

LWD REALTIME LOG



Drilling Dynamics
Gamma Ray

Scale:

1:240 MD

Company: Anadarko

Well: ALVIN 27N-29HZ

Depth Reference:

Field: WELD COUNTY (UTM/TRUE NORTH)

Driller's Depth

County: Weld

State: United States

Status:

Final Print

Surface Location:

Latitude: 040° 06' 11.374" N

Longitude: 104° 40' 46.109" W

Other Services:

API No: 051234220700

Job ID: 7693364

SEC: 29

TWN: 2N

RGE: 65W

Permanent Datum (P.D.): Ground Level

Elevation: 4909.00 ft

KB: 0.00 ft

Log Measured From: Rig Floor

Above P.D.

DF: 4925.00 ft

GL: 4909.00 ft

Dates Interval Logged

Magnetic Field Reference

Date From: 2015-12-22 Top: (ft) 6000.00

Azi Reference North: True

Dip Angle: (deg) 66.74

Date To: 2015-12-23 Bottom: (ft) 12737.00

Total Magnetic Field Strength: (nT) 52642

Spud Date: 2015-12-21

Mag to Reference North Correction: (deg) 8.10 E

Borehole Record

Casing Record

Hole Size (in) From (ft) To (ft)

Size (in)

Weight (lb/ft)

From (ft)

To (ft)

8.500 1886.00 12736.58

9.625

35.00

16.00

1876.00

Mud Record

Deviation Record

Type From (ft) To (ft)

Hole Size (in)

Interval (ft)

Inc | Az (Start)

Inc | Az (End)

Oil Based Mud 1886.00 12736.58

8.500

10850.58

12.95 | 210.01

89.63 | 1.52

Acquisition System

Software Version

Other

Baker Hughes Cadence

G3.2

Xtreme 24

Pilot Studio

3.2.7268.7

Rig:

Contractor: Xtreme Drilling

Unit:

District: RMA

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	Bottom	From	To	Start Logging	End Logging	
						(ft)	(ft)	(ft)	(ft)			
1	1	8.500	PDC	2.00	Motor	6000.00	12694.66	1886.00	12735.00	2015-12-21 12:15	2015-12-23 12:03	44.00

Crew

Name		Arrive Wellsite	Depart Wellsite	Name		Arrive Wellsite	Depart Wellsite	Name		Arrive Wellsite	Depart Wellsite
Adam Harris		2015-12-21	2015-12-23	Matthew Leopold		2015-12-21	2015-12-24	Mauricio Garcia		2015-12-21	2015-12-24
Ryan Kielian		2015-12-21	2015-12-24	Chad Hough		2015-12-23	2015-12-24				

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+ (%)
2015-12-21 18:00		1	3790.84	Oil Based Mud	9.0	19	N/A	N/A	61.5/30.0	Active Pit	48000	0.00
2015-12-23 12:37		1	12736.58	Oil Based Mud	9.7	19	N/A	N/A	62.0/26.0	Active Pit	44000	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	NaviGamma	13191954	Gamma (single)	11.42	41.92	6.750	2.750
1	NaviGamma	13191954	VSS	14.83	45.33	6.750	2.750
1	NaviGamma	13191954	Directional (mag)	14.83	45.33	6.750	2.750

Comments

- 1 Baker Hughes run 1 utilized a 6.75 inch NaviGamma (Directional and Gamma Ray) tool ran behind an 8.5 inch bit with a steerable assembly from 1886 to 12735 feet MD (1867 to 7040 feet TVD).
- 2 A sliding indicator is shown on the left side of track 1 as a heavy line. The indicator has been shifted to the Gamma Ray sensor offset to correspond with Gamma Ray data acquired while sliding.


Remarks

Number	Measured Depth (ft)	Hole Section (in)	Run No.	Remark
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	(ft)	(in)		
1	5995.00	8.500	1	The interval from Surface to 6000 feet MD (16 to 5845 feet TVD) was not logged due to directional only services required in the vertical section.
2	12705.00	8.500	1	The interval from 12695 to 12735 feet MD (7040 feet TVD) has no GRAX, GRIX or GRTX due to the Gamma Ray sensor offset to bit.

Curve Mnemonics

Presented Curves	Description	Units
ROPA	Depth Averaged ROP 3 ft Average	ft/h
GRAX	Gamma Ray - Apparent 0.5 ft Average	API
GRIX	Gamma Ray - Data Point Indicator	unitless
GRTX	Gamma Time Since Drilled	min
GRSI	Sliding Indicator Flag	unitless
TCDX	Downhole Temperature	degF
TVD	True Vertical Depth	ft
WOBA	Weight On Bit, Average 1 ft Average	klb



Company

Well

Interval

Created

Anadarko

ALVIN 27N-29HZ

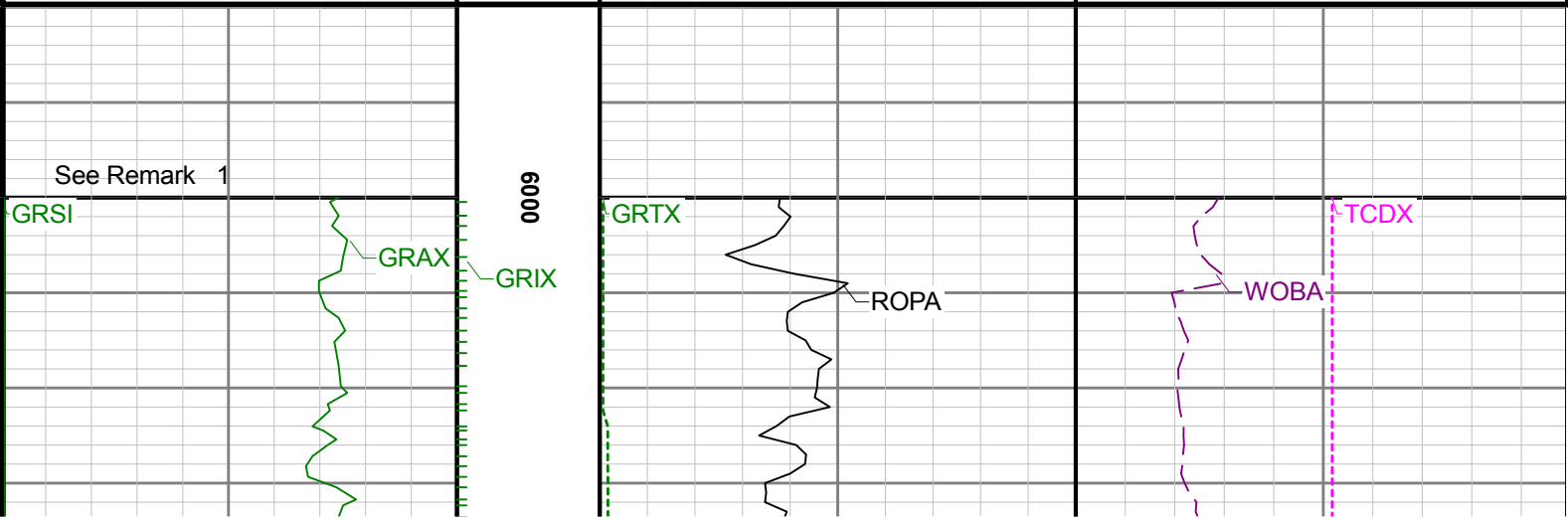
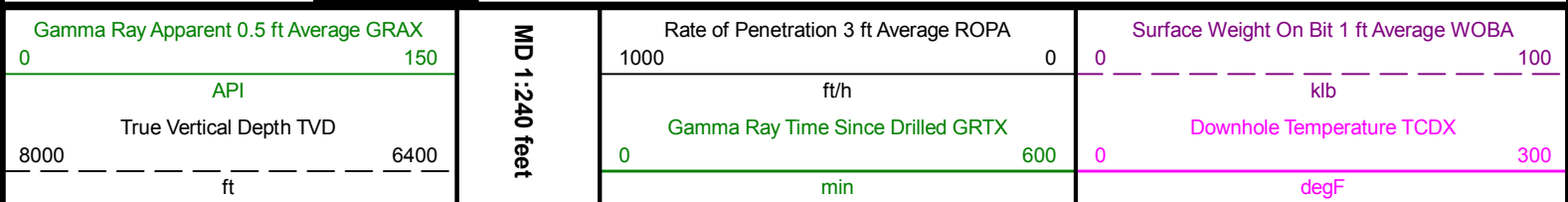
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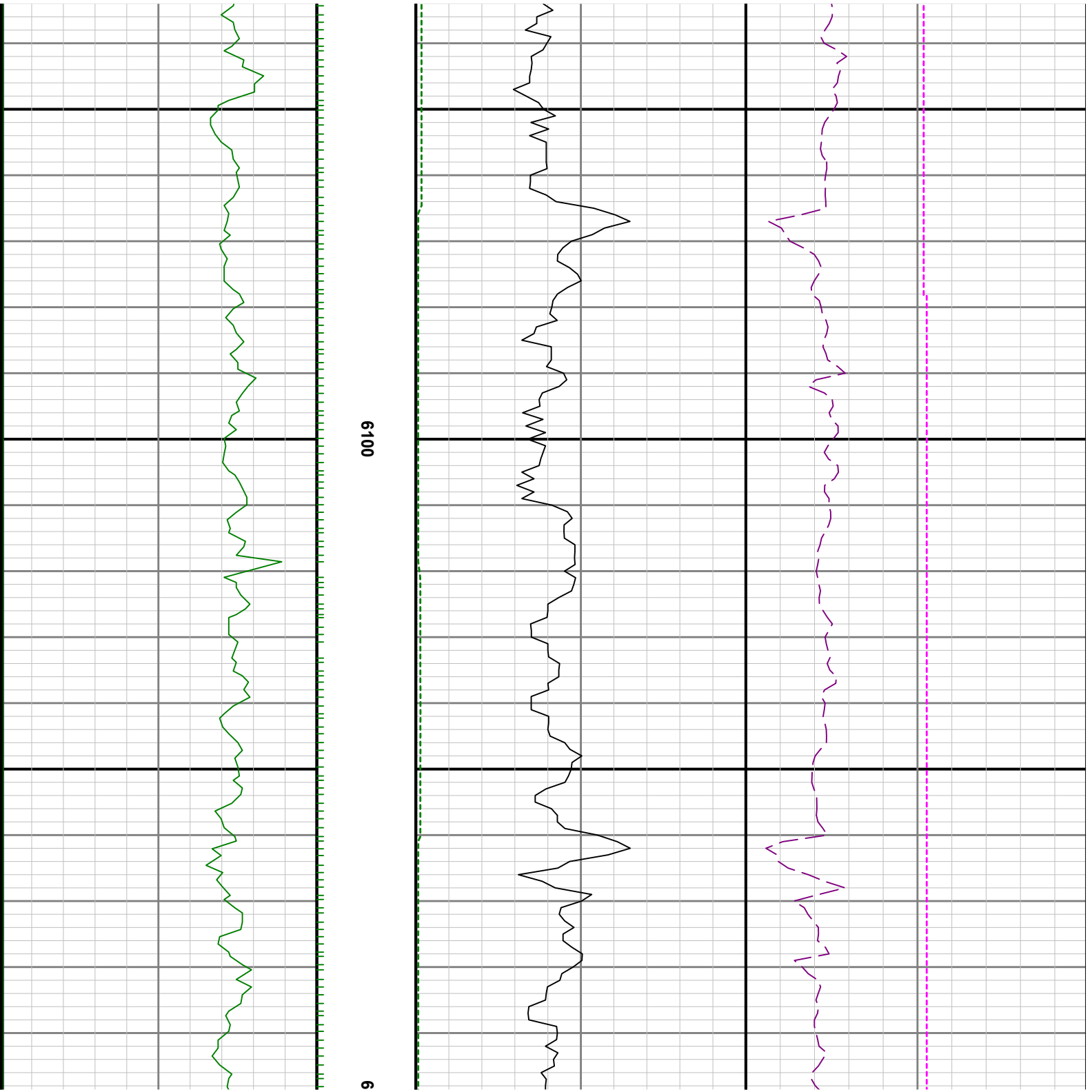
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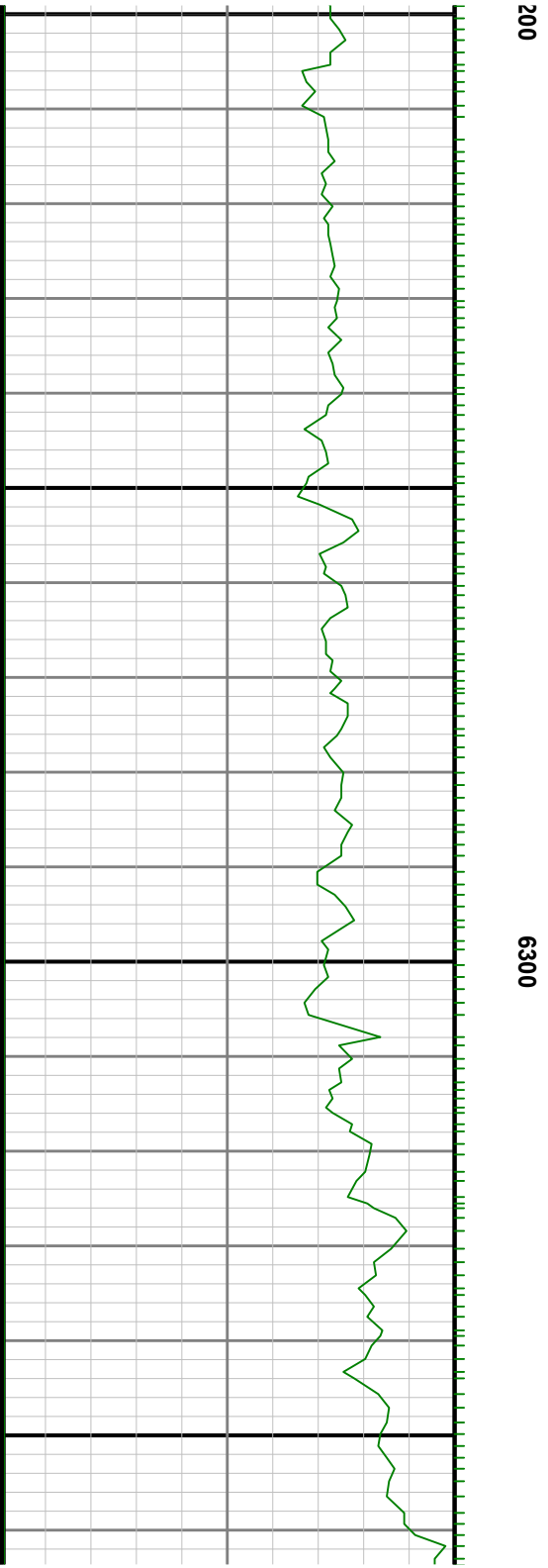
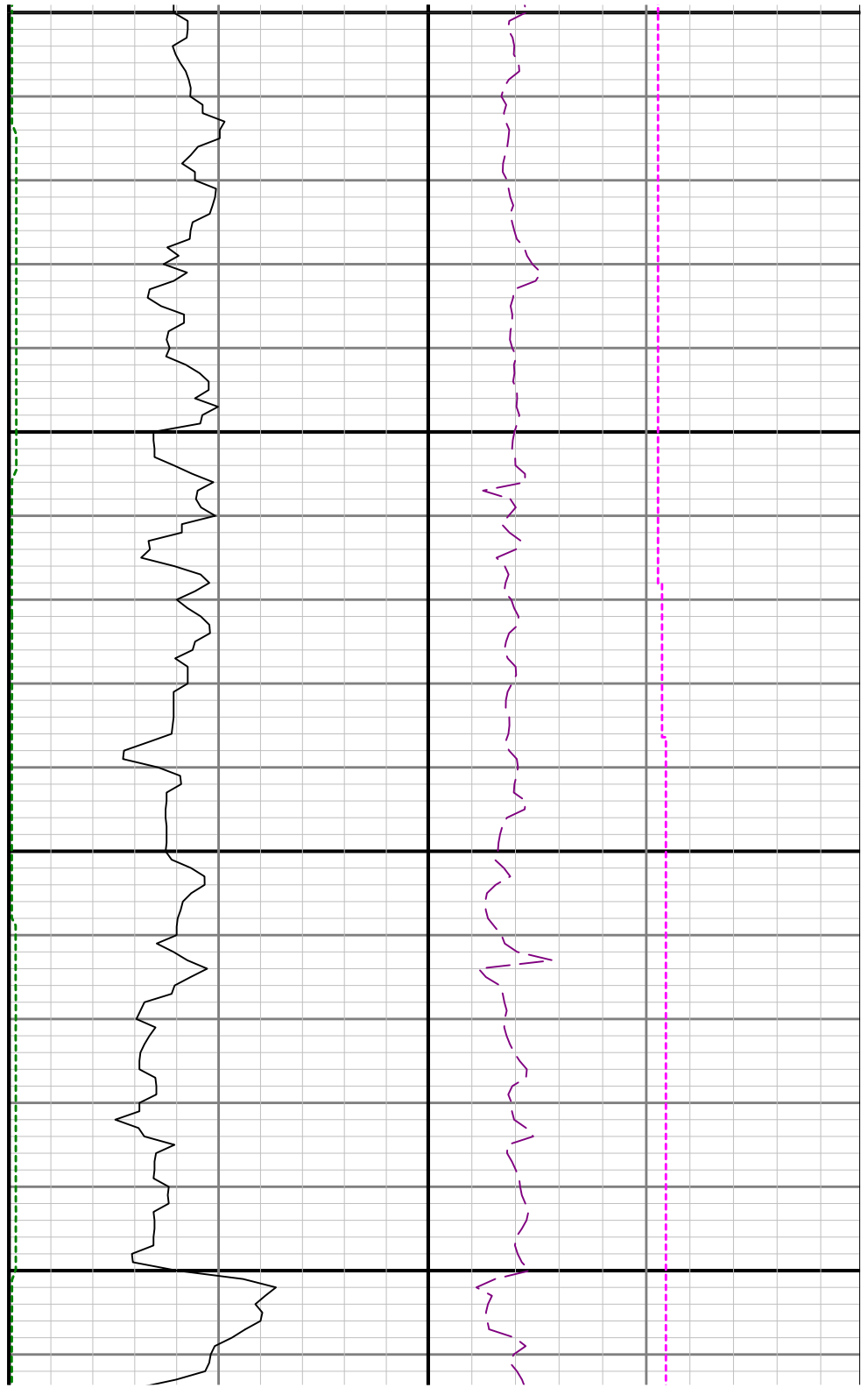
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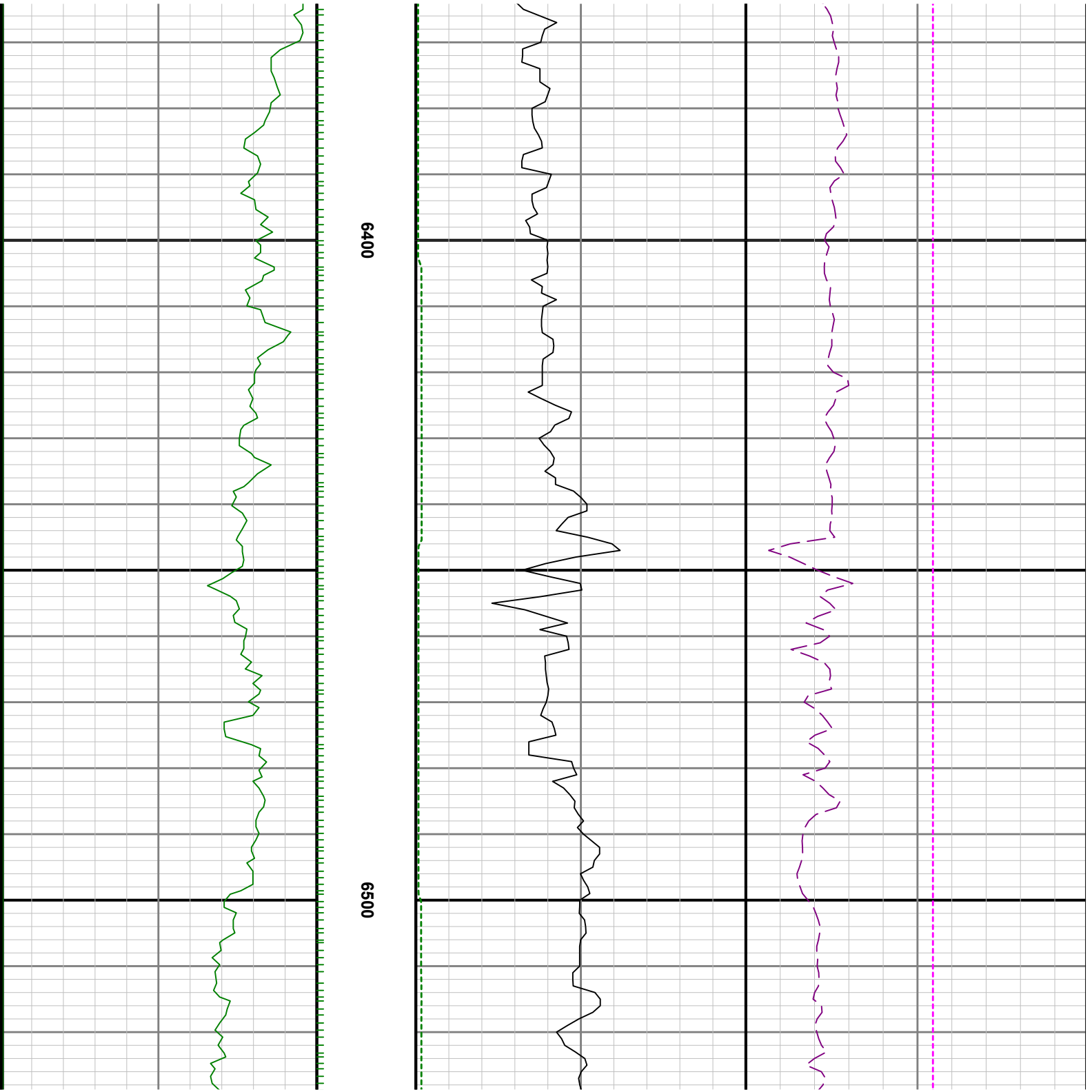
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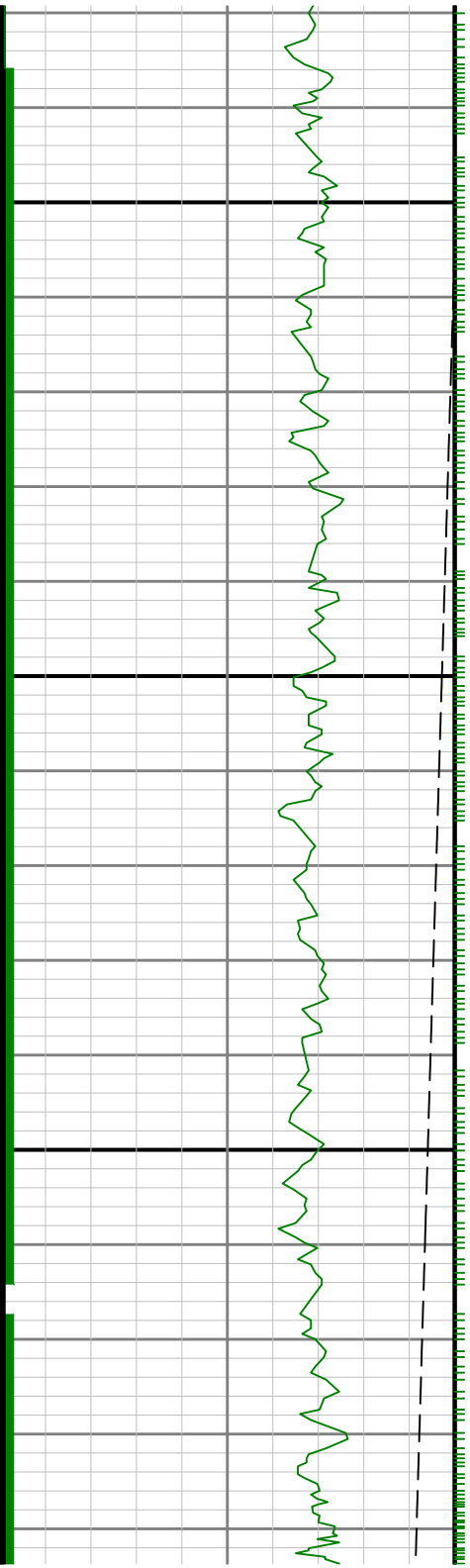
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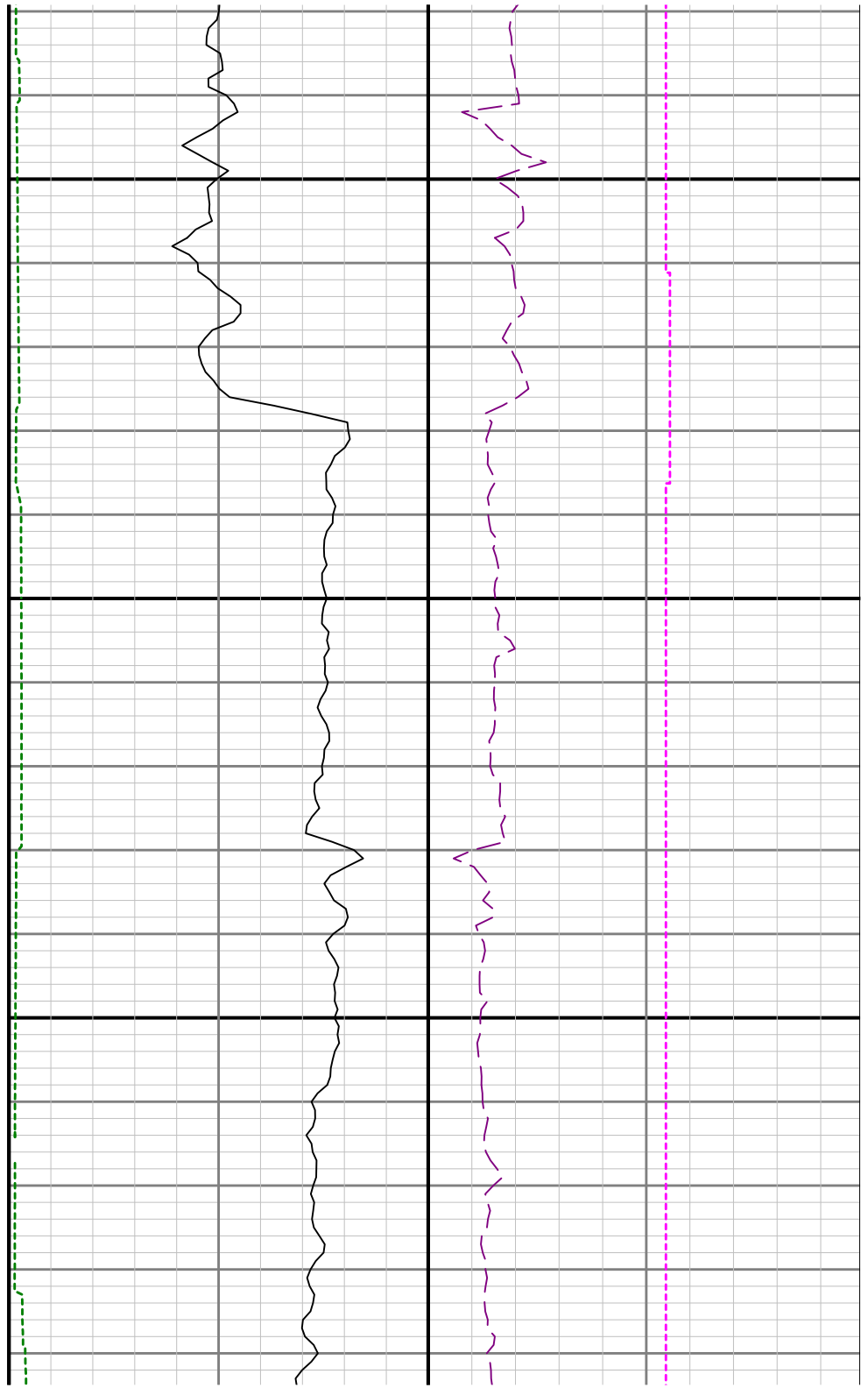


