

ENERGY SERVICES

RADIAL BOND TOOL
GAMMA RAY
CCL

Company	NOBLE ENERGY	Country	USA
Well	ROTH 12-30		
Field	WATTENBERG		
County	WELD		
State	CO		
Location:	API #: 05-123-13046 NW/SW		Other Services
Permanent Datum	SEC 30 TWP 6N RGE 64W	Elevation	4696'
Log Measured From	KB 11'		K.B. 4707'
Drilling Measured From	KB		D.F. 4706'
			G.L. 4696'

Date	3-4-2022
Run Number	ONE
Depth Driller	7030'
Depth Logger	4004'
Bottom Logged Interval	4000'
Top Log Interval	SURFACE
Open Hole Size	8.625"
Type Fluid	WATER
Density / Viscosity	NA
Max. Recorded Temp.	175.5 °F
Estimated Cement Top	ON ARRIVAL
Time Well Ready	NA
Time Logger on Bottom	NA
Equipment Number	3813
Location	GREELEY, CO
Recorded By	J. KERR
Witnessed By	R. COOK

Borehole Record		Tubing Record					
Run Number	Bit	From	To	Size	Weight	From	To


Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8.625"	24#	SURFACE	305'
Prot. String				
Production String	4.5"	11.6#	SURFACE	7030'
Liner				

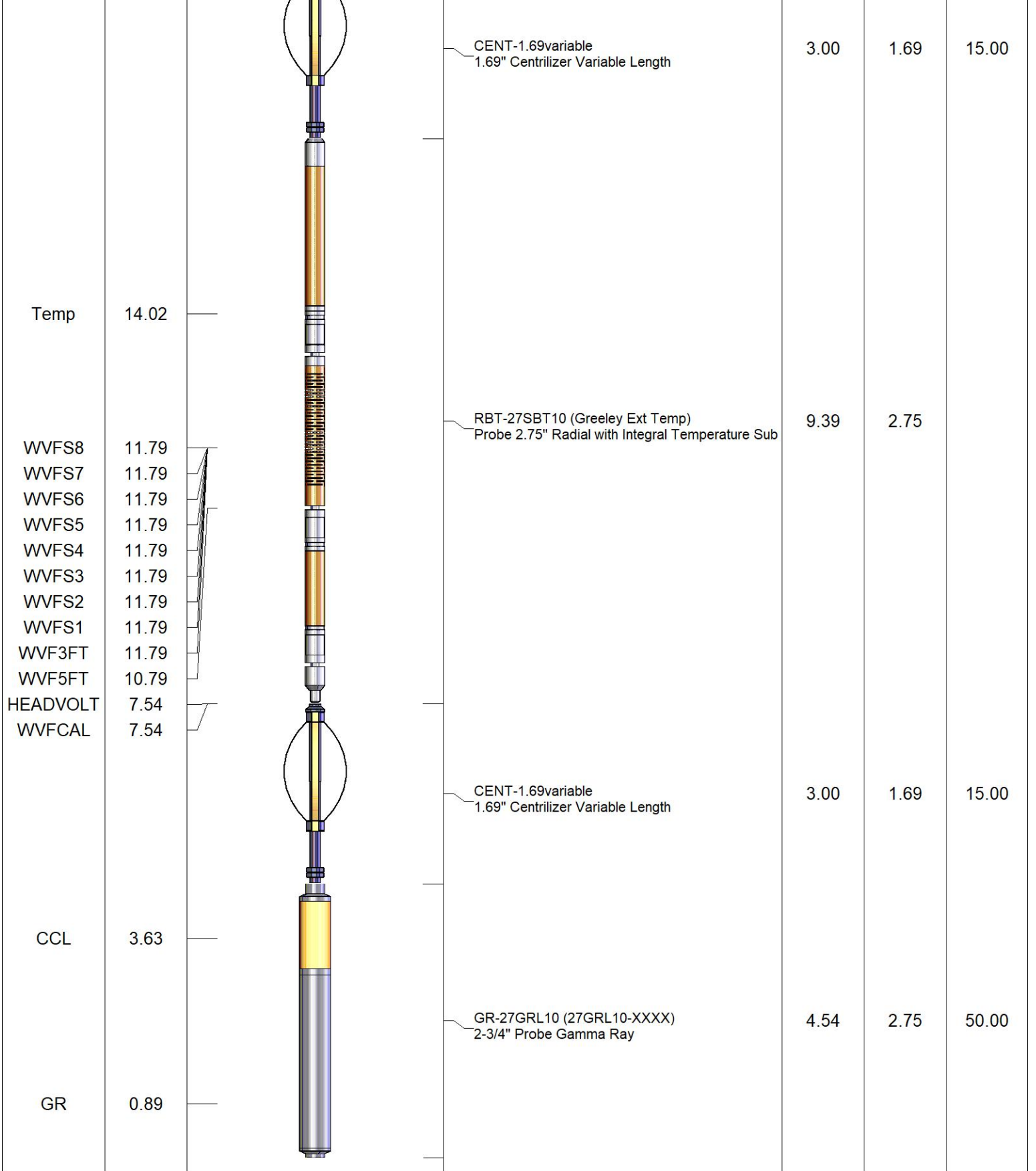
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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on 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

RAN CBL TO VERIFY CEMENT BOND
WELL LOADED UPON ARRIVAL

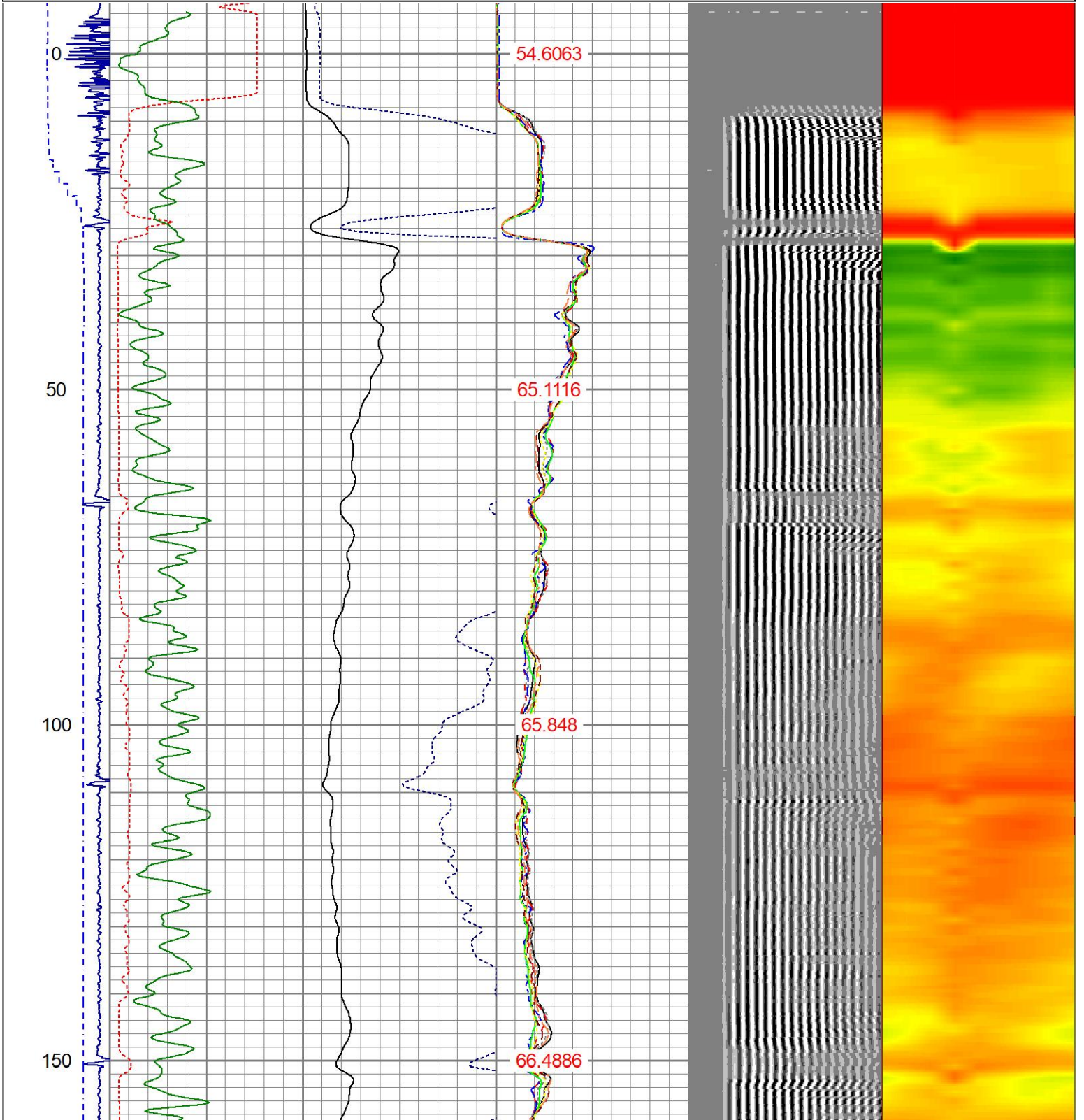
Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			CHD-1_11/16_Cablehead 1 11/16 Cablehead	1.00	1.68	5.00

