



Realtime Log

Natural Formation Evaluation
Gamma Ray

Scale: 1:240

Measured Depth

Company: Anadarko

Well: Kerr 14N-25HZ

Field: Weld County (Kerr Mcgee)

Region: Continental US Country: United States

Status: Final Print

Surface Location:

Latitude: 40° 7' 56.384" N

Longitude: 104° 50' 29.249" W

Section 13 TWN: 2N Range 67W

Other Services:

Directional VSS

Elevations:

KB: N/A

DF: 4899.00 ft.

GL: 4883.00 ft.

API Number: 05123389790000

Permanent Datum (P.D.): Ground Level Elevation: 4883.00 ft.

Log Measured From: Rig Floor 16.00 ft. Above P.D.

Depth Reference: Driller's Depth

Interval Logged

Top: 6418.0 ft. Date From: 18/Dec/14 Dip Angle: 66.76° Azi Reference North: True

Bottom: 17595.0 ft. Date To: 27/Dec/14 Total Mag to Reference

Spud Date: 18/Dec/14 Field Strength: 52805.5 nT North Correction: 8.56°

Borehole Record

Casing Record

Hole Size	From	To	Size	Weight	From	To
8.750 in.	1006.0 ft.	7723.0 ft.	9.265 in.	36.00 lb/ft	Surface	1000.0 ft.
6.125 in.	7723.0 ft.	17645.0 ft.	7.000 in.	26.00 lb/ft	Surface	7723.0 ft.

Mud Record

Deviation Record

Type	From	To	Hole Size	Interval	Inc / Az (Start)	Inc / Az (End)
Drill Water	Surface	7723.0 ft.	8.750 in.	85.0 ft.	0.4° / 230.2°	0.6° / 93.5°
LSND	7723.0 ft.	17645.0 ft.	8.750 in.	42.0 ft.	0.6° / 93.5°	82.9° / 182.1°
			6.125 in.	85.0 ft.	82.9° / 182.0°	94.8° / 181.5°
					/	/
					/	/
					/	/
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Acquisition System

Software Version

Other

Advantage	2.20U4	Rig / Contractor:	Xtreme 24	/ Advance Drilling
PATS	6.4.1.34	Job No:	6849004	/ 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	Bottom	From	To	Start		End		
							(ft.)	(ft.)	(ft.)	(ft.)					
1	1	1	8.750	PDC	2.000	Steerable	6418.0	6498.0	6469.0	6549.0	19/Dec/14	02:00	20/Dec/14	18:30	24.7
2	2	2	8.750	PDC	2.000	Steerable	6503.0	7677.0	6549.0	7723.0	20/Dec/14	19:30	21/Dec/14	22:00	13.2
3	3	3	6.125	PDC	6.000	Steerable	7673.0	17595.0	7723.0	17645.0	22/Dec/14	18:00	27/Dec/14	10:00	81.6

Crew

Name	Arrive	Depart	Name	Arrive	Depart	Name	Arrive	Depart
	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite
Osagie Otoikhine	18/Dec/14	28/Dec/14	Ben Klarin	18/Dec/14	28/Dec/14			

Mud Properties Record

Date / Time		LWD Run No.	Measured Depth (ft.)	Mud Type	Density (ppg)	Viscosity (sec/qt)	pH	Fluid Loss (cc)	Oil / Water	Source	Total Chlorides (mg/L)	K+ (%)
19/Dec/14	18:00	1	3826.0	Drill Water	8.5	31	10.2	N/A	1.0/97.5	Active Pits	1200	N/A
21/Dec/14	18:00	2	7723.0	LSND	10.1	38	11.2	N/A	2.0/90.0	Active Pits	1400	N/A
25/Dec/14	18:00	3	15092.0	LSND	9.3	44	9.7	N/A	3.3/90.0	Active Pits	1600	N/A

Mnemonics

Curve	Description	Units
GRAX	Gamma Ray Apparent 0.5 ft AVG	API
GRIX	Gamma Ray Data Density	points
GRSI	Gamma Ray Sliding Indicator	unitless
GRTX	Gamma Ray Time Since Drilled	min.
ROPA	Rate of Penetration, 3.0 ft Avg	ft/hr
TCDX	Downhole Temperature	degF
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	12479858	Directional	54.32	6.750	2.875
1	SRIG	12041110	Gamma	50.95	6.750	2.875
2	DIR	12859920	Directional	49.00	6.750	2.875
2	SRIG	10098472	Gamma	45.63	6.750	2.875
3	DIR	11814673	Directional	53.19	4.750	2.750
3	SRIG	12586753	Gamma	49.77	4.750	2.750

Service and Tool Mnemonics

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

Comments

- 1.) Baker Hughes Runs 1& 2 utilized a 6 1/2 inch NaviGamma (Directional and Gamma Ray) tool behind an 8 3/4 inch bit and steerable assembly from 6469 feet to 7723 feet MD (6425 feet to 7213 feet TVD).
- 2.) Baker Hughes Run 3 utilized a 4 3/4 inch NaviGamma (Directional and Gamma Ray) tool behind a 6 1/8 inch bit and steerable assembly from 7723 feet to 17645 feet MD (7213 feet to 7278 feet TVD).
- 3.) A sliding indicator is shown on the left side 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.

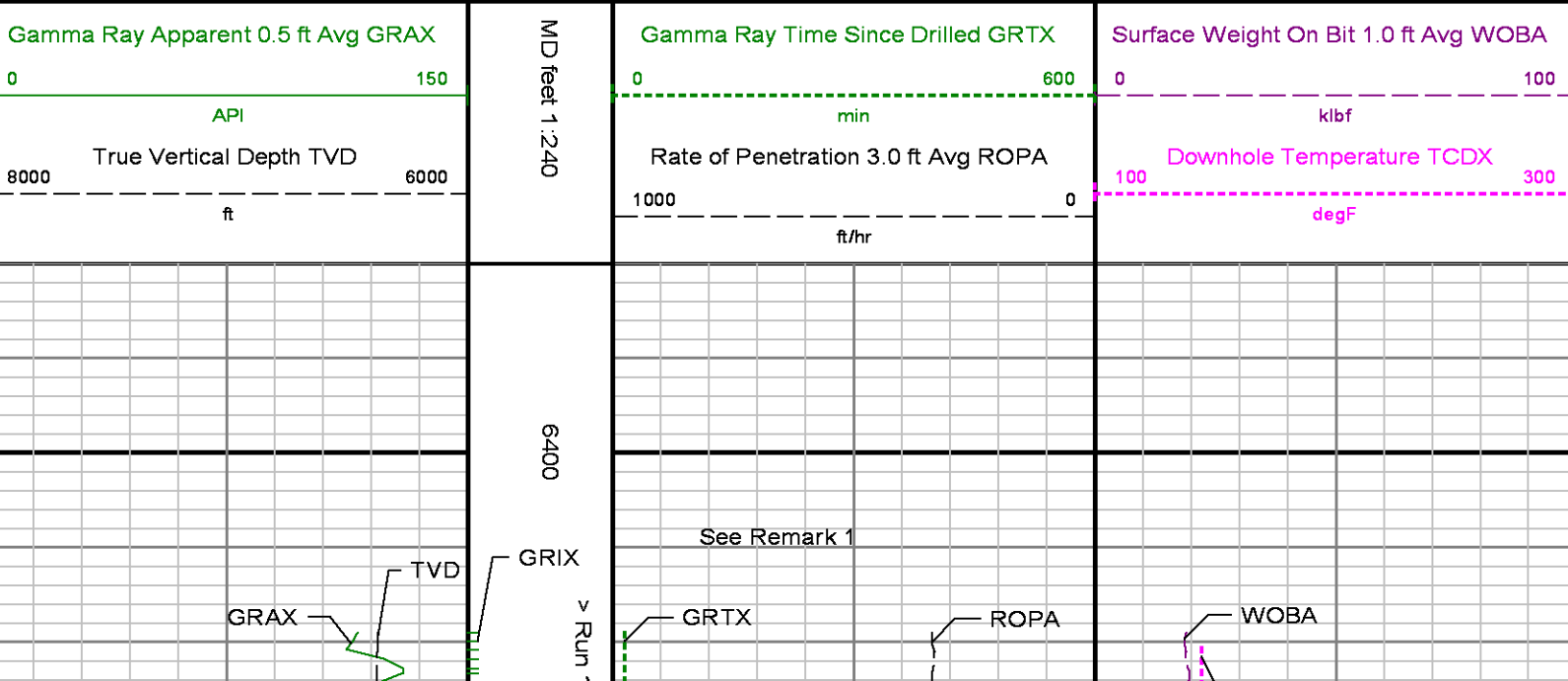
Remarks				
Number	Measured Depth (ft.)	Hole Section (in.)	LWD Run No.	Remark
1	6408	8.750	1	The interval from surface to 6418 feet MD (6374 feet TVD) was not logged since logging services began at kick off point.
2	6511	8.750	1	The interval from 6479 feet to 6552 feet MD (6435 feet to 6508 feet TVD) was logged more than 9 hours after drilling due to tripping for changing the MWD.
3	7689	8.750	2	The interval from 7681 feet to 7728 feet MD (7209 feet to 7214 feet TVD) was logged more than 9 hours after drilling due to tripping for casing and picking up lateral BHA.
4	xxxx	6.125	3	The interval from 17595 feet to 17645 feet MD (7283 feet to 7278 feet TVD) was not logged due to bit sensor offset at TD.

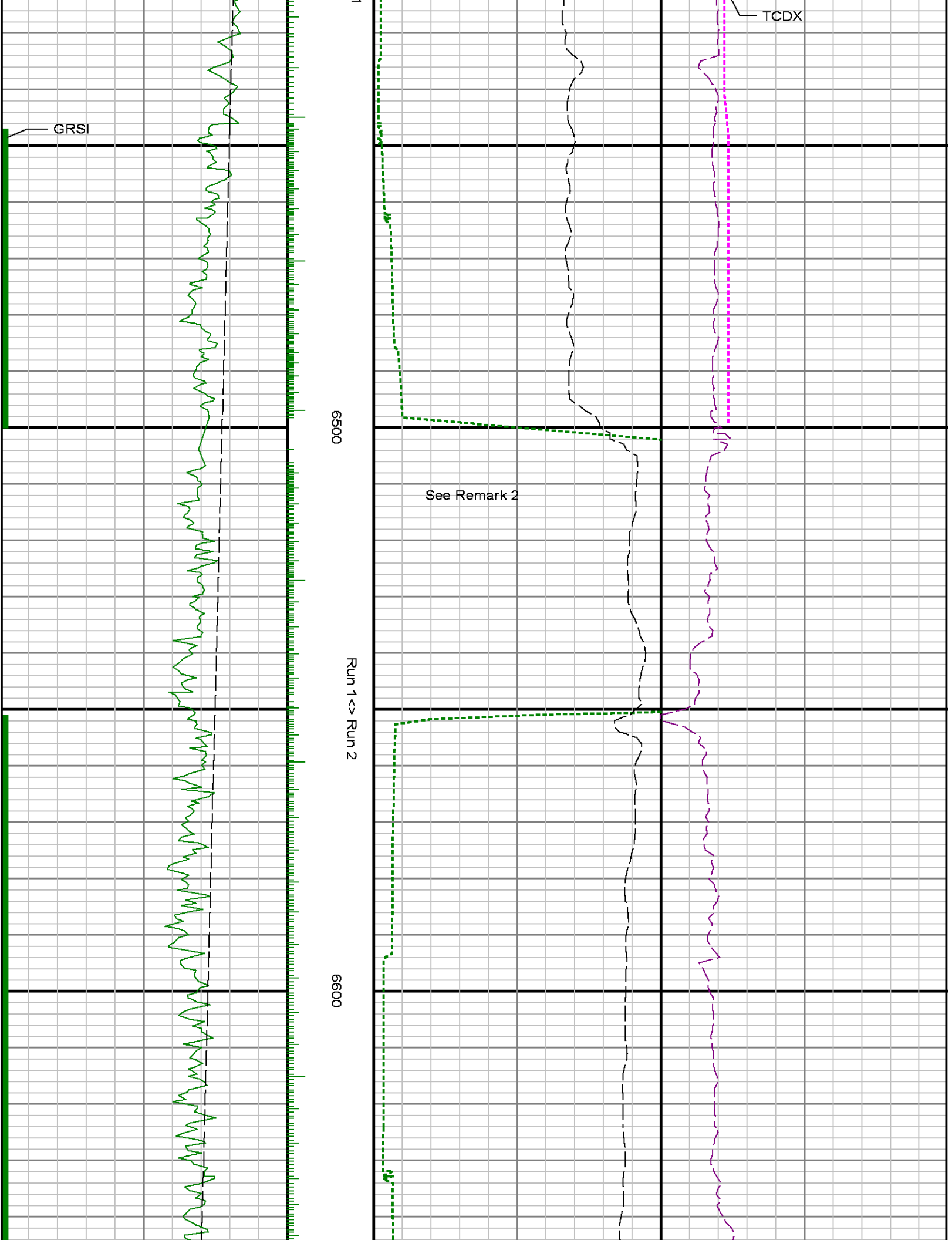
Curve Mnemonics

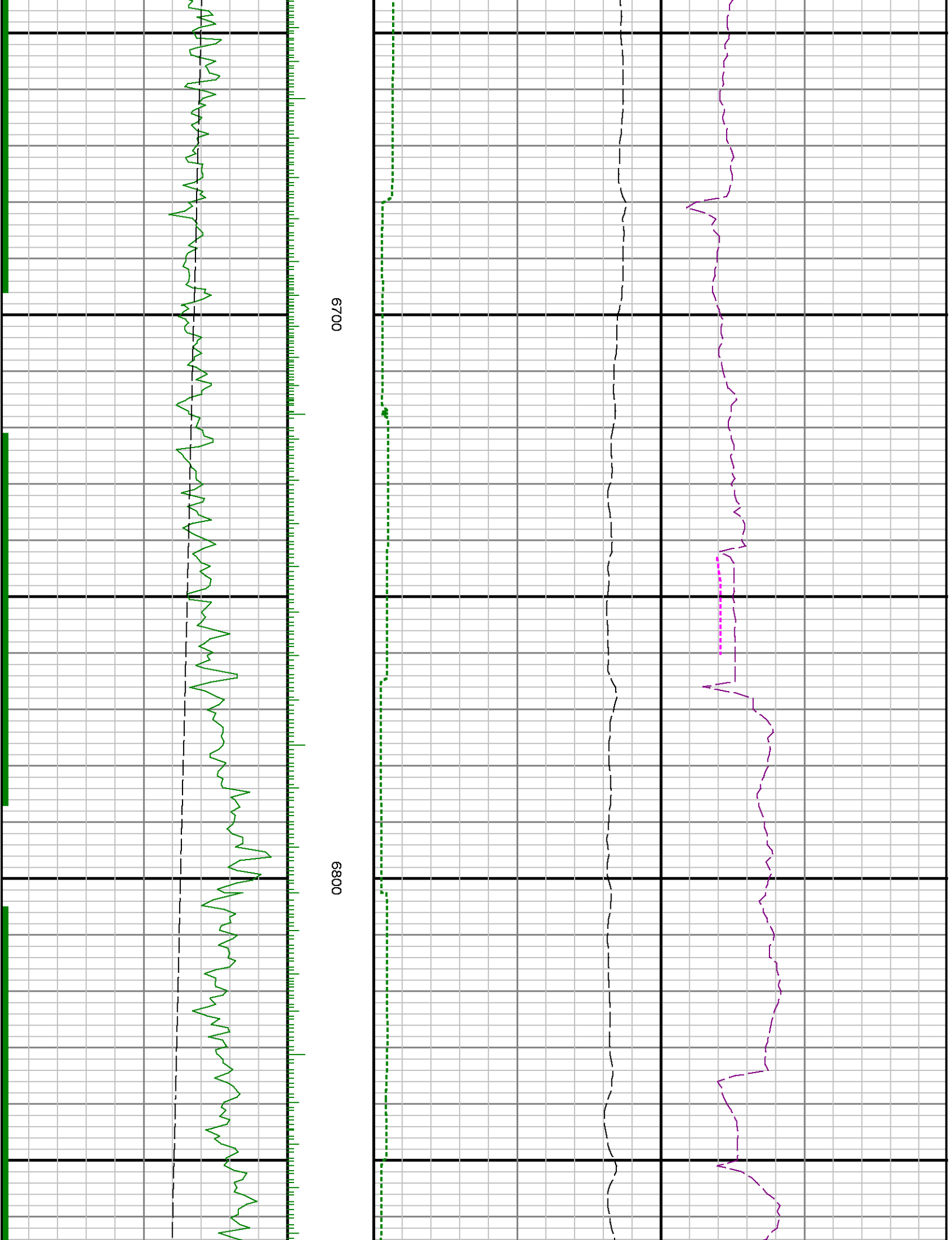
Curve	Description	Units
GRAX	Gamma Ray - Apparent	API
GRIX	Gamma Ray - Data Point Indicator	unitless
GRSI	Gamma Slide Ind.	unitless
GRTX	Gamma Ray Time Since Drilled GRTX	min
ROP_AVG	Depth Averaged ROP	ft/hr
TCDX	Downhole Temperature	degF
TVD	True Vertical Depth TVD	ft
WOB_AVG	AVERAGE Weight On Bit	klbf

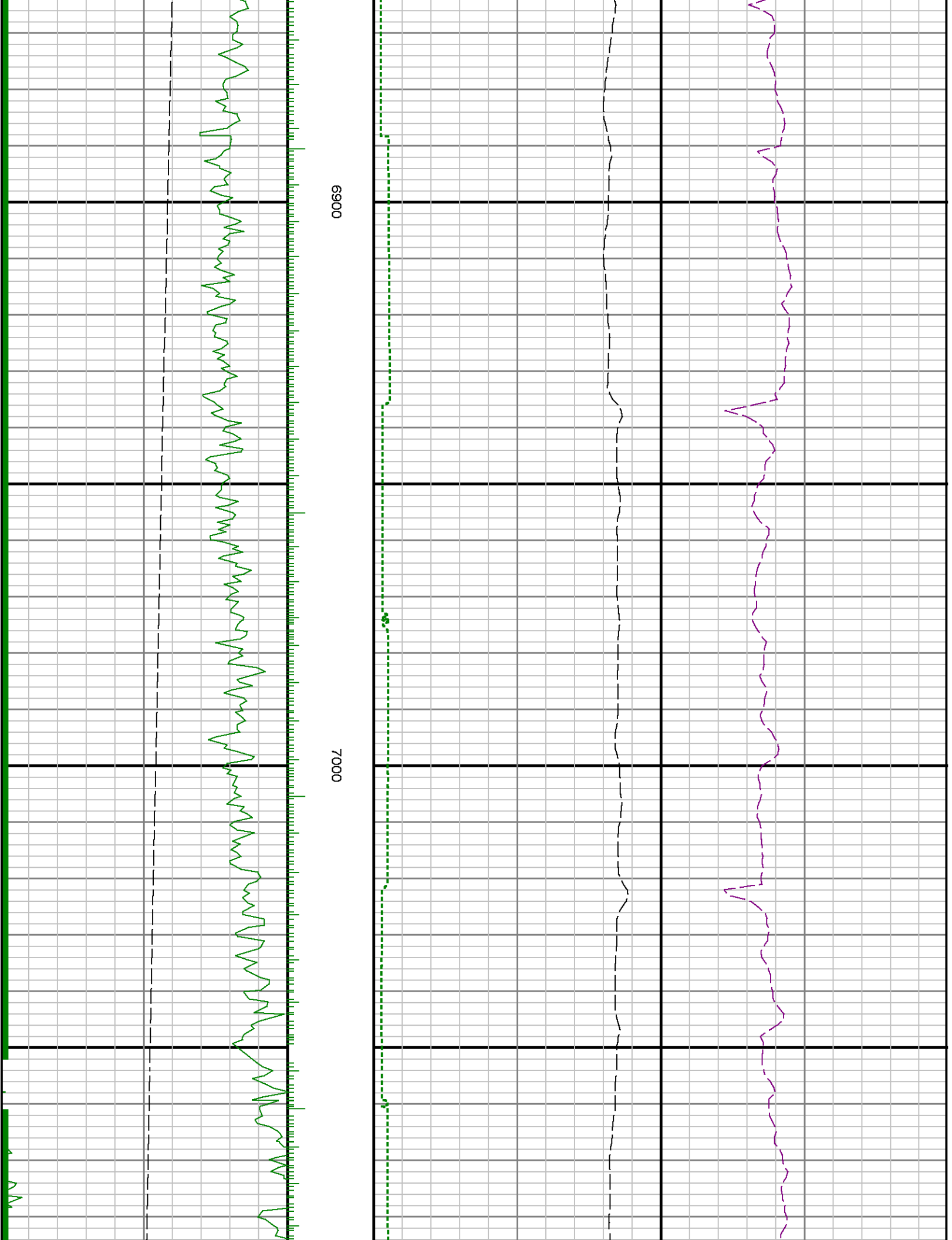


Company : Anadarko
Well : Kerr 14N-25HZ
Interval : 6380.00 - 17670.00 feet
Created : 26/Dec/2014 11:25:43 PM







