



Realtime Log

Natural Formation Evaluation  
Gamma Ray

Scale:

Company: Anadarko

Well: Viper Pyro 26N2-14HZ

Field: Weld County

Region: Continental US State: Colorado

1:240

MEASURED DEPTH

Status:

Final Print

Surface Location:

Latitude: 40° 13' 51.566" N

Longitude: 104° 53' 7.069" W

Other Services:

Directional  
VSS

API Number:

051234142700

Section: 15

TWN: 3S

Range 67W

Elevations:

N/A

Permanent Datum (P.D.): Mean Sea Level

Elevation: 4794.00 ft.

Rig Floor 20.00 ft.

Above P.D.

Driller's Depth

KB:

DF:

GL:

Elevations: N/A

4814.00 ft.

4794.00 ft.

Interval Logged

Dates

Magnetic Field Reference

Top: 6300.0 ft. Date From: 27/Jul/15 Date To: 03/Aug/15 Dip Angle: 66.87° Az: Reference North: True

Bottom: 16905.0 ft. Date To: 03/Aug/15 Total Mag to Reference

Spud Date: 27/Jul/15 Field Strength: 52454.0 nT North Correction: 8.42°

Borehole Record

Casing Record

Hole Size From To Size Weight From To

12.500 in. Surface 839.0 ft. 9.625 in. 36.00 lb/ft. Surface 829.0 ft.

8.750 in. 839.0 ft. 7372.0 ft. 7.000 in. 26.00 lb/ft. Surface 7363.0 ft.

6.125 in. 7372.0 ft. 16905.0 ft.

Mud Record

Deviation Record

Type From To Hole Size Interval Inc / Az (Start) Inc / Az (End)

Oil Based Surface 16905.0 ft. 12.500 in. 839.0 ft. 0.0° / 0.0° 6.8° / 87.3°

8.750 in. 7372.0 ft. 7.7° / 87.6° 83.5° / 91.8°

6.125 in. 16905.0 ft. 86.9° / 91.9° 89.6° / 91.4°

Acquisition System Software Version

Other

Advantage 2.2004 Rig / Contractor: Precision 462 / Precision Drilling

PAIS 6.4.1.34 Job No: 7343555 / D & E

District / Unit: RMD

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Log Run Summary

LWD Run No.	BHA Run No.	Bit Run No.	Bit Size  (in.)	Bit Type	Bit Gauge Length  (in.)	Assembly Type	Logged Interval		Bit Depth Interval		Date / Time				Circ. Time  (hrs.)
							Top  (ft.)	Bottom  (ft.)	From  (ft.)	To  (ft.)	Start		End		
1	1	1	8.750	PDC	3.500	Steerable	6300.0	7313.0	839.0	7372.0	28/Jul/15 00:12	29/Jul/15 16:05	31/Jul/15 03:01	03/Aug/15 05:13	33.4
2	2	2	6.125	PDC	3.000	Steerable	7313.0	16842.0	7372.0	16905.0	31/Jul/15 03:01	03/Aug/15 05:13			64.6

Crew

Name	Arrive	Depart	Name	Arrive	Depart	Name	Arrive	Depart
	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite
Andy King	27/Jul/15	03/Aug/15	Nick Gerard	01/Aug/15	03/Aug/15	Mike Cleary	27/Jul/15	03/Aug/15
Mike Gurnsey	27/Jul/15	03/Aug/15	Ken Perry	27/Jul/15	31/Jul/15	Bill Herbers	01/Aug/15	03/Aug/15

Mud Properties Record

Date / Time		LWD Run No.	Measured Depth (ft.)	Mud Type	Density (lb/gal)	Viscosity (sec/qt)	pH	Fluid Loss (cc)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
29/Jul/15	05:00	1	6506.0	MEGADRIL	9.4	56	N/A	3.8	74/26	Suction	N/A	N/A
02/Aug/15	17:00	2	15603.0	MEGADRIL	10.2	74	N/A	5.4	73/27	Suction	N/A	N/A

Mnemonics

Curve	Description	Units
GRAX	Gamma Ray Apparent, 0.5 ft. Avg.	API
GRTX	Gamma Ray Time Since Drilled	min.
GRIX	Gamma Ray Data Density	points
GRSI	Gamma Ray Slide Indicator	unitless
ROPA	Rate of Penetration 3.0 ft. Avg.	ft./hr
TCDX	Downhole Temperature	Deg F.
TVD	True Vertical Depth	Ft.
WOBA	Surface Weight on Bit 1.0 ft. Avg.	klbs.

Equipment and Service Data

LWD Run No.	Tool	Serial Number	Measurement	Bit Offset (ft.)	Max O.D. (in.)	Min I.D. (in.)
1	DIR	11954358	Directional	62.20	6.760	3.250
1	SRIG	12586753	Gamma	58.86	6.760	3.250
2	DIR	12323368	Directional	63.82	4.750	0.000
2	SRIG	12023992	Gamma	60.48	4.750	0.000

Service and Tool Mnemonics

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

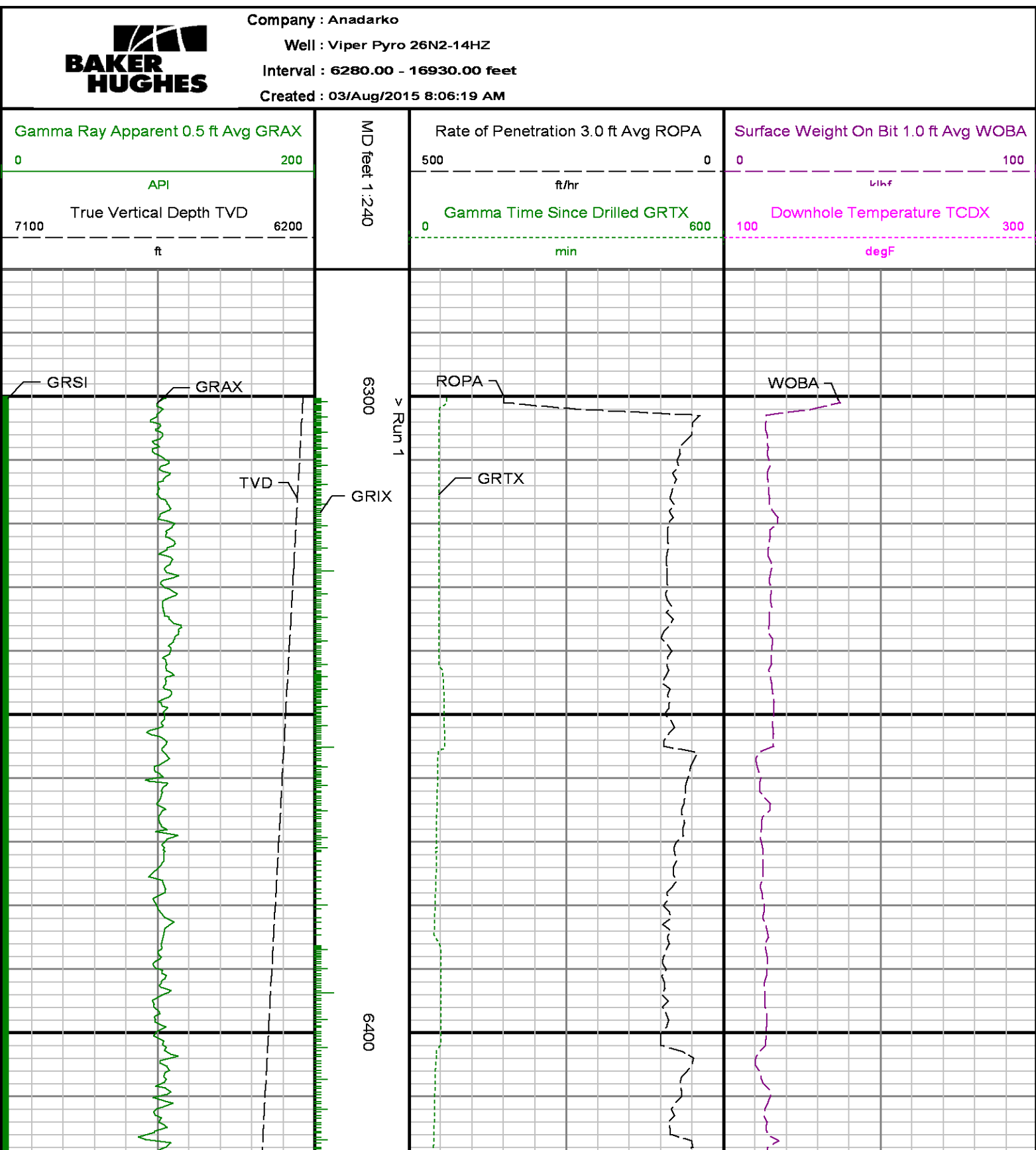
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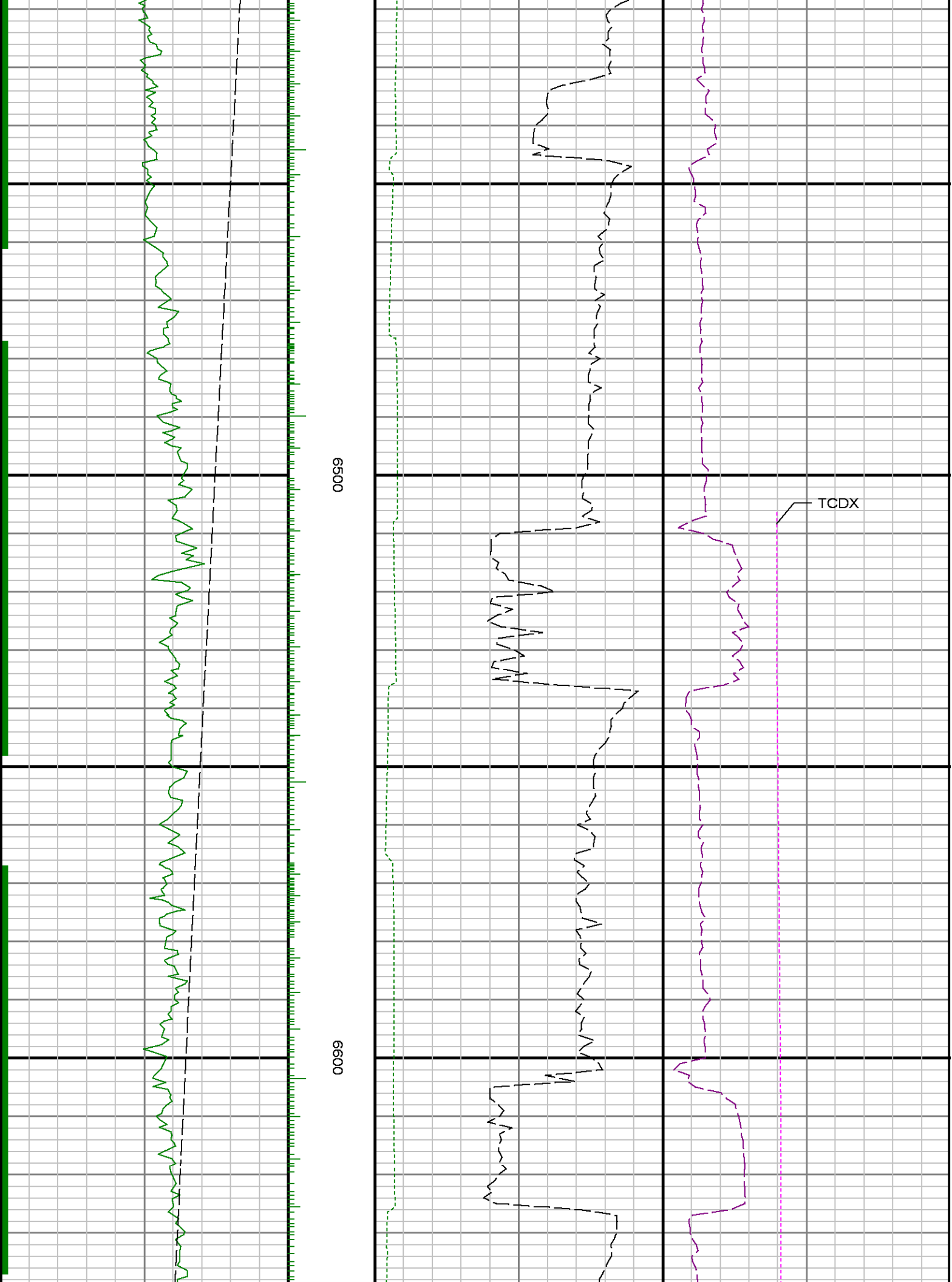
1.) Baker Hughes Run 1 utilized 6 3/4 inch NaviGamma services (Gamma Ray and Directional) behind an 8 3/4 inch bit and steerable assembly from 839 to 7372 feet MD (838 to 6902 feet TVD).
2.) Baker Hughes Run 2 utilized 4 3/4 inch NaviGamma services (Gamma Ray and Directional) behind an 6 1/8 inch bit and steerable assembly from 7372 to 16905 feet MD (6902 to 7050 feet TVD).
3.) Depth measurements were obtained from a depth control system not supplied or operated by Baker Hughes. Due to the lack of control by Baker Hughes logging engineers, depth calibrations and measurements could not be independently verified.
4.) A sliding indicator is shown on the left edge of track 1 as a heavy line. This indicator has been depth shifted to the Gamma Ray sensor offset to correspond with Gamma Ray data acquired while sliding.

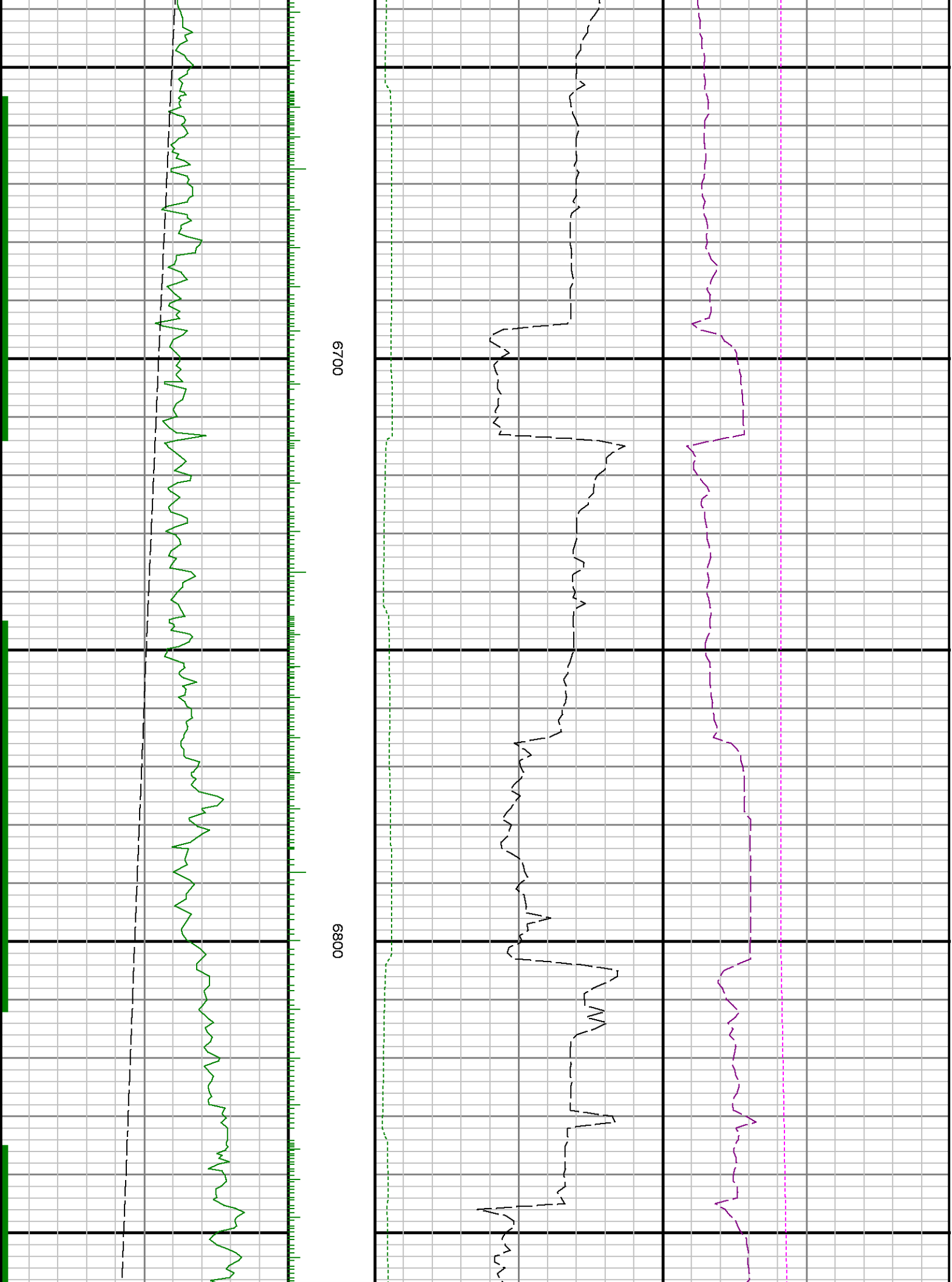
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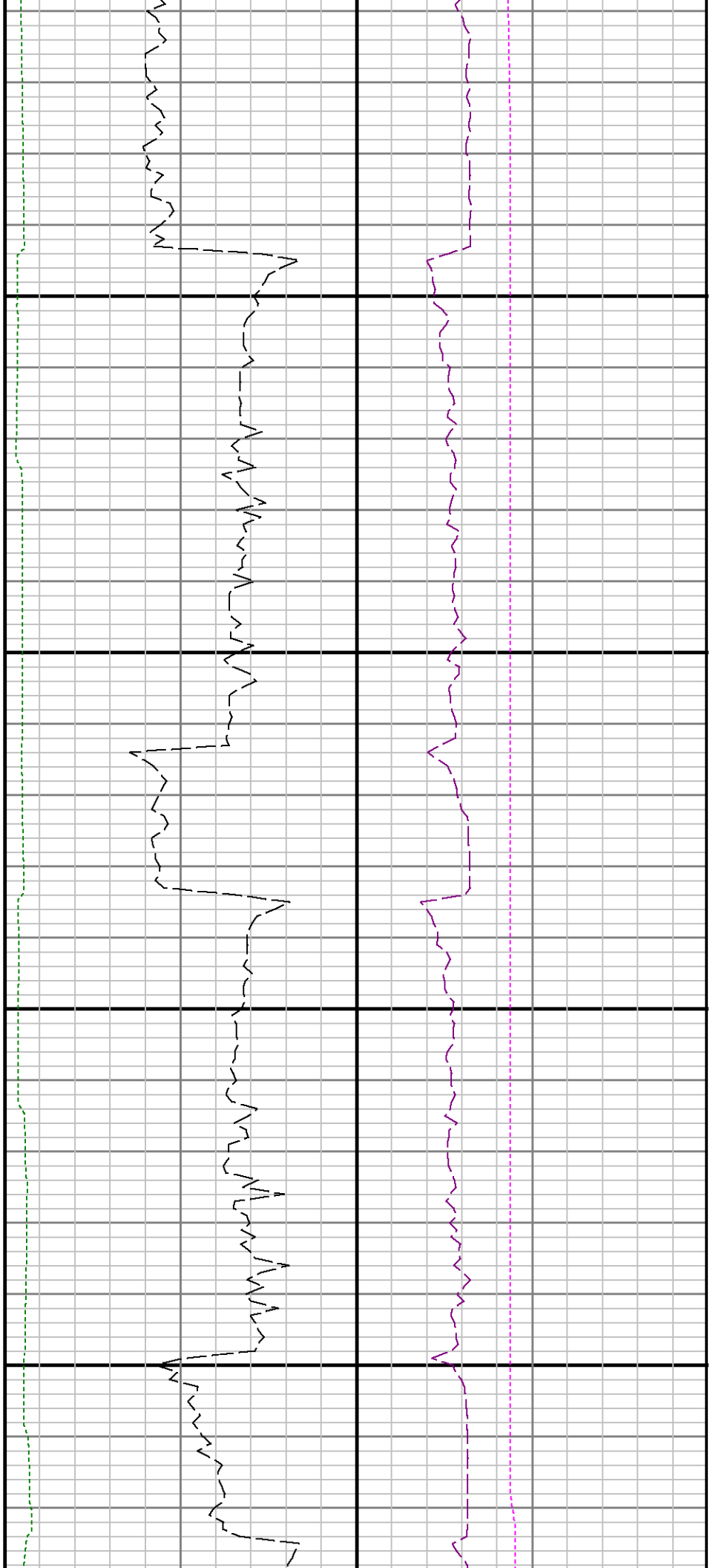
Number	Measured Depth	Hole Section	LWD Run No.	Remark
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	(ft.)	(in.)		
1	7325	8.750	1	The interval from 7313 to 7372 ft MD (6896 to 6902 ft TVD) was logged up to 35.0 hours after being drilled due to a trip out of hole to run casing and cement, and to pick up lateral BHA.
2	16860	6.125	2	The interval from 16842 to 16905 ft MD (7050 to 7050 ft TVD) contains no logging data due to sensor offset from the bit at well TD.