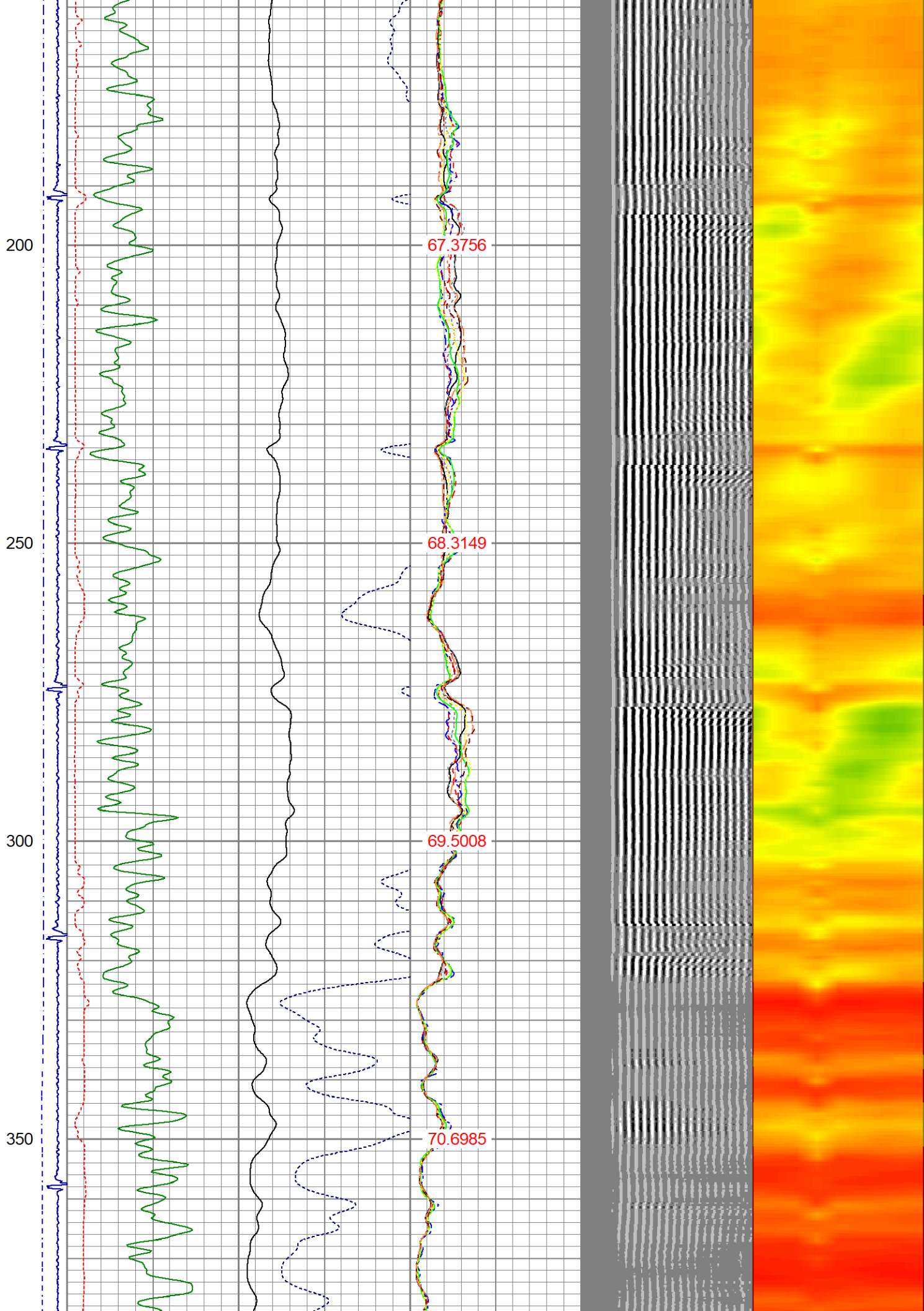


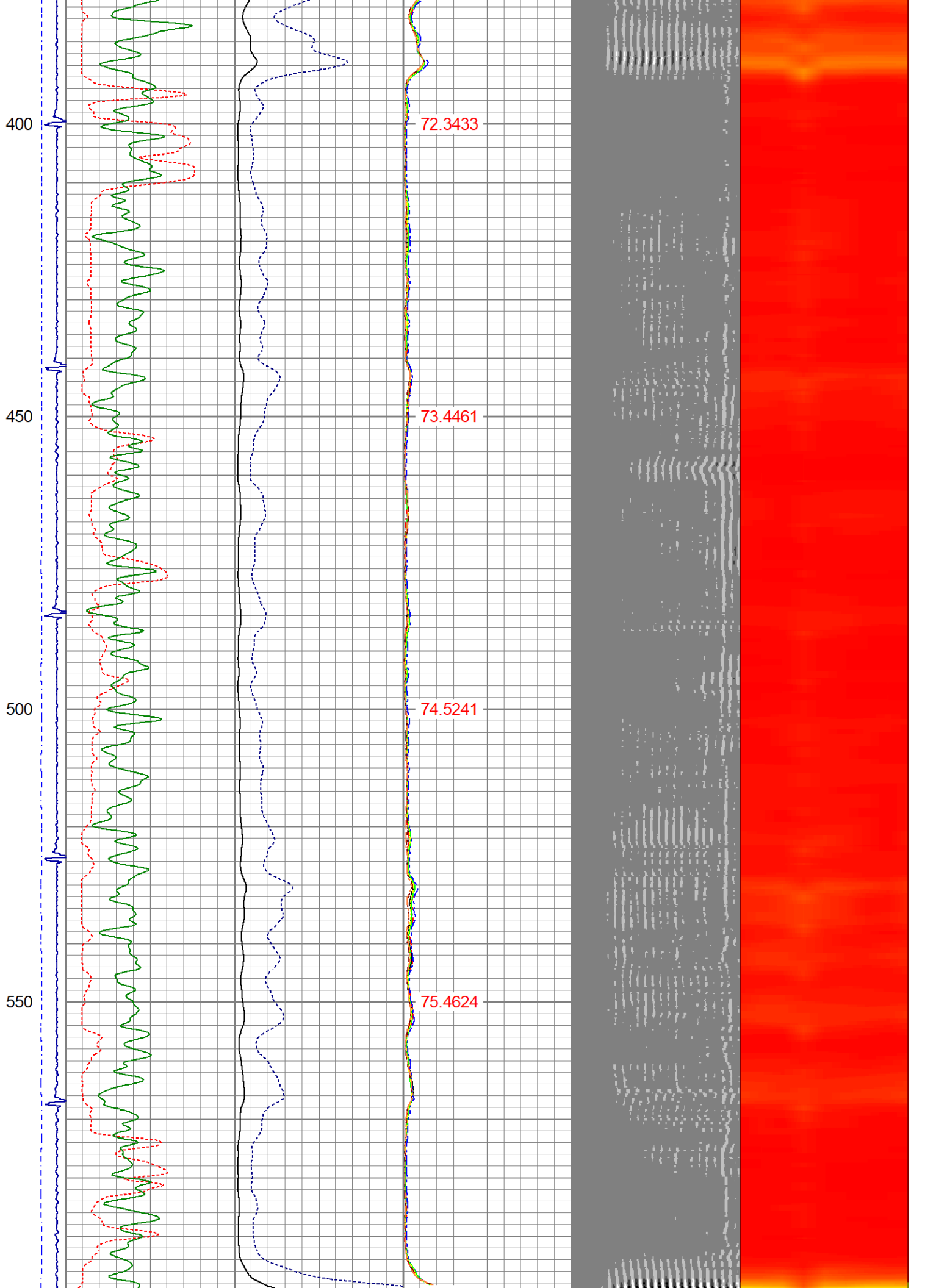
Dataset: roth 12-30.db: field/well/run1/pass7
 Total length: 20.93 ft
 Total weight: 85.00 lb
 O.D.: 2.75 in

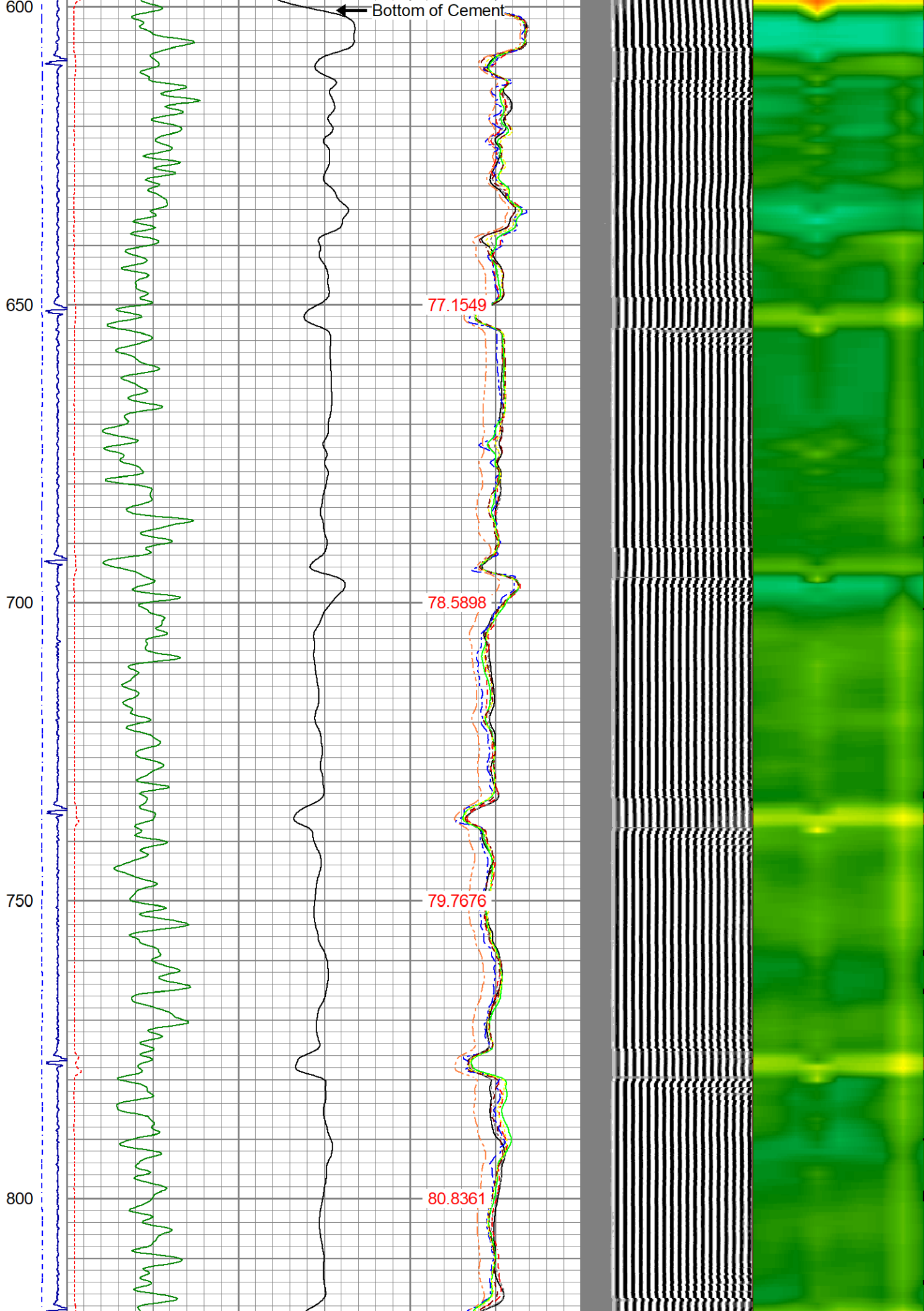
Database File roth 12-30.db
 Dataset Pathname pass7
 Presentation Format ips_rbtcolor
 Dataset Creation Fri Mar 04 08:28:41 2022
 Charted by Depth in Foot scaled 1:240

