WARRIOR ENERGY SERVICES

RADIAL CEMENT BOND
GAMMA RAY
CCL

Company KERR McGEE OIL AND GAS
Well WILLARD HEIN GAS UNIT #1
Field WATTENBERG
County WELD State CO

Location: API # : 05-123-07624

SW/NE

SEC 4 TWP 1N RGE 67W

Permanent Datum	GL	Elevation	4986'
Log Measured From	KB 10'		
Drilling Measured From	KB		

Other Services

Elevation
K.B. 4996'
D.F. 4995'
G.L. 4986'

Date	3-29-14		
Run Number	ONE		
Depth Driller	8215'		
Depth Logger	7970'		
Bottom Logged Interval	7967'		
Top Log Interval	SURFACE		
Open Hole Size	7.875		
Type Fluid	WATER		
Density / Viscosity	1.0		
Max. Recorded Temp.	221		
Estimated Cement Top	224'		
Time Well Ready	N/A		
Time Logger on Bottom	N/A		
Equipment Number	4310		
Location	GREELEY		
Recorded By	N. BREHMER		
Witnessed By	L. WEBB		

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8.63	24#	0	208'
Prot. String				
Production String	4.5	11.6#&10.5#	0	8209'
Liner				

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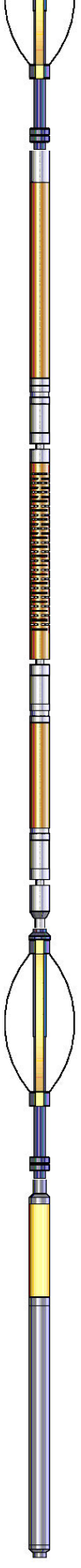
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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 INTO GAS HAD TO COME OUT AND ROLL THE HOLE
RAN CBL TO VERIFY CEMENT BOND

THANK YOU FOR USING WARRIOR !!!!!!!

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



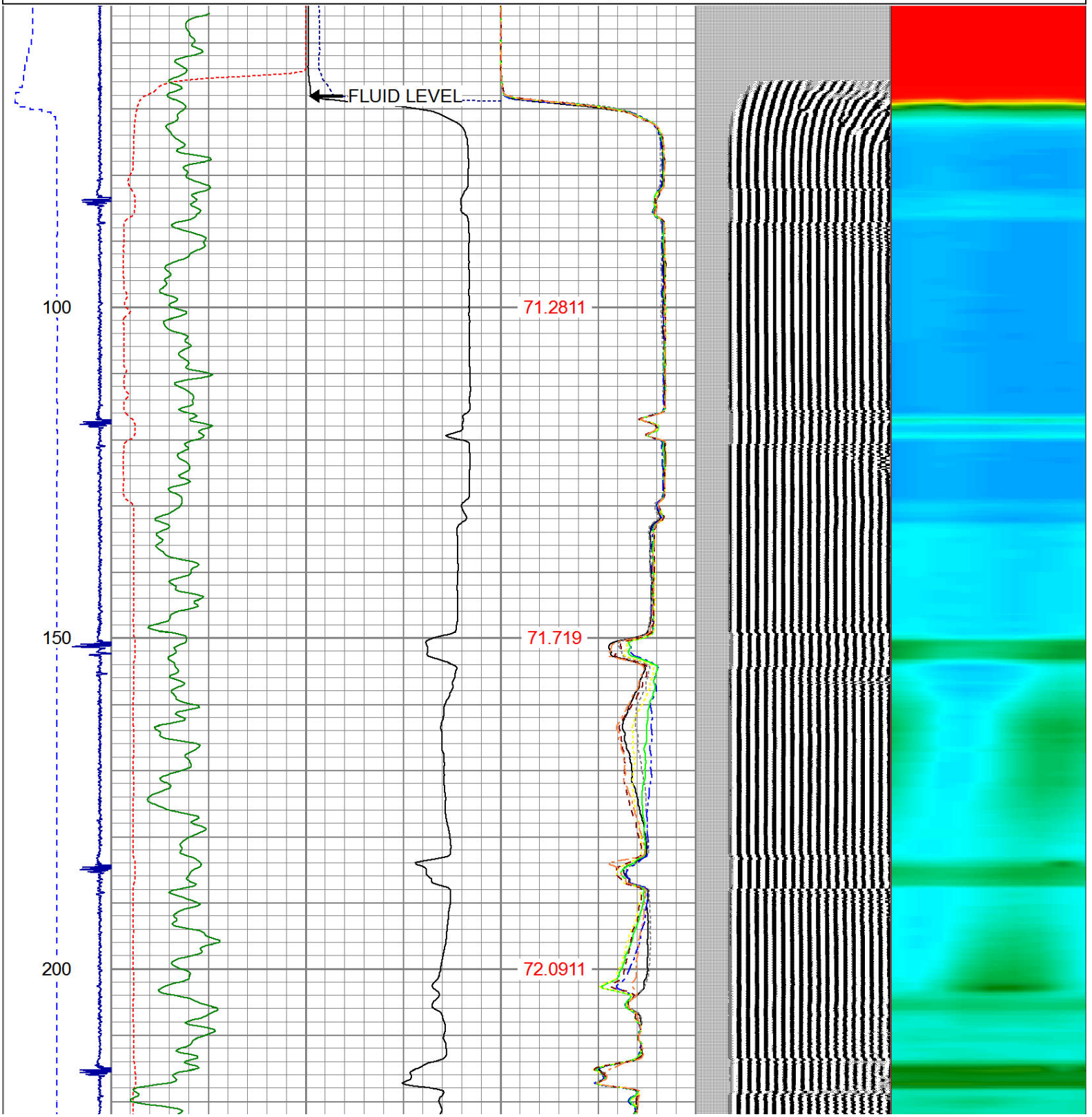
		PTS275	2.83	2.75	
HEADVOLT	16.13				
IntTemp	14.71				
		RBT-Probe (Base) Probe Radii Bond Tool with Digital Telemetry	8.92	2.75	90.00
WVF3FT	11.46				
WVFCAL	11.46				
WVFS1	11.46				
WVFS2	11.46				
WVFS3	11.46				
WVFS4	11.46				
WVFS5	11.46				
WVFS6	11.46				
WVFS7	11.46				
WVFS8	11.46				
WVF5FT	10.46				
CNLSC	6.00	CNT-Probe_B (275) 6 bow centrelizer	2.88	2.75	40.00
CNSSC	5.17				
CCL	3.64				
		GR-Probe (275) Probe 2.75"	4.33	2.75	30.00
GR	0.90				

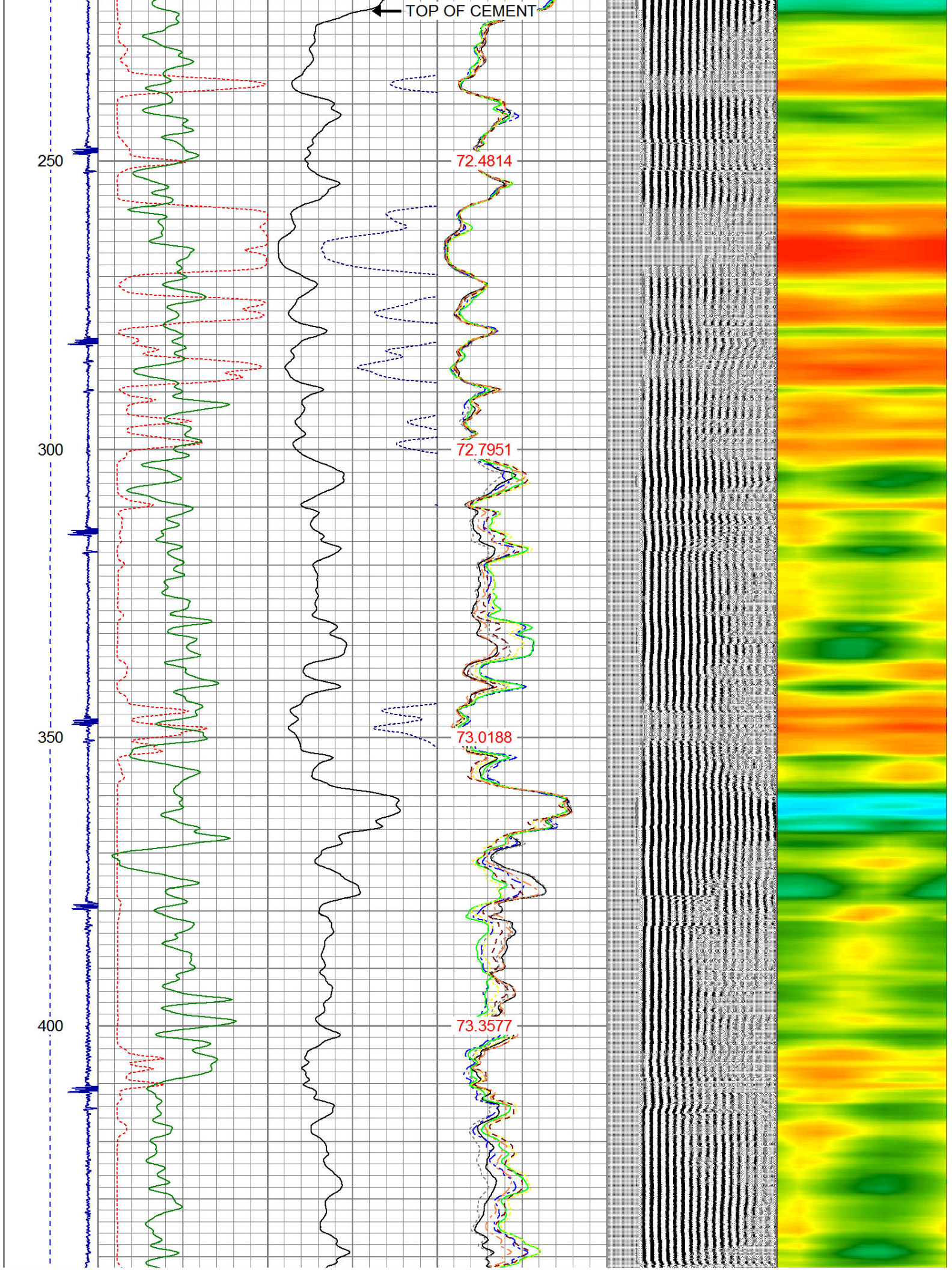
Dataset:	willard hein gas unit #1.db: field/well/run1/pass8
Total Length:	18.96 ft
Total Weight:	160.00 lb
O.D.	2.75 in

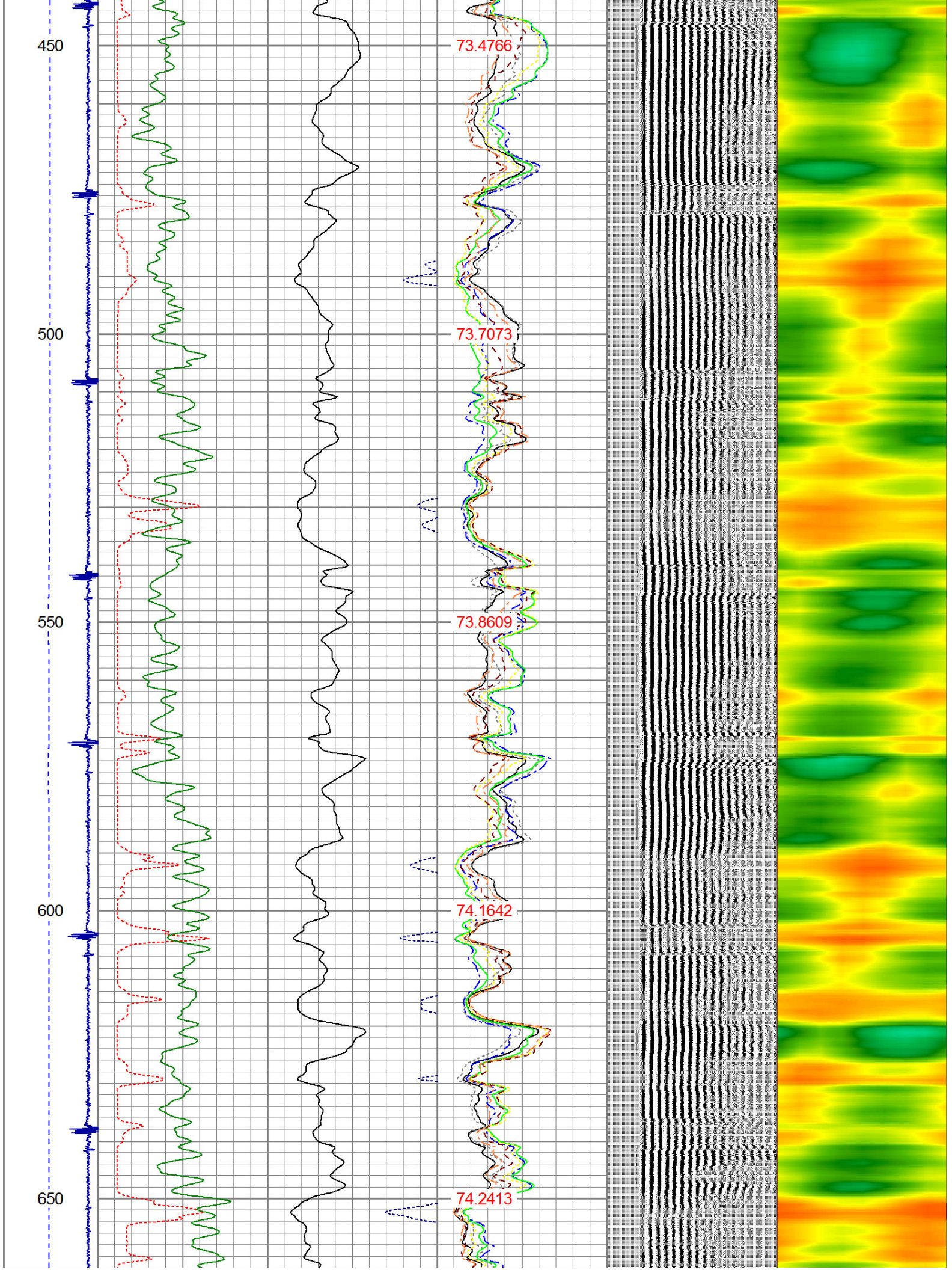
Database File:	willard hein gas unit #1.db
Dataset Pathname:	pass8
Presentation Format:	ips_rbt

Dataset Creation: Sat Mar 29 10:32:29 2014 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

