



TEMPERATURE LOG  
CCL

Company	WPX ENERGY						
Well	FEDERAL RU 32 - 8						
Field	RULISON						
County	GARFIELD		State	COLORADO			
Location:	API # : 05 - 045 - 22797			Other Services			
SEC 8		TWP 7s	RGE 93w				
Permanent Datum	G.L.	LAT : 39.465424		Elevation K.B. 7736' D.F. G.L. 7736'			
Log Measured From	K.B.	LONG: -107.800912					
Drilling Measured From	K.B.						
Date	01 - 05 - 2016						
Run Number	ONE						
Depth Driller	10340'						
Present Depth Driller	N/A						
Depth Logger	10305'						
Bottom Logged Interval	10305'						
Top Log Interval	SURFACE						
Fluid Level	SURFACE						
Type Fluid	WATER						
Max. Recorded Temp.	186 DEG F						
Estimated Cement Top	5043'						
Equipment Number	216						
Location	GRAND JCT.						
Recorded By	INGRAM		FERNANDEZ				
Witnessed By	MR. TED						
Borehole Record							
Run Number	Bit	From	To	Size	Casing Record		
					Weight	From	To

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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.

WARRIOR 7.0 SOFTWARE - Comments

NOTE: LOG WAS DEPTH CORRELATED USING KB OF 24'

SHORT JOINT: 6320' TO 6343'

MAIN PASS 5" = 100'

CSG PSI = STATIC

Calibration Report

Database File: 010516\_wpxenergy\_fed\_ru\_32\_8.db  
Dataset Pathname: main/pass2  
Dataset Creation: Wed Jan 06 02:04:55 2016 by Calc SCH 120430

# Temperature Calibration Report

Serial Number: 10008731  
 Tool Model: 016  
 Performed: Sat Feb 22 19:12:03 2014

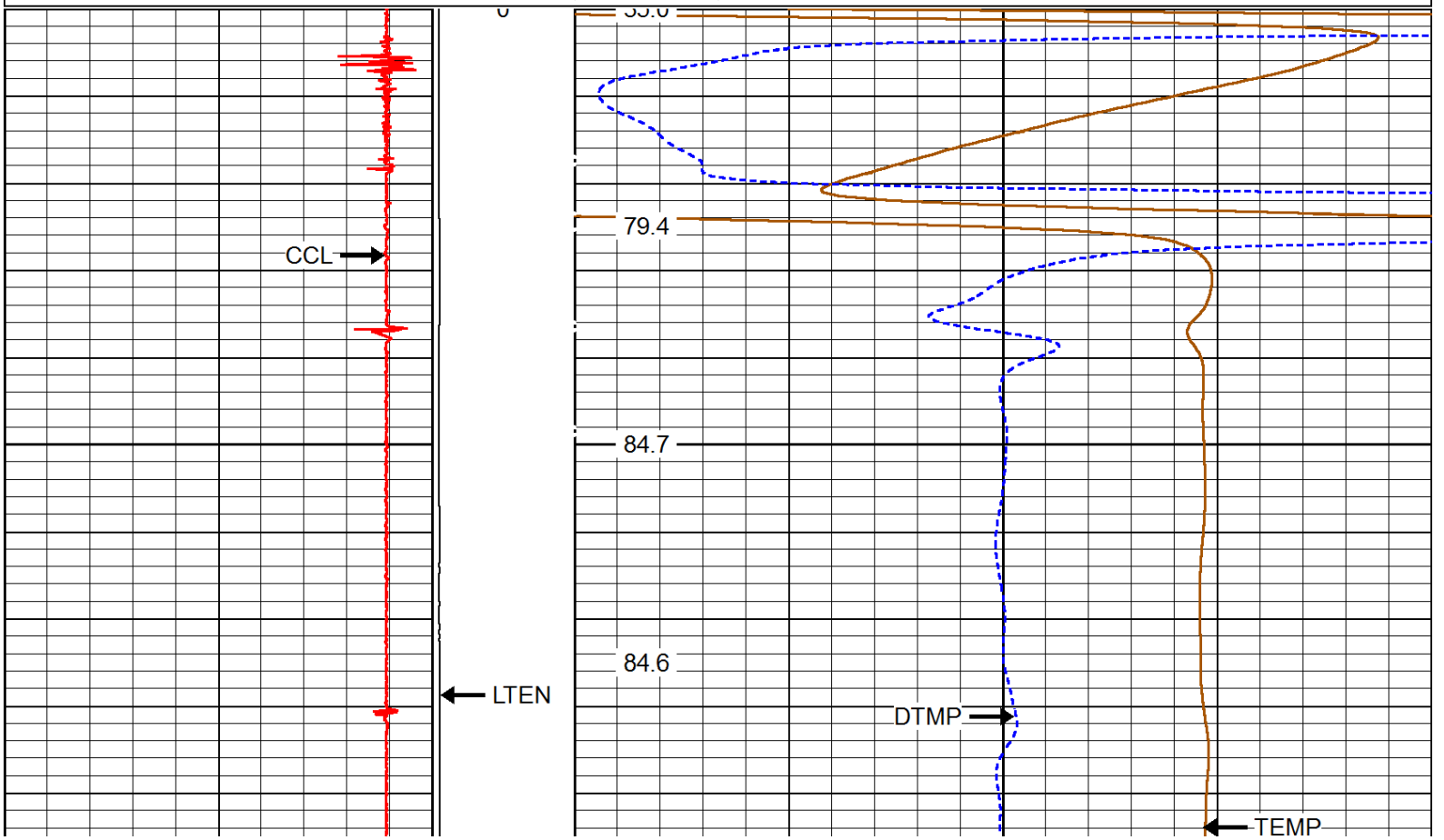
Point #	Reading		Reference	
1	12555.00	cps	71.24	degF
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3	40841.00	cps	246.56	degF
4	52725.00	cps	319.28	degF
5	58490.00	cps	355.39	degF
6		cps		degF
7		cps		degF
8		cps		degF
9		cps		degF
10		cps		degF

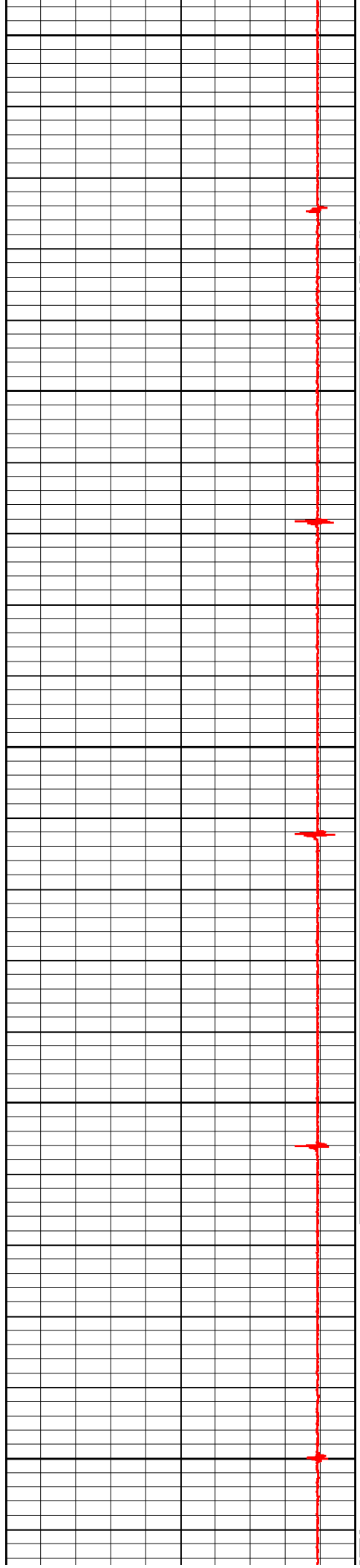


## MAIN PASS

Database File: 010516\_wpxenergy\_fed\_ru\_32\_8.db  
 Dataset Pathname: main/pass2  
 Presentation Format: rmws\_tem  
 Dataset Creation: Wed Jan 06 02:04:55 2016 by Calc SCH 120430  
 Charted by: Depth in Feet scaled 1:240

0	CCL	20000	LTEN	70	TEMP (degF)	90
			0 (lb)3000	-1	DTMP (degF)	1
				TEMP (degF)		





100

200

300

84.7

84.8

85.1

85.3

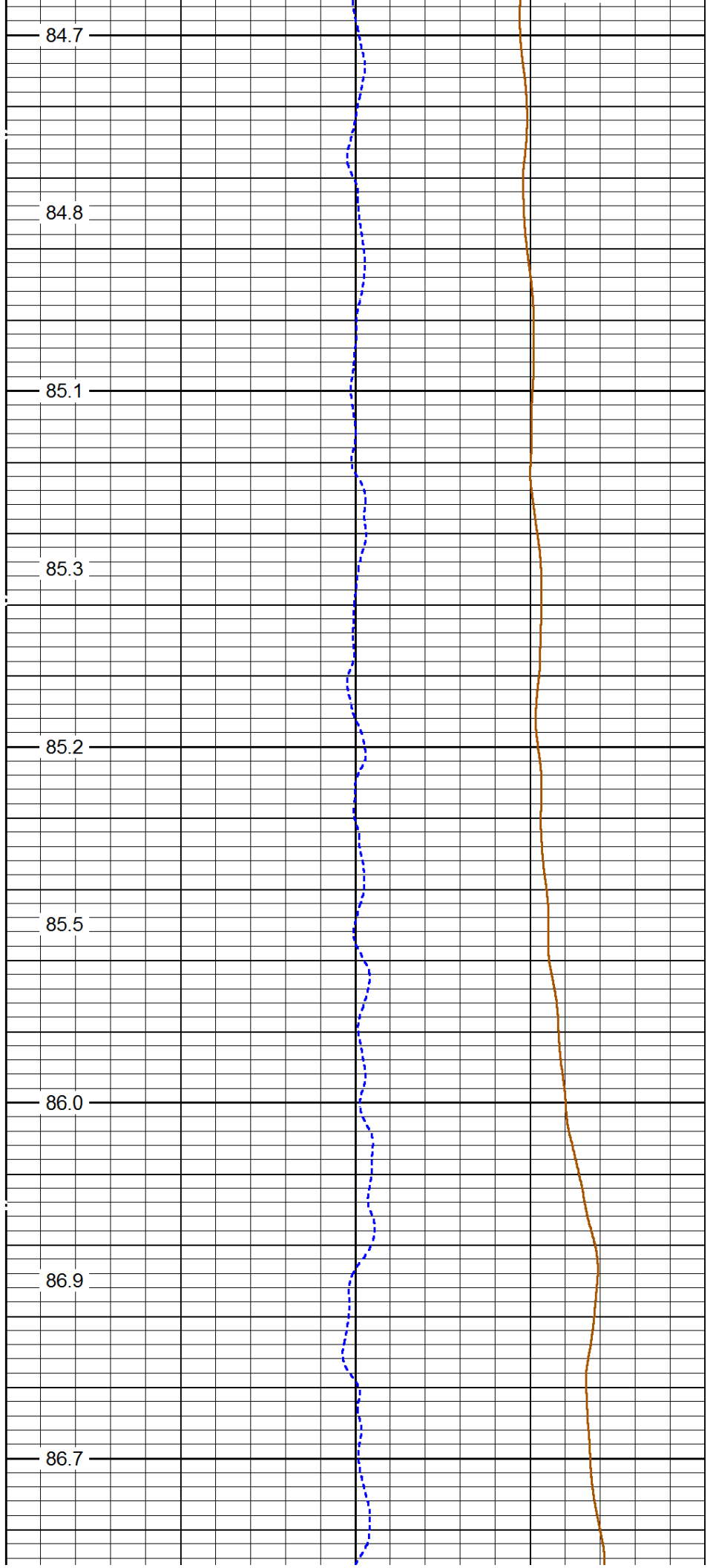
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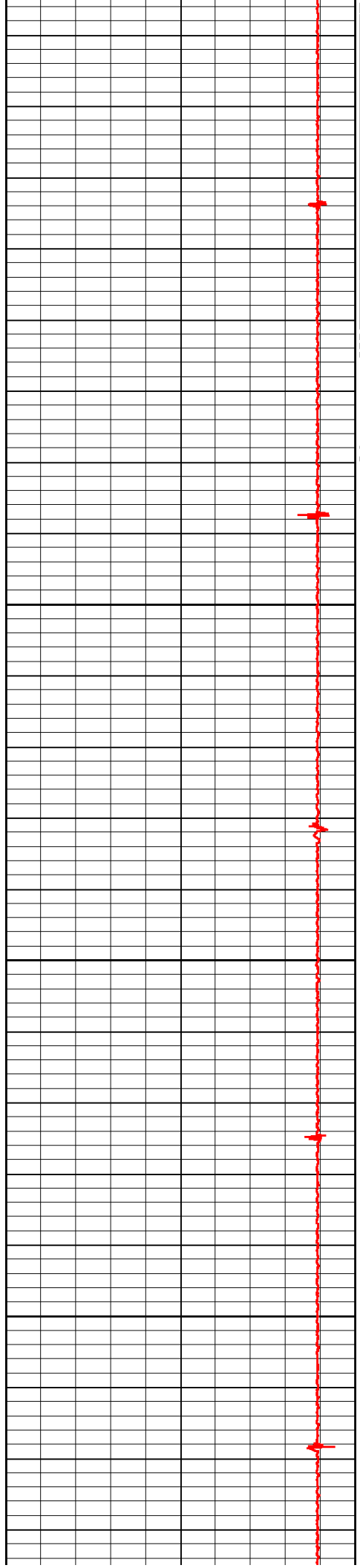
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86.0

86.9

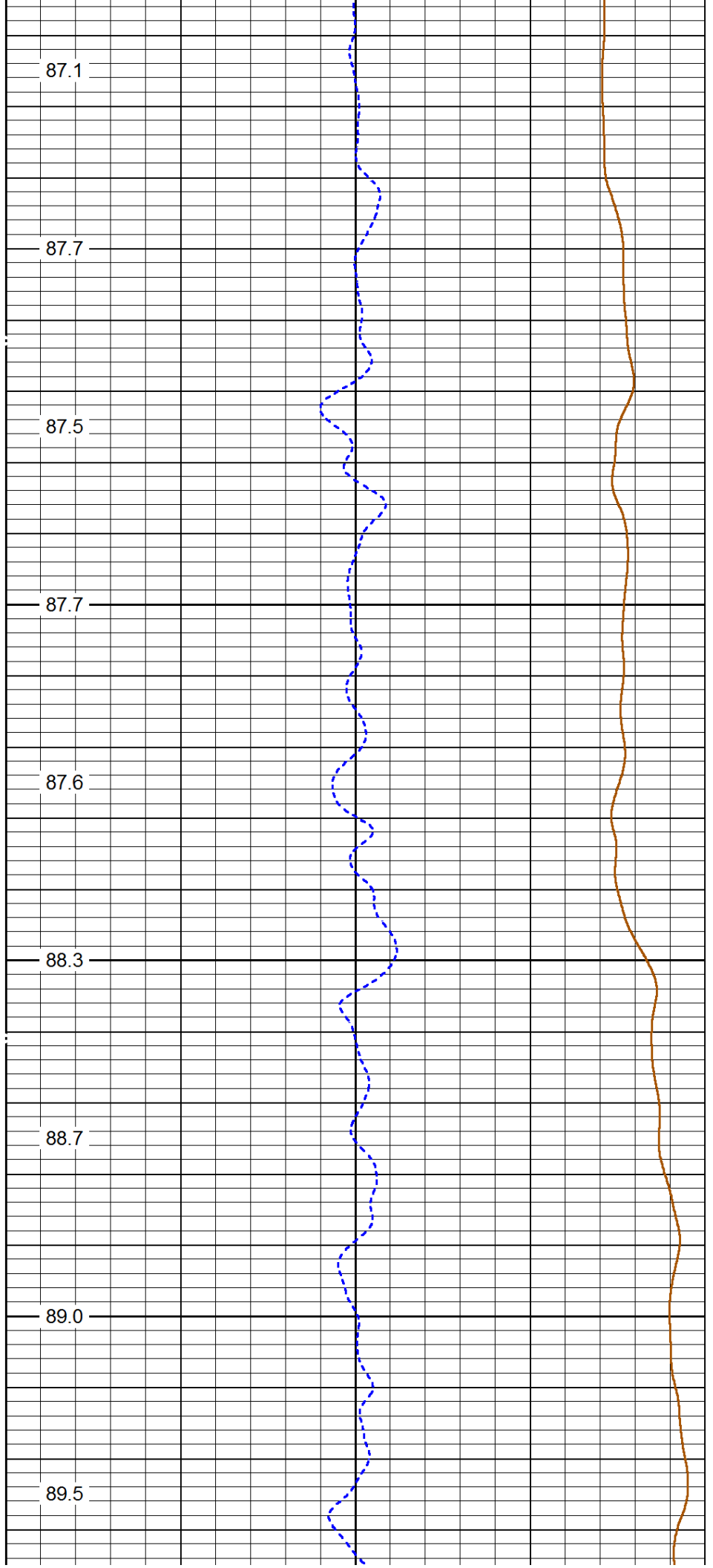
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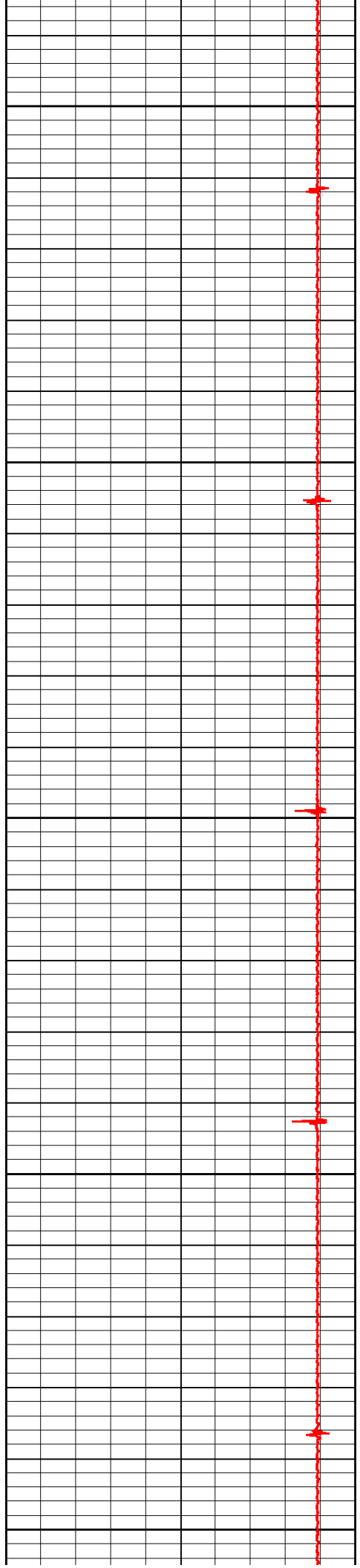




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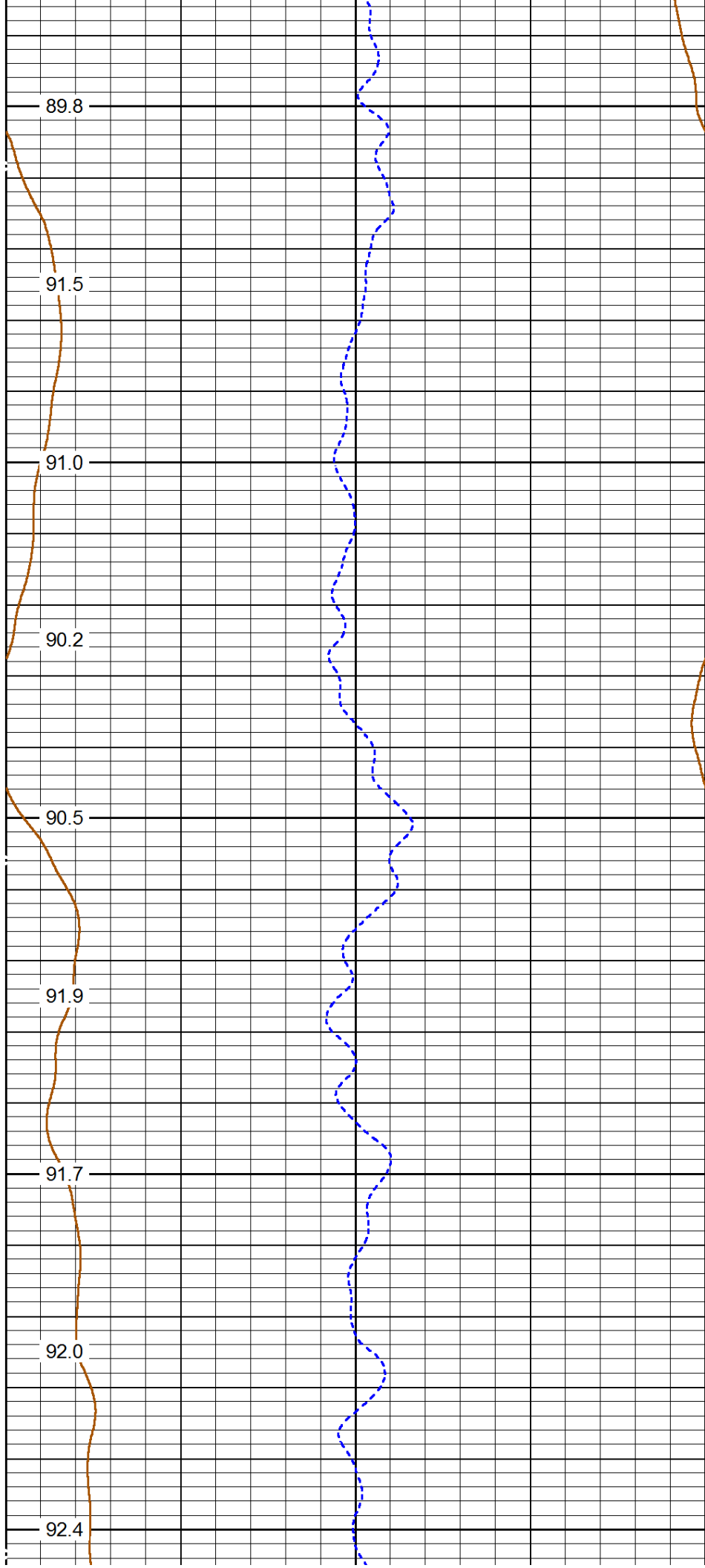
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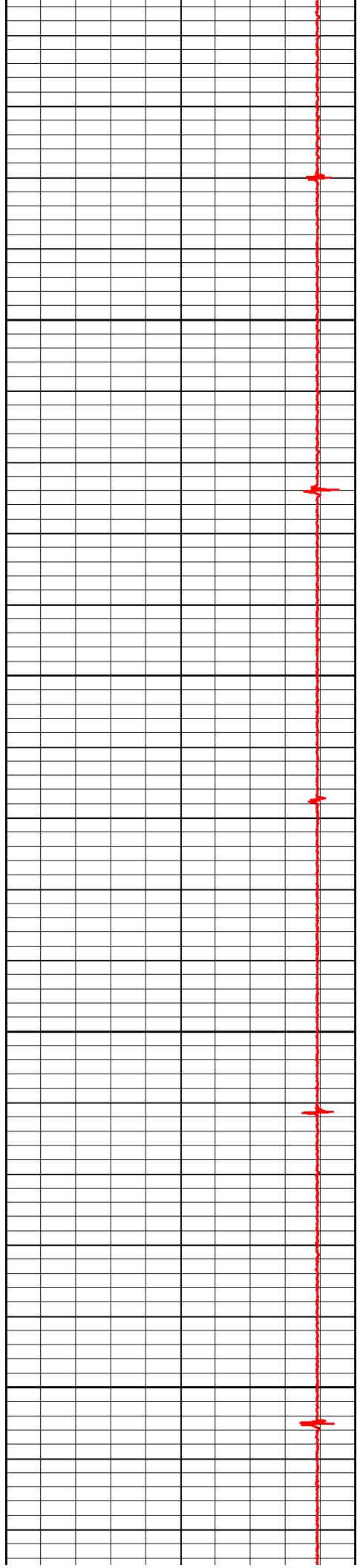




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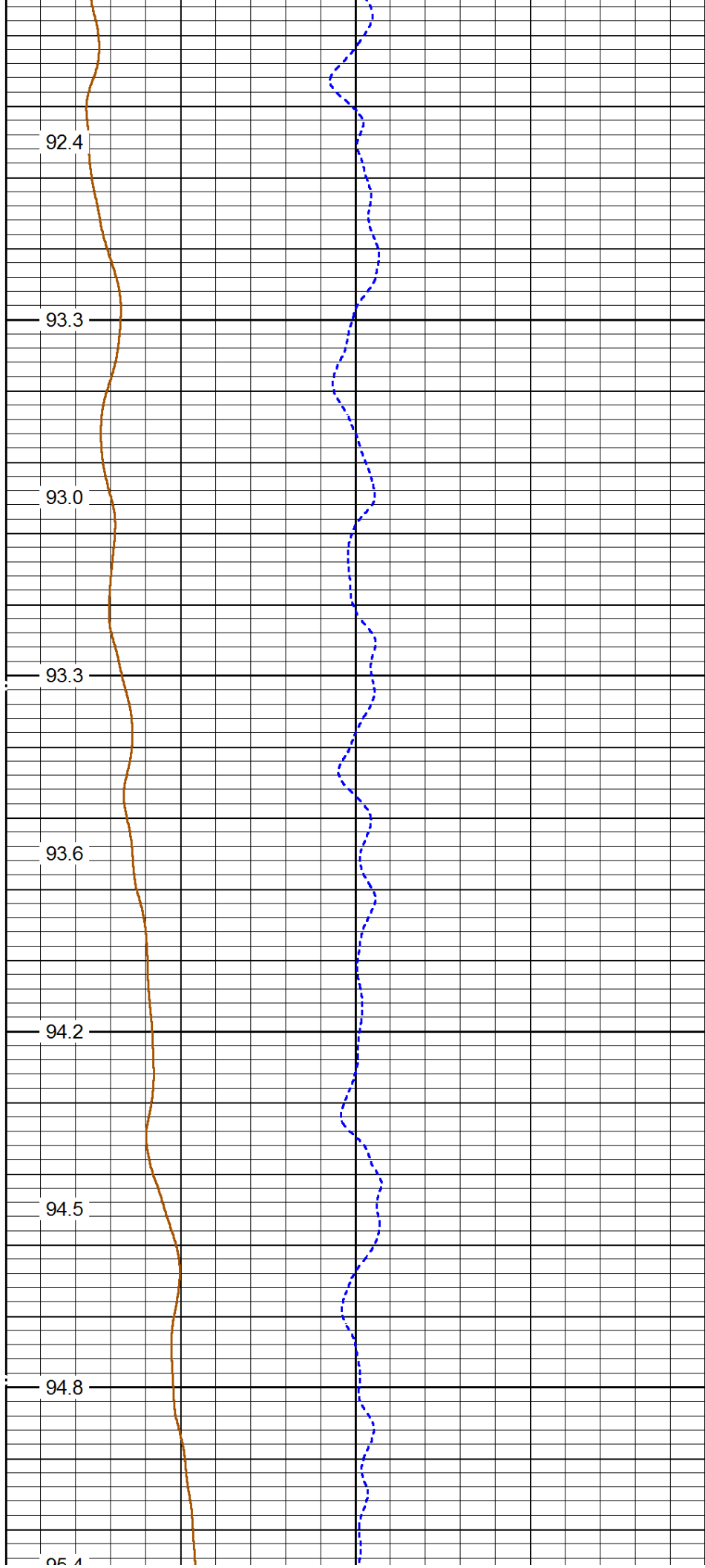
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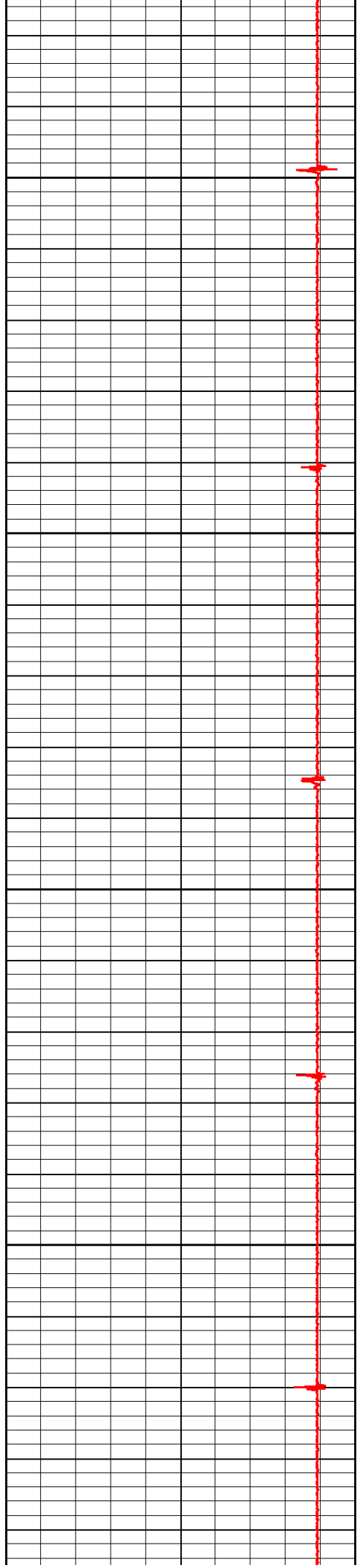




