



Real Time Log

Natural Formation Evaluation  
Gamma Ray

Scale: **Company: Anadarko**

**1:240**  
**Well: Barclay 15C-26HZ**

**Measured Depth**  
**Field: Weld County(Kerr McGee)**

**Region: Continental US** **Country: United States**

Status: **Final Print** Surface Location: Latitude: 40° 7' 56.660" N Longitude: 104° 51' 23.179" W Other Services: Directional VSS

API Number: 05123390610000 Section 14 TWN: 2N Range67W

Permanent Datum (P.D.): Ground Level Elevation: 4948.00 ft. Elevations: N/A

Log Measured From: Rig Floor 4964.00 ft. Above P.D. KB: 4964.00 ft.

Depth Reference: Driller's Depth GL: 4648.00 ft.

Interval Logged Dates Magnetic Field Reference

Top: 6800.0 ft. Date From: 22 Mar 15 Dip Angle: 66.79° Azi Reference North: True

Bottom: 17397.0 ft. Date To: 27 Mar 15 Total Mag to Reference

Spud Date: 20 Mar 15 Field Strength: 52752.0 nT North Correction: 8.55°

Borehole Record

Casing Record

Hole Size	From	To	Size	Weight	From	To
8.750 in.	1130.0 ft.	7893.0 ft.	1085.000 in.	N/A	Surface	1085.0 ft.
6.125 in.	7893.0 ft.	17397.0 ft.	7.000 in.	26.00 lb/ft	Surface	7867.0 ft.

Mud Record

Deviation Record

Type	From	To	Hole Size	Interval	Inc / Az (Start)	Inc / Az (End)
Water Based Mud	Surface	17397.0 ft.	8.750 in.	6763.0 ft.	0.4° / 72.6°	85.3° / 181.6°
			6.125 in.	9504.0 ft.	85.3° / 181.6°	89.5° / 178.1°
					/	/
					/	/
					/	/
					/	/
					/	/

Acquisition System Software Version

Other

Advantage	2.20U4	Rig / Contractor:	Xtreme 23	/ Advance Drilling
PATS	6.4.1.34	Job No:	7086326	/ D&E
		District / Unit:	RMD	

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Log Run Summary

LWD  Run  No.	BHA  Run  No.	Bit  Run  No.	Bit  Size  (in.)	Bit  Type	Bit  Gauge  Length  (in.)	Assembly  Type	Logged Interval		Bit Depth Interval		Date / Time				Circ.  Time  (hrs.)
							Top	Bottom	From	To	Start		End		
1	1	2	8.750	PDC	3.000	Steerable	6800.0	7893.0	6800.0	7893.0	22 Mar 15	06:31	22 Mar 15	23:53	17
2	2	3	6.125	PDC	3.000	Steerable	7893.0	17350.0	7893.0	17397.0	24 Mar 15	08:15	27 Mar 15	12:20	75

Crew

Name	Arrive	Depart	Name	Arrive	Depart	Name	Arrive	Depart
	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite
Jason Williams	20 Mar 15	27 Mar 15	Andrew Clancy	20 Mar 15	21 Mar 15	Sumanth Belawadi	22 Mar 15	27 Mar 15

Mud Properties Record

Date / Time	LWD Run No.	Measured Depth (ft.)	Mud Type	Density (ppg)	Viscosity (cp)	pH	Fluid Loss (cc)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
23 Mar 15 7:00	1	7400.0	Water Based Mud	10.4	15	8.5	N/A	1/87	Halliburton	6,400	N/A
24 Mar 15 9:00	2	7950.0	Water Based Mud	9.5	11	9.5	N/A	1/91.6	Halliburton	5,700	N/A

Mnemonics

Curve	Description	Units
GRAX	Gamma Ray Apparent, 0.5 ft. Avg	API
GRIX	Gamma Ray Data Density	points
GRSI	Gamma Ray Sliding Indicator	unitless
GRTX	Gamma Ray Time Since Drilled	min
ROPA	Rate of Penetration, 3.0 ft. Avg	ft/hr
TCDX	Downhole Temperature	degF
TVD	True Vertical Depth	ft.
WOBA	Surface Weight on Bit, 1.0 ft. Avg.	klbs

Equipment and Service Data

LWD Run No.	Tool	Serial Number	Measurement	Bit Offset (ft.)	Max O.D. (in.)	Min I.D. (in.)
1	DIR	12456790	Directional	47.34	6.750	3.188
1	SRIG	11814653	Gamma	43.96	6.750	3.188
2	DIR	10073495	Directional	51.27	4.750	2.688
2	SRIG	12596753	Gamma	47.85	4.750	2.688

Service and Tool Mnemonics

Mnemonic	Name	Description
DIR	Directional	Wellbore directional survey
SRIG	Inclination and Gamma	Probe based gamma ray and inclination module

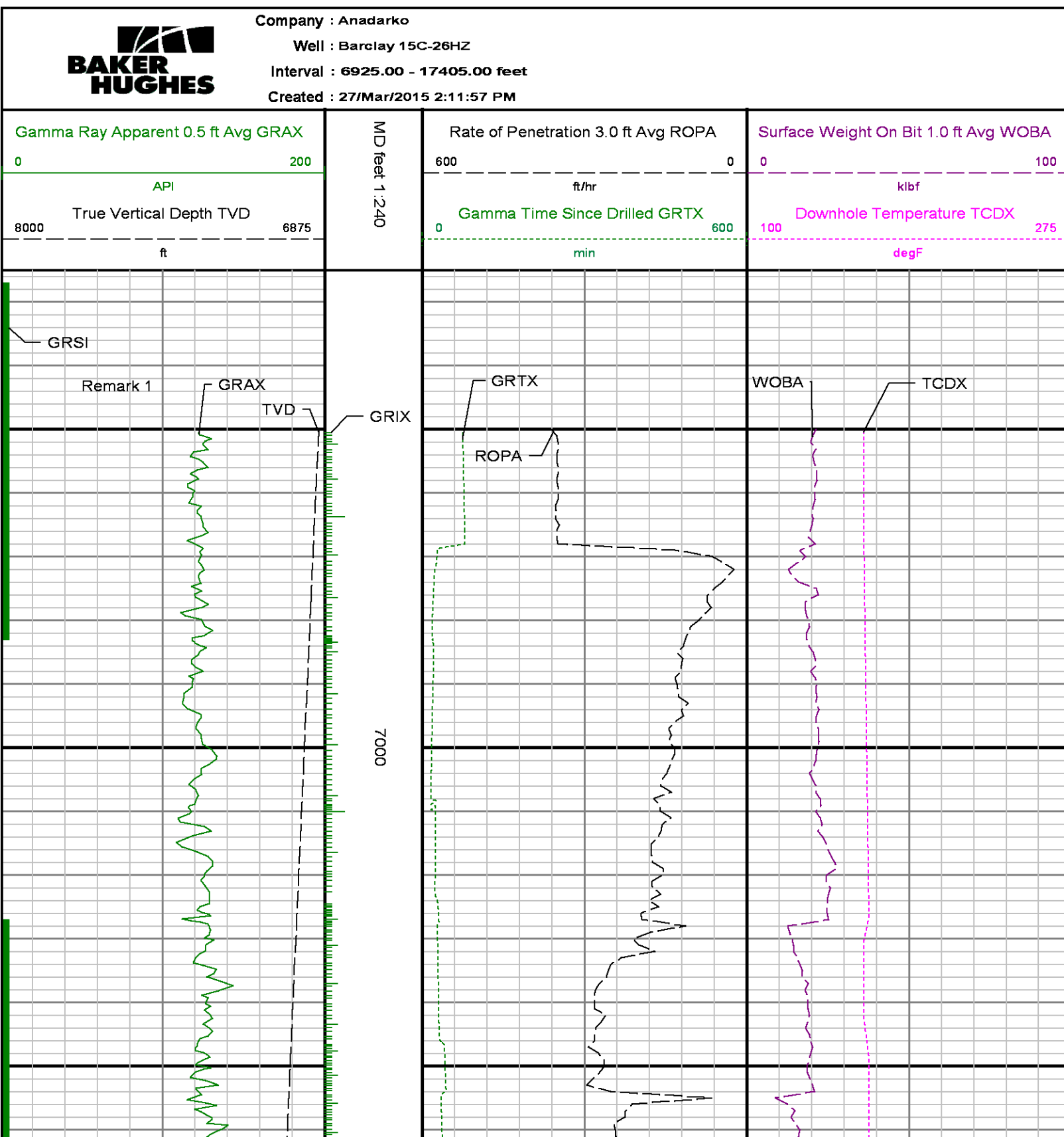
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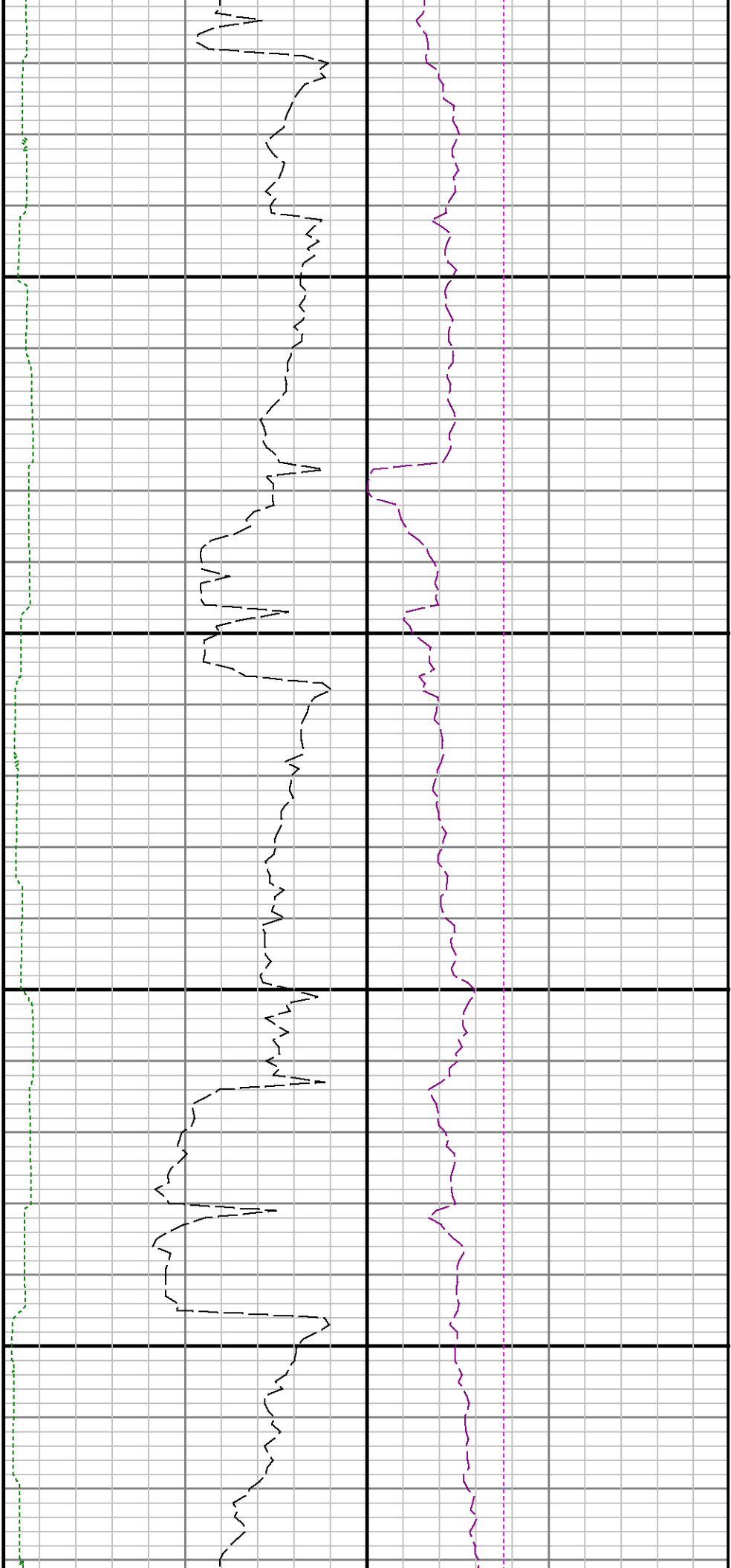
<p>1.) Depth measurements were obtained from a depth control system not supplied or operated by Baker Hughes. Due to lack of control by Baker Hughes logging engineers, depth calibrations and measurements could not be independently verified and the unverified depths as supplied to Baker Hughes are being used to represent logging data.</p> <p>2.) Baker Hughes Run 1 utilized a 6 3/4 inch NaviGamma (Directional and Gamma Ray) tool behind an 8 3/4 inch bit and steerable assembly from 6800 to 7983 feet MD (6745.92 to 7499.13 feet TVD).</p> <p>3.) Baker Hughes Runs 2 utilized a 4 3/4 inch NaviGamma (Directional and Gamma Ray) tool behind a 6 1/8 inch bit and steerable assembly from 7938 to 17397 feet MD (749913 to 7540.11 feet TVD).</p> <p>4.) A sliding indicator is shown on the left side of track 1 as a heavy line. This indicator has been depth-shifted to the Gamma Ray sensor offset to correspond with Gamma Ray data acquired while sliding.</p>
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Remarks

Number	Measured Depth (ft.)	Hole Section (in.)	LWD Run No.	Remark
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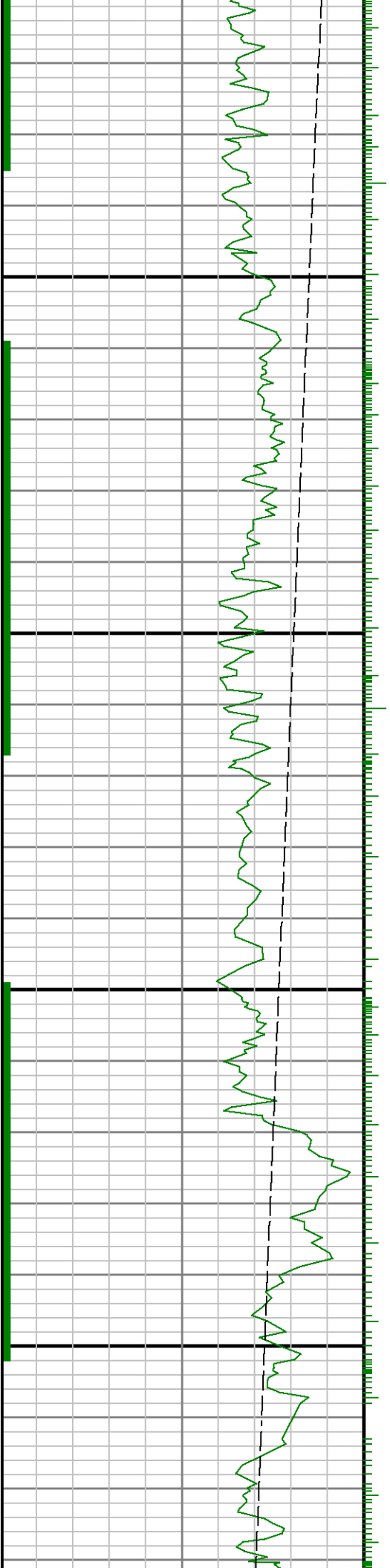
1	6800	8.750	1	Logging services began at 6800. No logging data prior to 6800 feet MD(6753.06 feet TVD) as per client request.
2	7847	8.750	1	The interval from 7847 to 7893 feet MD(7496.63 to 7499.13 feet TVD) was logged up to 32 hours after being drilled due to casing operations.
3	17397	6.125	2	The interval from 17349 to 17397 feet MD (7539.87 to 7540.11 feet TVD) was not logged due to gamma sensor offset to bit at TD.

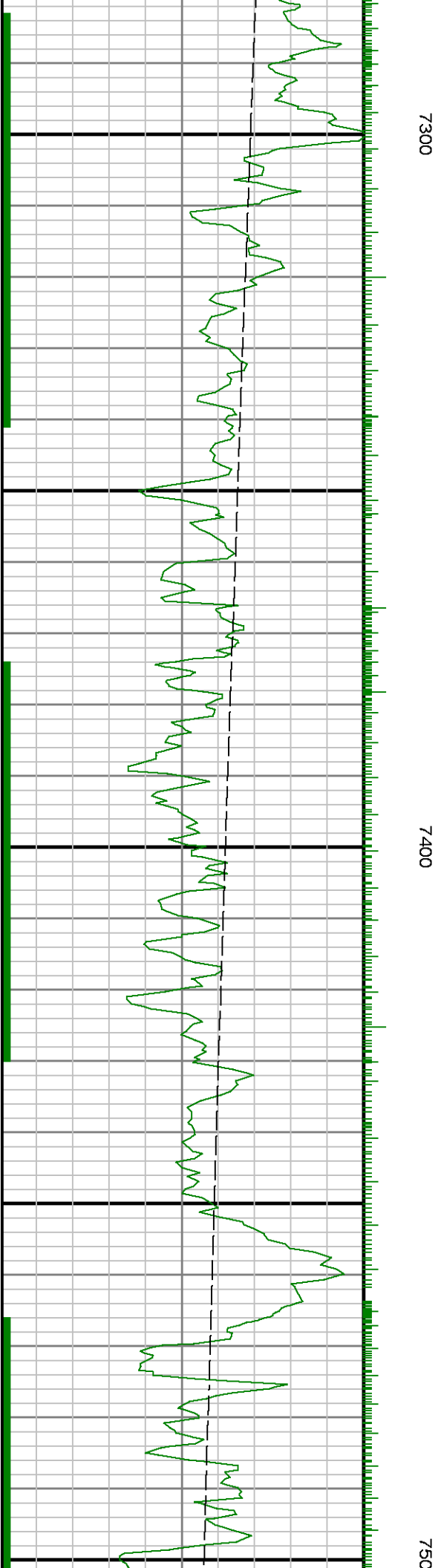
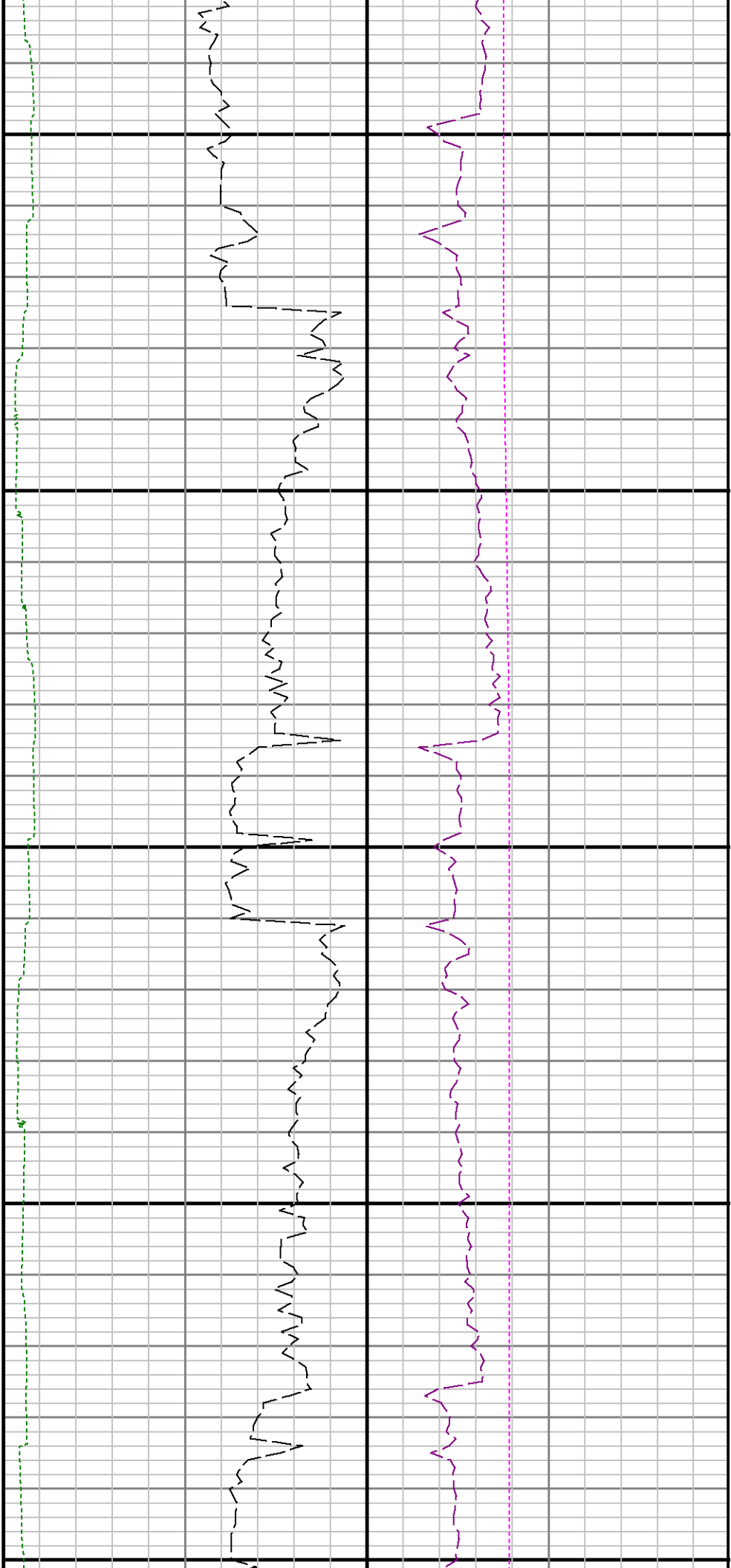


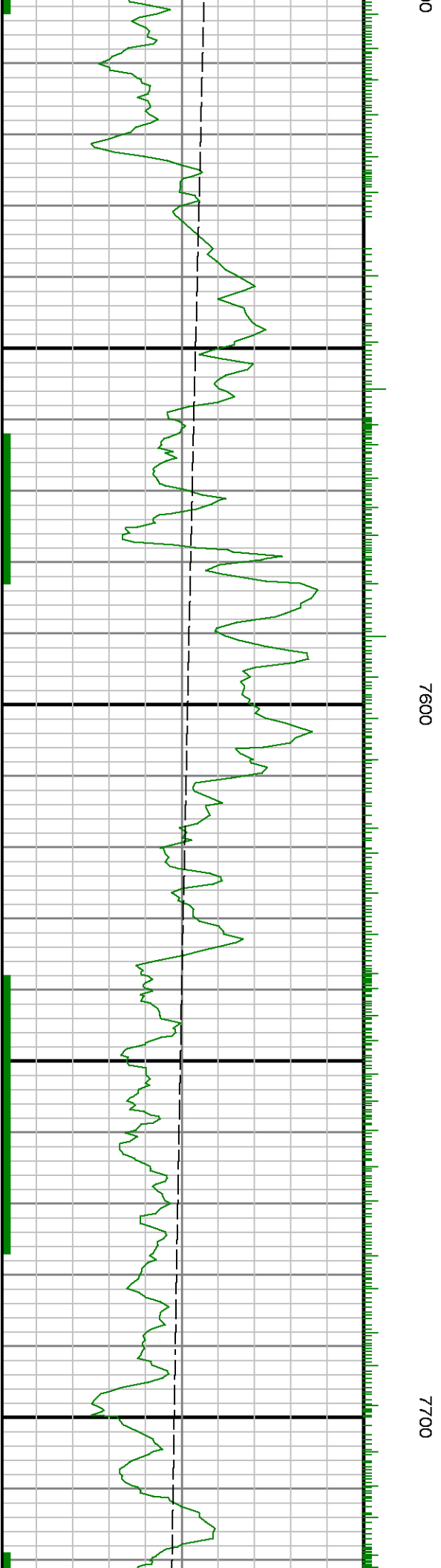
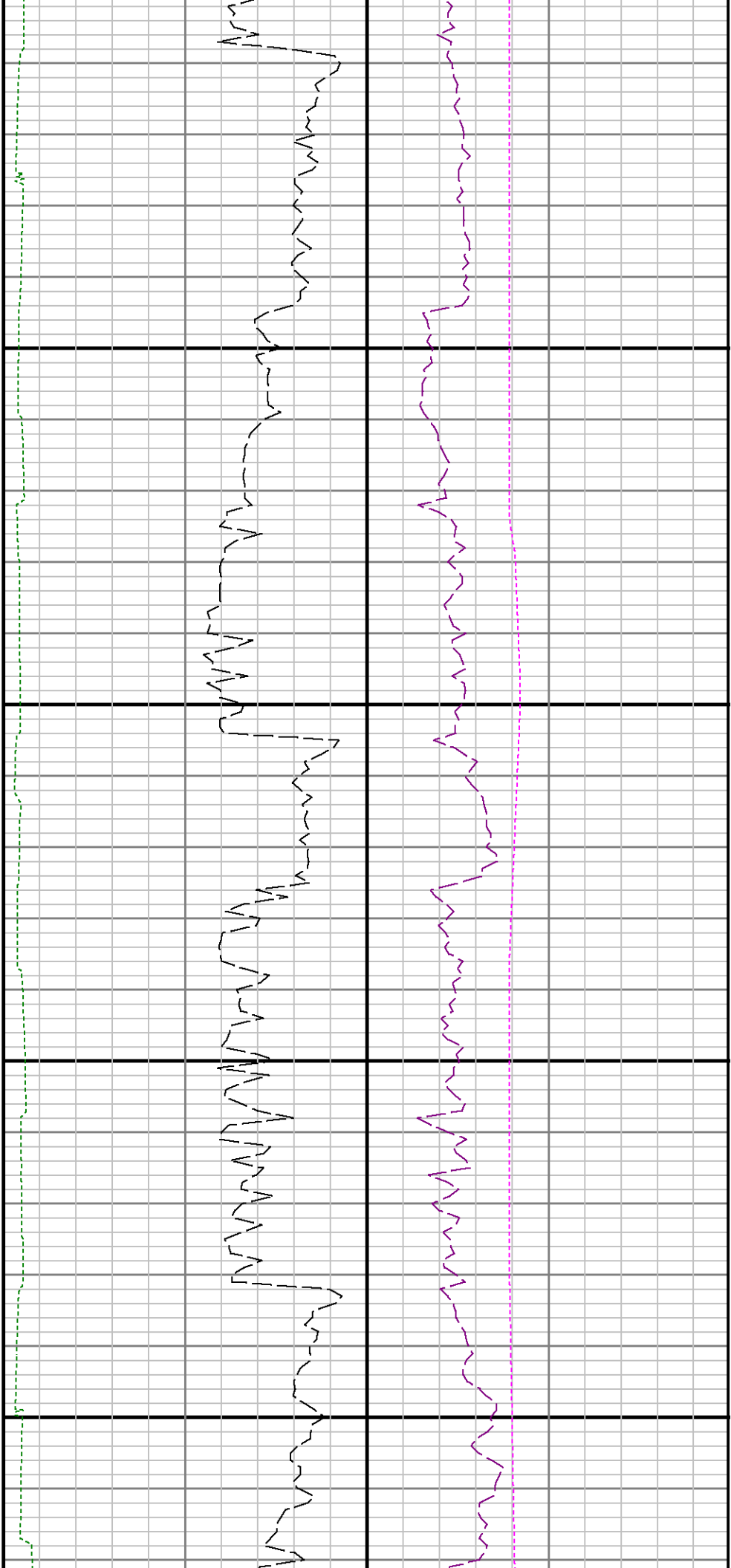


