



Gamma Ray

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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	Bottom	From	To	Start Logging	End Logging	
						(ft)	(ft)	(ft)	(ft)			
1	1	13.500	PDC	4.50	Motor	140.00	1558.00	140.00	1558.00	2017-07-20 14:06	2017-07-20 21:26	6.33
2	2	8.500	PDC	3.00	AutoTrak Curve	1557.00	12504.00	1557.00	12518.00	2017-08-12 22:28	2017-08-15 10:57	54.02

Crew

Name		Arrive Wellsite	Depart Wellsite	Name		Arrive Wellsite	Depart Wellsite	Name		Arrive Wellsite	Depart Wellsite
Andrew Clancy		2017-08-12	2017-08-14	Pierce Lovesee		2017-08-12	2017-08-16	Bryan Severson		2017-08-14	2017-08-16

Mud Properties Record

Date / Time	Run No.	Measured Depth (ft)	Mud Type	Density (ppg)	Viscosity (cP)	pH	Fluid Loss (cm3)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
2017-07-20 05:21	1	20.00	Water Based Mud	8.5	54	9.5	0.0	0/100	Flow Line	800	0.00
2017-08-12 19:00	2	1558.00	Diesel-Oil Based Mud	10.0	27	N/A	0.0	74/26	Active Pit	24000	0.00
2017-08-13 19:00	2	7158.00	Diesel-Oil Based Mud	10.0	23	N/A	0.0	73/27	Active Pit	21000	0.00
2017-08-14 19:00	2	10329.00	Diesel-Oil Based Mud	10.0	22	N/A	0.0	75/25	Active Pit	24000	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	NaviTrak	11912324	VSS	13.13	49.20	8.000	0.000
1	NaviTrak	11912324	Directional (mag)	13.13	49.20	8.000	0.000
2	ATC_SU	12480108	Near Bit Inclination	5.93	6.73	7.000	4.330
2	ATC_SU	12480108	Near Bit VSS	5.93	6.73	7.000	4.330
2	ATC_MWD	12168891	Gamma (single)	2.20	12.36	7.000	3.250
2	ATC_MWD	12168891	Directional (mag)	12.26	22.42	7.000	3.250

Service and Tool Mnemonics

Mnemonic	Name	Description
NTK	NaviTrak	Probe Based Directional Module, NaviTrak Platform
ATC_SU	ATC_SU	Auto Trak Curve Steering Unit
ATC_MWD	ATC_MWD	Auto Trak Curve MWD
ATC_LCPM	ATC_LCPM	Auto Trak Curve LCPM


Comments

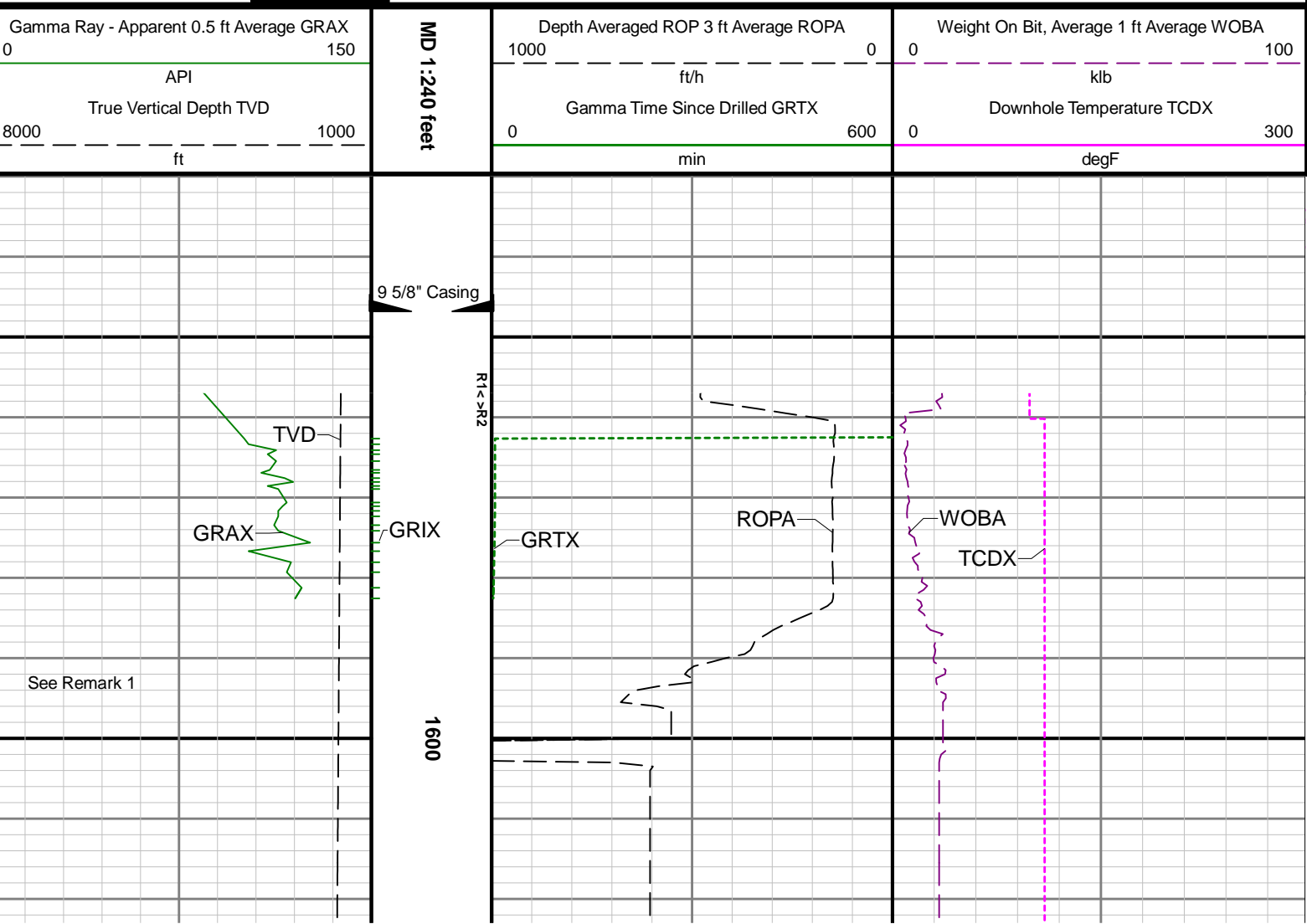
1	Depth measurements were obtained from a depth control system not supplied or operated by Baker Hughes. Due to lack of control by Baker Hughes logging engineers, depth calibrations and measurements could not be independently verified.
2	Calibration of the depth control system was performed by Baker Hughes logging engineers at 1557 feet TVD.
3	Gaps in Gamma Ray data are present throughout the log due to downlinking while drilling ahead.

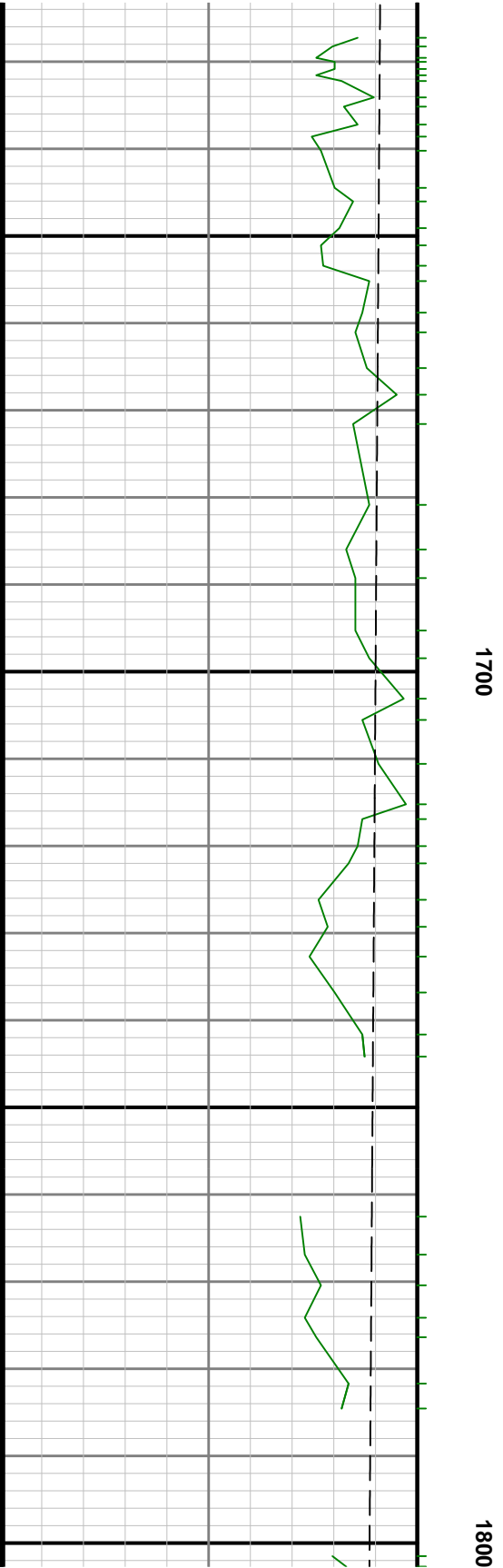
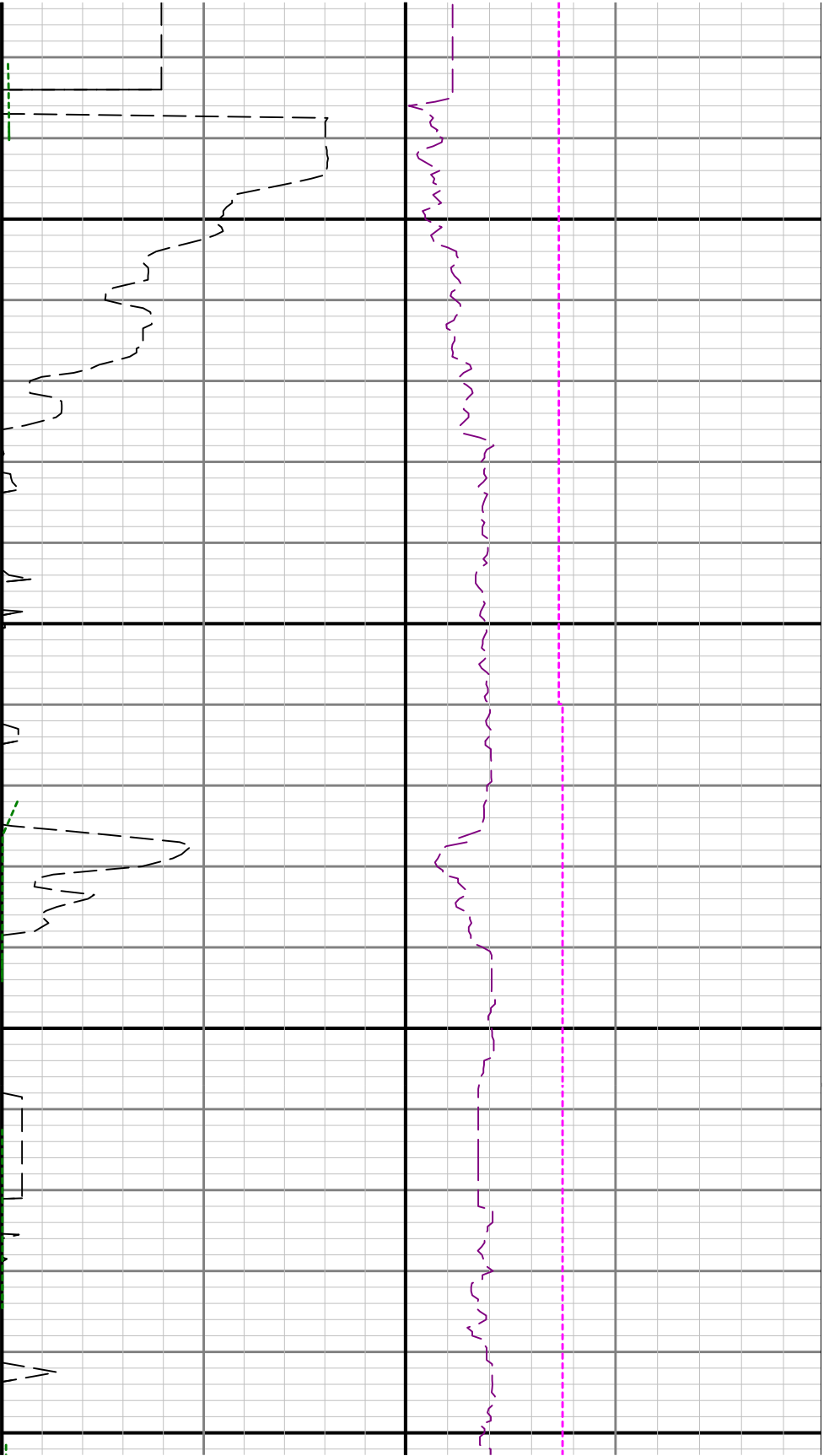
4 Óæ'ŋ'ÁP' * @•ŠY ŌÄŮ • ÁCá áãâĀ Ą/ą & Qā qā ā { æ'ŋ'c̣'æ'ŋ'Qō { æŬ æ'š'q'ā/Qā & q'ā q'ā ā [æ'ŋ'Á P'ŊS & Qā qā ā [œ'ŋ'Á c'ŋ'æ'ŋ'š'æ'ŋ' { àr'Ár [{ AfííĀ
to 12518 feet MD (1557 to 7074 feet TVD).

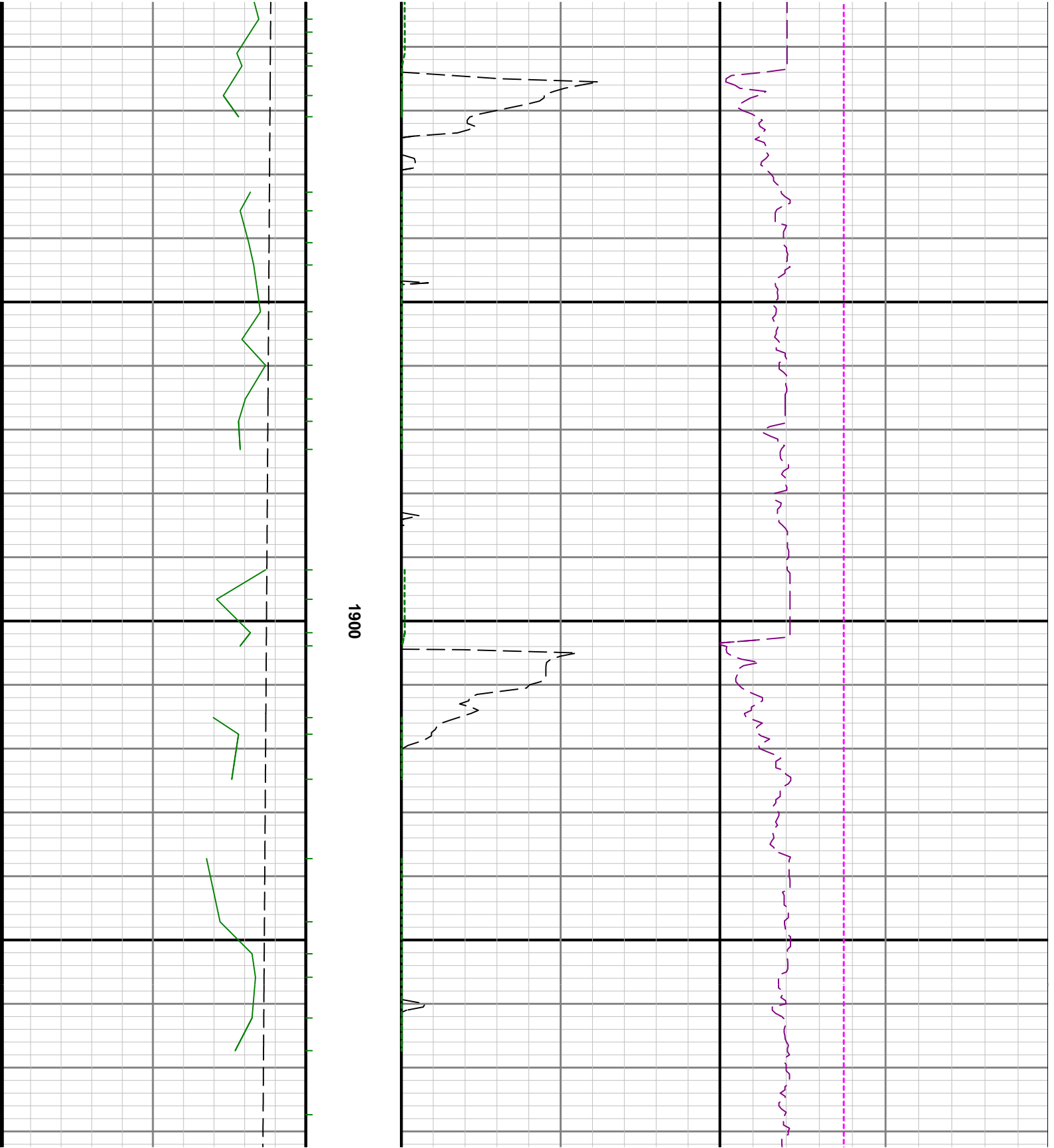
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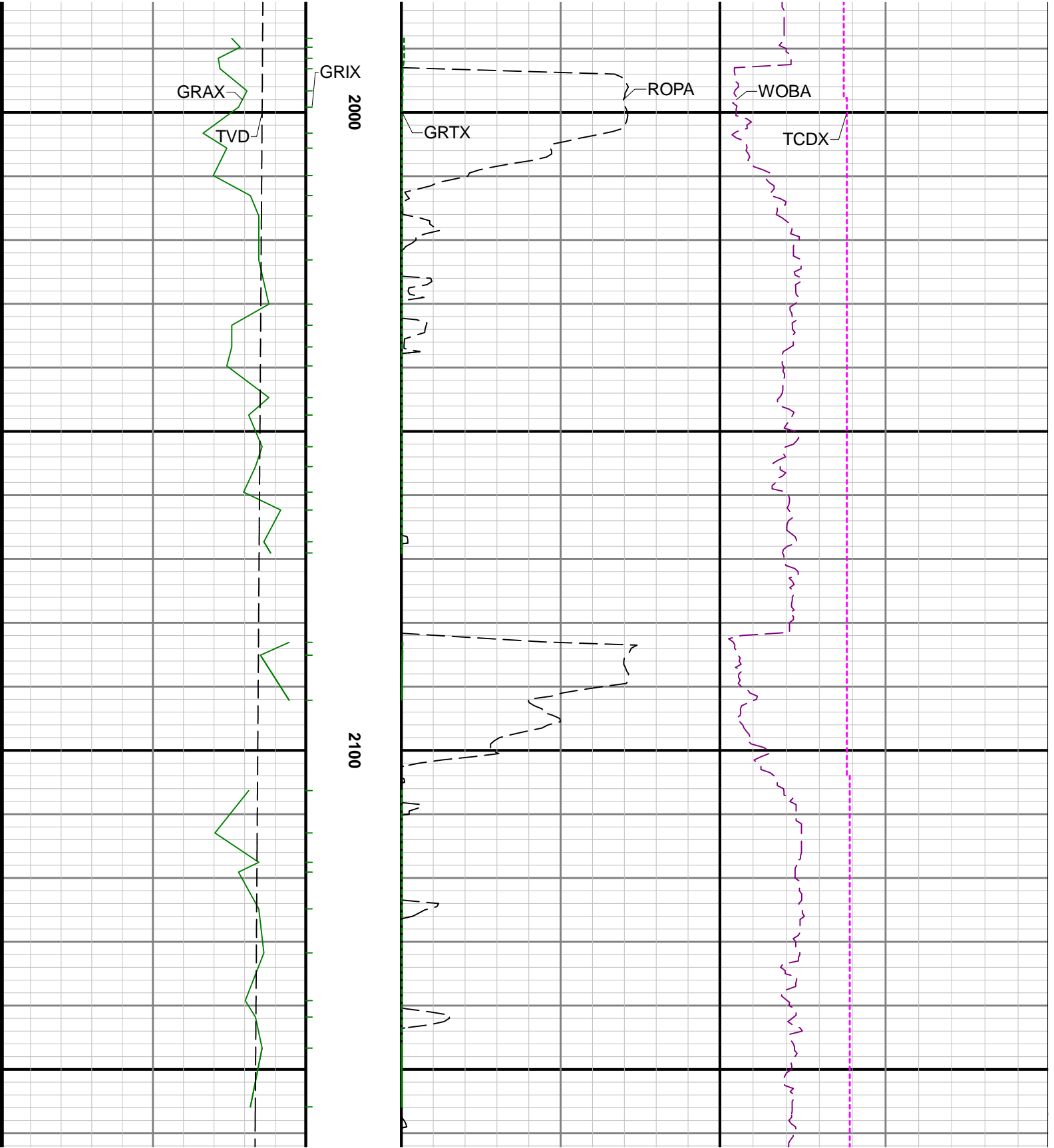
Number	Measured Depth (ft)	Hole Section (in)	Run No.	Remark
1	1582.00	8.500	2	No gamma data was logged during the interval from 1582 to 1627 feet MD (1582 to 1627 feet TVD) due to surface system issues while drilling ahead, Customer was made aware.
2	12505.00	8.500	2	The interval from 12505 to 12518 feet MD (7074 feet TVD) was not logged due to sensor to bit offset at well TD.

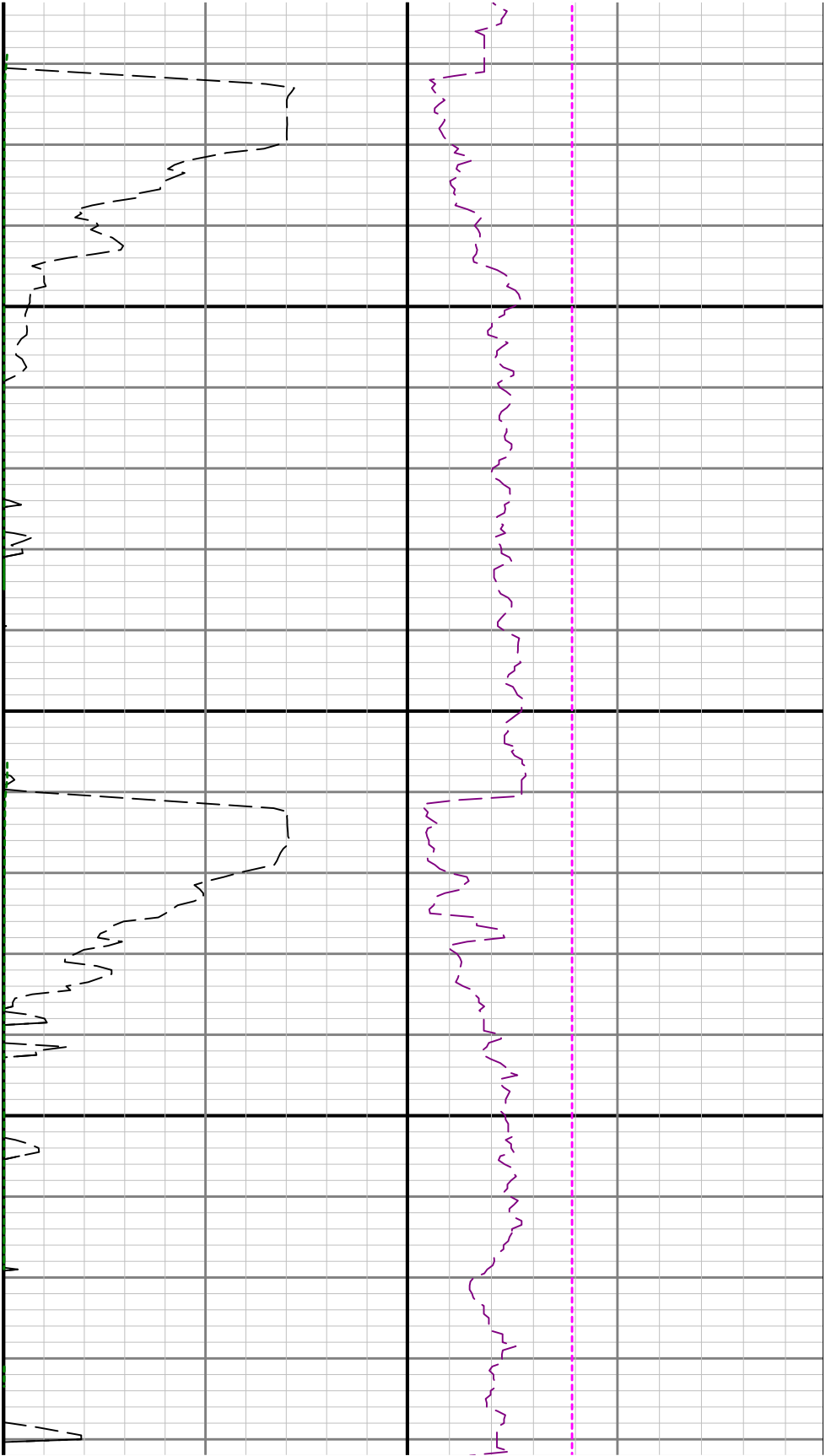
	Company	Great Western		
	Well	Raindance FD 20-319HN		
	Interval	Date From:	2017-07-20 09:00:16	Top: 1557.00
		Date To:	2017-08-15 11:00:00	Bottom: 12518.00
	Created	2017-08-15 12:09:03		