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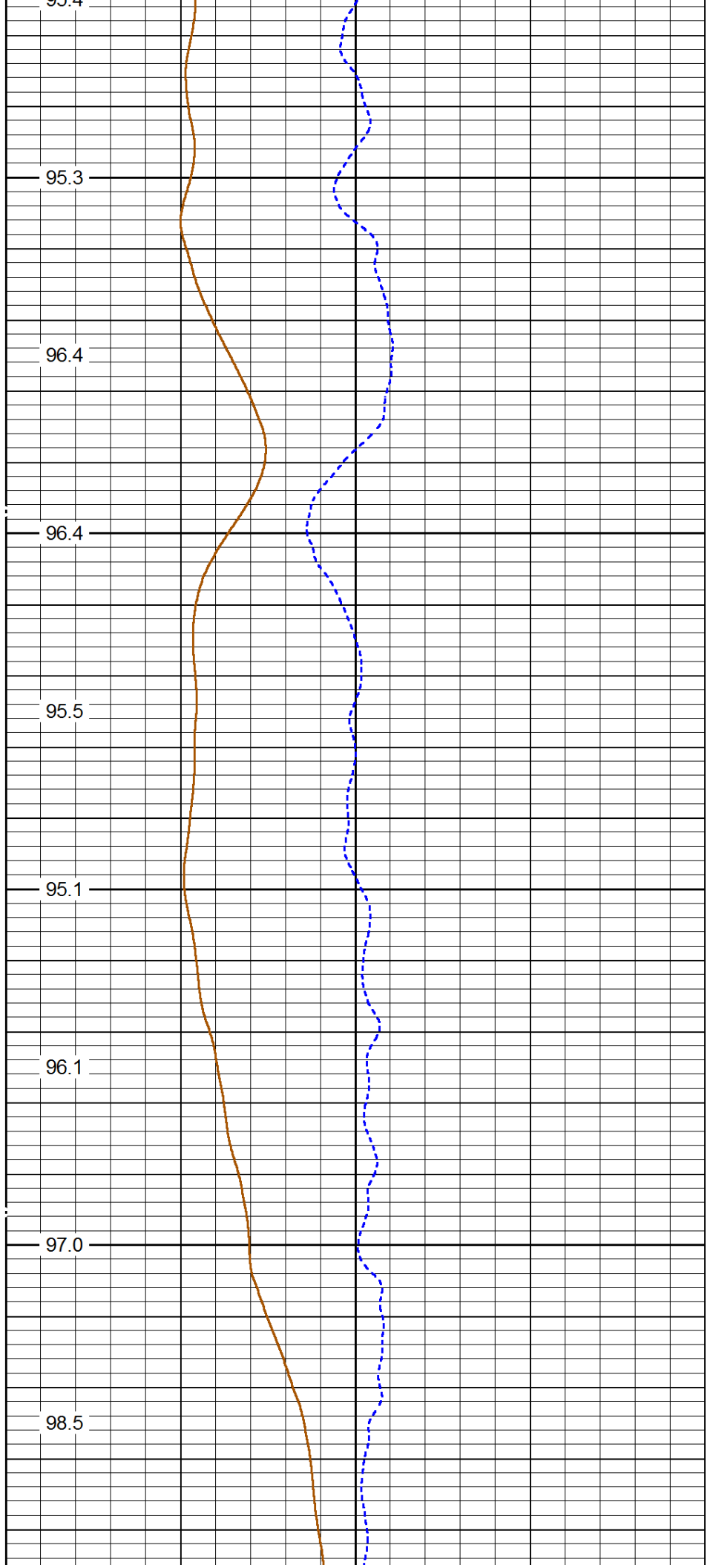
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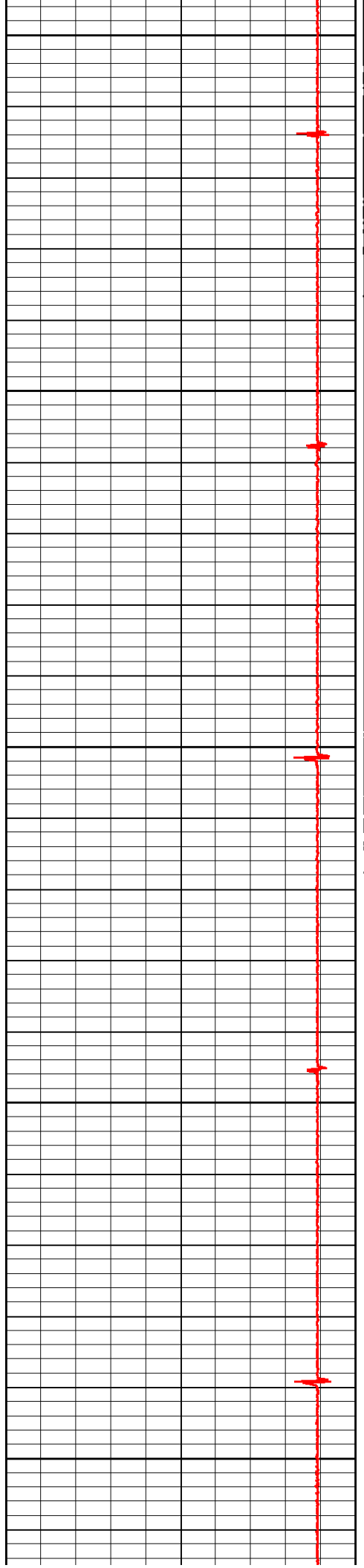




1000

1100

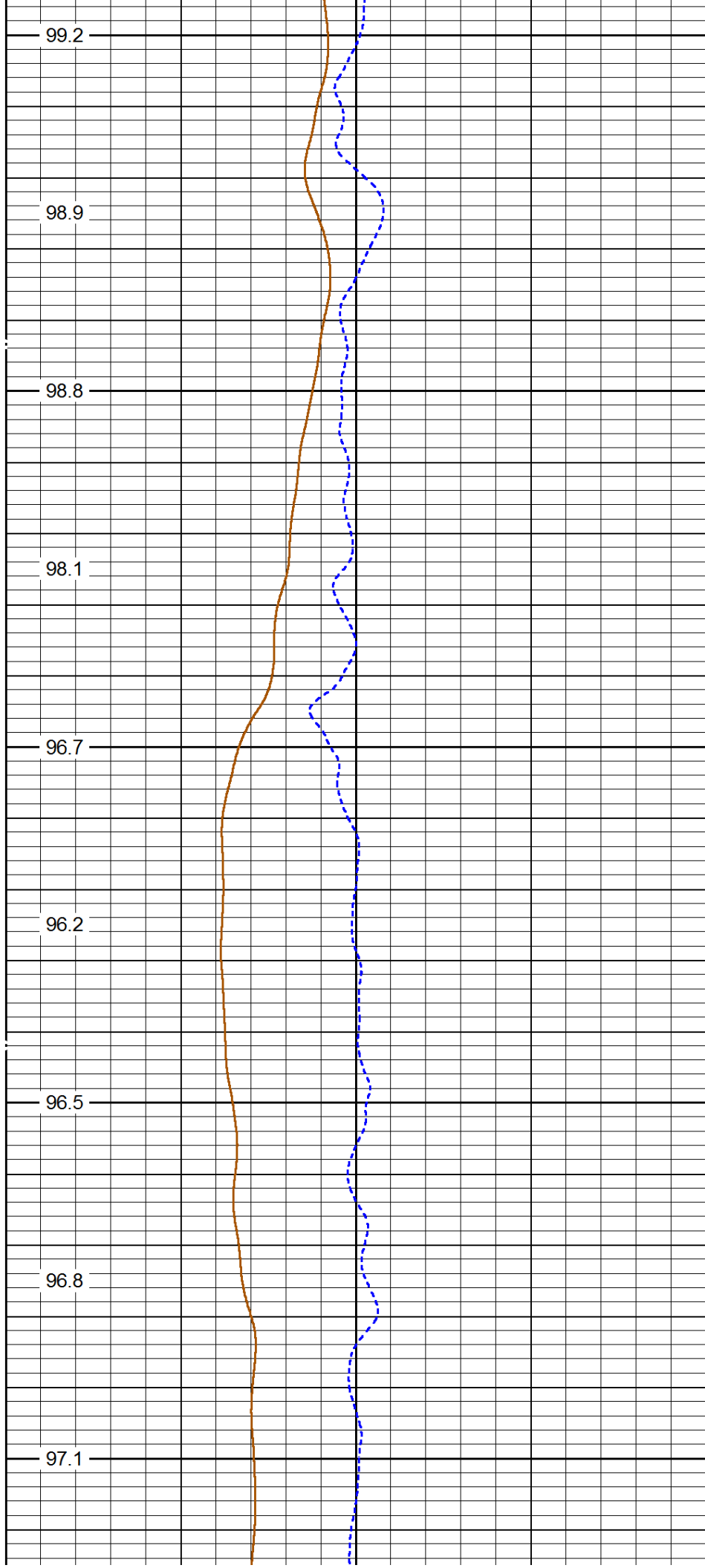




1200

1300

1400



99.2

98.9

98.8

98.1

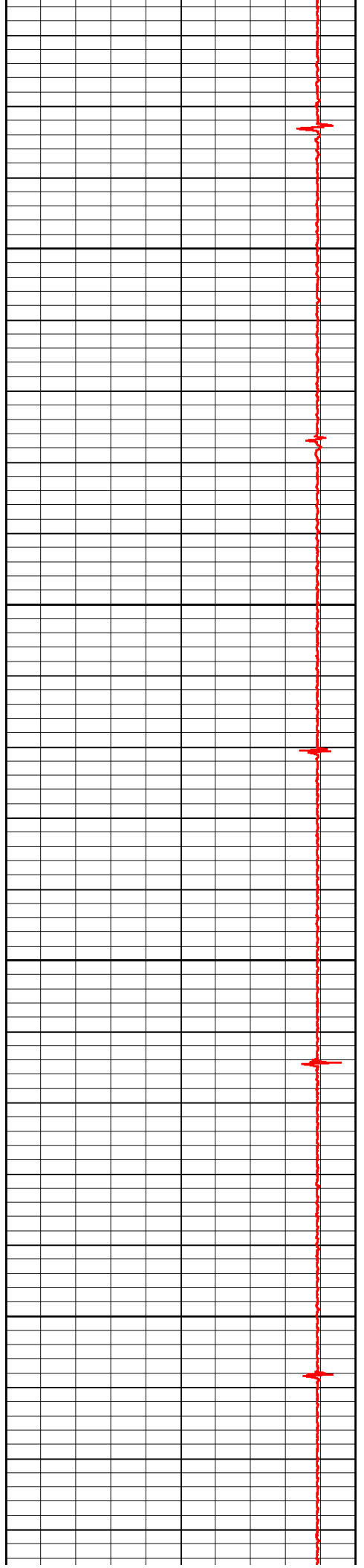
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96.2

96.5

96.8

97.1



1500

1600

97.0

97.2

97.0

96.8

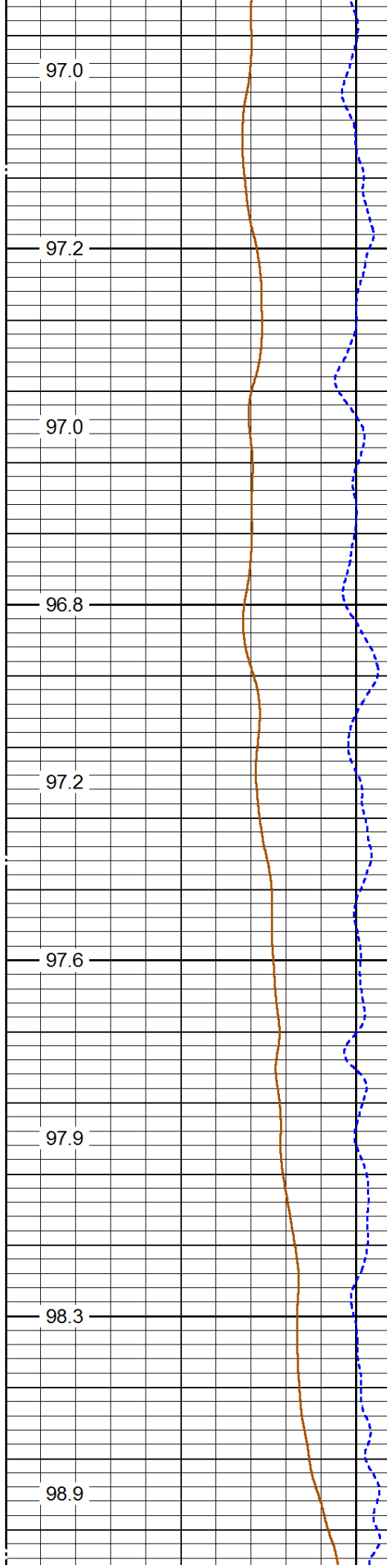
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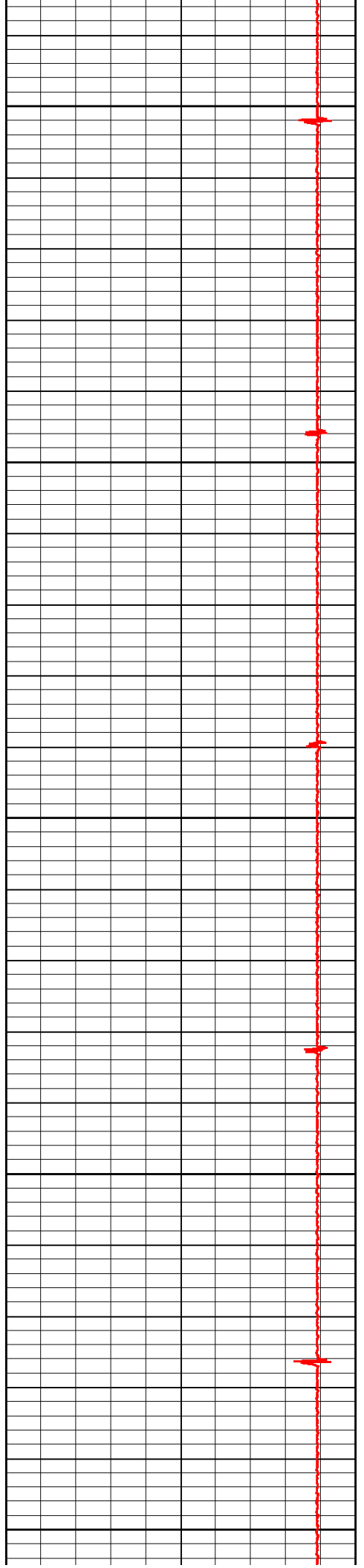
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97.9

98.3

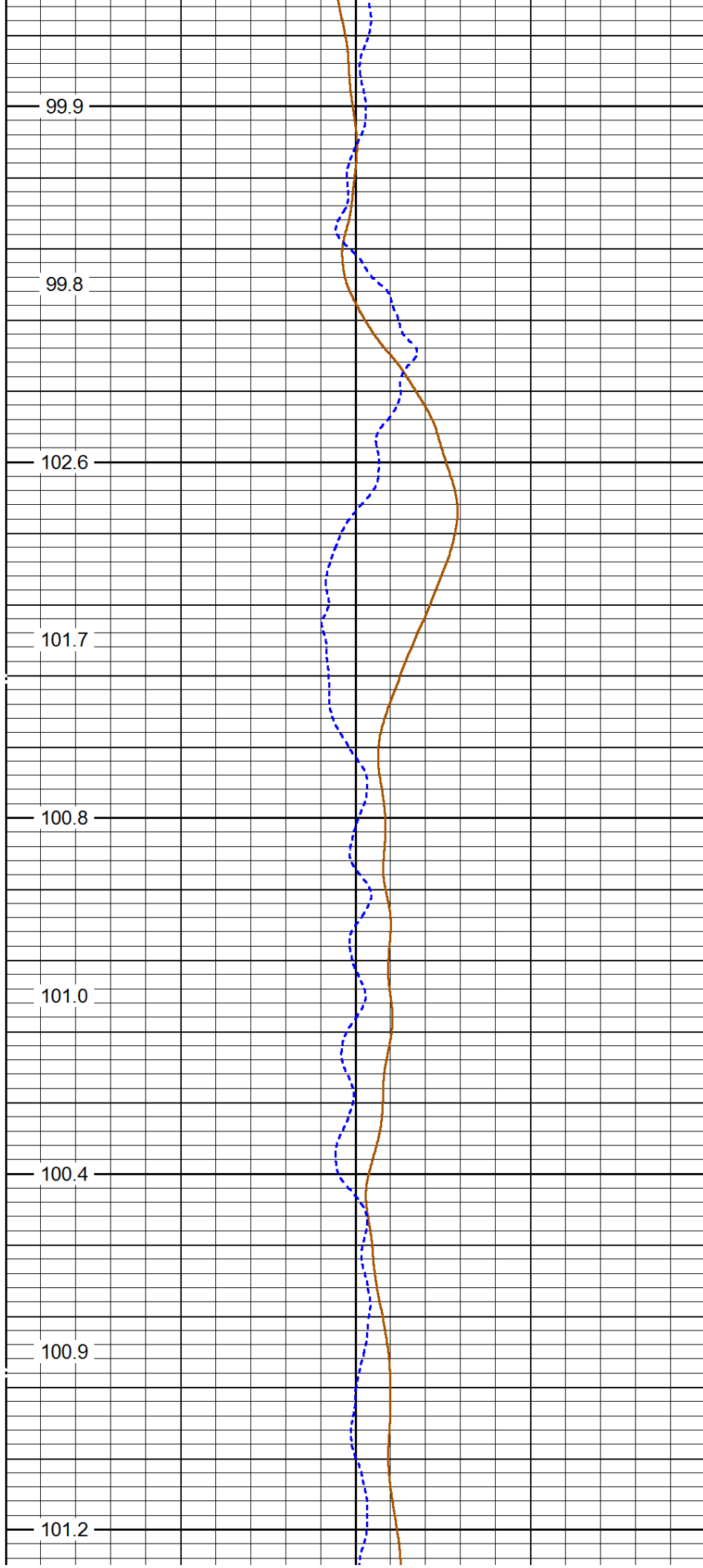
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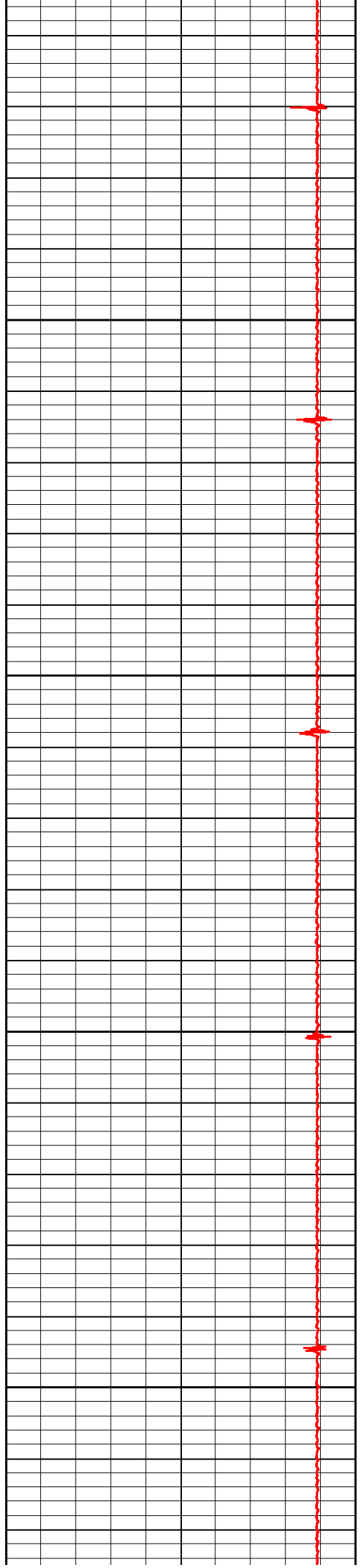




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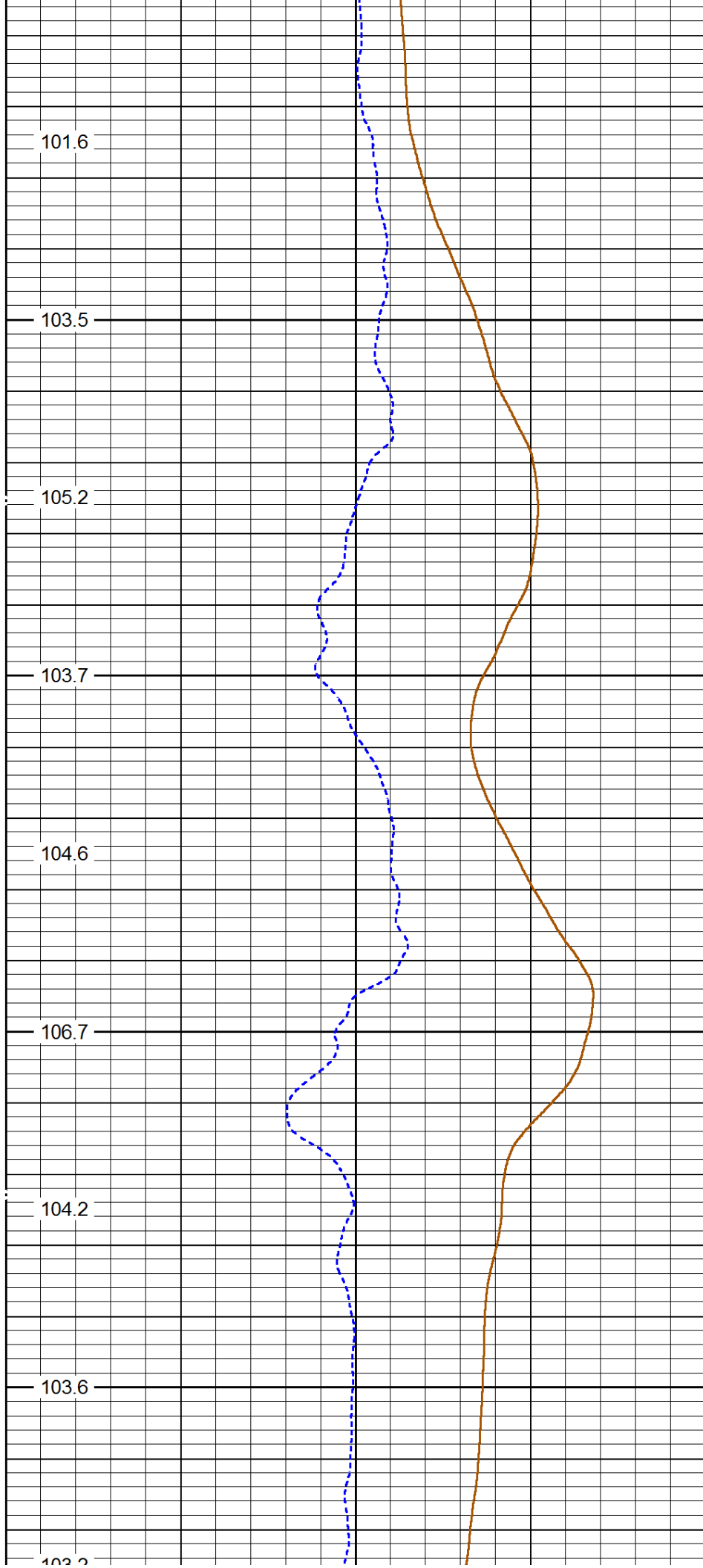
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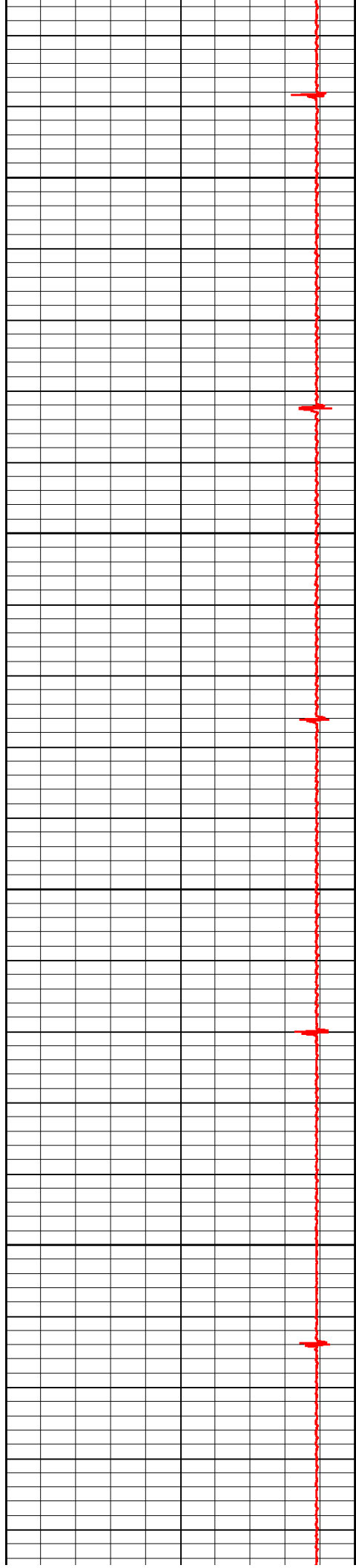




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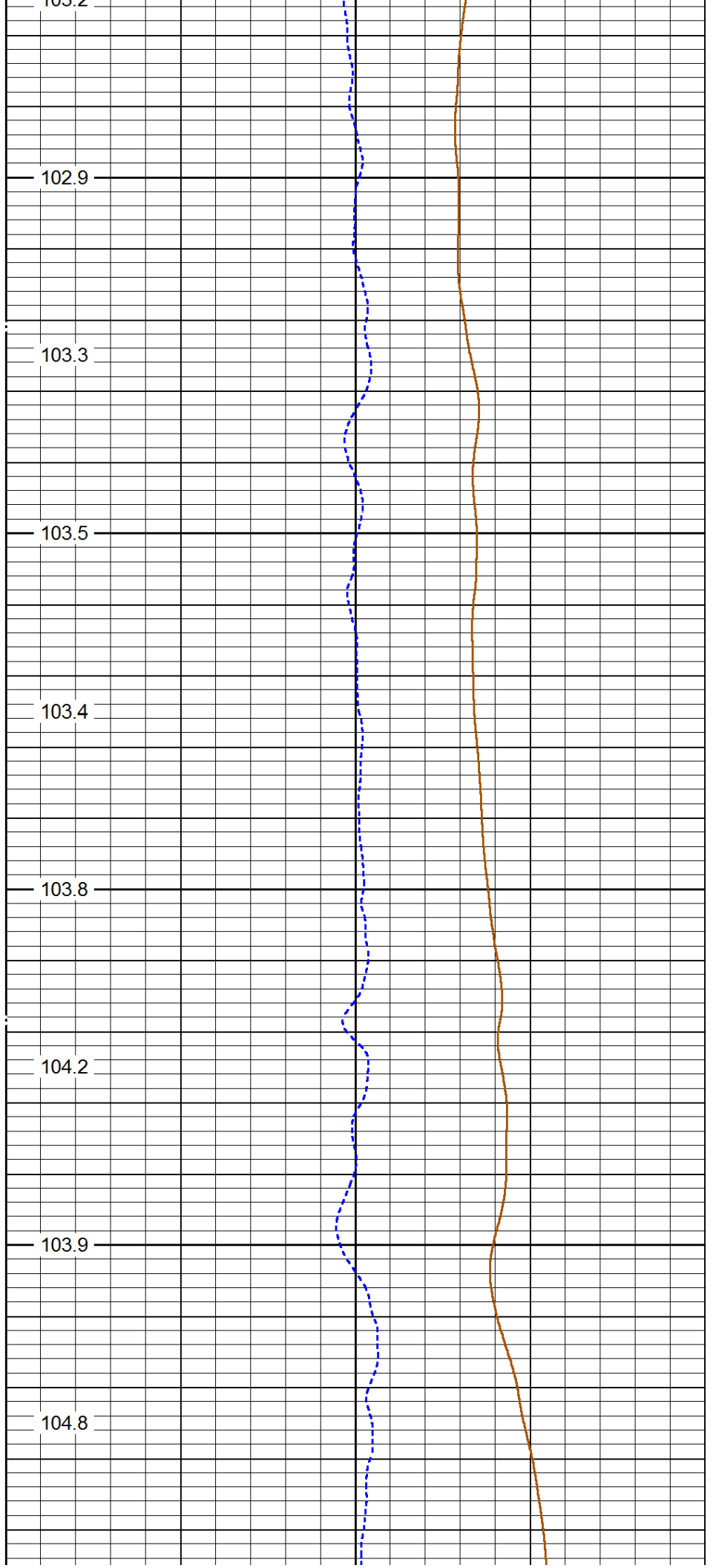
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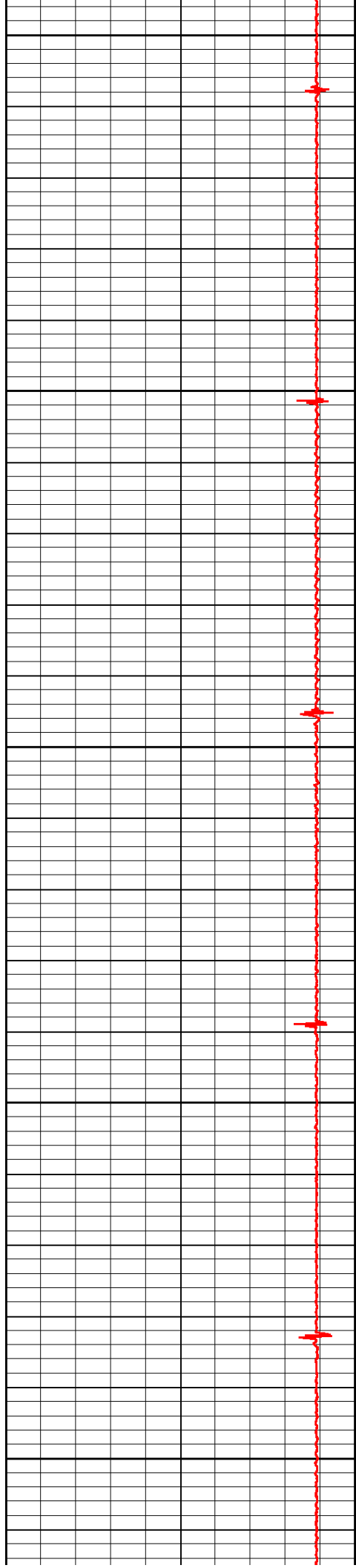




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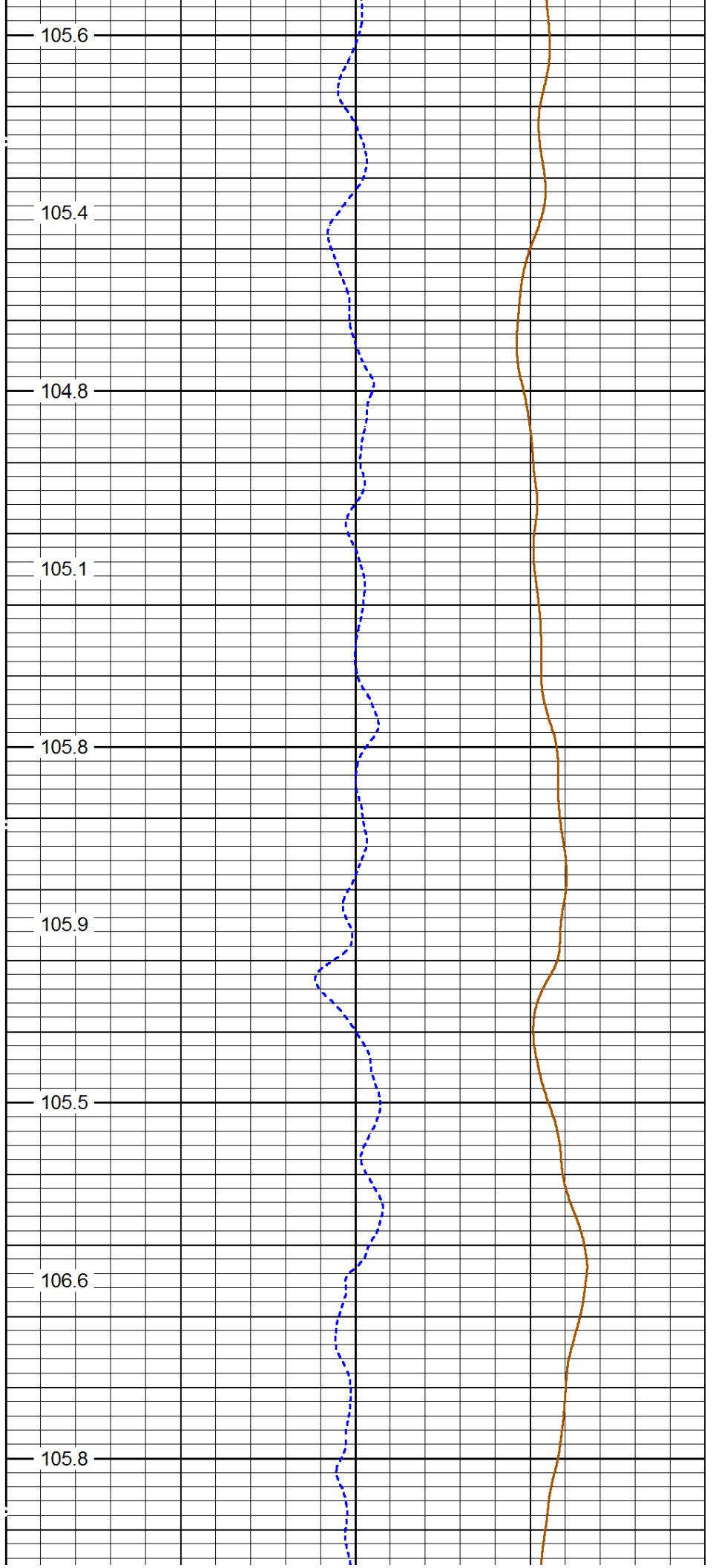