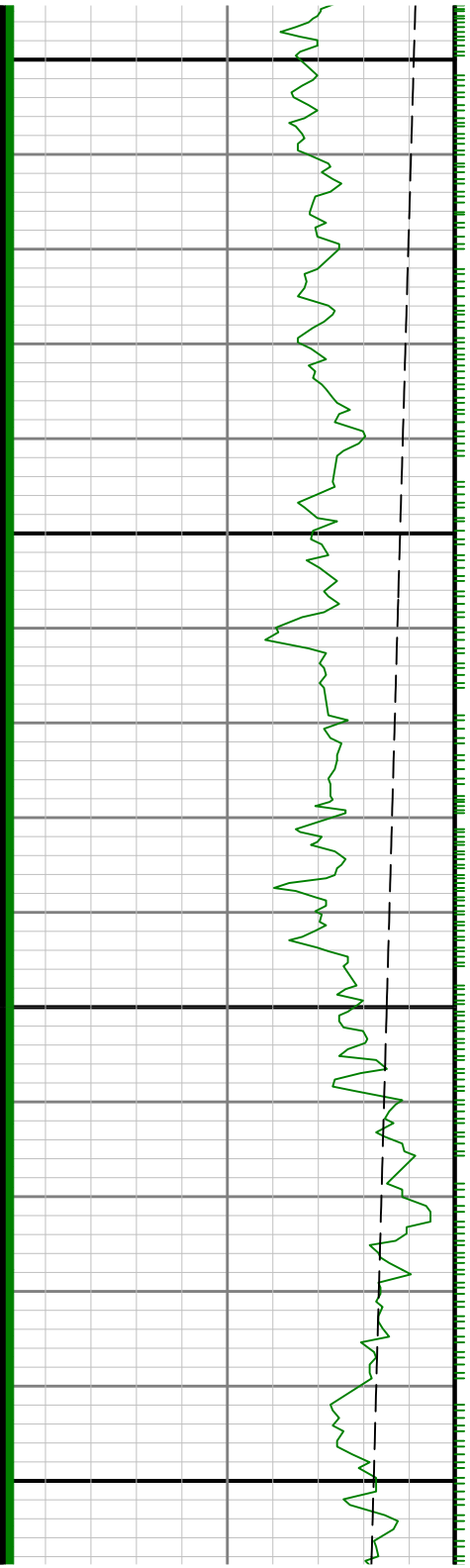






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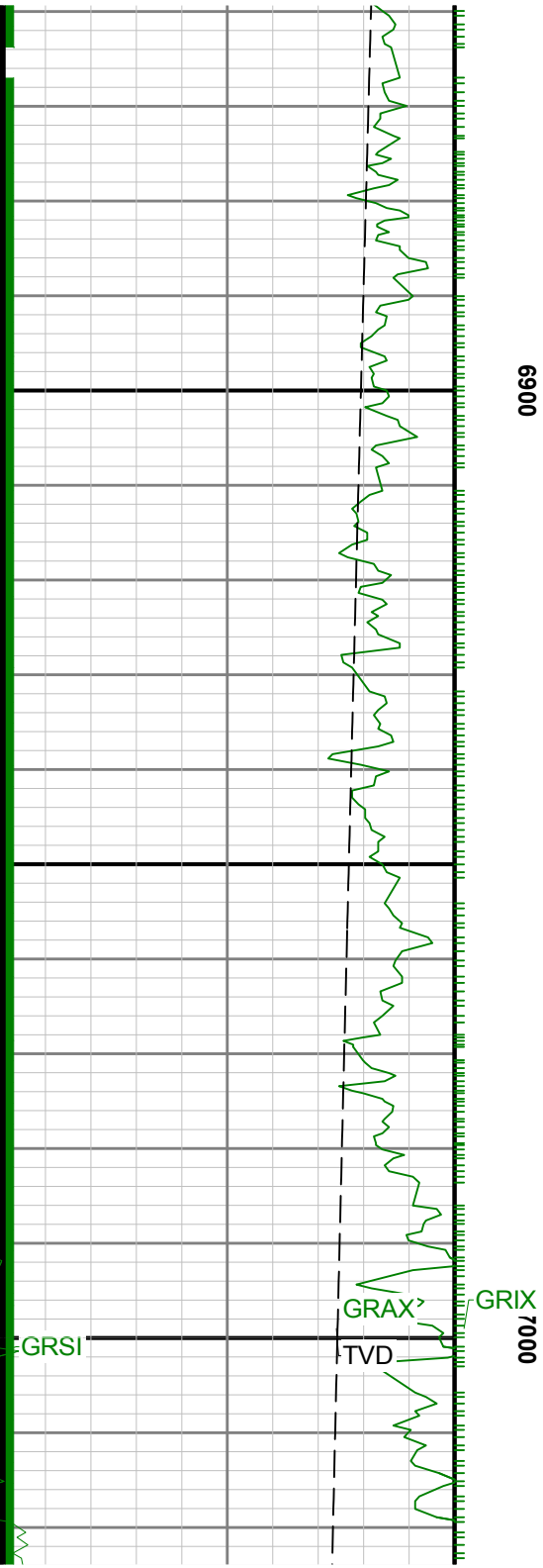


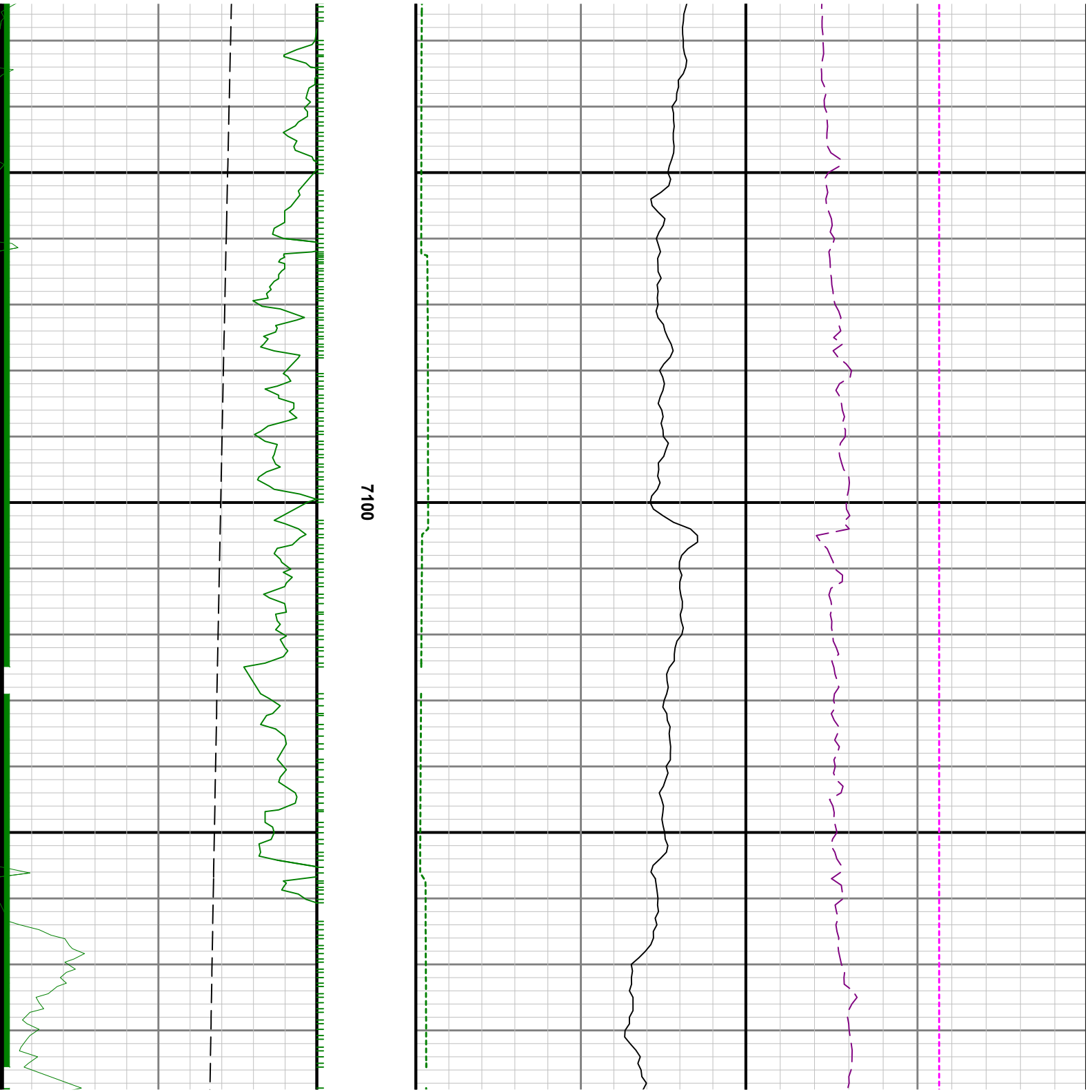


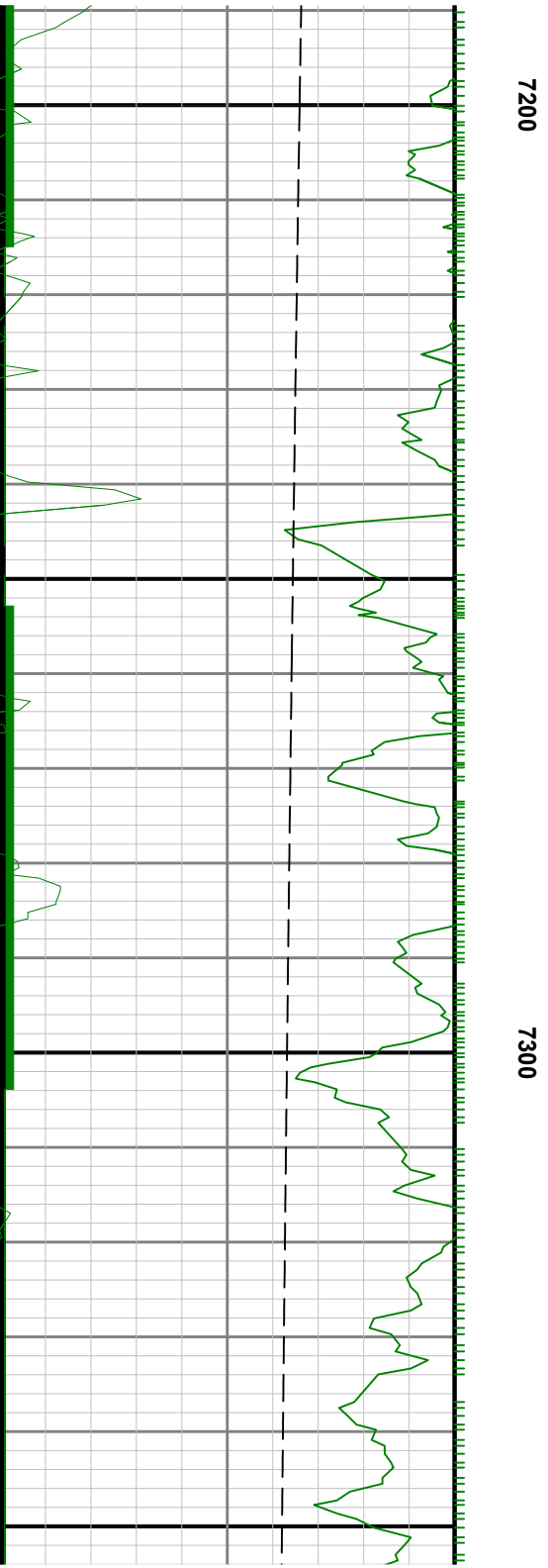
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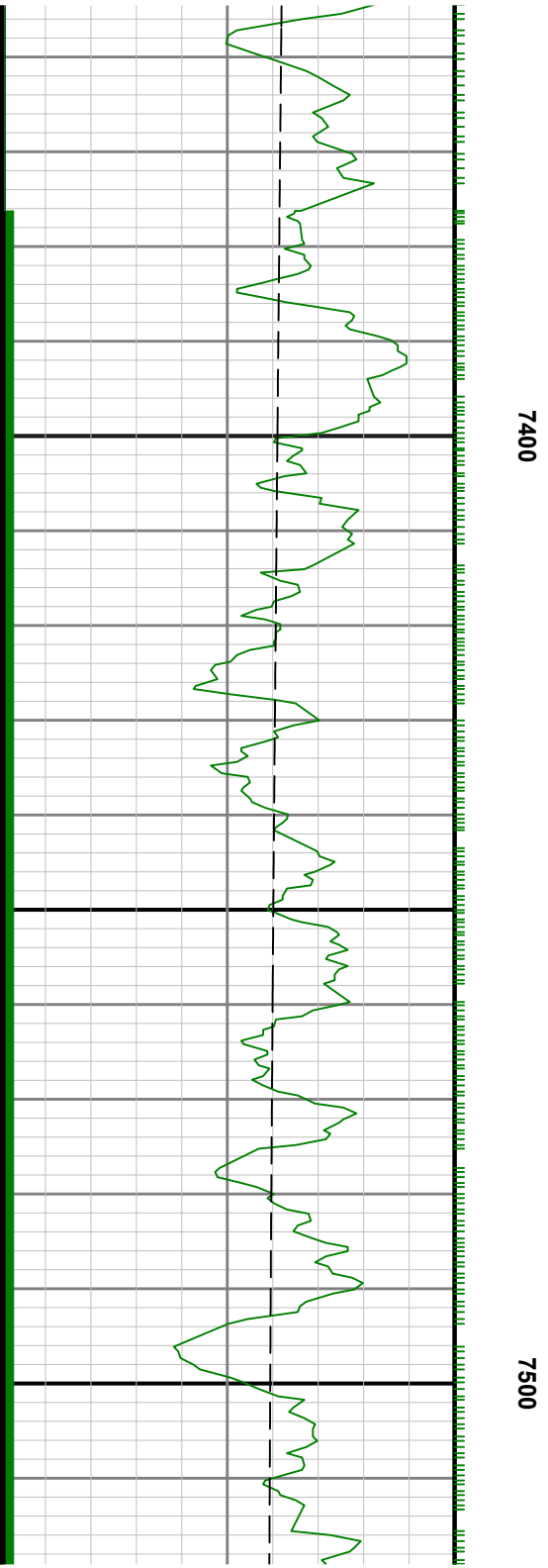
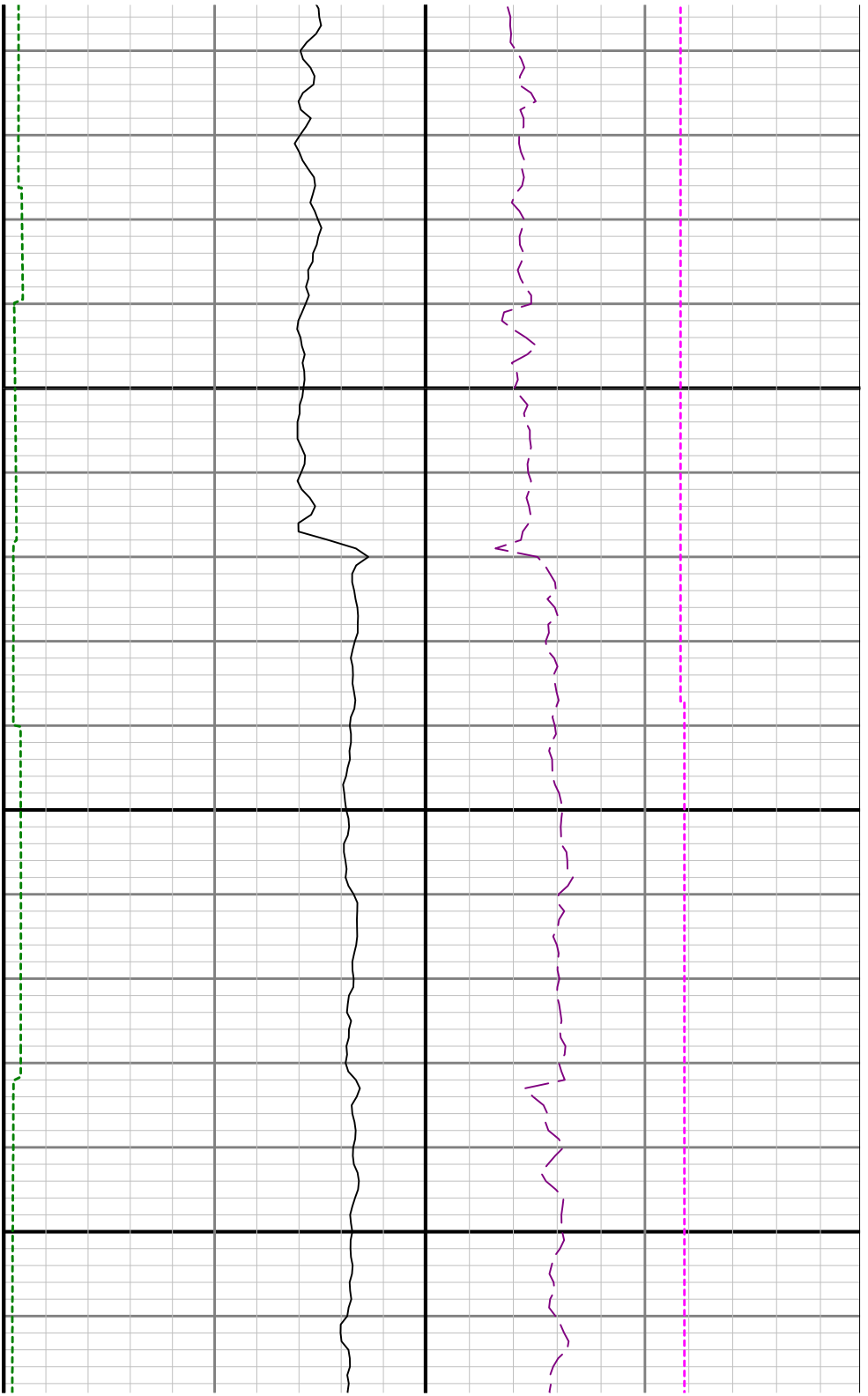
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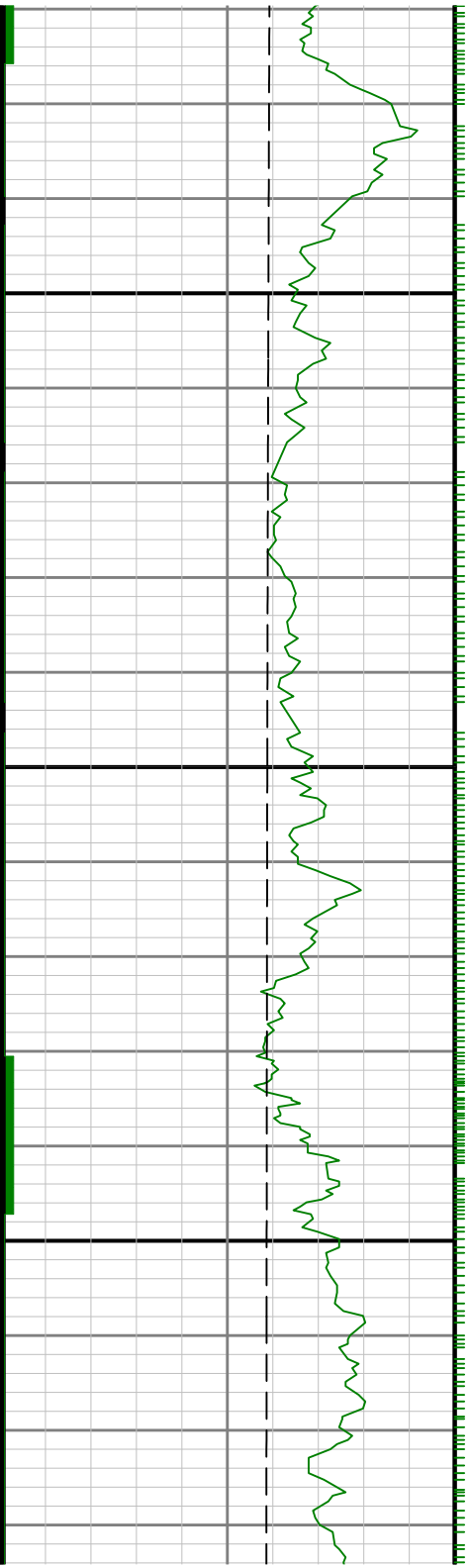




