

REALTIME LOG											
<div><div><div>BAKER HUGHES</div><div>a GE company</div></div><div></div></div>				Gamma Ray							
Scale:				Company: Anadarko							
1:240				Well: MAB 15-5HZ							
Measured Depth				Field: Wattenburg							
Depth Reference:				County: WeldCountry: United States							
Driller's Depth				State: Colorado							
Status:				Surface Location:			Other Services:				
Final Print				Latitude:			040° 02' 43.861" N				
API No: 051234924500				Longitude:			104° 45' 41.947" W				
Job ID: 109687977				SEC: 15 TWN: 1N RGE: 66W			Directional				
Permanent Datum (P.D.): Mean Sea Level				Elevation: 0.00 ft			Elev. KB: 5130.00 ft				
Log Measured From: Rig Floor				Above P.D.: 5130.00 ft			Elev. DF: 5113.00 ft				
Dates				Interval			Magnetic Field Reference				
From: 2019-04-01				Drilled (ft)		Logged (ft)		Azi Reference North: True		Dip Angle: (deg) 66.38	
To: 2019-04-07				Top: 1880.00		Top: 1880.00		Total Magnetic Field Strength: (nT)		52375	
Spud: 2019-04-01				Bottom: 18325.00		Bottom: 18284.00		Mag to Reference North Correction: (deg)		7.93	
Borehole Record										Casing Record	
Hole Size (in)				From (ft)		To (ft)		Size (in)		Weight (lb/ft)	
13.500				17.00		1880.00		9.625		25.00	
7.875				1880.00		18325.00				17.00	
Mud Record										Deviation Record	
Type				From (ft)		To (ft)		Hole Size (in)		Interval (ft)	
Diesel-Oil Based Mud				1880.00		18325.00		7.875		16445.00	
										15.34 120.33	
										91.08 357.73	

MWD	EvoOne - Dir Gamma	EvoOne
GAM	NaviGamma	Probe Based Gamma Module, NaviTrak Platform

Comments

- 1
- Depth measurements were obtained from a depth control system not supplied or operated by Baker Hughes. Due to the lack of control by Baker Hughes logging engineers, depth calibrations and measurements could not be independently verified.
- 2
- A sliding indicator is shown to the left edge of track 1 as a heavy line. The indicator has been depth-shifted to the Gamma Ray sensor offset to correspond with Gamma Ray data acquired while sliding.
- 3
- Baker Hughes run 1 utilized 6.50 inch Evo One services (Gamma Ray and Directional) behind a 7.875 inch bit and steerable assembly from 1880 to 12107 feet MD (1847 to 7634 feet TVD).
- 4
- Baker Hughes run 2 utilized 6.50 inch Navigamma services (Gamma Ray and Directional) behind a 7.875 inch bit and steerable assembly from 12107 to 18325 feet MD (7634 to 7614 feet TVD).
- 5
- Gamma Ray (GRAX) scale is presented 0 to 200 API per customer request.

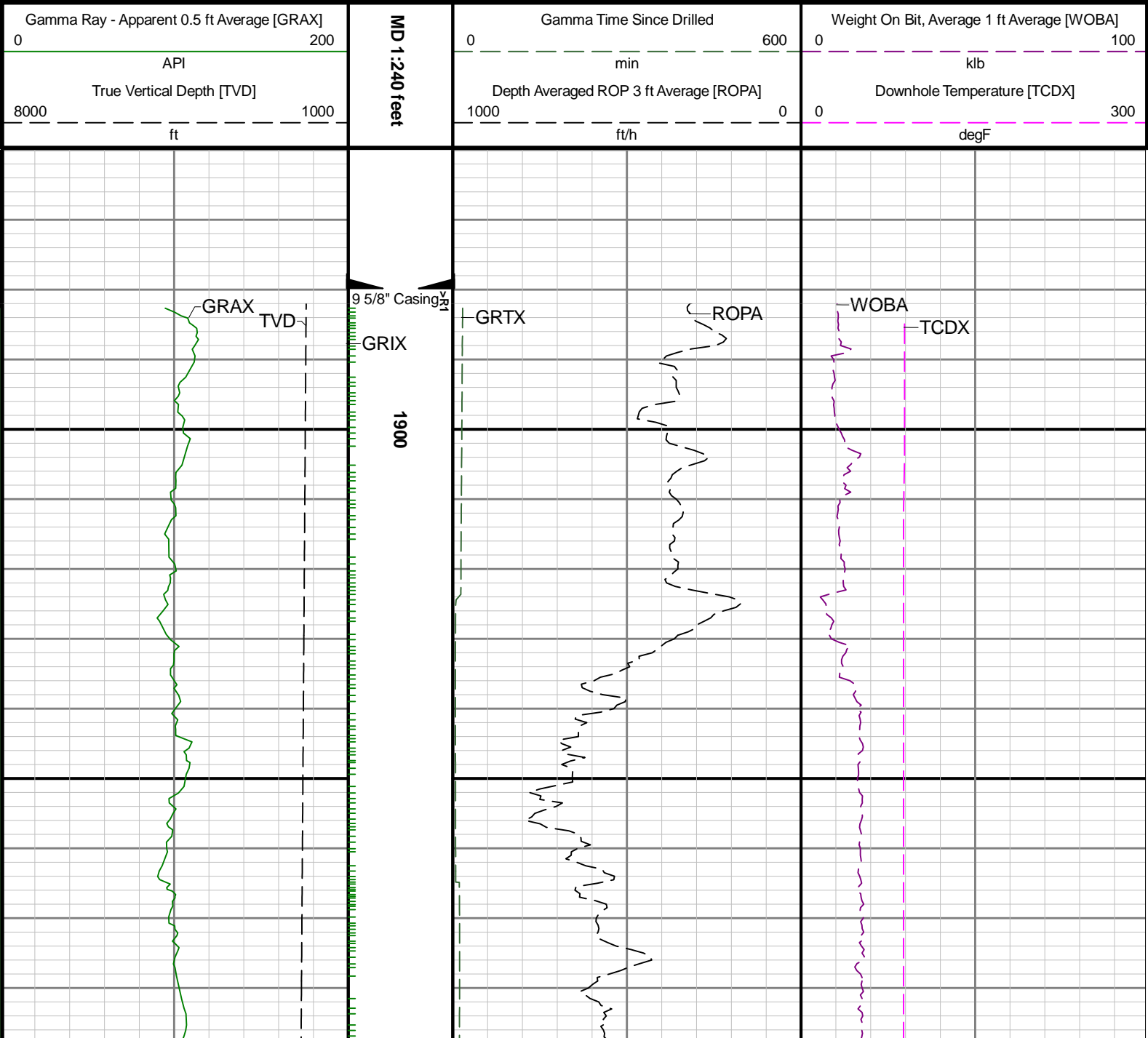
Remarks

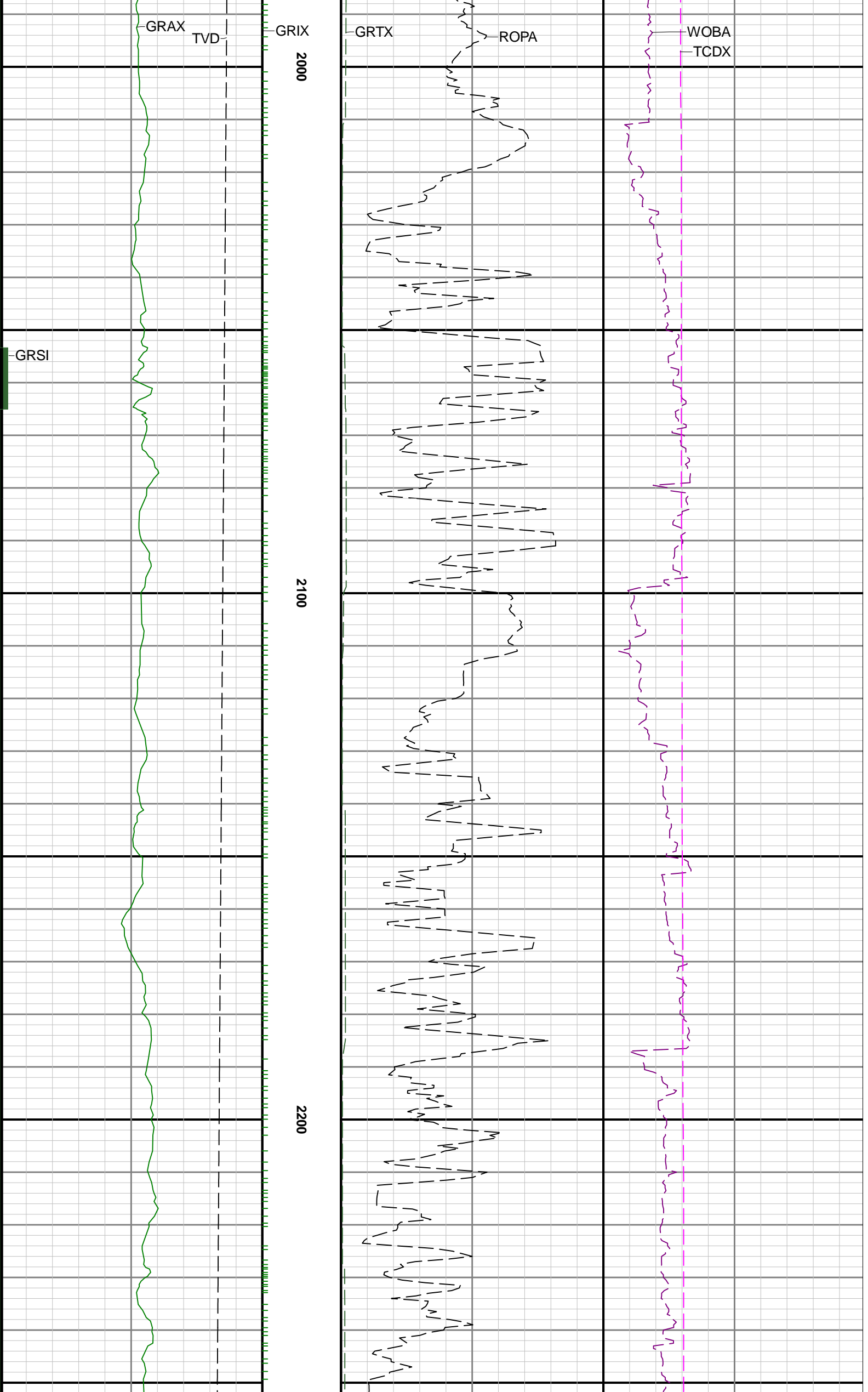
Number	Depth (ft)	Hole Section (in)	Run No.	Remark
1	12079.00	7.875	1	The interval from 12064 to 12107 feet MD (7636 feet TVD) was not logged due to trip out of hole for MWD failure.
2	18300.00	7.875	2	The interval from 18284 to 18325 feet MD (7614 feet TVD) was not logged due to sensor to bit offset at well TD.

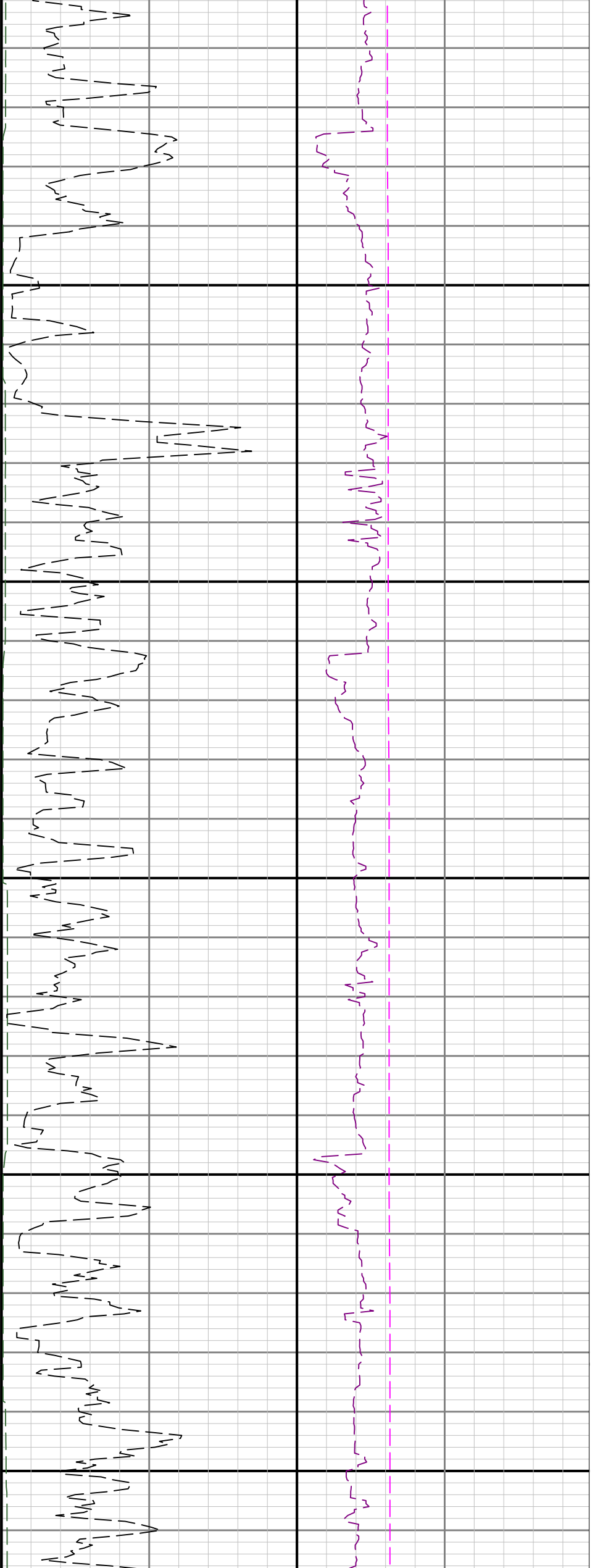
Curve Mnemonics

Presented Curves	Description	Units
TCDX	Downhole Temperature	degF
ROPA	Depth Averaged ROP 3 ft Average	ft/h
TVD	True Vertical Depth	ft
WOBA	Weight On Bit, Average 1 ft Average	klb
GRAX	Gamma Ray - Apparent - Real-Time 0.5 ft Average	API
GRIX	Gamma Ray - Data Point Indicator - Real-Time	unitless
GRTX	Gamma Ray - Time Since Drilled - Real-Time	min
GRSI	Sliding Indicator Flag	unitless

<div><div><div>BAKER HUGHES</div><div>a GE company</div></div><div><div>Company</div><div>Well</div><div>Interval</div><div>Created</div></div><div><div>Anadarko</div><div>MAB 15-5HZ</div><div>Date From: 2019-04-01 03:15</div><div>Date To: 2019-04-07 02:42</div><div>2019-04-07 02:04:53</div></div></div>	Interval Drilled: (ft) 1880.00 - 18325.00			
	Interval Logged: (ft) 1880.00 - 18284.00			



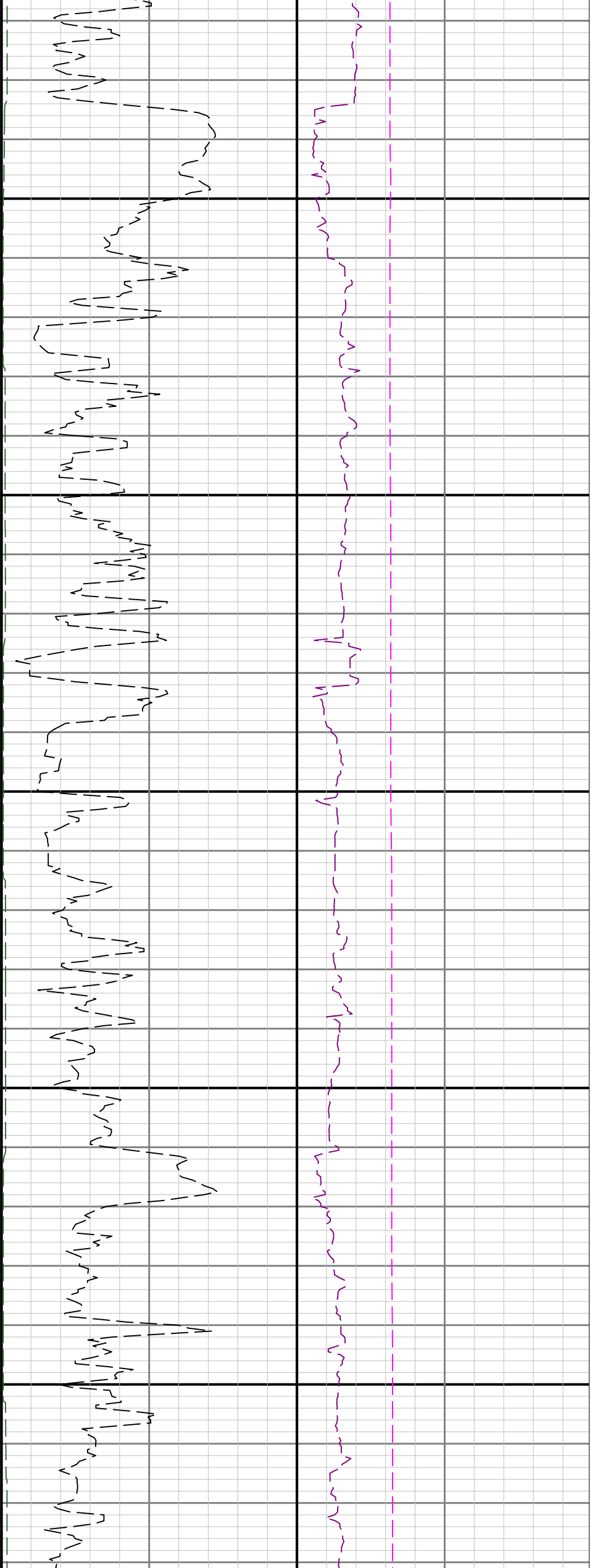




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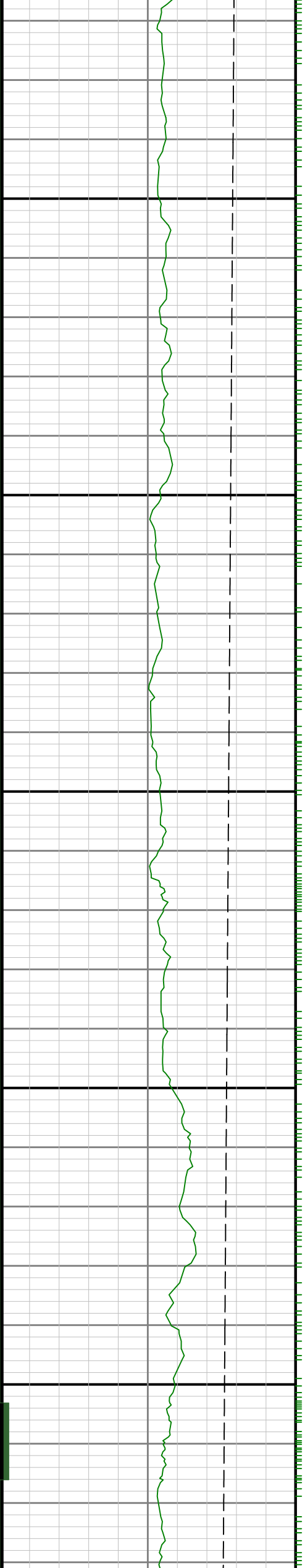
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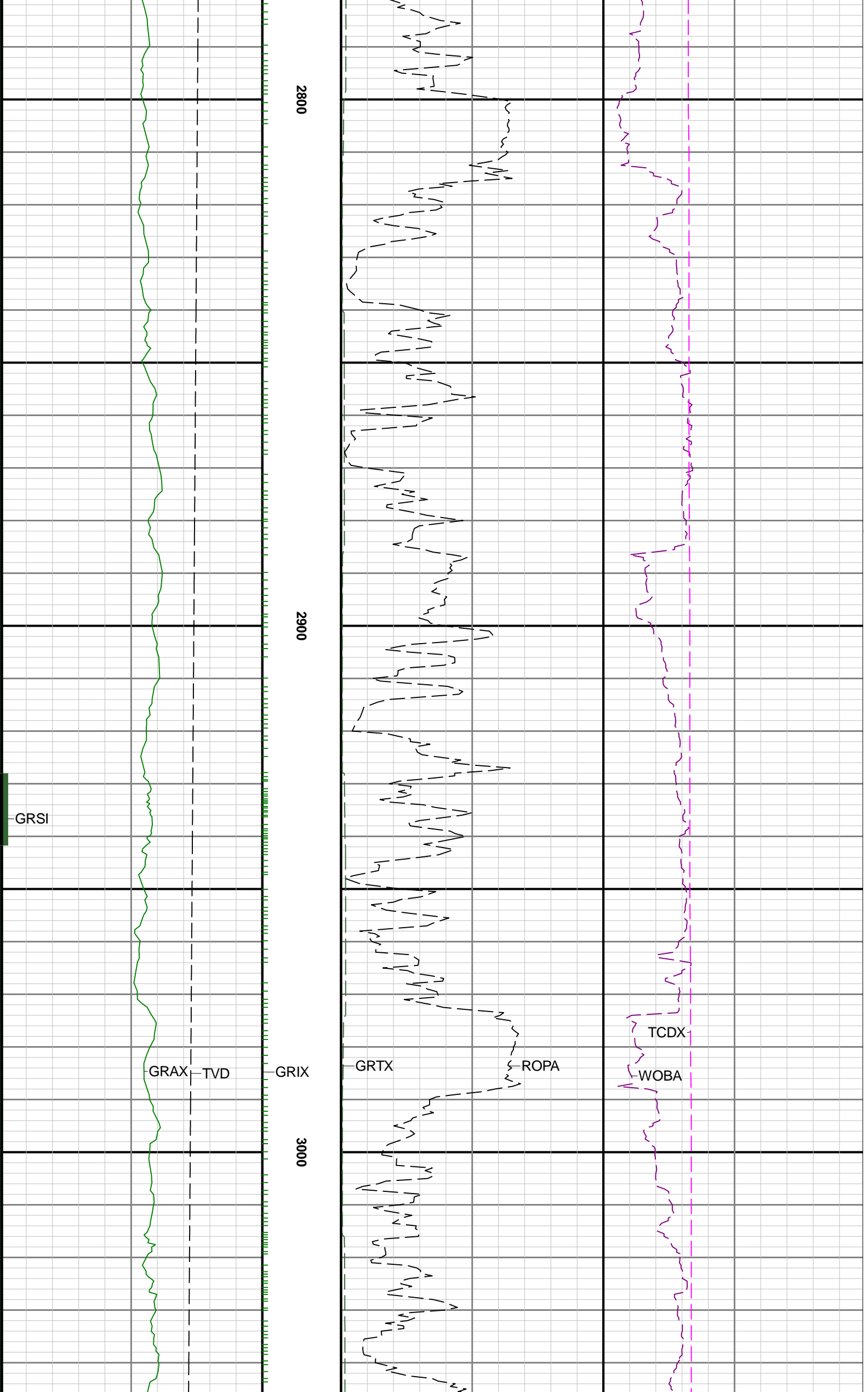
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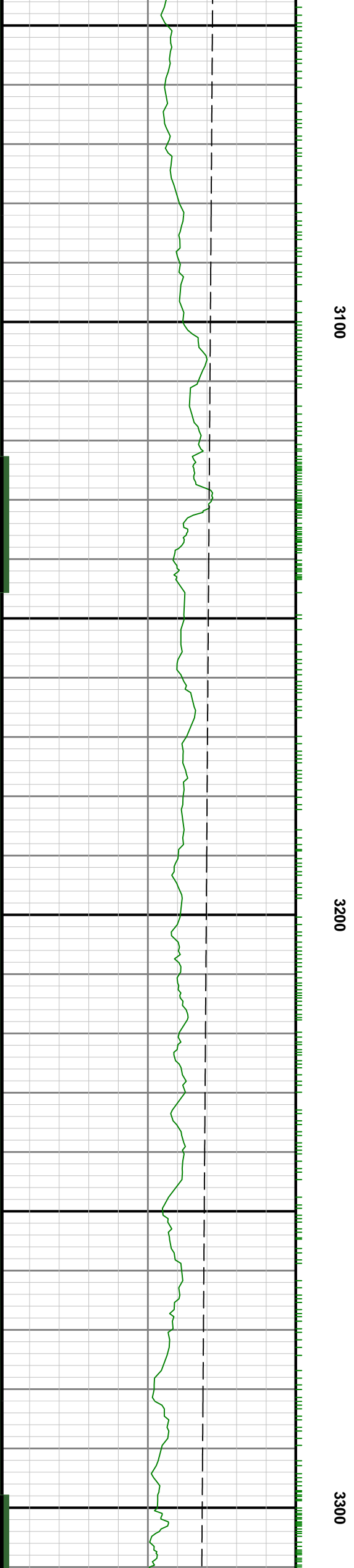
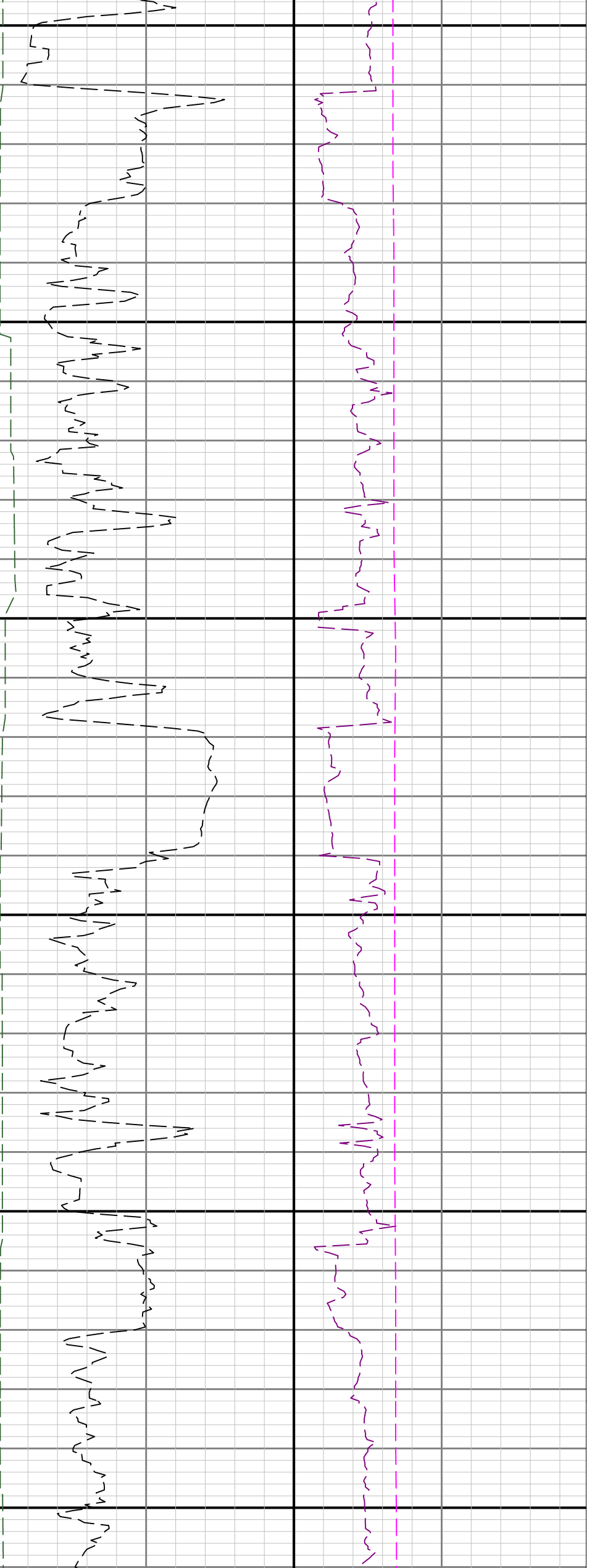


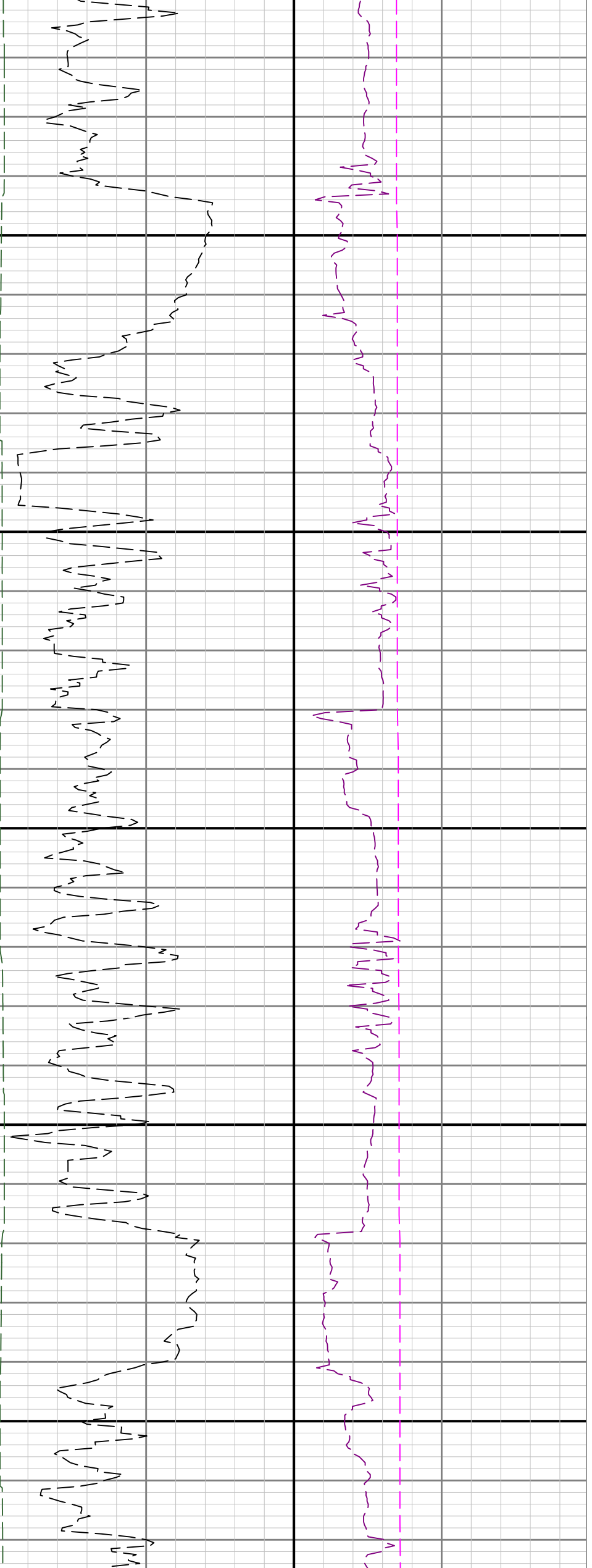
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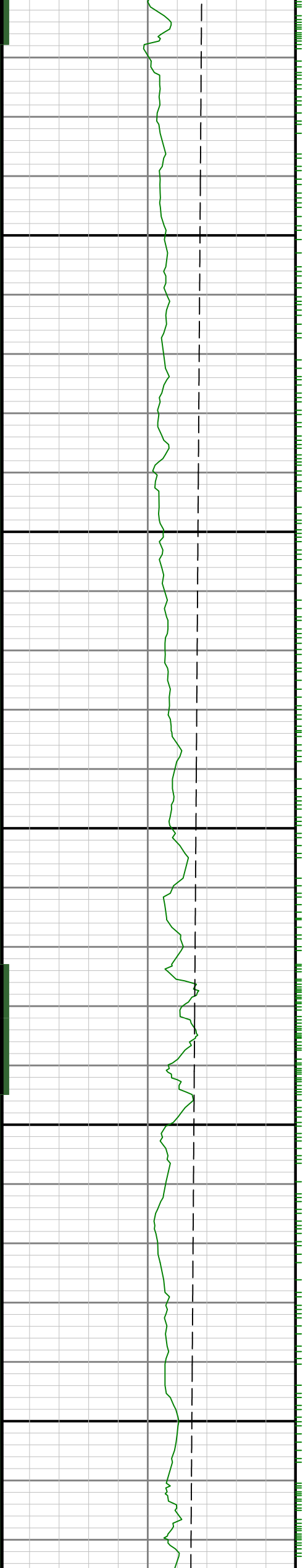


