



Realtime Logs

Natural Formation Evaluation
Gamma Ray

Scale: Company: Kerr McGee Oil and Gas Onshore LP

1:240

Well: Douthit 8N-27HZ

Measured Depth

Field: Weld County

County: Weld State: Colorado

Status:

Final Print

Surface Location:

Latitude: 40 ° 12 0.882" N
Longitude: 104 ° 57' 42.192" W

Other Services:

API Number: 05123394990000

Section: 26 TWN: 3S Range: 68W

Directional

Permanent Datum (P.D.): Ground Level Elevation: 4959.00 ft.

Elevations: 17.00 ft.
N/A

Log Measured From: Kelly Bushing 4959.00 ft. Above P.D.

Depth Reference: Driller's Depth

KB: 17.00 ft.
DF: N/A
GL: 4942.00 ft.

Interval Logged

Dates

Magnetic Field Reference

Top: 6552 ft. Date From: 10/Oct/14 Dip Angle: 66.87 ° Azi Reference North: True

Bottom: 12859 ft. Date To: 18/Oct/14 Total Mag to Reference

Spud Date: 10/Oct/14 Field Strength: 52630.0 nT North Correction: 8.67 °

Borehole Record

Casing Record

Hole Size	From	To	Size	Weight	From	To
13.500 in.	Surface	1241 ft.	9.000 in.	36.00 lb/ft	Surface	1241 ft.
8.750 in.	1241 ft.	7668 ft.	7.000 in.	36.00 lb/ft	Surface	7639 ft.
6.125 in.	7668 ft.	12919 ft.				

Mud Record

Deviation Record

Type	From	To	Hole Size	Interval	Inc / Az (Start)	Inc / Az (End)
Water Base	Surface	12923 ft.	13.500 in.	Surface	0.0 ° / 0.0 °	0.4 / 224.6 °
			8.750 in.	Vert / Curve	0.4 / 224.6 °	82.3 ° / 266.5 °
			6.125 in.	Lateral	83.4 ° / 266.2 °	90.4 ° / 268.8 °
					/	/
					/	/
					/	/

Acquisition System Software Version

Other

Advantage	2.20U4	Rig: / Contractor:	Xtreme 8	/ Anadarko
PATS	6.4.1.34	Job No:	6532407	
		District: / Unit:	RMD	/ D&E

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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		
							(ft.)	(ft.)	(ft.)	(ft.)					
1	1	2	8.750	PDC	N/A	Mud Motor	6552	7613	6620	7668	11/Oct/2014 22:50	12/Oct/2014 10:05	39.7		
2	2	3	8.750	PDC	N/A	Mud Motor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3	3	4	6.125	PDC	N/A	Mud Motor	7613	12859	7668	12919	16/Oct/2014 01:00	18/Oct/2014 17:45	42		

Crew

Name	Arrive	Depart	Name	Arrive	Depart	Name	Arrive	Depart
	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite
Kevin Sheridan	10/15/2014	10/18/2014	Shirley Arimah	10/10/2014	10/18/2014	David Belek	10/10/2014	10/15/2014

Mud Properties Record

Date / Time		LWD Run No.	Measured Depth (ft.)	Mud Type	Density (sg)	Viscosity (cp)	pH	Fluid Loss (cc)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
10/12/2014	15:45	1	6575	Water- Based	10.4	46	9.7	N.A	2/89	Active Pits	2900	N/A
10/15/2014	20:10	2	7600	Water- Based	9.4	40	9.6	N/A	2/92	Active Pits	2400	N/A
10/17/2014	21:00	3	12800	Water- Based	9.3	43	9.6	N/A	3/92	Active Pits	2100	N/A

Mnemonics

Curve	Description	Units
GRAX	Gamma Ray Apparent	API 0.5 ft. avg.
GRIX	Gamma Ray Density	Points
ROP_AVG	Rate of Penetration	ft/hr 3.0 ft. avg.
TCDX	Downhole Temperature	deg F
TVD	True Vertical Depth	ft.
WOBA_AVG	Surface Weight On Bit	klbf 1.0 ft. avg.

Equipment and Service Data

LWD Run No.	Tool	Serial Number	Measurement	Bit Offset (m.)	Max O.D. (in.)	Min I.D. (in.)
1	SRIG	12285328	Gamma	56.72	6.750	3.250
1	DIR	11685175	Directional	60.10	6.750	3.250
2	SRIG	12285328	Gamma	56.80	6.750	3.250
2	DIR	11685175	Directional	60.18	6.750	3.250
3	SRIG	10098472	Gamma	58.21	4.750	2.750
3	DIR	12546374	Directional	61.59	4.750	2.750

Service and Tool Mnemonics

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

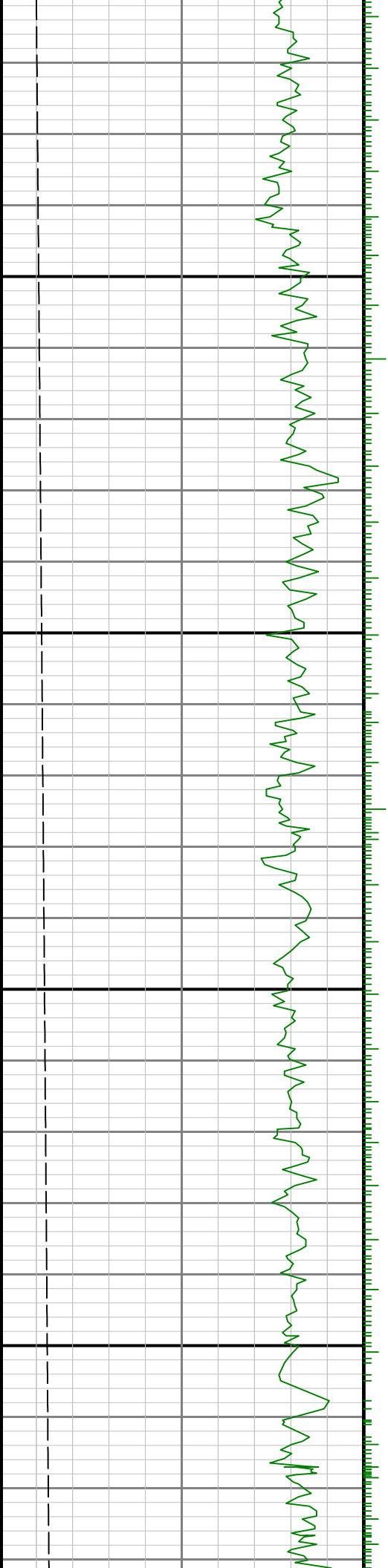
Comments

1) Baker Hughes INTEQ run 1 utilized a 6.5 inch NaviGamma (Gamma Ray and Directional) tool behind a 8 3/4inch bit and steerable assembly from surface to 7668 ft. MD (7167 ft. TVD).
2) Baker Hughes INTEQ run 2 utilized a 4.75 inch NaviGamma (Gamma Ray and Directional) tool behind a 6 1/8 inch bit and steerable assembly was used to ream welbore
3) Baker Hughes INTEQ run 3 utilized a 4.75 inch NaviGamma (Gamma Ray and Directional) tool behind a 6 1/8 inch bit and steerable assembly from 7668 to 12919 ft. MD (7167 to 7180 ft. TVD).

Remarks

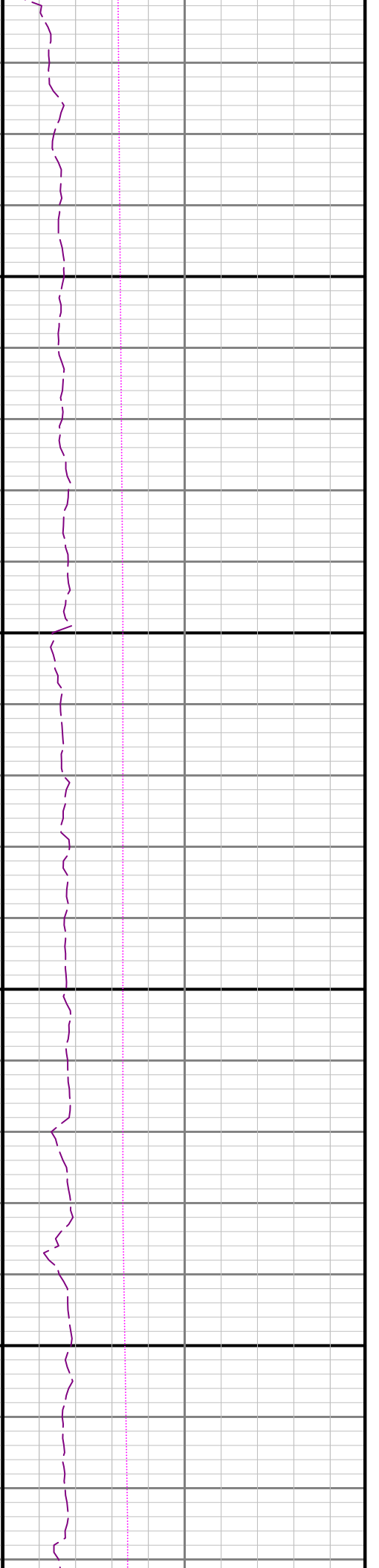
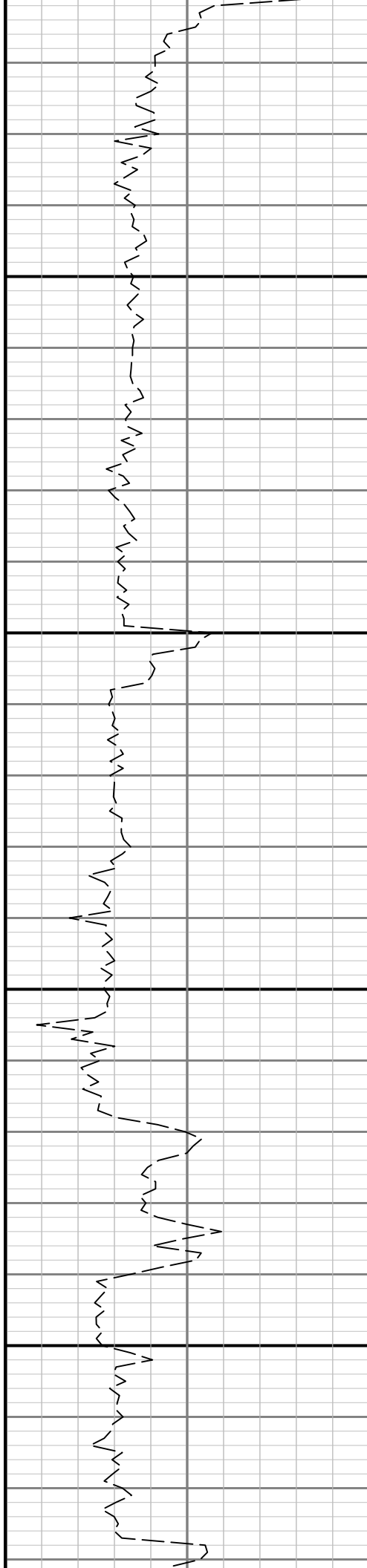
Number	Measured Depth	Hole Section	LWD Run No.	Remark
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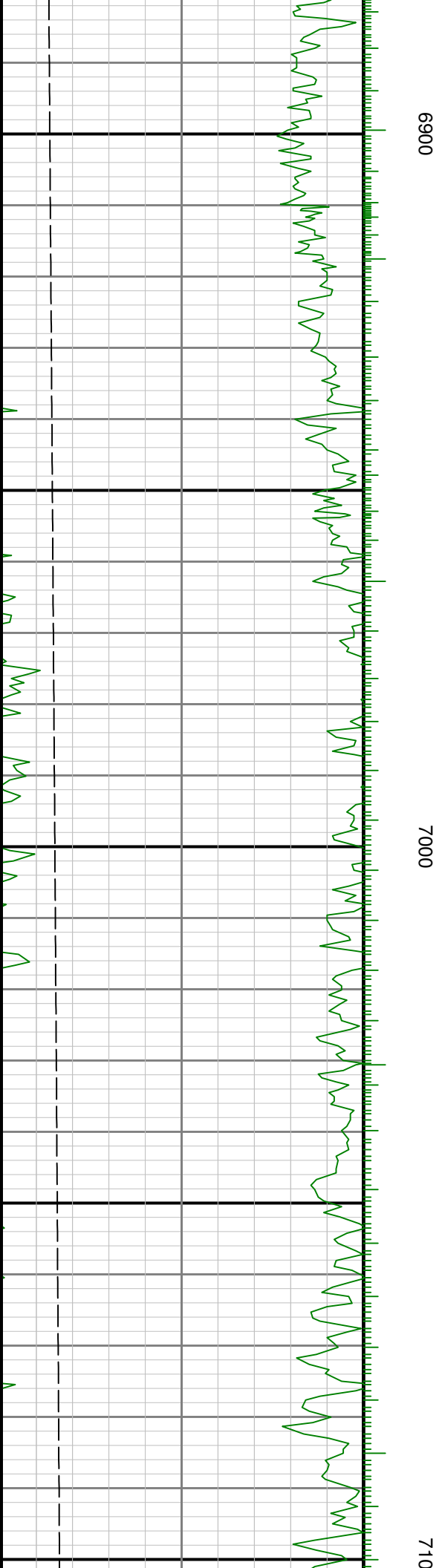
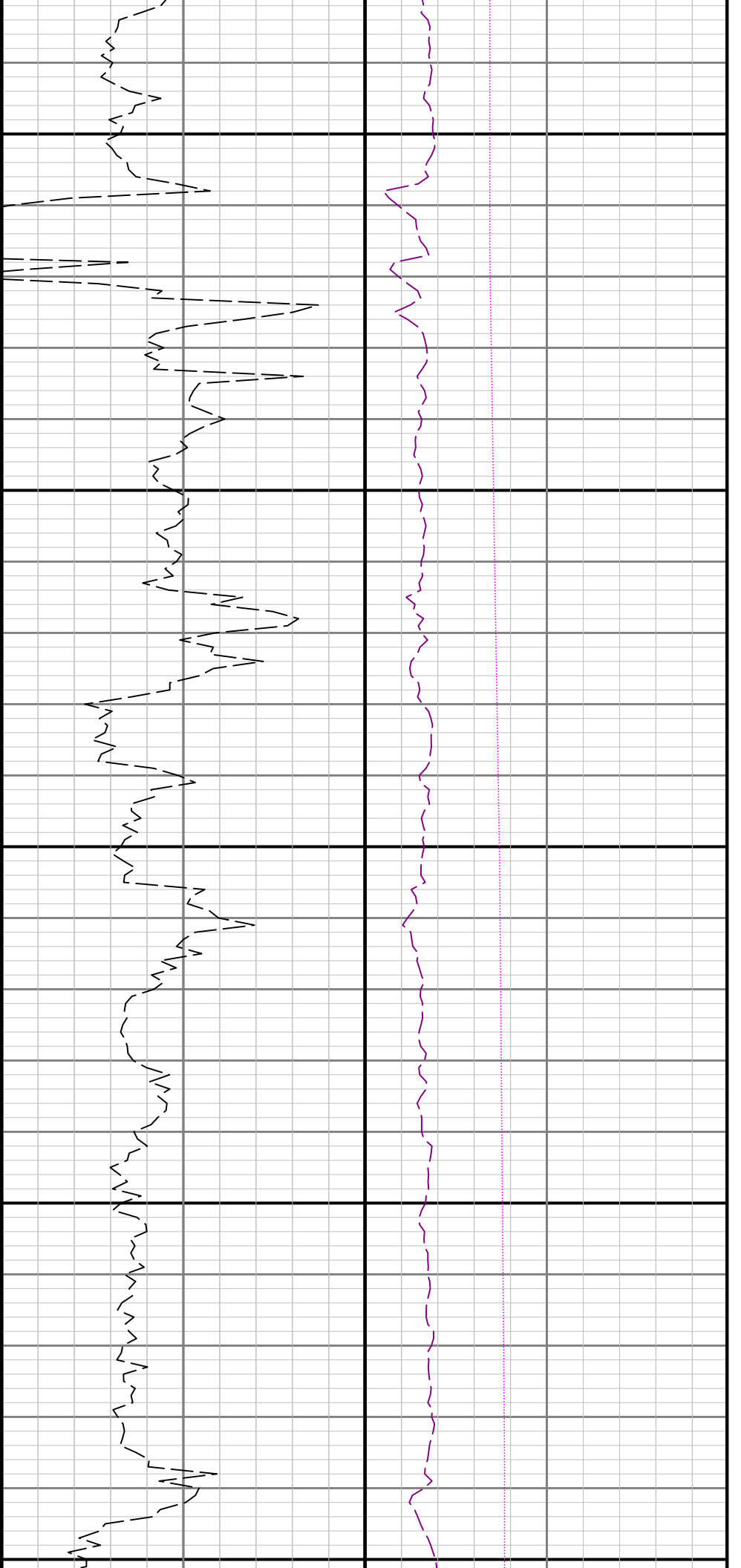
	(m.)	(in.)		
1	6652	8.750	1	The interval from surface to 6652 feet MD (6470 feet TVD) was logged due to gamma offset at the start of the curve.
2	7668	6.125	3	The interval from 7613 to 7668 feet MD (7162 to 7167 feet TVD) was logged up to 100 hours after drilling due to tripping out of the hole for a reaming run of the welbore, casing and cement operations. Gamma data is attenuated due to logging behind casing.
3	9200	6.125	3	Data at 9200, 10600, 10800, 10900 feet MD (7174, 7142, 7140, 7140 feet TVD) gamma data is zero due to tool issues.
4	12919	6.125	4	The interval from 12859 to 12919 feet MD (7181 to 7180 feet TVD) was not logged due to sensor offsets to bit at TD.