2300

2400

2500



105.6

105.4

104.8

105.1

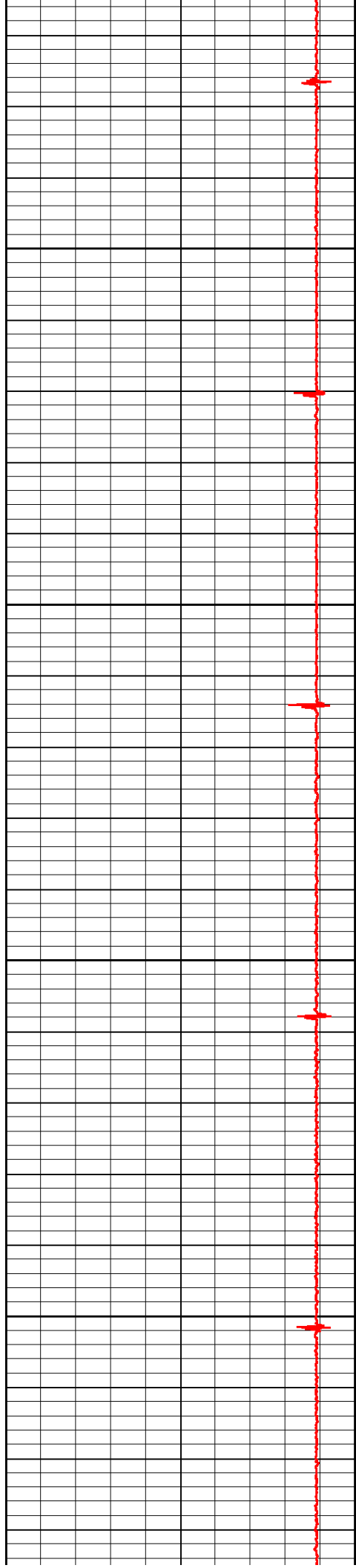
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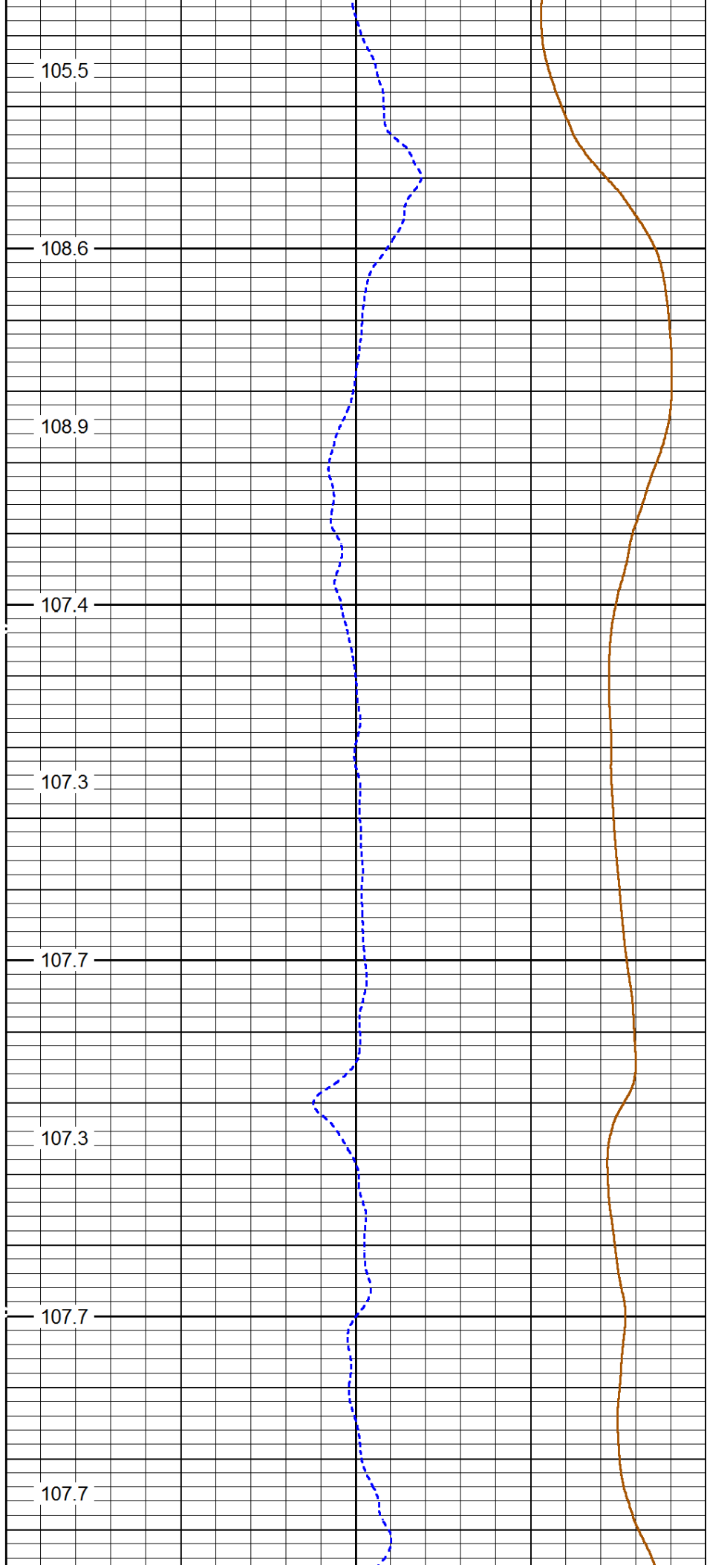
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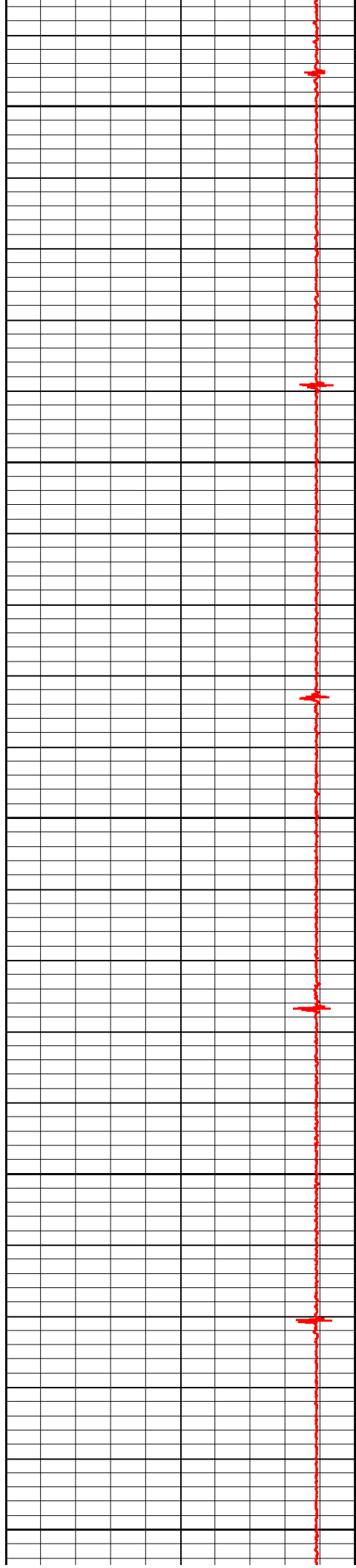
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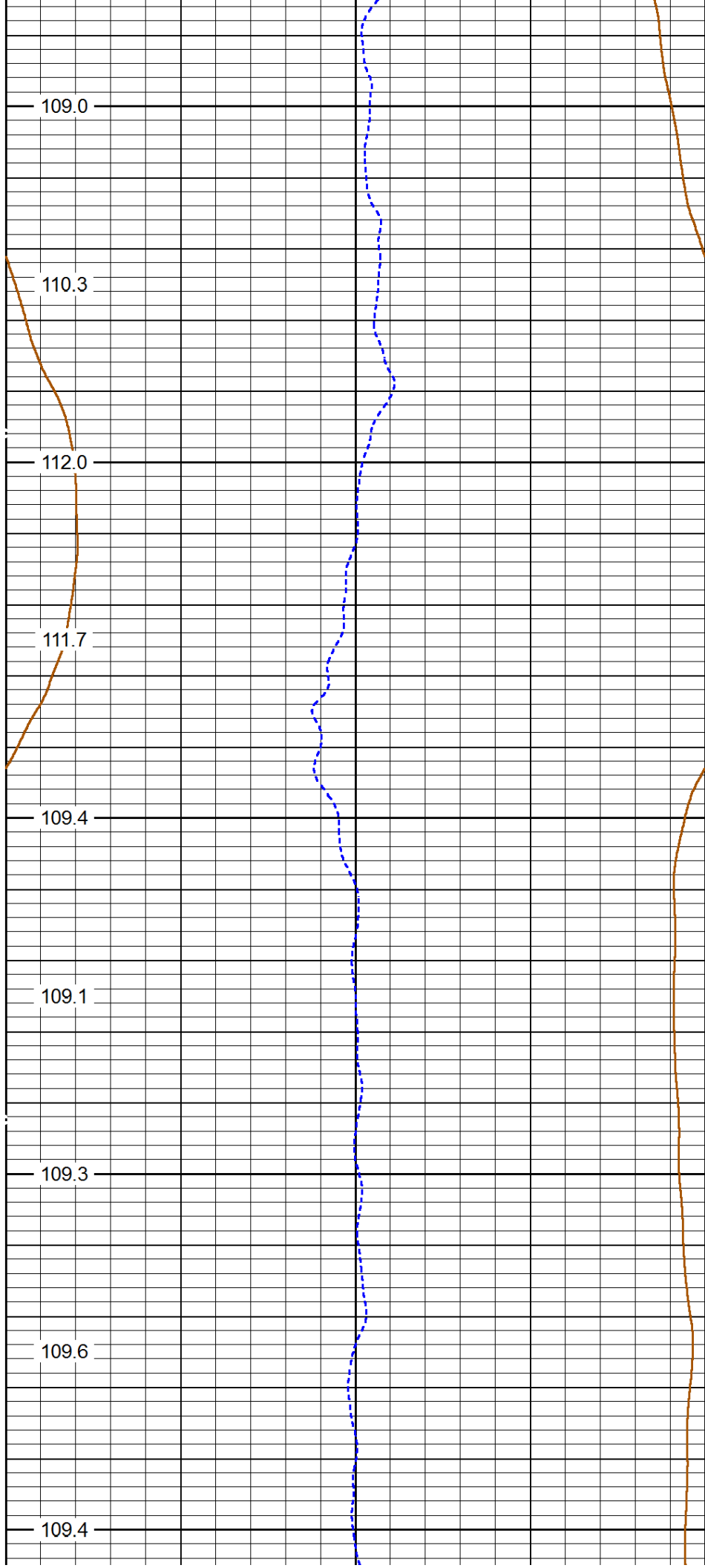
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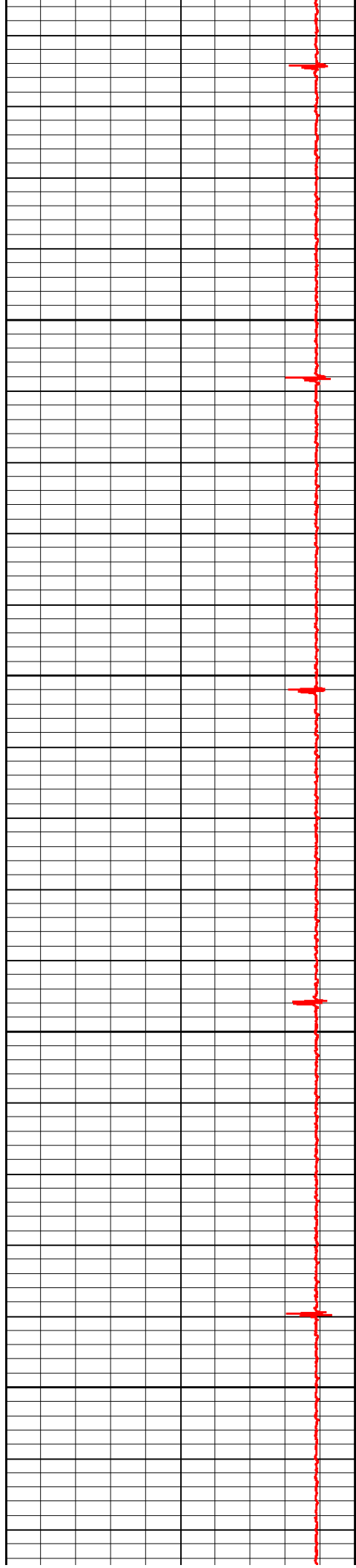




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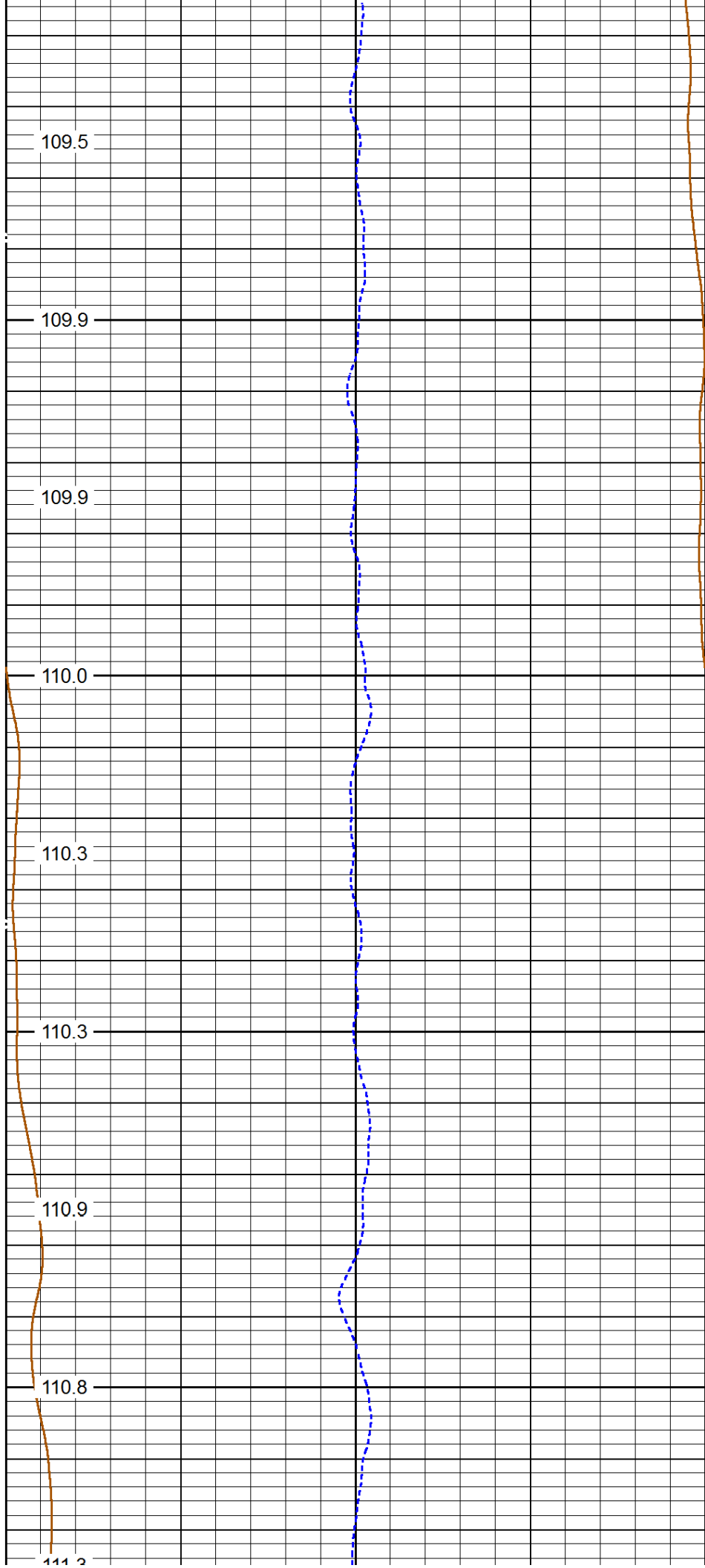
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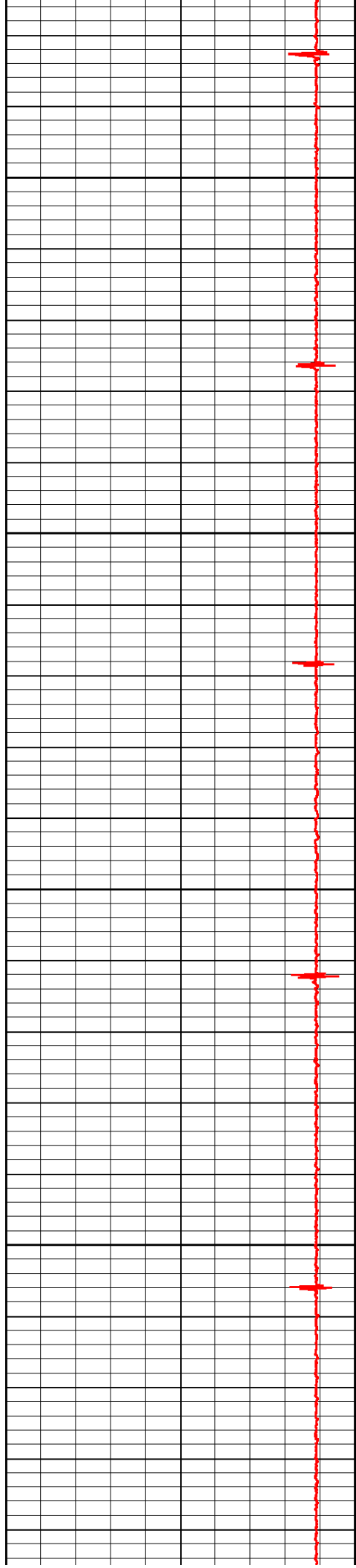




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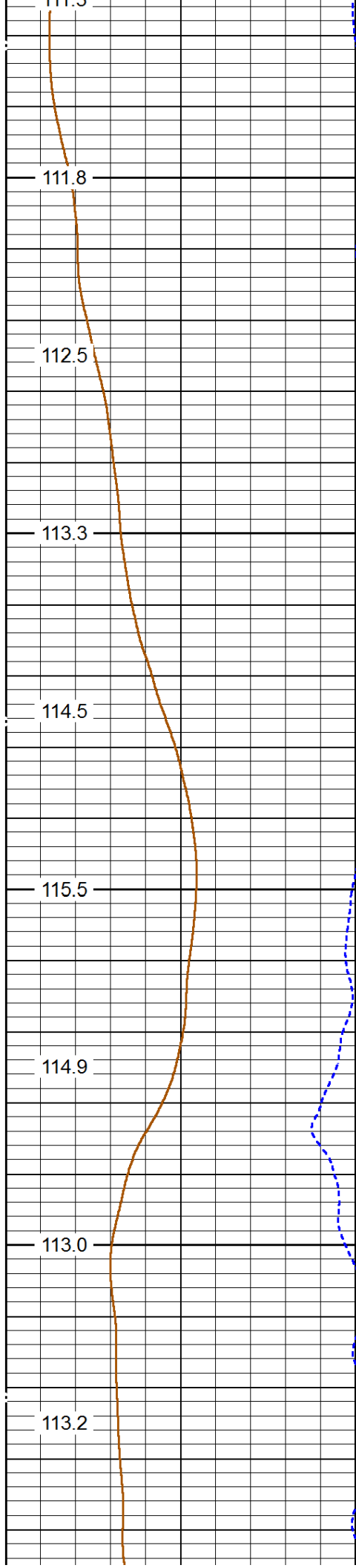
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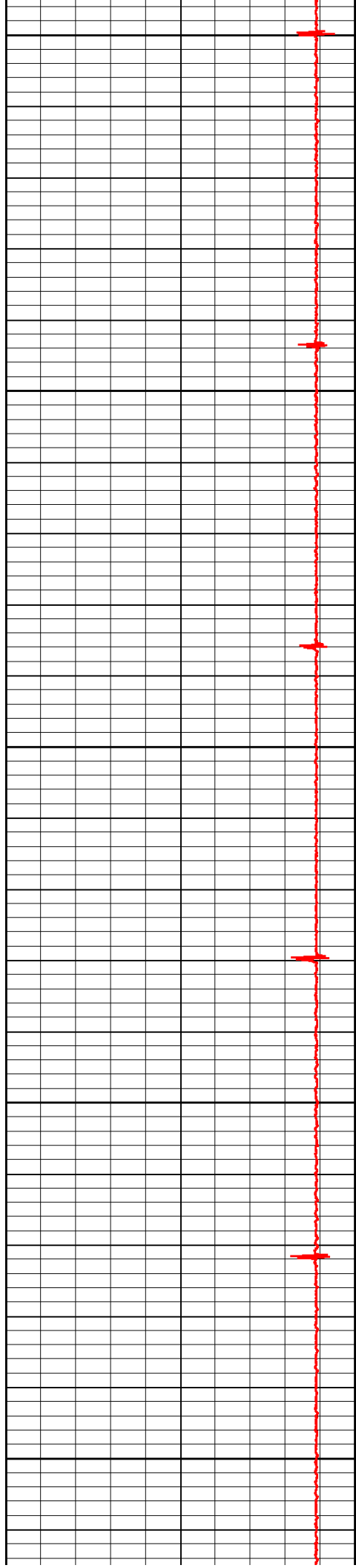




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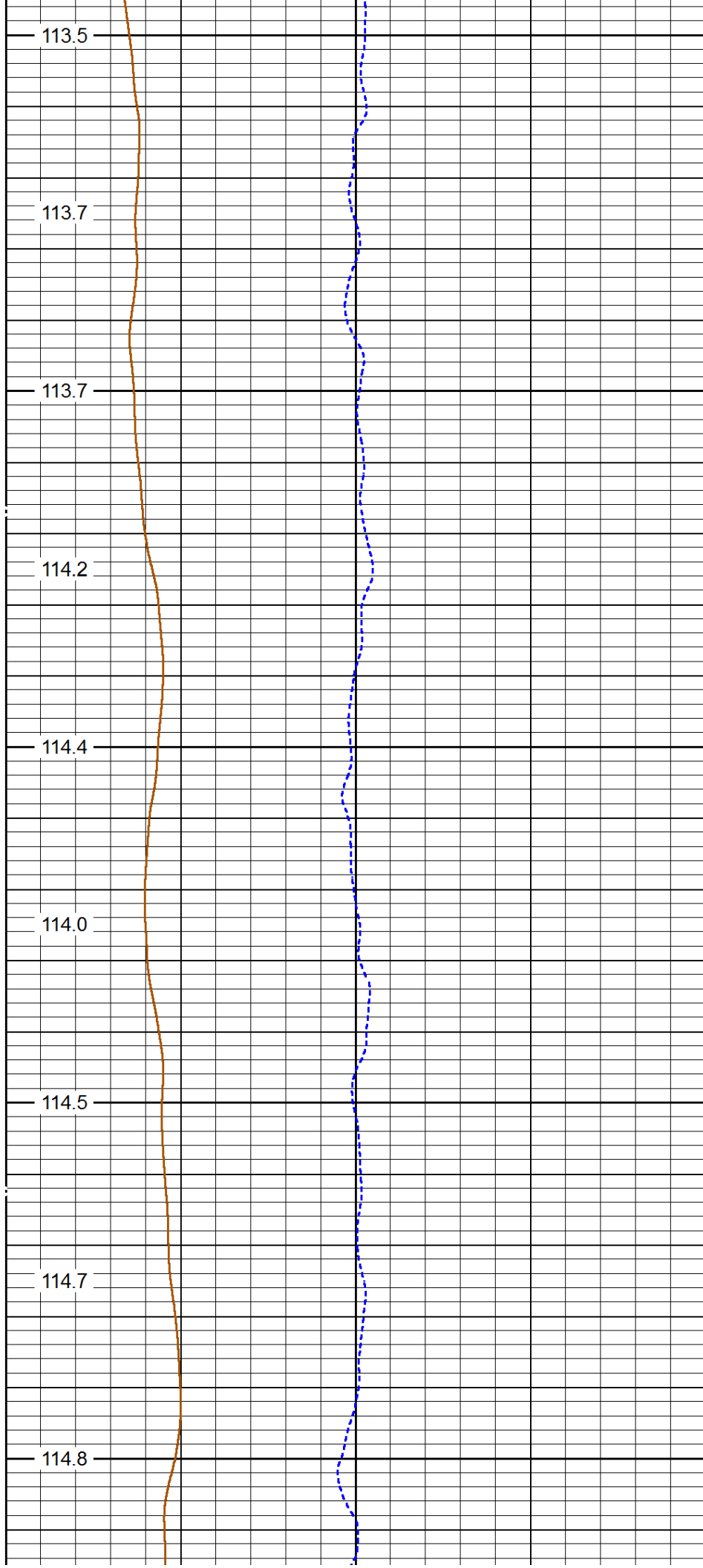




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3500

3600



113.5

113.7

113.7

114.2

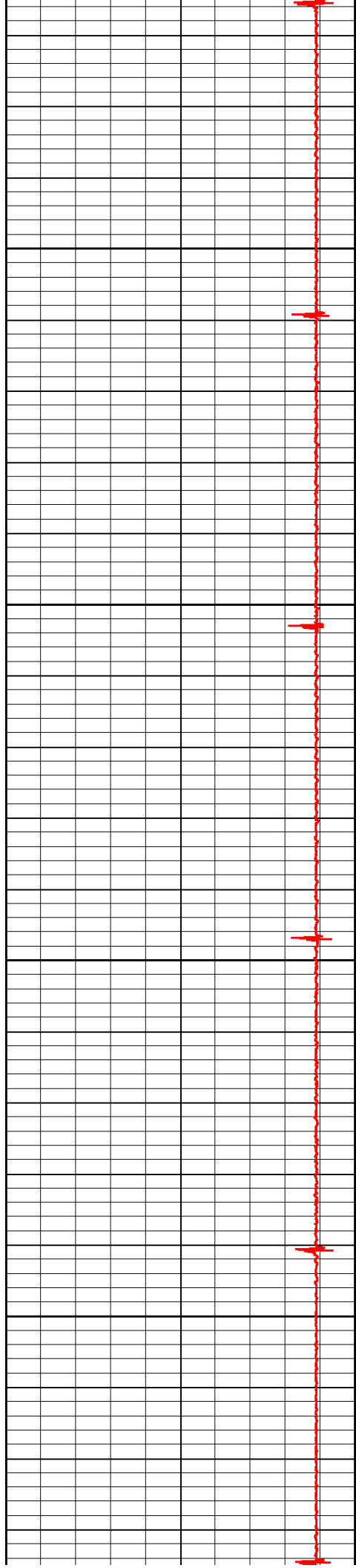
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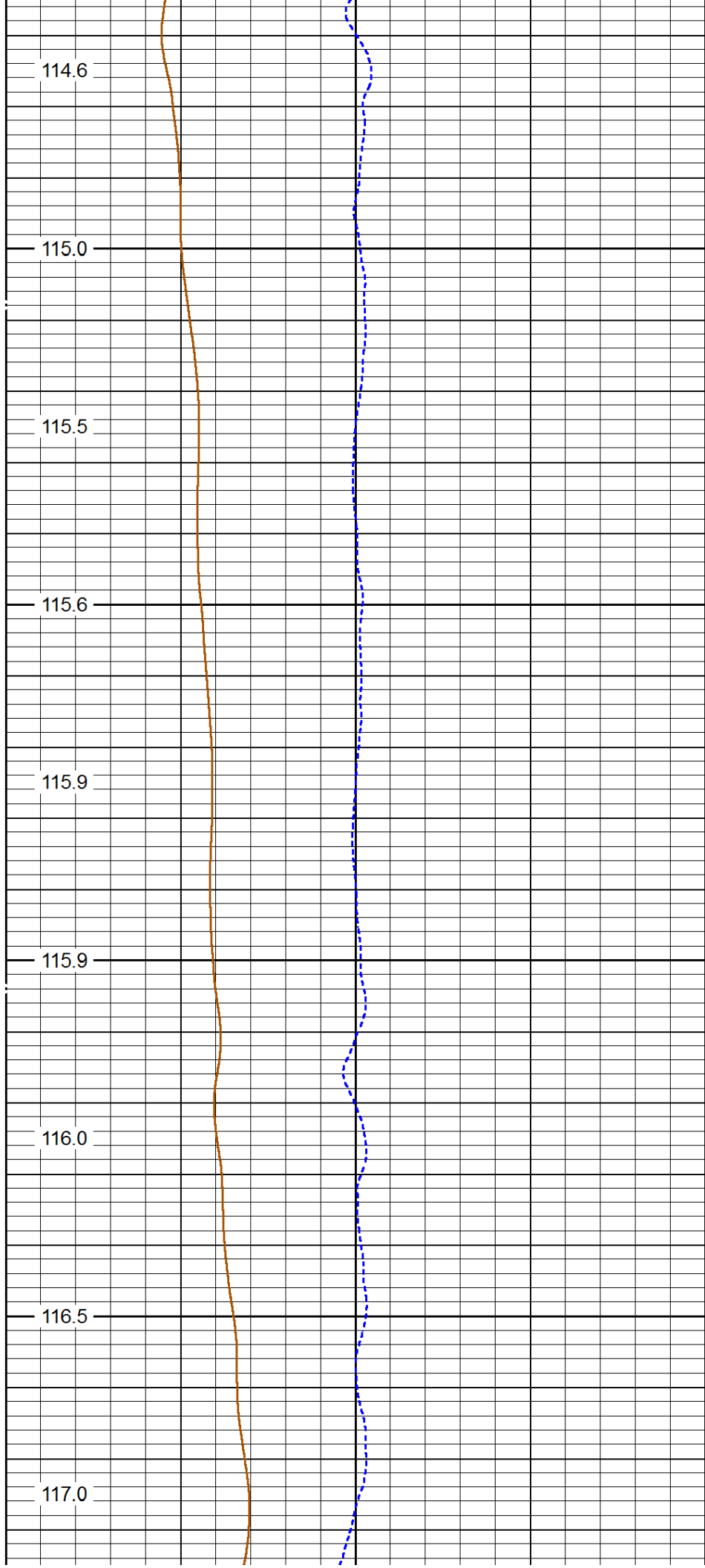
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114.8