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




TOP OF CEMENT
250
300
350
400
72.4814
72.7951
73.0188
73.3577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500
550
600
650
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73.7073
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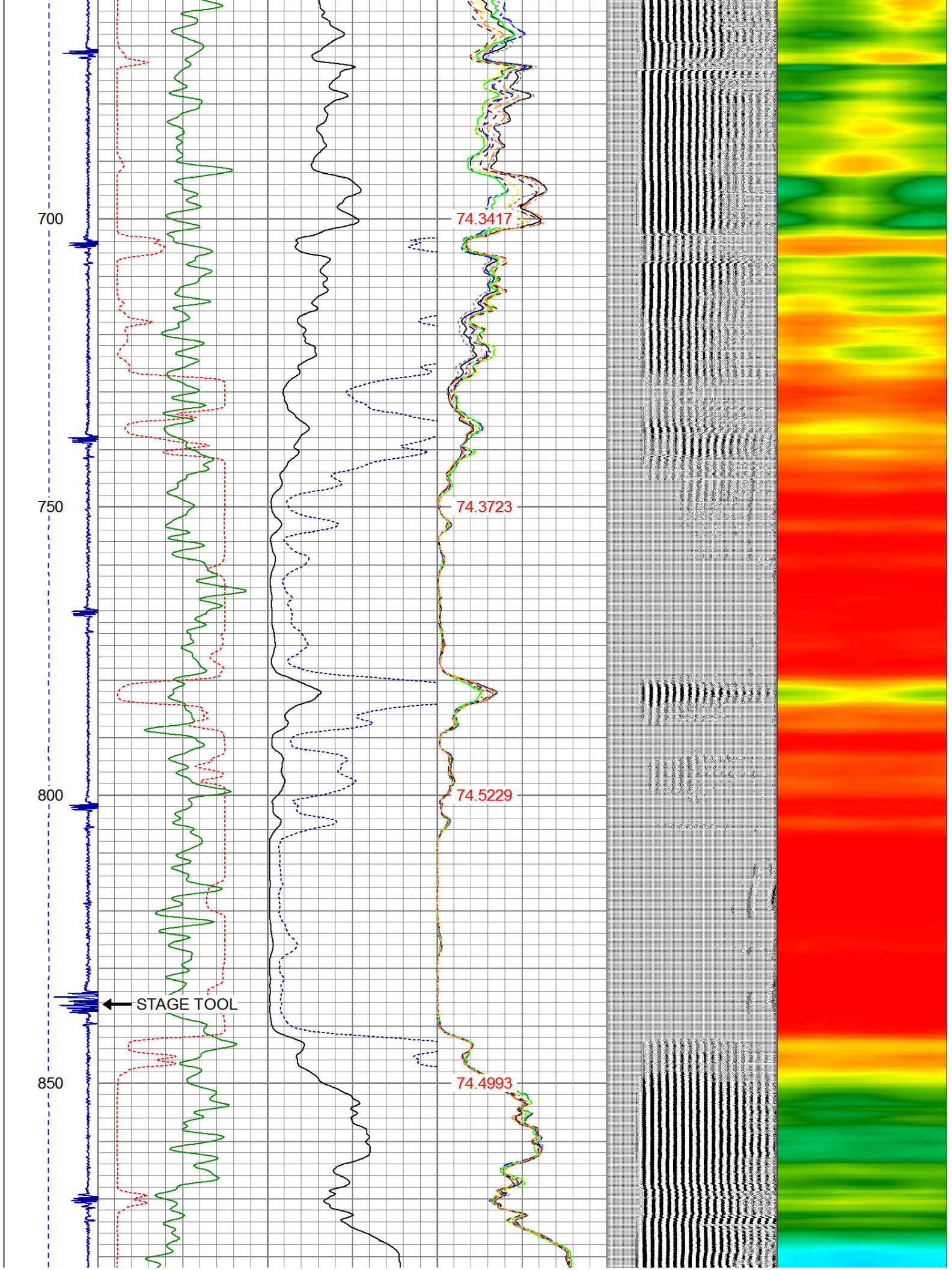
74.1642
74.2413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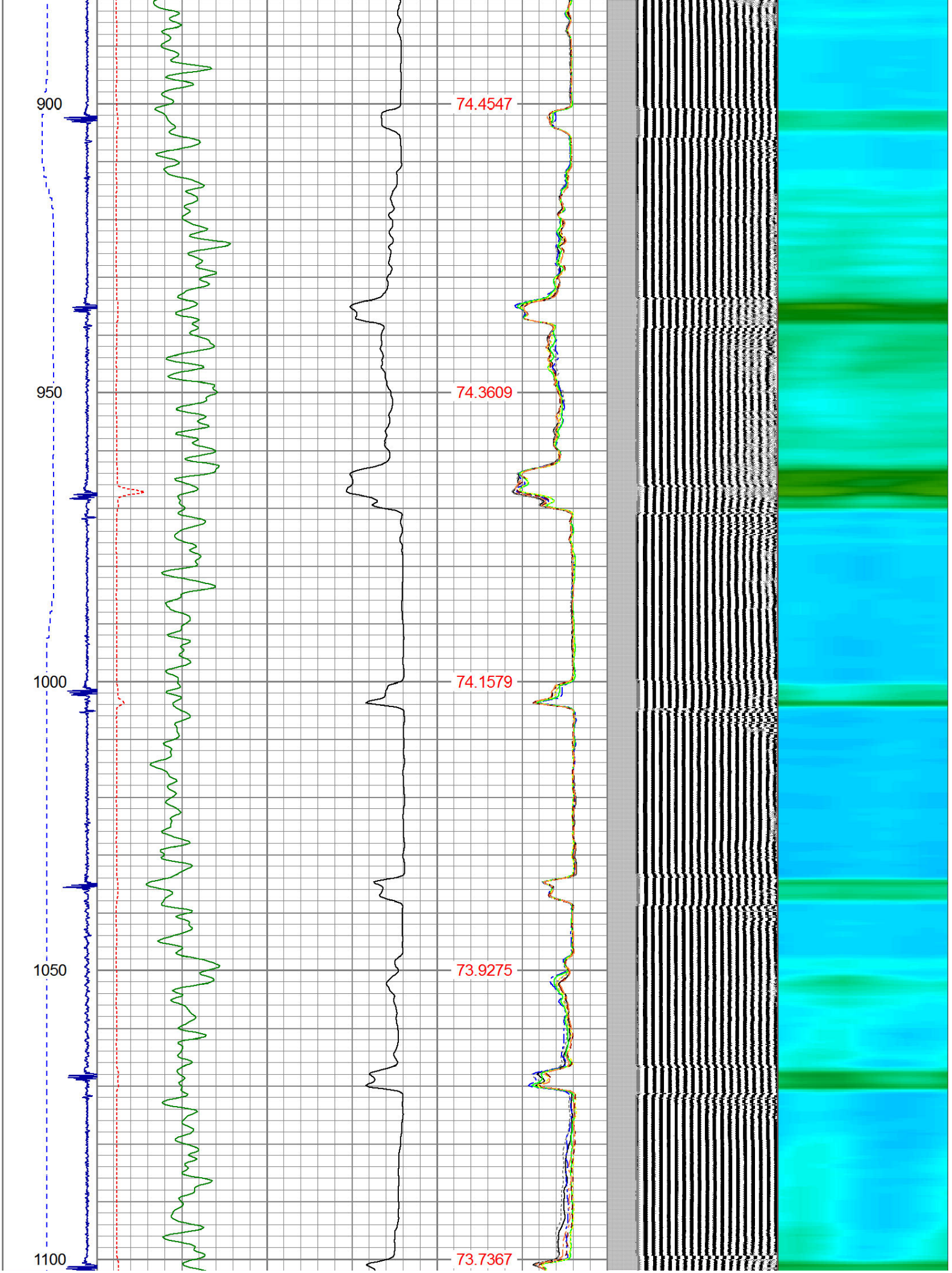
750
800
850
74.3417
74.3723
74.5229
74.4993
STAGE TOOL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950
1000
1050
1100
74.4547
74.3609
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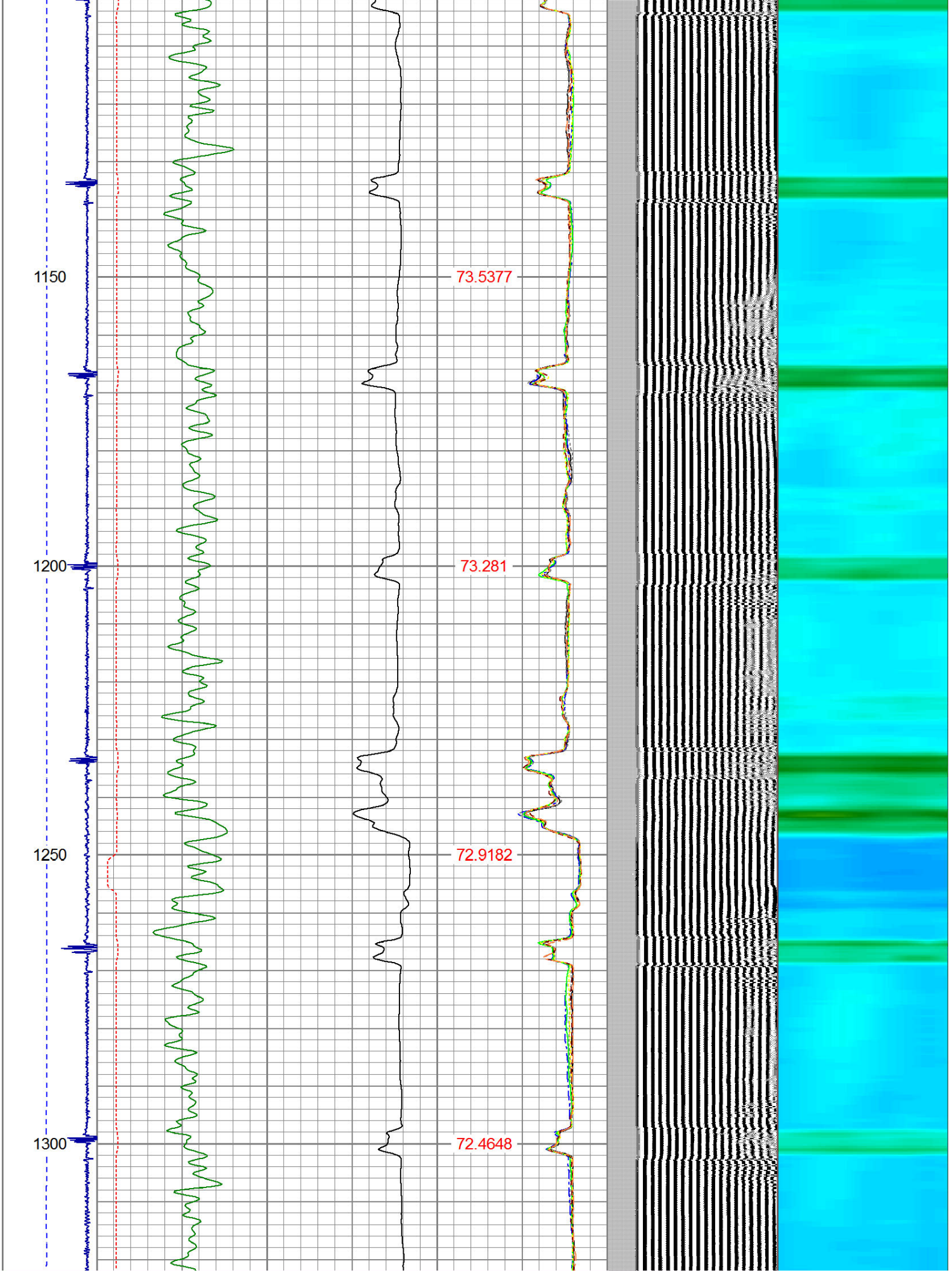
73.9275
73.7367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1200
73.281
1250
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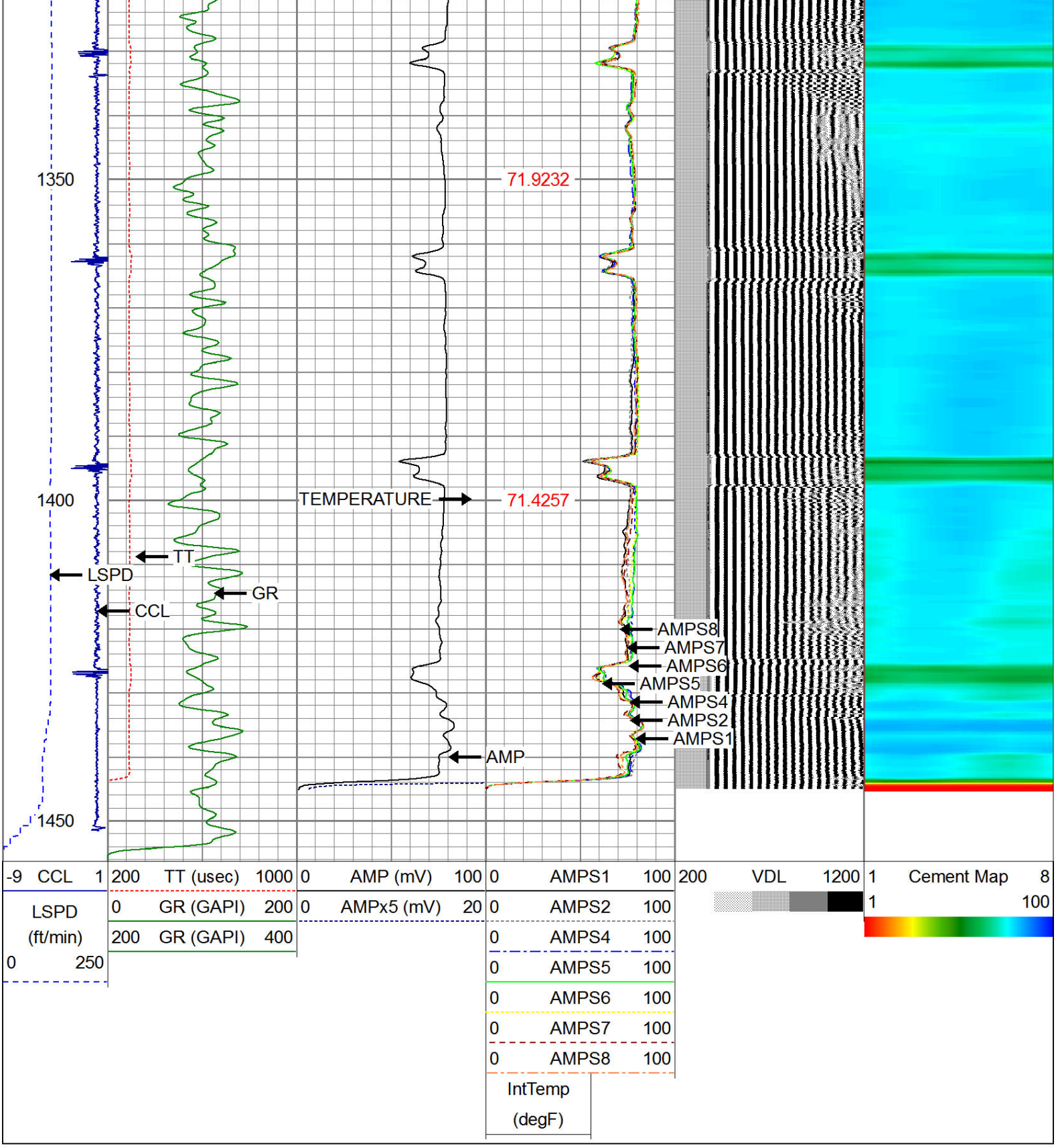
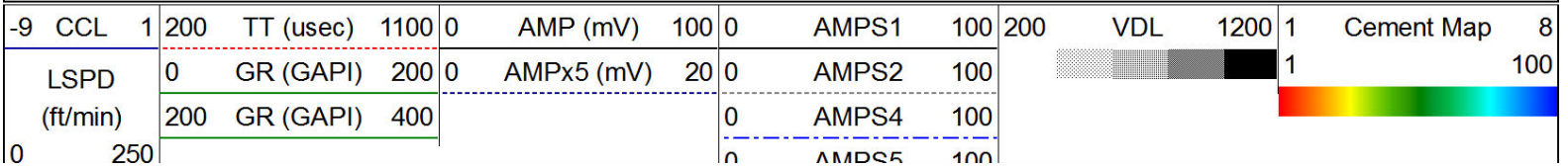
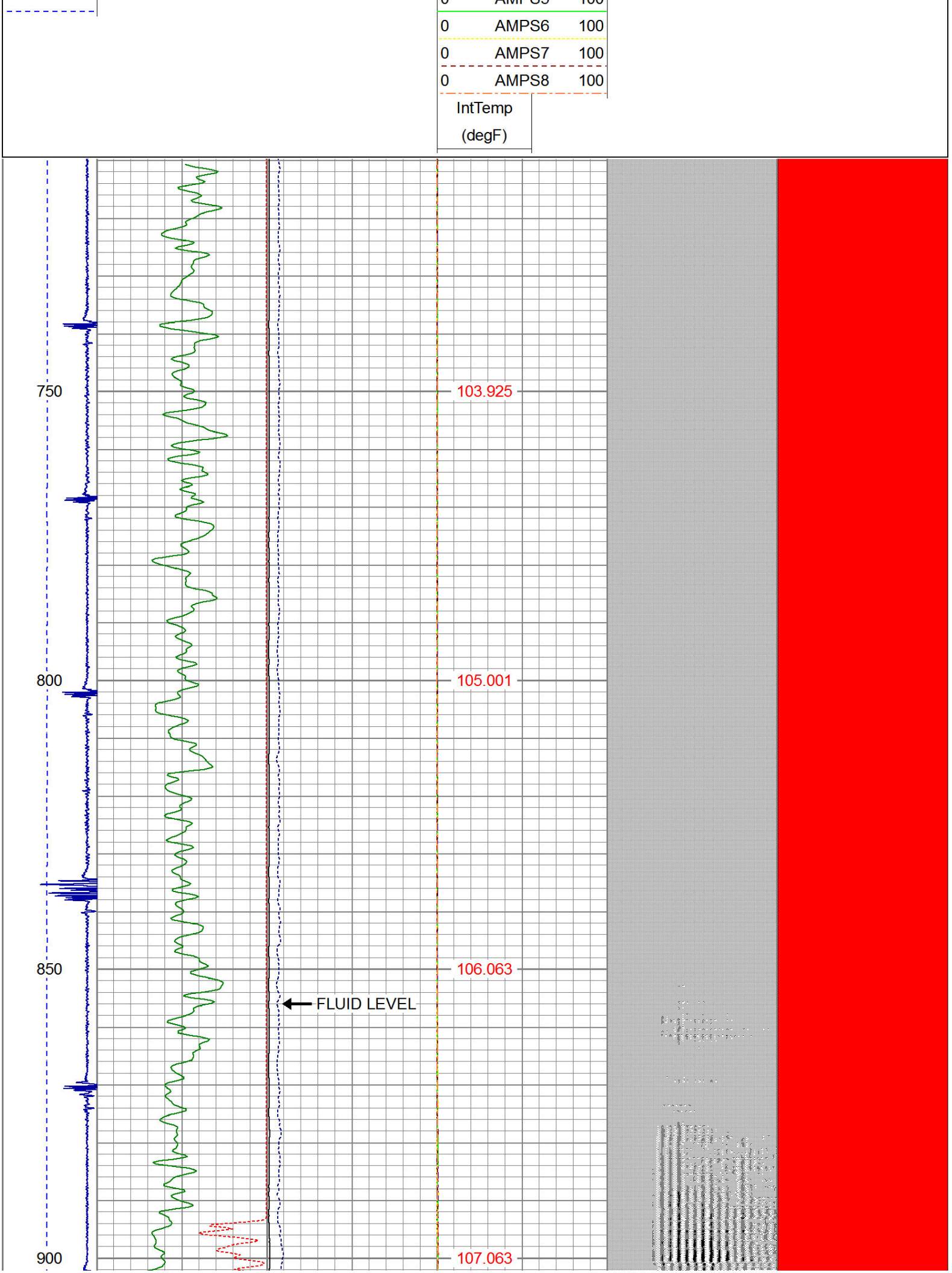
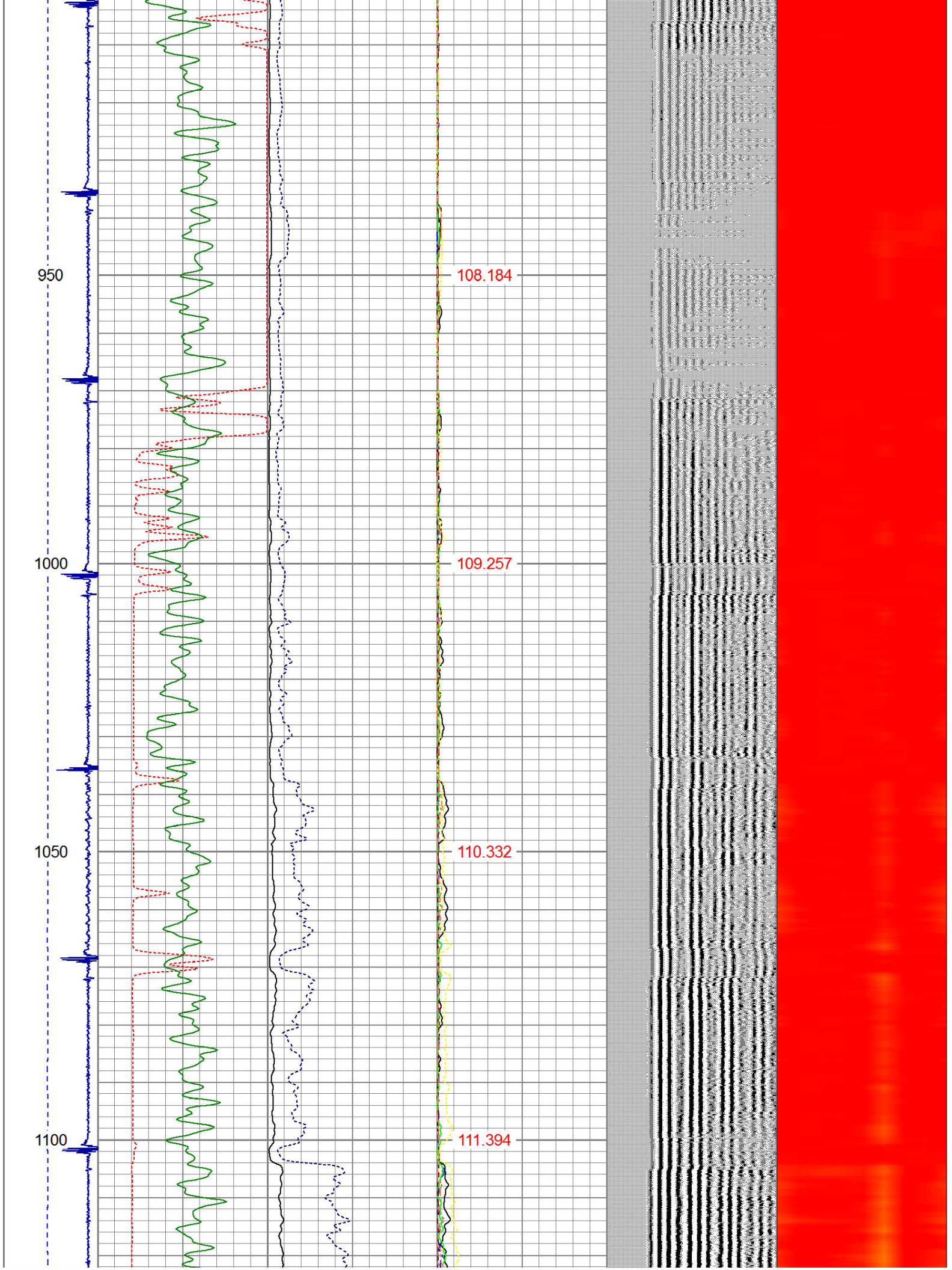
1300
72.4648