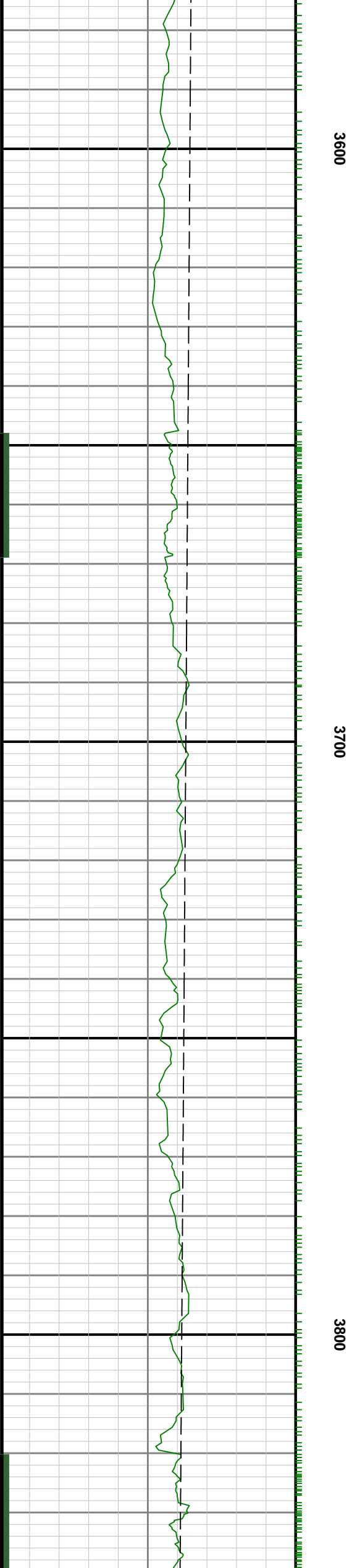
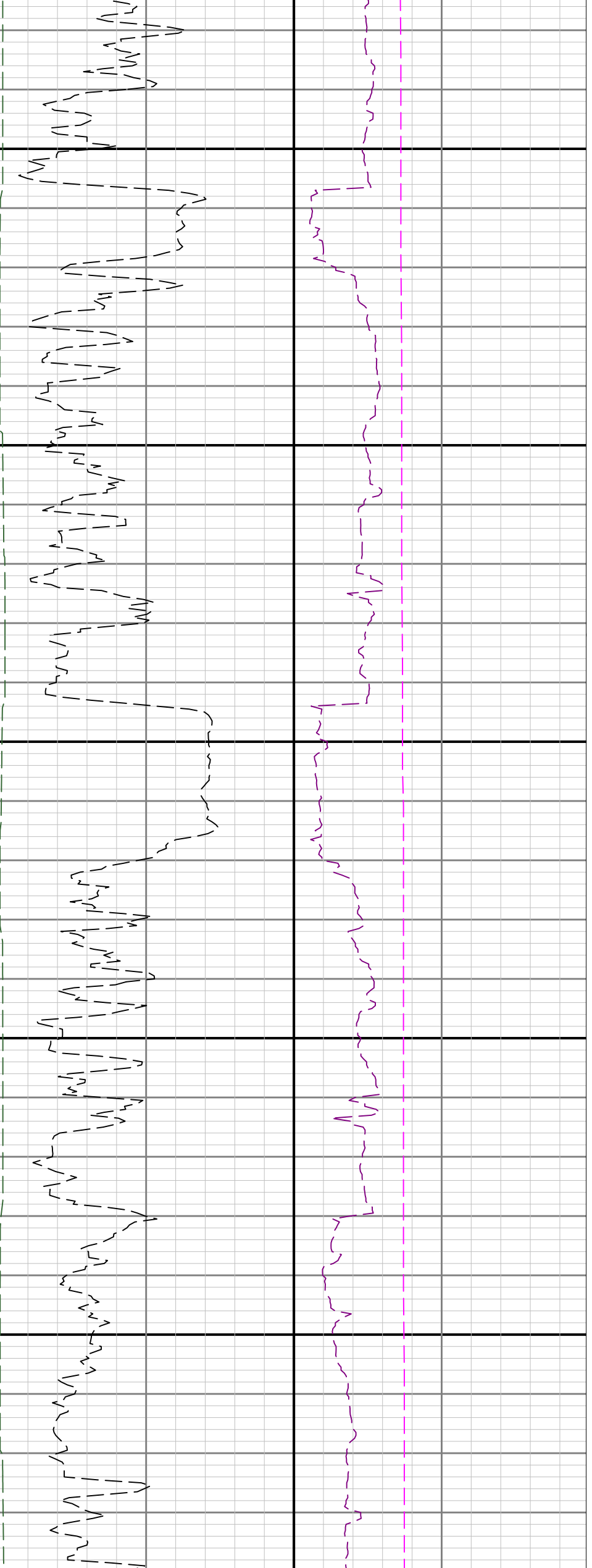


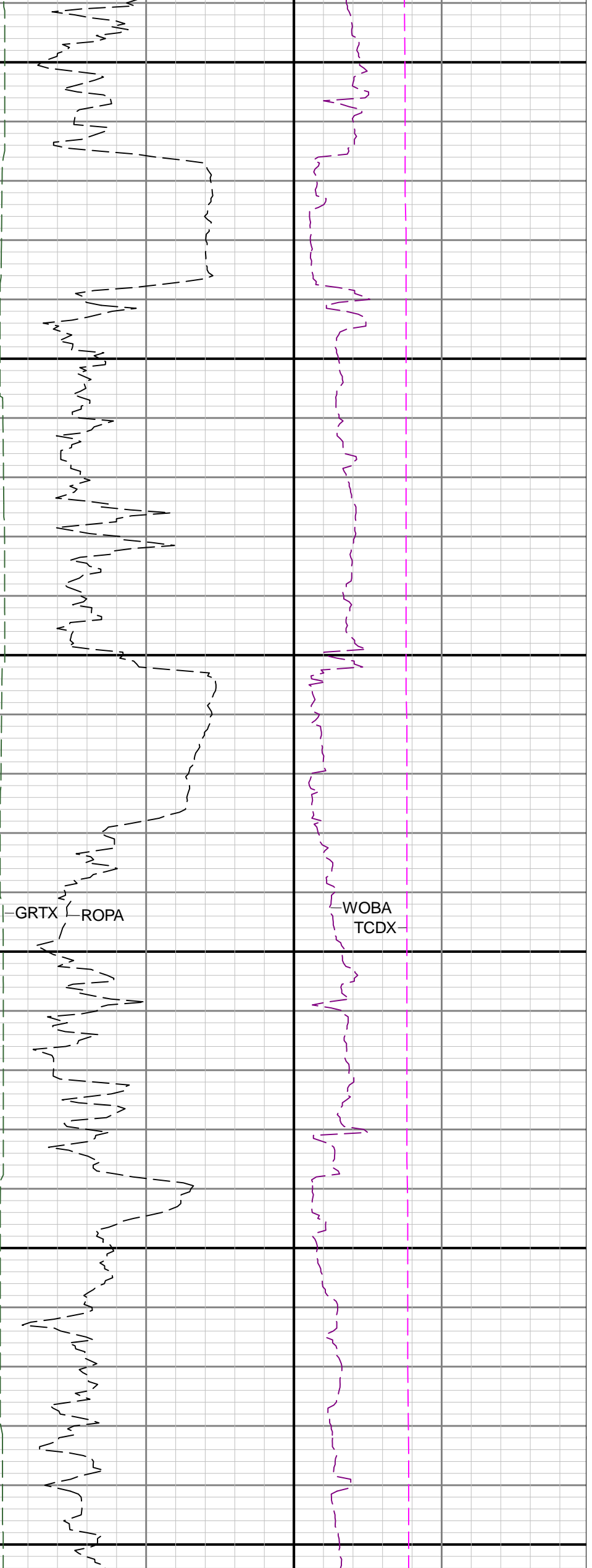


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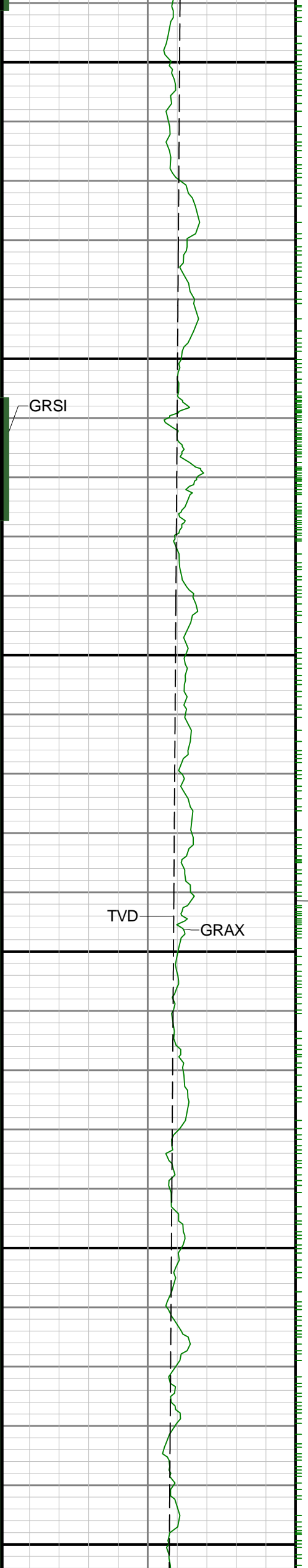




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4000

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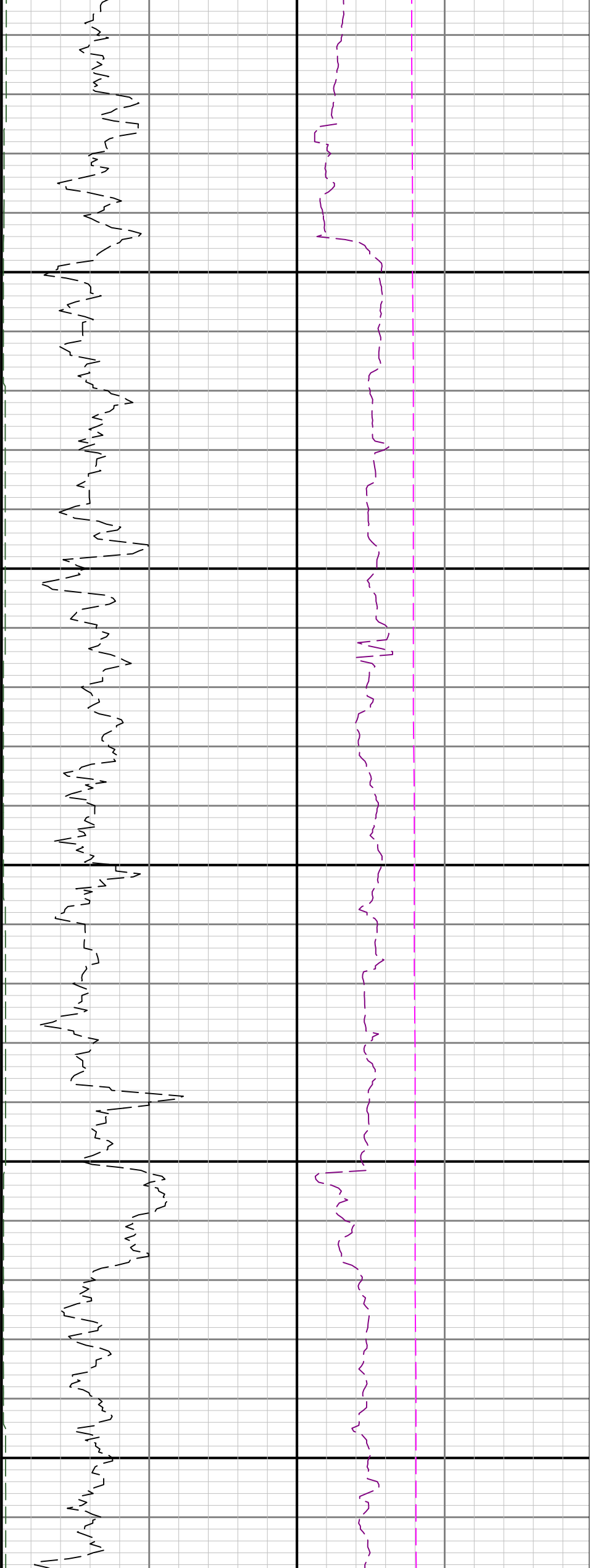


GRSI

TVD

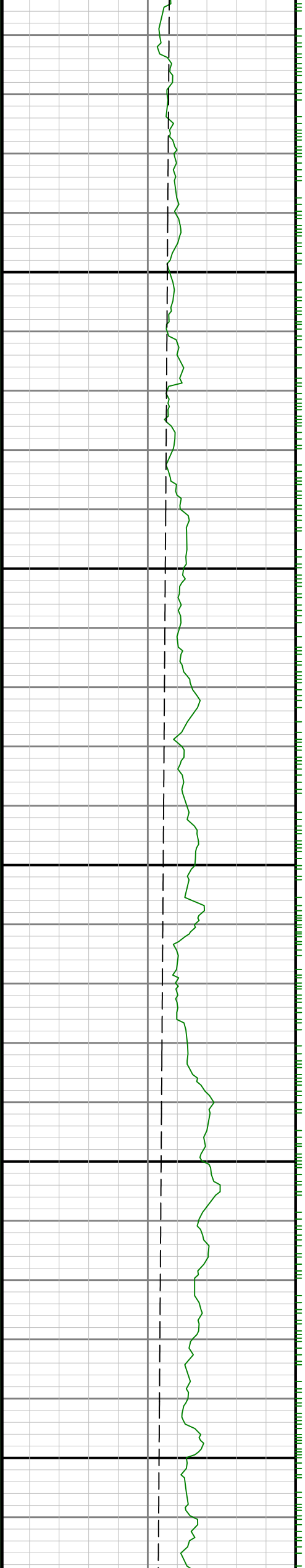
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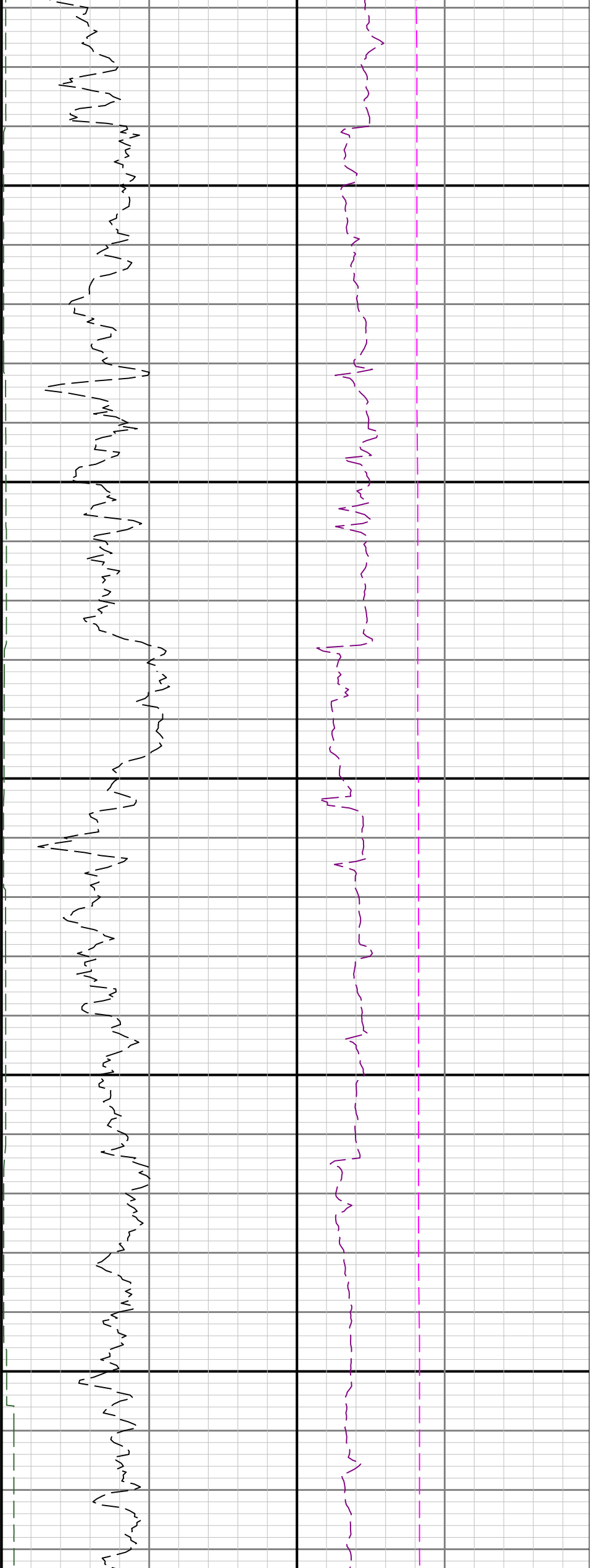
GRIX



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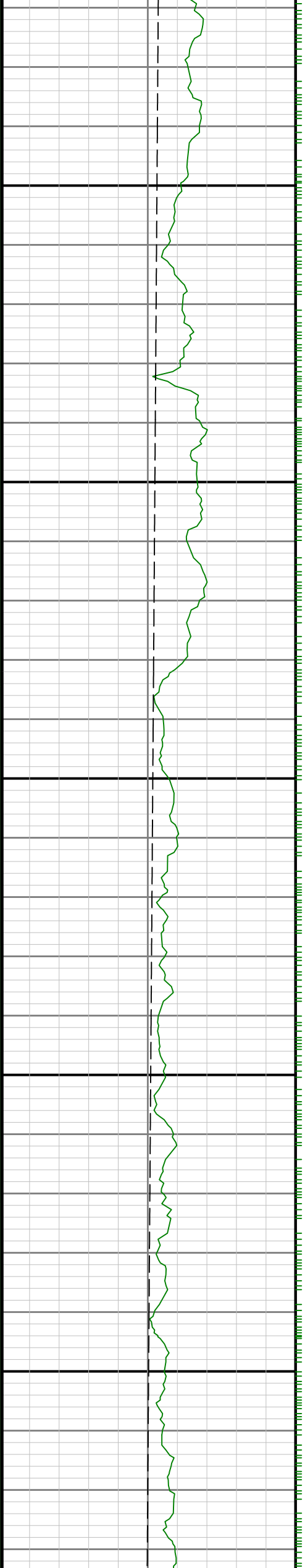


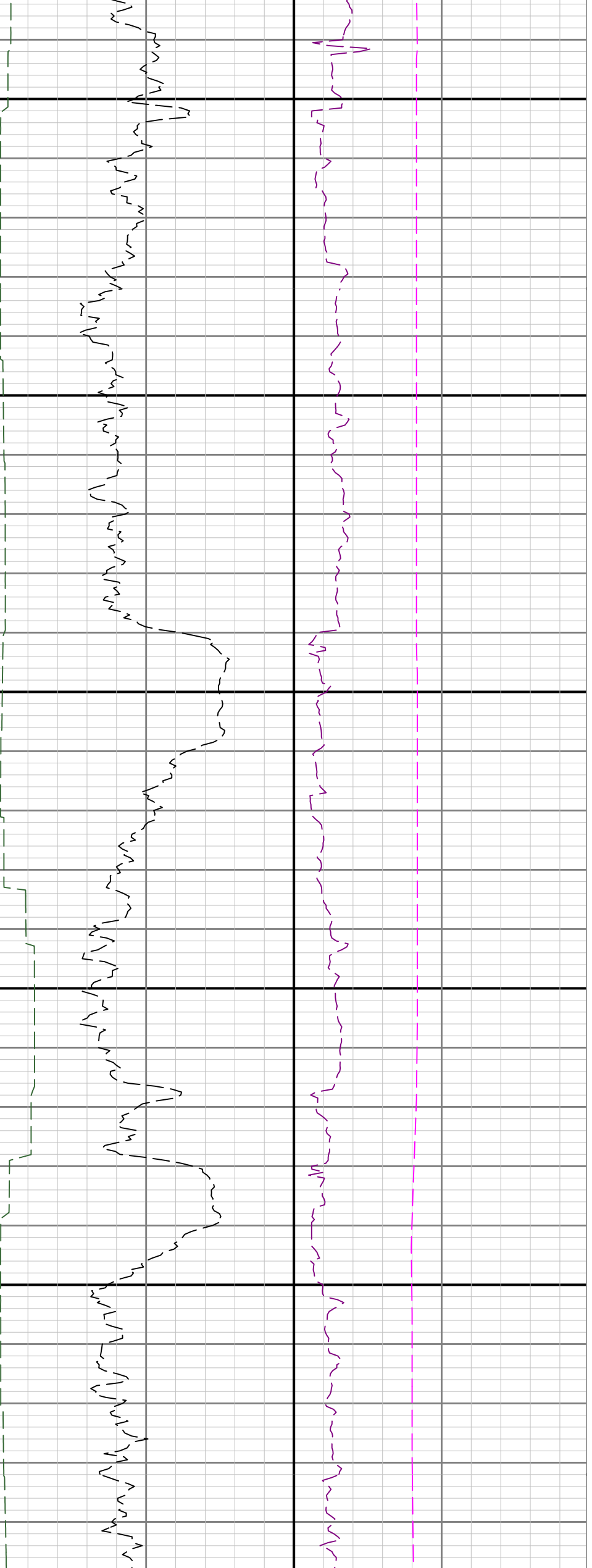


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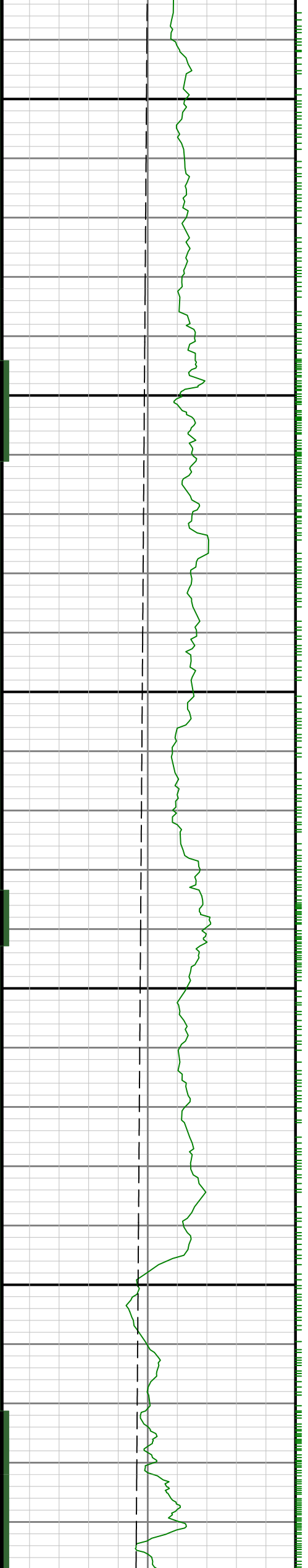
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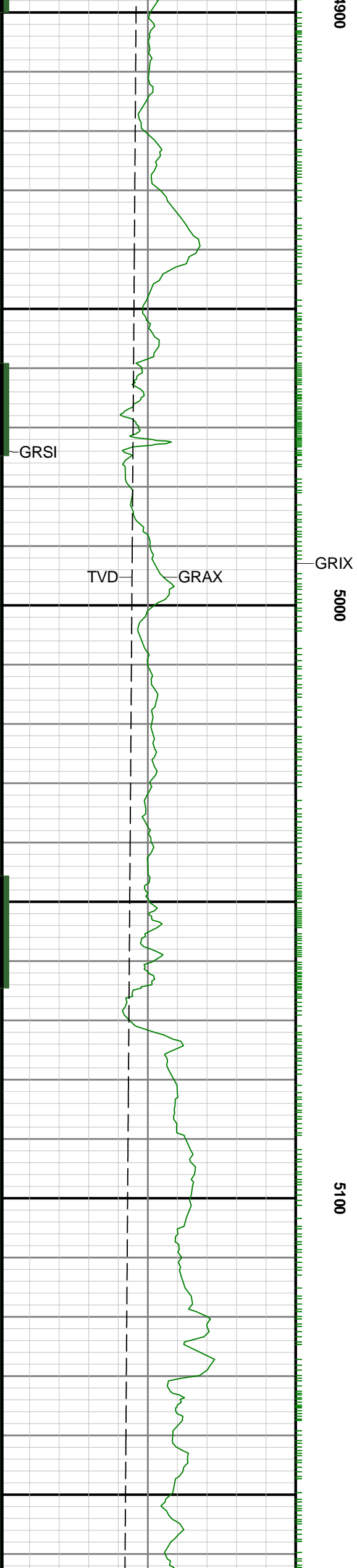
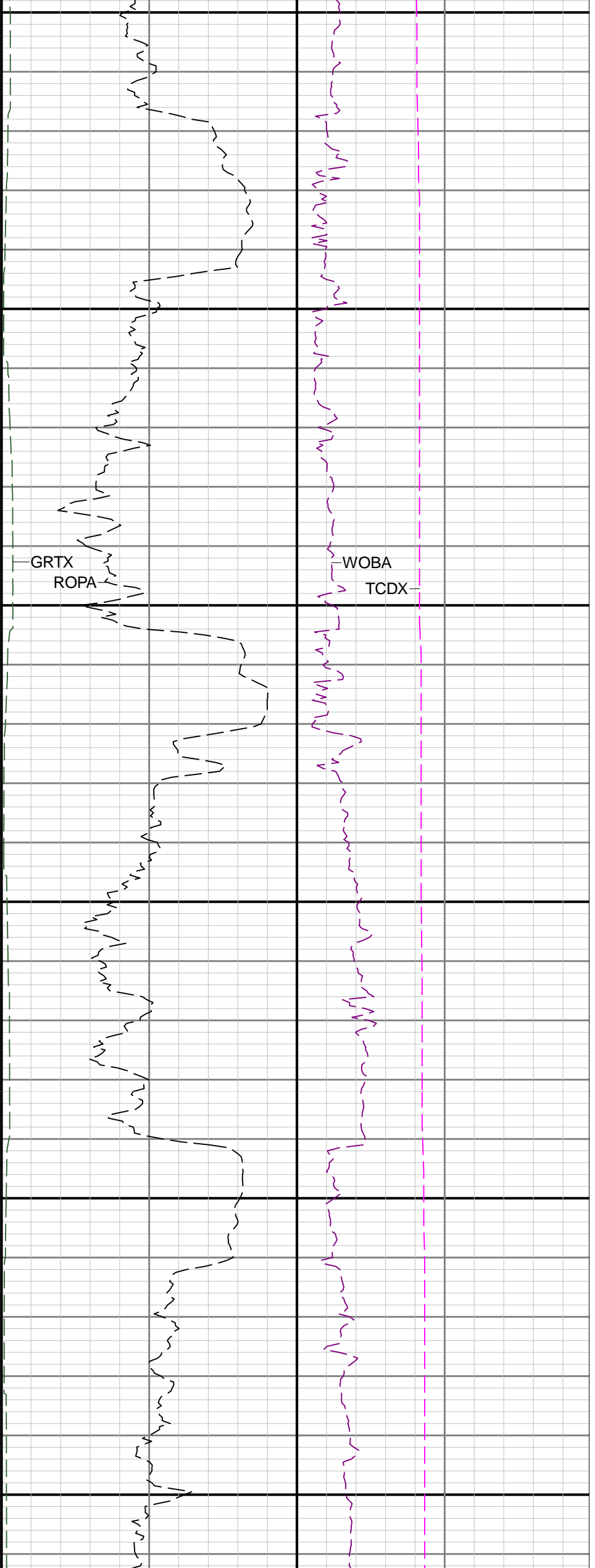


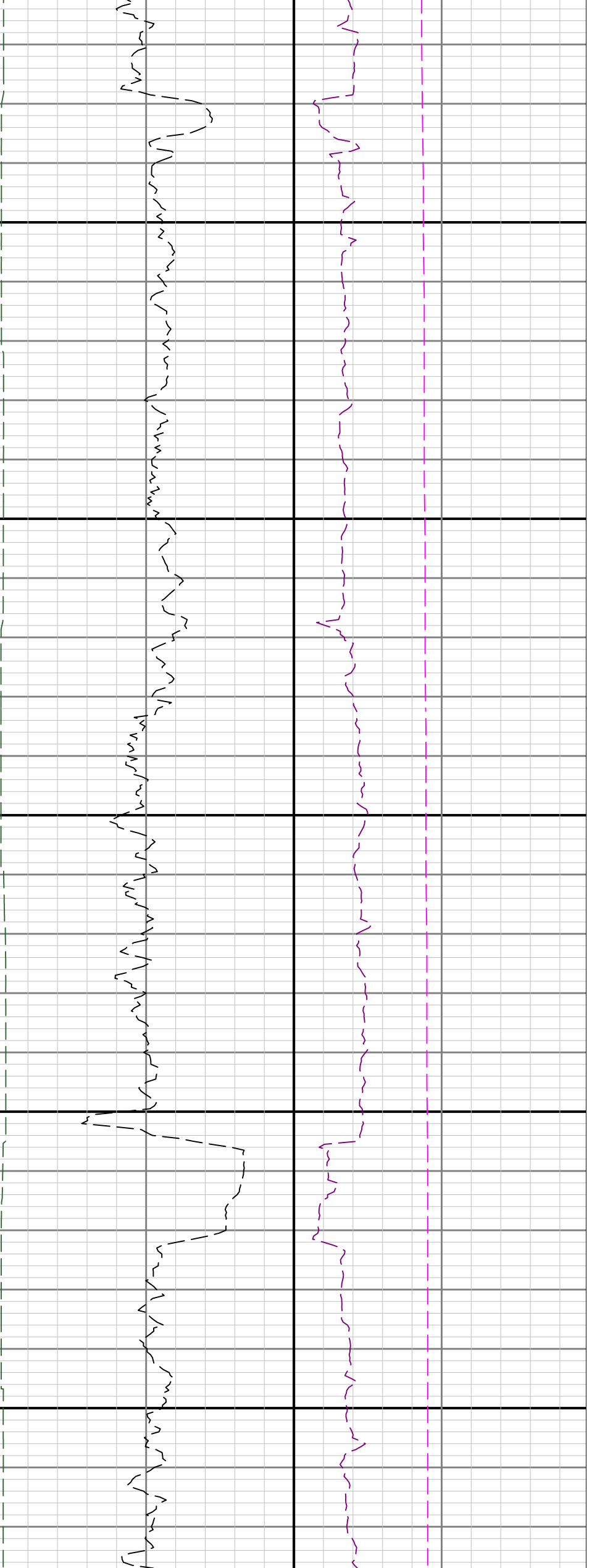


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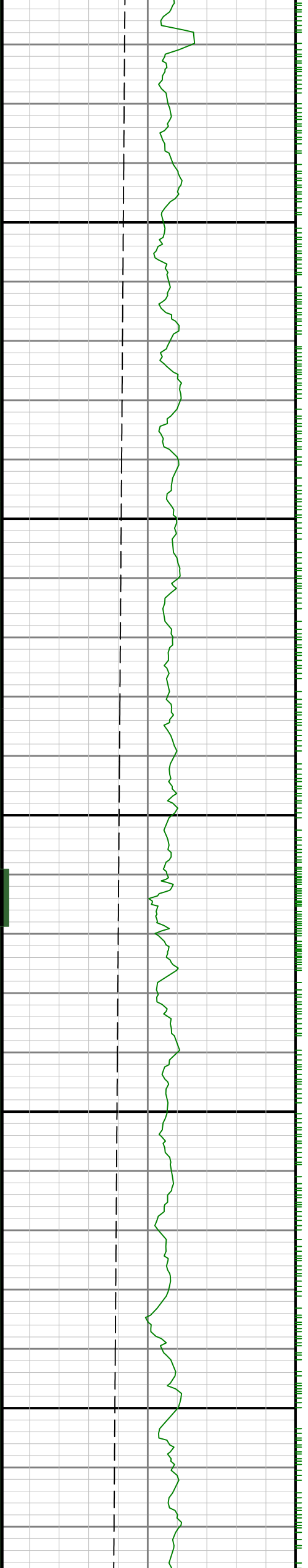


