



Gamma Ray

LWD REALTIME LOG

Scale: Company: Anadarko

1:240 Well: Damore 18-2HZ

Measured Depth Field: Wattenberg

Depth Reference: County: Weld Country: United States

Driller's Depth State: Colorado

Status: Surface Location: 40° 24' 03.532" N Other Services:

Final Print Latitude: 104° 56' 32.330" W Directional

API No: 05123507740000 SEC: 18 TWN: 5N RGE: 67W

Job ID: 110322398 Permanent Datum (P.D.): Mean Sea Level Elevation: 0.00 ft Elev. KB: N/A

Log Measured From: Rig Floor Above P.D.: 4948.00 ft Elev. DF: 4948.00 ft Elev. GL: 4922.00 ft

Dates Interval Magnetic Field Reference

From: 2020-03-10 To: 2020-03-13 Spud: 2020-03-13 Drilled (ft) 1894.00 Top: 1894.00 Bottom: 17737.00 Logged (ft) 1894.00 Top: 1894.00 Bottom: 17681.00 Azi Reference North: True Dip Angle: (deg) 66.53 Total Magnetic Field Strength: (nT) 52363 Mag to Reference North Correction: (deg) 7.99

Borehole Record Casing Record

Hole Size (in)	From (ft)	To (ft)	Size (in)	Weight (lb/ft)	From (ft)	To (ft)
13.500	26.00	1894.00	9.625	36.00	26.00	1884.00
7.875	1894.00	17737.00				

Mud Record Deviation Record

Type	From (ft)	To (ft)	Hole Size (in)	Interval (ft)	Inc Az (Start)	Inc Az (End)
Synthetic Based Mud	1894.00	17737.00	7.875	15843.00	20.68 271.30	88.98 86.55

Acquisition System Software Version Other

Cadence RT 5.5 Precision 564 Rig: Contractor: Precision Drilling Unit: D&E
Plot Studio 5.5.8765.1 District: RMA

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Log Run Summary

Run No	Bit Run No.	Bit Size (in)	Bit Type	Bit Gauge Length (in)	Assembly Type	Logged Interval		Bit Depth Interval		Date / Time		Circ. Hours (h)
						Top (ft)	Bottom (ft)	From (ft)	To (ft)	Start Logging	End Logging	
1	1	7.875	PDC	3.00	Steerable	1894.00	17681.00	1894.00	17737.00	2020-03-10 01:26	2020-03-13 16:45	53.09

Crew

Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite
Joshua Monroe	2020-03-10	2020-03-13	Matt Yule	2020-03-10	2020-03-13			

Mud Properties Record

Date / Time	Run No.	Depth (ft)	Mud Type	Density (ppg)	Viscosity (cP)	pH	Fluid Loss (cm3)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
2020-03-11 16:00	1	6342.00	Synthetic Based Mud	9.3	17	N/A	N/A	77.7/22.3	Active Pit	50095	0.00
2020-03-12 16:00	1	12667.00	Synthetic Based Mud	9.3	17	N/A	N/A	77.5/22.5	Active Pit	51643	0.00

Equipment and Service Data

Run No.	Tool	Serial Number	Measurement	Sensor Offset (ft)	Bit Offset (ft)	Max O.D. (in)	Min I.D. (in)
1	EvoOne	G650-0315	Gamma (single)	8.18	56.01	6.500	0.000
1	EvoOne	G650-0315	Directional (mag)	9.37	57.20	6.500	0.000

Service and Tool Mnemonics

Mnemonic	Name	Description
MWD	EvoOne - Dir Gamma	EvoOne

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.

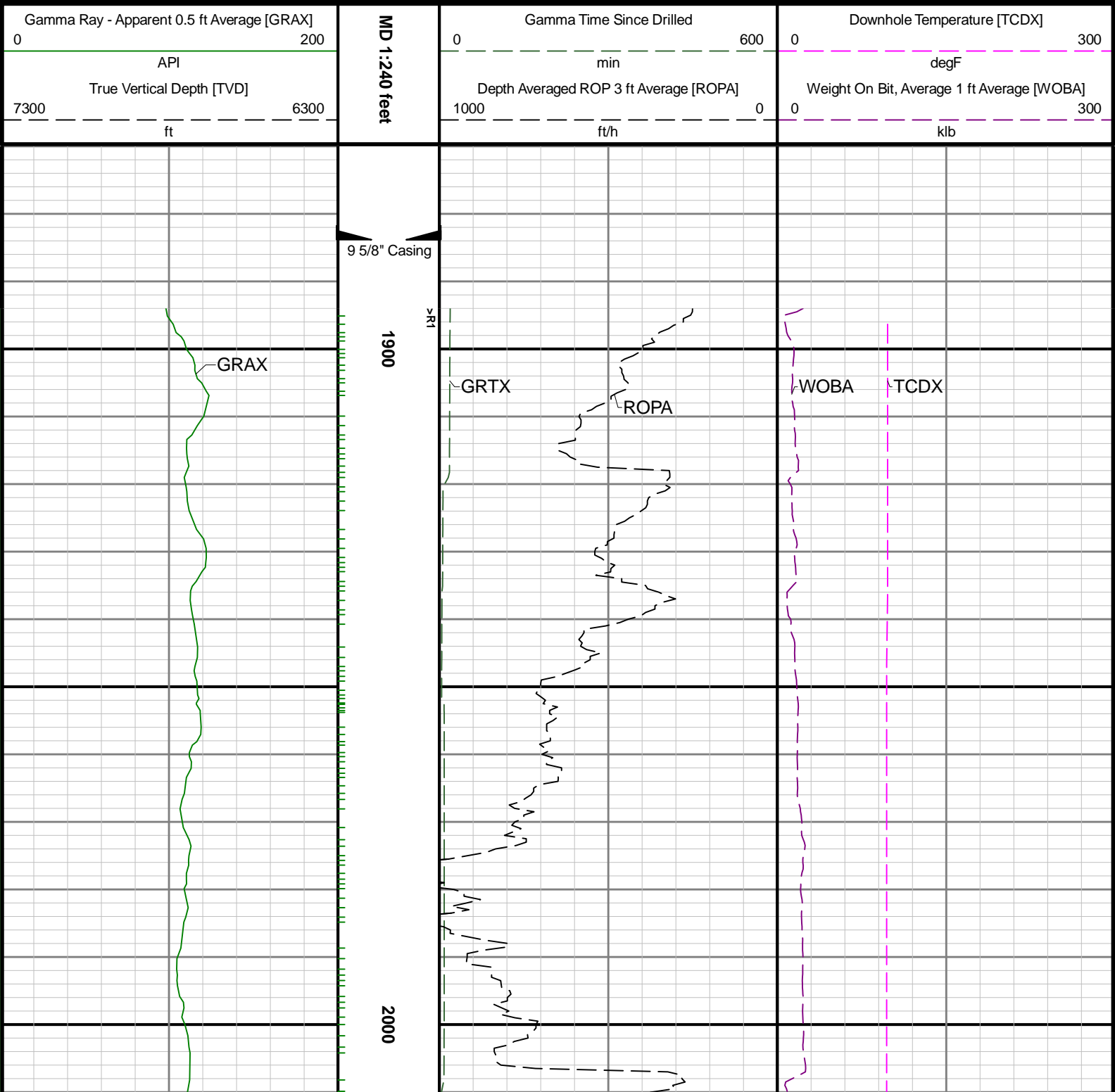
3 Baker Hughes run 1 utilized 6.50 inch NaviTrak UT services (Gamma Ray and Directional) behind a 7 7/8 inch bit and steerable assembly from 1894 to 17737 feet MD (1850 to 7238 feet TVD).

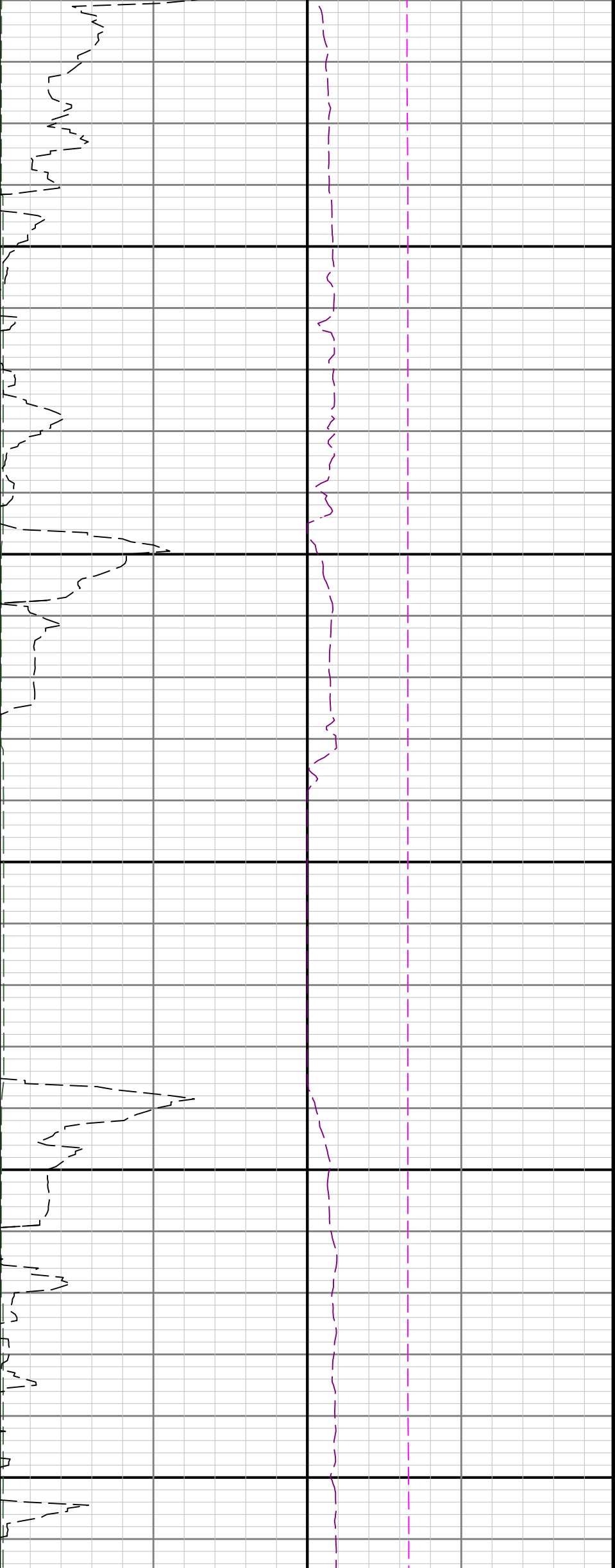
4 Gamma Ray (GRAX) scale is presented 0 to 200 API per customer request.

Remarks				
Number	Depth	Hole Section	Run No.	Remark
	(ft)	(in)		
1	17681.00	7.875	1	The interval from 17681 to 17737 feet MD (7238 feet TVD) was not logged due to sensor to bit offset at the end of 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 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

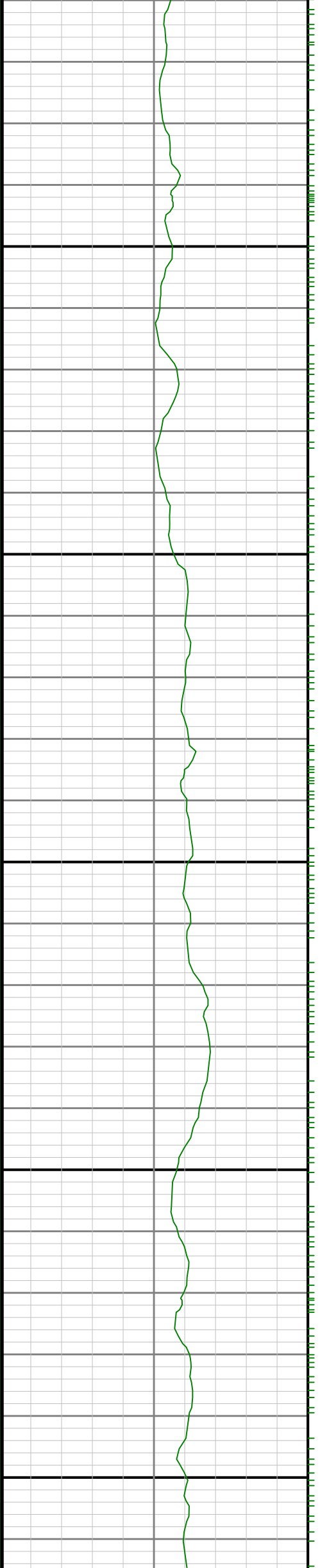
	Company	Anadarko			
	Well	Damore 18-2HZ			
	Interval	Date From:	2020-03-10 01:26	Interval Drilled: (ft)	1894.00 - 17737.00
	Created	Date To:	2020-03-13 16:53	Interval Logged: (ft)	1894.00 - 17681.00
		Created	2020-03-13 17:02:08		

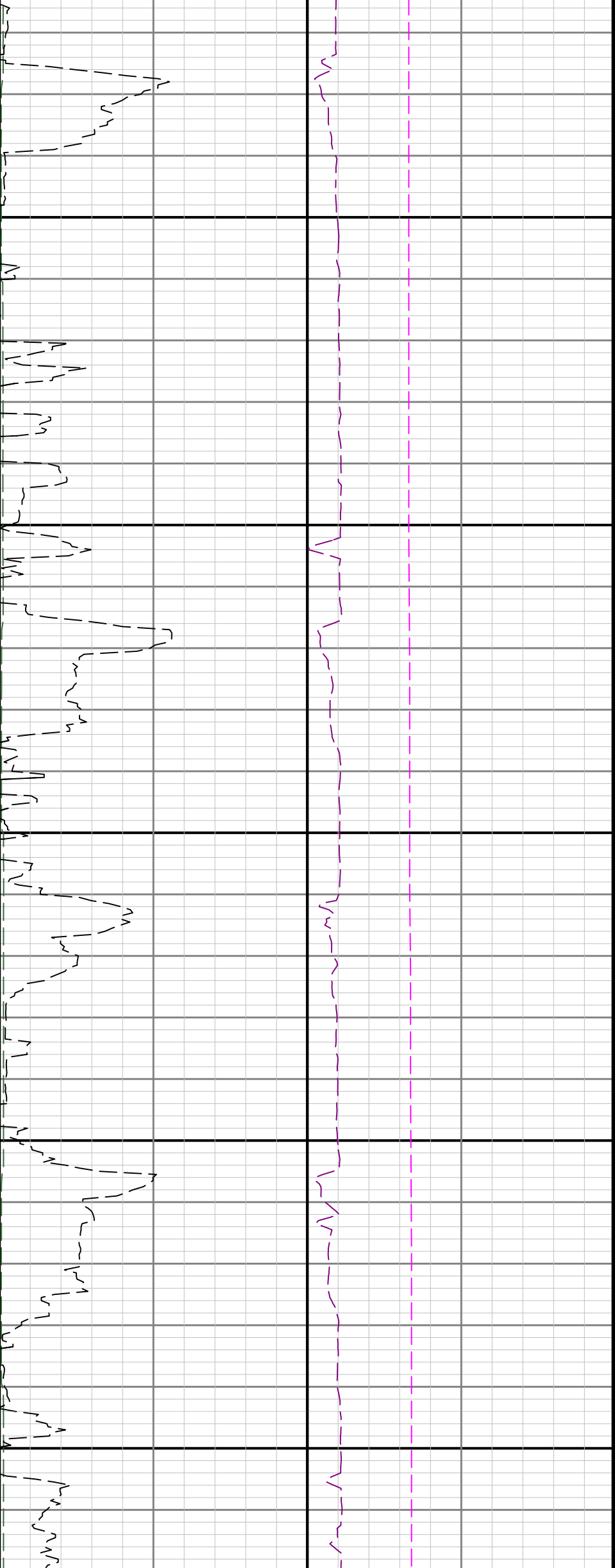




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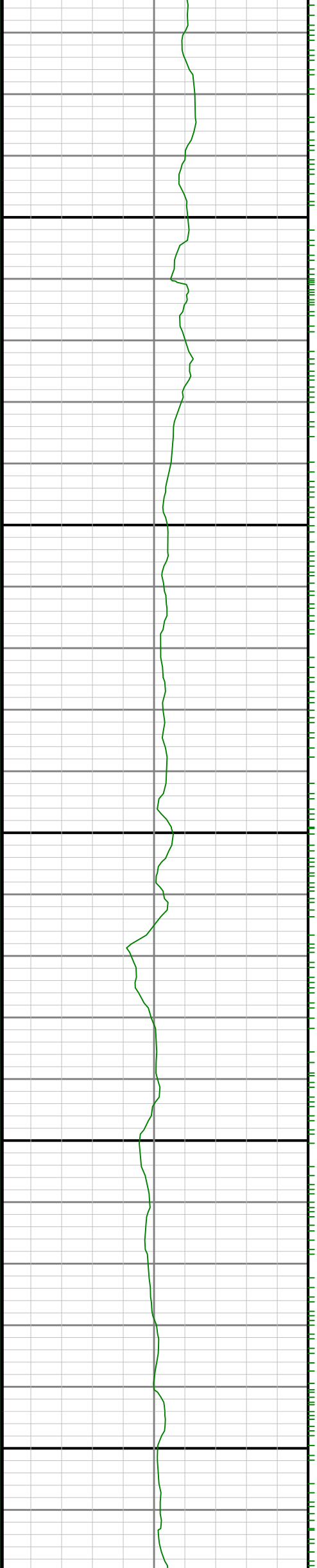


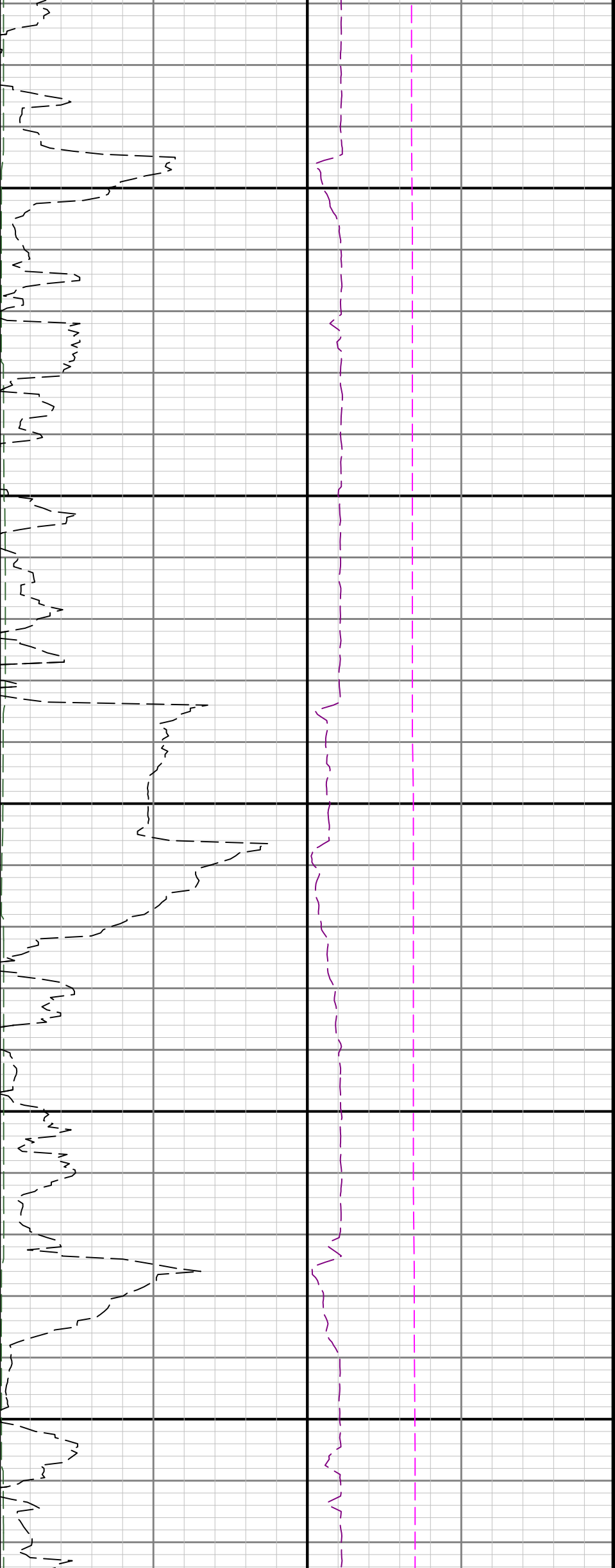


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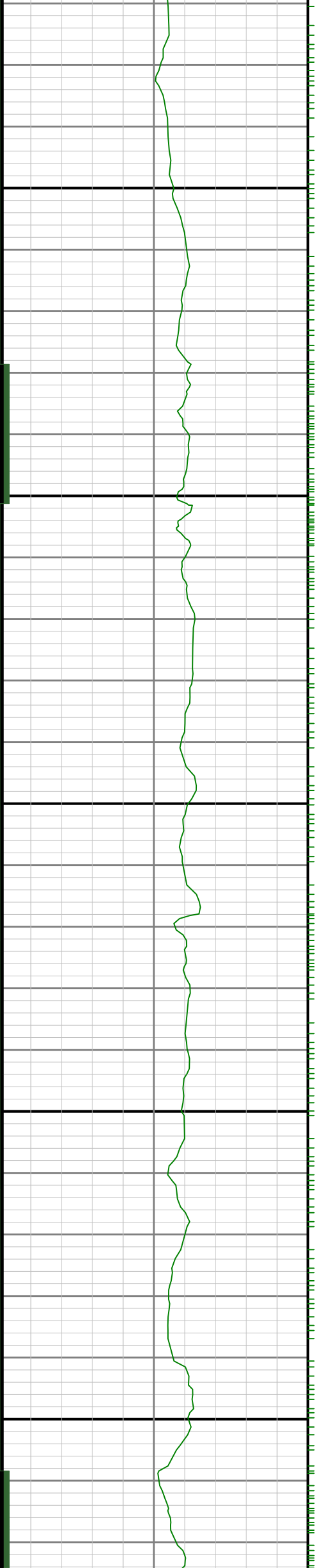
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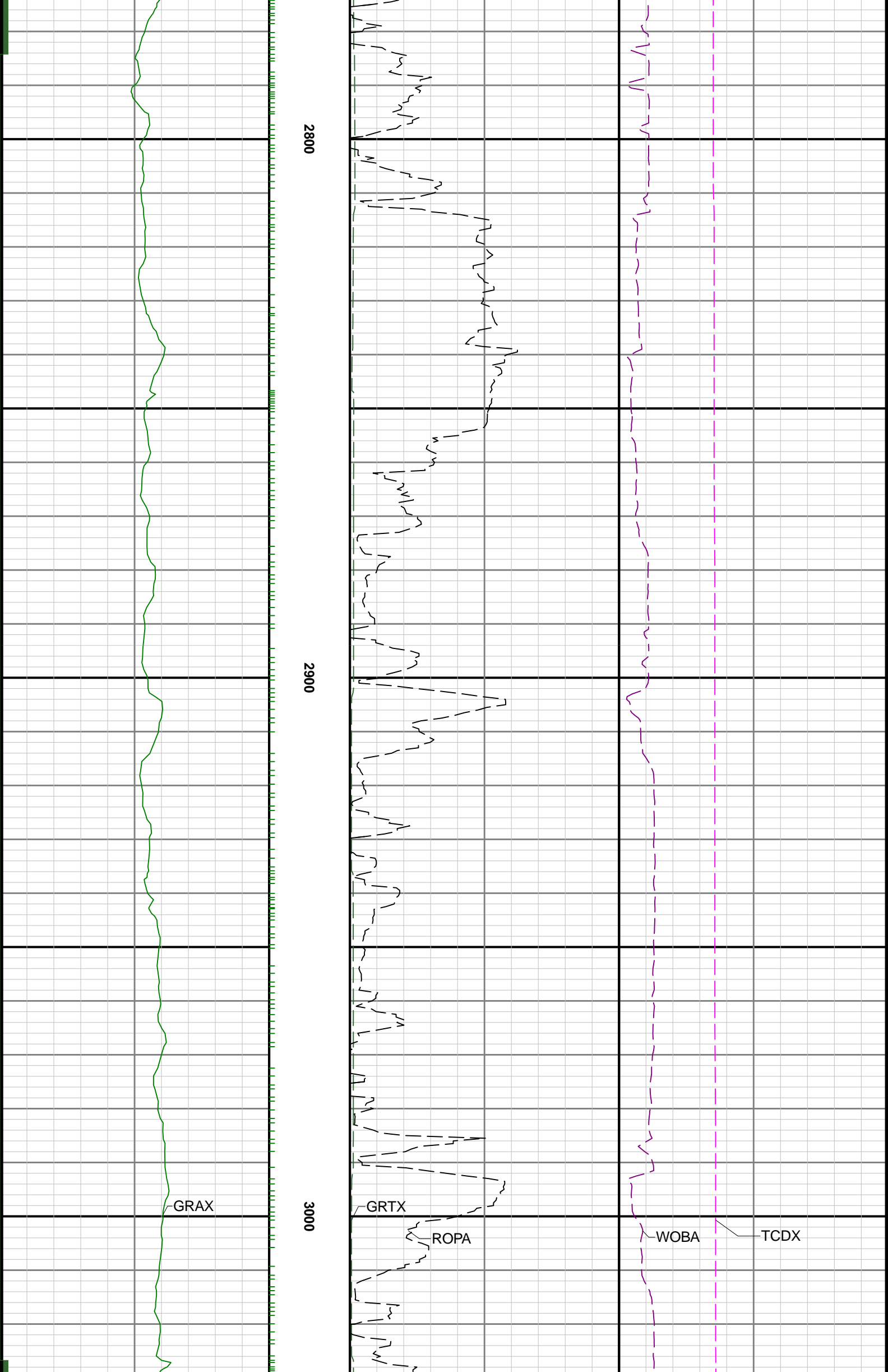


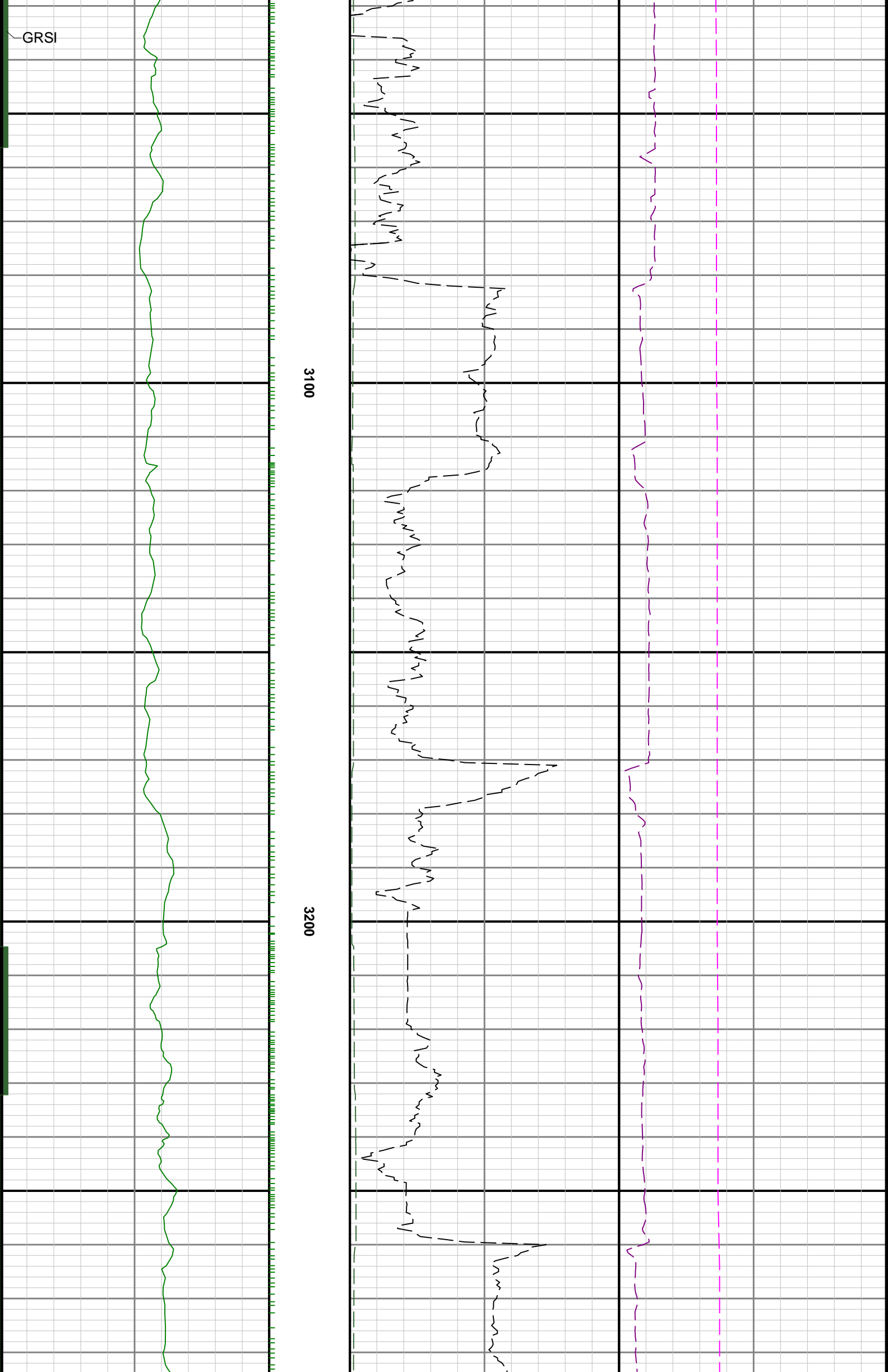


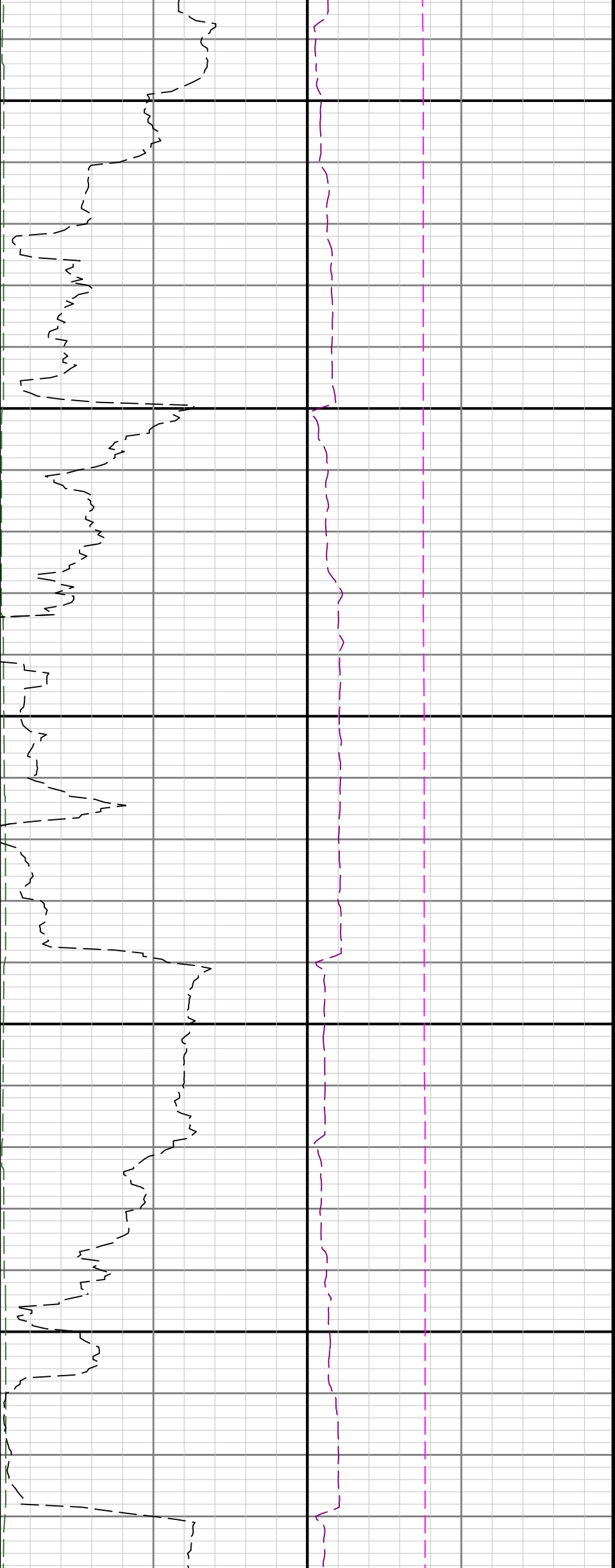
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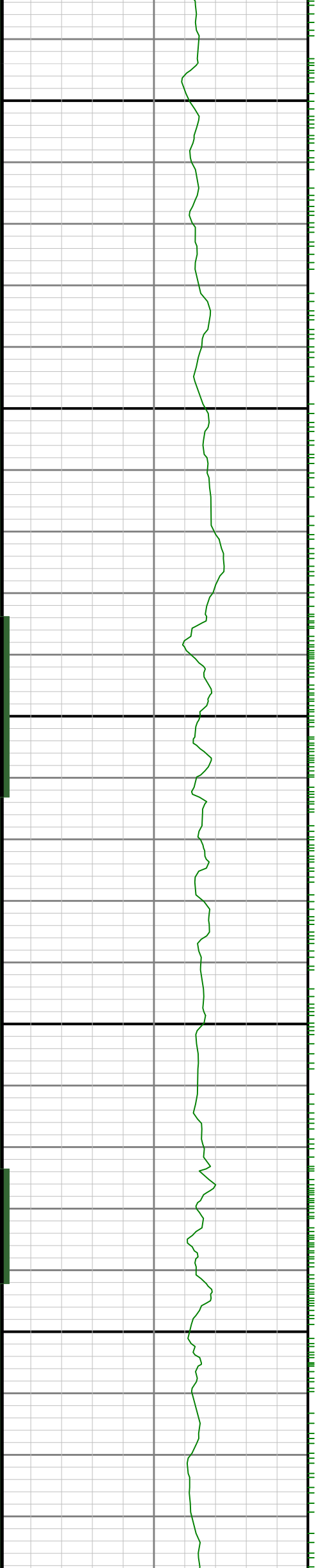


