



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	8.500	PDC	3.00	AutoTrak Curve	1495.00	12310.00	1495.00	12323.00	2017-07-07 08:18	2017-07-09 07:07	41.25

Crew

Name		Arrive Wellsite	Depart Wellsite	Name		Arrive Wellsite	Depart Wellsite	Name		Arrive Wellsite	Depart Wellsite
Andrey Clancy		2017-07-07	2017-07-09	Doug Rusco		2017-07-07	2017-07-09				

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+ (%)
2017-07-08 06:42	1	7459.00	Oil Based Mud	9.8	19	0	0.0	71/29	Active Pit	33000	0.00
2017-07-09 06:34	1	12096.00	Oil Based Mud	9.8	25	0	0.0	73/27	Active Pit	34000	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	ATC_SU	12187651	Near Bit VSS	5.93	6.73	7.000	4.330
1	ATC_SU	12187651	Near Bit Inclination	5.93	6.73	7.000	4.330
1	ATC_MWD	12304801	Gamma (single)	2.75	12.90	7.000	3.250
1	ATC_MWD	12304801	Directional (mag)	12.27	22.42	7.000	3.250

Service and Tool Mnemonics

Mnemonic	Name	Description
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 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	Gas flow rate is 0.5 to 1.0 m3/hr. Gas composition is 95% methane and 5% ethane. Gas flow rate is 0.5 to 1.0 m3/hr. Gas composition is 95% methane and 5% ethane.
3	Gaps in Gamma Ray data are present throughout the log due to downlinking while drilling ahead.


Remarks

Number	Measured Depth	Hole Section	Run No.	Remark
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	(ft)	(in)		
1	8601.00	8.500	1	Gamma data was not logged due to TOTCO server crash, rig continued to drill stand while it was down from 8601 to 8629 feet MD (7504 feet TVD).
2	12310.00	8.500	1	The interval from 12310 to 12323 feet MD (7059 feet TVD) was not logged due to sensor to bit offset at well 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, Average 1 ft Average	klb
GRAX	OnTrak - Gamma Ray - Apparent - Real-Time 0.5 ft Average	API
GRIX	OnTrak - Gamma Ray - Data Point Indicator - Real-Time	unitless
GRTX	OnTrak - Gamma Ray - Time Since Drilled - Real-Time	min



Company

Well

Interval

Created

Ward Petroleum

Ritchey 26-1-21HN

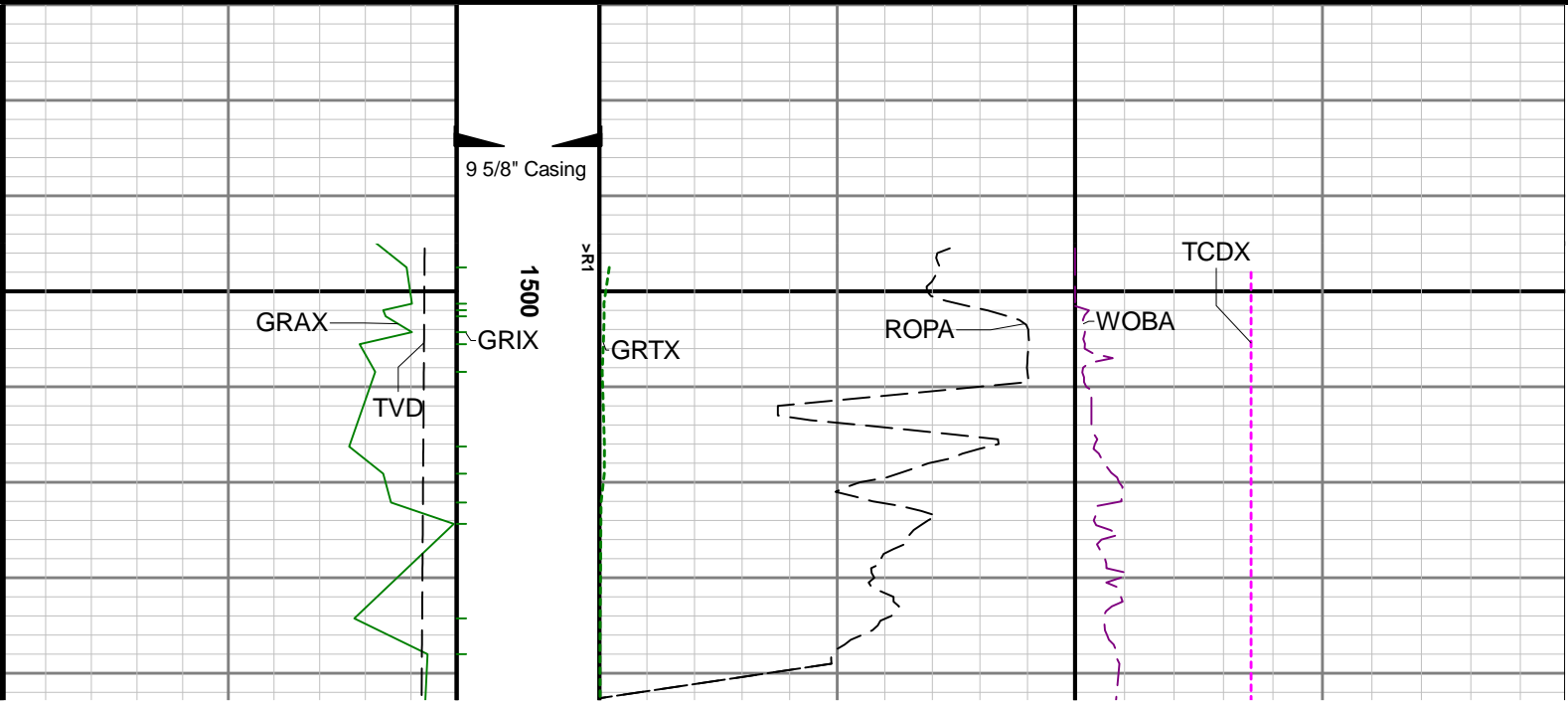
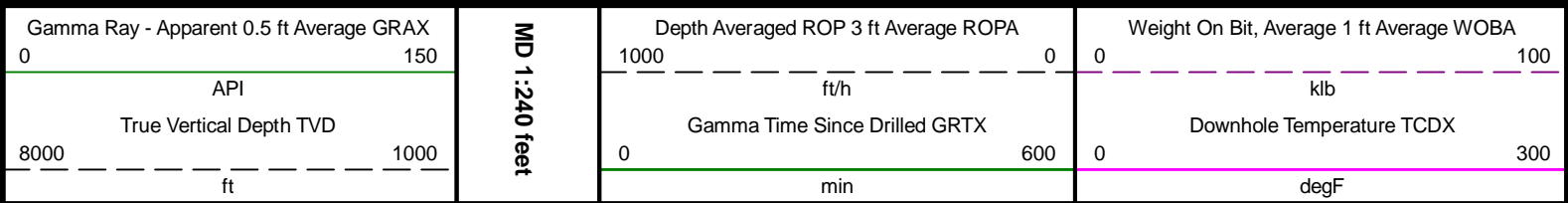
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Date To: 2017-07-09 07:07:01

2017-07-09 09:36:00

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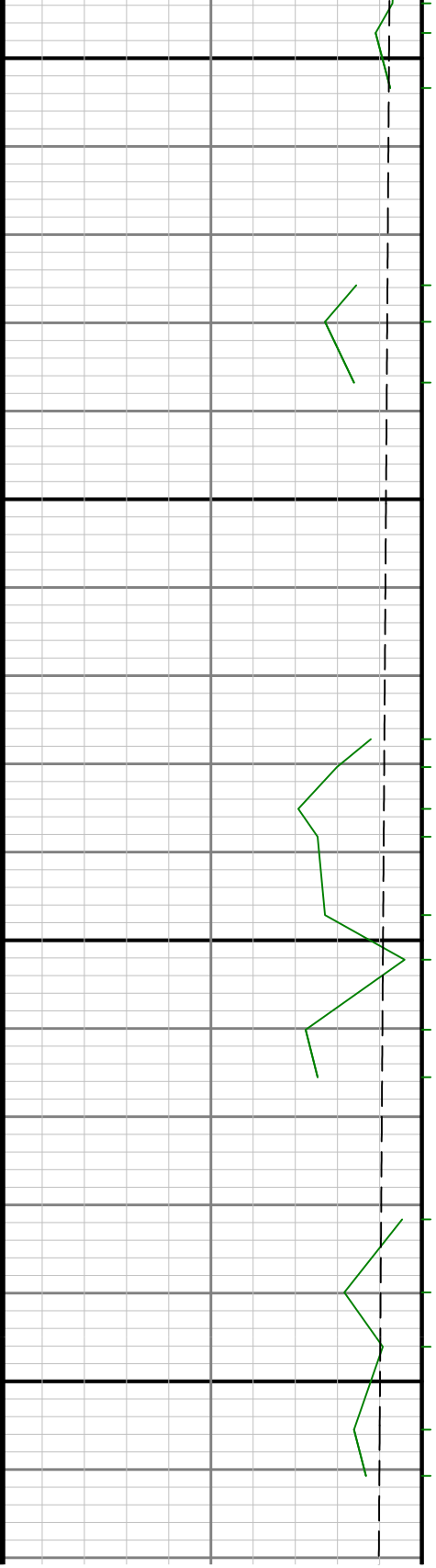
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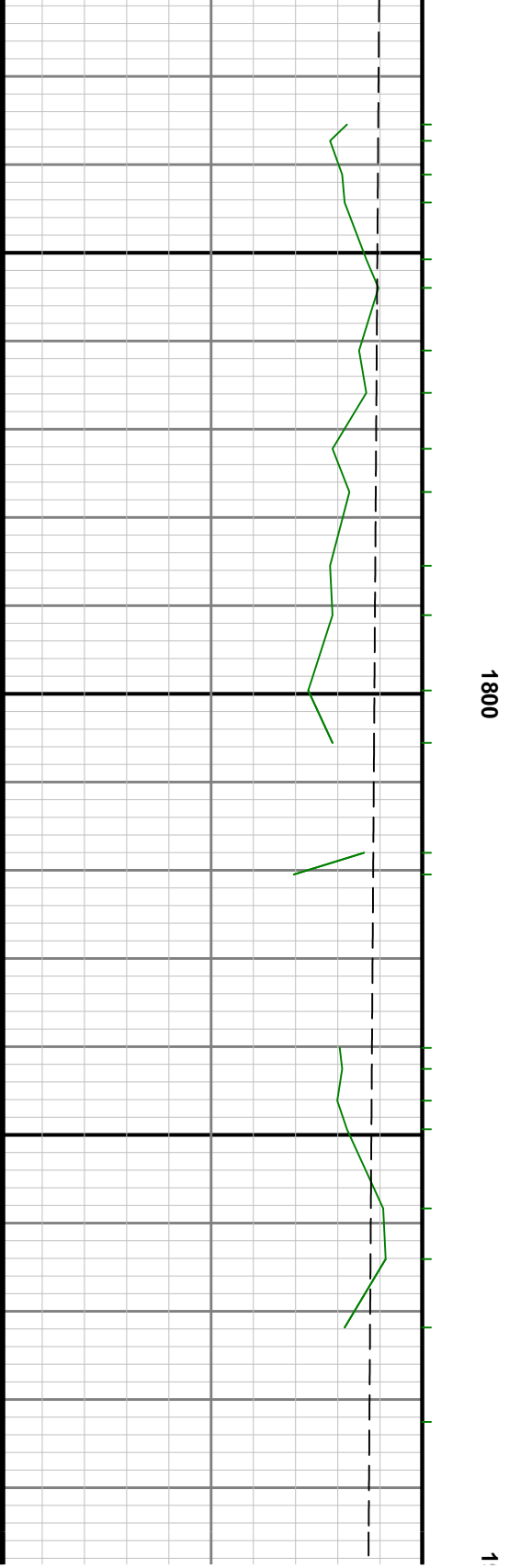
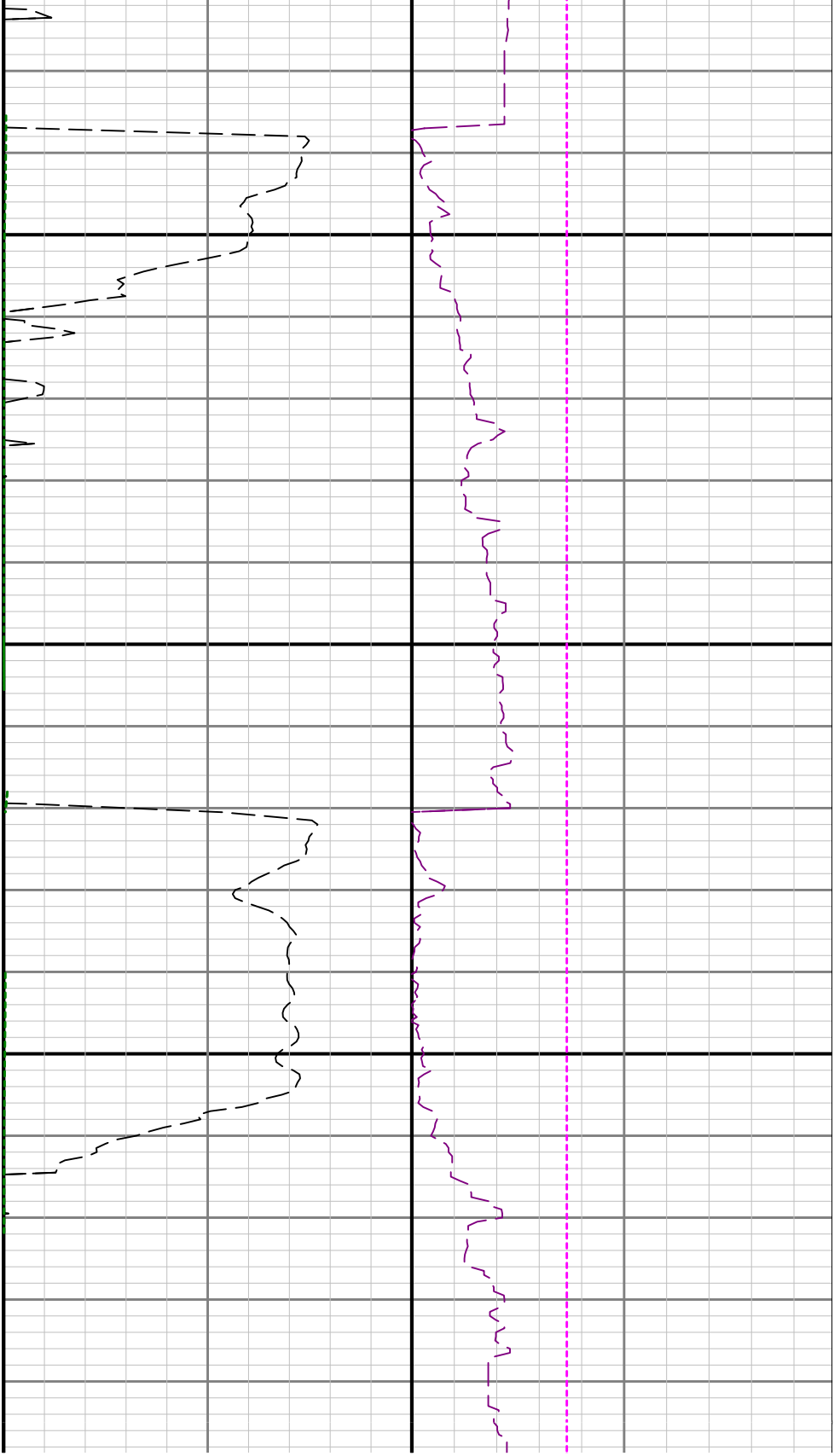


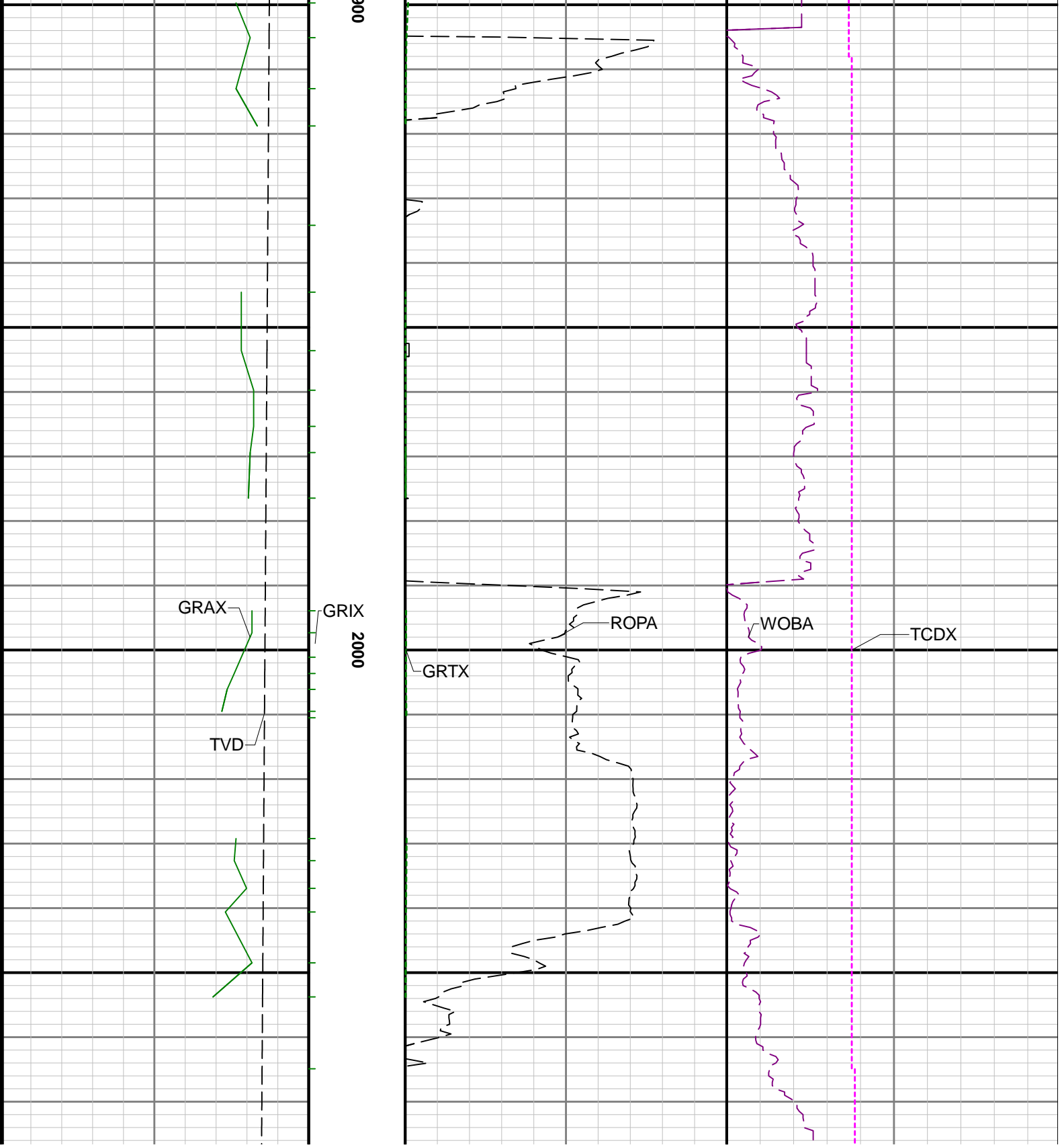


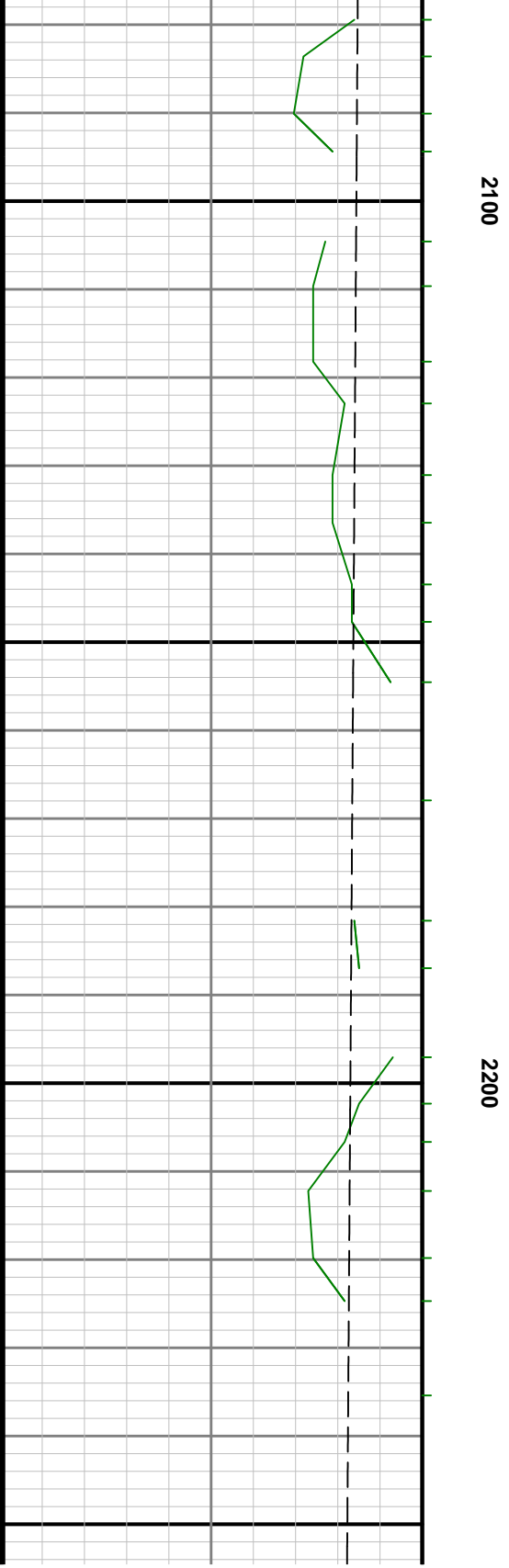
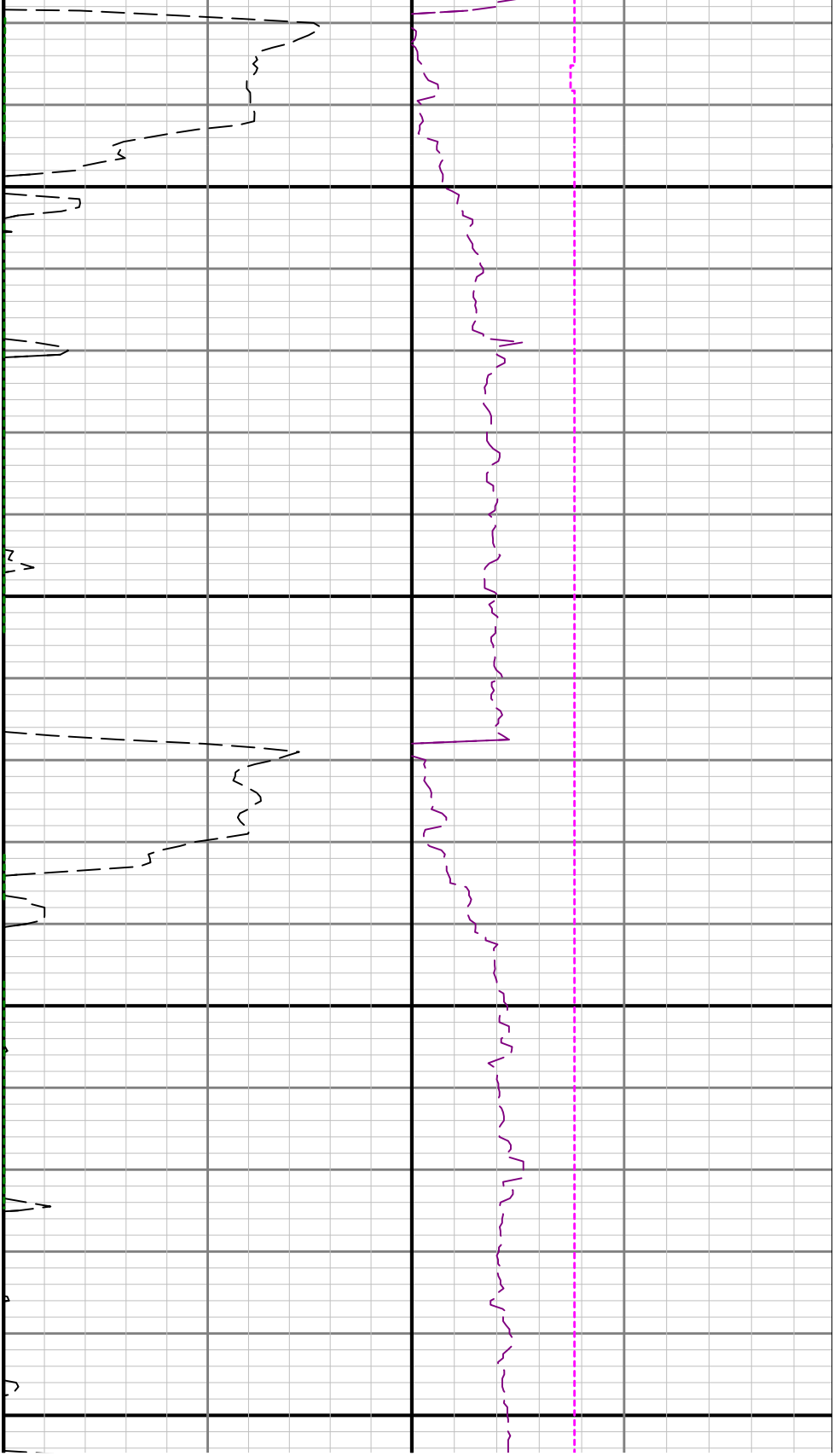
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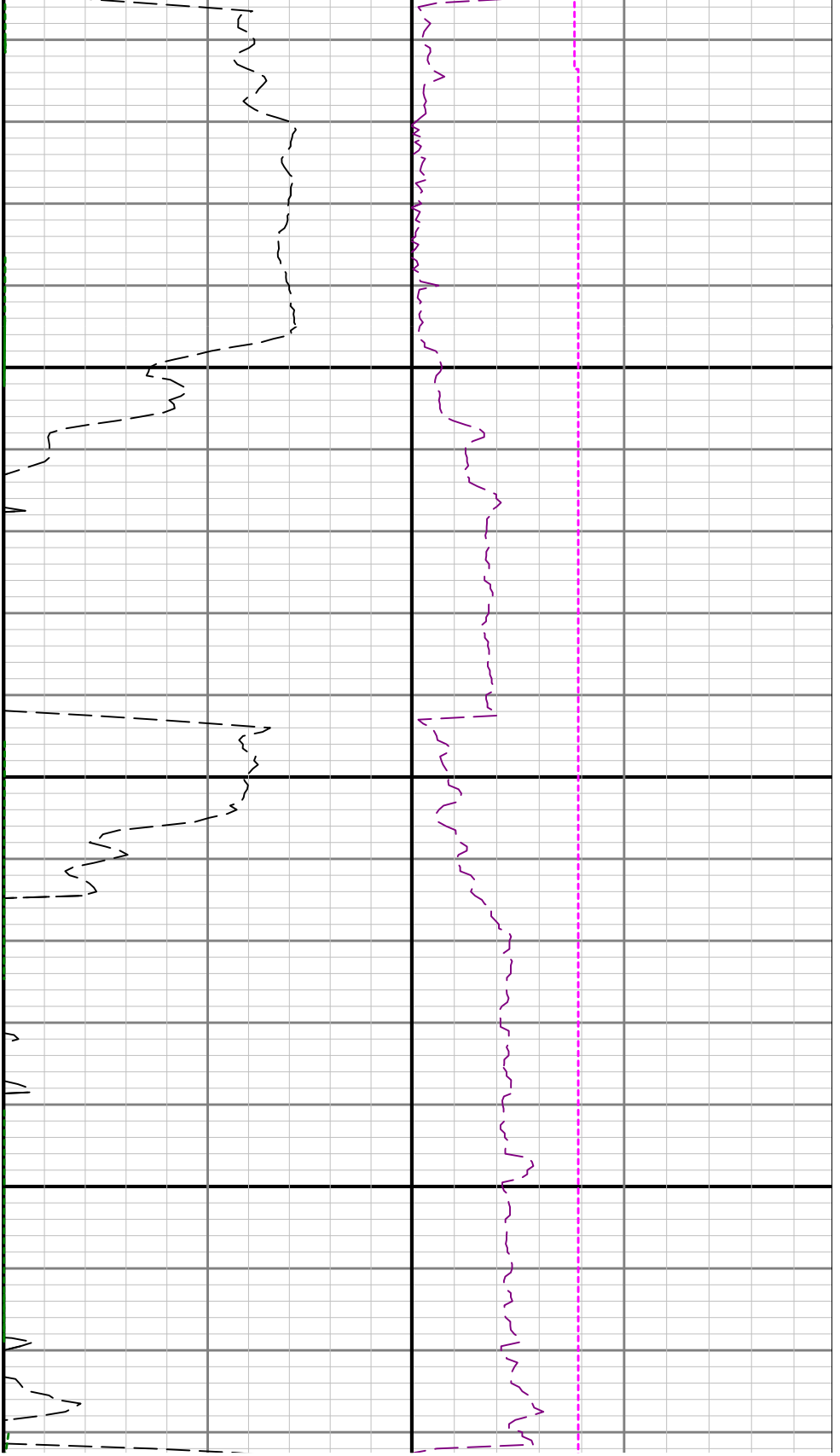
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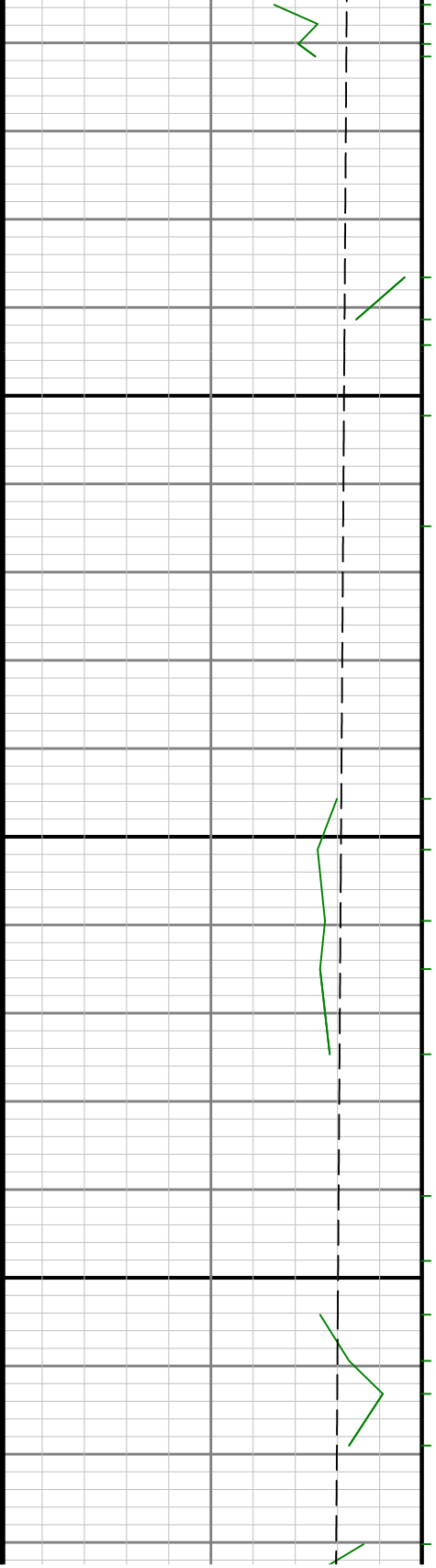


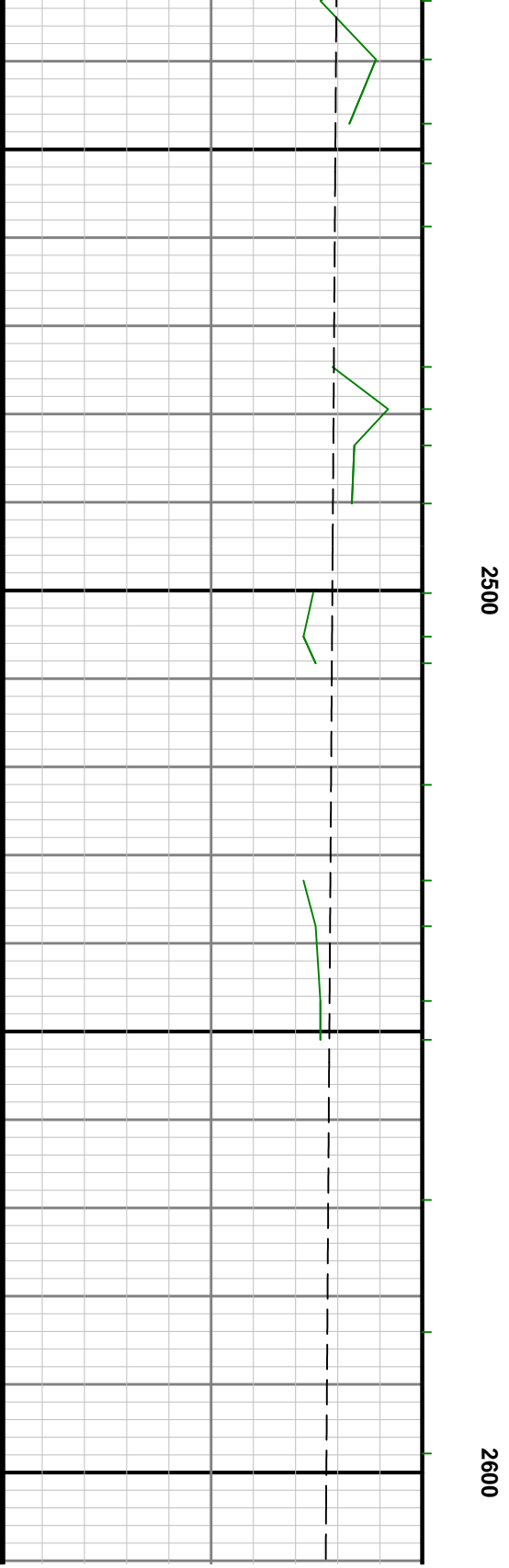
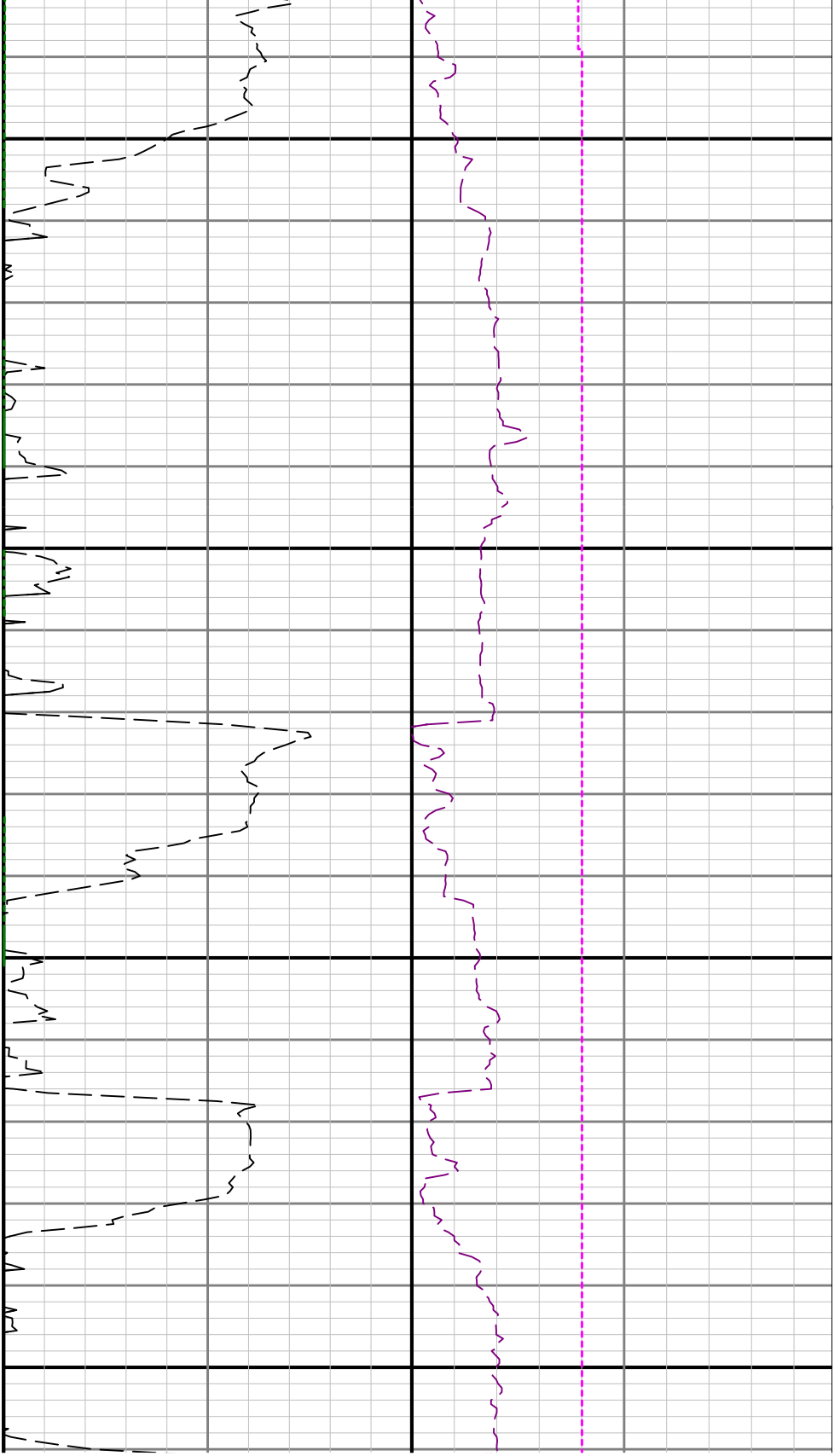