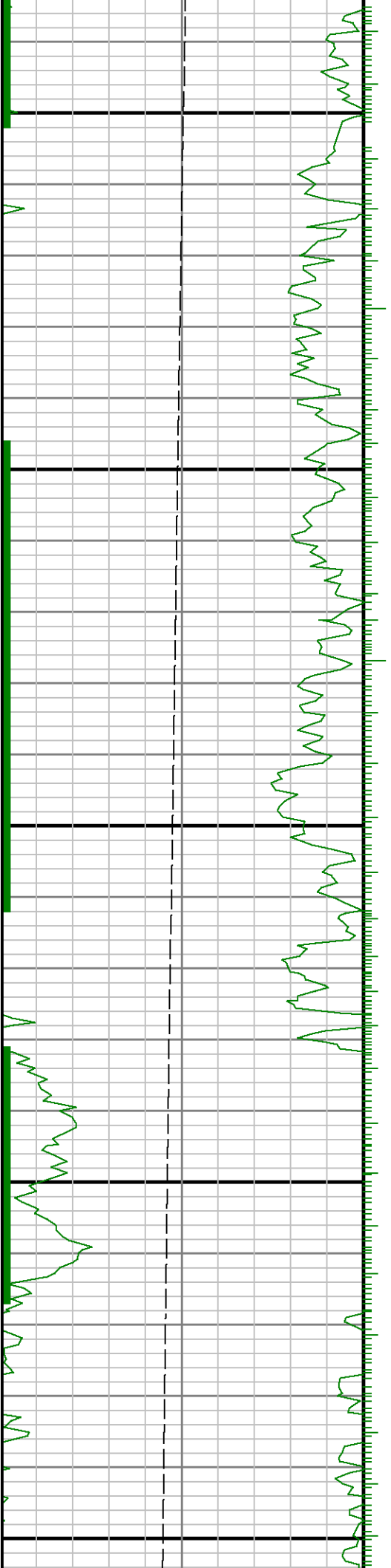


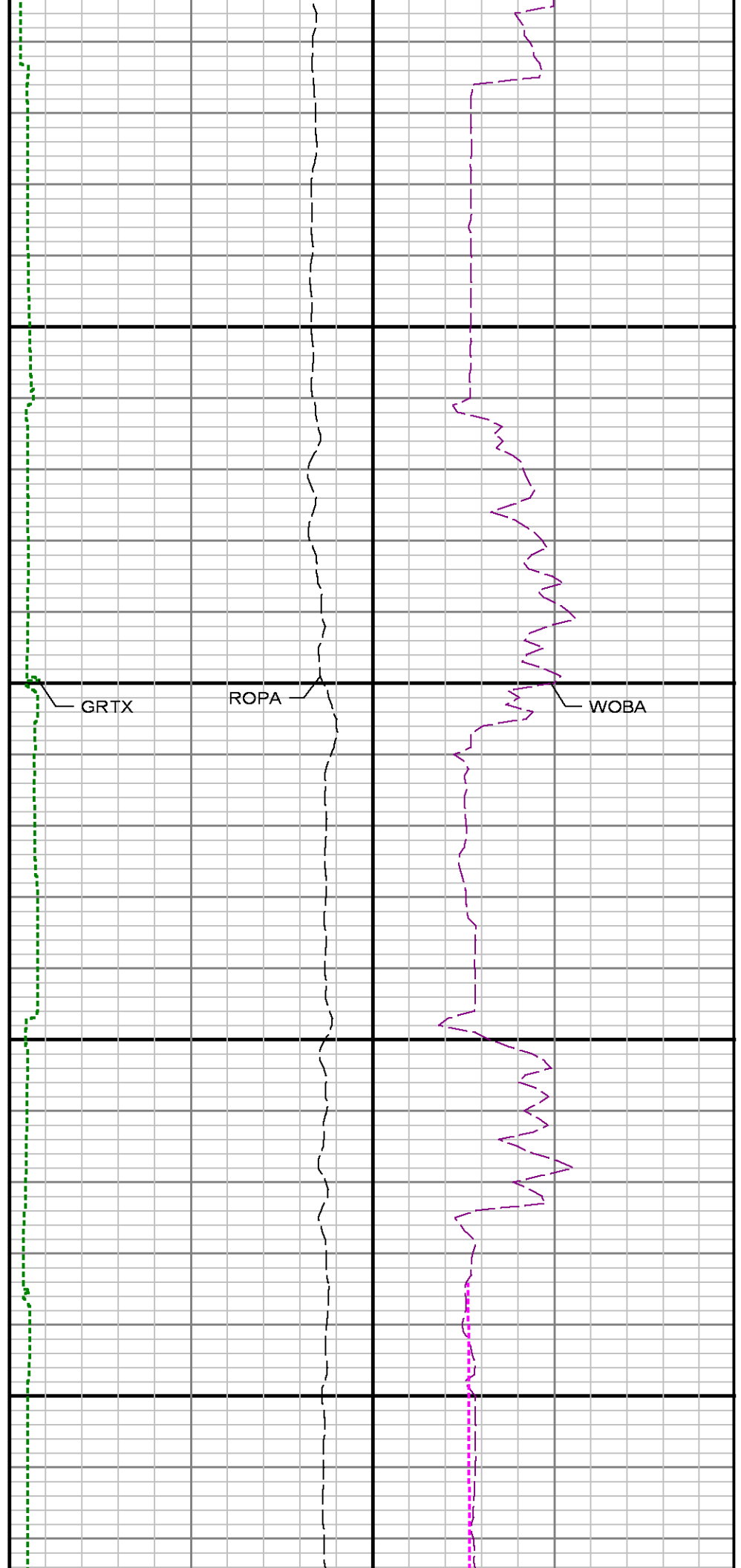
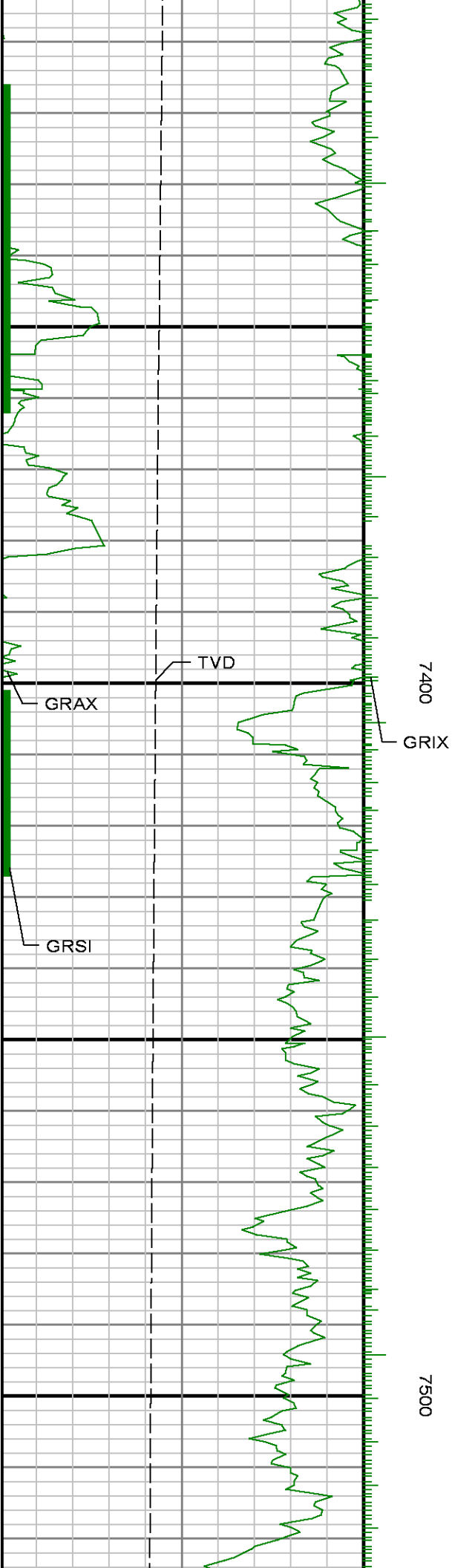


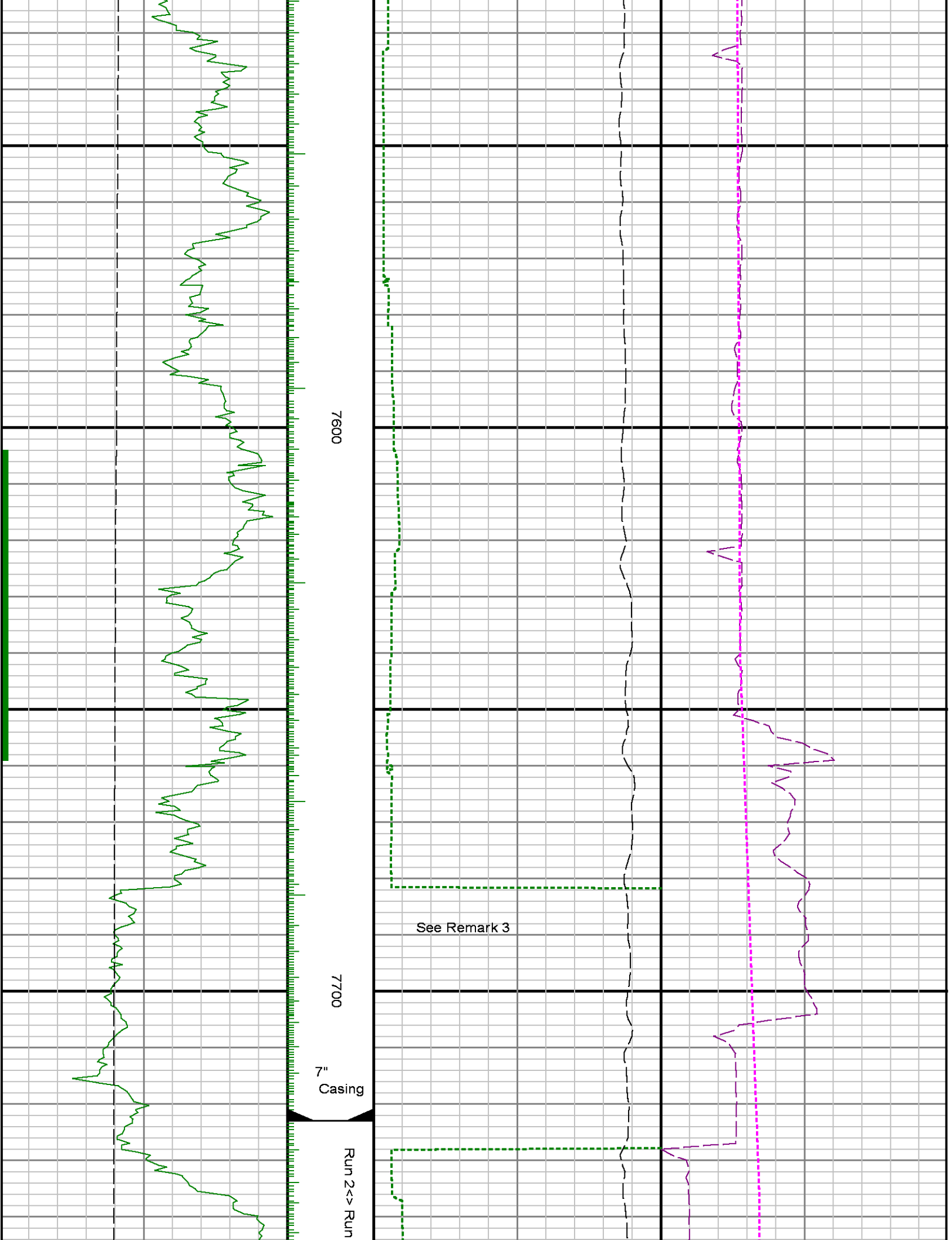
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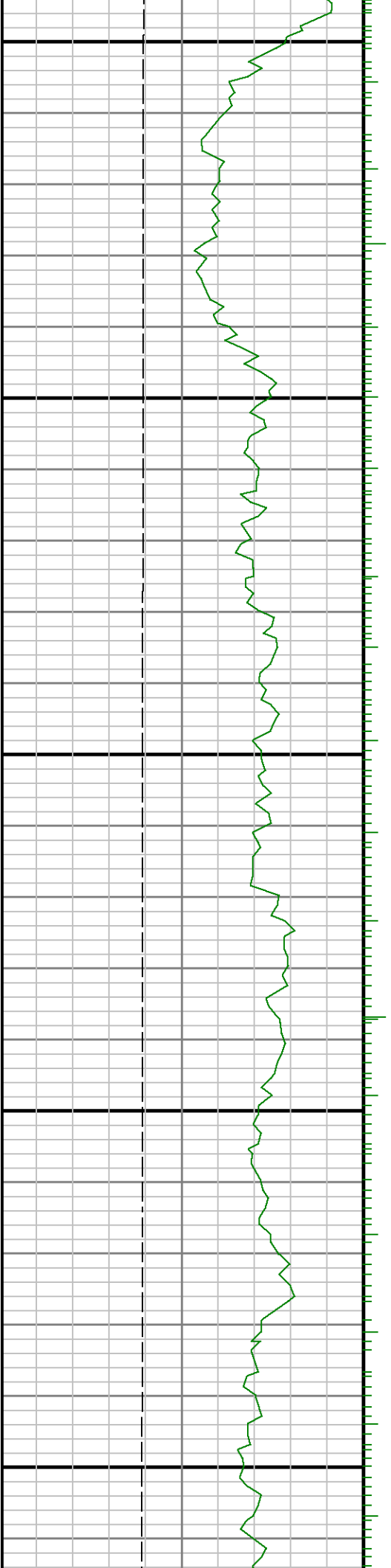