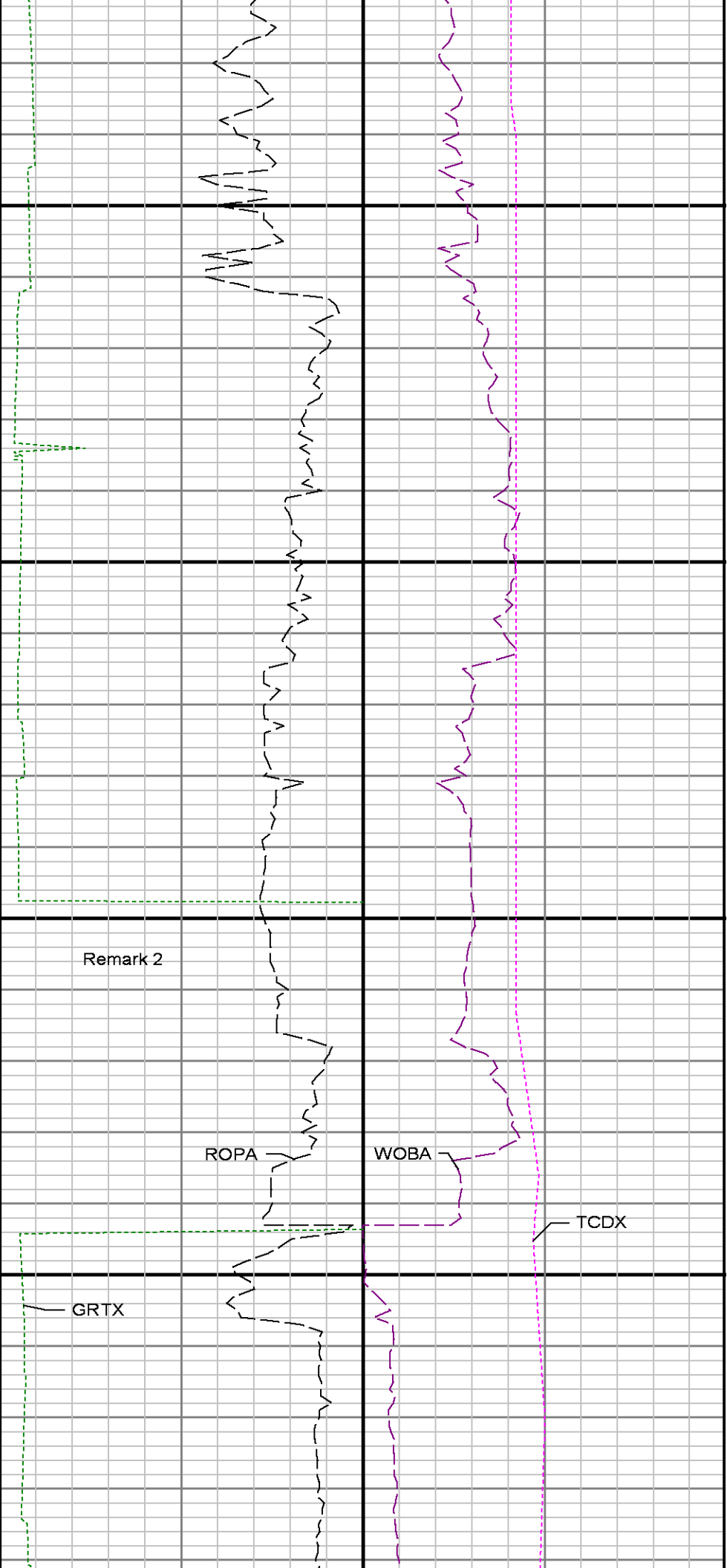
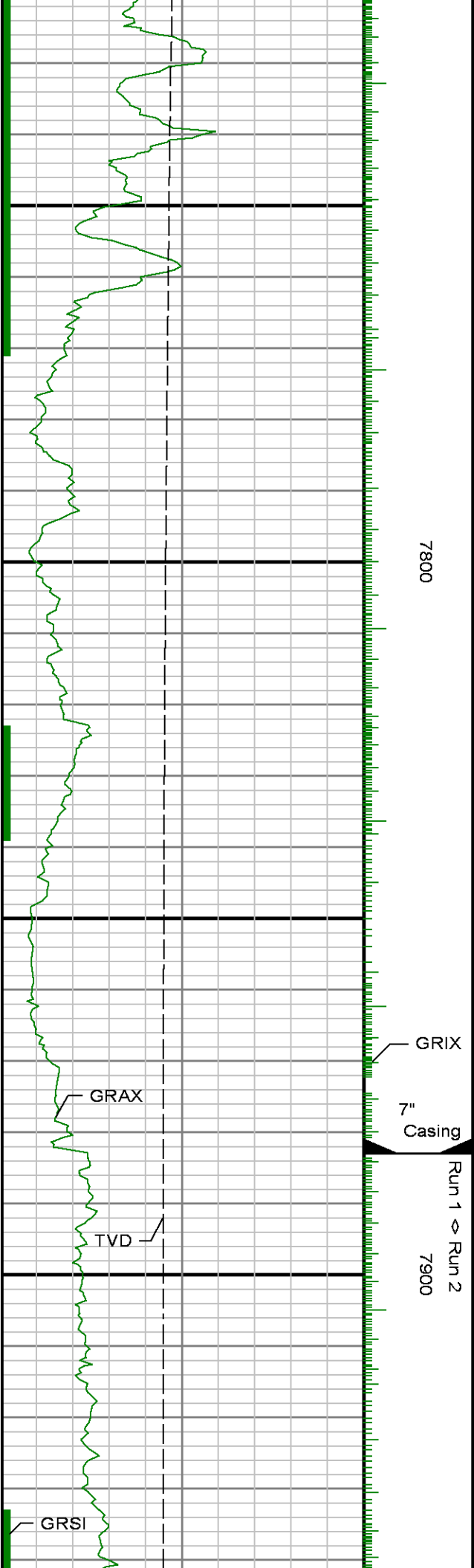
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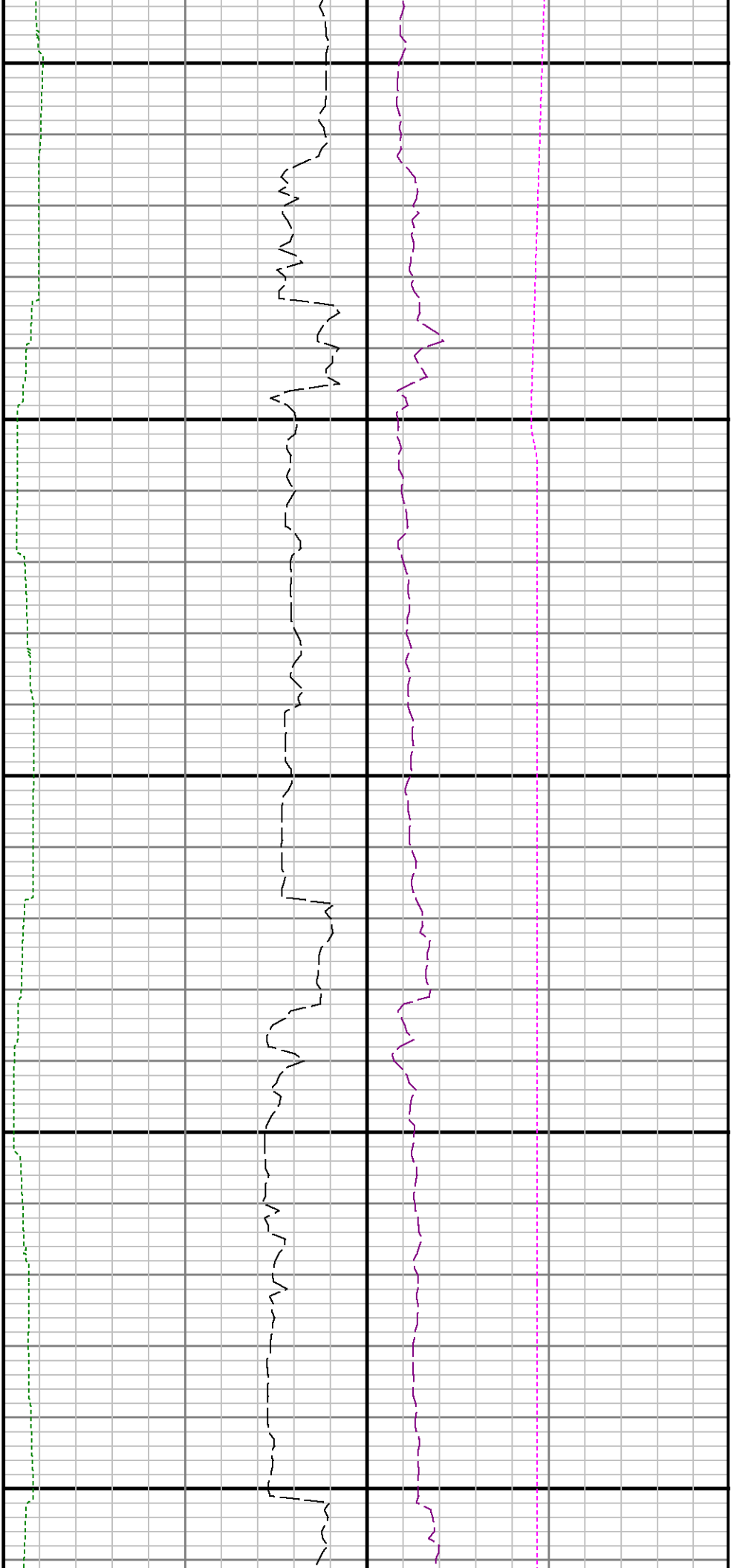
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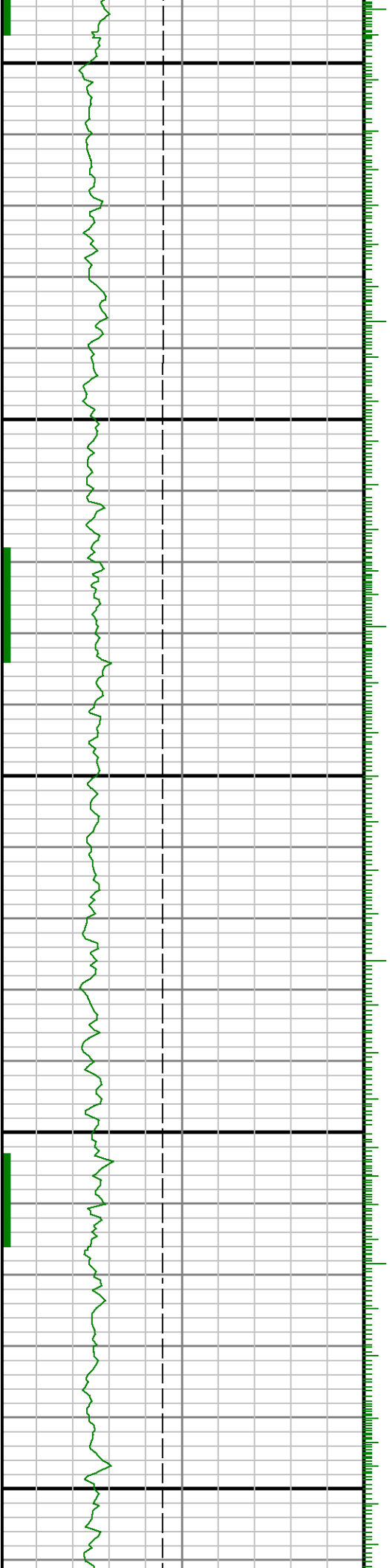




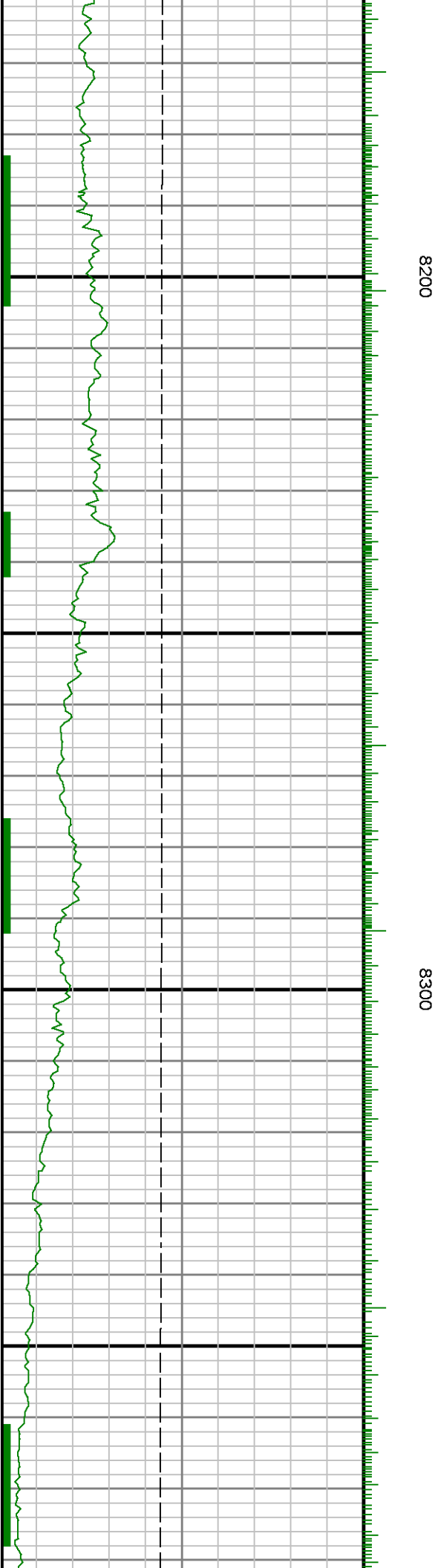
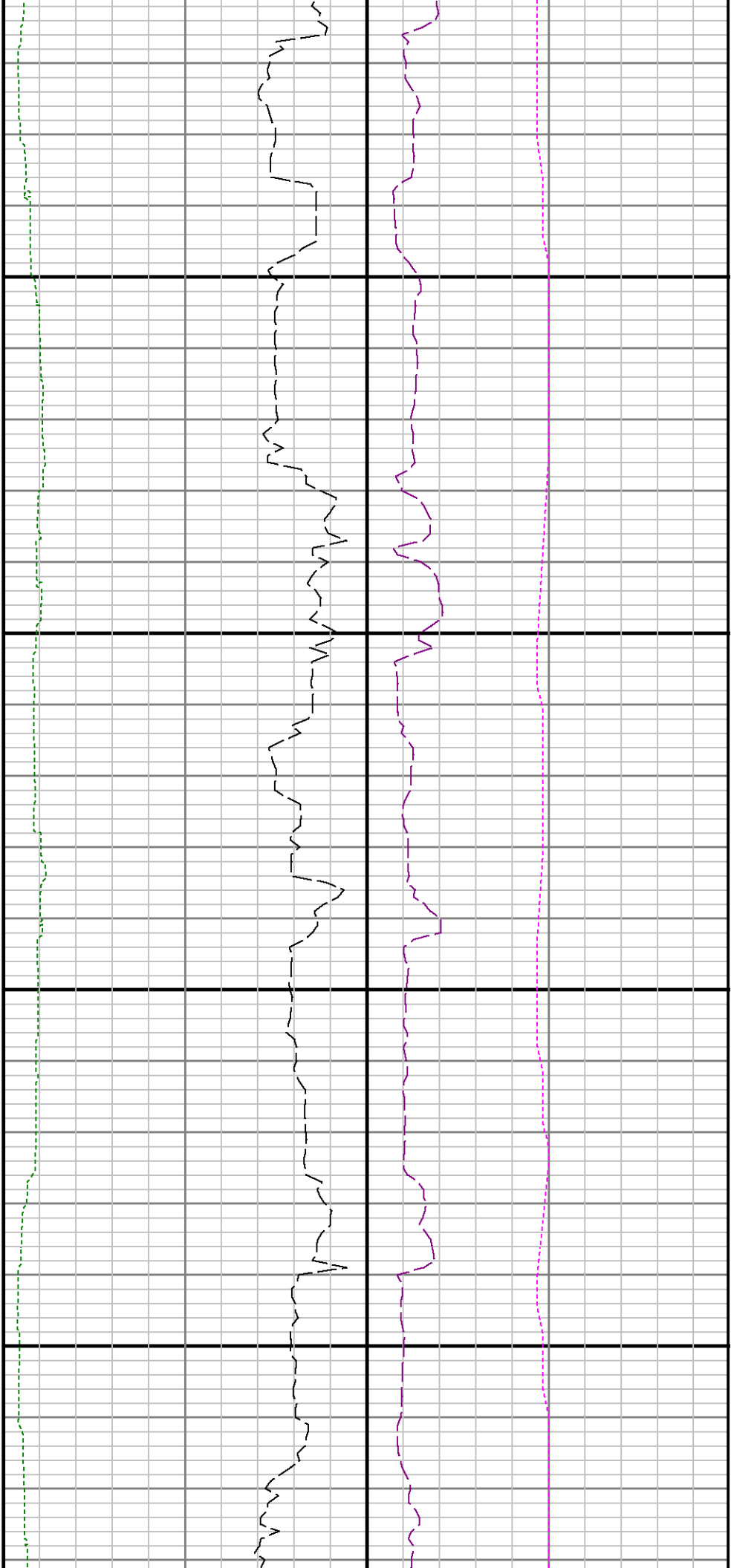


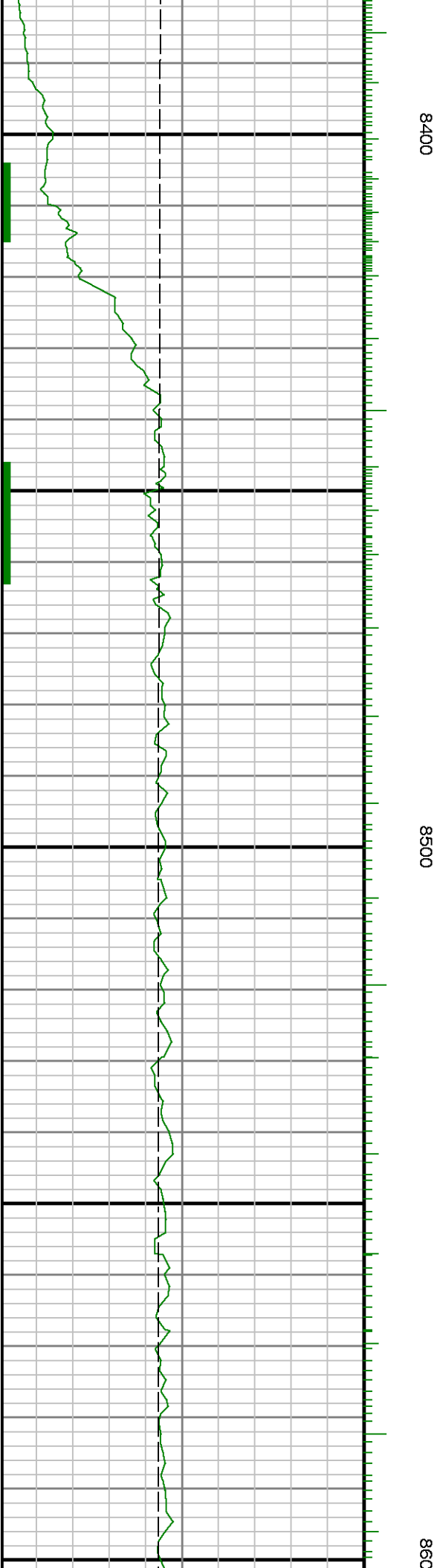
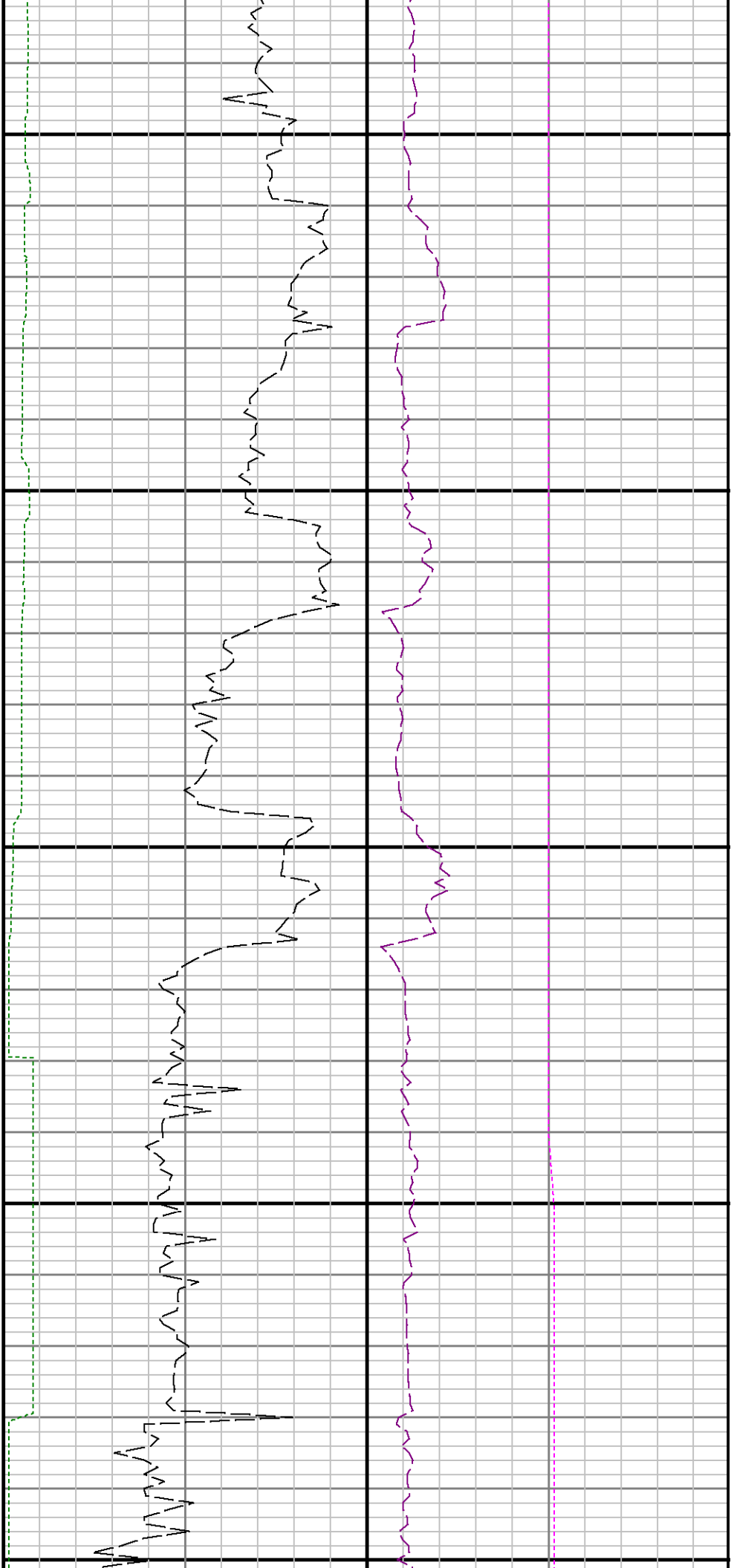
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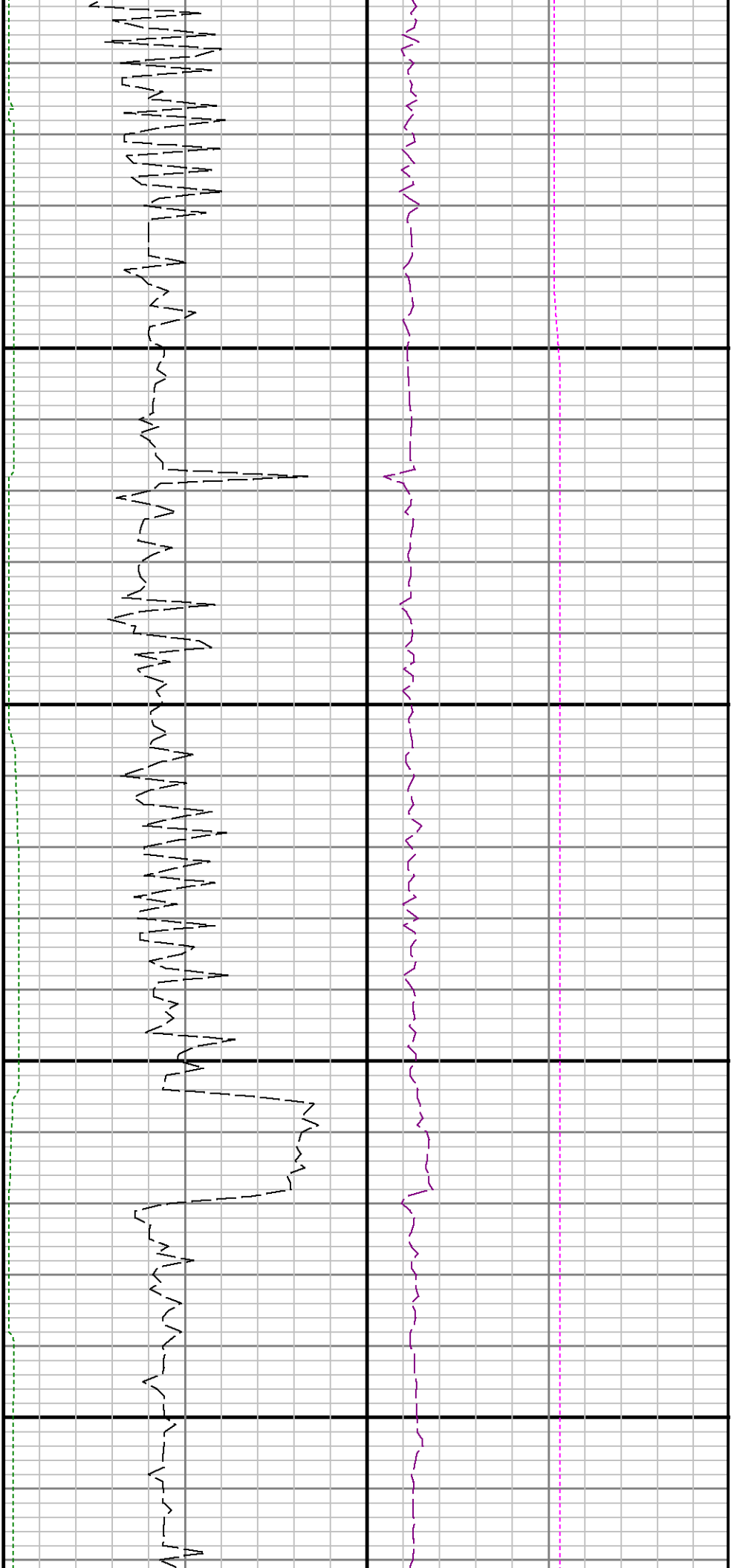
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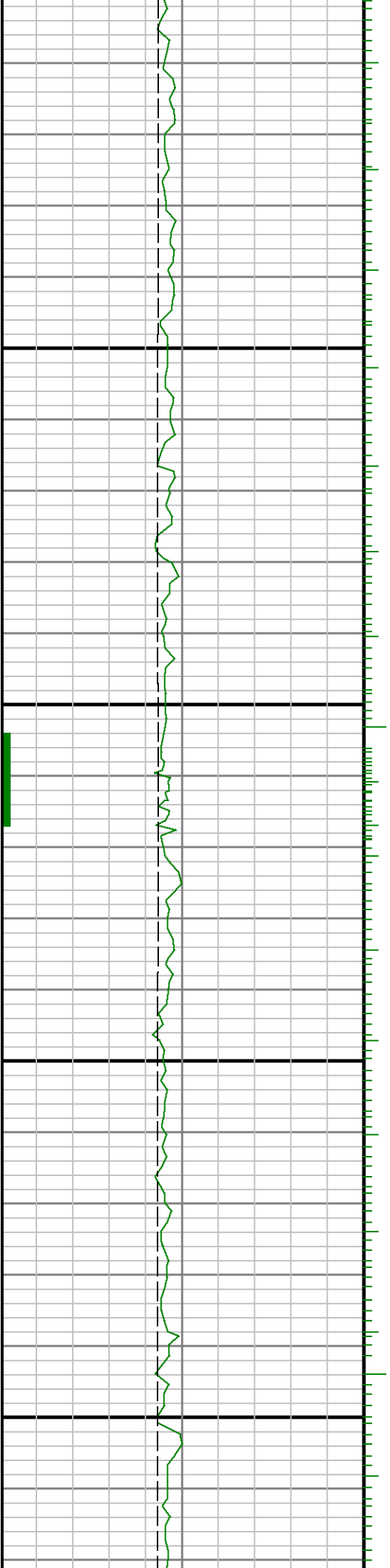