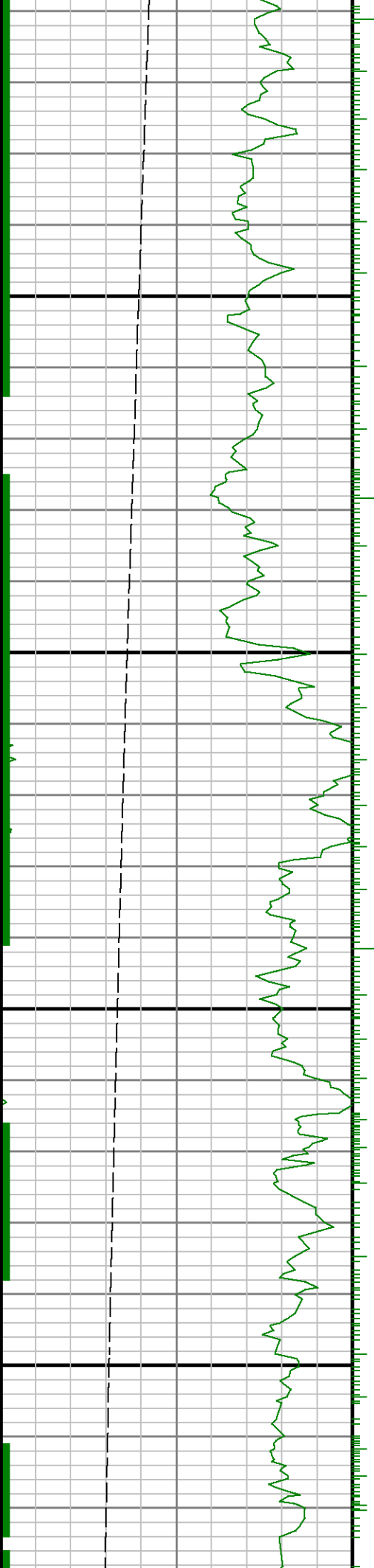


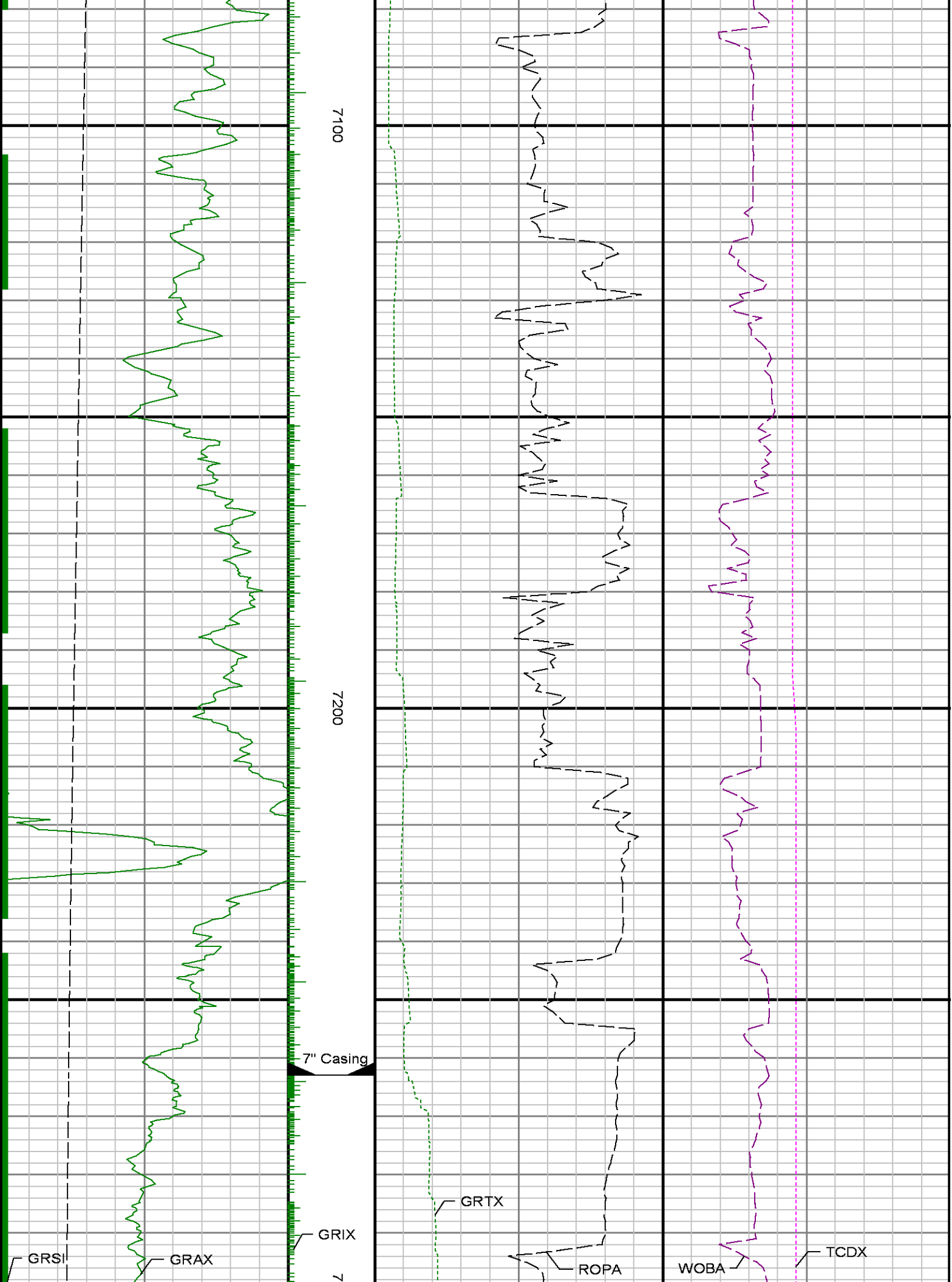


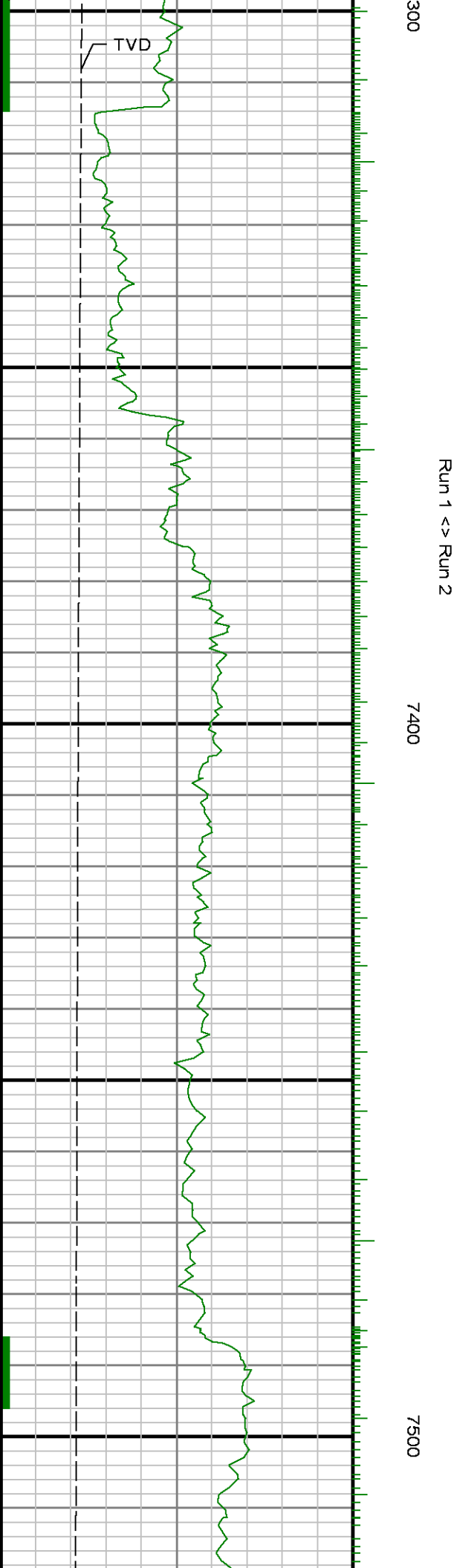


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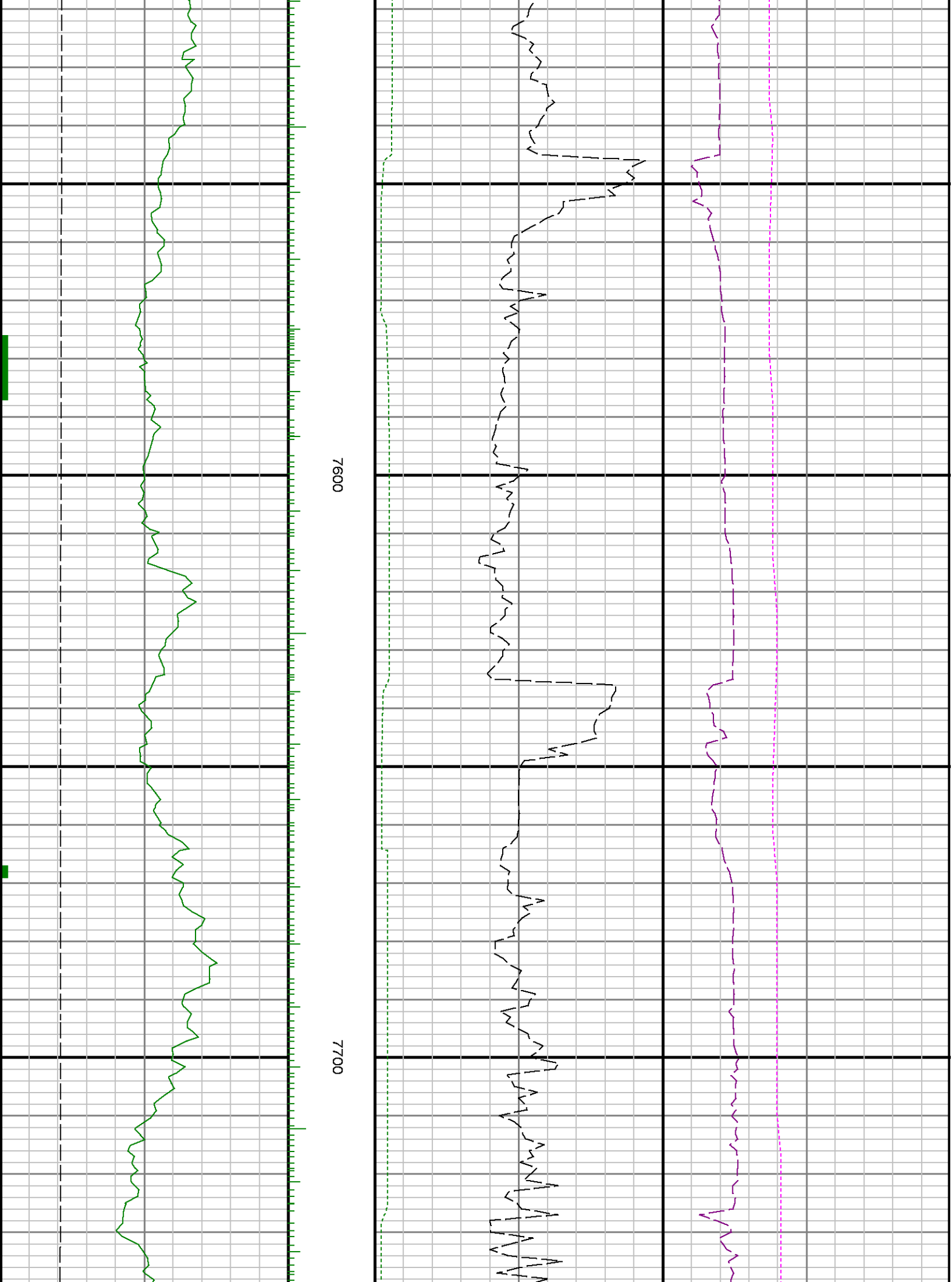
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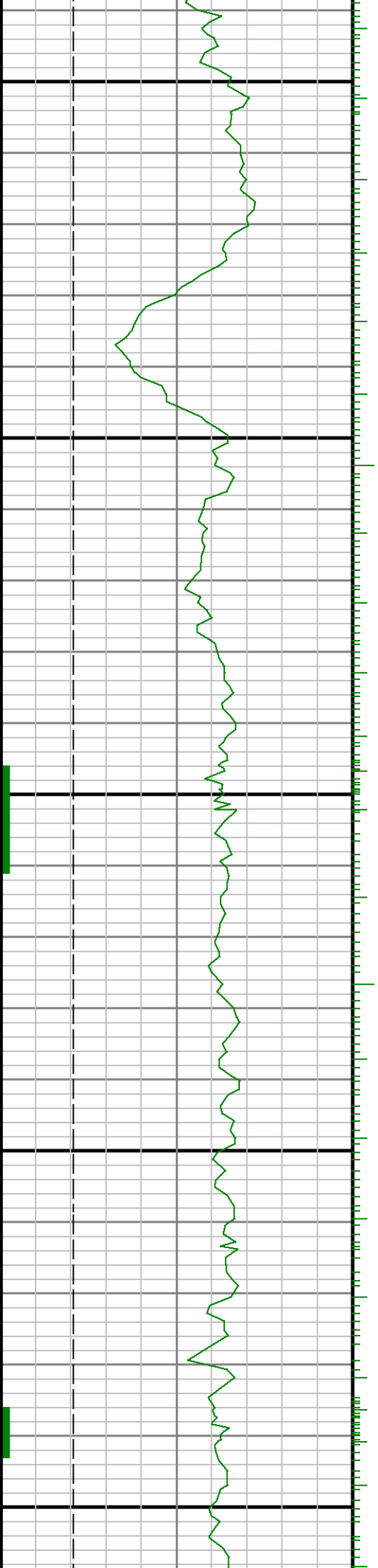






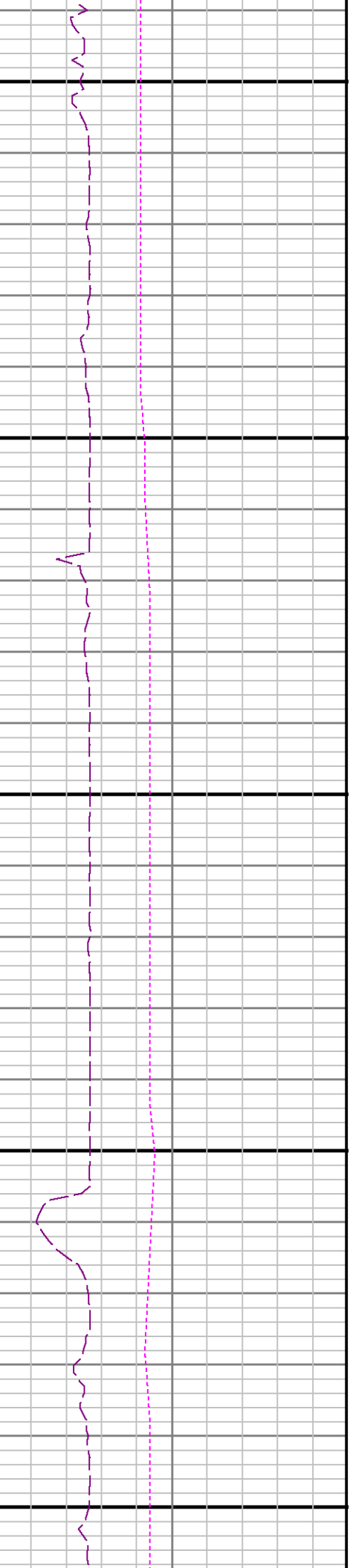
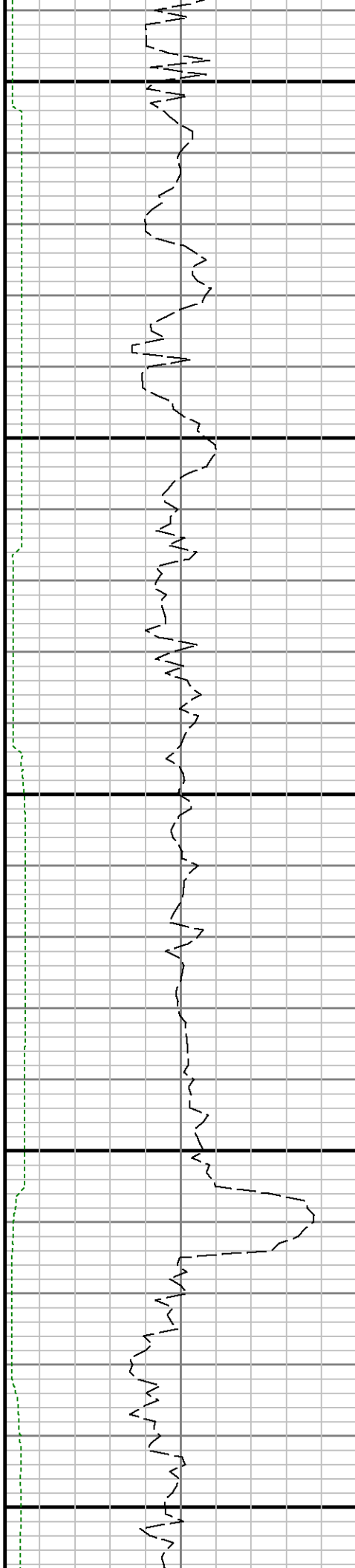


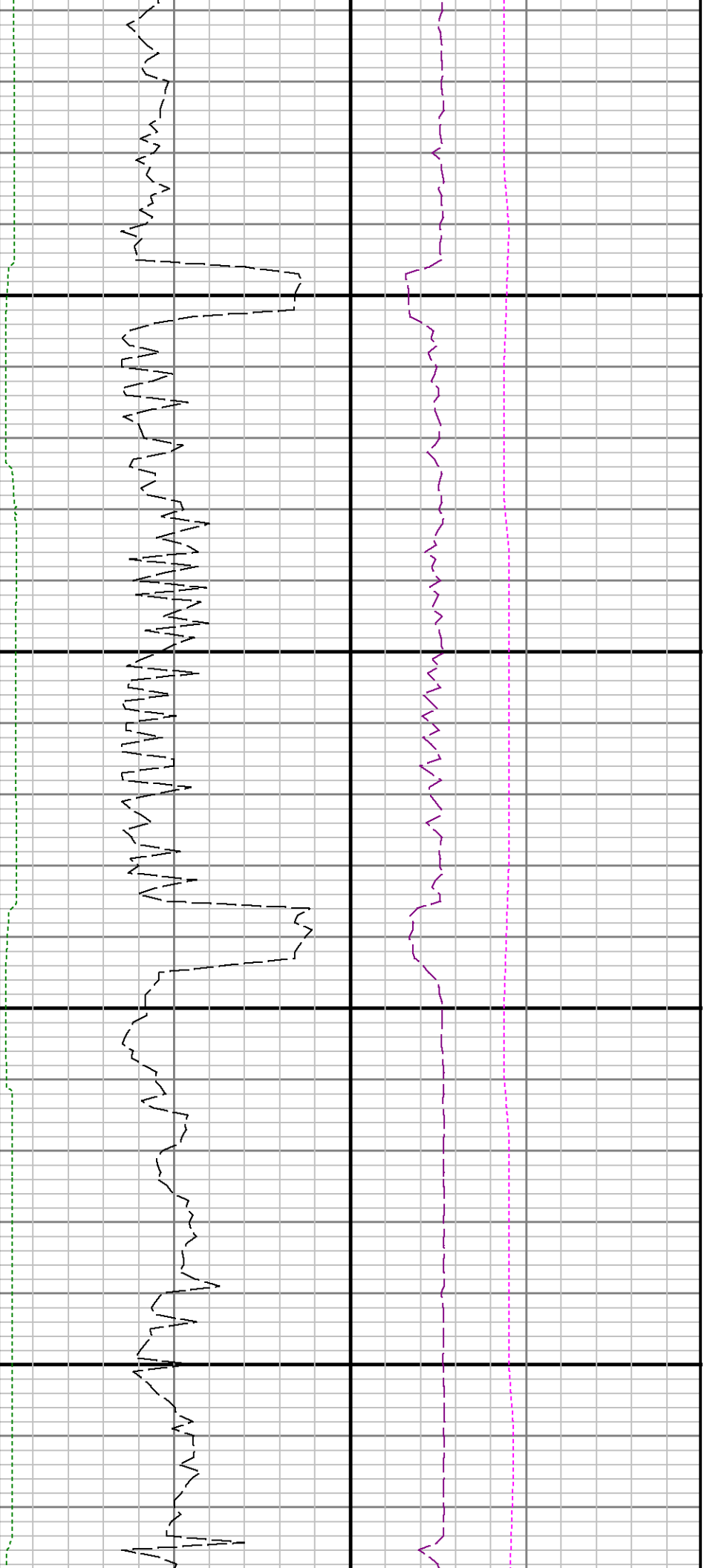




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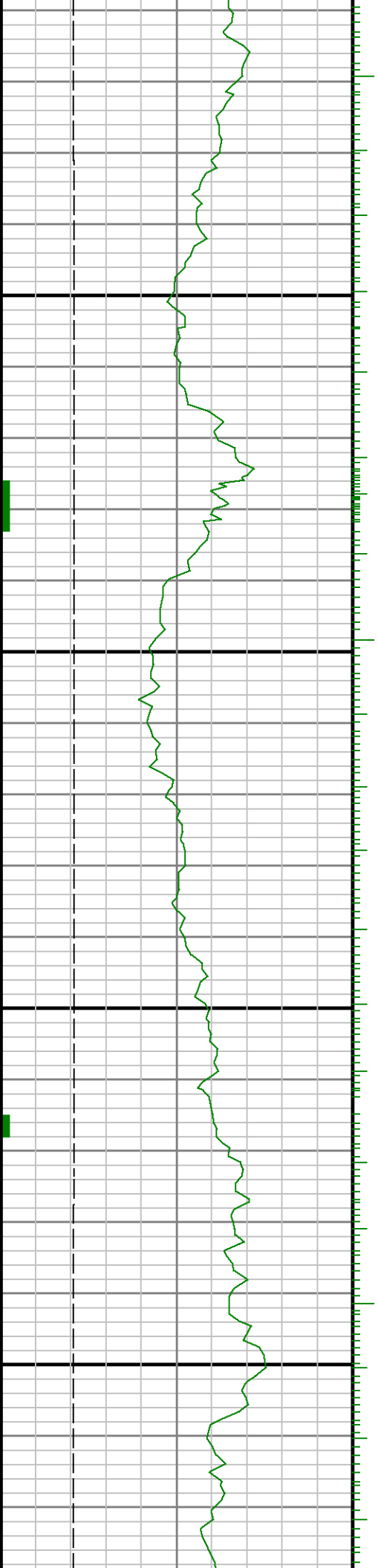
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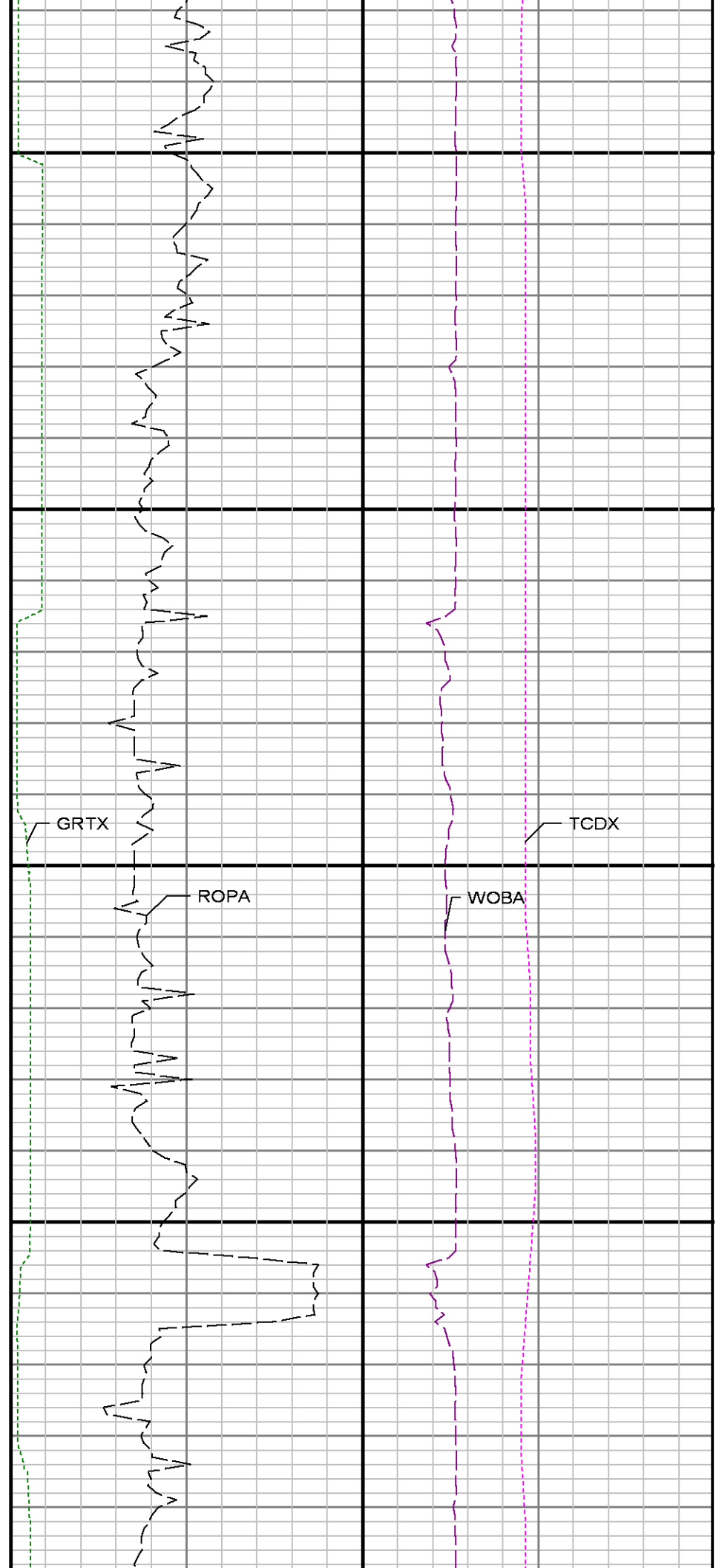
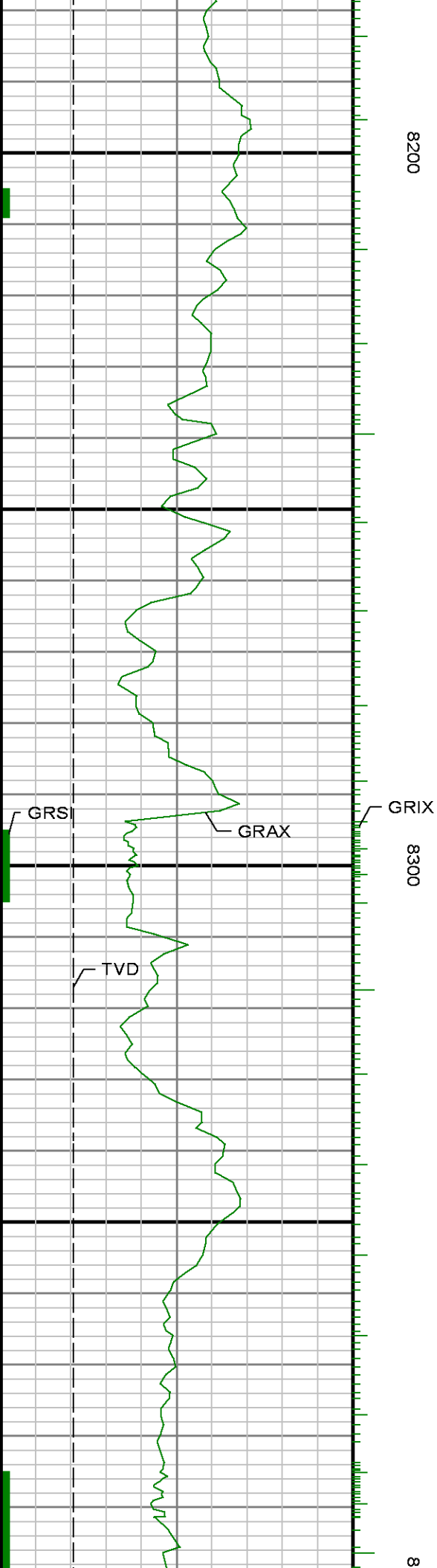


