



**GAMMA RAY CCL
CEMENT BOND
SECTOR VDL**

Company CRESTONE PEAK RES. OPERATING LLC
Well LUSSING TRUST 4-64 19-20 2BH
Field DJ HORIZONTAL NIOBRARA
County ARAPAHOE
State COLORADO

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Well LUSSING TRUST 4-64 19-20 2BH
Field DJ HORIZONTAL NIOBRARA
County ARAPAHOE State COLORADO

Location: API #: 05-005-07566
SEC 19 TWP 4S RGE 64W
Permanent Datum GL Elevation 5696
Log Measured From KB
Drilling Measured From KB
Other Services
K.B. 5721
D.F. 5720
G.L. 5696

Date AUGUST 23, 2024
Run Number ONE
Depth Driller 18,168
Depth Logger 8054
Bottom Logged Interval 8054
Top Log Interval 90
Open Hole Size 8-1/2
Type Fluid WATER
Density / Viscosity N/A
Max. Recorded Temp. 246°F
Estimated Cement Top 92
Time Well Ready ROA
Time Logger on Bottom 12:00
Equipment Number 802
Location KERSEY, CO
Recorded By GREG NOLAN
Witnessed By JOSH KLIJESON

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

	Size	Wgt/Ft	Top	Bottom
Casing Record	9-5/8	36# J-55	SURFACE	3240
Surface String	5-1/2	20# P-110	SURFACE	18,168
Prot. String				
Production String				
Liner				

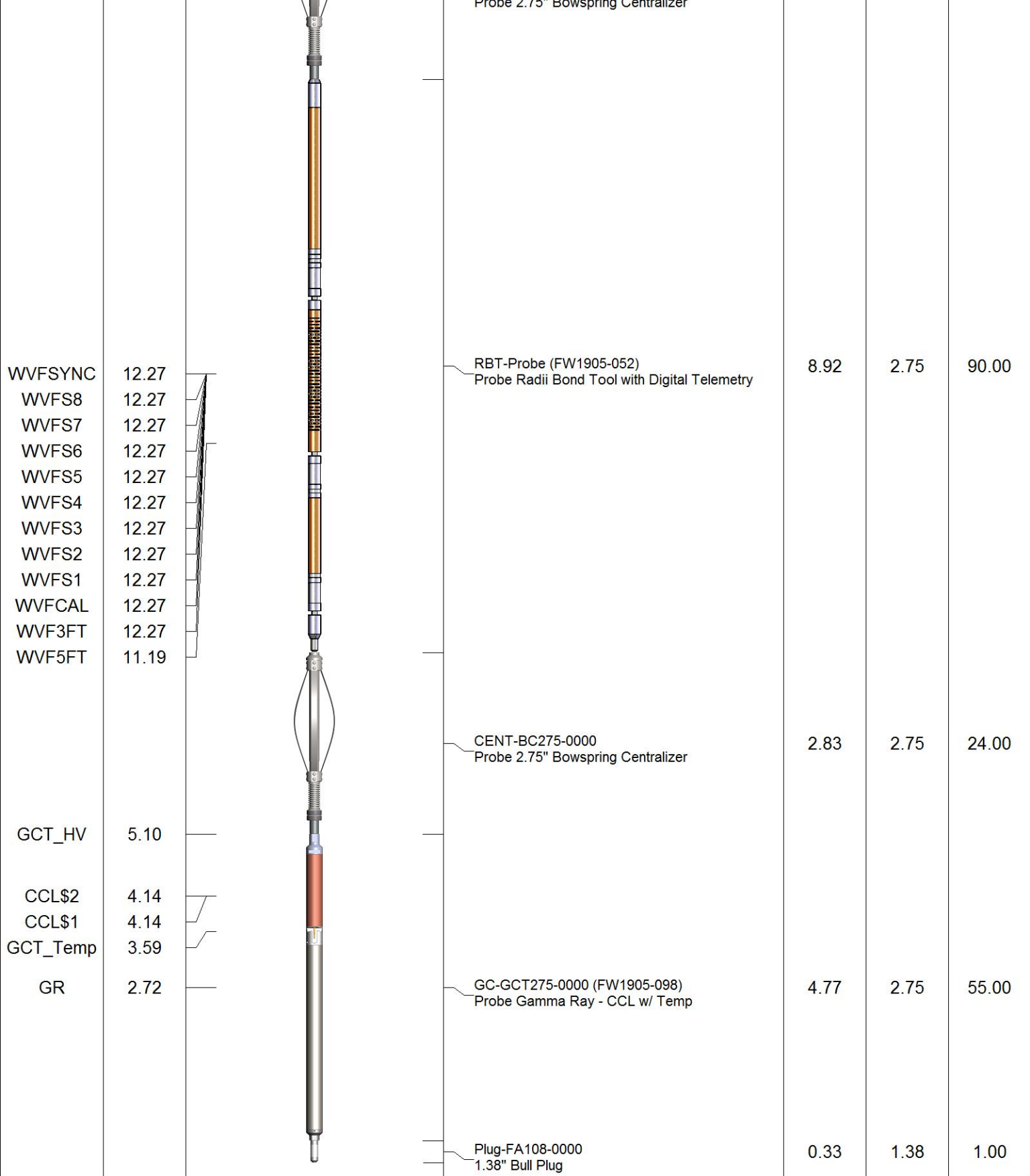
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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on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

THANK YOU FOR CHOOSING SUREFIRE WIRELINE WEST!!!!

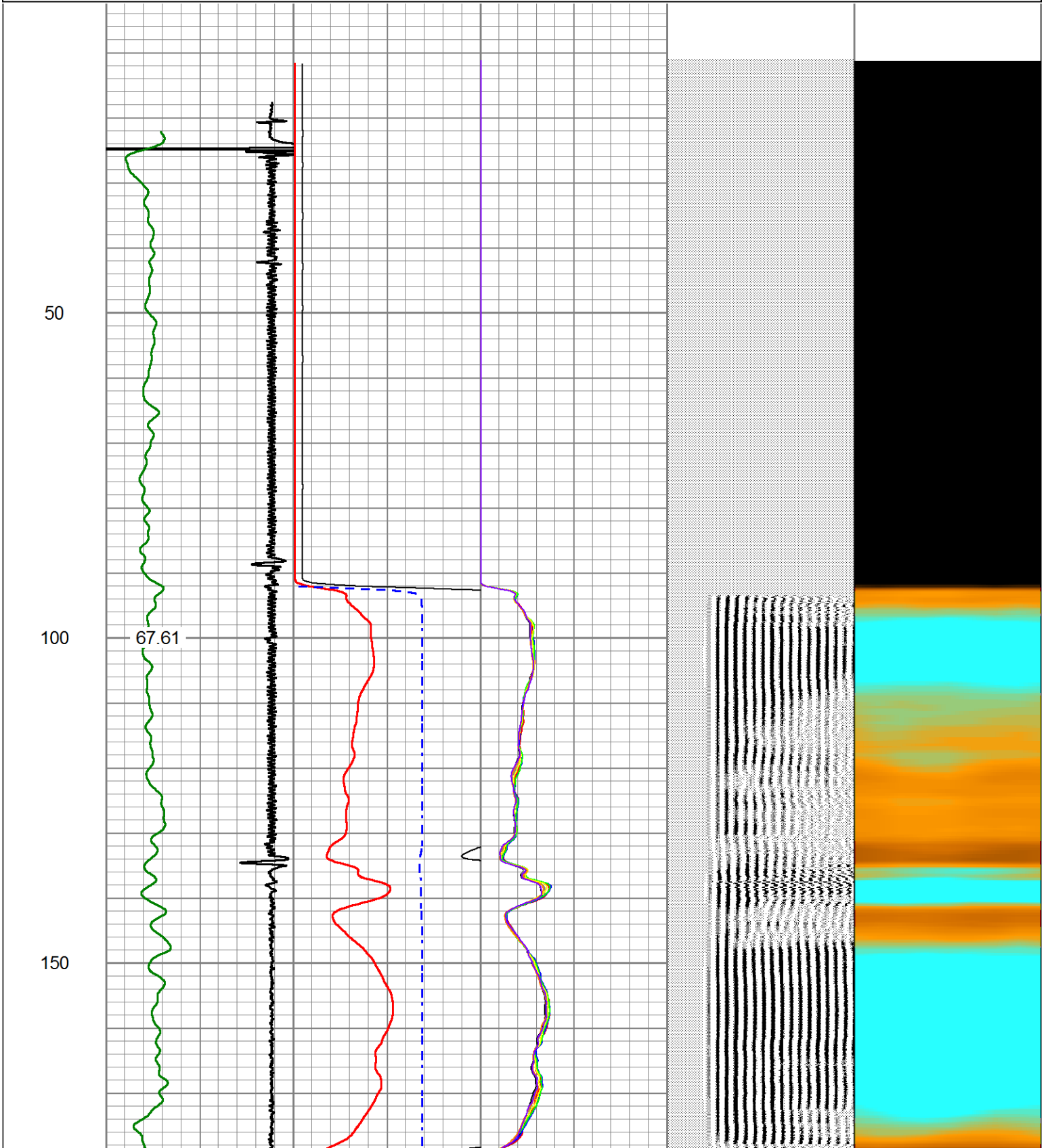
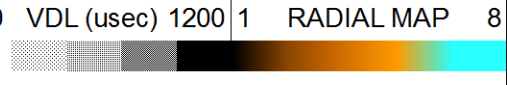
Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
ErrCt	19.69		CENT-BC275-0000 Pulsar 275L Reservoir Centralizer	2.83	2.75	24.00



Dataset: cbl civitas lussing trust 4-64 19-20 2bh.db: field/well/run1/pass3
 Total length: 19.69 ft
 Total weight: 194.00 lb
 O.D.: 2.75 in

Database File cbl civitas lussing trust 4-64 19-20 2bh.db
 Dataset Pathname pass3
 Presentation Format civitas
 Dataset Creation Fri Aug 23 12:03:03 2024
 Charted by Depth in Feet scaled 1:240

5	CCL\$1	-0.625	0	AMP (mV)	100	0	AMPS1	150	200	VDL (usec)	1200	1	RADIAL MAP	8
0	GR (GAPI)	150	650	TT (usec)	150	0	AMPS2	150						
GCT_TEMP			0	AMPx5 (mV)	20	0	AMPS3	150						
(degF)						0	AMPS4	150						
						0	AMPS5	150						
						0	AMPS6	150						
						0	AMPS7	150						
						0	AMPS8	150						



200

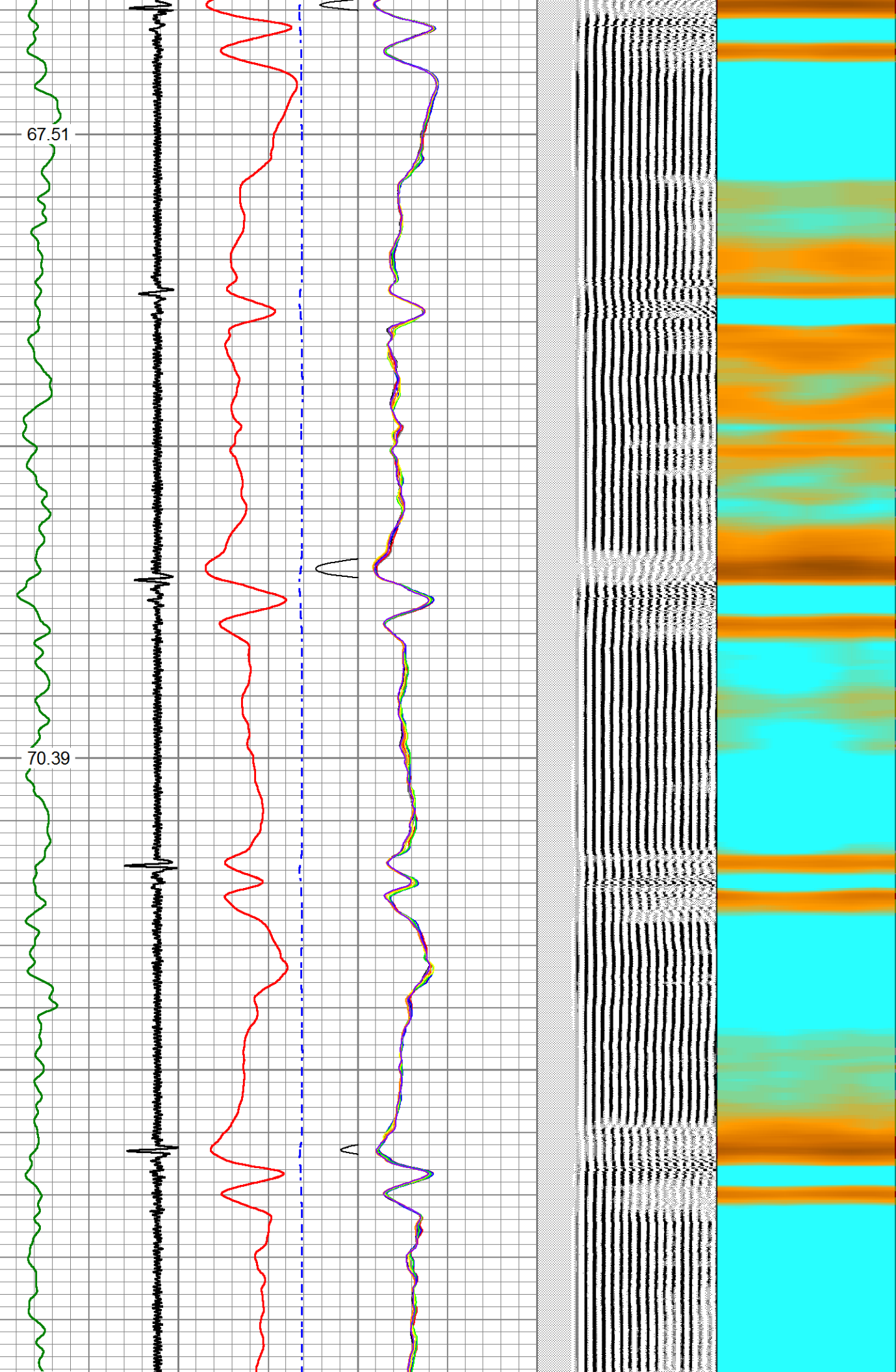
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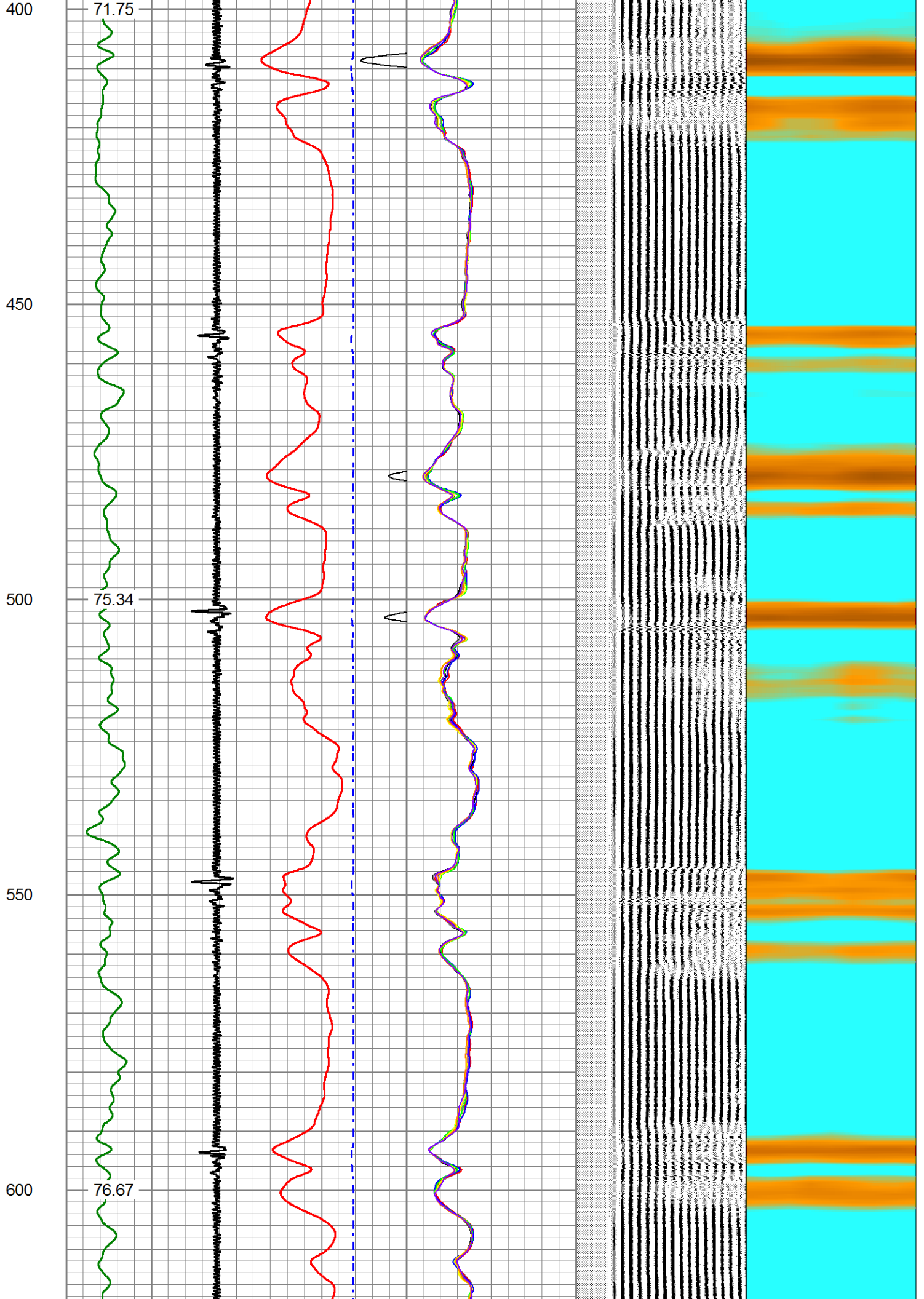
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300

70.39

350



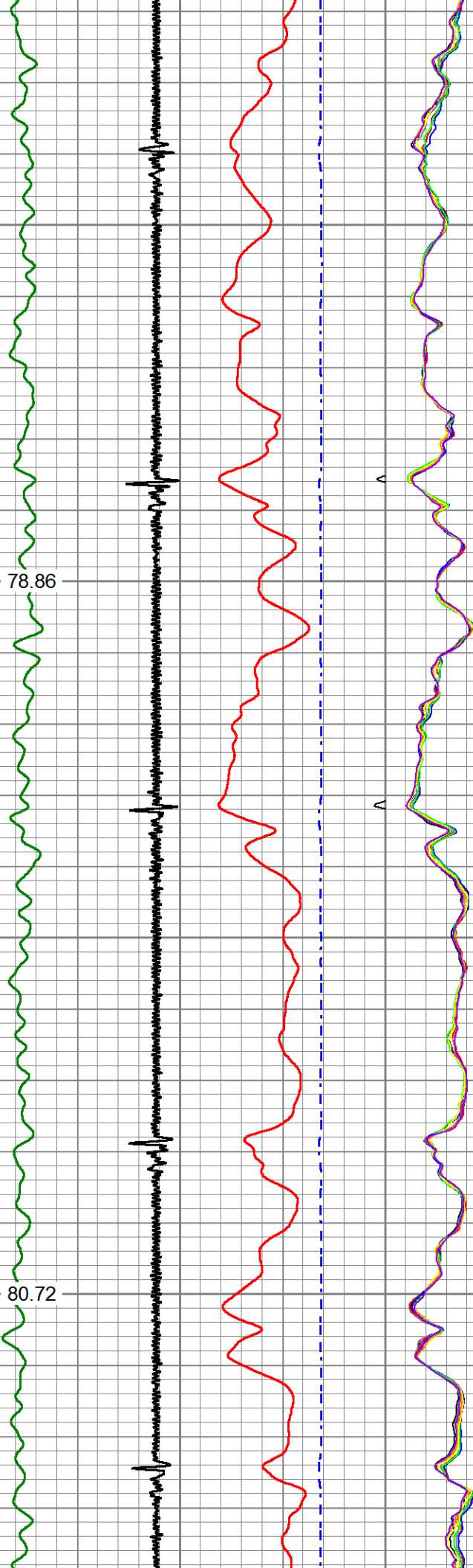


650

700

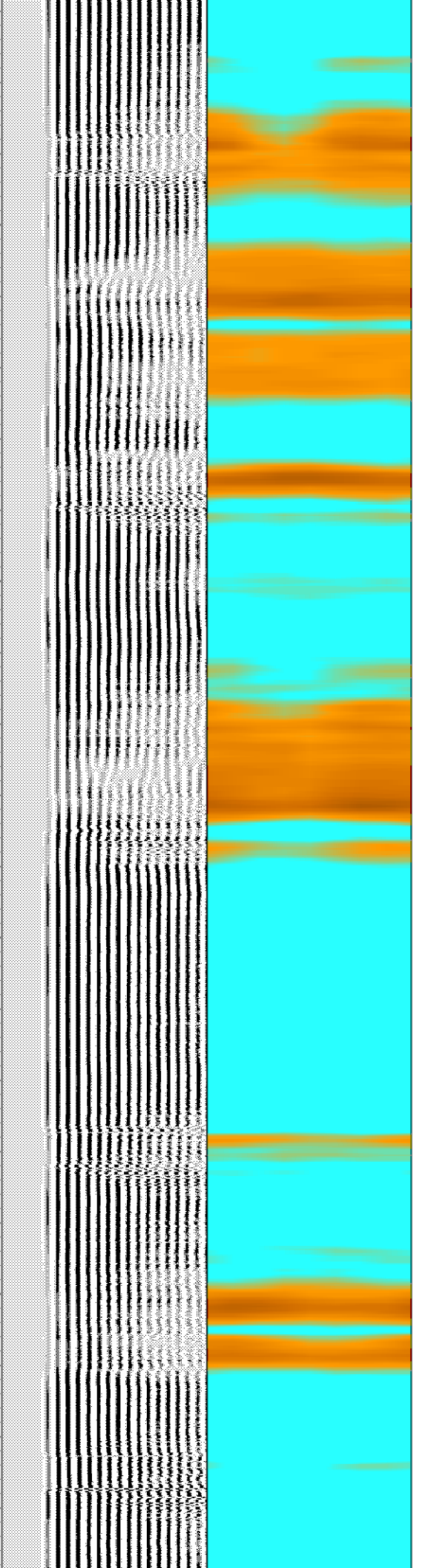
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800