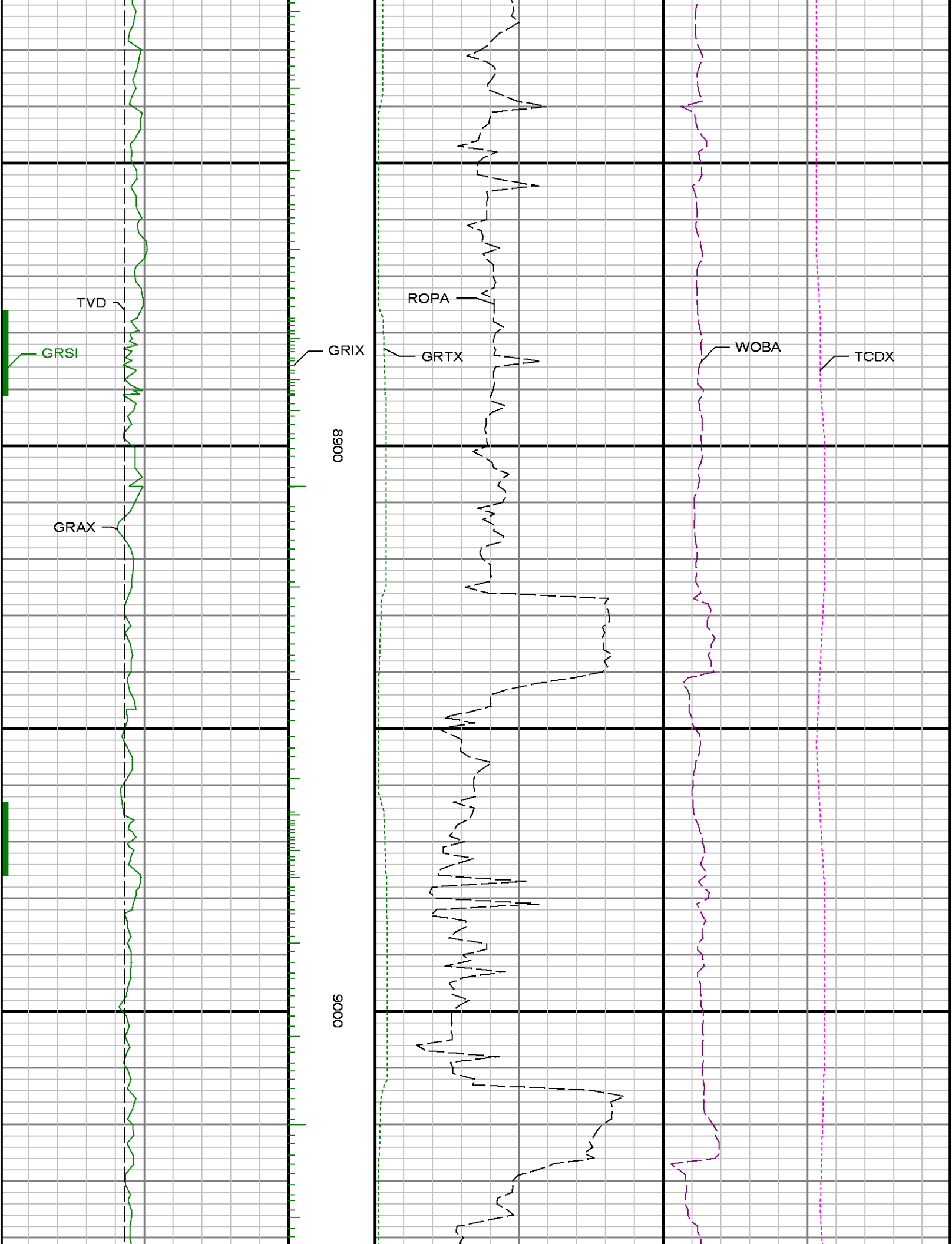


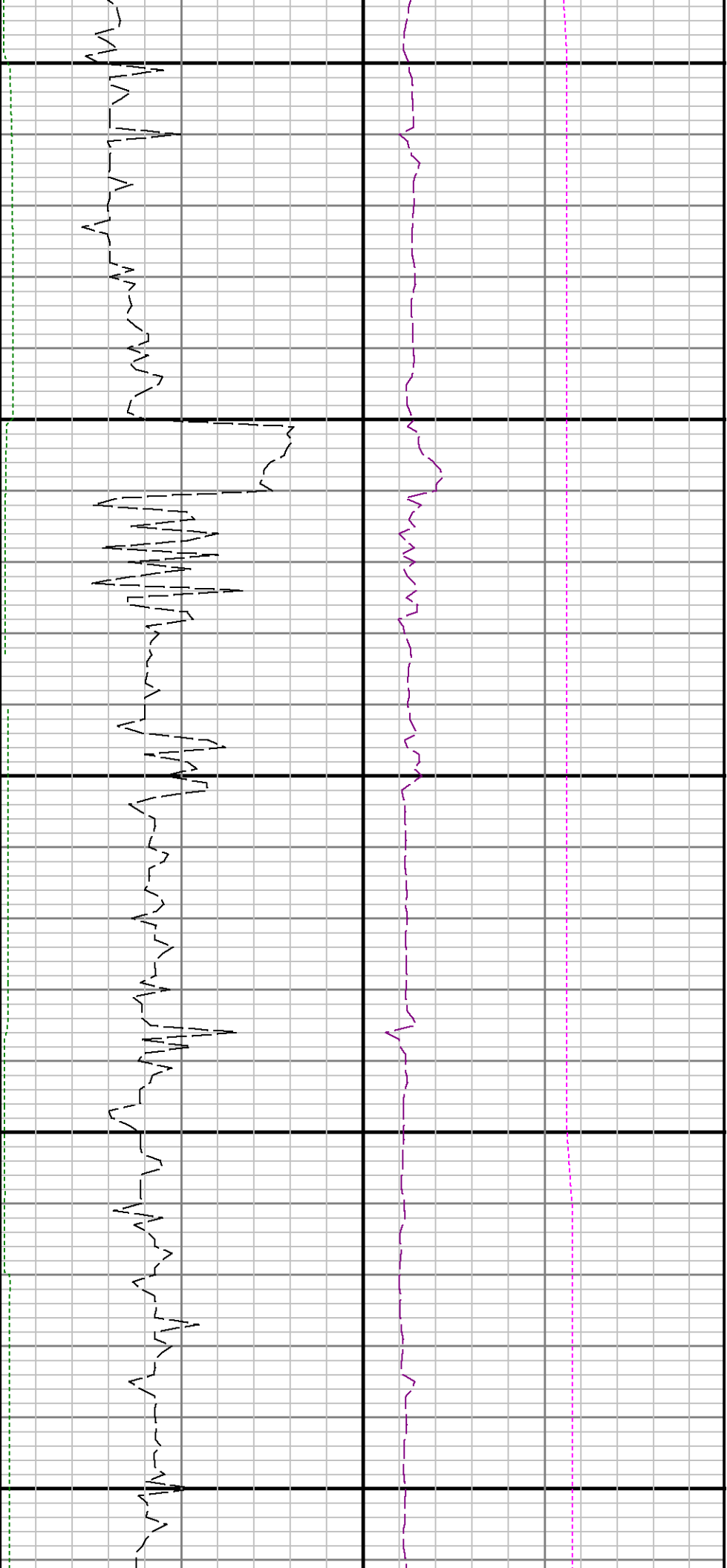




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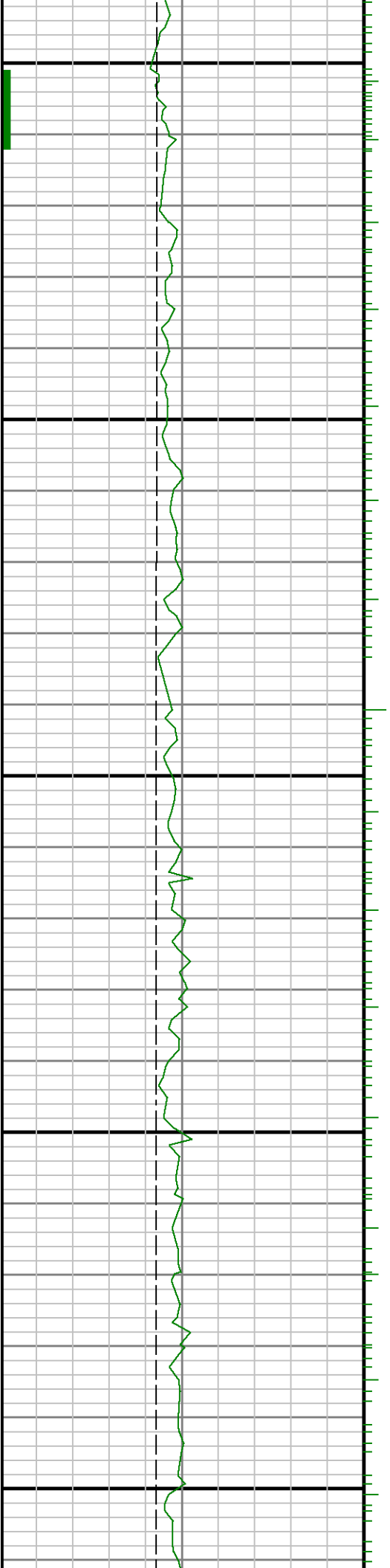






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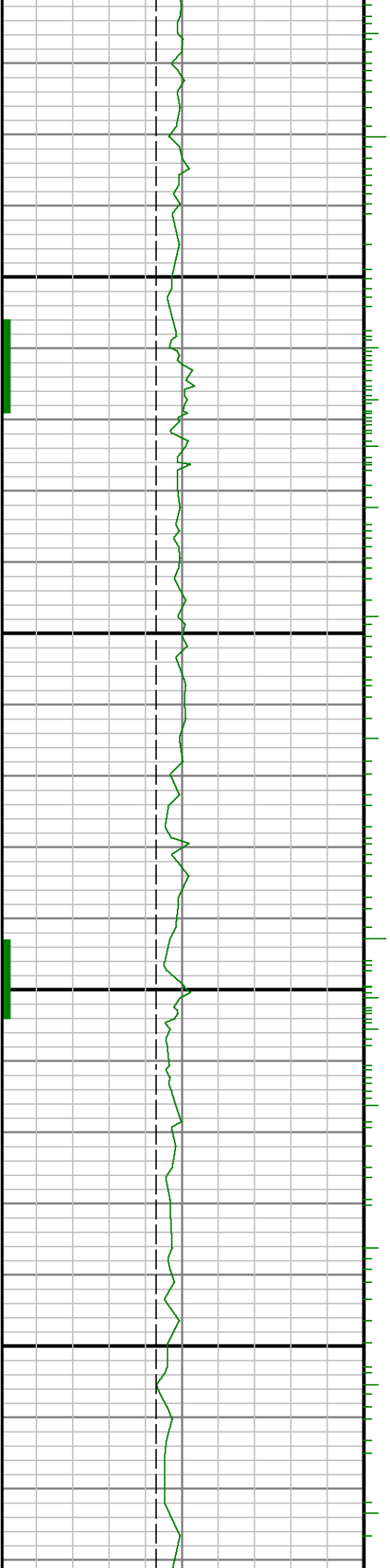
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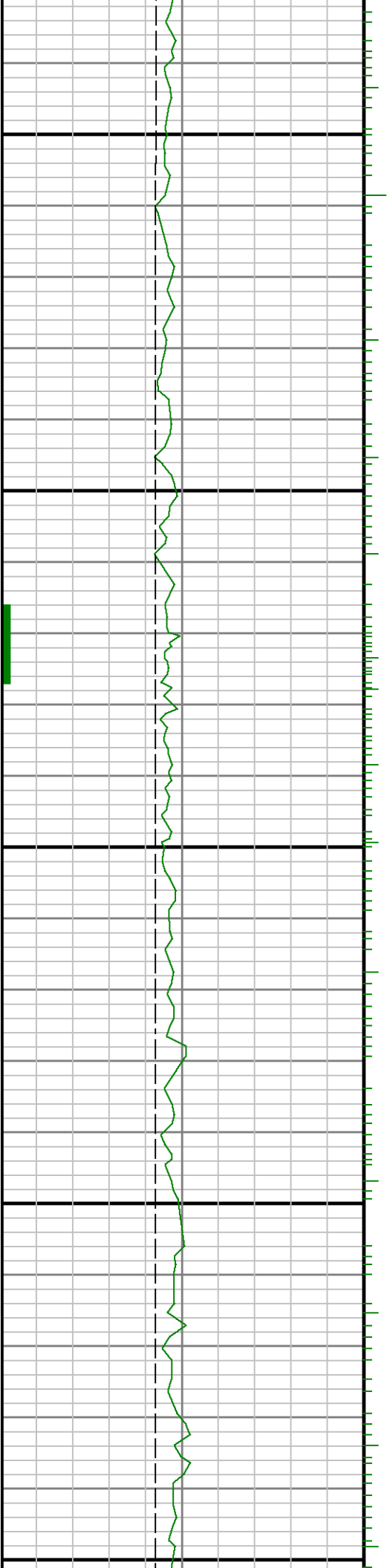




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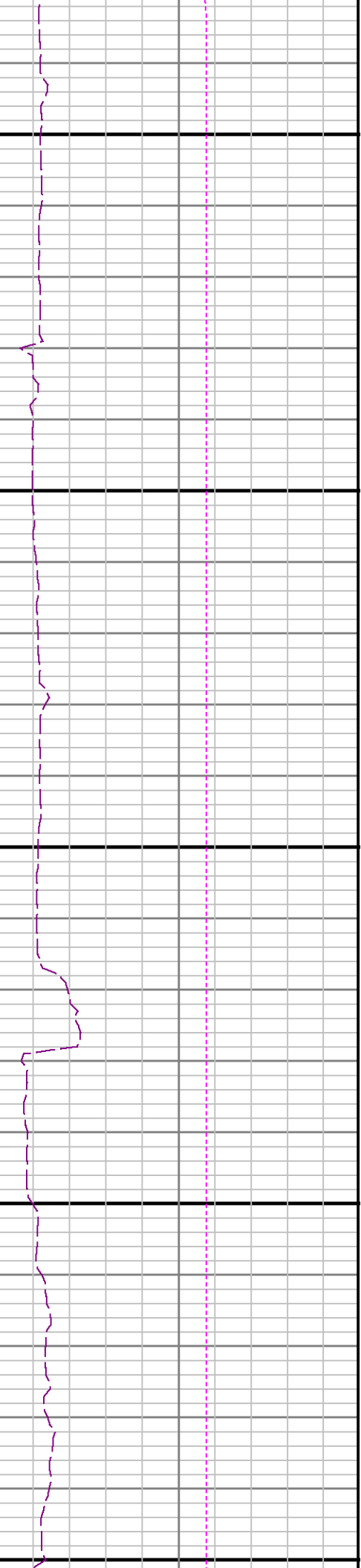


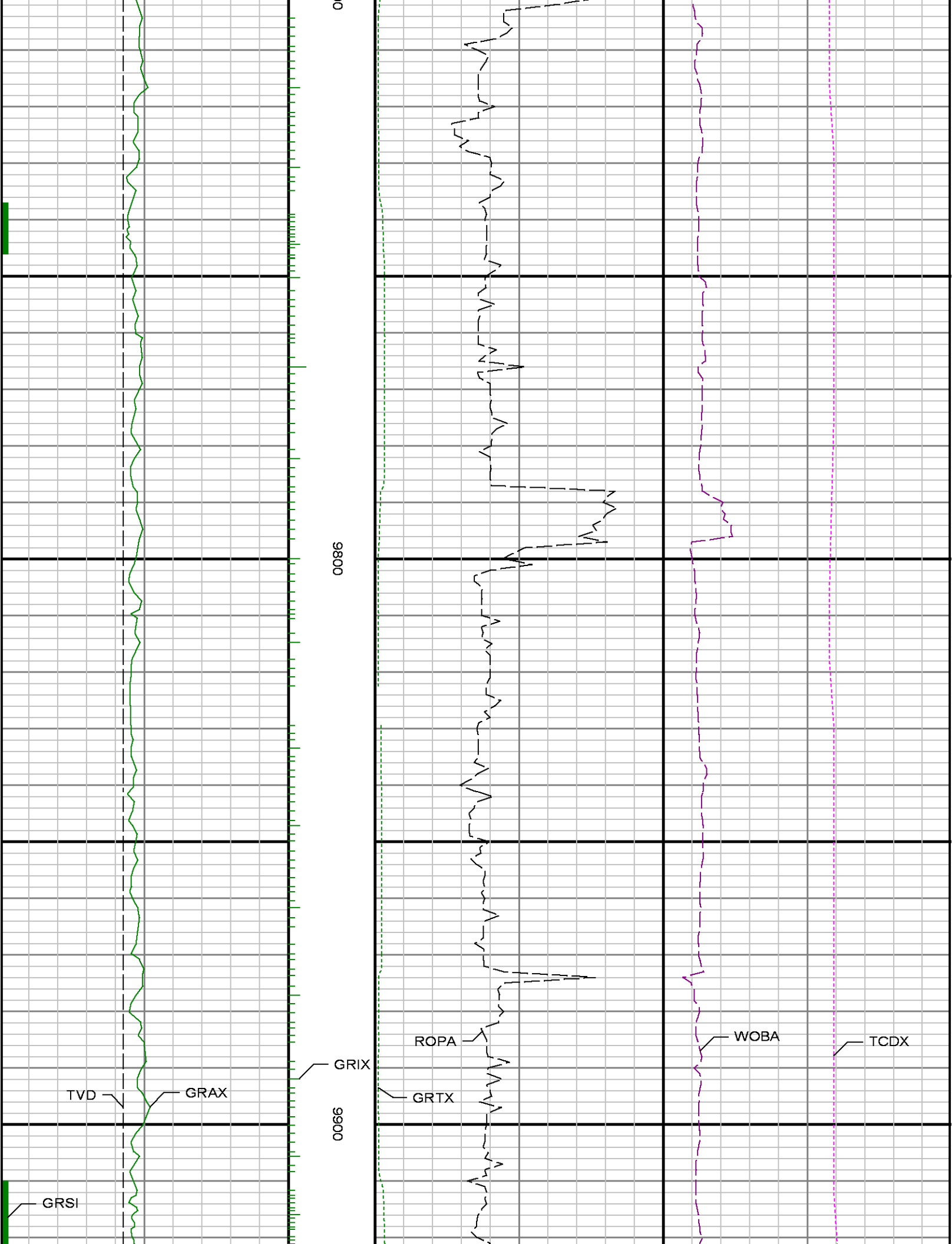


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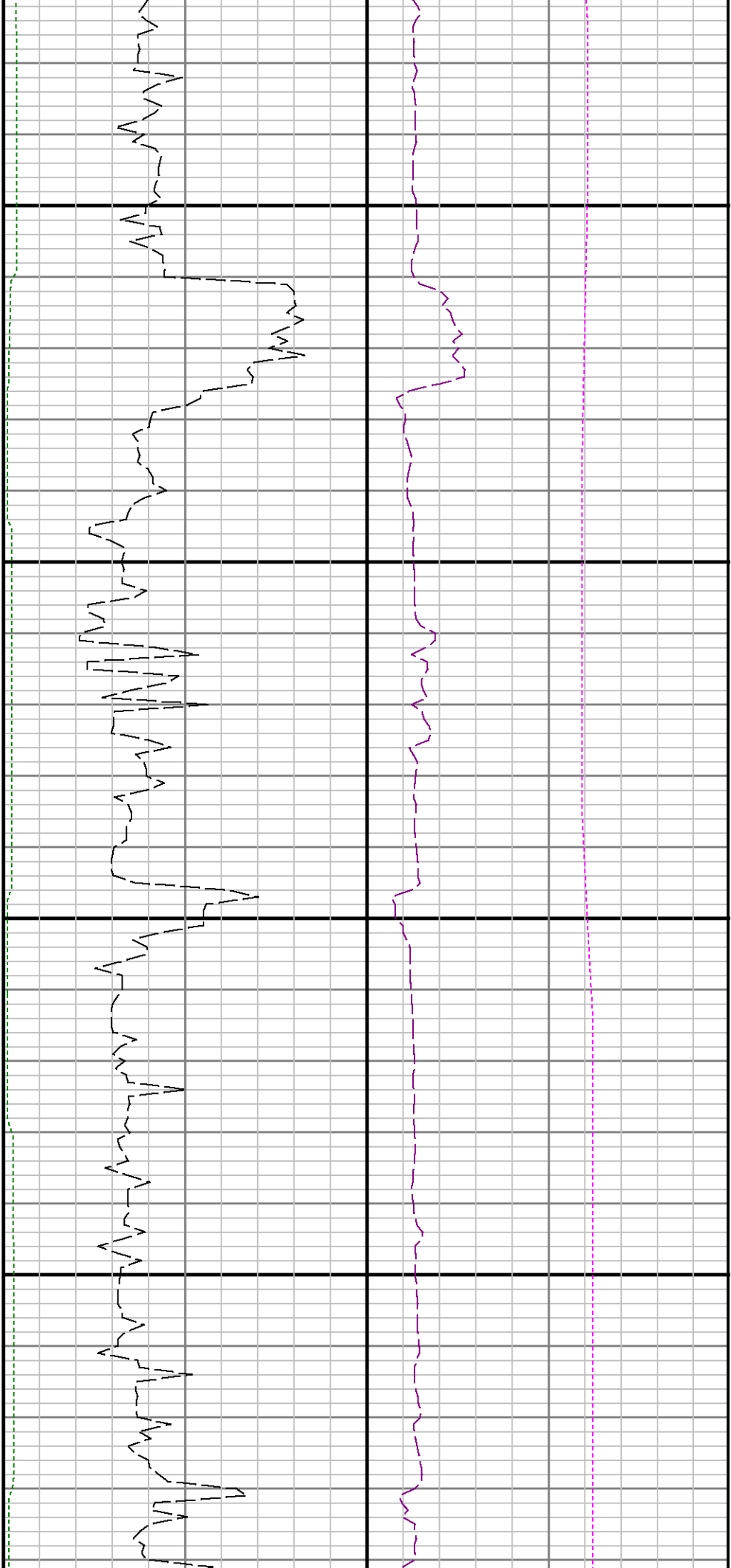
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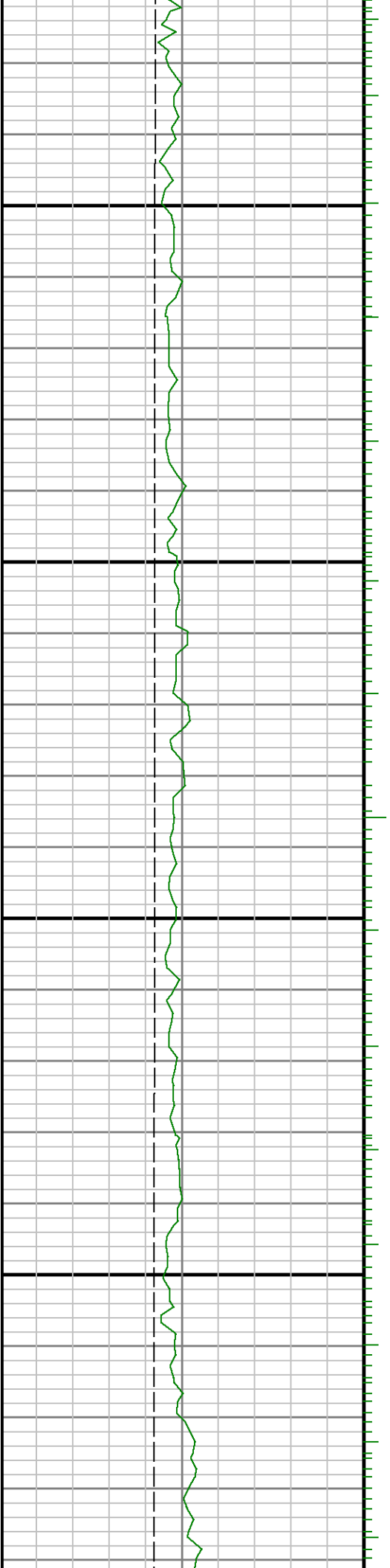