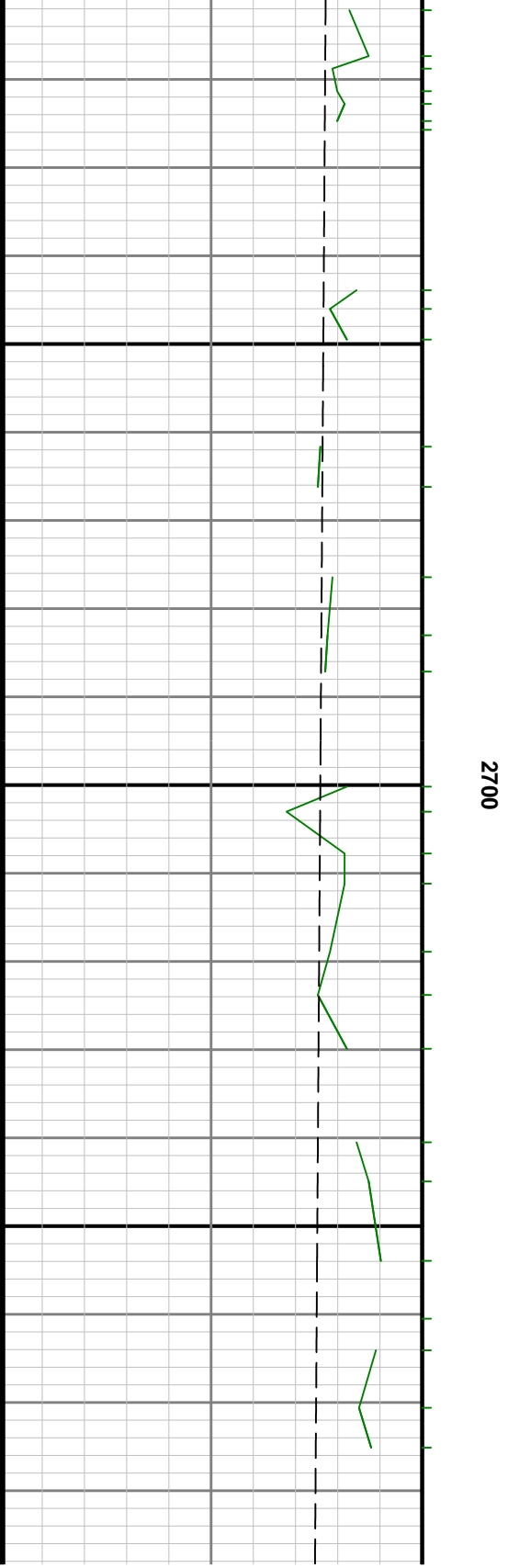
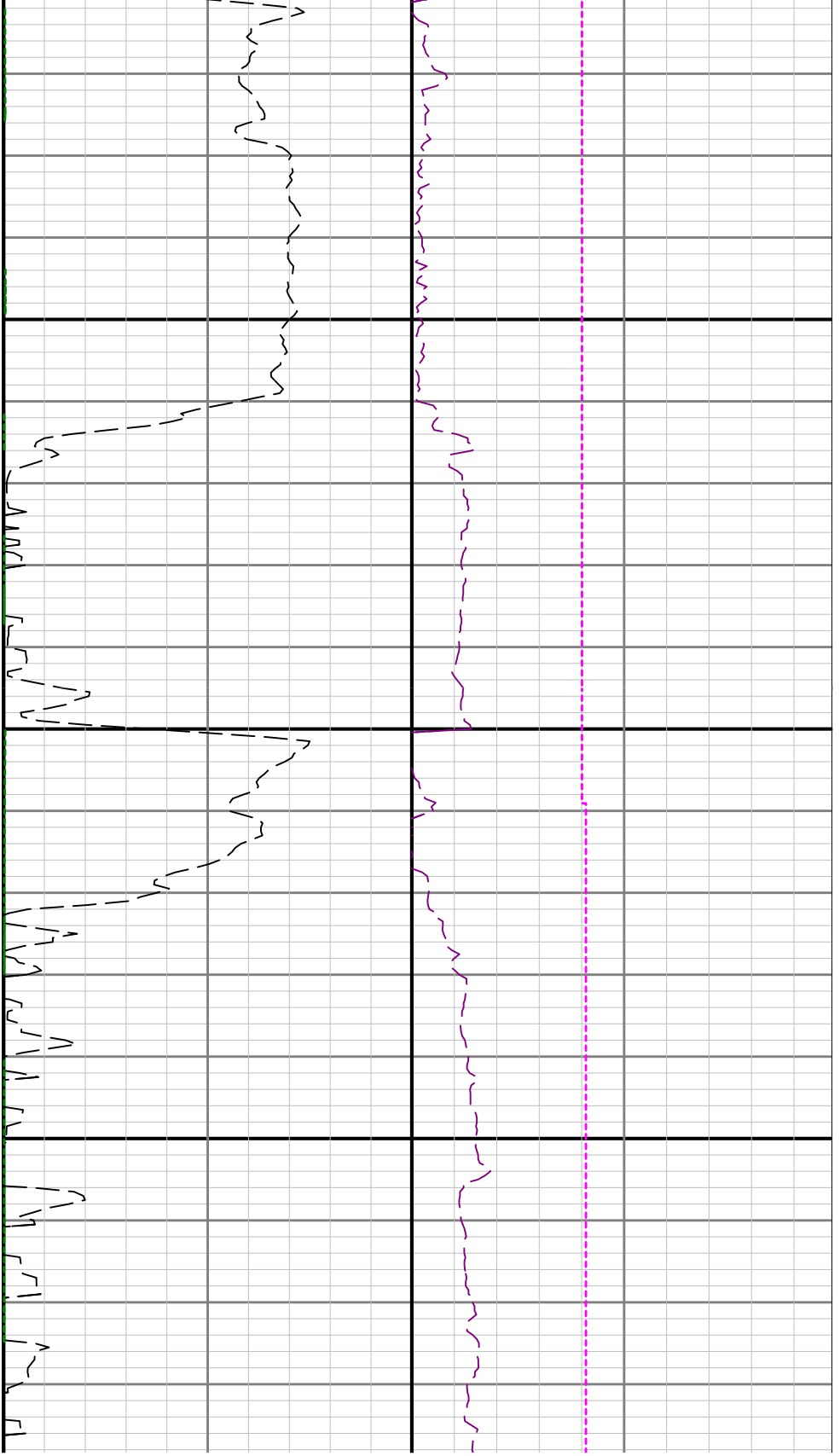


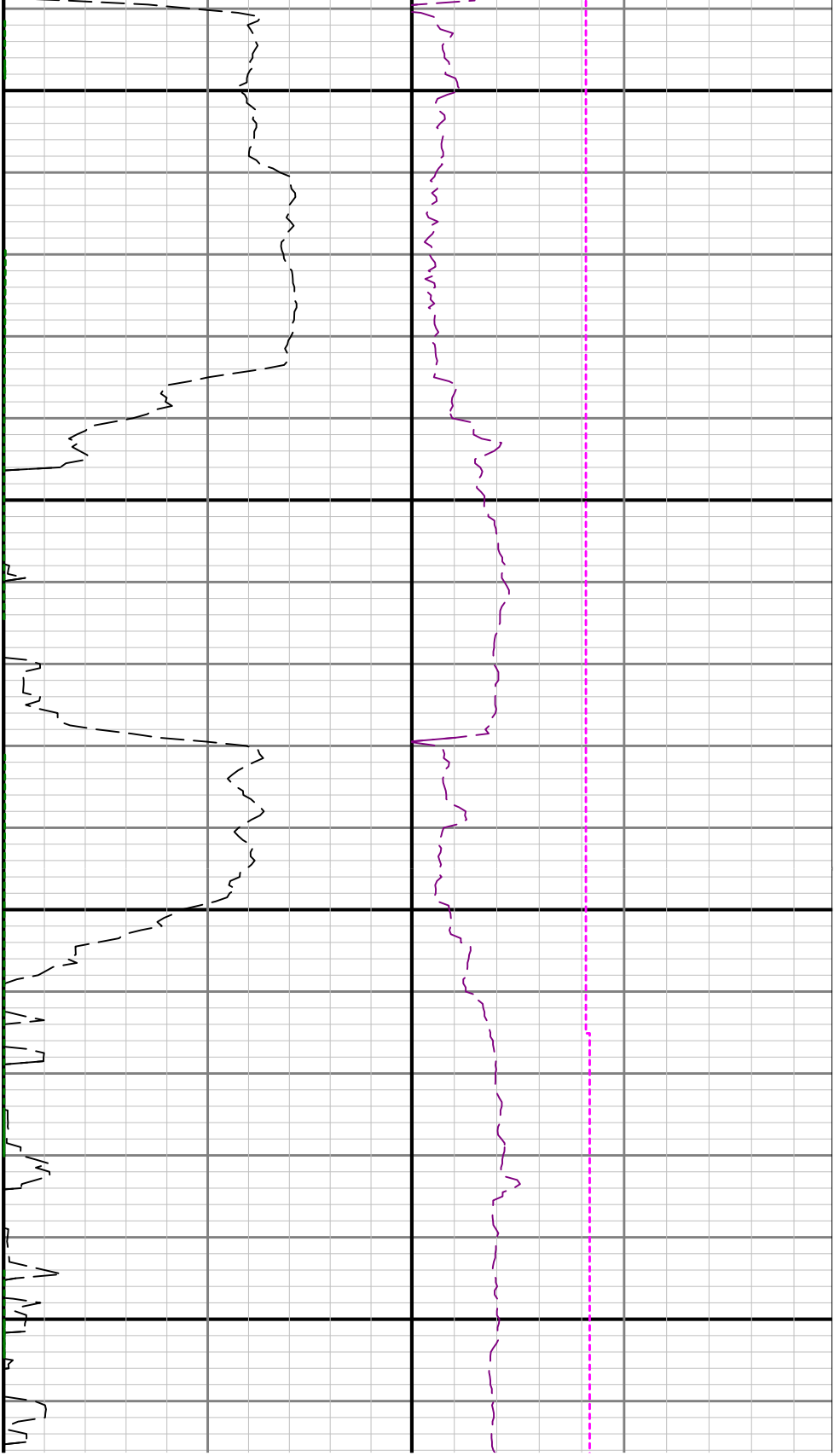
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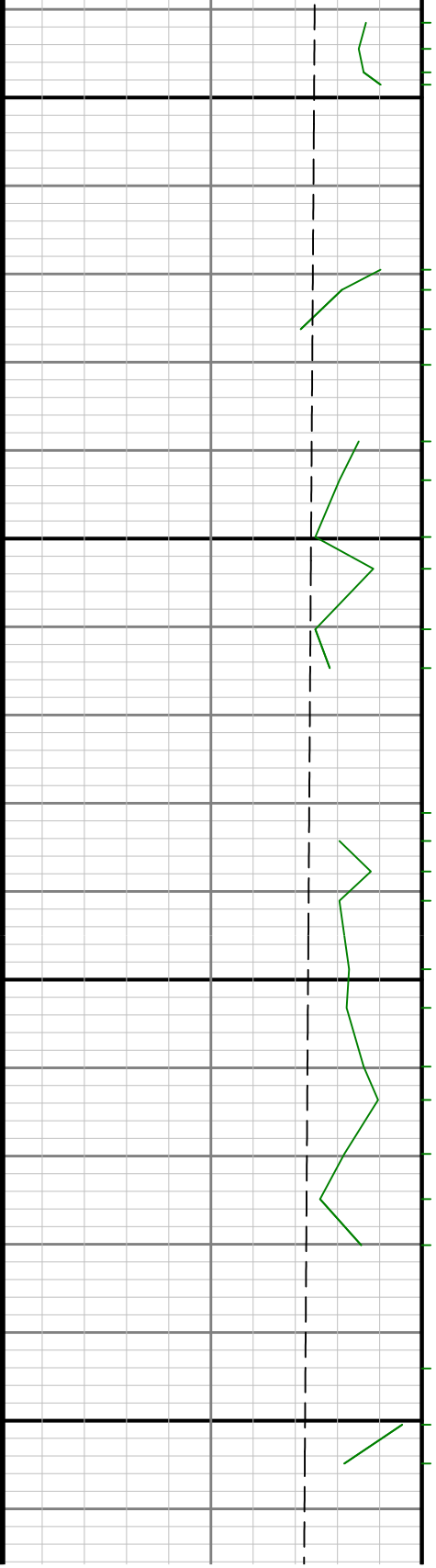


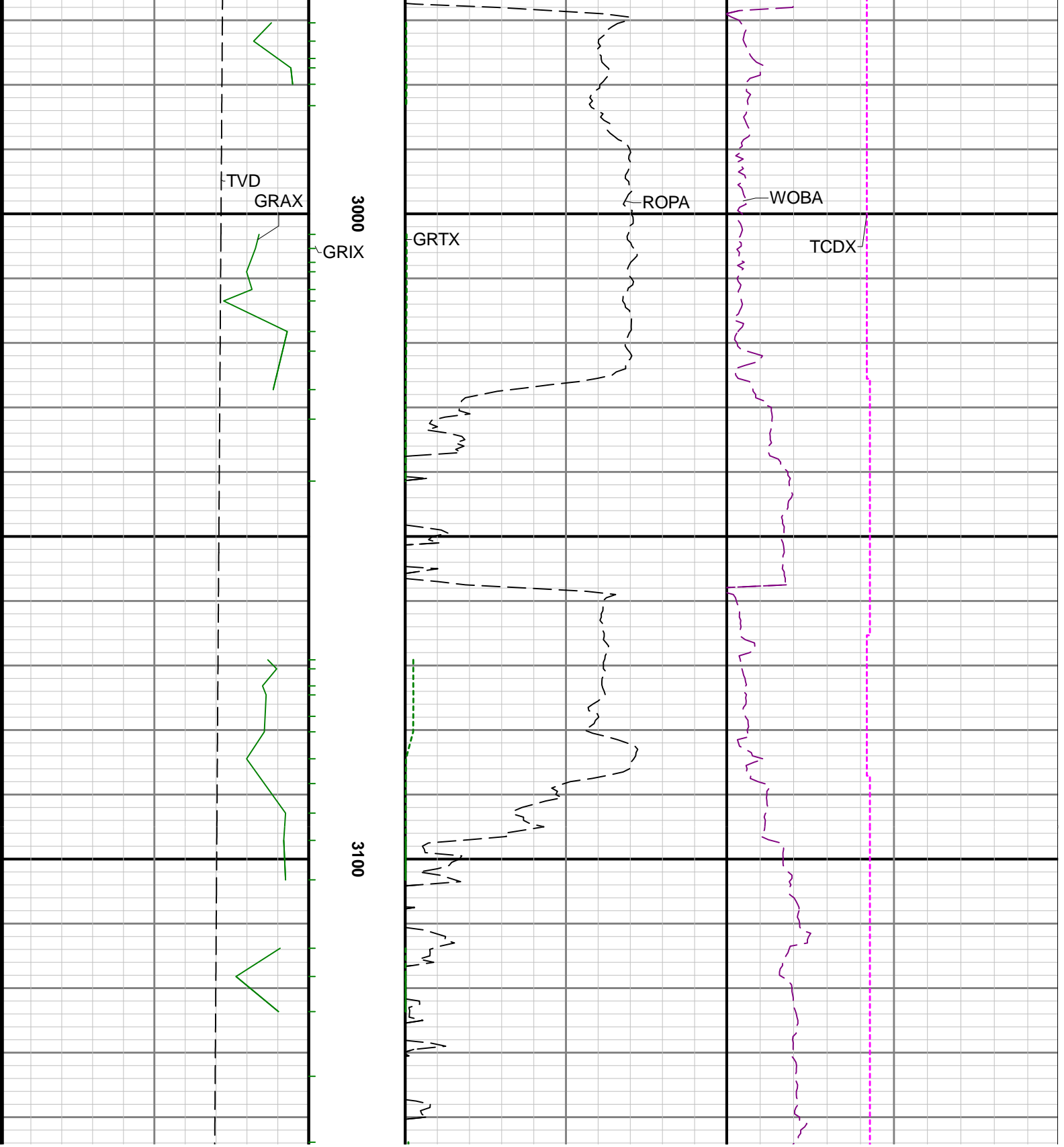


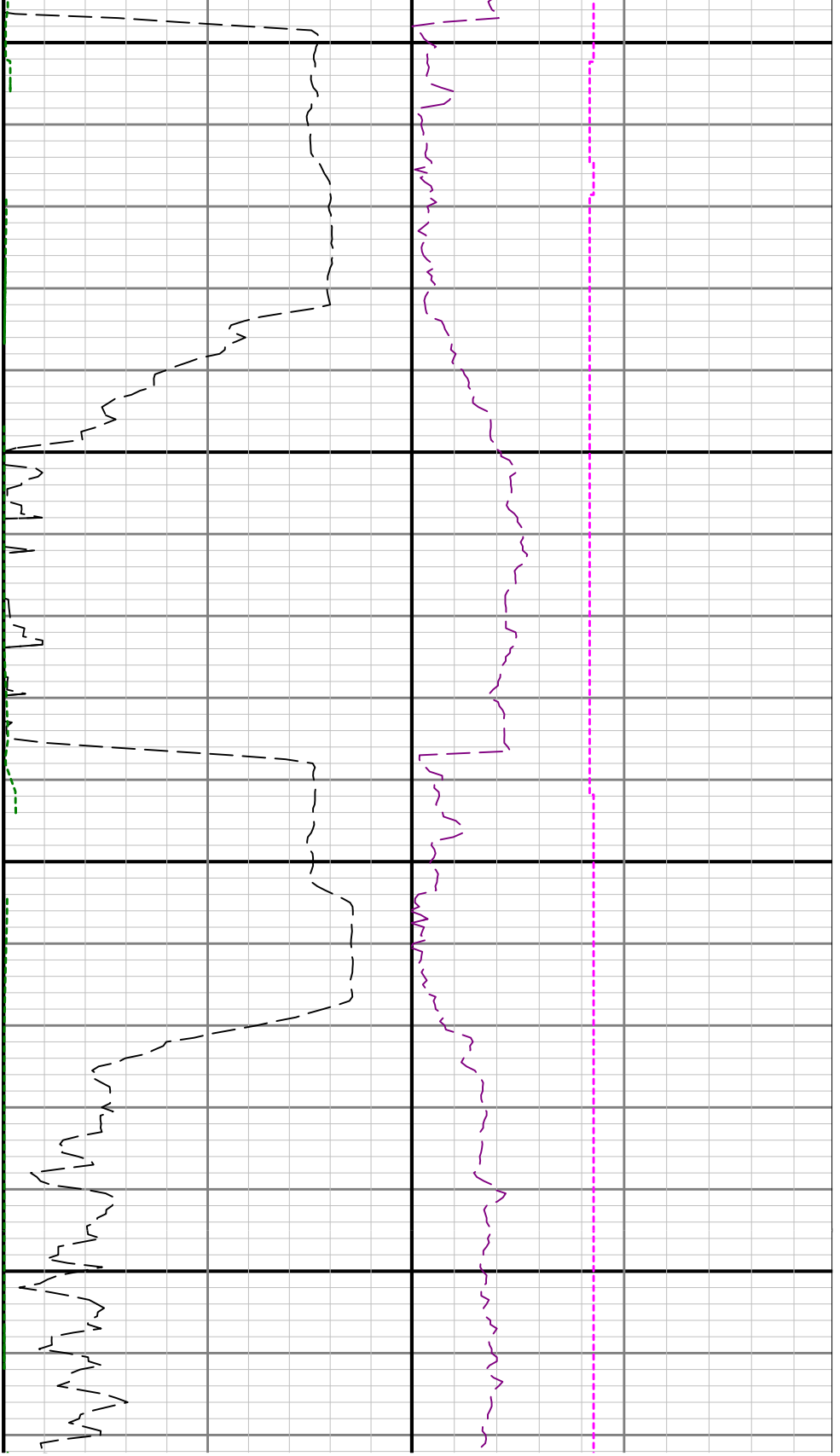


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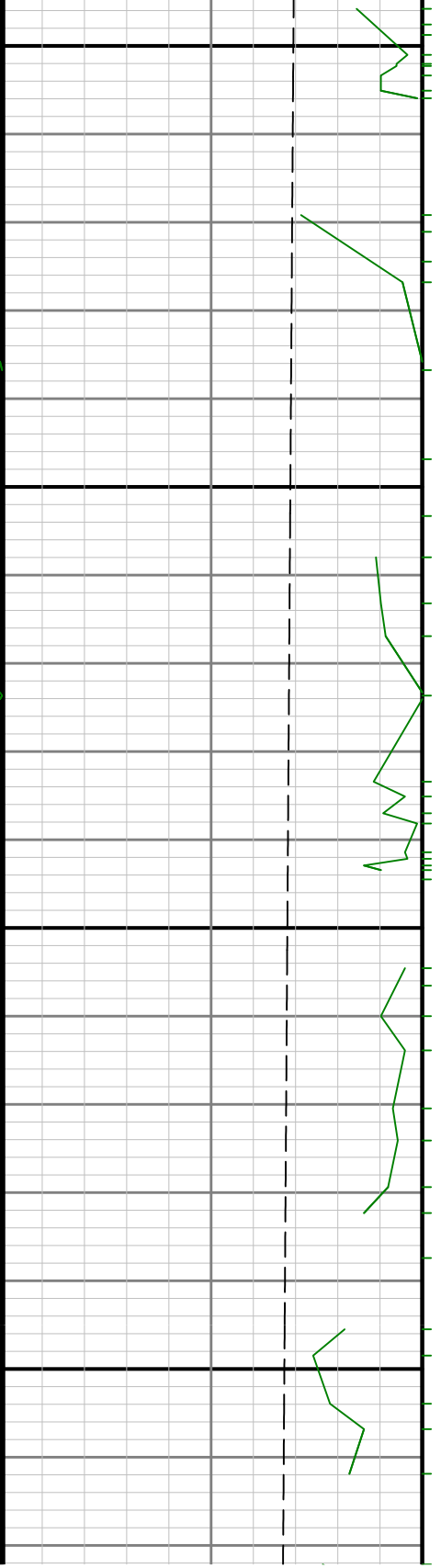


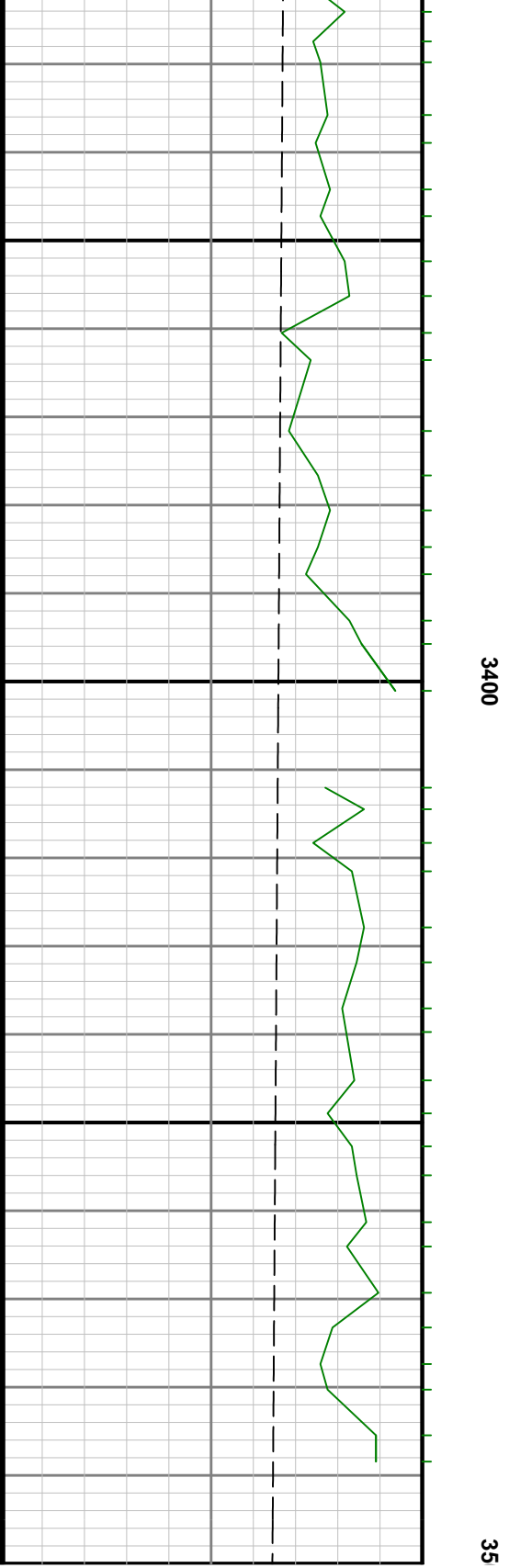
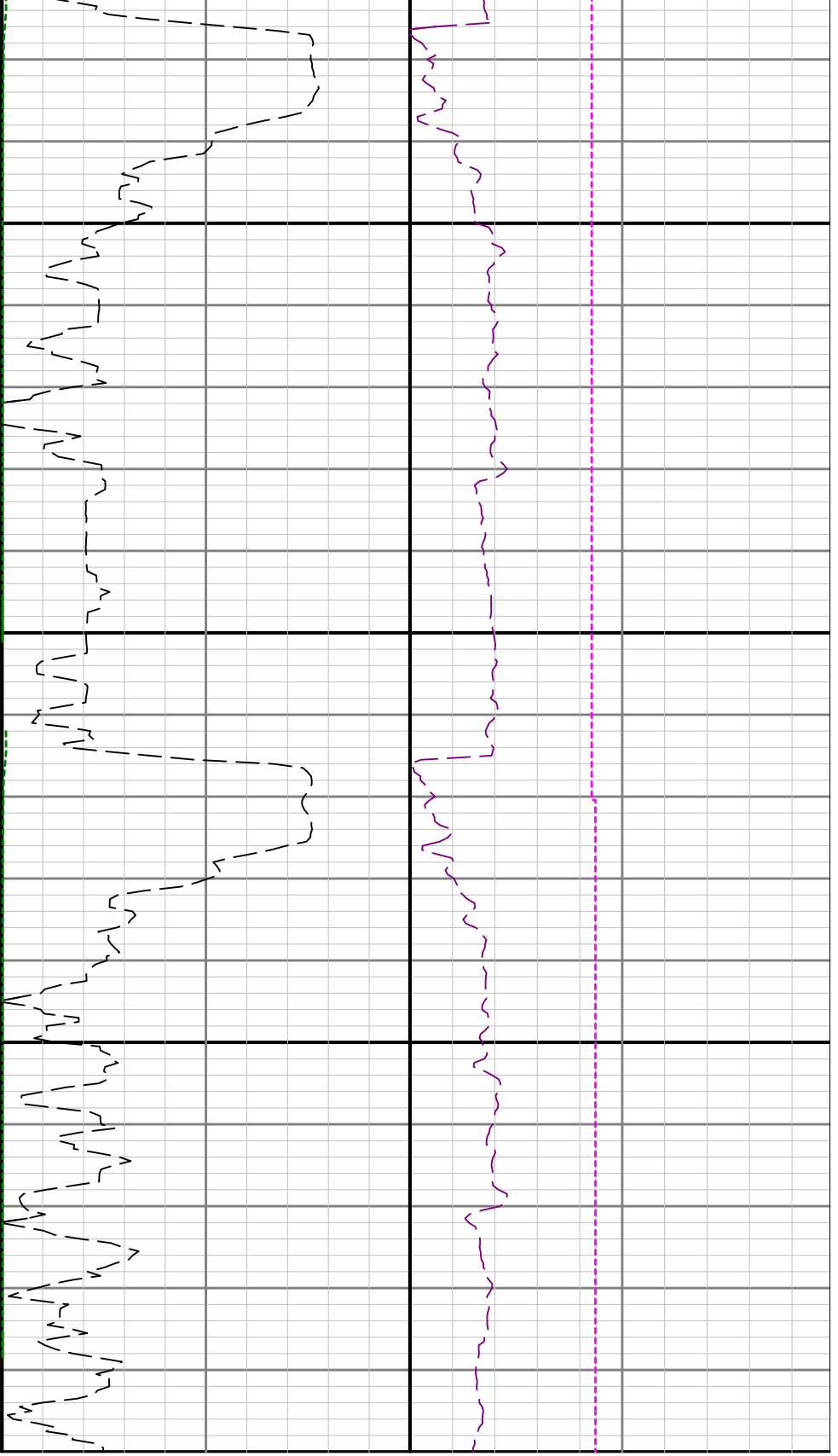


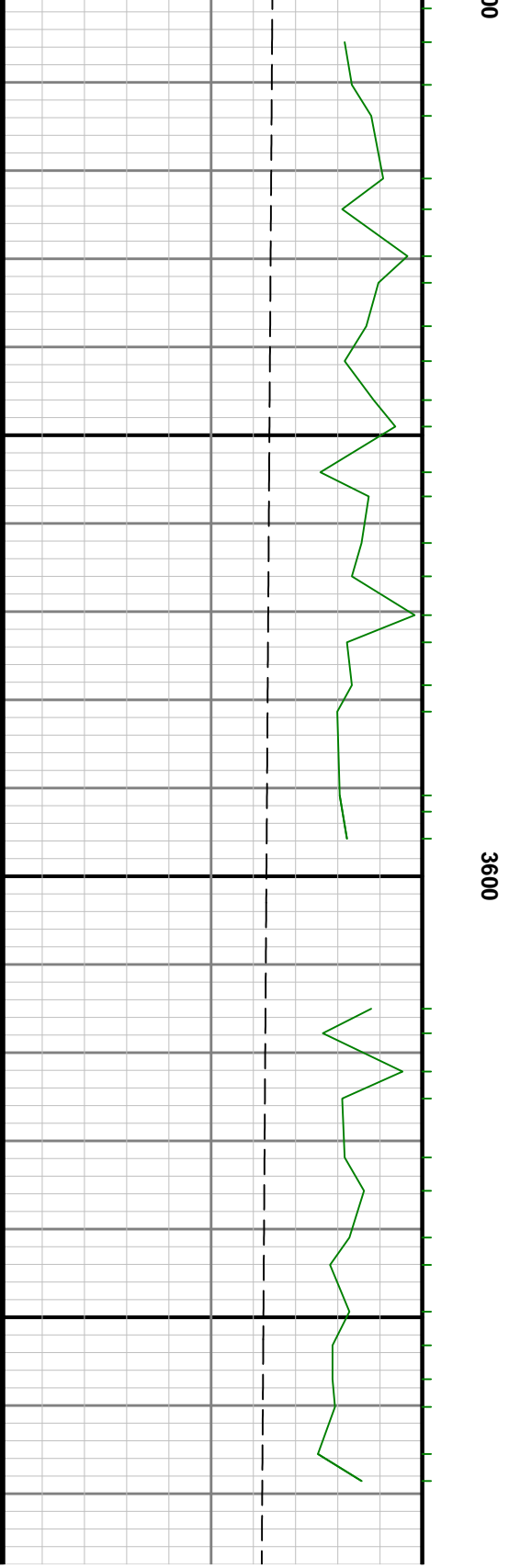


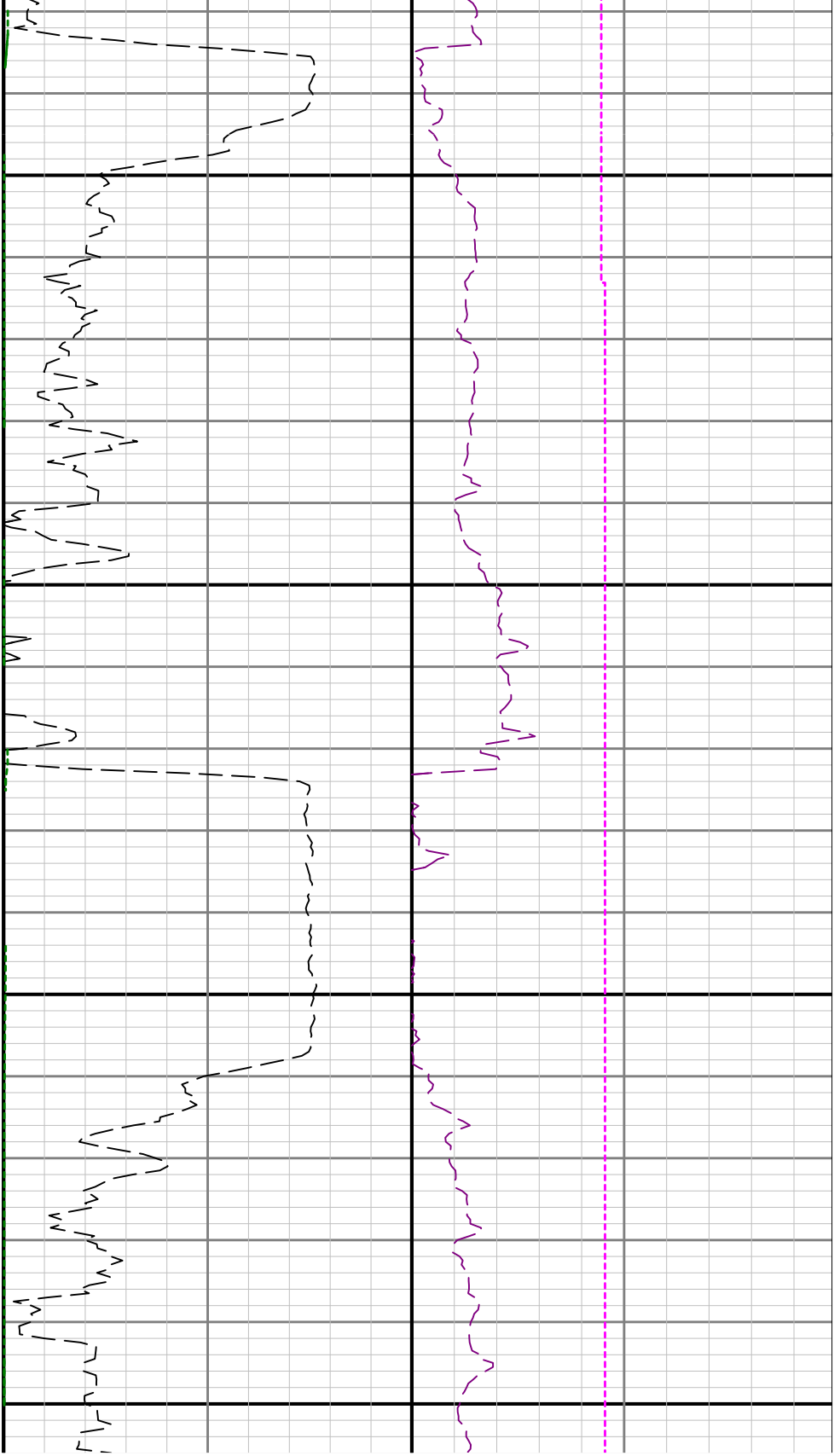
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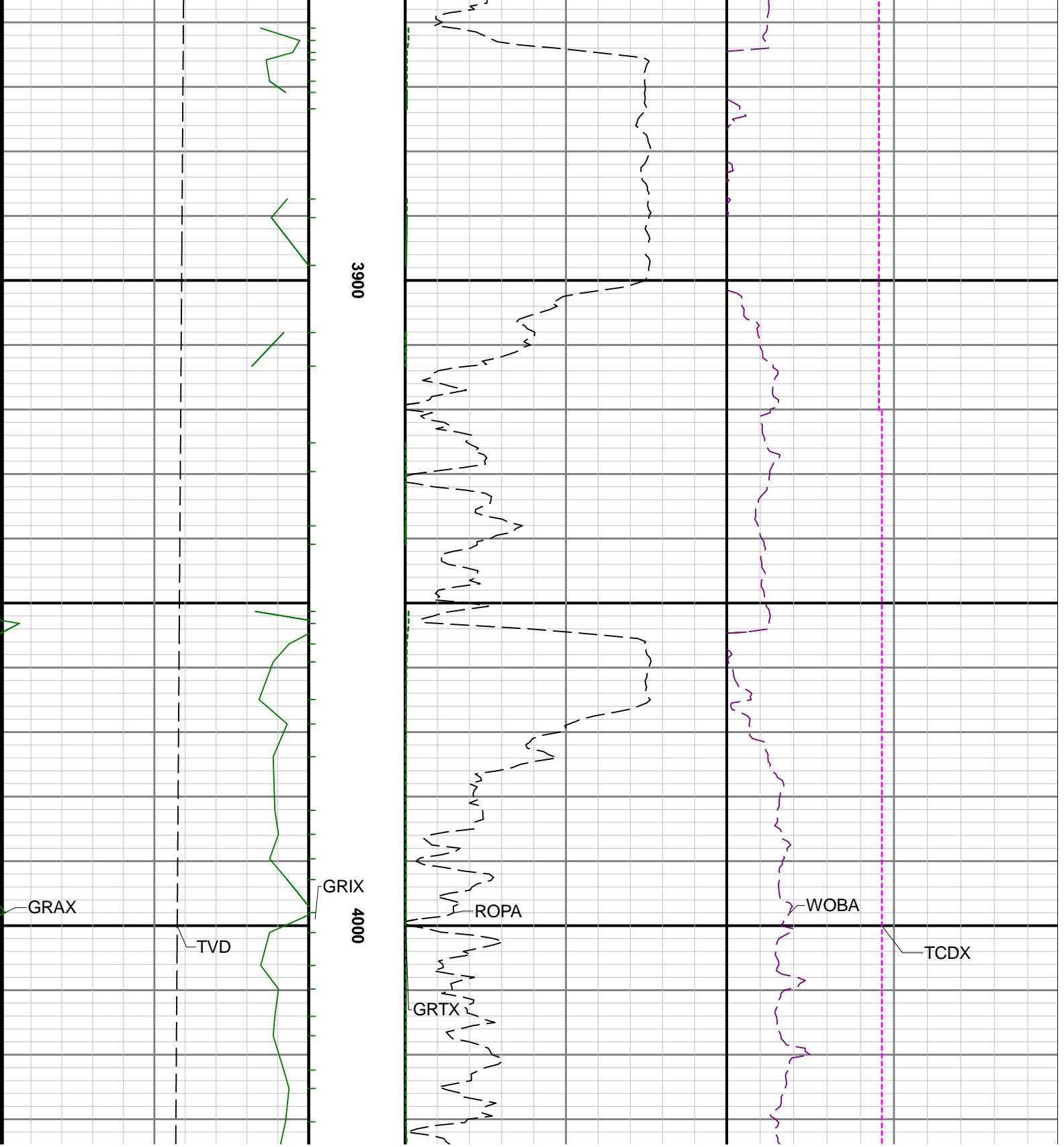