78.86

80.72



850

900

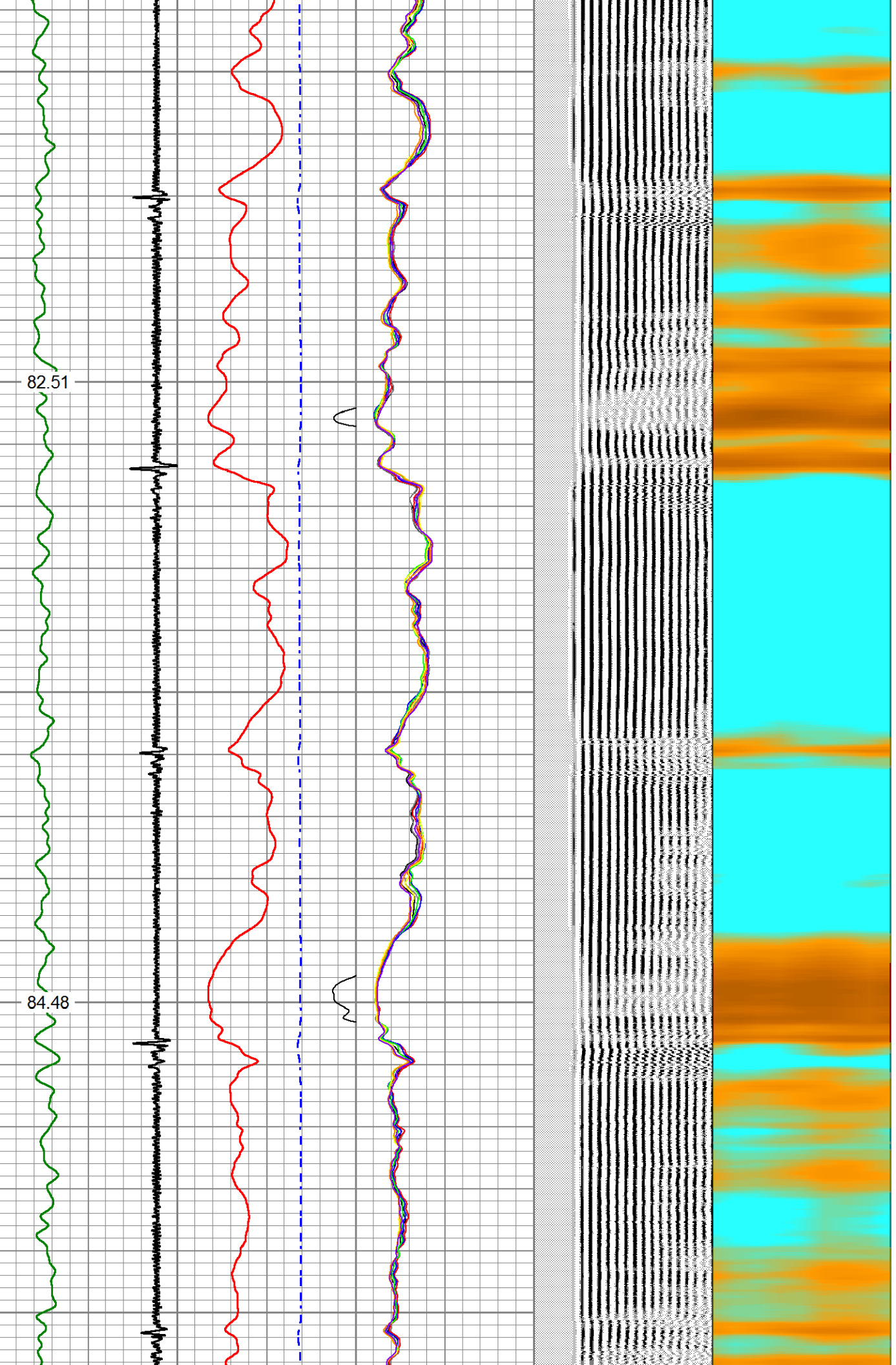
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1000

1050

82.51

84.48



1100

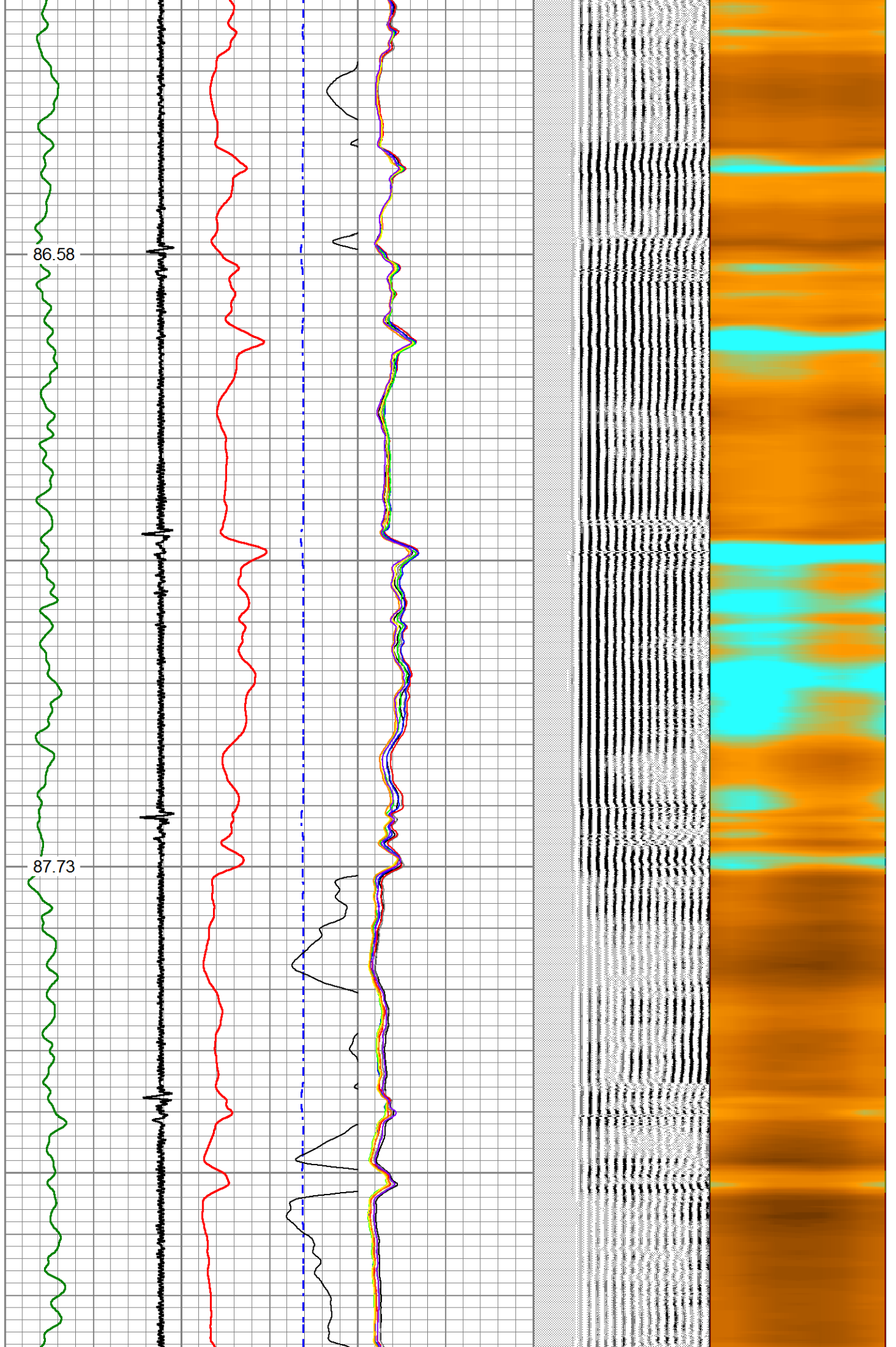
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1150

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87.73

1250



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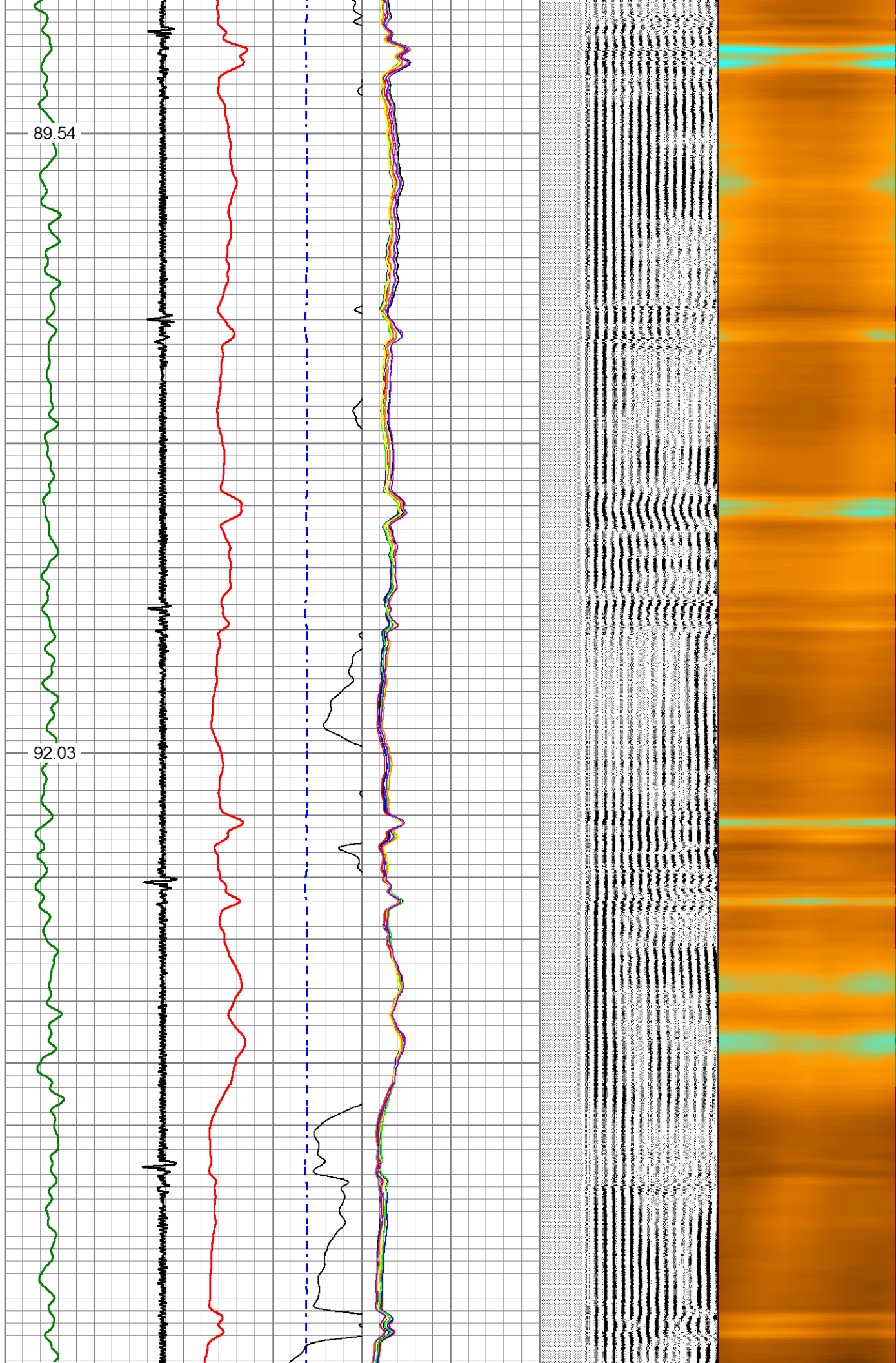
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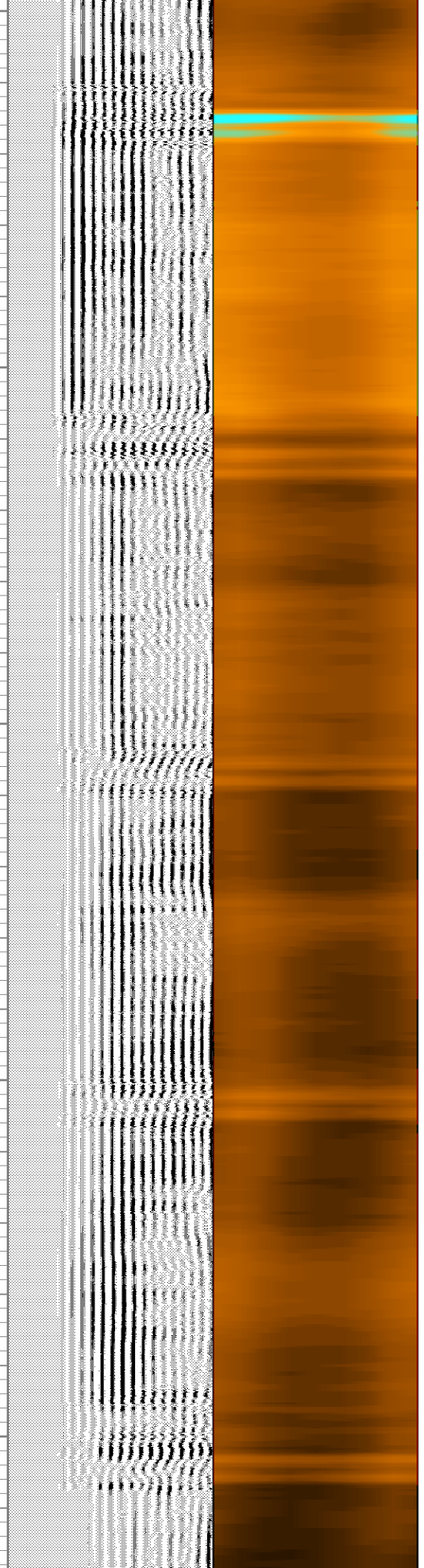
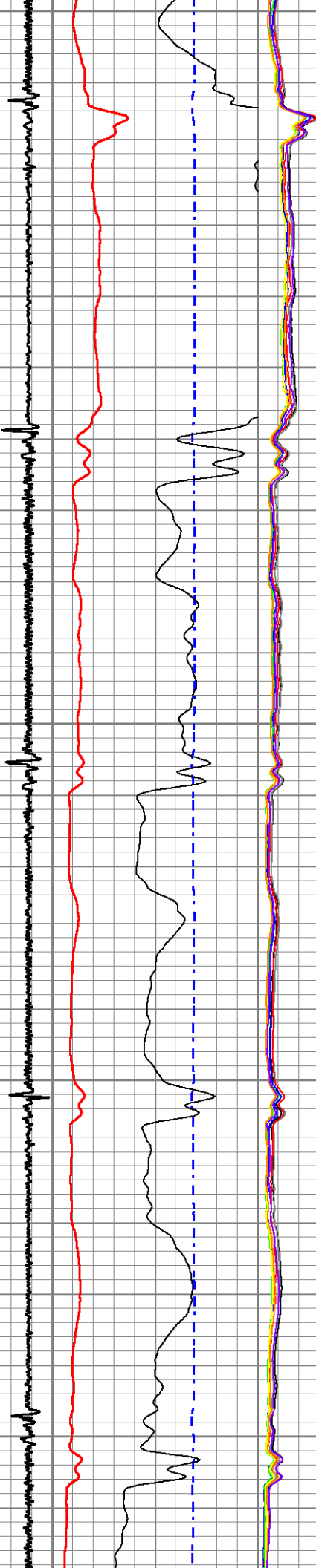
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1500
1550
1600
1650
1700

94.46
95.76
98.87



1750

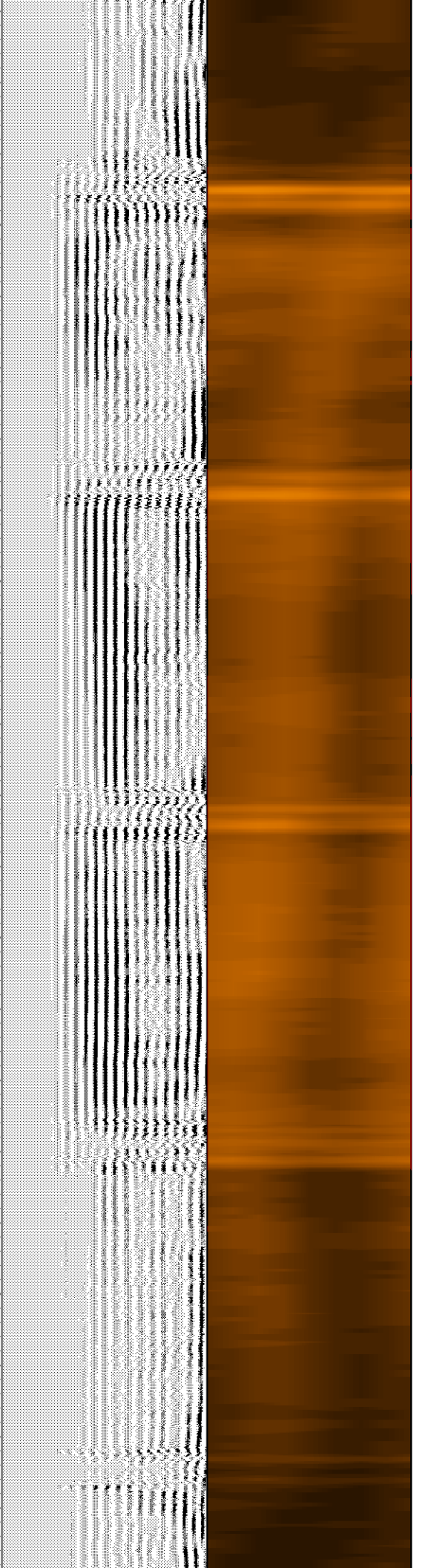
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1850

1900

99.88

101.30



1950

2000

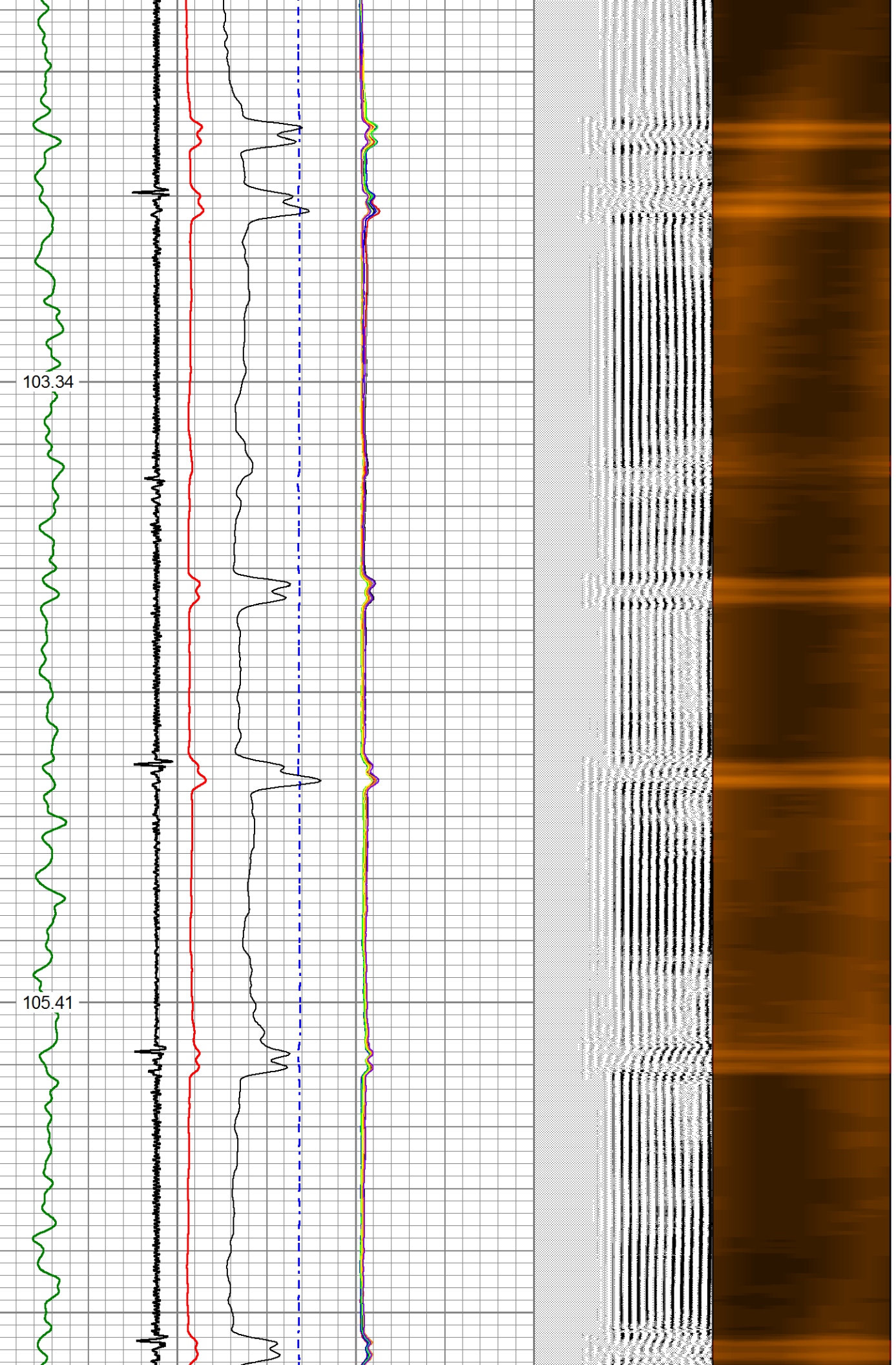
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2150