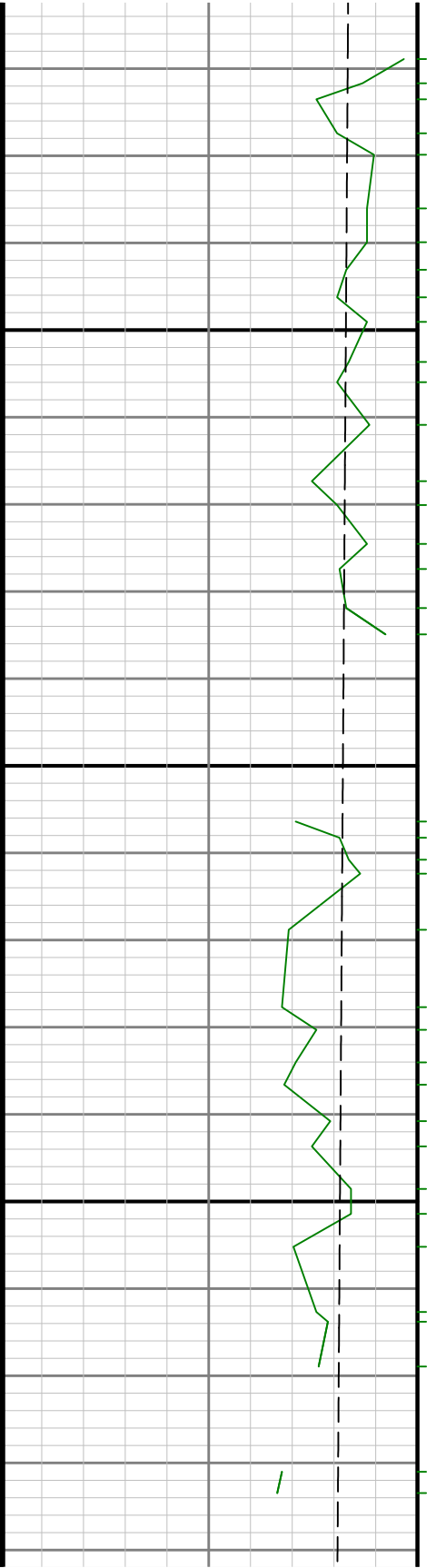


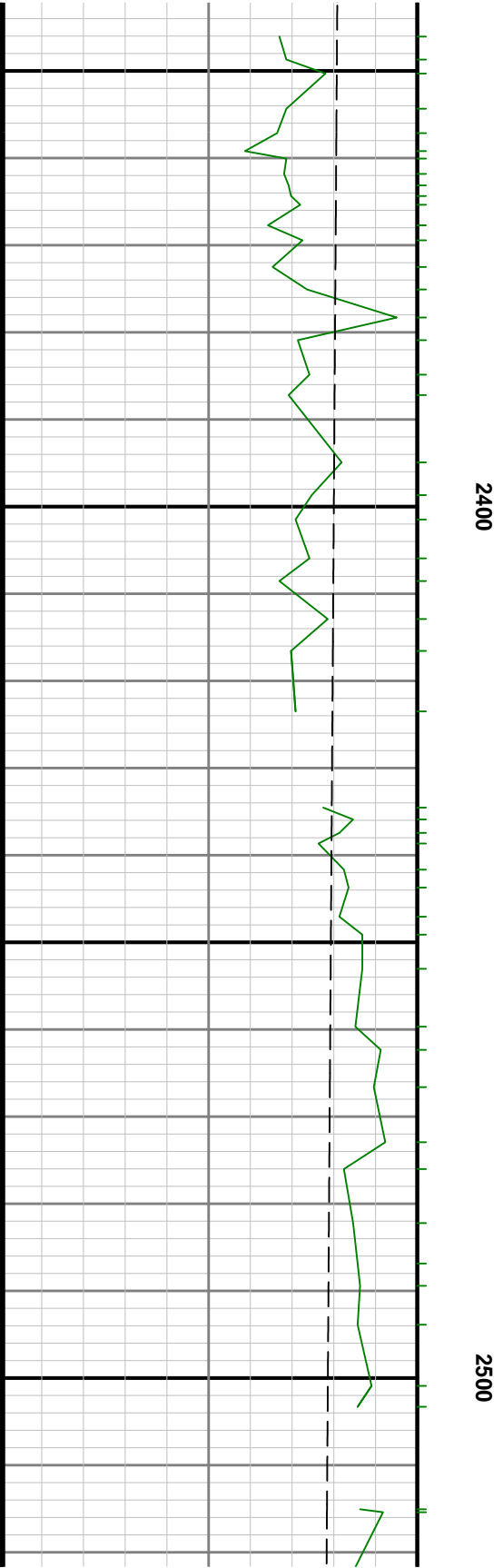
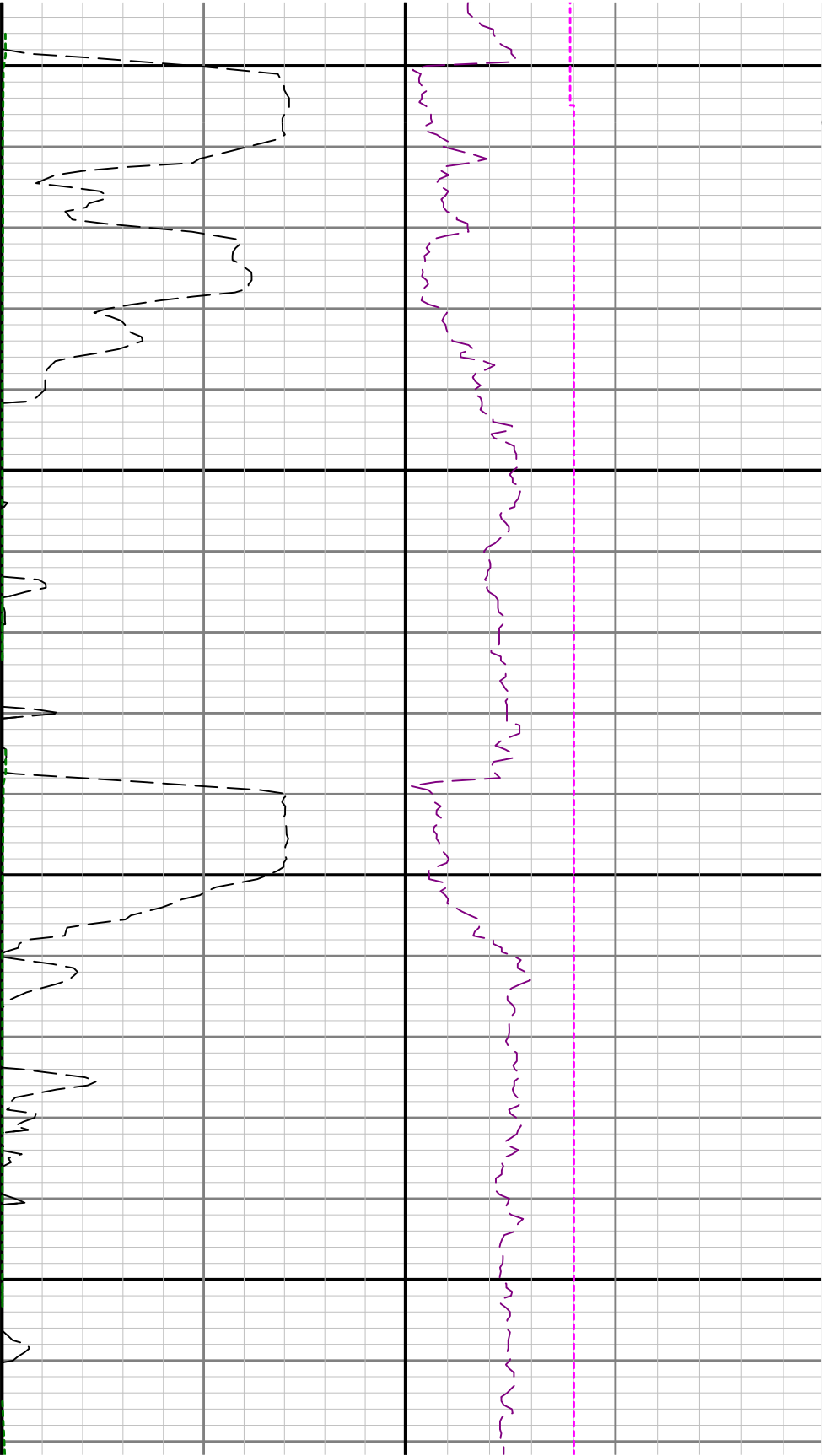


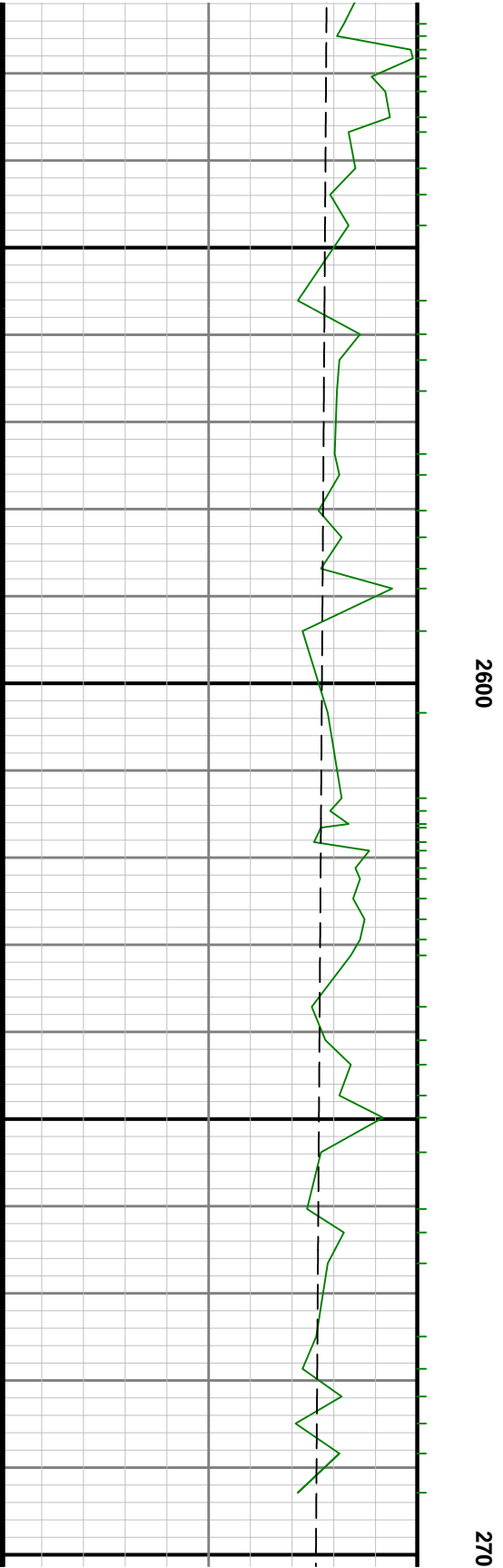
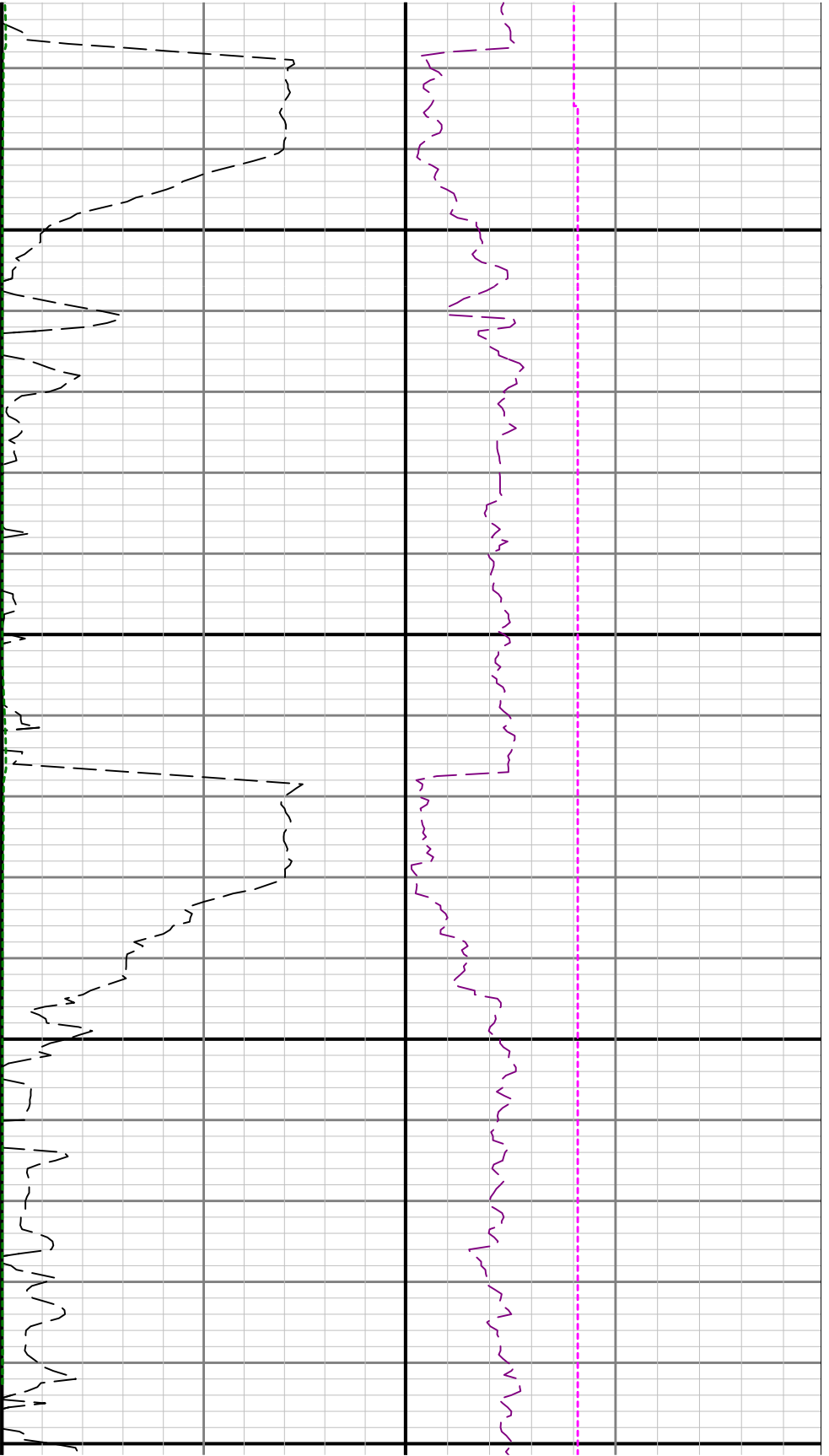


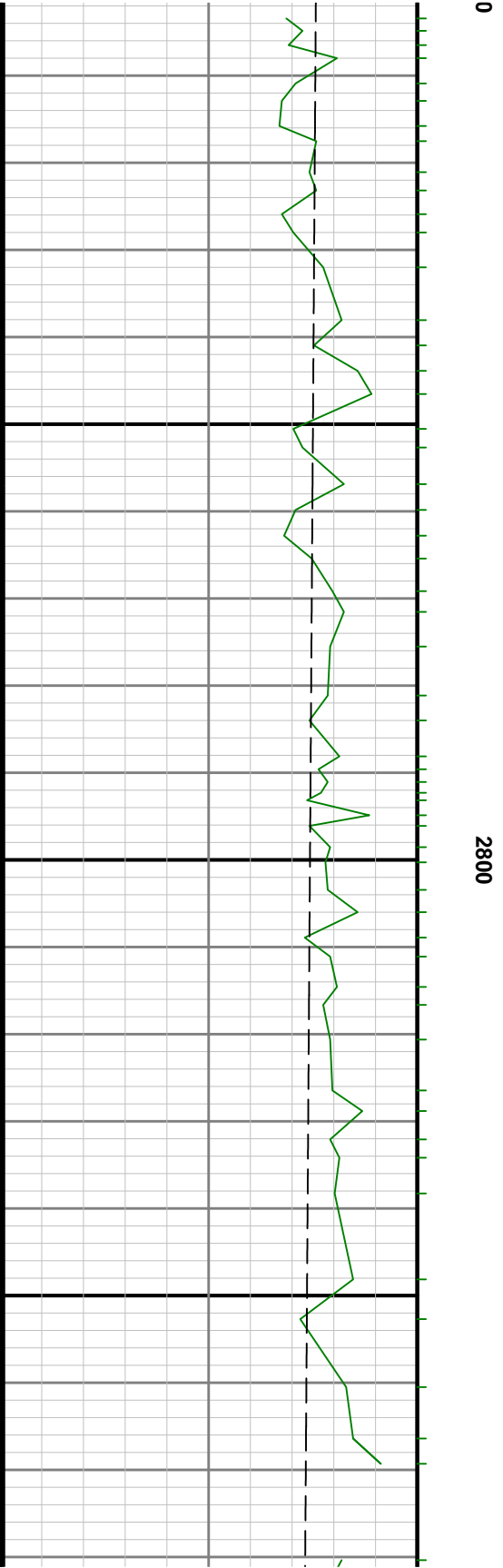
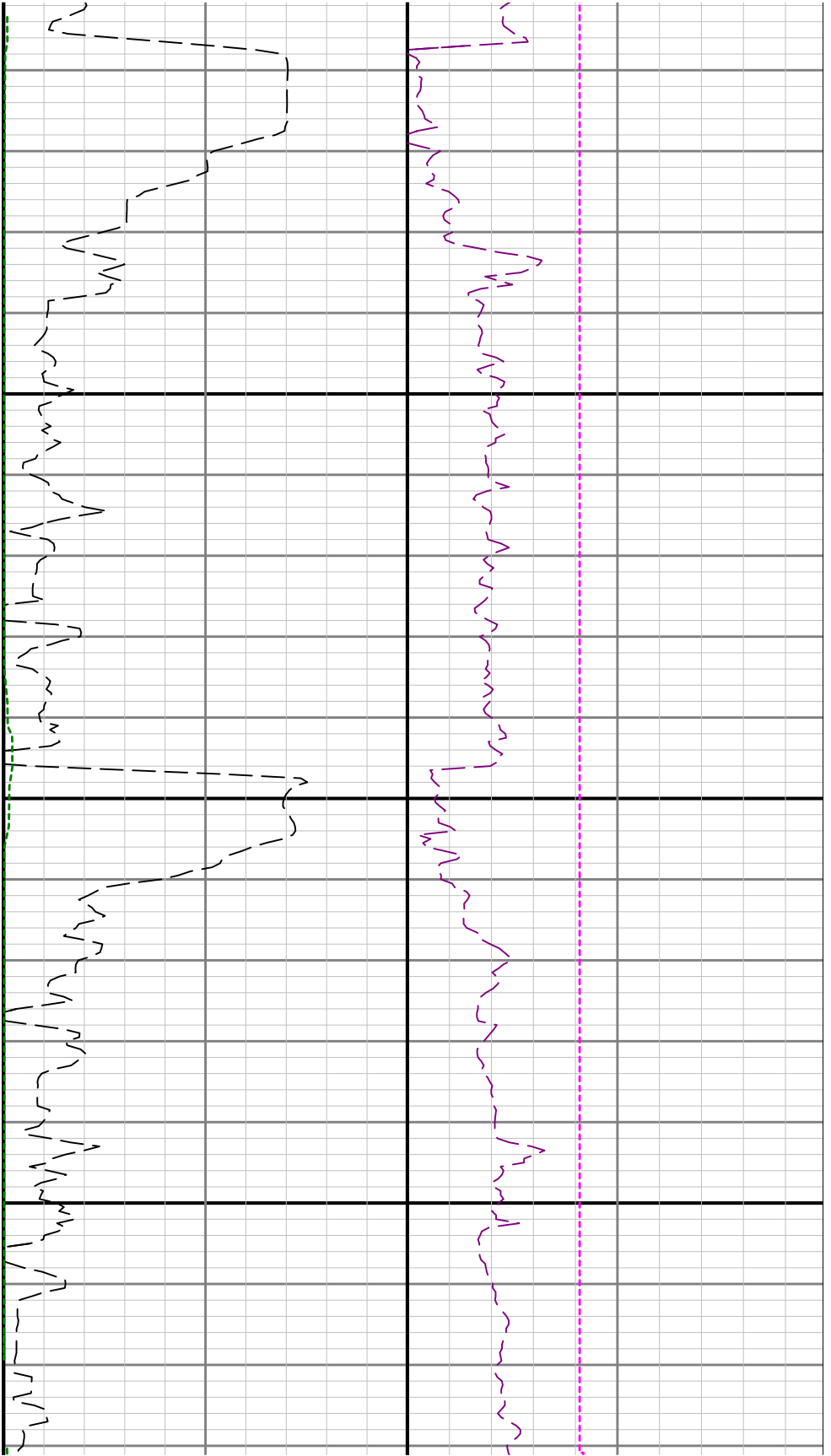
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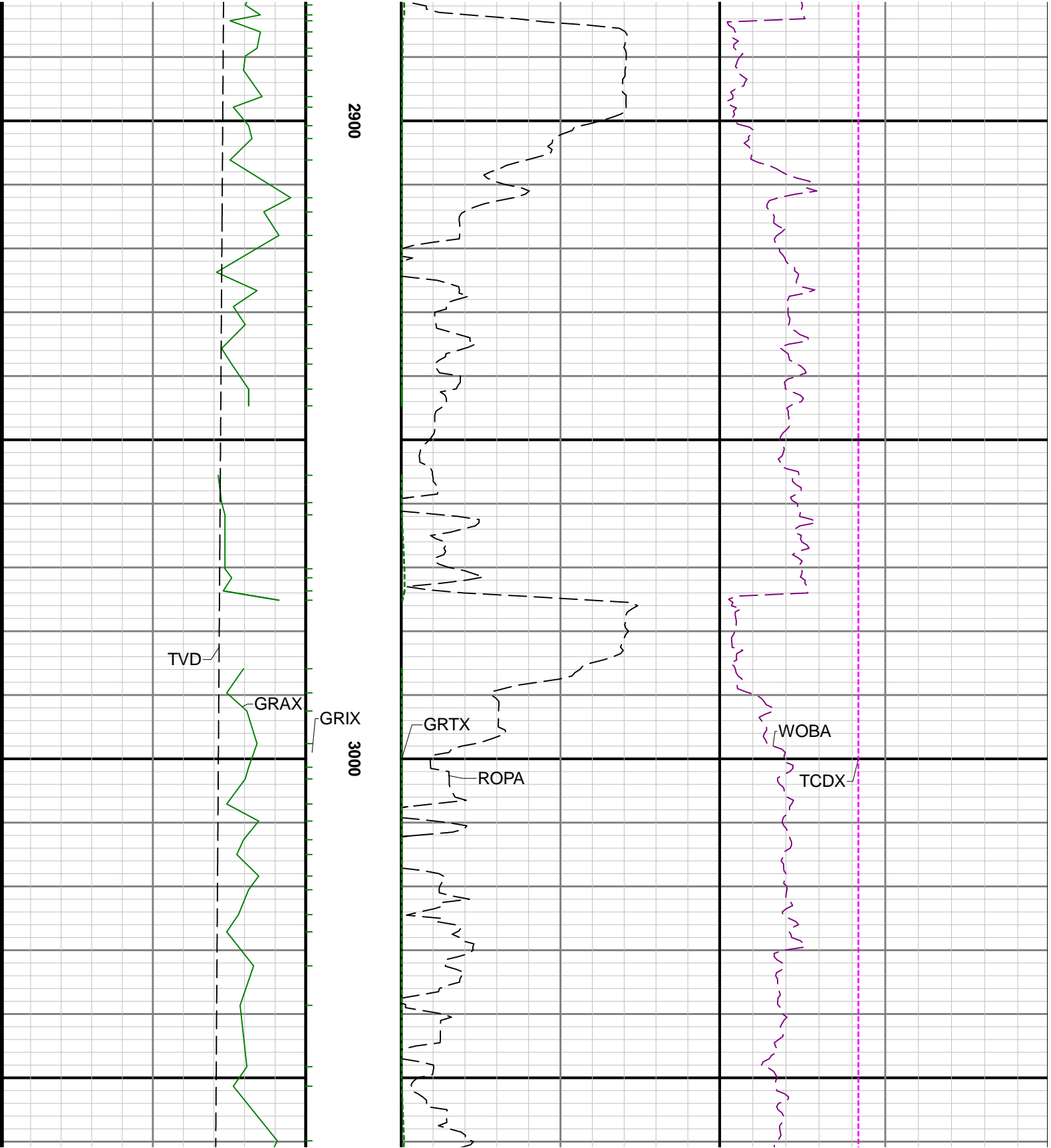
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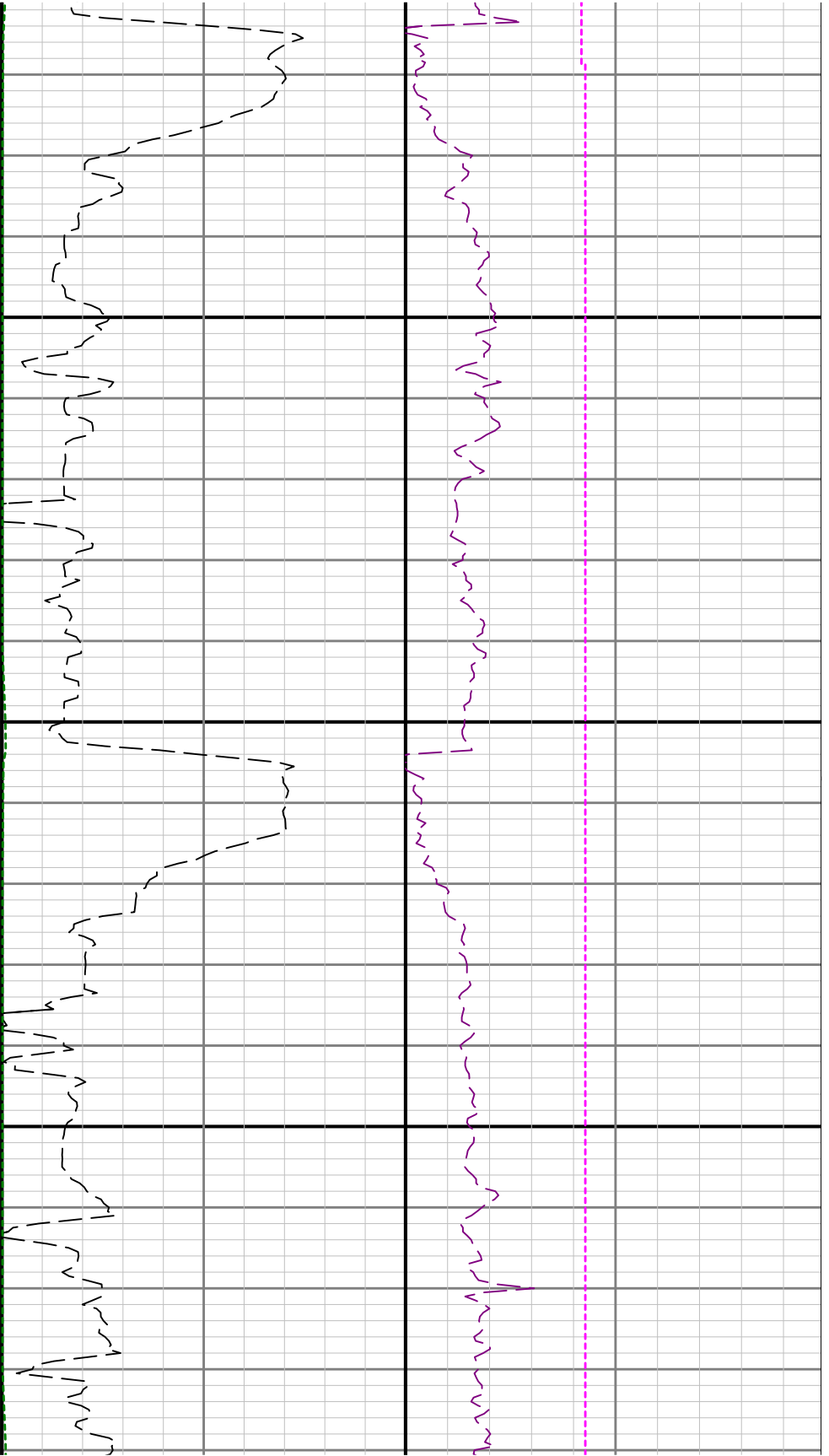






