



## Realtime Log

## Measured Depth

**Company: Kerr-McGee Oil & Gas Onshore LP**

**Well: Reynolds Cattle 31C-23HZ**

**Field:** Wattenberg

Region: Continental US Country: U.S.A.

Final Print

Surface Location:

Latitude: 40° 13' 1.978" N

05-123-39133-00

SEC: 23      TWN: 3N      RGE: 68W

Elevation: 4931.00 ft.

Log Measured From:	Drill Floor	16.00 ft.	Above P.D
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DE: 4947.00 ft.

Depth Reference: Driller's Depth

GL: 4931.00 ft.

Depth Reference: Driller's Depth

GL: 4931.00 ft.

## Dates

Top: 6800.0 ft. Date From: 28/Jun/14 Dip Angle: 66.90 ° Azi Reference North:

Bottom:	12554.0 ft.	Date To:	02/JUL/14	Total	Mag to Reference
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Spud Date: 26/Jun/14 Field Strength: 52581.0 nT North Correction:

Spud Date: 26/Jun/14

Field Strength: 52581.0 nT North Correction:

8.68

## Casing Record

Hole Size	From	To	Size	Weight	From	To
13.500 in.	Surface	1372.0 ft.	9.625 in.	36.00 lb/ft	Surface	1361.0 ft.
8.750 in.	1372.0 ft.	7738.0 ft.	7.000 in.	26.00 lb/ft	Surface	7728.0 ft.
6.125 in.	7738.0 ft.	12637.0 ft.				

## Deviation Record

Type	From	To	Hole Size	Interval	Inc / Az (Start)	Inc / Az (End)
Water Based - Fresh	1489.0 ft.	12637.0 ft.	13.500 in.	13722.0 ft.	0.6 ° / 75.9 °	0.7 ° / 16.2 °
			8.750 in.	6366.0 ft.	0.7 ° / 16.2 °	84.0 ° / 267.0 °
			6.125 in.	4899.0 ft.	88.4 ° / 270.1 °	90.9 ° / 269.9 °
					/	/
					/	/
					/	/
					/	/

Acquisition System	Software Version
...	...

Other

Advantage	2.20U4	Rig: / Contractor:	Xtreme 20	/ Kerr-McGee Oil & Gas Onshore LP
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Rig: / Contra:

Xtreme 20

**McGee Oil & Gas Onshore LP**

PATs

Job No:	
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6489089

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[illegible]

Crew

Name	Arrive	Depart	Name	Arrive	Depart	Name	Arrive	Depart
	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite
Adam Schlenz	June 28 2014	July 03 2014	David Campbell	June 22 2014	July 03 2014	Greg Dore	June 27 2014	June 27 2014

Witness

Name	LWD Run Number
Tim Walker	1,2
Marvin Hackworth	1,2

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+ (%)
28/Jun/2014 12:00	1	7028.0	Water Based	10.0	12	8.6	N/A	2/89.4	Active Mud Pit	4300	N/A
28/Jun/2014 22:00	1	7683.0	Water Based	10.0	12	8.7	N/A	2/89.4	Active Mud Pit	4500	N/A
29/Jun/2014 12:00	1	7738.0	Water Based	10.4	13	8.6	N/A	2/88	Active Mud Pit	4300	N/A
29/Jun/2014 22:00	1	7738.0	Water Based	10.4	13	8.6	N/A	2/88	Active Mud Pit	4300	N/A
30/Jun/2014 10:00	2	7738.0	Water Based	9.7	11	8.6	N/A	2/90.5	Active Mud Pit	4000	N/A
30/Jun/2014 22:00	2	8296.0	Water Based	9.6	11	8.6	N/A	2/90.8	Active Mud Pit	3400	N/A
01/Jul/2014 10:00	2	10007.0	Water Based	9.6	14	9.2	N/A	2/91	Active Mud Pit	3400	N/A
01/Jul/2014 22:00	2	11652.0	Water Based	9.7	13	9.3	N/A	2/90.6	Active Mud Pit	3400	N/A

Mnemonics

Curve	Description	Units
GRAX	Gamma Ray Apparent, 0.5 ft. Avg.	API
GRIX	Gamma Ray Data Density	point
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	11941434	Directional	63.25	6.750	3.250
1	SRIG	12816077	Gamma	59.87	6.750	3.250
2	DIR	12093879	Directional	67.00	4.750	2.810





Company : Kerr-McGee Oil & Gas Onshore LP

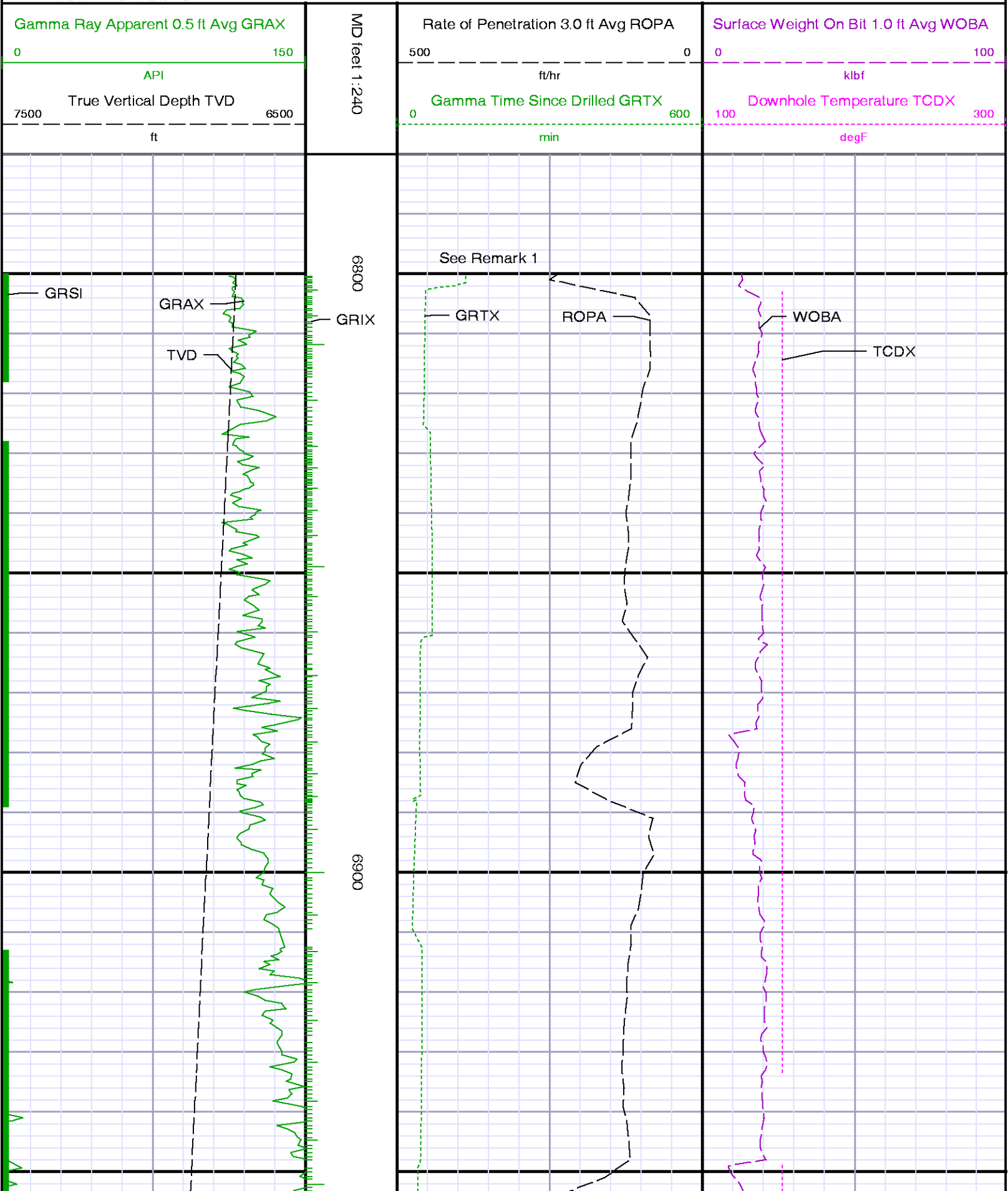
Well : Reynolds Cattle 31C-23HZ

Interval : 6780.00 - 12650.00 feet

Created : 02/Jul/2014 1:35:43 PM



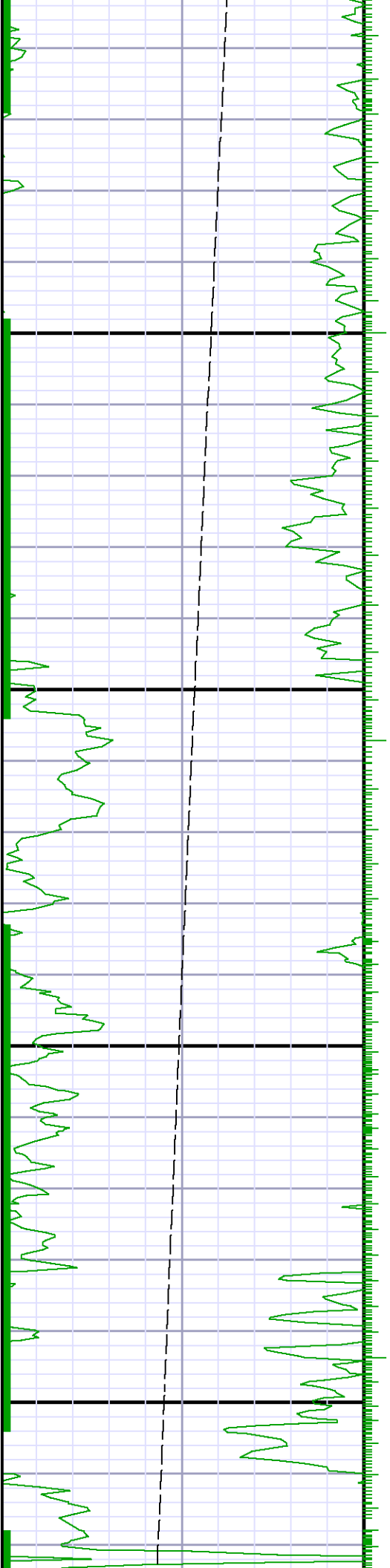
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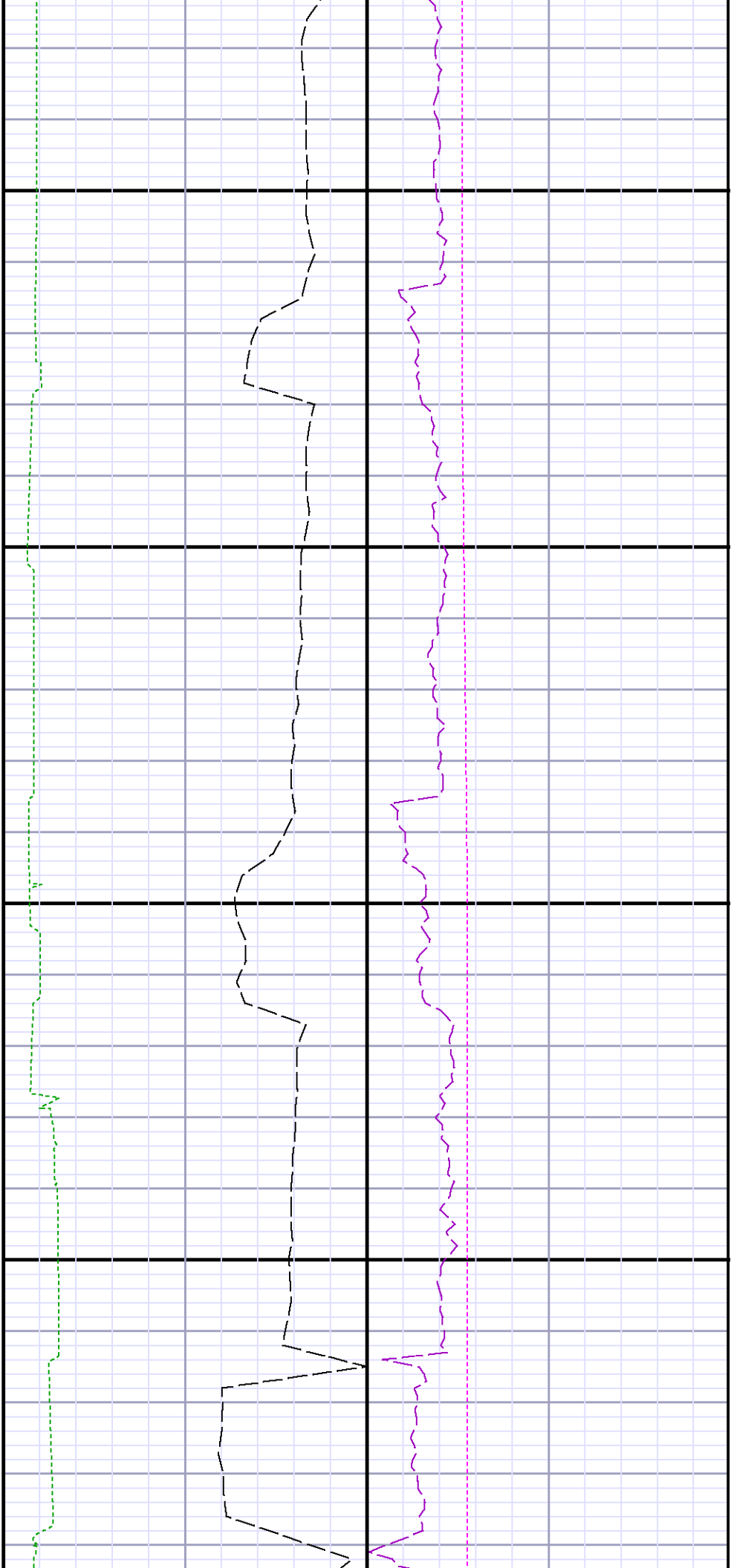




