



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	AutoTrak Curve Steering Unit	13867779	Near Bit Inclination	5.93	6.88	7.000	4.330
1	AutoTrak Curve Steering Unit	13867779	Near Bit VSS	5.93	6.88	7.000	4.330
1	AutoTrak Curve MWD	14219820	Gamma (single)	2.74	13.05	7.000	3.250
1	AutoTrak Curve MWD	14219820	Directional (mag)	12.27	22.58	7.000	3.250
2	AutoTrak Curve Steering Unit	12273684	Near Bit VSS	5.93	6.88	7.000	4.330
2	AutoTrak Curve Steering Unit	12273684	Near Bit Inclination	5.93	6.88	7.000	4.330
2	AutoTrak Curve MWD	14371880	Gamma (single)	2.75	13.05	7.000	3.250
2	AutoTrak Curve MWD	14371880	Directional (mag)	12.27	22.57	7.000	3.250

Service and Tool Mnemonics

Mnemonic	Name	Description
ATC SU	AutoTrak Curve SU	Auto Trak Curve Steering Unit
ATC MWD	AutoTrak Curve MWD	Auto Trak Curve MWD
ATC LCPM	AutoTrak Curve LCPM	Auto Trak Curve LCPM

Comments

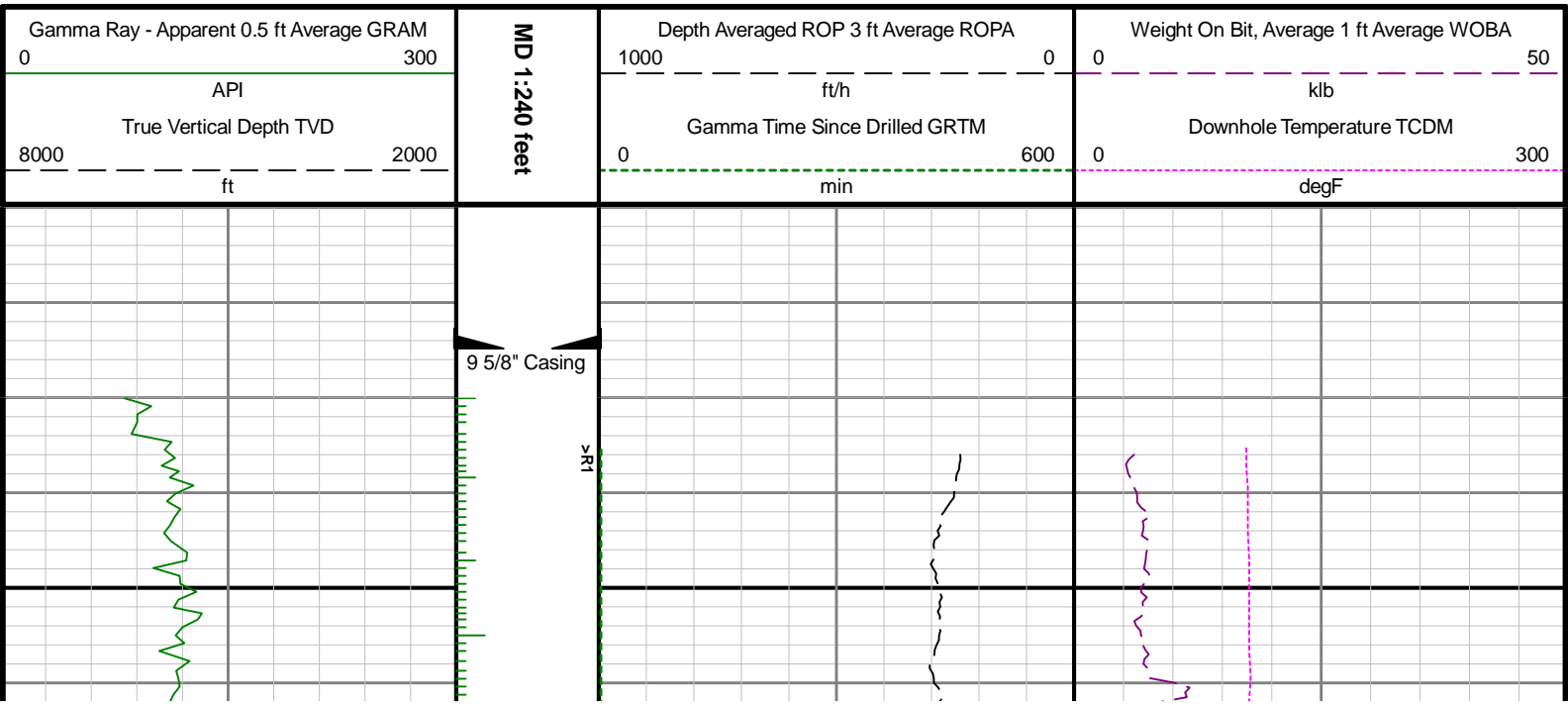
- 1 Depth measurements were obtained from a depth control system not supplied or operated by Baker Hughes. Due to lack of control by Baker Hughes logging engineers, depth calibrations and measurements could not be independently verified.
- 2 Baker Hughes LWD Run 1 utilized 6 ¾ inch NaviGamma service (Gamma Ray and Directional) behind a 8 1/2 inch bit and rotary steerable assembly from 1935 to 15101 feet MD (1935 to 6857 feet TVD).
- 3 The Gamma Ray Apparent (GRAM) data is presented 0 to 300 API, per the customer's request.
- 4 Several gaps appear in the log due to drilling ahead before the assembly had time to properly power on.

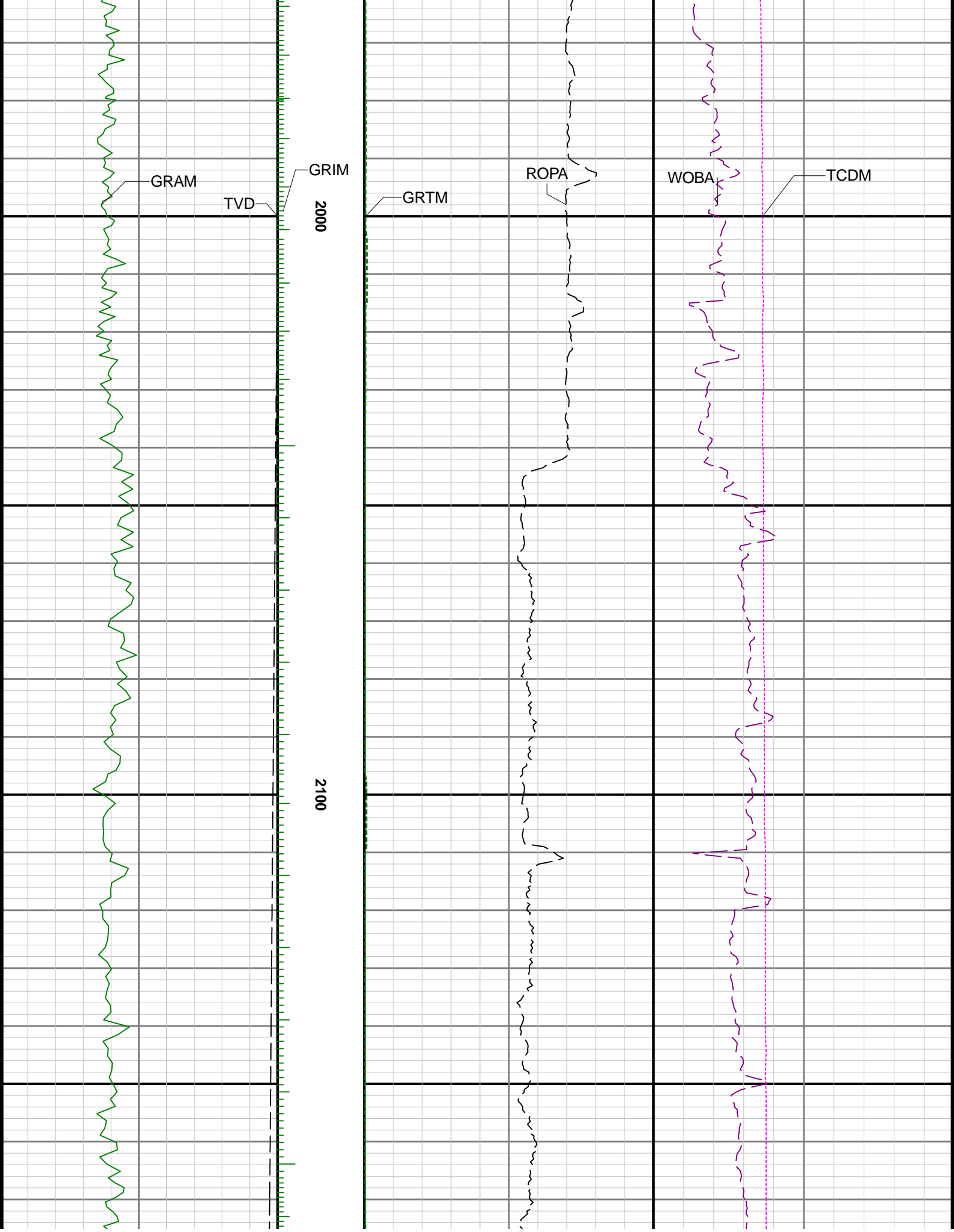
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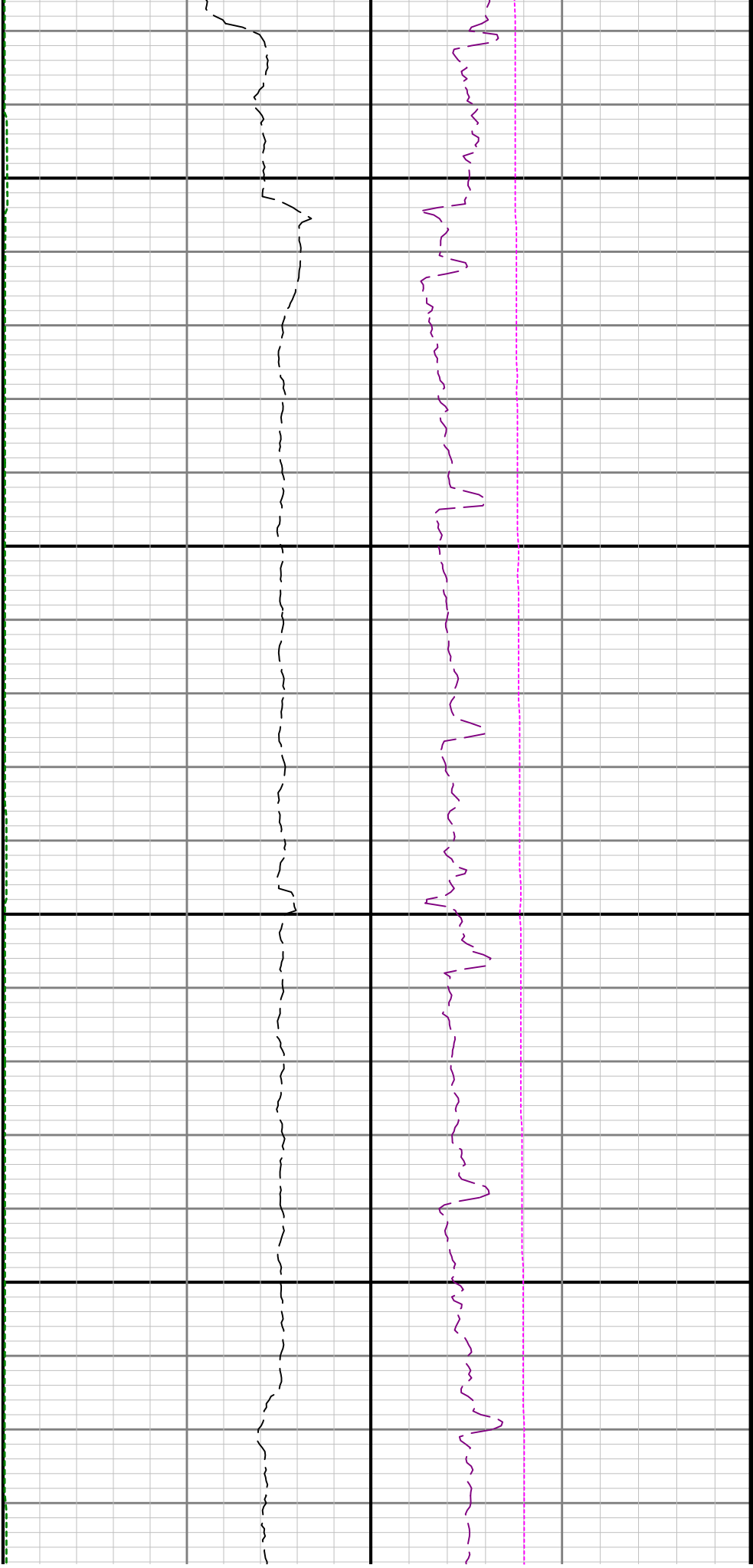
Number	Depth (ft)	Hole Section (in)	Run No.	Remark
1	15087.00	8.500	2	The interval from 15087 to 15101 feet MD (6857 feet TVD) was not logged due to sensor to bit offset at well TD.

Curve Mnemonics

Presented Curves	Description	Units
ROPA	Depth Averaged ROP 3 ft Average	ft/h
TVD	TVD	ft
WOBA	Weight On Bit 1 ft Average	klb
GRAM	Gamma Ray - Apparent - Memory 0.5 ft Average	API
GRIM	Gamma Ray - Data Point Indicator - Memory	unitless
GRTM	Gamma Ray - Time Since Drilled - Memory	min
TCDM	Directional Real-Time Survey Temperature	degF

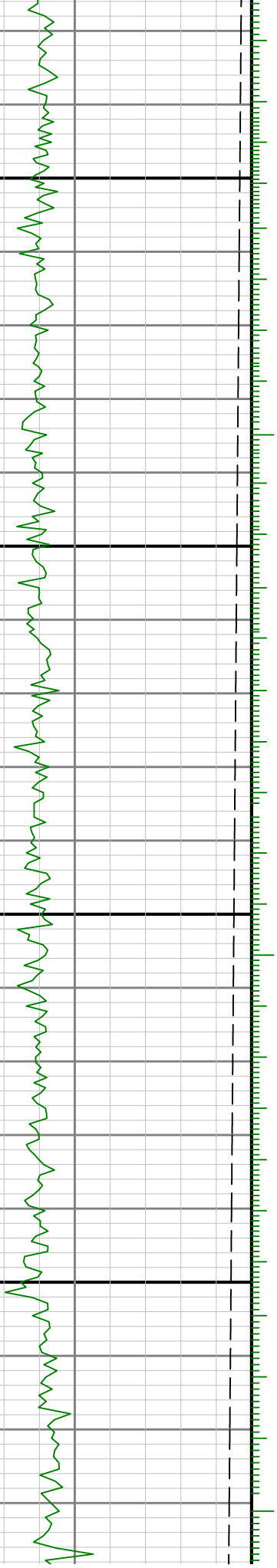


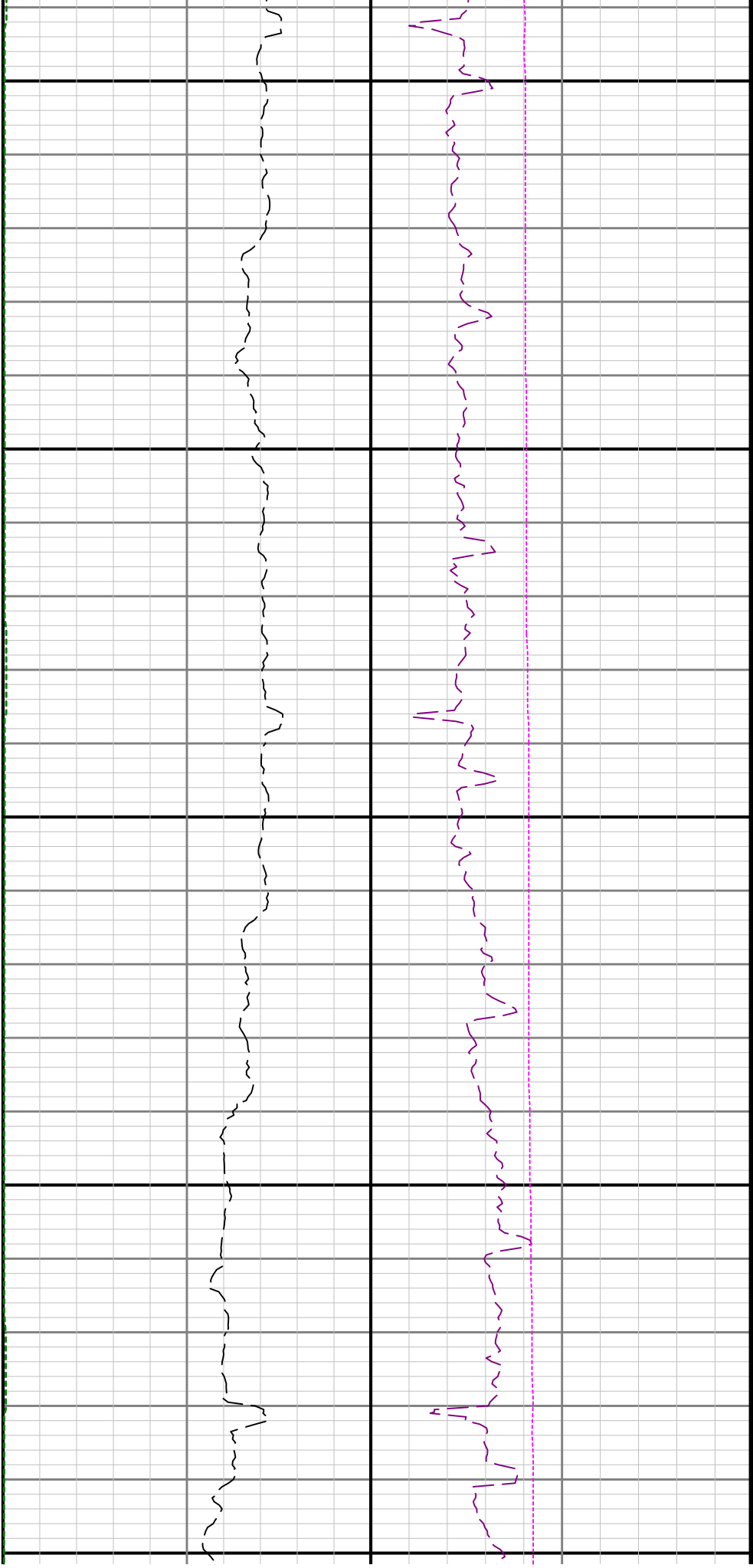




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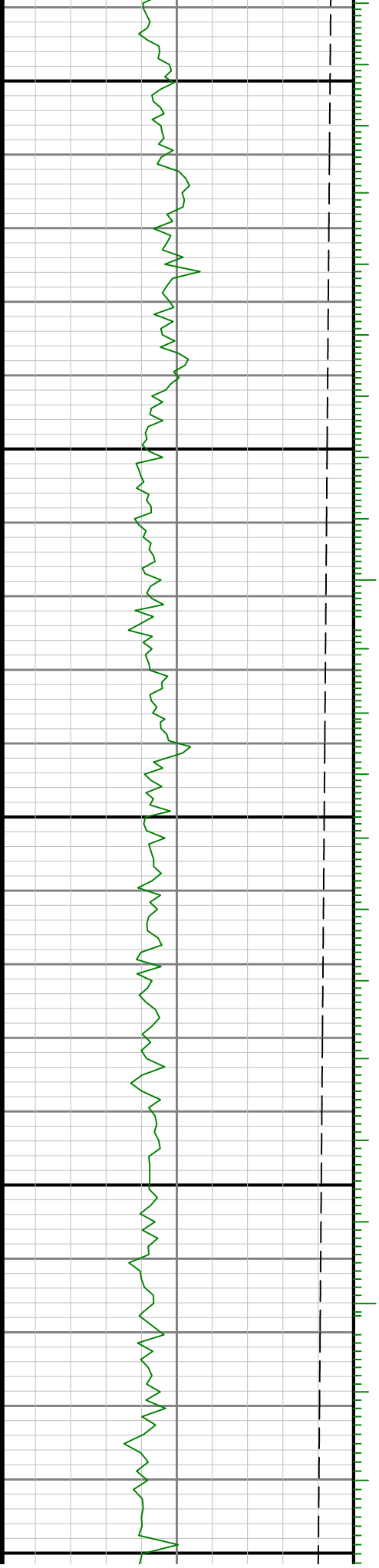


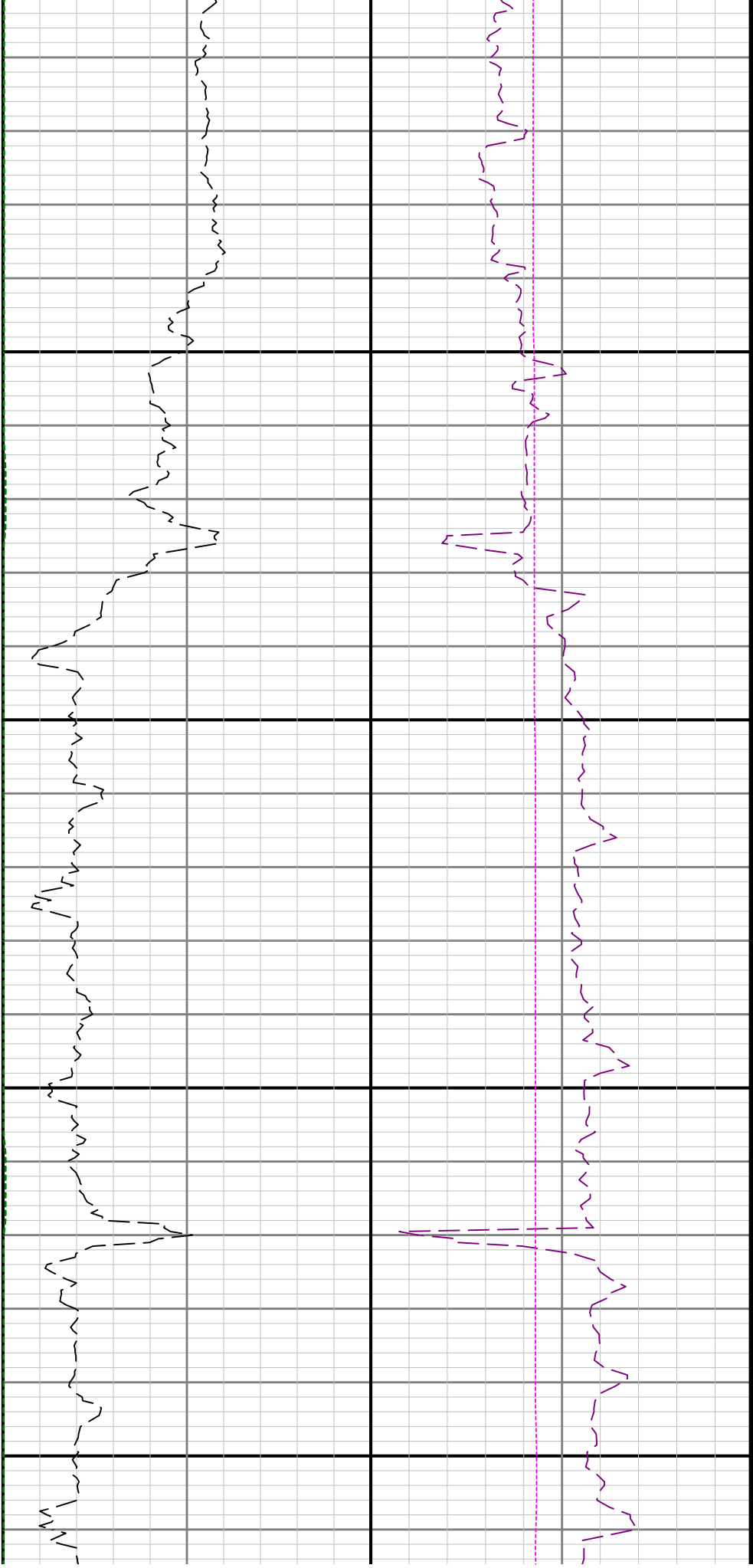


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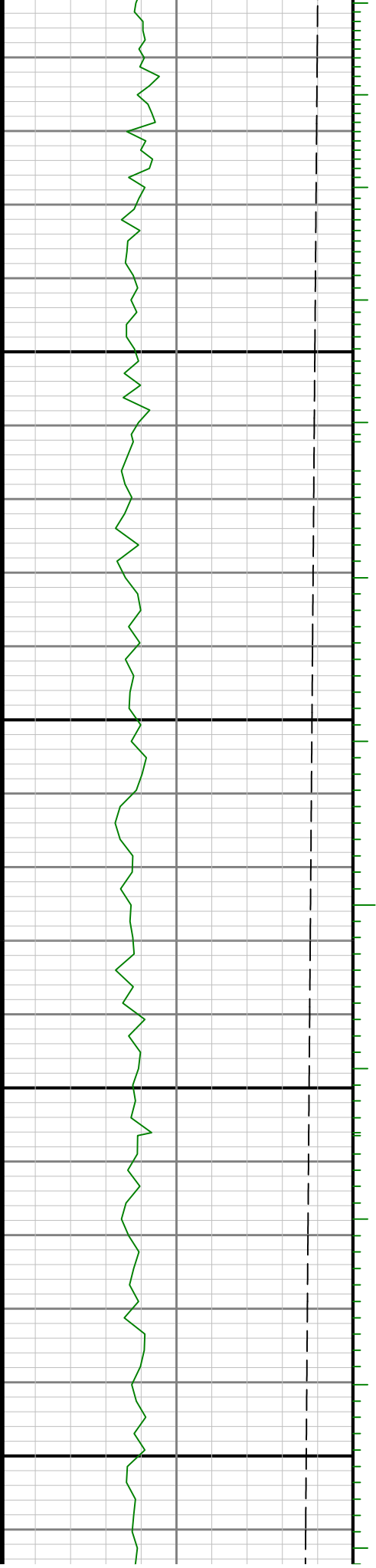
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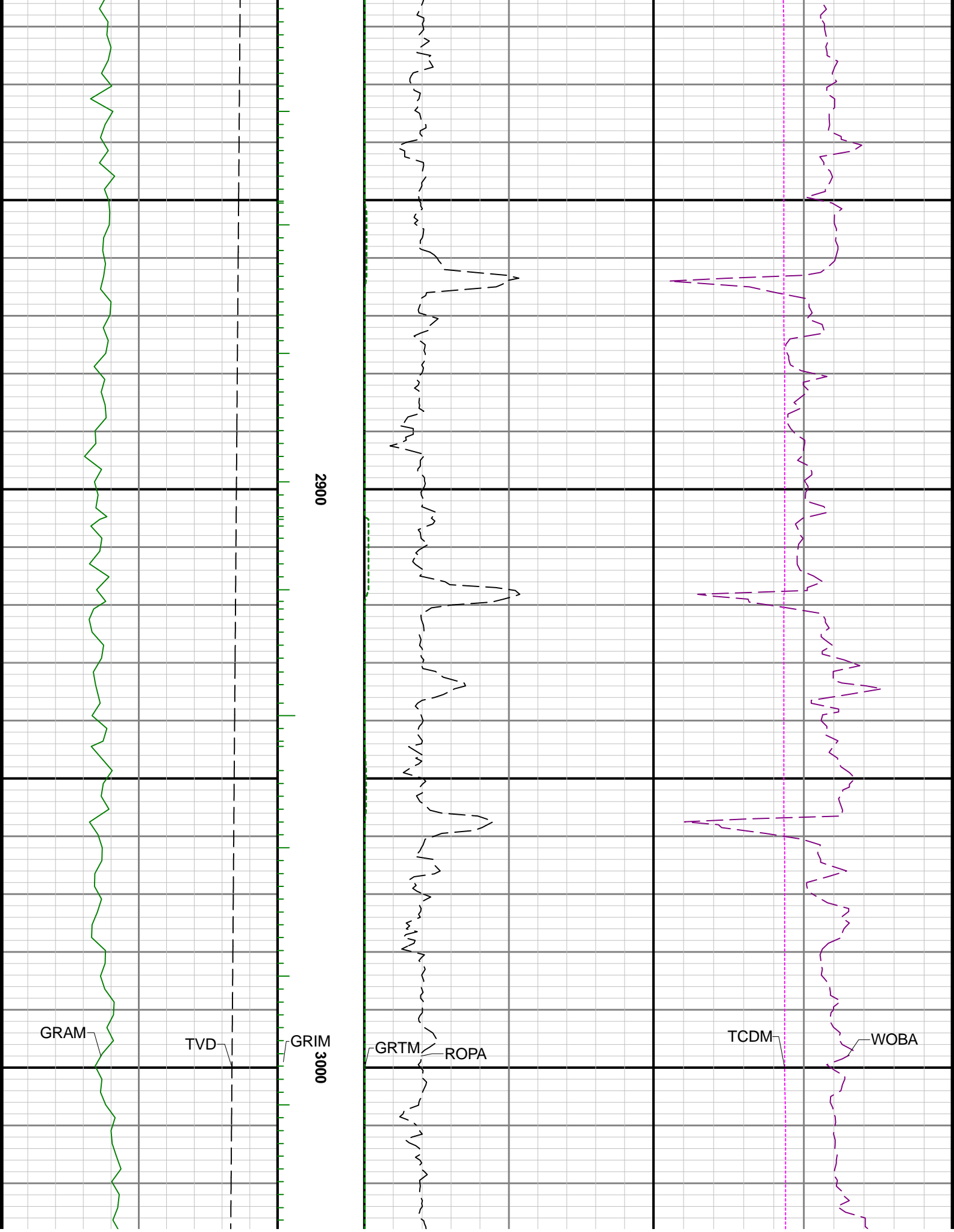


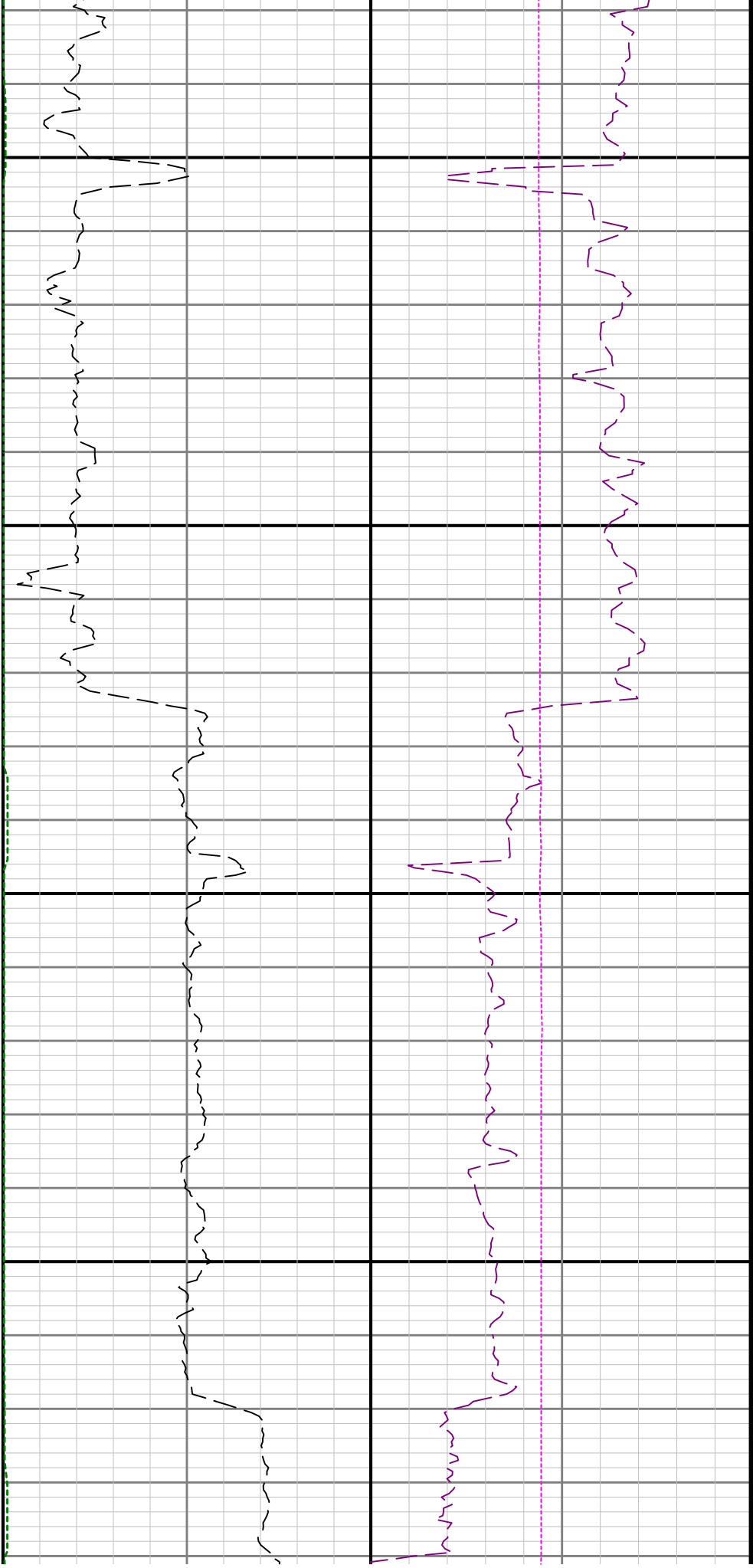


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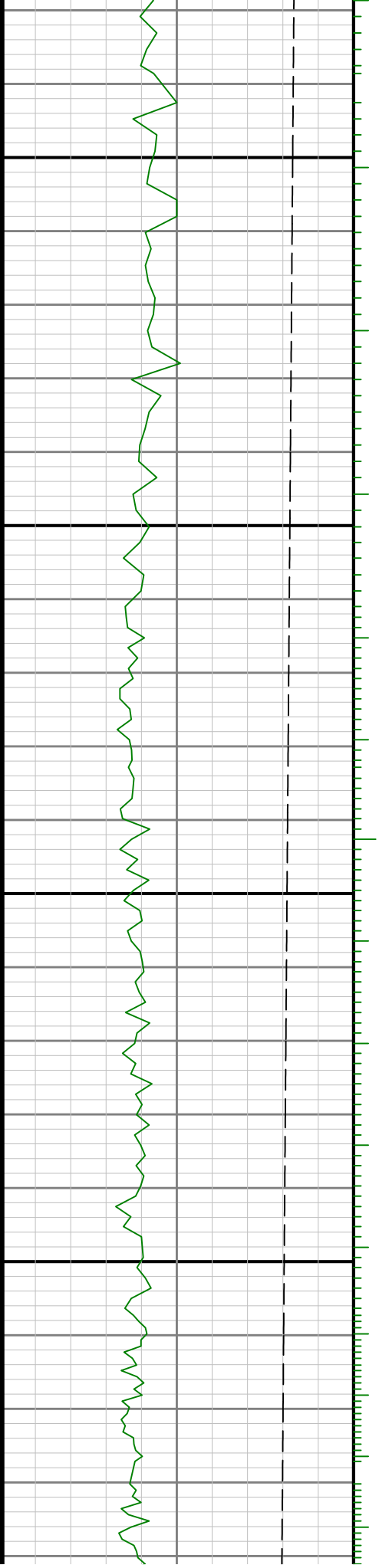


