

LWD MEMORY LOG



Gamma Ray

Company: SRC Energy

Well: Trout 8N-23B-M

Field: DJ Basin

County: Weld County Country: United States

State: Colorado

Surface Location:

Latitude:

Longitude:

Other Services:

Final Print

API No: 05-123-46239

Job ID: 9189430

SEC:

27

TWN:

6N

RGE:

66W

Permanent Datum (P.D.): Ground Level

Elevation:

4719.00 ft

Elev. KB:

4744.00 ft

Log Measured From: Rig Floor

Above P.D.

25.00 ft

Elev. GL:

4719.00 ft

Dates Interval Drilled

Magnetic Field Reference

Date From: 2018-09-07

Top: (ft)

1821.00

Azi Reference North:

True

Date To: 2018-09-11

Bottom: (ft)

14900.00

Dip Angle: (deg)

66.77

Spud Date: 2018-06-04

Total Magnetic Field Strength: (nT)

52383

Borehole Record

Casing Record

Hole Size (in)

From (ft)

To (ft)

Size (in)

Weight (lb/ft)

From (ft)

To (ft)

13.500

20.00

1821.00

9.625

36.00

20.00

1811.00

8.500

1821.00

14900.00

Mud Record

Deviation Record

Type

From (ft)

To (ft)

Hole Size (in)

Interval (ft)

Inc | Azi (Start)

Inc | Azi (End)

Diesel-Oil Based Mud

25.00

14900.00

13.500

1821.00

0.001

71.46

8.500

13079.00

12.001

19.49

Acquisition System

Software Version

Other

Baker Hughes Cadence

RT 4.2

4.2.8155.1

Rig:

PD562

Contractor:

Precision Drilling

District:

RMD

Unit: D&E

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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 (ft)	Bottom (ft)	From (ft)	To (ft)	Start Logging	End Logging	
2	2	8.500	PDC	3.00	AutoTrak Curve	1821.00	14887.00	1821.00	14900.00	2018-09-07 23:18	2018-09-10 12:11	53.56

Crew

Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite
Garrett Gerdson	2018-09-07	2018-09-11						

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+ (%)
2018-09-07 14:30	2	1840.00	Diesel-Oil Based Mud	9.7	20	N/A	12.0	87/13	Active Pit	35000	0.00
2018-09-08 15:00	2	6088.00	Diesel-Oil Based Mud	9.6	16	N/A	9.0	76/24	Active Pit	38000	0.00
2018-09-09 15:00	2	10860.00	Diesel-Oil Based Mud	9.8	23	N/A	10.0	74/26	Active Pit	39000	0.00

2018-09-09 15:00	2	10860.00	Diesel-Oil Based Mud	9.8	22	N/A	10.0	74/26	Active Pit	39000	0.00
2018-09-10 15:00	2	14900.00	Diesel-Oil Based Mud	10.0	22	N/A	10.0	73/27	Active Pit	40000	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)
2	ATC_SU	14316022	Near Bit Inclination	5.93	6.73	7.000	4.330
2	ATC_SU	14316022	Near Bit VSS	5.93	6.73	7.000	4.330
2	ATC_MWD	14146740	Gamma (single)	2.22	12.33	7.000	3.250
2	ATC_MWD	14146740	Directional (mag)	12.27	22.38	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

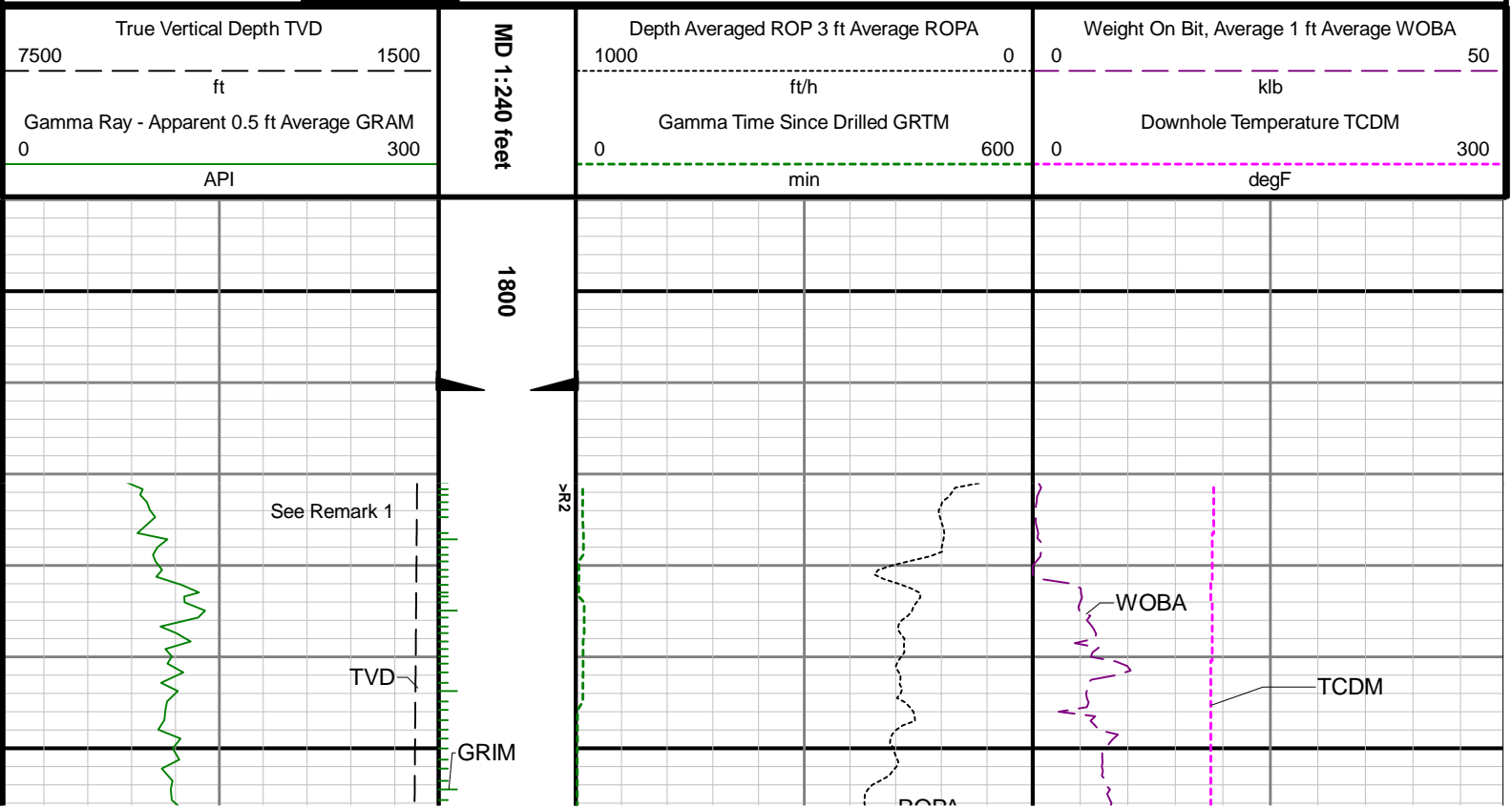
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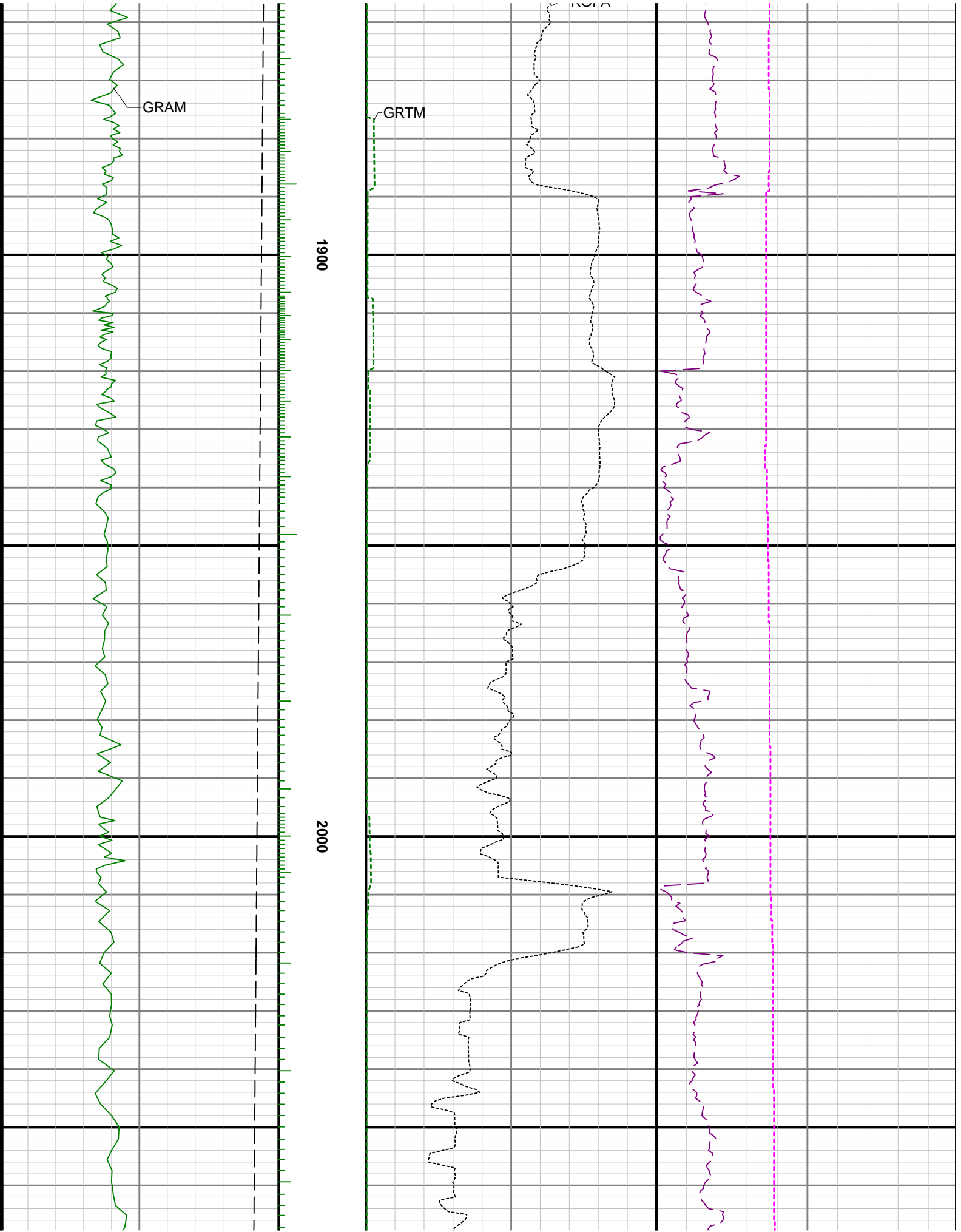
1	Depth measurements obtained from a depth control system not supplied or operated by Baker Hughes. Due to lack of control by Baker Hughes logging engineers, depth calibrations and measurements could not be independently verified.
2	Baker Hughes LWD Run 1 utilized 8 inch NaviTrak service (Directional only) behind a 13 1/2 inch bit and steerable assembly from surface to 1821 feet MD (surface to 1795 feet TVD). No logging data was acquired during this run.
3	Baker Hughes LWD Run 2 utilized 6 ¾ inch NaviGamma services (Gamma Ray and Directional) behind an 8 ½ inch bit and rotary steerable assembly from 1821 to 14900 feet MD (1795 to 6974 feet TVD).
4	Gamma Ray Apparent (GRAM) is presented 0 to 300 API per customer request.

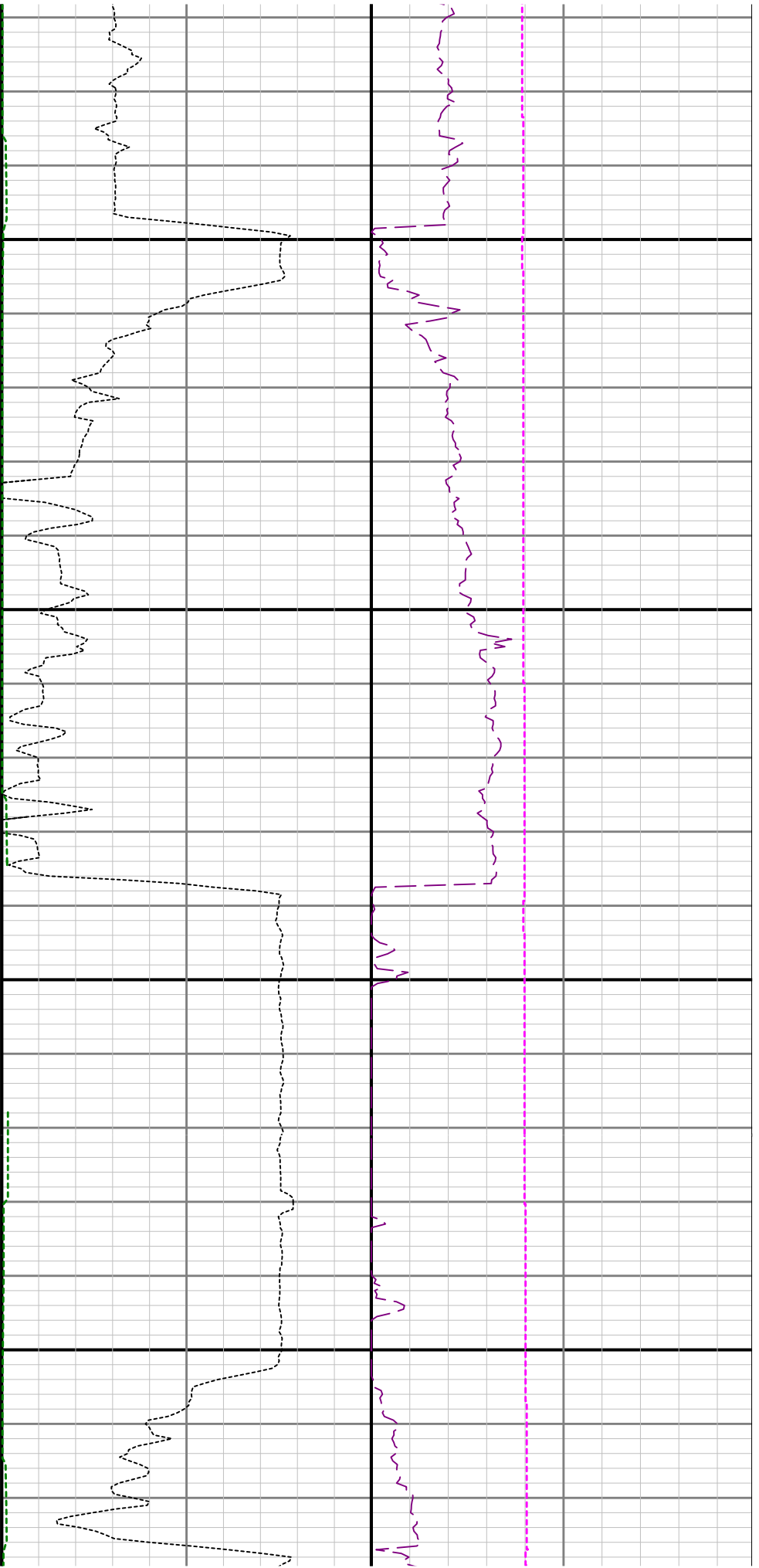
Remarks

Number	Measured Depth (ft)	Hole Section (in)	Run No.	Remark
1	1825.00	8.500	2	Gamma Ray logging operations began at 1821 feet (1782 feet TVD).
2	14895.00	8.500	2	The interval from 14887 to 14900 feet MD (6974 feet TVD) was not logged due to sensor to bit offset at well TD.

<div> <div>BAKER HUGHES</div> <div>a GE company</div> </div>	Company	SRC Energy	
	Well	Troudt 8N-23B-M	
	Interval	Date From: 2018-09-07 21:12	Top: 1821.00 ft
	Created	Date To: 2018-09-11 00:51	Bottom: 14900.00 ft
		2018-09-11 18:31:30	

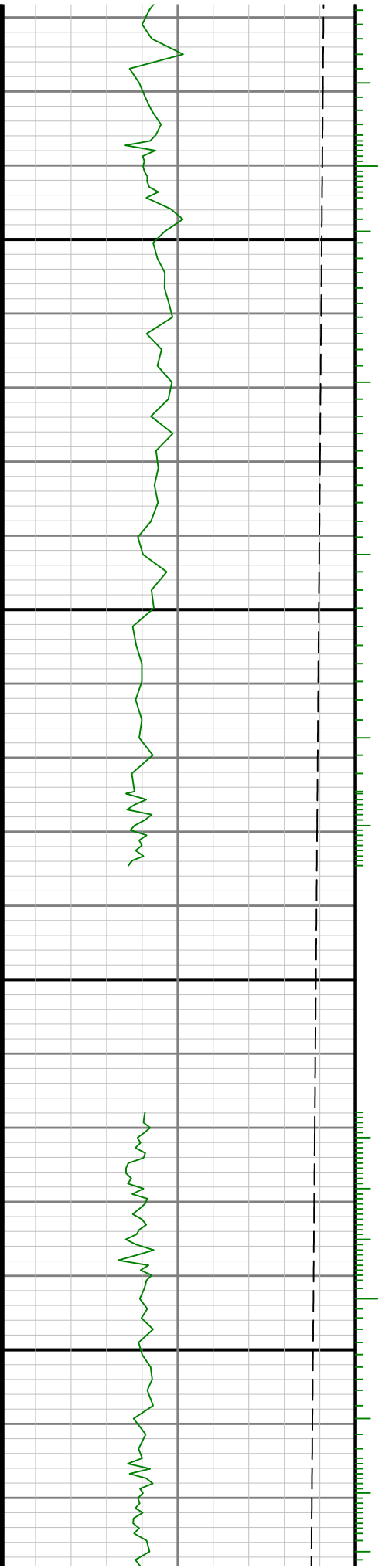


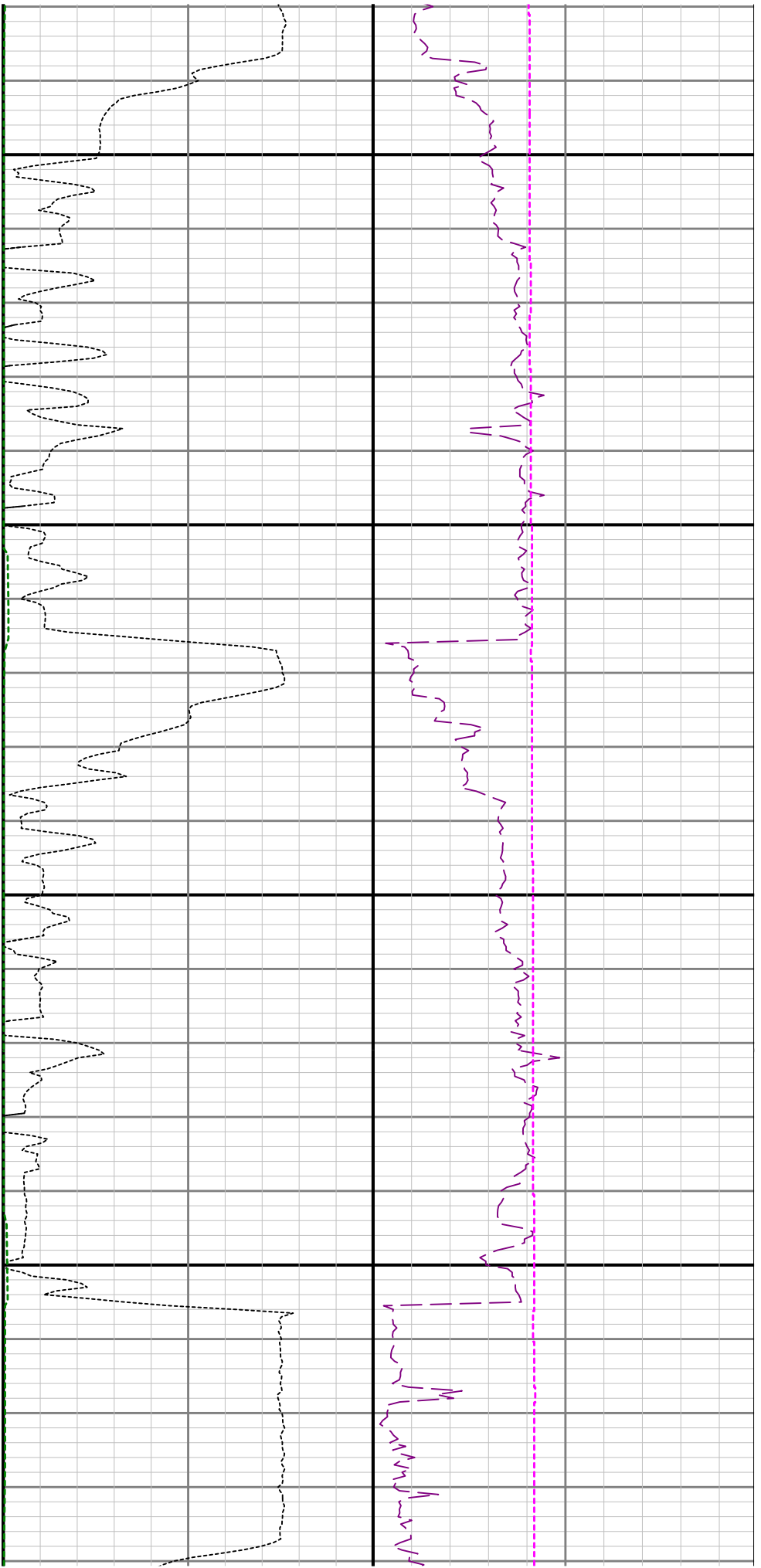




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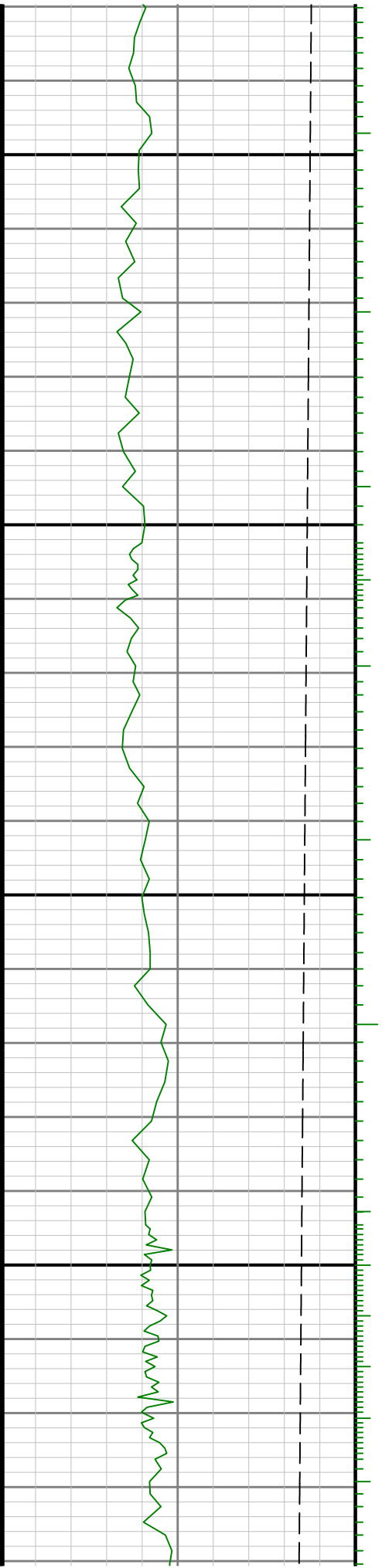
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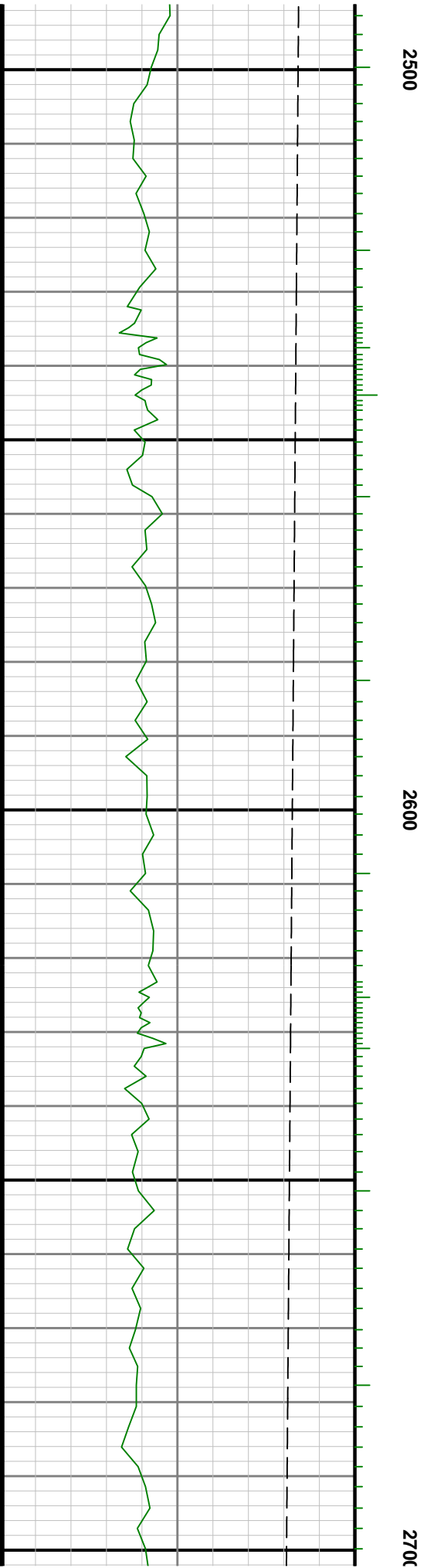
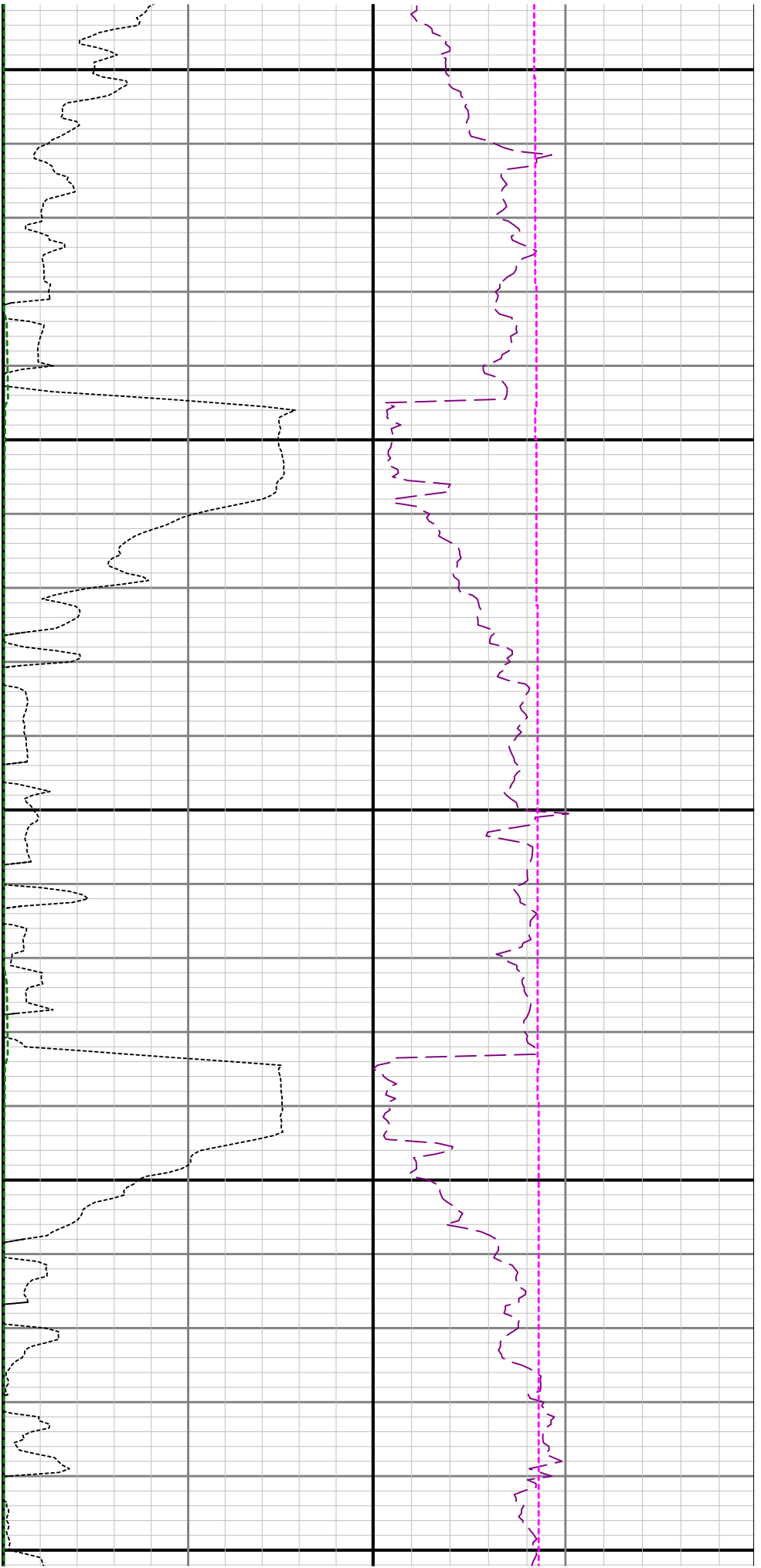


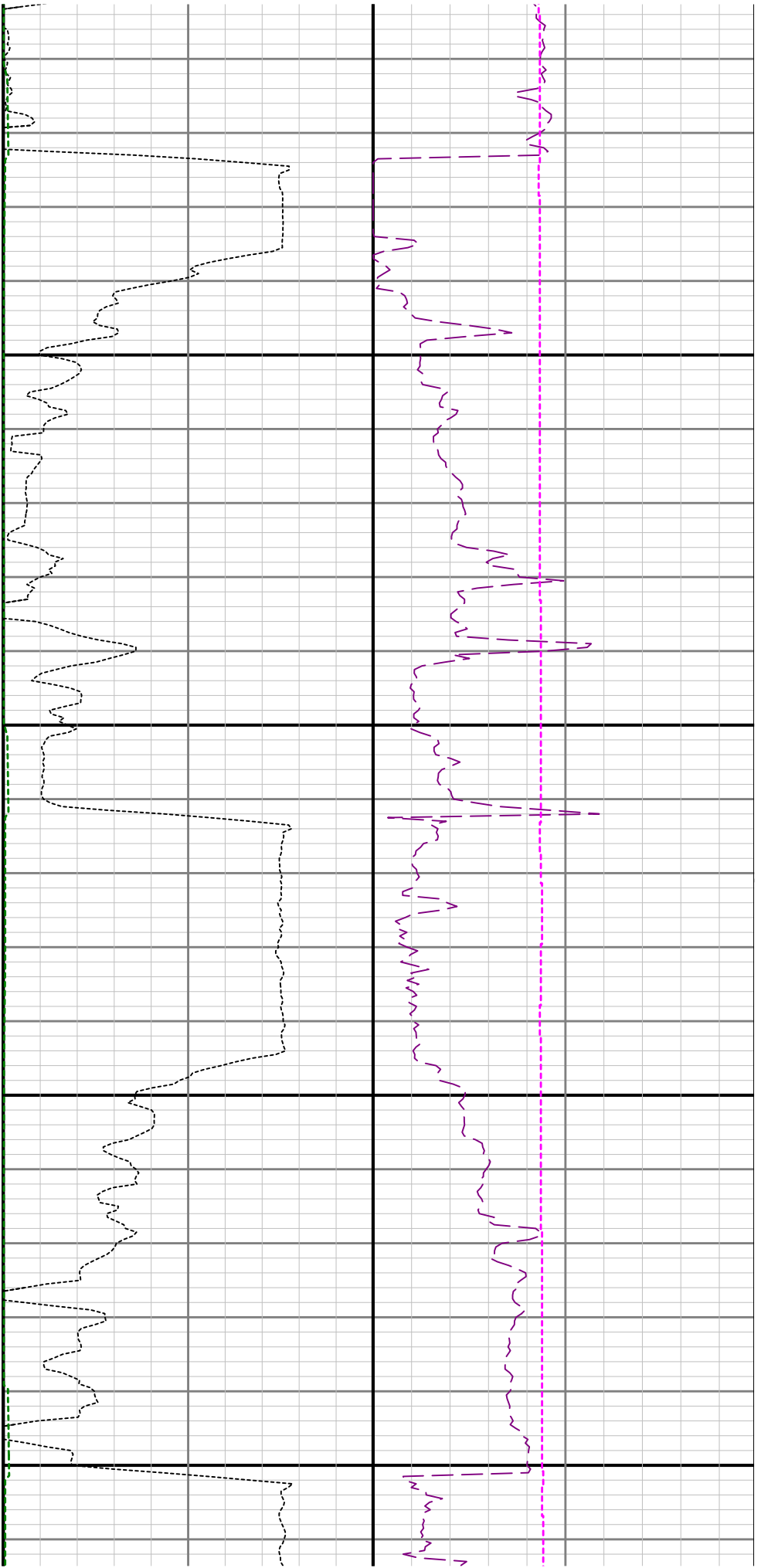


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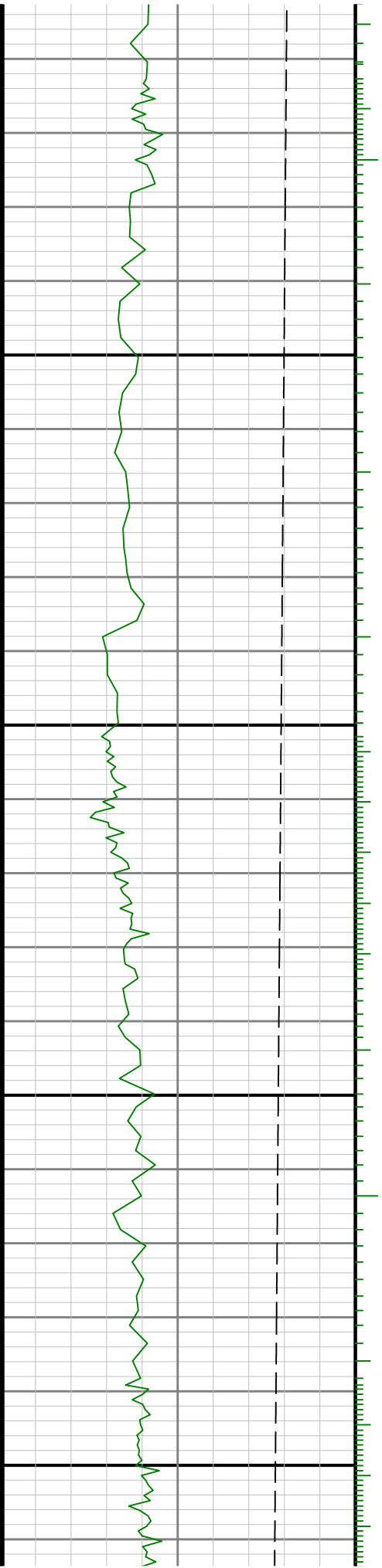