-9	CCL	1	200	TT (usec)	1000	0	AMP (mV)	100	0	AMPS1	100	200	VDL (usec)	1200	1	Cement Map	8
LSPD	0	GR (GAPI)	200	0	AMPx5 (mV)	20	0	AMPS2	100								
(ft/min)	200	GR (GAPI)	400					0	AMPS3	100							
0	250							0	AMPS4	100							
								0	AMPS5	100							
								0	AMPS6	100							
								0	AMPS7	100							
								0	AMPS8	100							
								TEMP									
								(degF)									









850

900

950

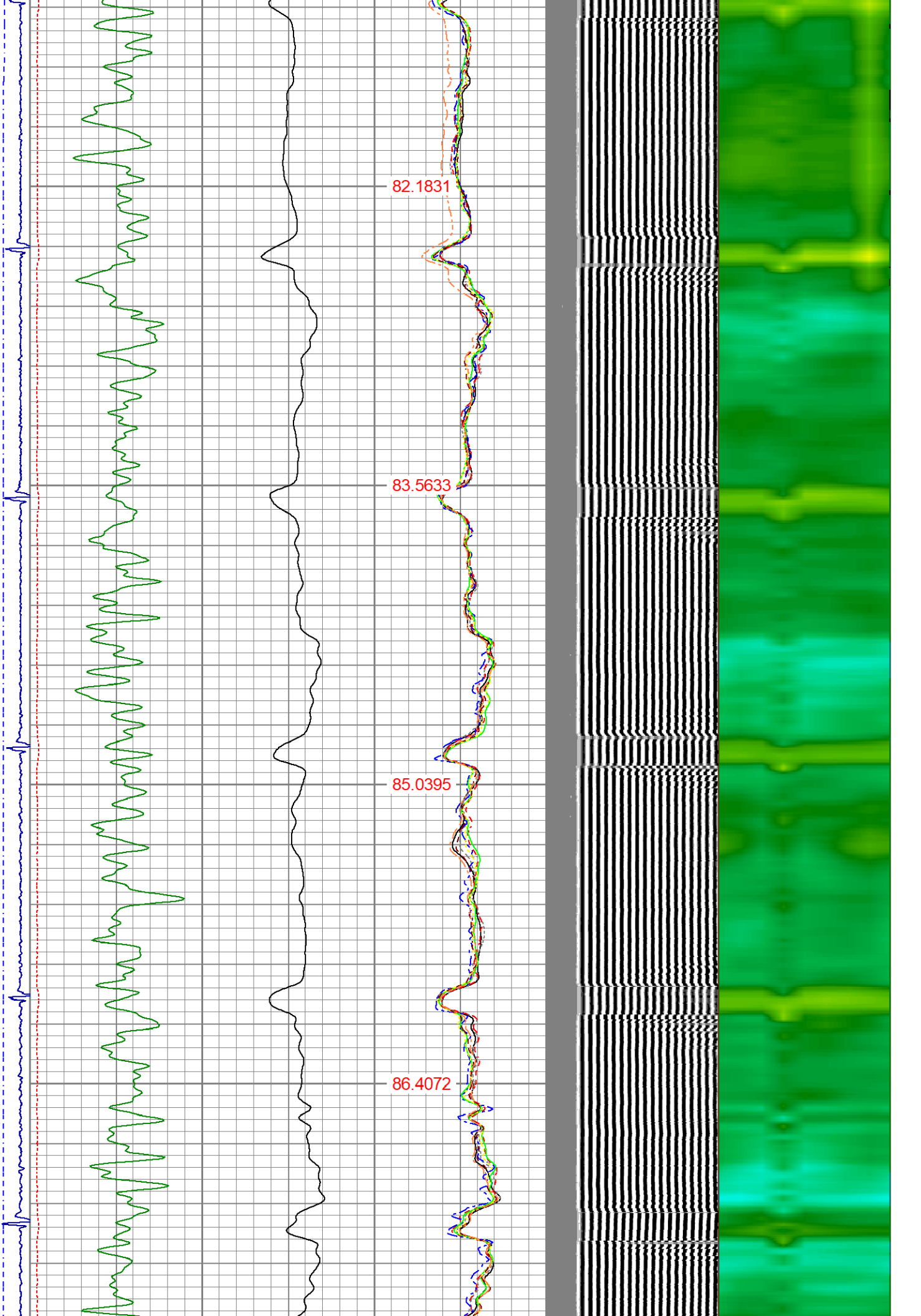
1000

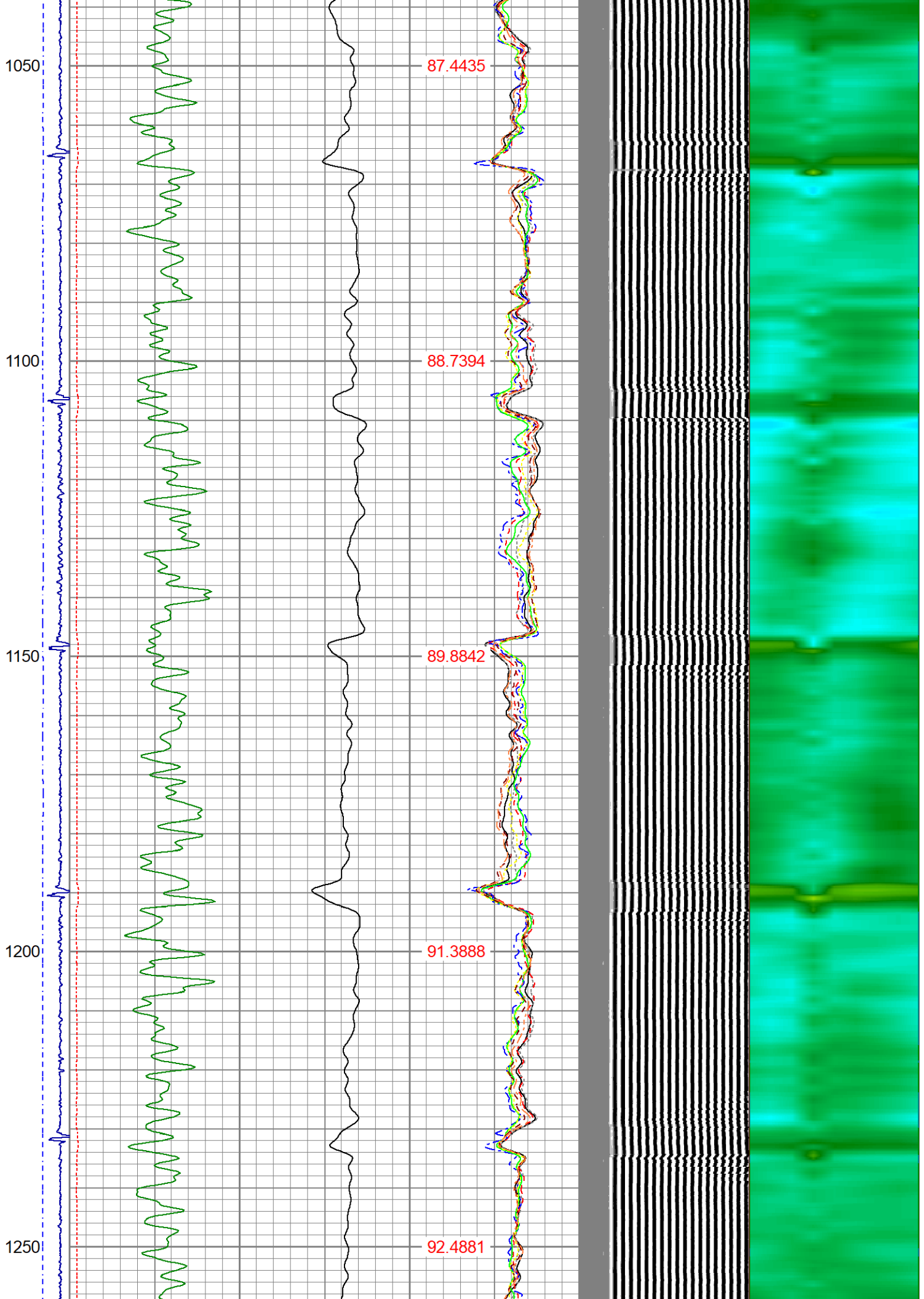
82.1831

83.5633

85.0395

86.4072





1300

1350

1400

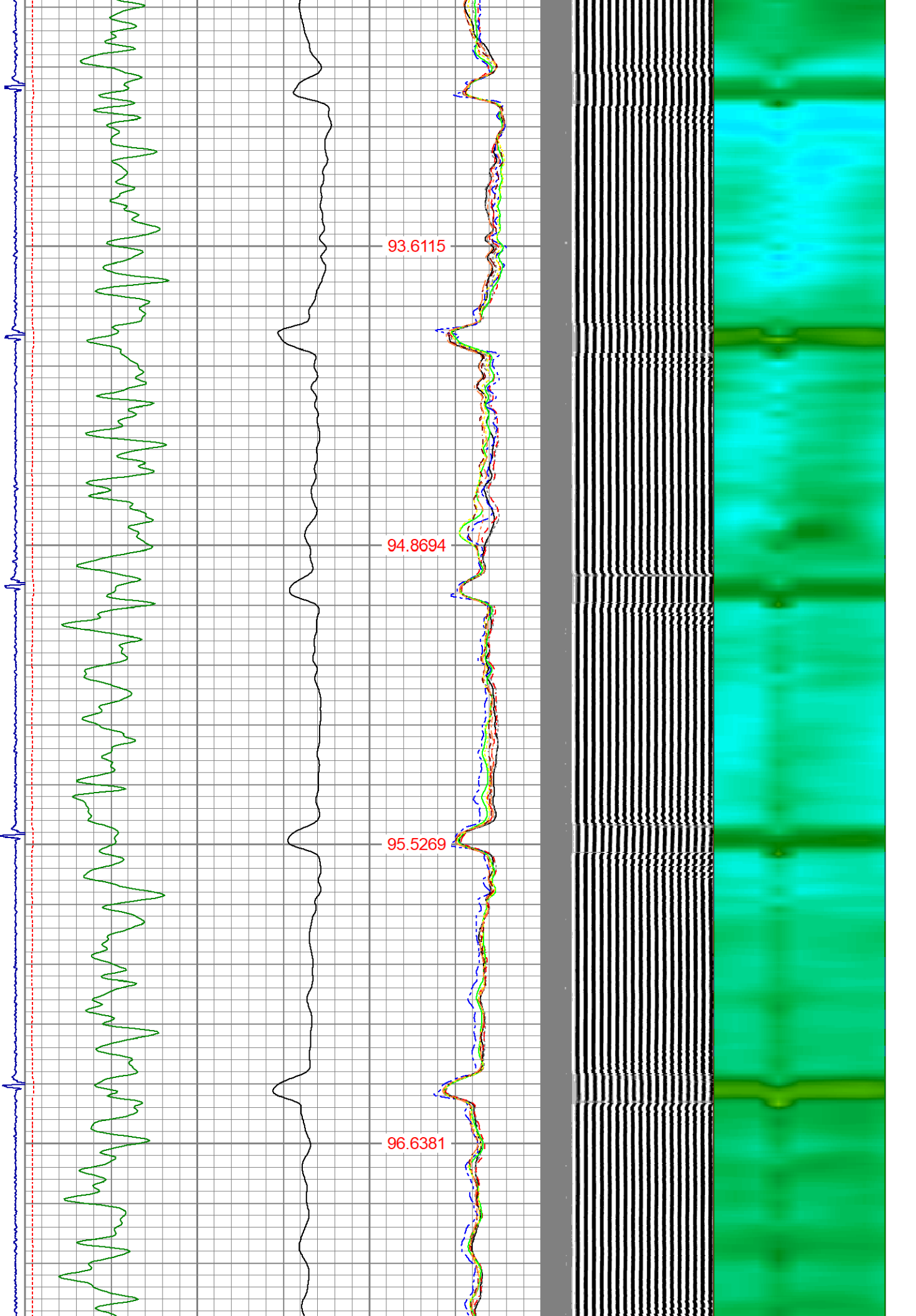
1450

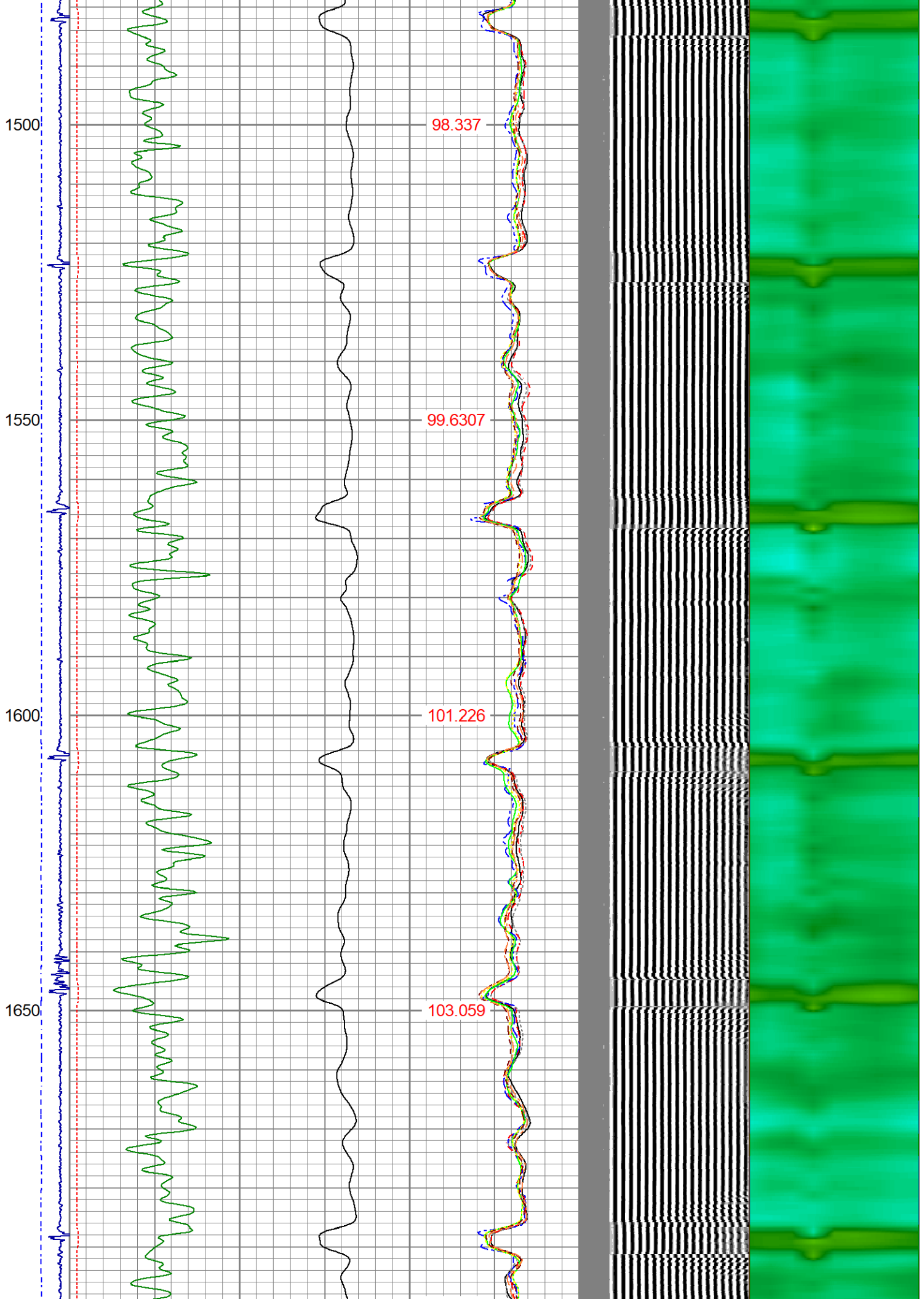
93.6115