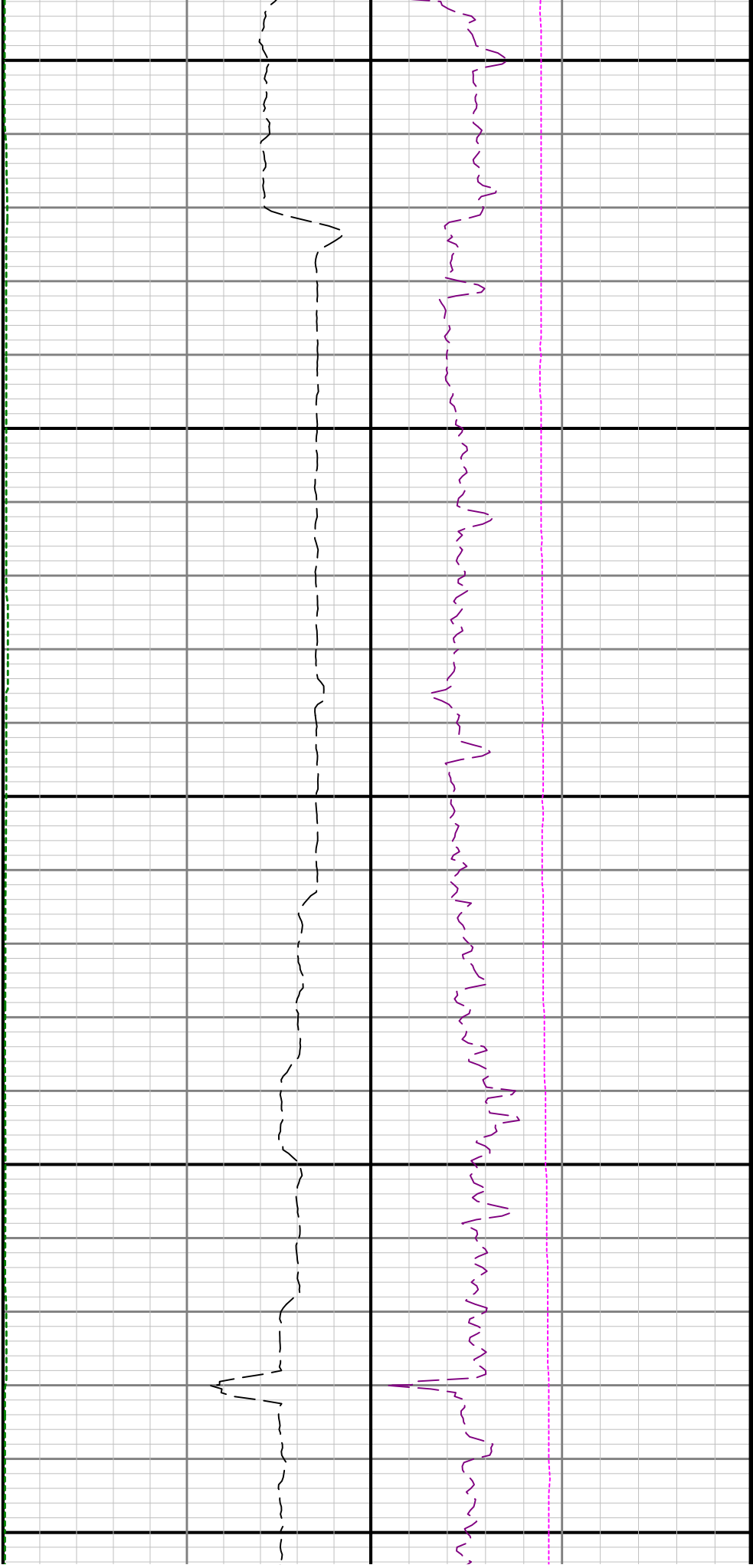




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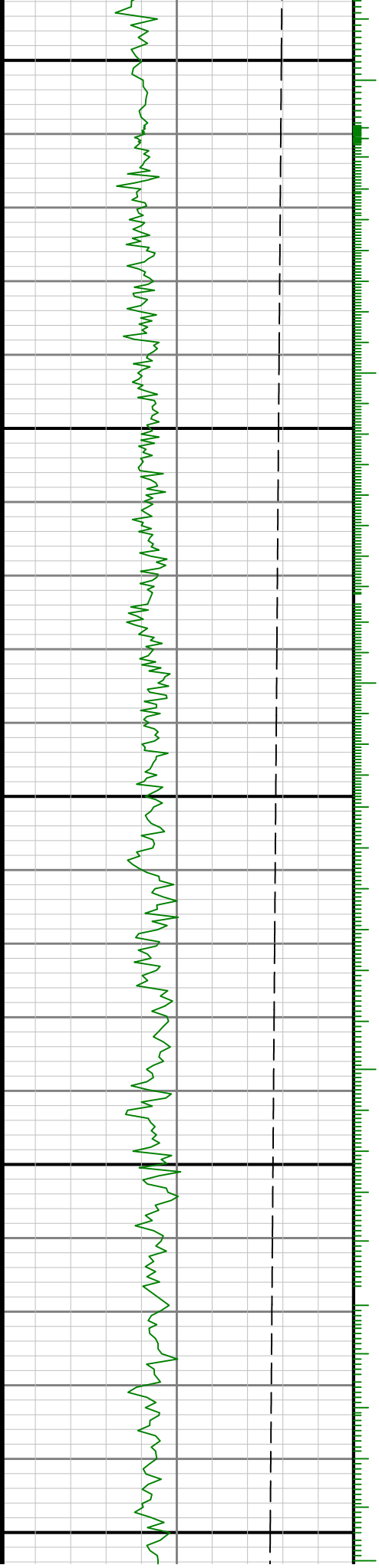
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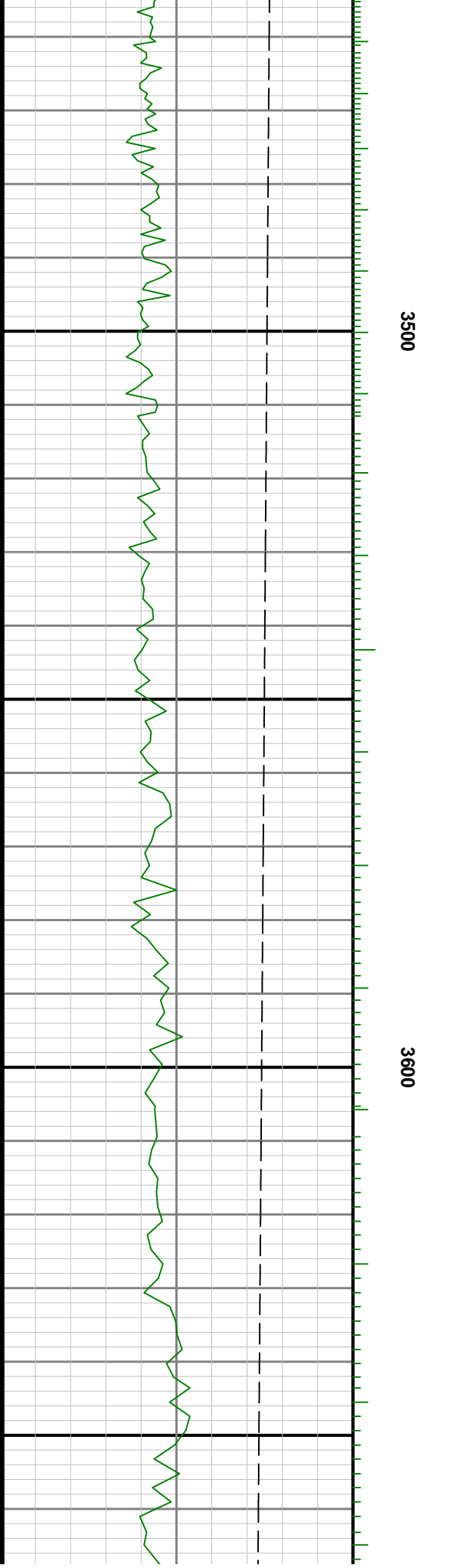
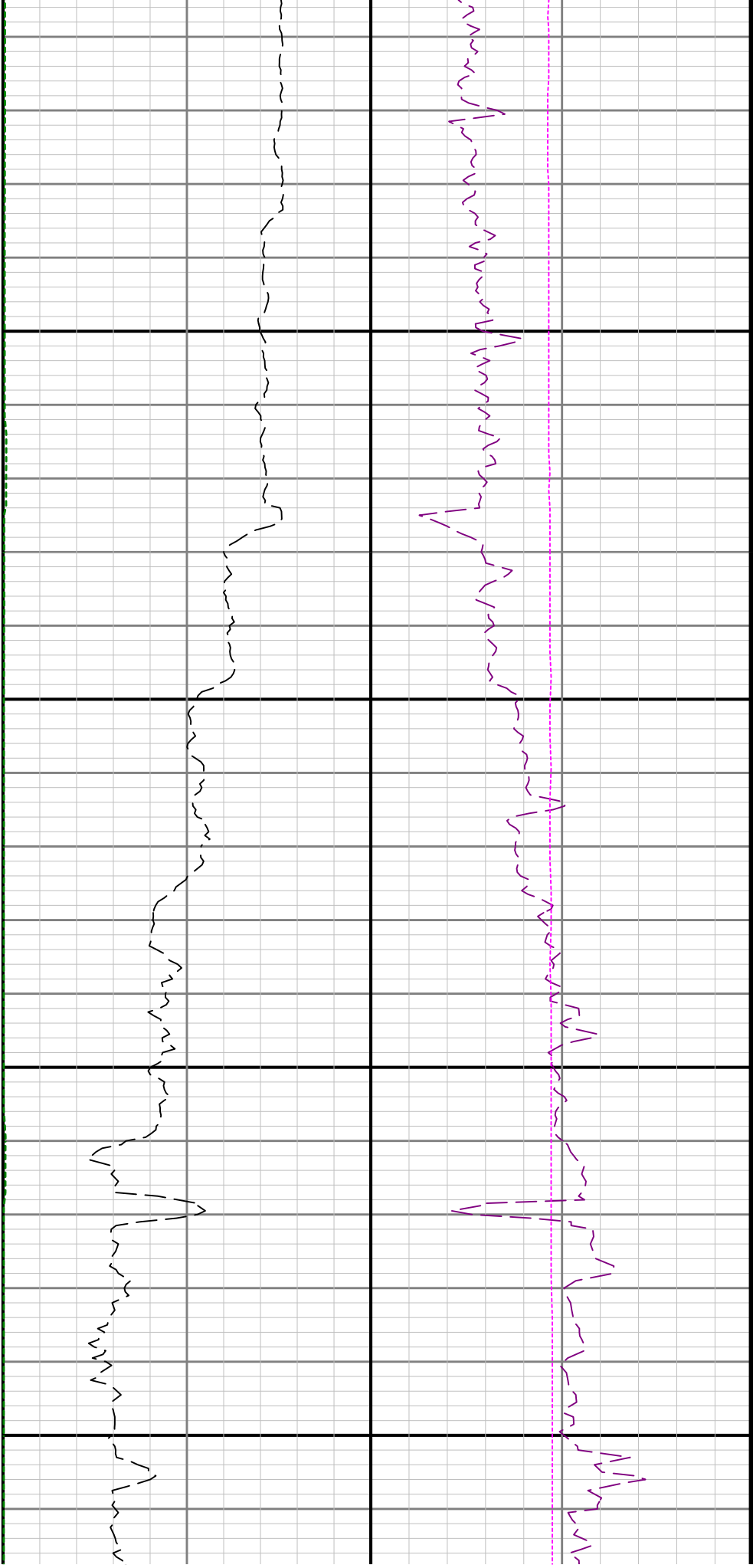




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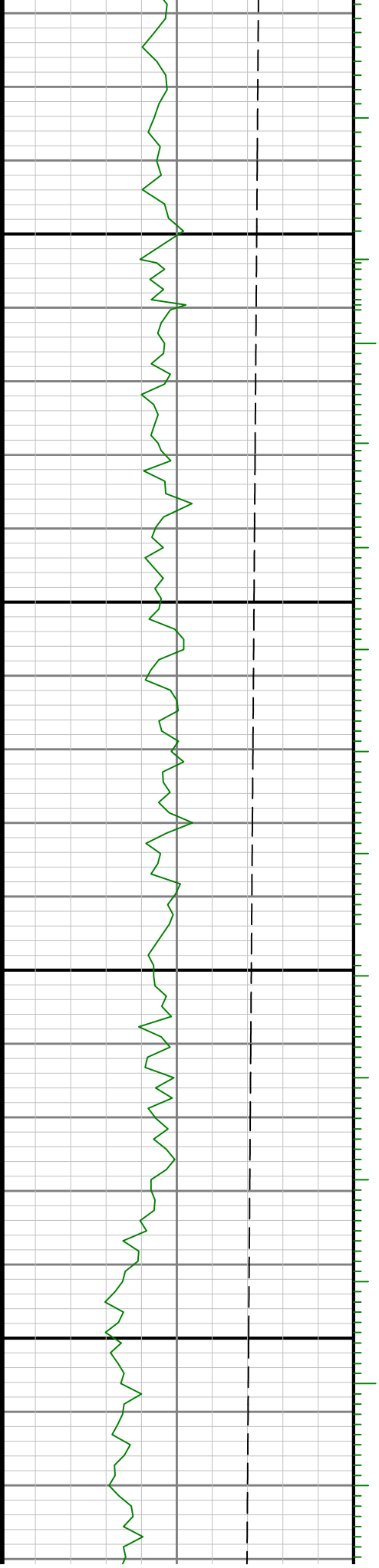


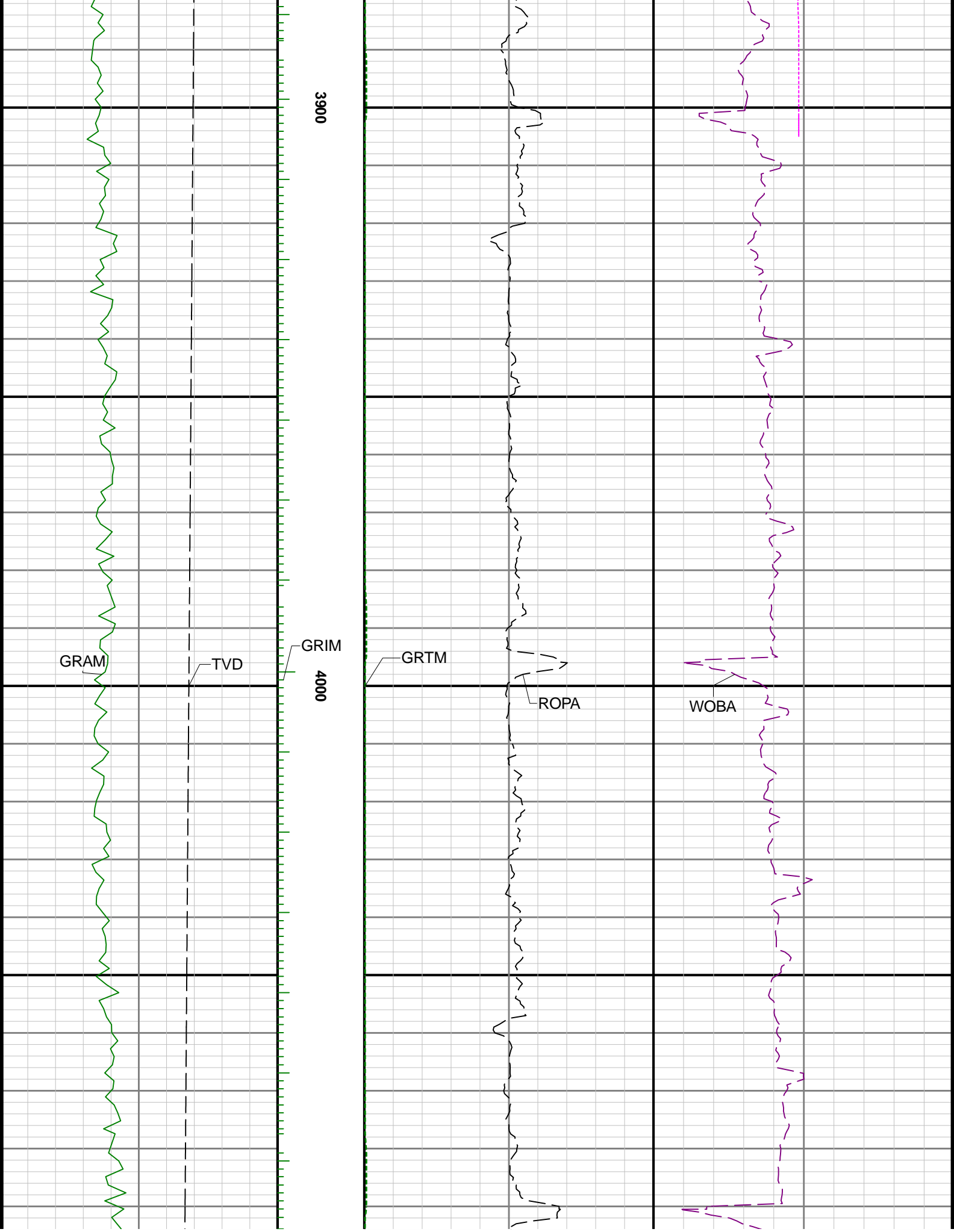


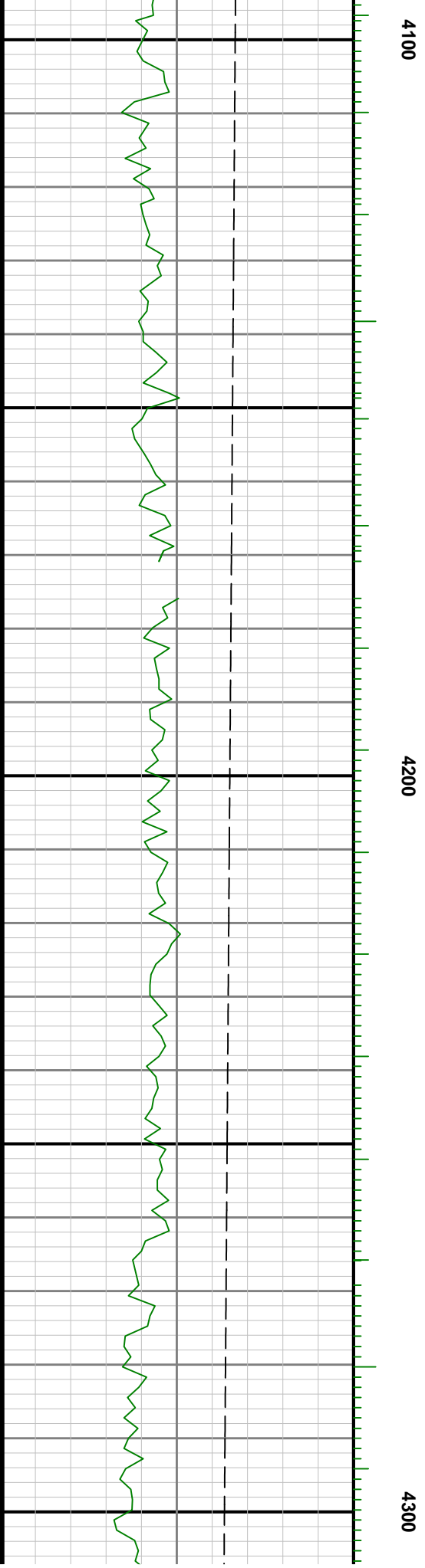


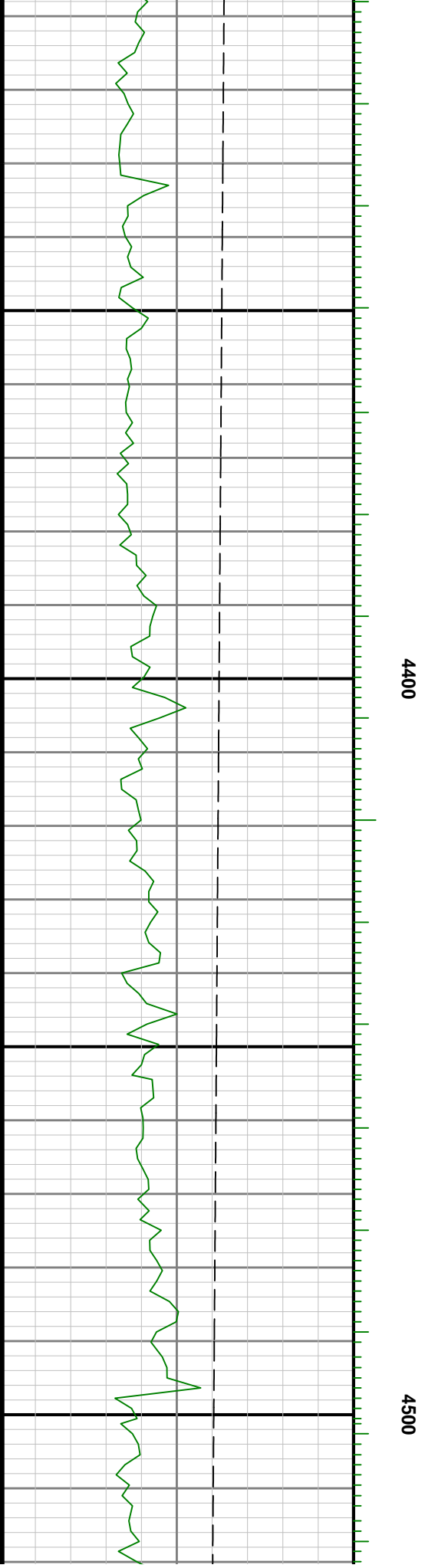
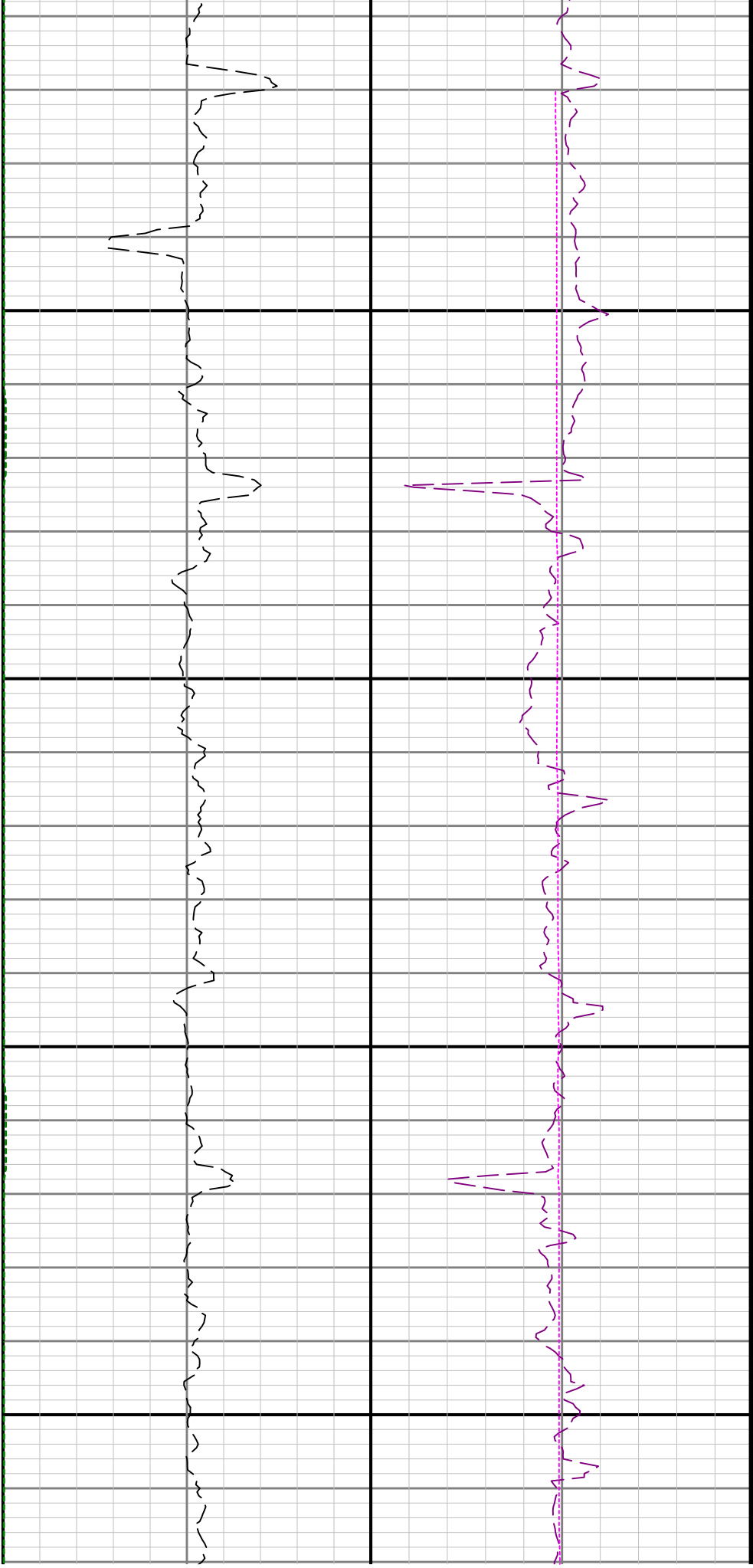
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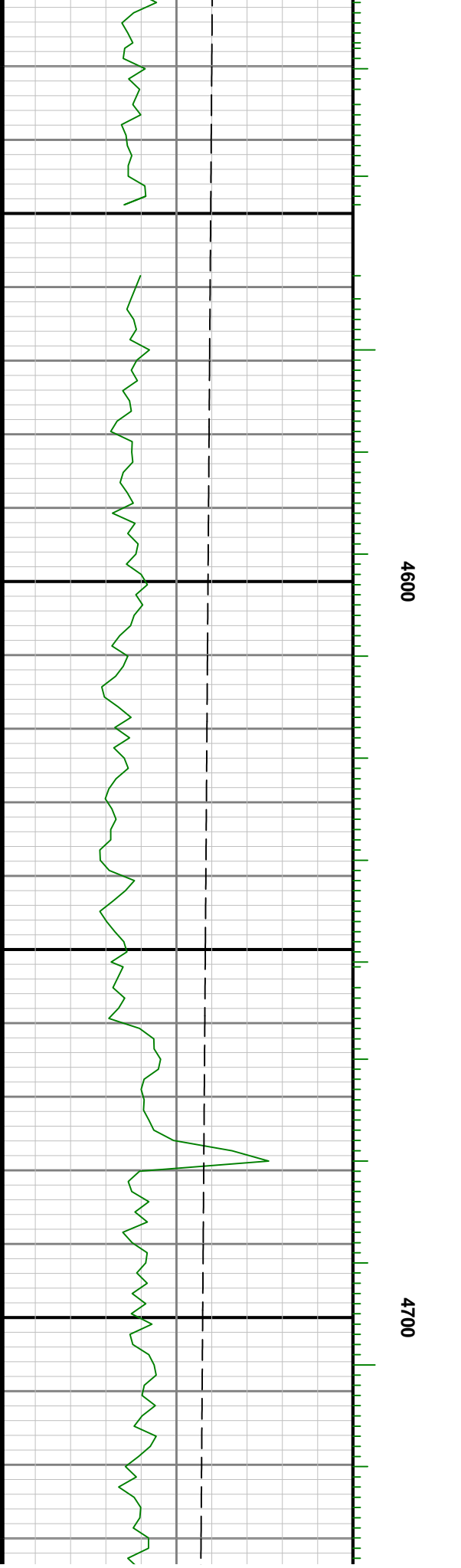
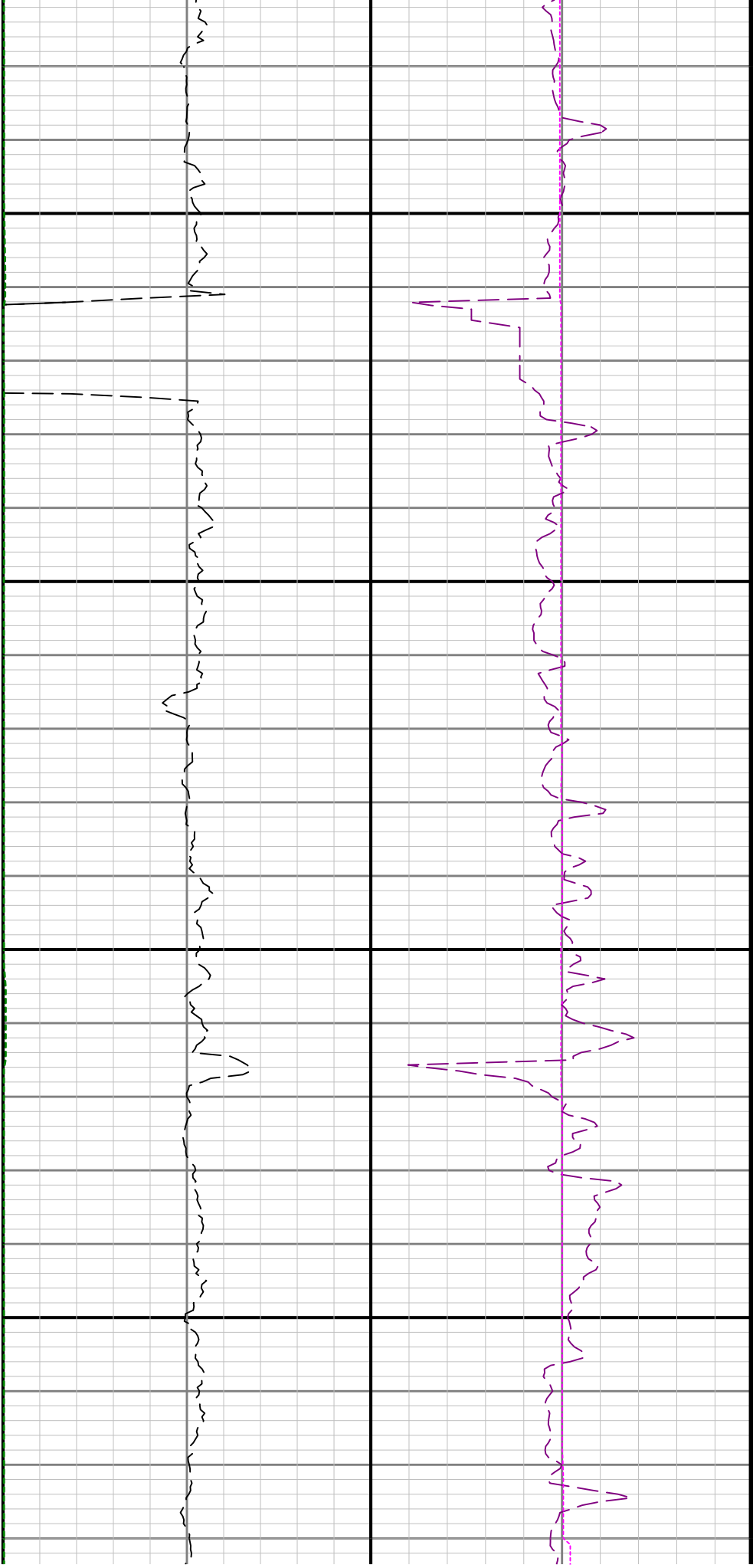
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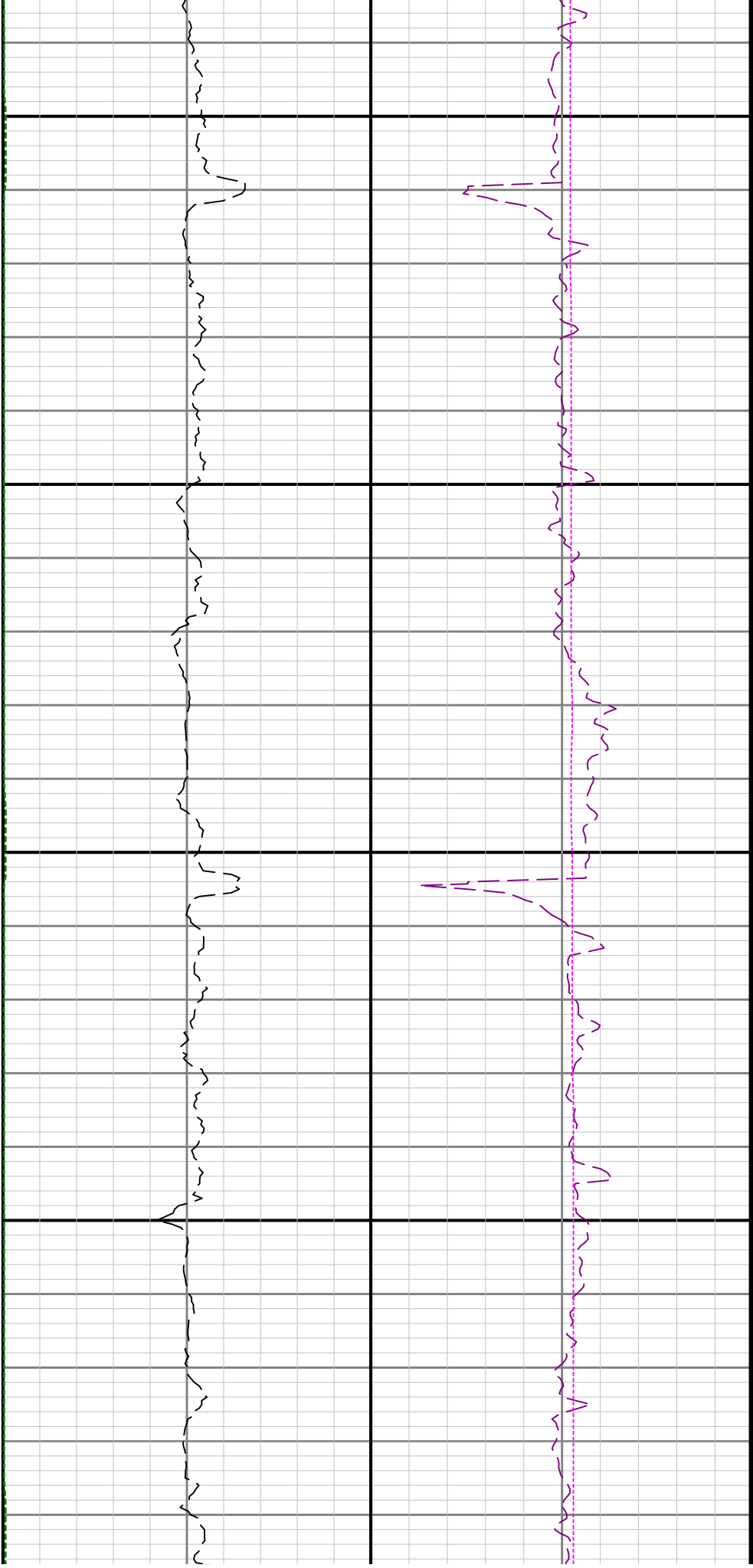