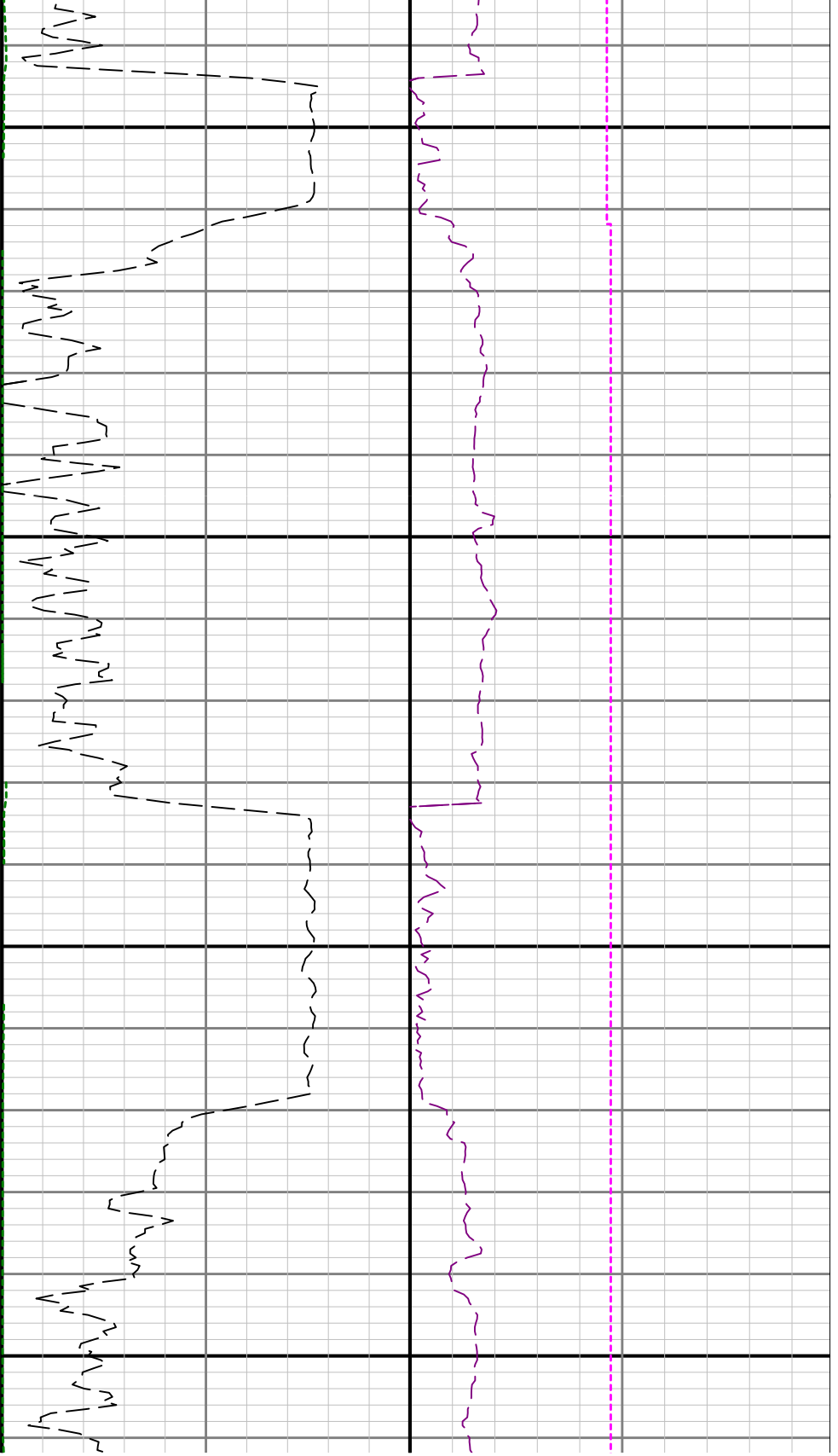


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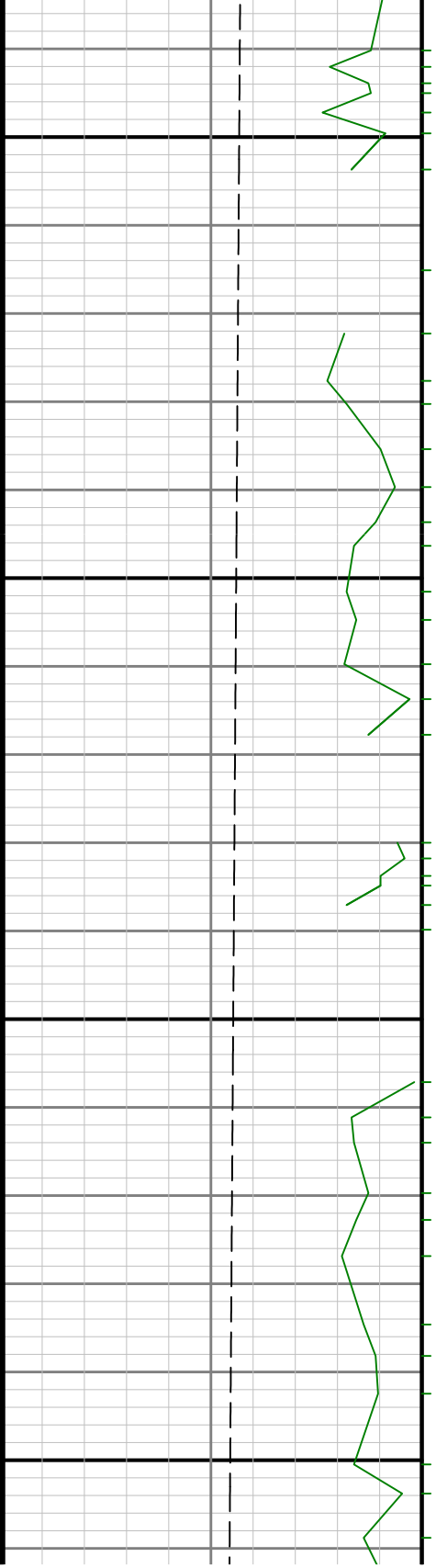


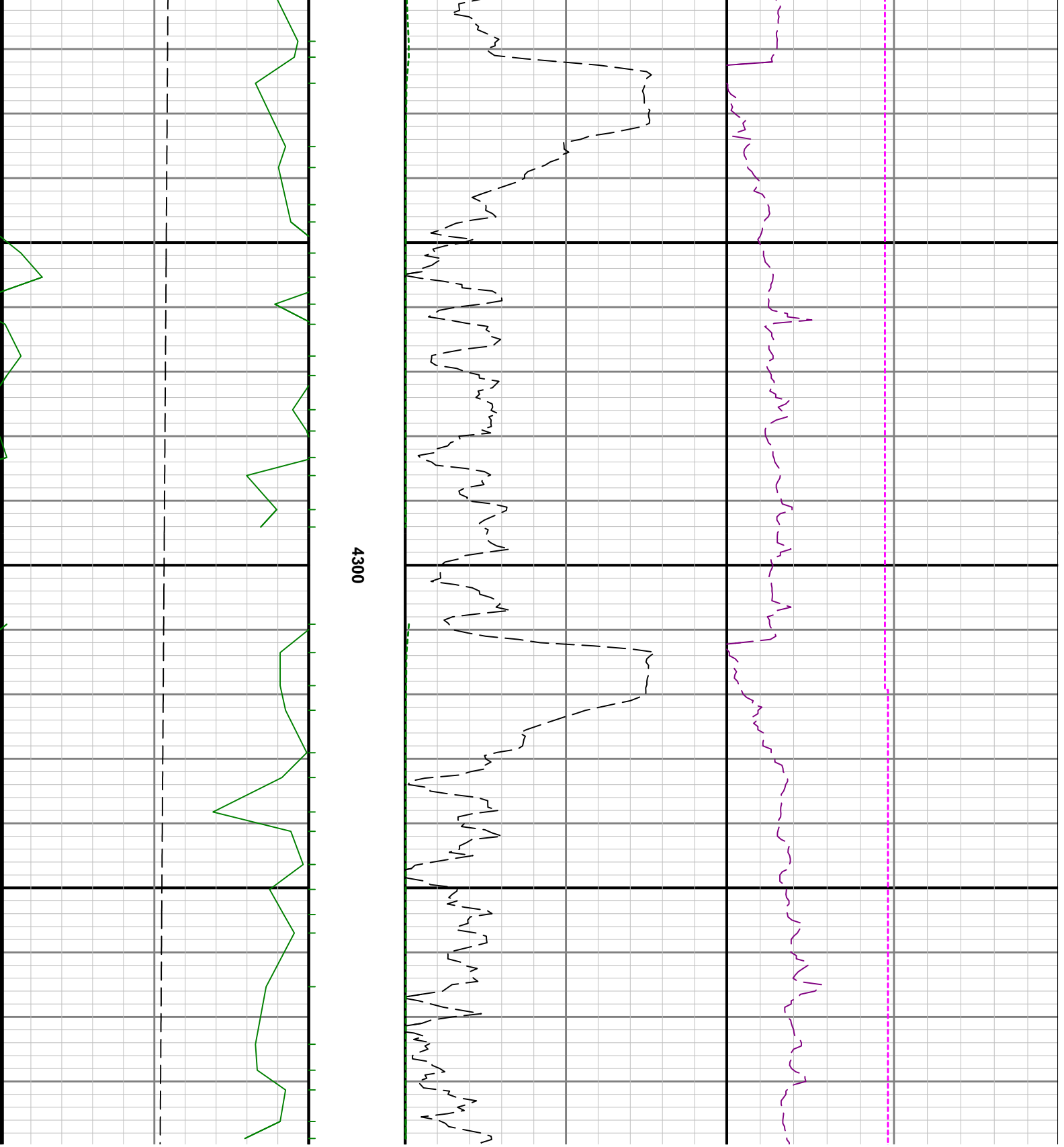


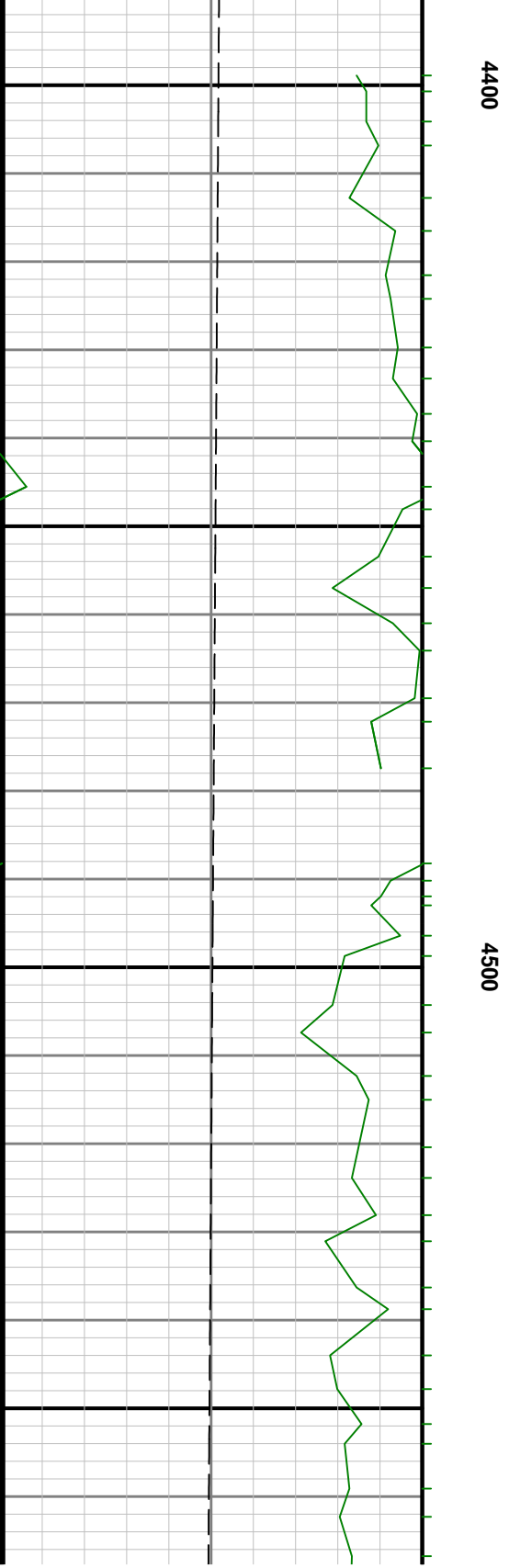
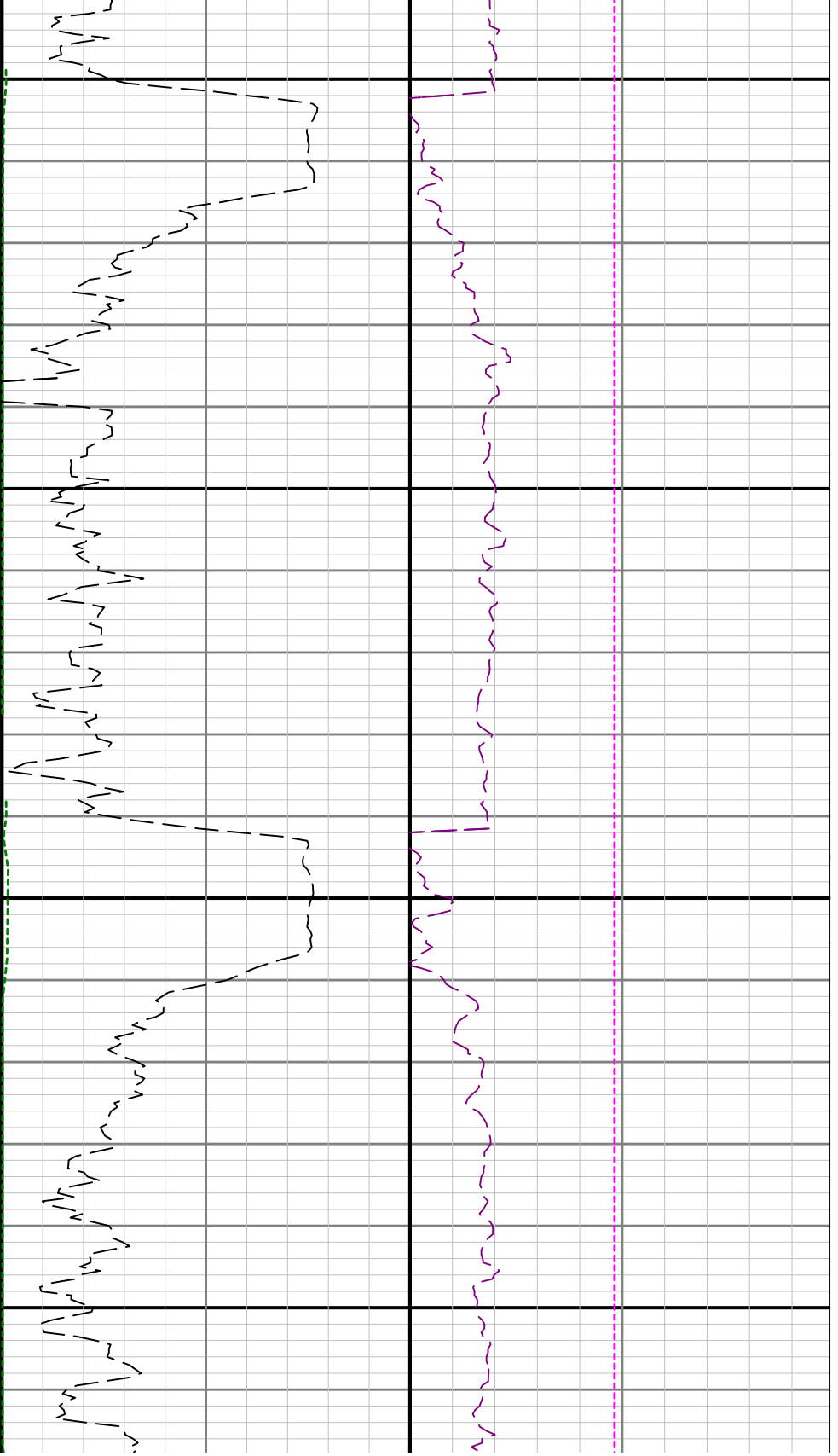


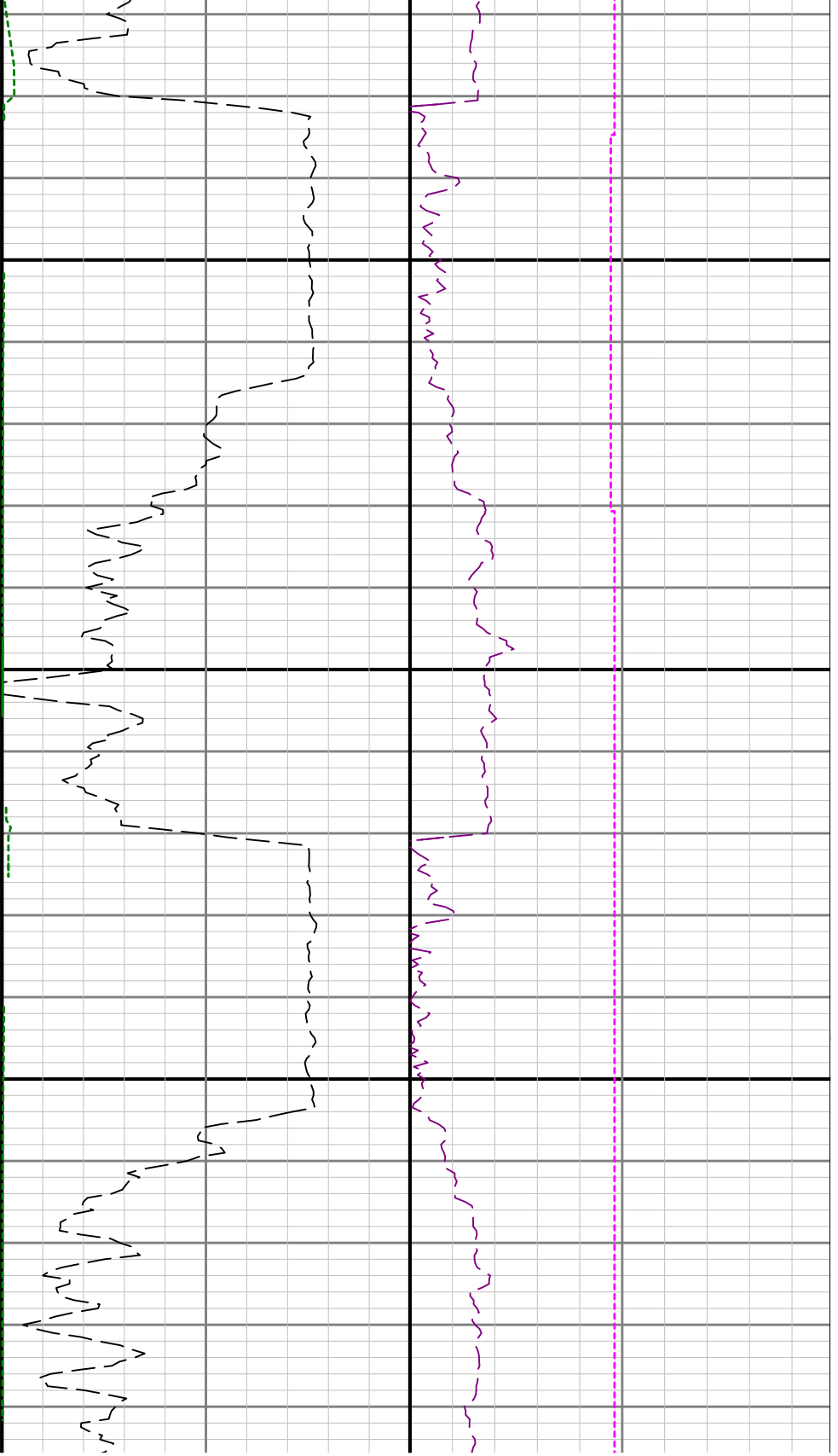
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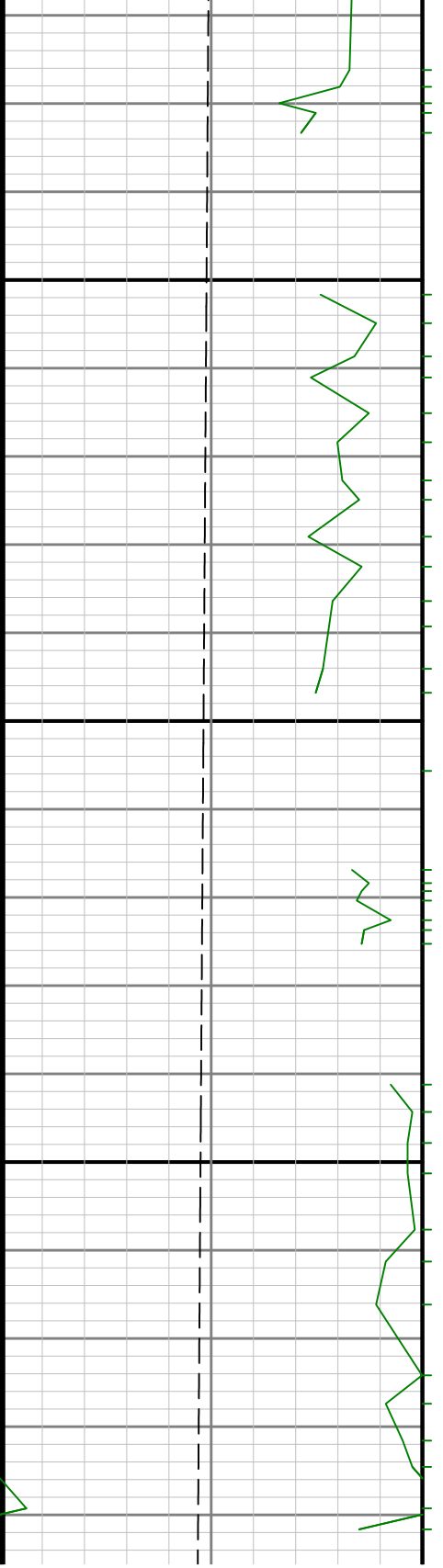


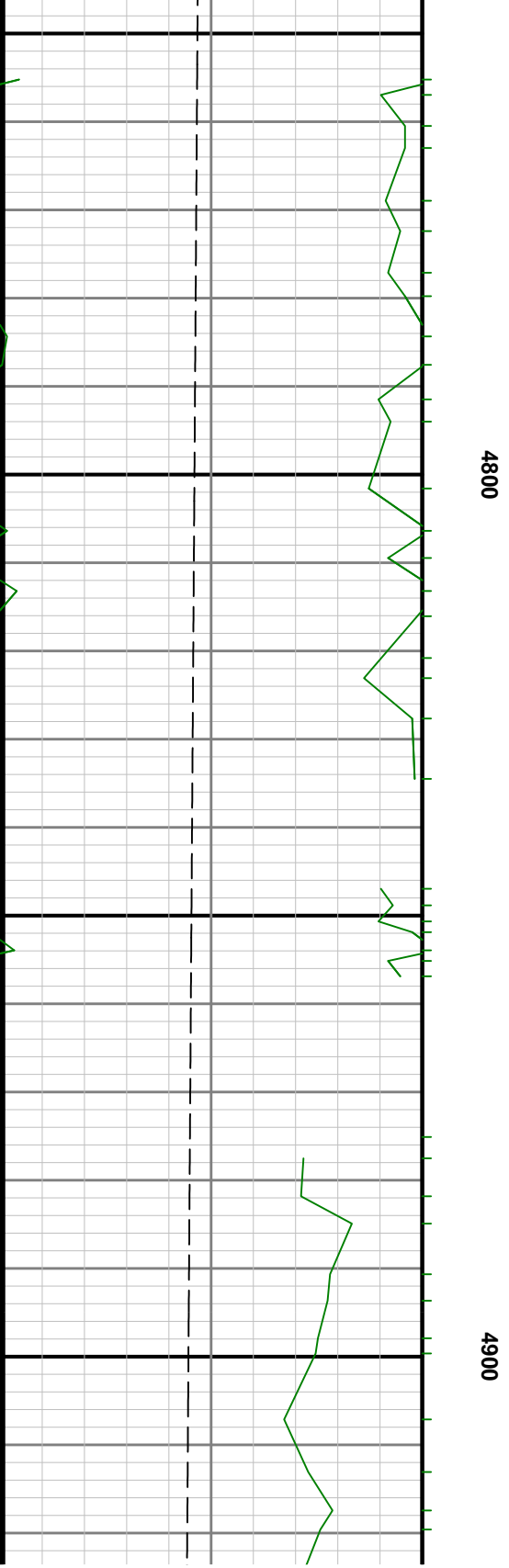
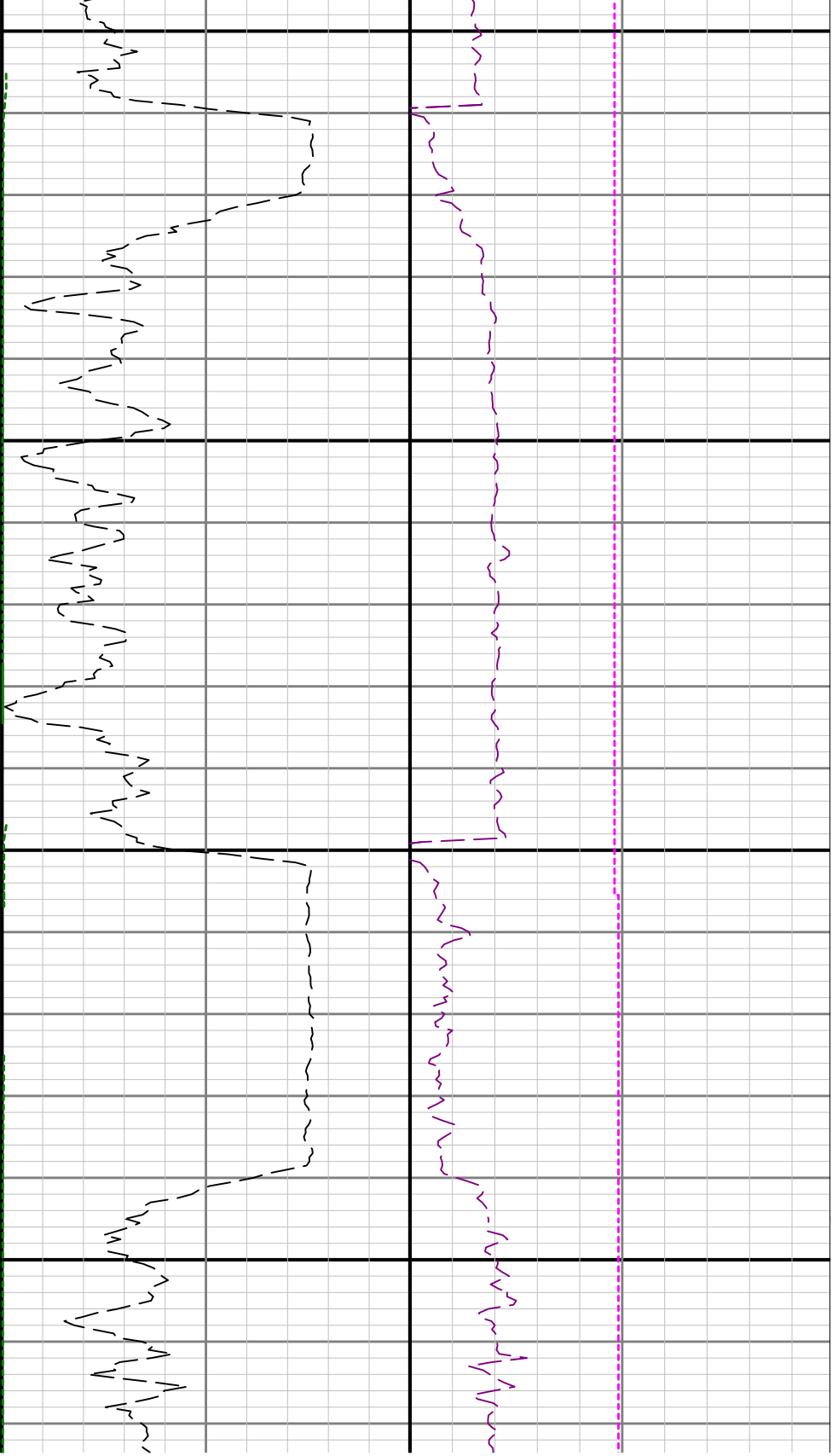


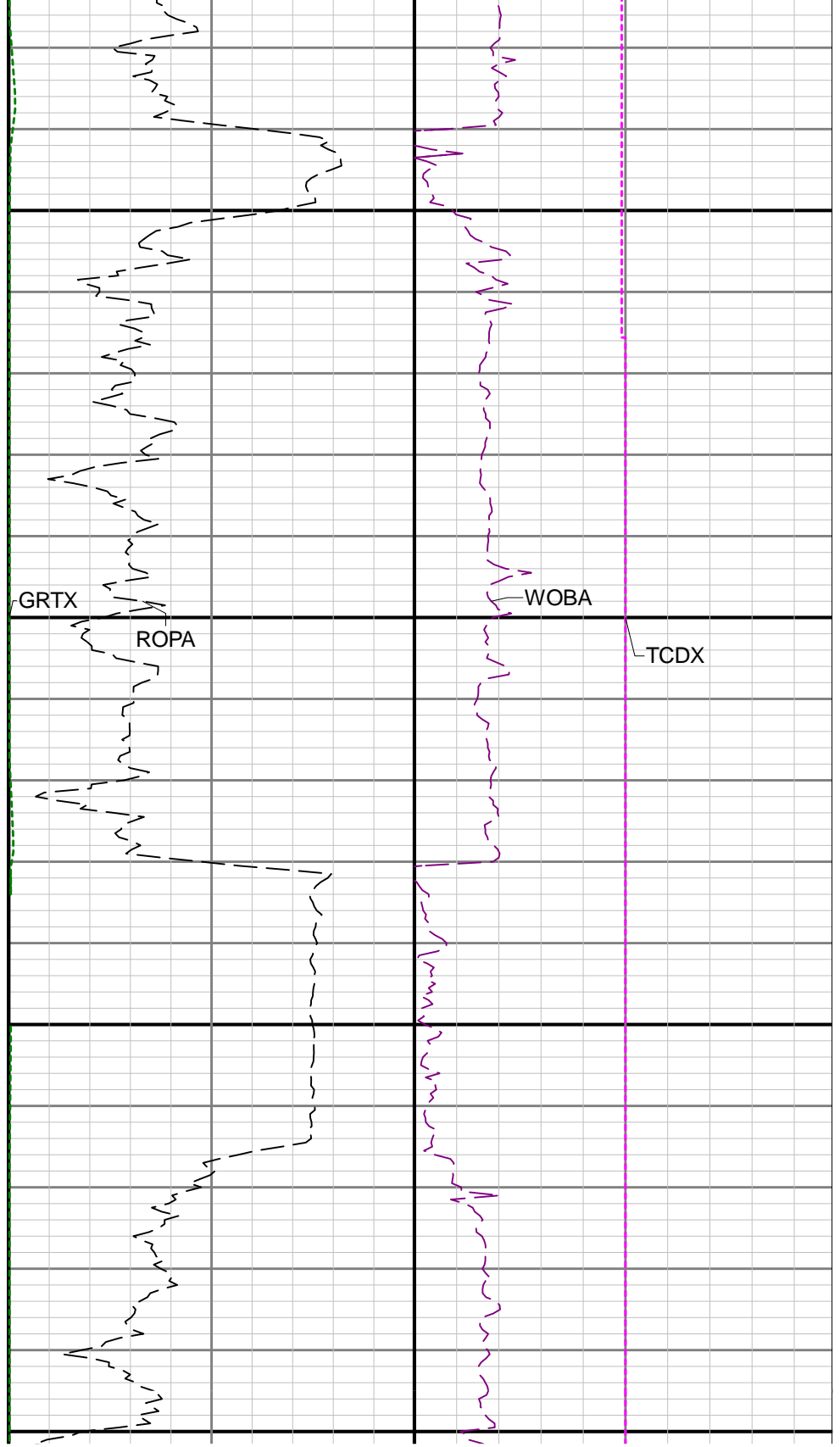
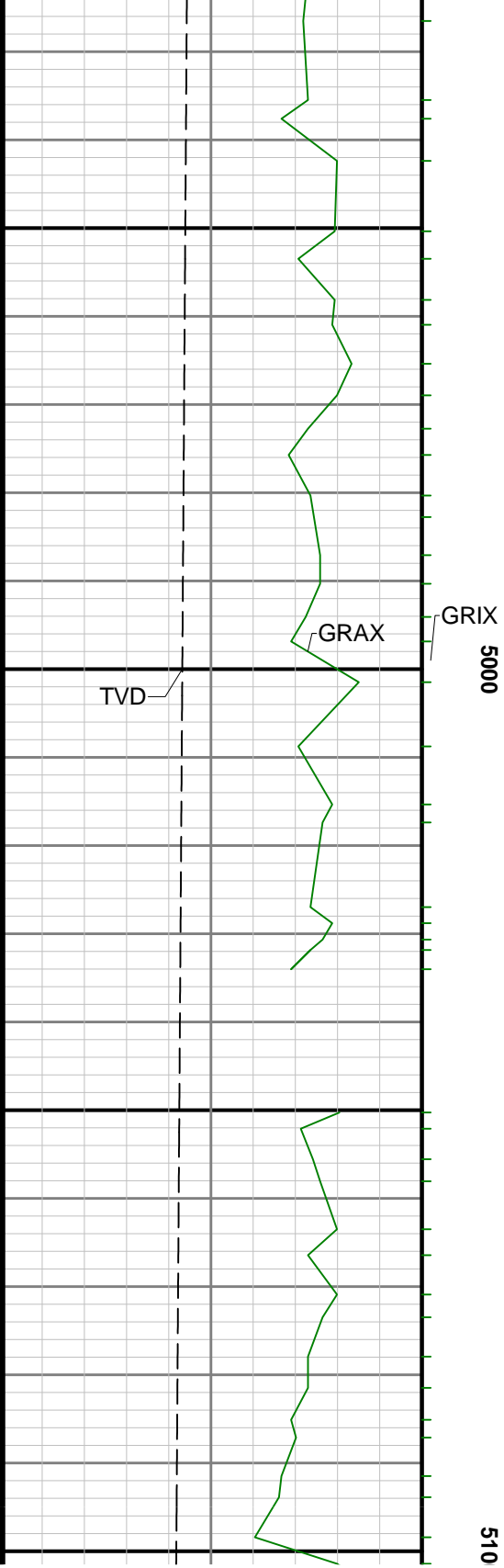