Database File:	willard hein gas unit #1.db
Dataset Pathname:	pass5
Presentation Format:	ips_rbt
Dataset Creation:	Sat Mar 29 08:13:55 2014 by Log 7.0 B1
Charted by:	Depth in Feet scaled 1:240




0 AMPS5 100
0 AMPS6 100
0 AMPS7 100
0 AMPS8 100
IntTemp (degF)
750
800
850
900
103.925
105.001
106.063
107.063
FLUID LEVEL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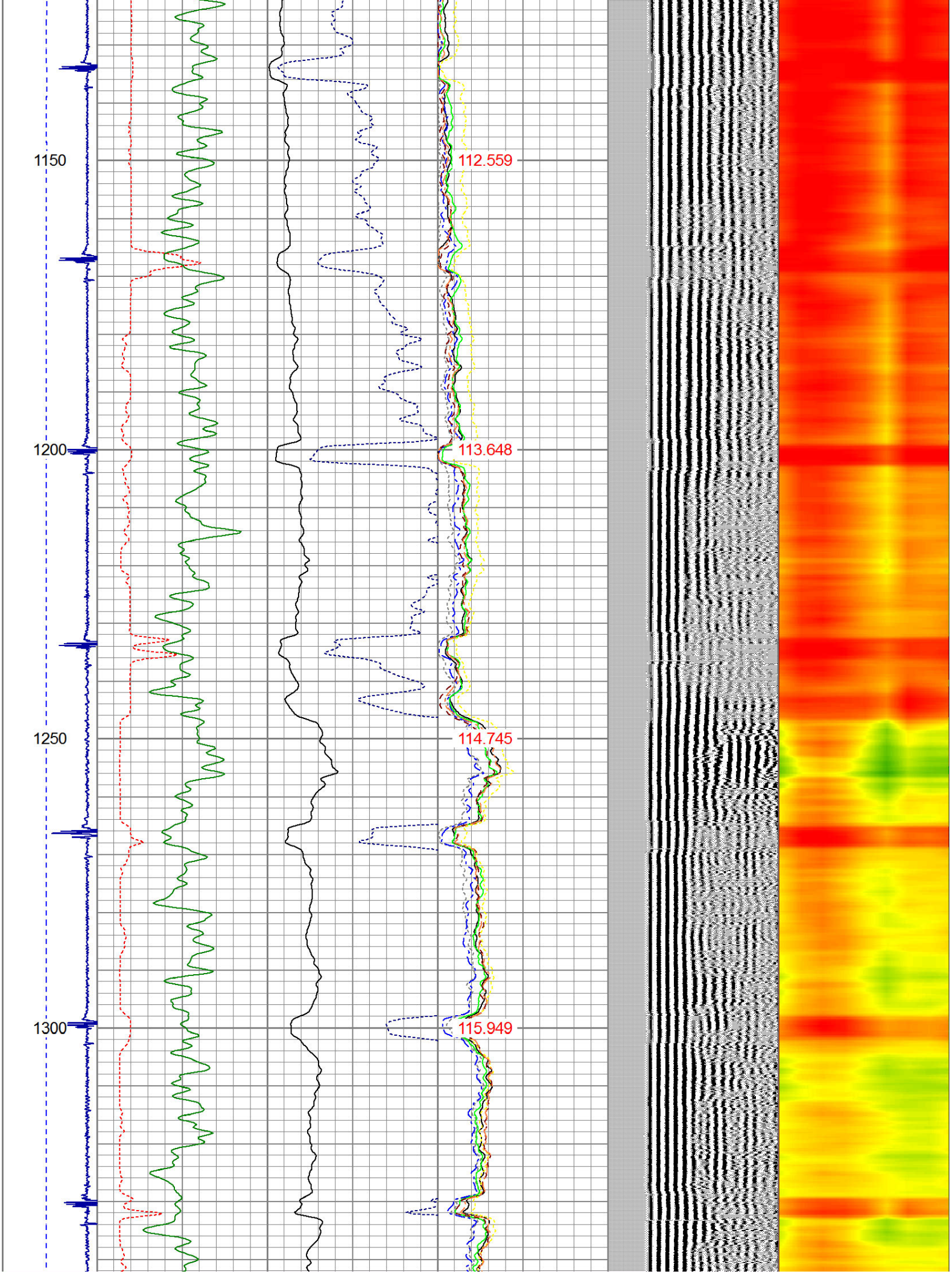
108.184
1000
109.257
1050
110.332
1100
111.394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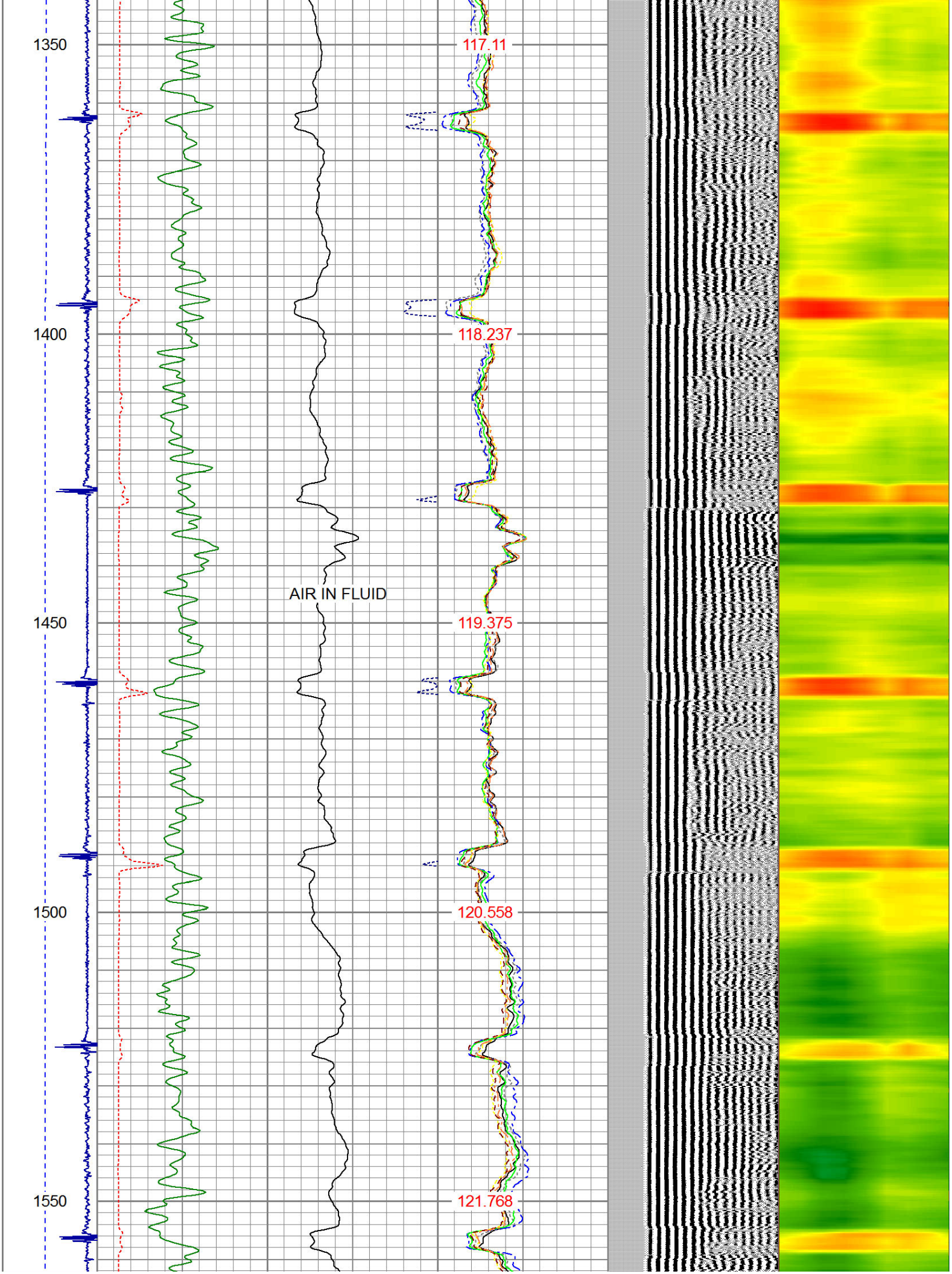
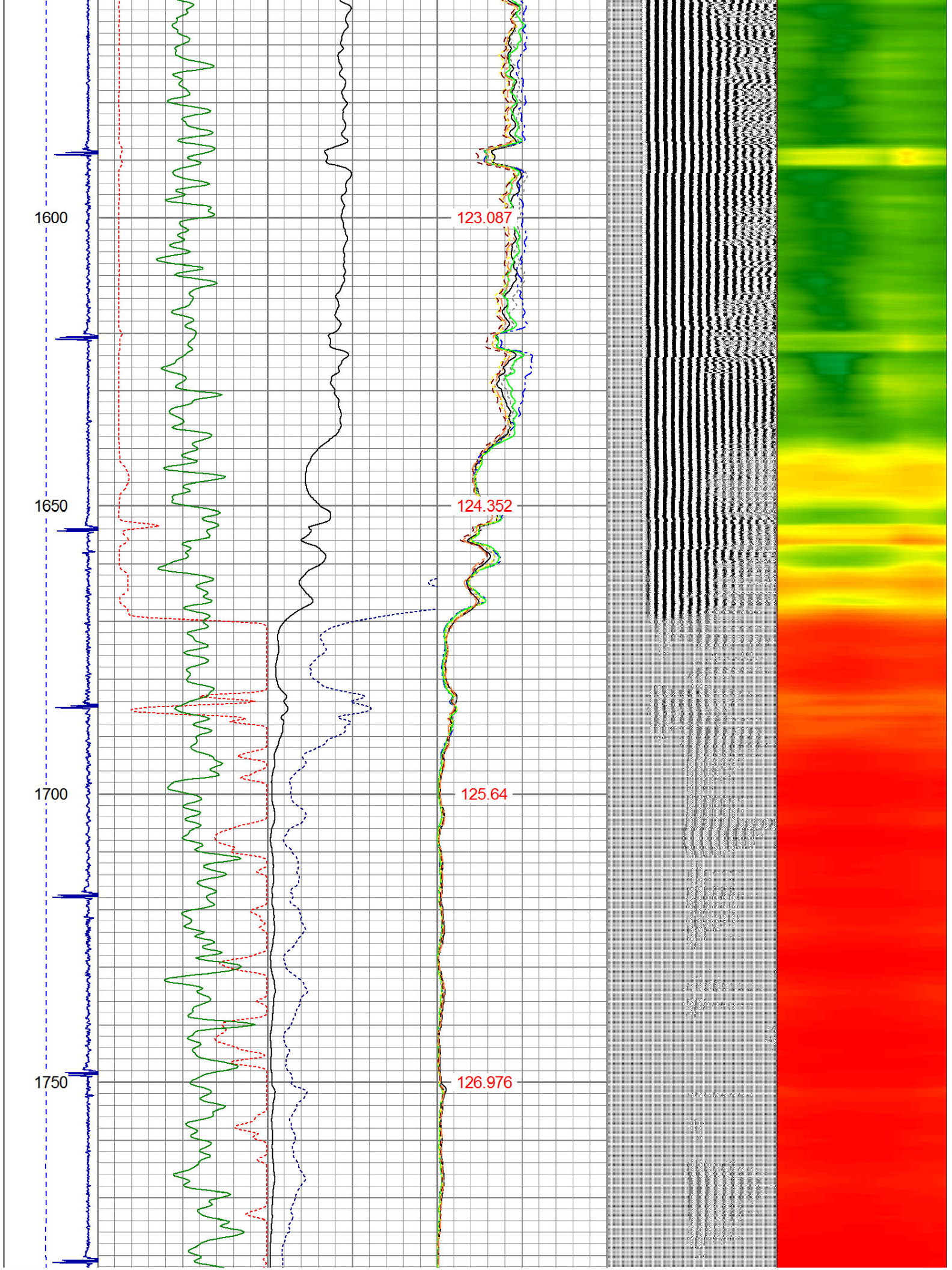
112.559
1200
113.648
1250
114.745
1300
115.949