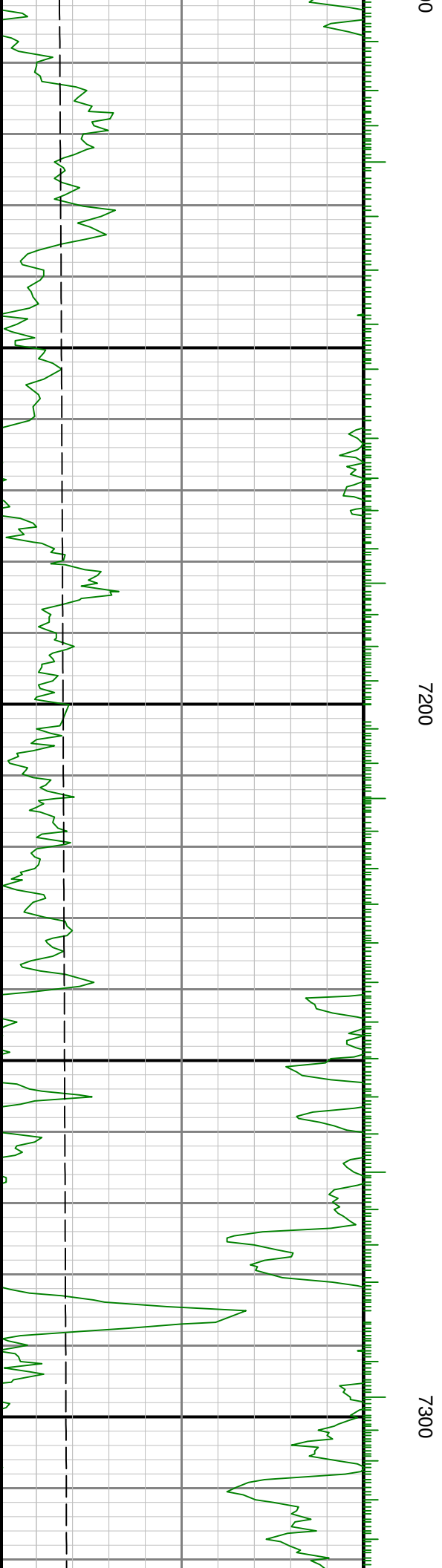
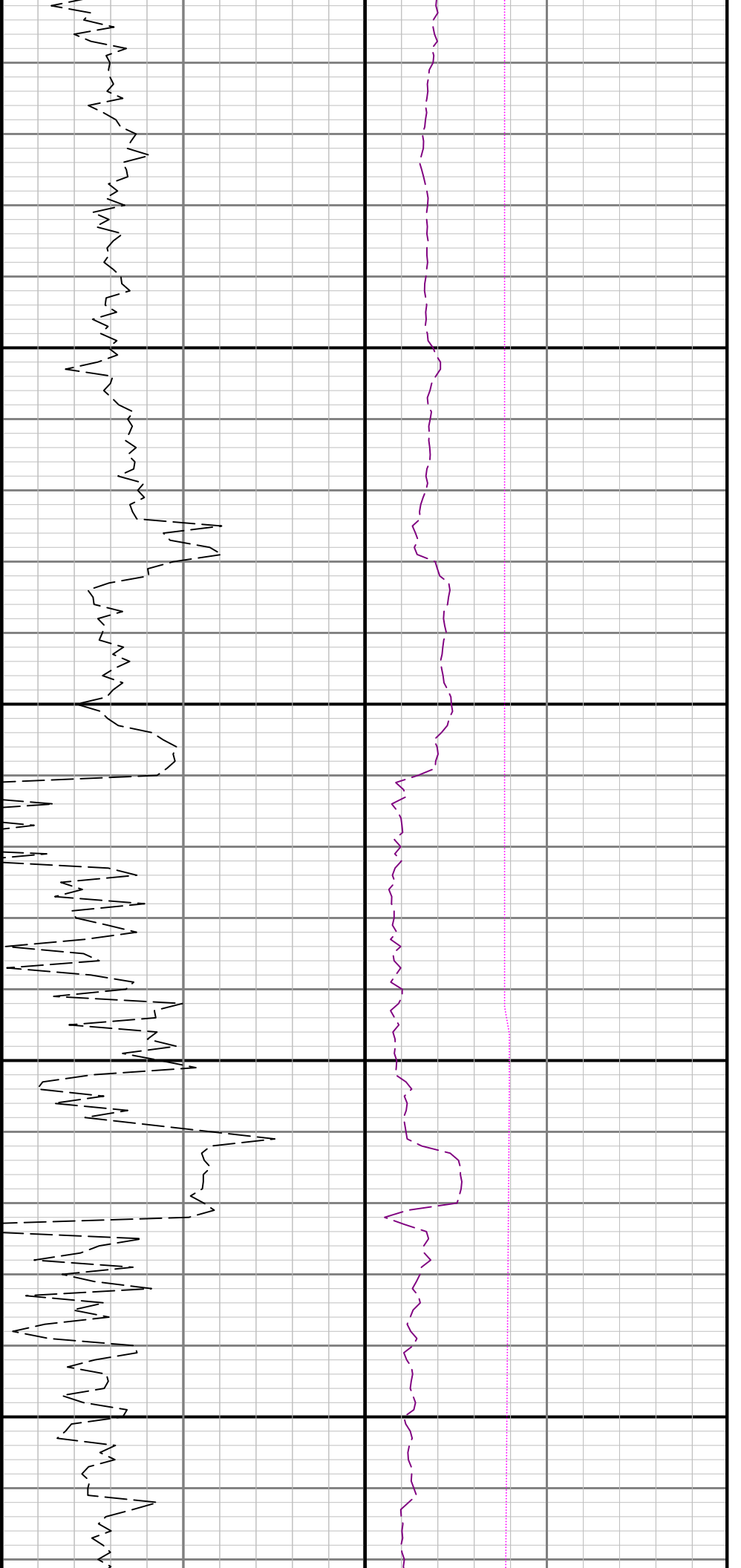


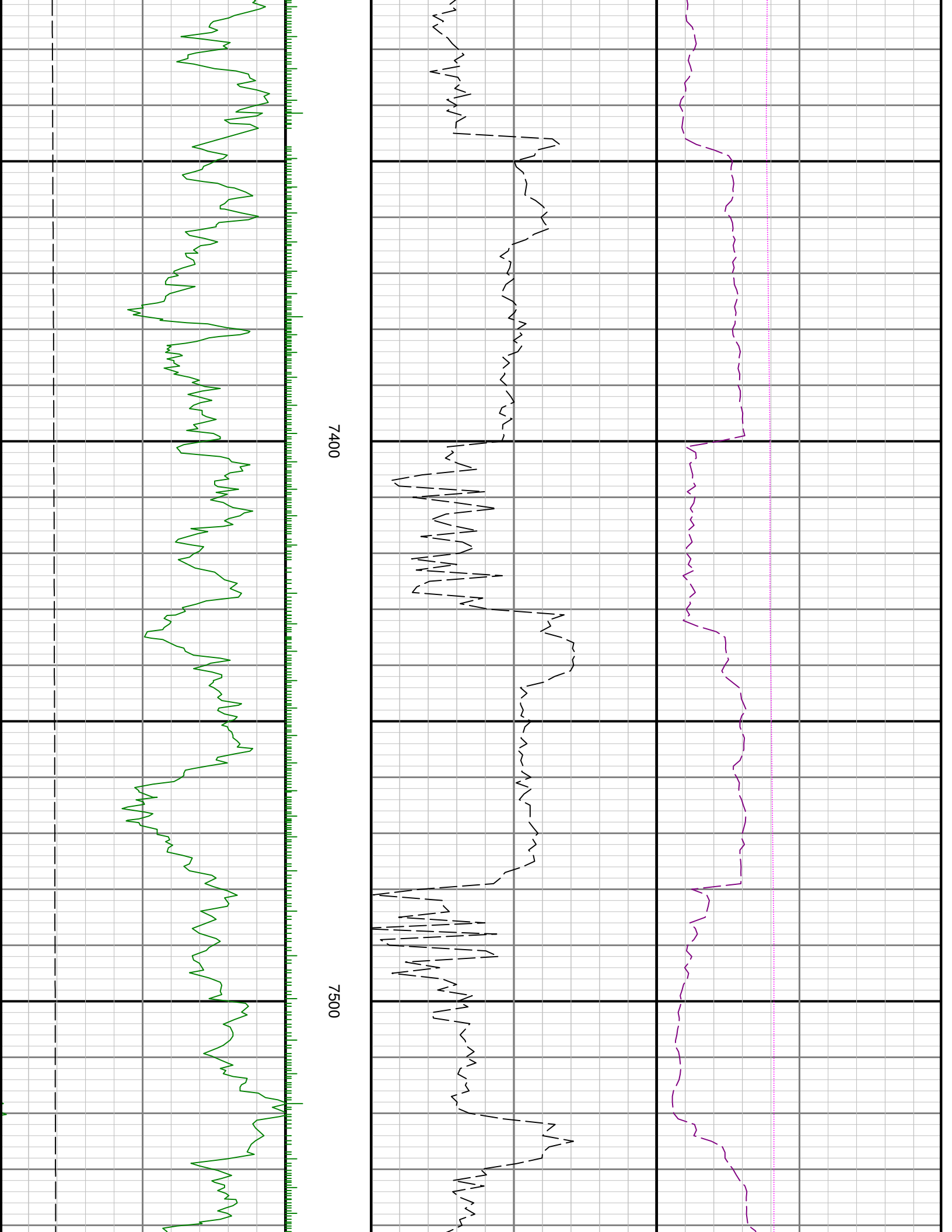
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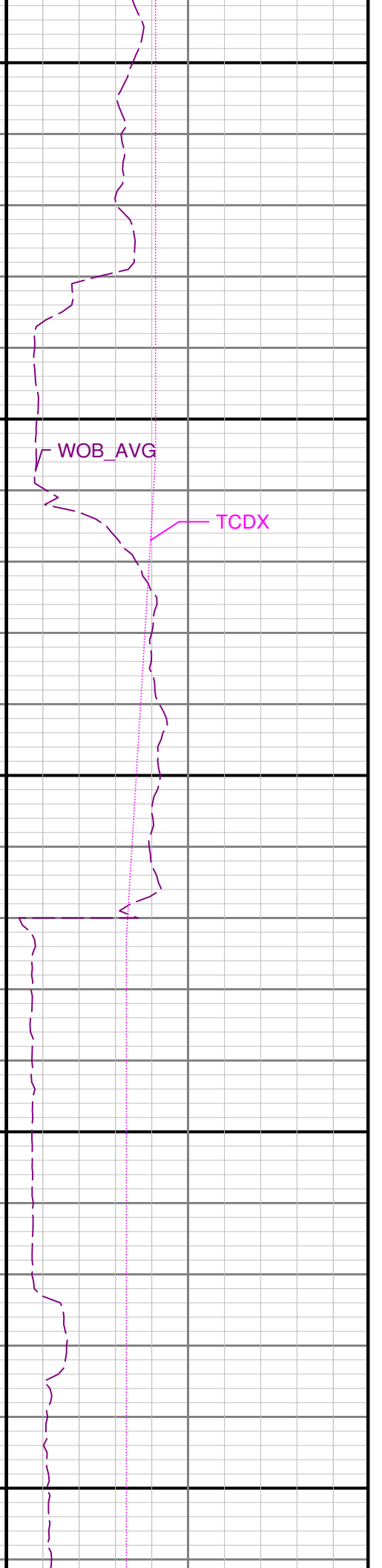
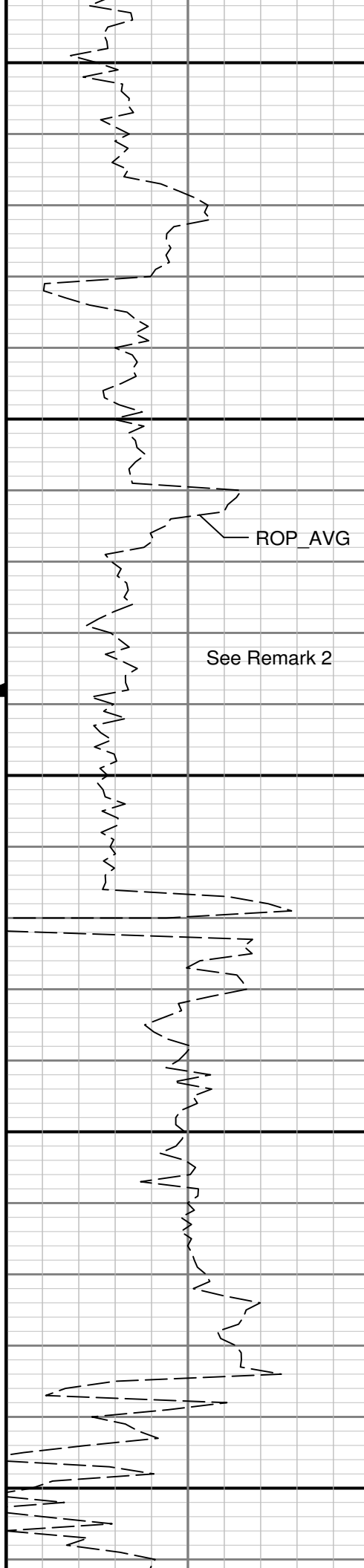
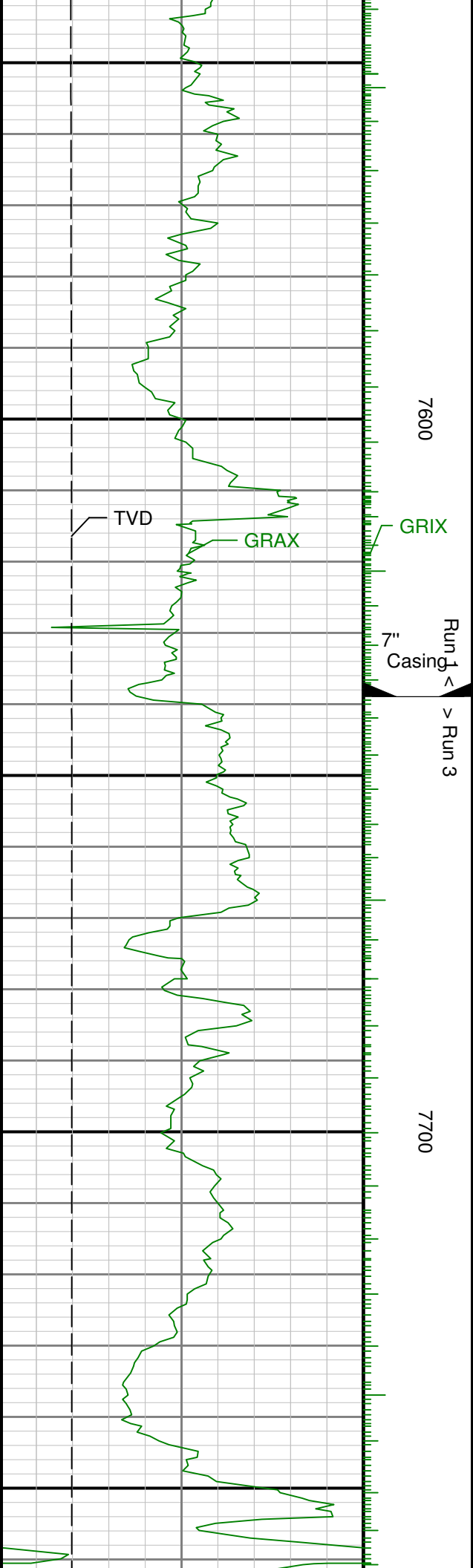
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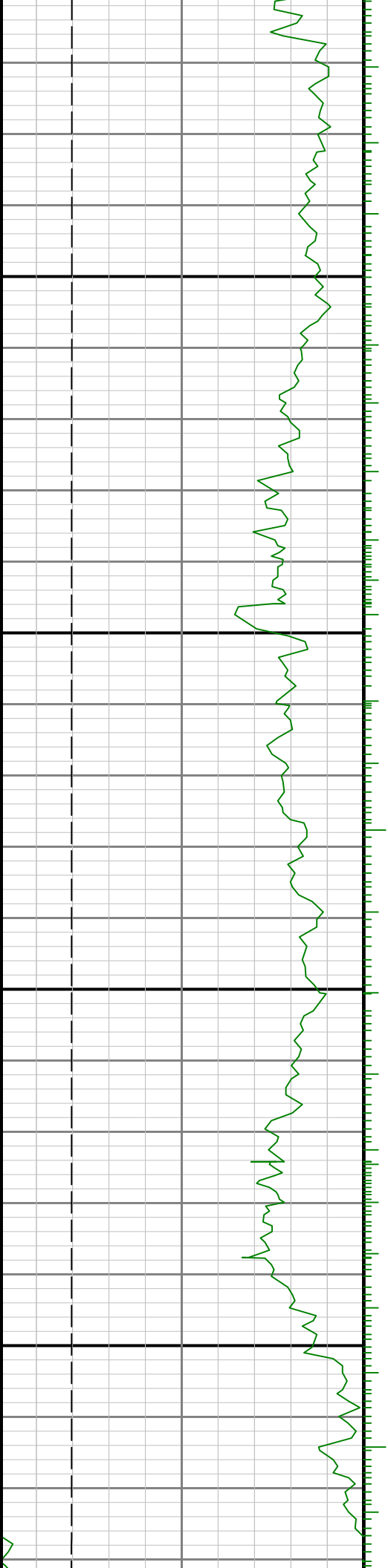