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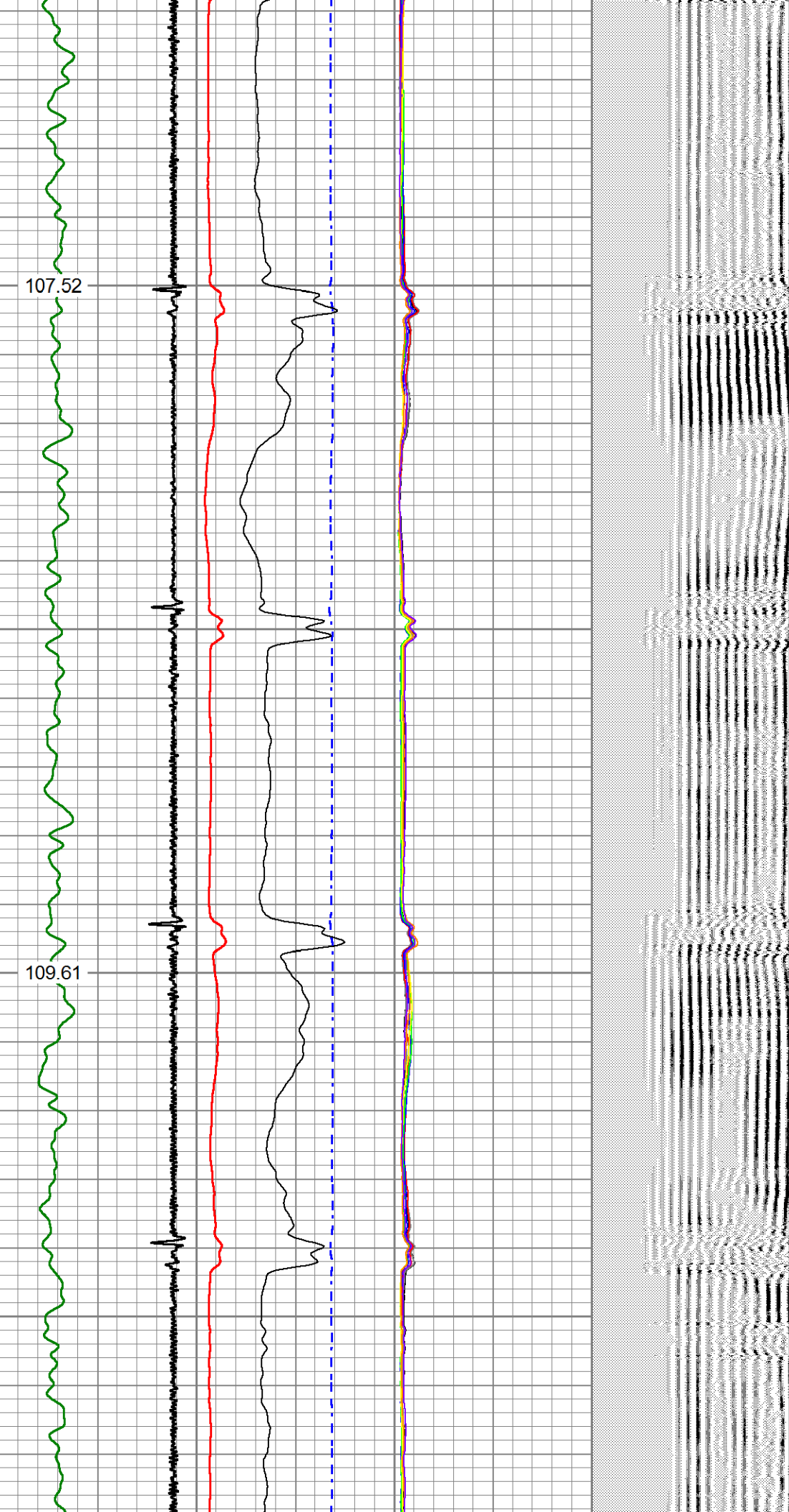
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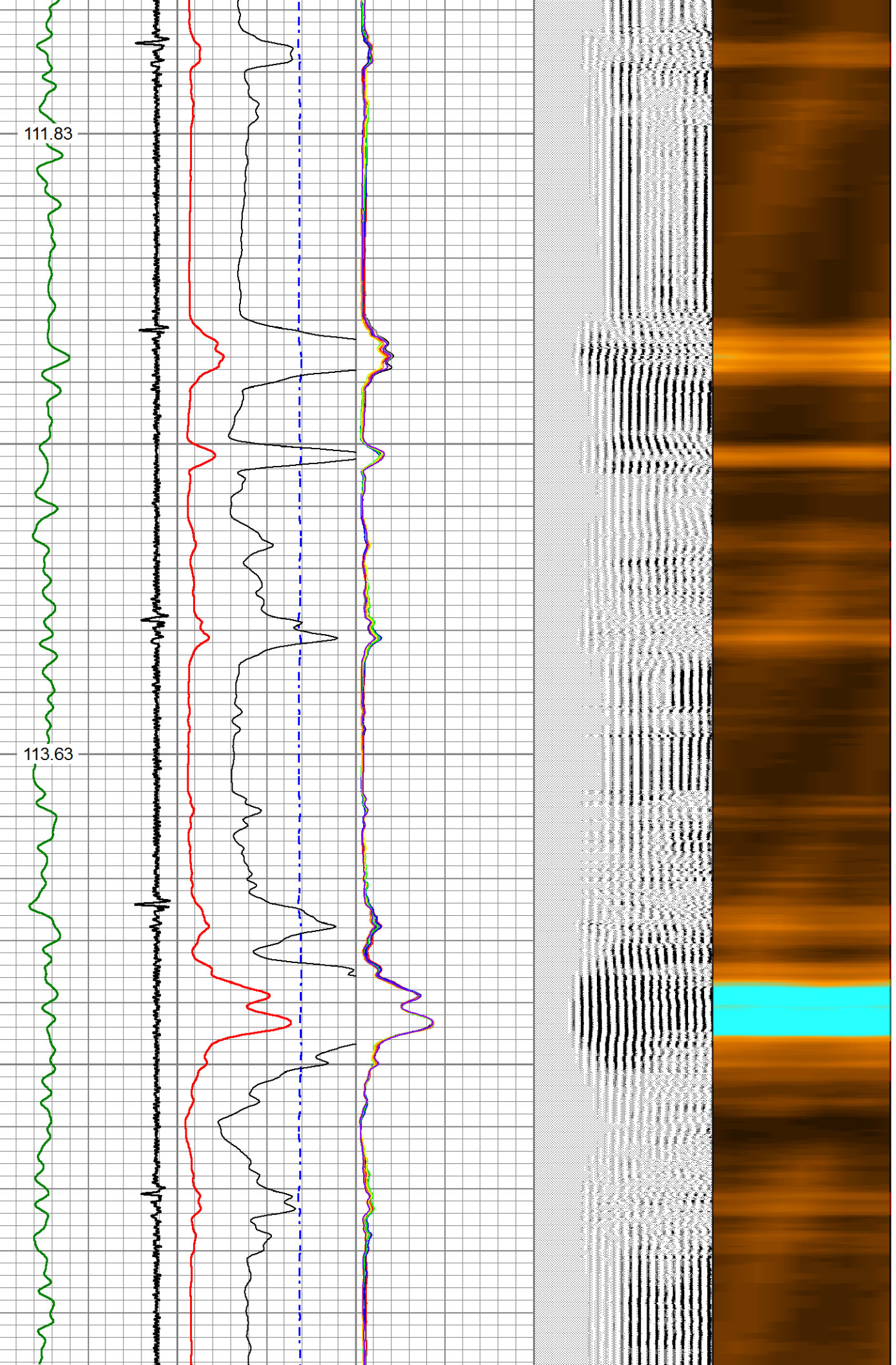
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2450

2500

113.63

2550



2850

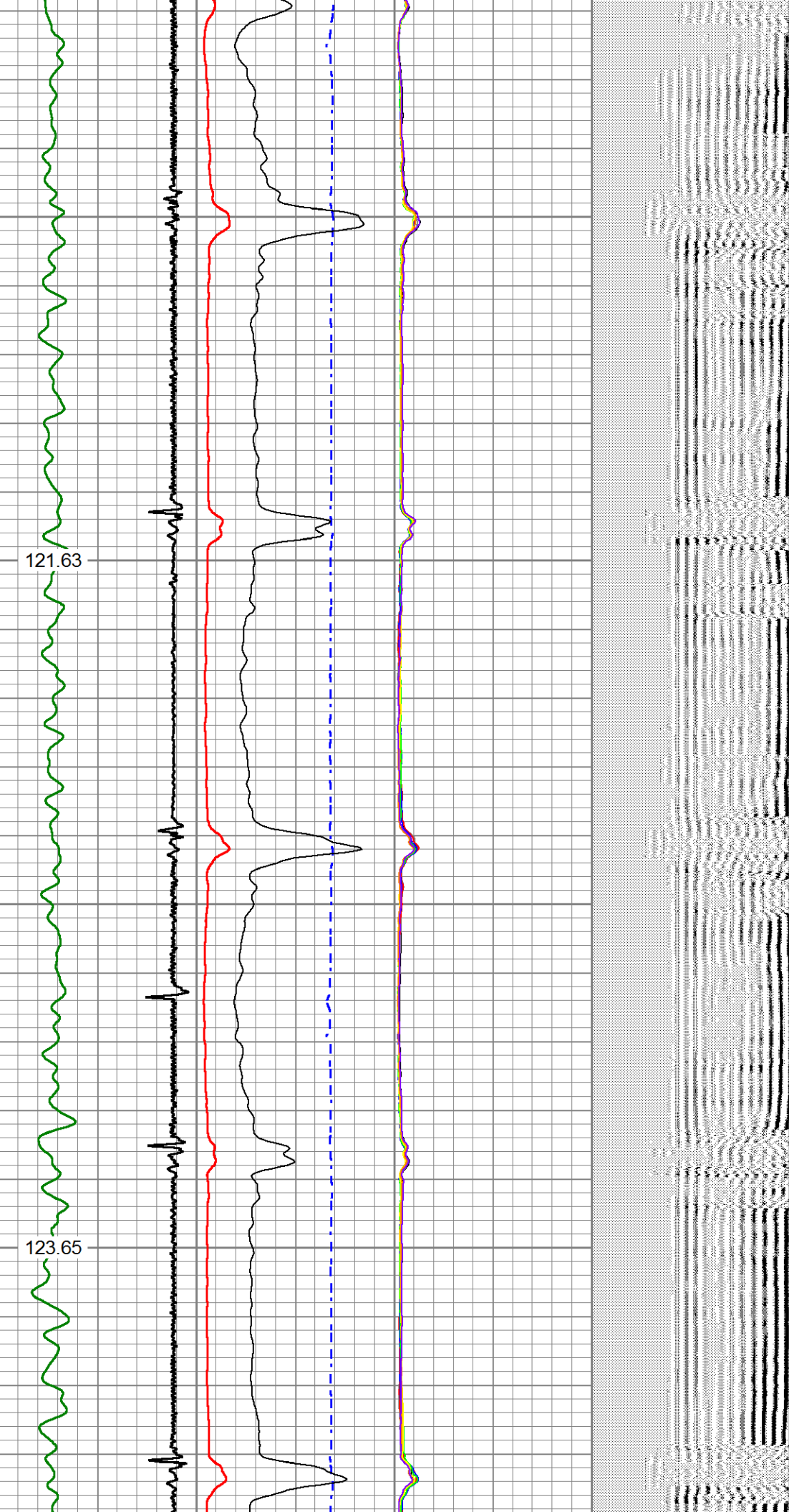
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123.65



3050

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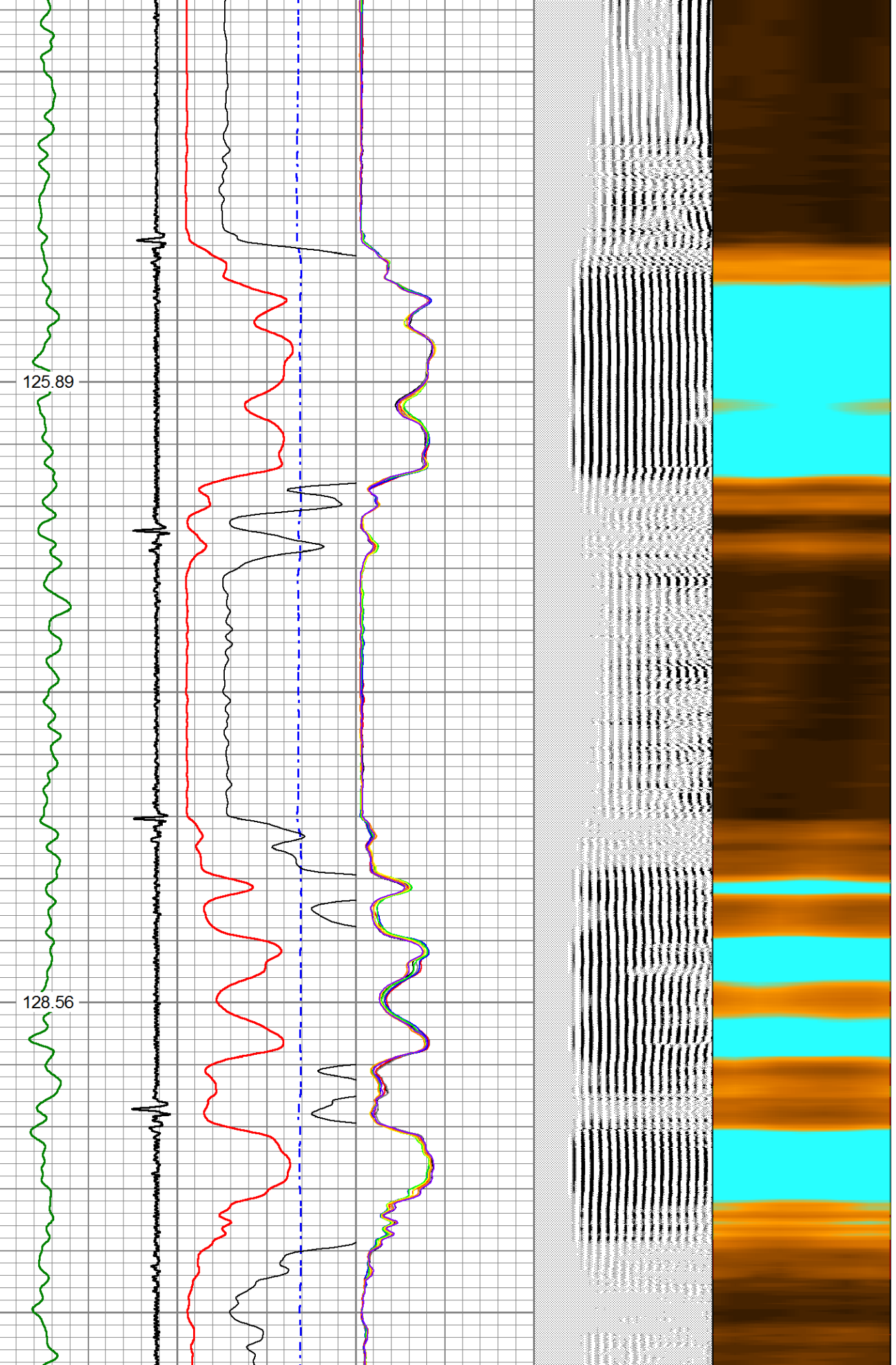
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3250

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128.56



3300

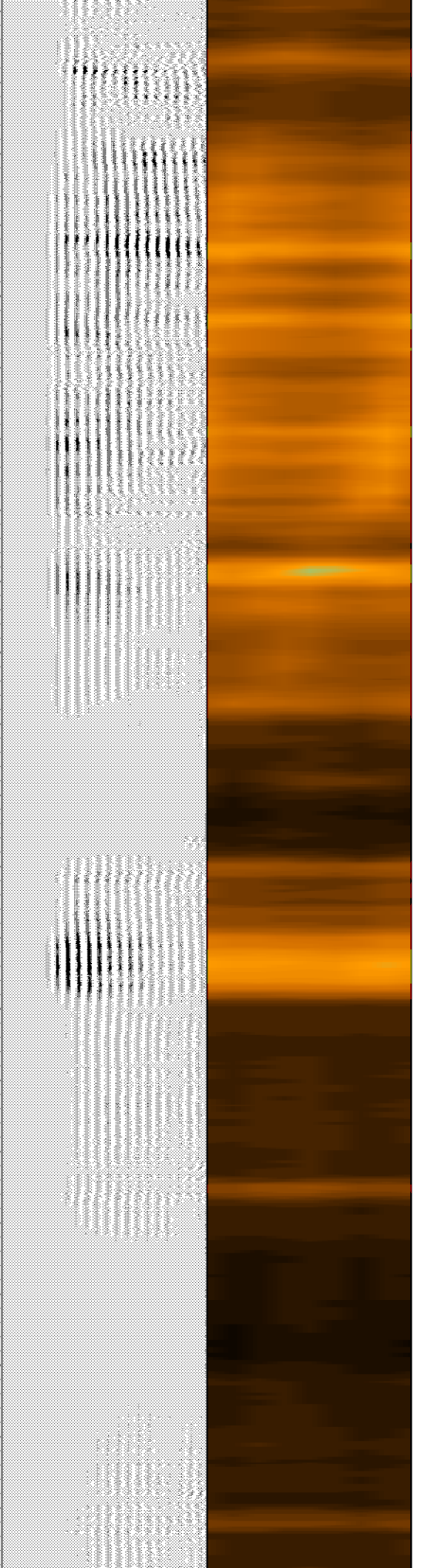
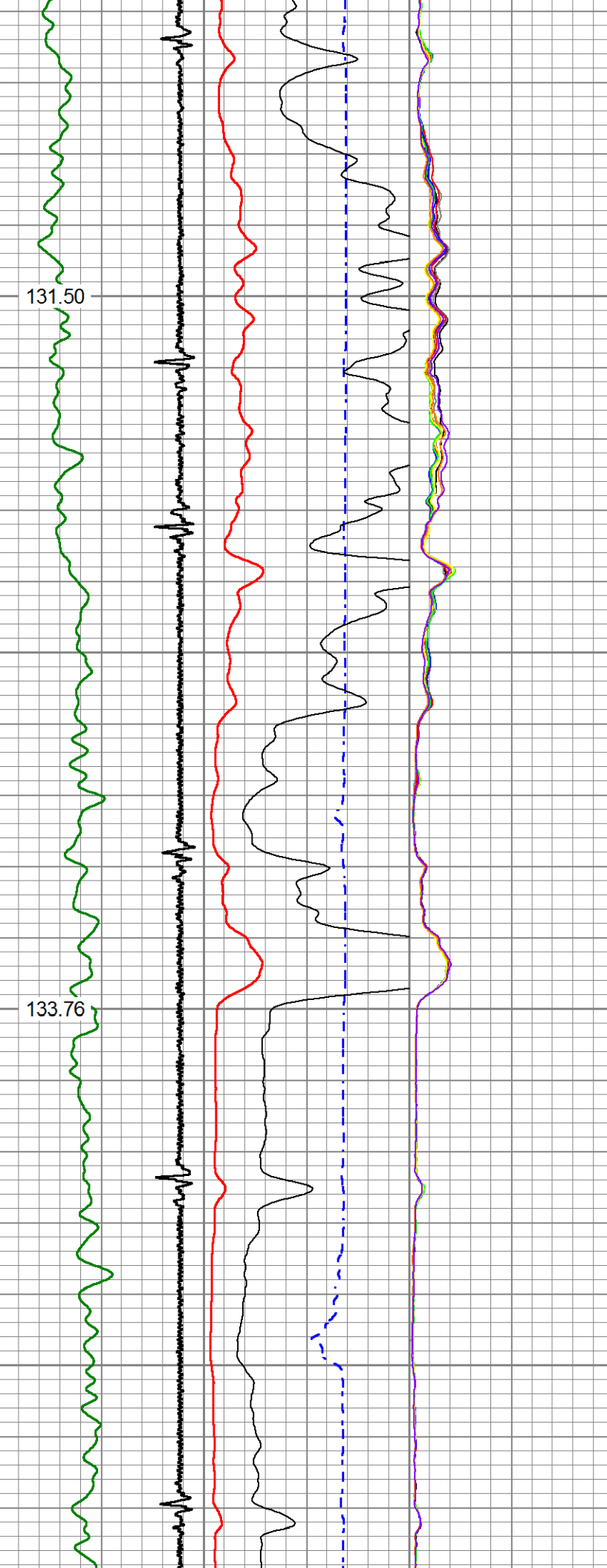
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3350