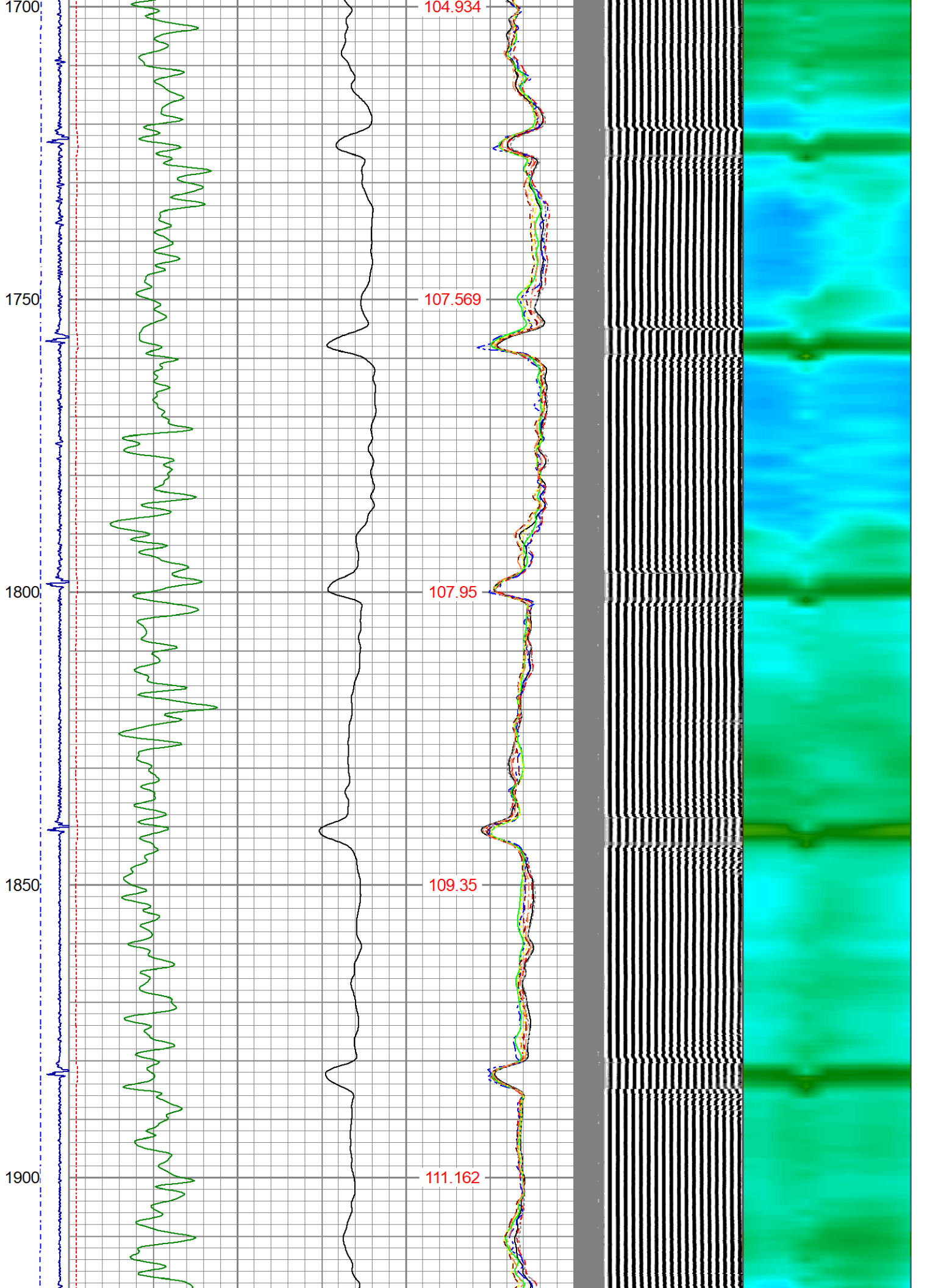
94.8694

95.5269

96.6381







1950

2000

2050

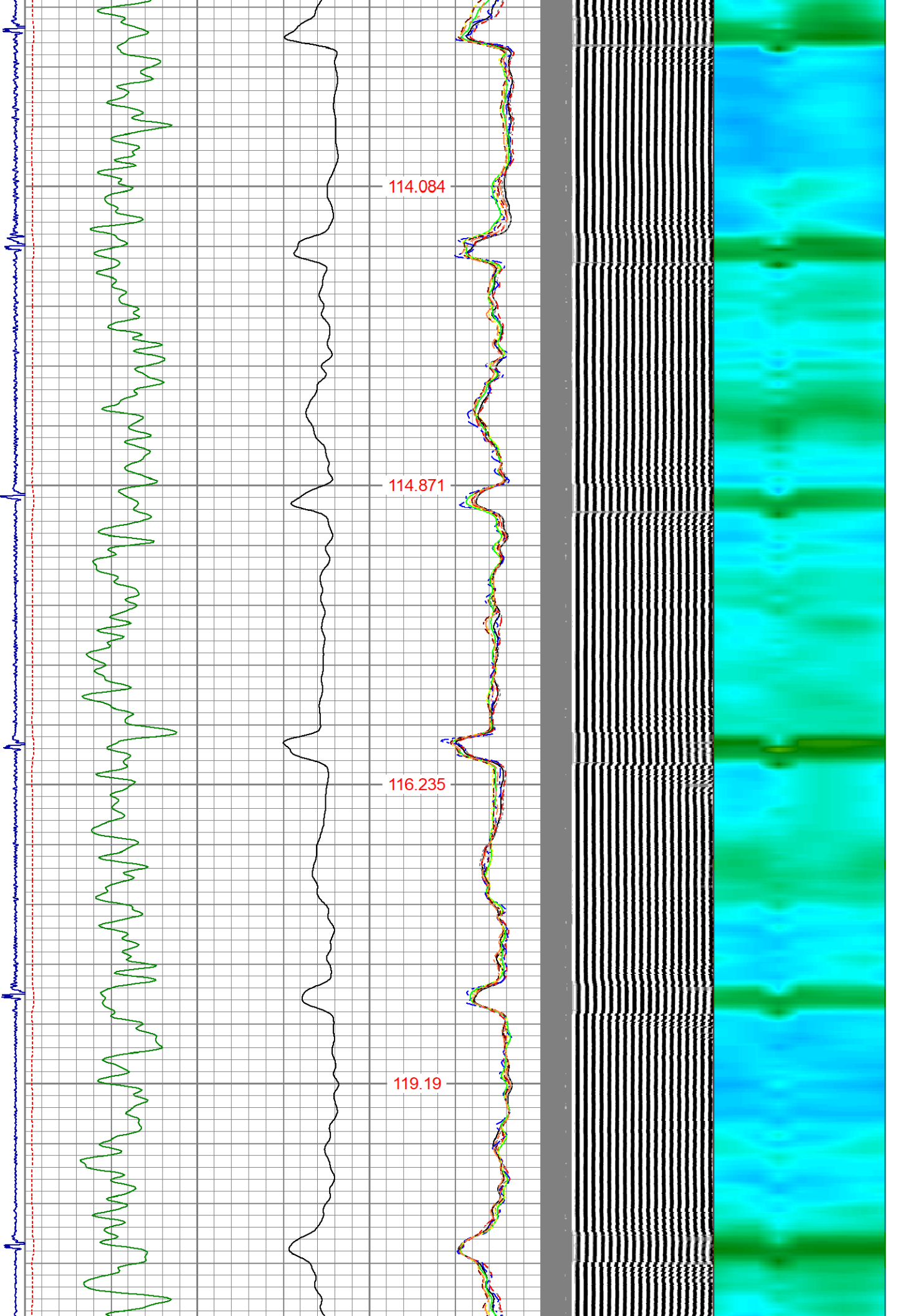
2100

114.084

114.871

116.235

119.19



2150

120.134

2200

123.271

2250

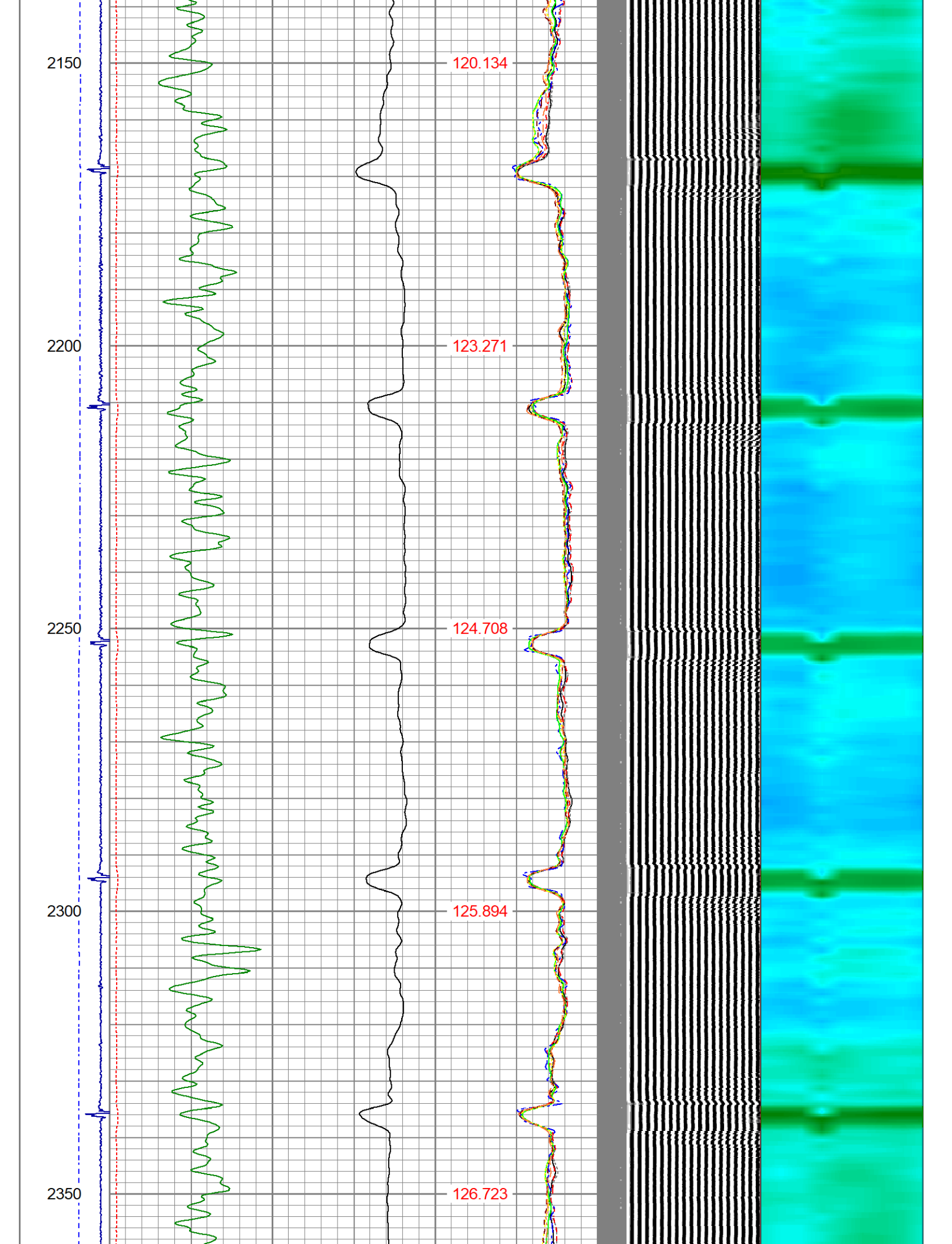
124.708

2300

125.894

2350

126.723



2400

2450

2500

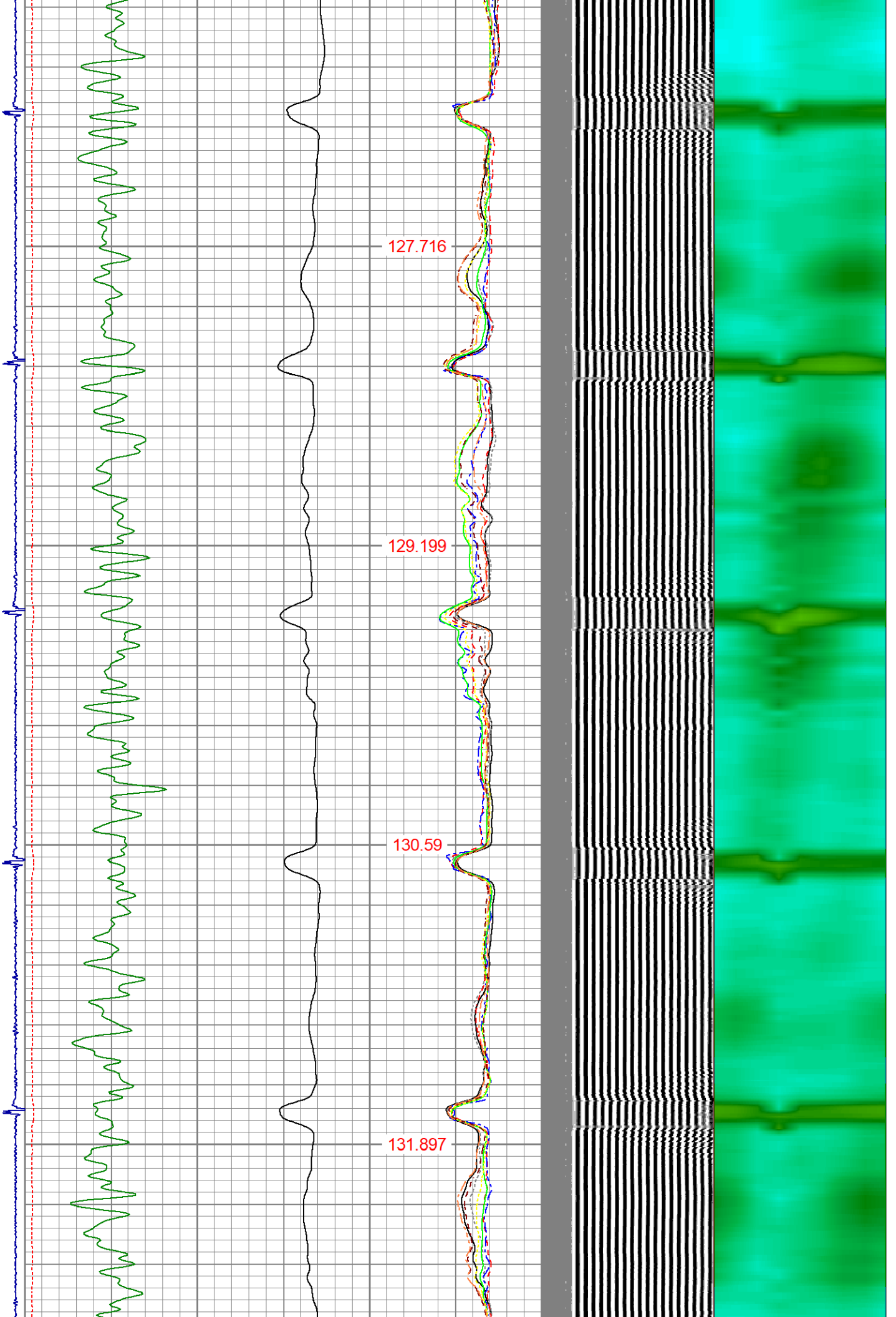