1350
117.11
1400
118.237
AIR IN FLUID
1450
119.375
1500
120.558
1550
121.768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123.087
1650
124.352
1700
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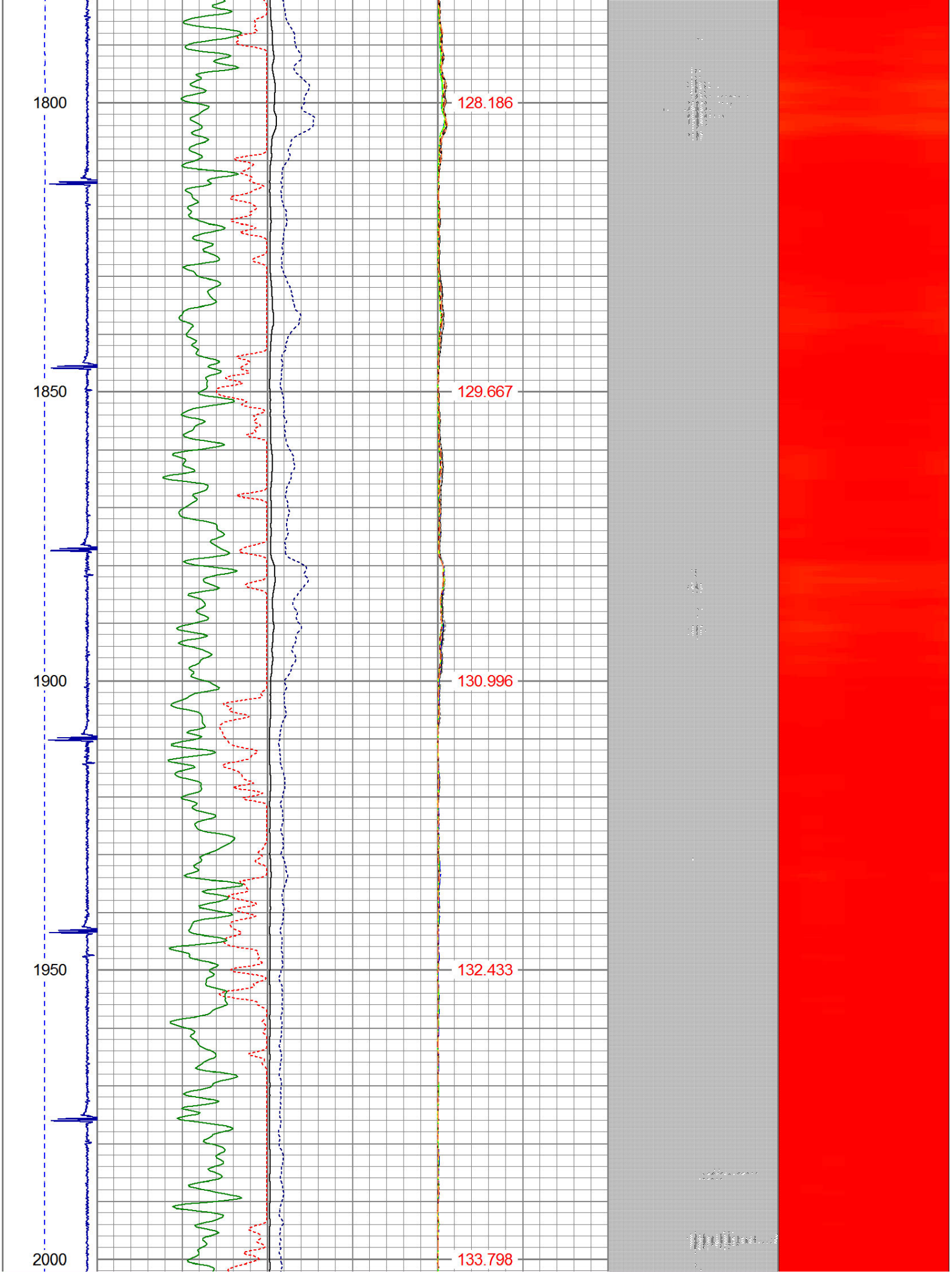
1750
126.976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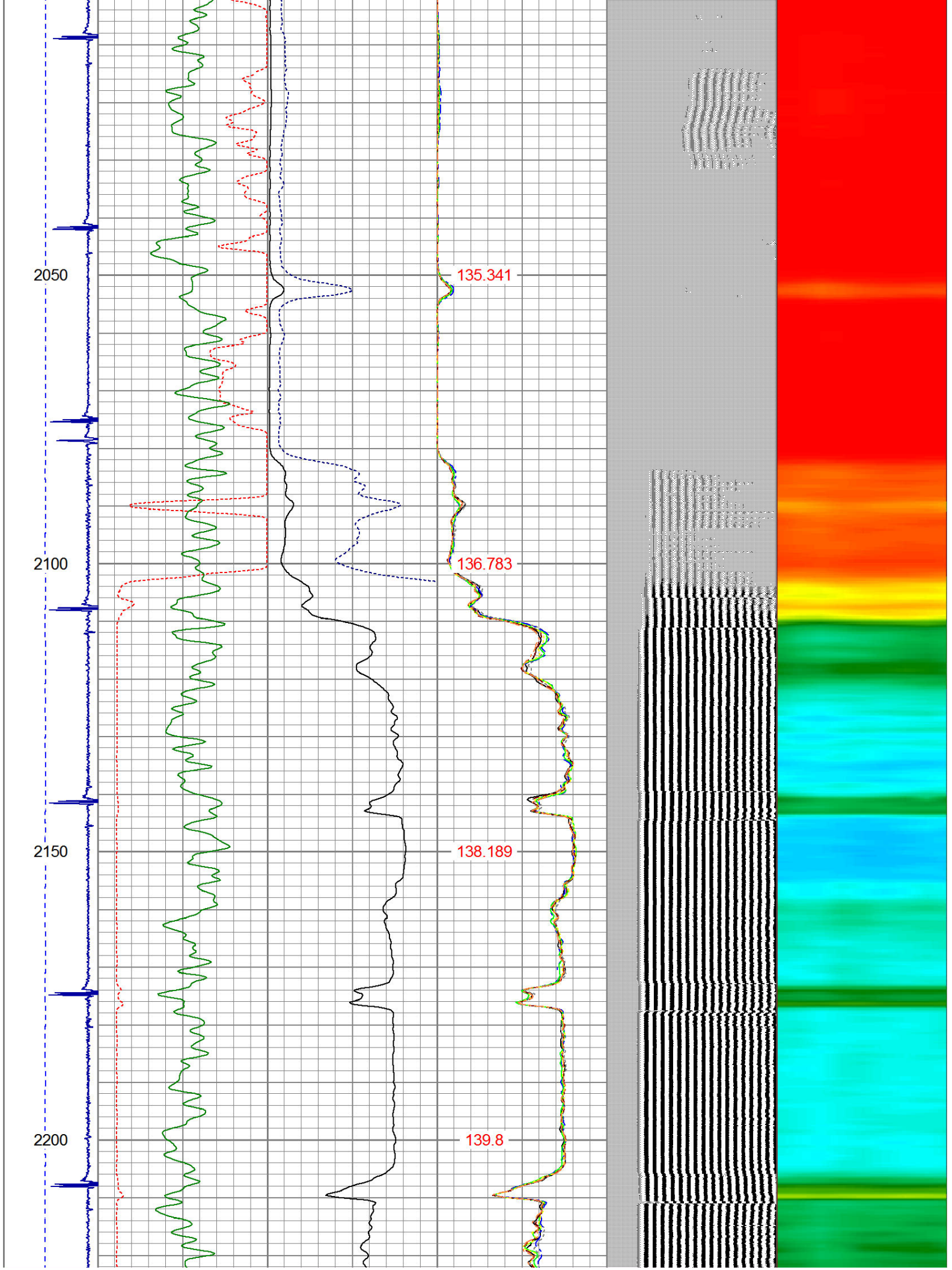
128.186
1850
129.667
1900
130.996
1950
132.433
2000
133.798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2100
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2200
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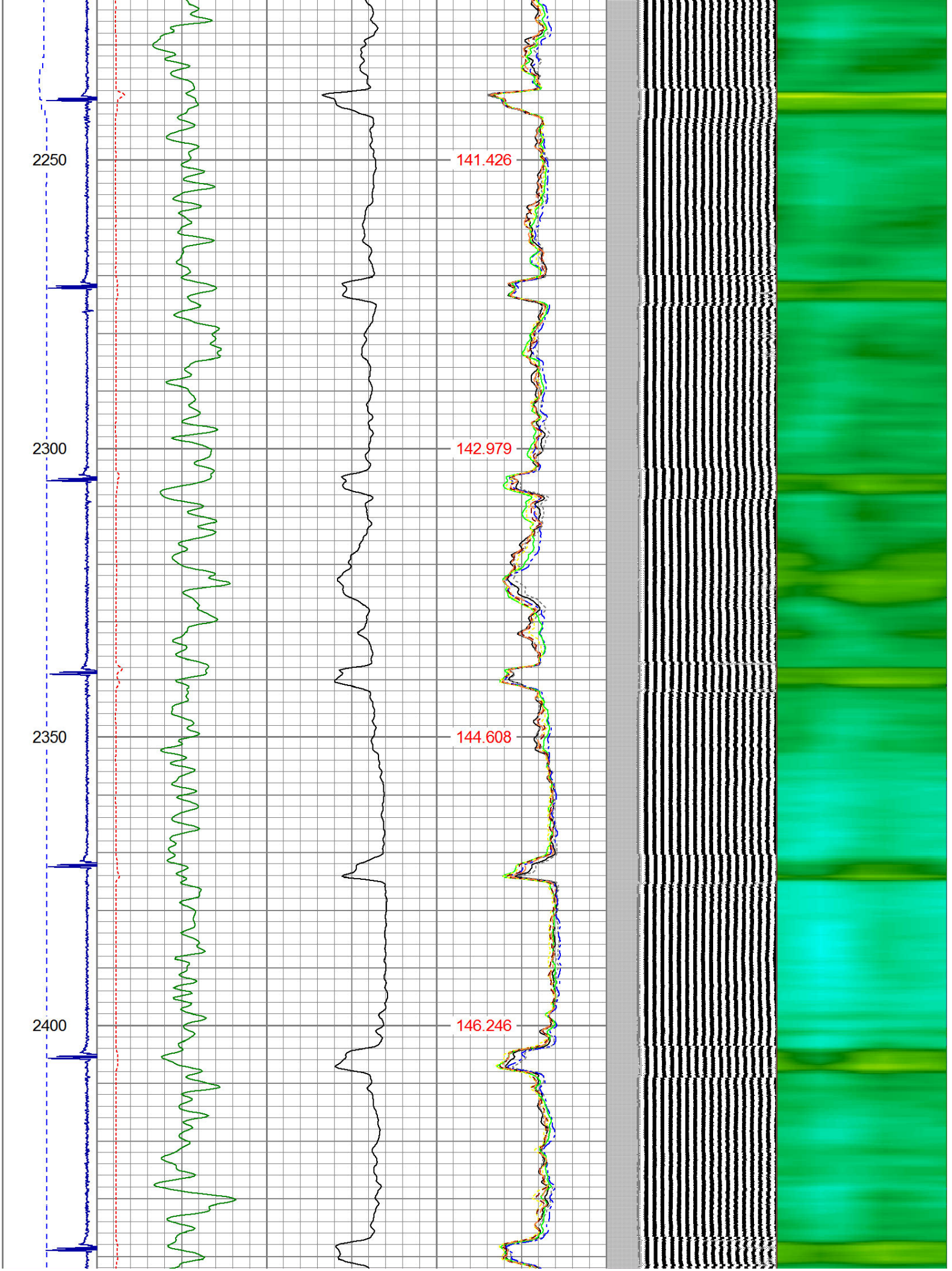