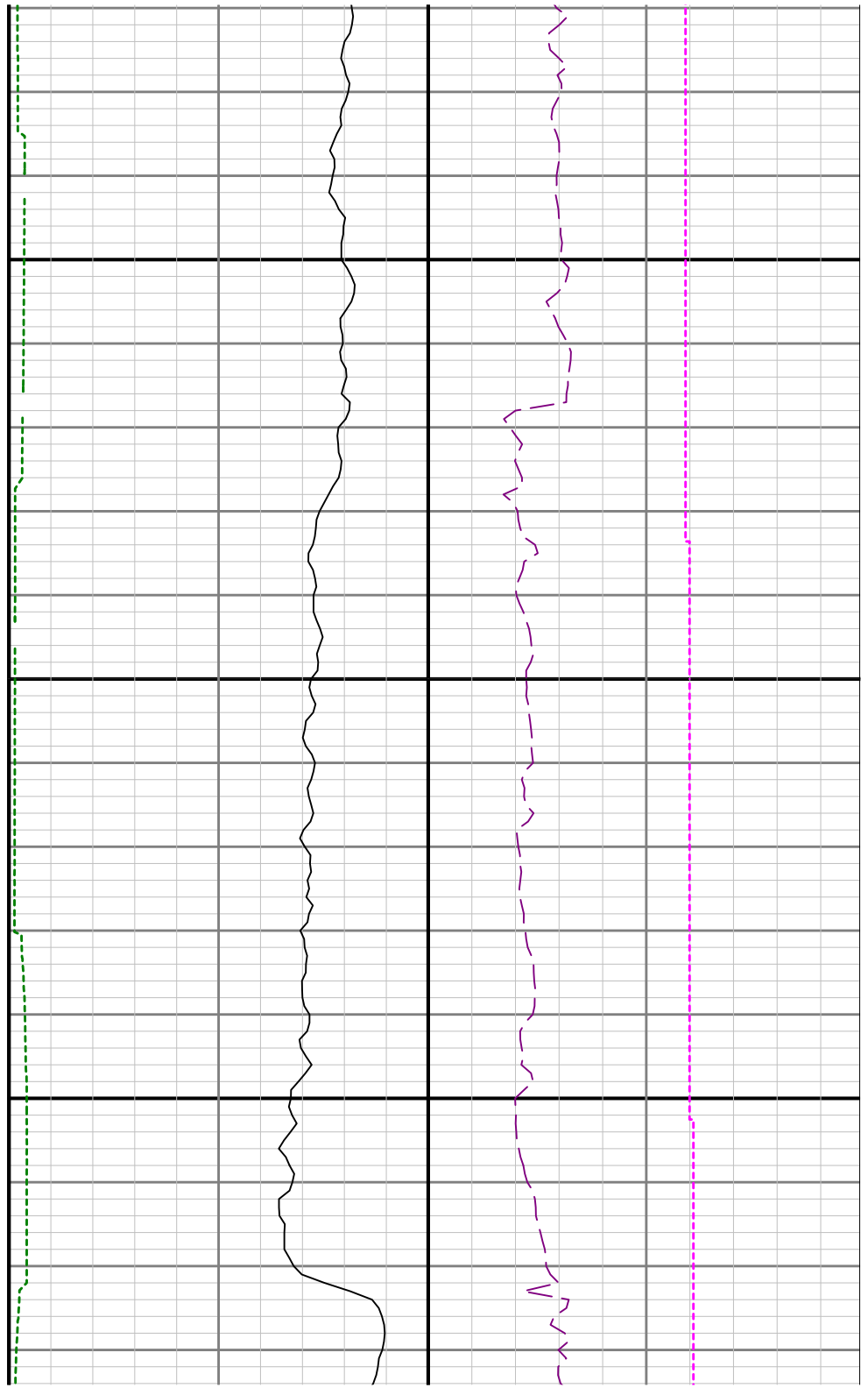


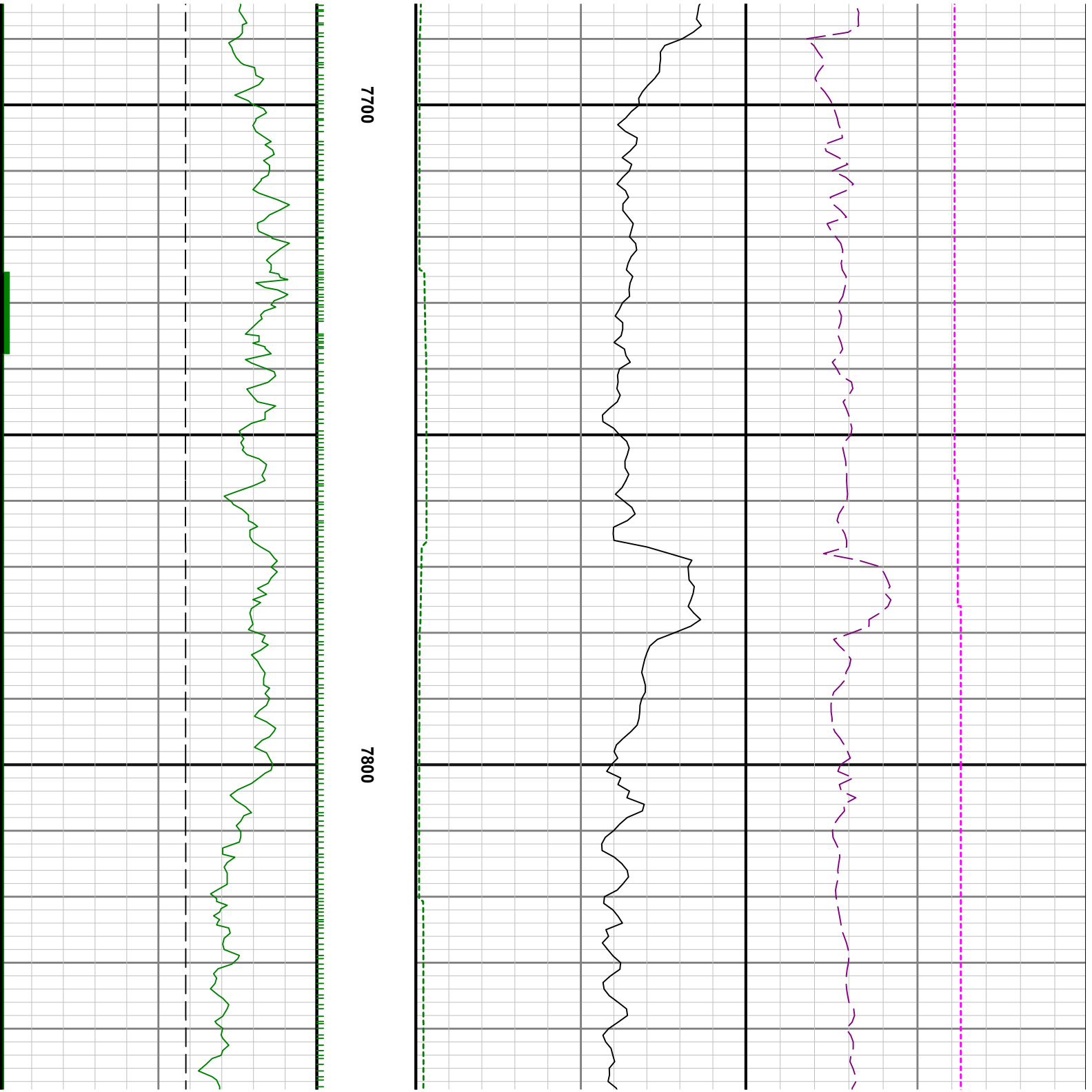


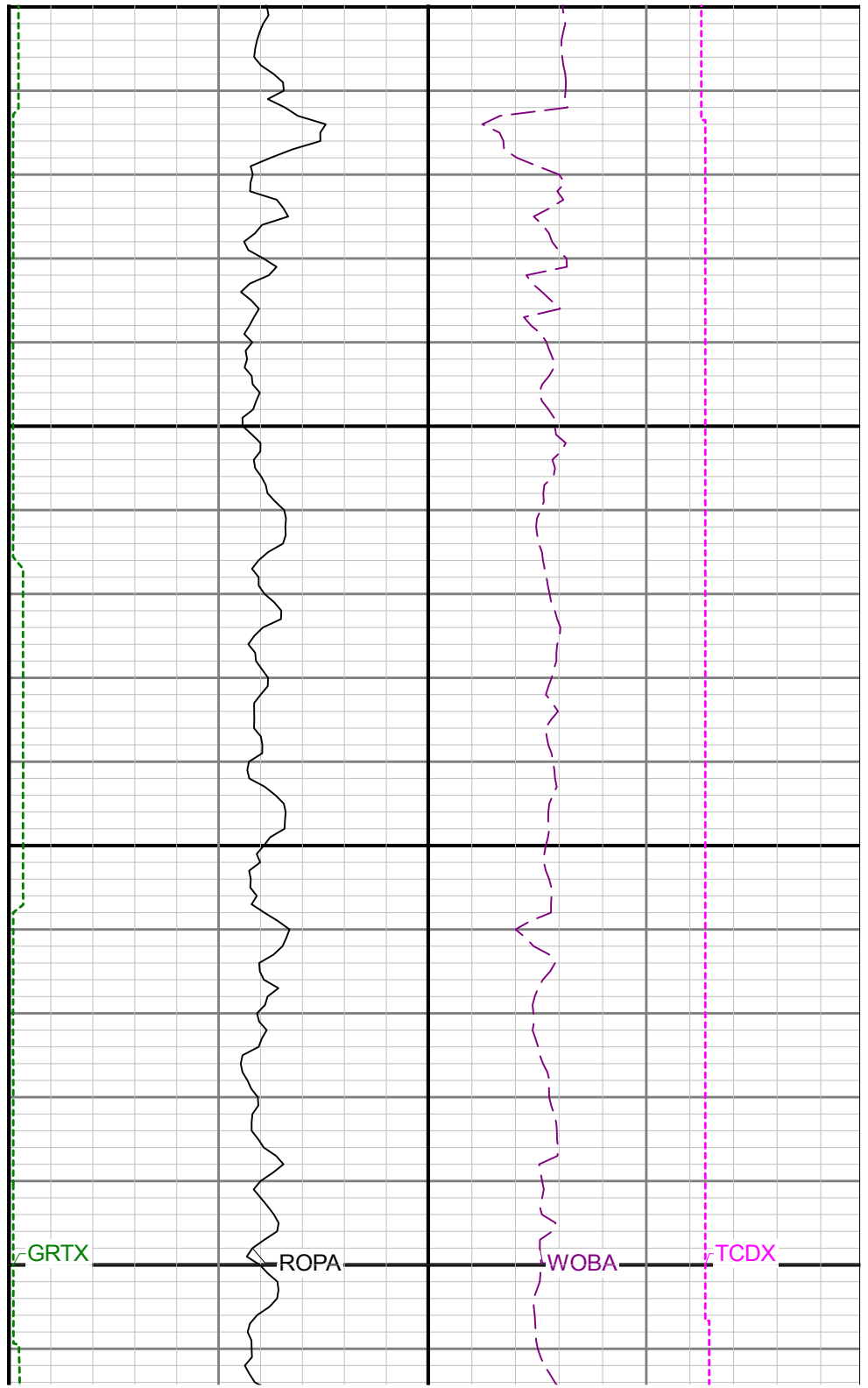
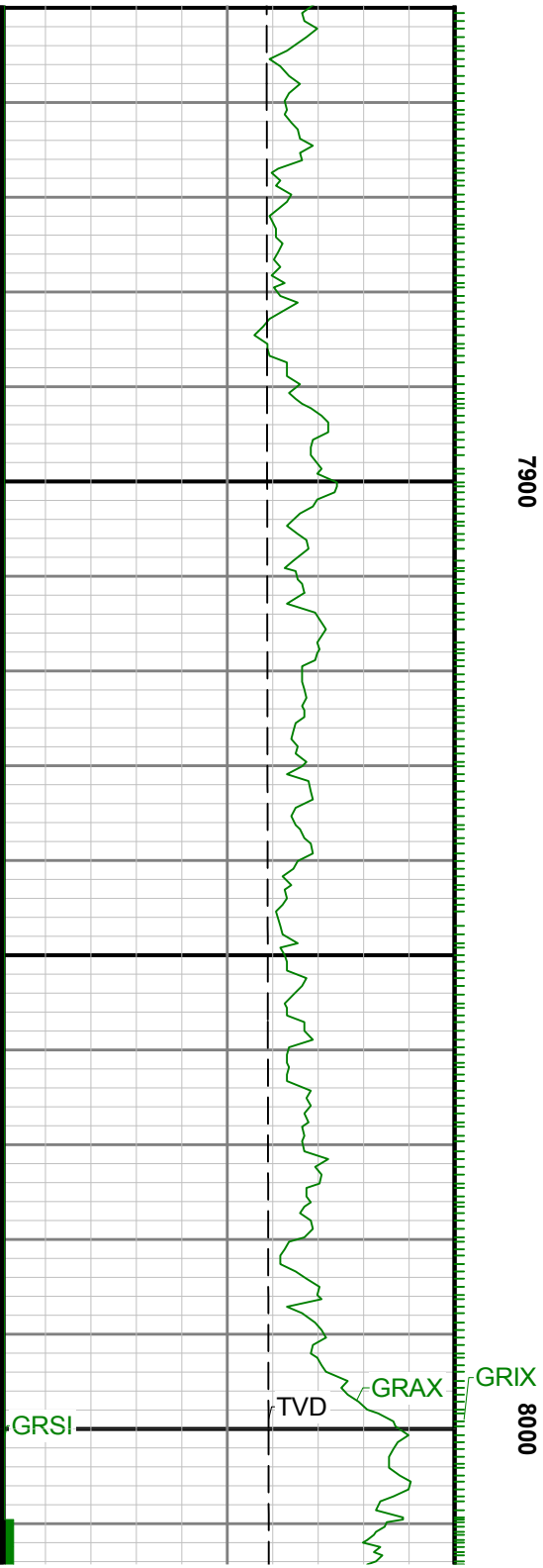


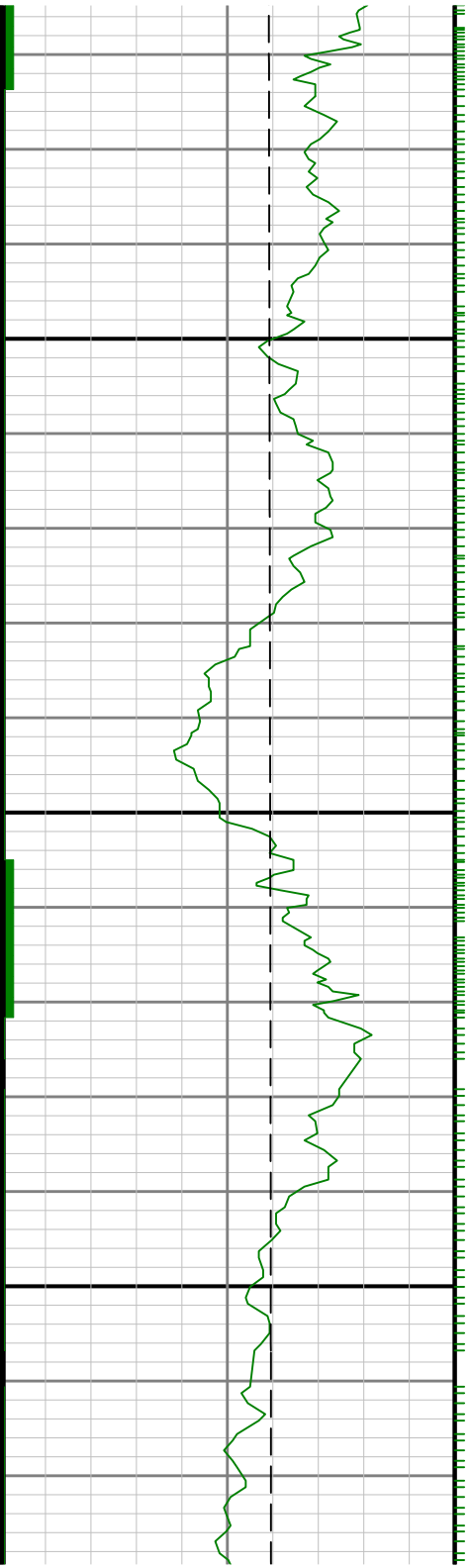


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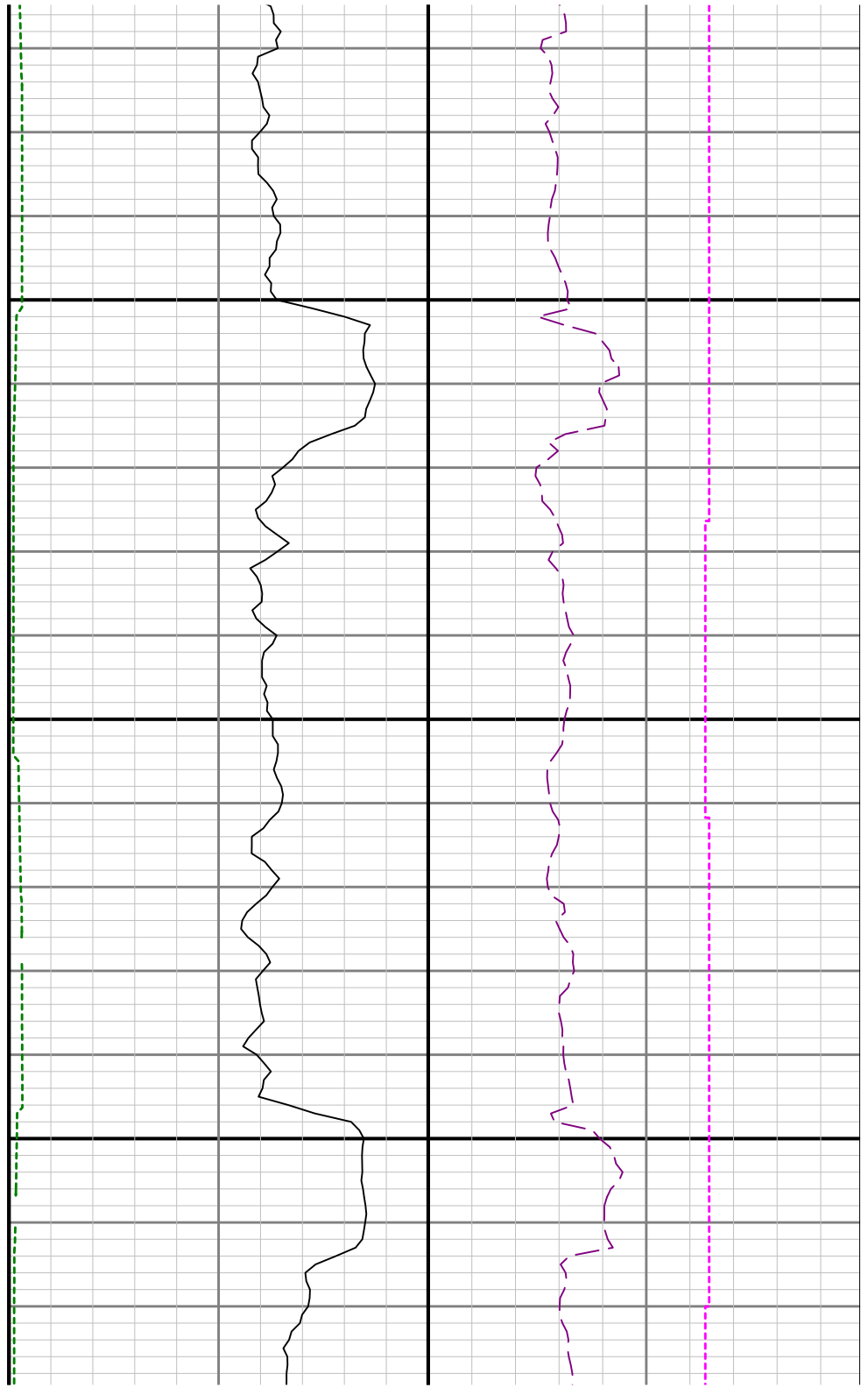


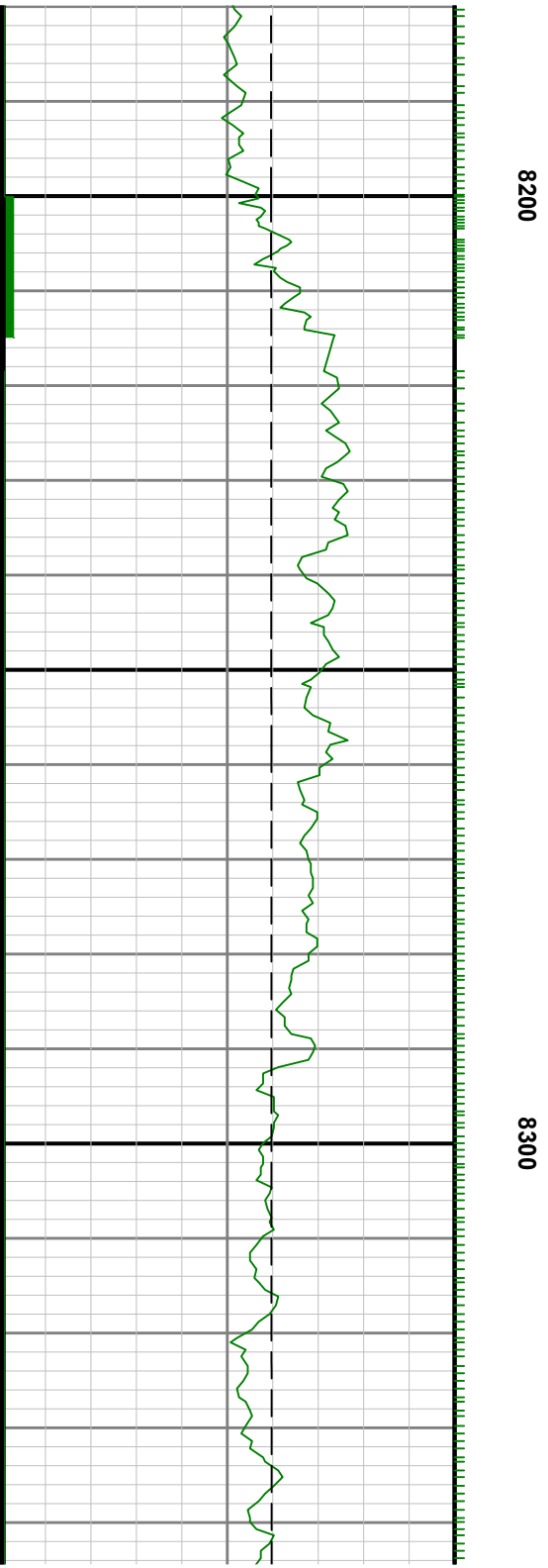
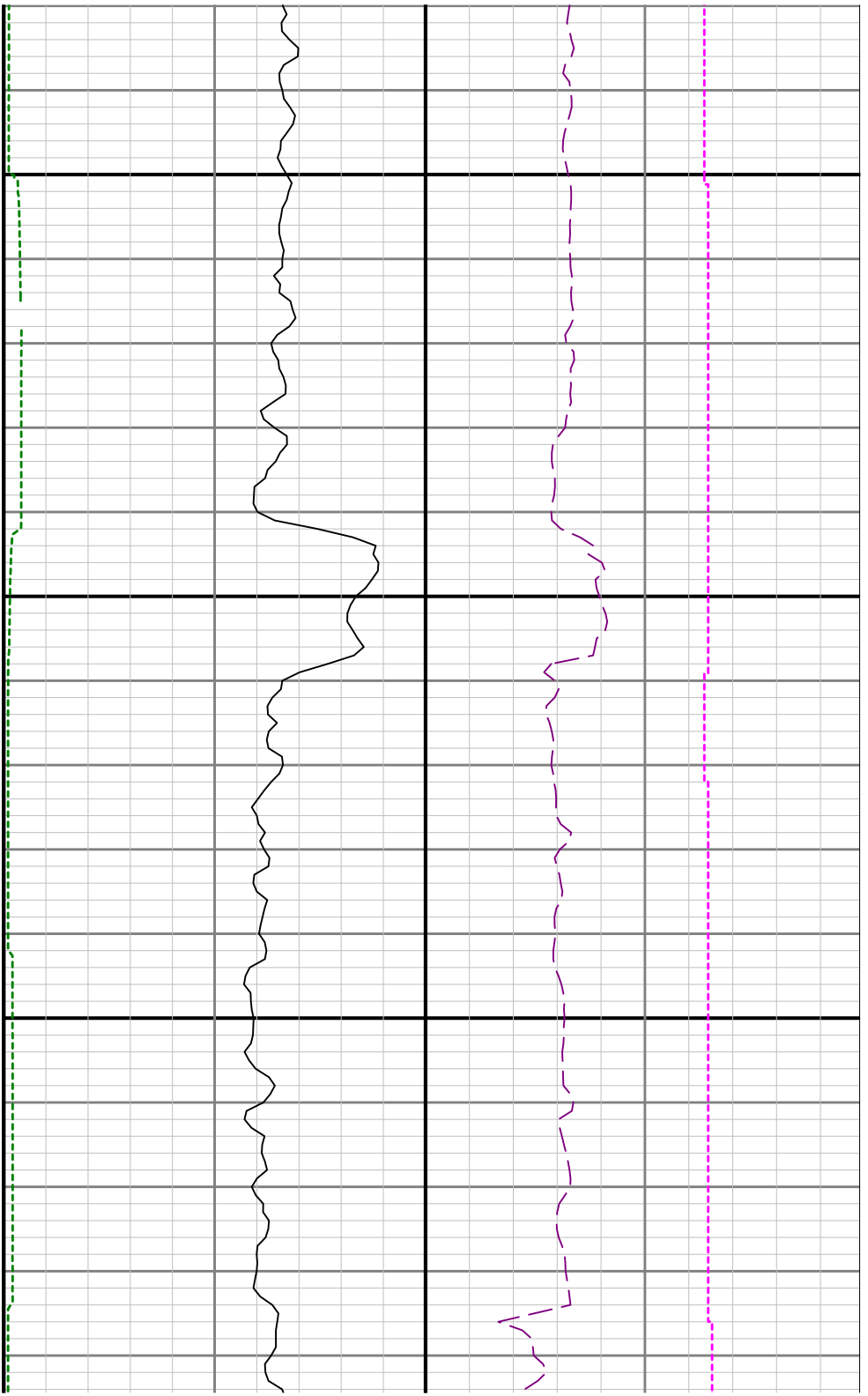