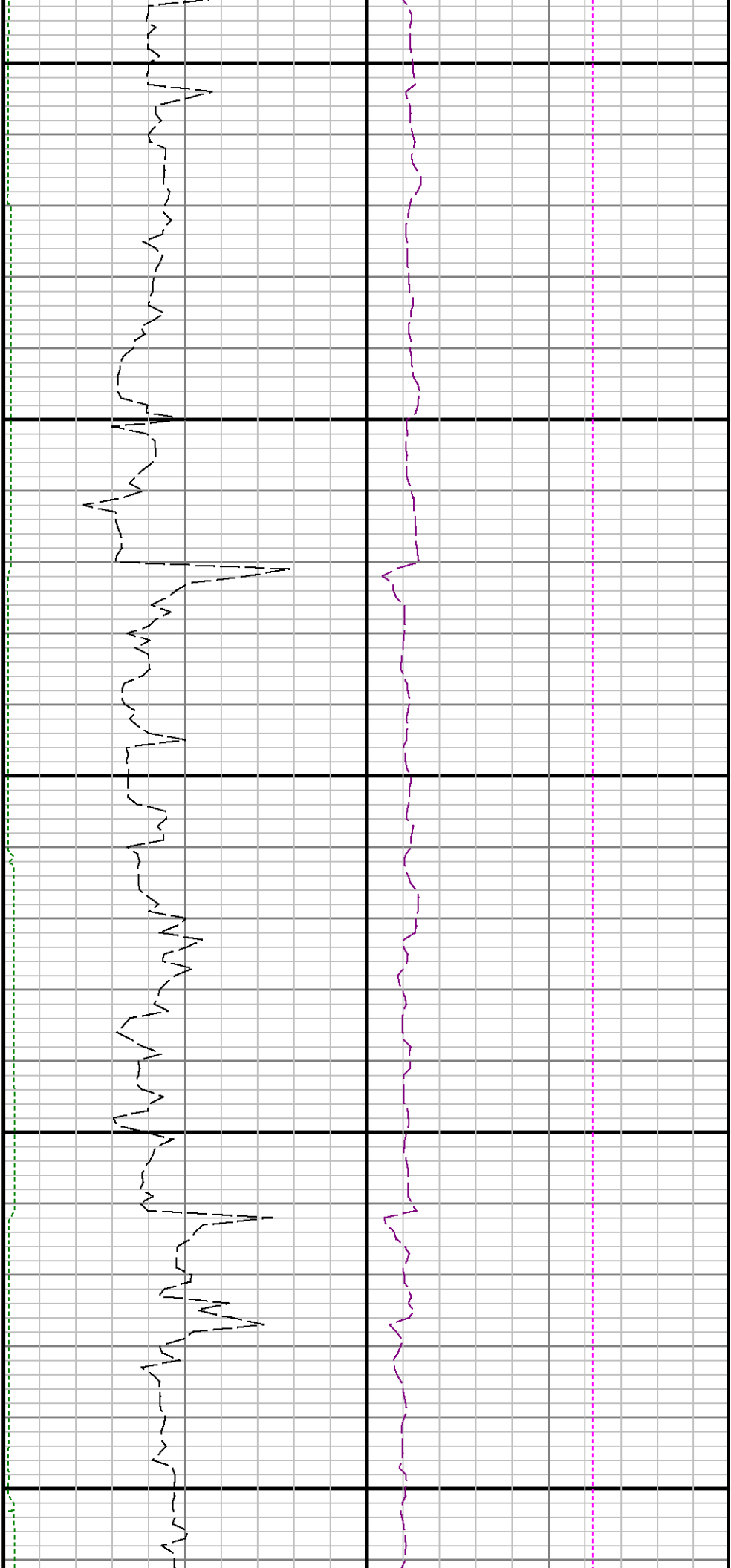




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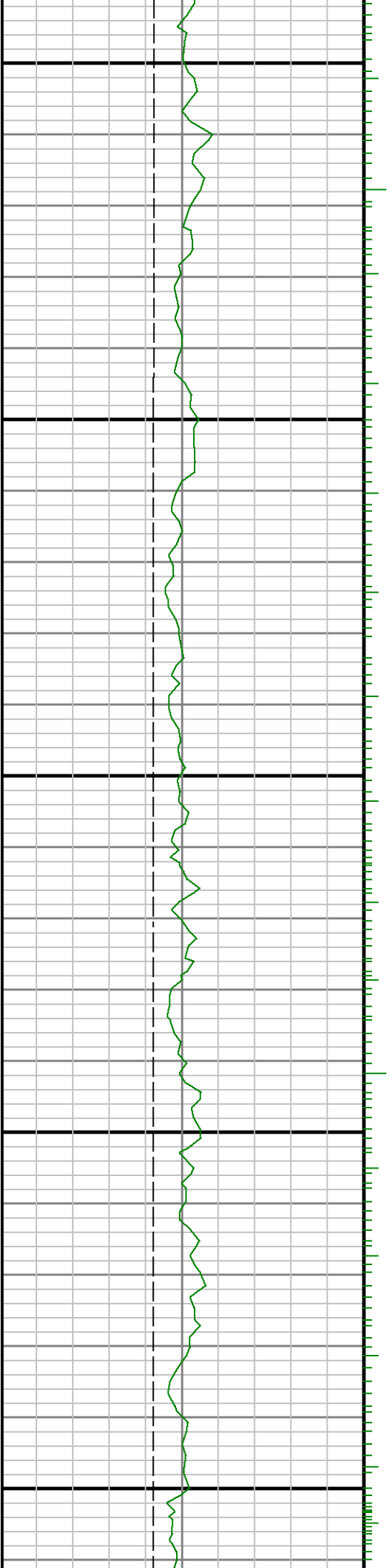
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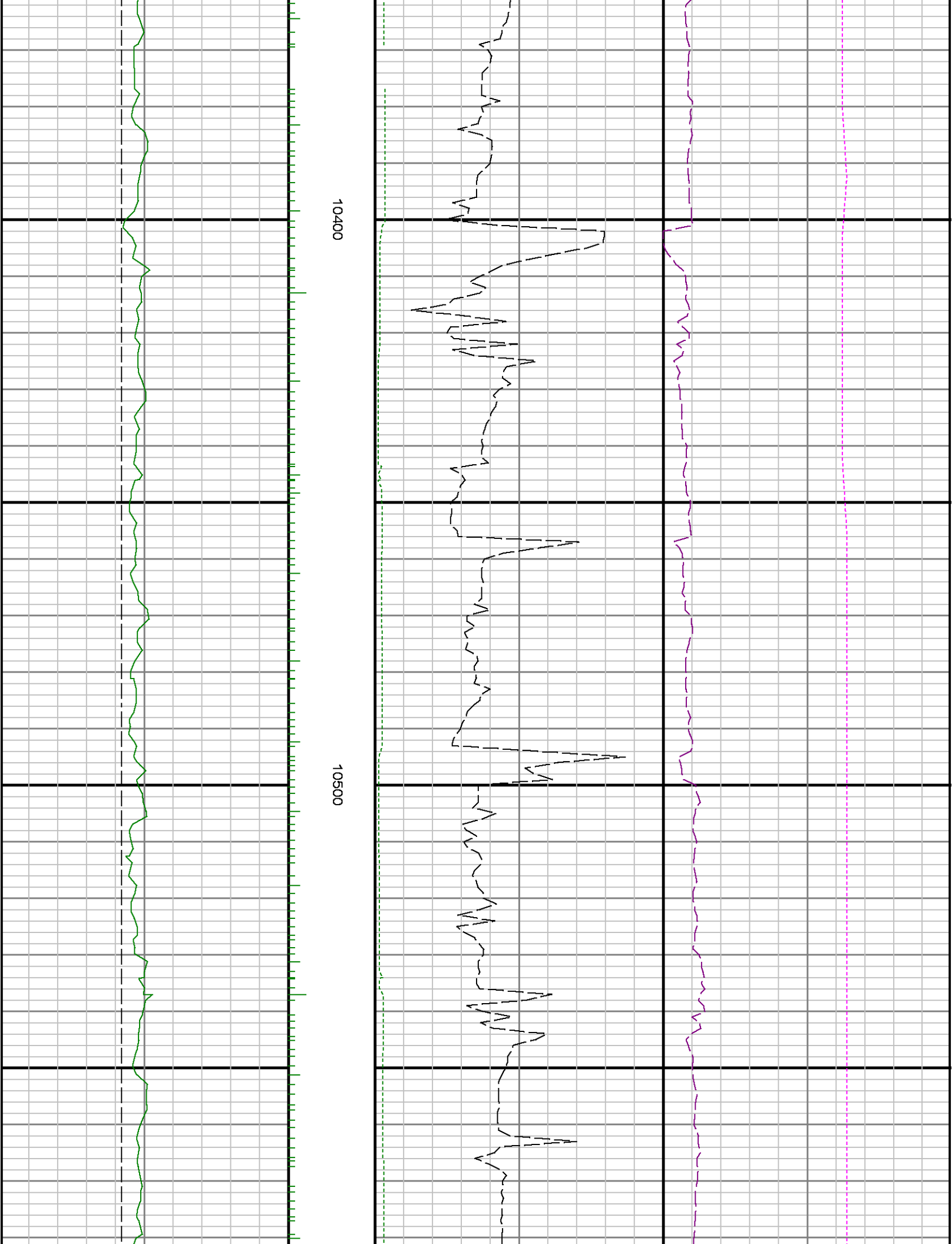


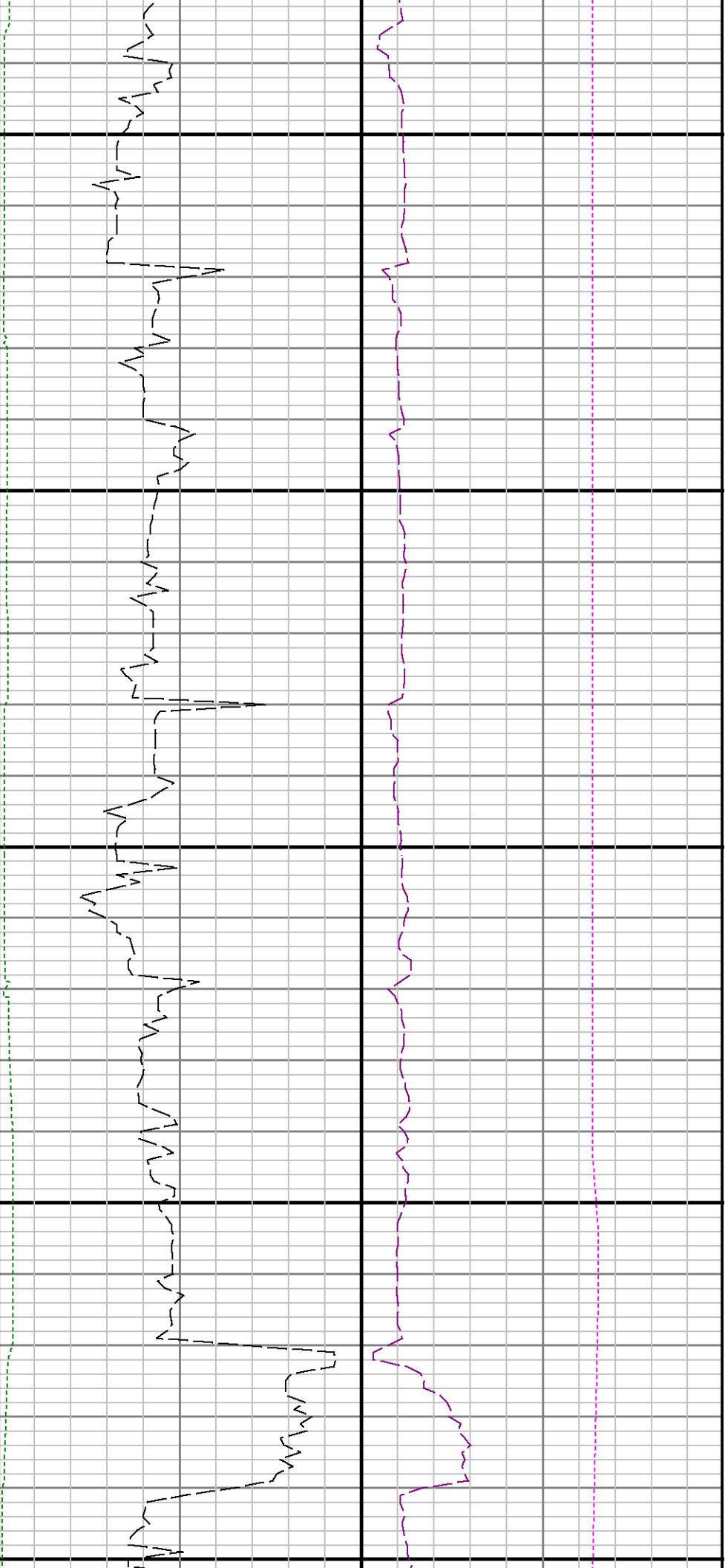


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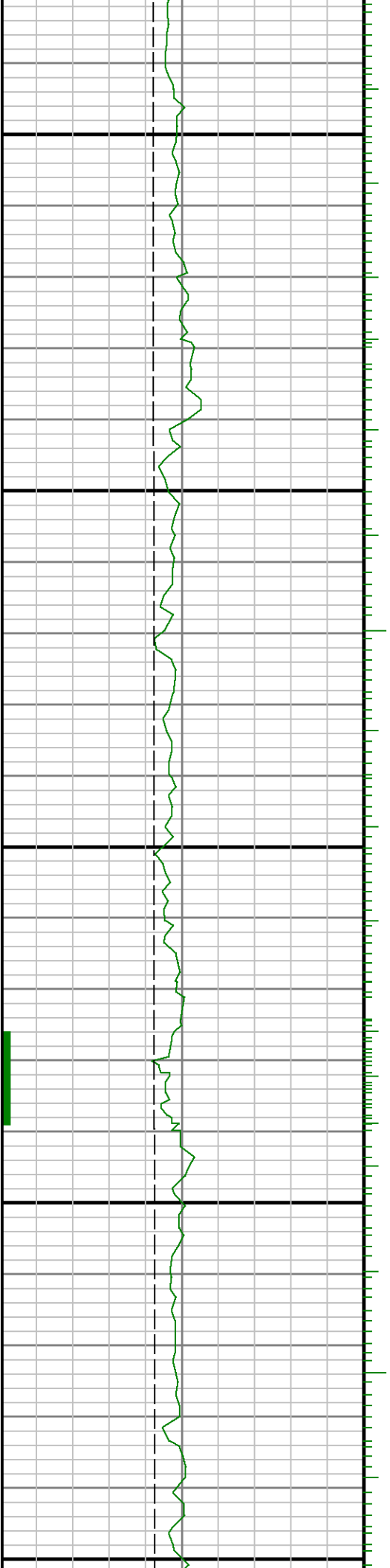


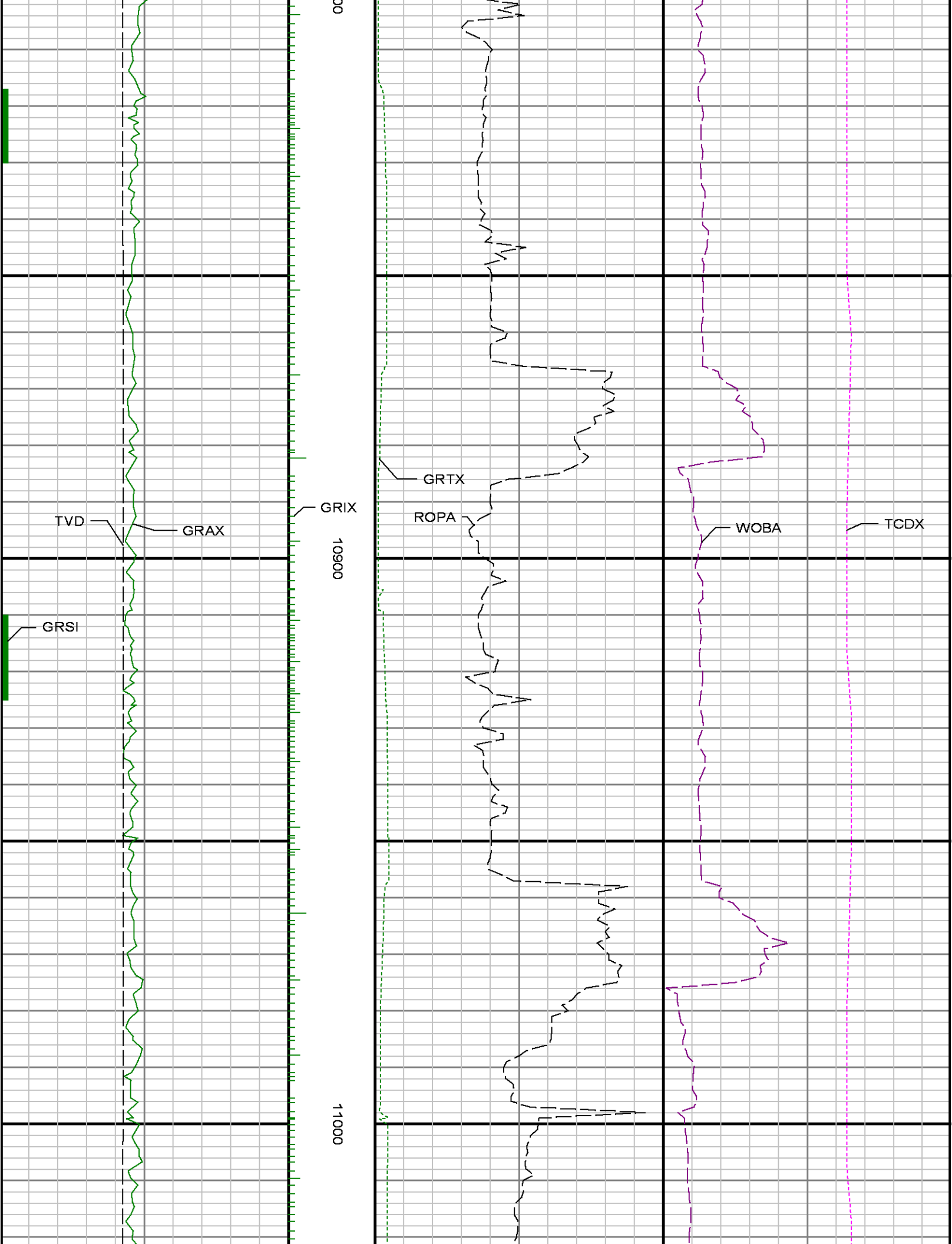


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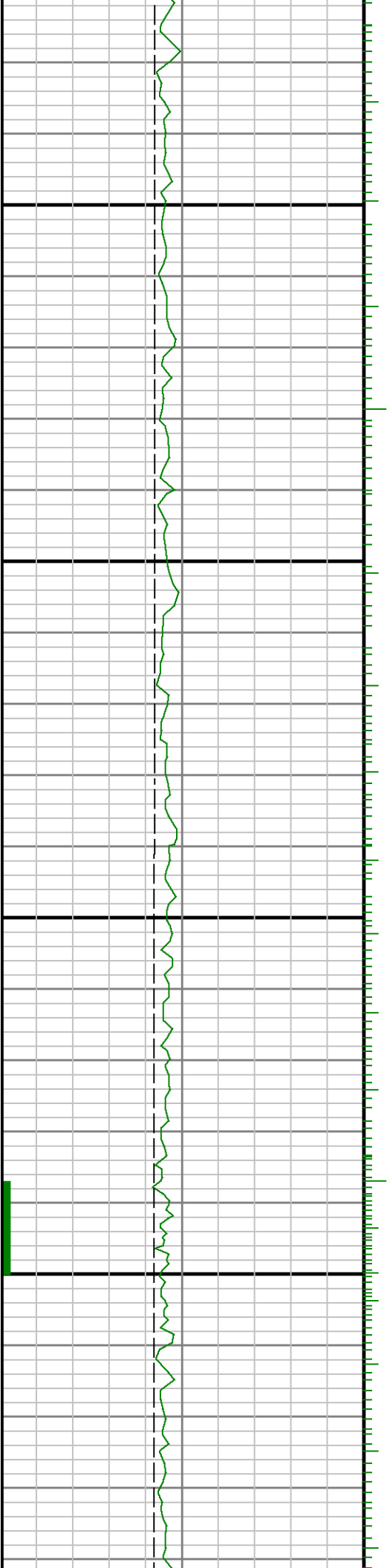






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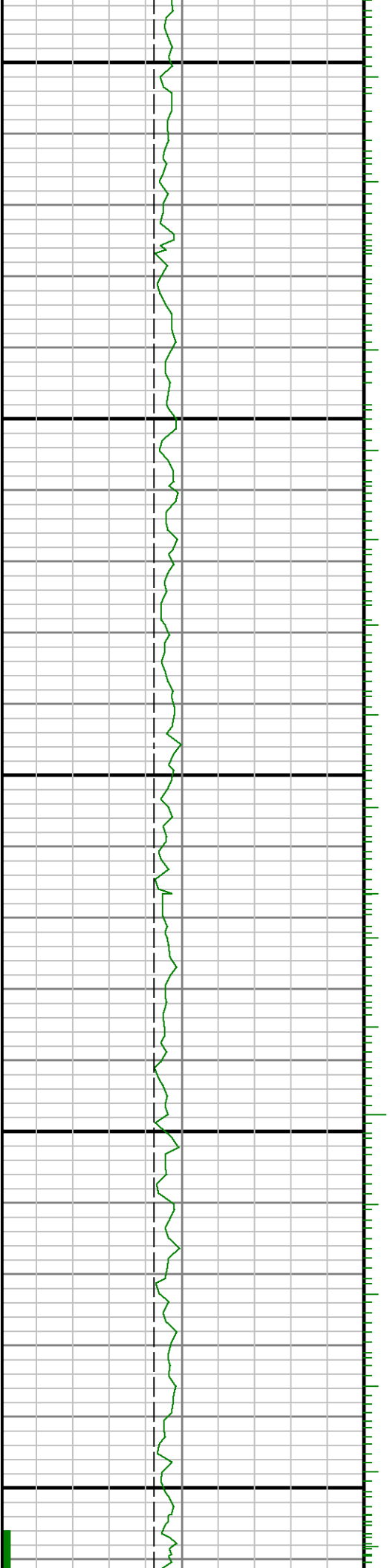
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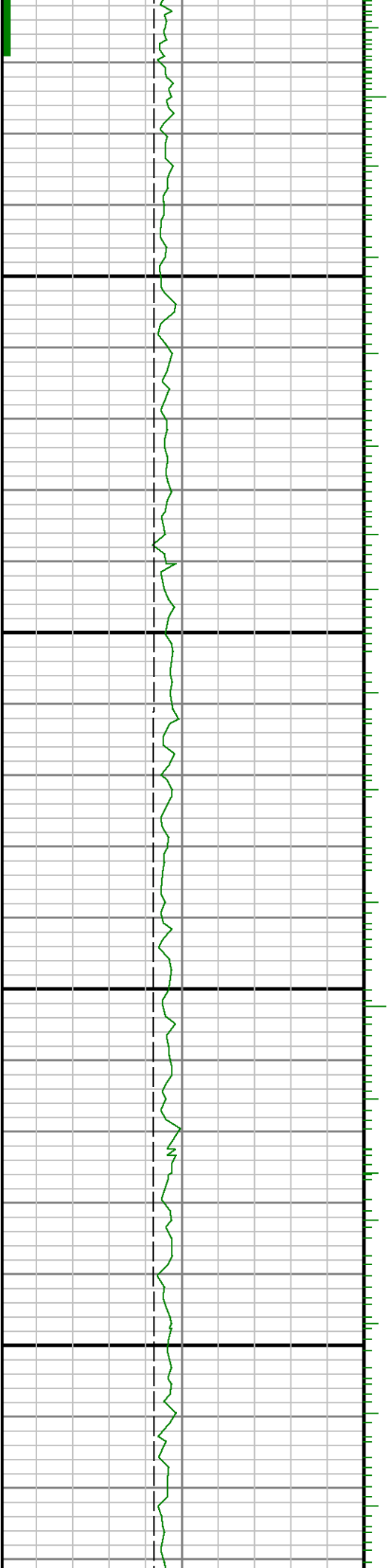
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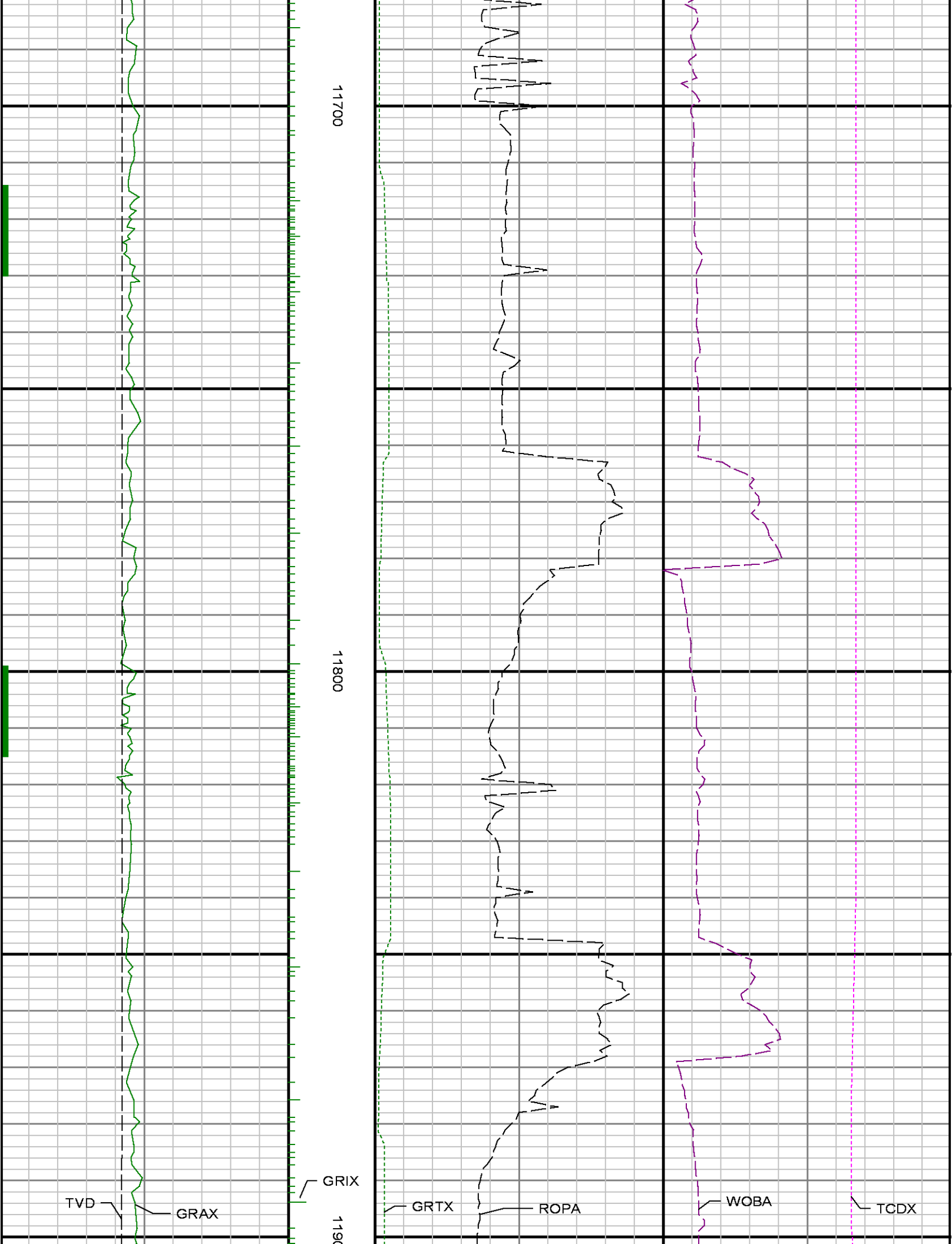


