



Temperature
Gamma Ray
Casing Collar Log

Company TEP Rocky Mountain LLC		Well Federal RU 13-17		Field Rulison		County Garfield		State Colorado	
Company TEP Rocky Mountain LLC		Well Federal RU 13-17		Field Rulison		County Garfield		State Colorado	
Location:		API # : 05-045-23748		Other Services					
SEC 17 TWP 7S RGE 93W		Ground Level		Elevation		8365.6'			
Log Measured From		Kelly Bushing		24 FT		K.B. 8389.6'			
Drilling Measured From		Kelly Bushing				D.F. 8388.6'			
						G.L. 8365.6'			
Date	Run Number	1-Apr-2018							
Depth Driller	One	10924 FT							
Depth Logger	10590 FT								
Bottom Logged Interval	10590 FT								
Top Log Interval	Surface								
Open Hole Size	8.750"								
Type Fluid	Fresh Water								
Density / Viscosity	8.34 lb/gal								
Max. Recorded Temp.	243°F								
E. estimated Cement Top	5150 FT								
Time Well Ready	ROA								
Time Logger on Bottom	4:20								
E. equipment Number	HD-0359								
Location	Grand Junction, CO								
Recorded By	Z. Fisher								
Witnessed By	Nathan Burr								
Borehole Record		Tubing Record							
Run Number	Bit	From	To	Size	Weight	From	To		
Casing Record	Size (in)	Wgt (lbs/ft)	Grade	Top	Bottom				
Surface Casing	9 5/8	32.3	H-40	Surface	1100 FT				
Intermediate #1	4 1/2	11.6	P-110	Surface	10924 FT				
Intermediate #2									
Inner									

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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

Log ran as per customer request
Depth referenced to Kelly Bushing at 24 FT
Log ran from 10590 FT to Surface
Log ran with 0 PSI Surface Induced Pressure

Thank you for choosing Reliance Oilfield Services, LLC!!

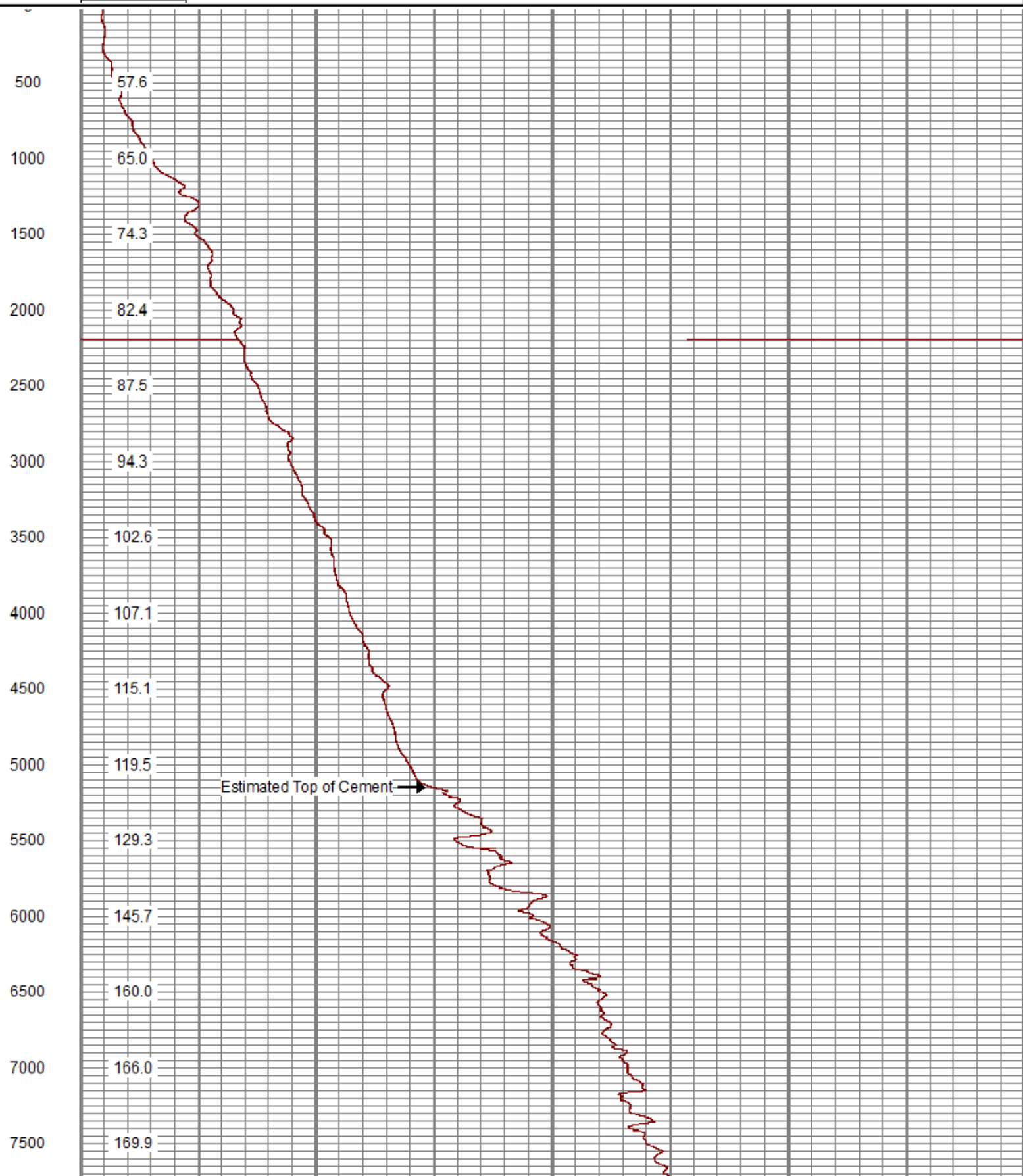


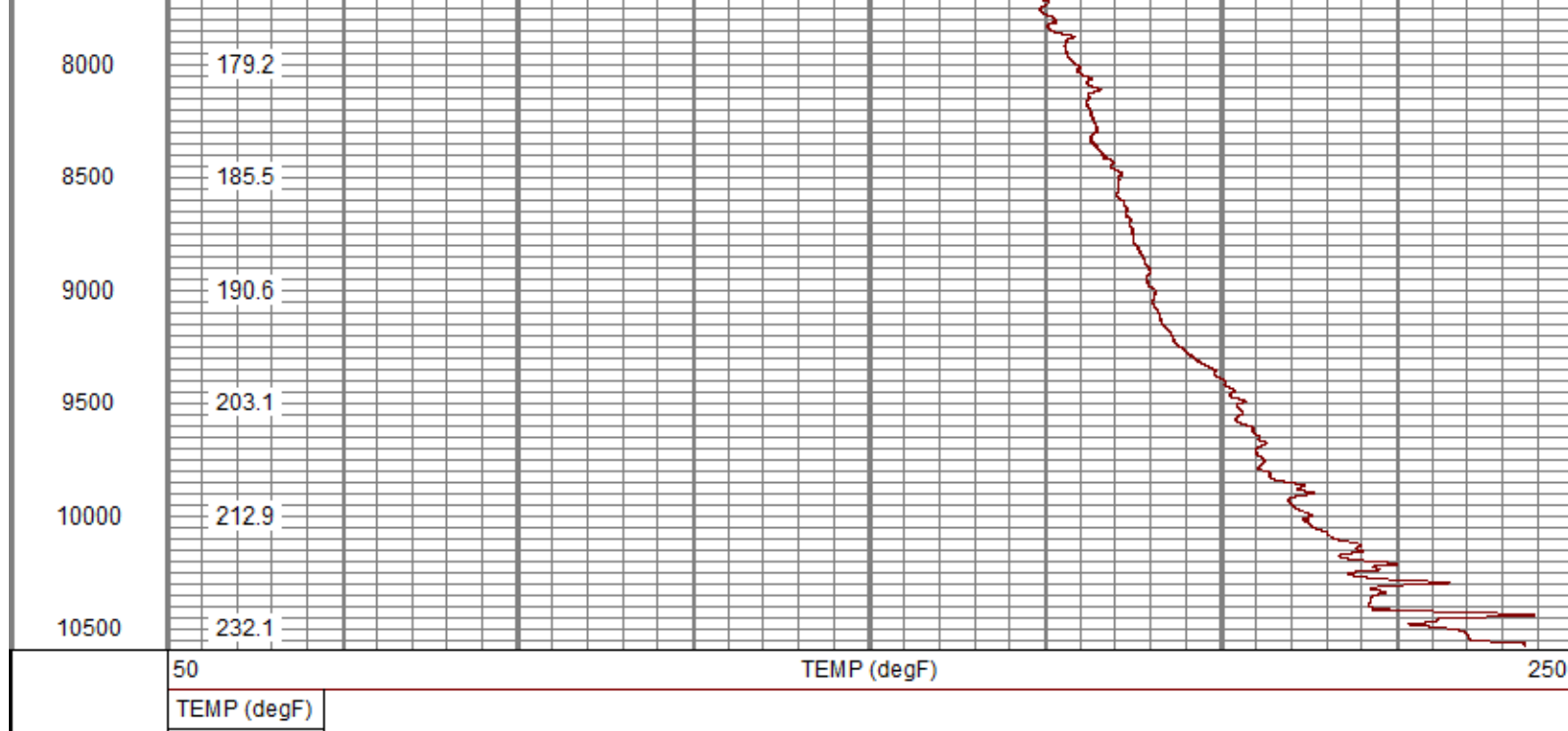
Main Pass (Quick Look)


Recorded with 0 PSI Surface Induced Pressure

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Dataset Pathname main.1
Presentation Format ros_temp_ql_tep
Dataset Creation Sun Apr 01 06:02:43 2018
Charted by Depth in Feet scaled 1:10000

50 TEMP (degF) 250
TEMP (degF)







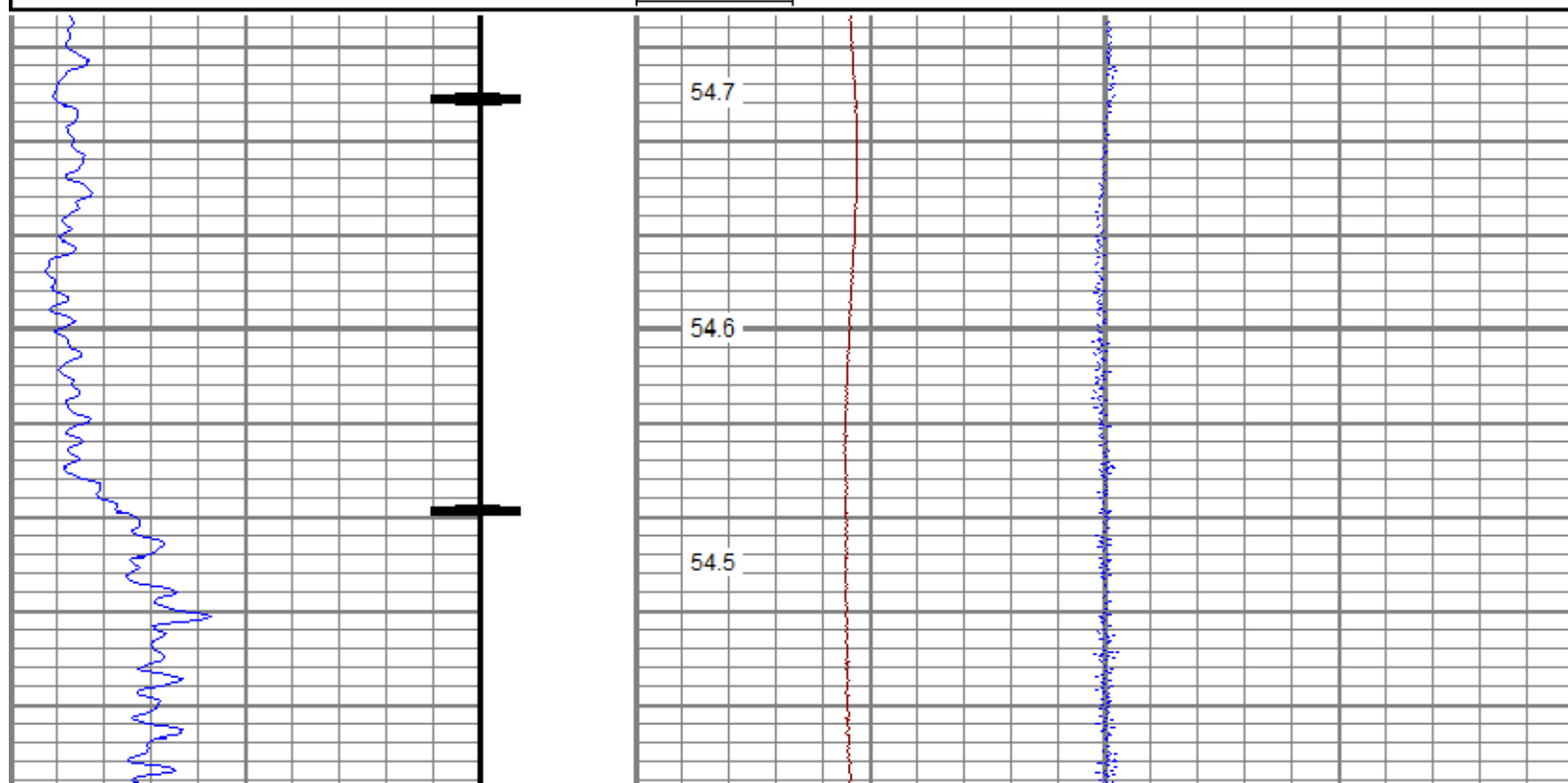
RELIANCE
OILFIELD SERVICES

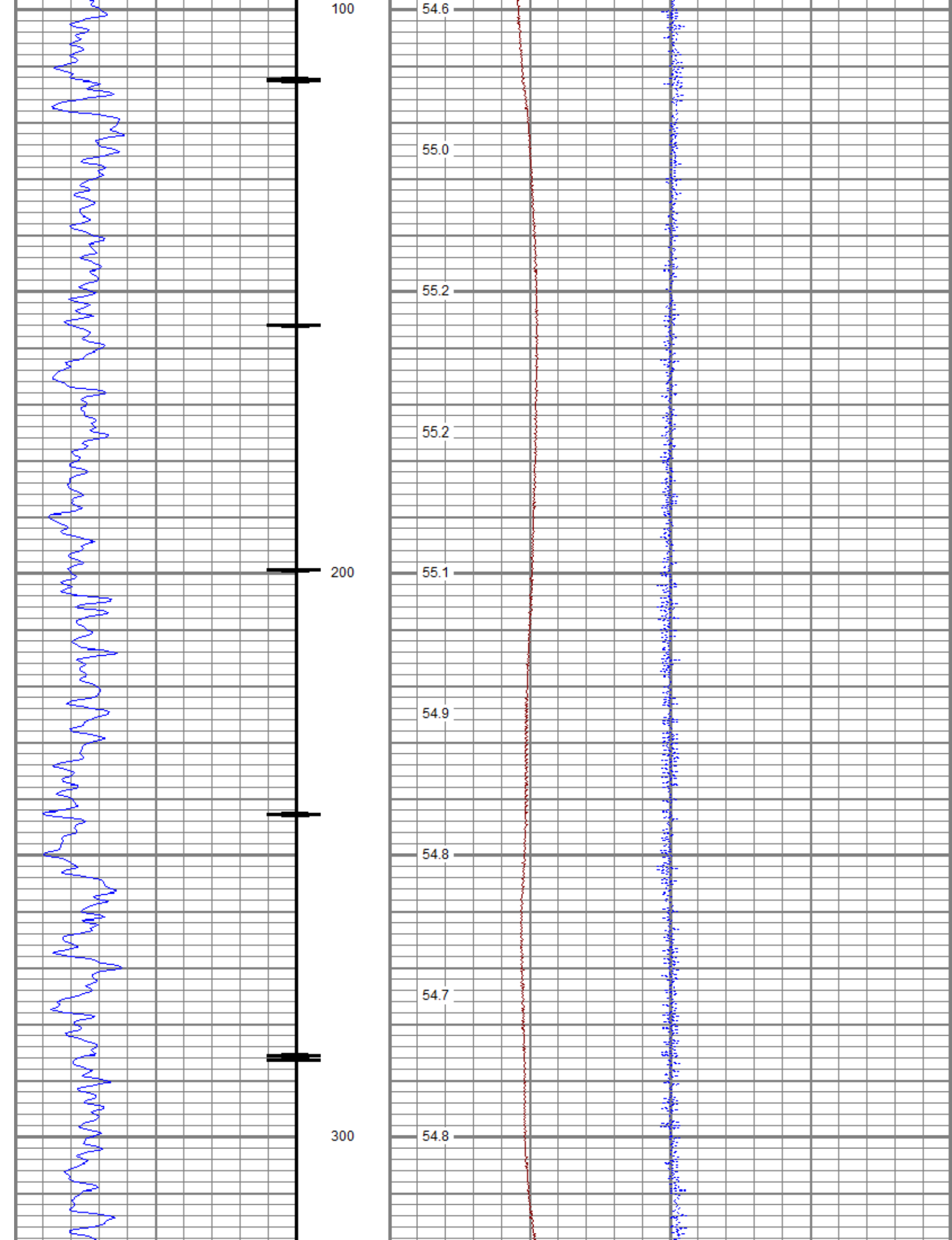
Main Pass

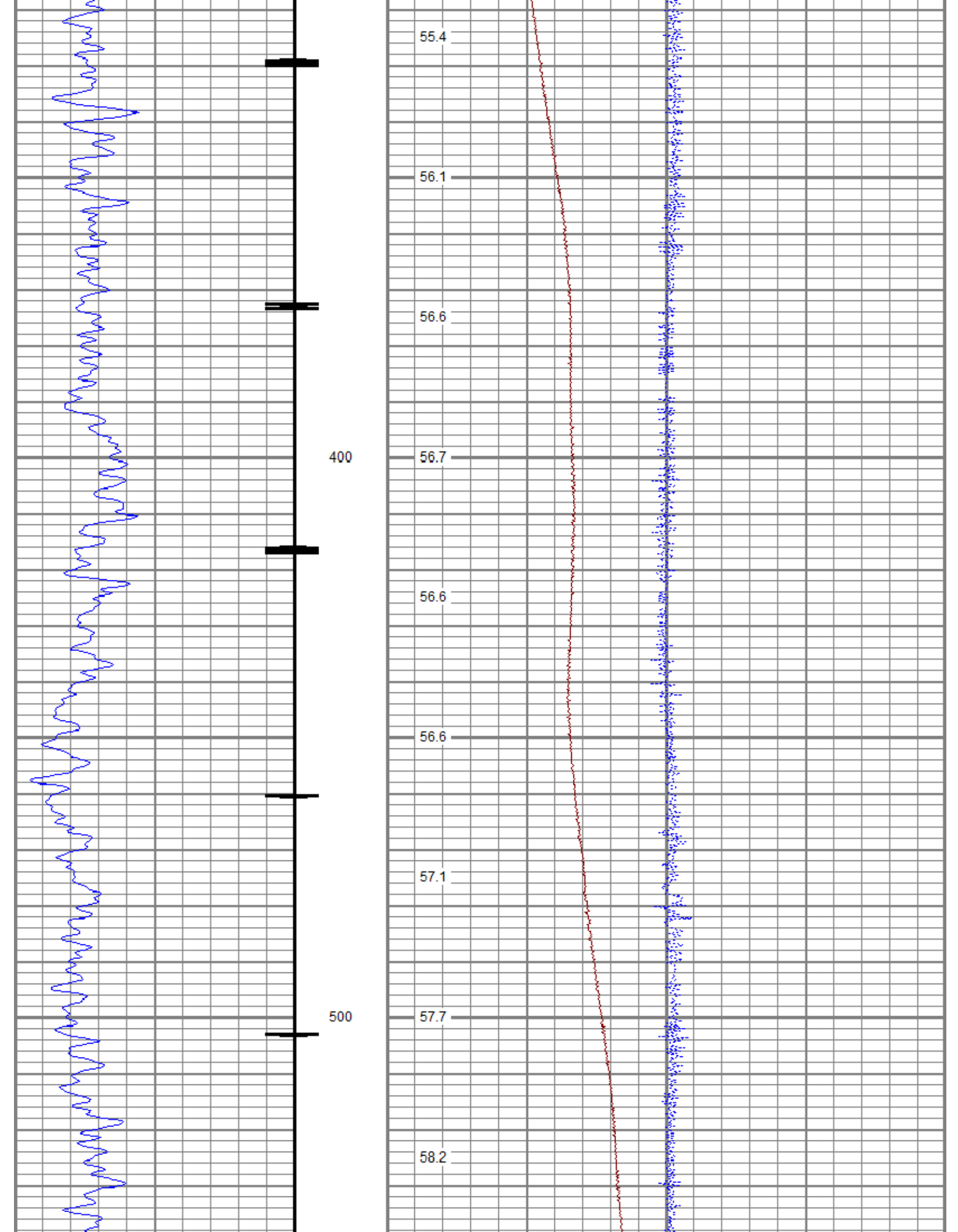
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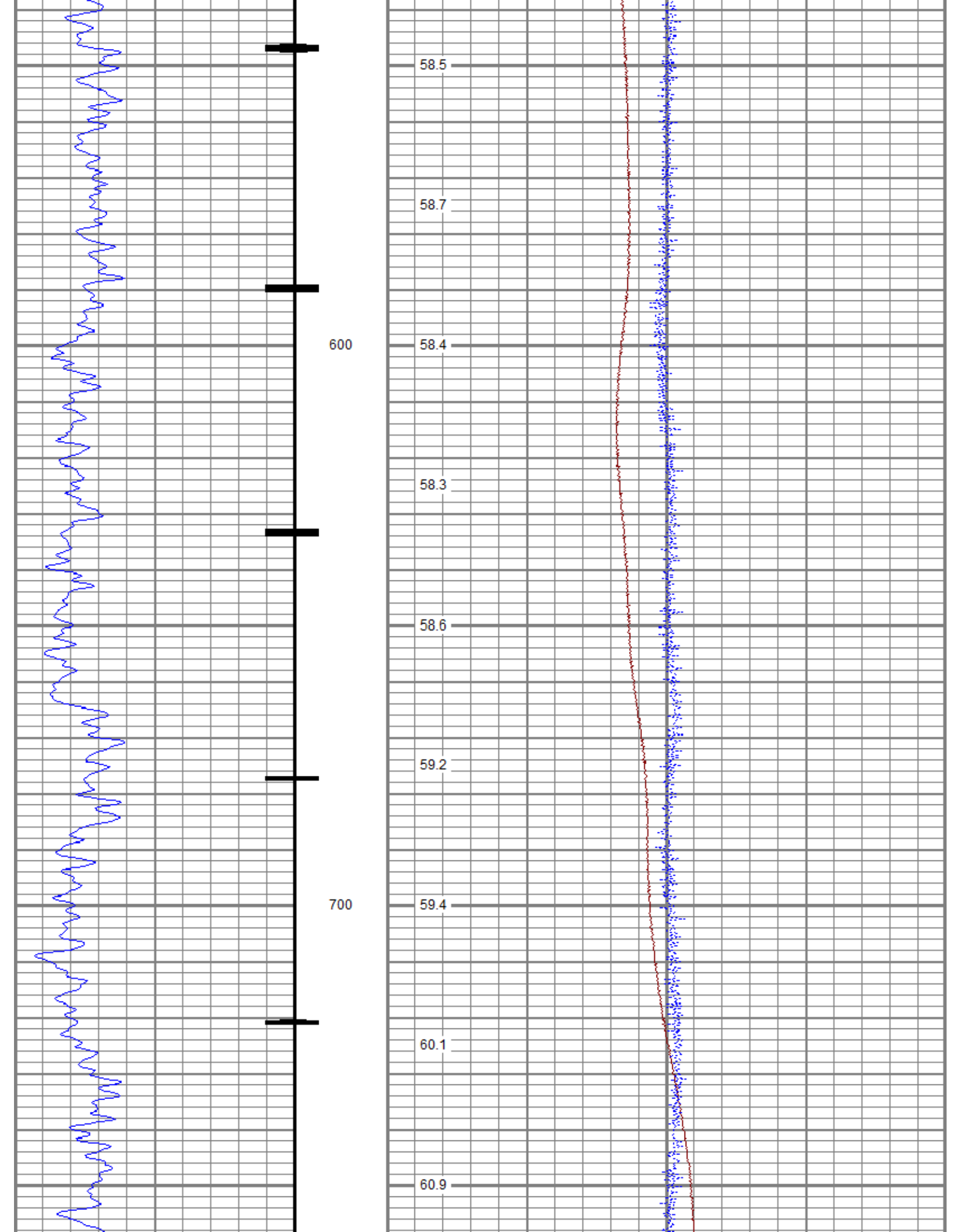
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Dataset Pathname	main
Presentation Format	ros_temp_tep
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Charted by	Depth in Feet scaled 1:240

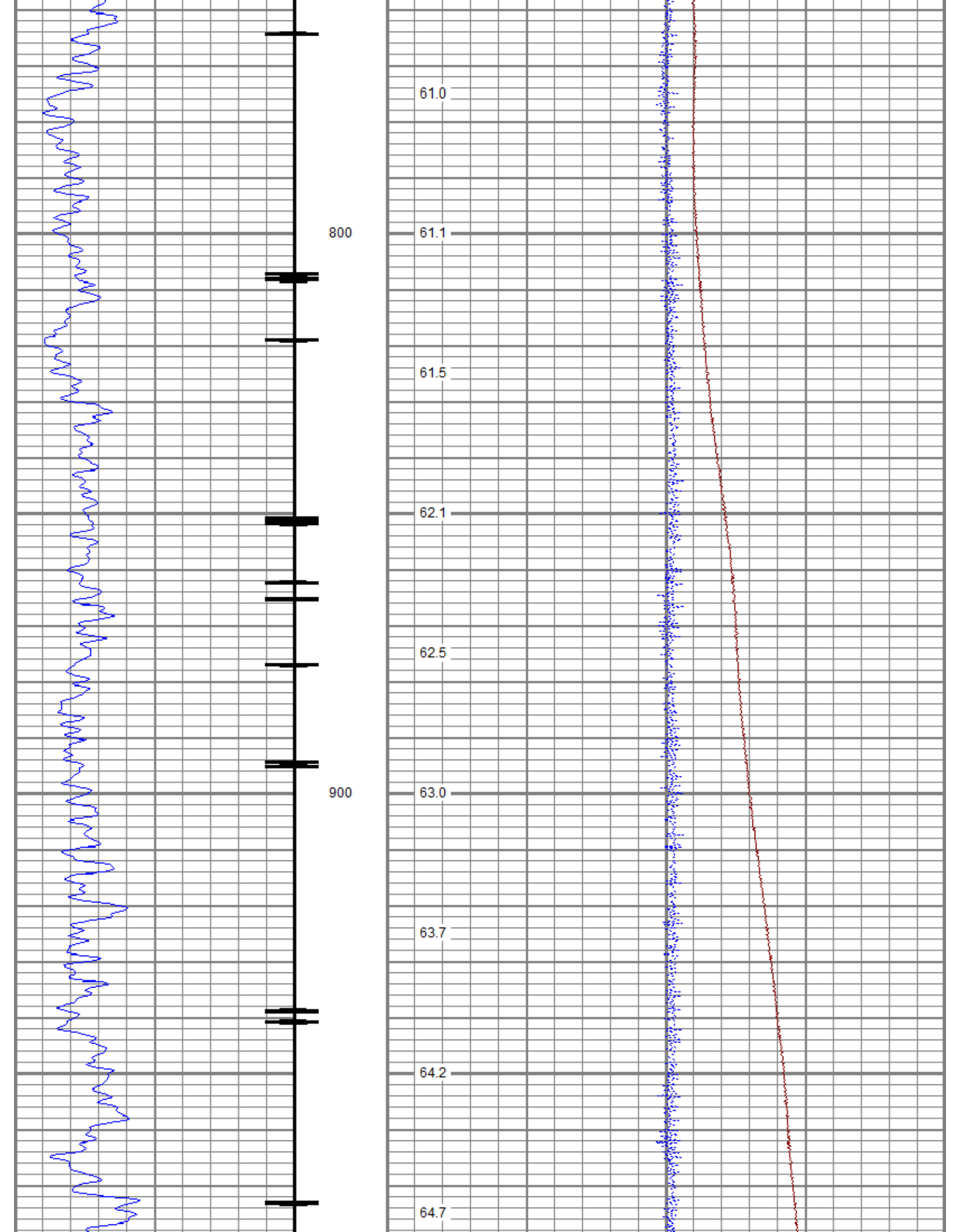
0	Gamma Ray (GAPI)	120	LTEN	50	TEMP (degF)	70
	Casing Collar Locator	0	(lb) 2000	-1	DTMP (degF)	1
				TEMP (degF)		