3700

3800



114.6

115.0

115.5

115.6

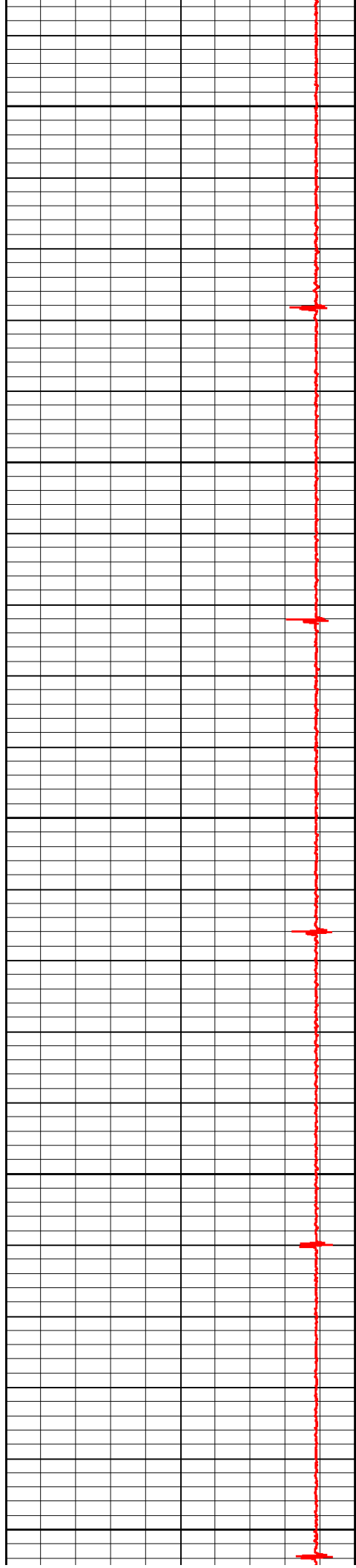
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115.9

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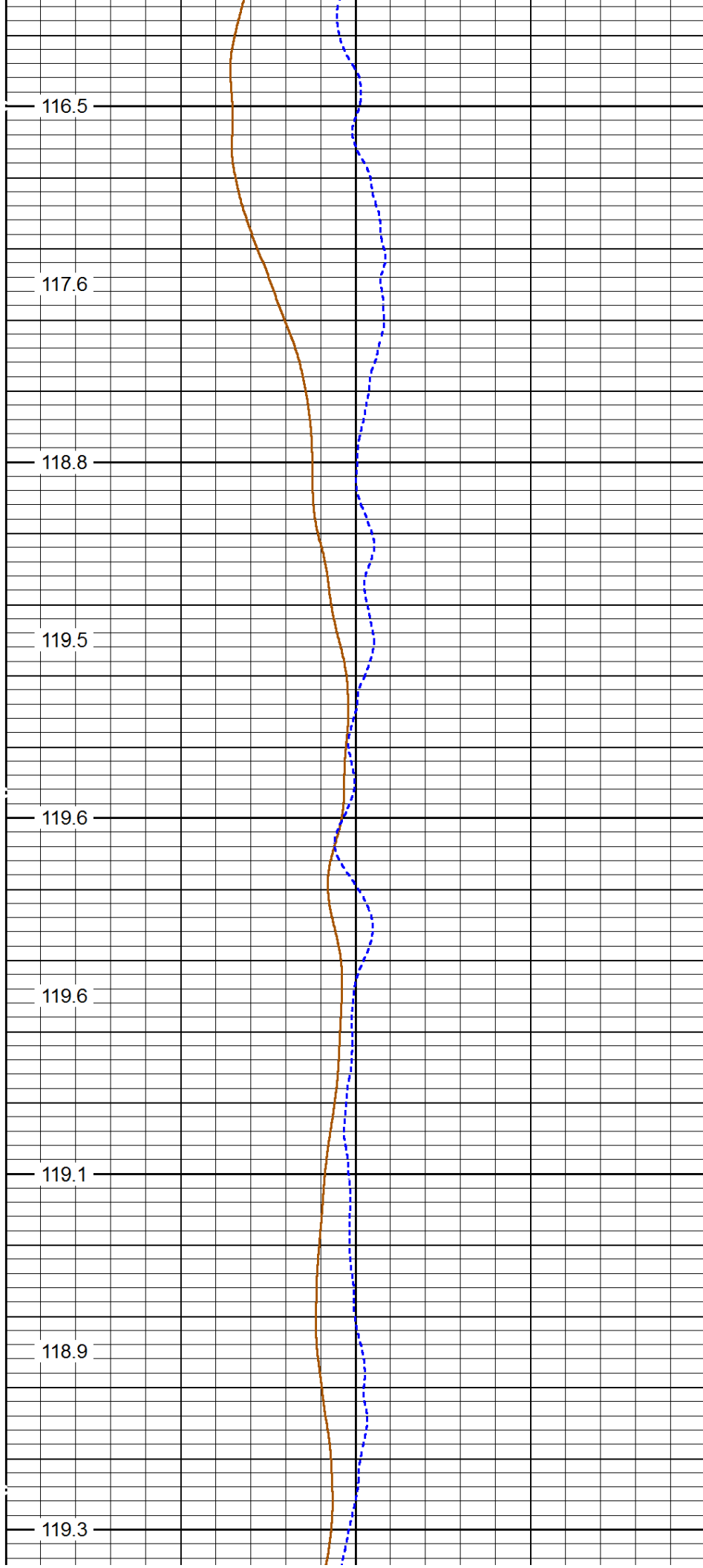
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117.0



3900

4000



116.5

117.6

118.8

119.5

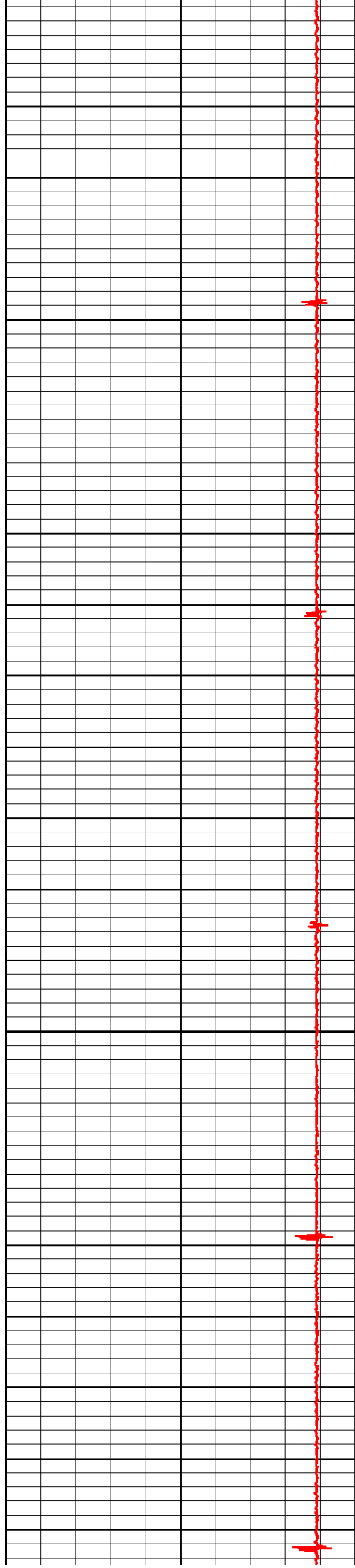
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119.6

119.1

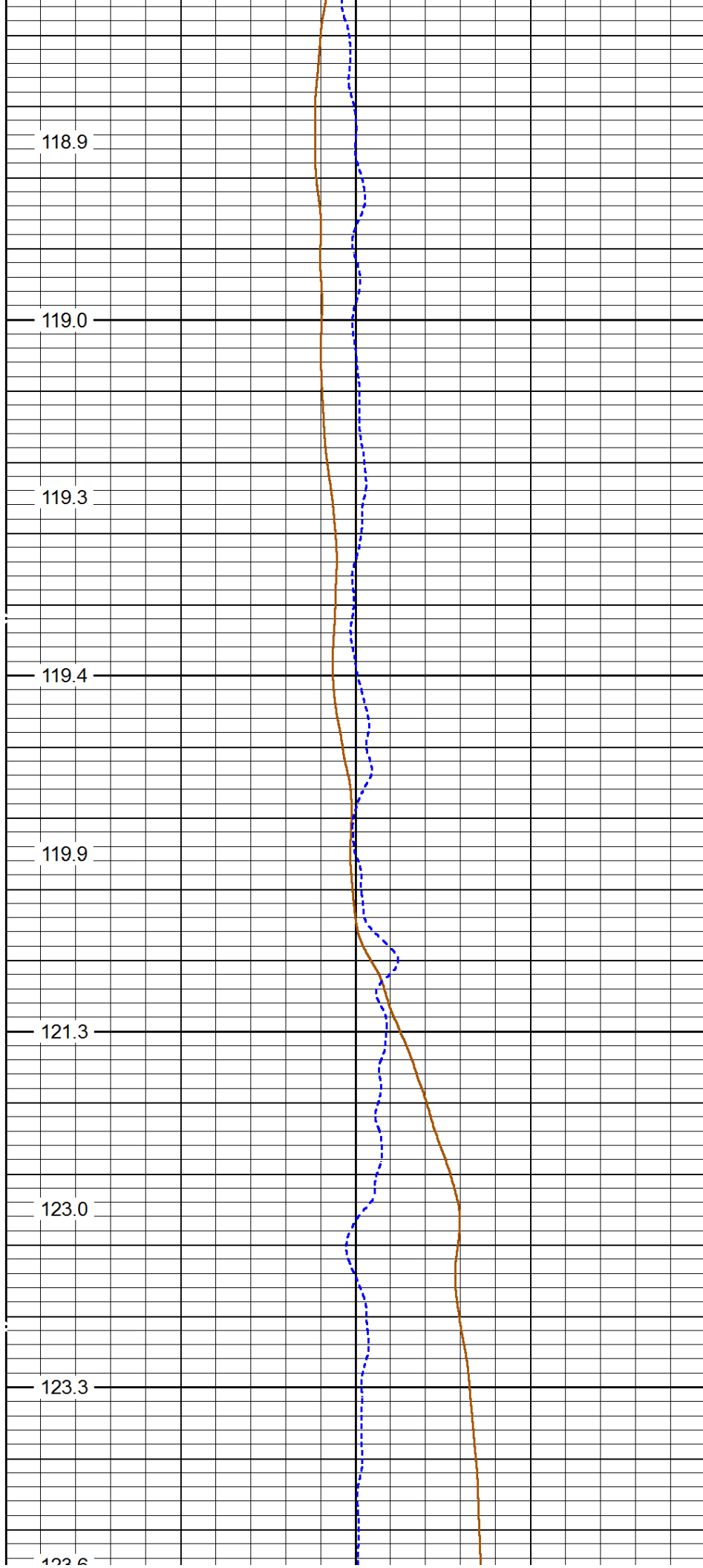
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119.3



4100

4200



118.9

119.0

119.3

119.4

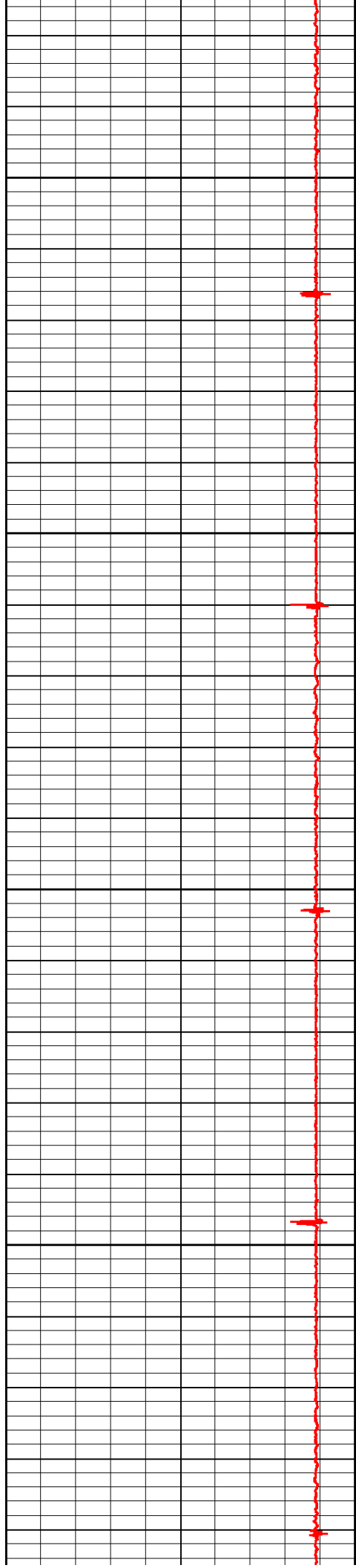
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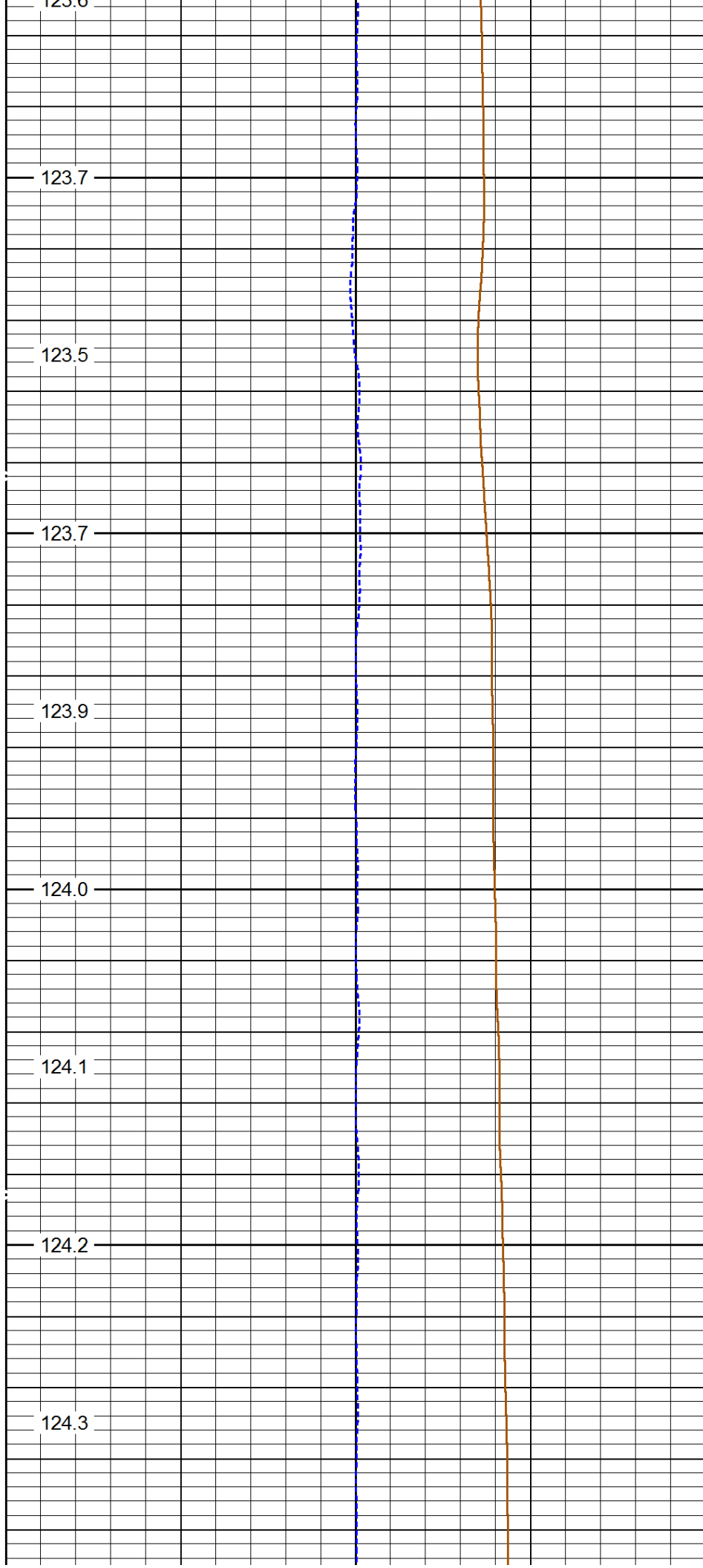
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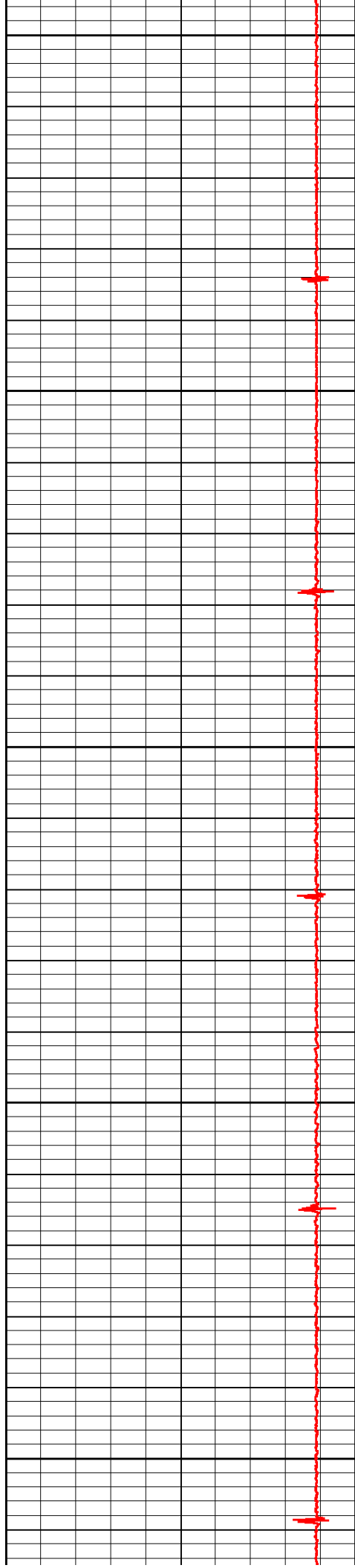
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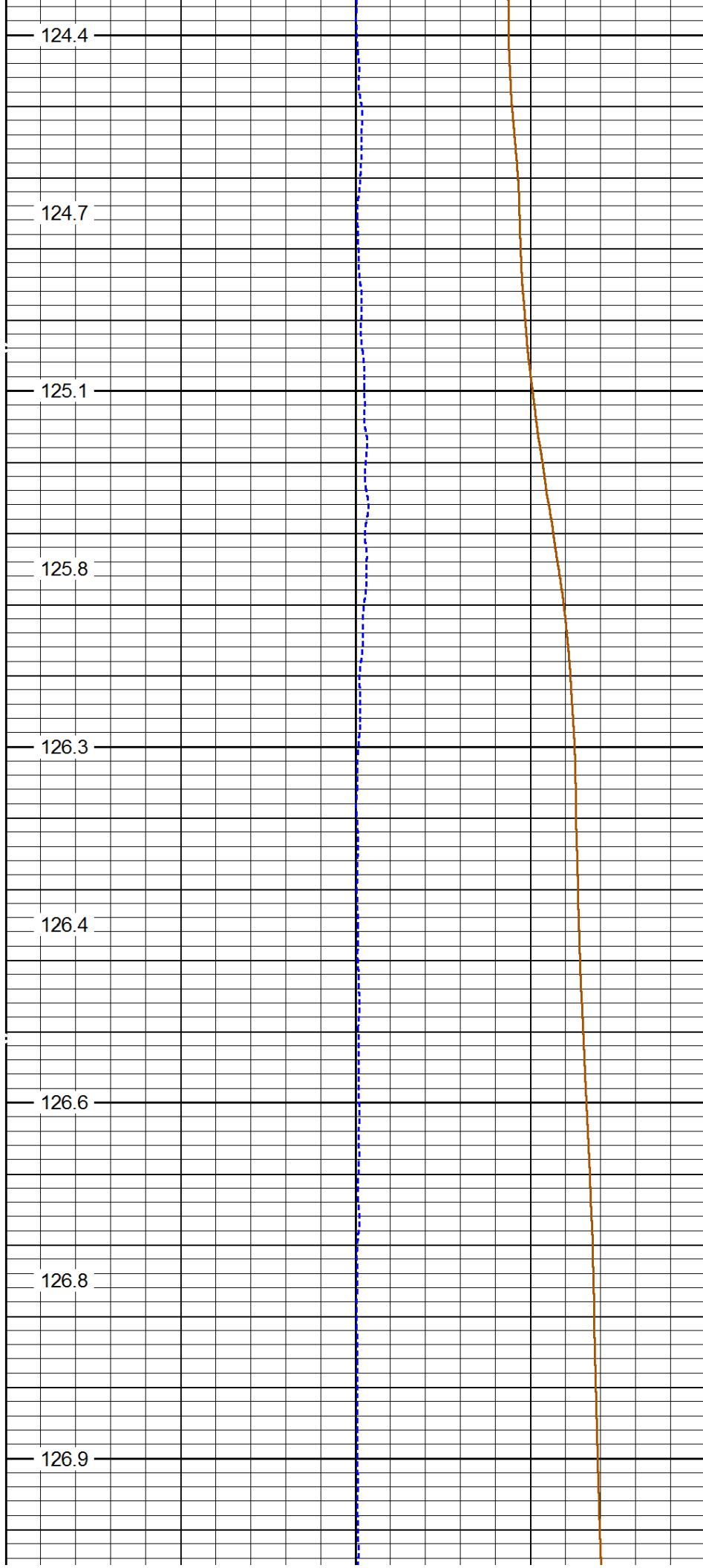




4500

4600

4700



124.4

124.7

125.1

125.8

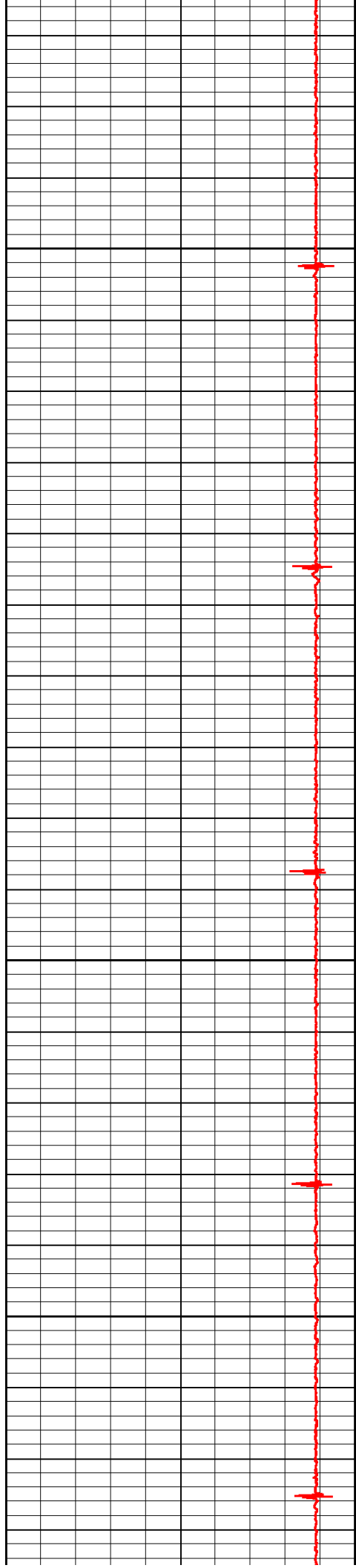
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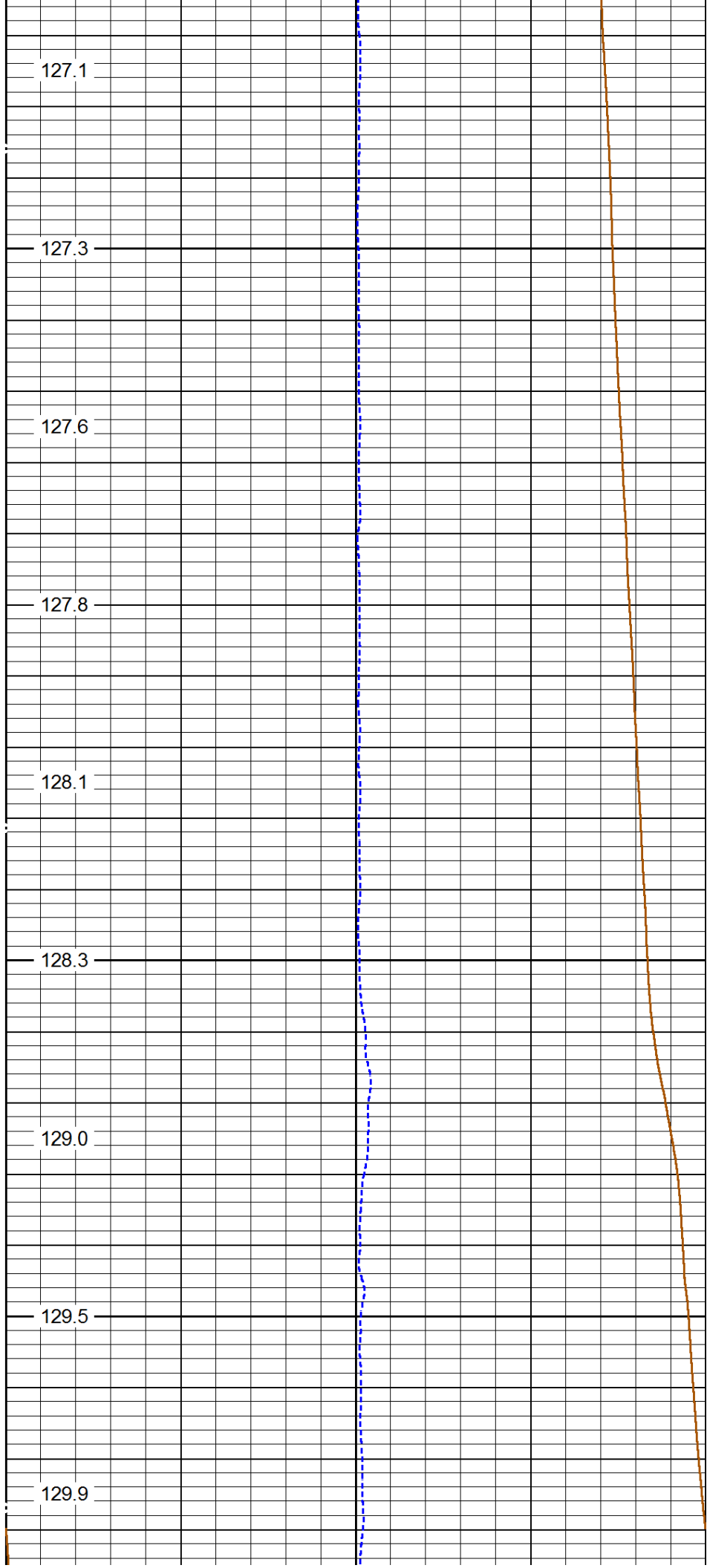
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4900