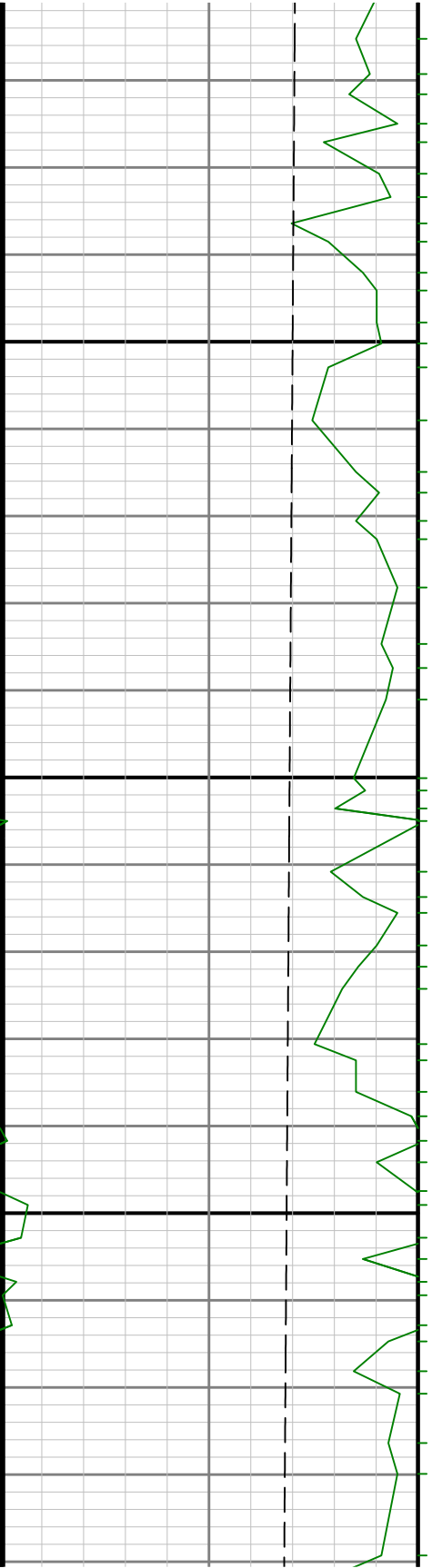


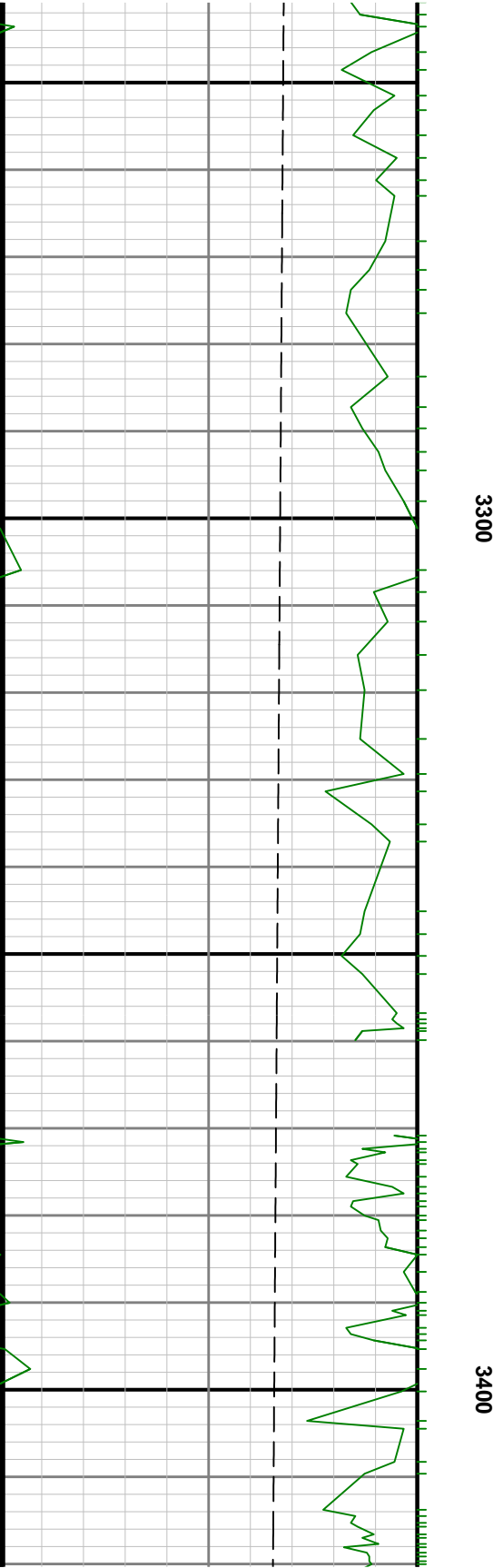
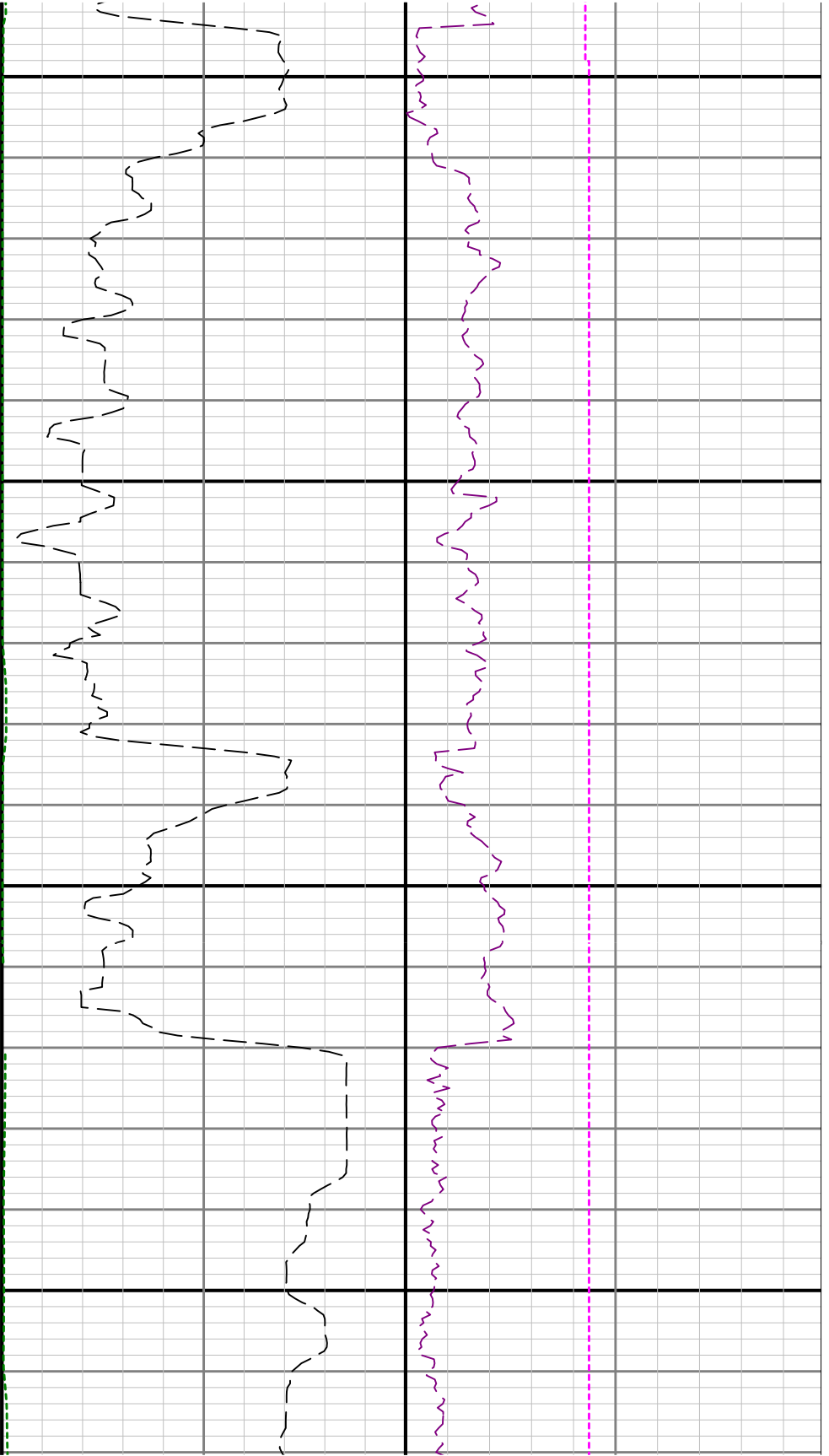


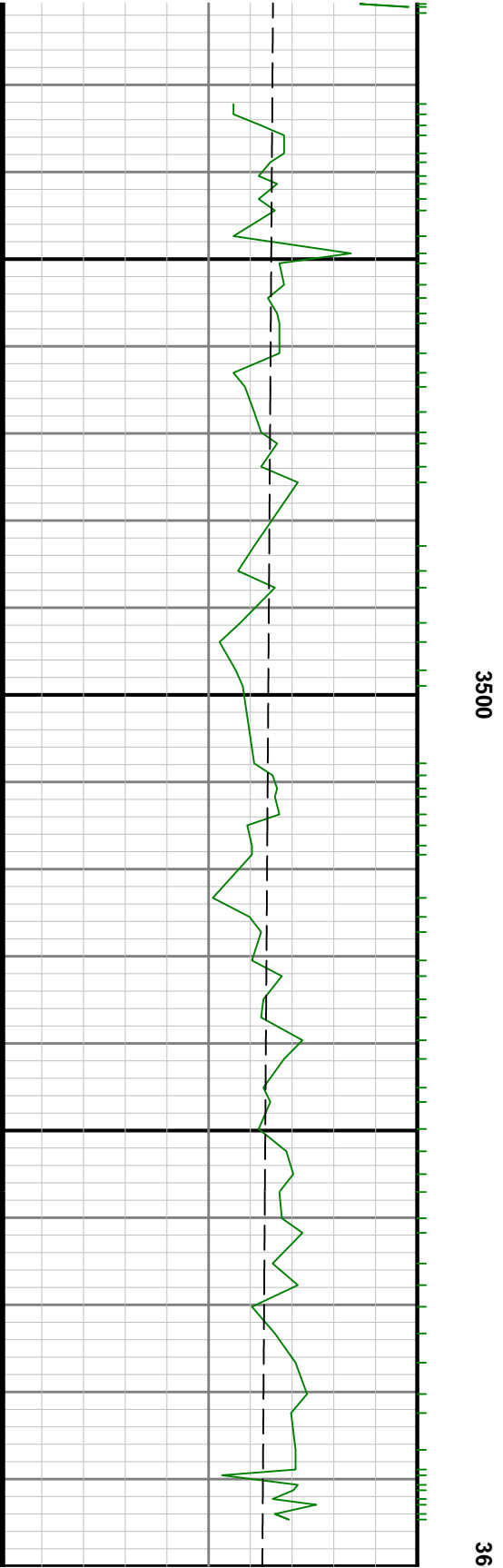
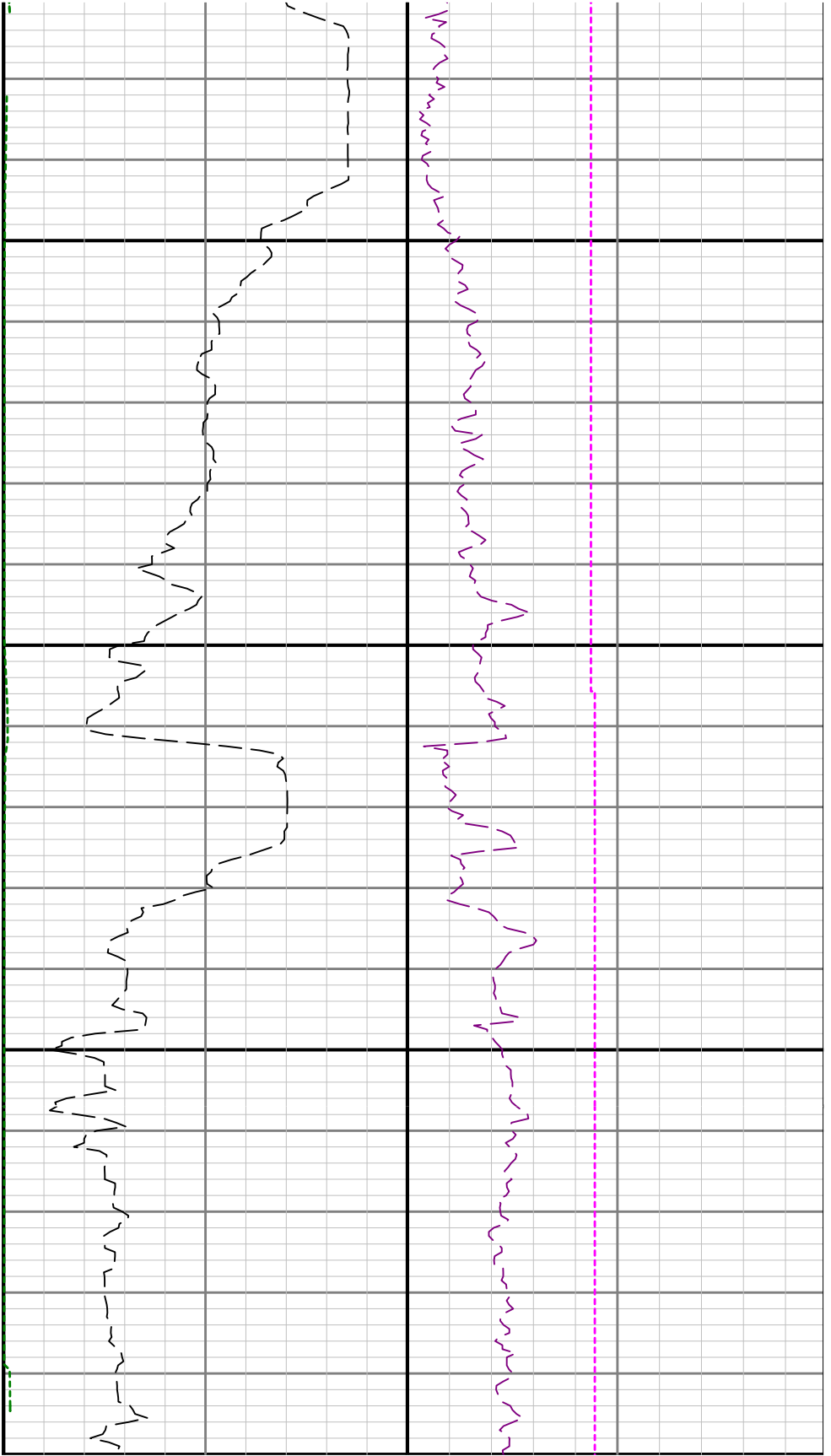


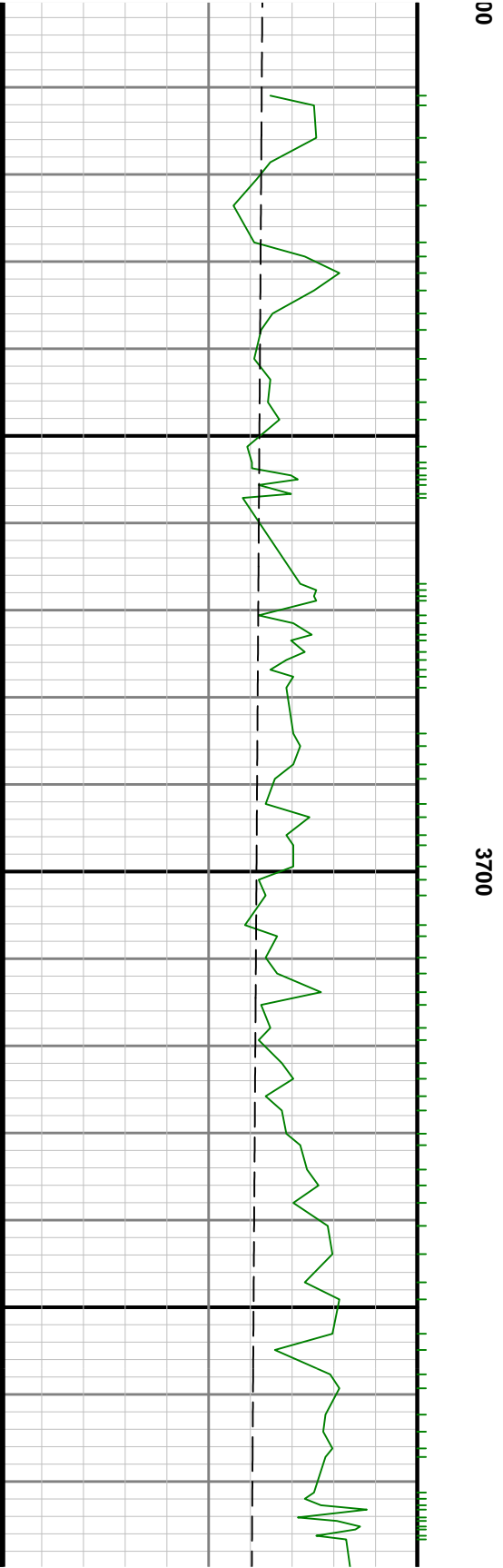
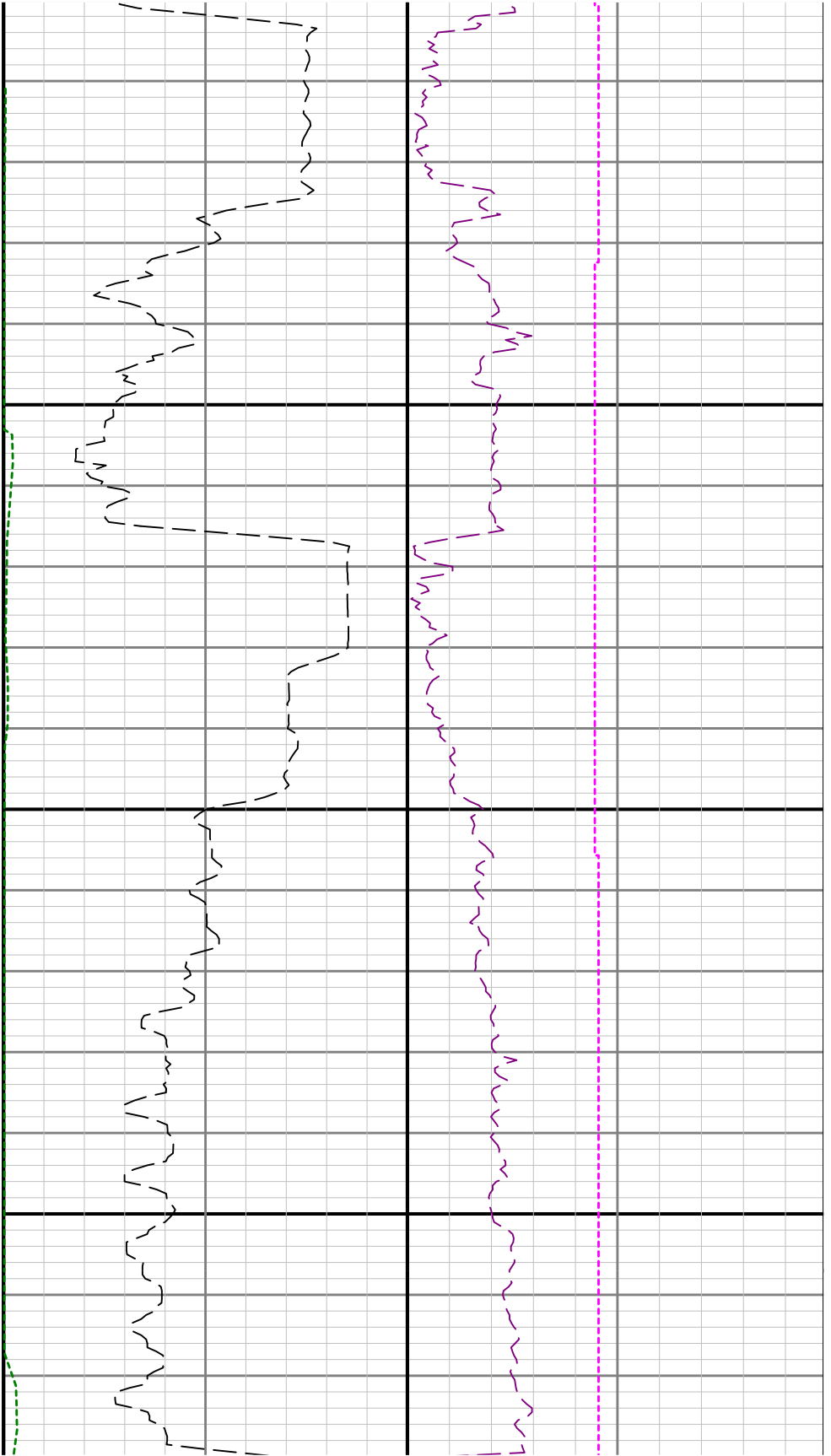
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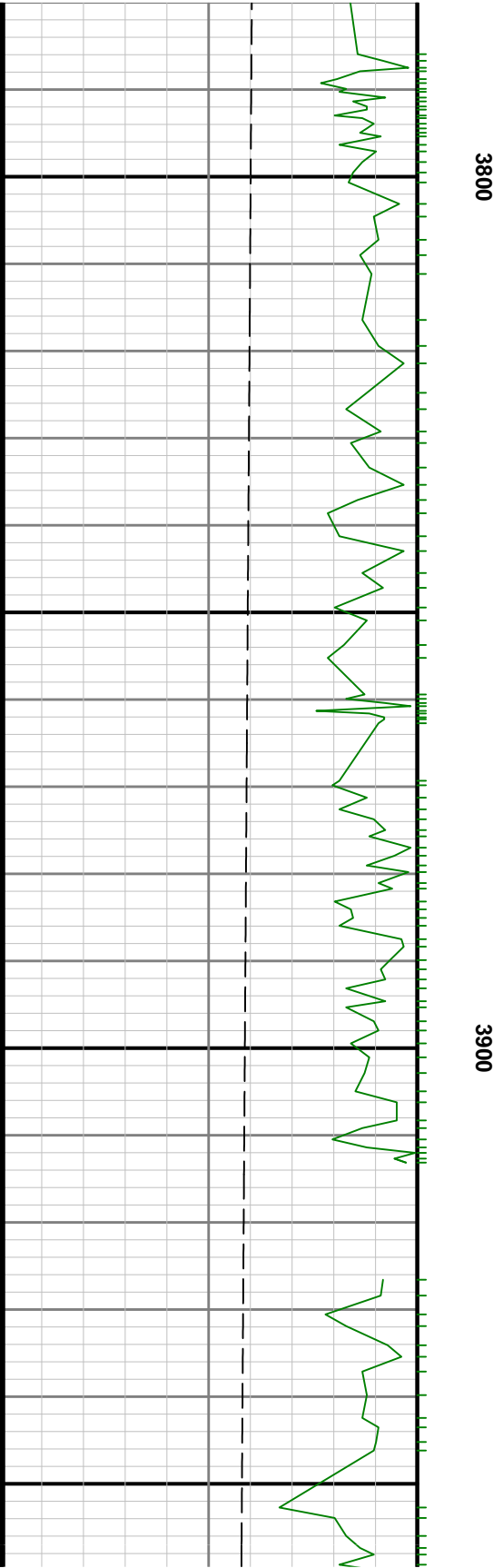
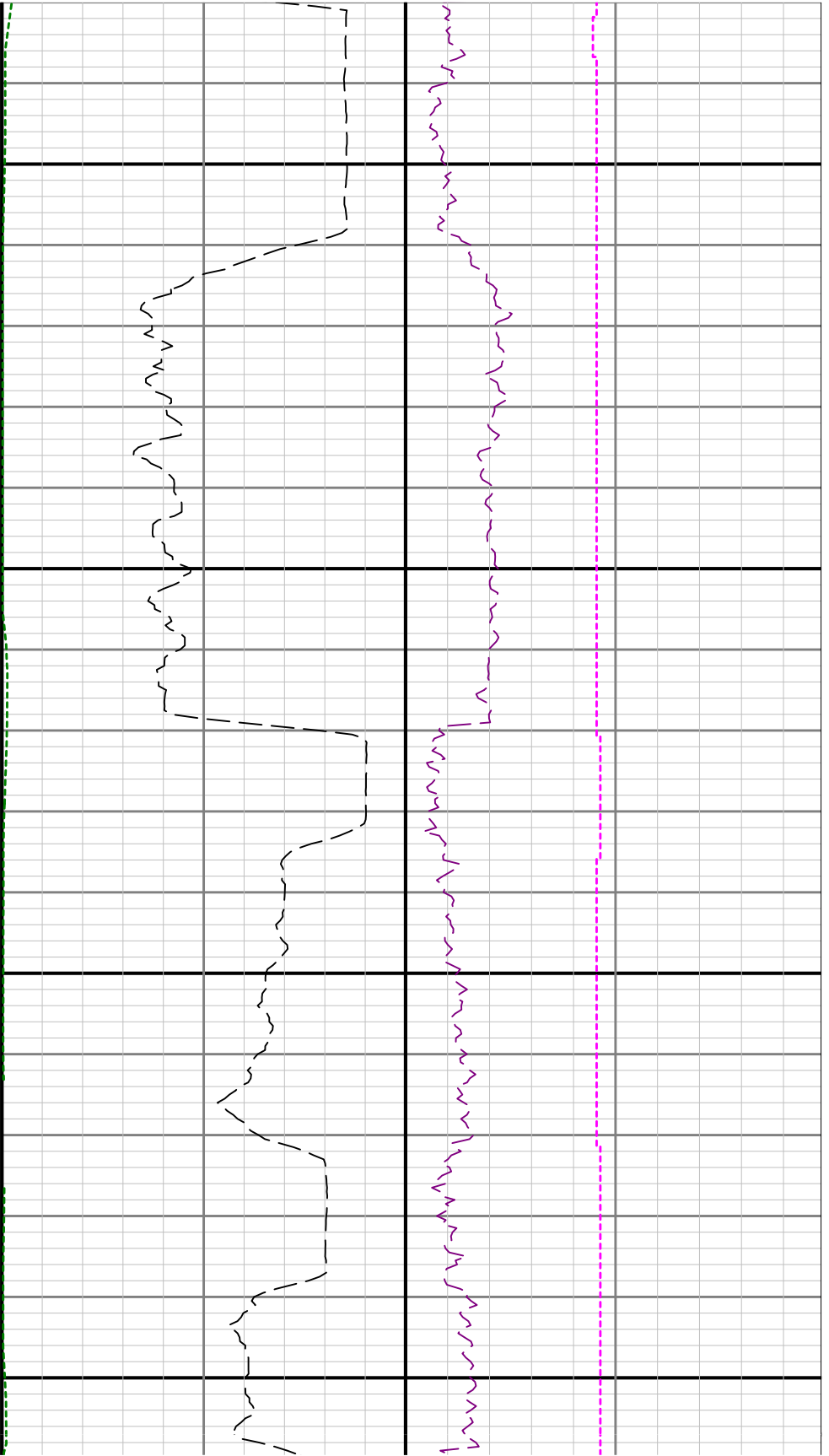
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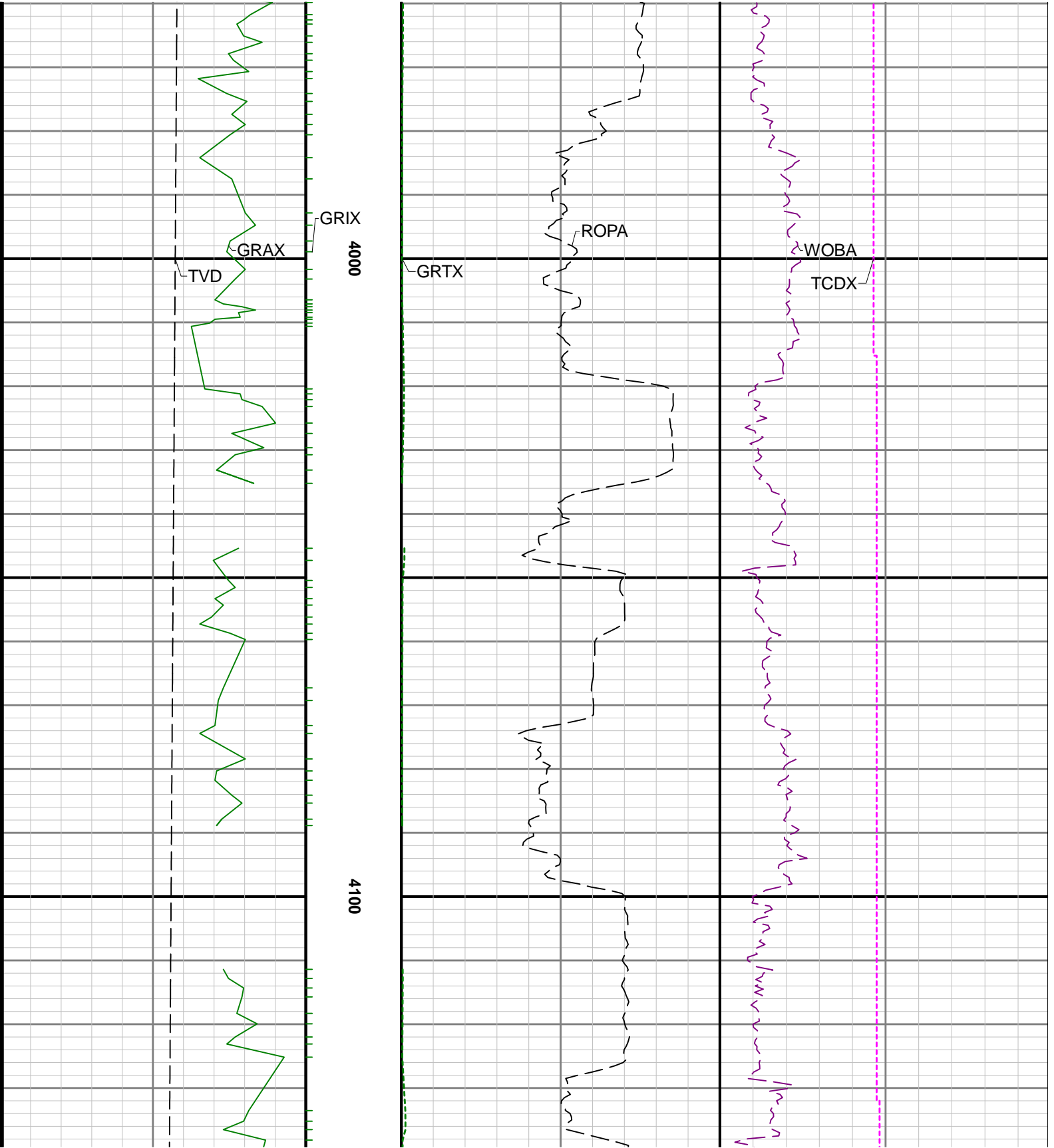