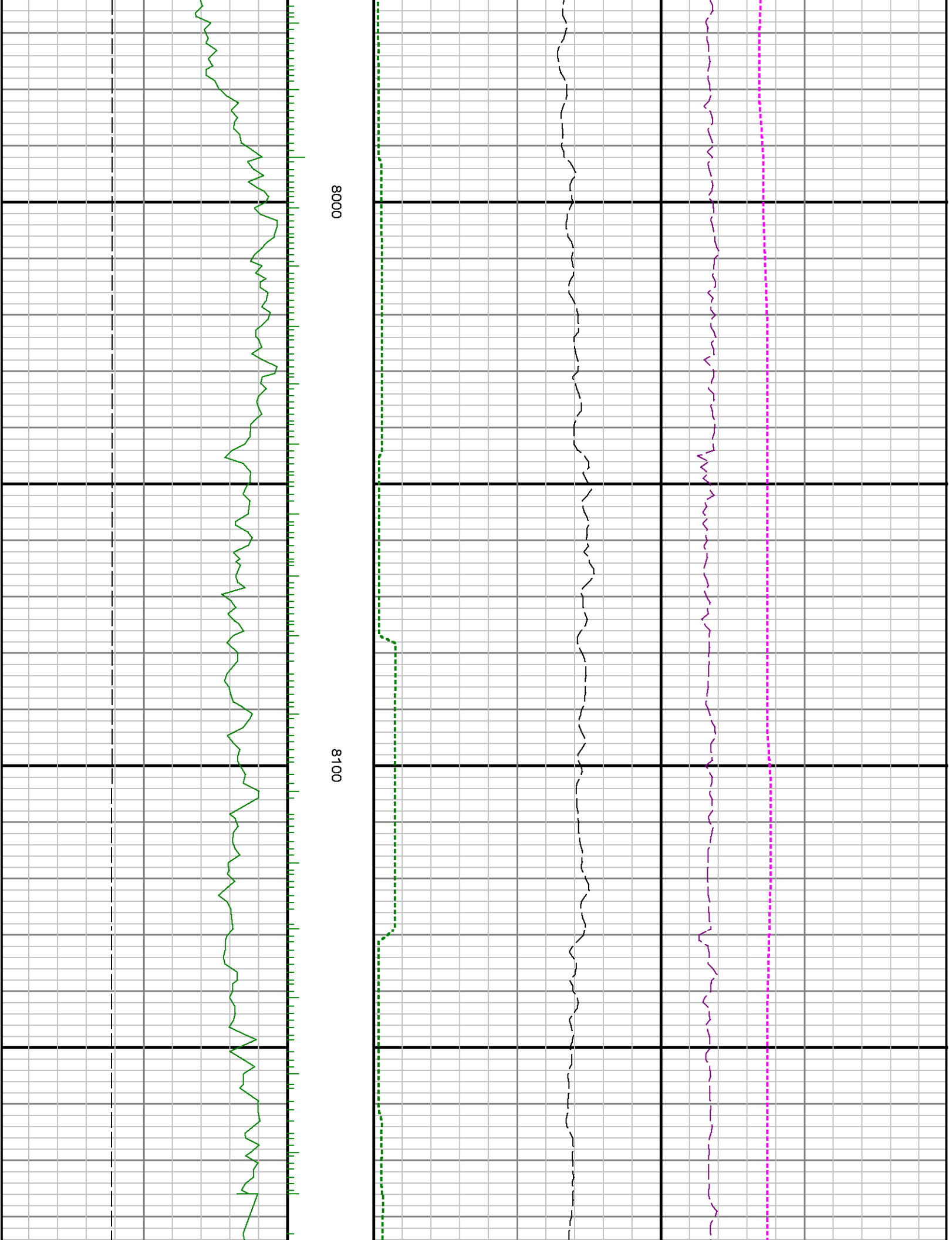


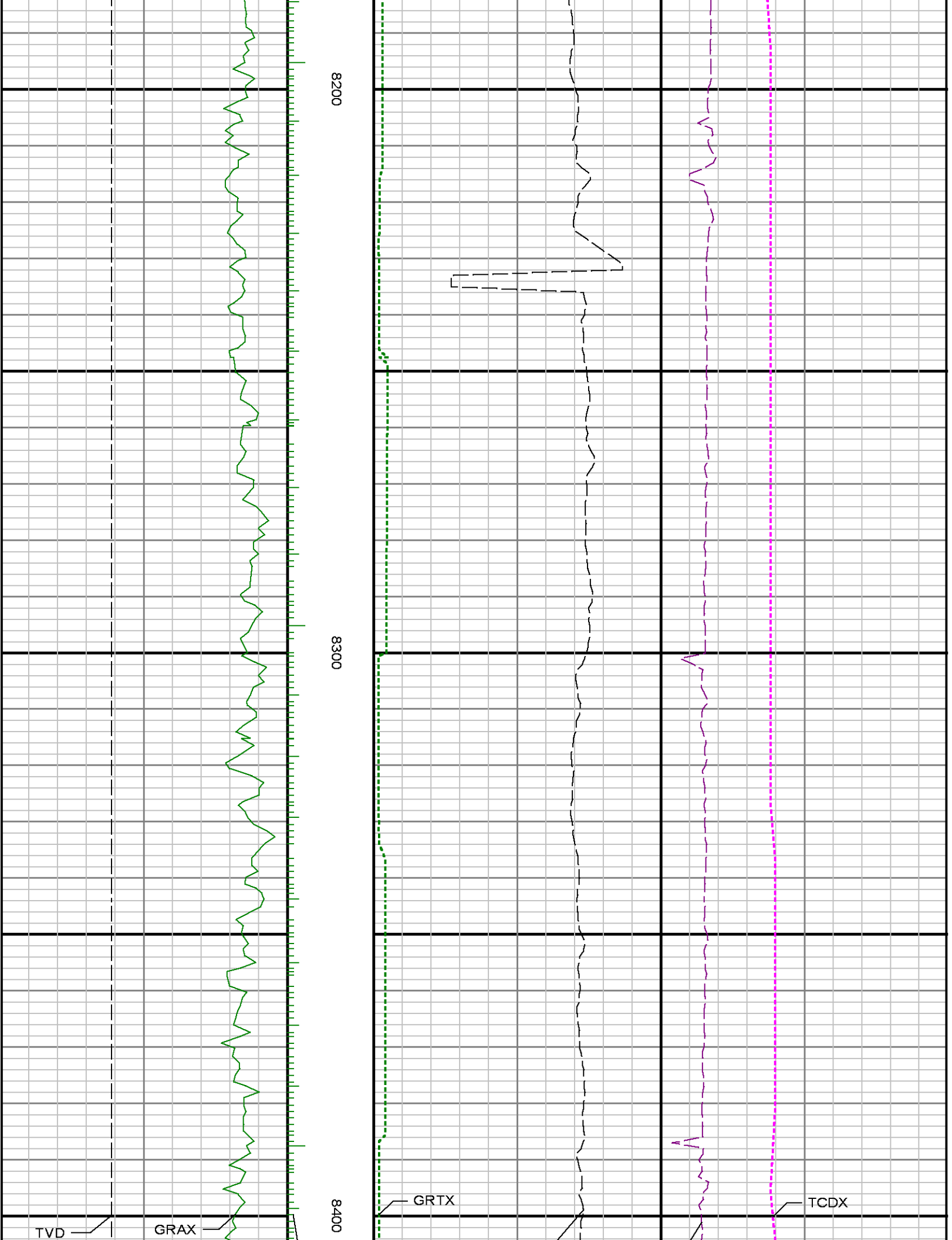


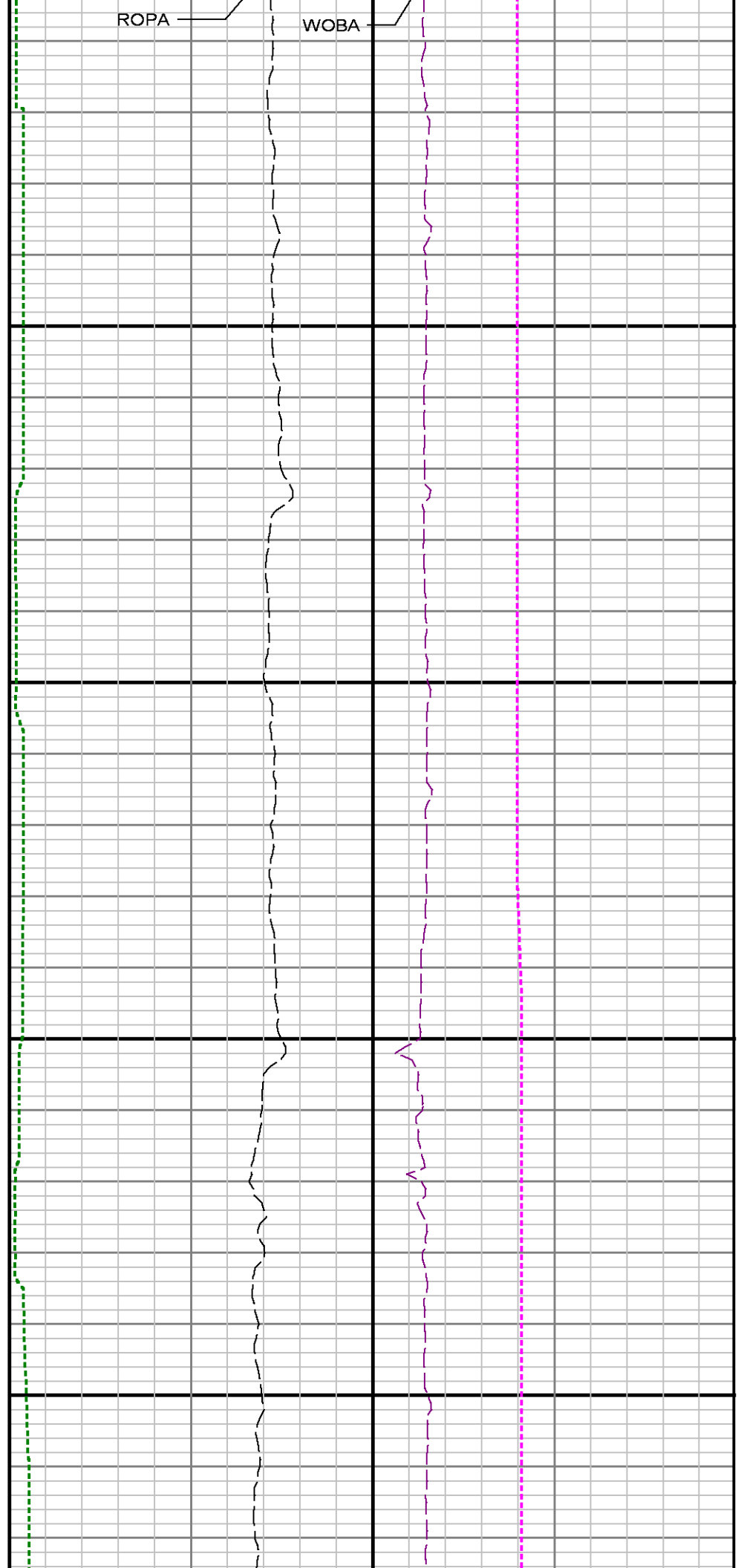
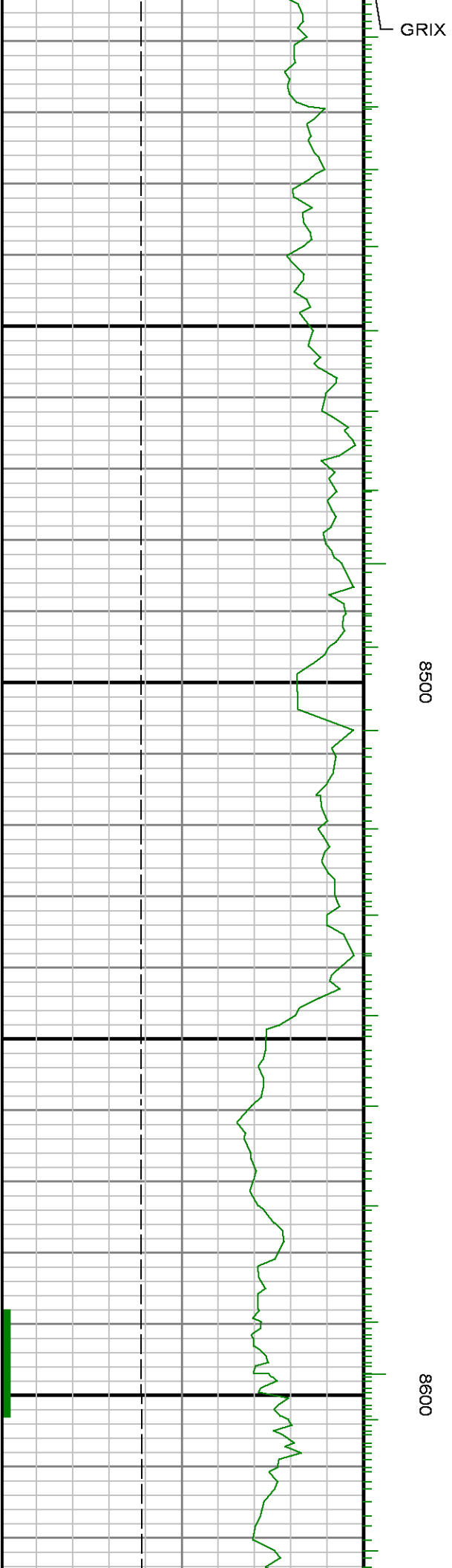
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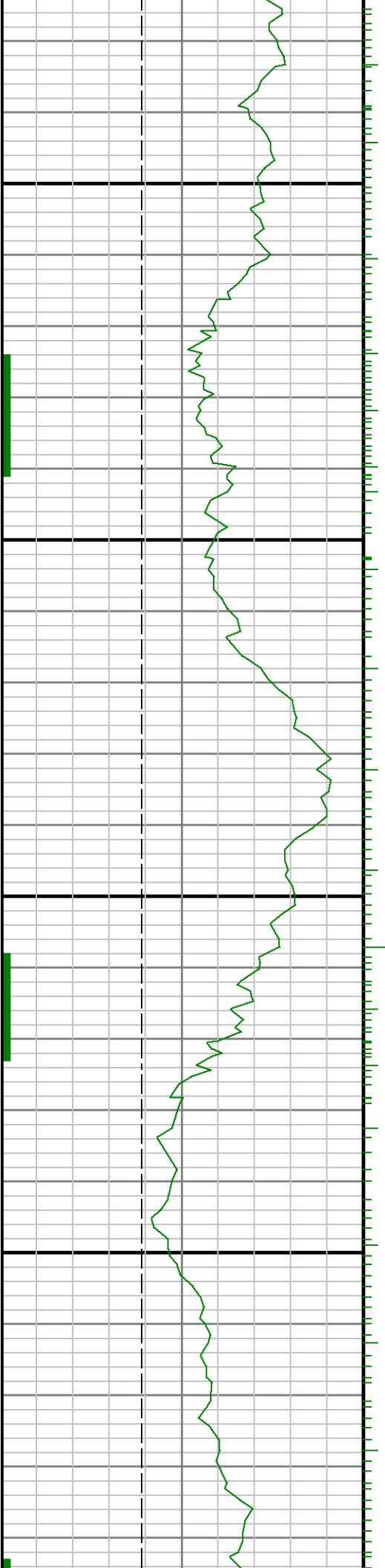
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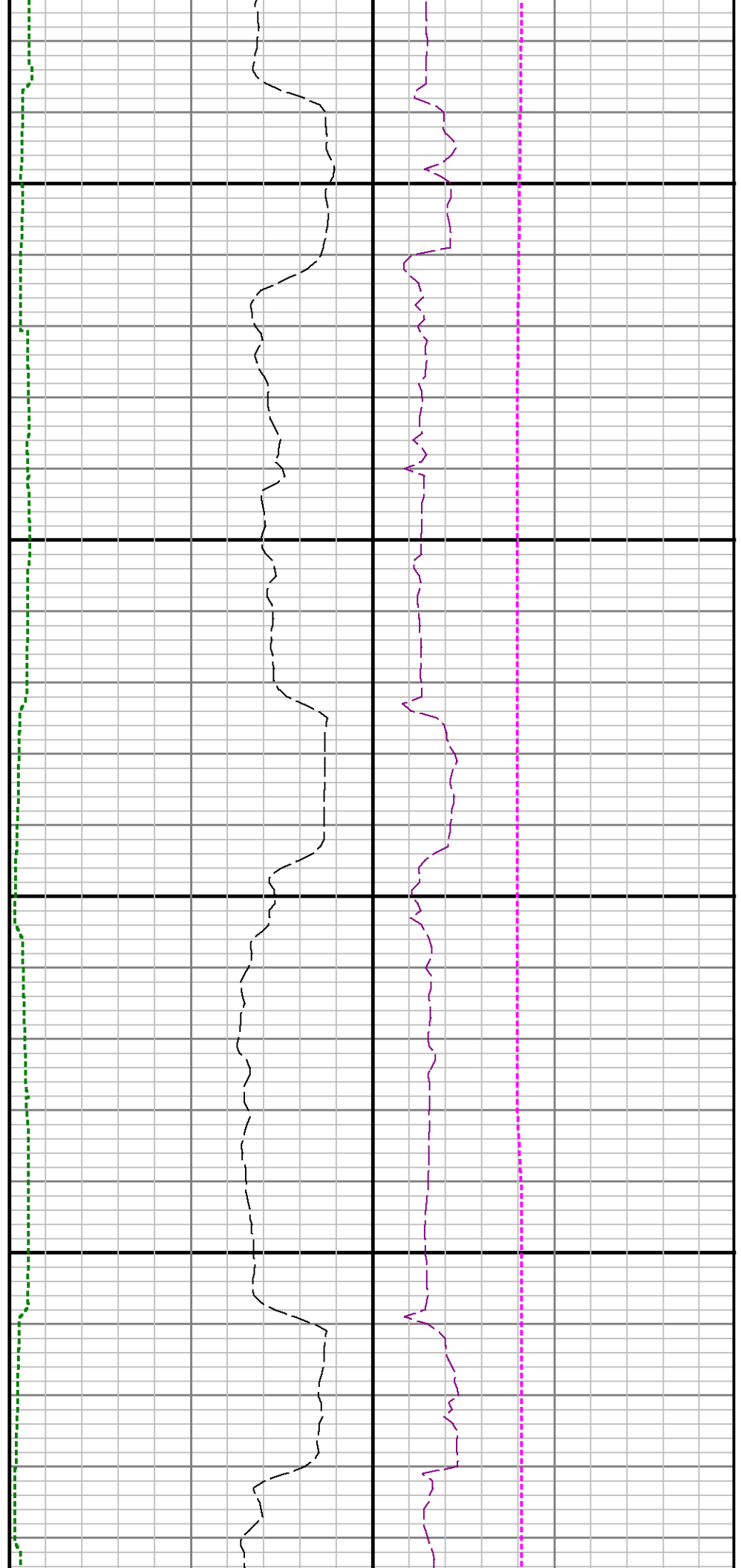


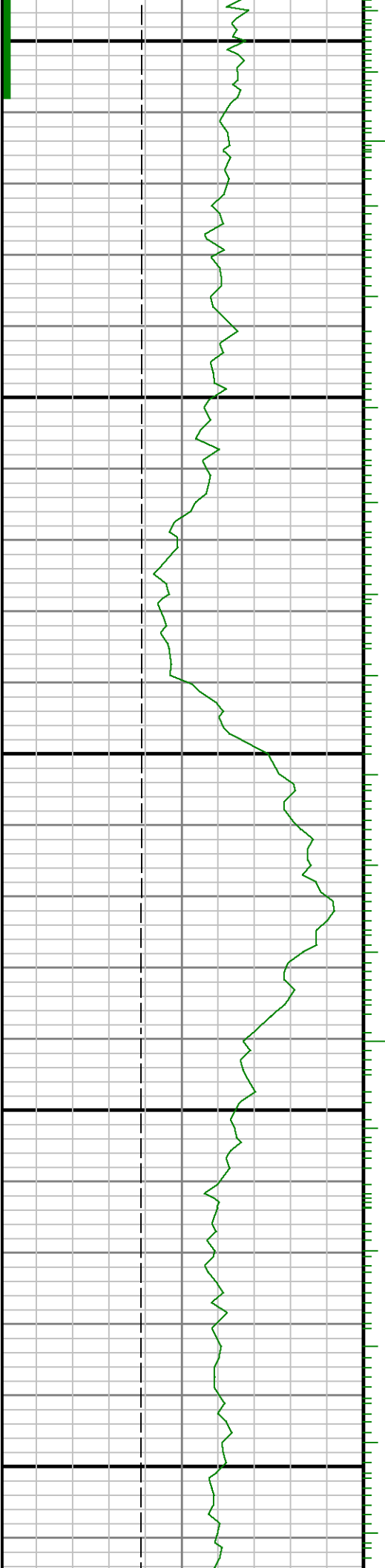




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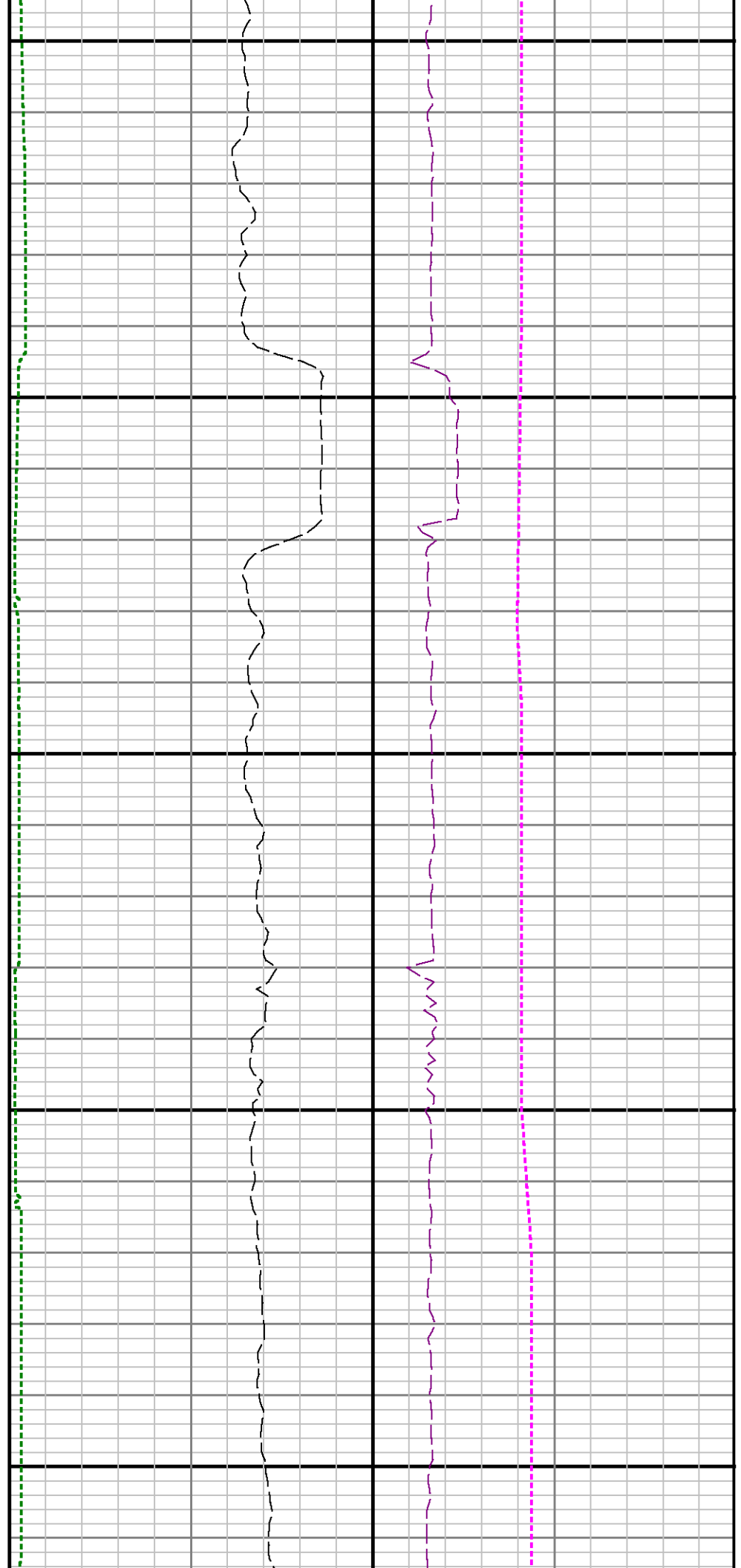
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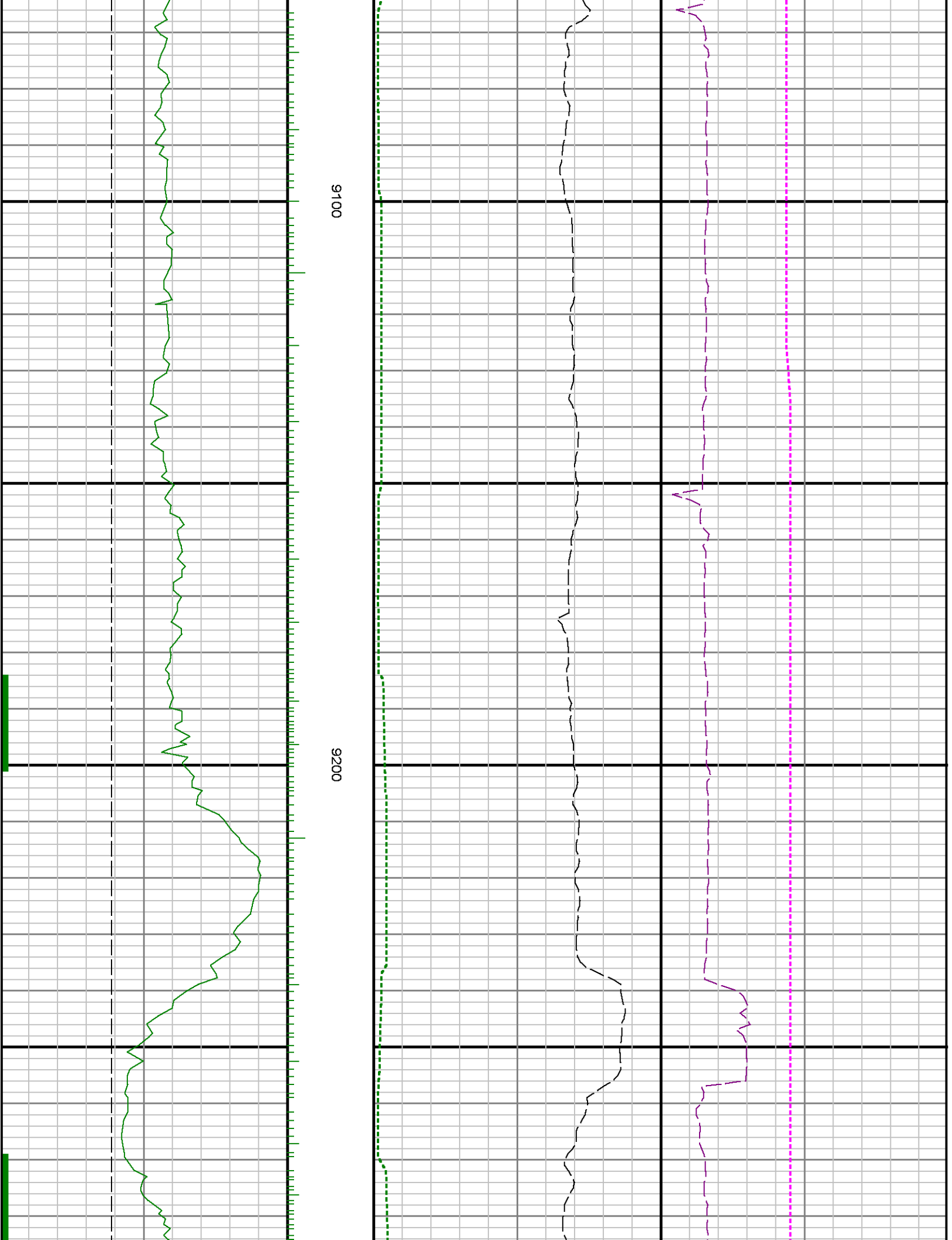


