



RADIAL CEMENT BOND LOG
GAMMA RAY
CCL

Company		Kerr McGee Oil & Gas					
Well		HSR WELD 3-2A					
Field		Wattenberg					
County		Weld					
State		CO					
Location:		API # : 05-123-20535					
Permanent Datum		NE/NW					
Log Measured From		LAT : 40.17370 LONG:-104.97280					
Drilling Measured From		SEC 13 TWP 3N RGE 66W					
Elevation		4815'					
Other Services		K.B. 4827' D.F. 4826' G.L. 4815'					
Date		10-6-2014					
Run Number		ONE					
Depth Driller		7890'					
Depth Logger		6938'					
Bottom Logged Interval		6935'					
Top Log Interval		Surface					
Open Hole Size		7 7/8					
Type Fluid		WATER					
Density / Viscosity		1.0					
Max. Recorded Temp.		196					
Estimated Cement Top		140'					
Time Well Ready		NA					
Time Logger on Bottom		NA					
Equipment Number		7770					
Location		GREELEY					
Recorded By		A.STEERMAN					
Witnessed By		R.THOMPSON					
Borehole Record		Tubing Record					
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record	Size		Wgt/Ft		Top		Bottom
Surface String	8 5/8		24#		0		666'
Prot. String							
Production String	4 1/2		11.6#		7881'		7713'
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

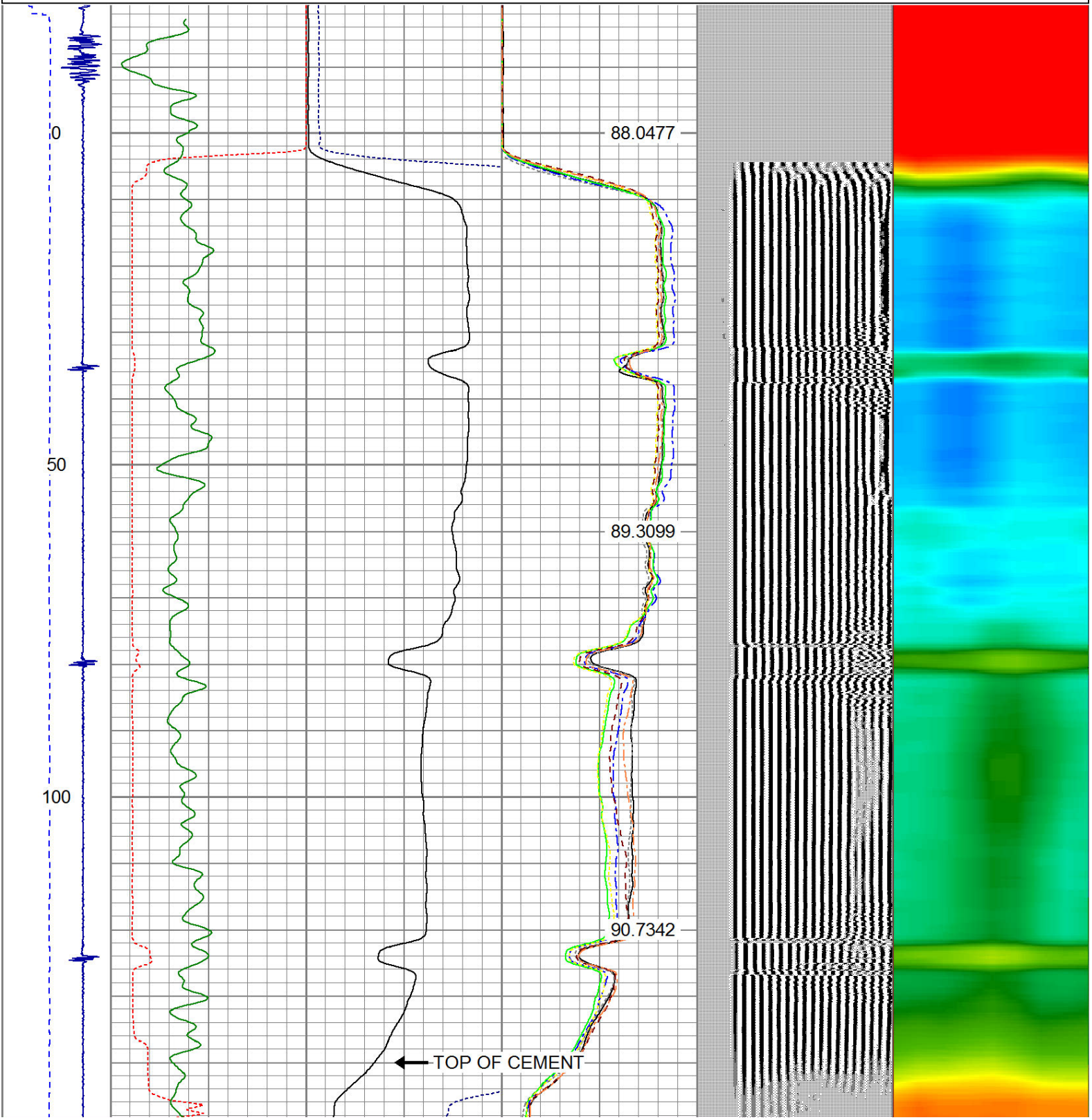
CORRELATED TO BRAN-DEX LOG FROM 10-1-2001
SHIFTED UPHOLE 17'
RAN CBL TO VERIFY CEMENT.

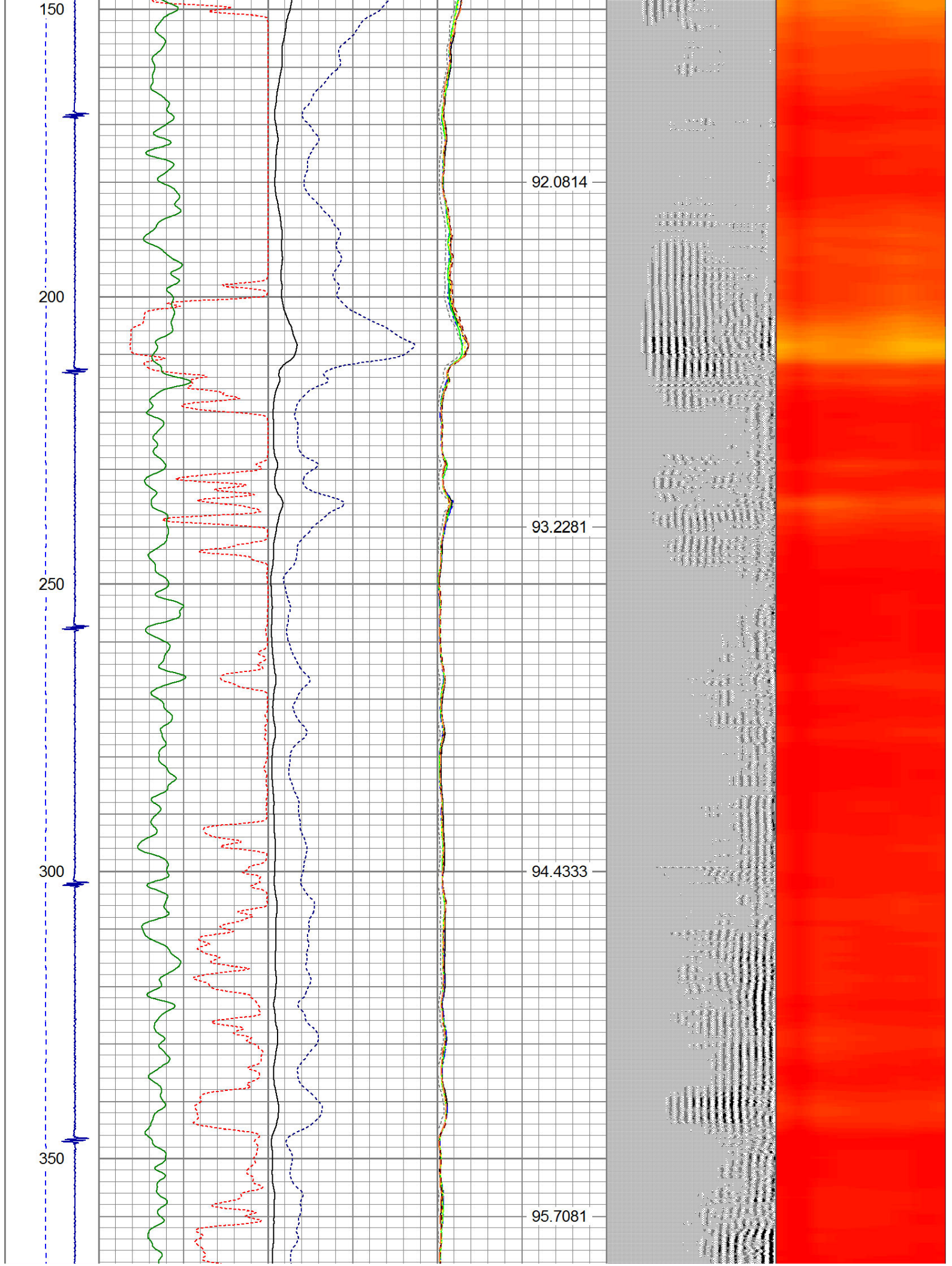
THANK YOU FOR USING WARRIOR ENERGY!

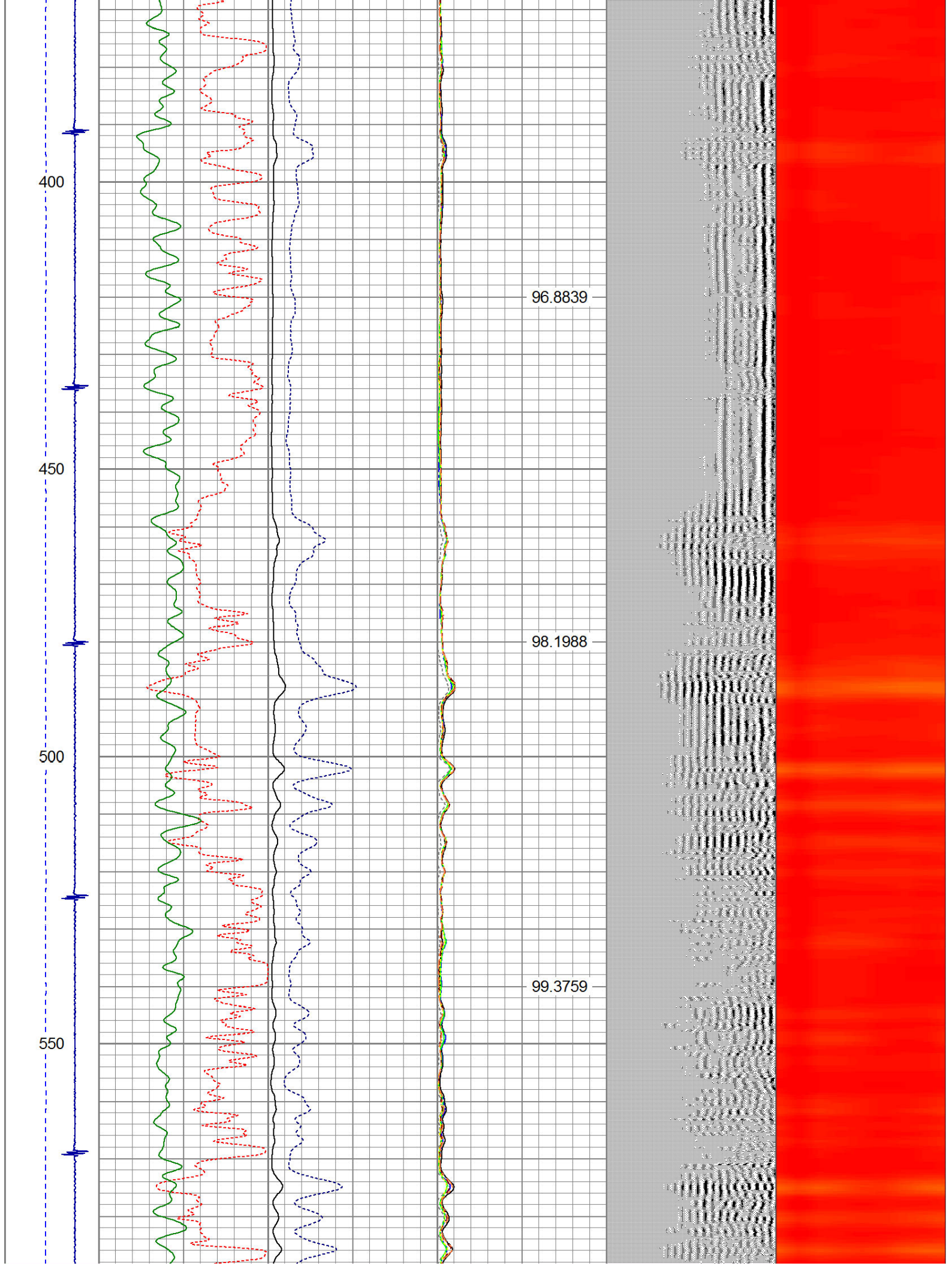
Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)