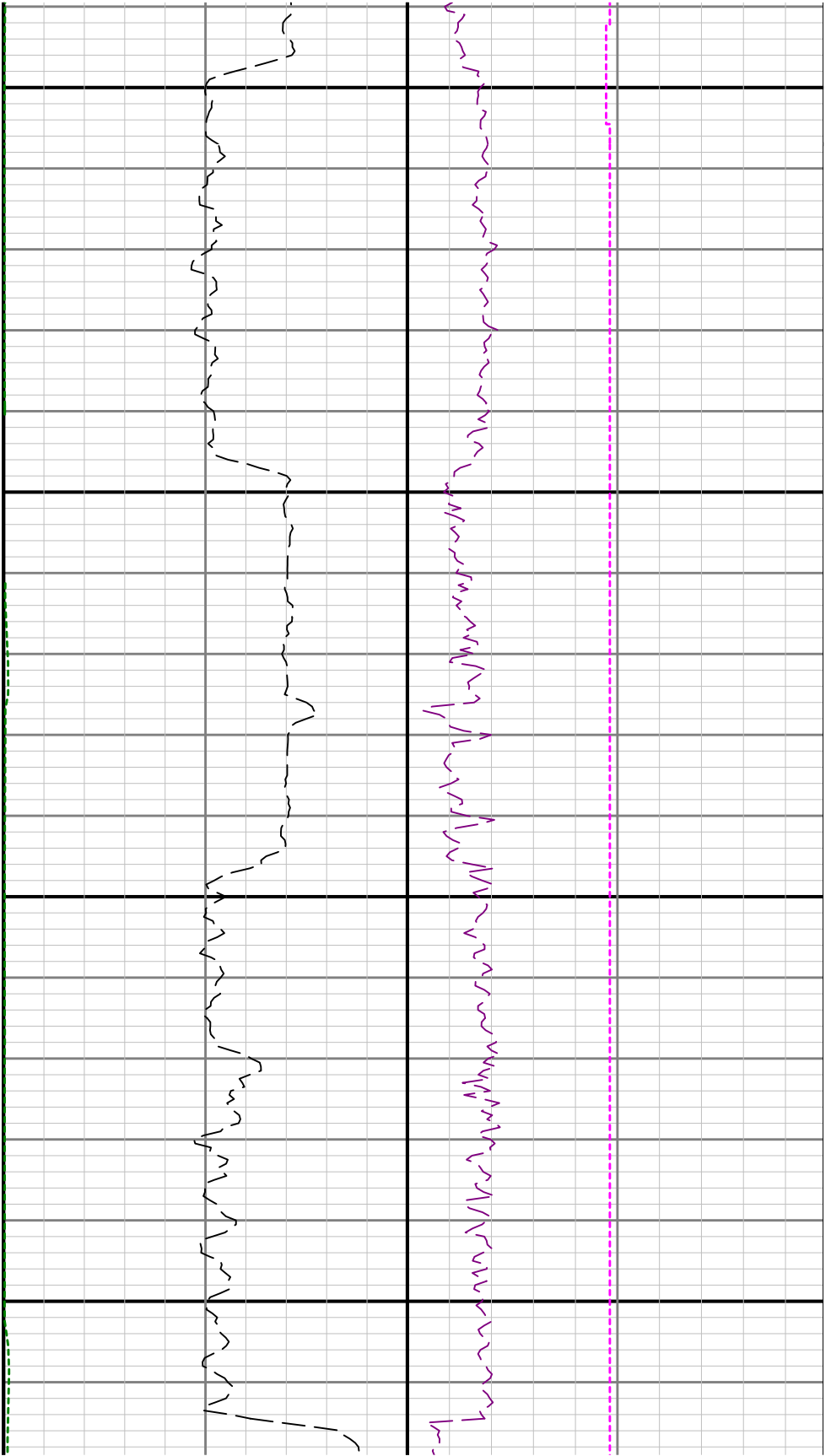






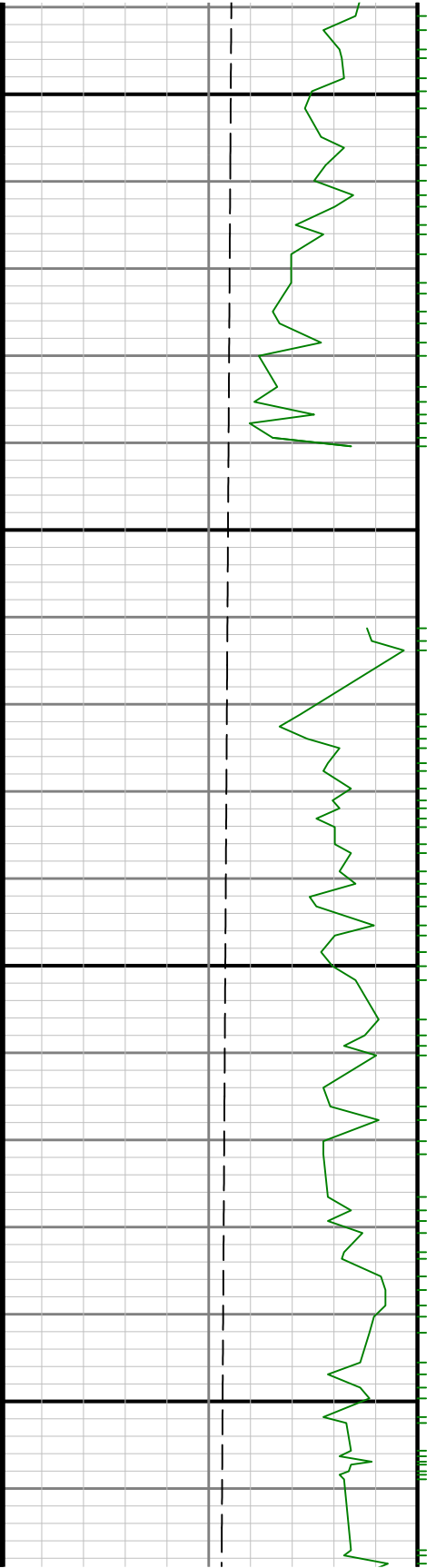


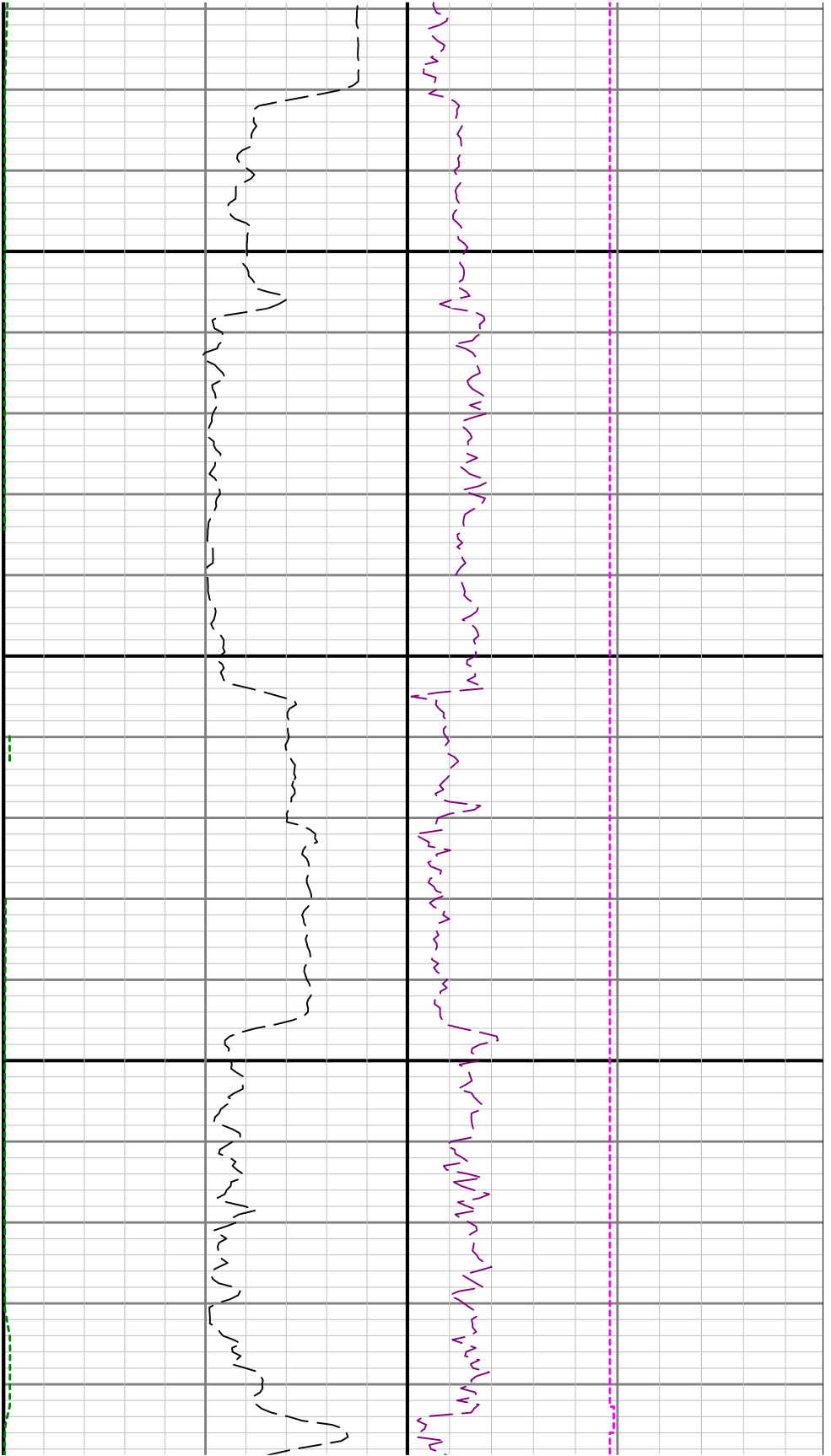




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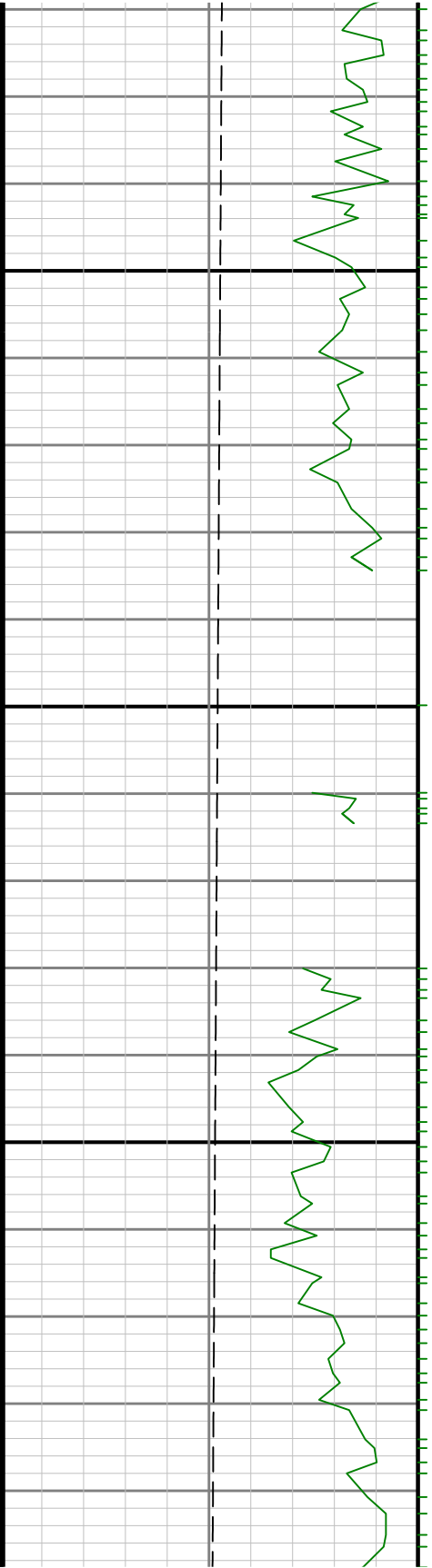
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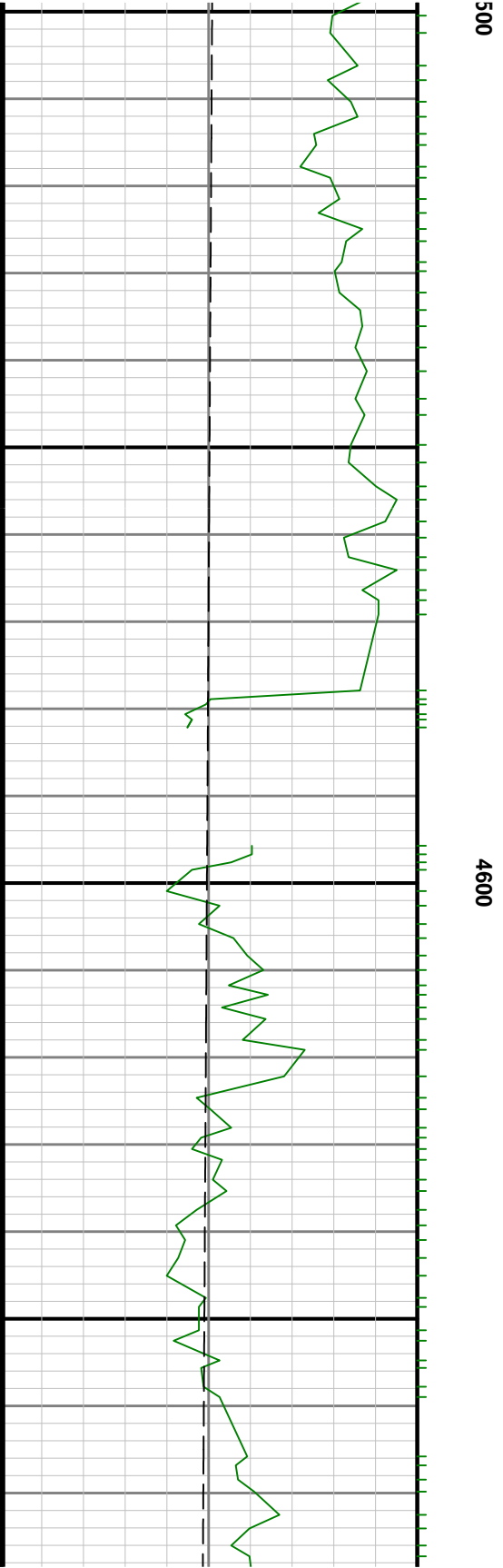
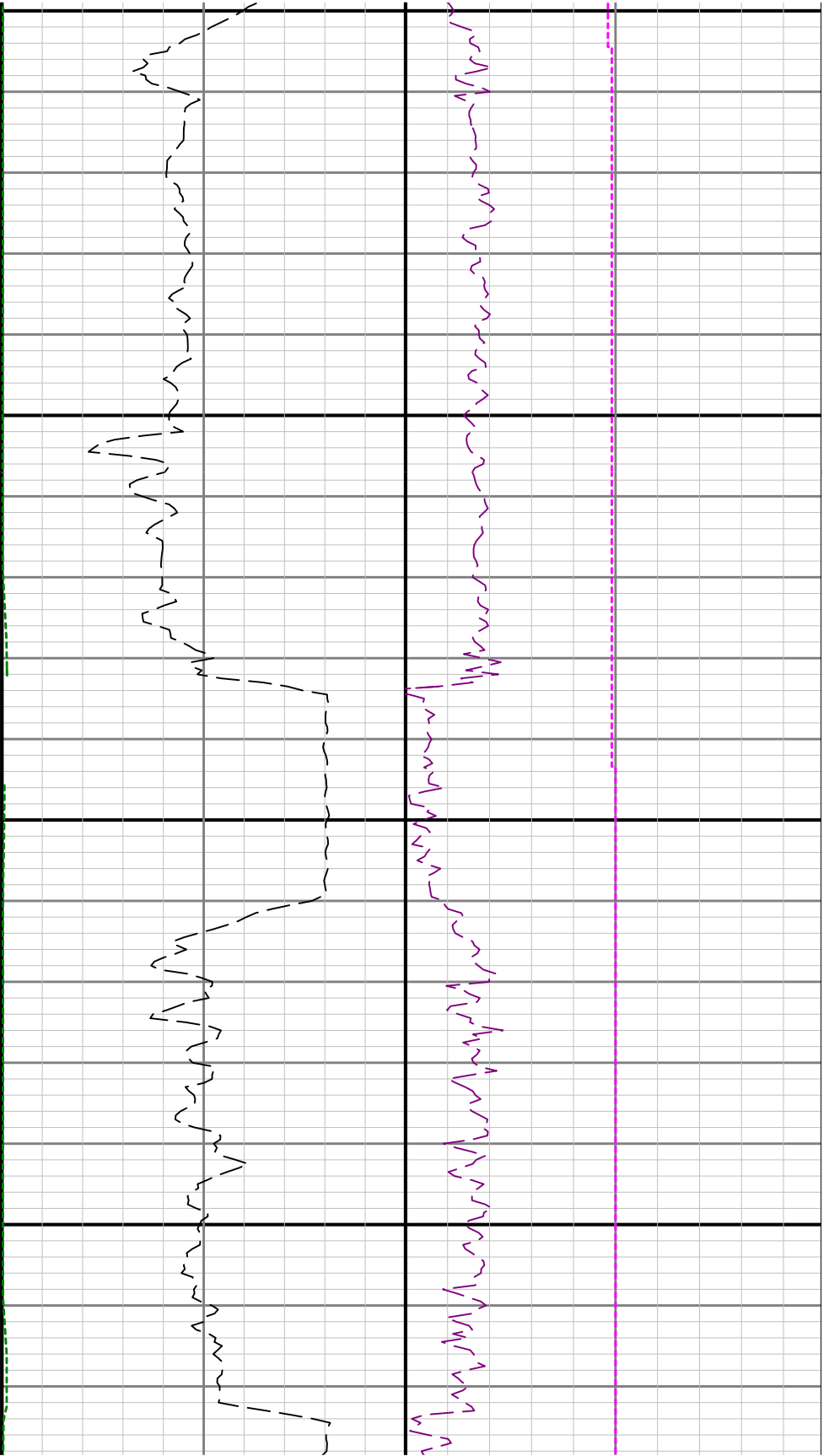


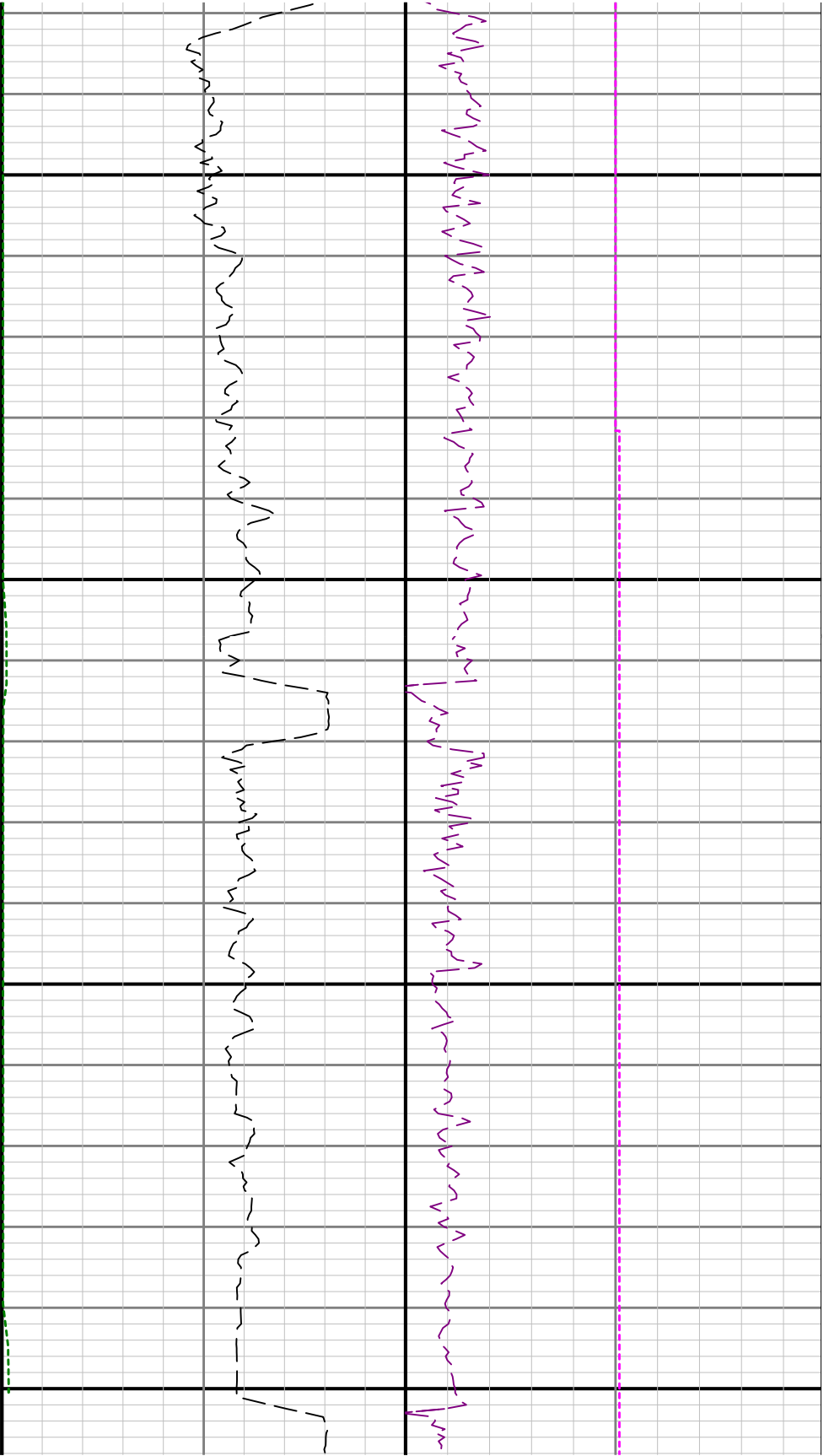


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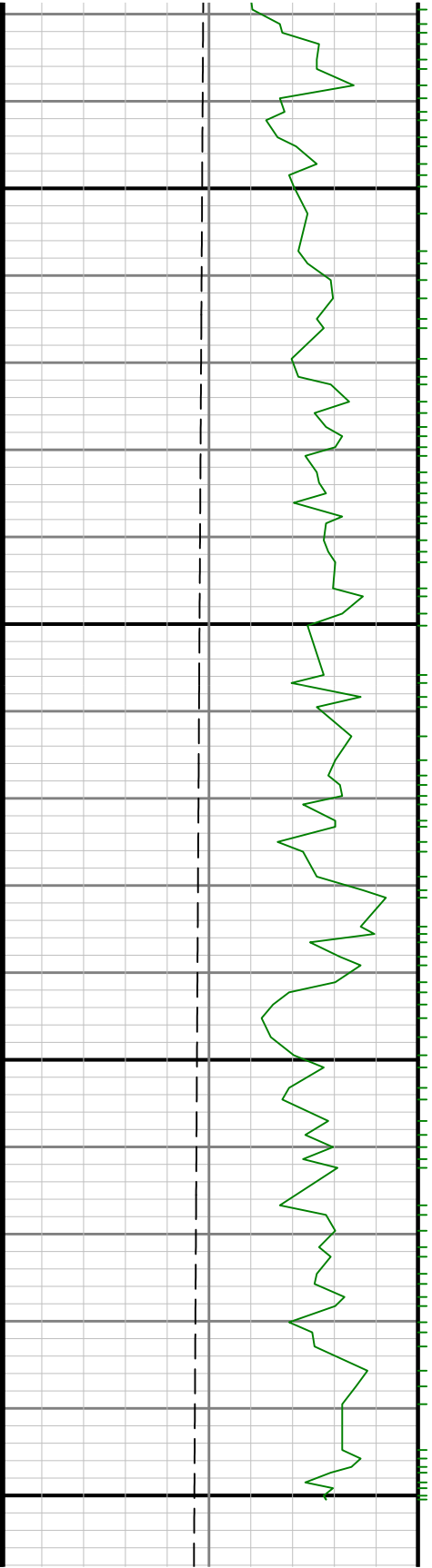