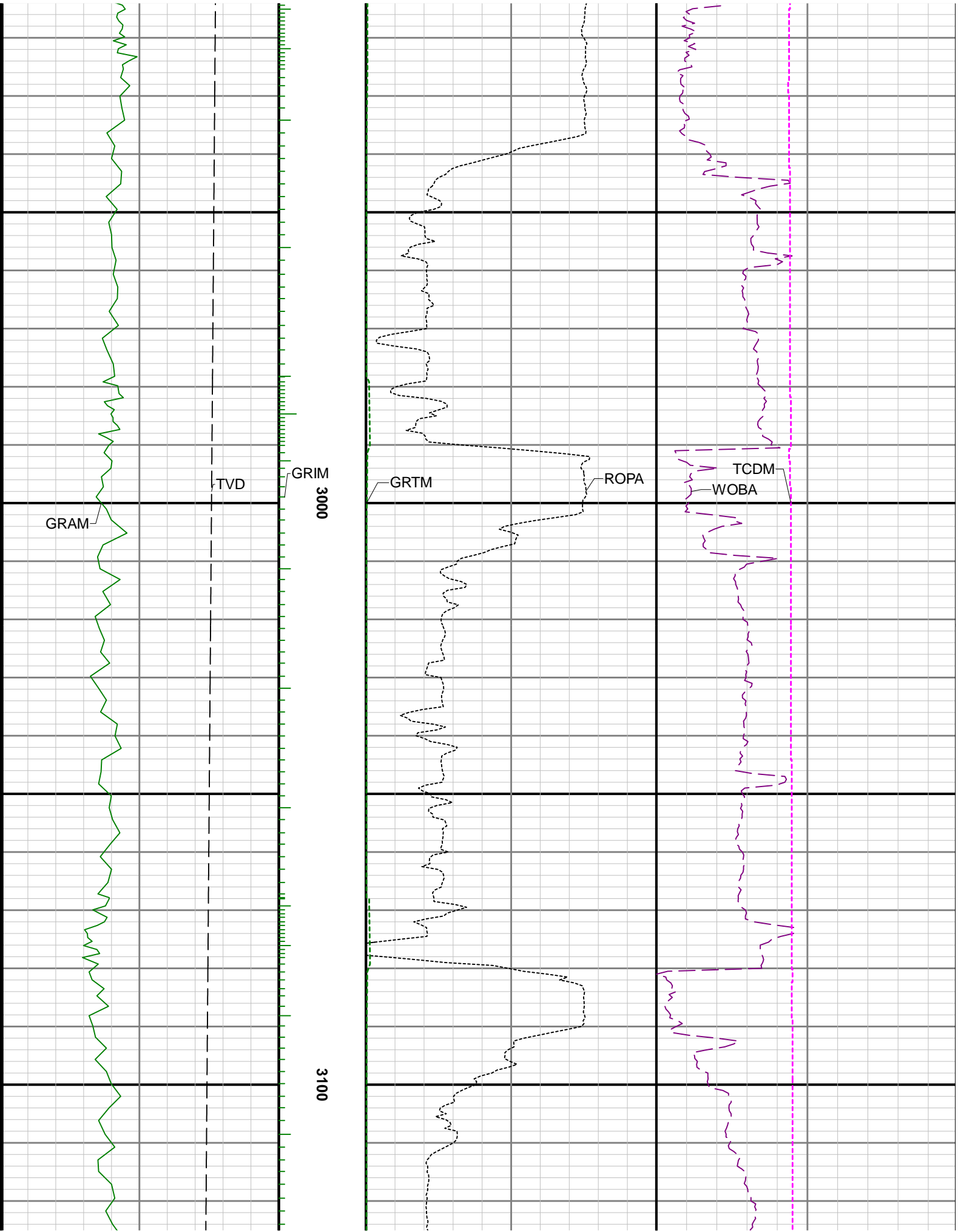


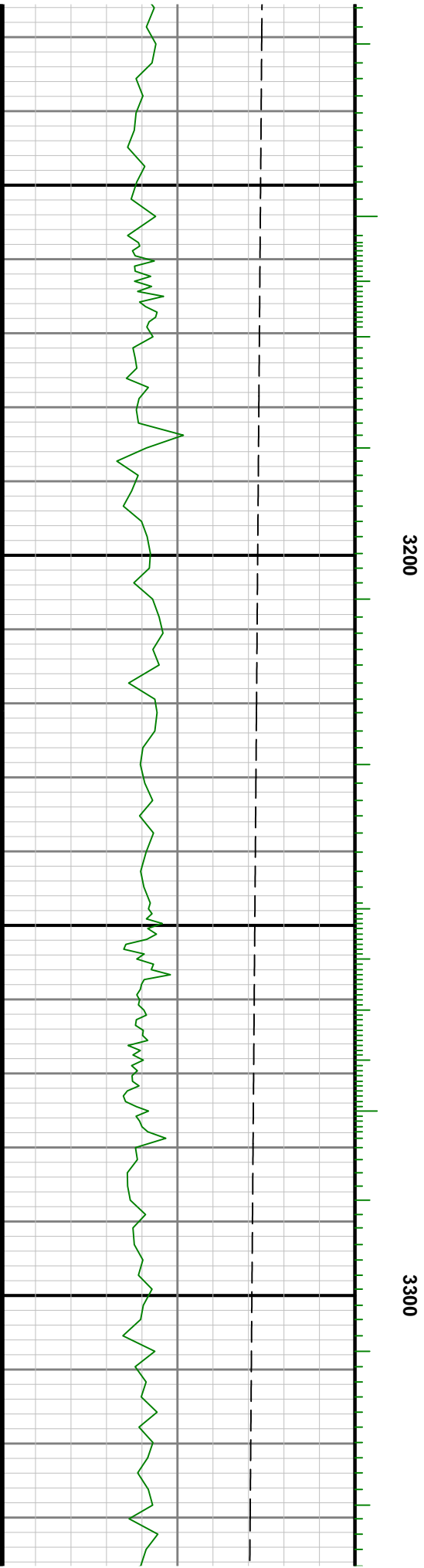
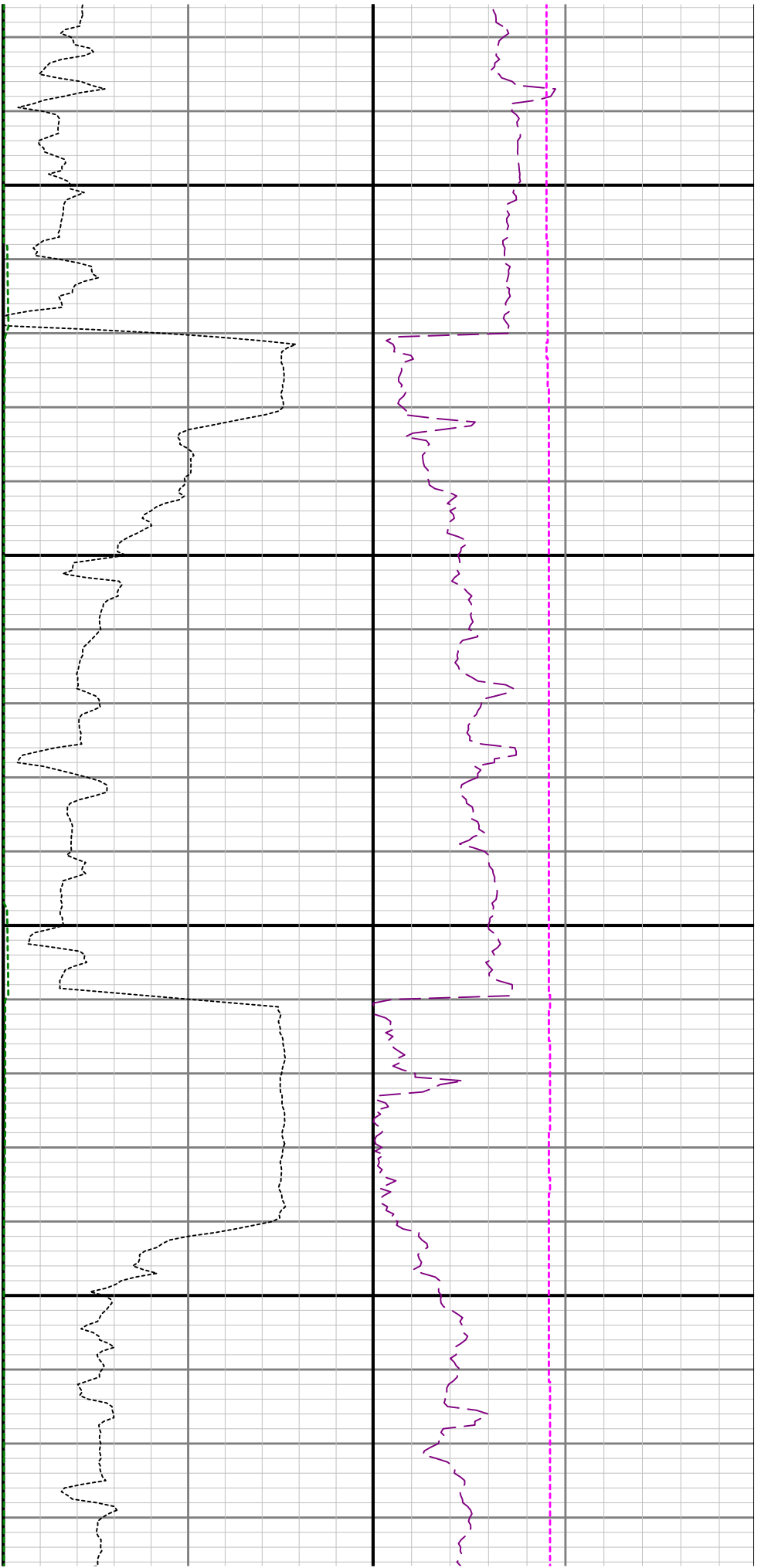


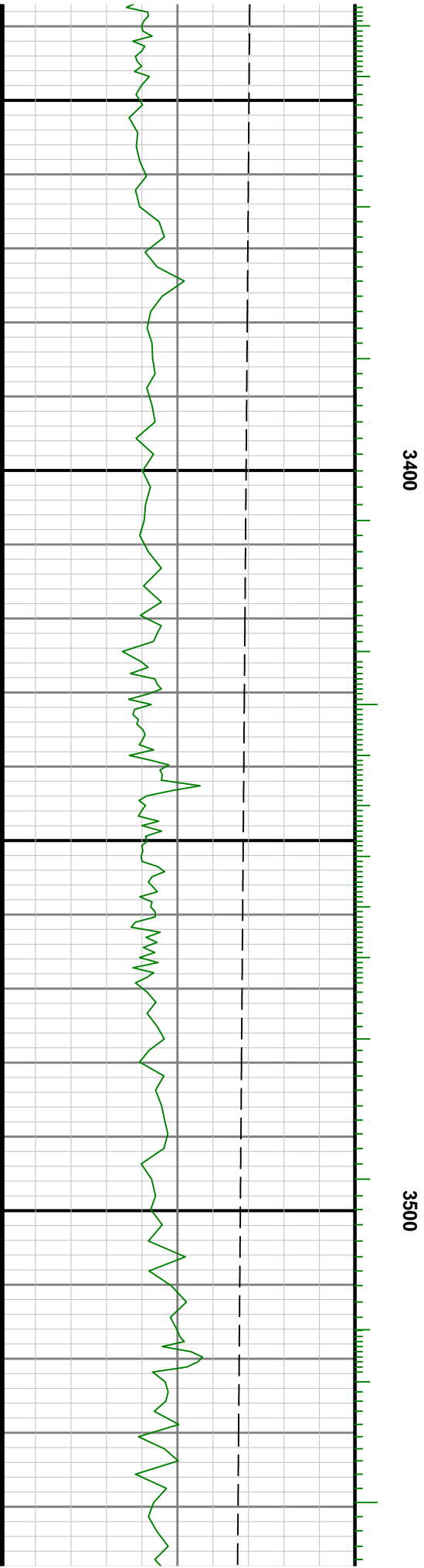
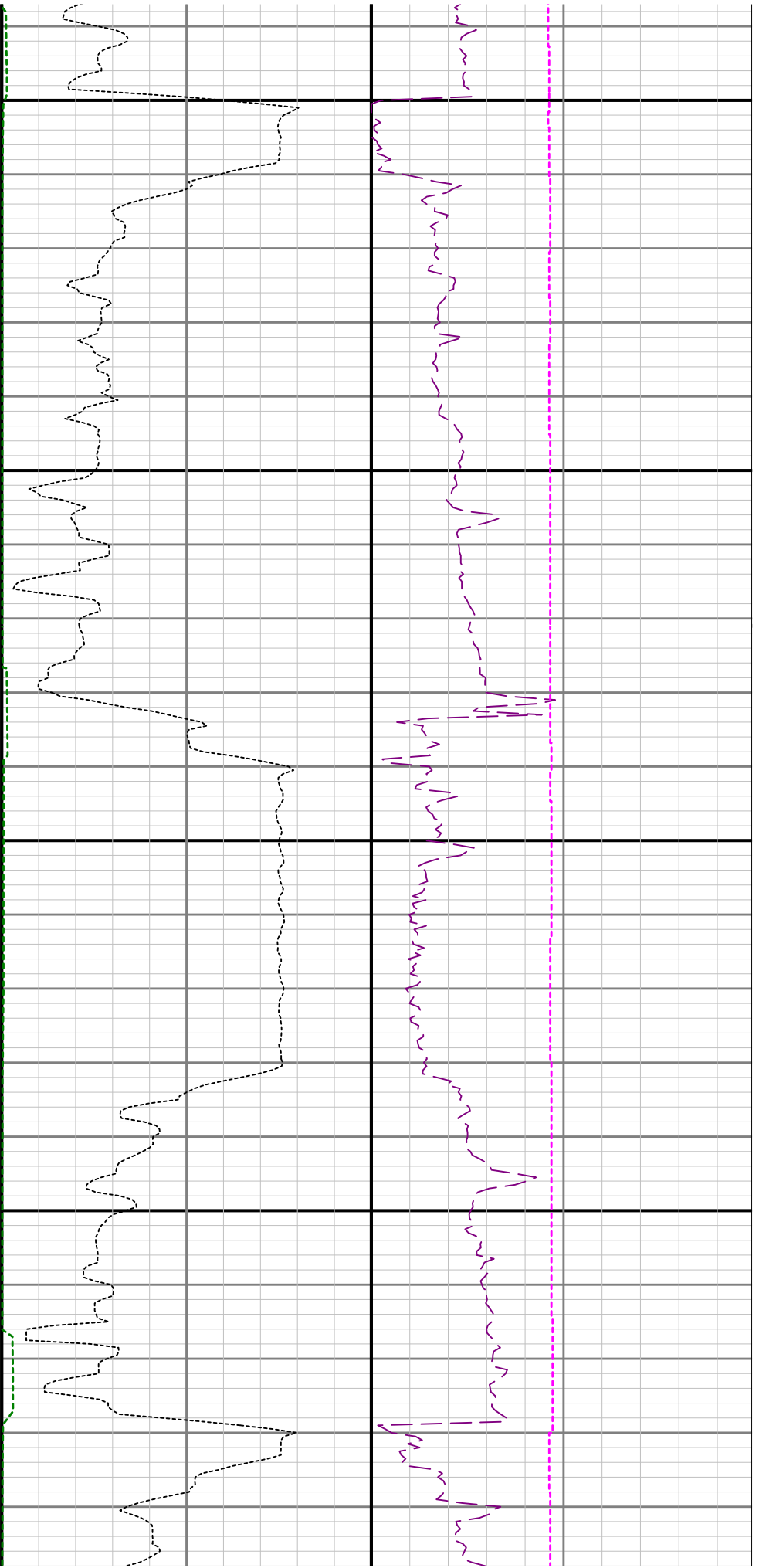
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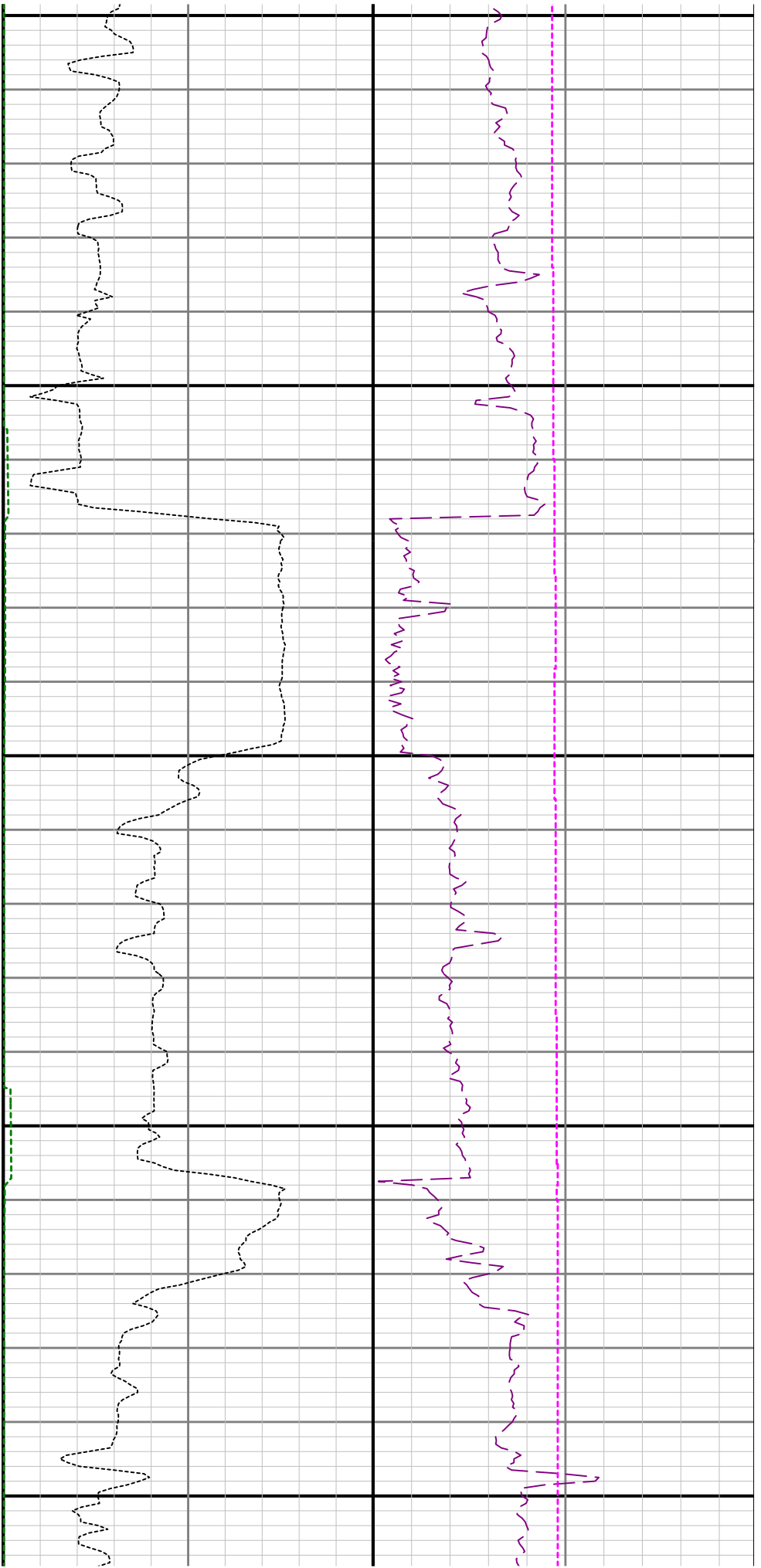
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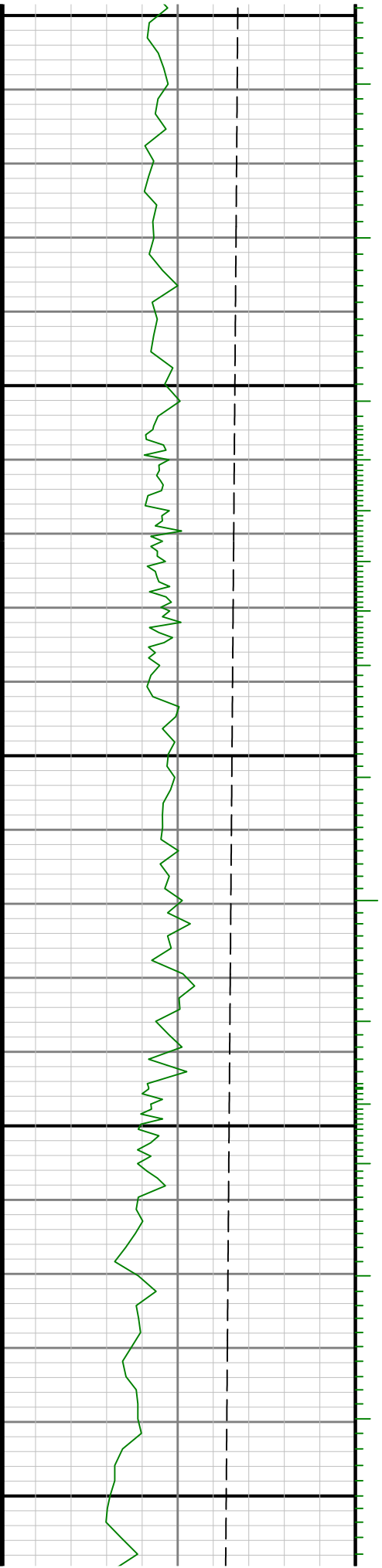


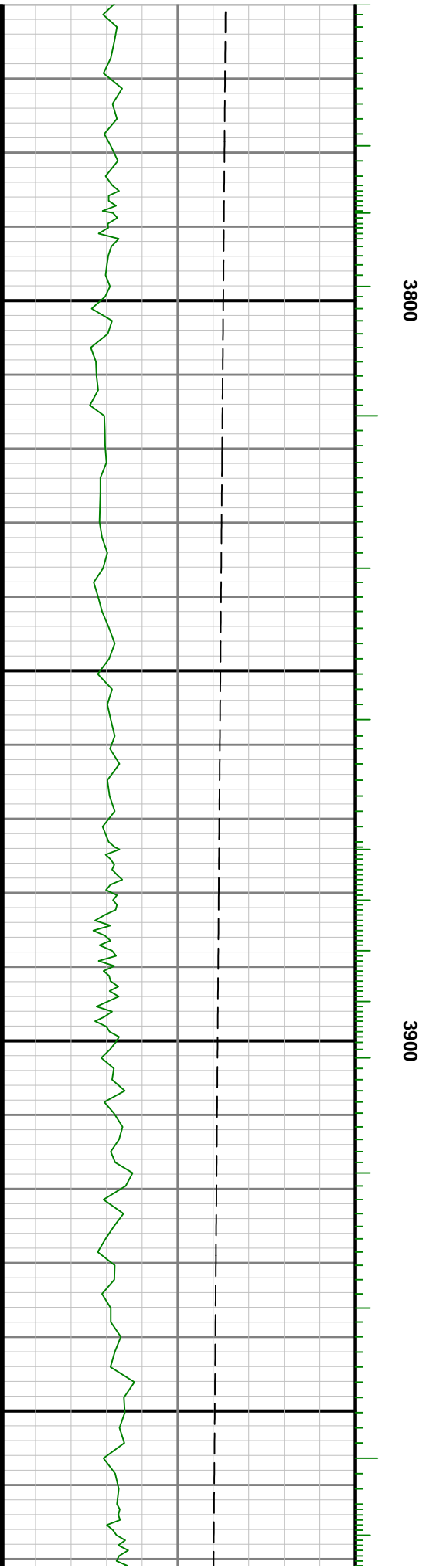
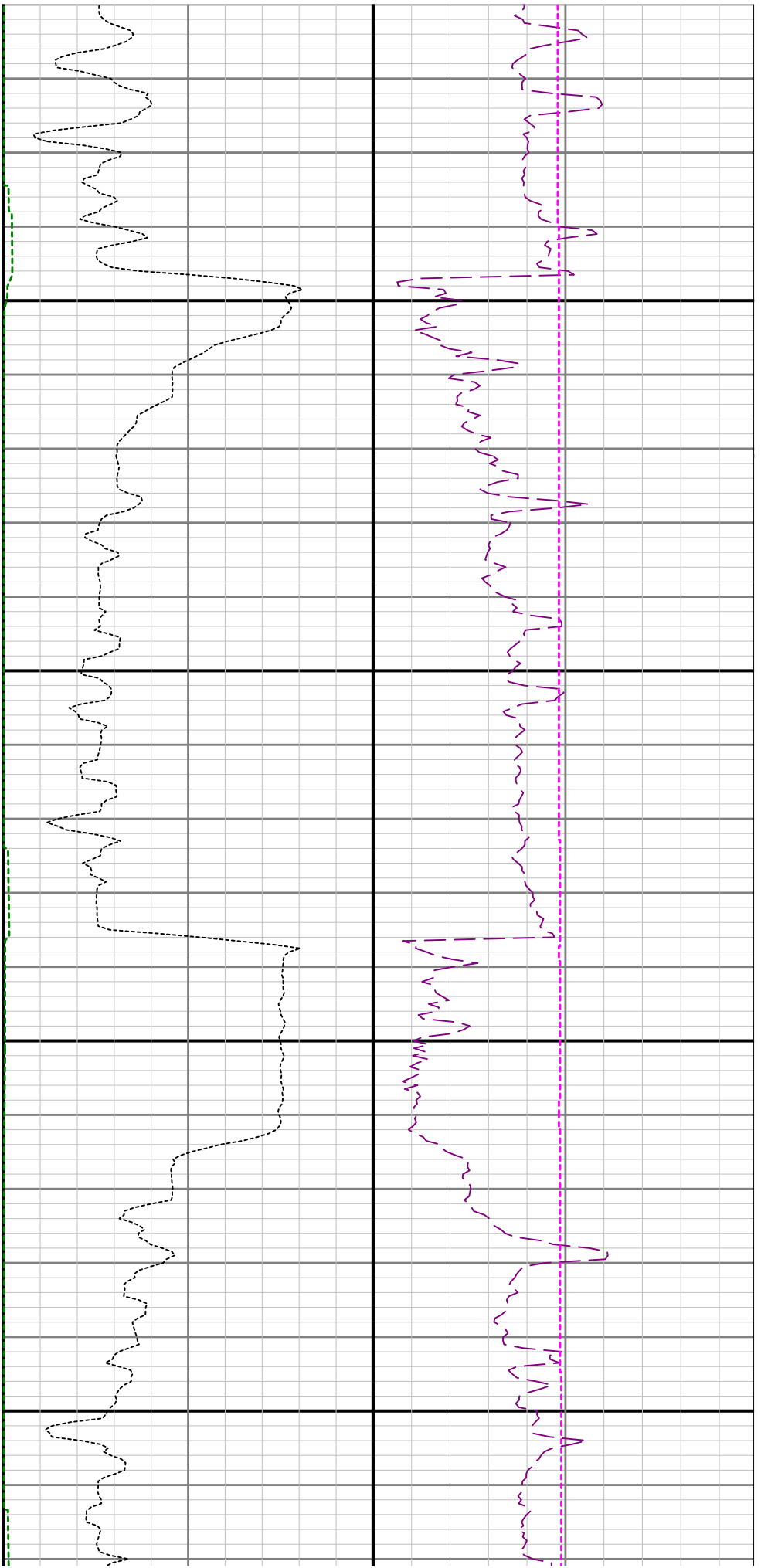