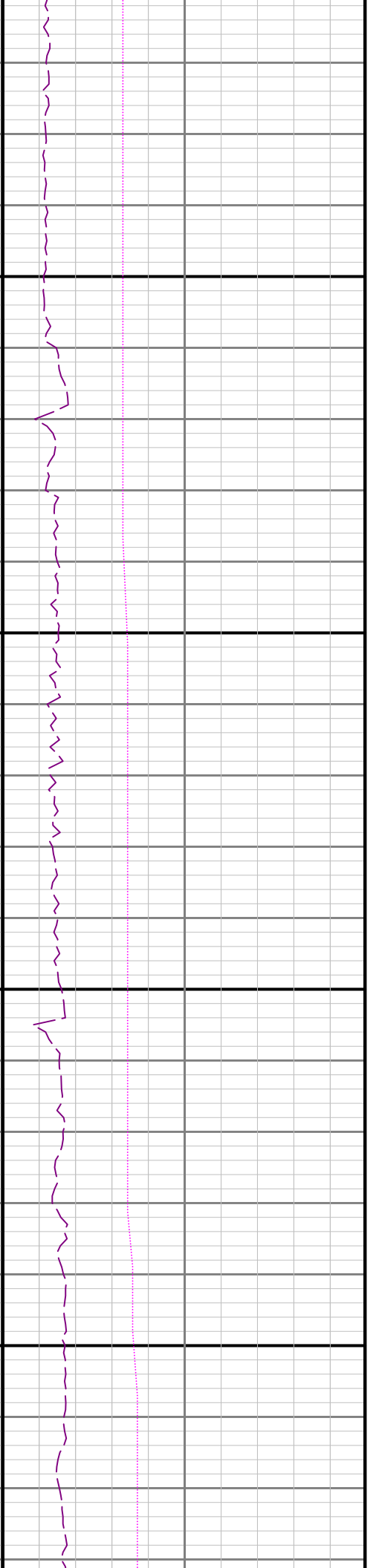
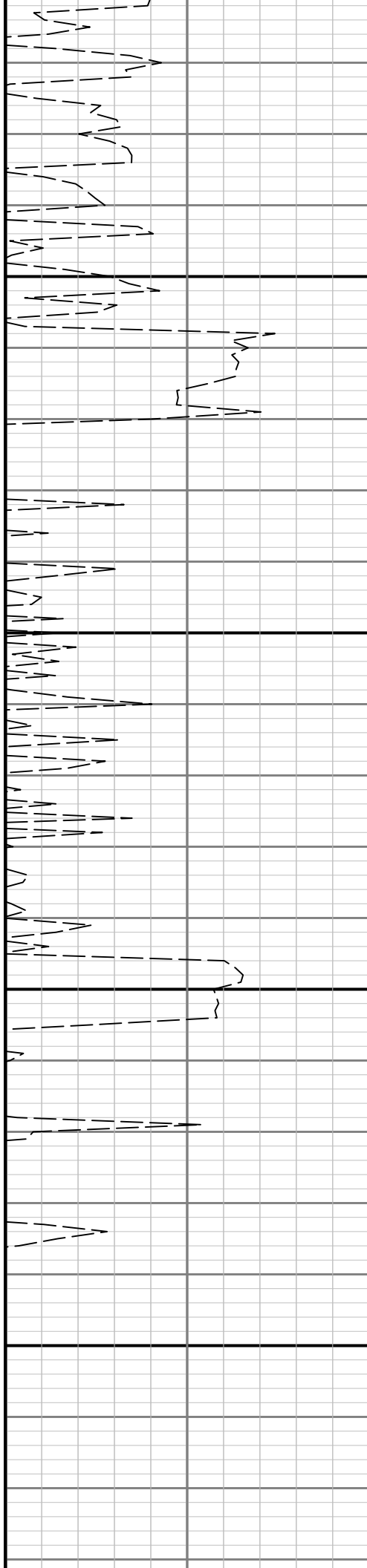


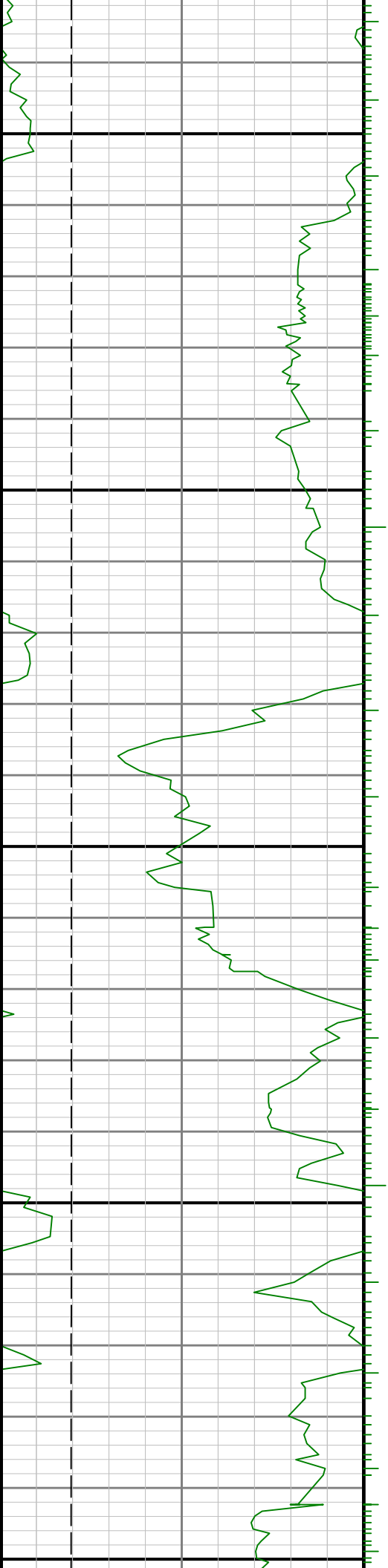




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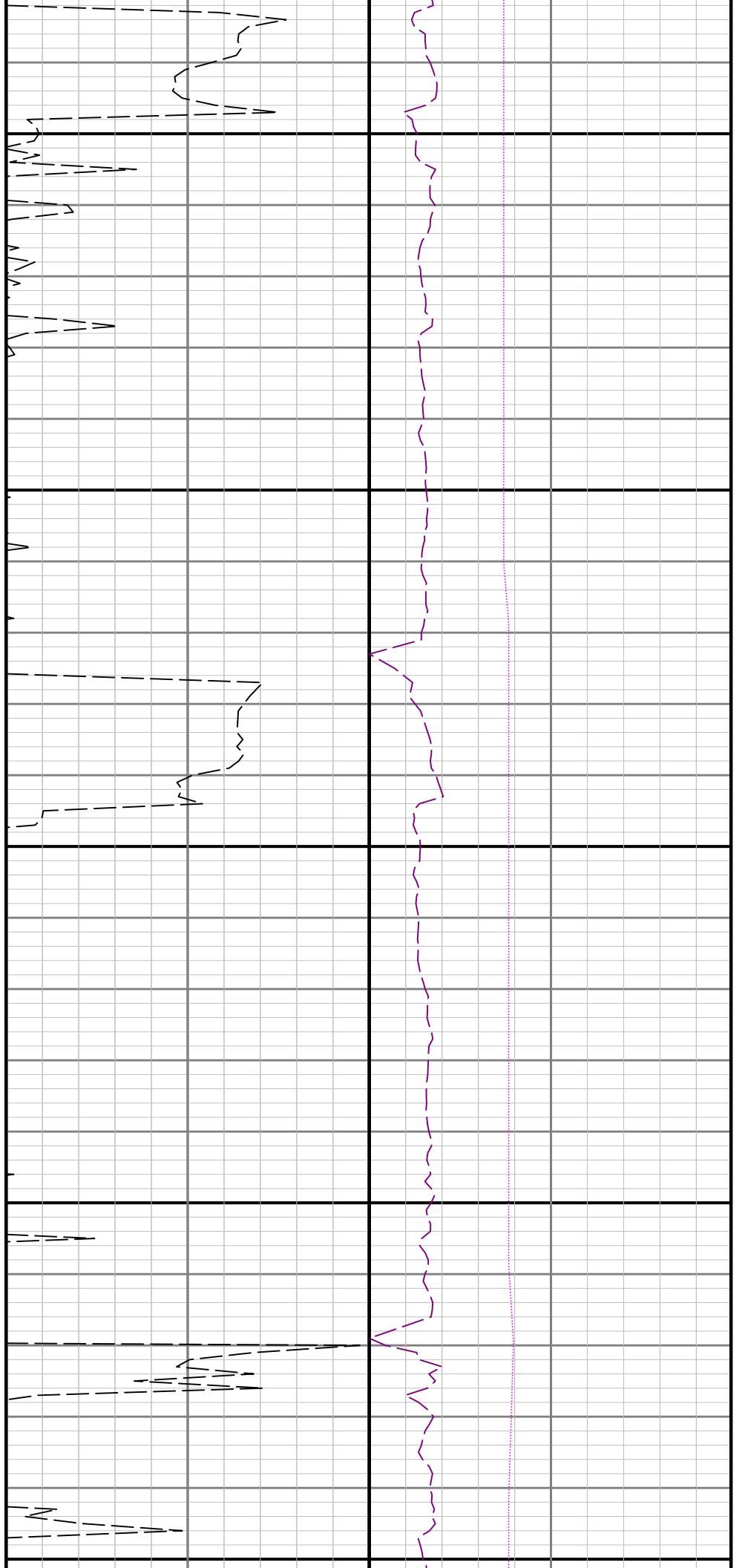


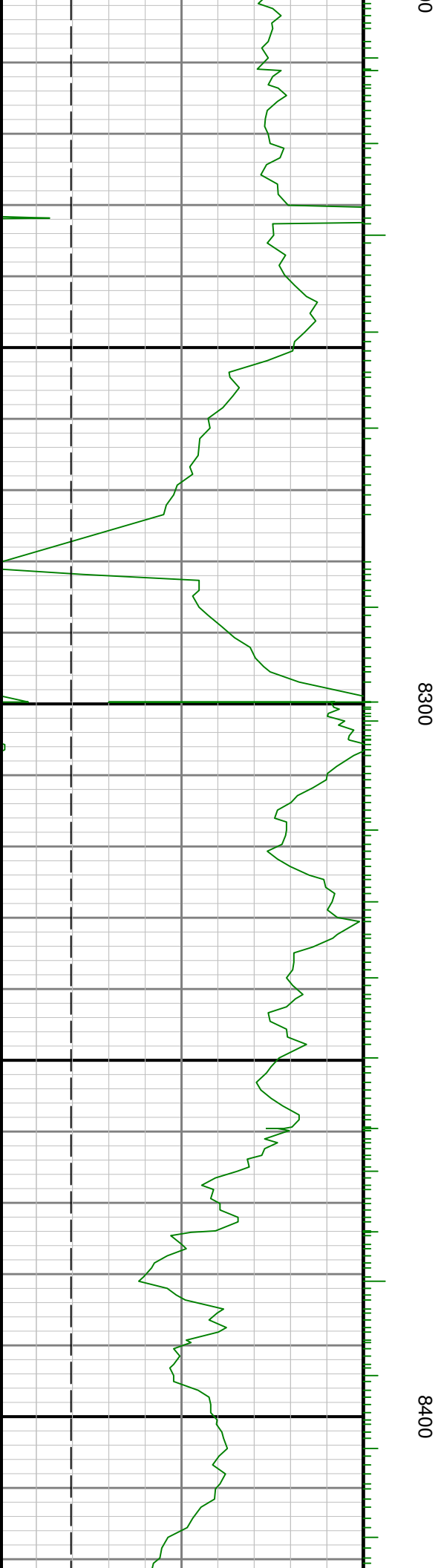
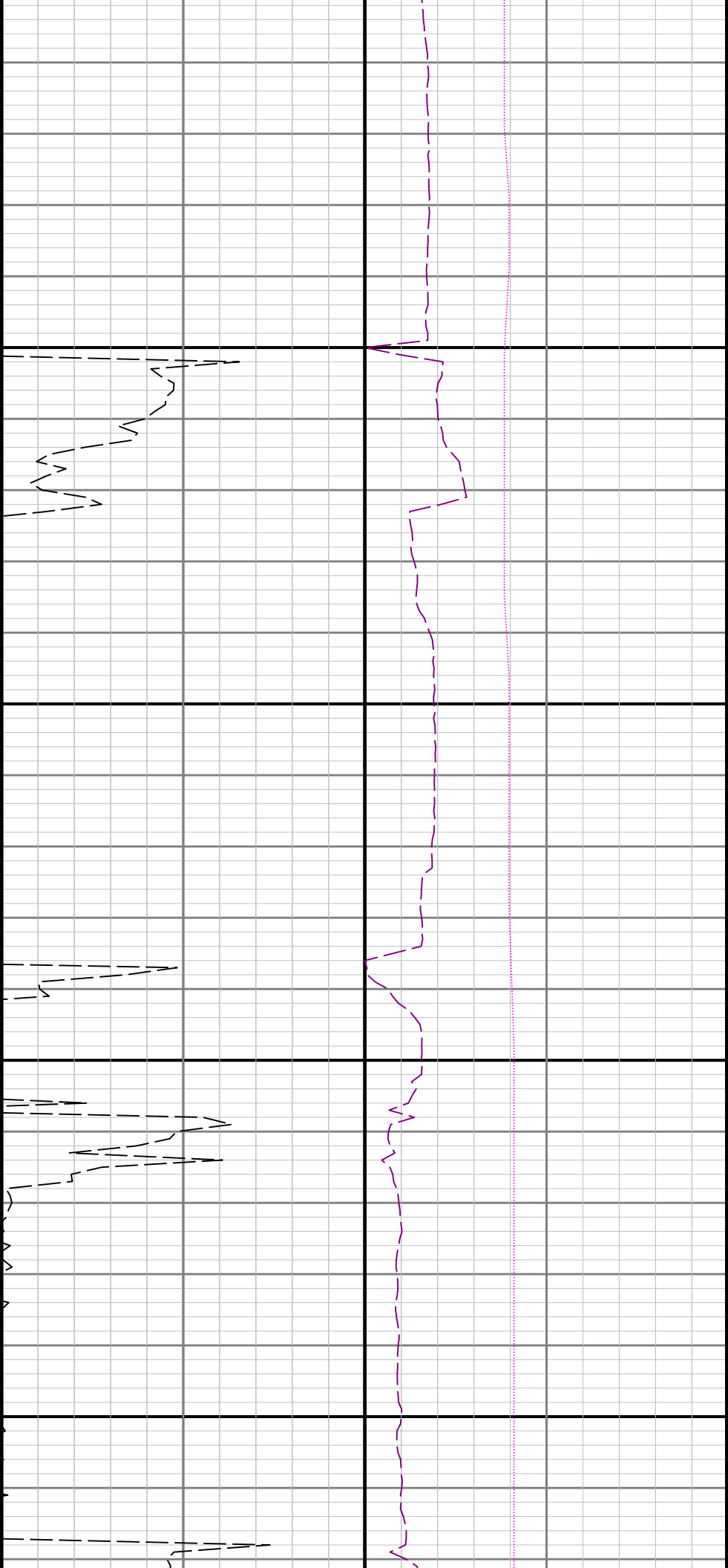