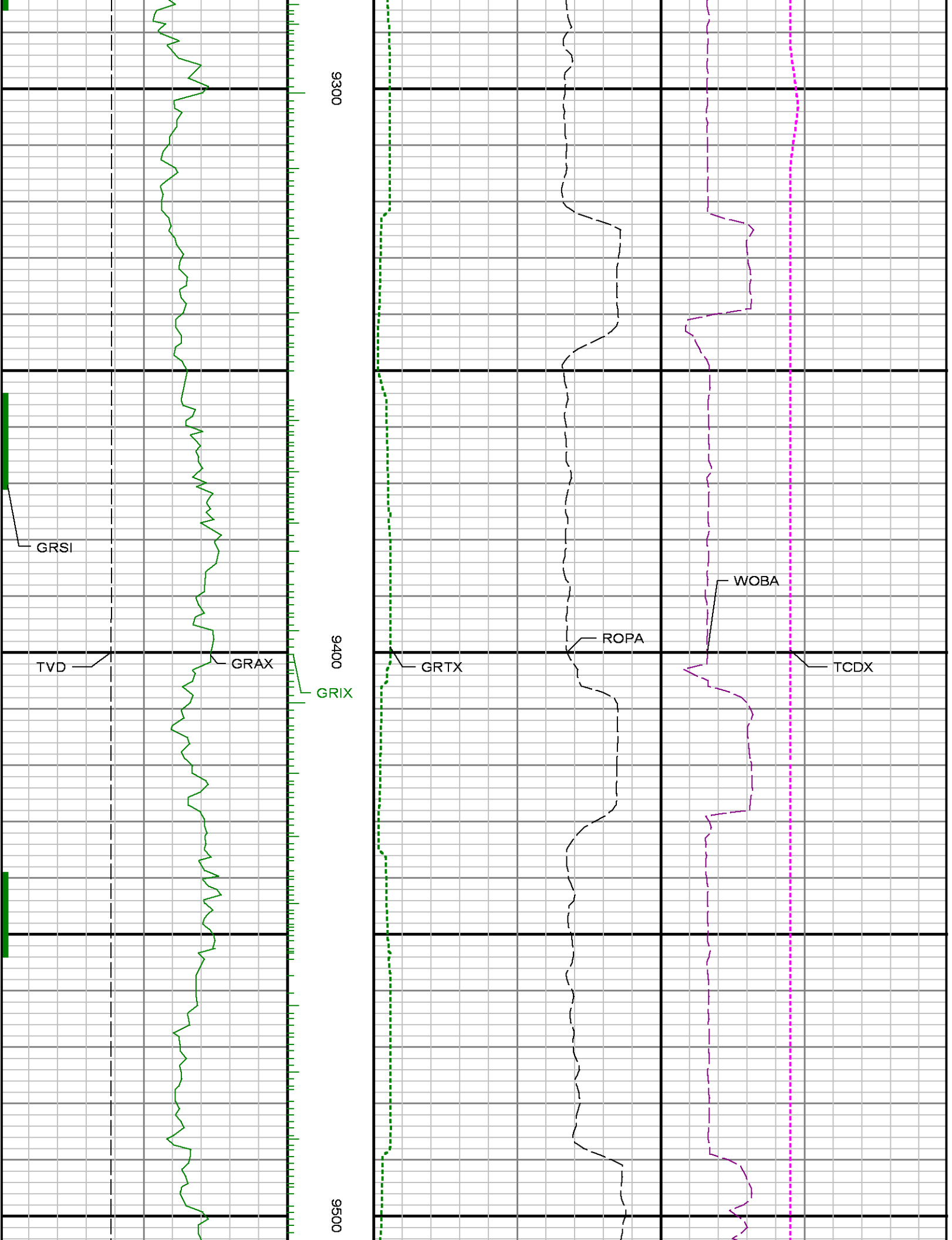


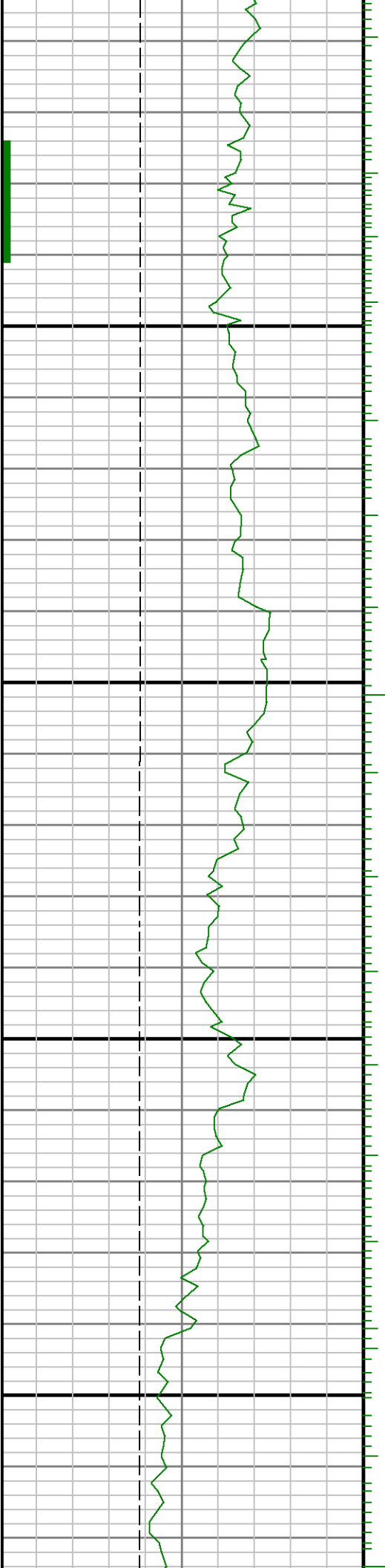
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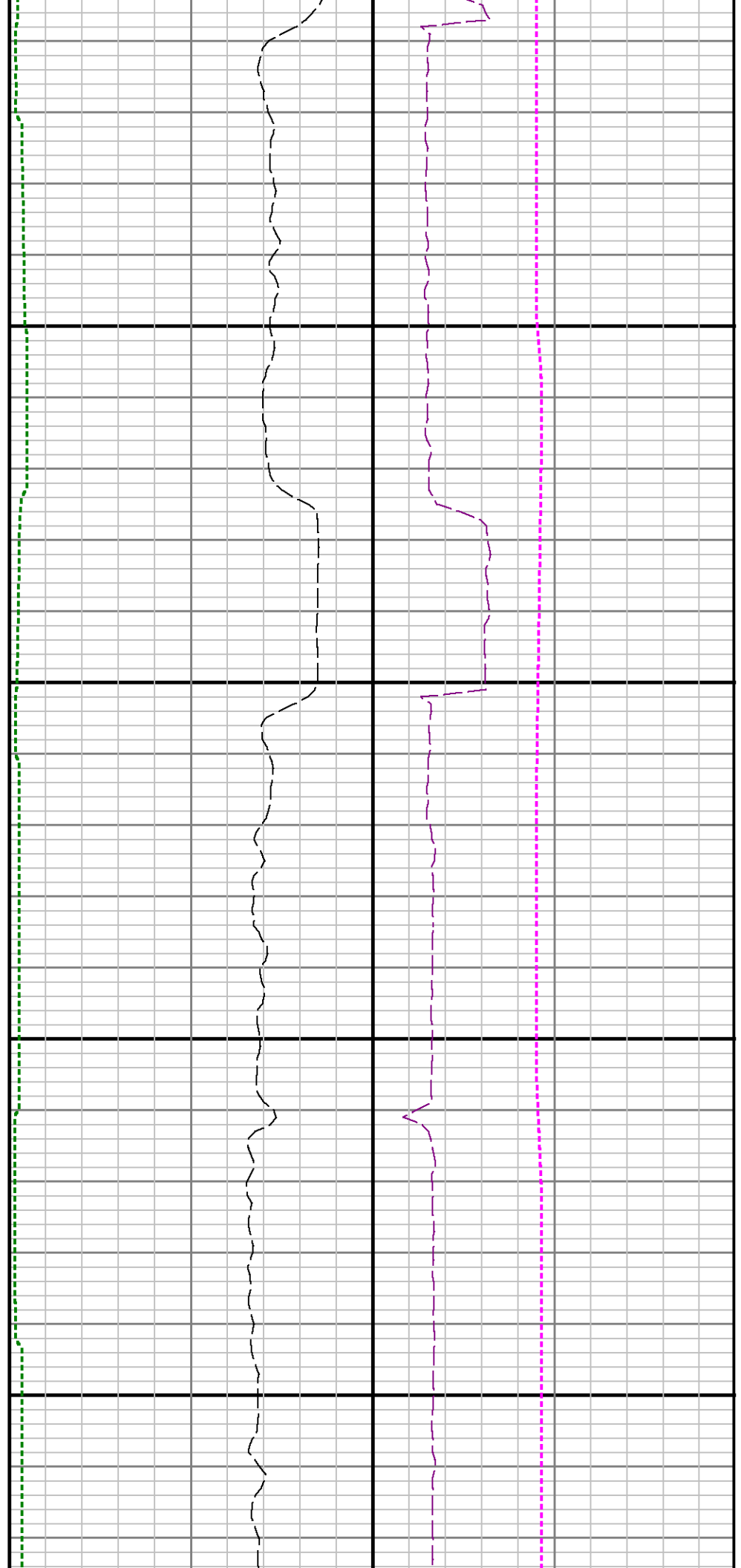


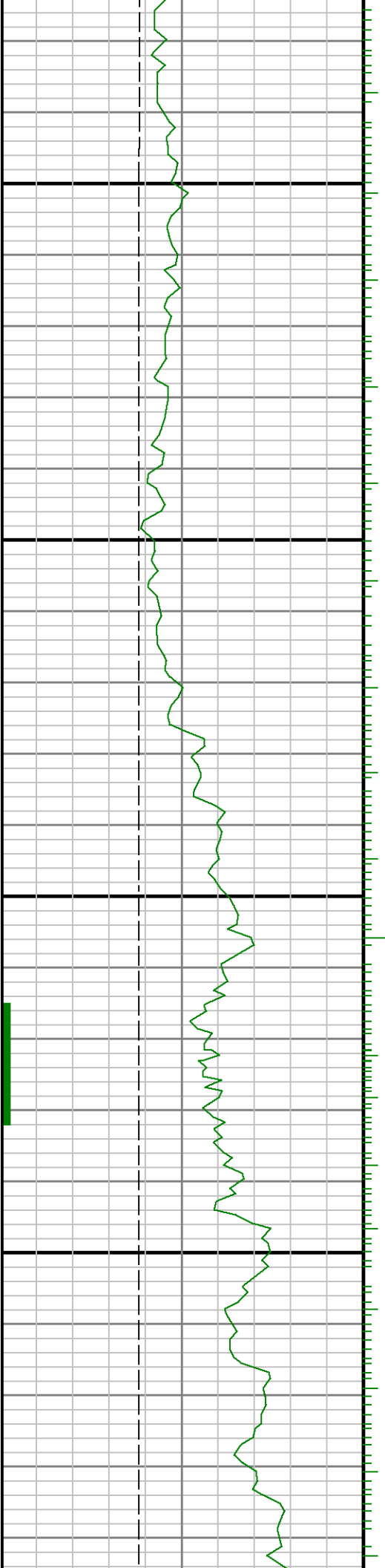




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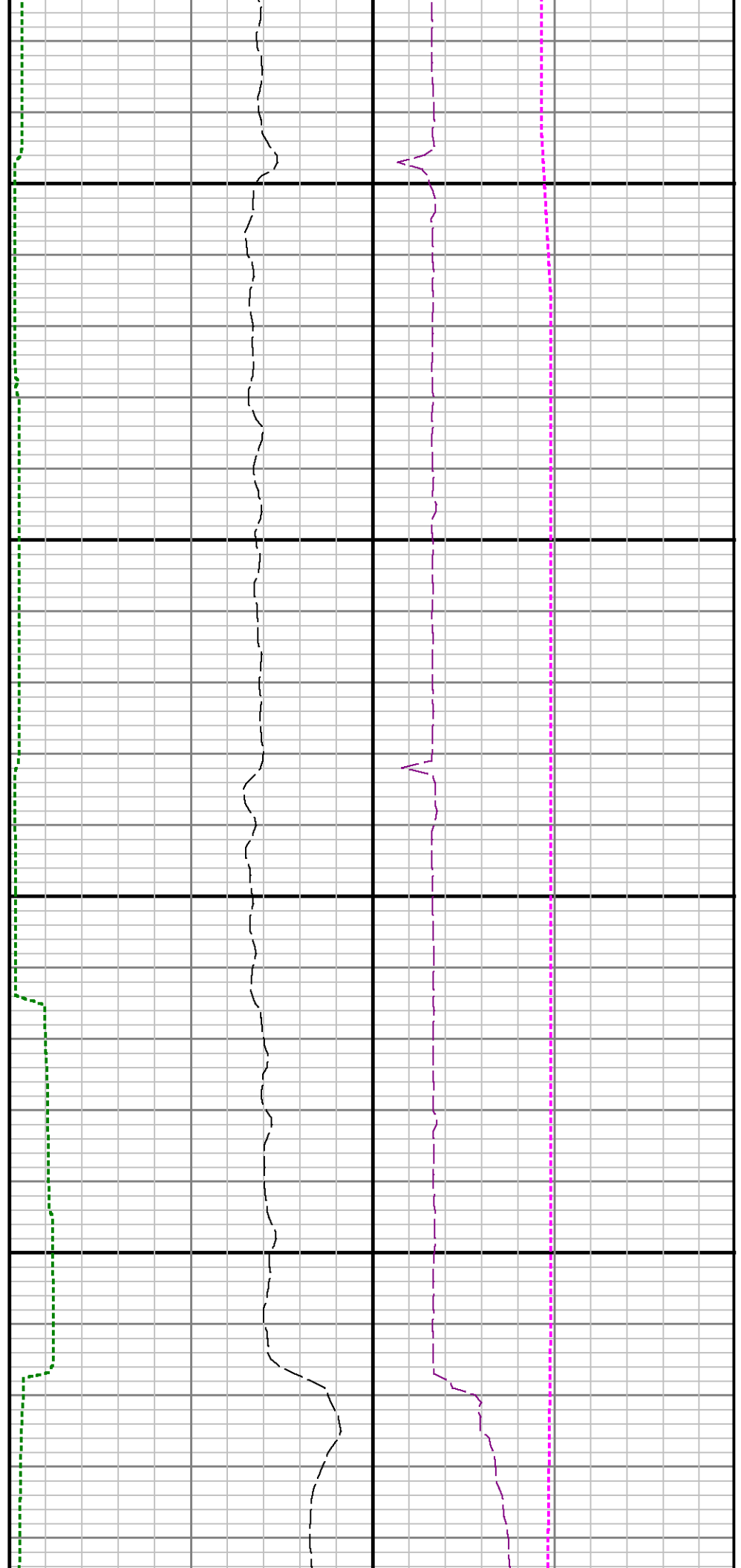
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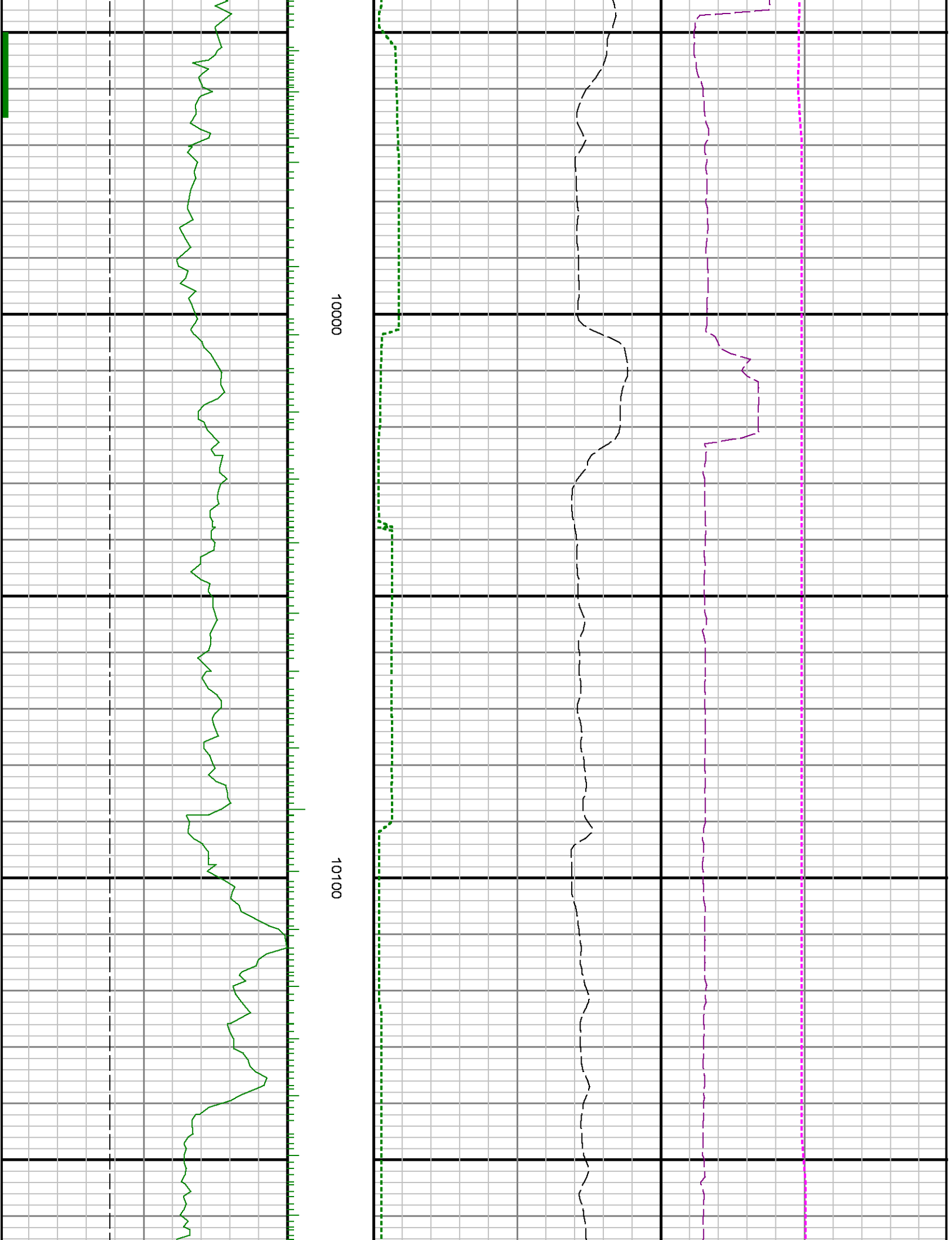