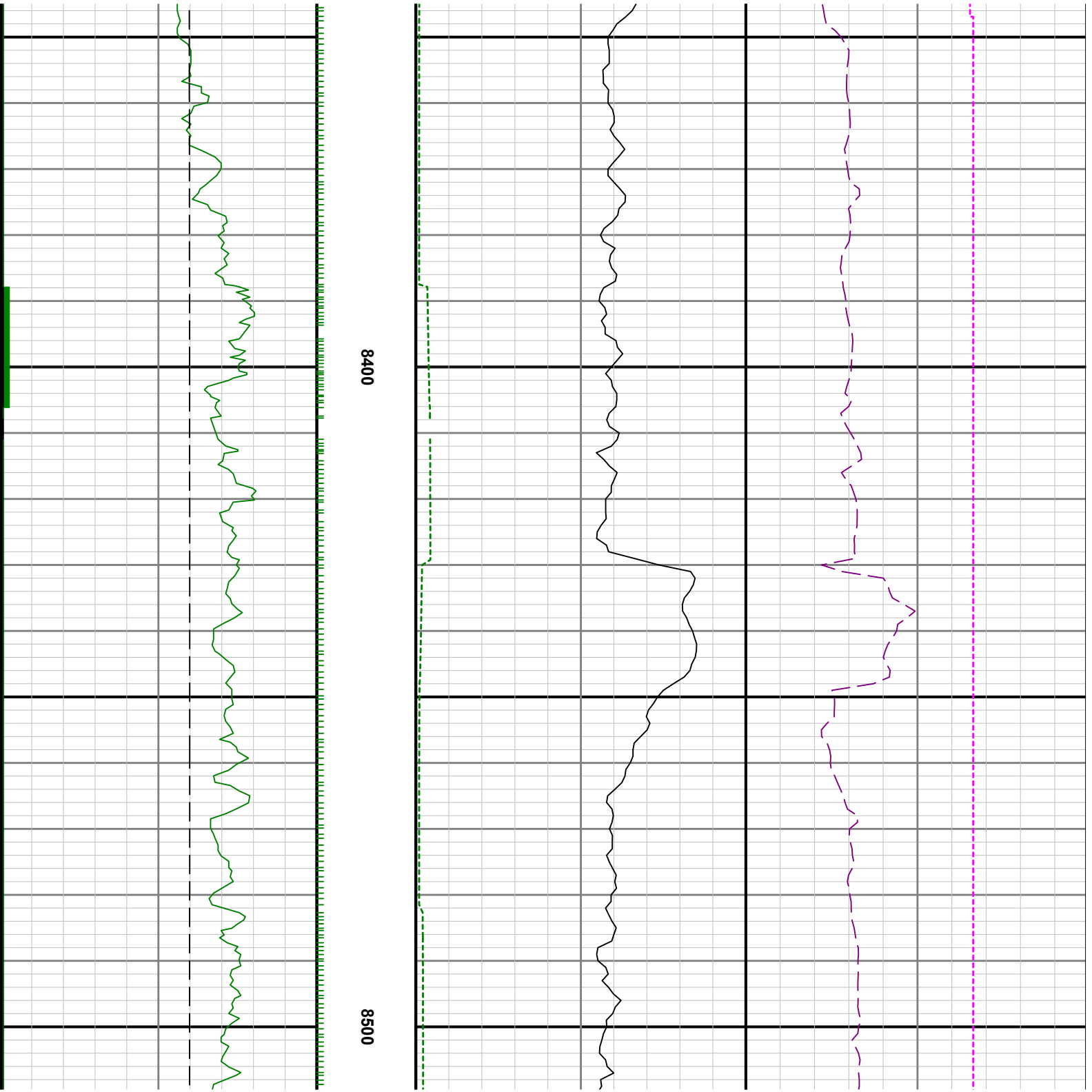


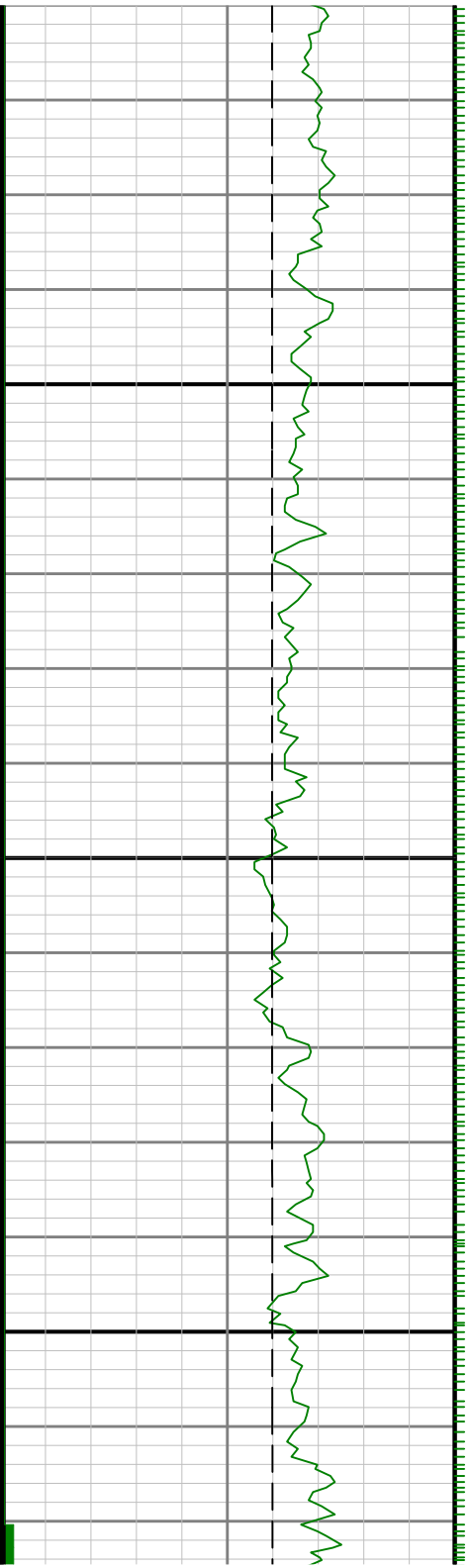


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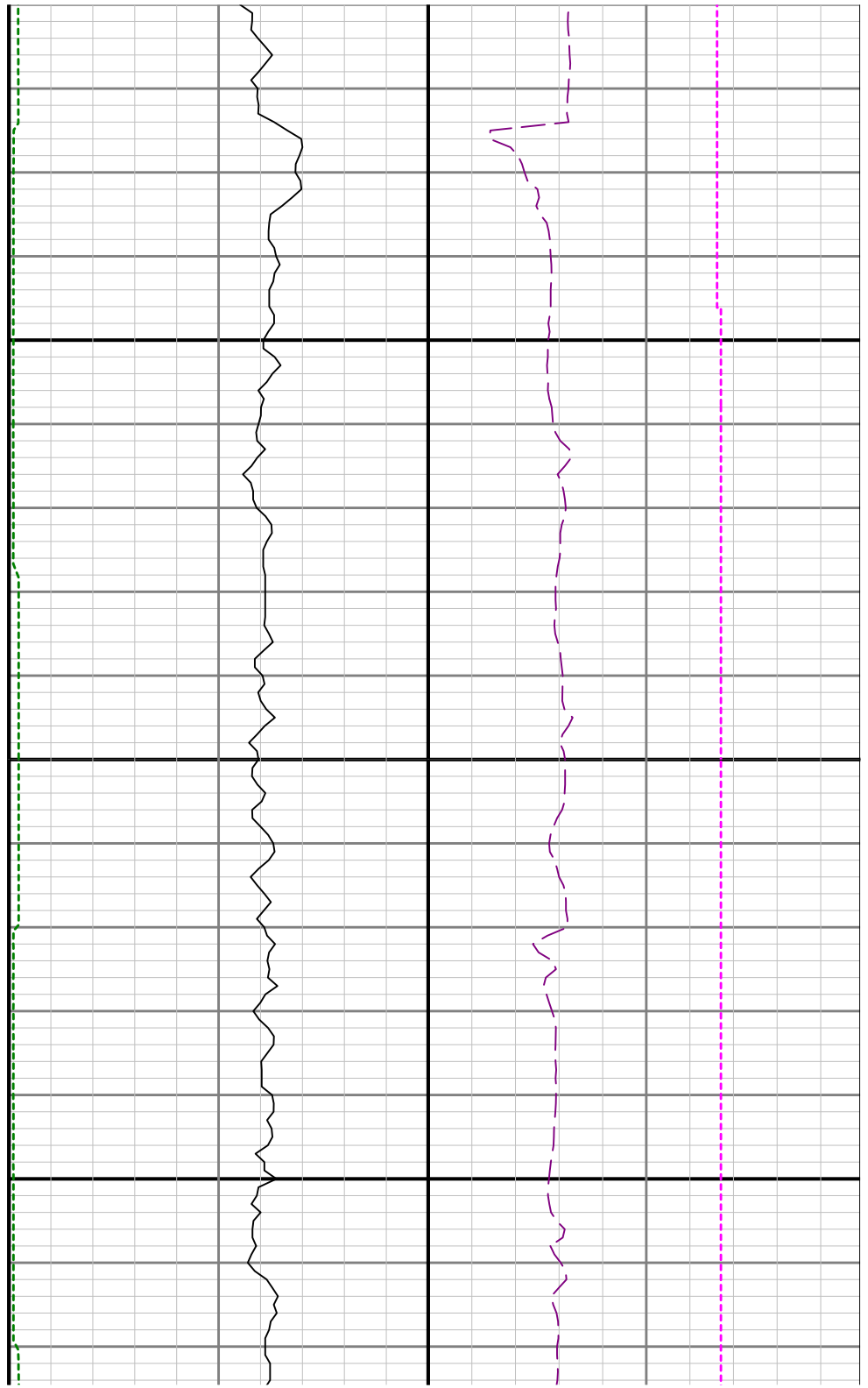


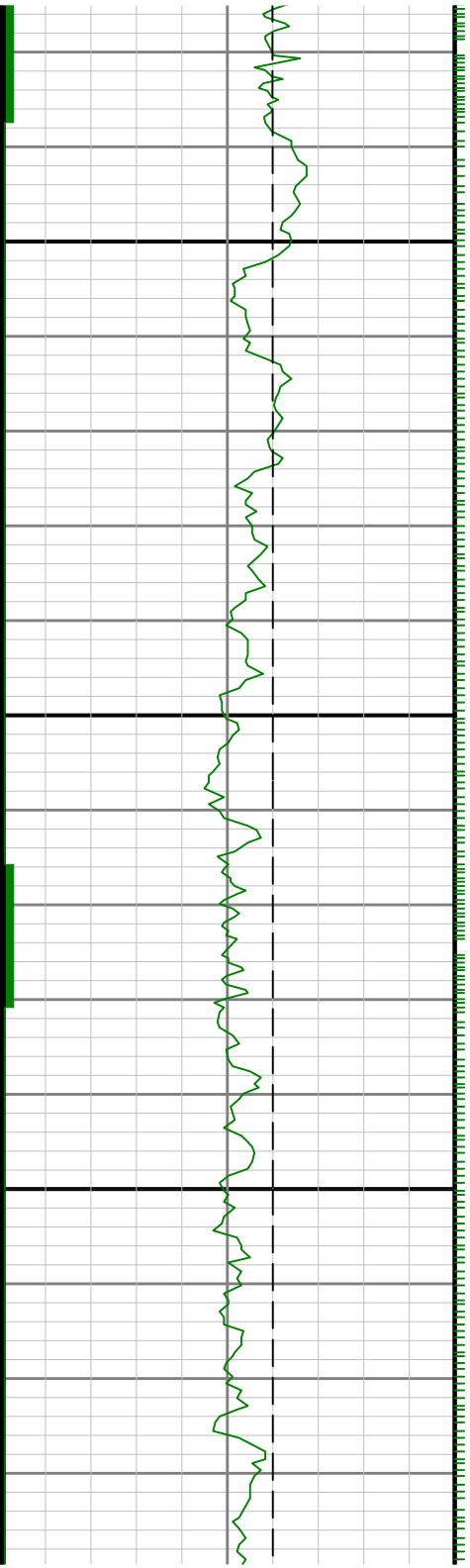






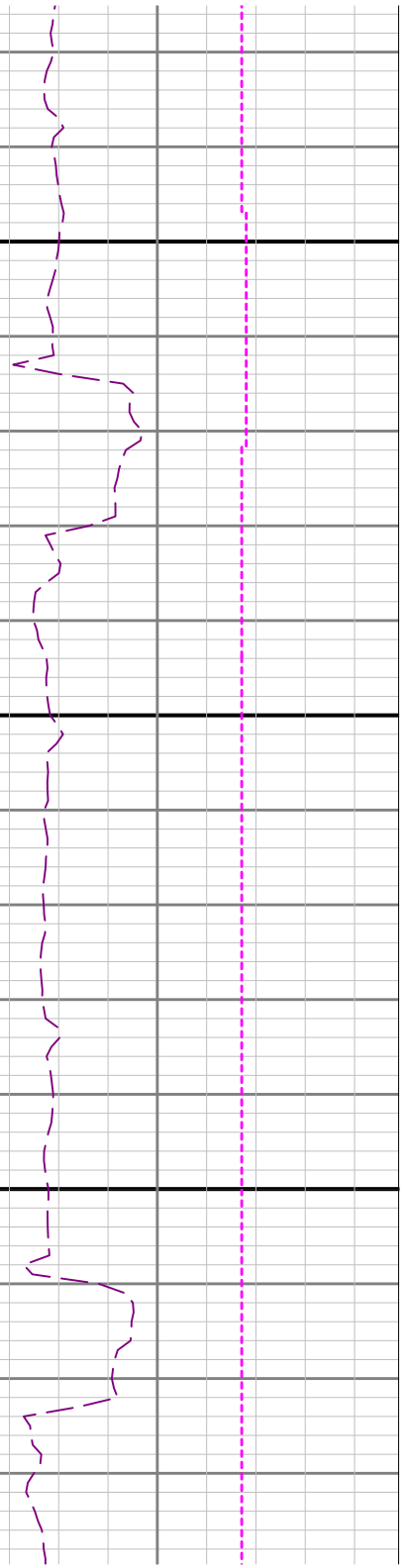
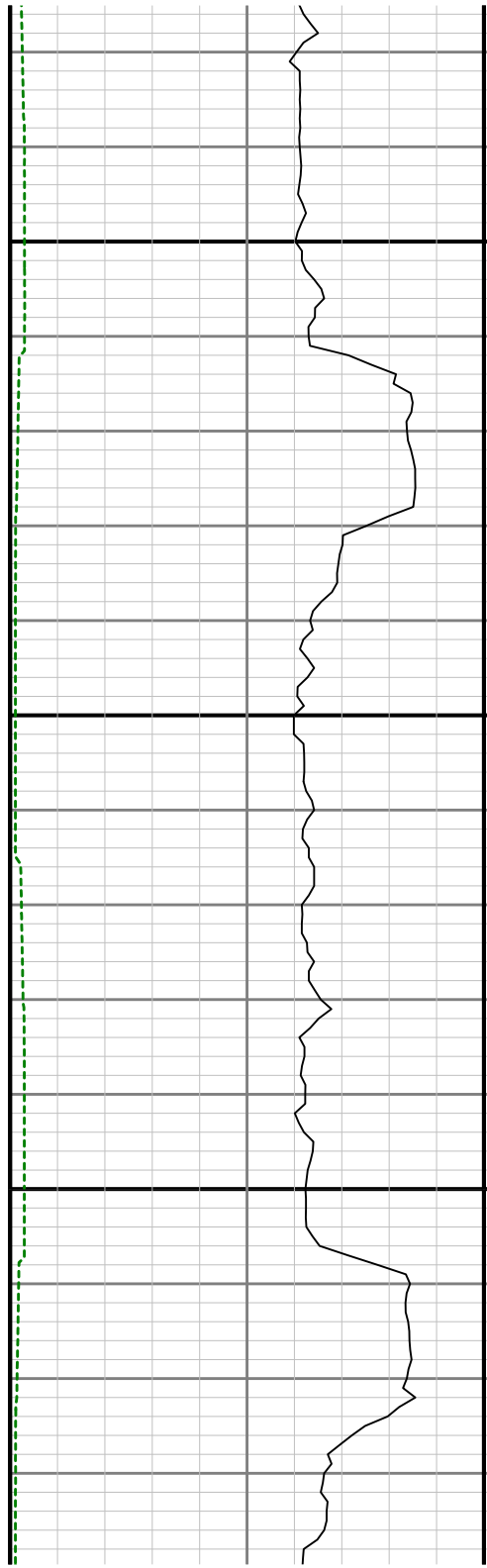
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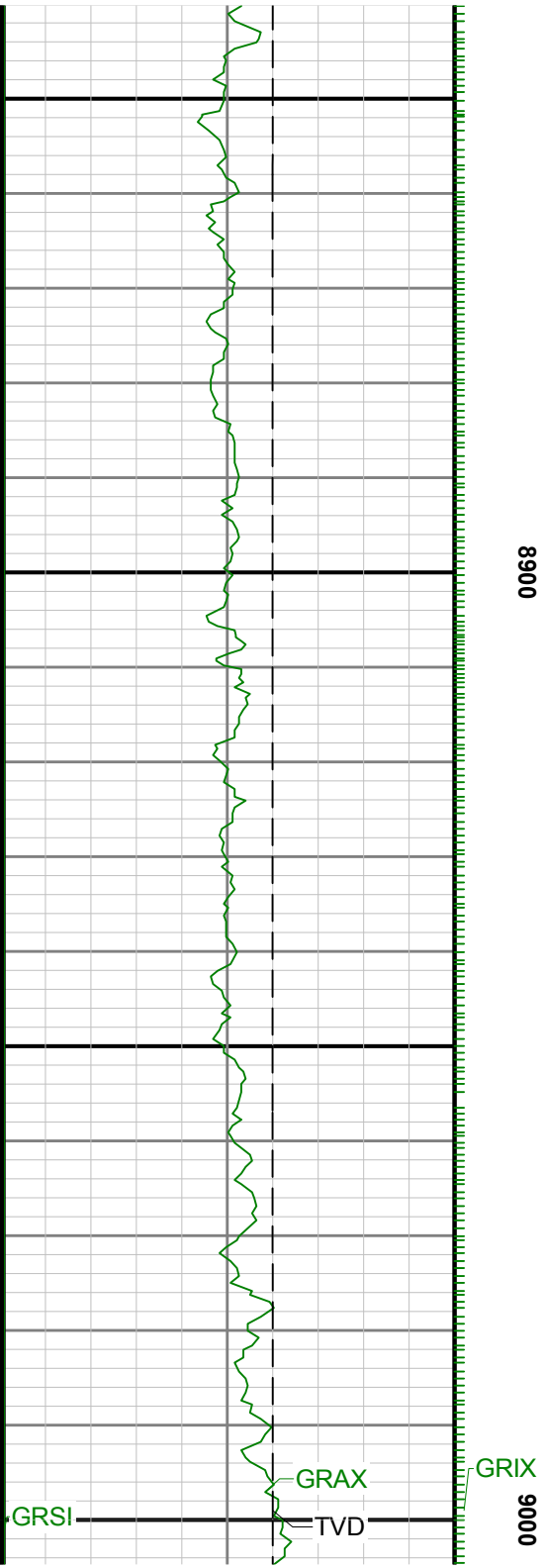