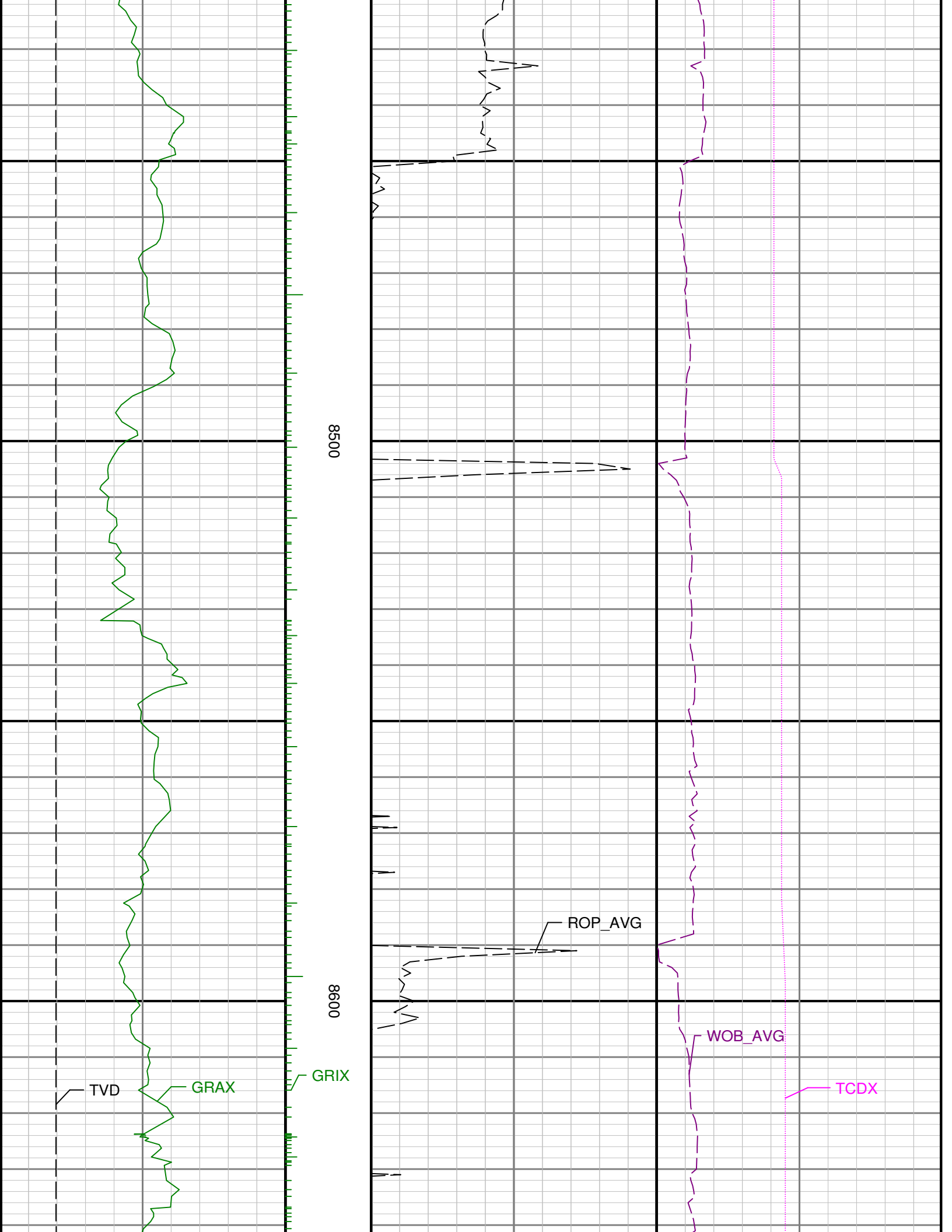
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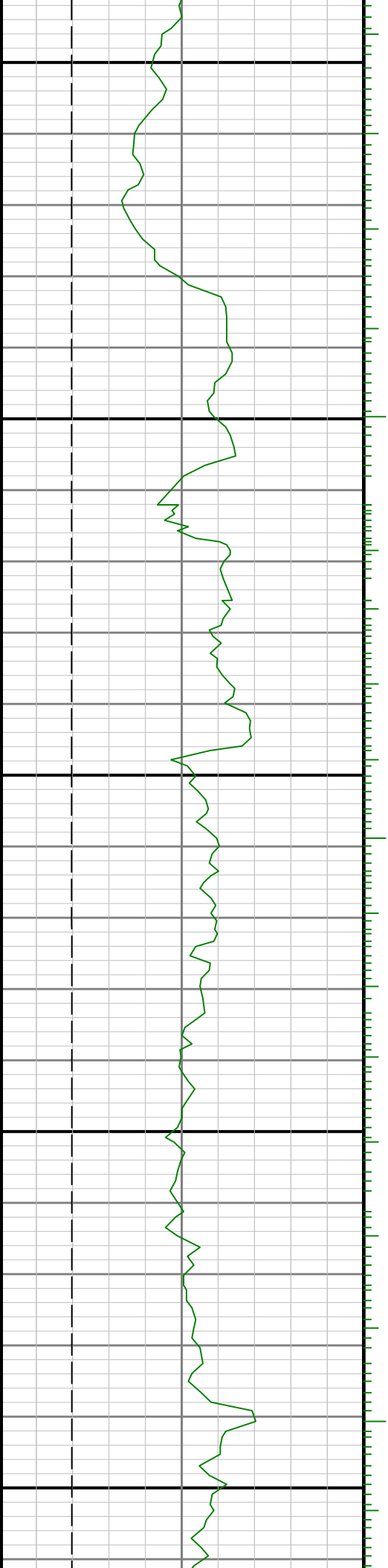
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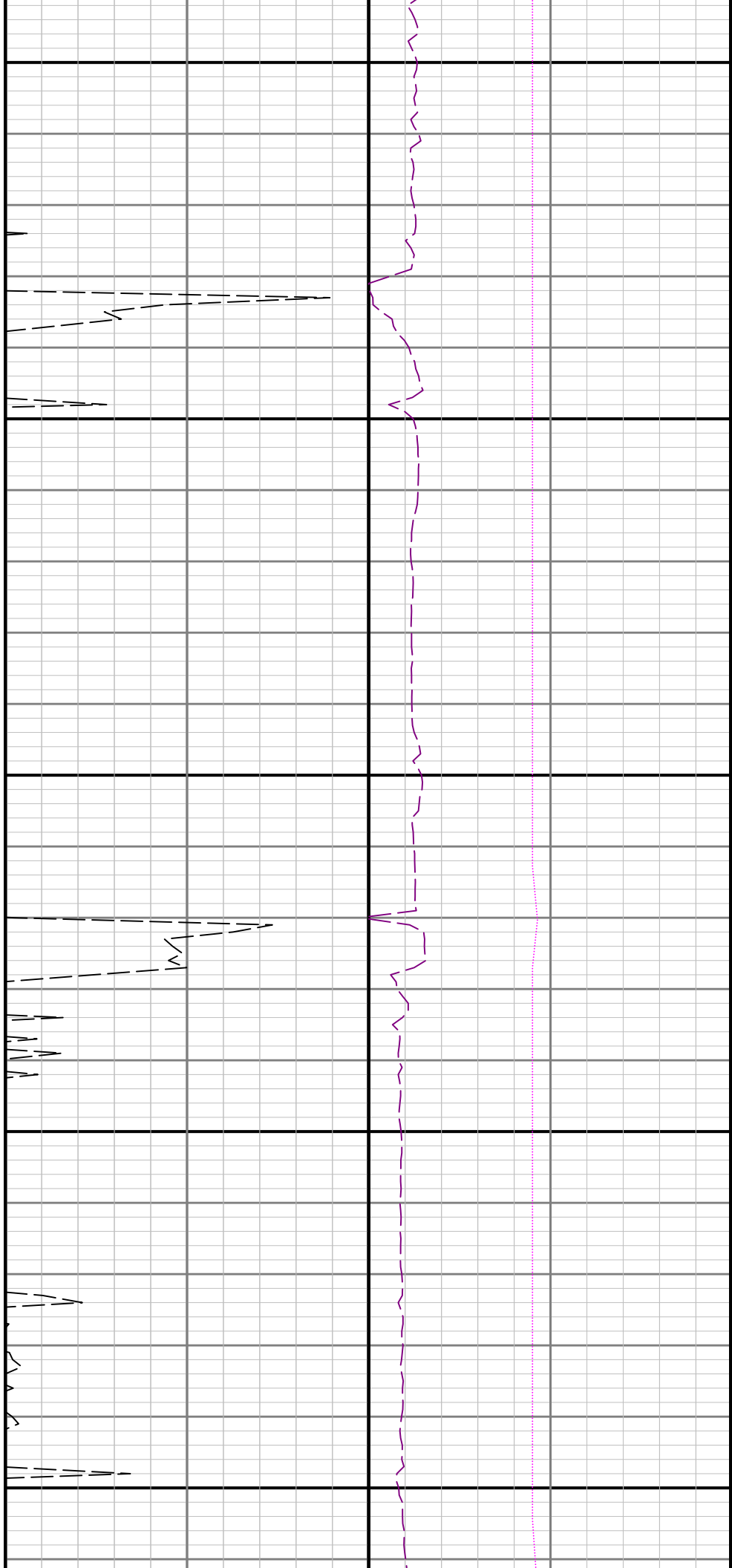


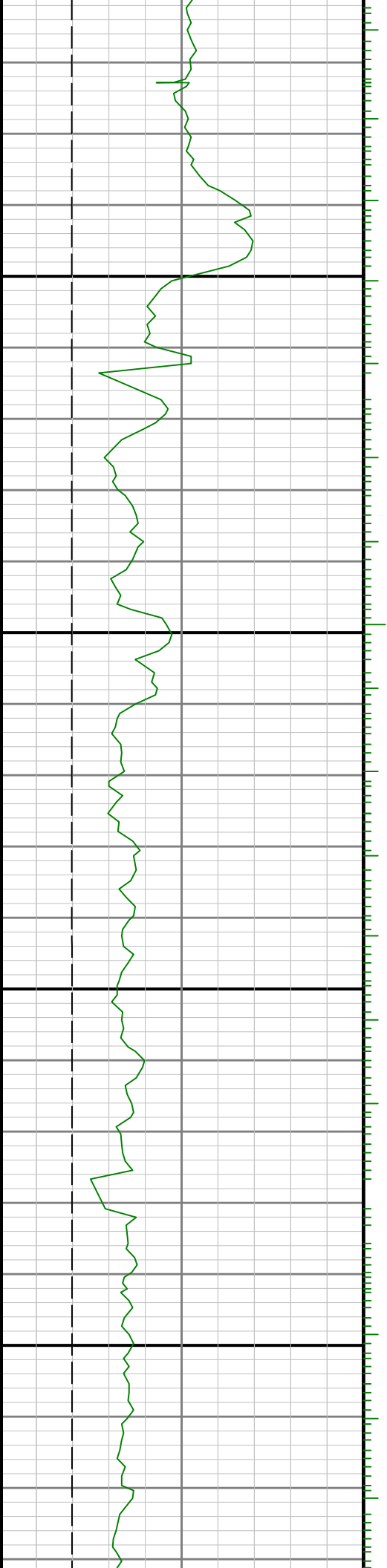




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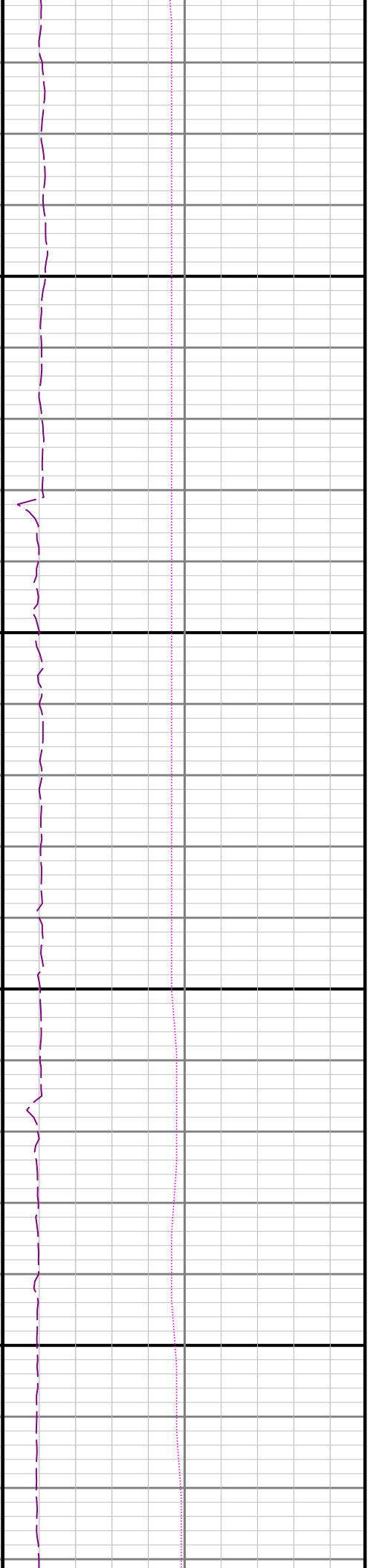
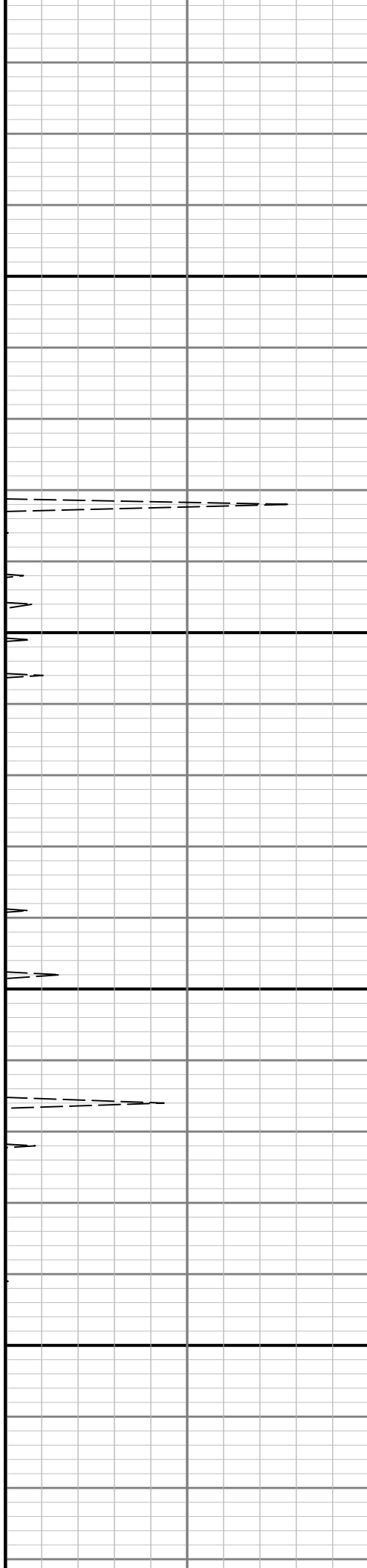
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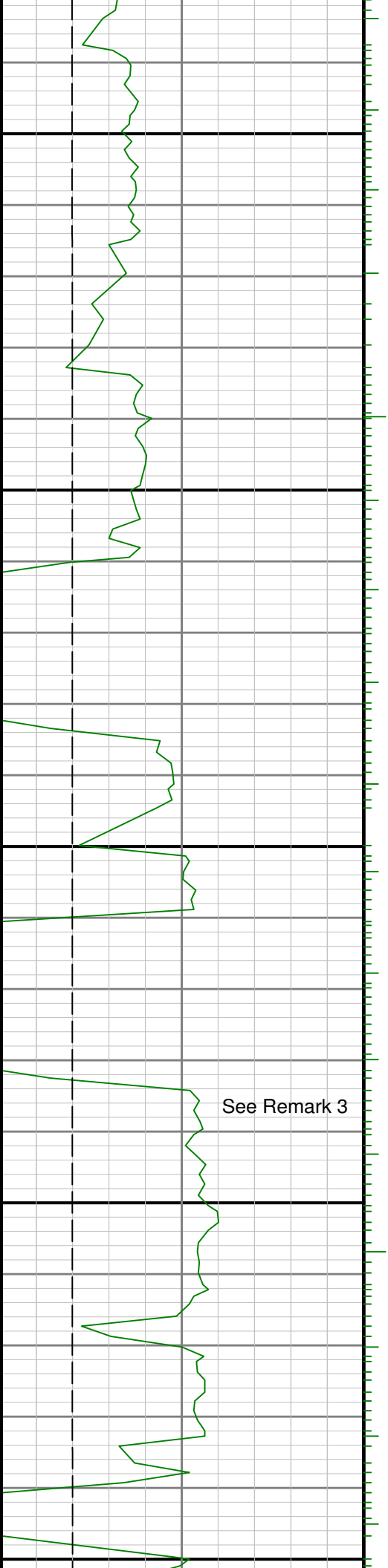




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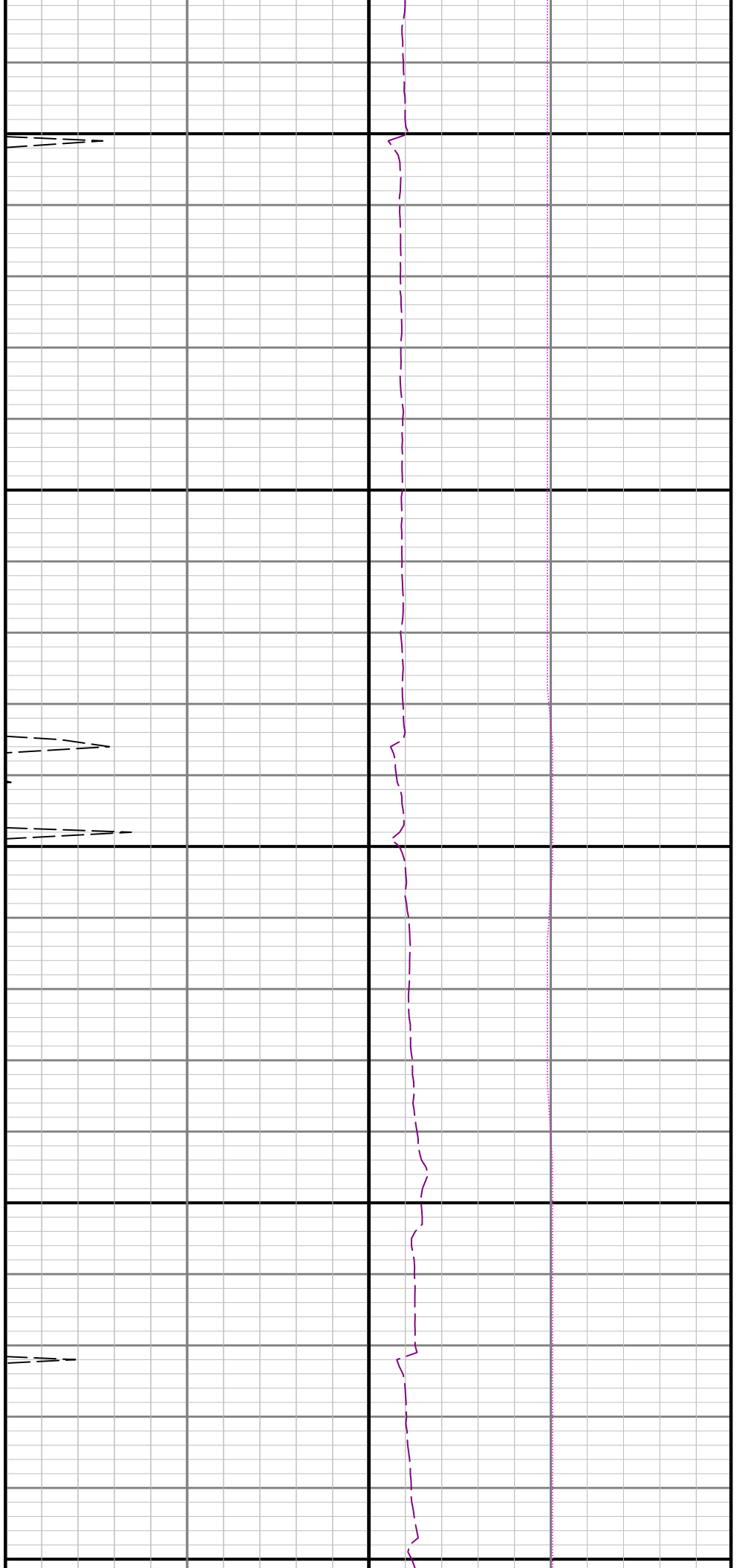