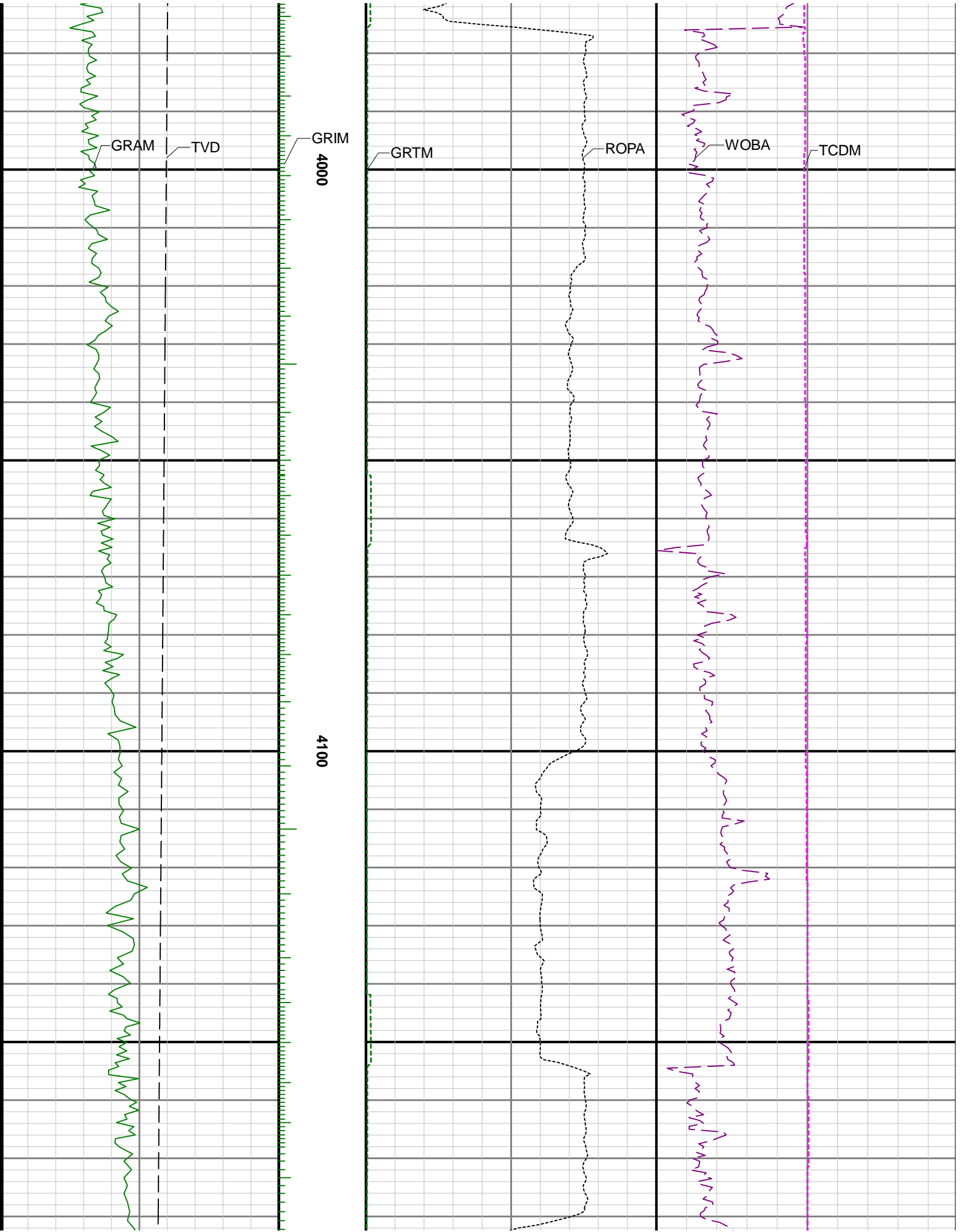


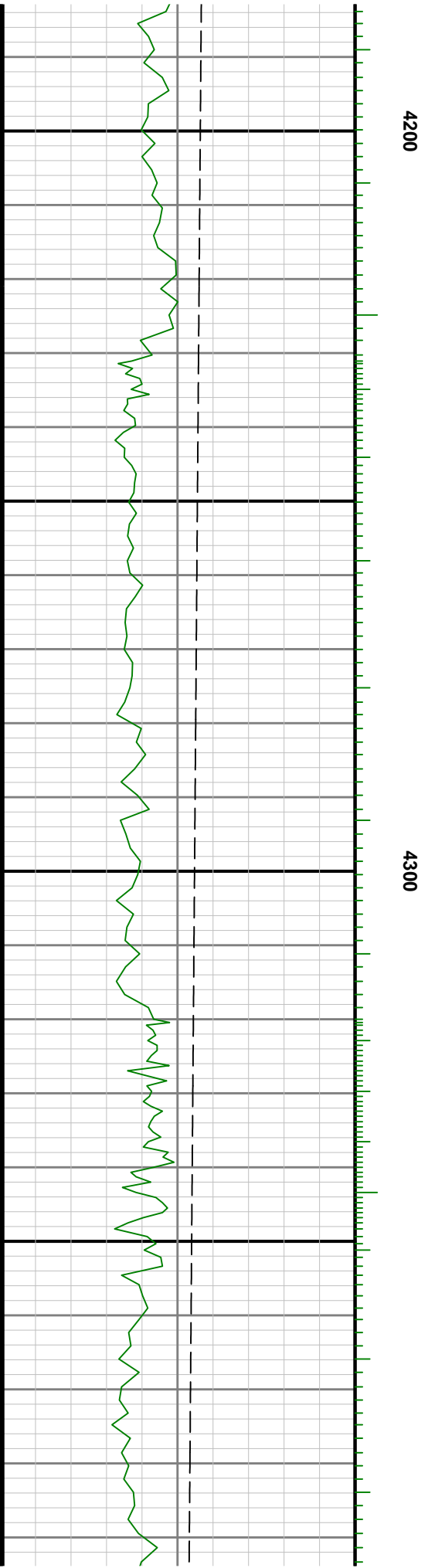
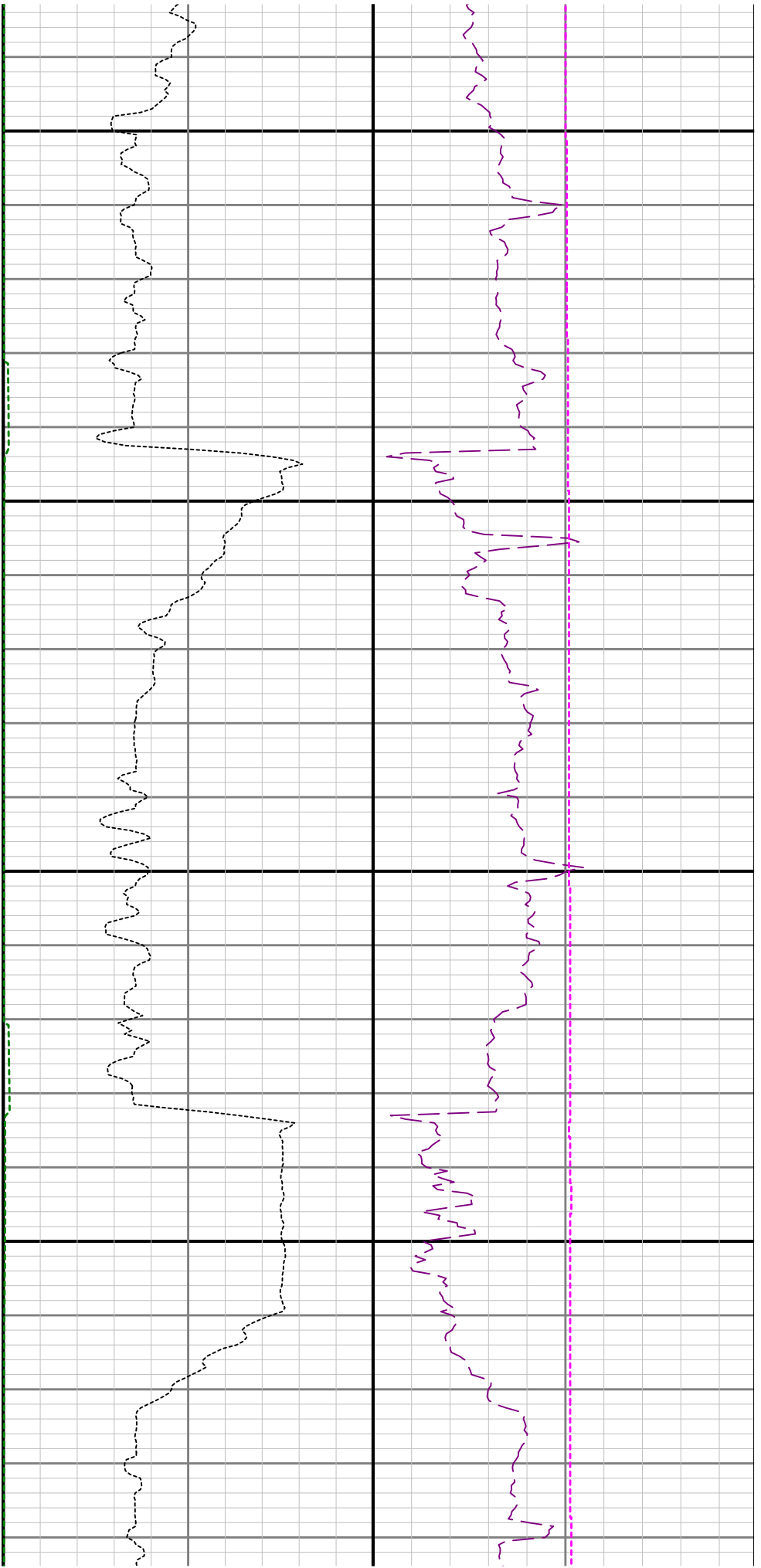
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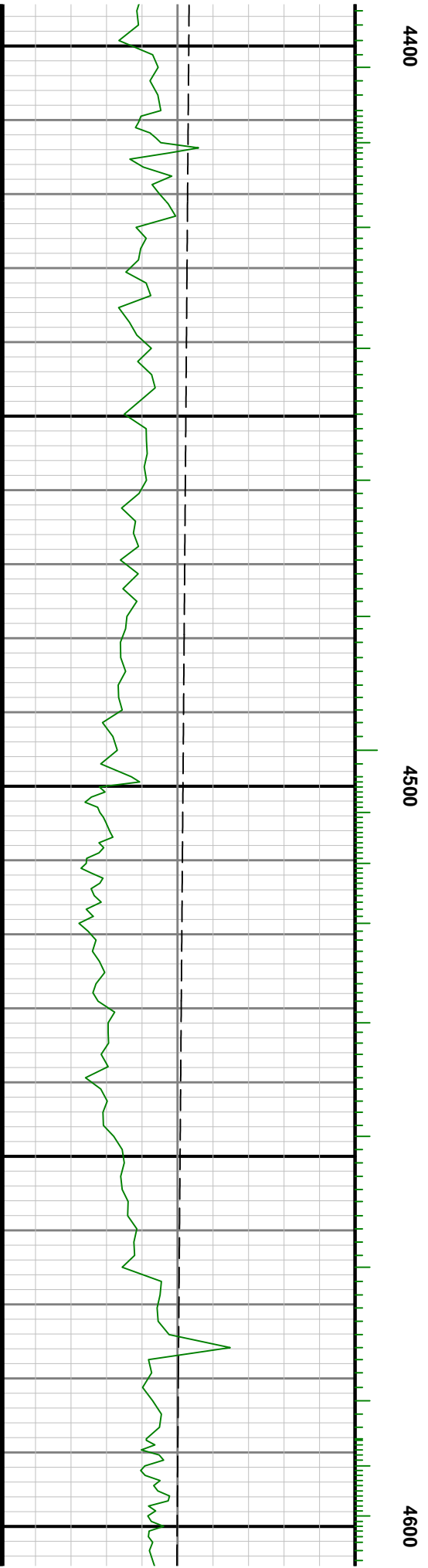
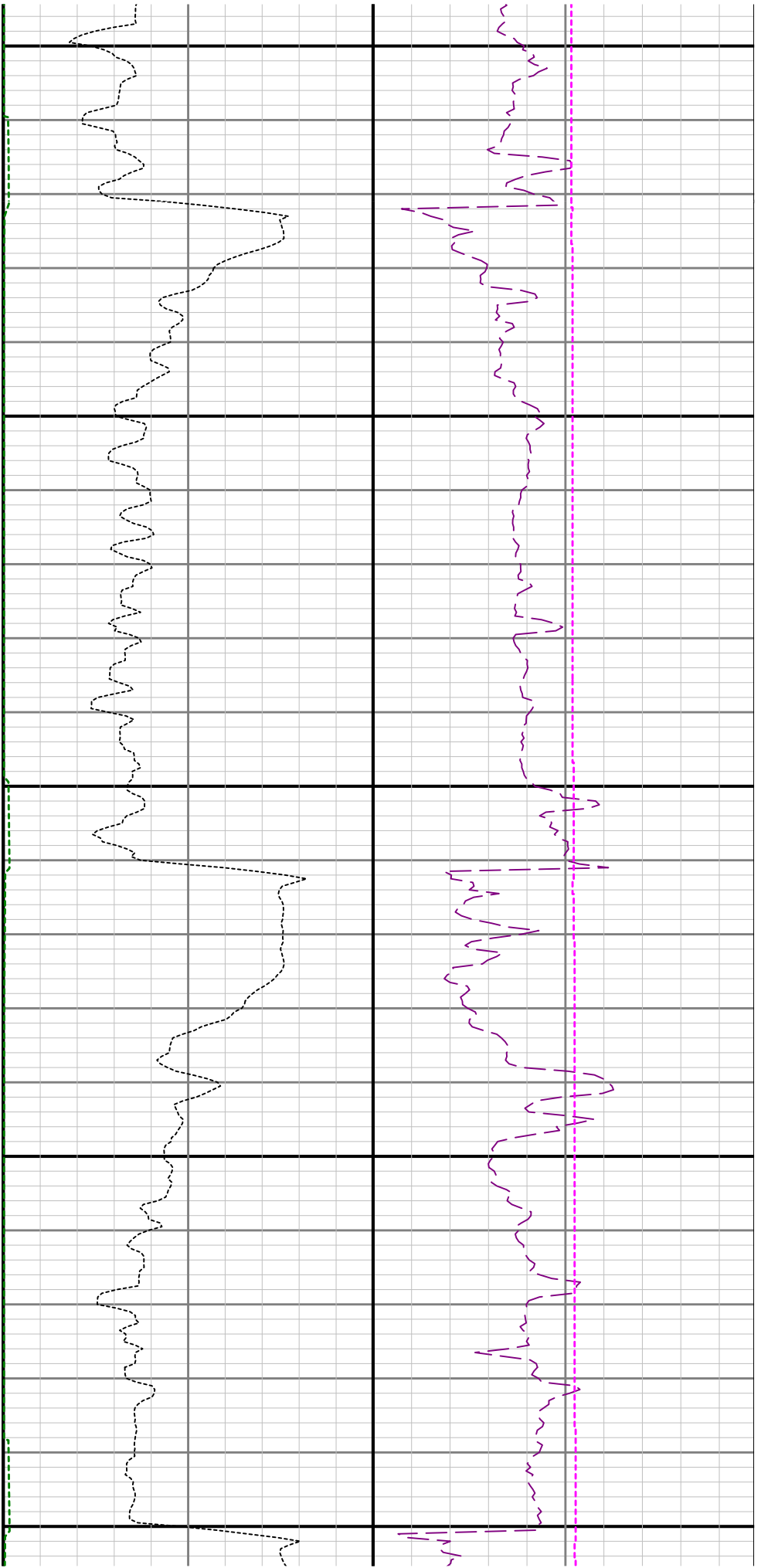
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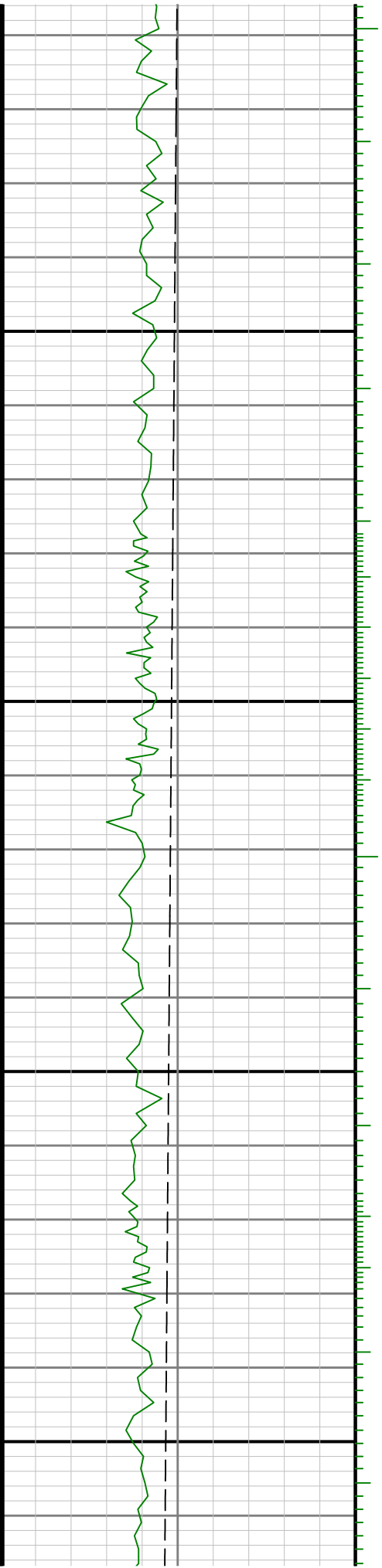


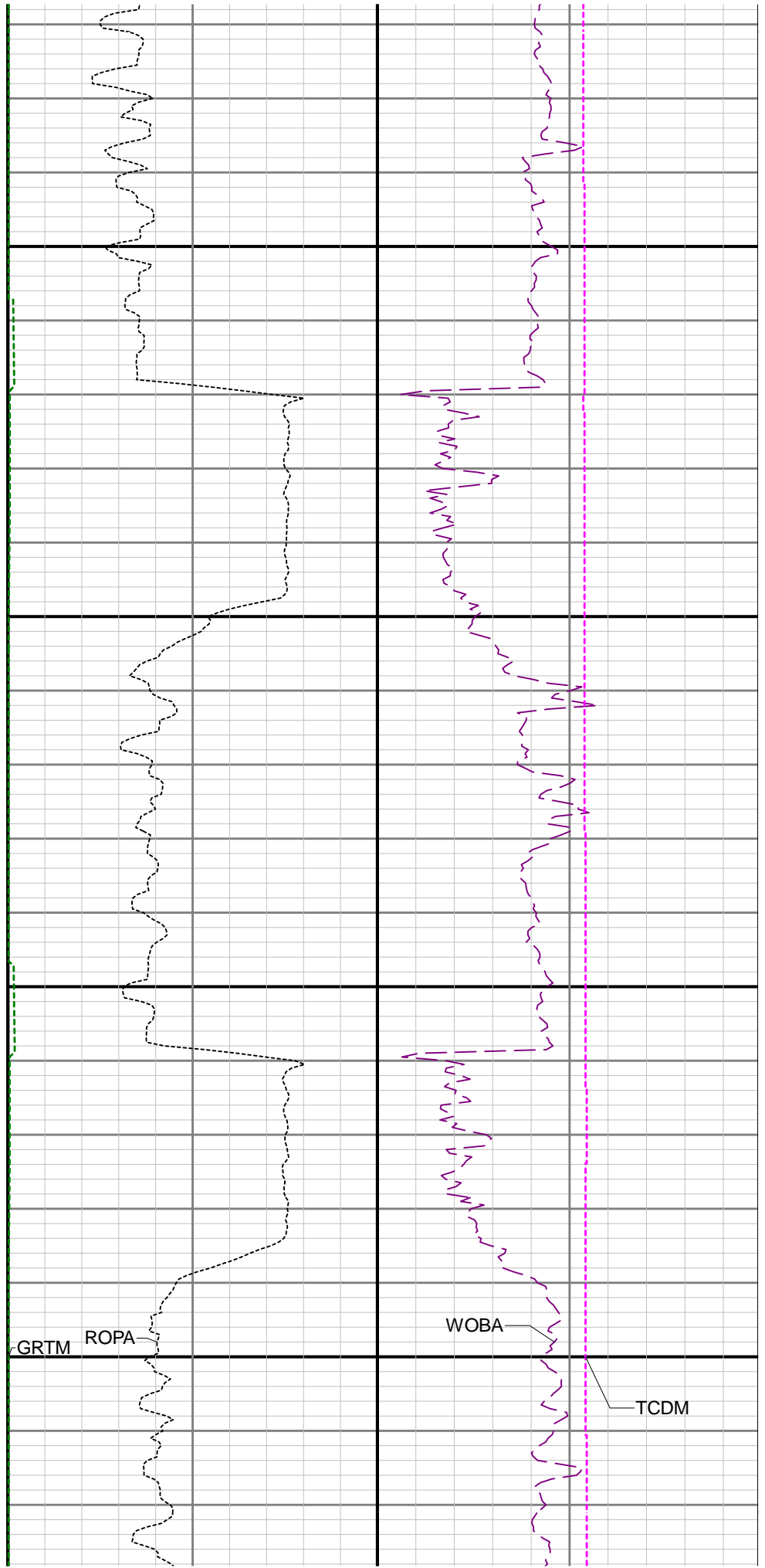
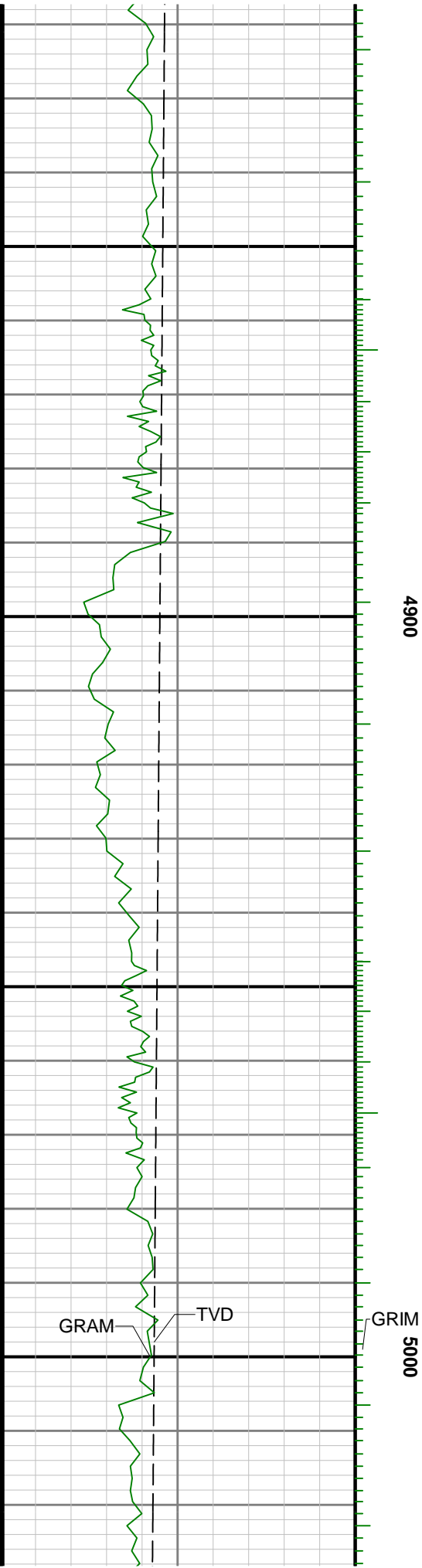


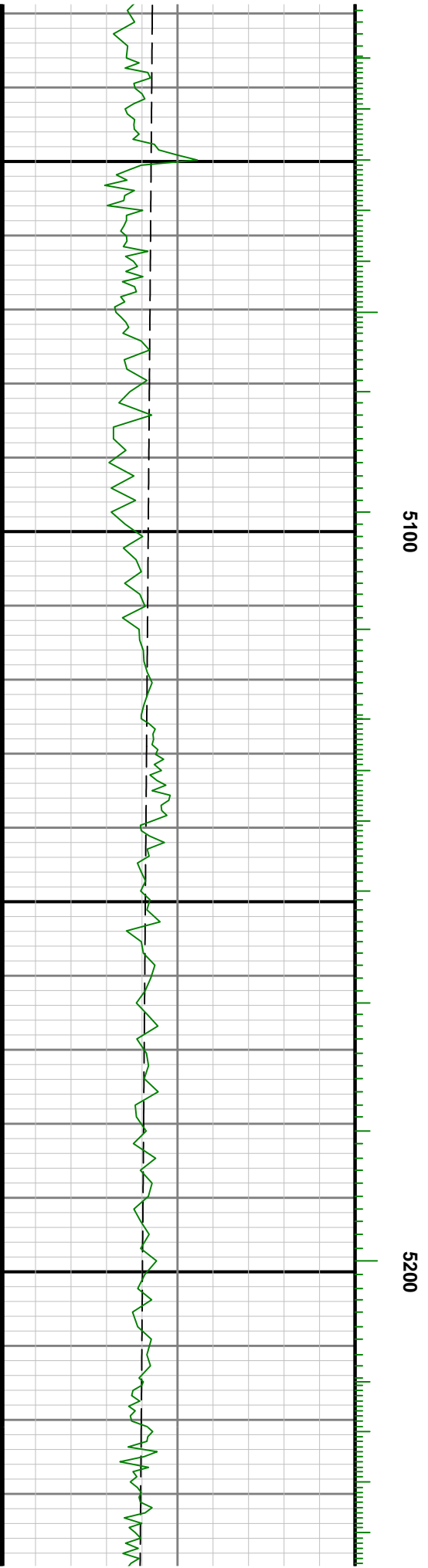
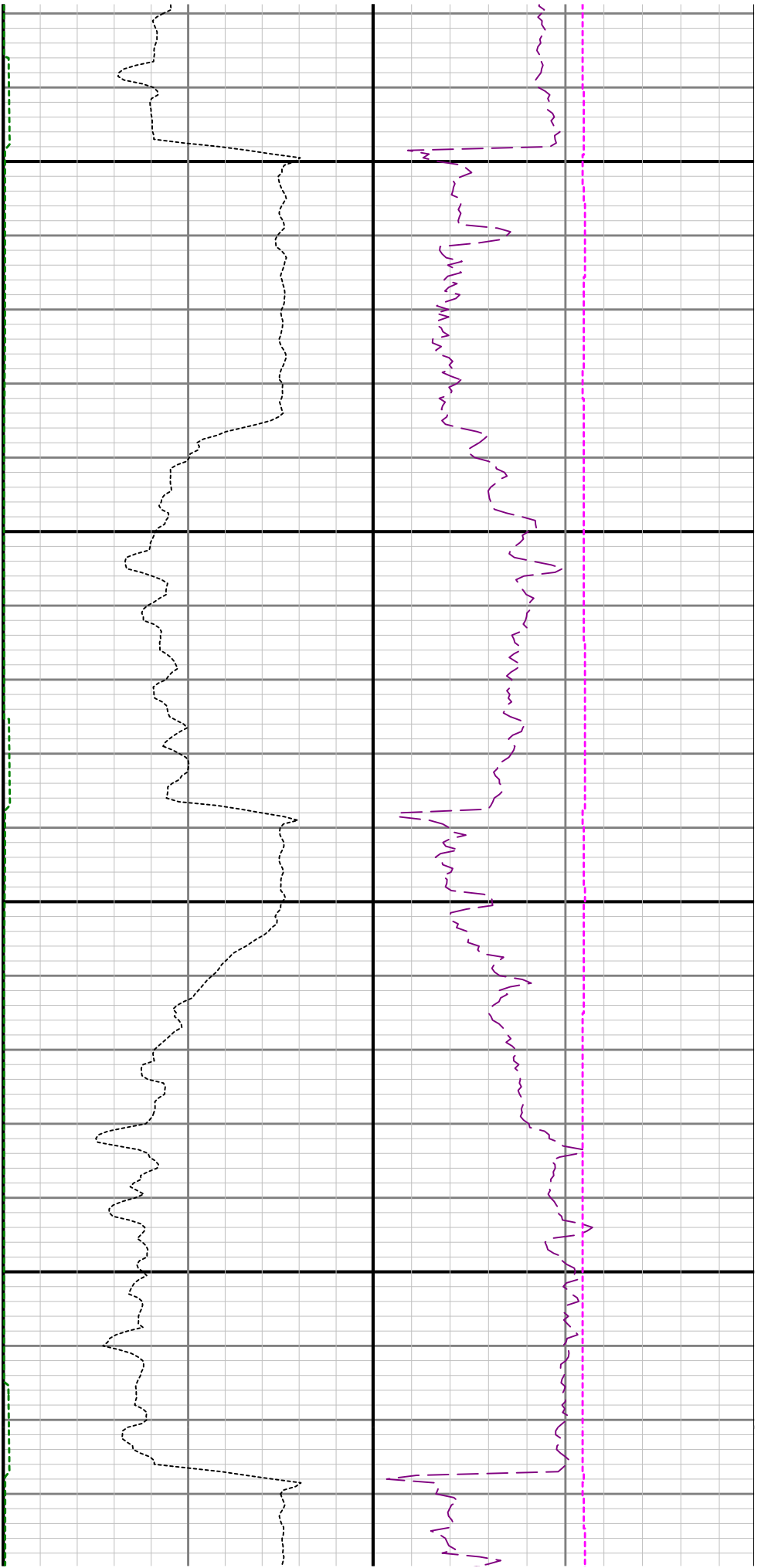


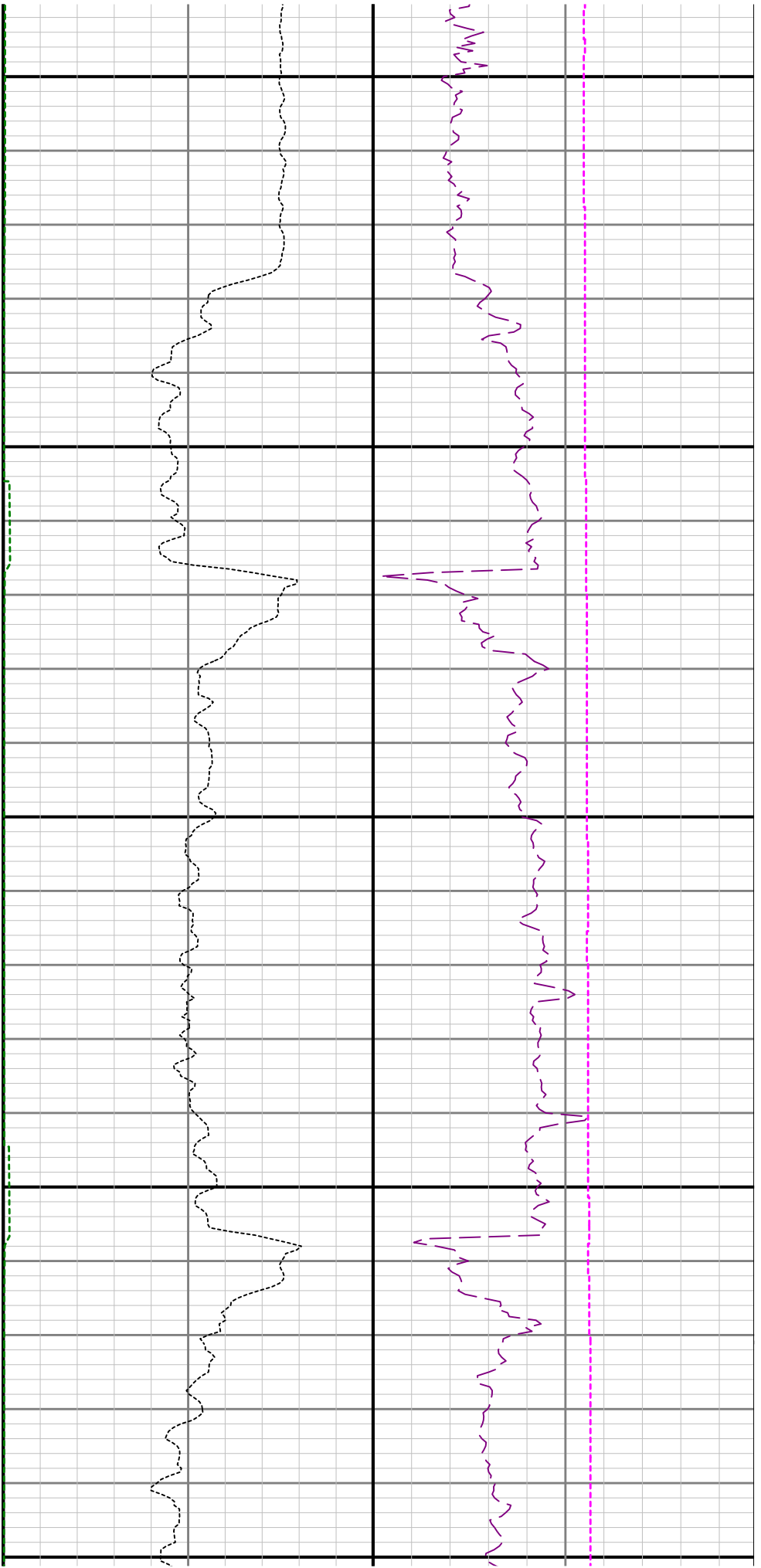
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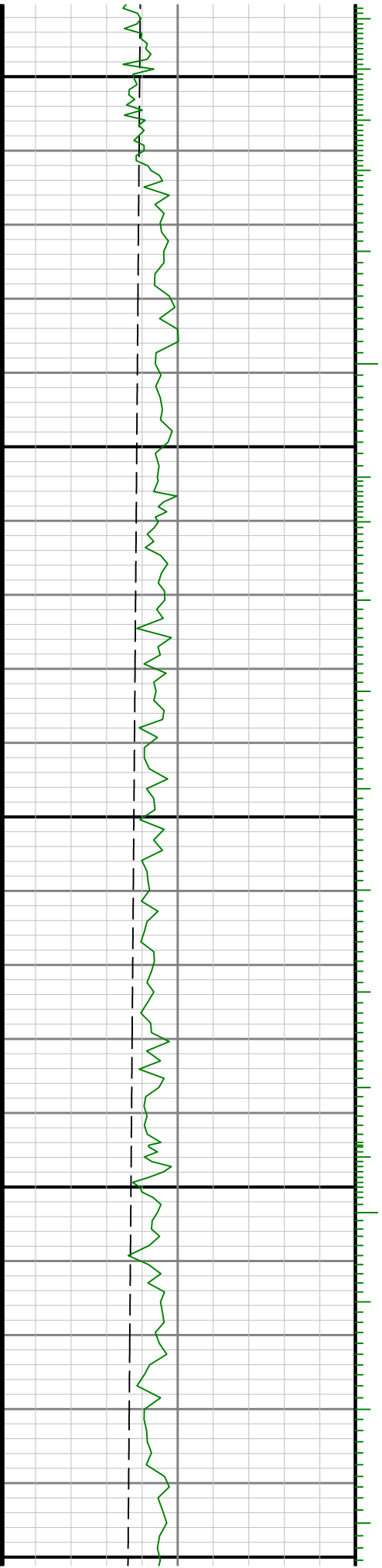