3400

133.76

3450



3500

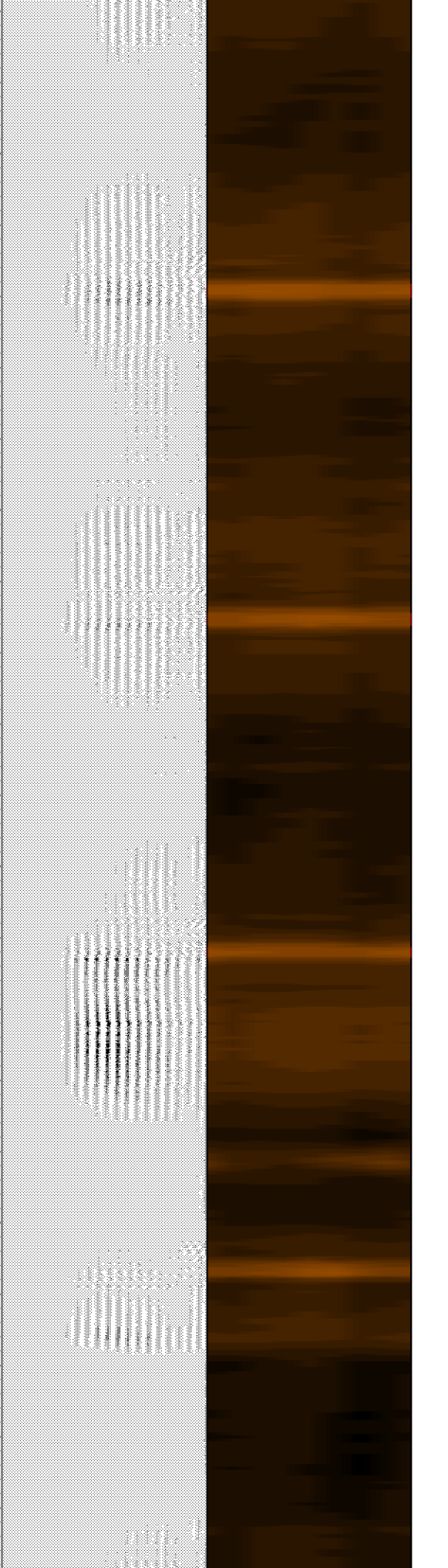
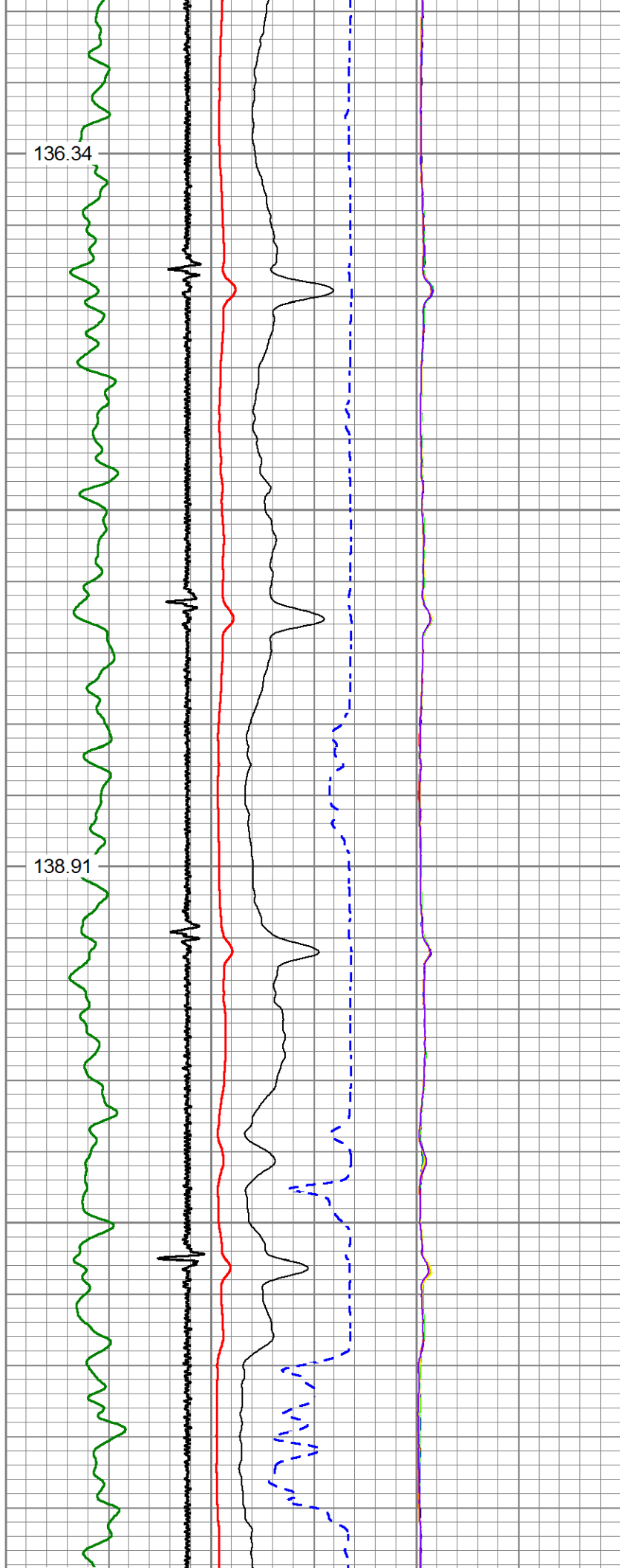
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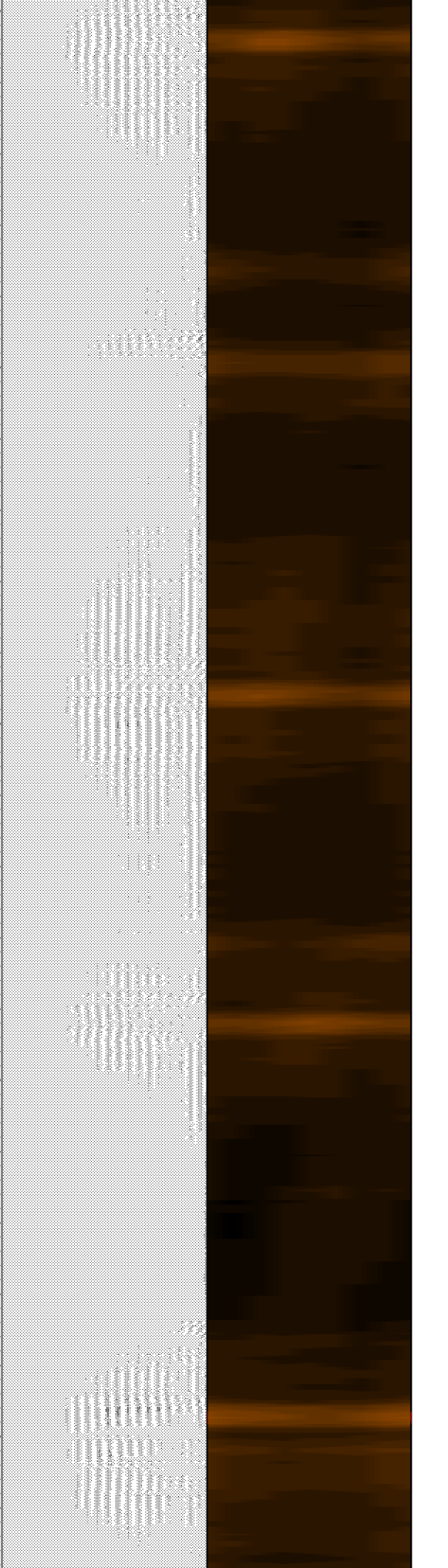
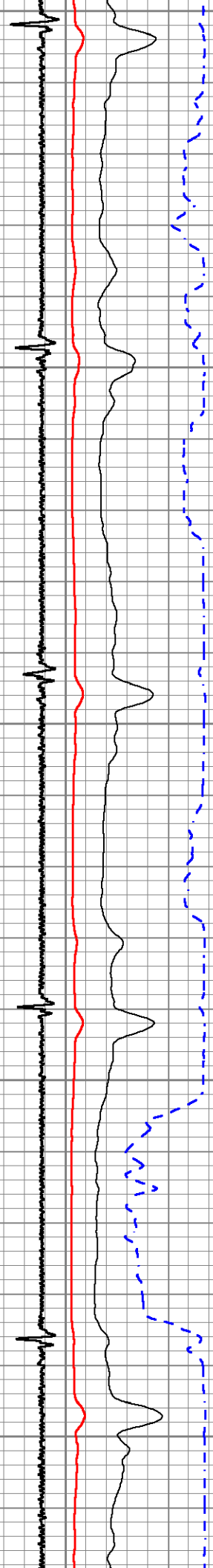
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3850
3900

141.68
144.37
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3950

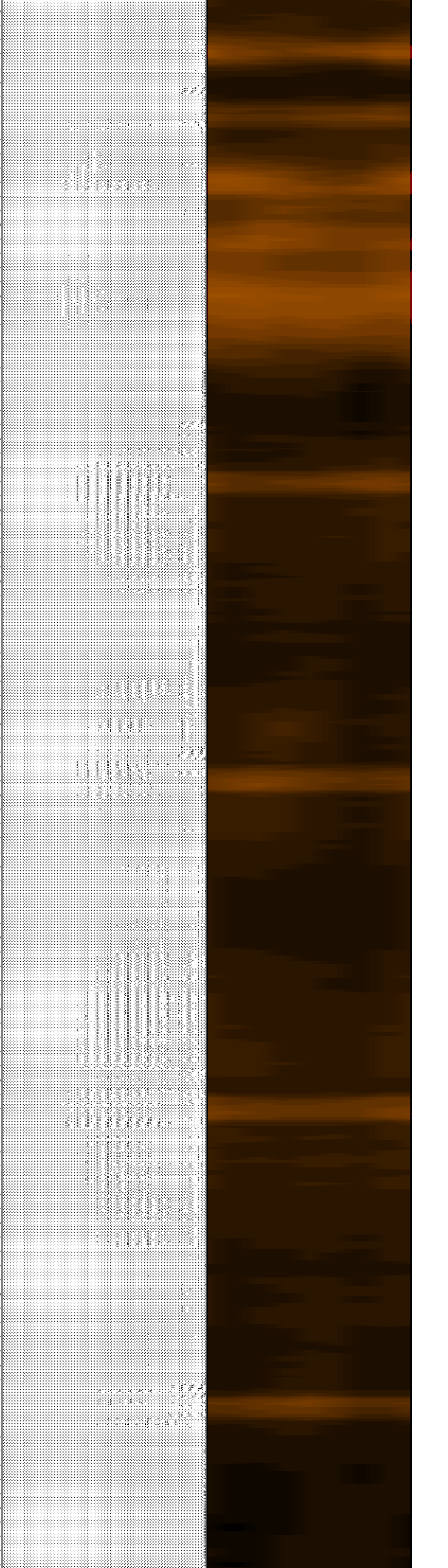
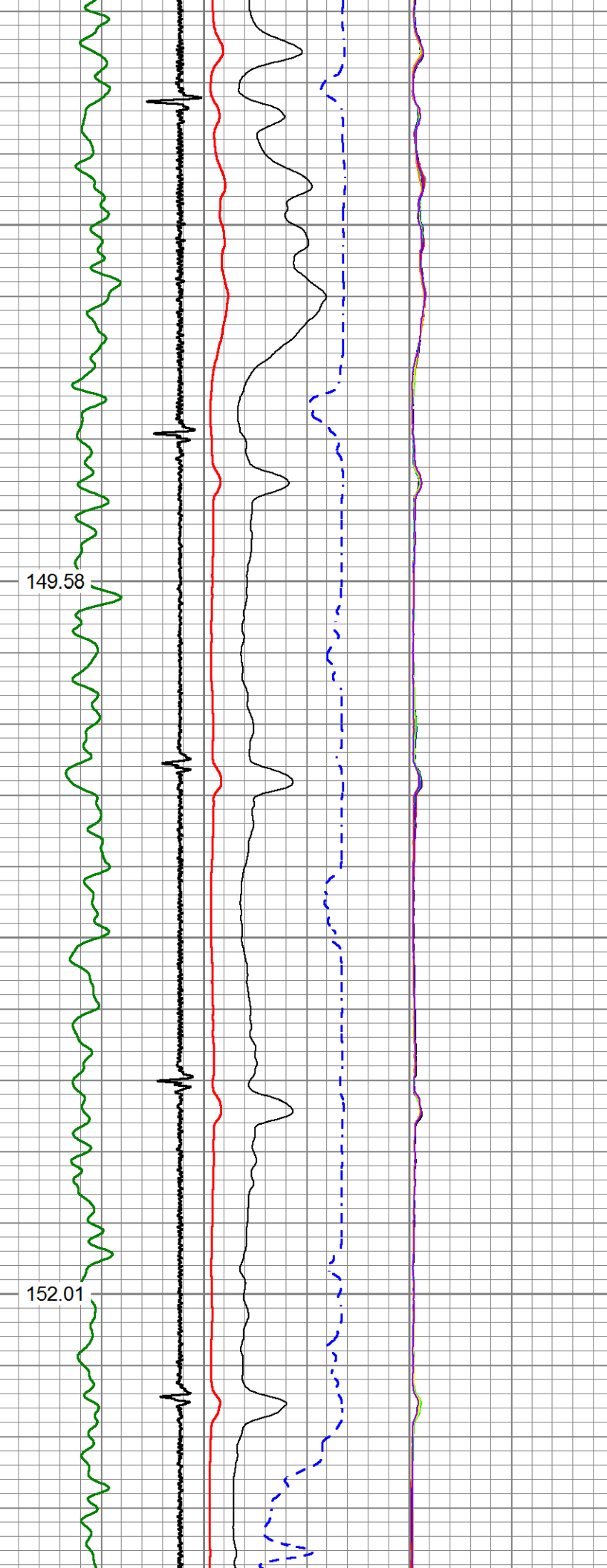
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149.58

152.01



4150

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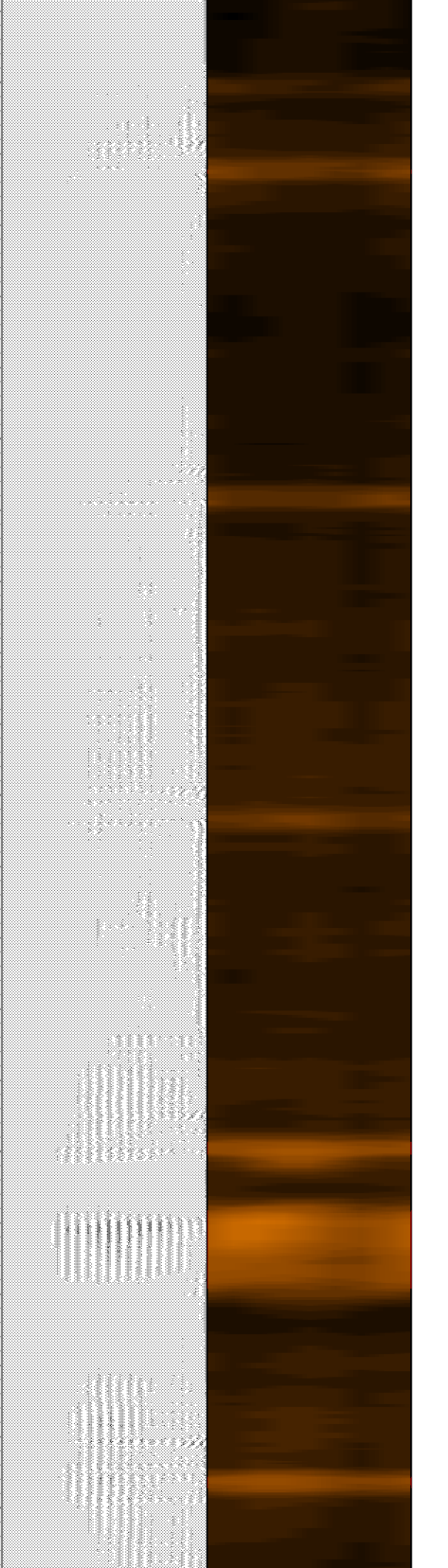
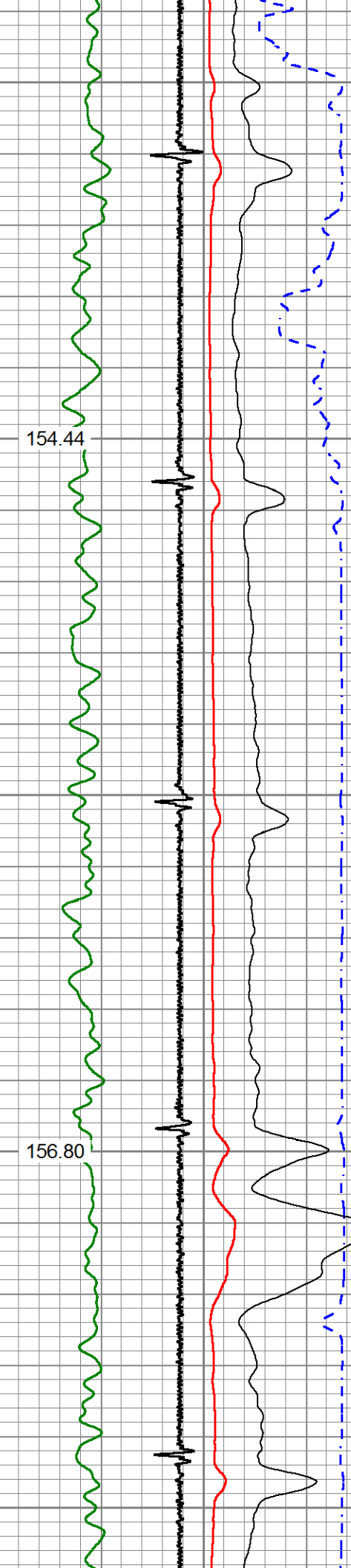
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4350

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4400

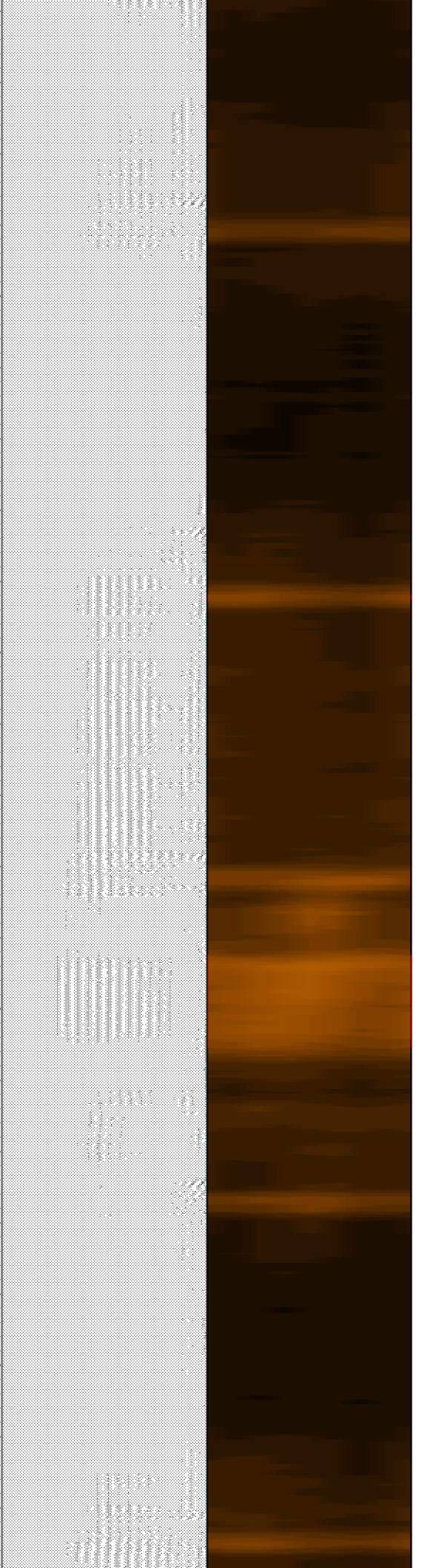
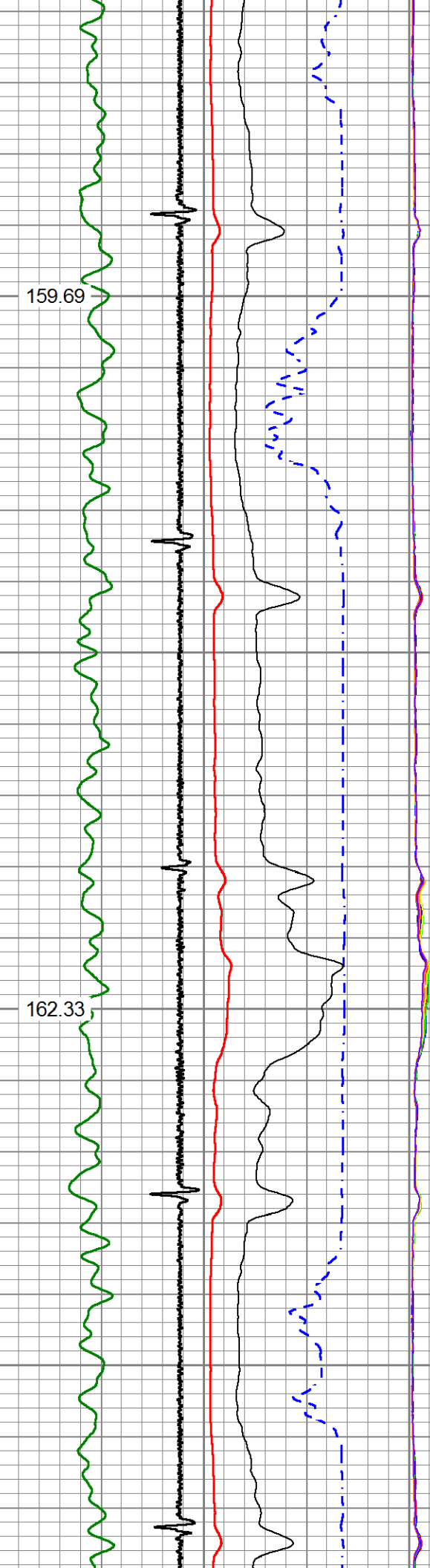
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4550