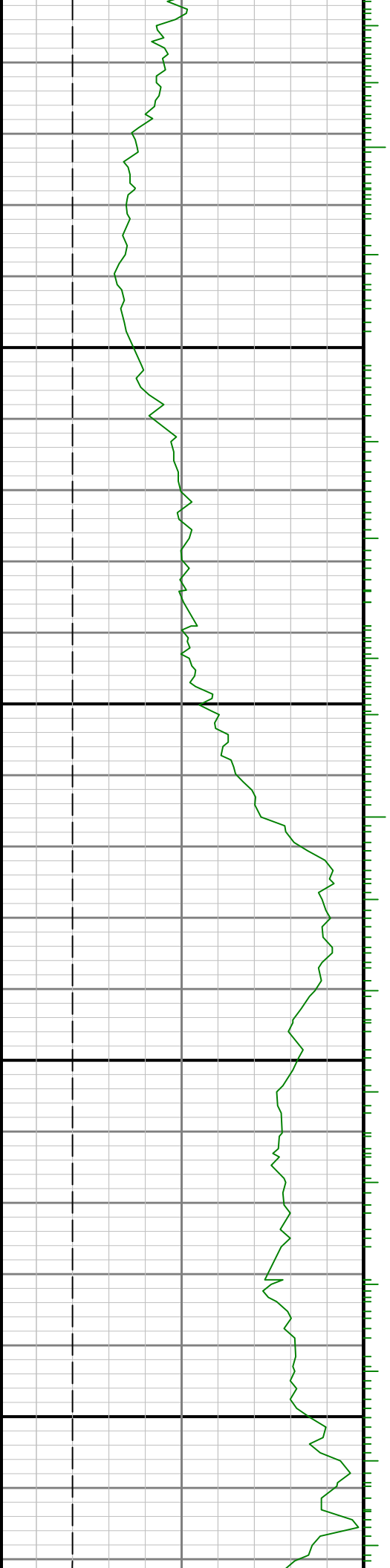
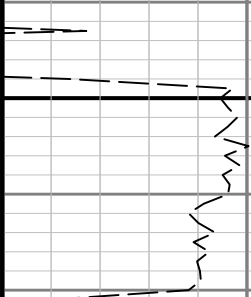
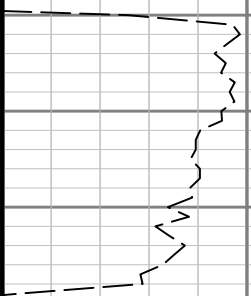
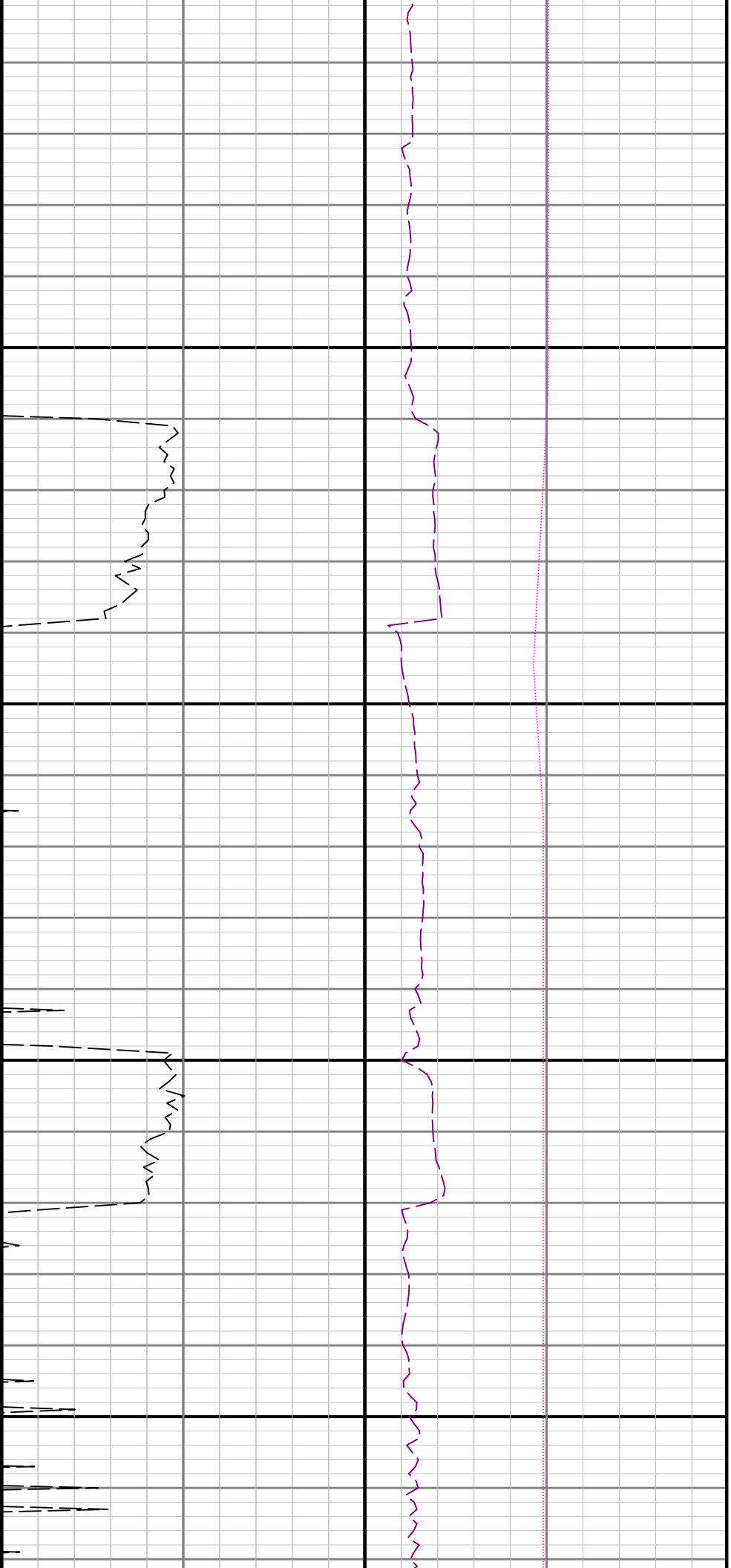
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See Remark 3

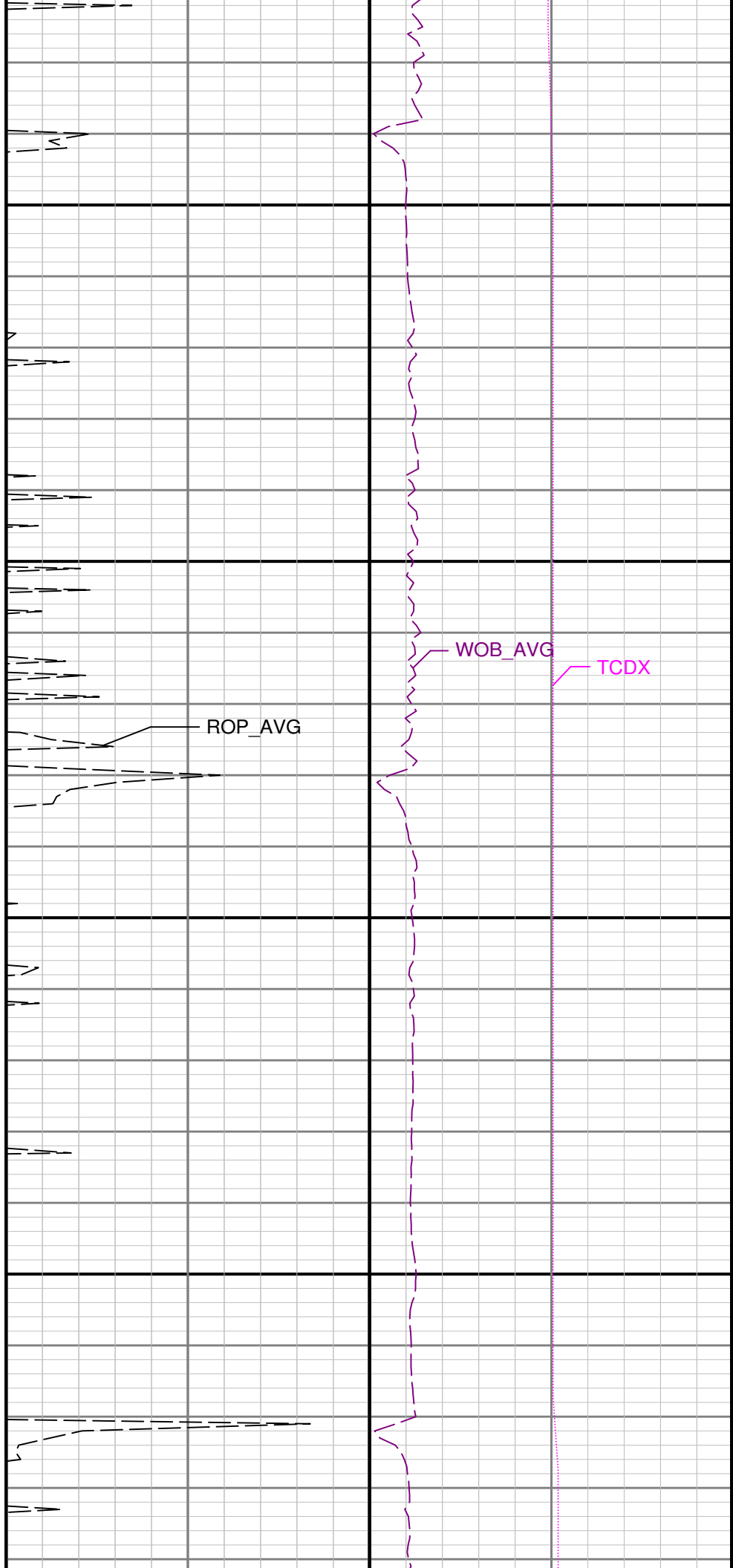
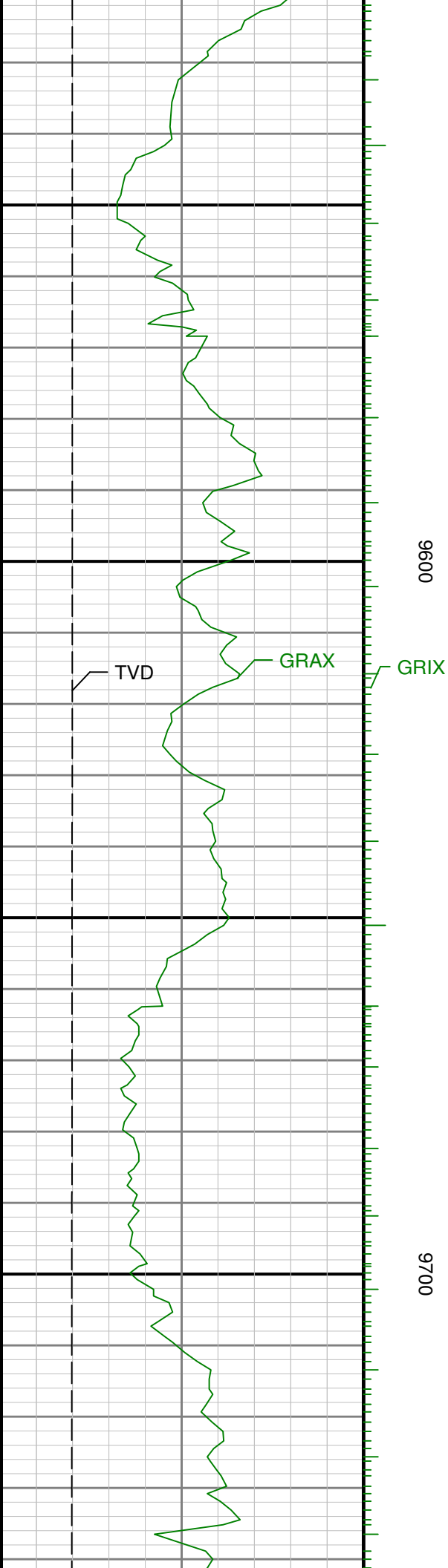
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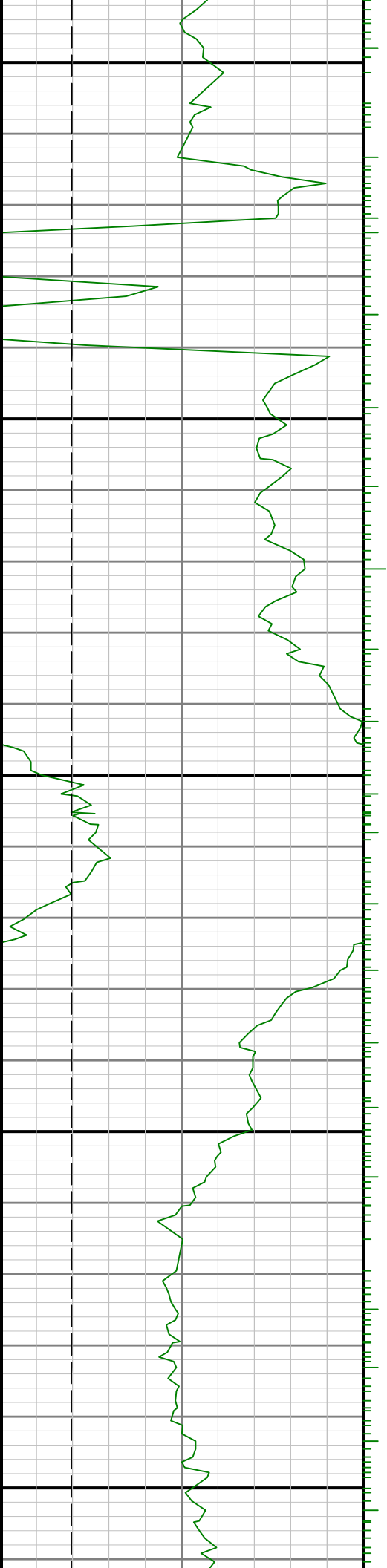