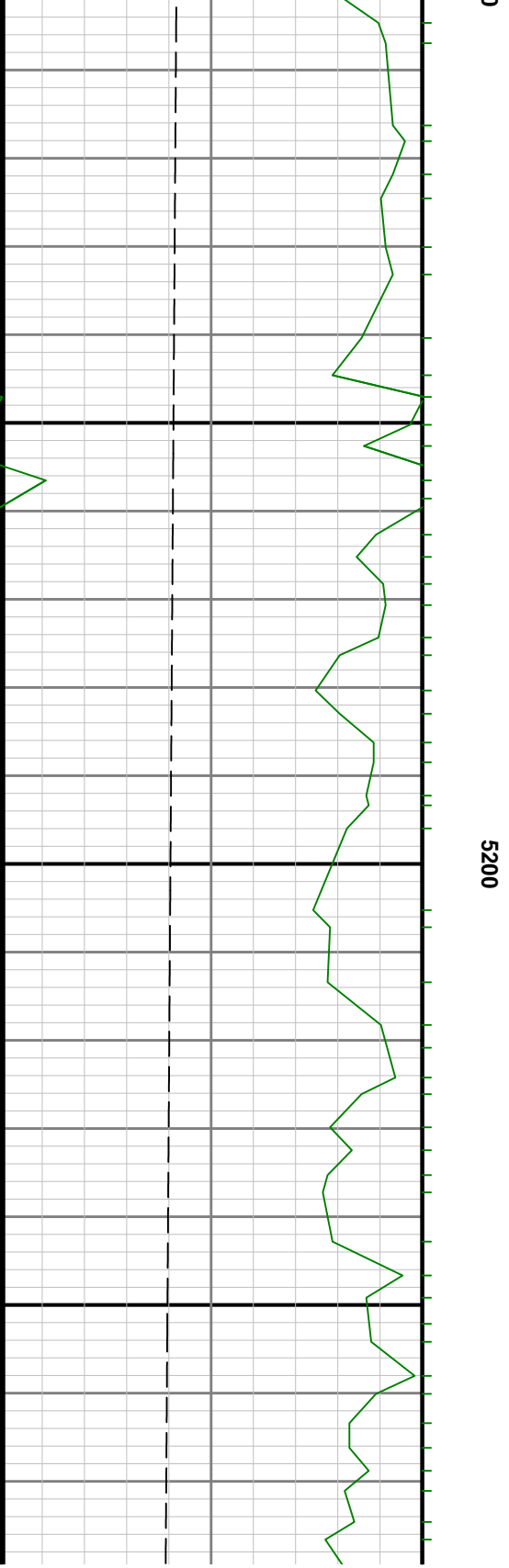
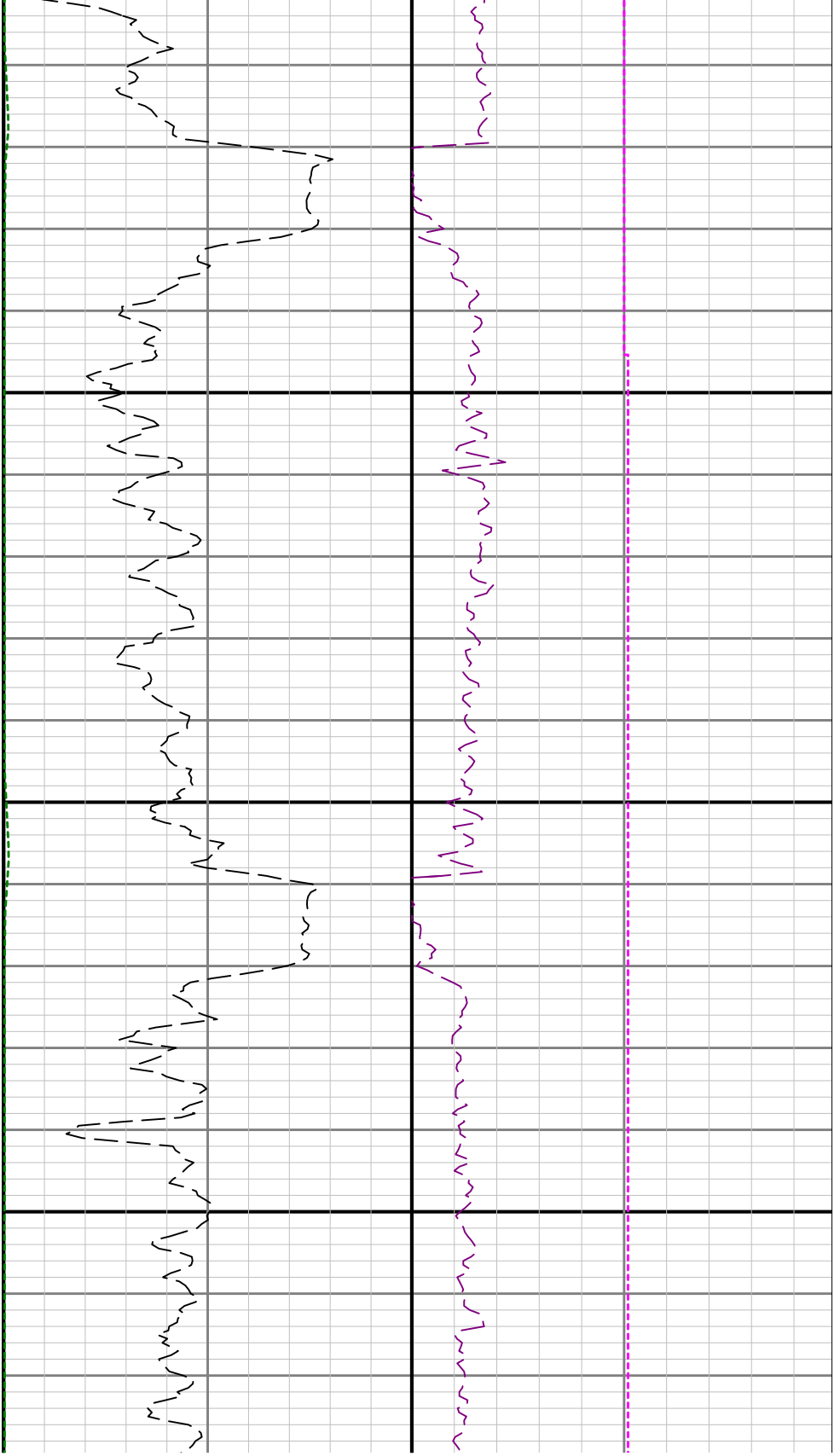
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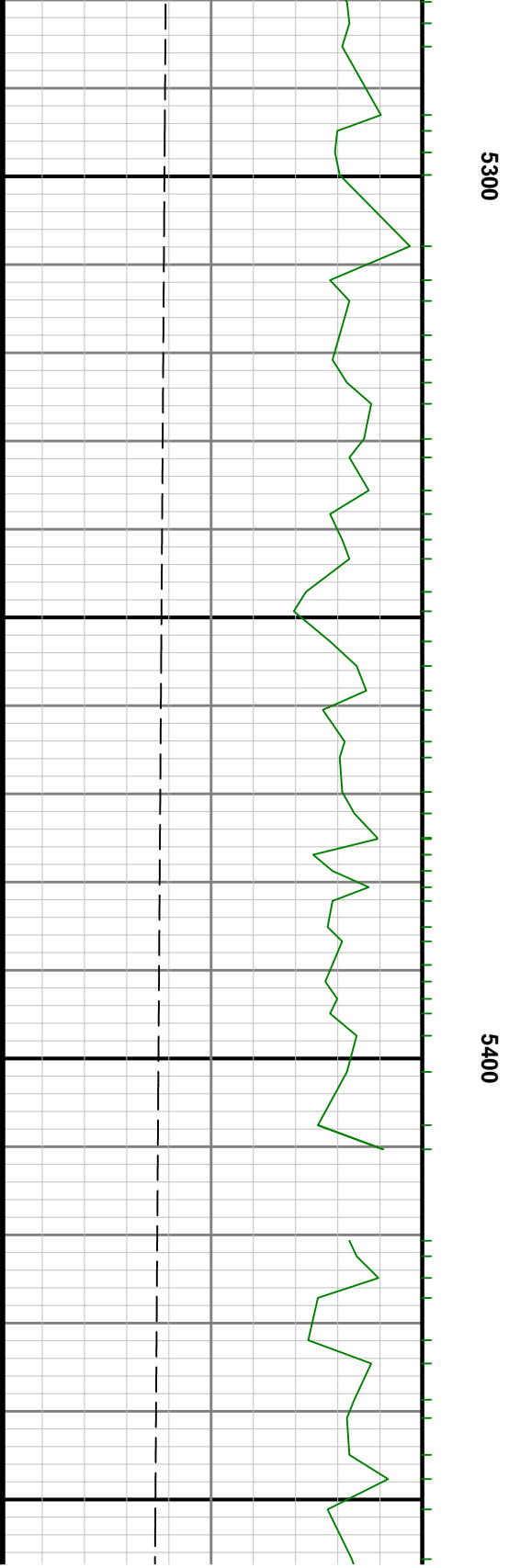
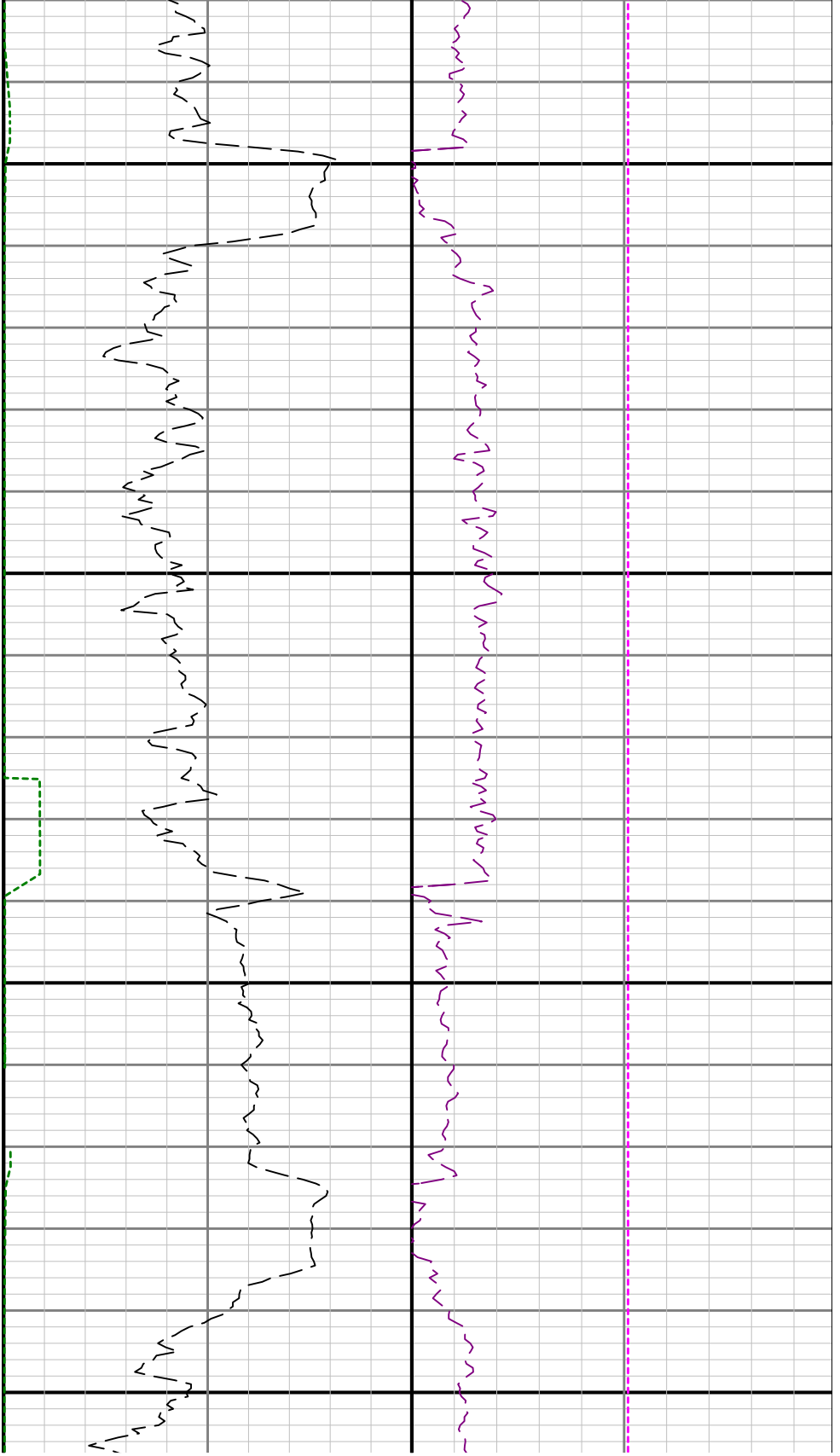
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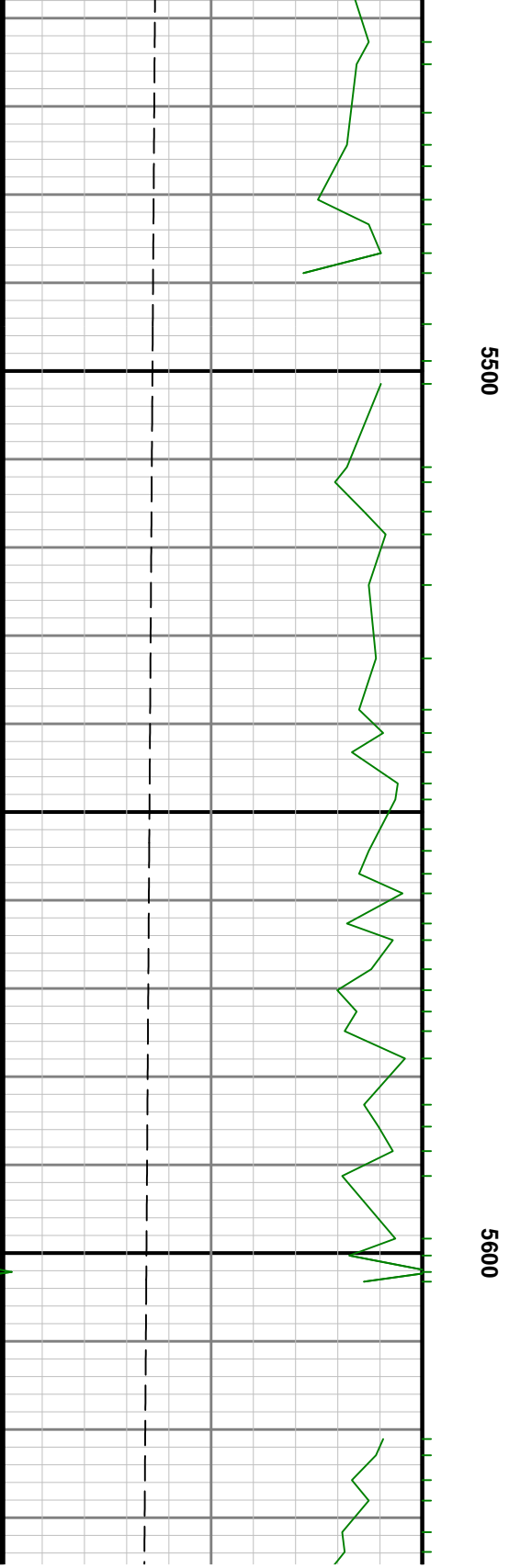
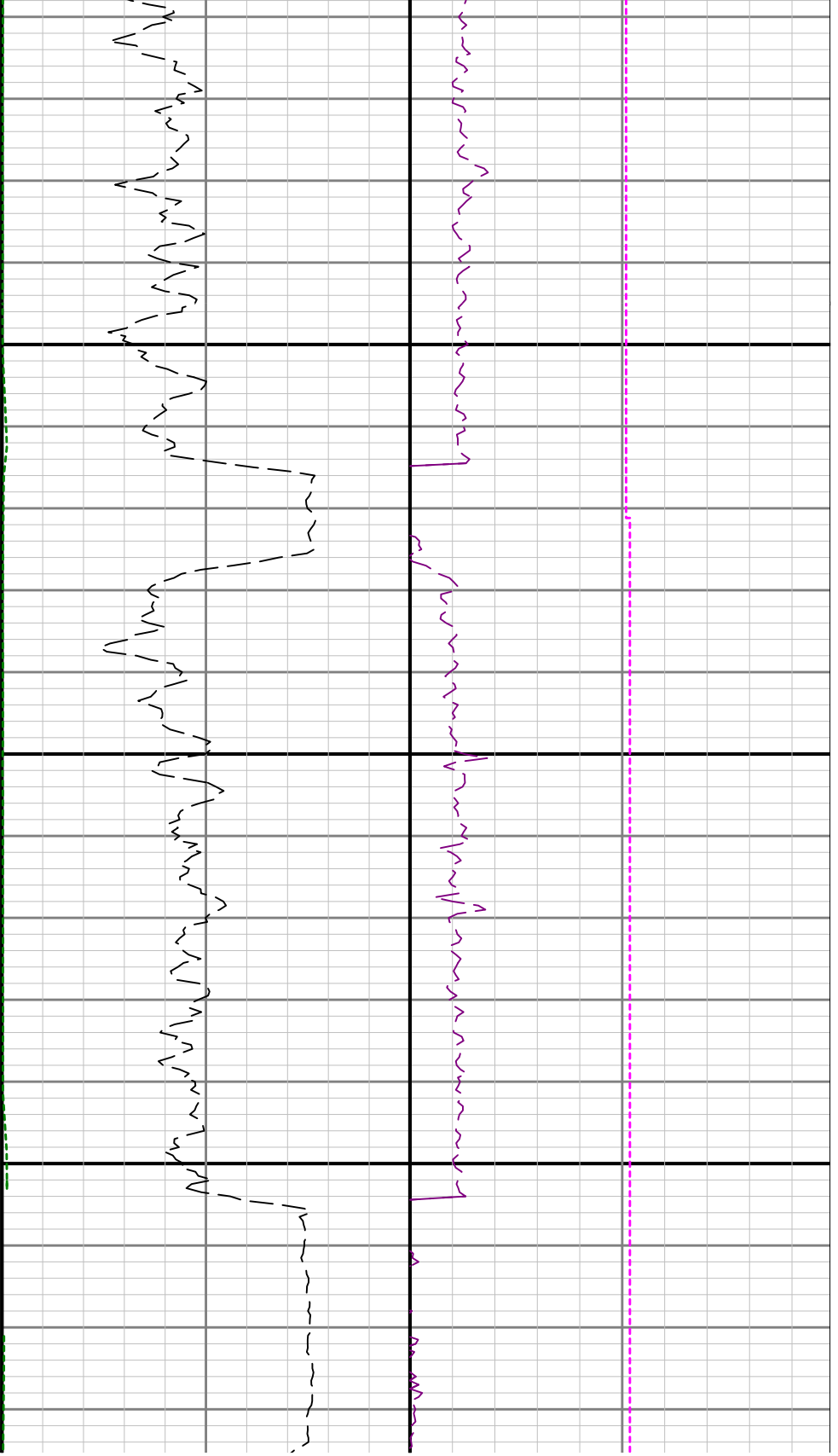








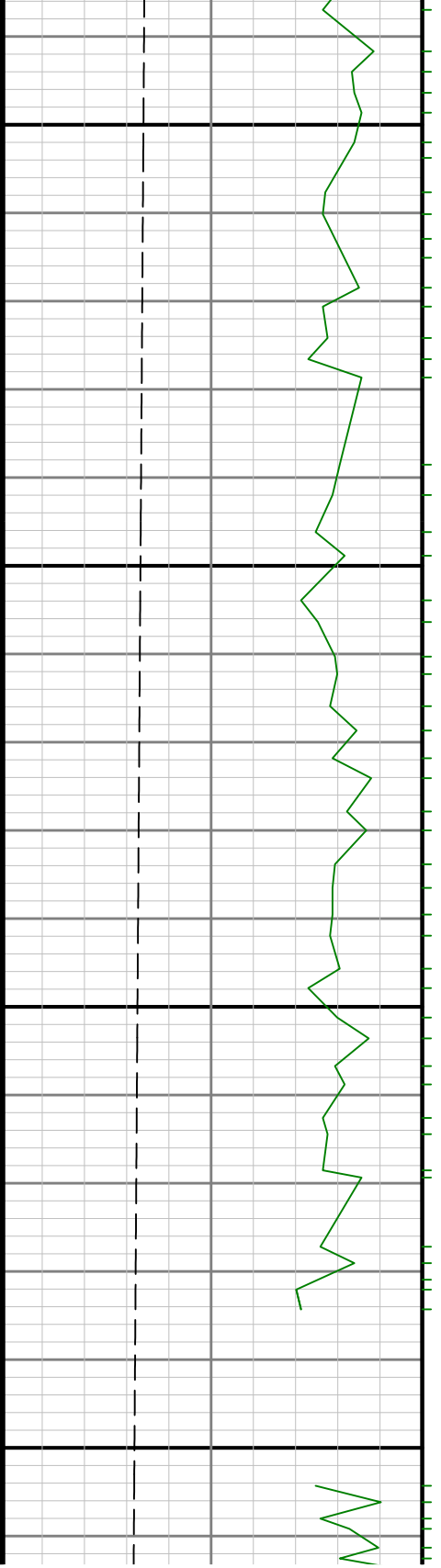


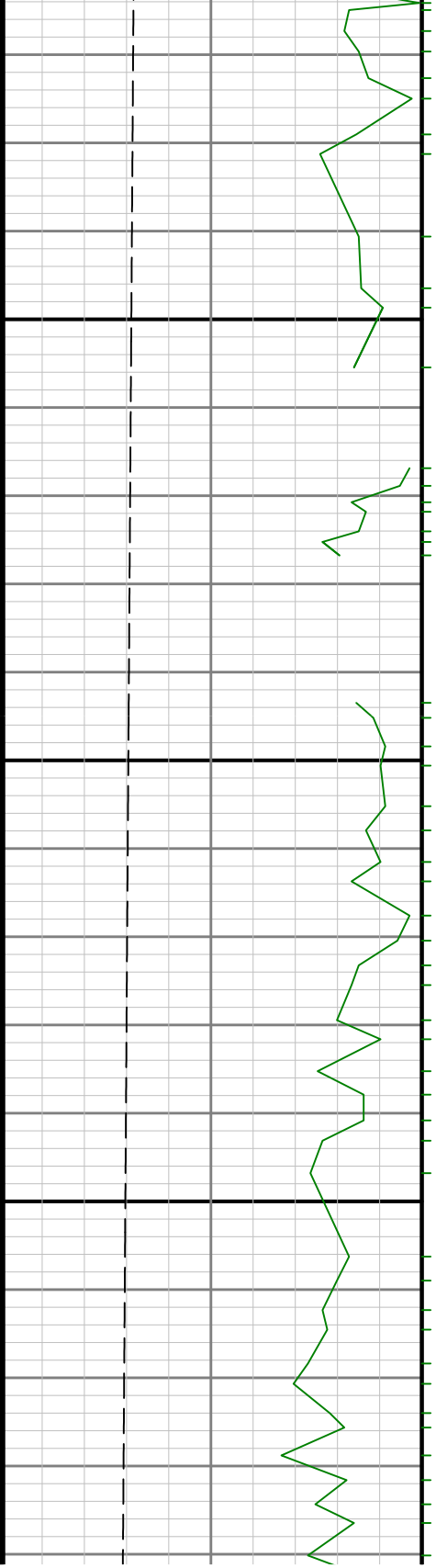




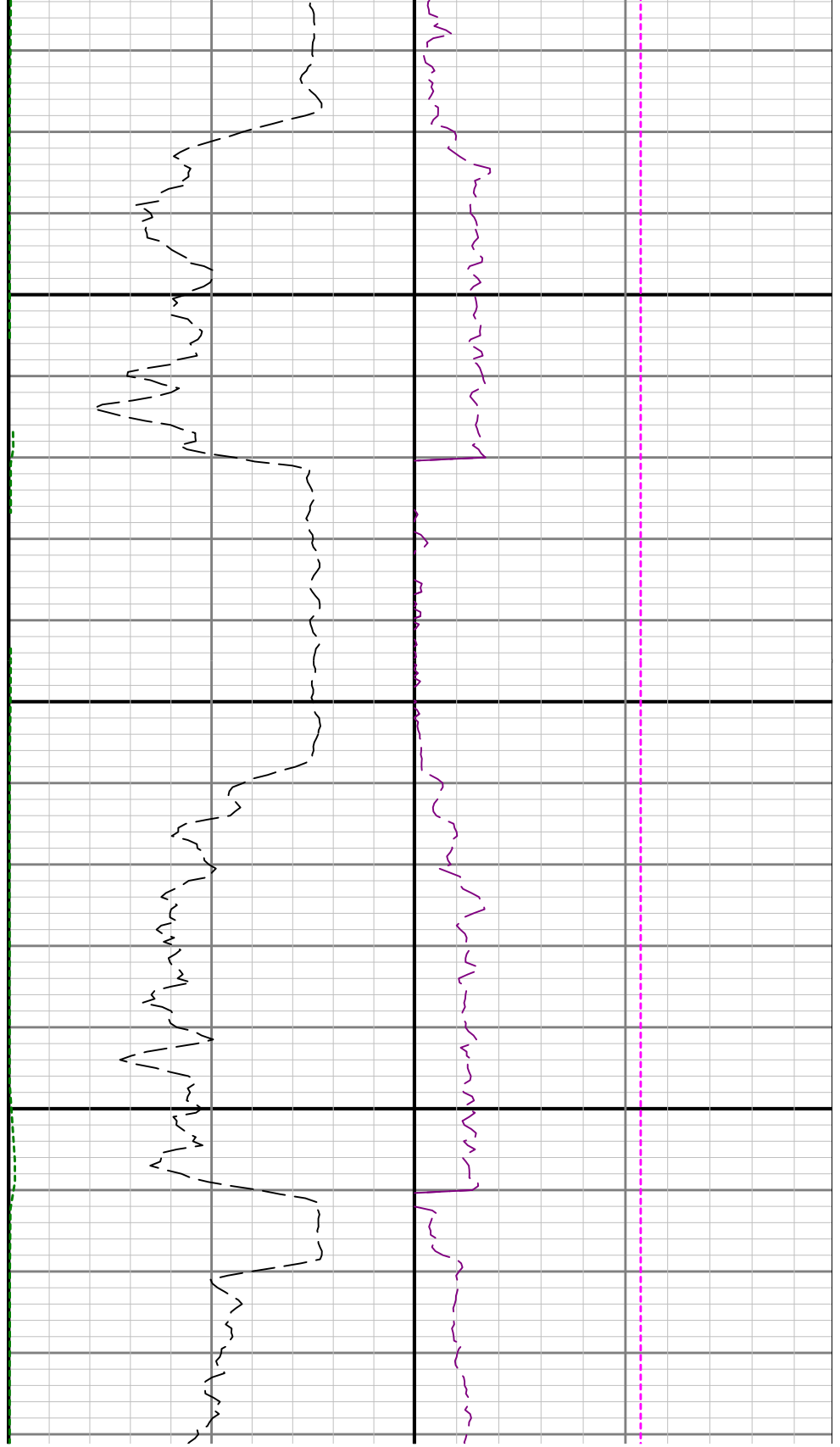
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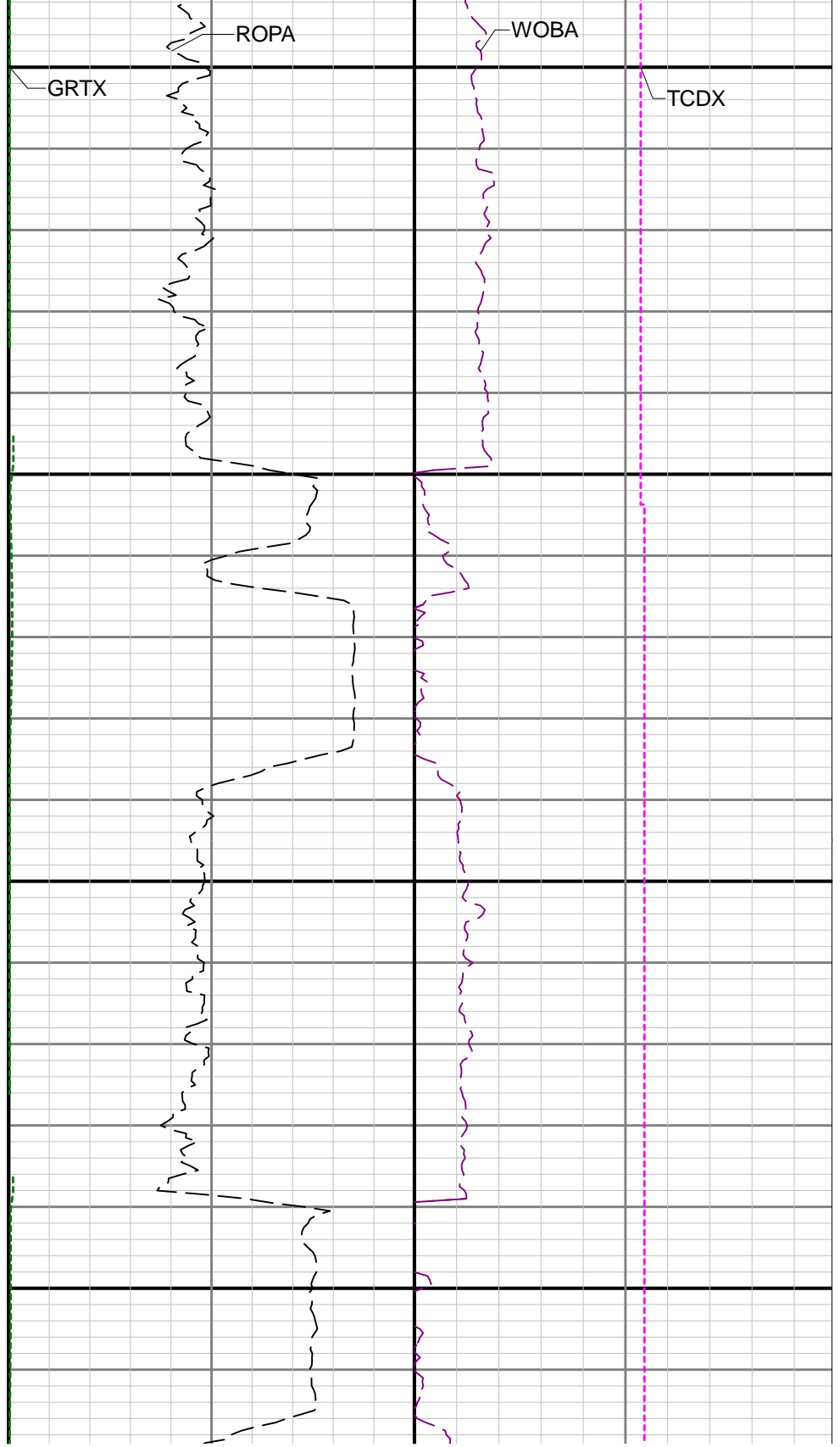
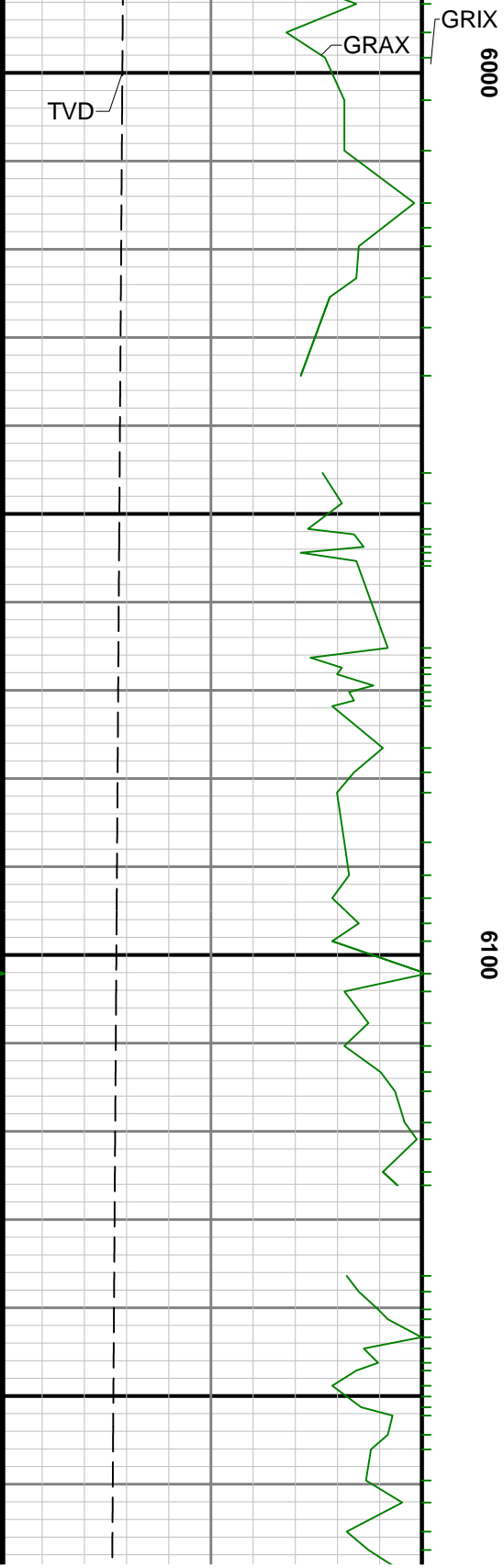
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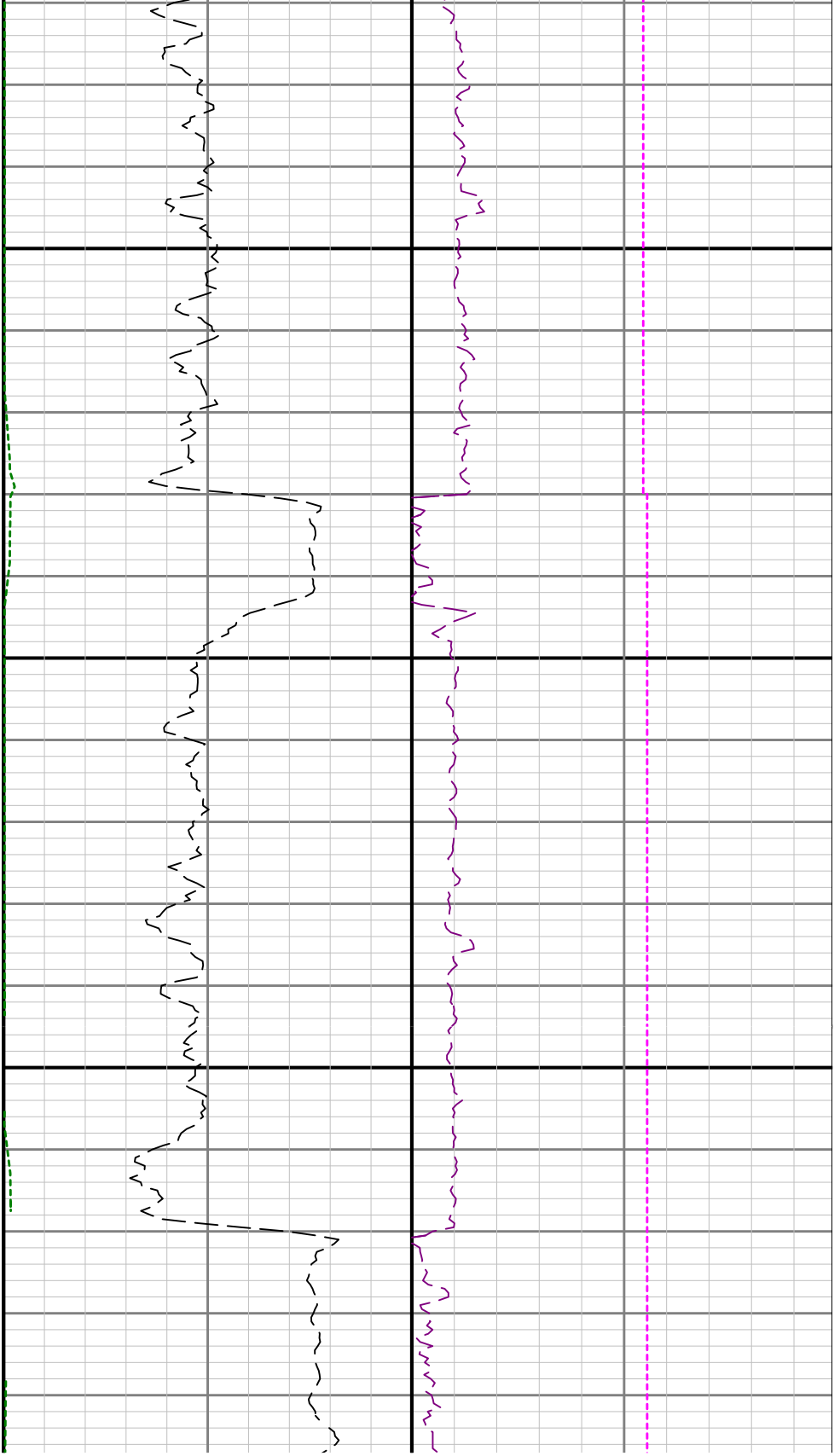




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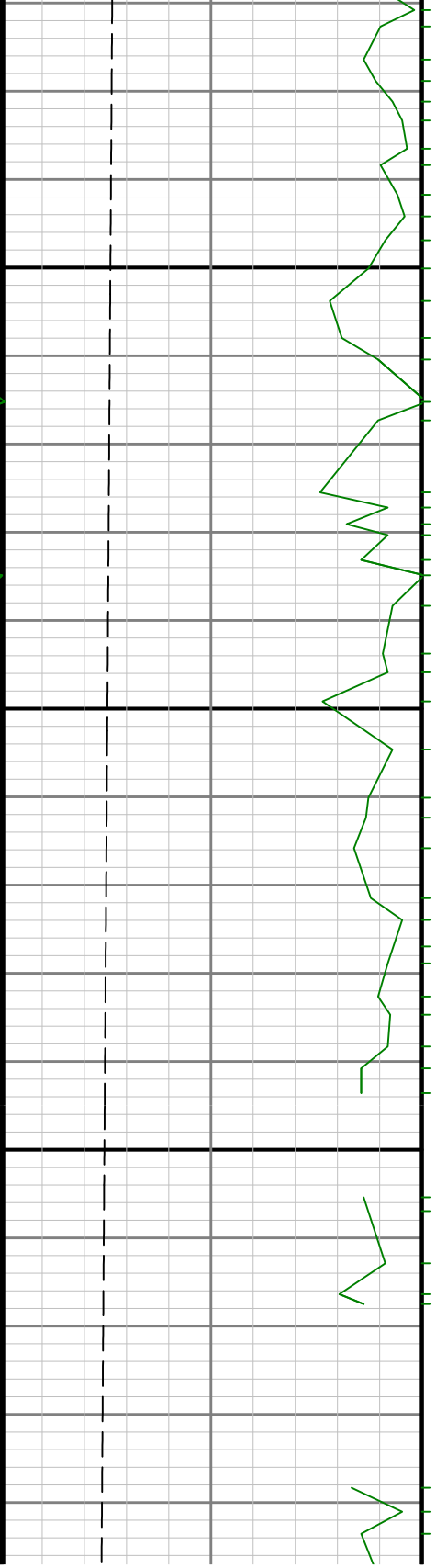