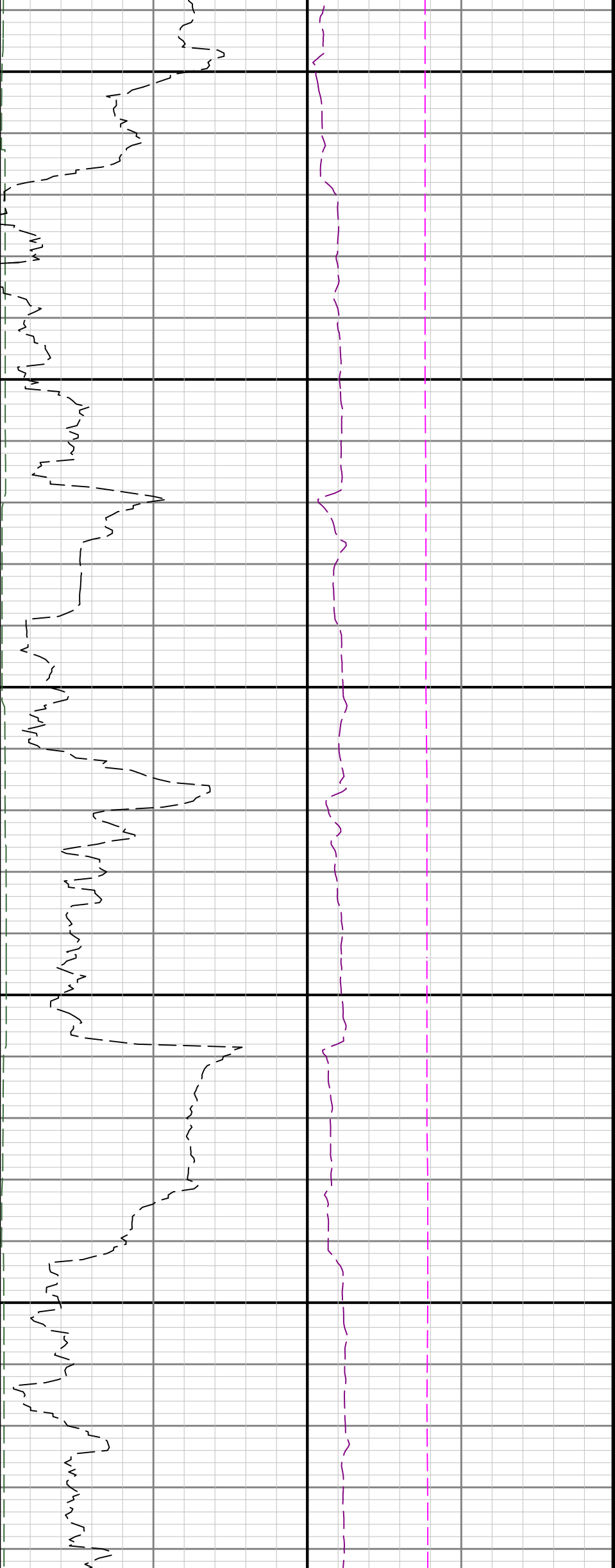


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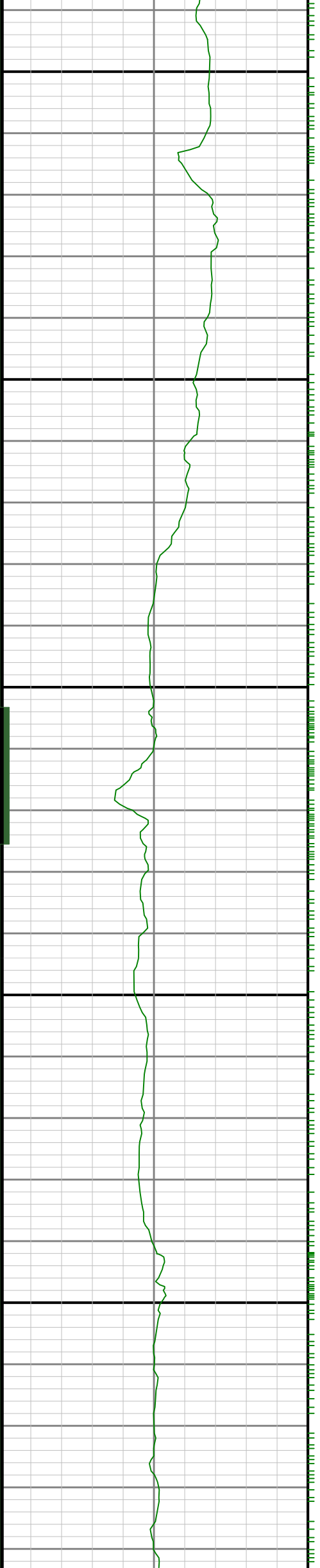
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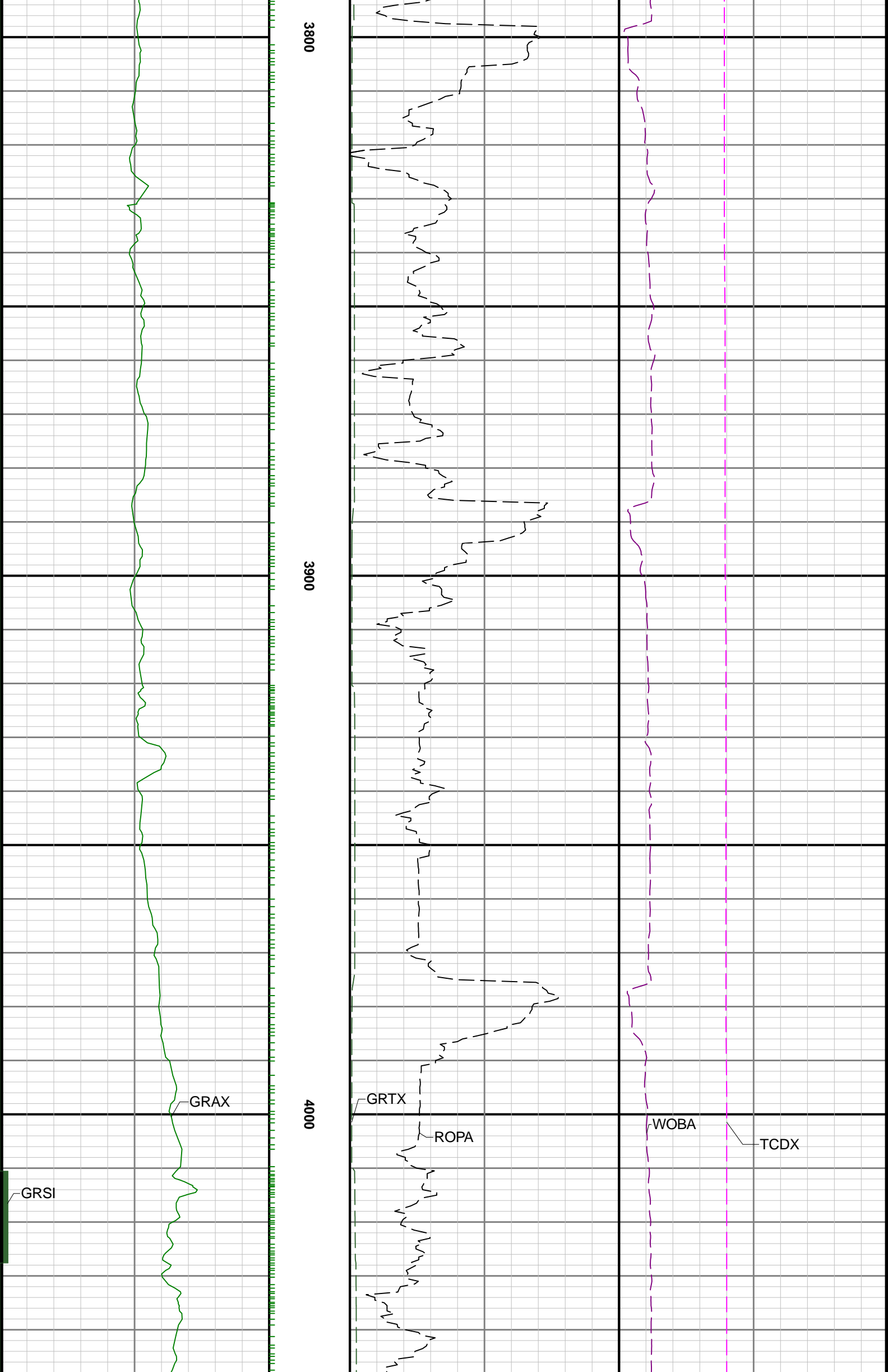


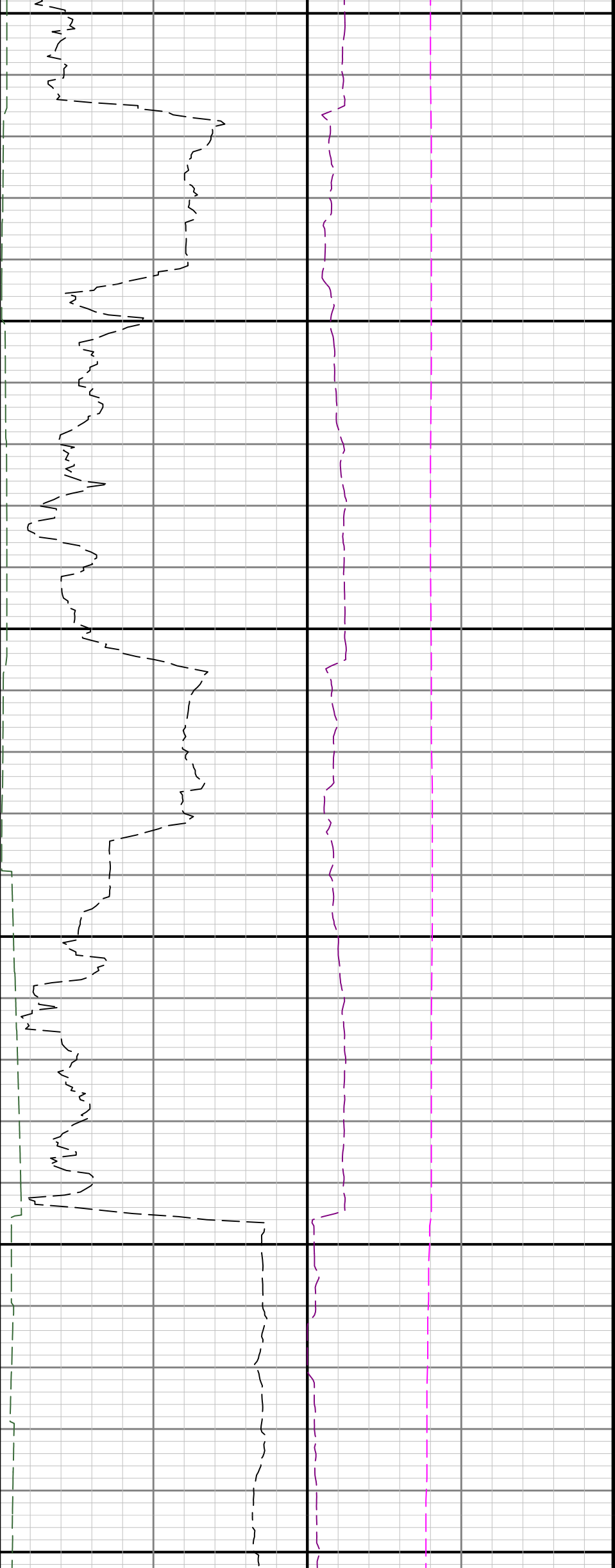


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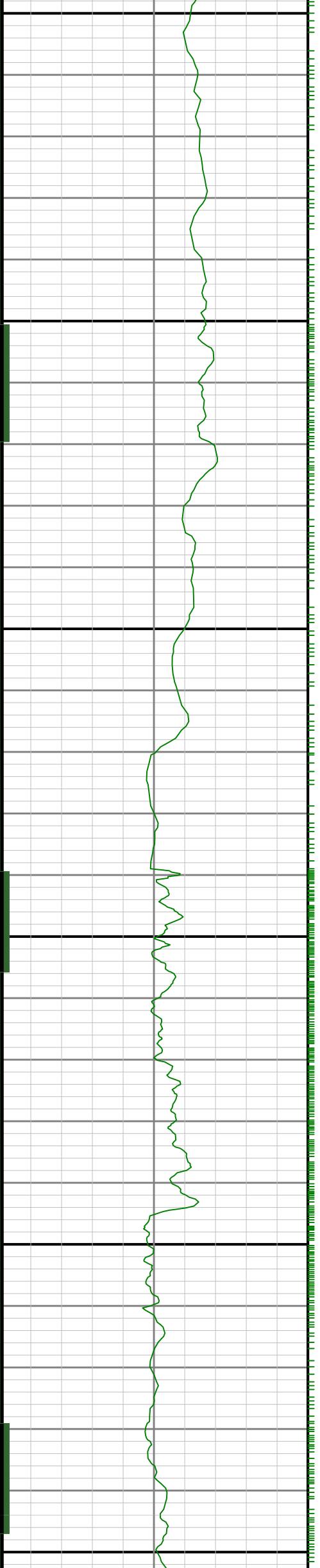


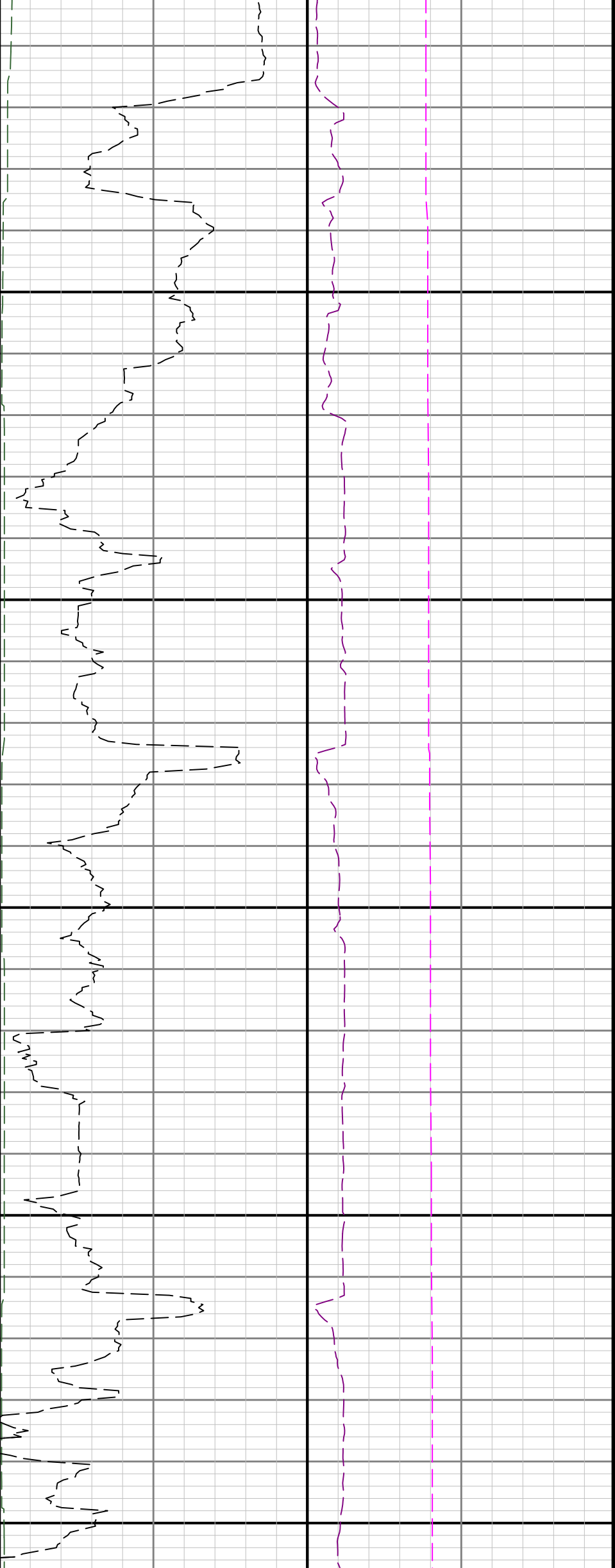


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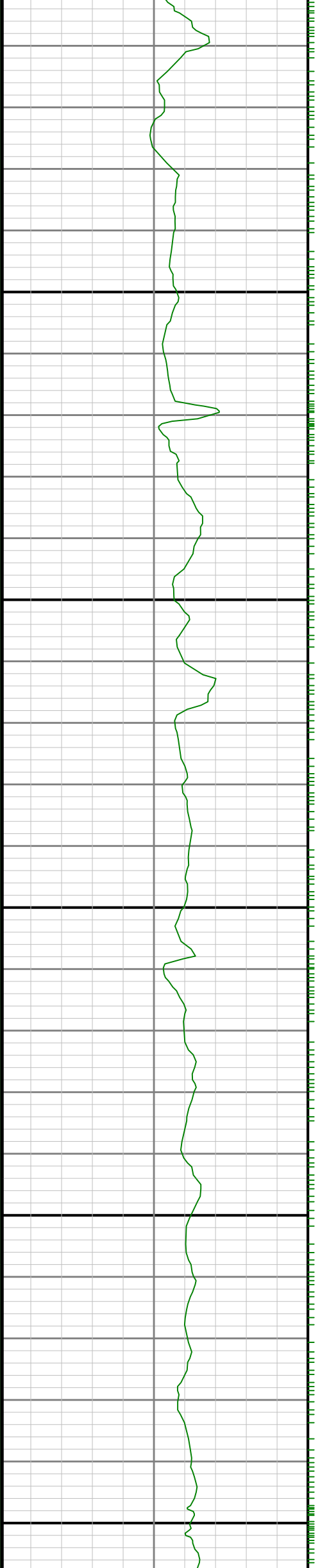
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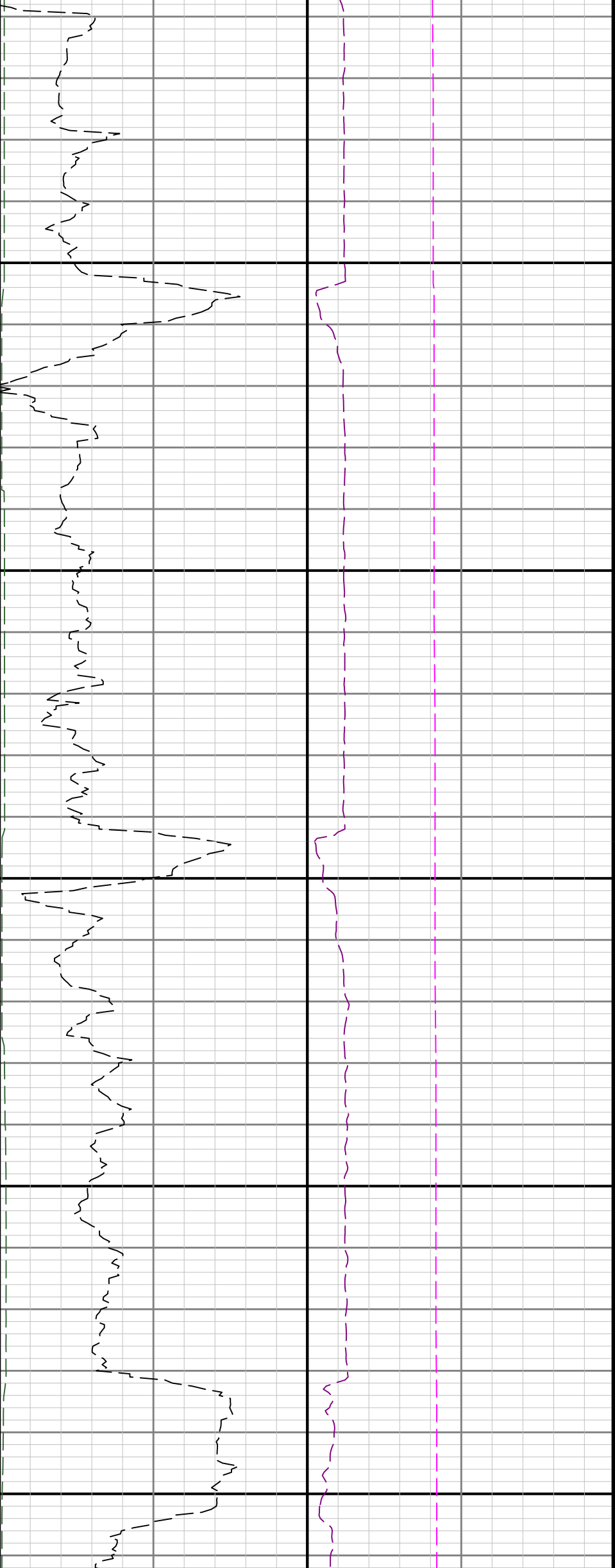




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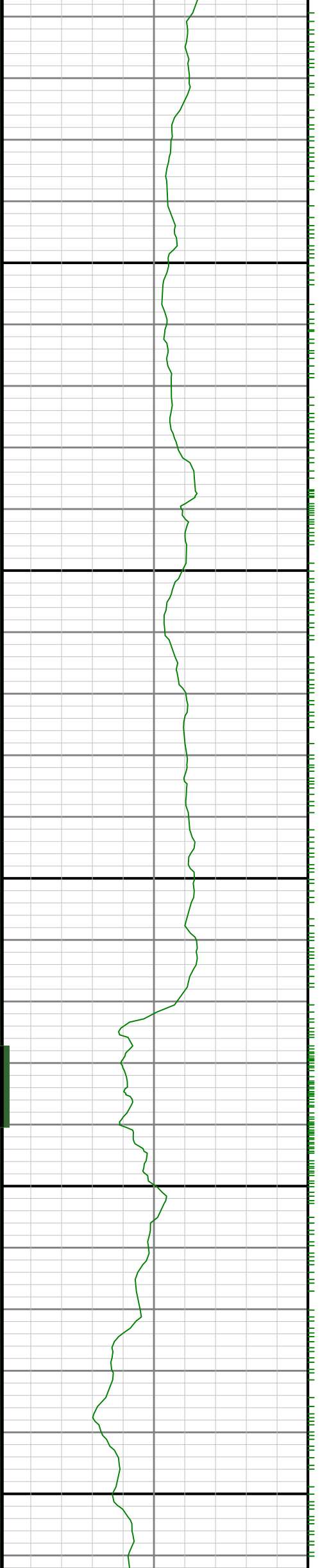


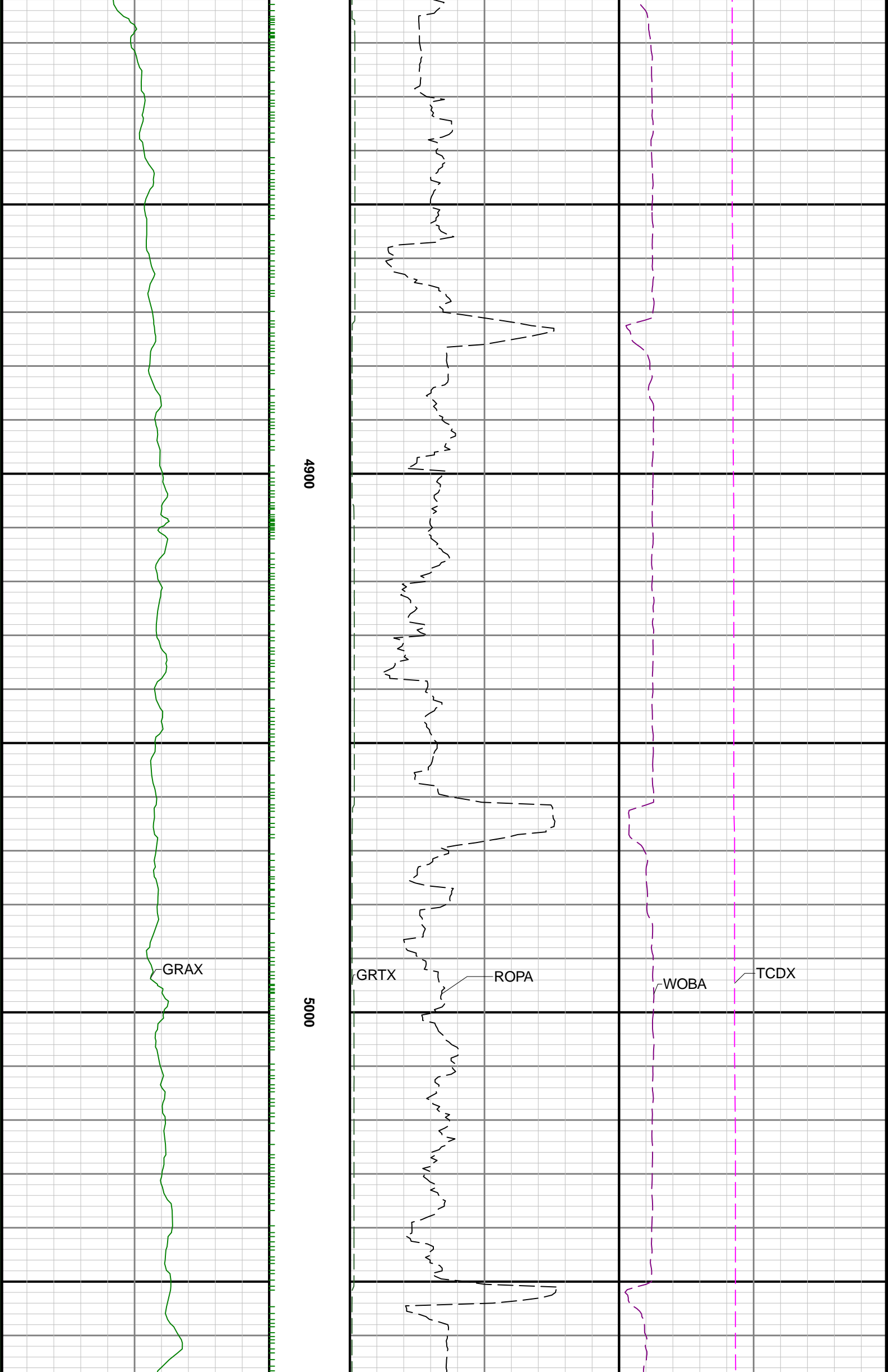


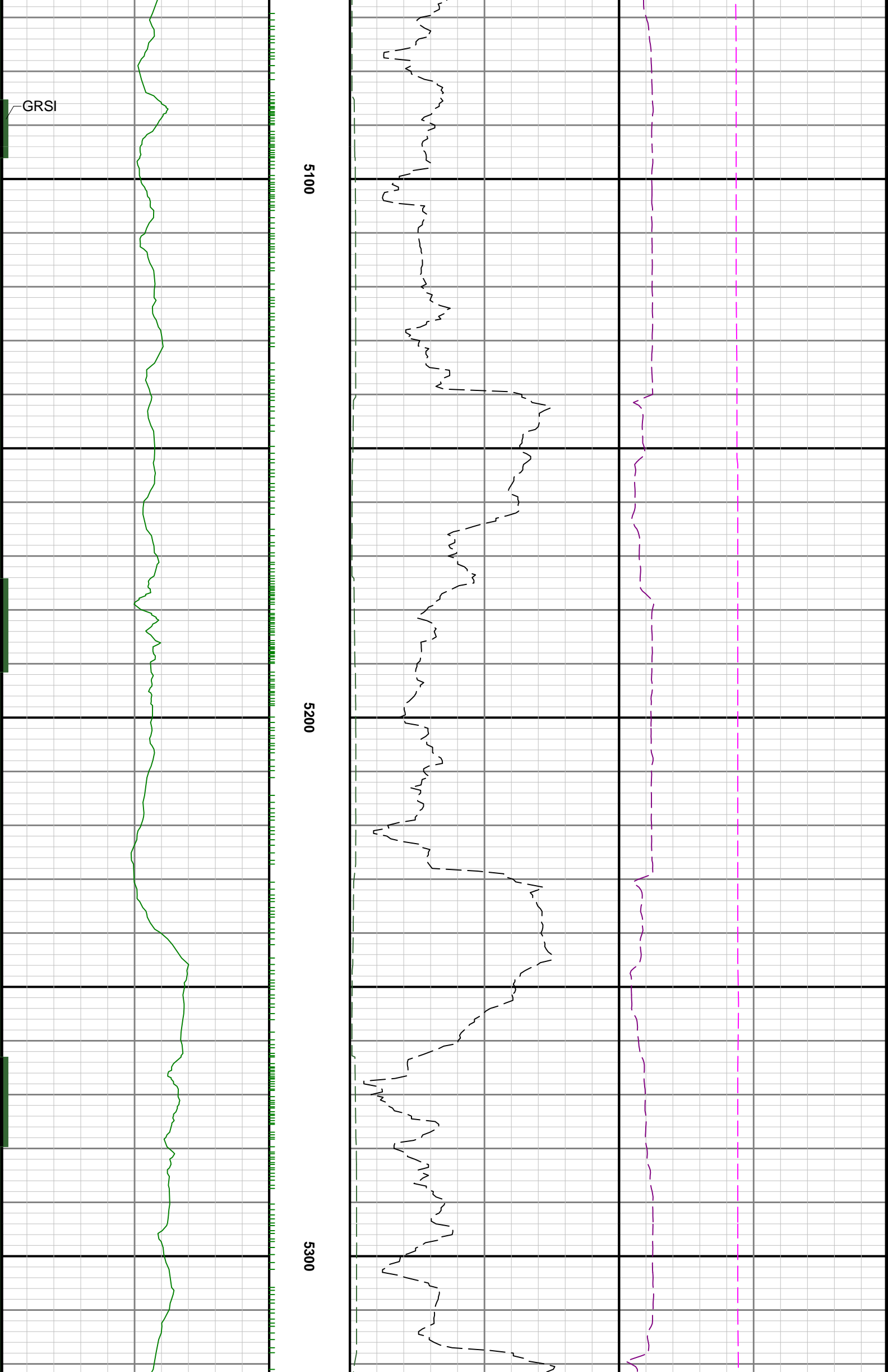
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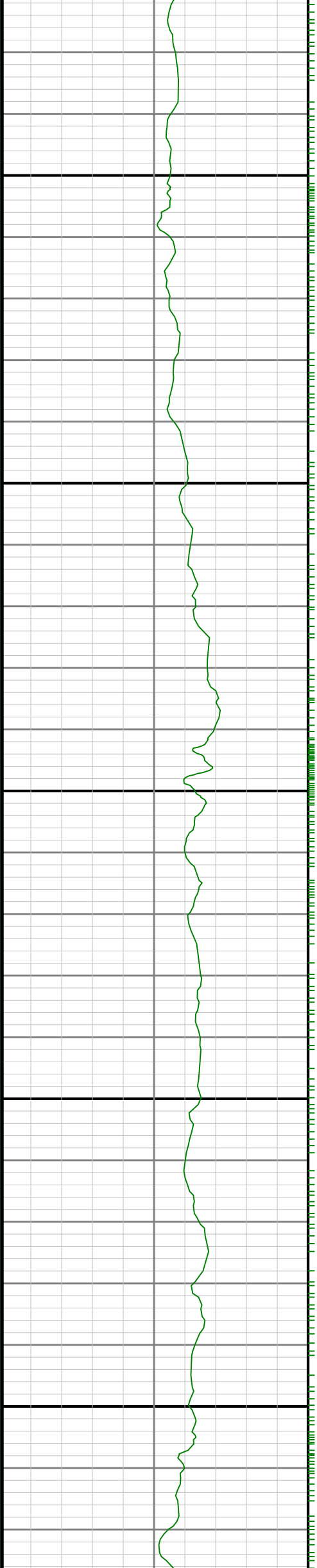