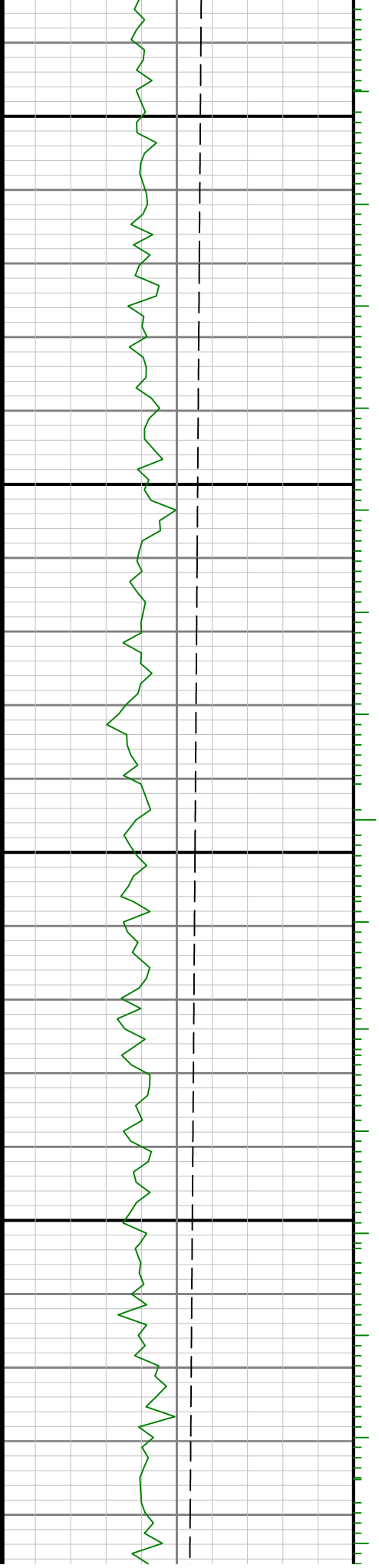


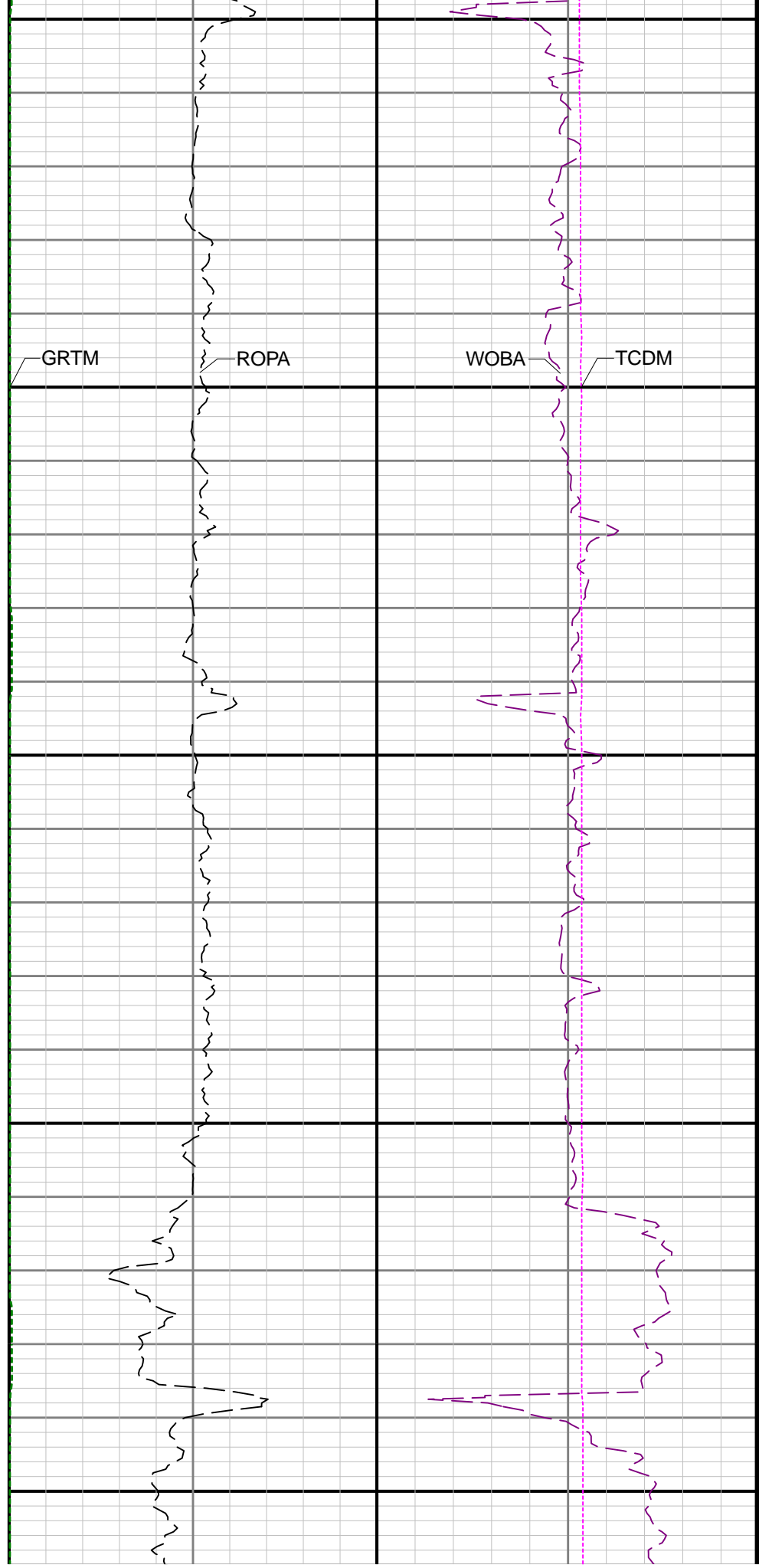
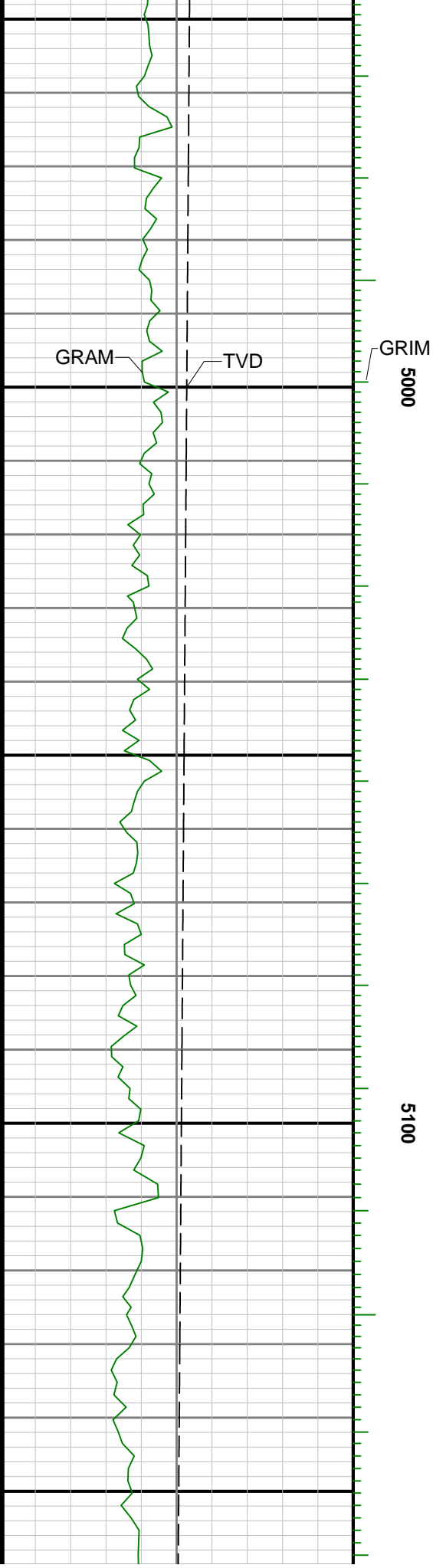


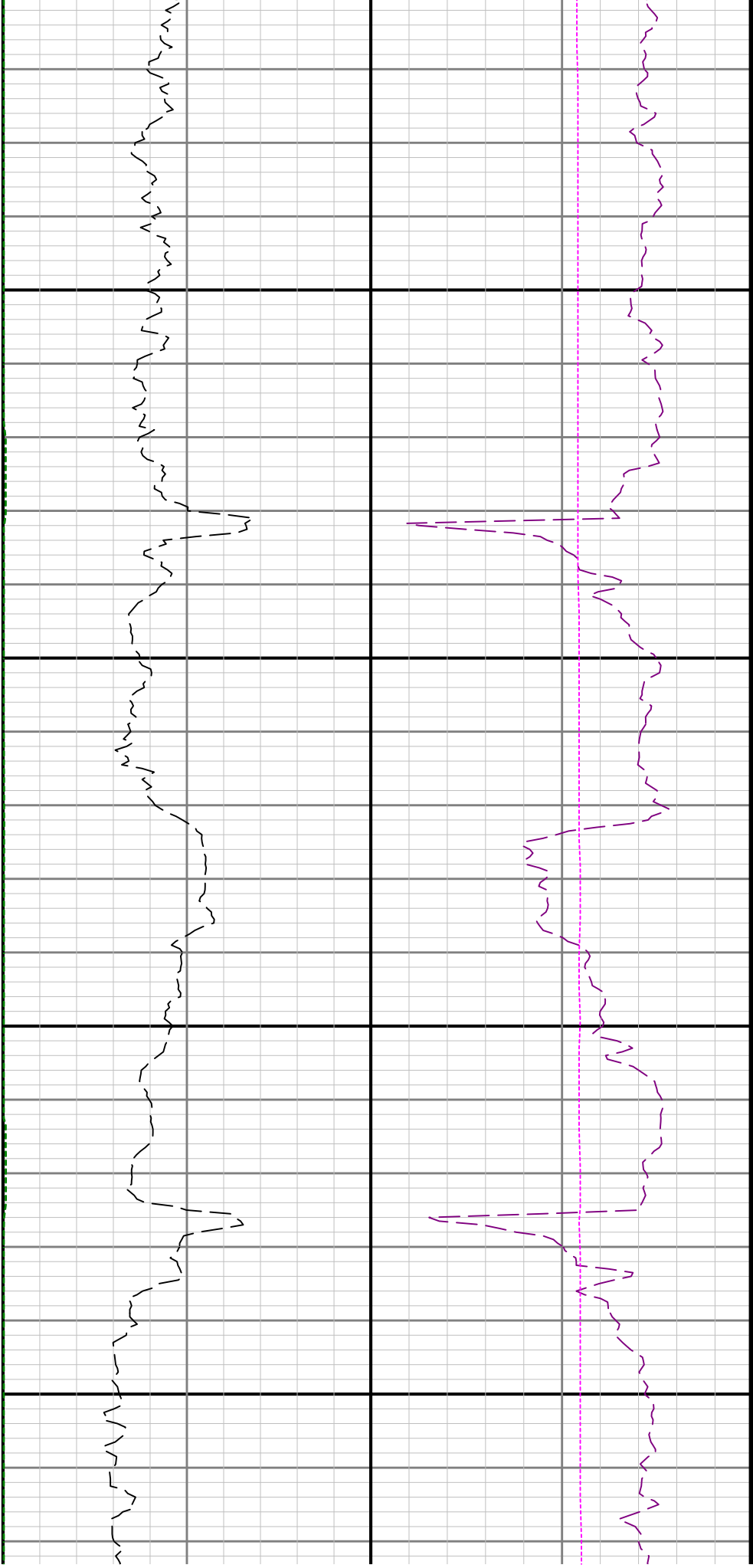


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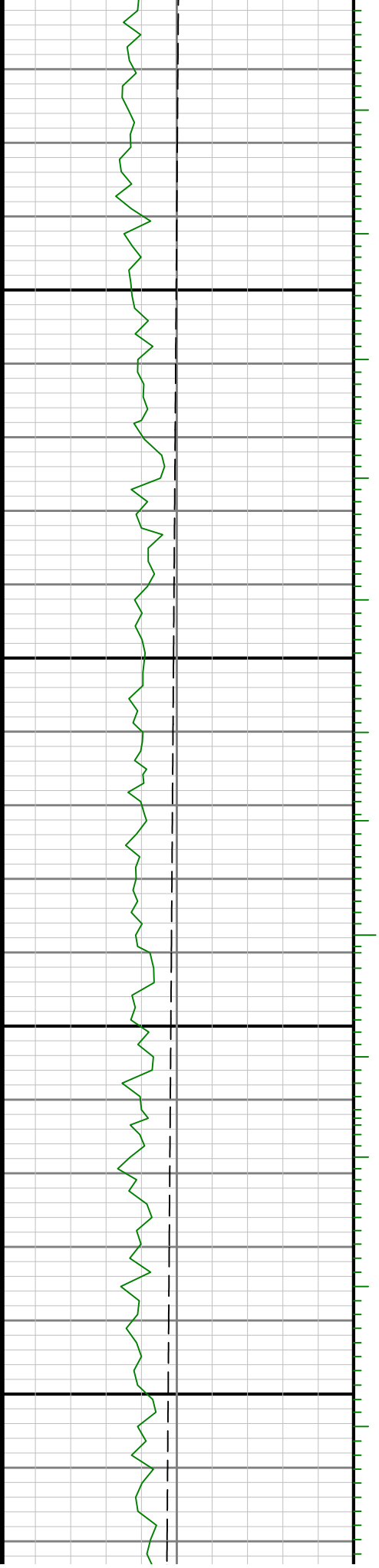


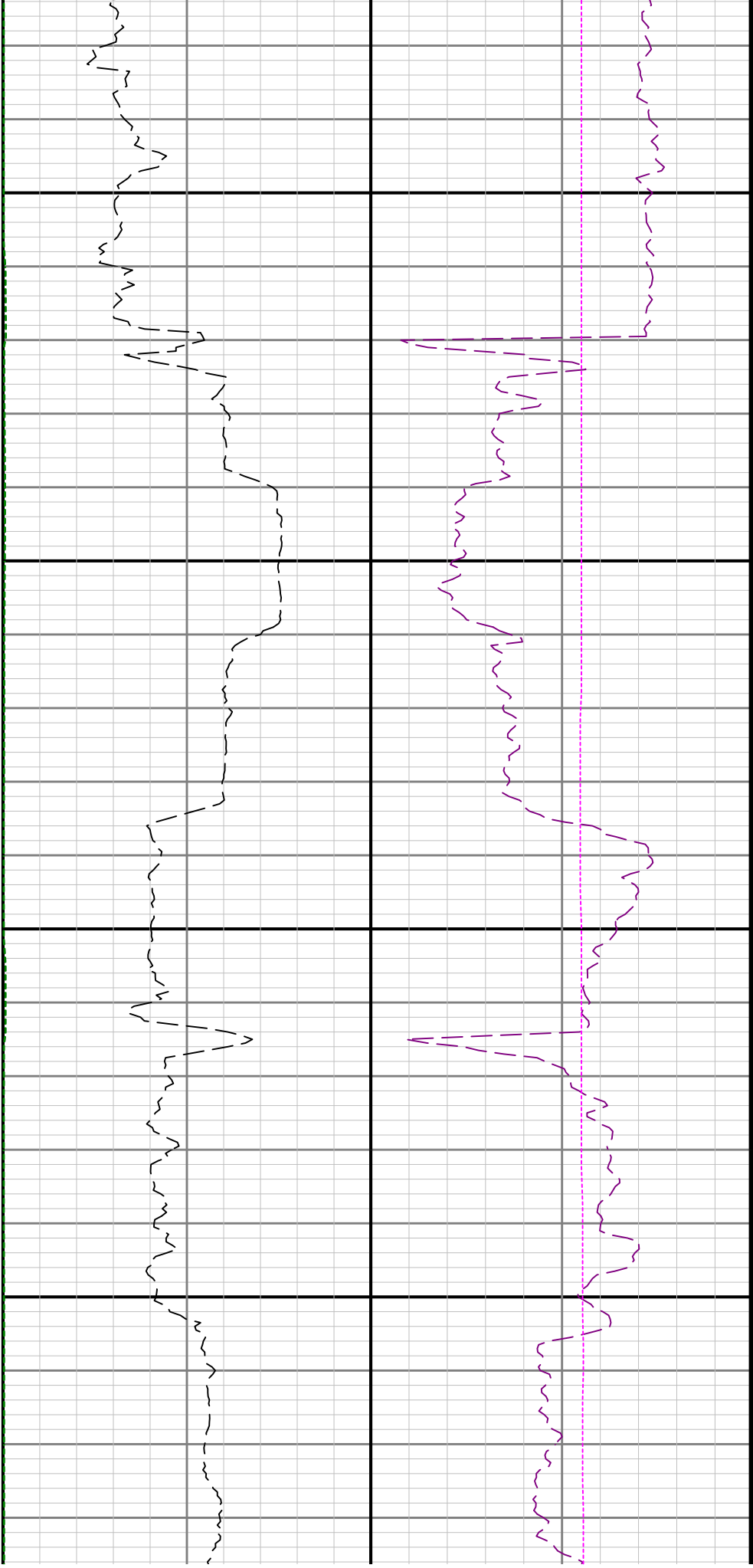




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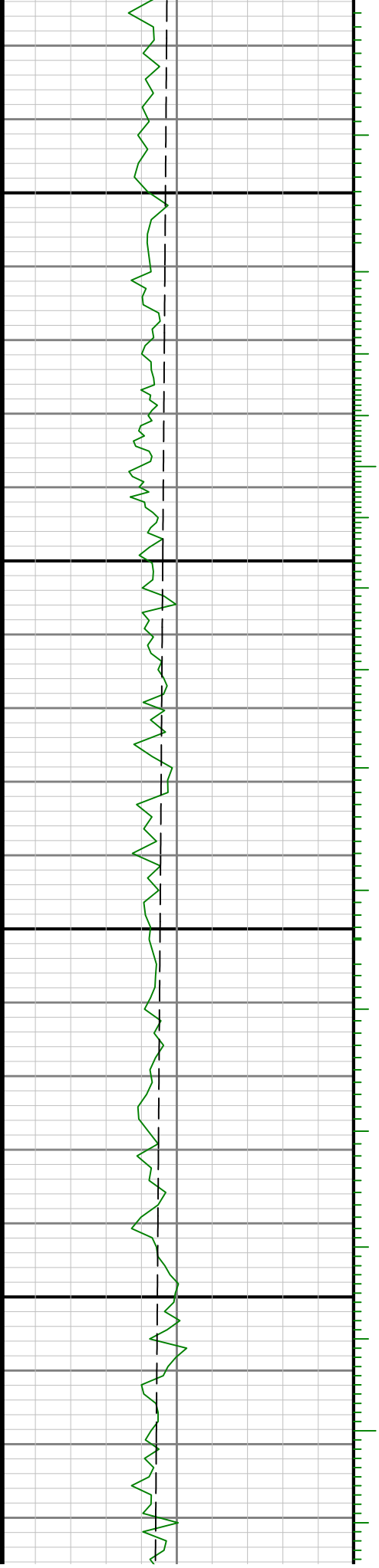
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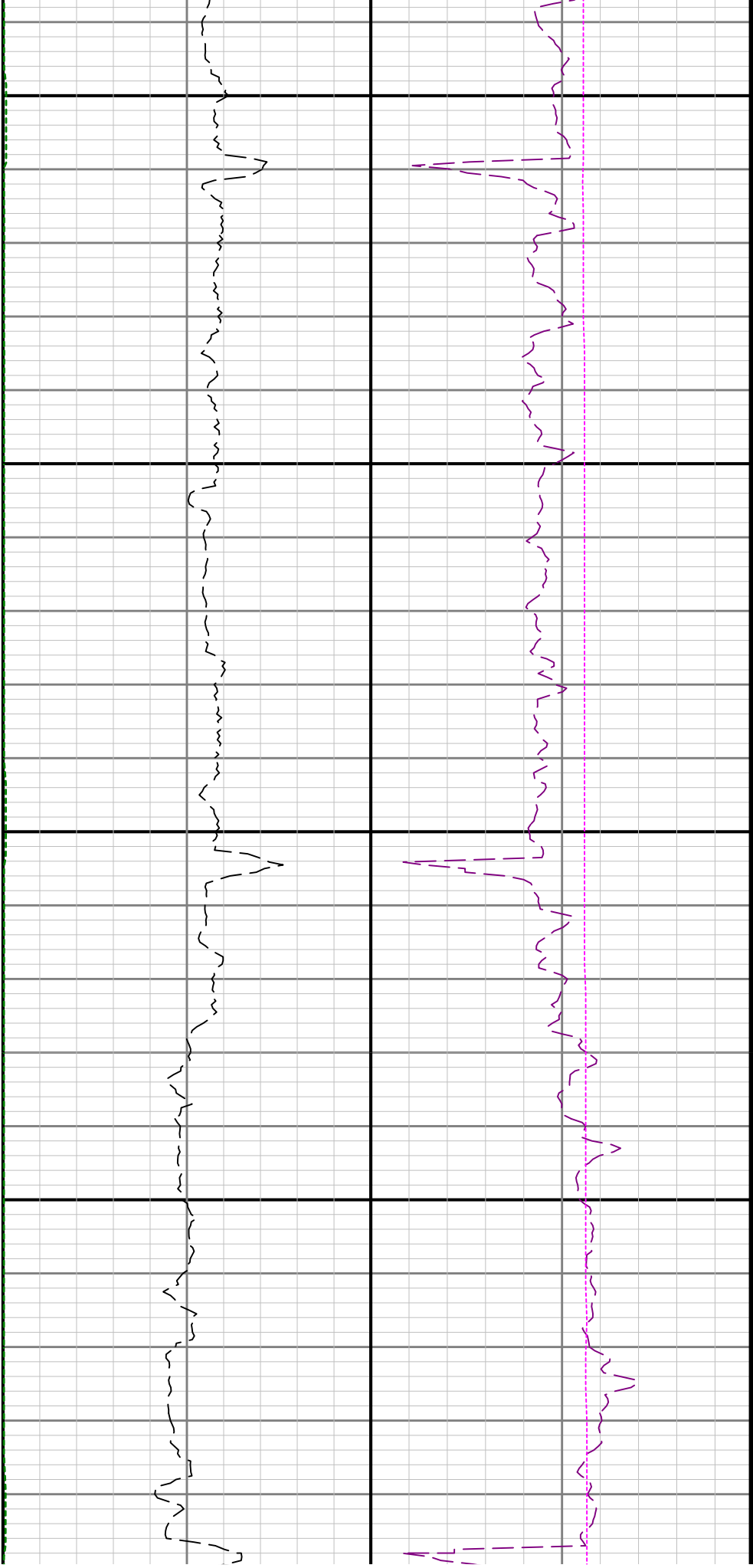




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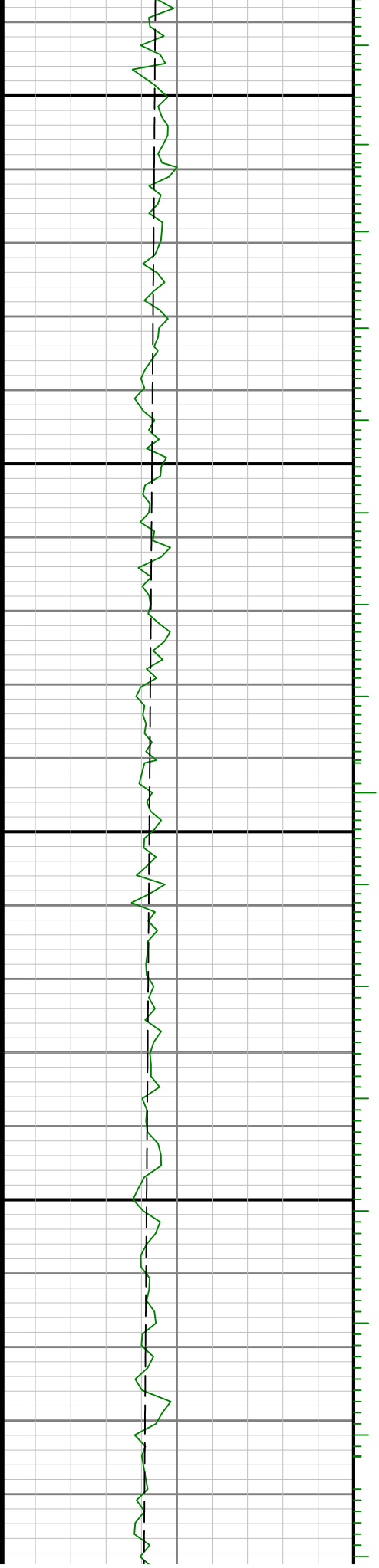


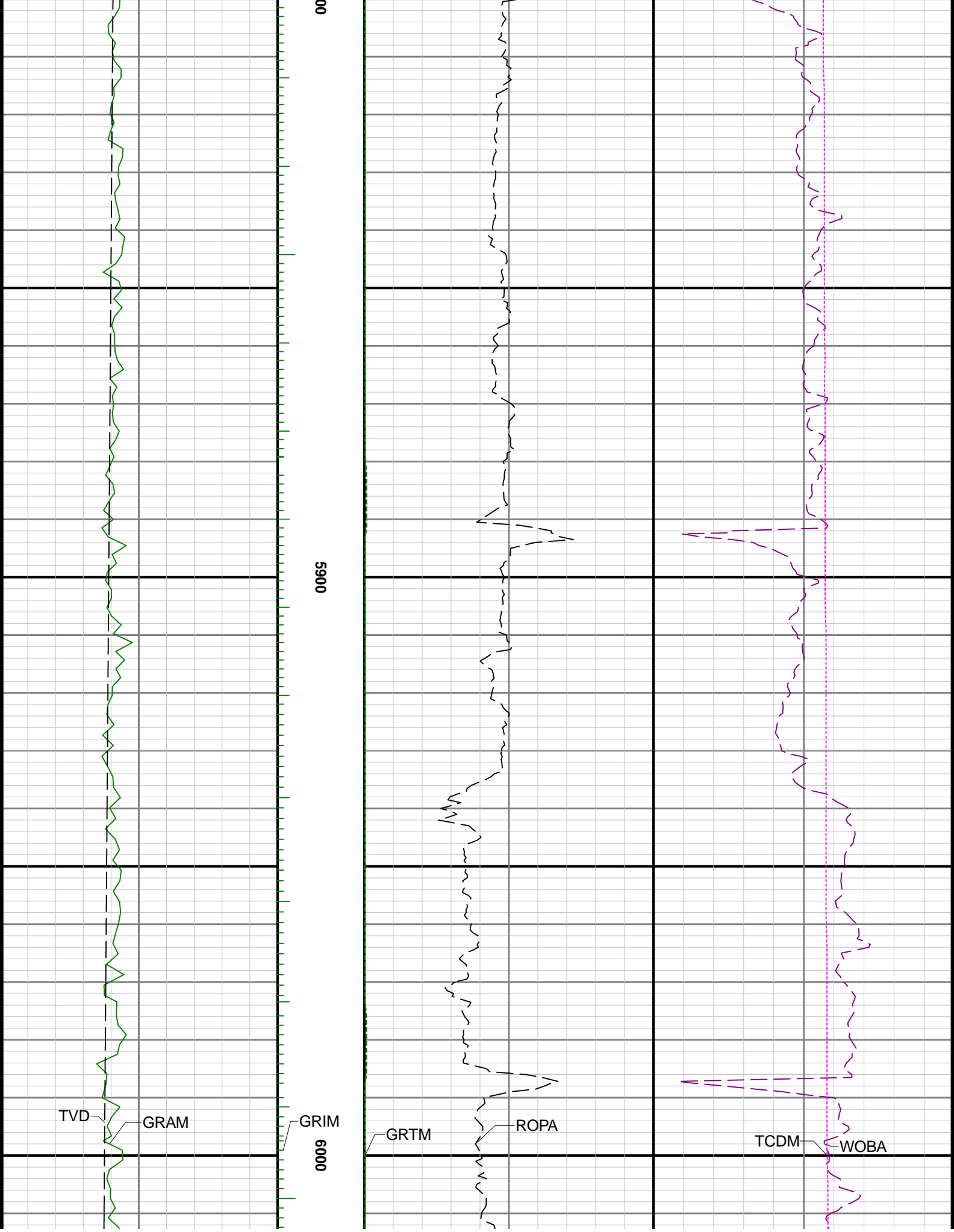


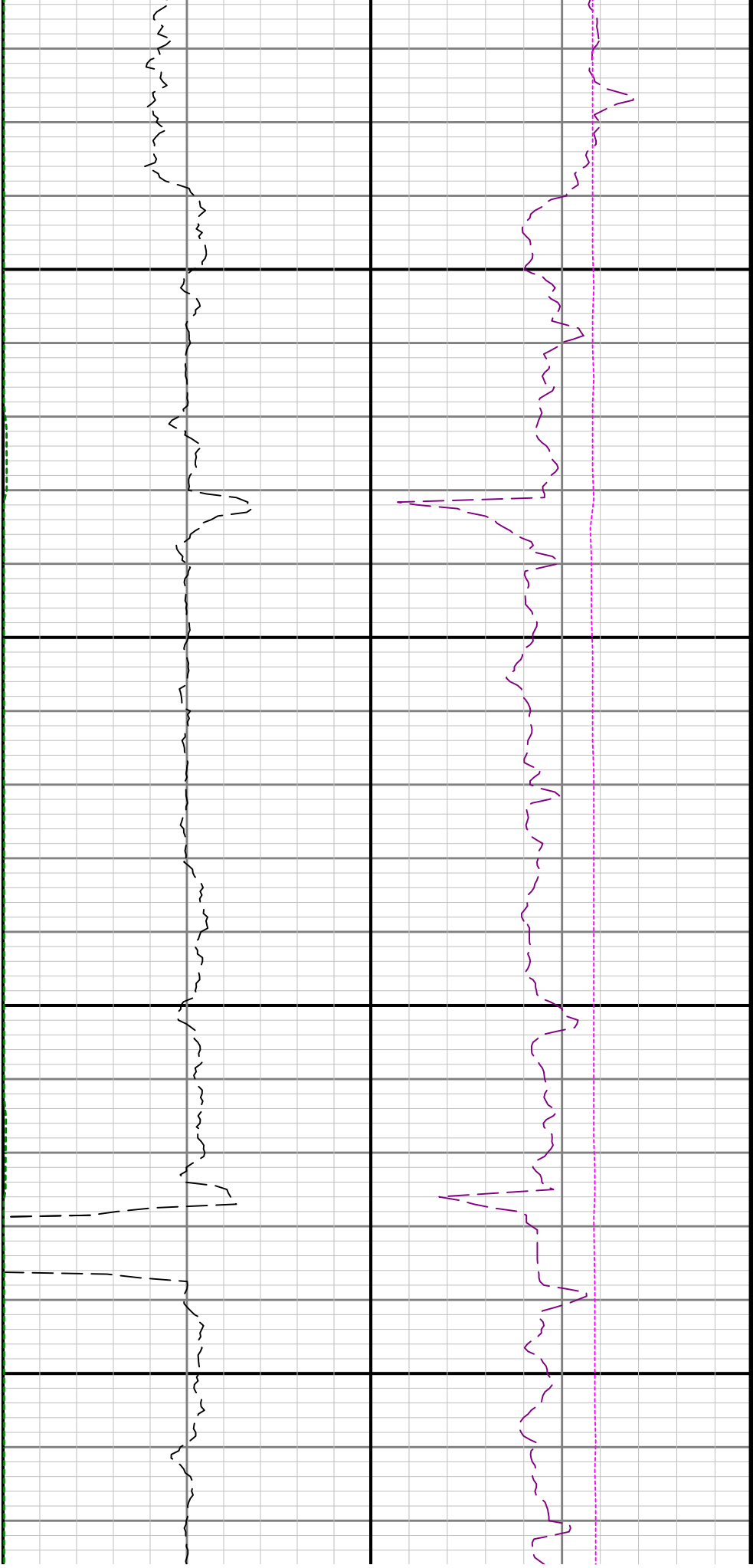
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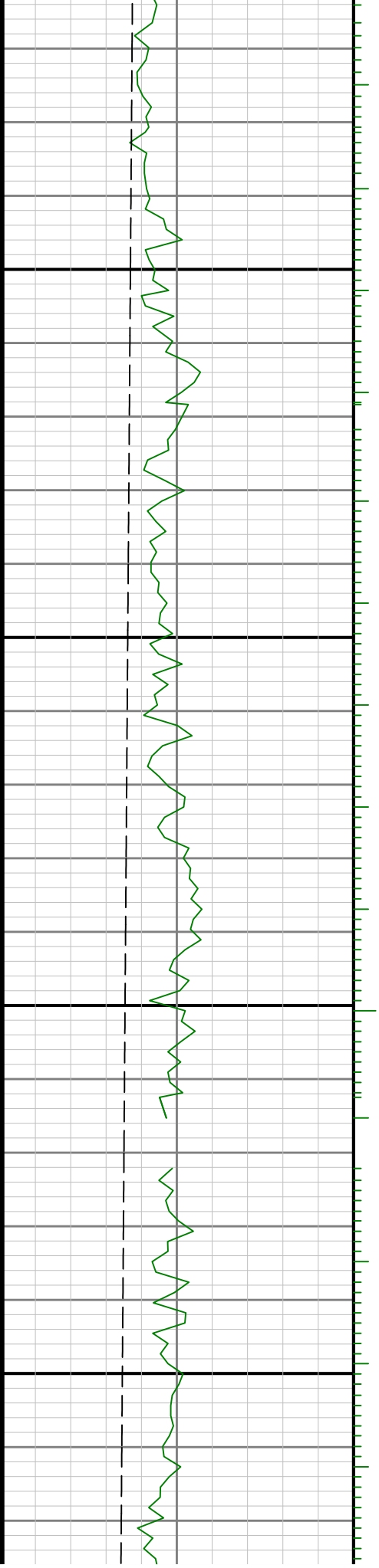




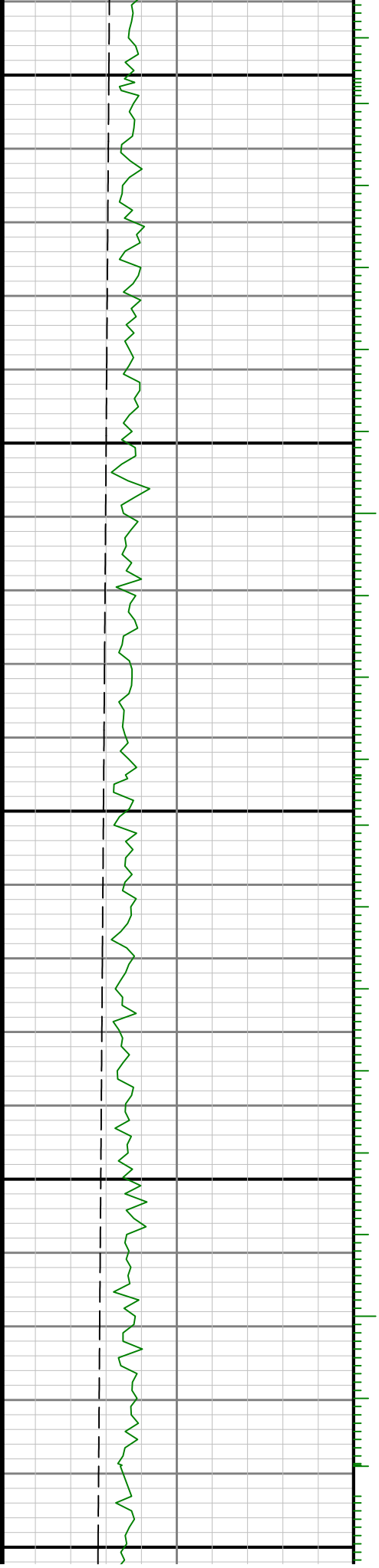


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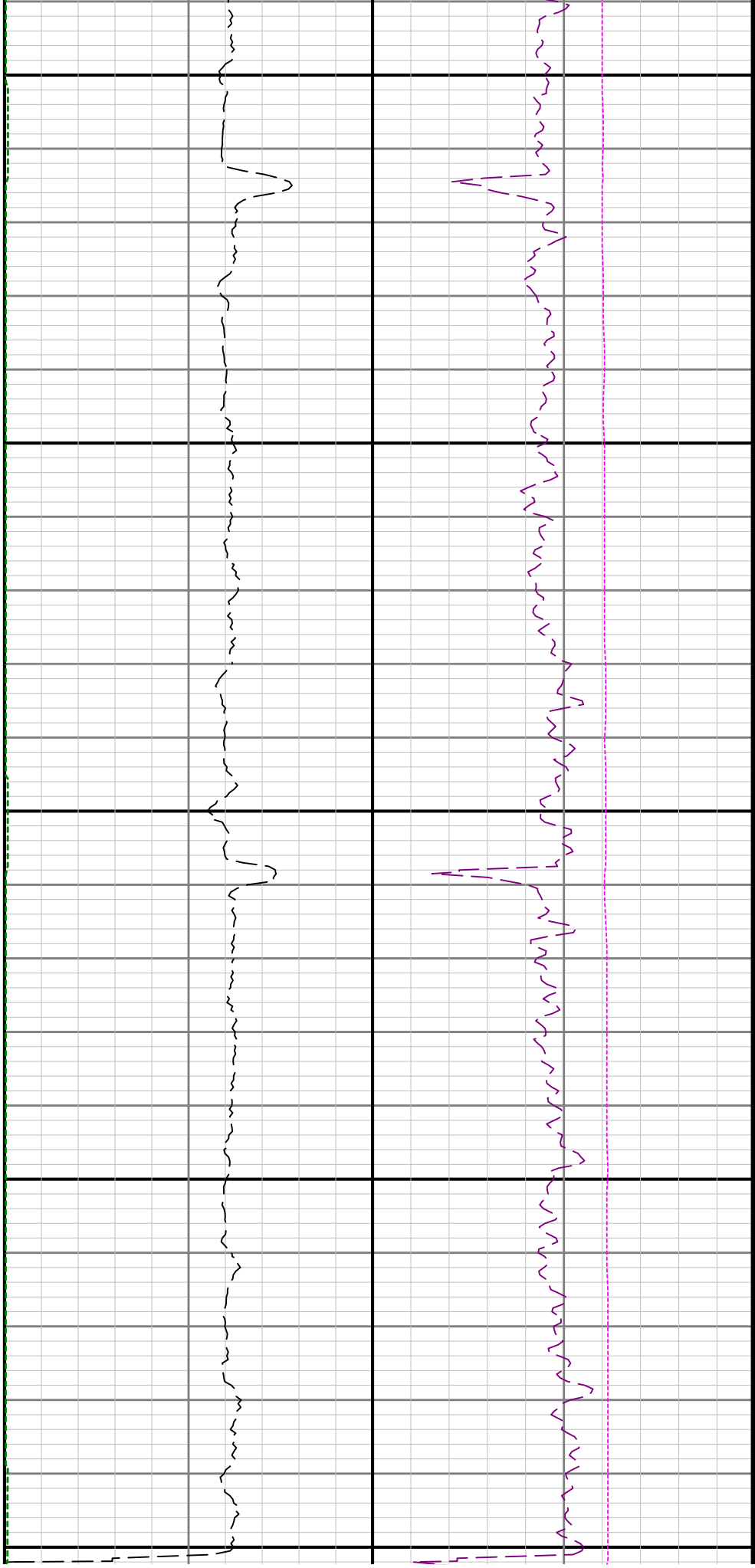