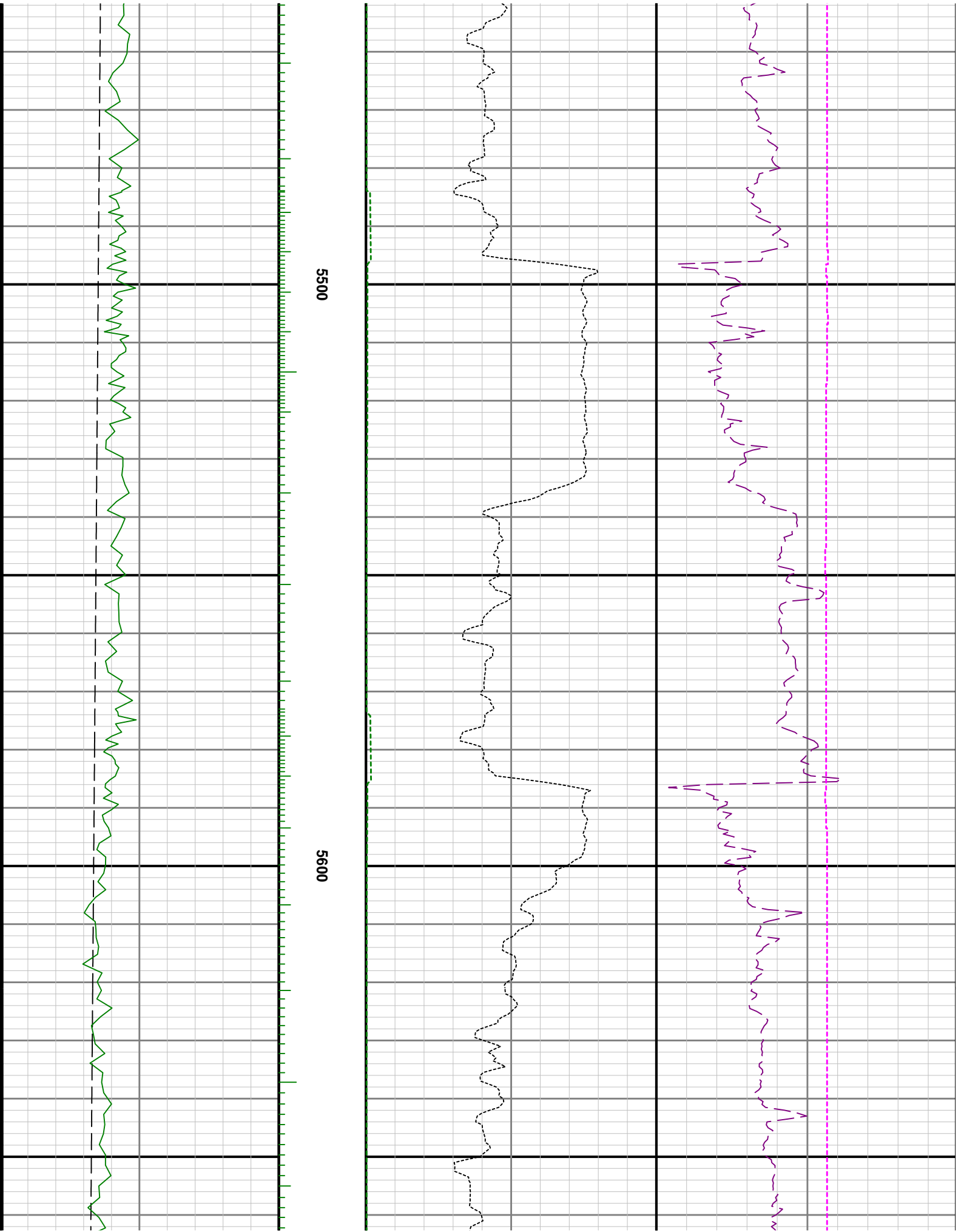


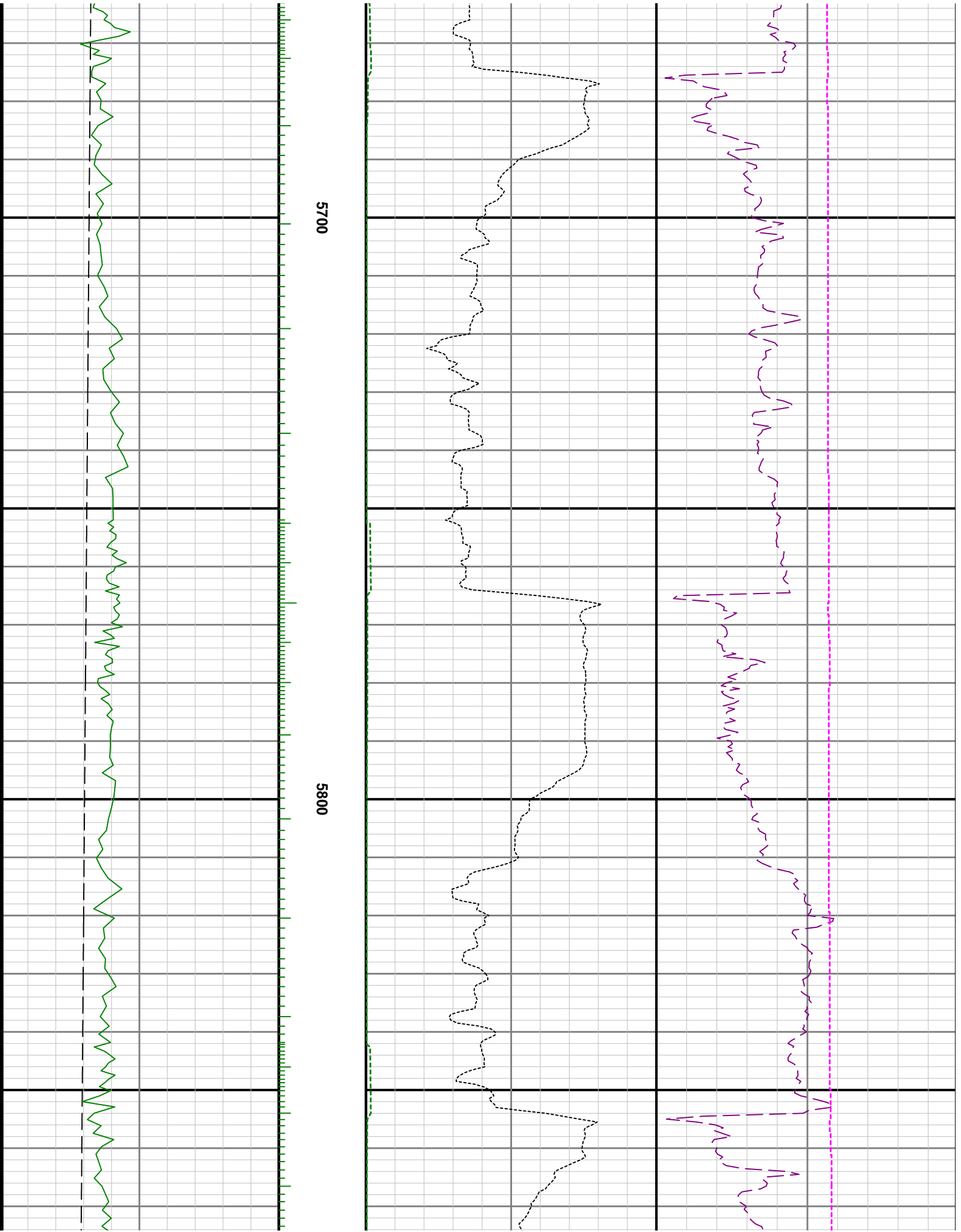


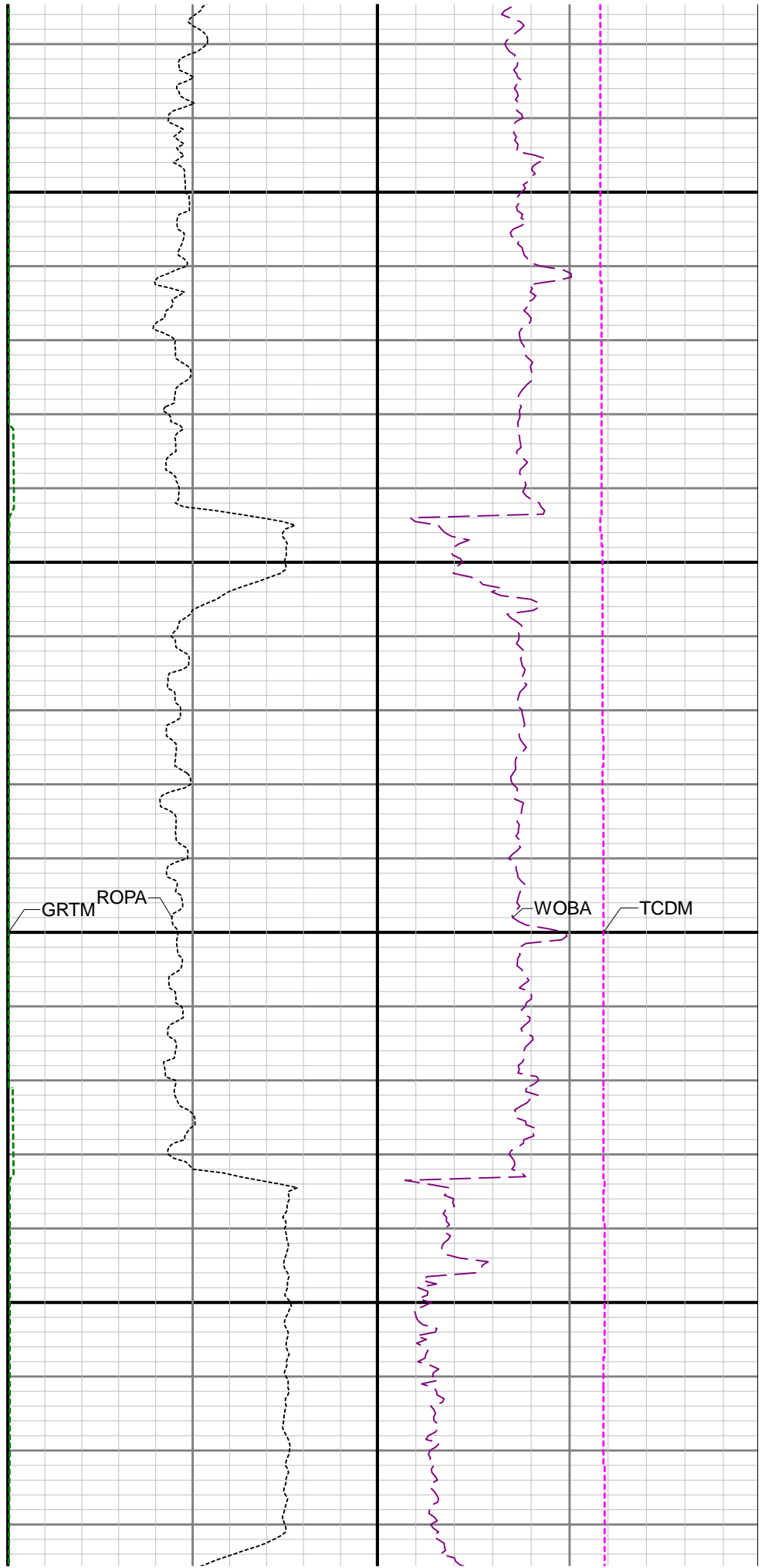
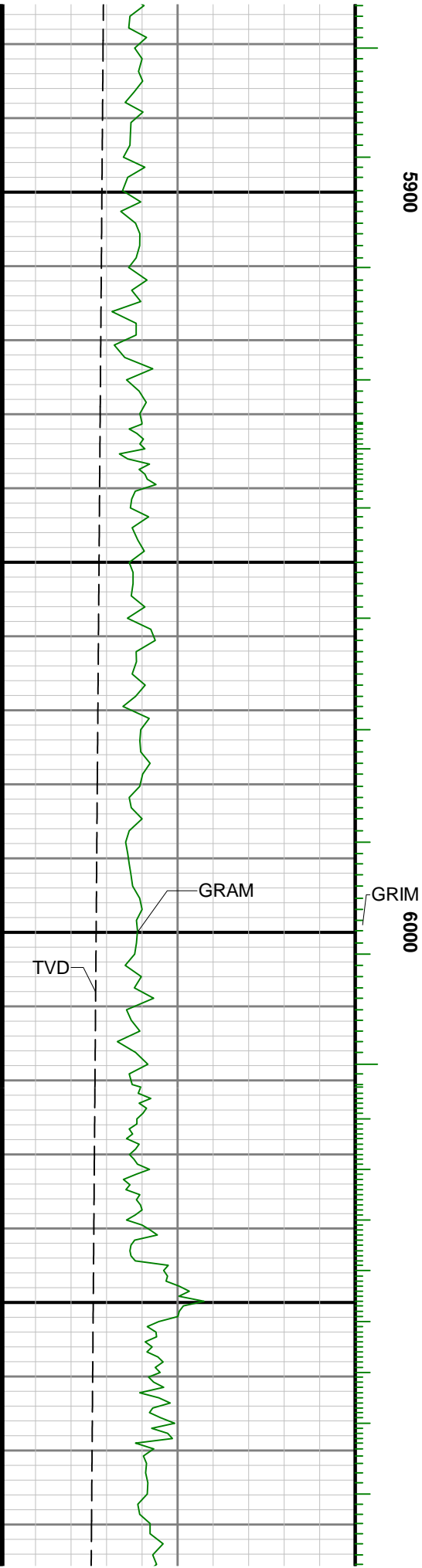
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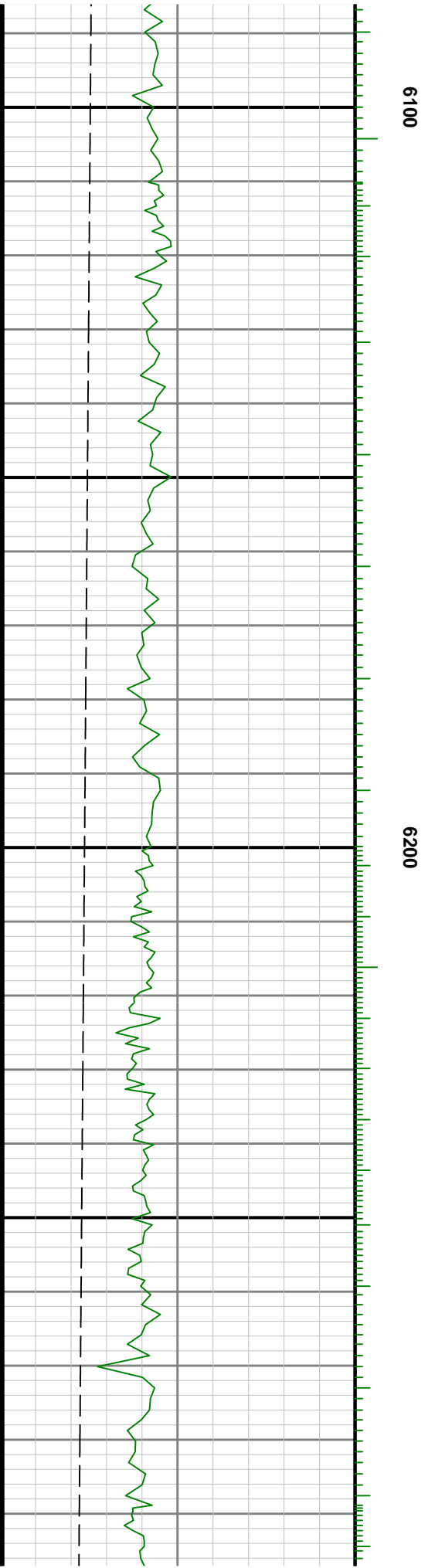
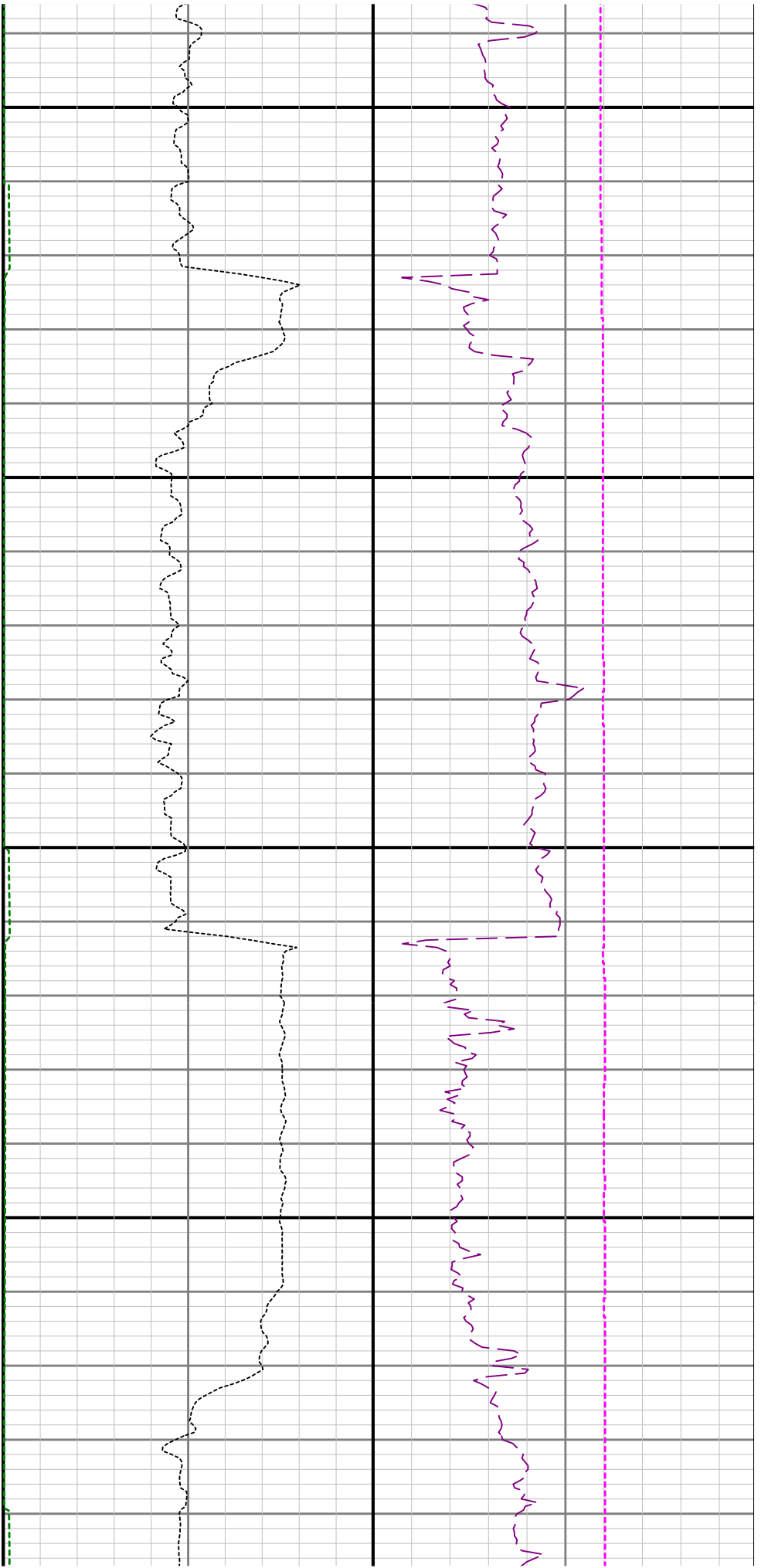
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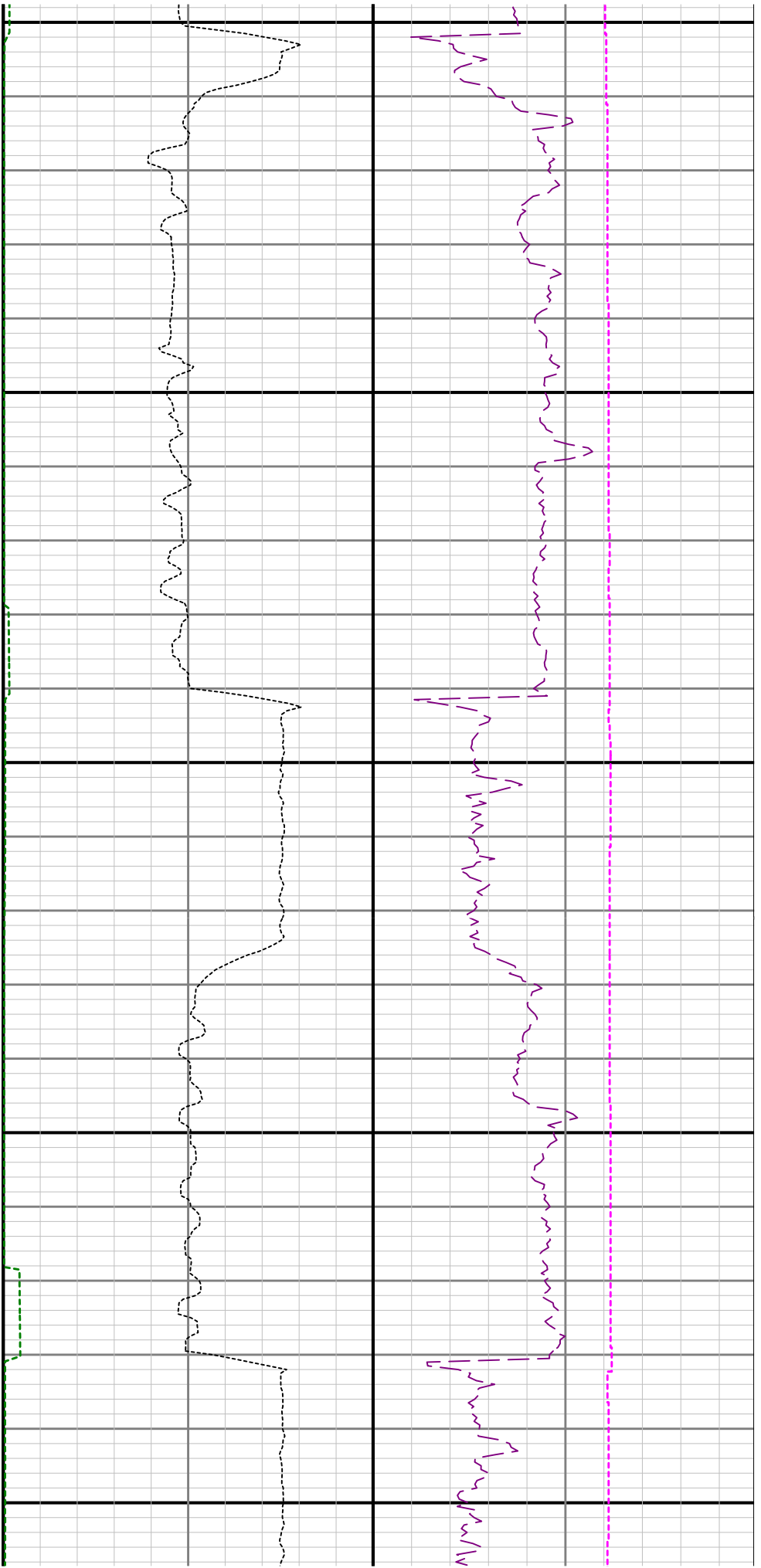








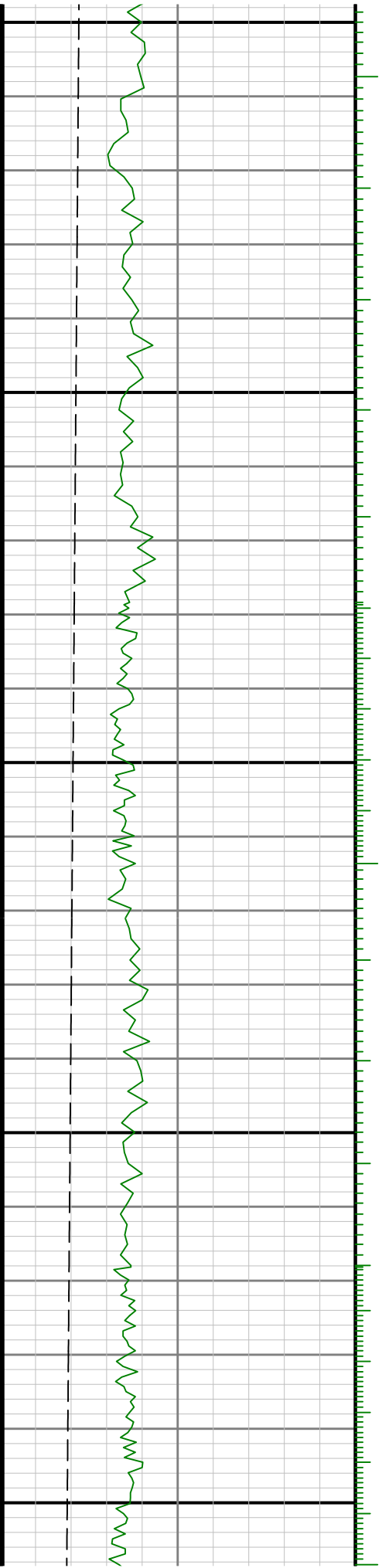


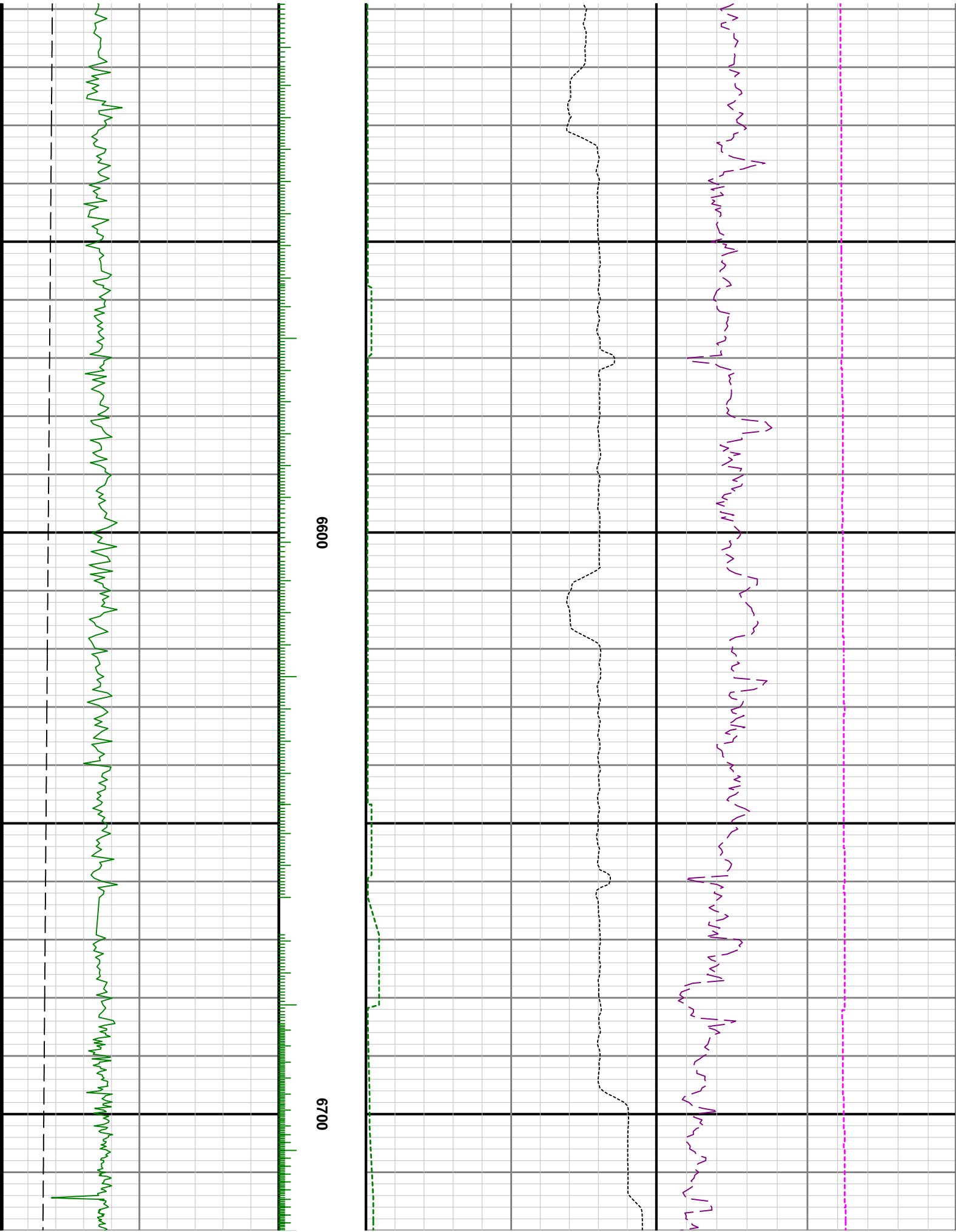


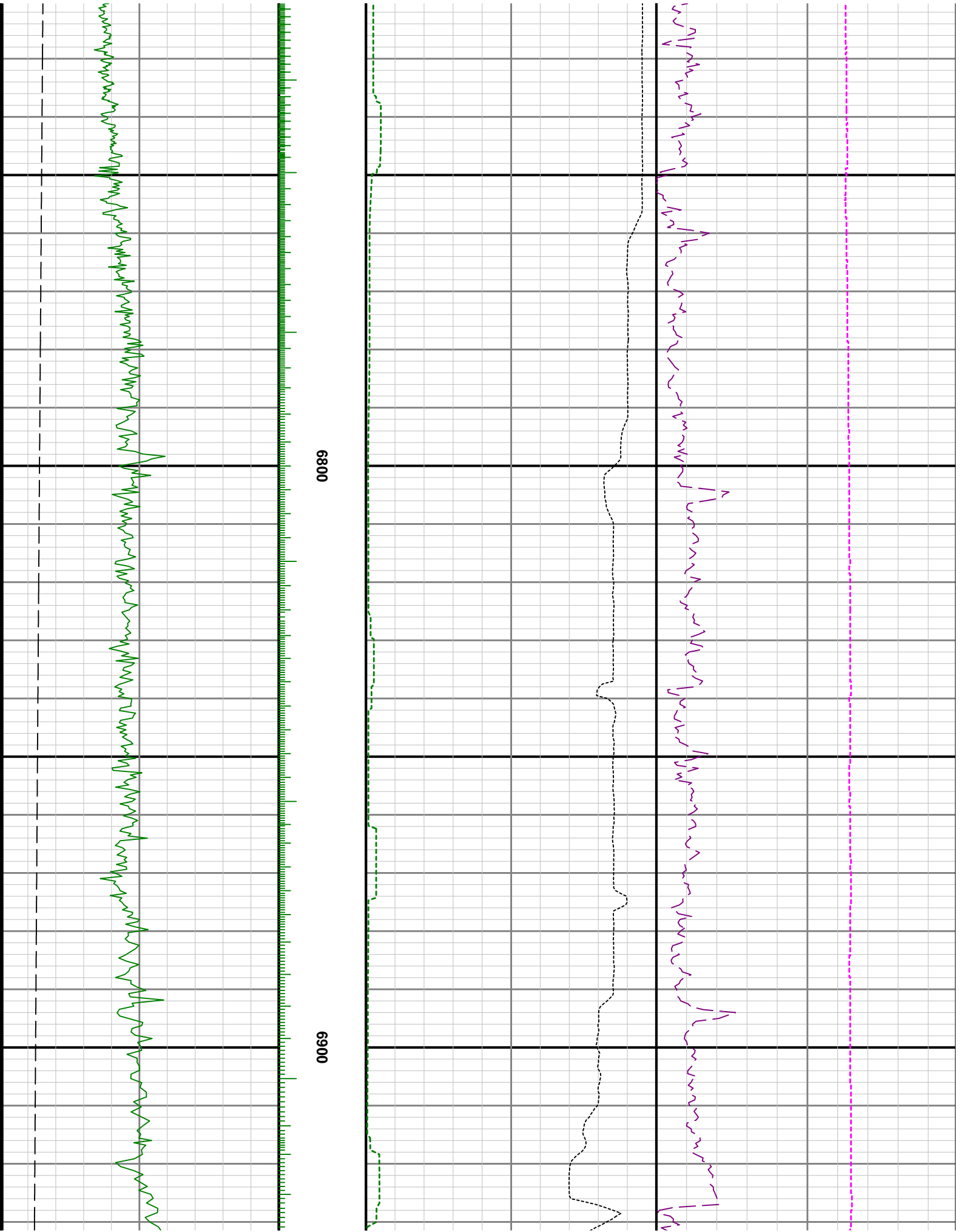
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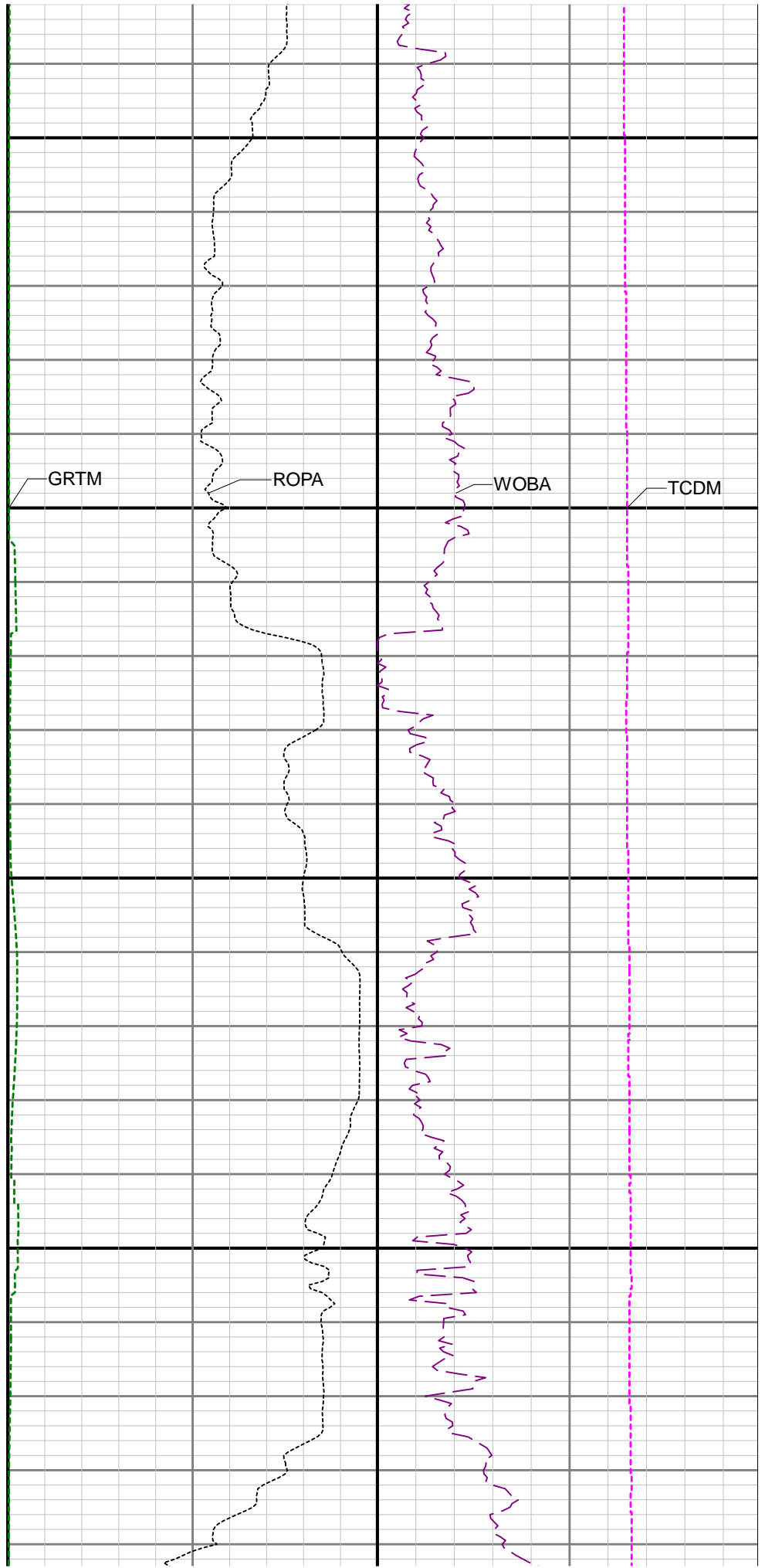
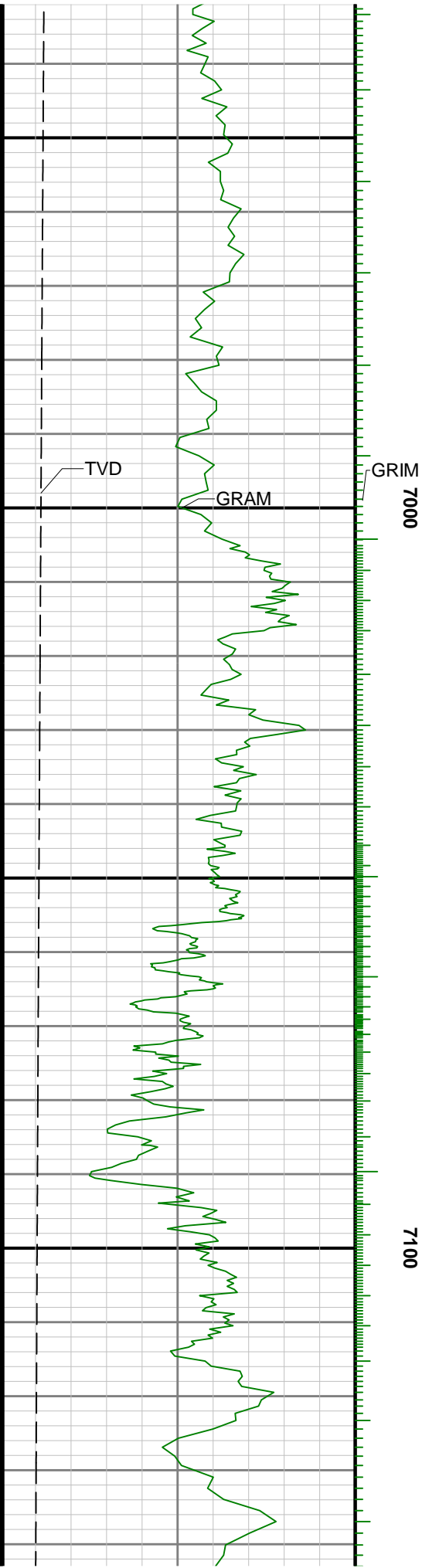