139.8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142.979
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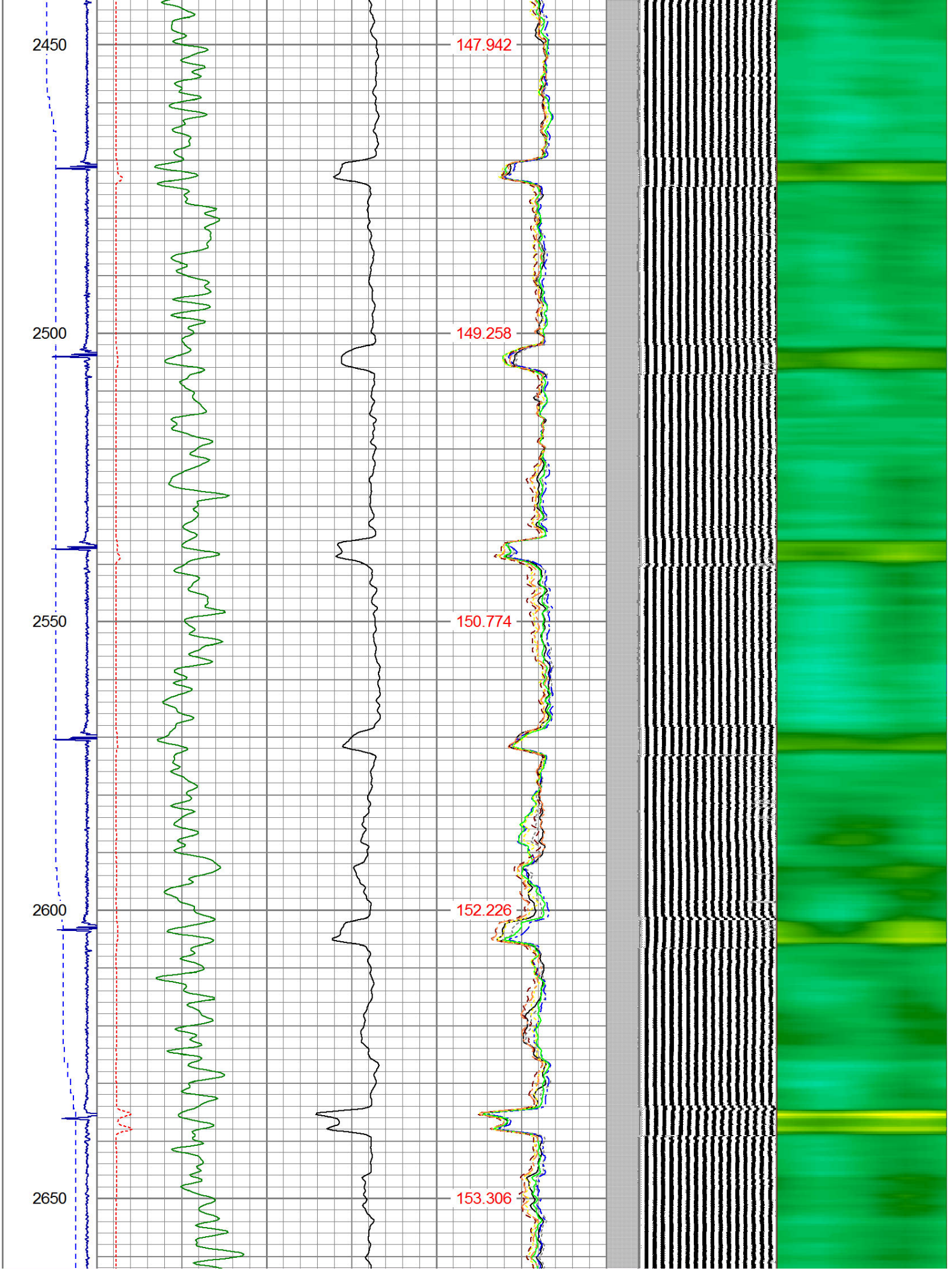
2400
146.246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2650
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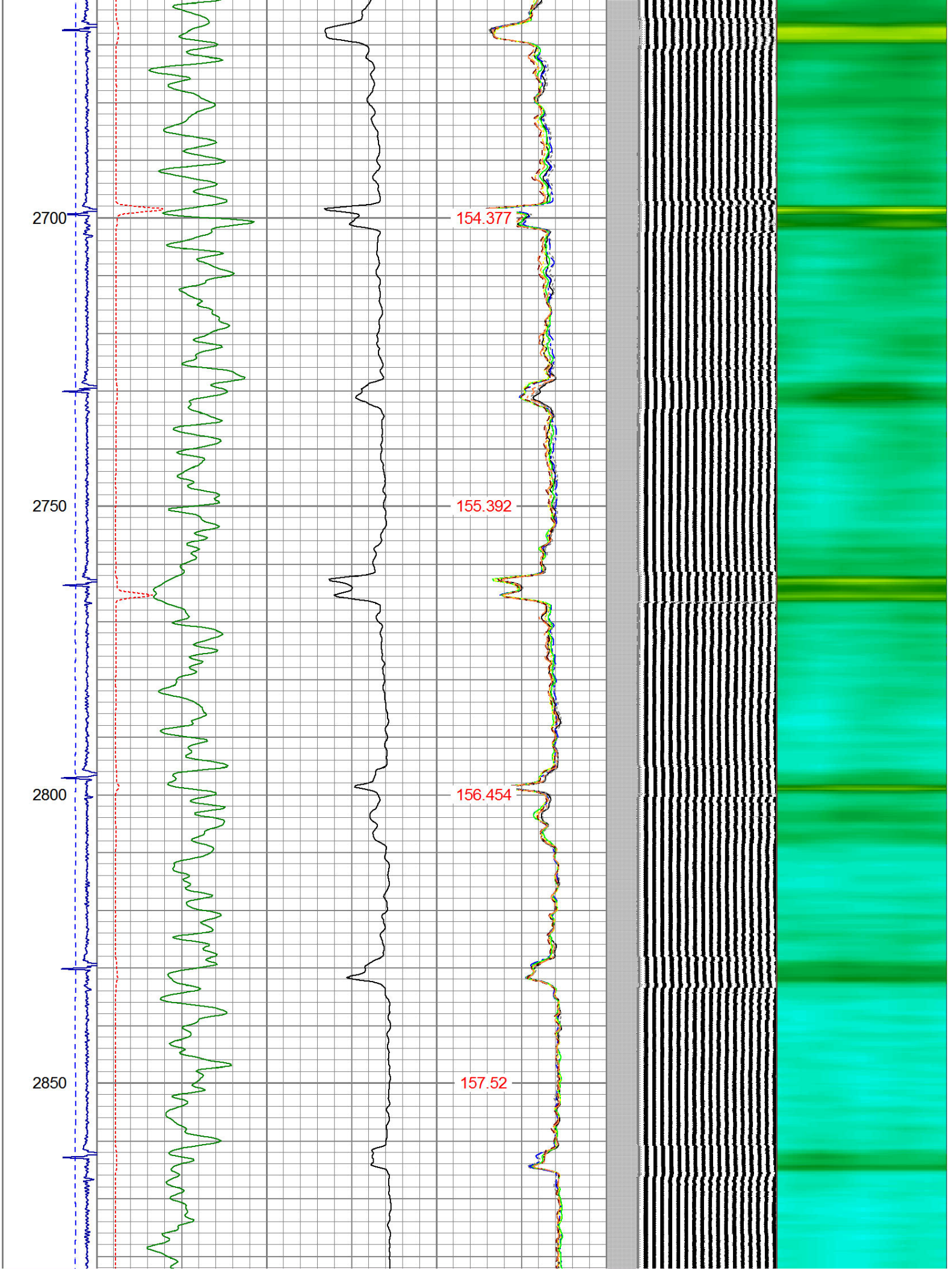
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155.392
2800
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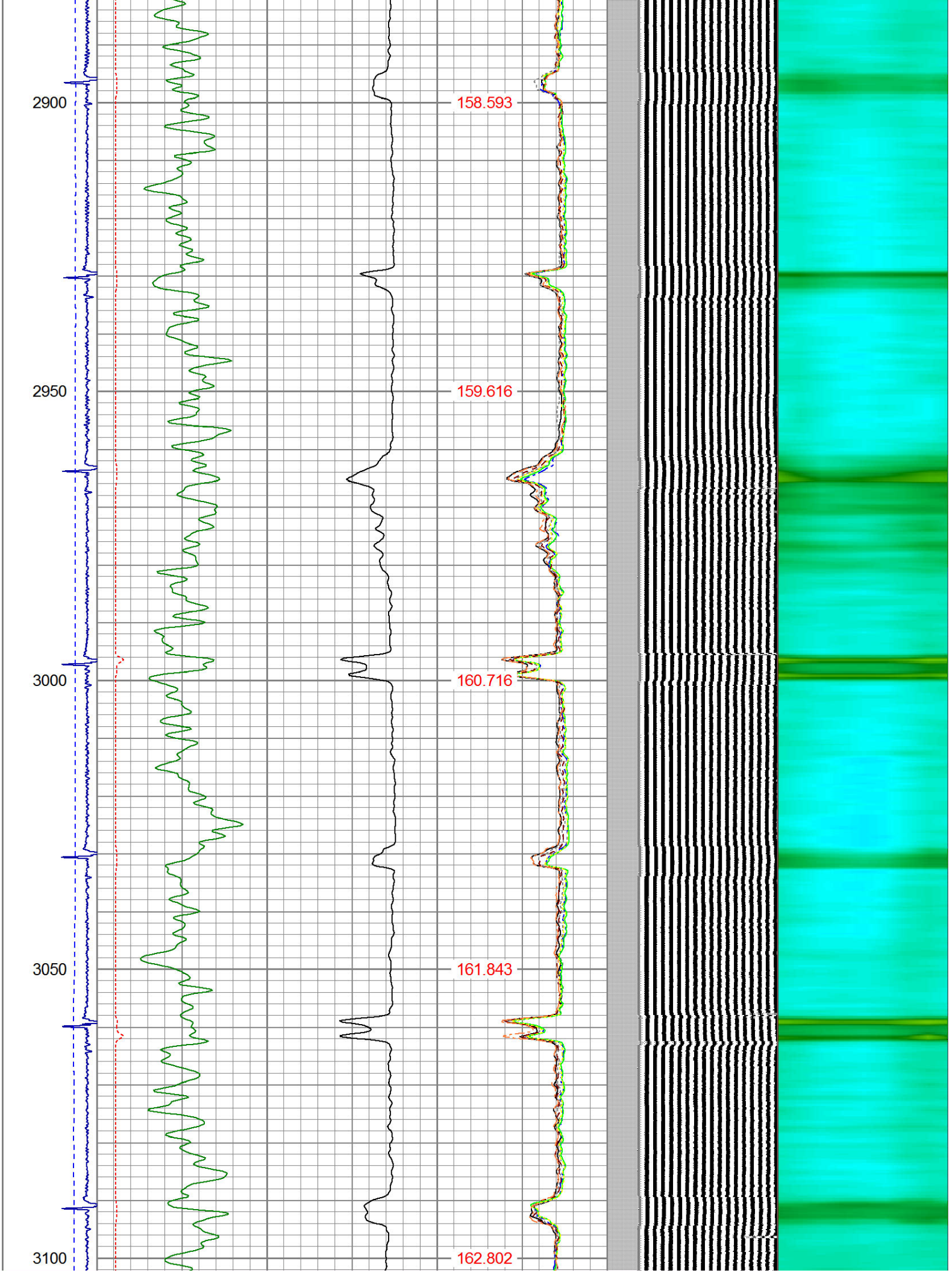
2850
157.52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2950