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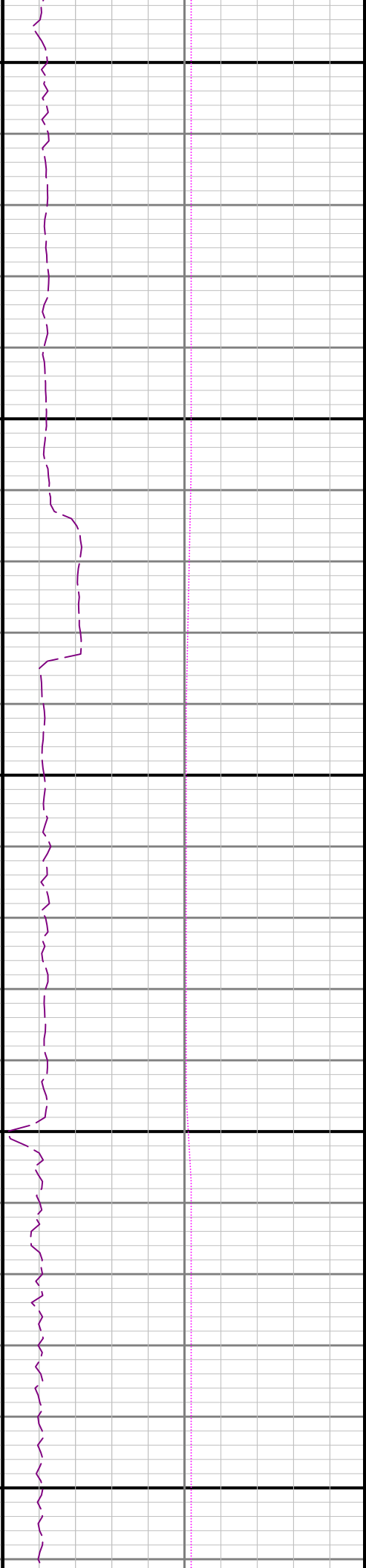
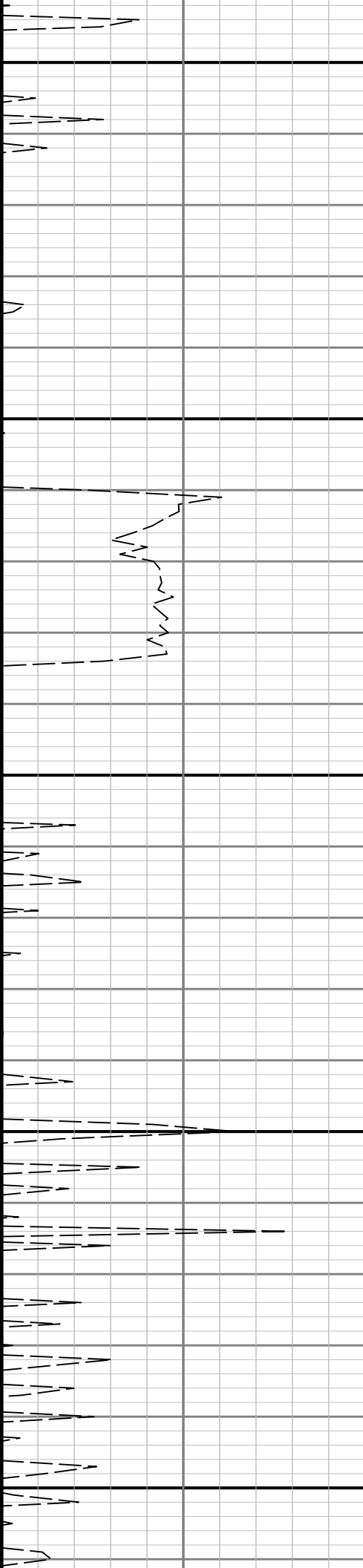
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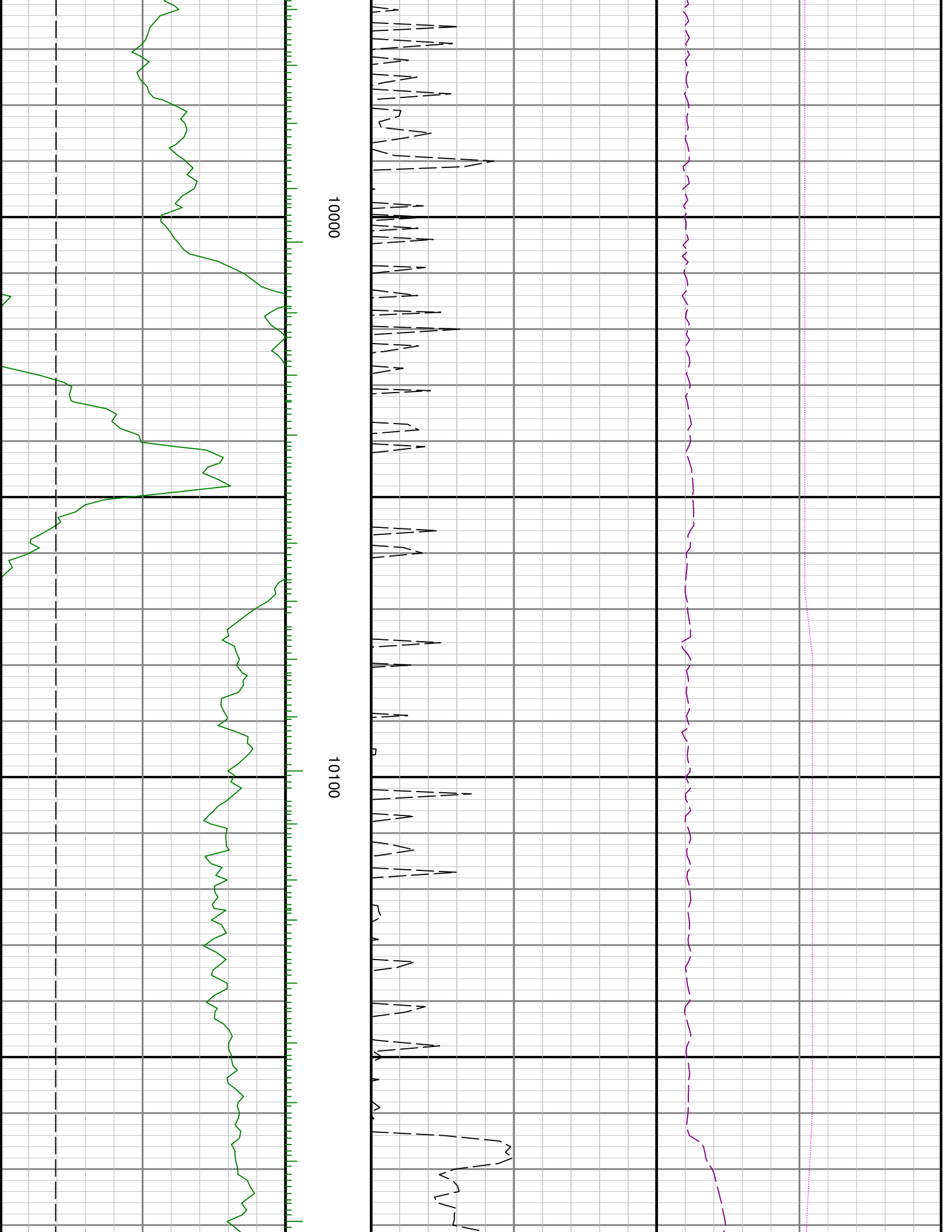


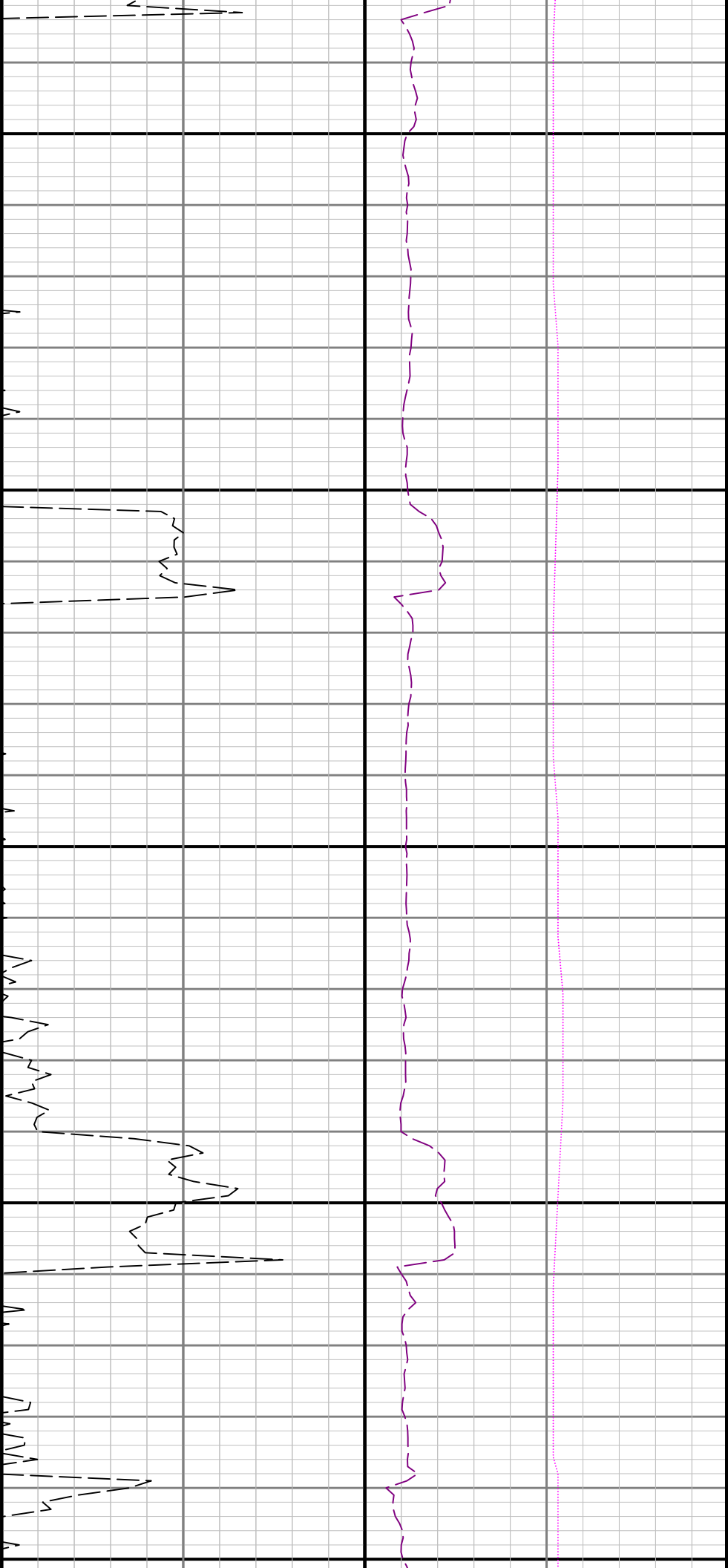


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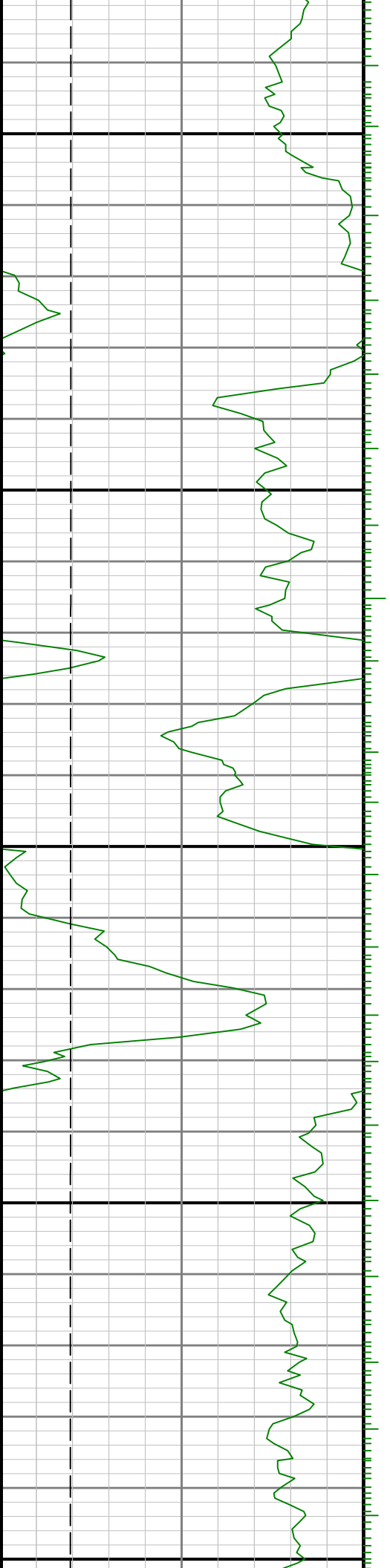


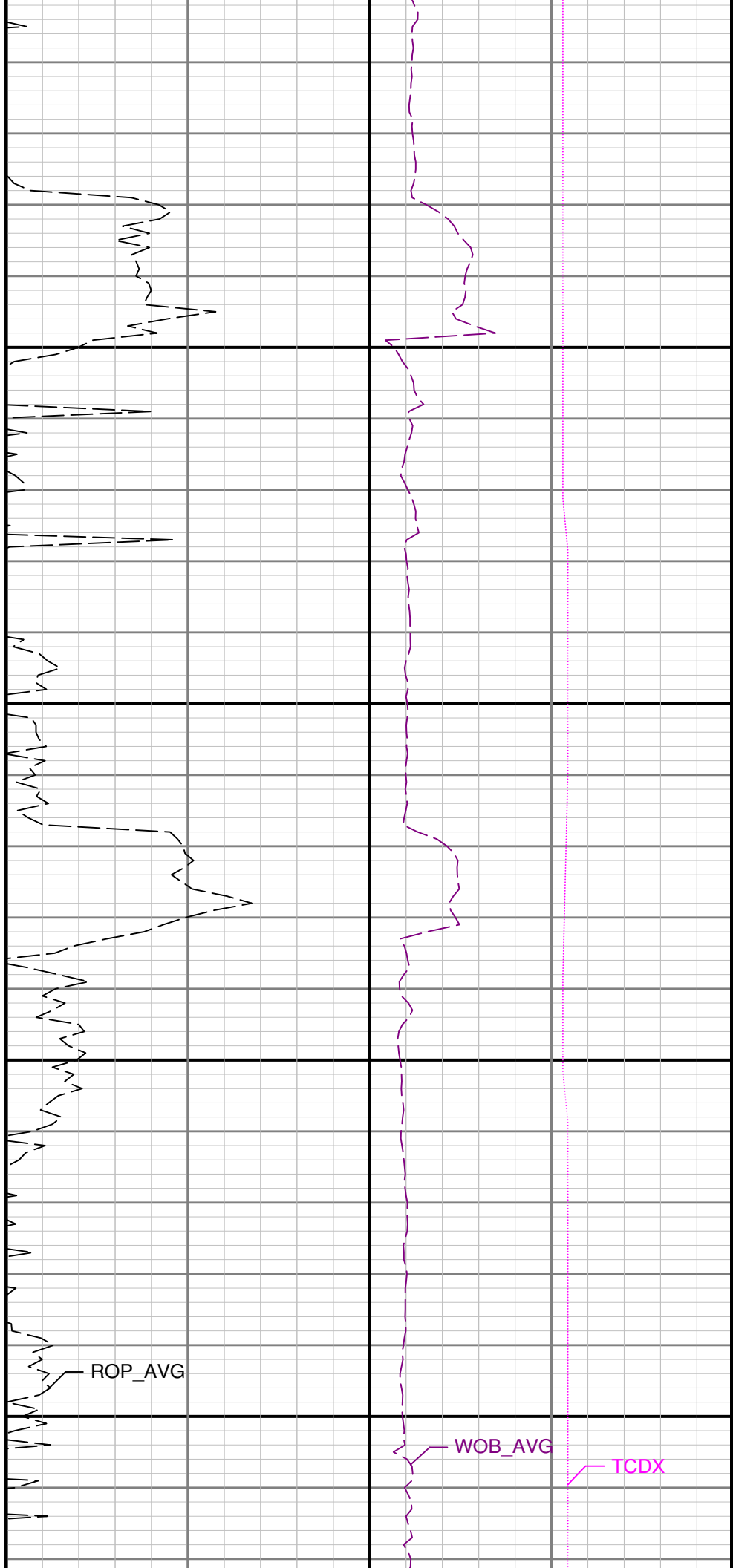
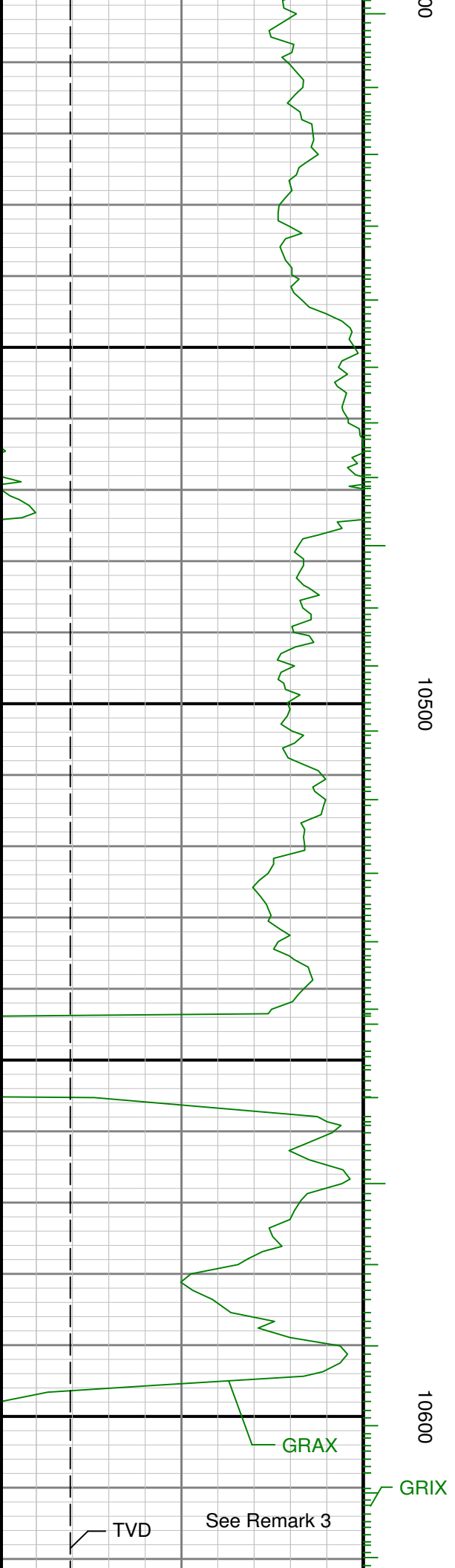