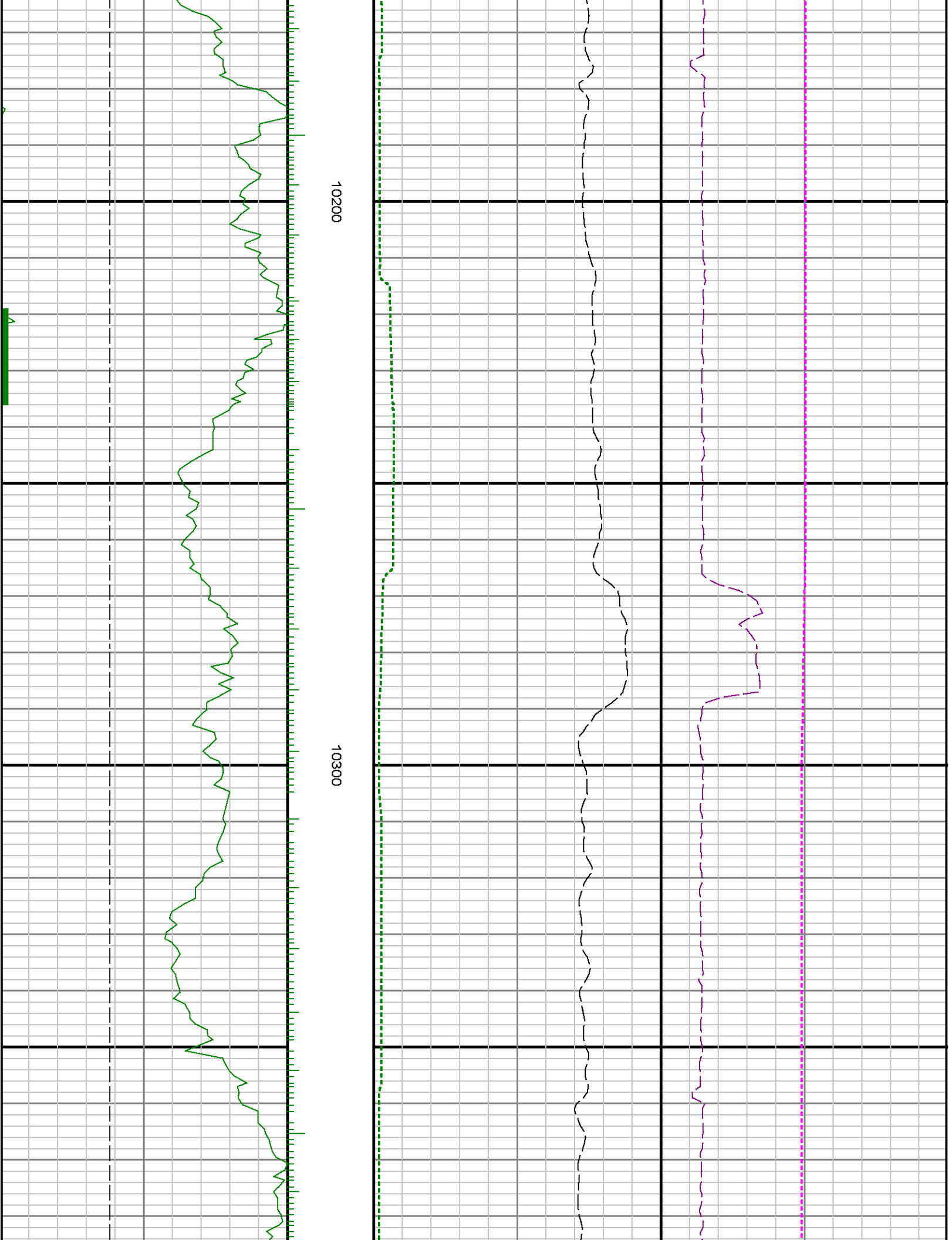


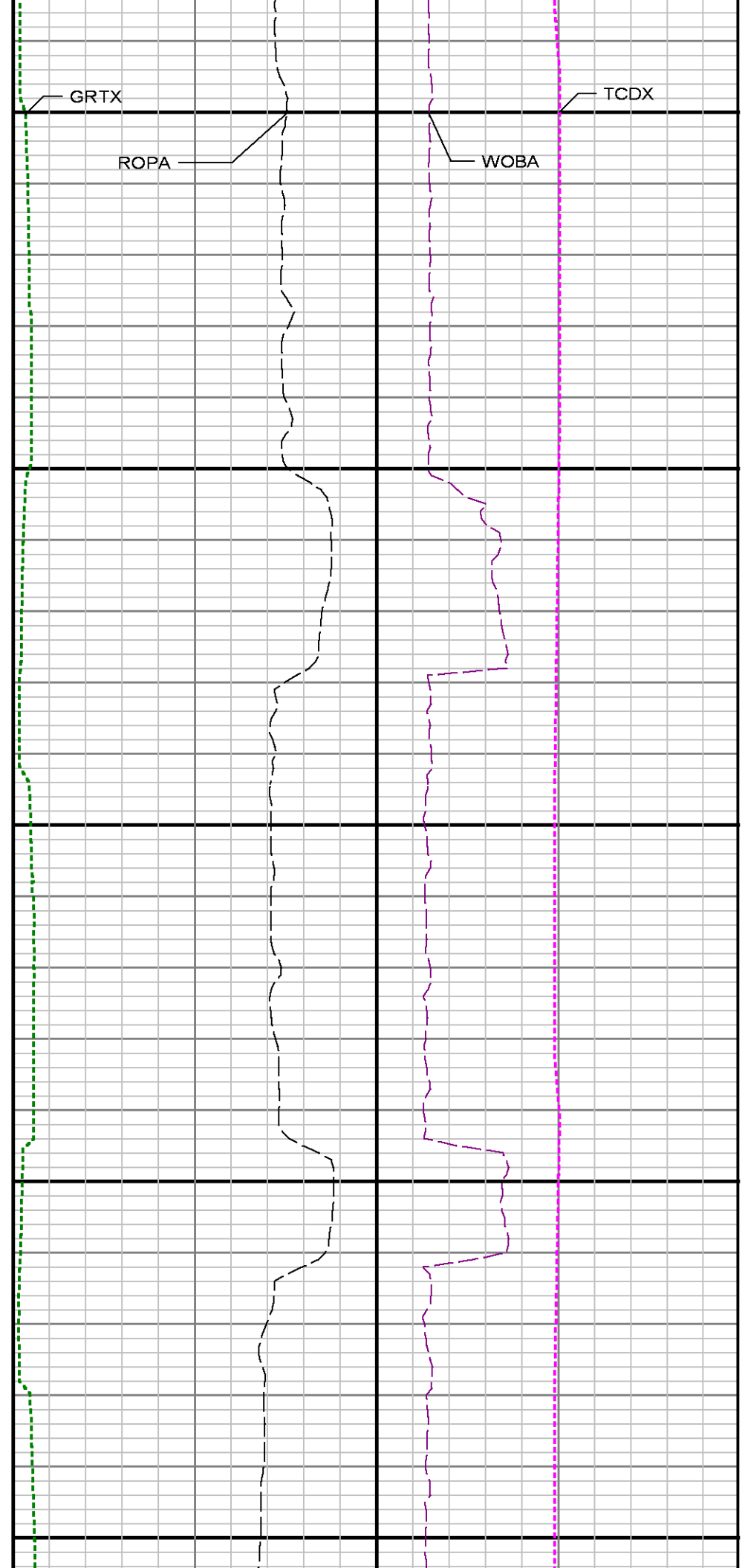
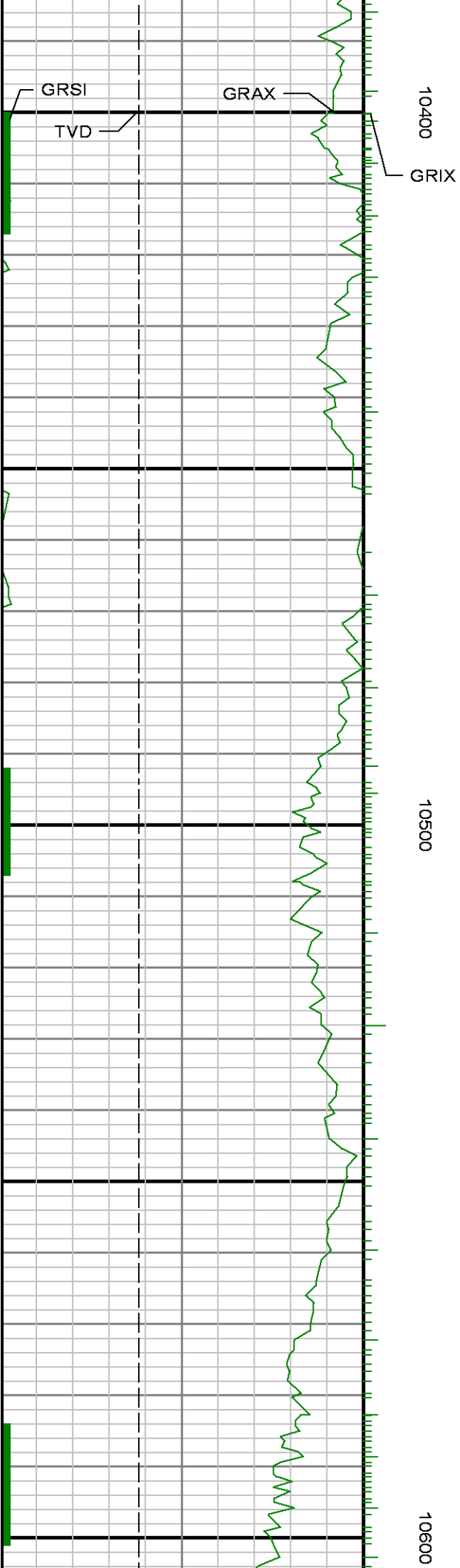
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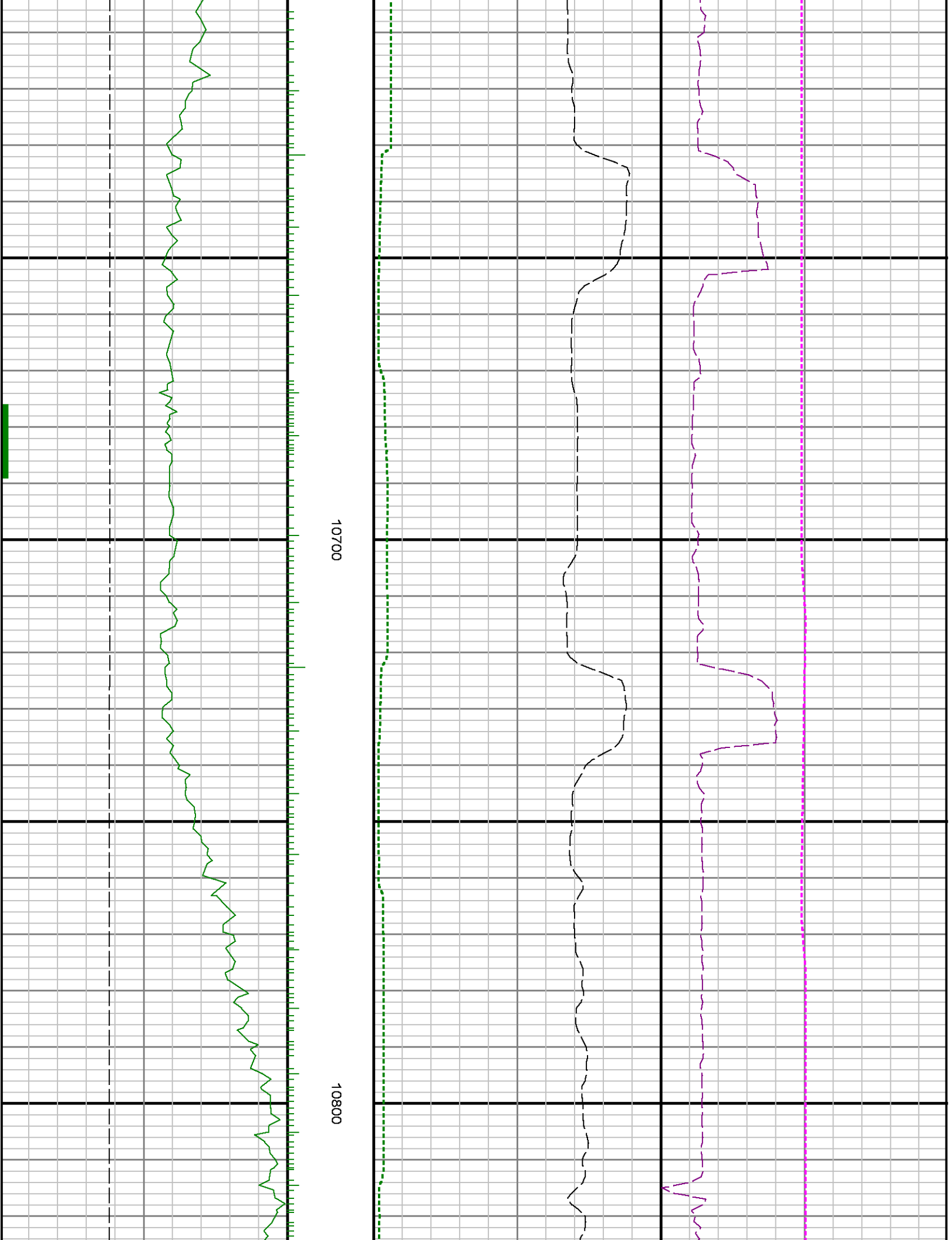
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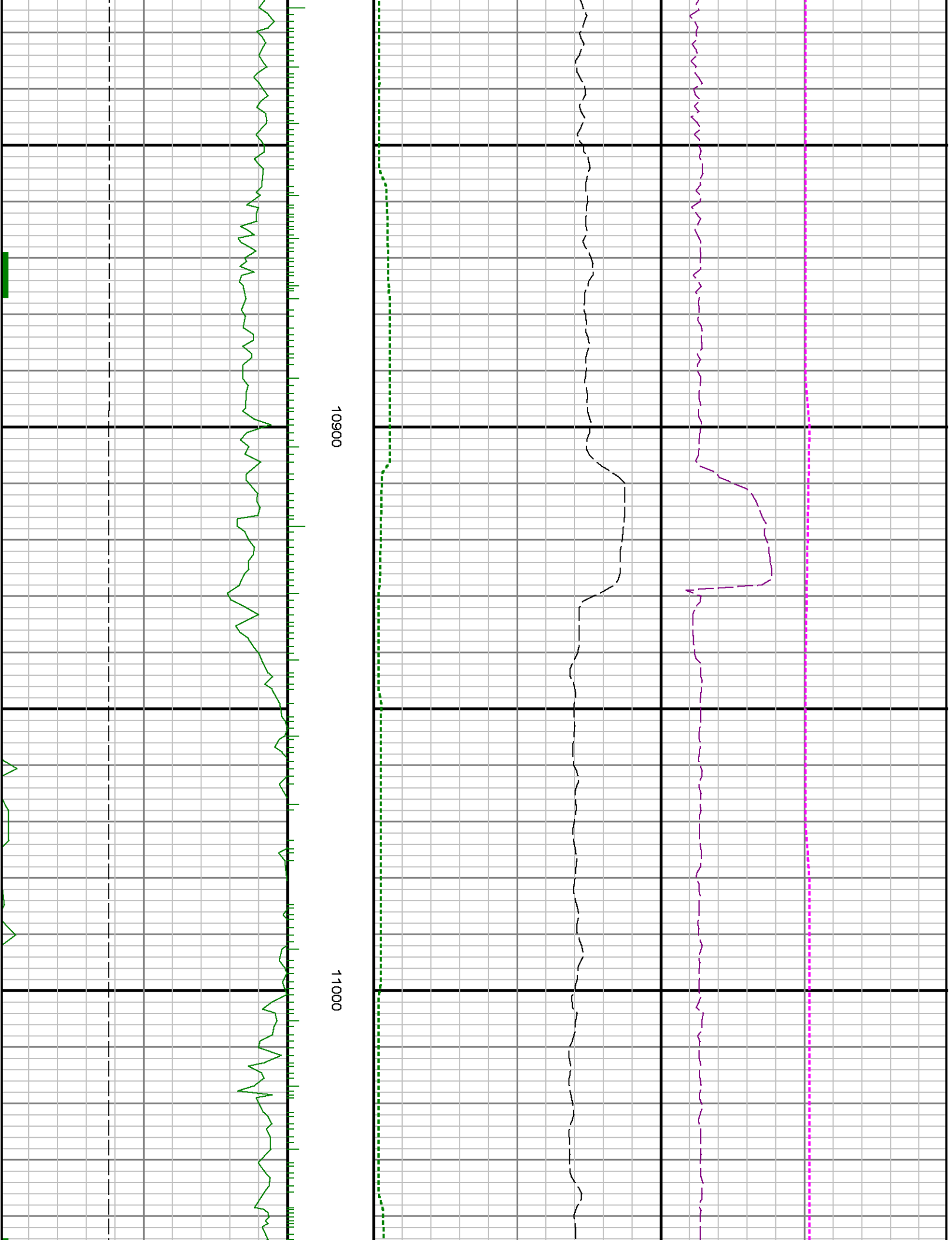