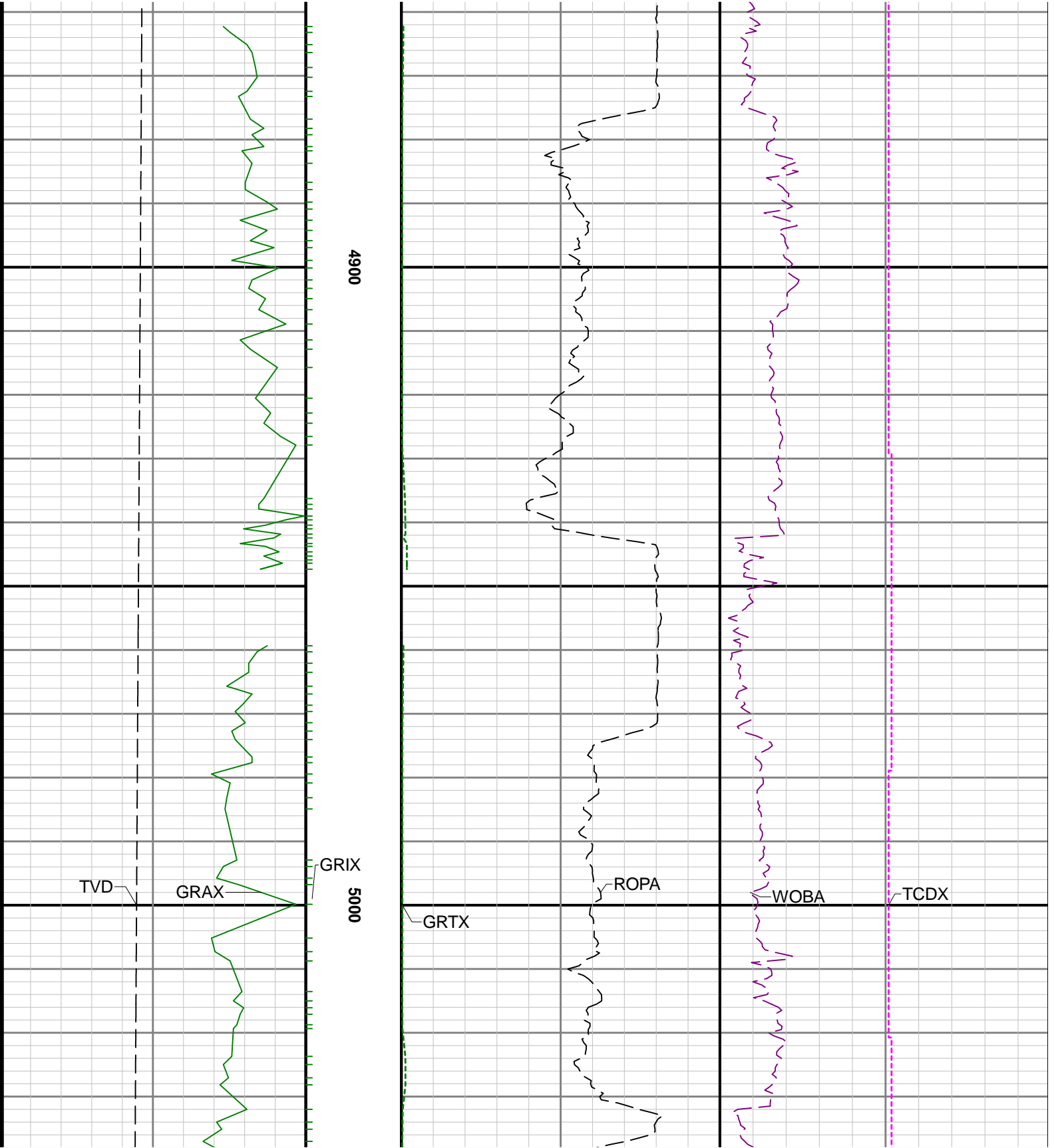


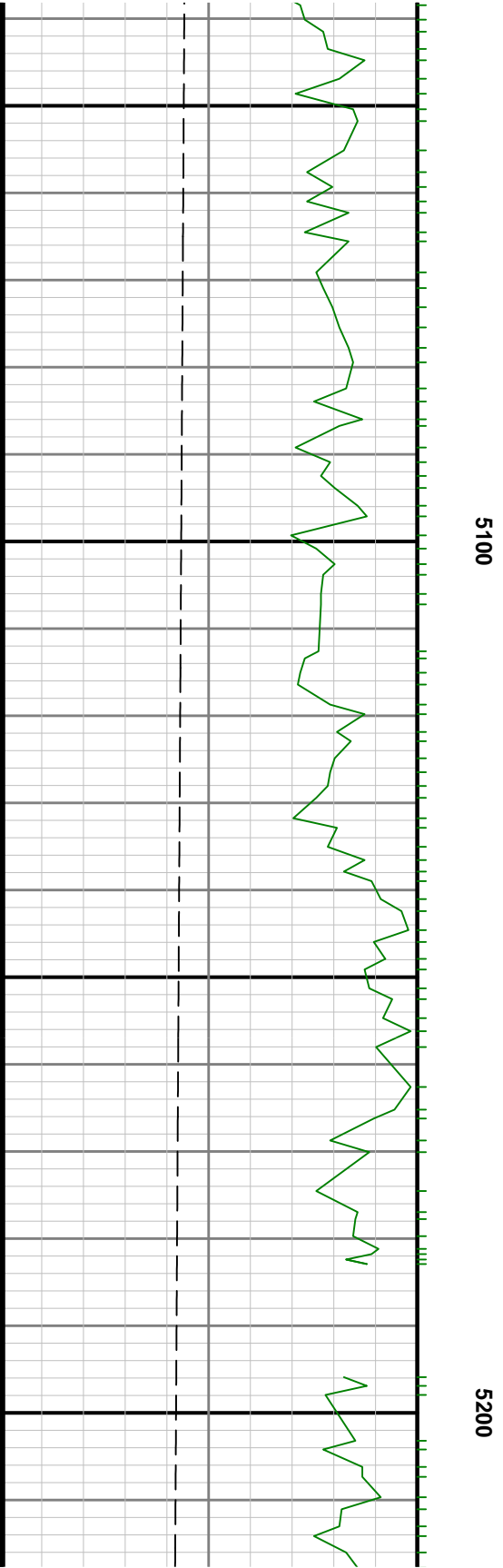


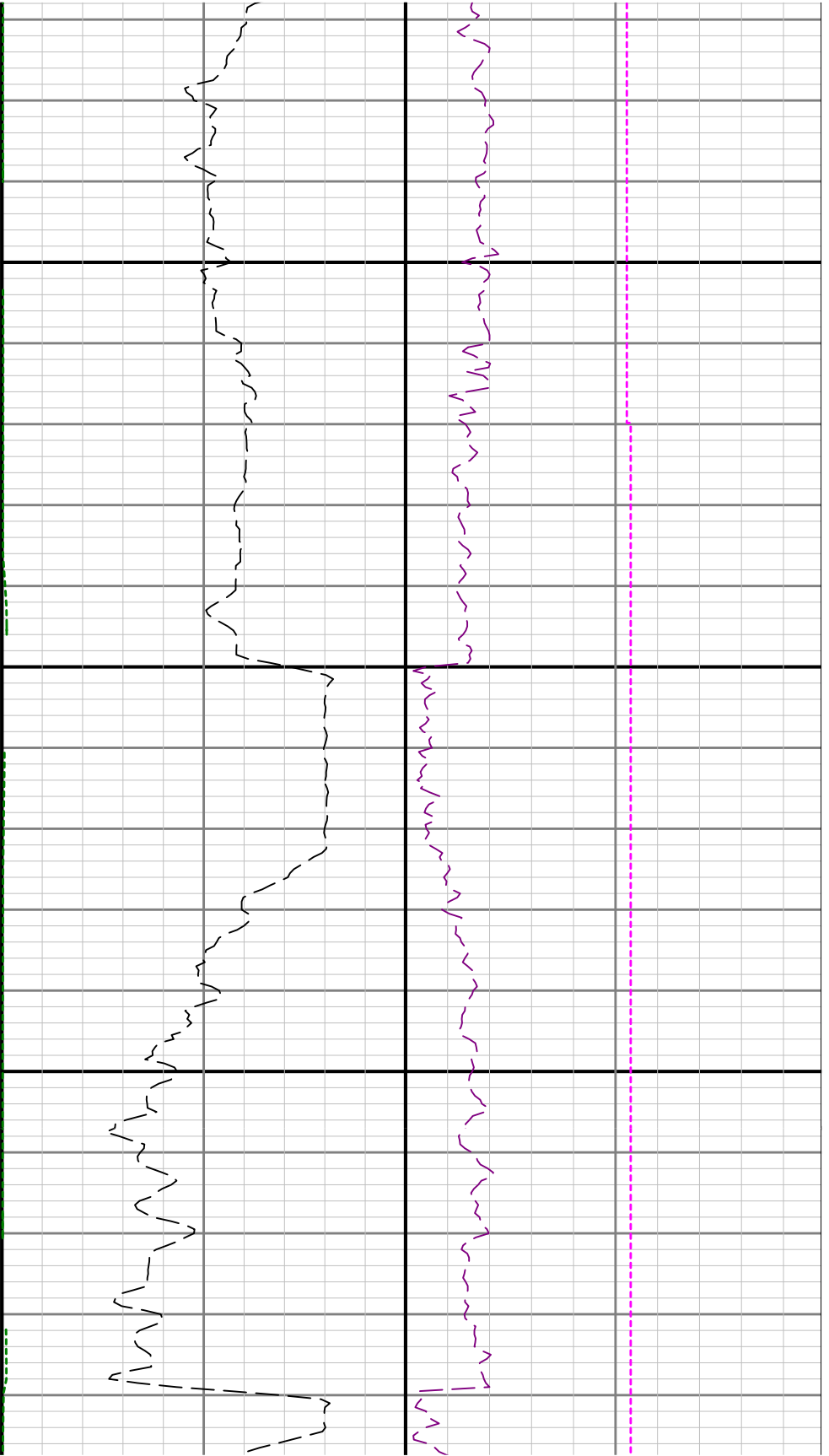
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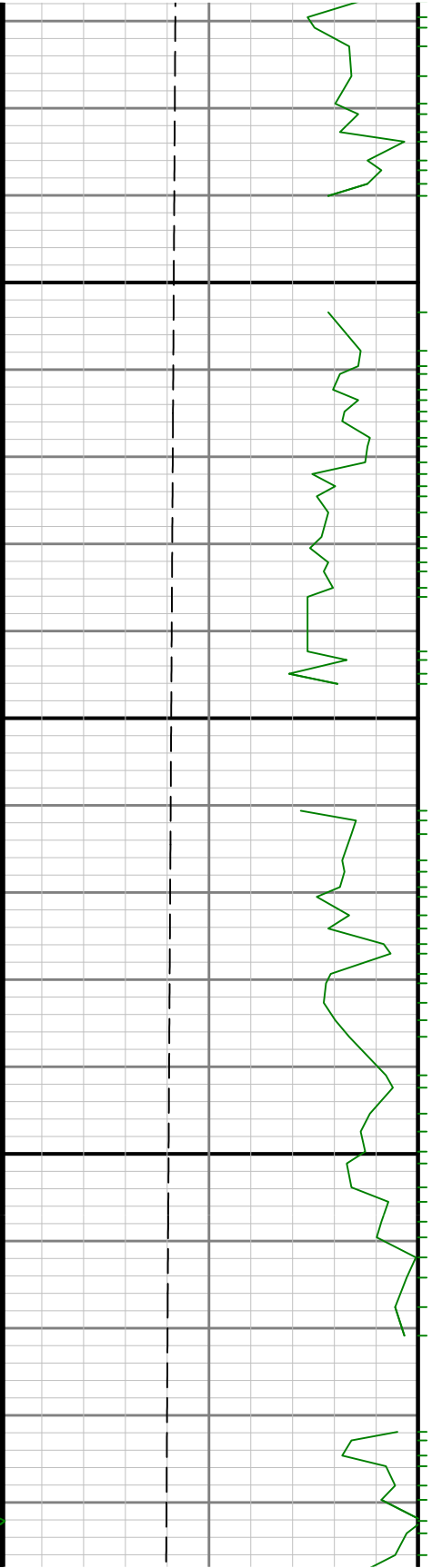


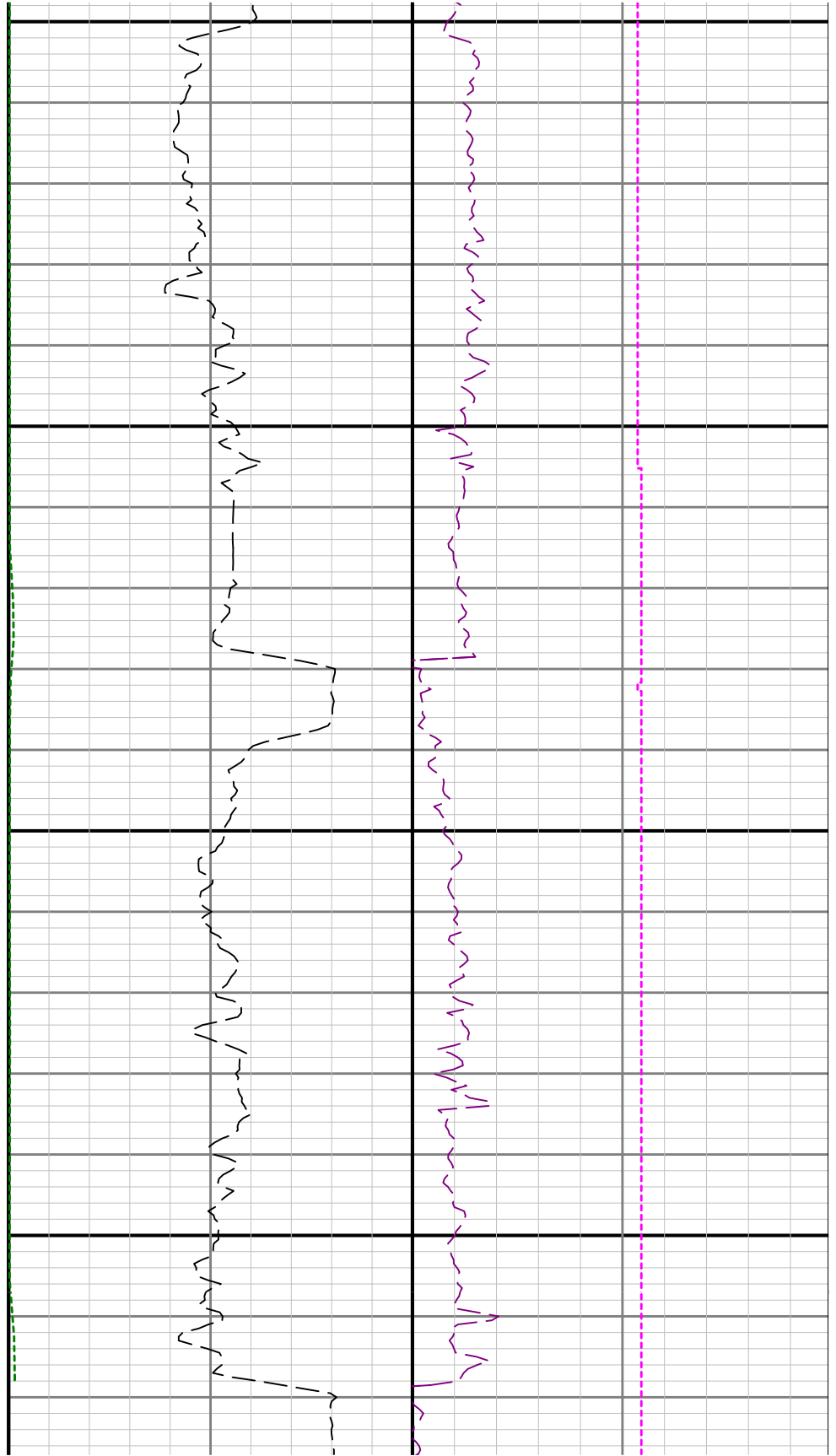






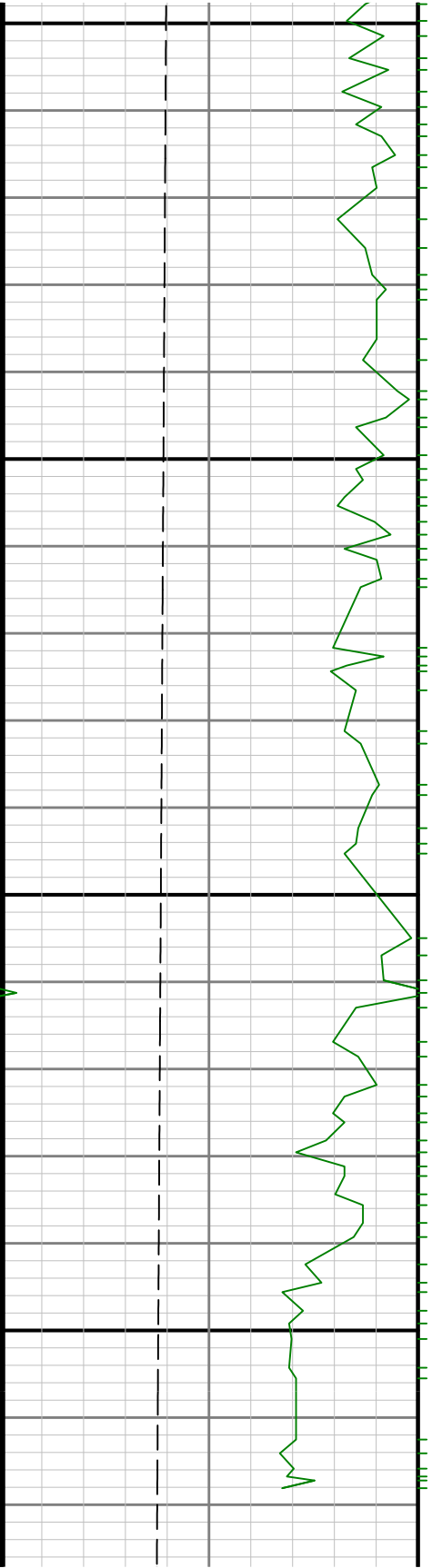
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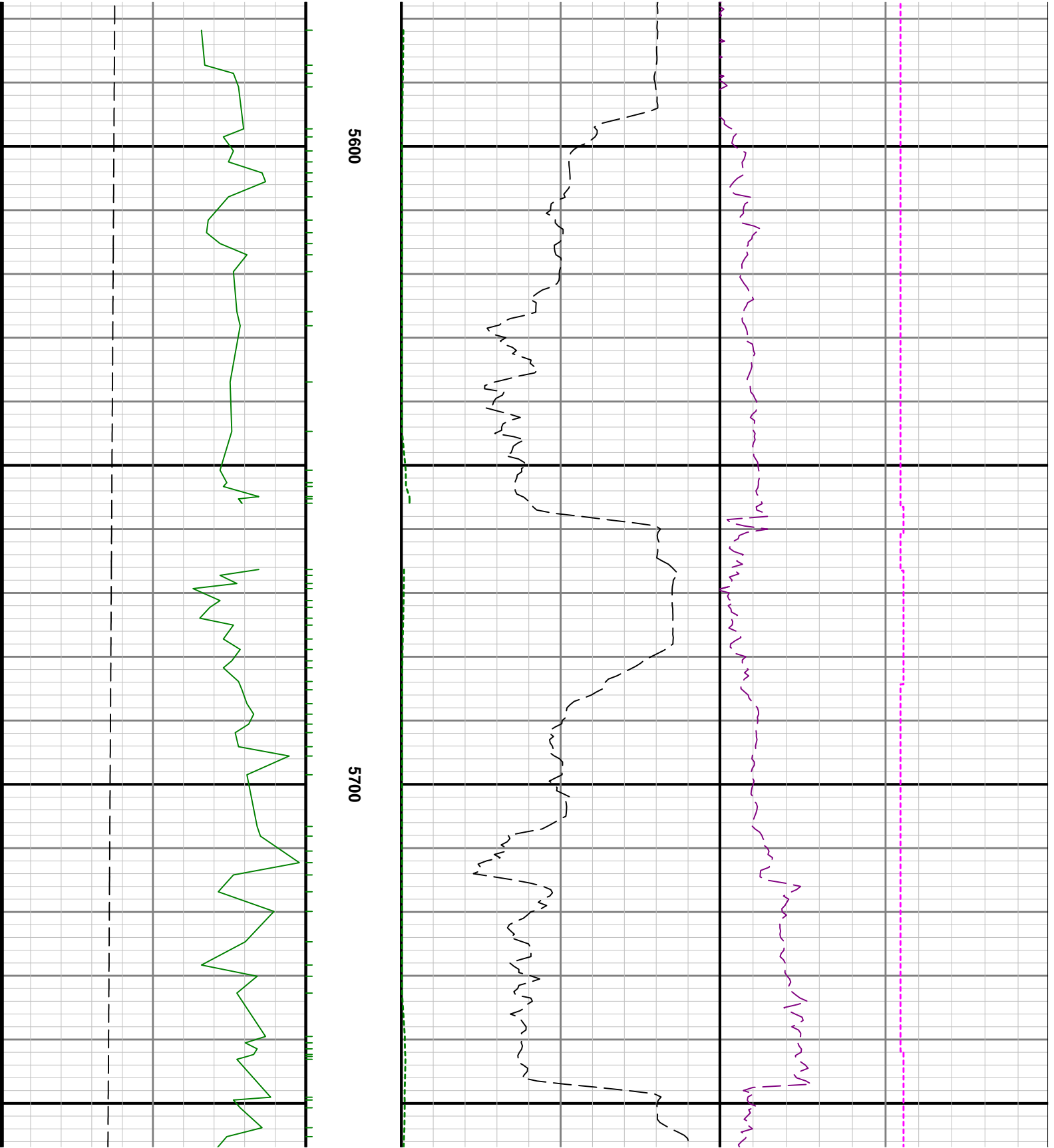