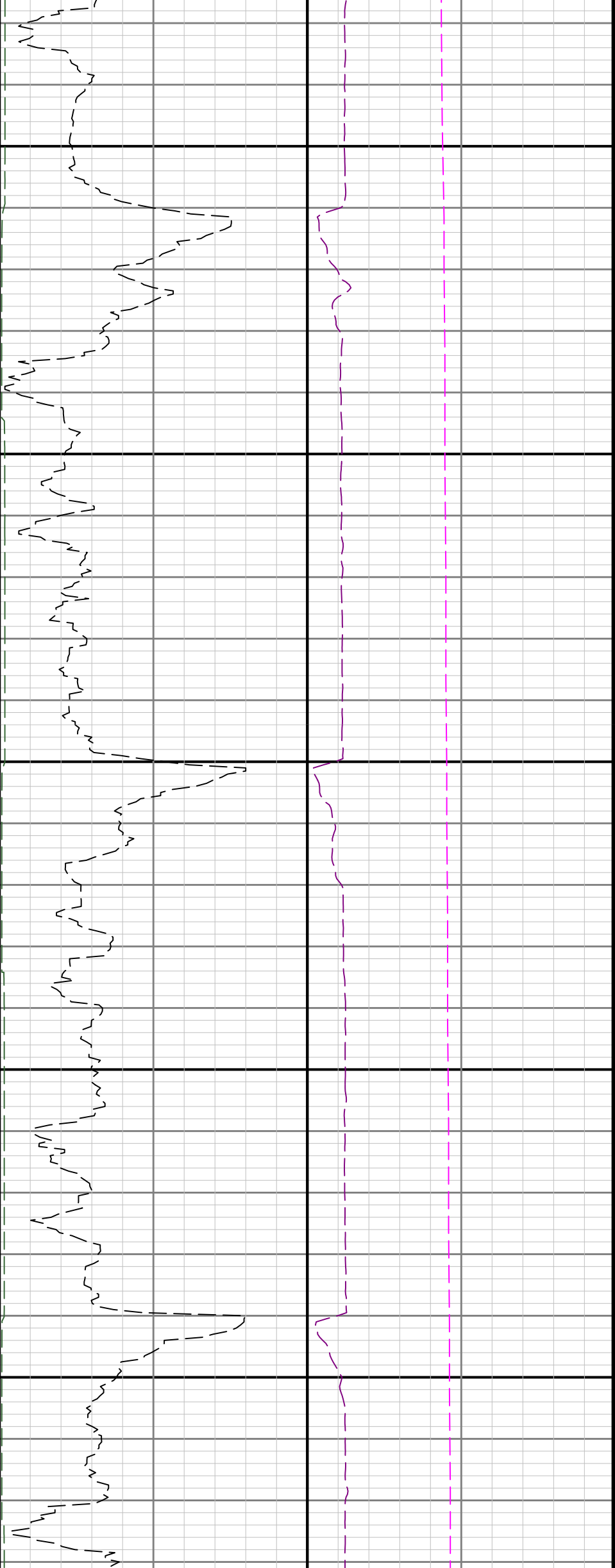




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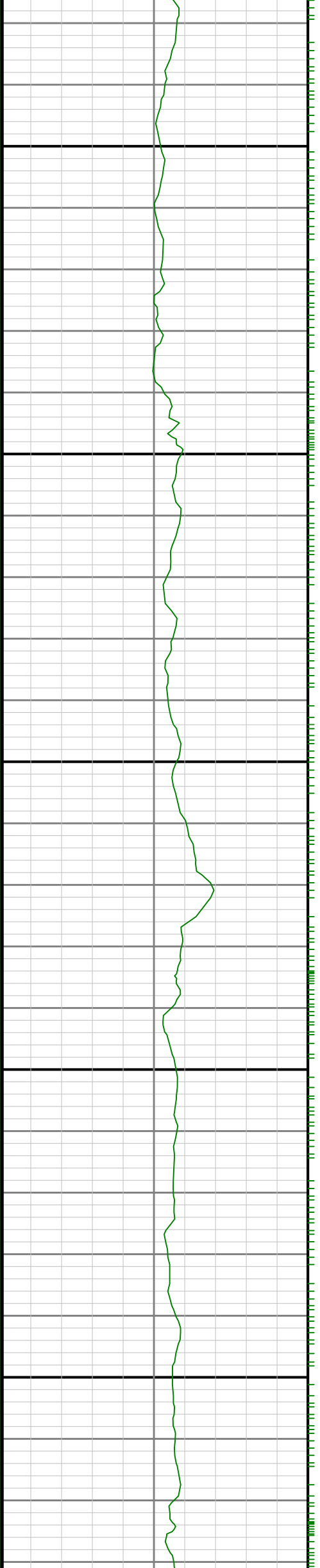




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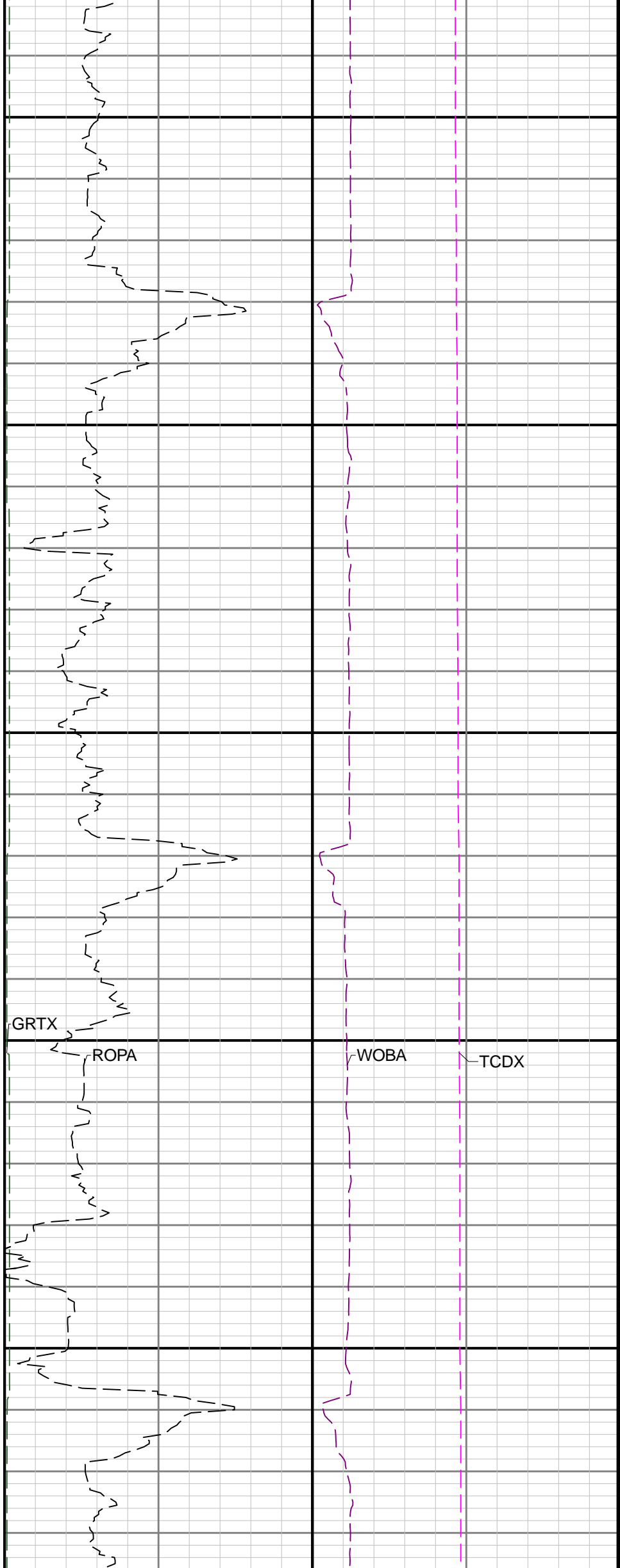
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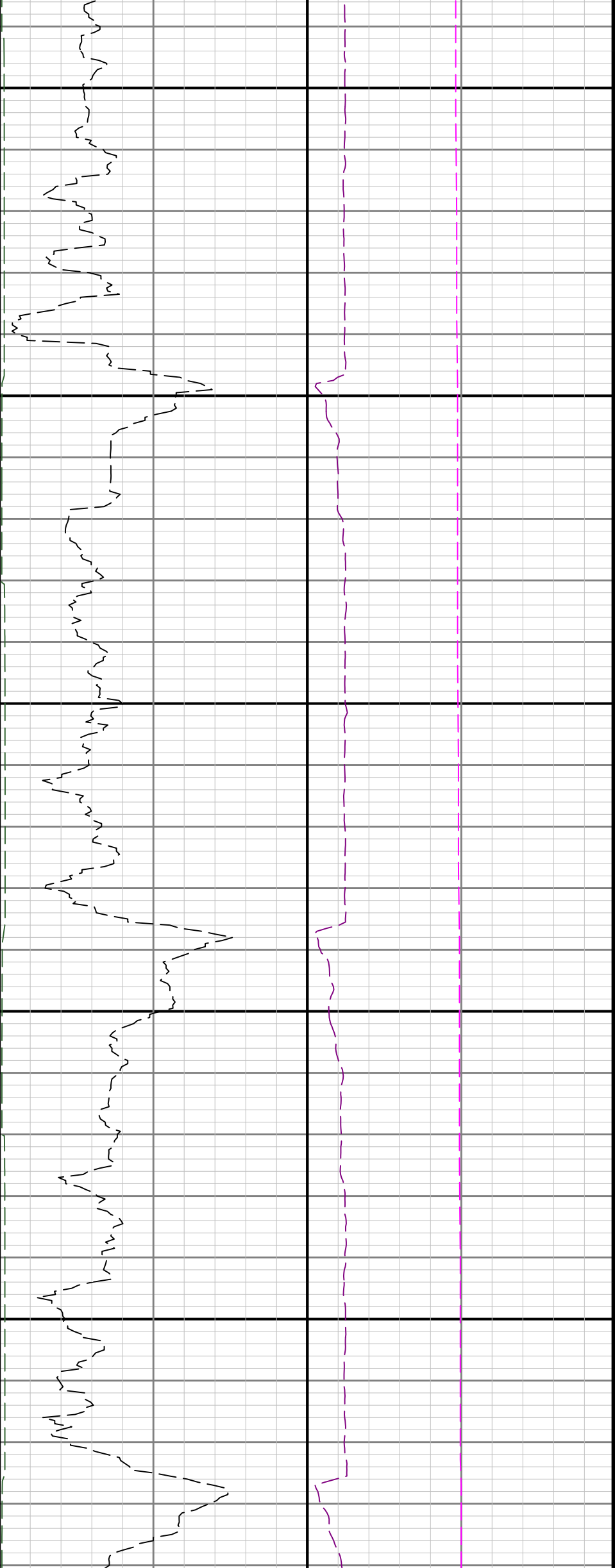


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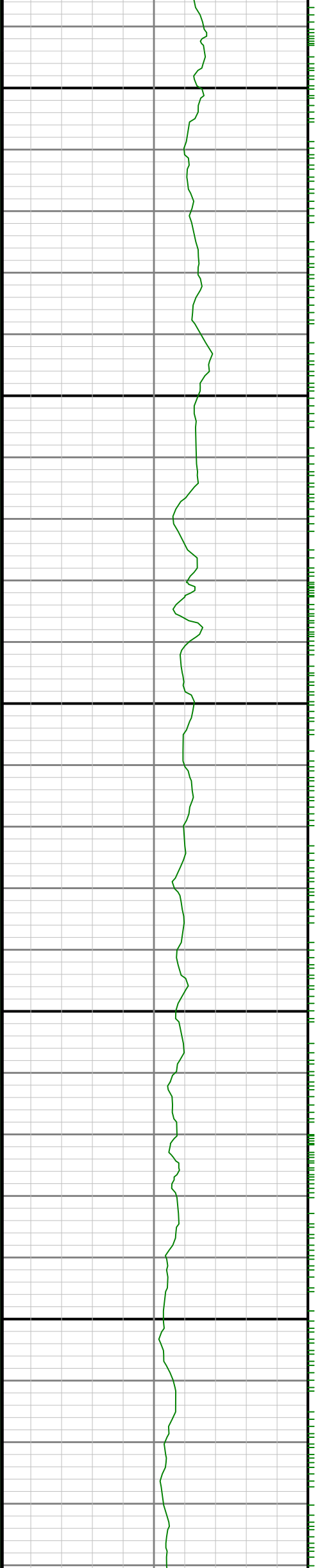
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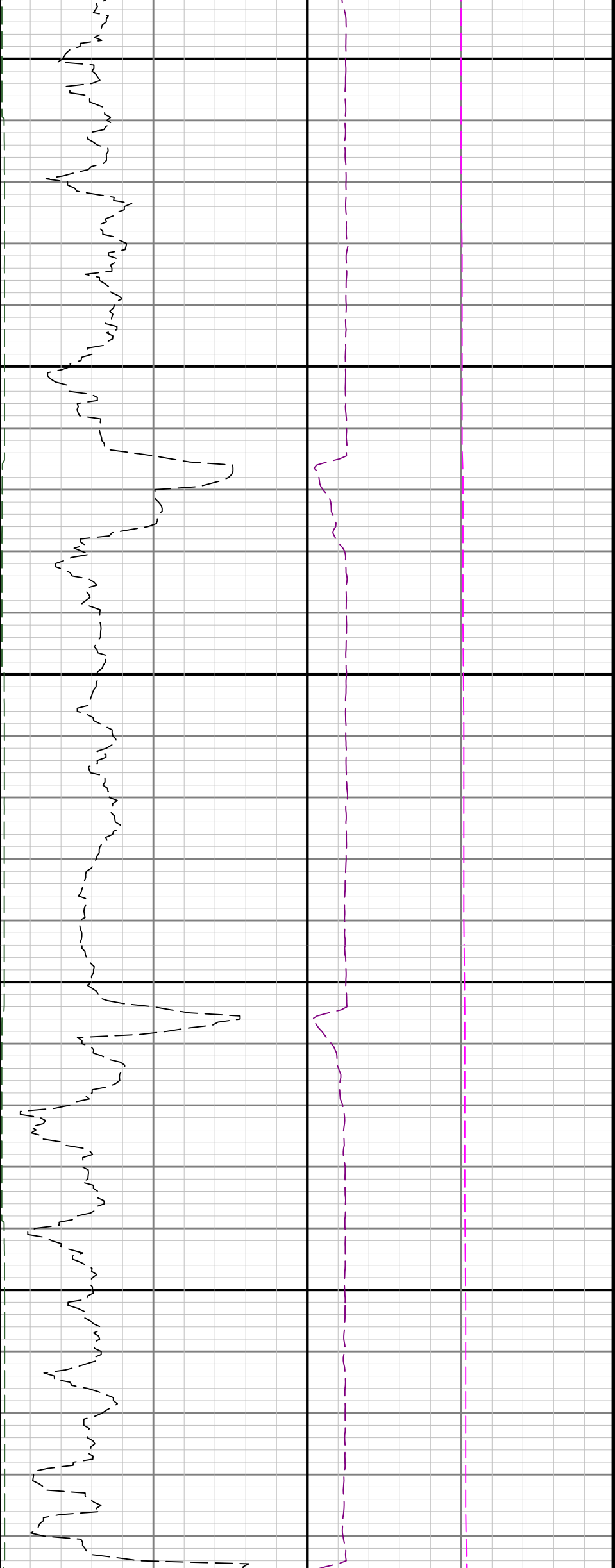


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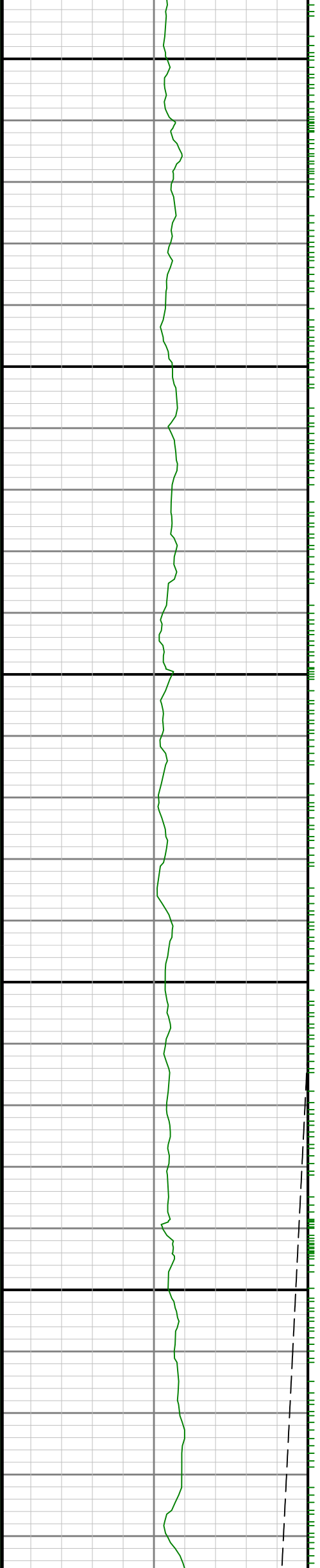
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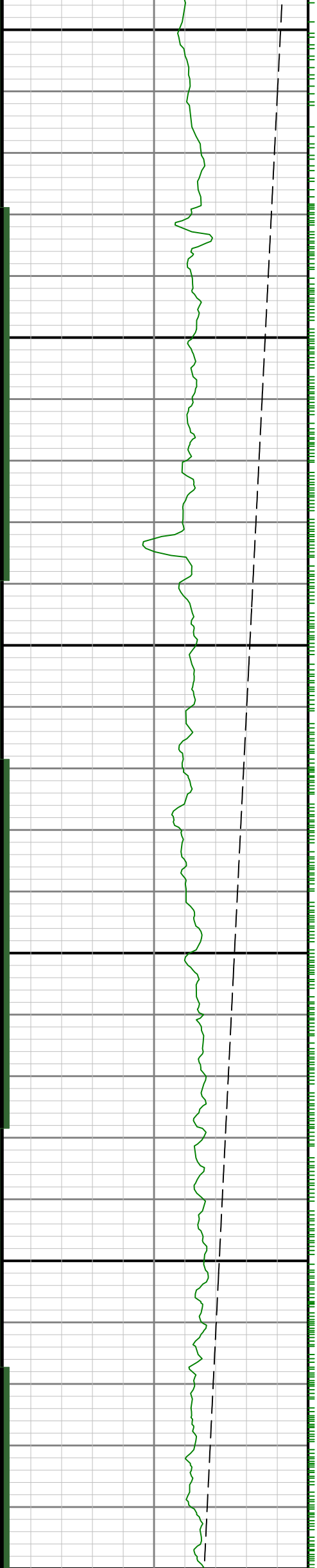




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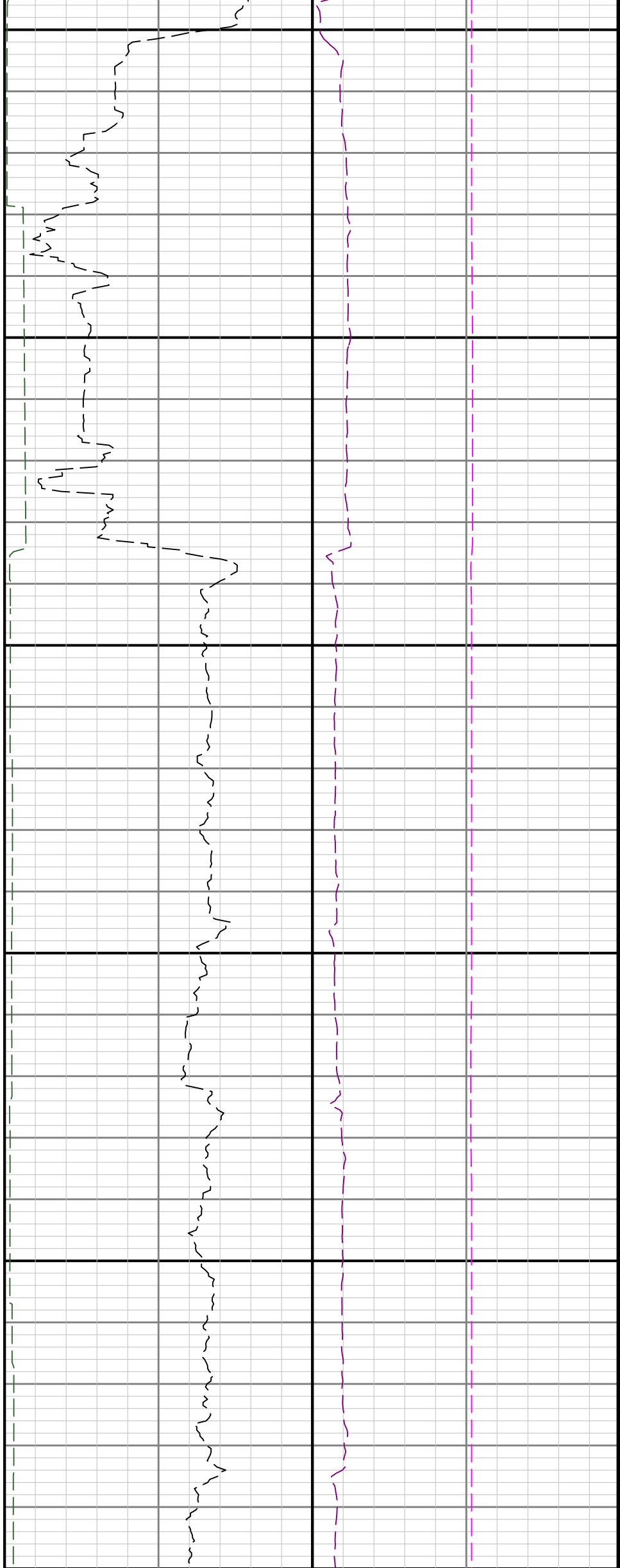


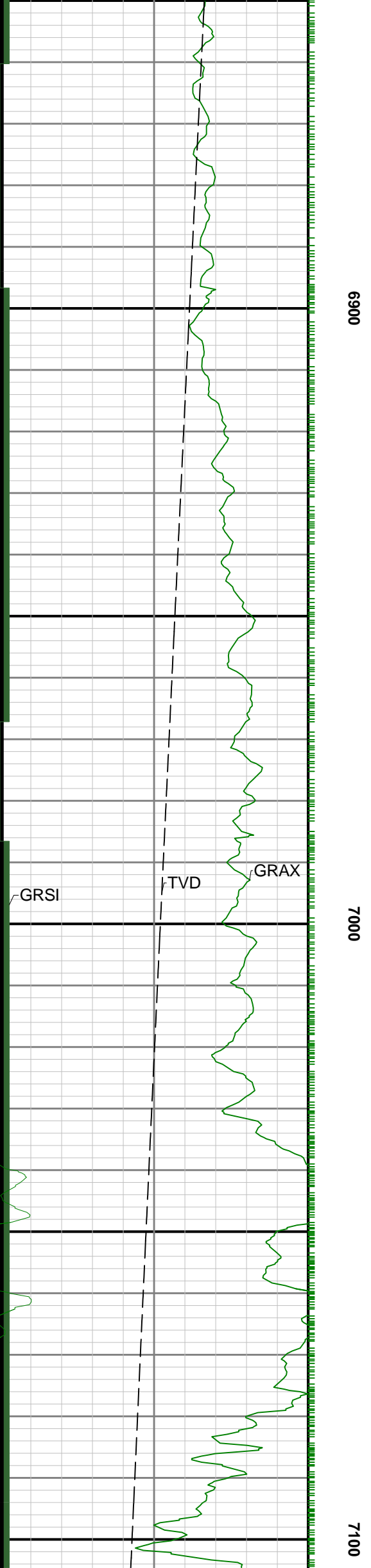
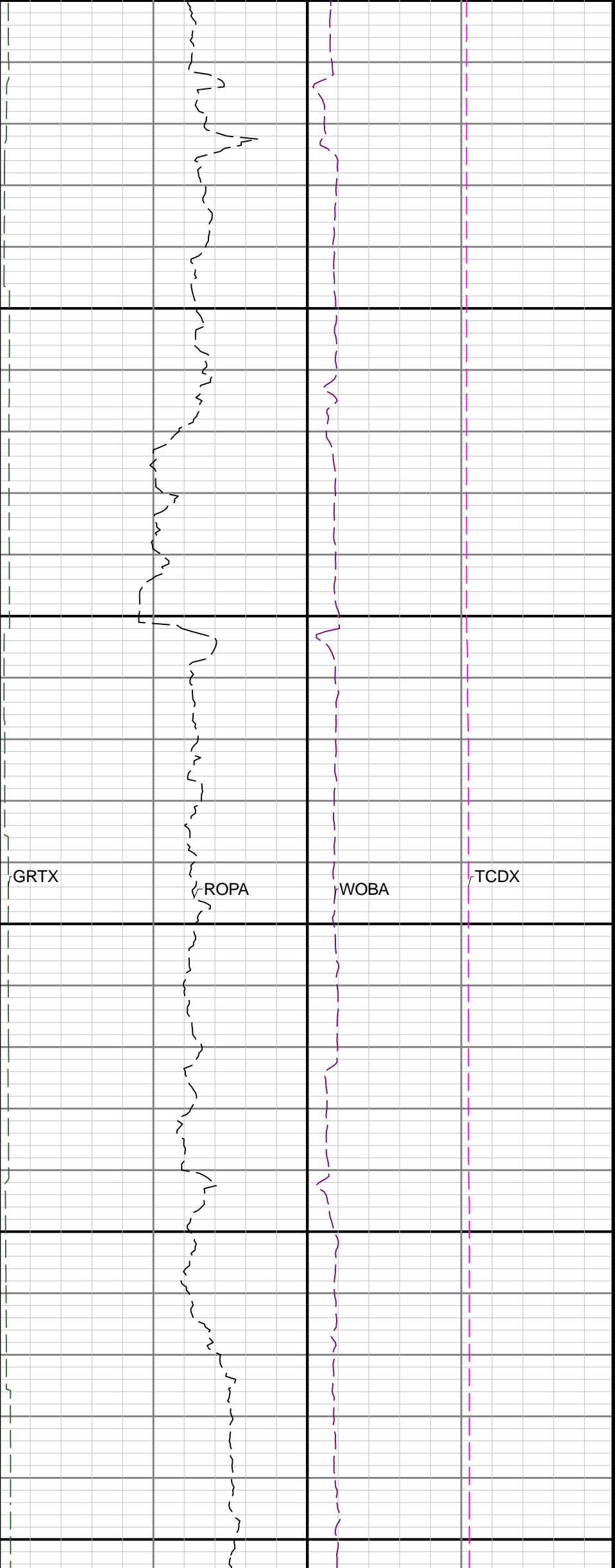


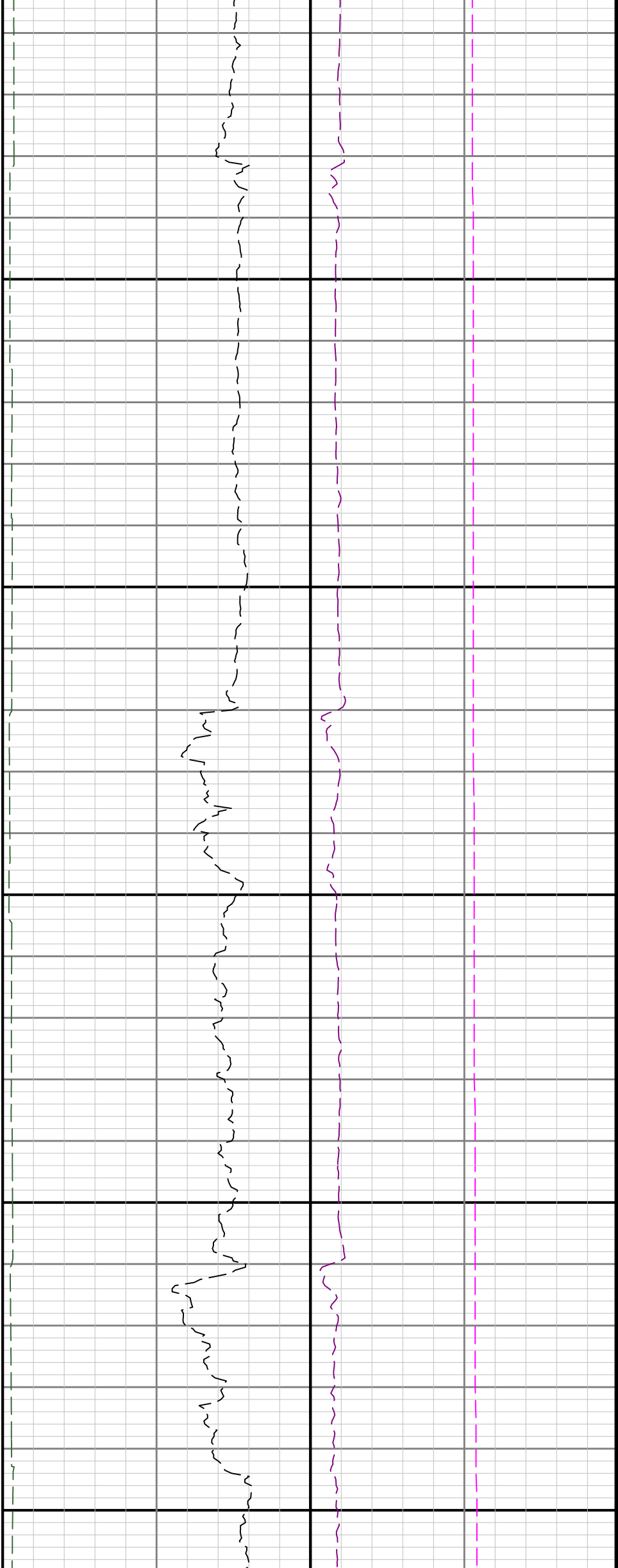
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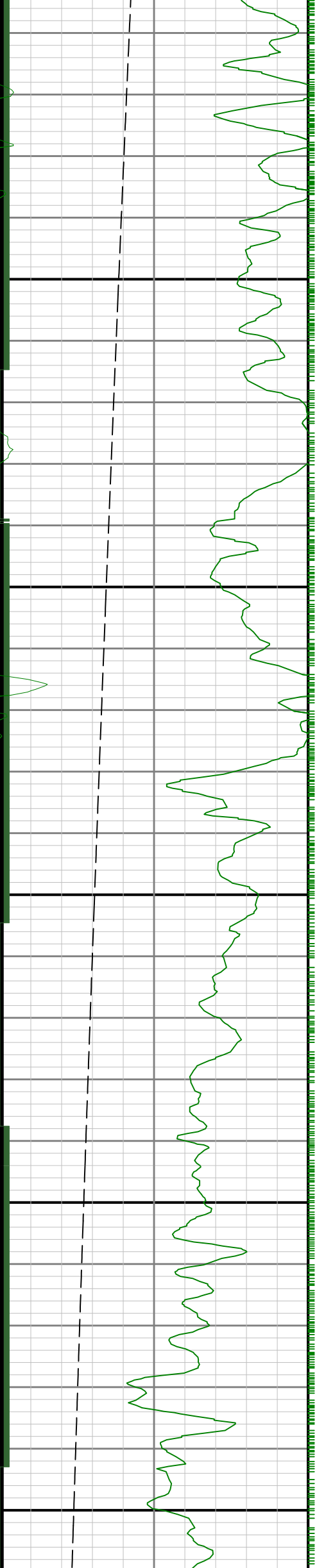


