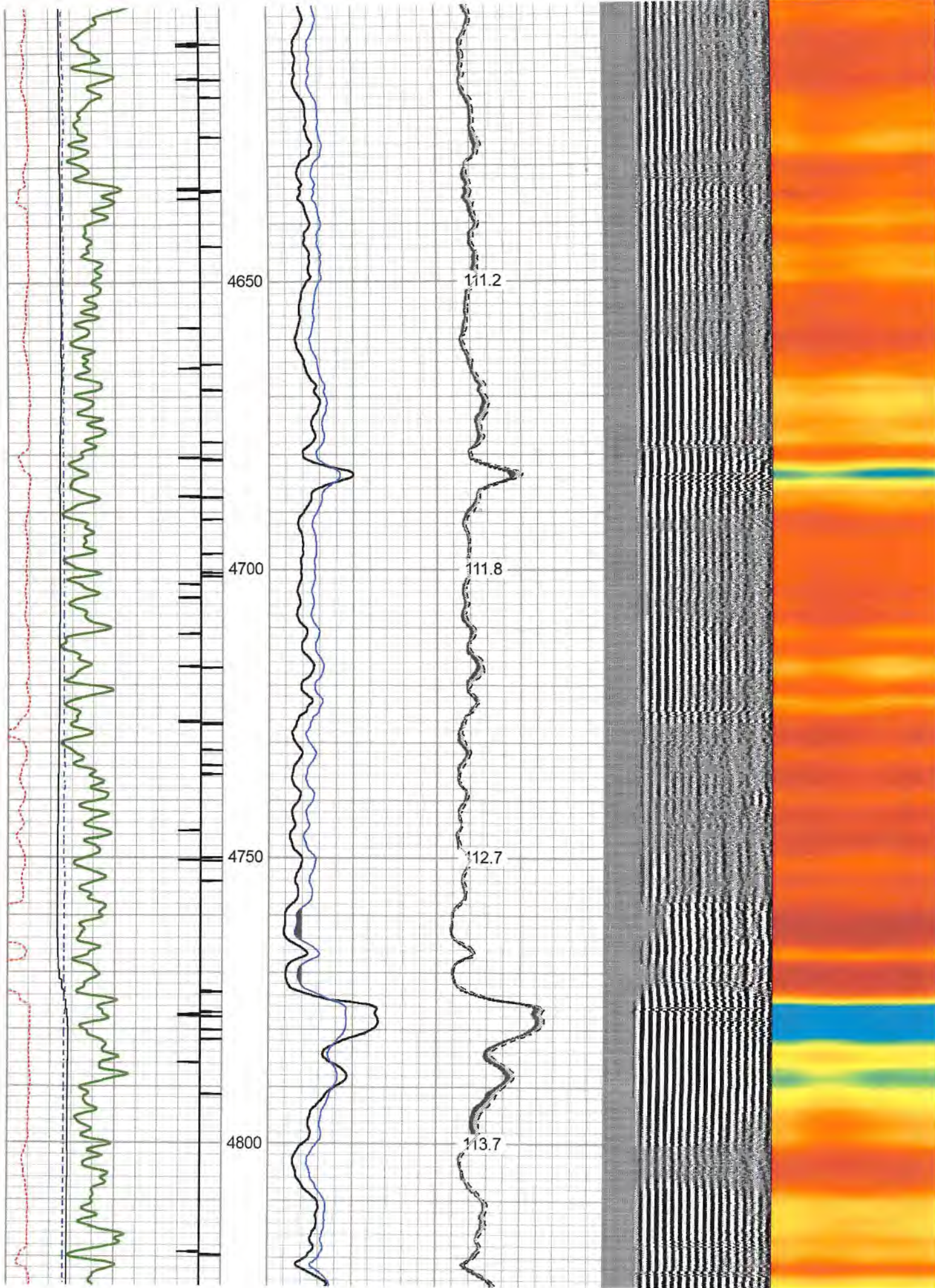




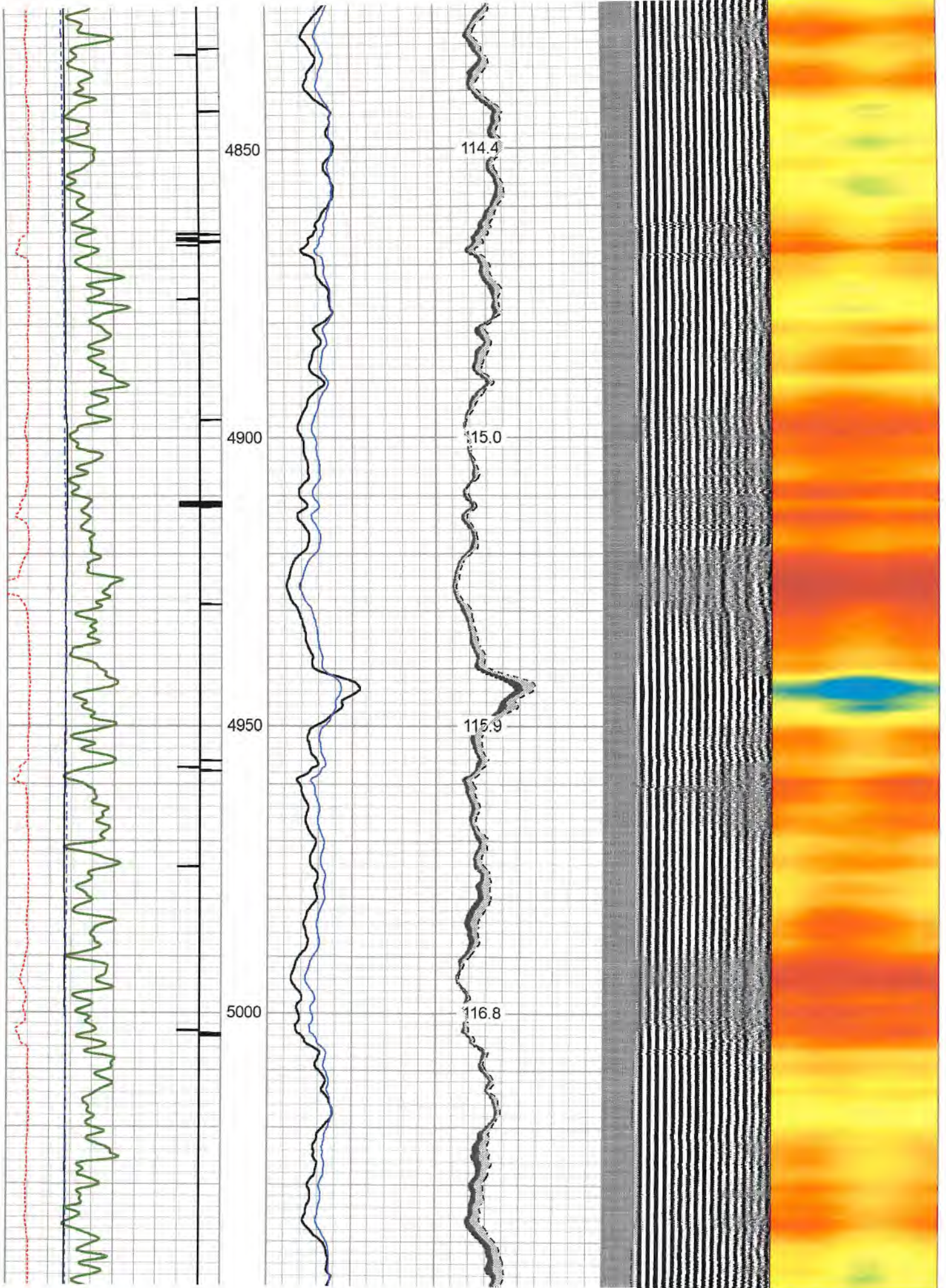