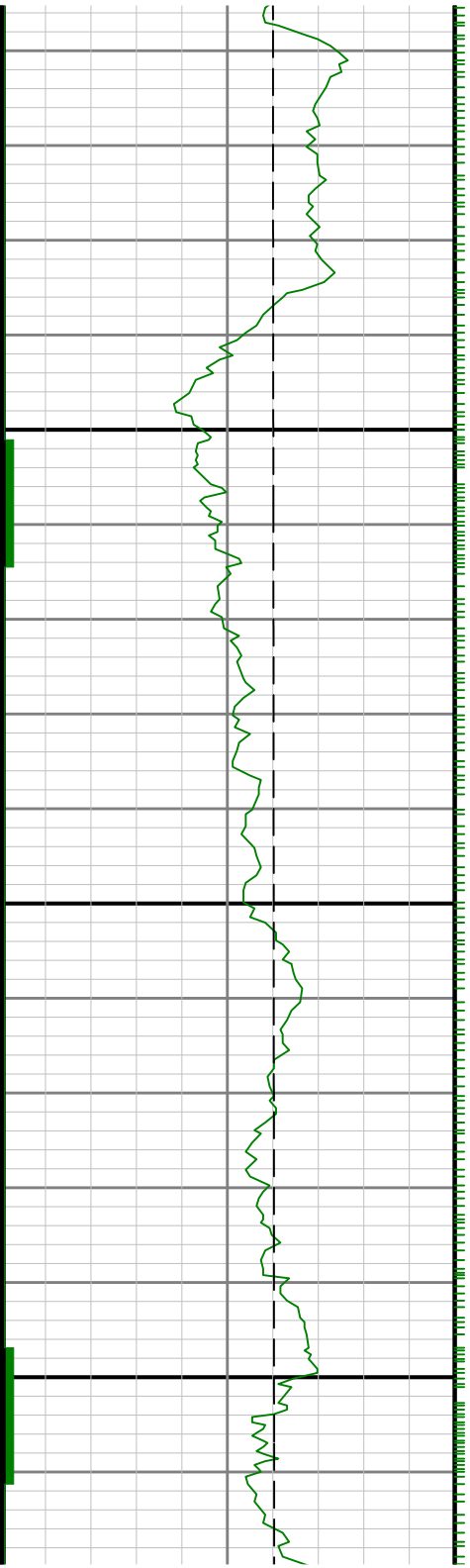


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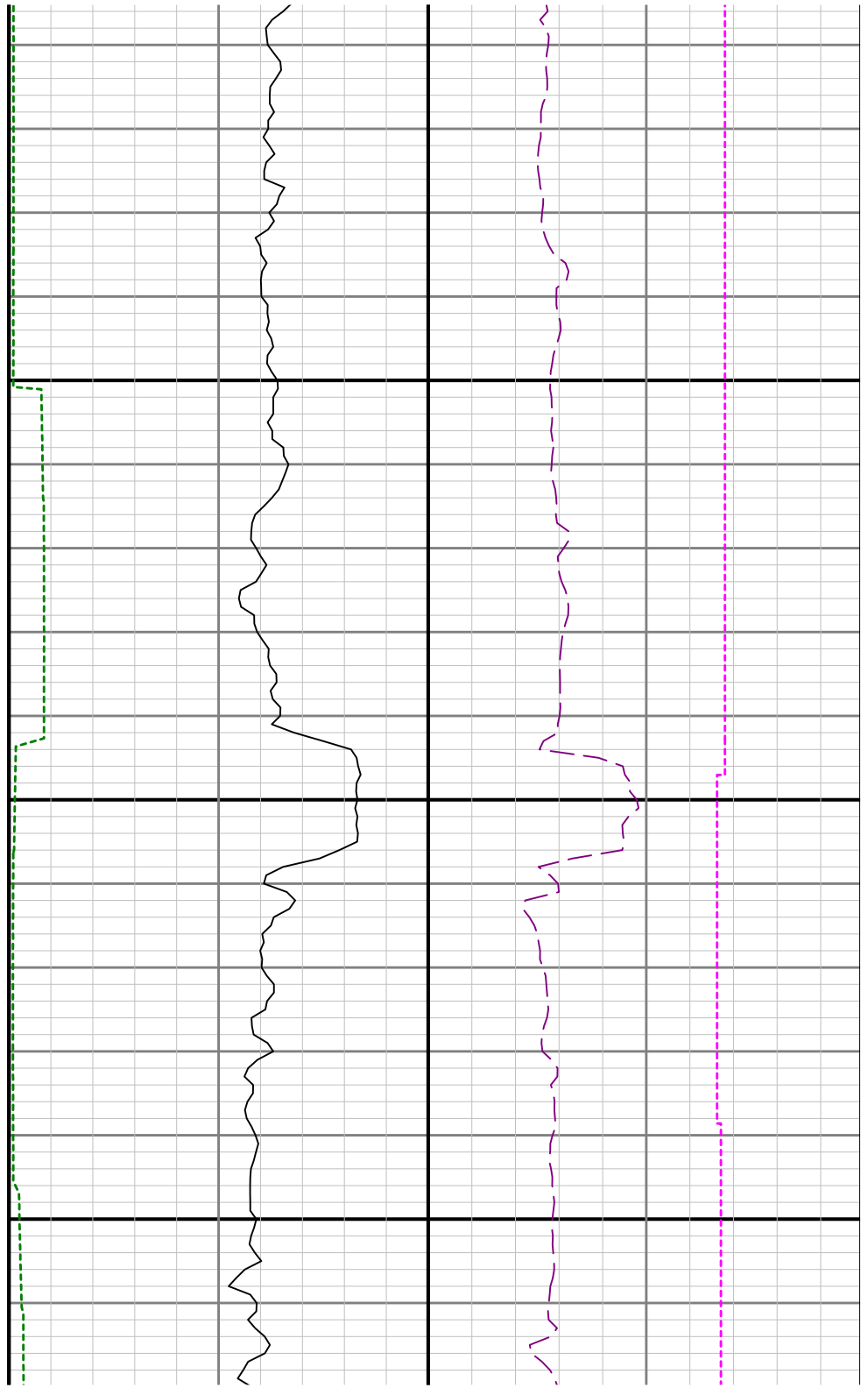
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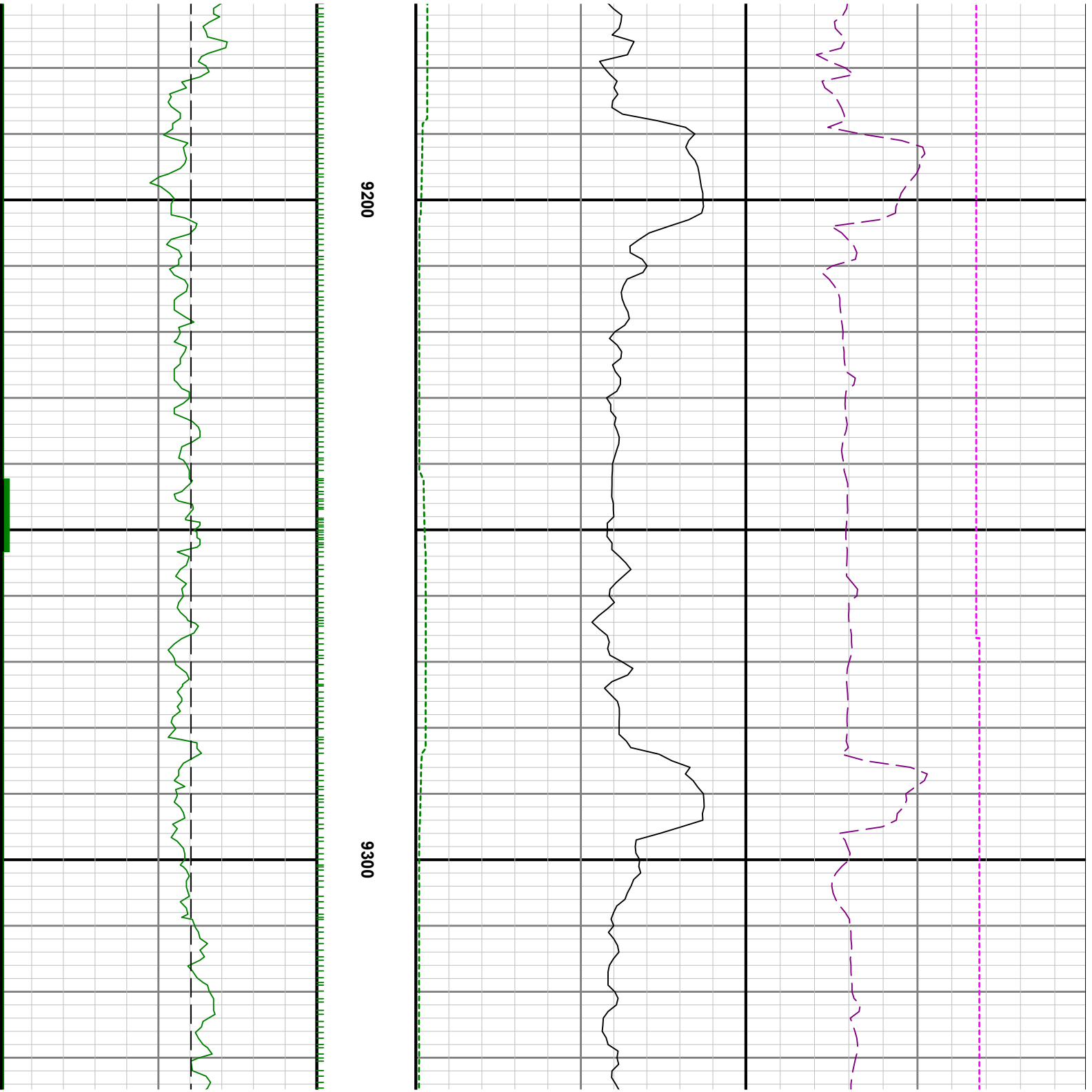






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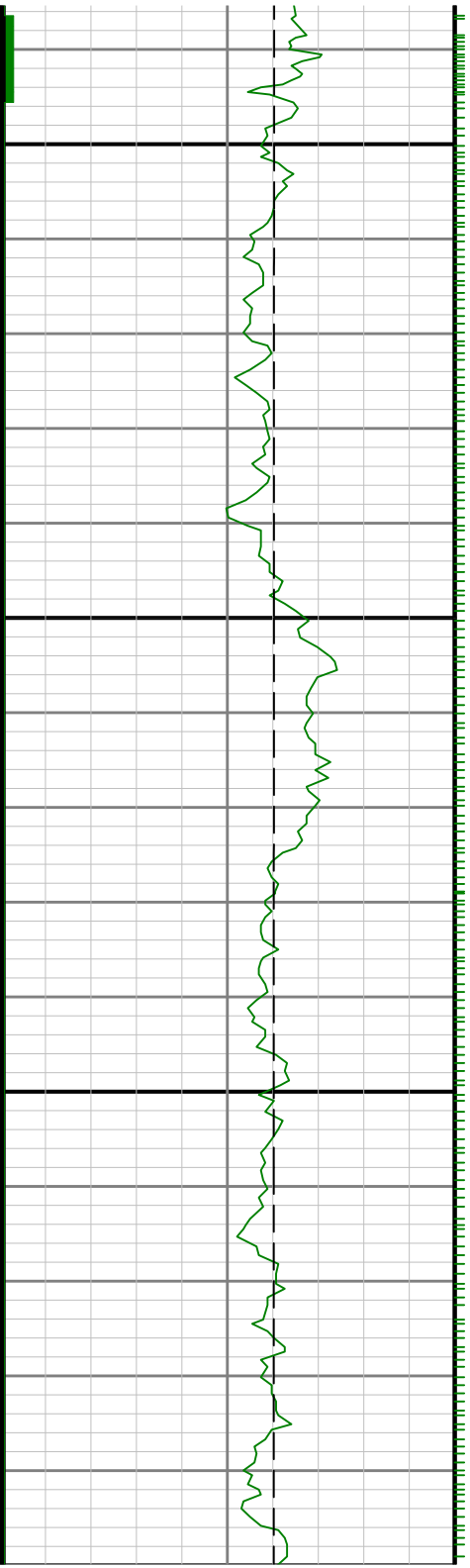


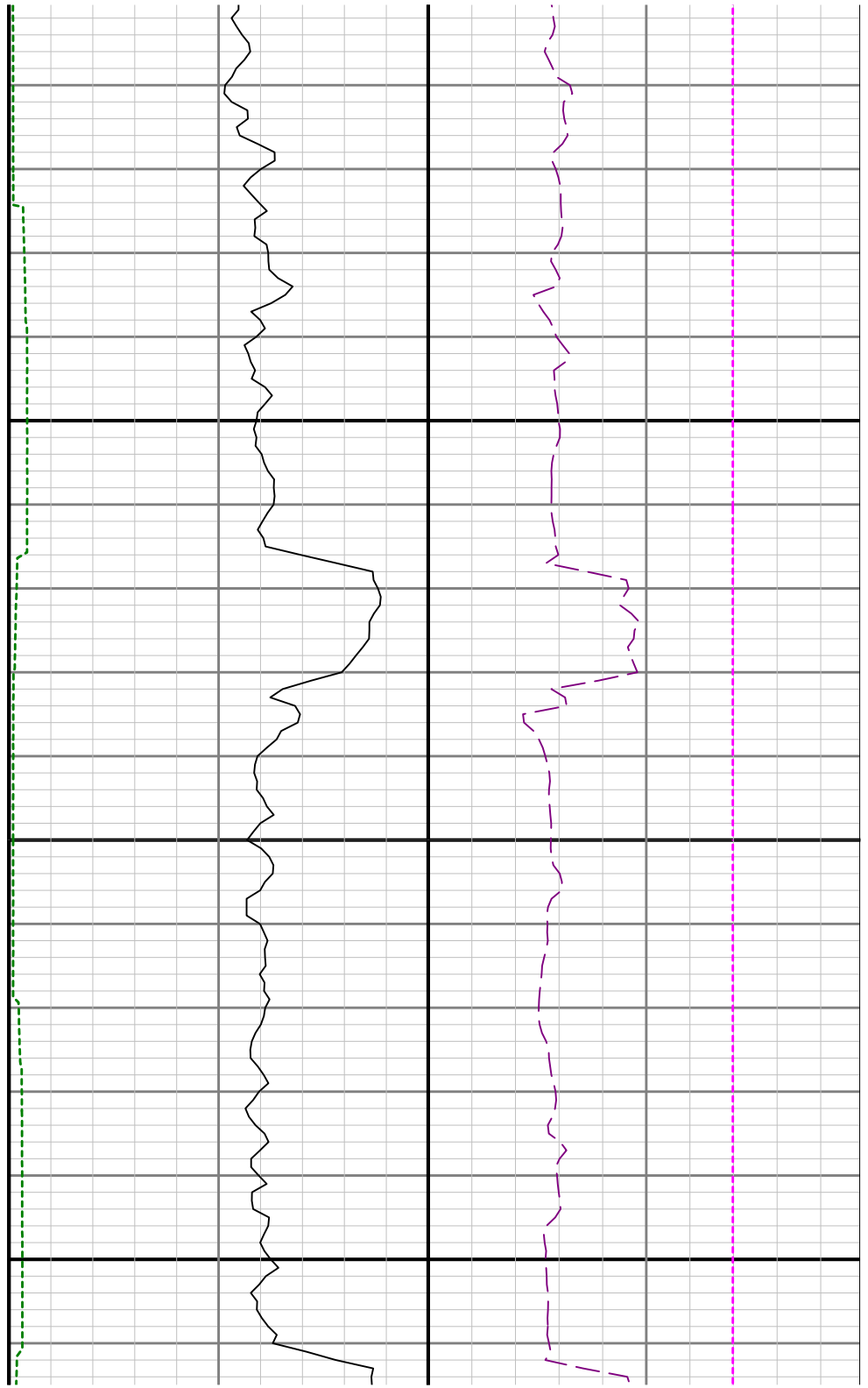
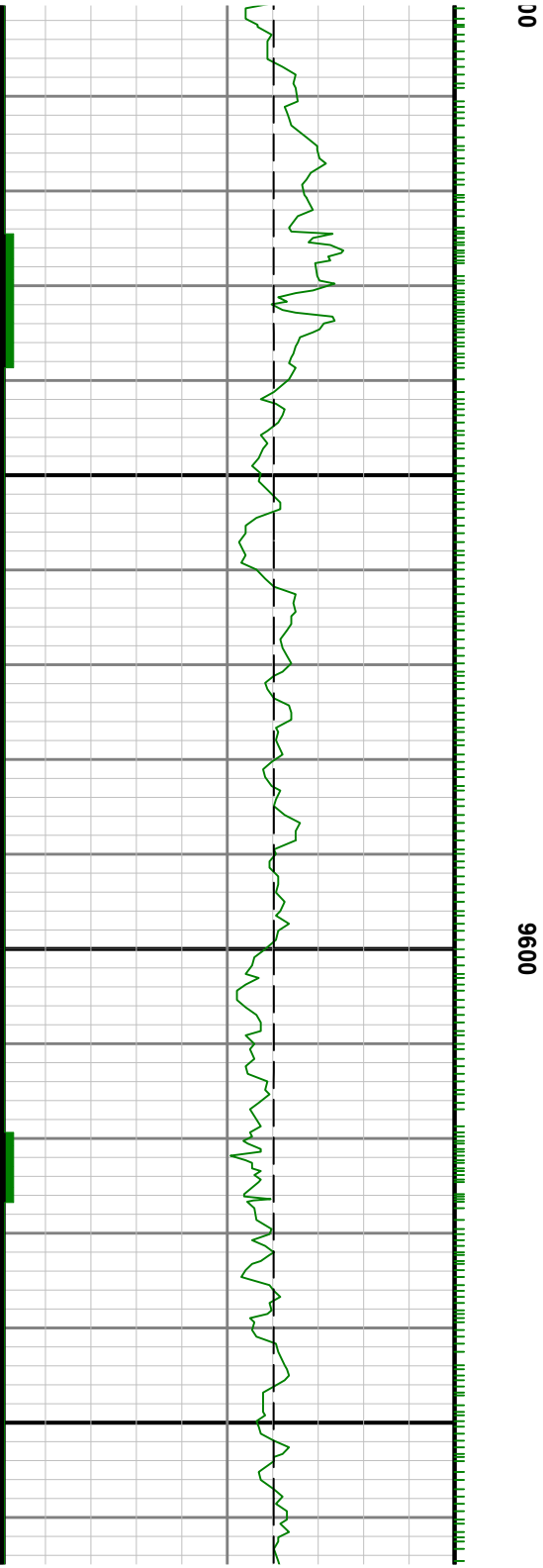


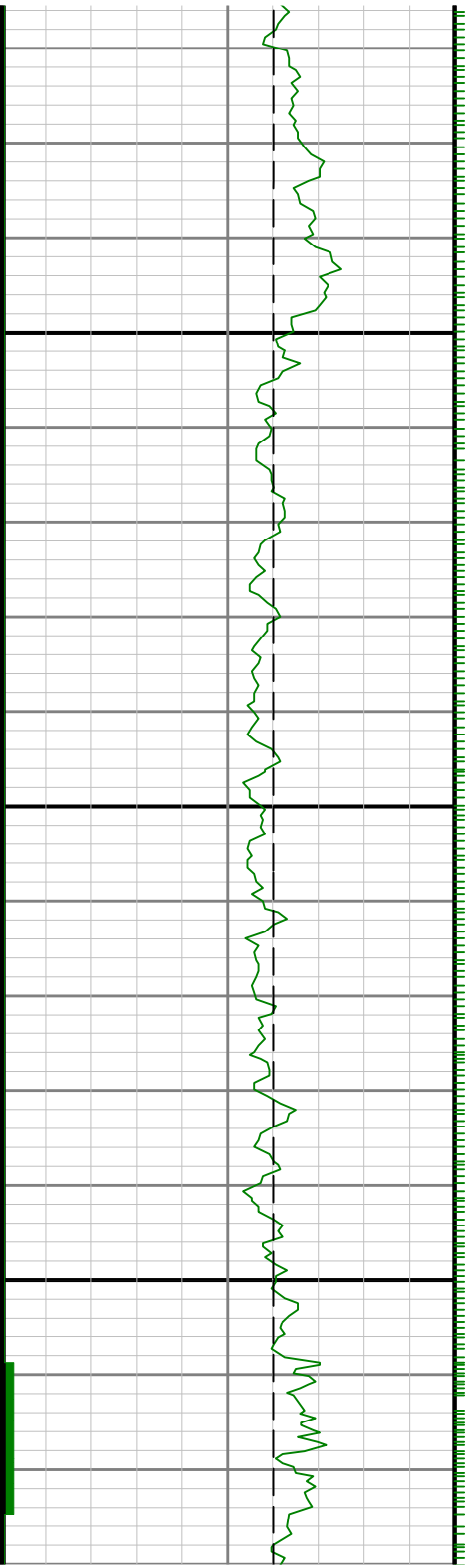


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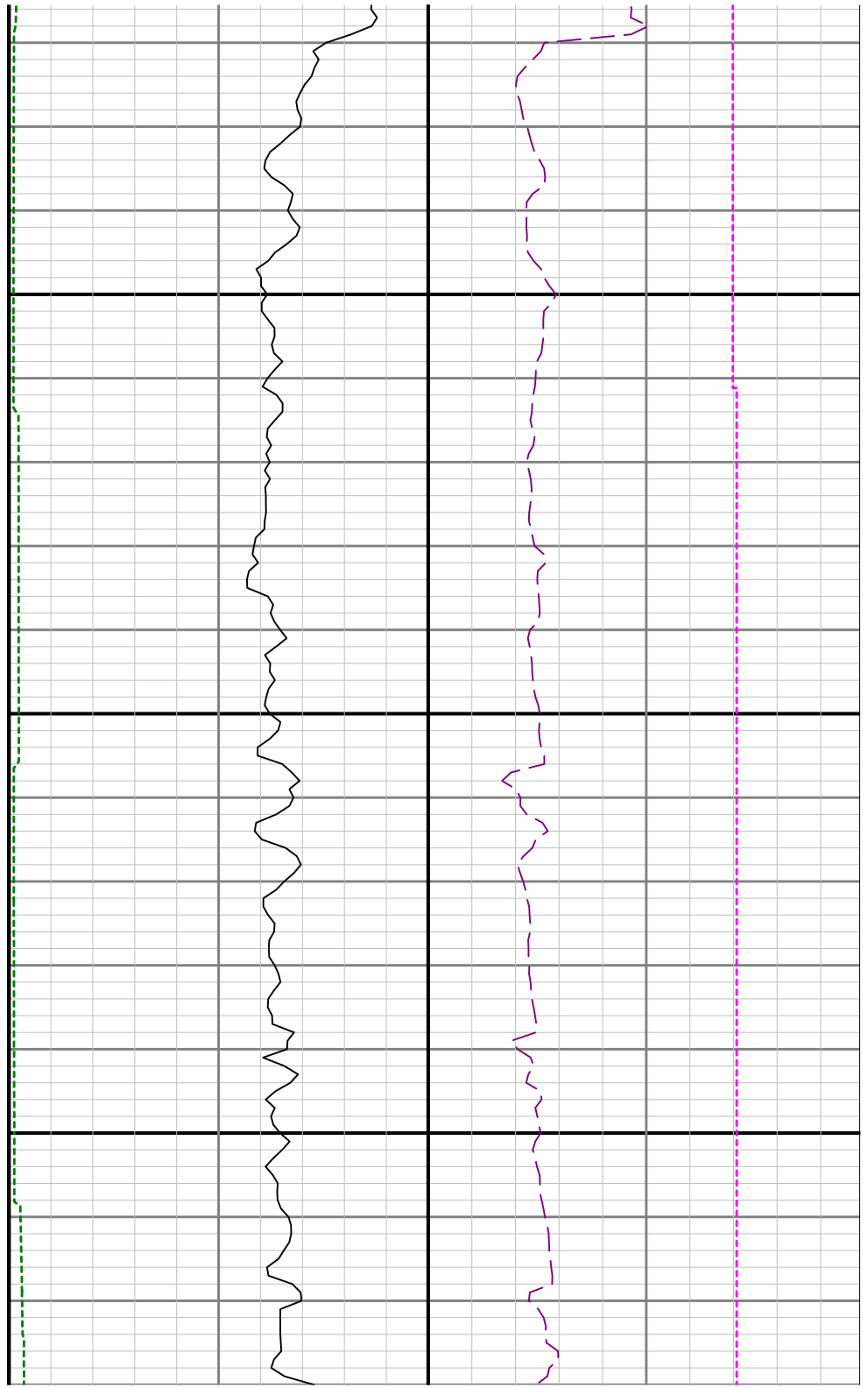