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3000
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3100
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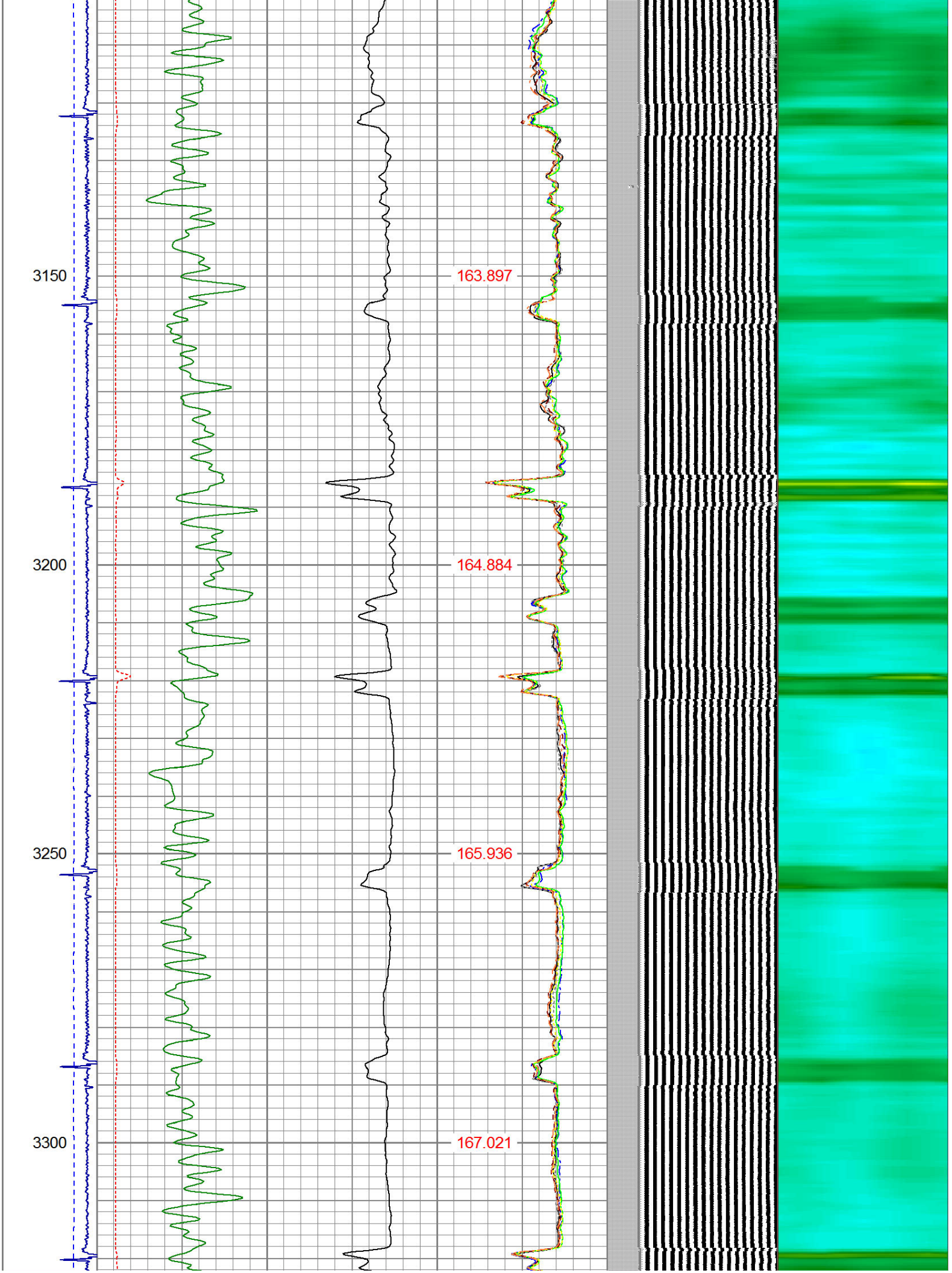
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3200
3250
3300
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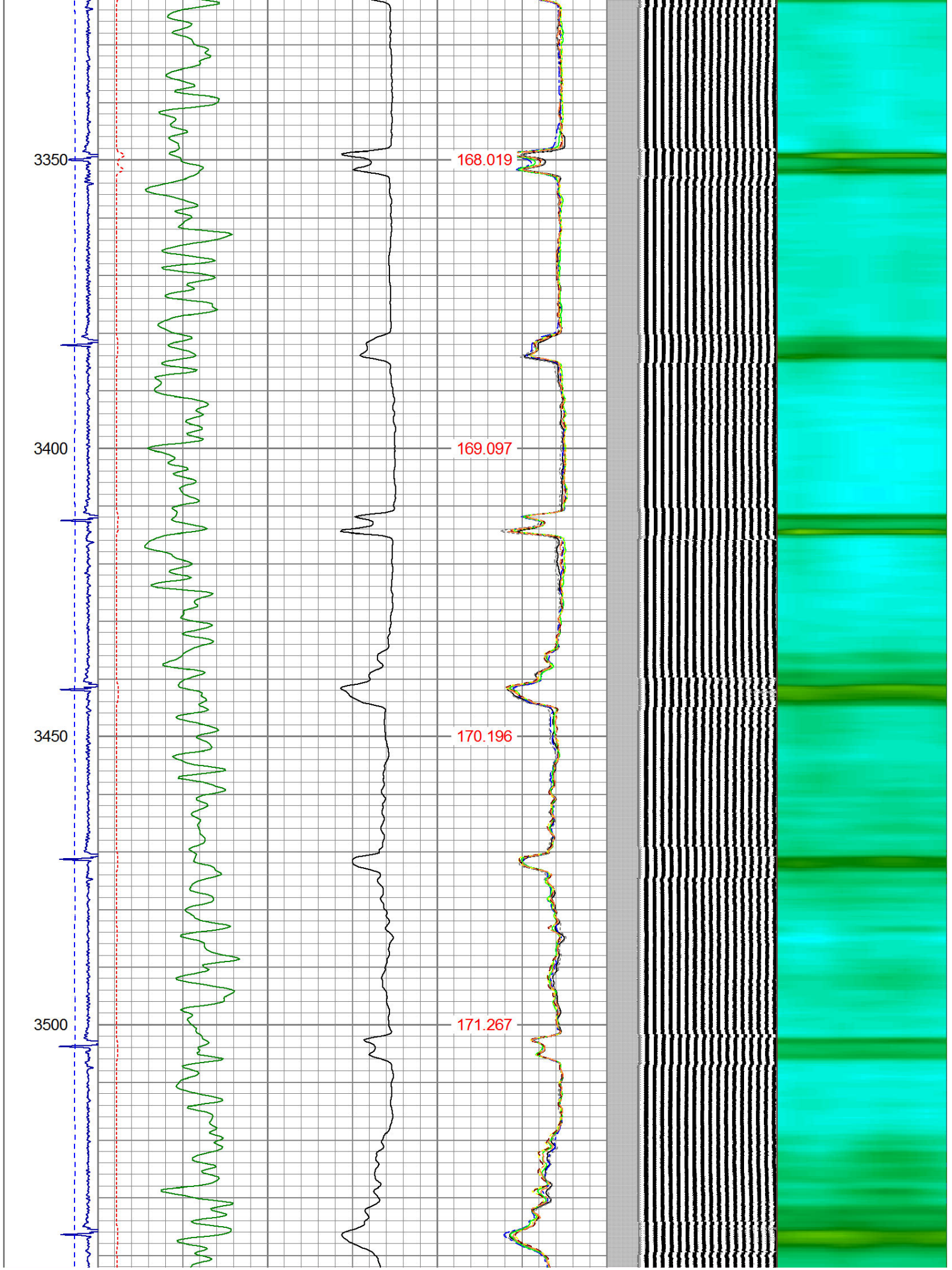
165.936
167.021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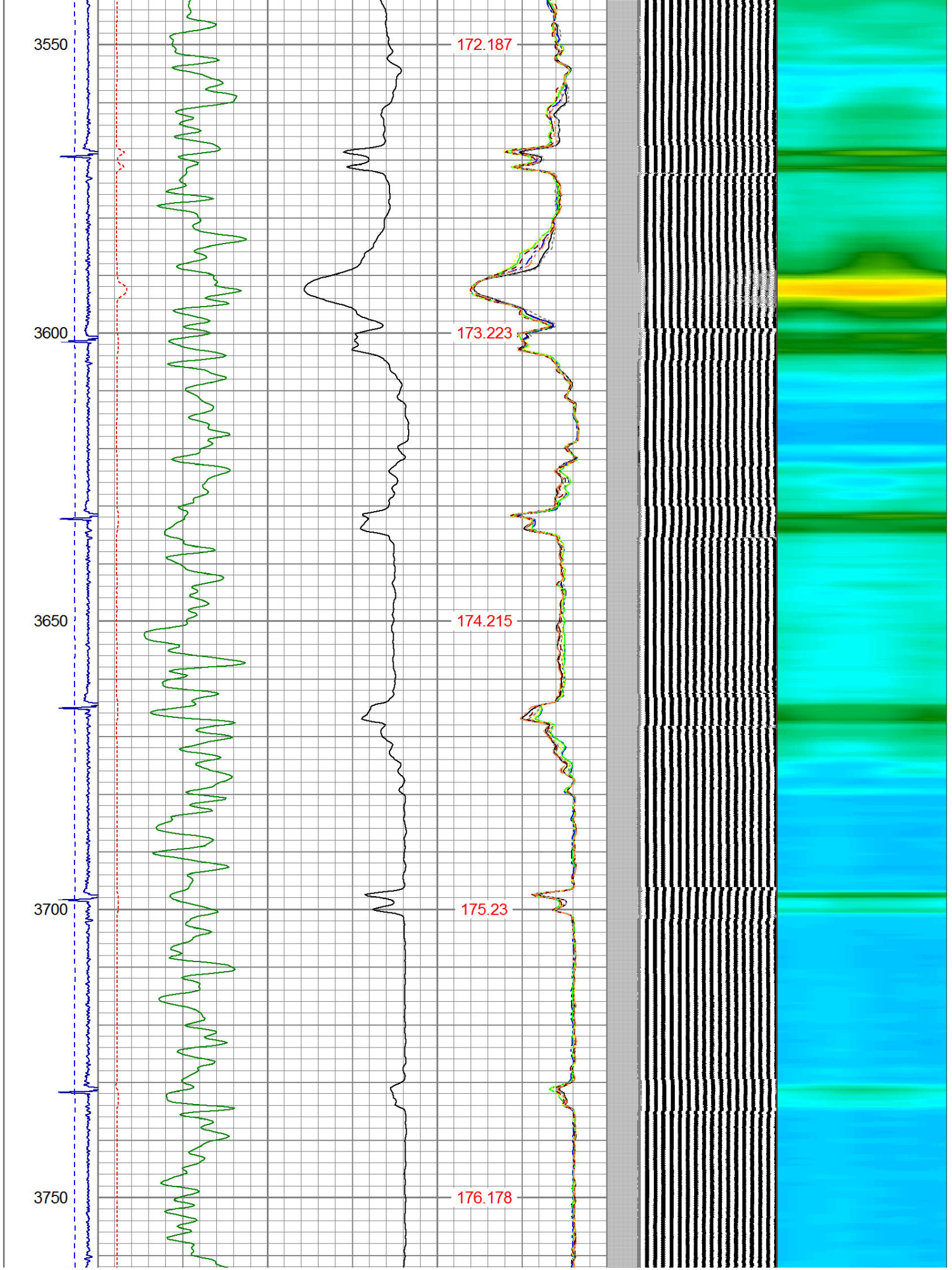
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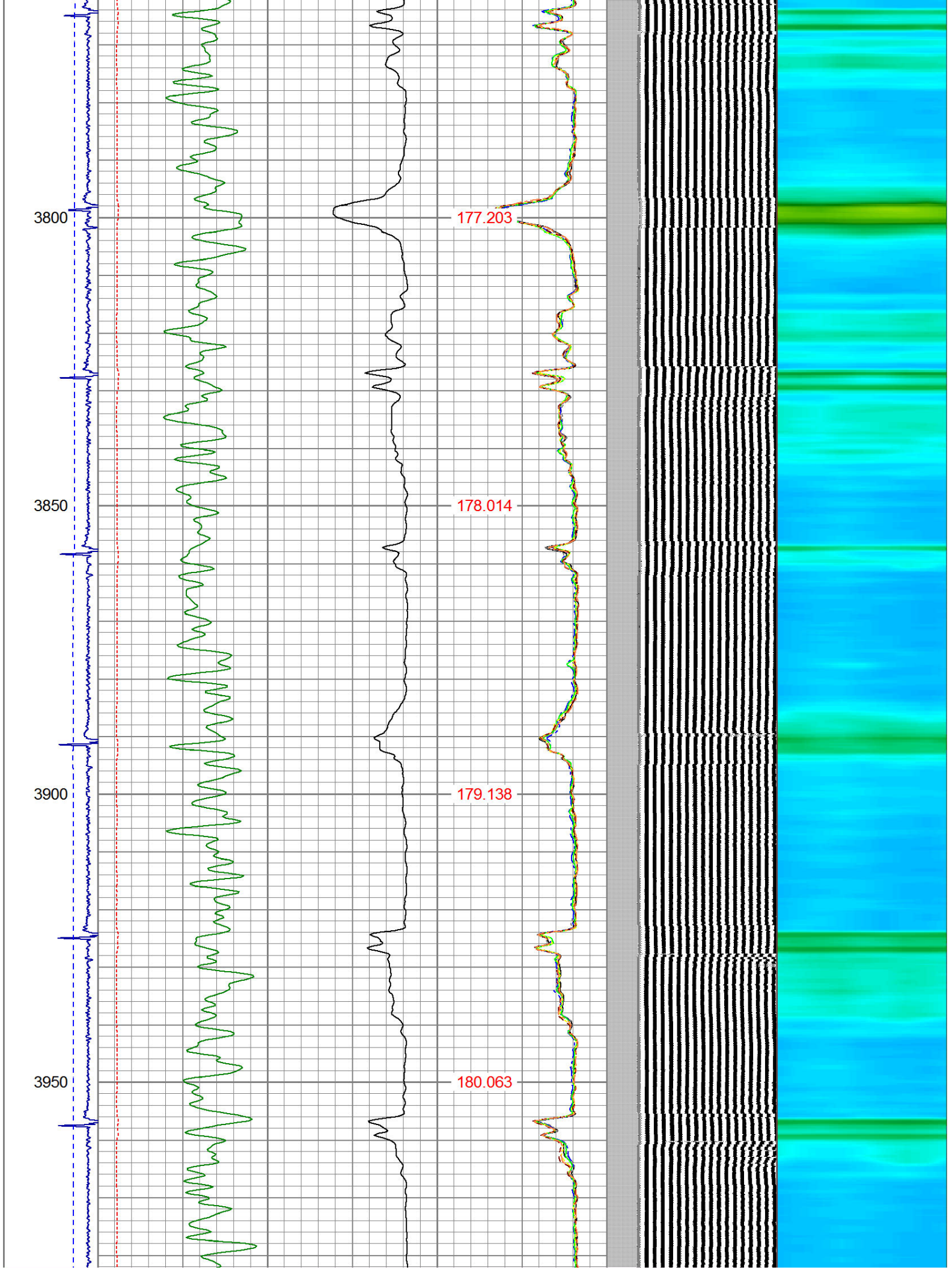