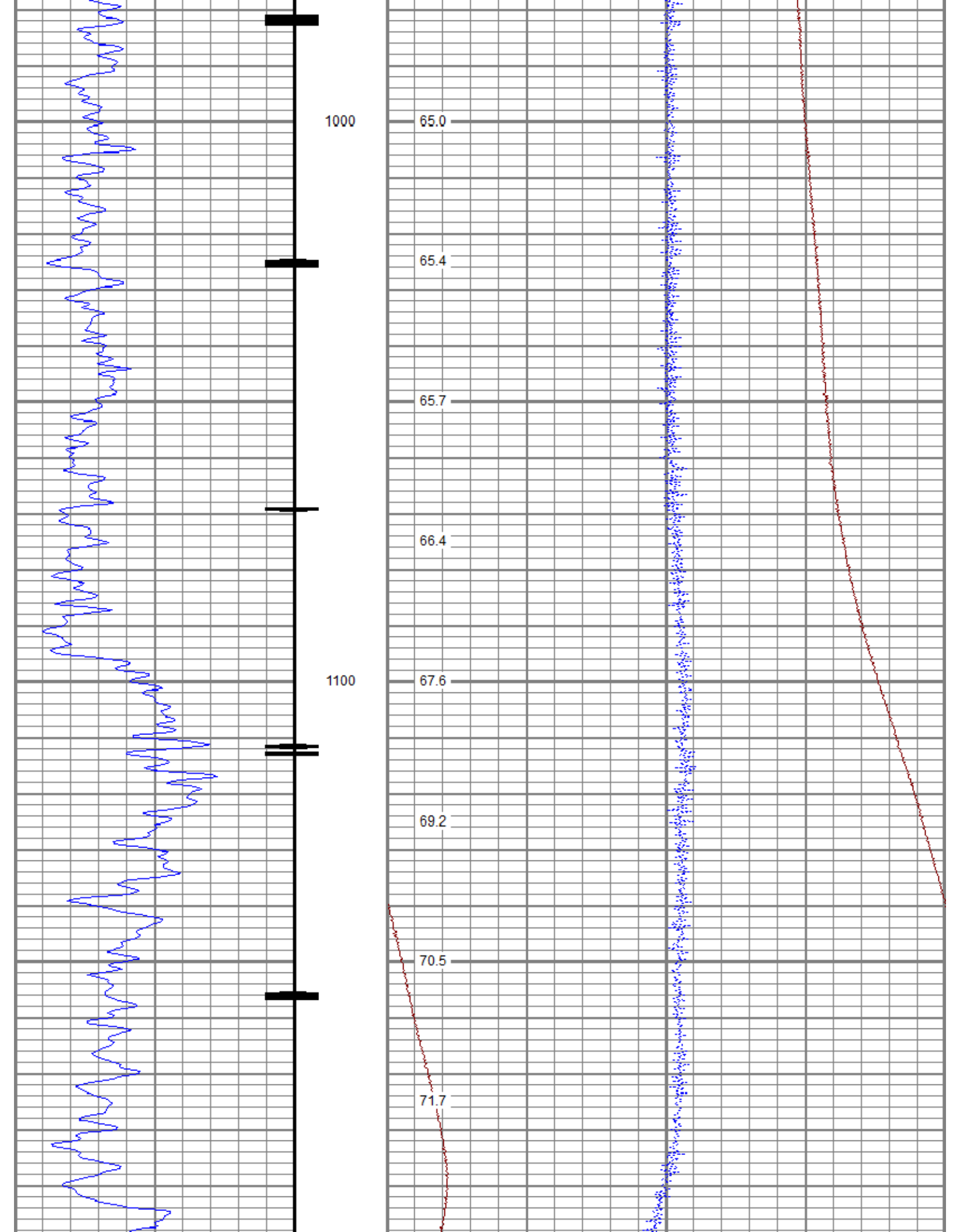


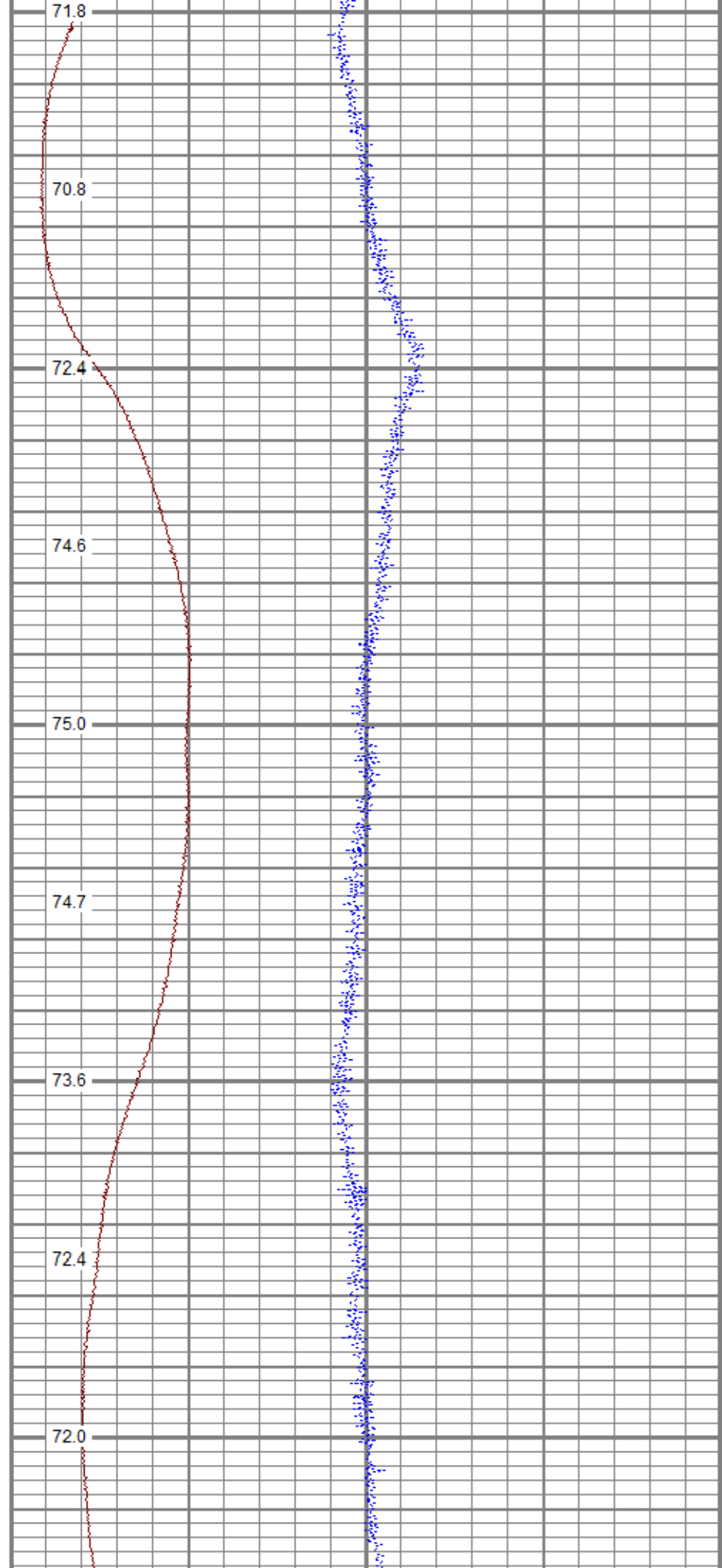
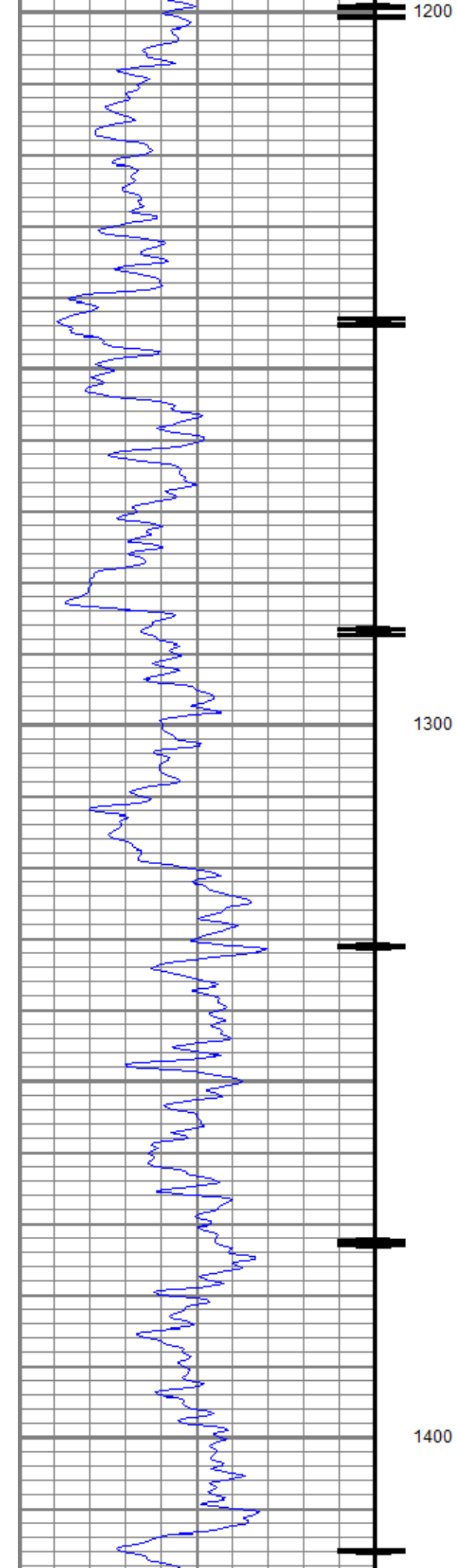


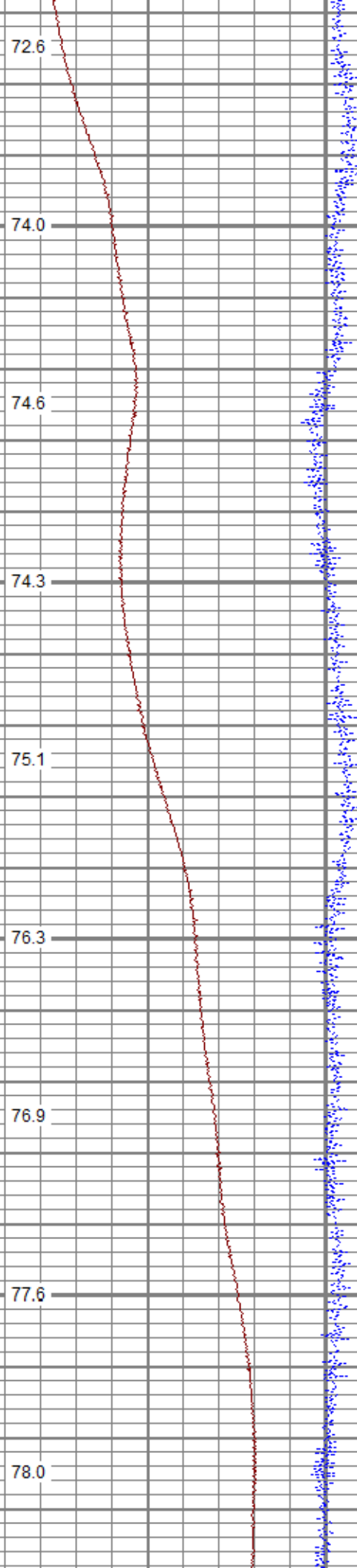
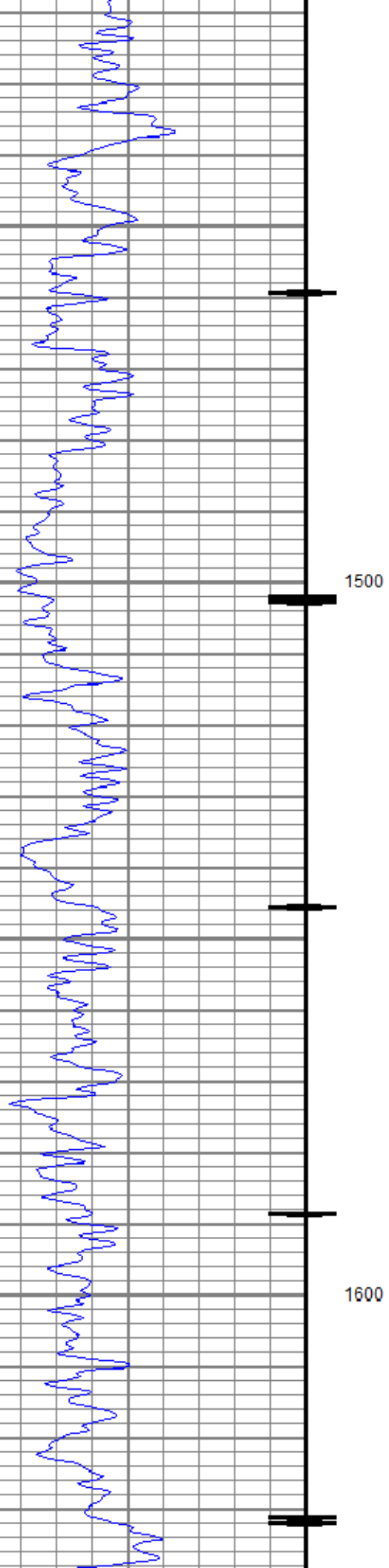


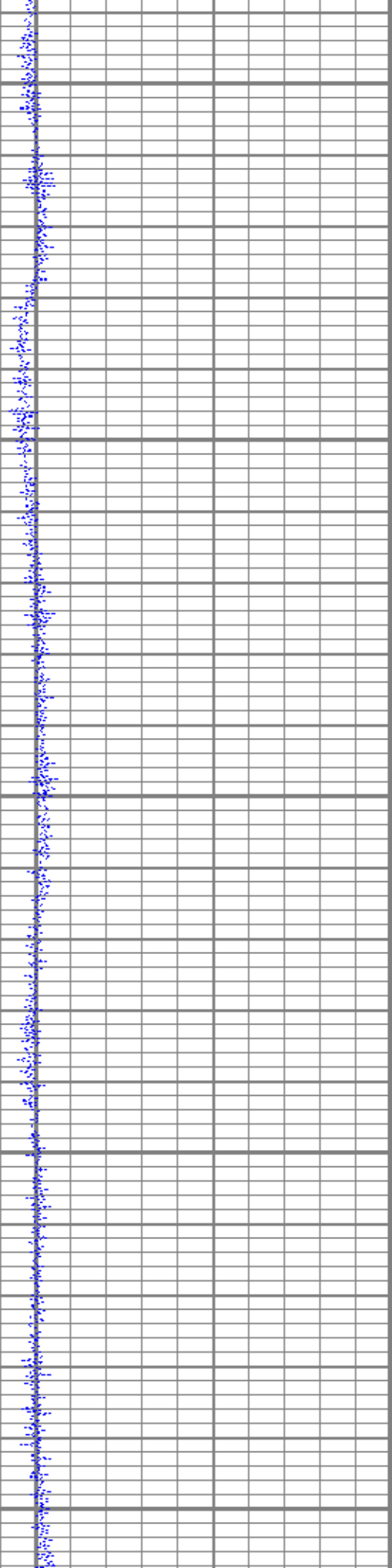
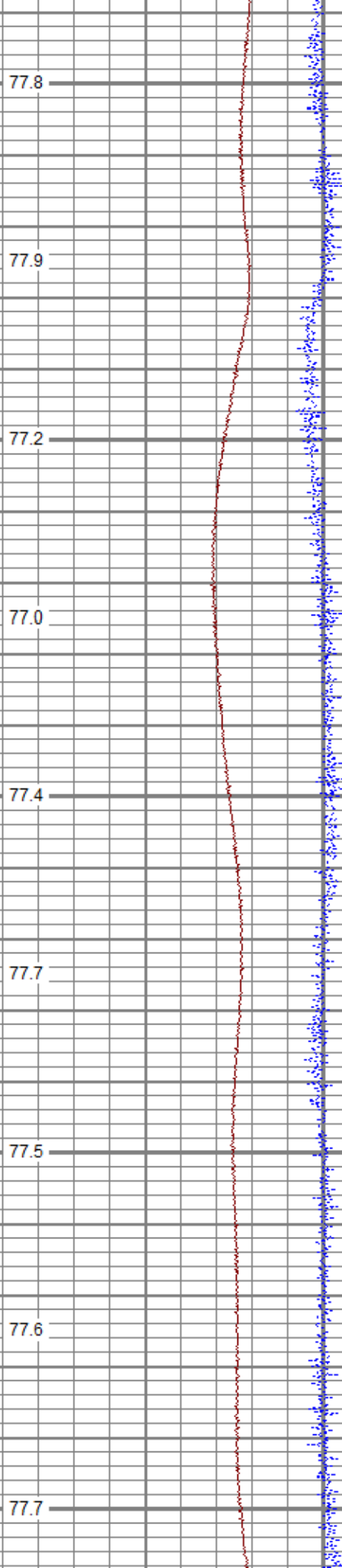
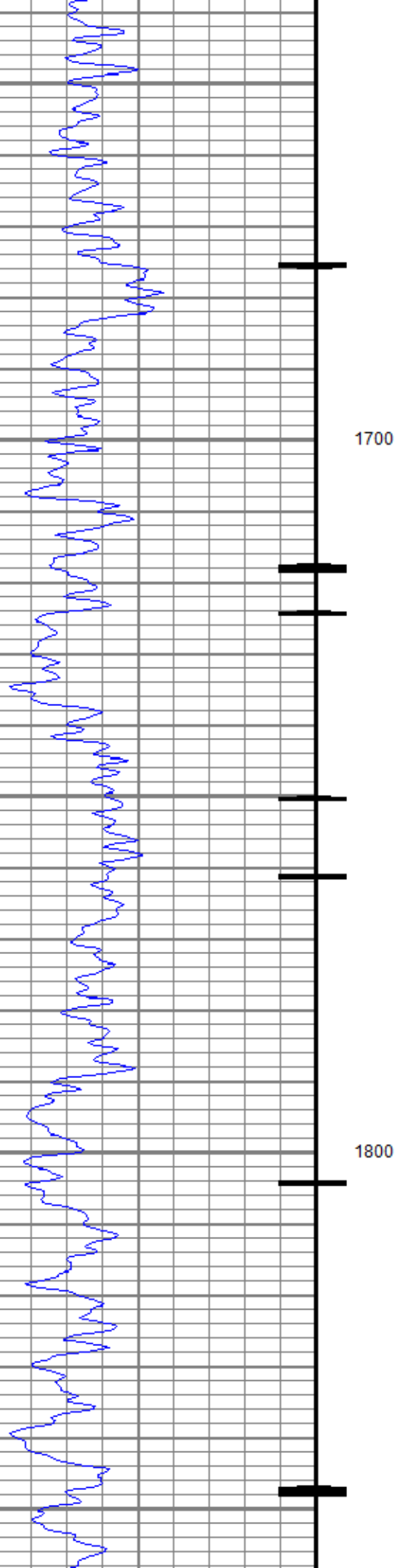