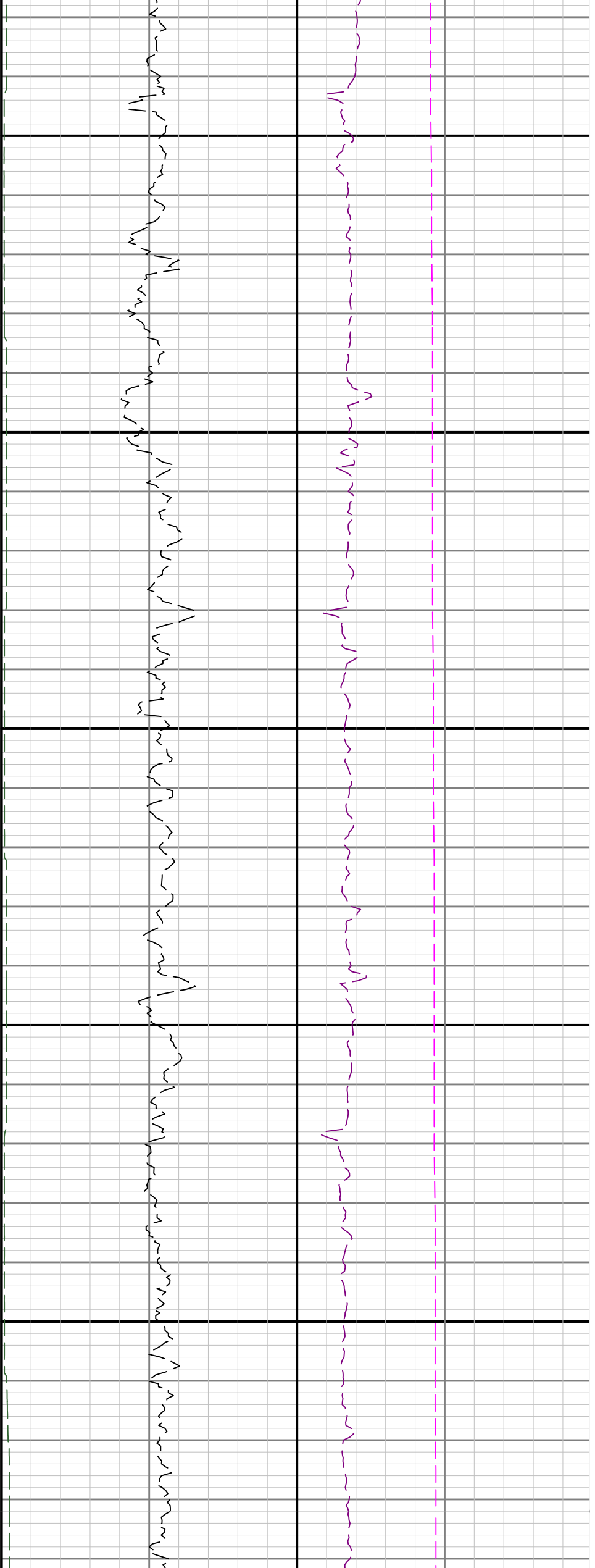


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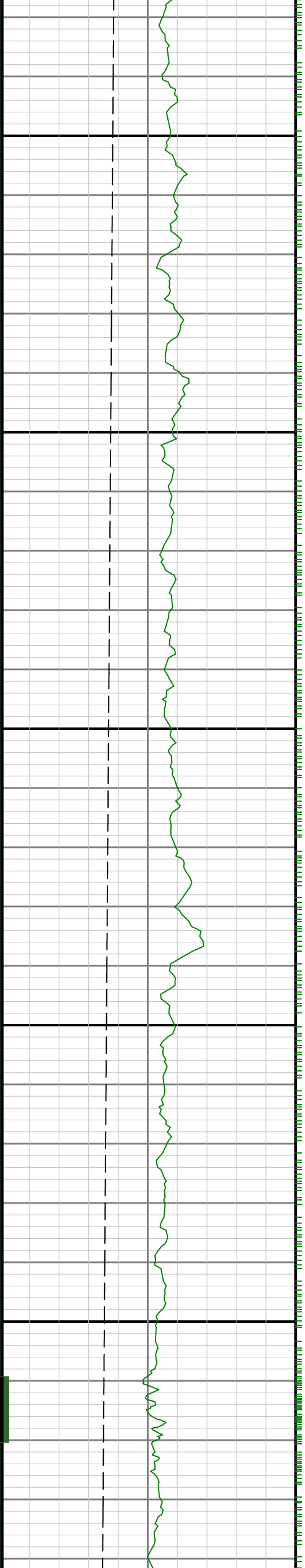
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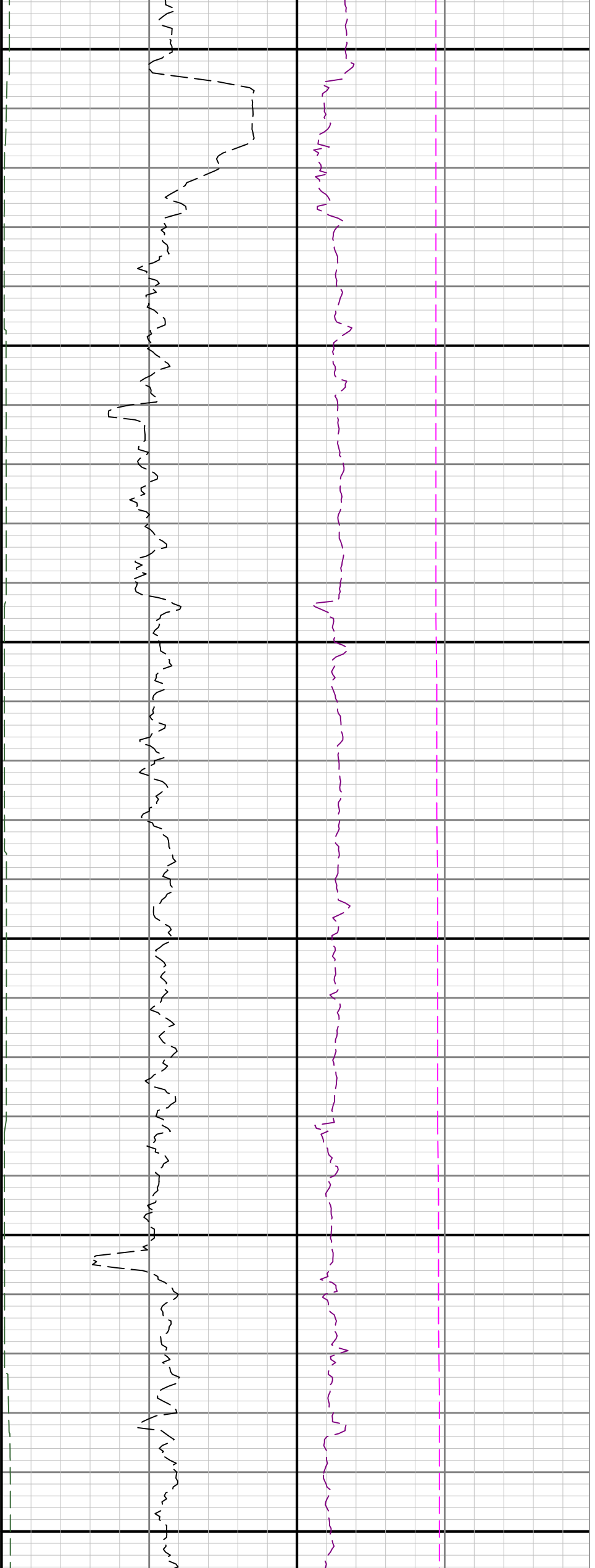




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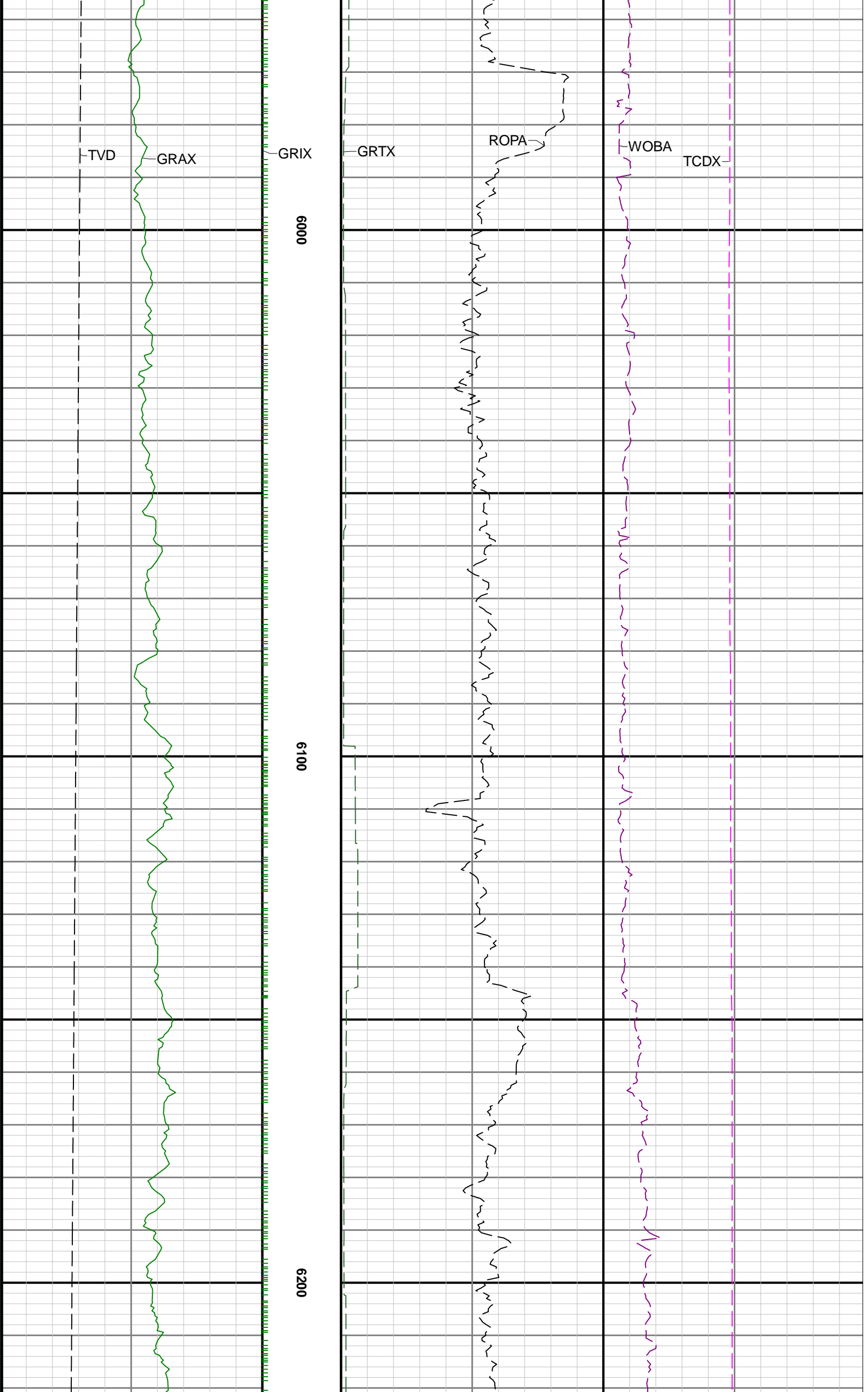


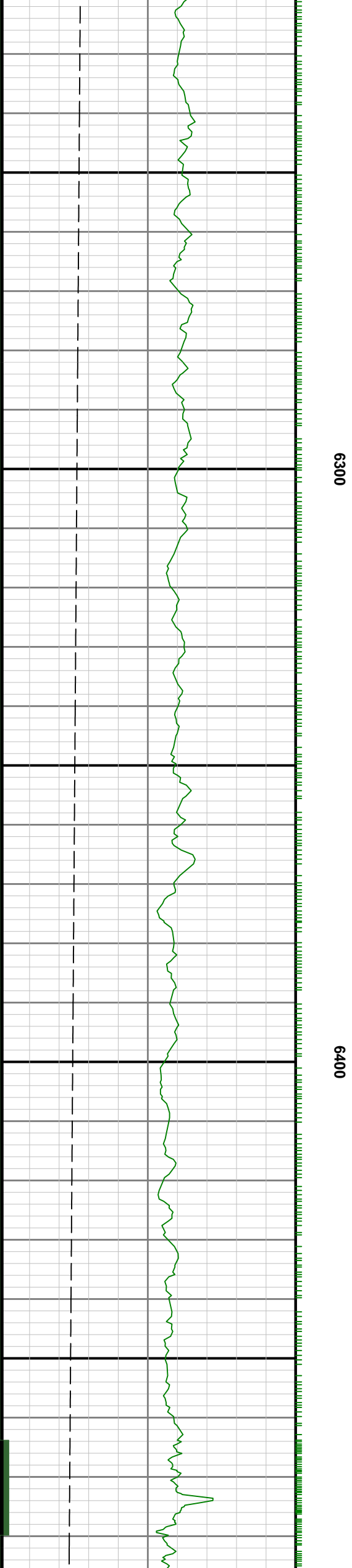
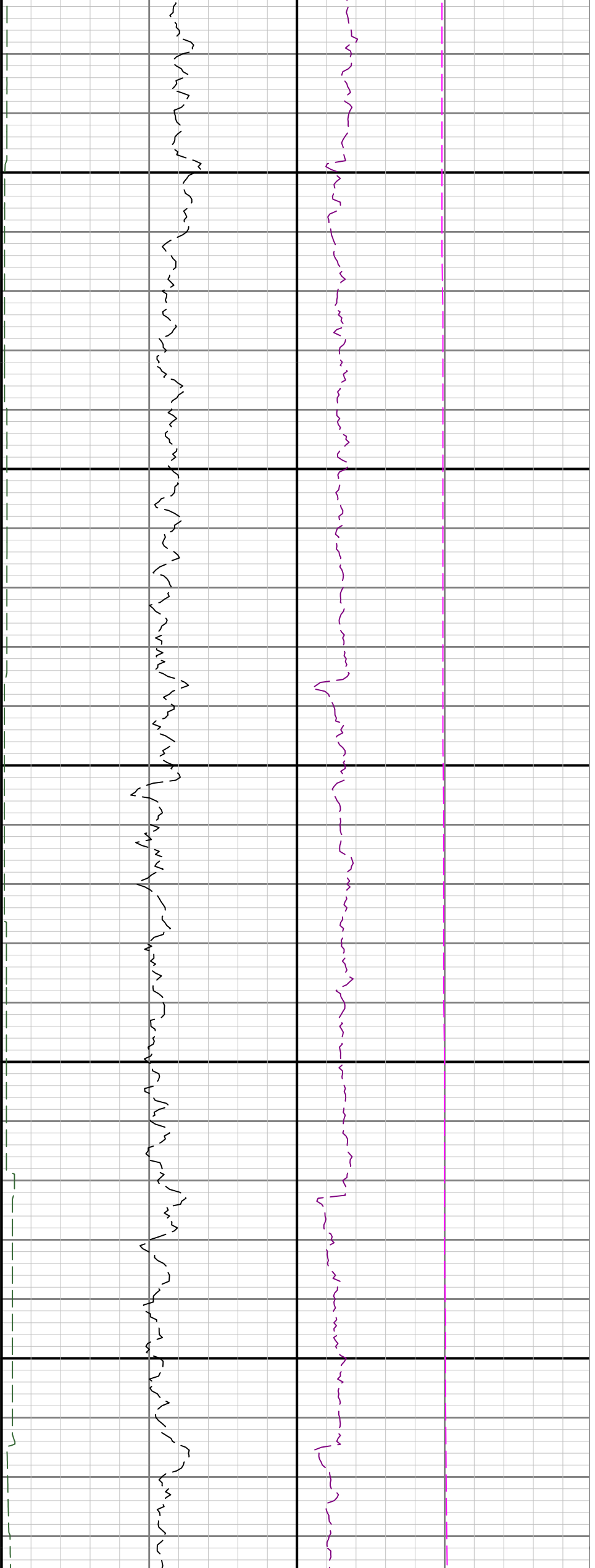
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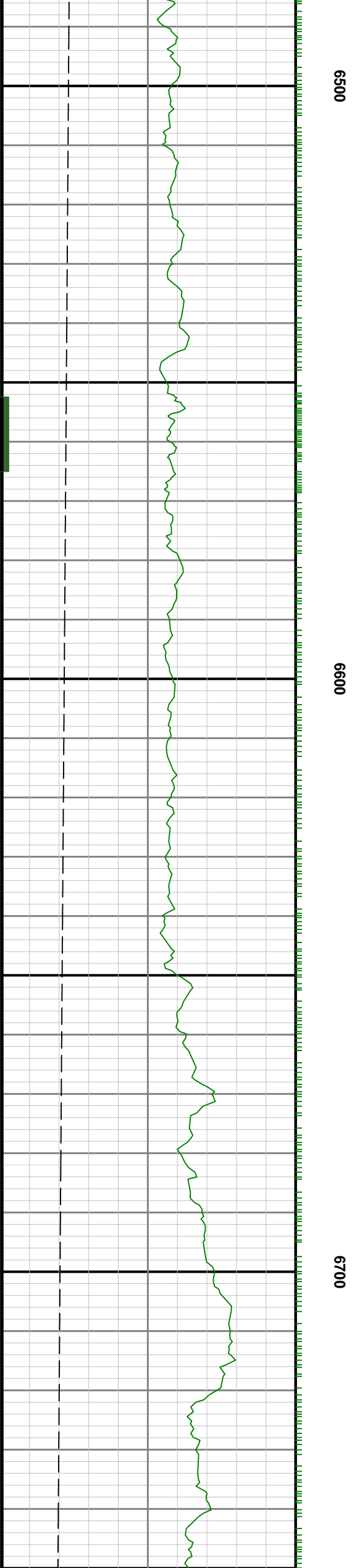
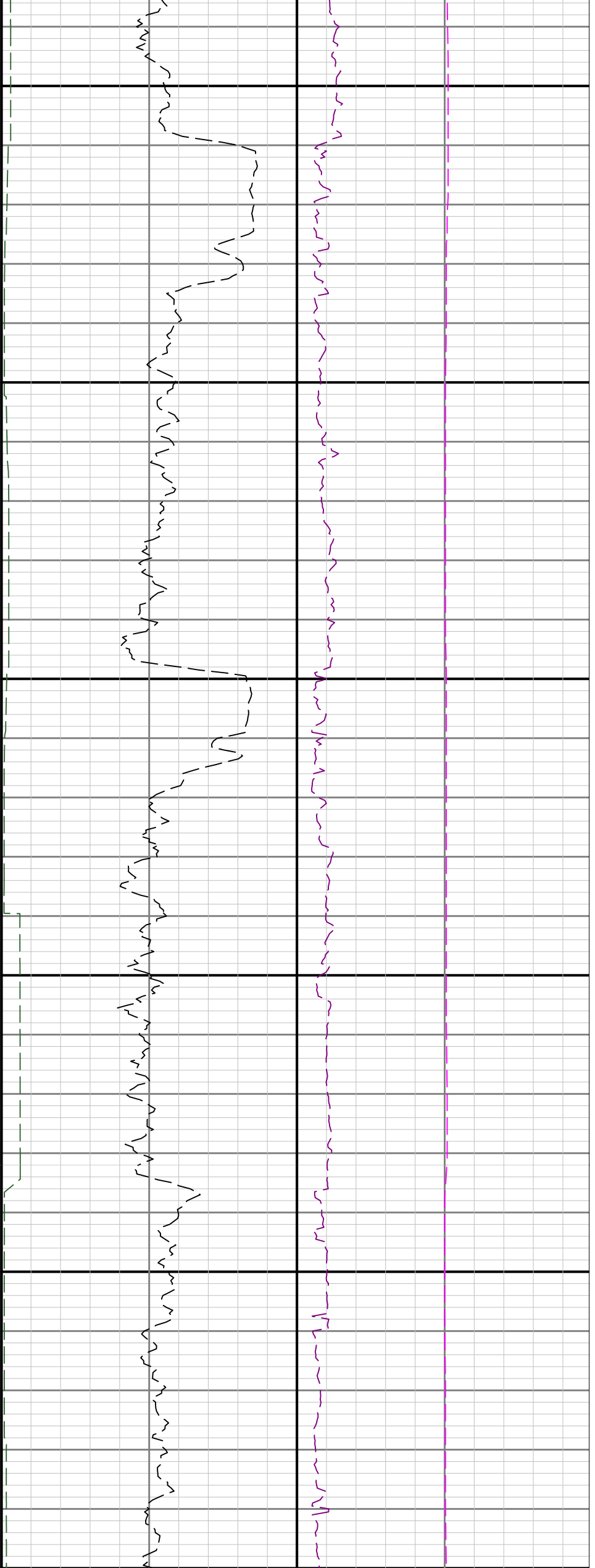
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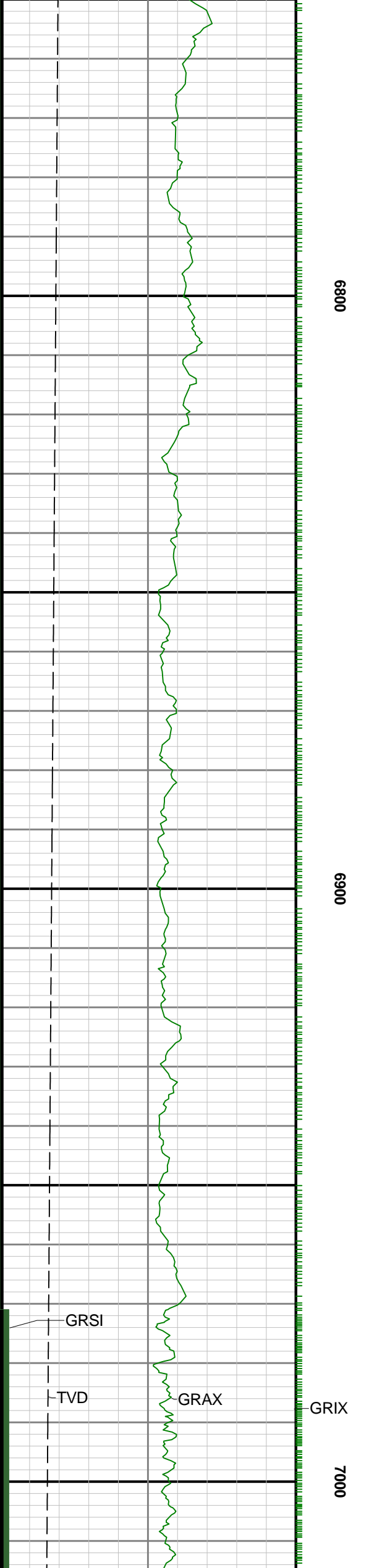
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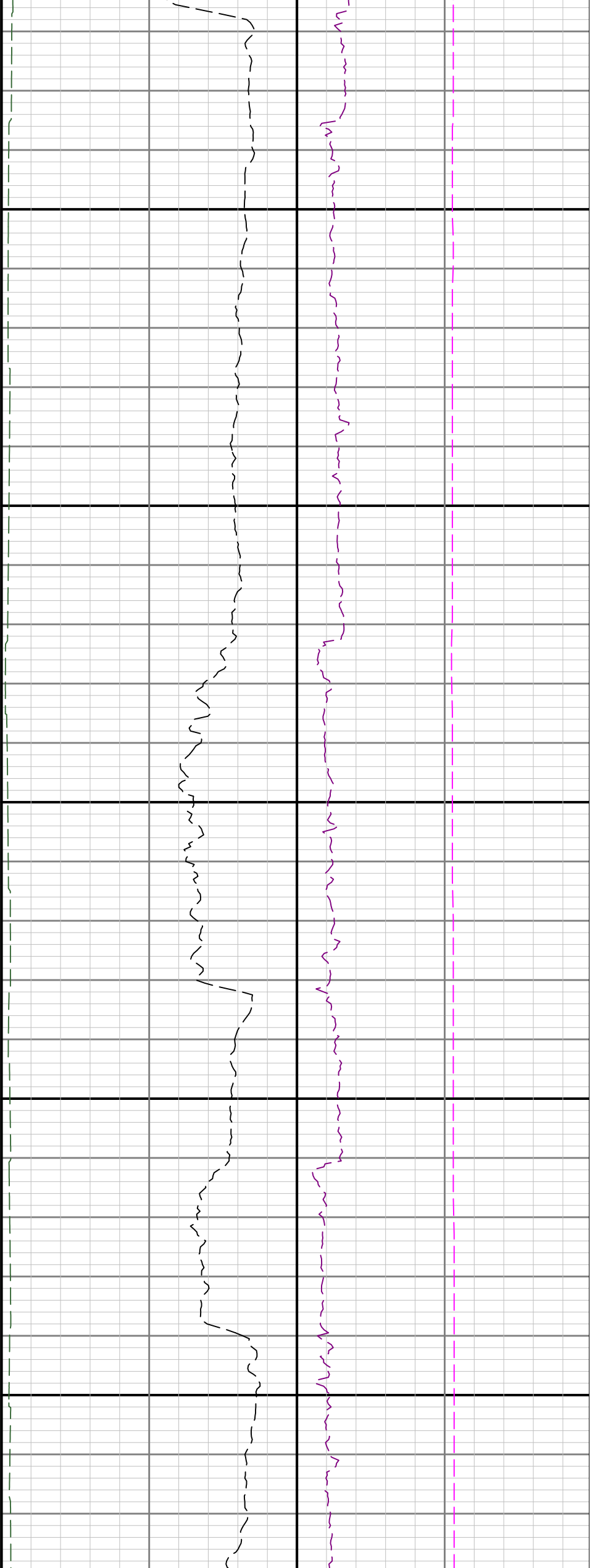
GRSI





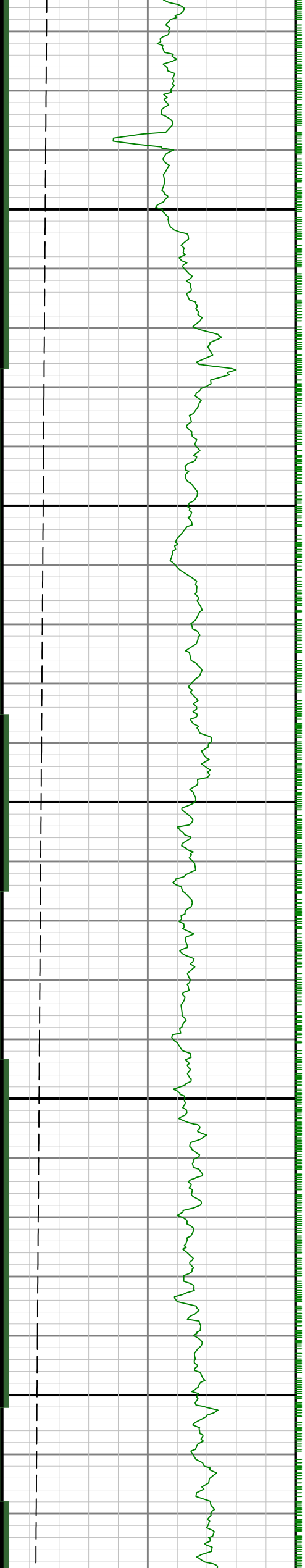


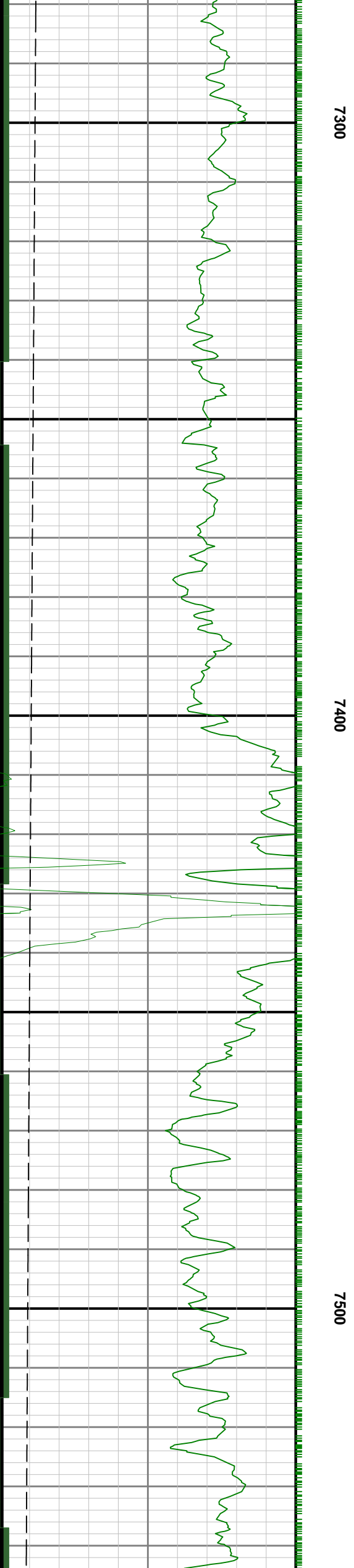


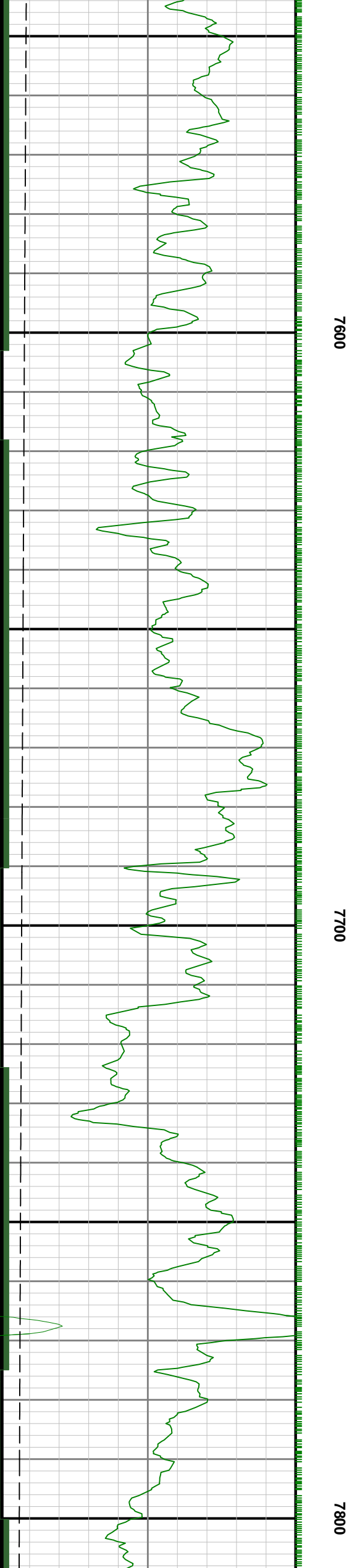
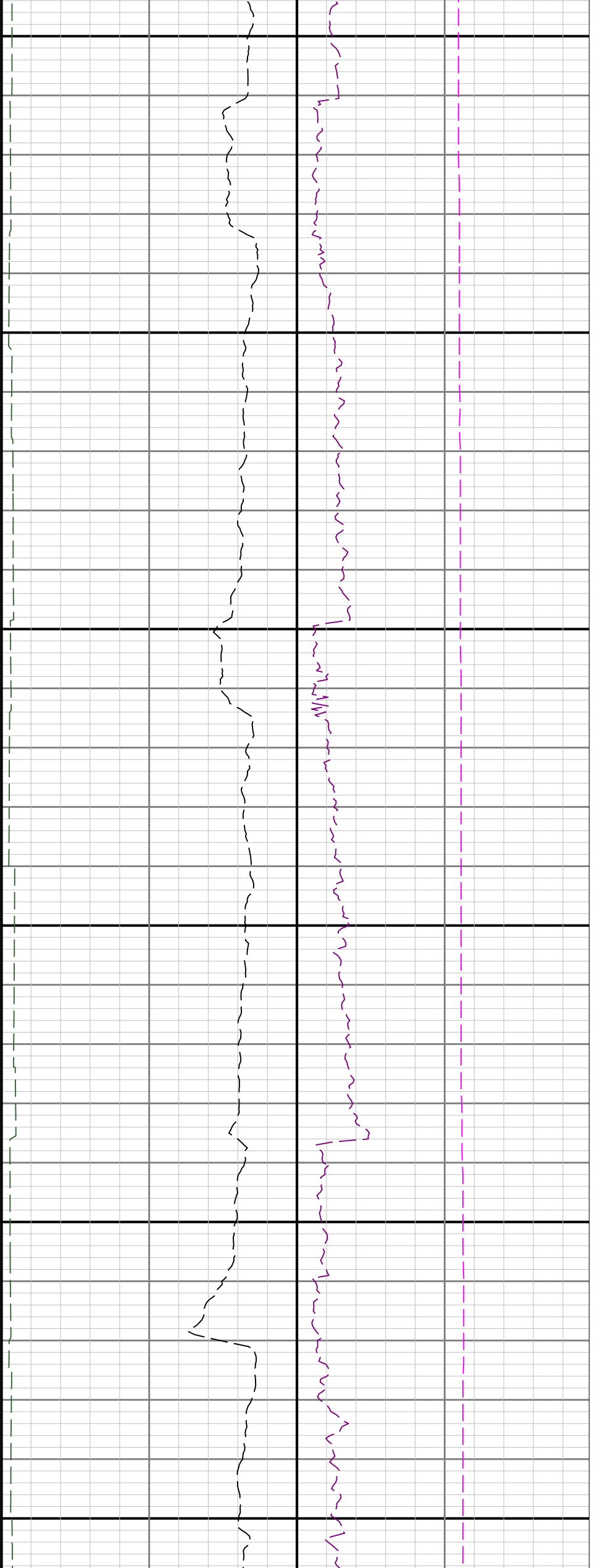