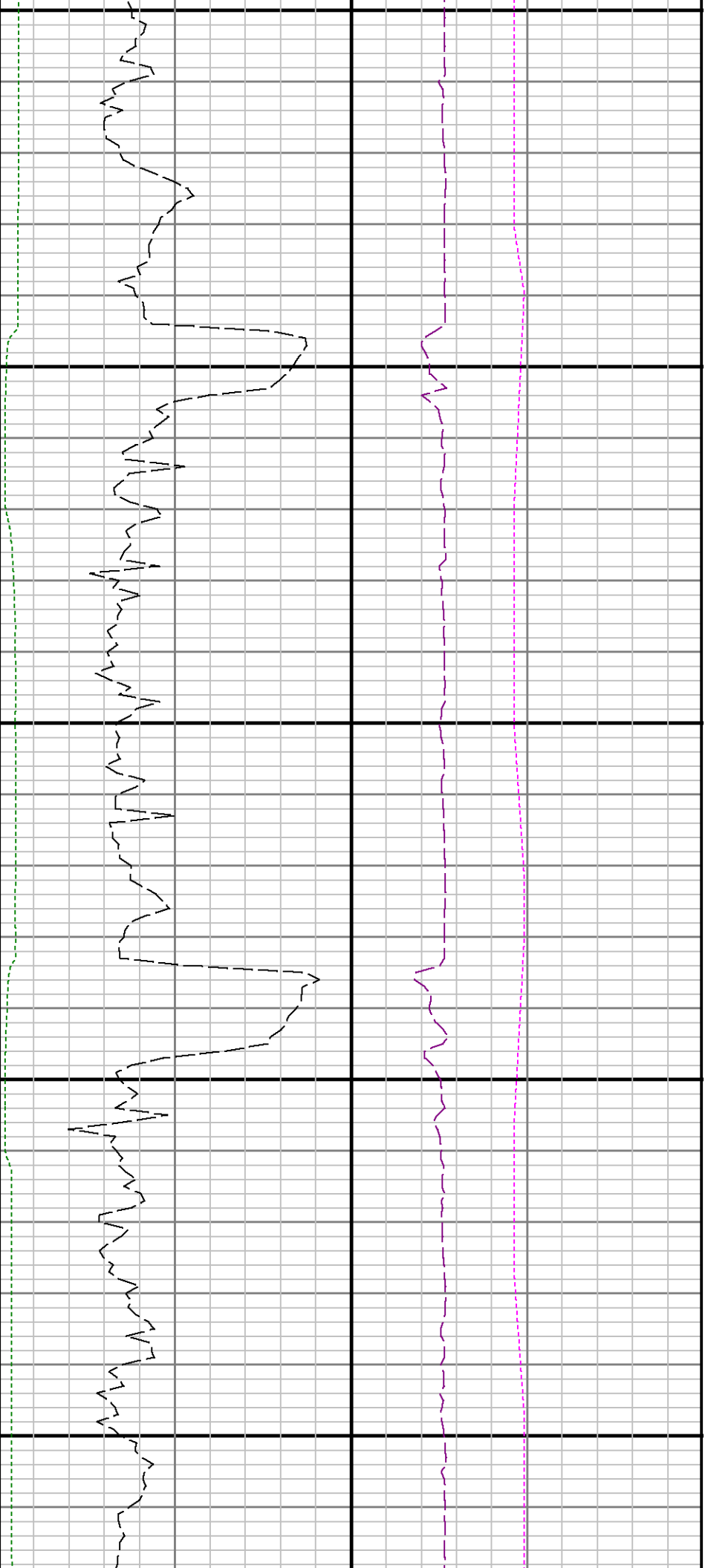


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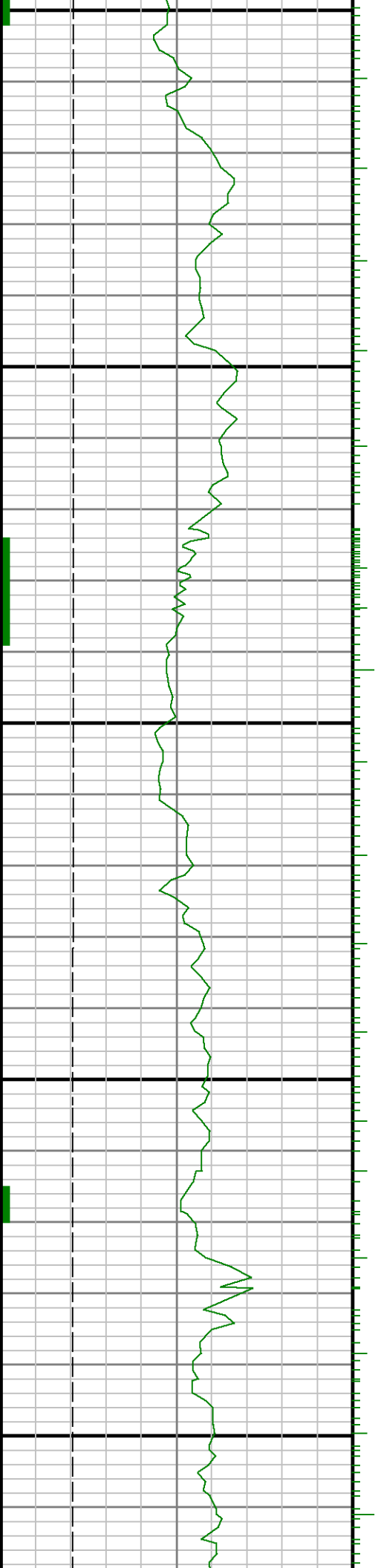


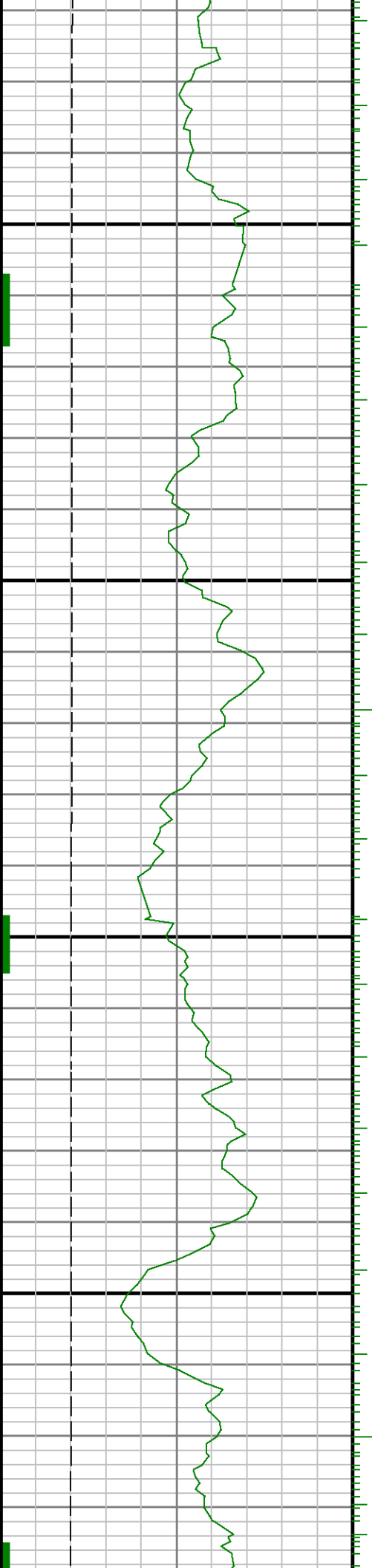


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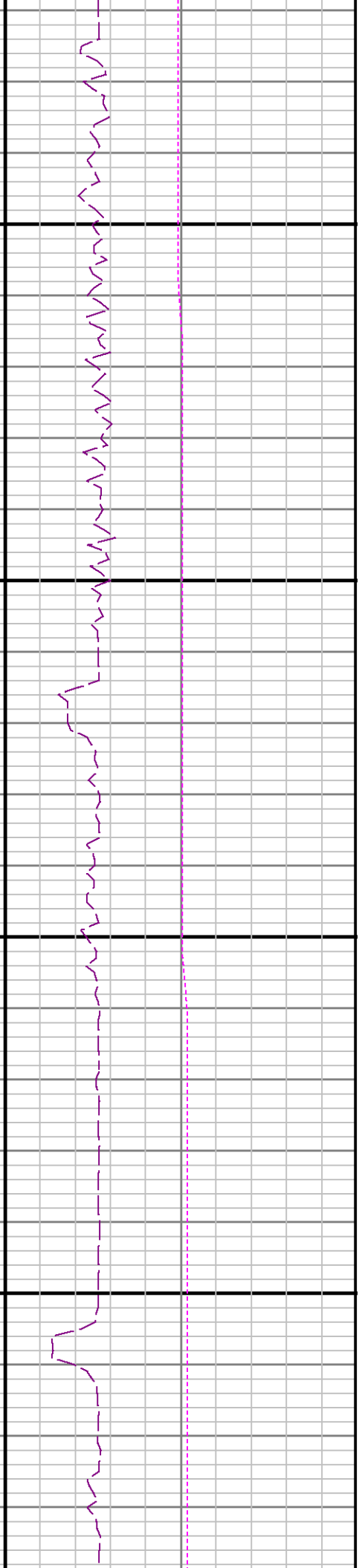
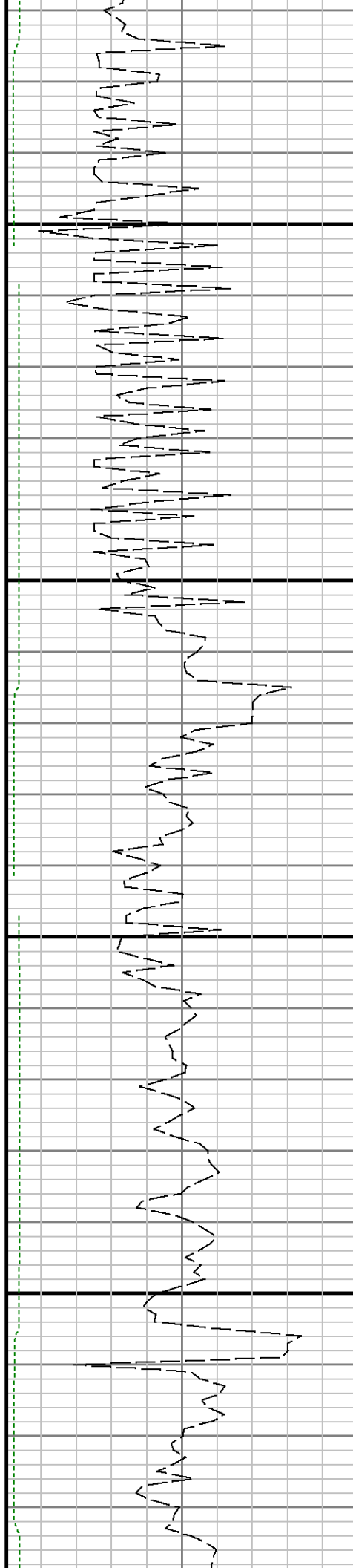
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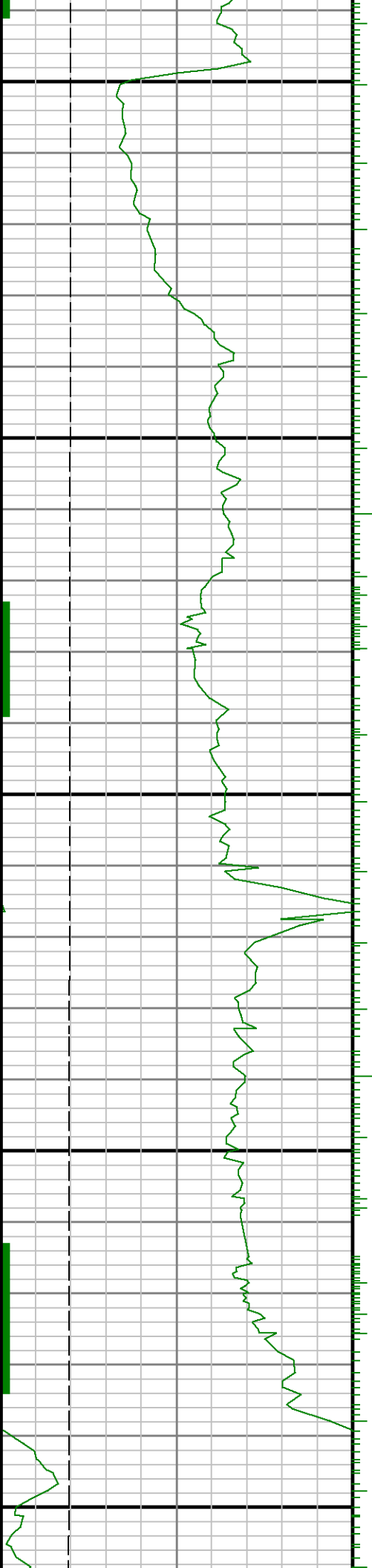




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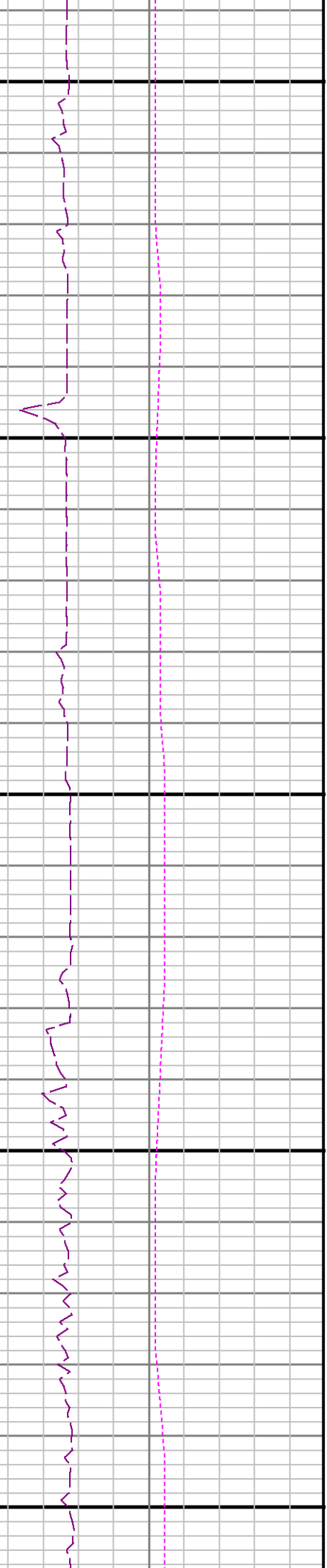
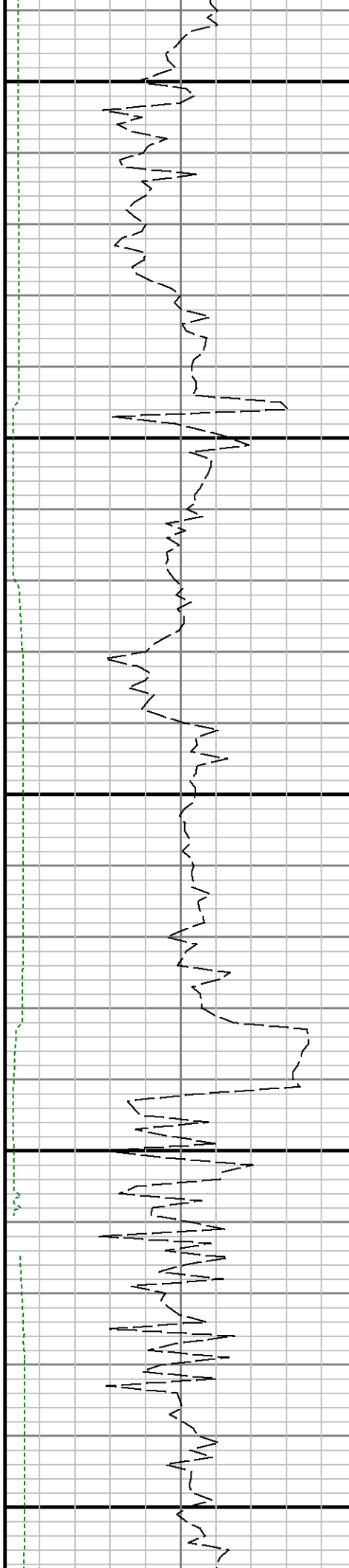
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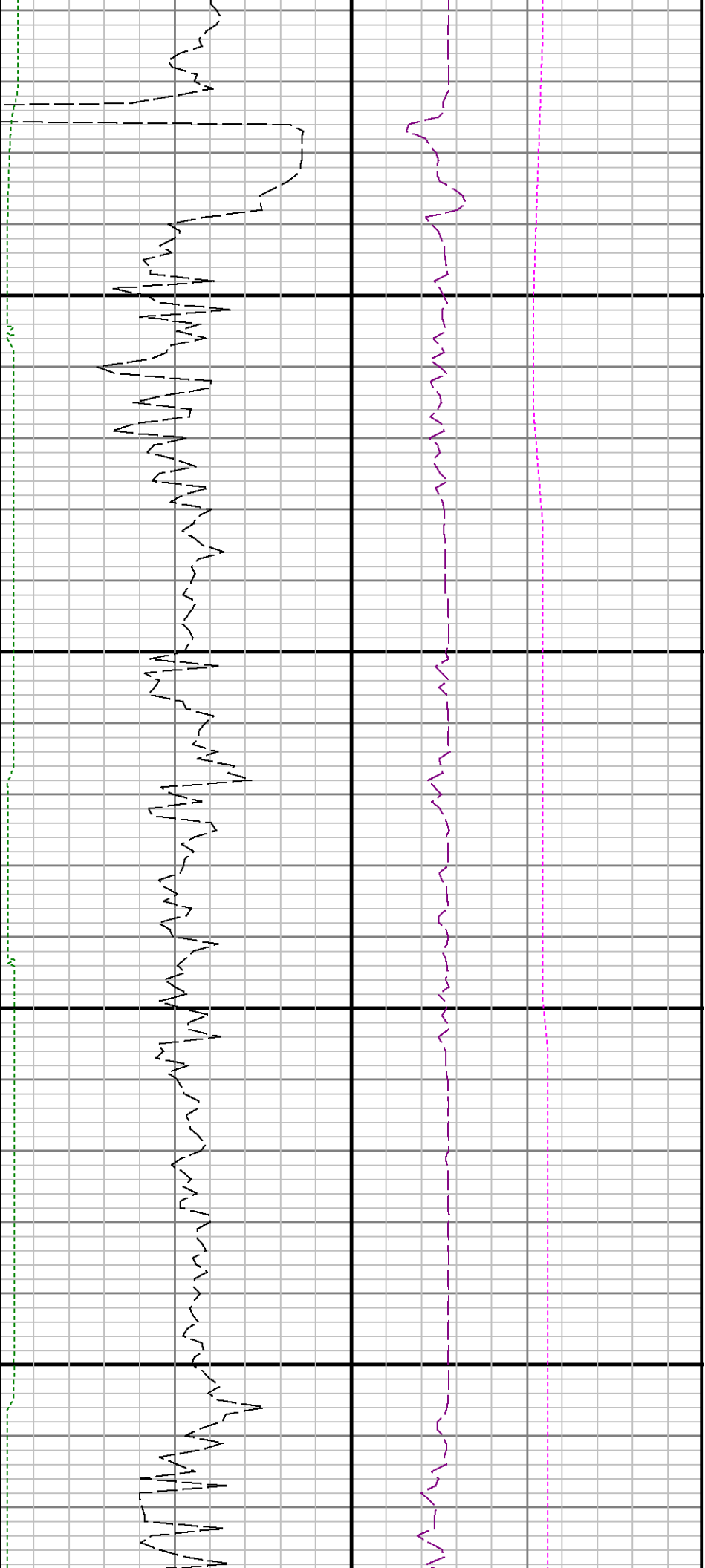




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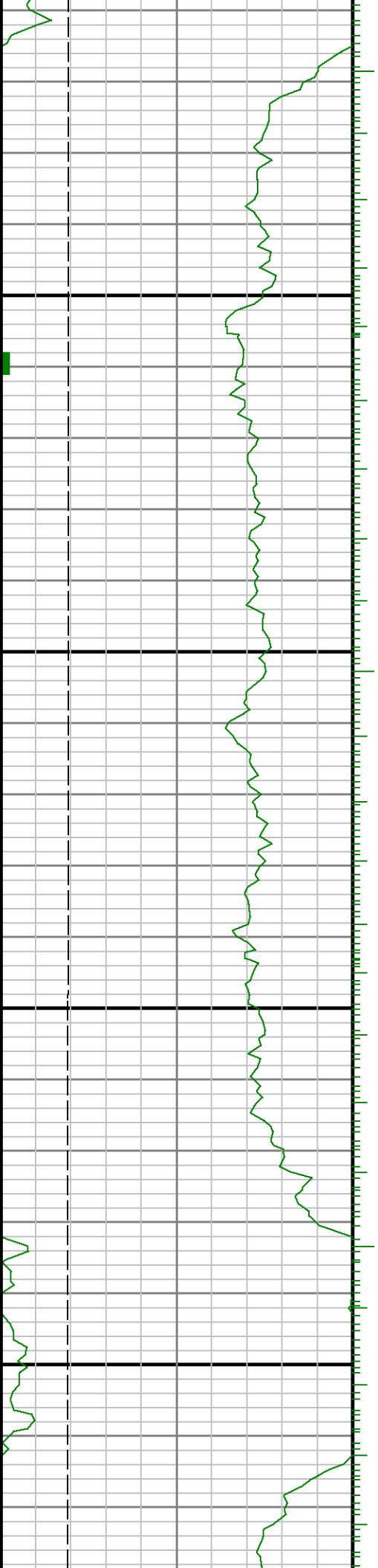
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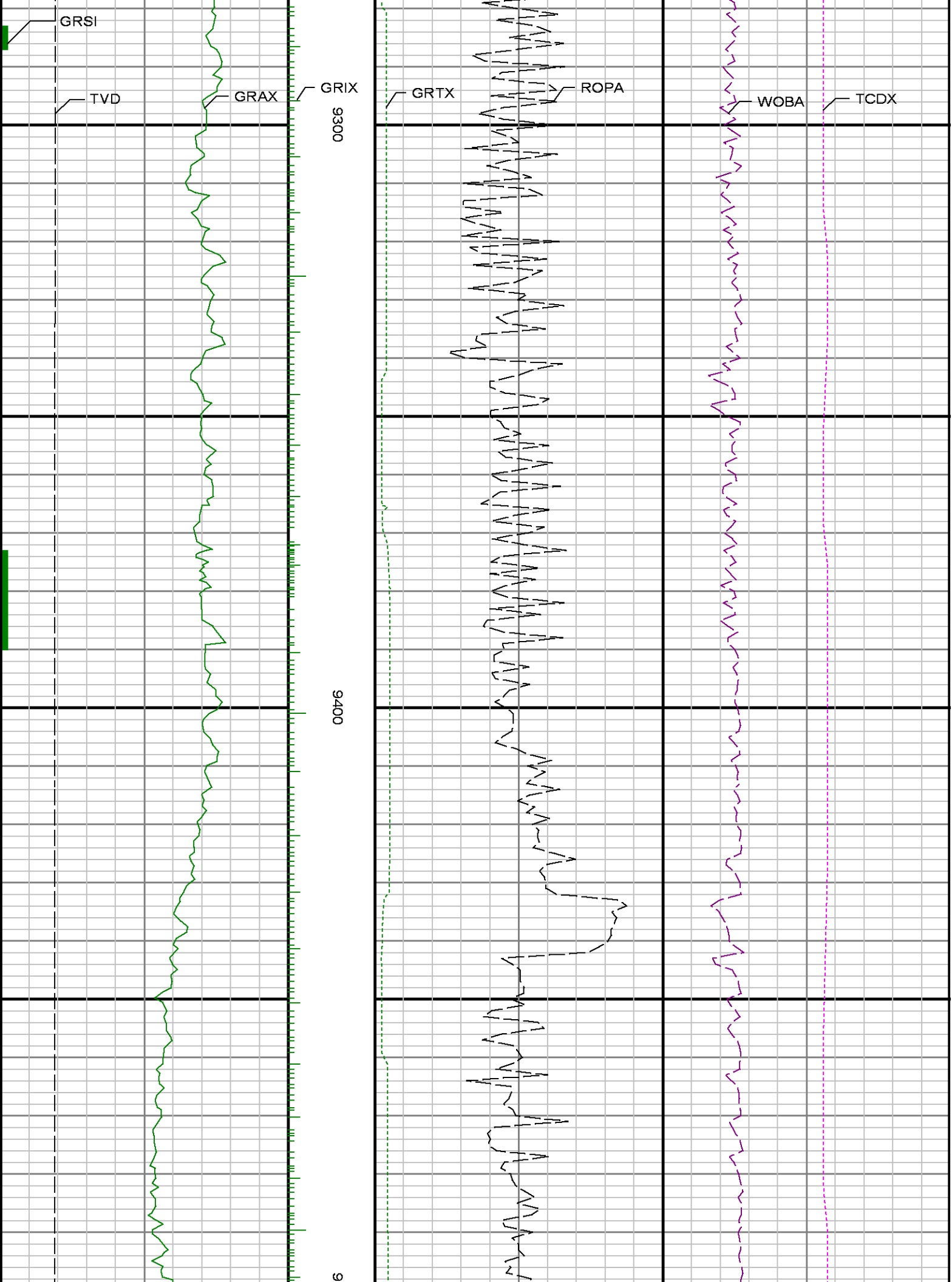