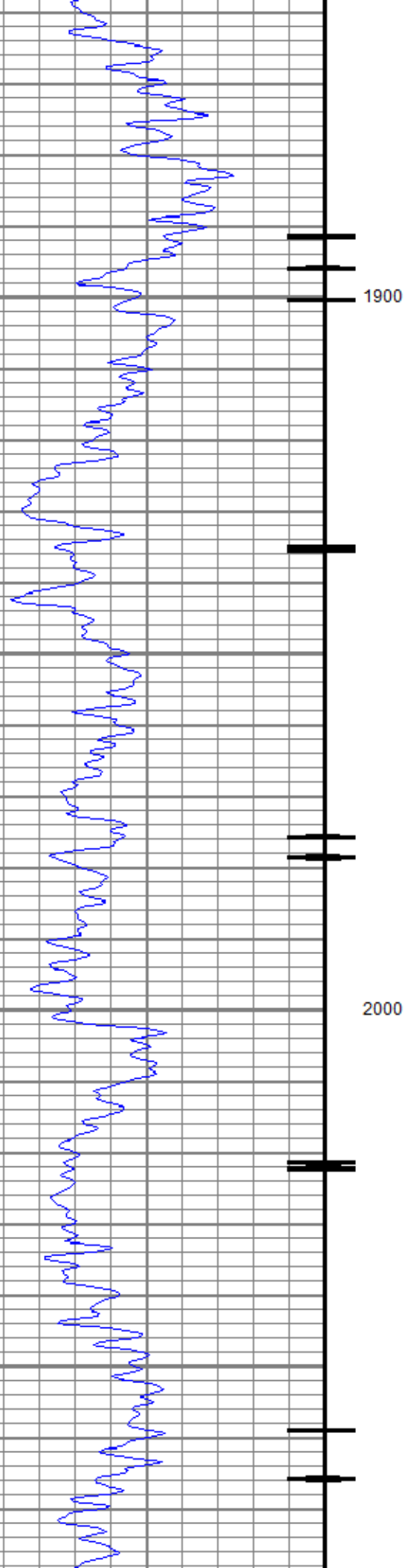












78.4

79.0

79.8

81.0

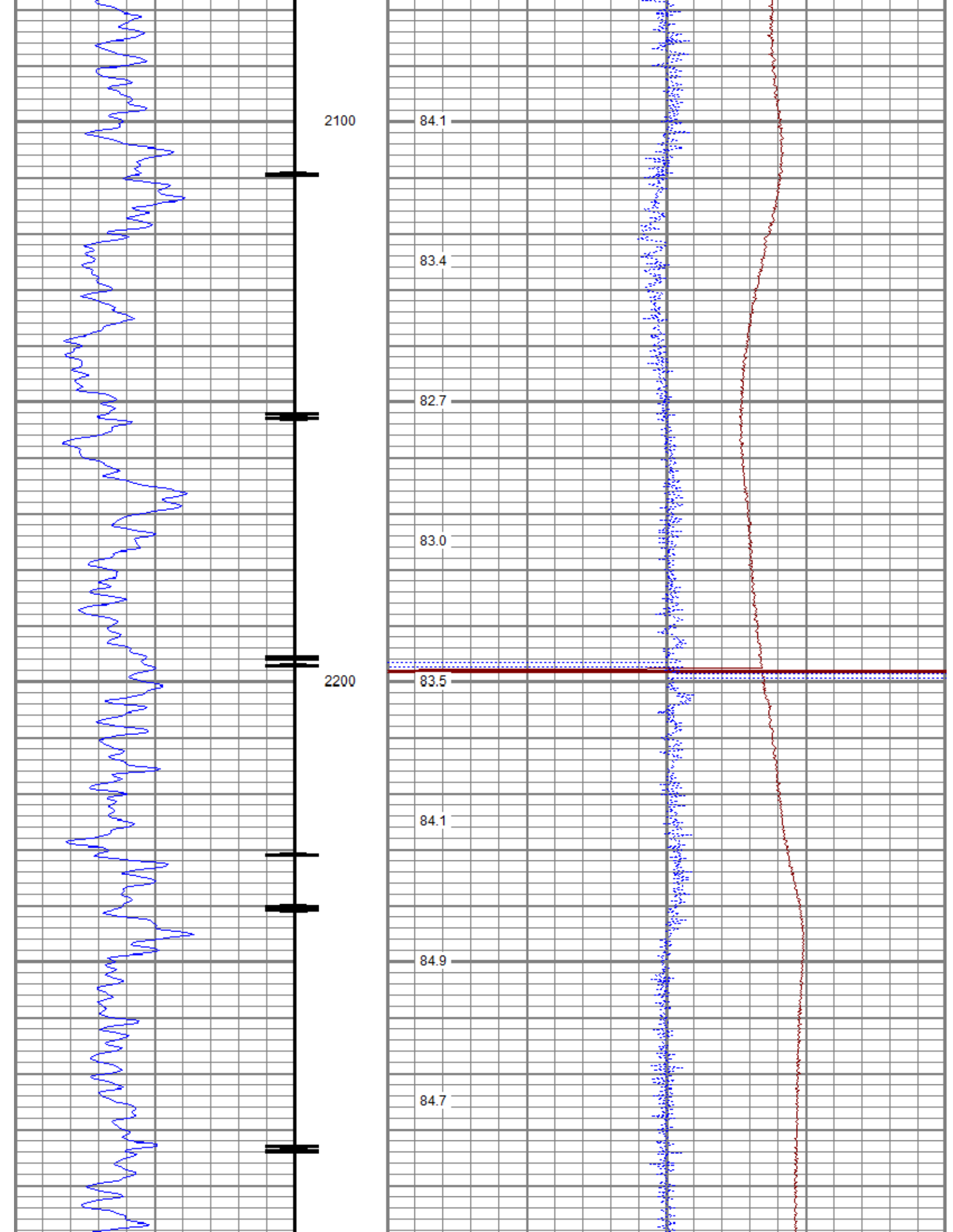
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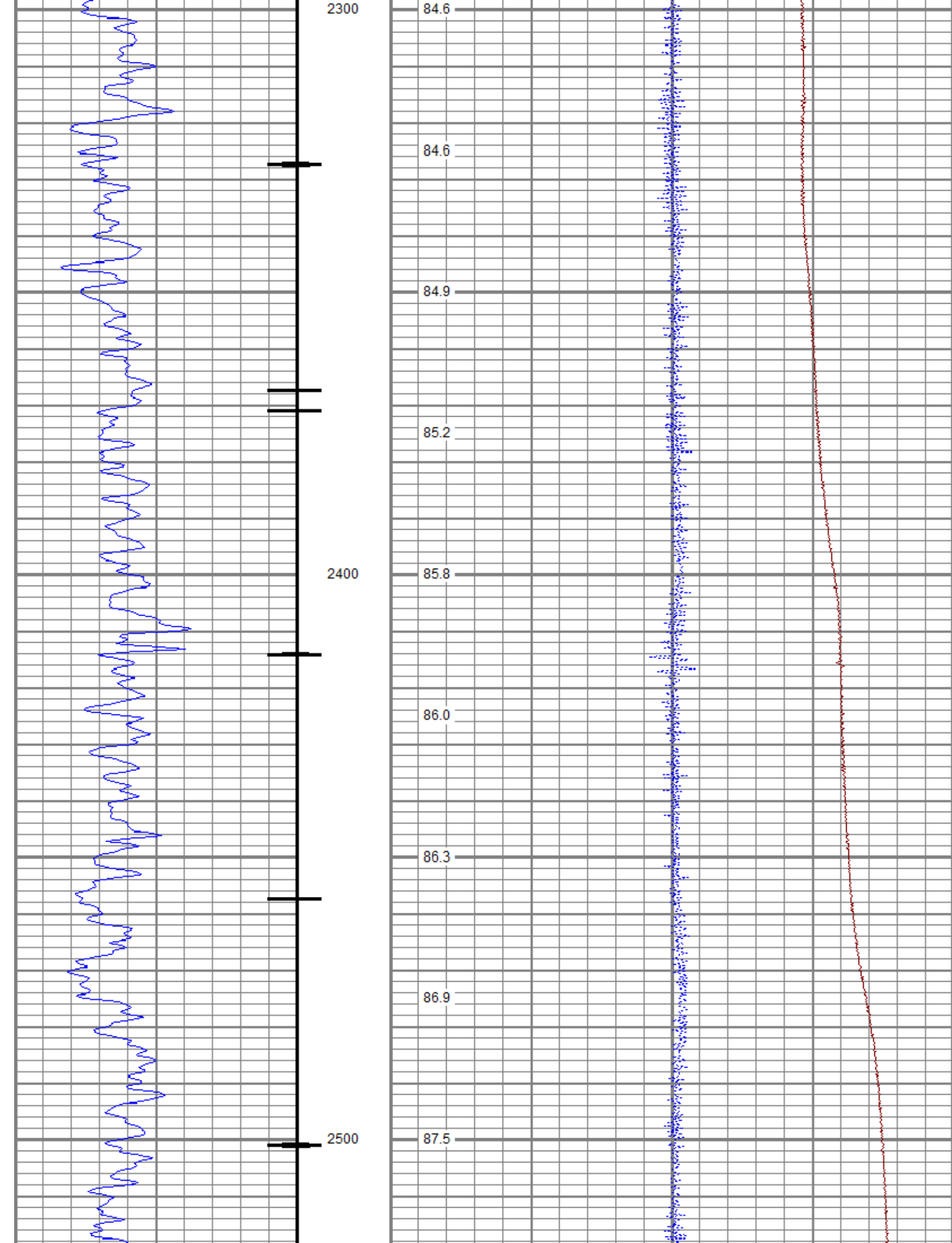
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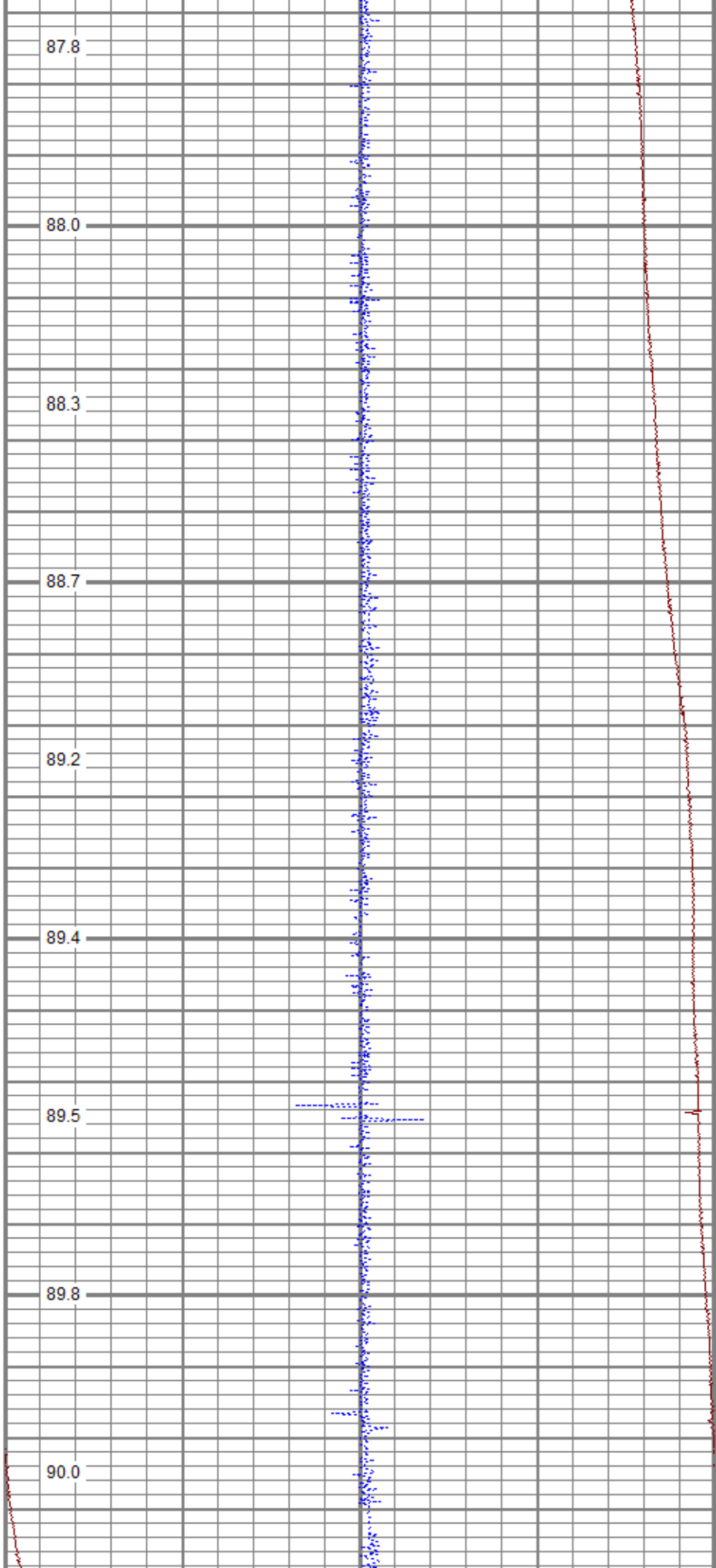
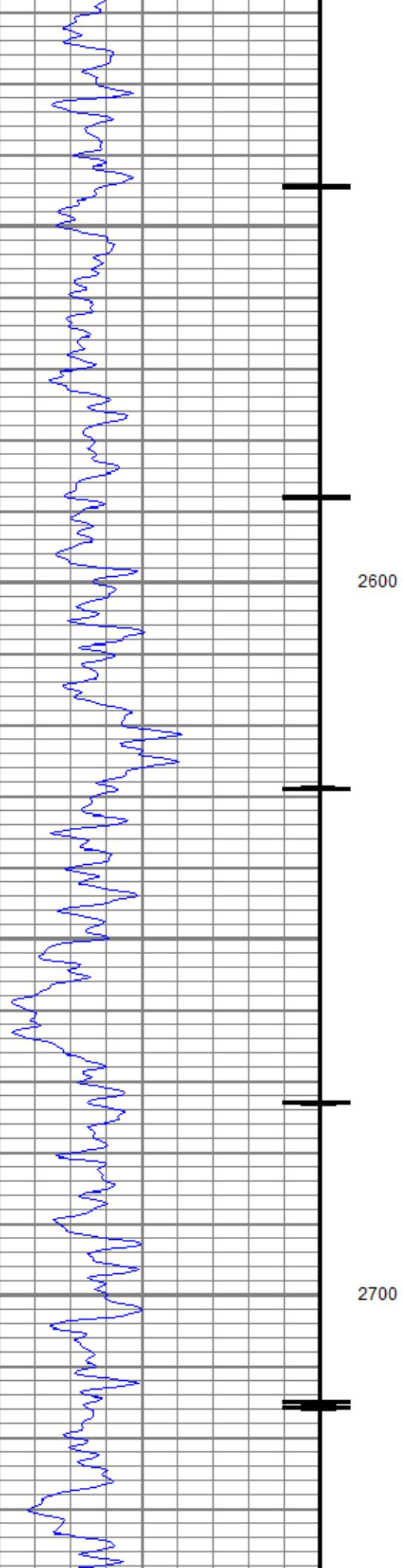
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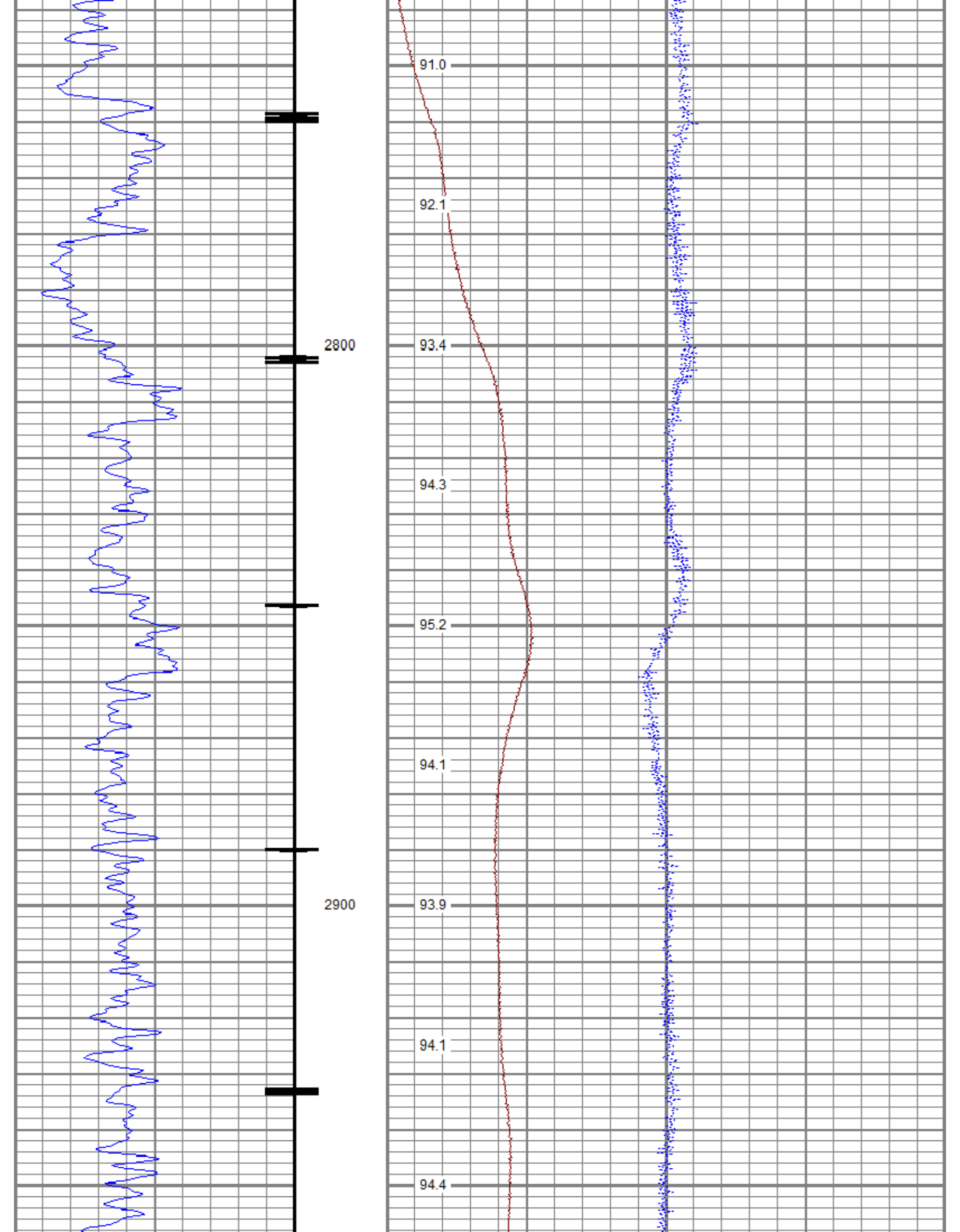
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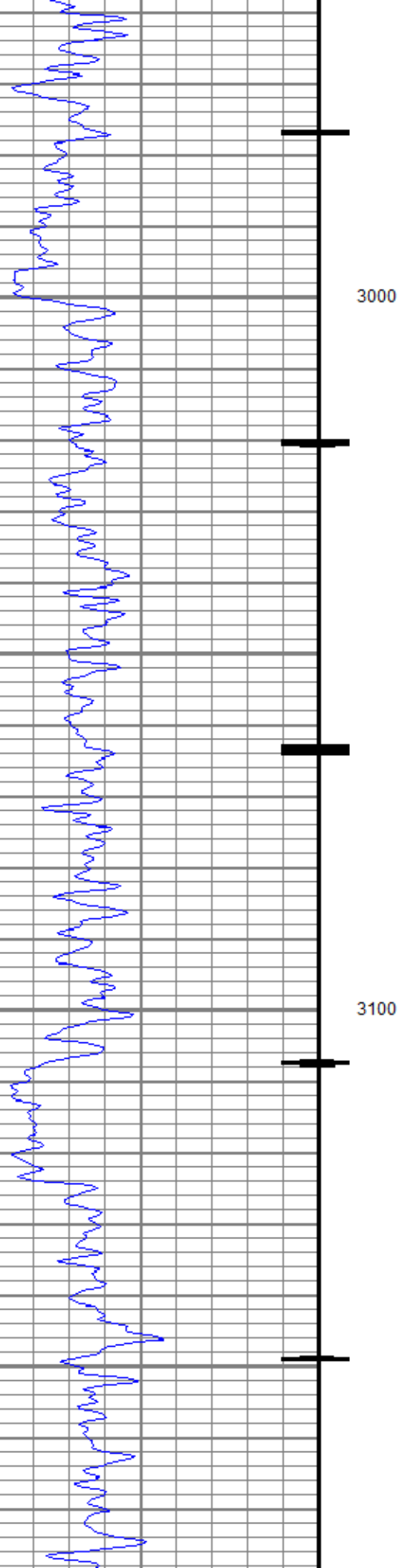
83.8











94.1

94.3

94.7

95.1

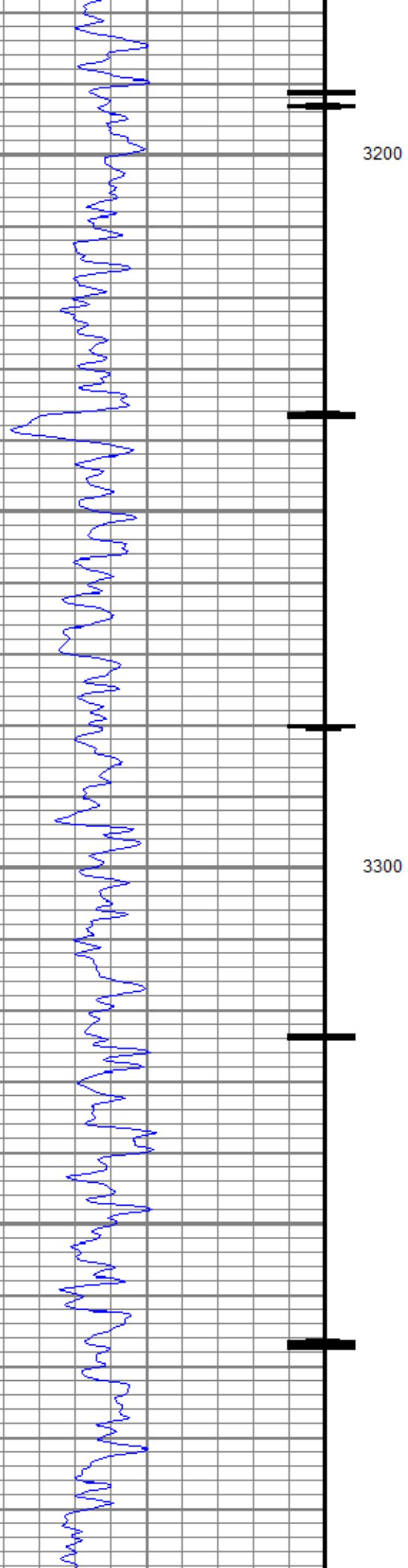
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96.0