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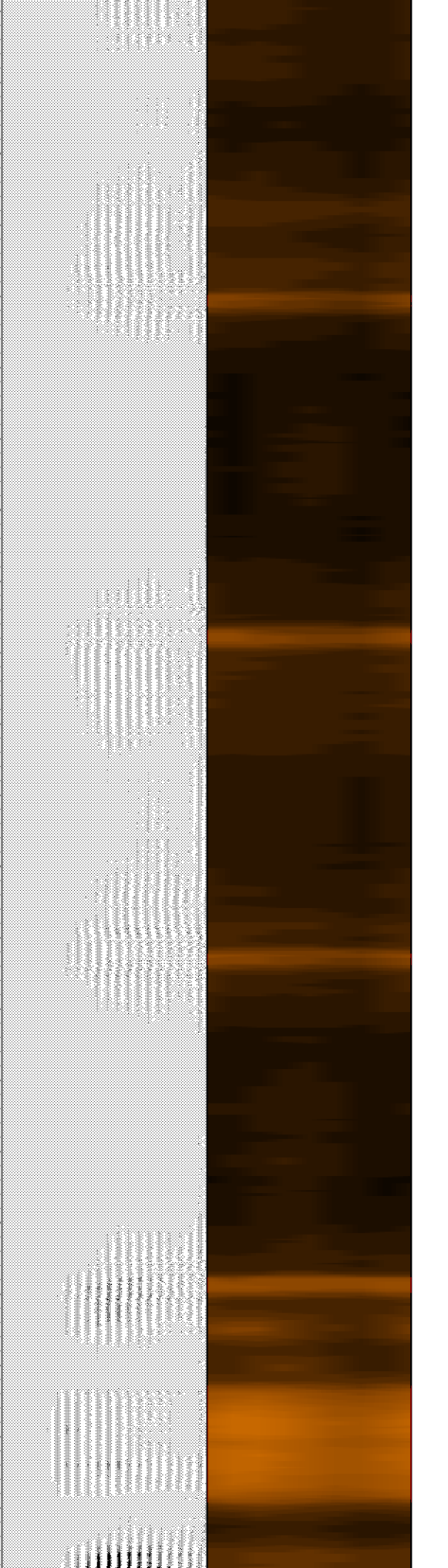
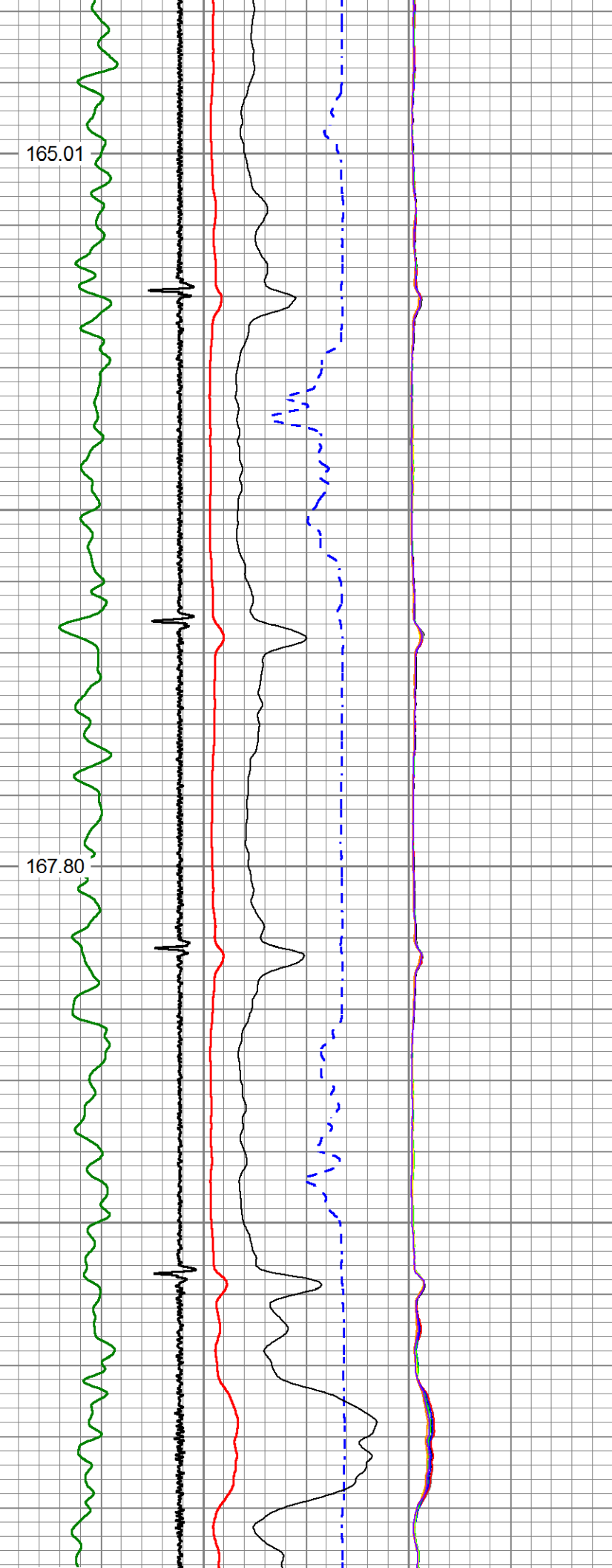
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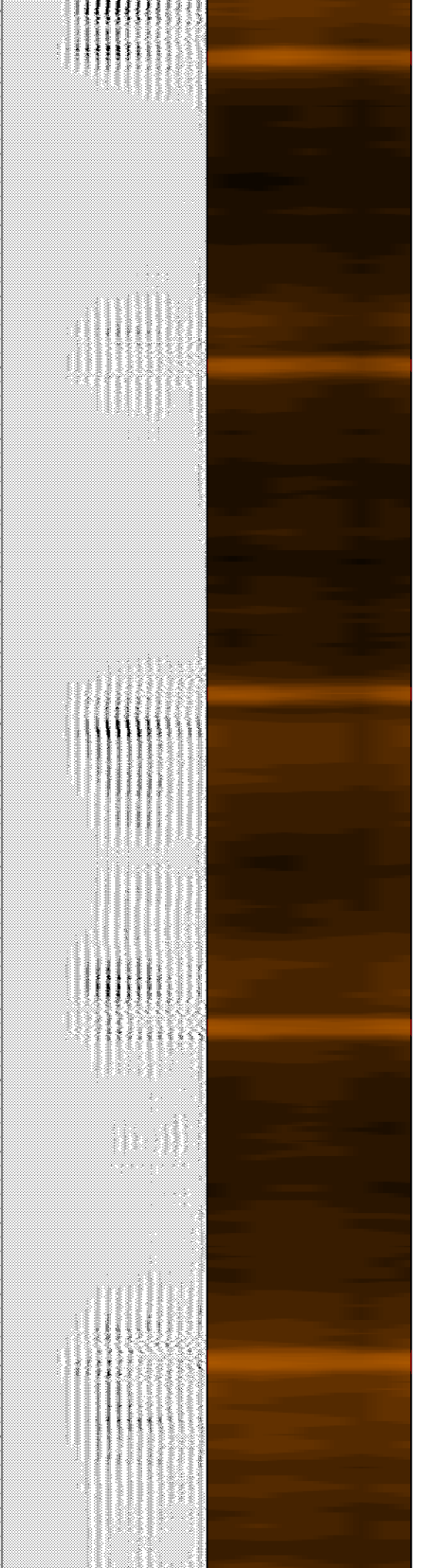
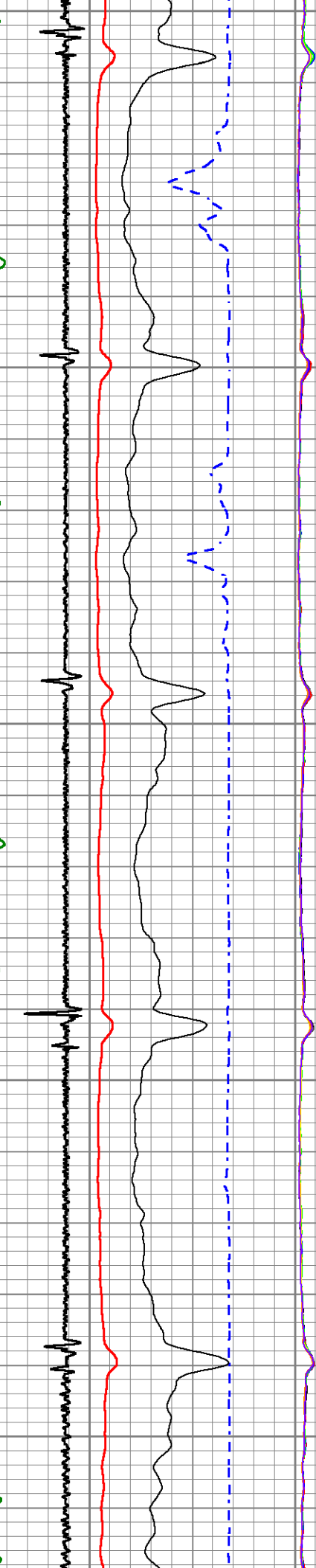
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4950
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173.37
175.63



5050

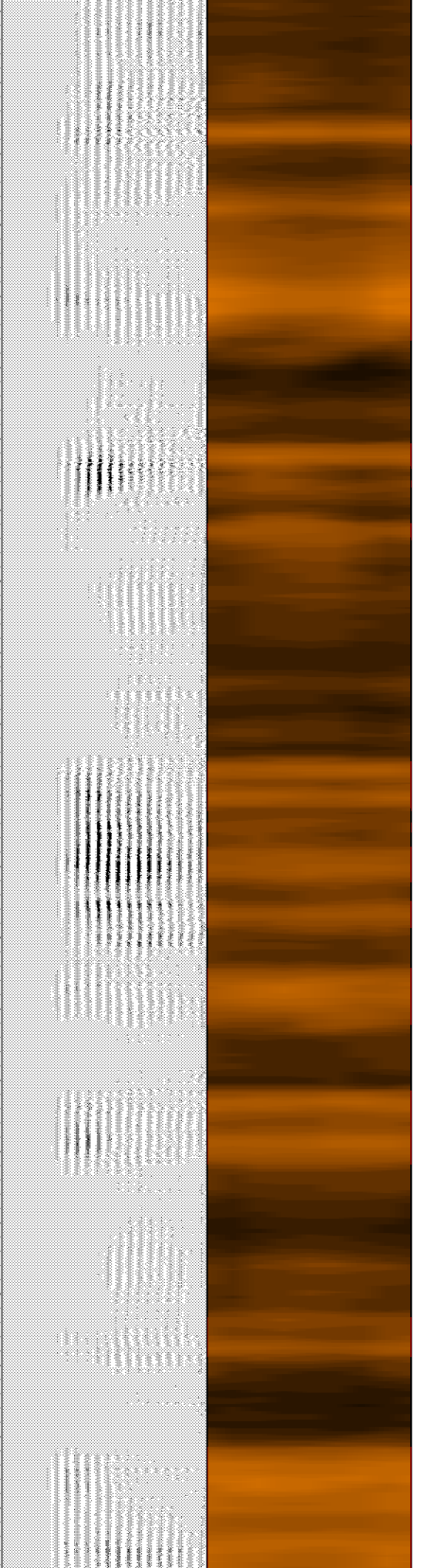
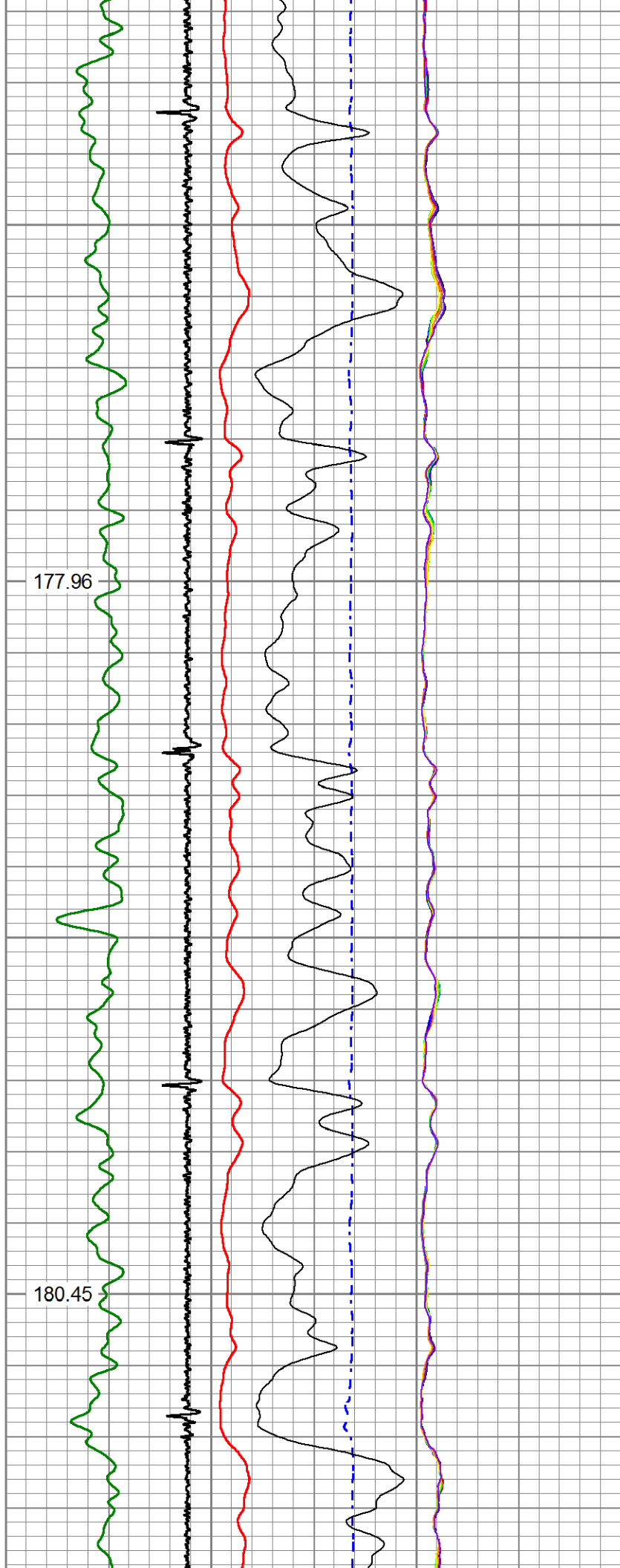
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5150

5200

177.96

180.45



5250

5300

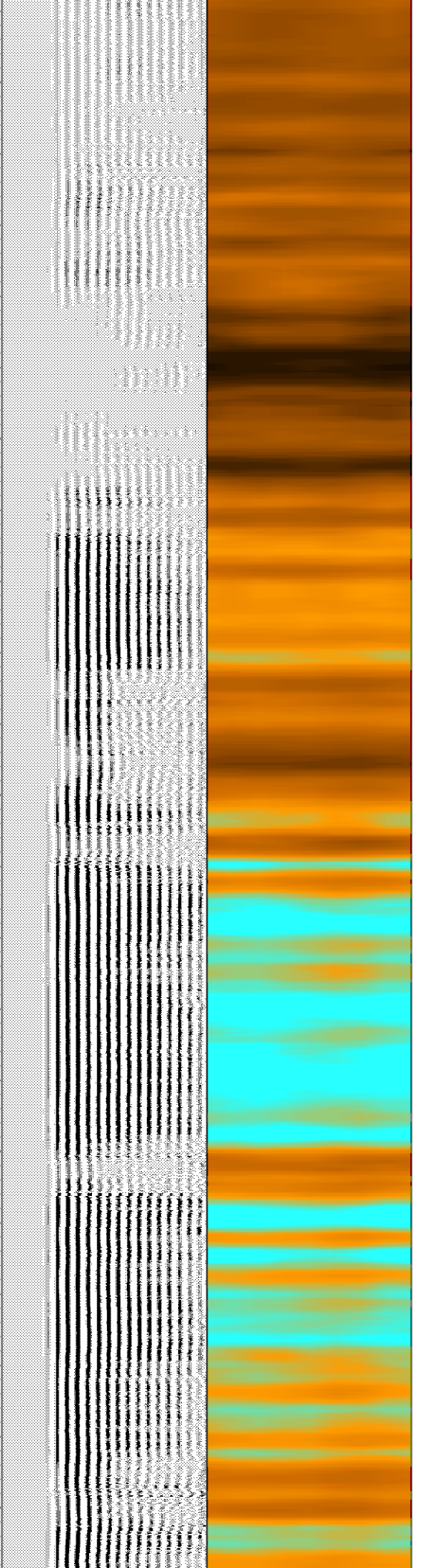
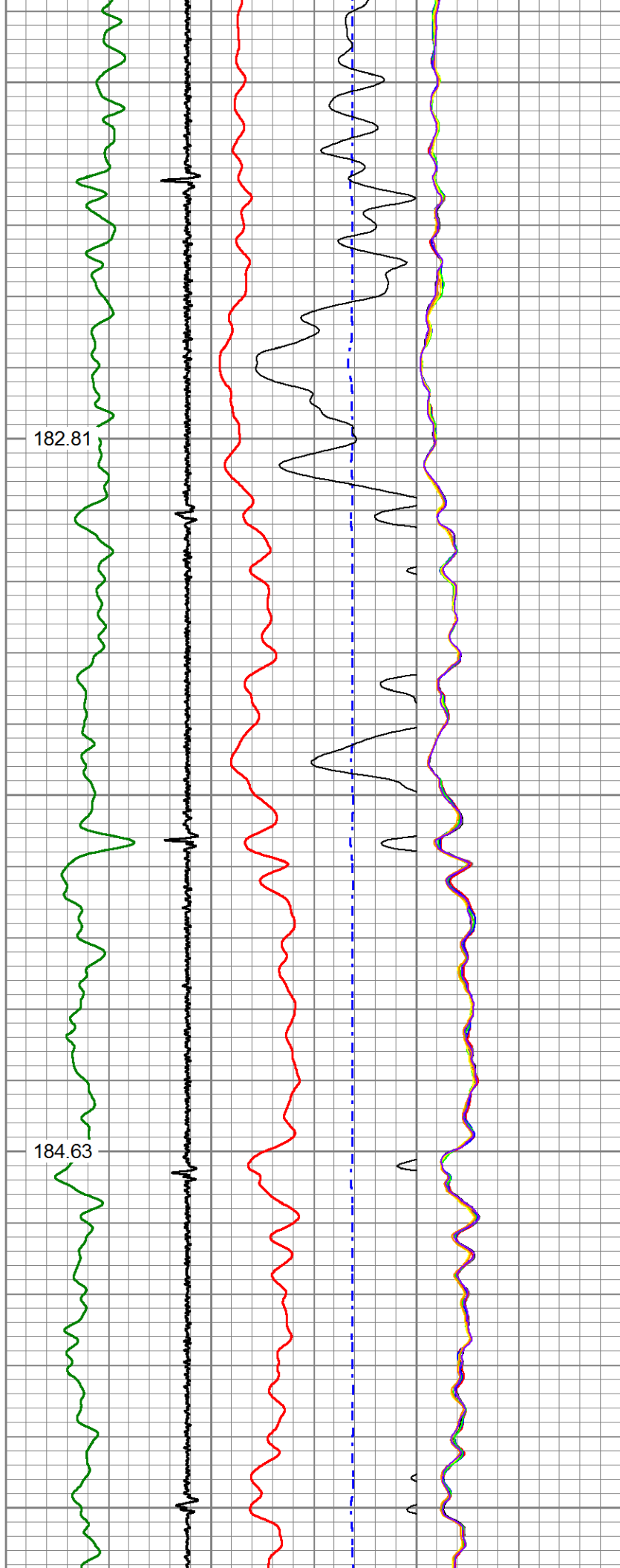
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5500