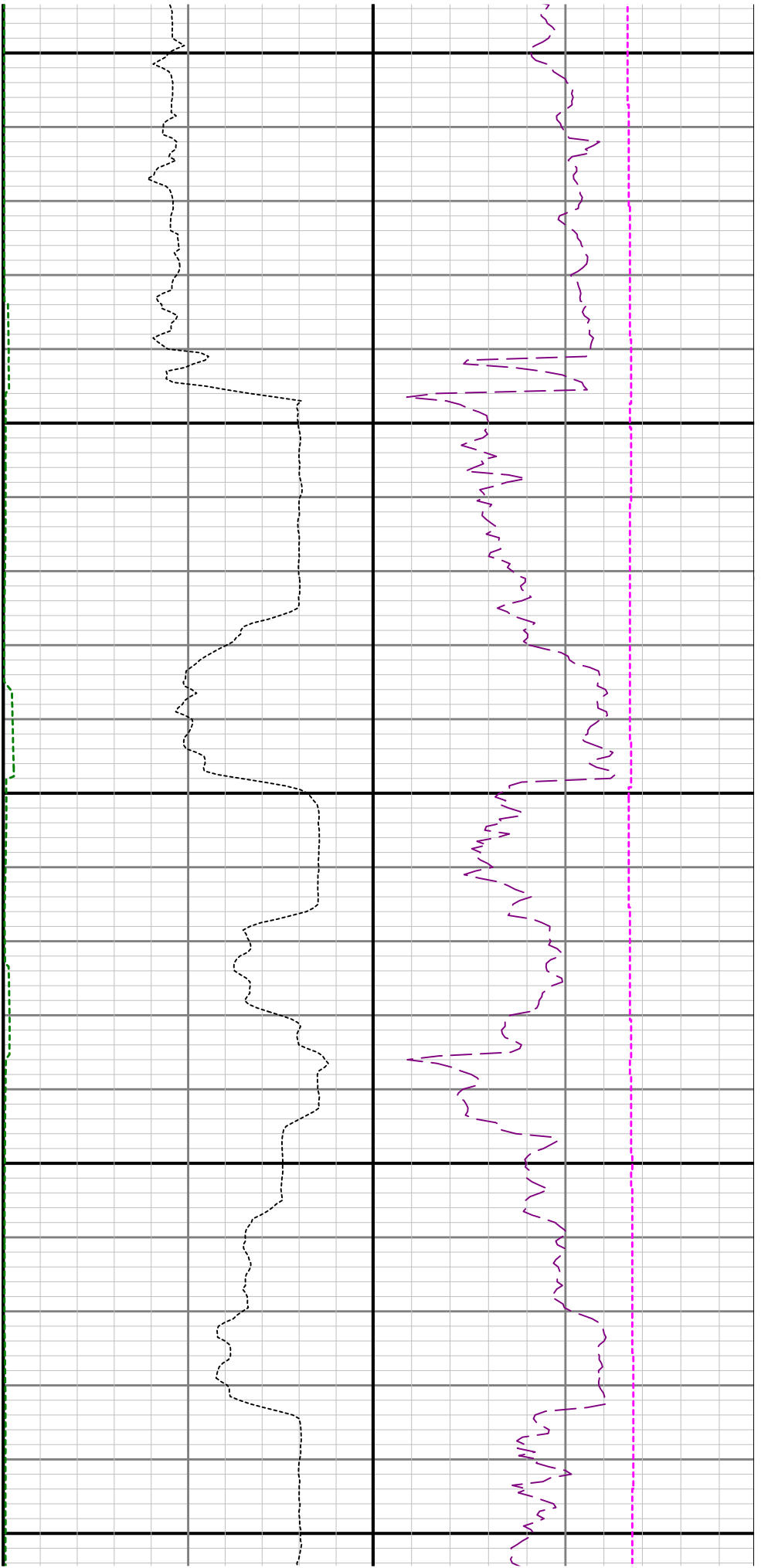




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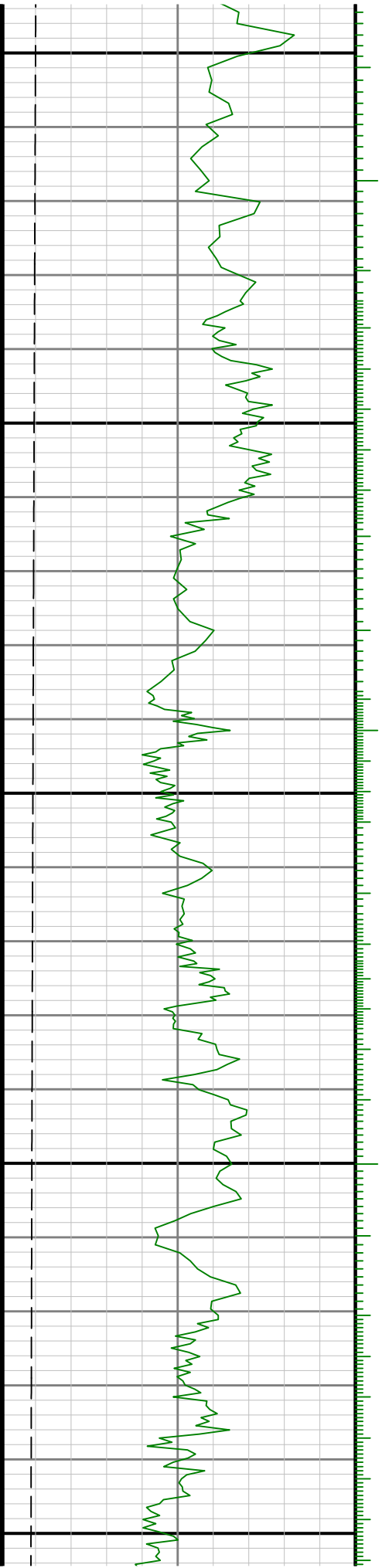
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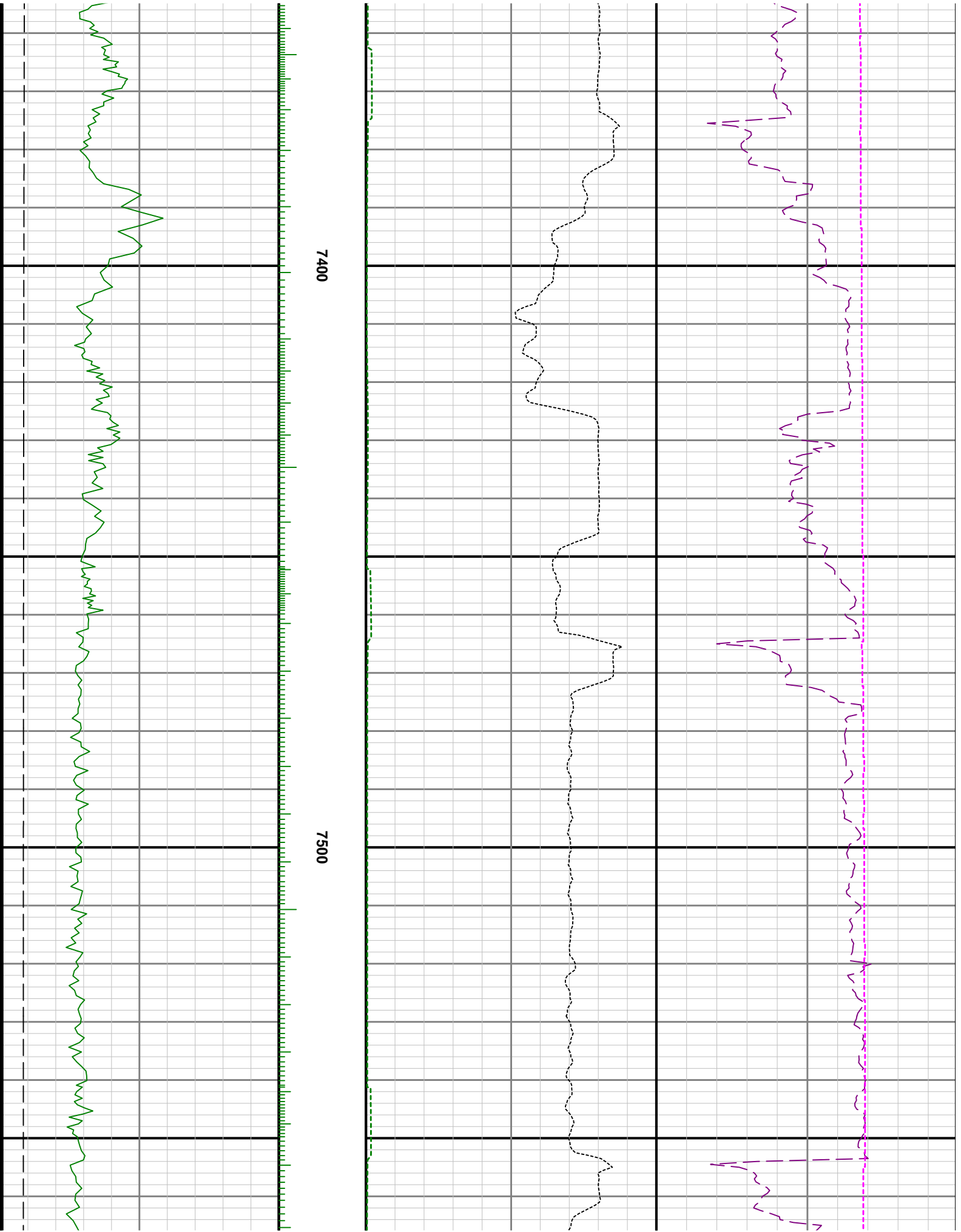


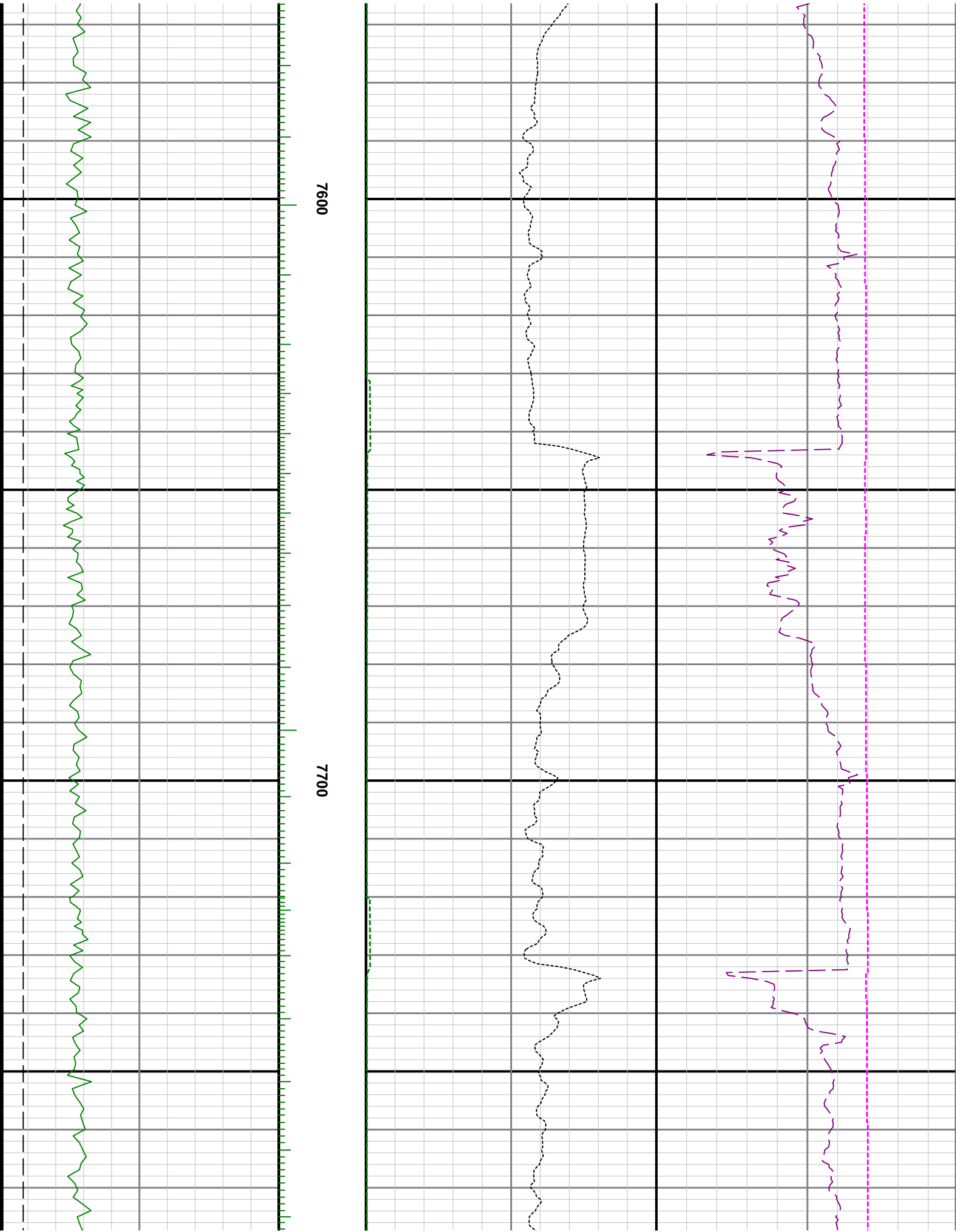


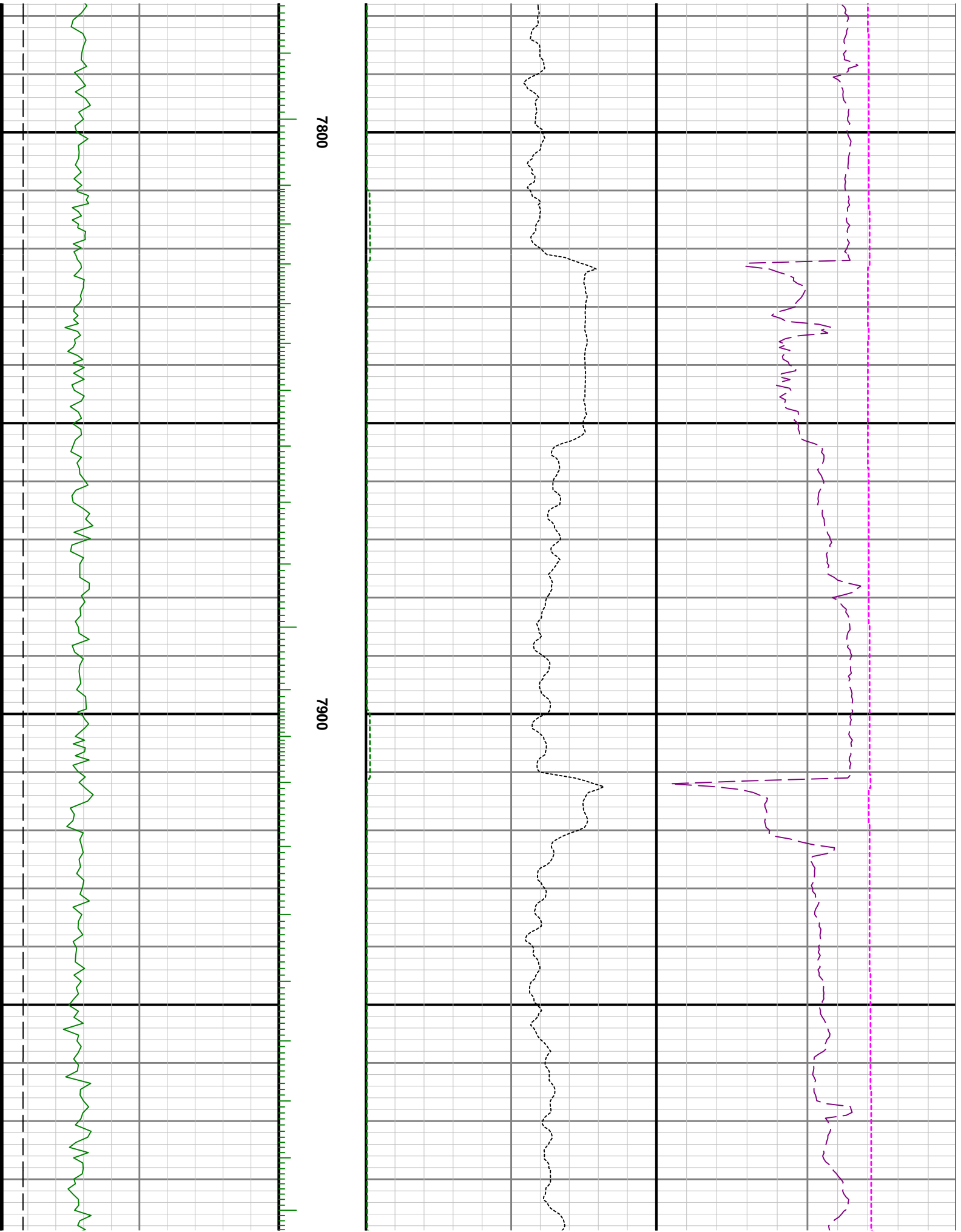
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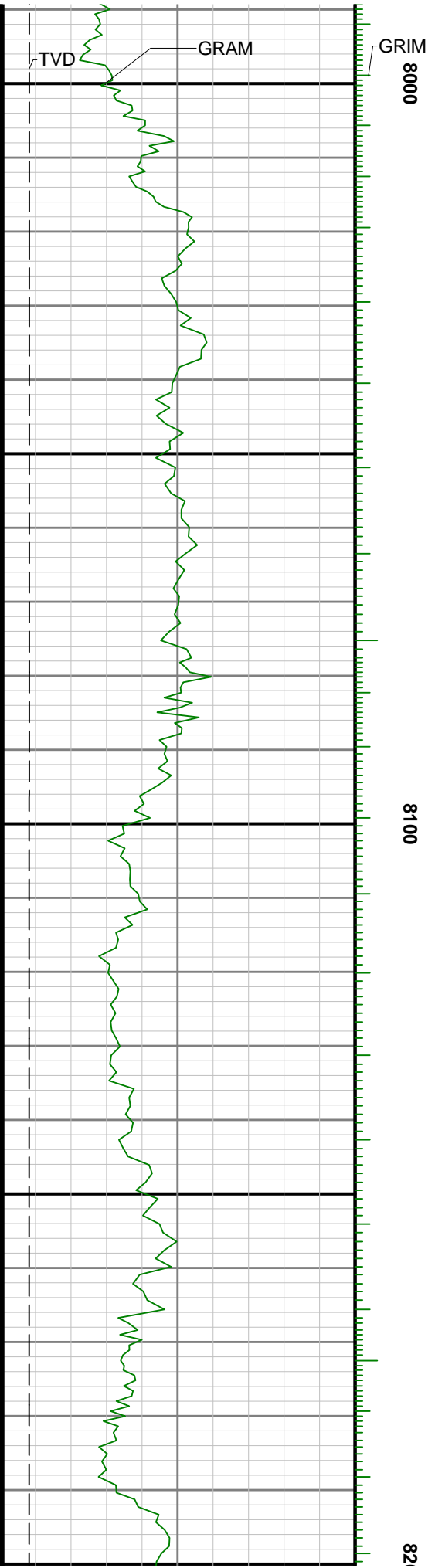
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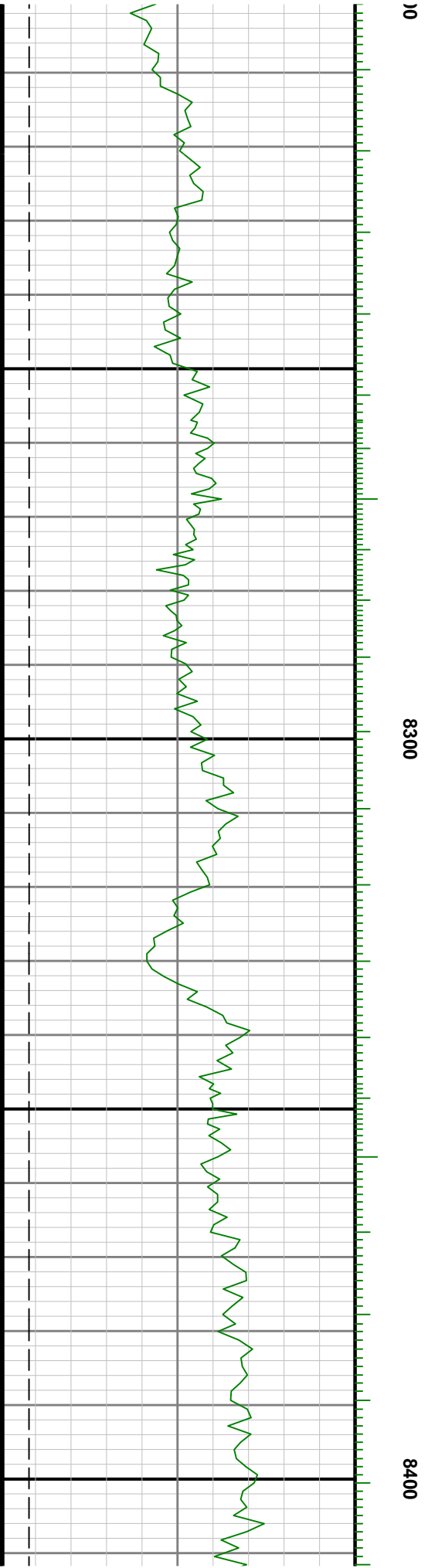
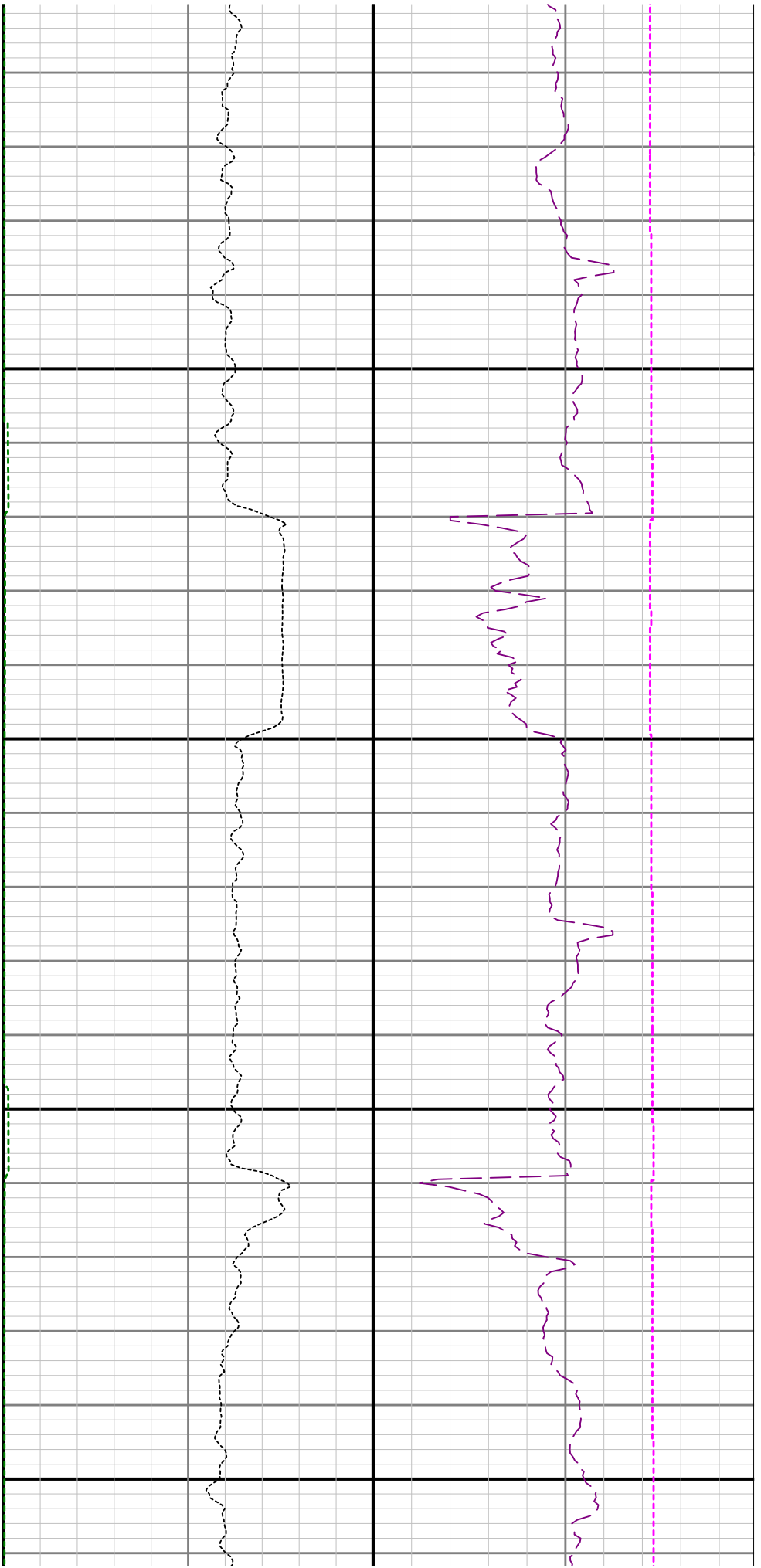