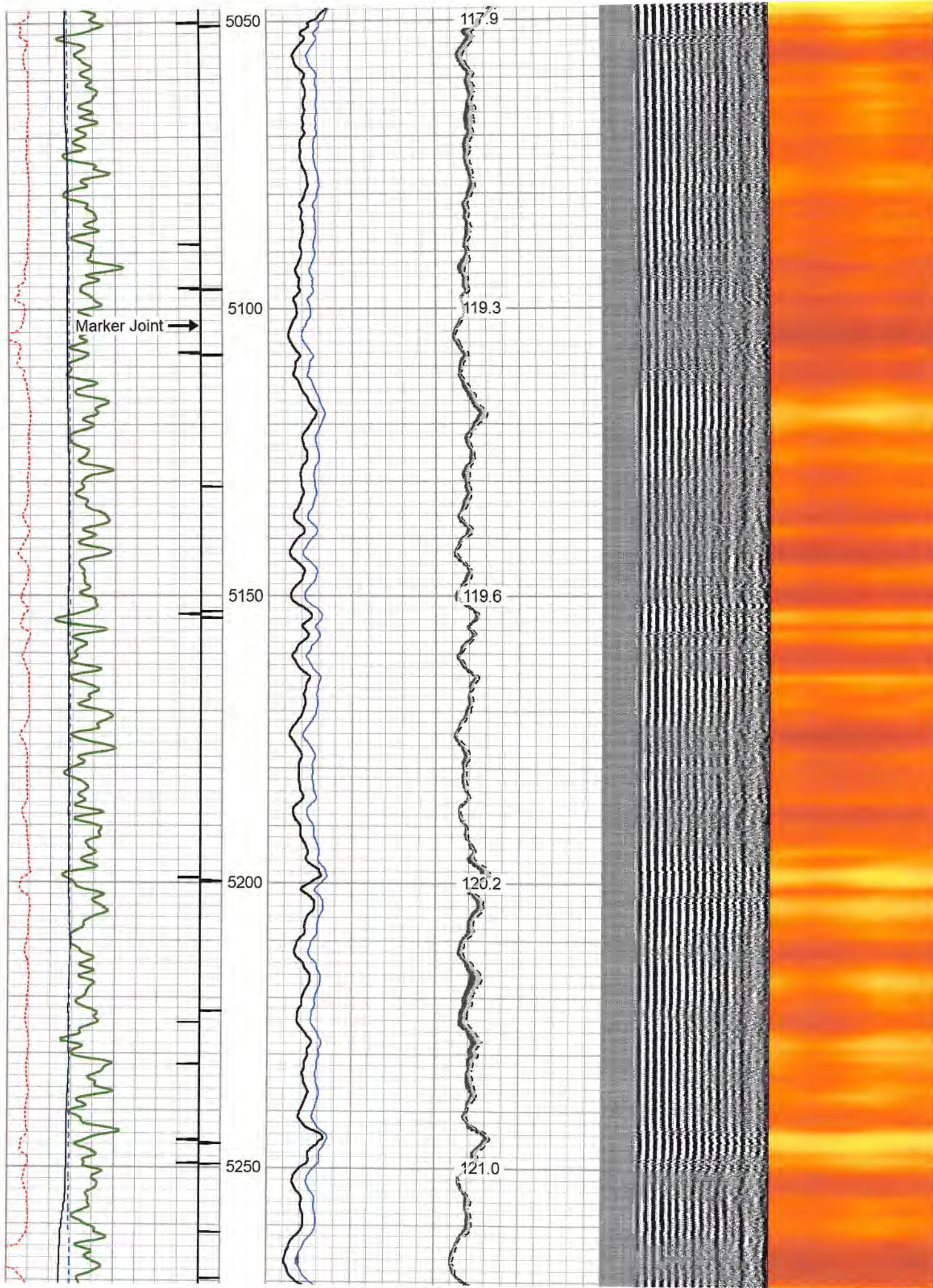




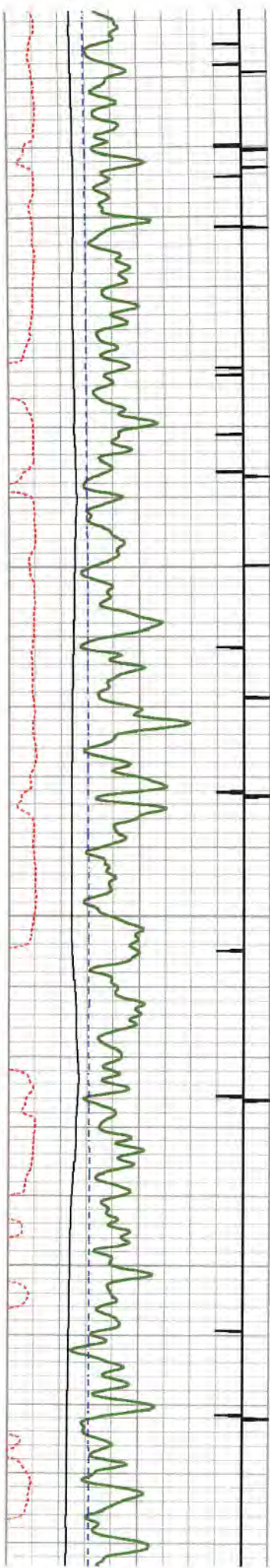