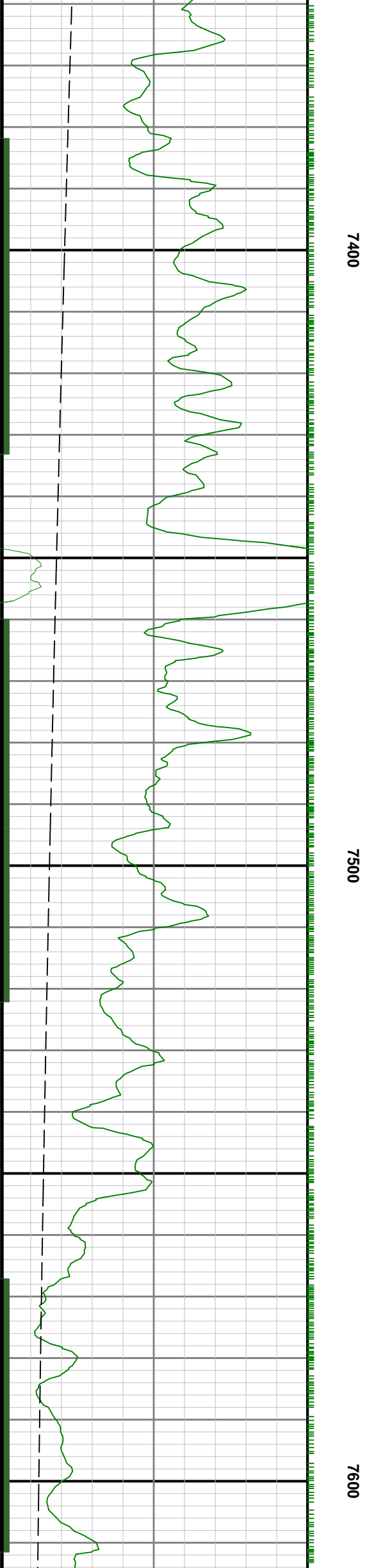
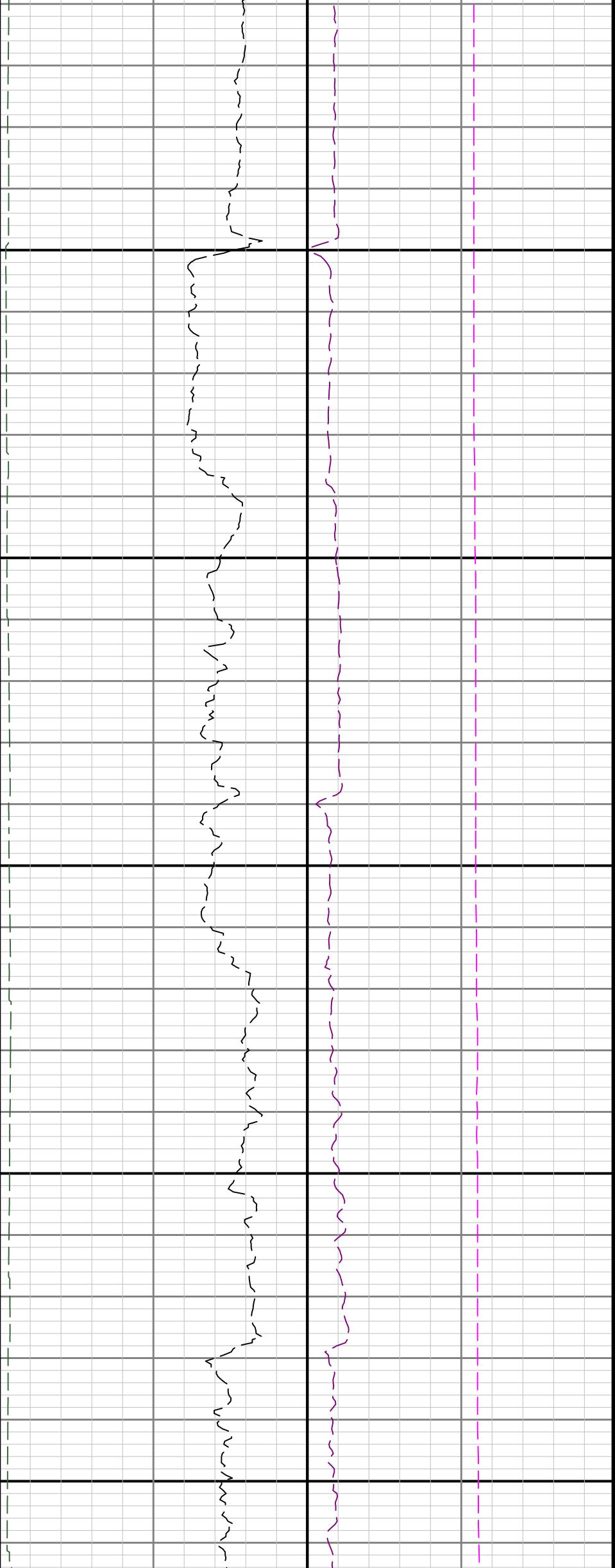


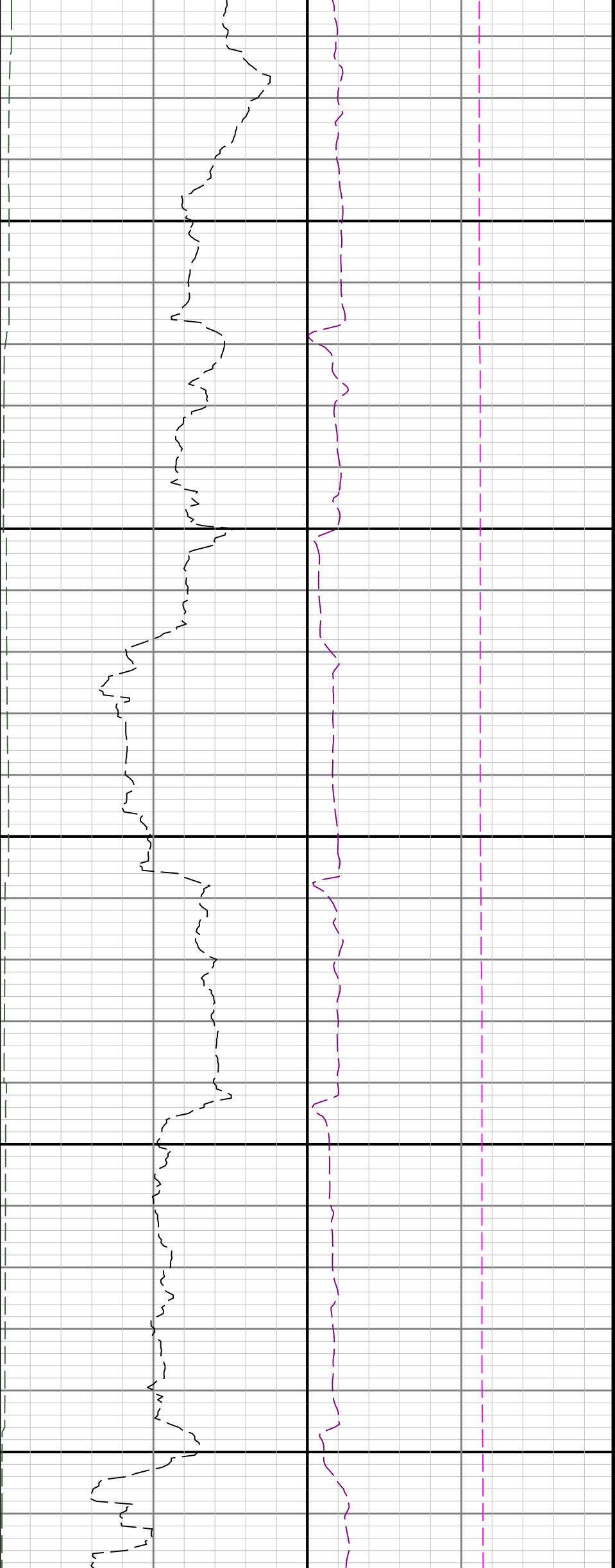


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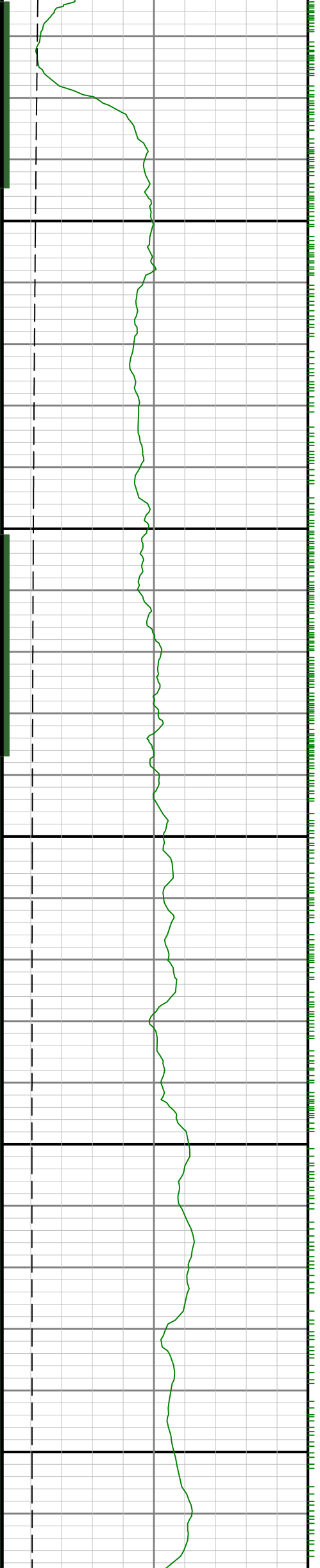


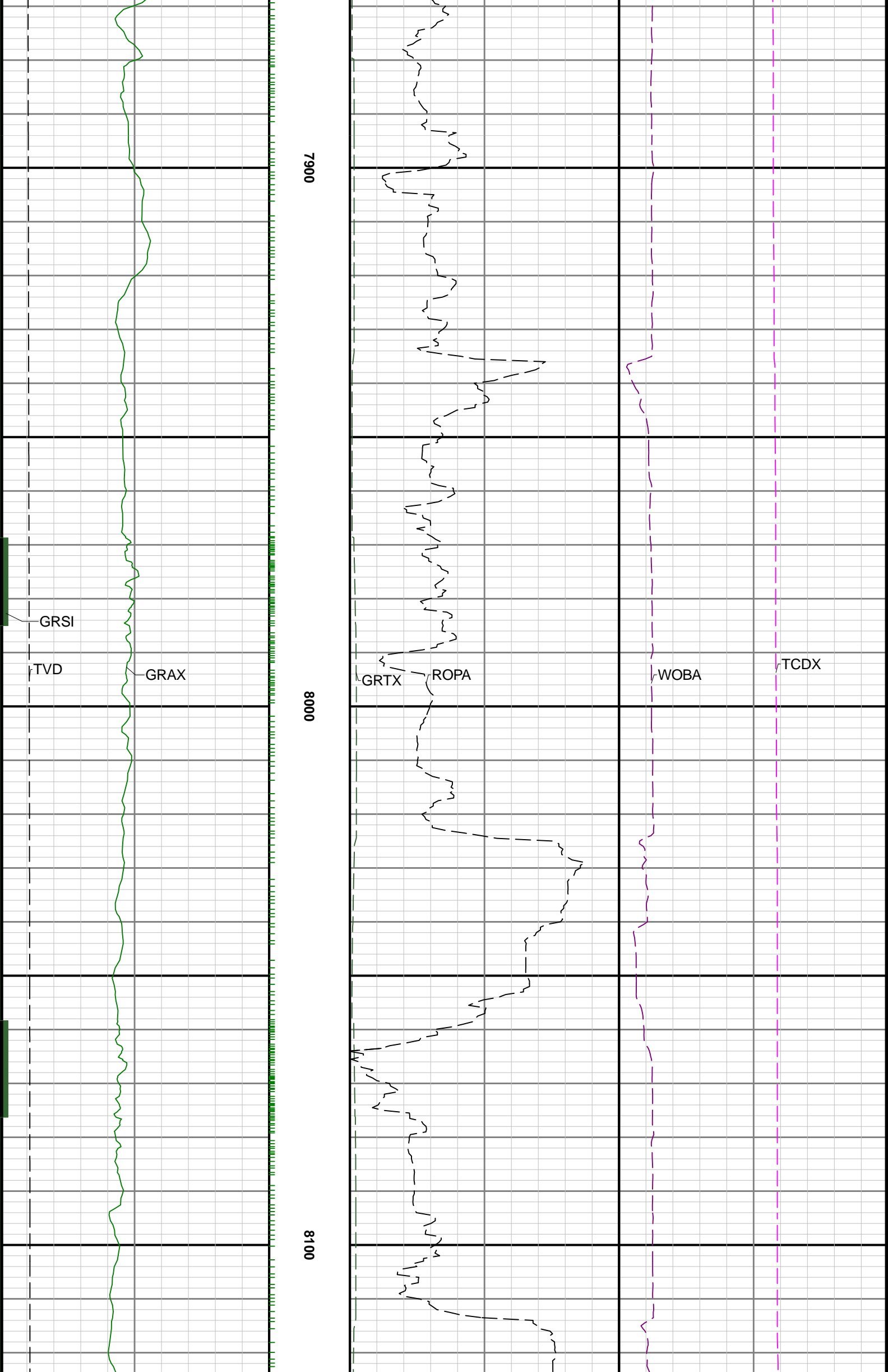


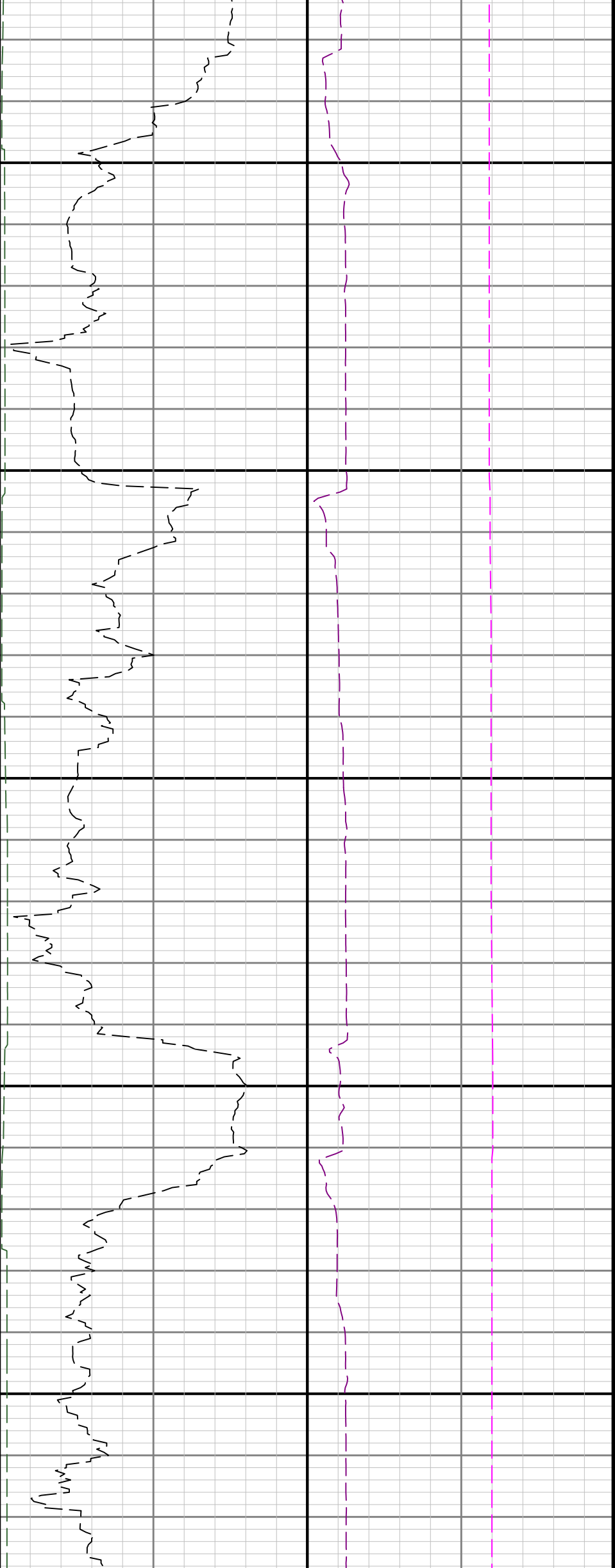


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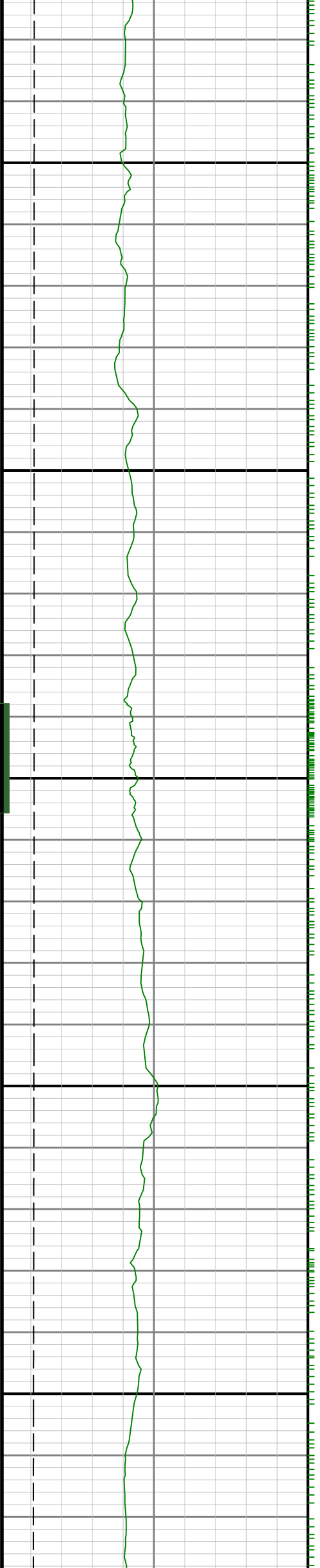


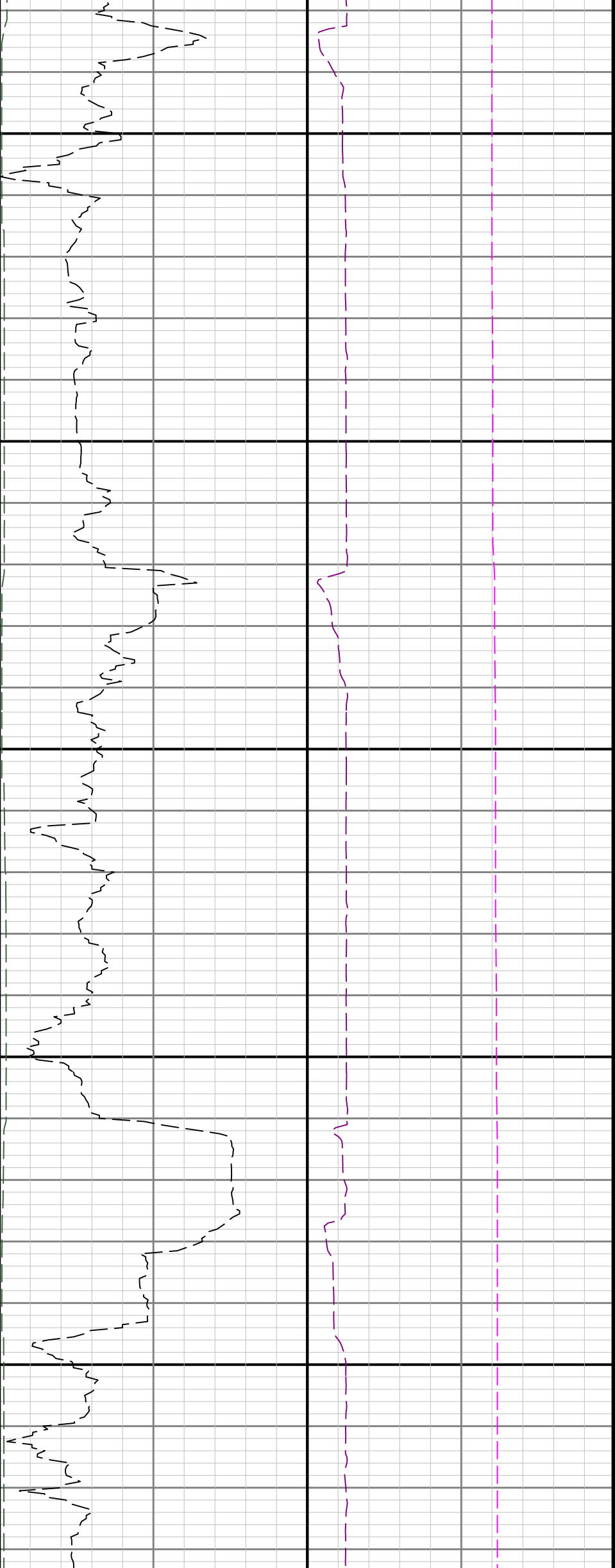




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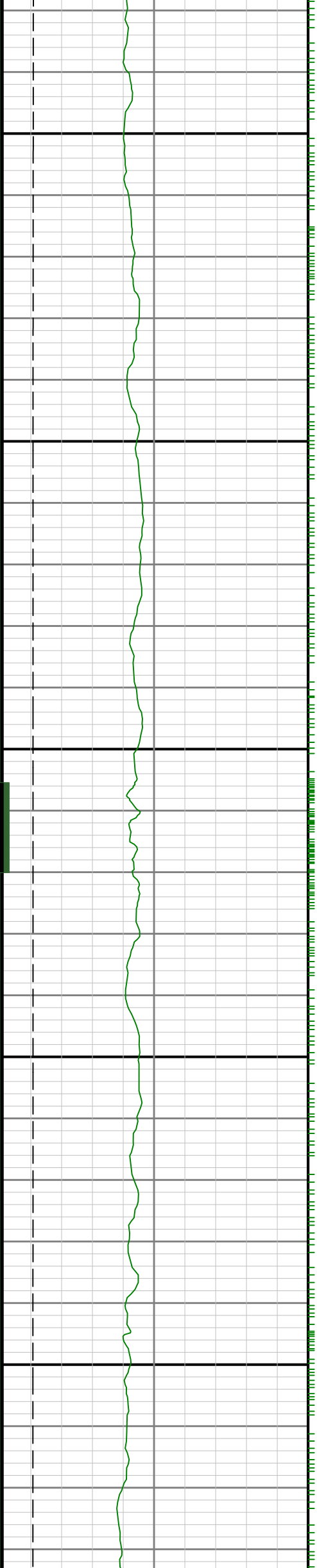


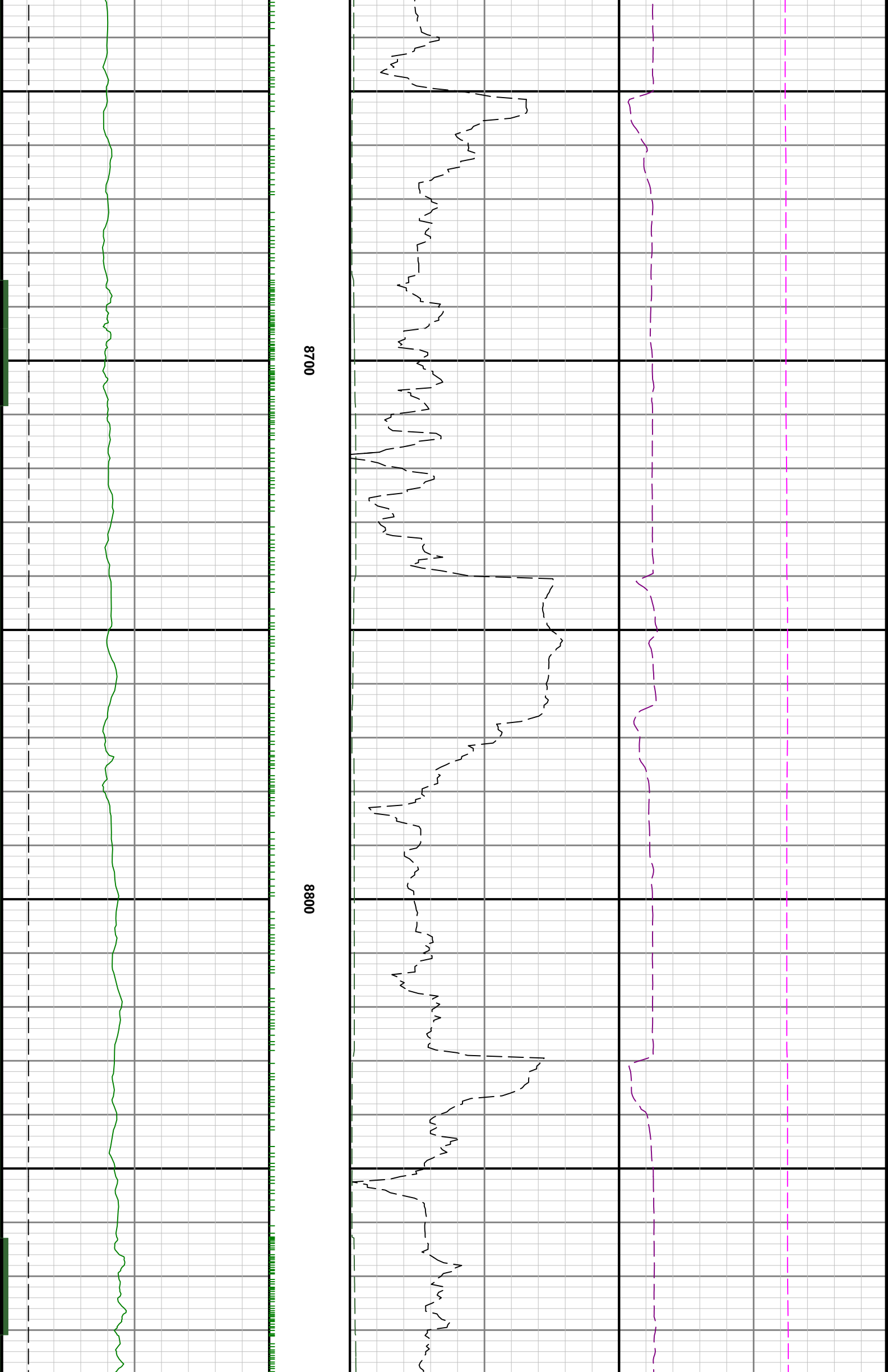


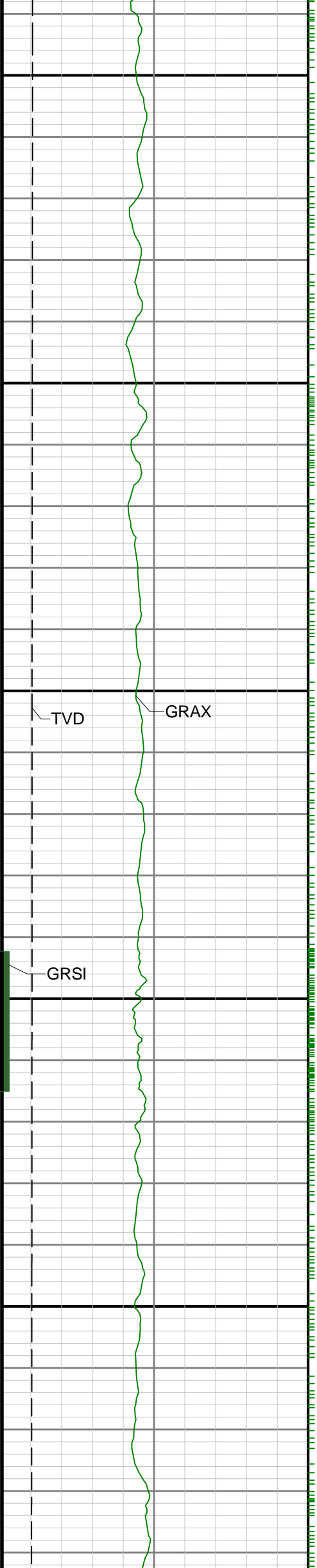
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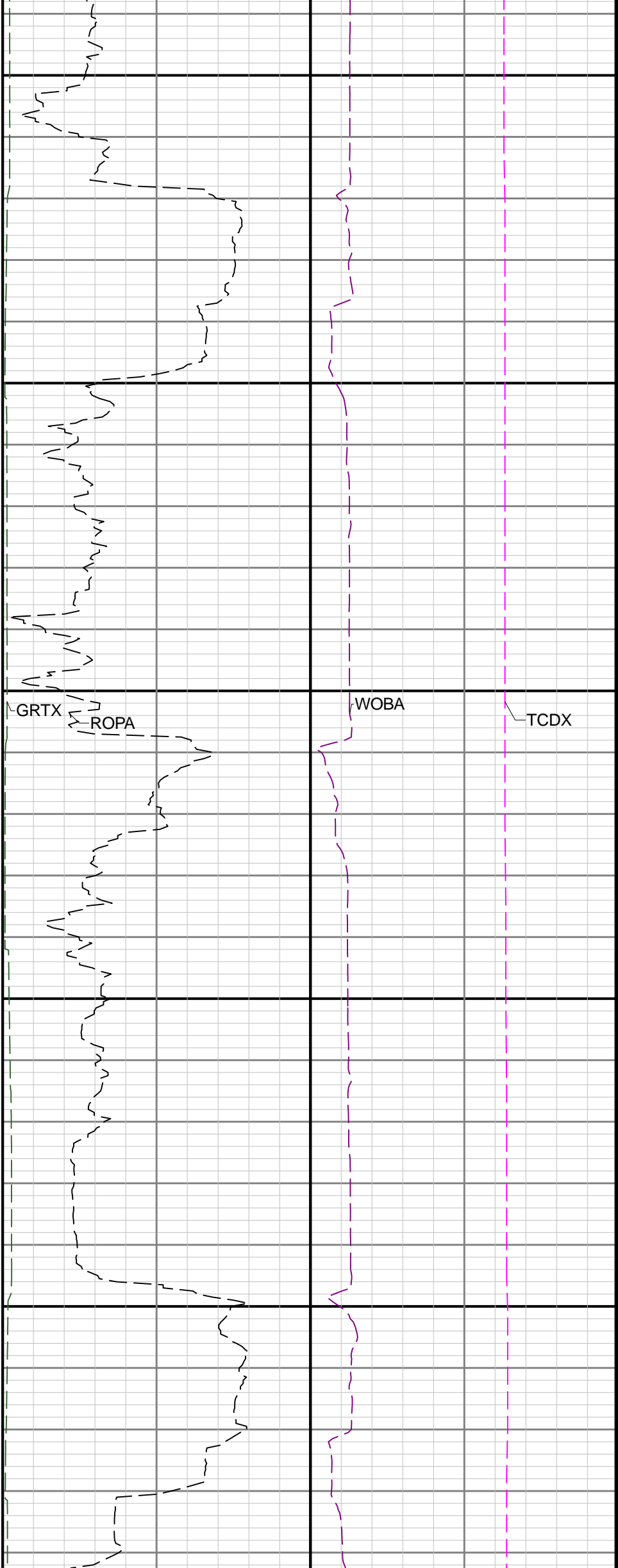