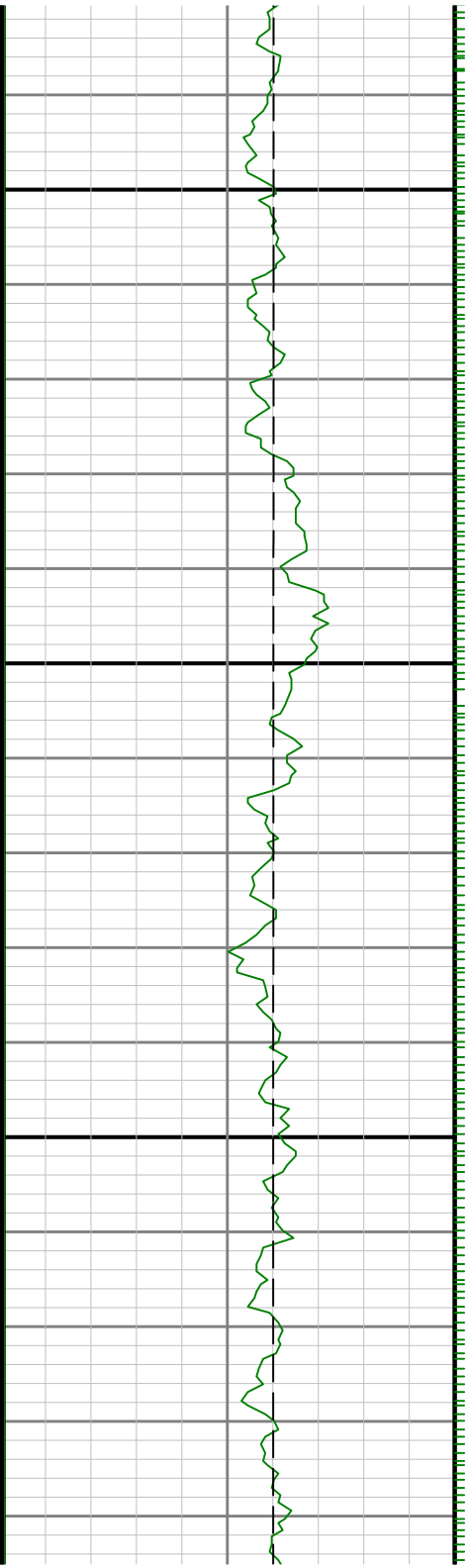




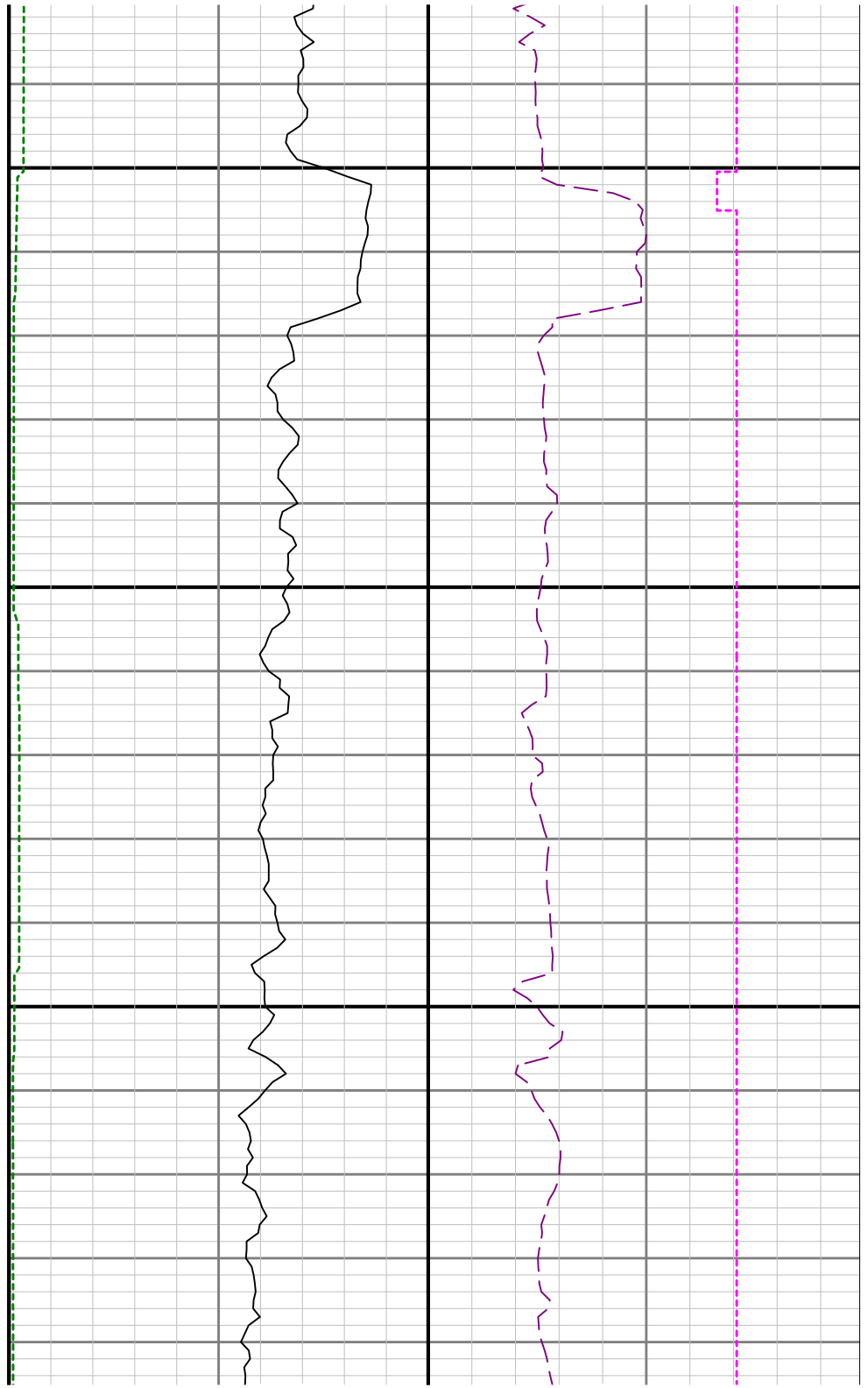
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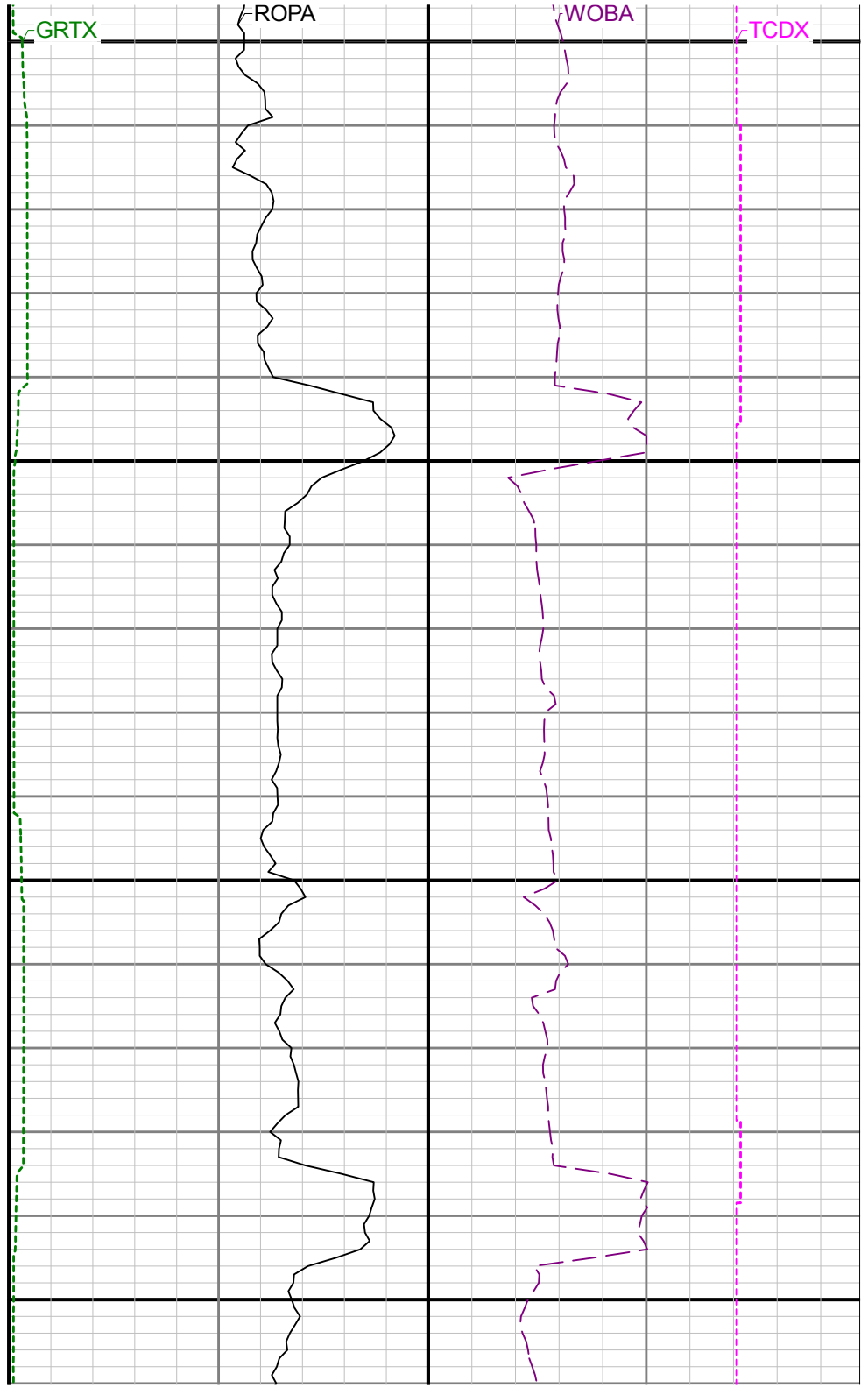
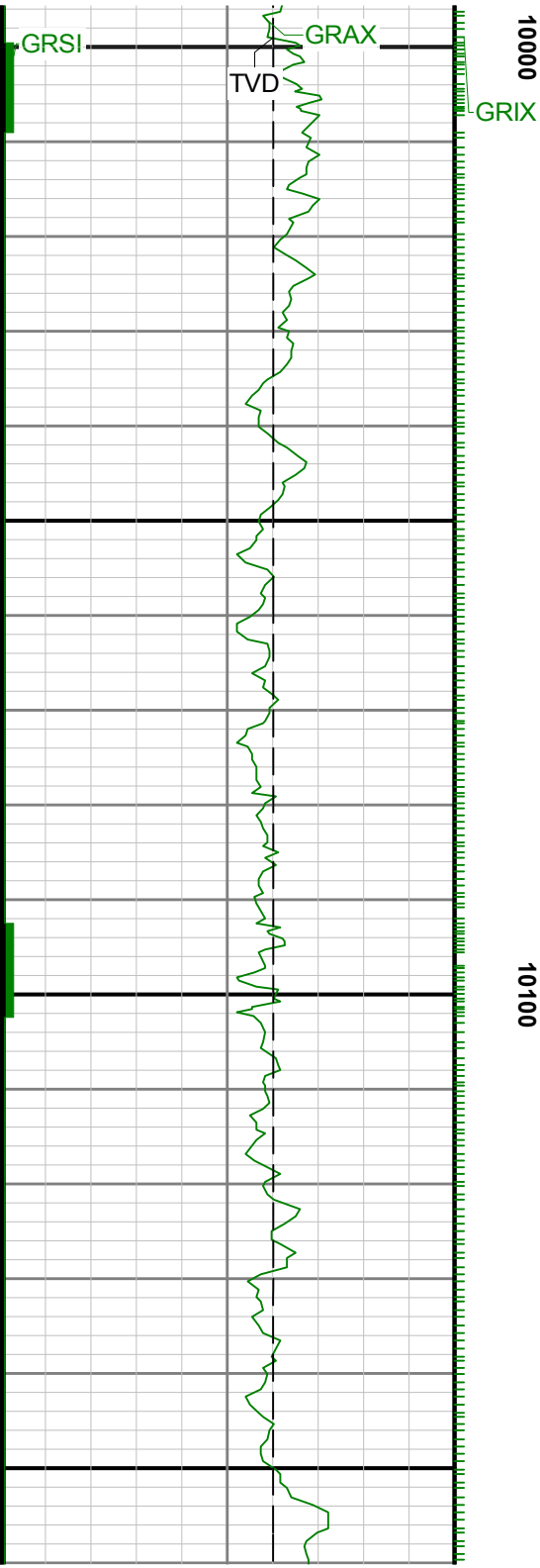
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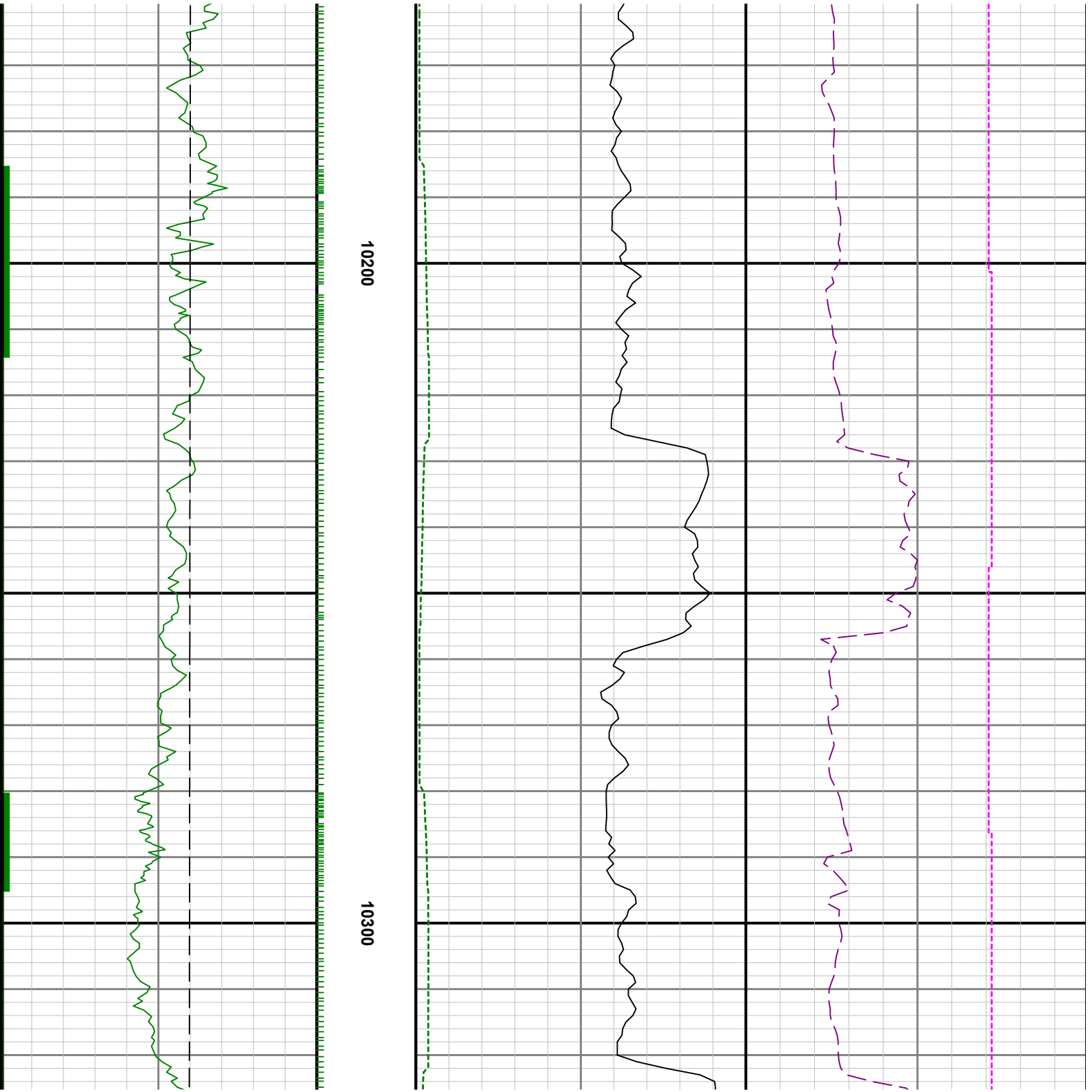


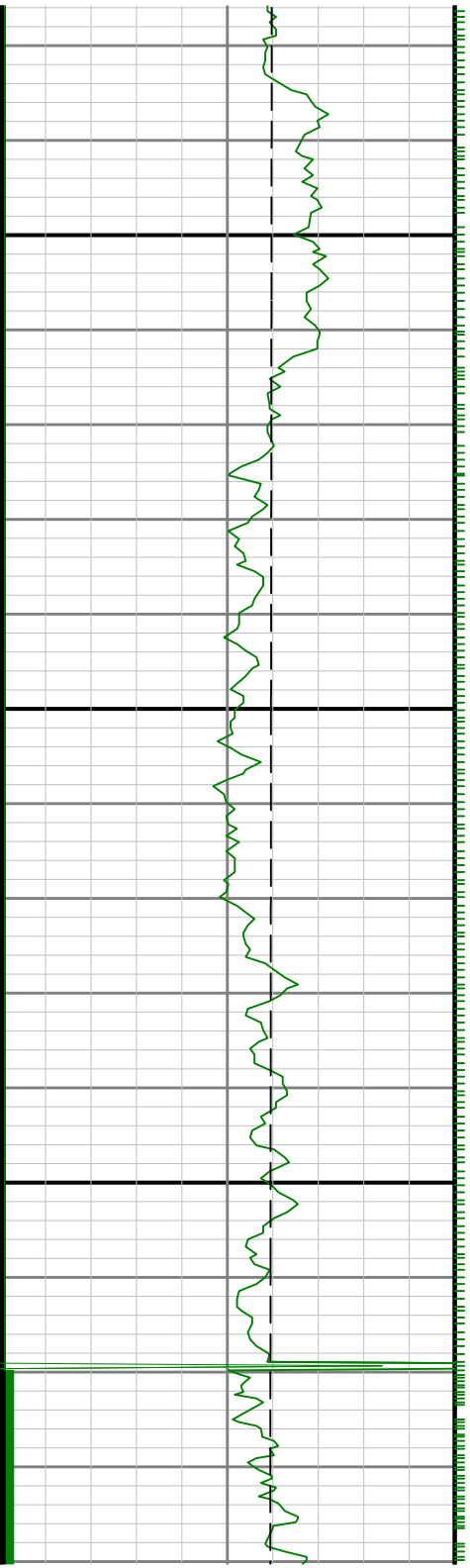


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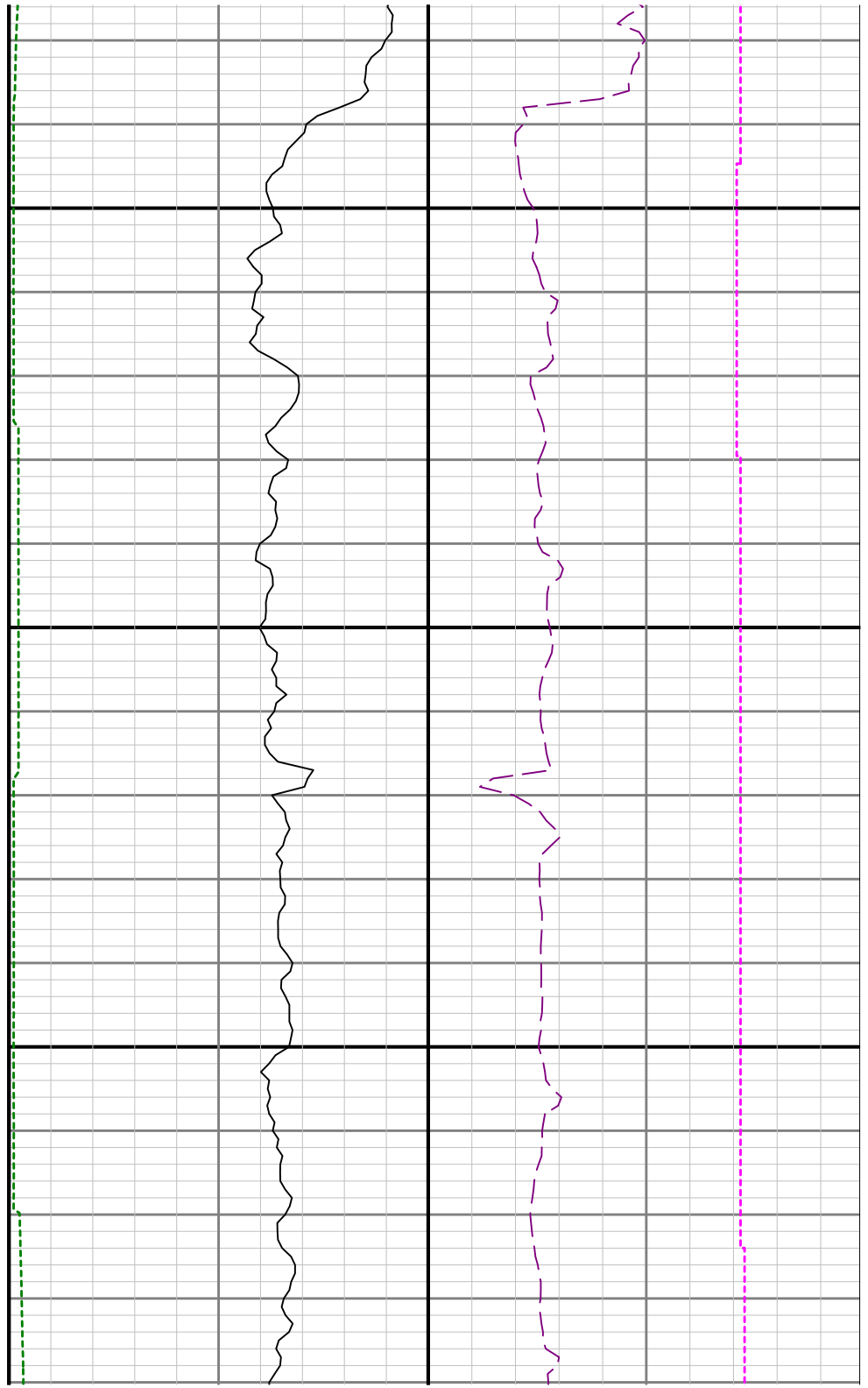


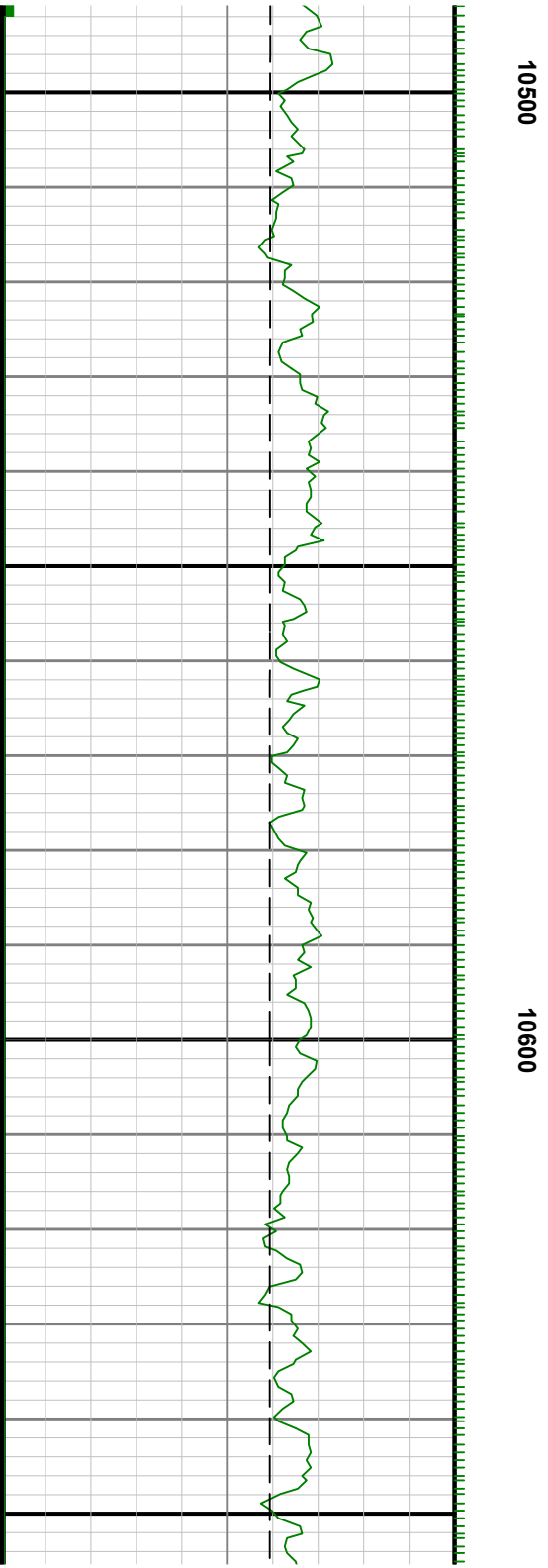
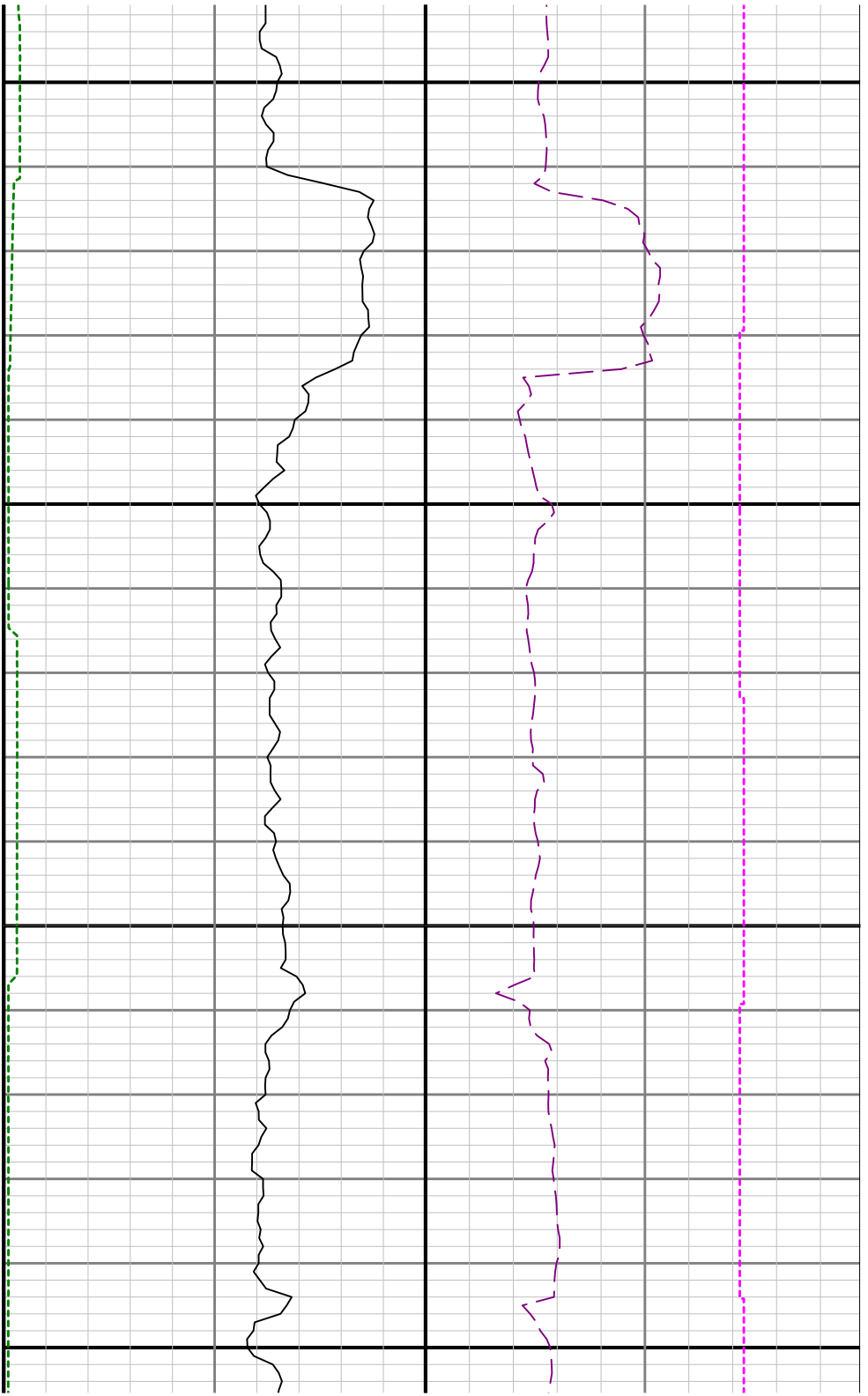