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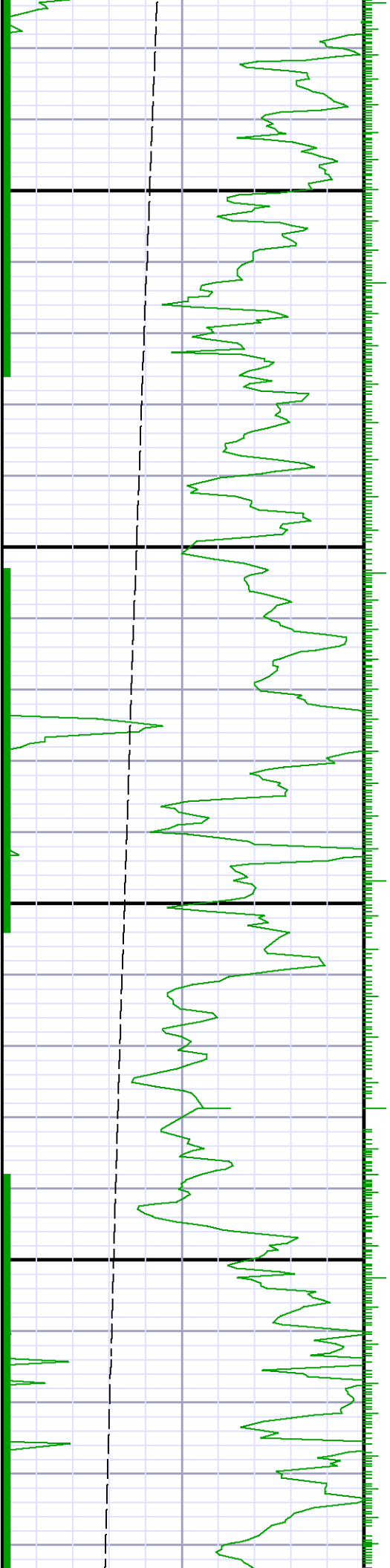
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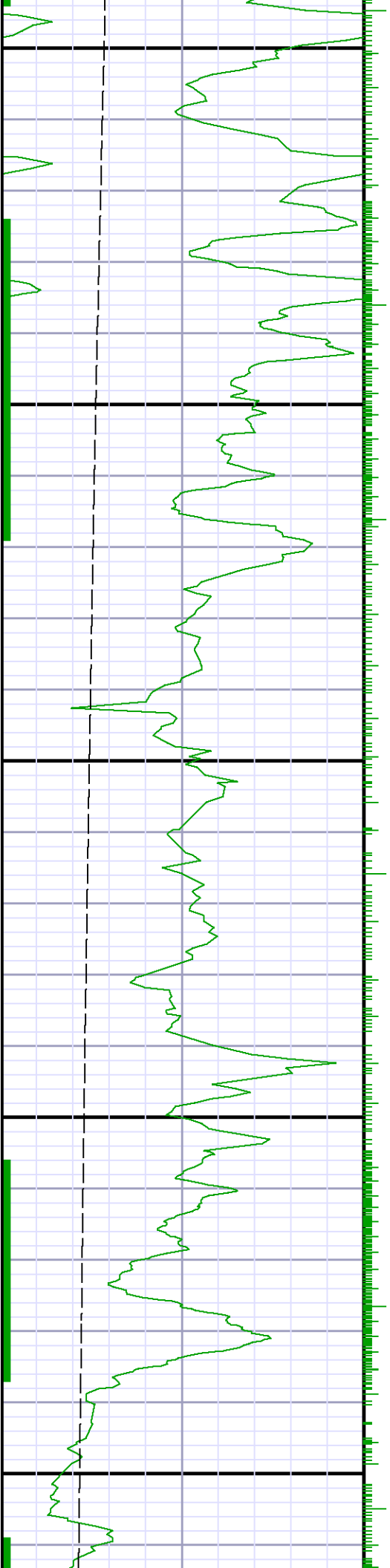