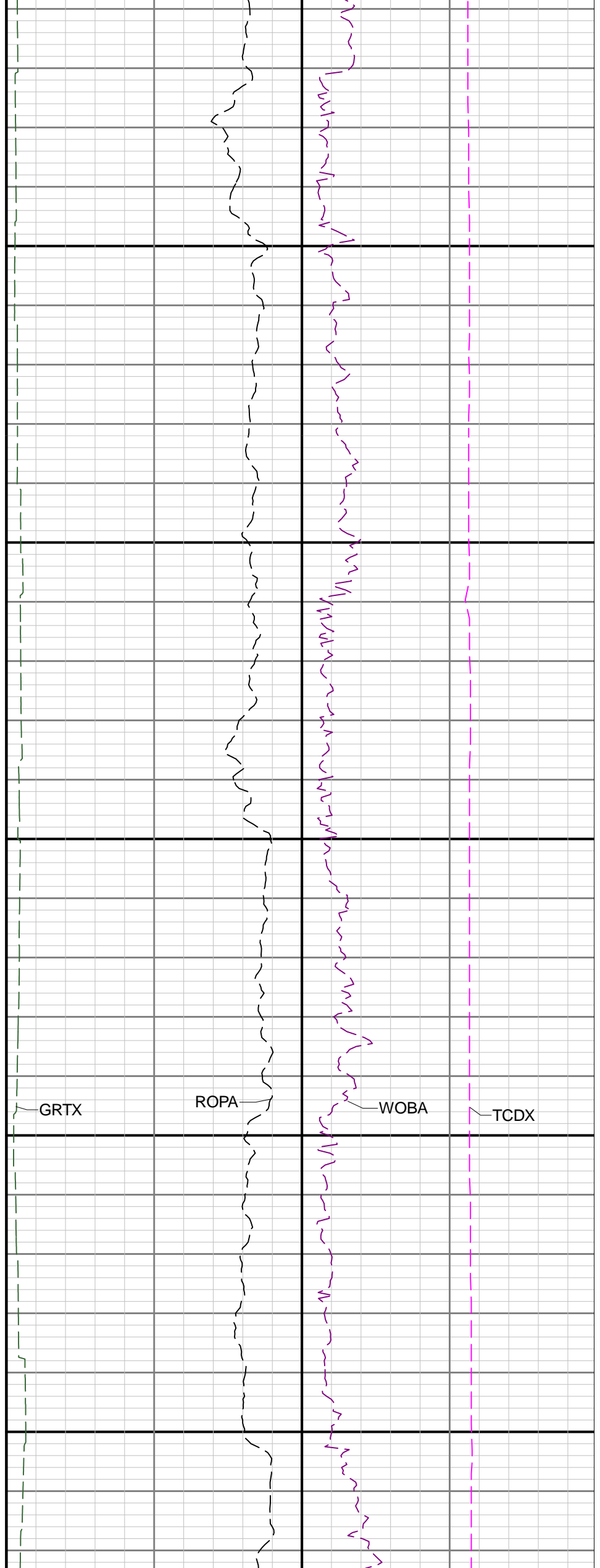
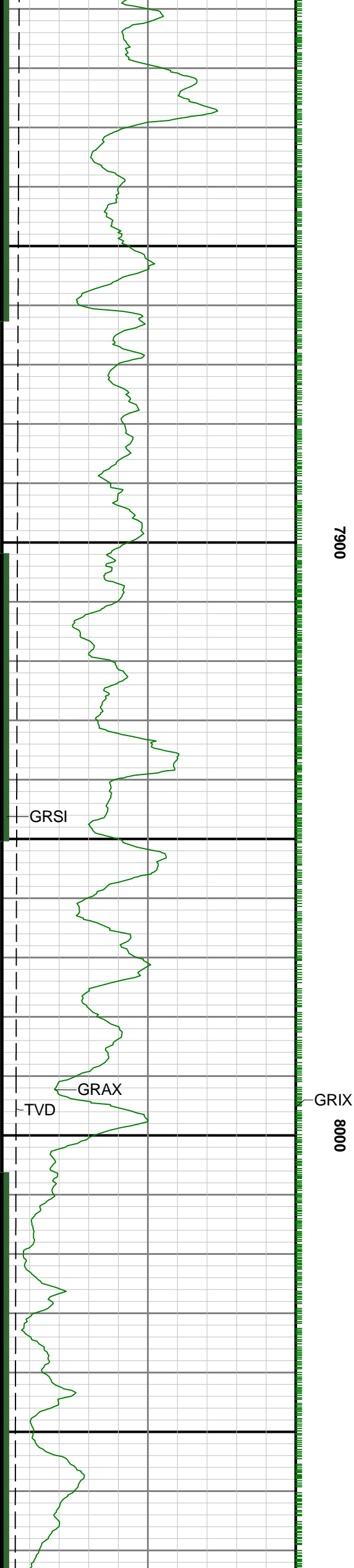
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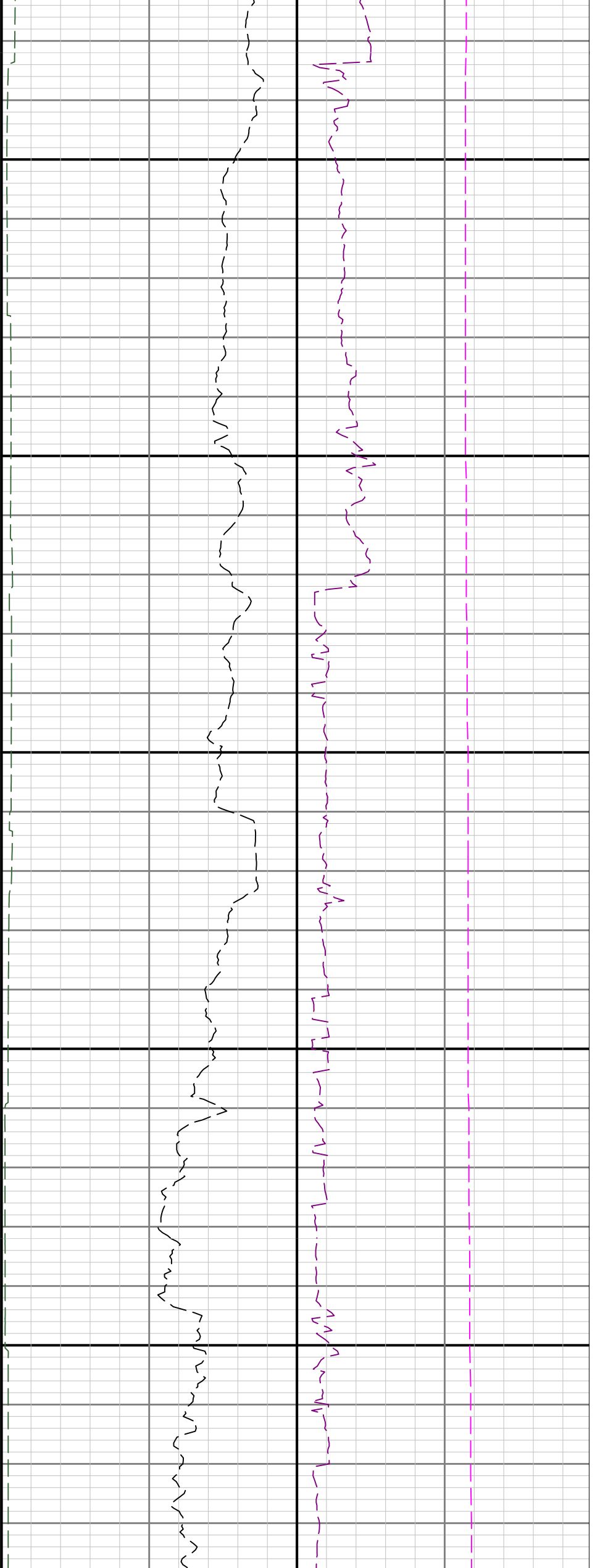
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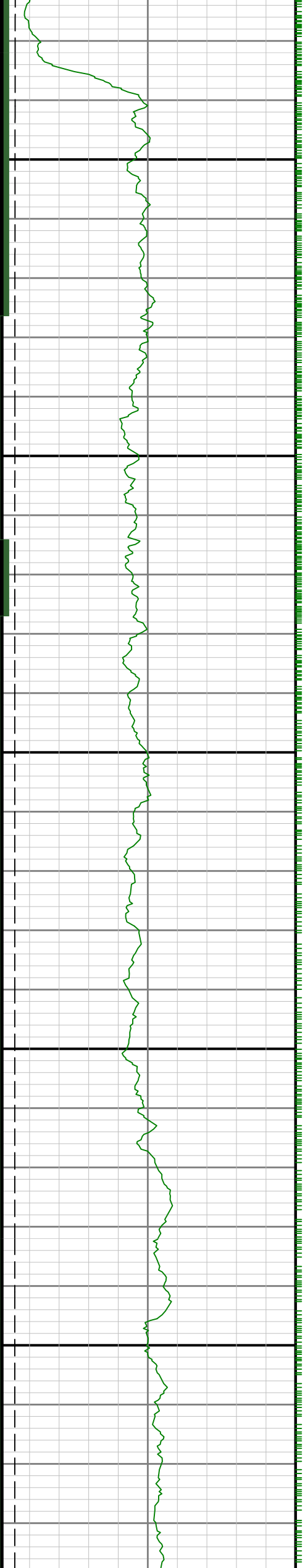


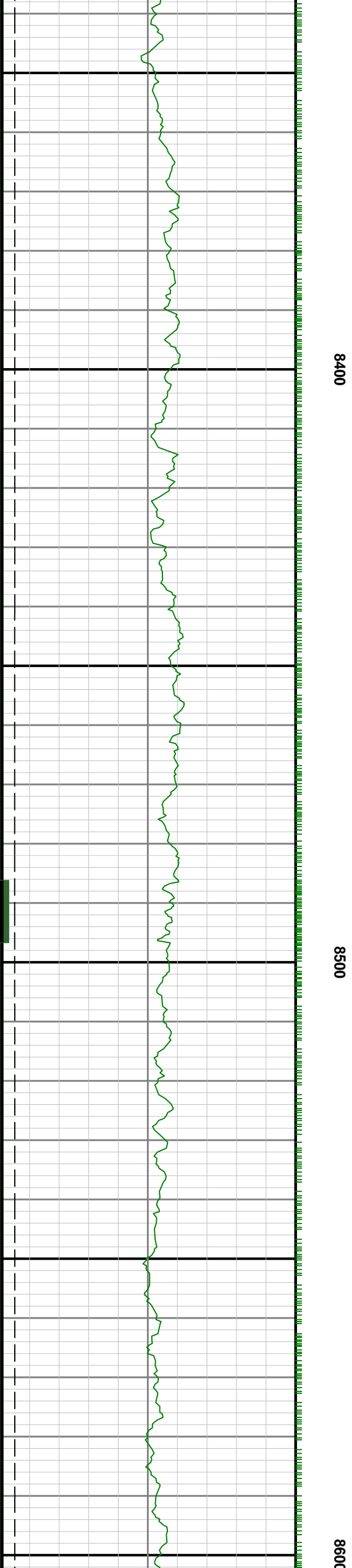
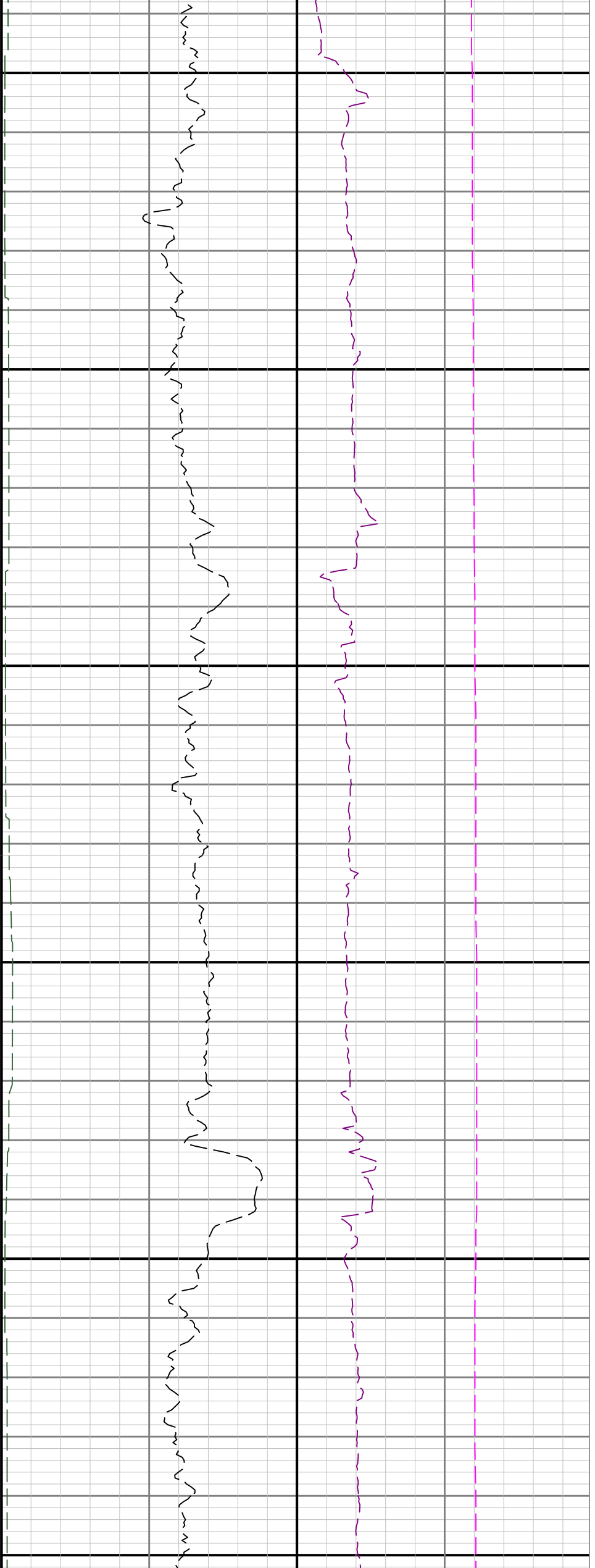


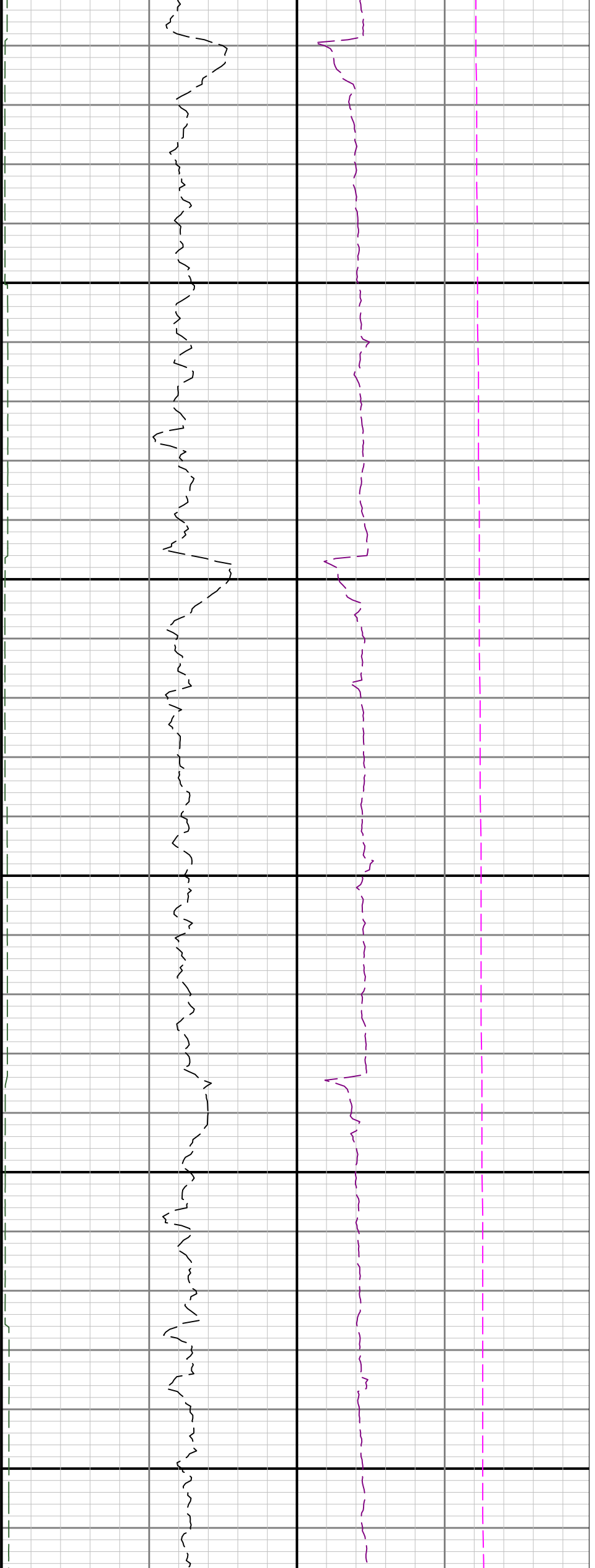
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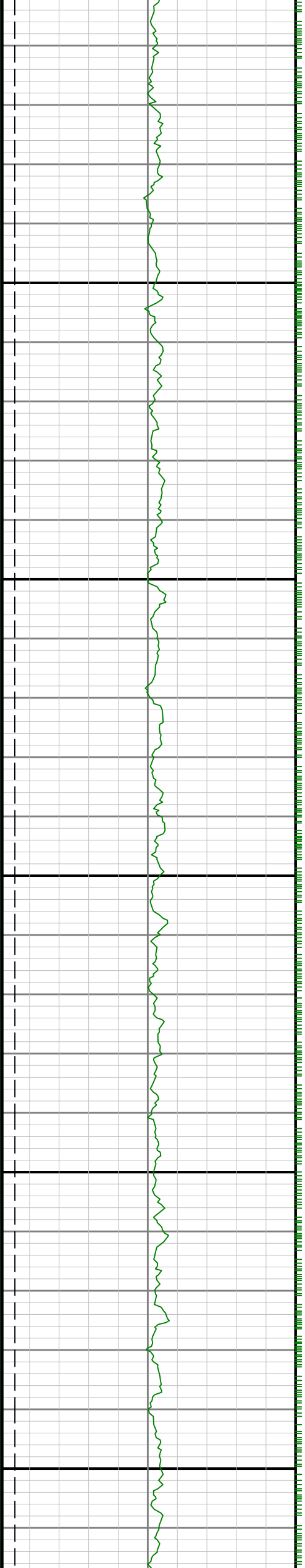


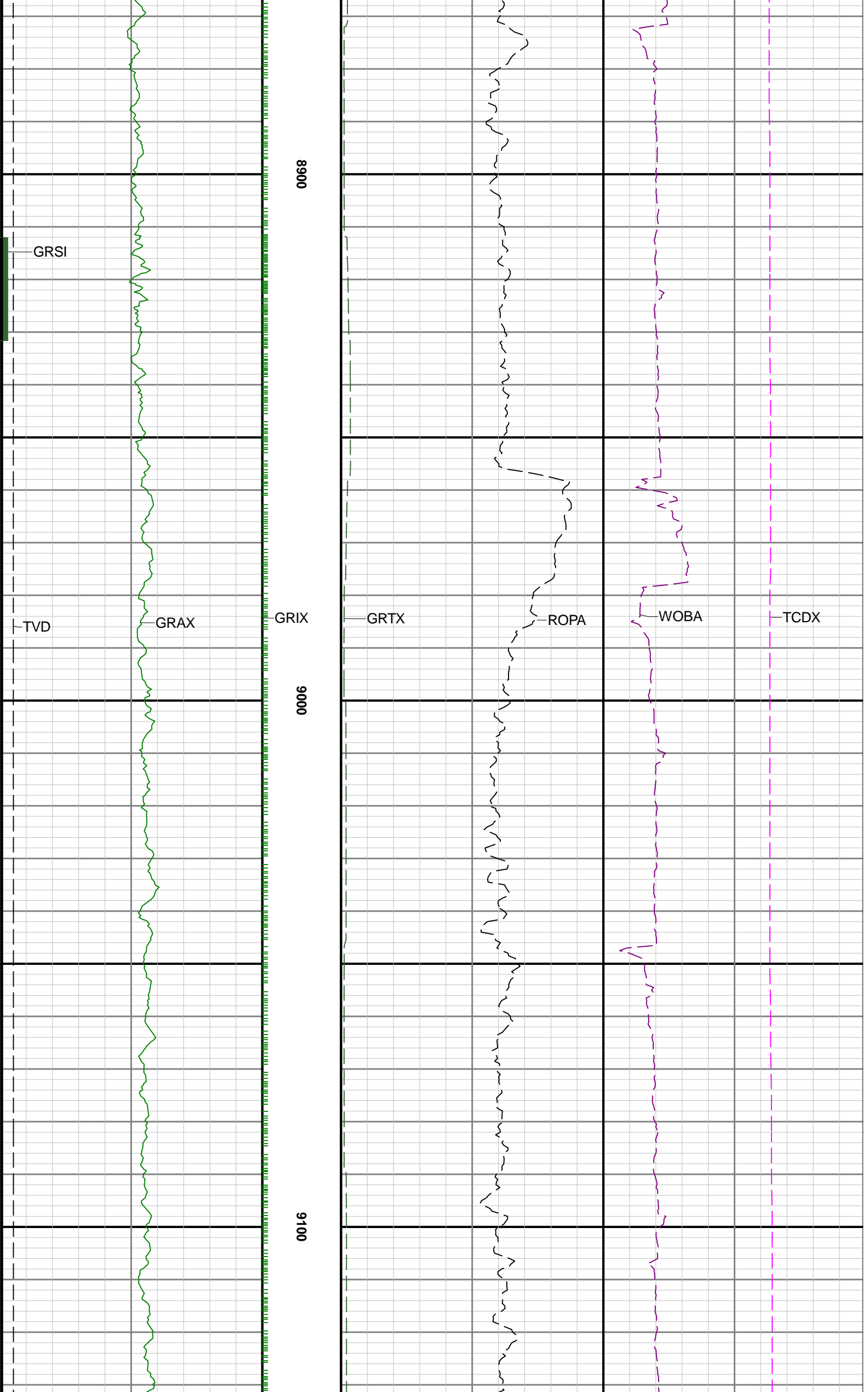


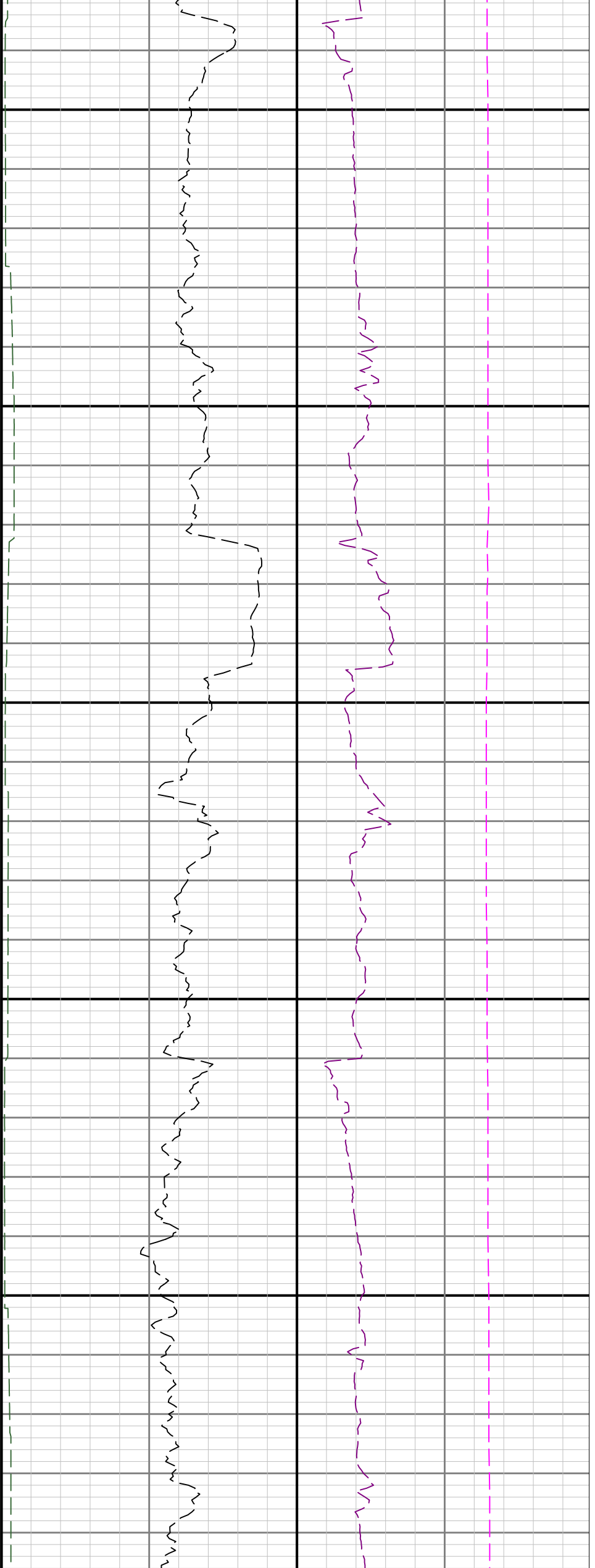


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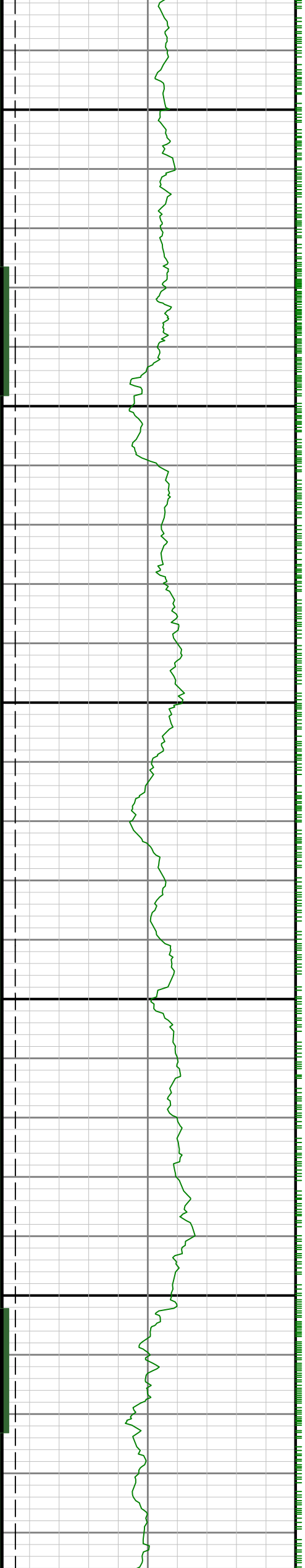