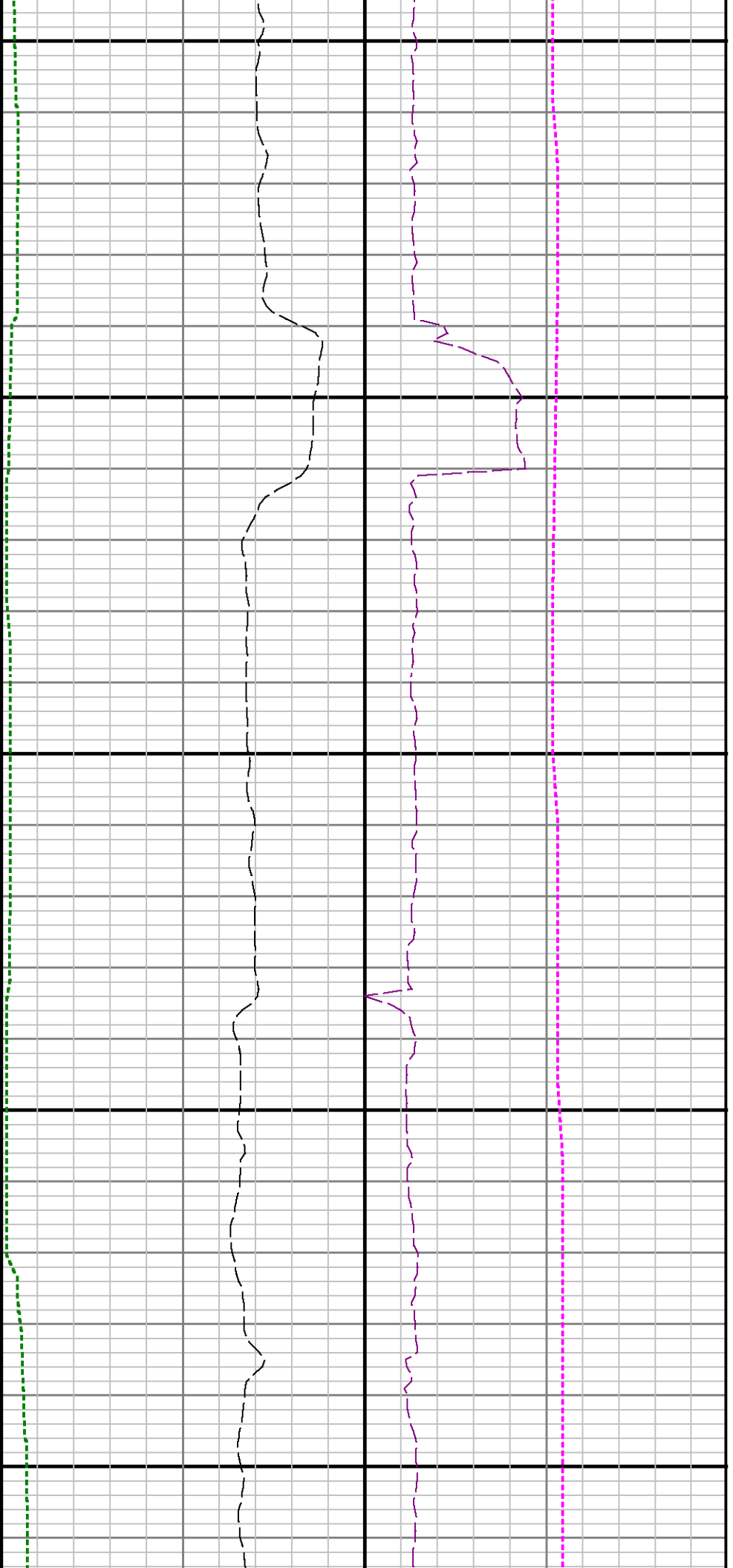






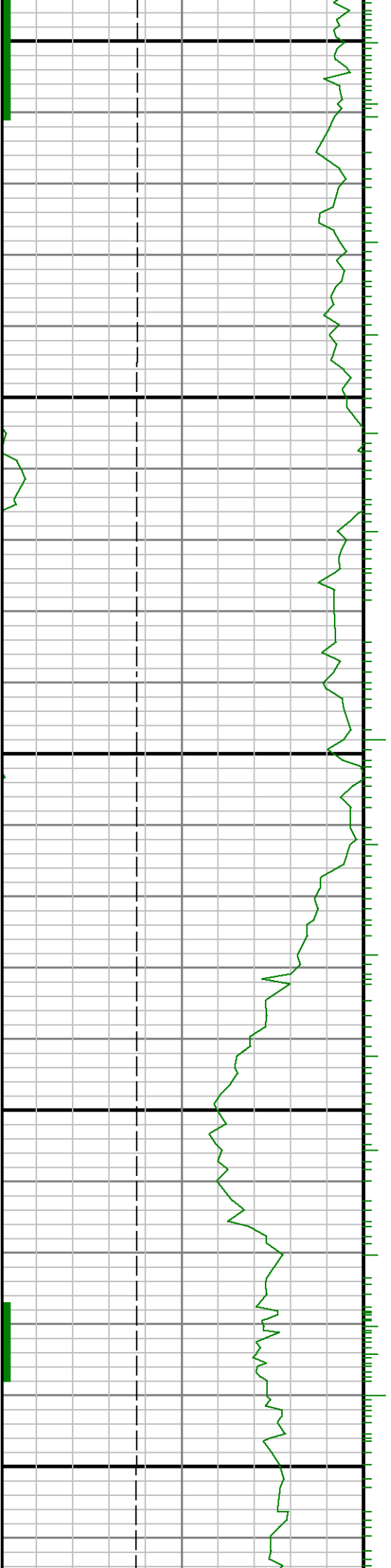


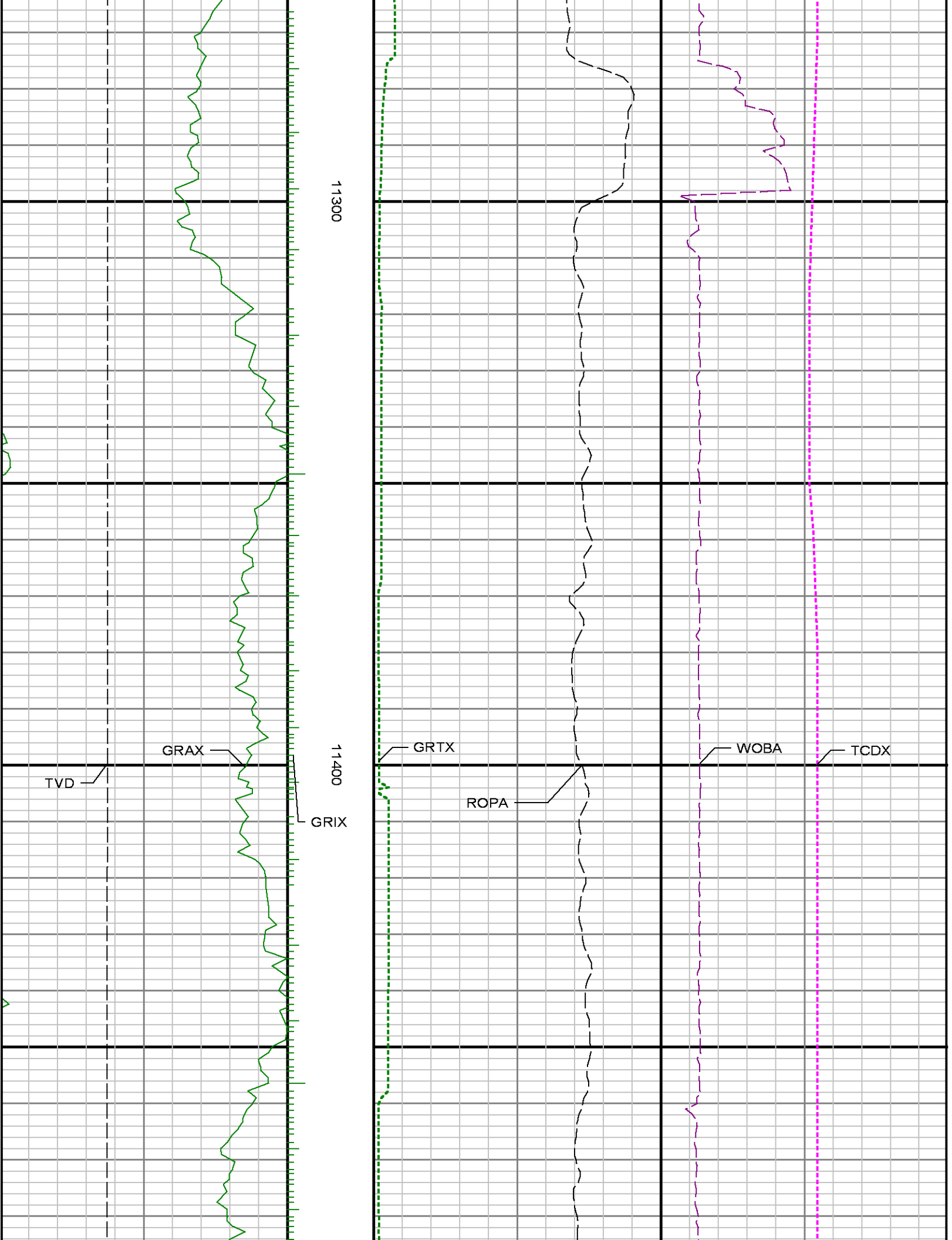


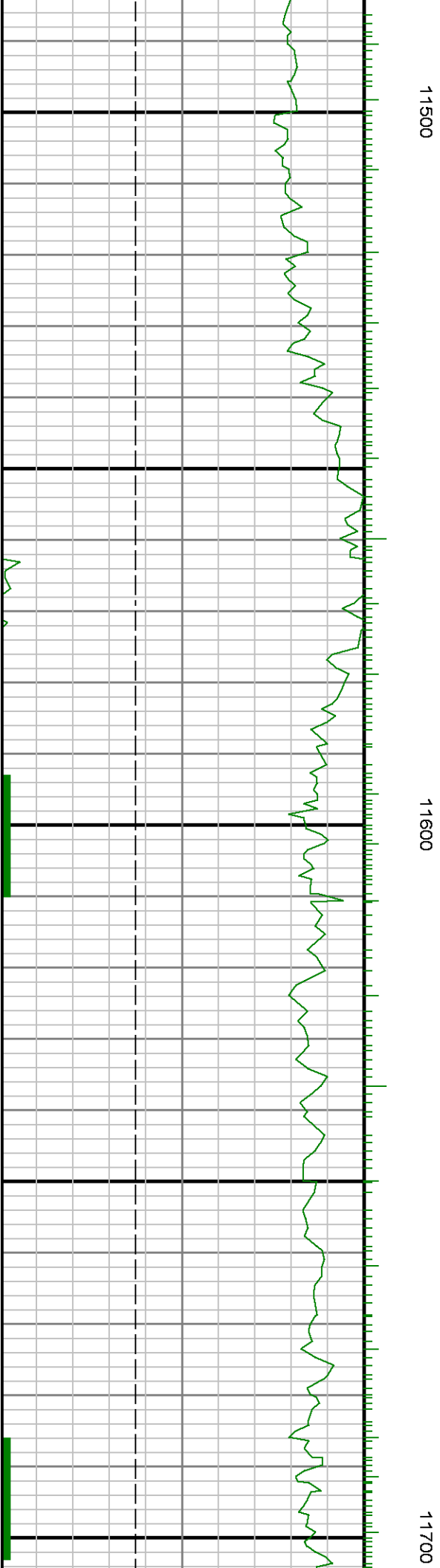
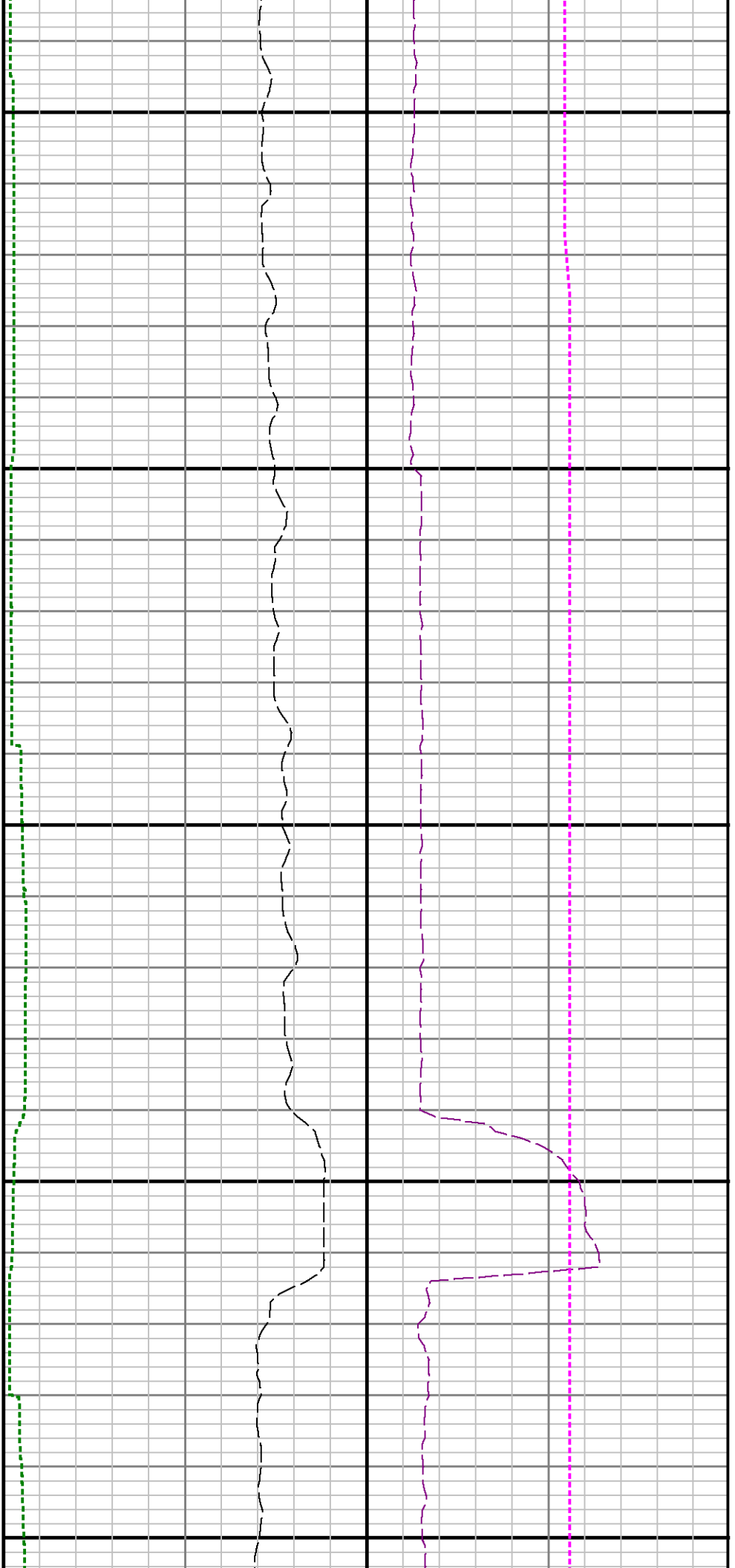


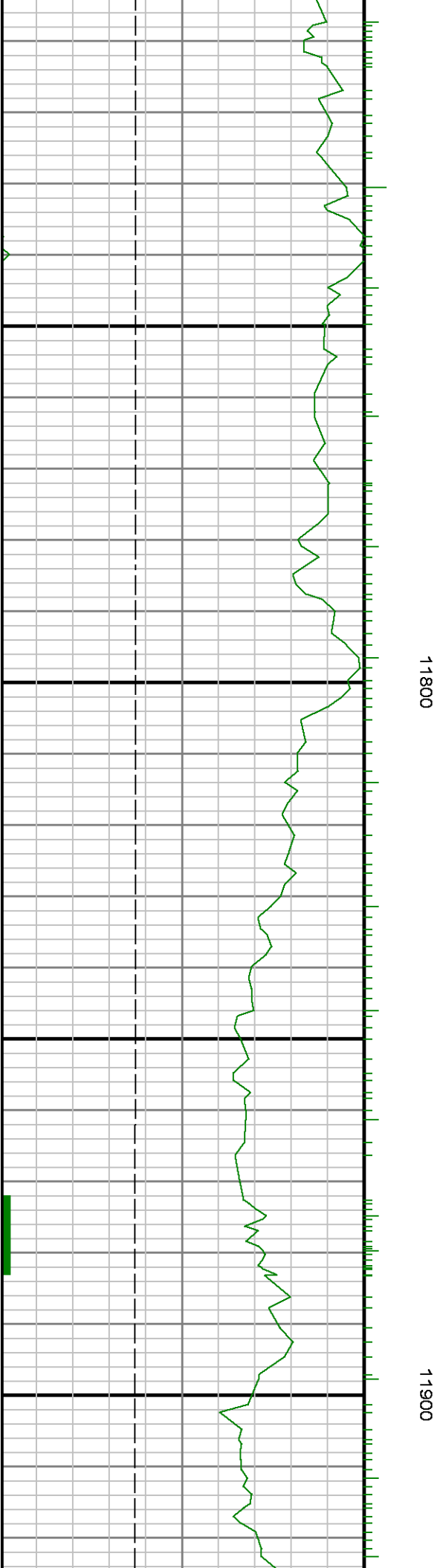
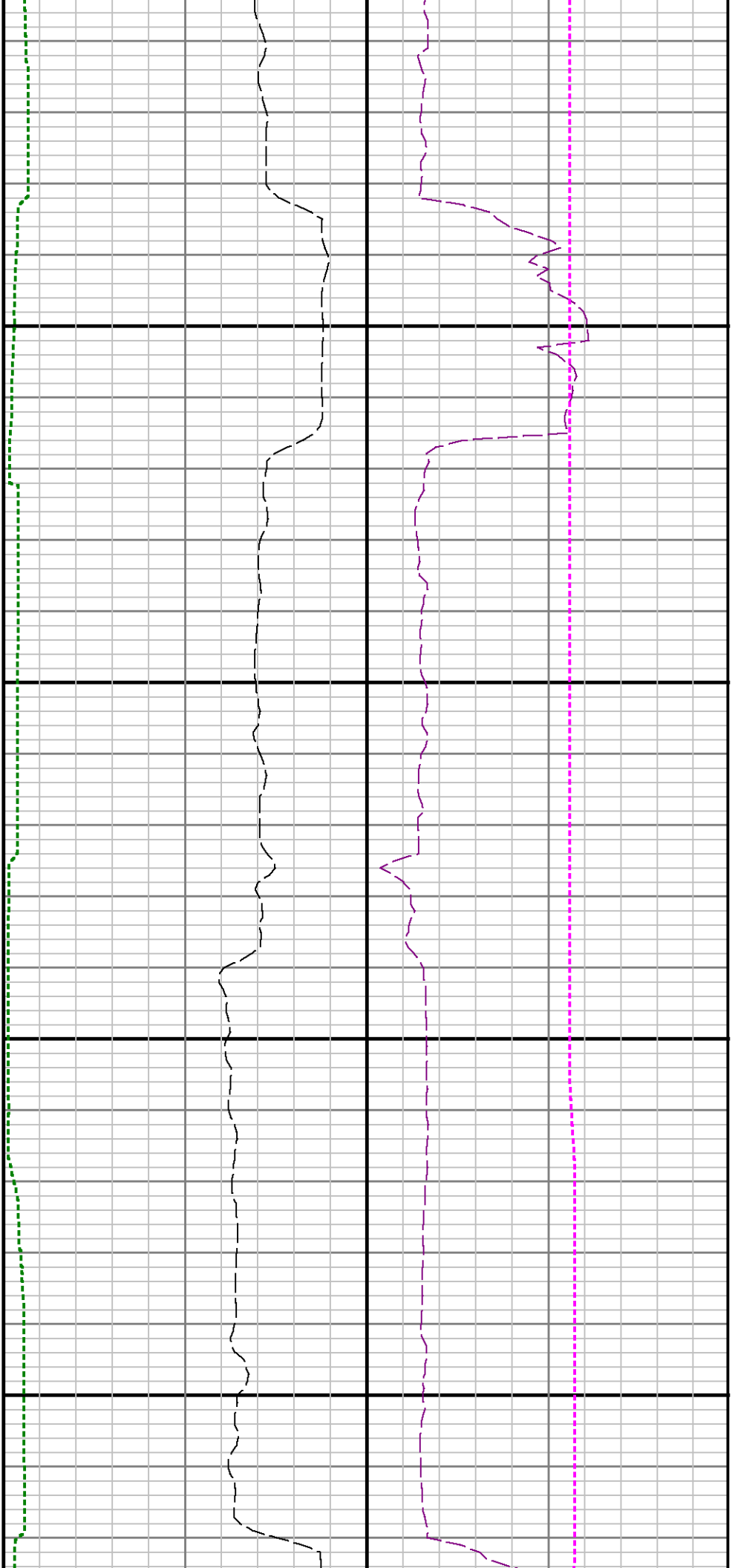
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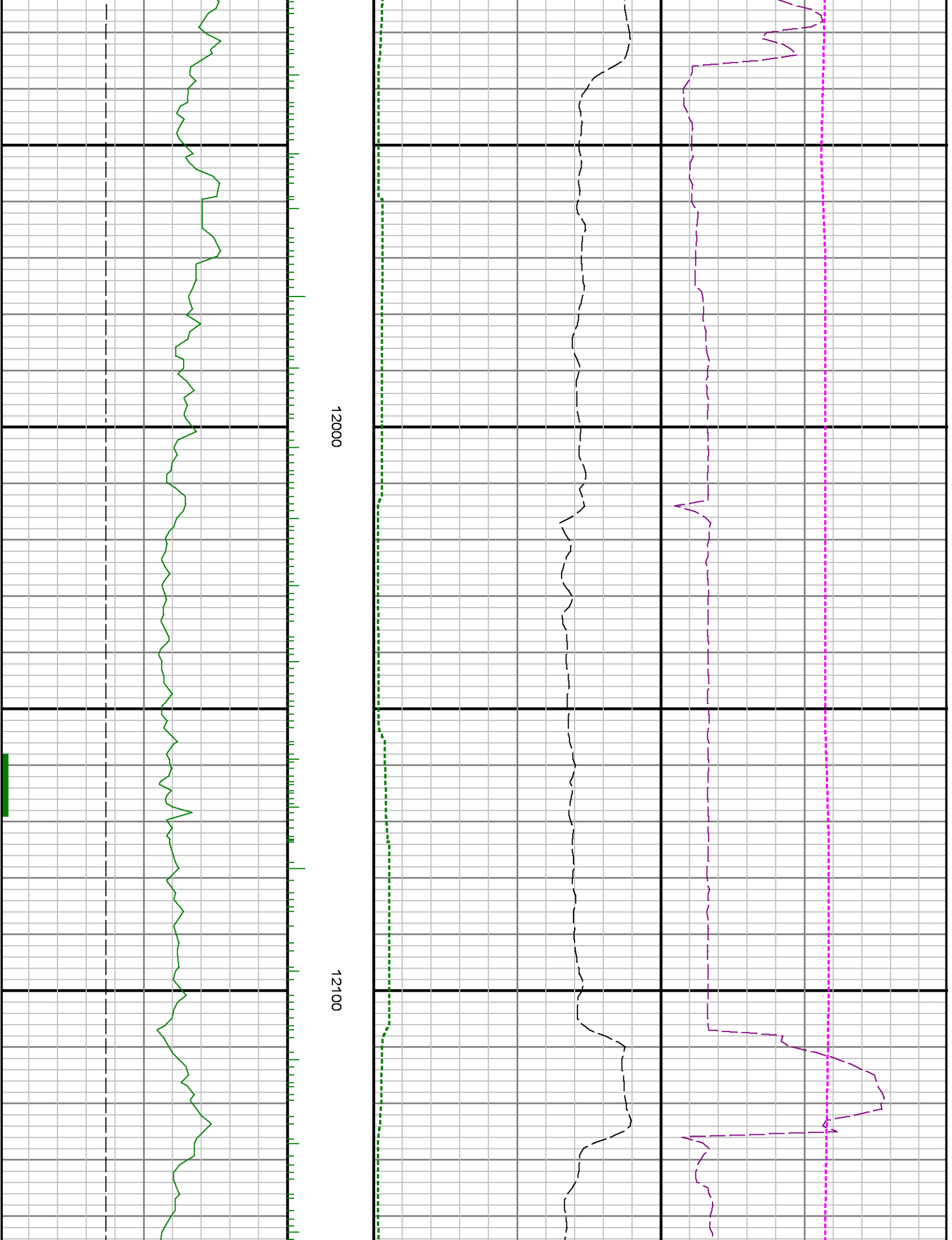
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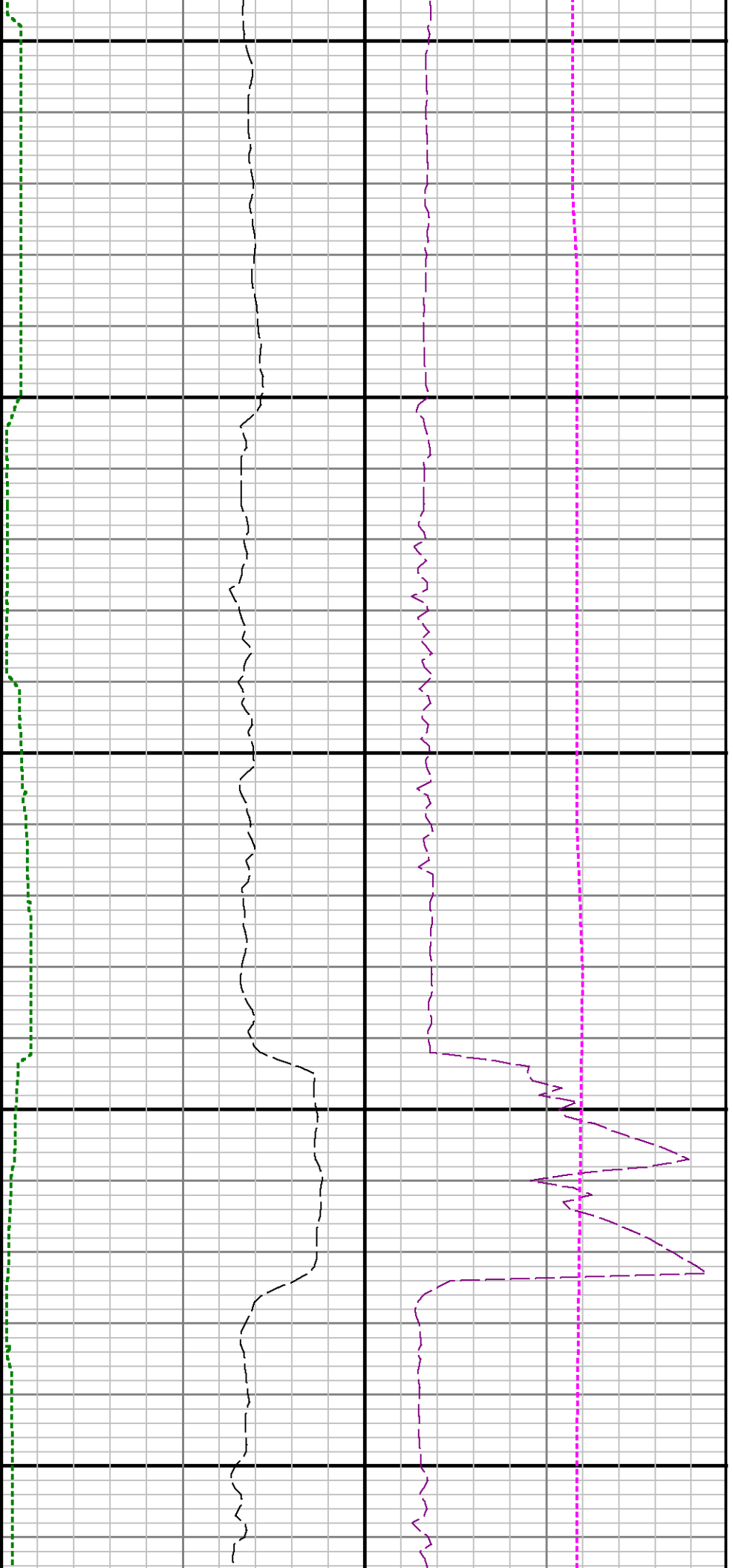