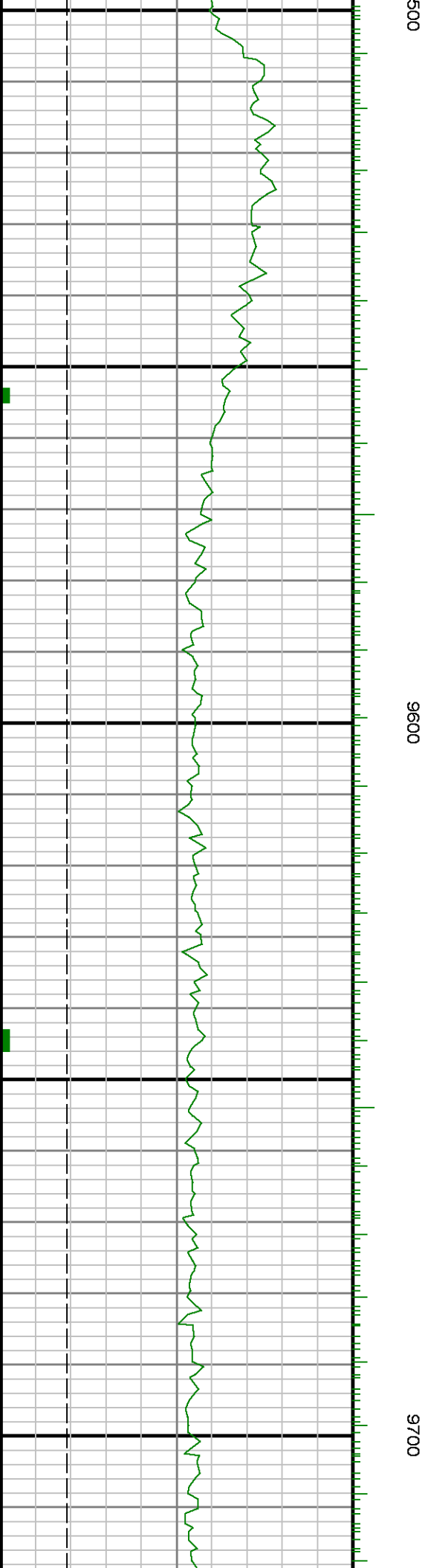
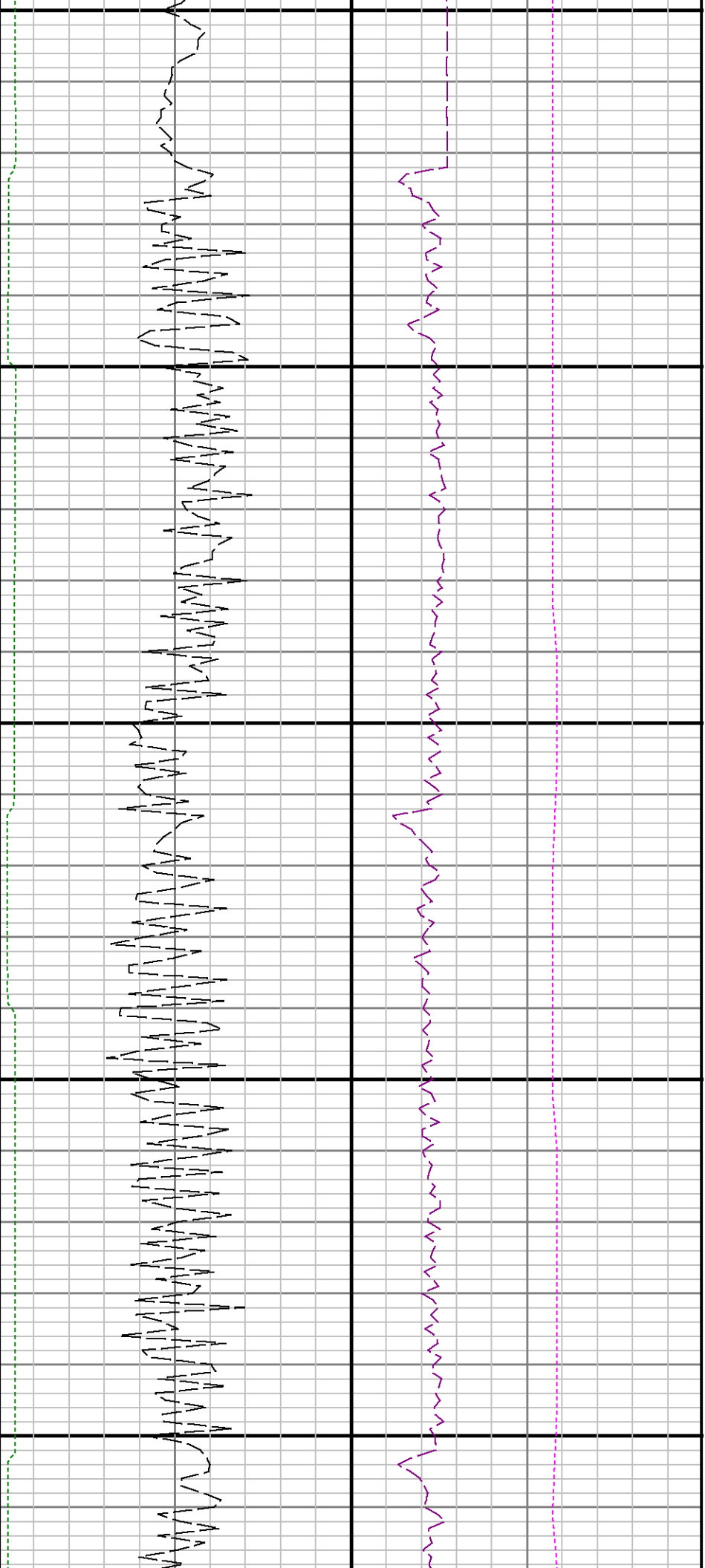
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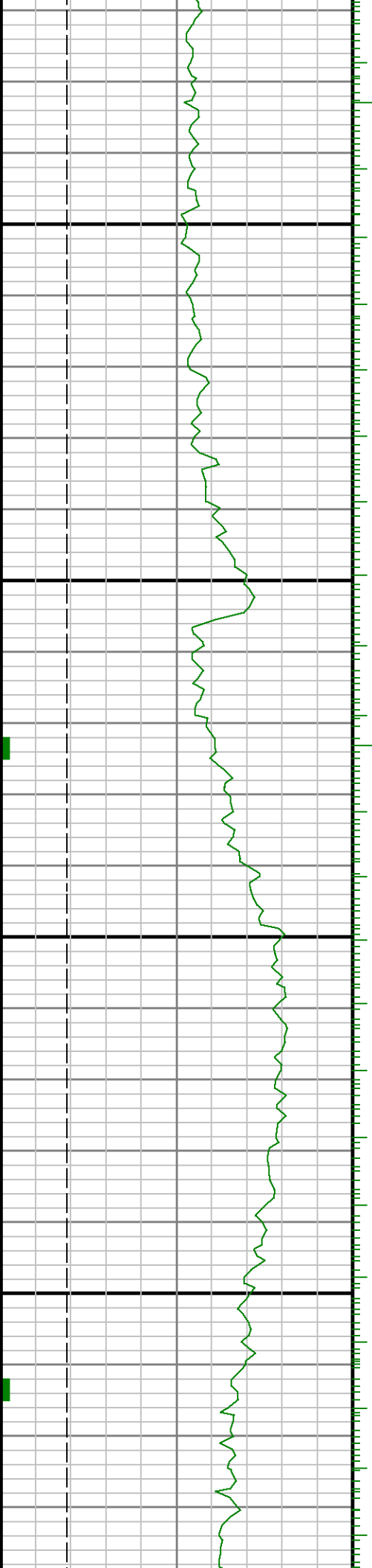
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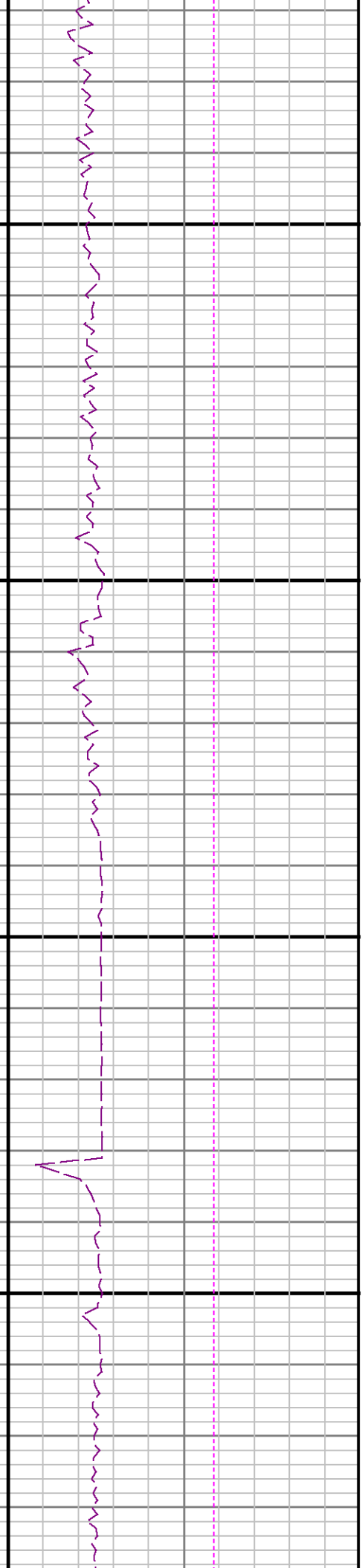
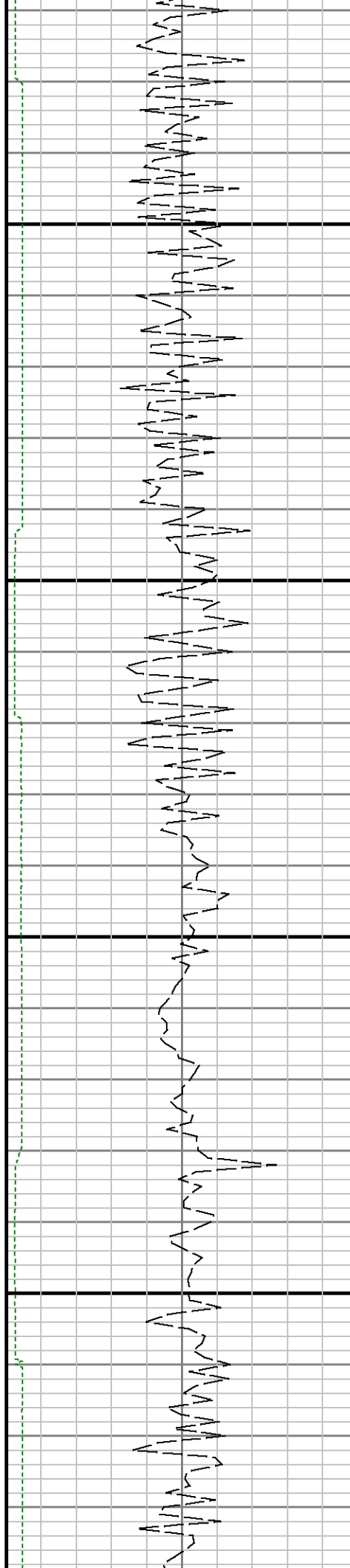


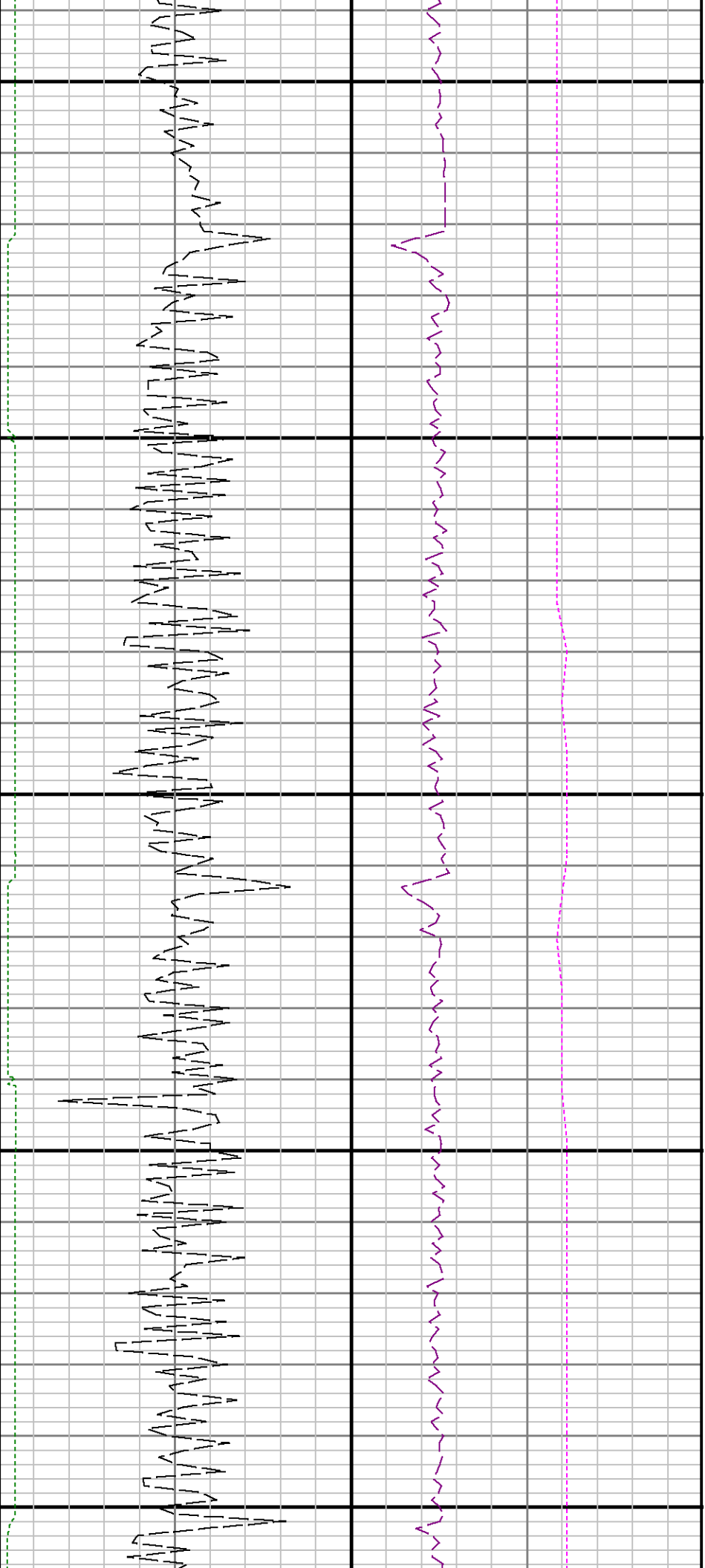




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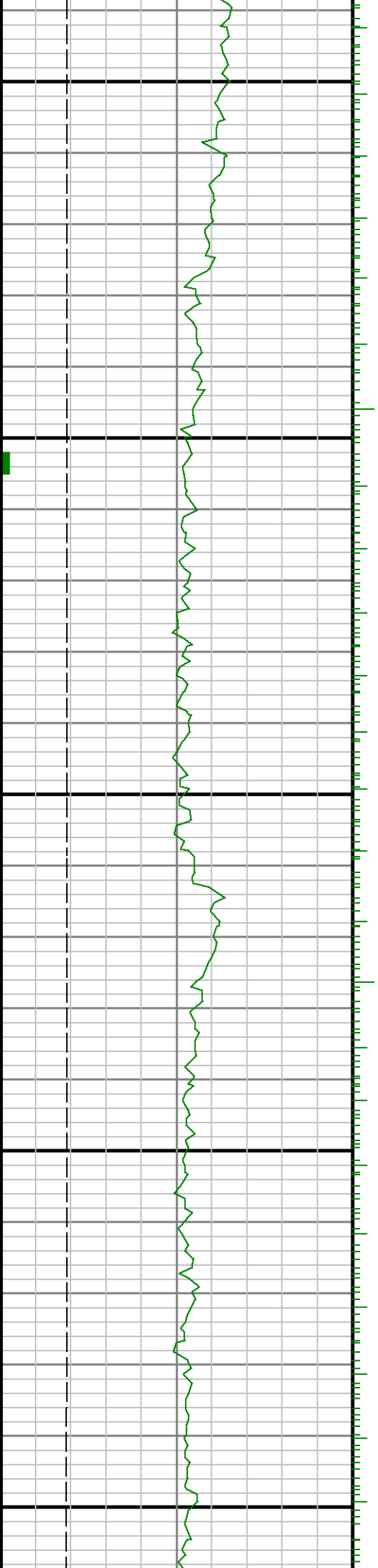
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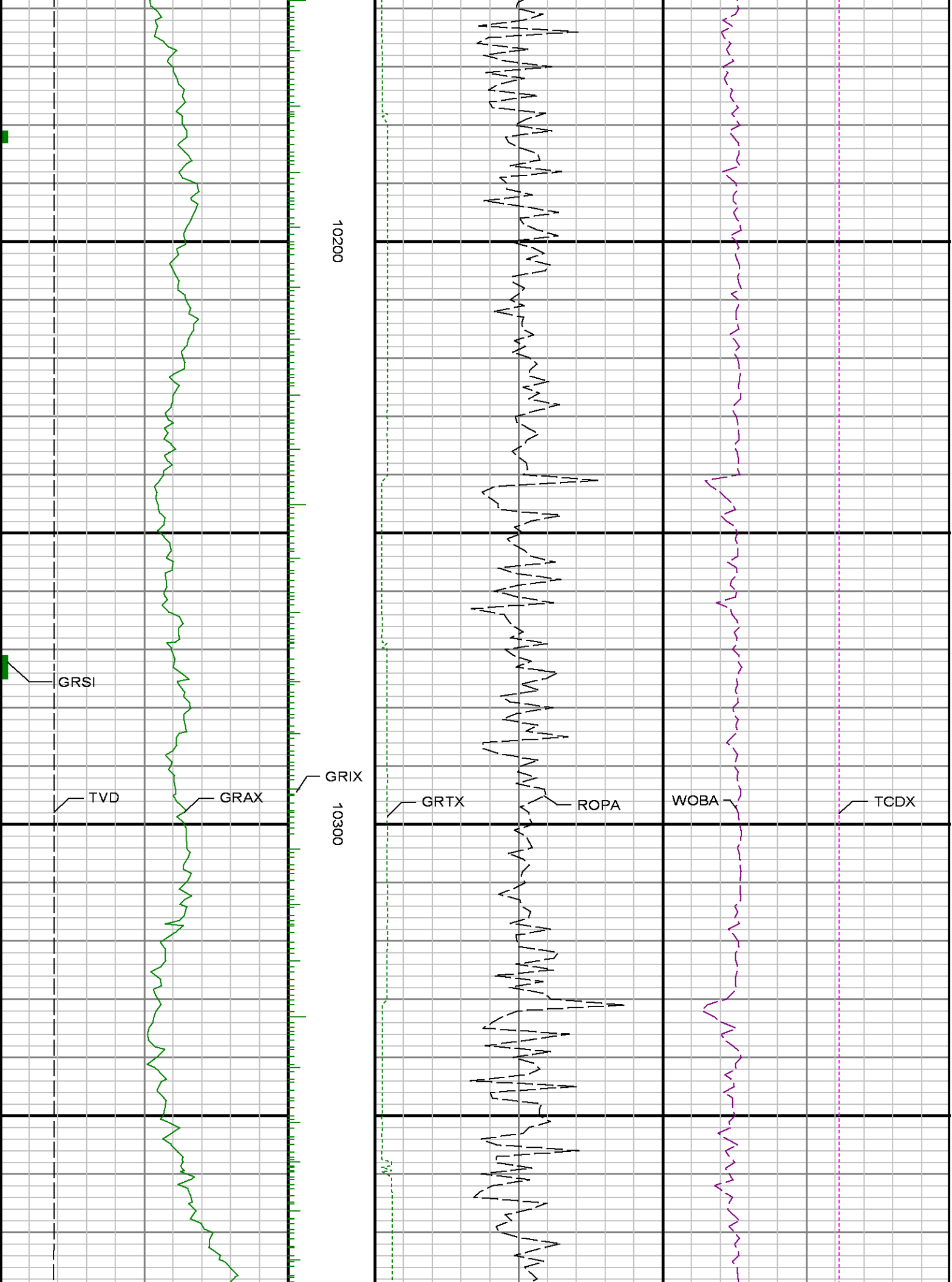


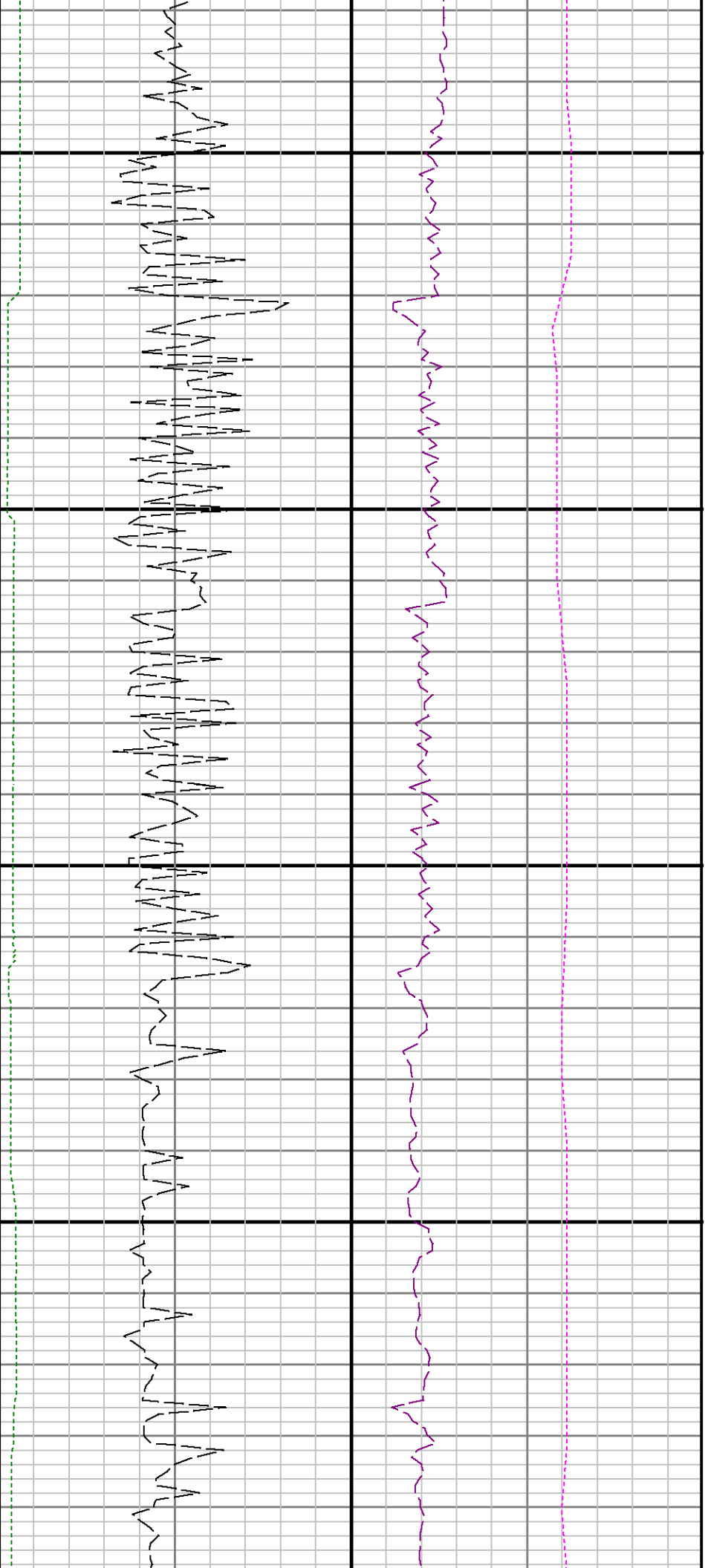


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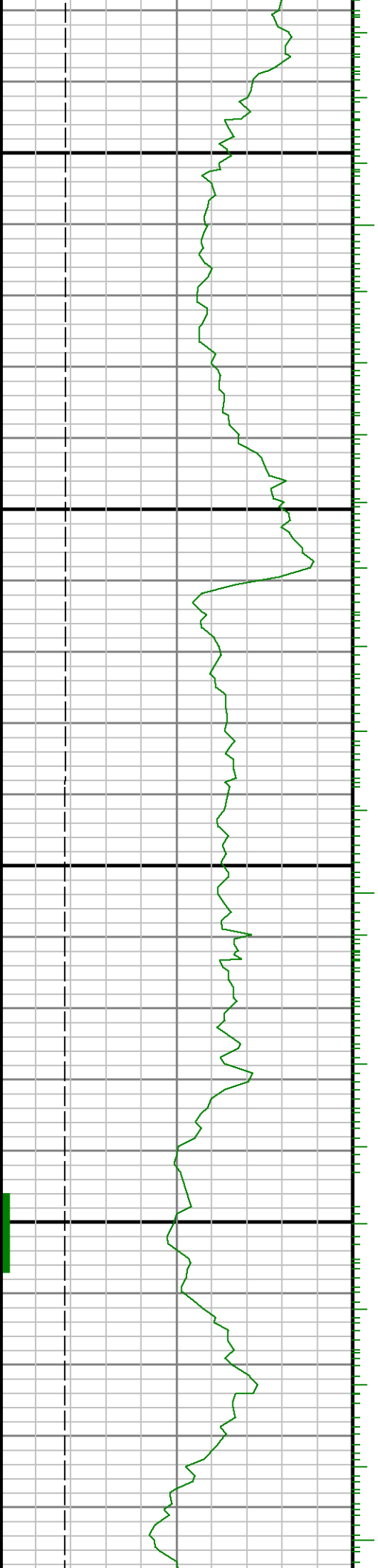