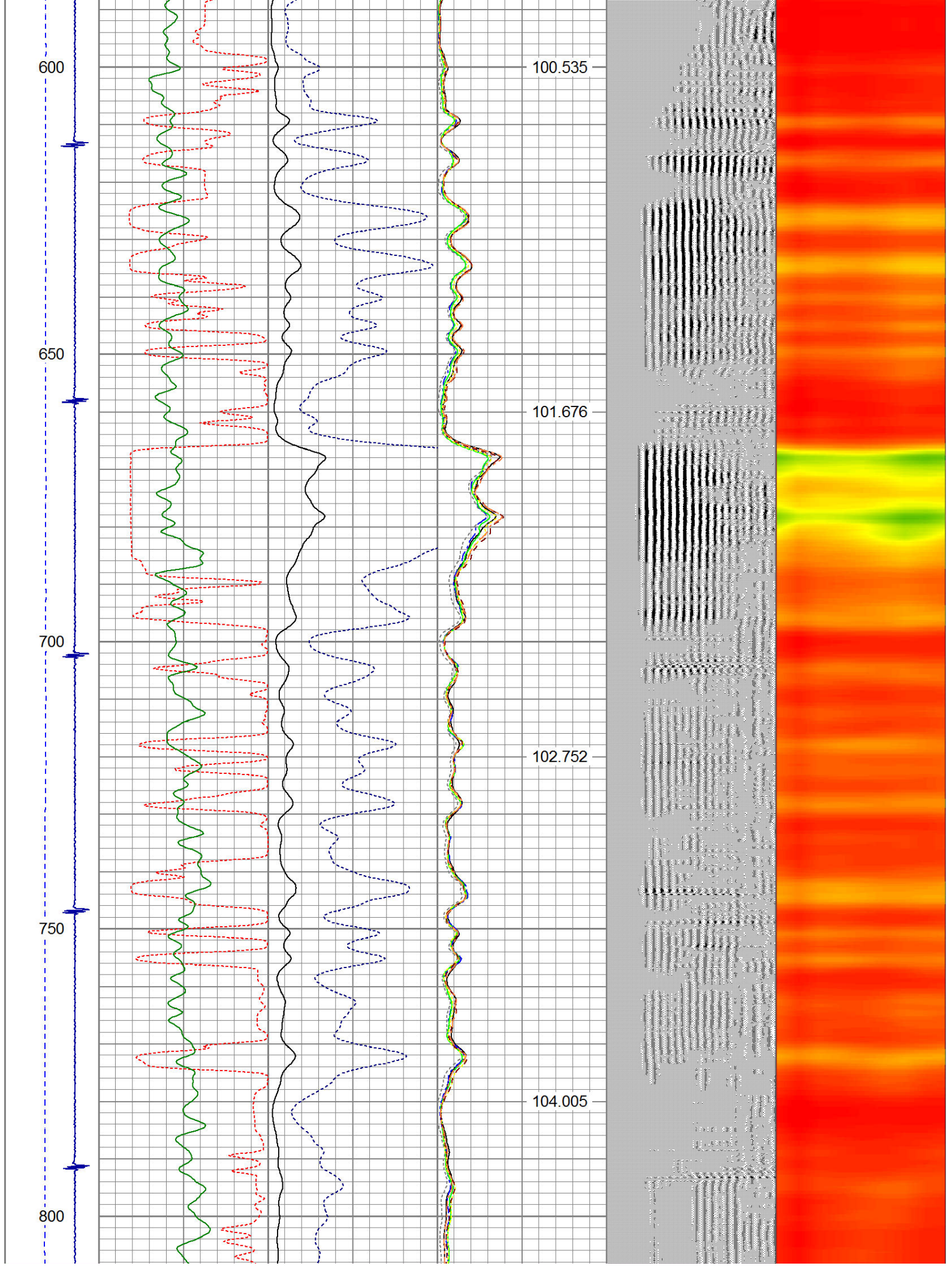
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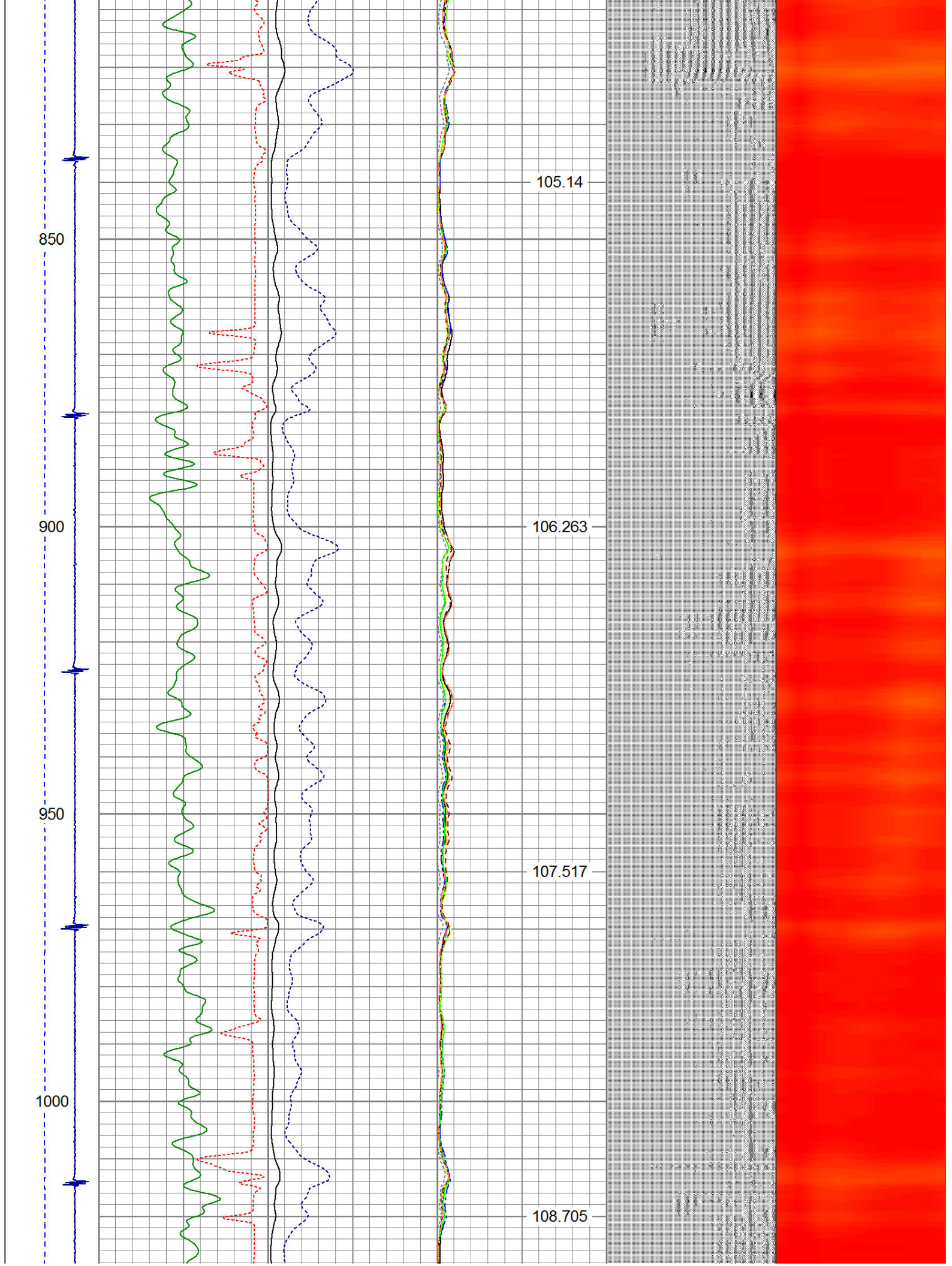
Dataset Creation:		Mon Oct 06 07:40:31 2014 by Log Std Casedhole 09061																					
Charted by:		Depth in Feet scaled 1:240																					
-9	CCL	3	200	TT (usec)	800	0	AMP (mV)	100	0	AMPS1	100	200	VDL	1200	1	Cement Map	8						
LSPD (ft/min)	0		0	GR (GAPI)	200	0	AMPx5 (mV)	20	0	AMPS2	100			1				100					
	200		200	GR (GAPI)	400																		
	0		-250																				
													0	AMPS4				100					
													0	AMPS5				100					
													0	AMPS6				100					
													0	AMPS7				100					
													0	AMPS8				100					
										IntTemp													
										(degF)													