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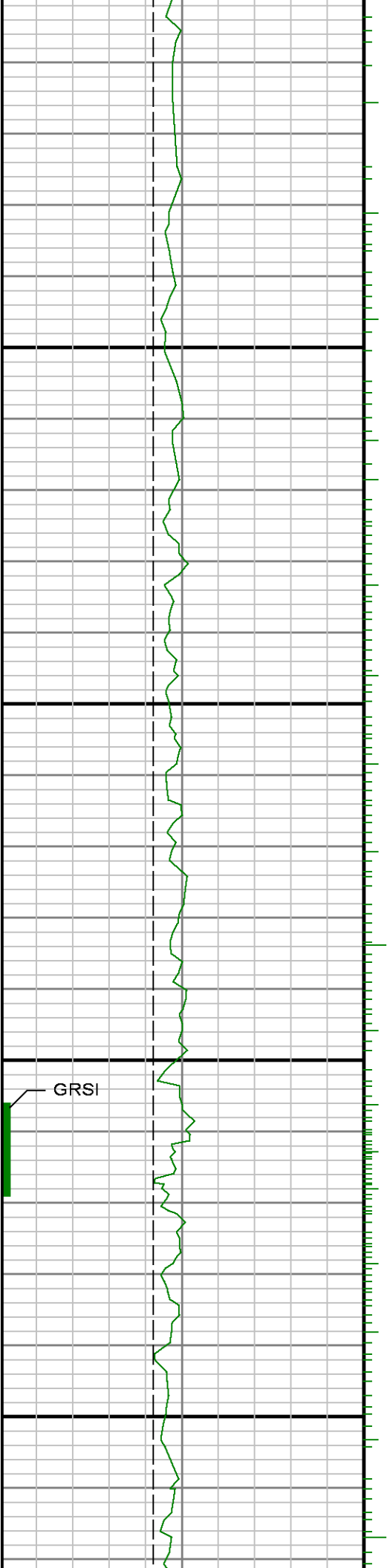




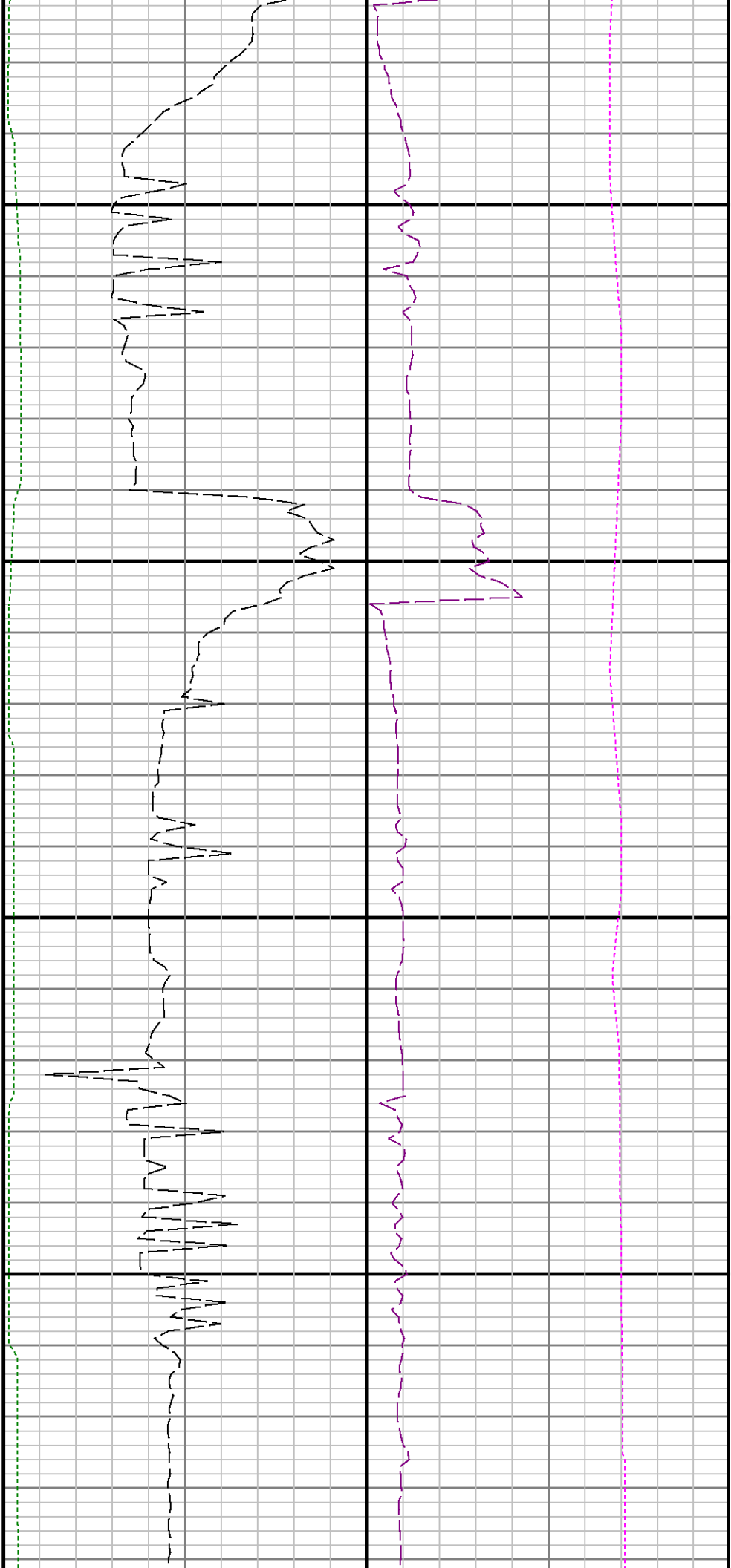
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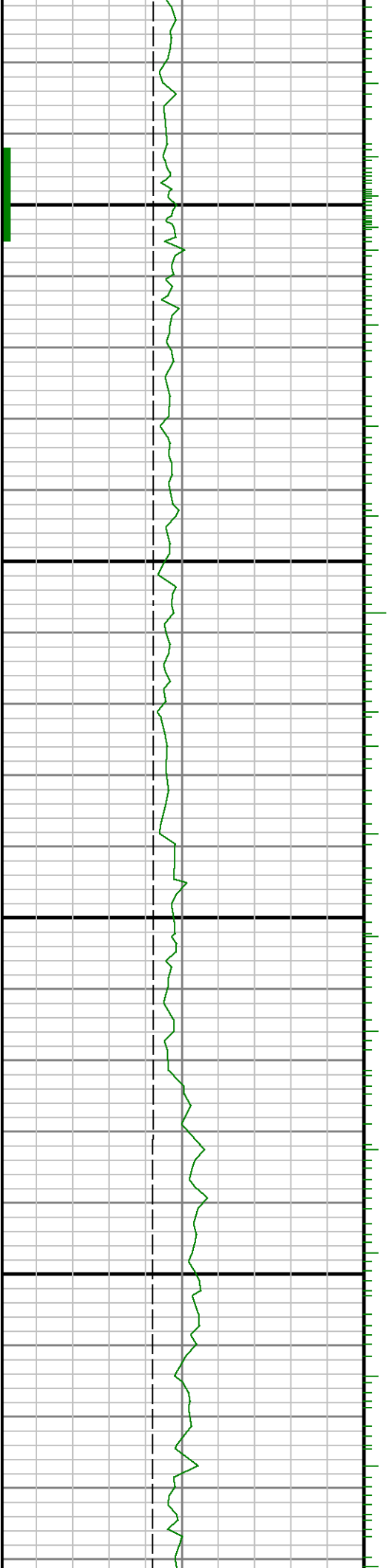


GRSI



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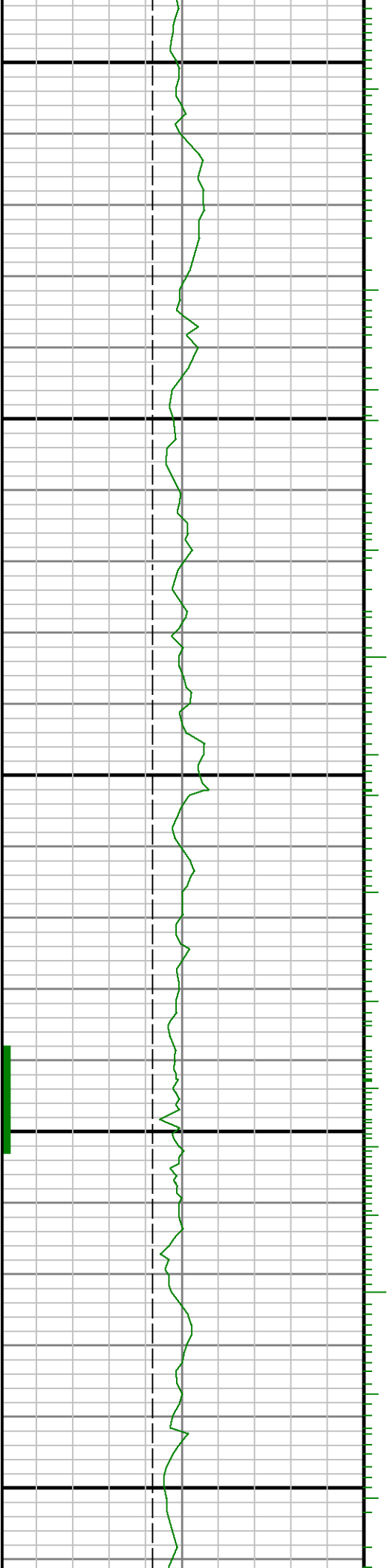
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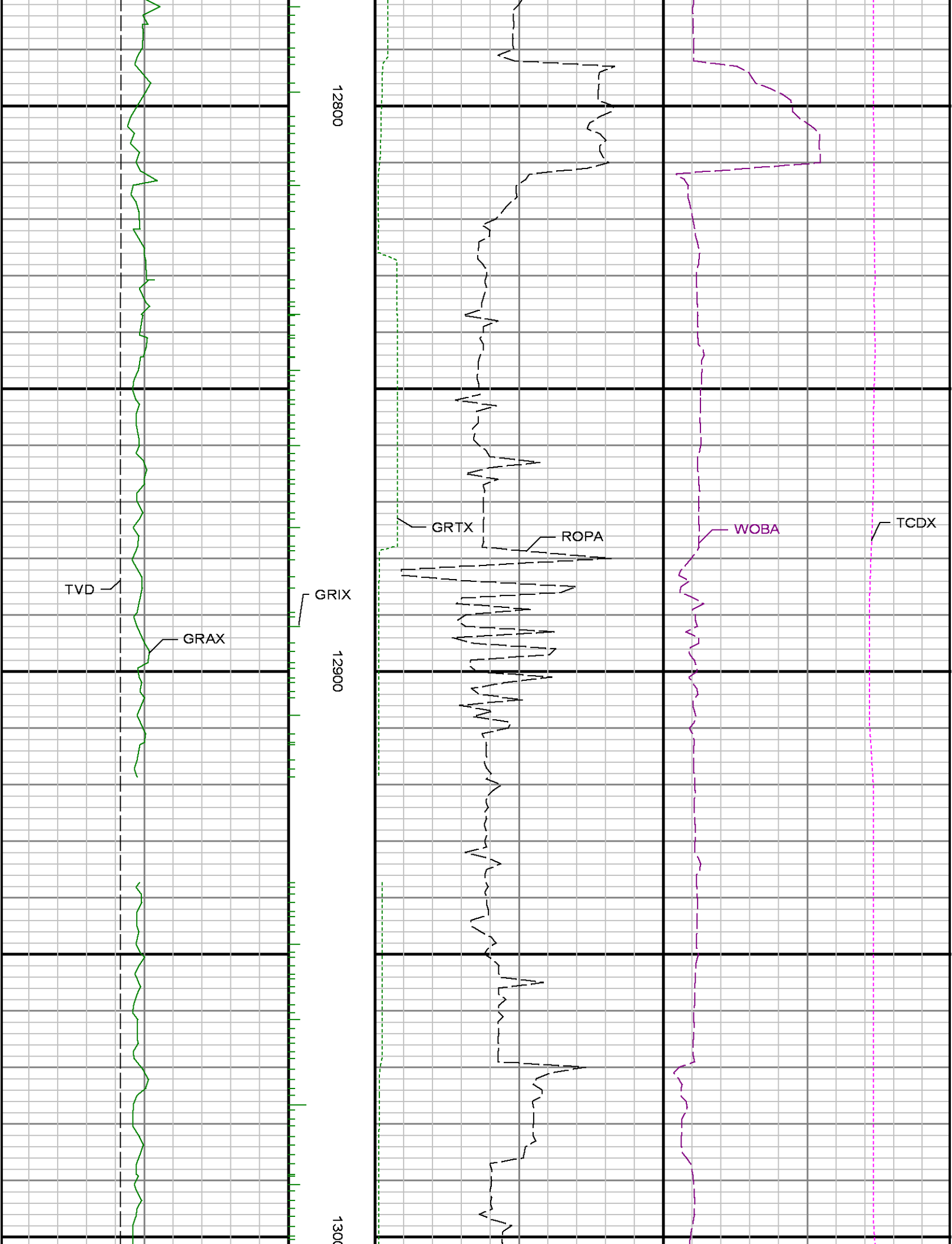


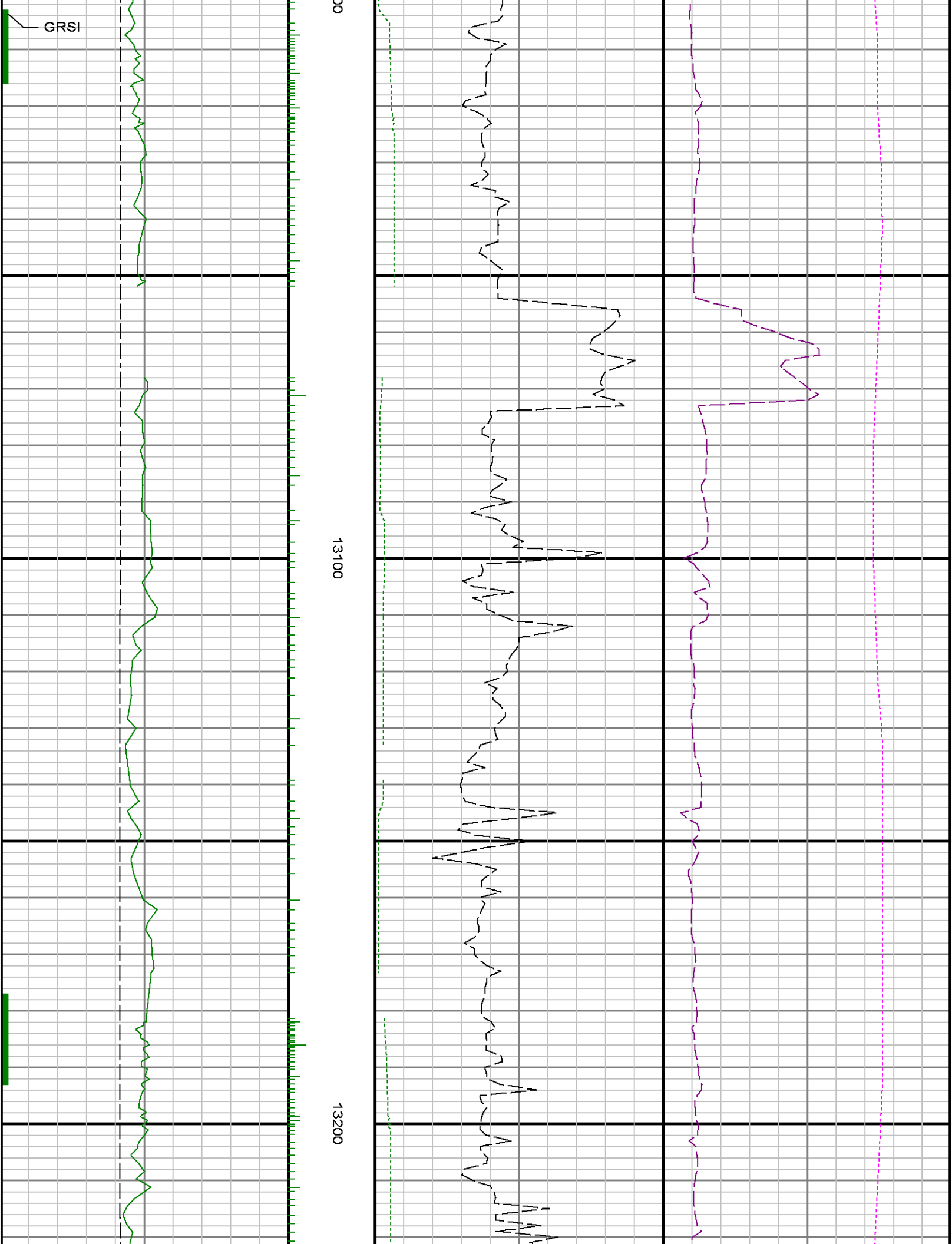
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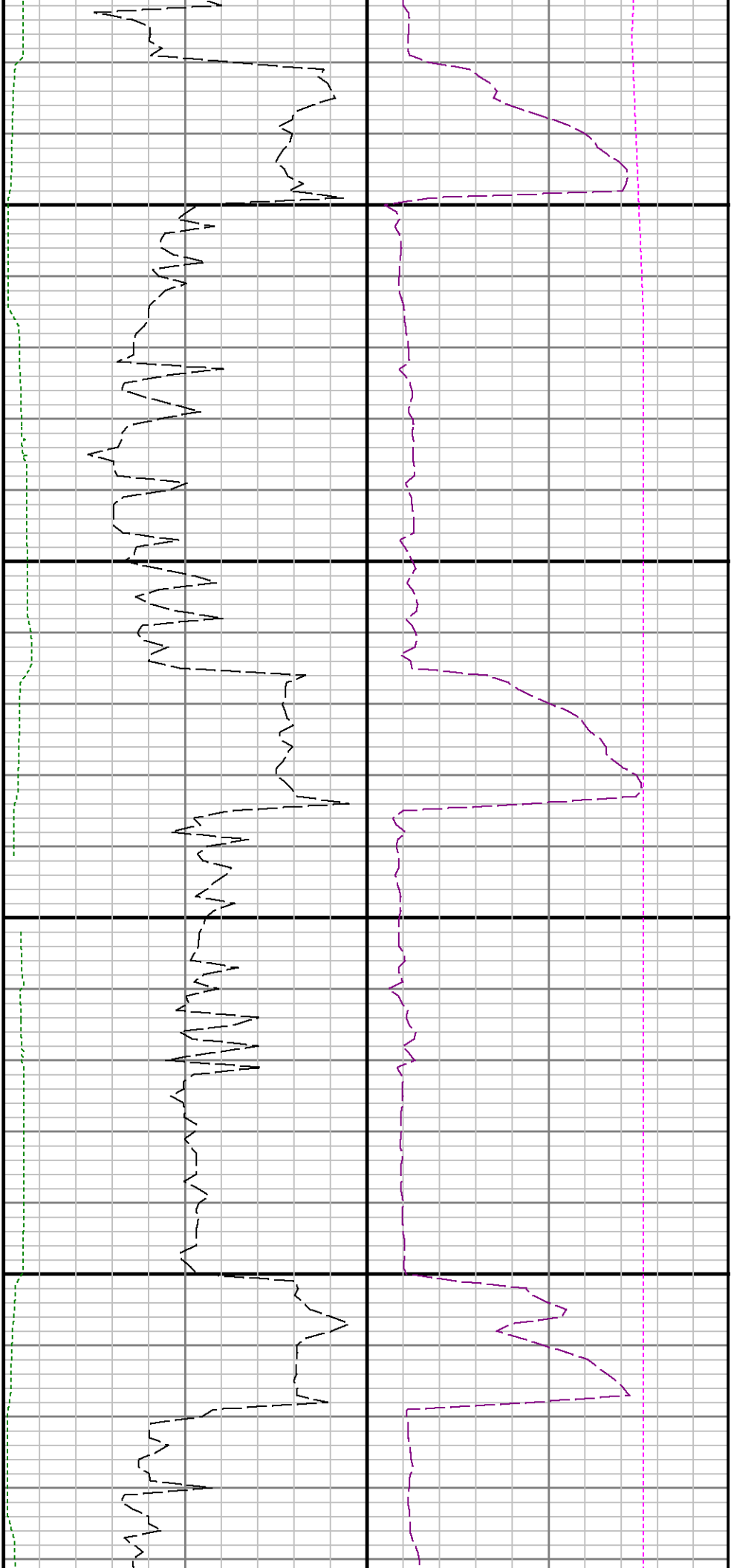
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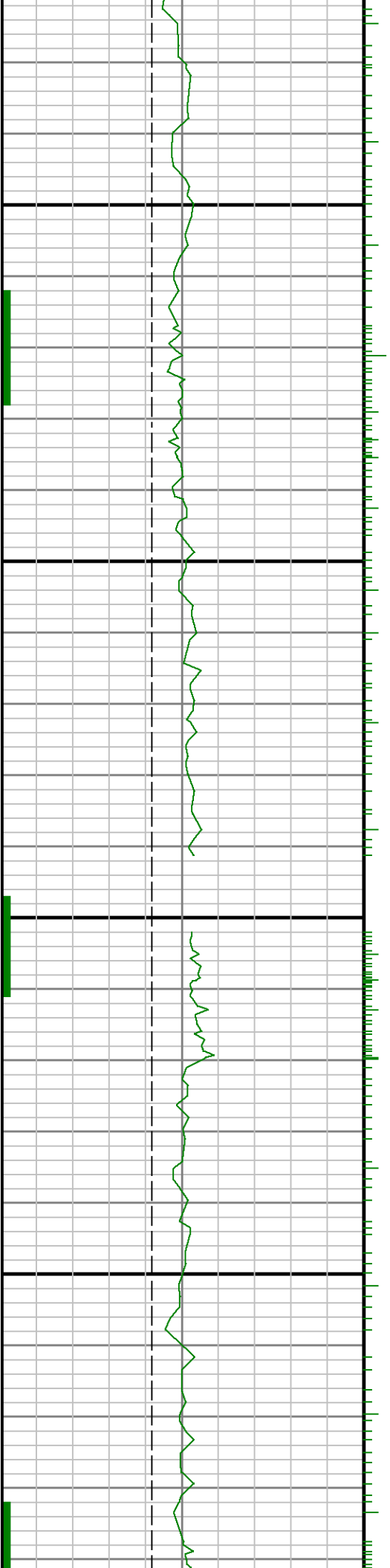




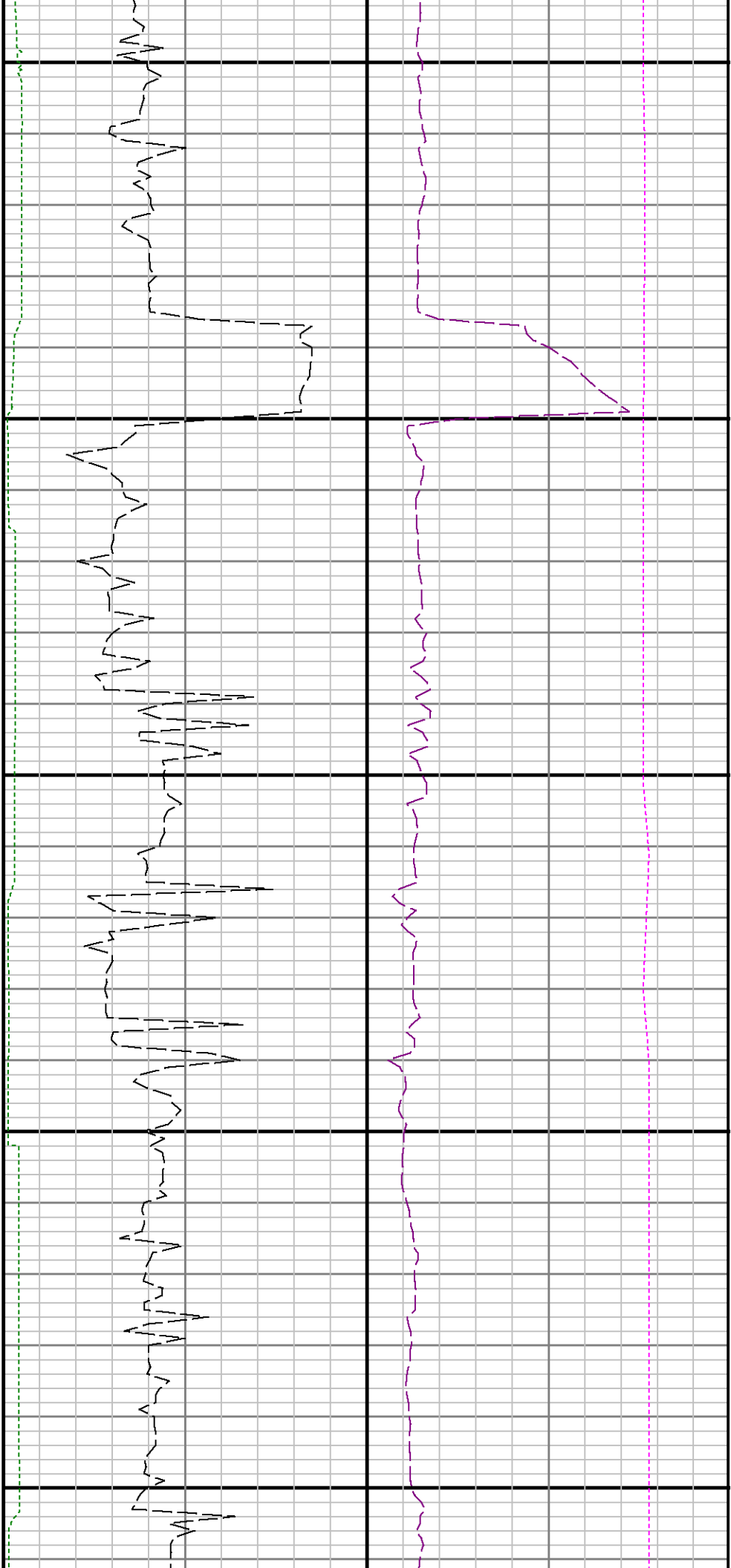


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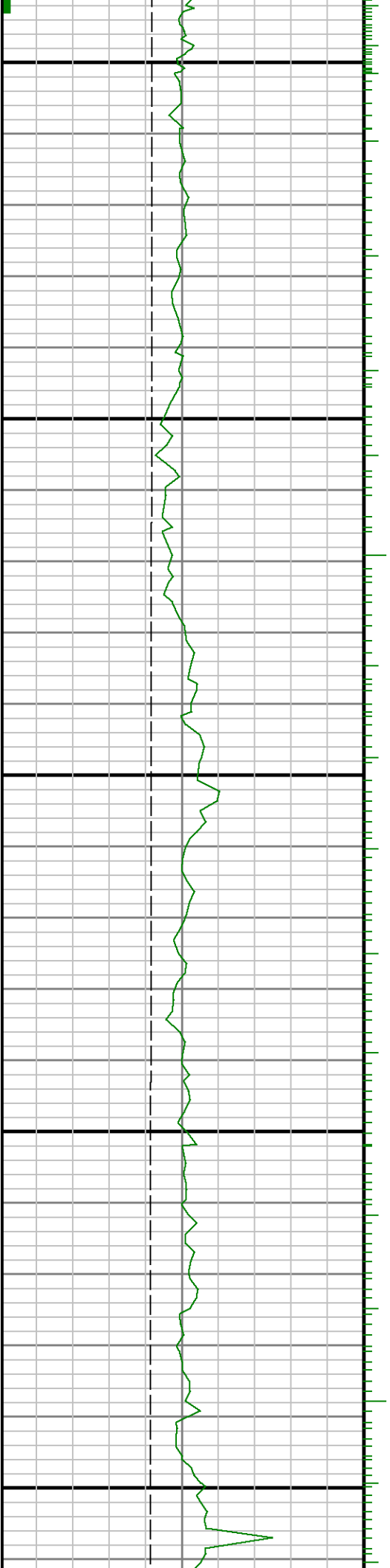