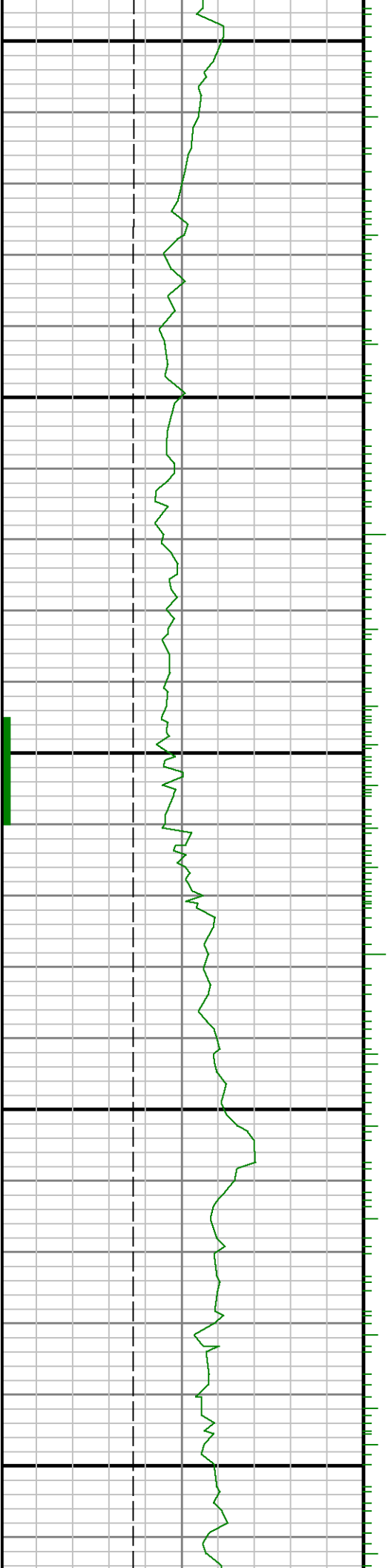


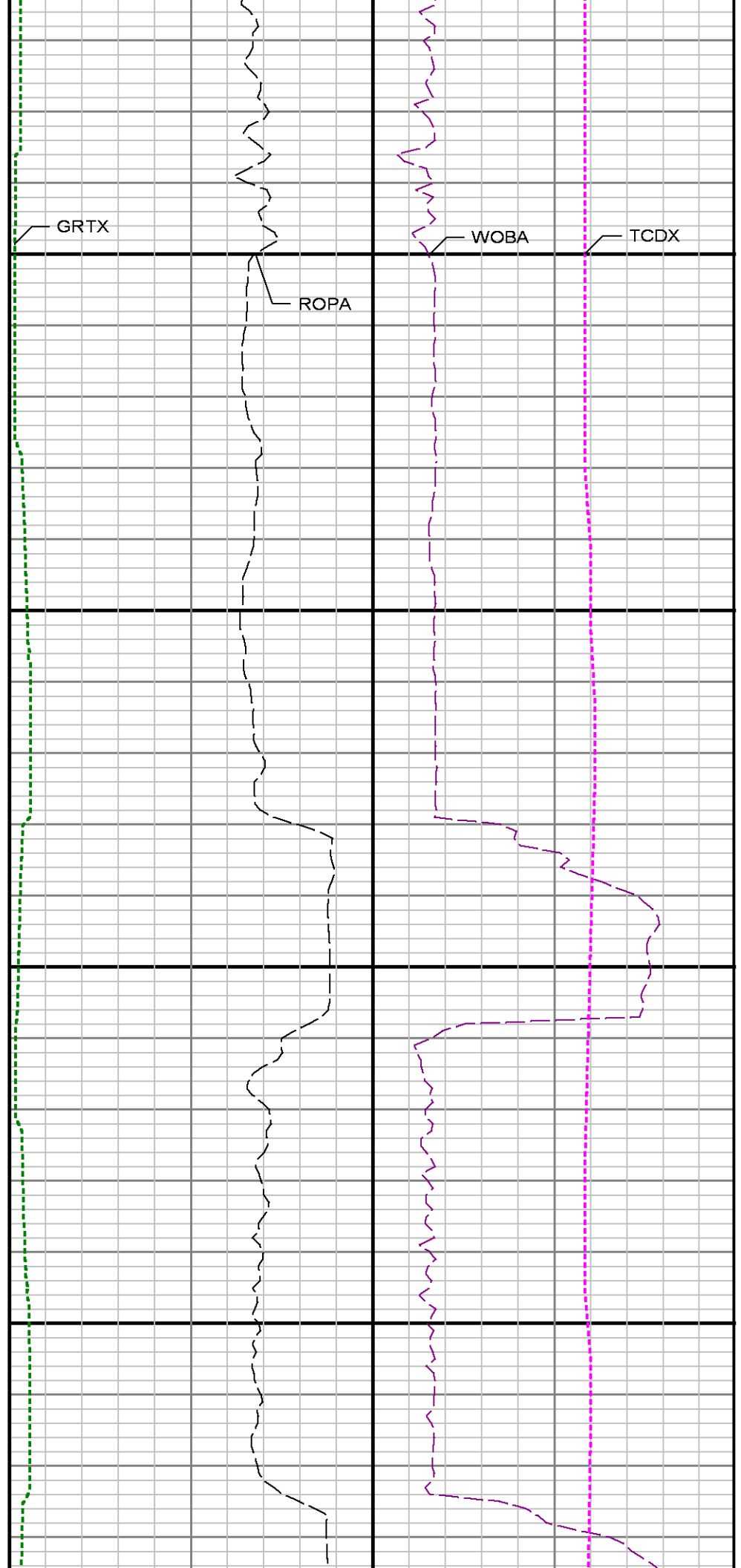
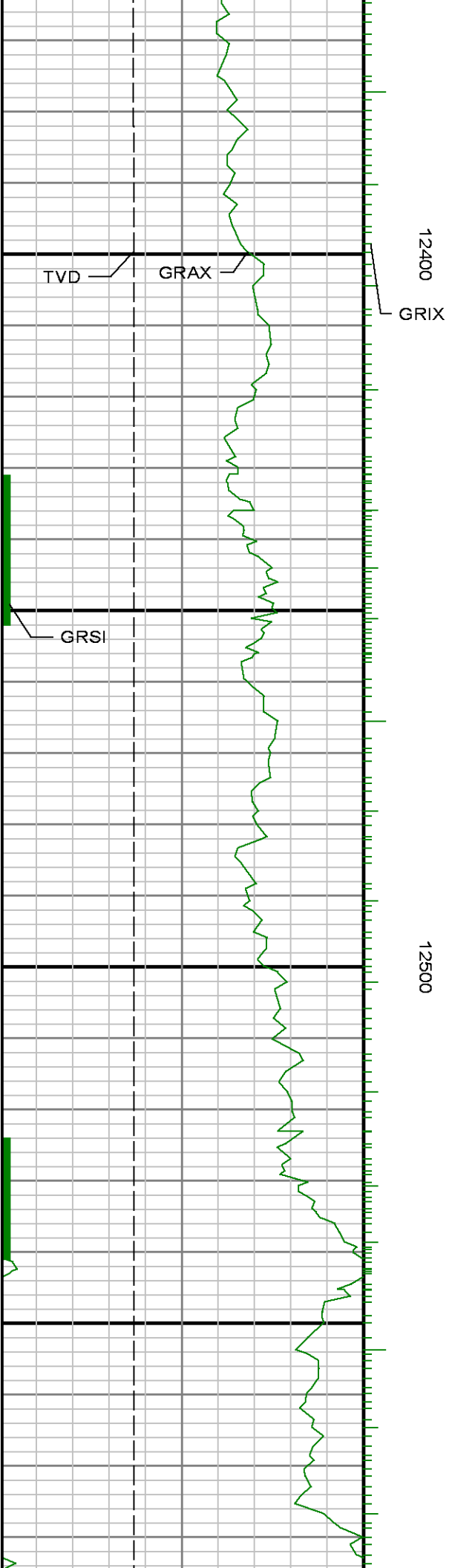


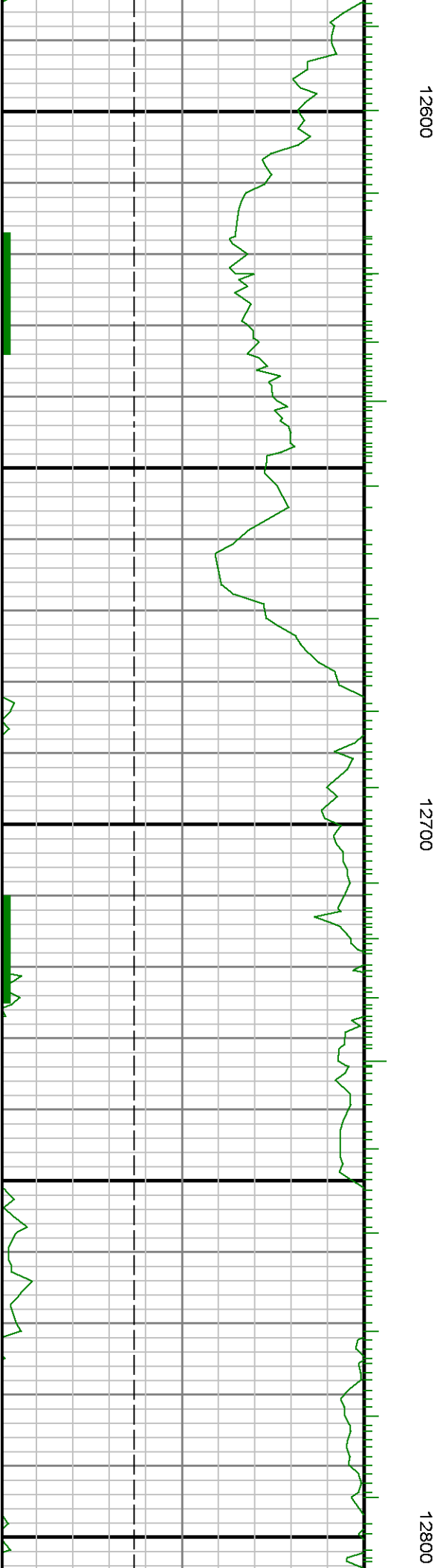
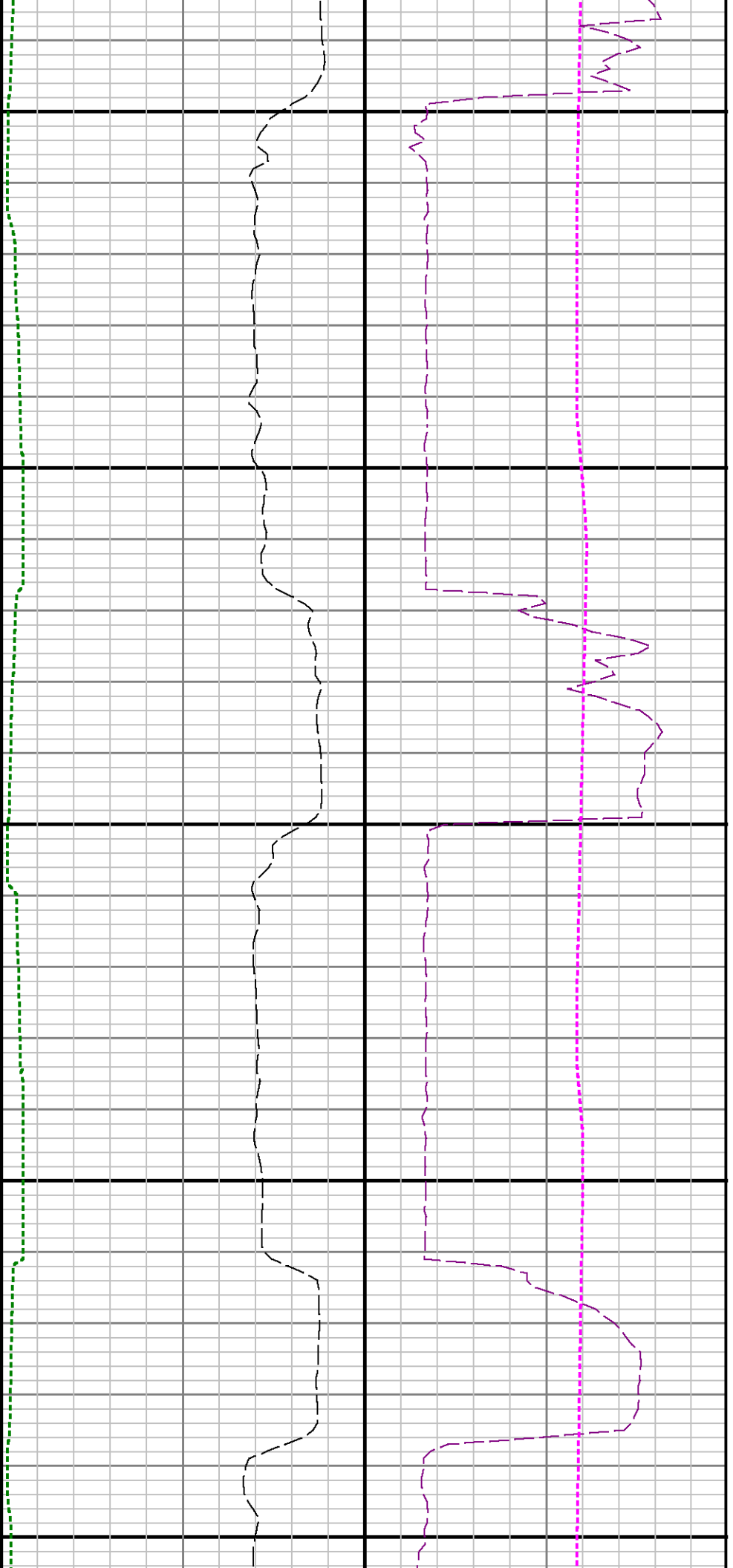


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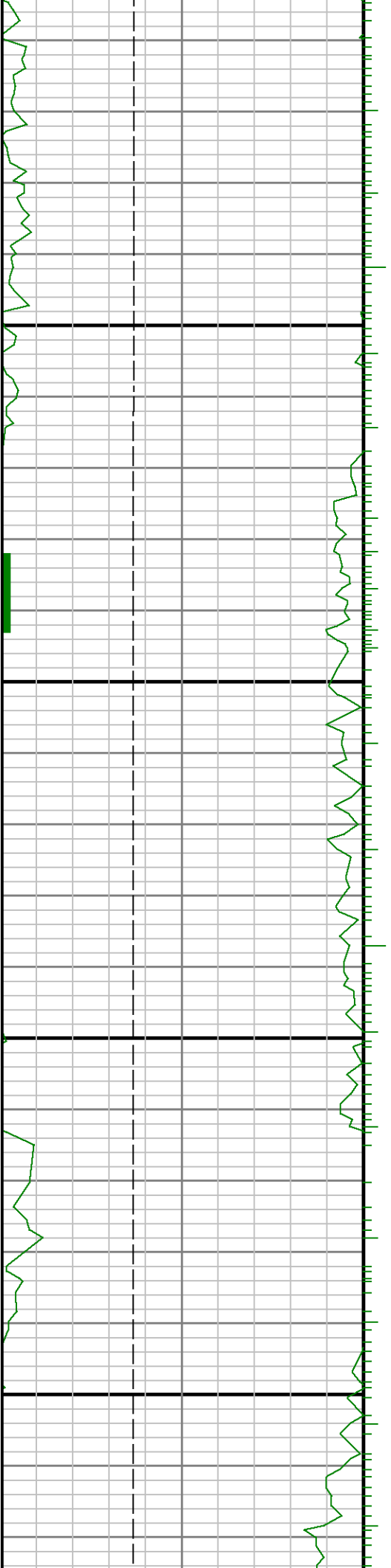