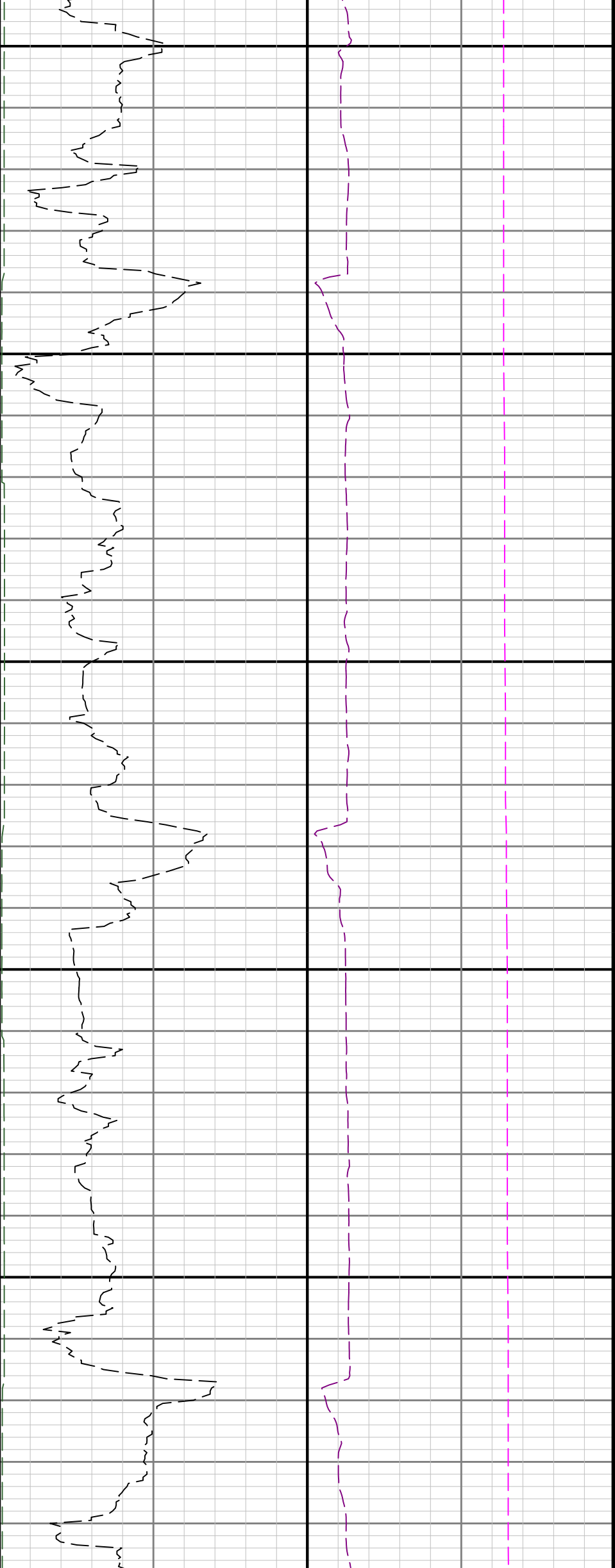


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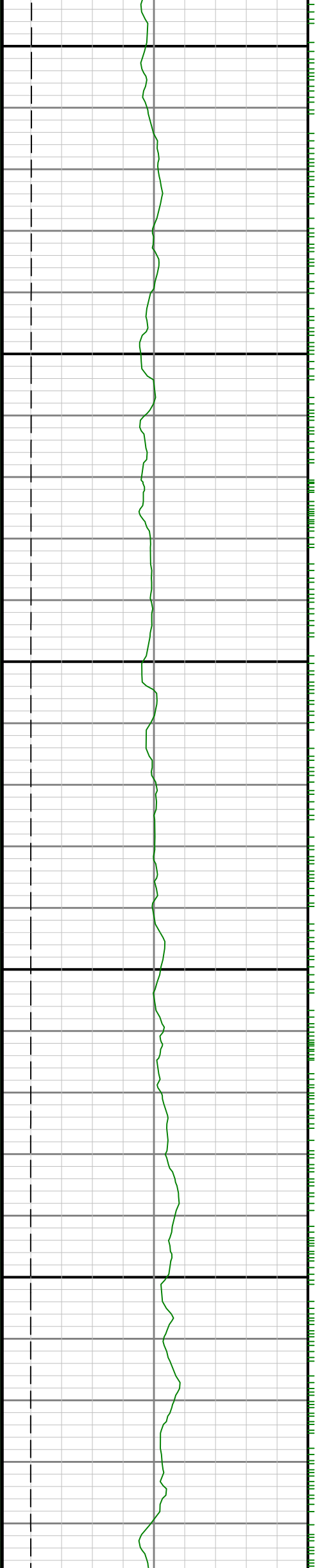
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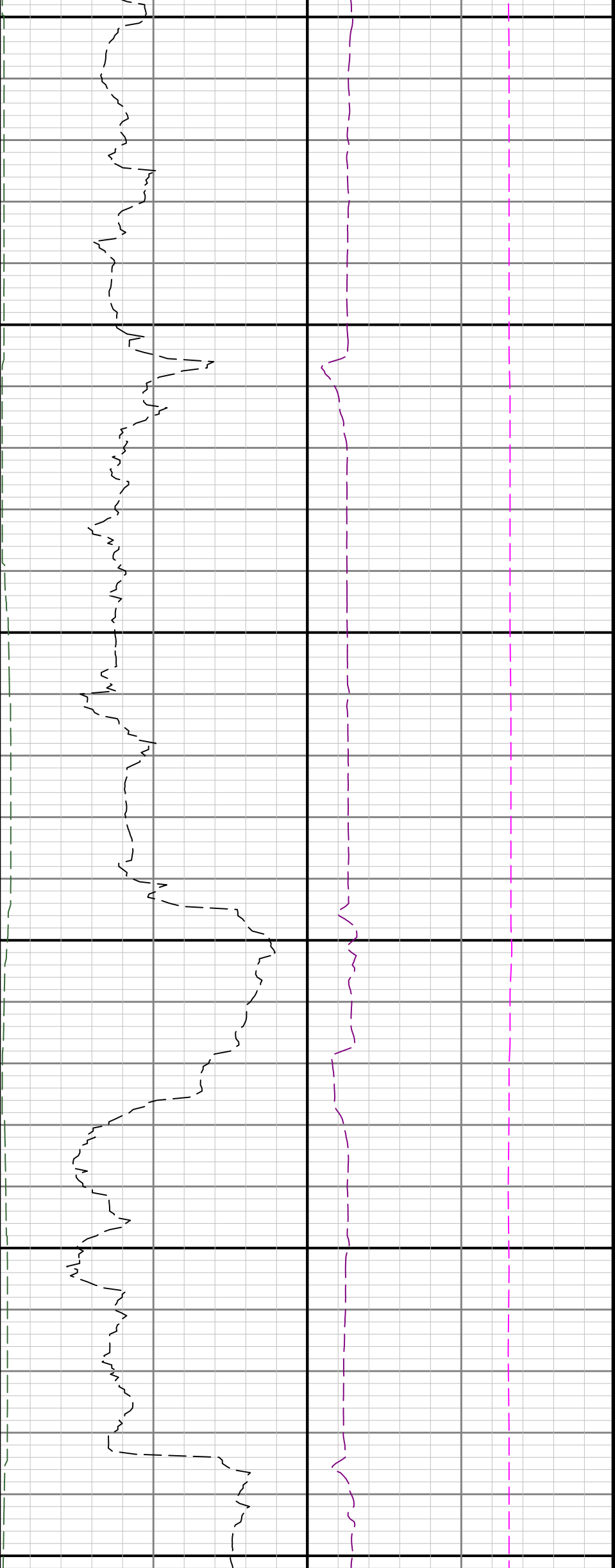




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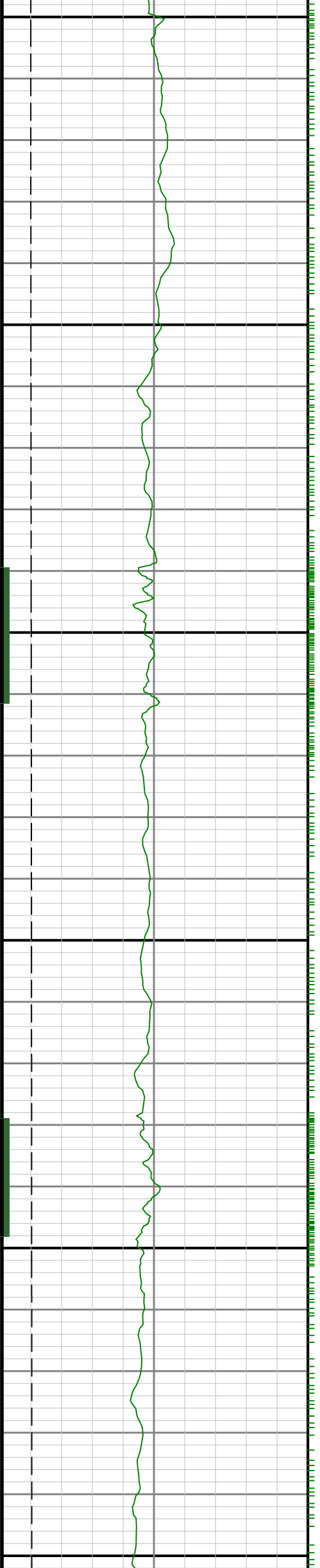


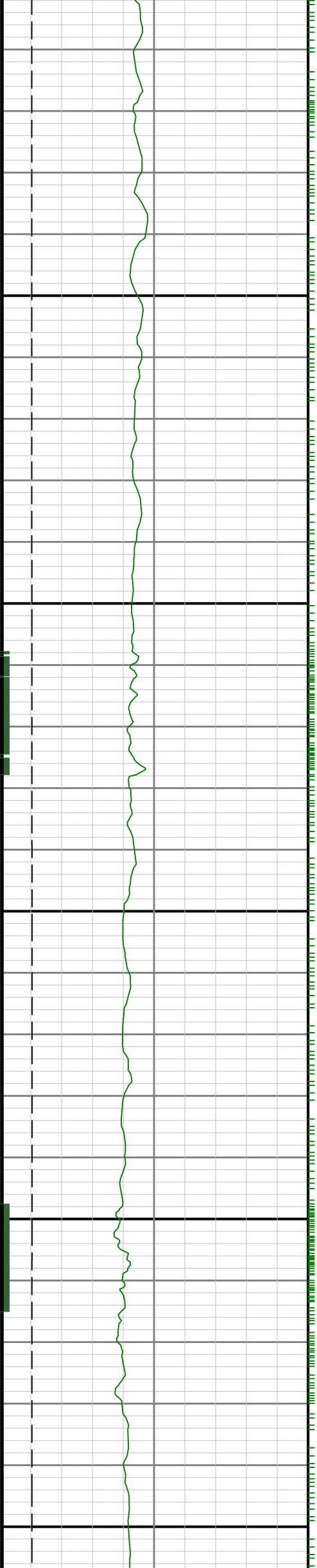


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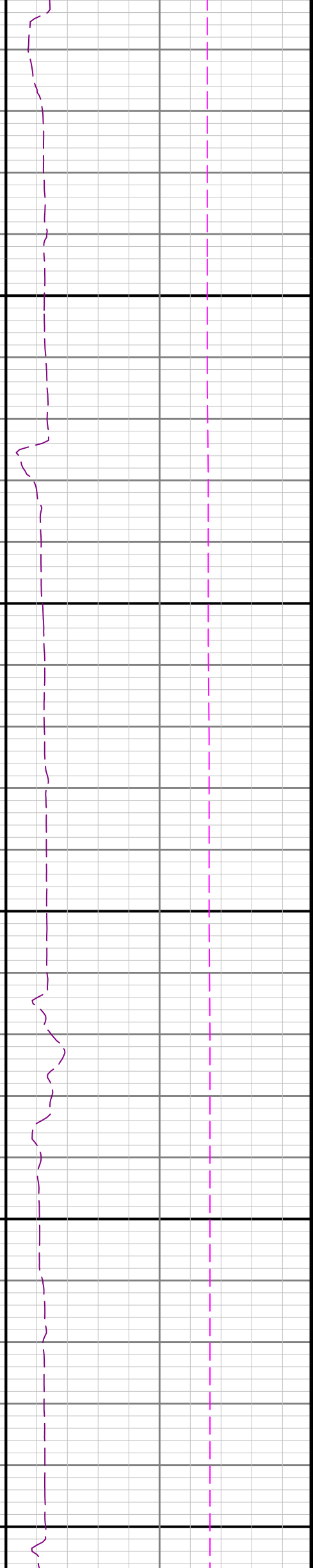
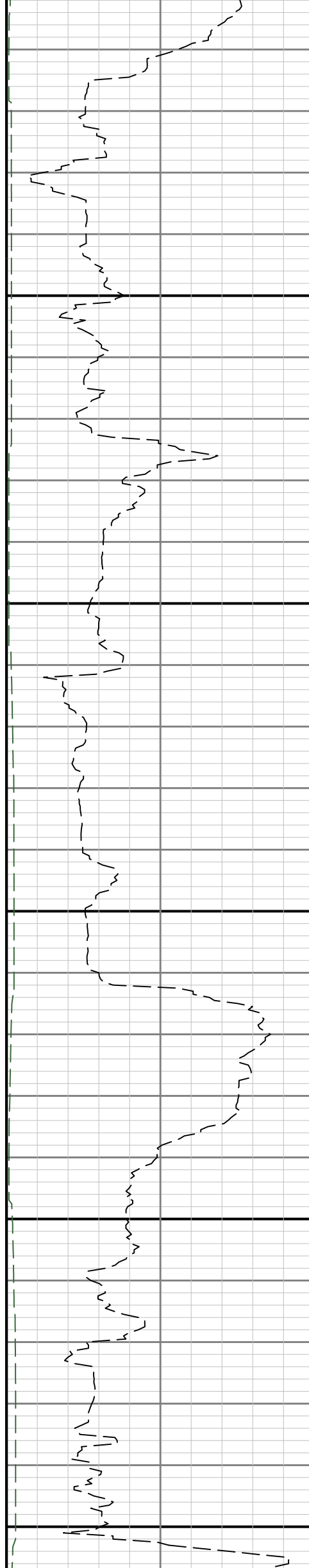


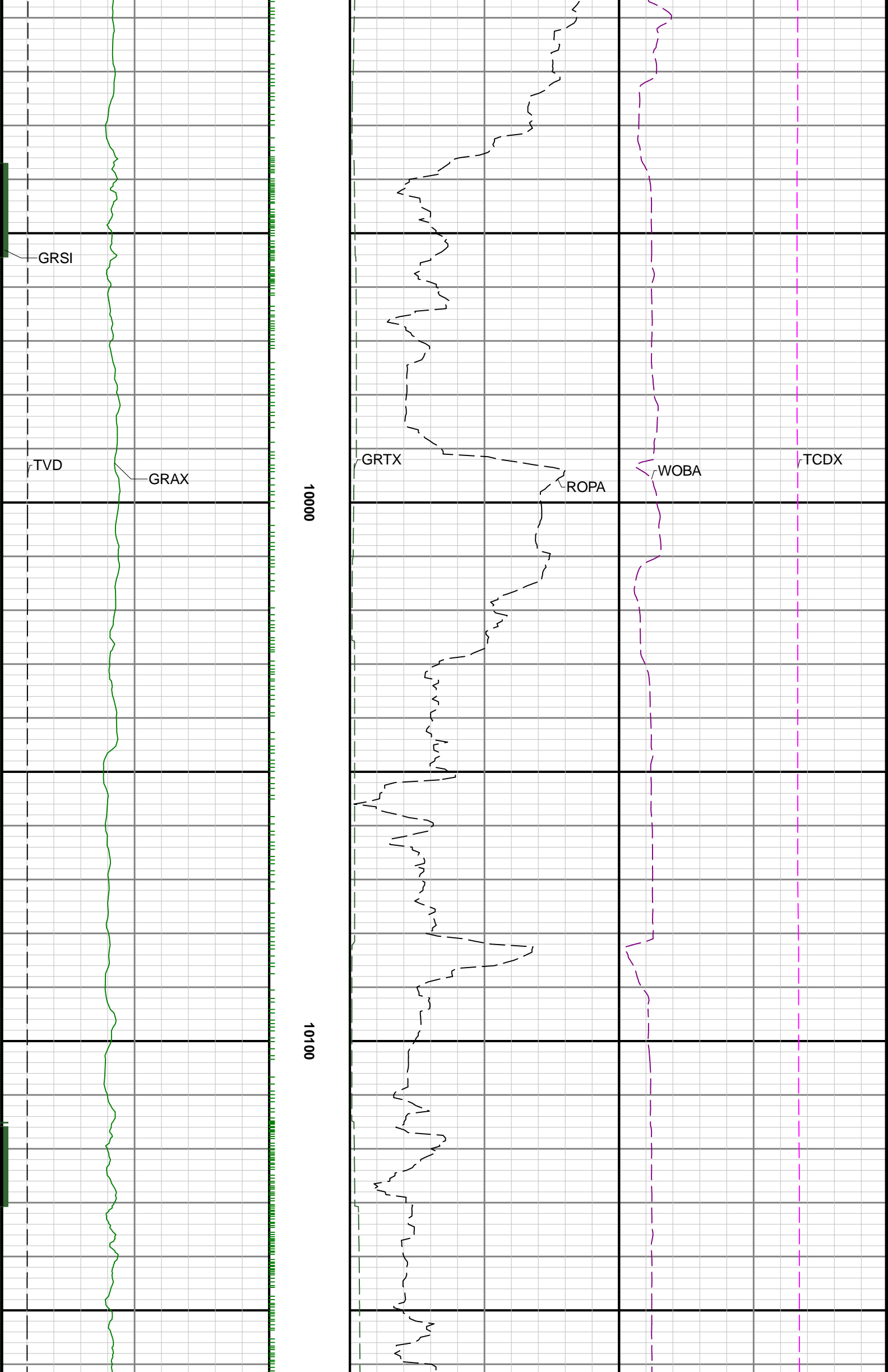


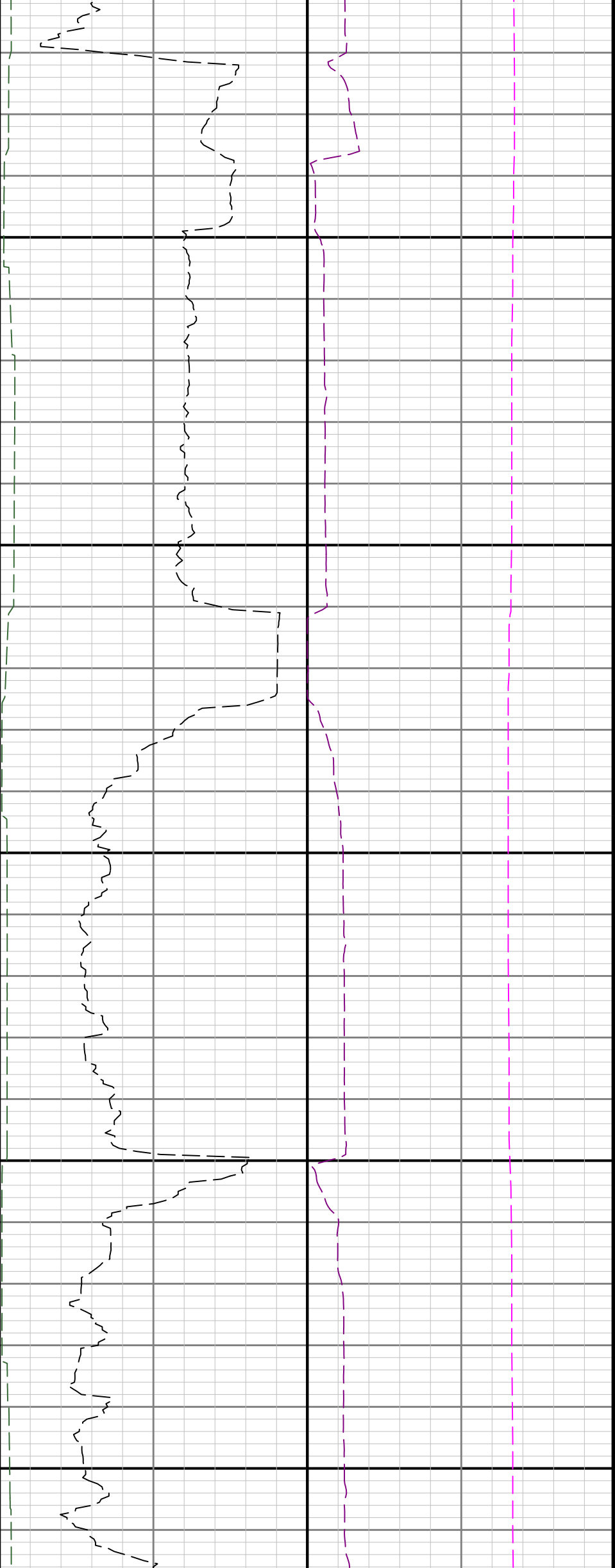
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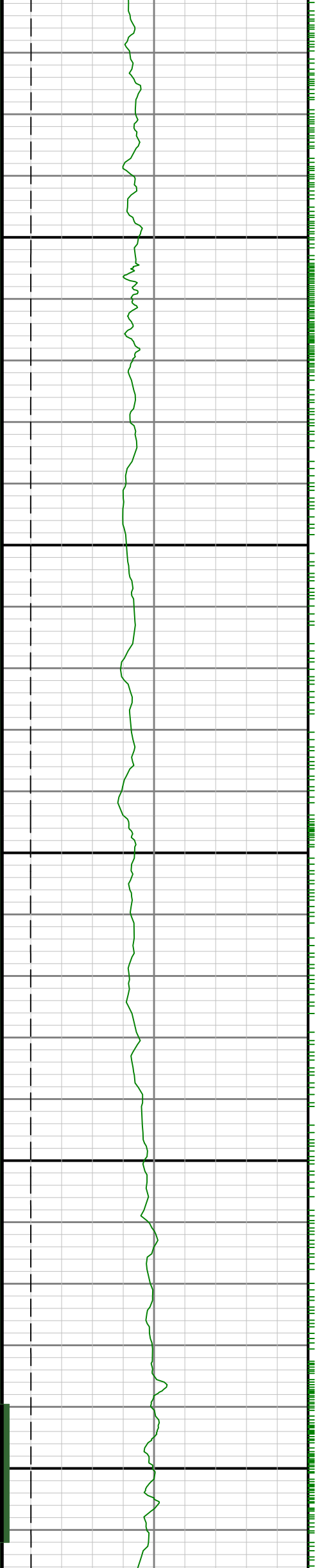


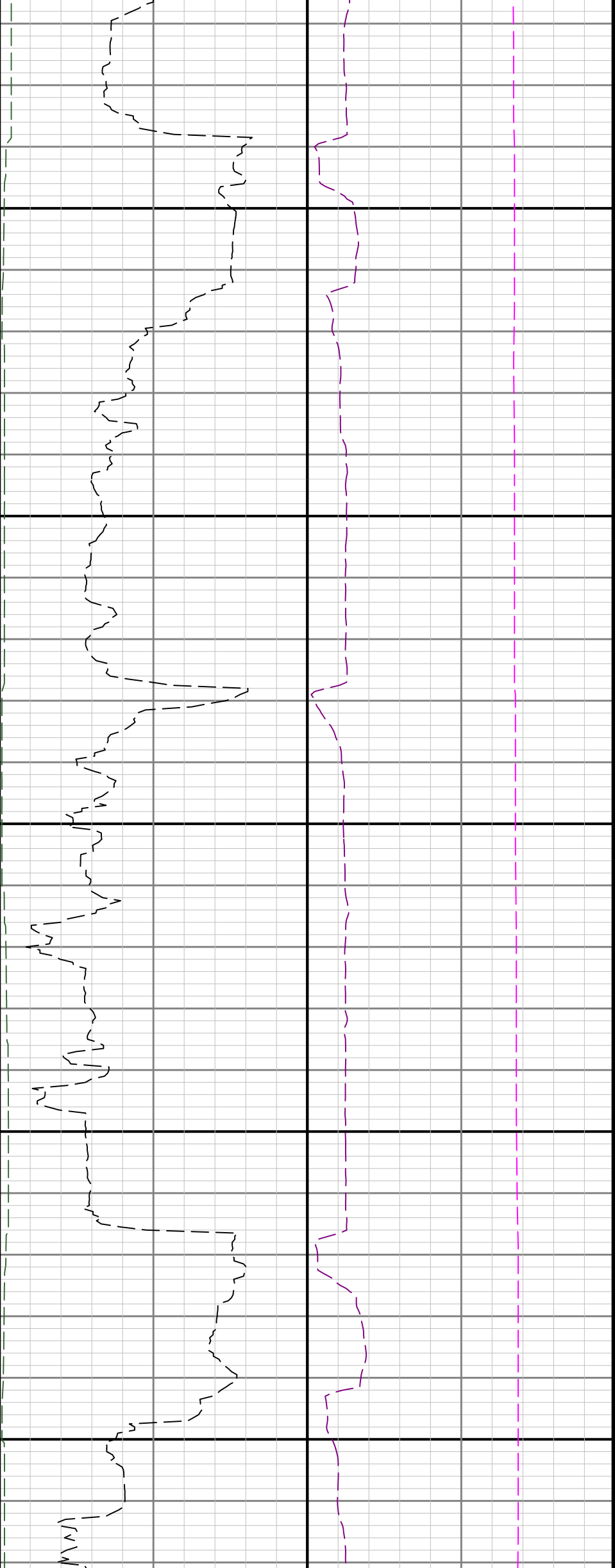


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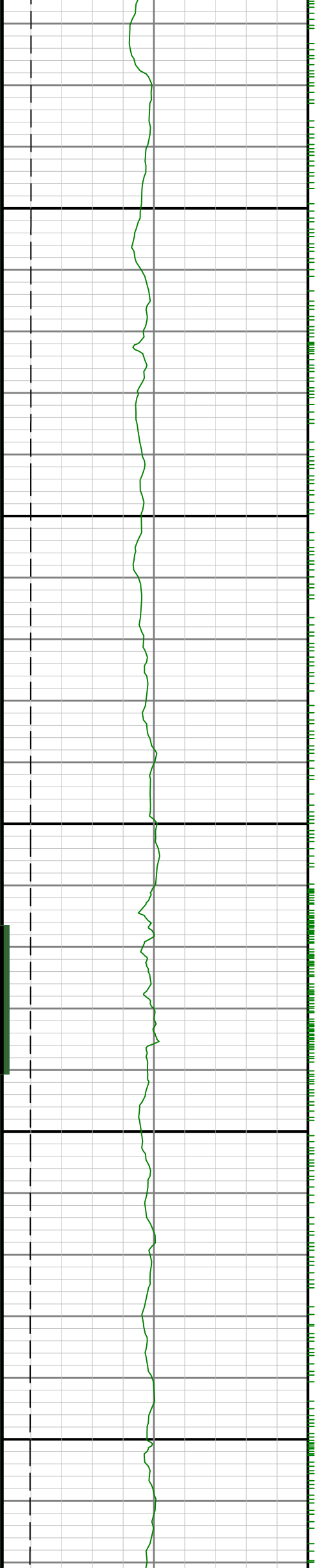
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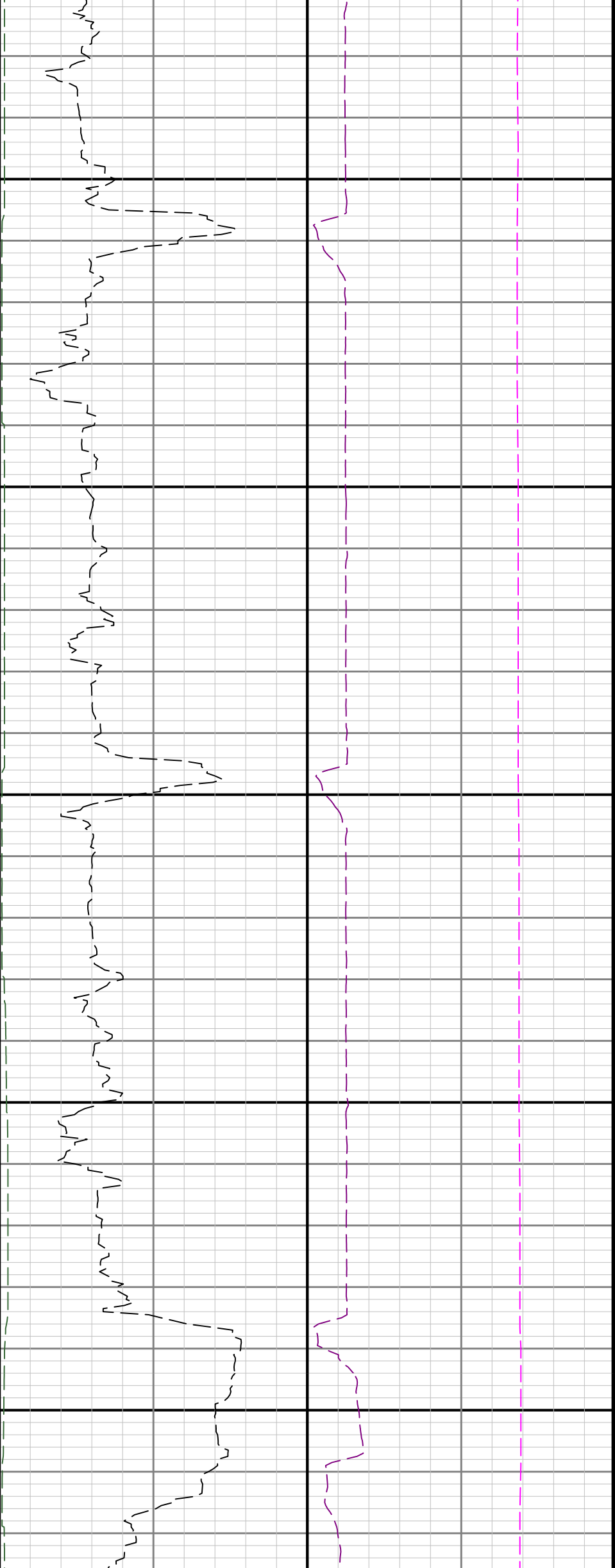




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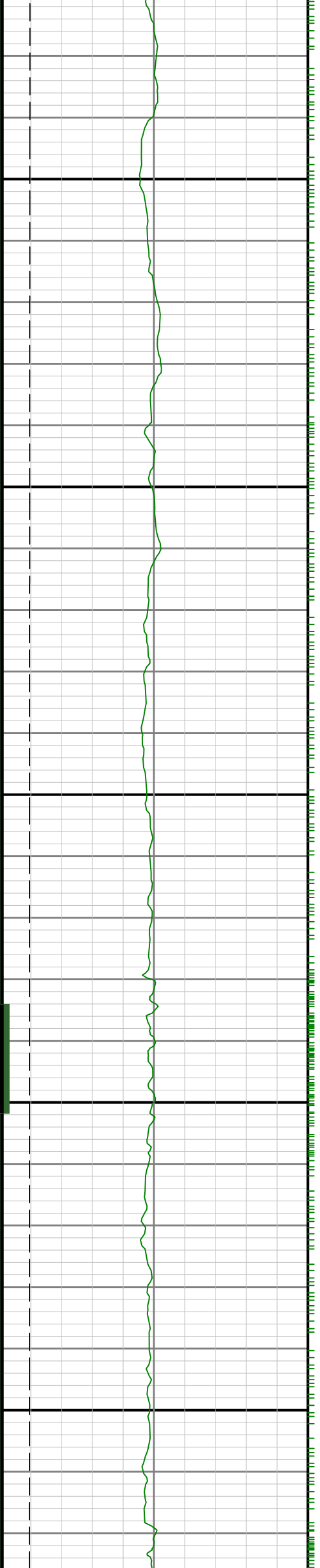


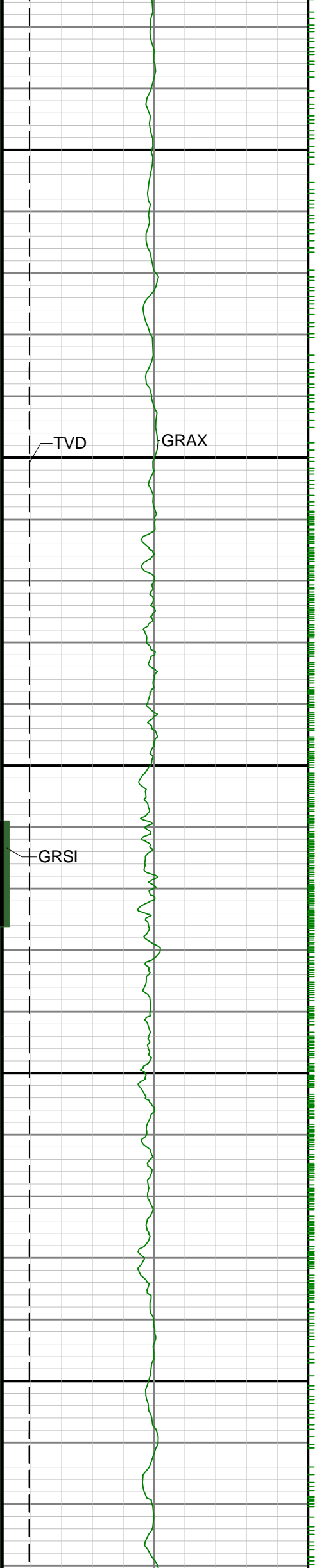


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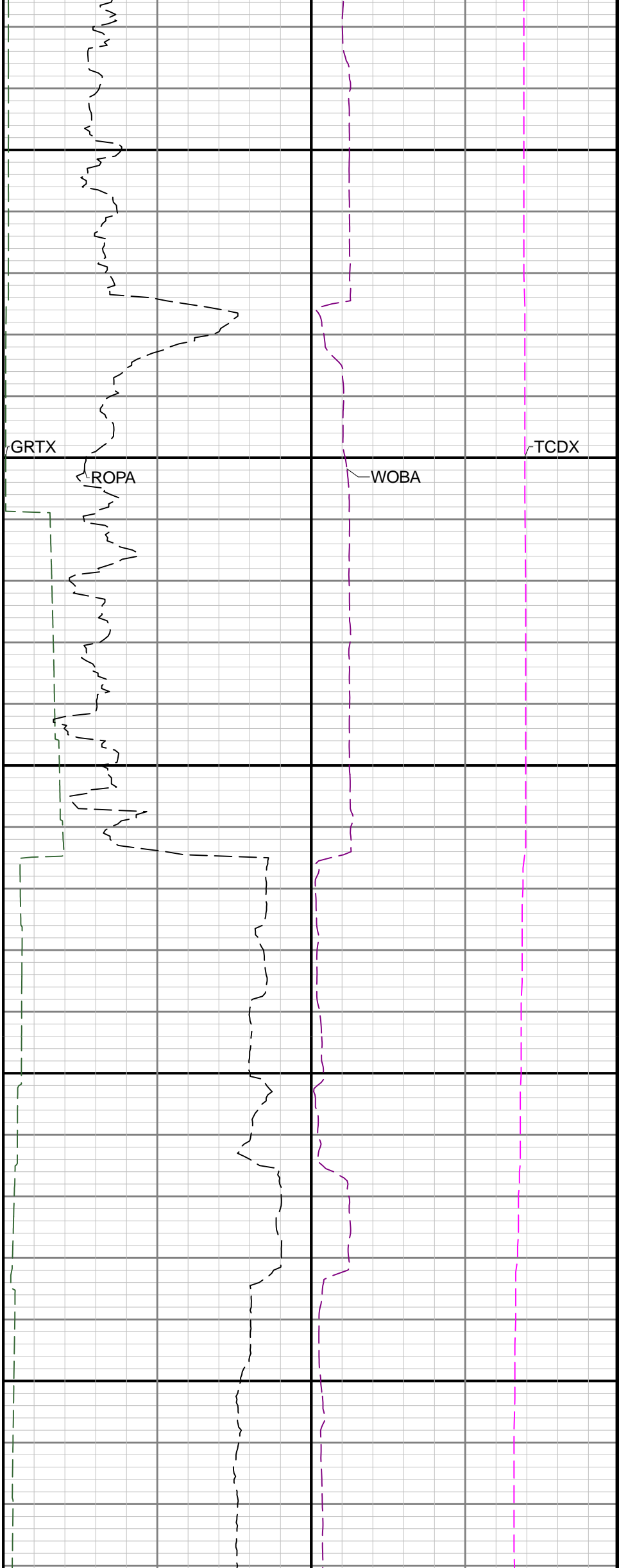
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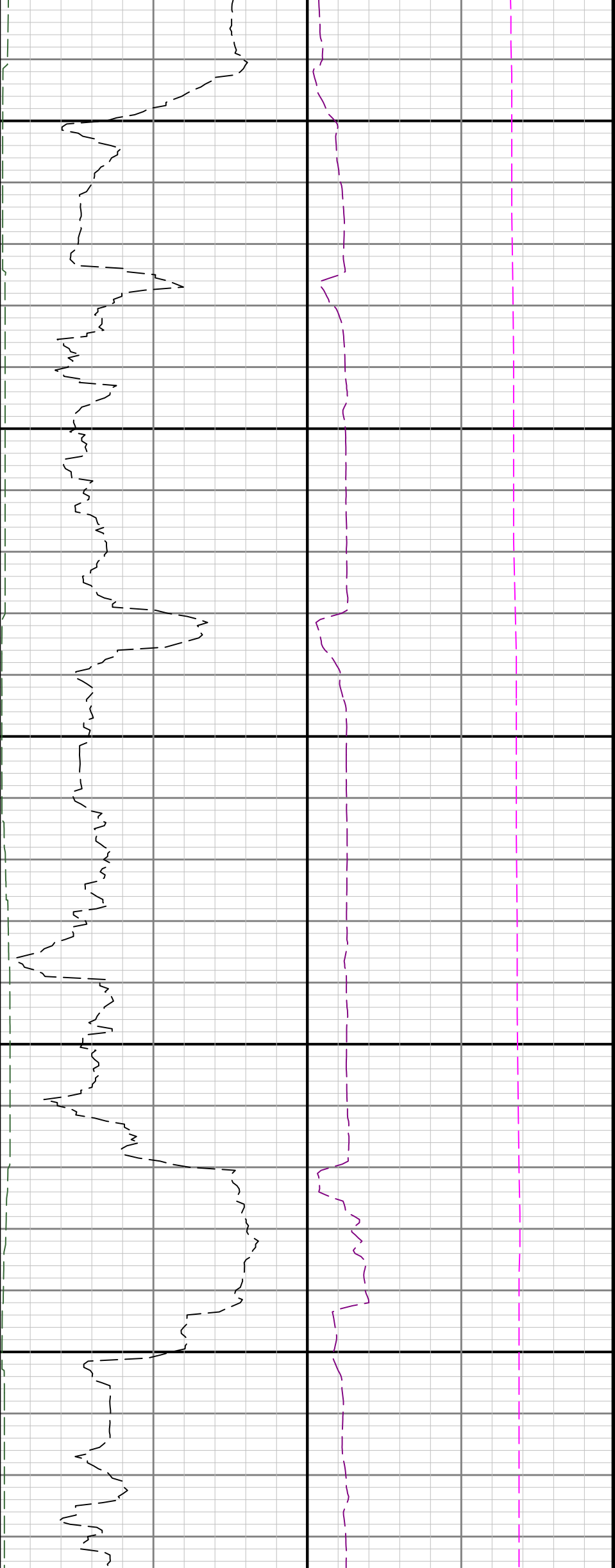