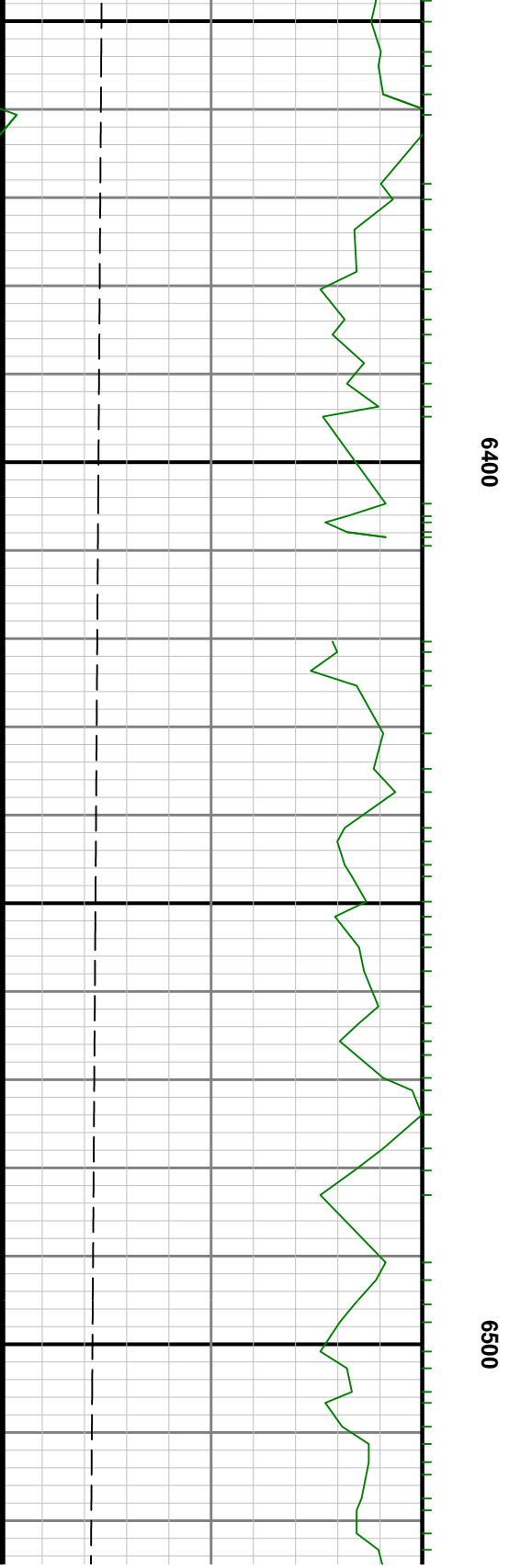
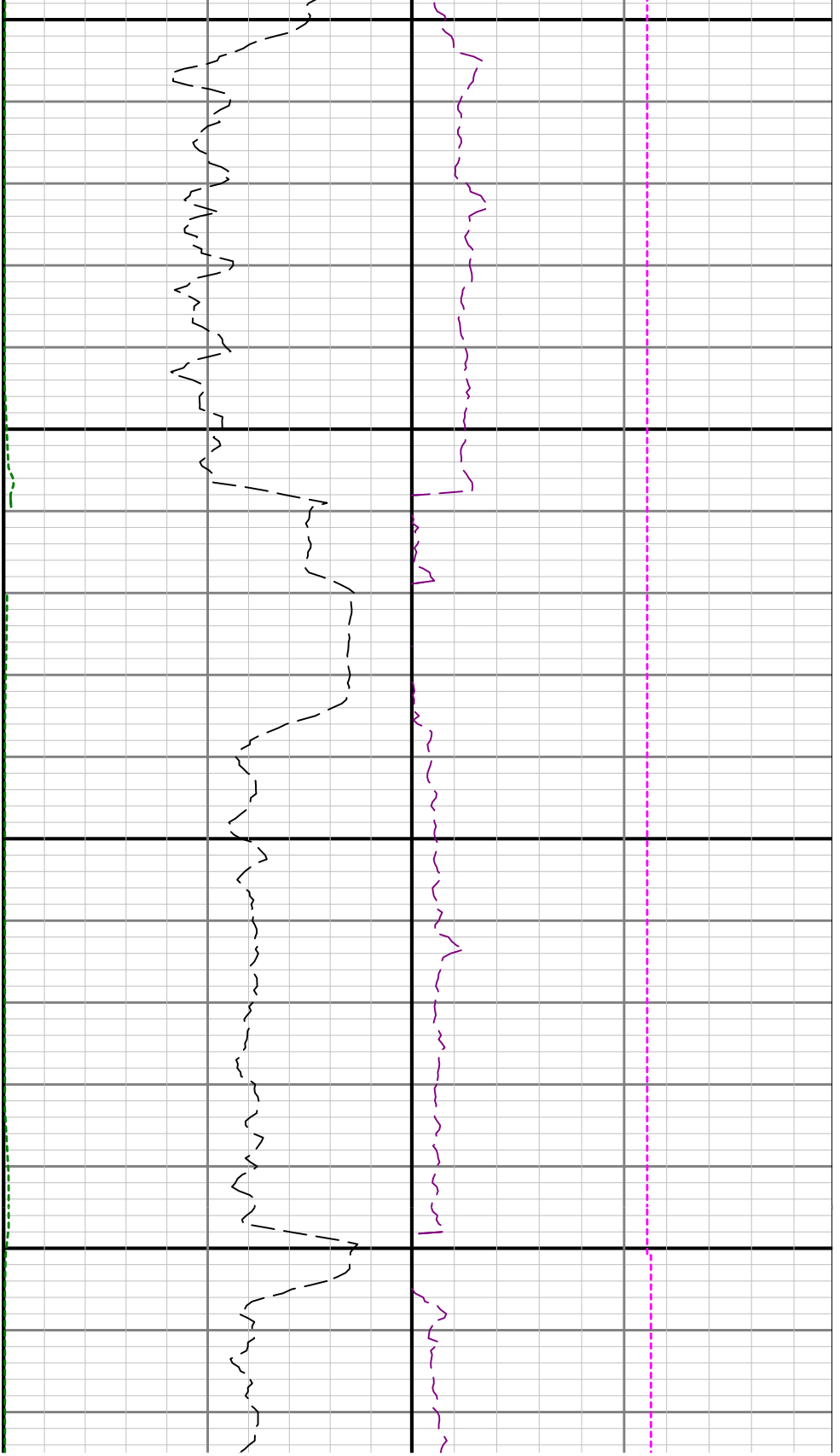


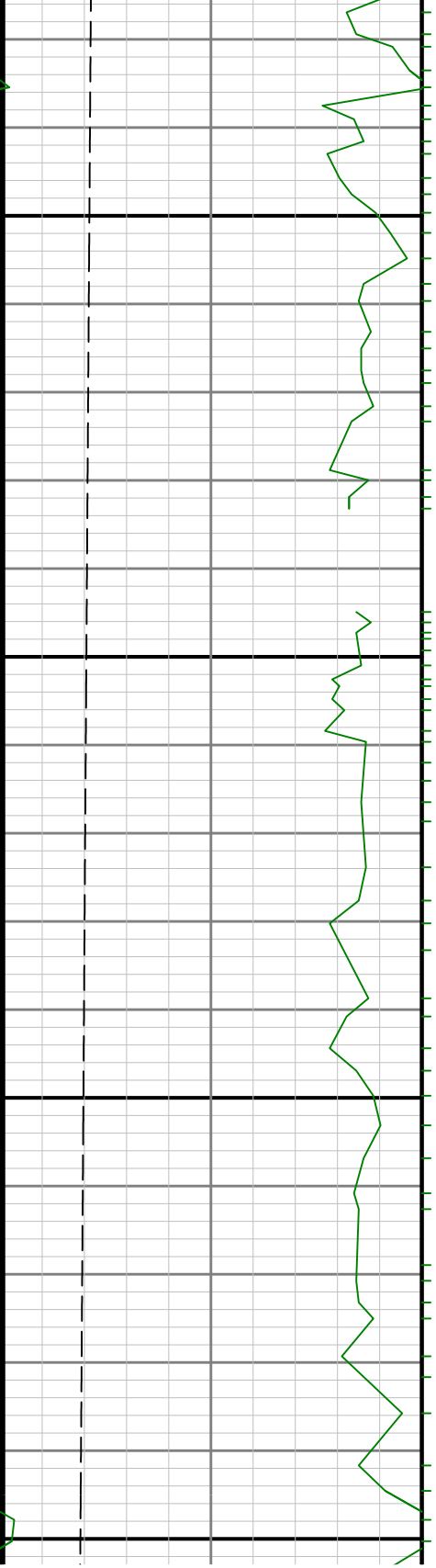


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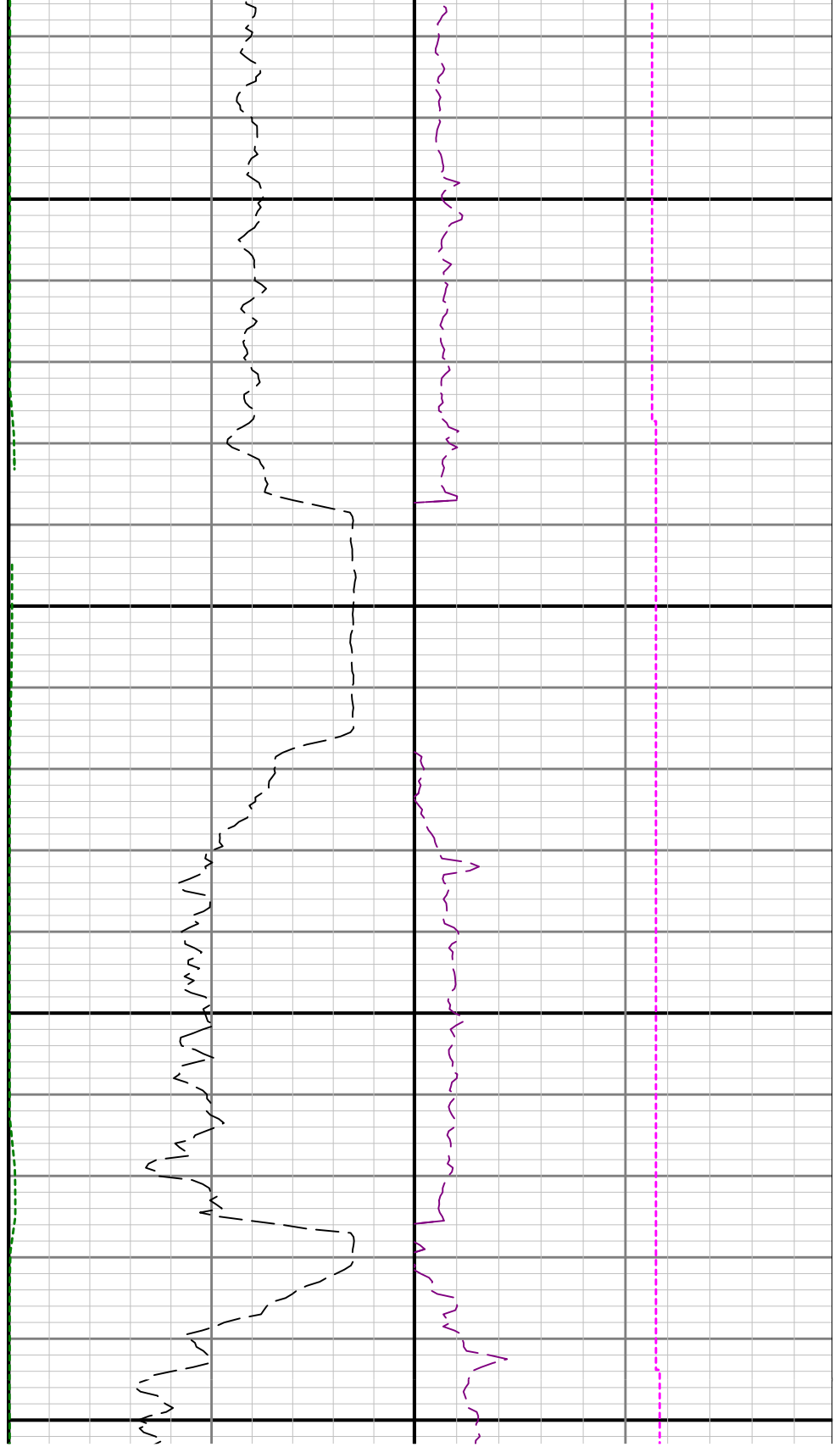


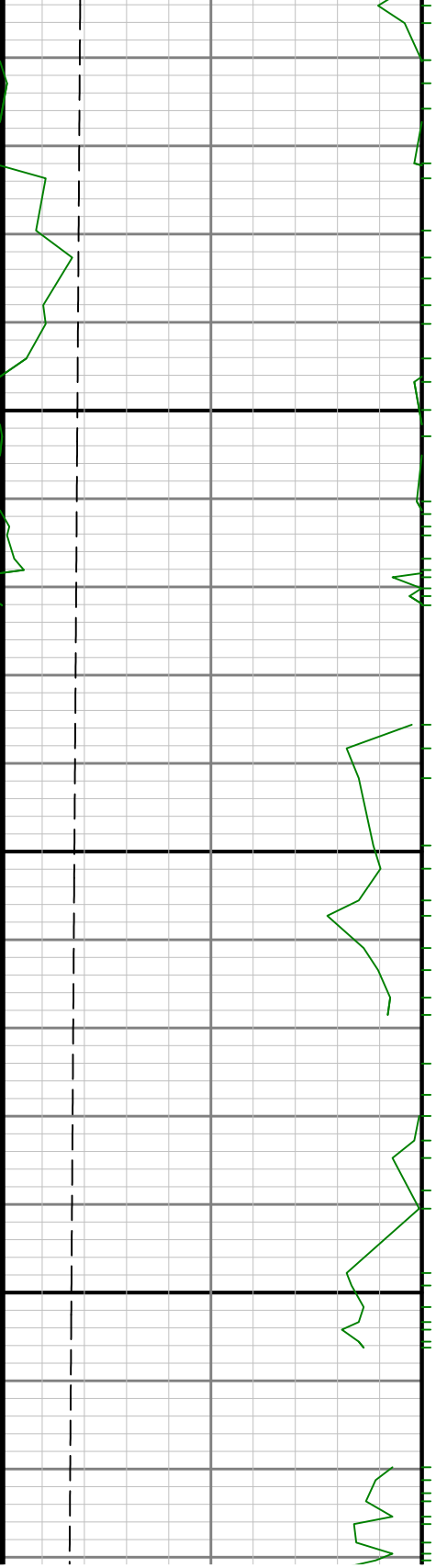




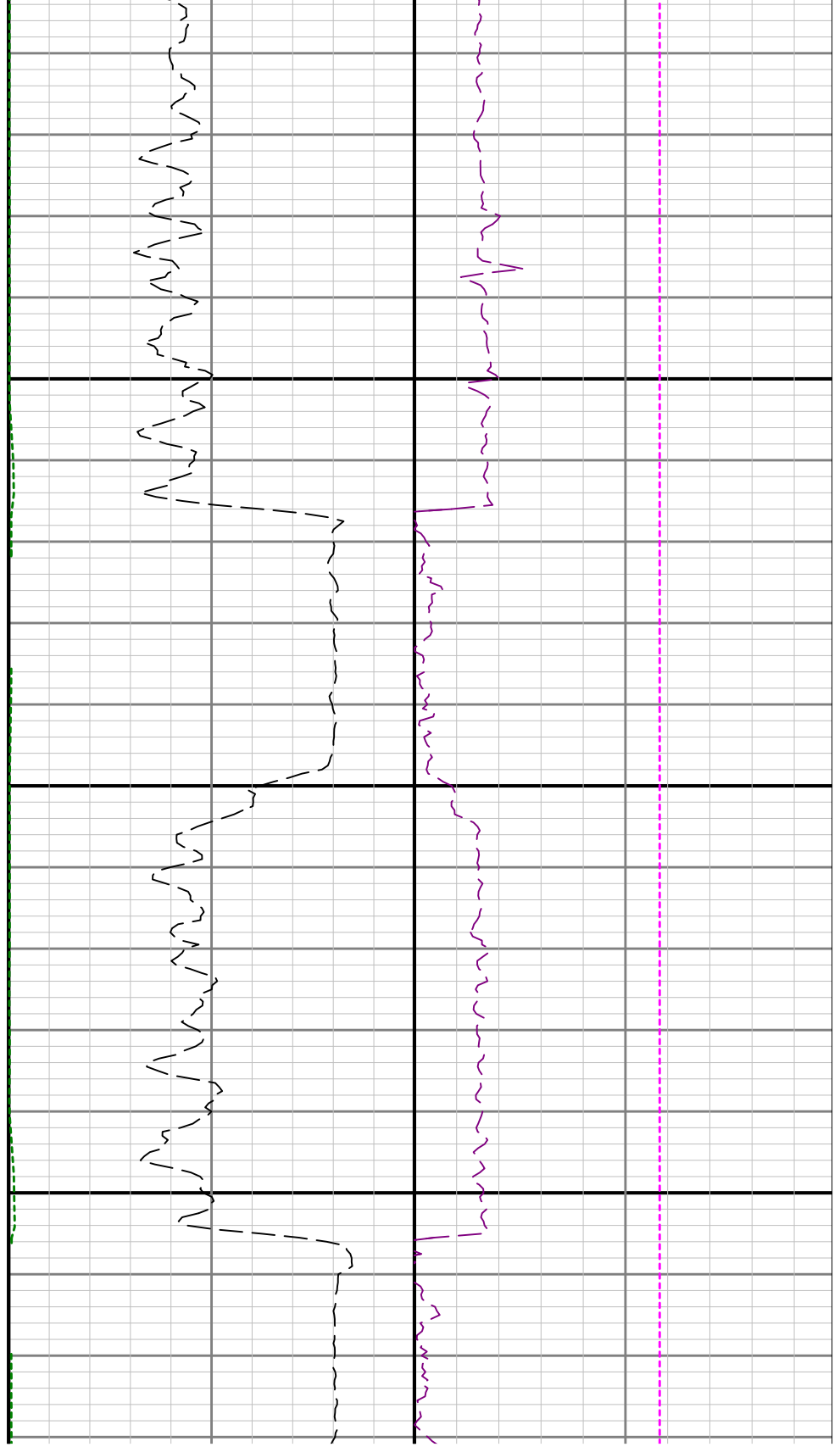
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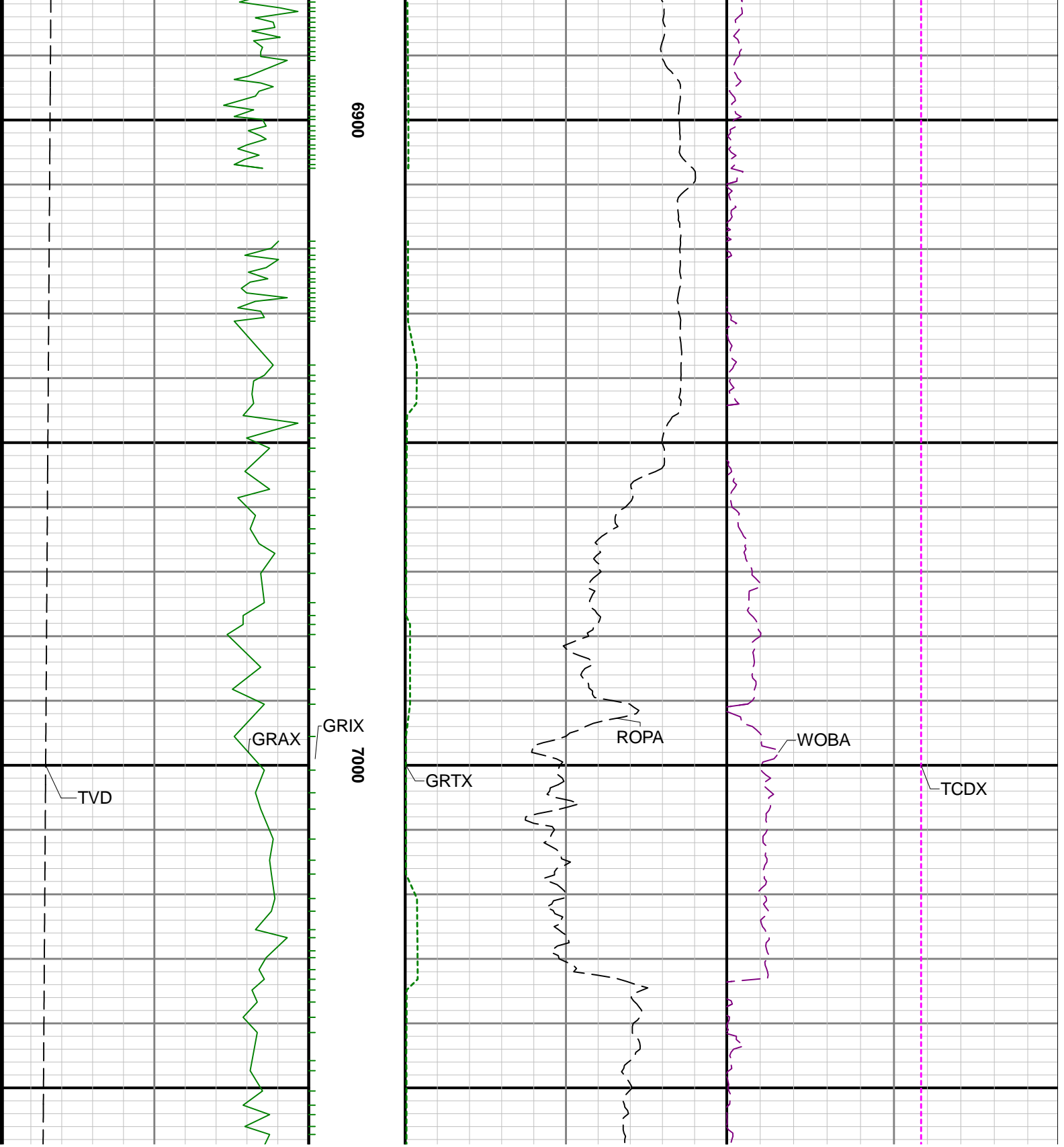
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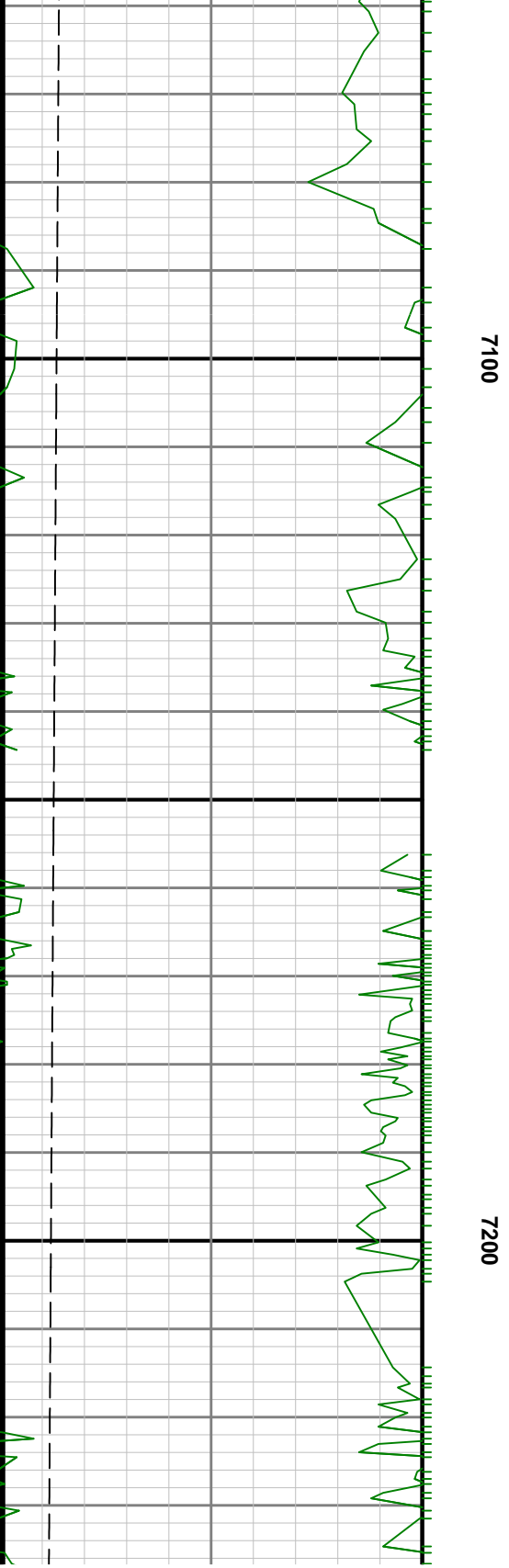
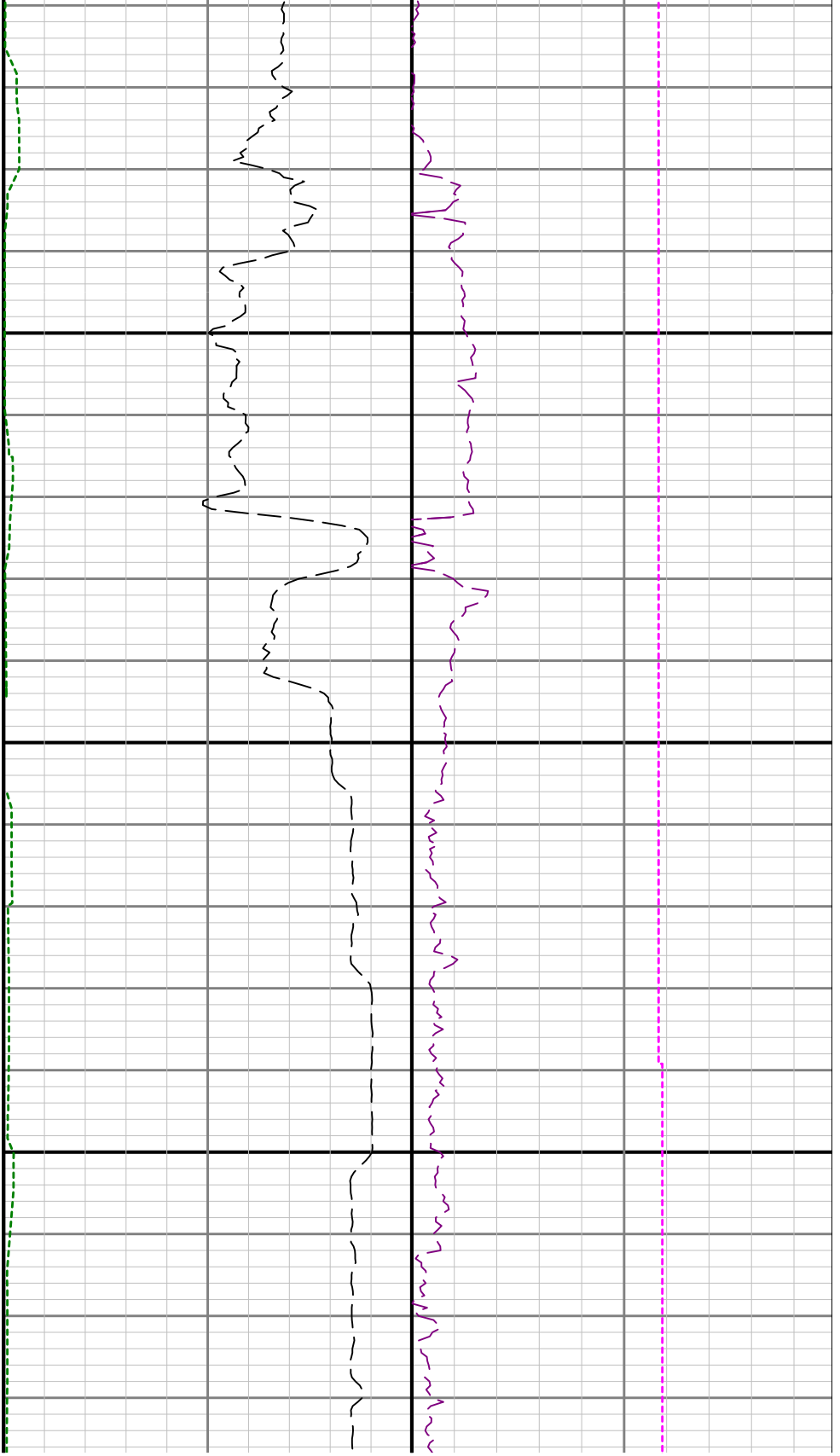


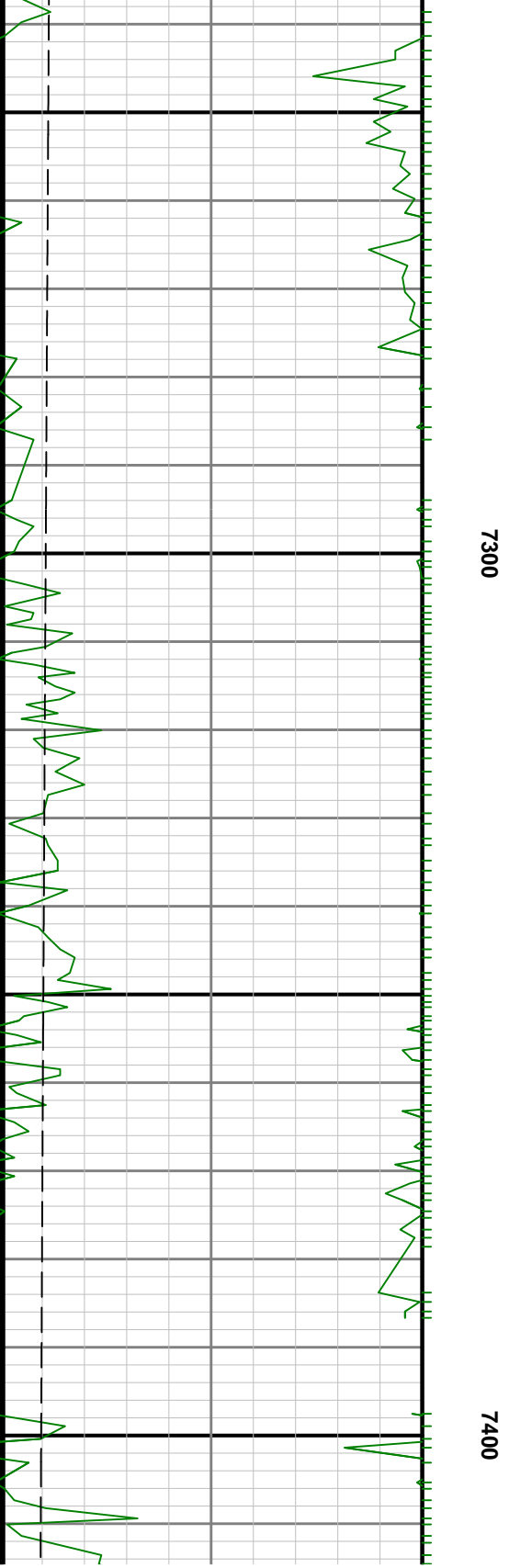


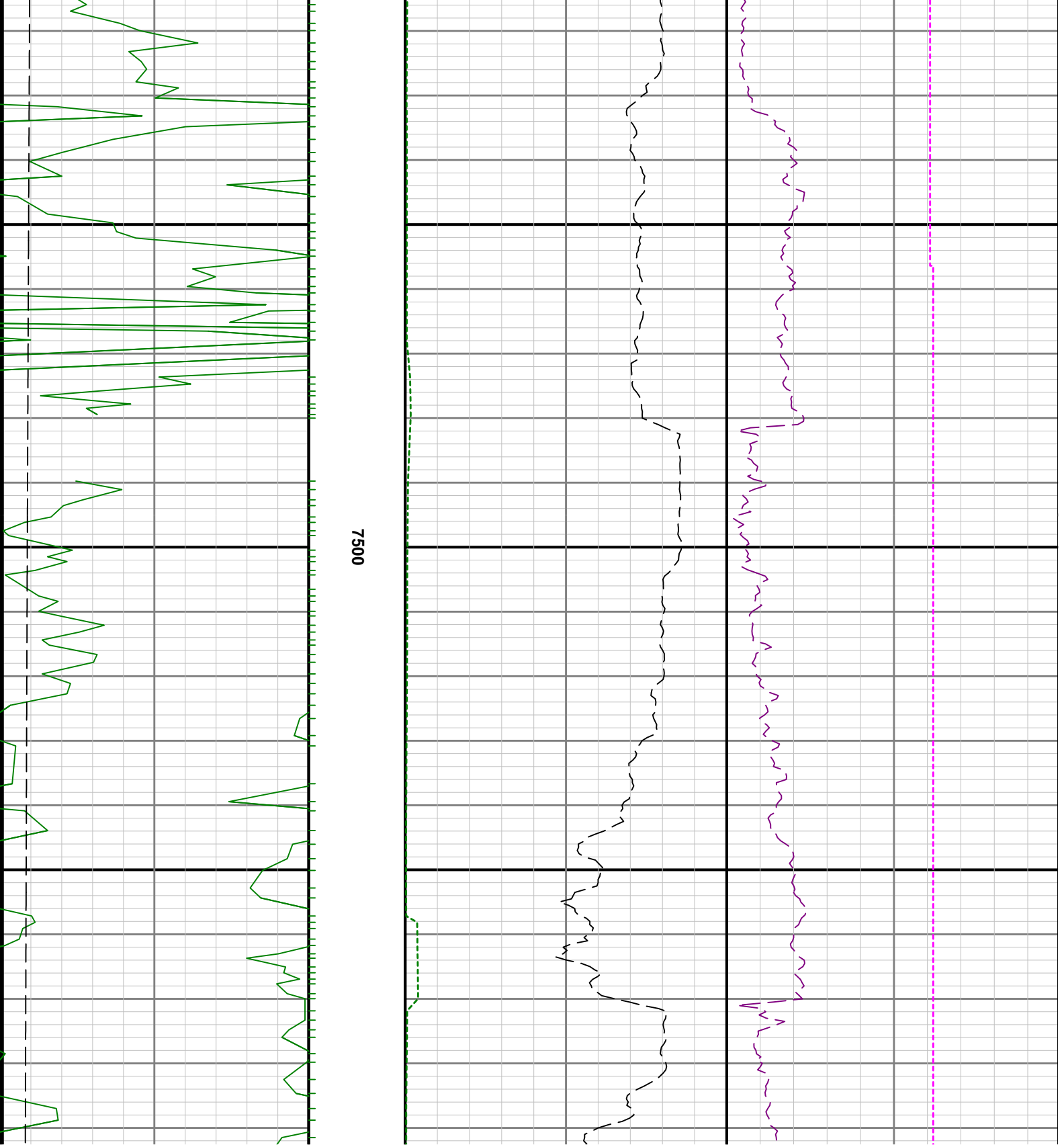
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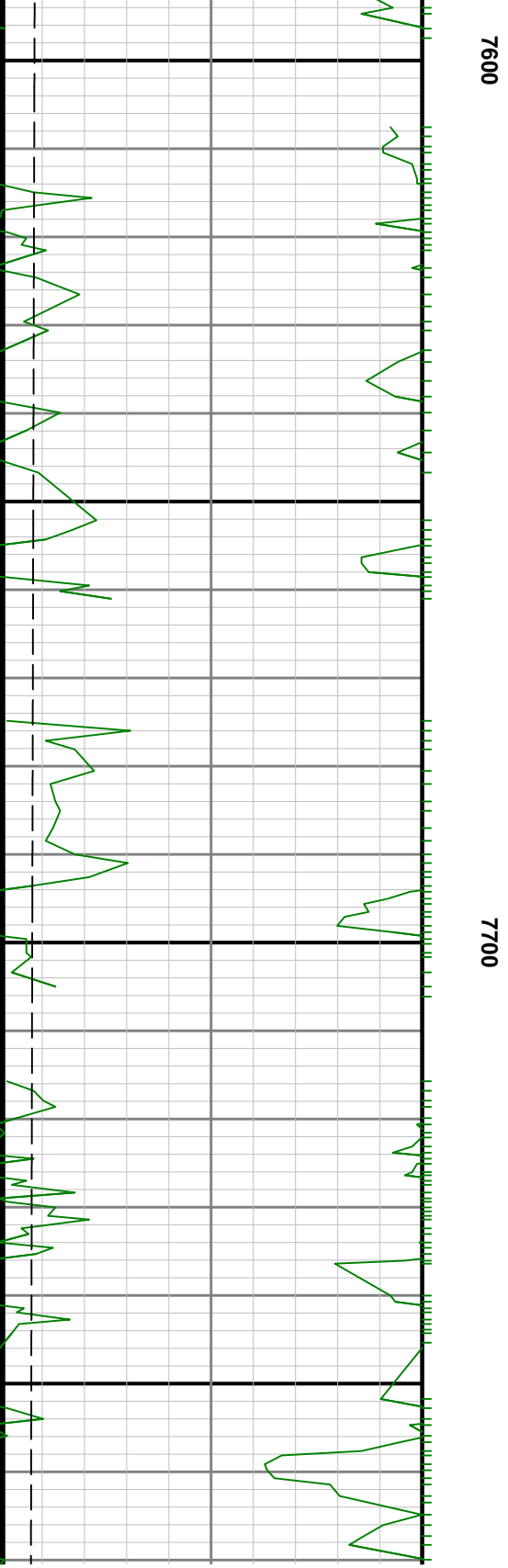
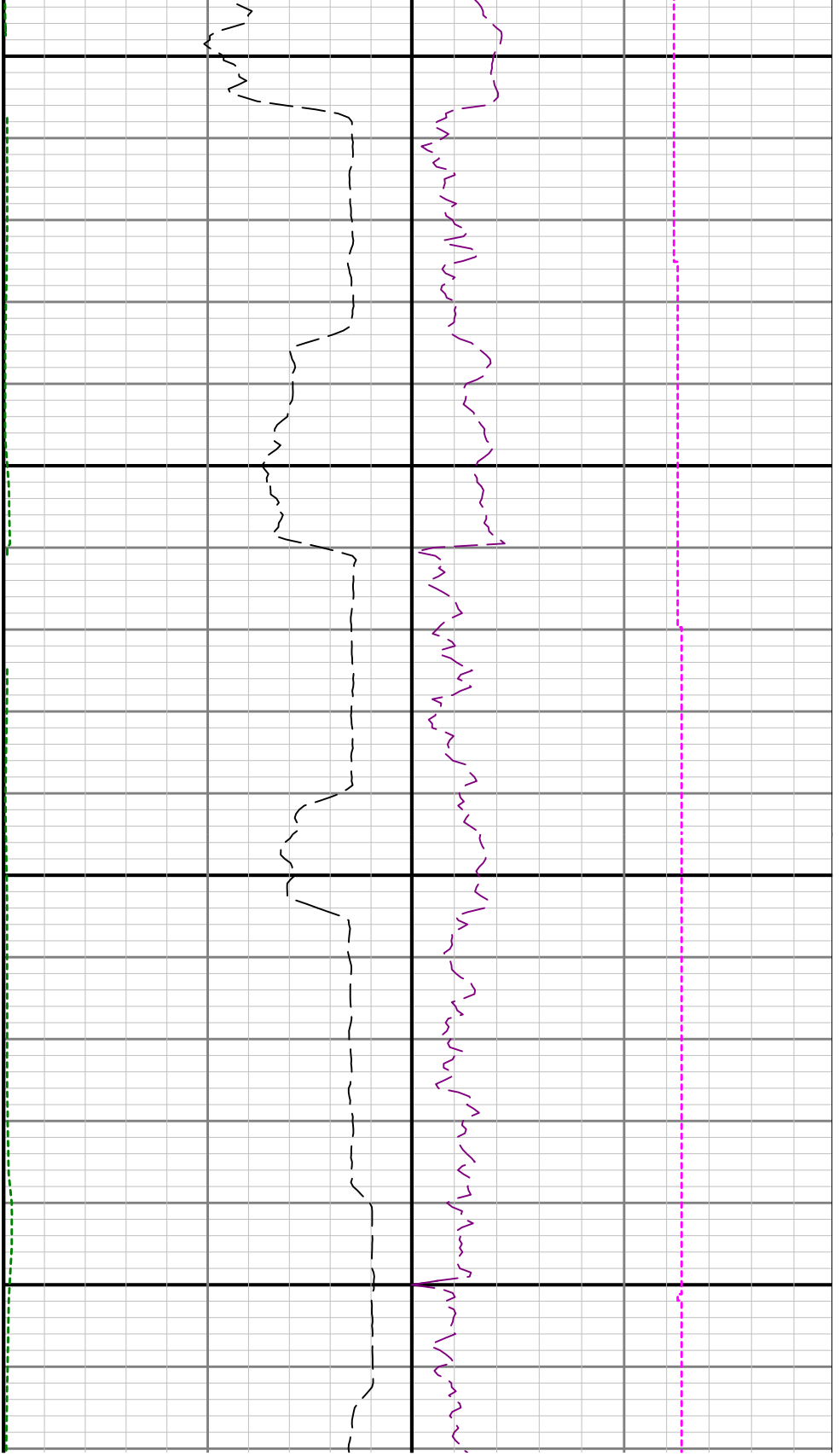