127.1

127.3

127.6

127.8

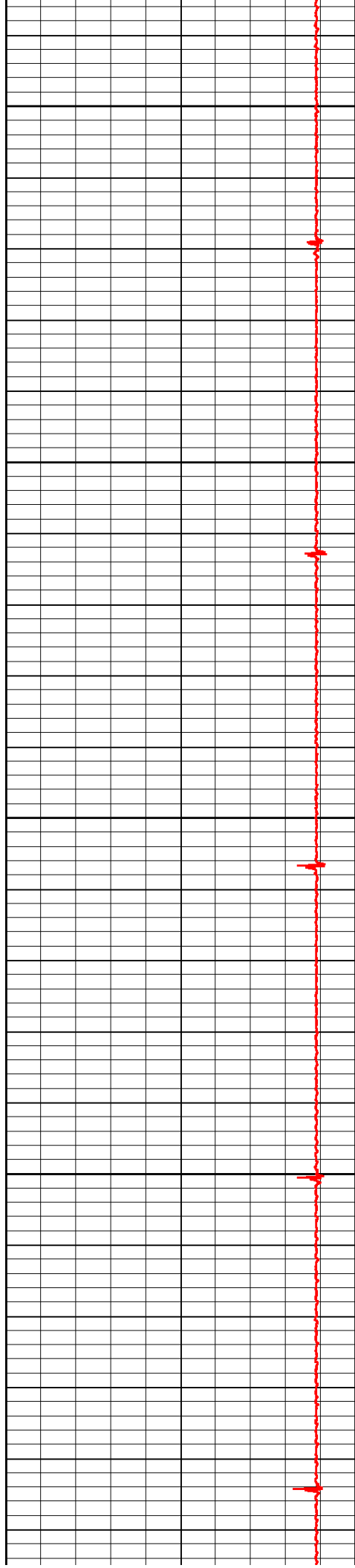
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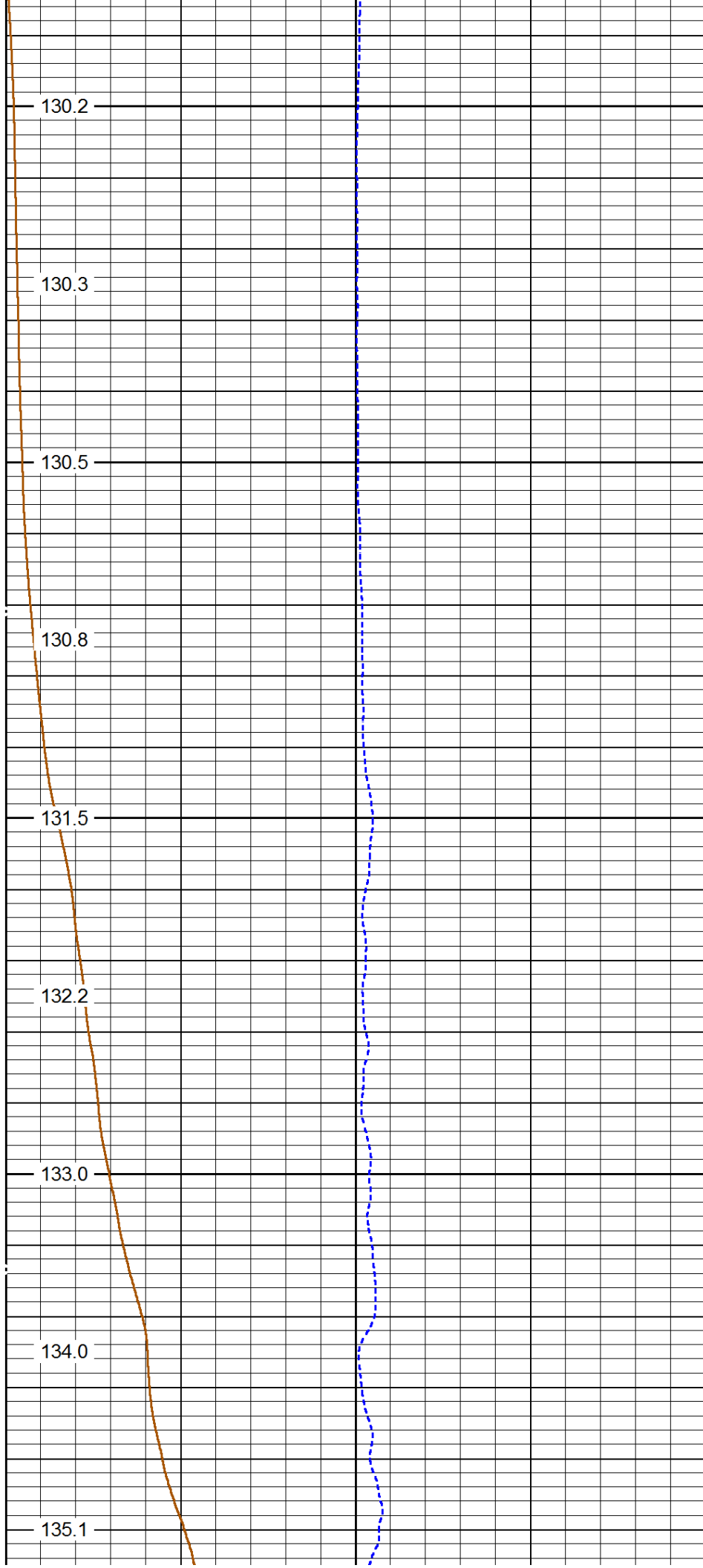
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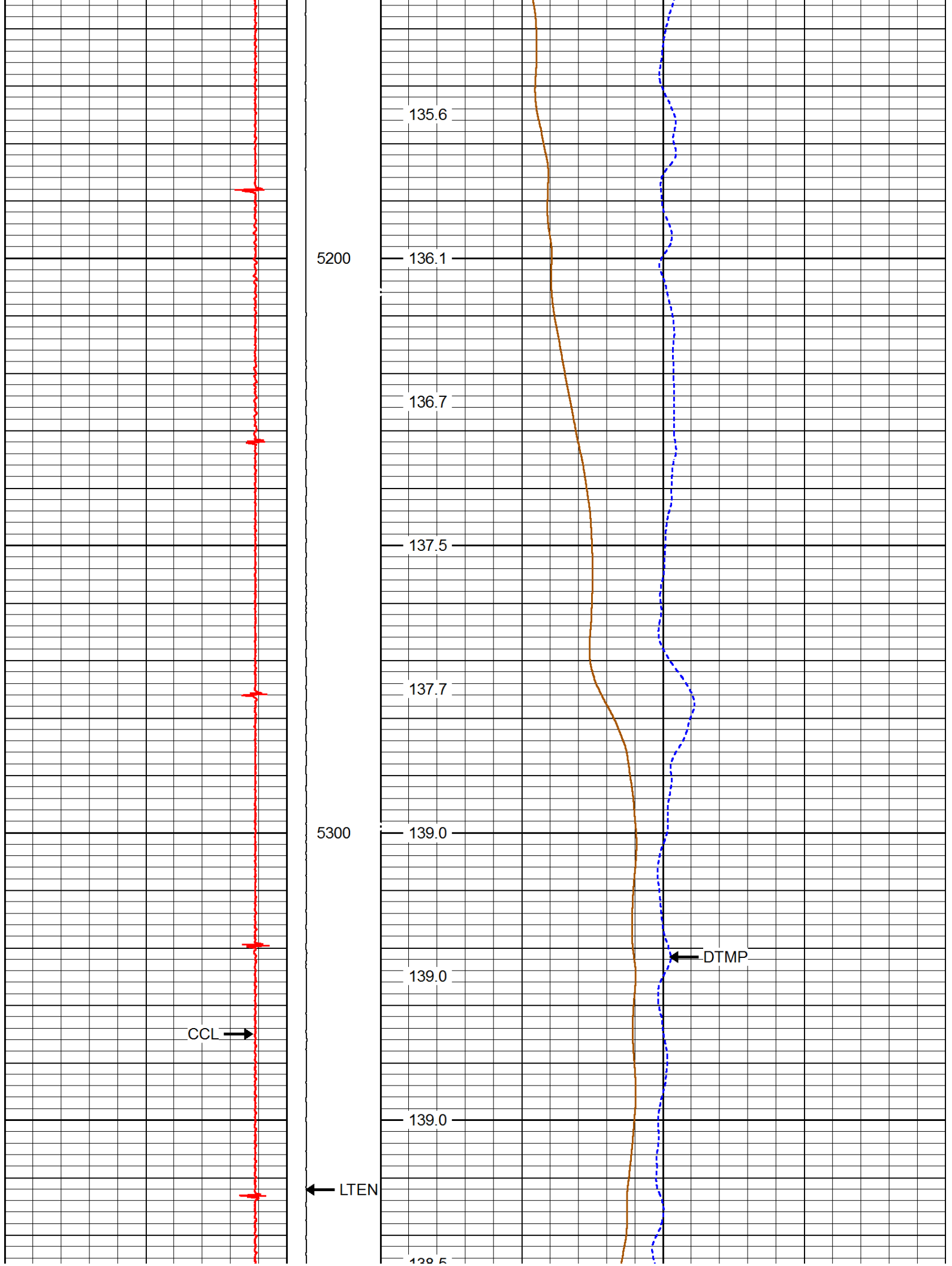
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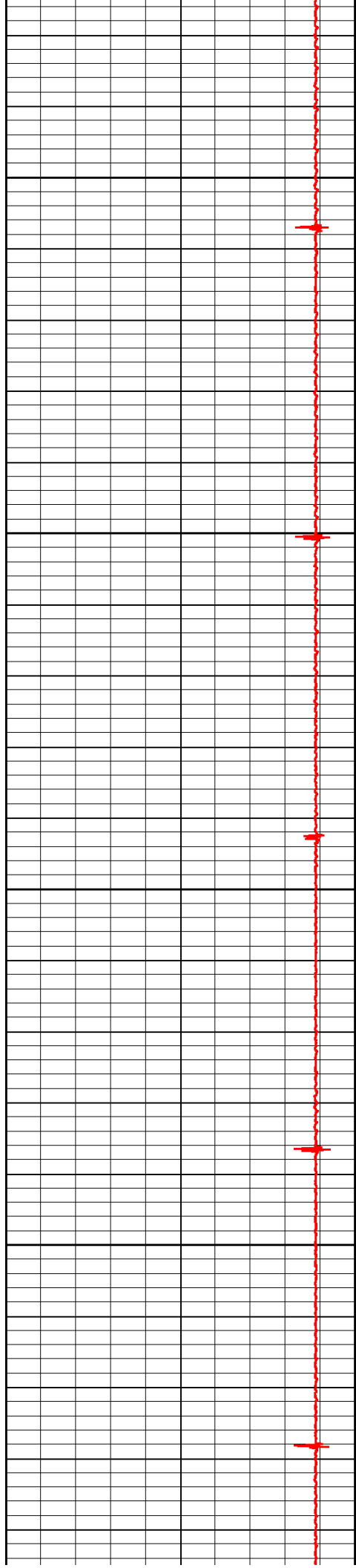


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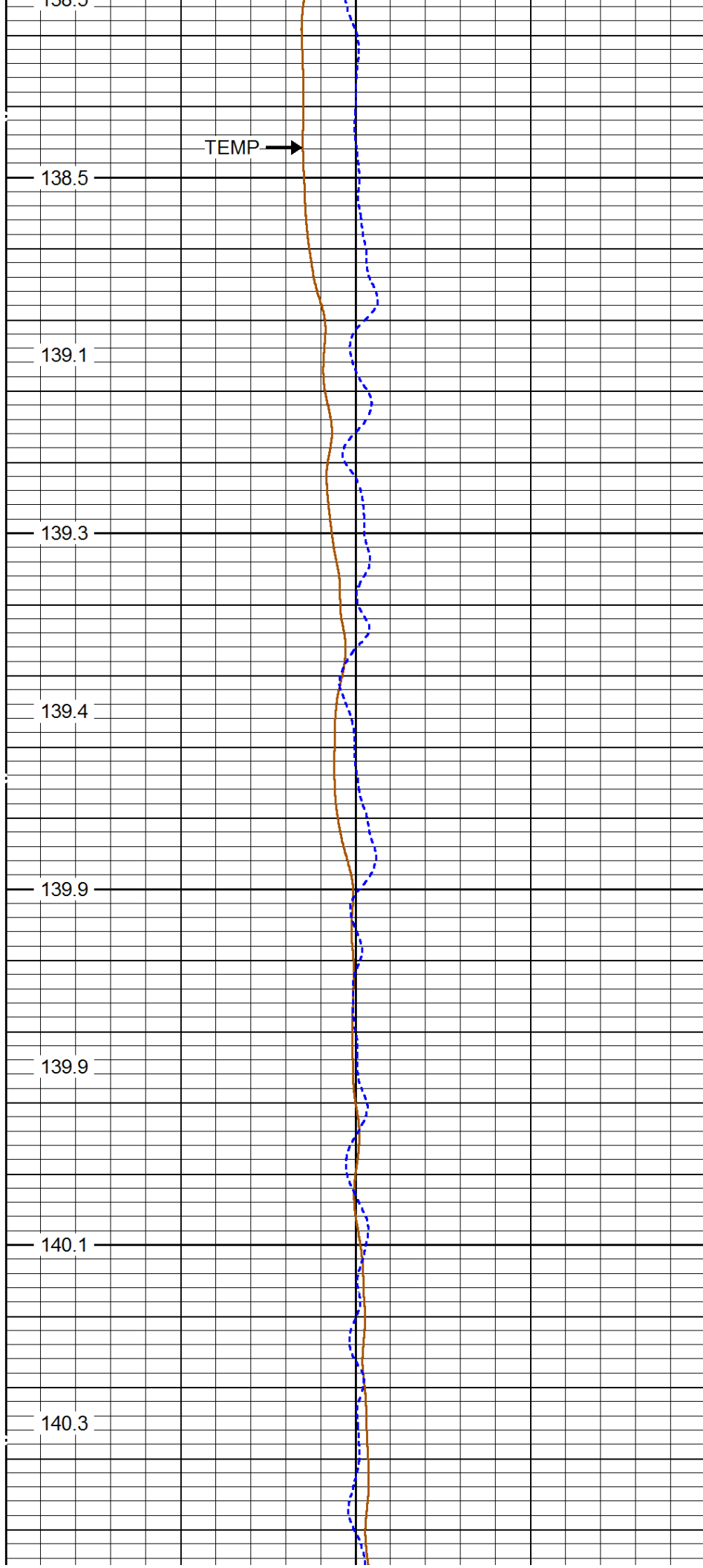


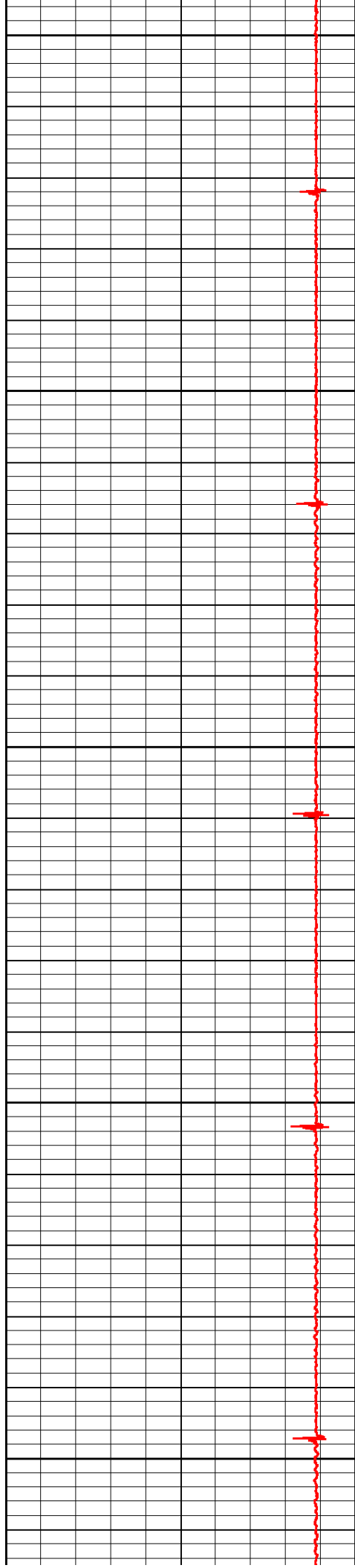




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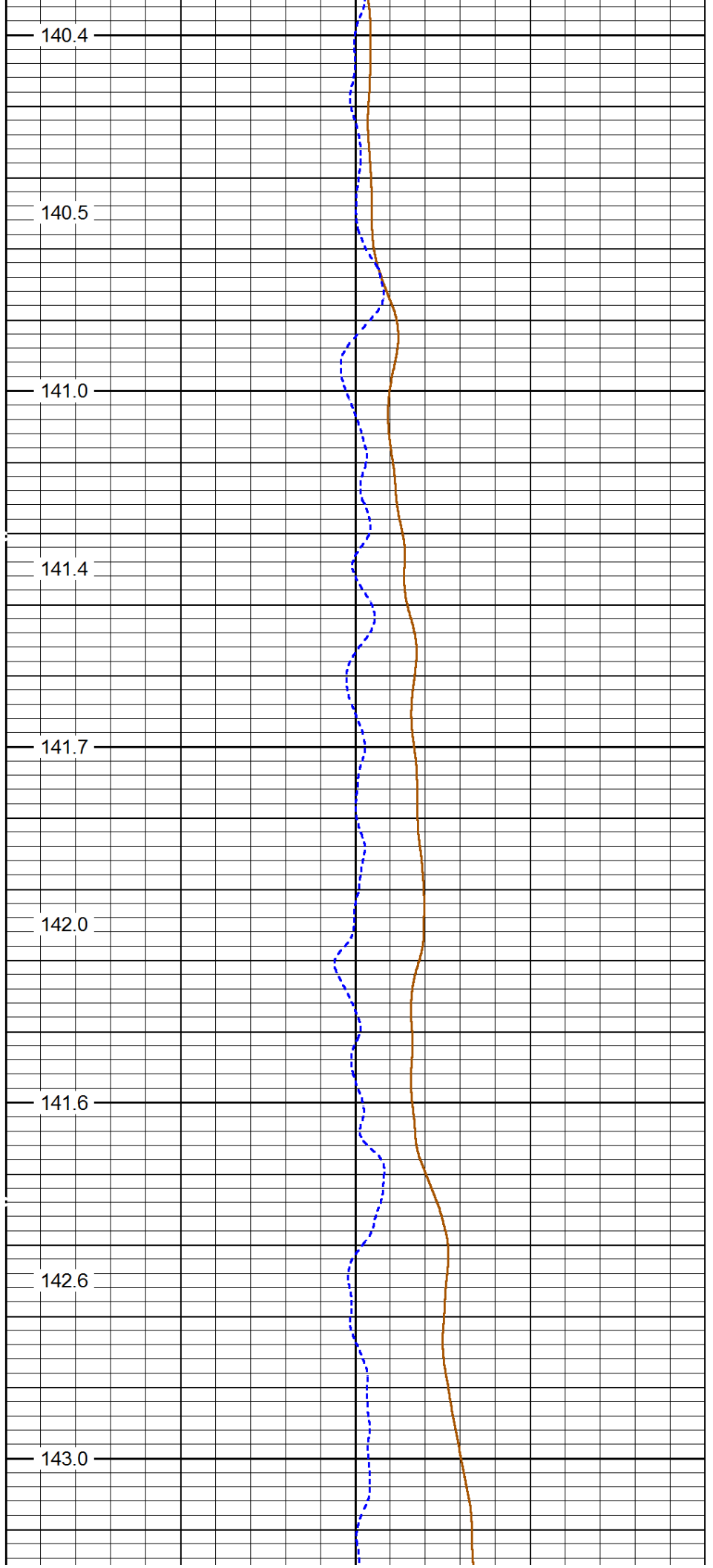




5600

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5800



140.4

140.5

141.0

141.4

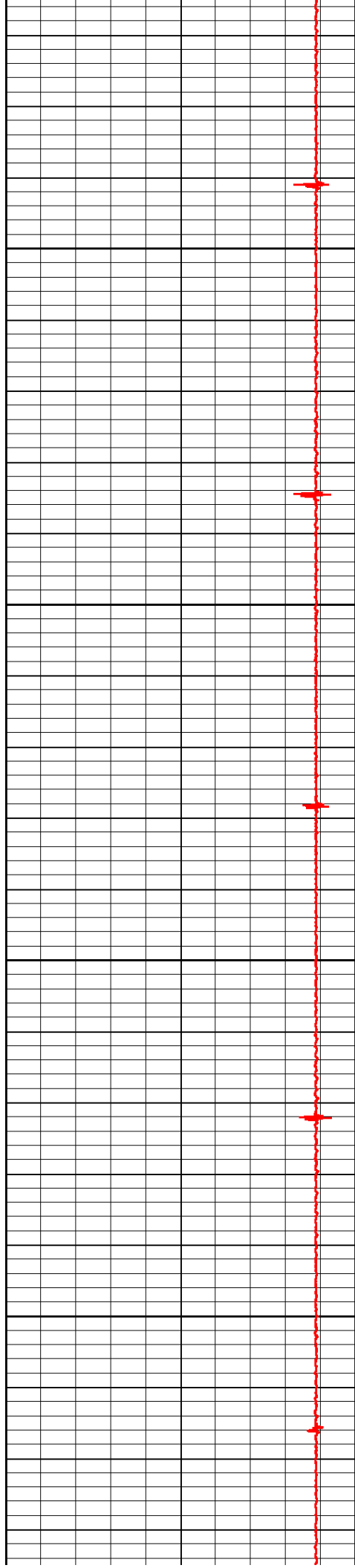
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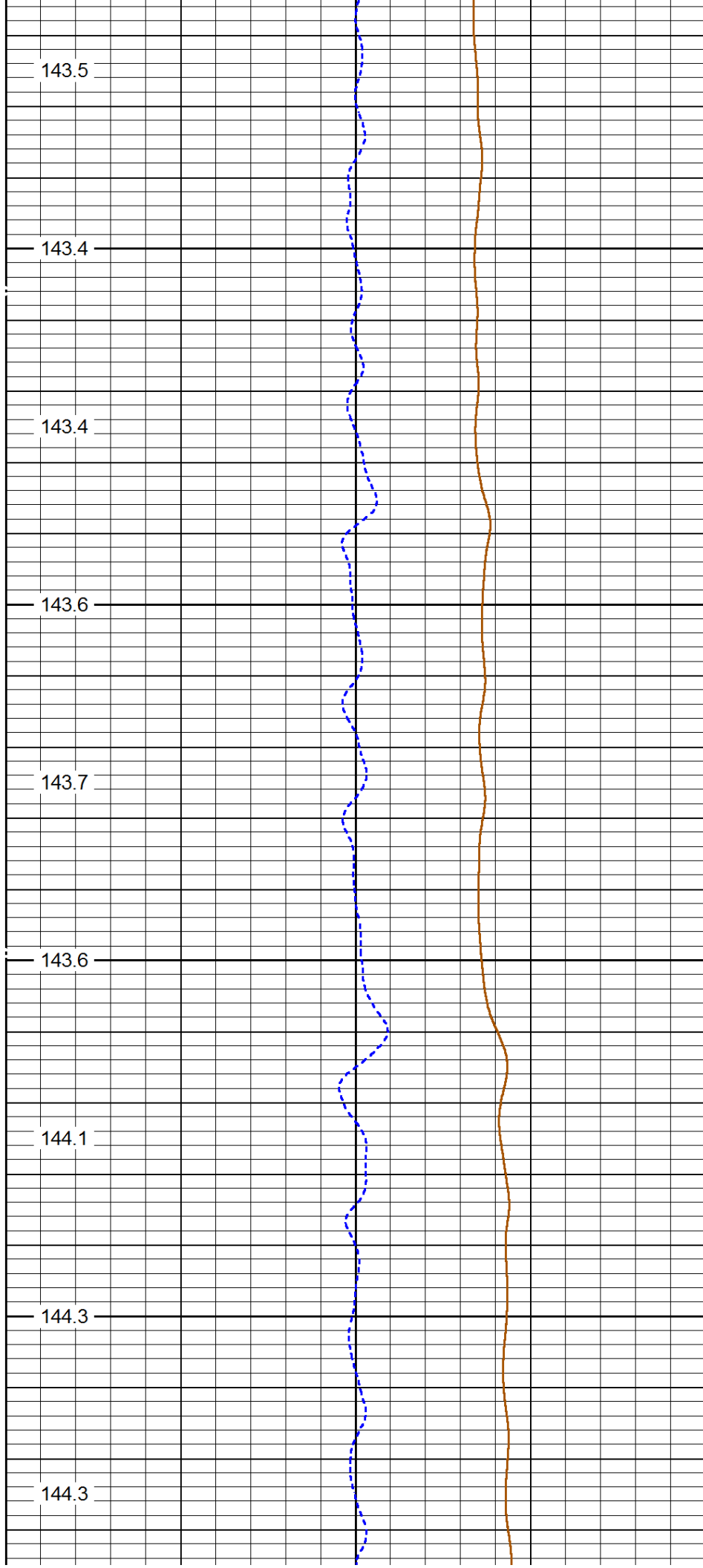
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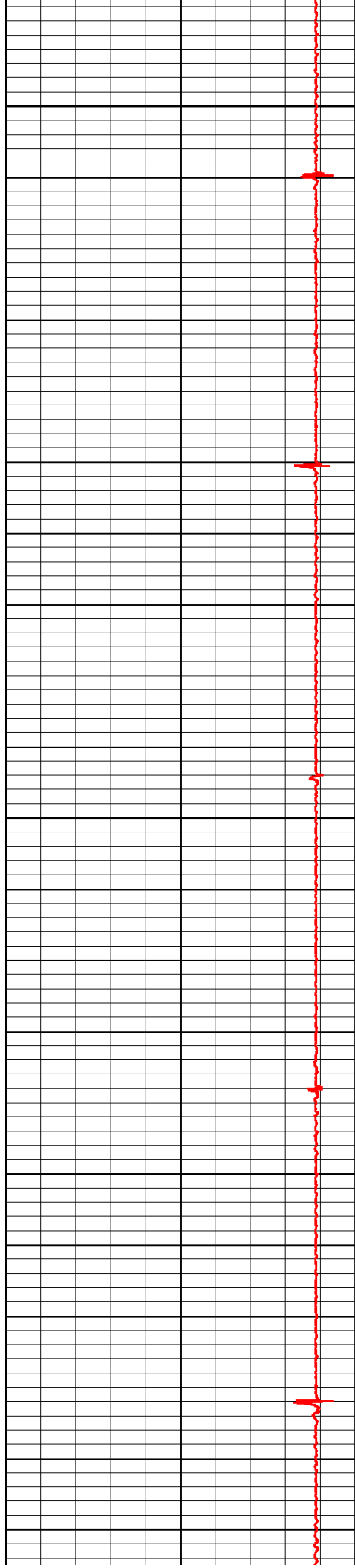
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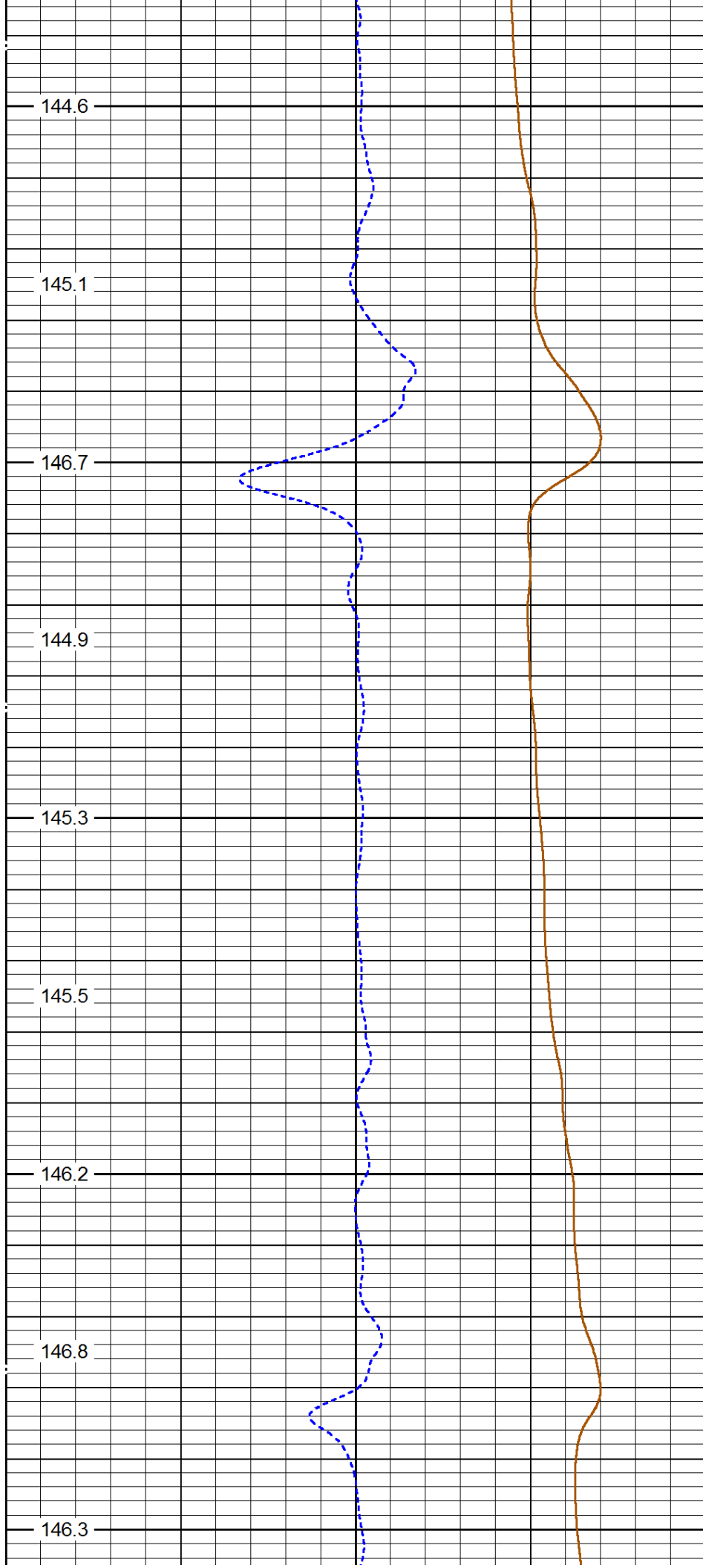
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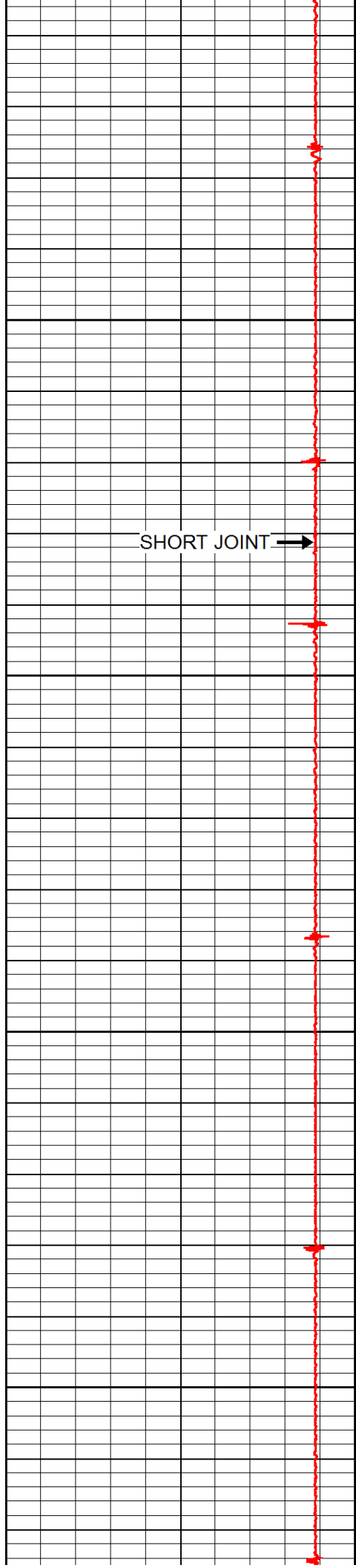