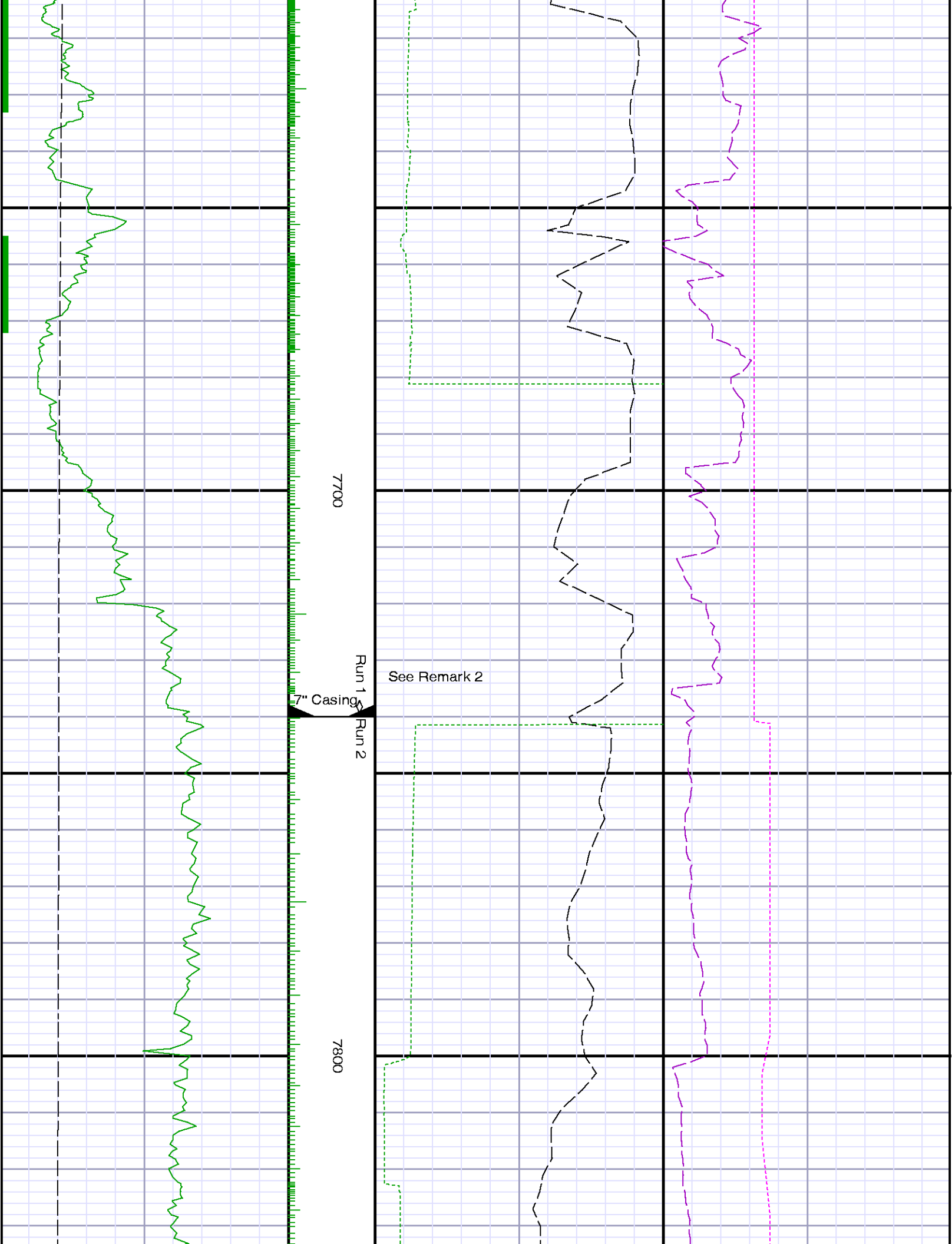


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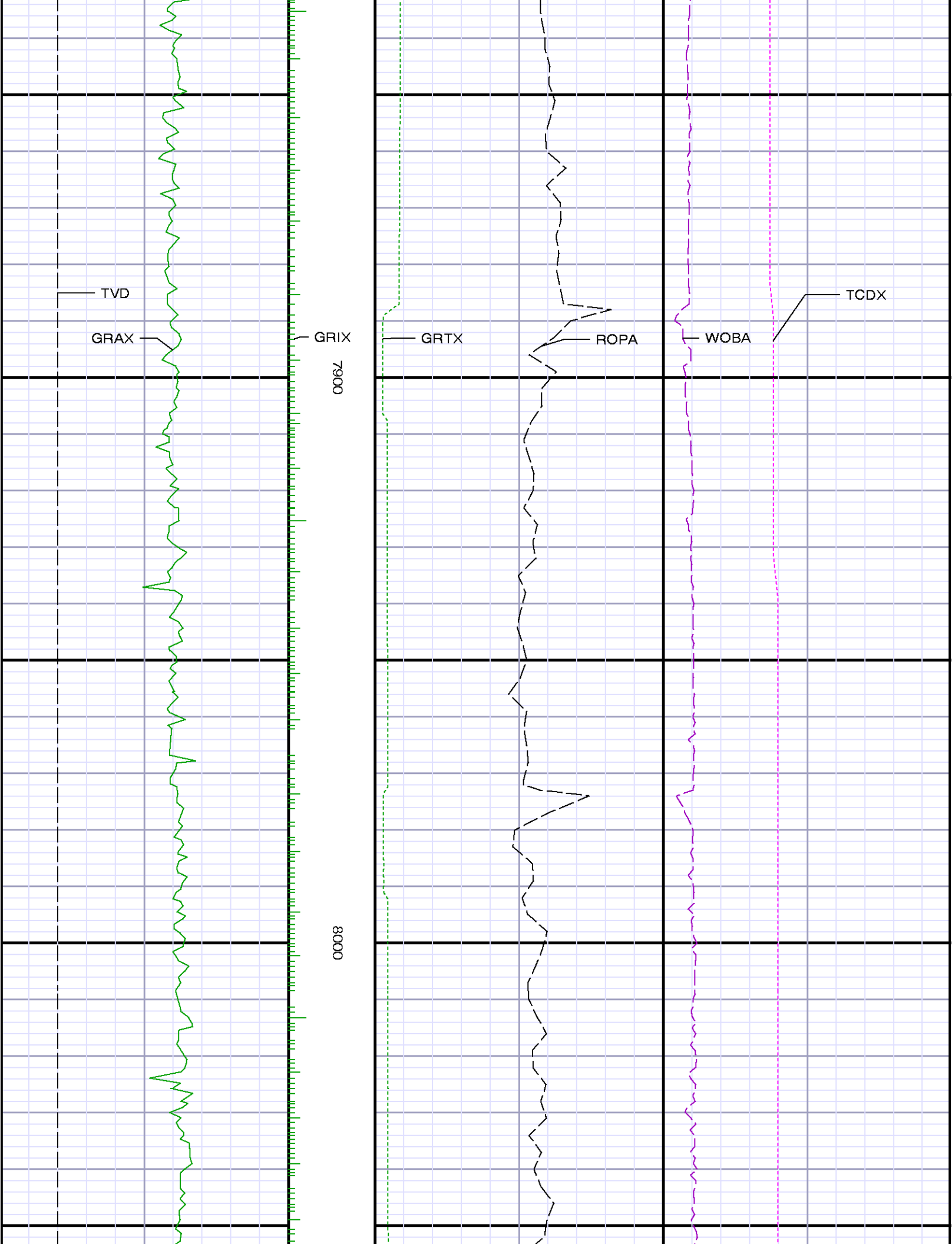
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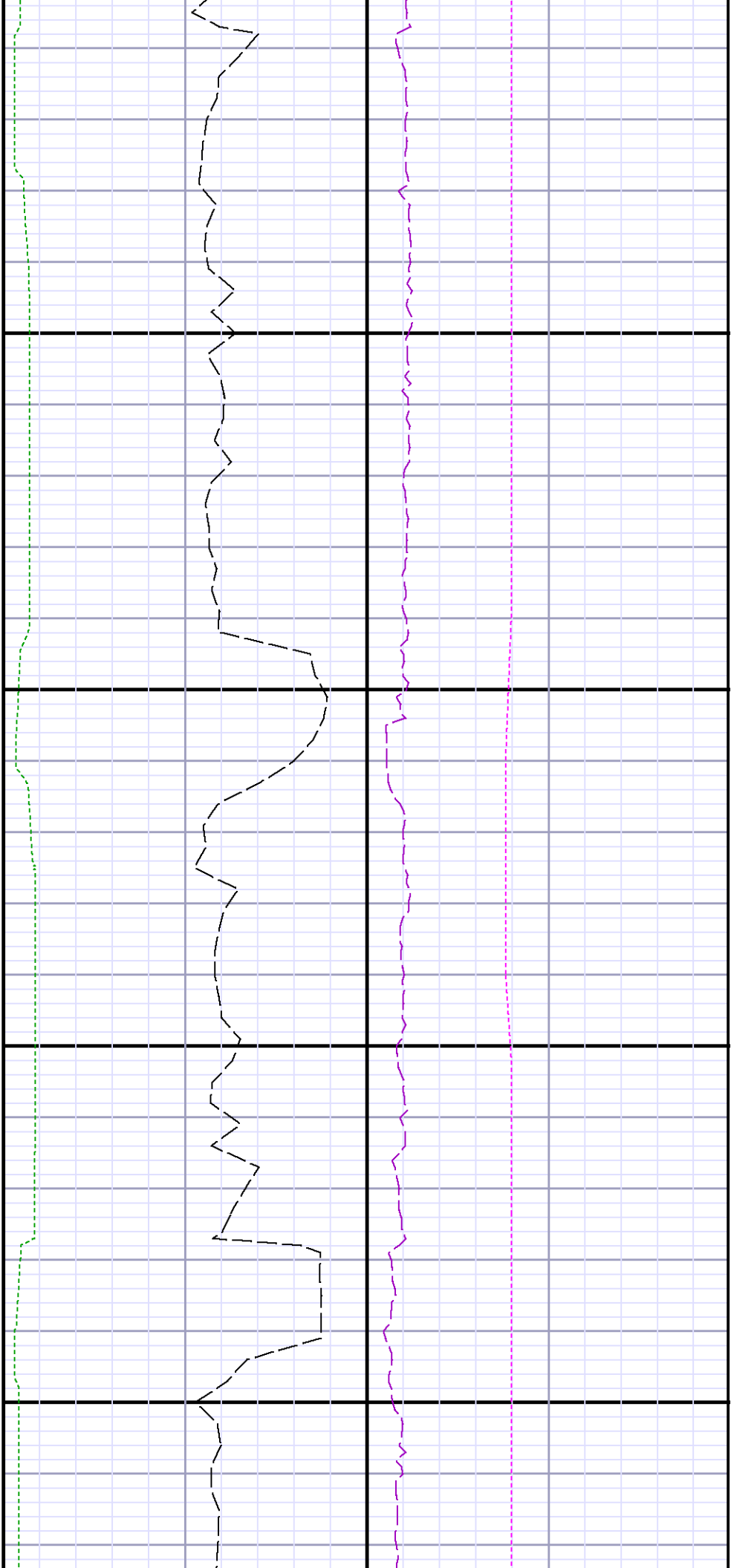
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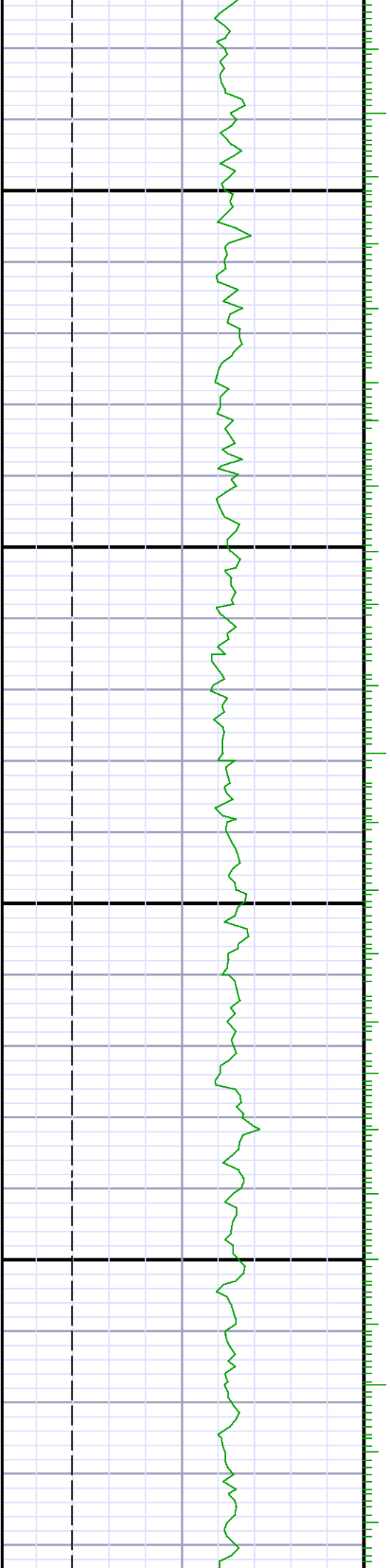
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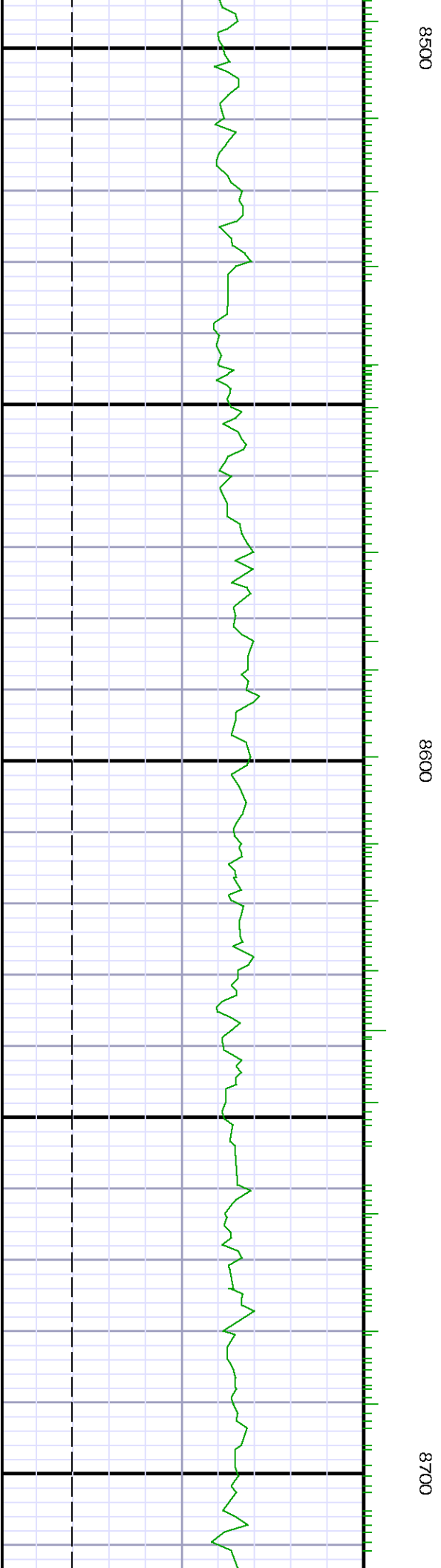


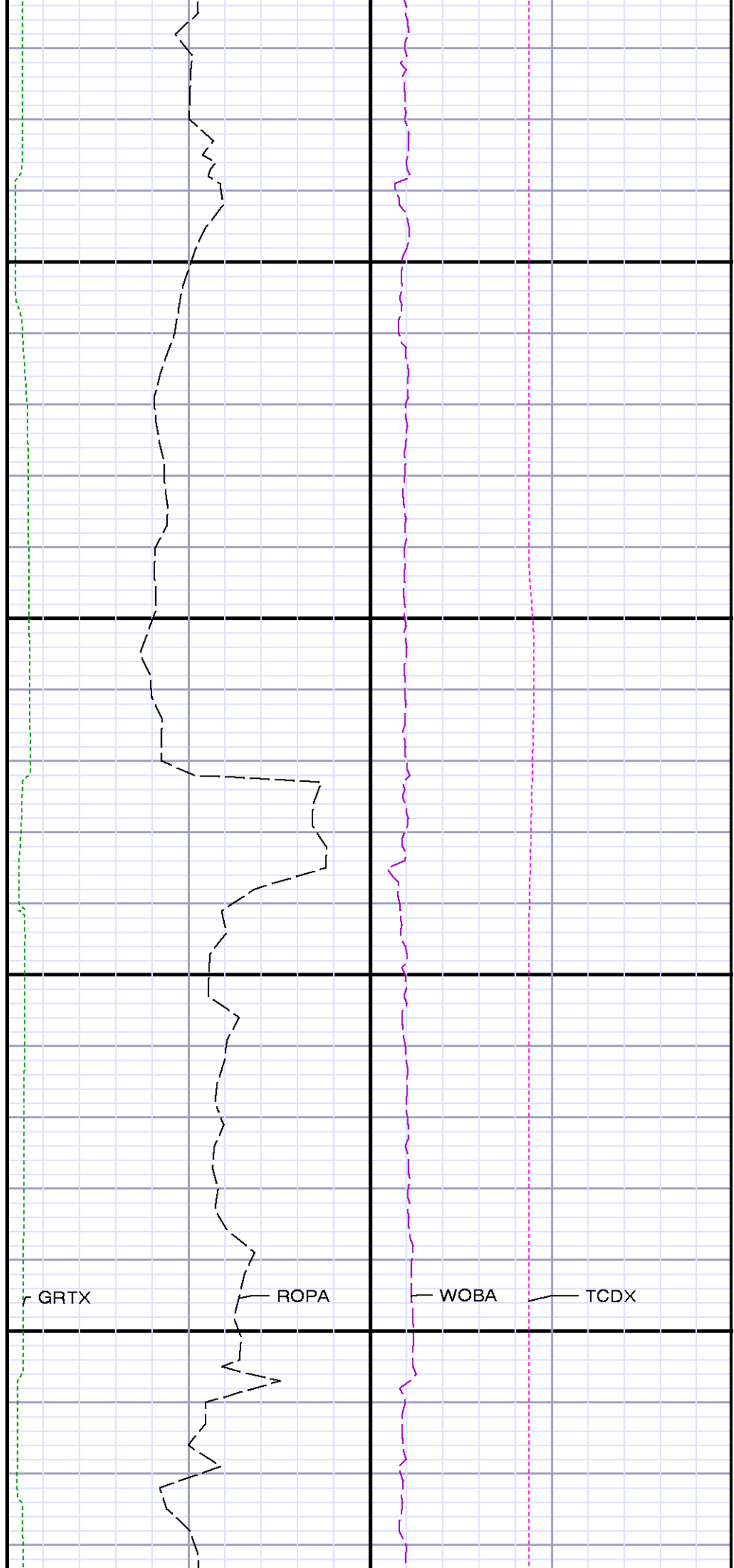
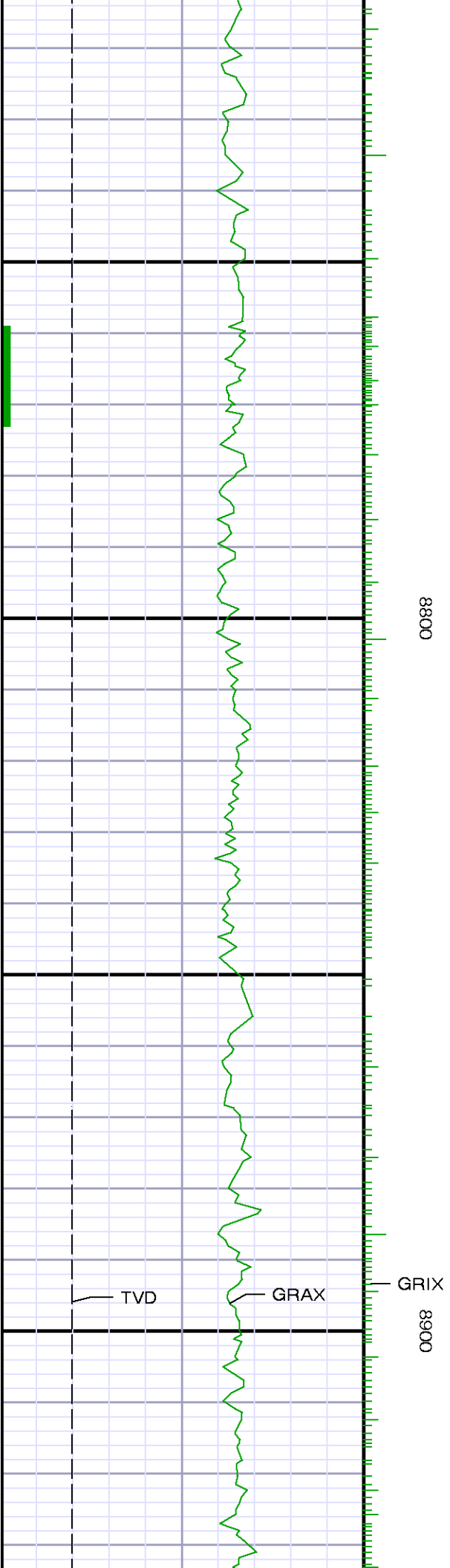