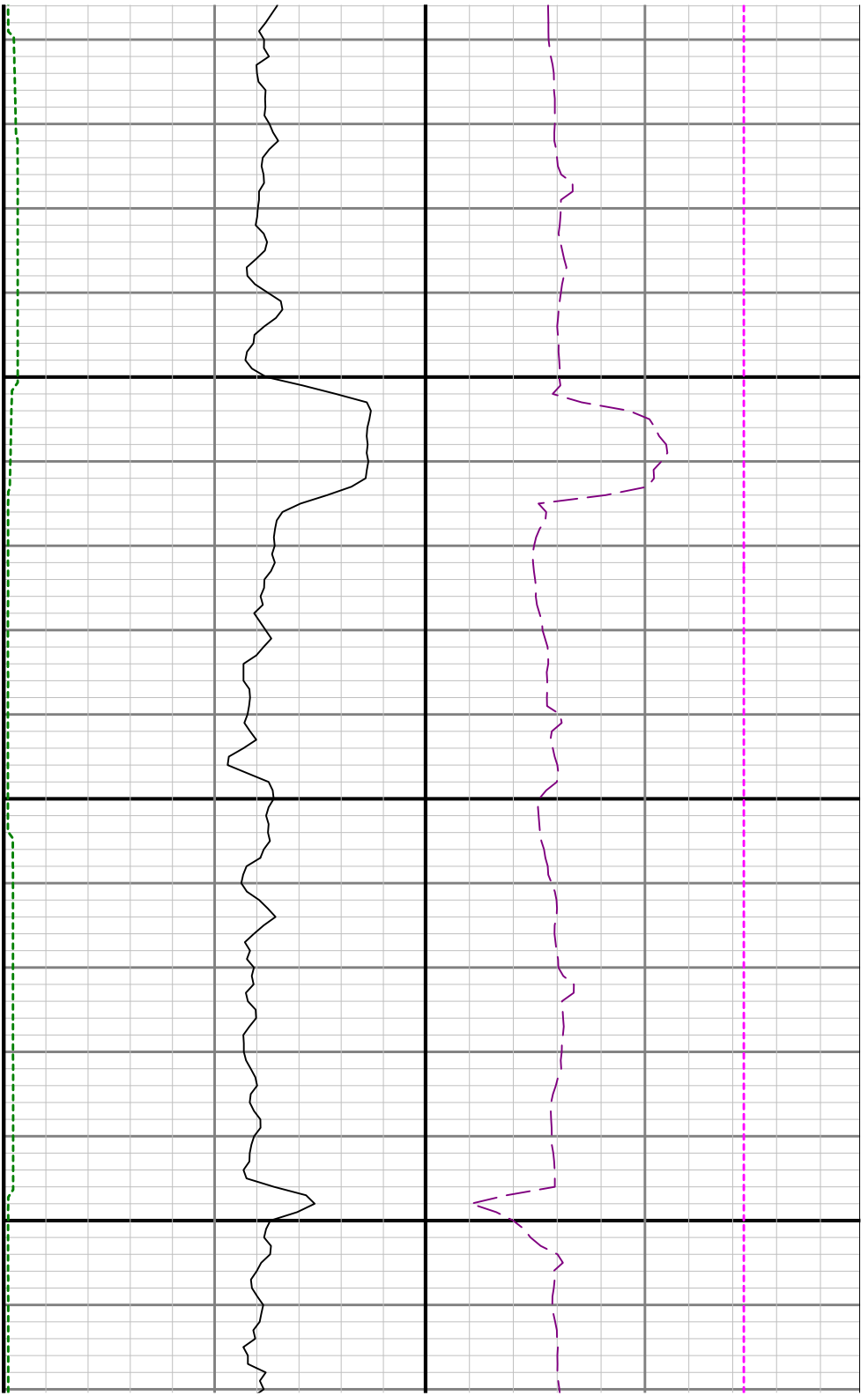




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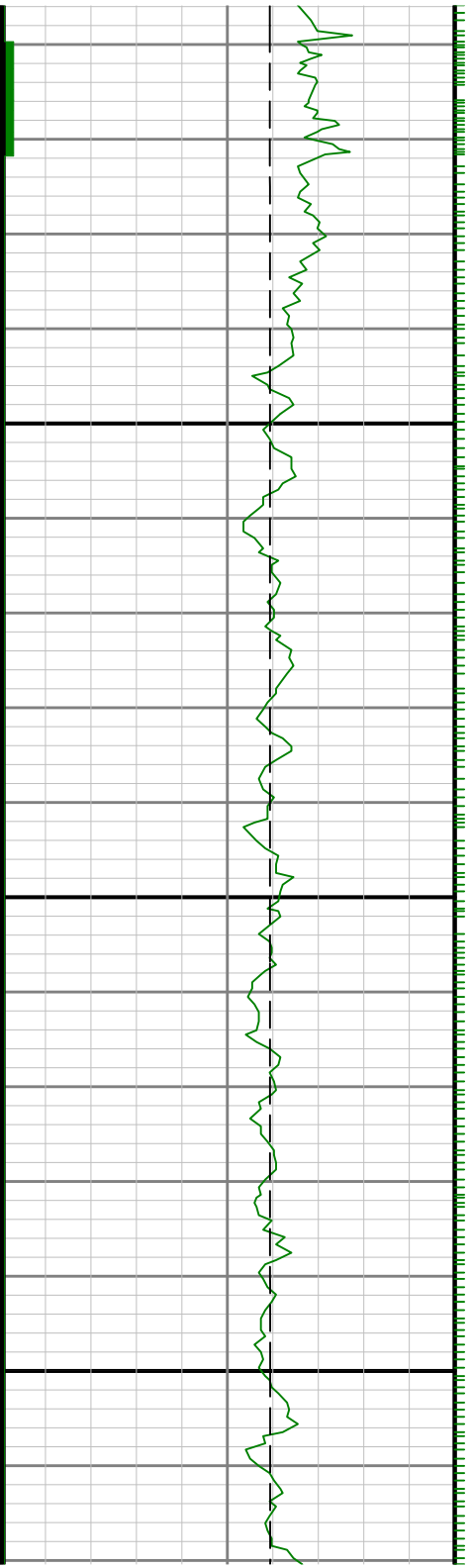


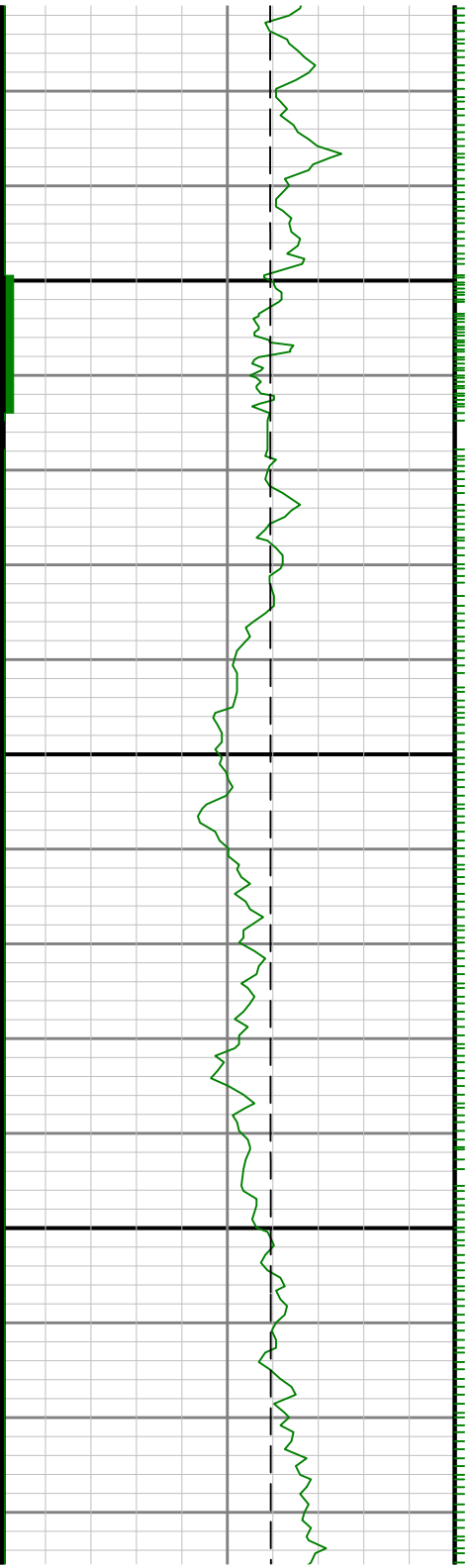




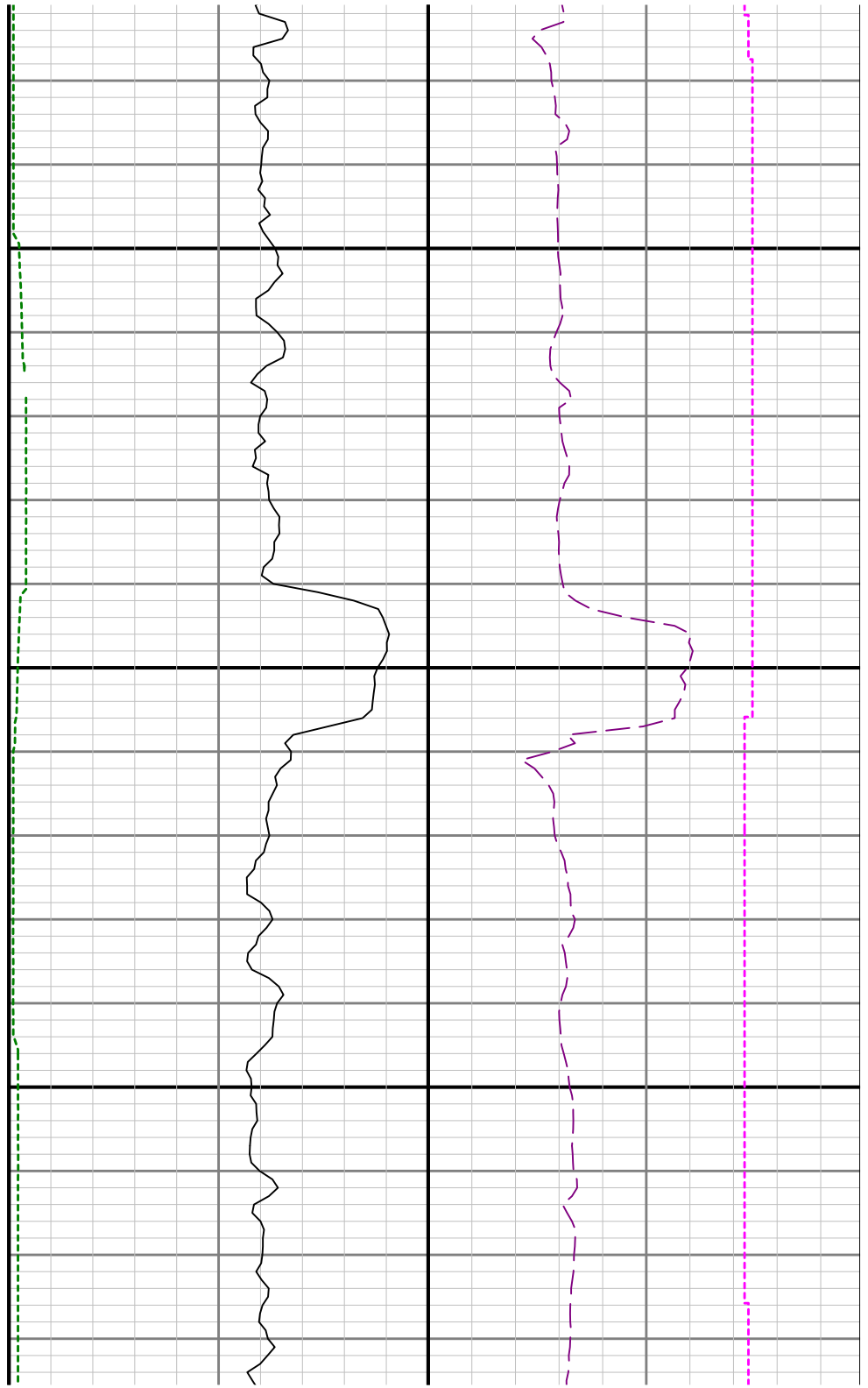
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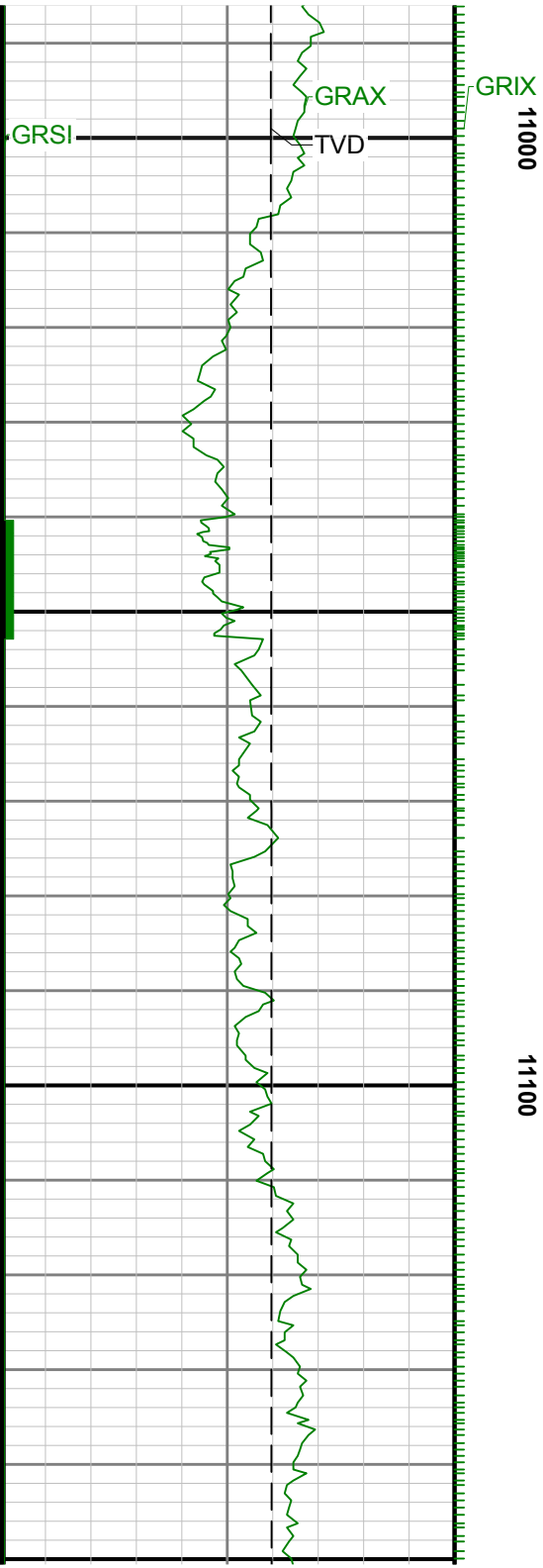
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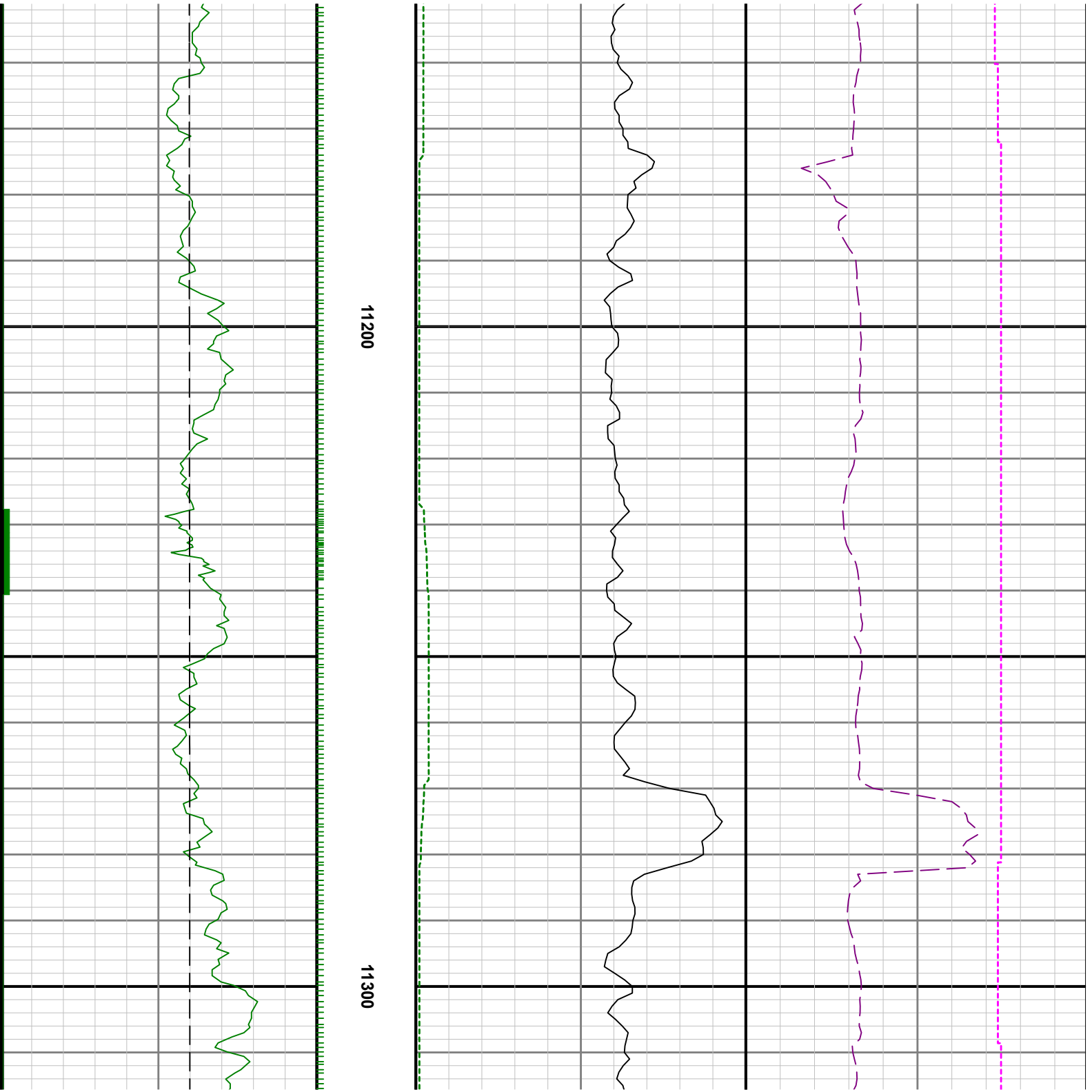


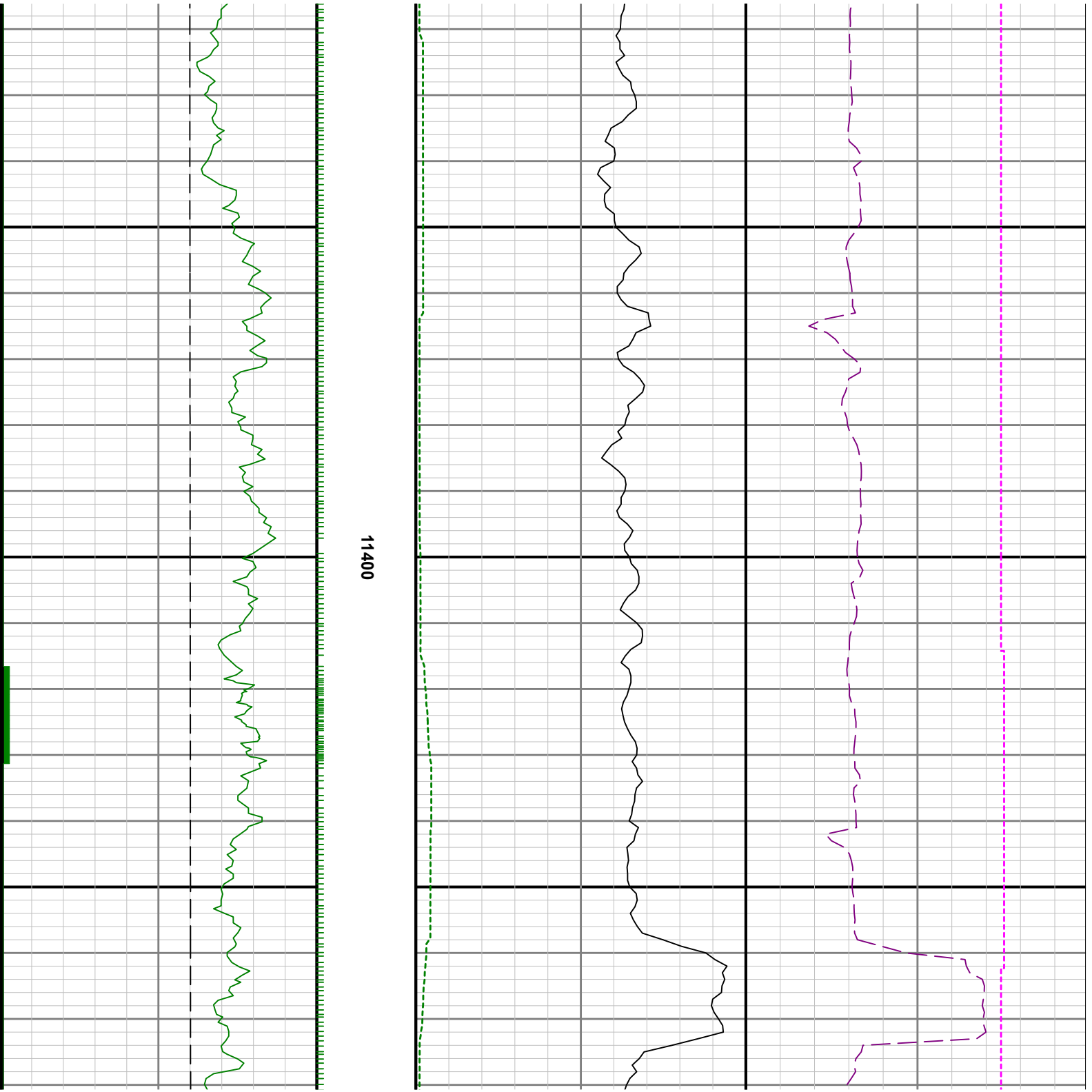


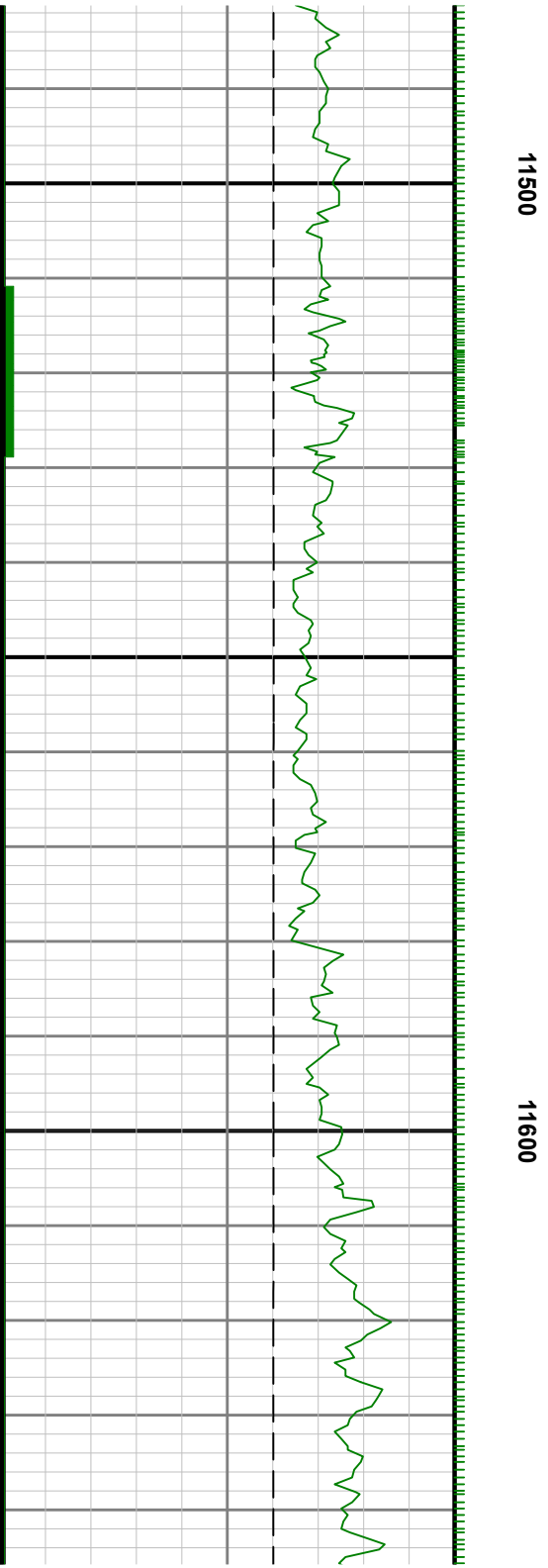
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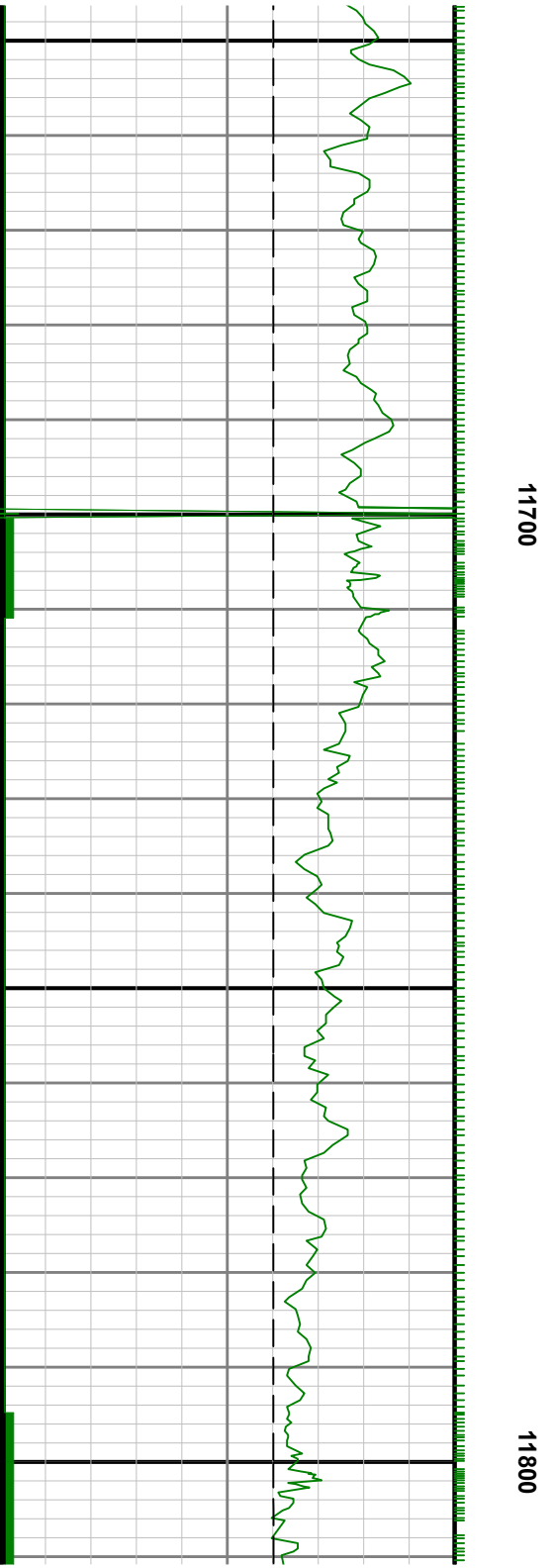
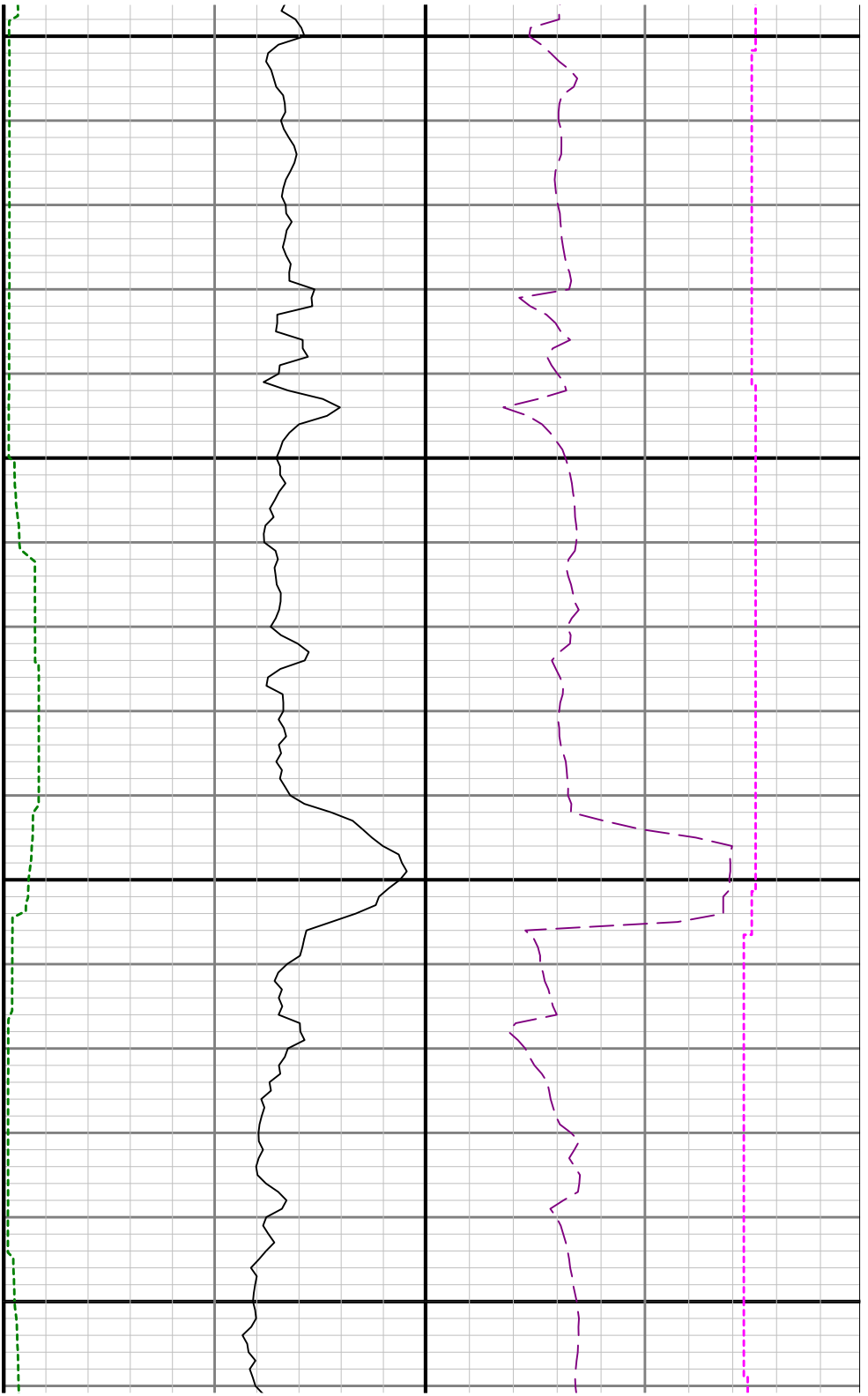