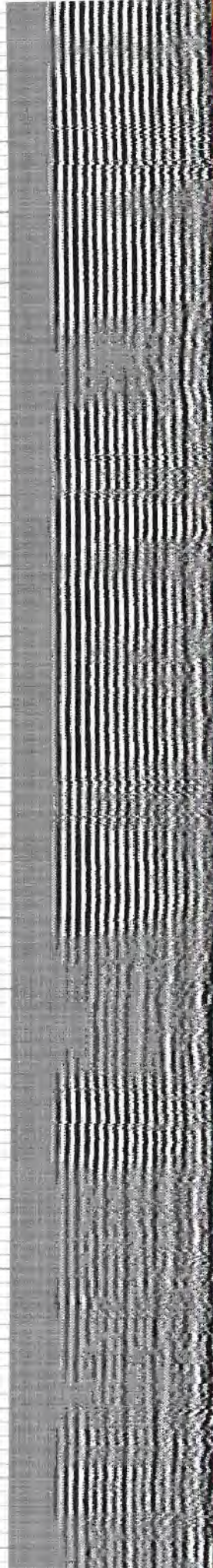
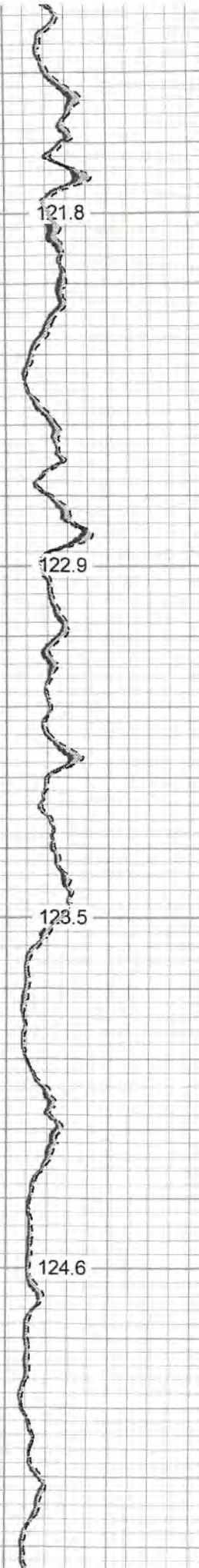