2550

127.716

129.199

130.59

131.897



2600

2650

2700

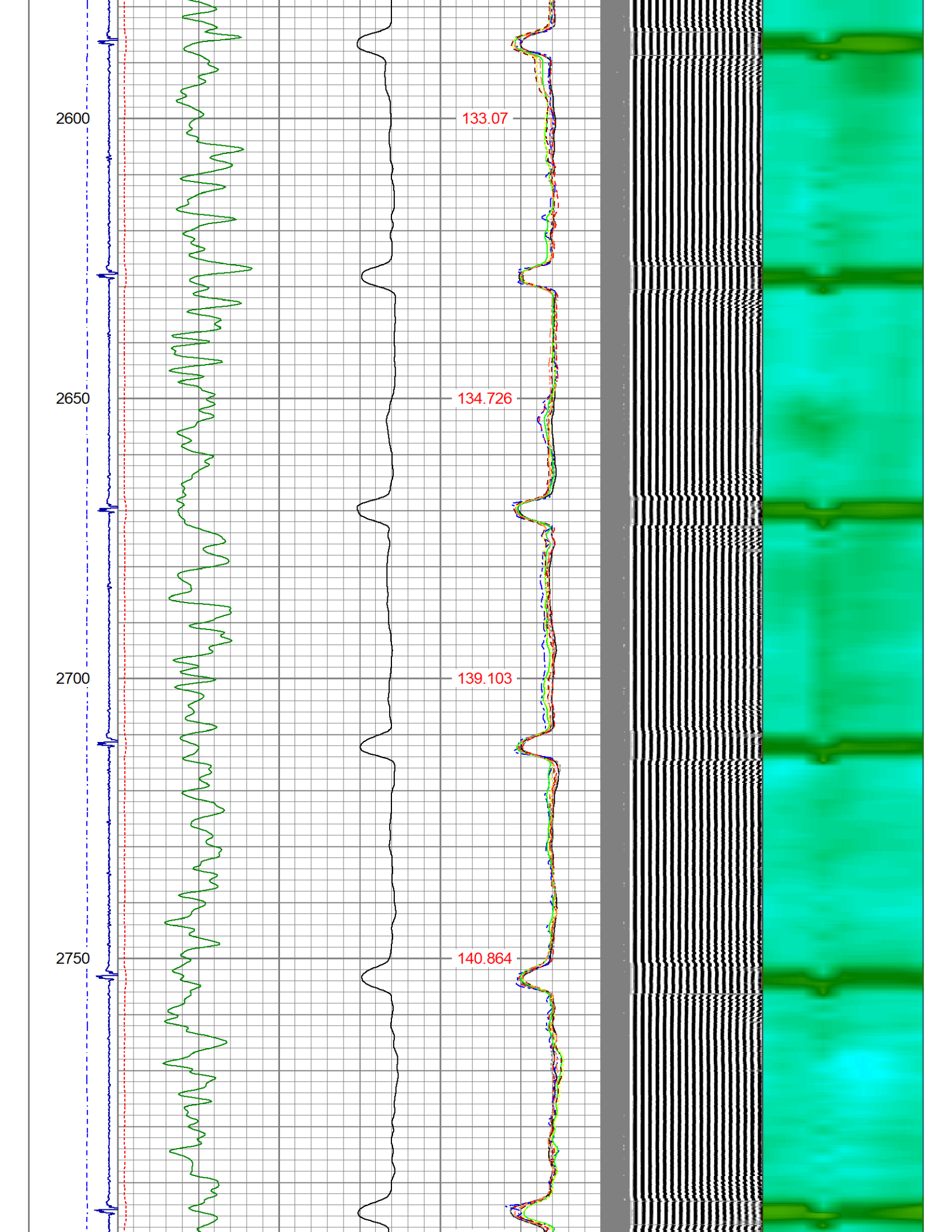
2750

133.07

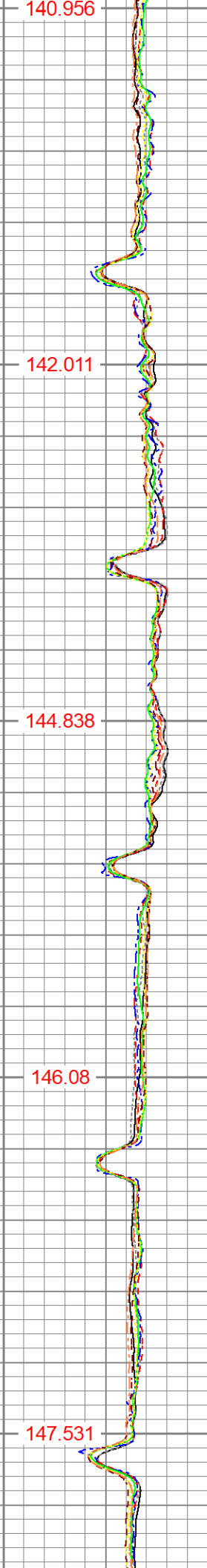
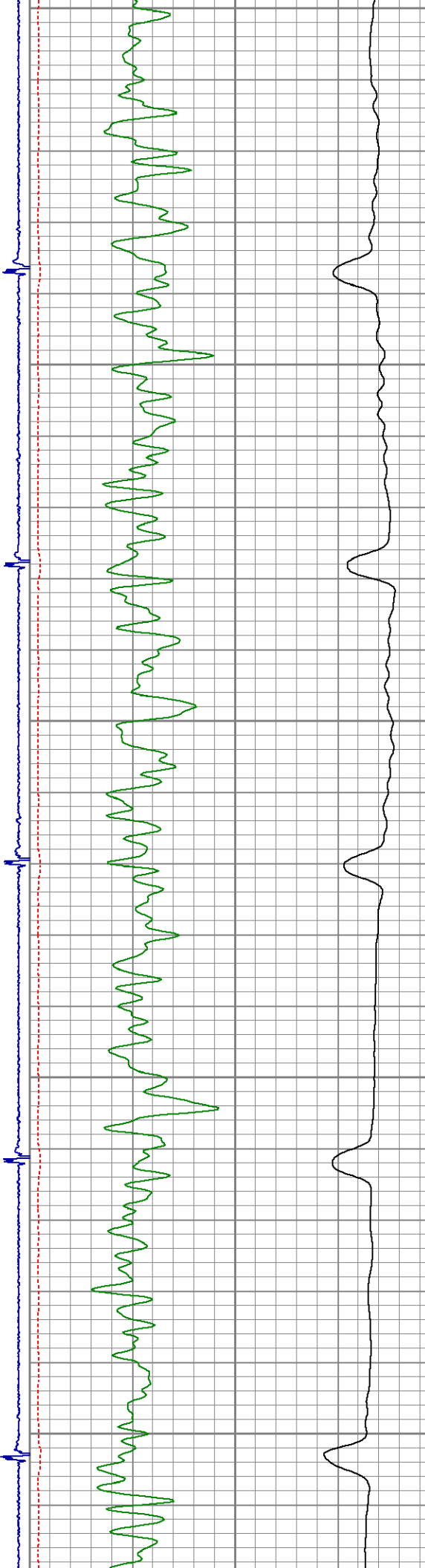
134.726

139.103

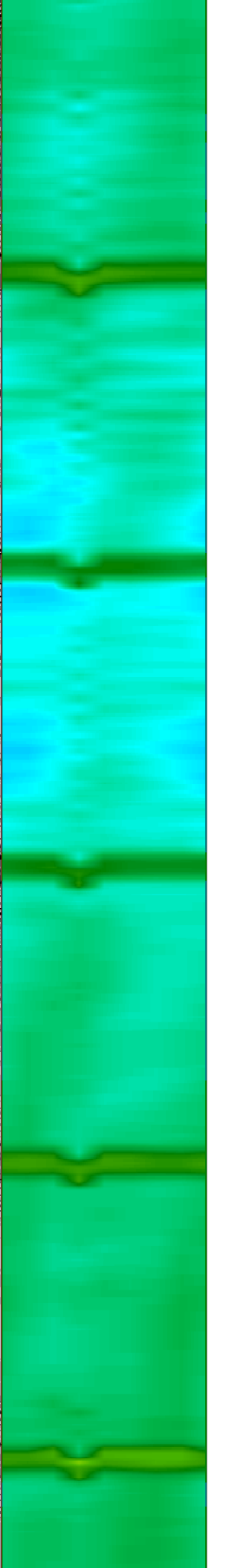
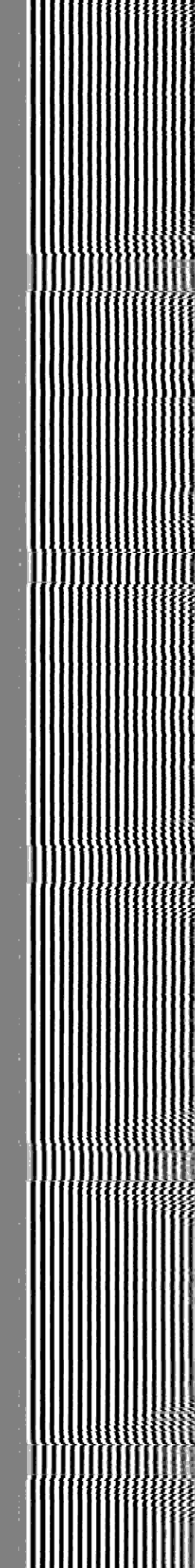
140.864