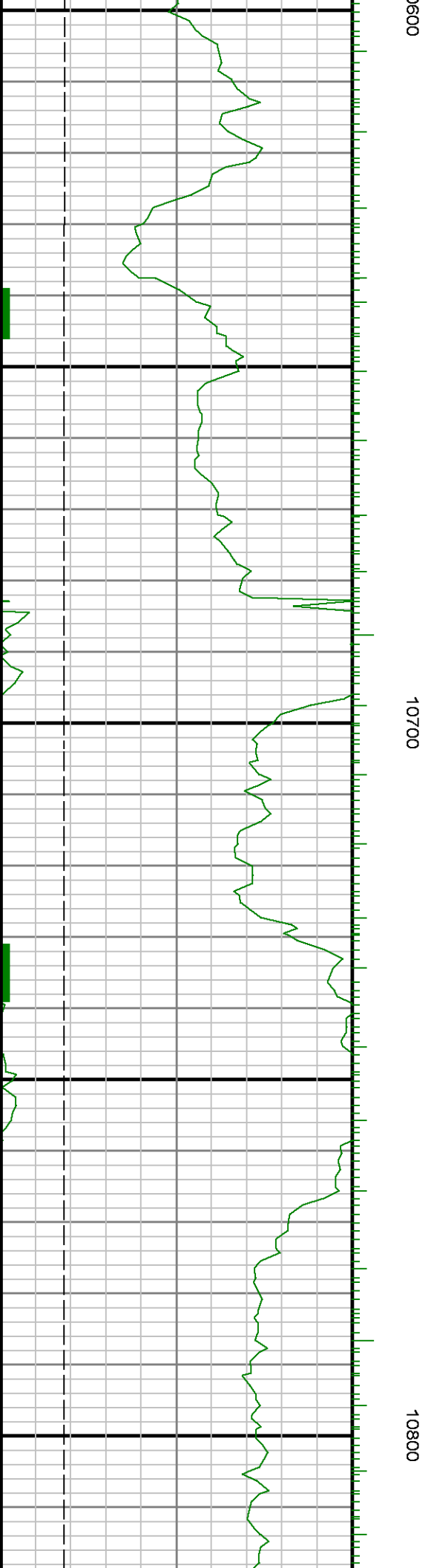
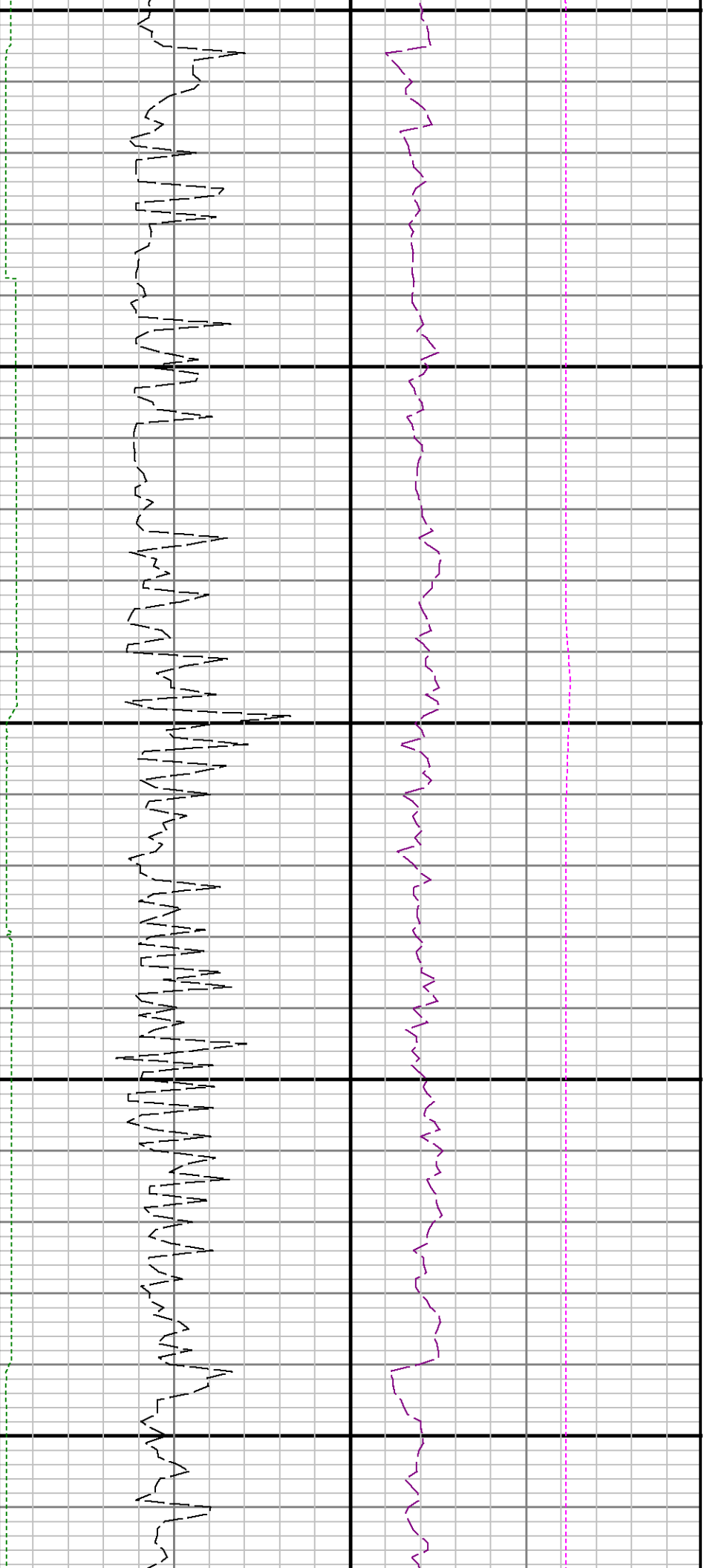


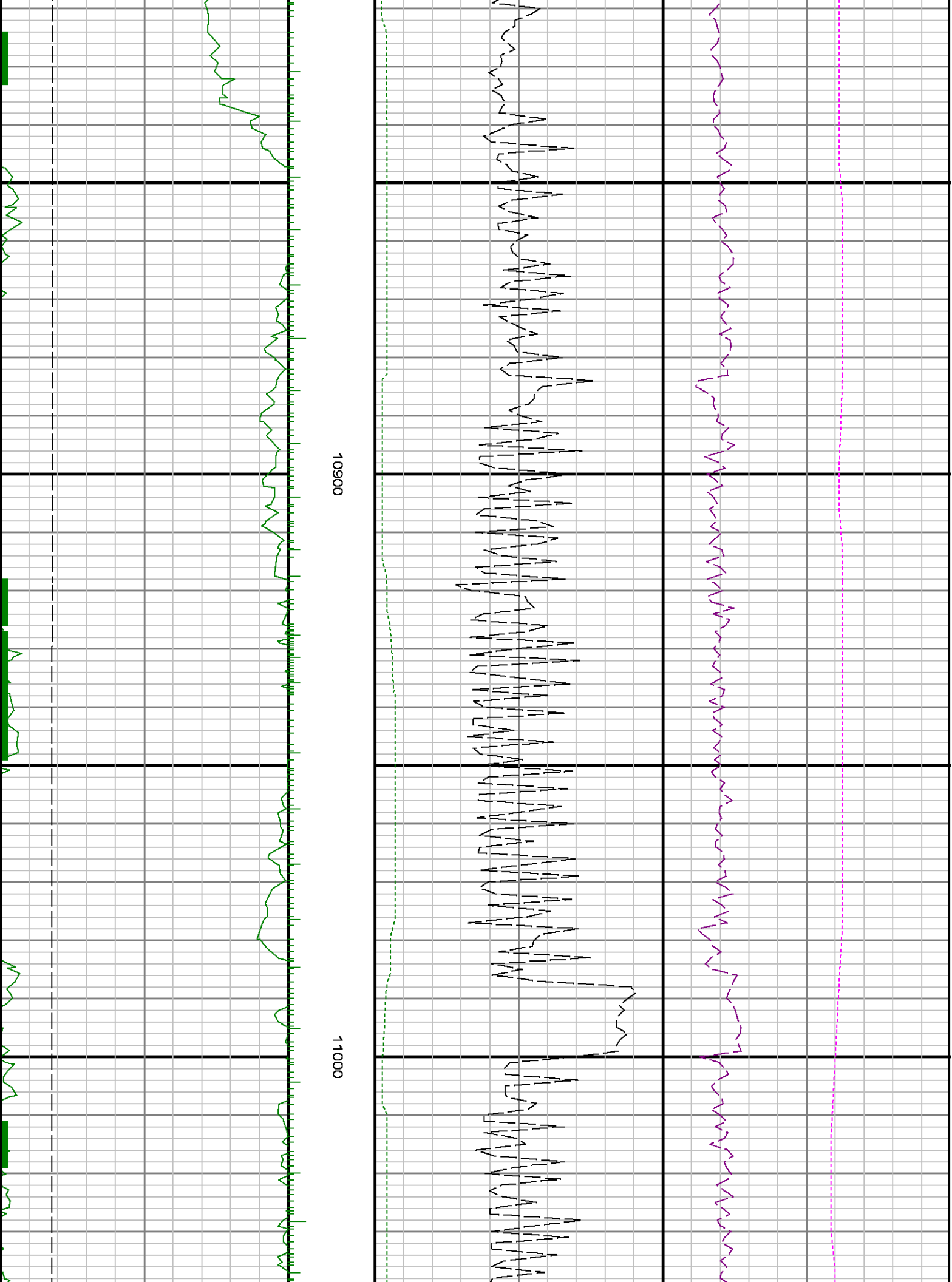
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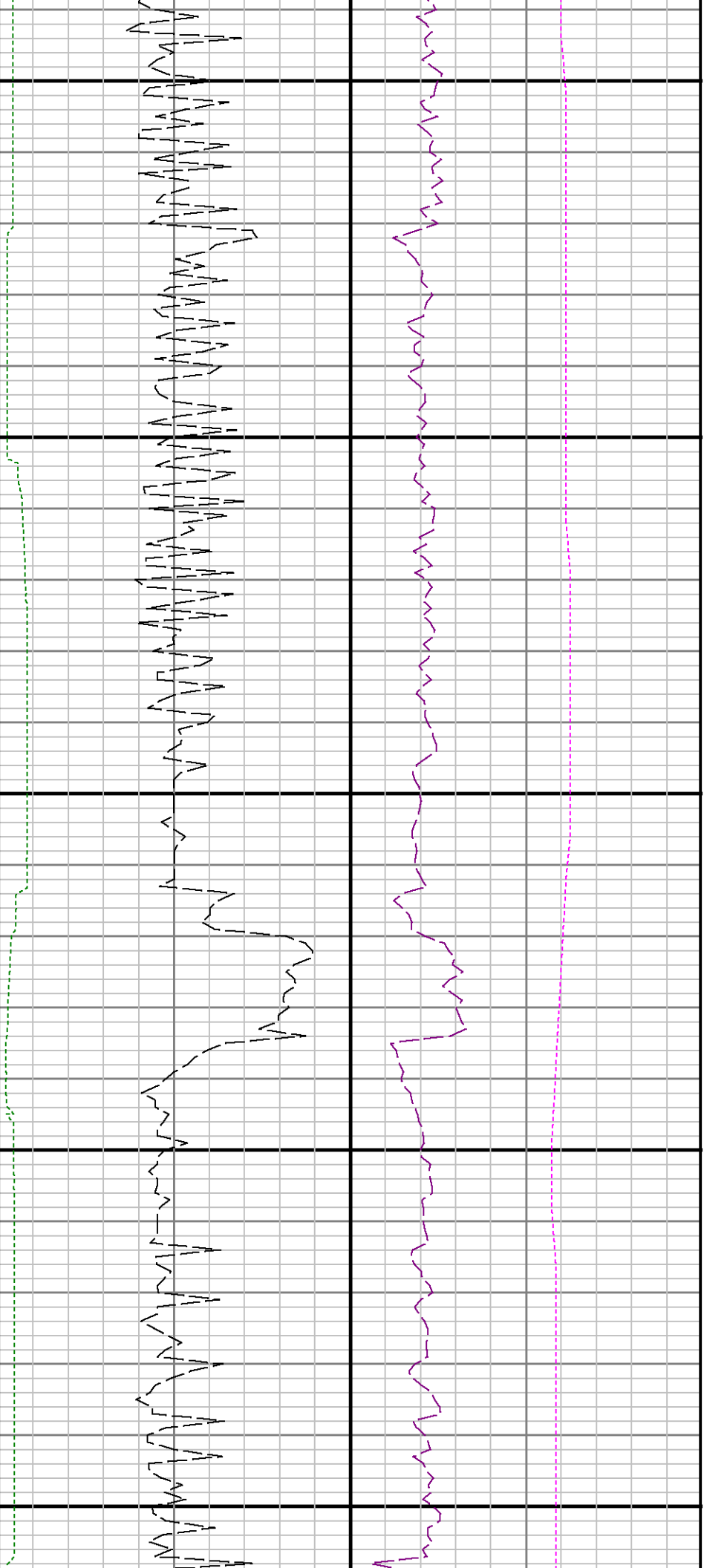
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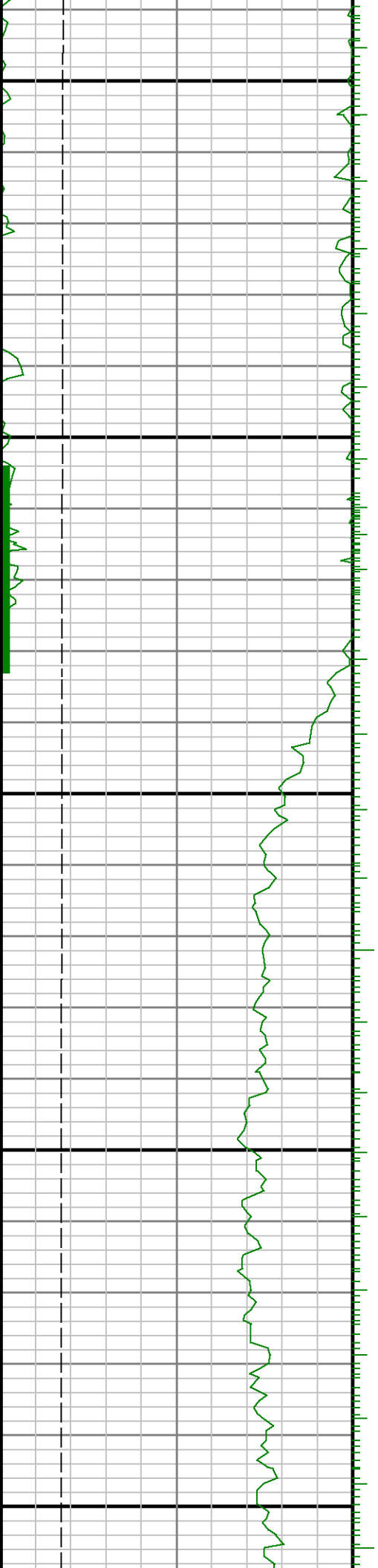


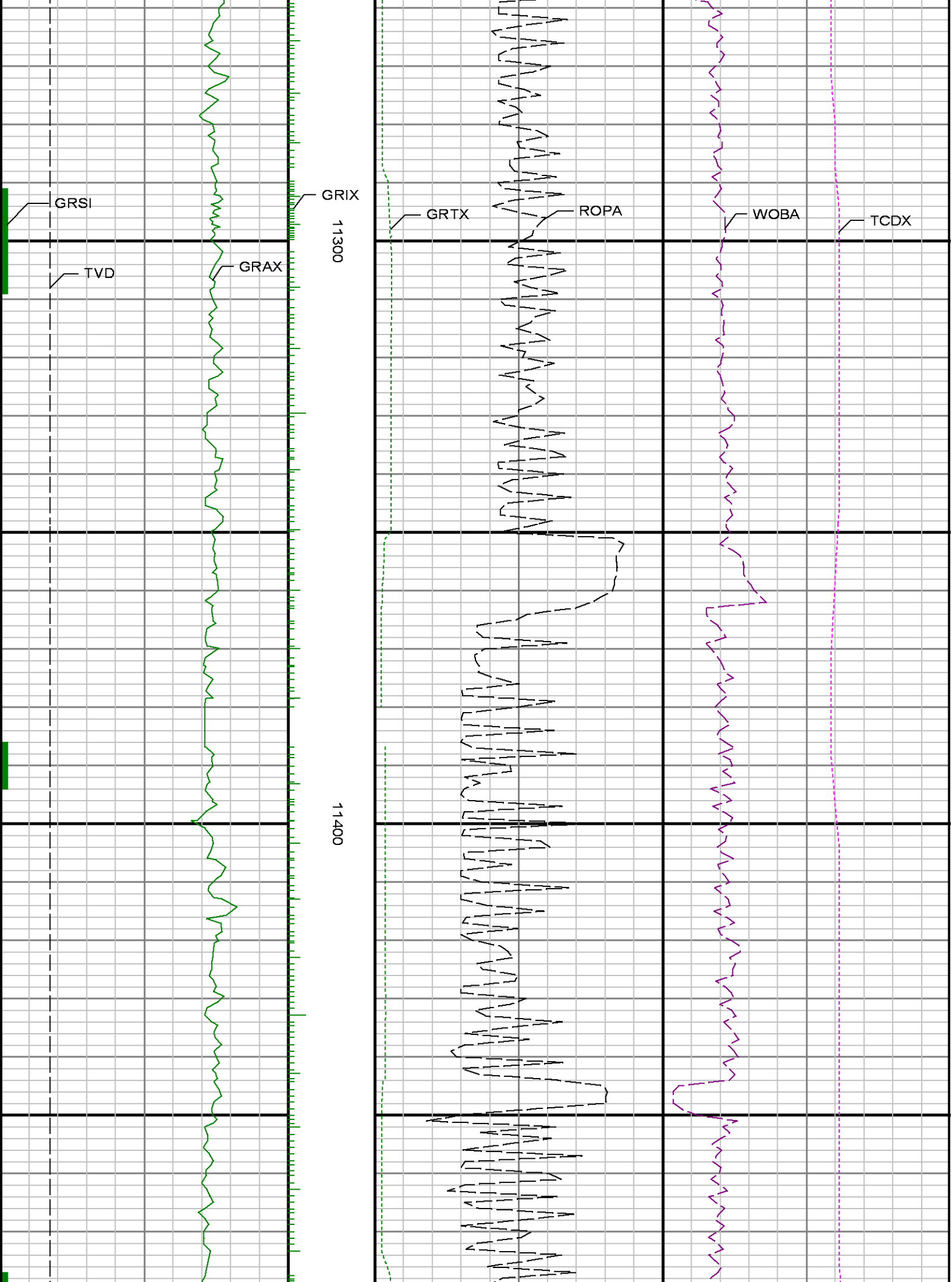


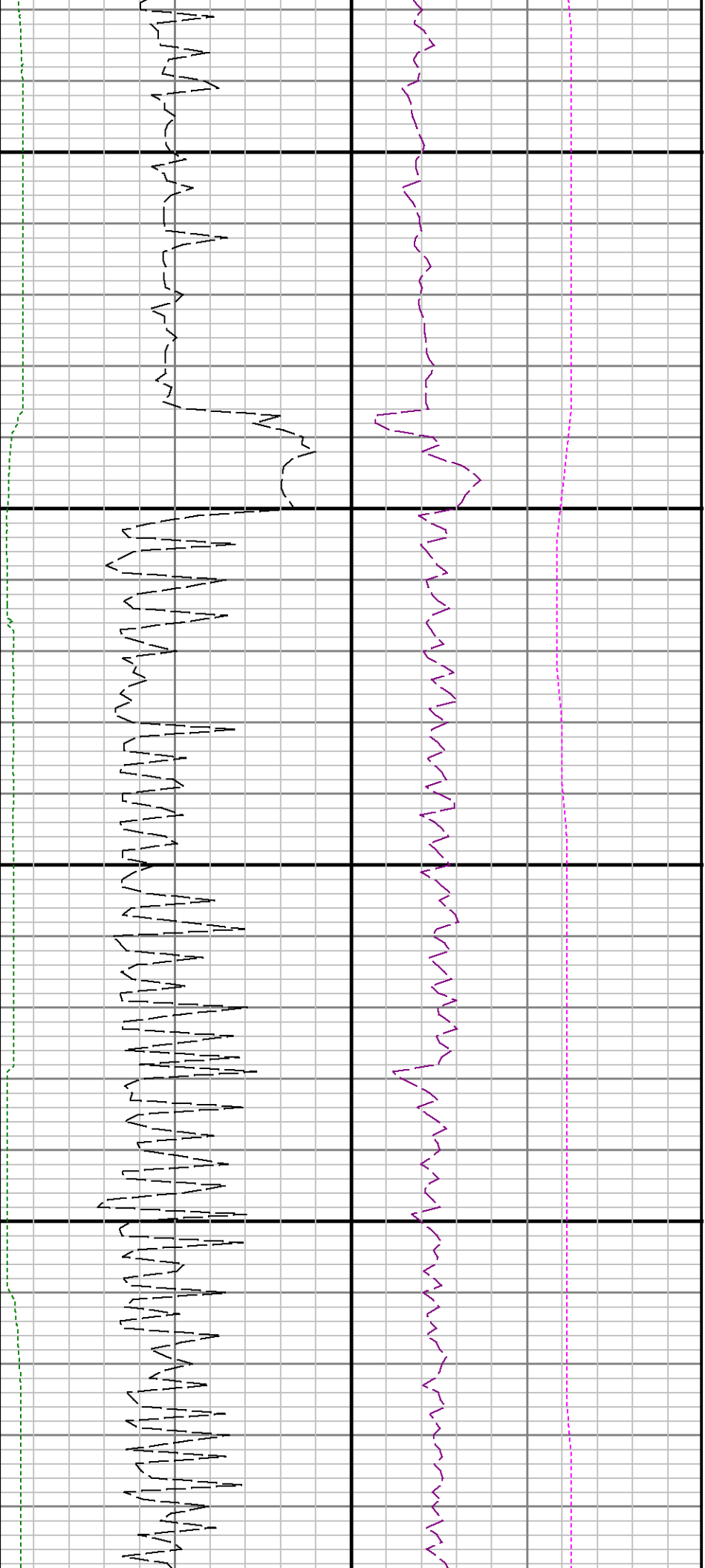


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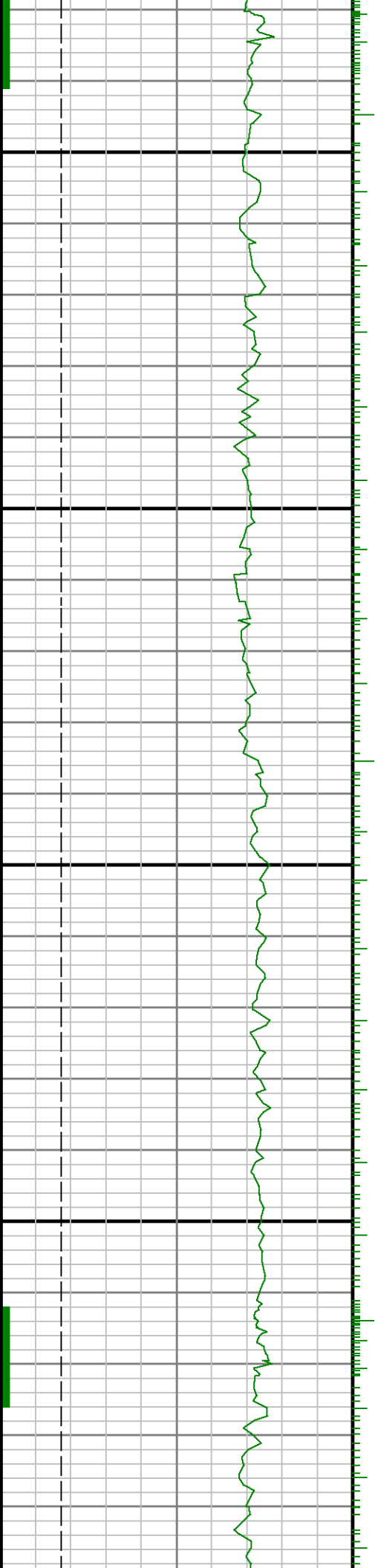