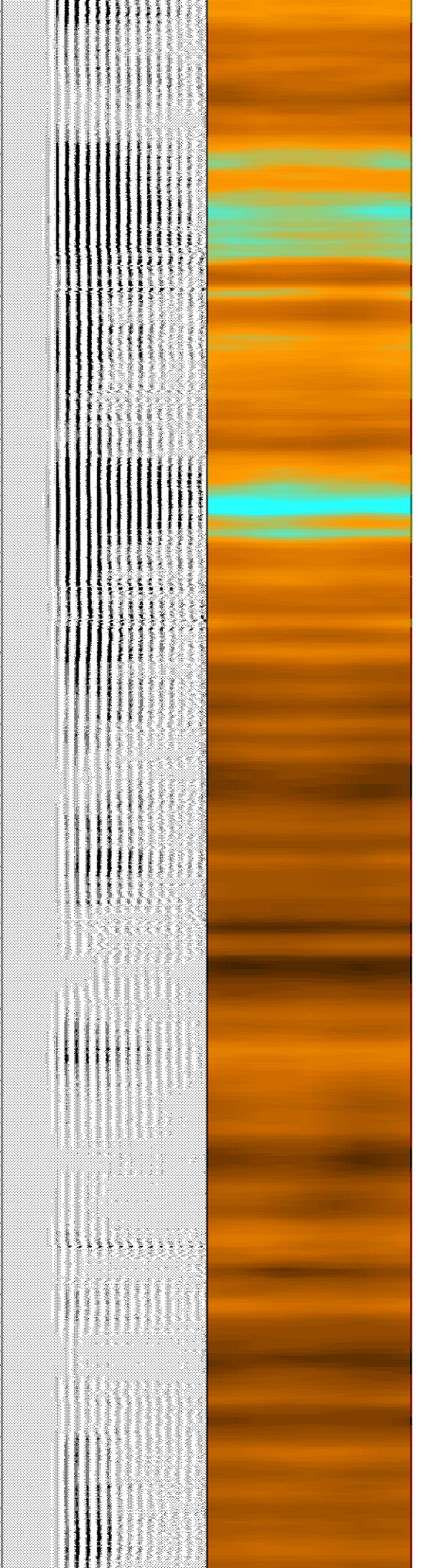
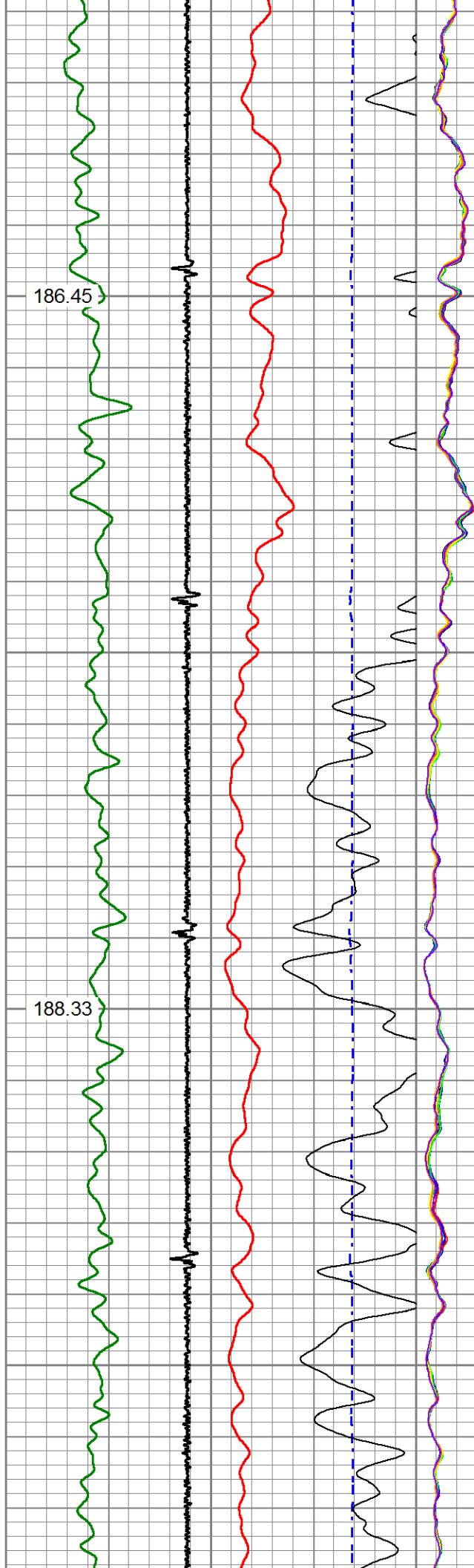
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5700

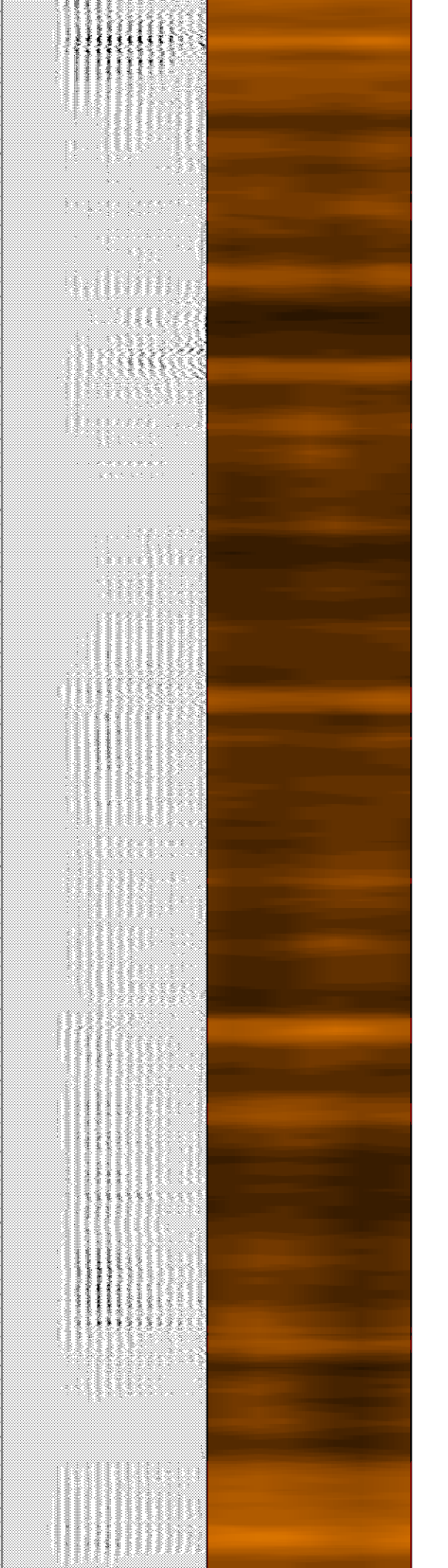
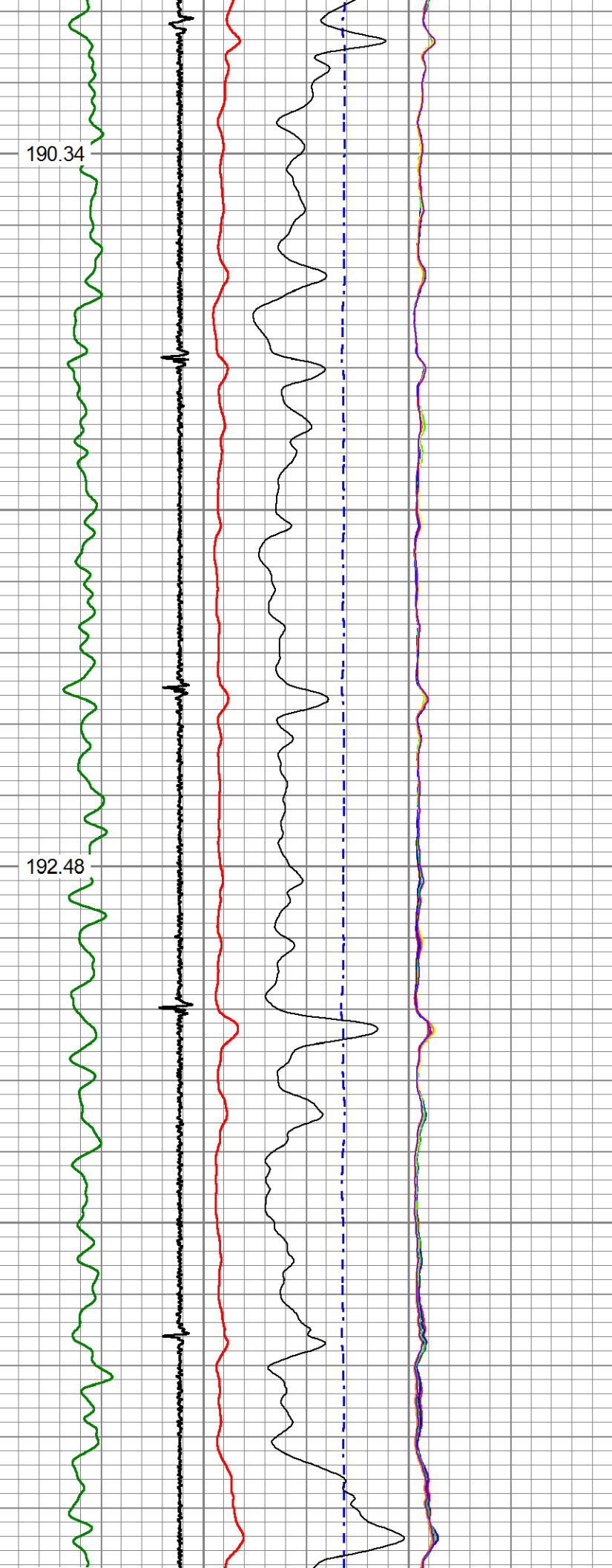
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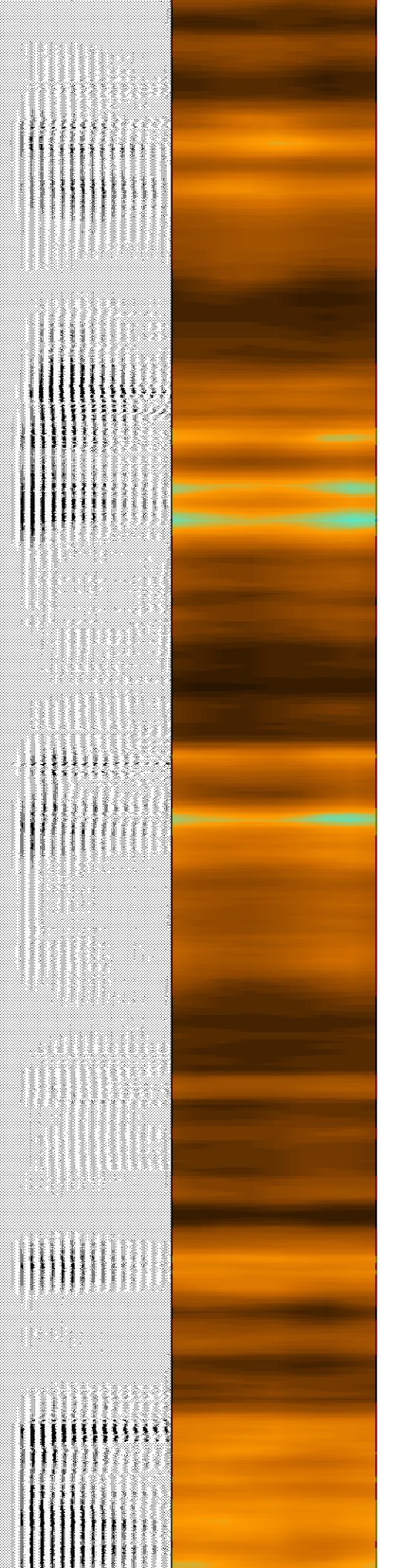
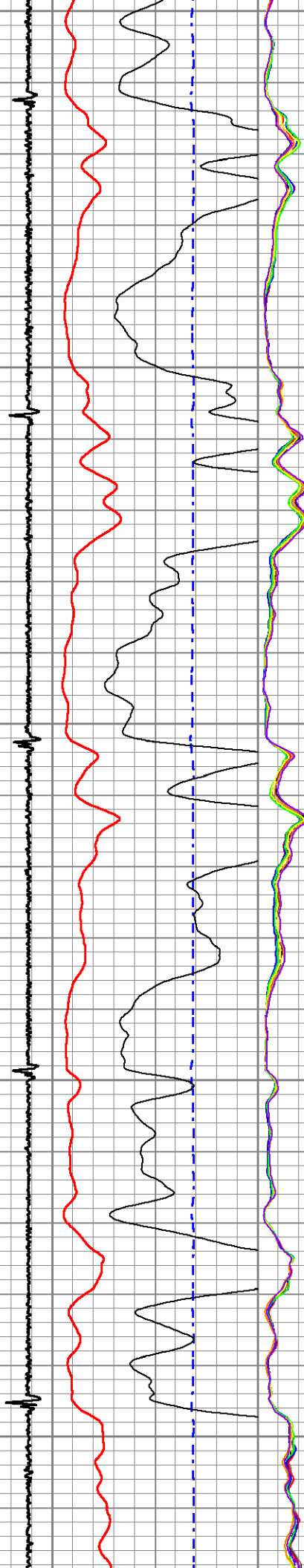
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6000
6050
6100

194.76
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6150

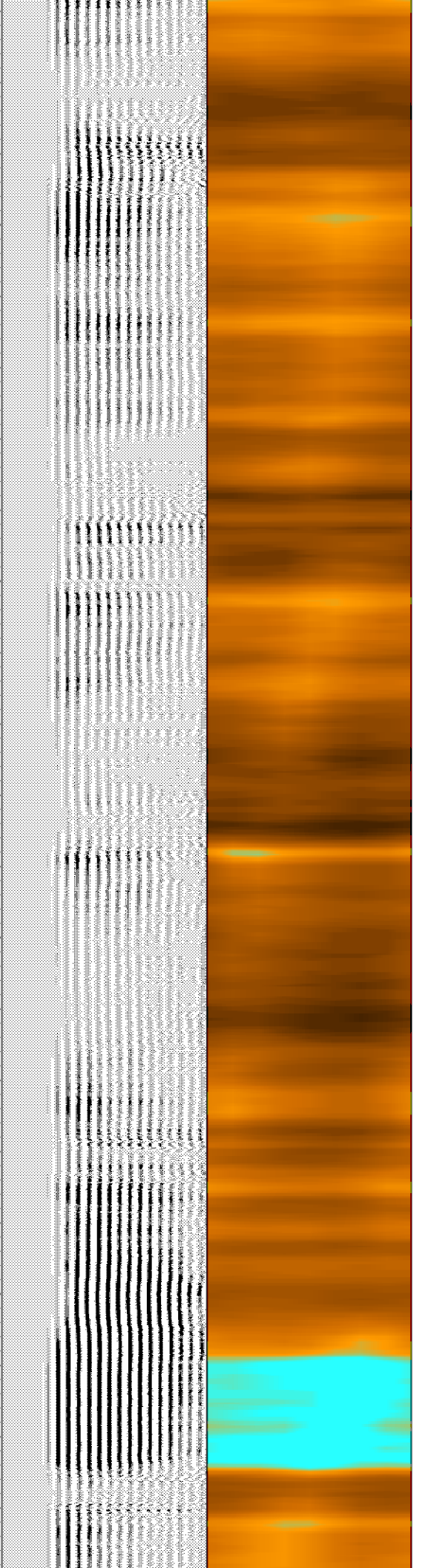
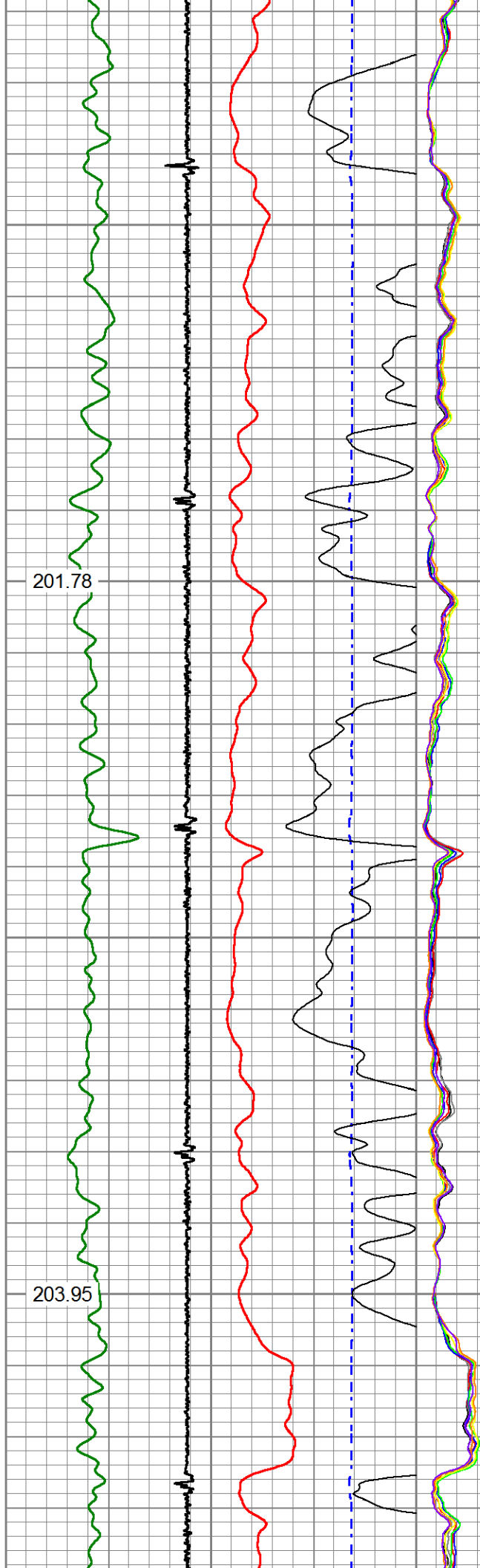
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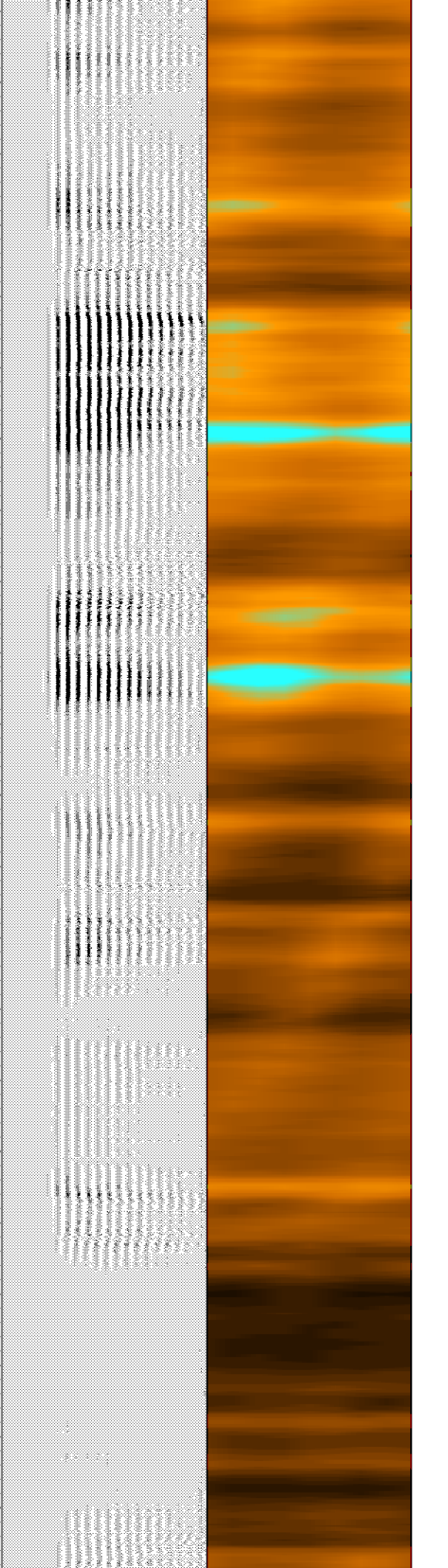
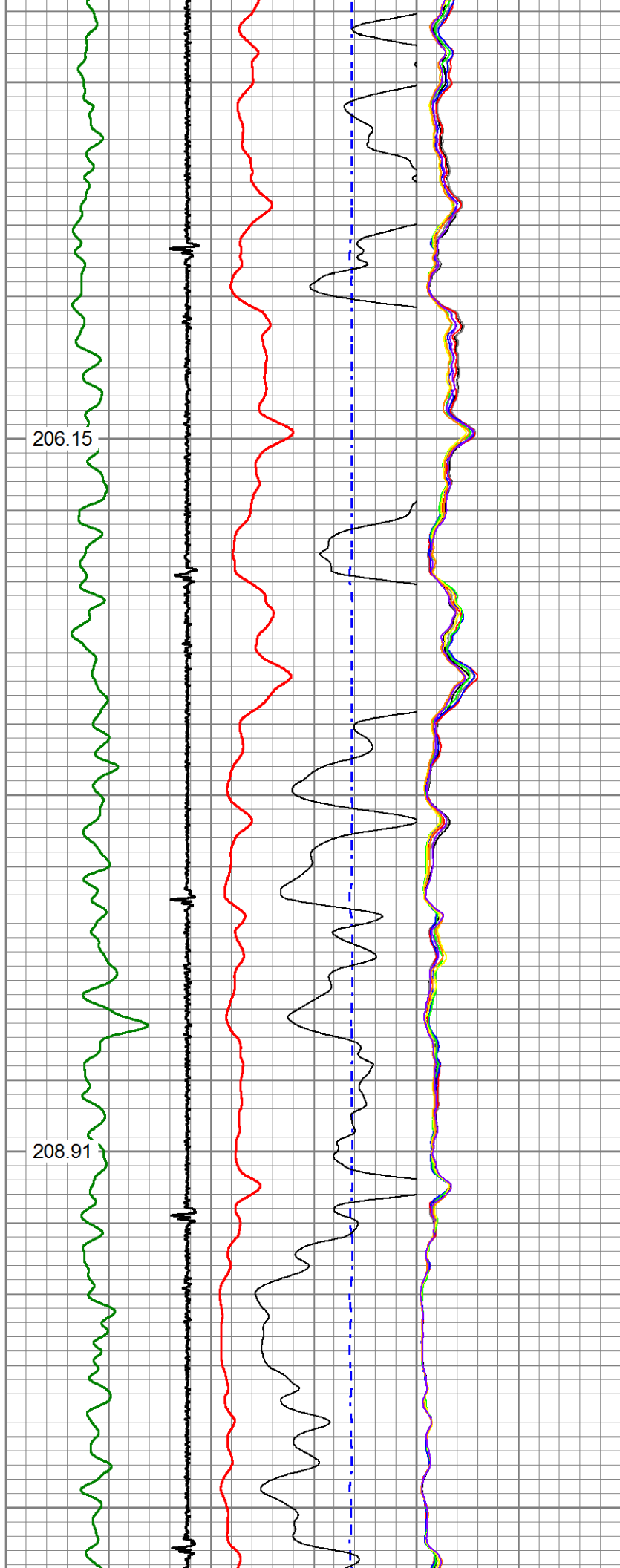
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6600