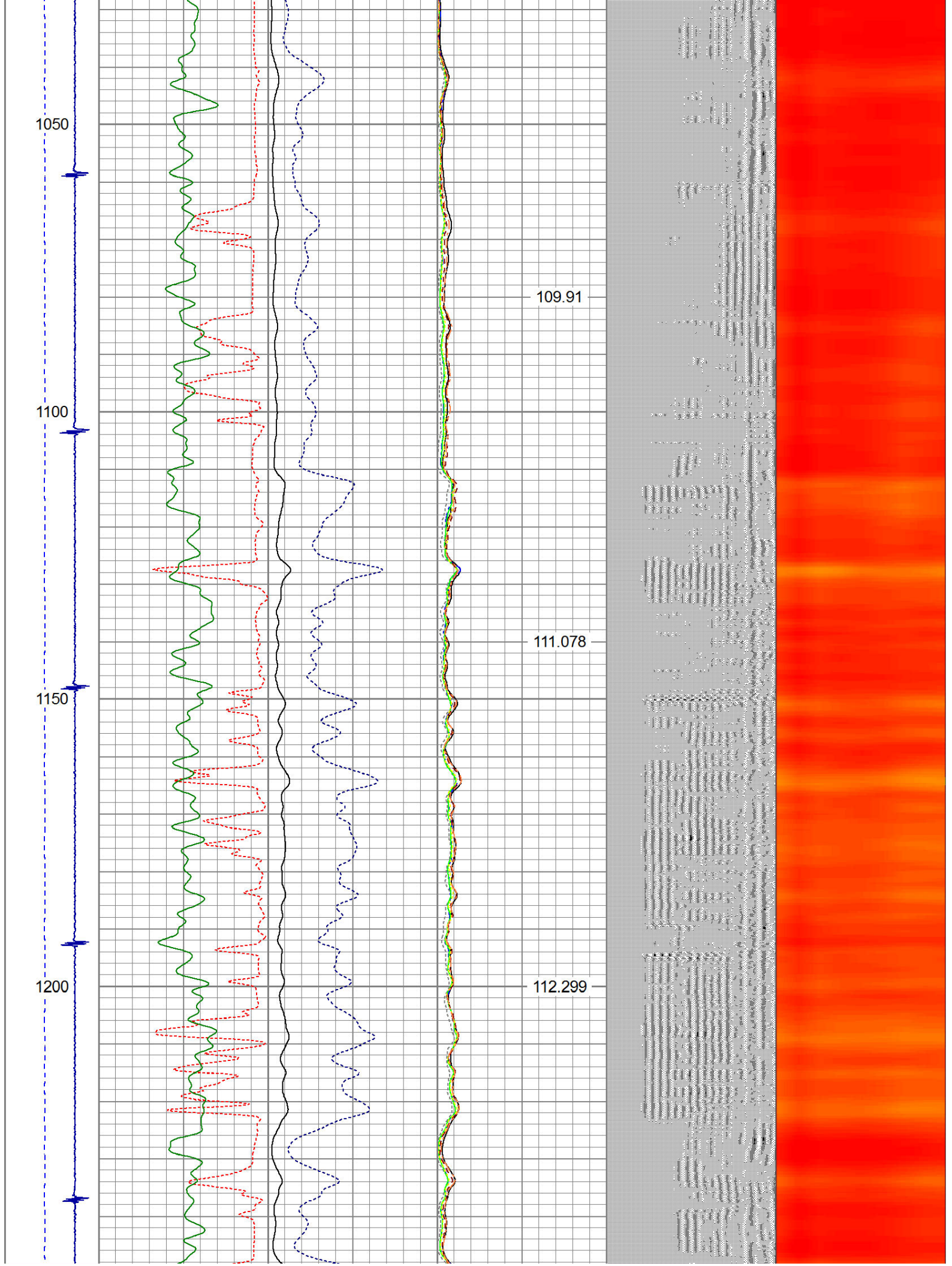


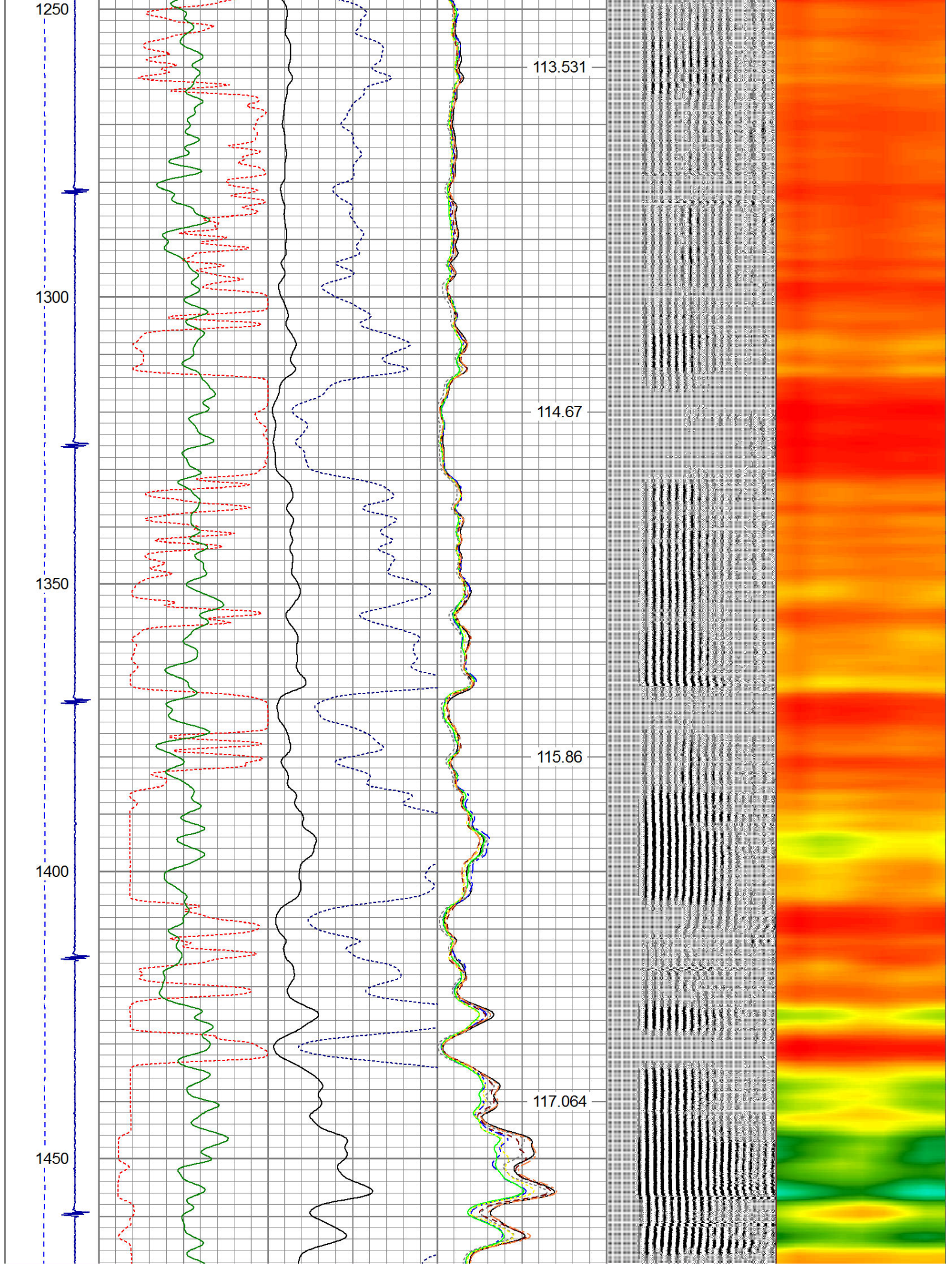


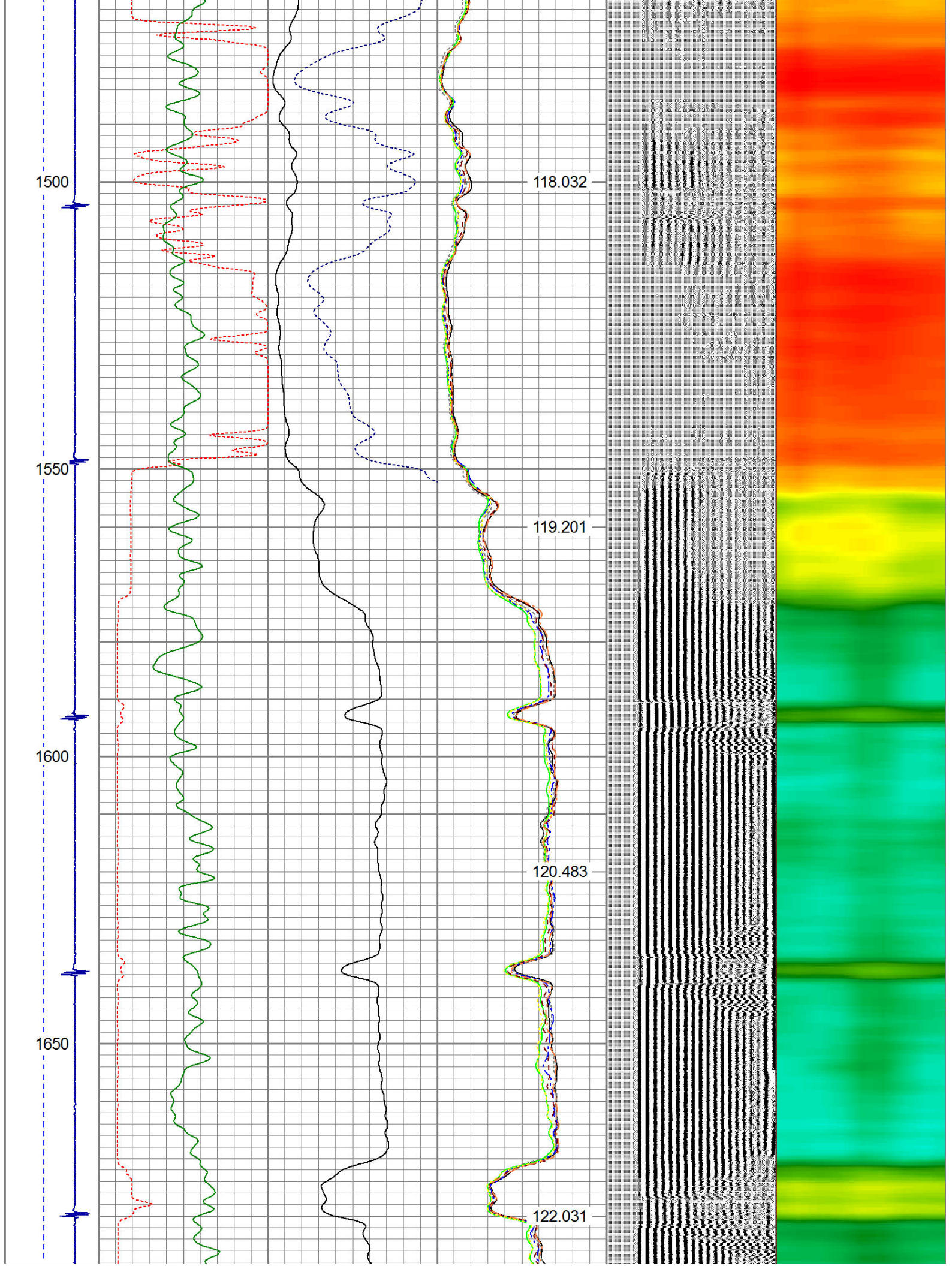












1700

1750

1800

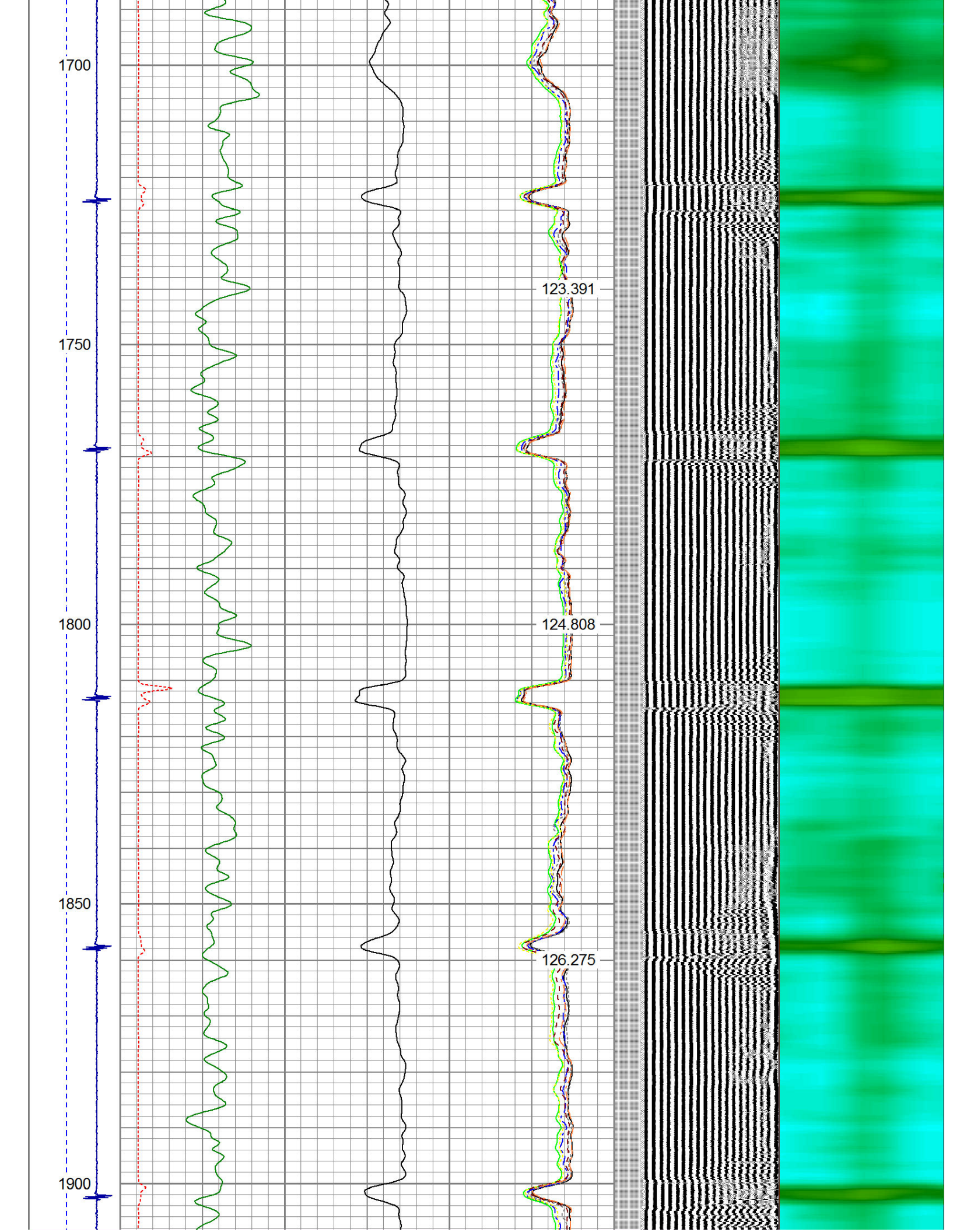
1850

1900

123.391

124.808

126.275



1950

2000

2050

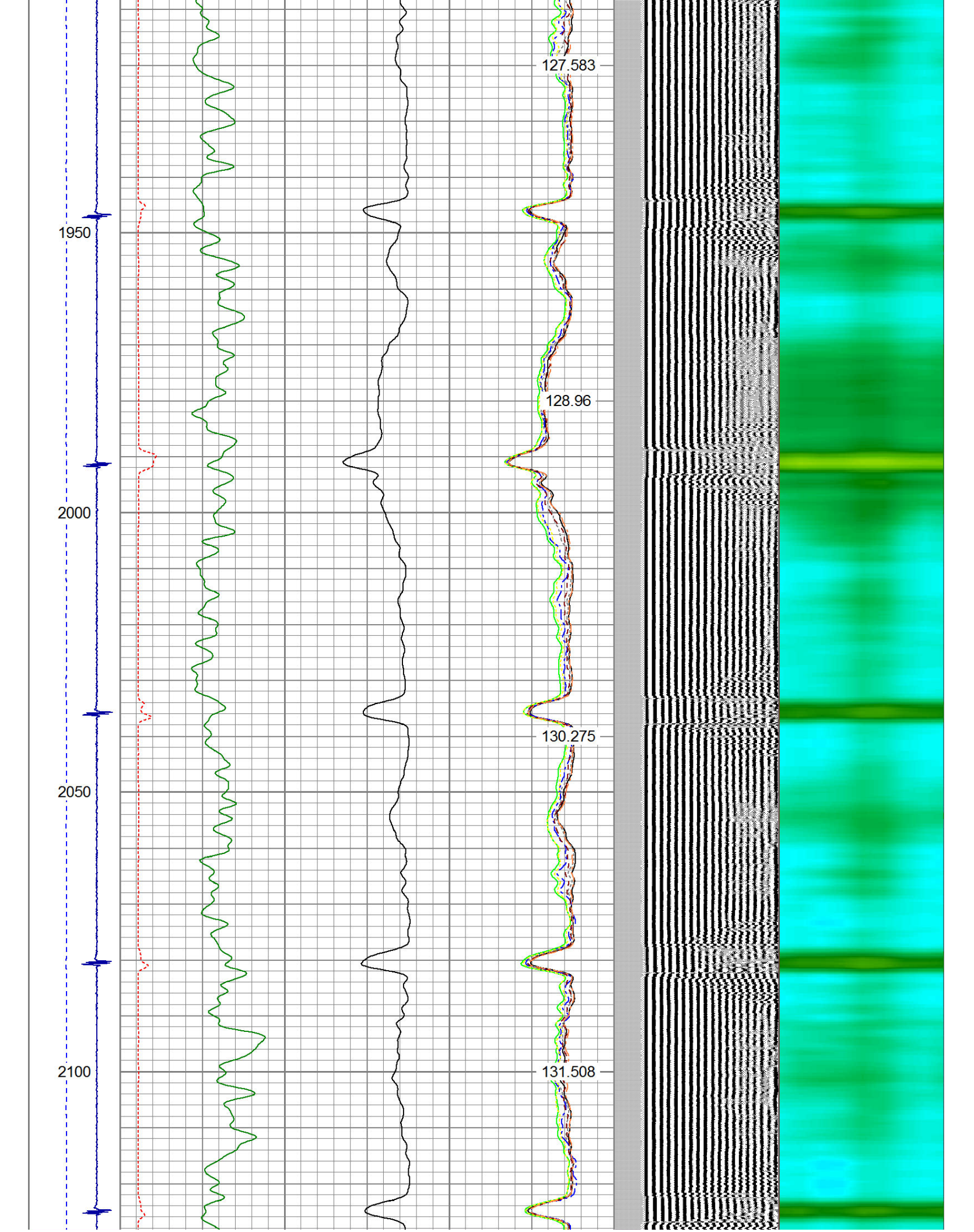
2100

127.583

128.96

130.275

131.508



2150

2200

2250

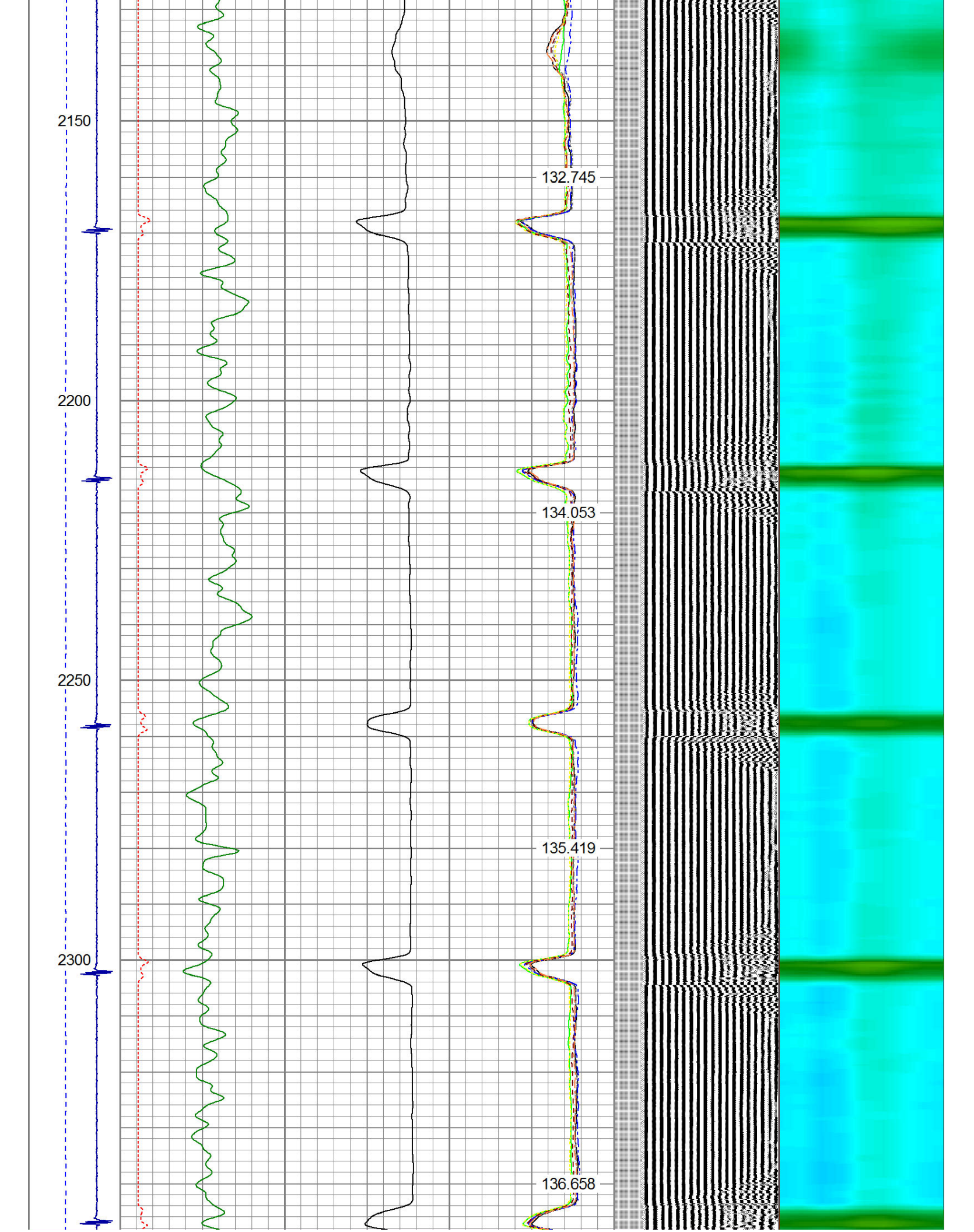
2300

132.745

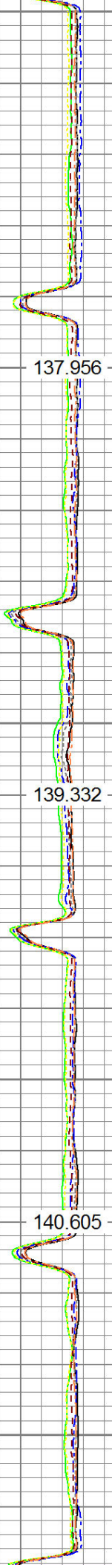
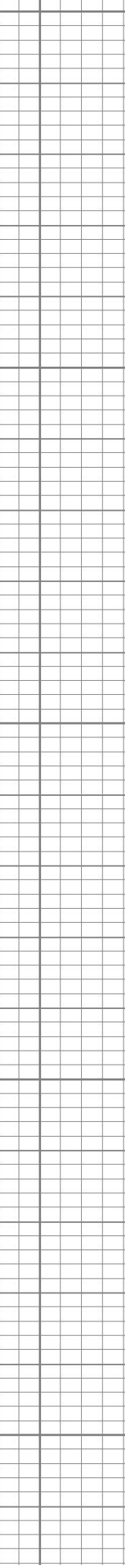
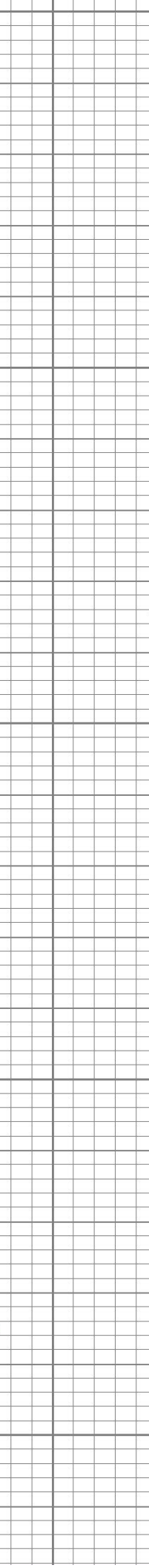
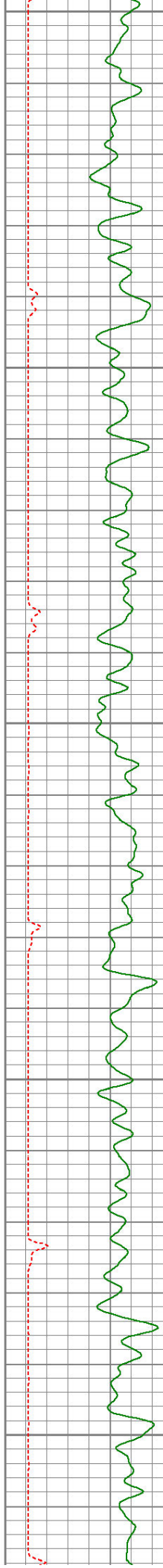
134.053