2800
2850
2900
2950
3000



140.956
142.011
144.838
146.08
147.531



3050

3100

3150

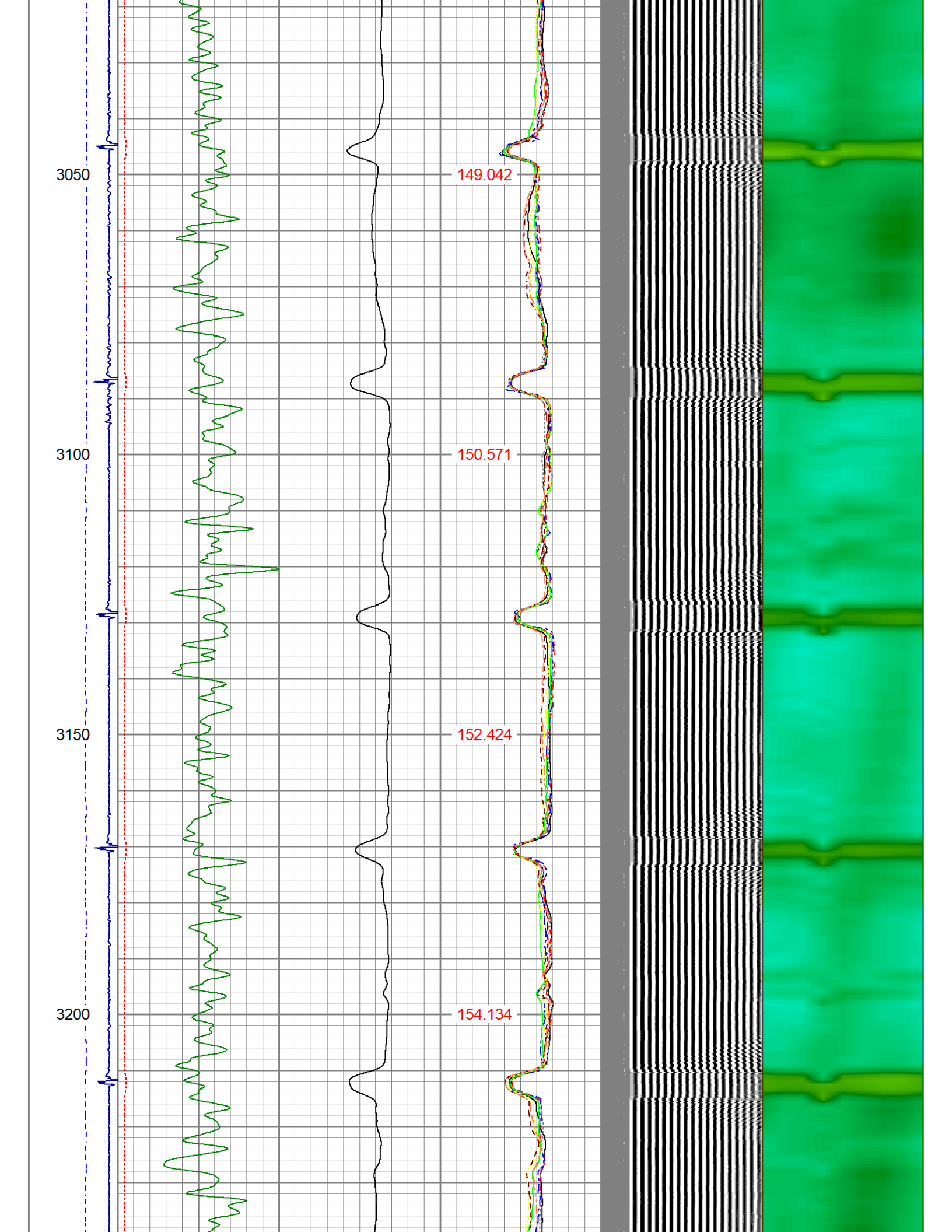
3200

149.042

150.571

152.424

154.134



3250

154.957

3300

154.937

3350

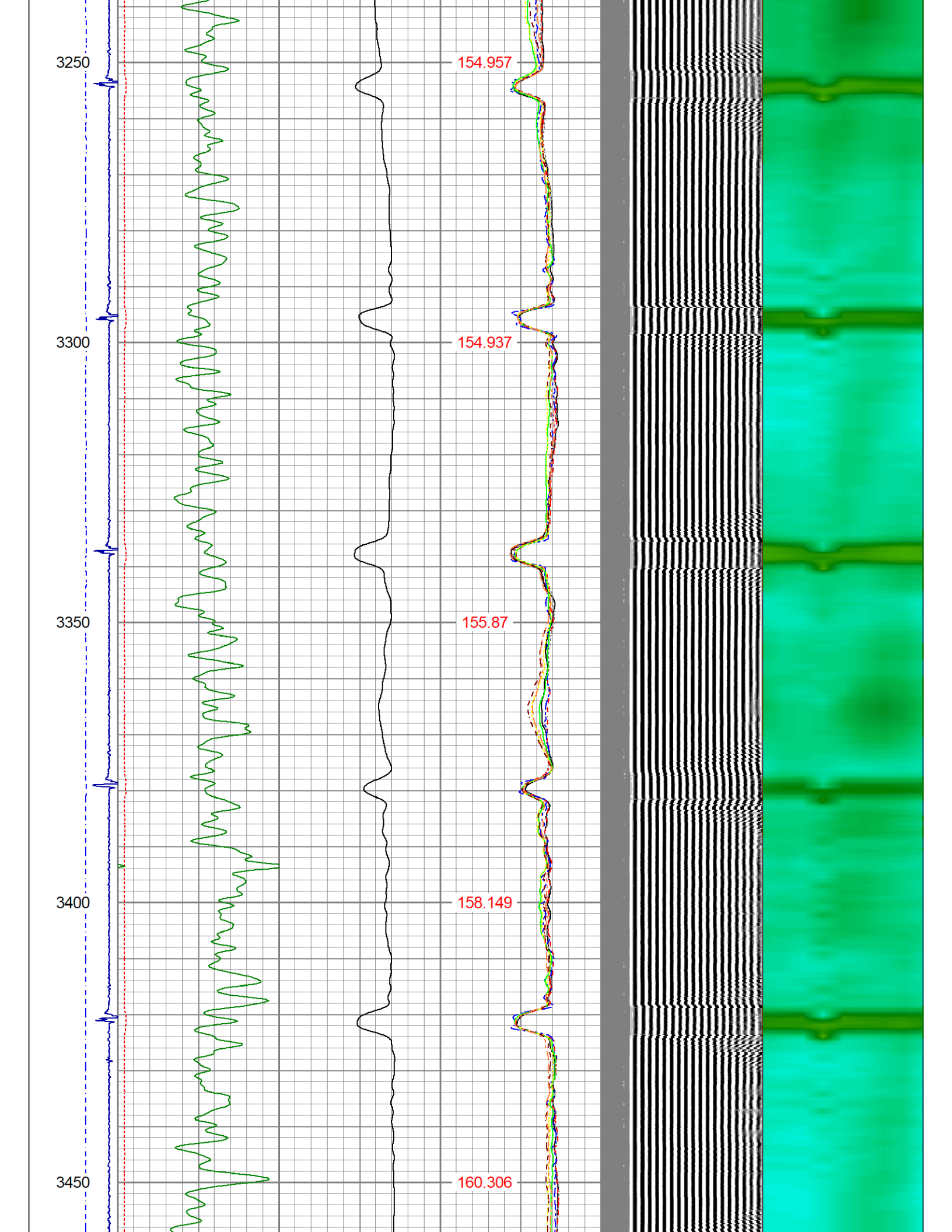
155.87

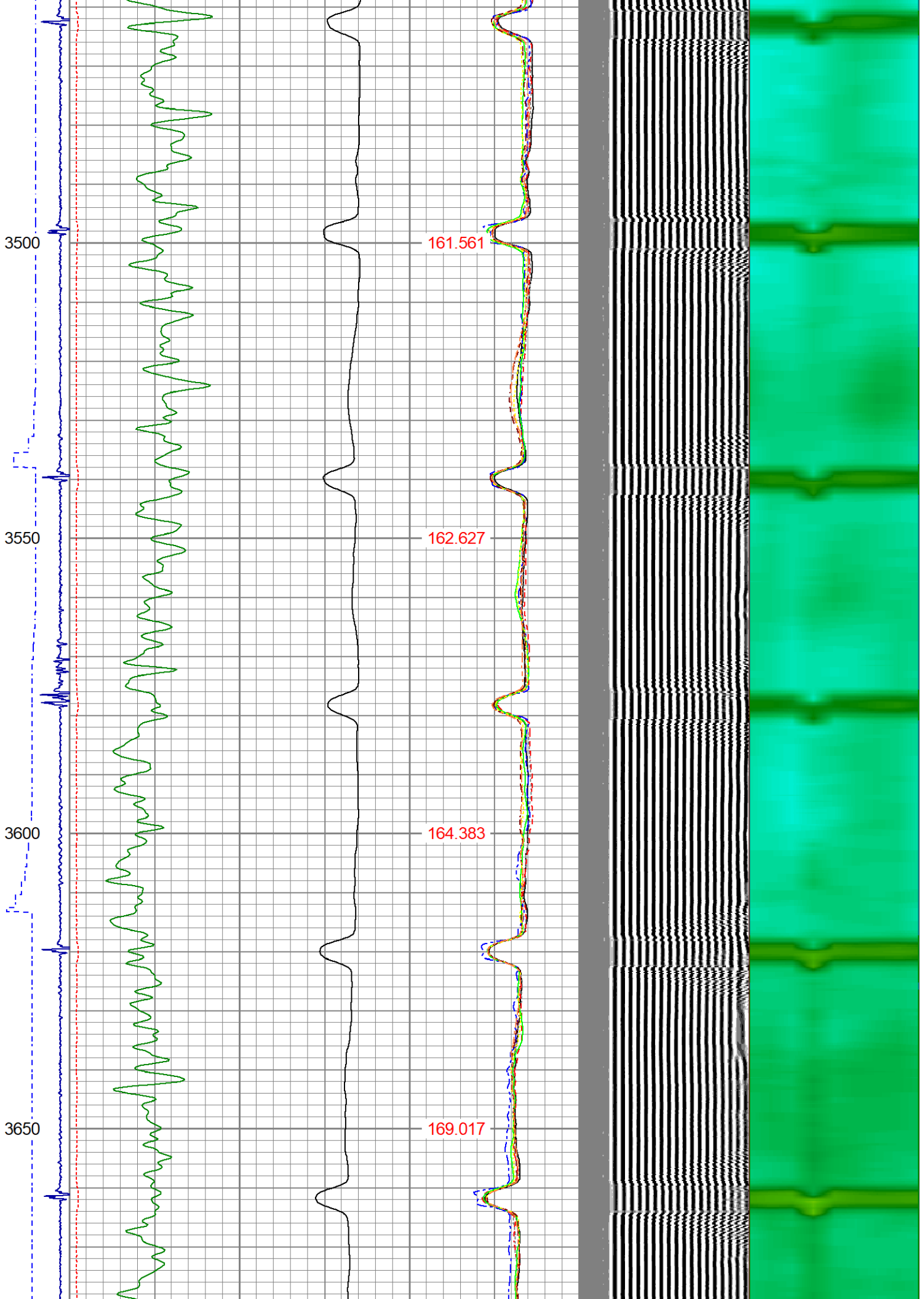
3400

158.149

3450

160.306





3700

3750

3800

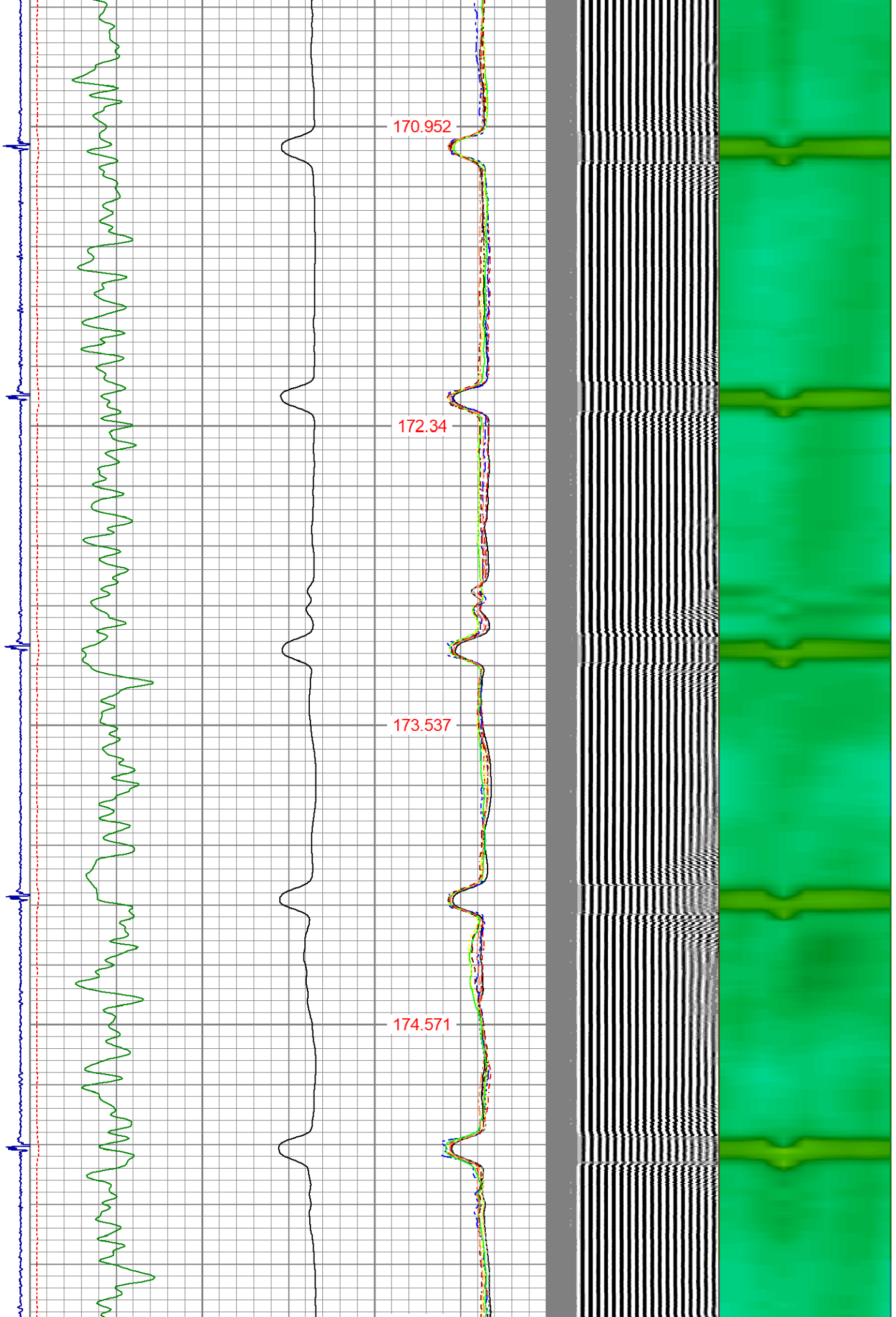
3850

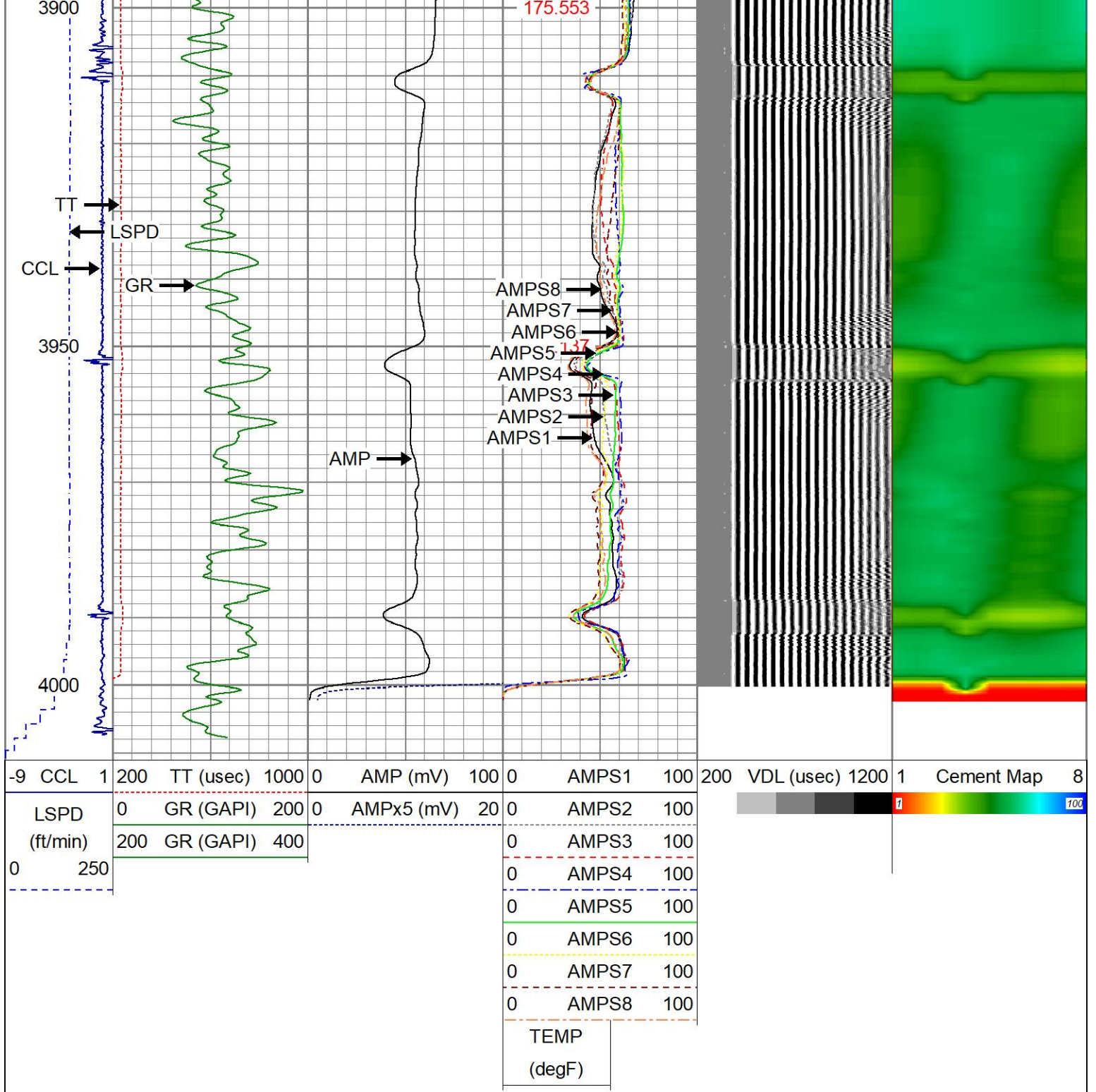
170.952

172.34

173.537

174.571





Calibration Report

Database File roth 12-30.db
 Dataset Pathname pass7
 Dataset Creation Fri Mar 04 08:28:41 2022

Gamma Ray Calibration Report

Serial Number: 27GRL10-XXXX
 Tool Model: 27GRL10
 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: Greeley Ext Temp
Tool Model: 27SBT10

Calibration Casing Diameter: 4.500 in
Calibration Depth: 3472.302 ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	2.404	1.000	81.196	33.364	0.997
CAL	0.000	1.275				
5'	0.000	2.249	1.000	81.196	35.663	0.997
SUM						
S1	0.000	2.375	0.000	81.196	34.192	-0.003
S2	0.000	2.323	0.000	81.196	34.947	-0.003
S3	0.000	2.323	0.000	81.196	34.961	-0.003
S4	-0.026	2.363	0.000	81.196	33.989	0.874
S5	-0.004	2.398	0.000	81.196	33.805	0.138
S6	-0.002	2.425	0.000	81.196	33.455	0.063
S7	0.000	2.439	0.000	81.196	33.289	-0.003
S8	0.000	2.438	0.000	81.196	33.306	-0.003

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.000	1.275	1.000	0.000

Air Zero Calibration, performed Fri Mar 4 07:32:44 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



Company NOBLE ENERGY
Well ROTH 12-30
Field WATTENBERG
County WELD
State CO

Country USA