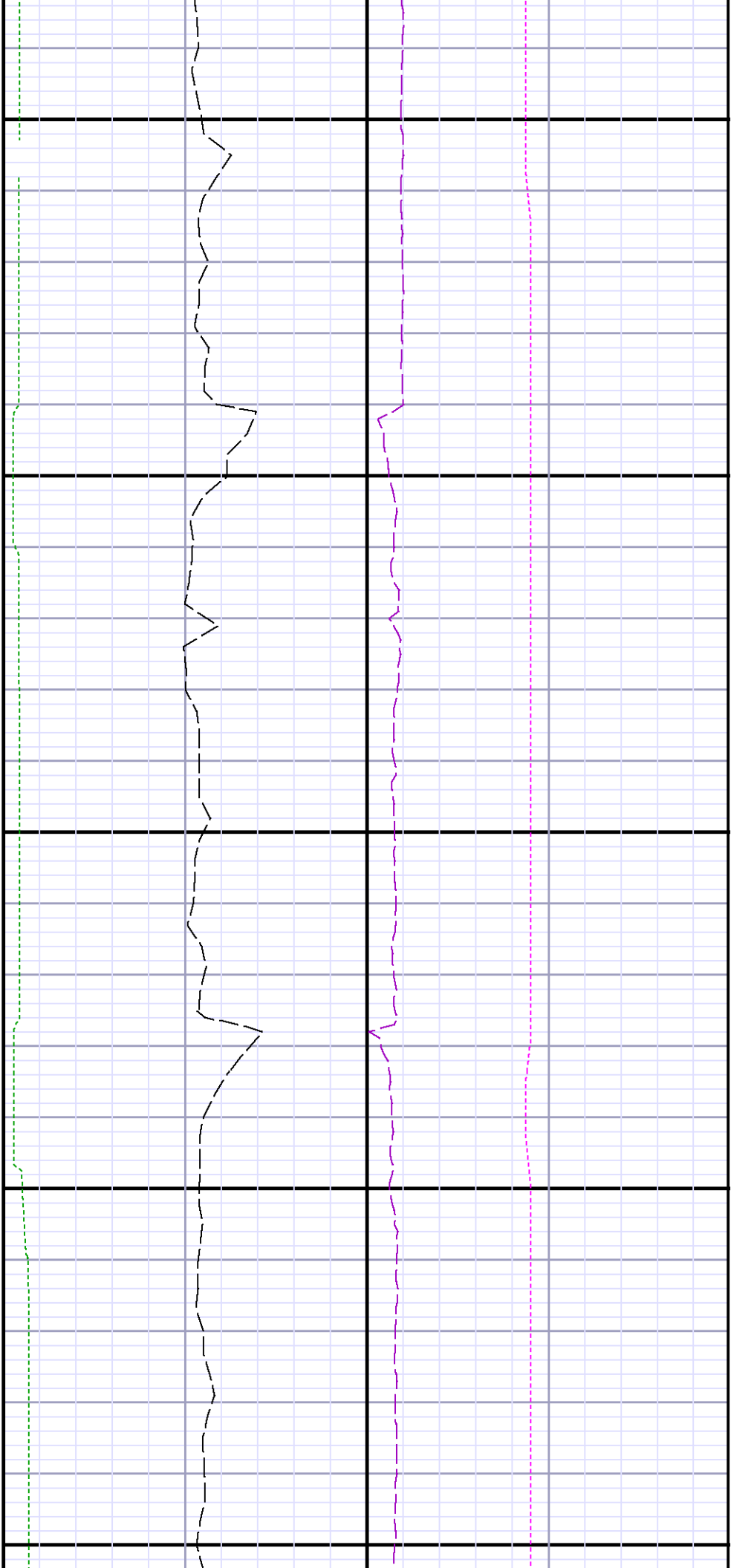
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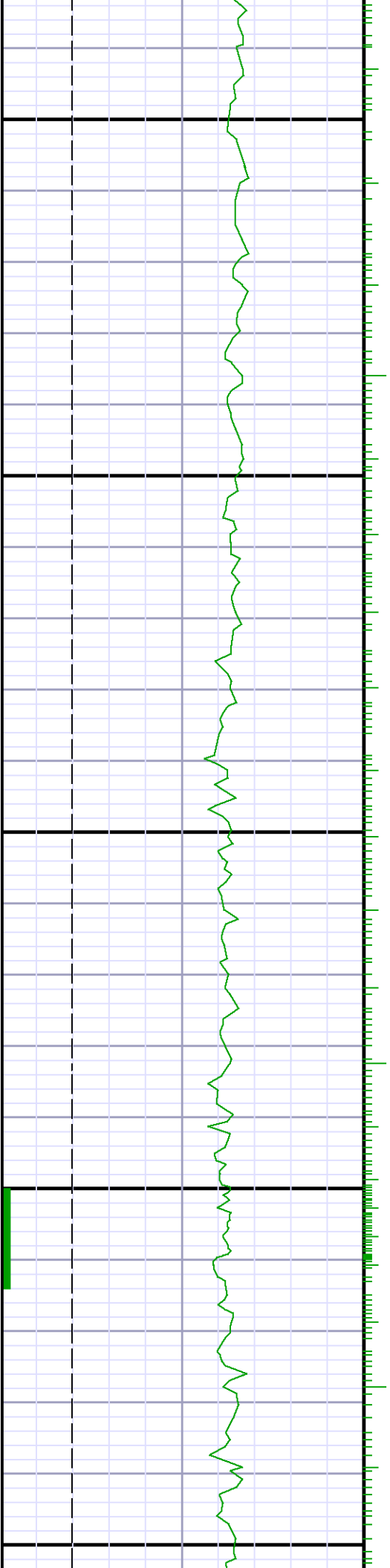


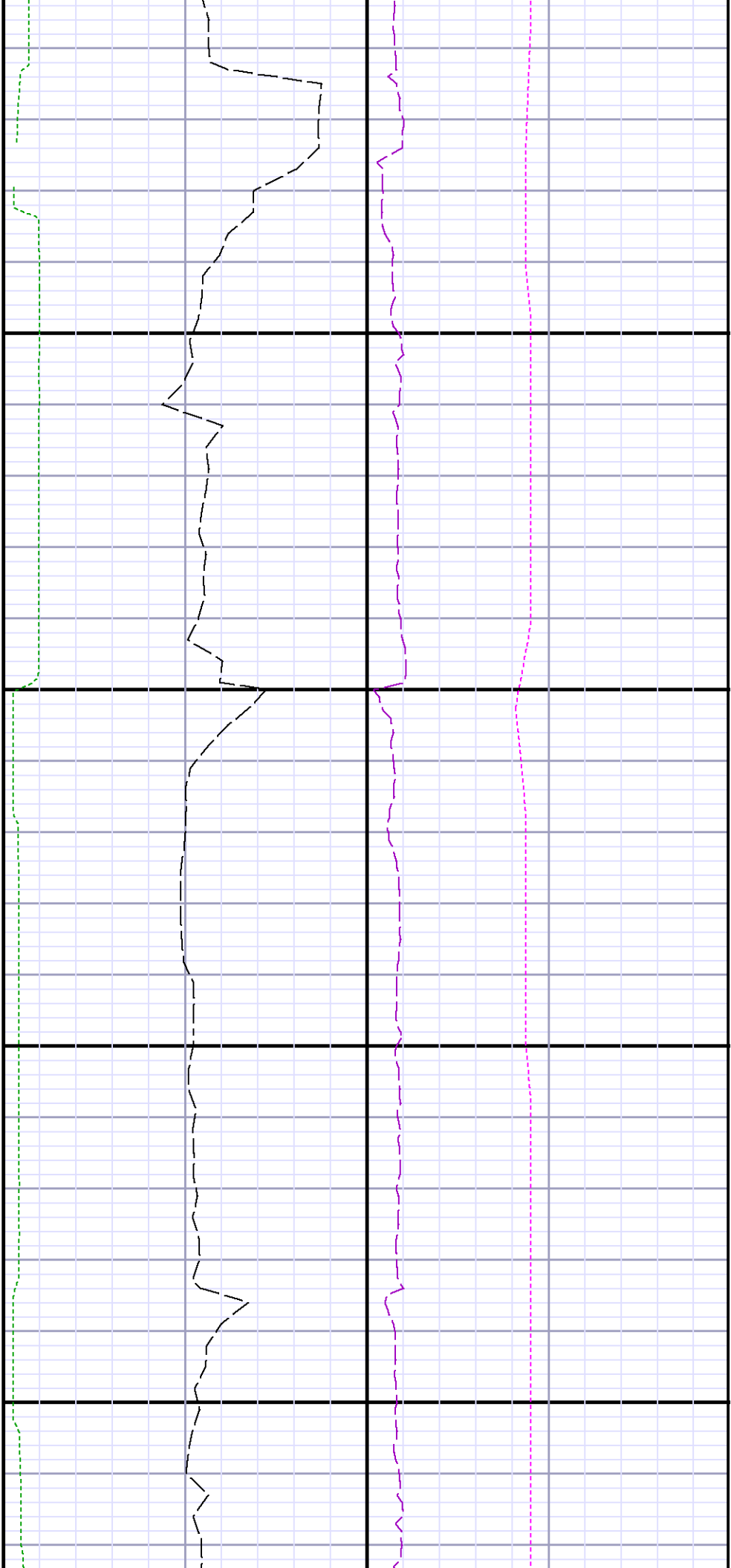




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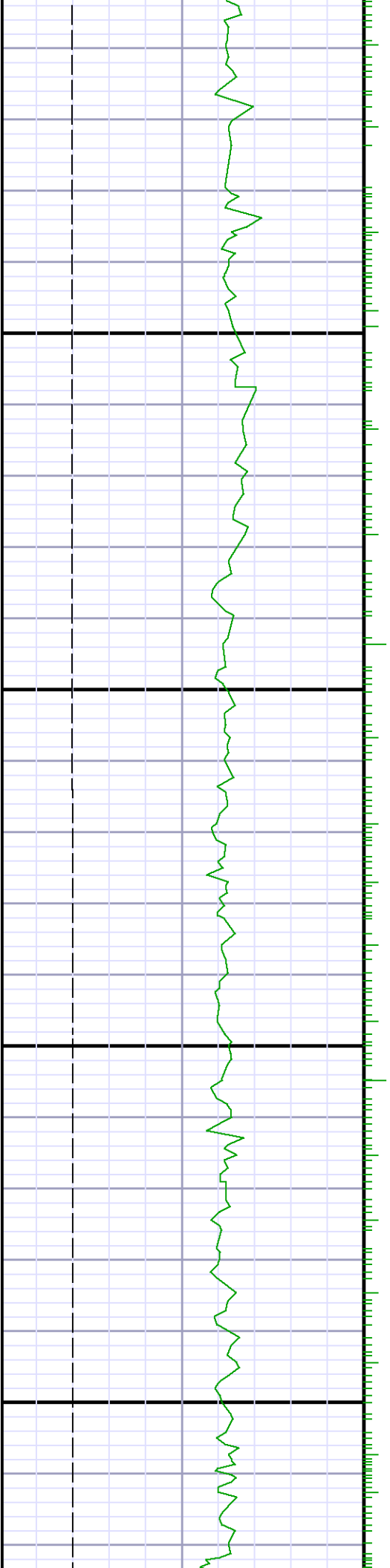
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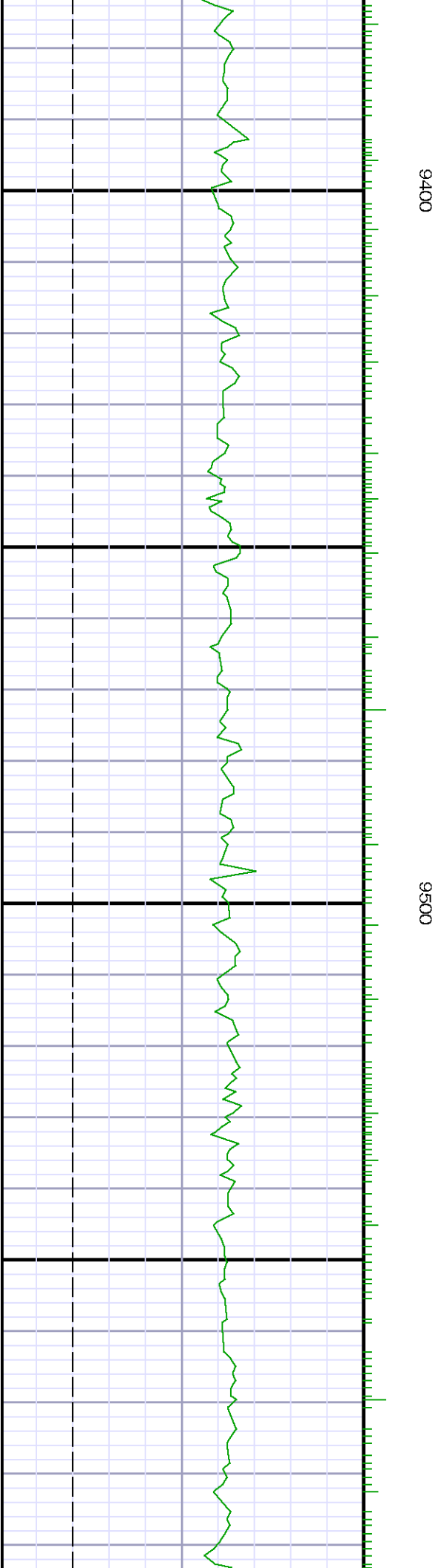