135.419

136.658



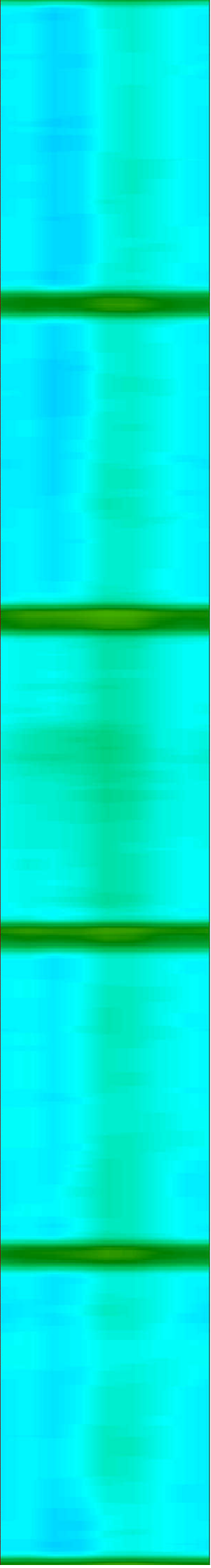
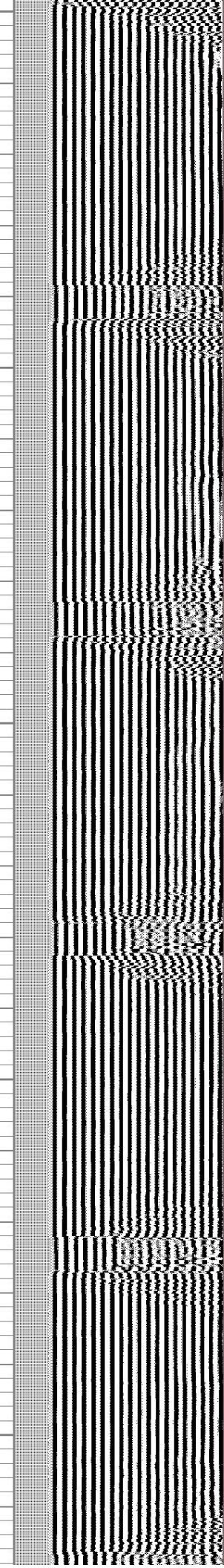
2350
2400
2450
2500
2550



137.956

139.332

140.605



2600

2650

2700

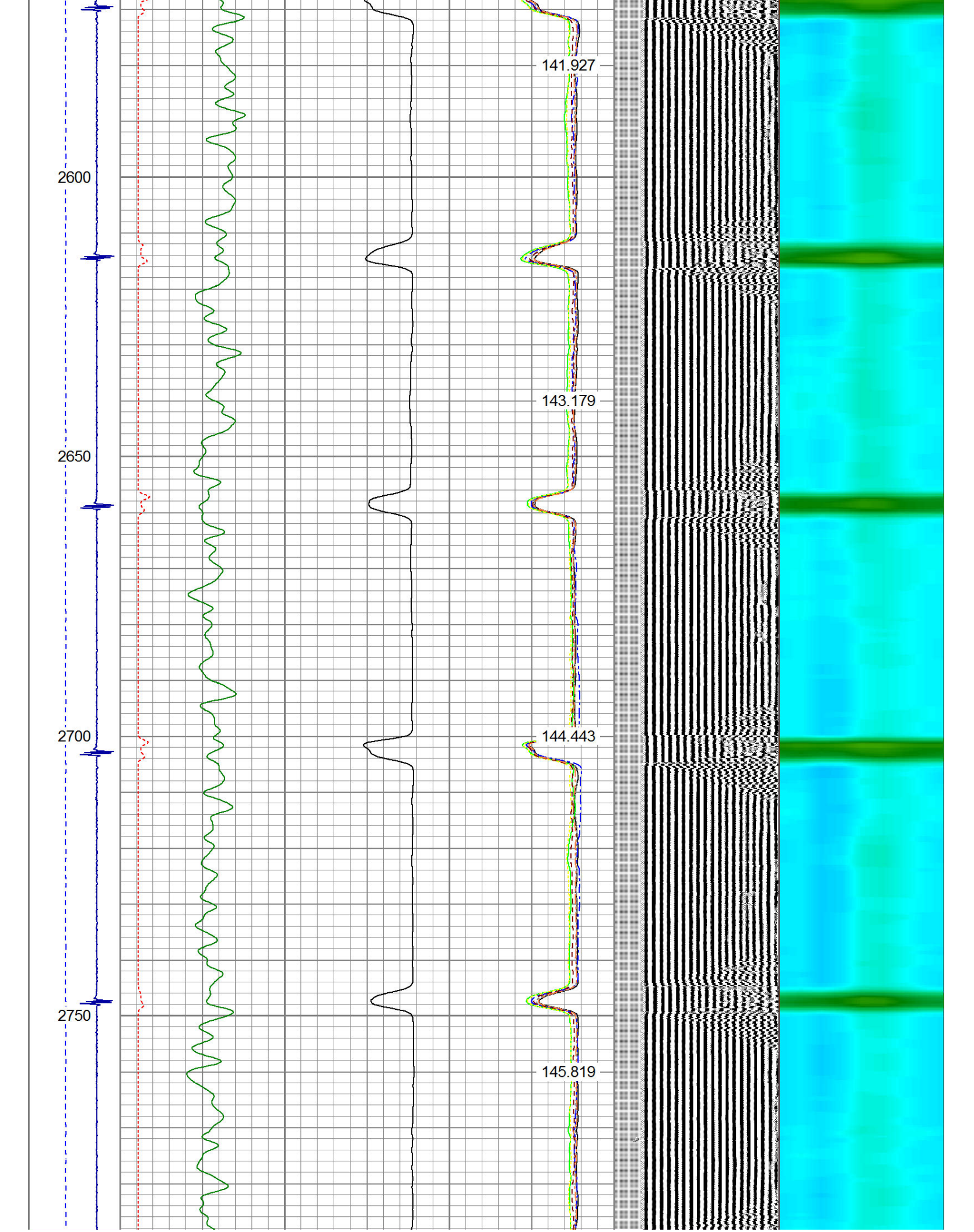
2750

141.927

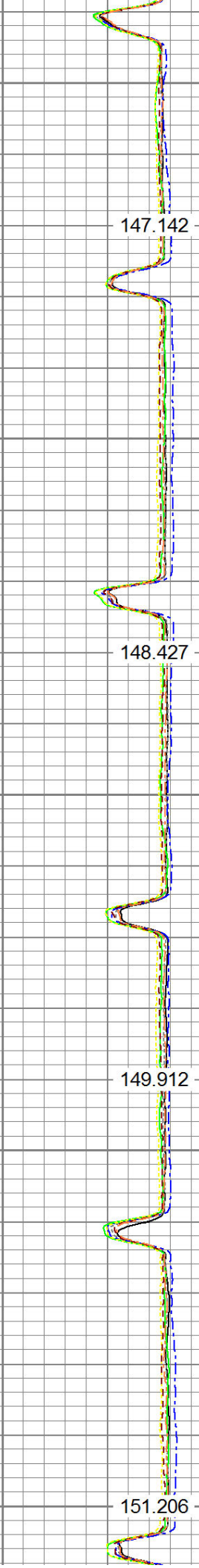
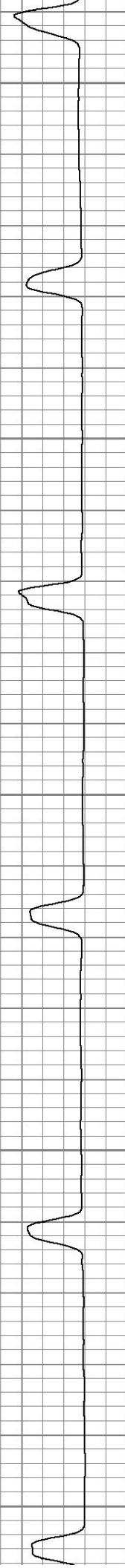
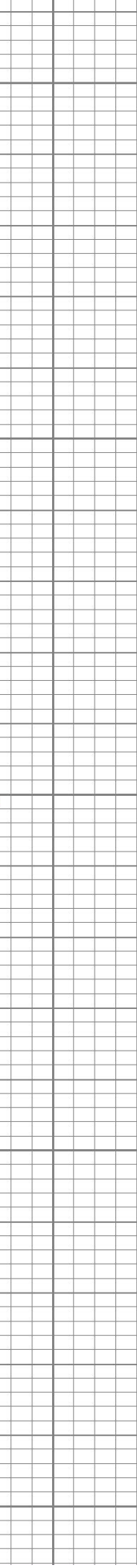
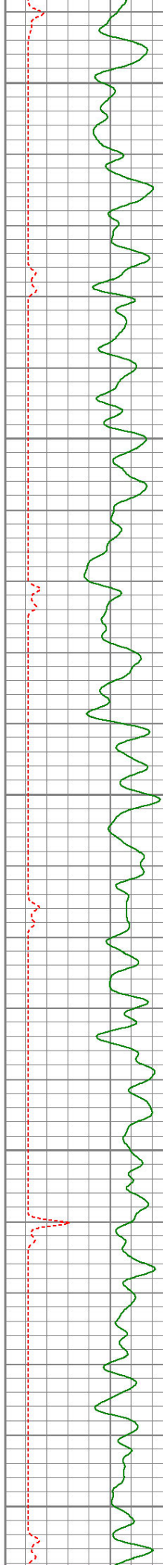
143.179

144.443

145.819



2800
2850
2900
2950
3000

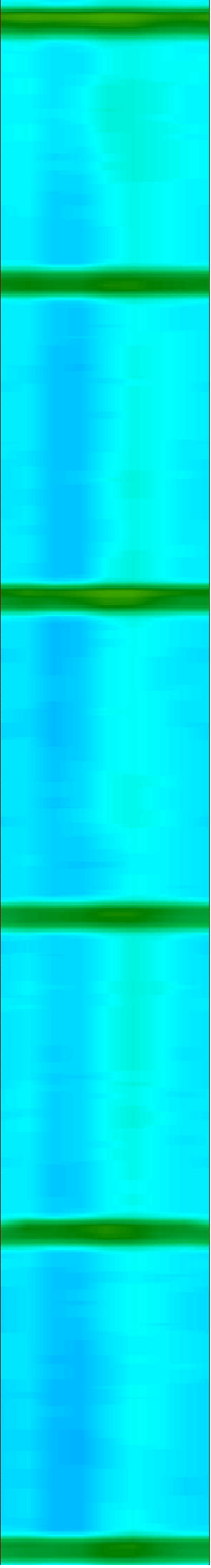
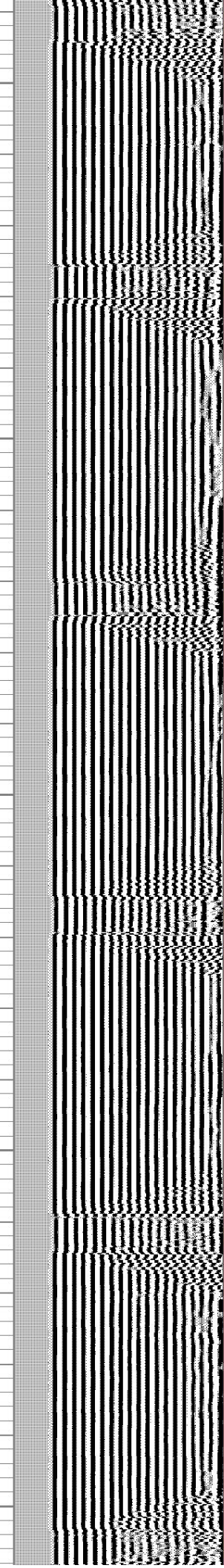