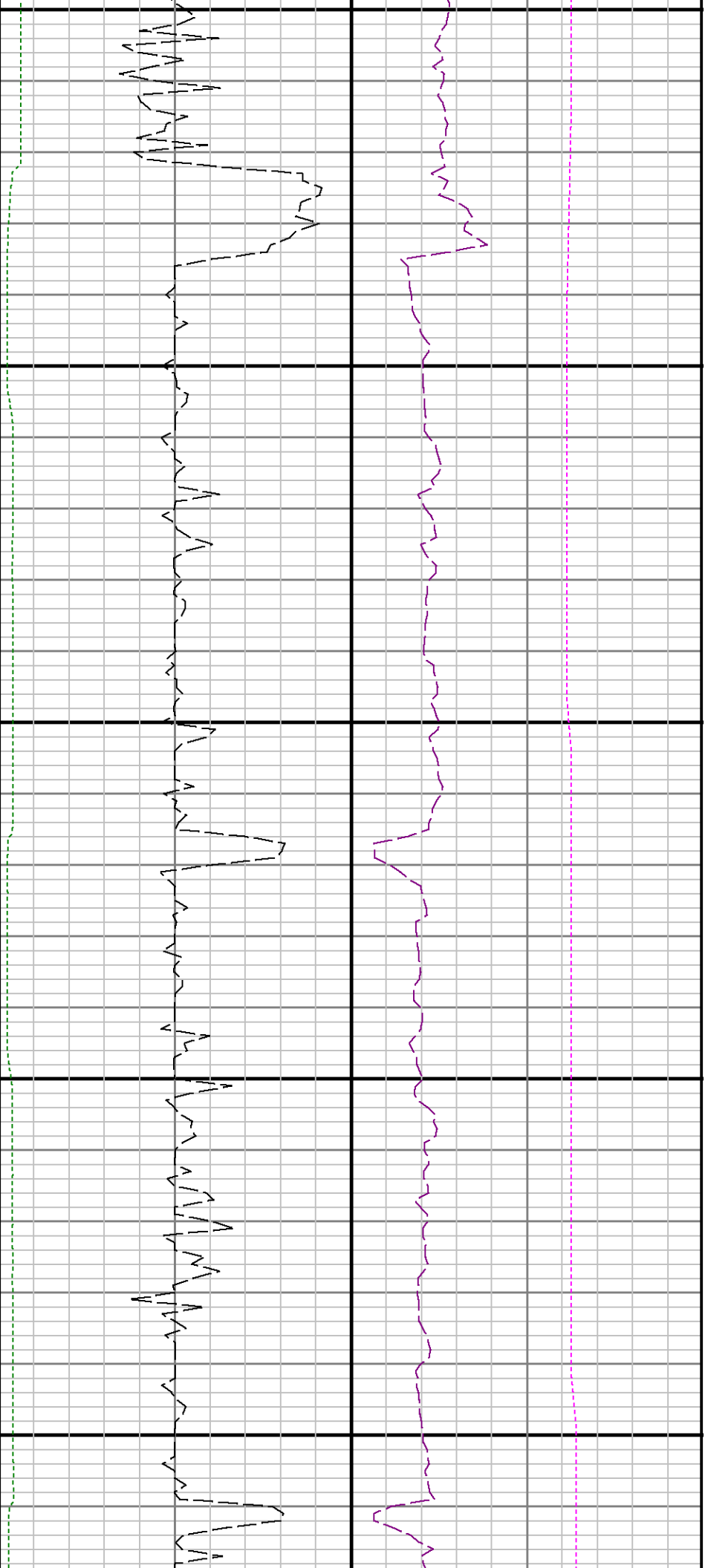


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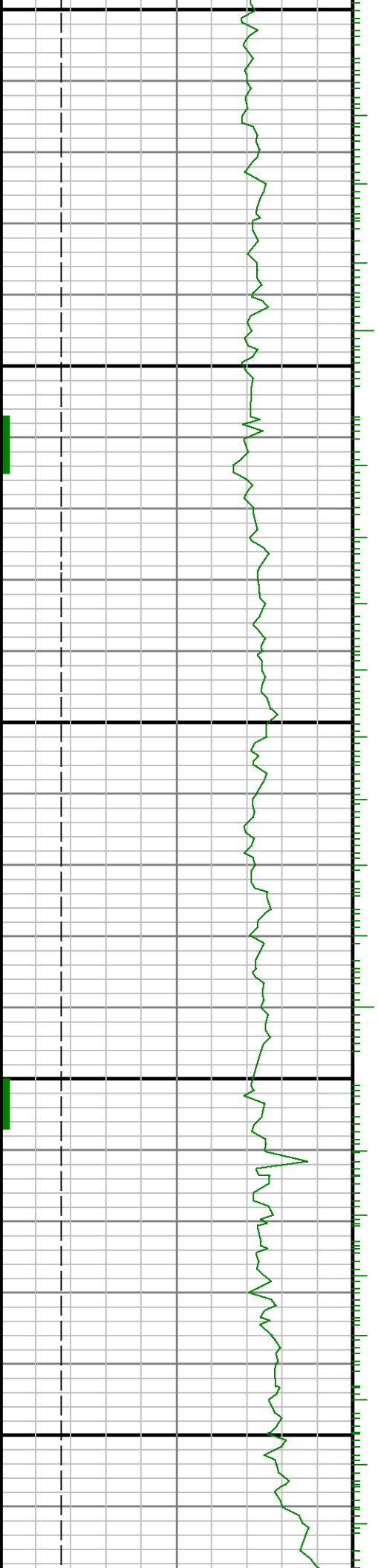


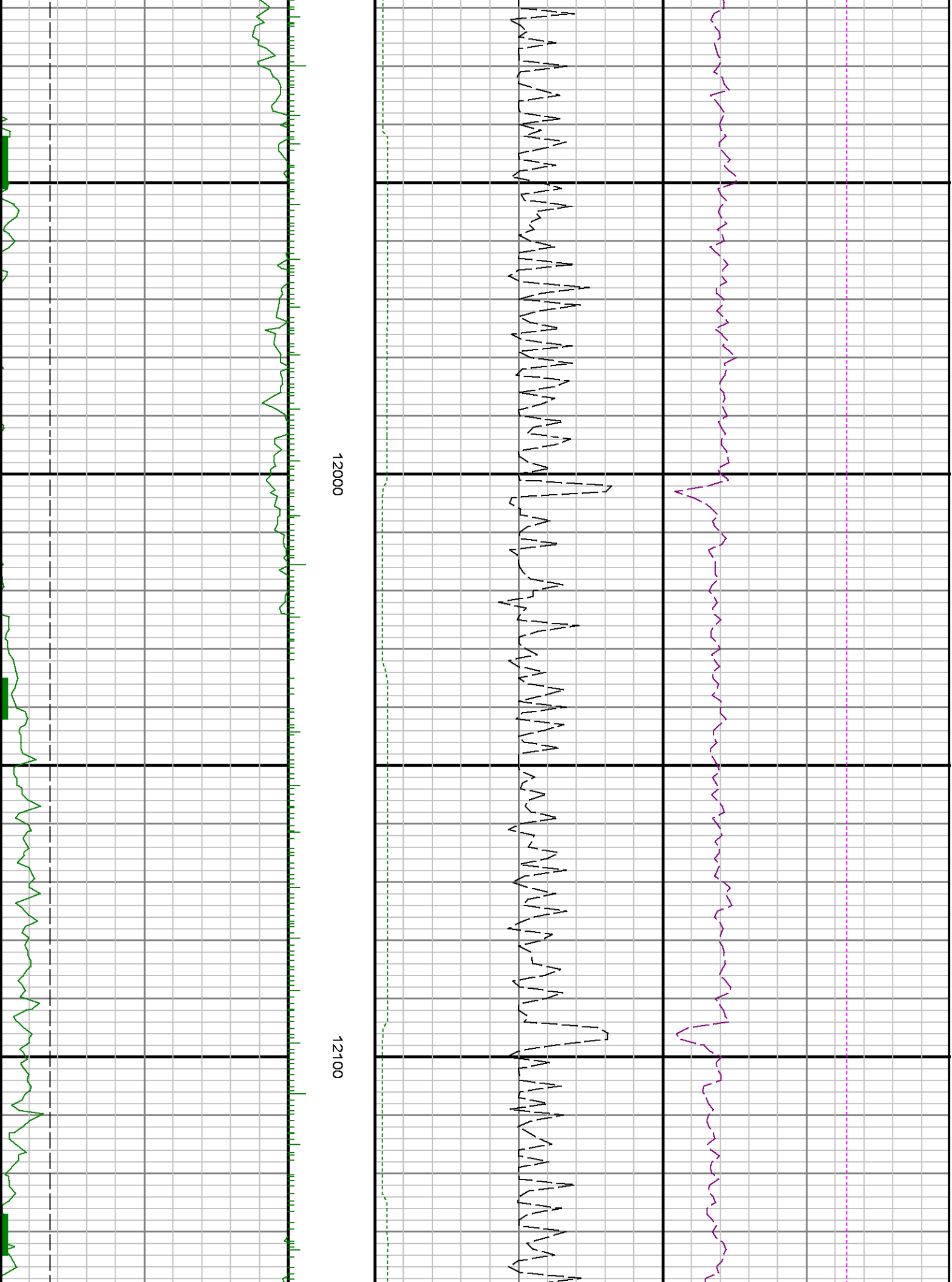


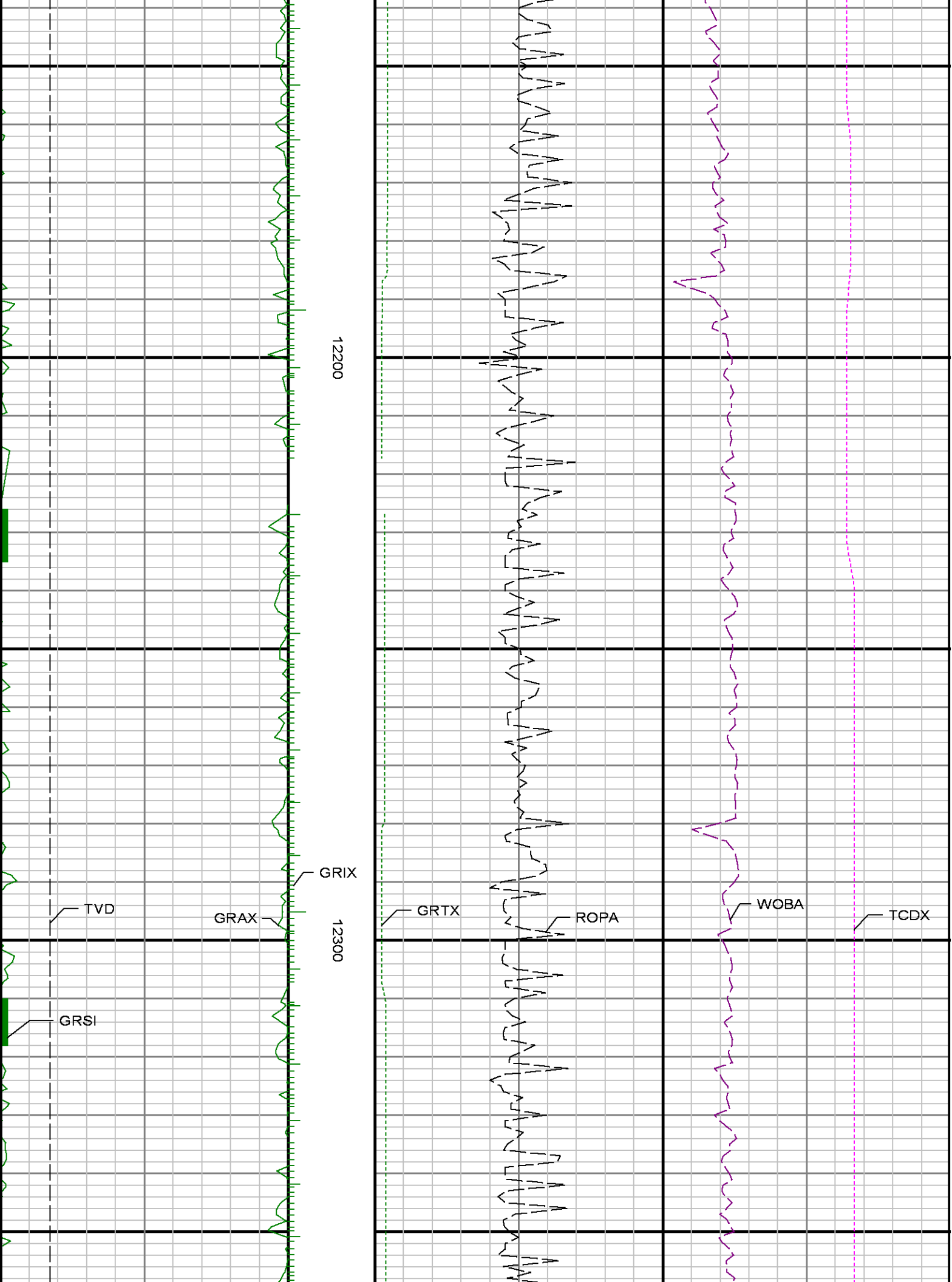
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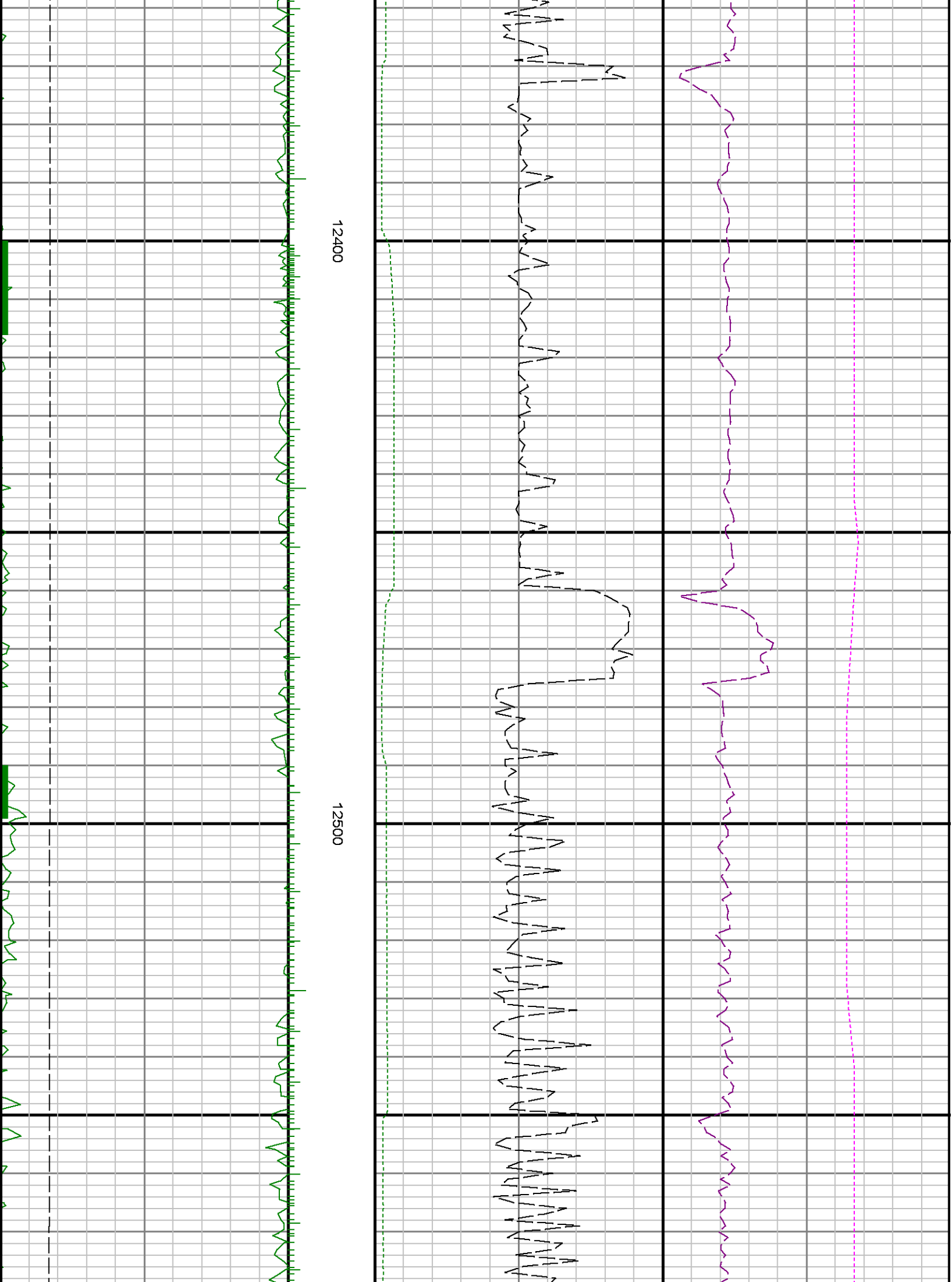
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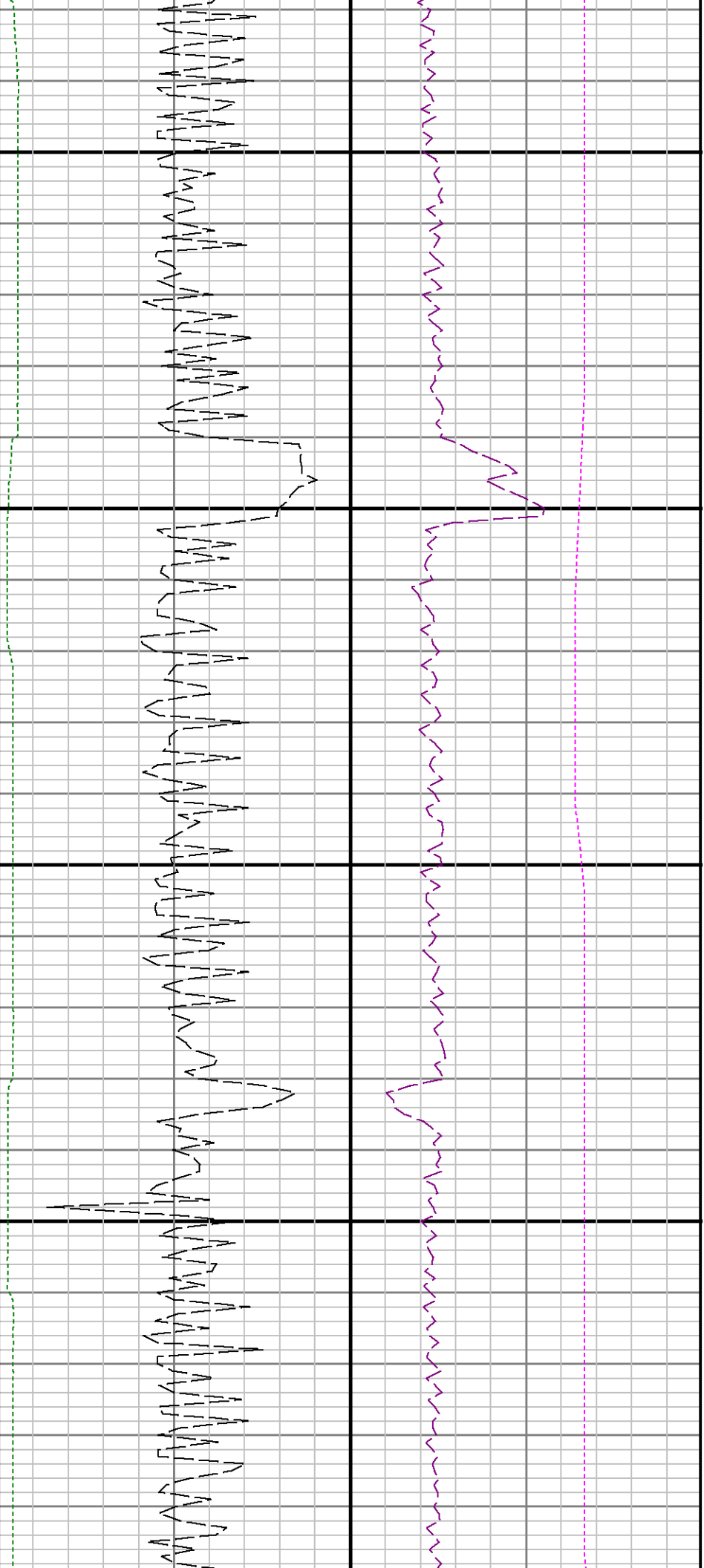
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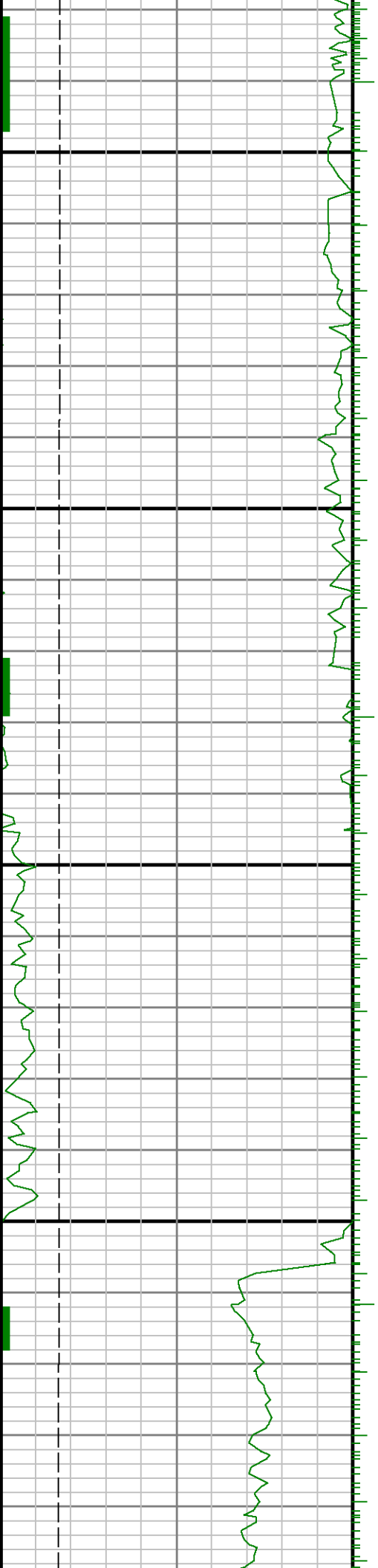