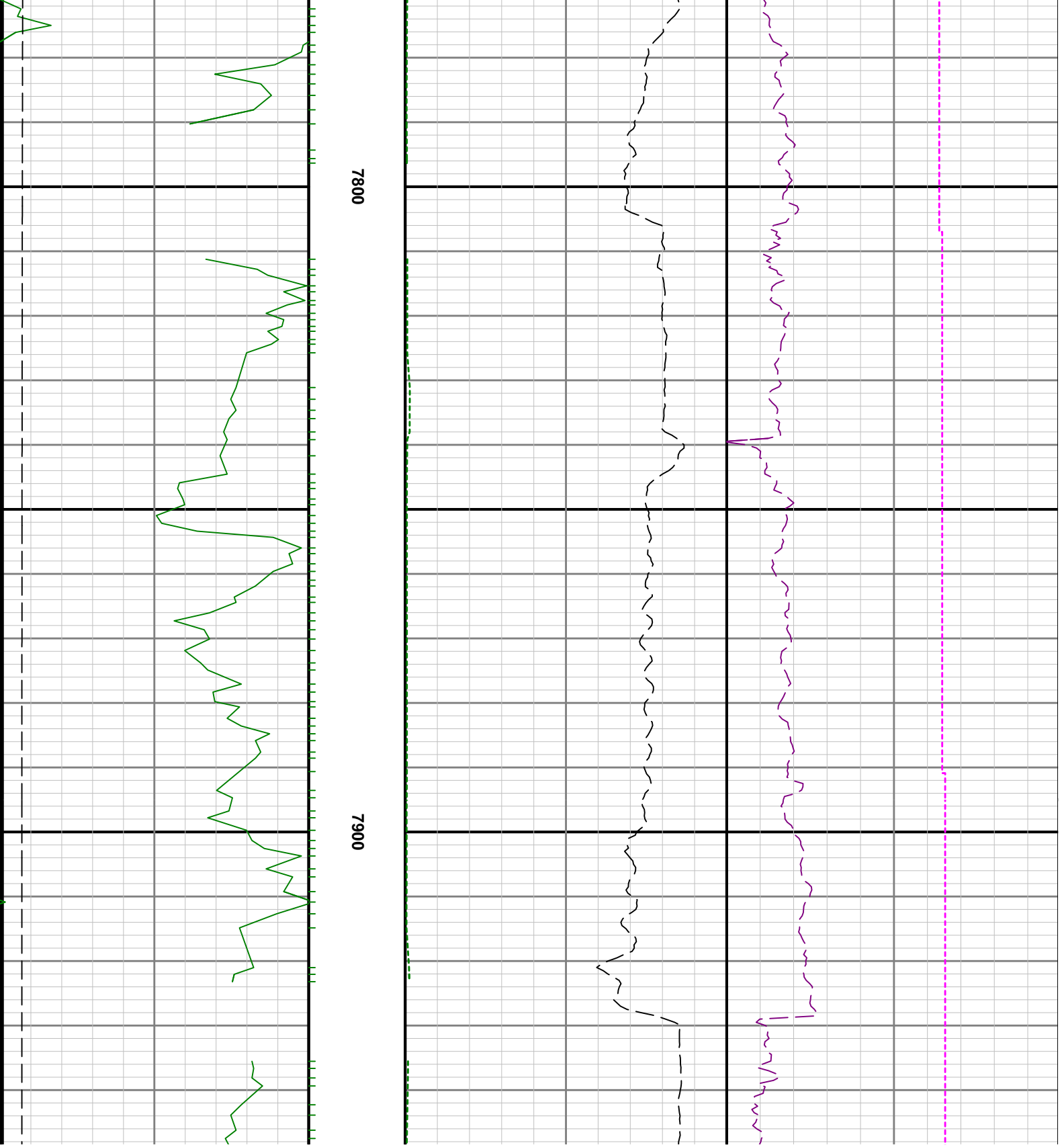


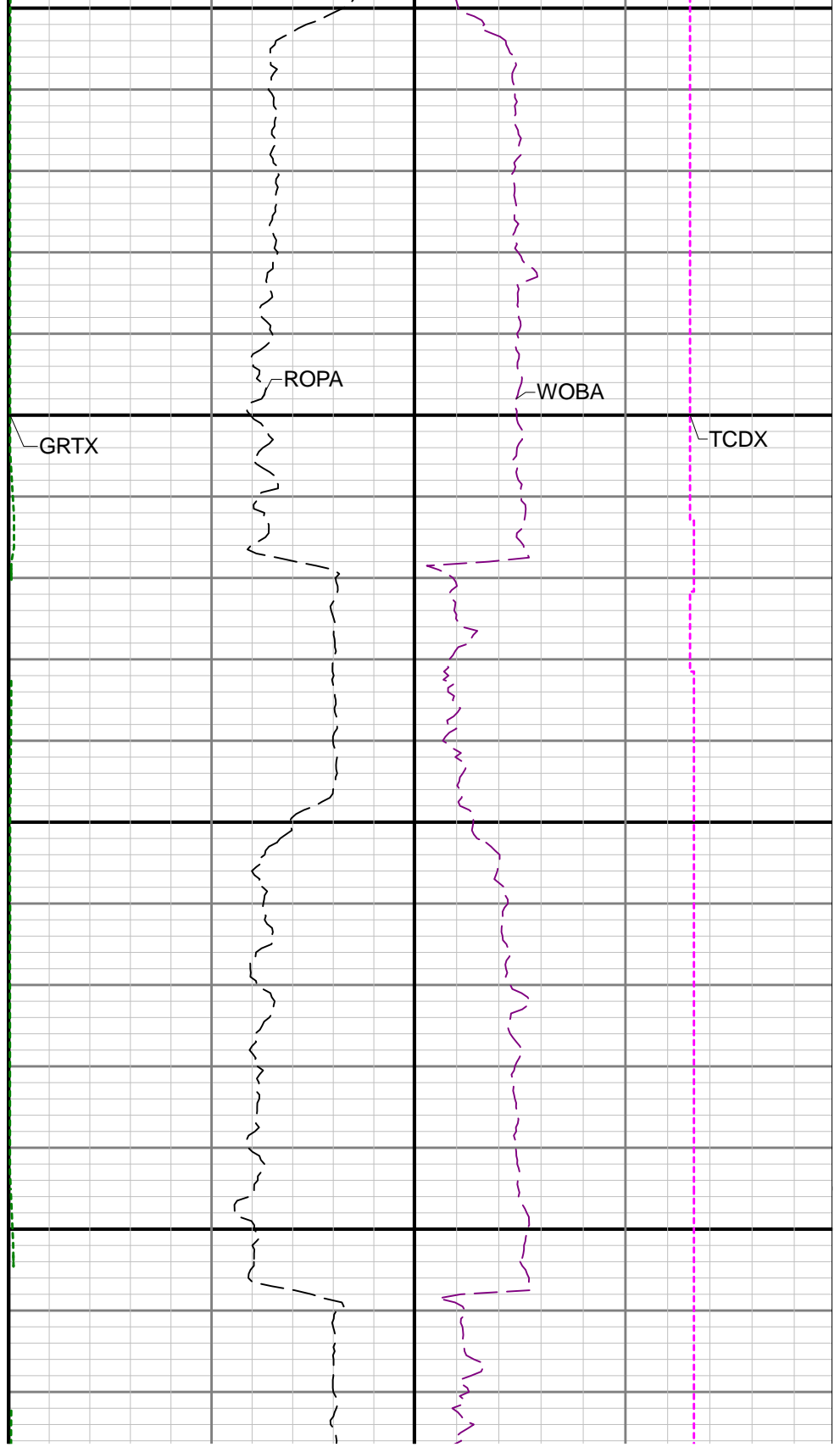
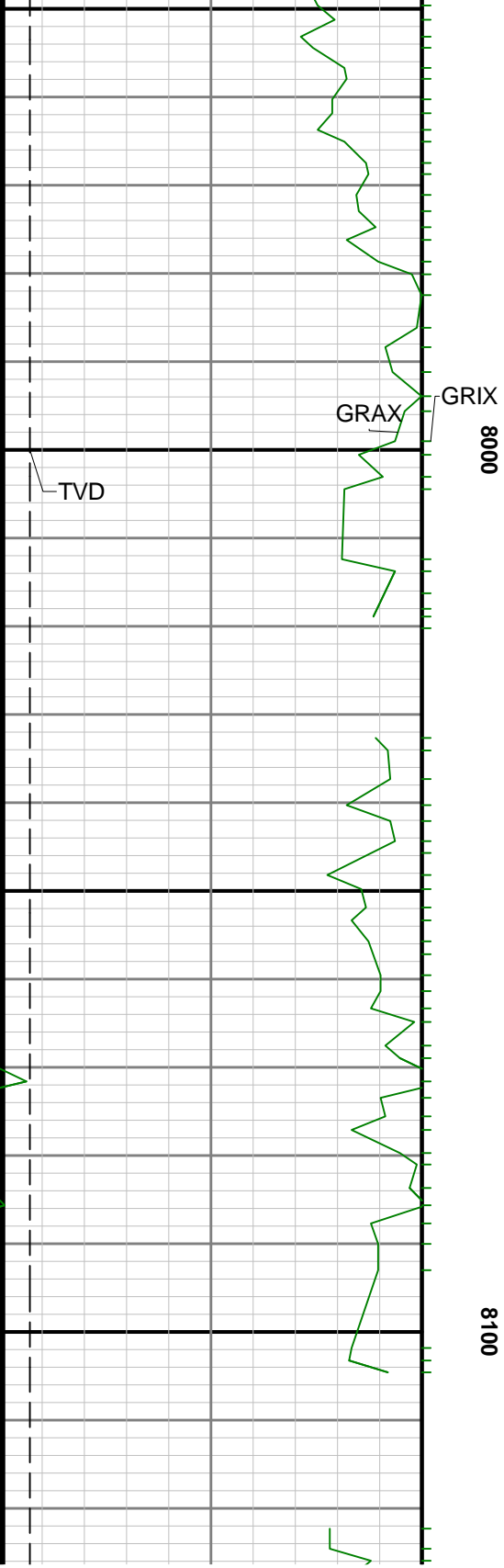


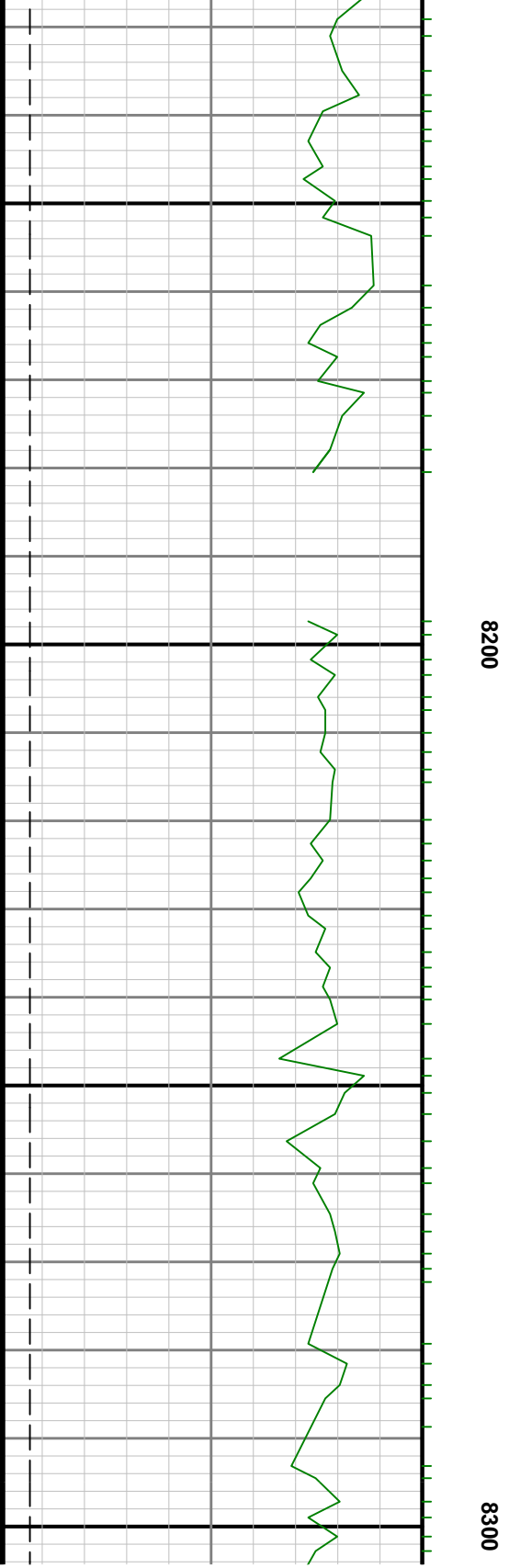
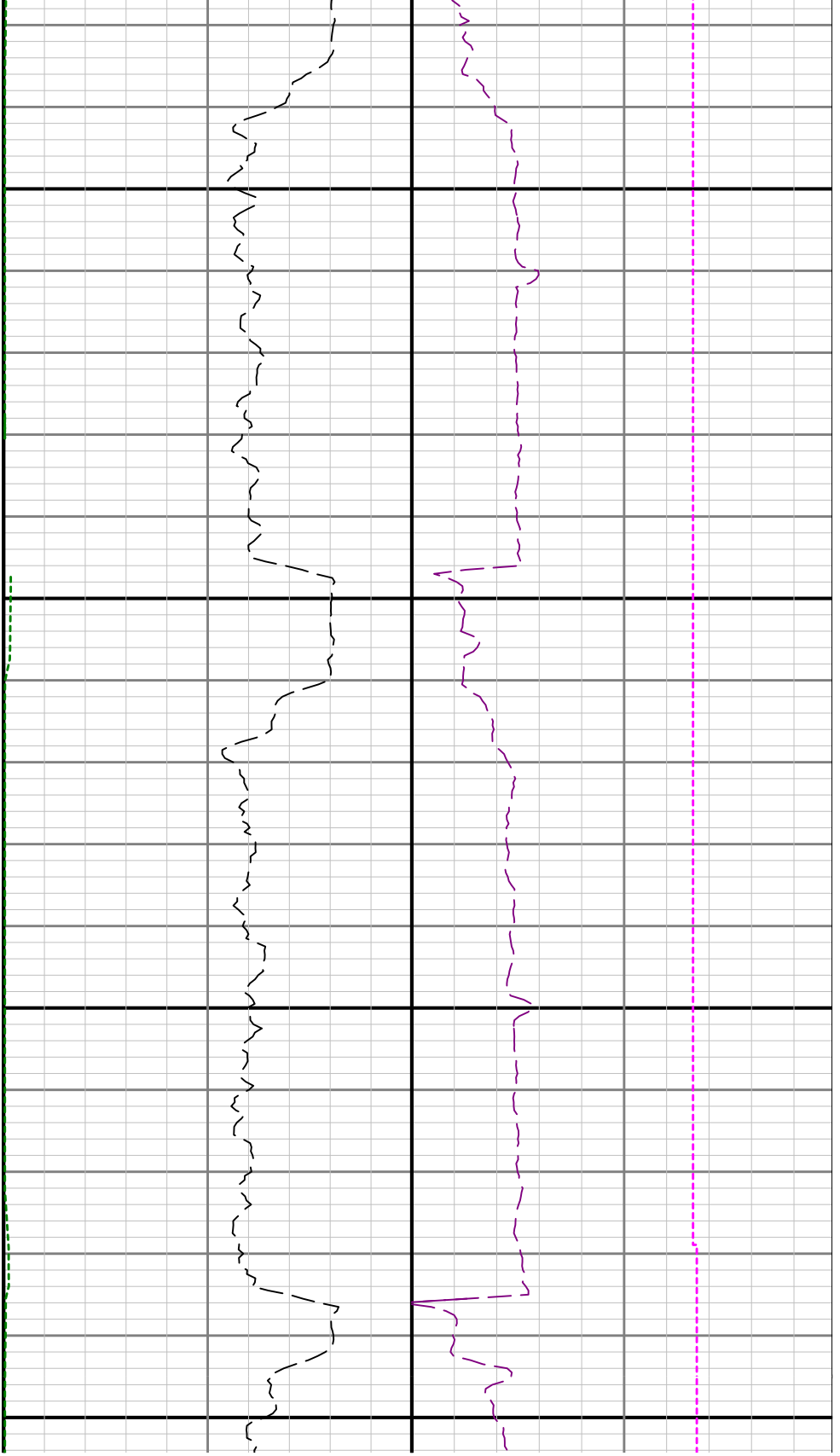


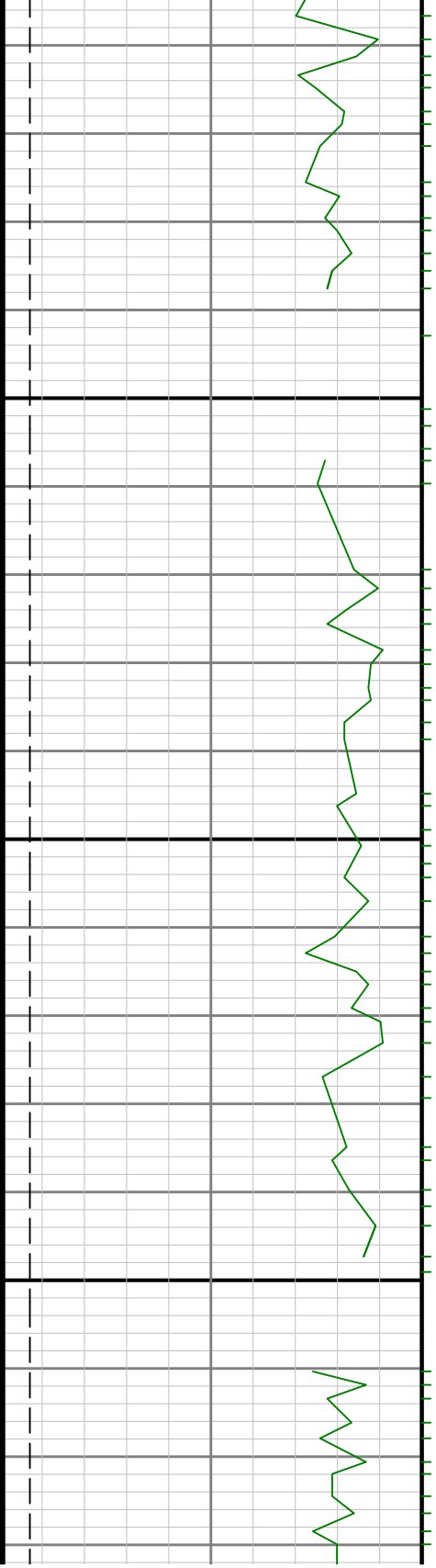
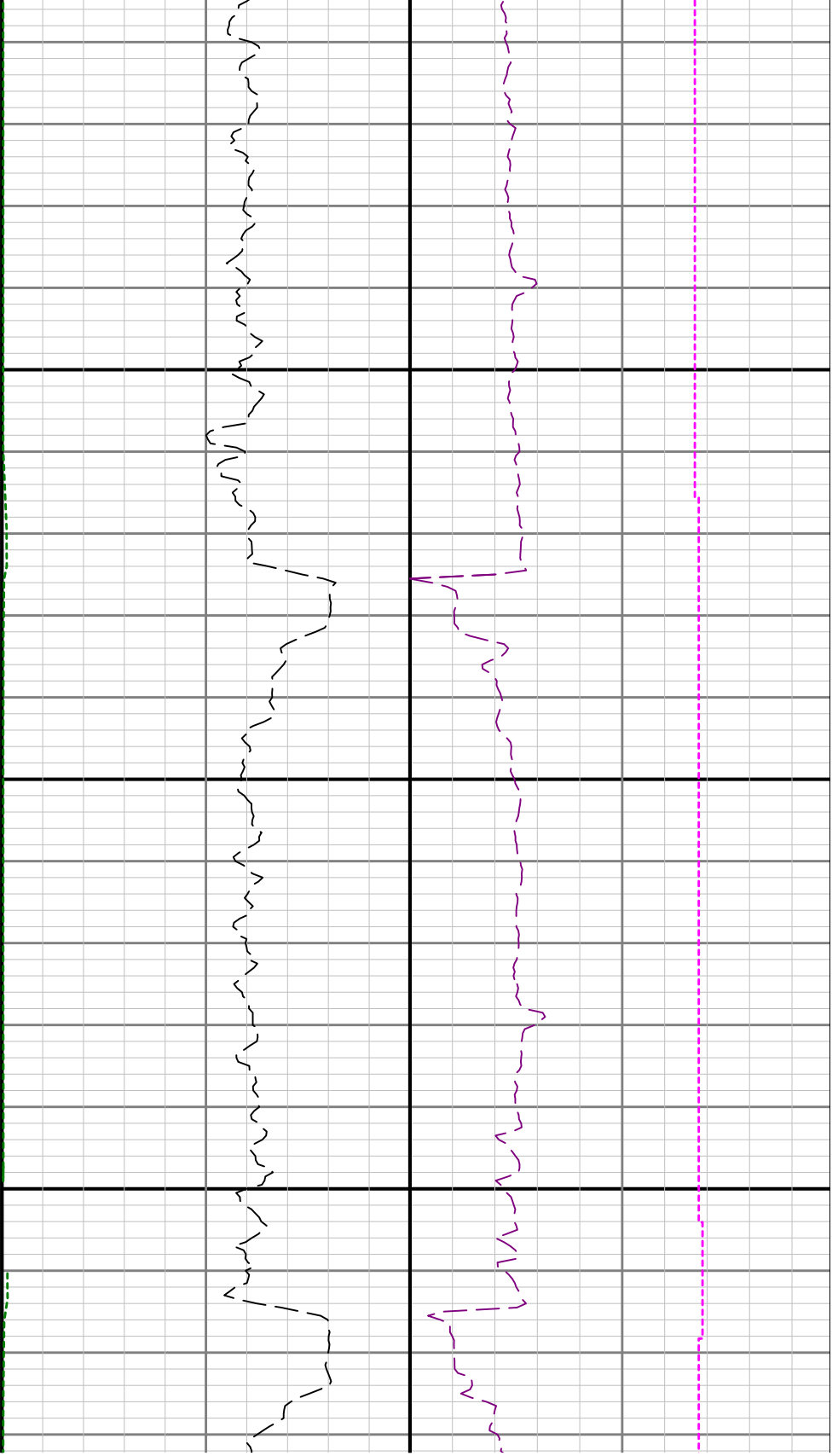