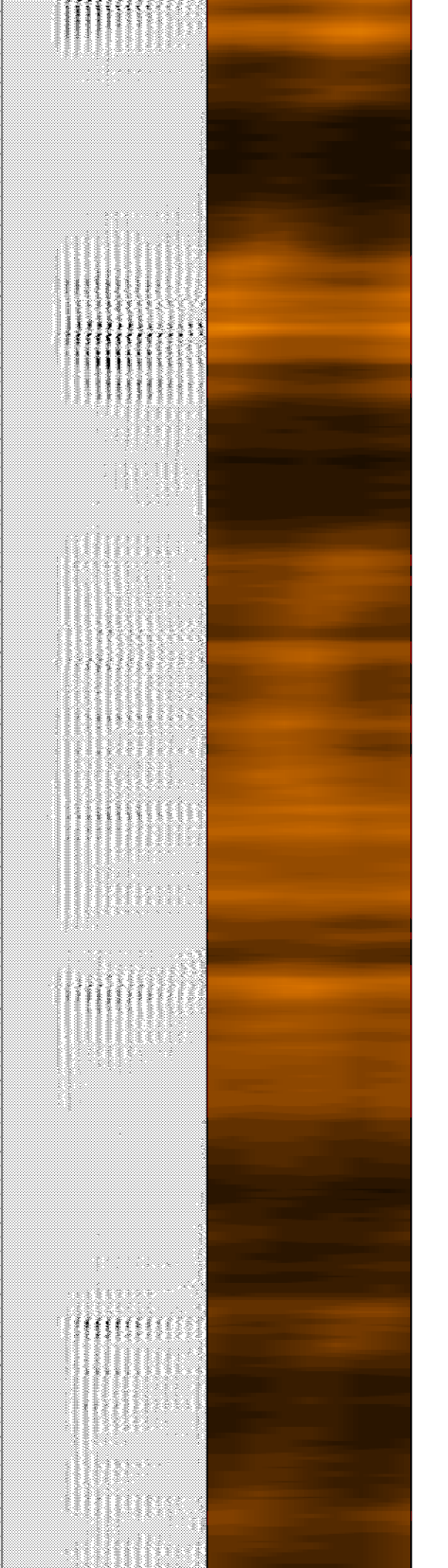
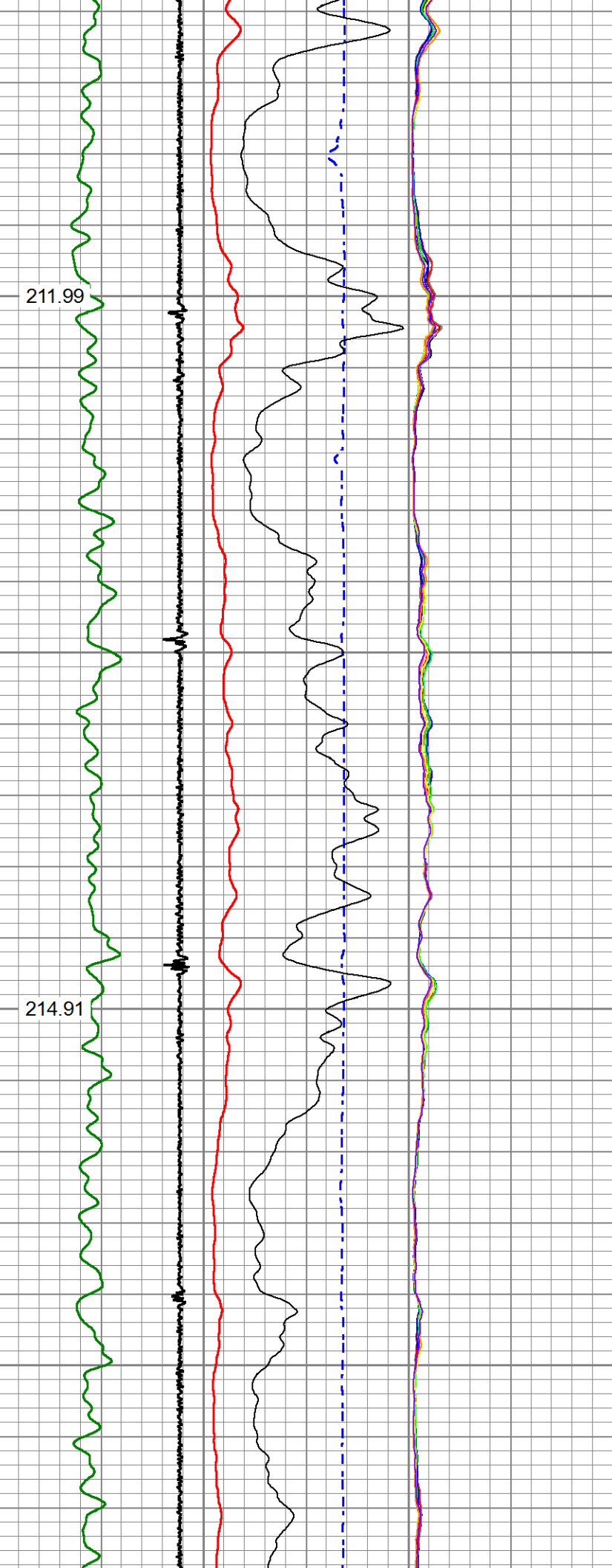
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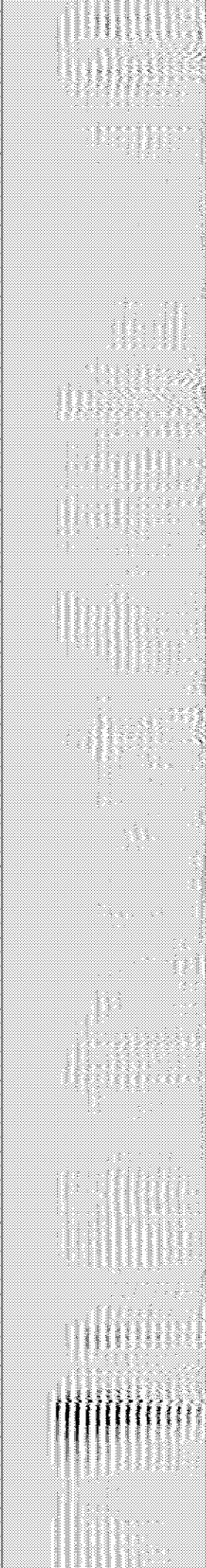
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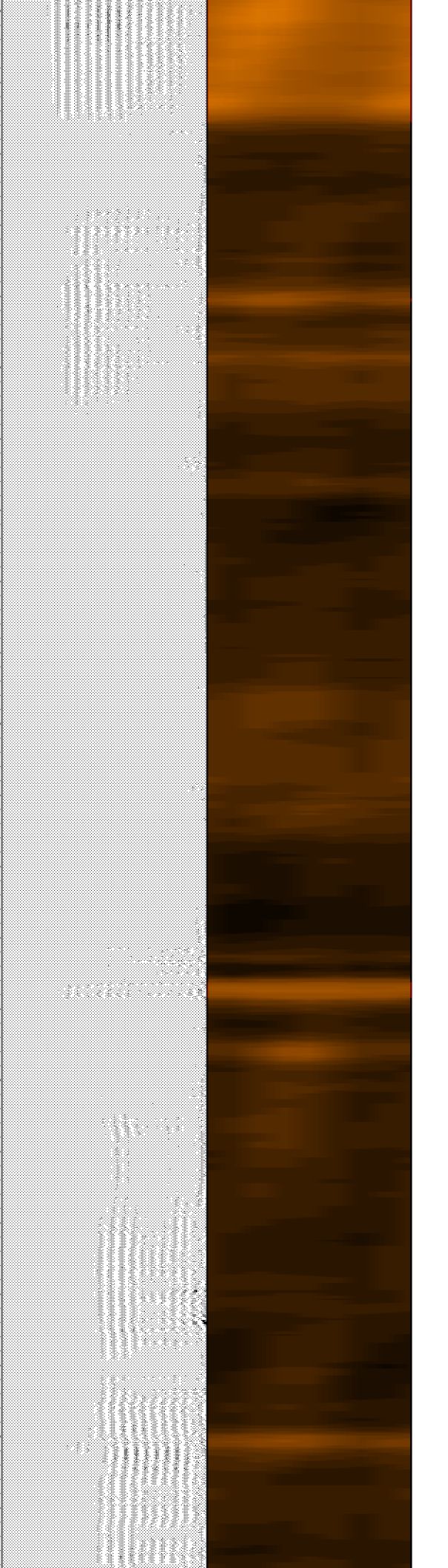
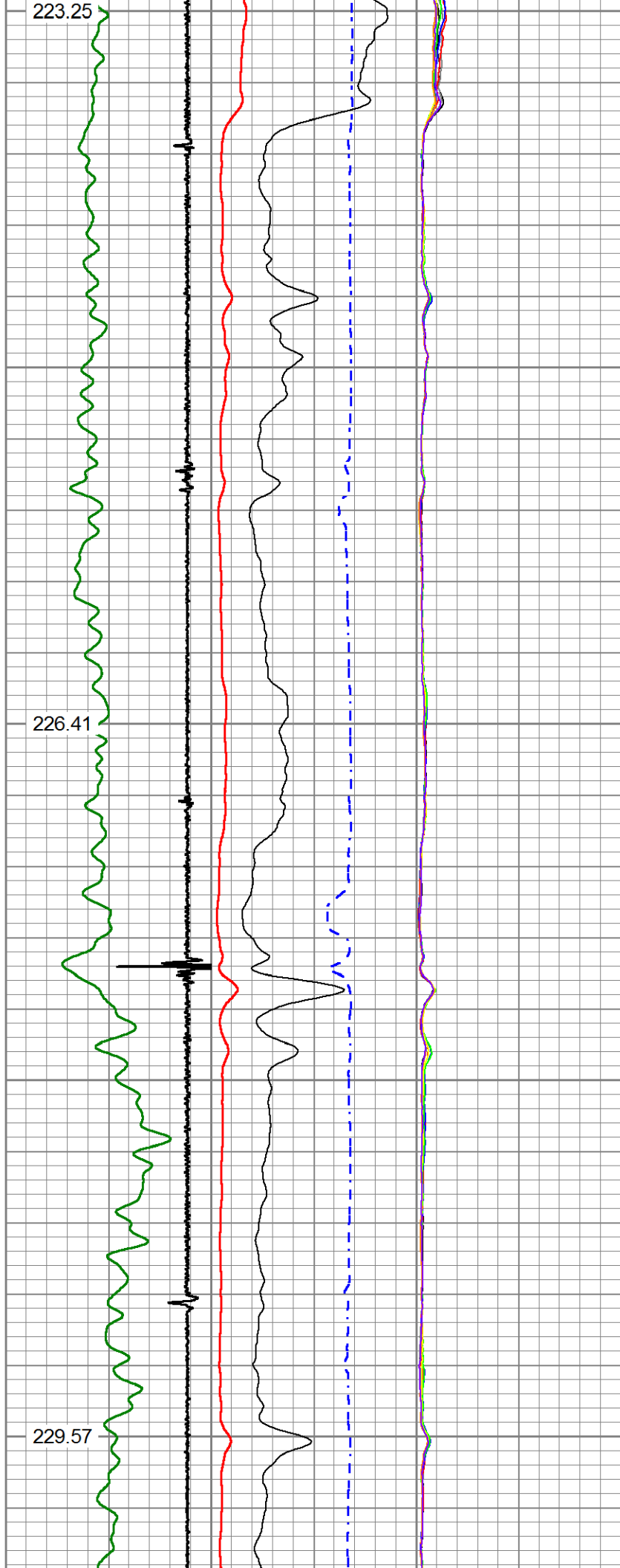
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7200