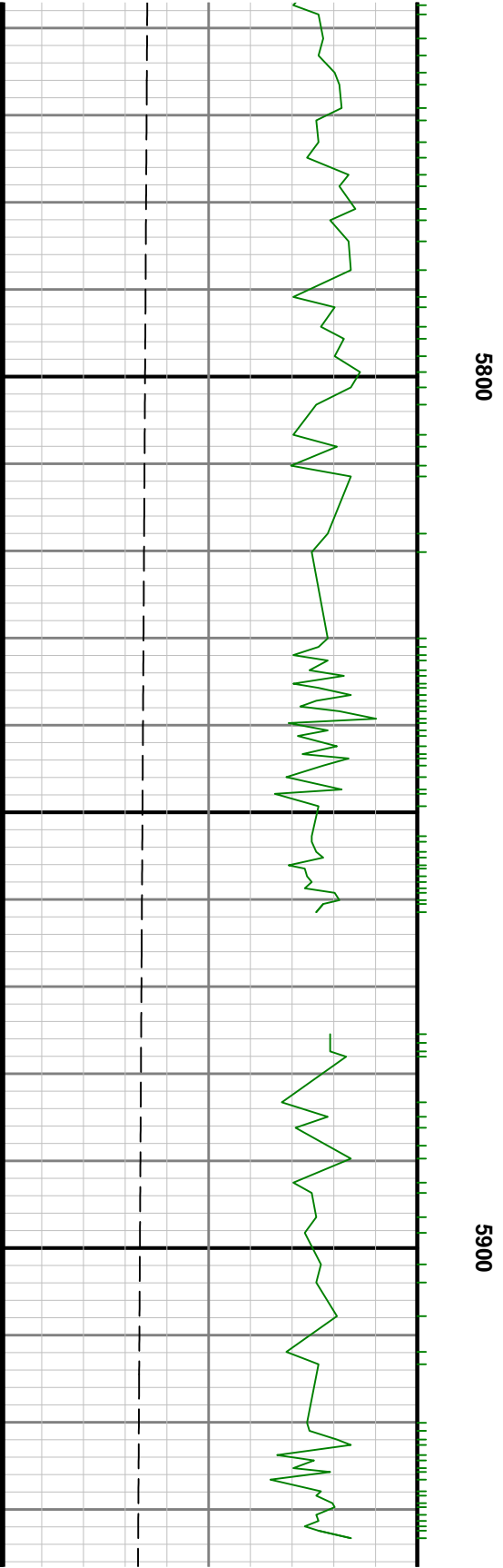
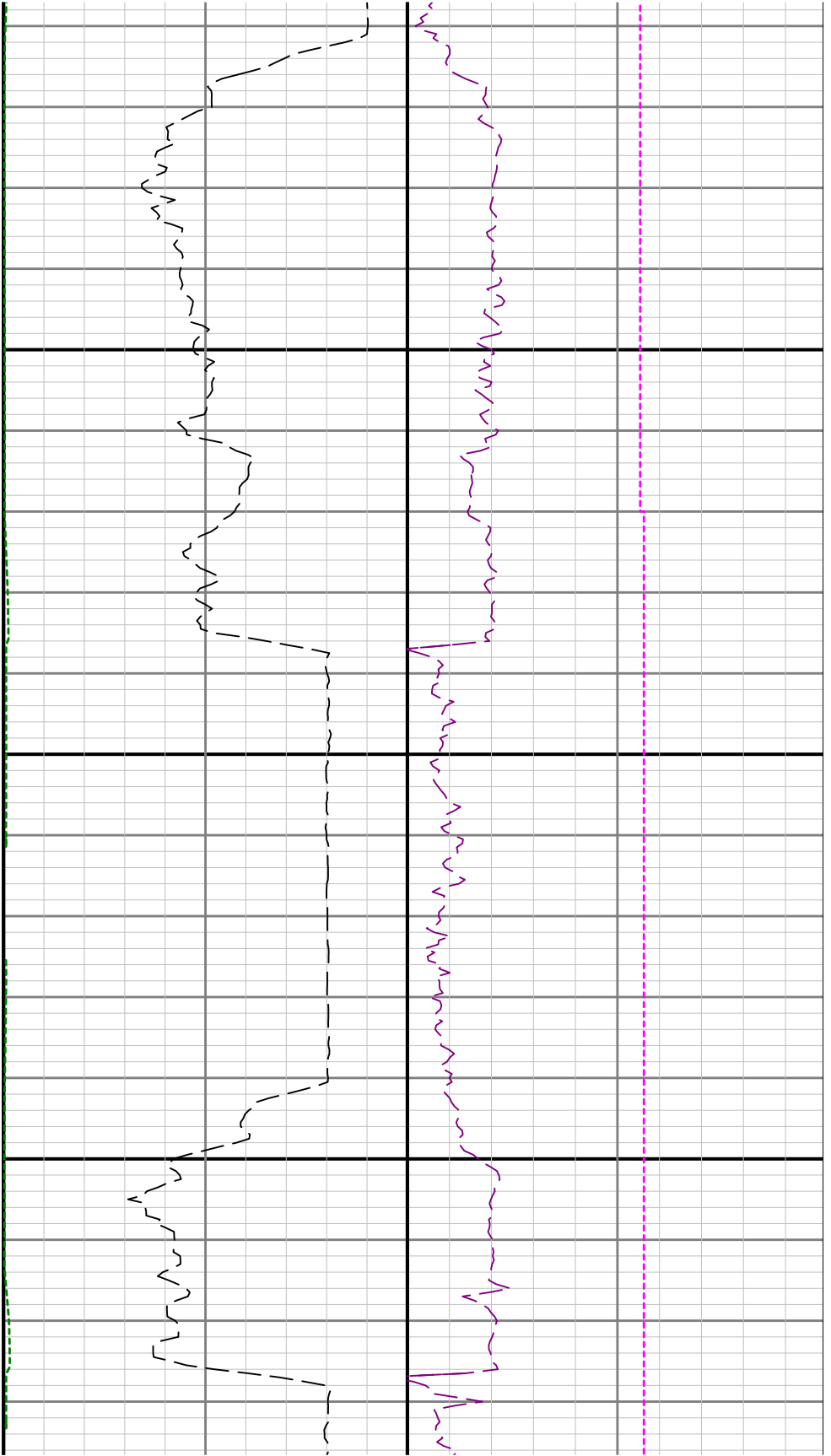


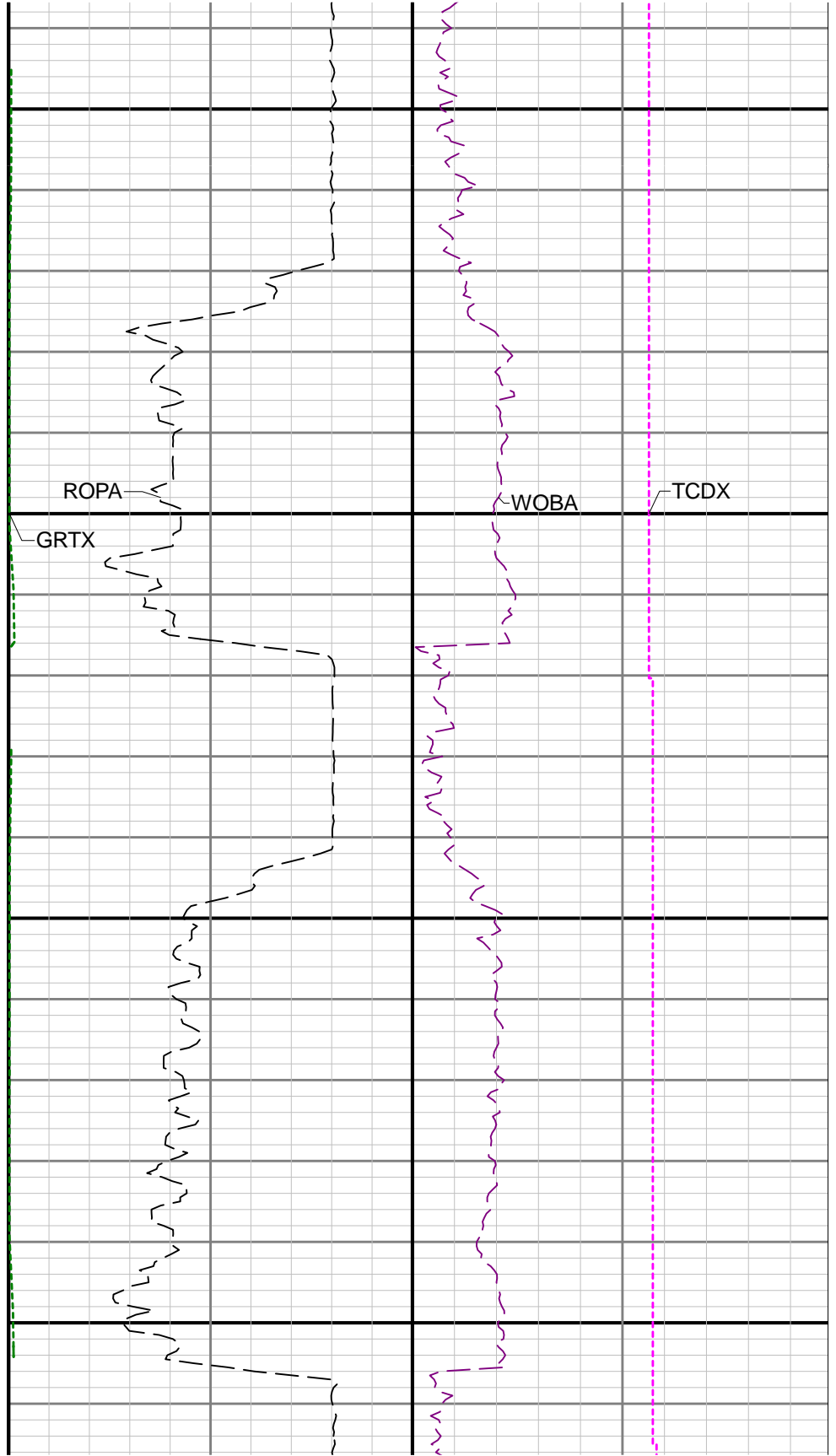
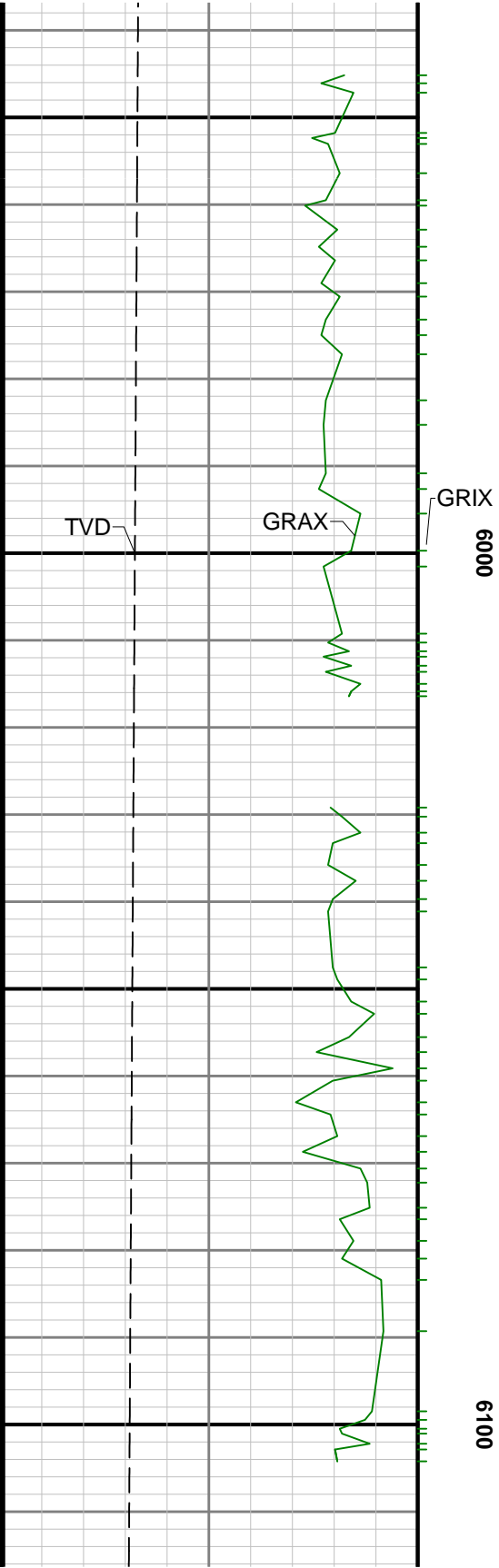
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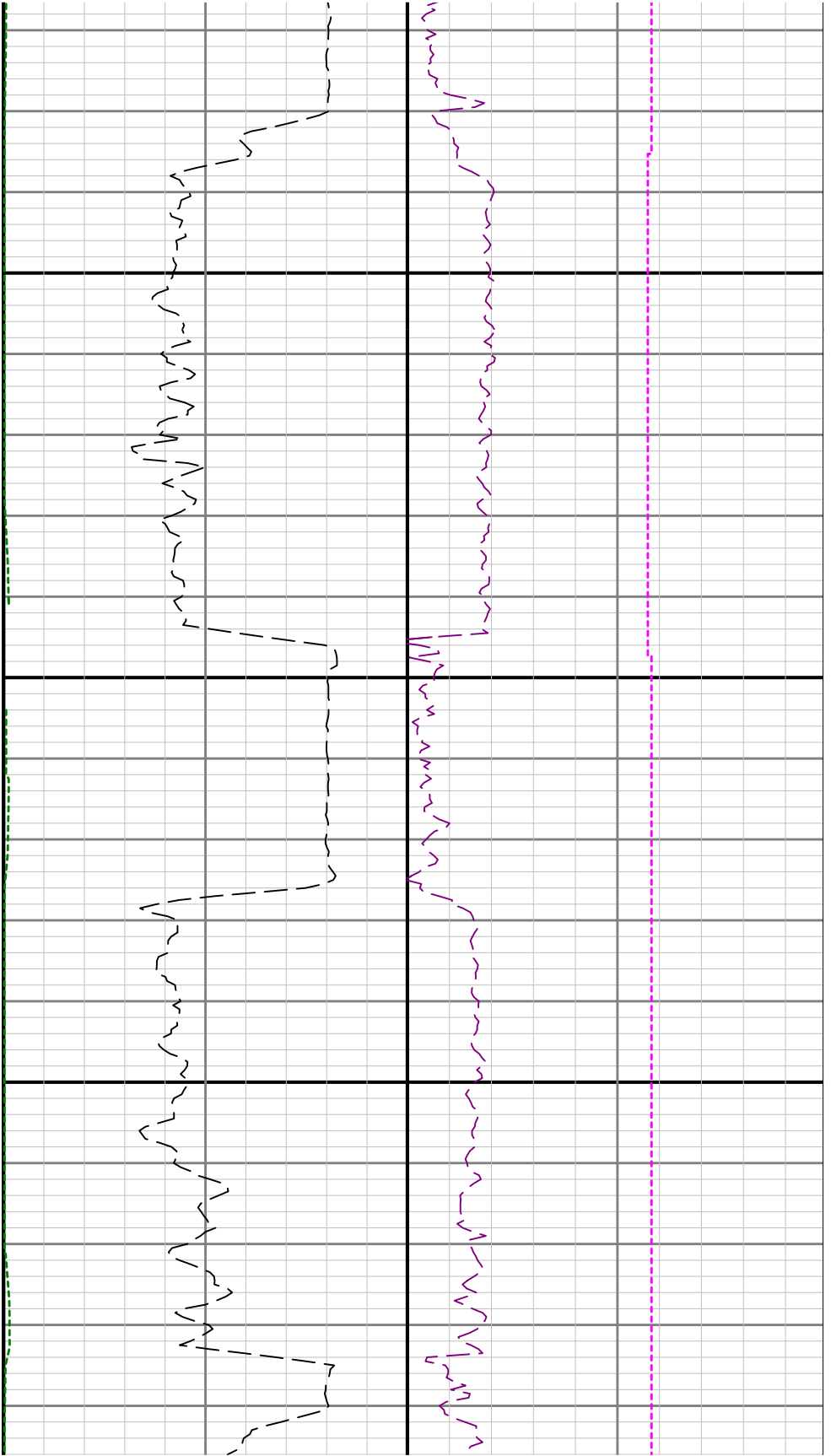
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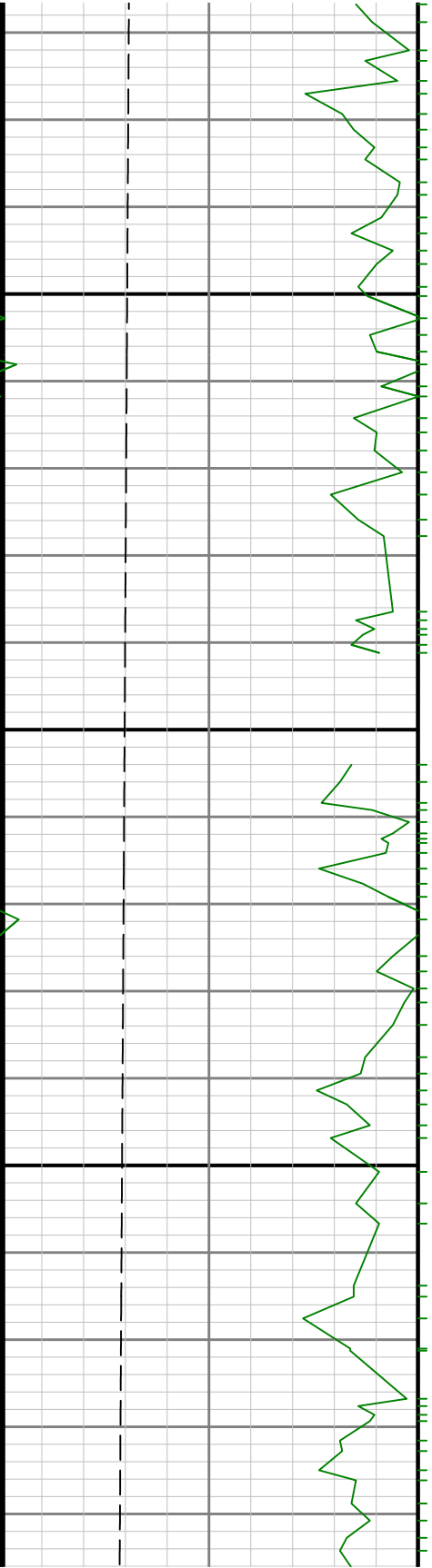


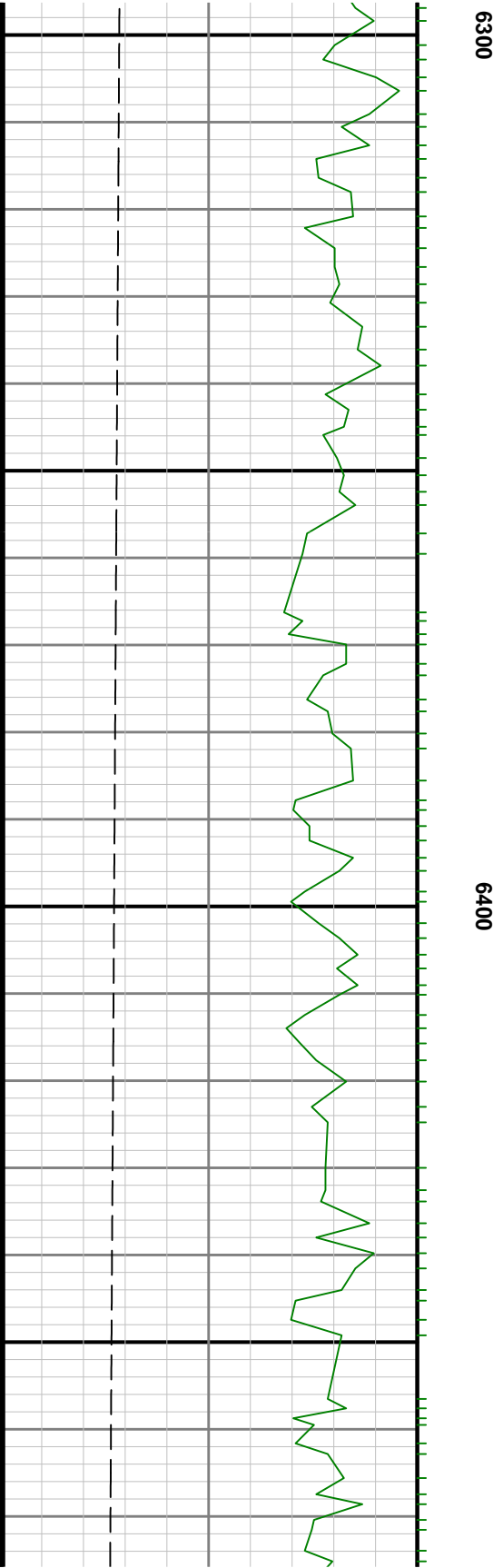
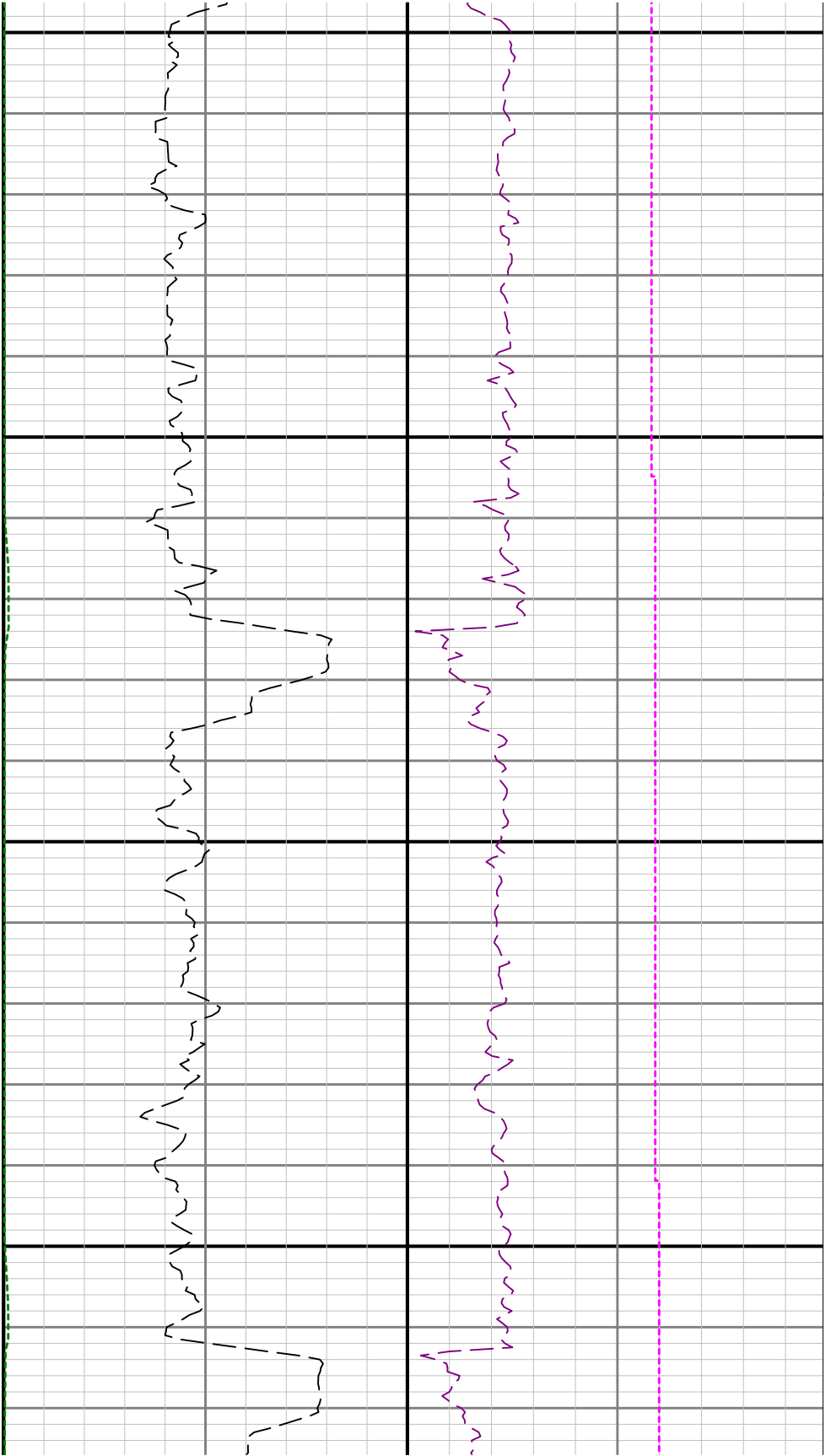


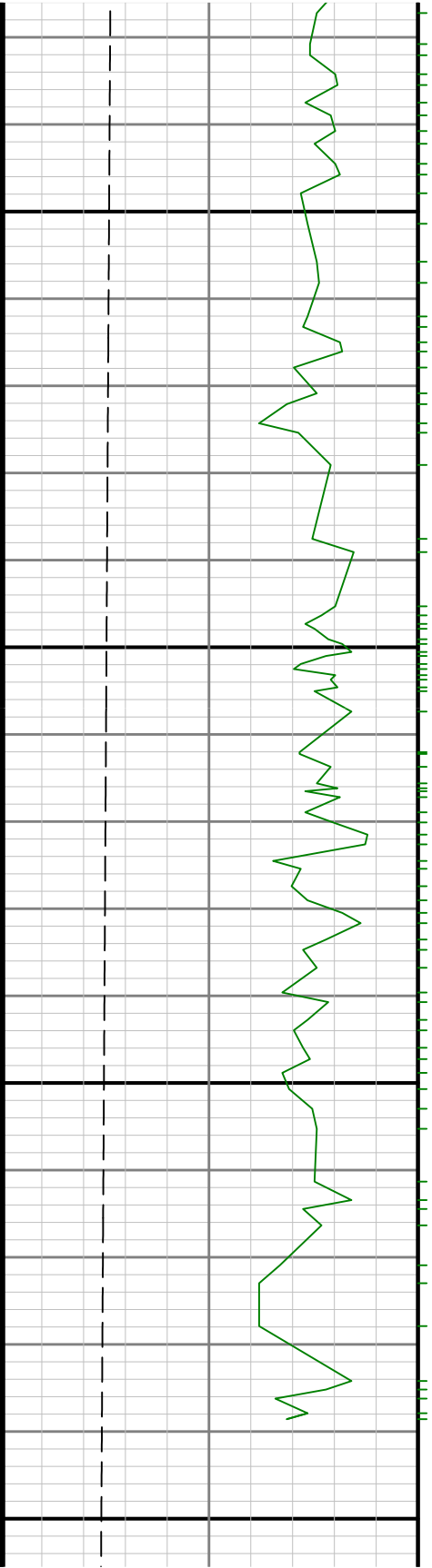




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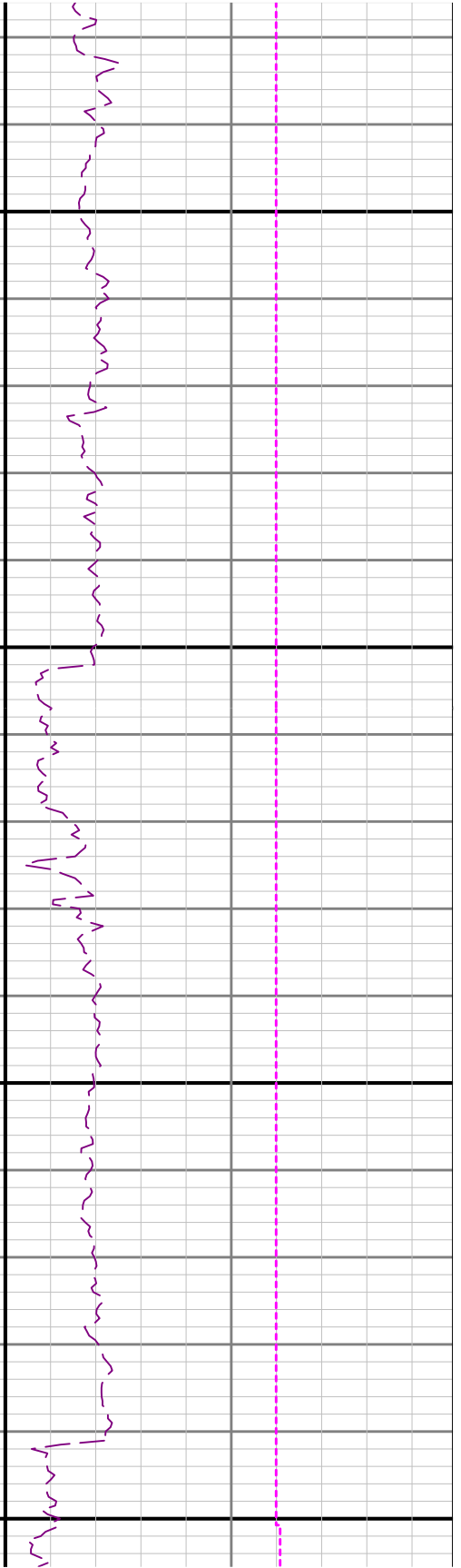
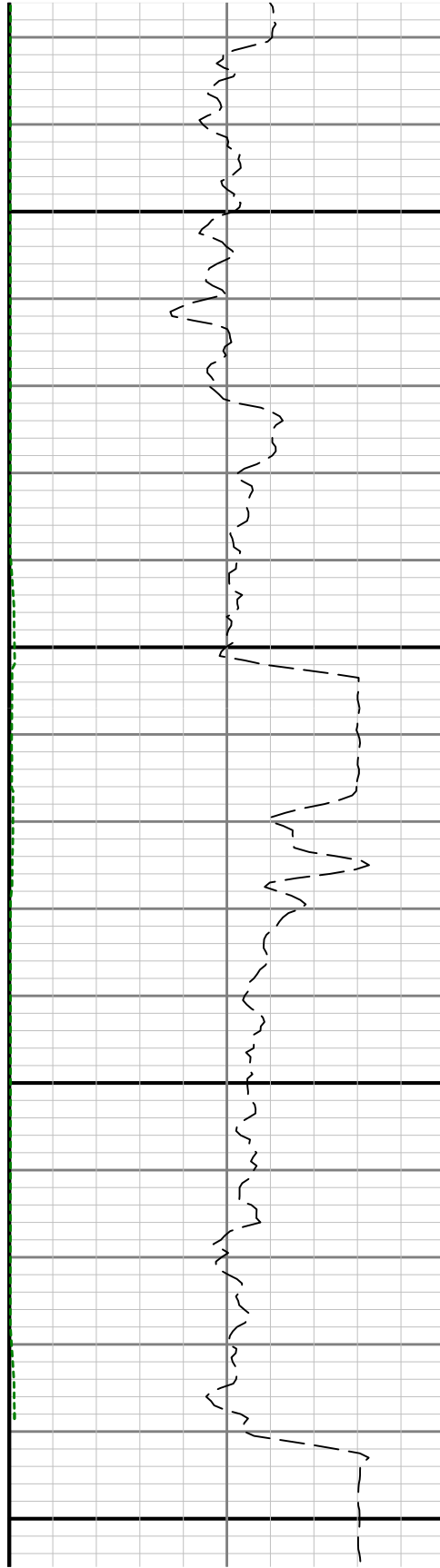