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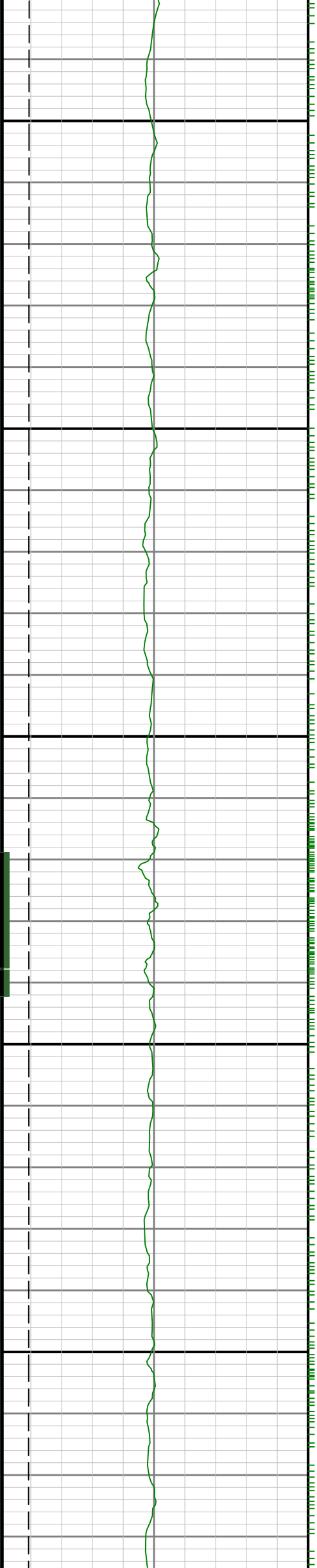


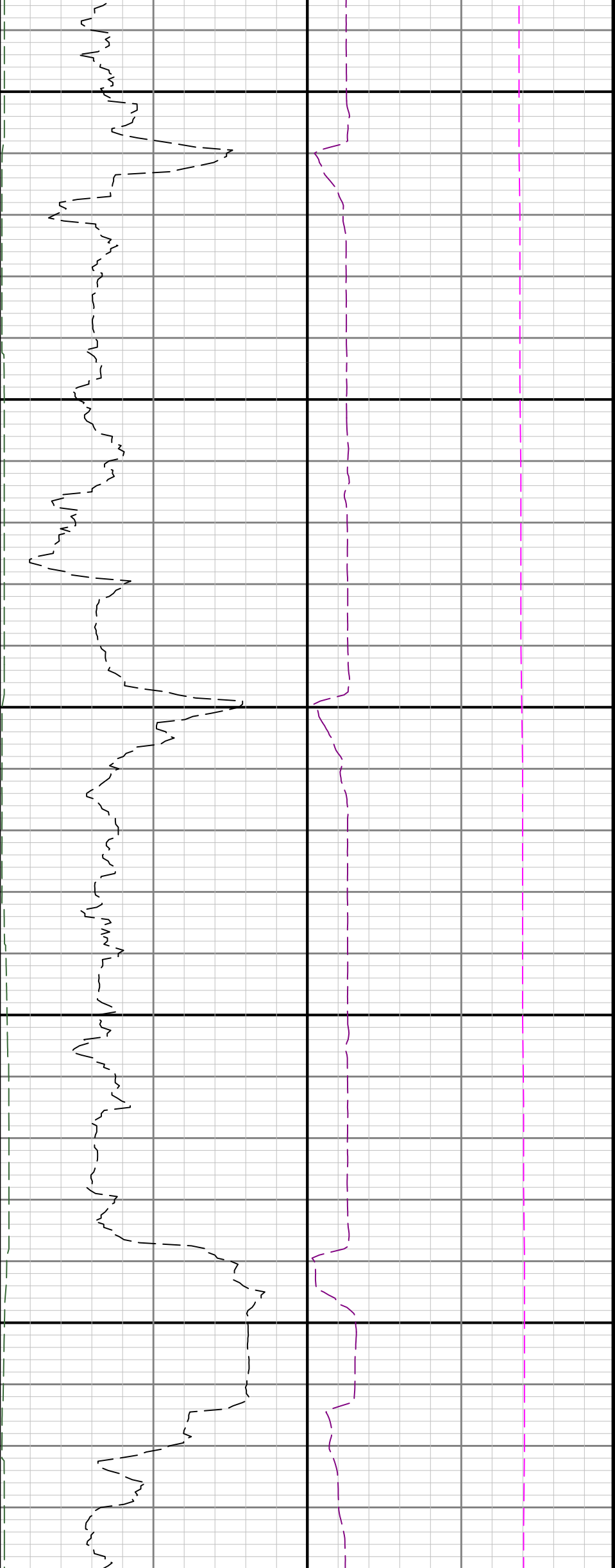


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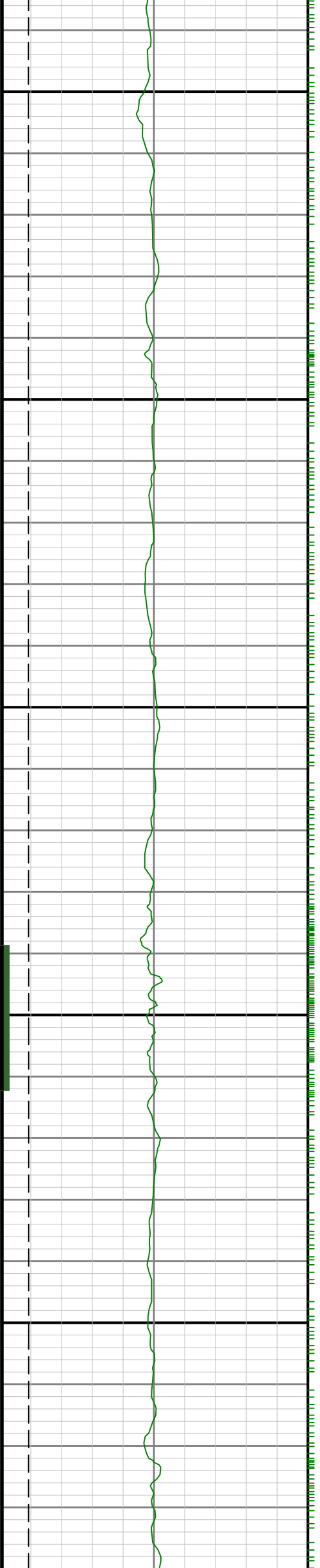
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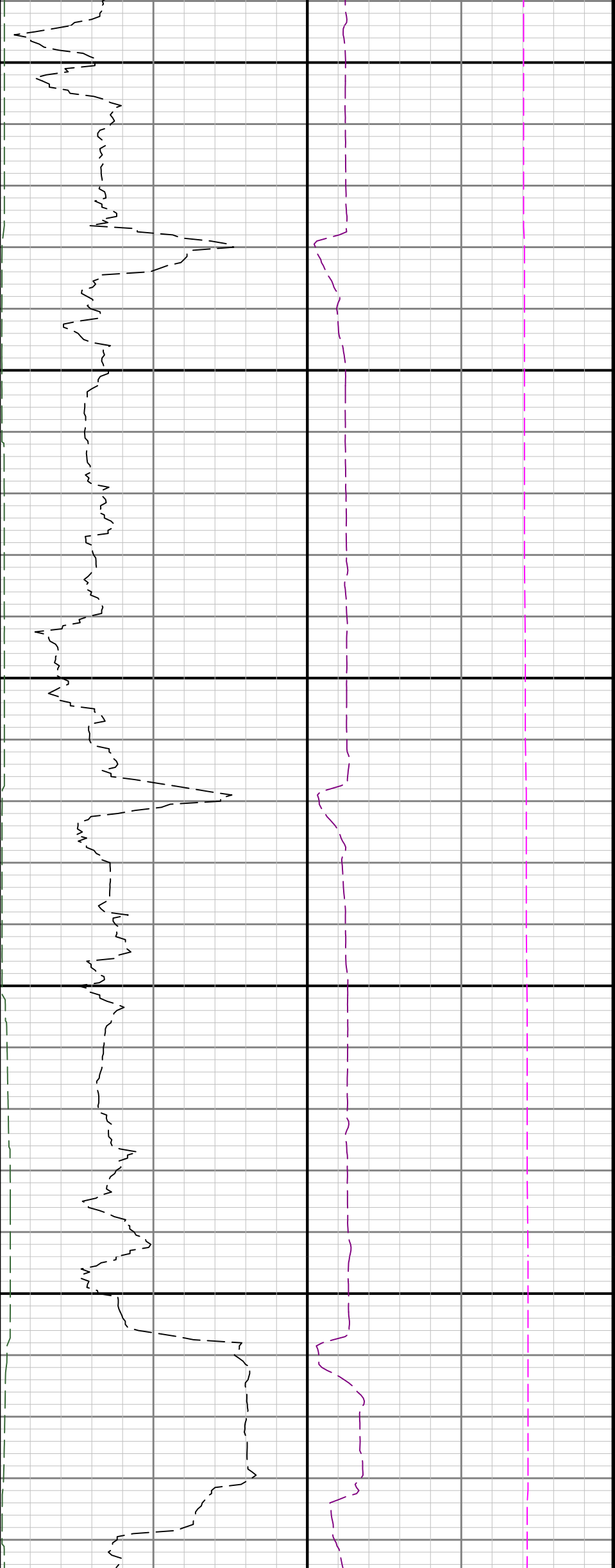




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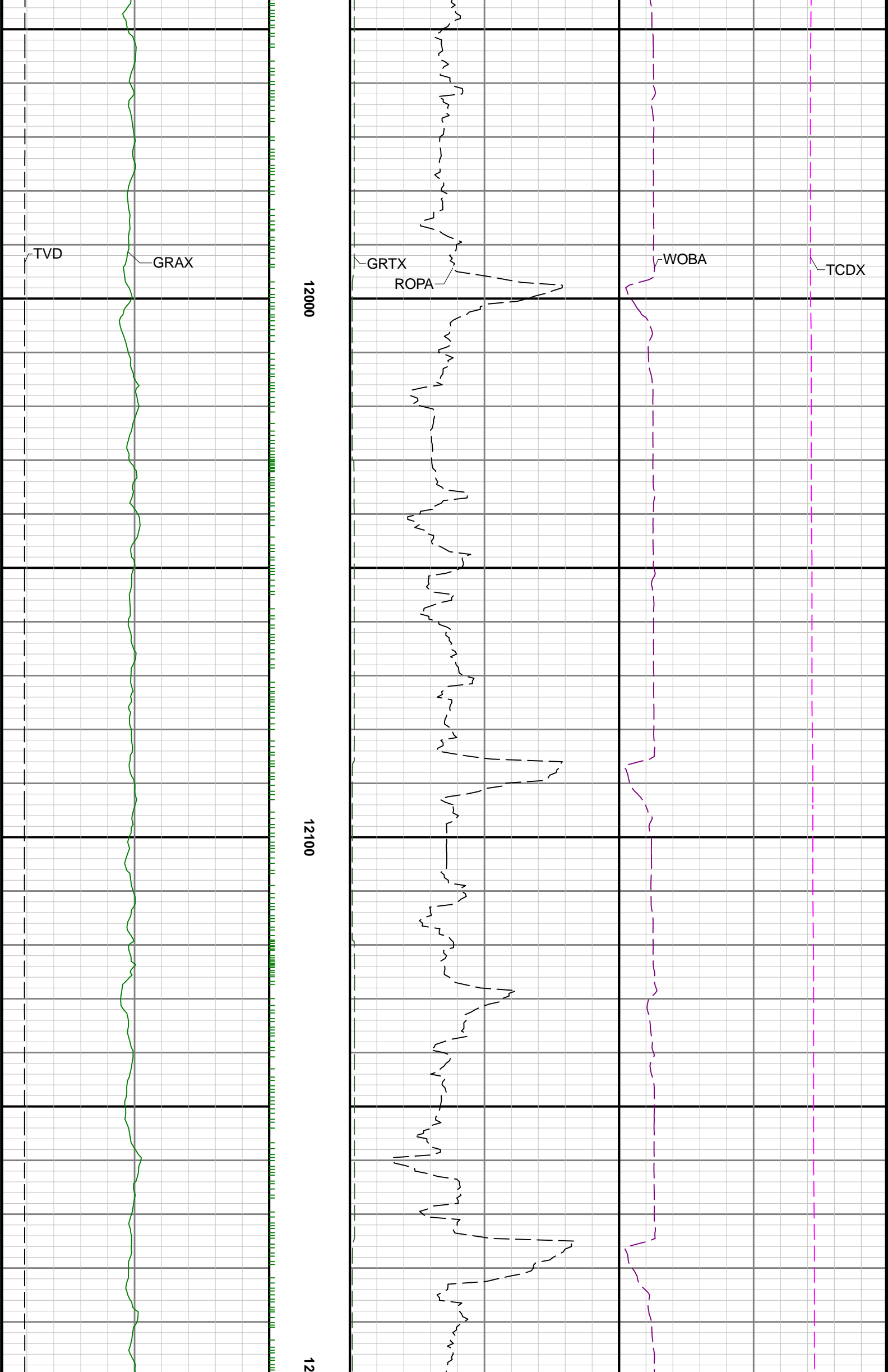


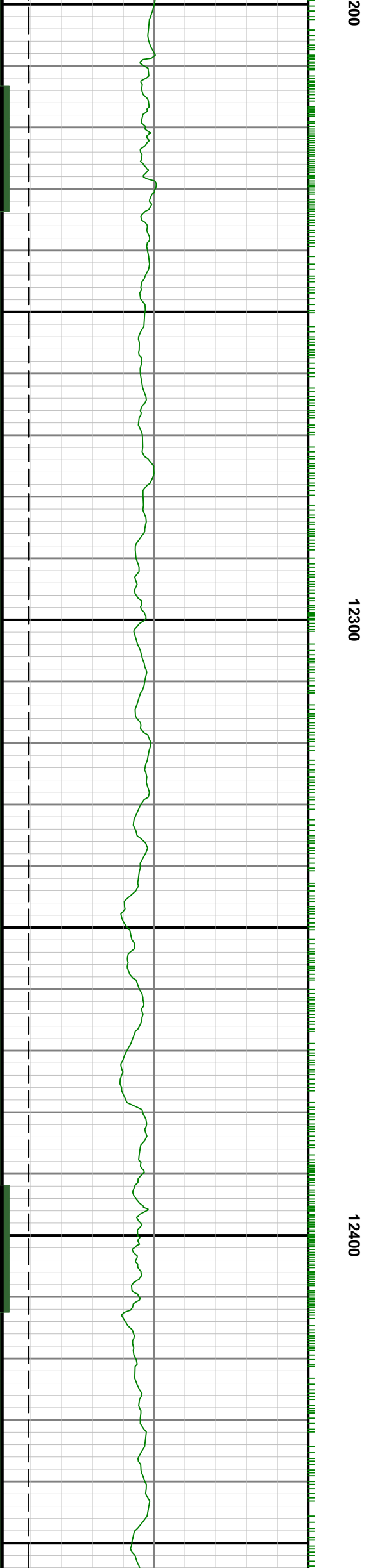
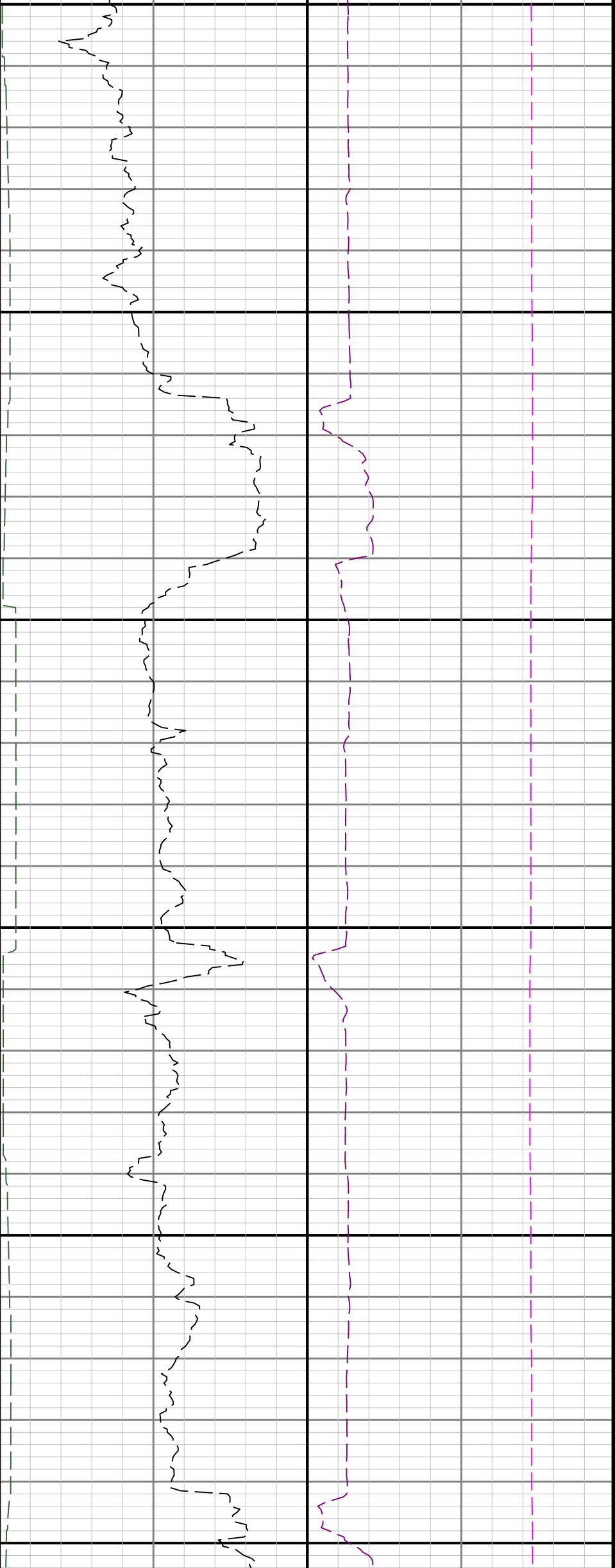
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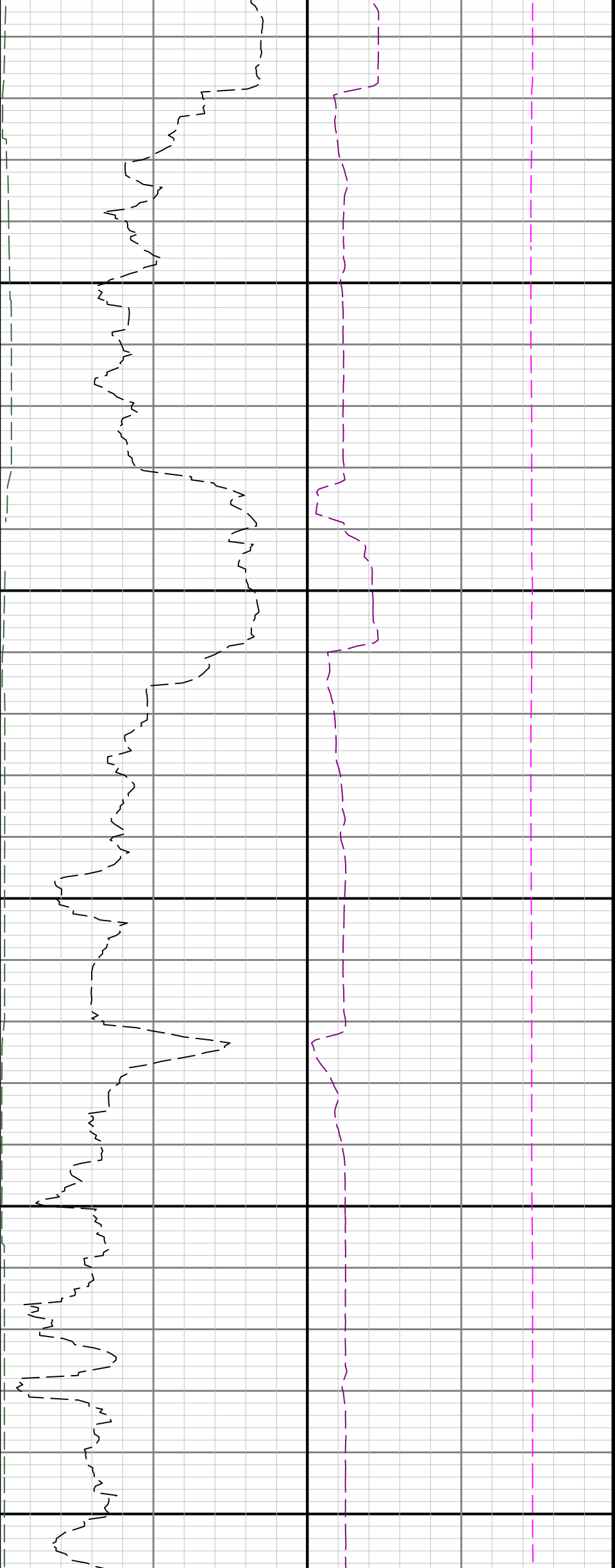
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GRSI