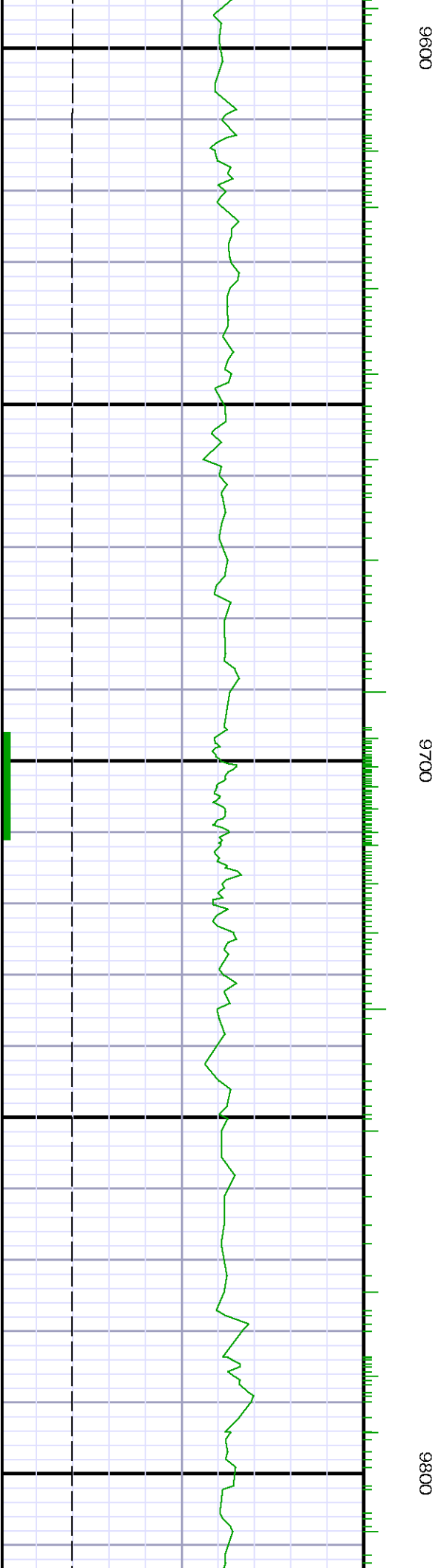
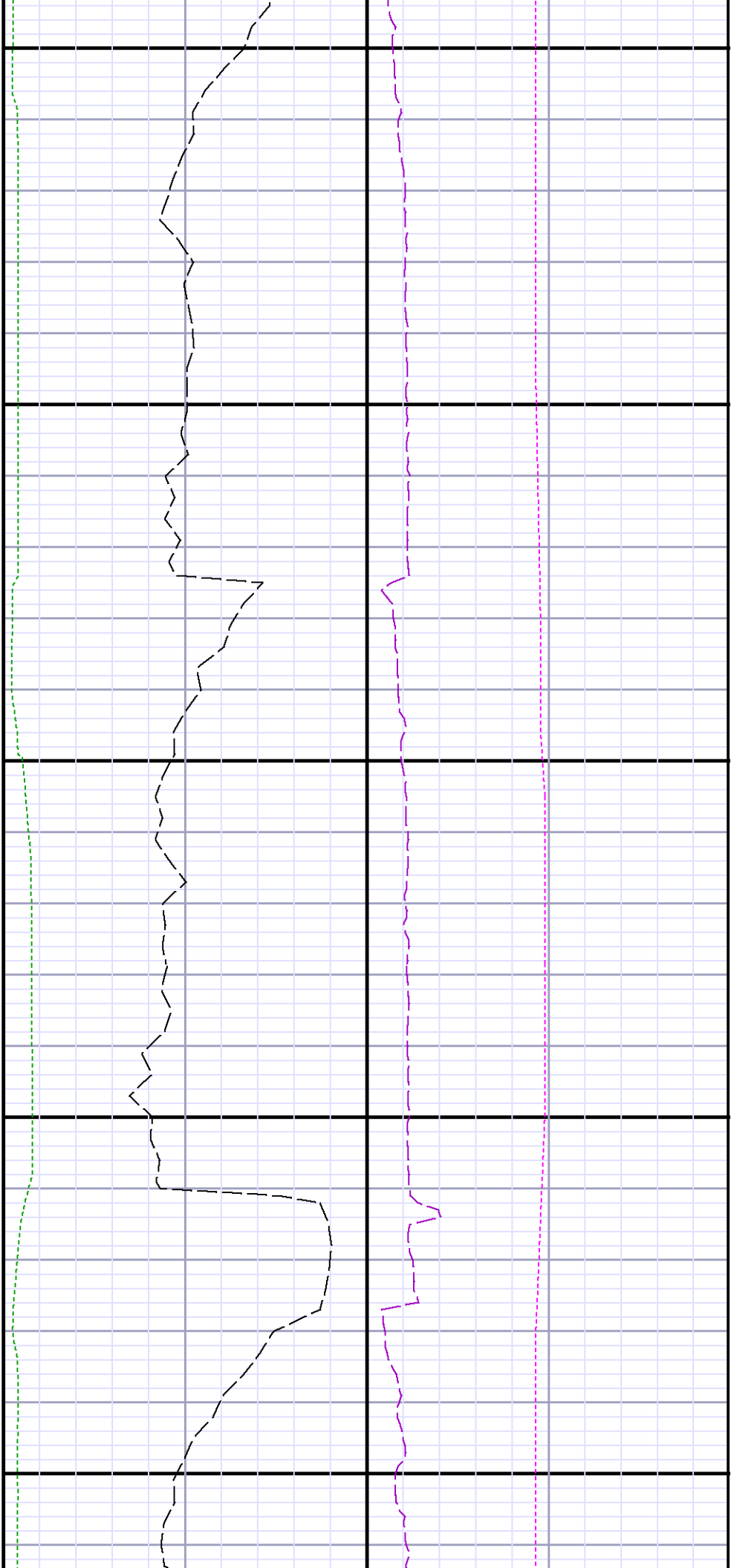
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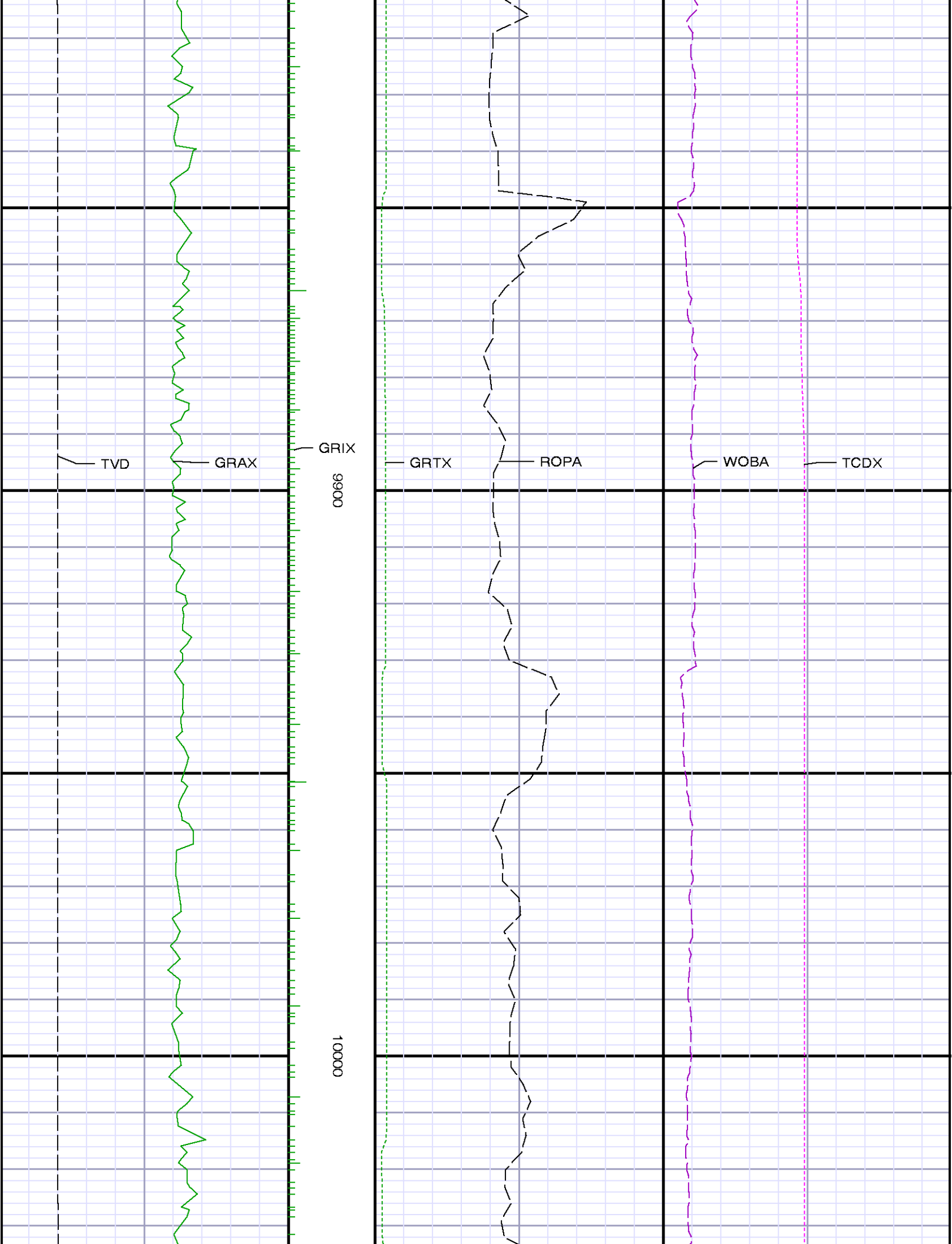
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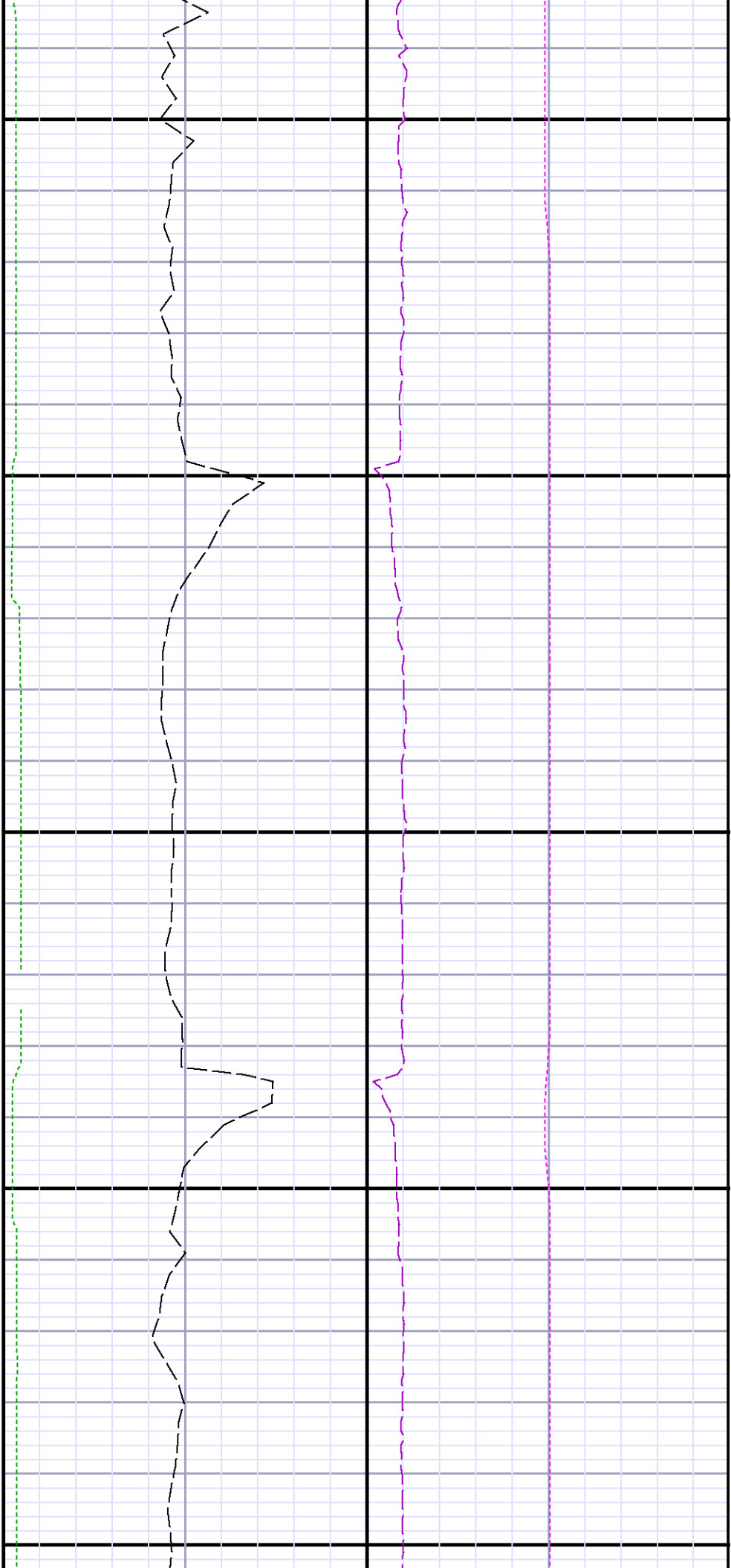