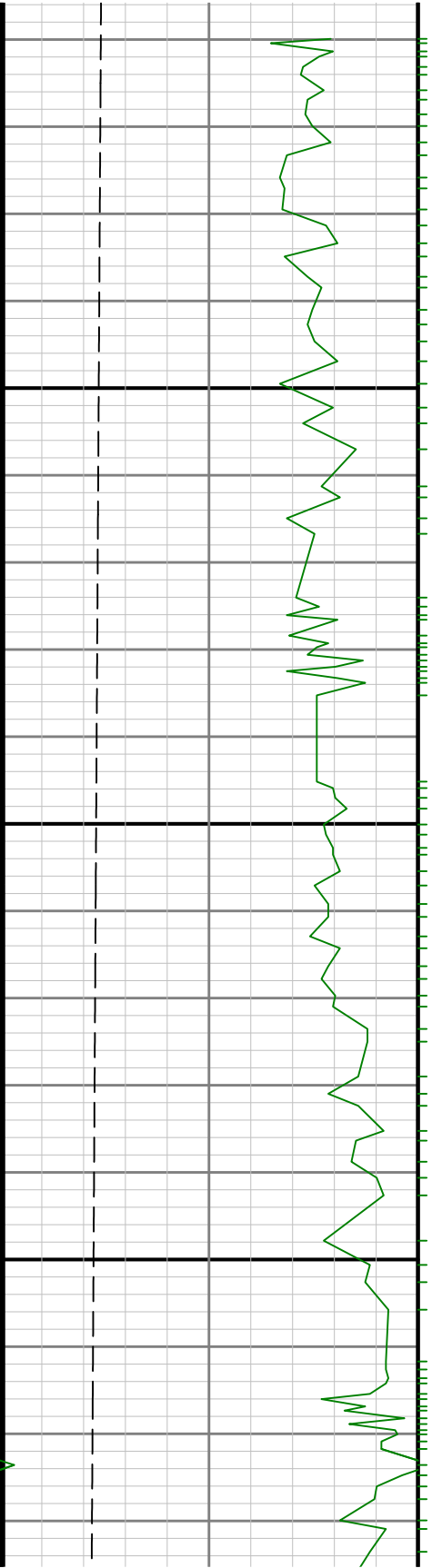




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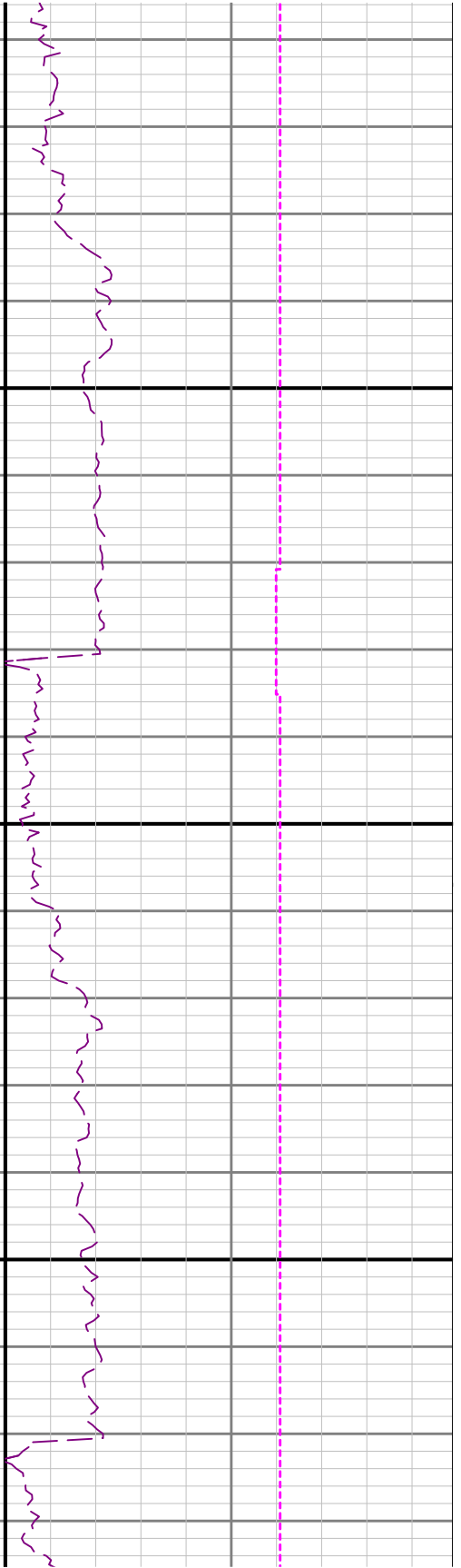
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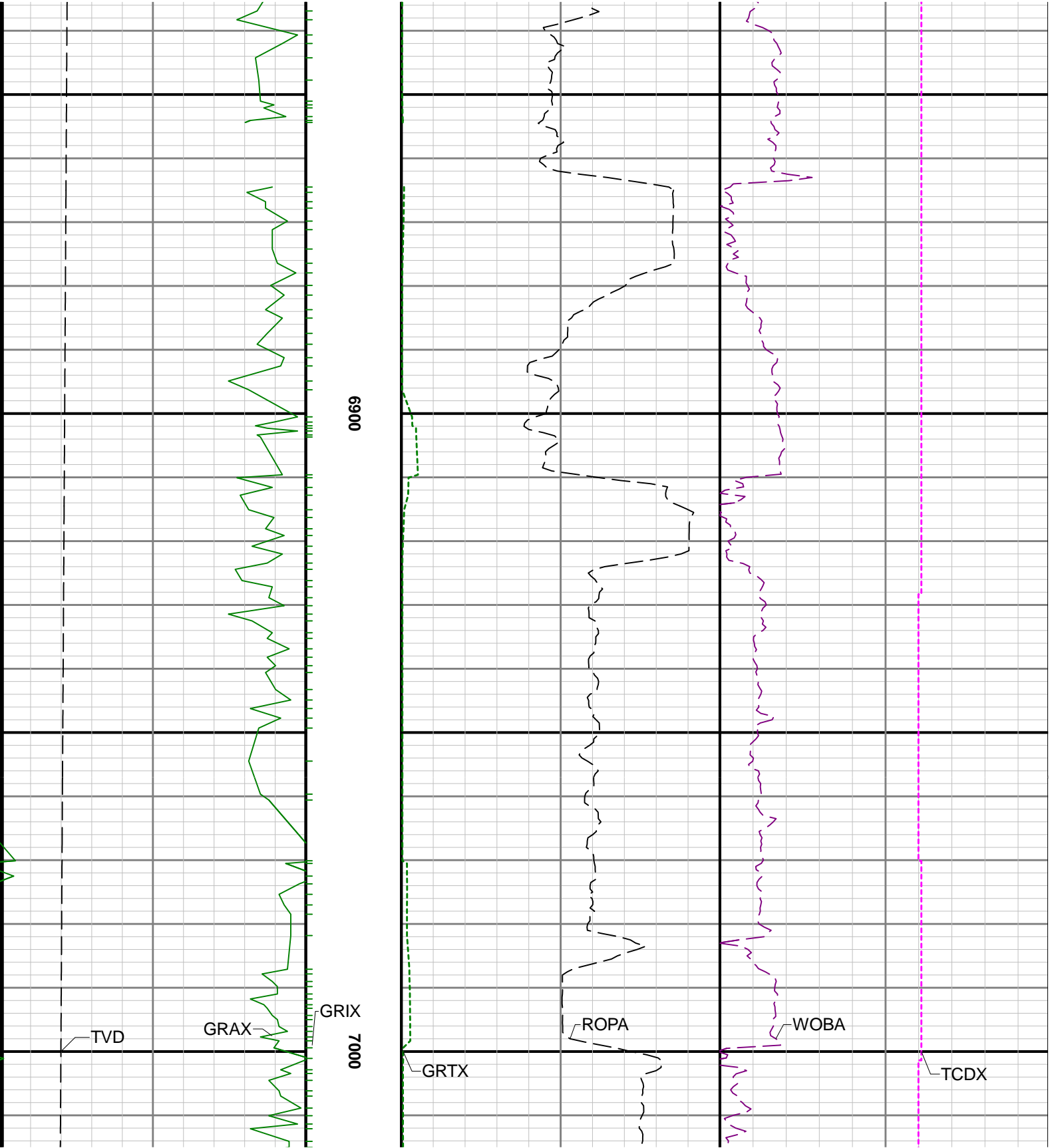


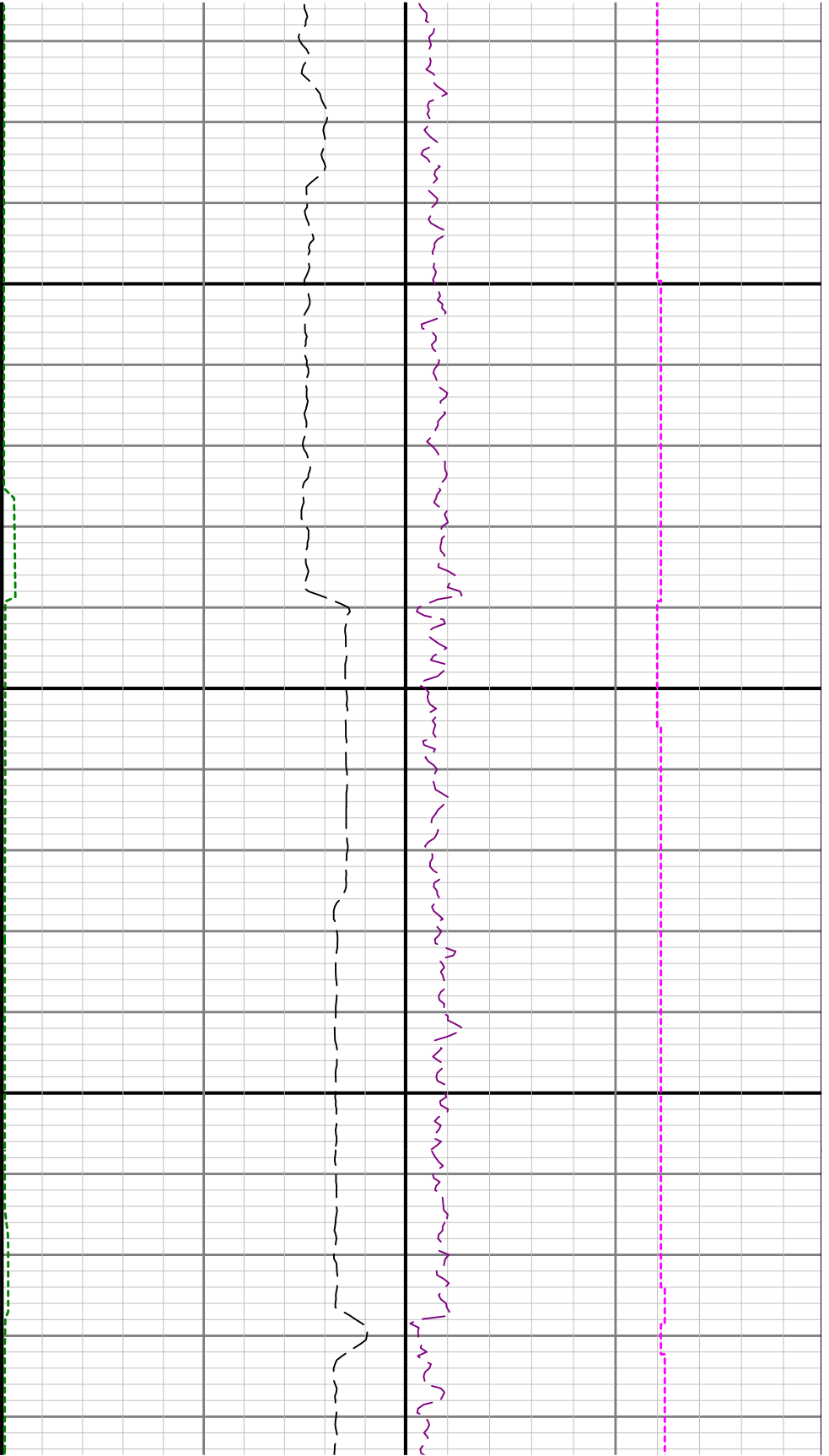


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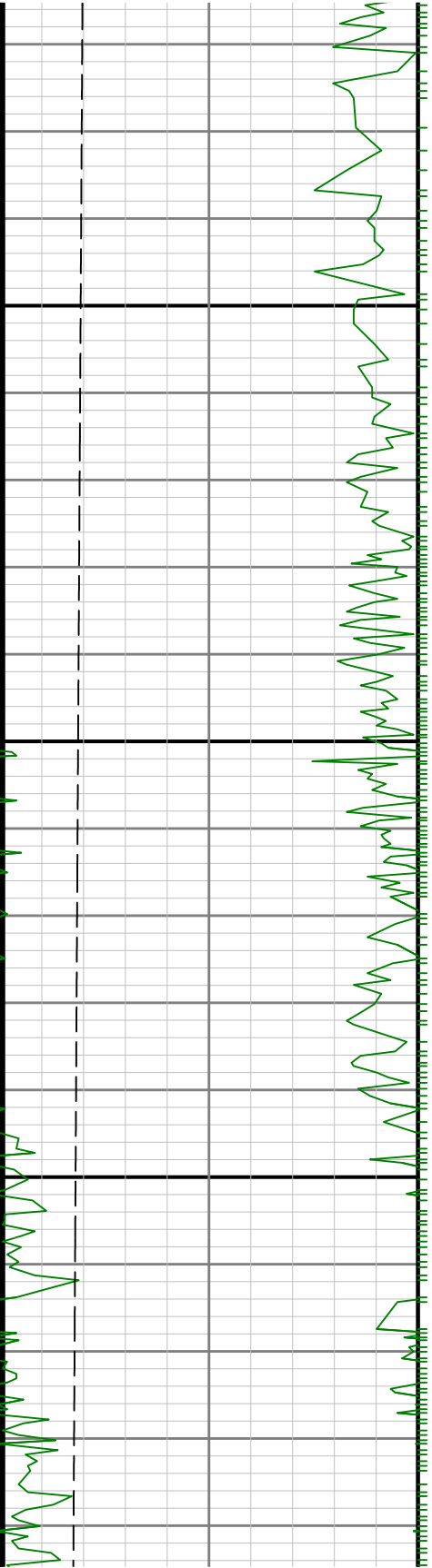
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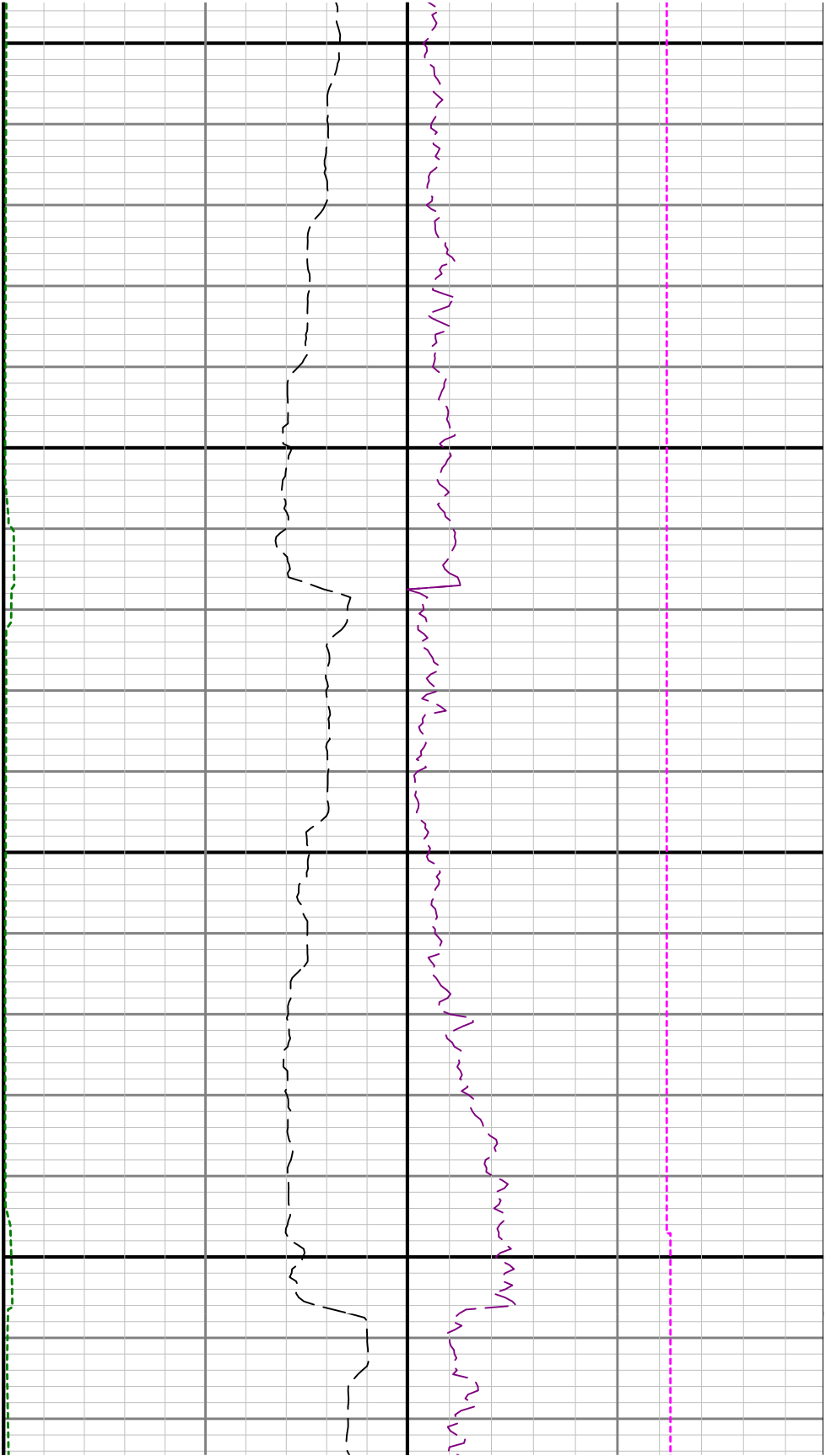






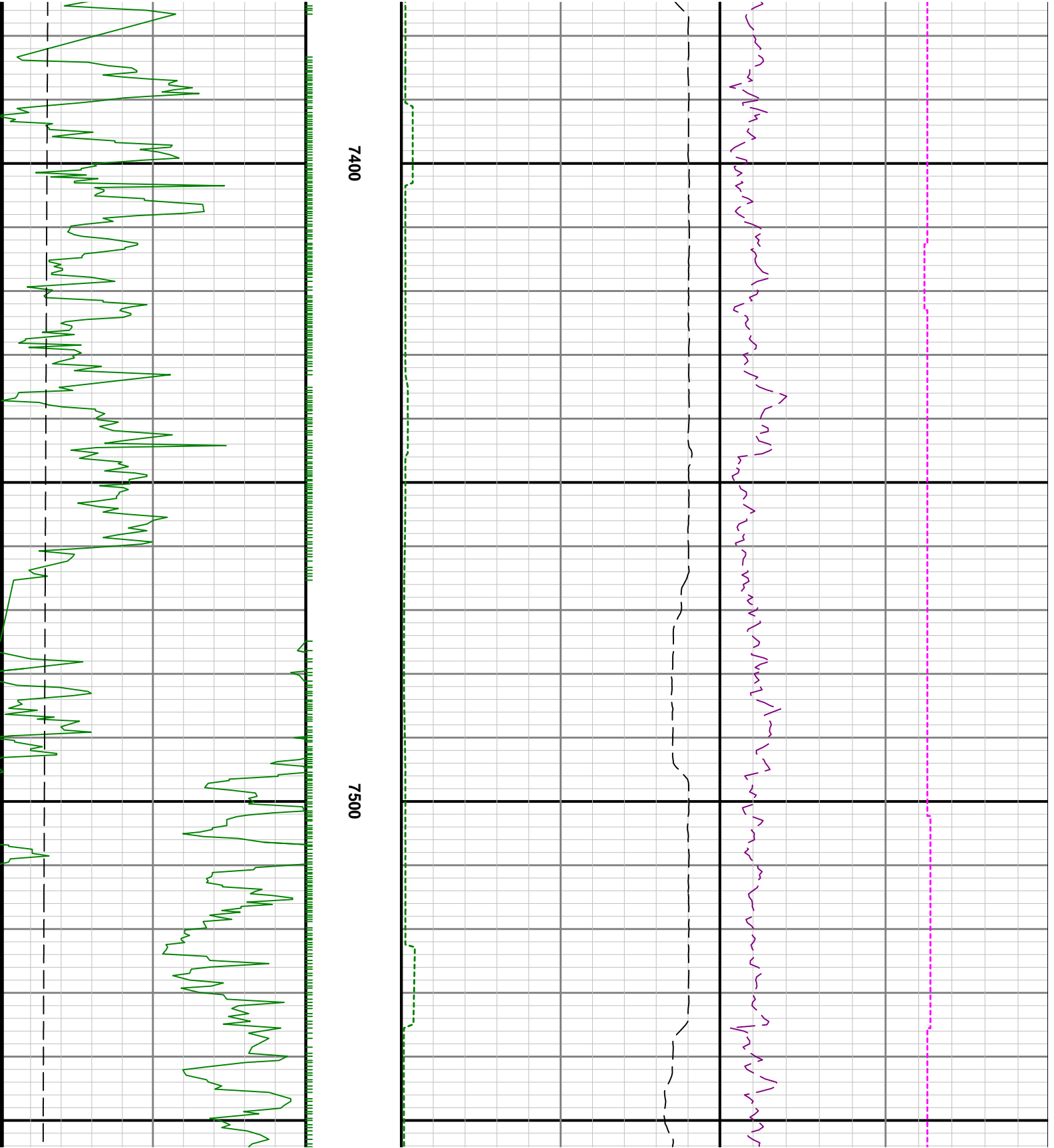
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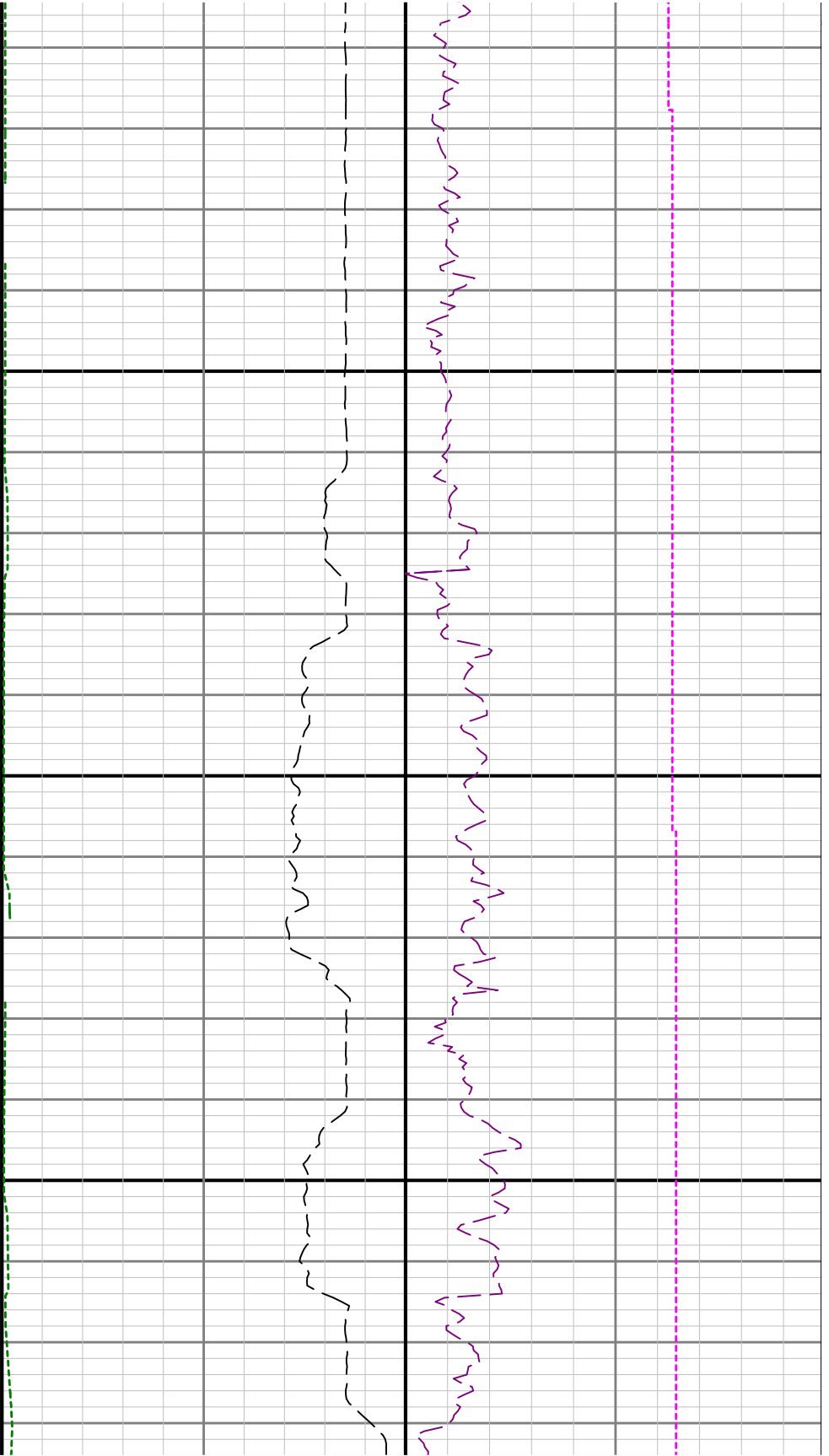