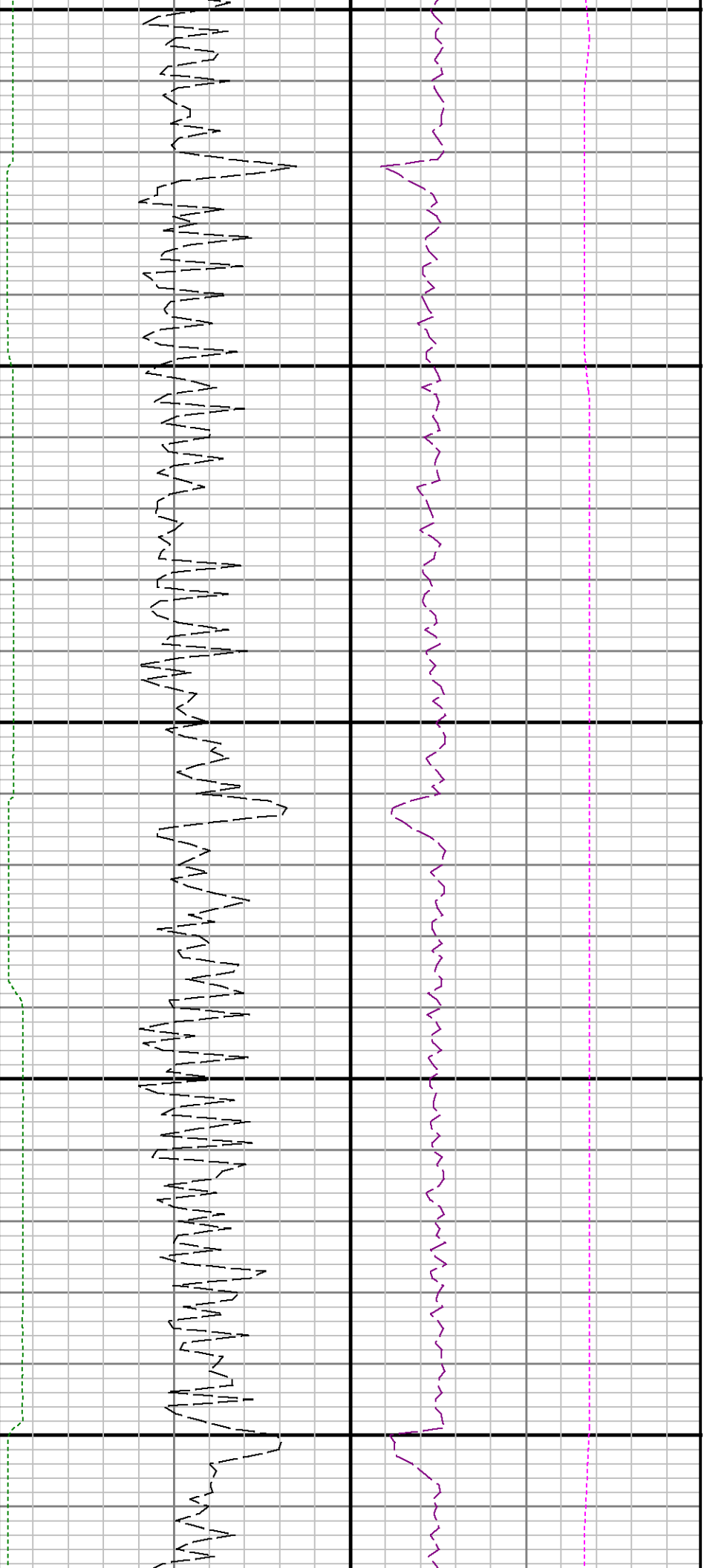
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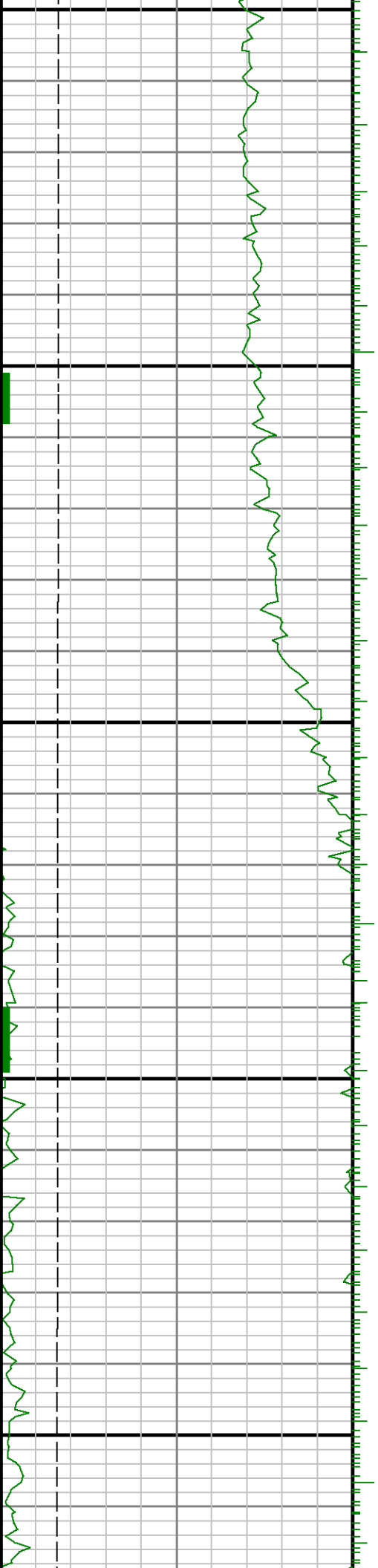




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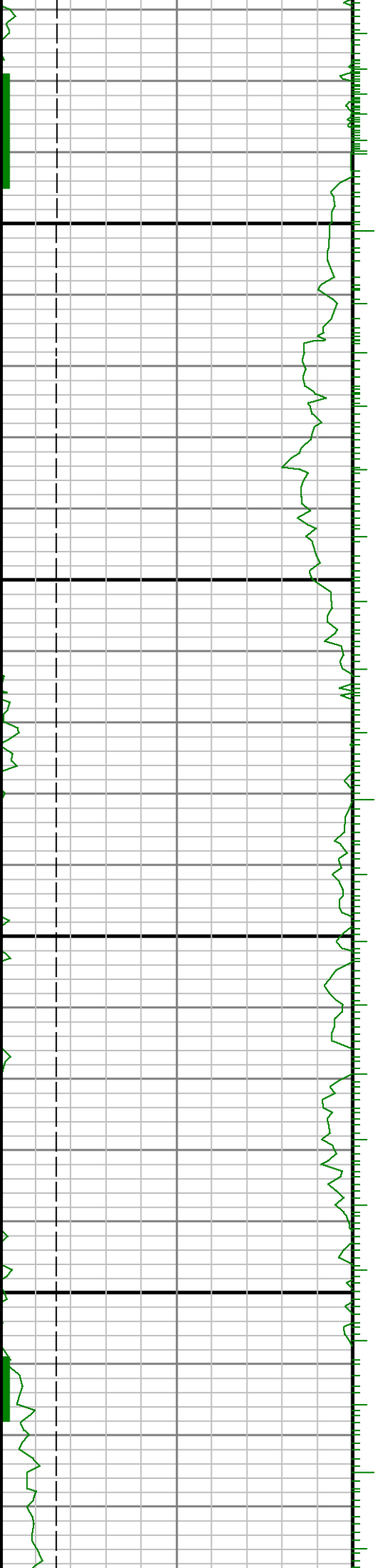
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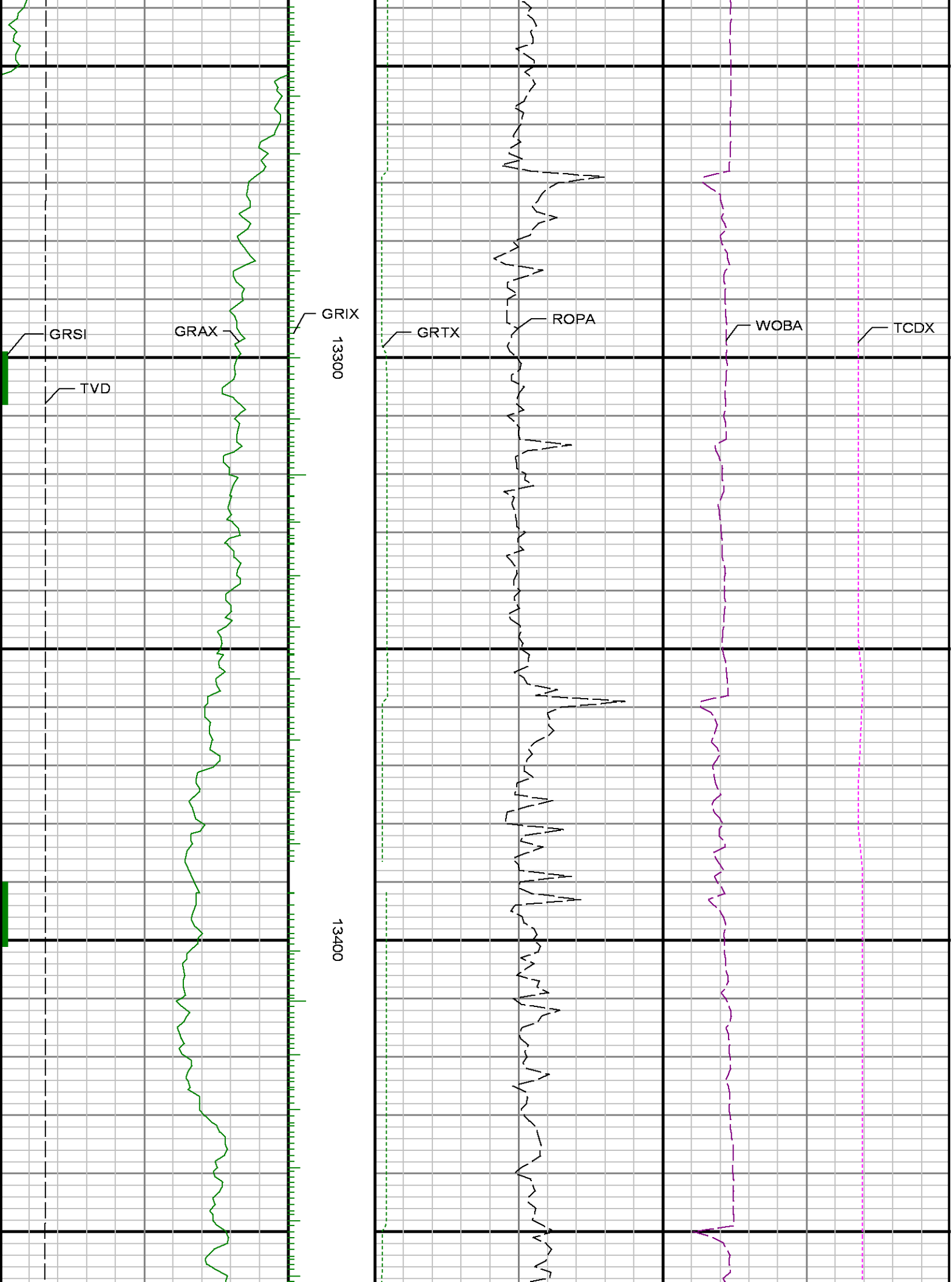




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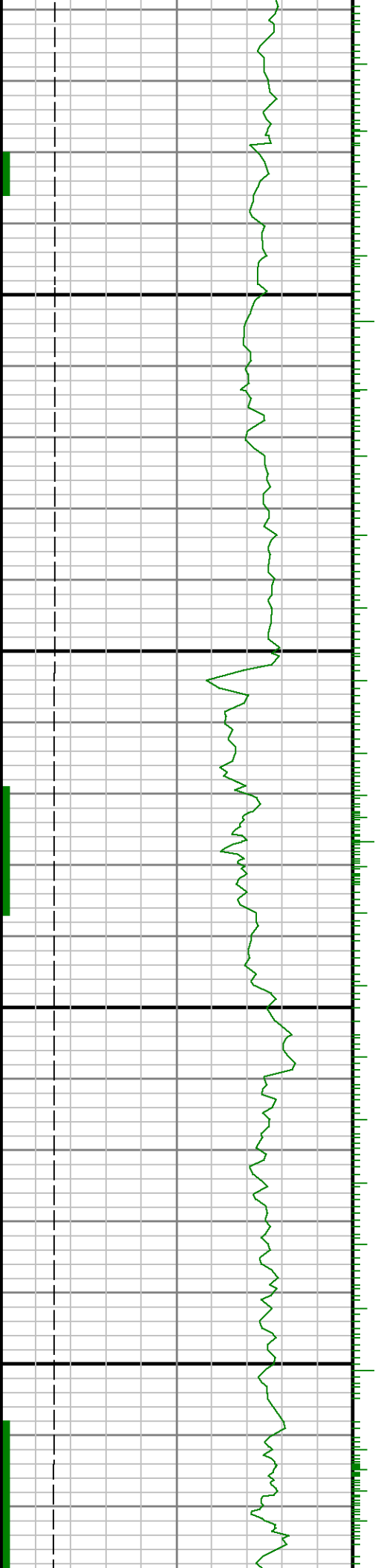


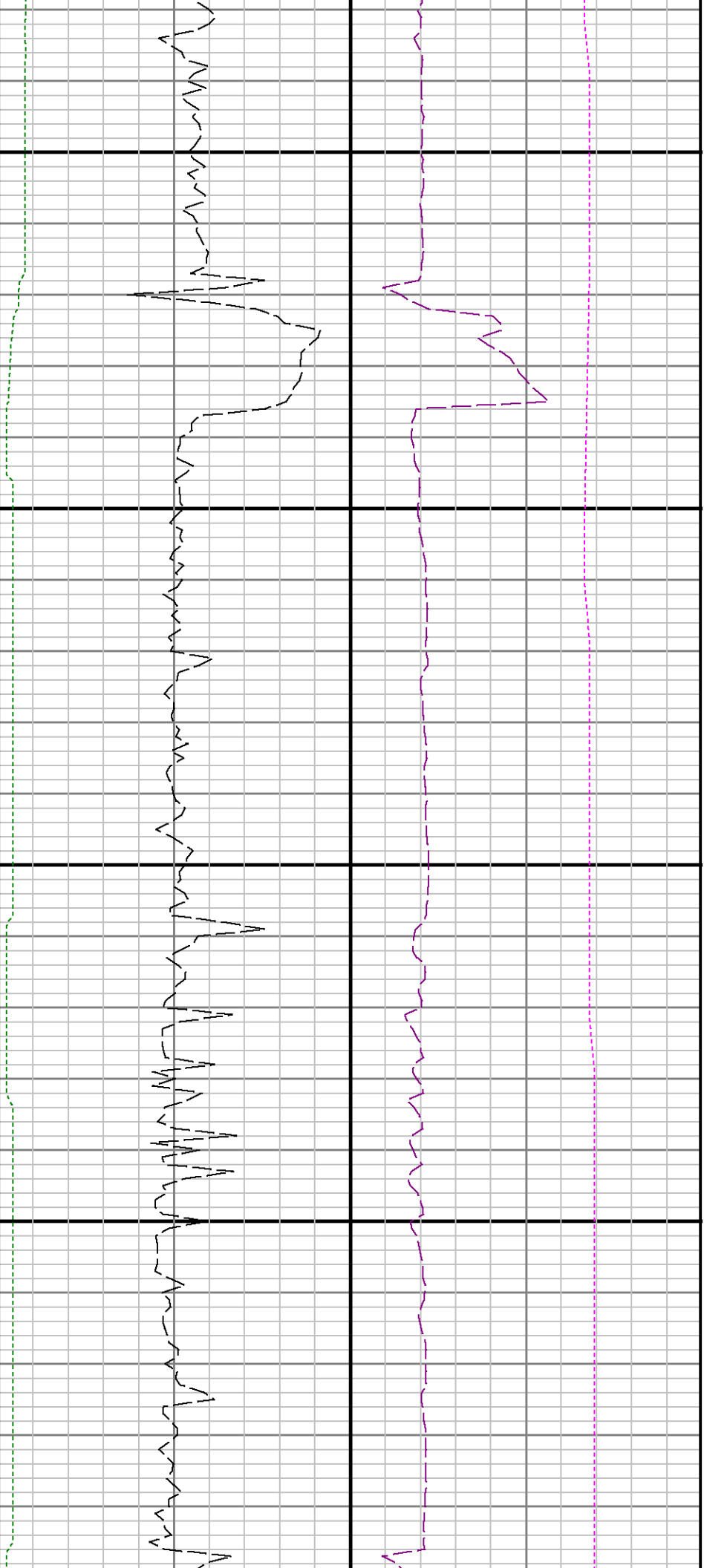




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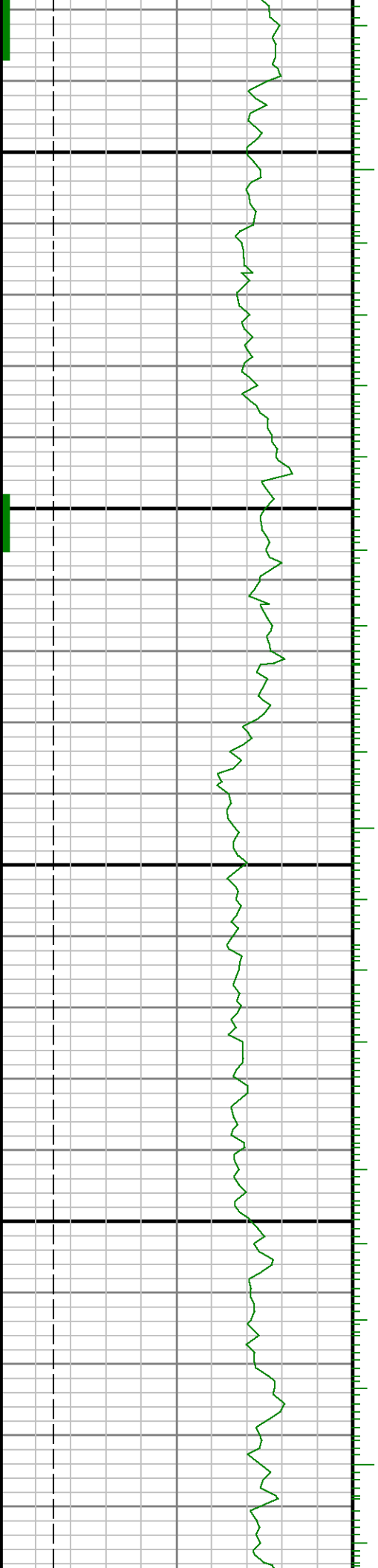


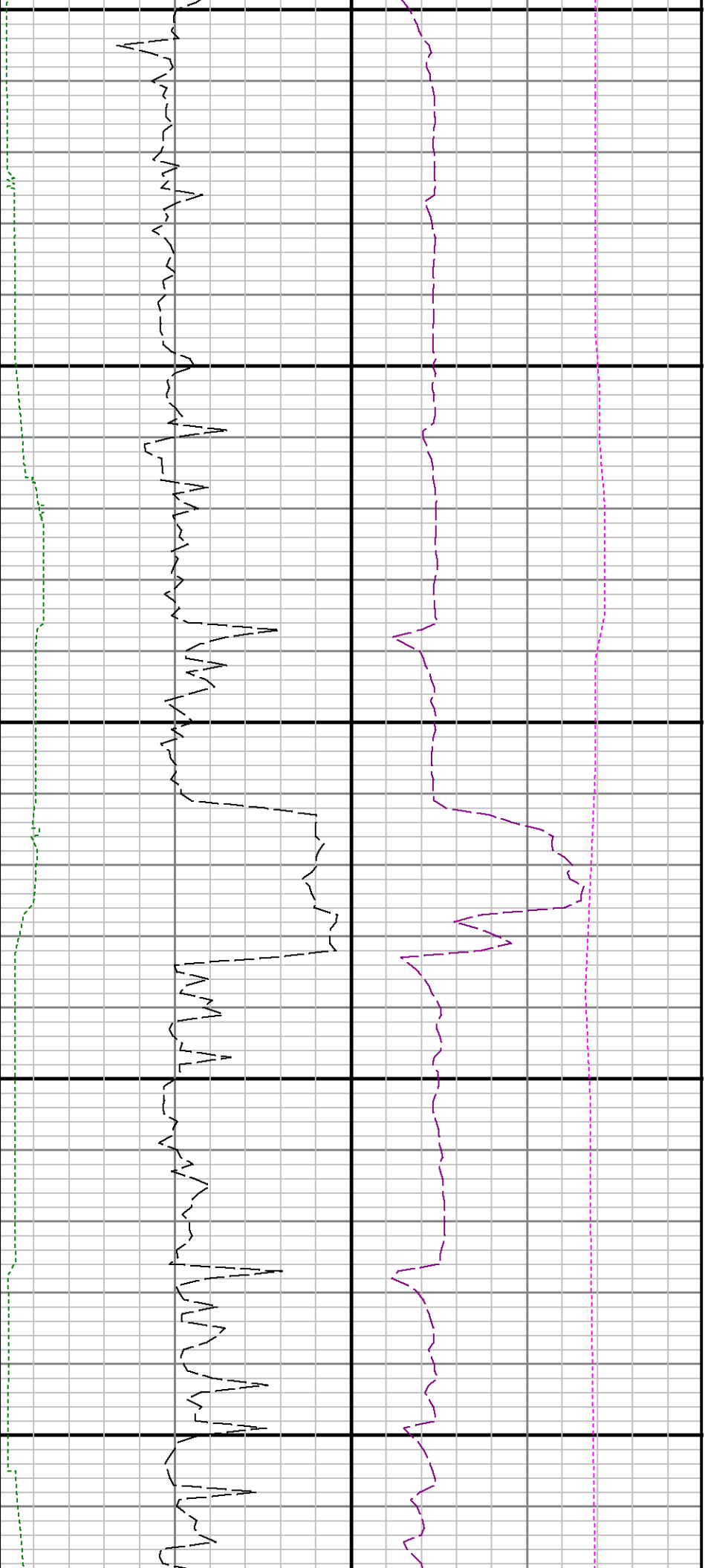


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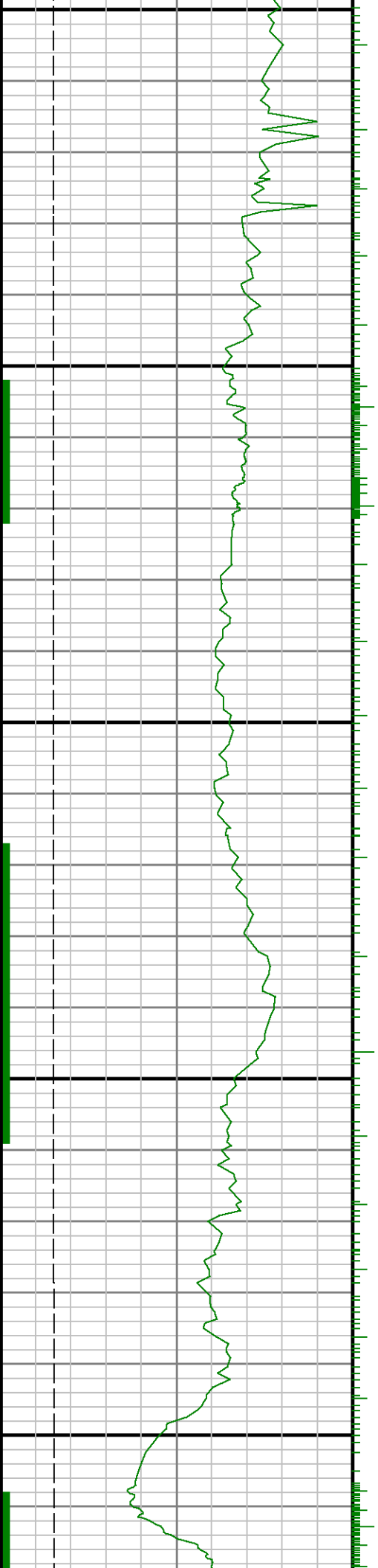
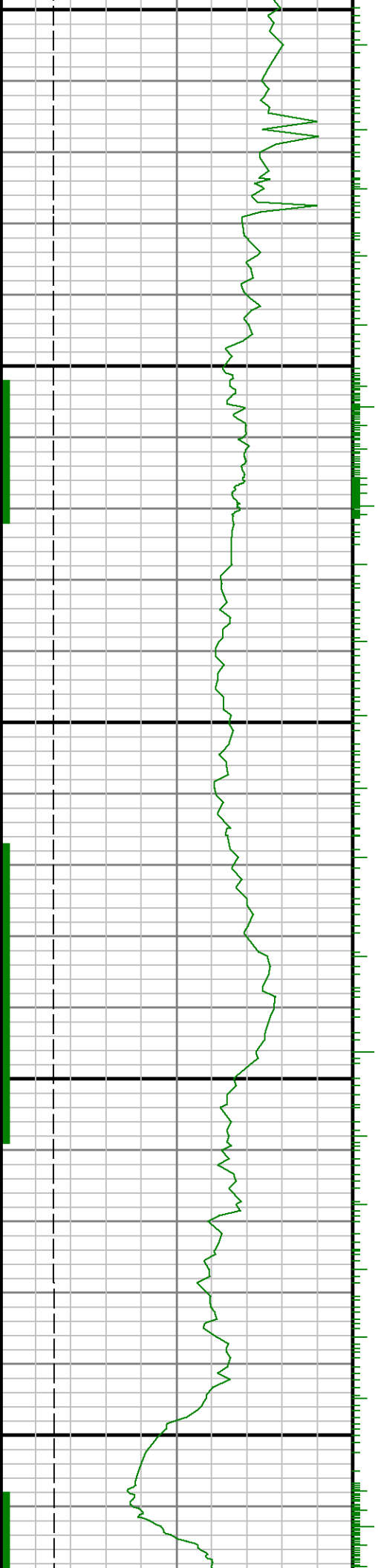