96.3

96.8

96.9



97.0

97.0

97.6

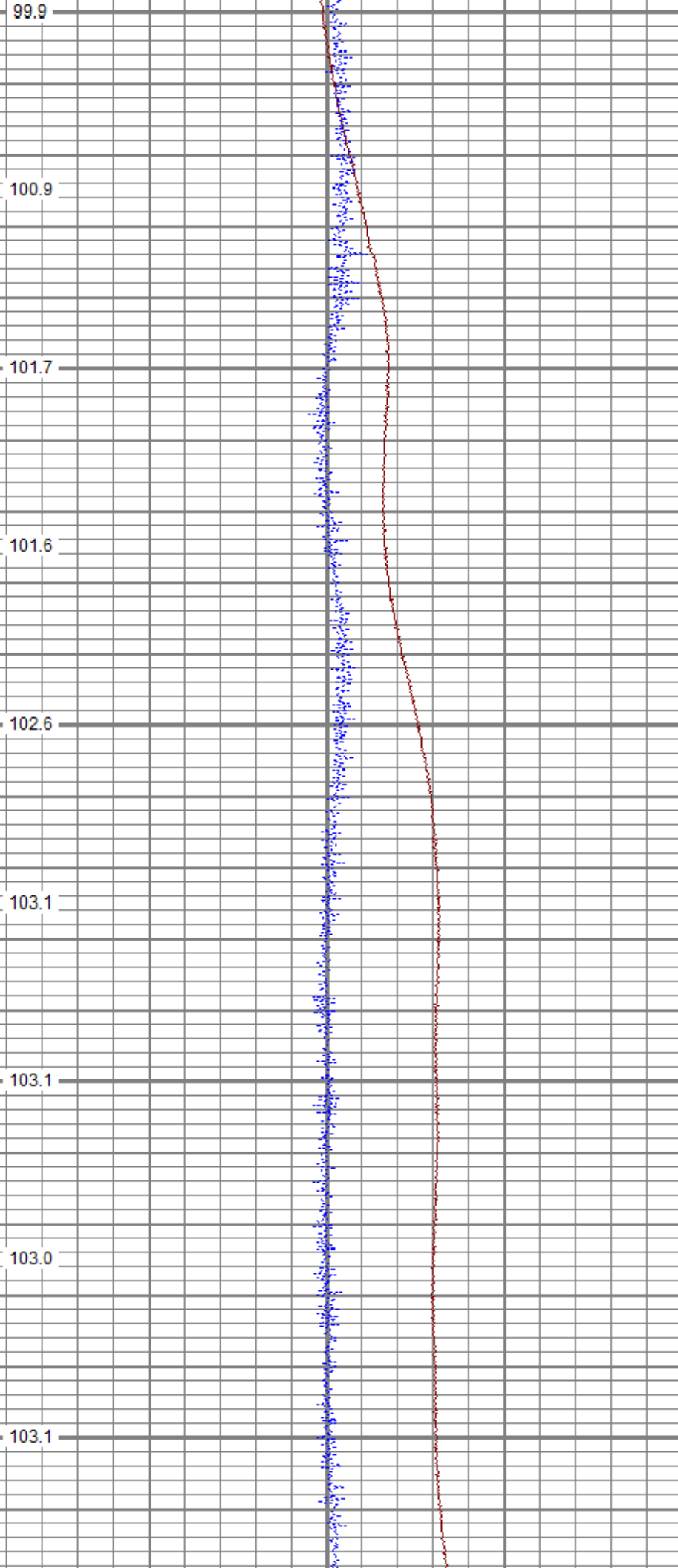
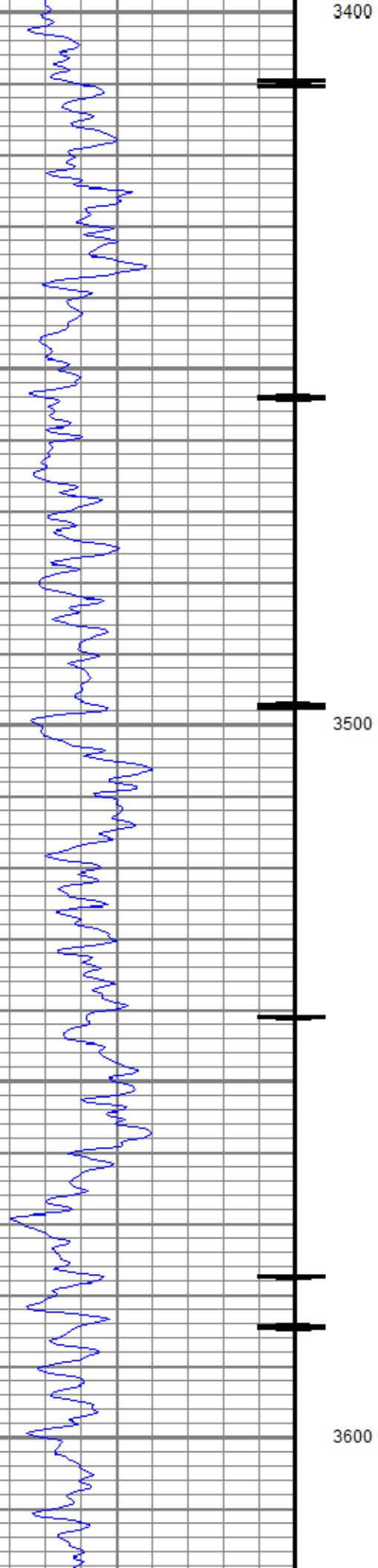
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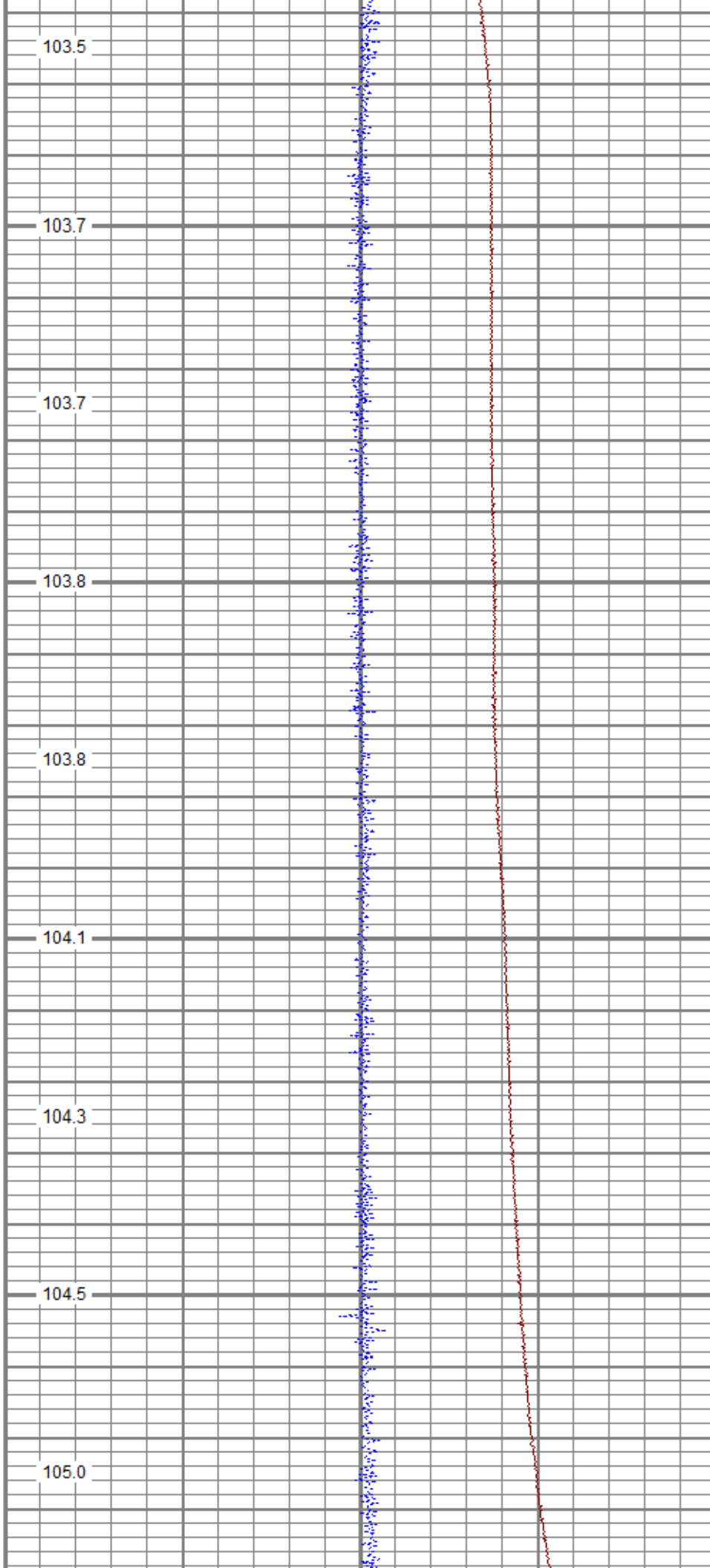
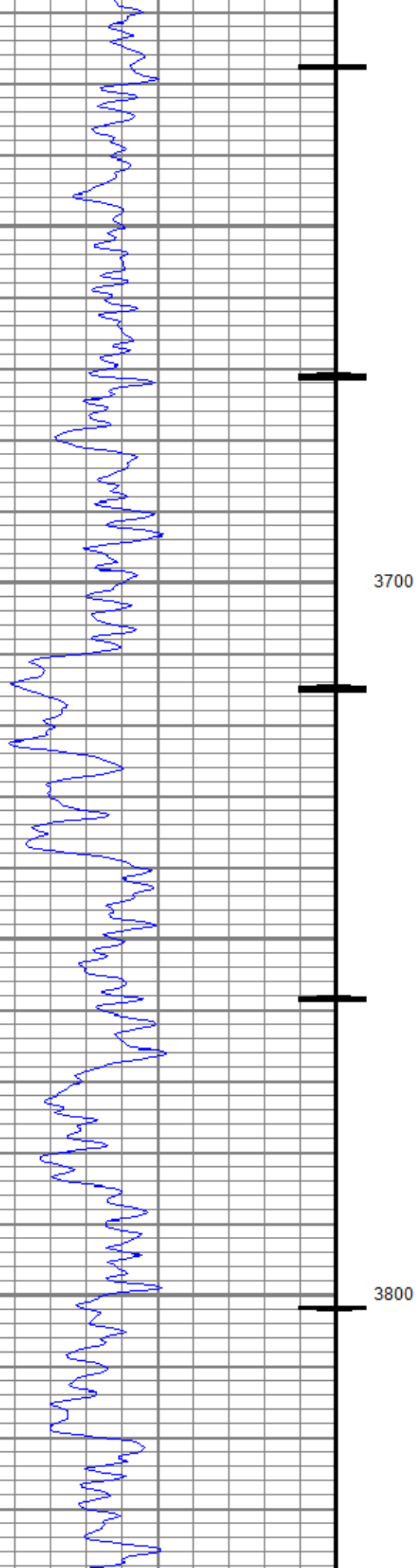
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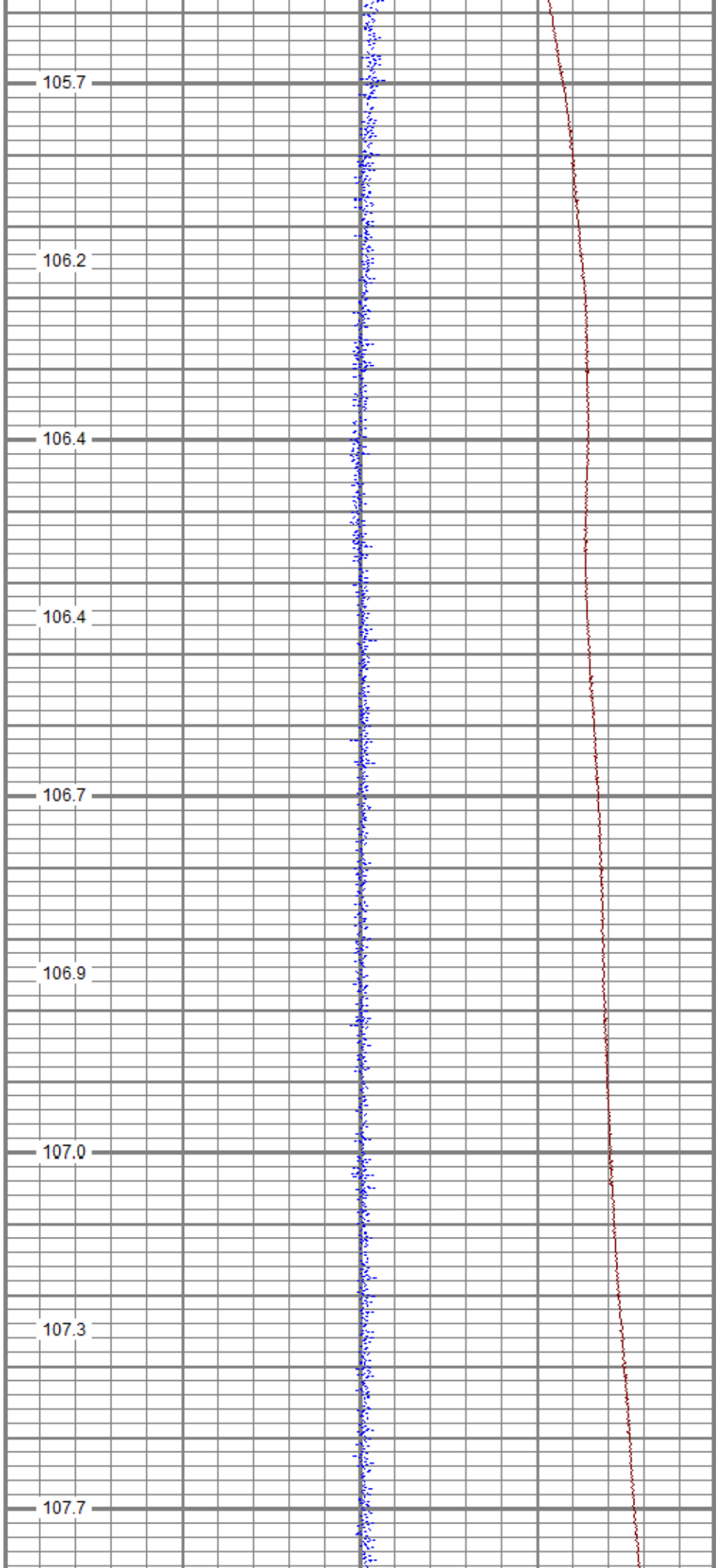
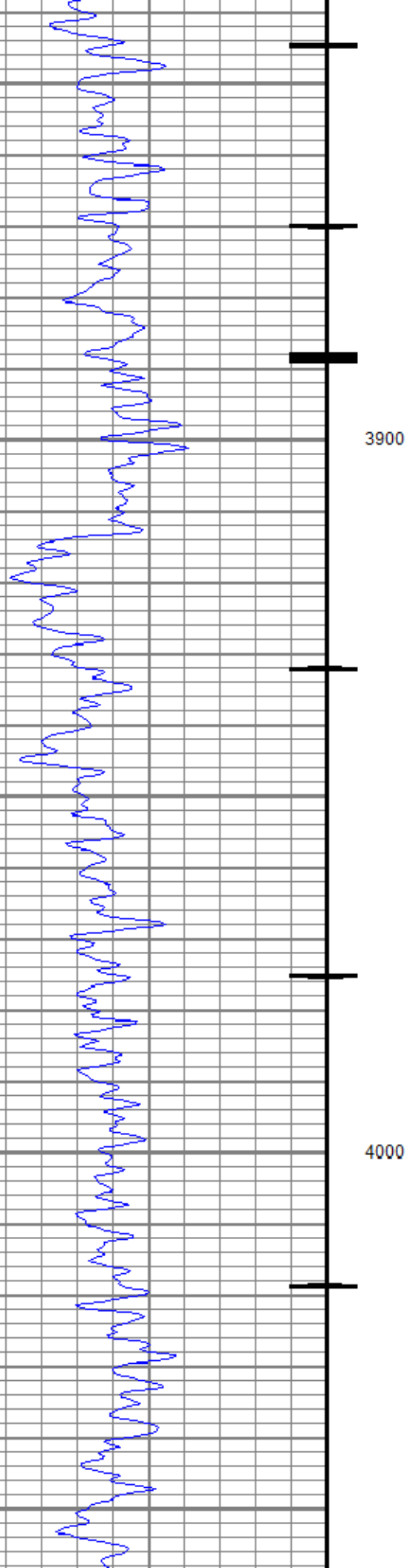
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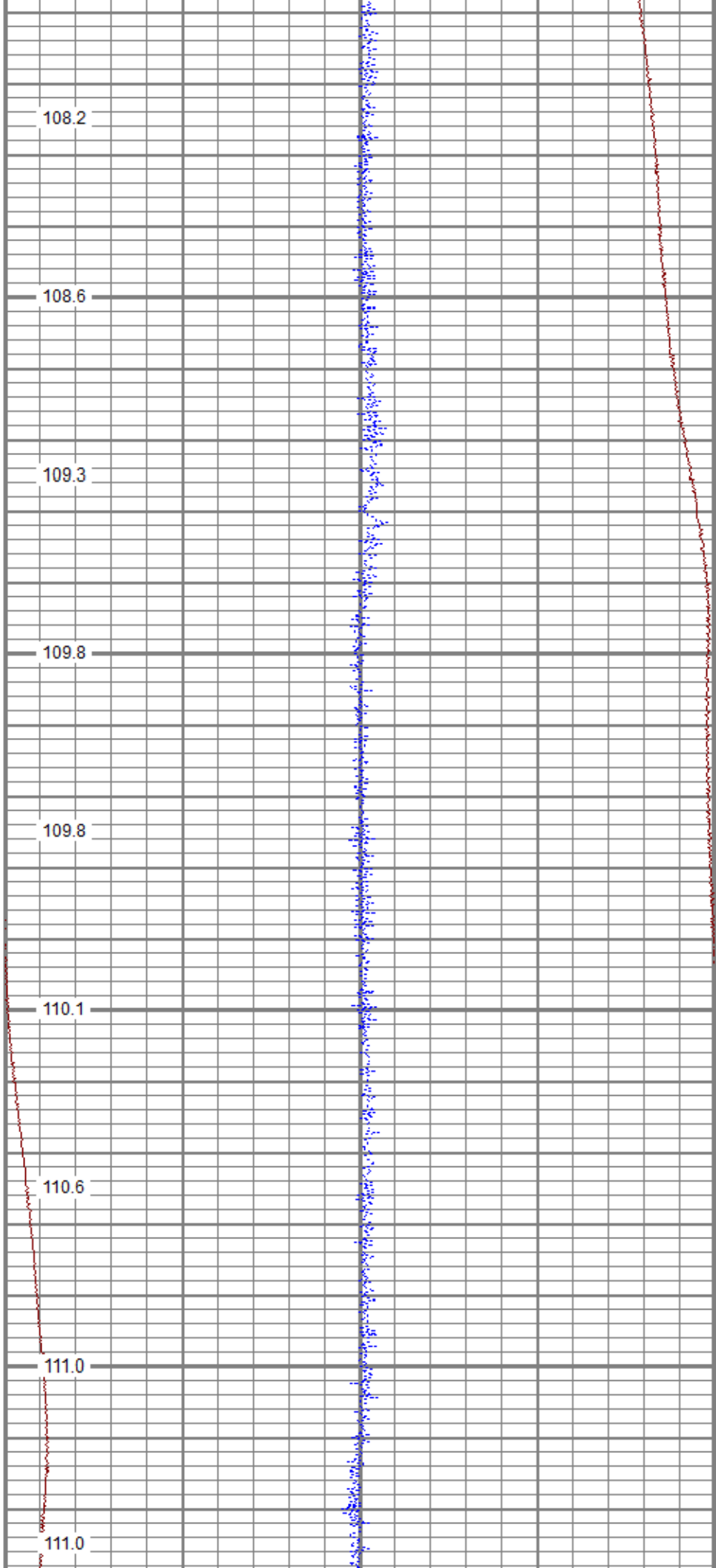
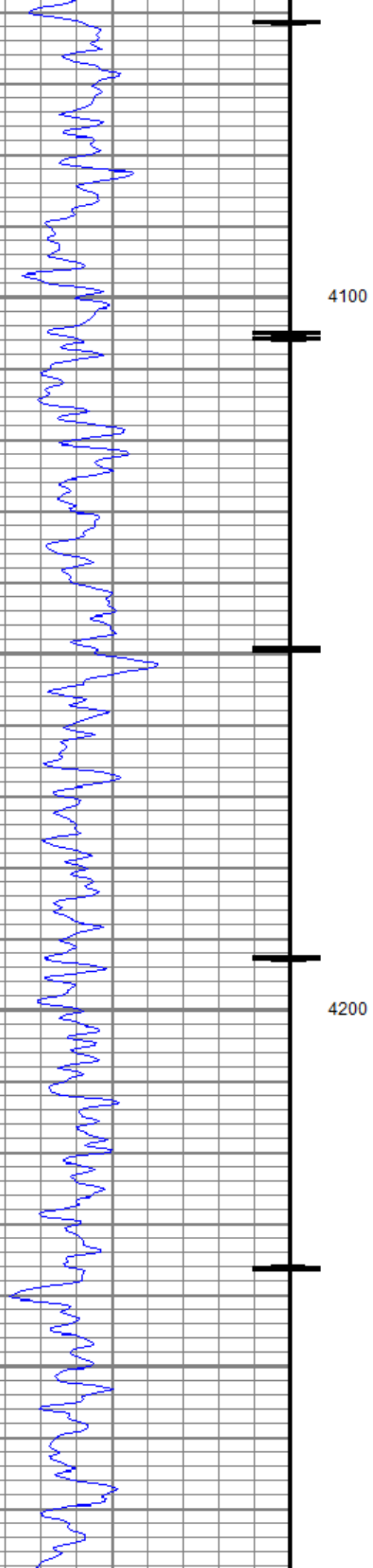
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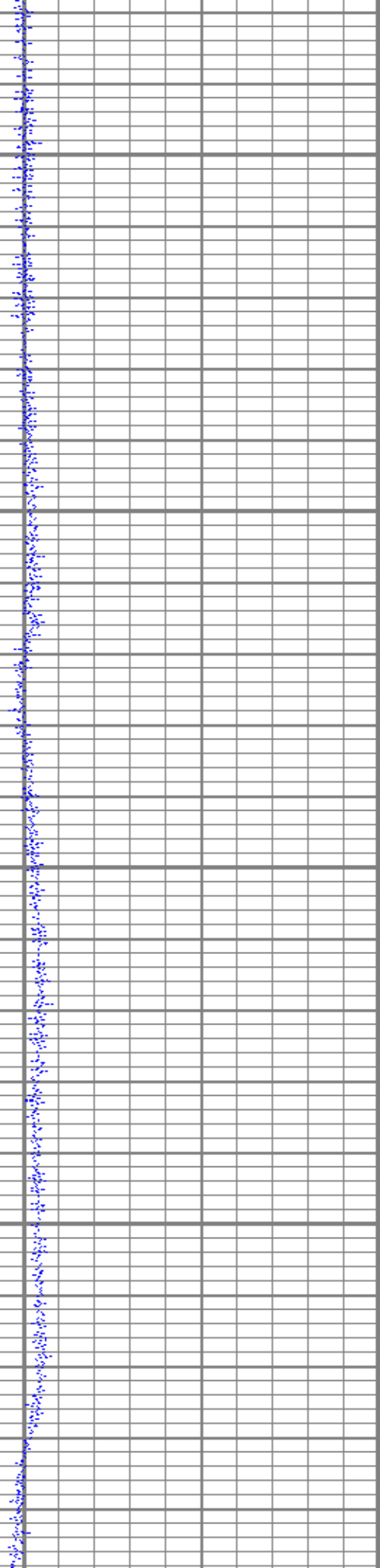
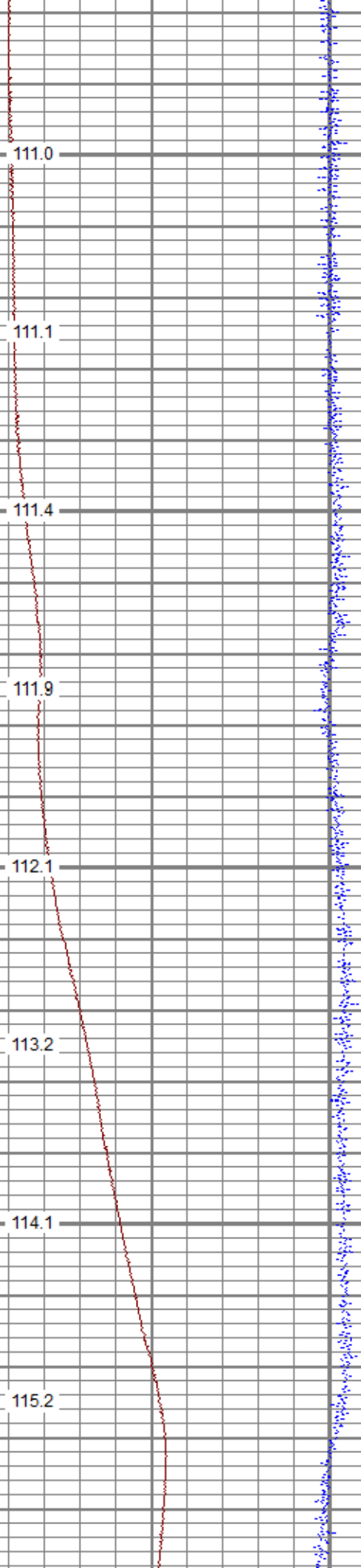
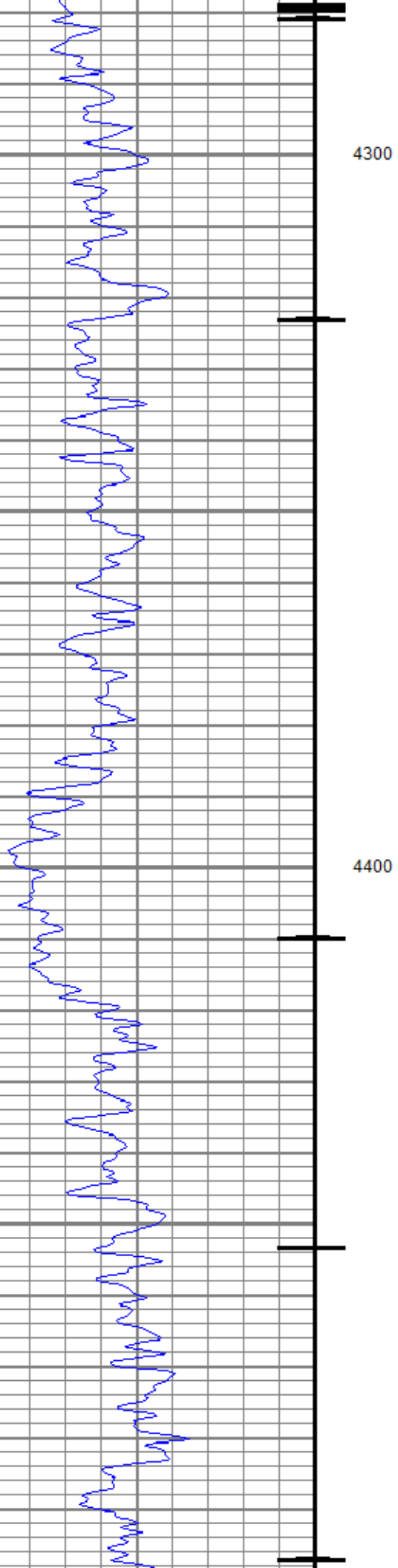
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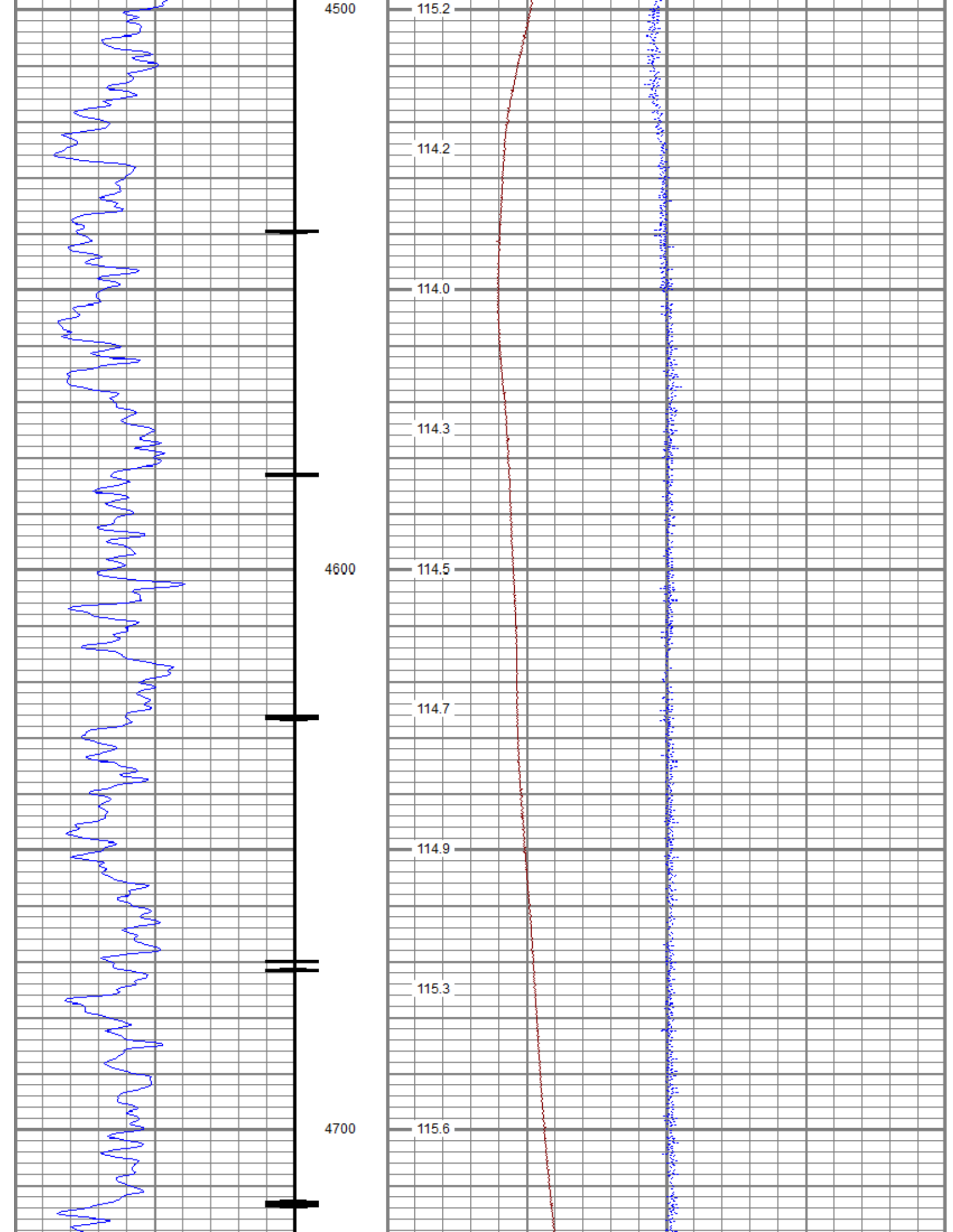