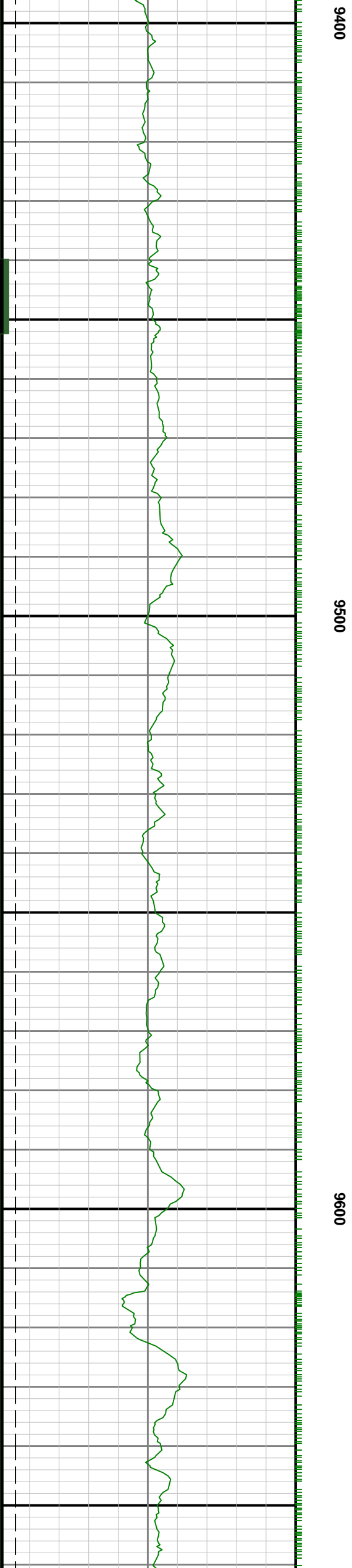
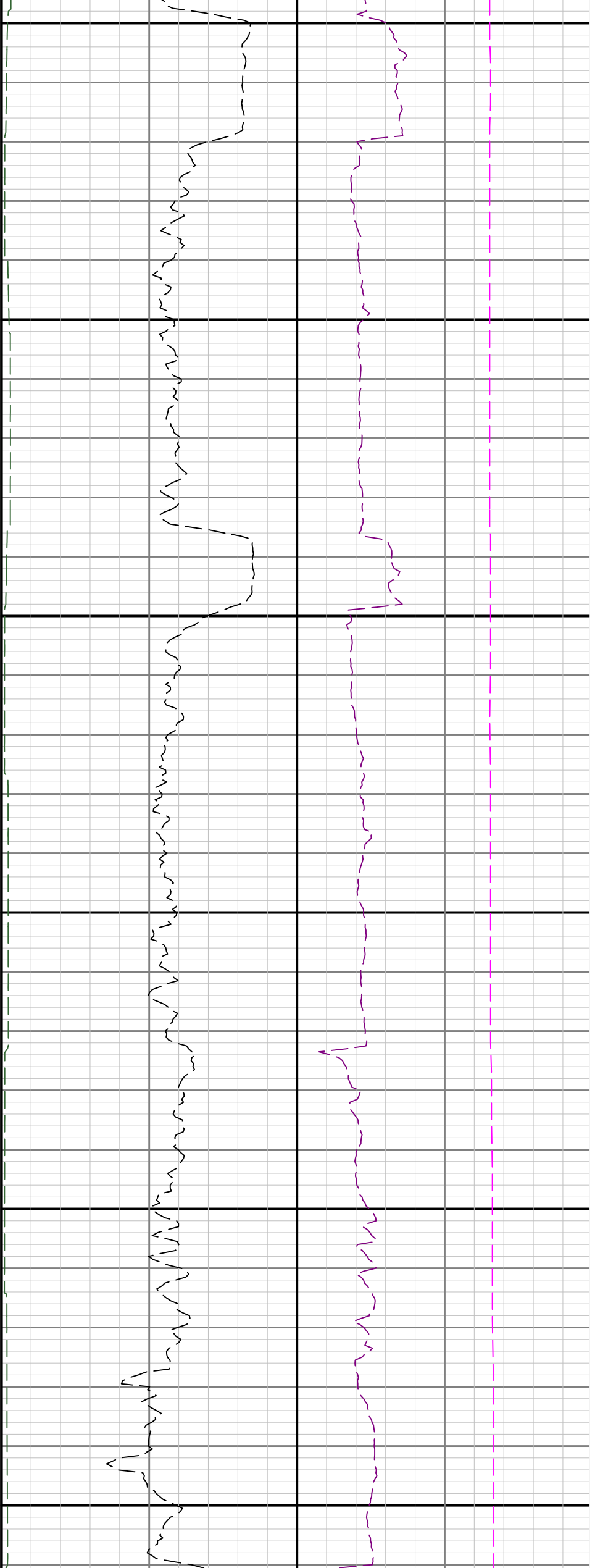


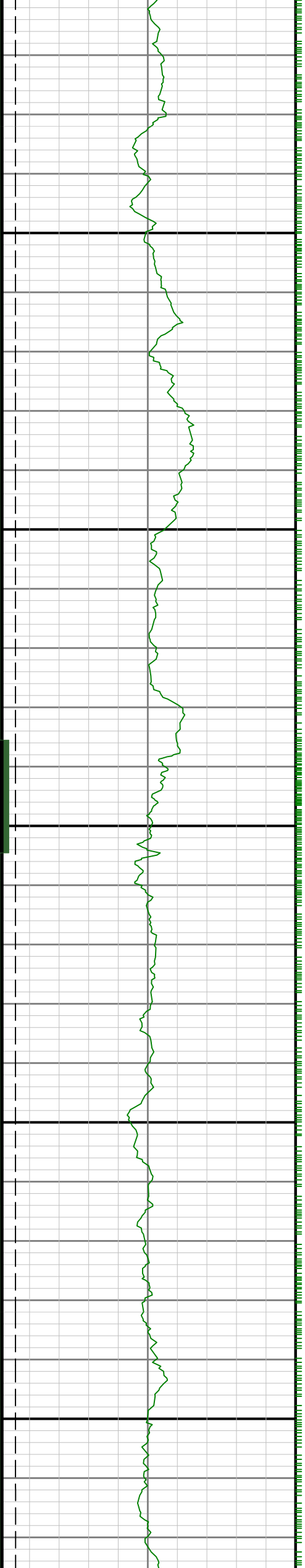


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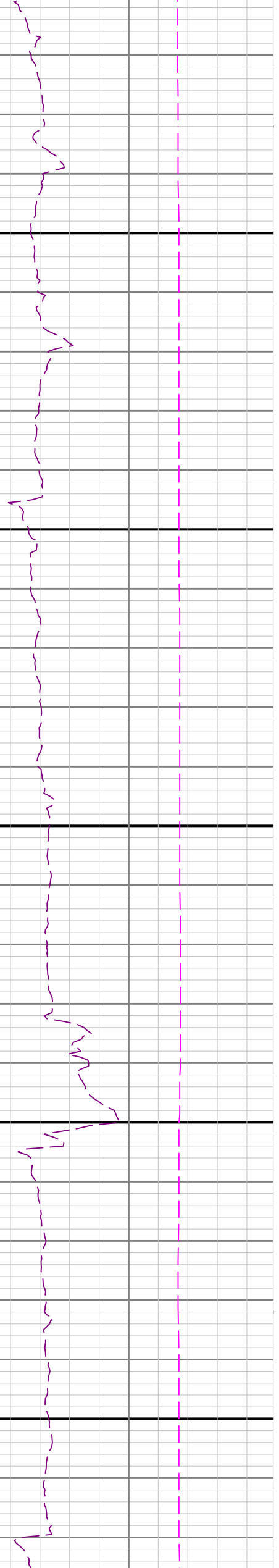


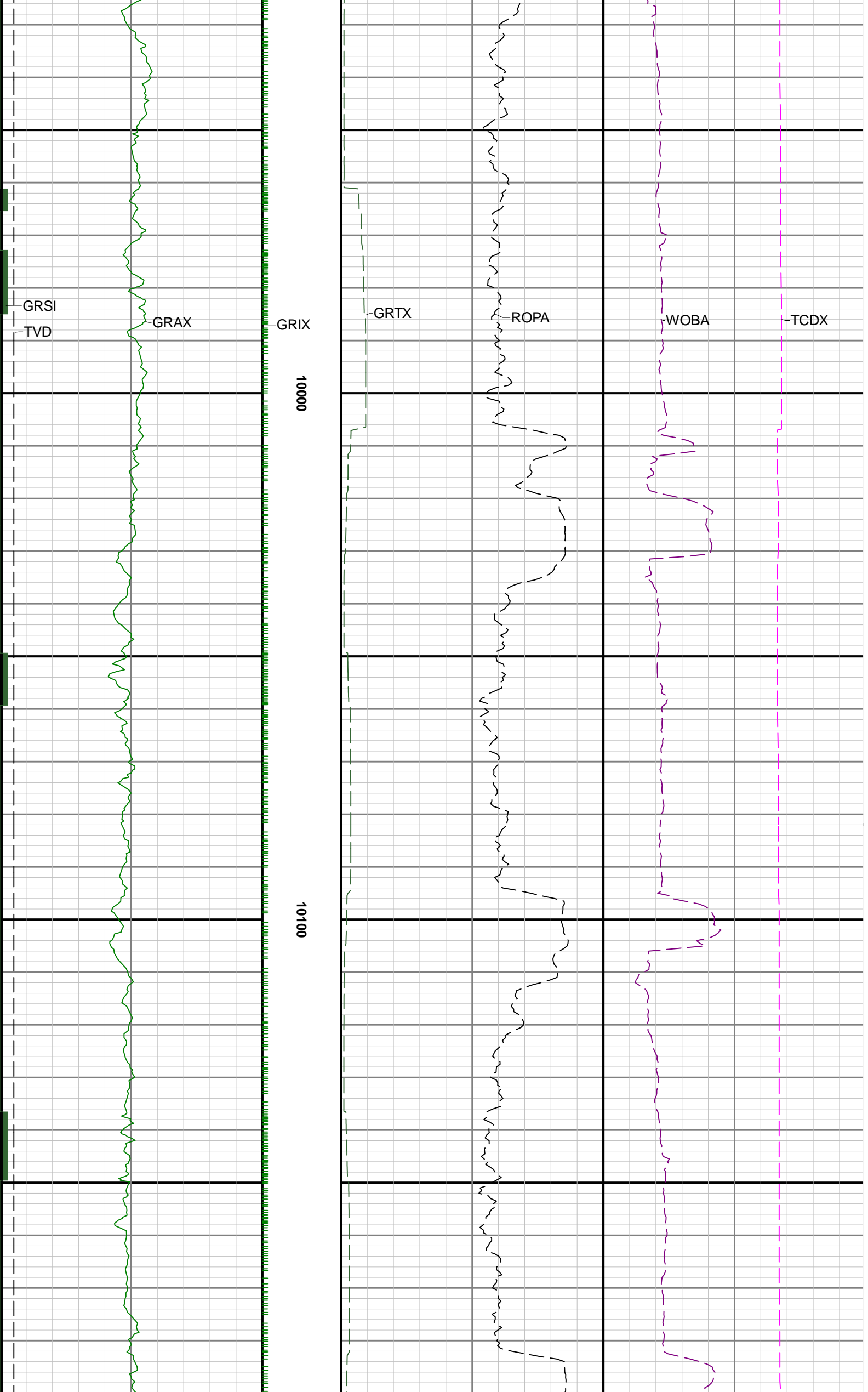


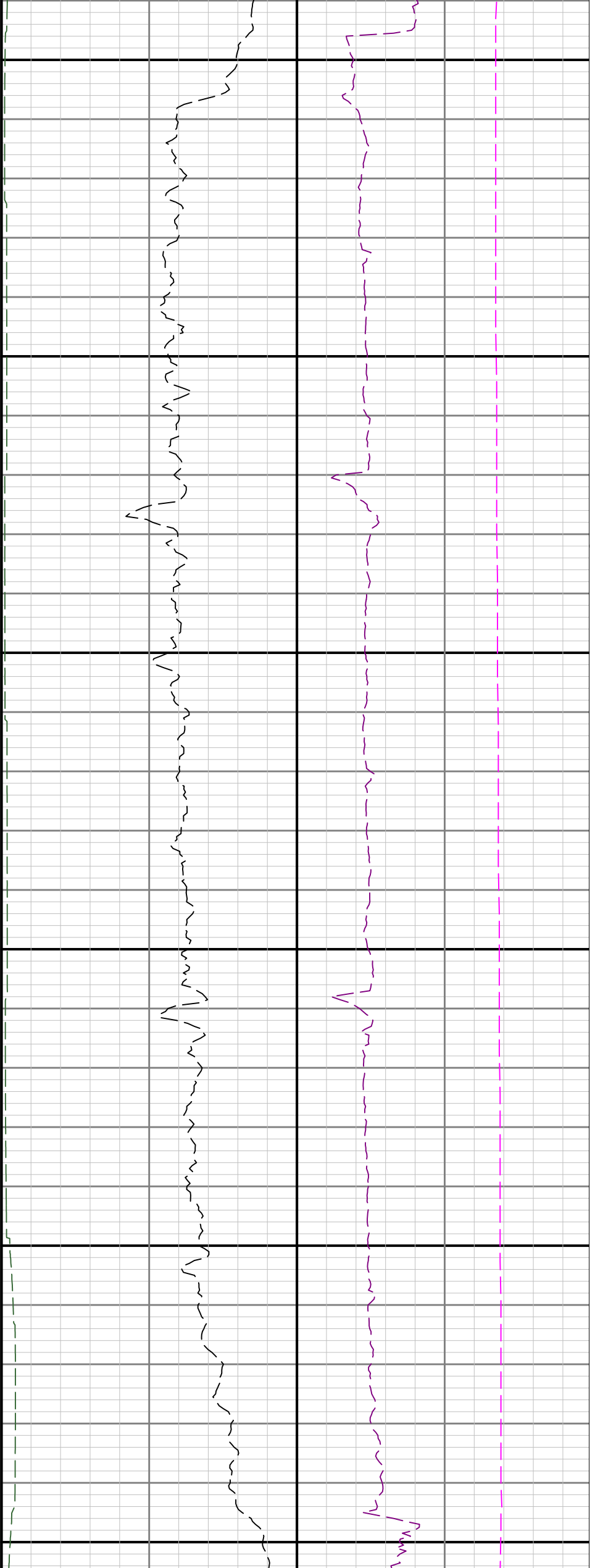
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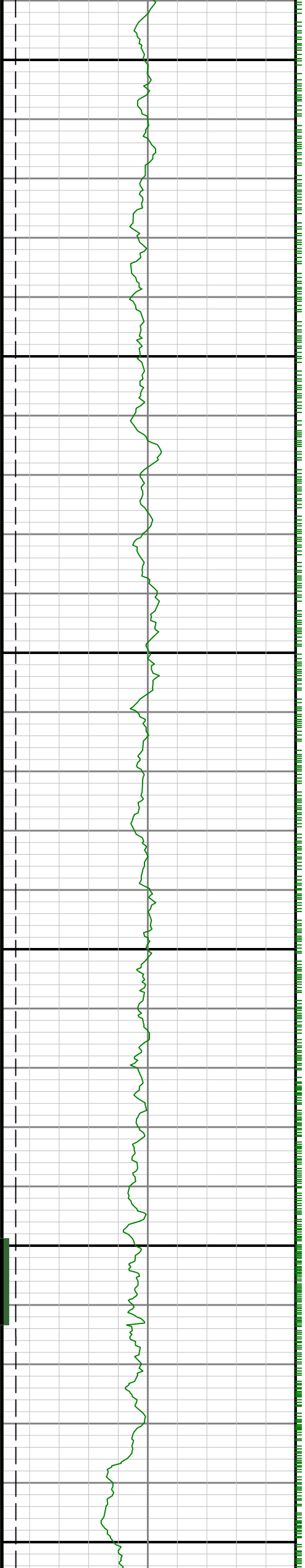


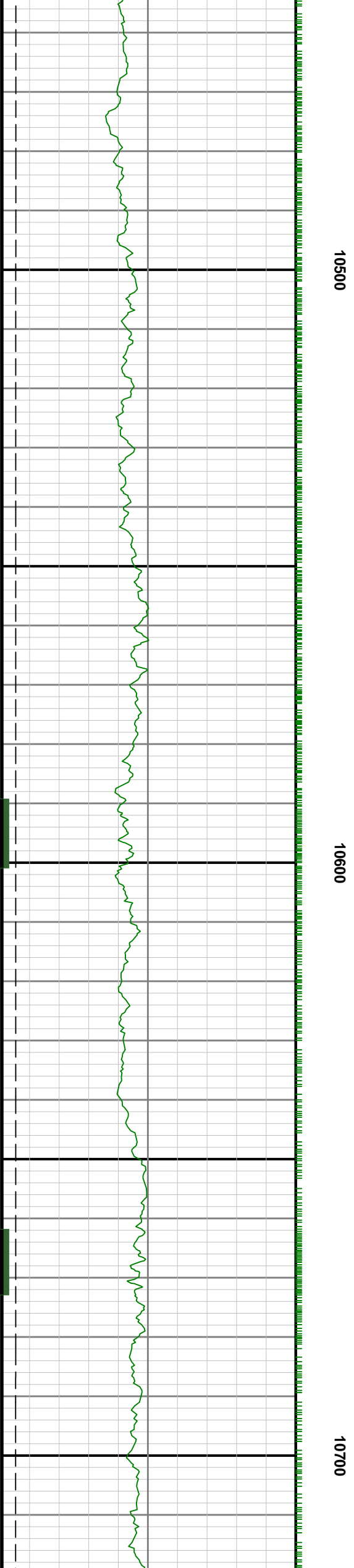
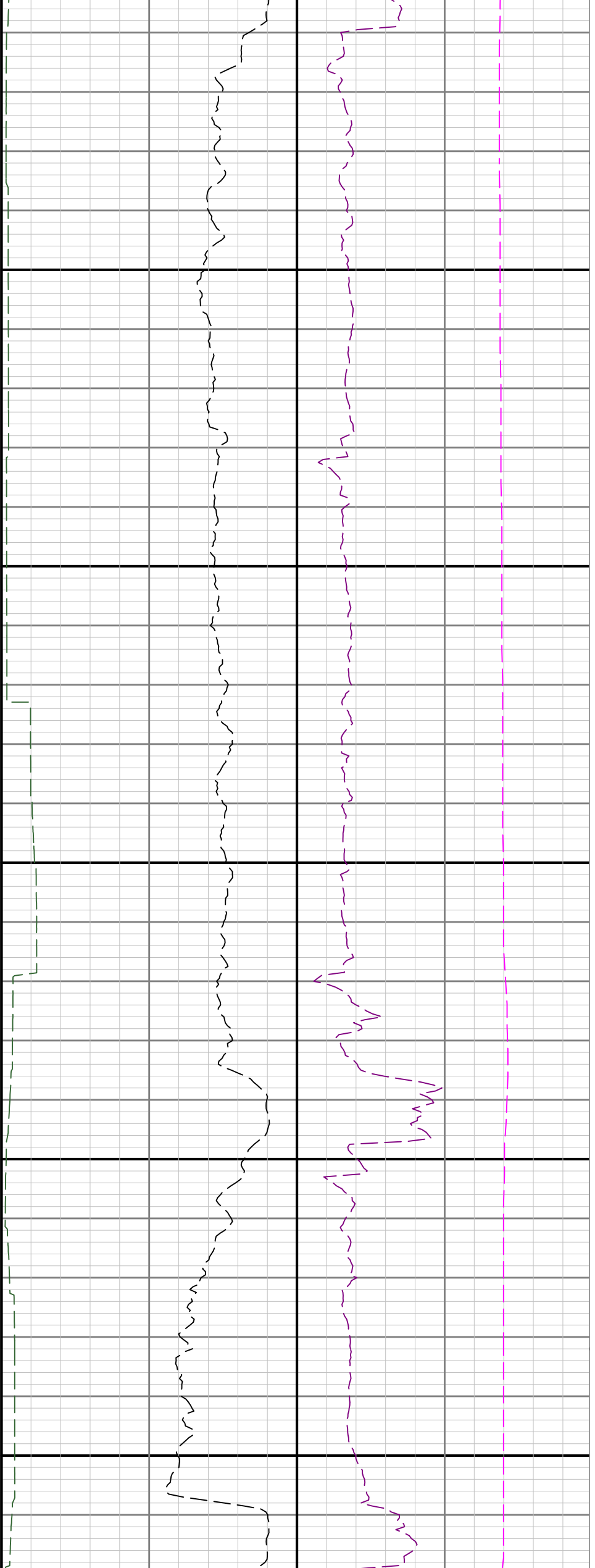


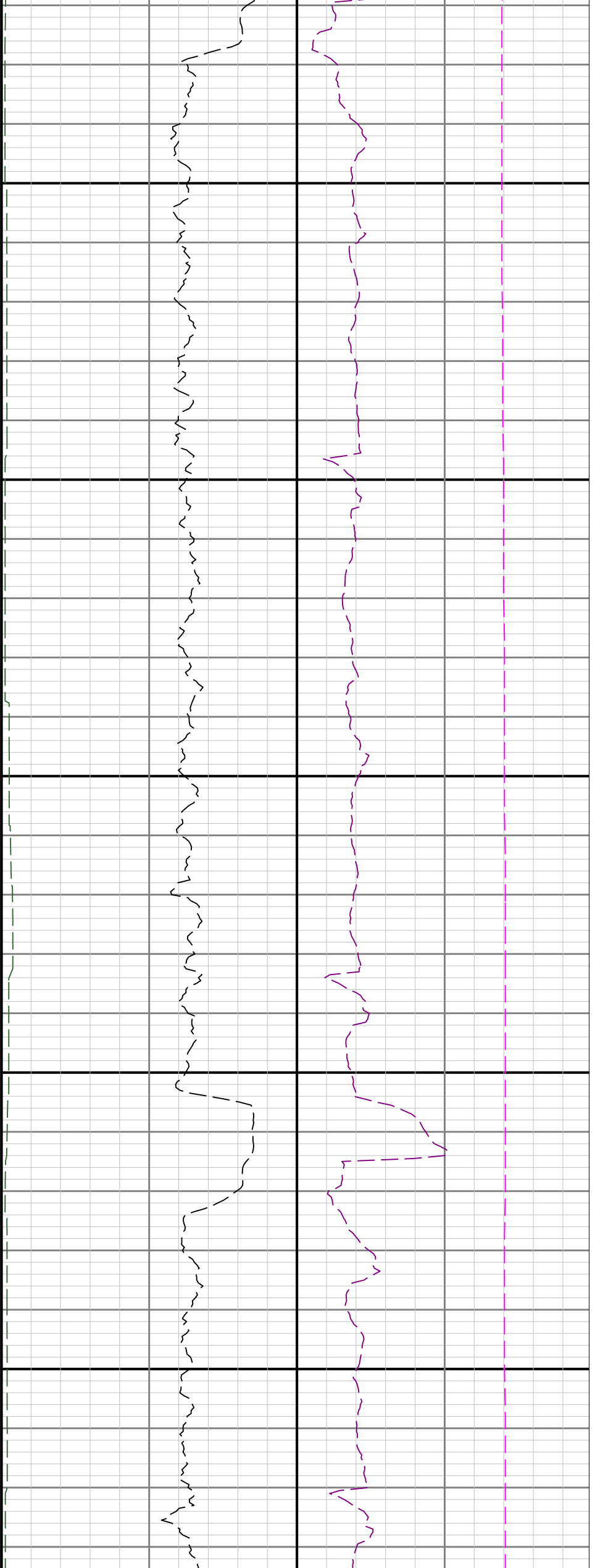
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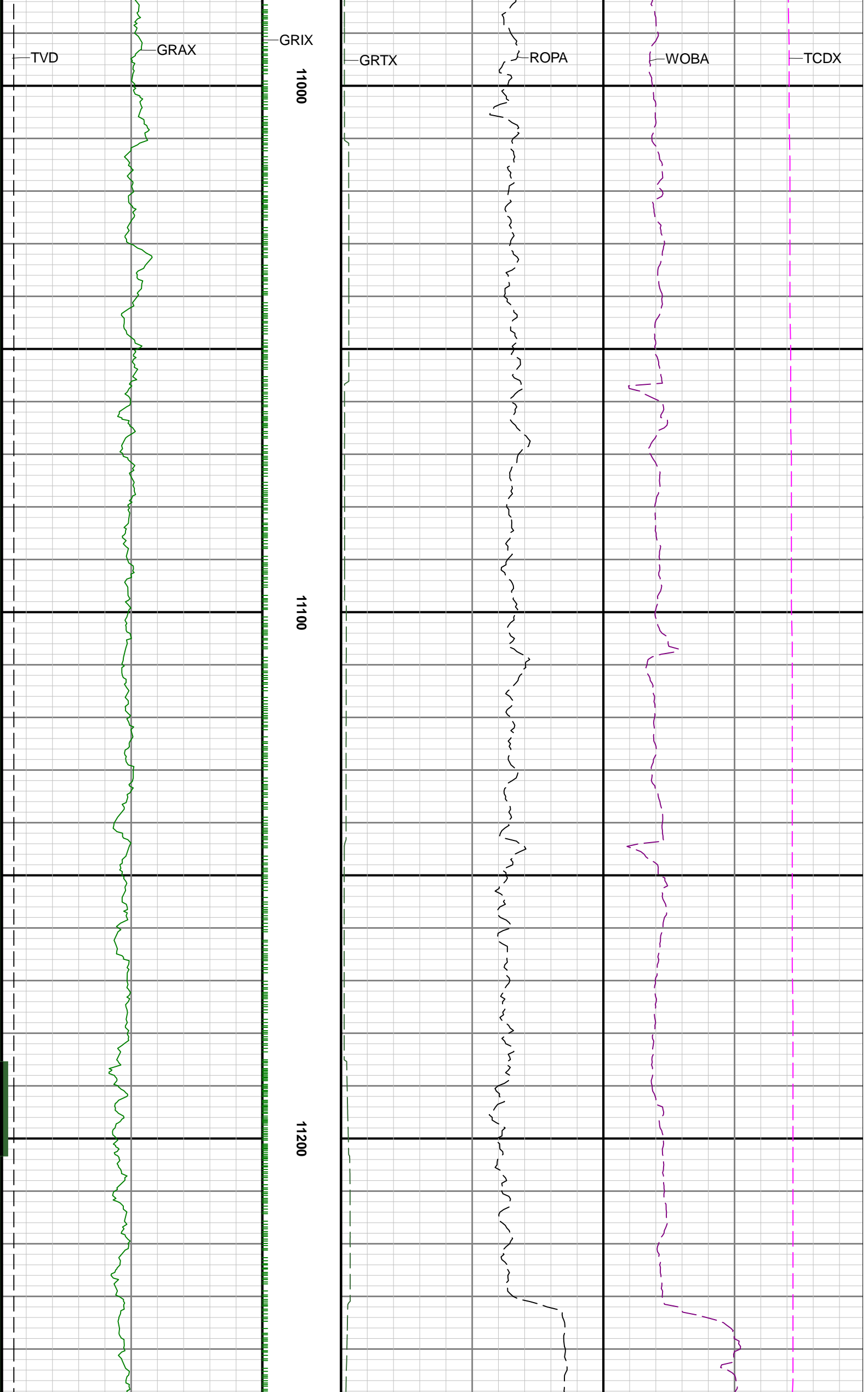


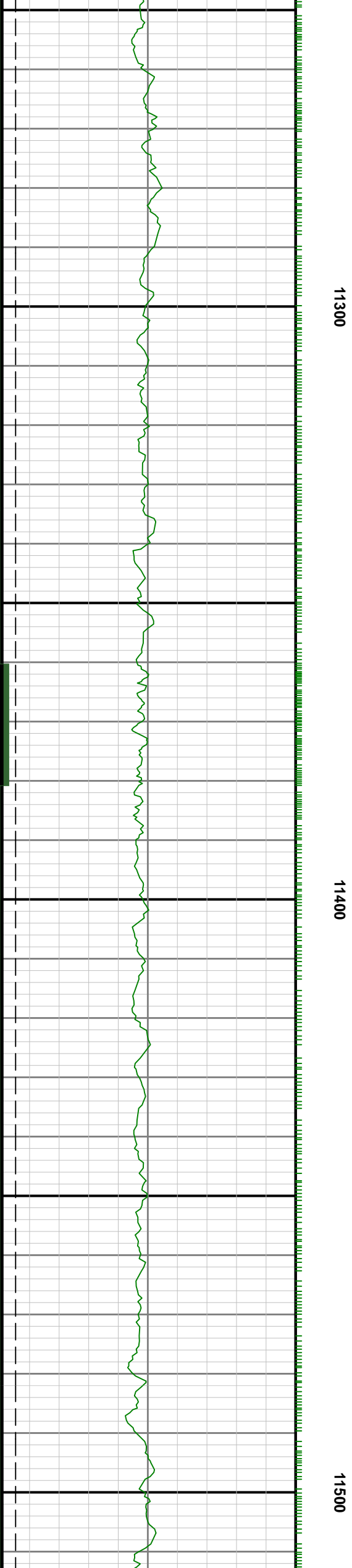
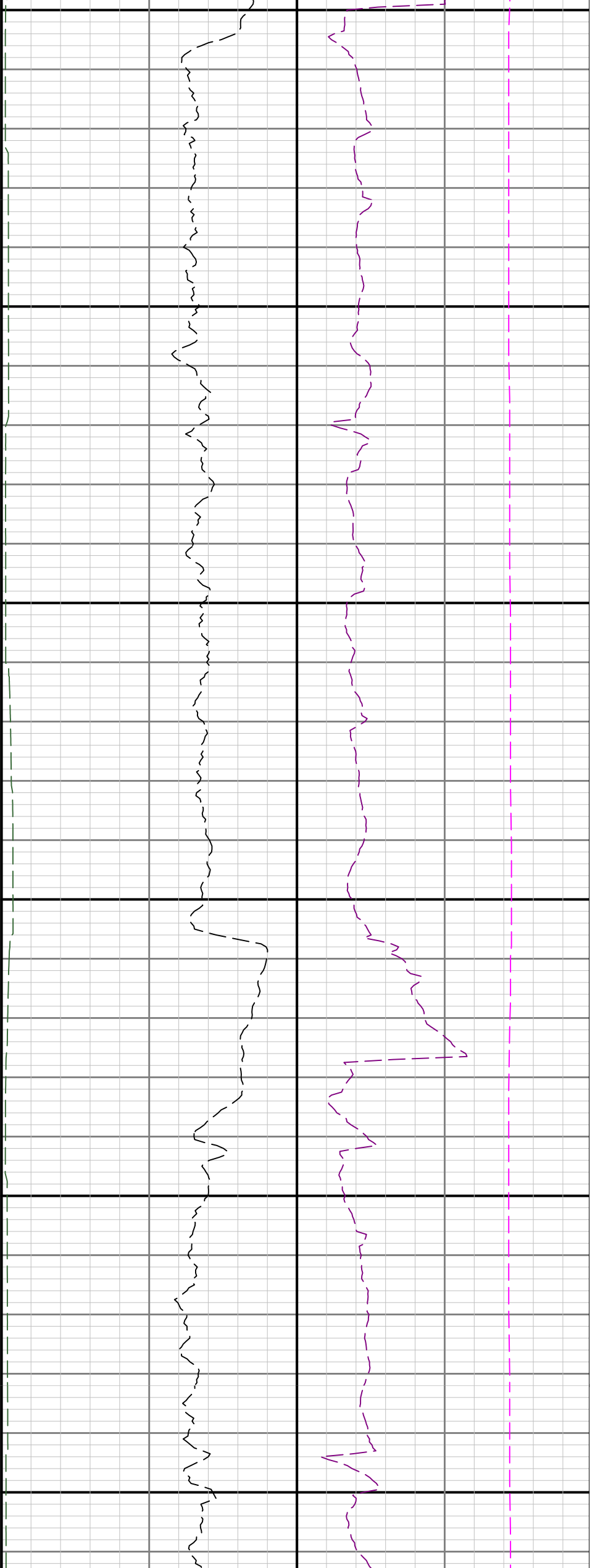