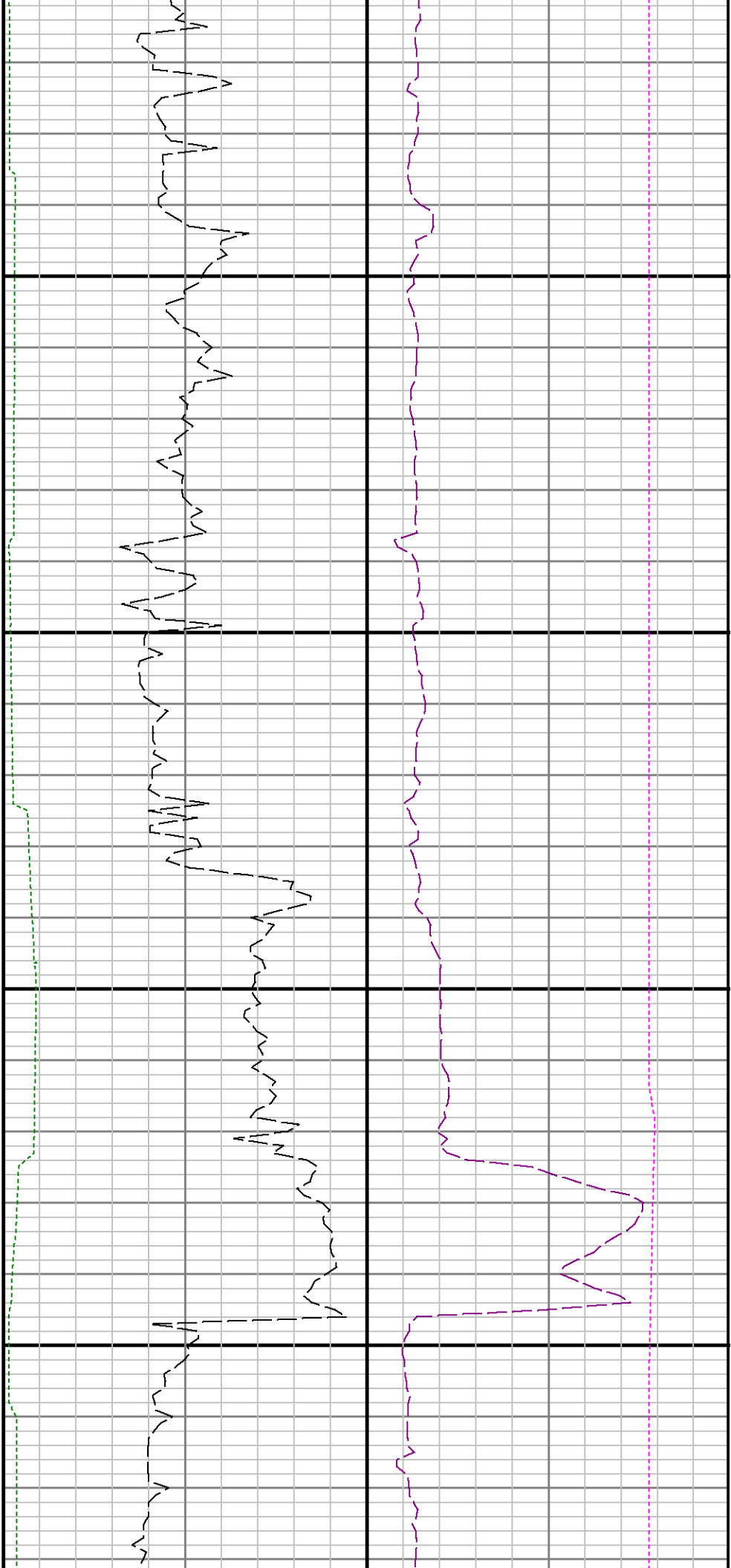




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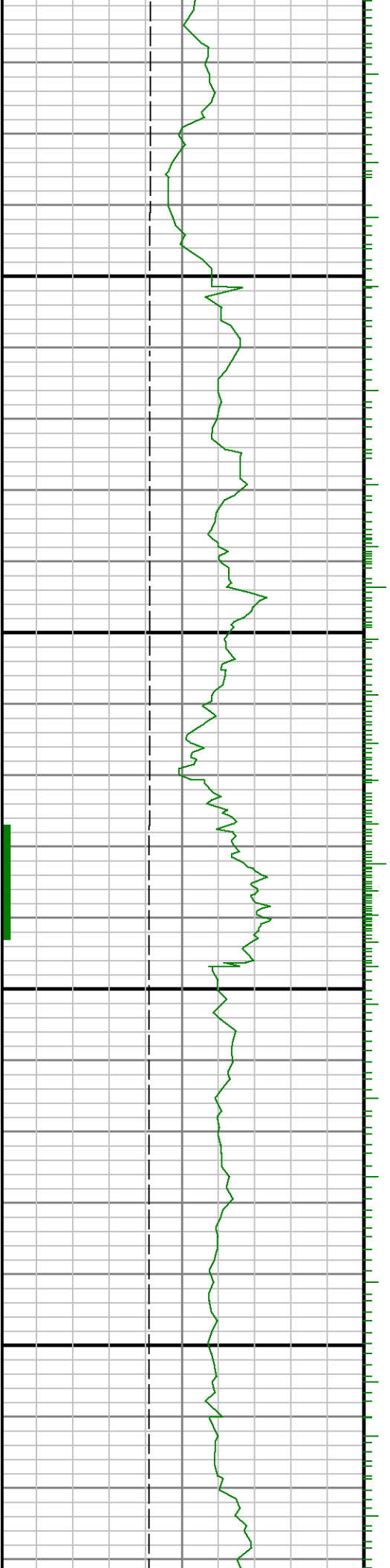
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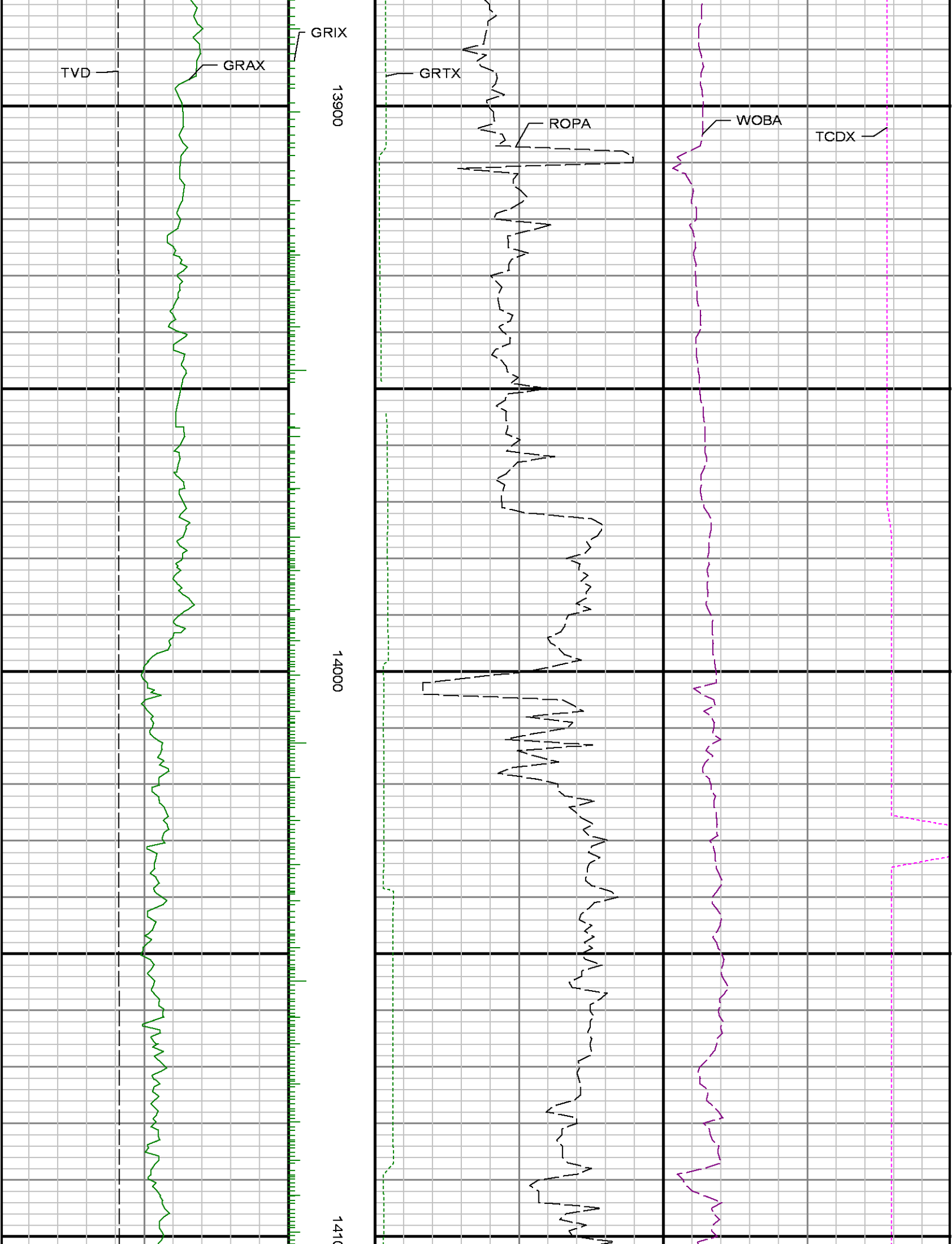


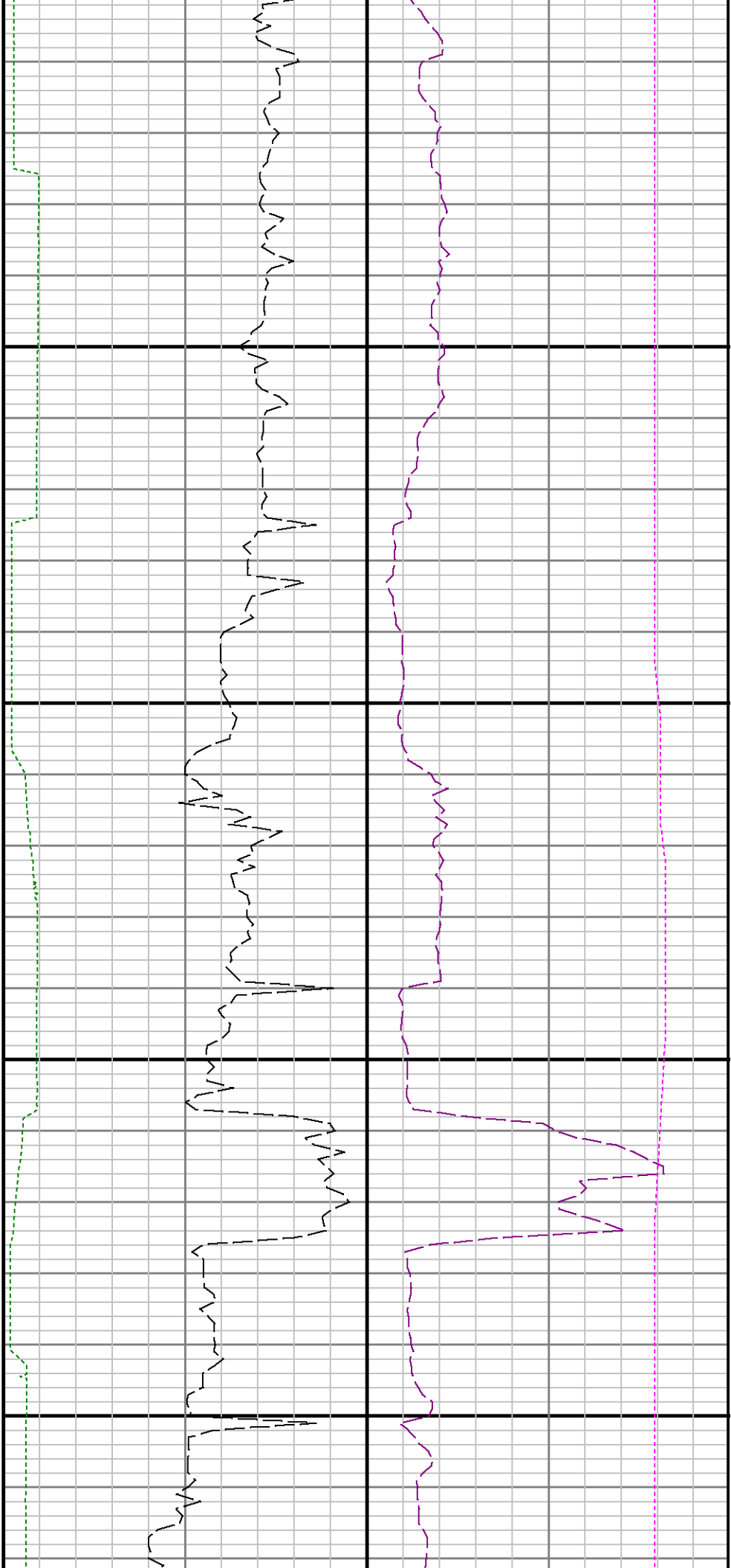


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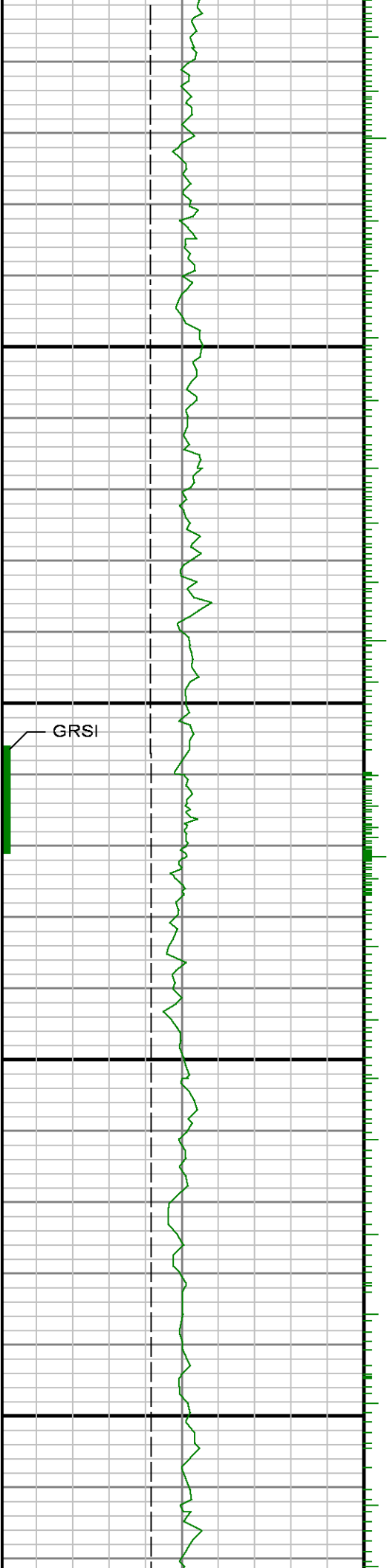




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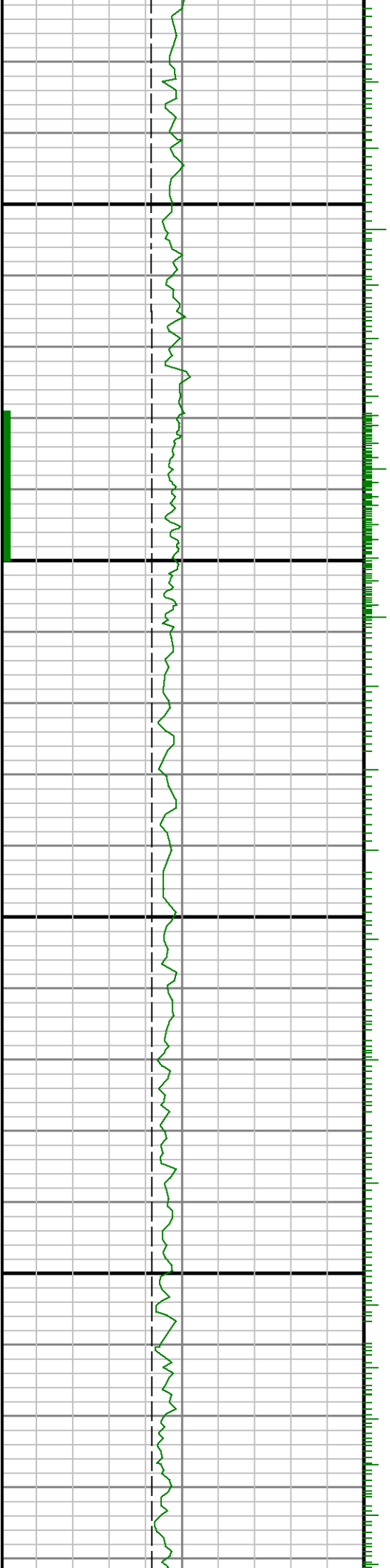


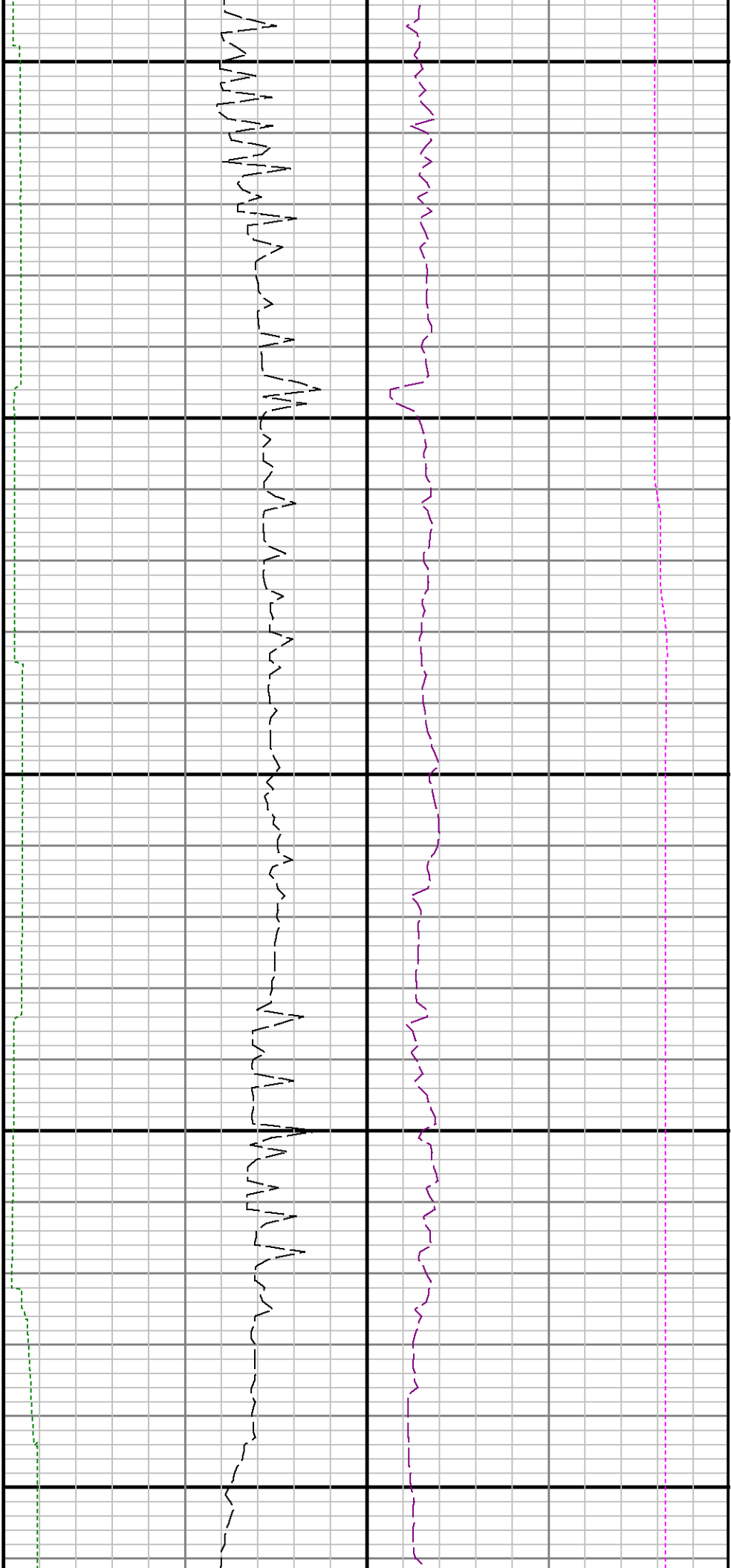
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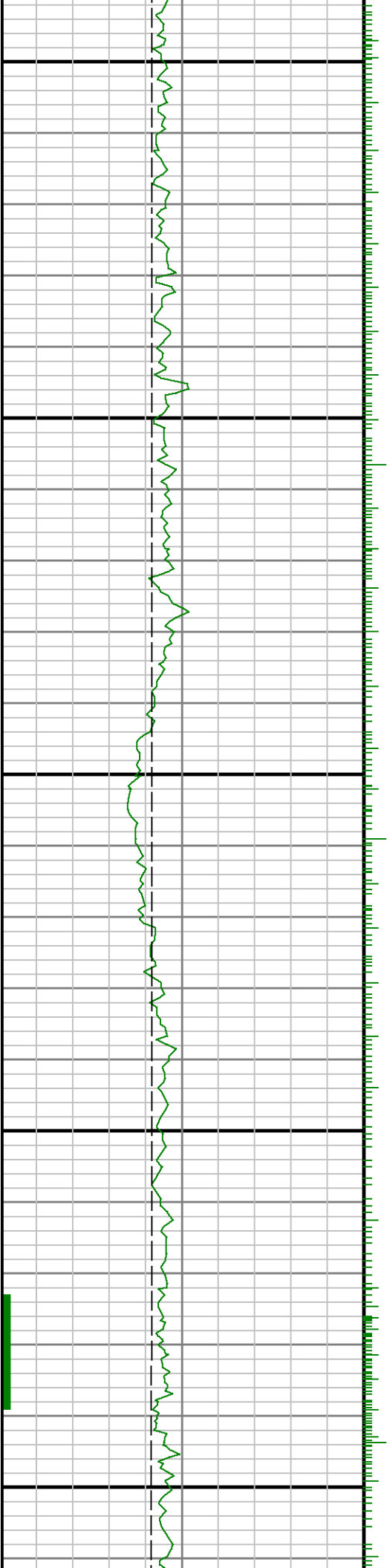
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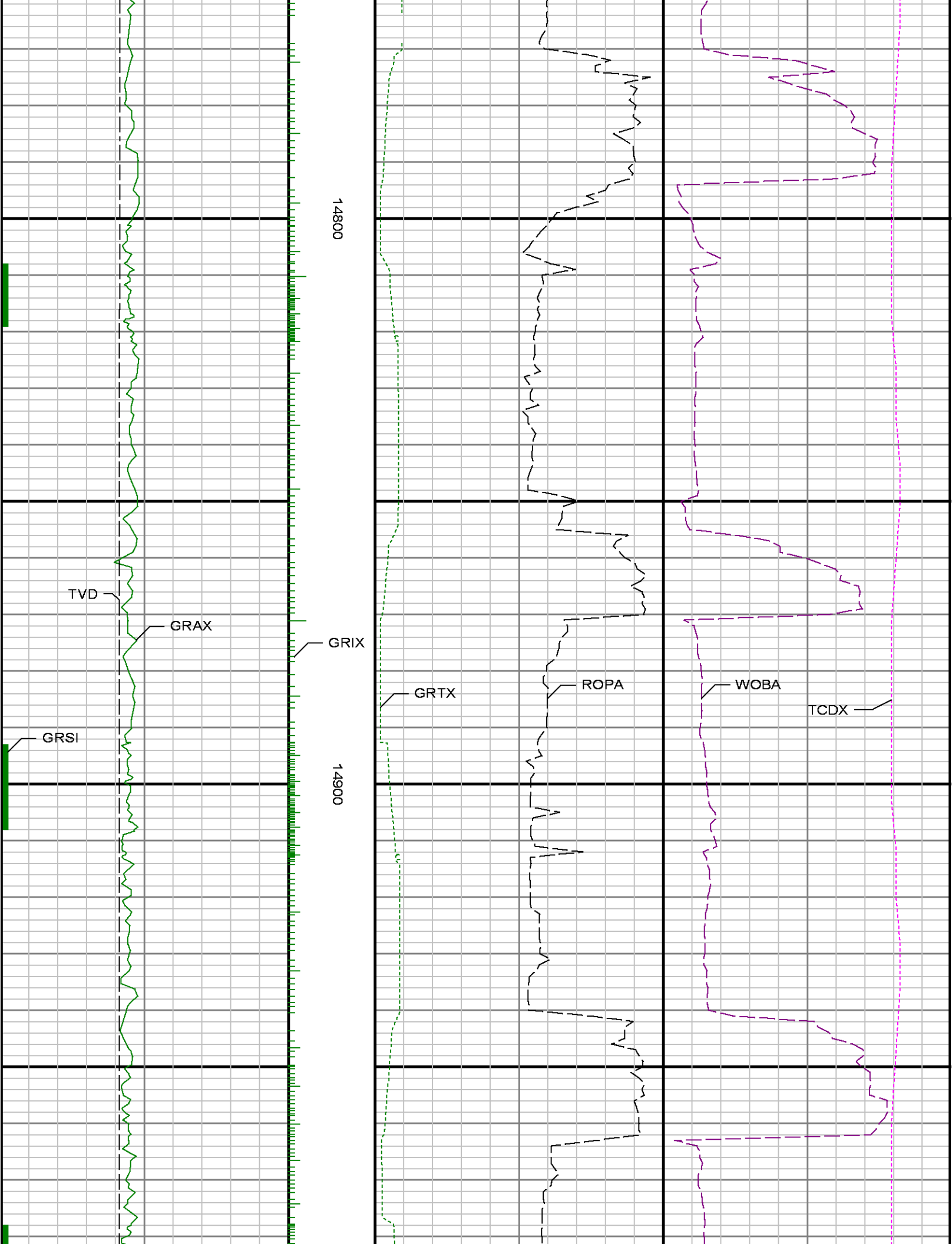