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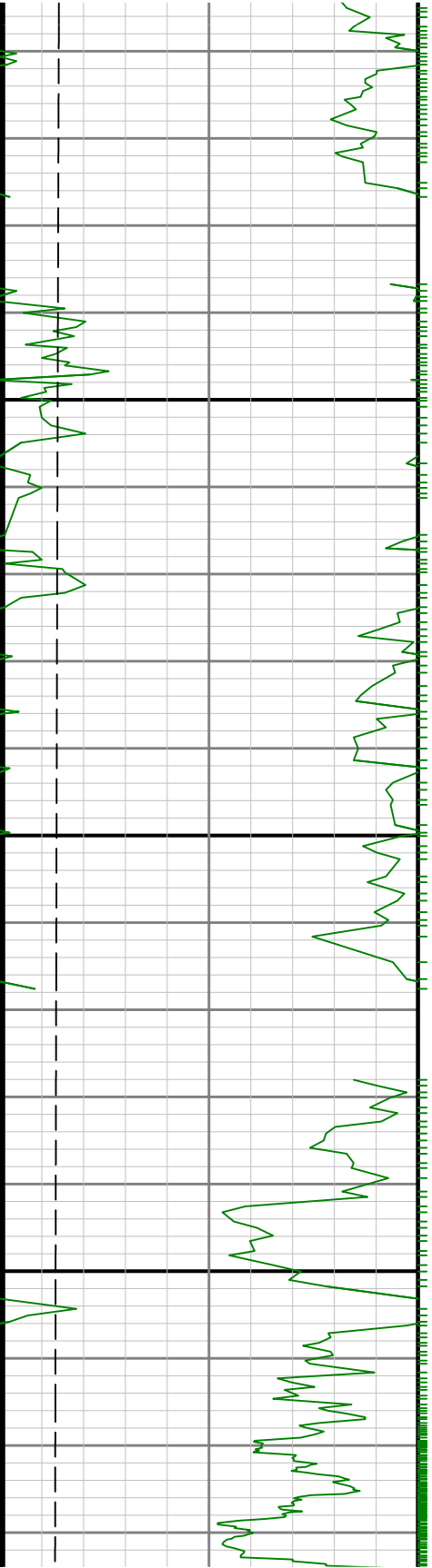
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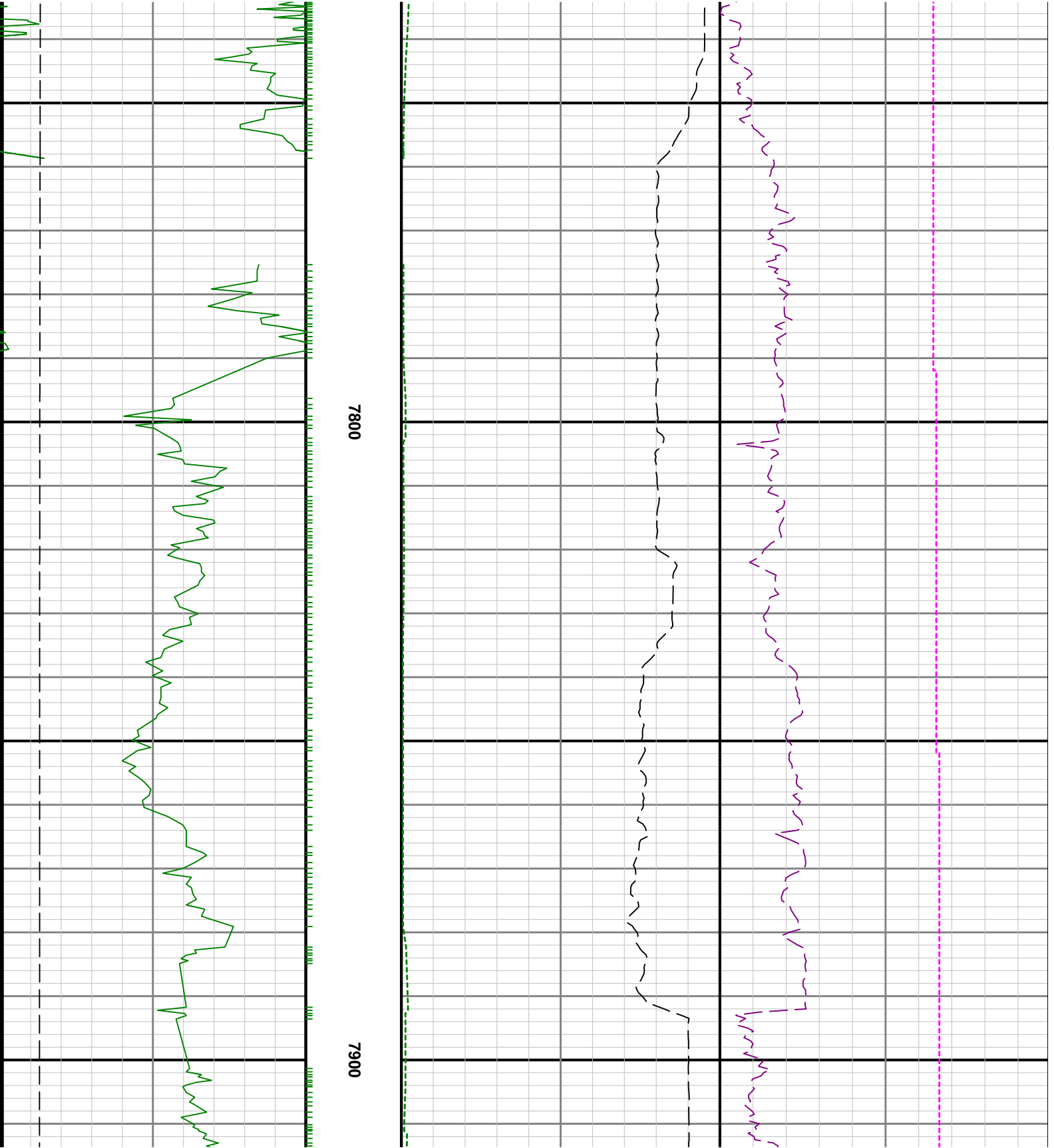


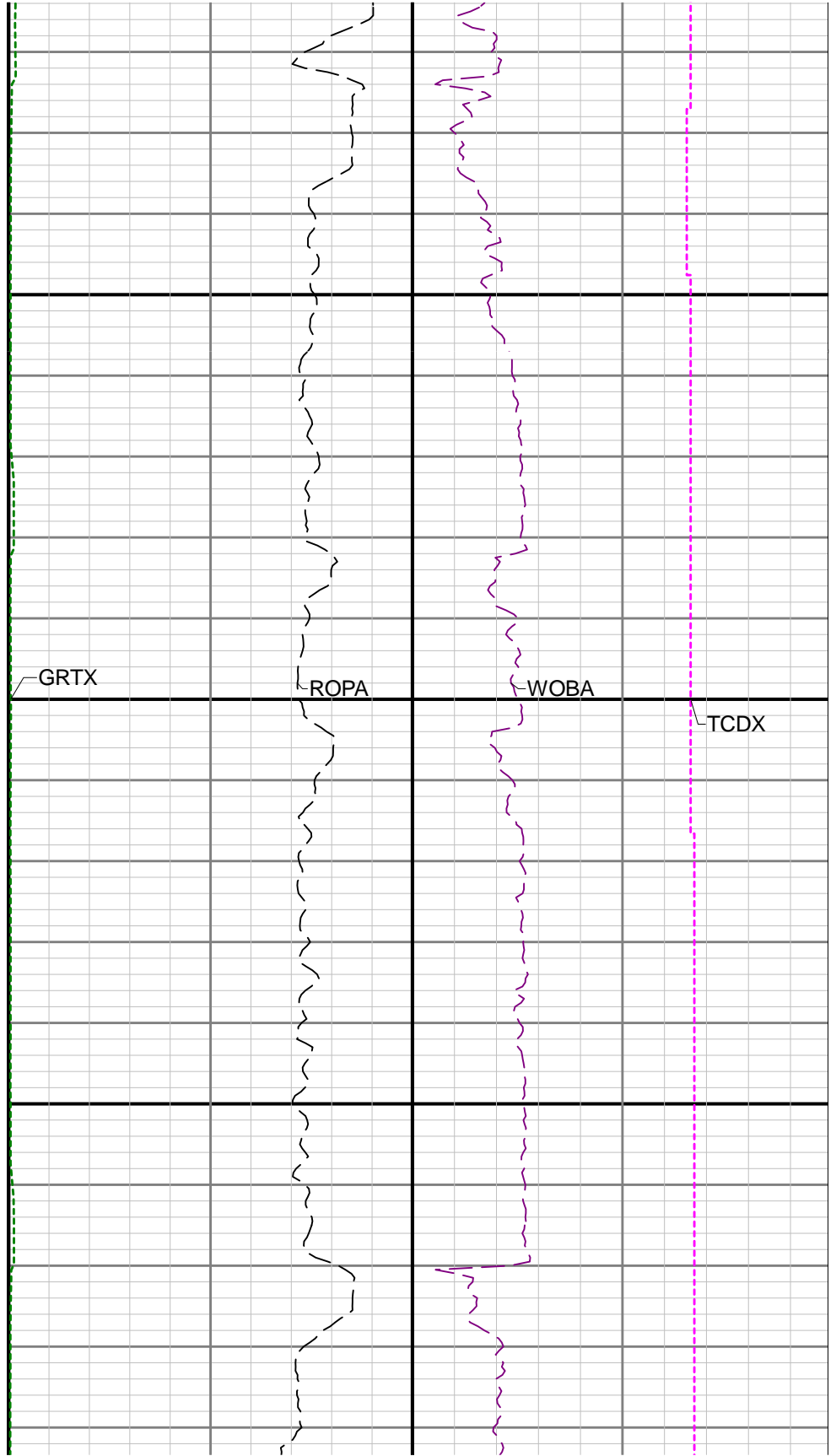
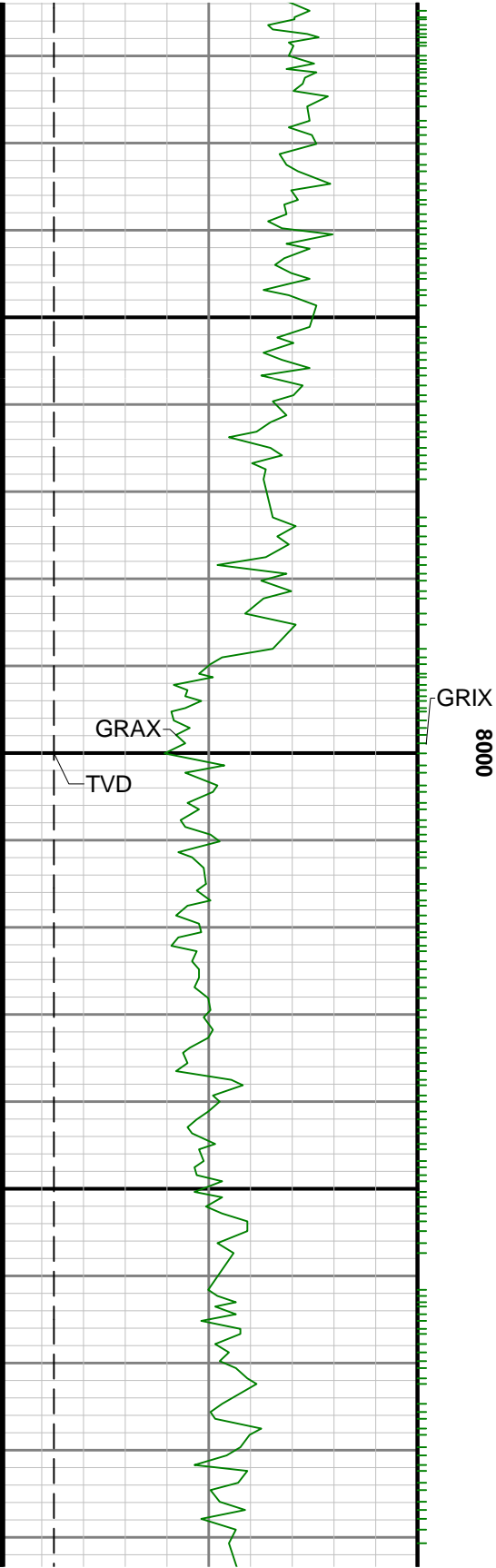


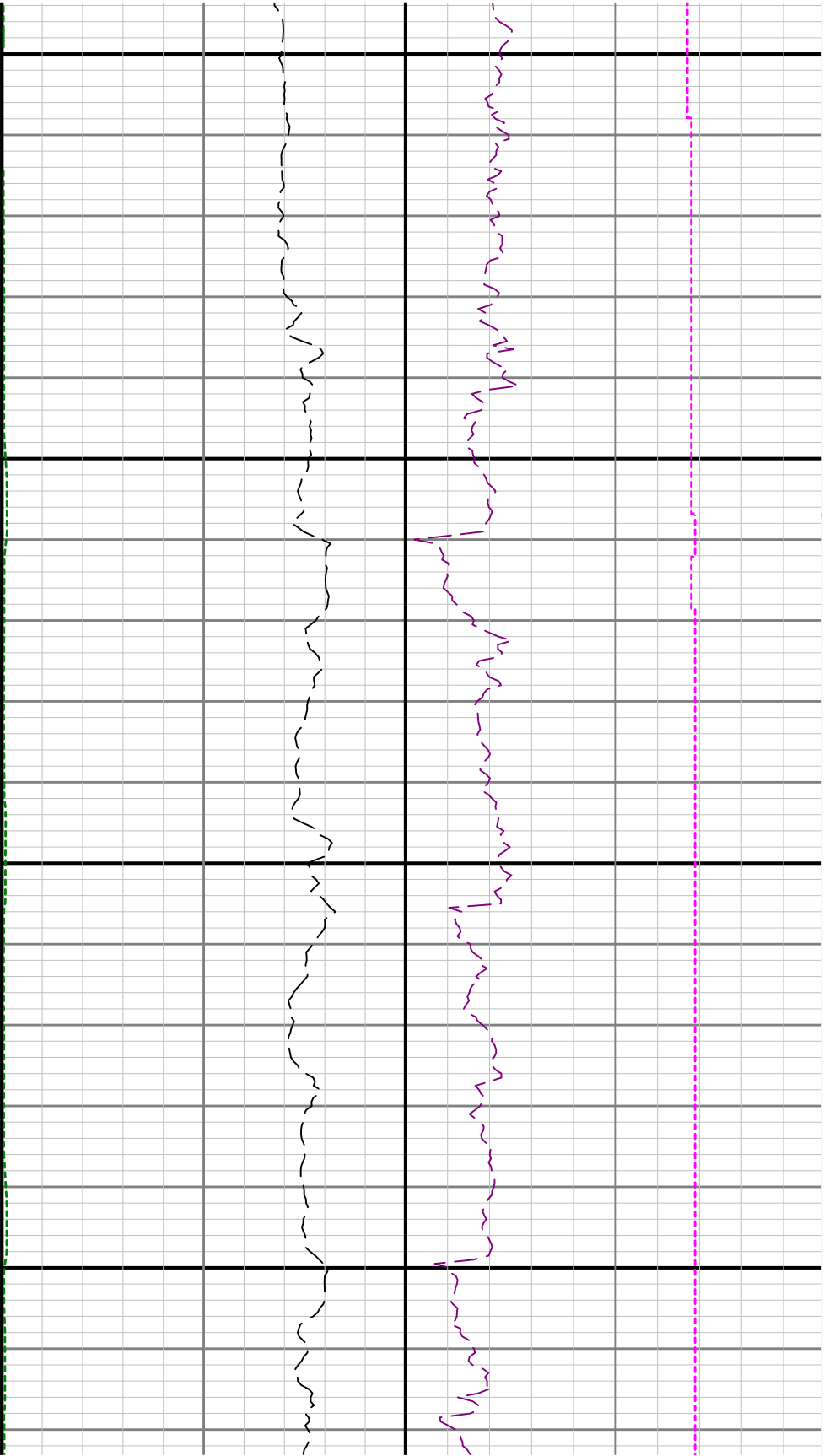
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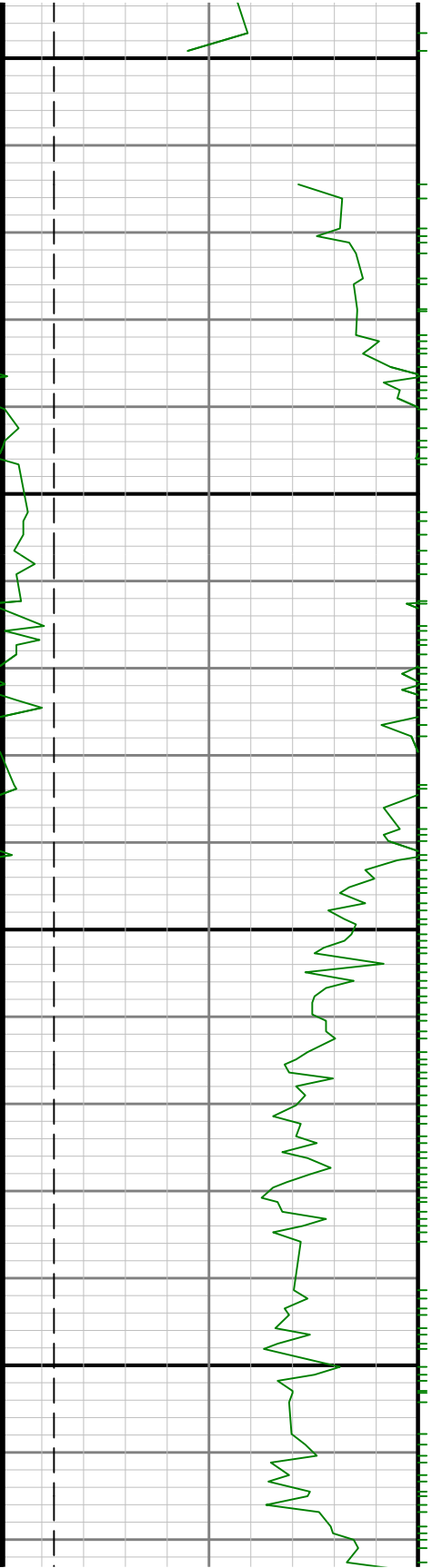


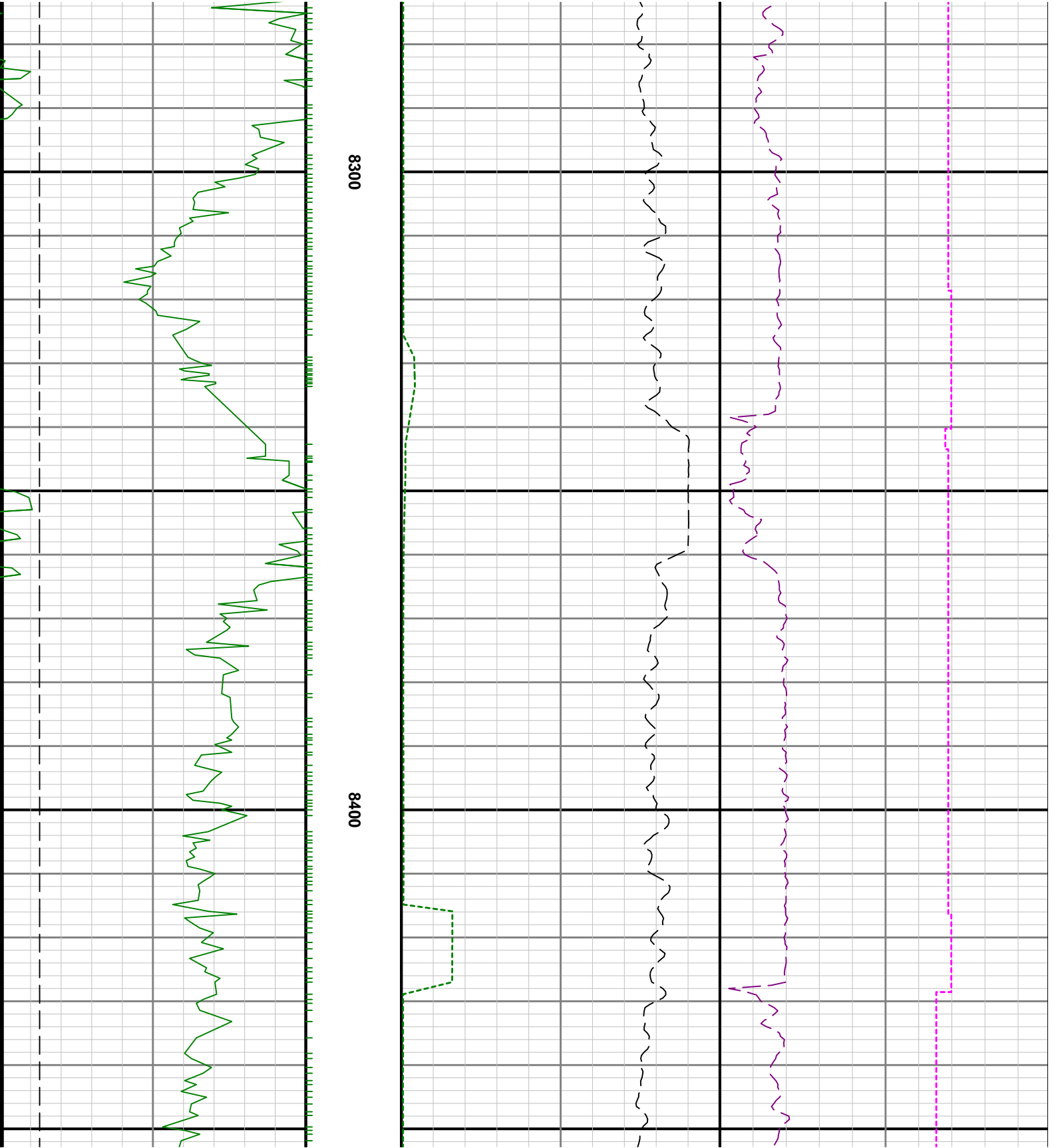


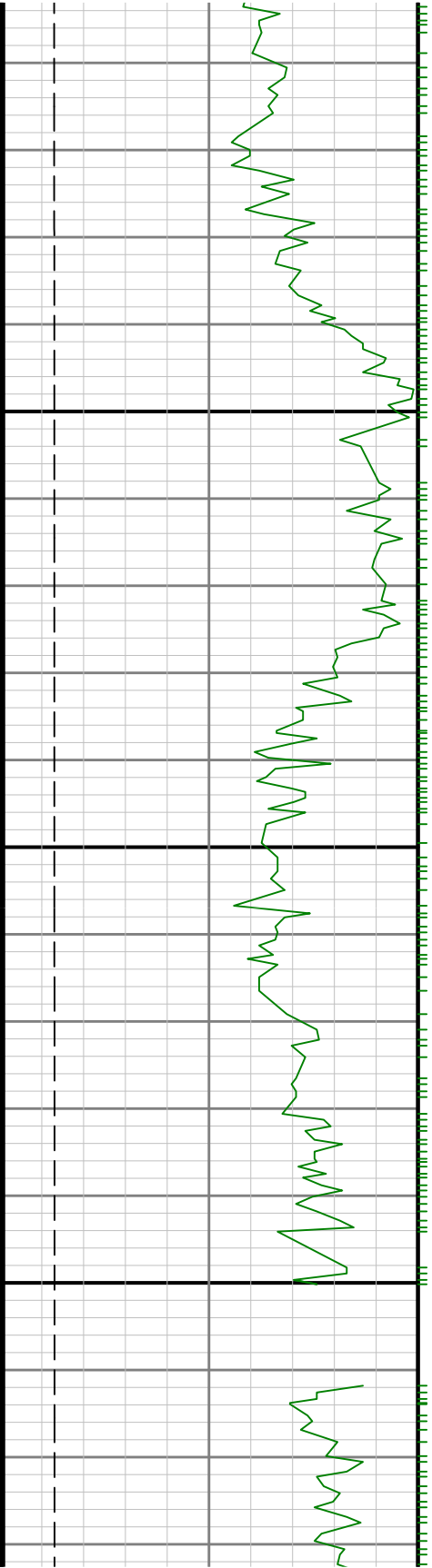


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