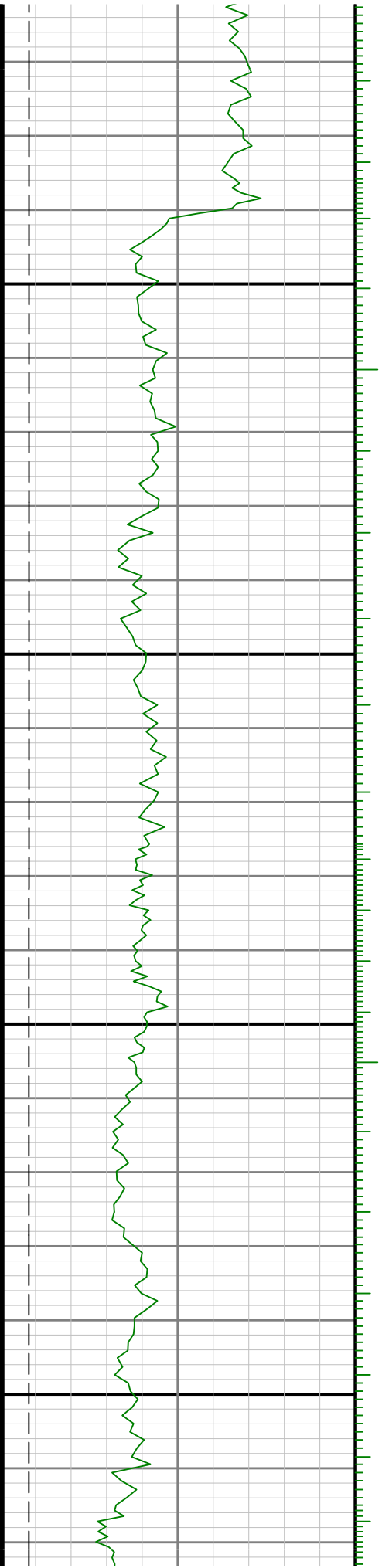






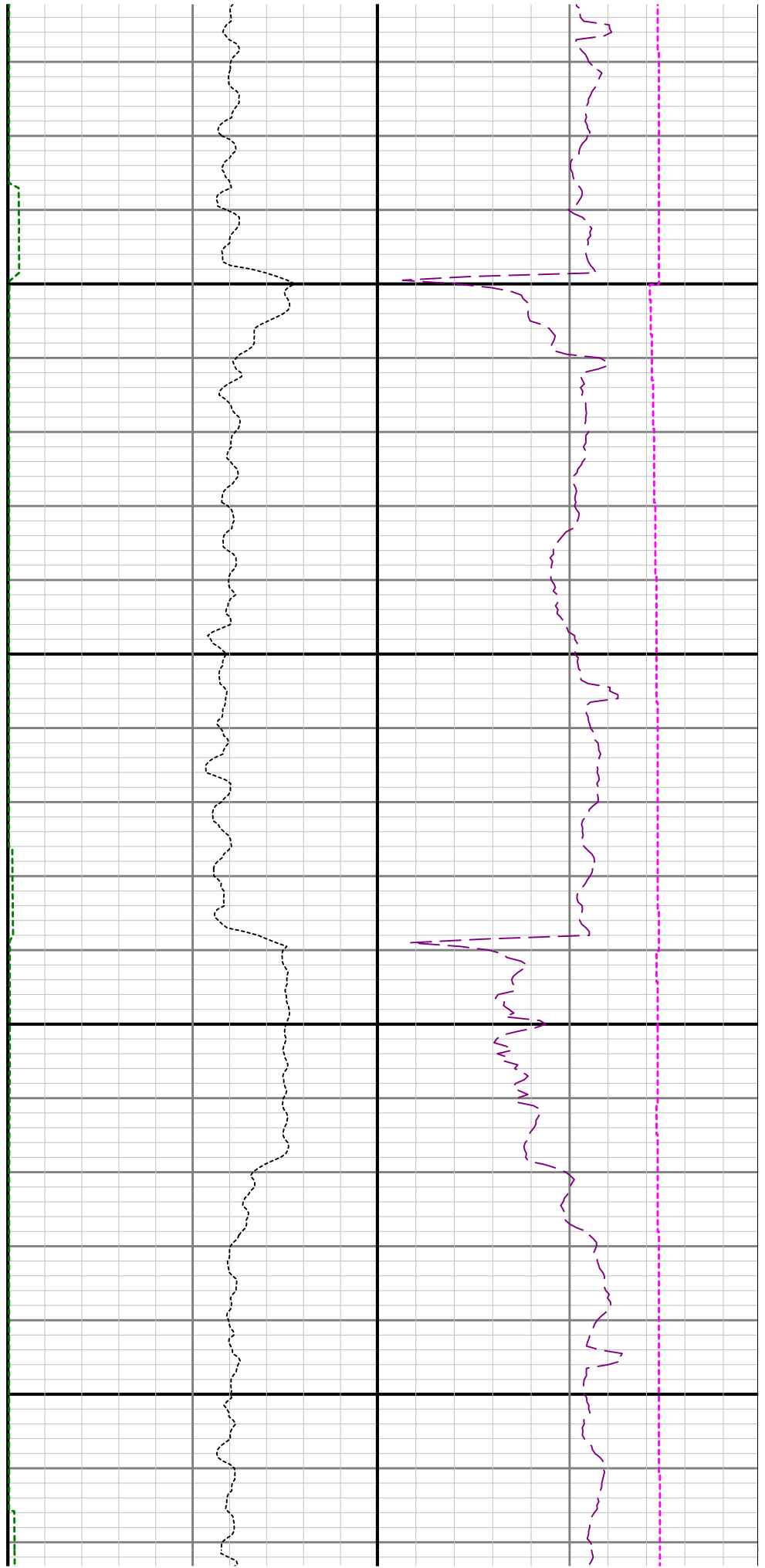


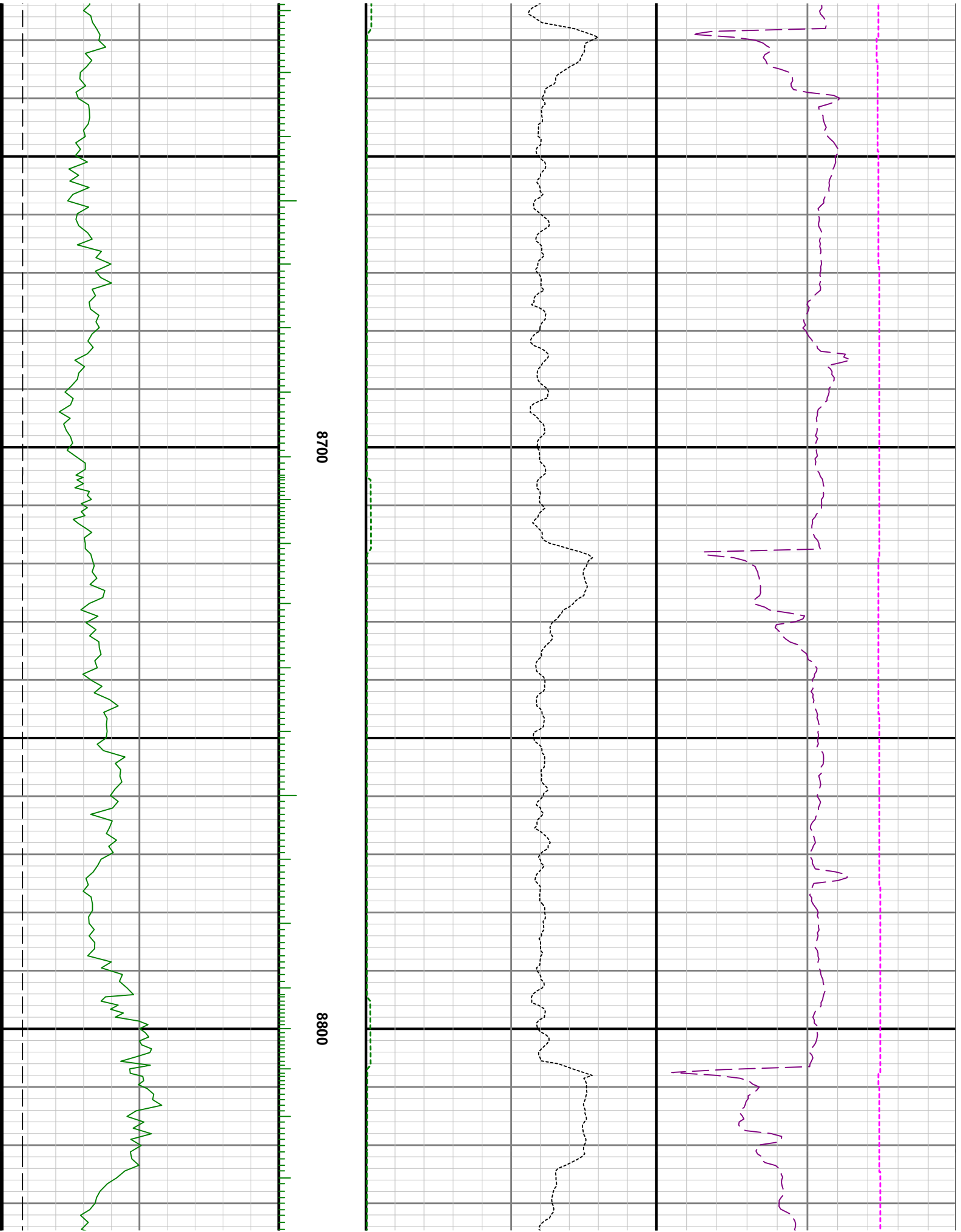


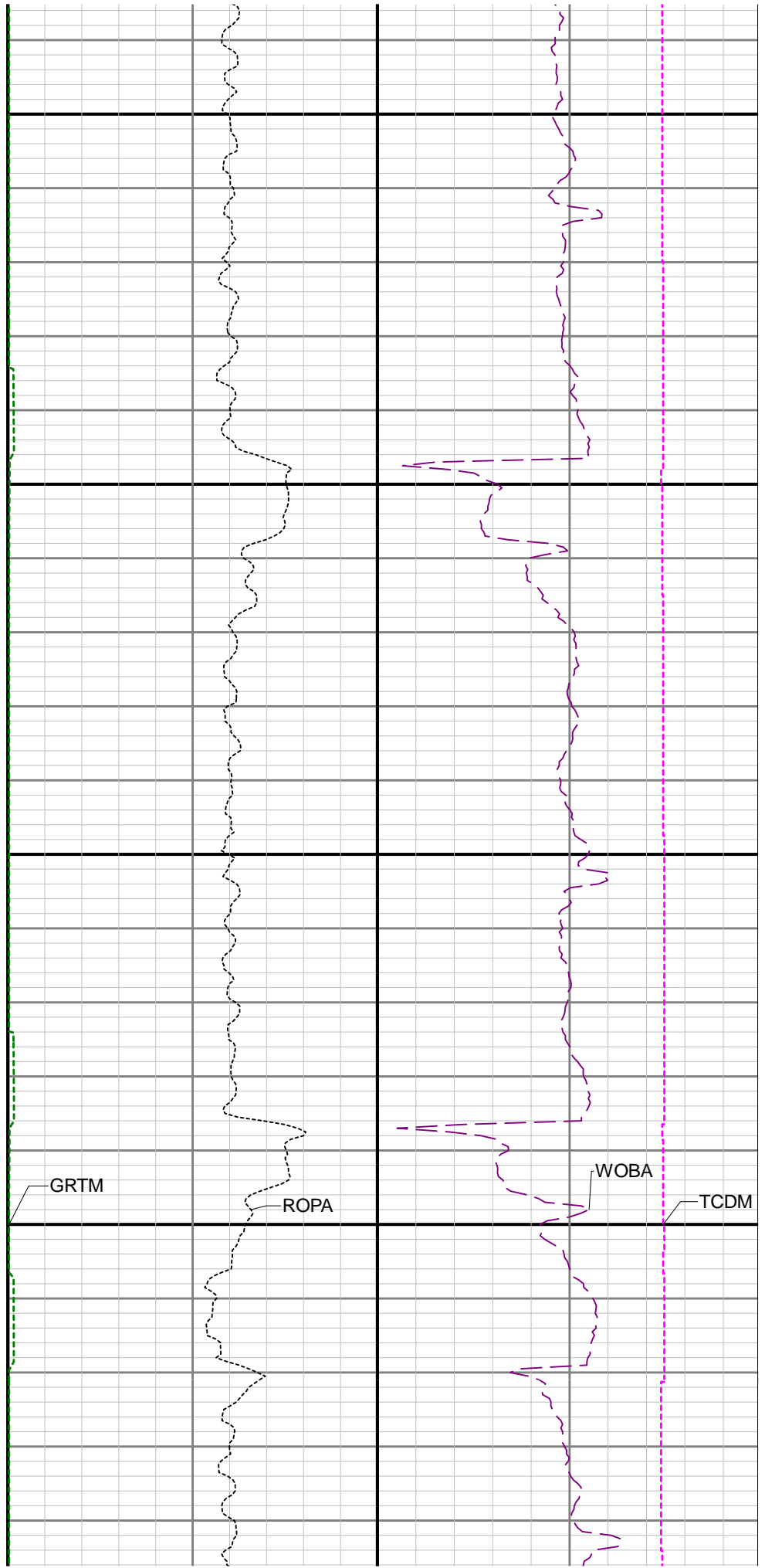
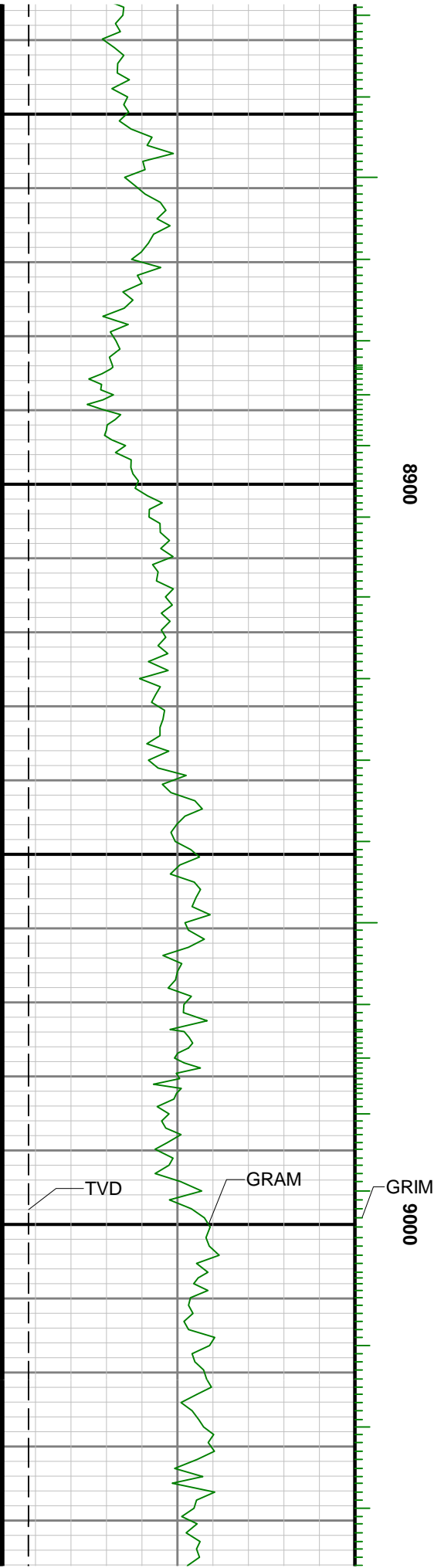


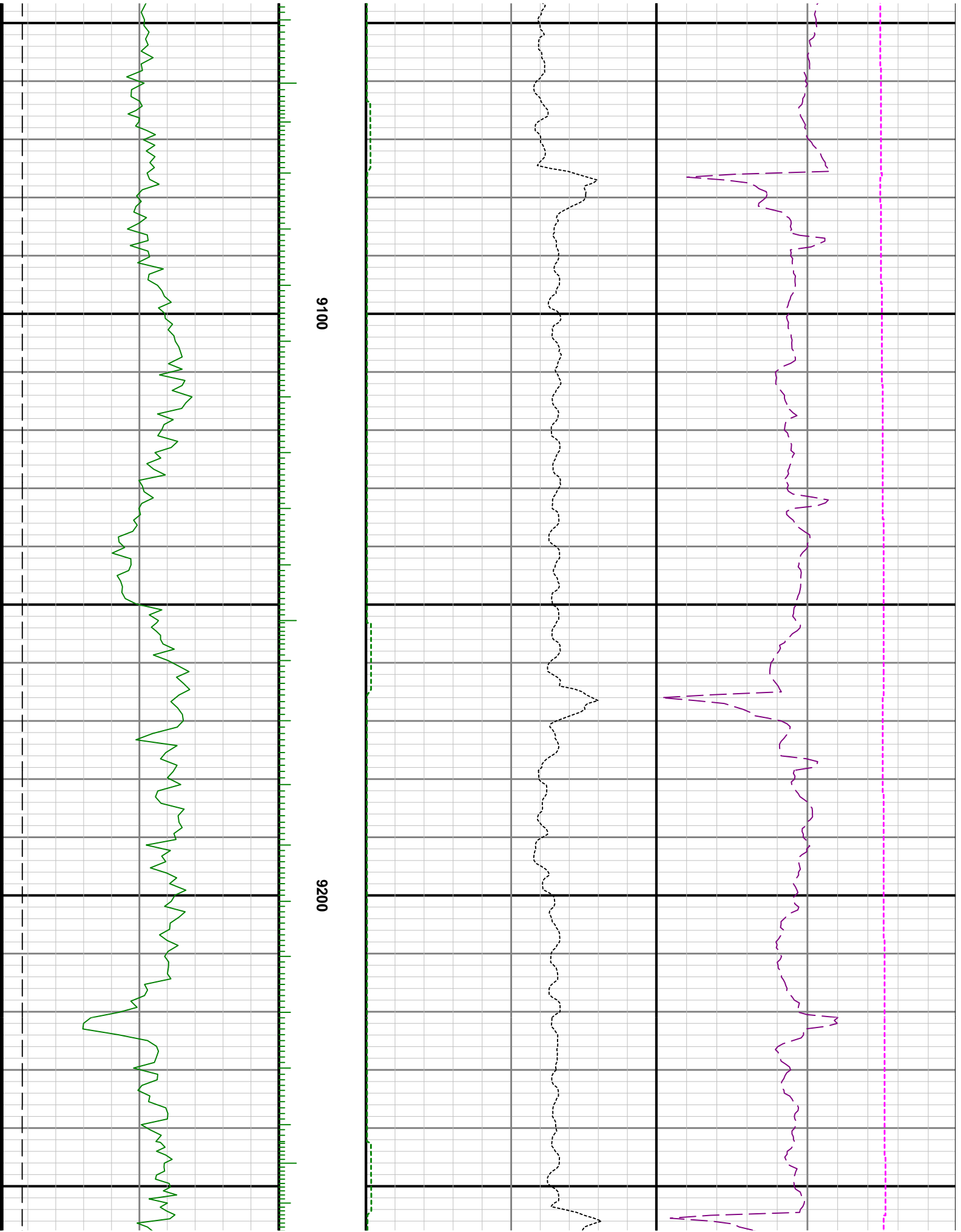
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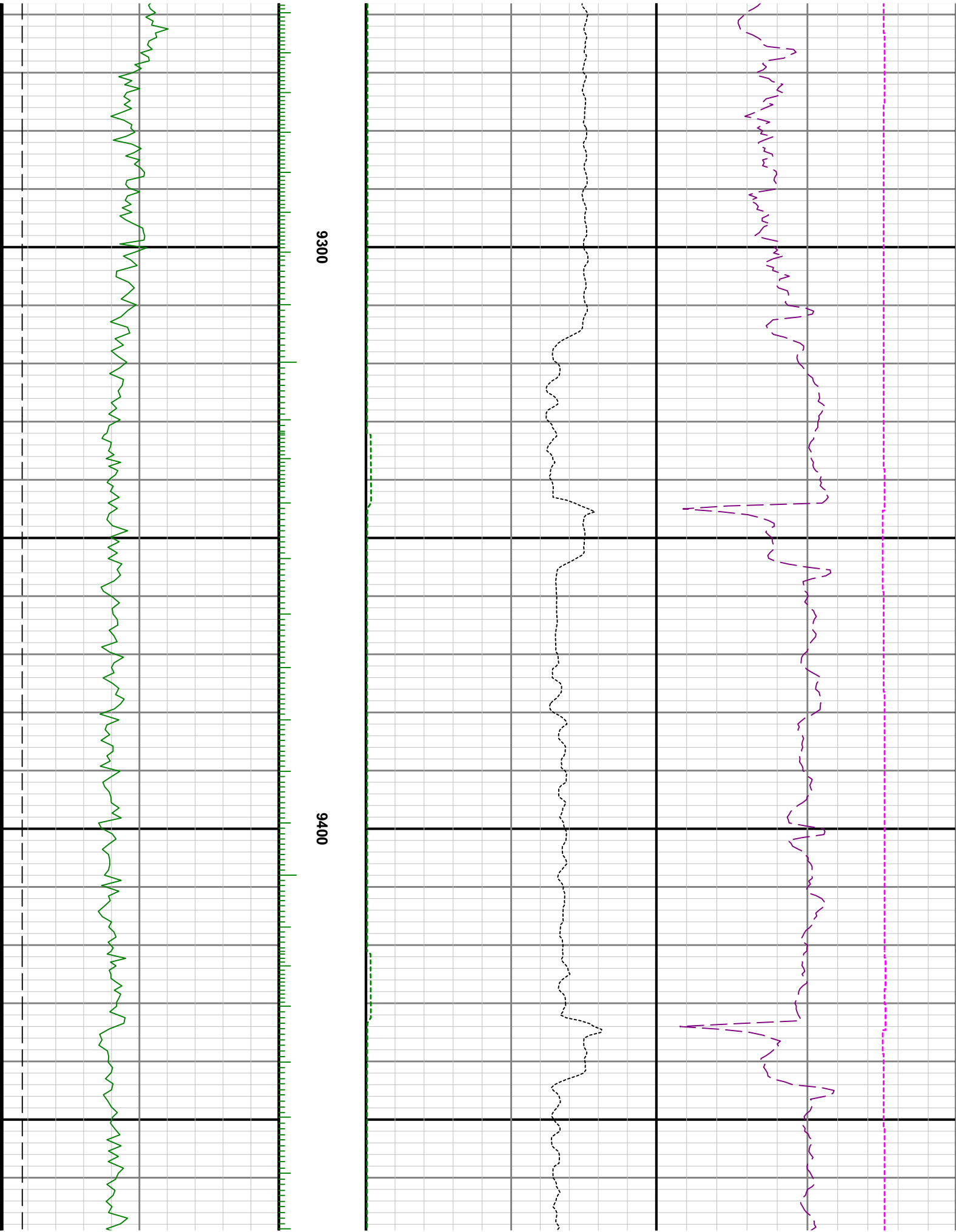
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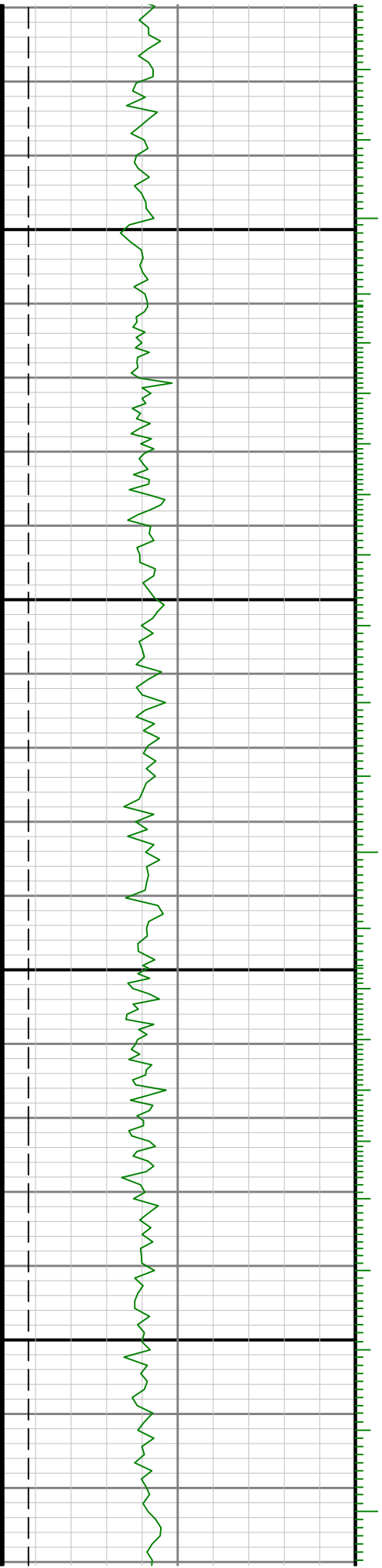






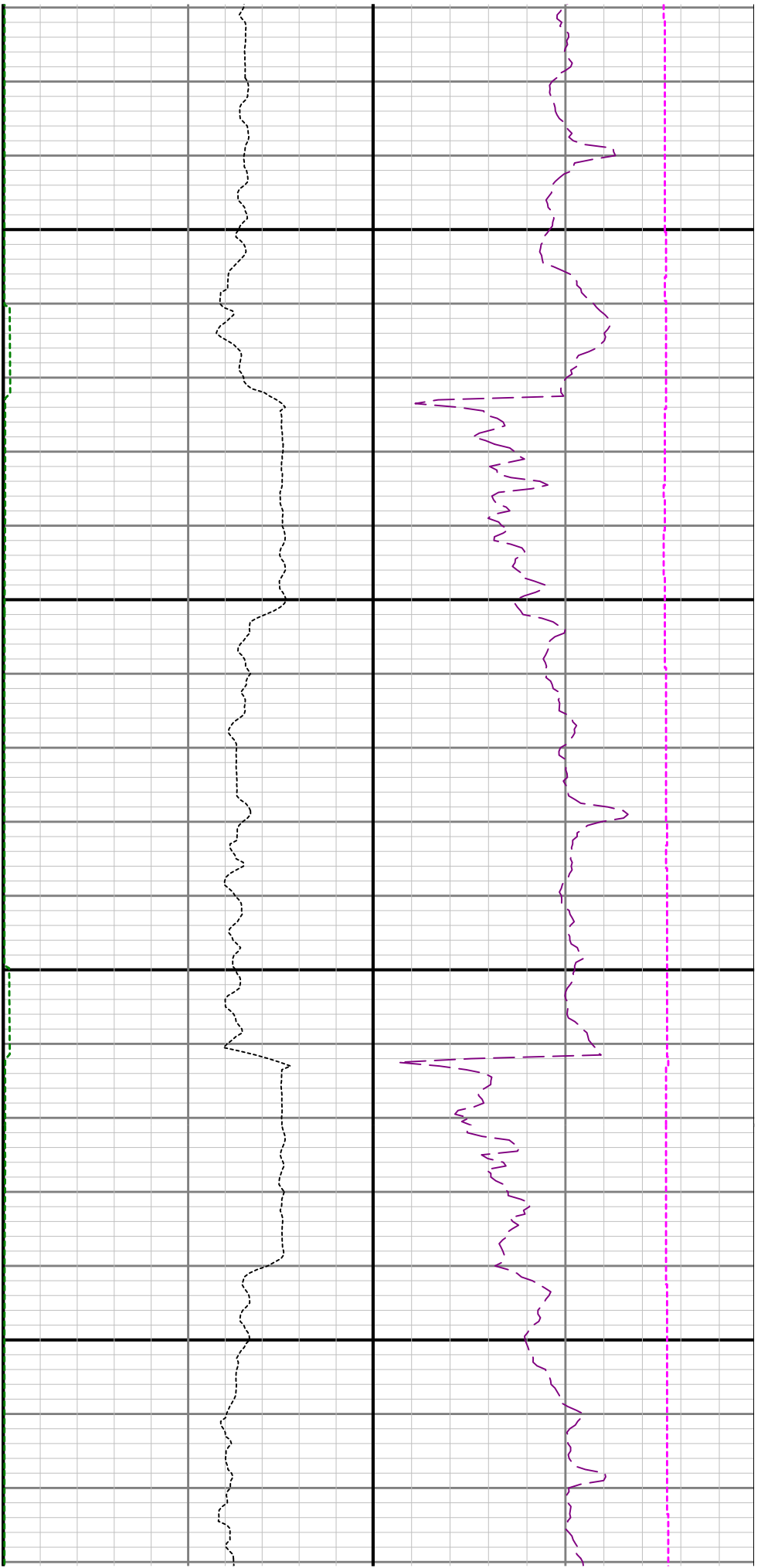




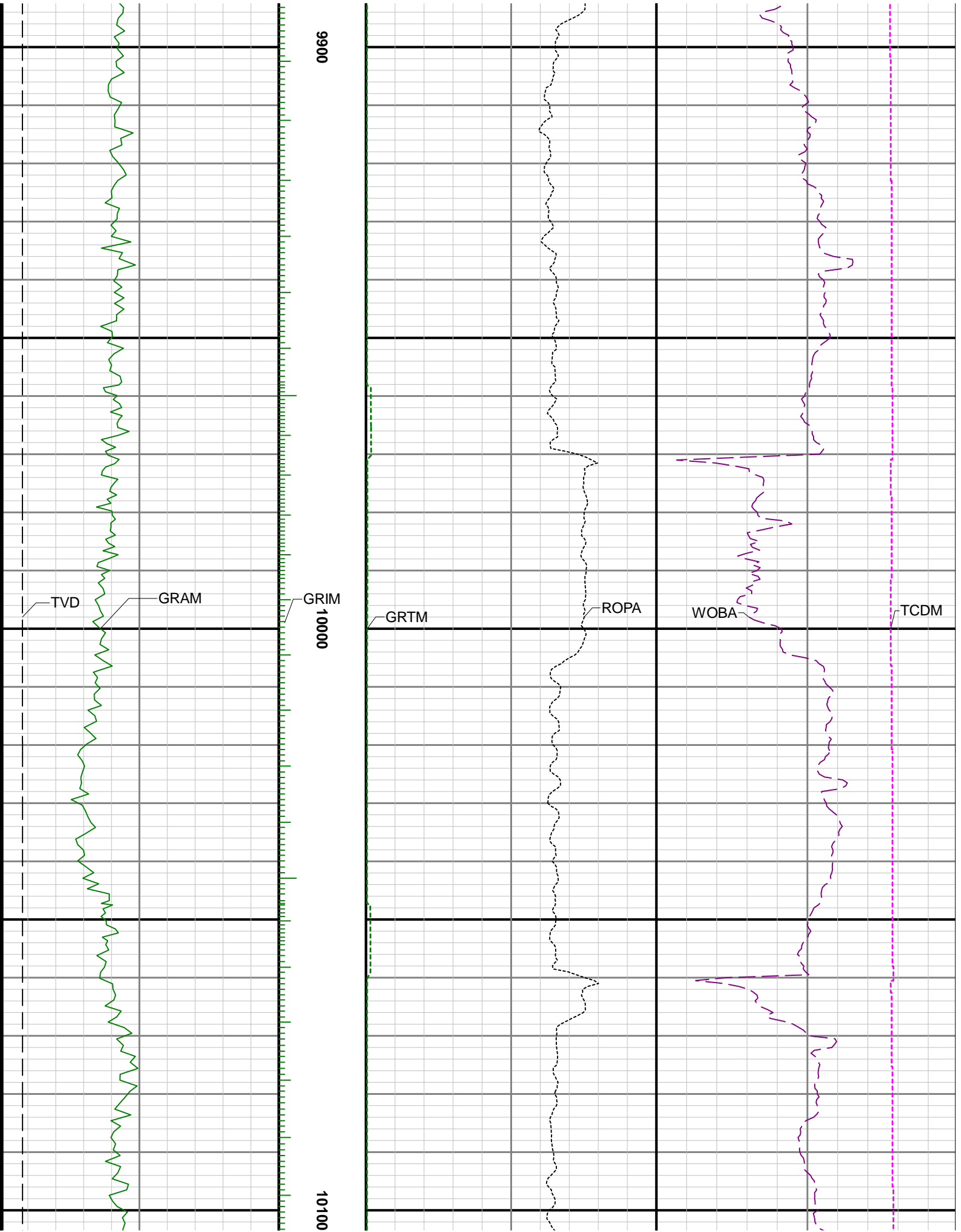


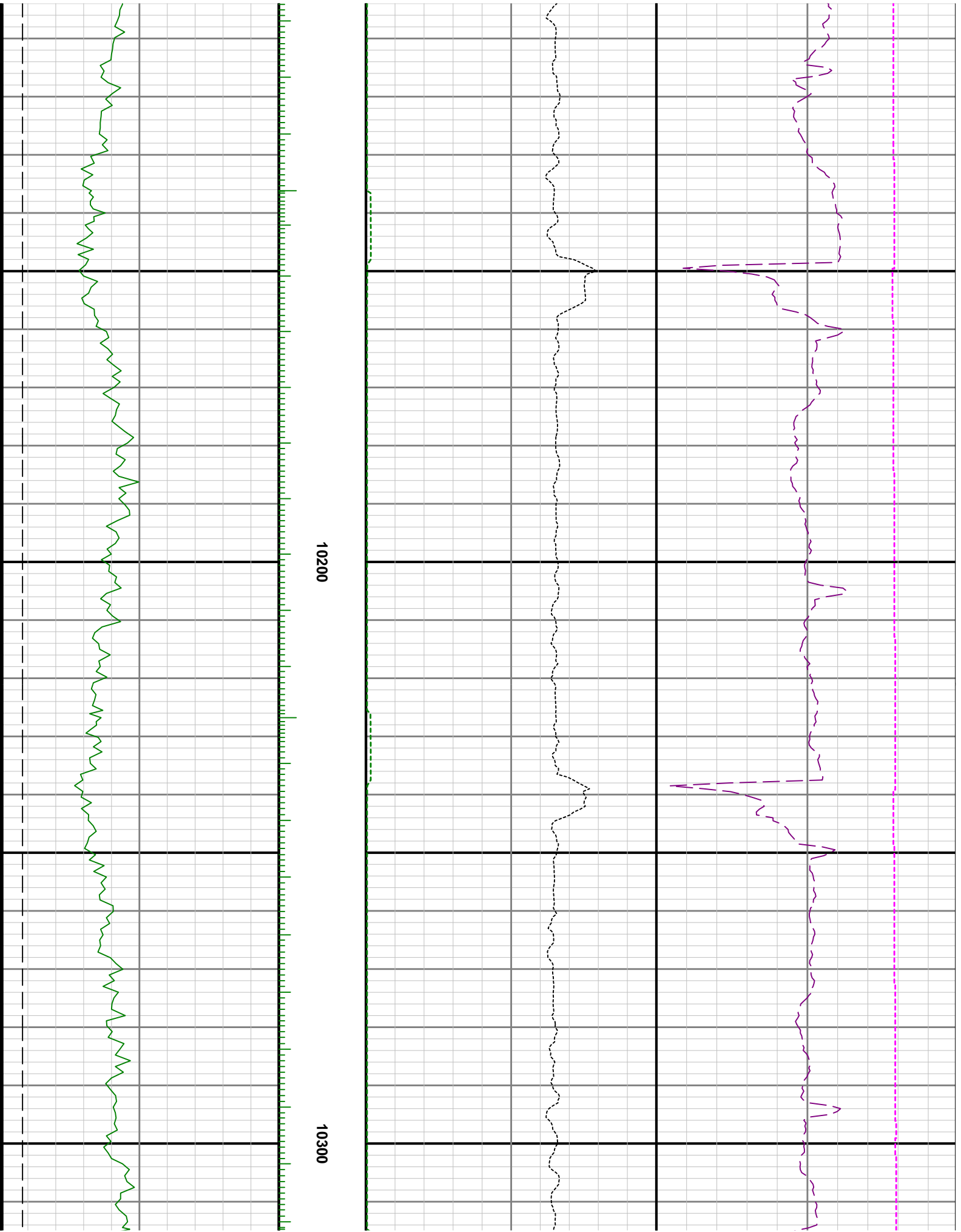
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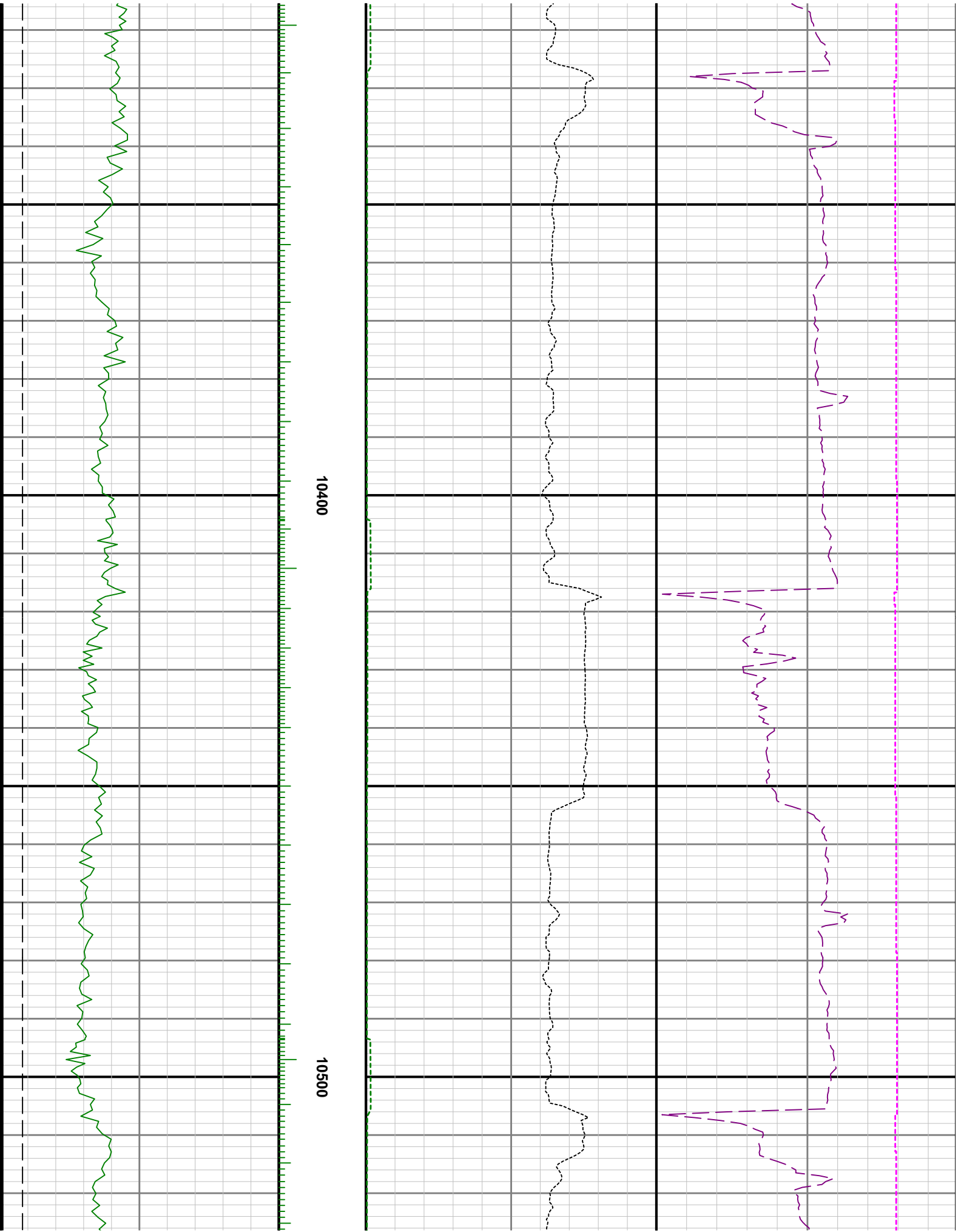
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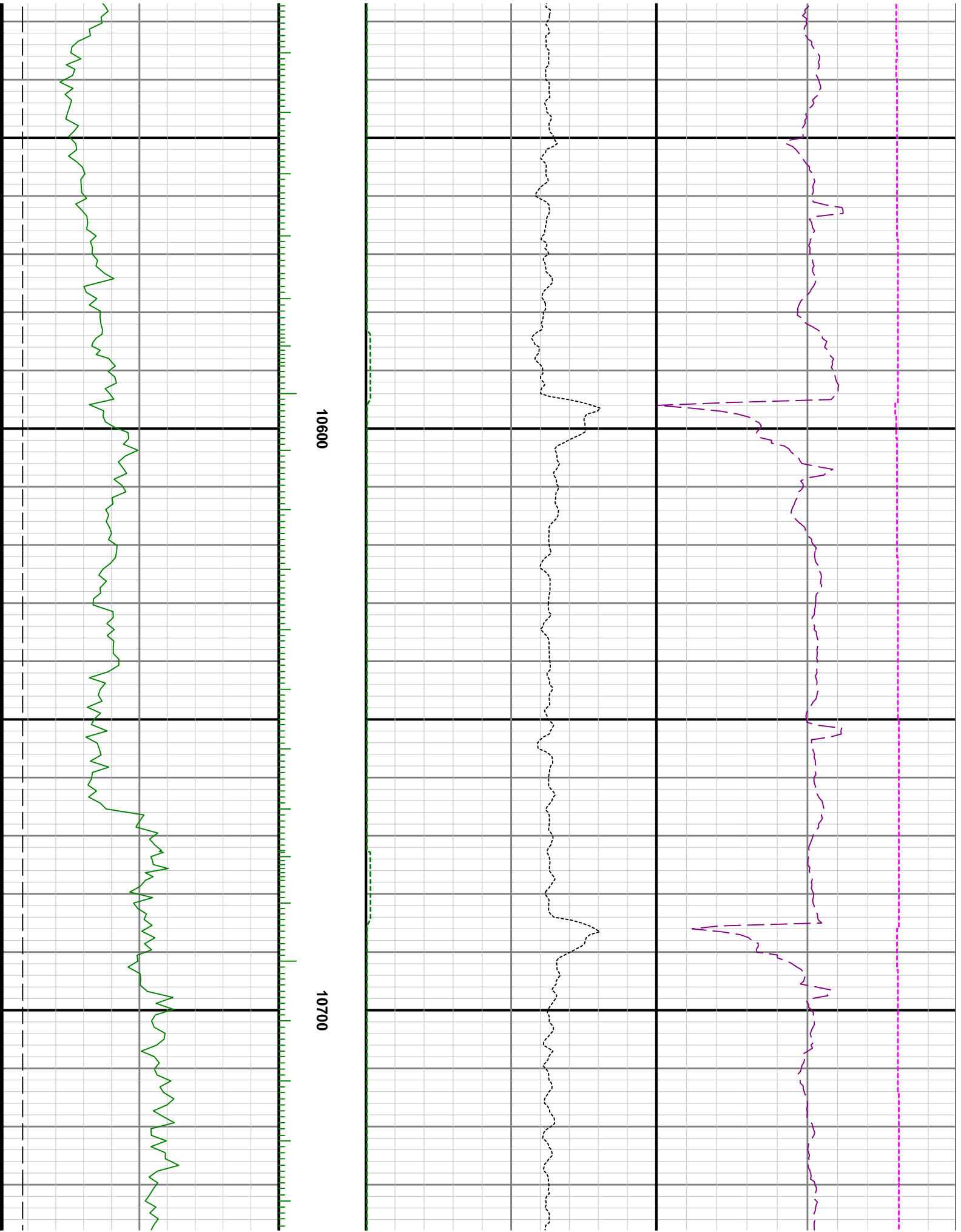