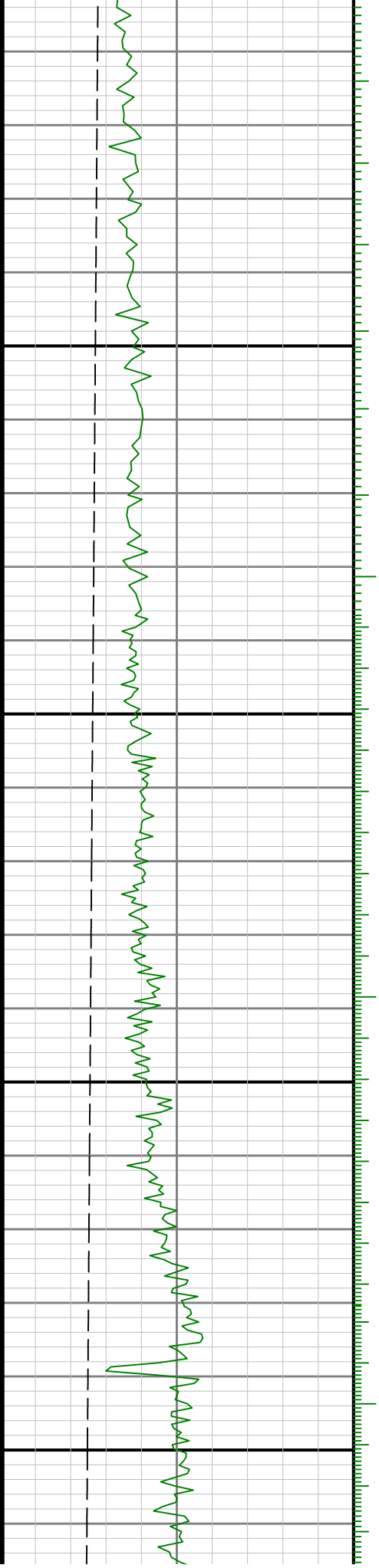




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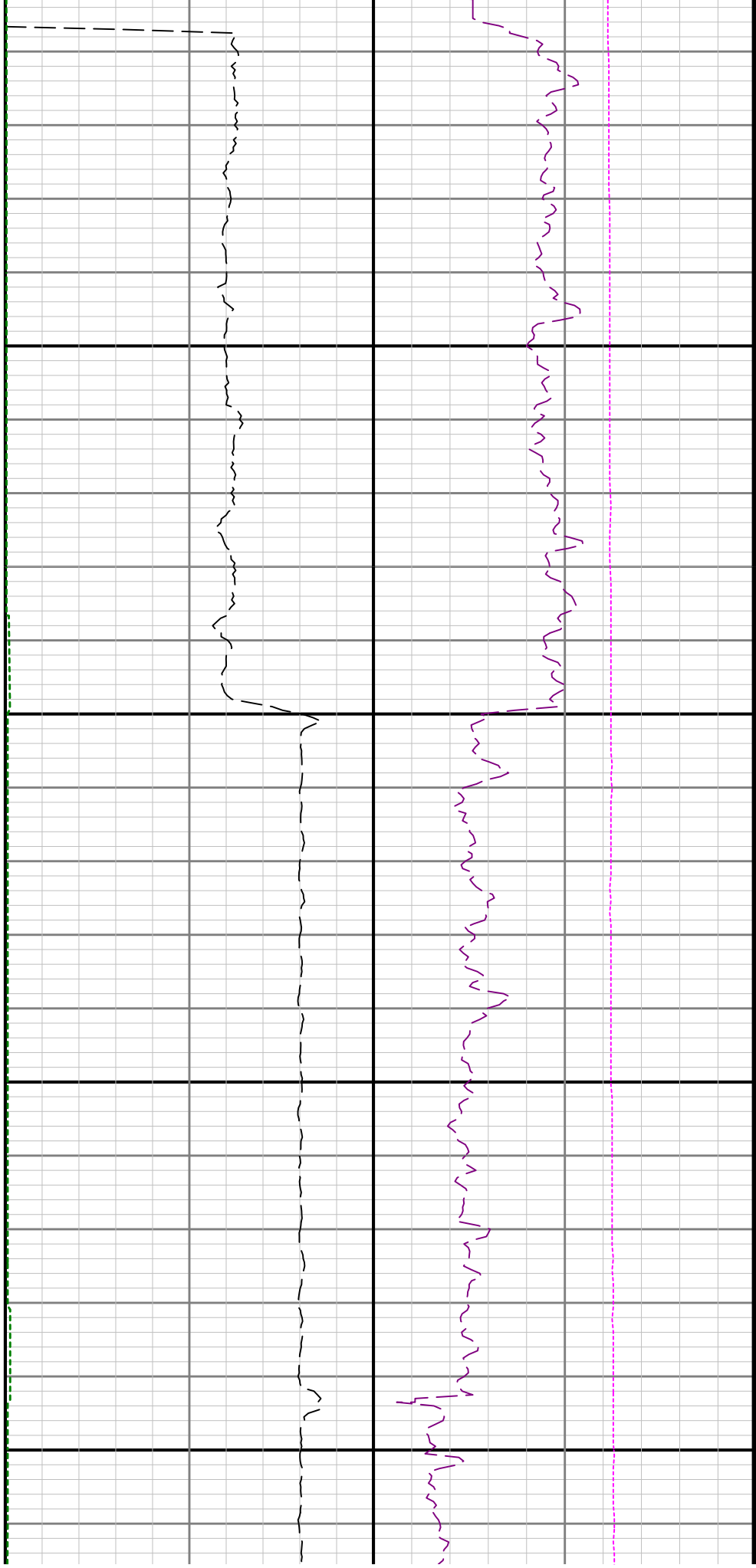
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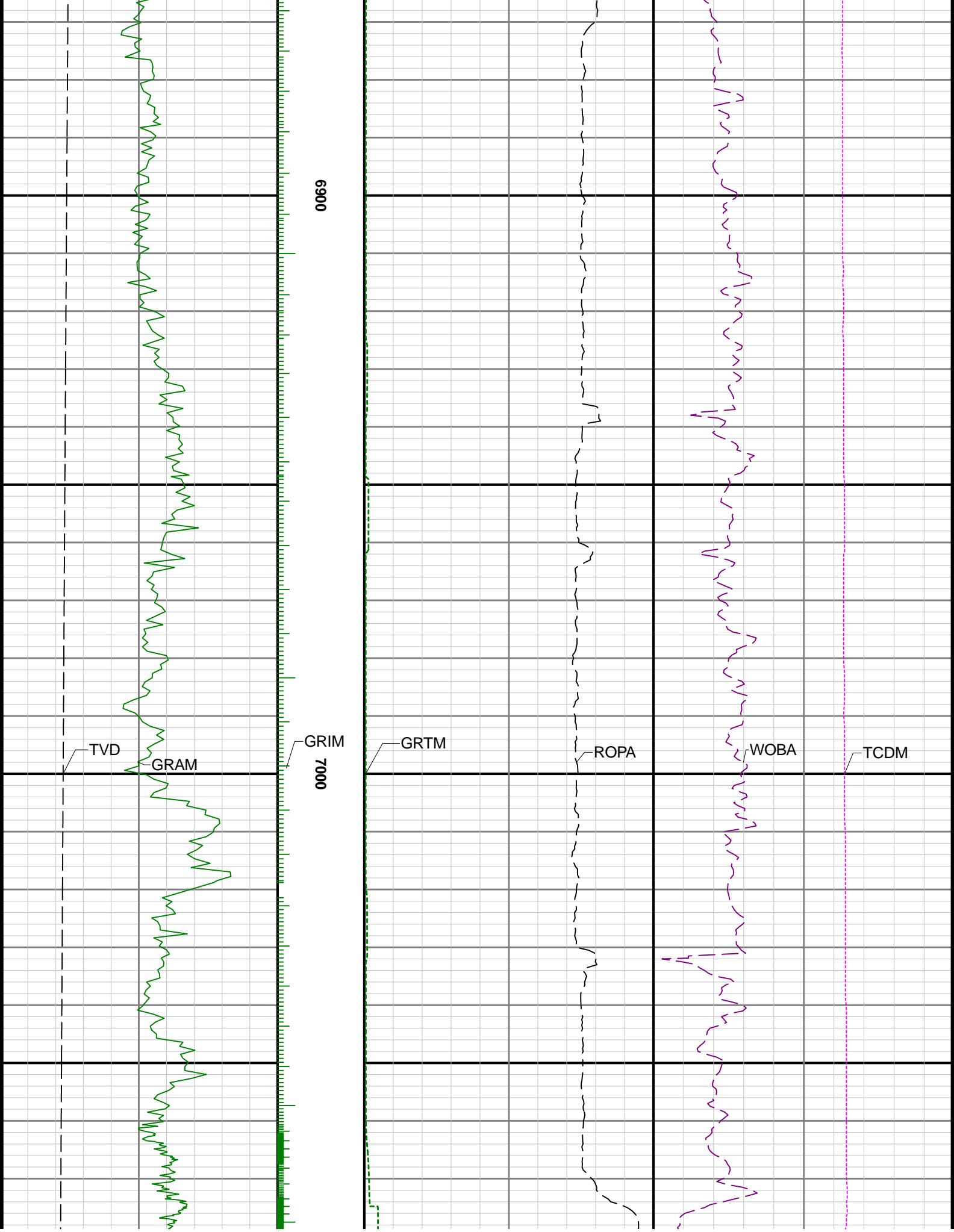


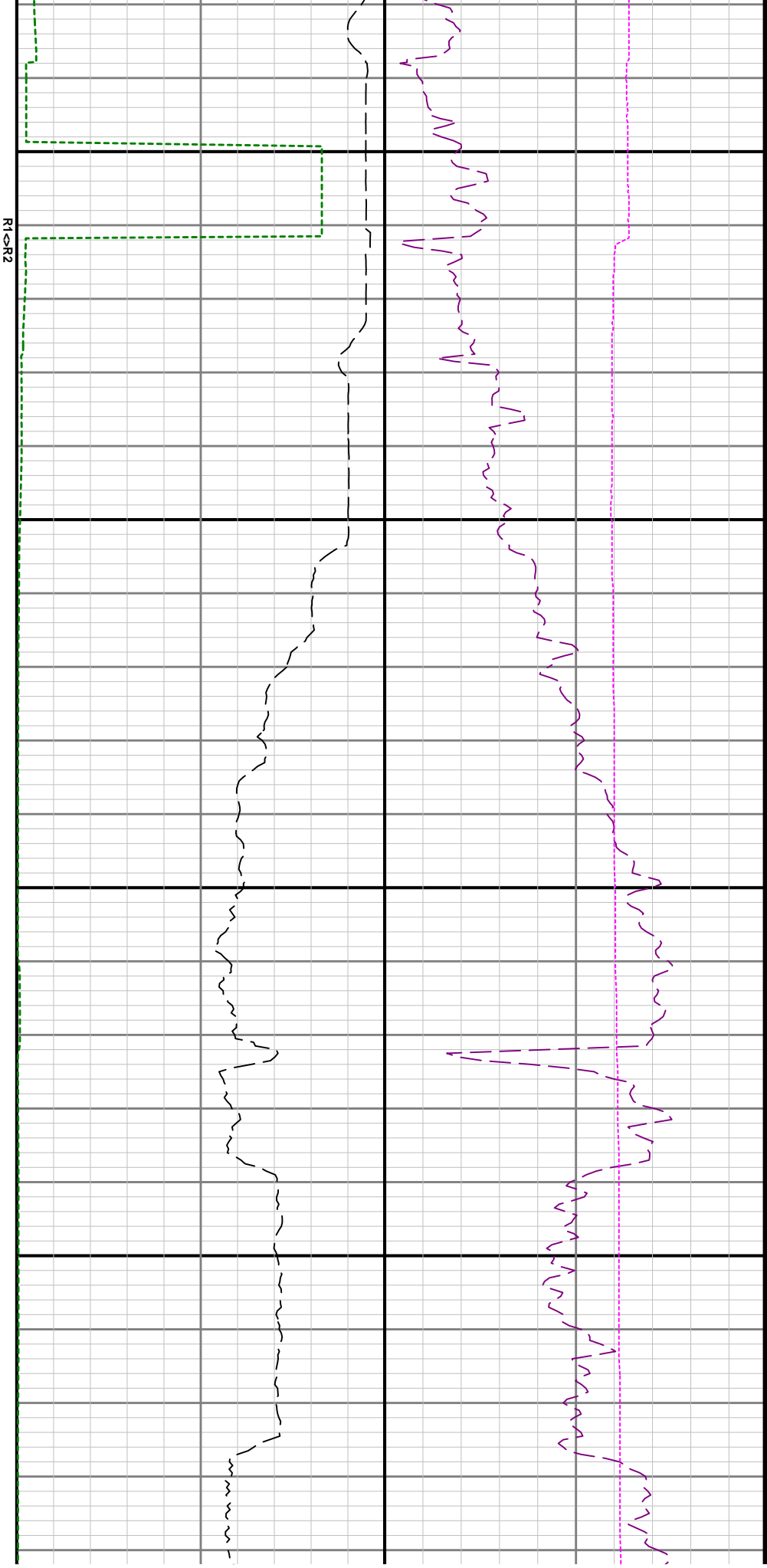


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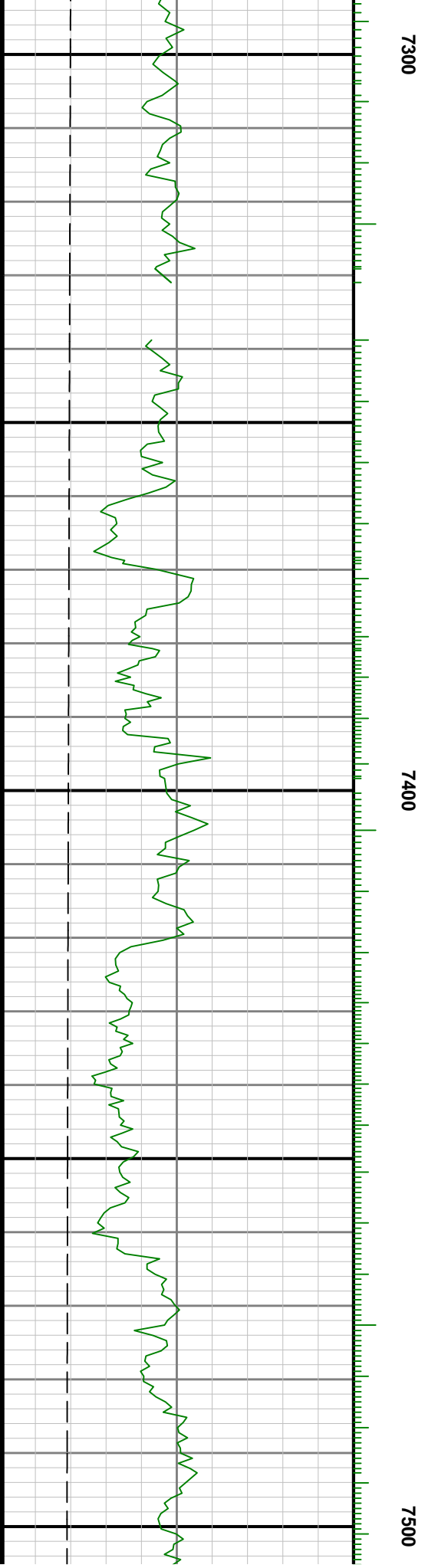
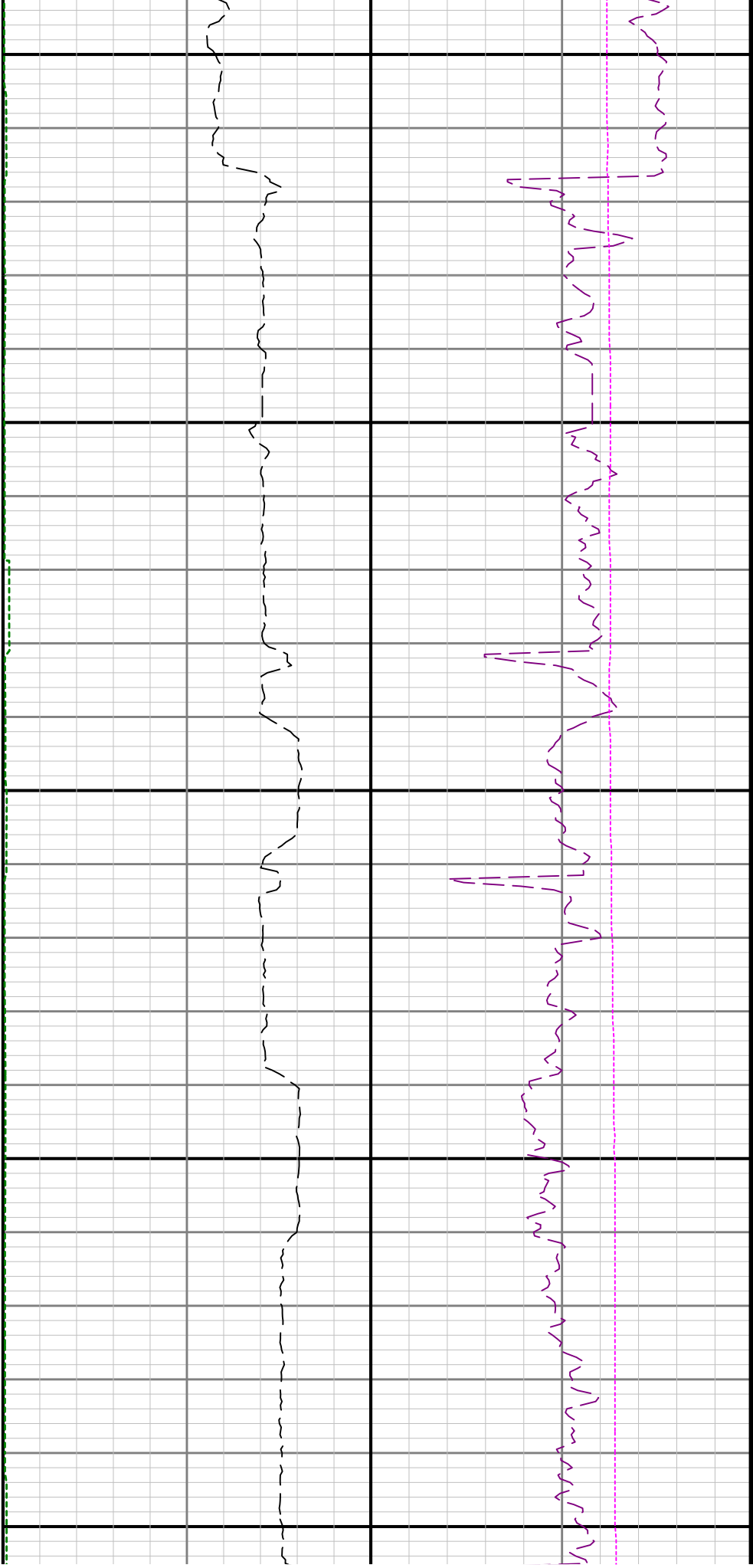


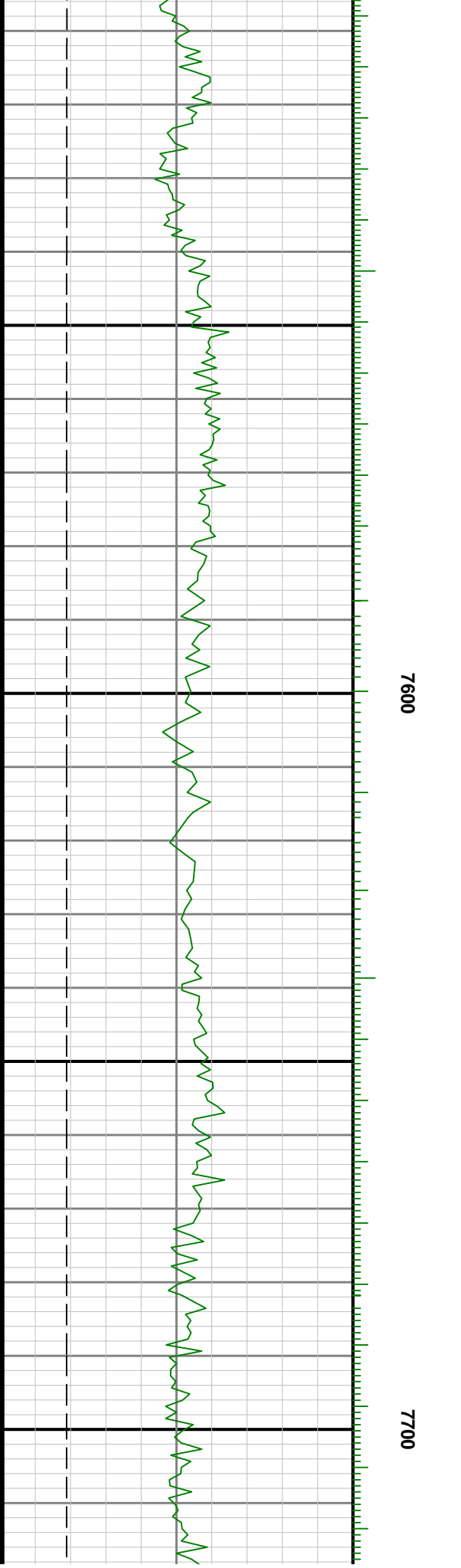
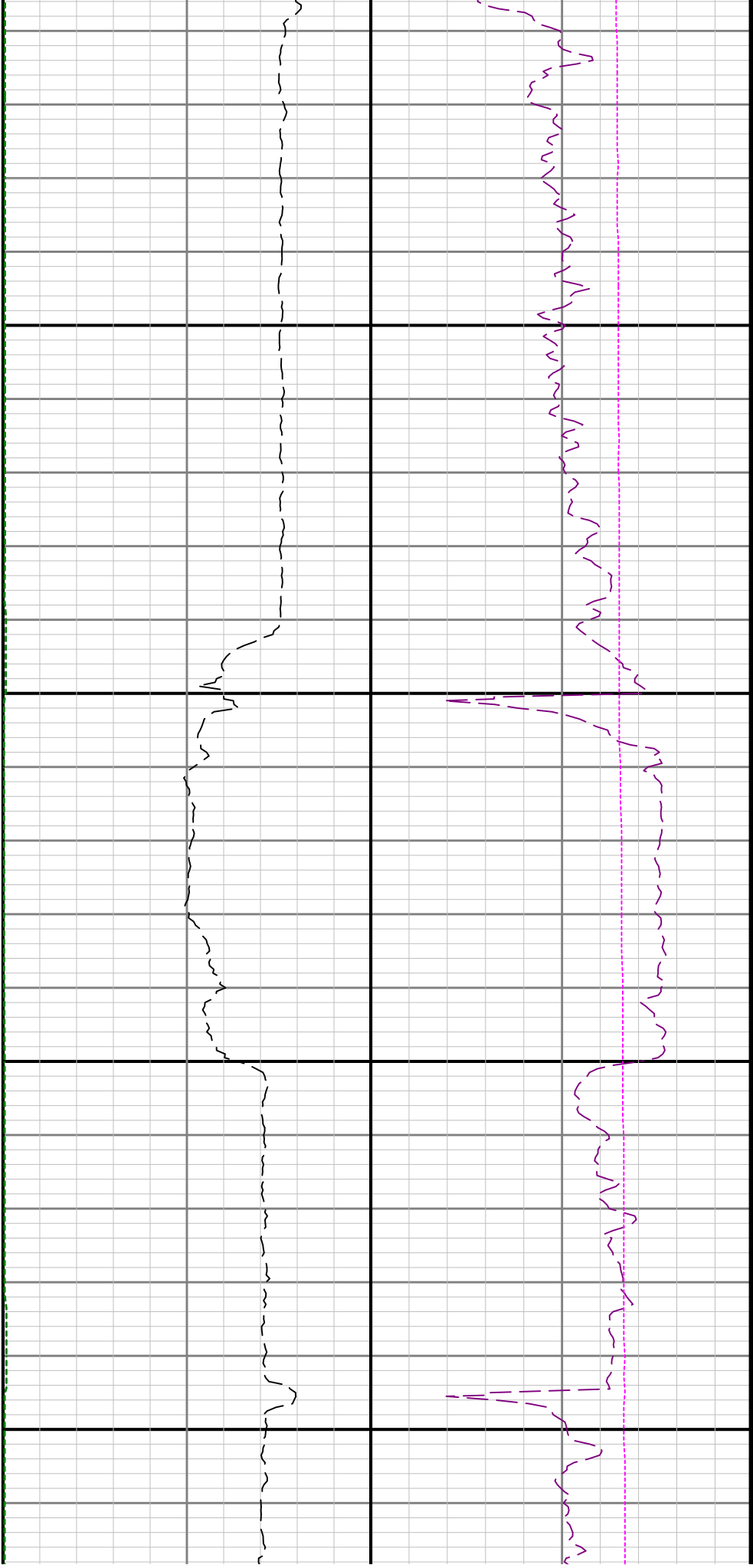


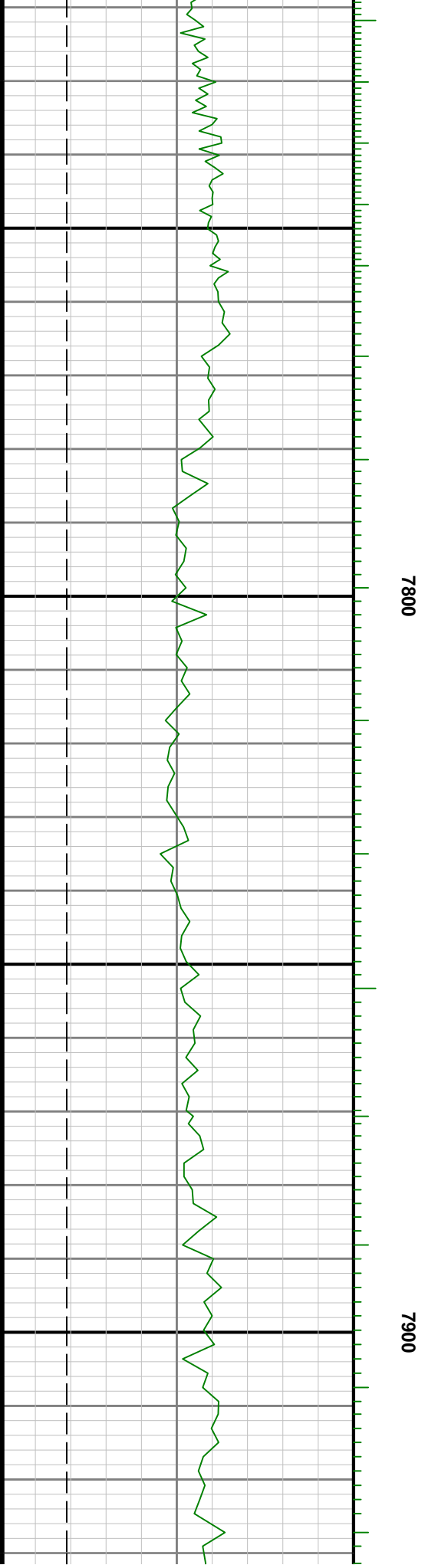
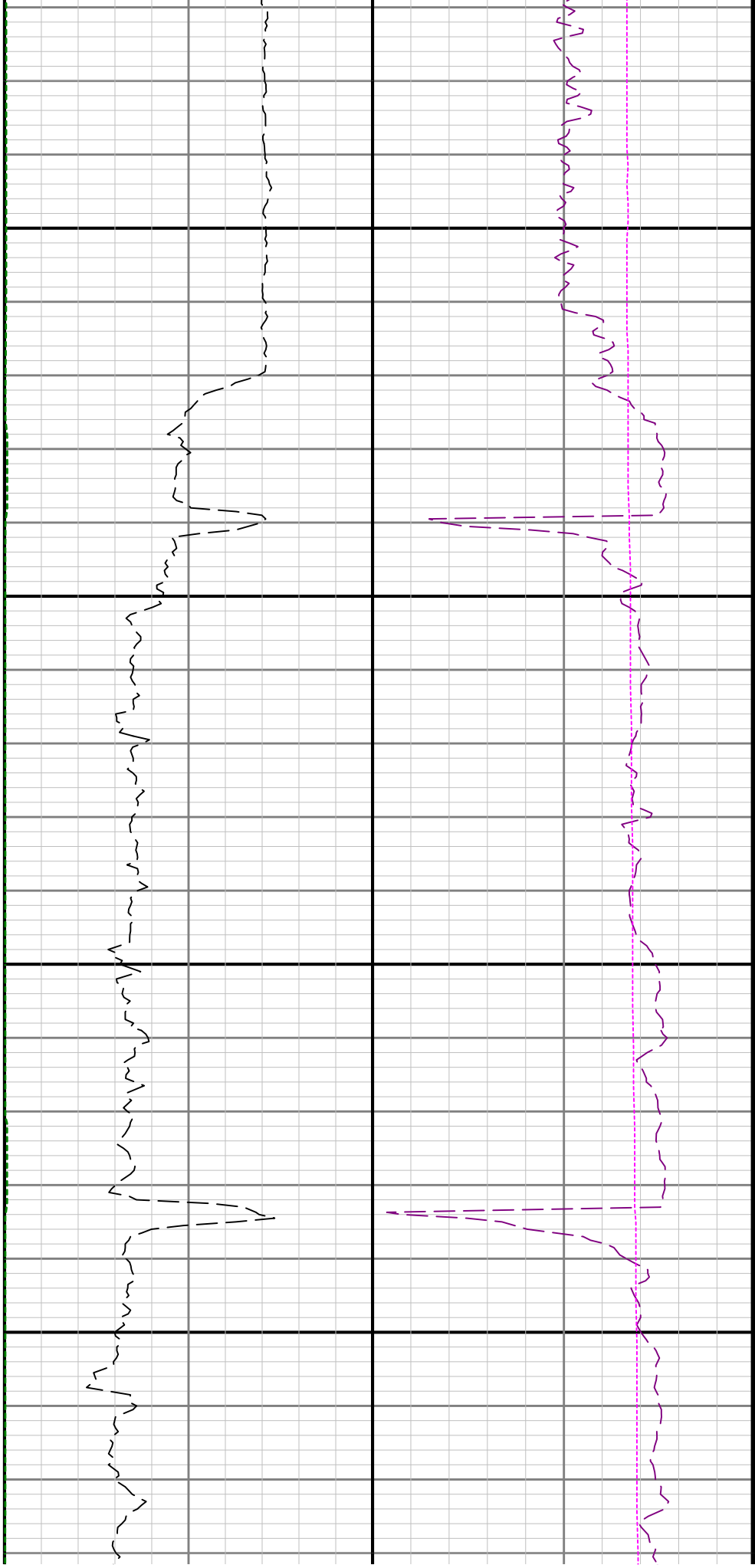


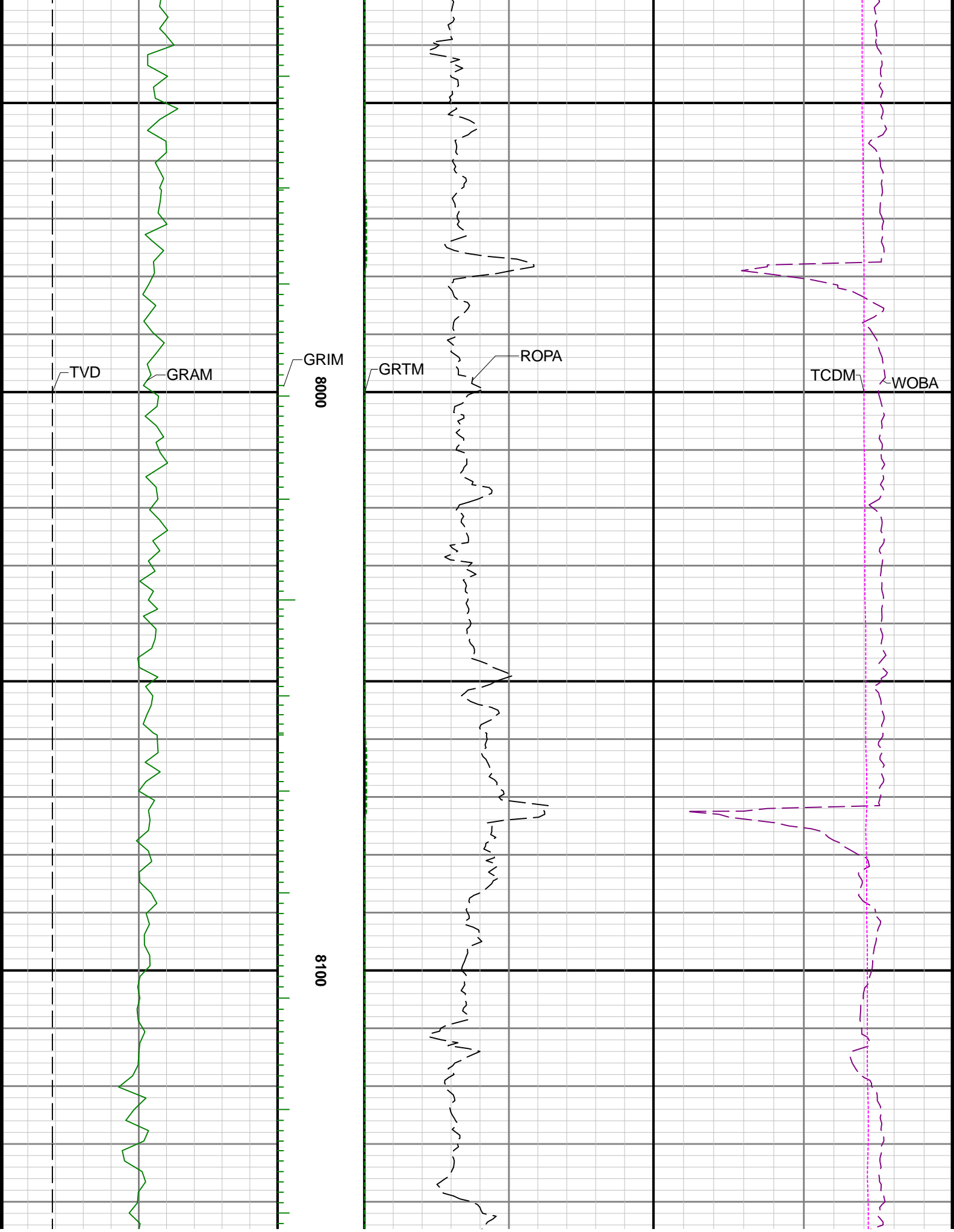
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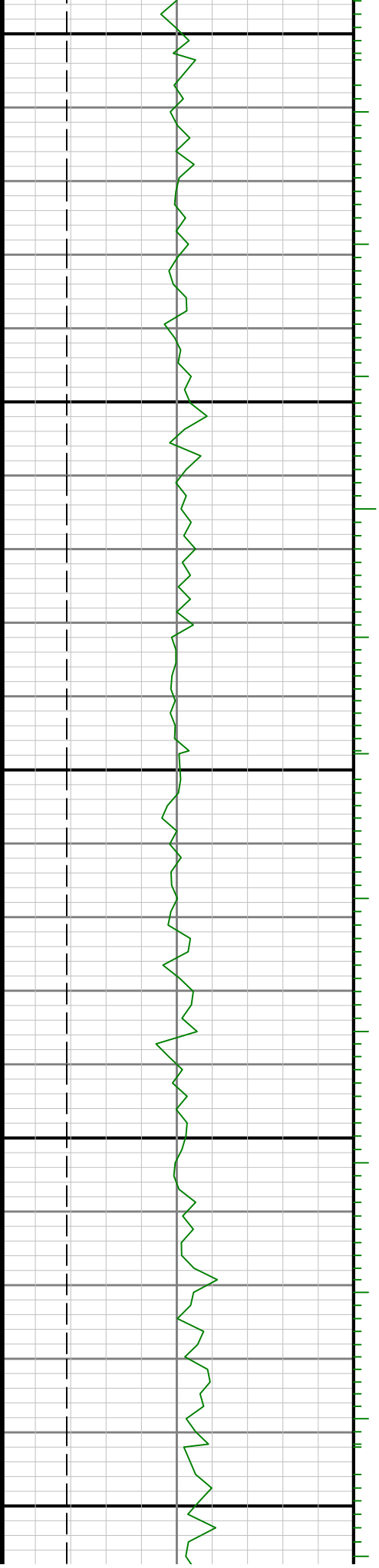