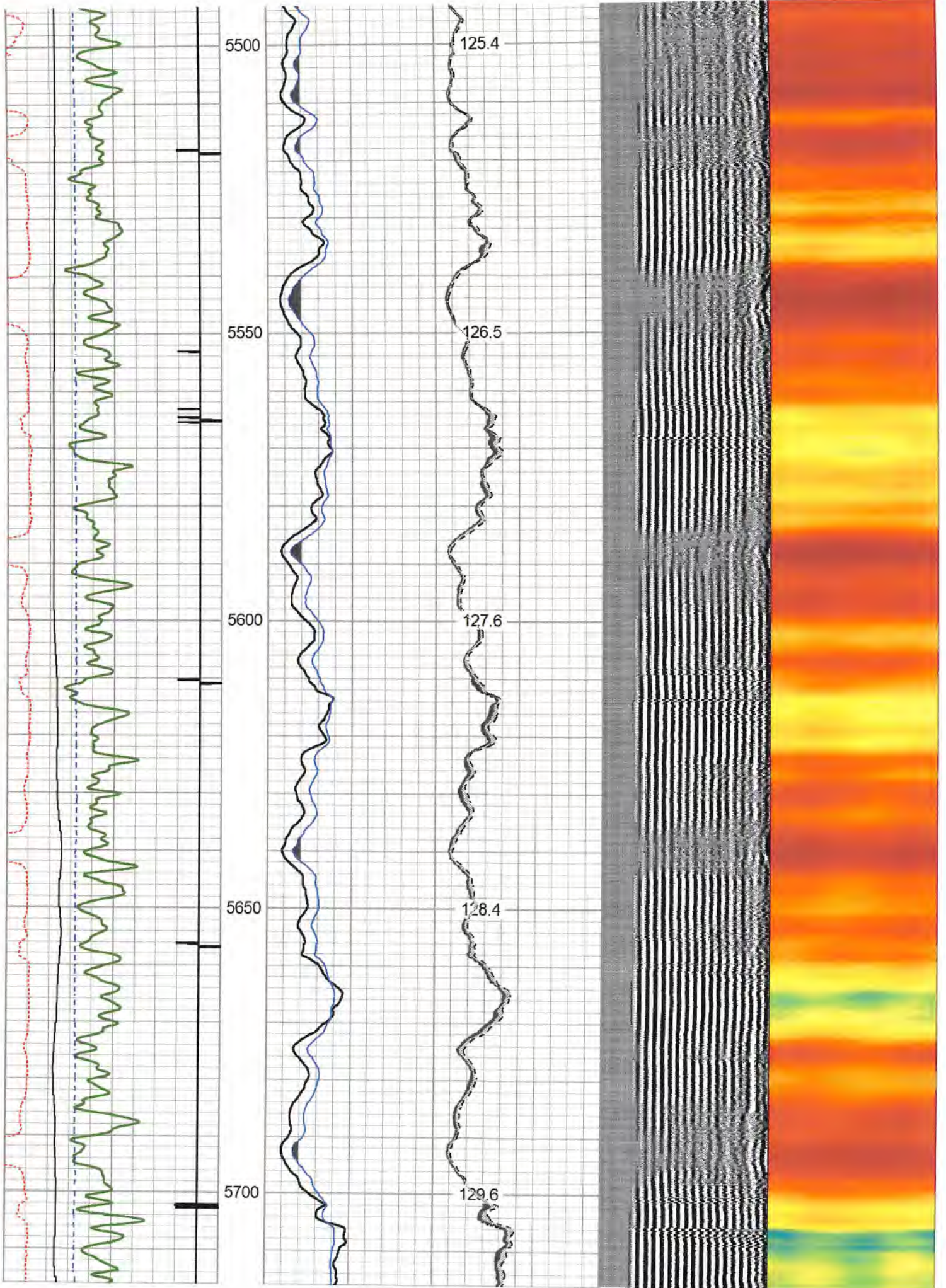




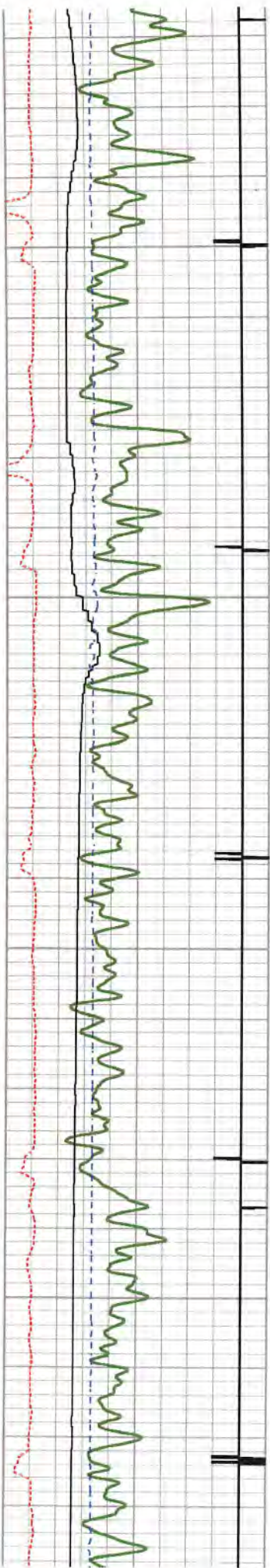
5300  
5350  
5400  
5450



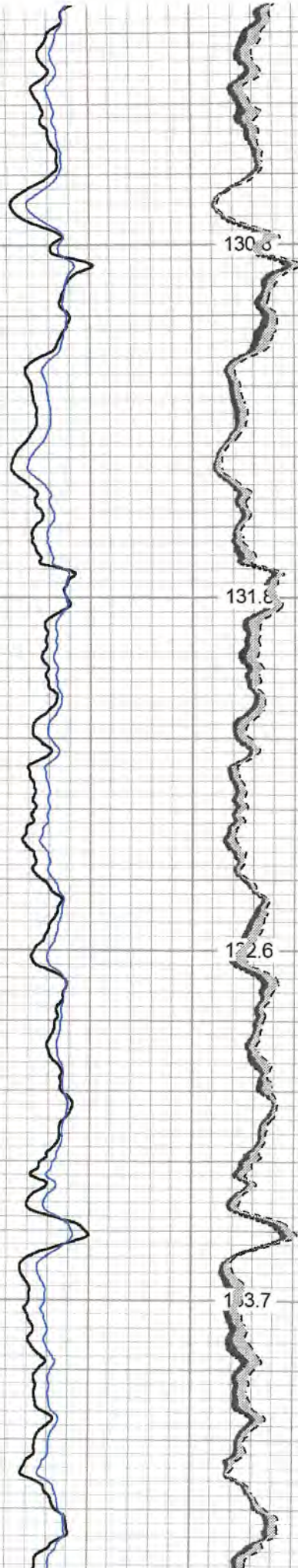




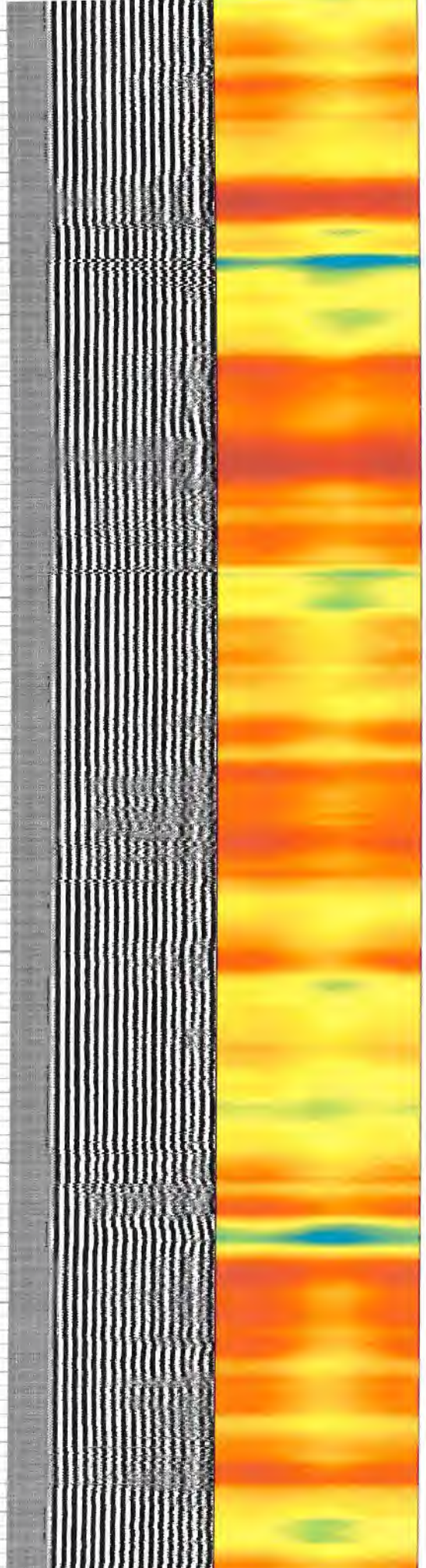




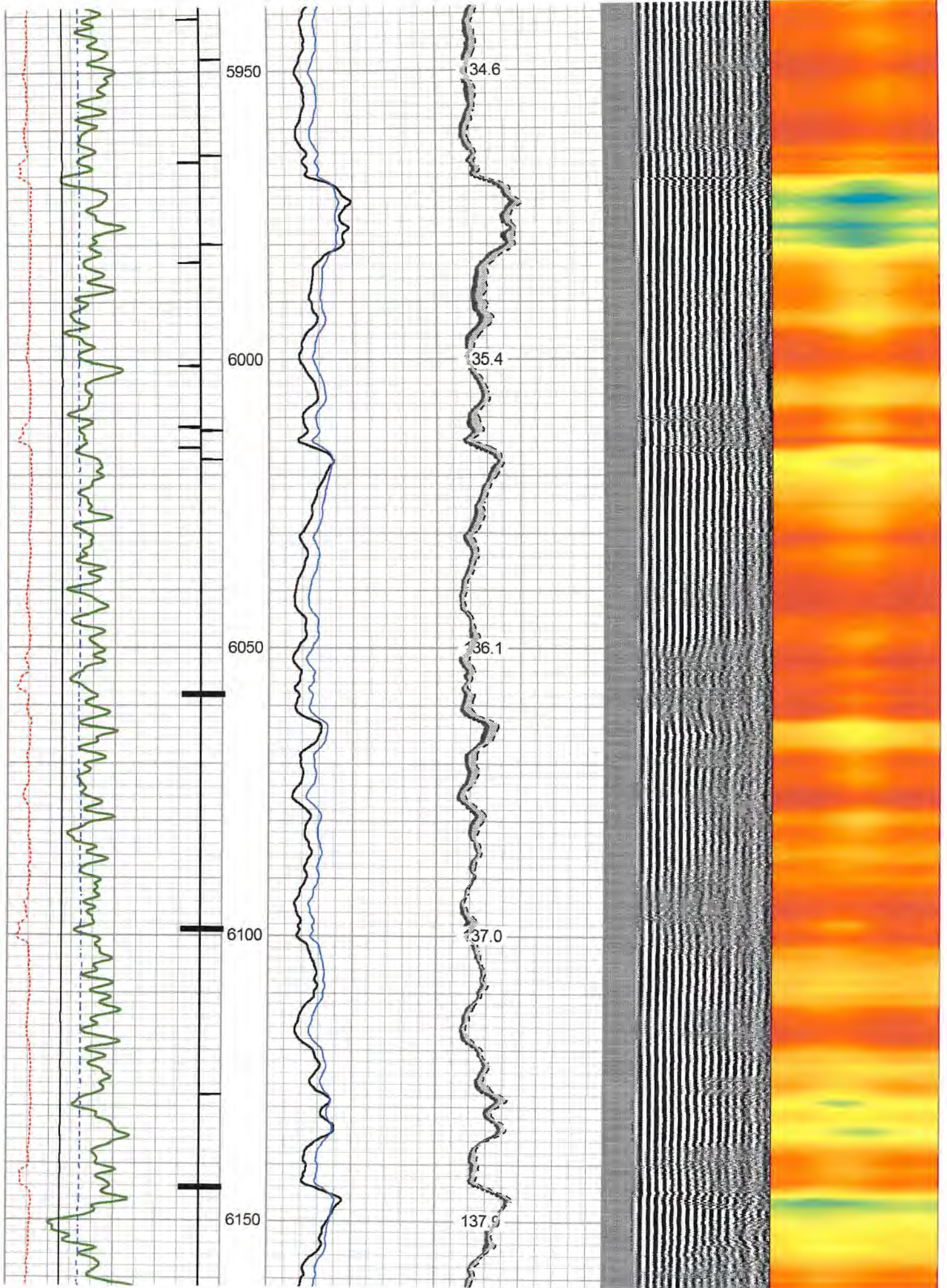
5750  
5800  
5850  