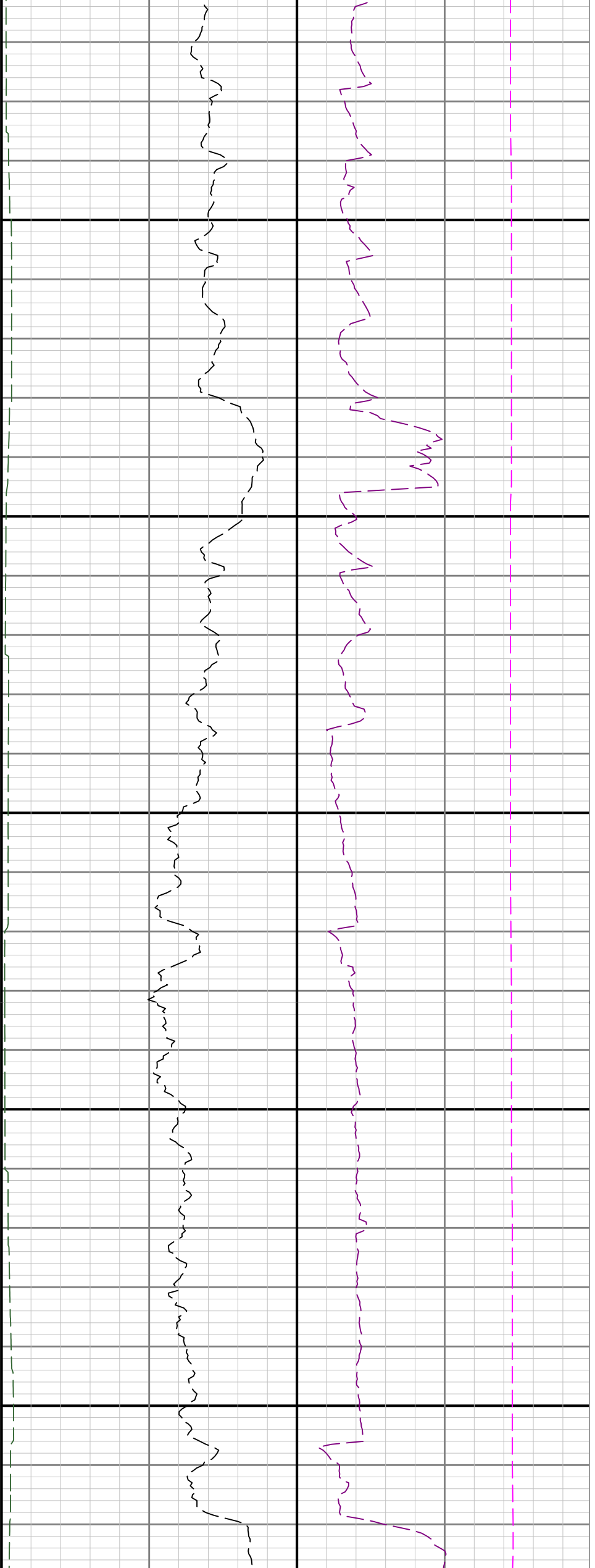
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GRSI

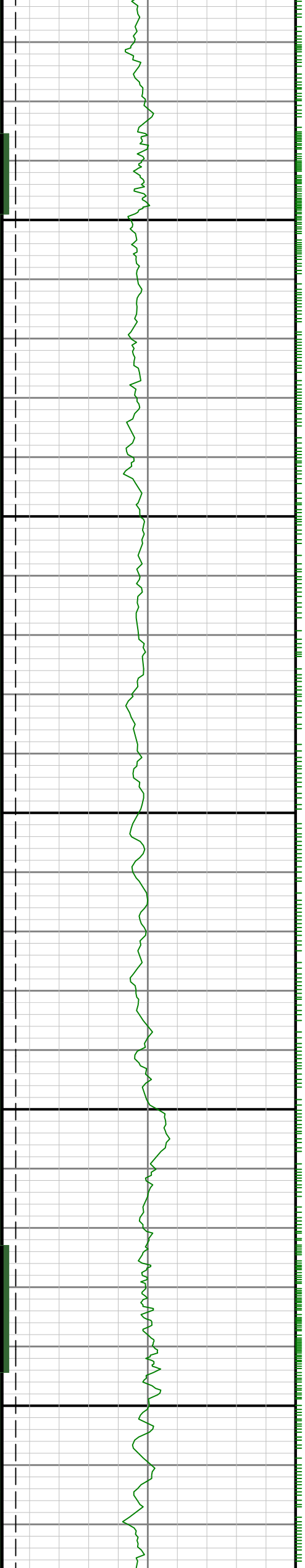


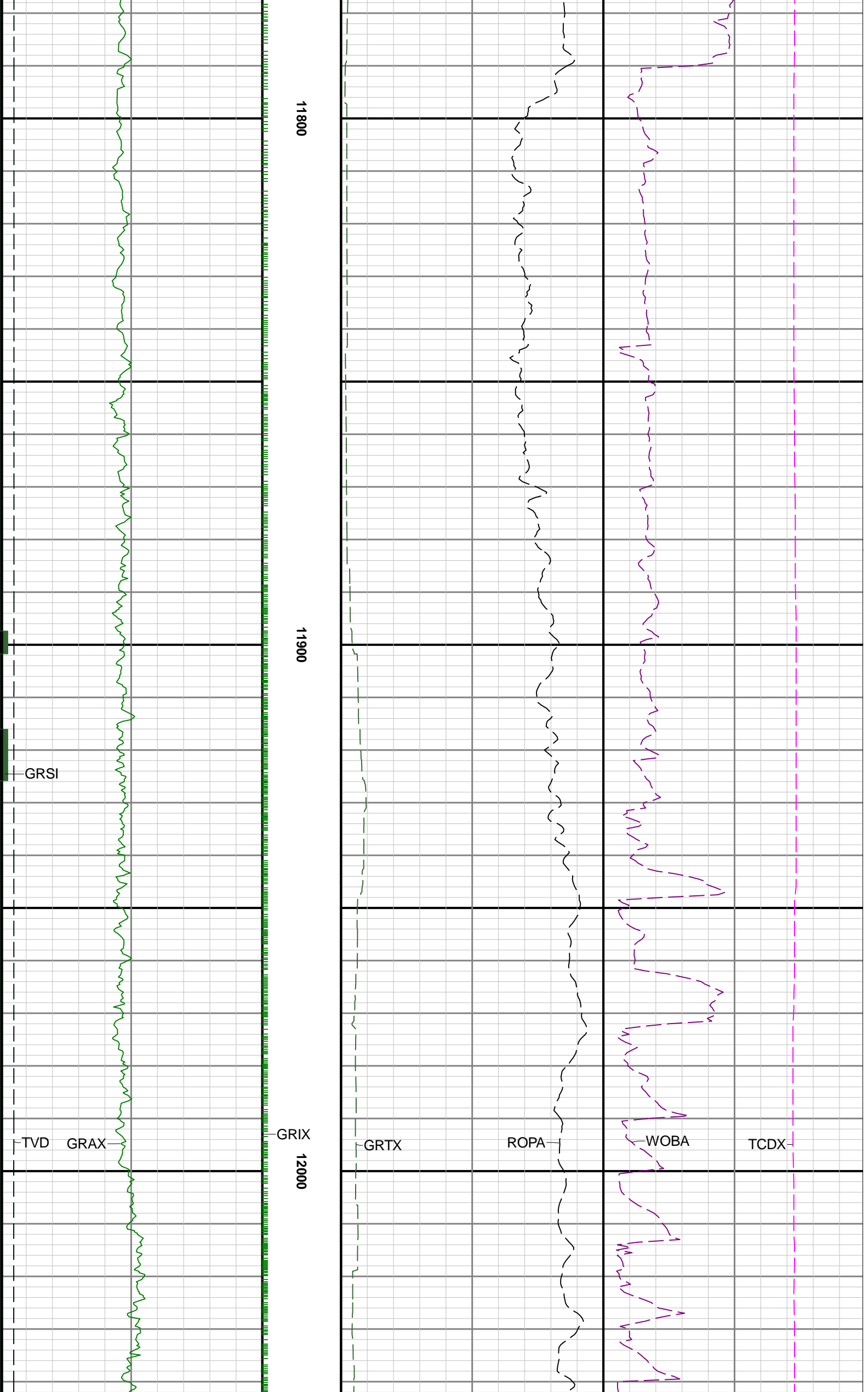


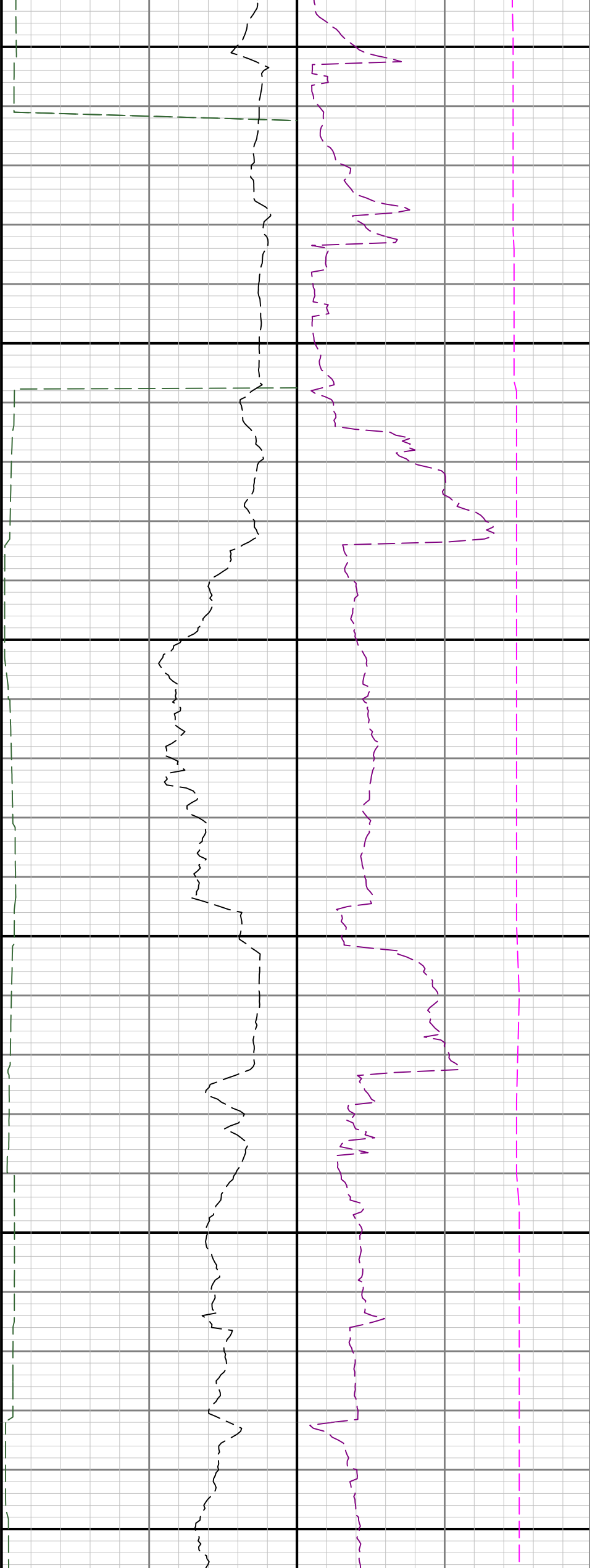


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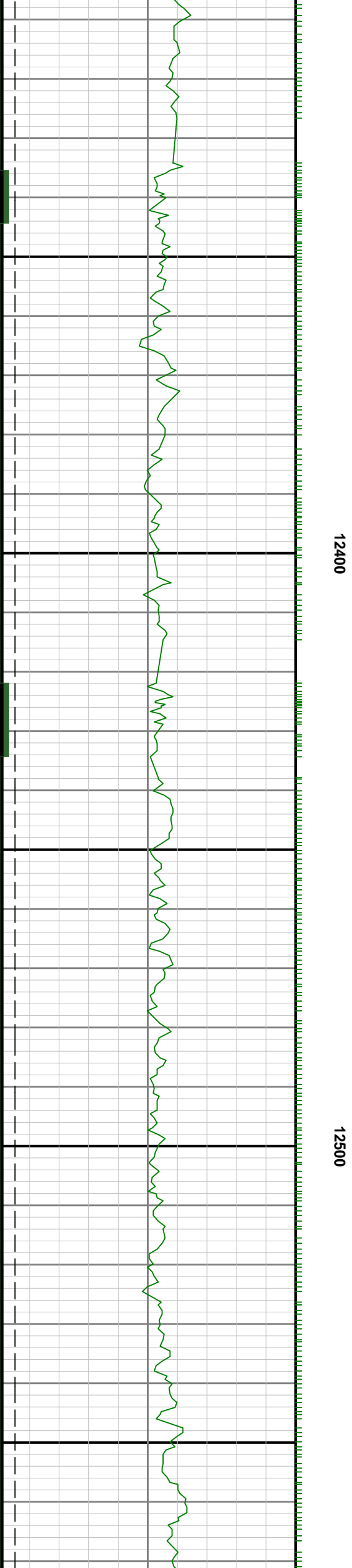
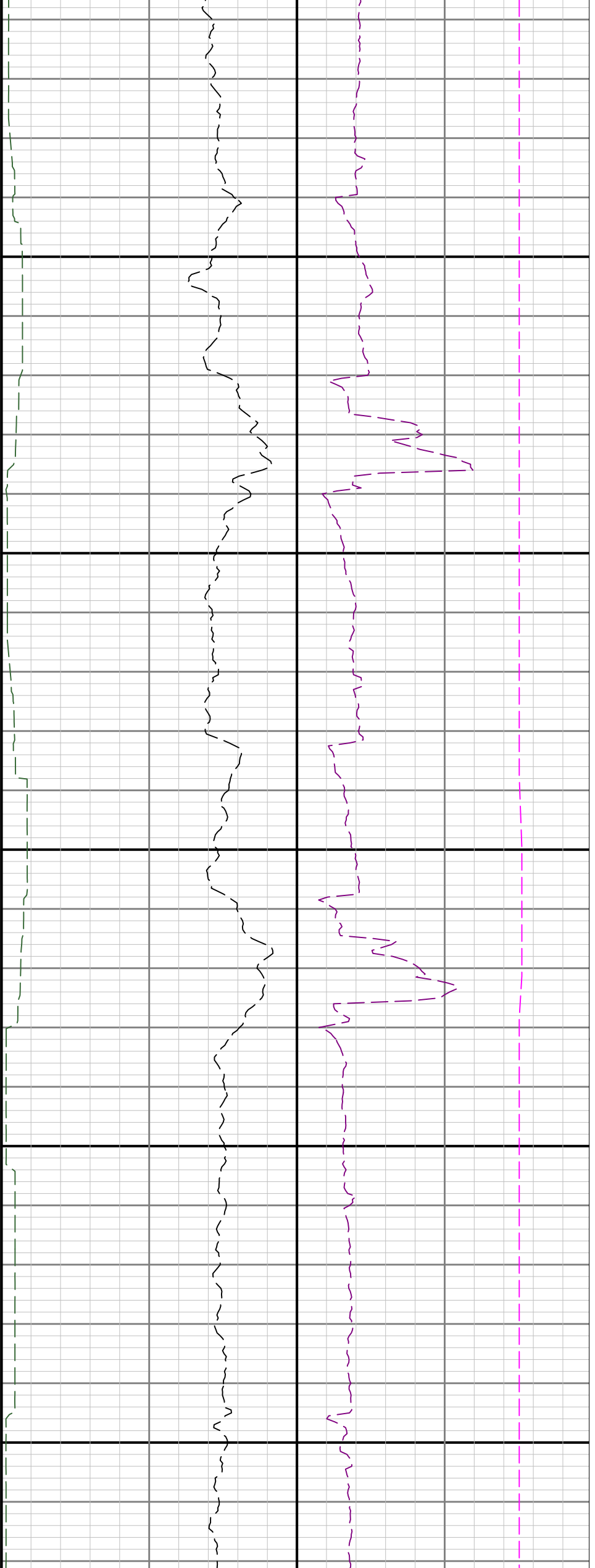
R1 ⇄ R2

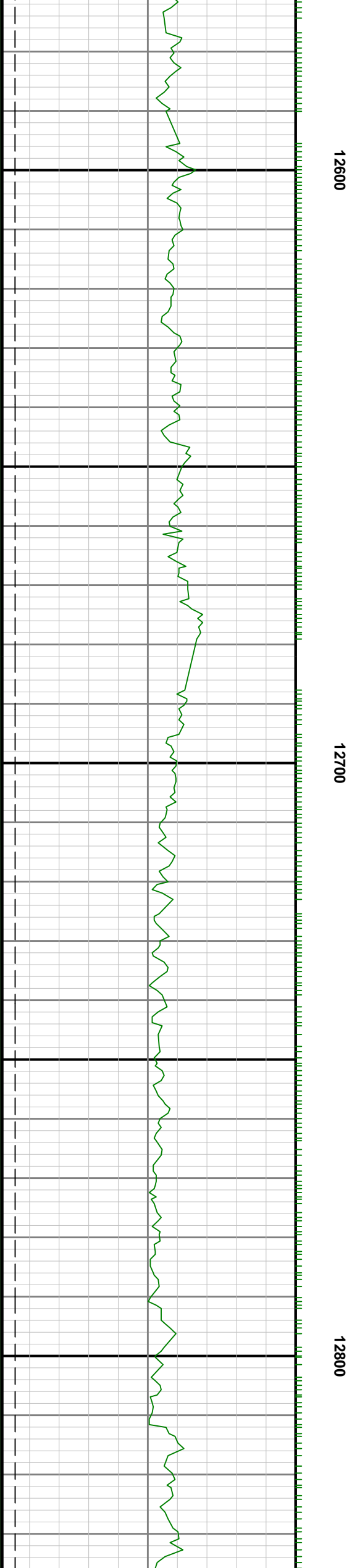
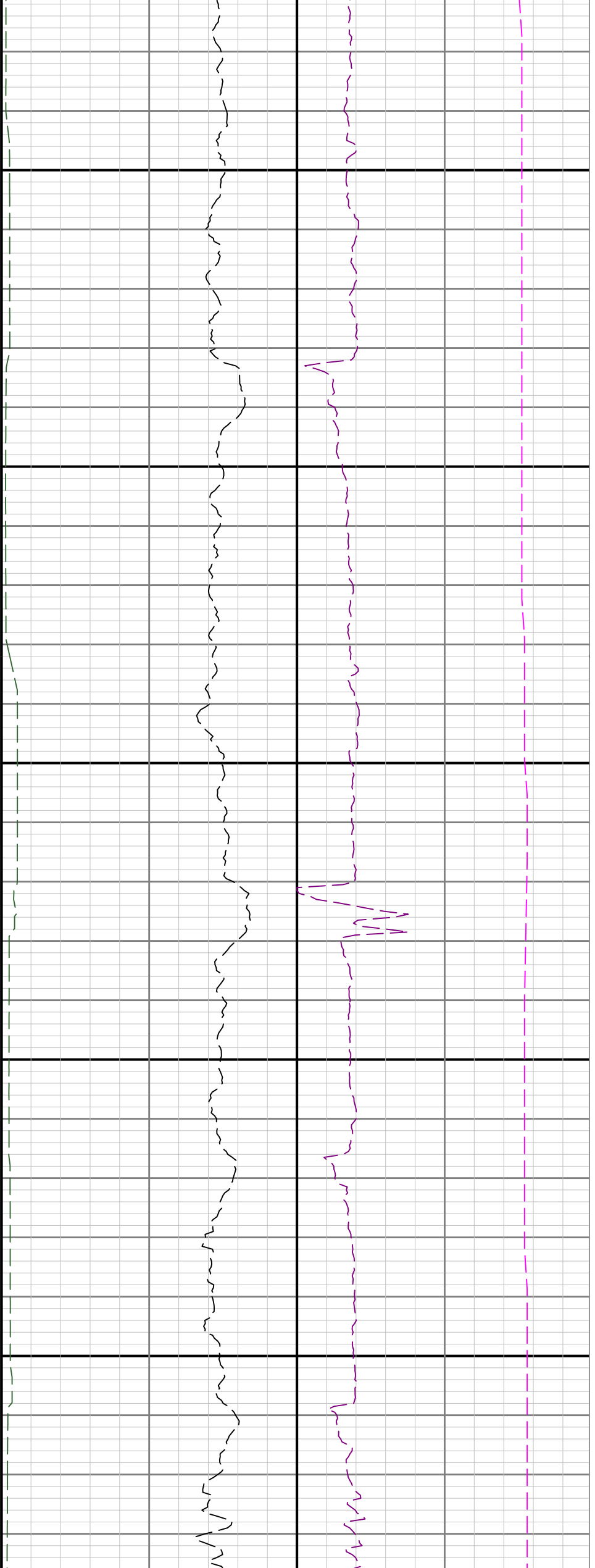
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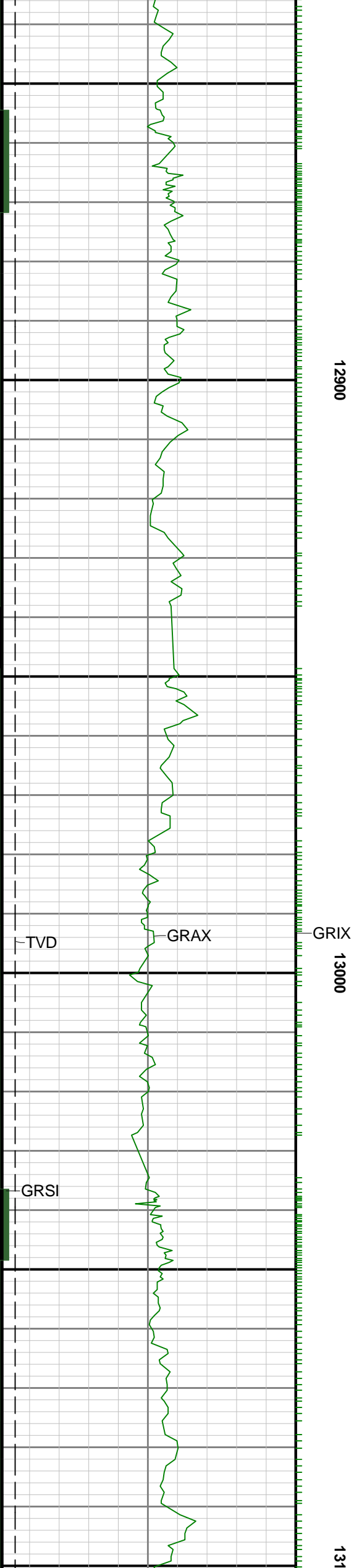
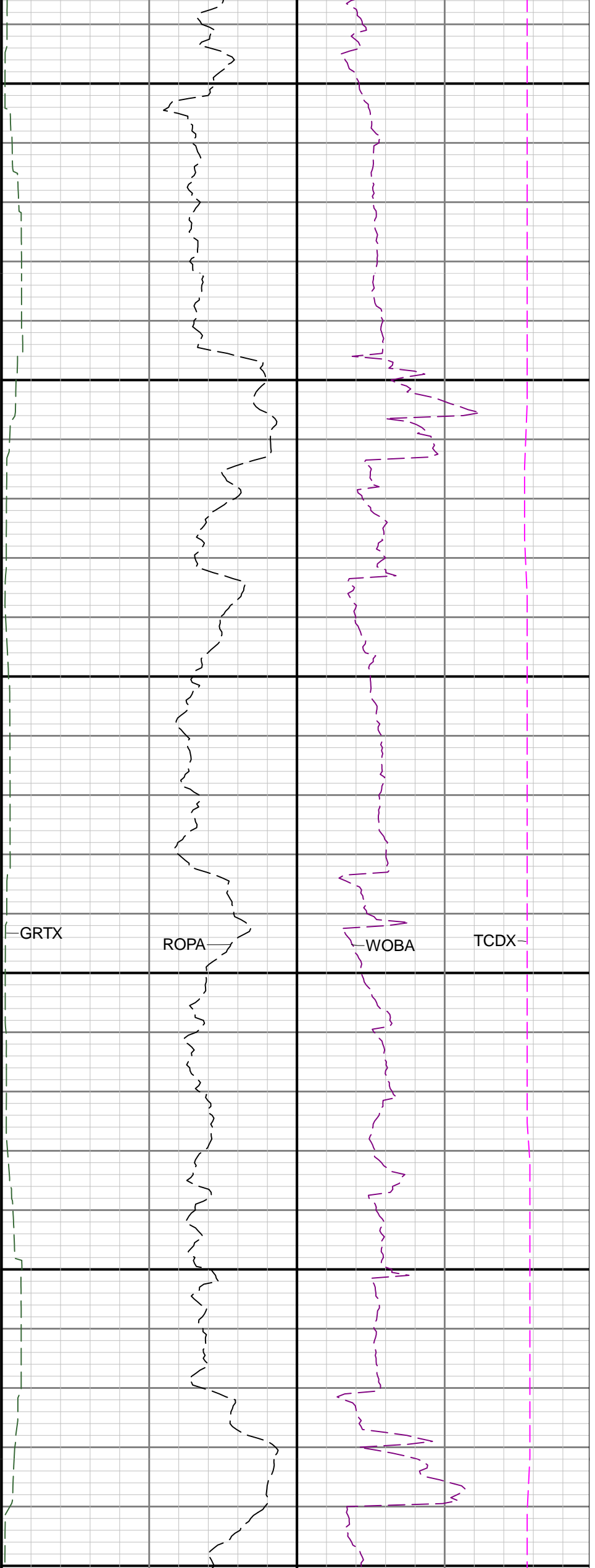
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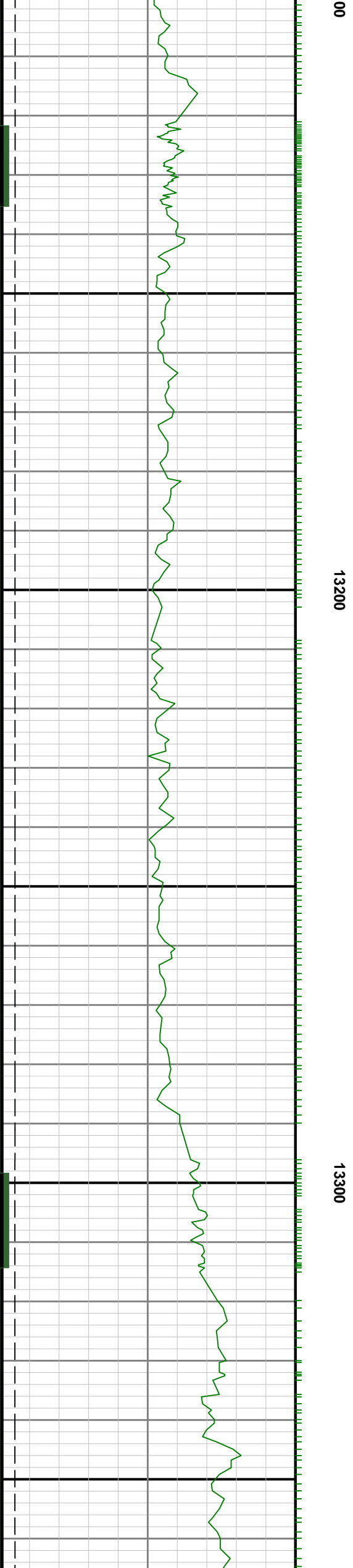
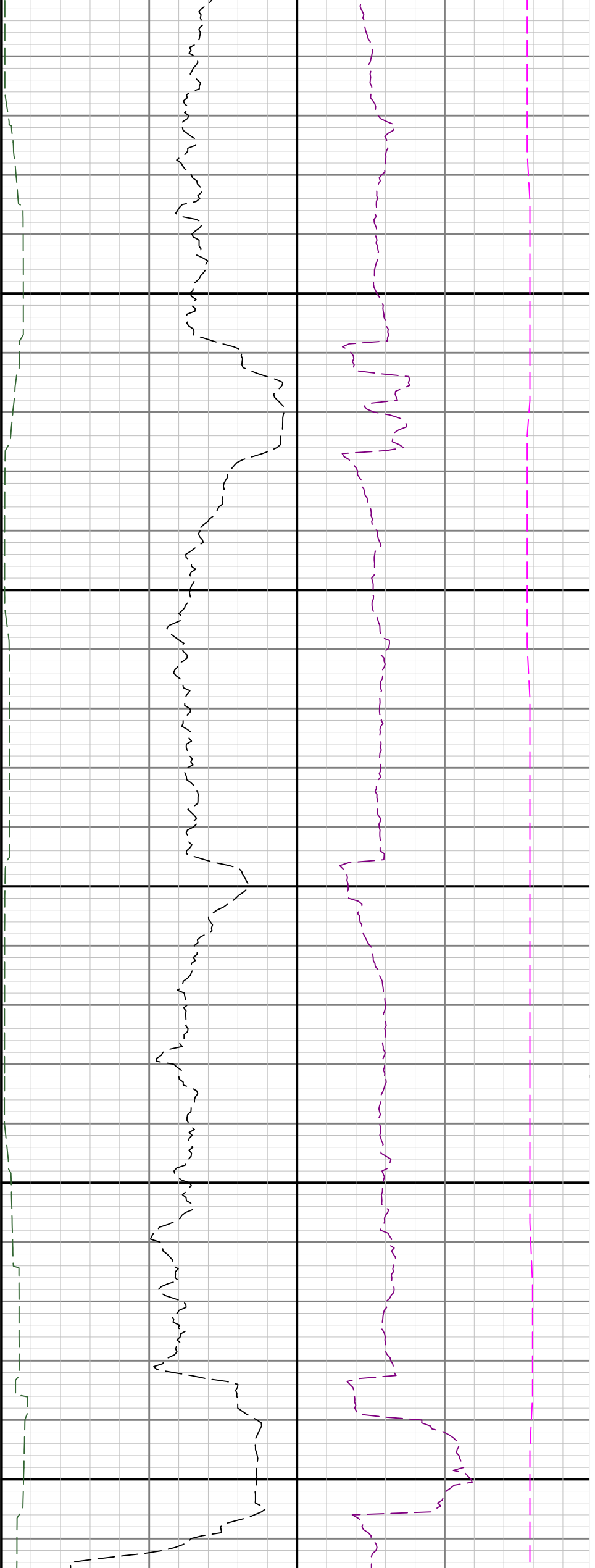
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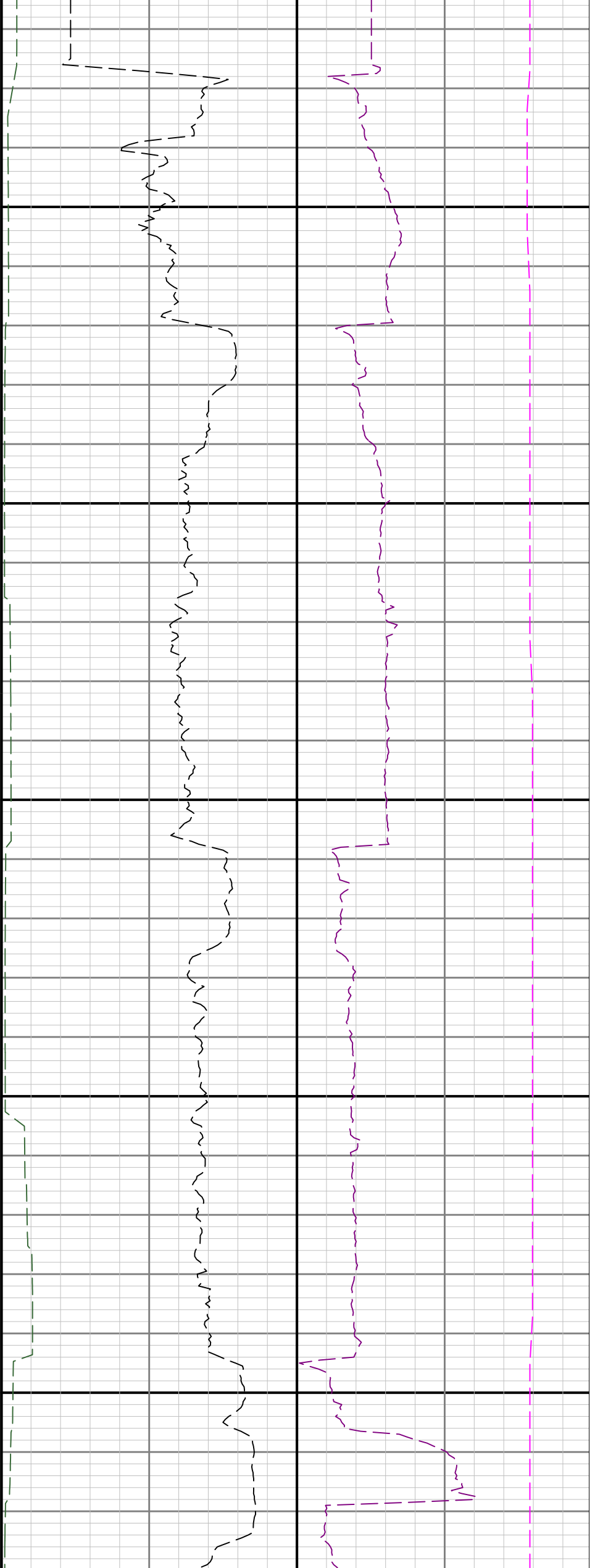
See Remark 1