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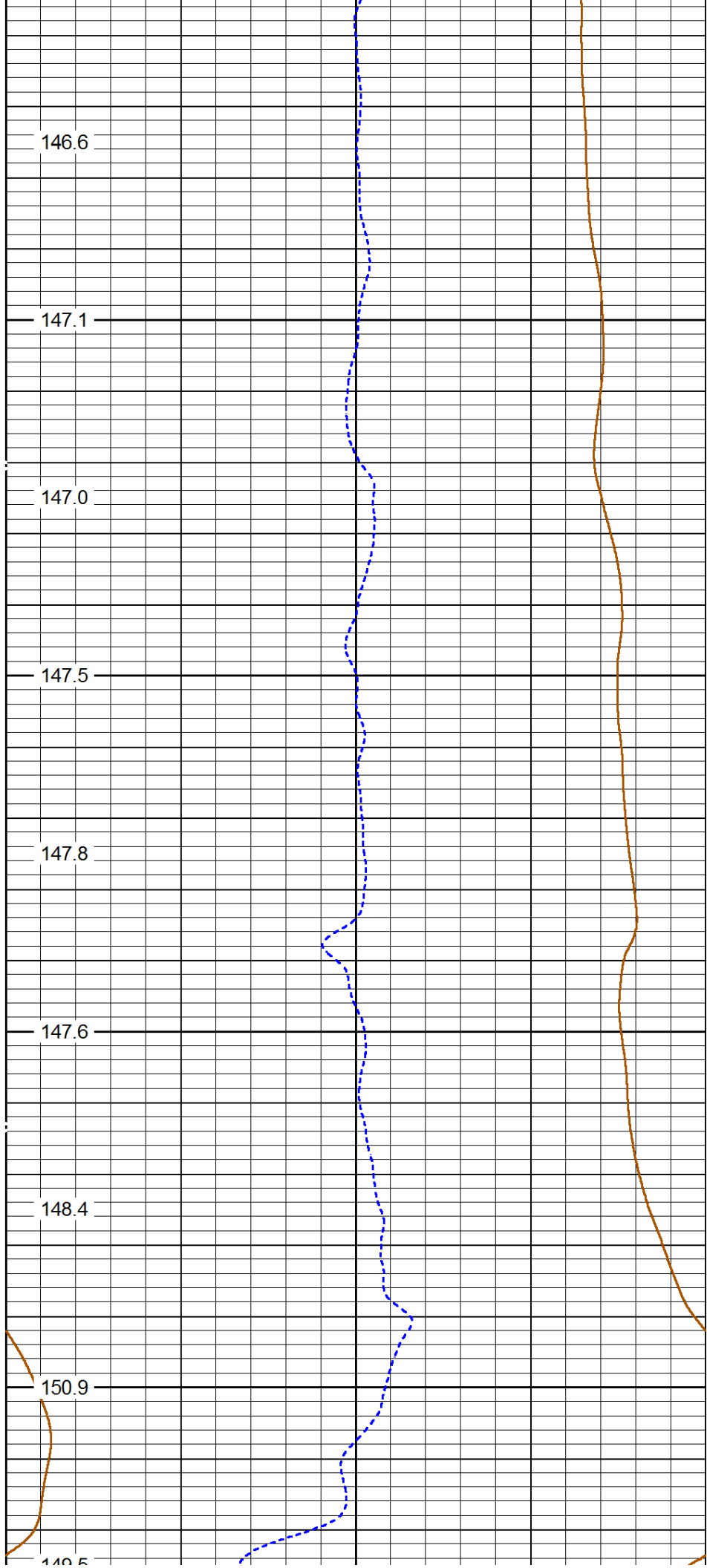
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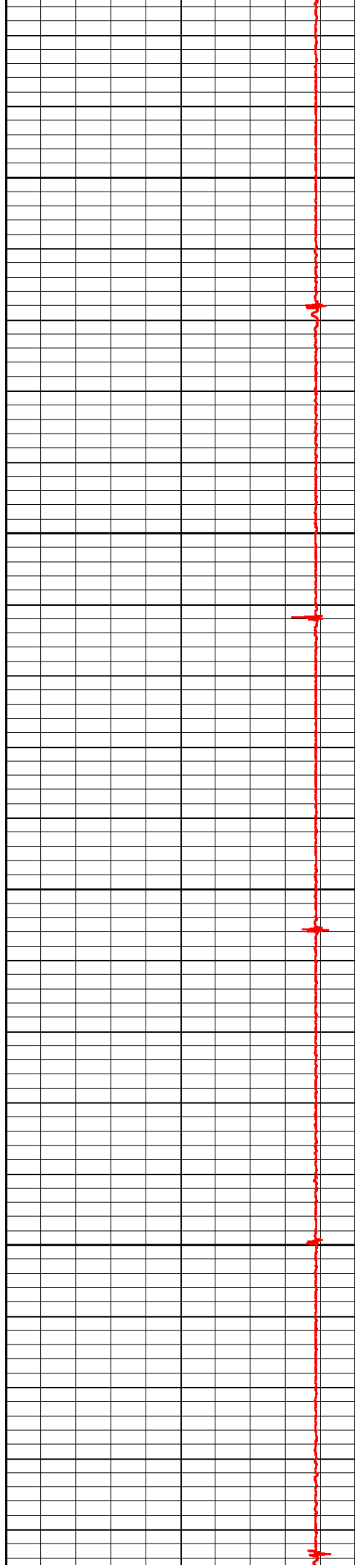




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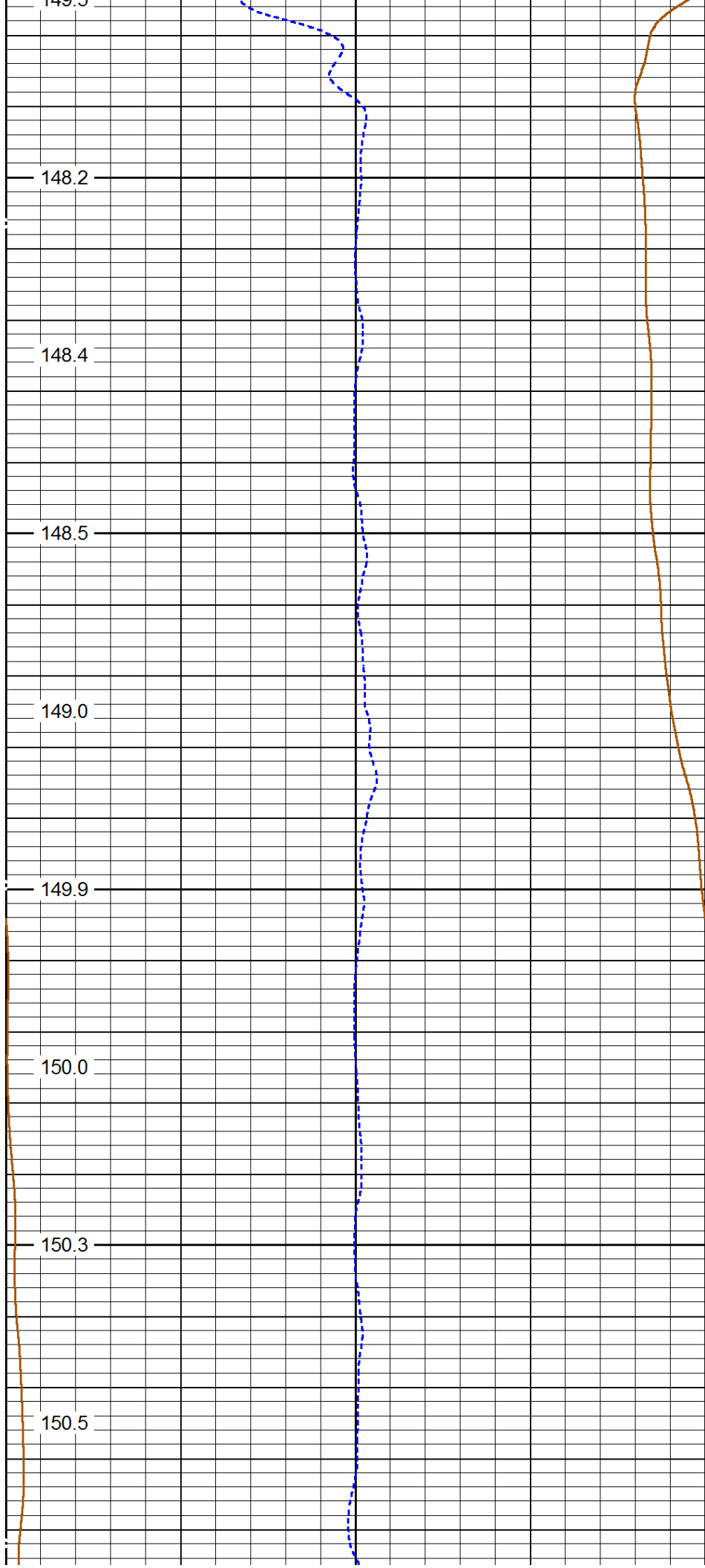
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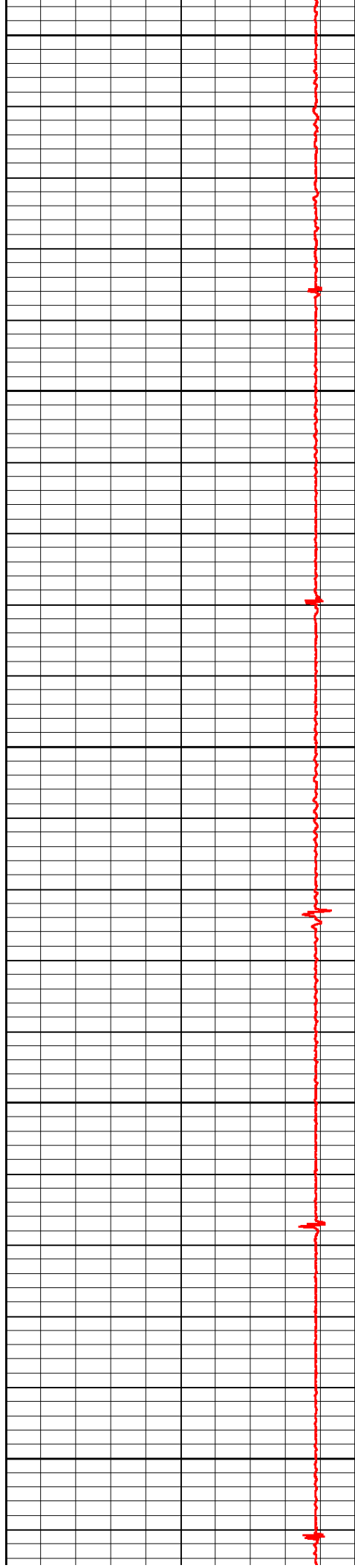




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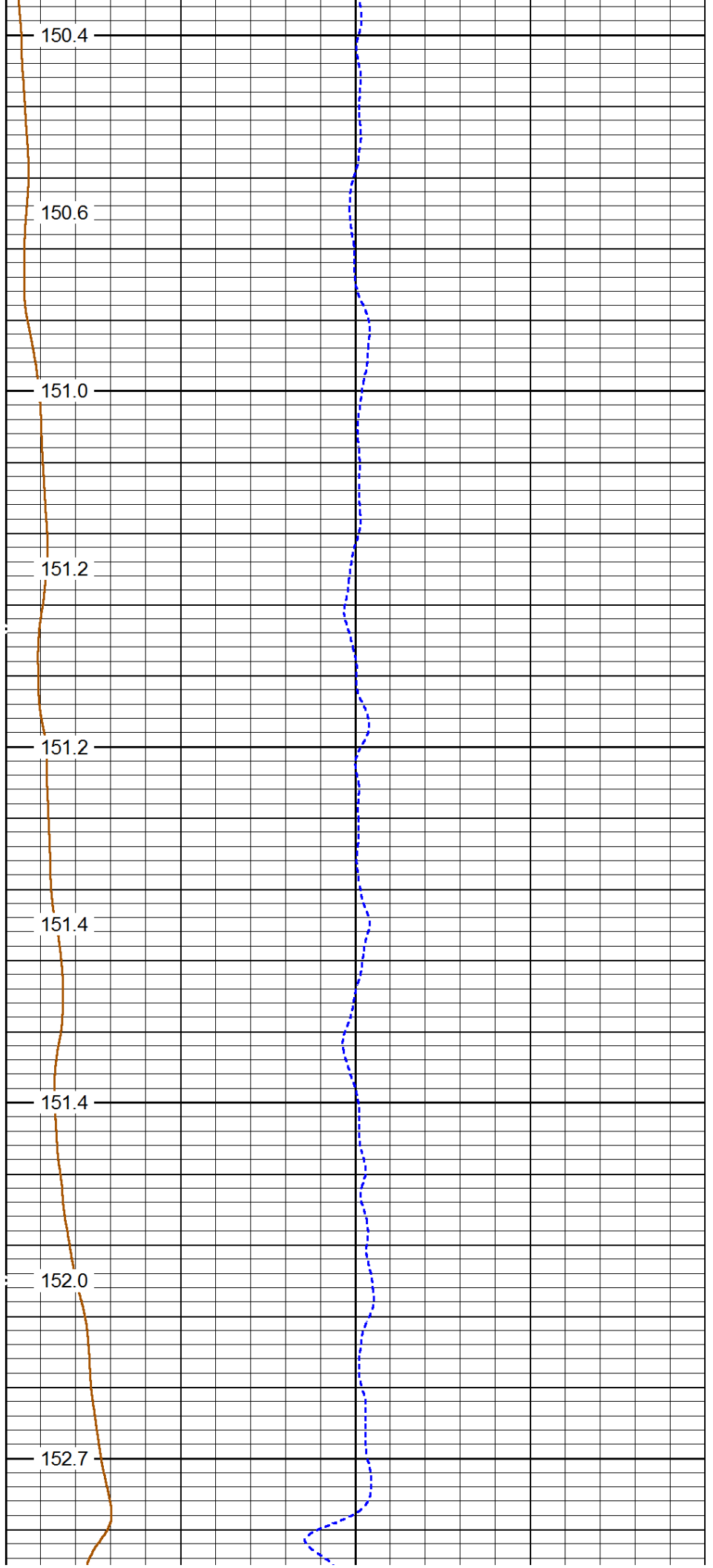




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6800

6900



150.4

150.6

151.0

151.2

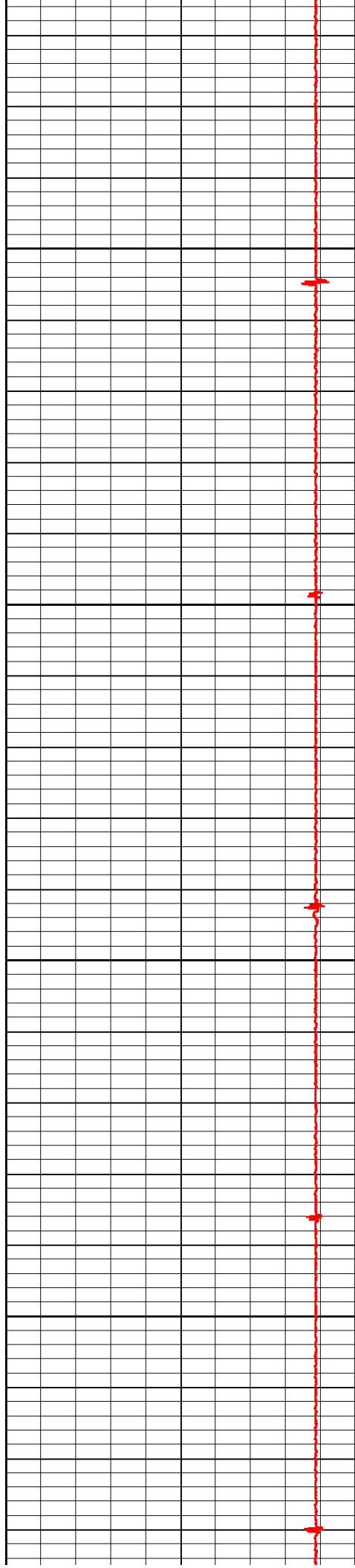
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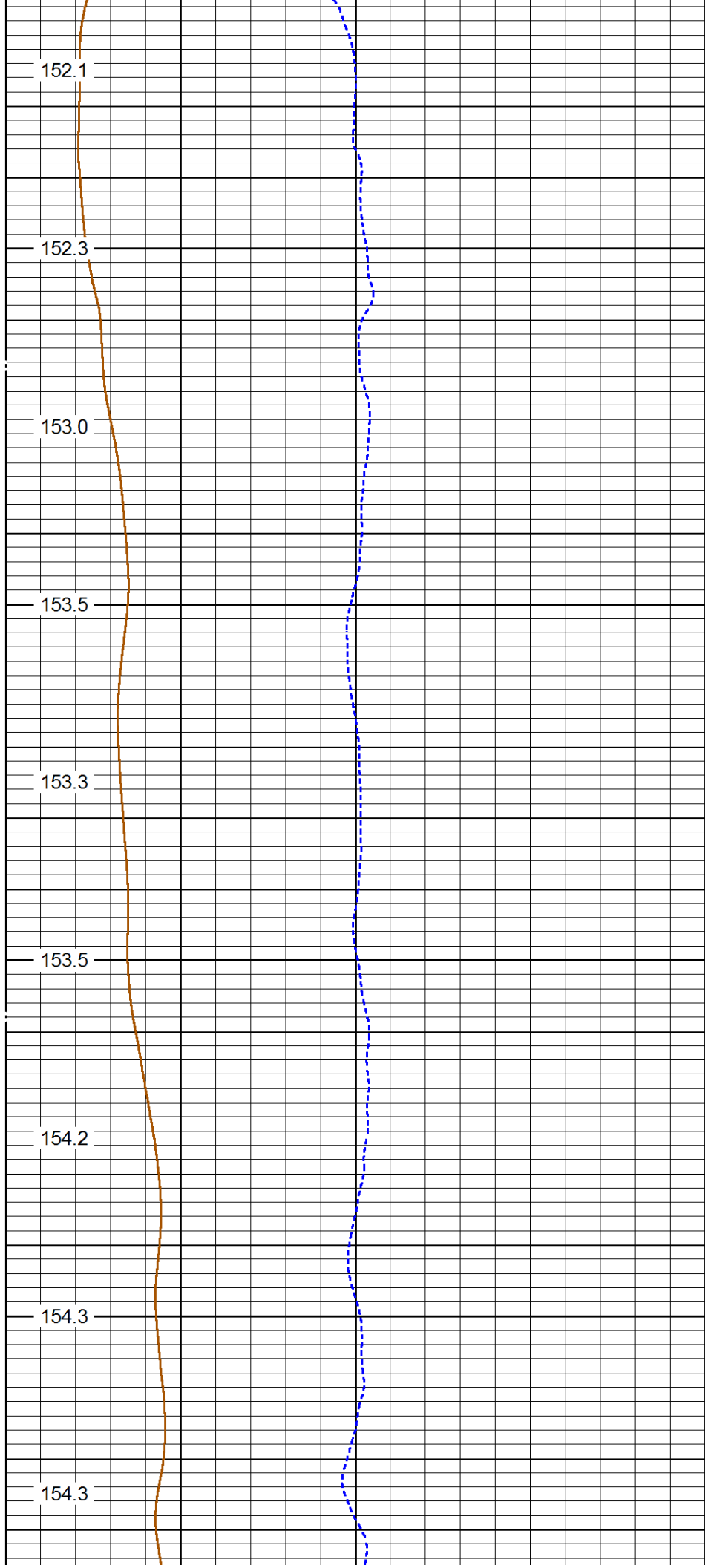
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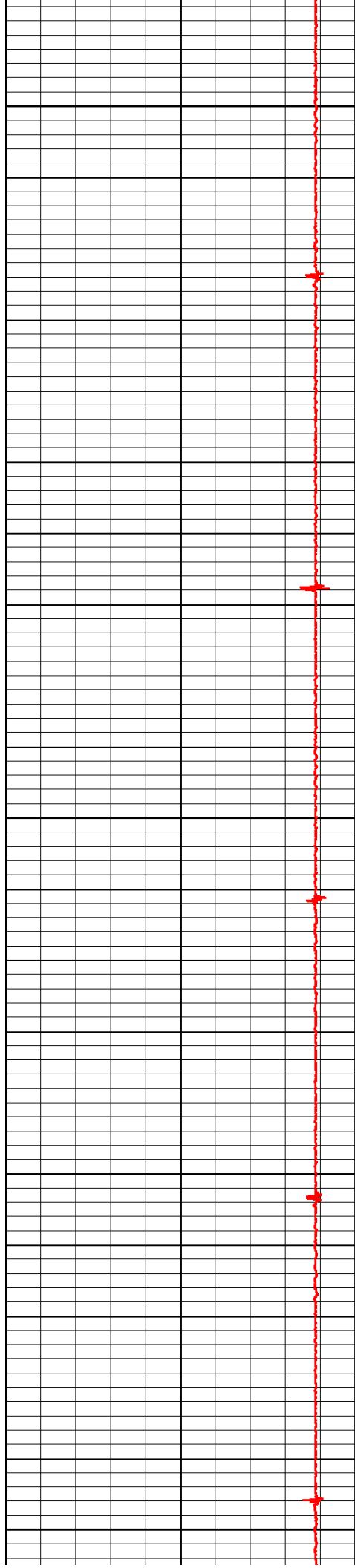
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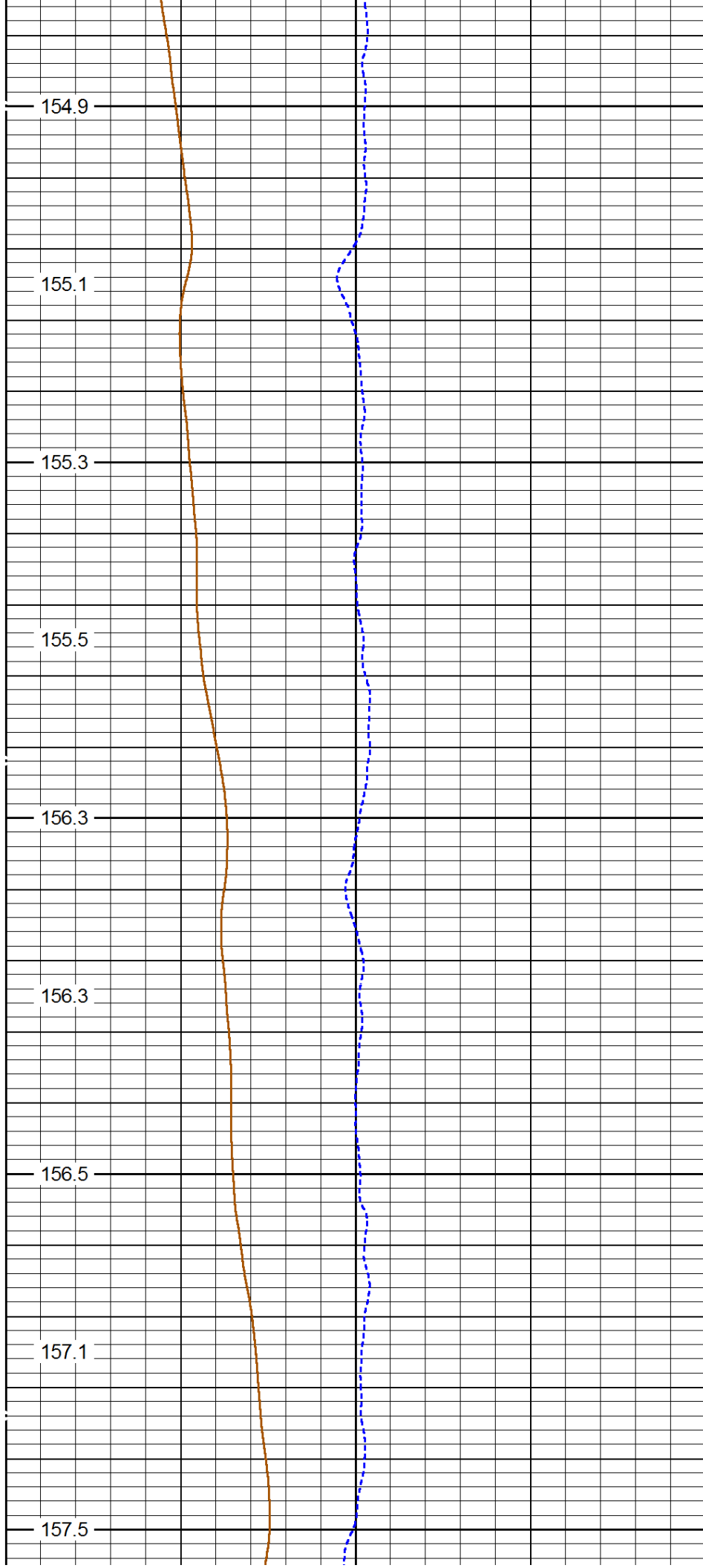
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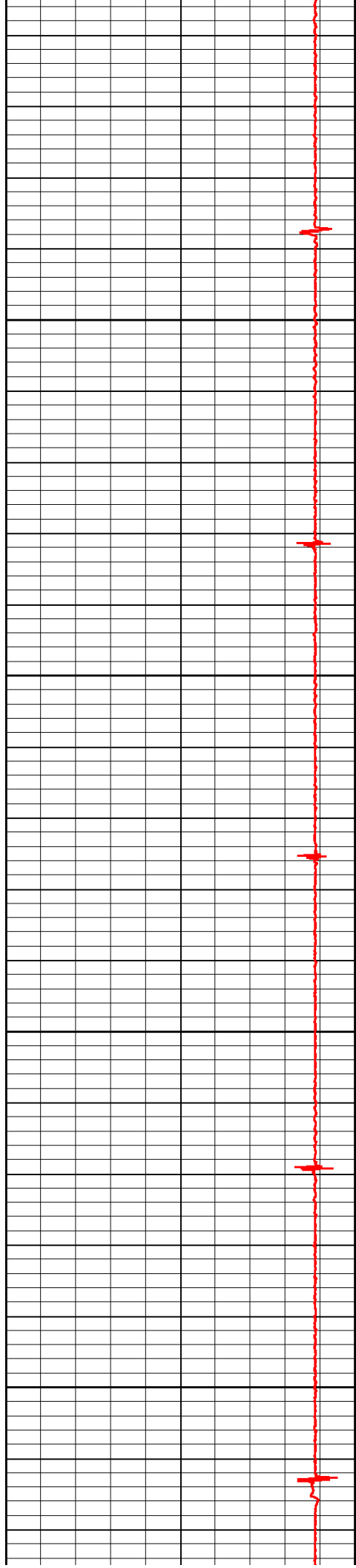




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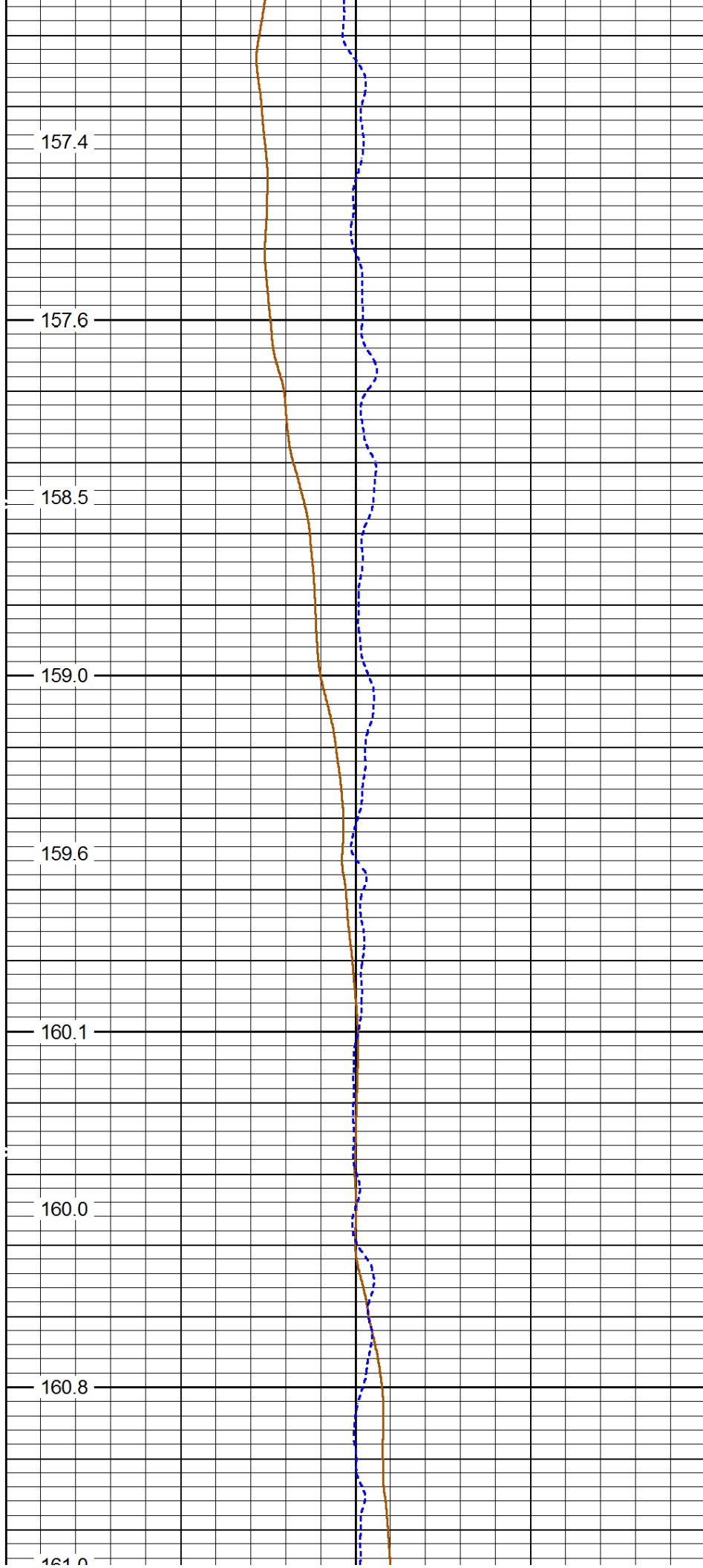
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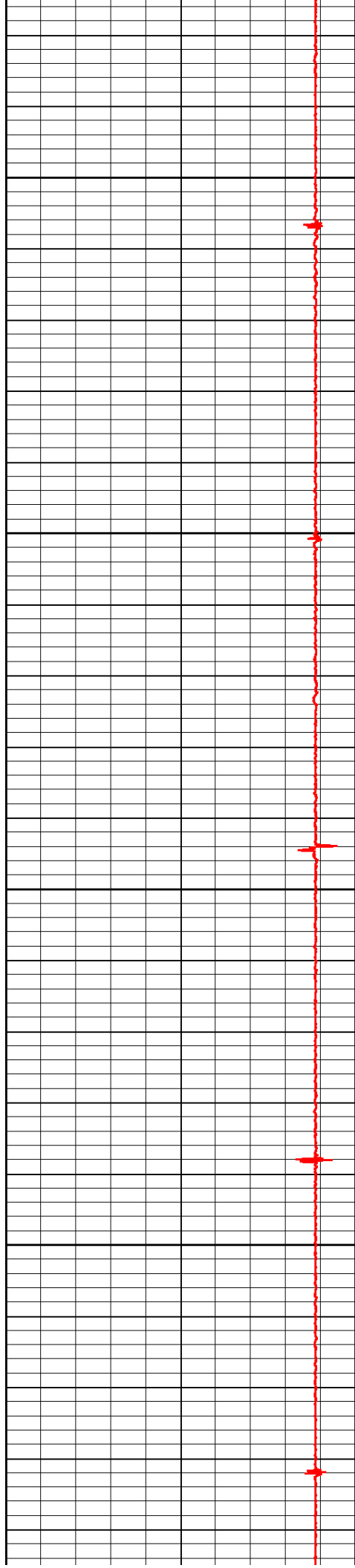