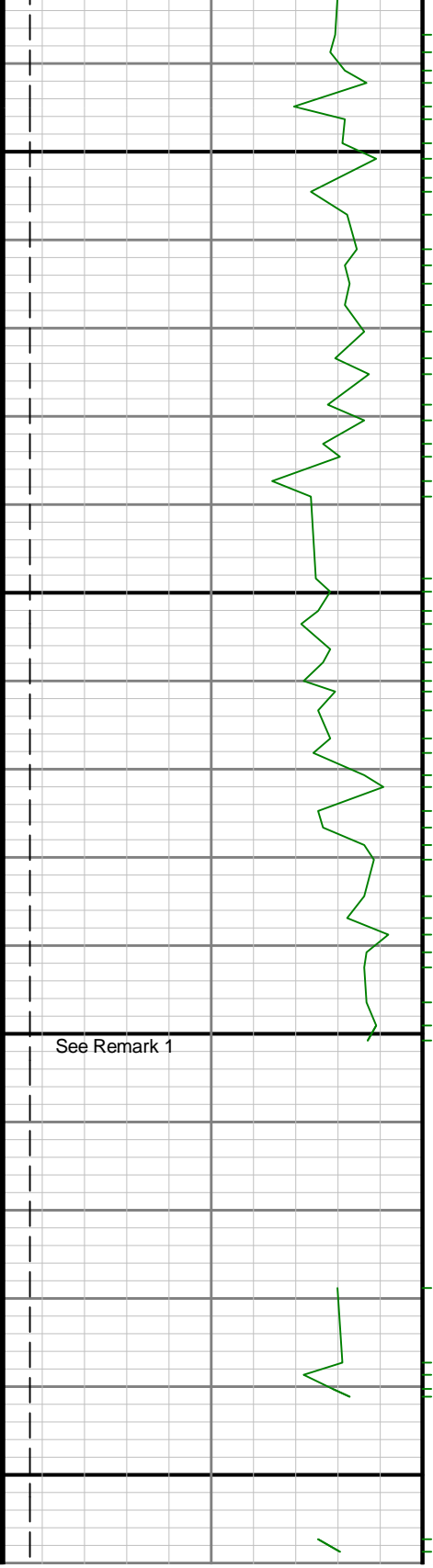






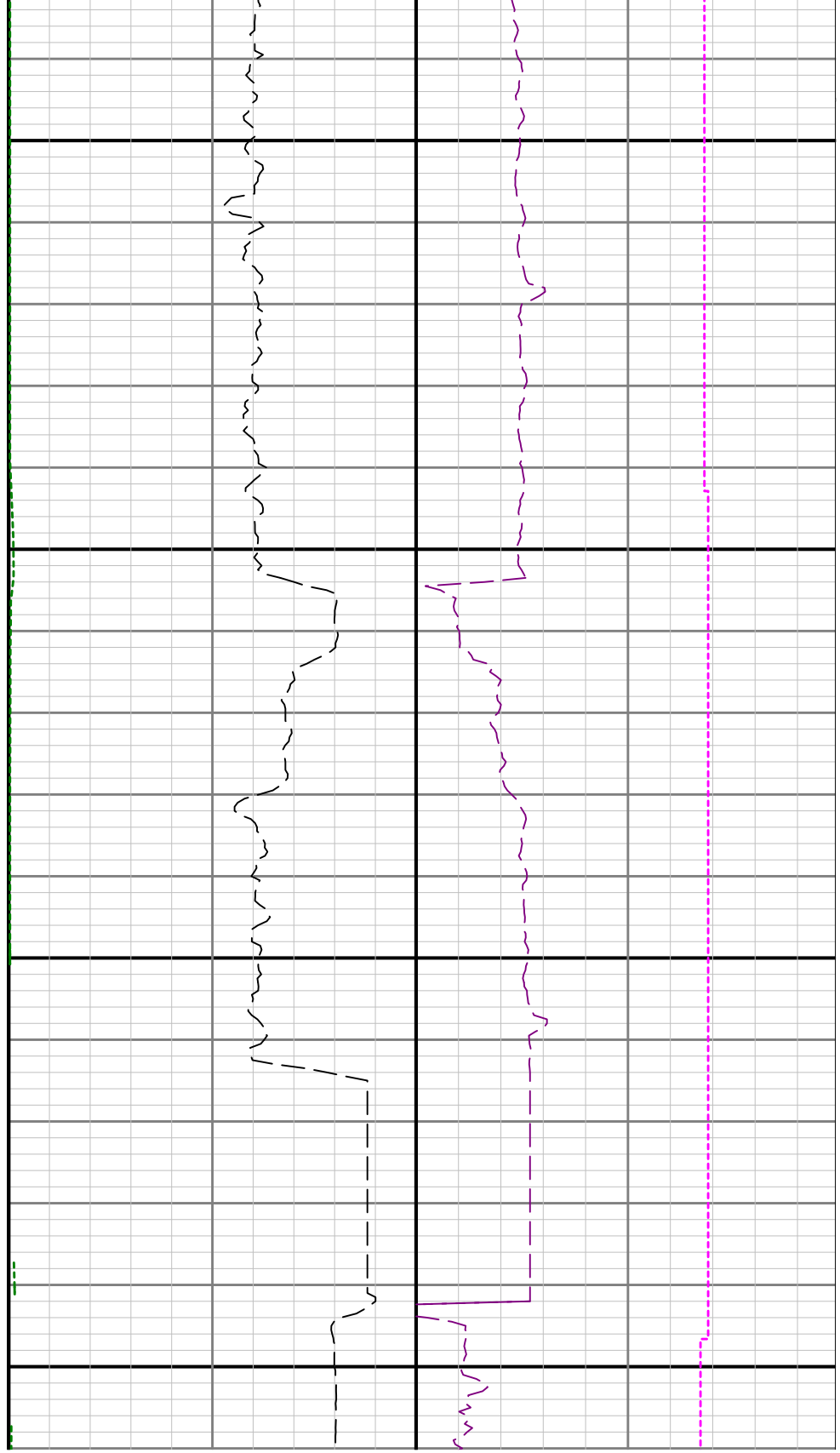


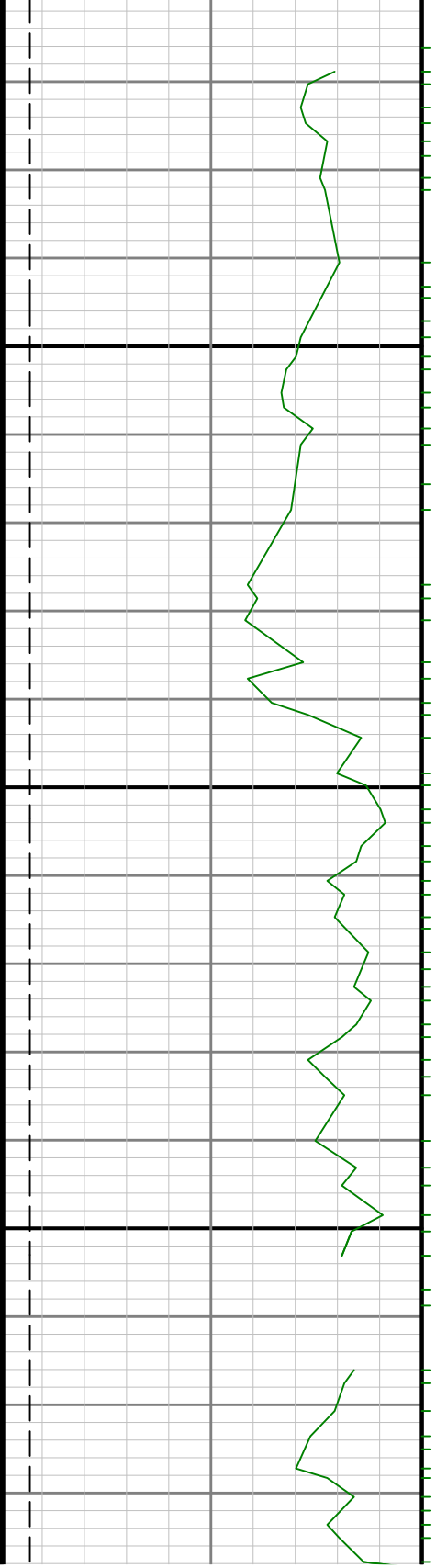




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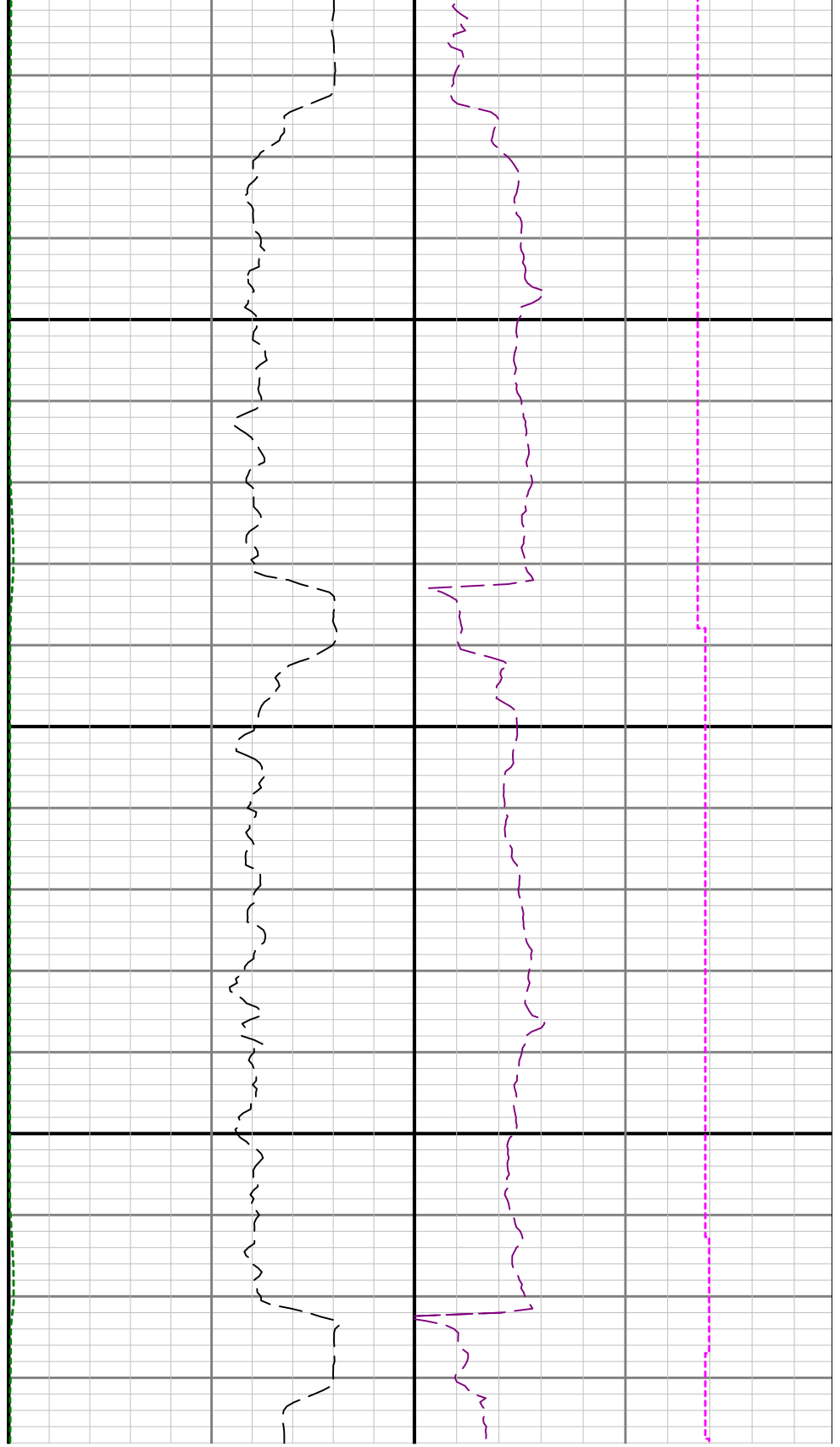
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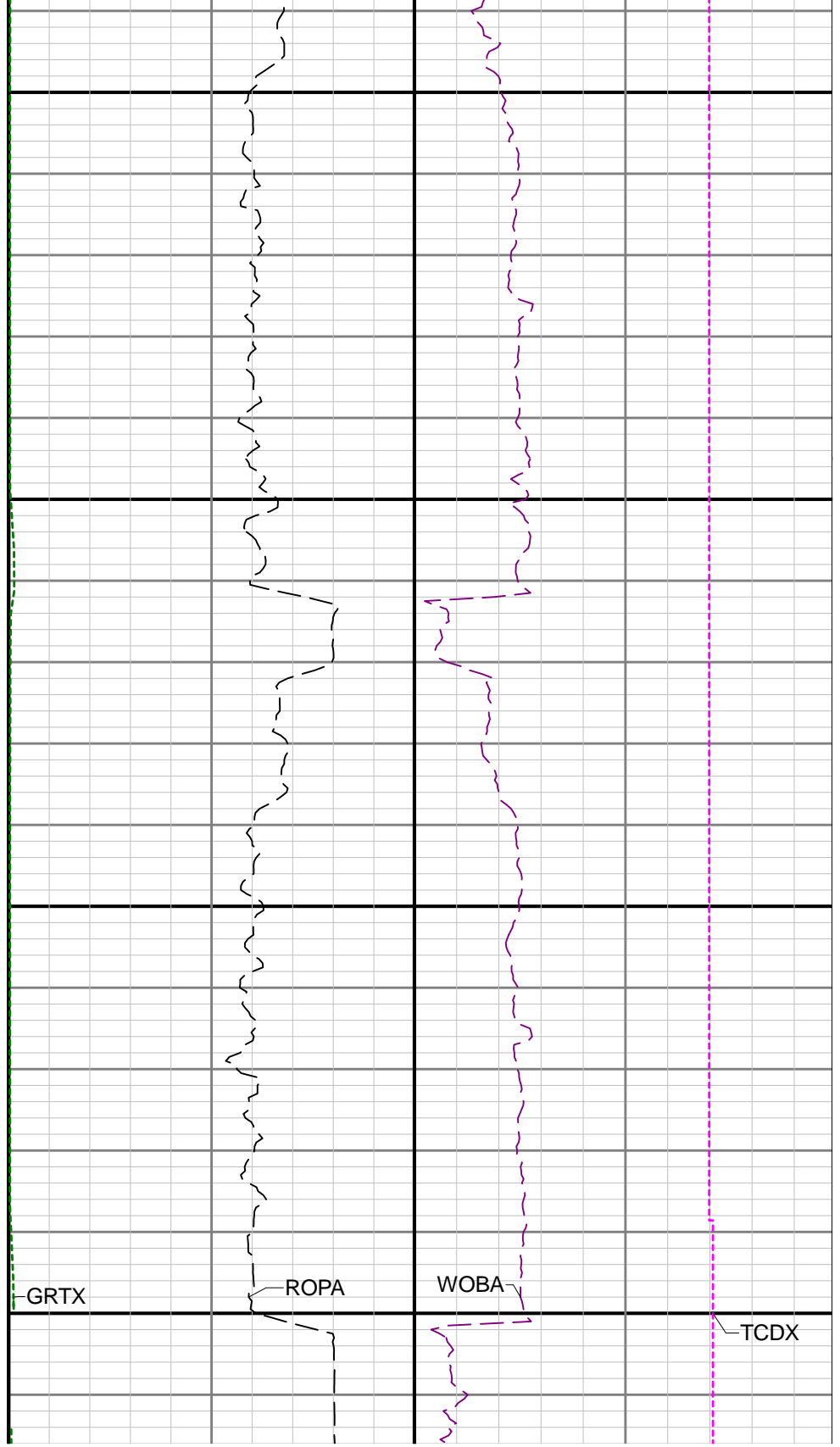
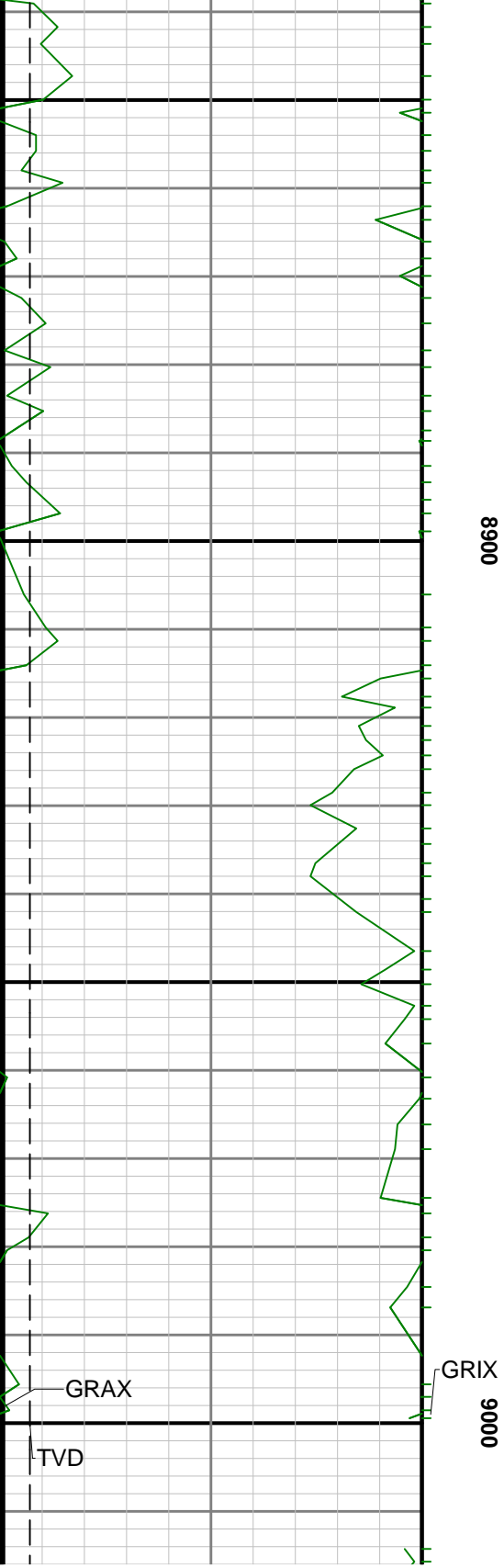


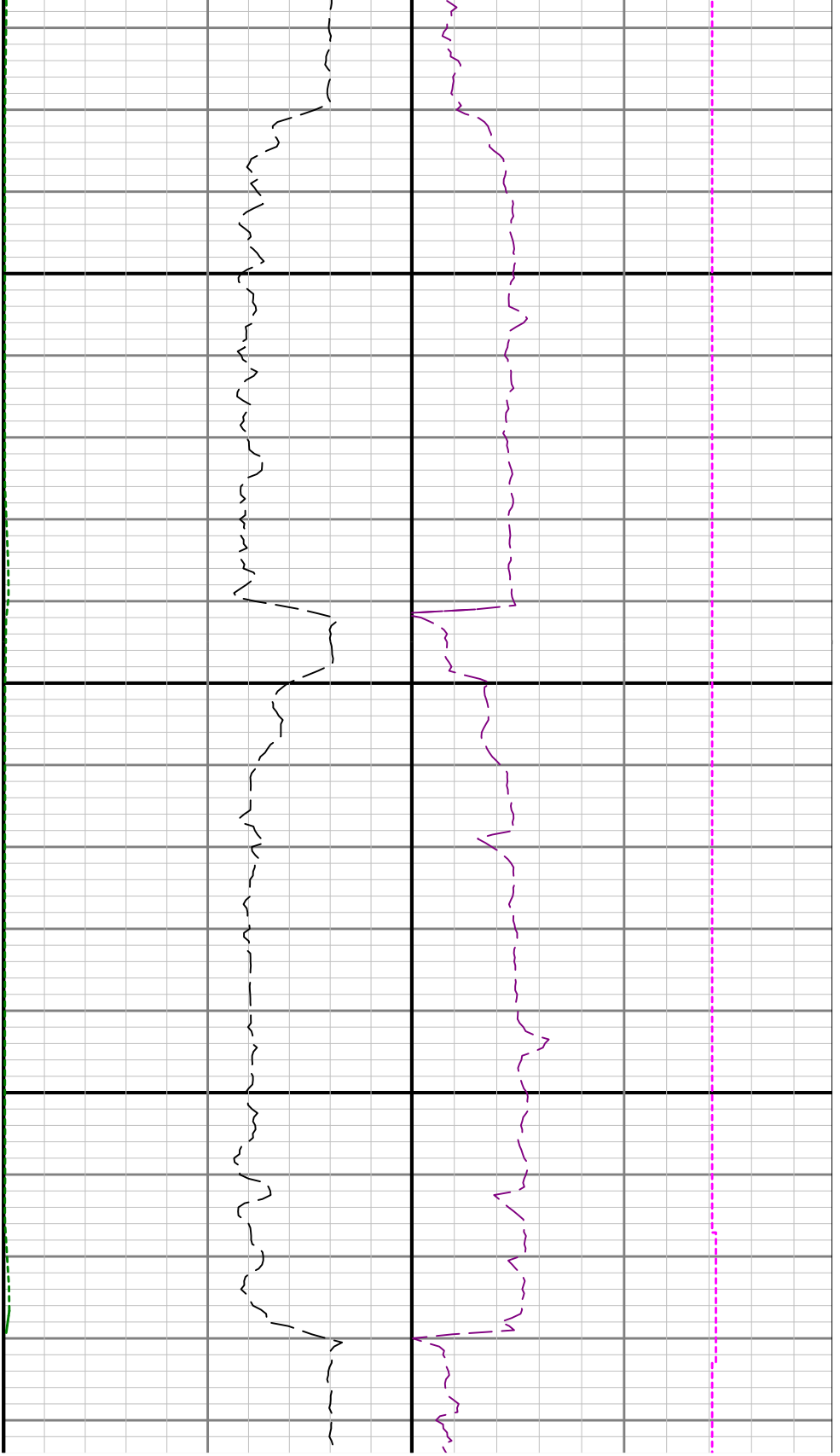


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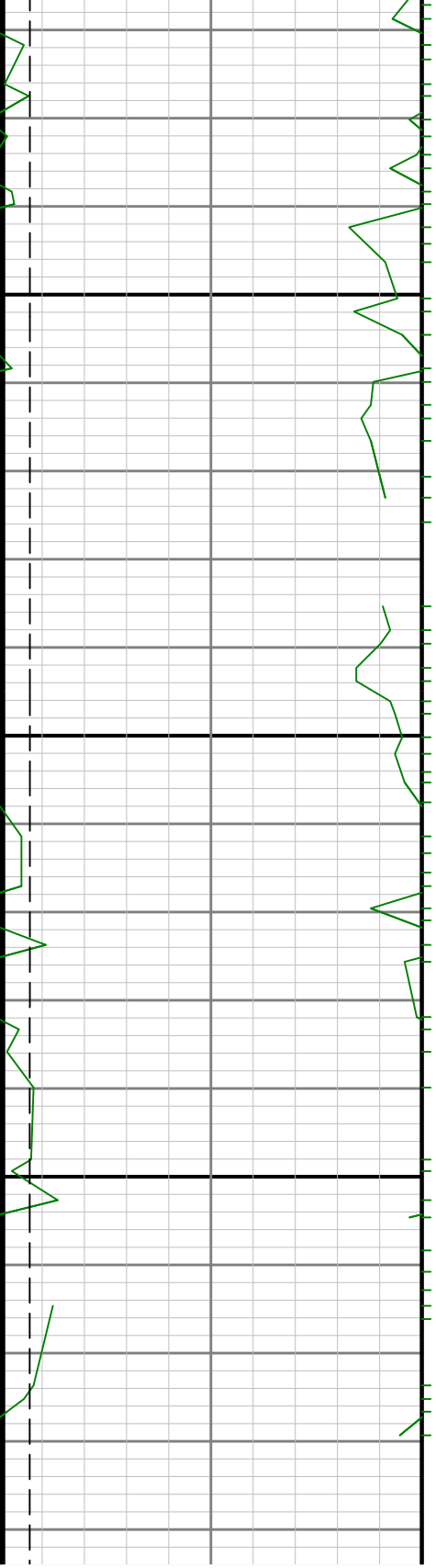
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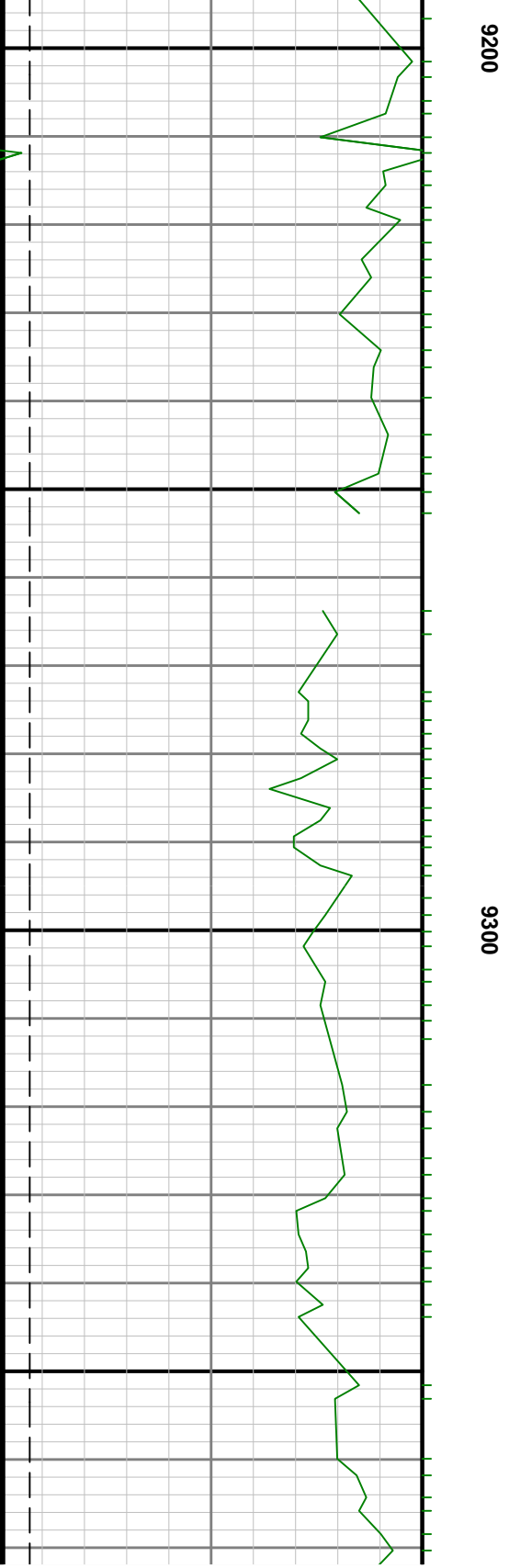
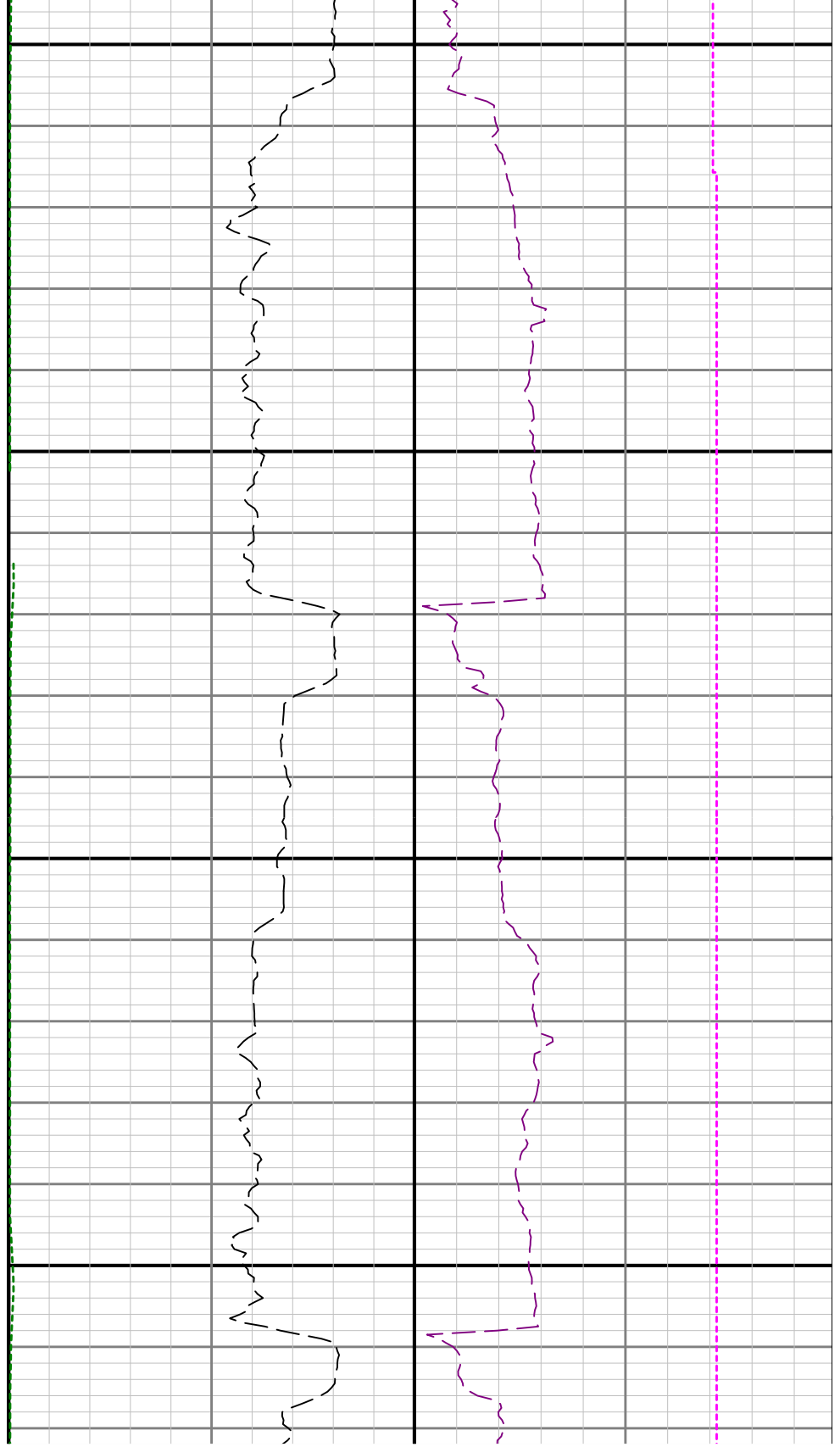


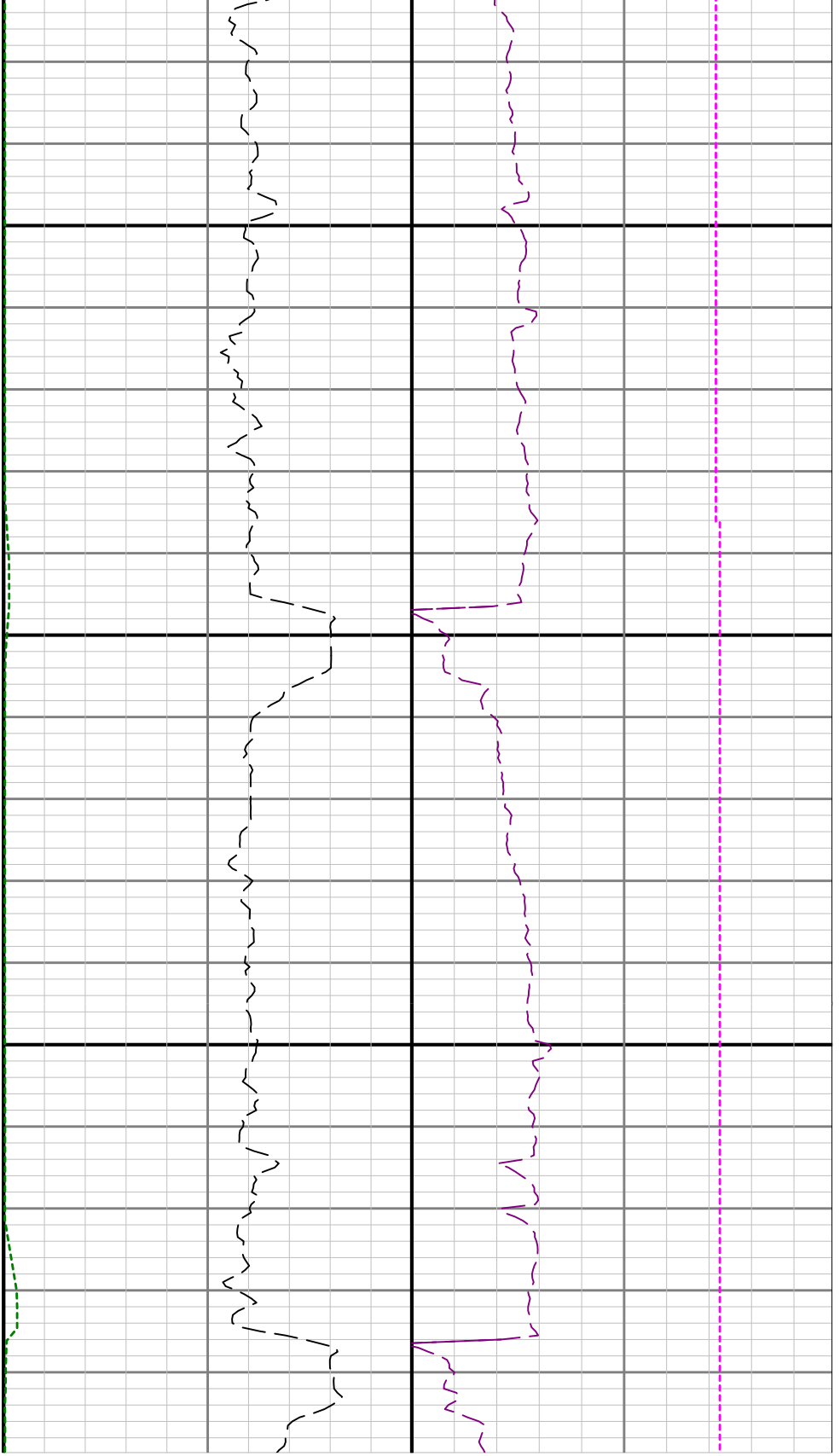




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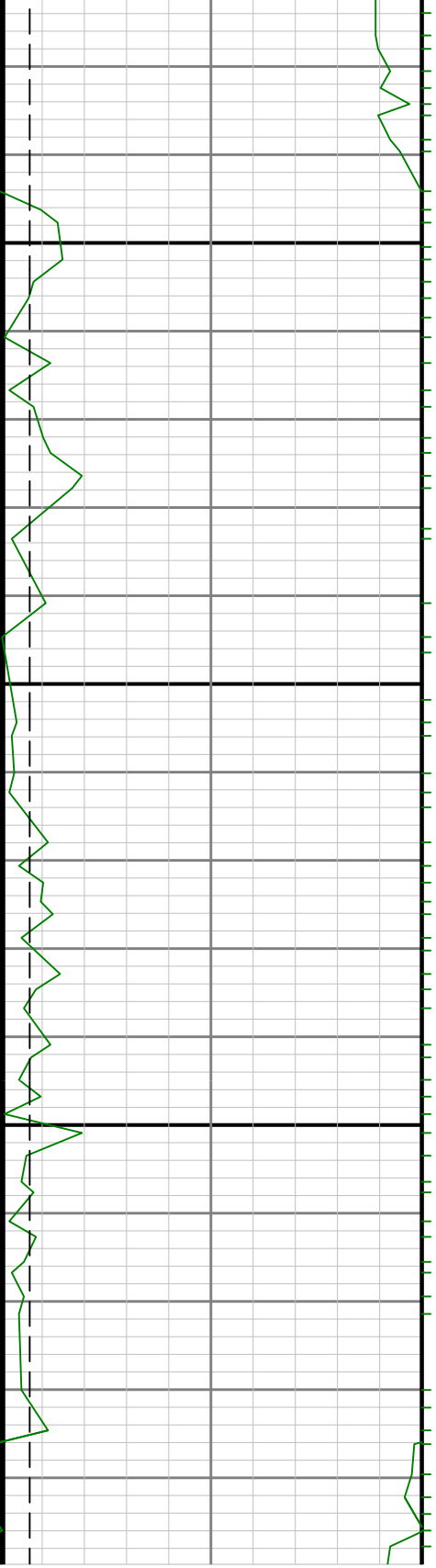


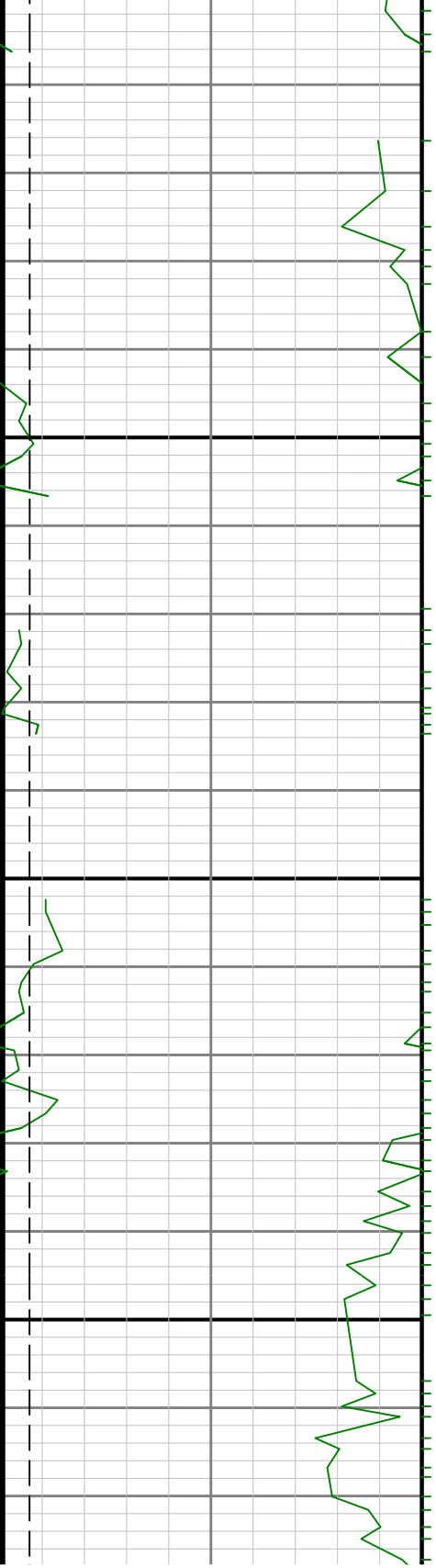




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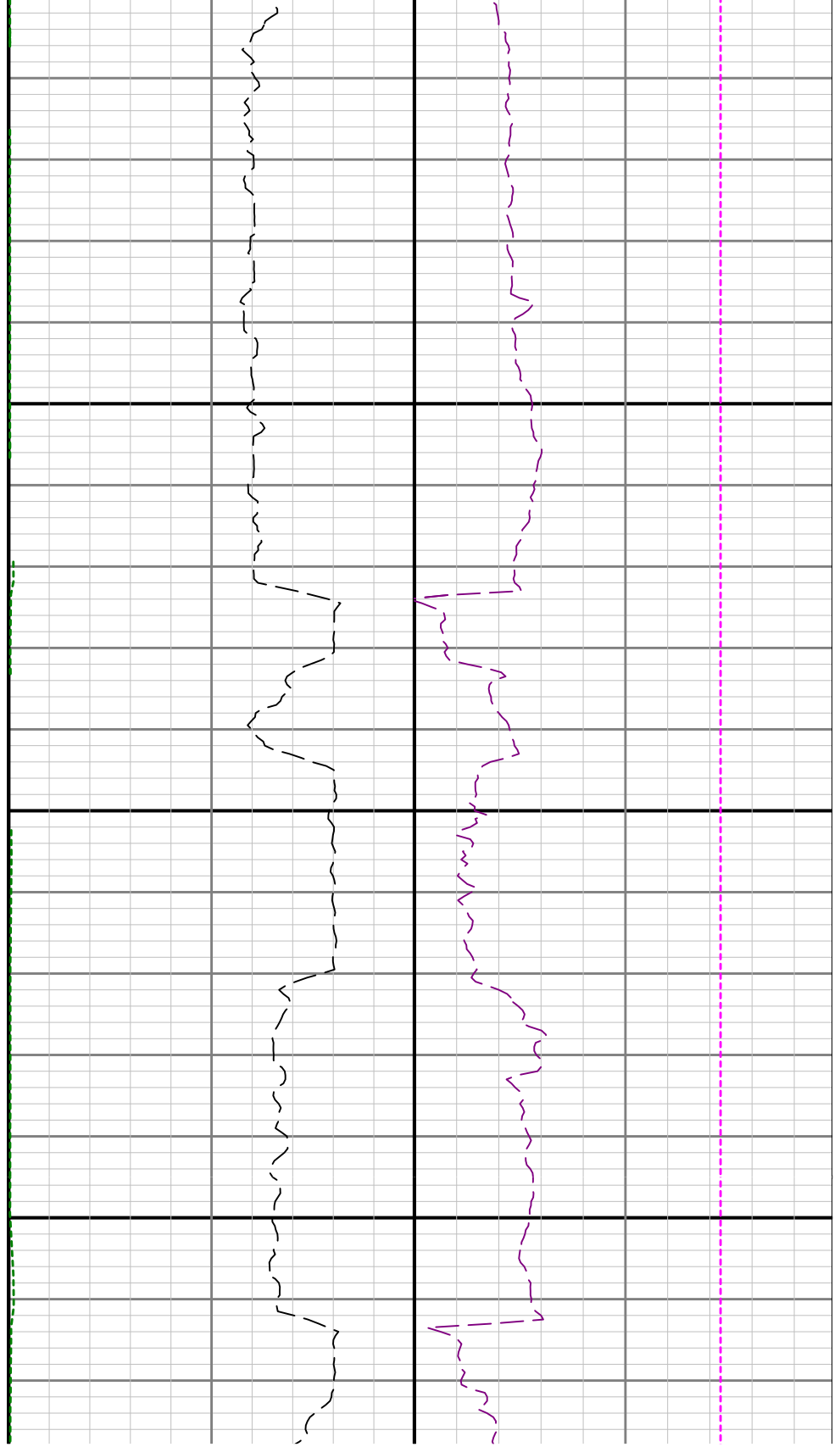
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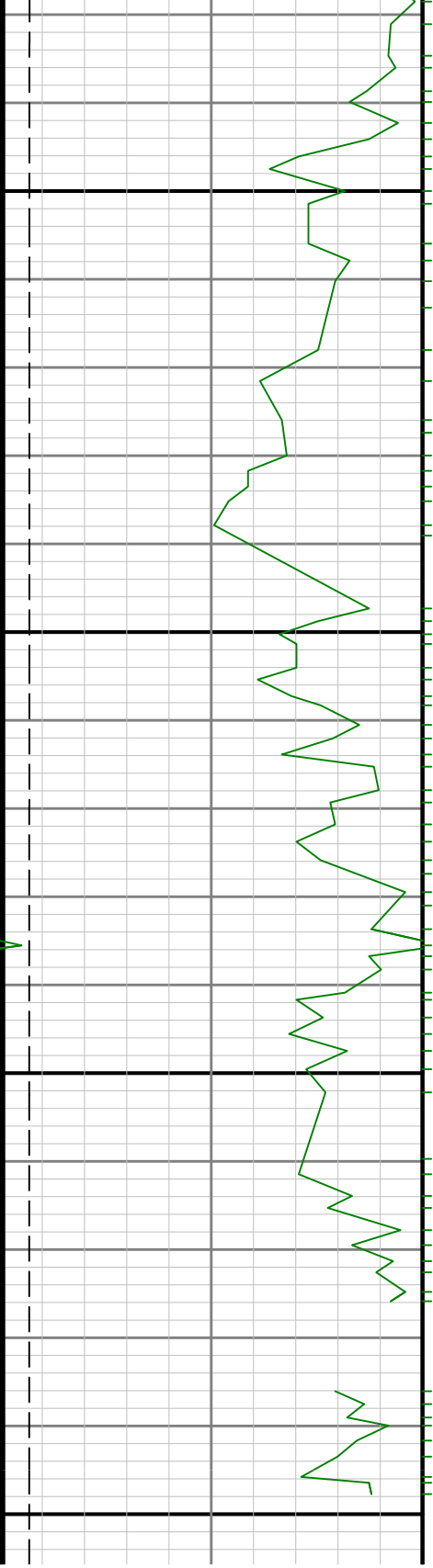




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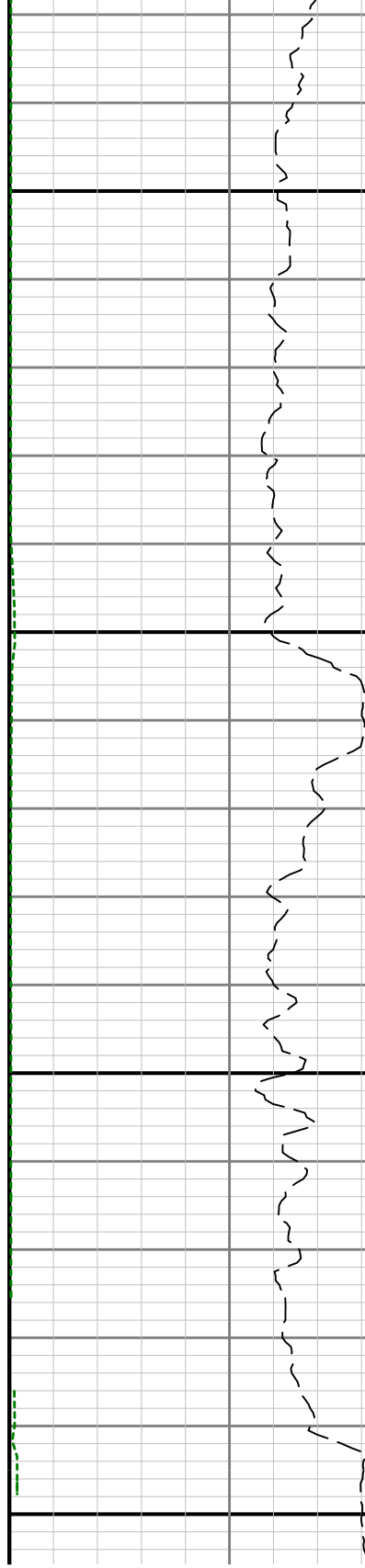
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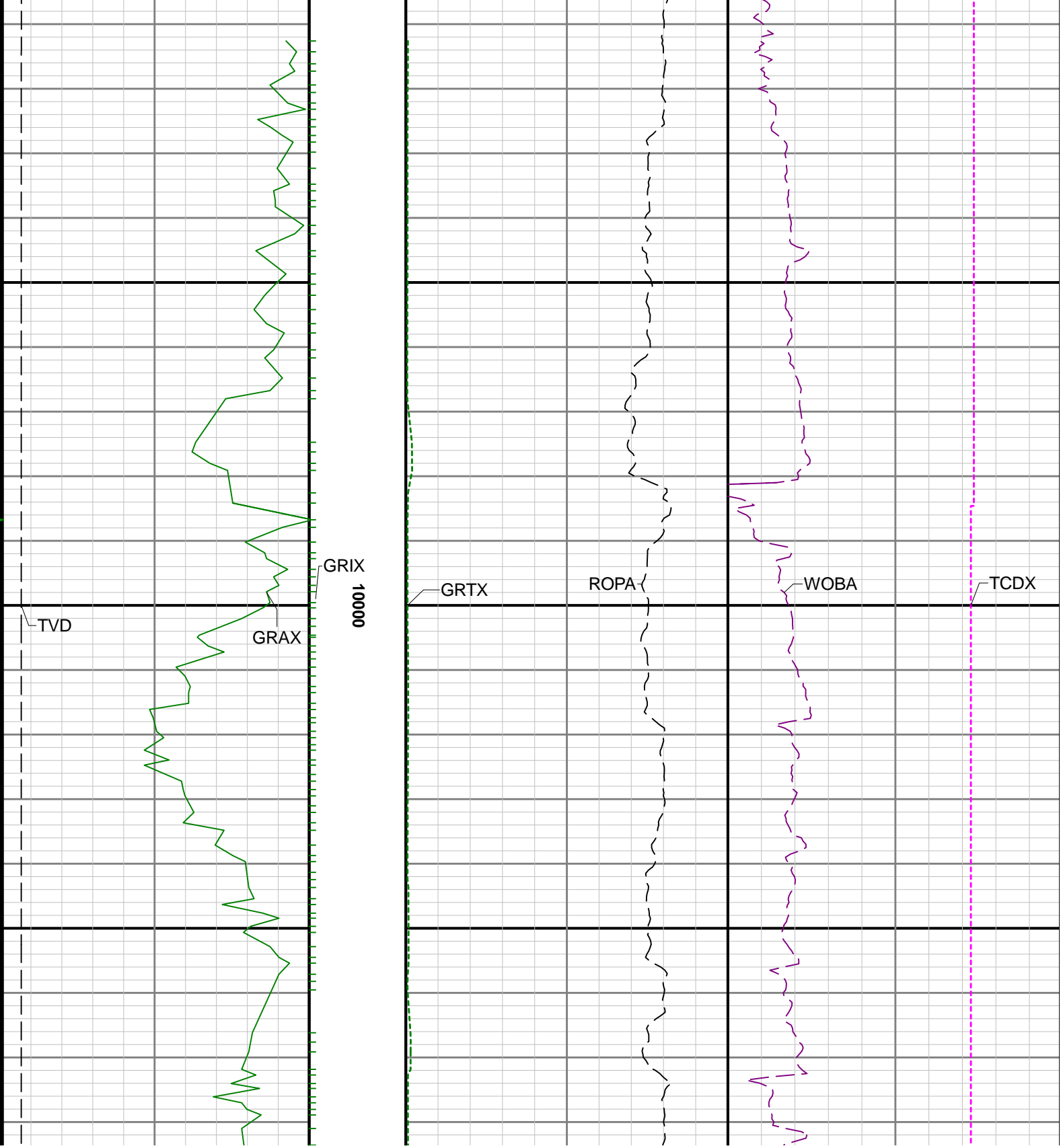