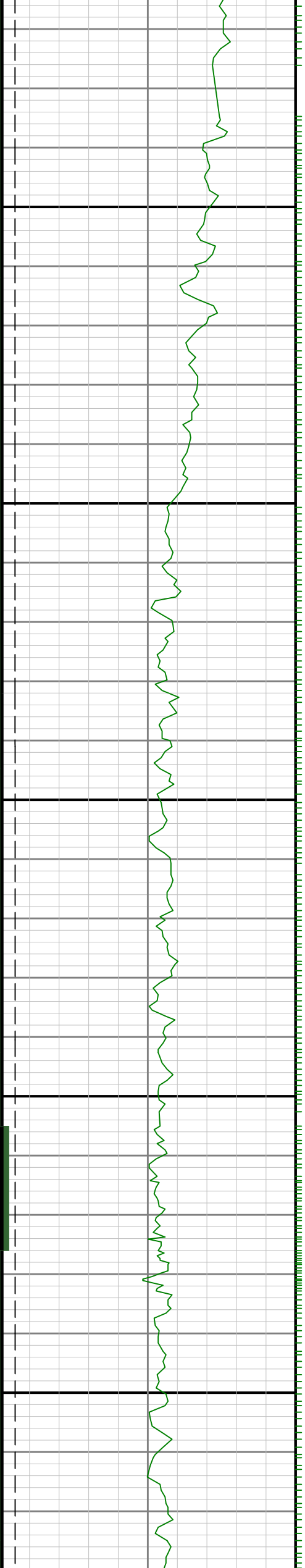


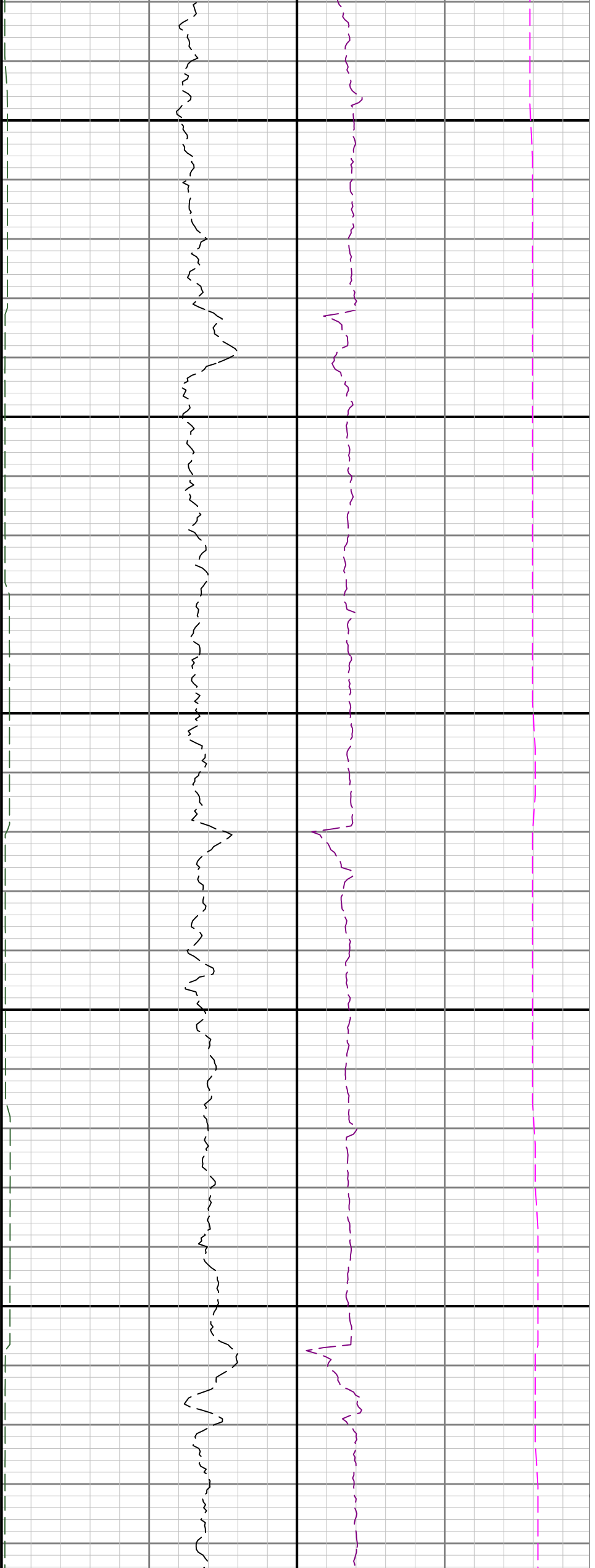


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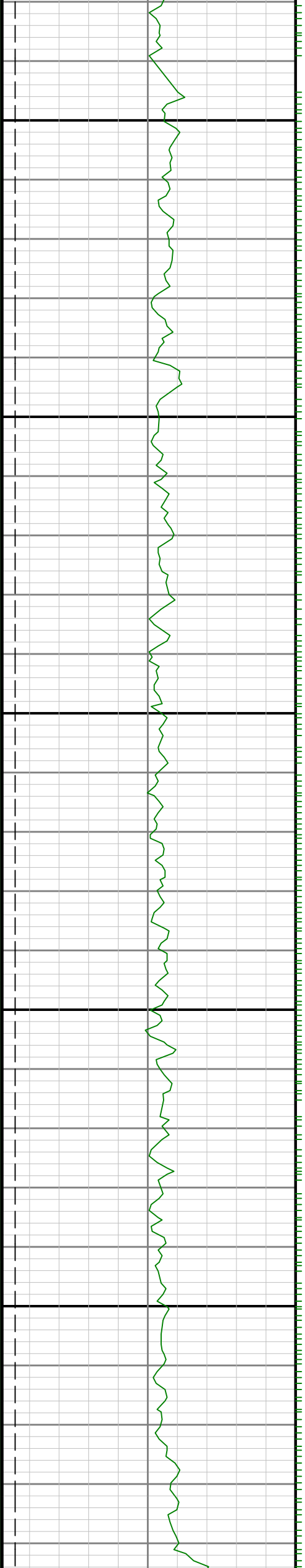
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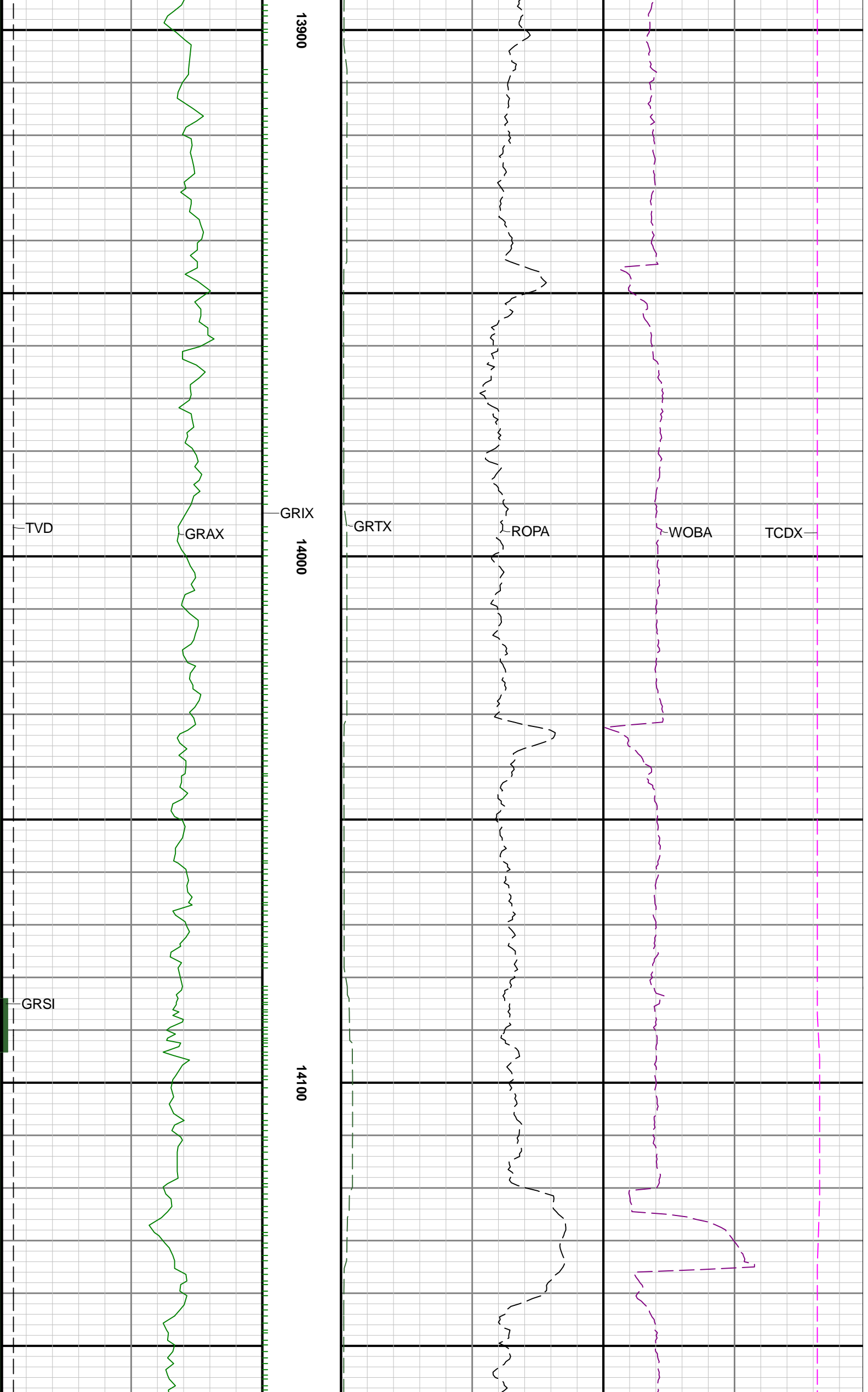


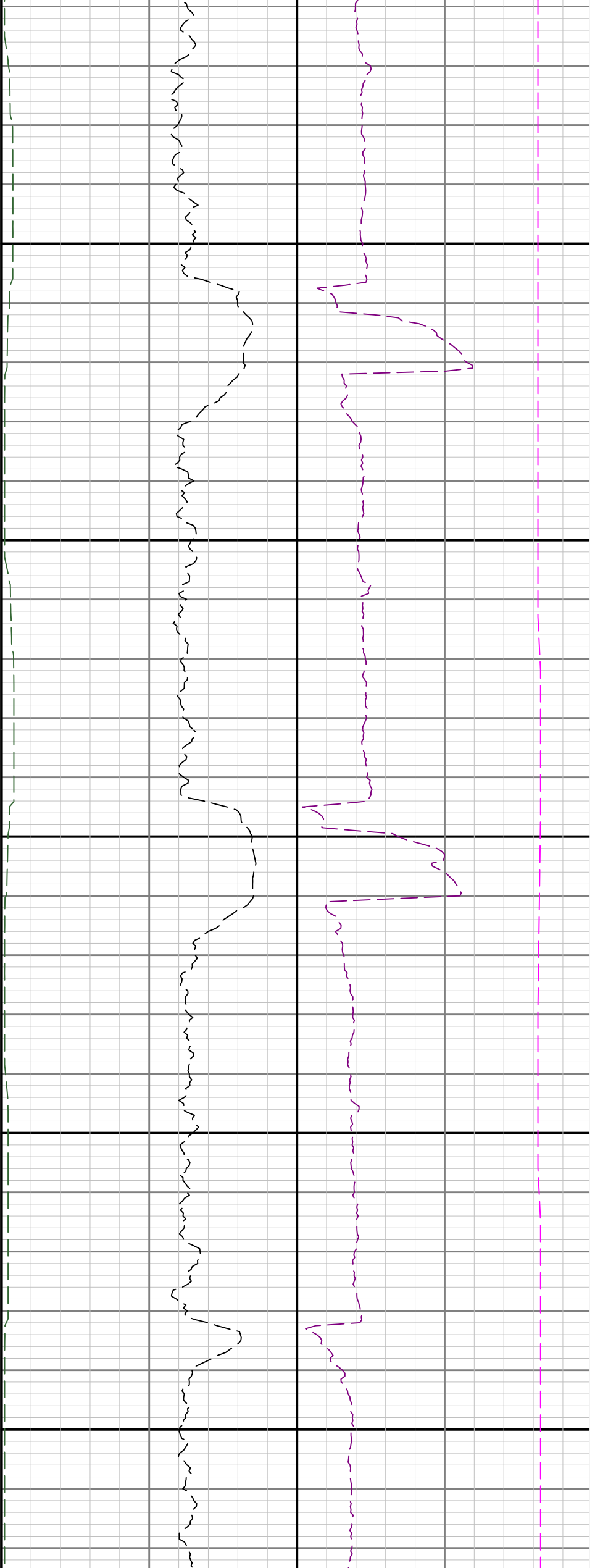


13700

13800



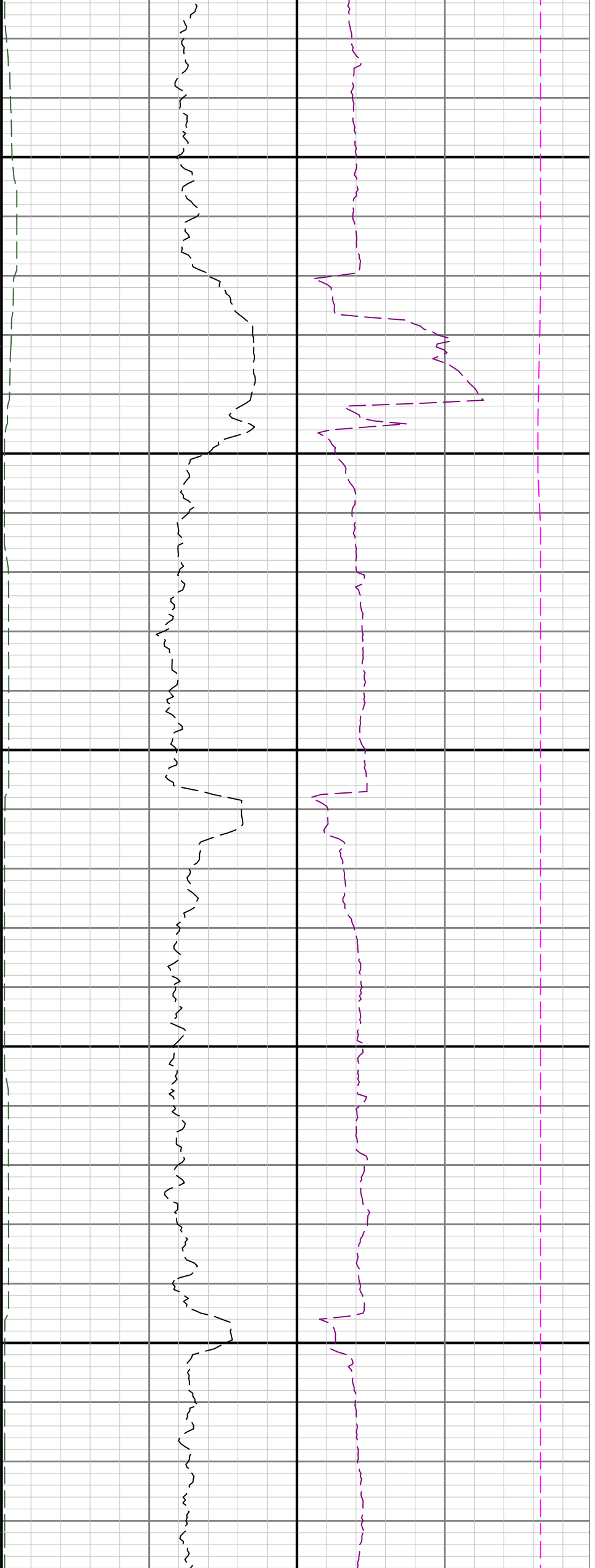




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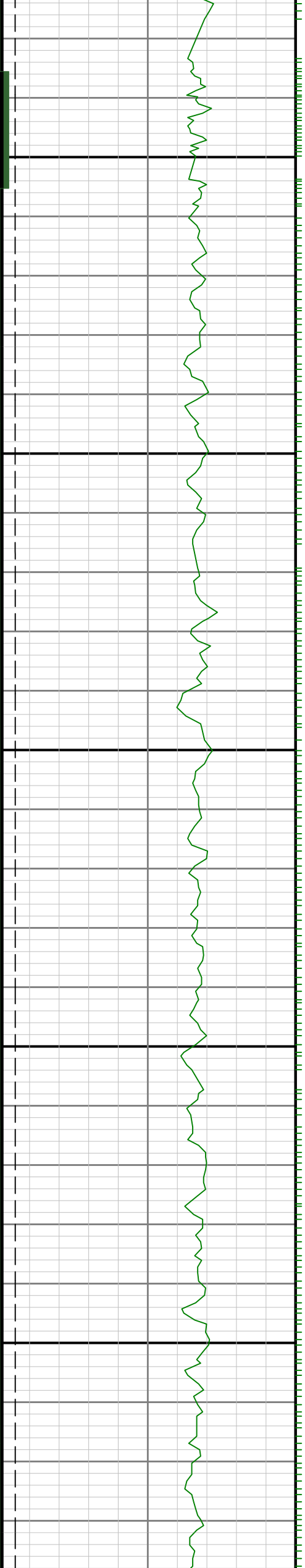
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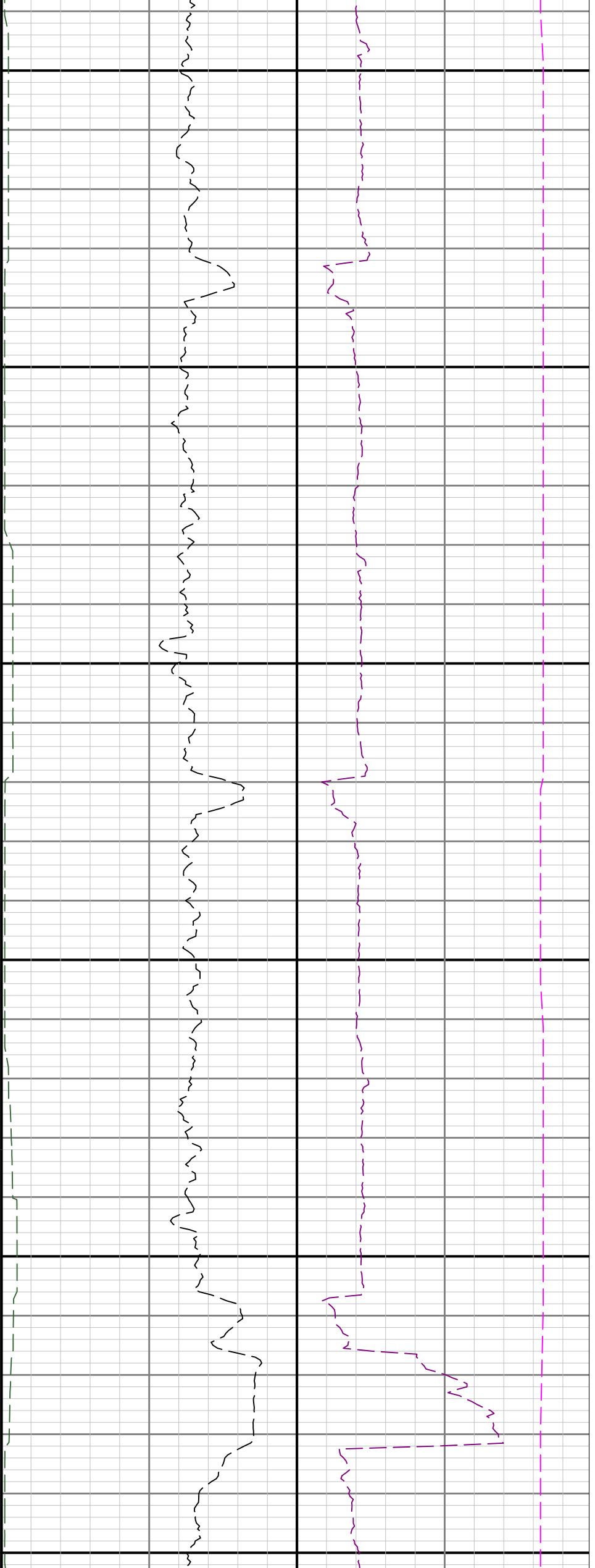
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14500

14600



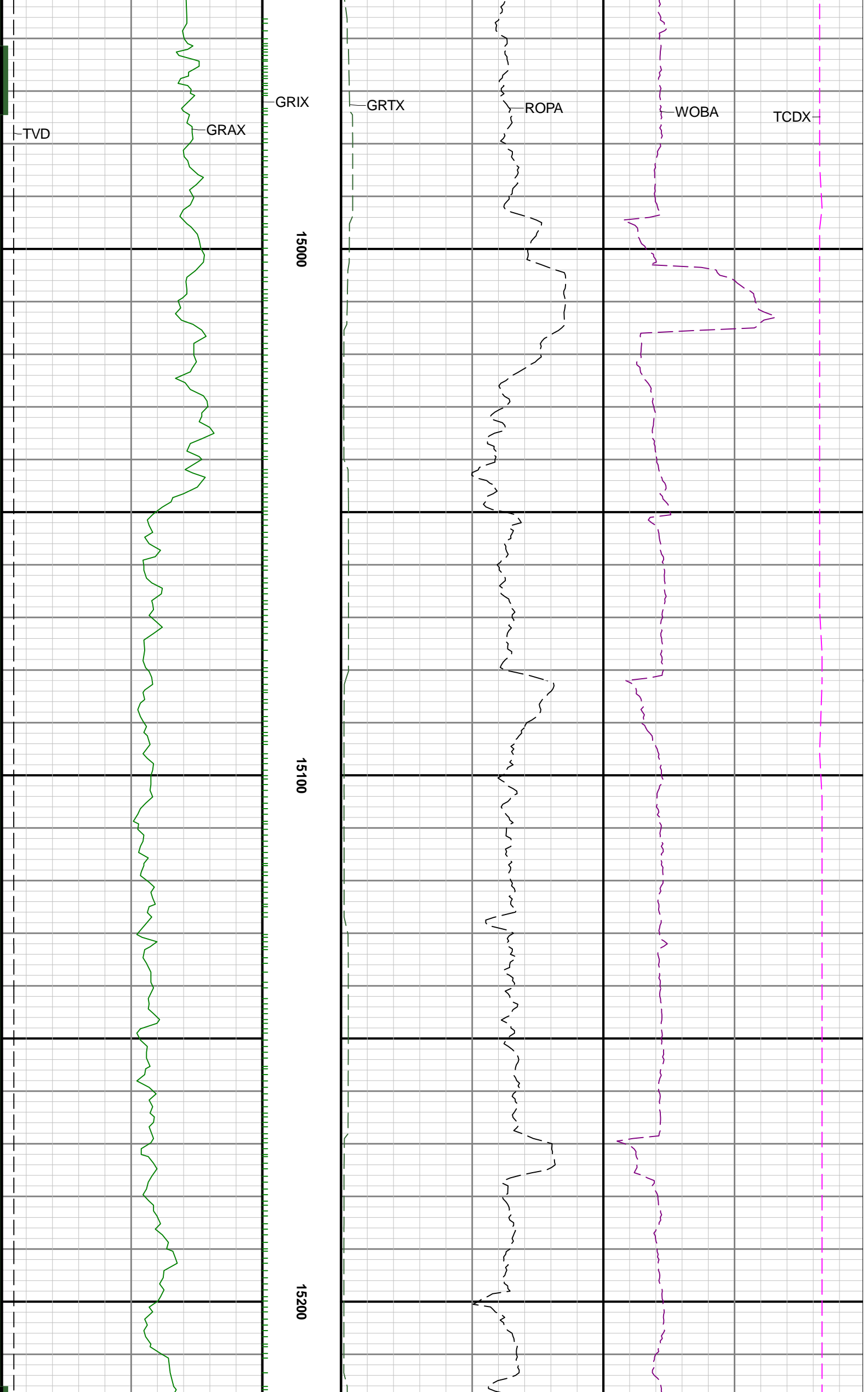


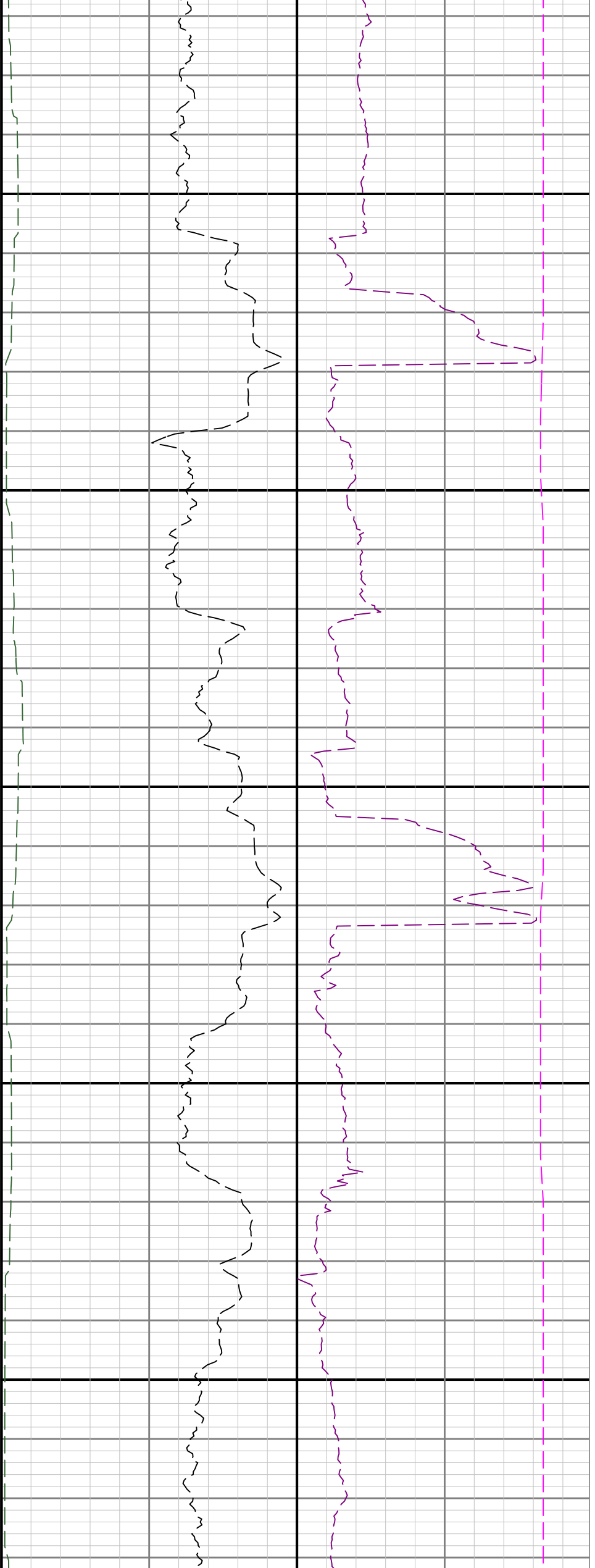
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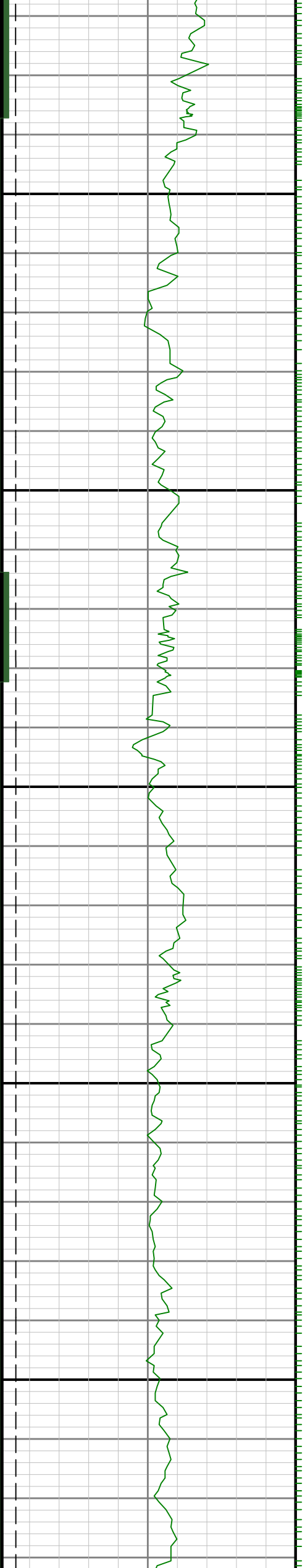
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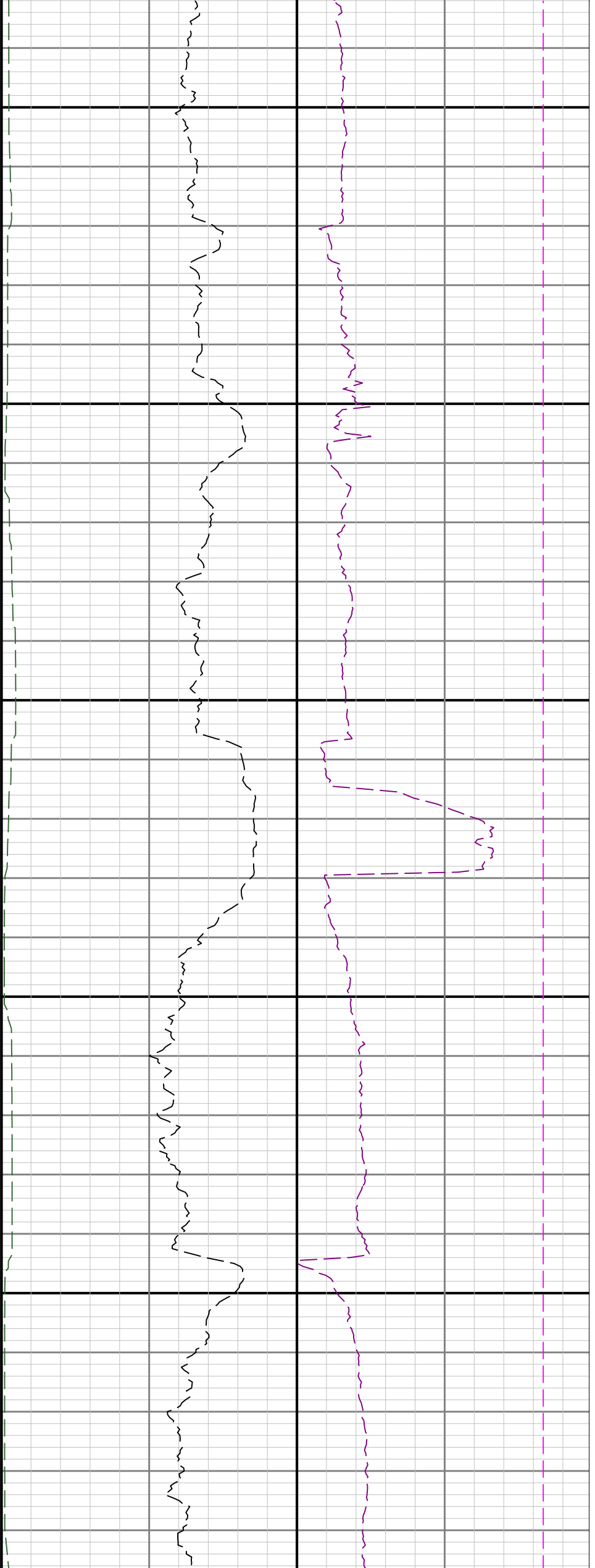