147.142

148.427

149.912

151.206



3050

3100

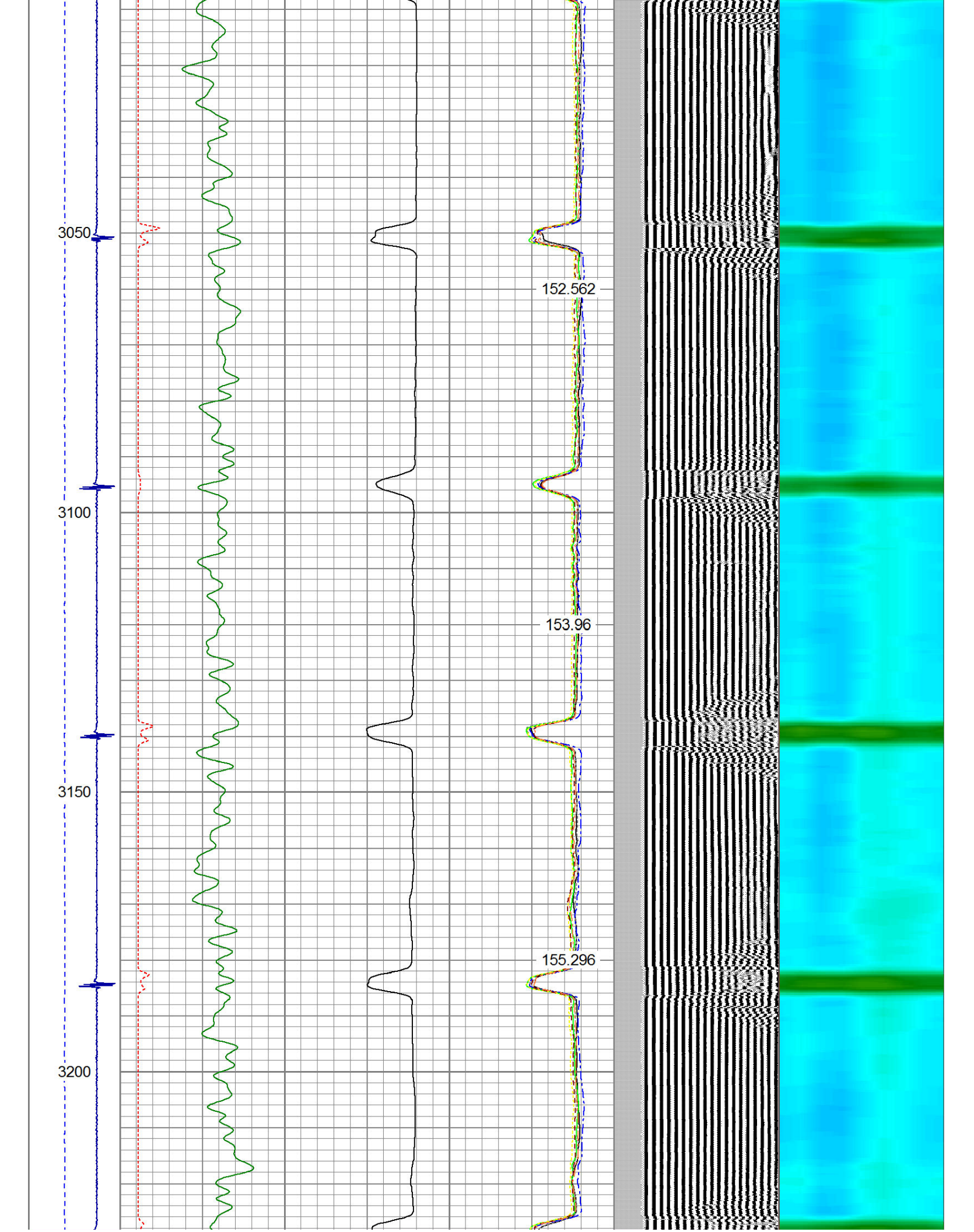
3150

3200

152.562

153.96

155.296



3250

3300

3350

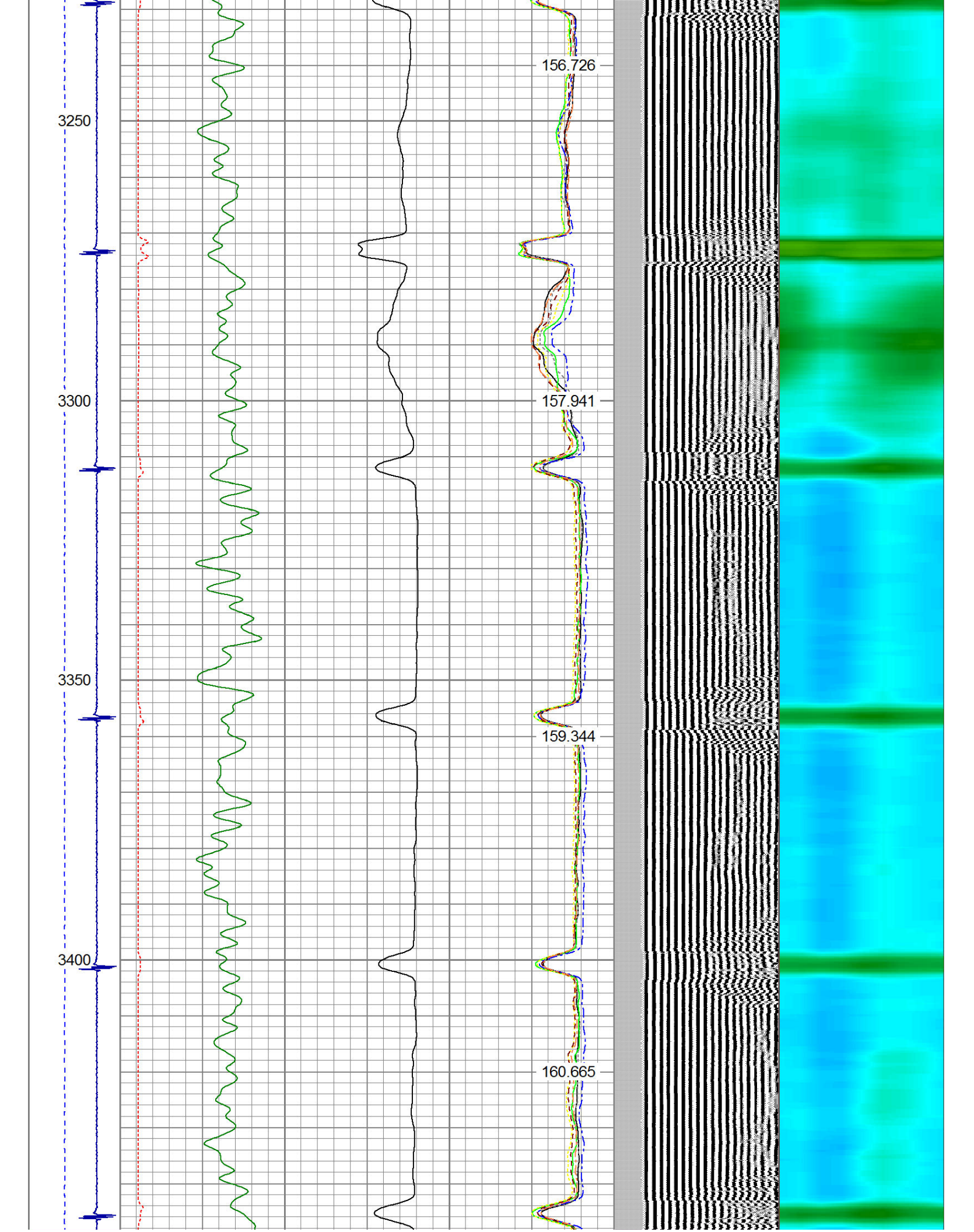
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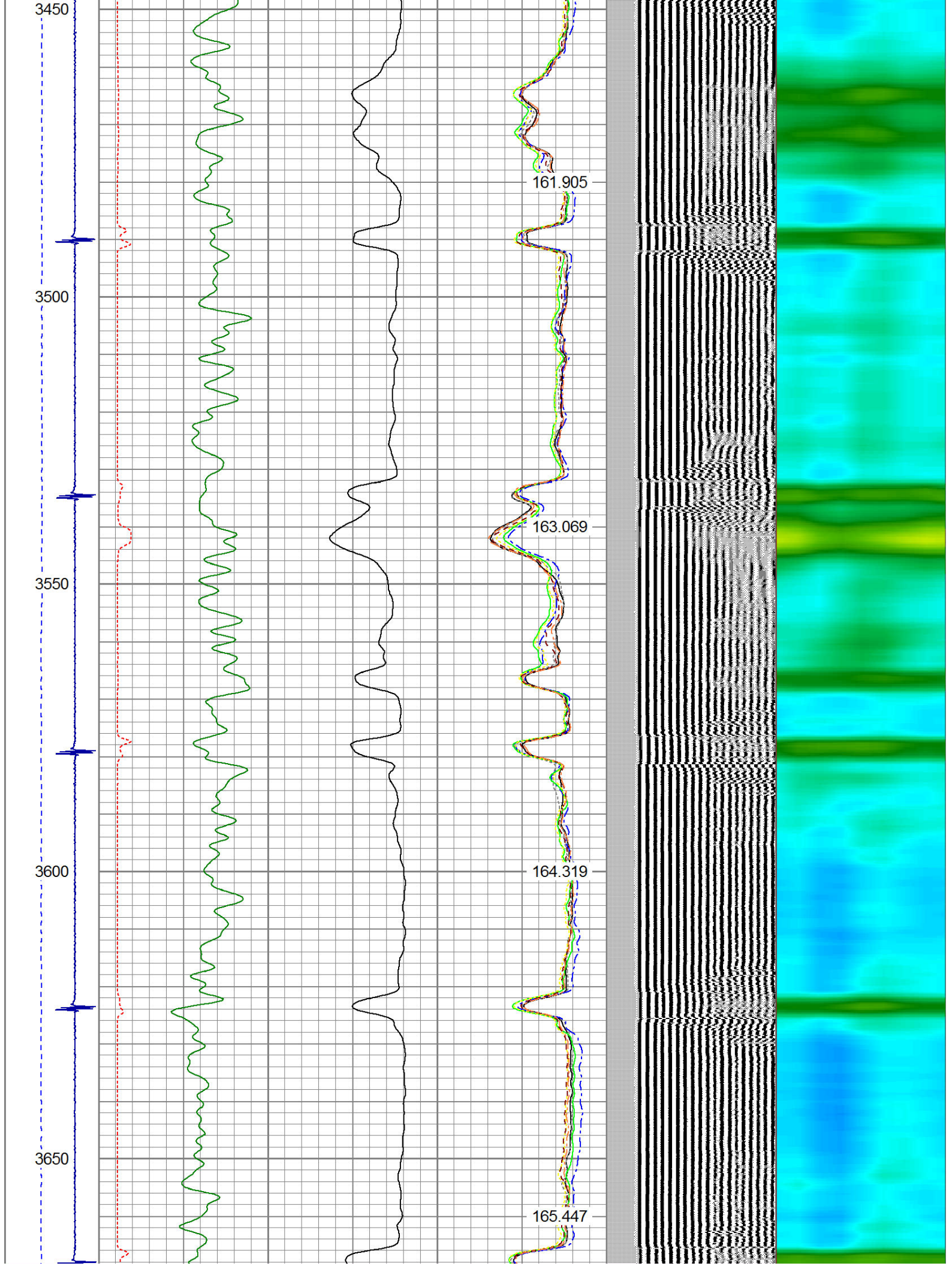
156.726