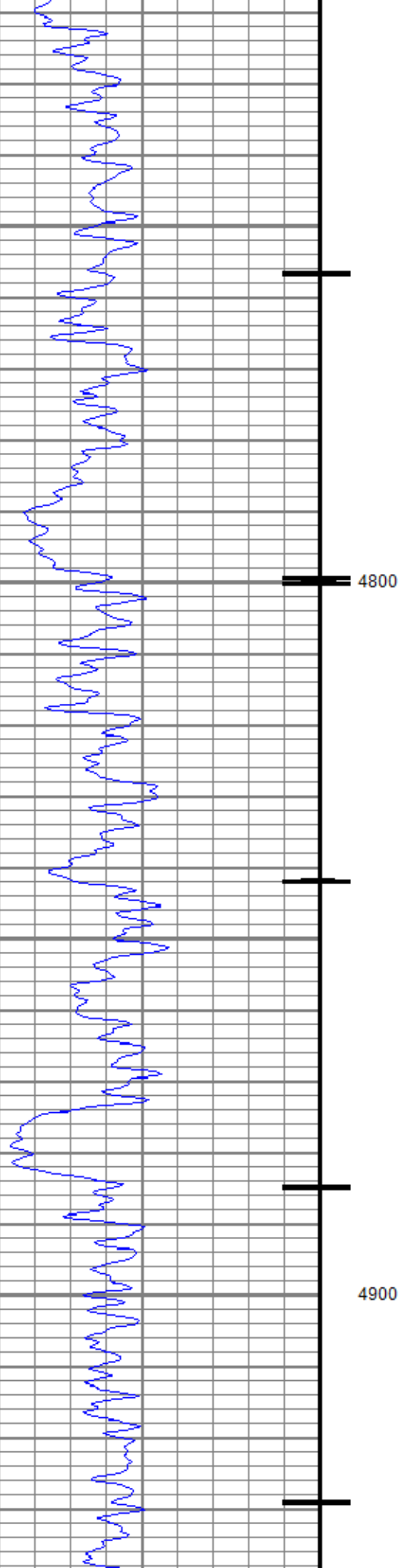












116.1

116.3

116.6

116.7

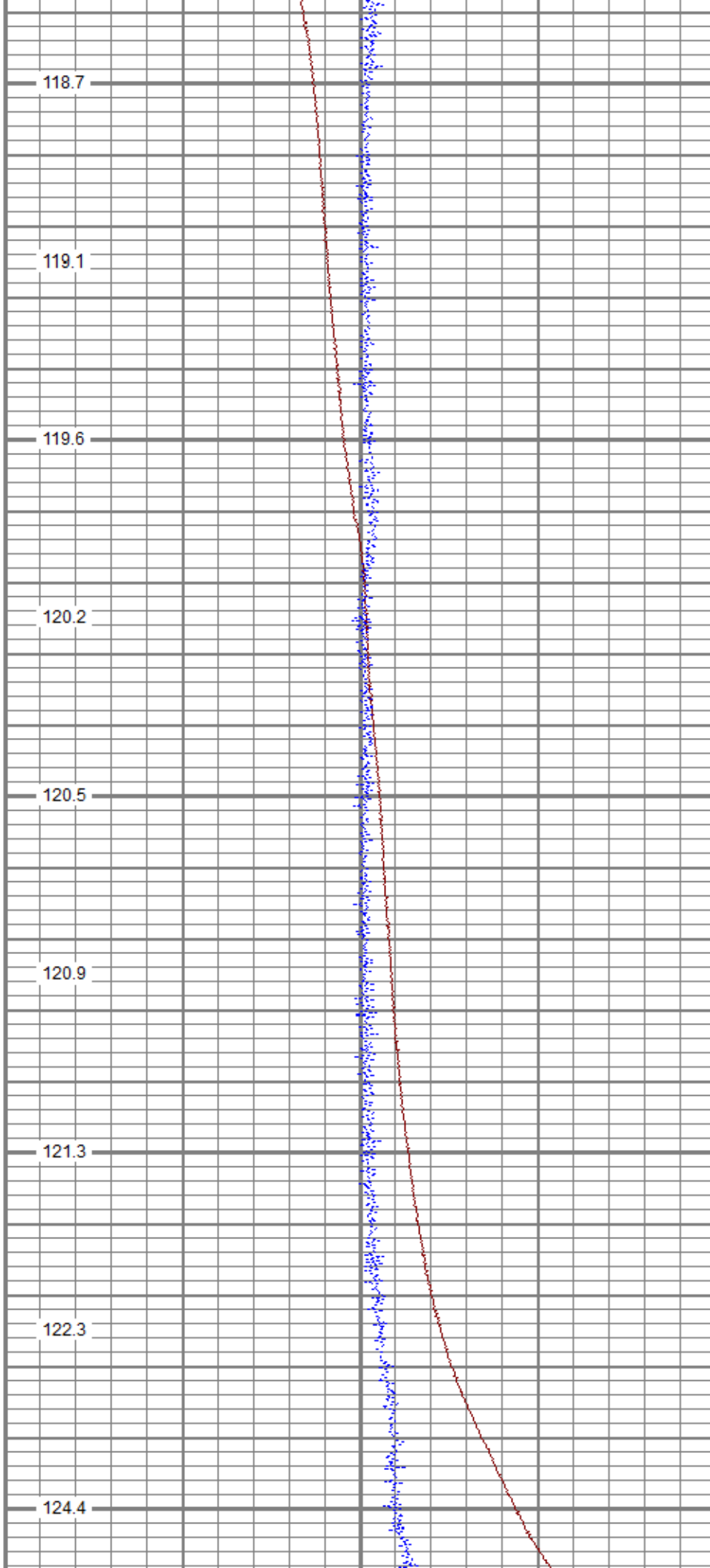
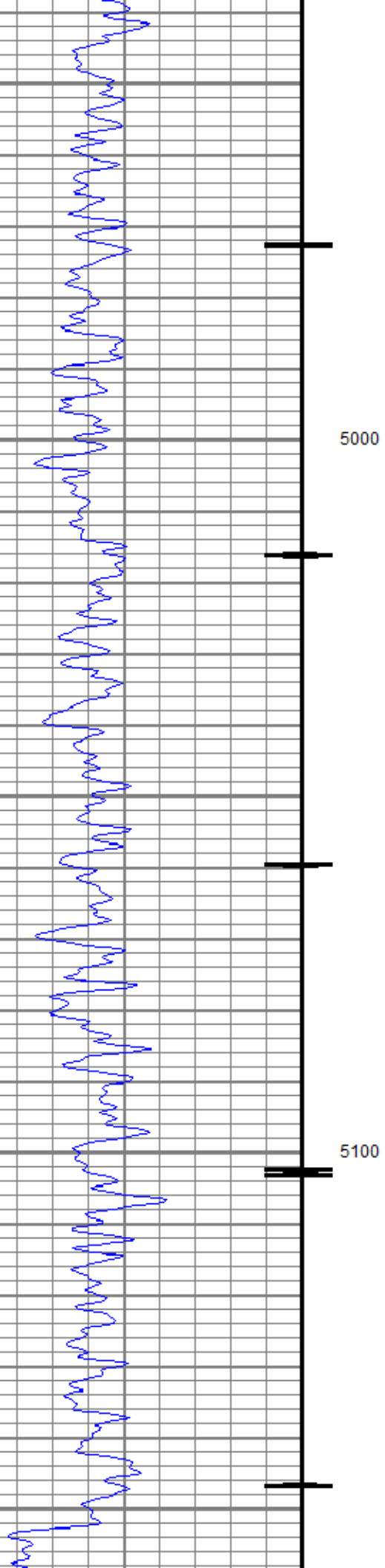
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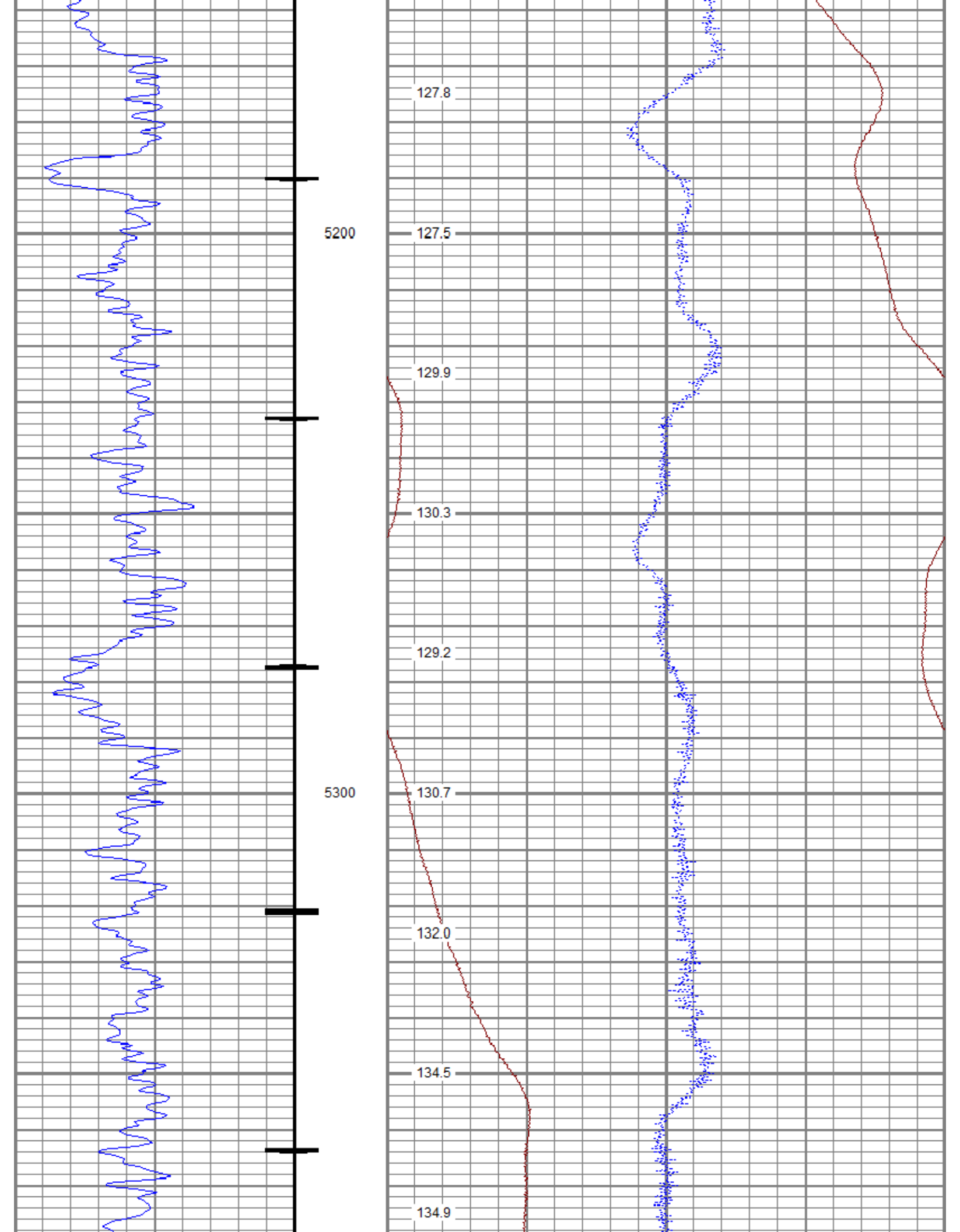
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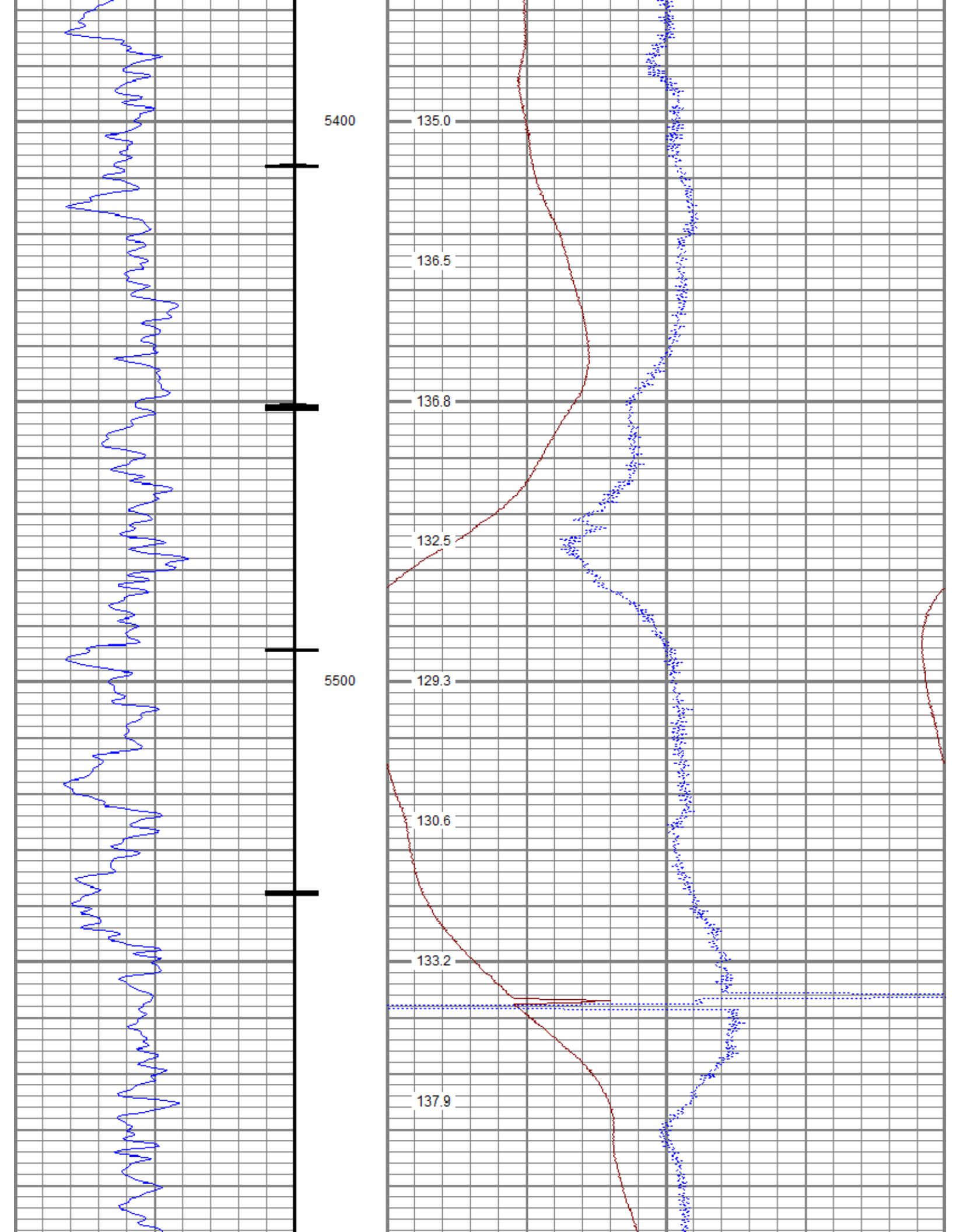
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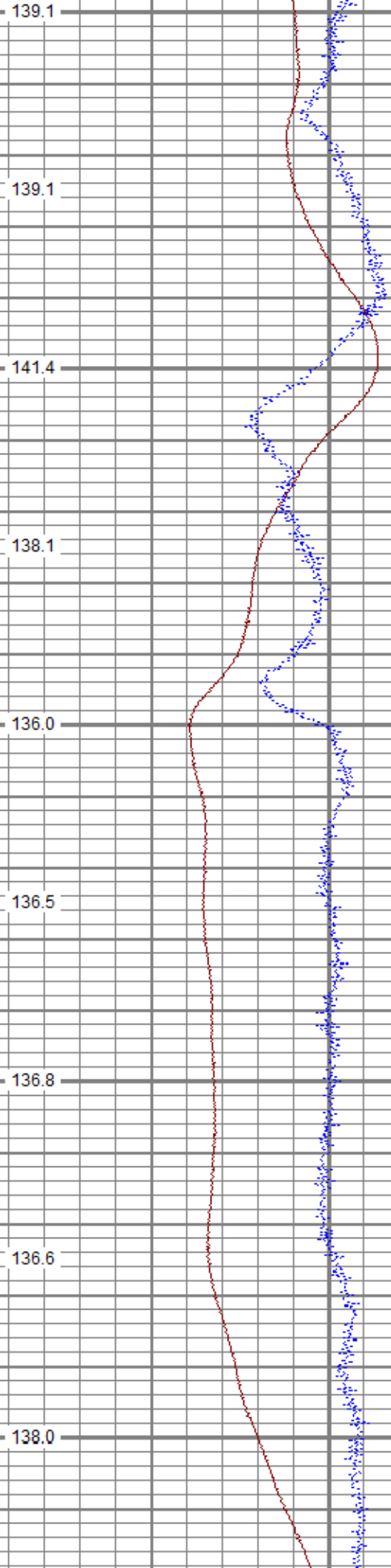
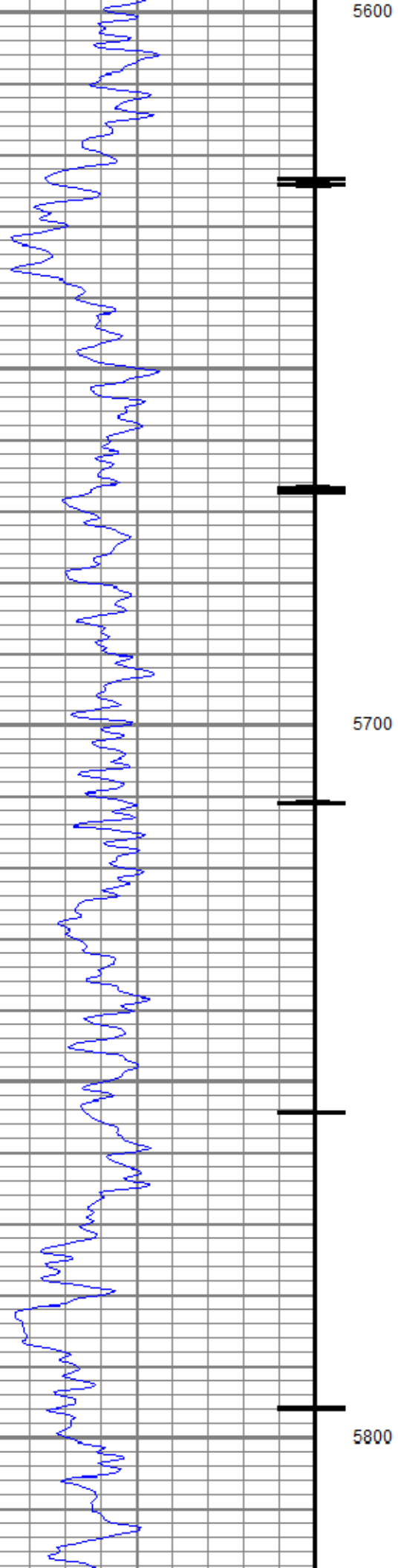
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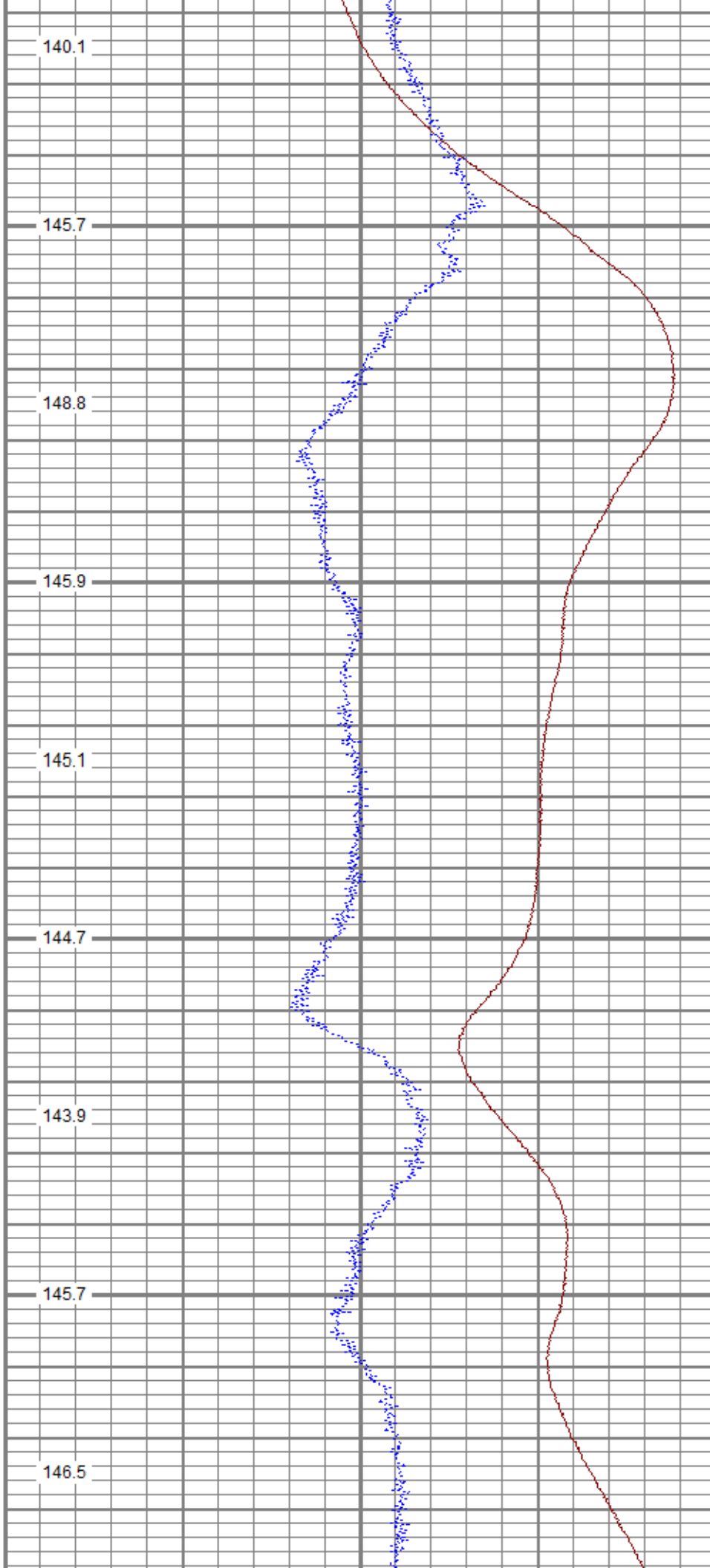
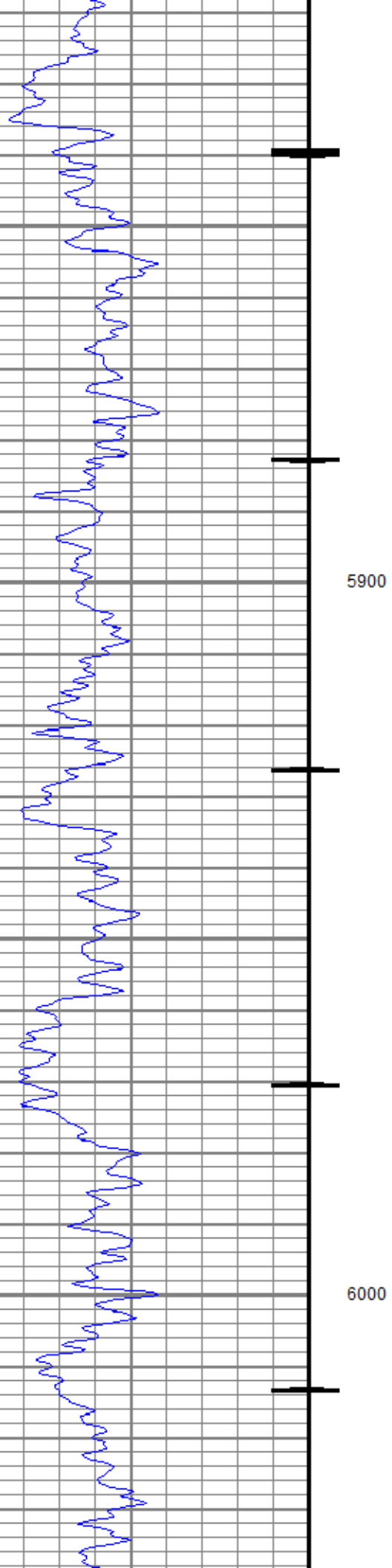
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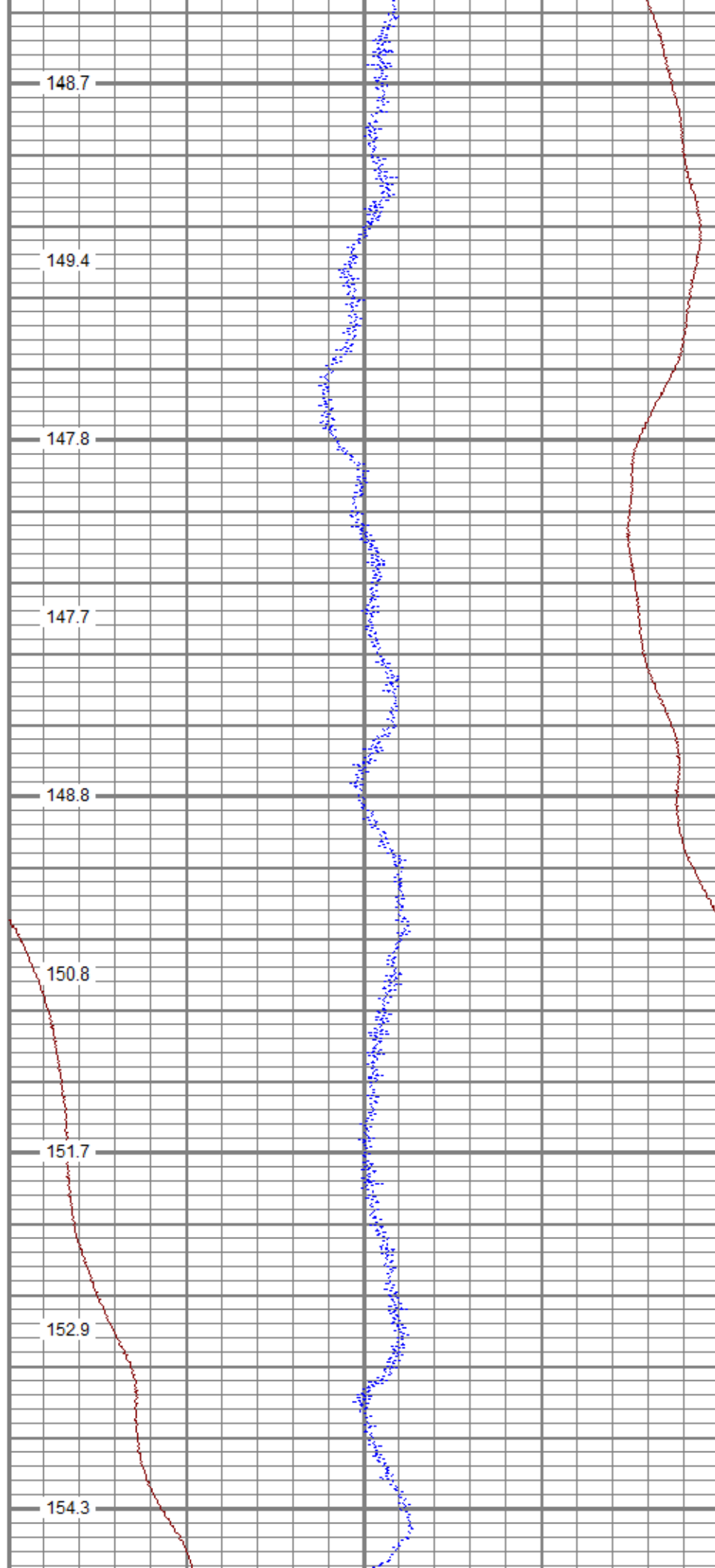
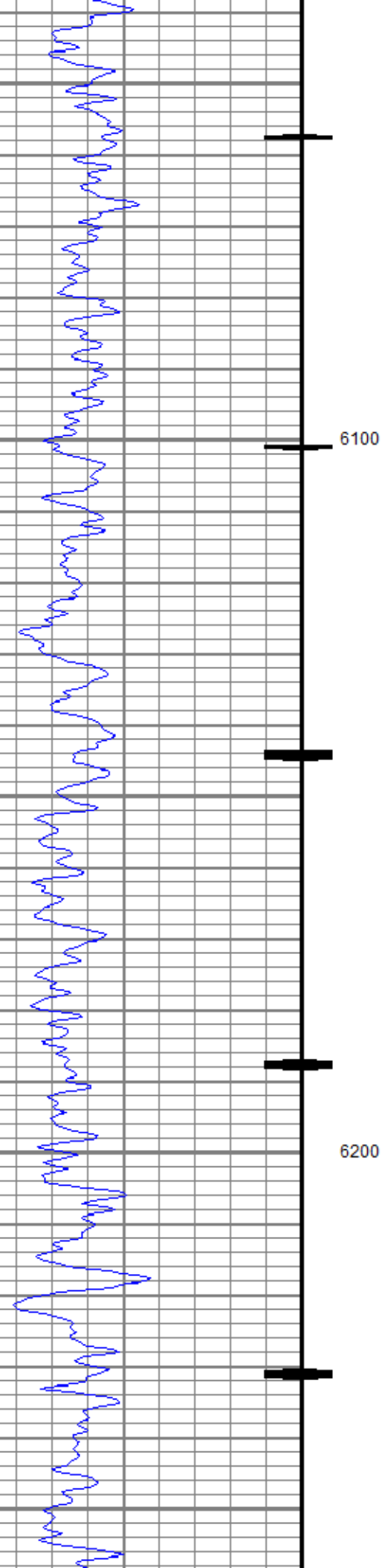