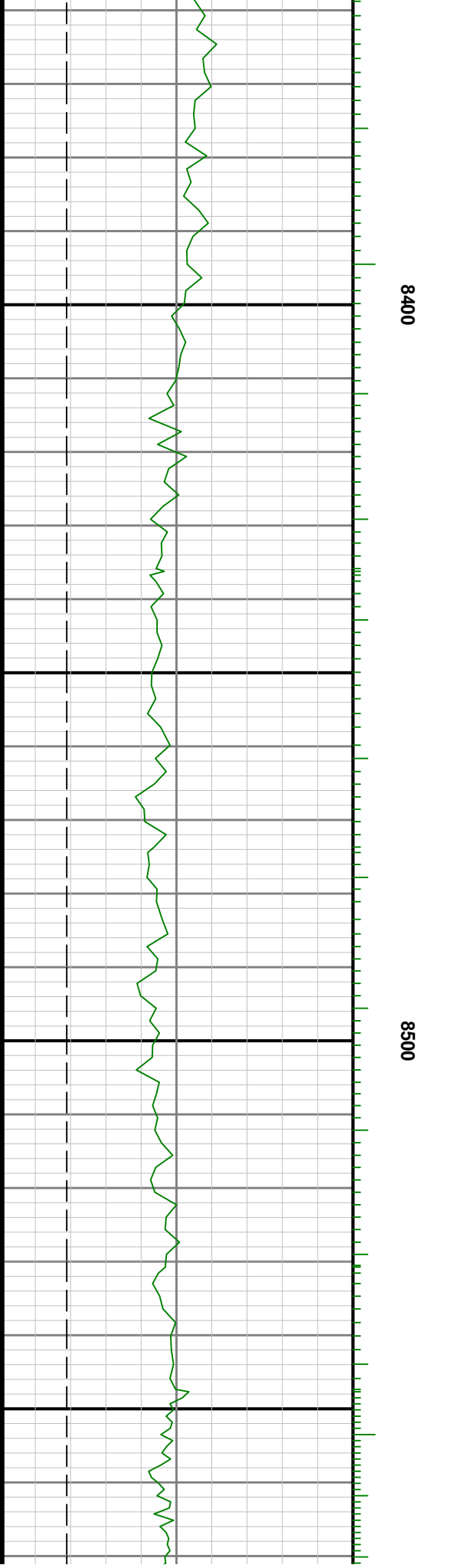
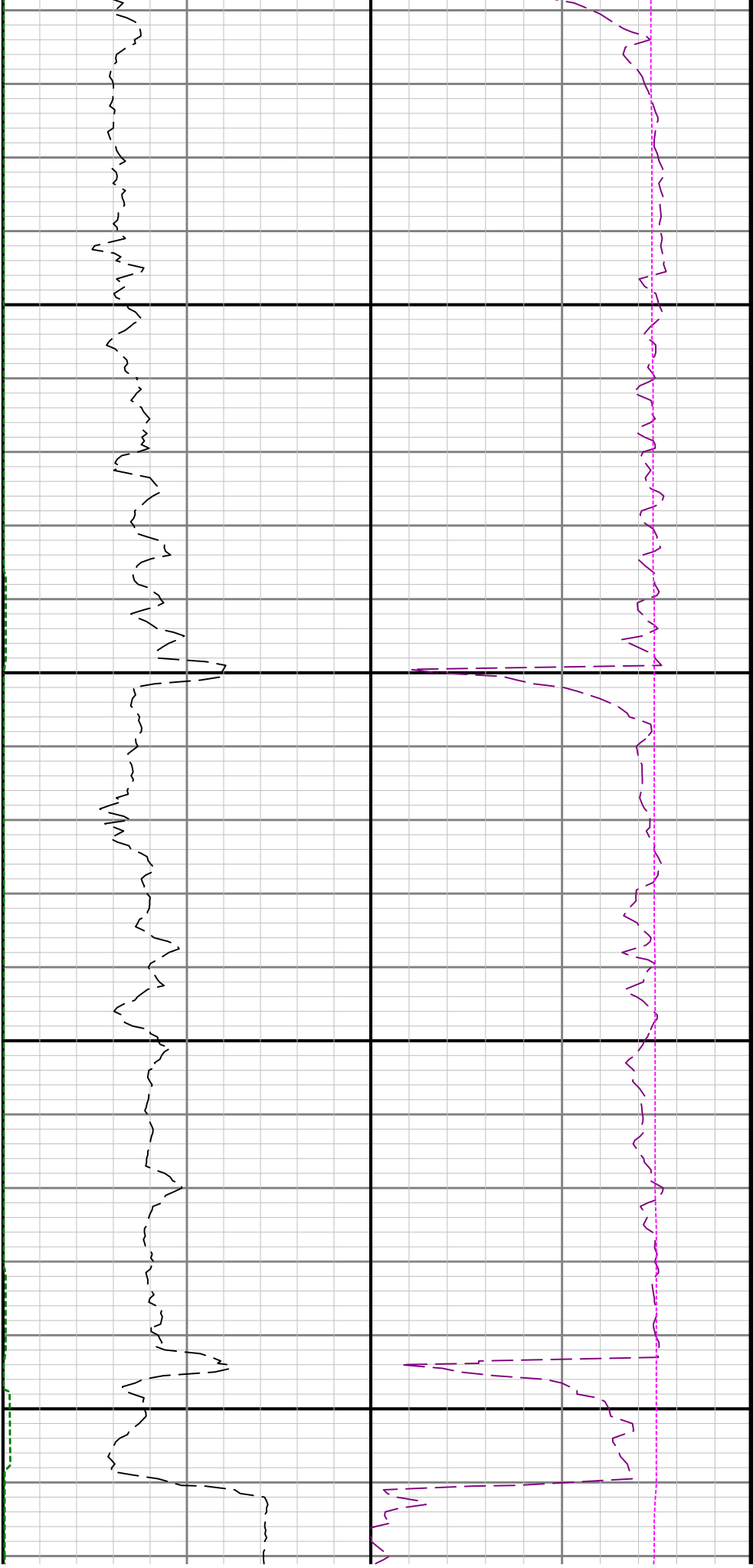


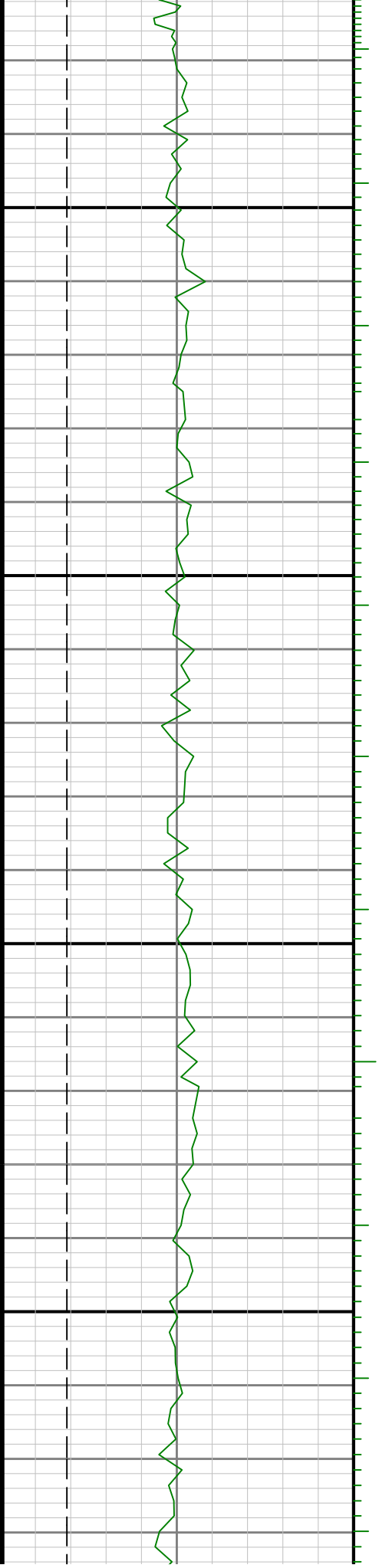


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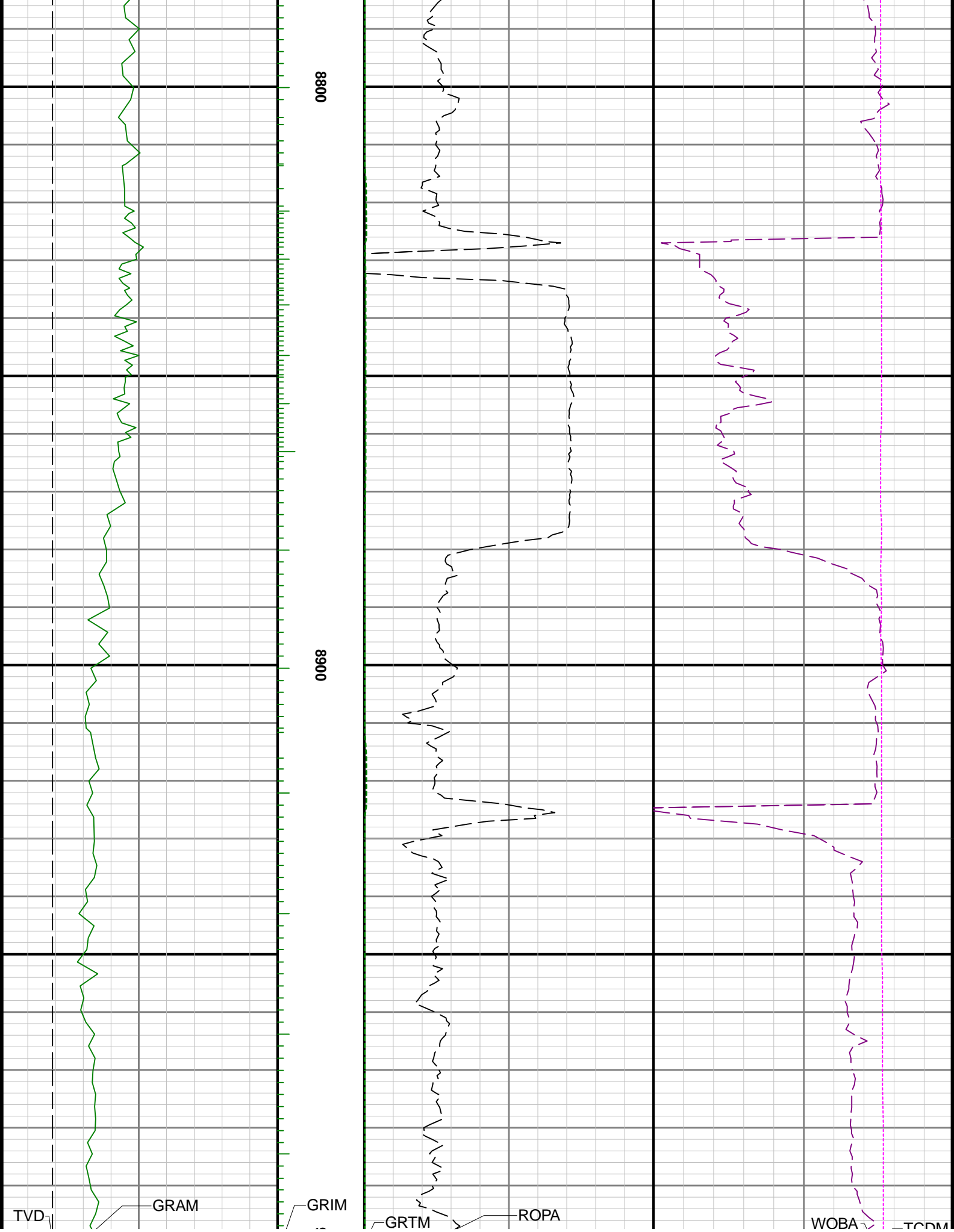


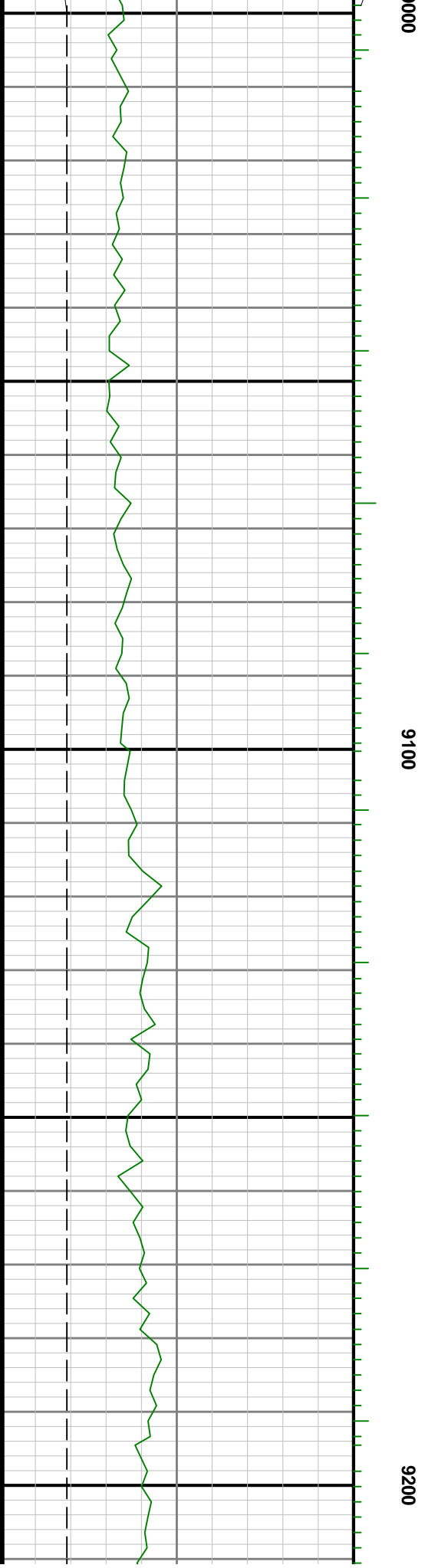
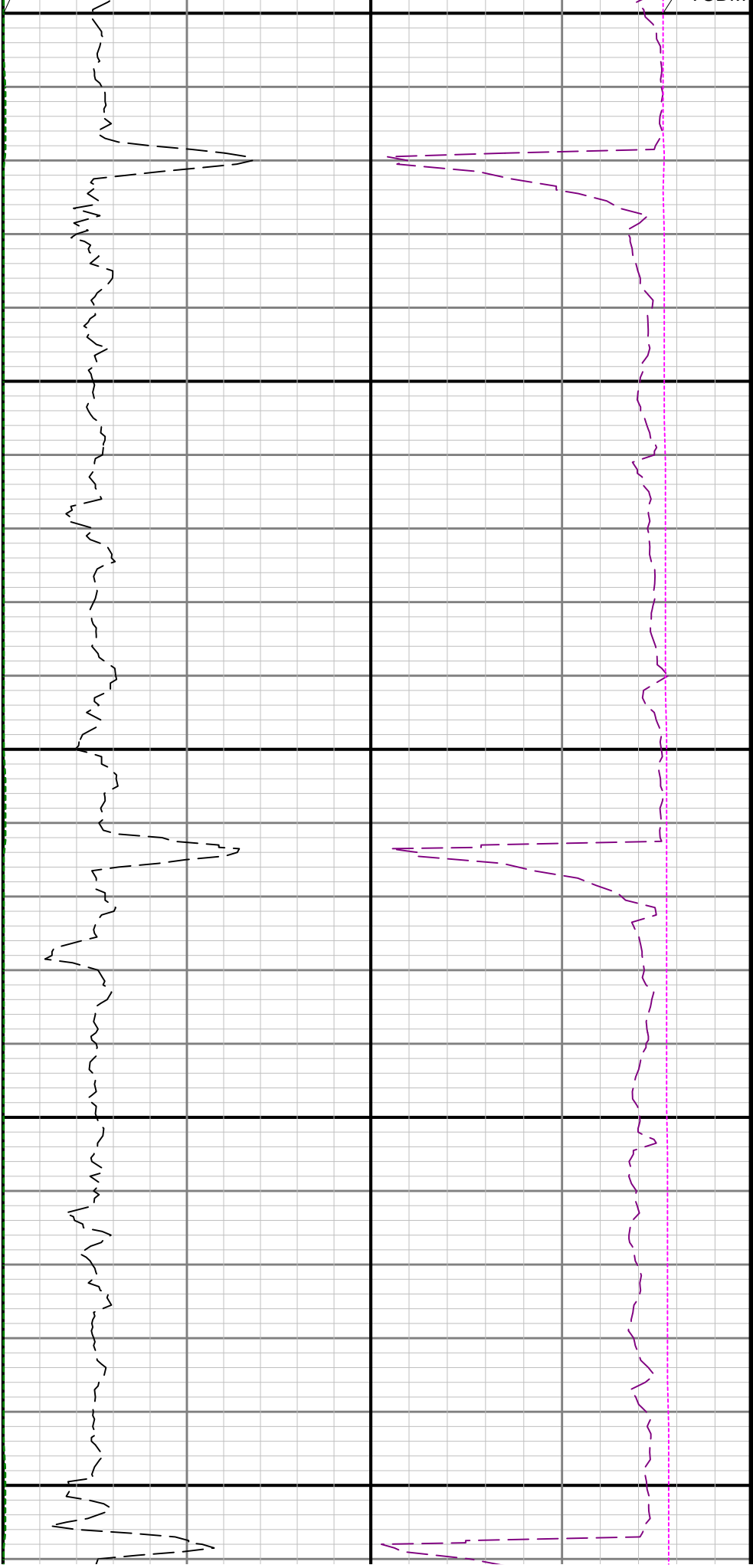


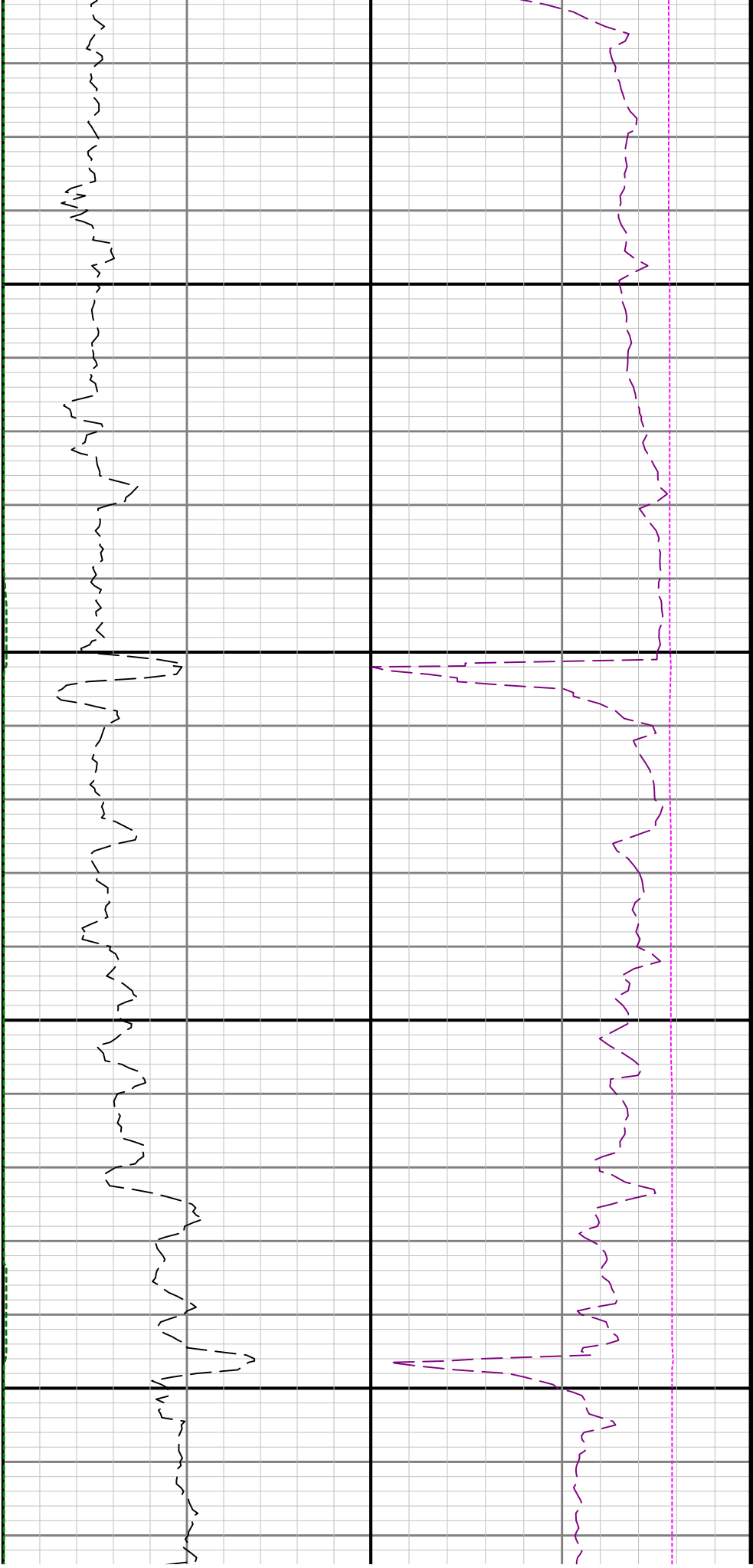
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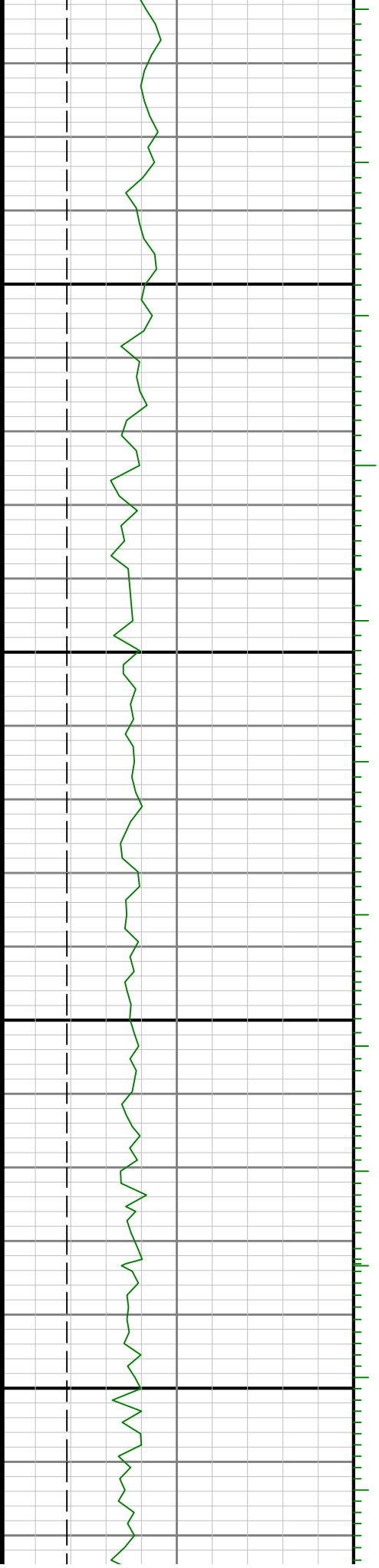


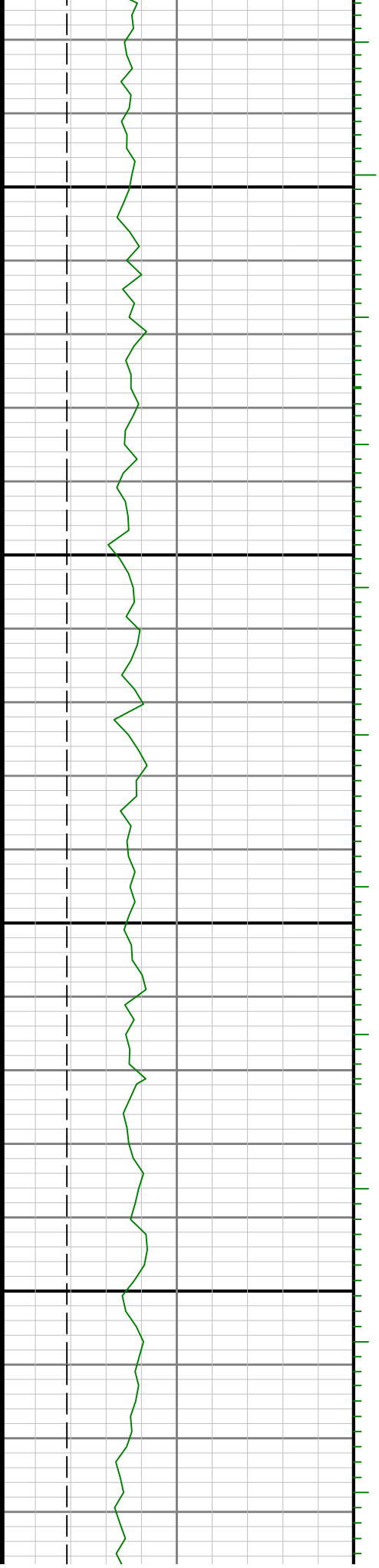




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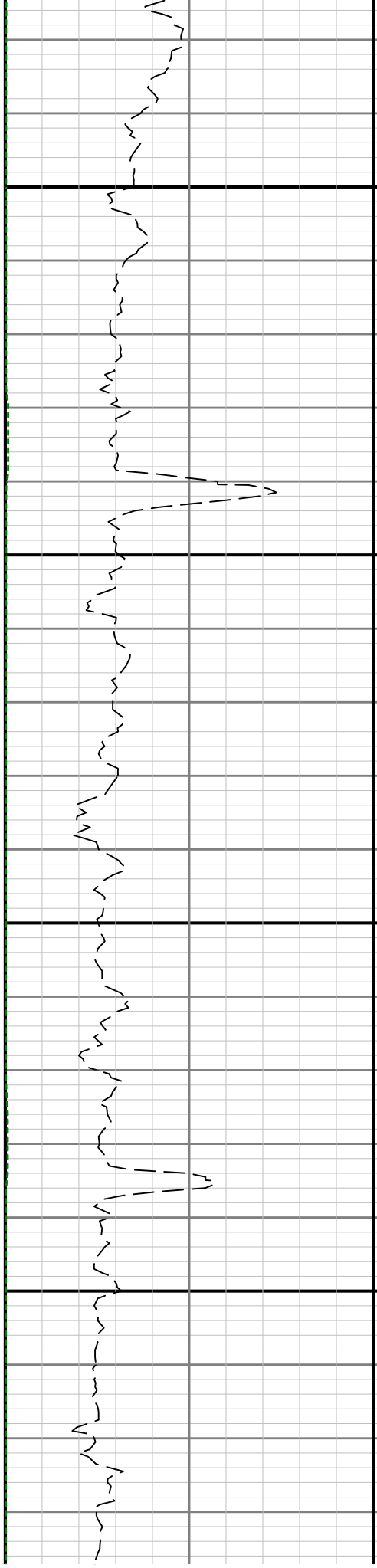
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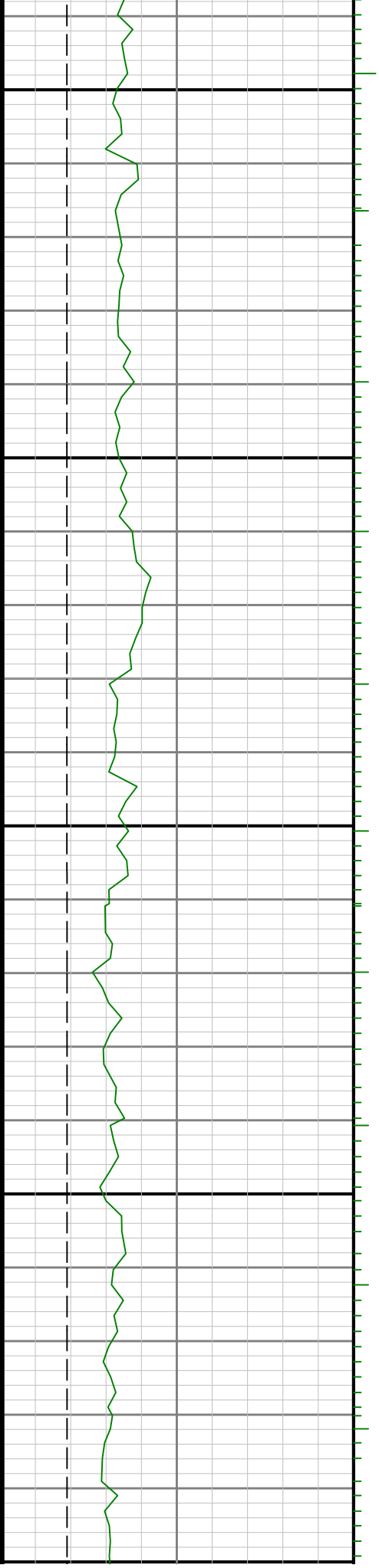




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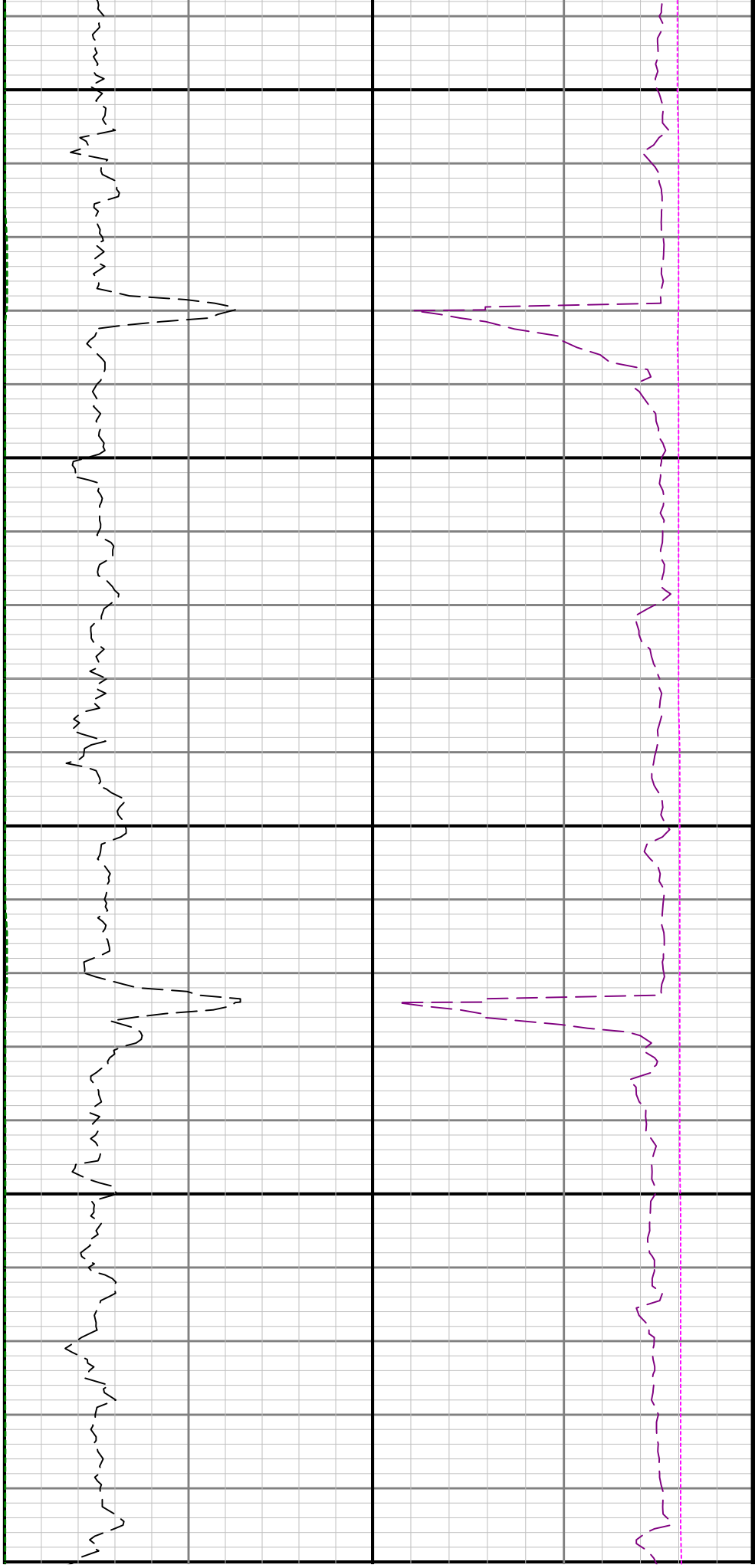
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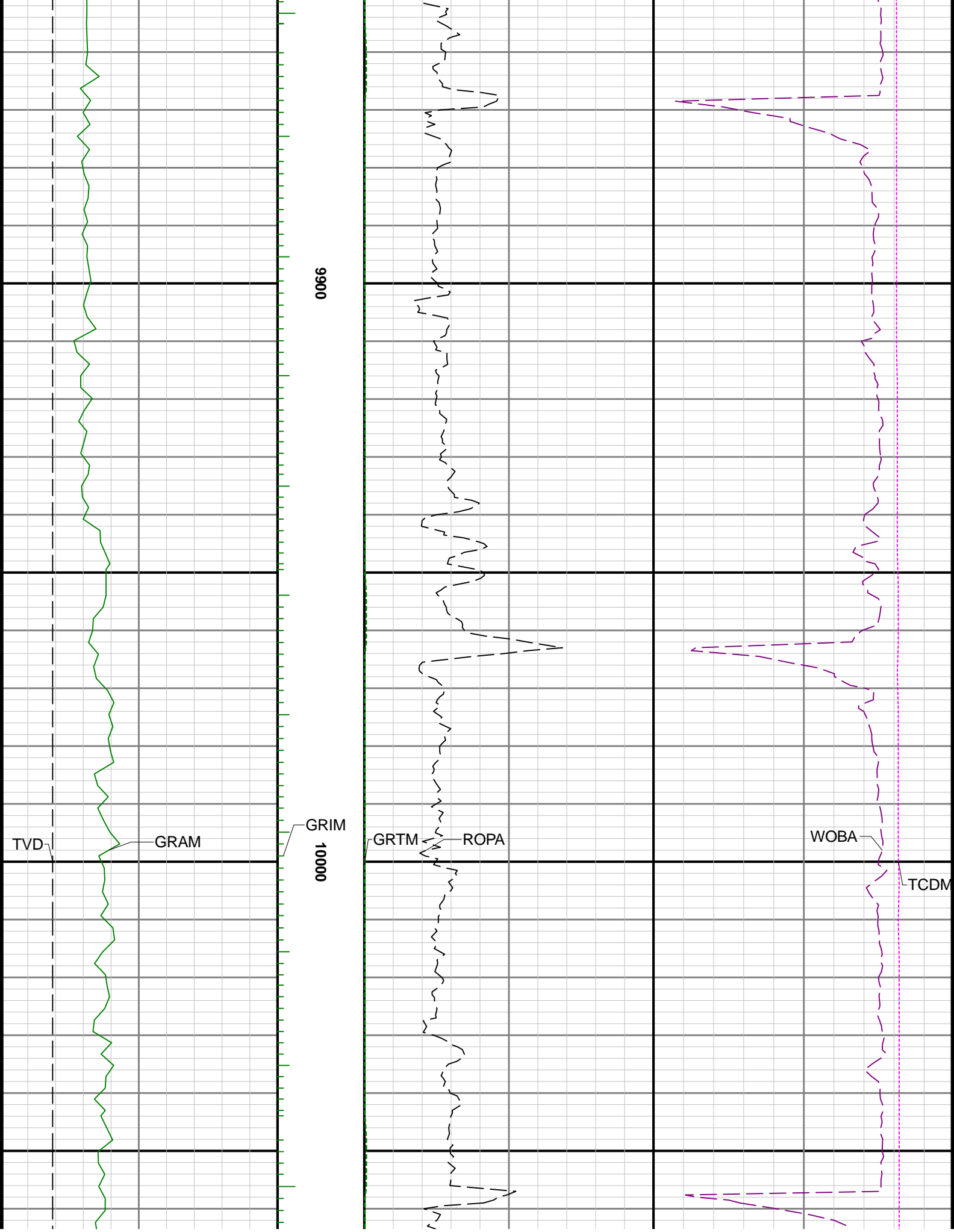