157.941

159.344

160.665





3700

3750

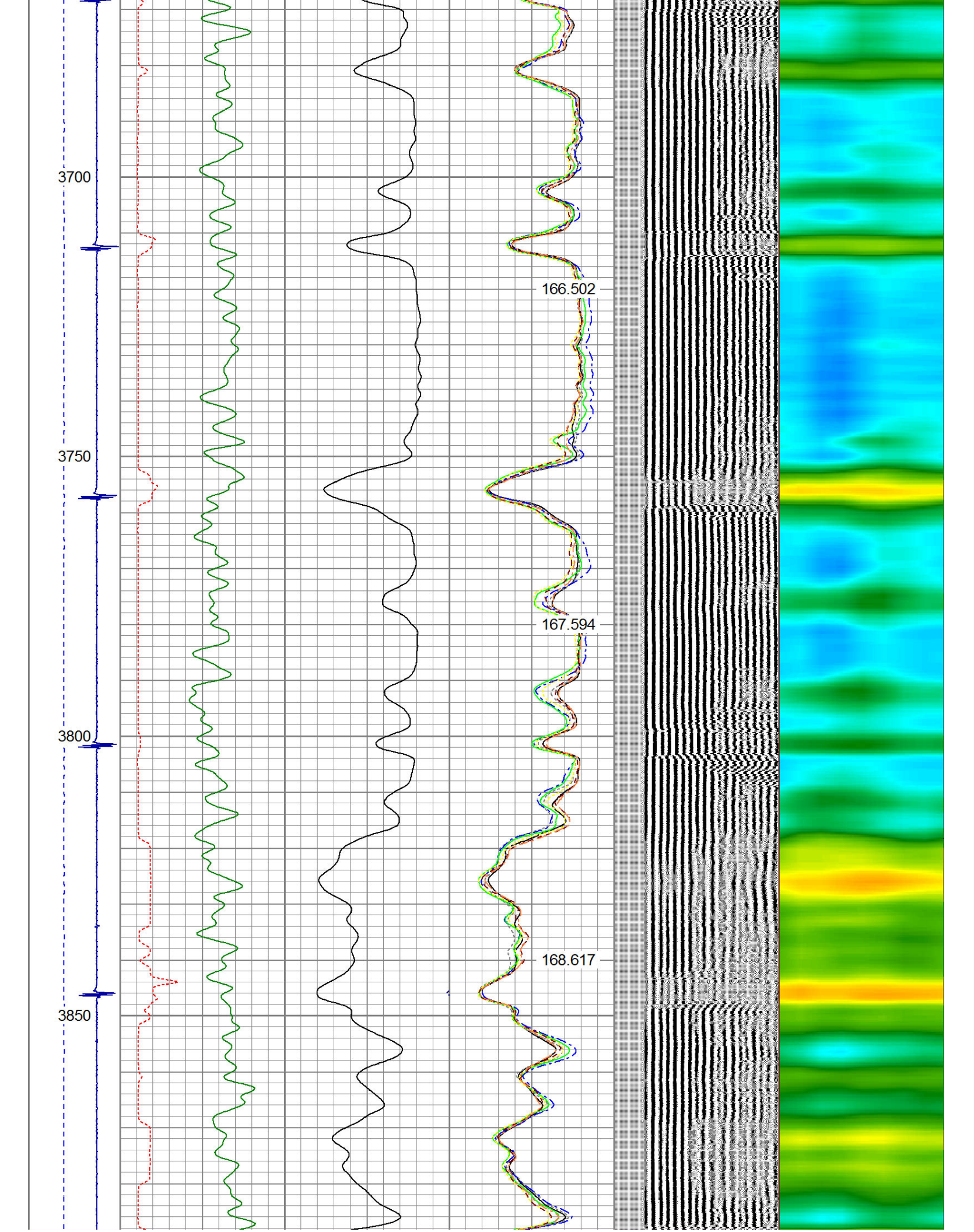
3800

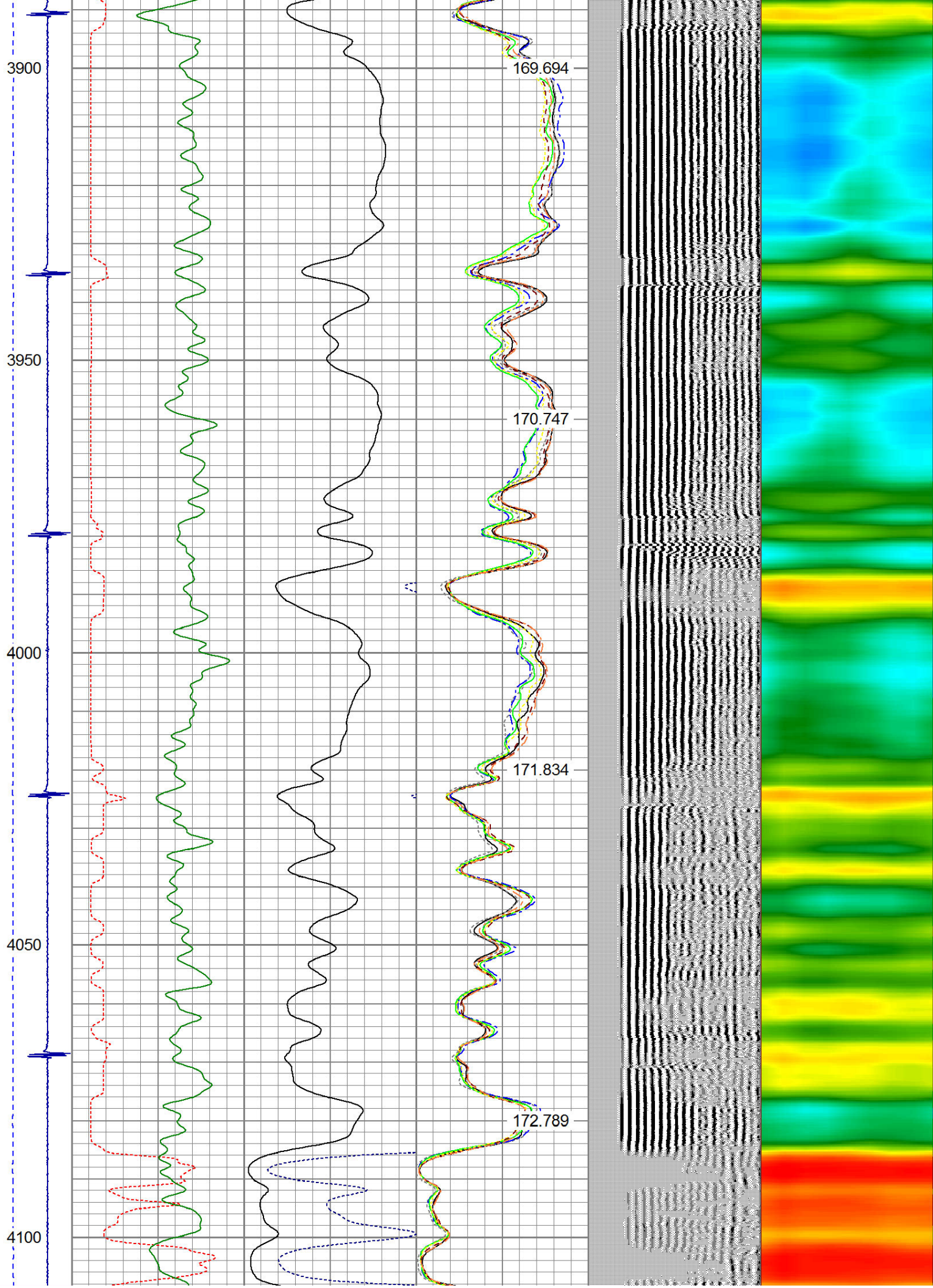
3850

166.502

167.594

168.617





4150

4200

4250

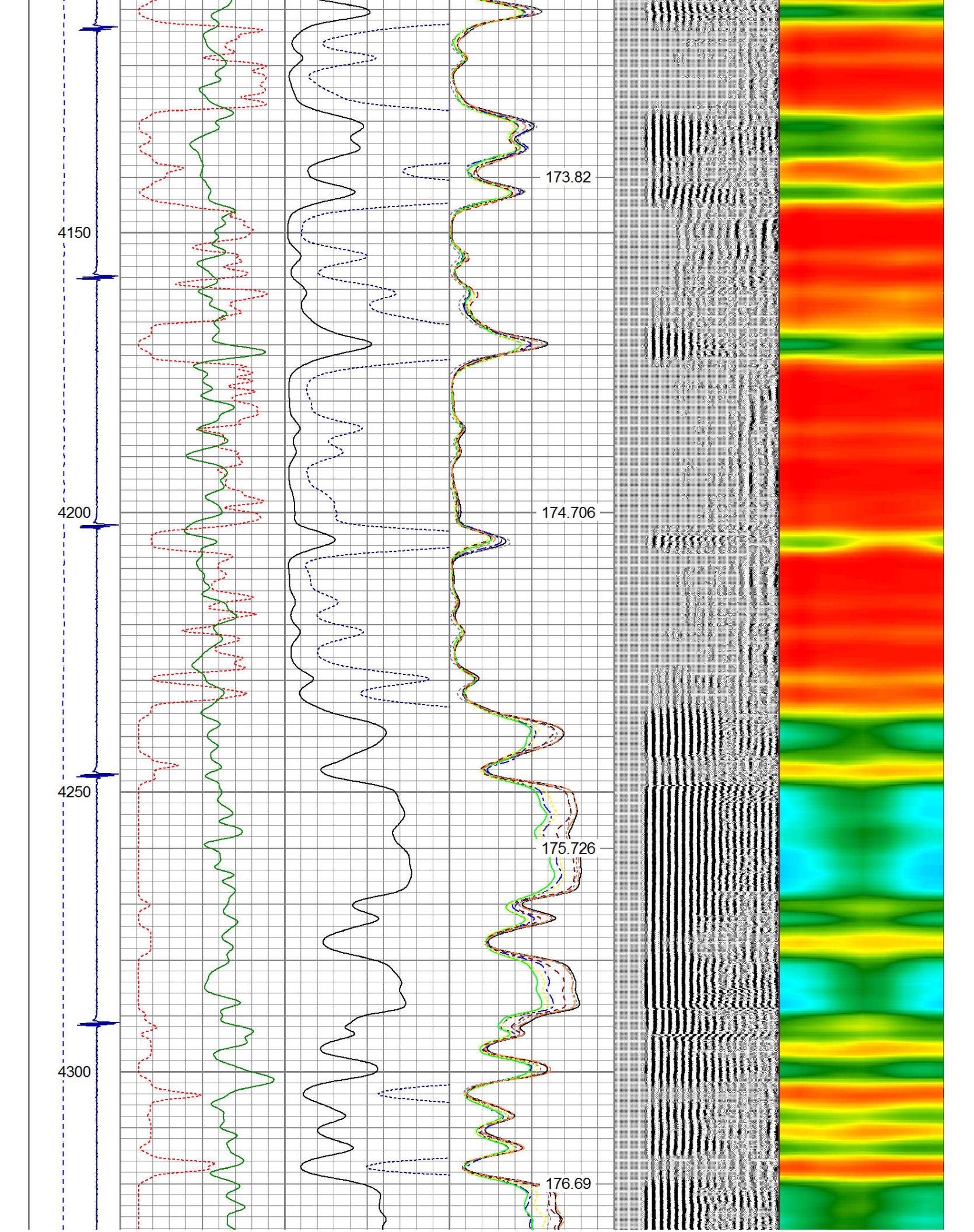
4300

173.82

174.706

175.726

176.69



4350

4400

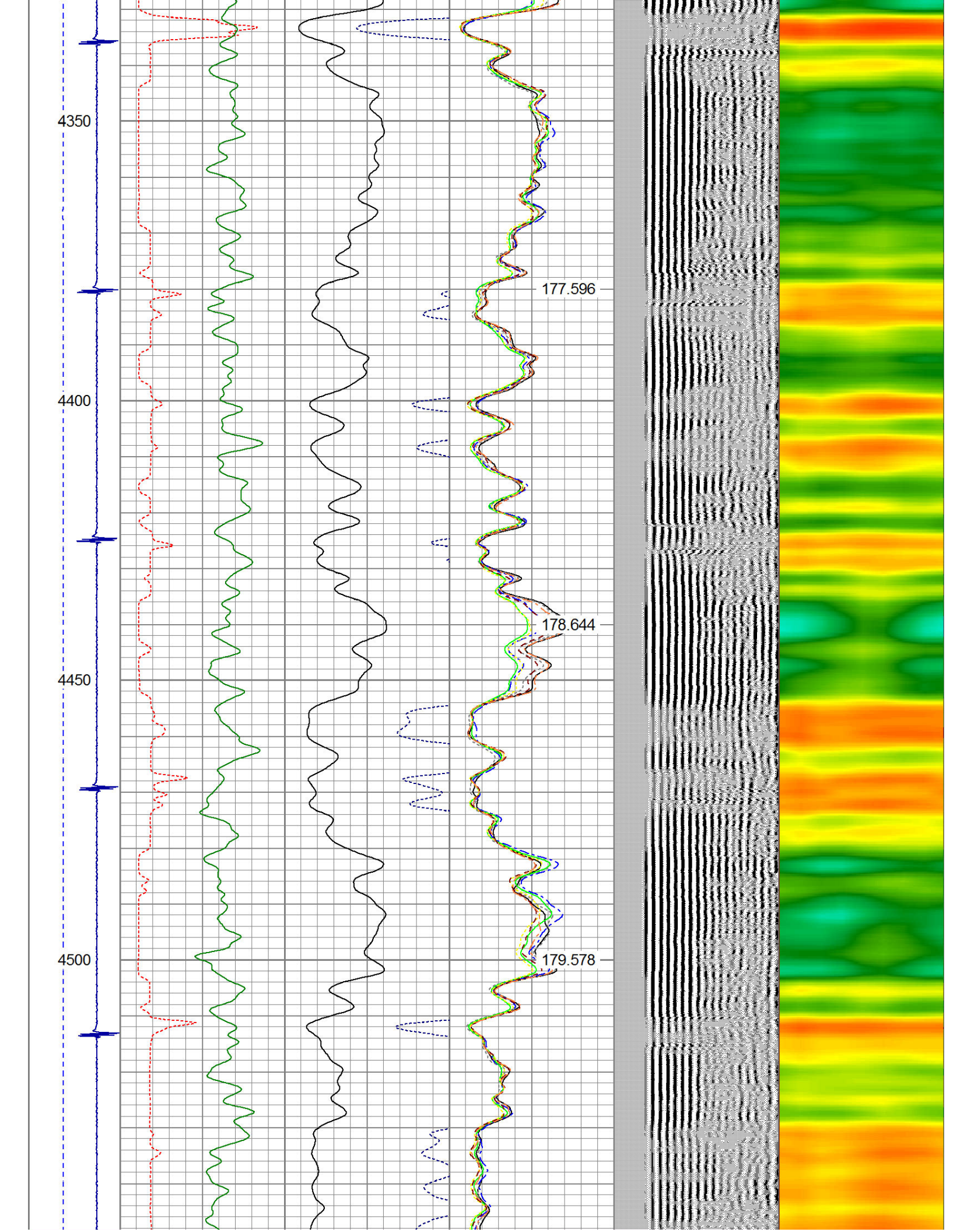
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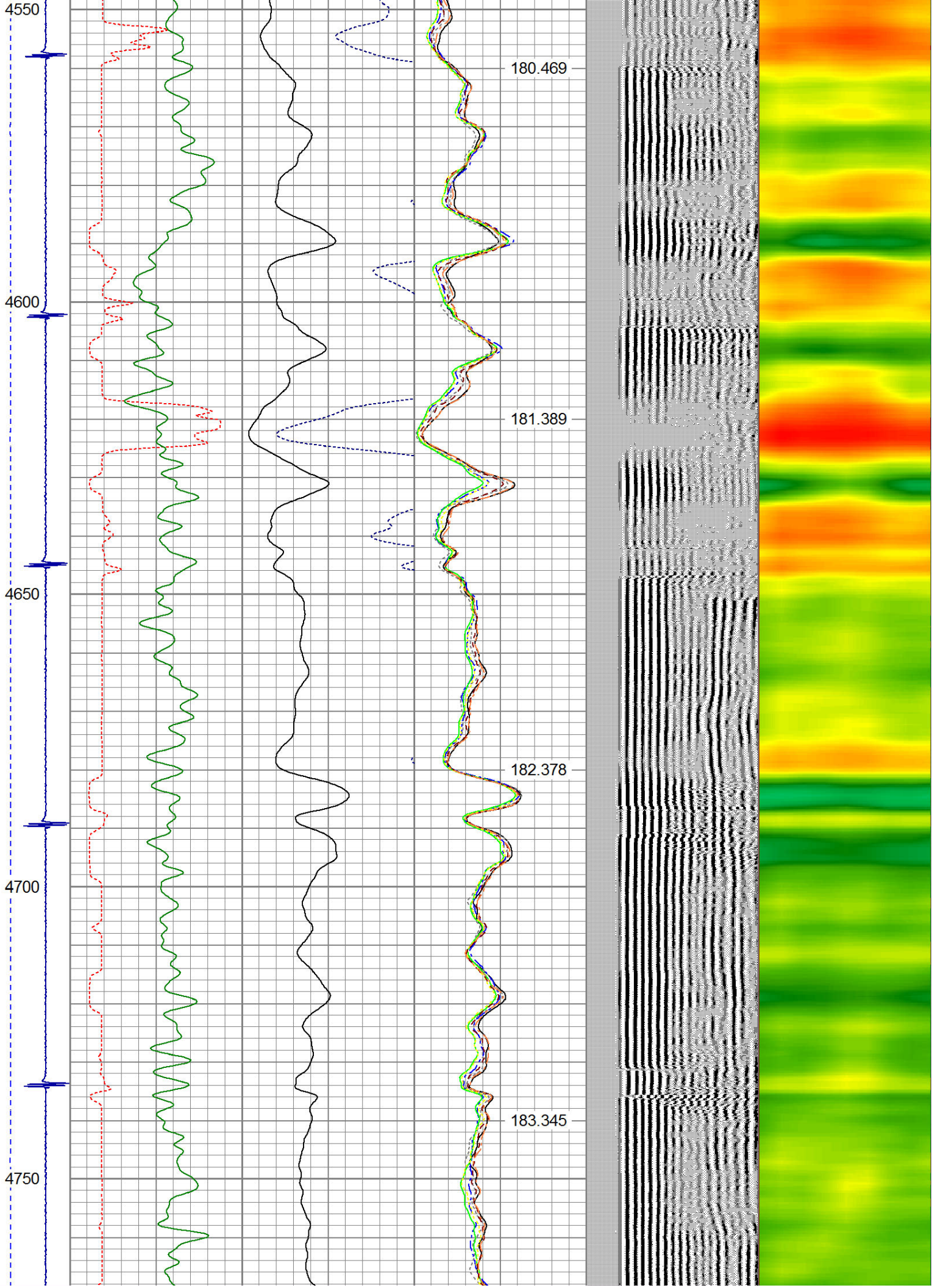
4500