5900



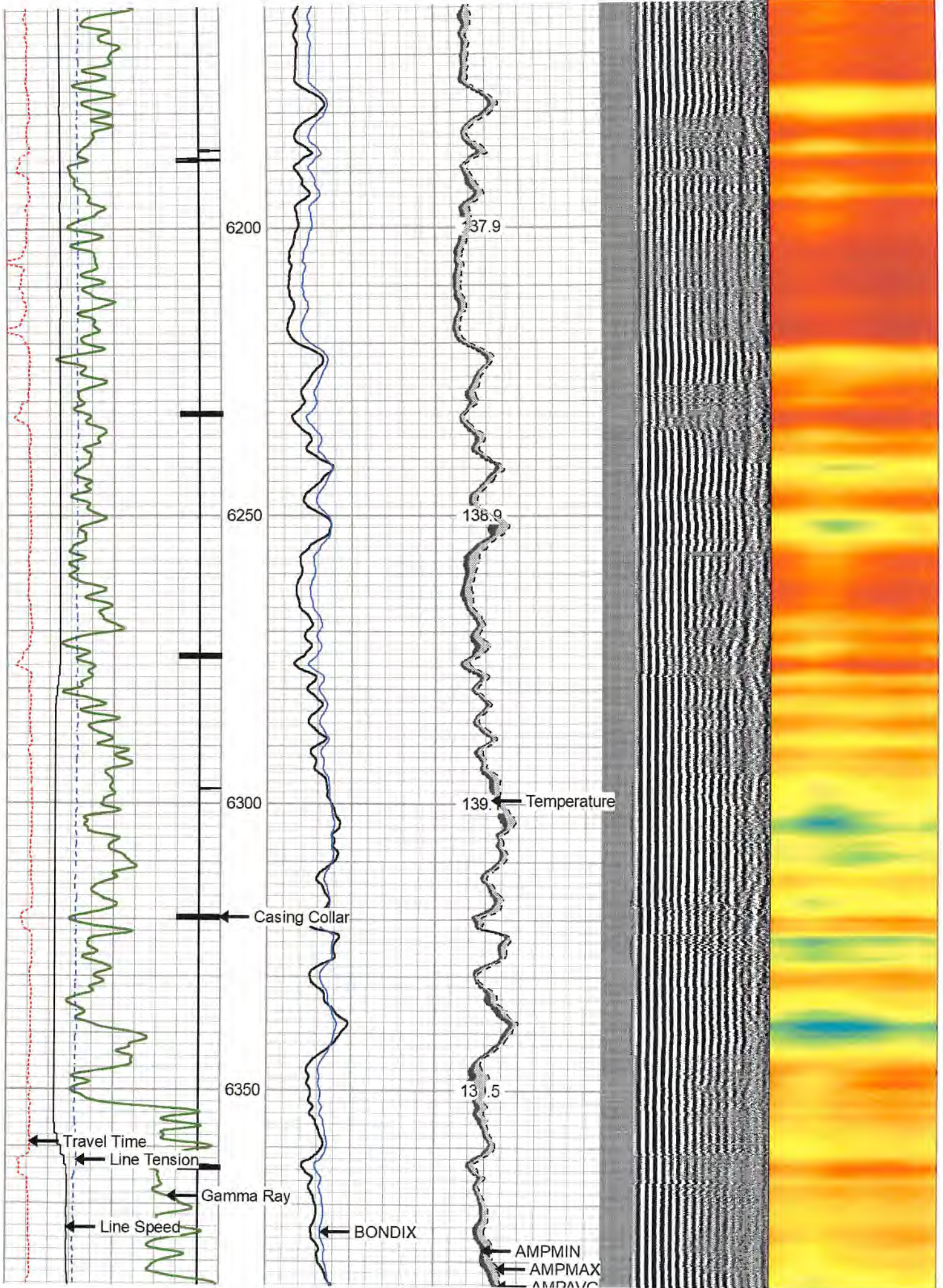
130.8  
131.8  
122.6  
113.7







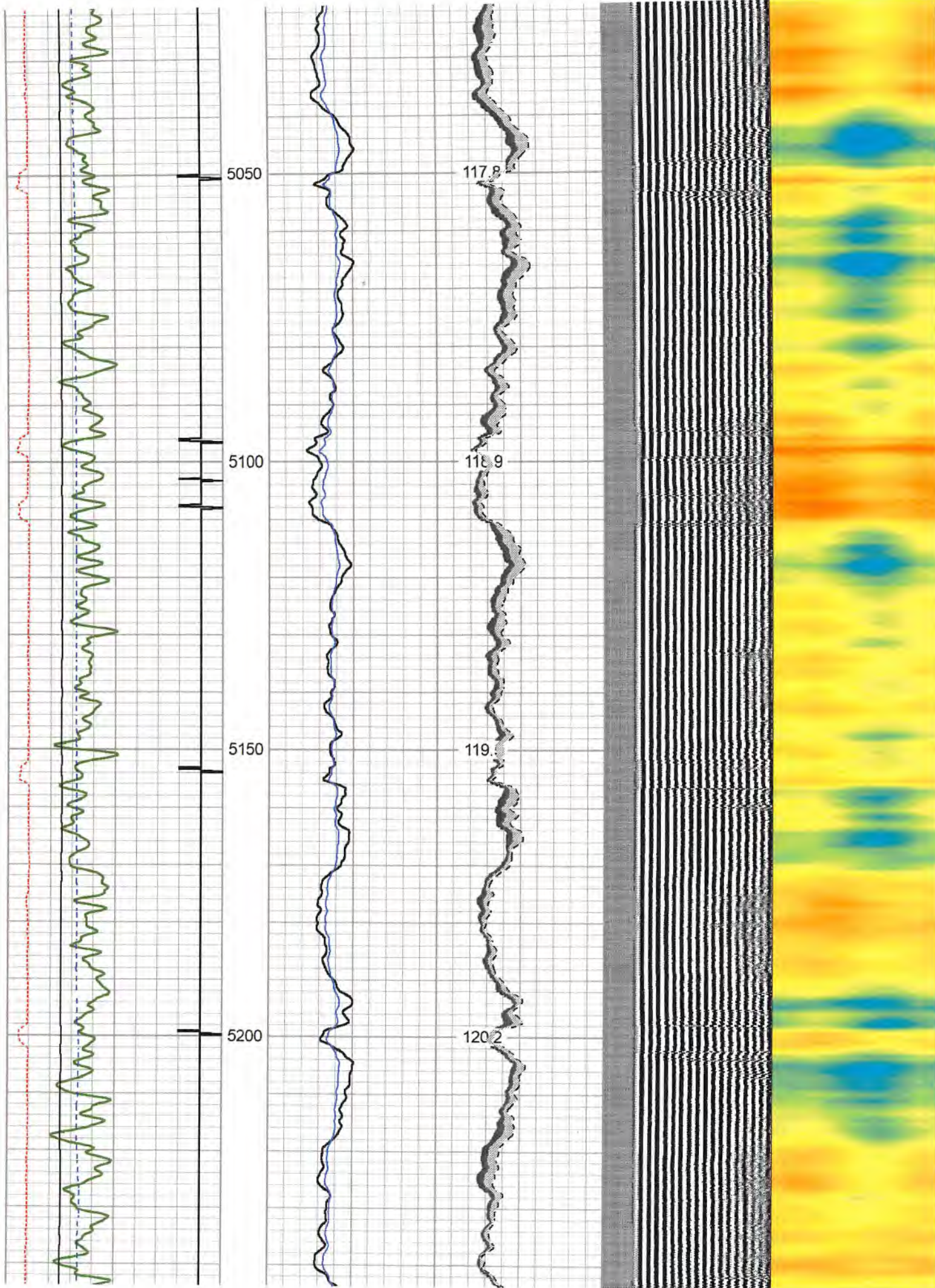




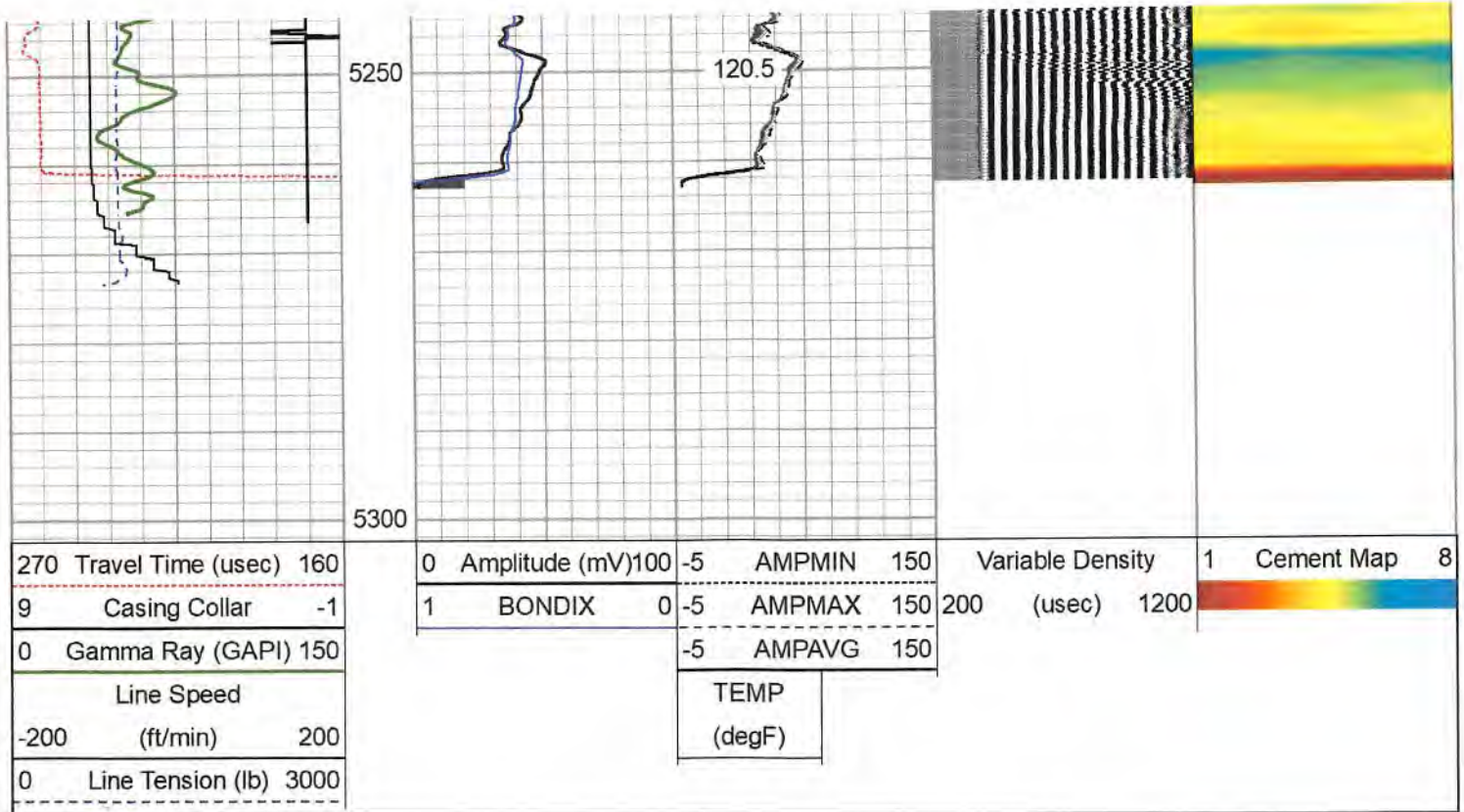












## Log Variables

DatabaseC:\ProgramData\Warrior\Data\antero\_phaeton\_1h\_rcbl\_15\_sep\_2022.db  
 Dataset river\_front/phaeton\_1h/run1/pass4/\_vars\_

### Top - Bottom

BHTEMP_Src	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	CASEWGHT lb/ft	MAXAMPL mV	MINAMPL mV
TEMP	7.875	140	5.5	0.415	23	71.9	3.4
MINATTN db/ft	PERFS	PPT usec	SRFTEMP degF	TDEPTH ft			
9.6	No	261	70	6700			

### 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

### Calibration Report

Database File antero\_phaeton\_1h\_rcbl\_15\_sep\_2022.db  
 Dataset Pathname river\_front/phaeton\_1h/run1/pass4  
 Dataset Creation Fri Sep 16 04:58:26 2022