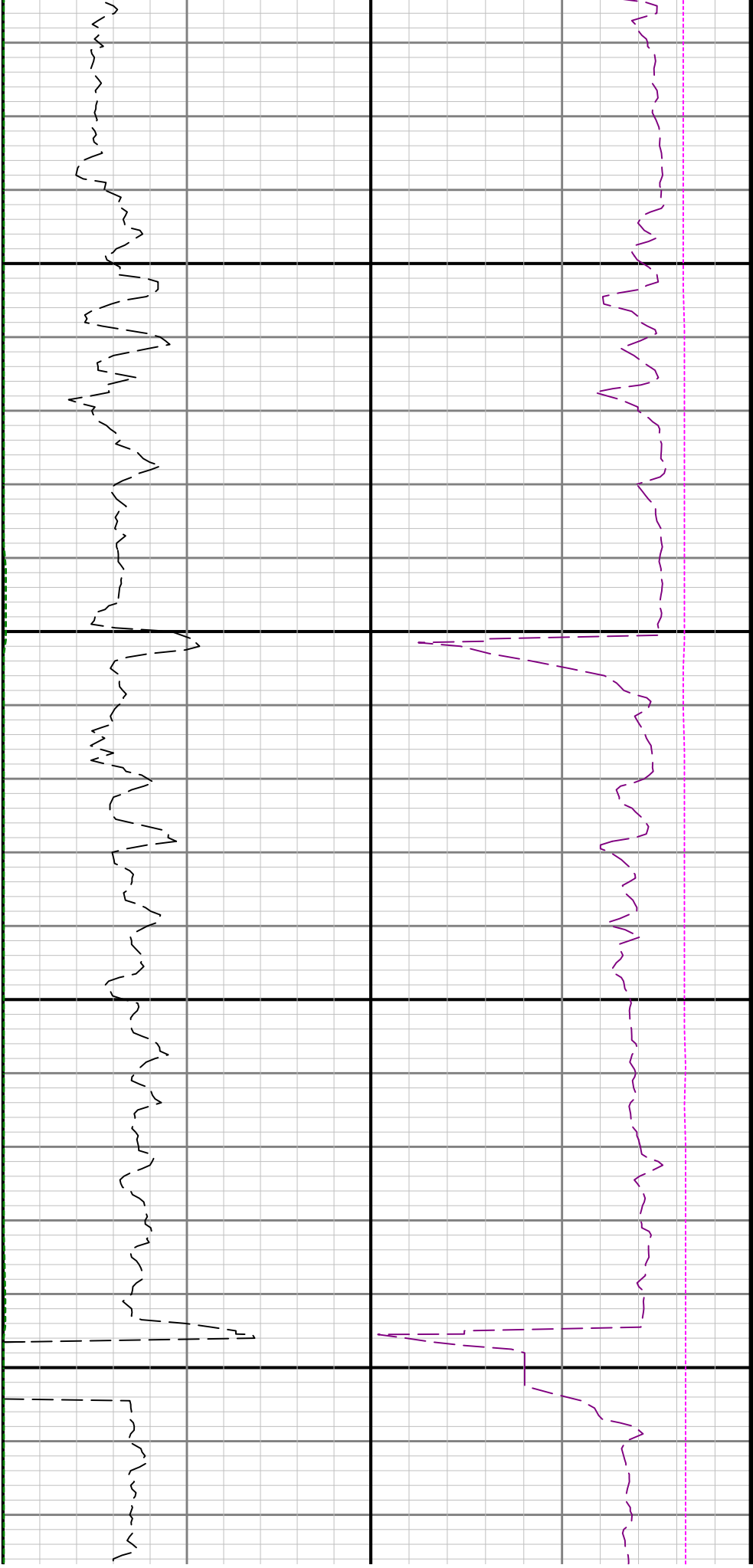


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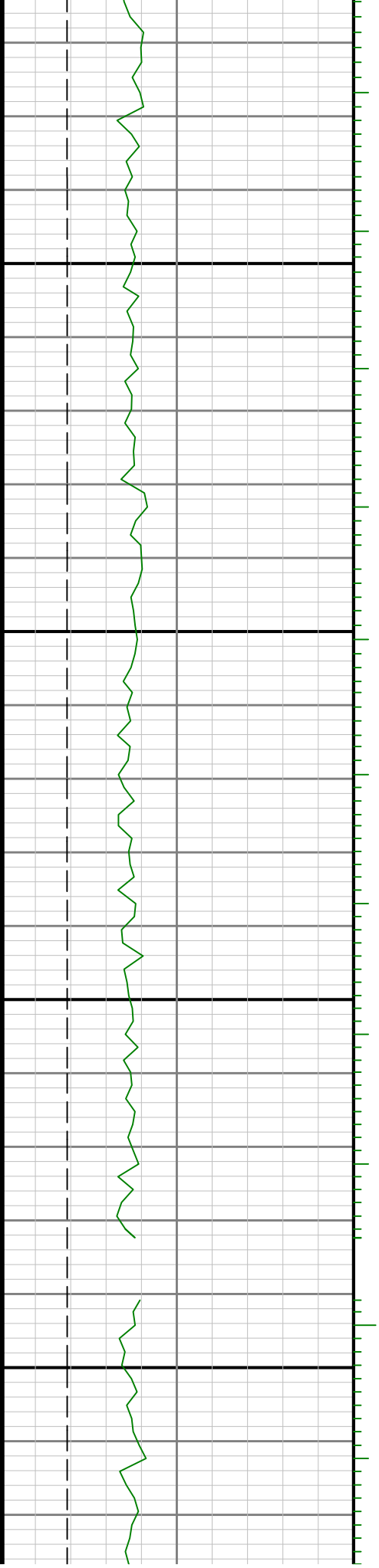


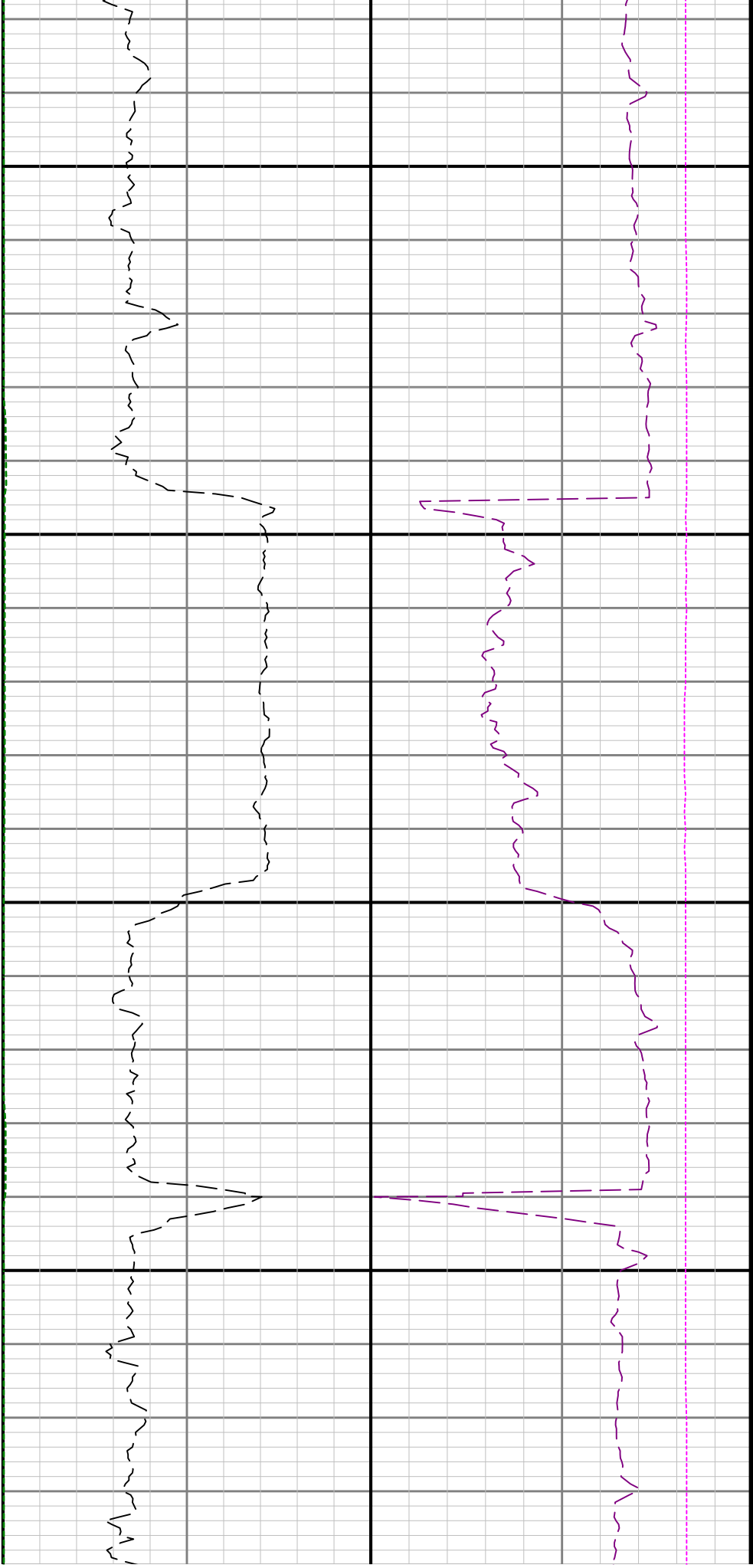




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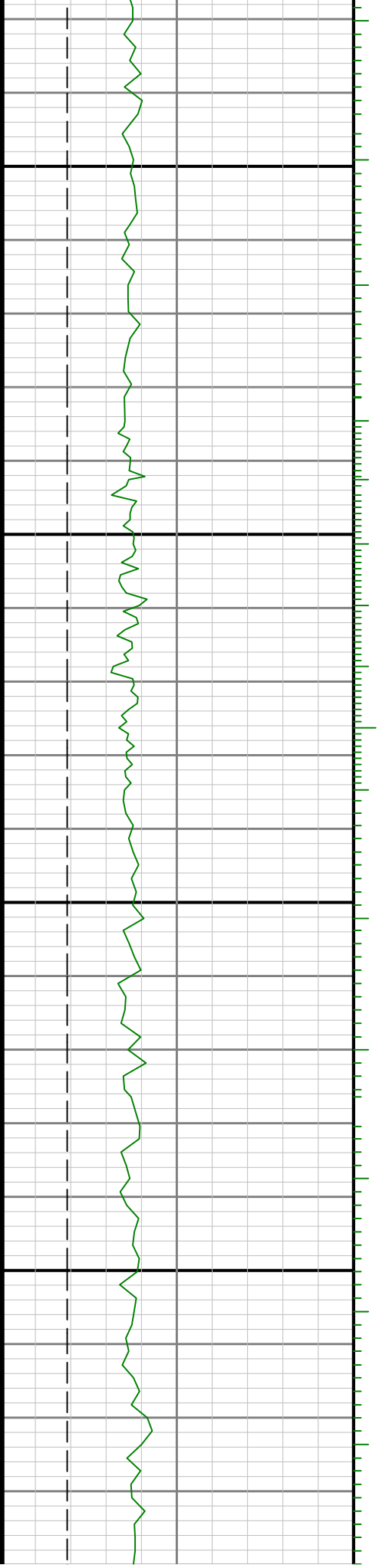
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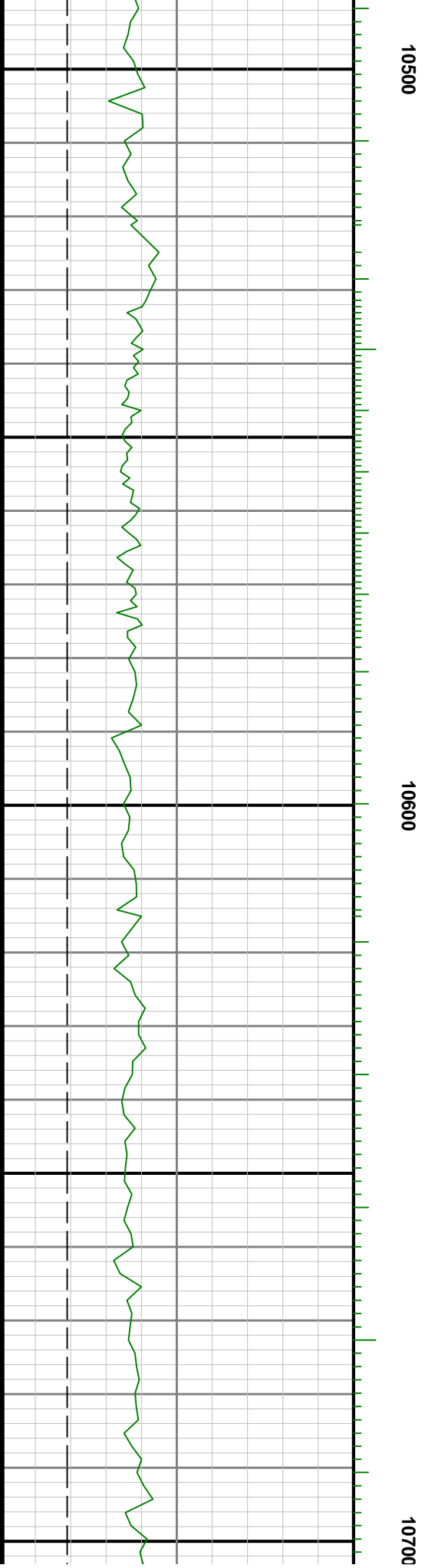
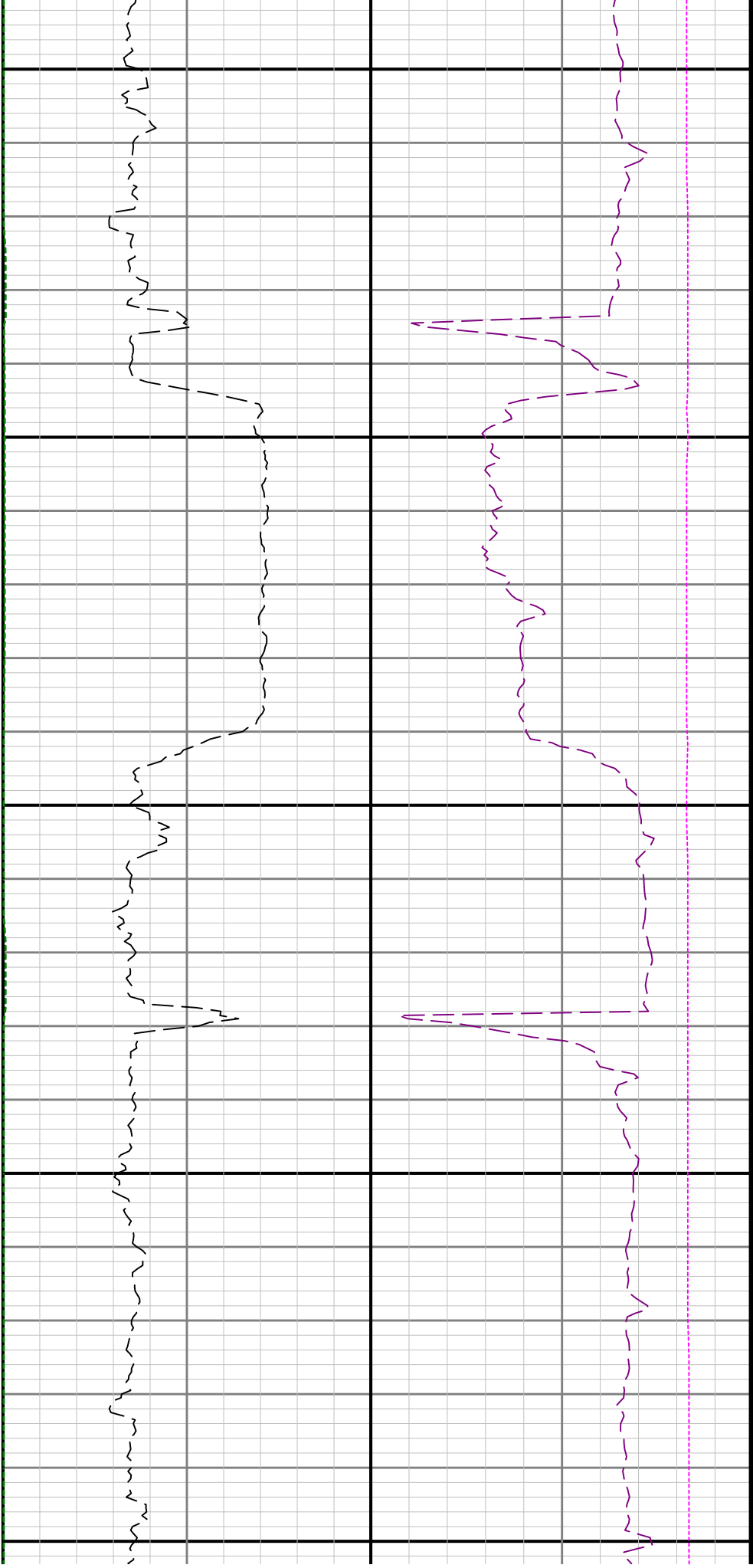


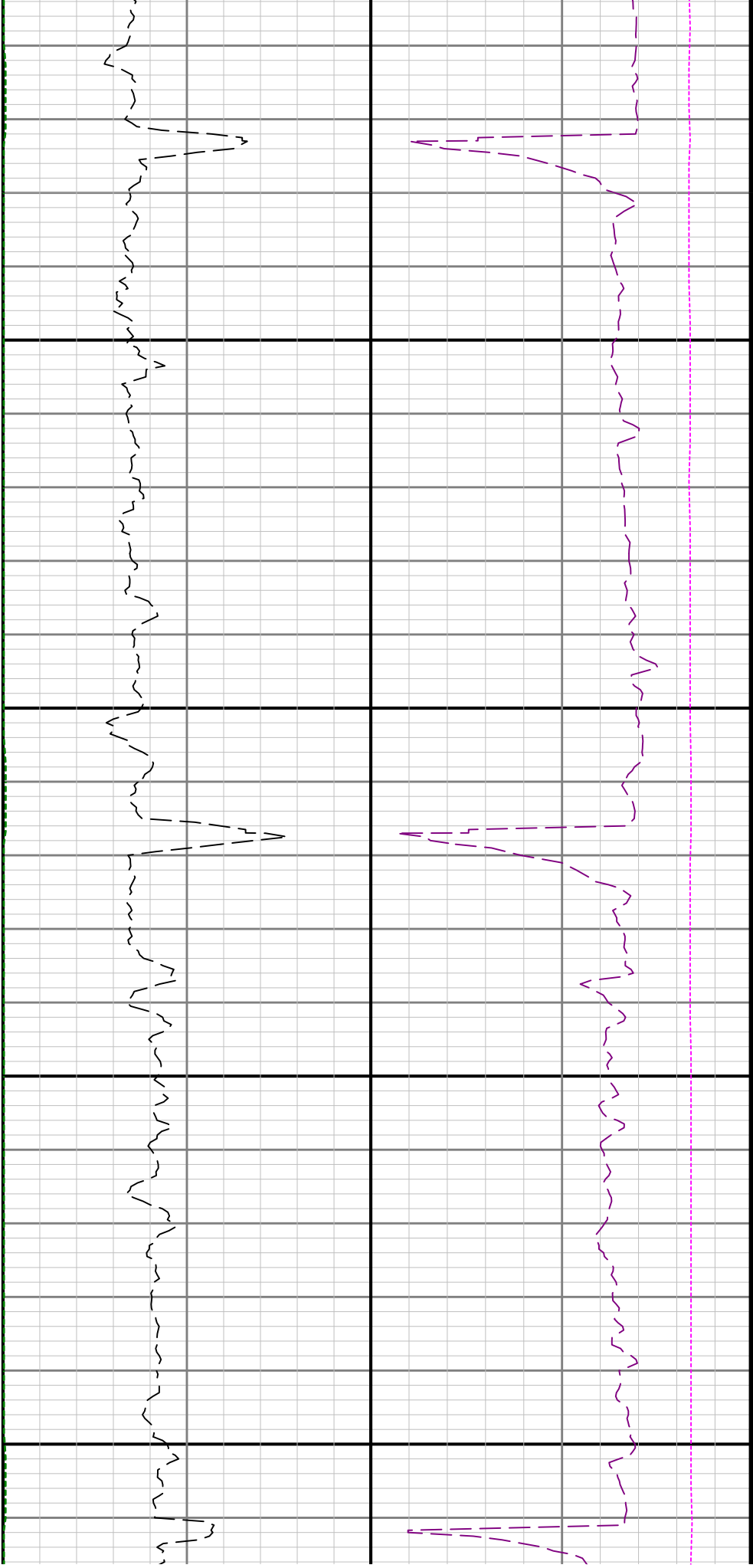


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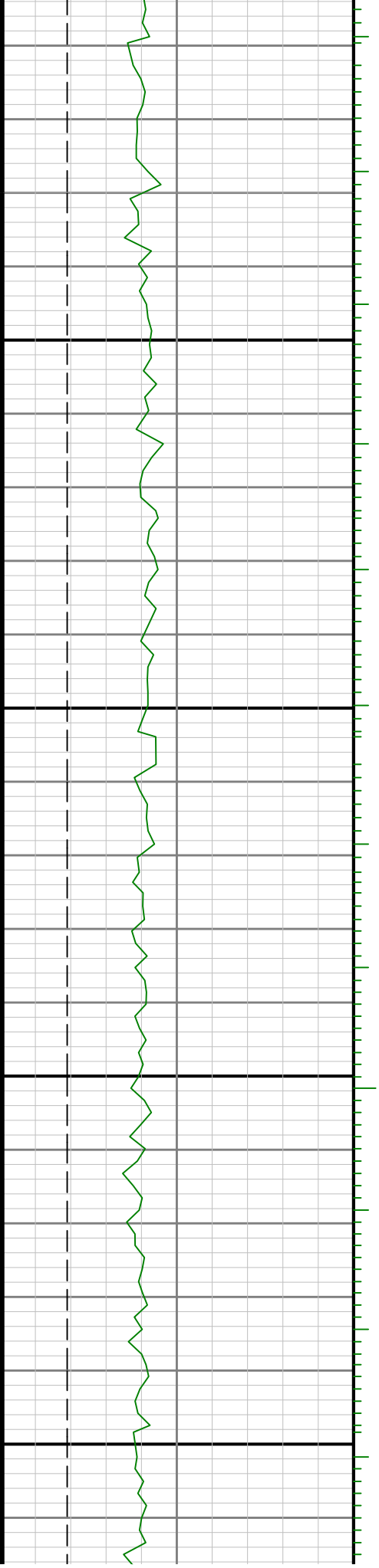


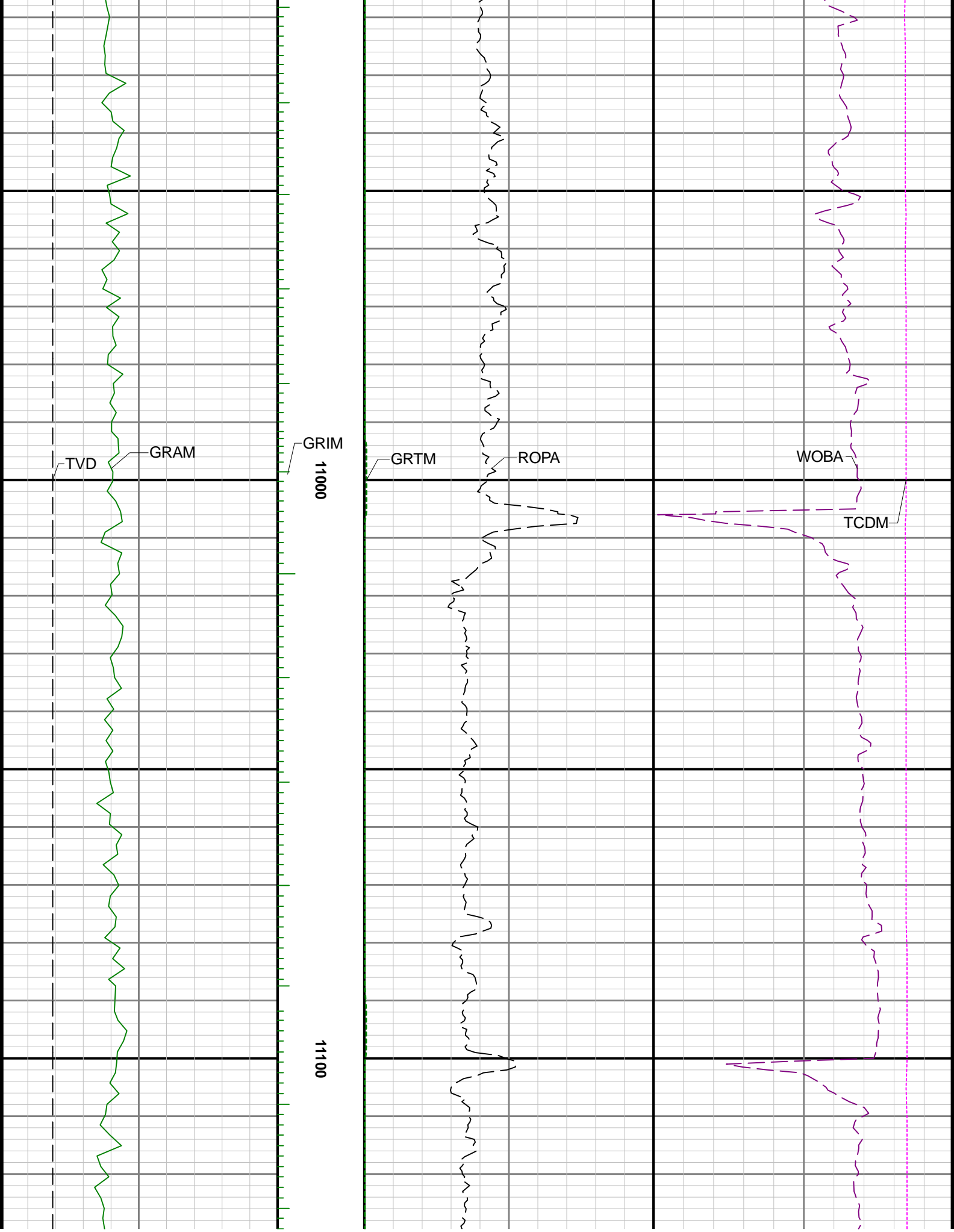


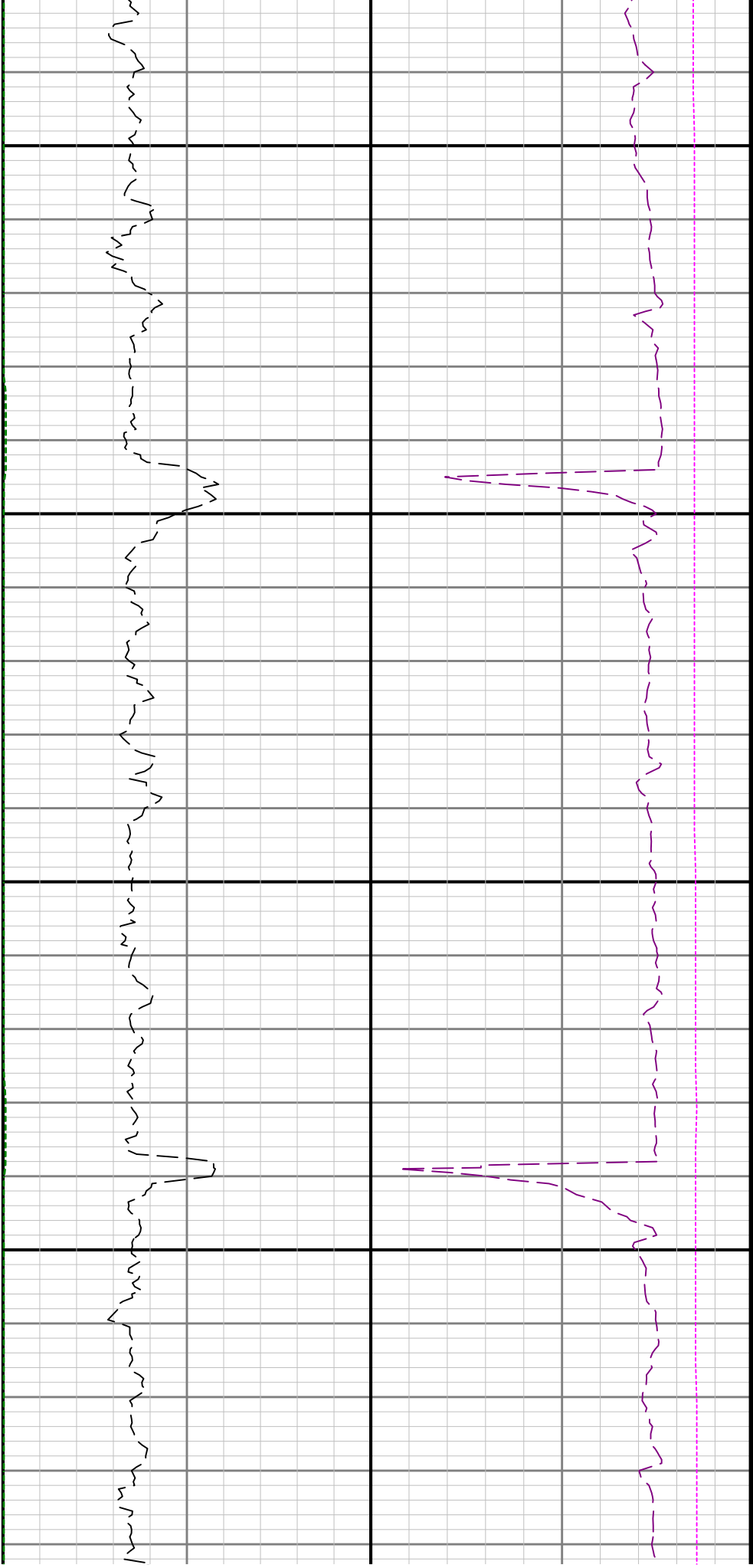


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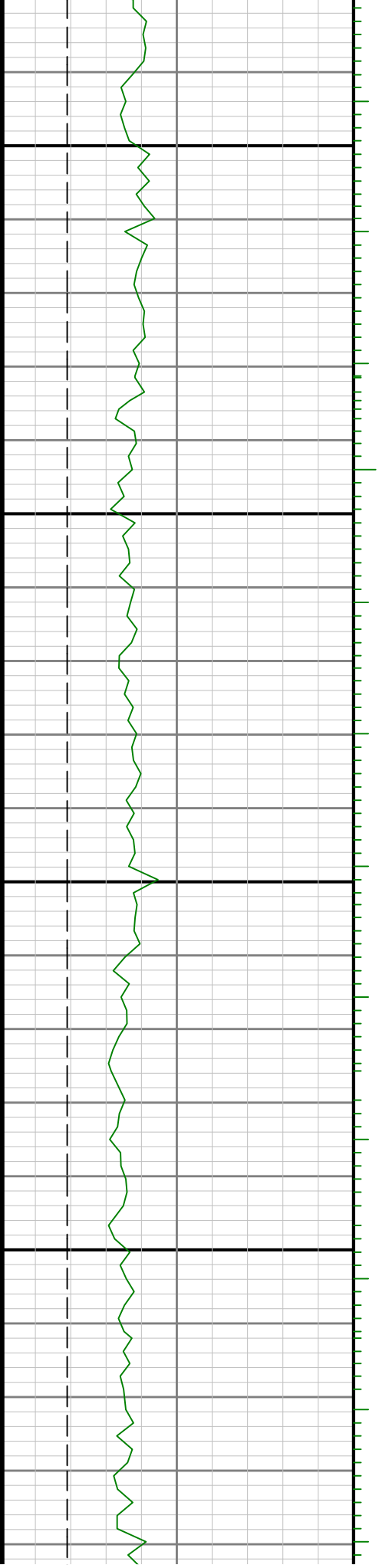


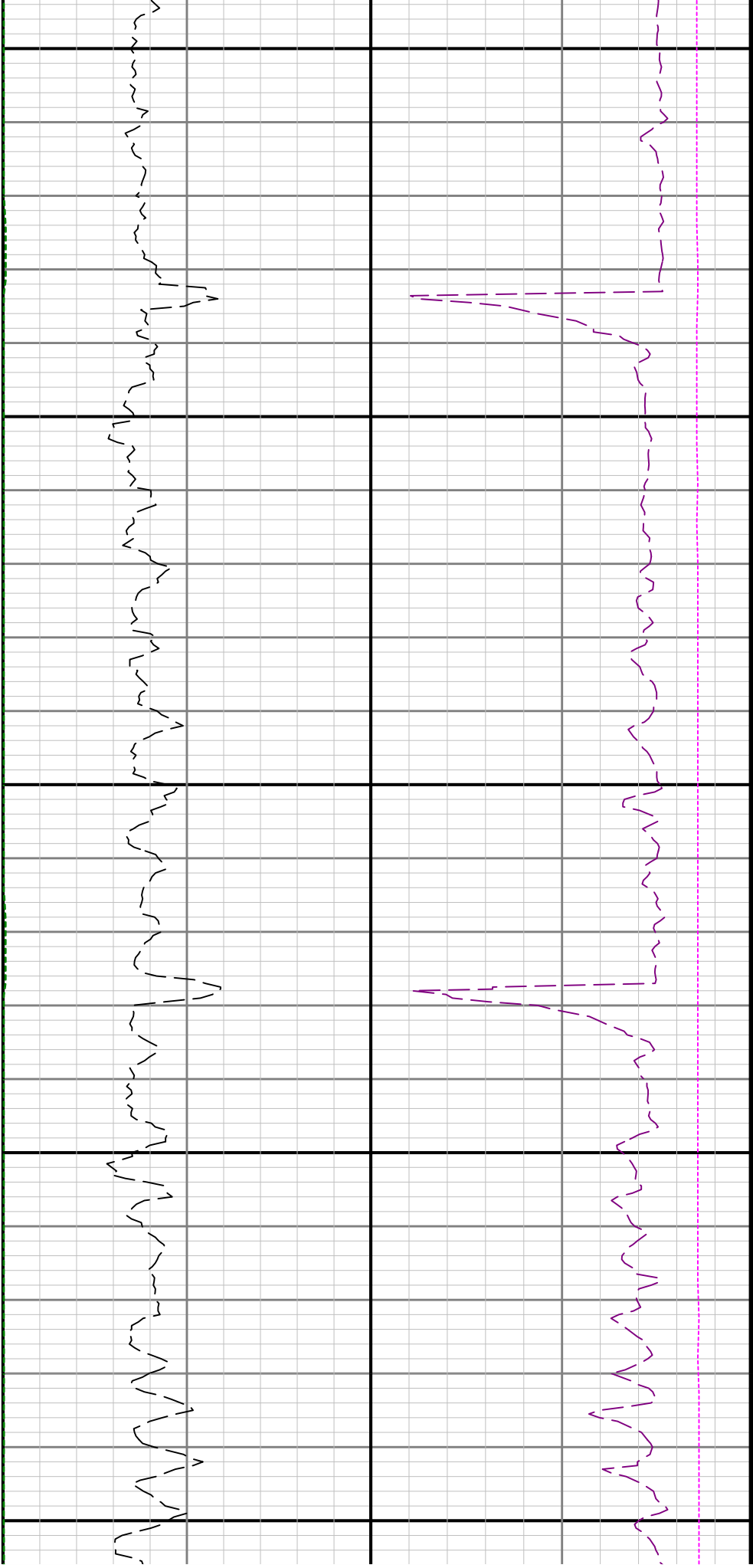




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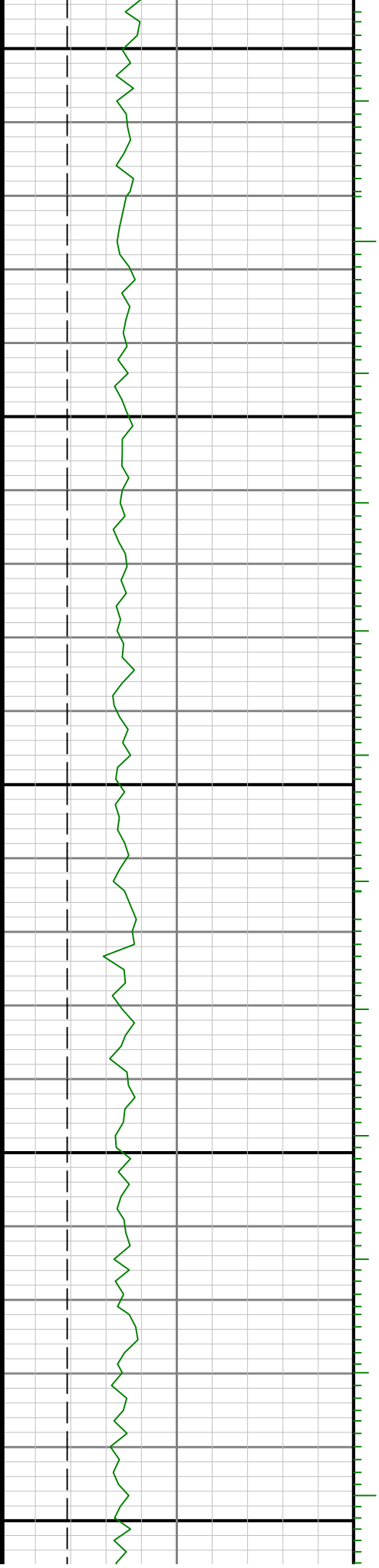
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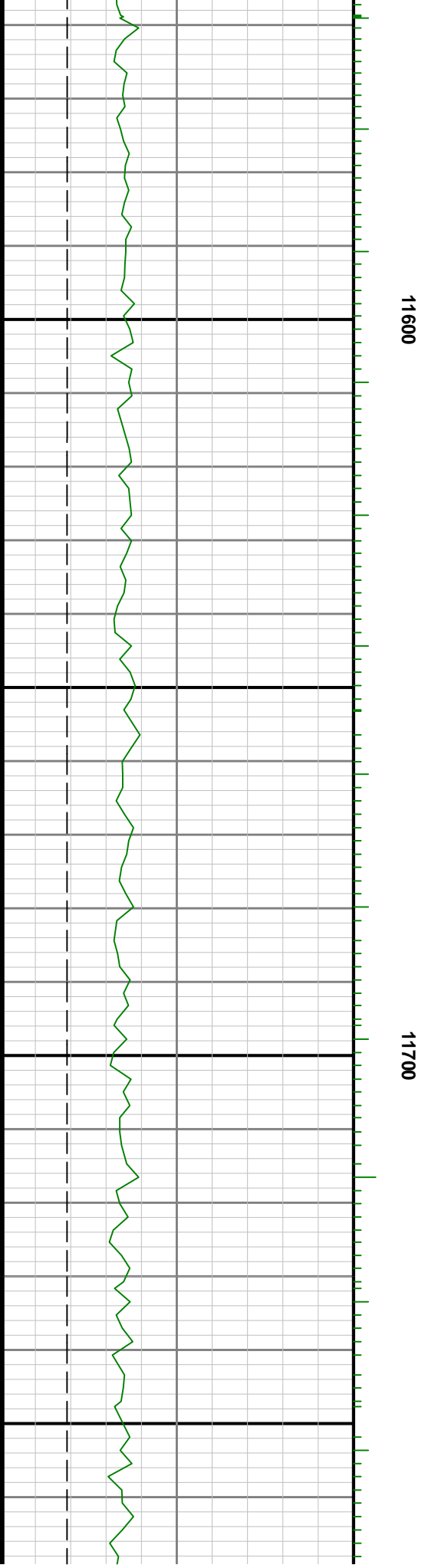