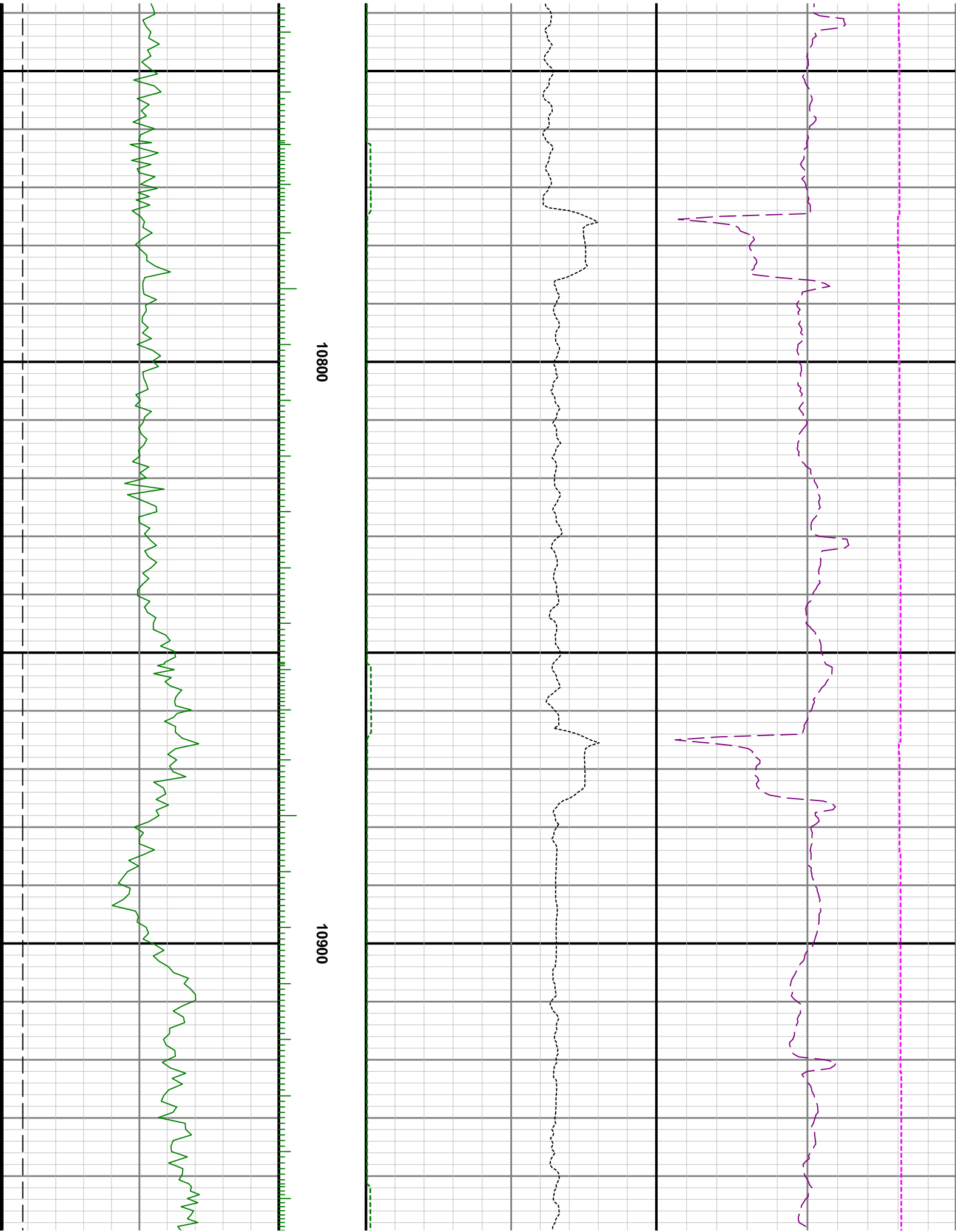


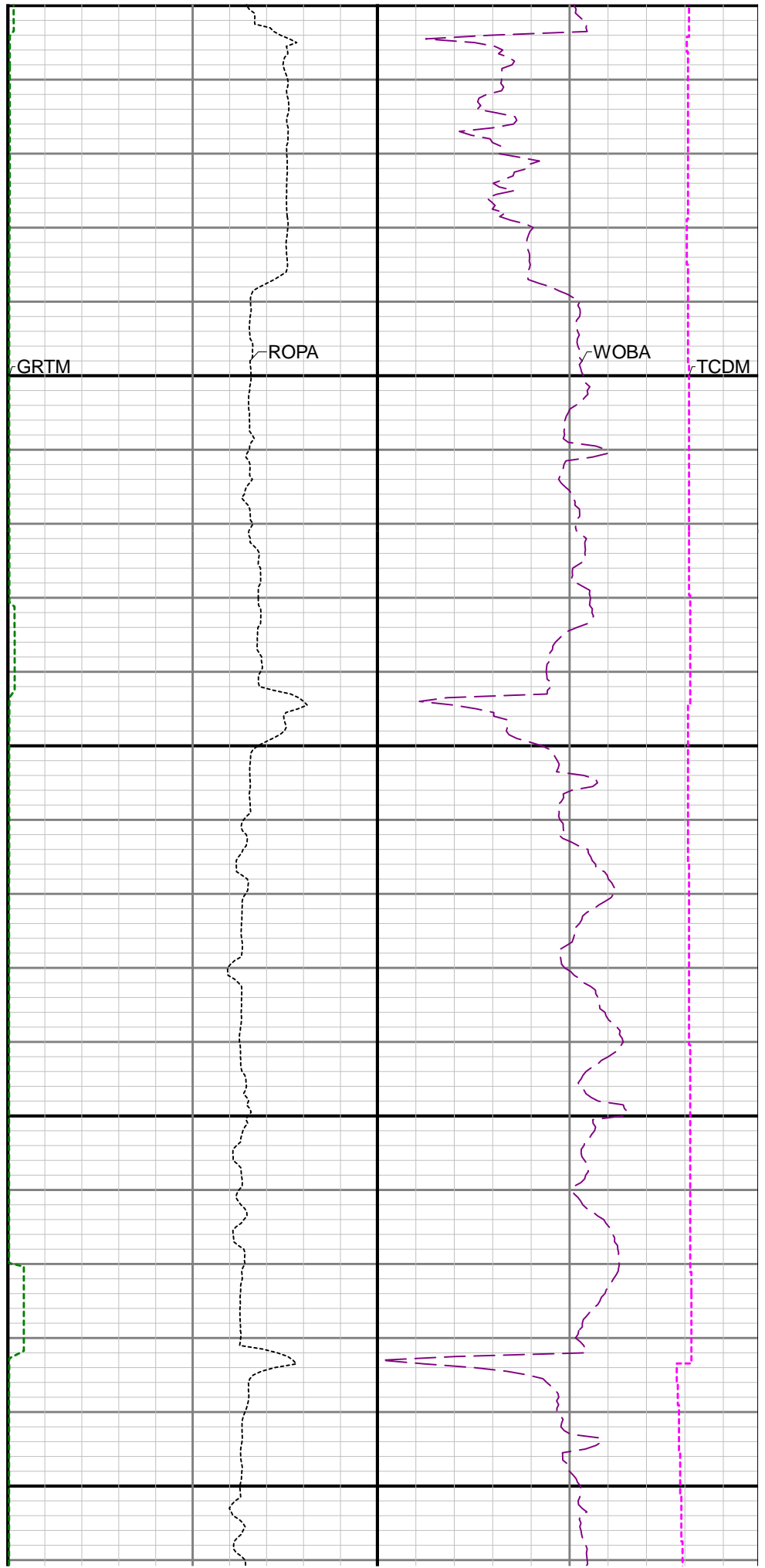
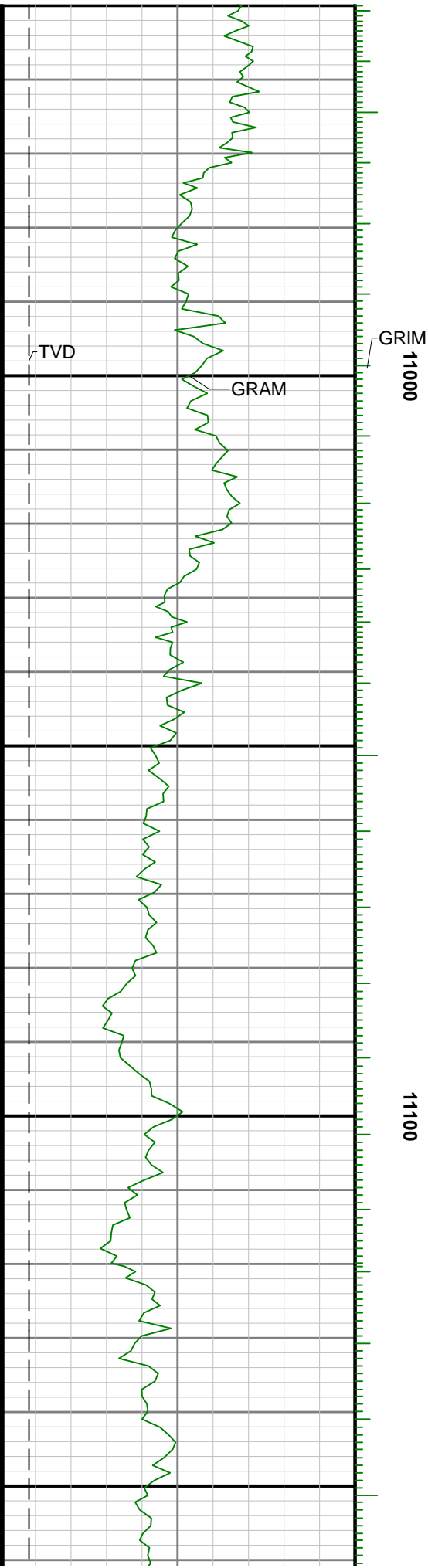


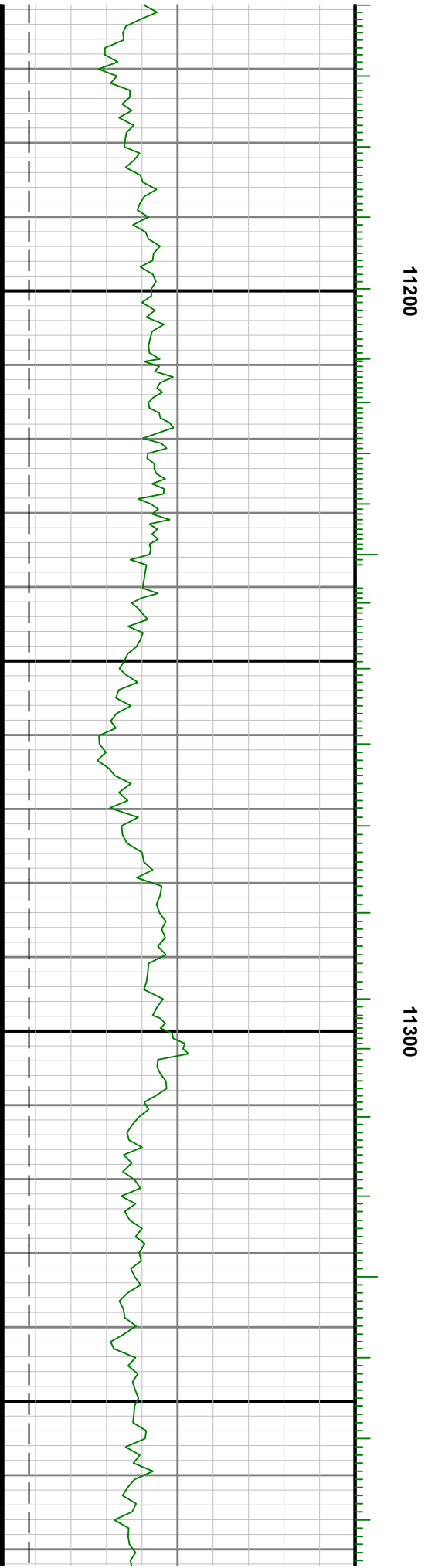
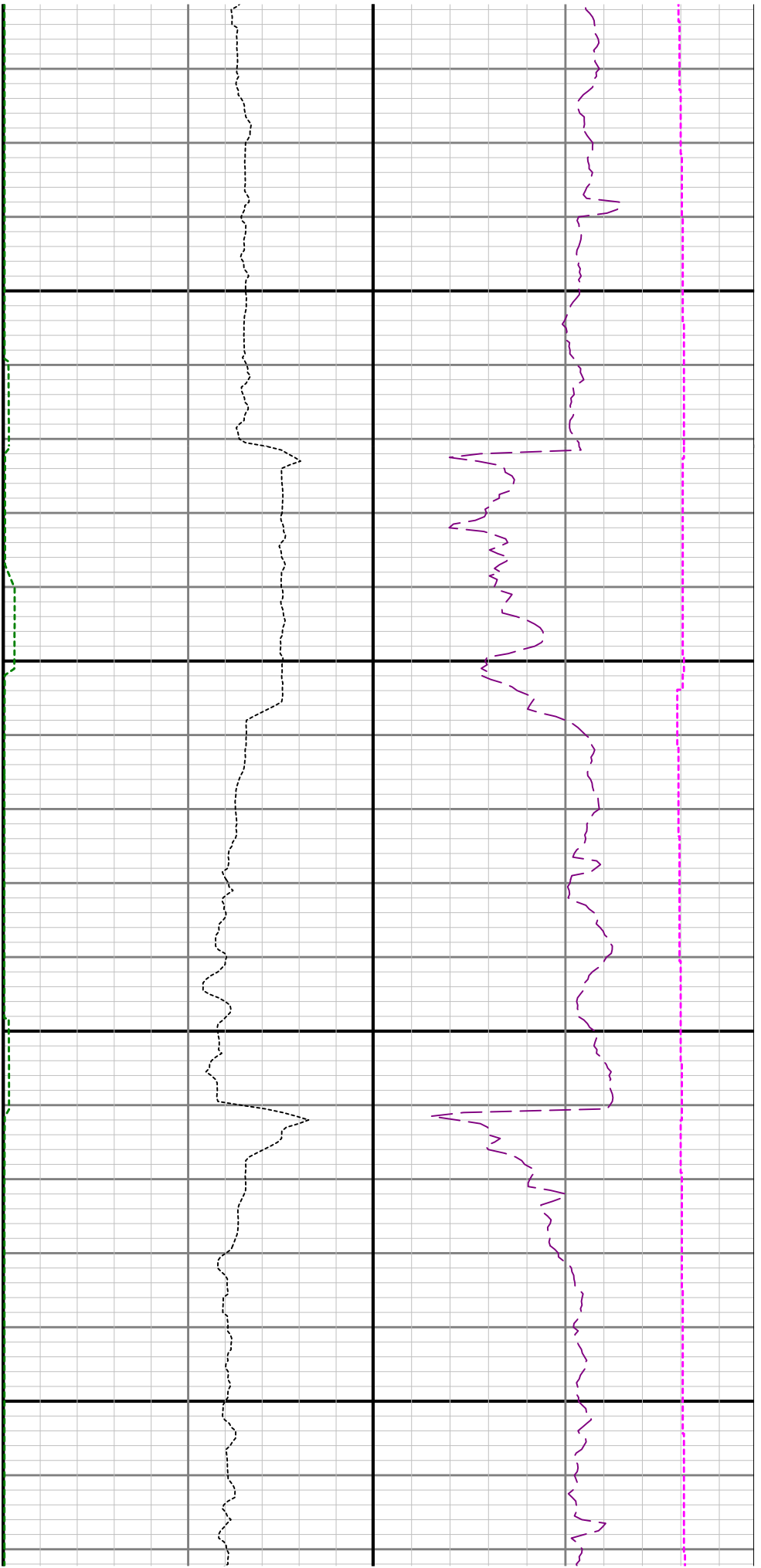














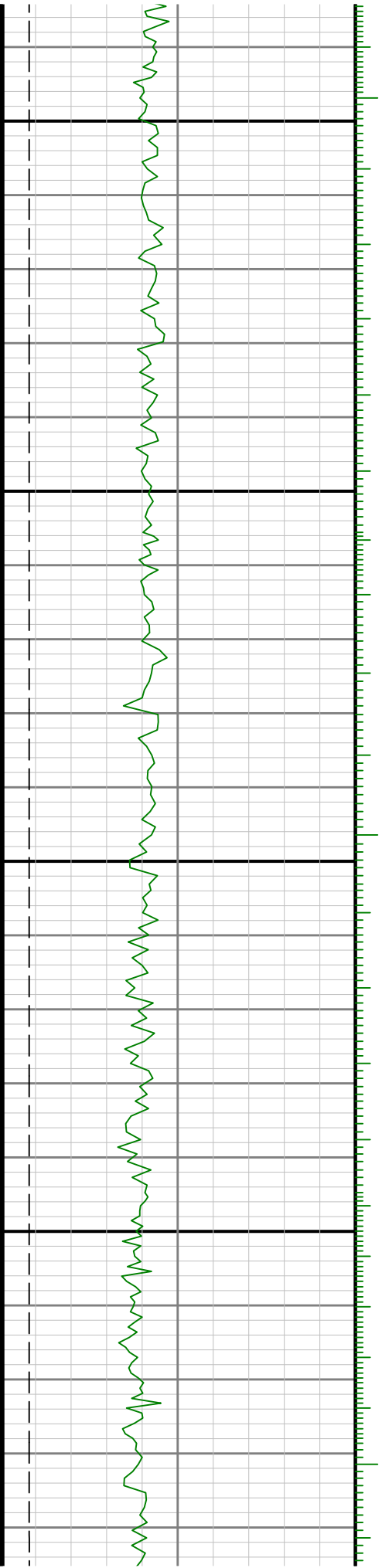
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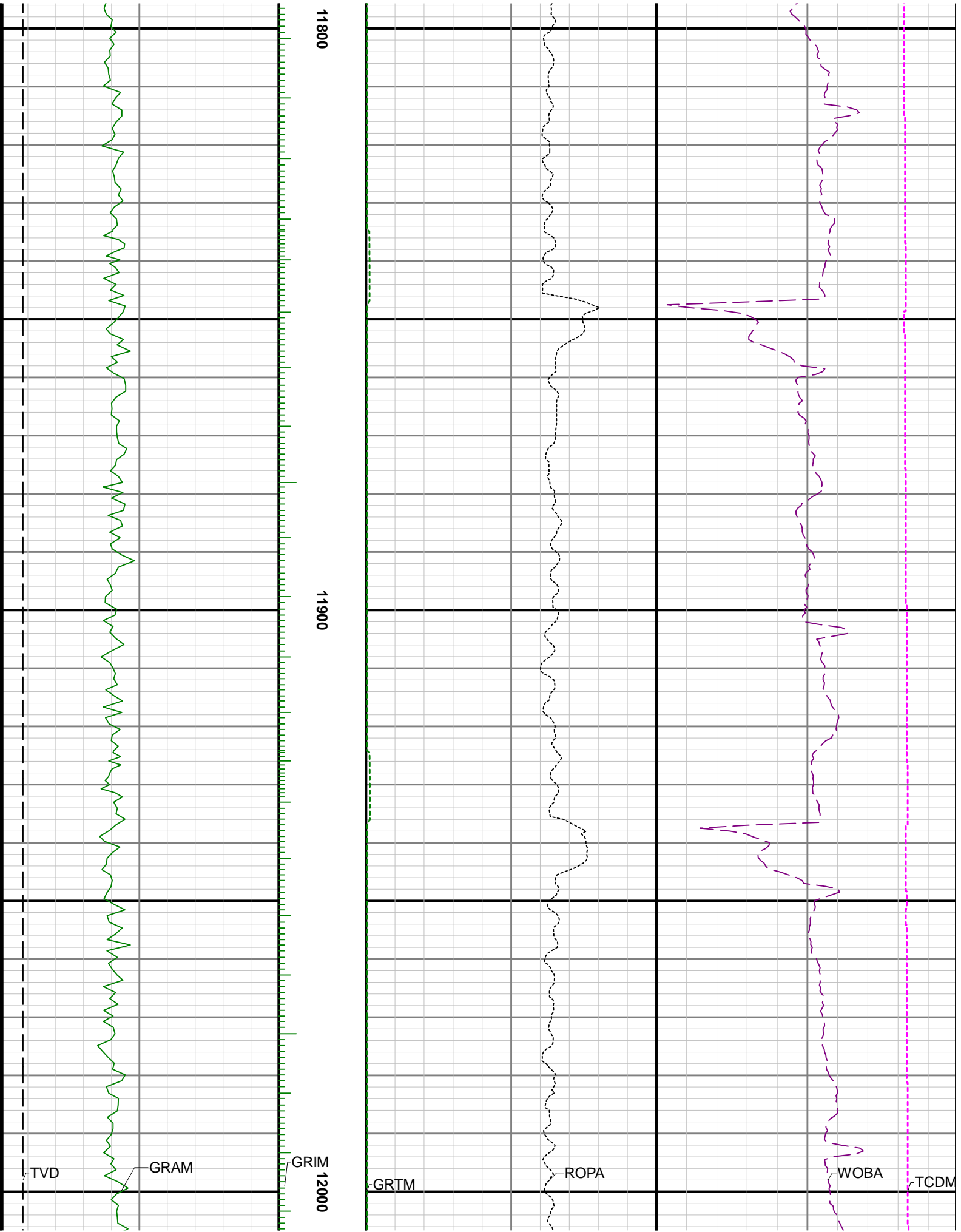
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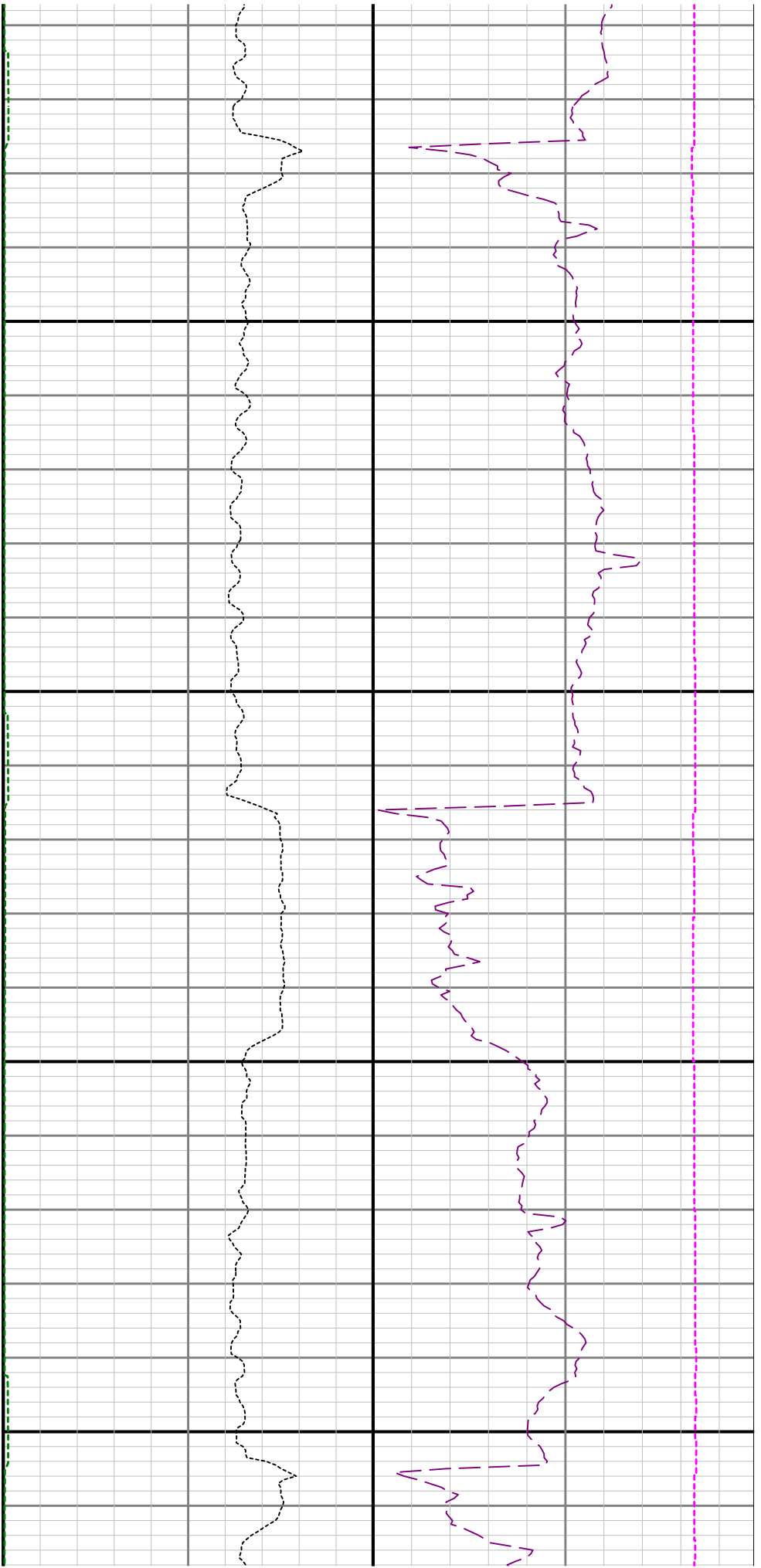


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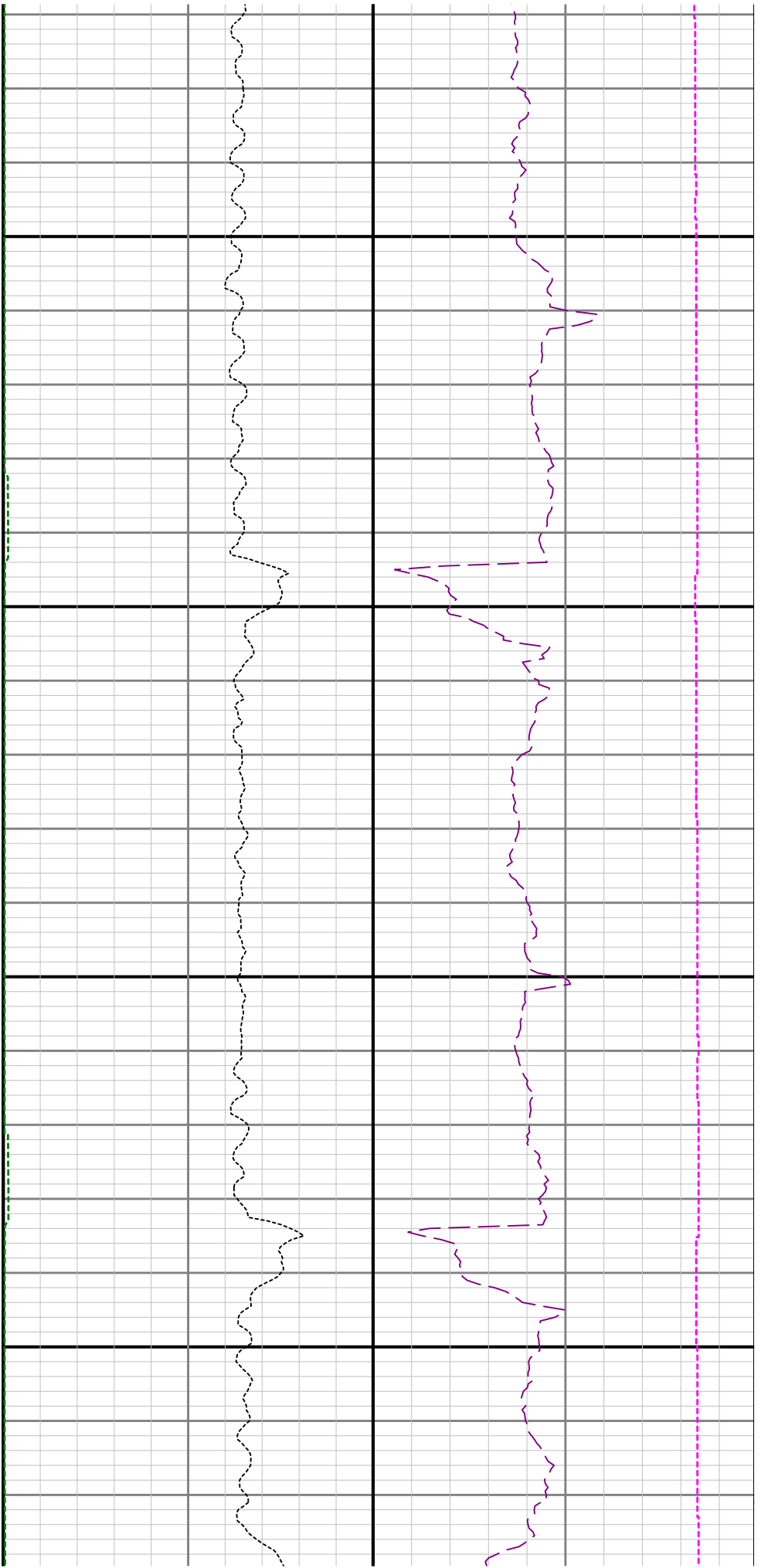






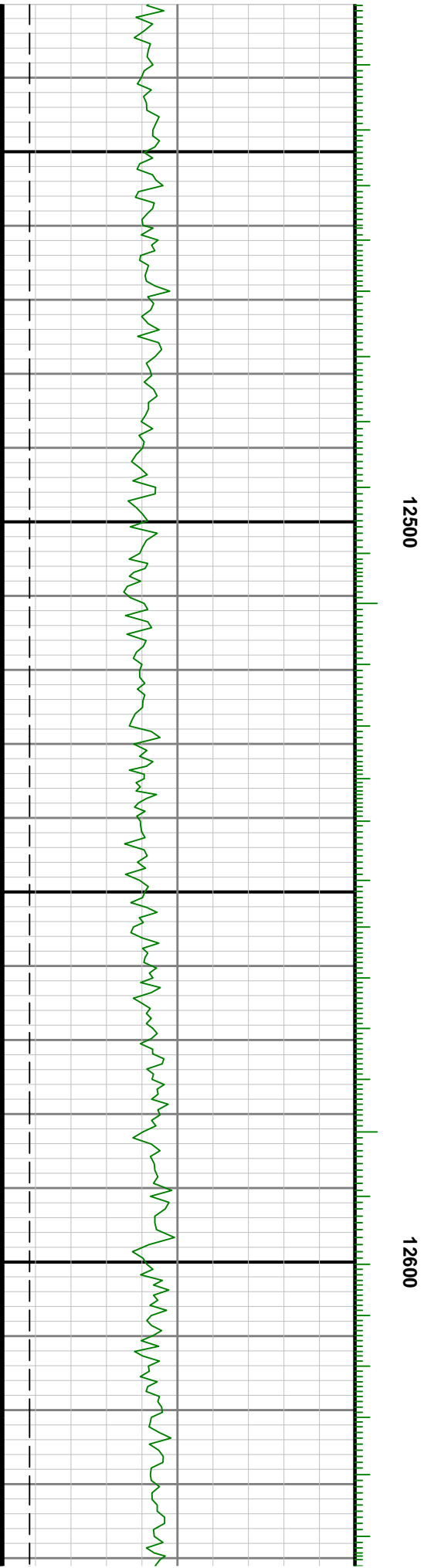
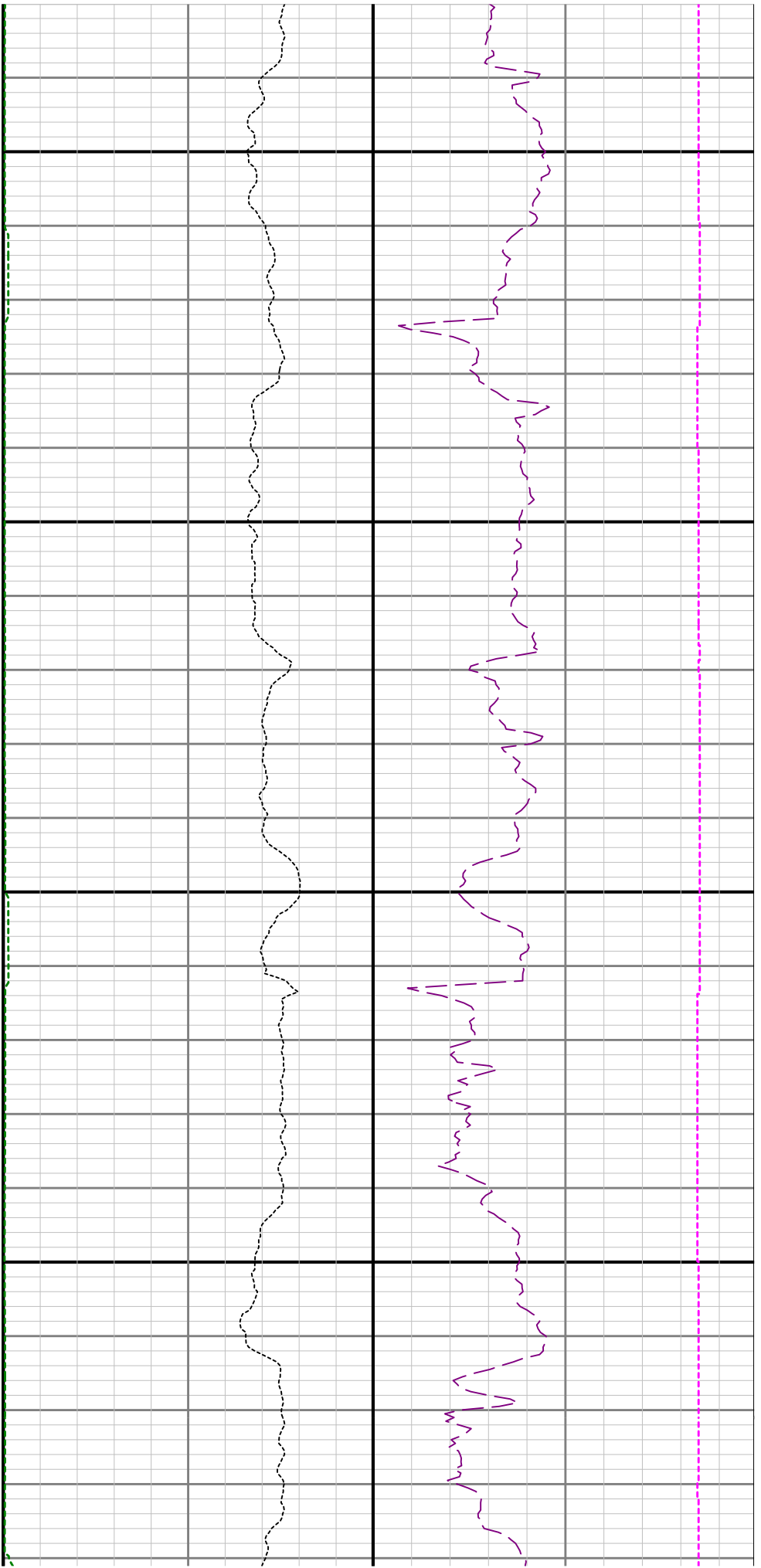
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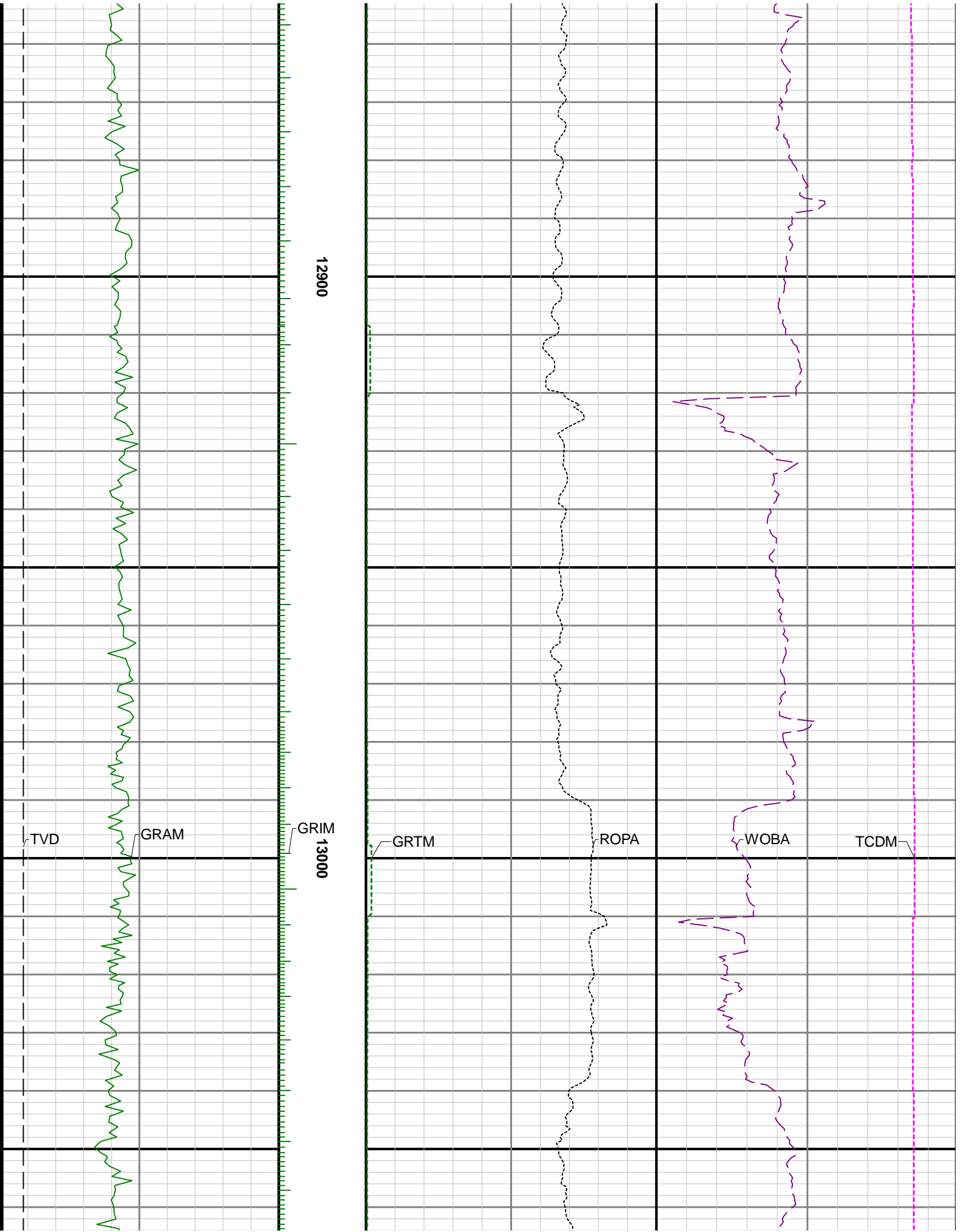