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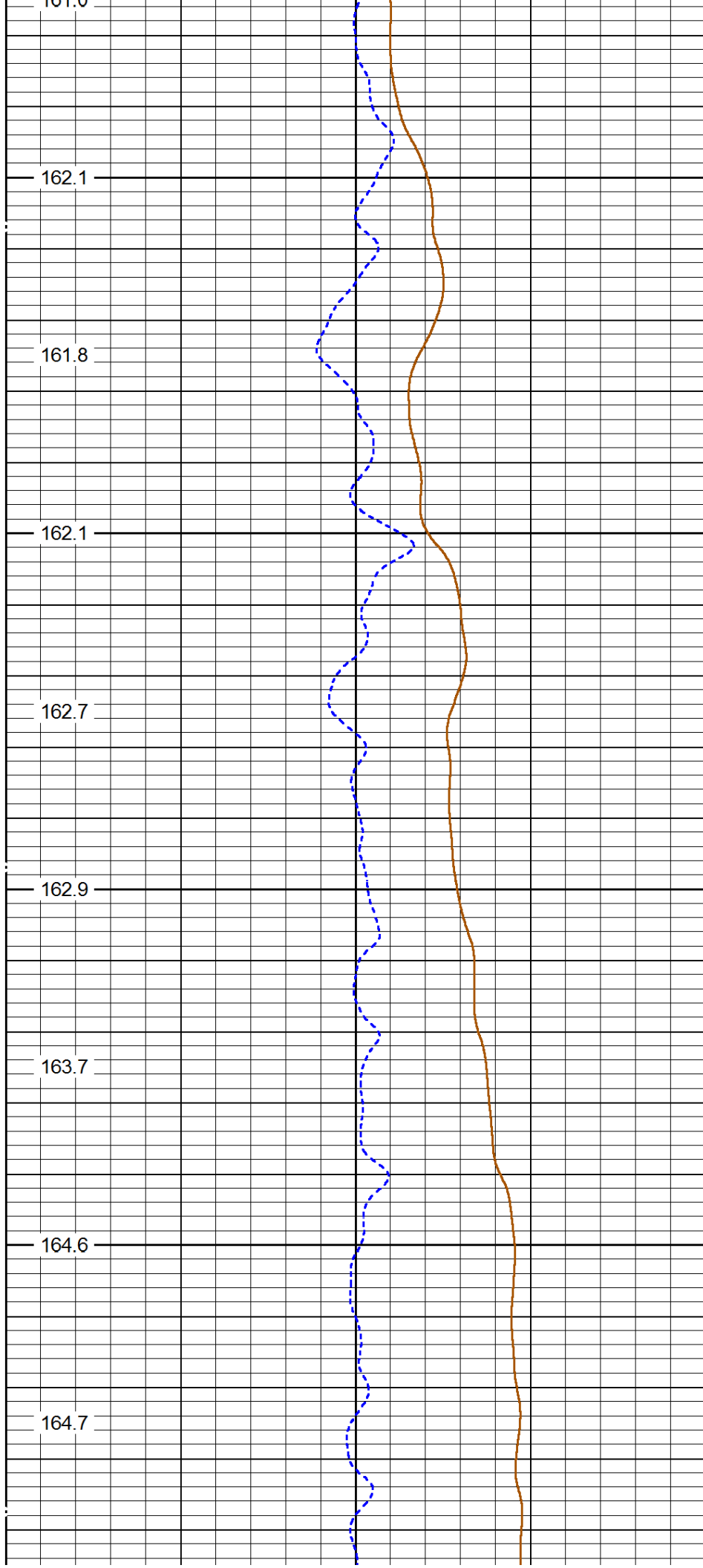
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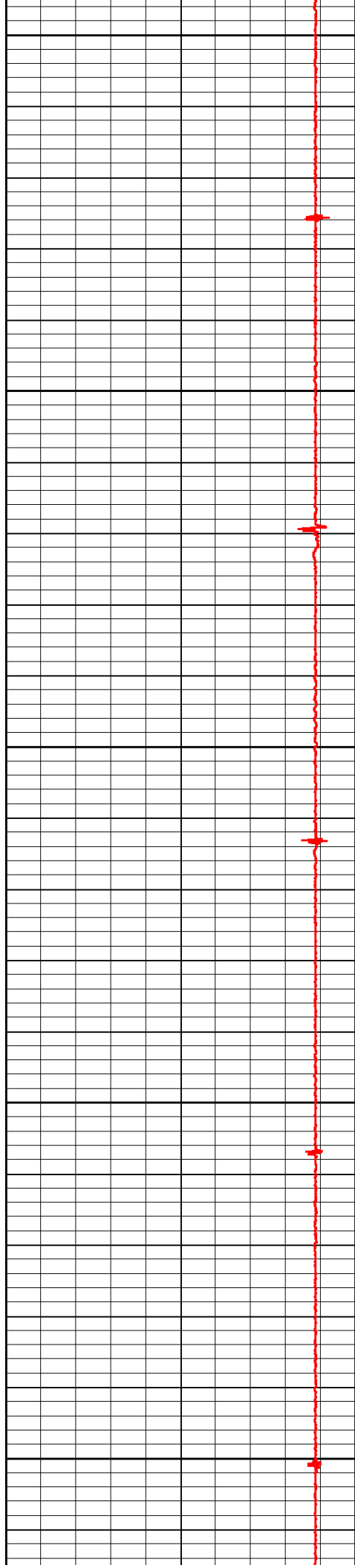




7600

7700

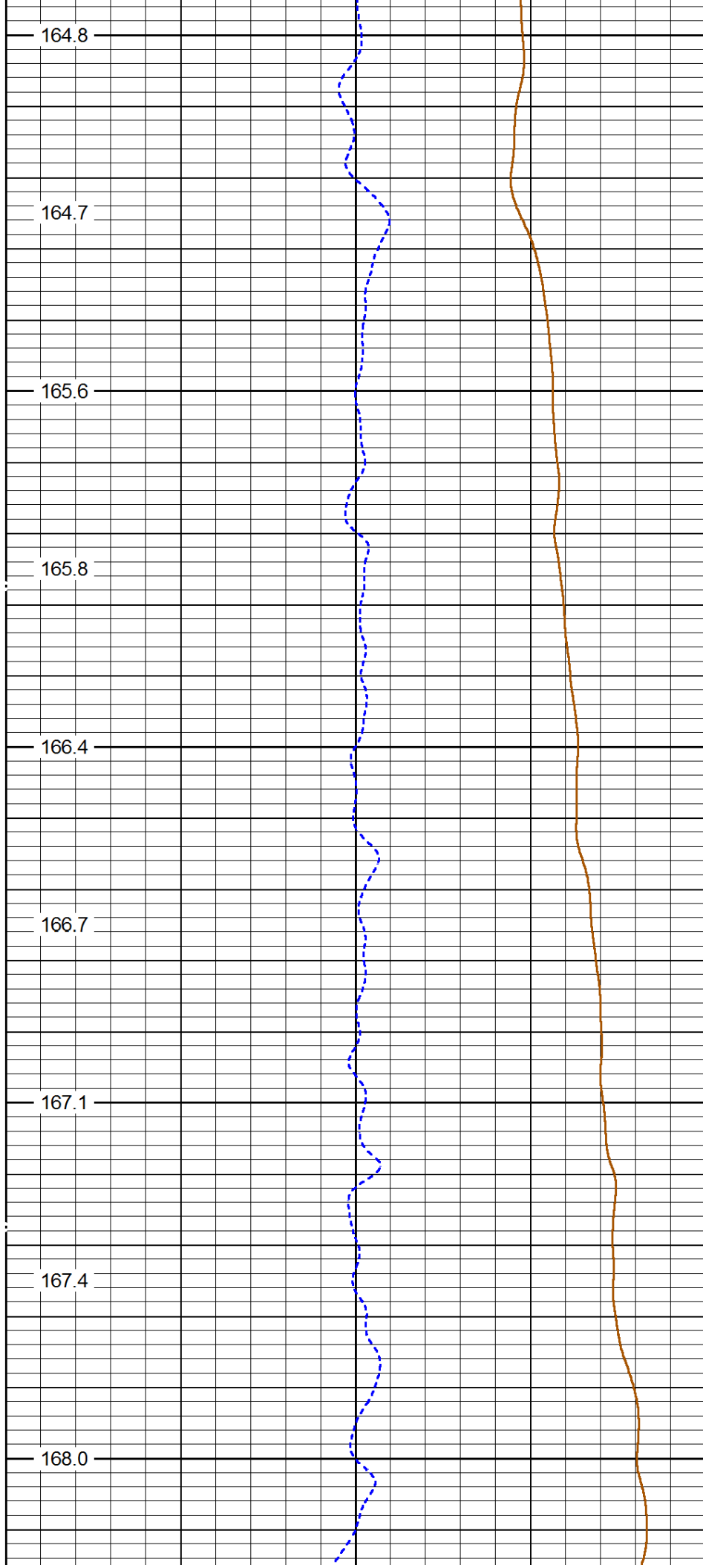


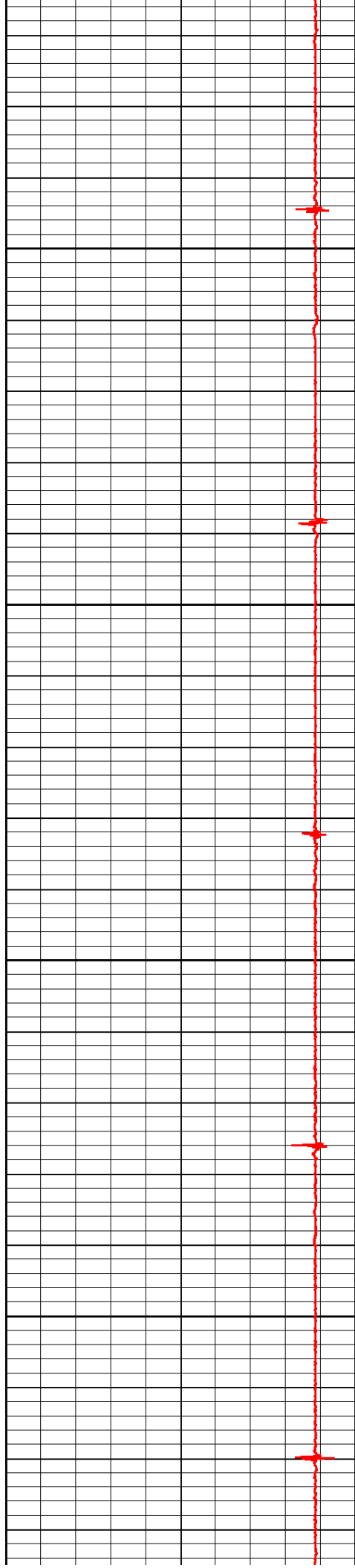


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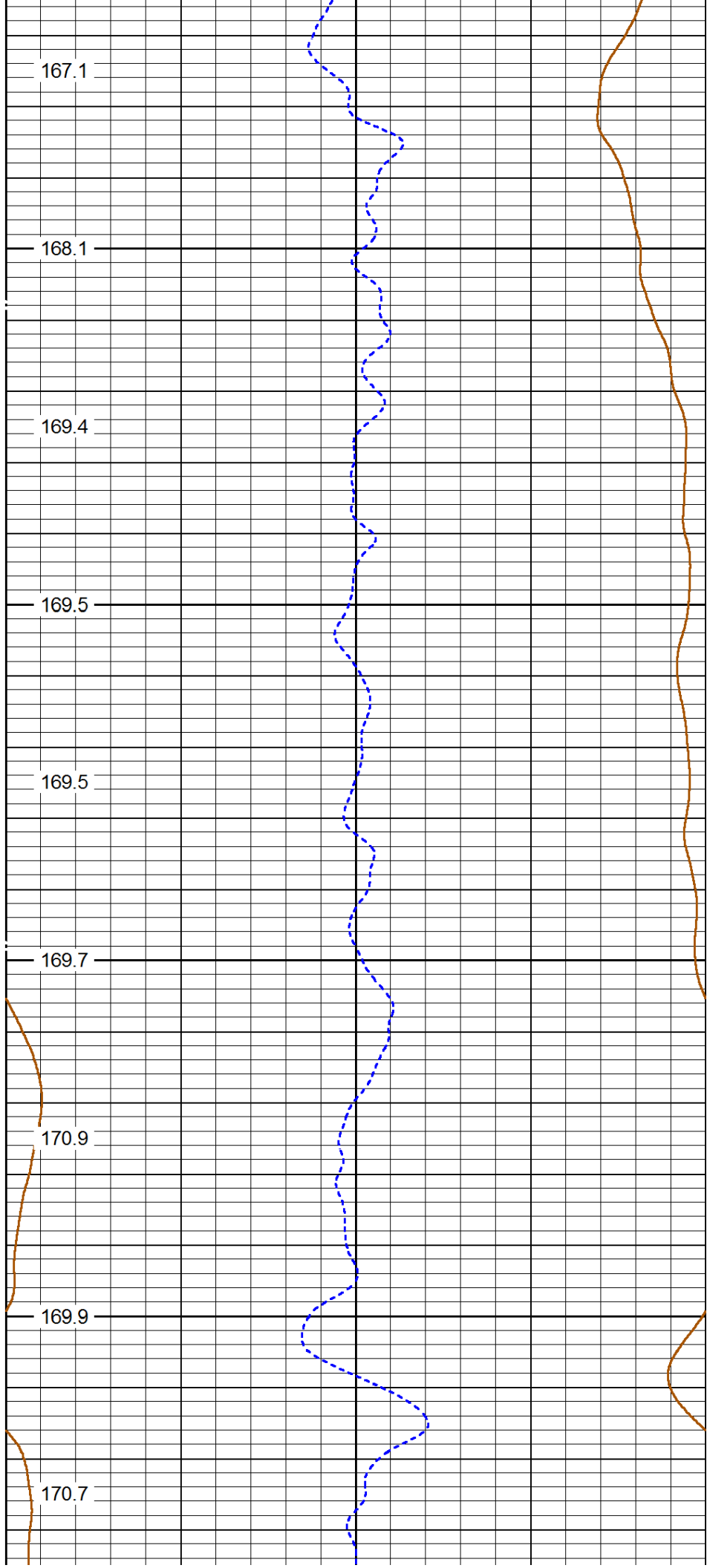
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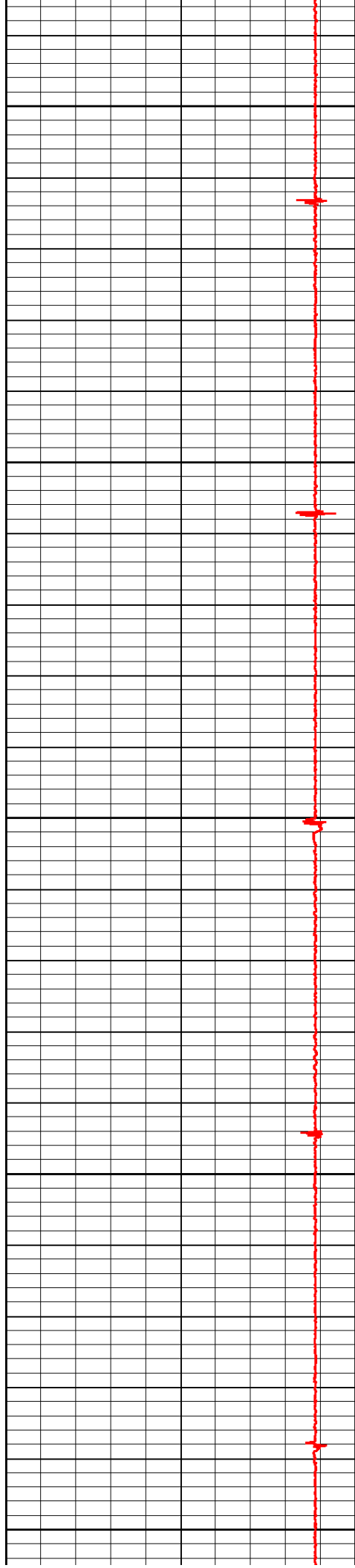




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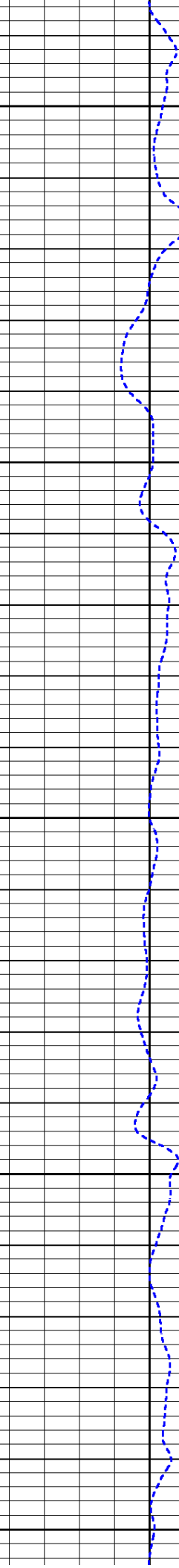
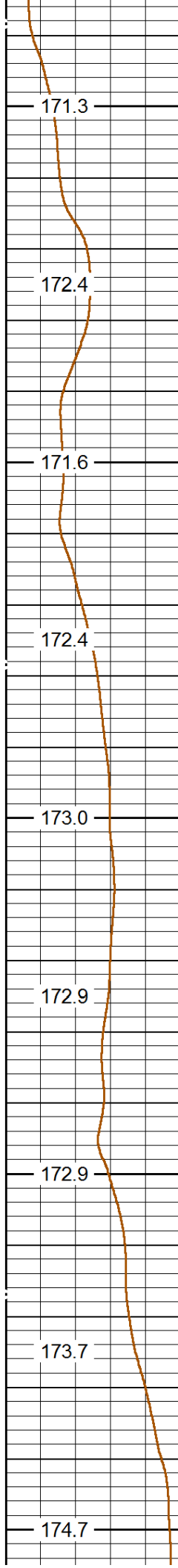
8200