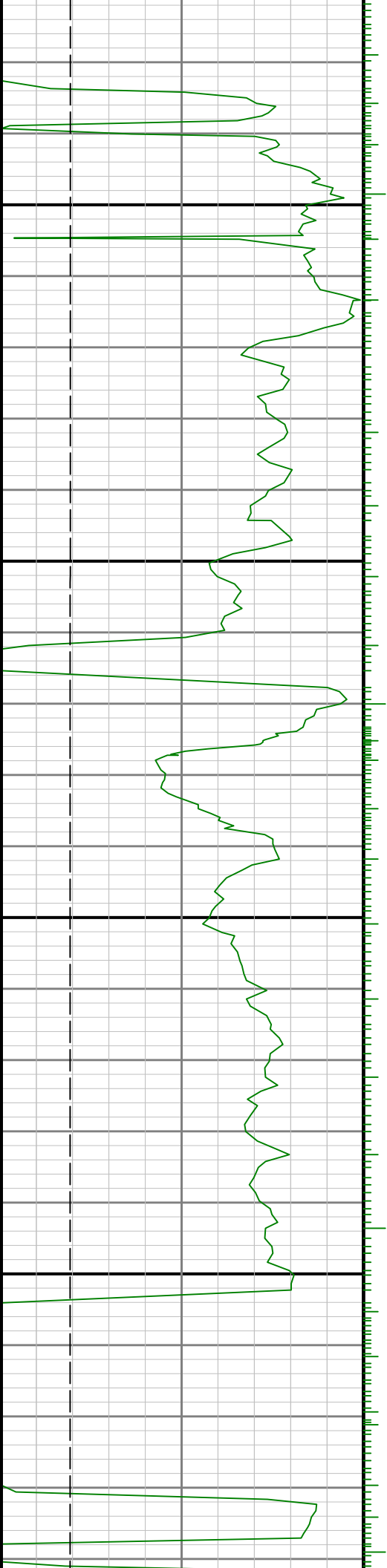
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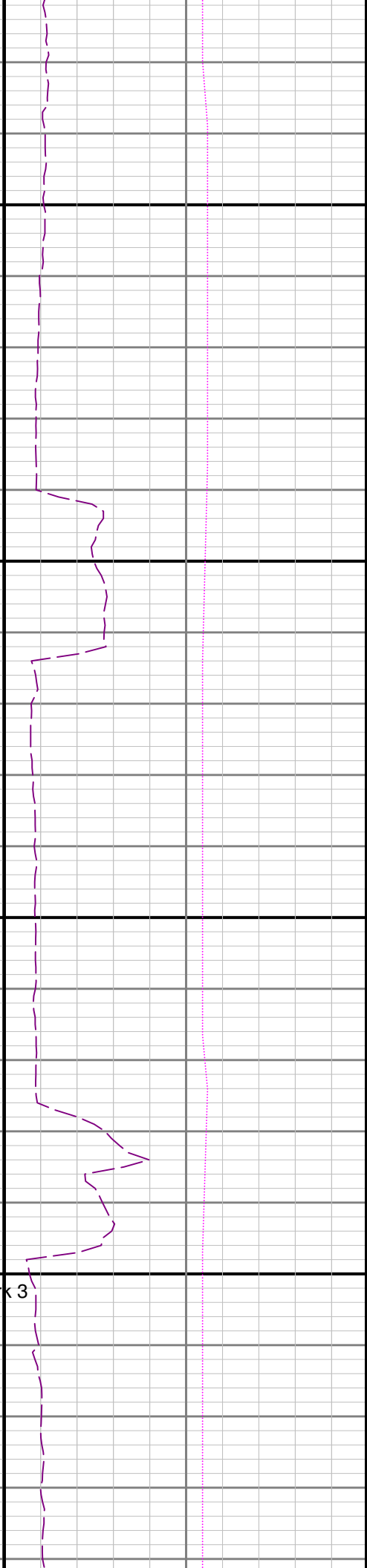
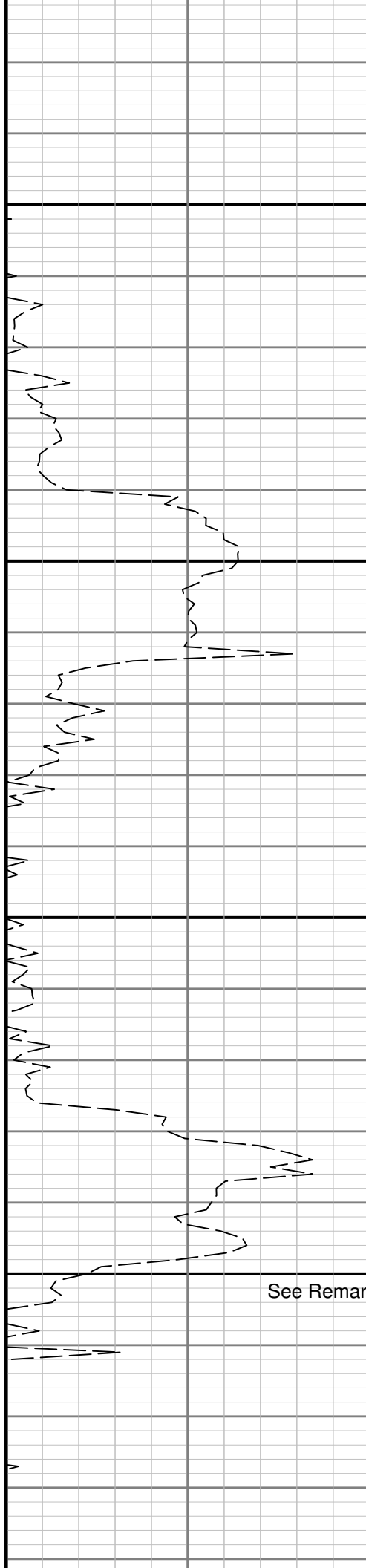




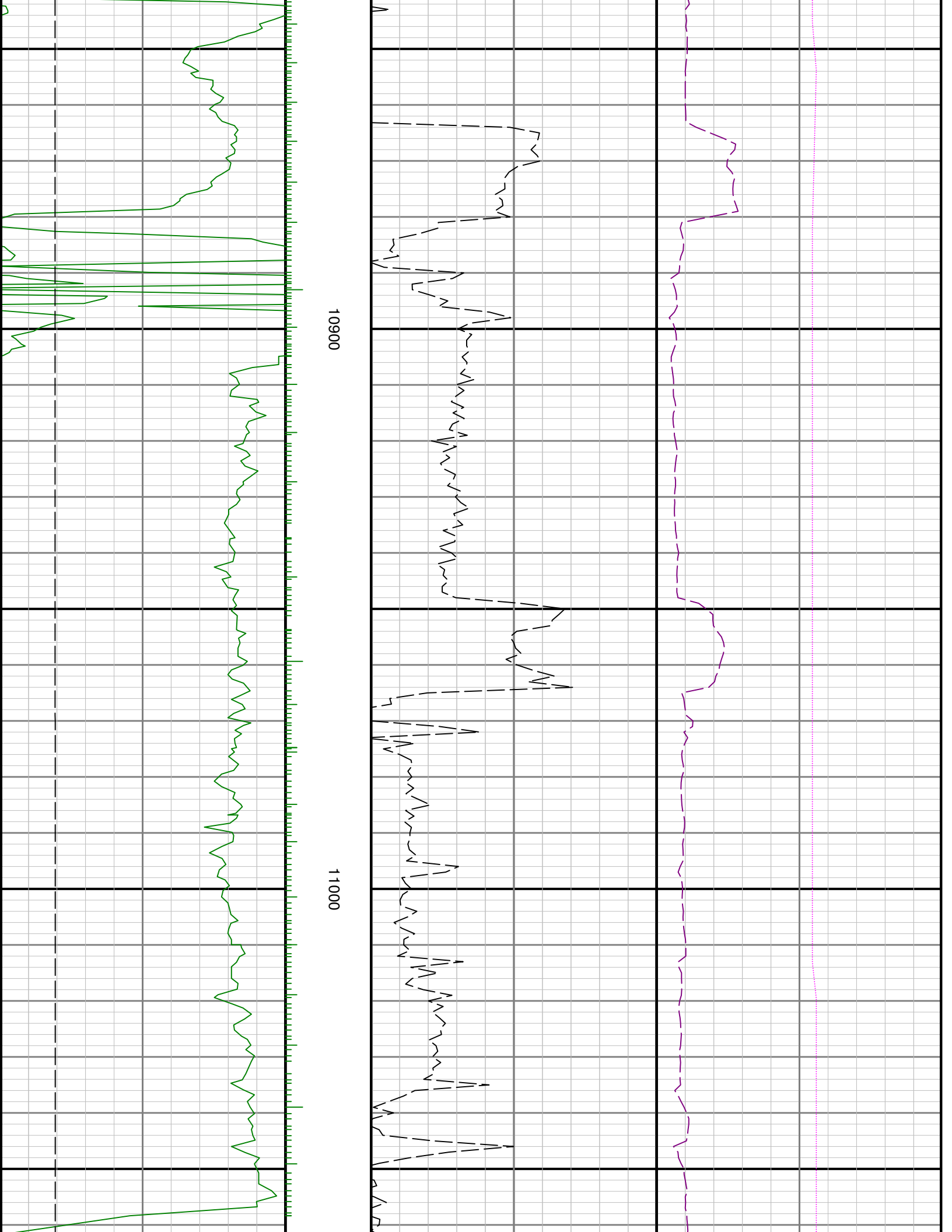


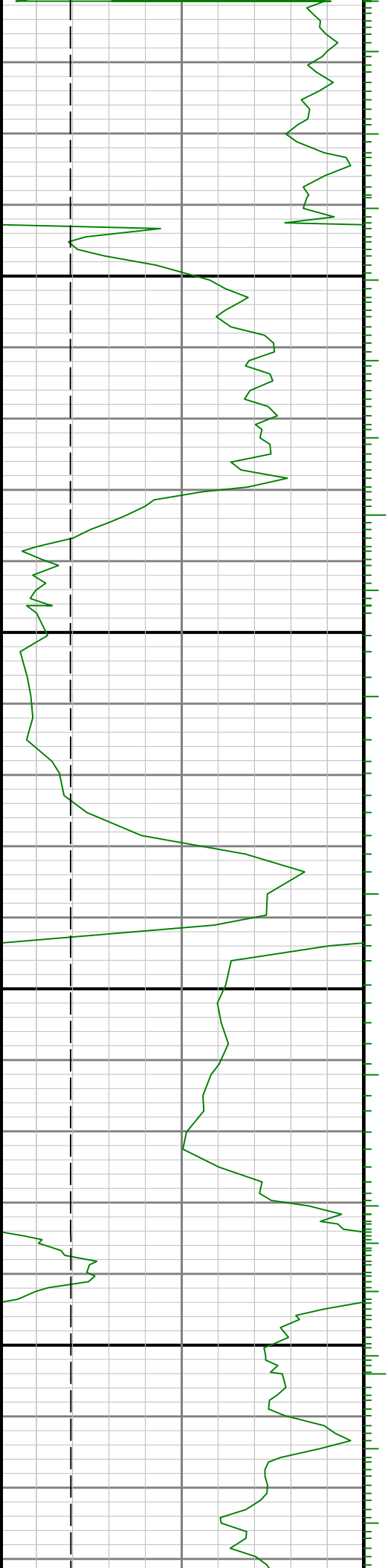
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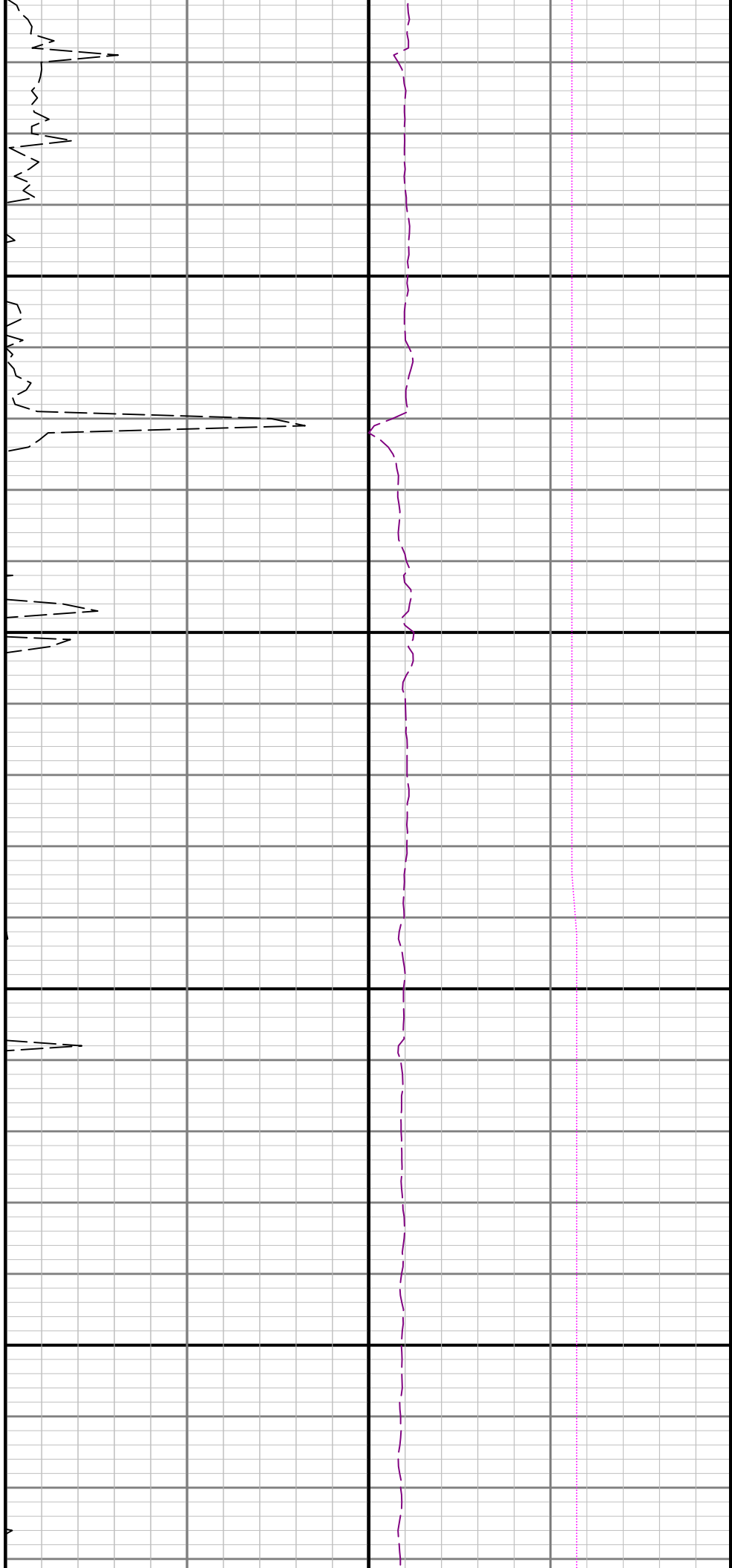
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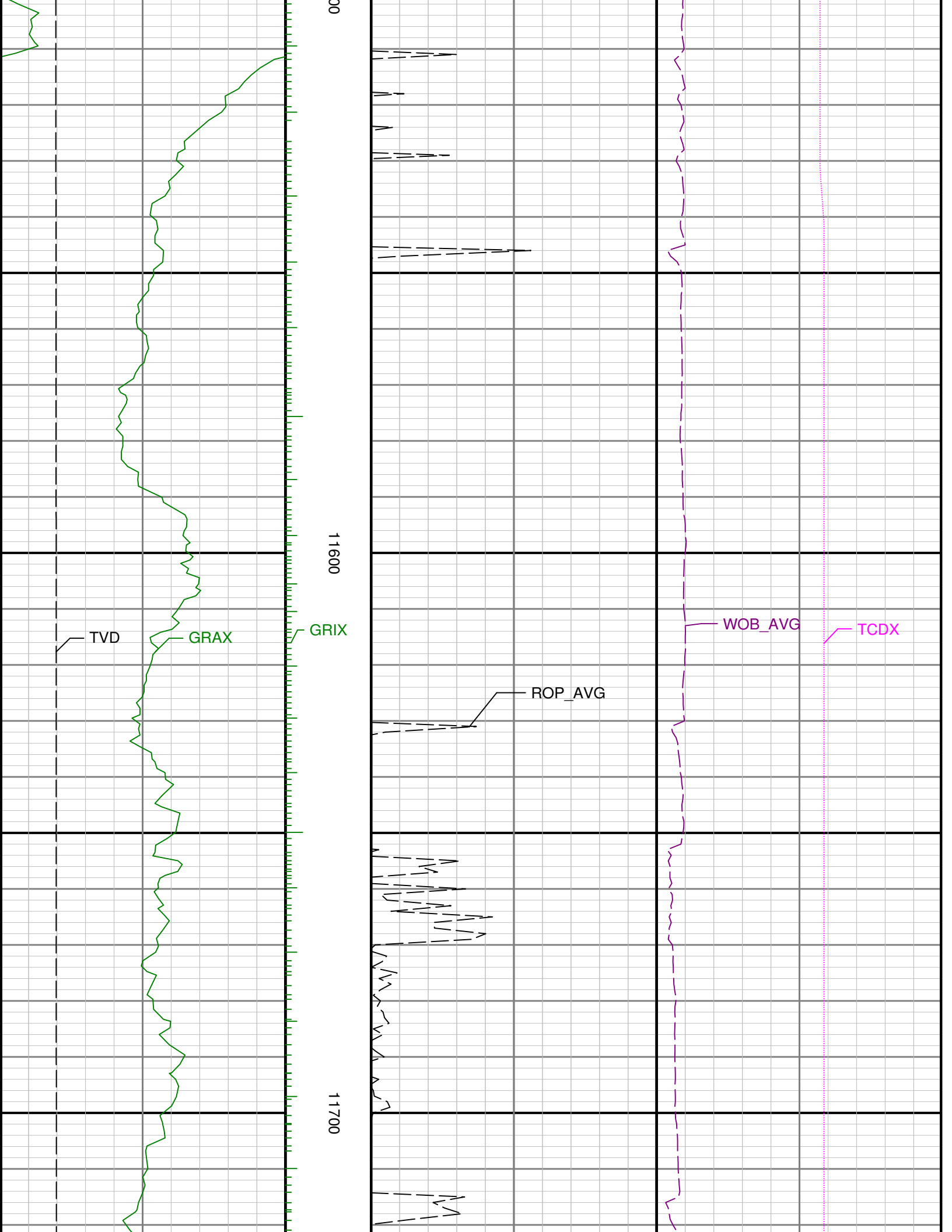