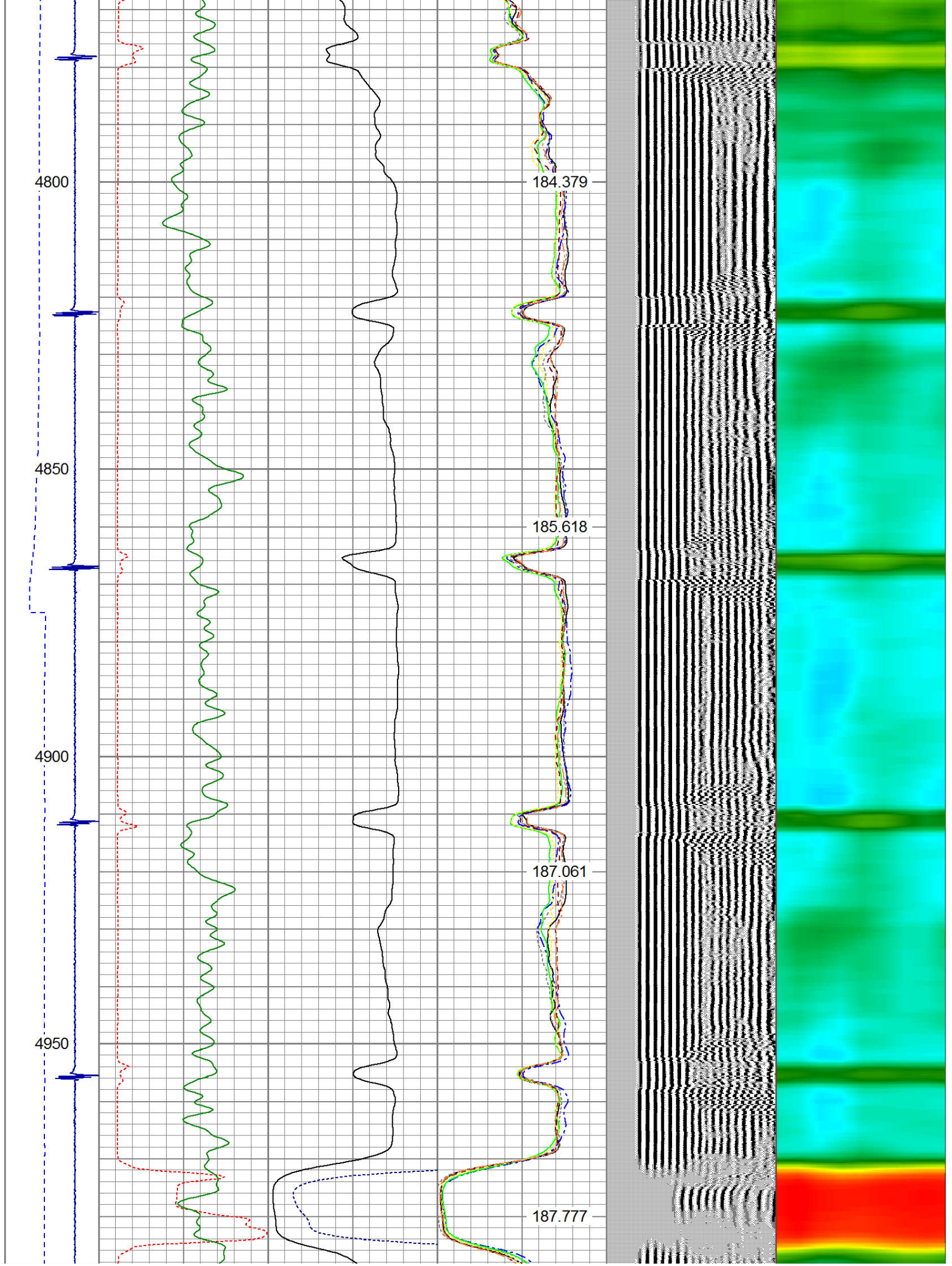
177.596

178.644

179.578







5000

5050

5100

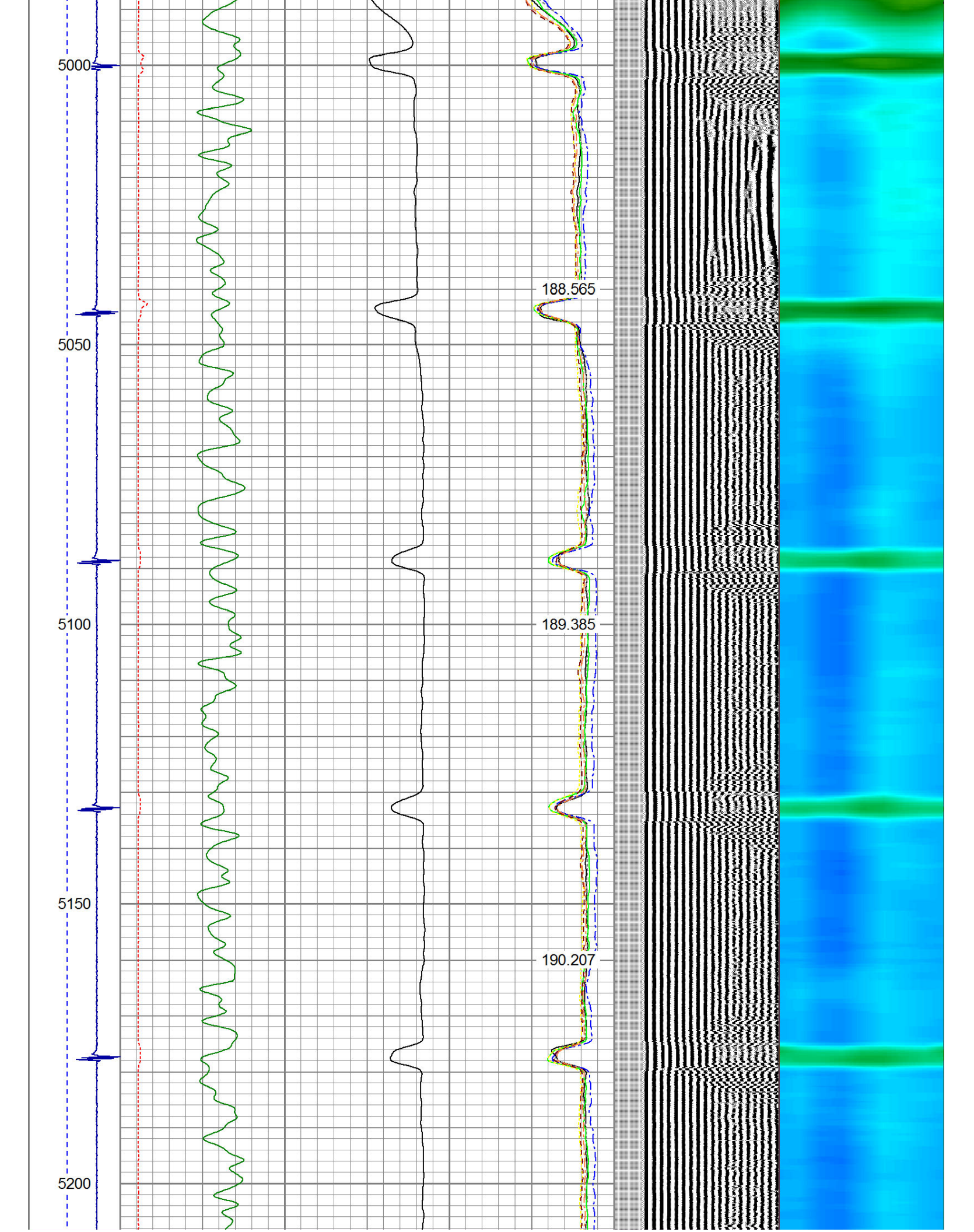
5150

5200

188.565

189.385

190.207



5250

5300

5350

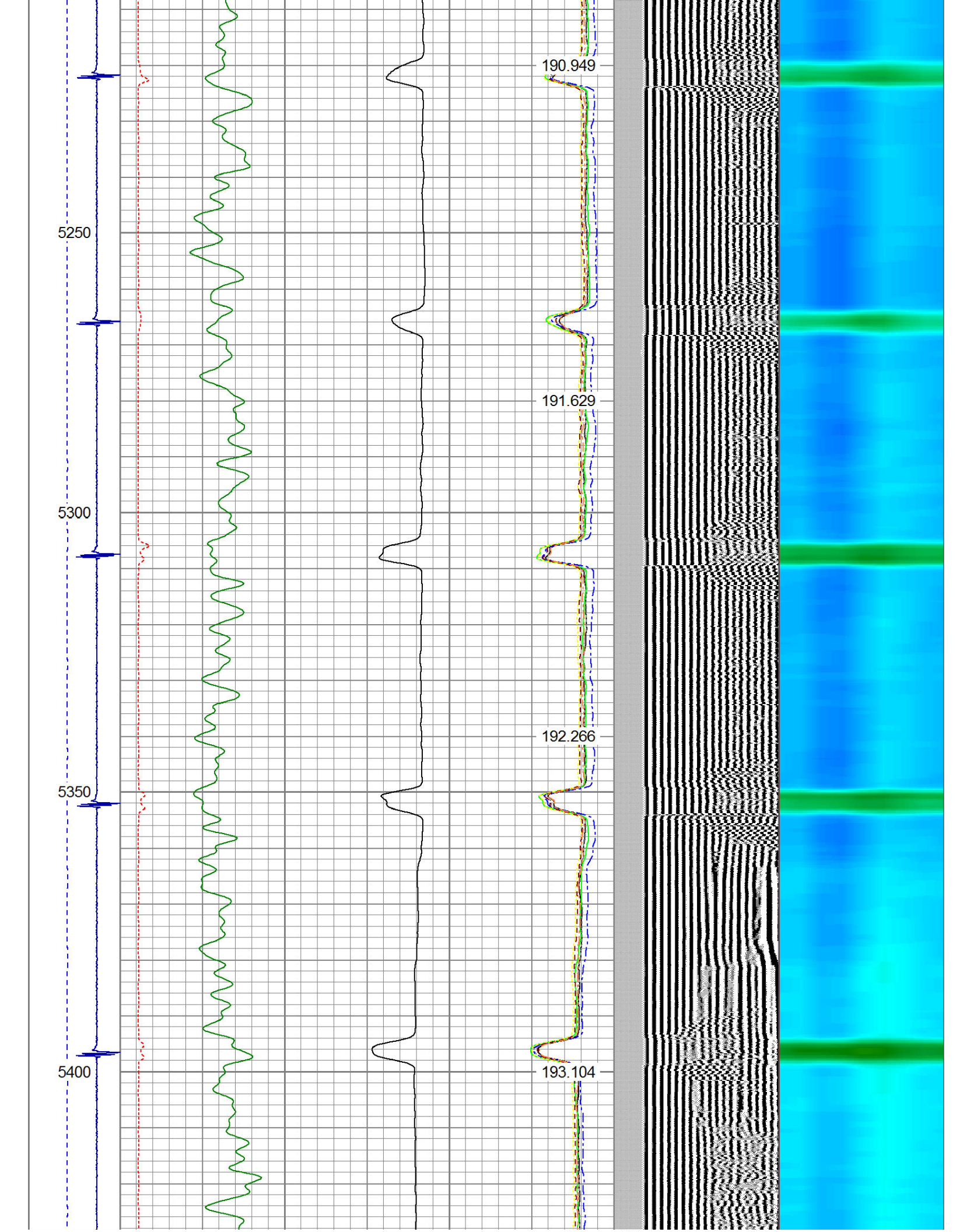
5400

190.949

191.629

192.266

193.104



5450

5500

5550

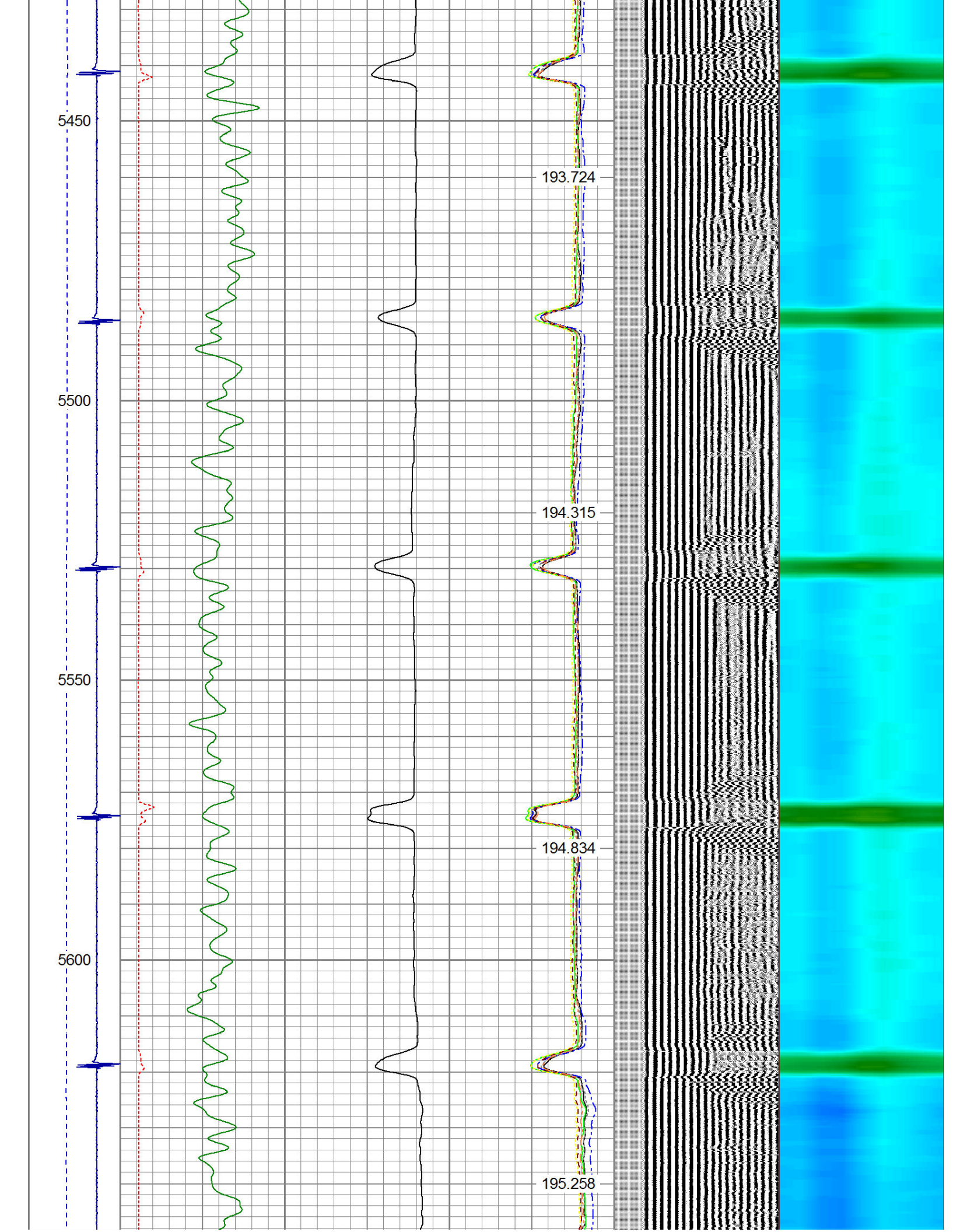
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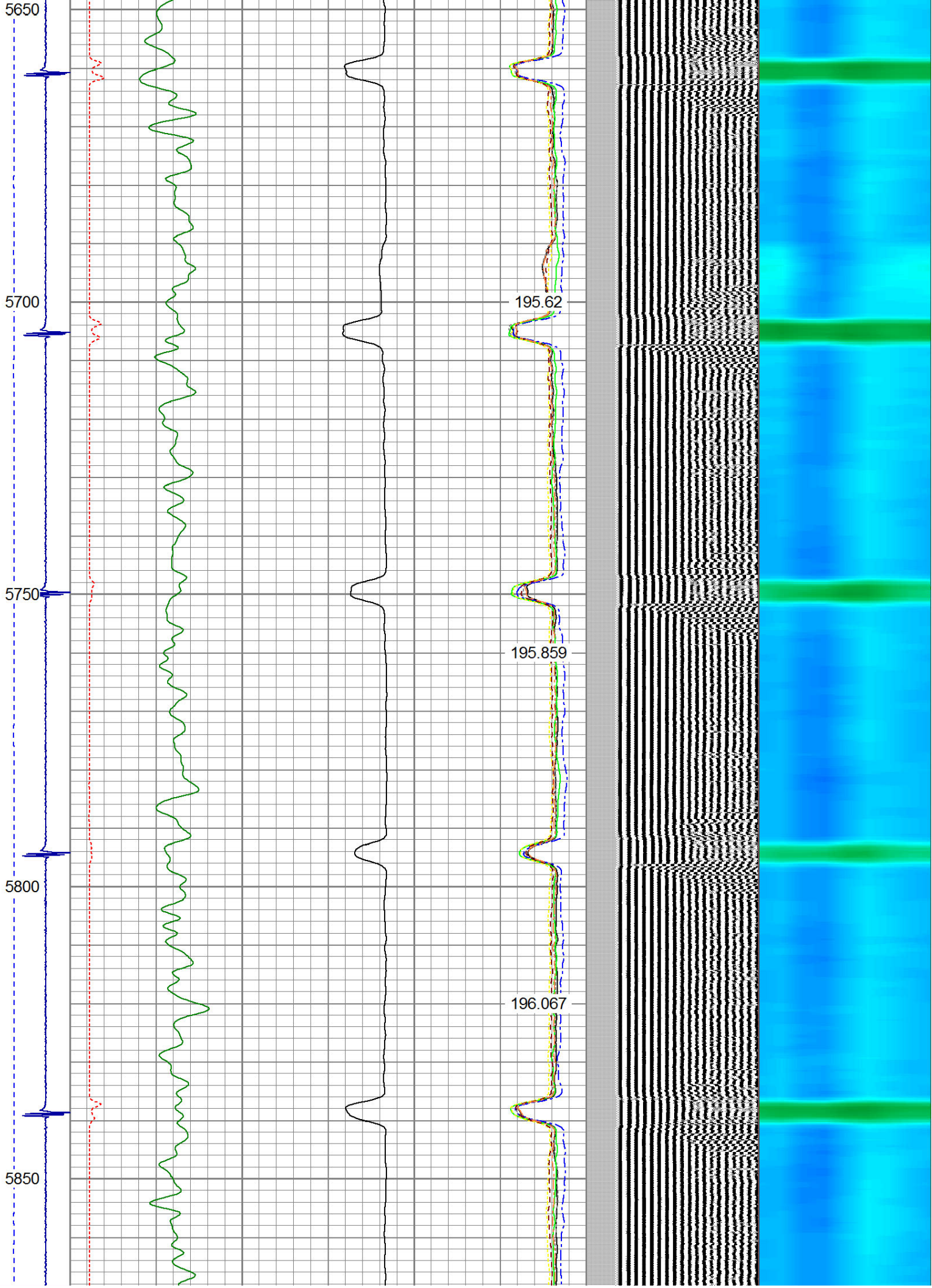
193.724