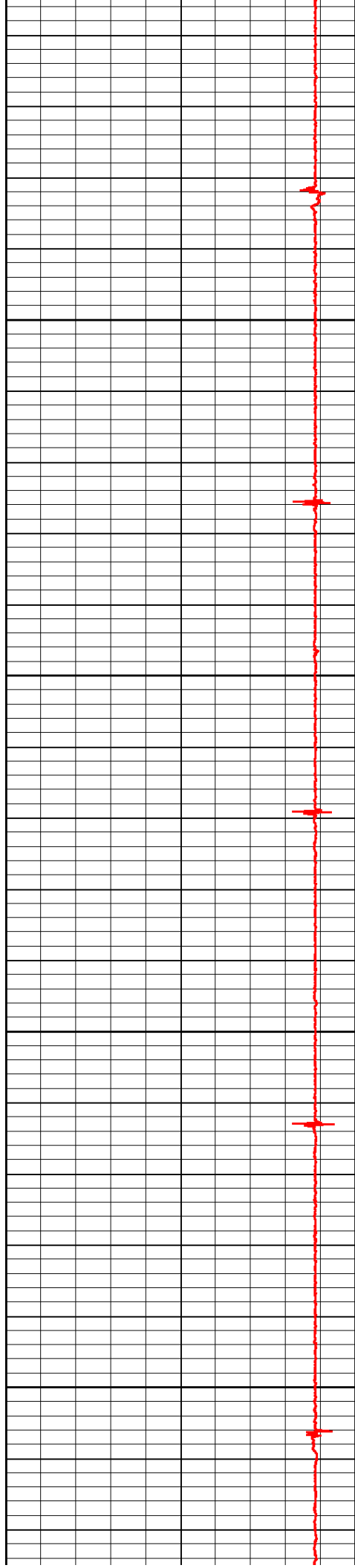




8300

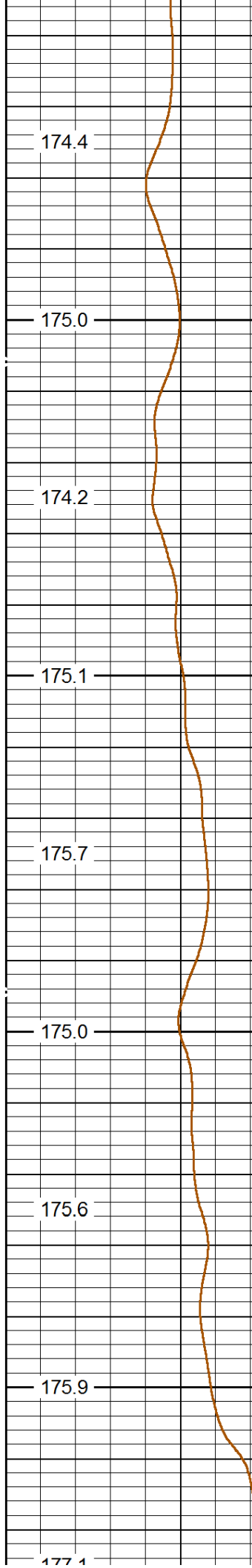
8400





8500

8600



174.4

175.0

174.2

175.1

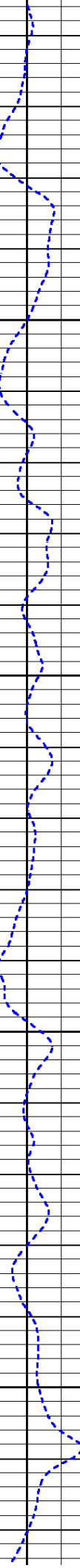
175.7

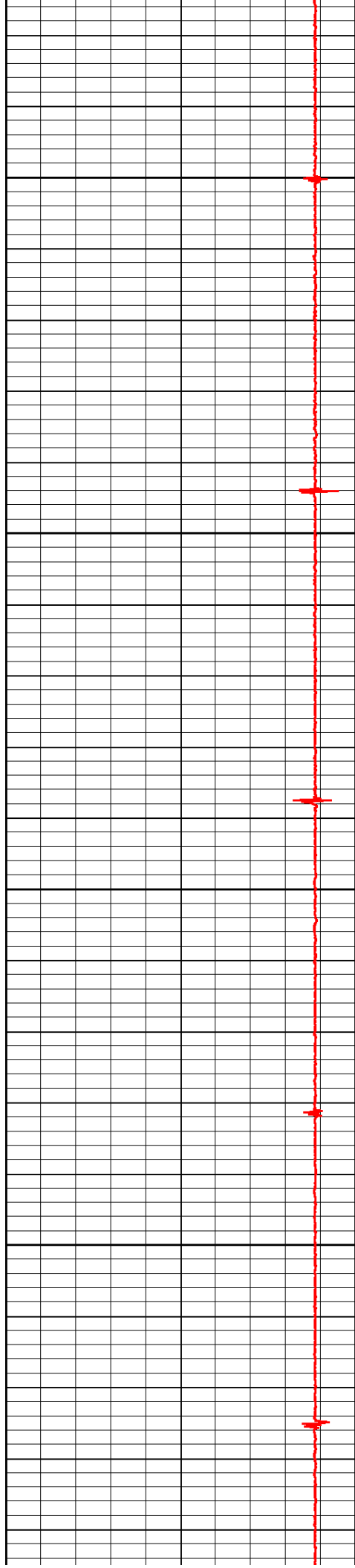
175.0

175.6

175.9

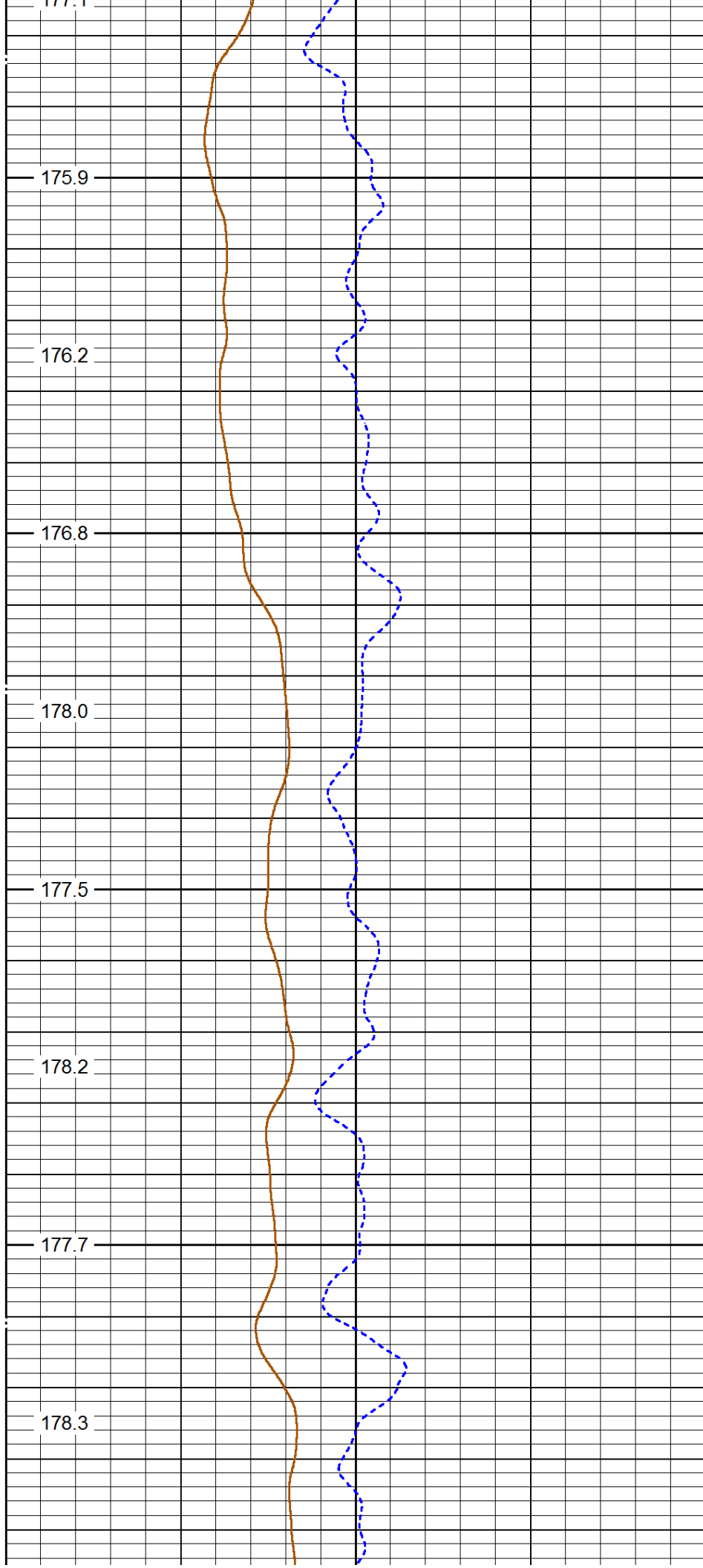
177.1

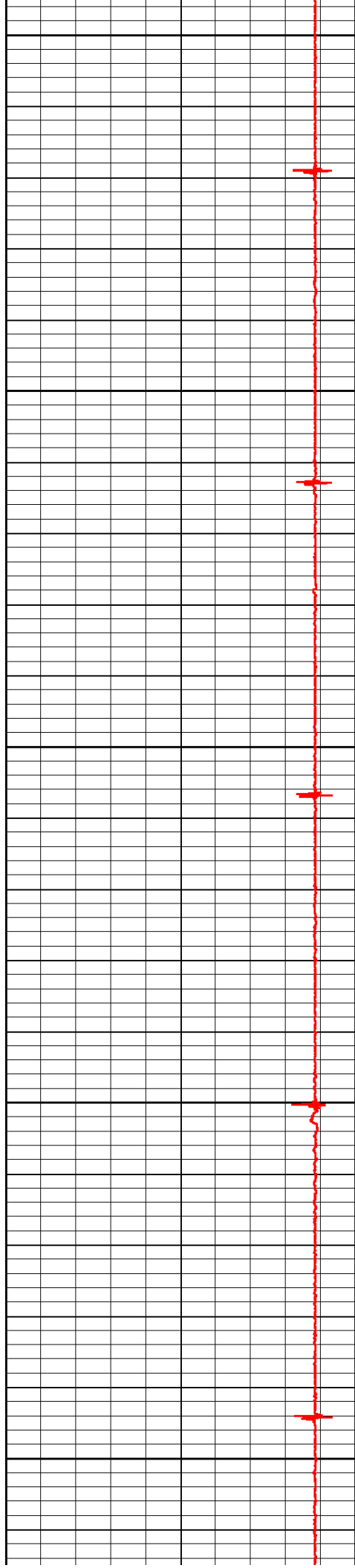




8700

8800

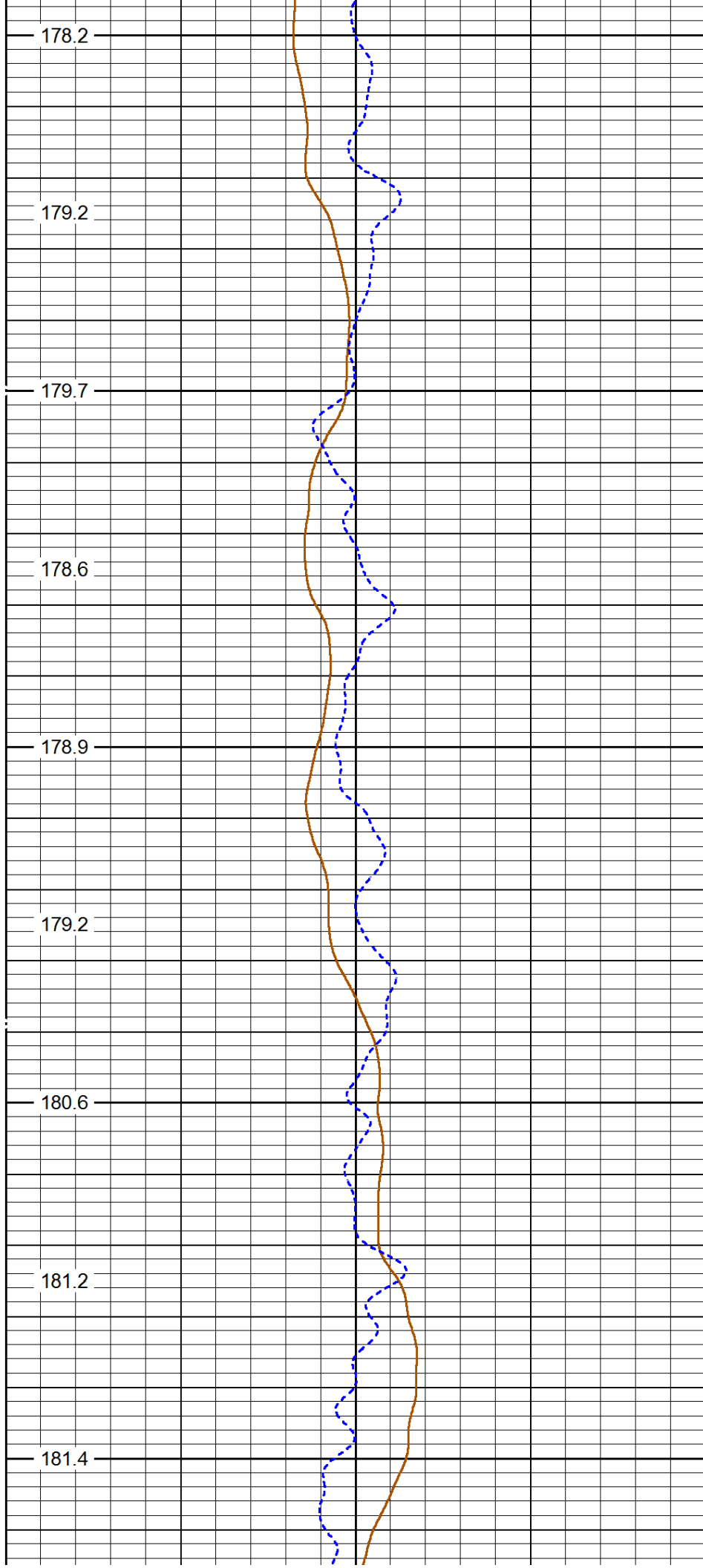


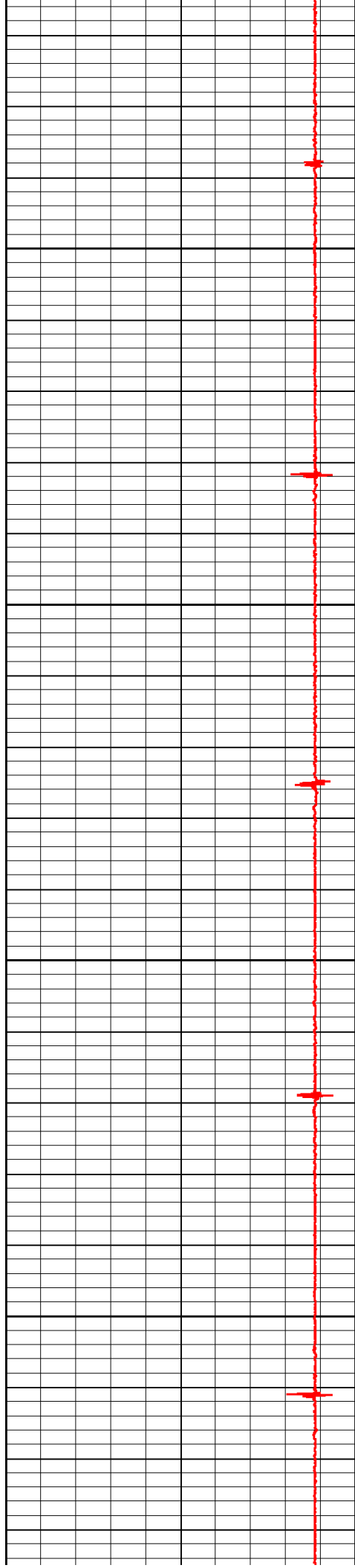


8900

9000

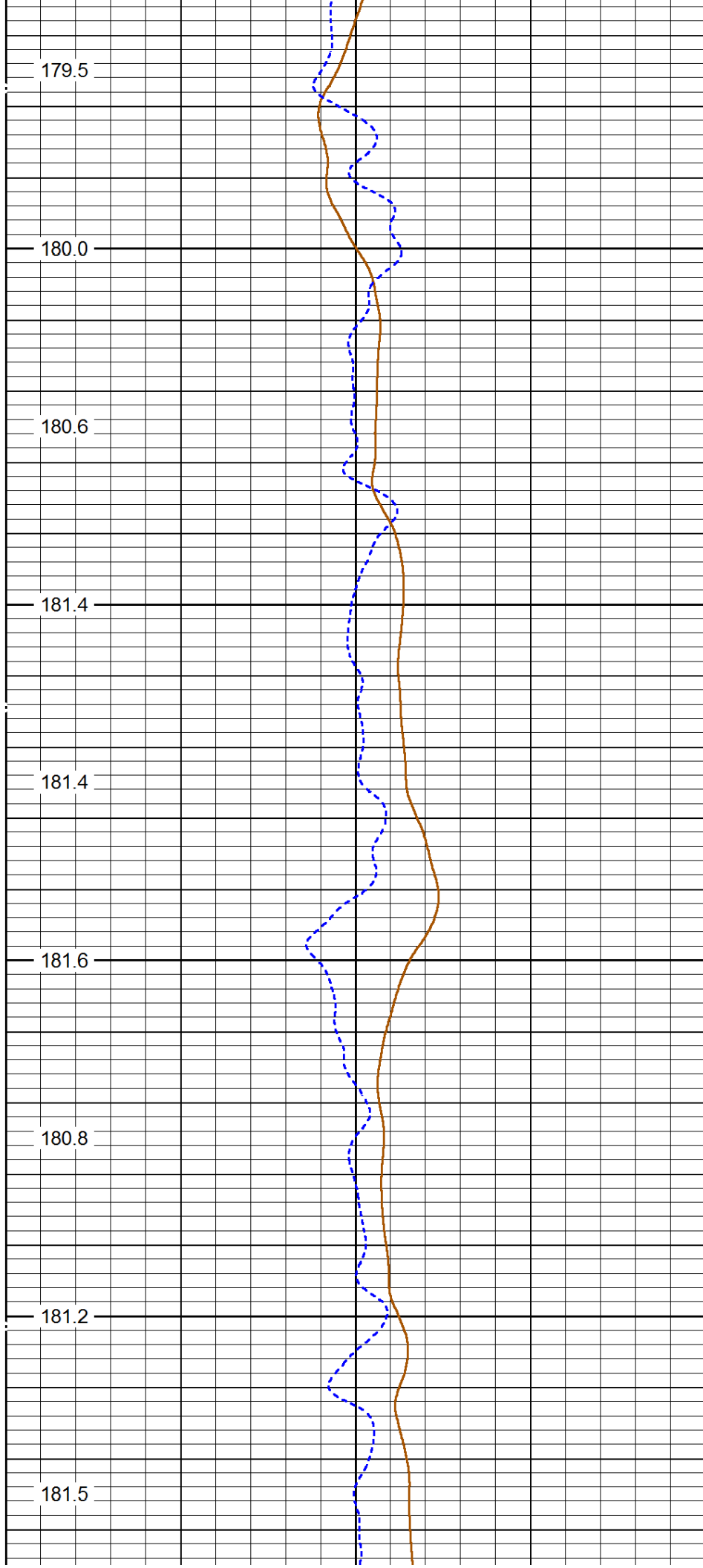
9100

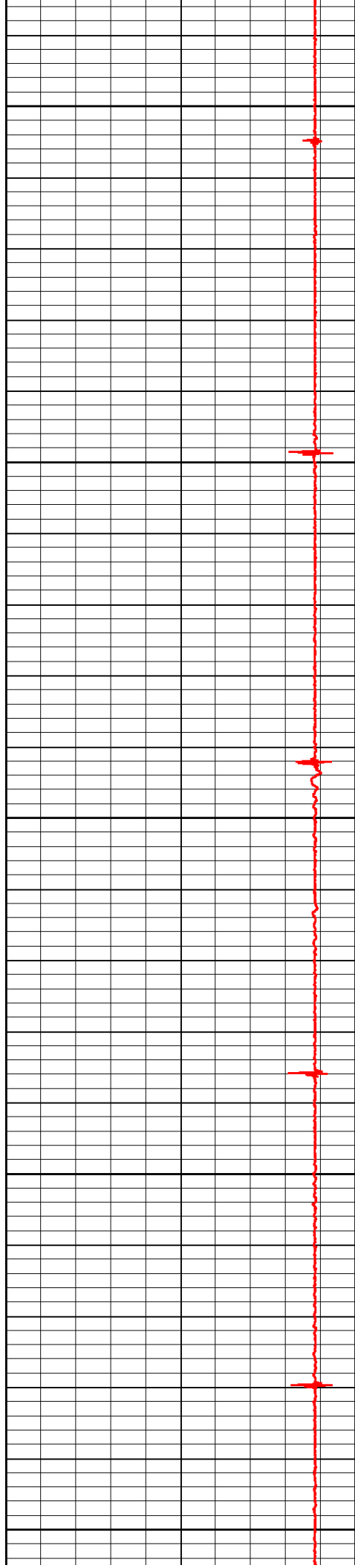




9200

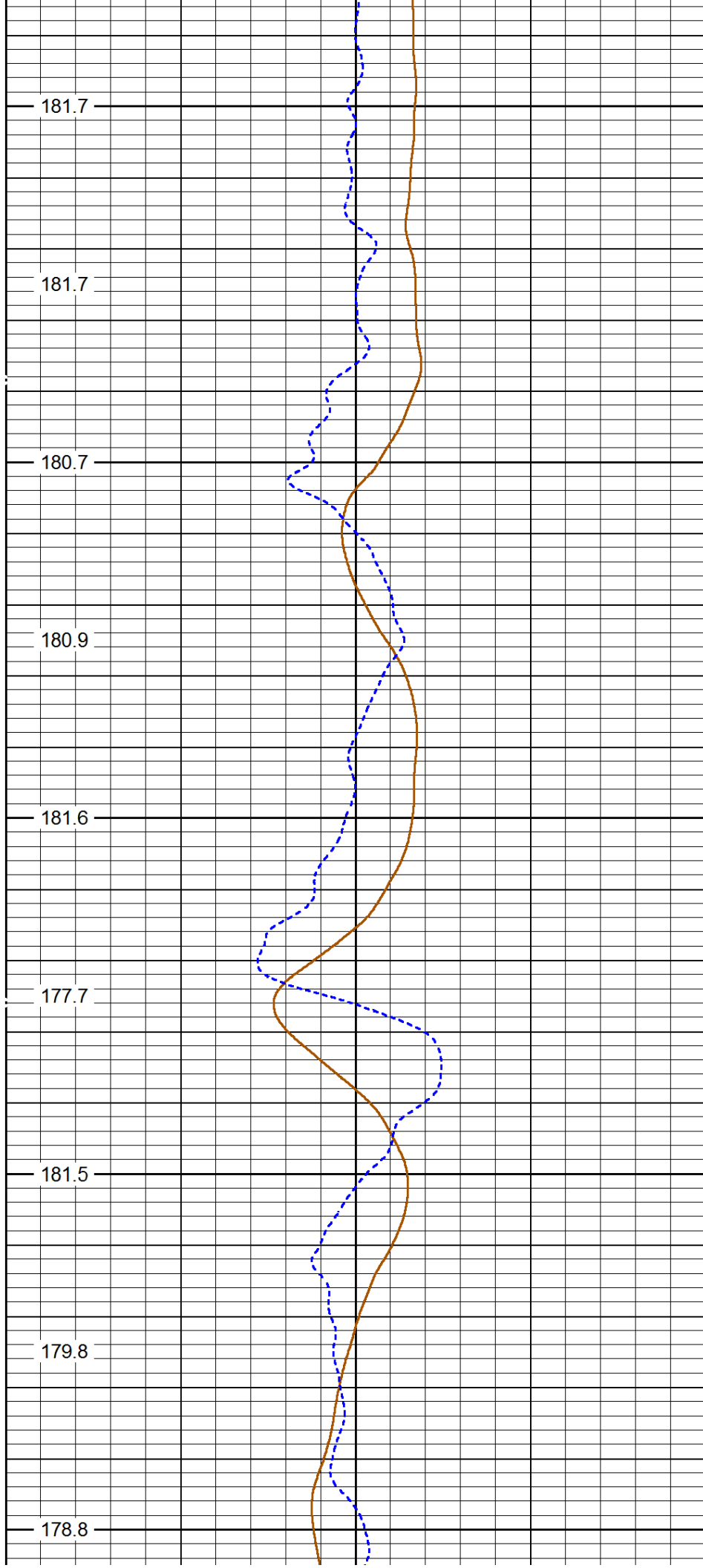
9300

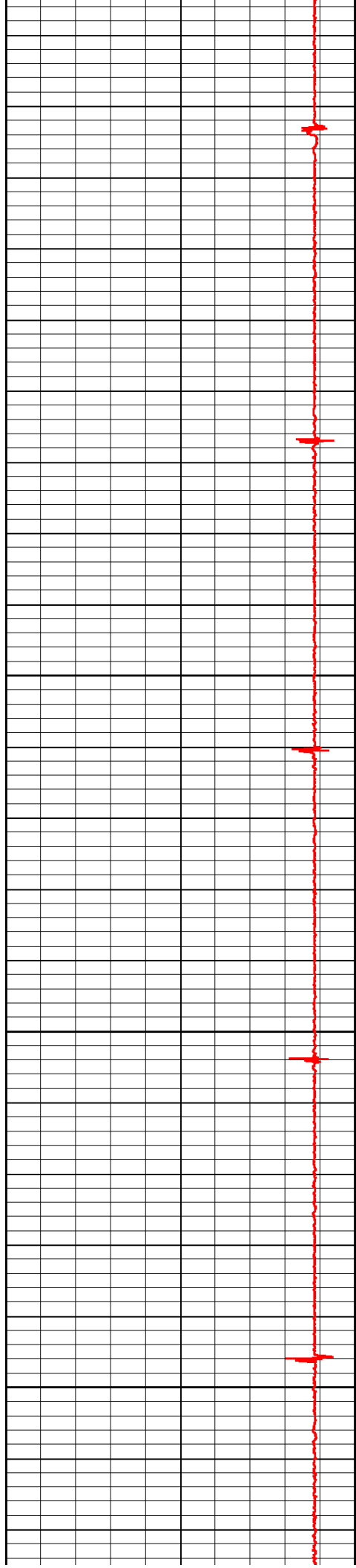




9400

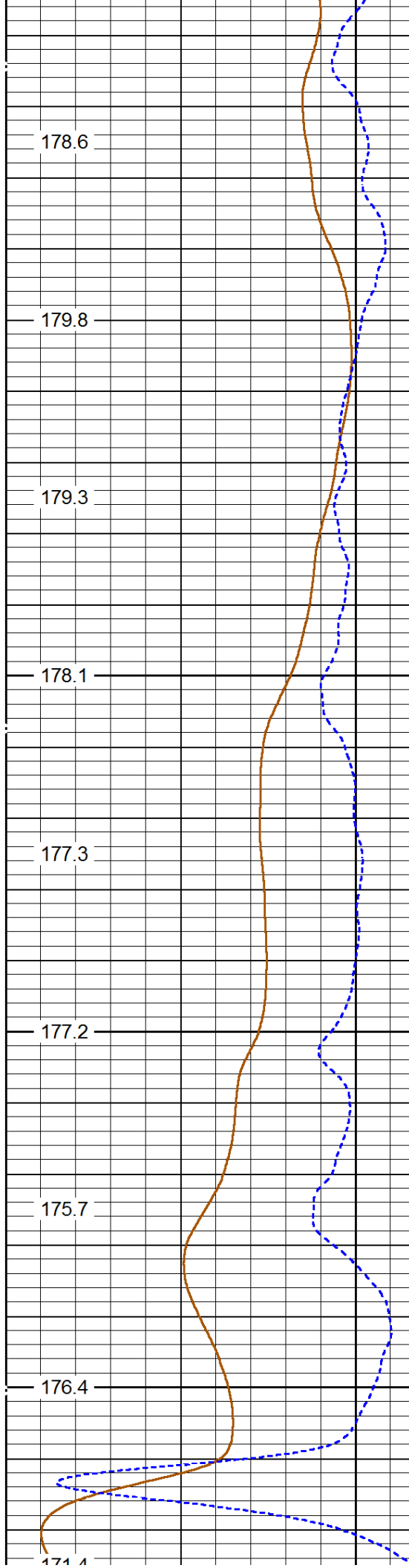
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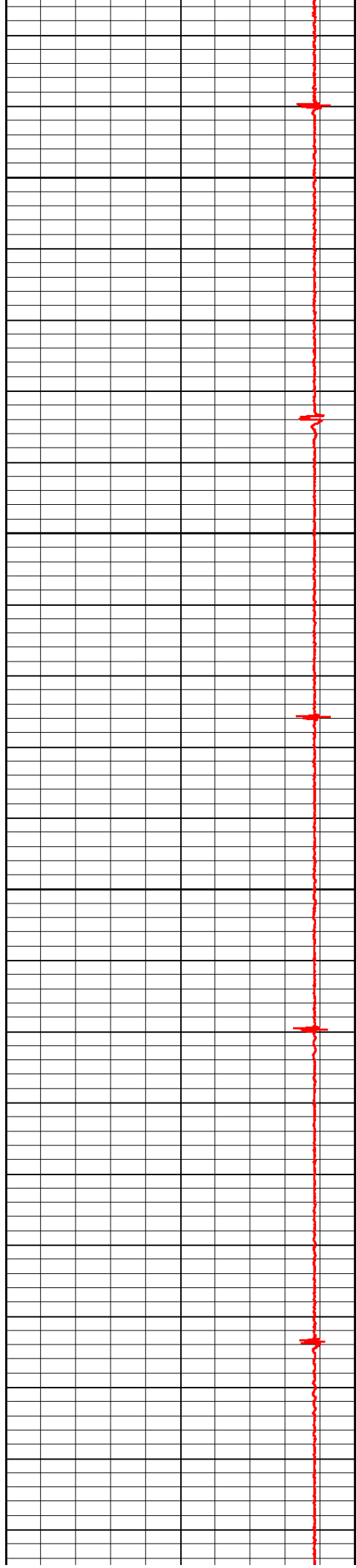




9600

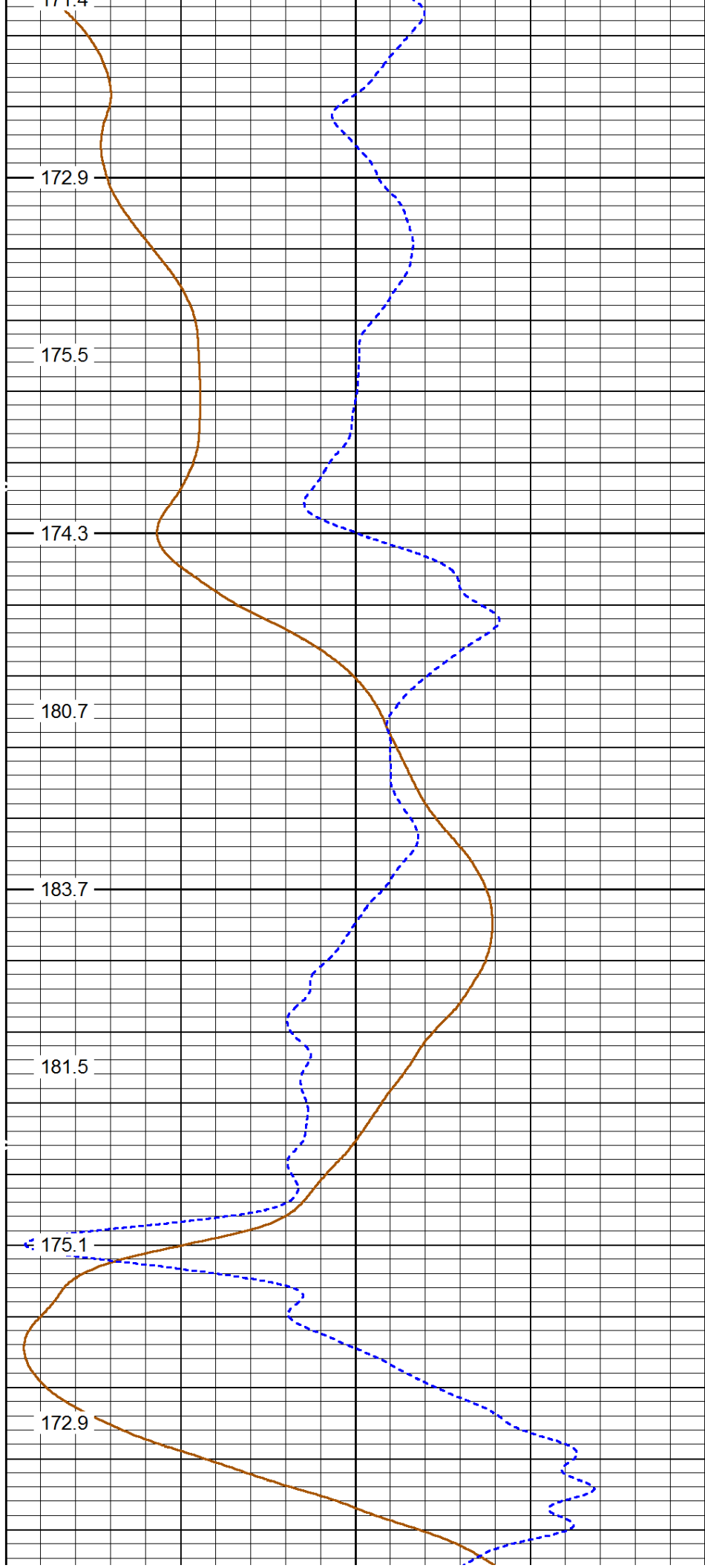
9700



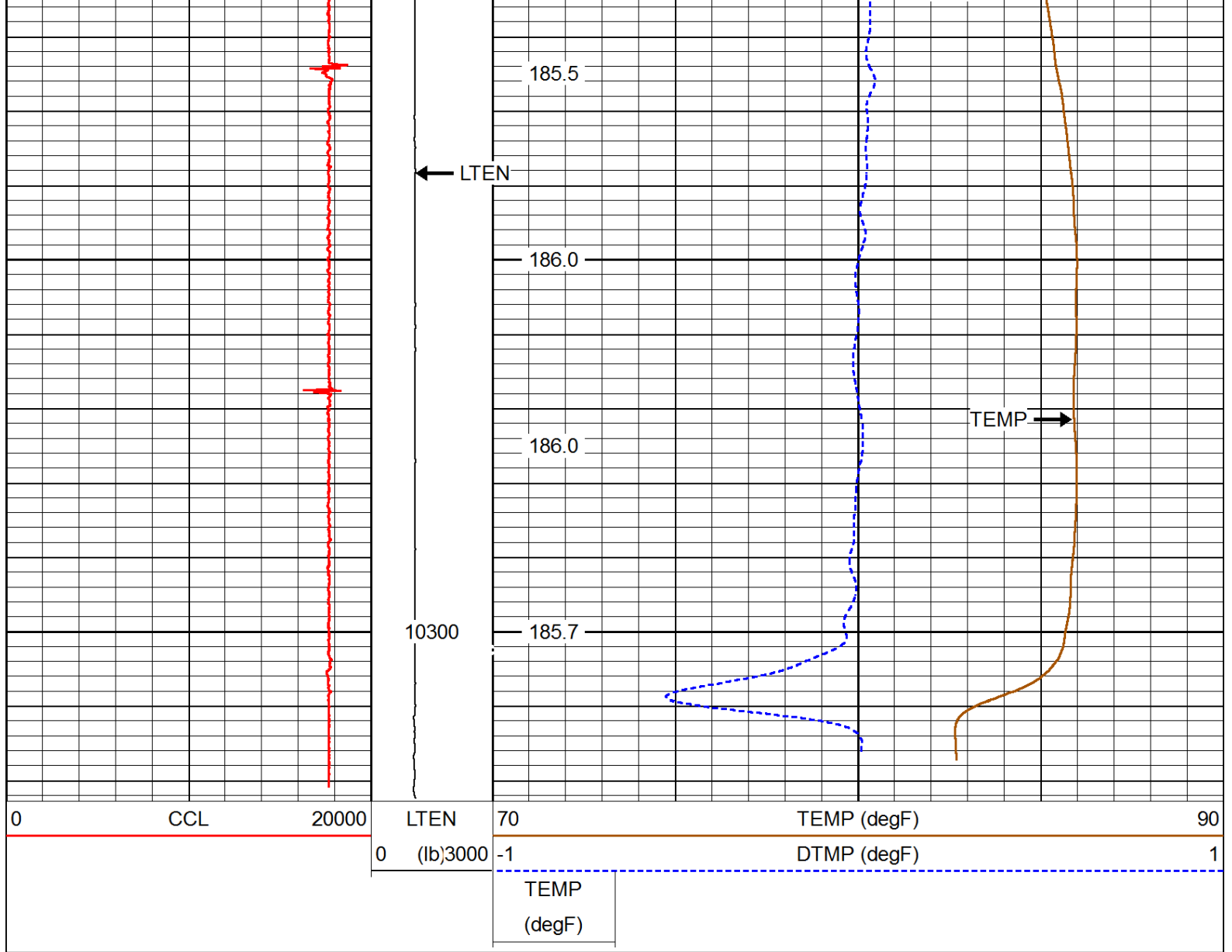


9800

9900

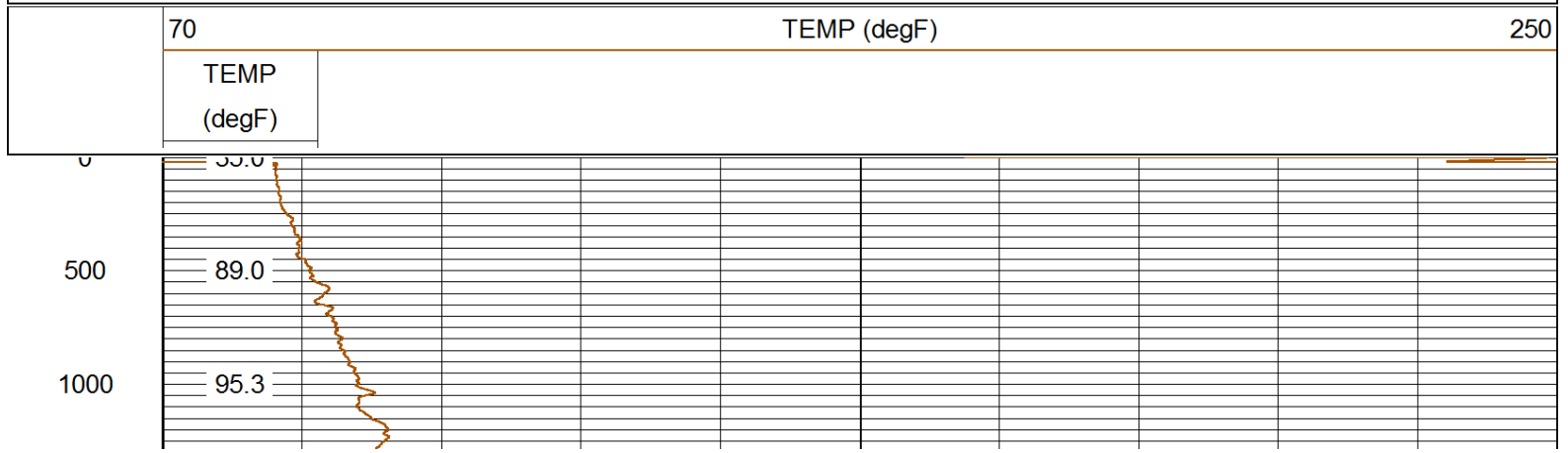


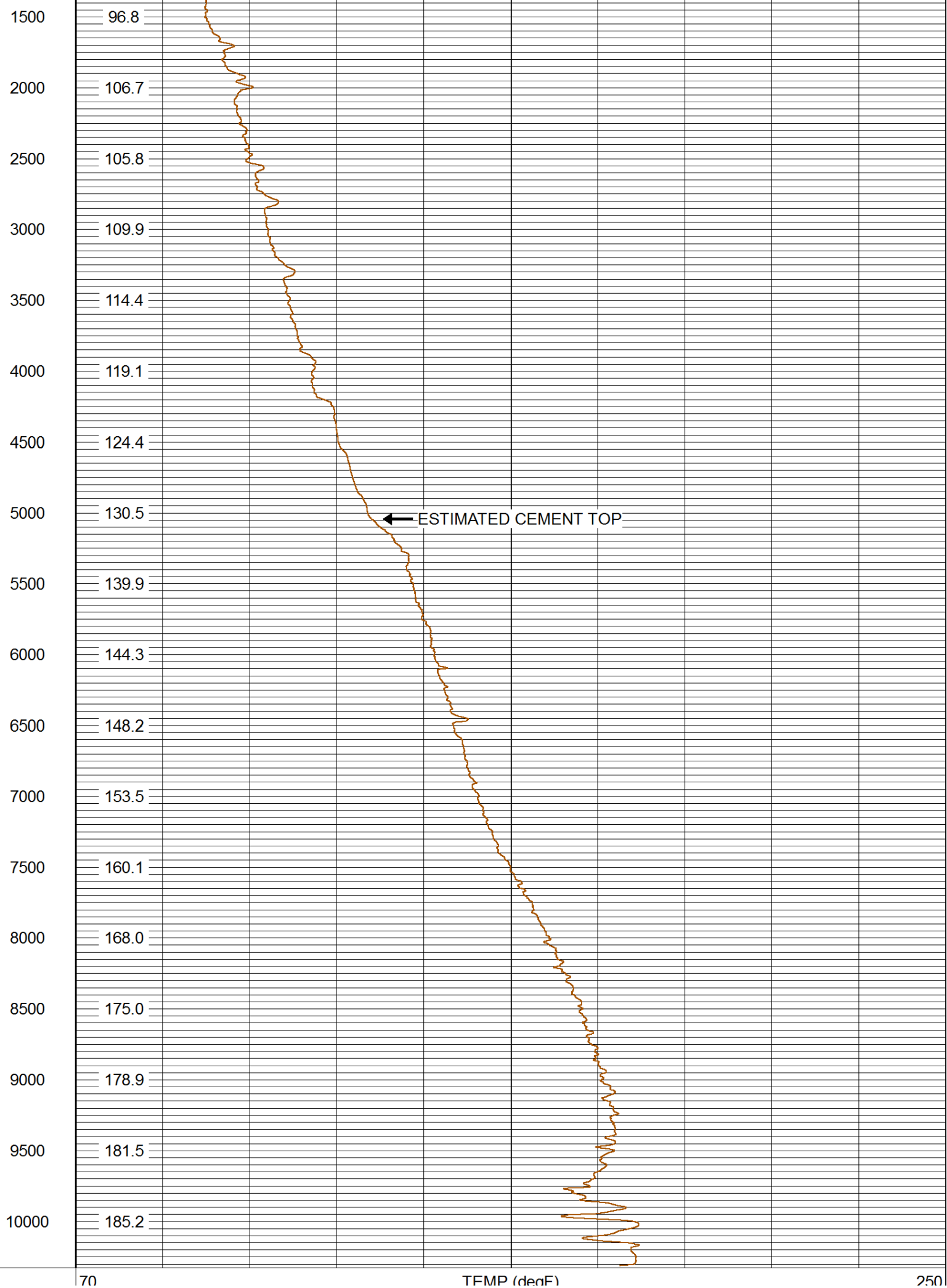







# MAIN PASS QUICKLOOK


Database File: 010516\_wpxenergy\_fed\_ru\_32\_8.db  
 Dataset Pathname: main/pass3  
 Presentation Format: rmtmp\_q  
 Dataset Creation: Wed Jan 06 02:05:49 2016 by Calc SCH 120430  
 Charted by: Depth in Feet scaled 1:10000





	TEMP (degF)	
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Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)	
CCL	1.77		CHD-AES (000001) Cable Head	1.04	1.69	2.00	
			XTU-002 (10006455) Crossover Ultrawire Toolbus To Ultralink	1.58	1.69	6.50	
			CCL-028 (1037) CCL UW 3 1/8" SONDEX	1.61	3.13	36.00	
TEMP	0.37		PRT-016 (10008731) Platinum Resistance Thermometer	1.04	1.69	6.00	
TSTAMP	0.00			BUL-006 (212965) Bullnose Terminator	0.22	1.69	1.20
ITEMPX	0.00						
HVOLTX	0.00						
Dataset: 010516_wpxenergy_fed_ru_32_8.db: field/well/main/pass2 Total Length: 5.50 ft Total Weight: 51.70 lb O.D. 3.13 in							

	Company	WPX ENERGY
	Well	FEDERAL RU 32 - 8
	Field	RULISON
	County	GARFIELD
	State	COLORADO