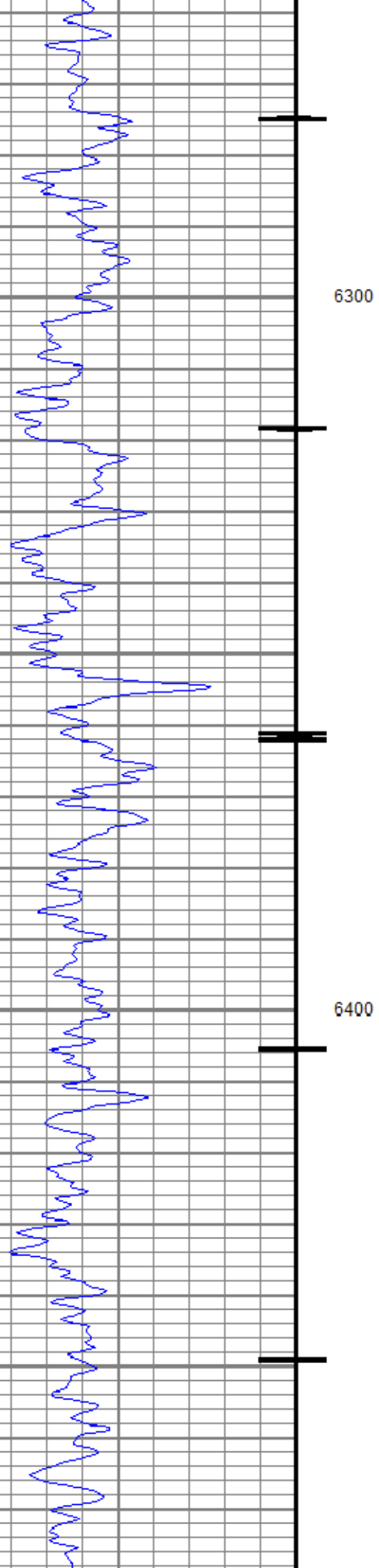












154.7

154.0

154.1

154.7

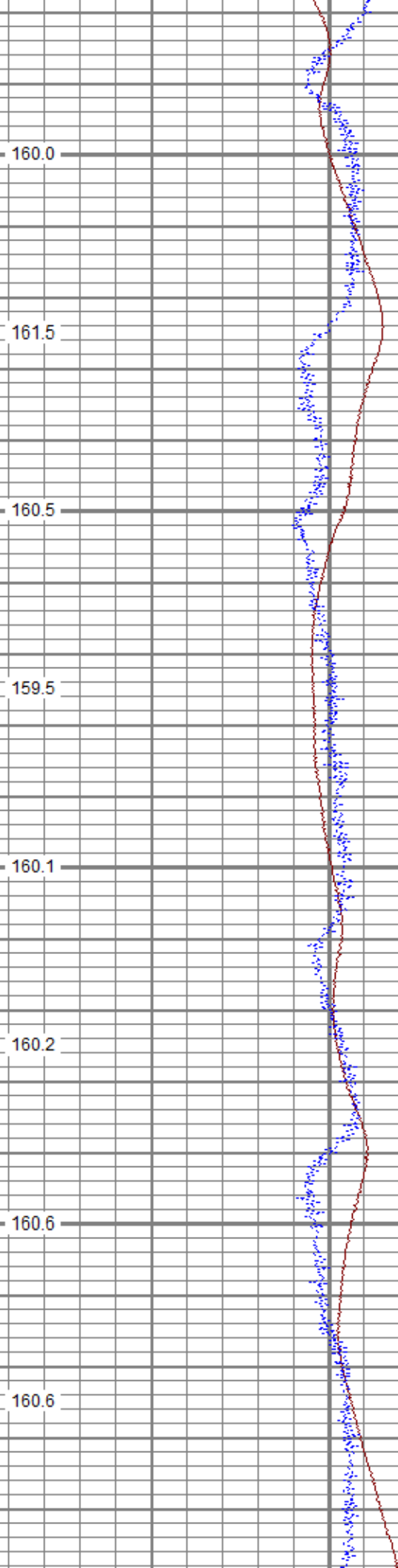
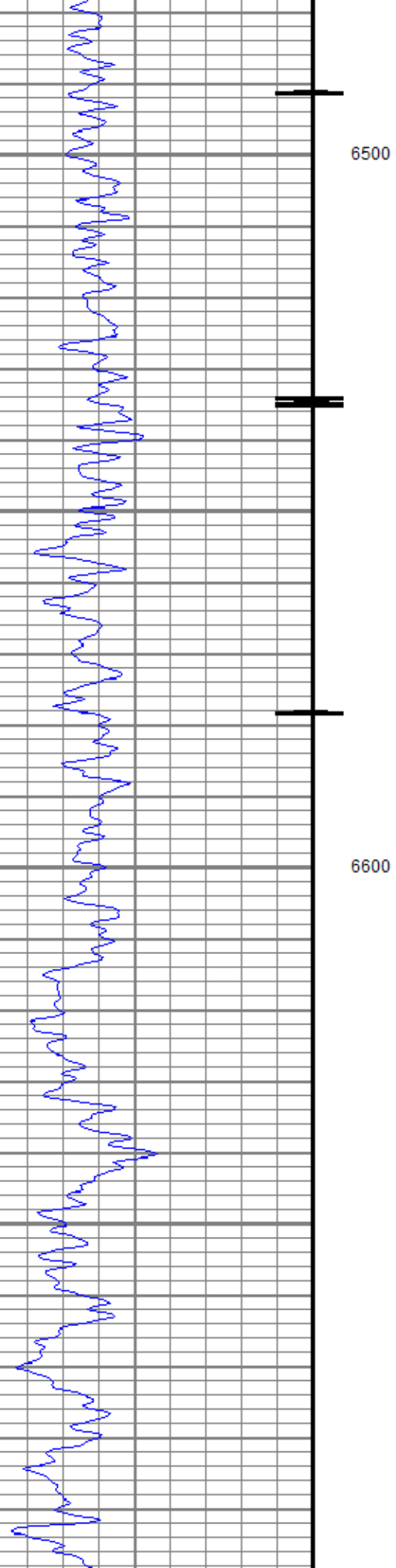
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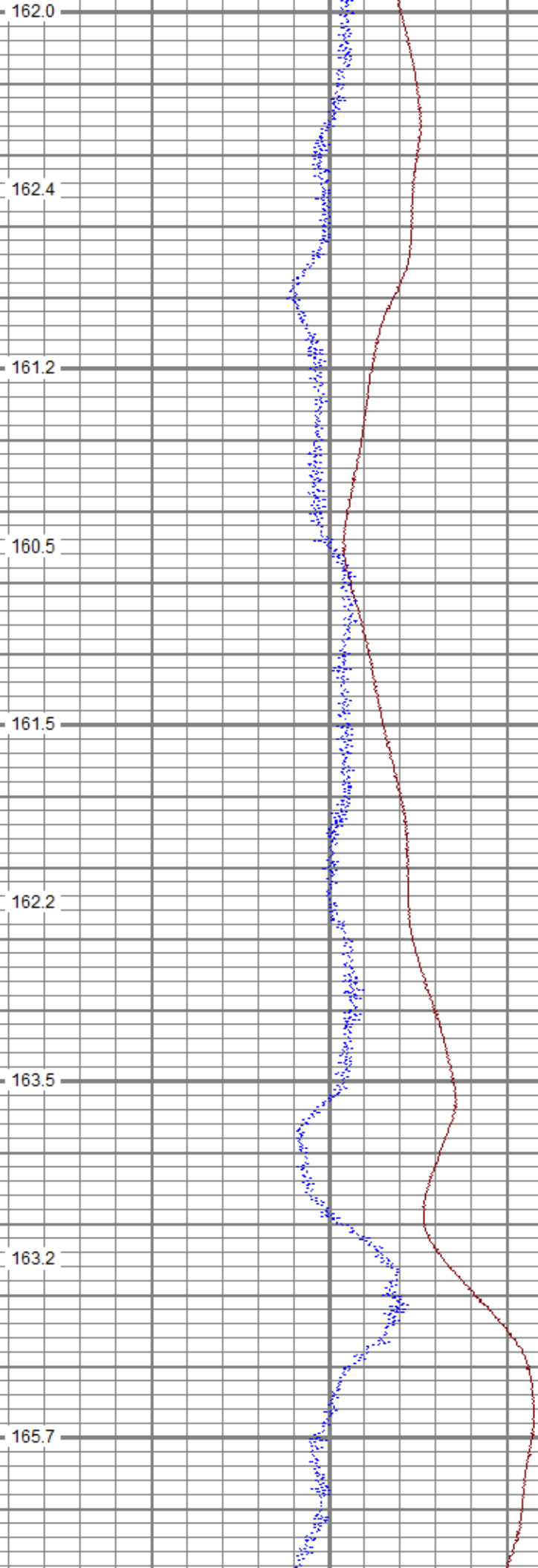
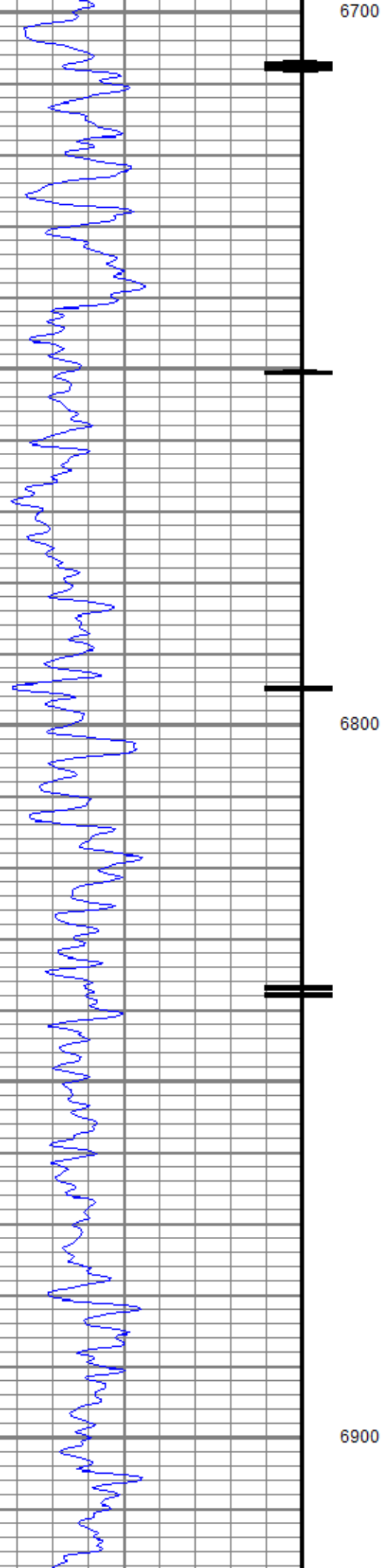
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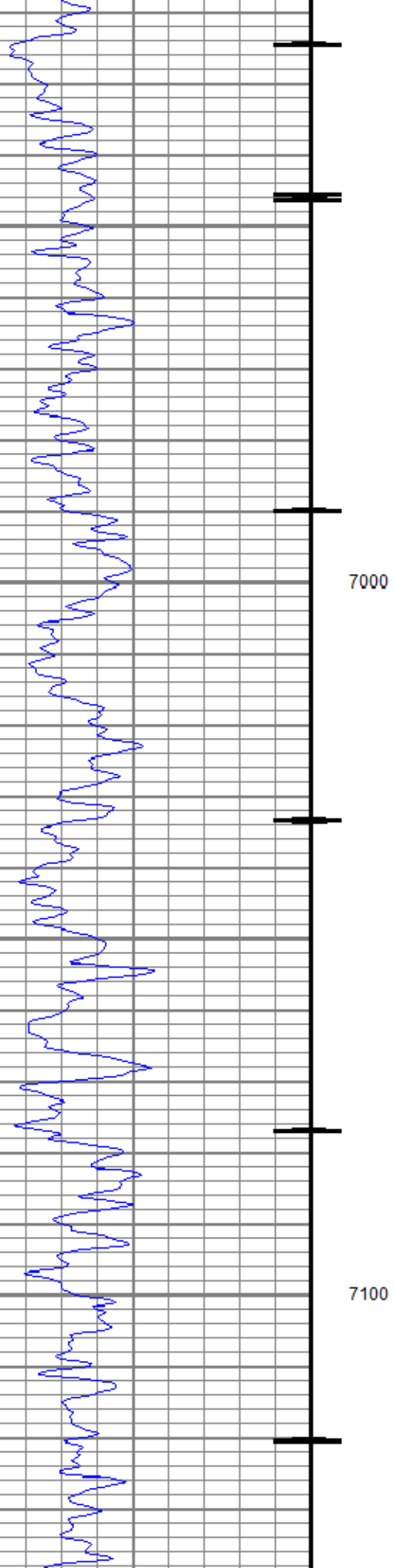
156.5

158.3

159.2







164.4

164.8

165.8

166.0

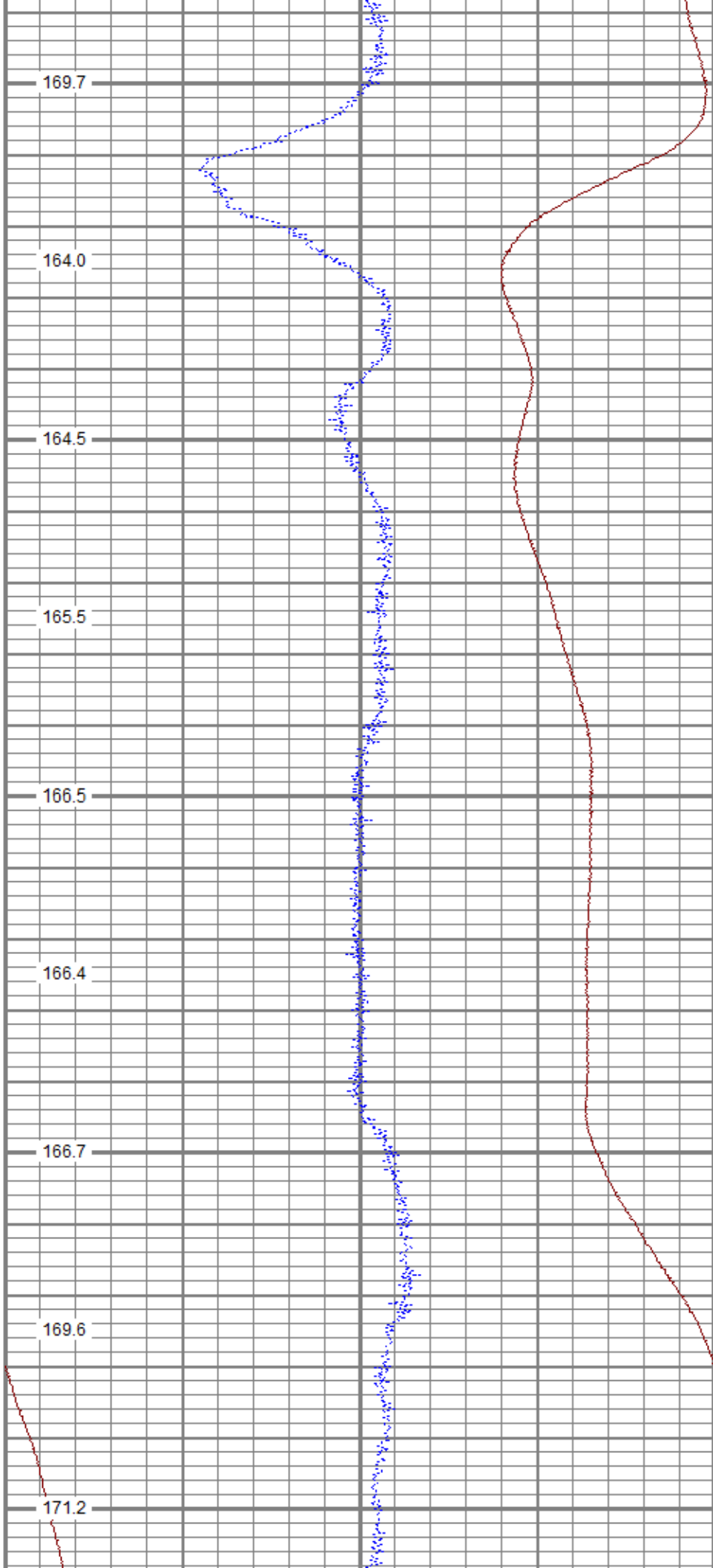
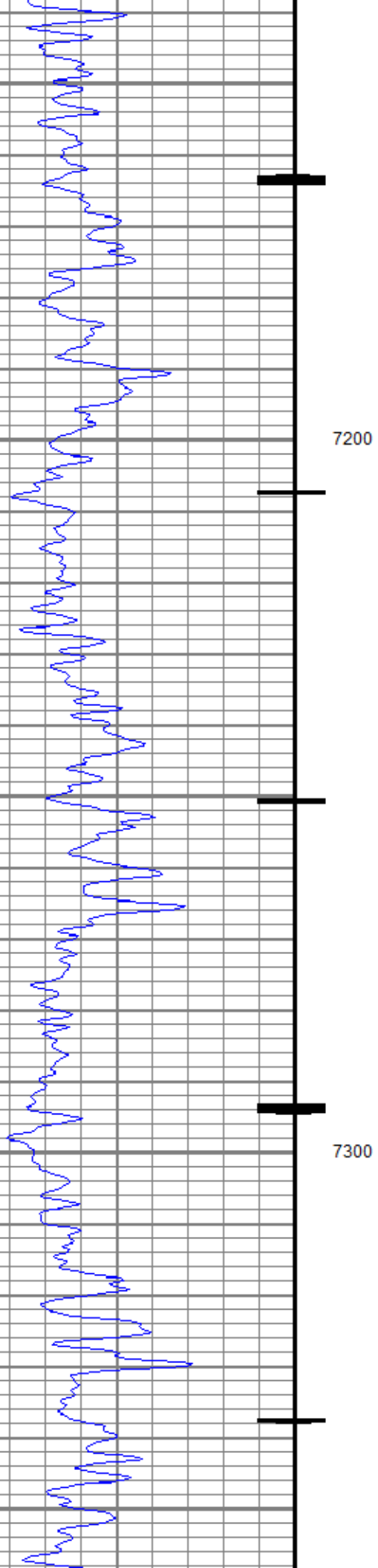
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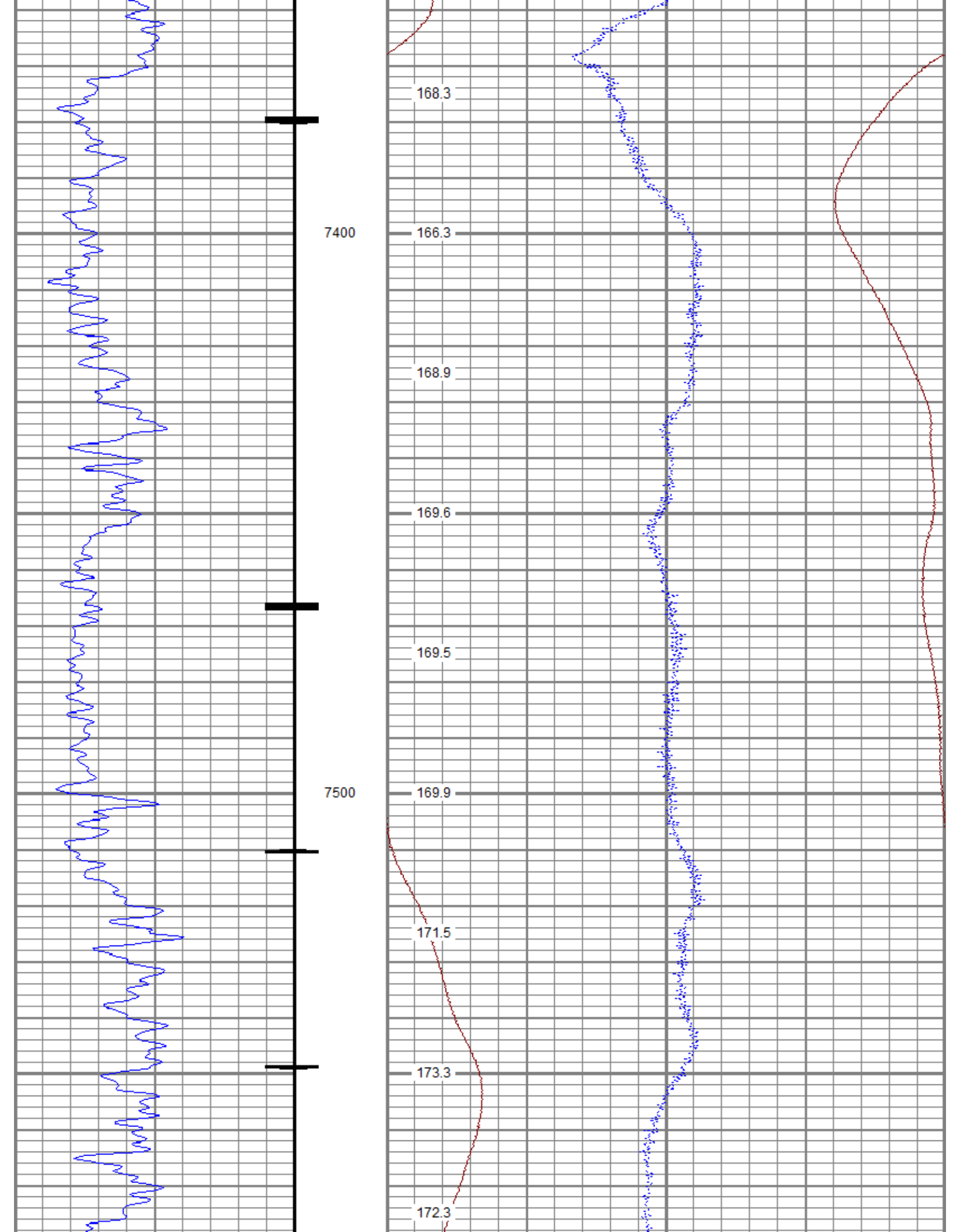
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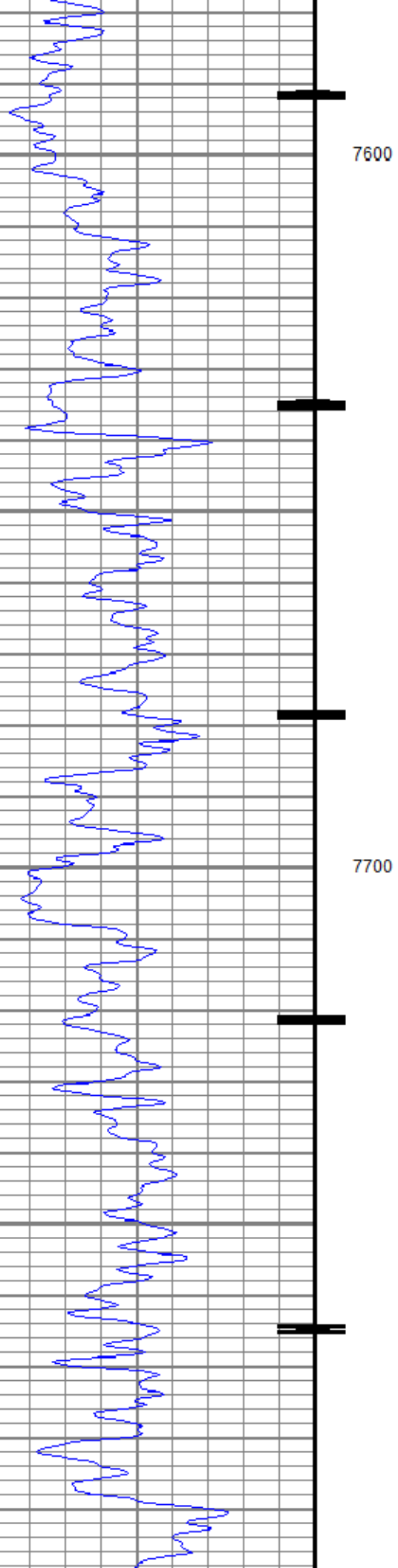
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168.8