176.178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3850
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3900
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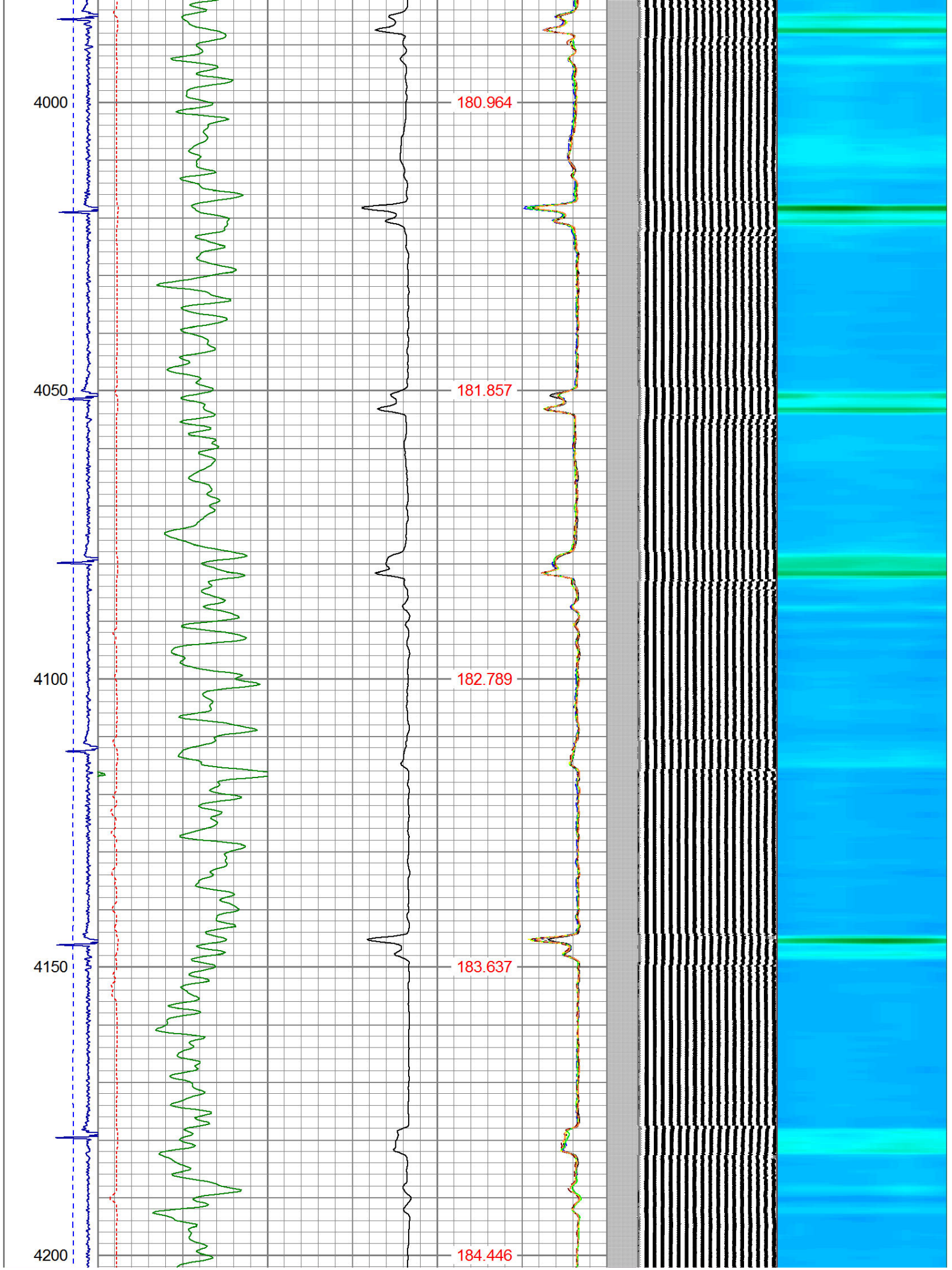
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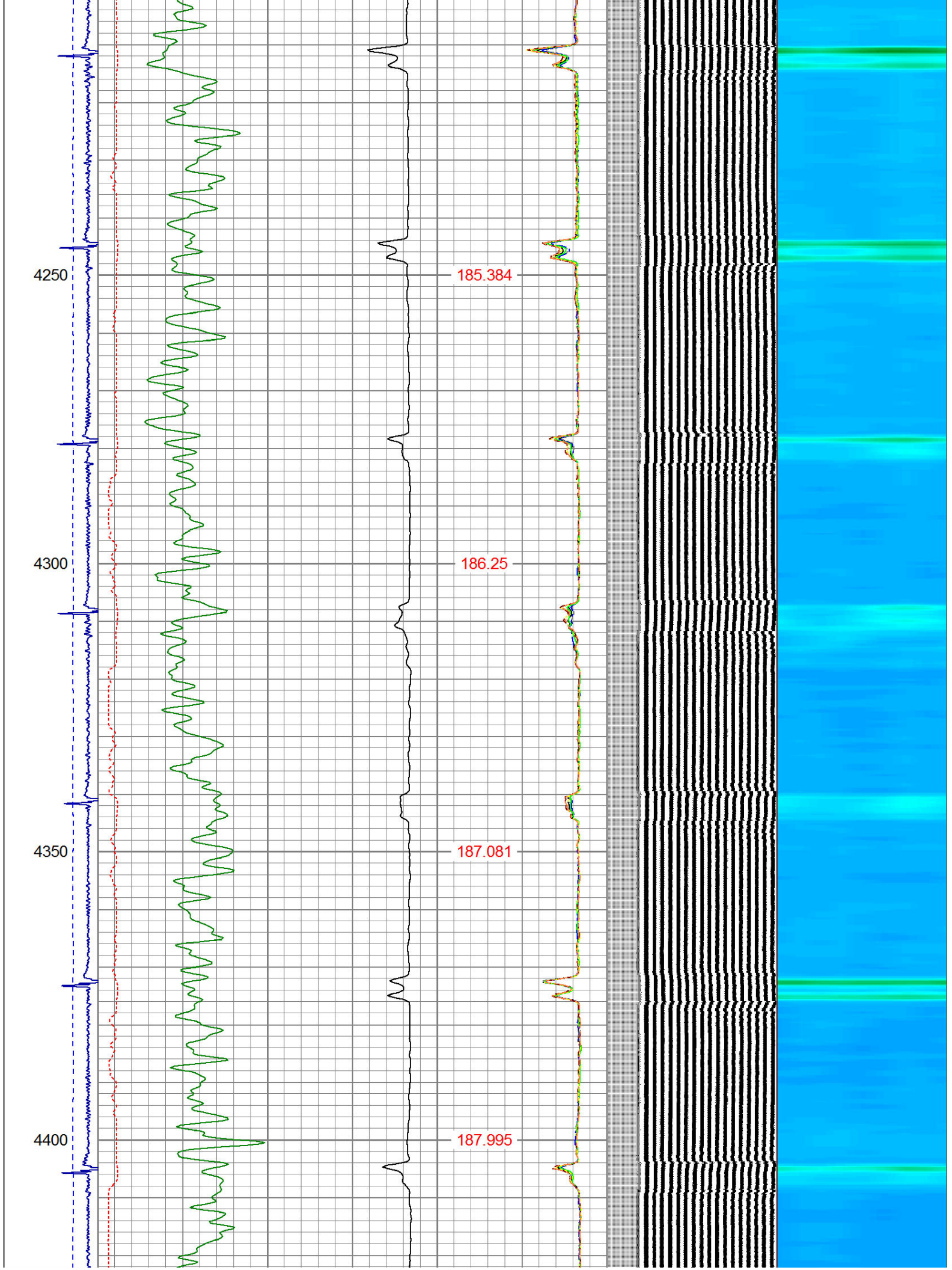
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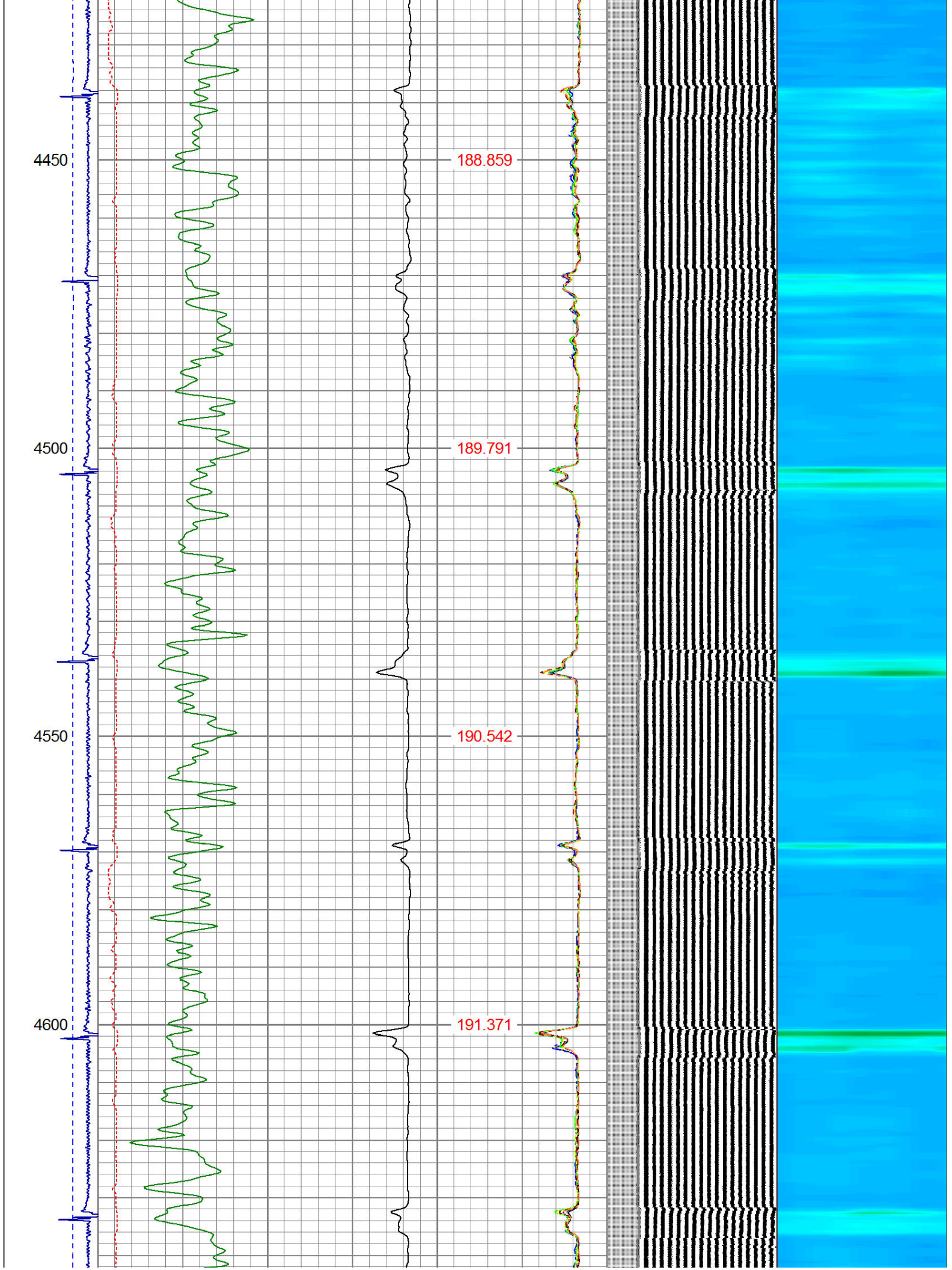
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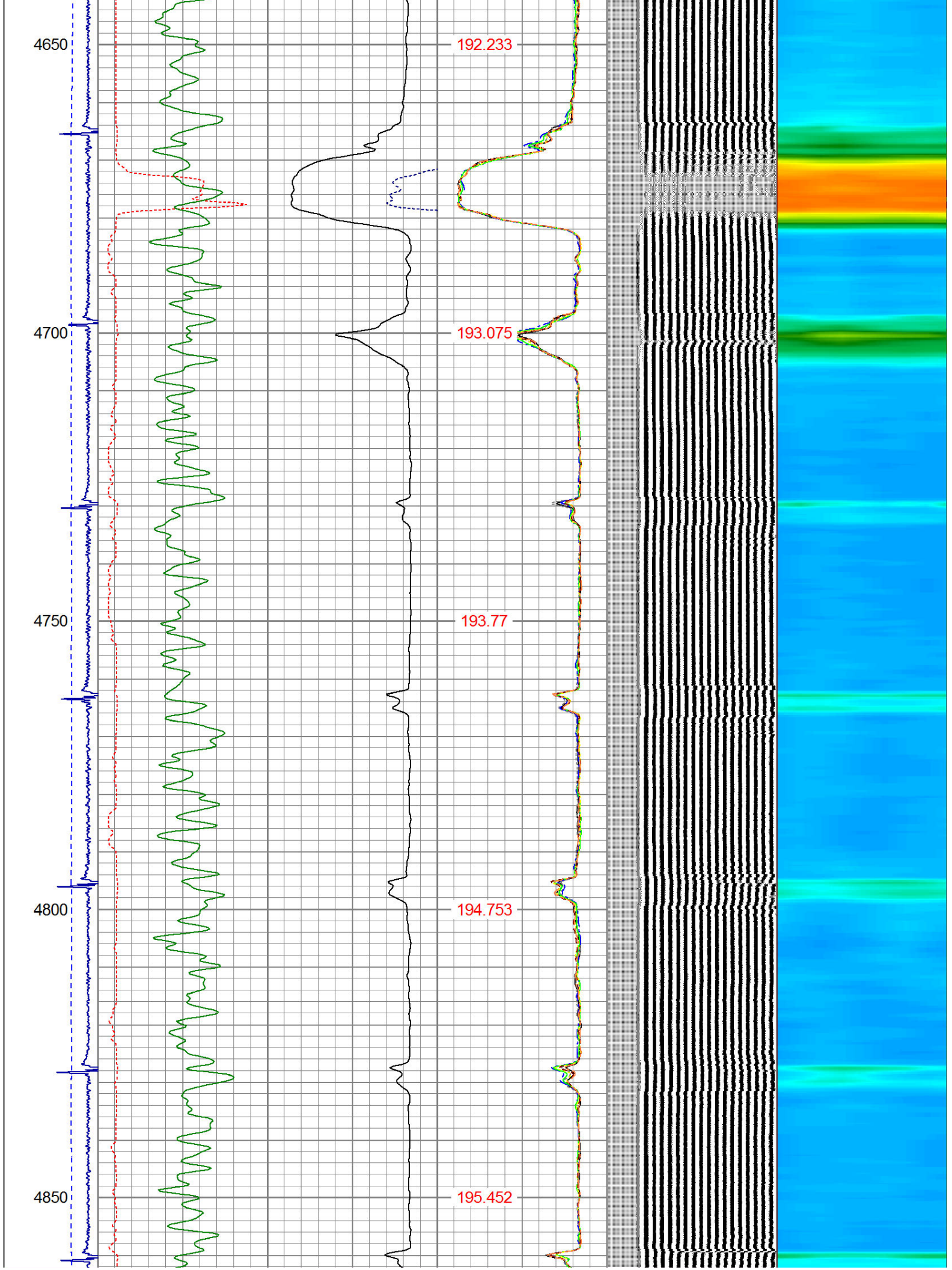
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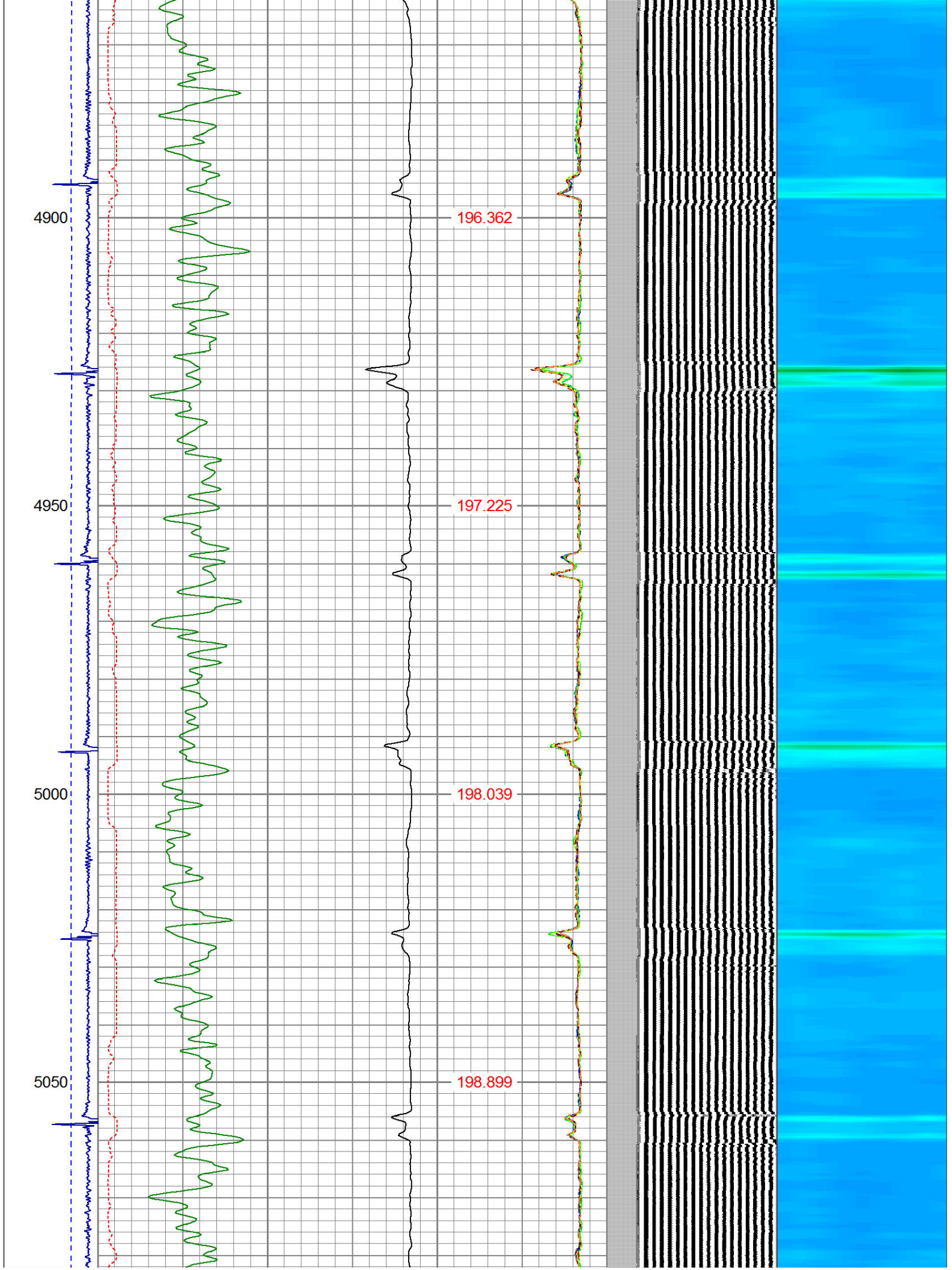