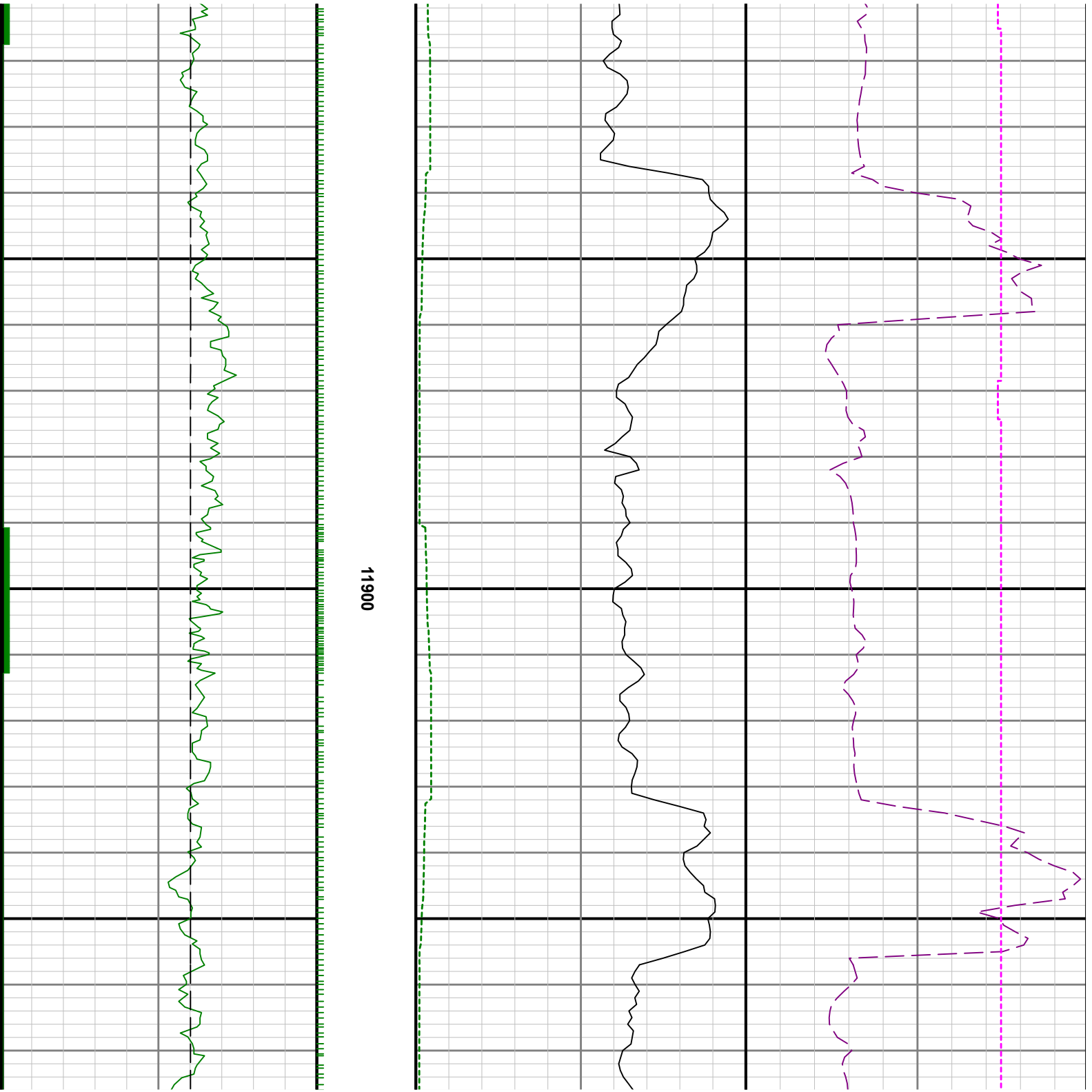


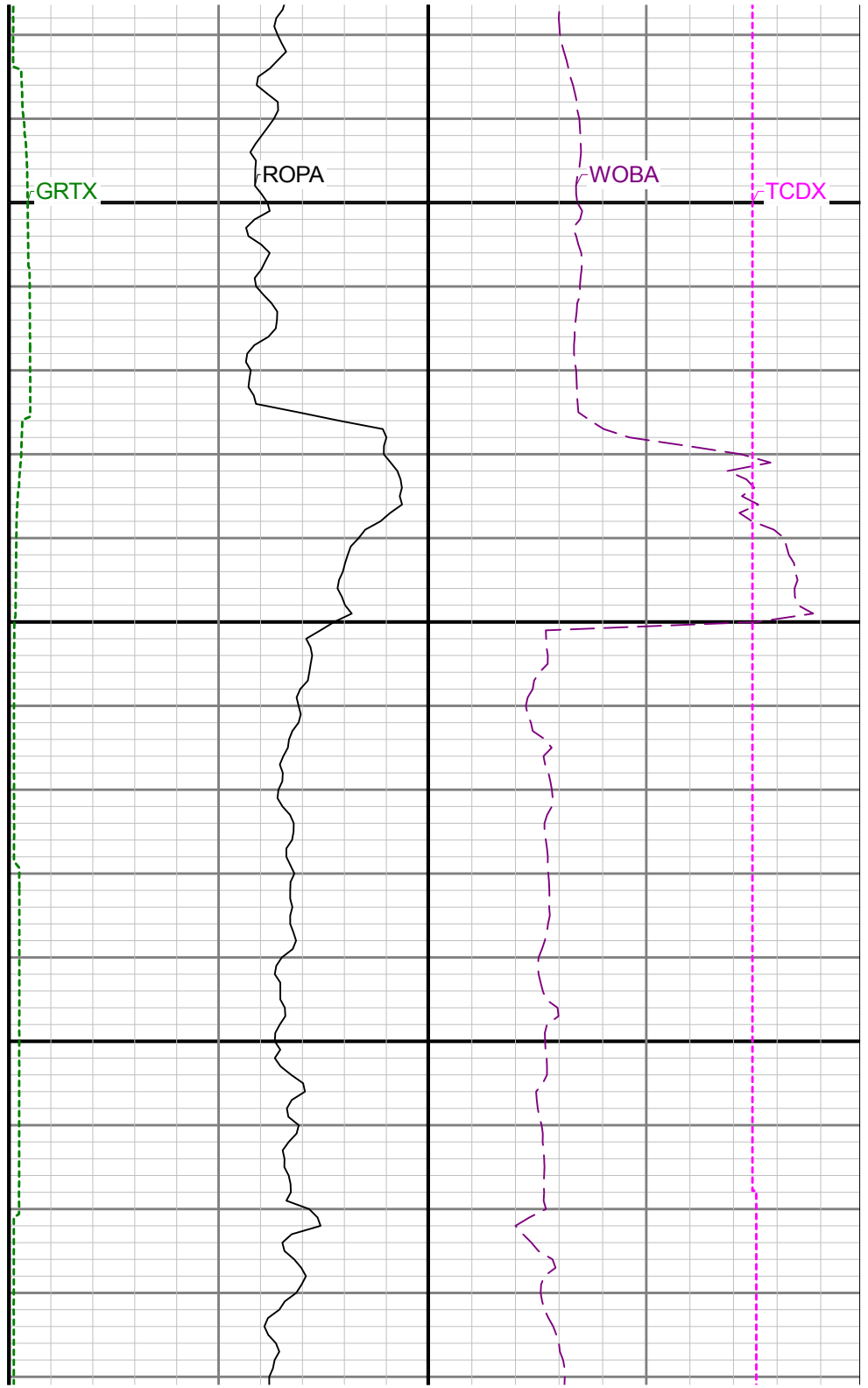
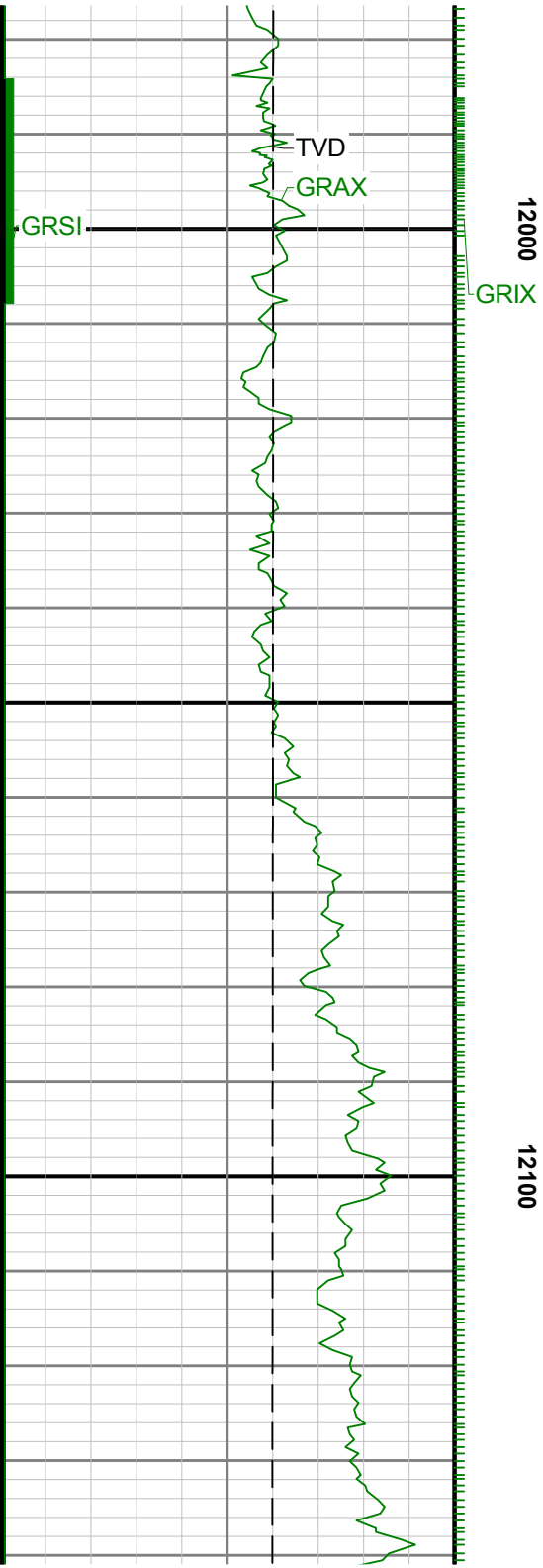


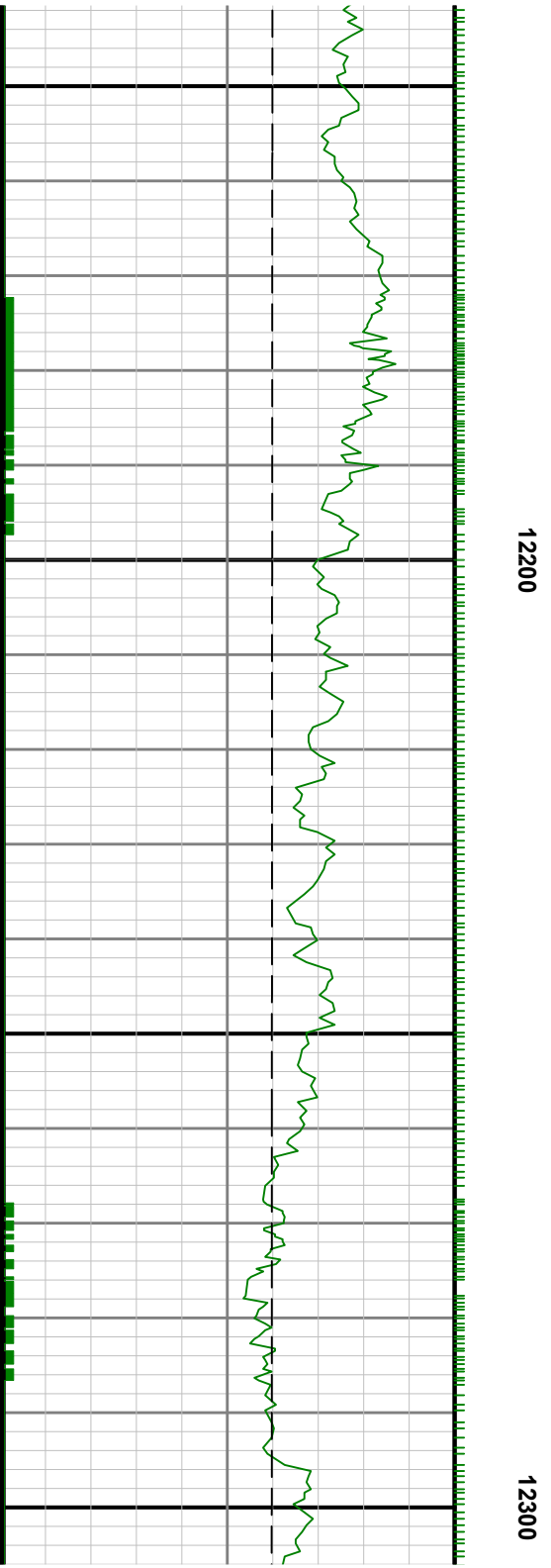
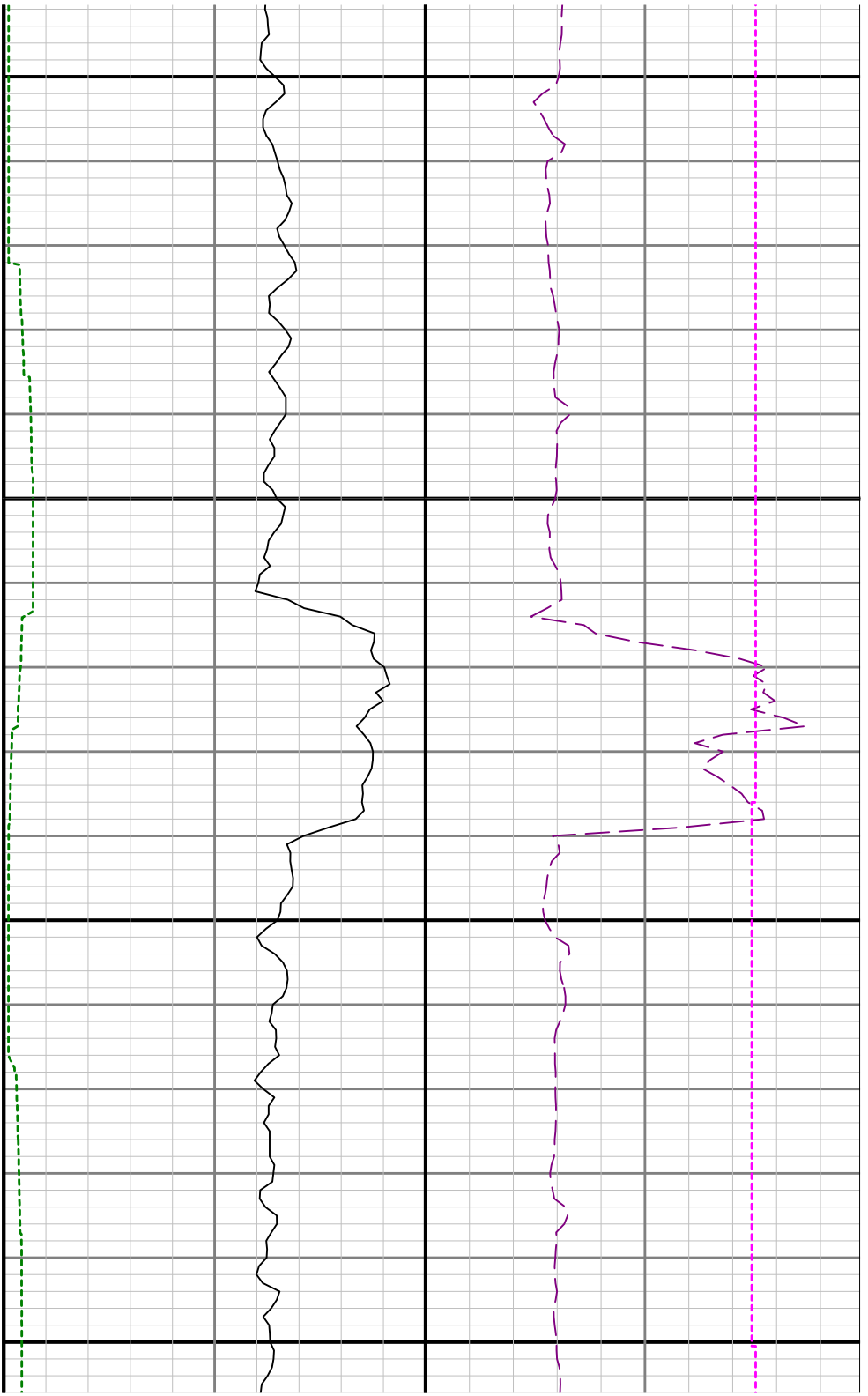


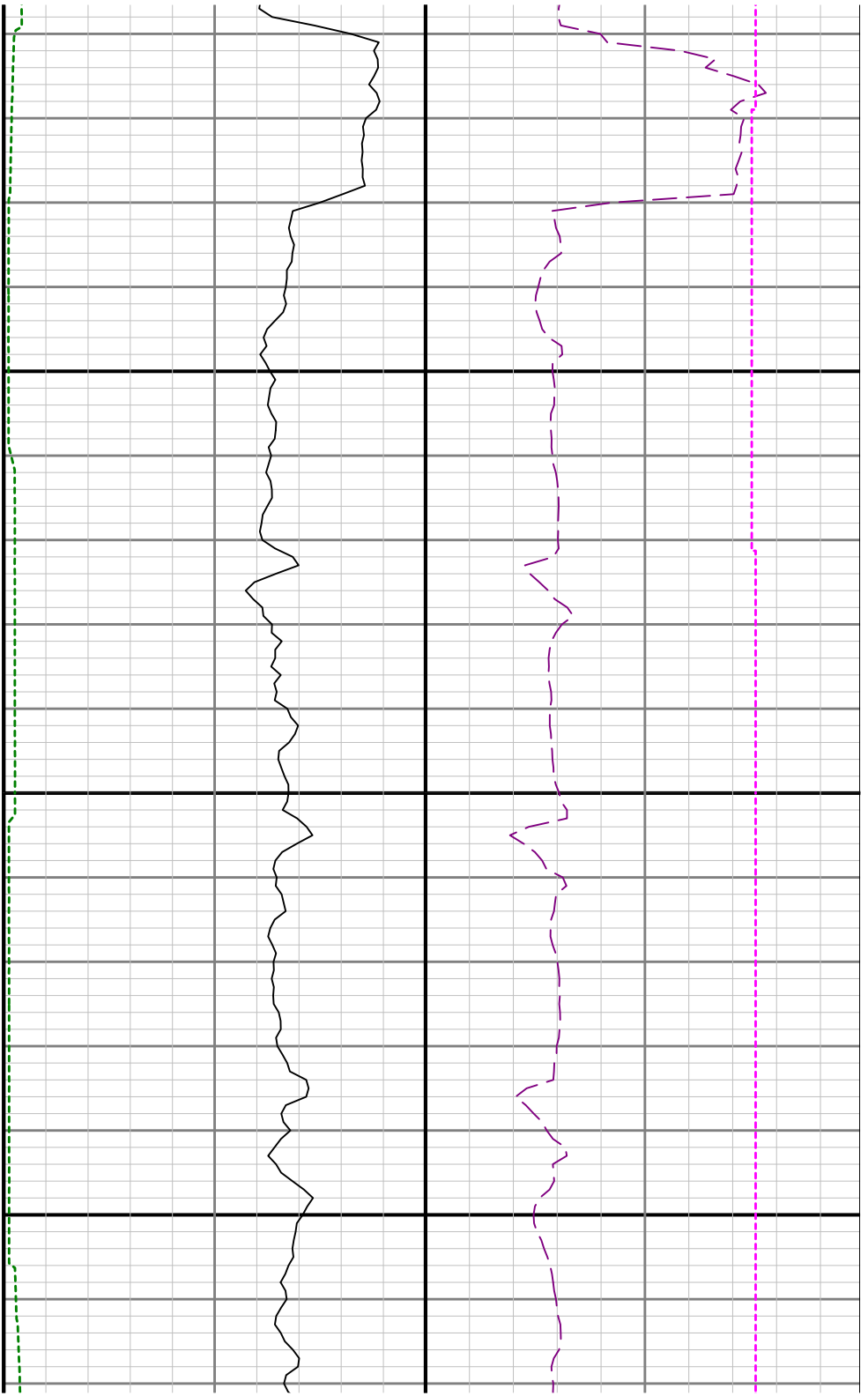












12400