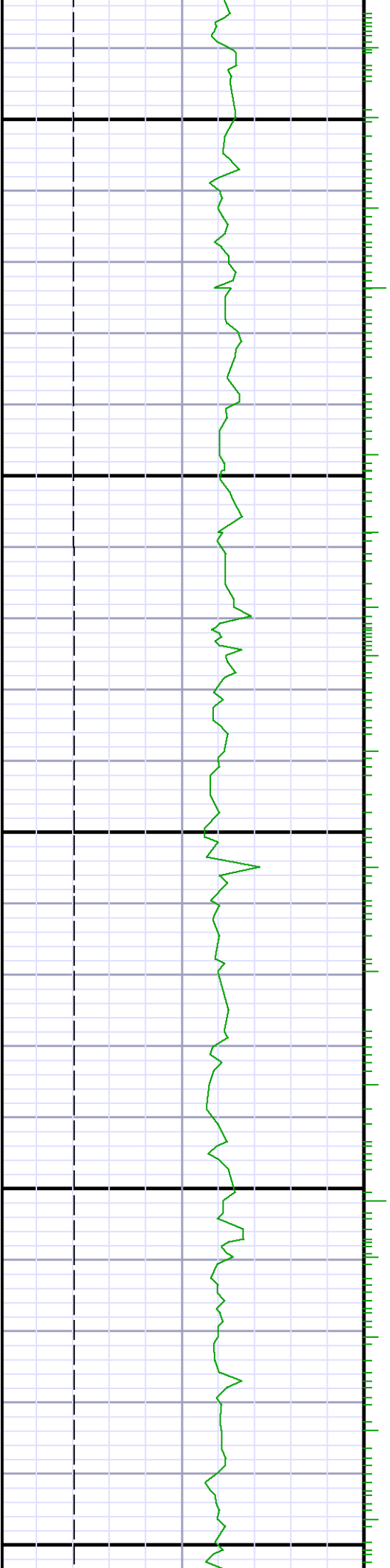


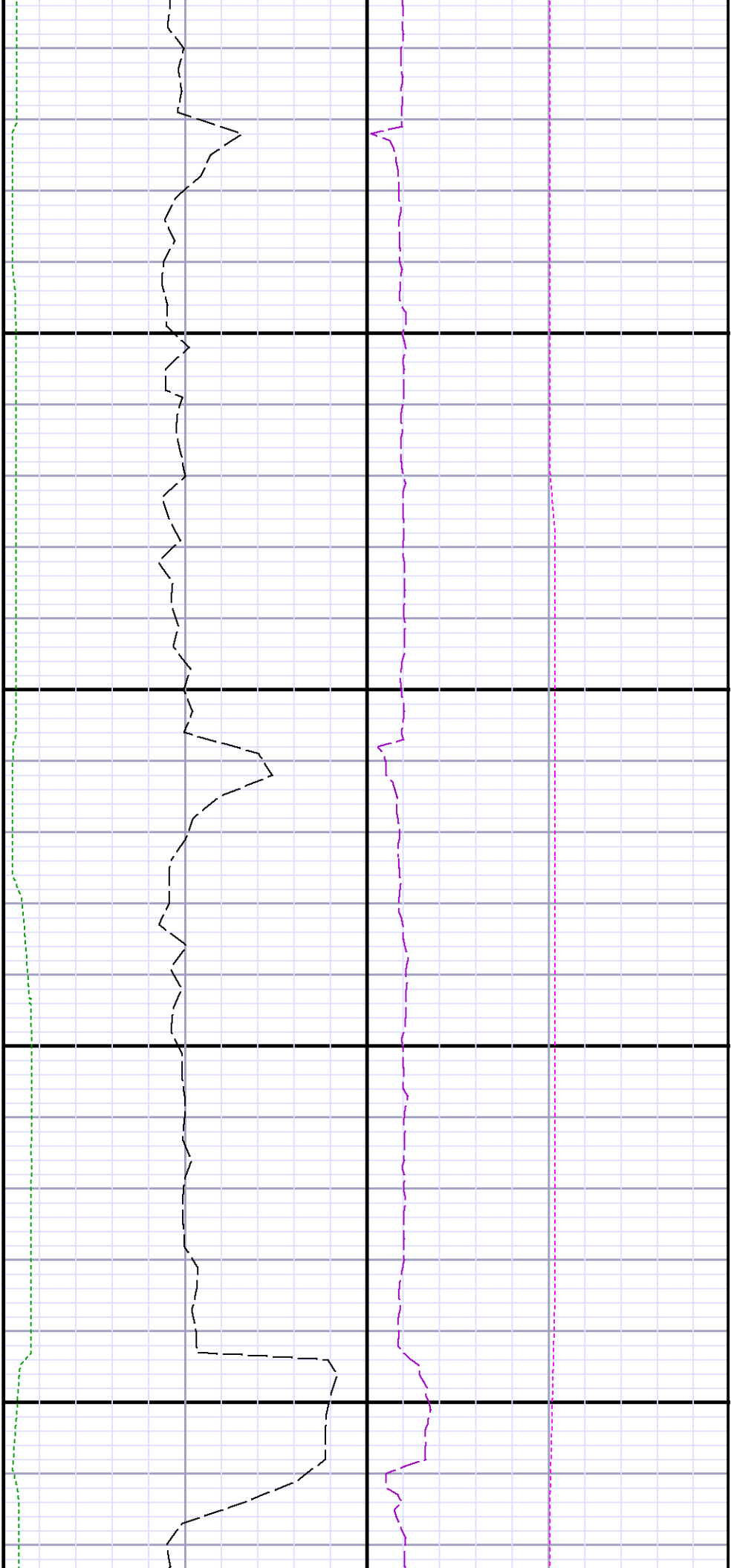




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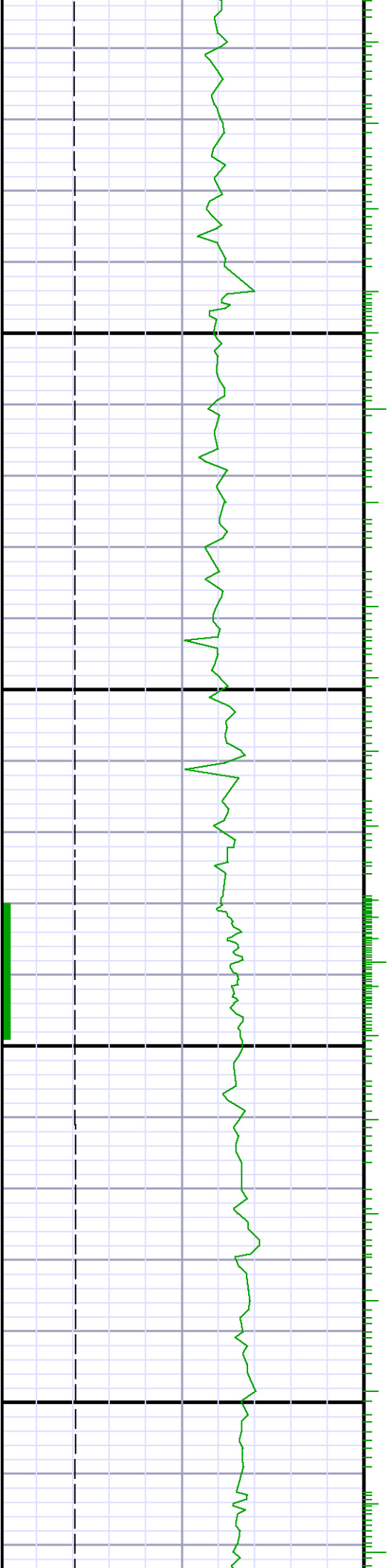
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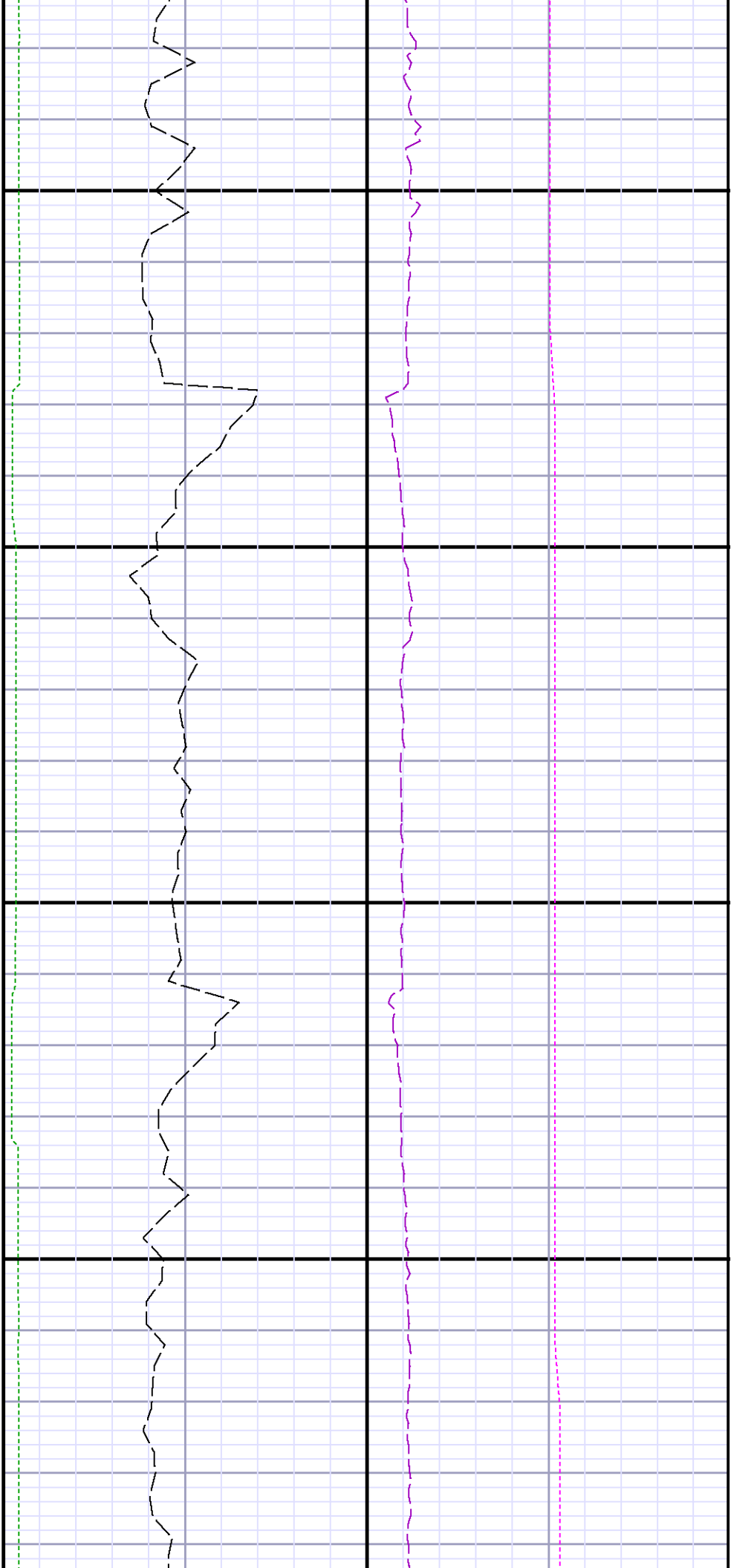




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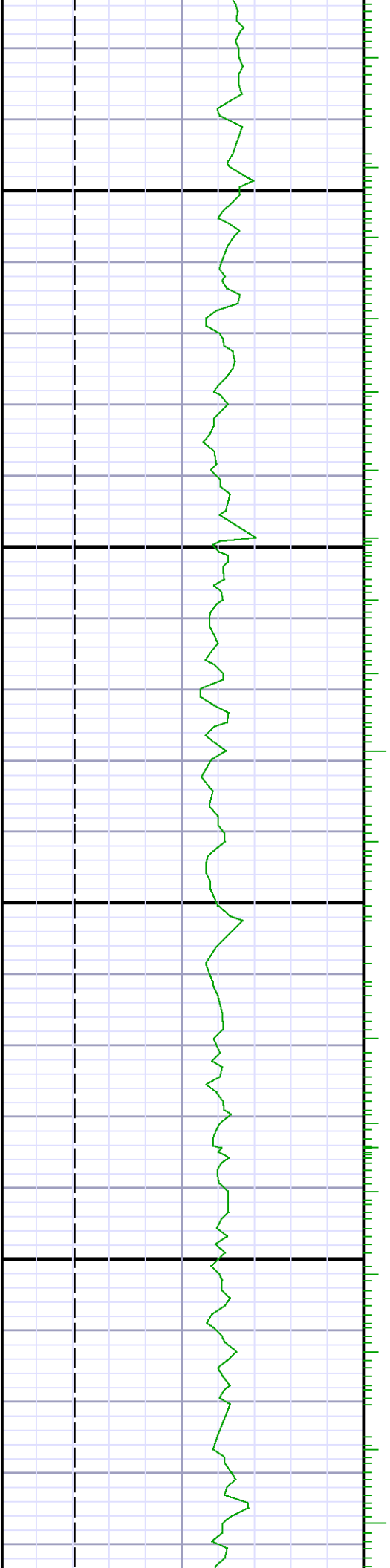
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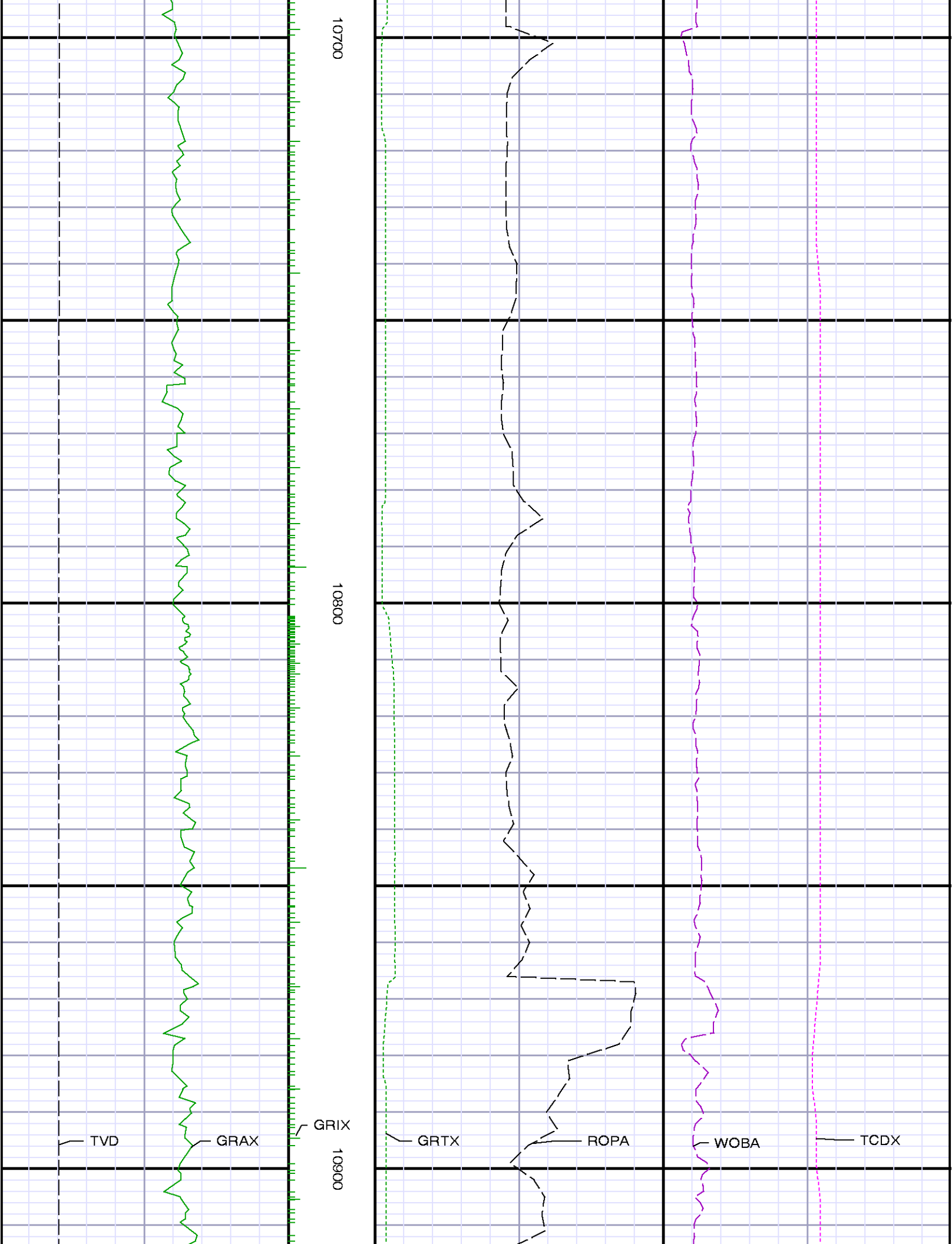