### Gamma Ray Calibration Report

Serial Number: 275  
 Tool Model: Probe  
 Performed: Thu Apr 07 08:17:10 2016

Calibrator Value: 100.0 GAPI

Recovery Reading: 25.0



Background Reading: 33.0 cps  
 Calibrator Reading: 160.0 cps  
 Sensitivity: 0.5000 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: FW1312-32  
 Tool Model: Probe275T  
 Calibration Casing Diameter: 5.500 in  
 Calibration Depth: 191.158 ft

Master Calibration, performed Fri Sep 16 00:13:48 2022:




	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.010	0.704	3.400	71.921	98.818	2.382
CAL	0.846	0.967				
5'	0.008	0.702	3.400	71.921	98.785	2.608
SUM						
S1	0.001	0.722	0.000	100.000	138.577	-0.101
S2	0.002	0.691	0.000	100.000	145.135	-0.243
S3	0.001	0.753	0.000	100.000	132.905	-0.120
S4	0.000	0.728	0.000	100.000	137.364	-0.042
S5	-0.000	0.681	0.000	100.000	146.902	0.009
S6	-0.000	0.671	0.000	100.000	149.002	0.002
S7	-0.000	0.689	0.000	100.000	145.086	0.062
S8	0.000	0.725	0.000	100.000	138.080	-0.042

Internal Reference Calibration, performed (Not Performed):

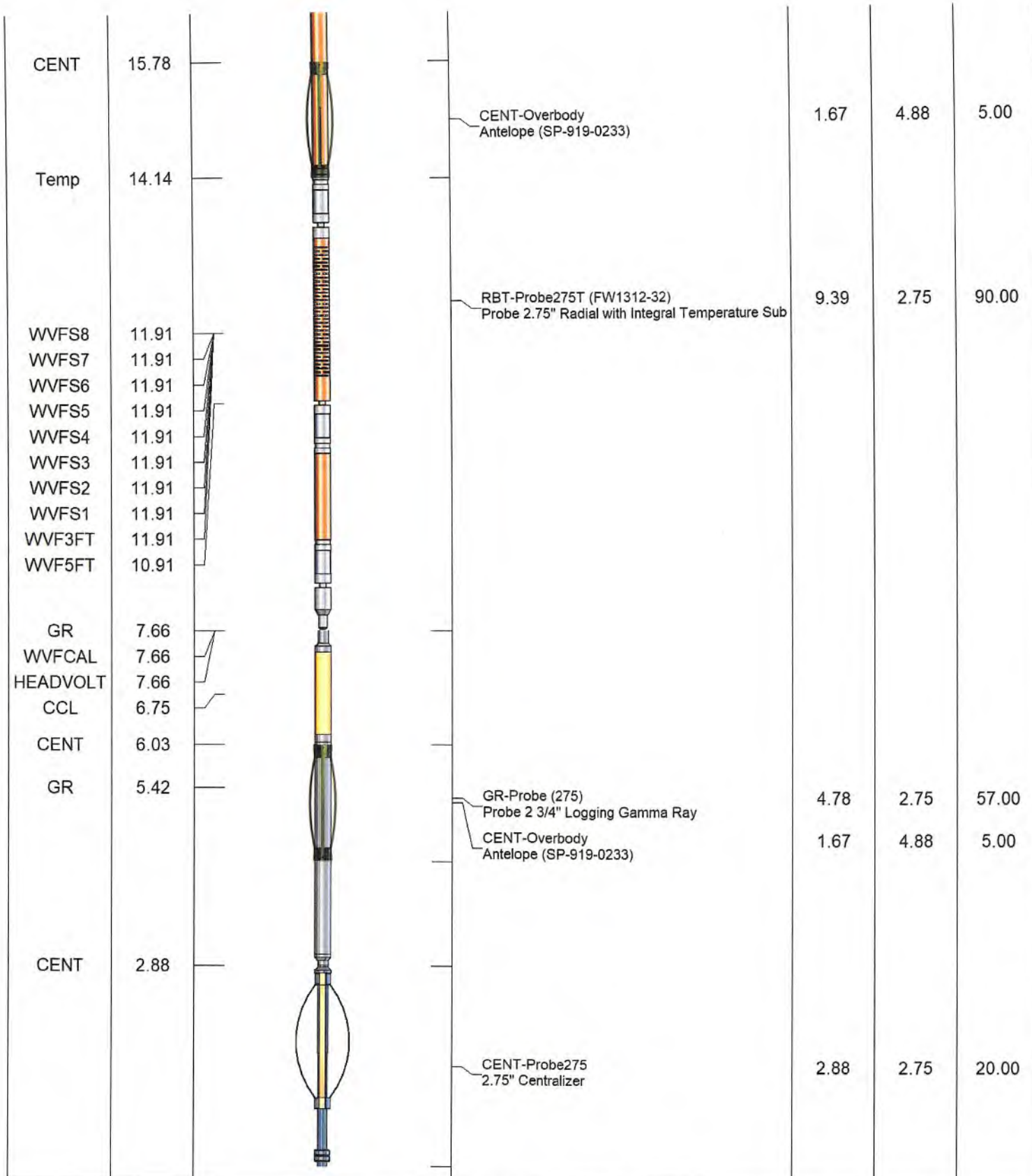
	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.846	0.967	1.000	0.000

Air Zero Calibration, performed Thu Sep 15 21:55:09 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

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
CHD	18.07		CHD-Titan Standard 1 7/16" Cable Head	1.02	1.44	1.00
RBT	17.05					
HeadVolt	16.99					





Dataset: antero\_phaeton\_1h\_rcbl\_15\_sep\_2022.db: river\_front/phaeton\_1h/run1/pass4  
 Total length: 18.07 ft  
 Total weight: 178.00 lb  
 O.D.: 4.88 in



Company Antero Resources  
 Well Elden Phaeton 1H  
 Field River Front





# Nine

County

Tyler

State

WV