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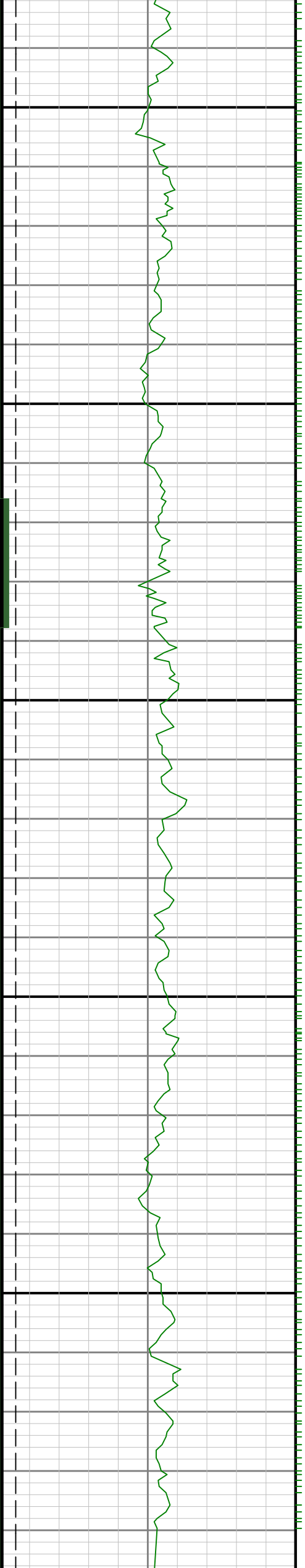


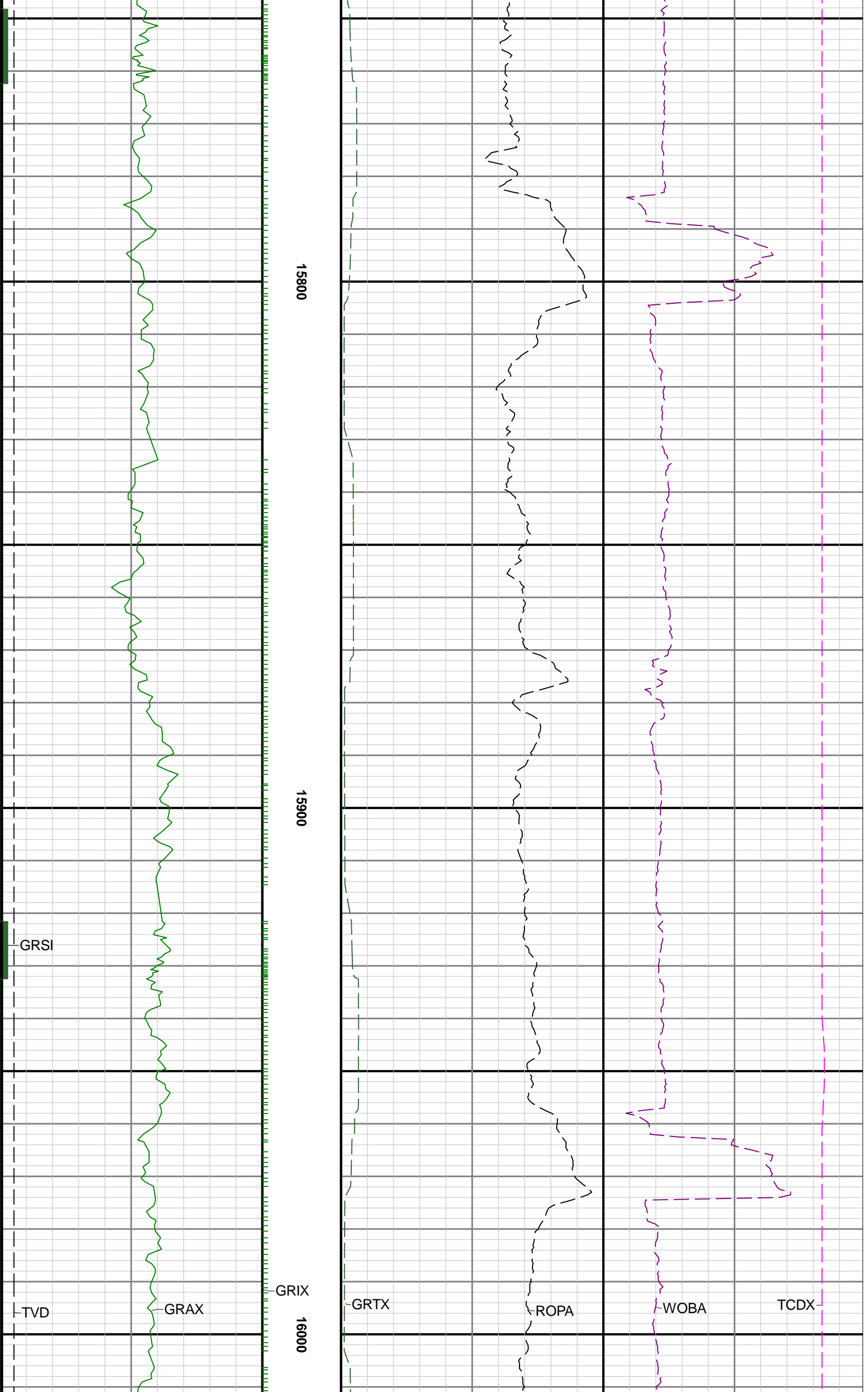


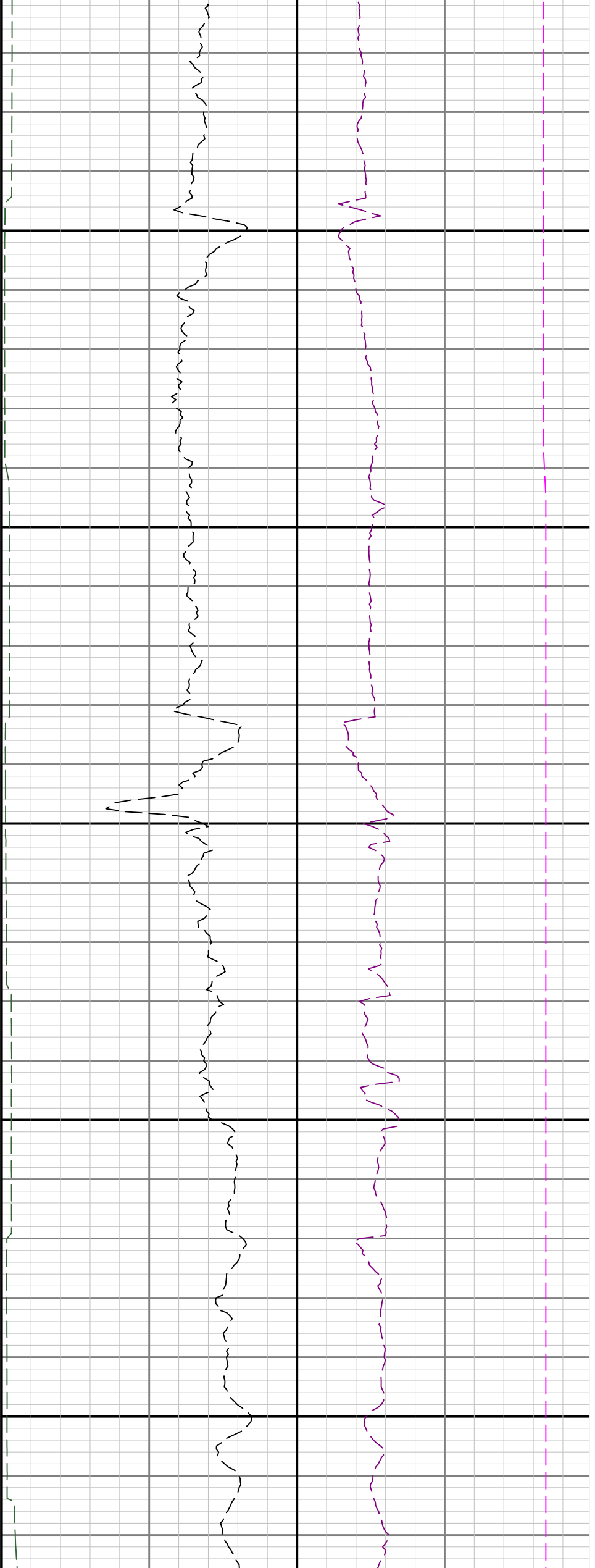
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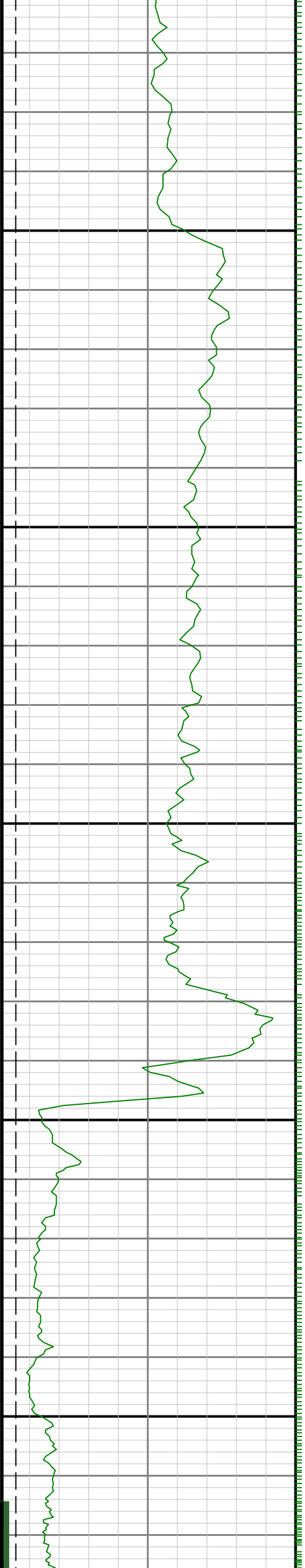


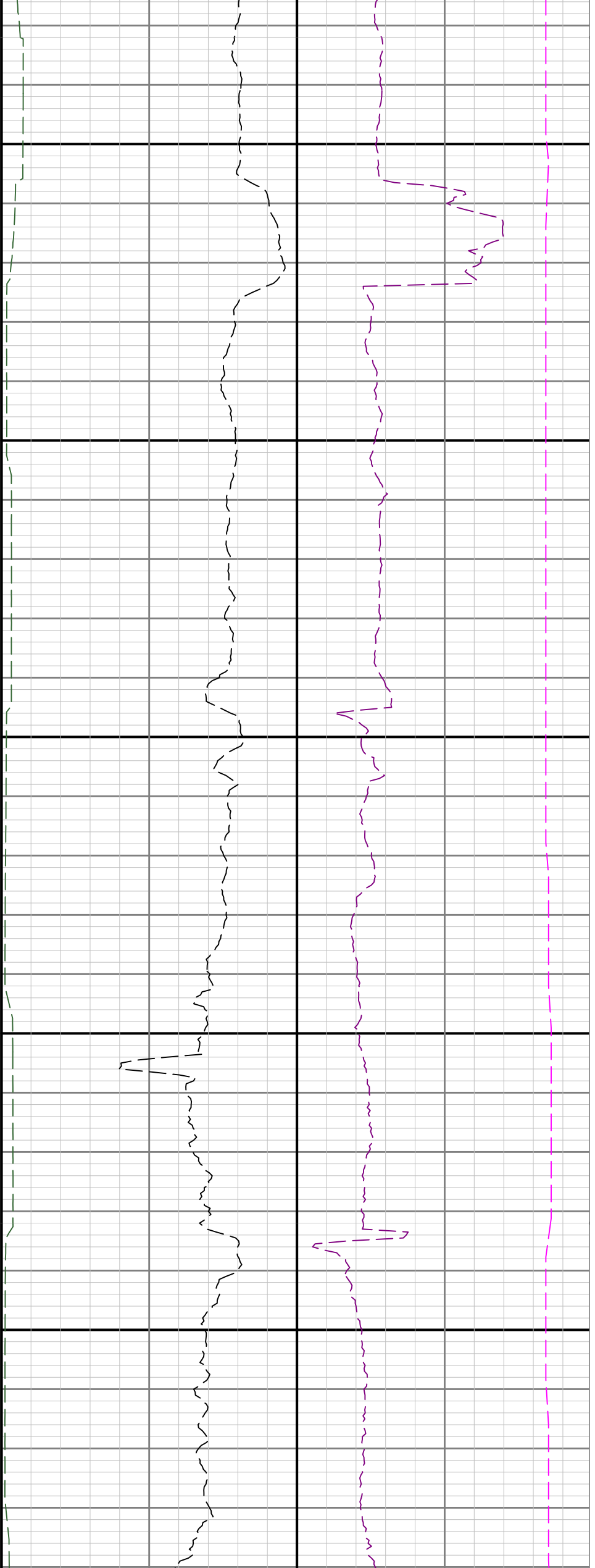




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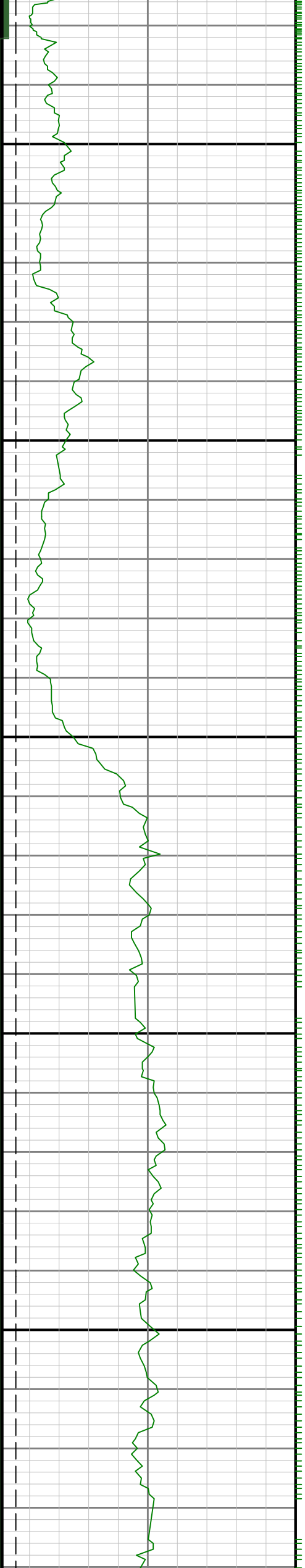


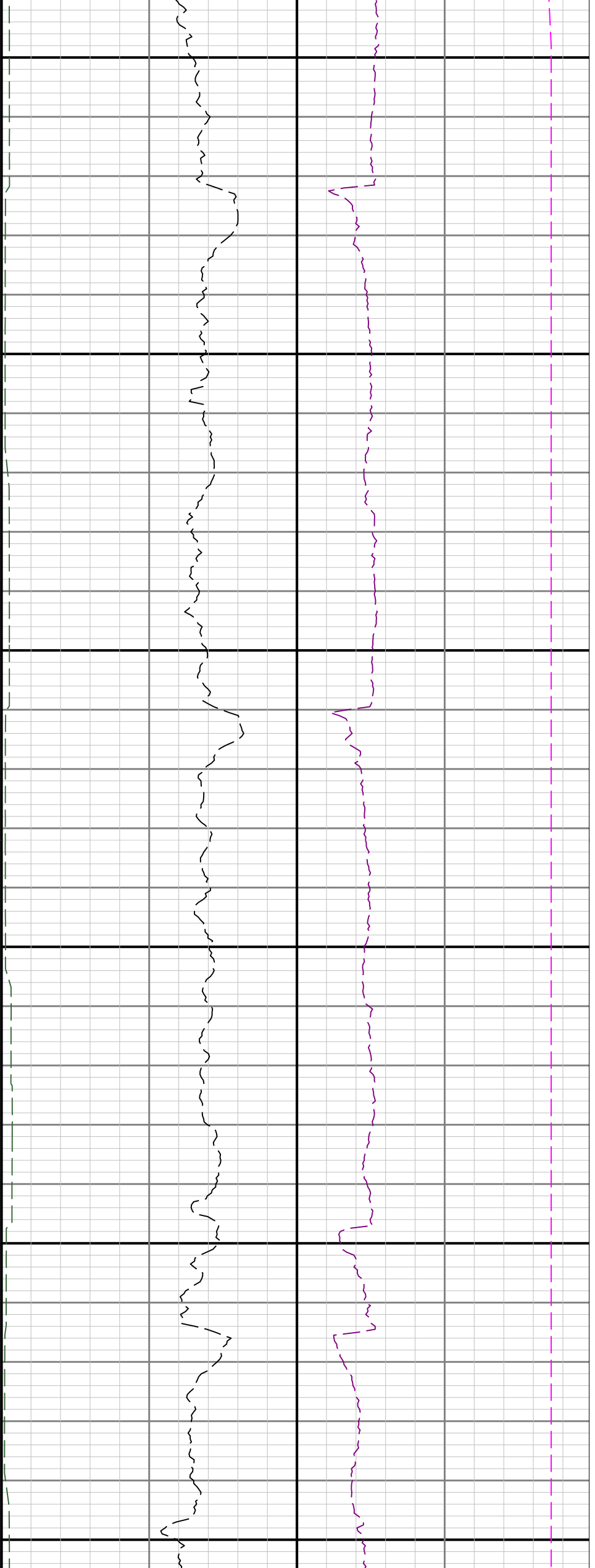


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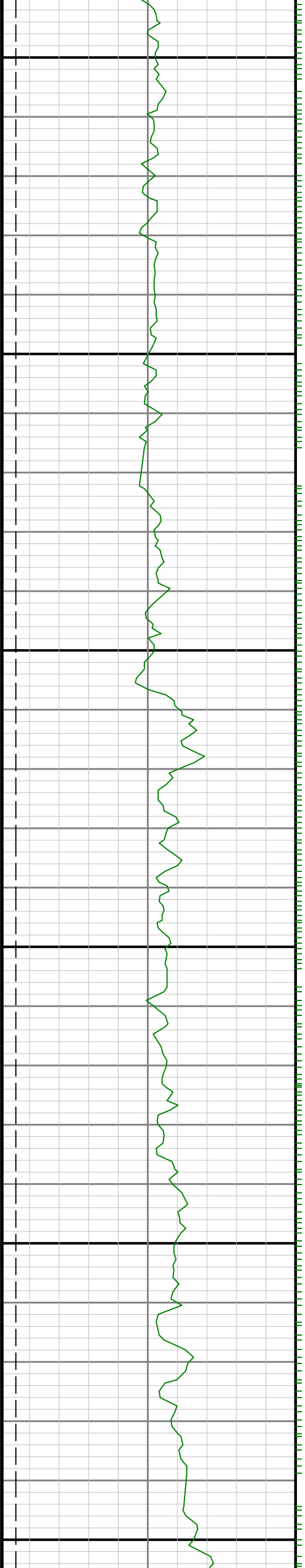


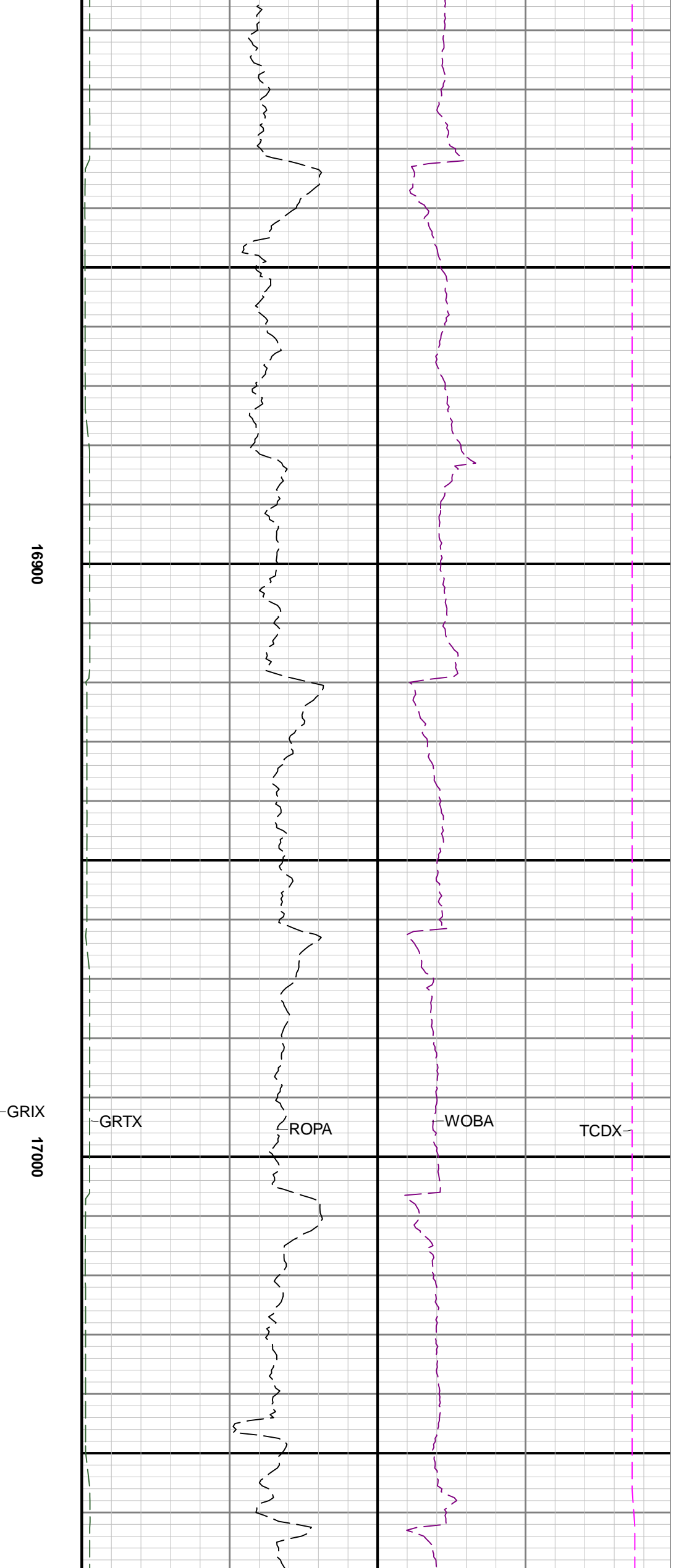
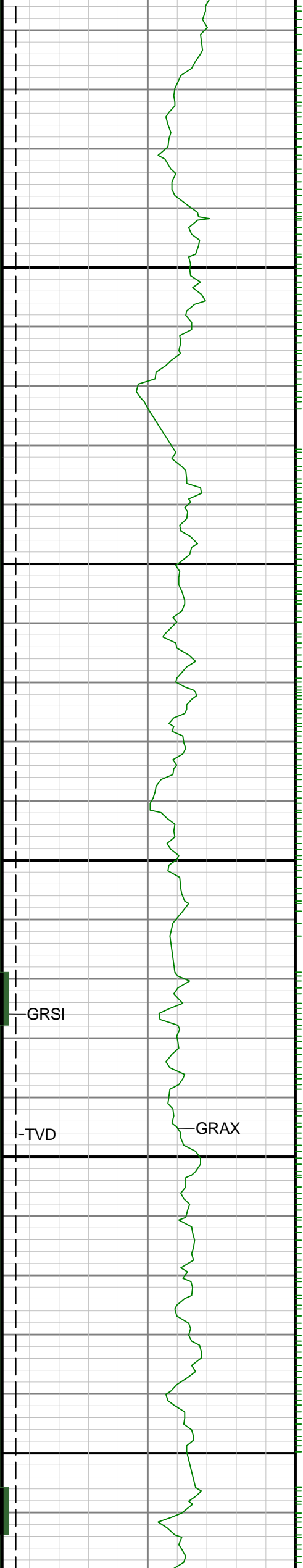


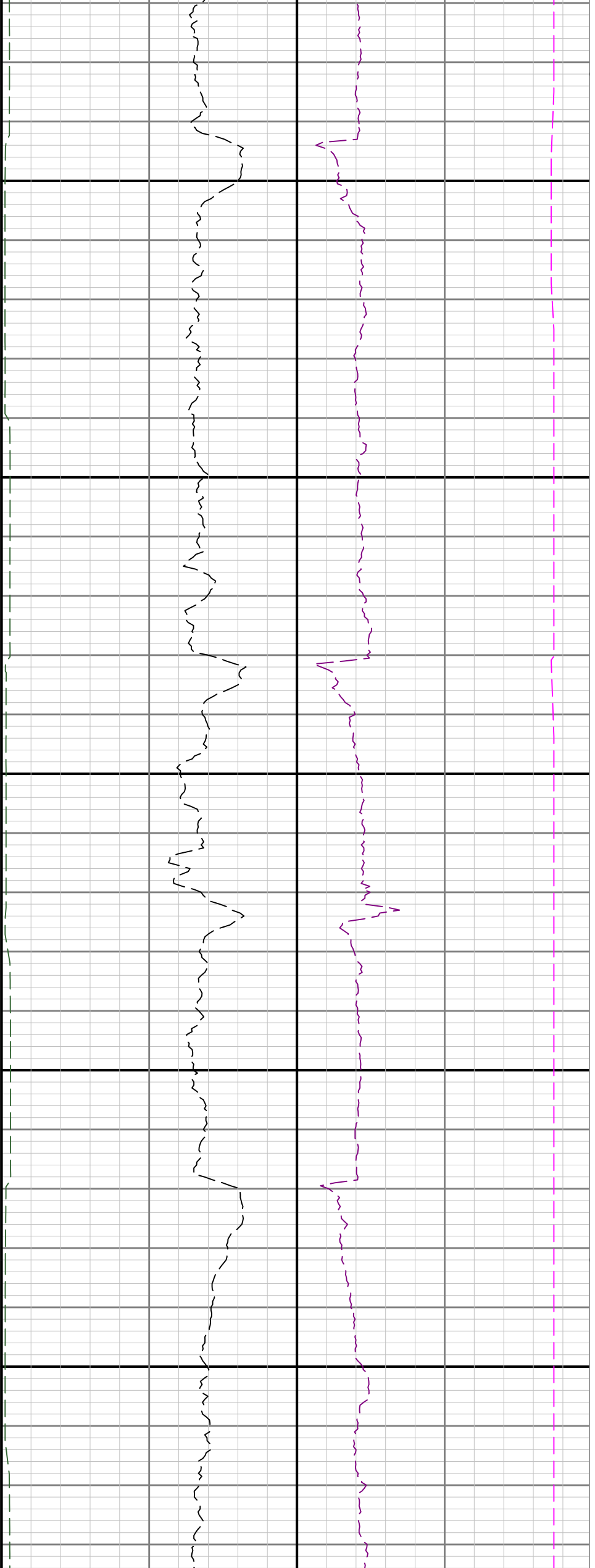
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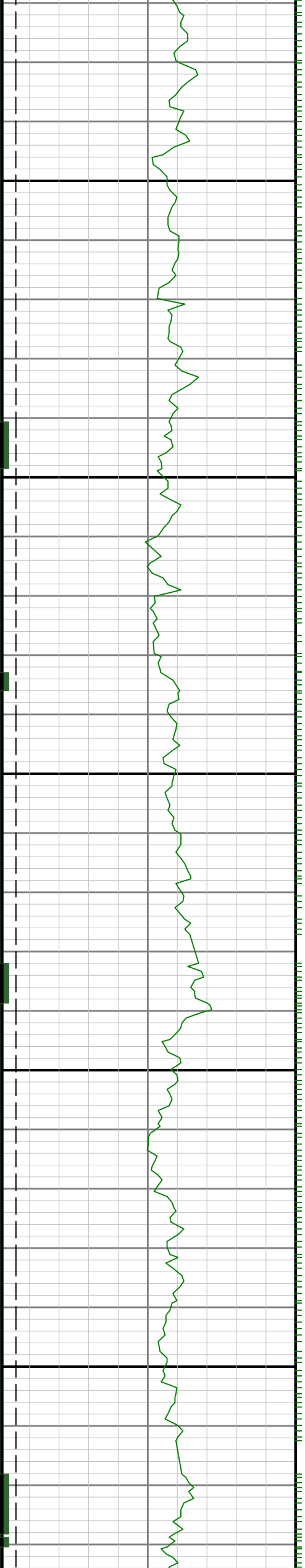


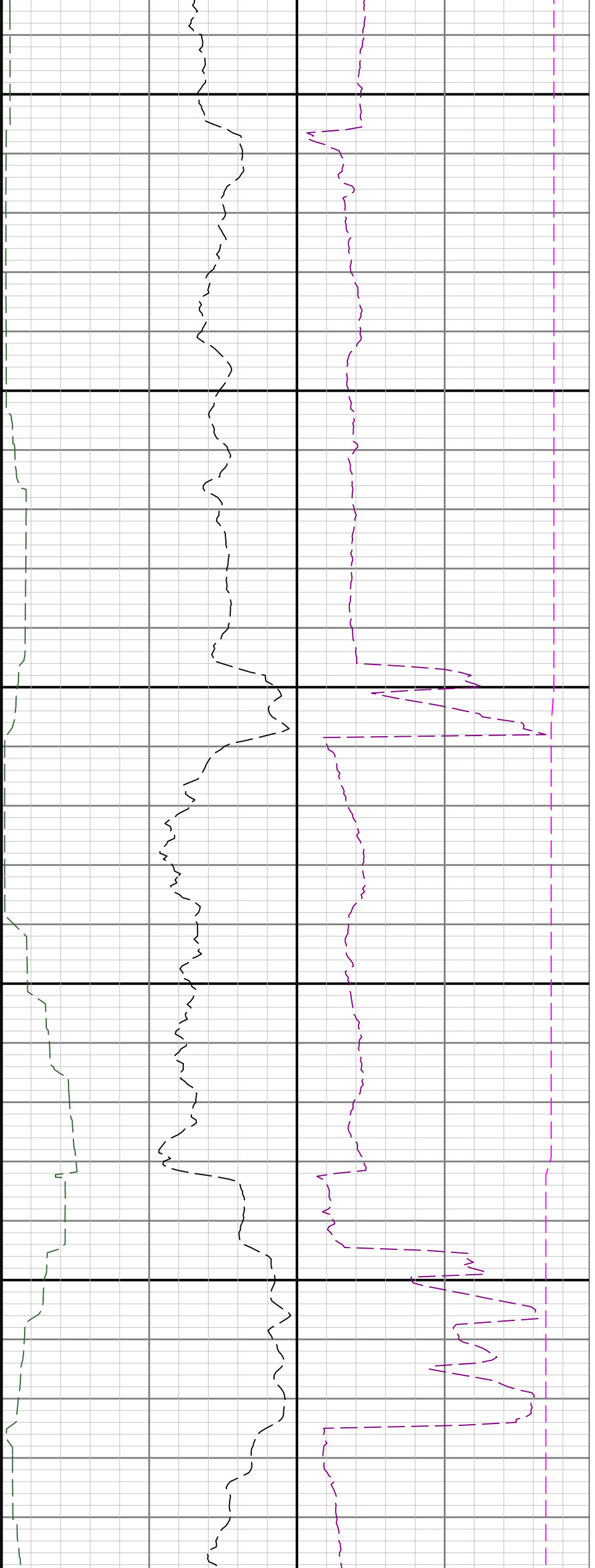


17100

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