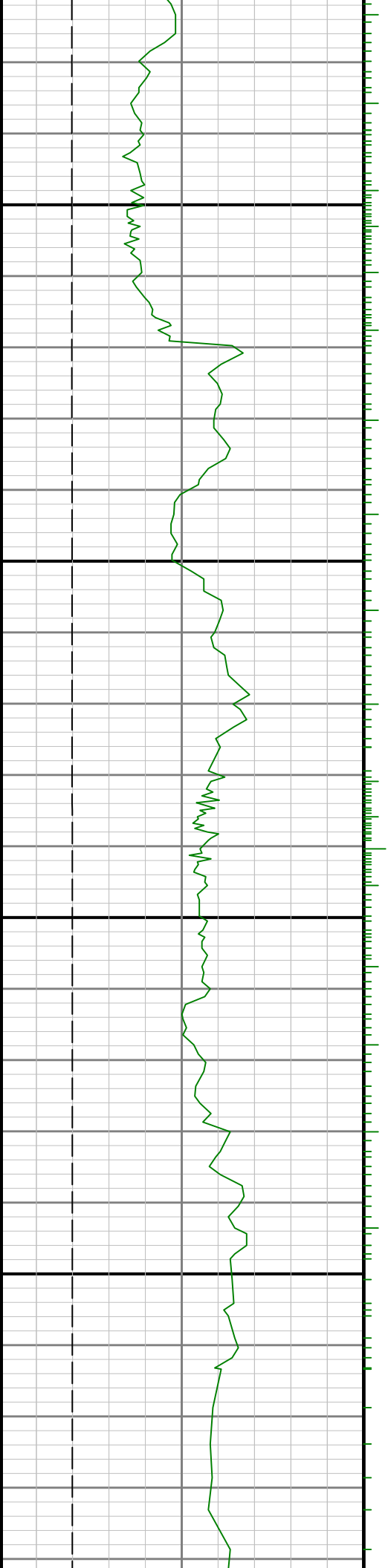


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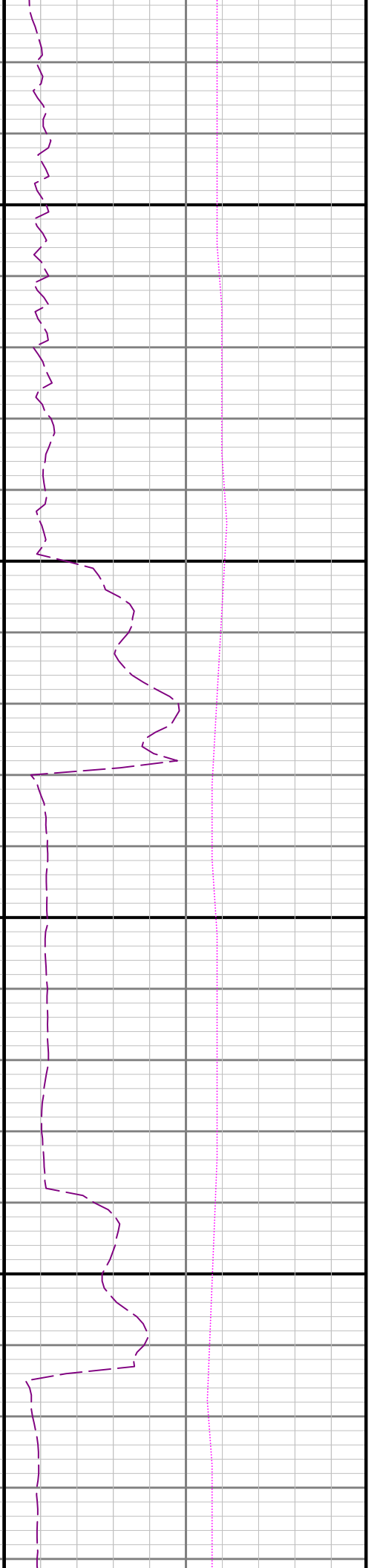
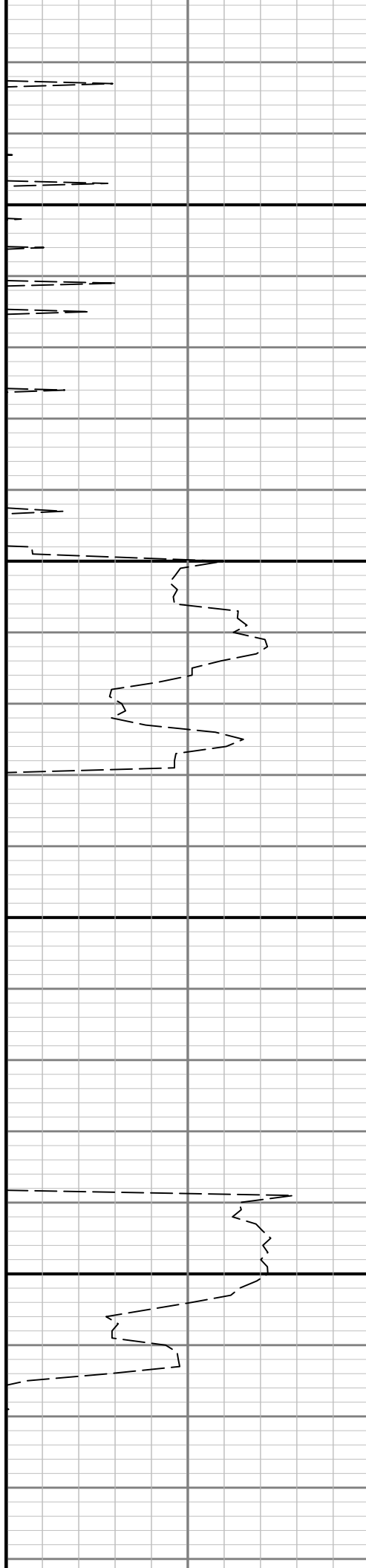


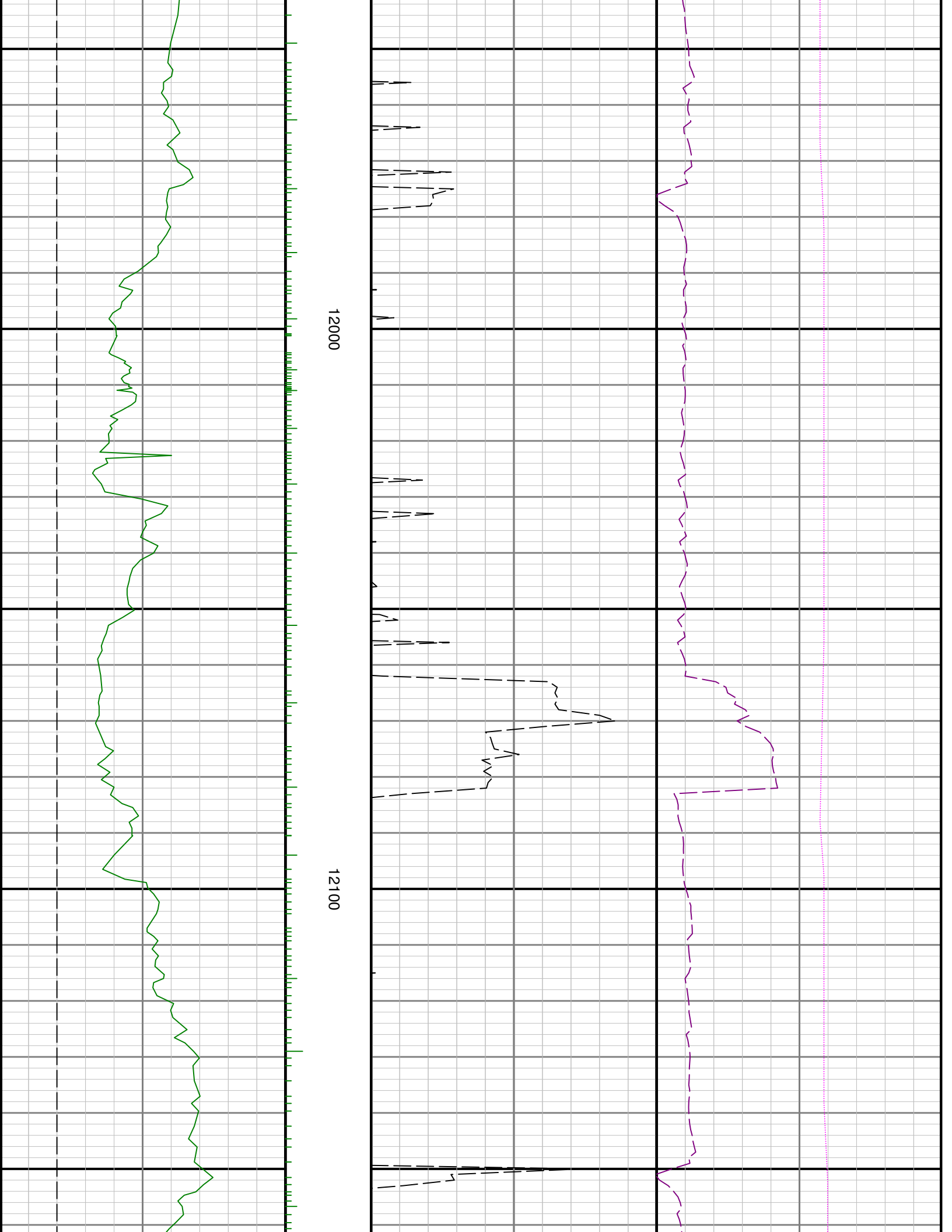


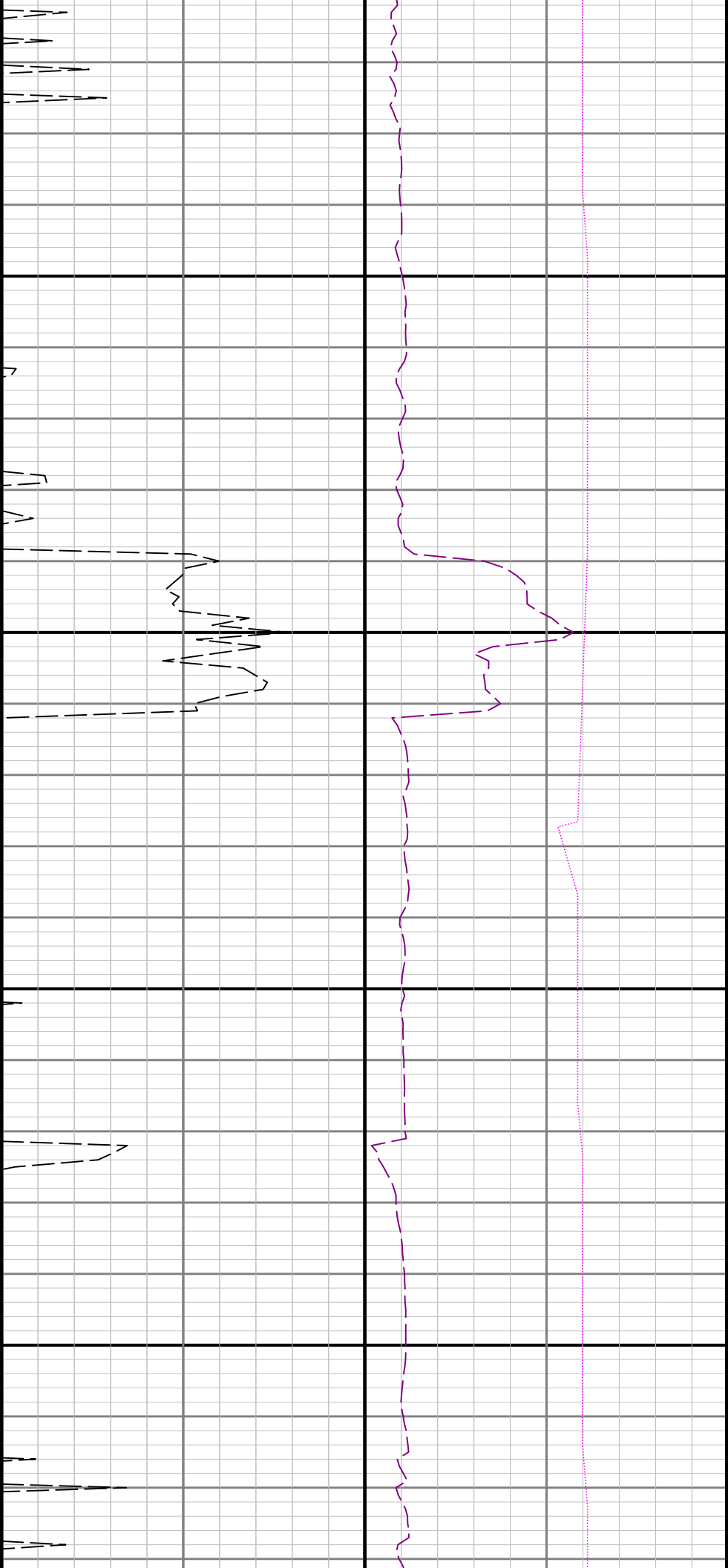


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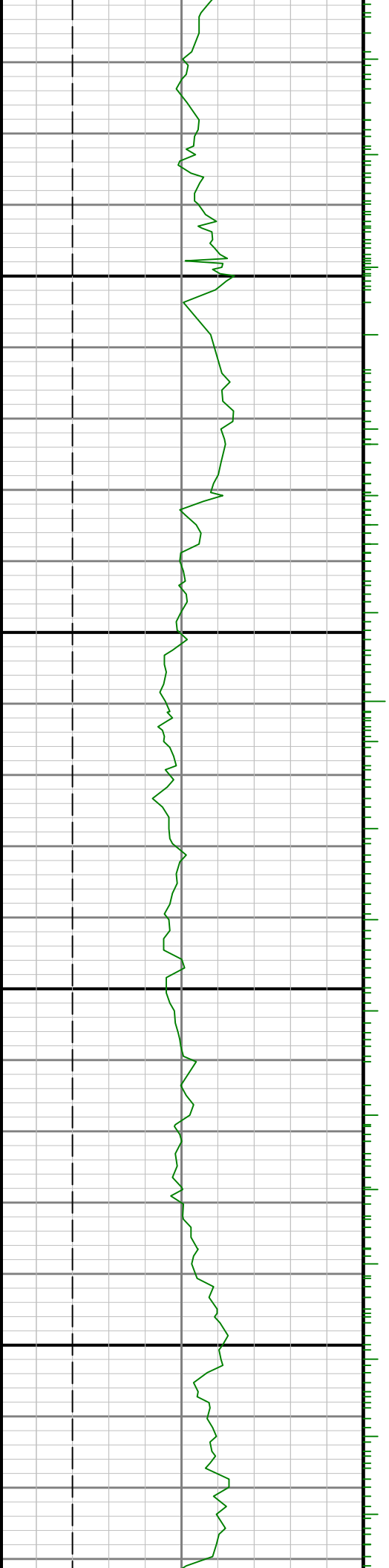


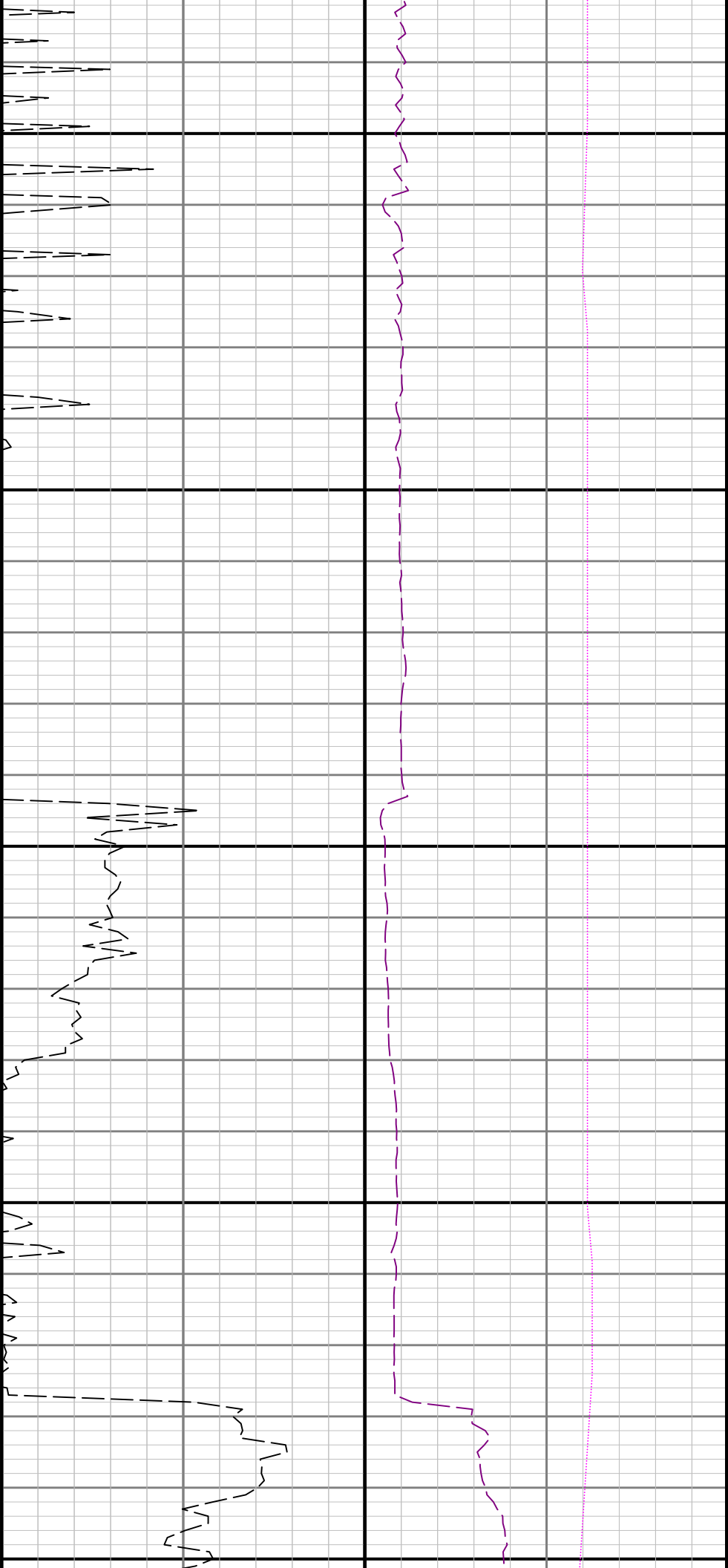




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12300





12400

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12600