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7250

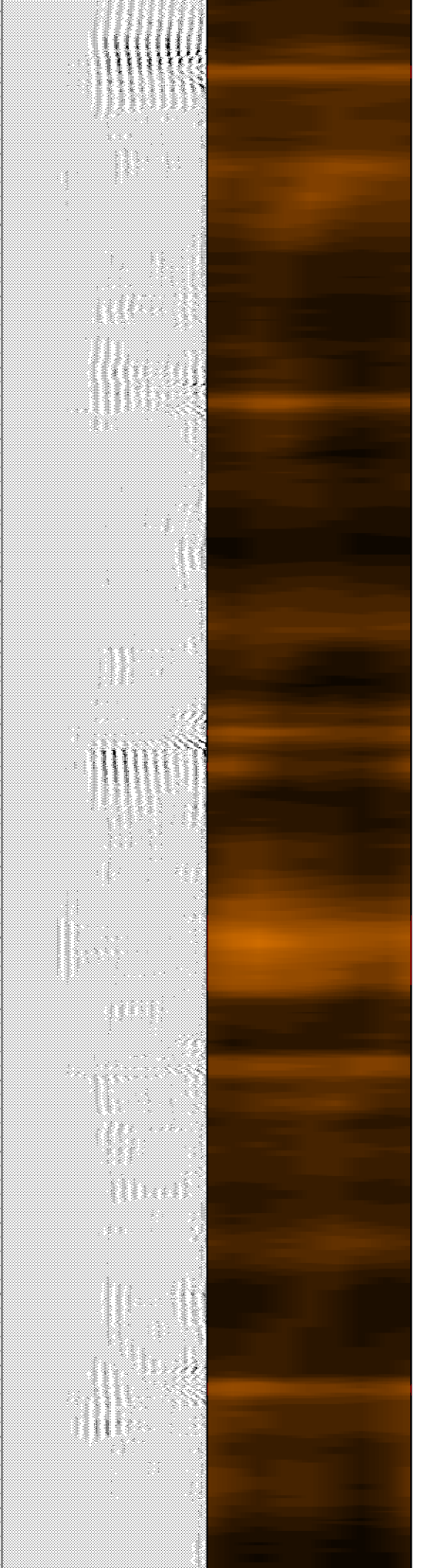
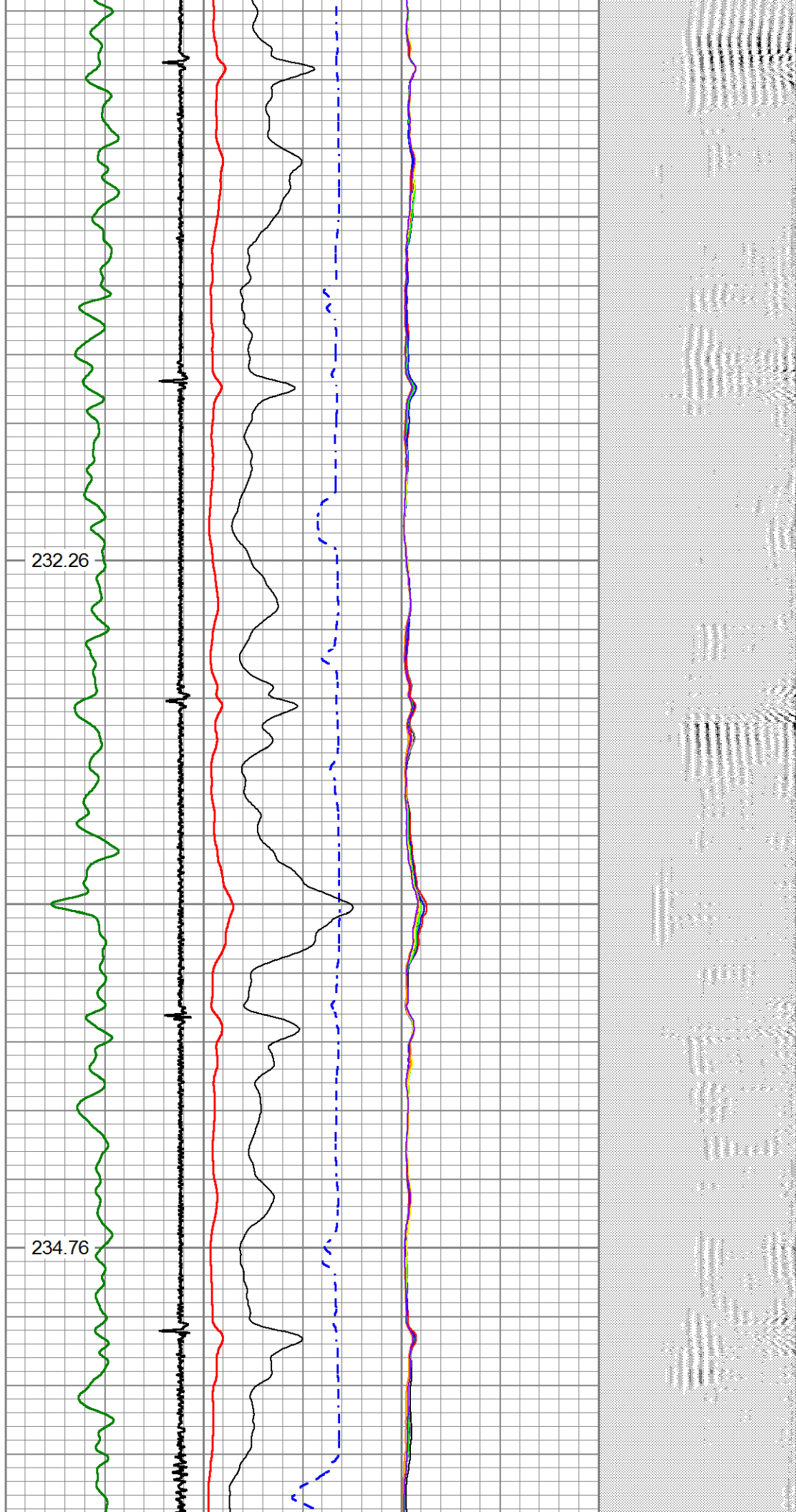
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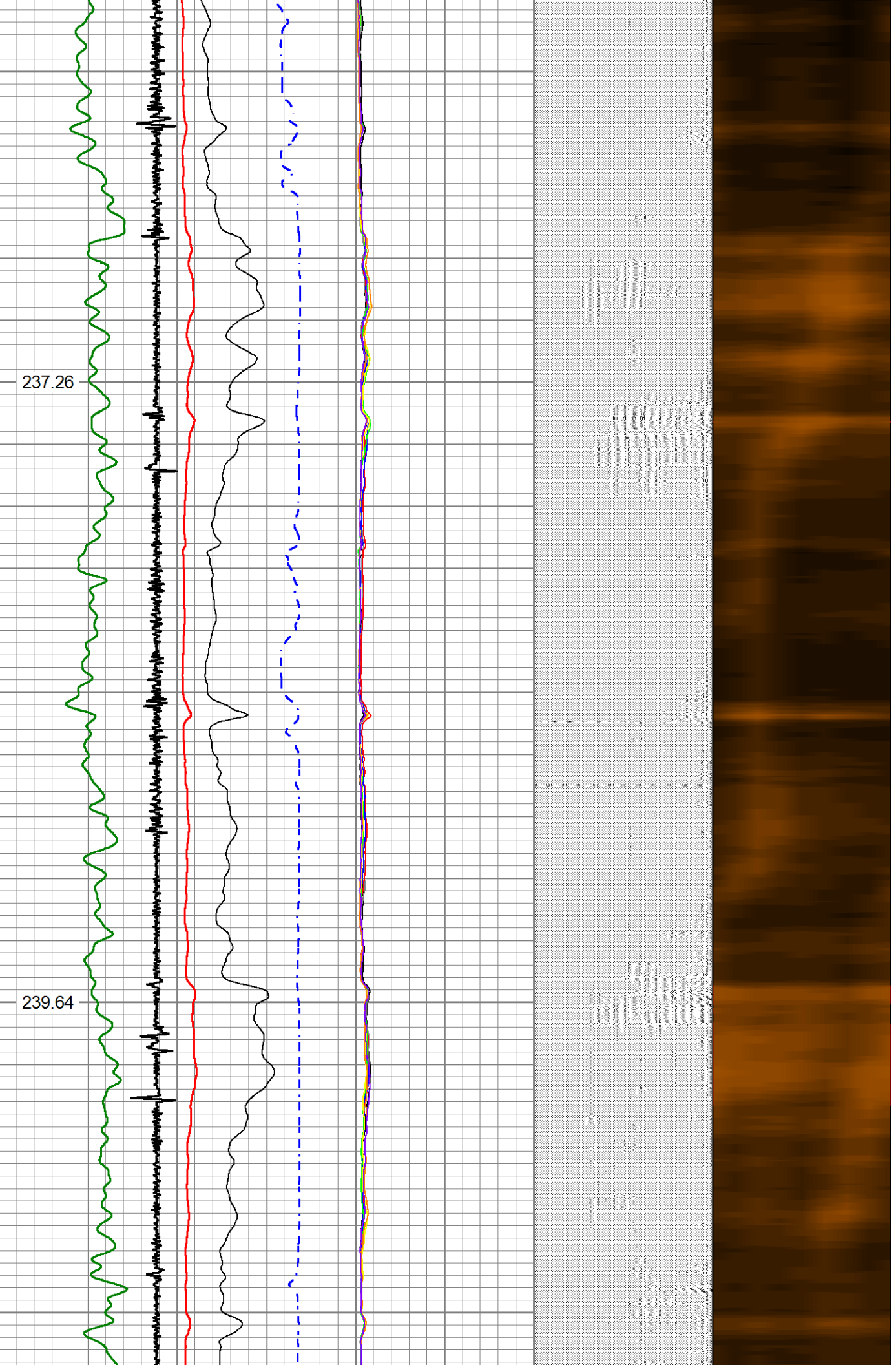
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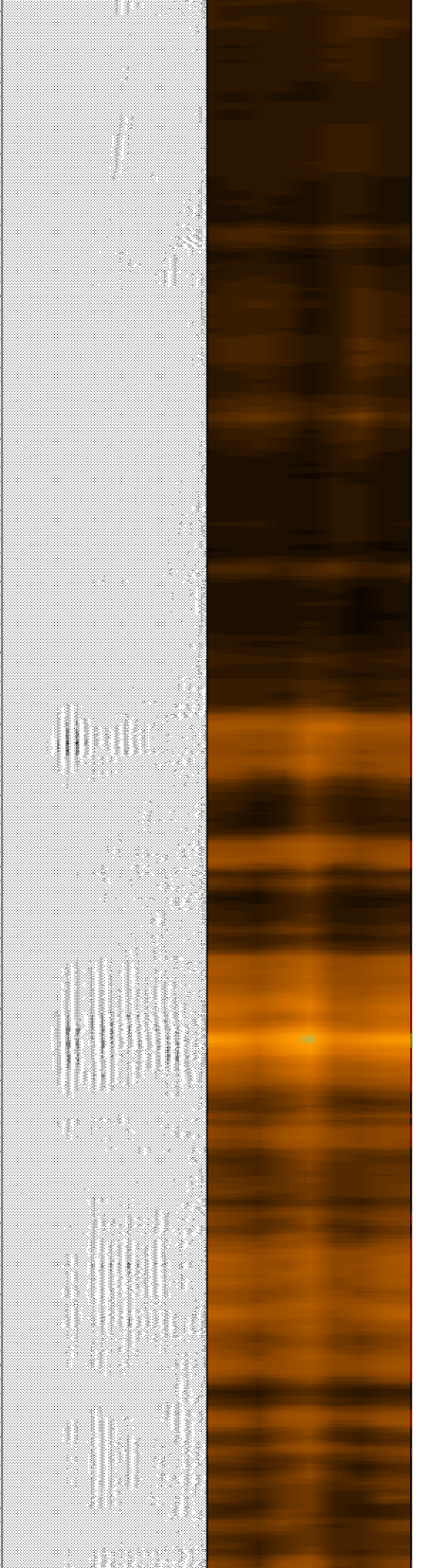
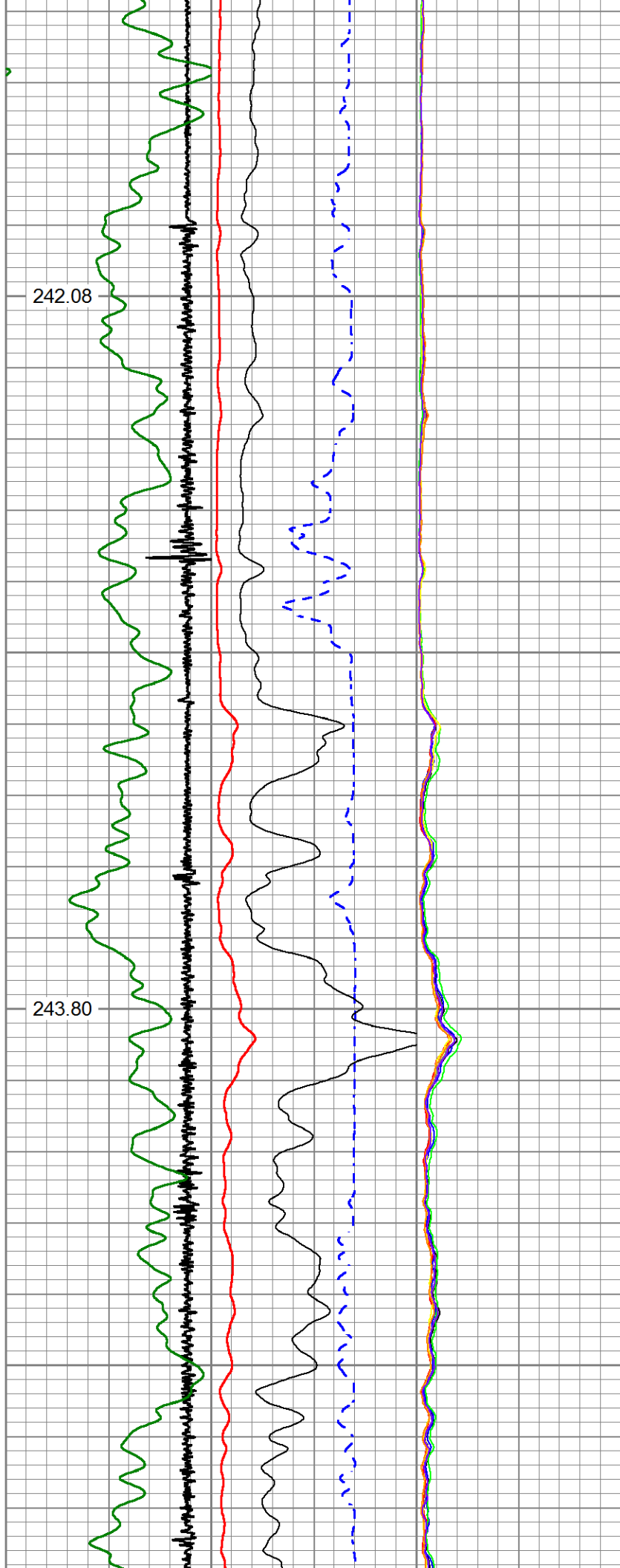
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7800

243.80

7850



7900

245.16

7950

GR

CCL\$1

TT

AMPS8

AMPS7

AMPS6

AMPS5

AMPS4

AMPS3

AMPS2

AMPS1

8000

246.16

AMP

AMPx5

8050

TOOL PICKUP

LOGGER'S TD@8054

5	CCL\$1	-0.625	0	AMP (mV)	100	0	AMPS1	150	200	VDL (usec)	1200	1	RADIAL MAP	8
0	GR (GAPI)	150	650	TT (usec)	150	0	AMPS2	150						
	GCT_TEMP		0	AMPx5 (mV)	20	0	AMPS3	150						
	(degF)					0	AMPS4	150						
						0	AMPS5	150						
						0	AMPS6	150						

0	AMPS6	150
0	AMPS7	150
0	AMPS8	150

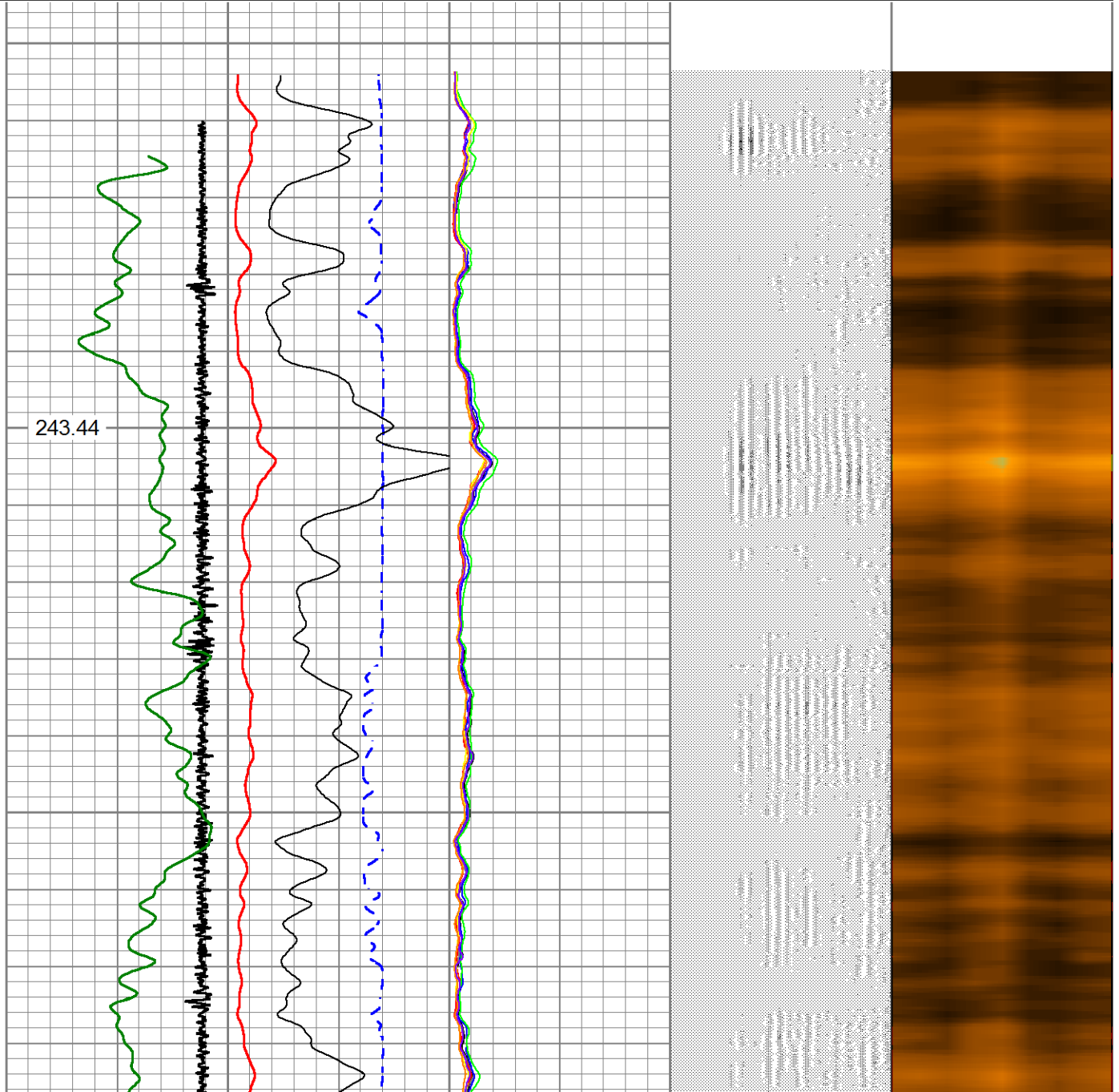
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Dataset Pathname pass2
Presentation Format civitas
Dataset Creation Fri Aug 23 11:58:11 2024
Charted by Depth in Feet scaled 1:240

5	CCL\$1	-0.625	0	AMP (mV)	100	0	AMPS1	150	200	VDL (usec)	1200	1	RADIAL MAP	8
0	GR (GAPI)	150	650	TT (usec)	150	0	AMPS2	150						
GCT_TEMP			0	AMPx5 (mV)	20	0	AMPS3	150						
(degF)						0	AMPS4	150						
						0	AMPS5	150						
						0	AMPS6	150						
						0	AMPS7	150						
						0	AMPS8	150						

7750

7800

7850



7900

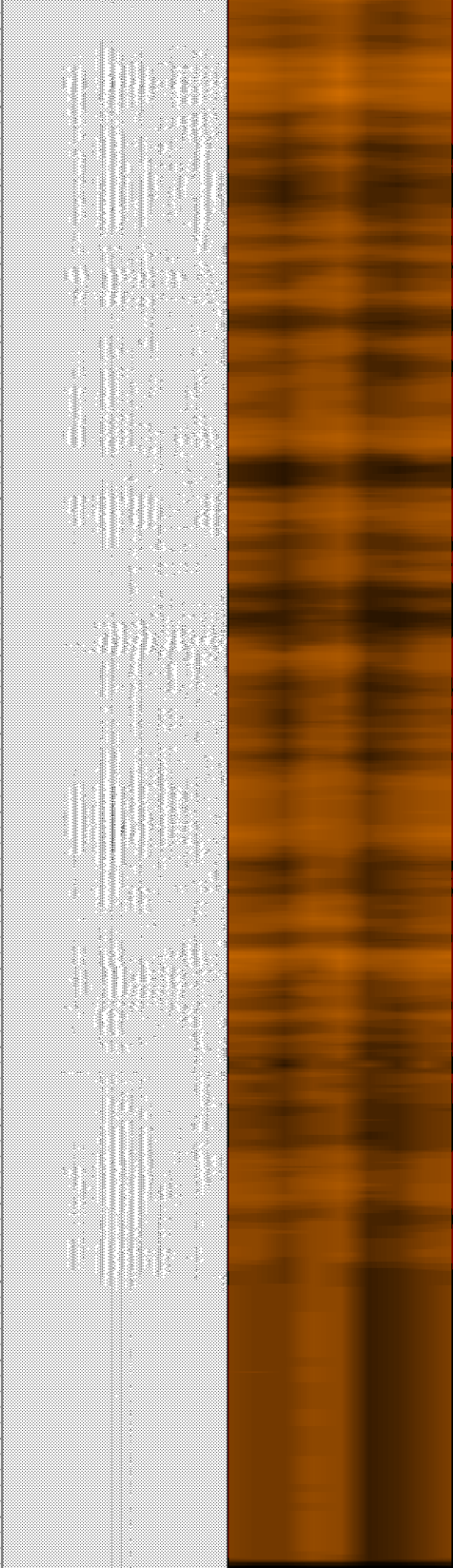
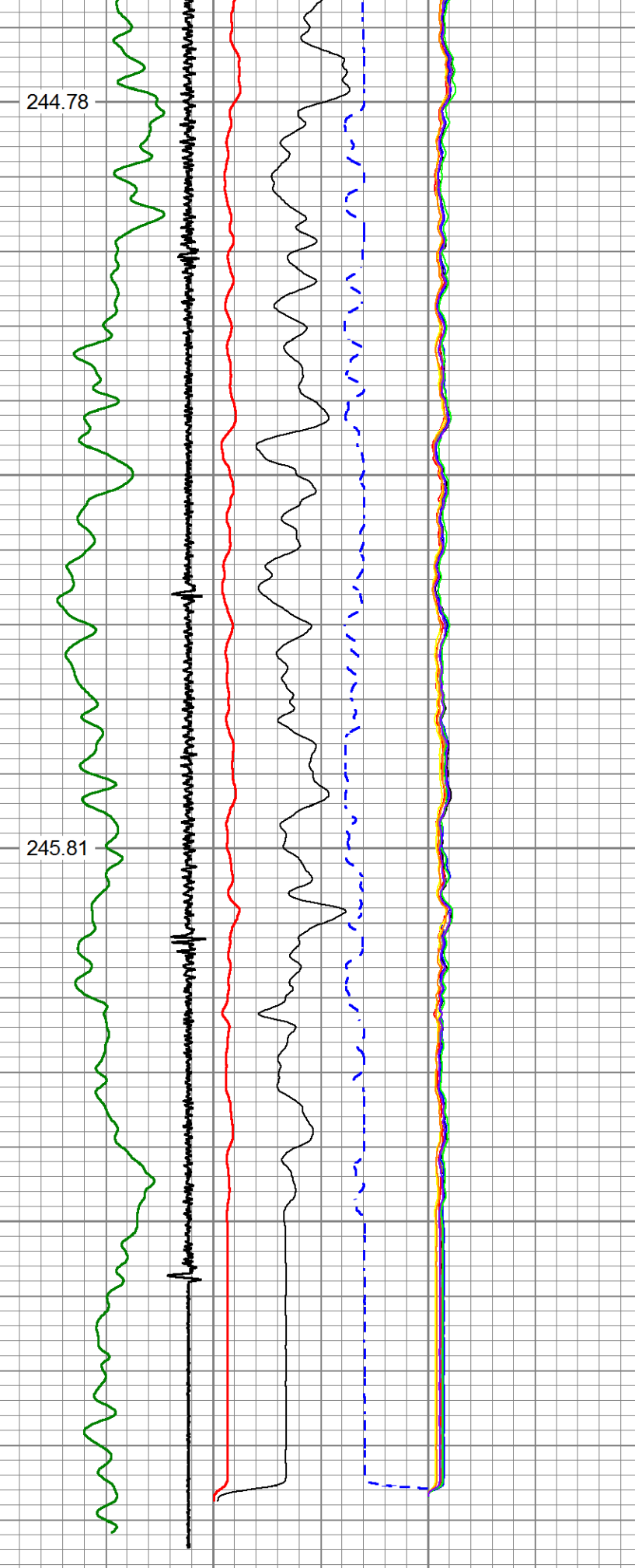
244.78

7950

8000

245.81

8050



5	CCL\$1	-0.625	0	AMP (mV)	100	0	AMPS1	150	200	VDL (usec)	1200	1	RADIAL MAP	8
0	GR (GAPI)	150	650	TT (usec)	150	0	AMPS2	150						

GCT_TEMP (degF)	0	AMPx5 (mV)	20	0	AMPS3	150
				0	AMPS4	150
				0	AMPS5	150
				0	AMPS6	150
				0	AMPS7	150
				0	AMPS8	150

Calibration Report

Database File cbl civitas lussing trust 4-64 19-20 2bh.db
Dataset Pathname pass3
Dataset Creation Fri Aug 23 12:03:03 2024

Gamma Ray Calibration Report

Serial Number: FW1905-098
Tool Model: GCT275-0000
Performed: Fri Aug 25 09:31:17 2023

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.6000 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: FW1905-052
Tool Model: Probe

Calibration Casing Diameter: 5.500 in
Calibration Depth: 141.892 ft

Master Calibration, performed Fri Aug 23 08:13:45 2024:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.011	2.086	0.800	71.921	34.284	0.407
CAL	2.219	2.190				
5'	0.025	2.109	0.800	71.921	34.117	-0.042
SUM						
S1	0.008	2.105	0.000	71.921	34.292	-0.262
S2	0.020	2.091	0.000	71.921	34.730	-0.711
S3	0.018	2.103	0.000	71.921	34.494	-0.609
S4	0.016	2.079	0.000	71.921	34.852	-0.550
S5	0.013	2.051	0.000	71.921	35.287	-0.467
S6	0.015	2.046	0.000	71.921	35.413	-0.532
S7	0.024	2.023	0.000	71.921	35.986	-0.880
S8	0.016	2.102	0.000	71.921	34.492	-0.566

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	2.219	2.190	1.000	0.000

Air Zero Calibration, performed Wed Aug 21 15:15:51 2024:

	Raw (v)	Calibrated (v)	Results
	<u>Zero</u>	<u>Zero</u>	<u>Offset</u>
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