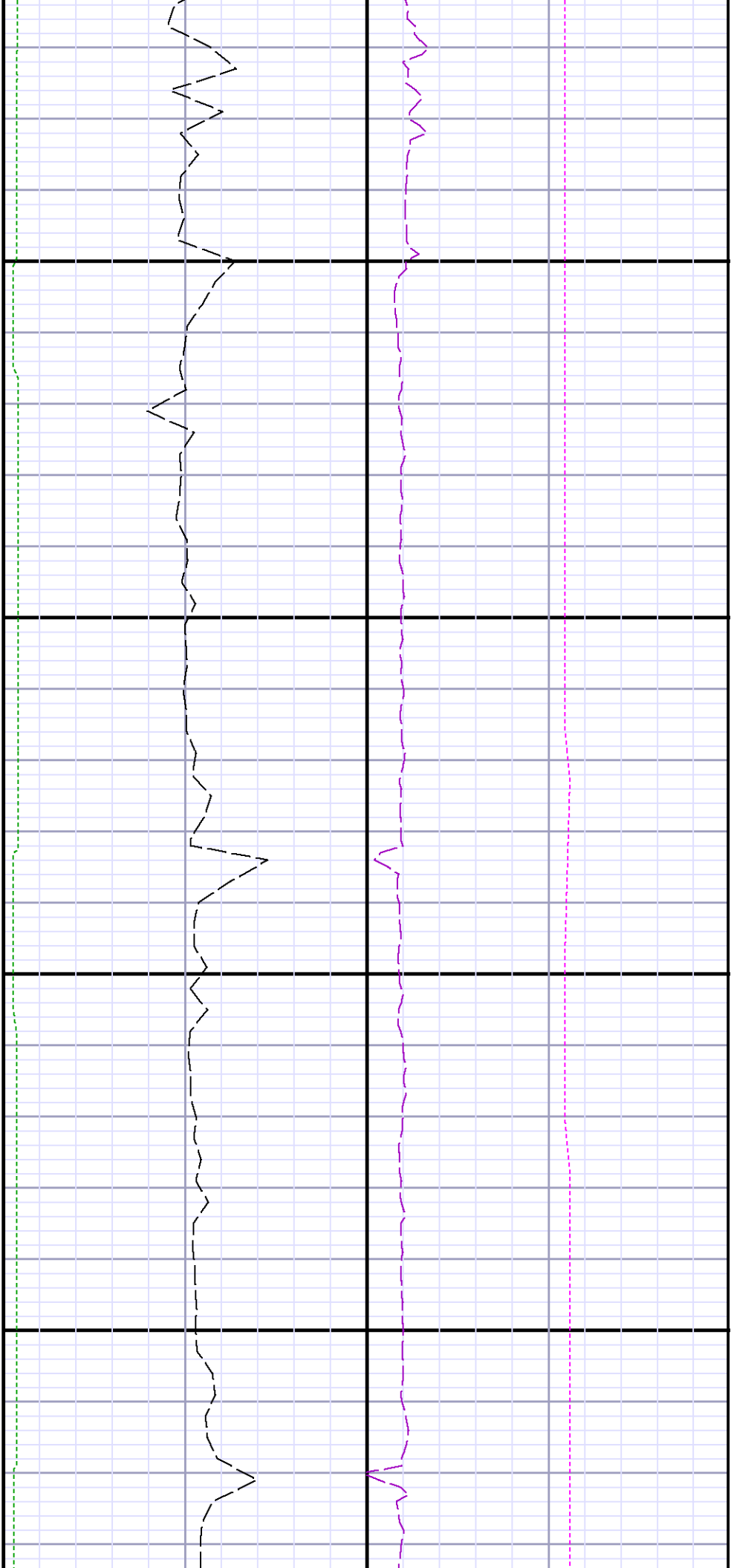


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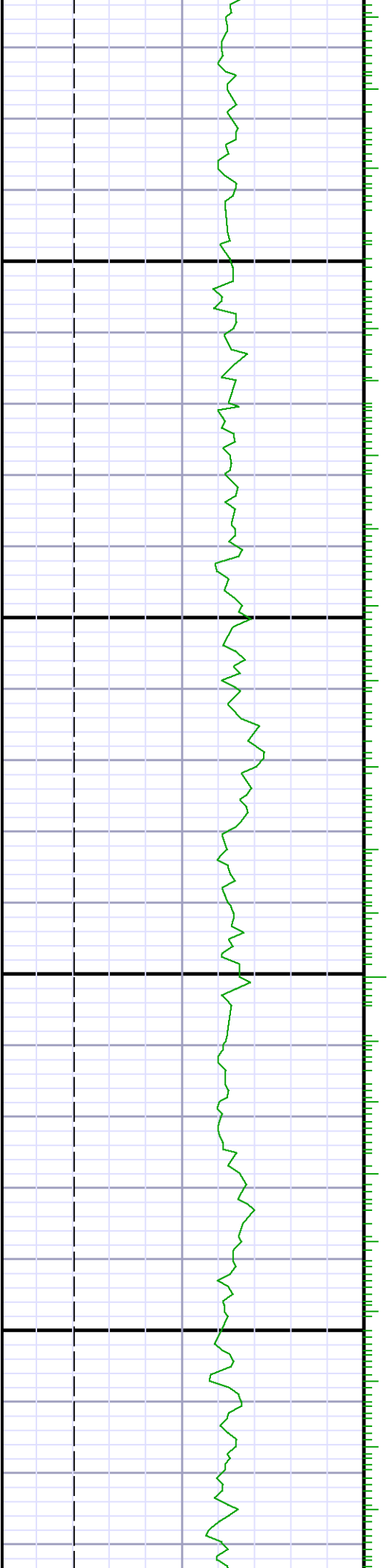