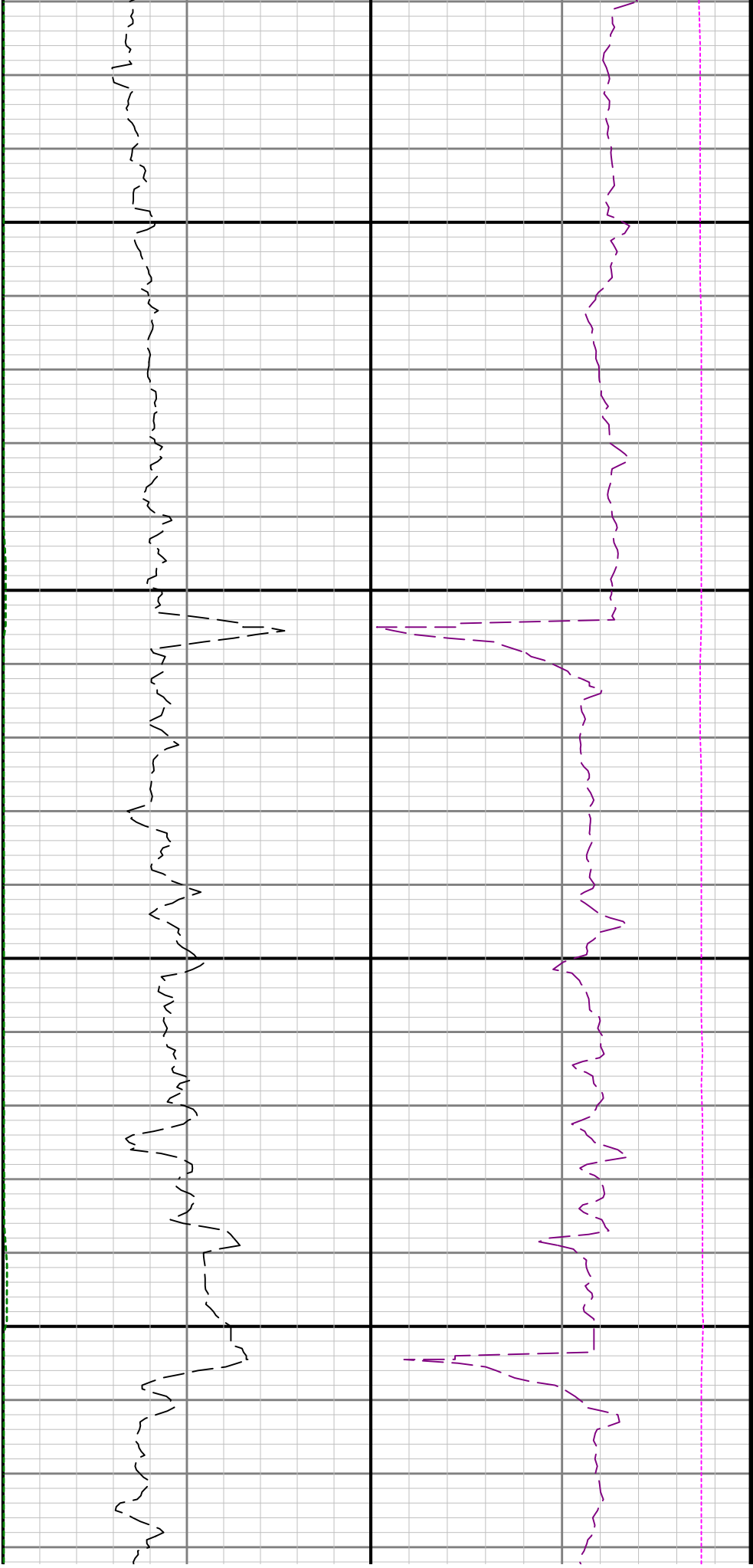


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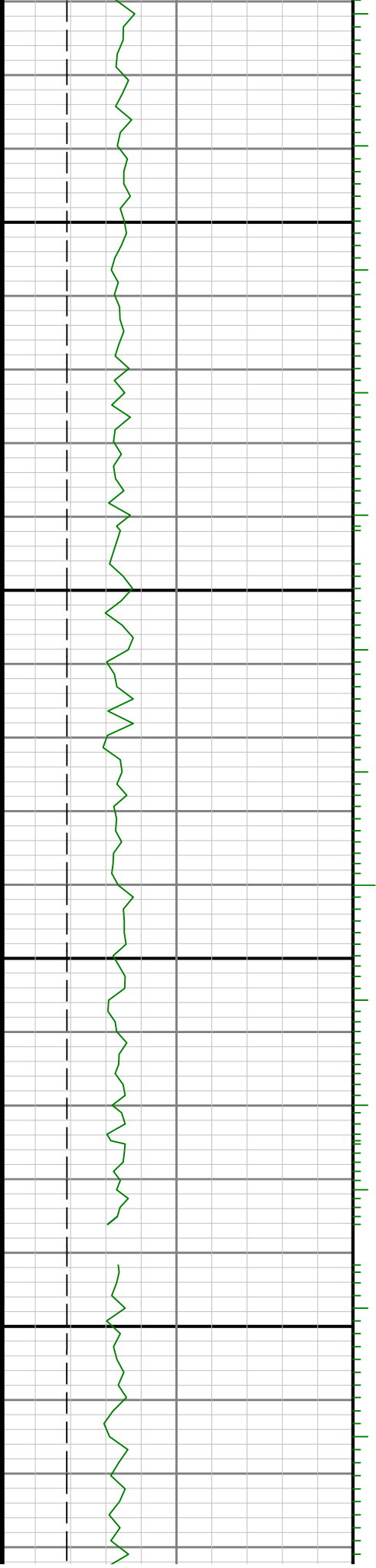




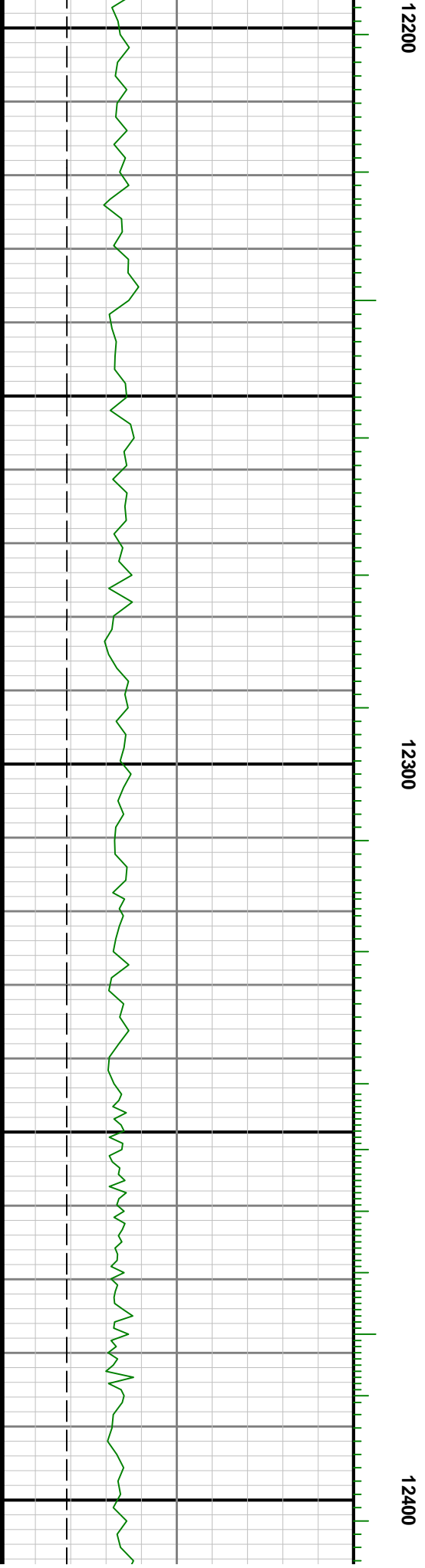
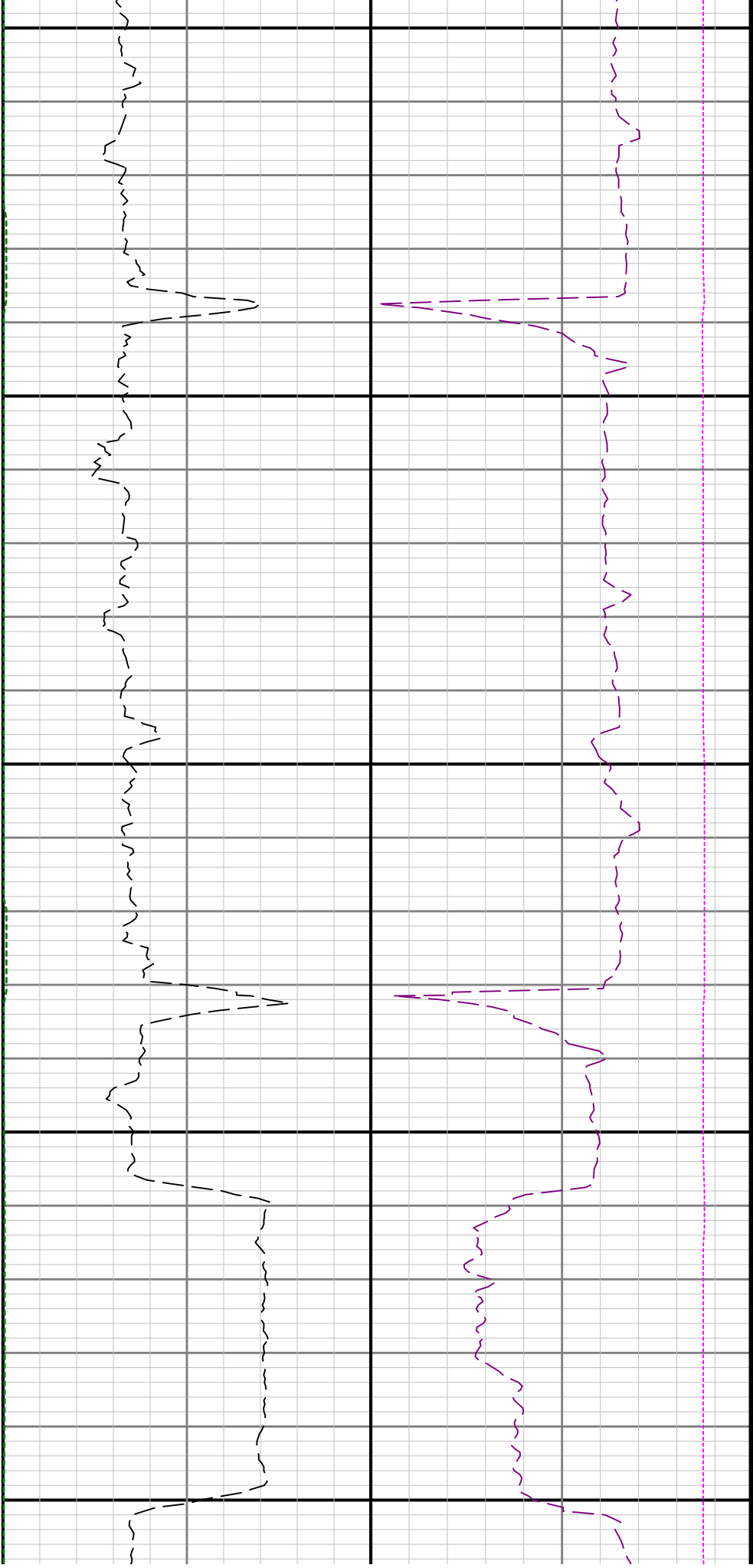


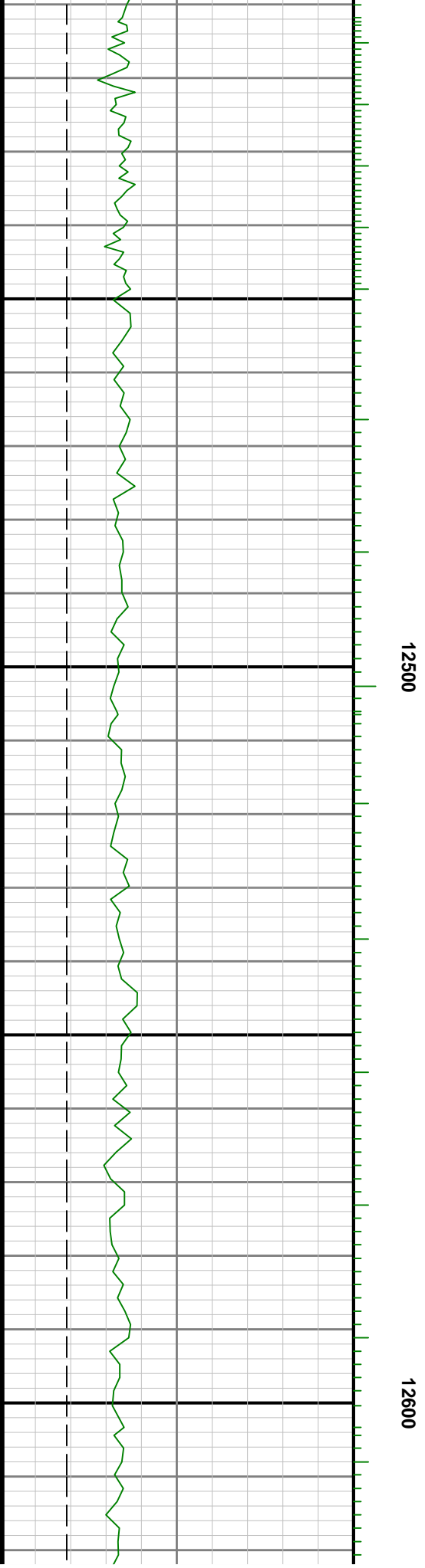
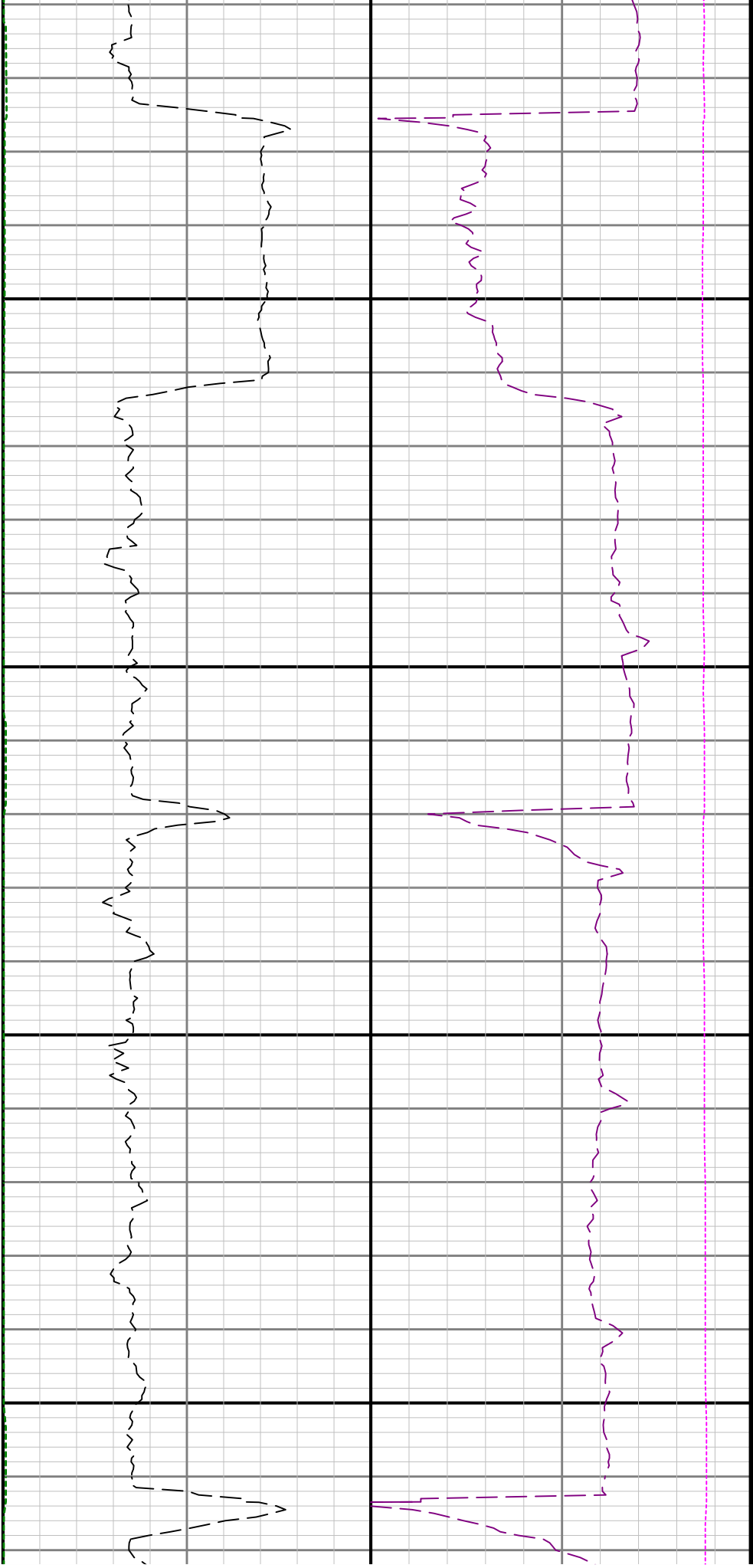
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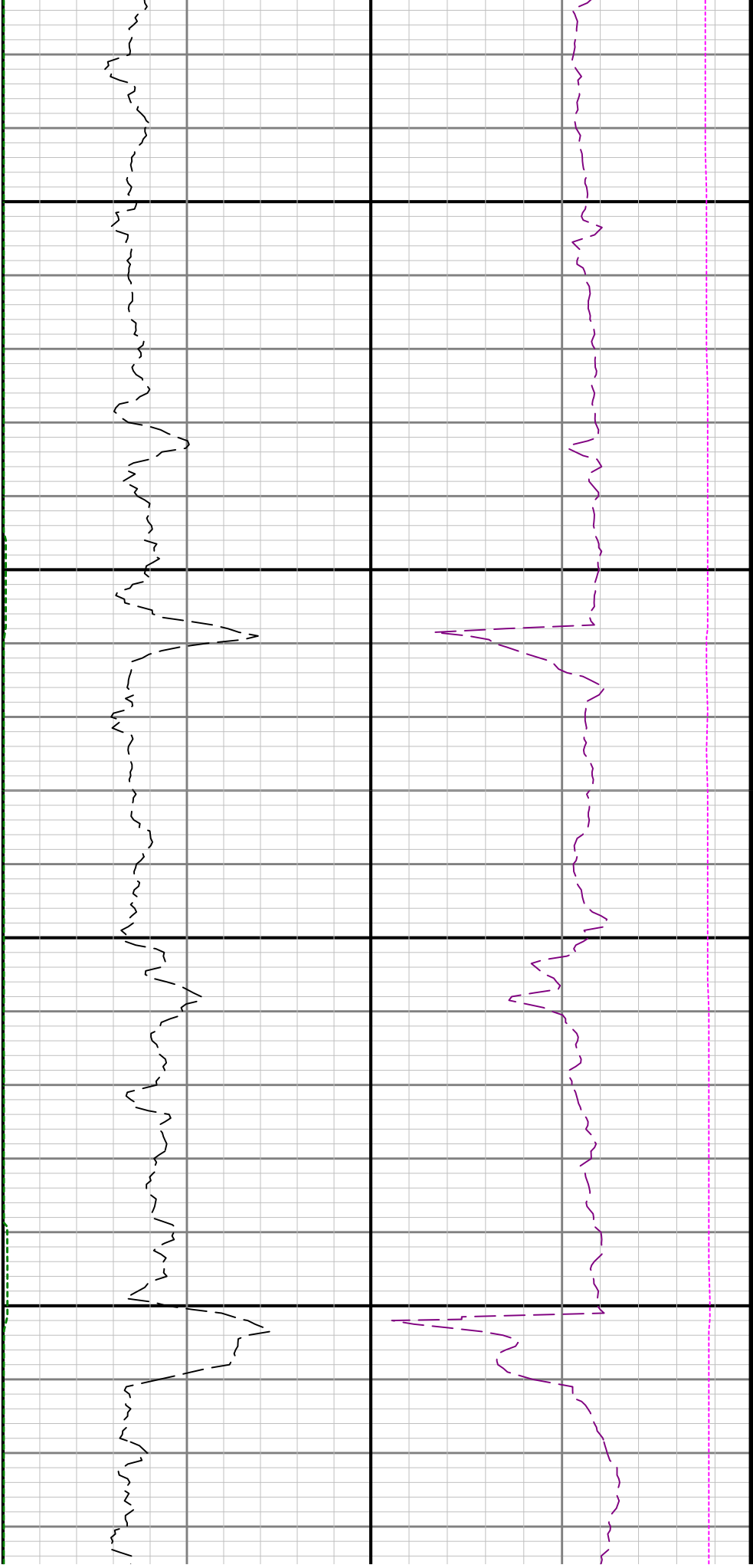
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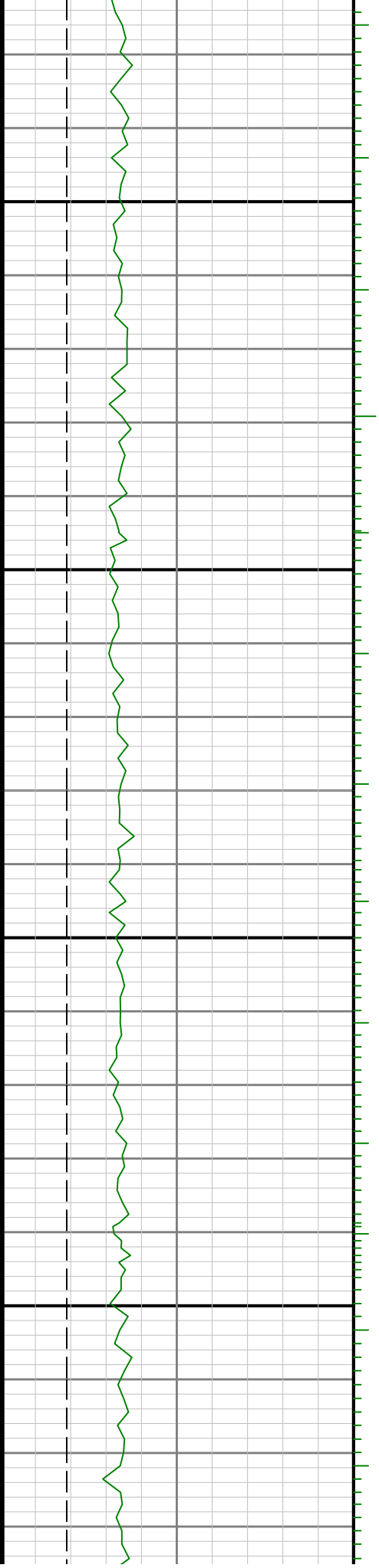


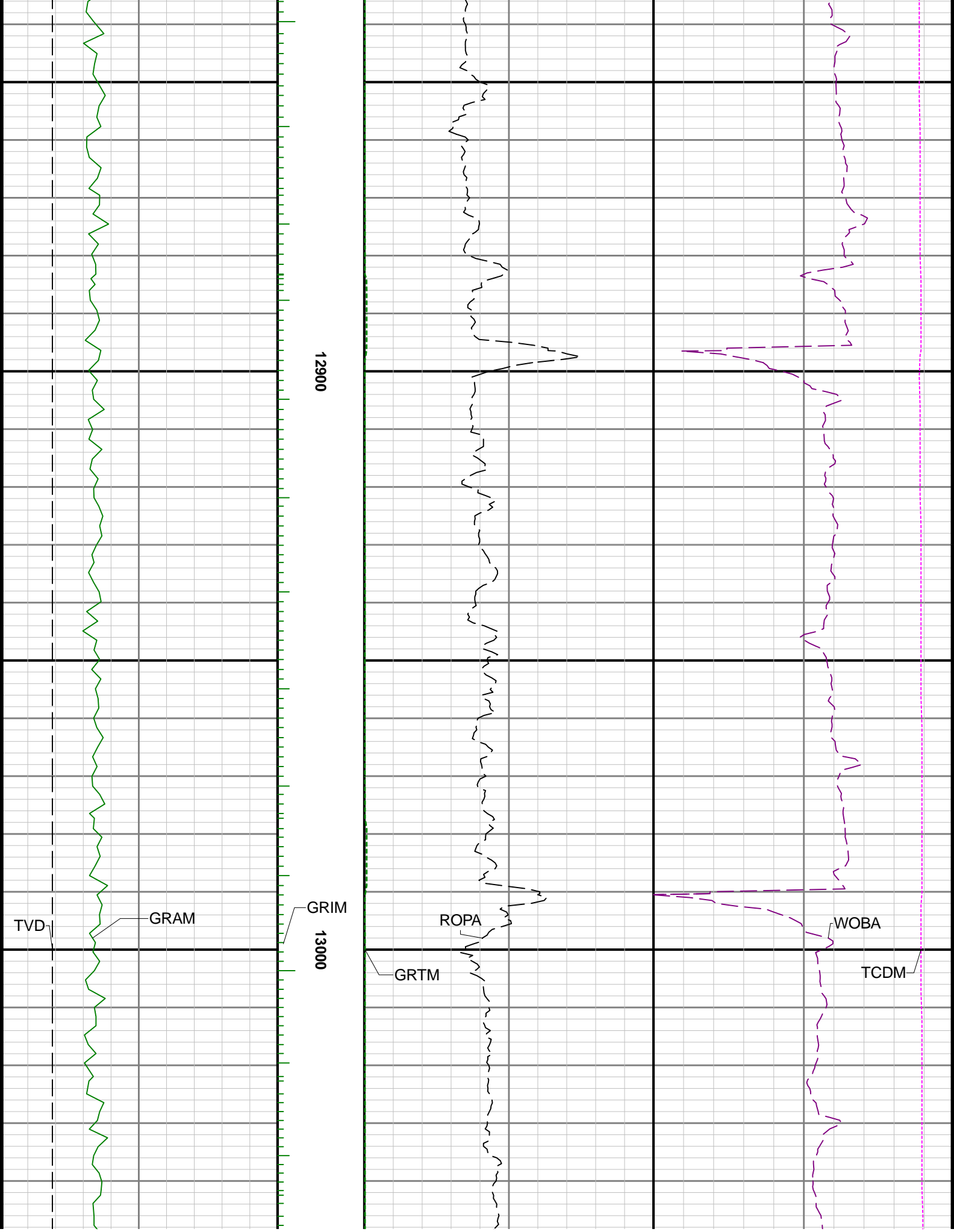


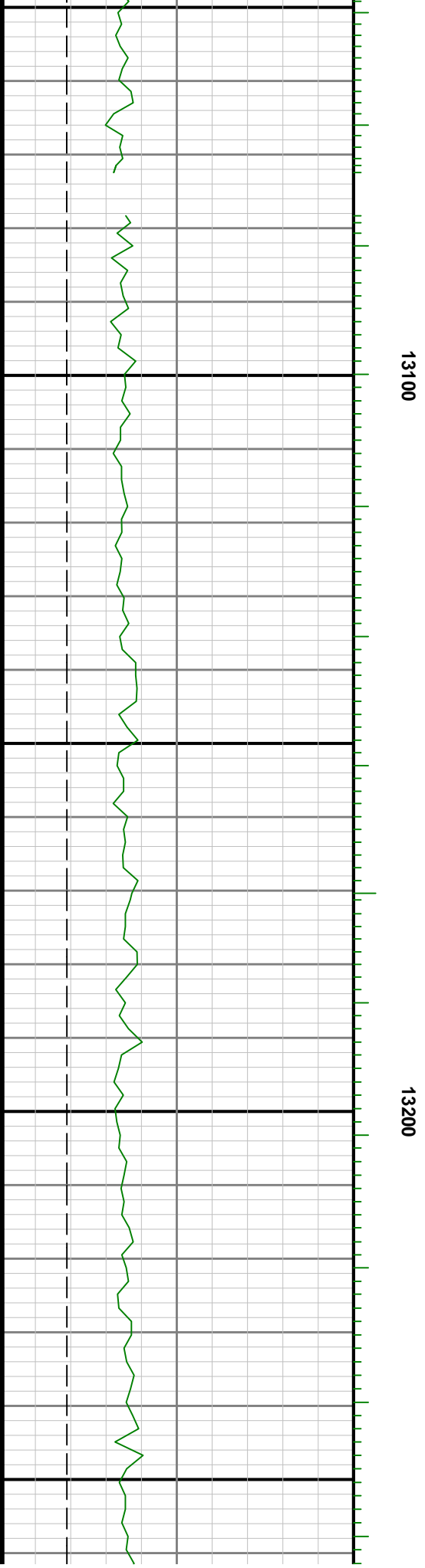
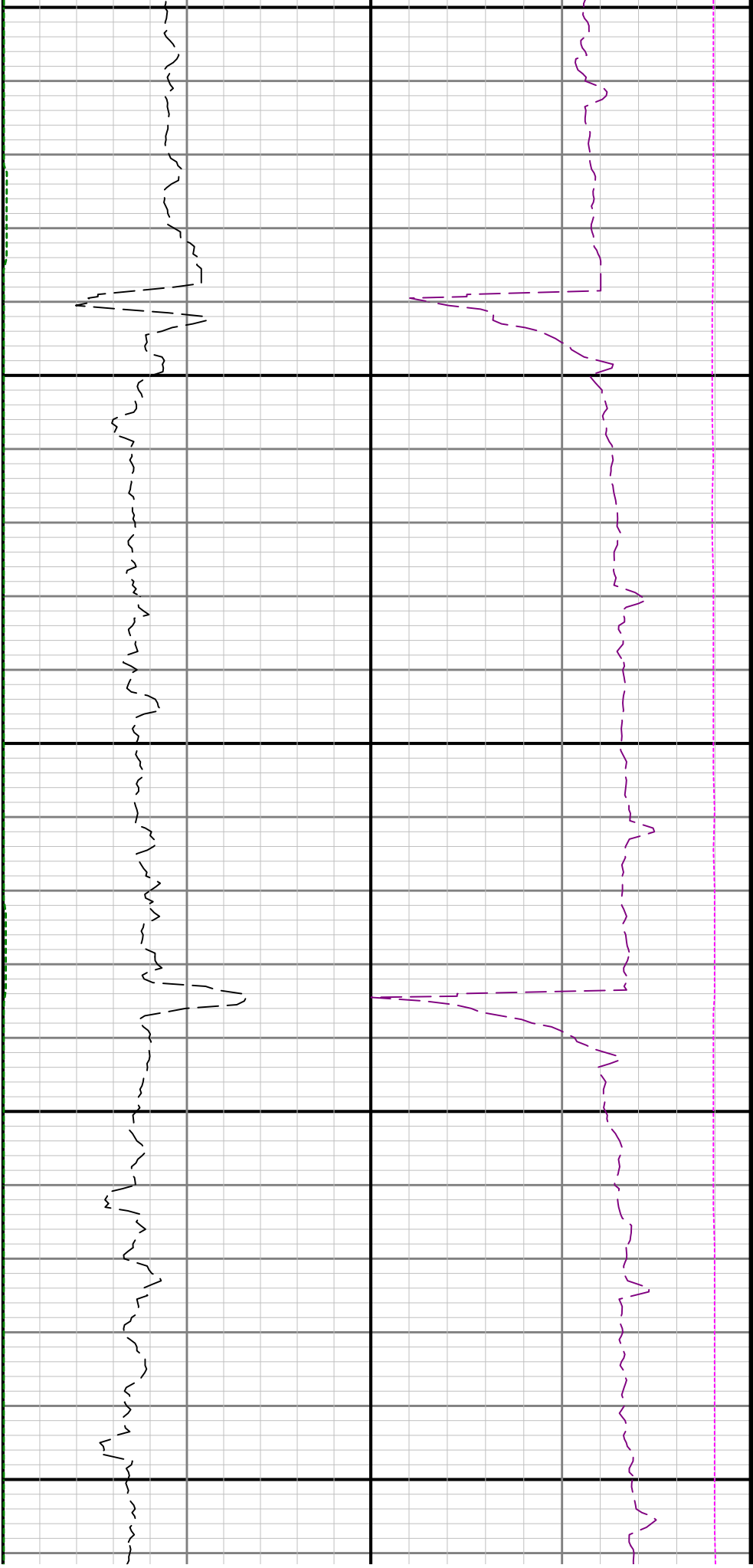