169.1







7600

7700

171.6

172.0

173.9

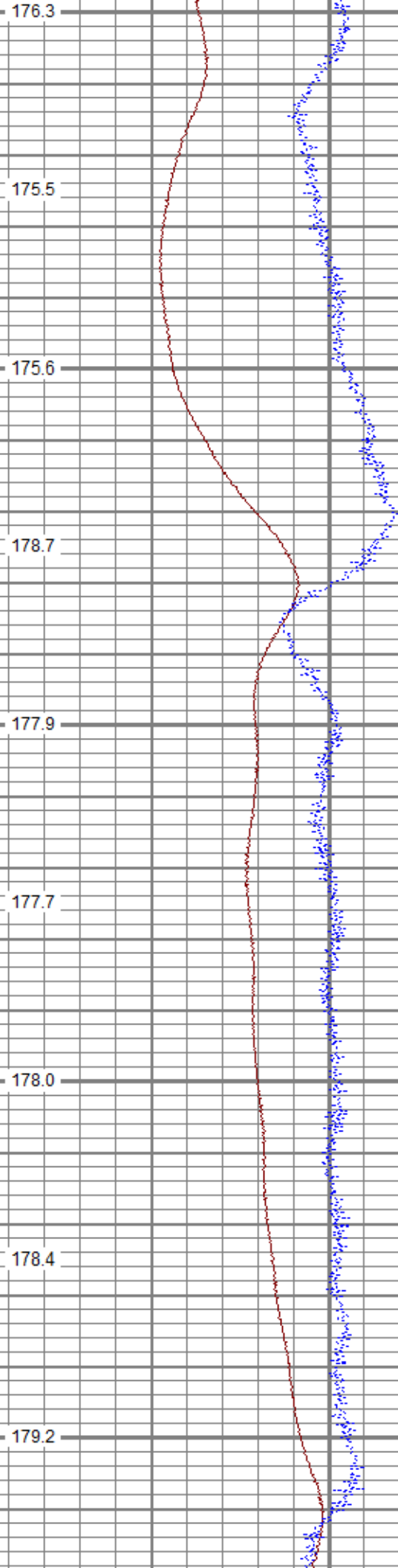
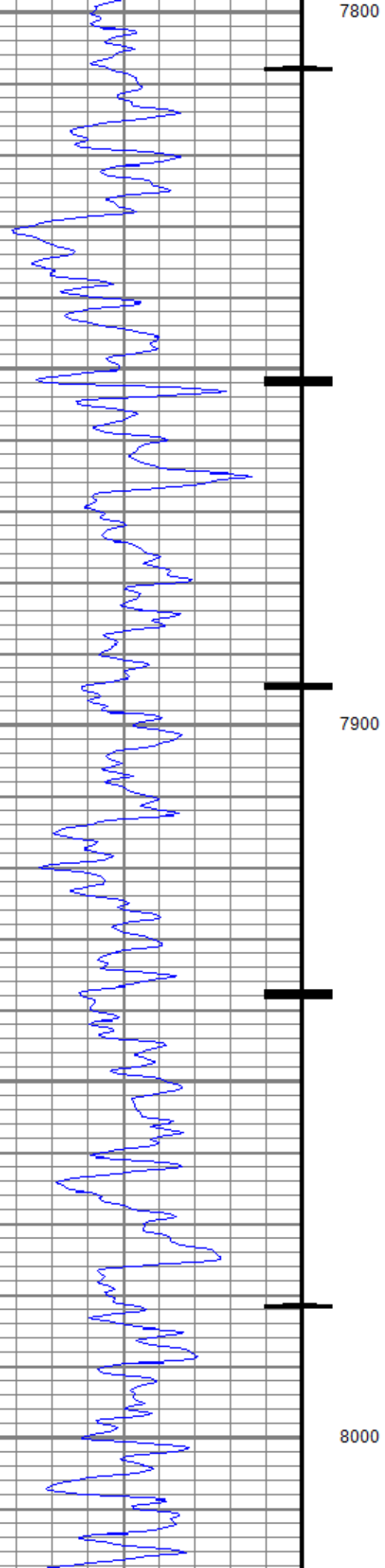
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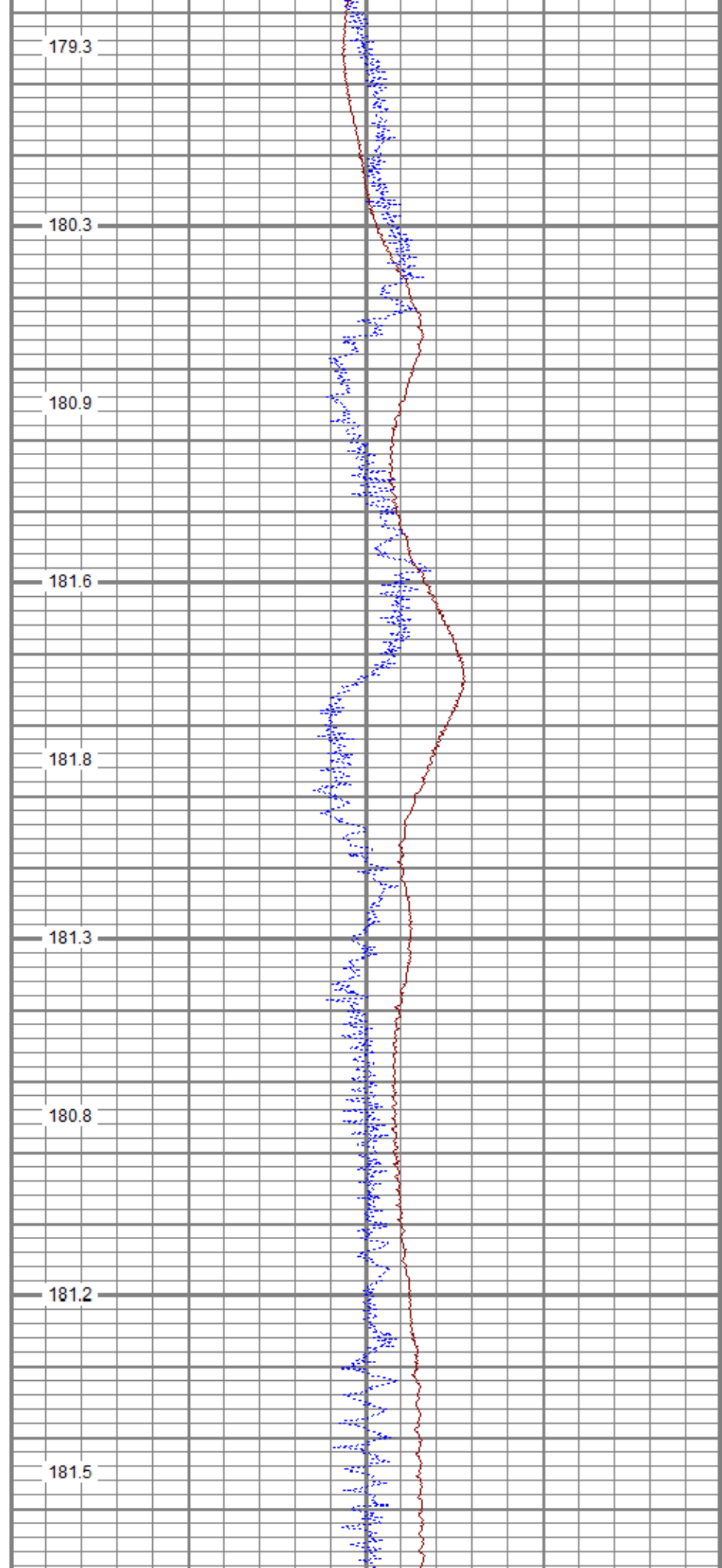
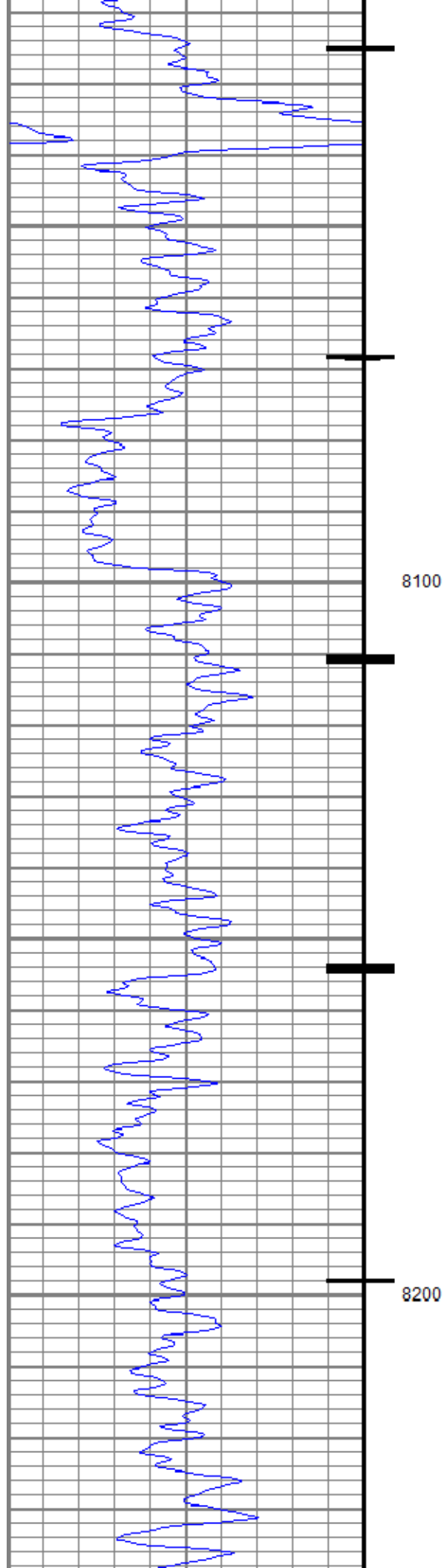
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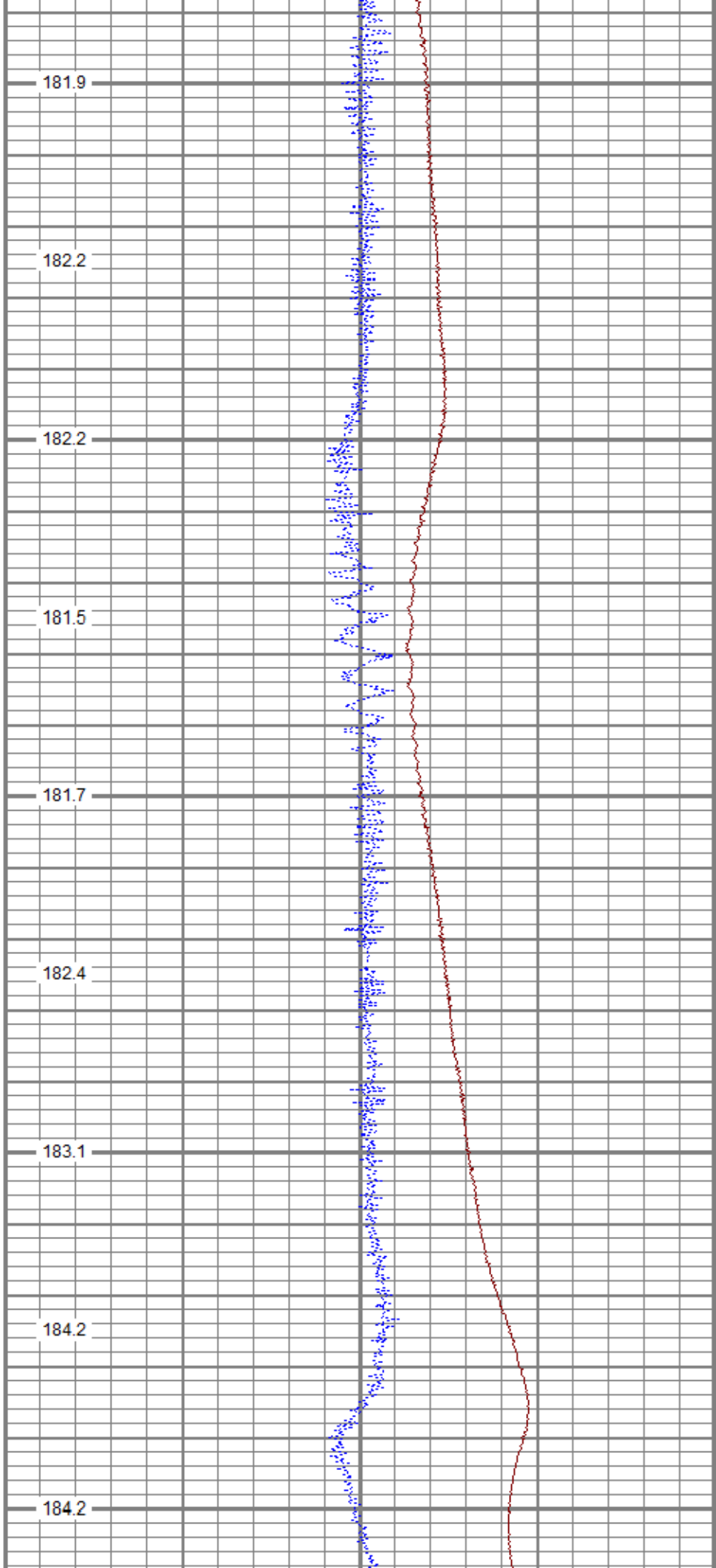
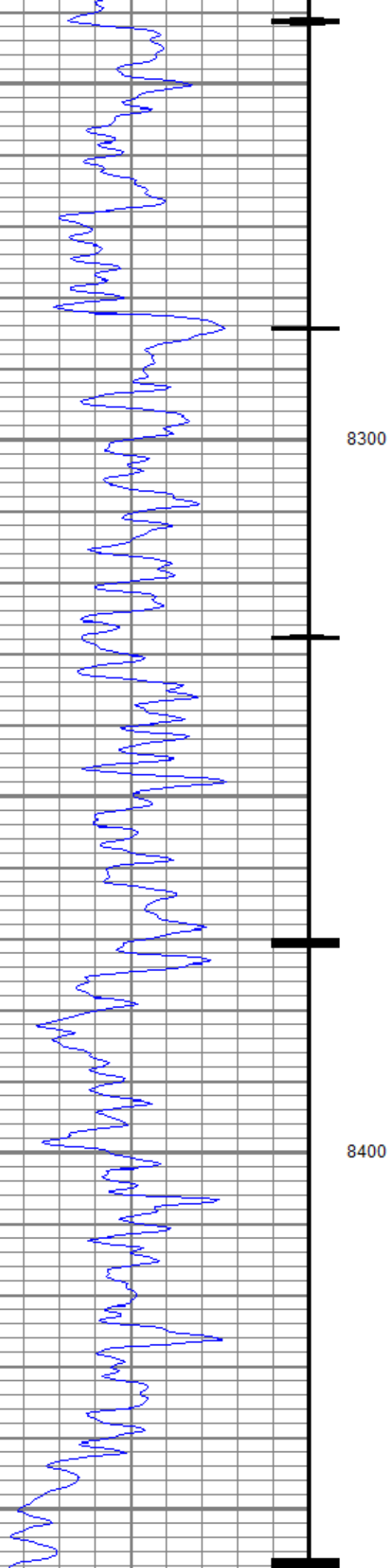
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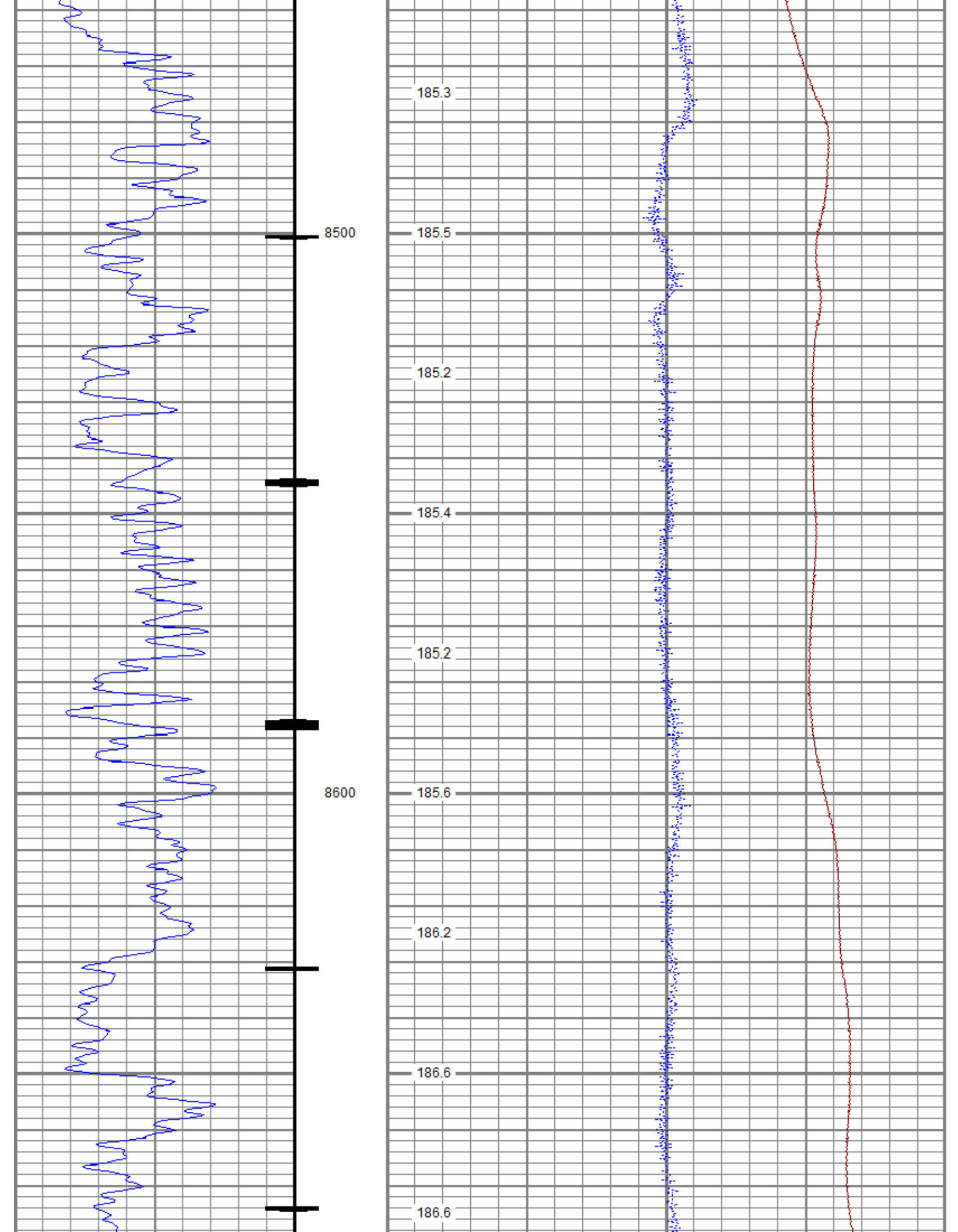
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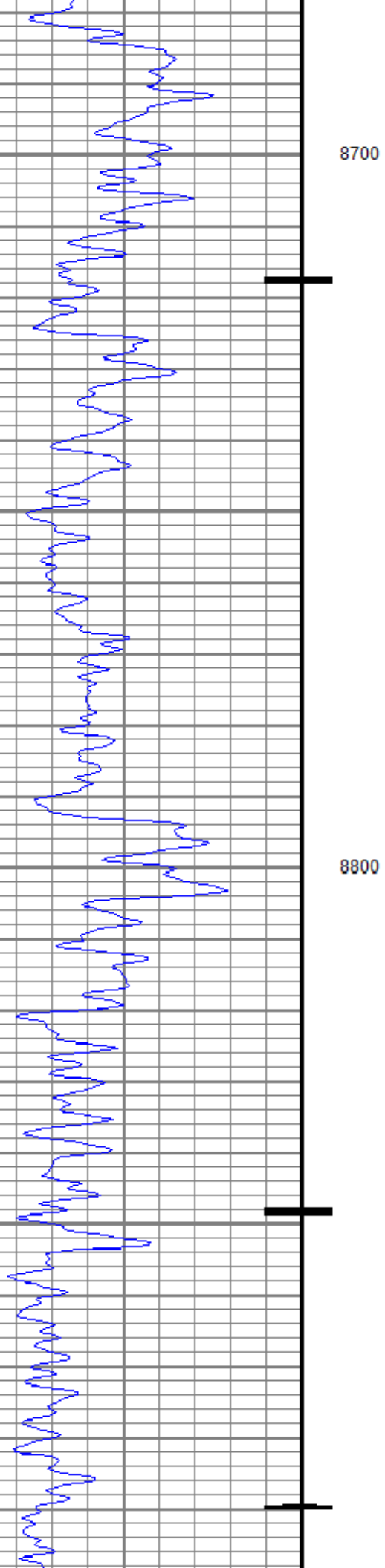
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187.0