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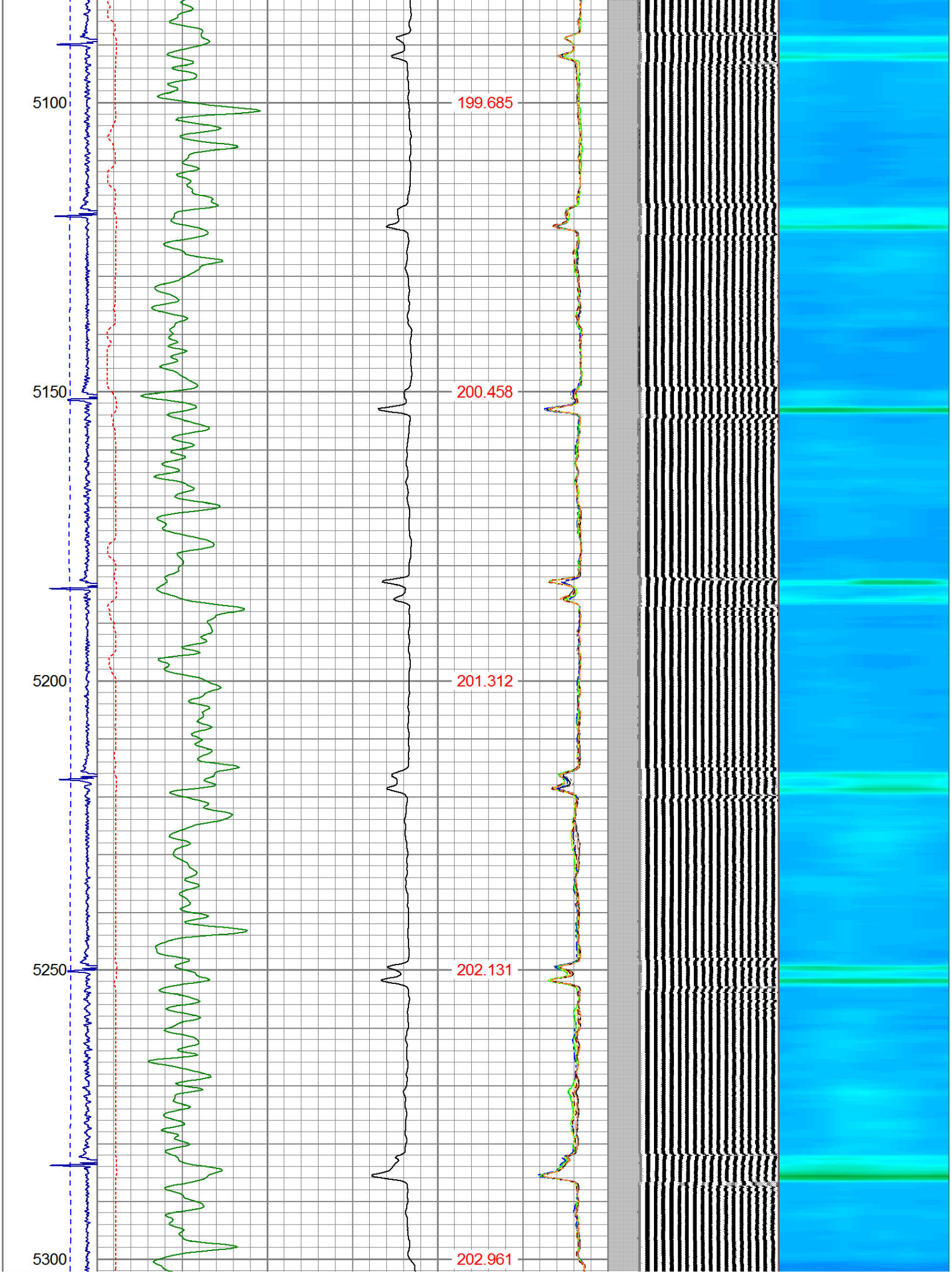
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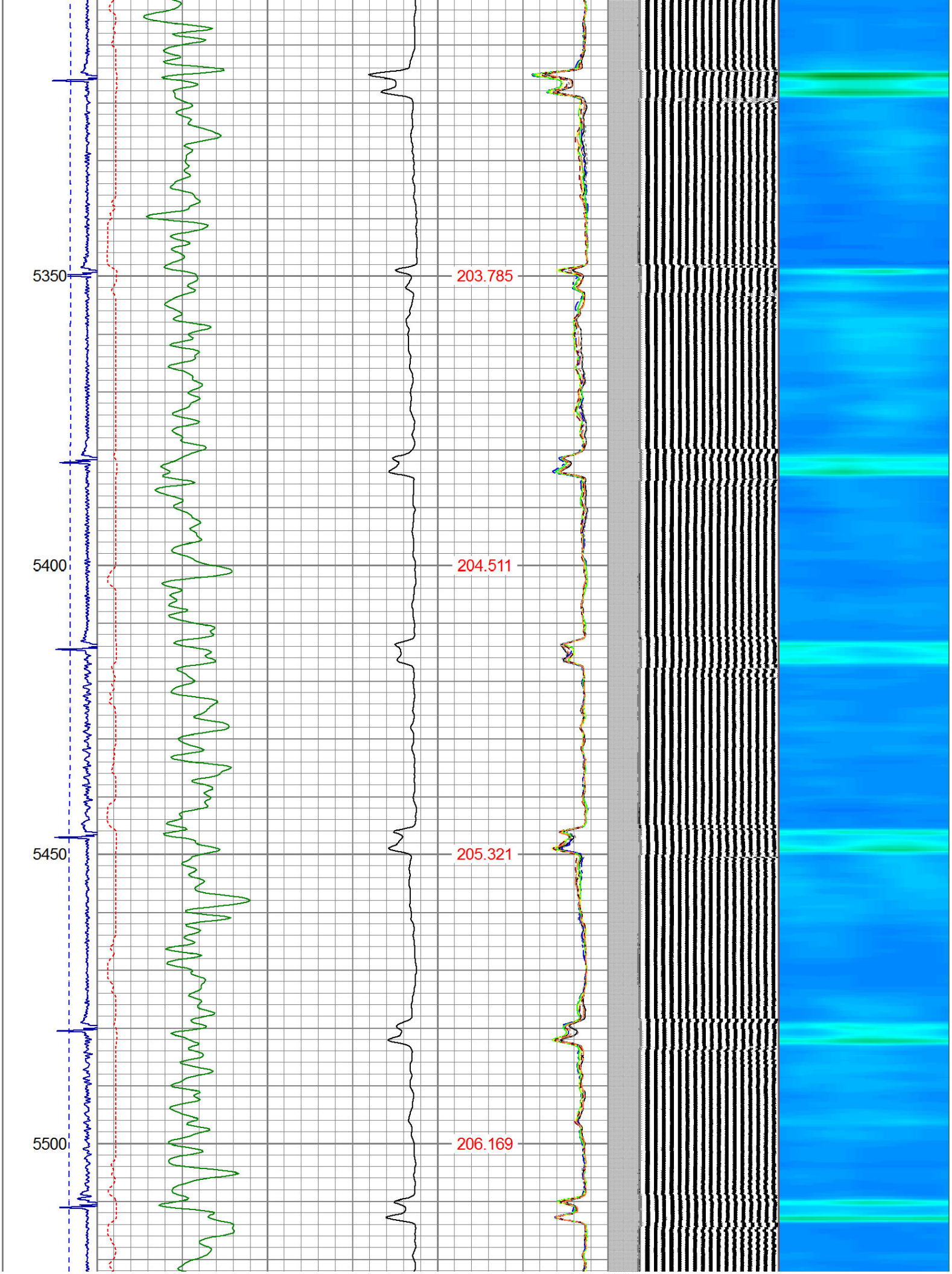
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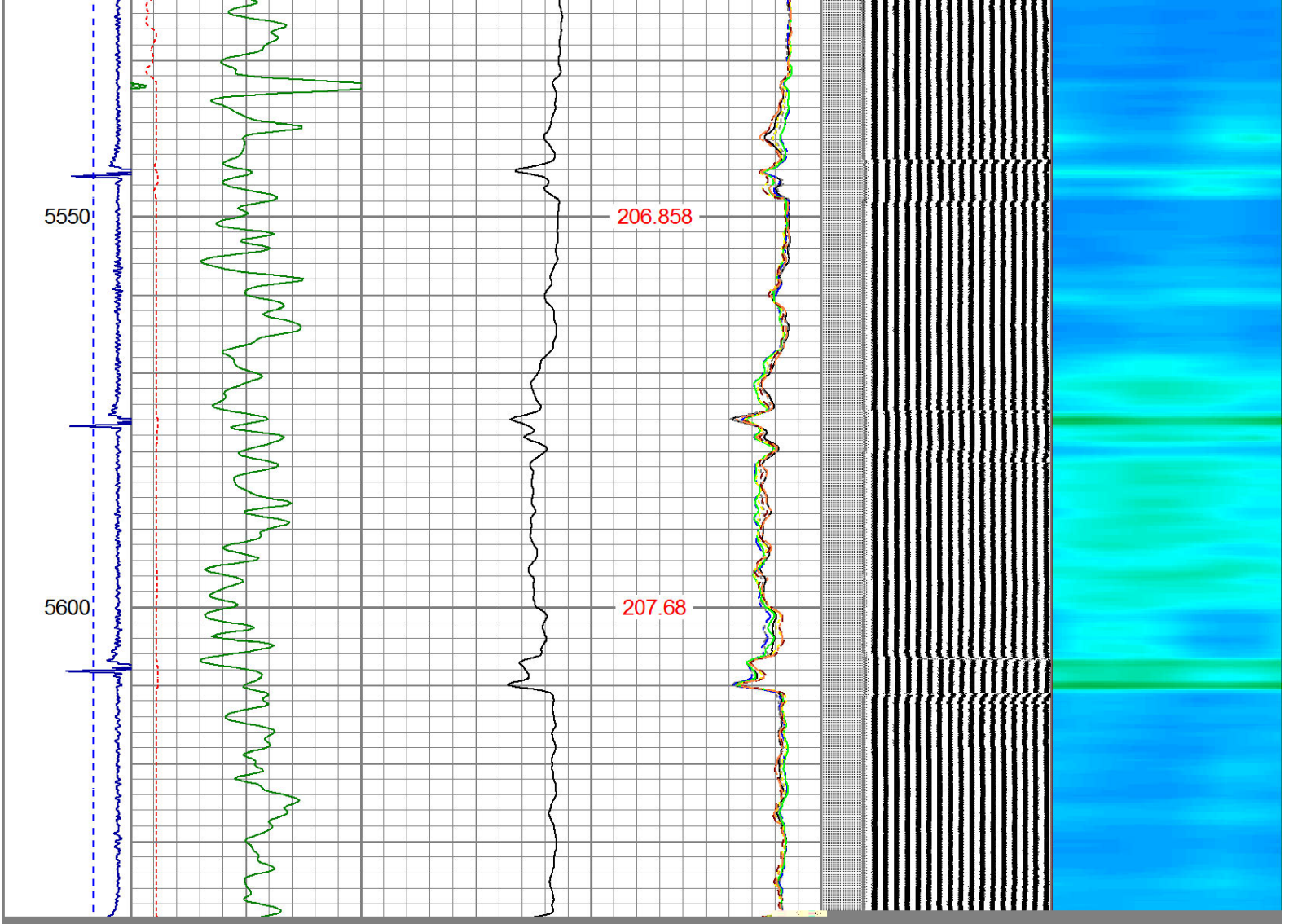
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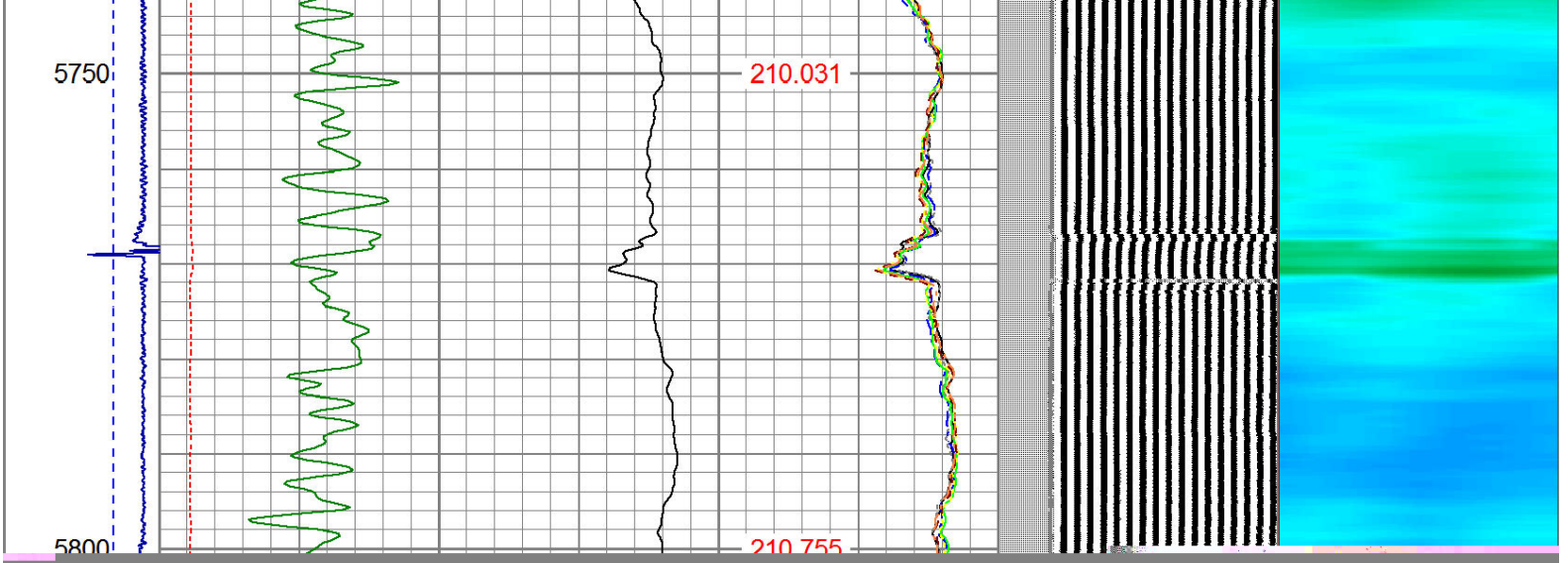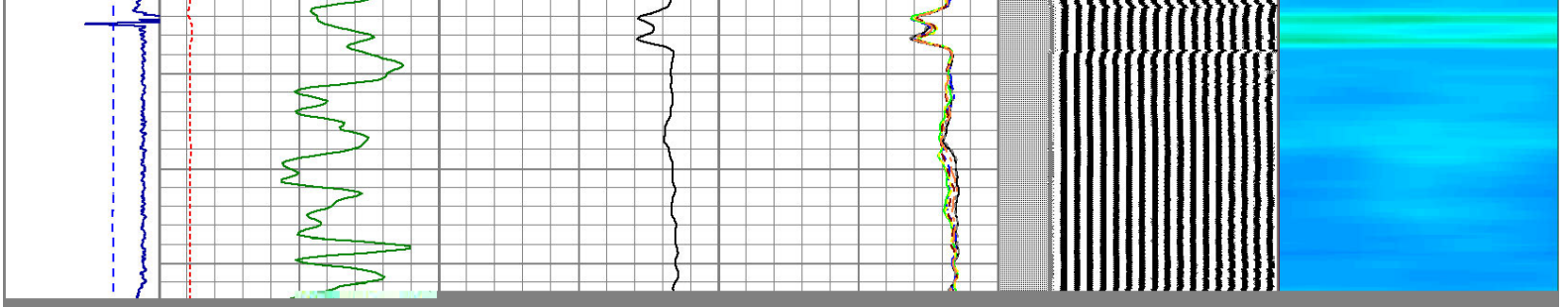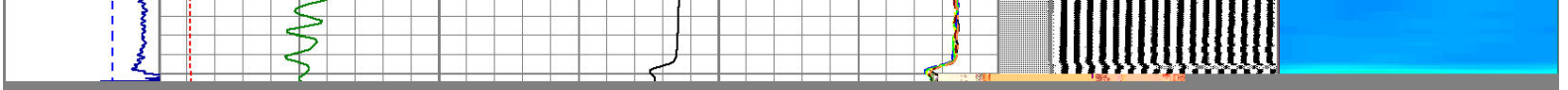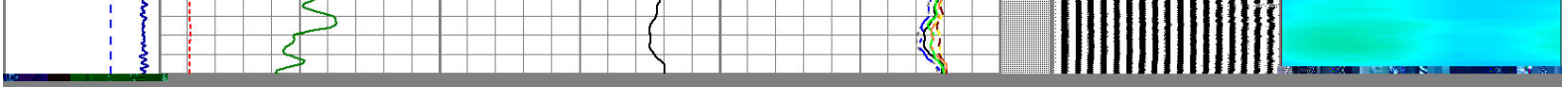
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