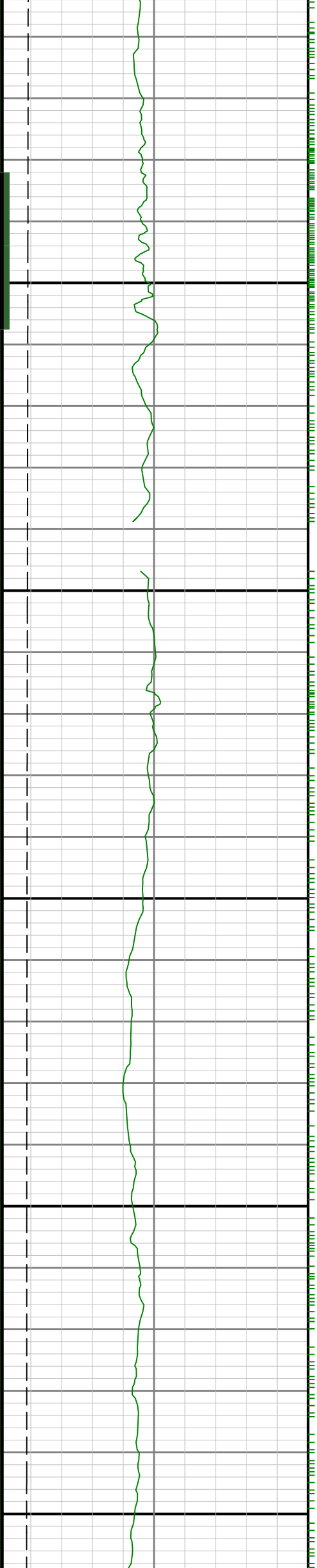


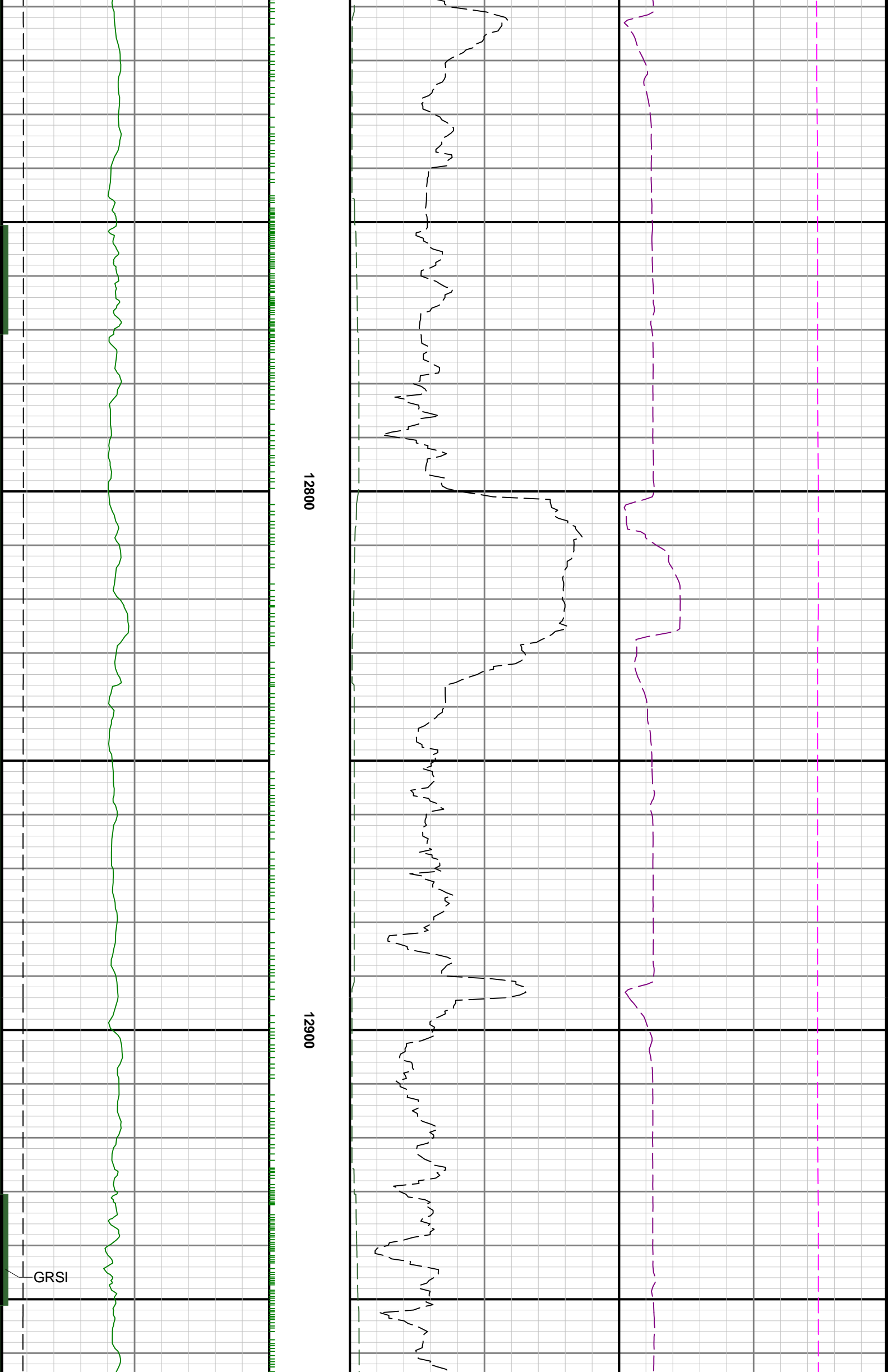


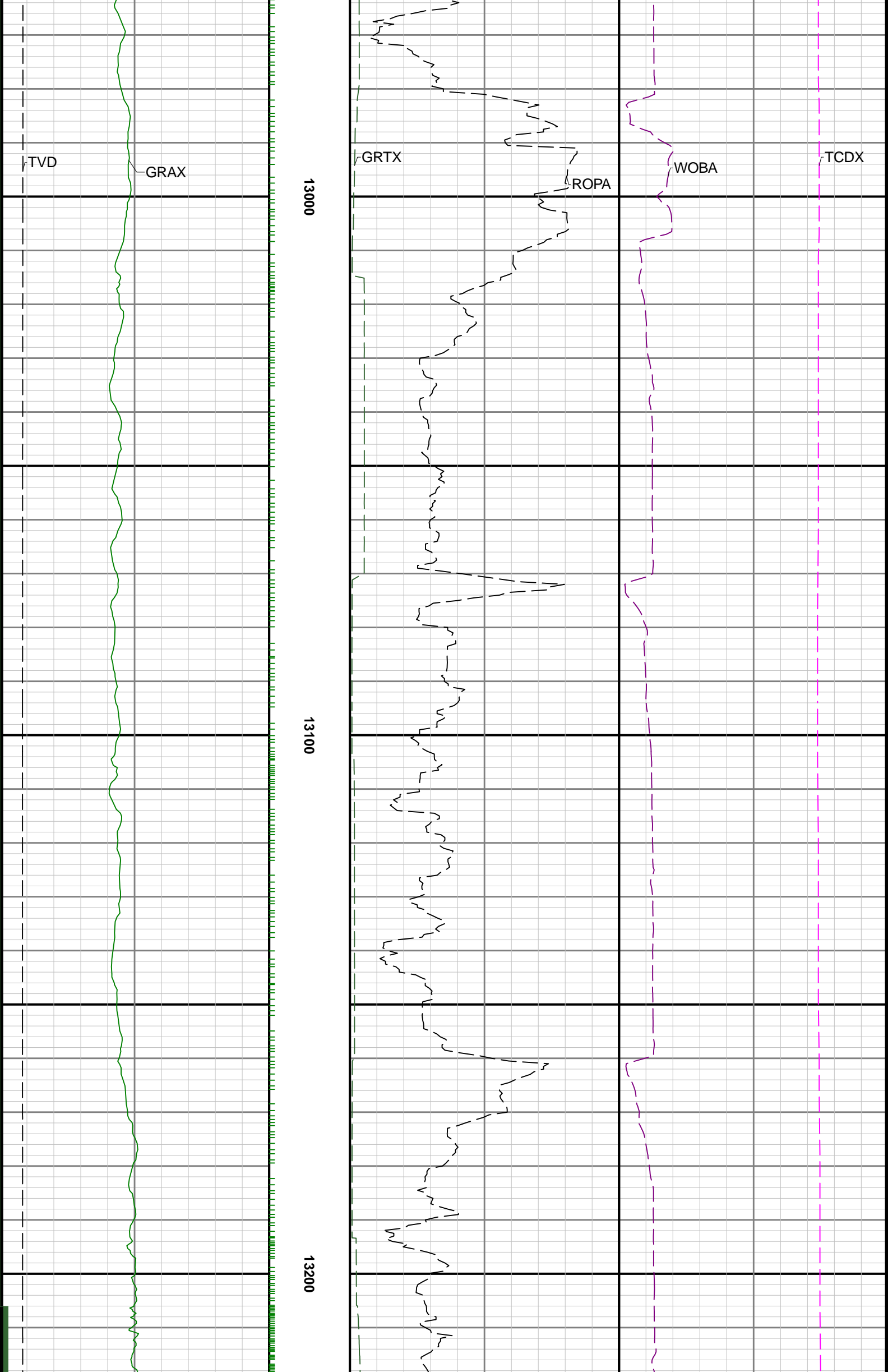
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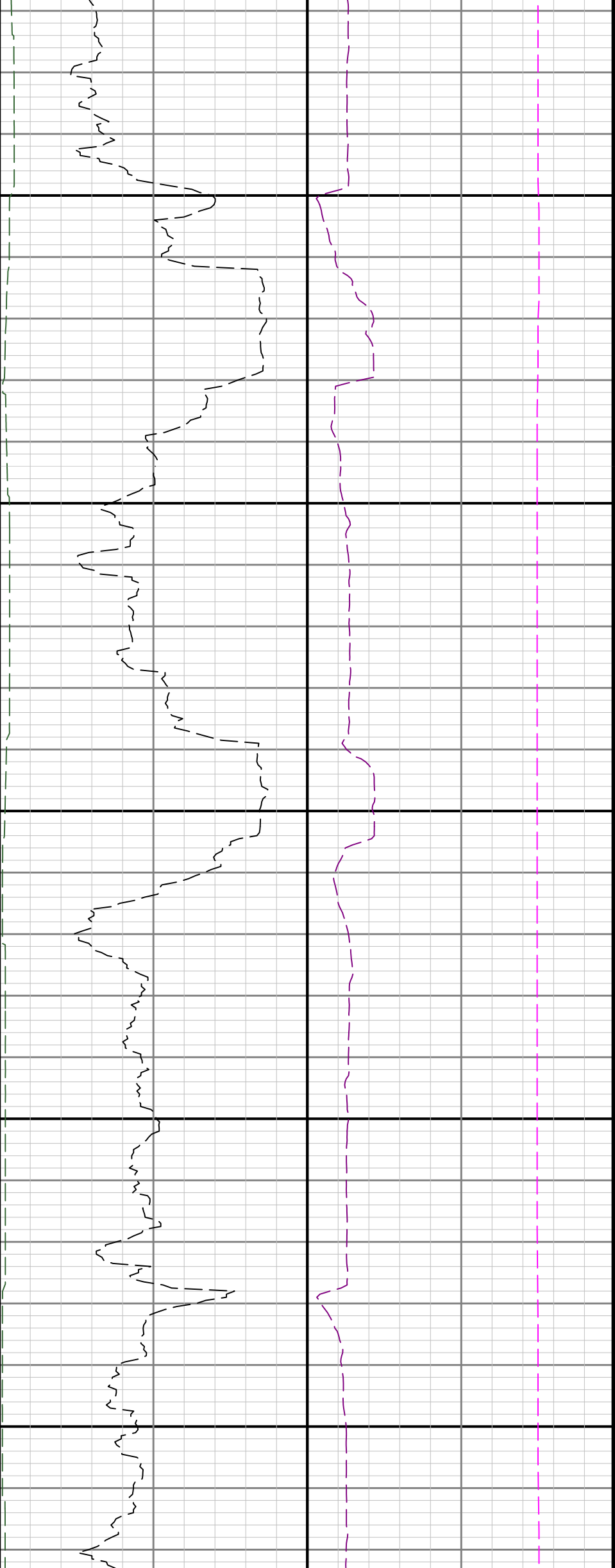
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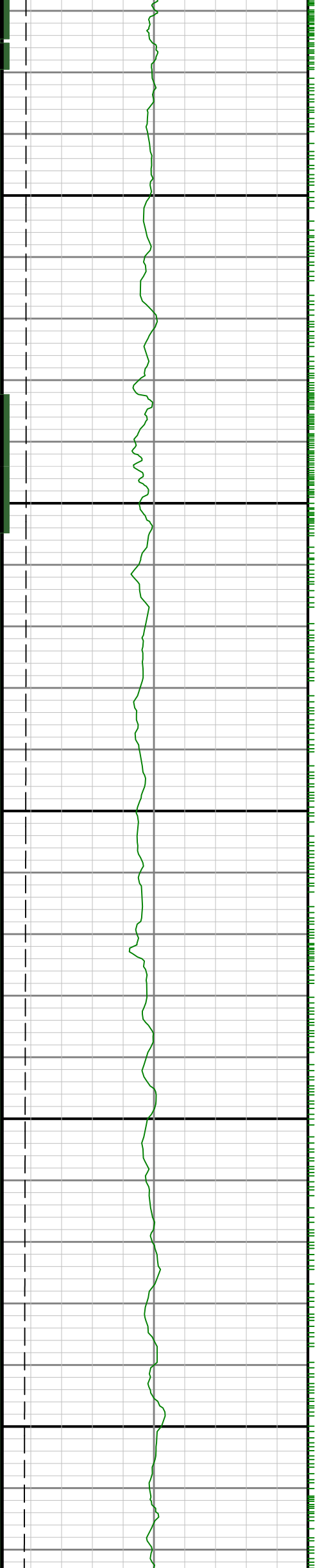


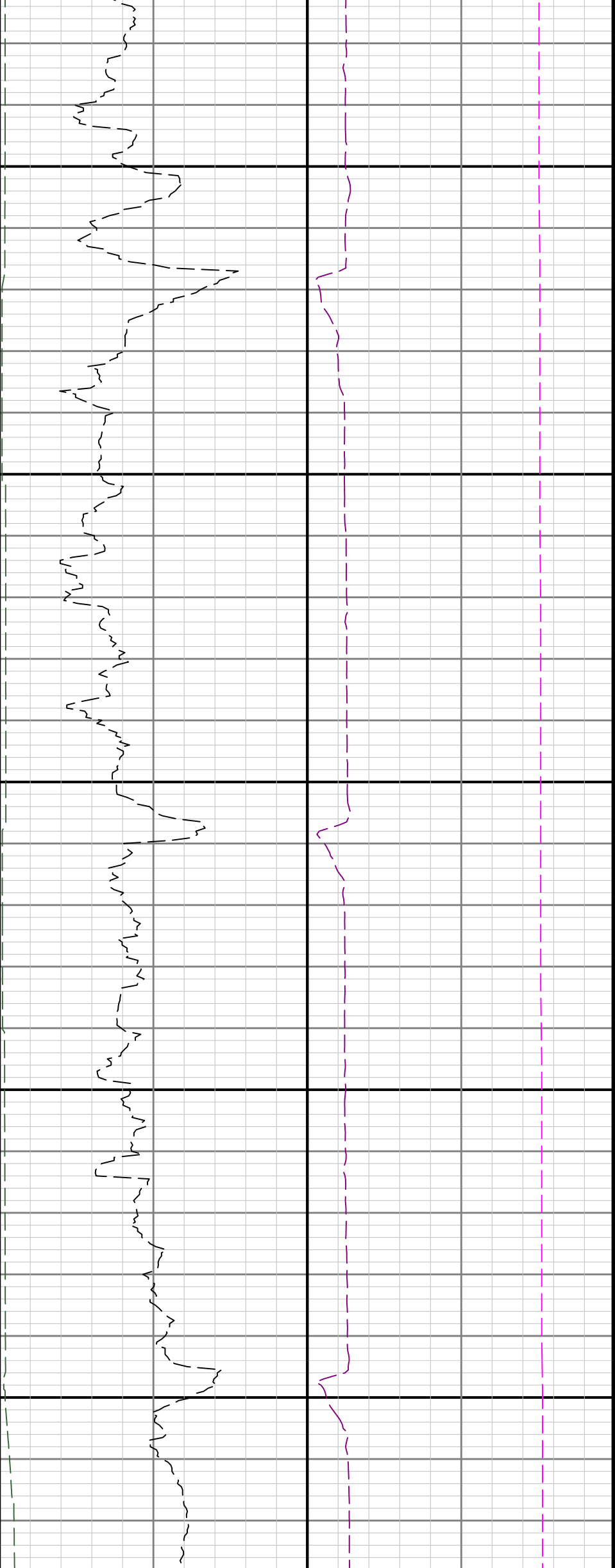




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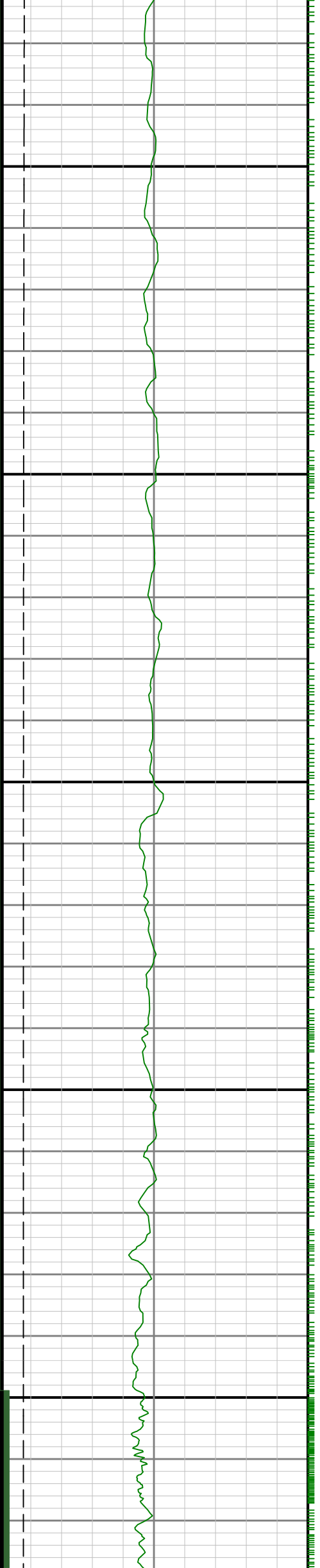


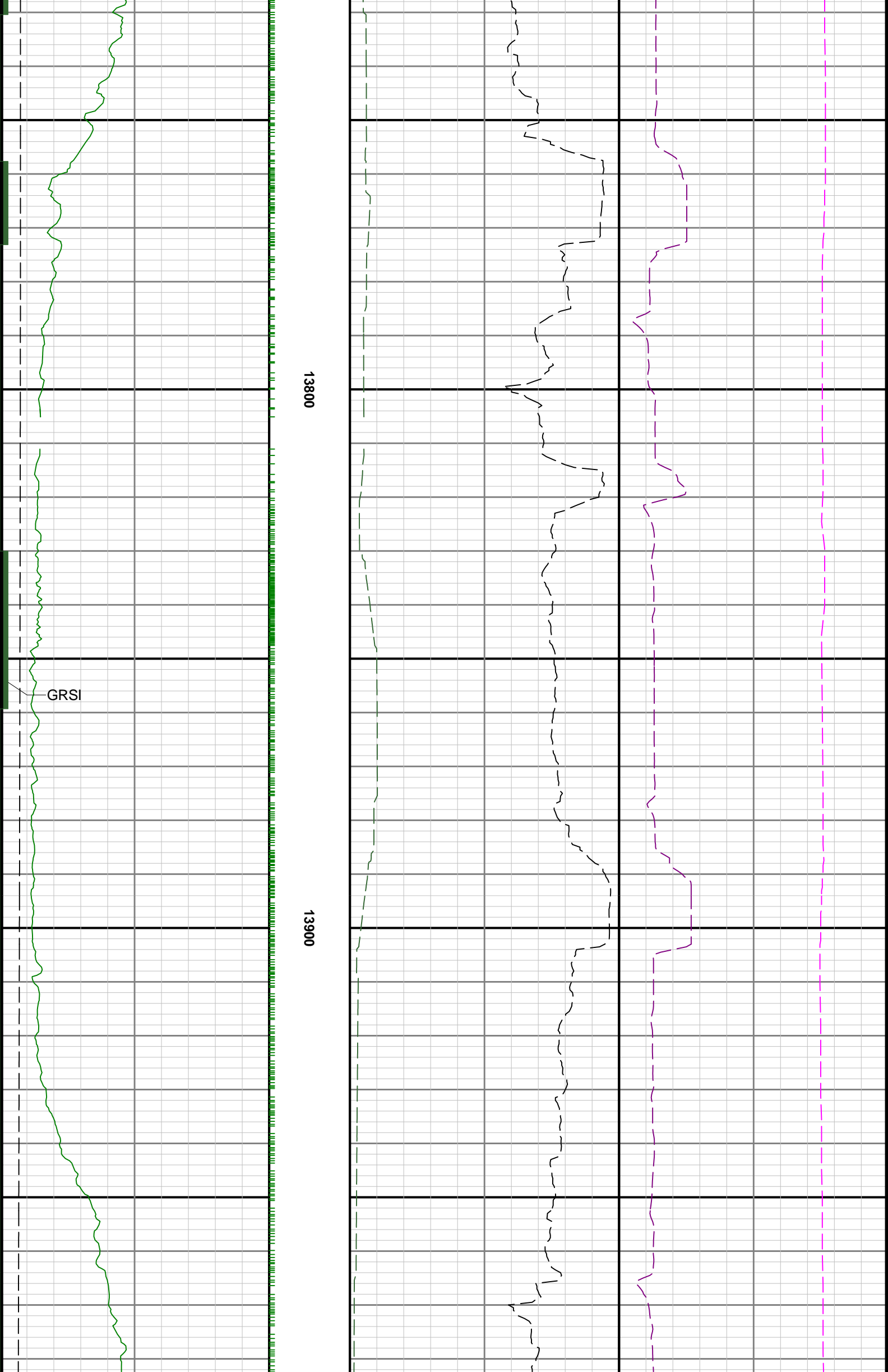


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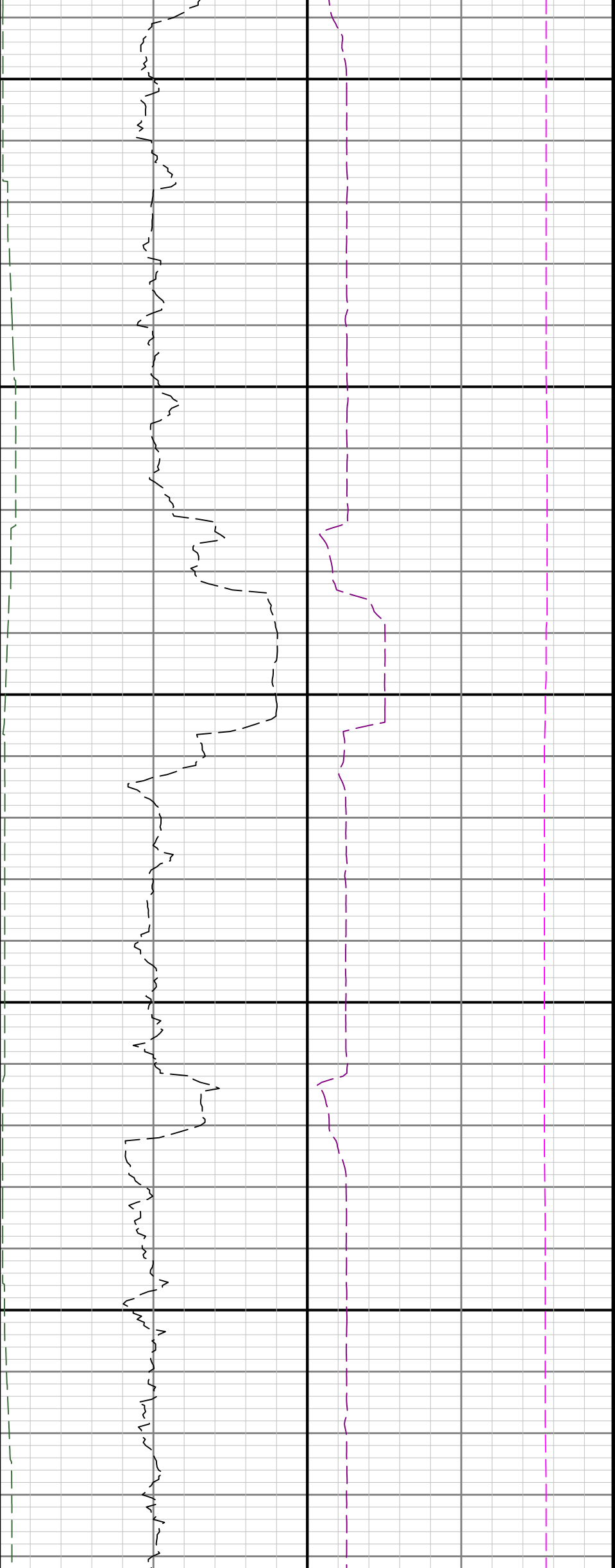
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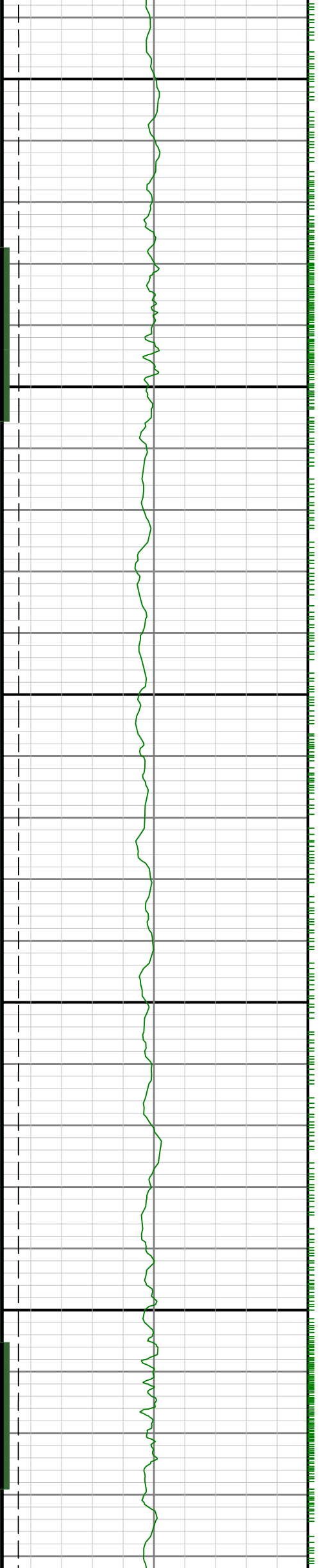


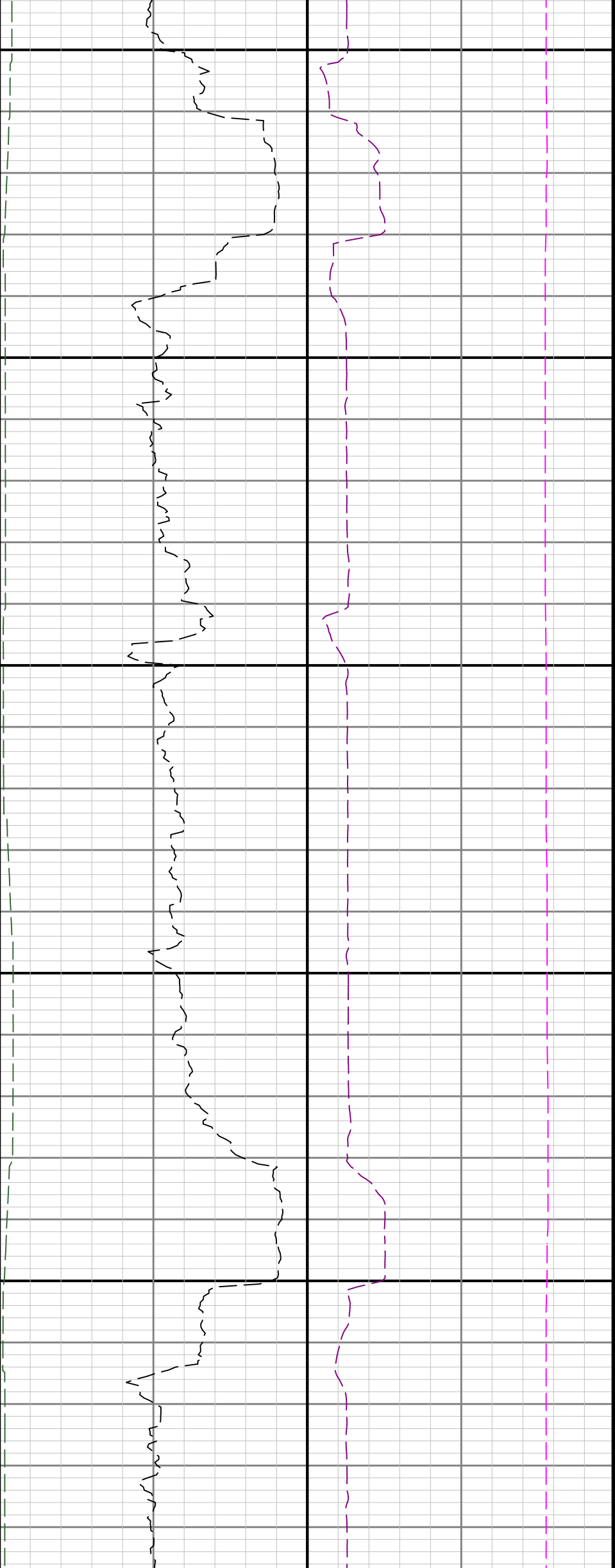




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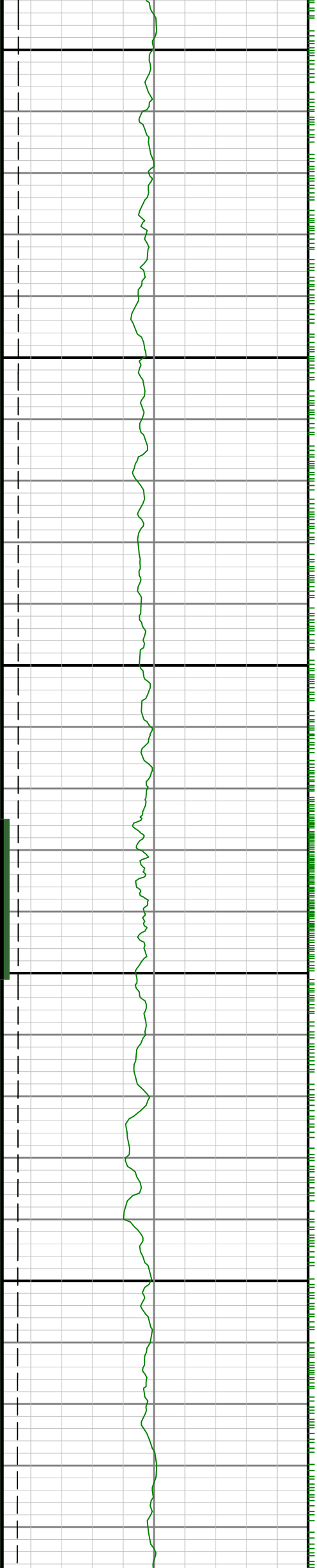


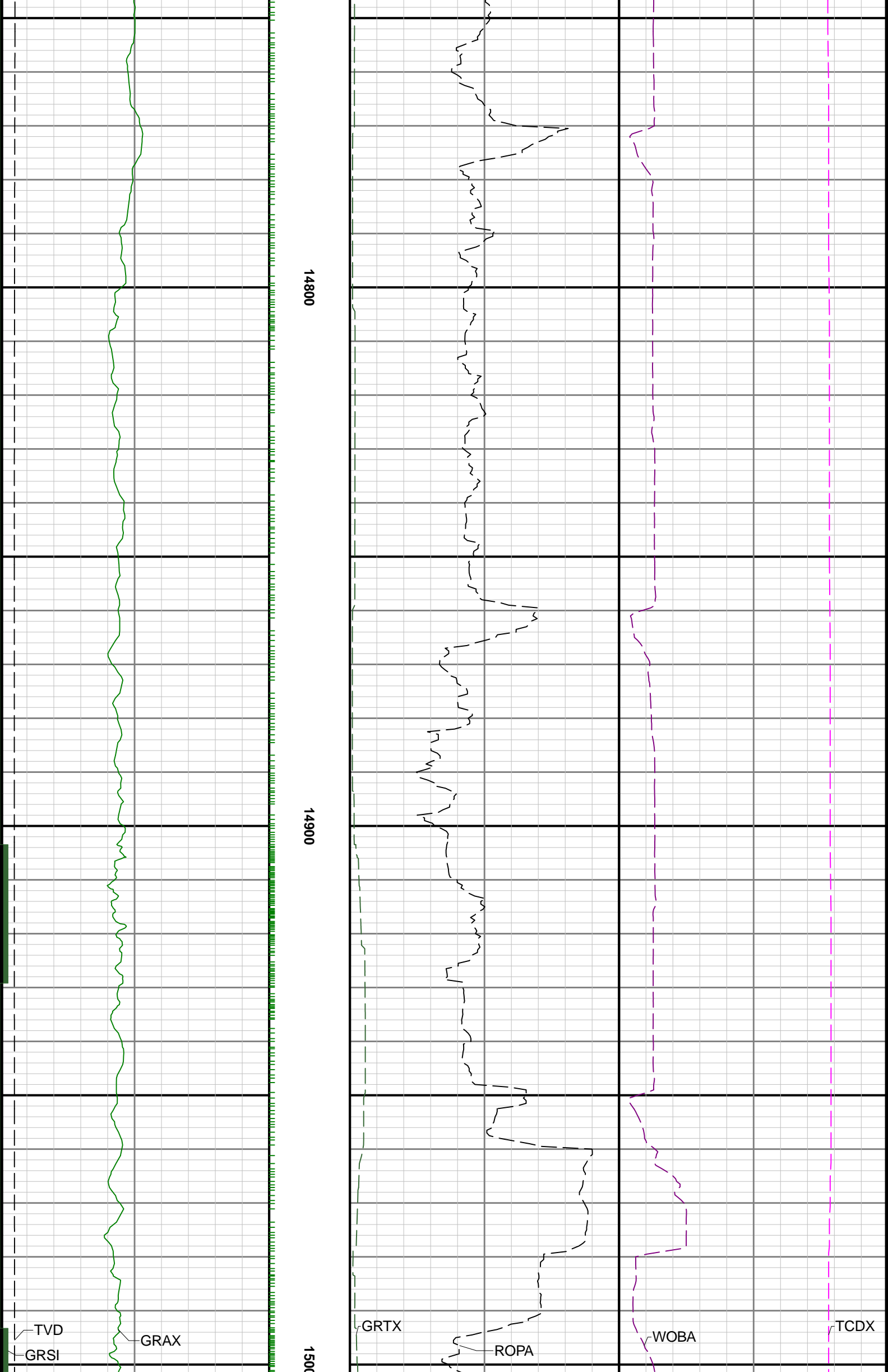


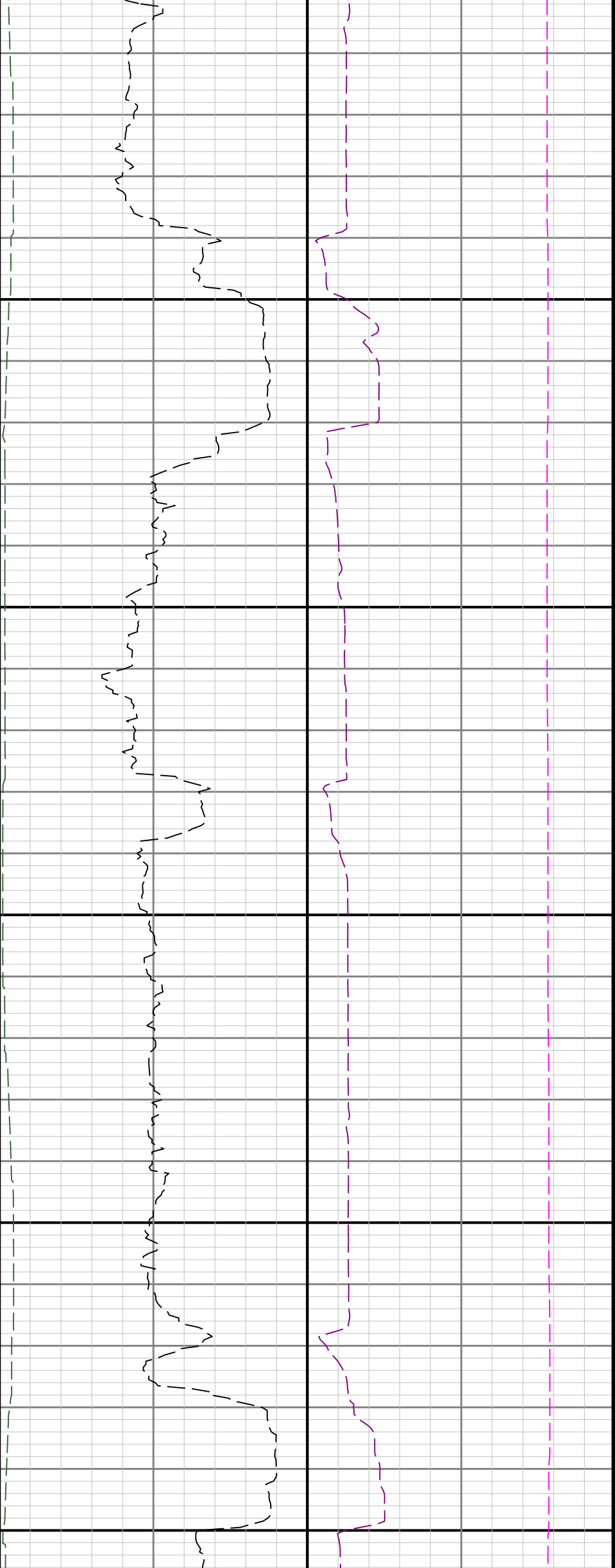
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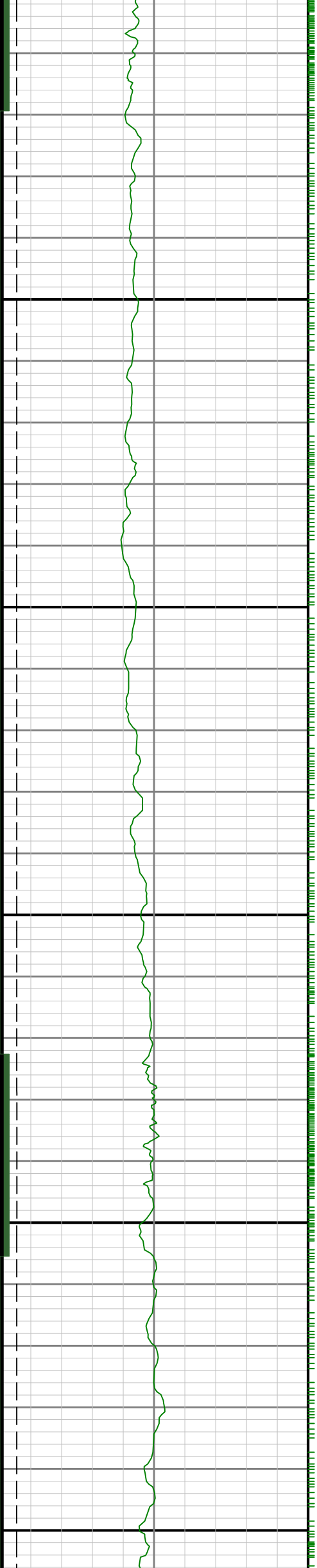
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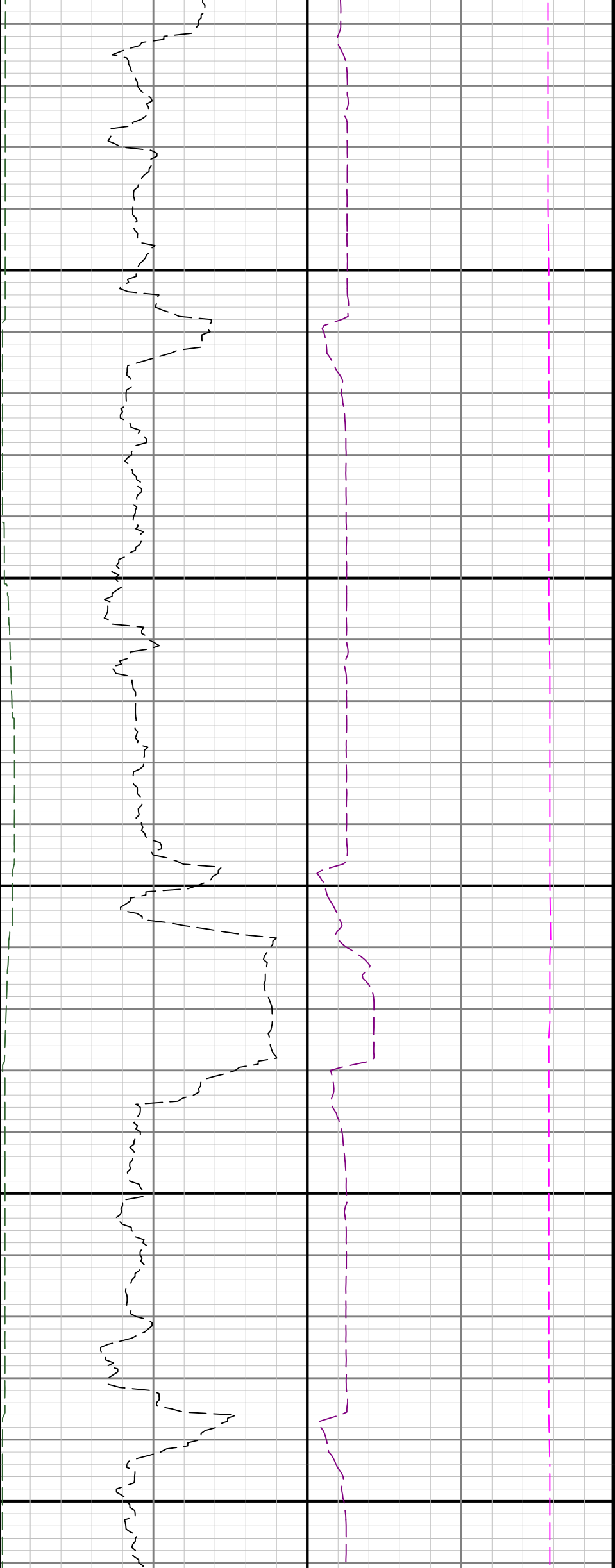