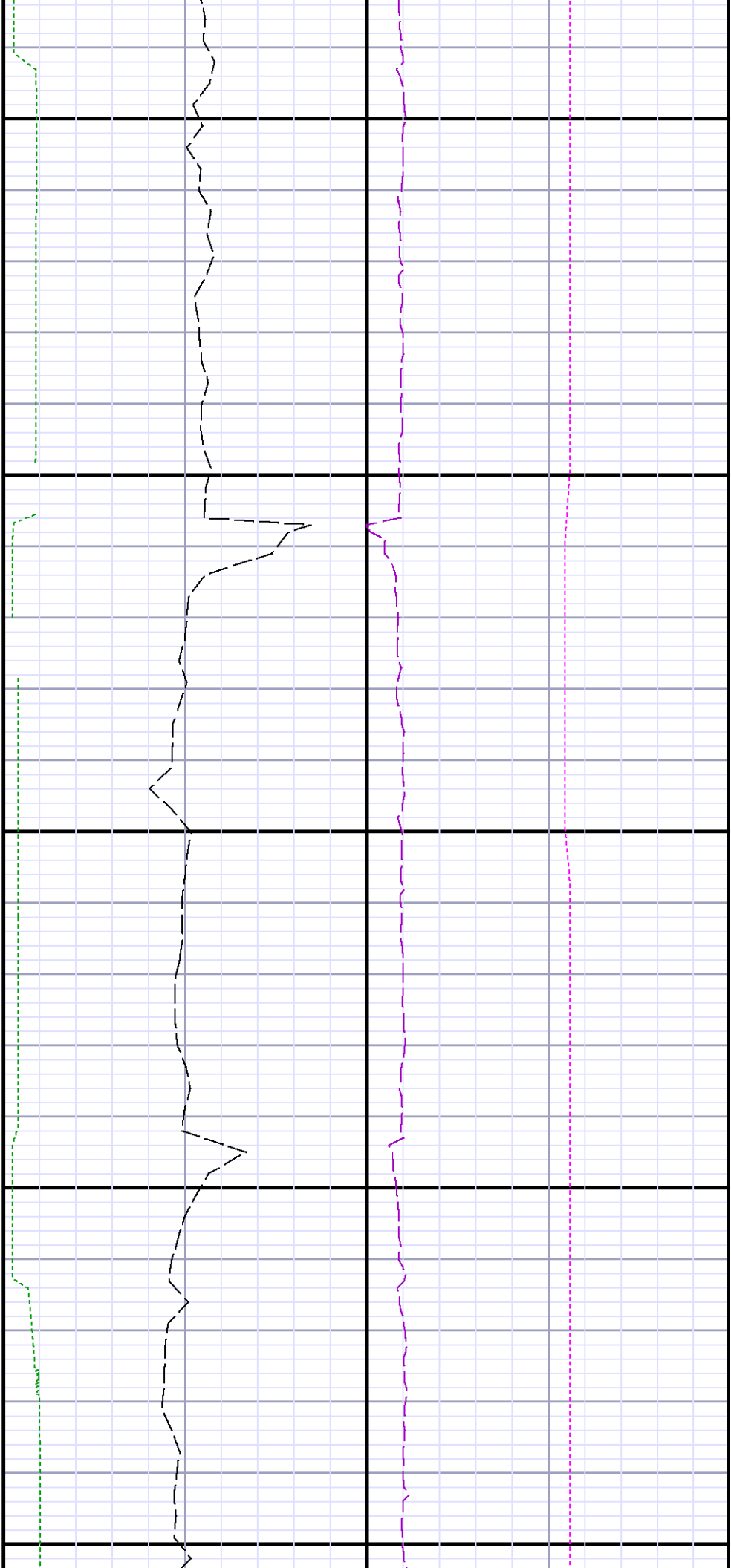




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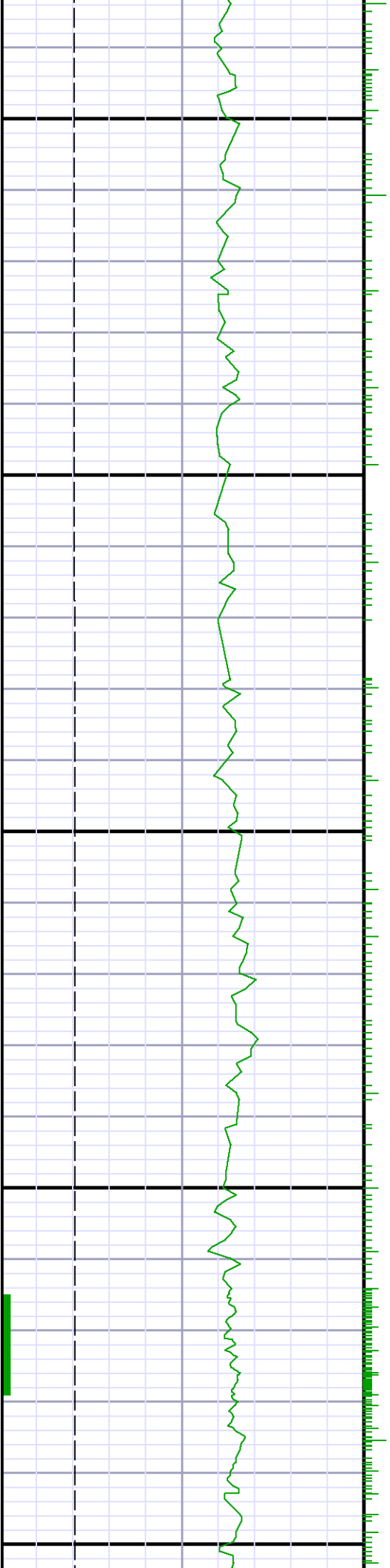
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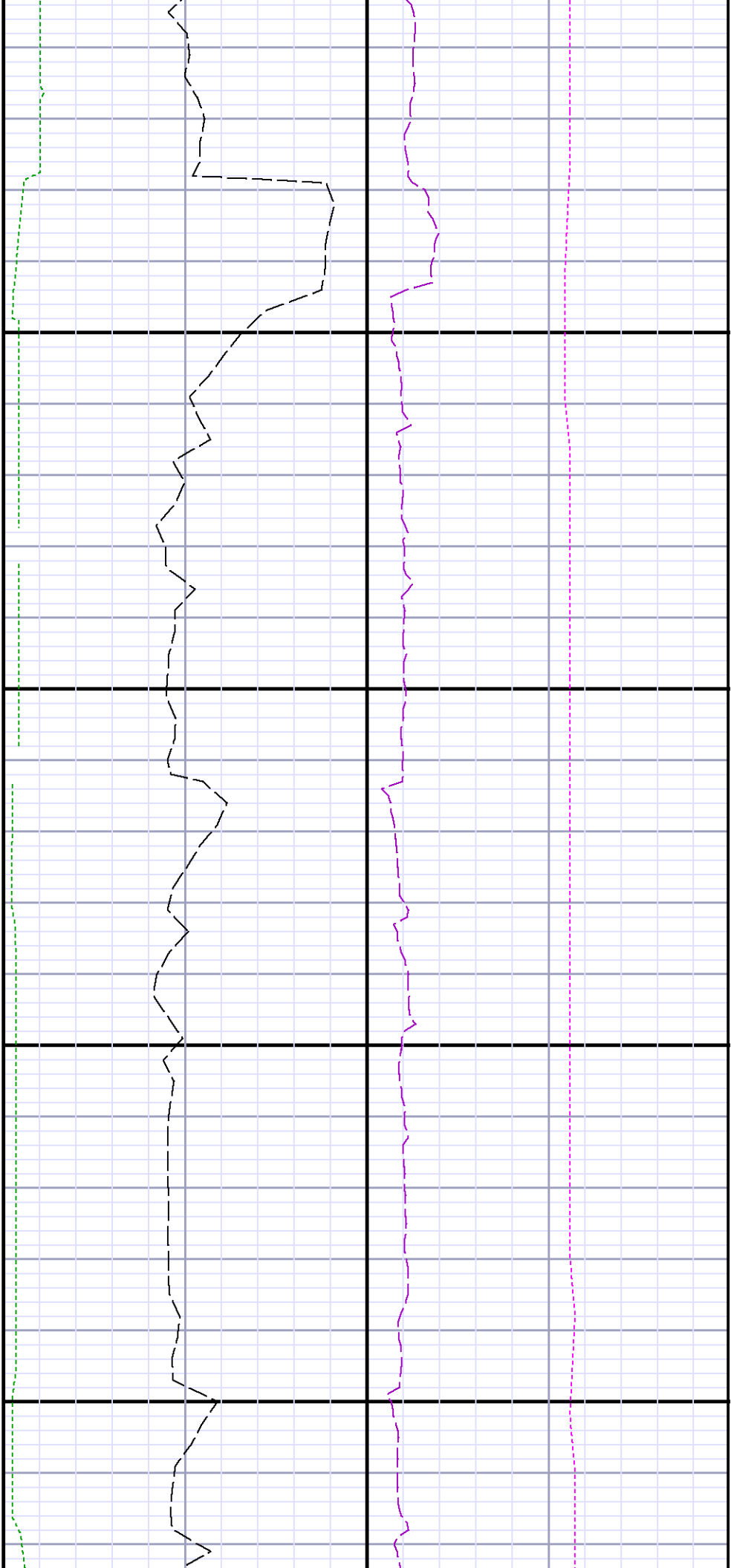


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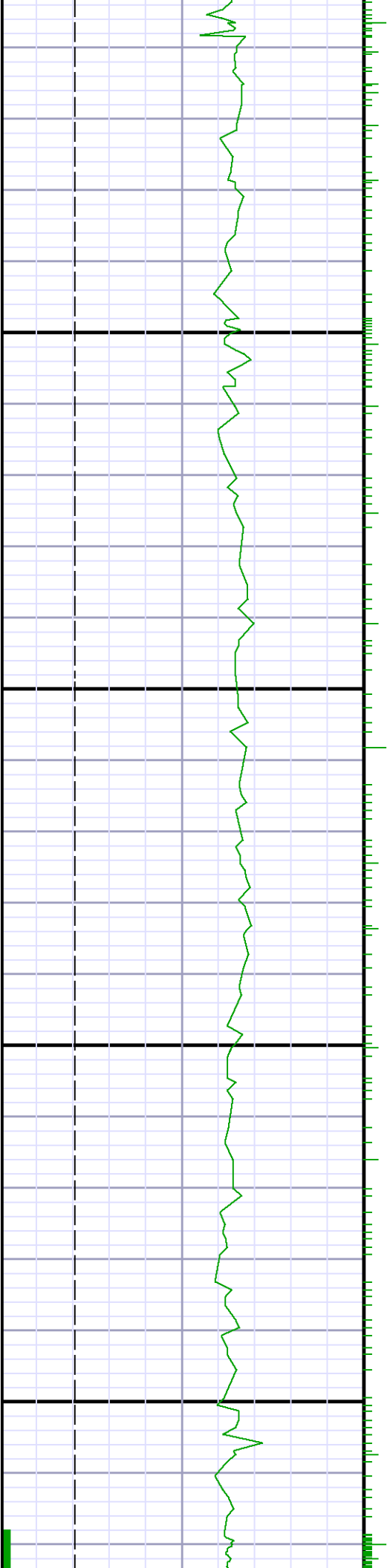






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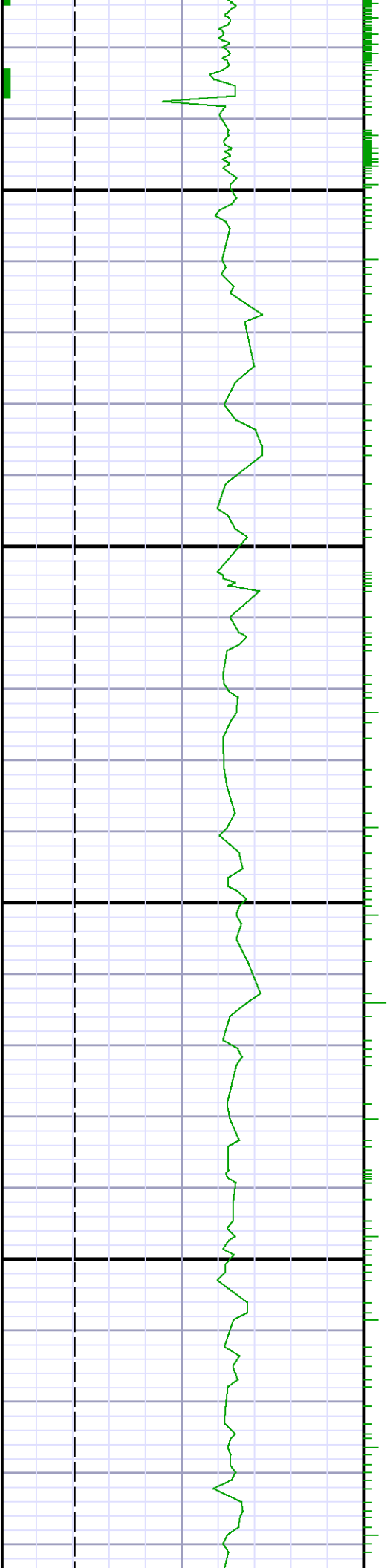
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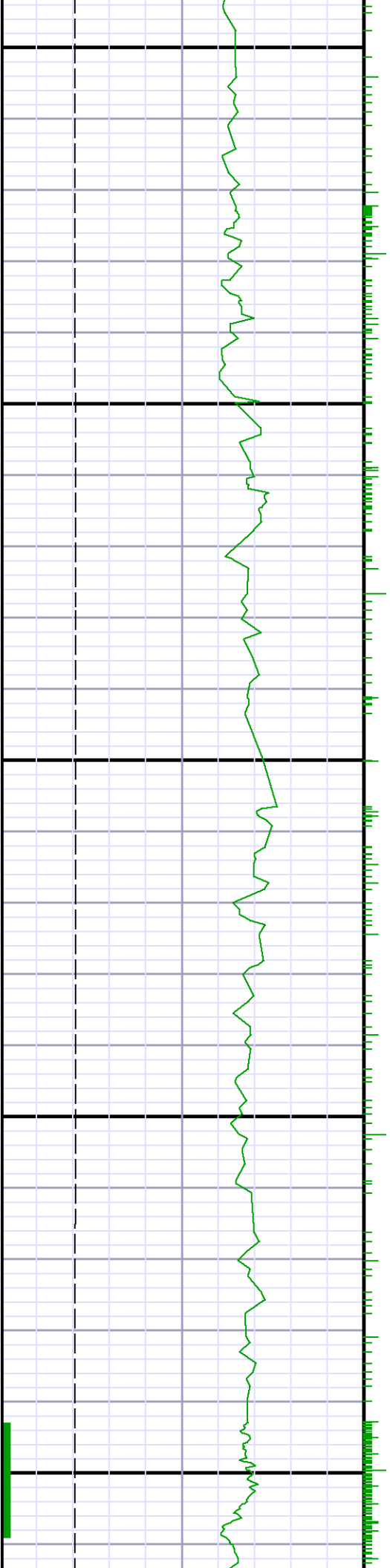


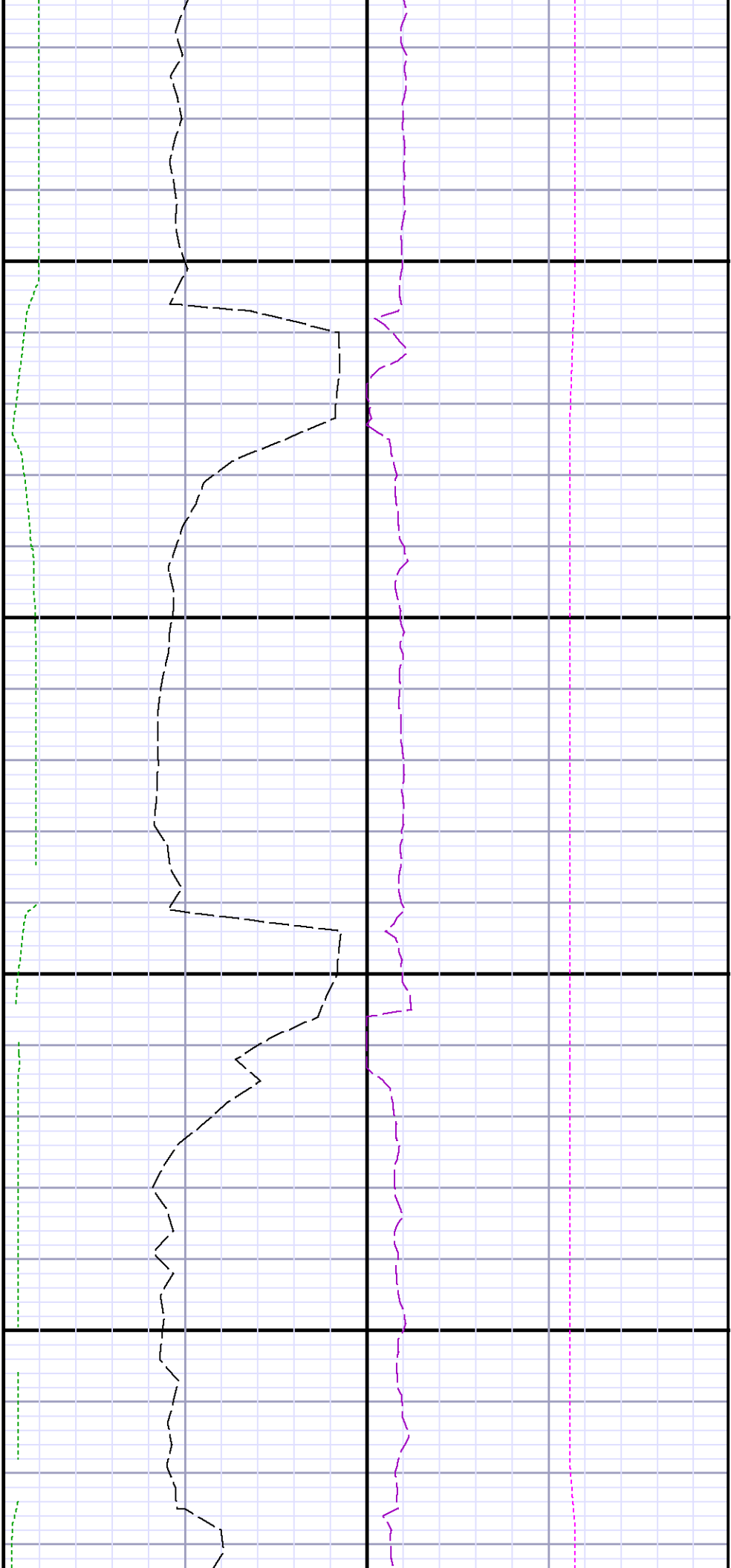


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