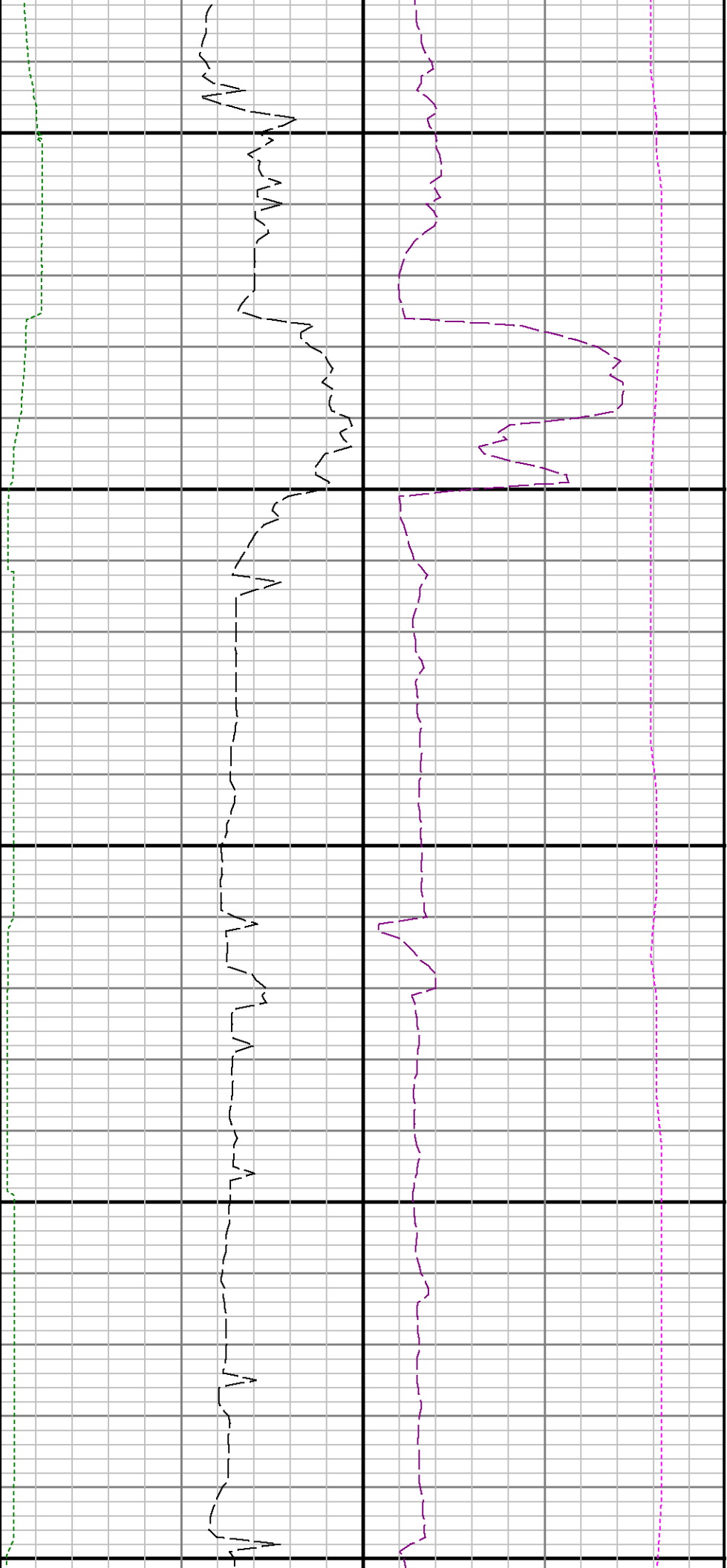


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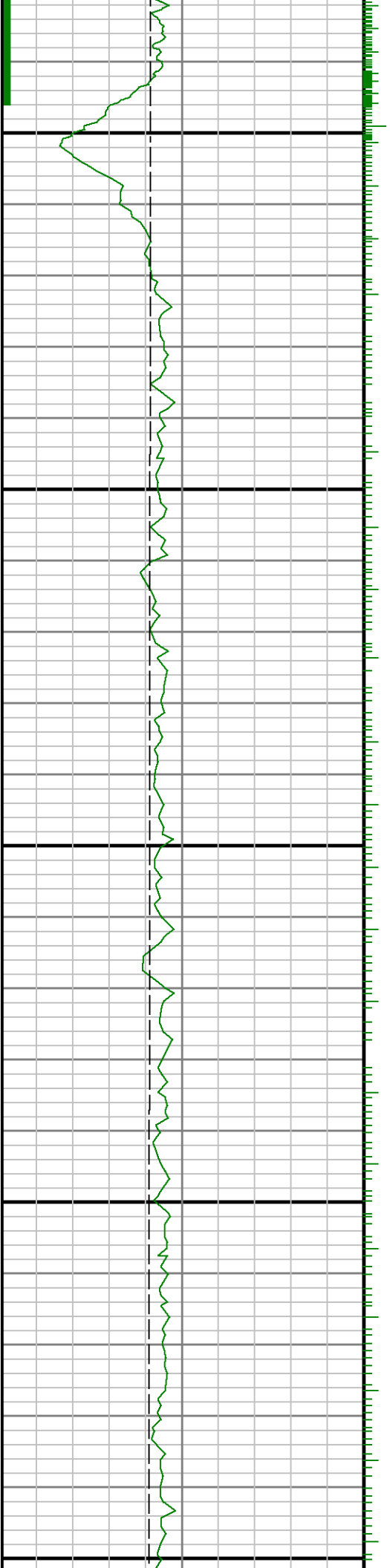




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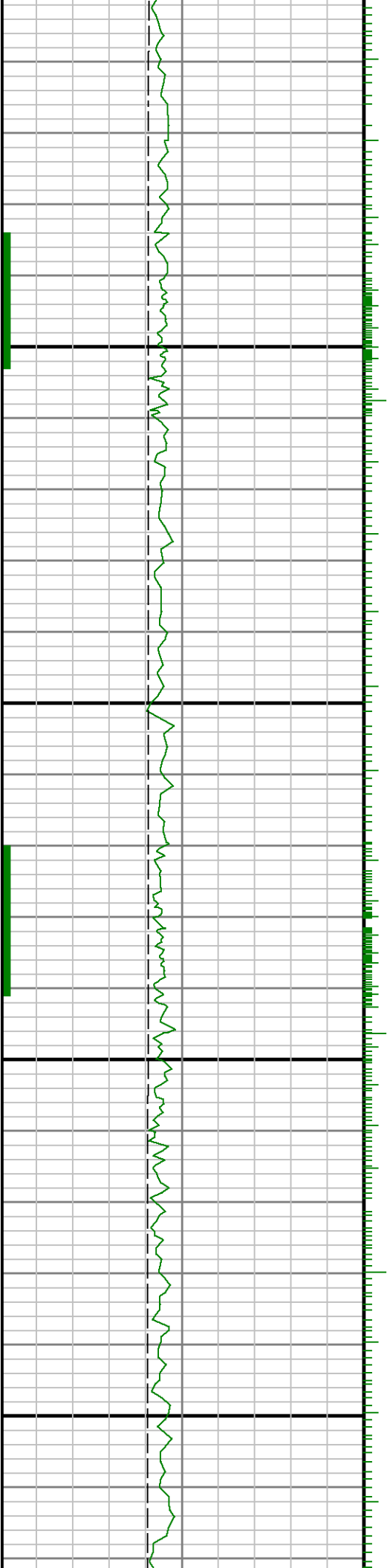


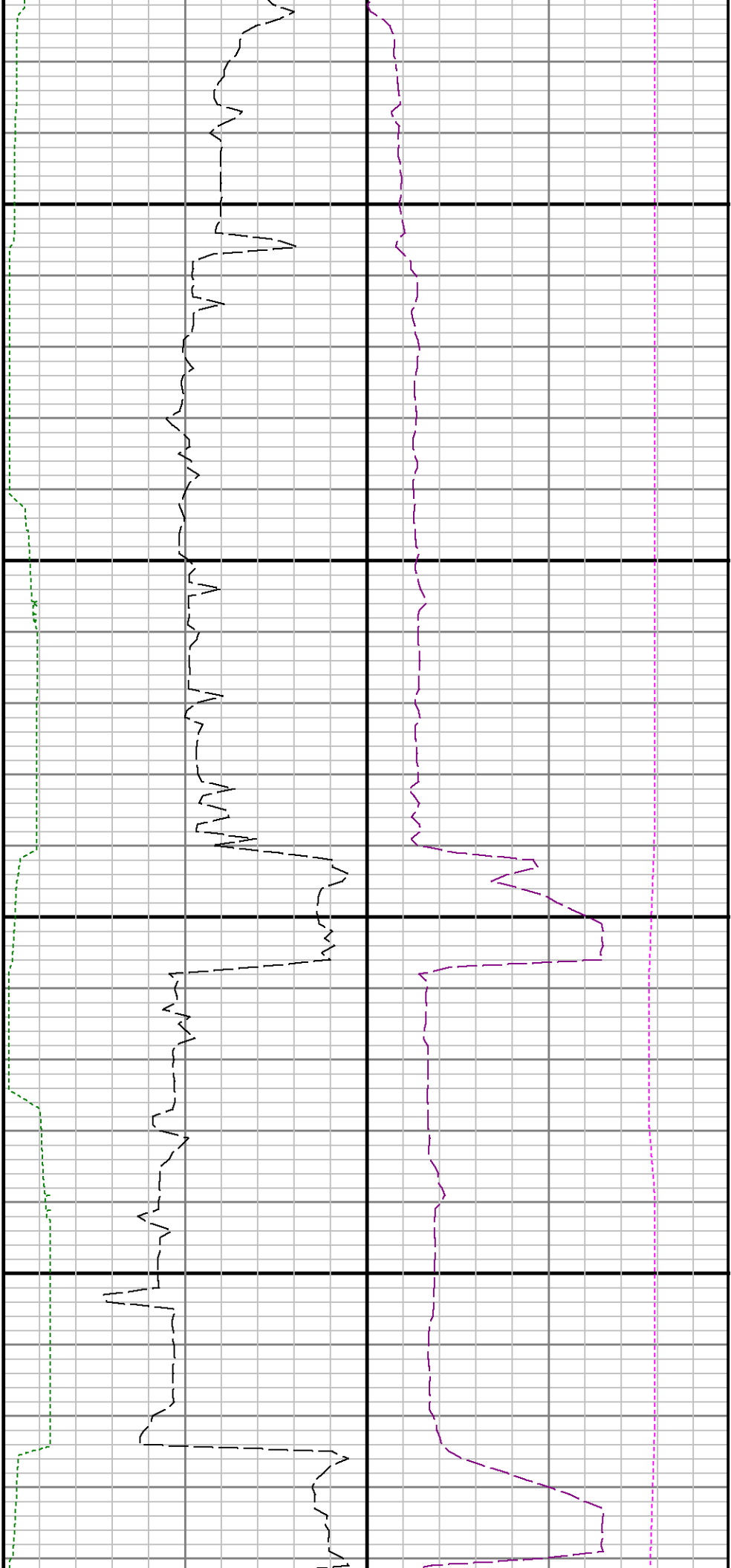


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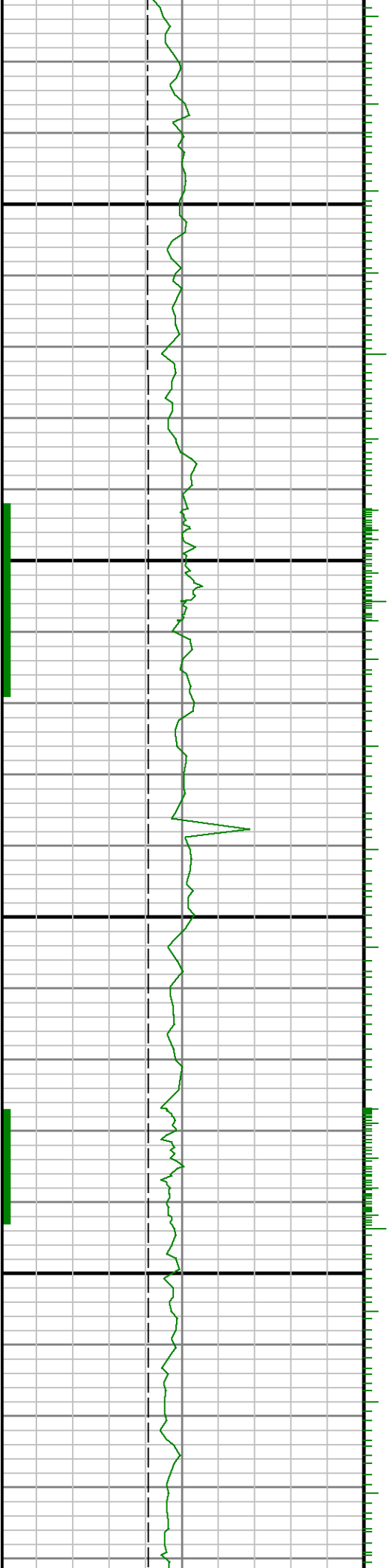
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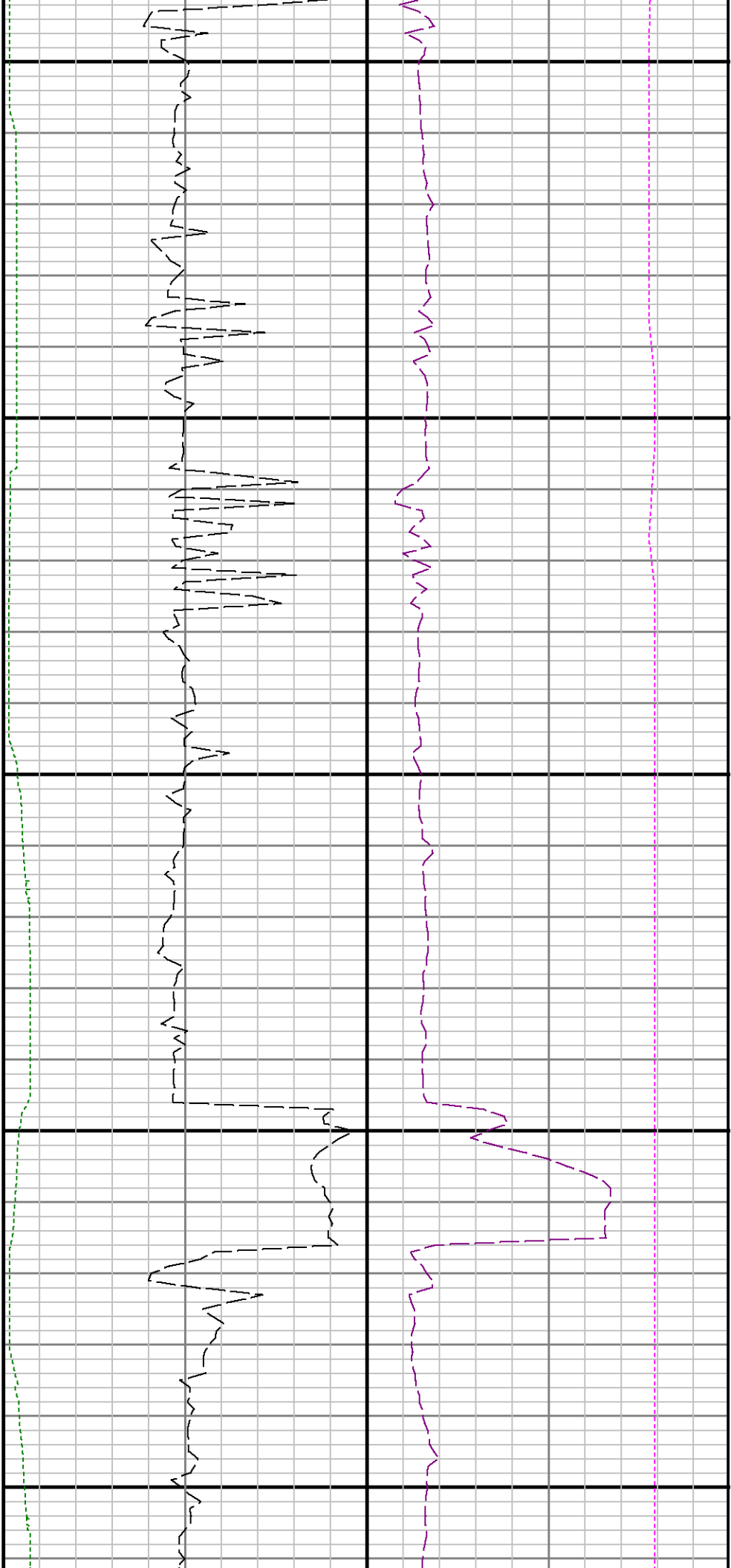




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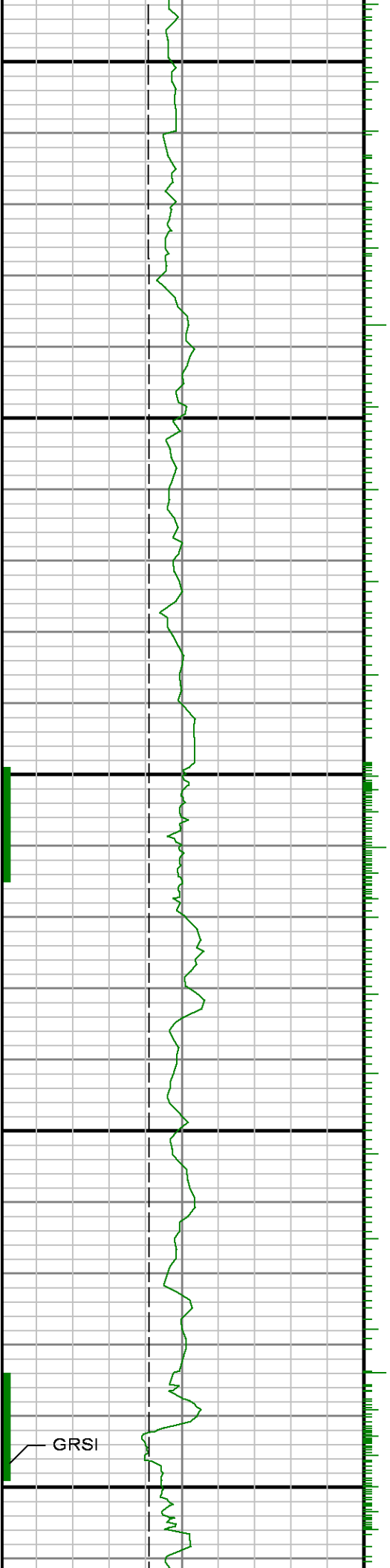
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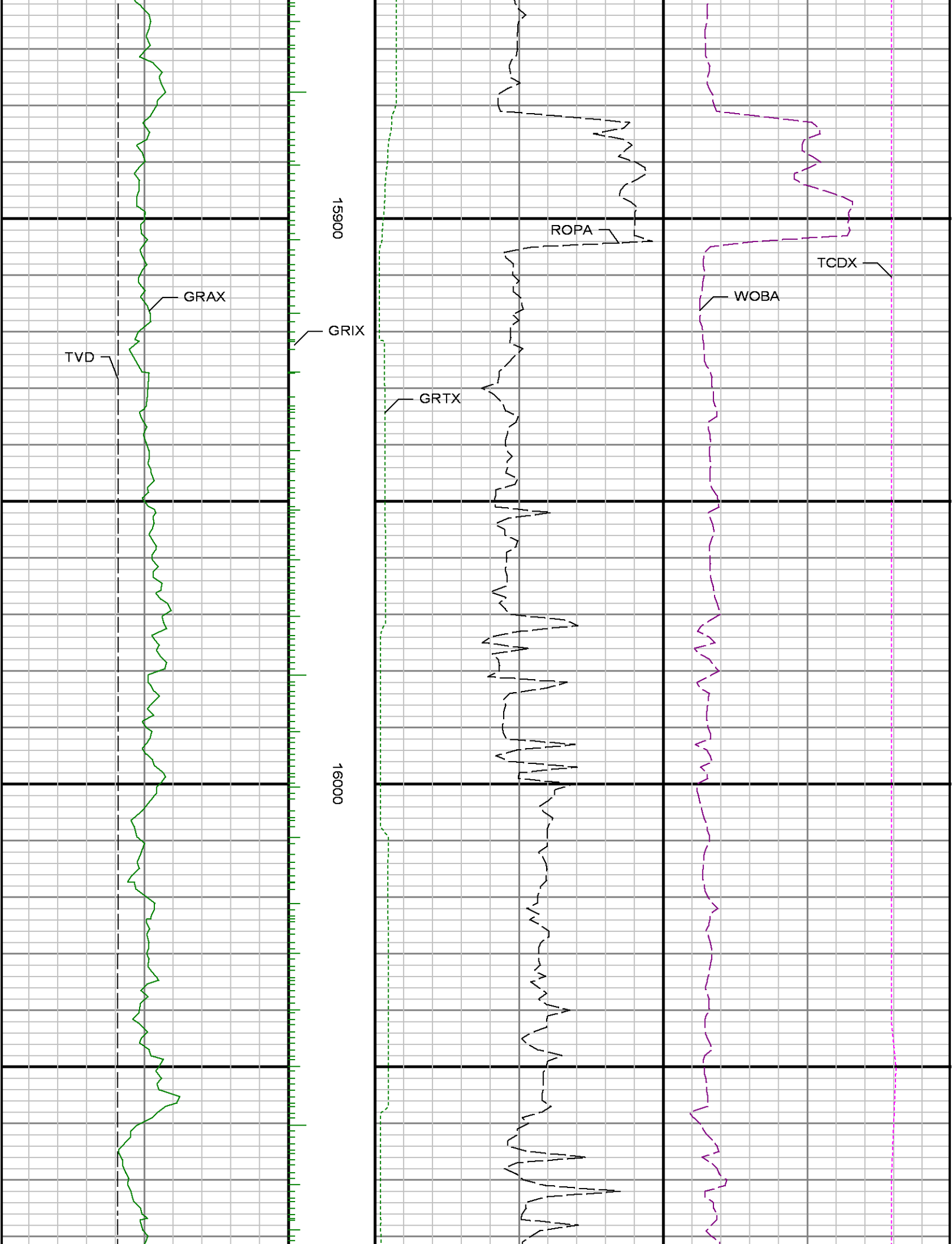


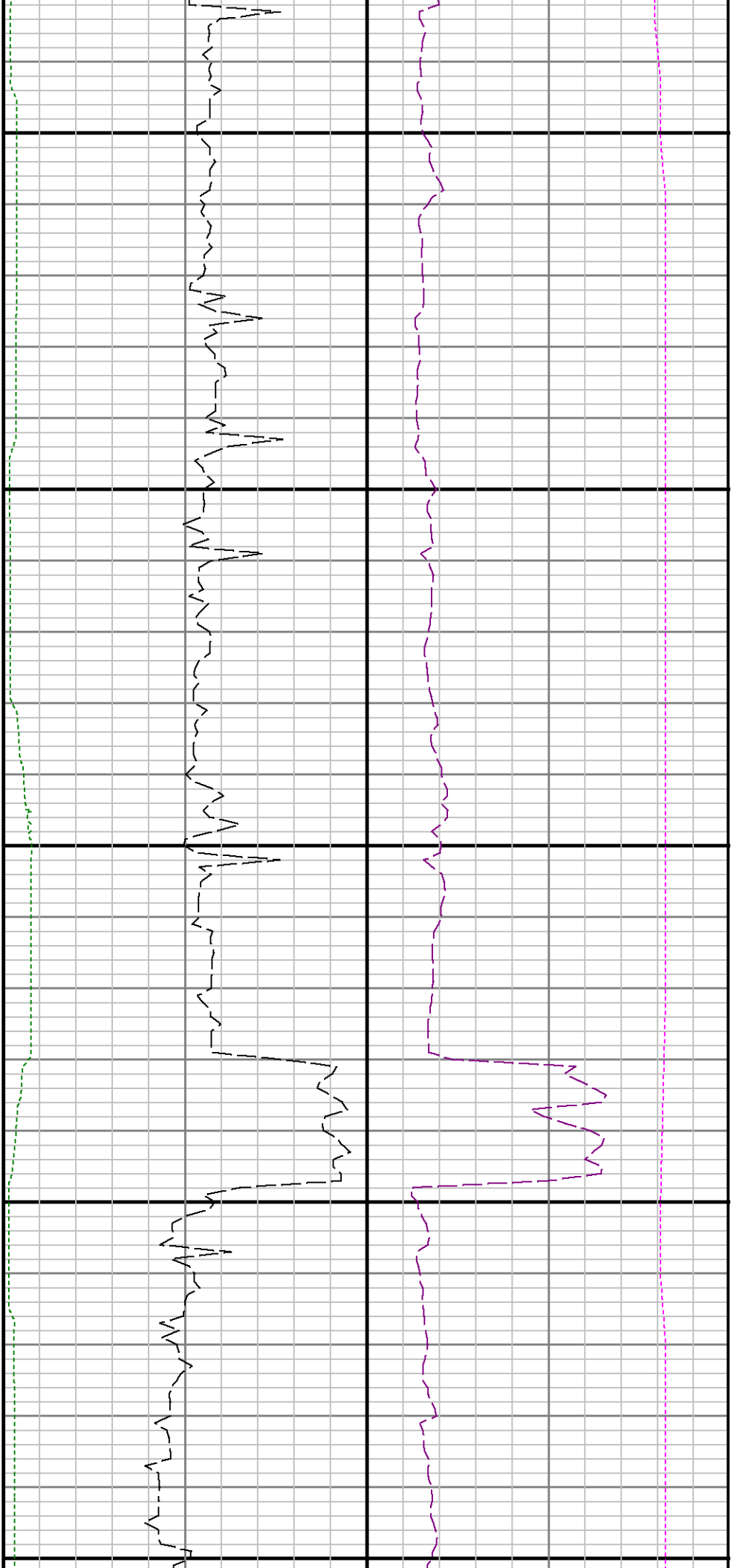
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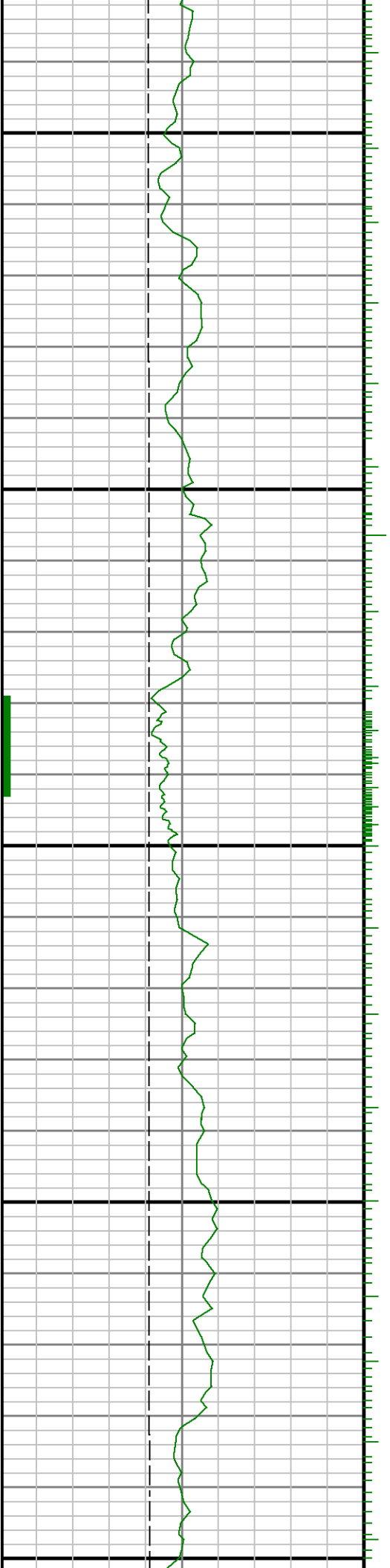