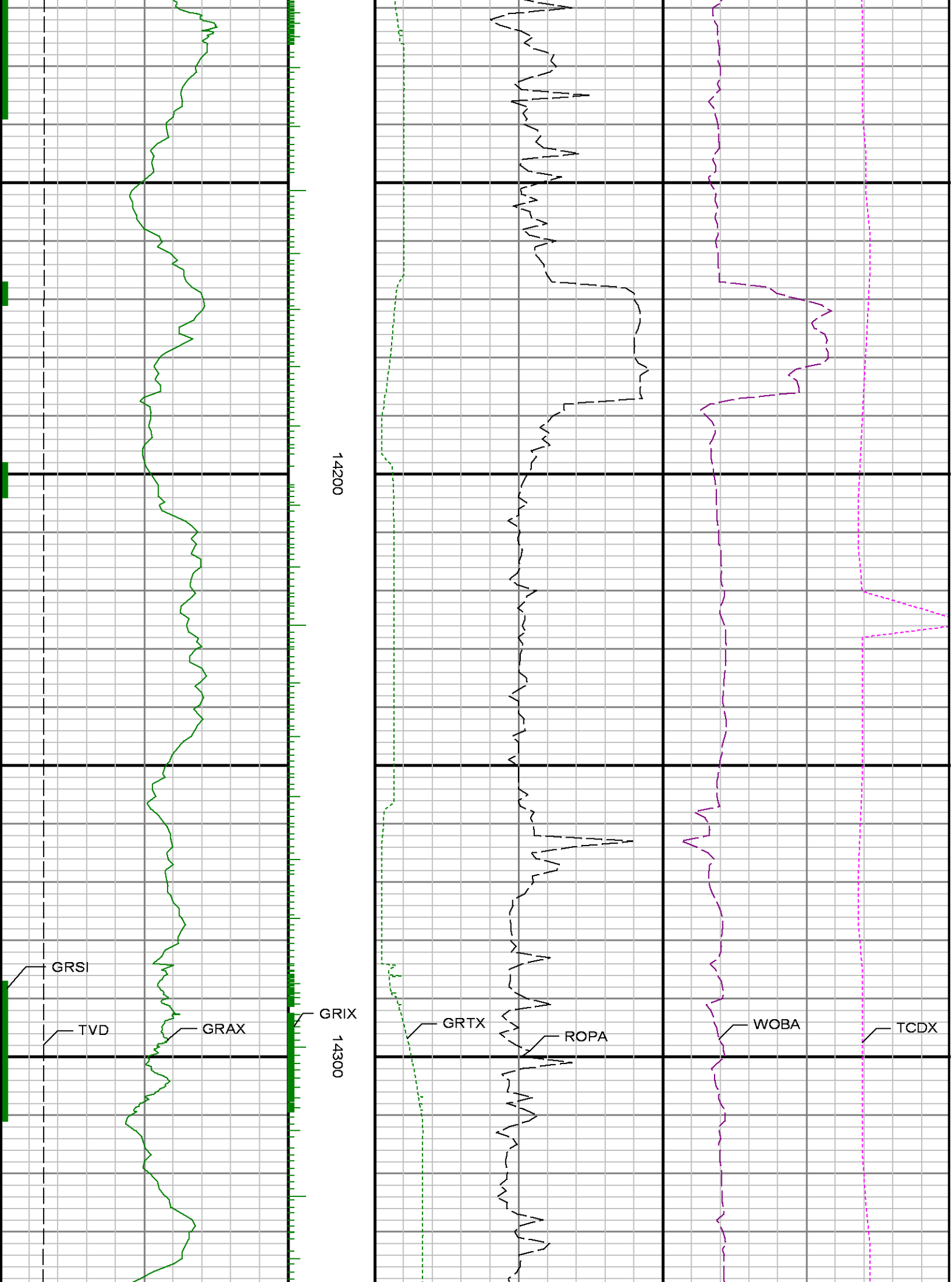


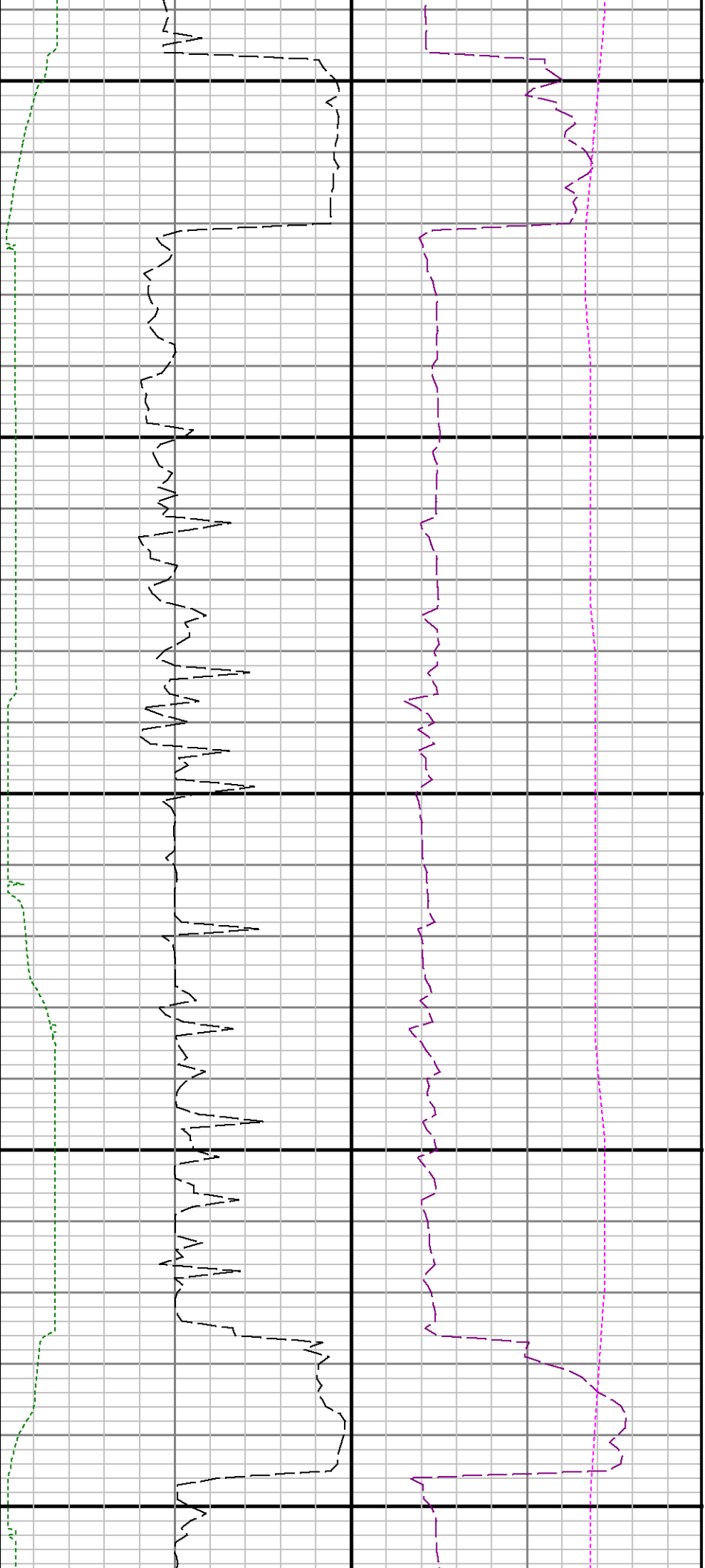
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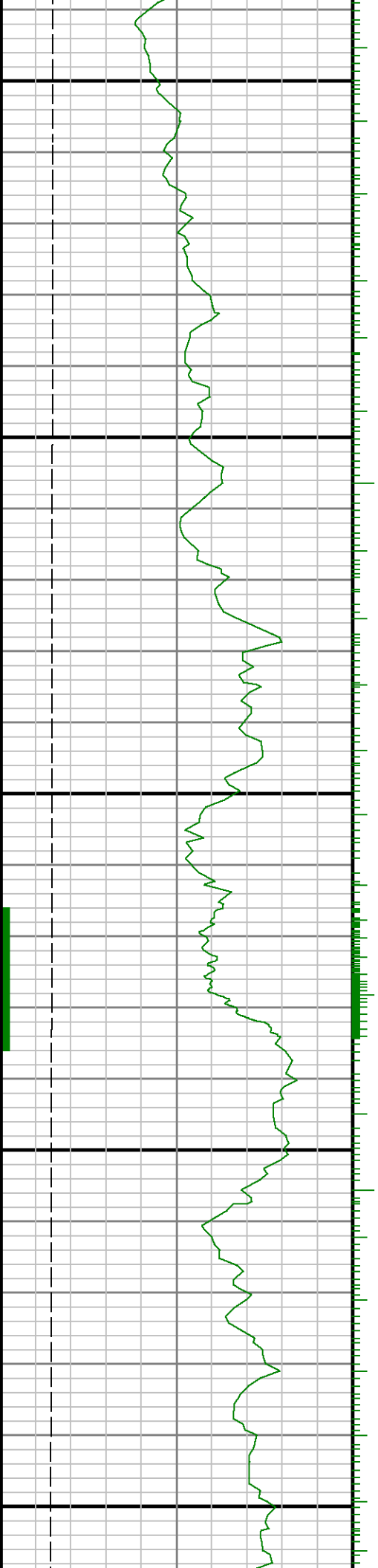




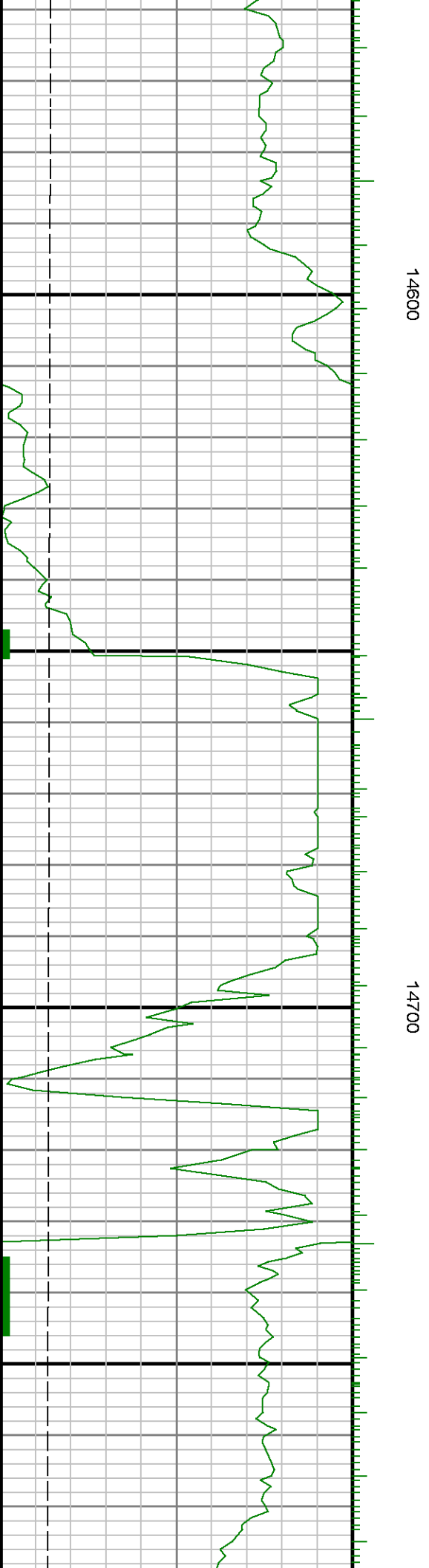


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14500









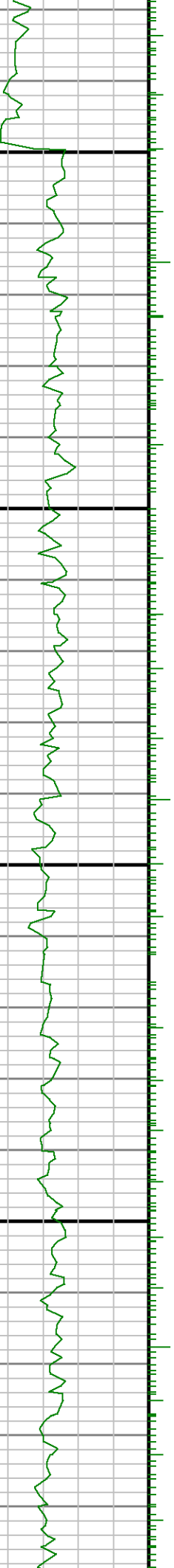
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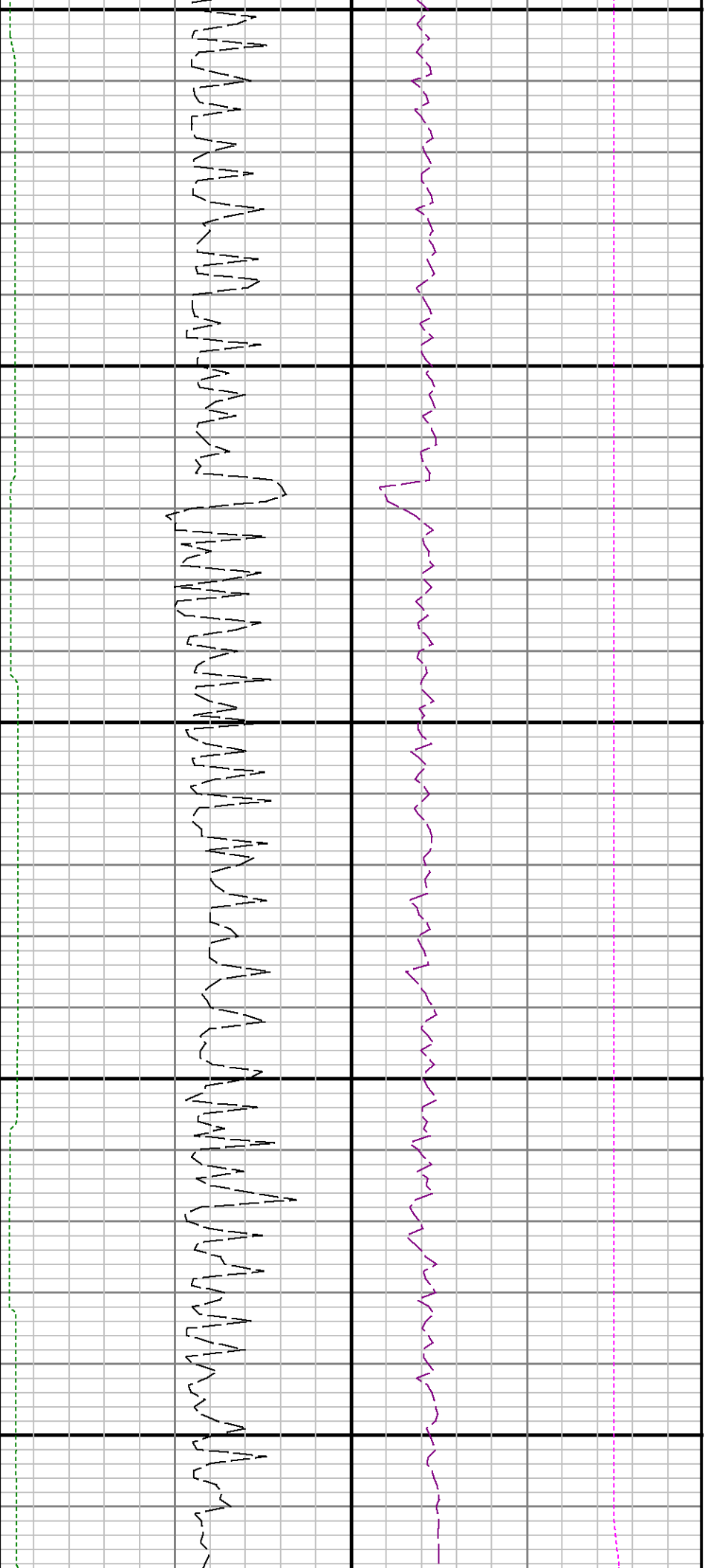


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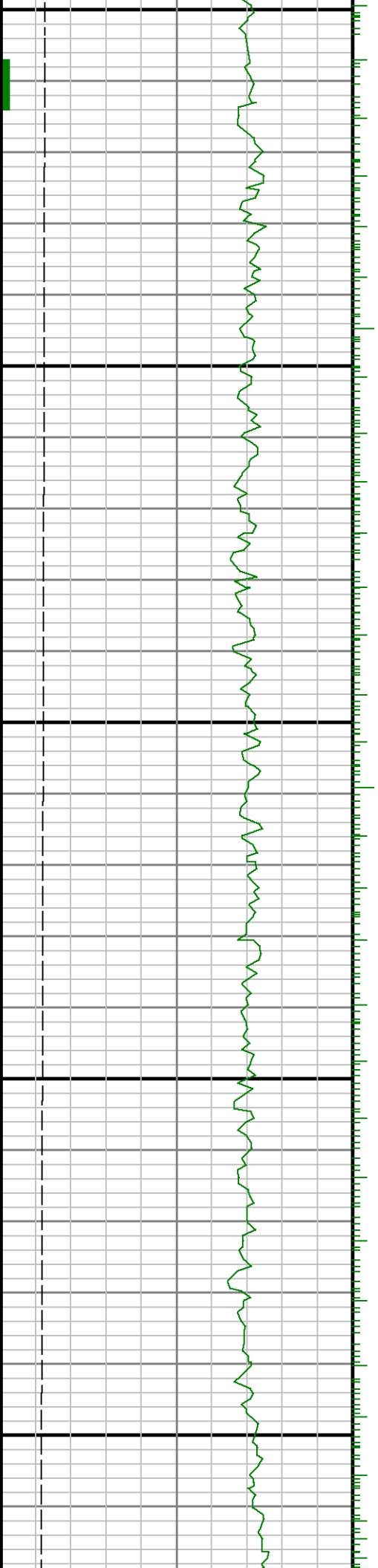


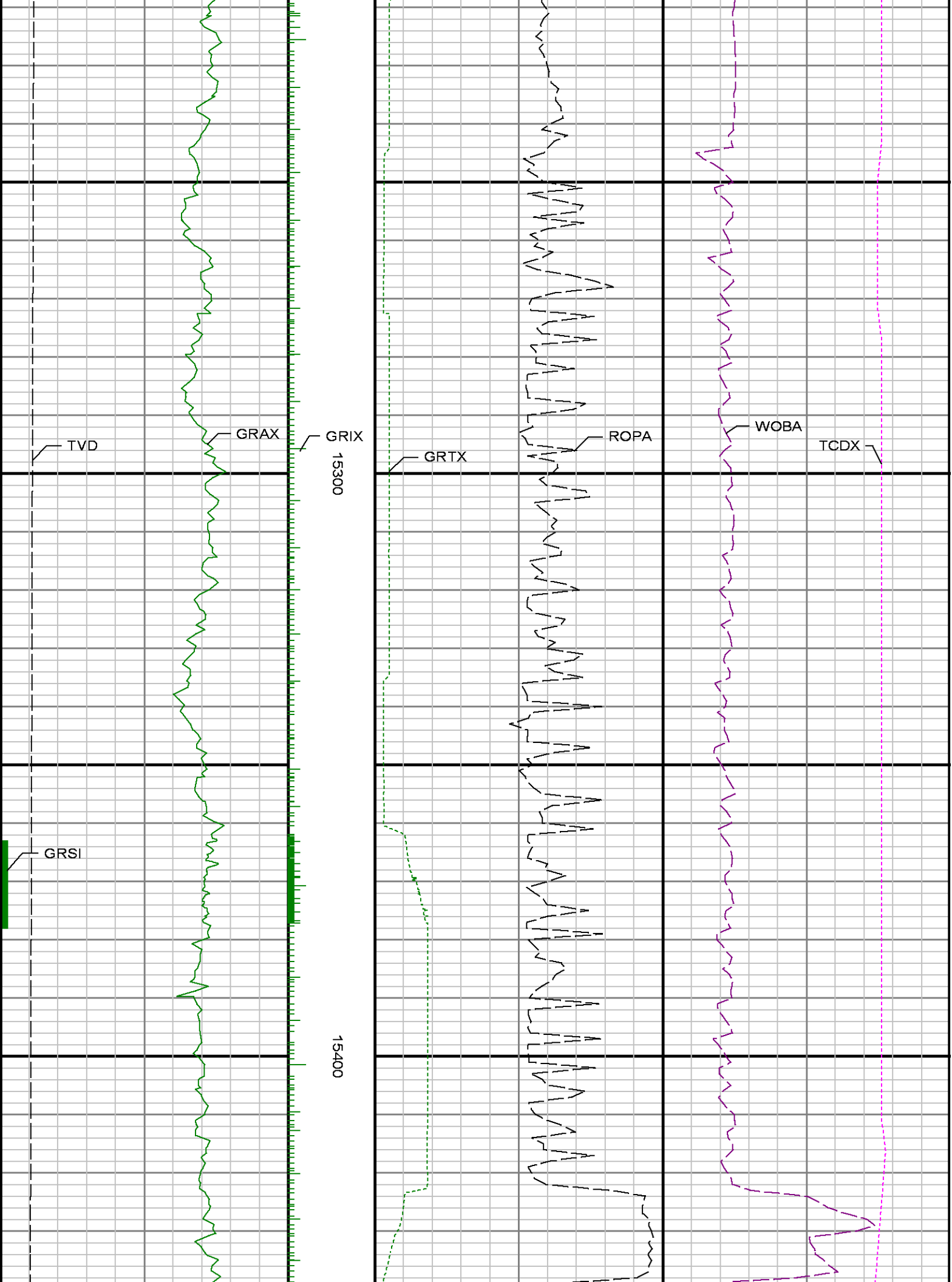


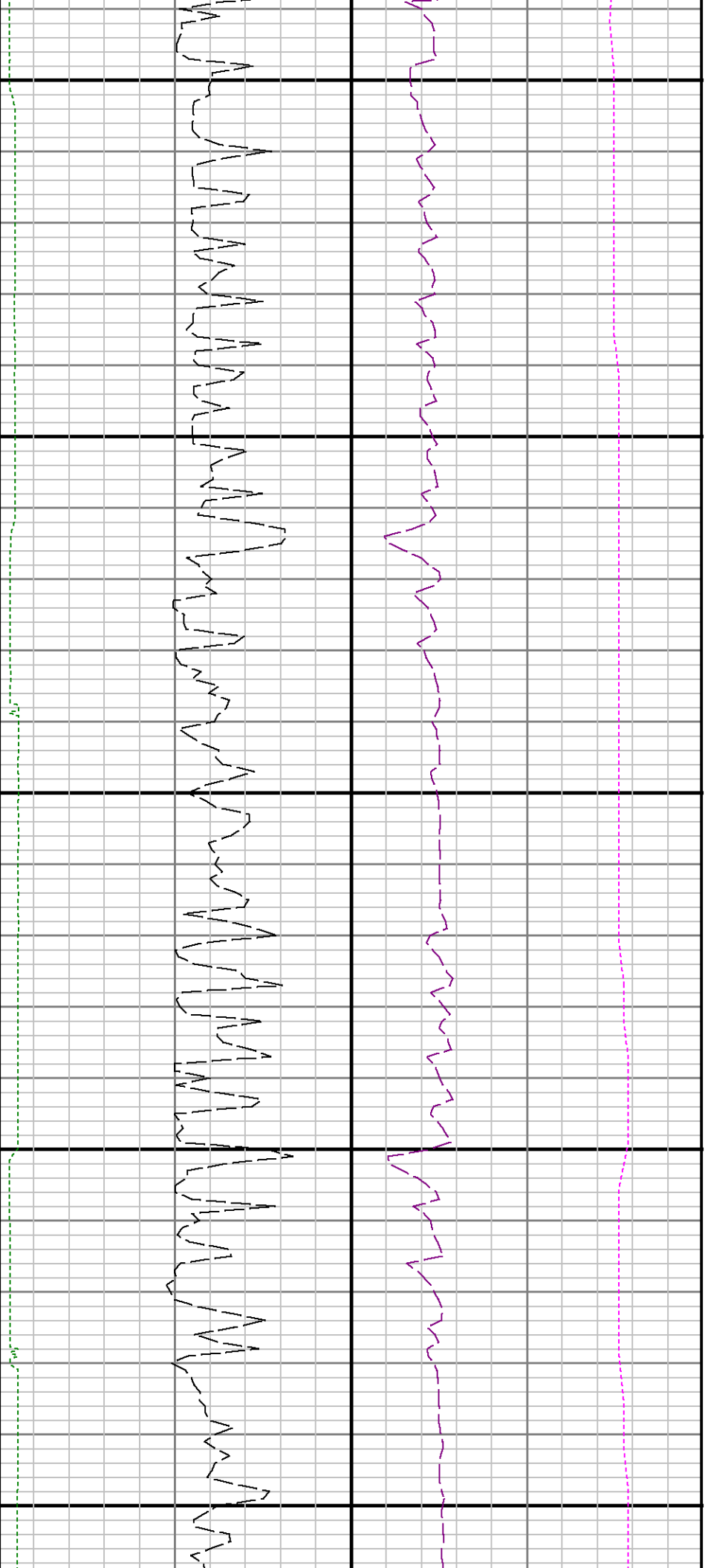
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15100

15200







15500

15600