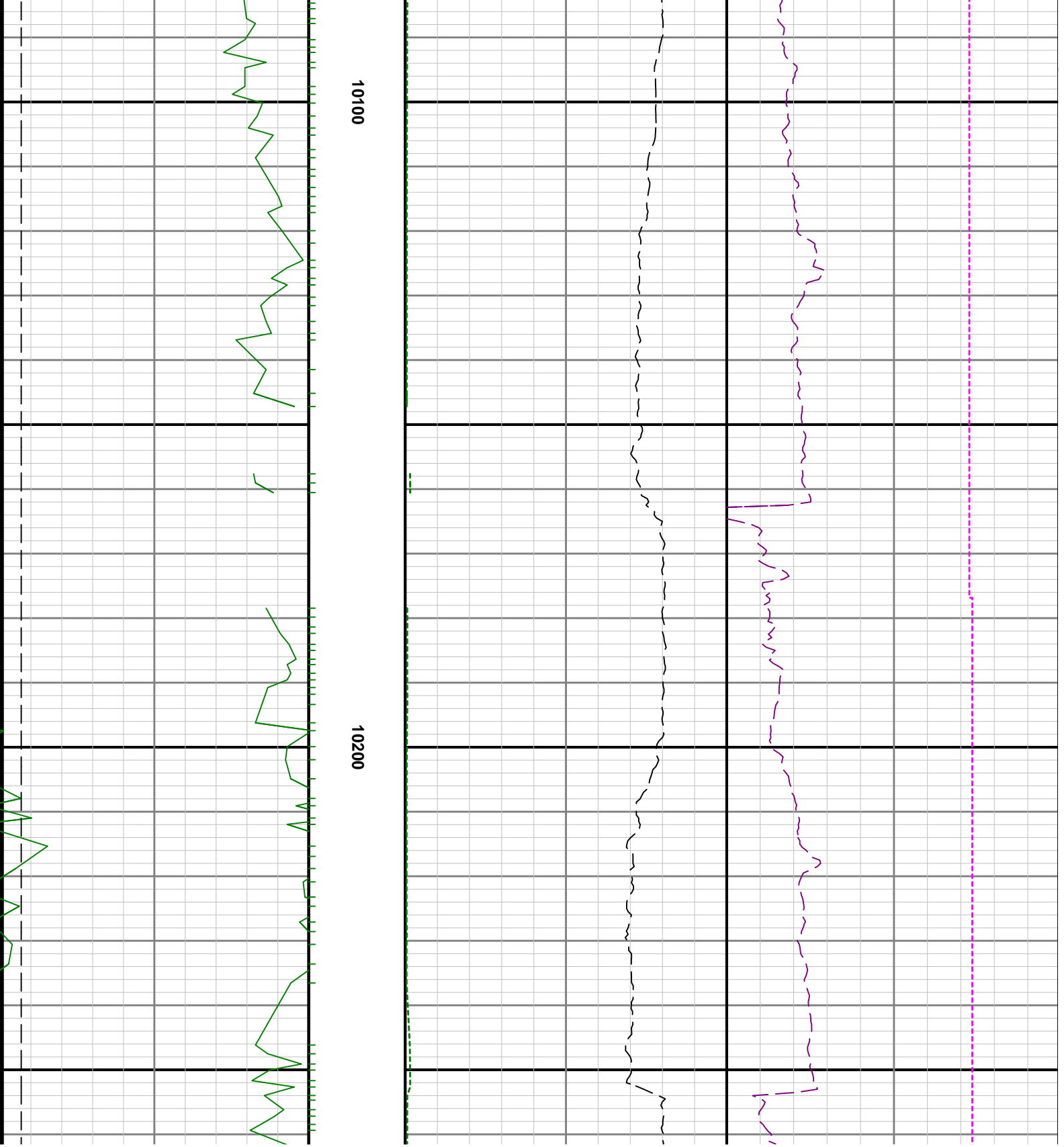


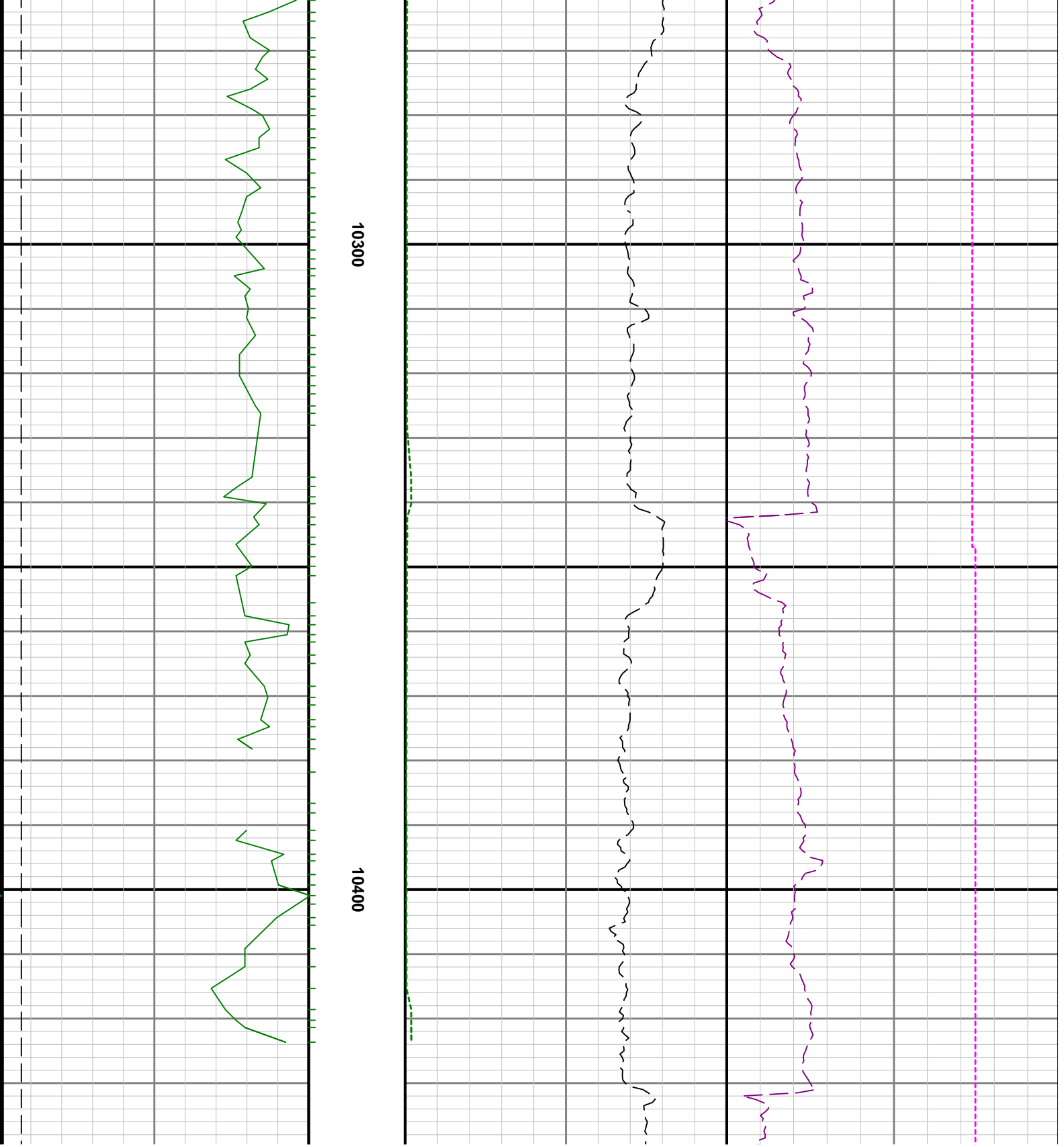
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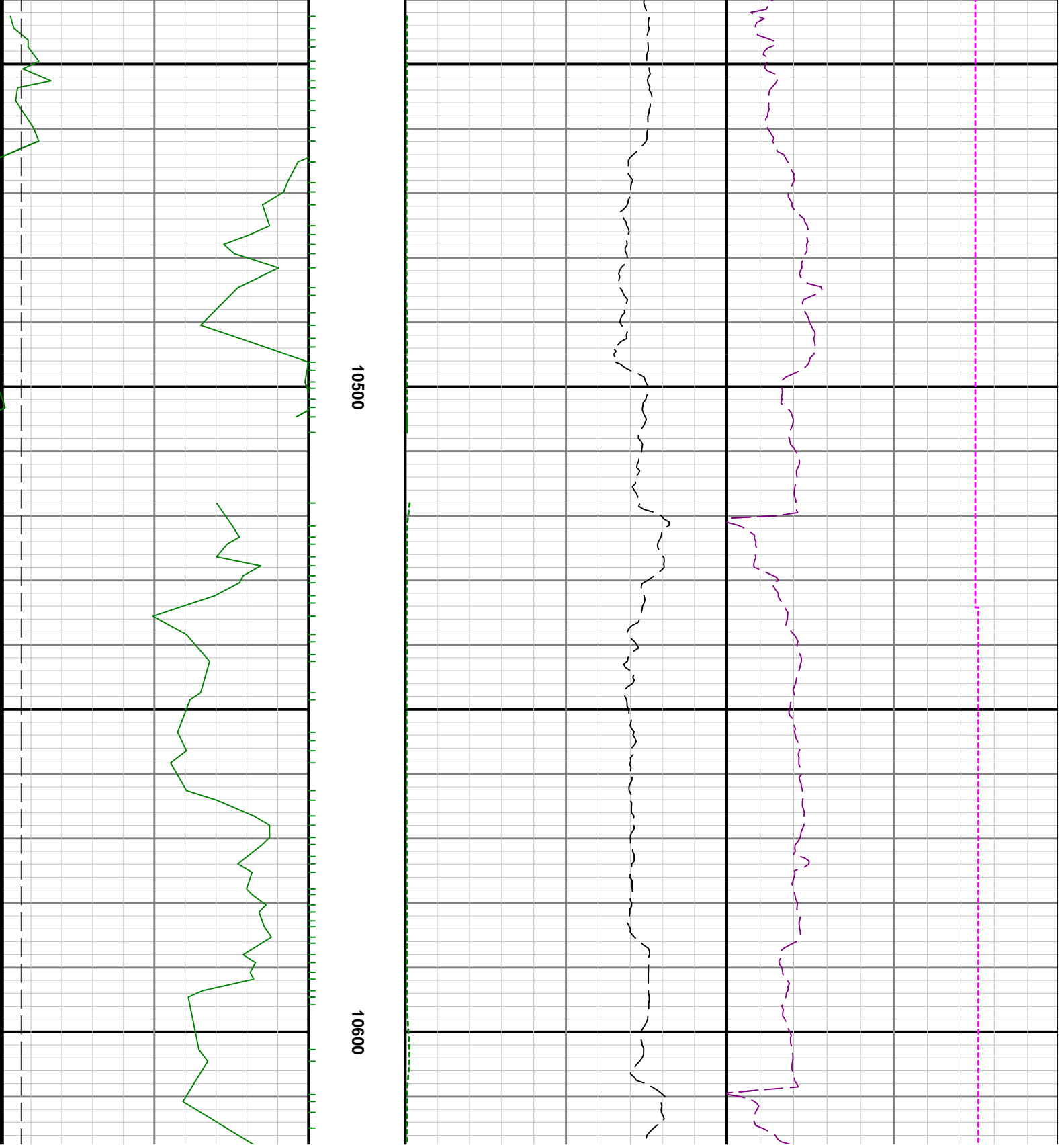
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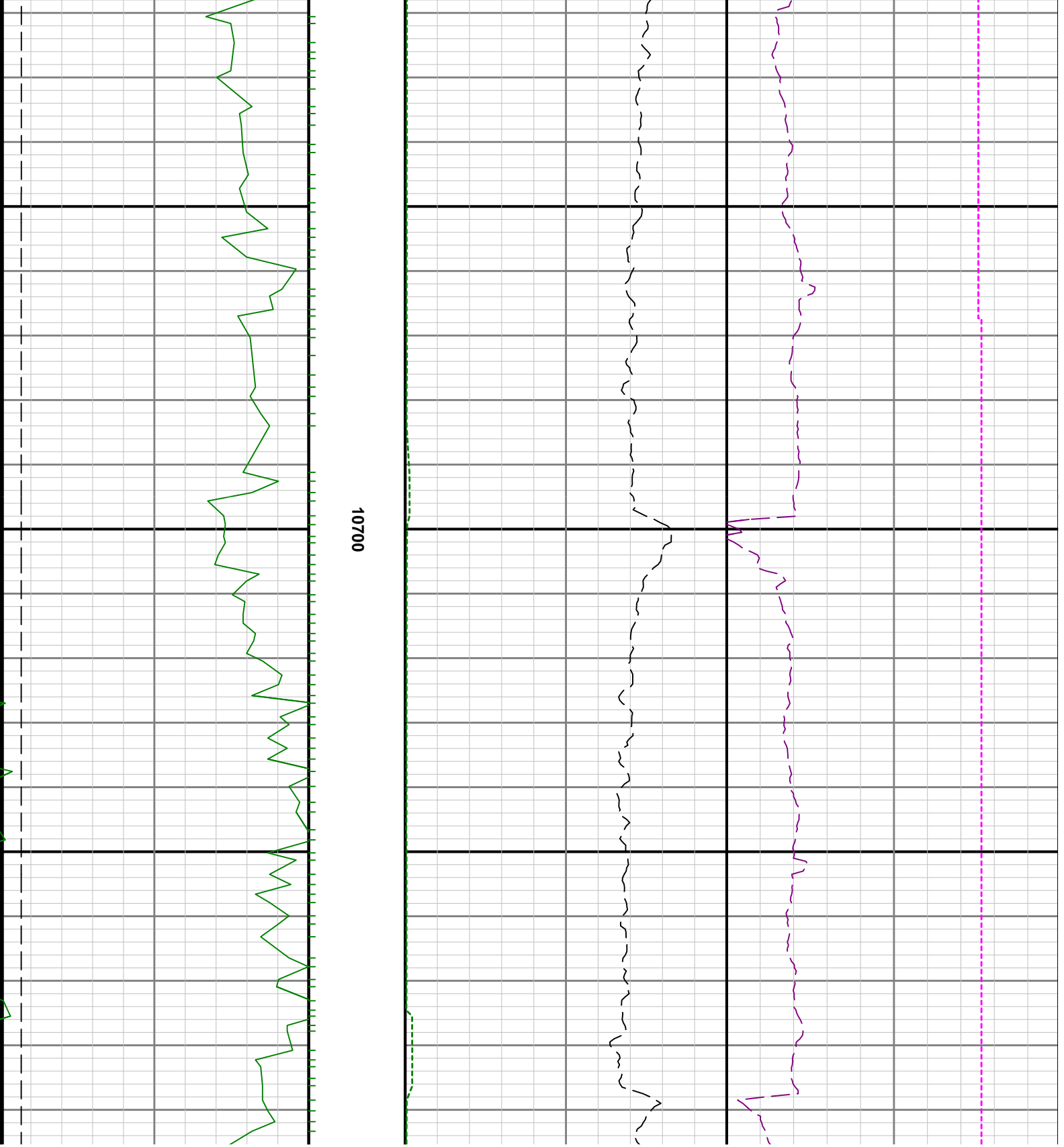


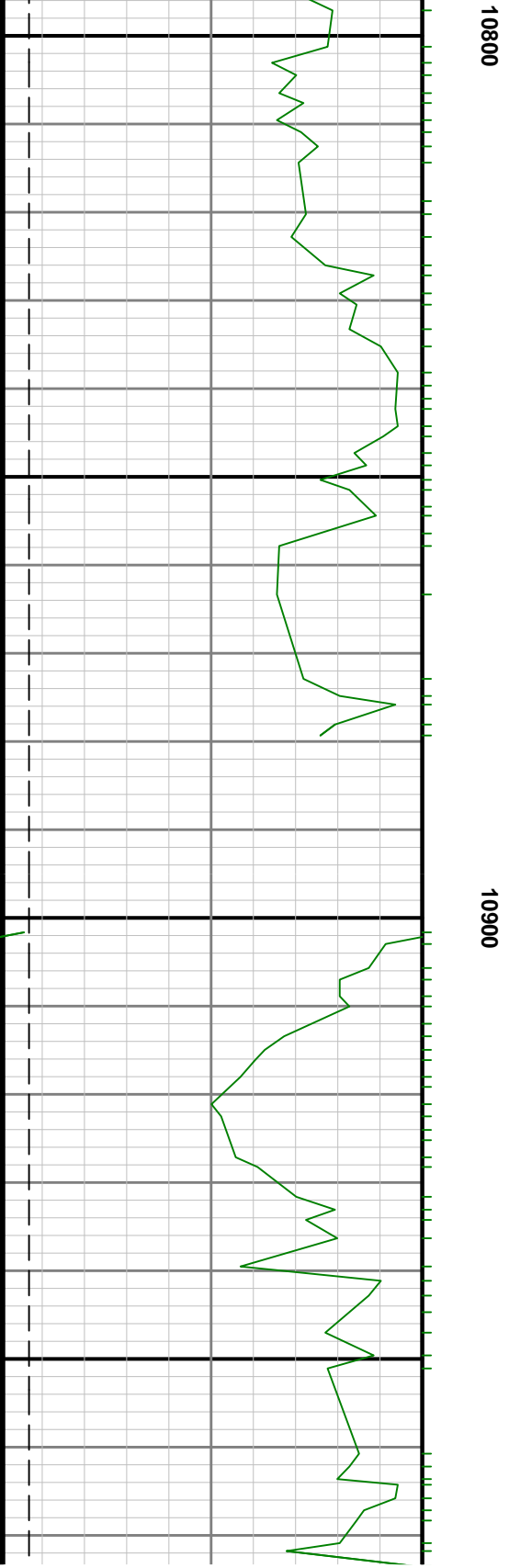
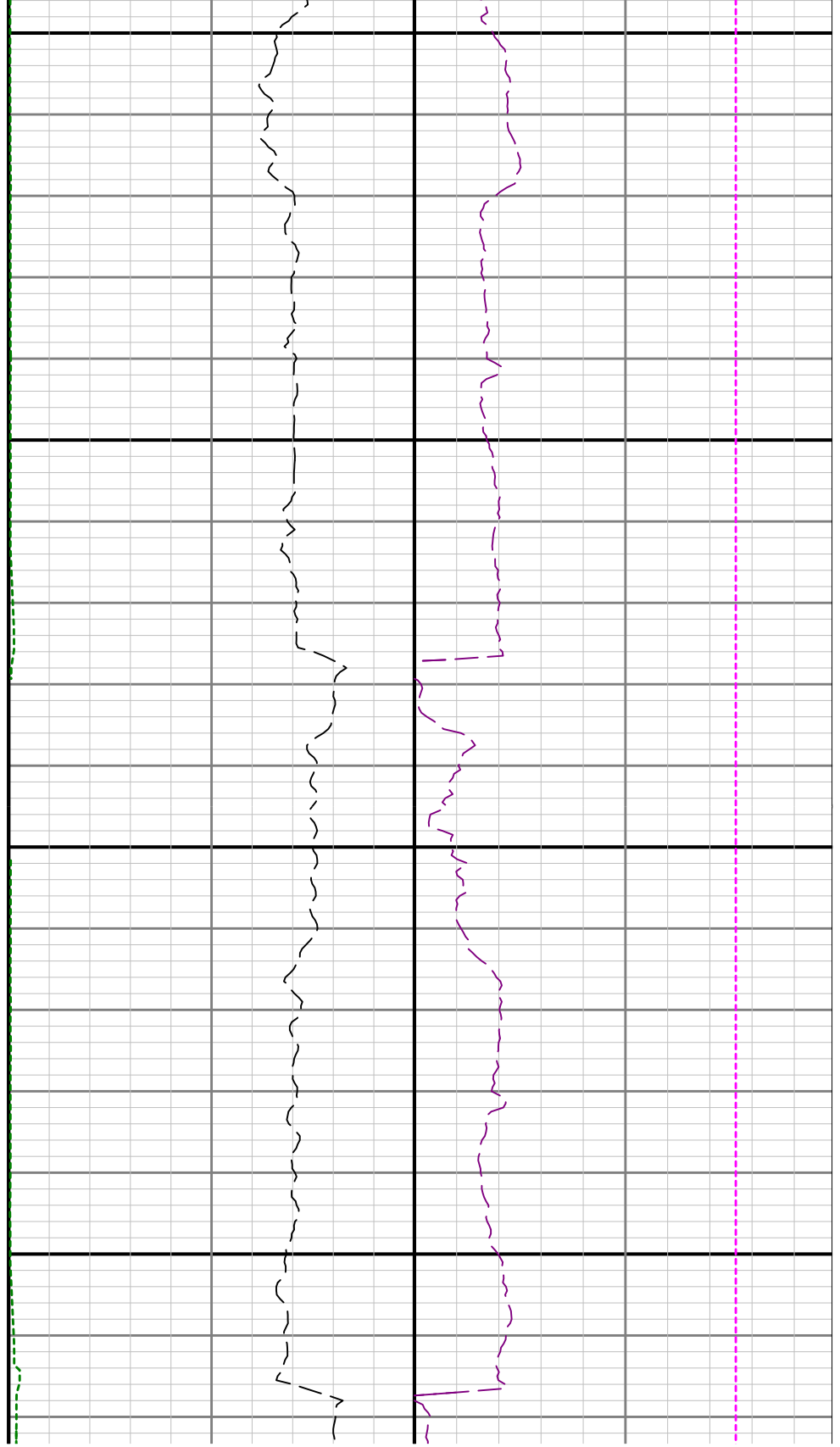


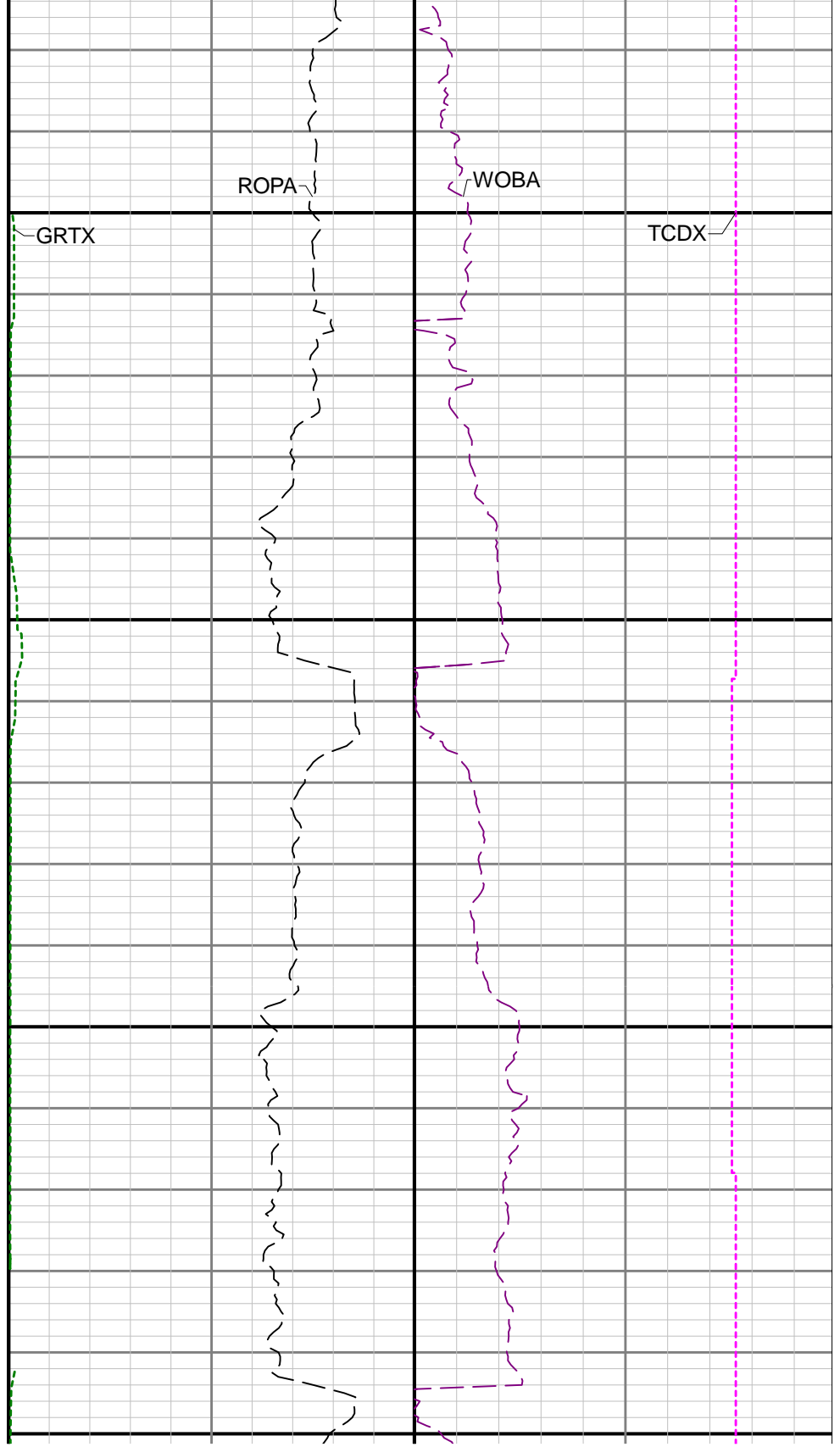
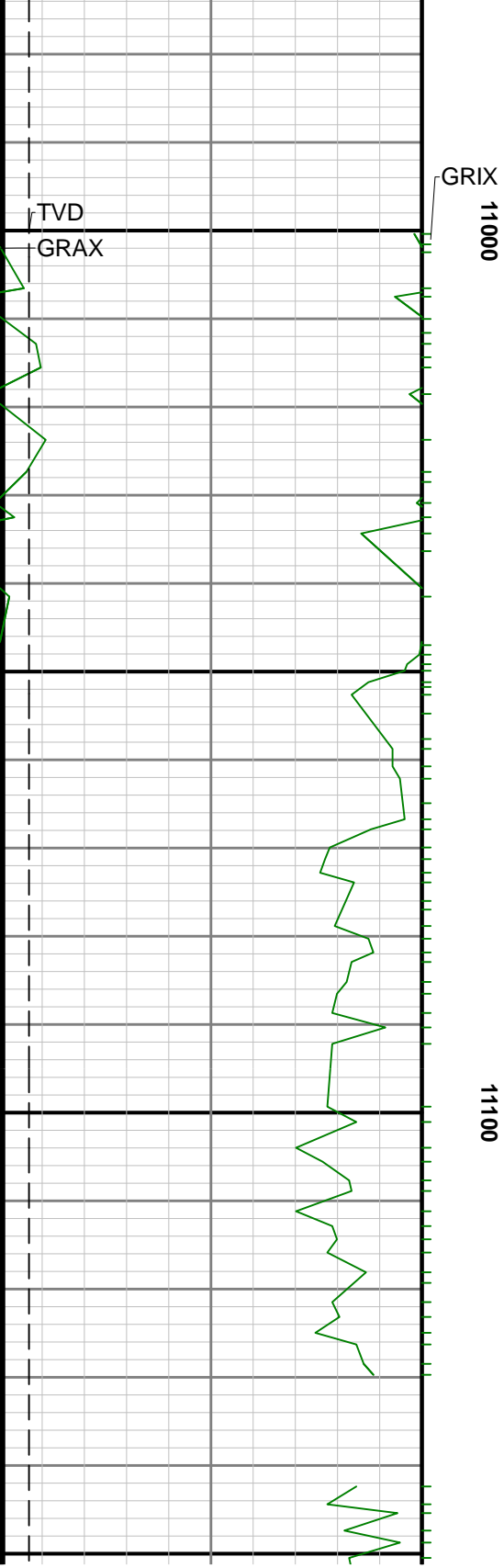


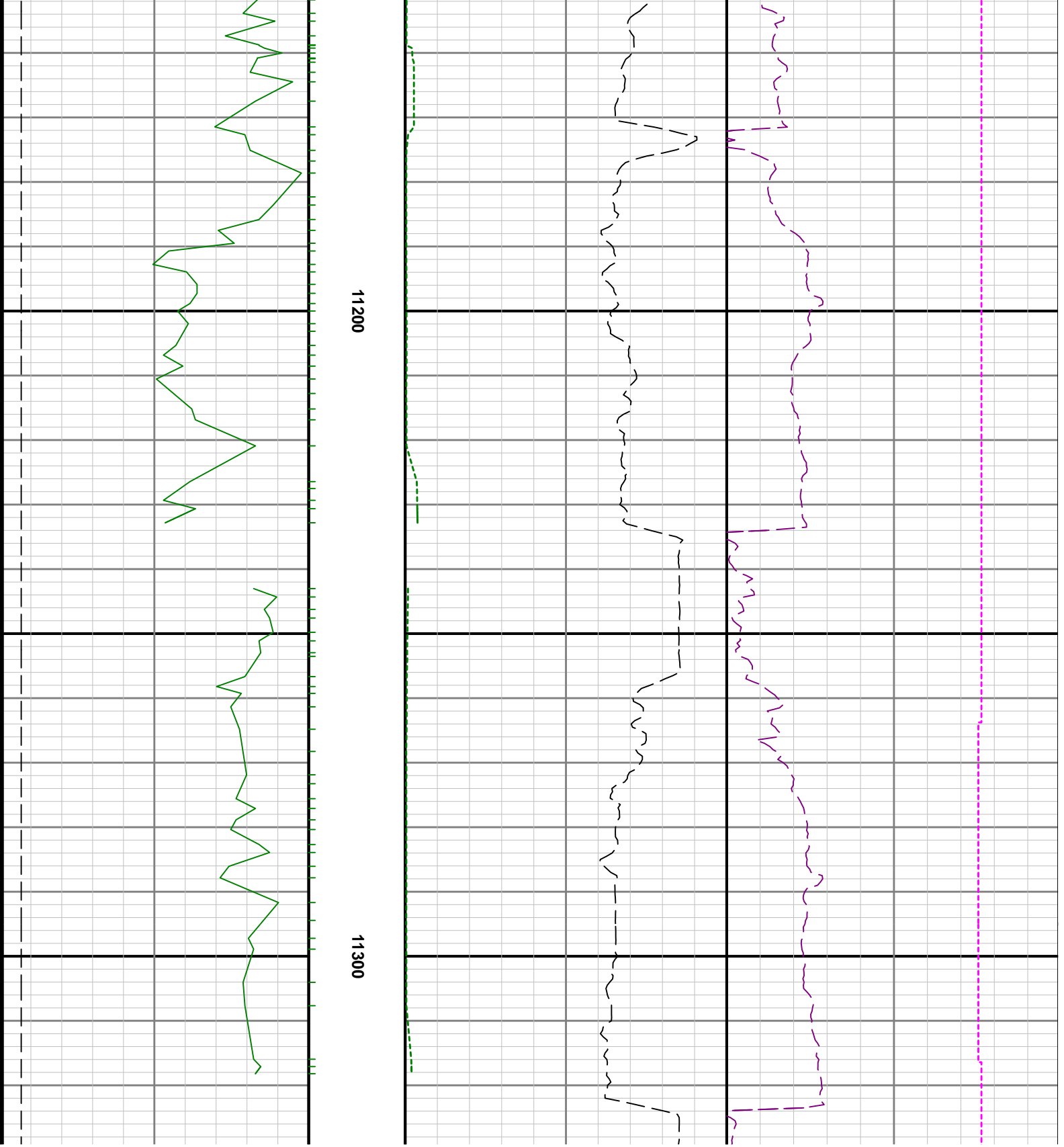


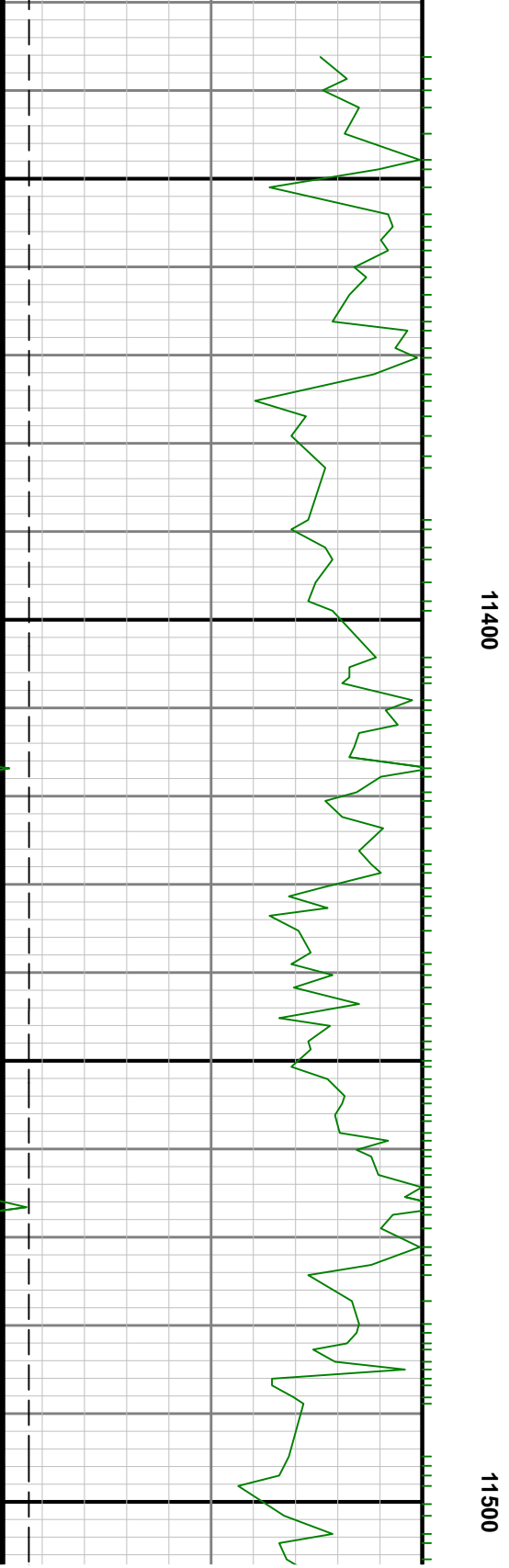


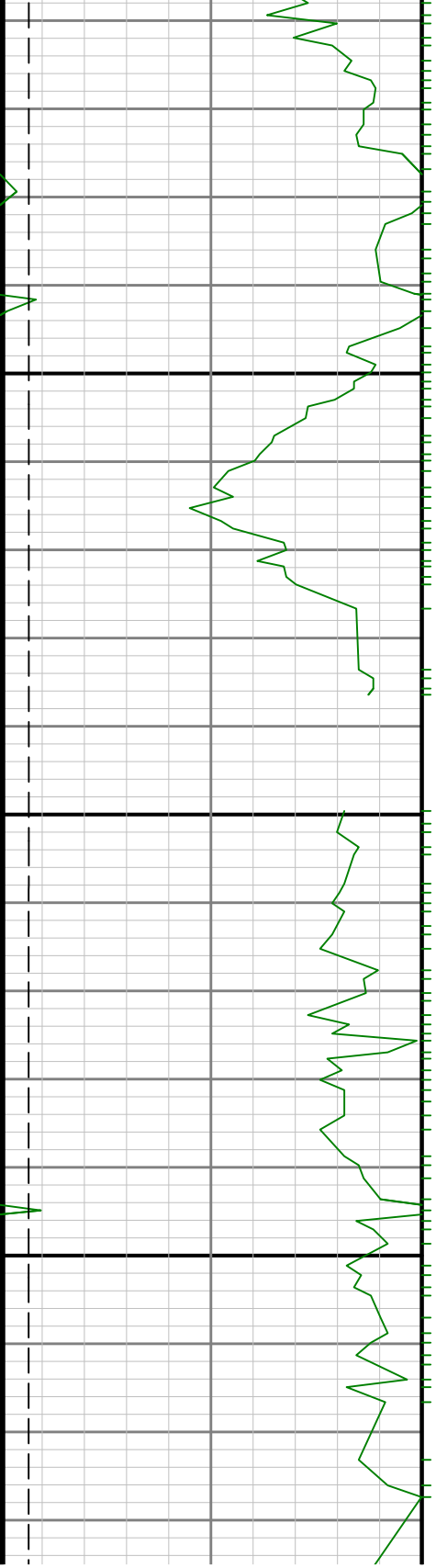












11600