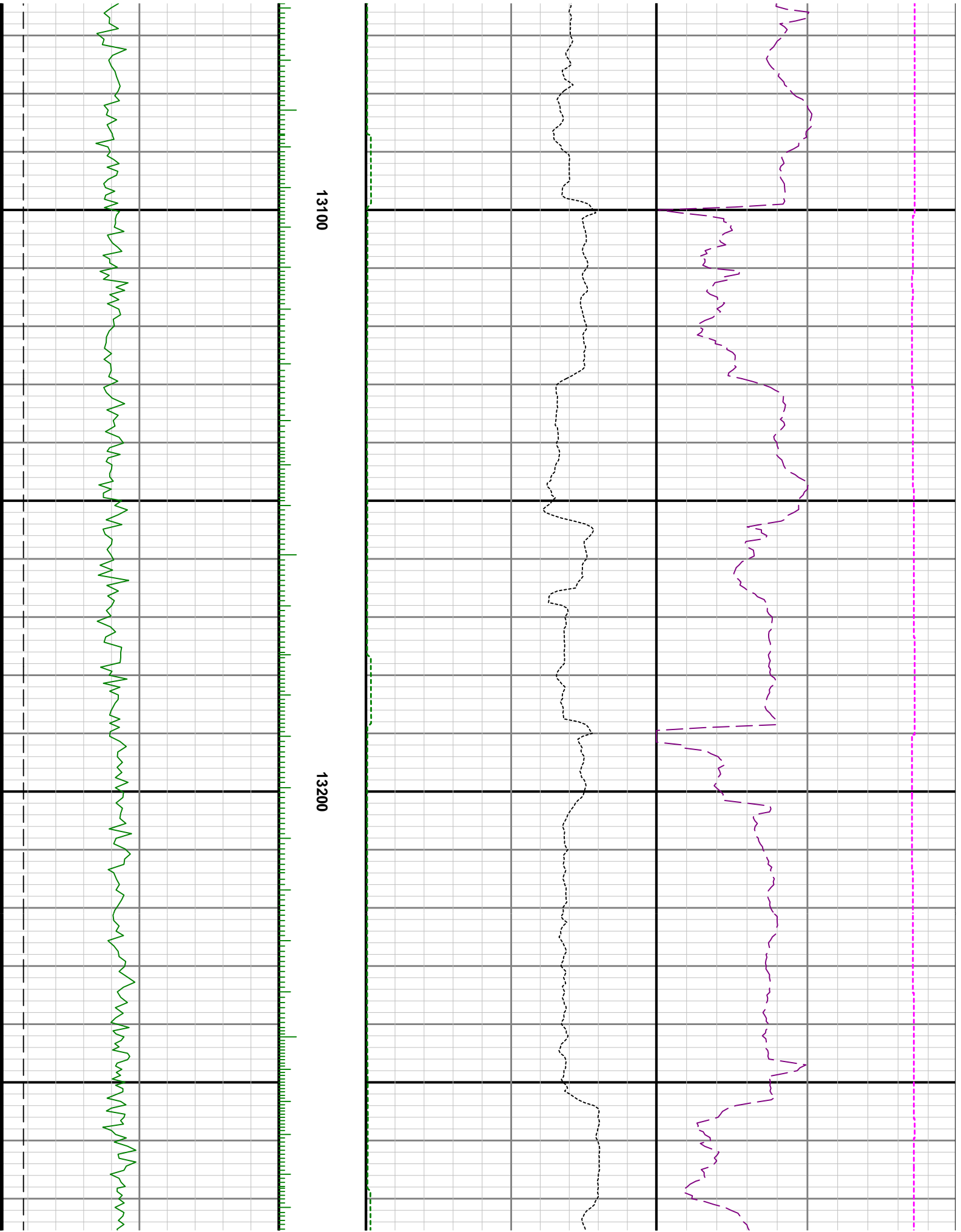
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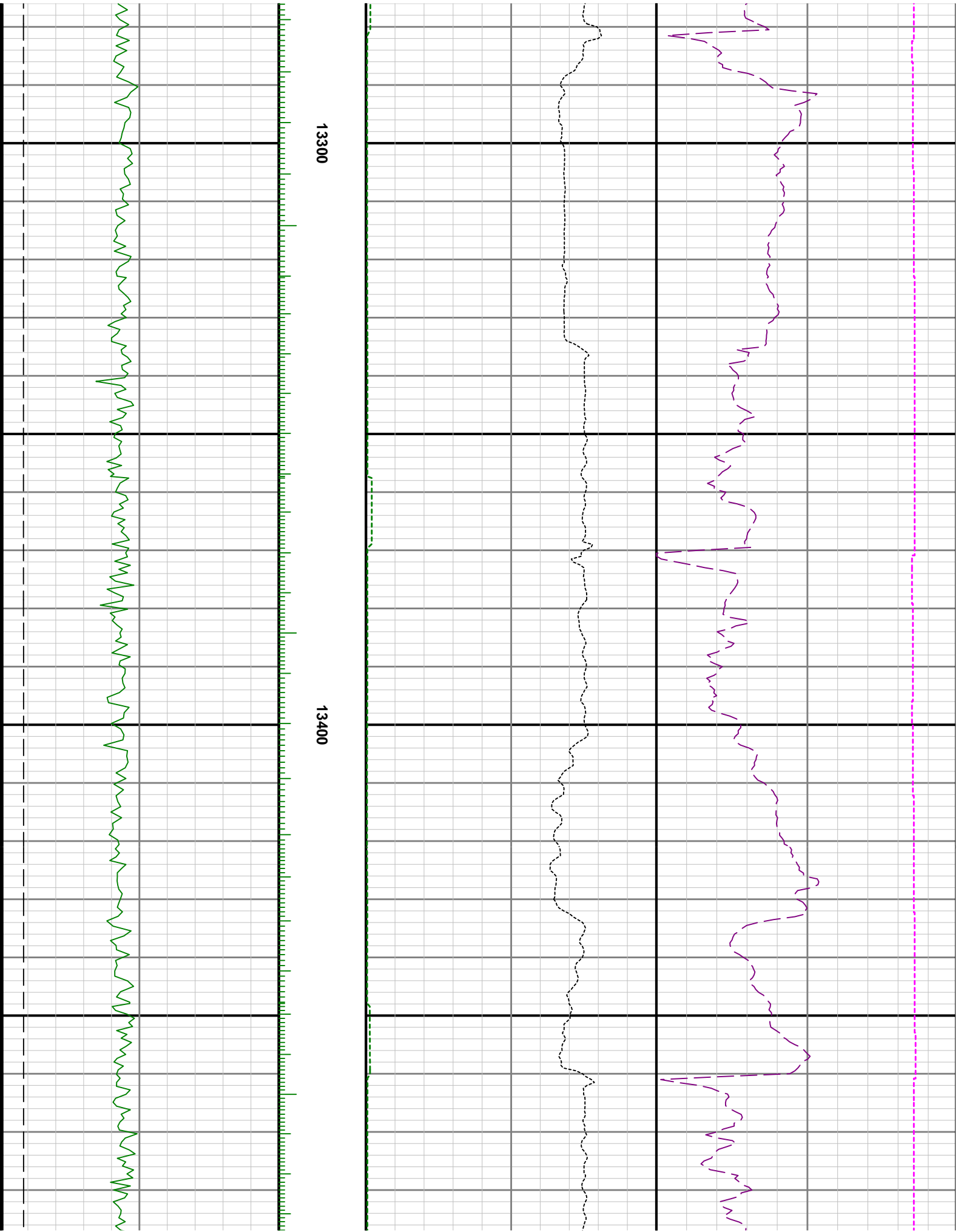
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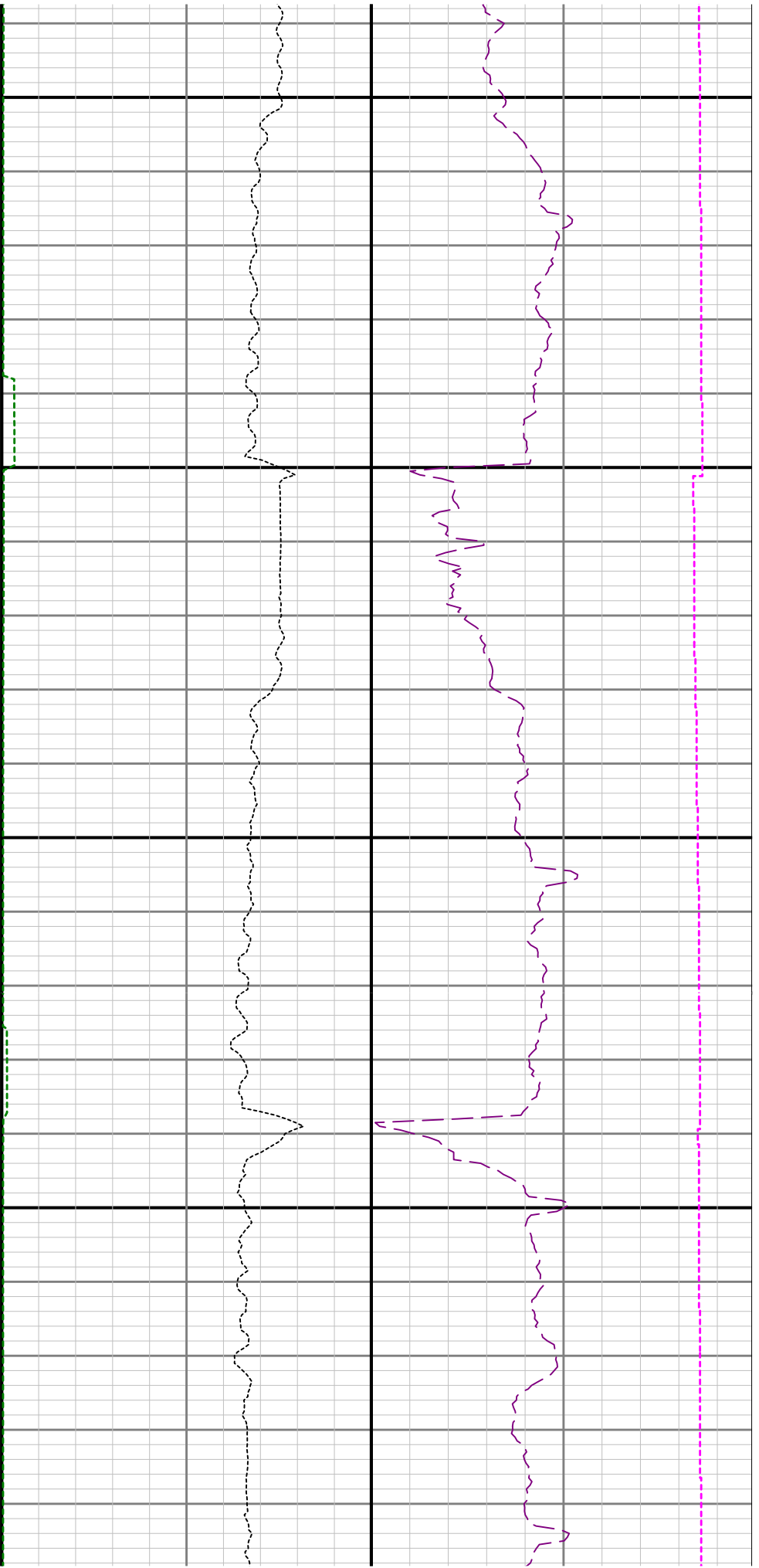








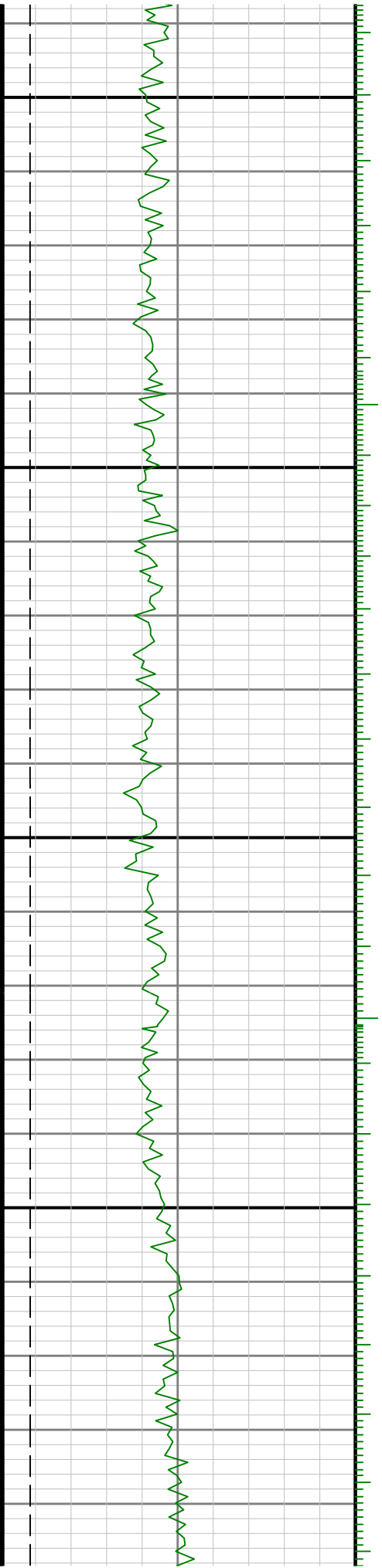


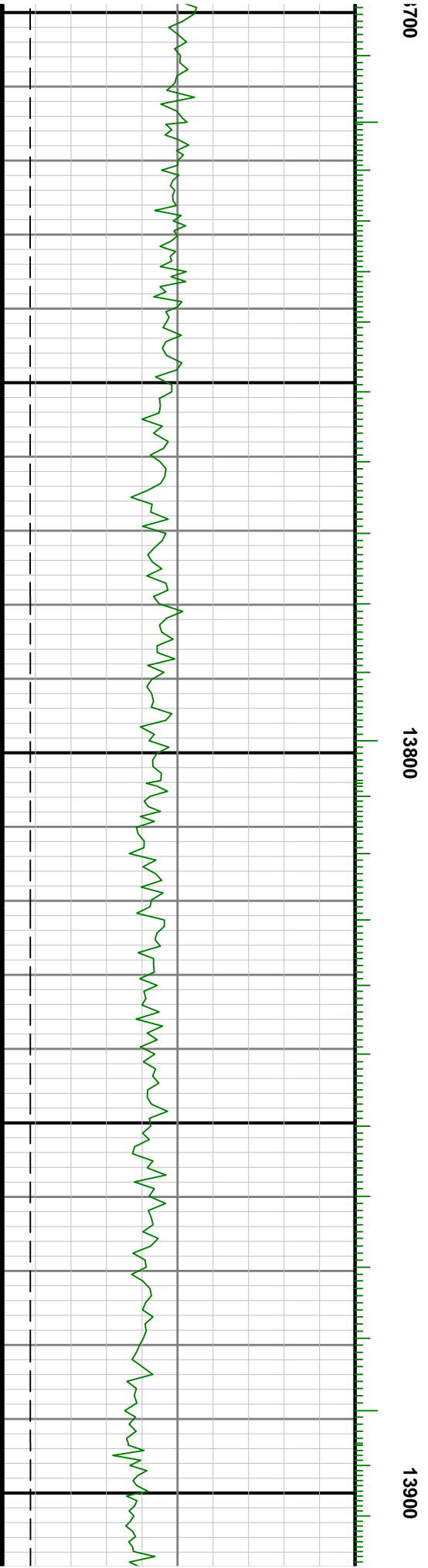
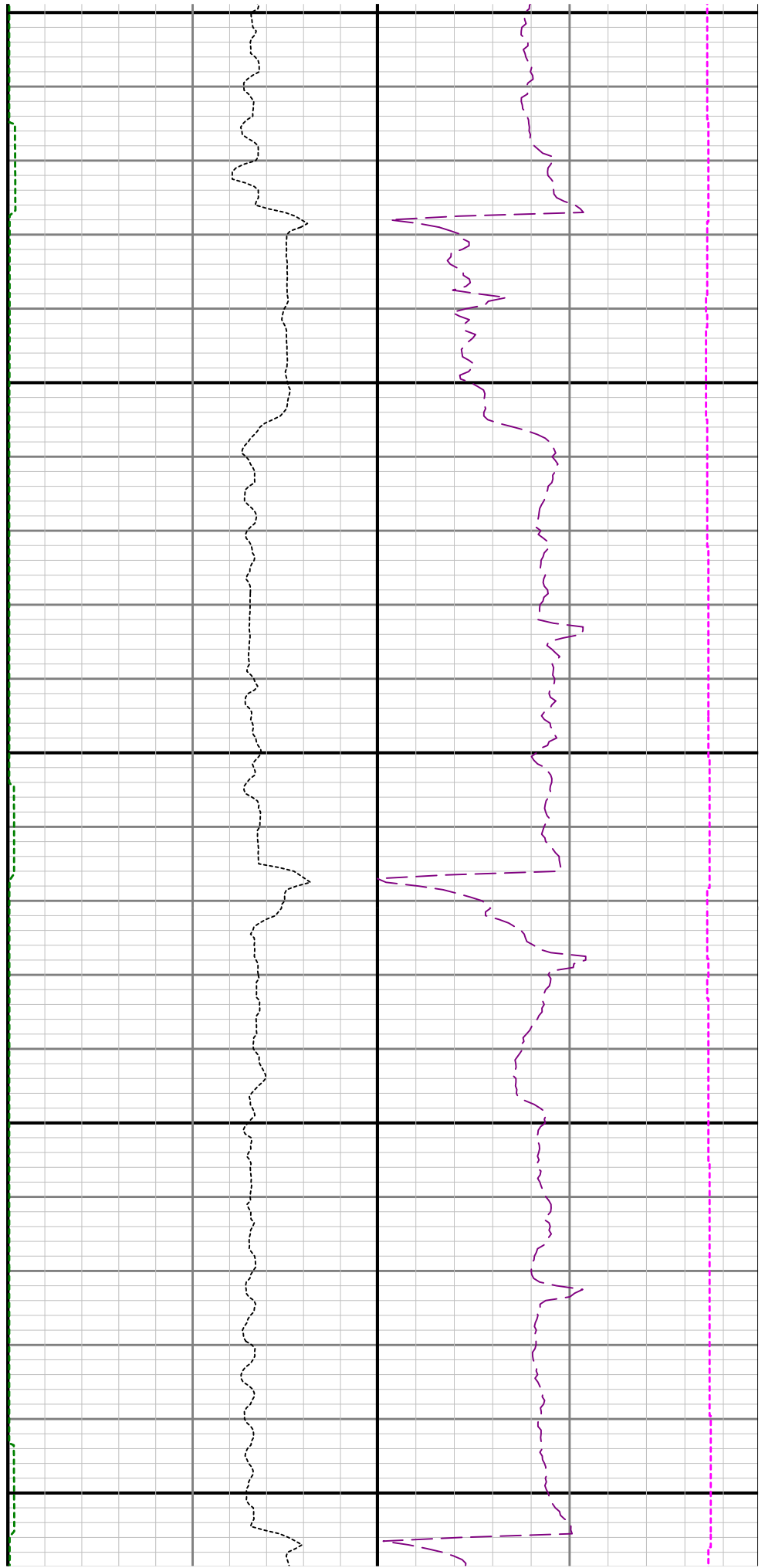


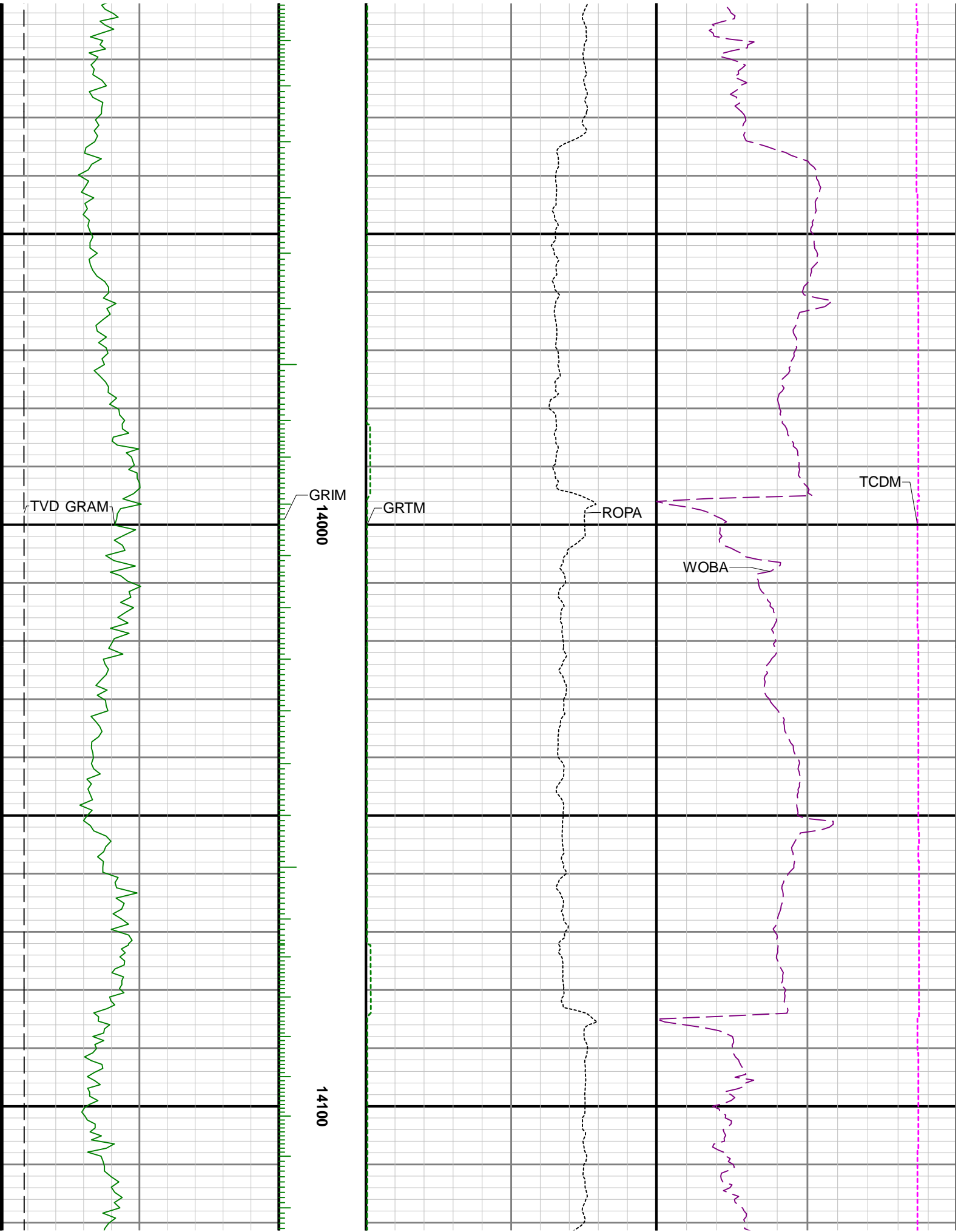
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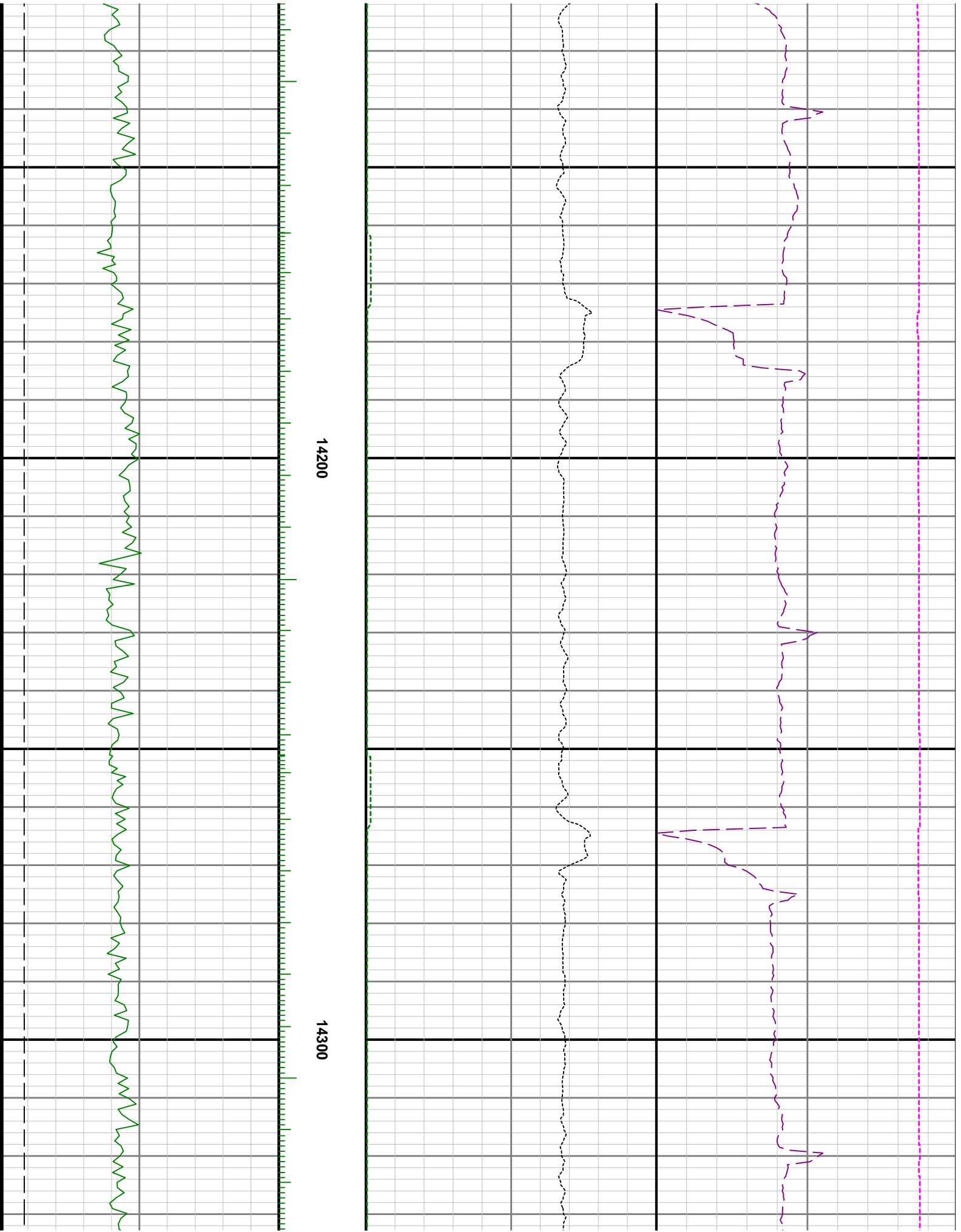
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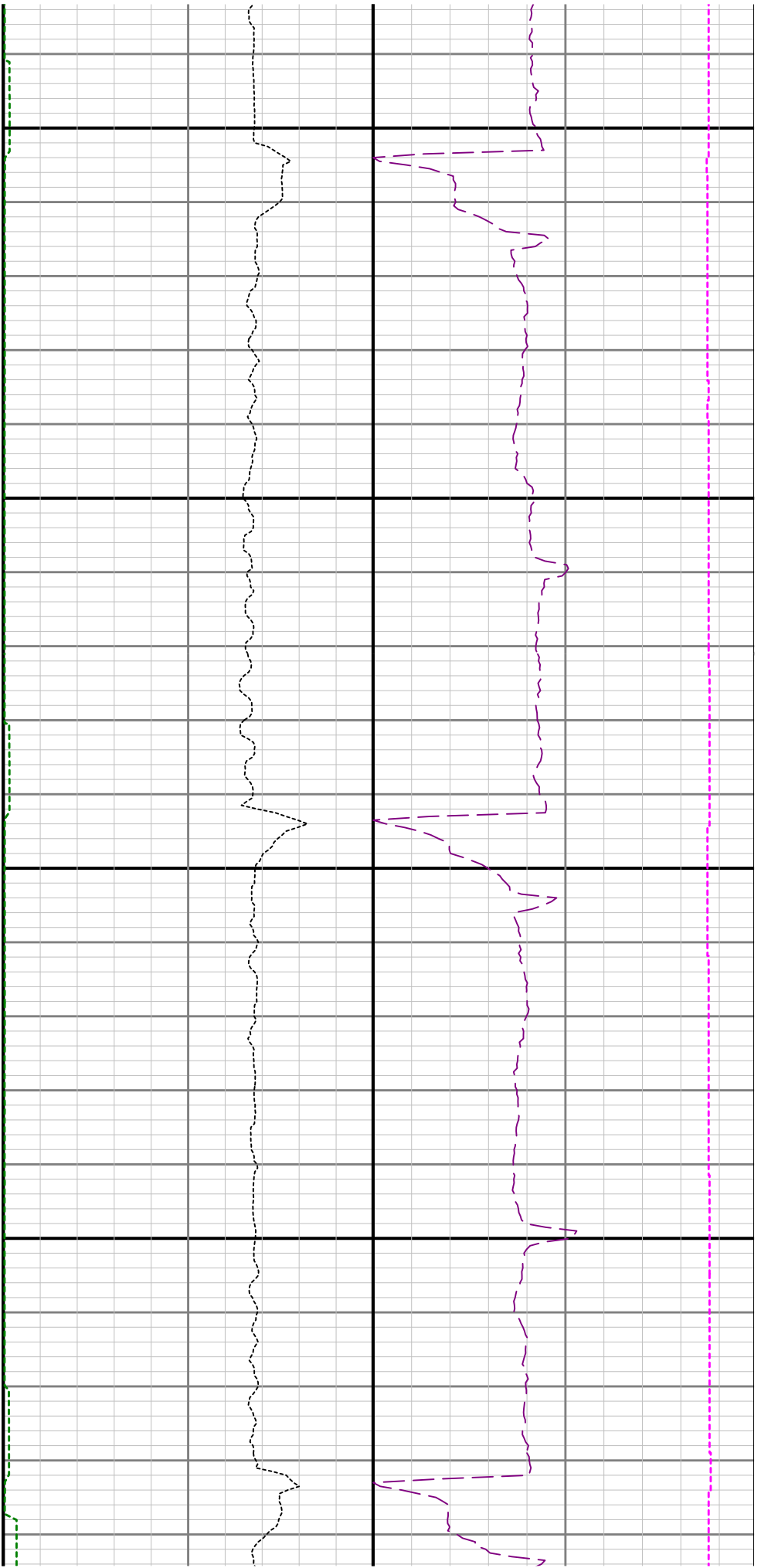
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14400

14500