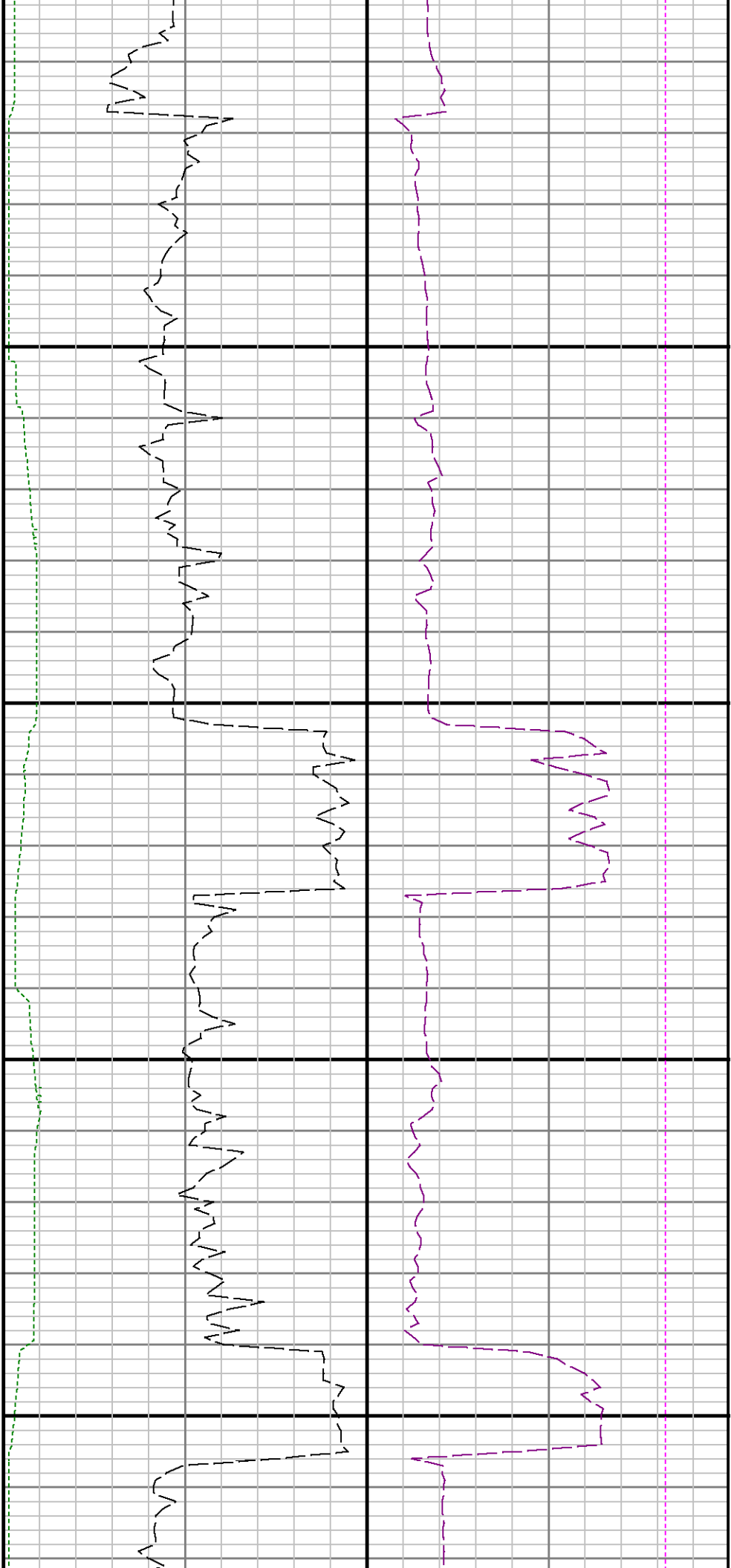


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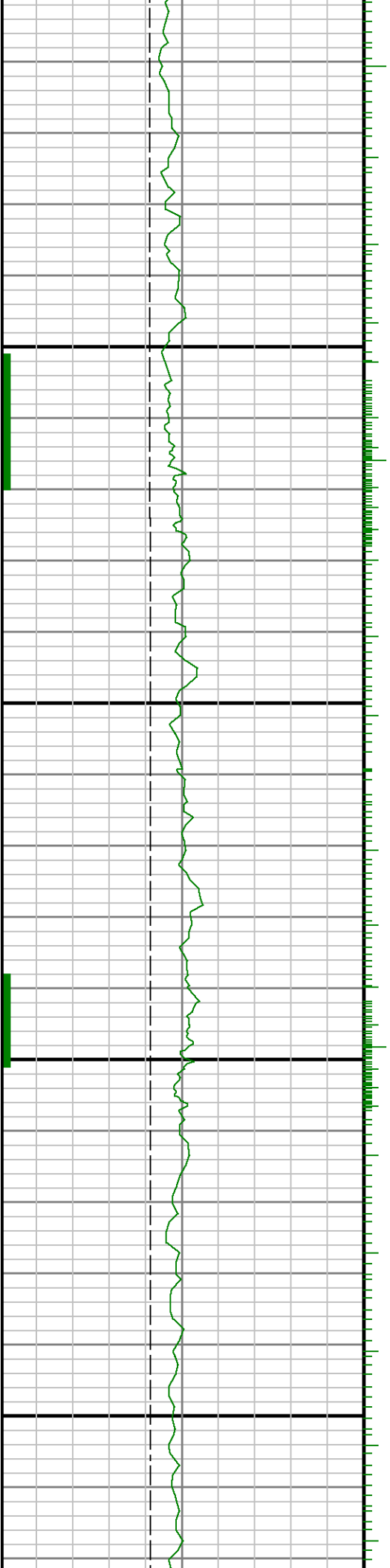
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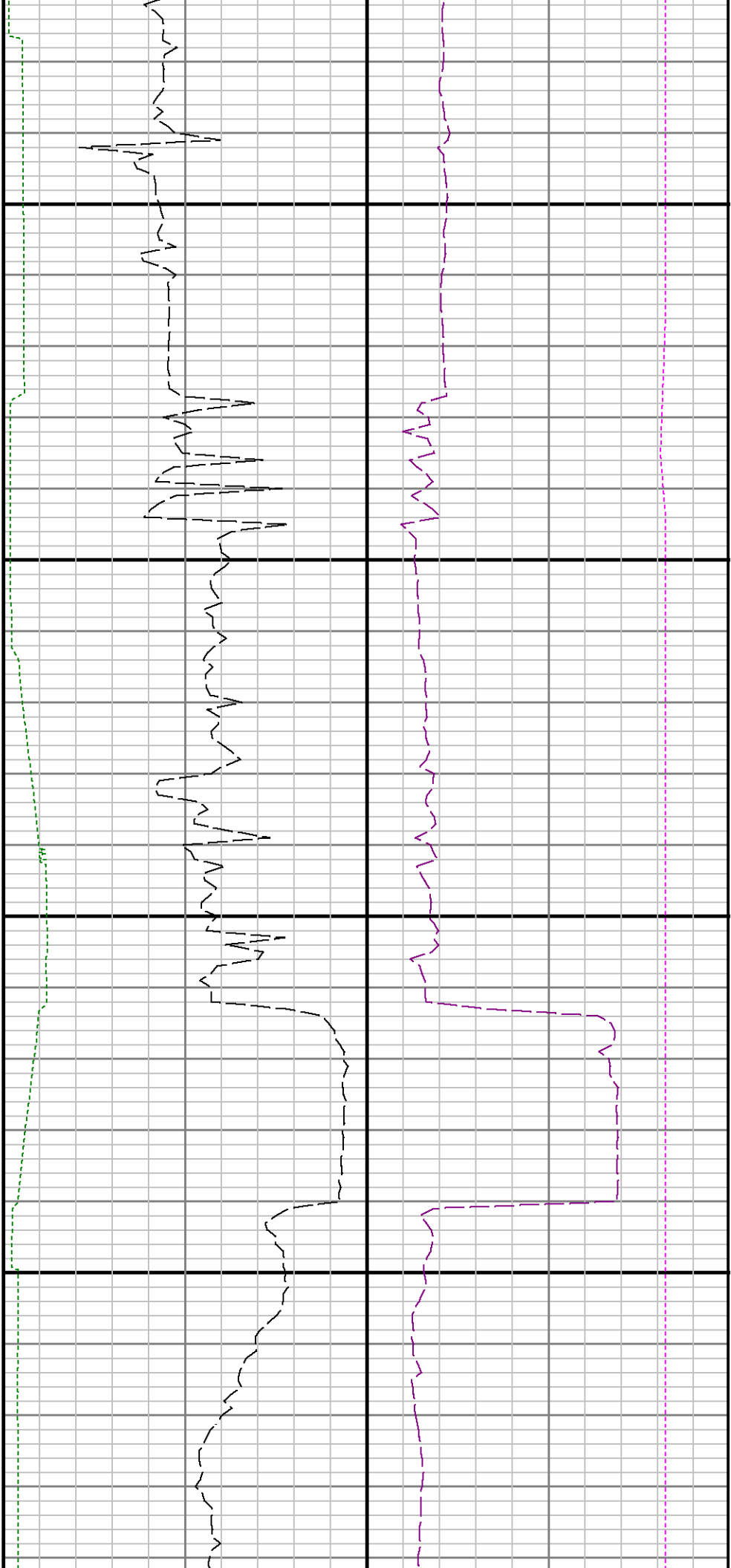
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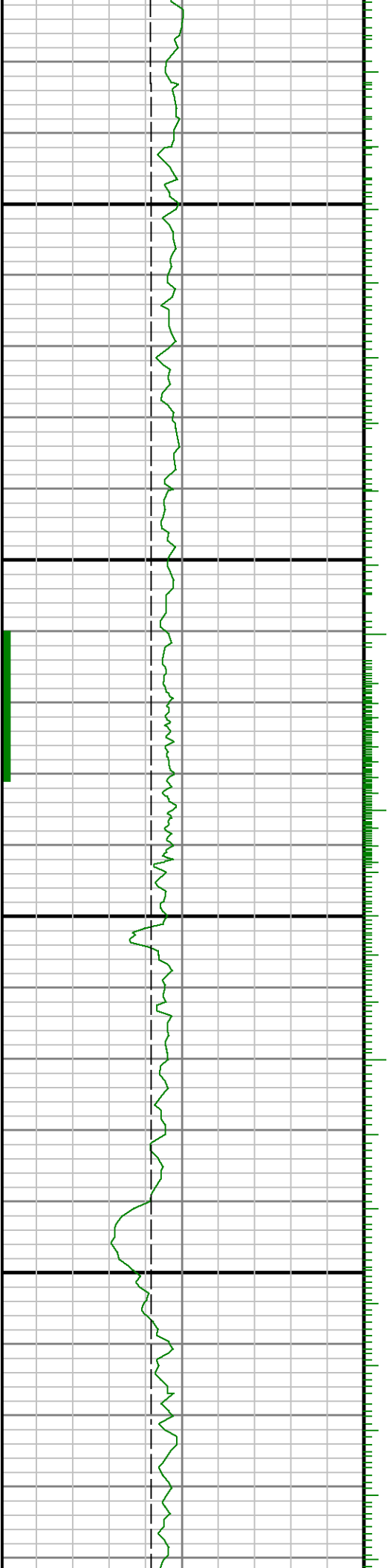
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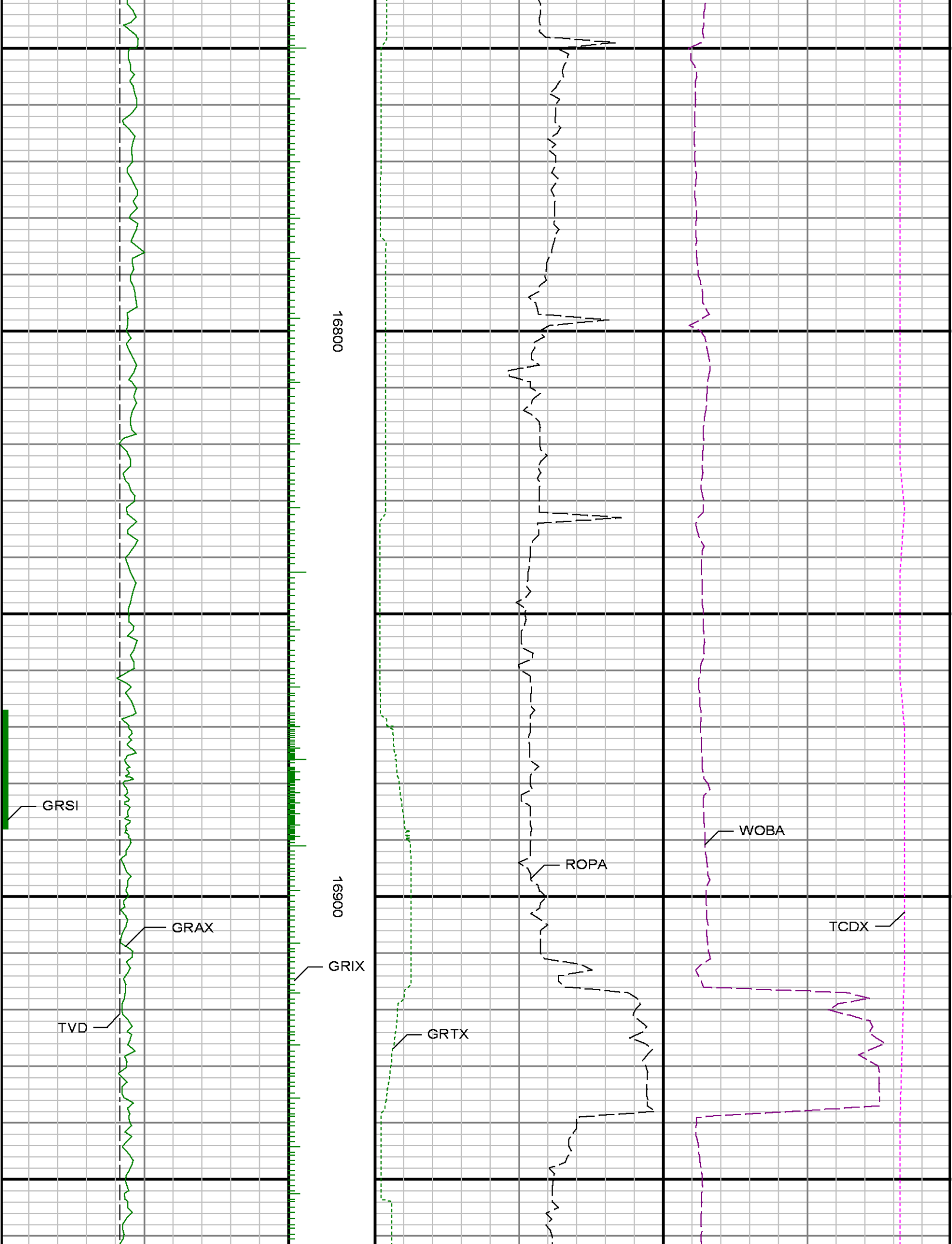




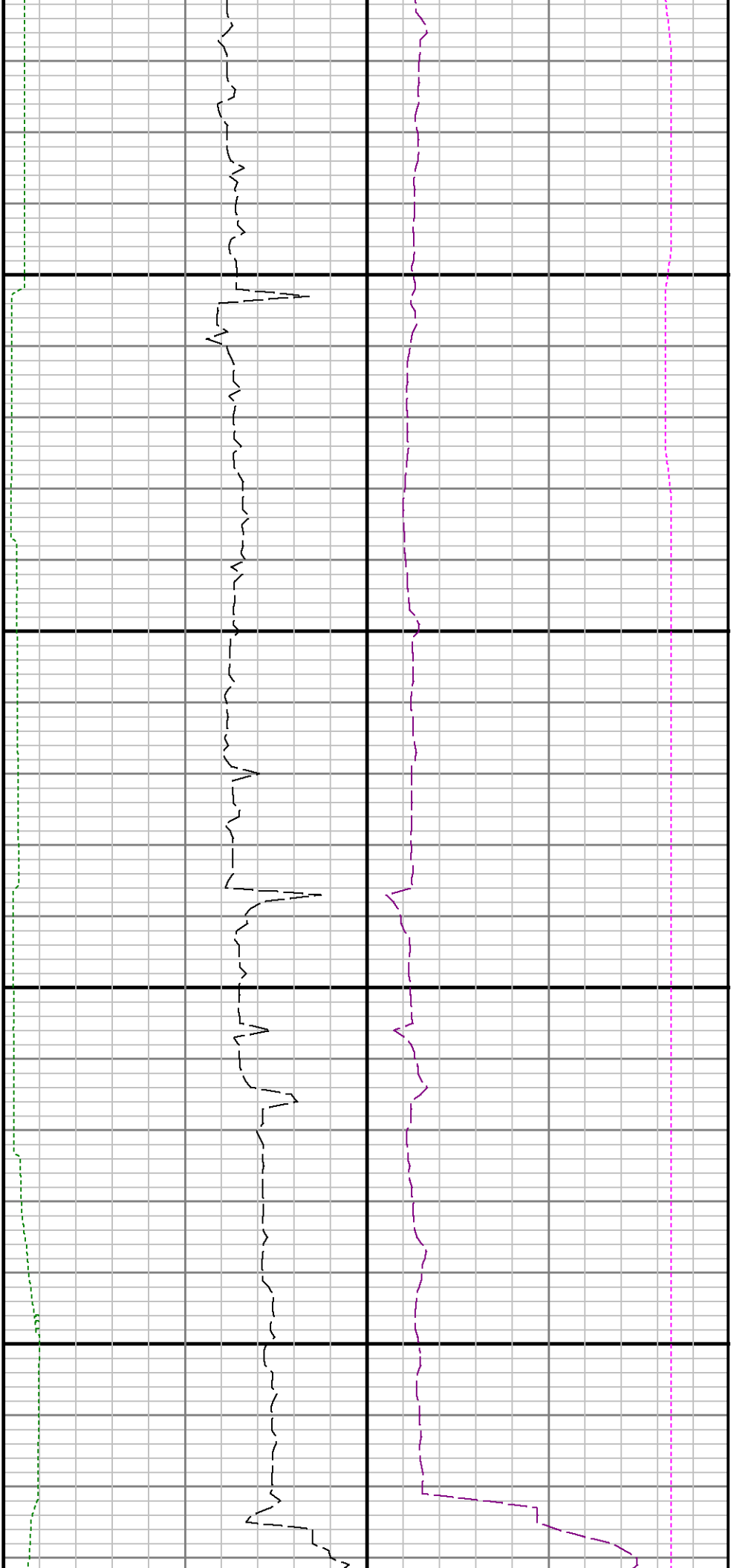
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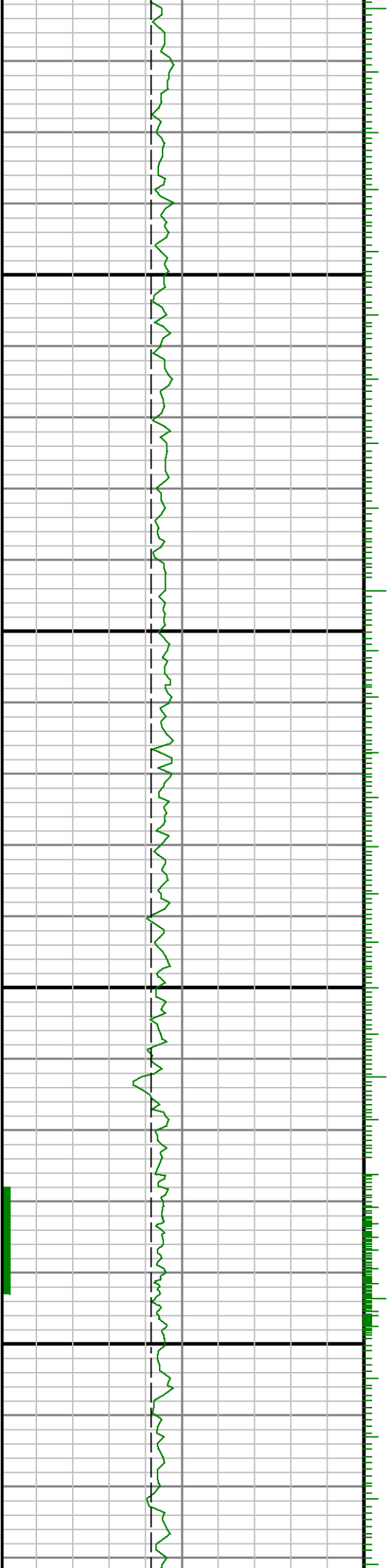


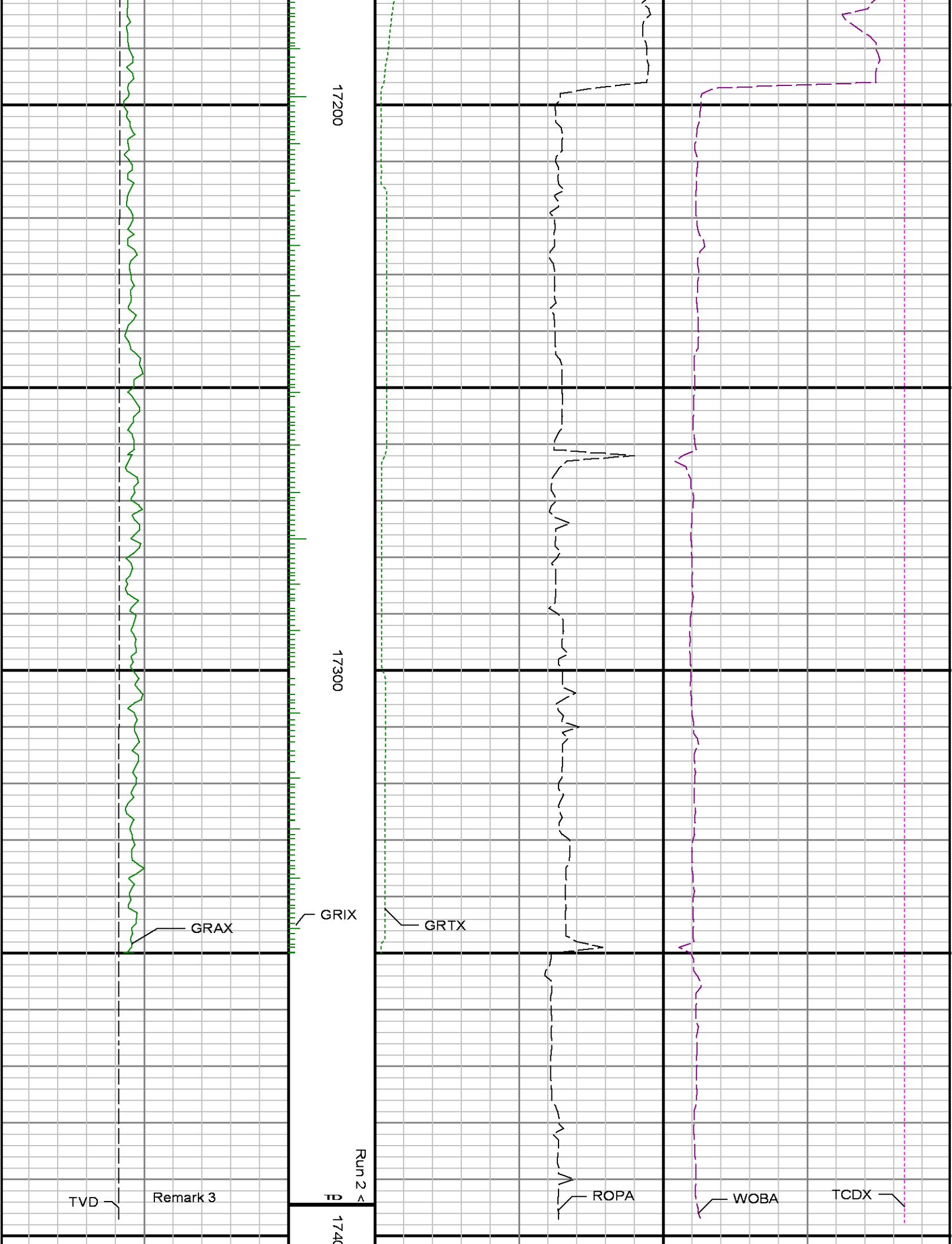




17000

17100





[illegible]