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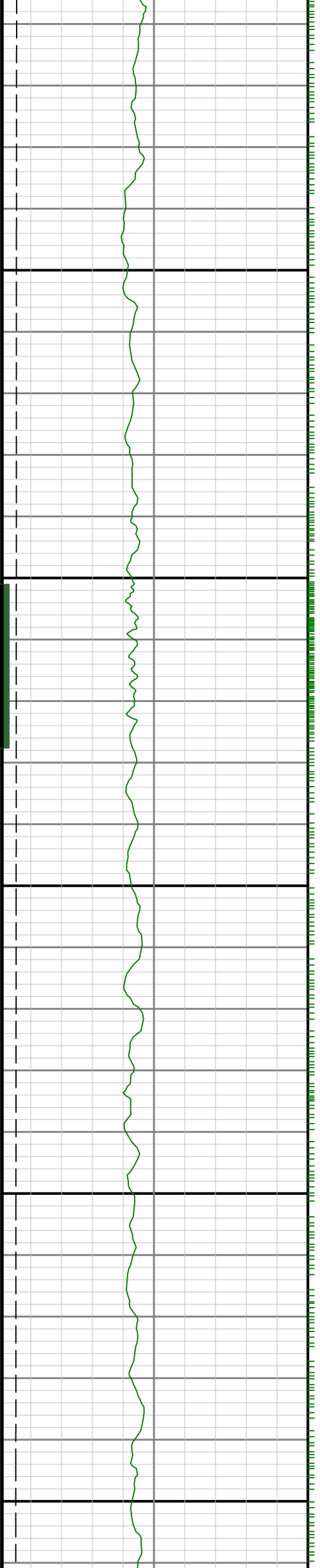


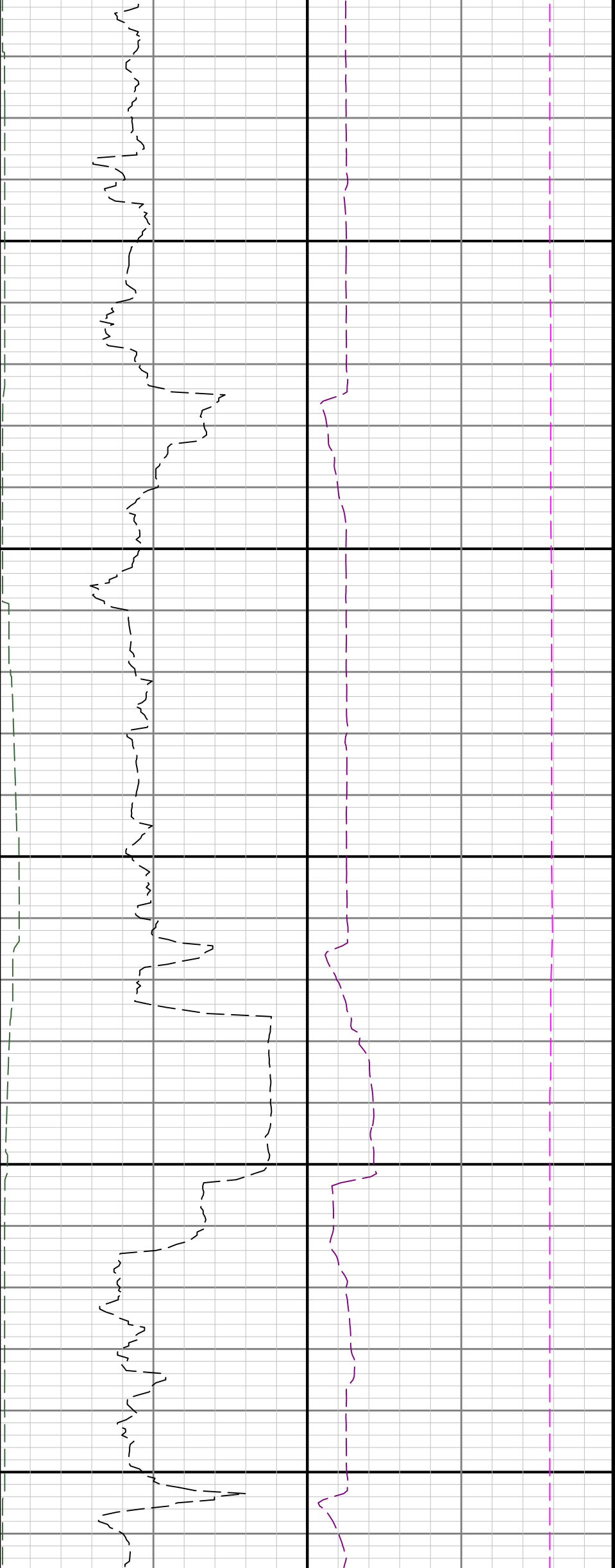


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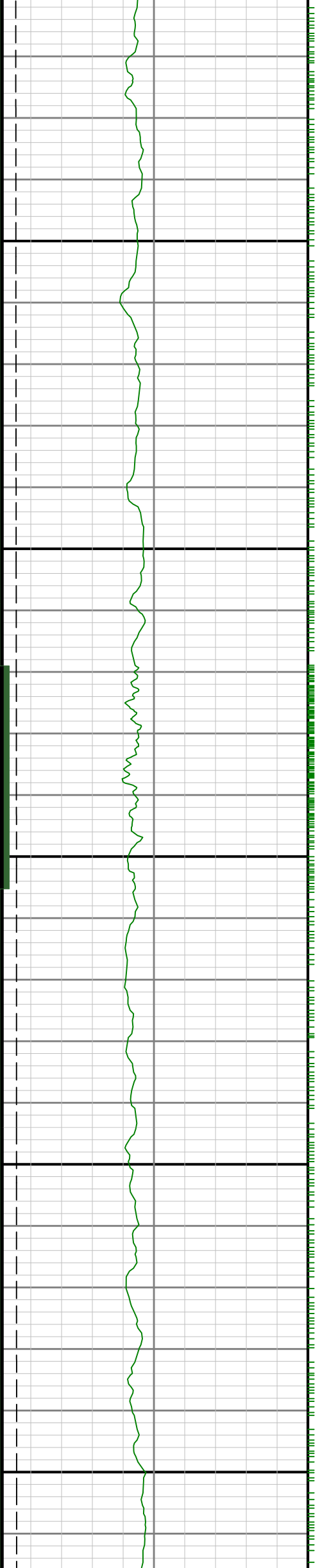
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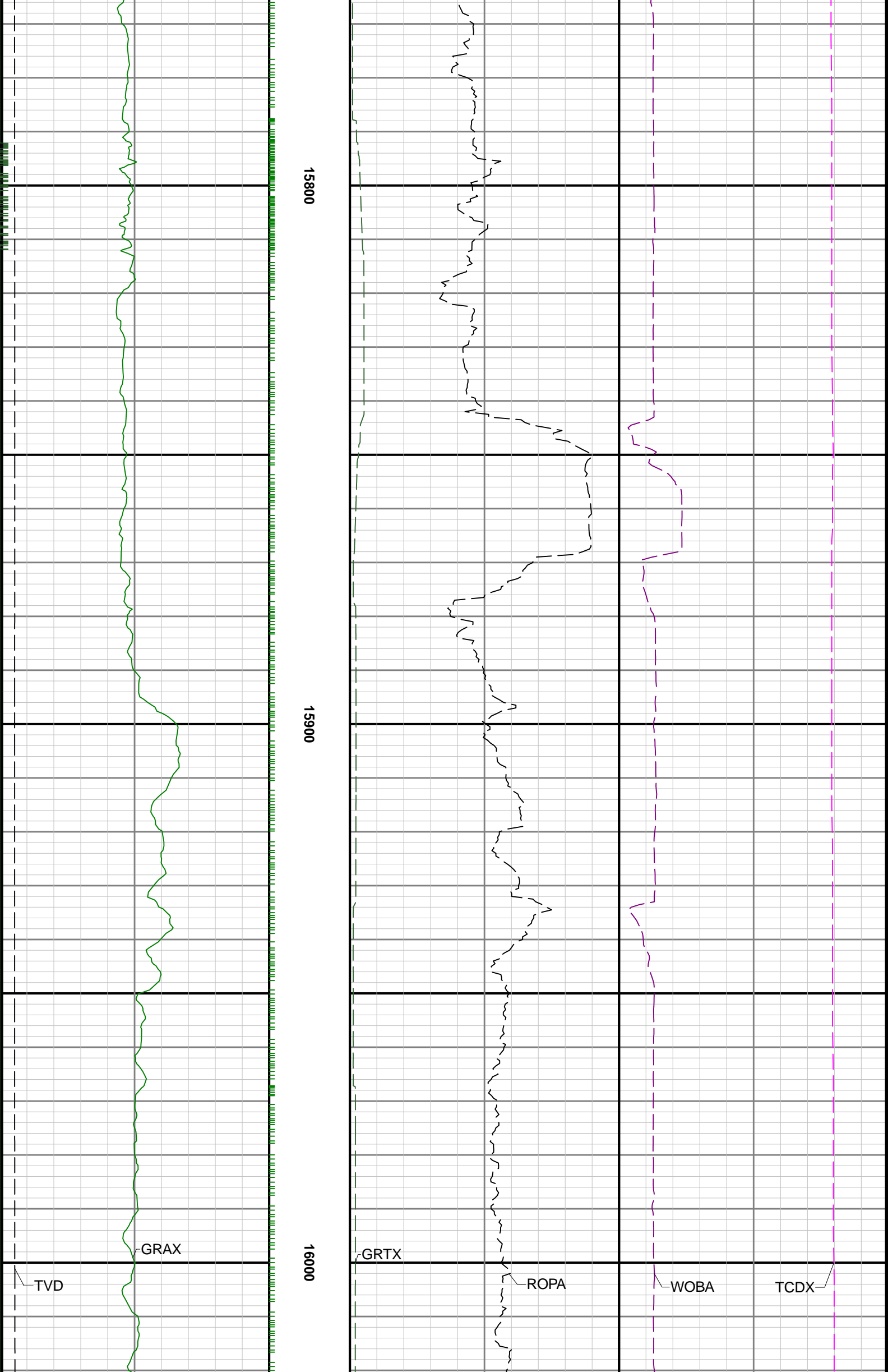


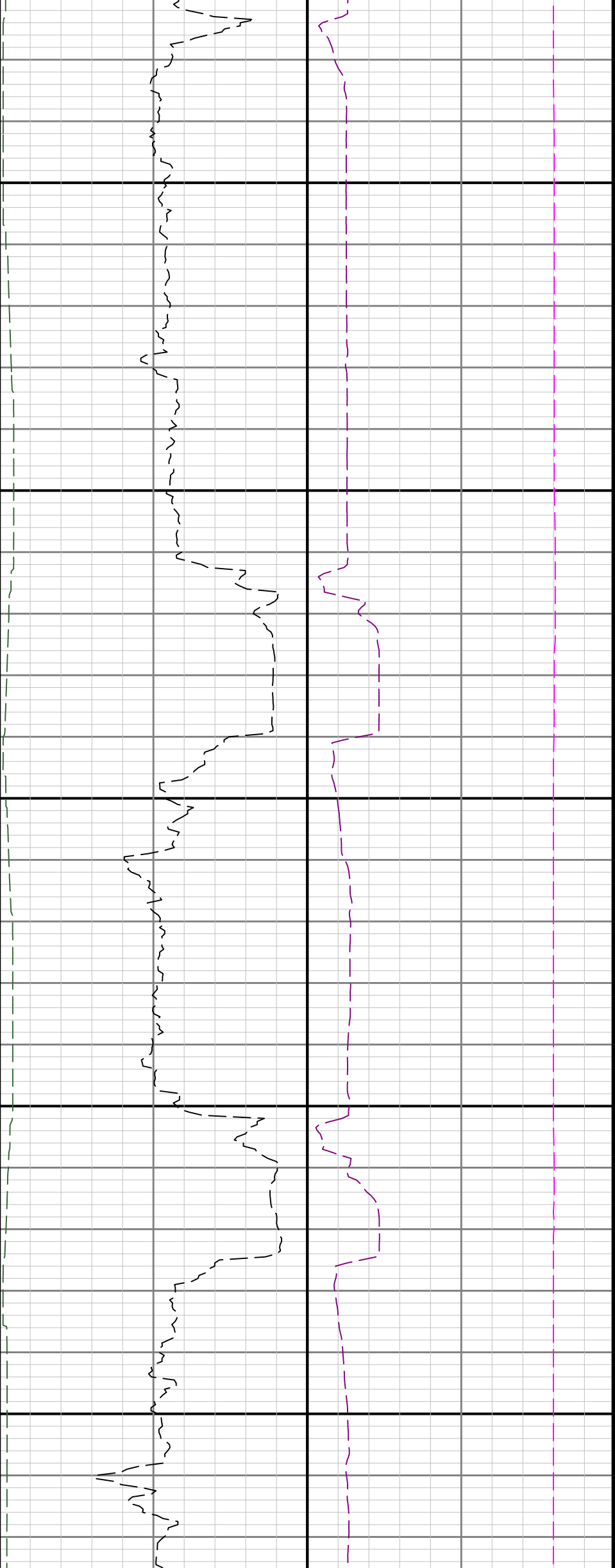


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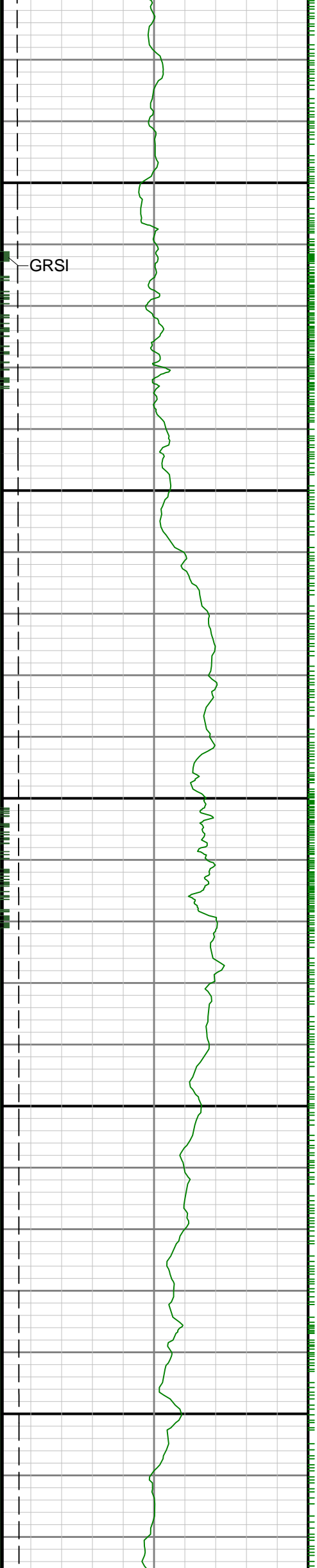


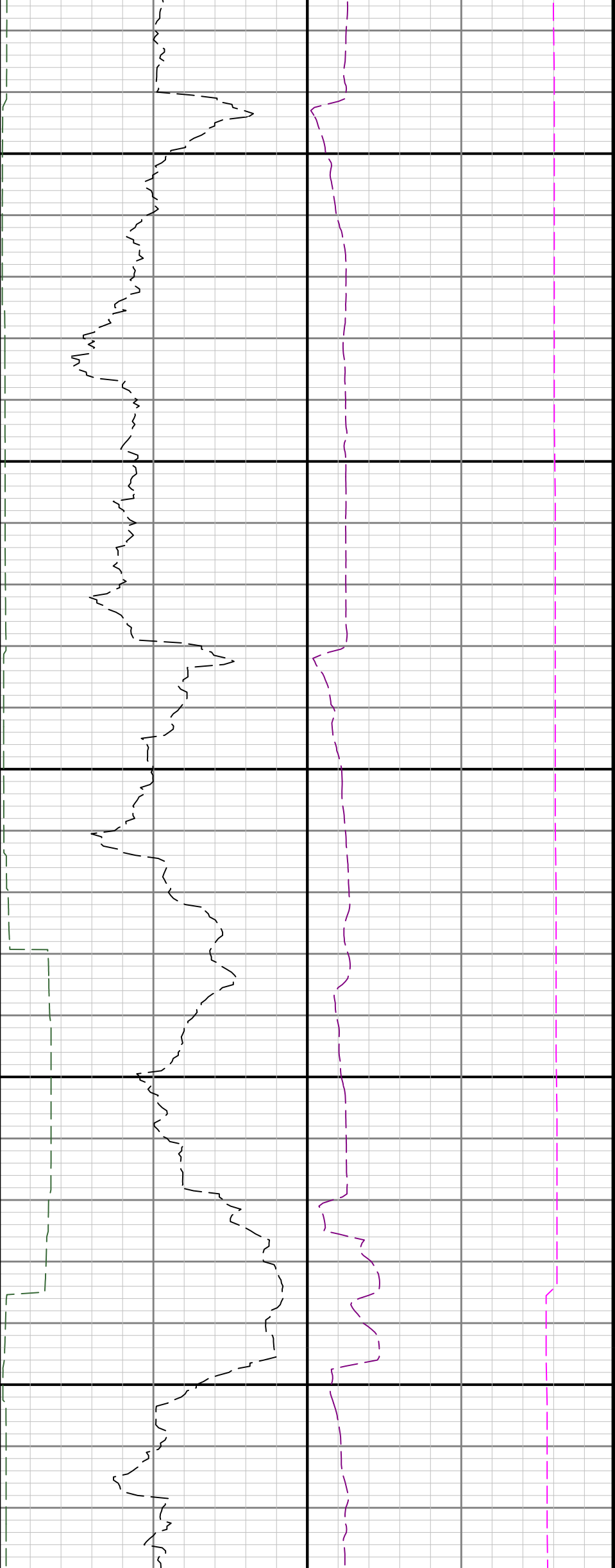




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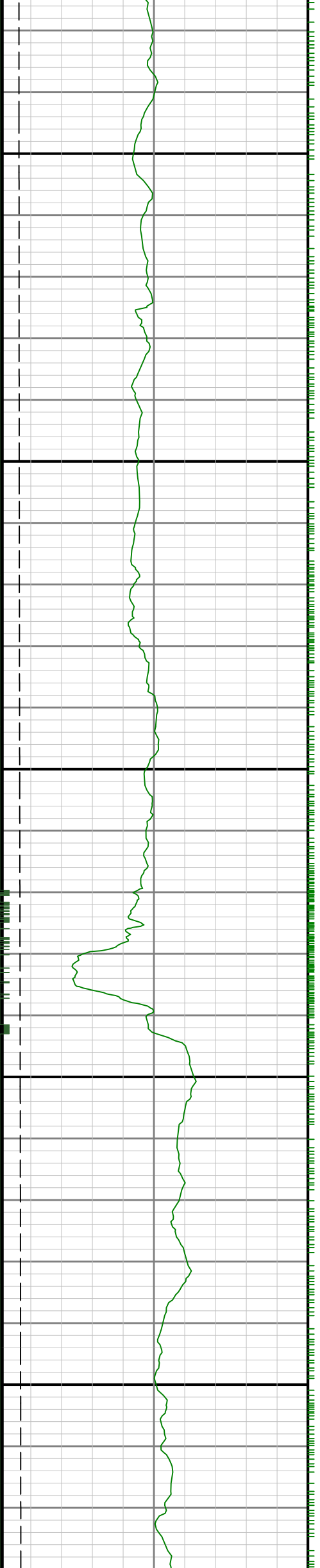


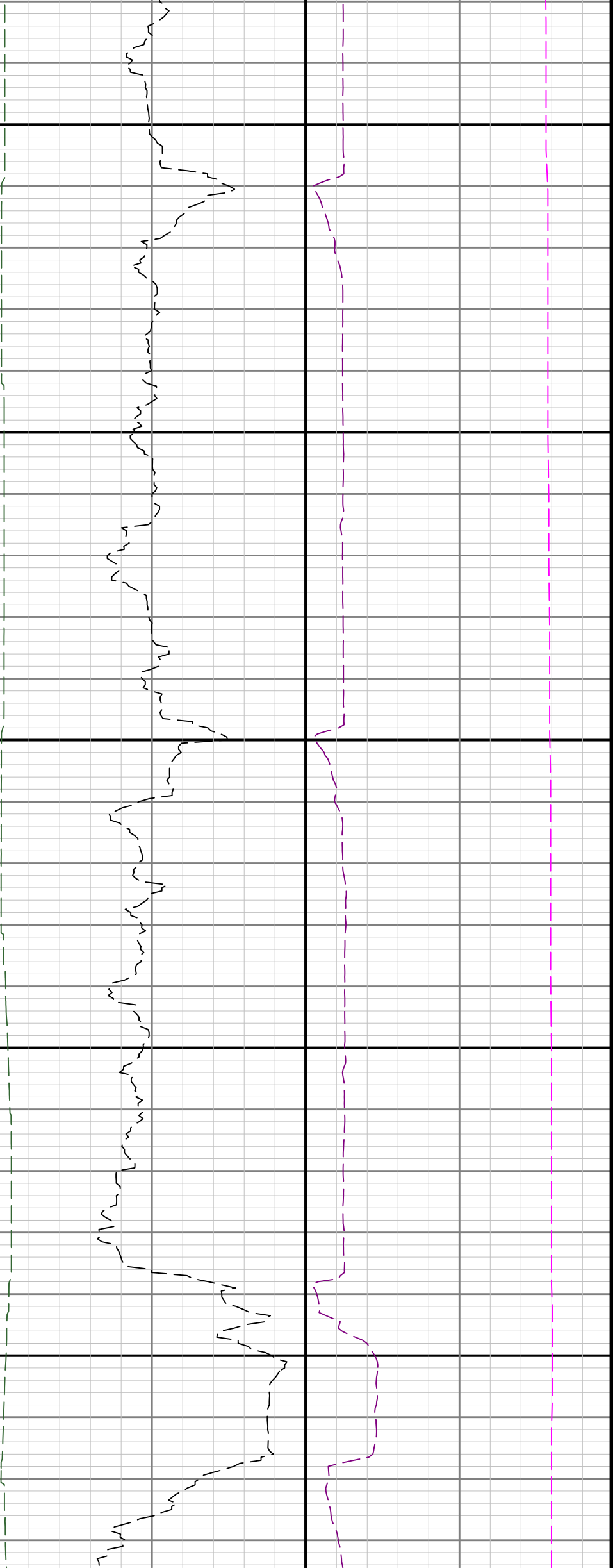


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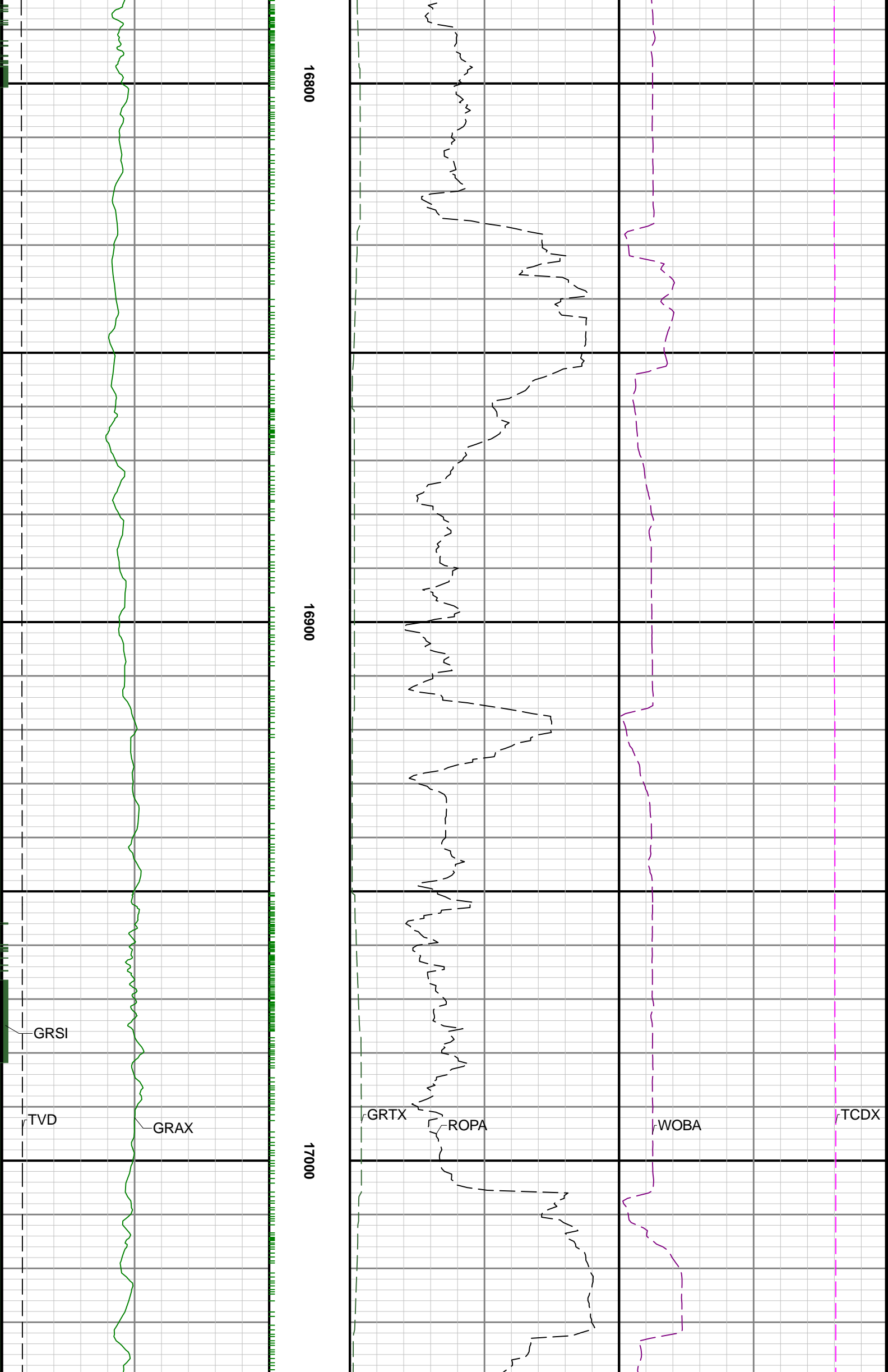
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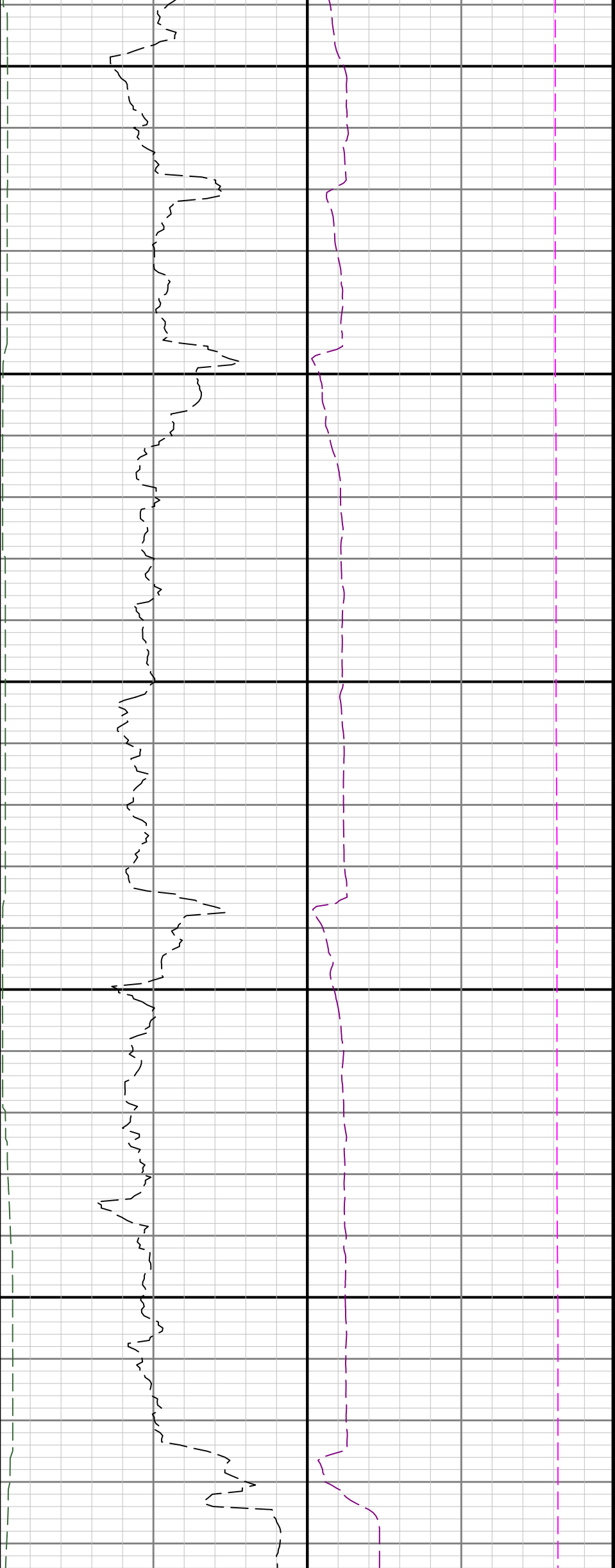




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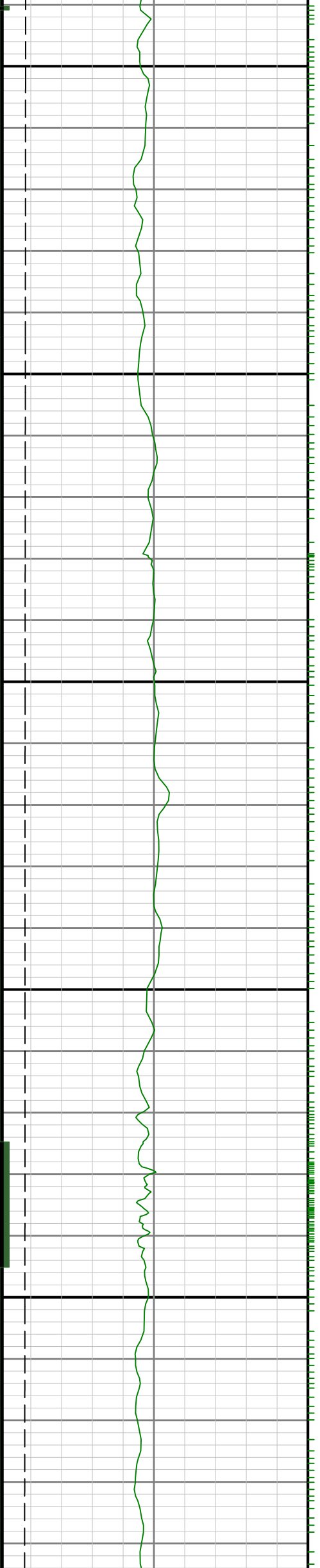
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