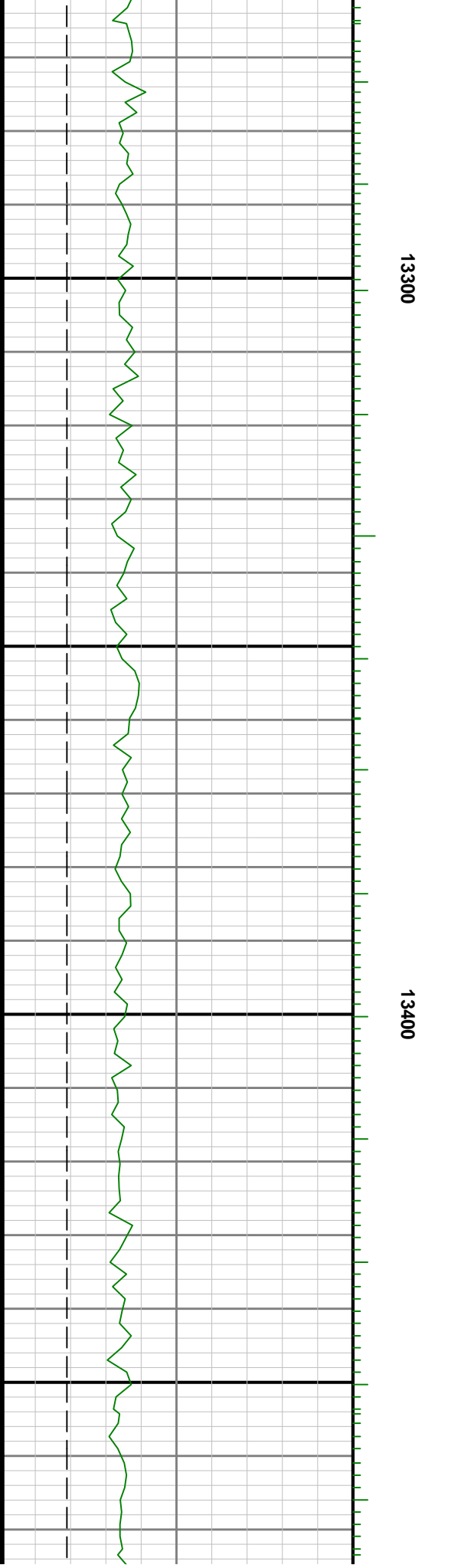
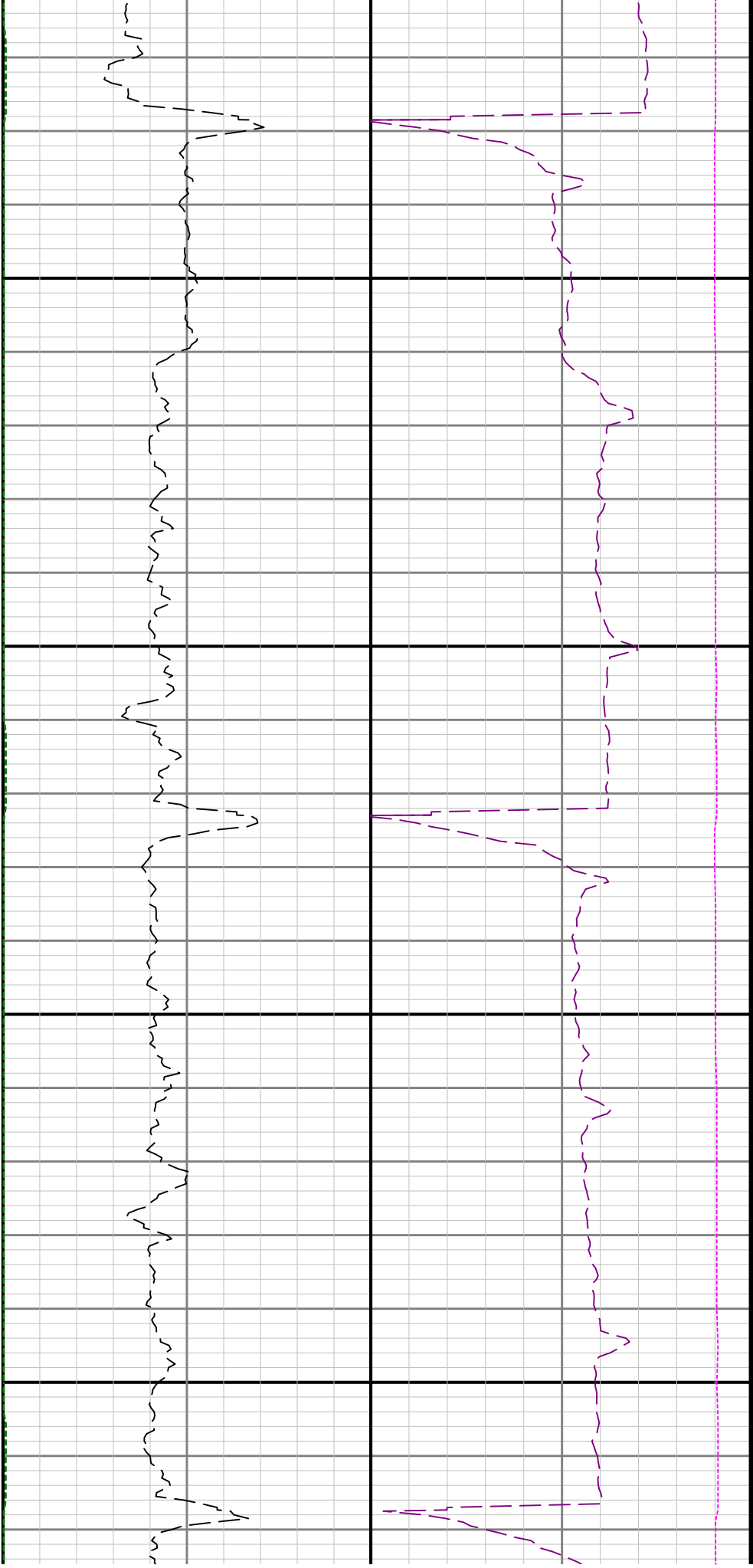
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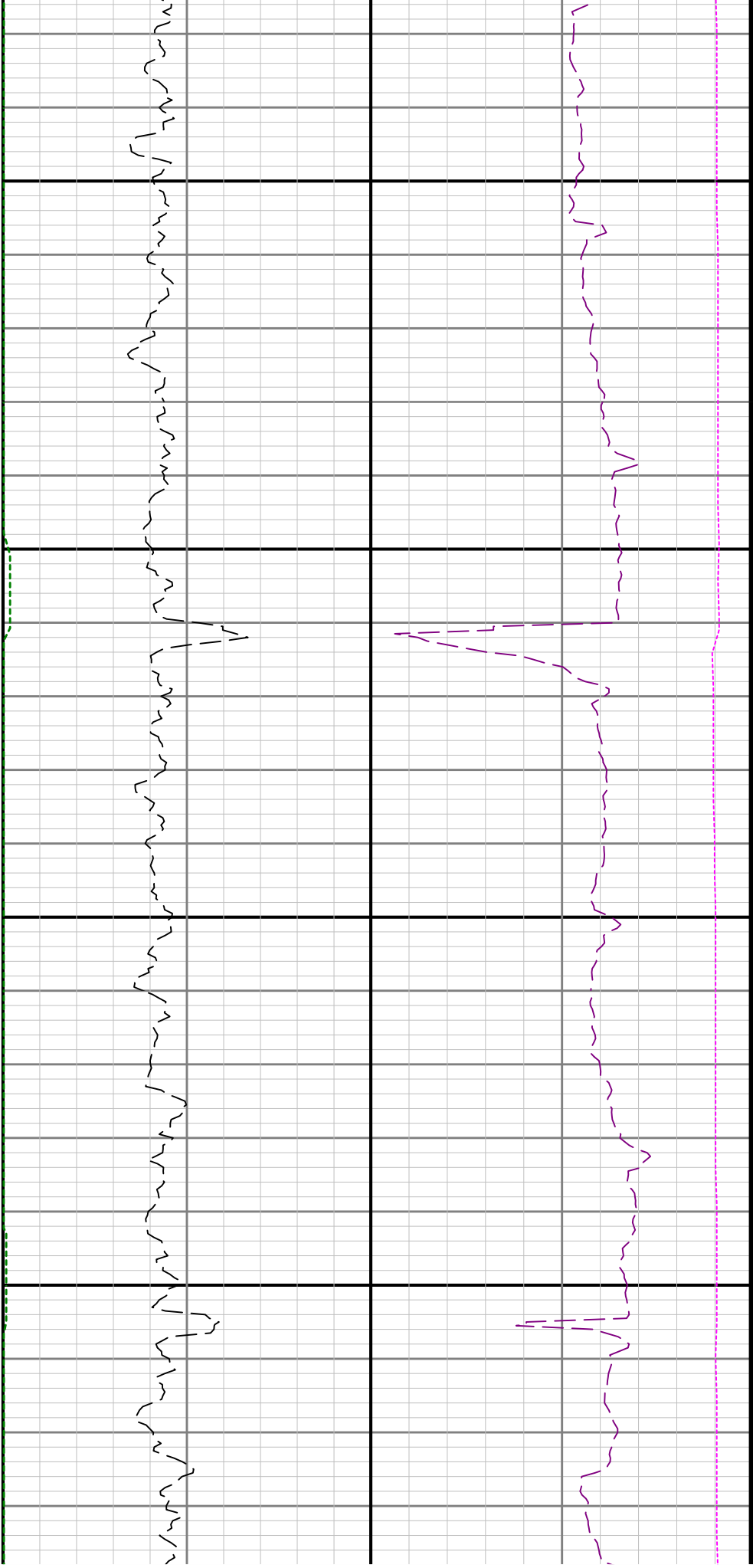
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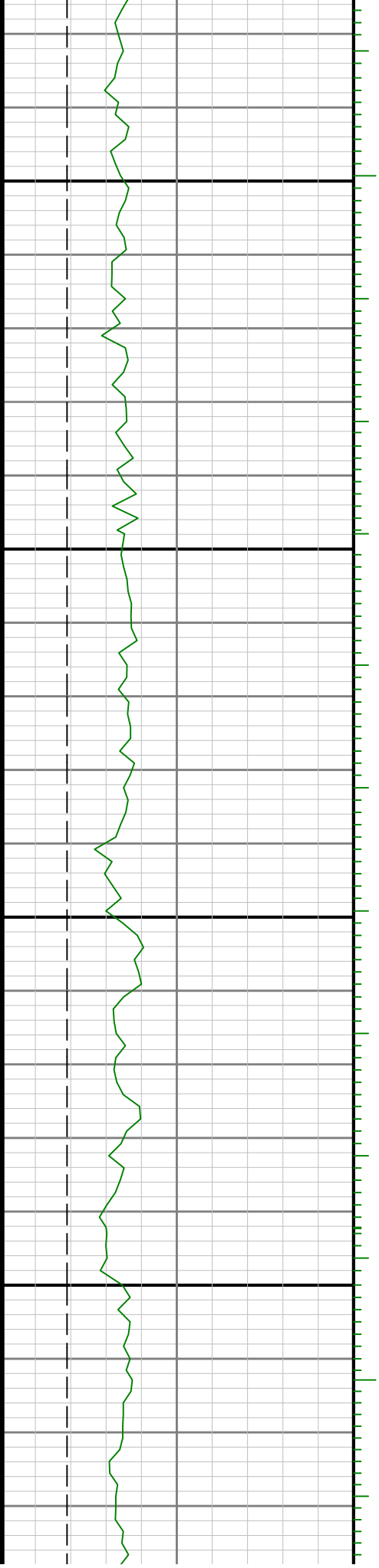


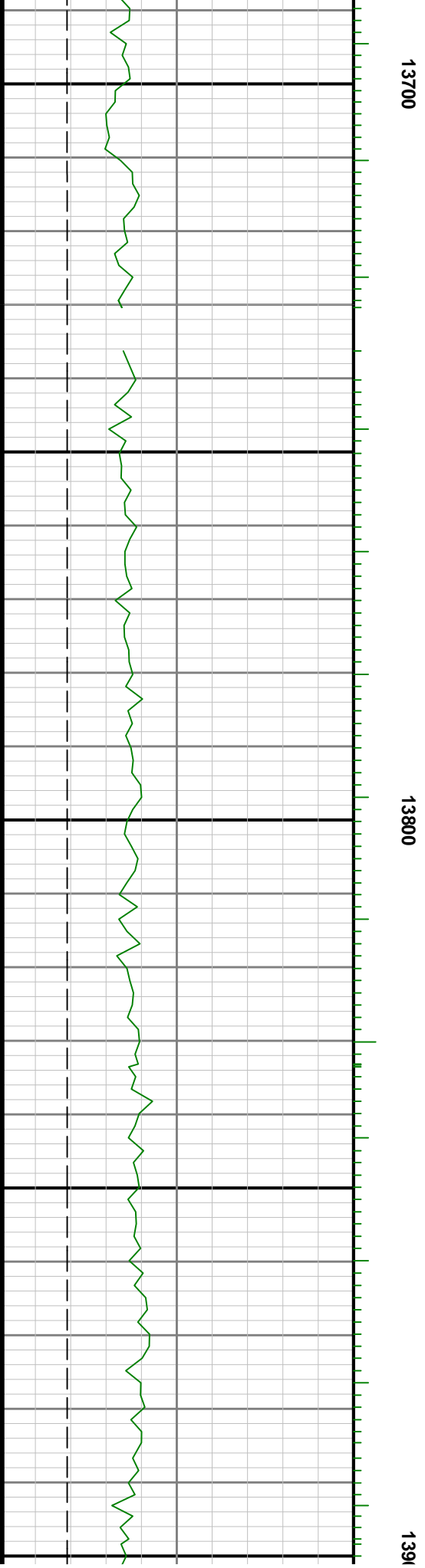
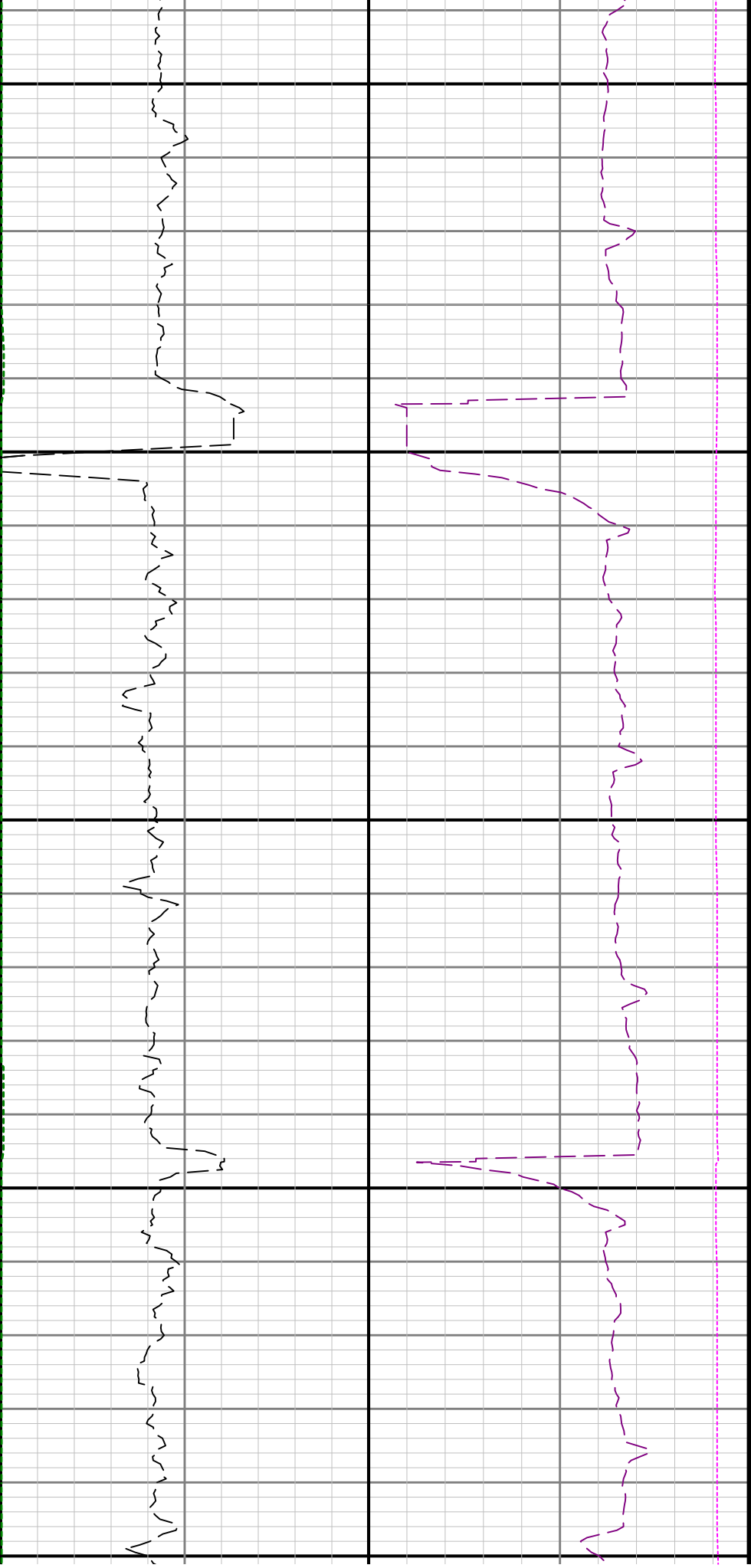


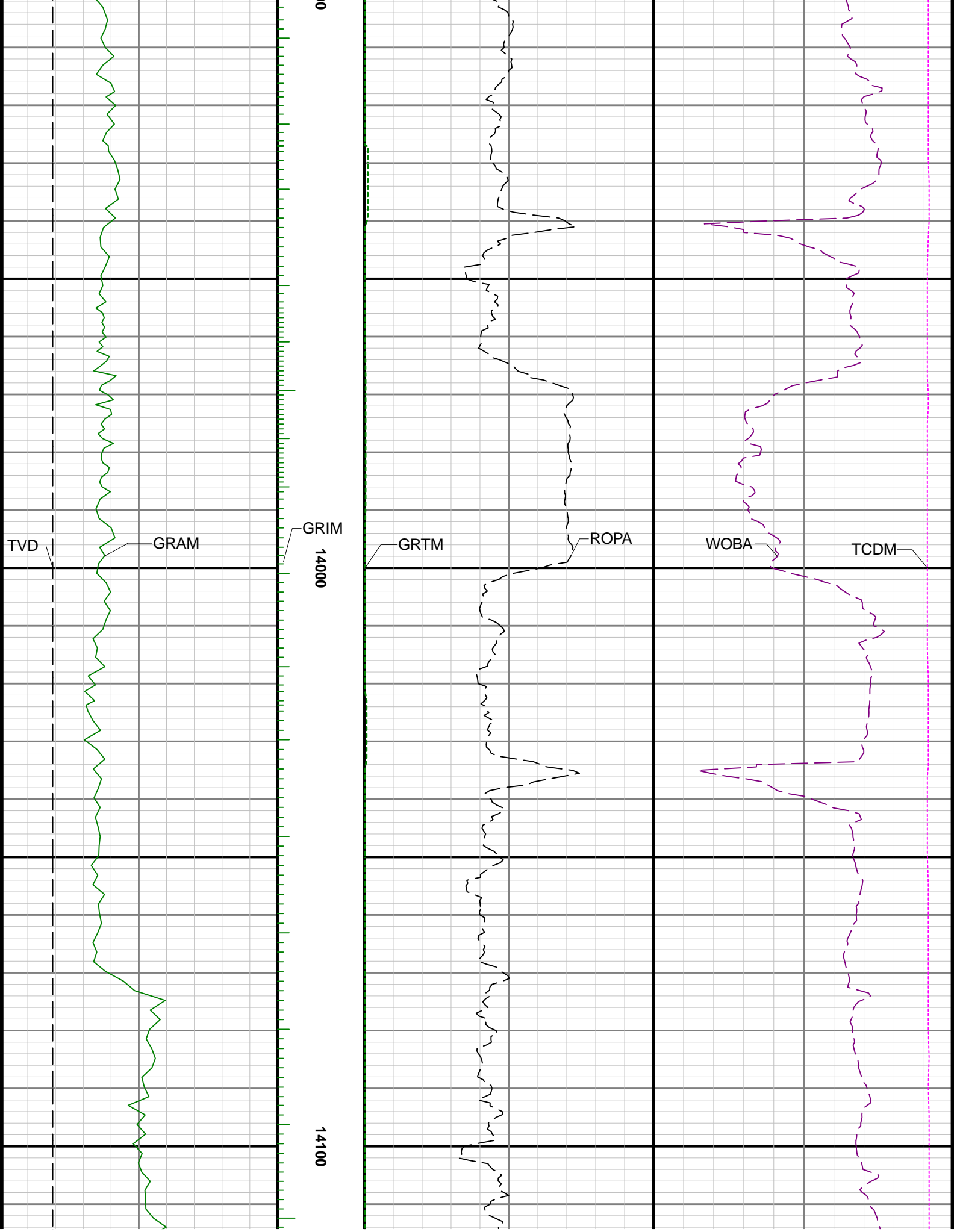


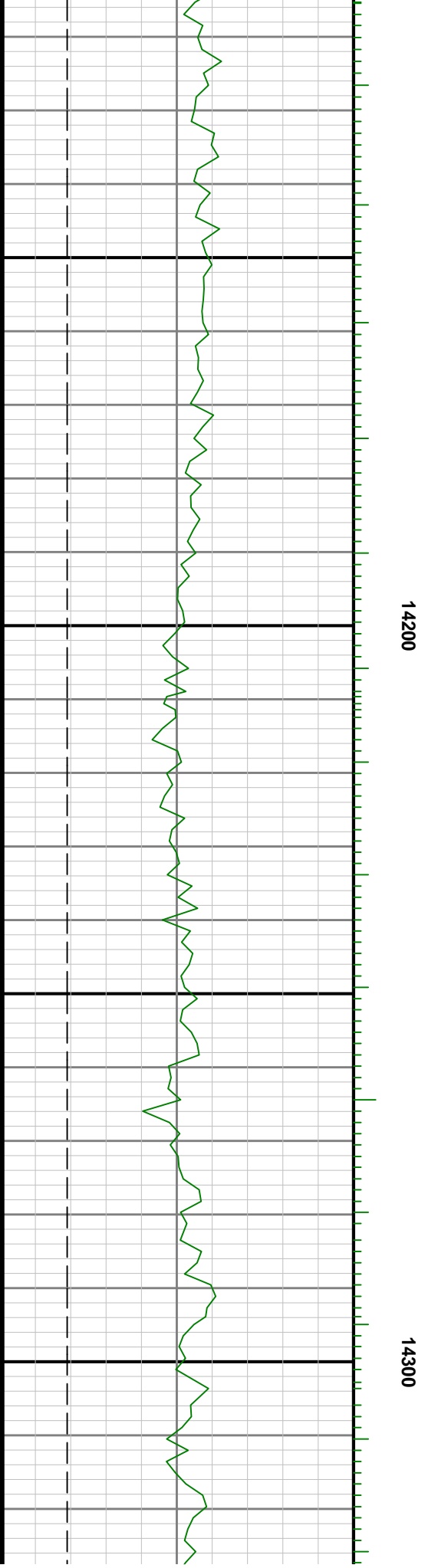
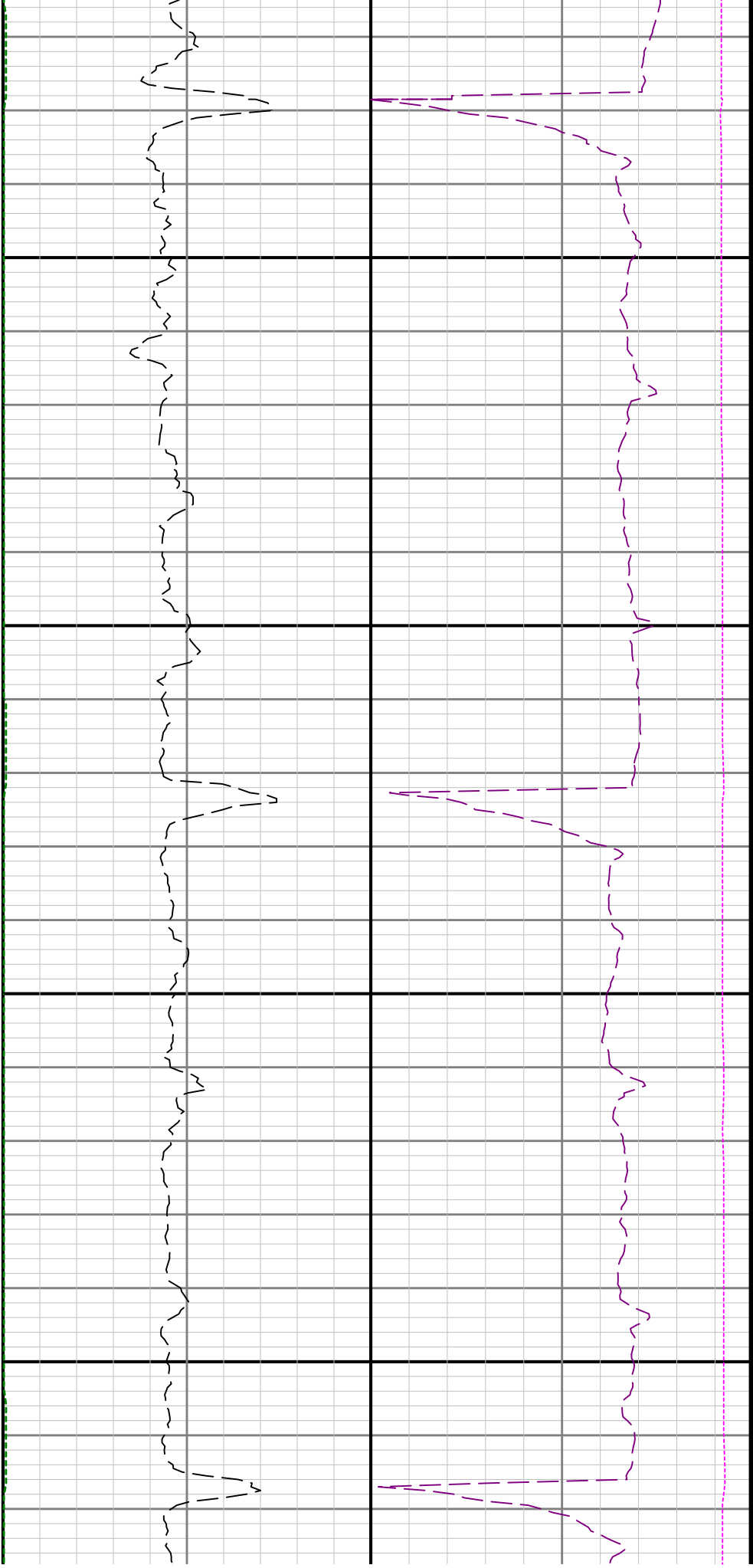
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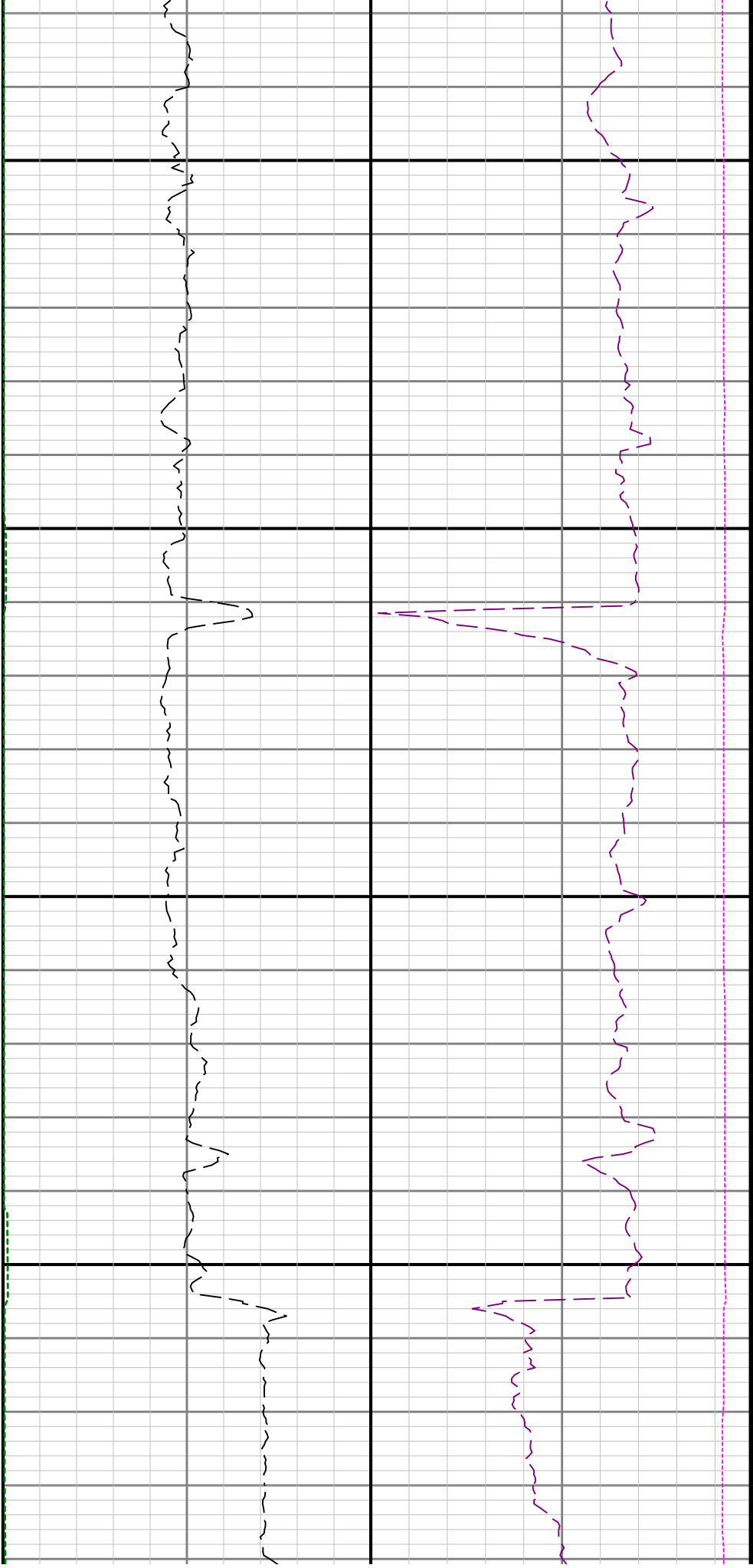
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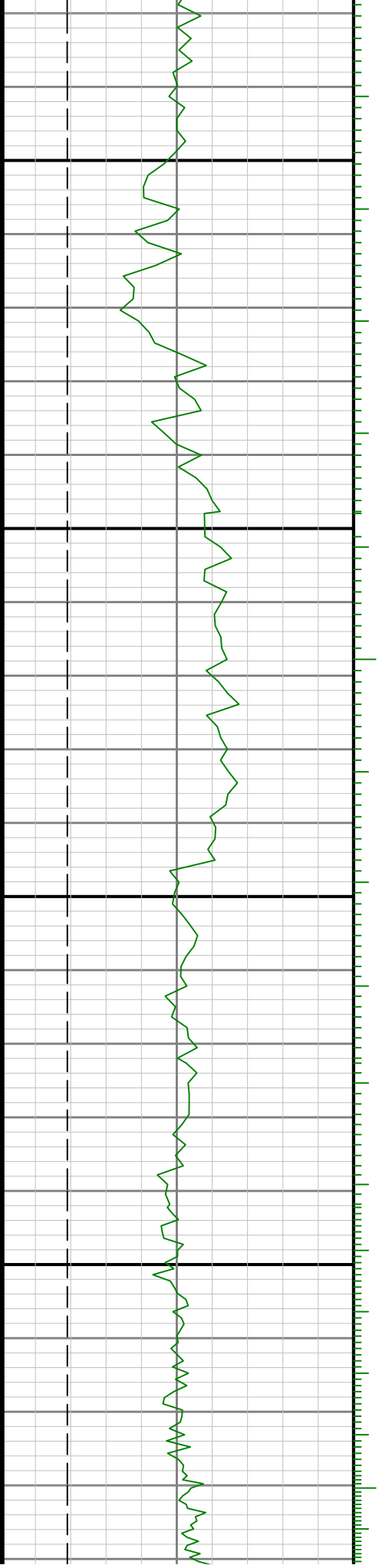


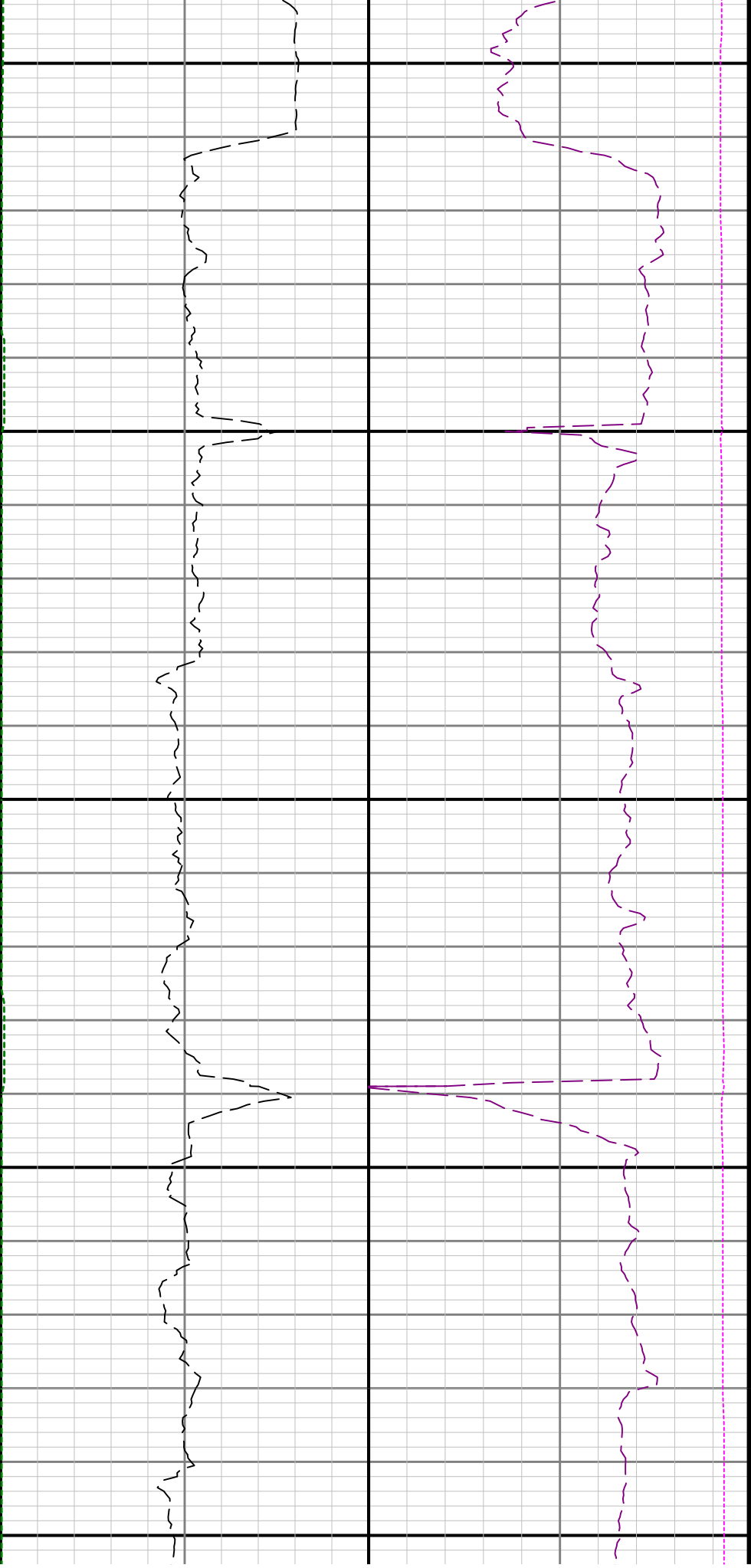




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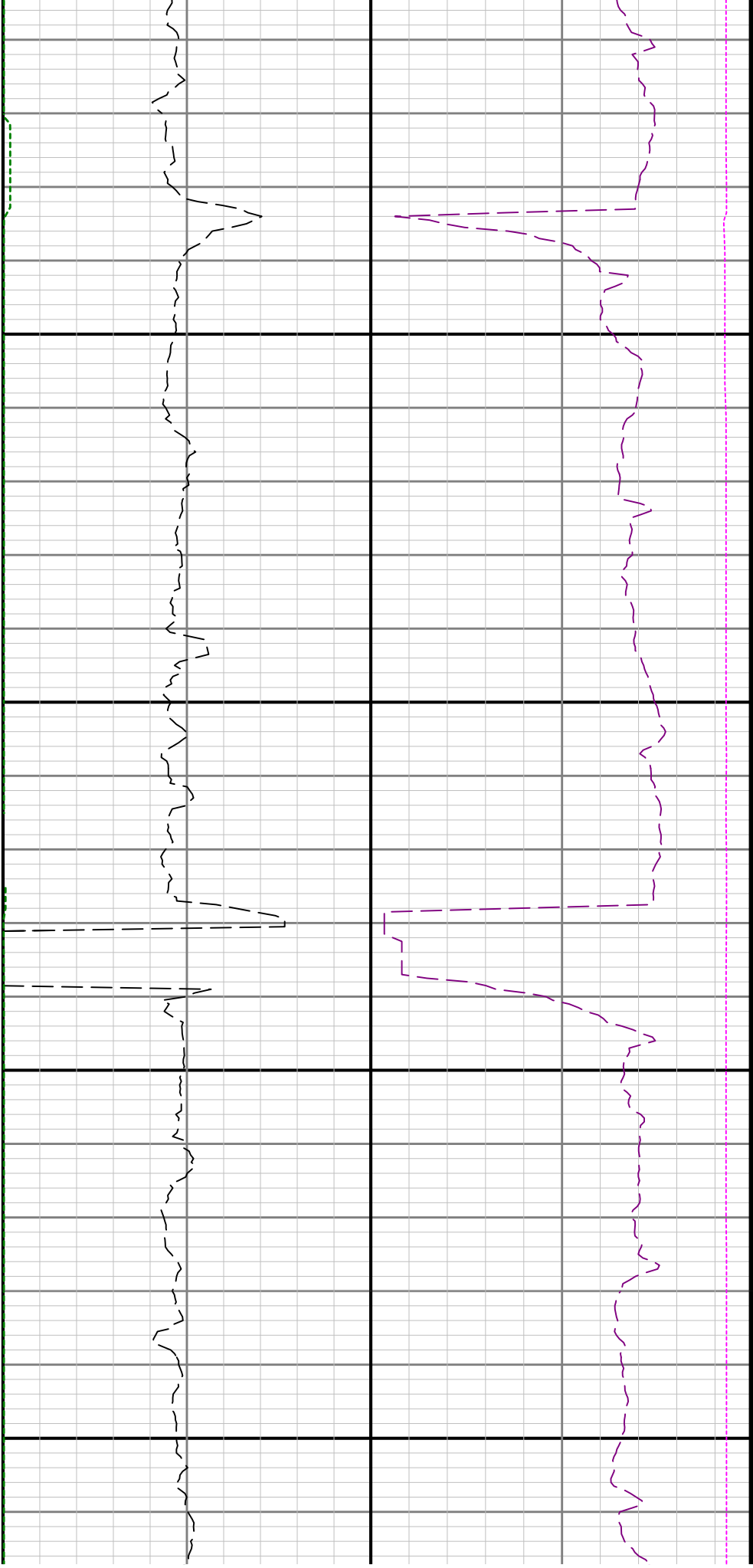
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14600

14700



14800

14900