194.315

194.834

195.258





5900

5950

6000

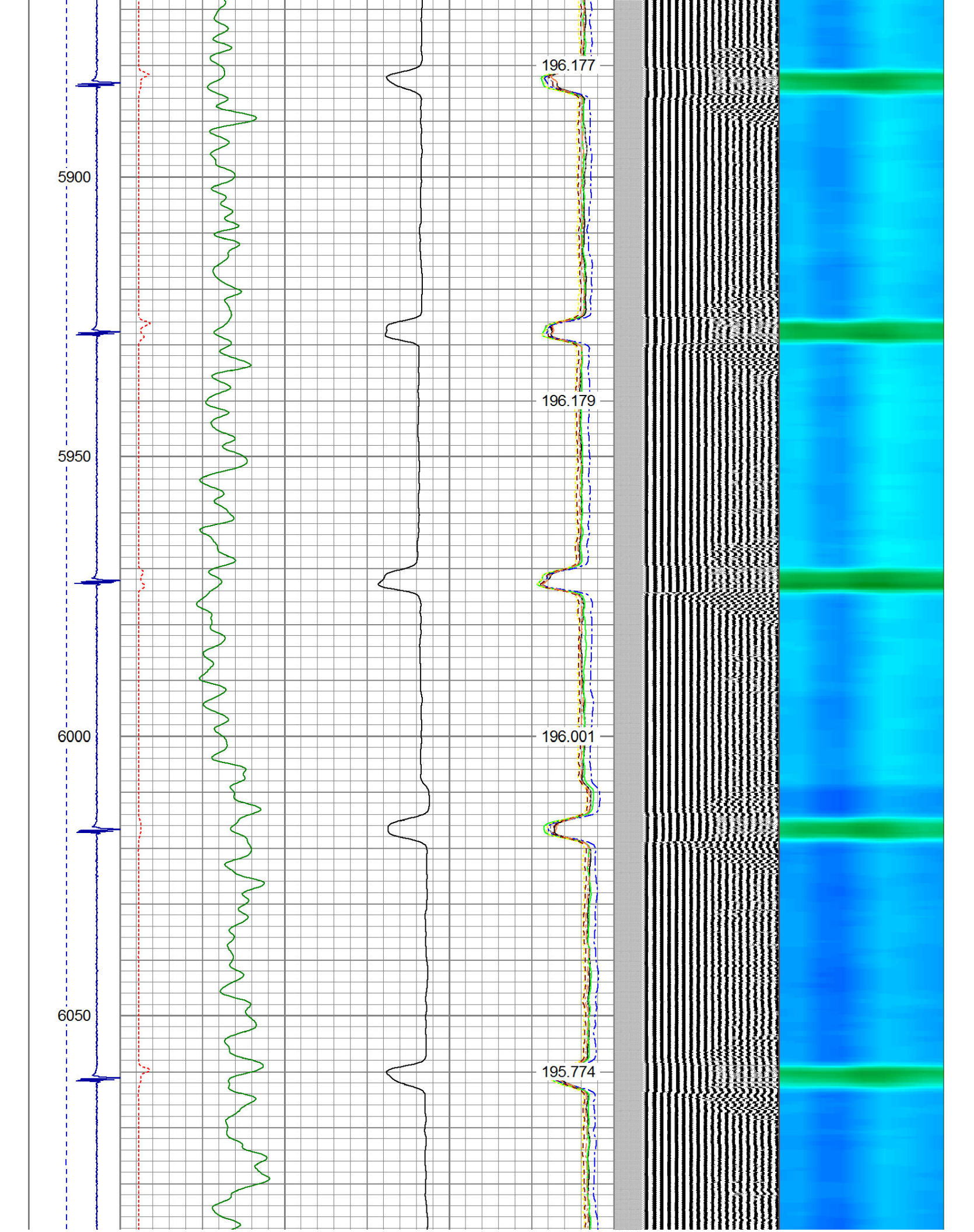
6050

196.177

196.179

196.001

195.774



6100

6150

6200

6250

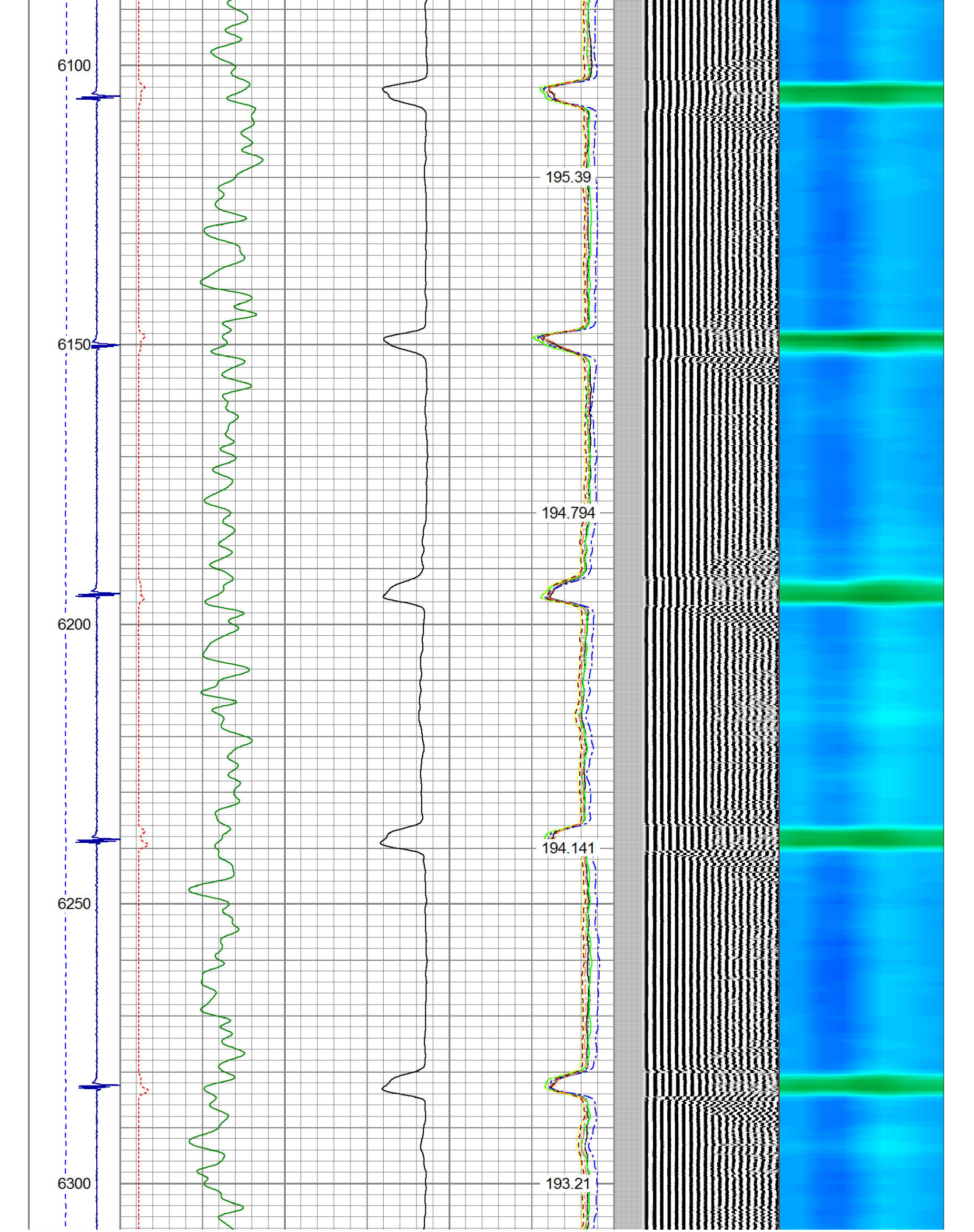
6300

195.39

194.794

194.141

193.21



6350

6400

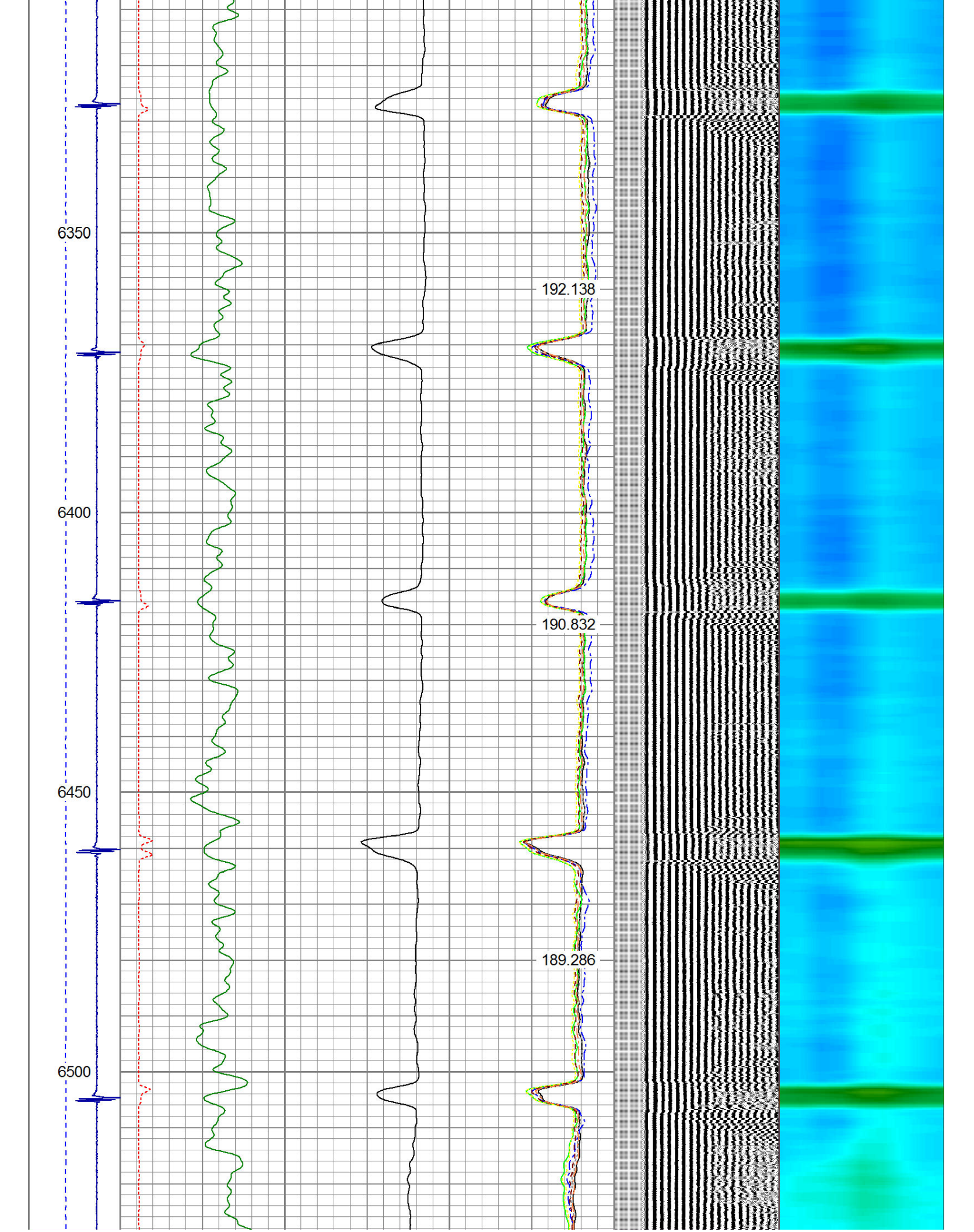
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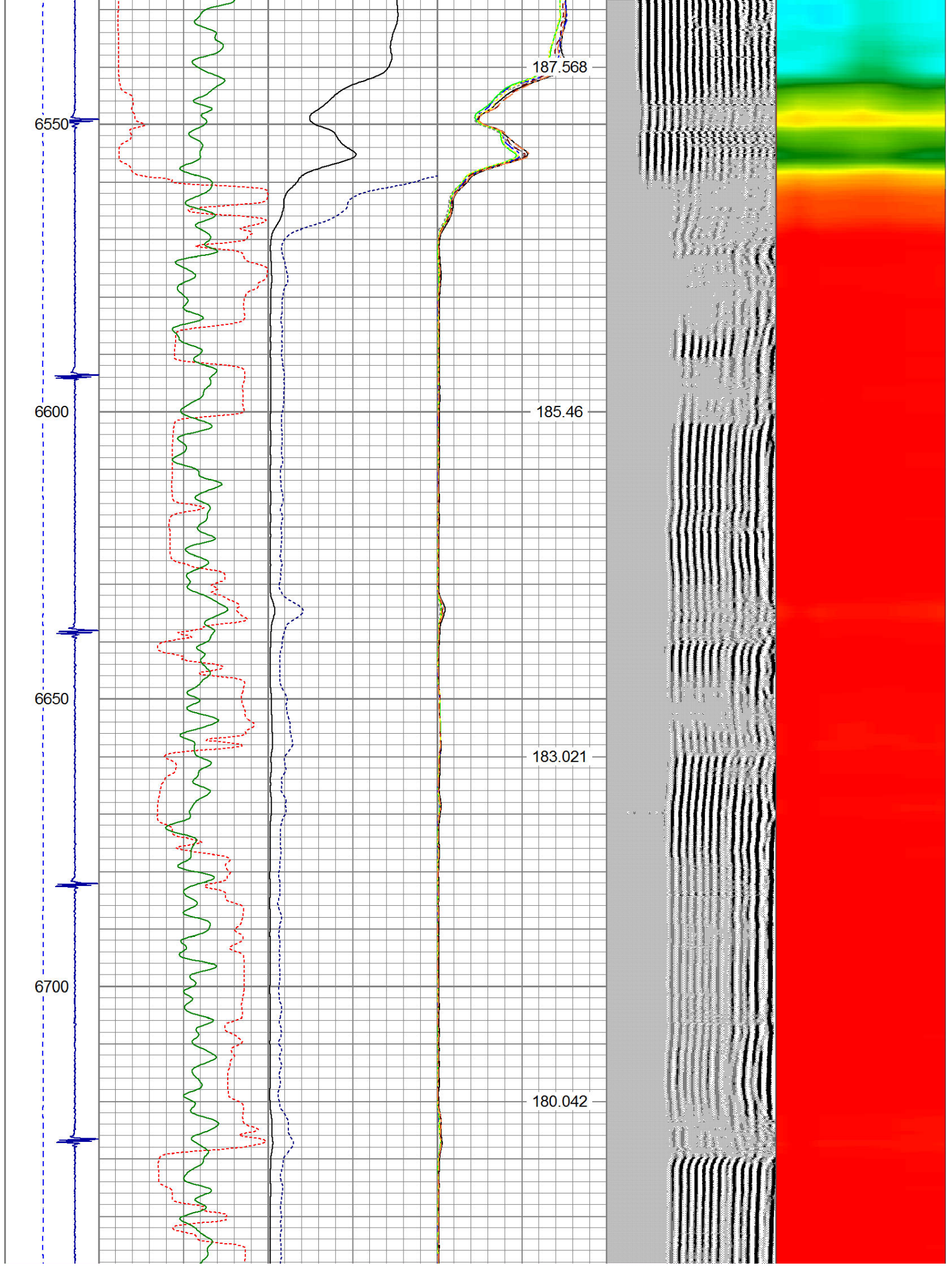
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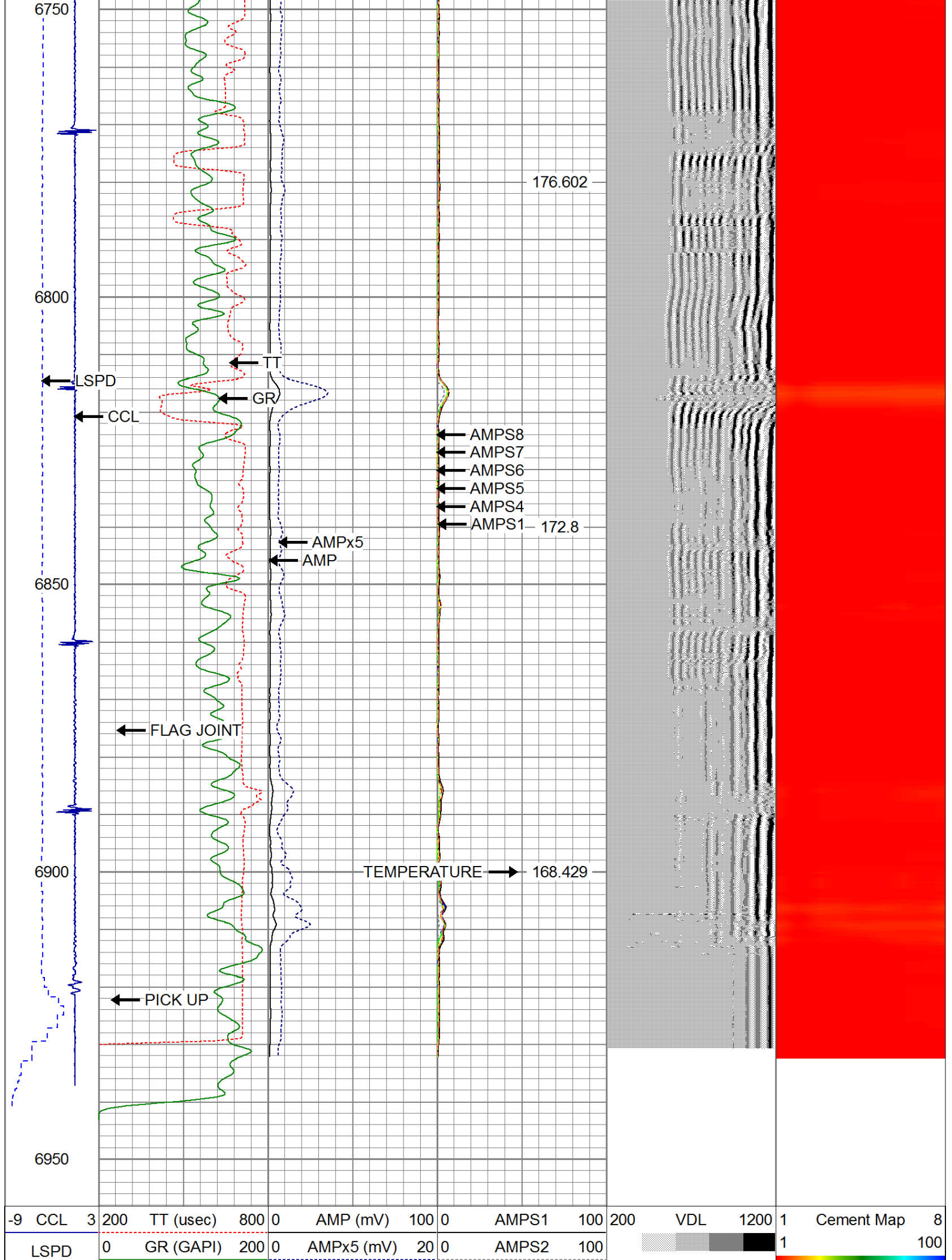
192.138

190.832

189.286







(ft/min)	200	GR (GAPI)	400	0	AMPS4	100	
0	-250			0	AMPS5	100	
				0	AMPS6	100	
				0	AMPS7	100	
				0	AMPS8	100	
					IntTemp		
					(degF)		



WARRIOR

ENERGY SERVICES

Company

Kerr McGee Oil & Gas

Well

HSR WELD 3-2A

Field

Wattenberg

County

Weld

State

CO