187.2

187.3

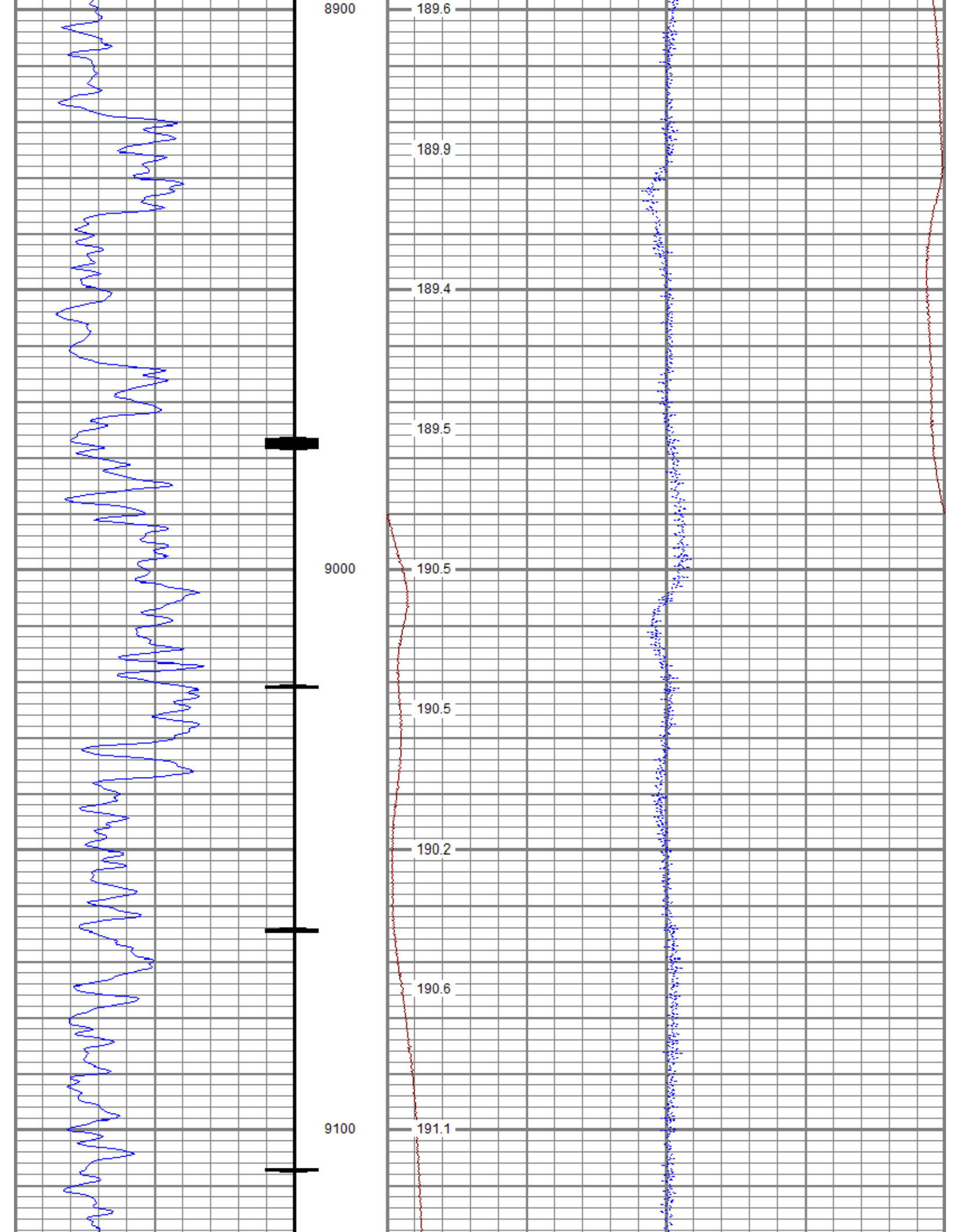
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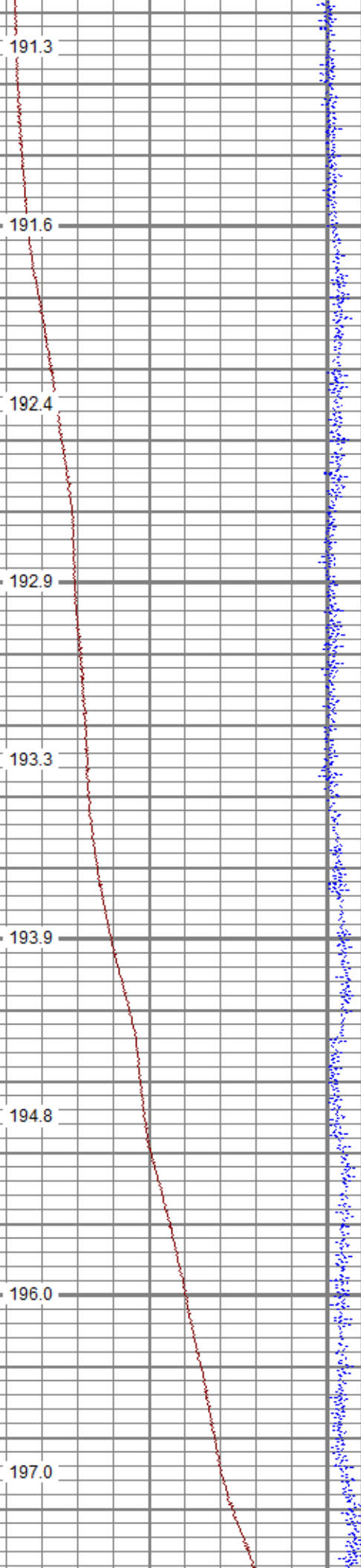
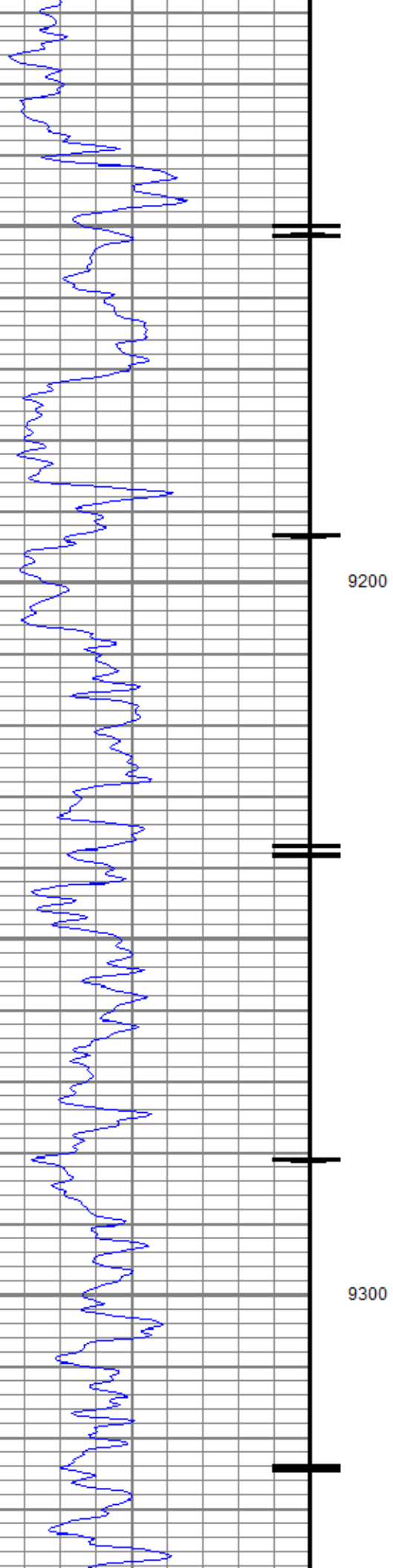
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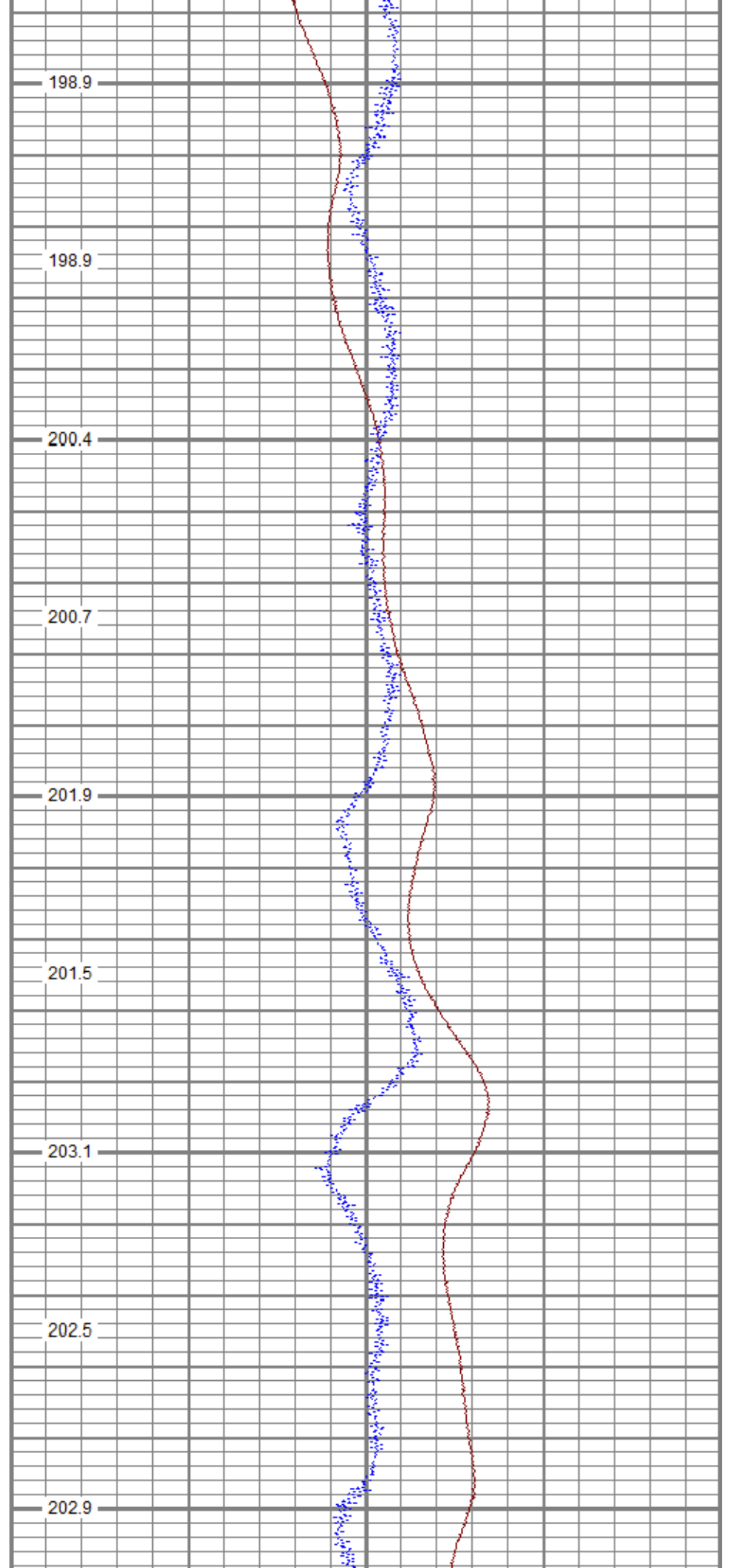
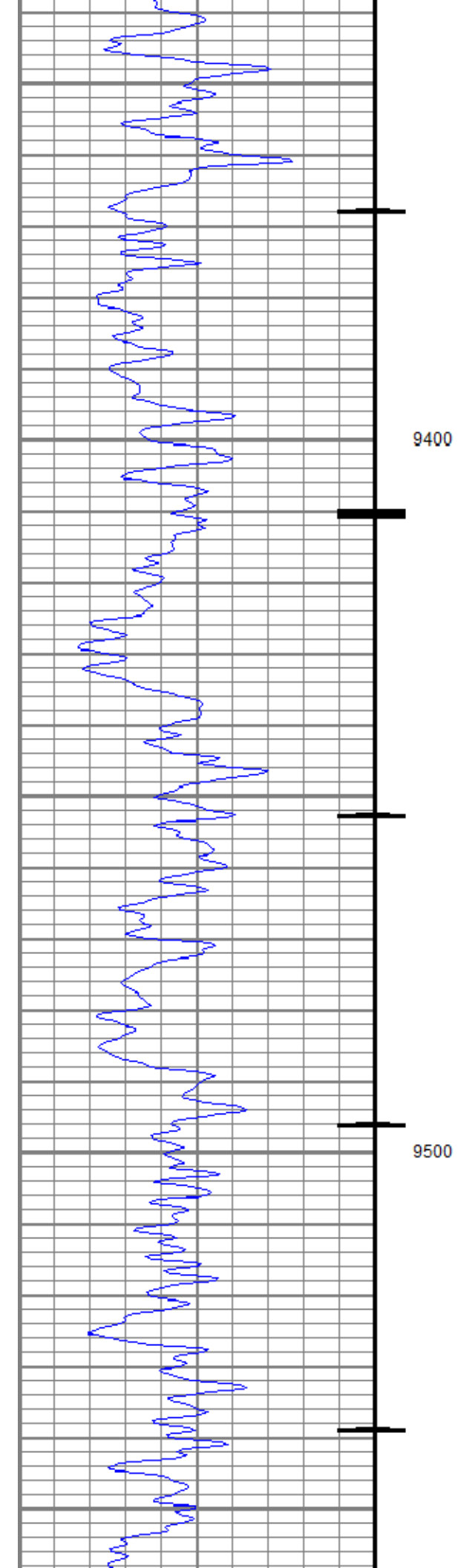
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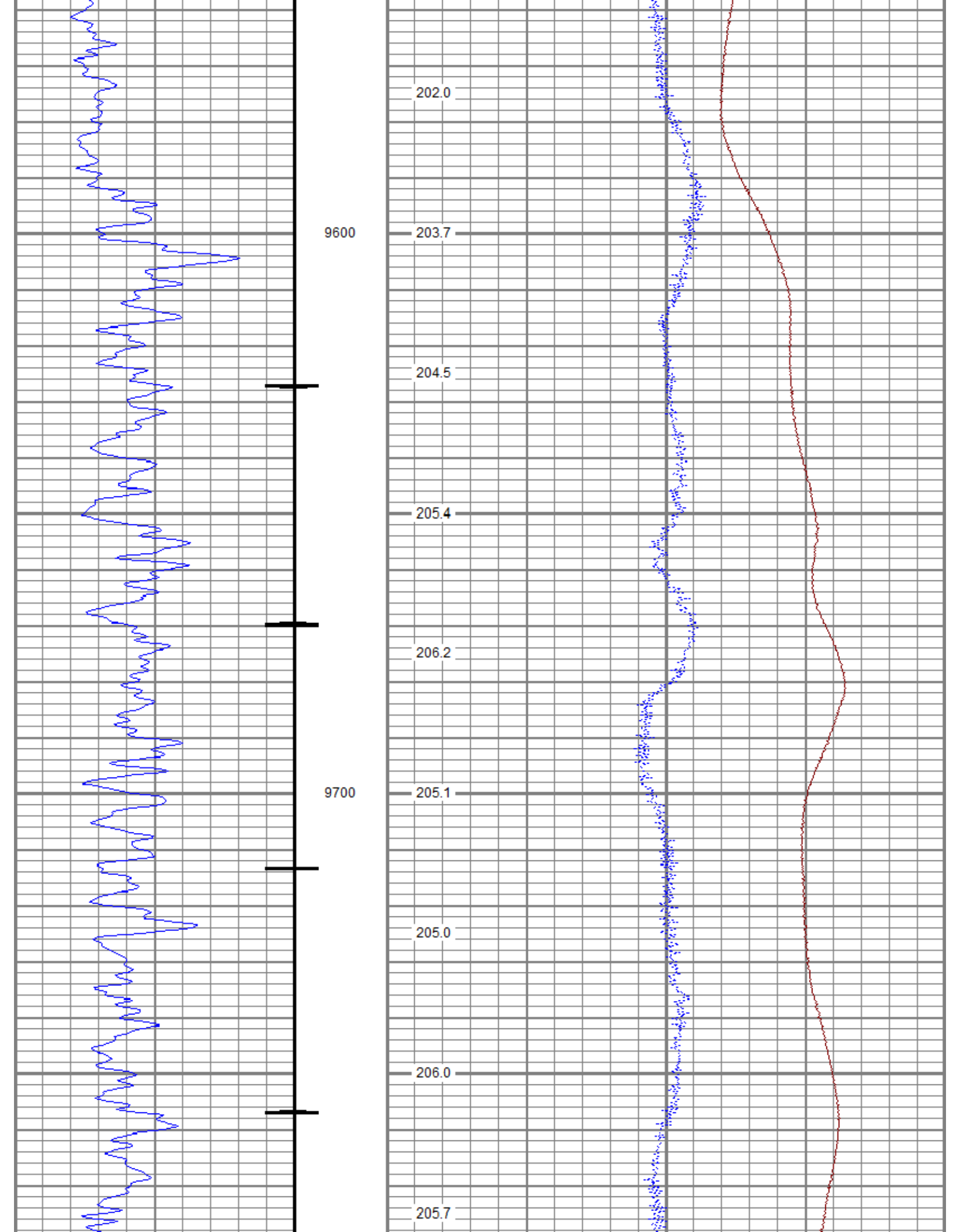
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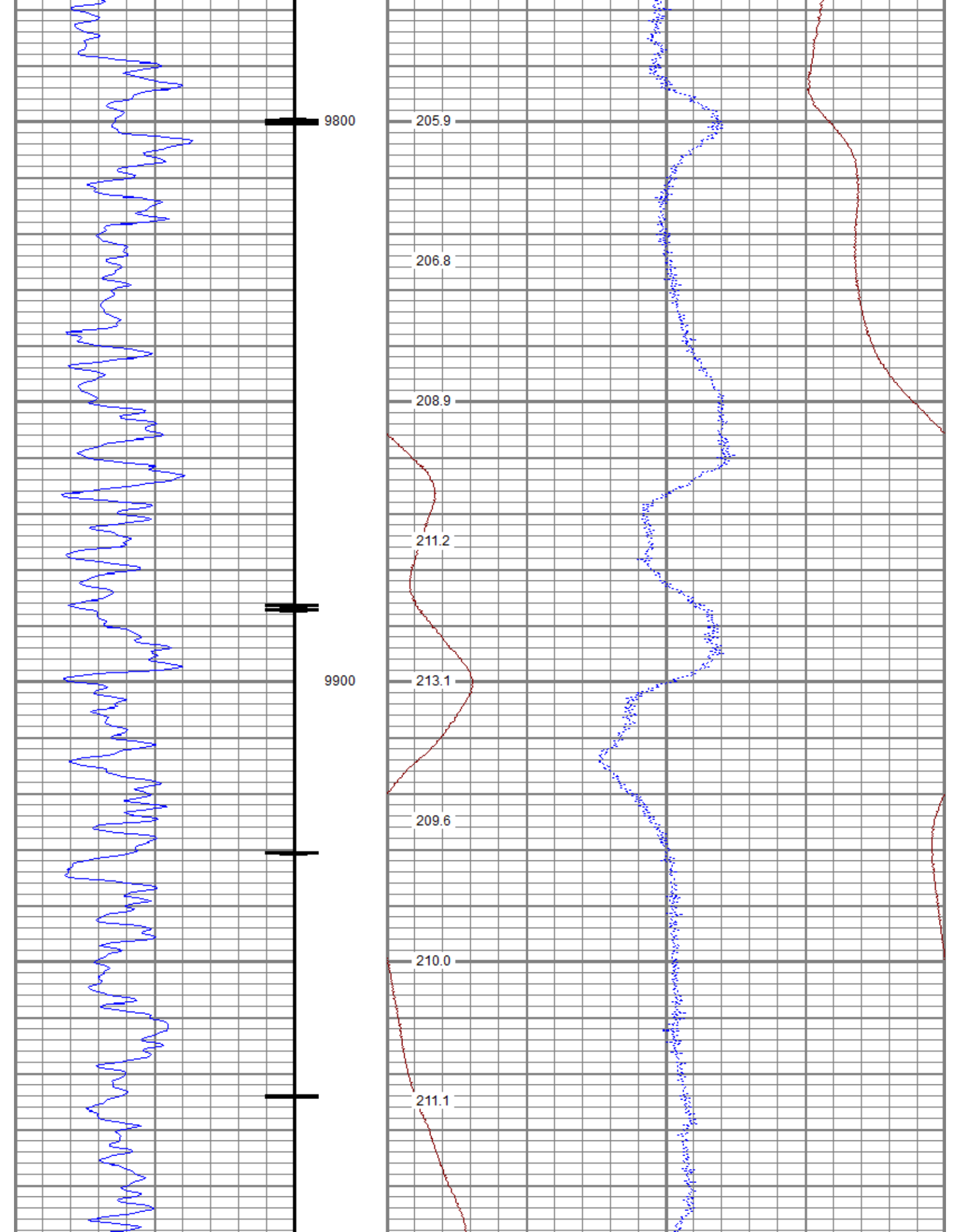
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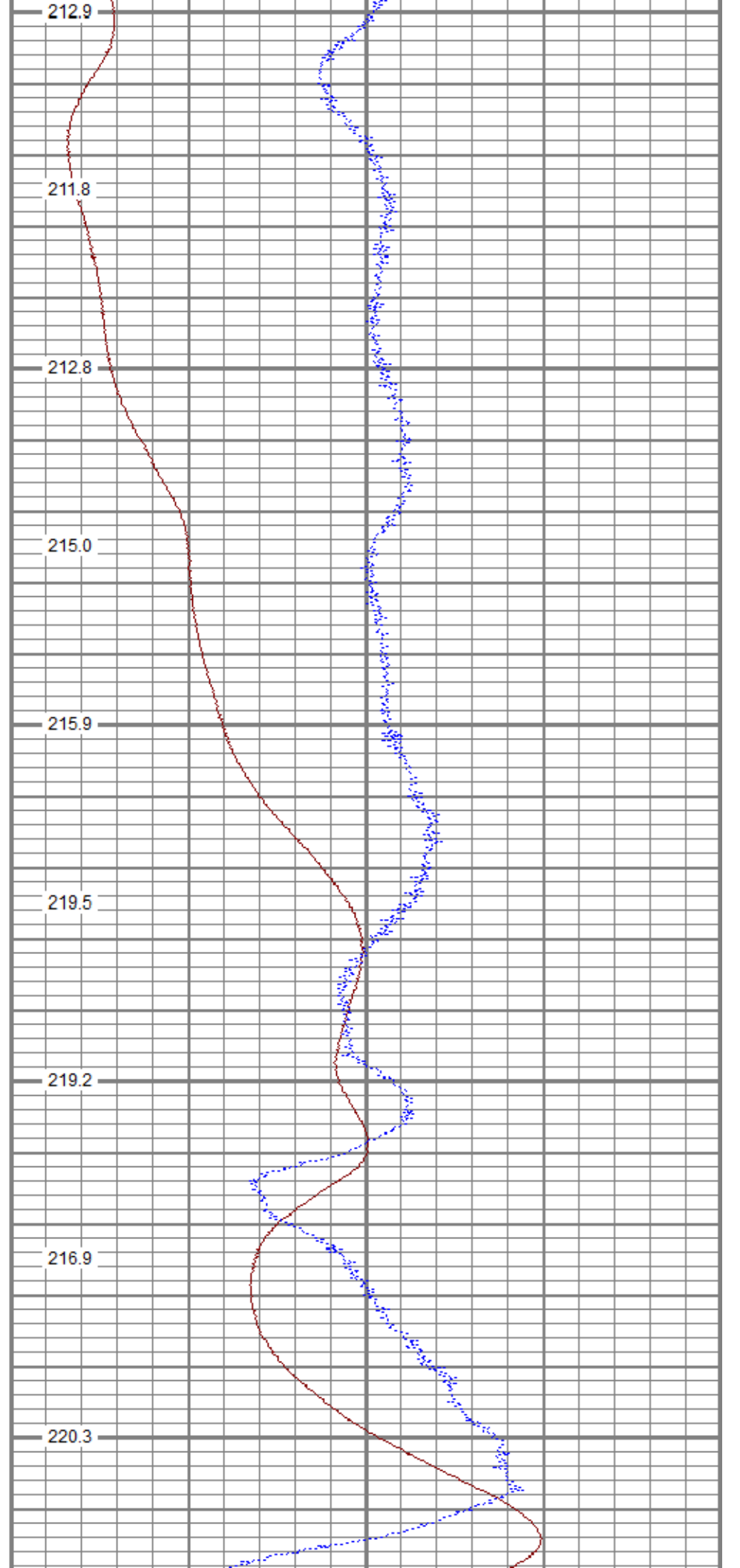
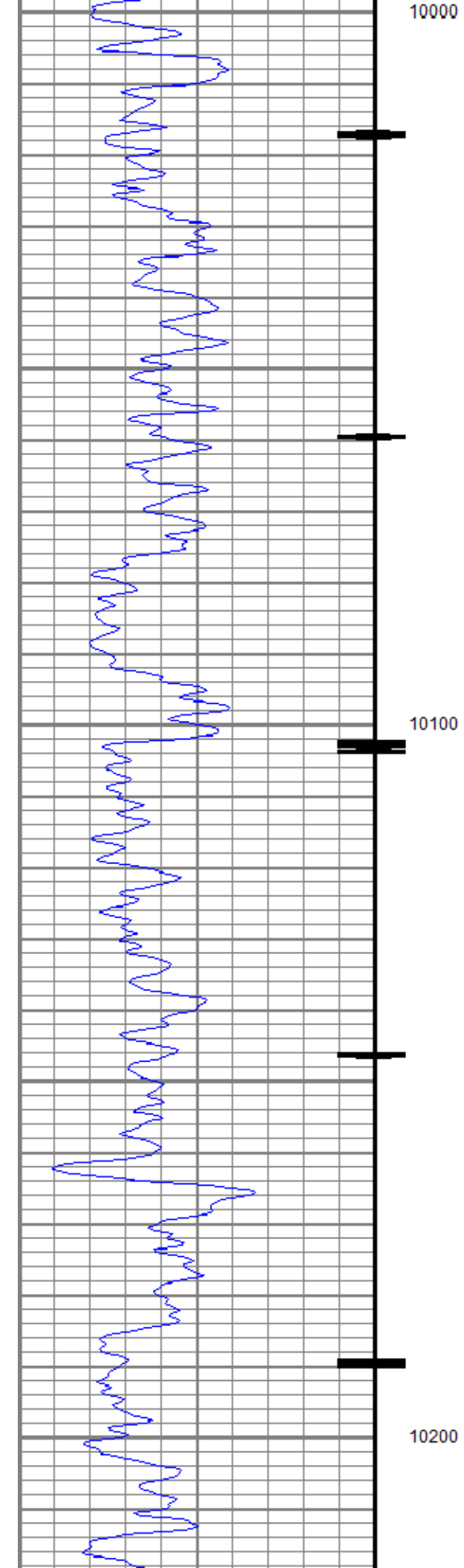


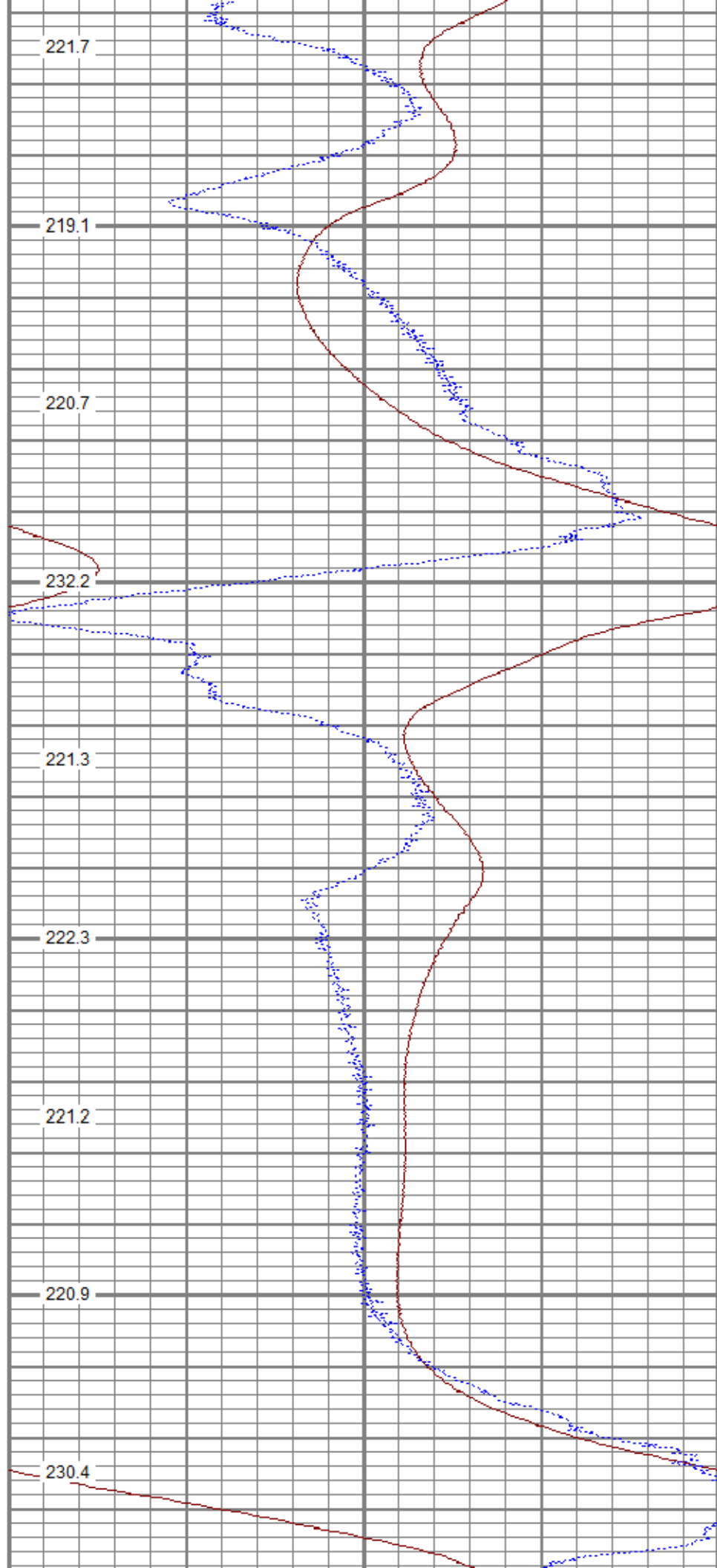
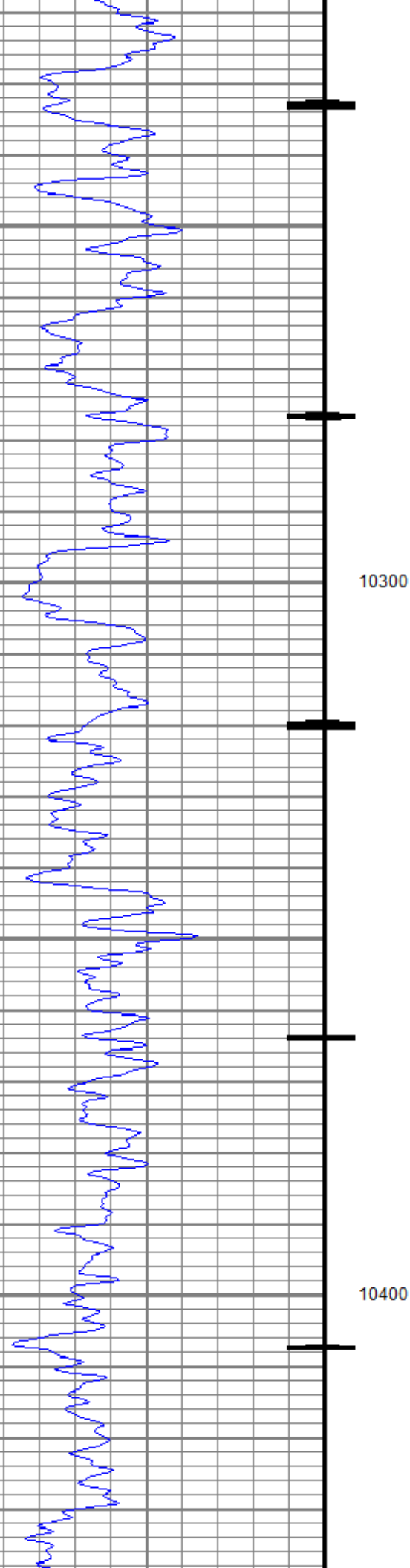


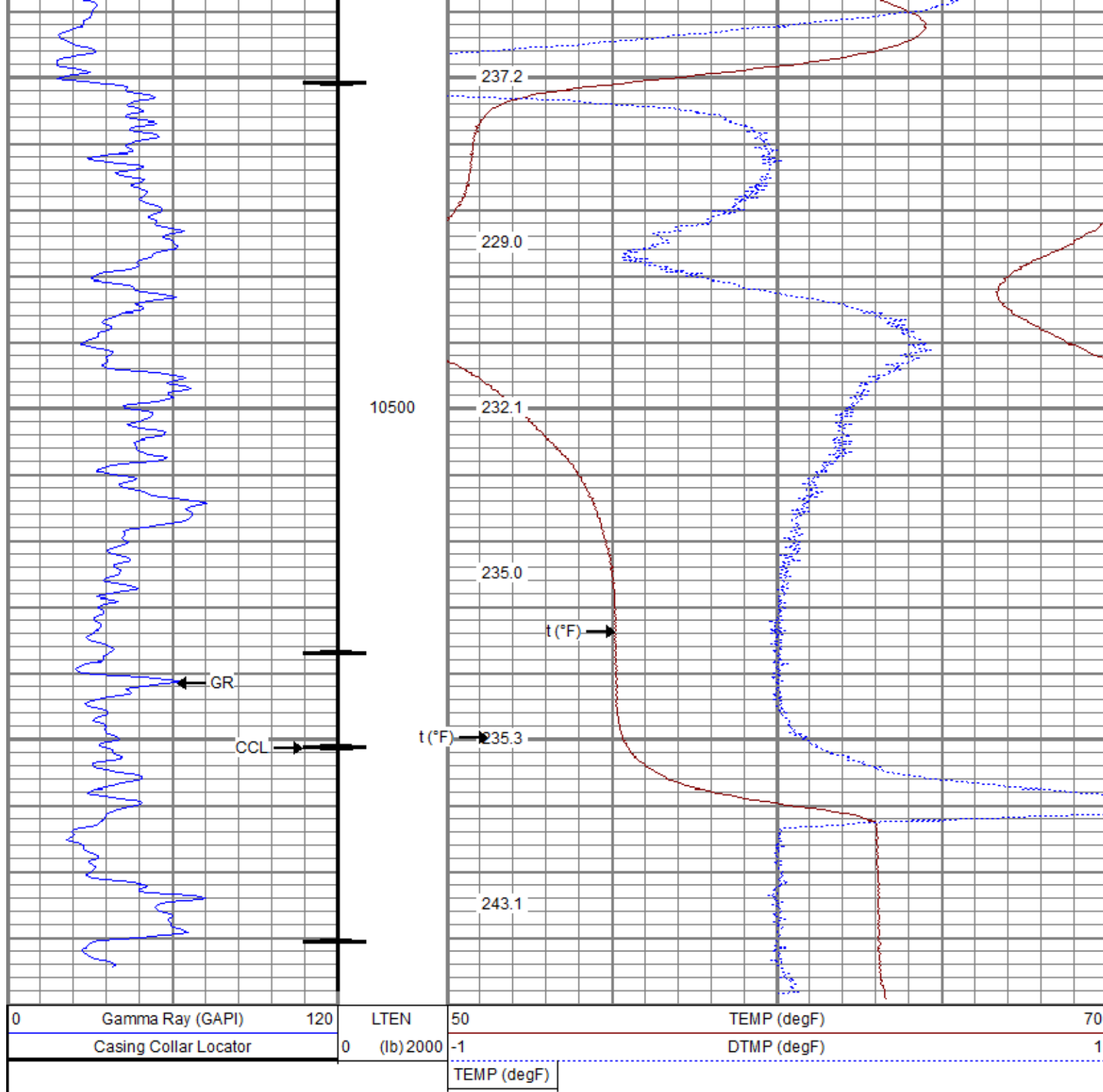












Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Titan CHD-14375 GO	1.03	1.44	3.60
			Titan 1-7/16" Assembled Electric Cable Head w/ 1" Fishing Neck			
			UW AGS-001 (211461)	0.21	1.69	1.00
			Sondex Adapter - GO Box to Sondex Pin			

			UW XTU-002 (10017430) Crossover Ultrawire Toolbus to Ultralink	1.58	1.69	6.50
			UW PGR-020 (10019371) Production Gamma Ray	1.92	1.69	9.50
GR	3.37					
			UW CCL-028 (10018437) 3-1/8" Ultrawire Casing Collar Locator	1.61	3.13	36.00
CCL	1.77					
			UW PRT-016 (10025093) Platinum Resistance Thermometer	1.04	1.69	5.20
TEMP	0.37					
HVOLTX	0.00					
ITEMPX	0.00					
TSTAMP	0.00		UW BUL-006 (10019616) Sondex Ultrawire Bullnose Terminator Sub	0.22	1.69	1.20
Dataset: tep_federal_ru_13-17_temp_1-apr-2018.db: field/well/run1/main Total length: 7.62 ft Total weight: 63.00 lb O.D.: 3.13 in						

Calibration Report					
Database File	tep_federal_ru_13-17_temp_1-apr-2018.db				
Dataset Pathname	main				
Dataset Creation	Sun Apr 01 04:17:42 2018				
Temperature Calibration Report					
Serial Number:		10025093			
Tool Model:		016			
Performed:		Sun Nov 12 13:20:23 2017			
Point #	Reading			Reference	
1	13006.00	cps		68.00	degF
2	18181.00	cps		104.00	degF
3	29634.00	cps		176.00	degF
4	41077.00	cps		248.00	degF
5	52560.00	cps		320.00	degF
6	58409.00	cps		356.00	degF
7		cps			degF
8		cps			degF
9		cps			degF
10		cps			degF

Gamma Ray Calibration Report

Serial Number:	10019371	
Tool Model:	020	
Performed:	Sun Nov 12 05:37:04 2017	
Calibrator Value:	637.0	GAPI
Background Reading:	78.8	cps
Calibrator Reading:	1069.9	cps
Sensitivity:	0.6427	GAPI/cps



Company	TEP Rocky Mountain LLC
Well	Federal RU 13-17
Field	Rulison
County	Garfield
State	Colorado

Country