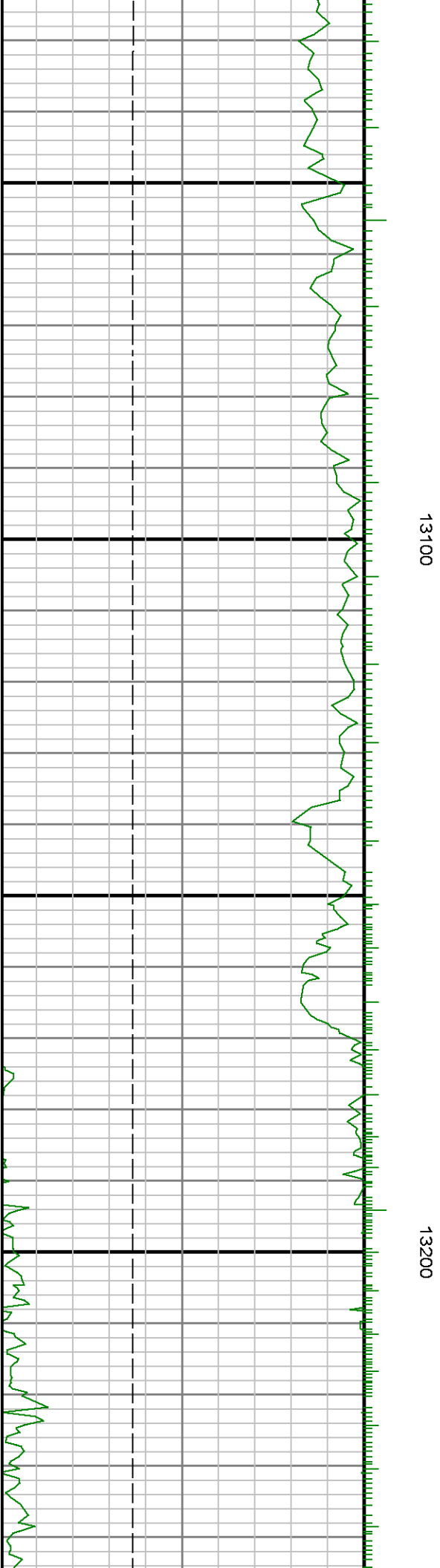
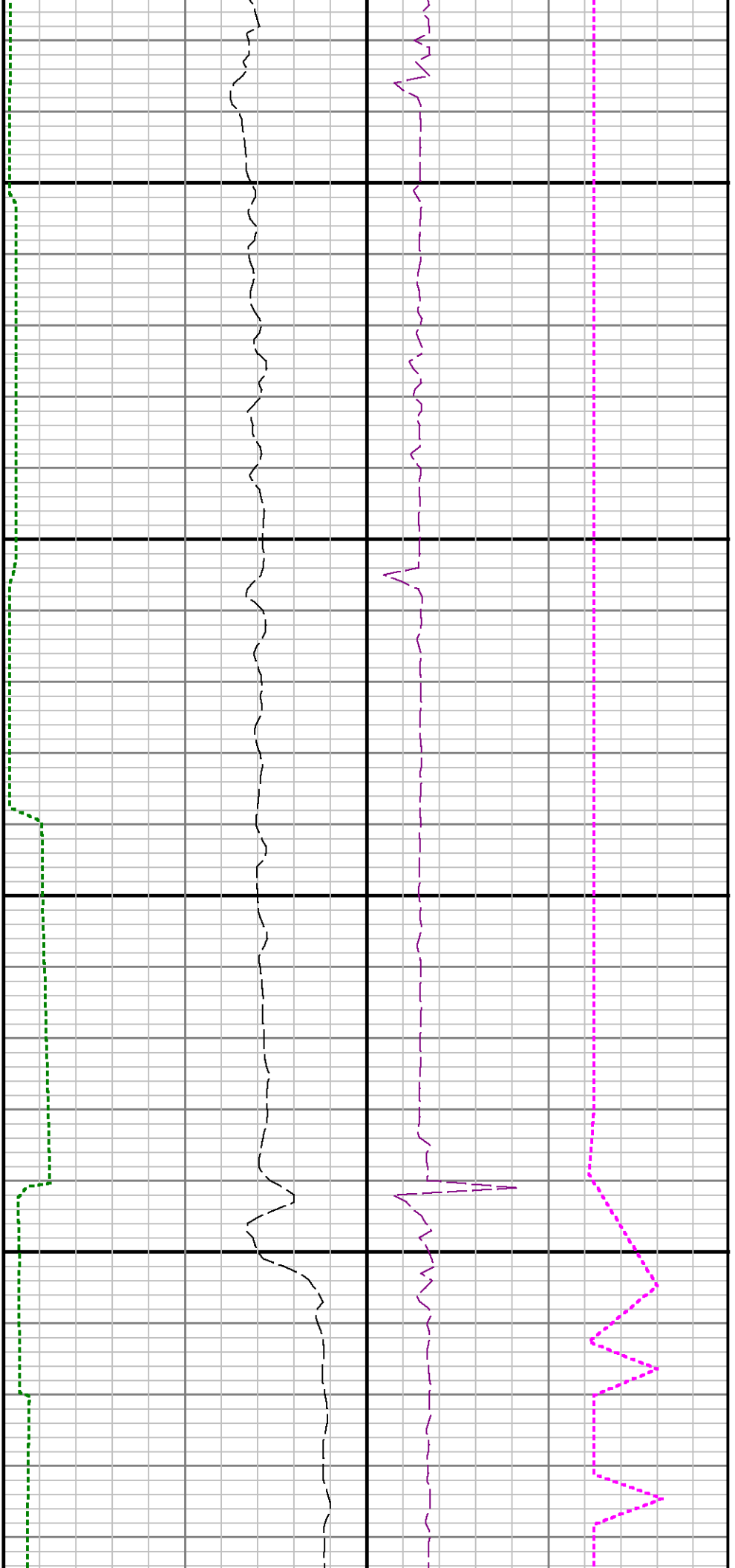


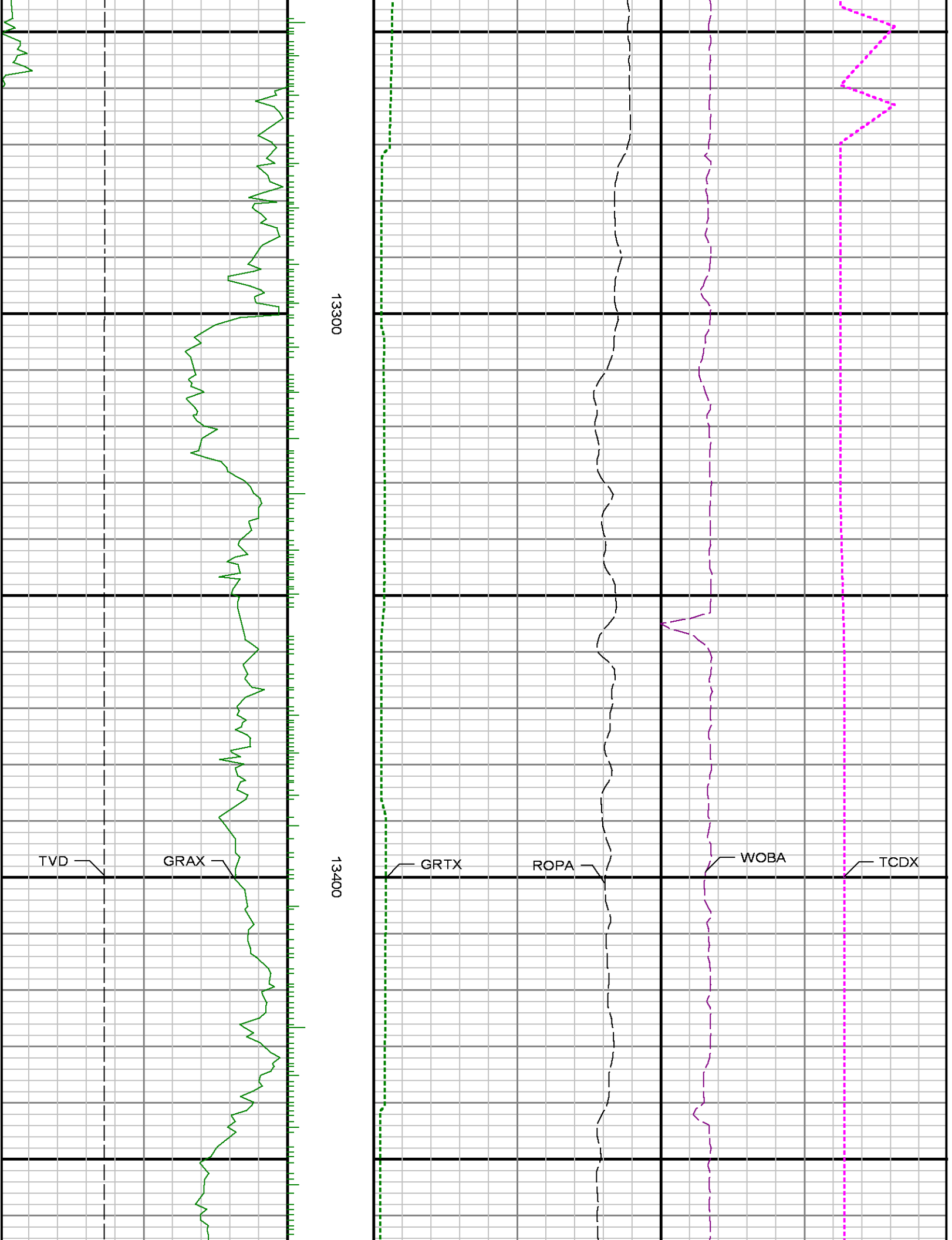


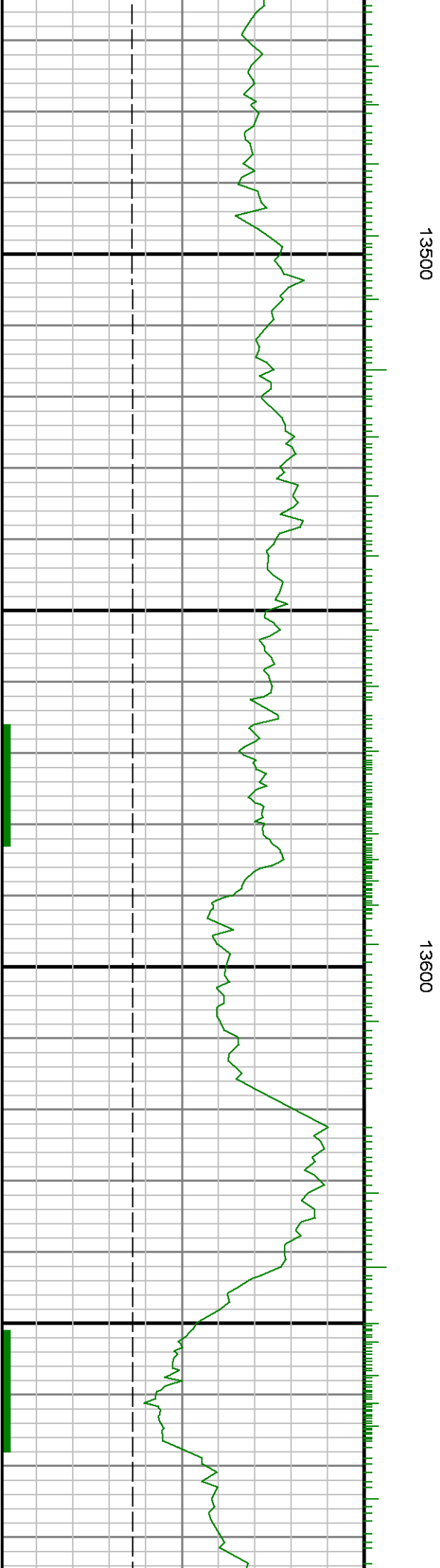
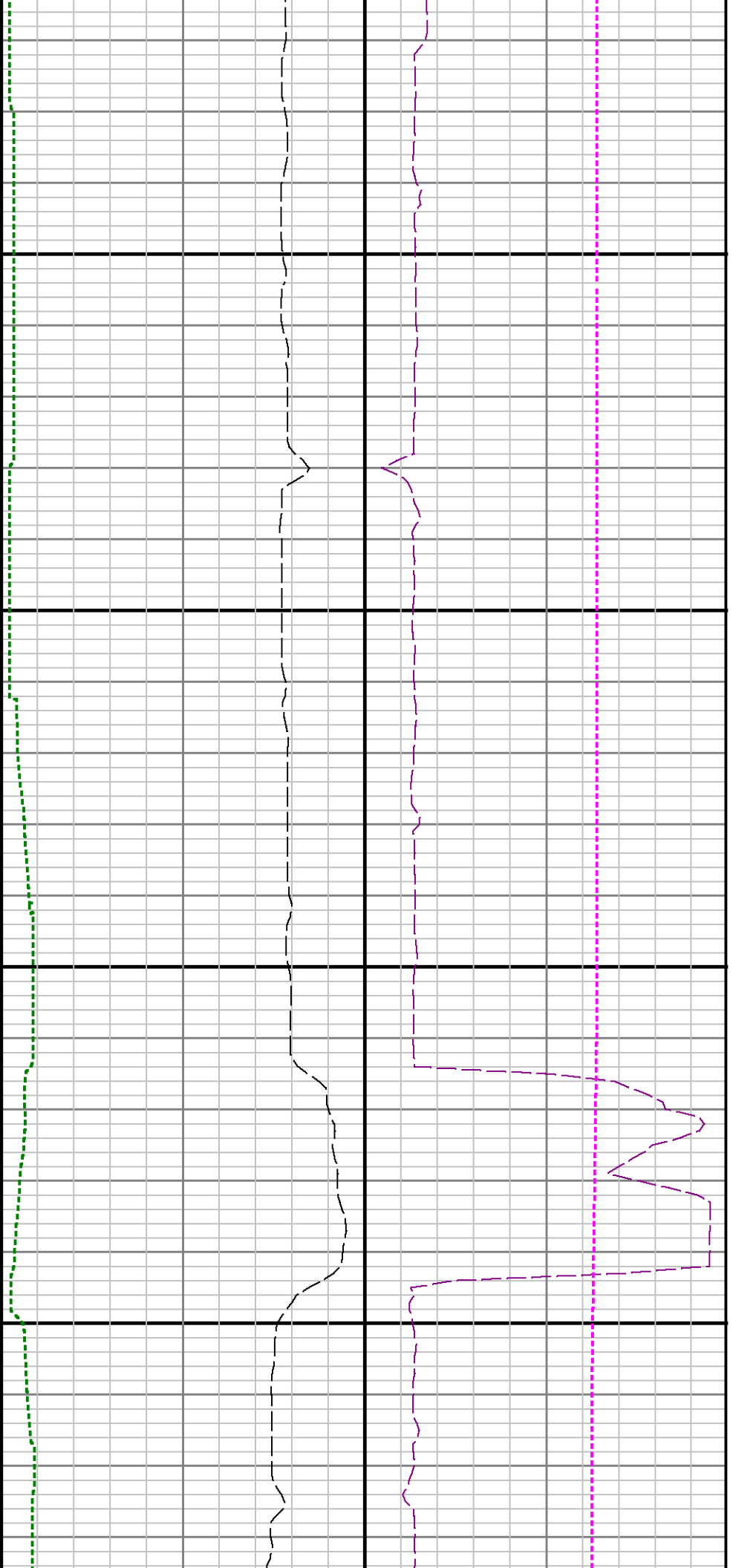
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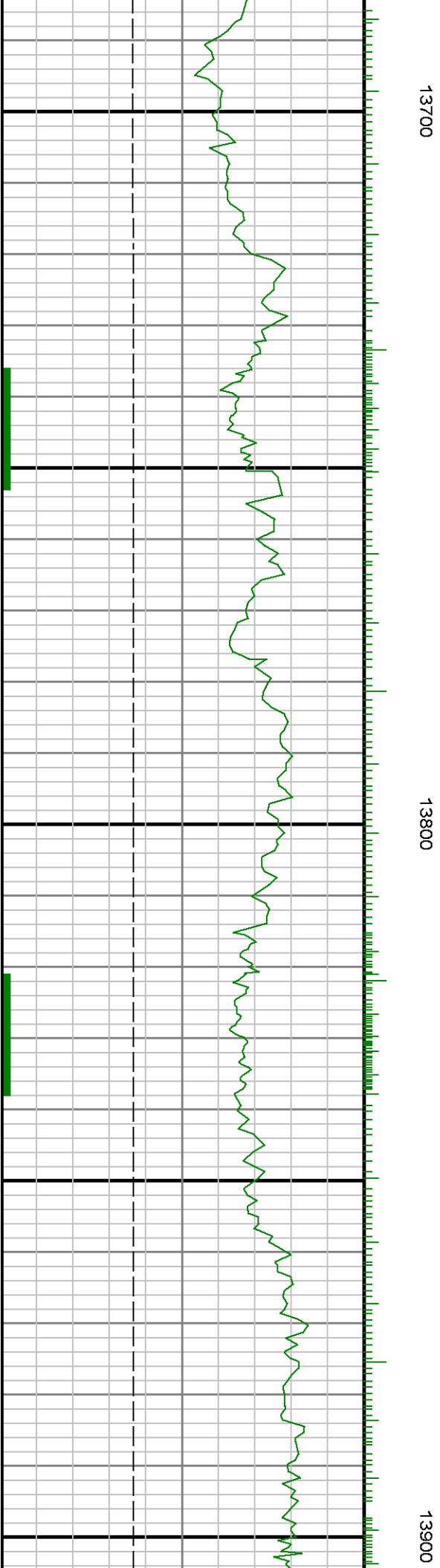
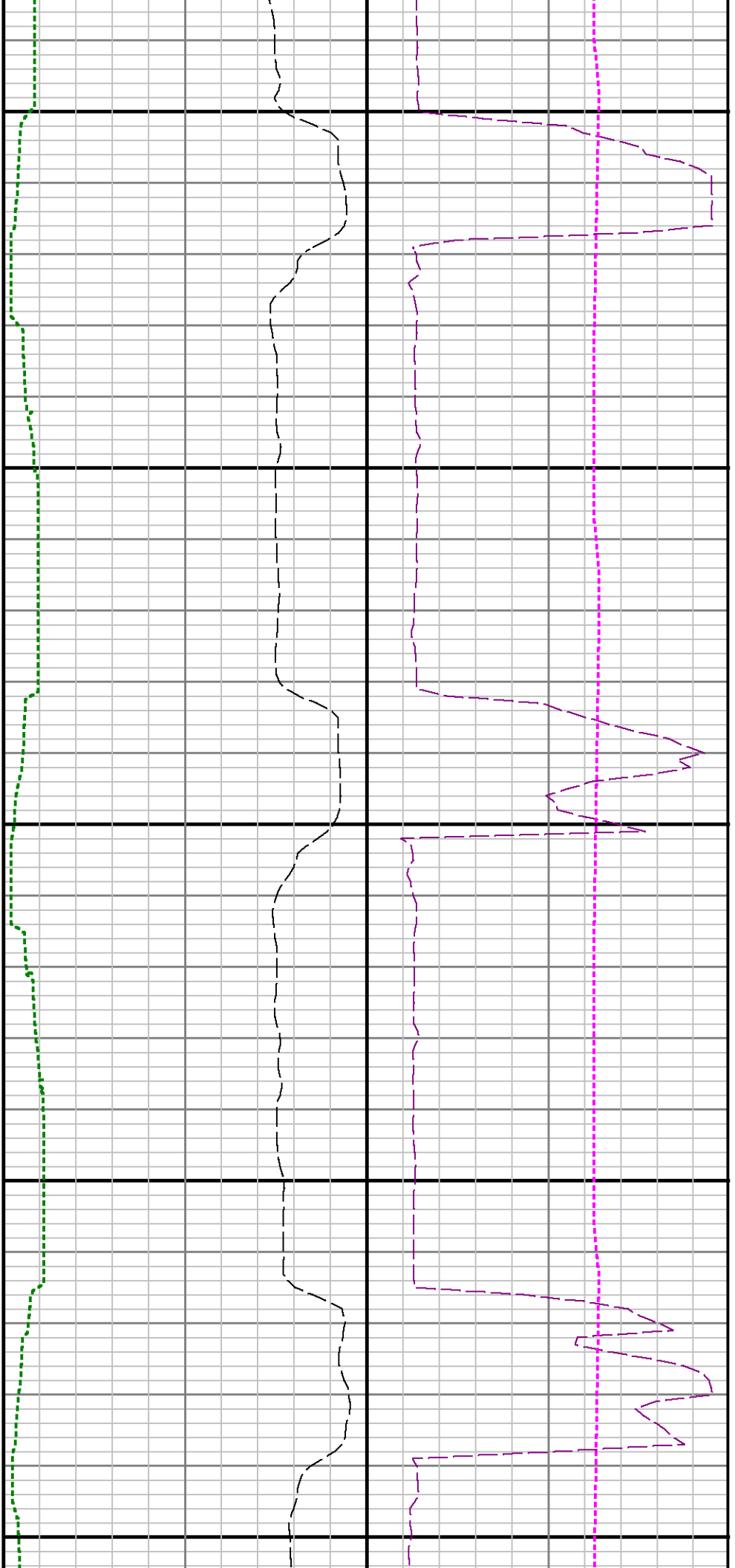
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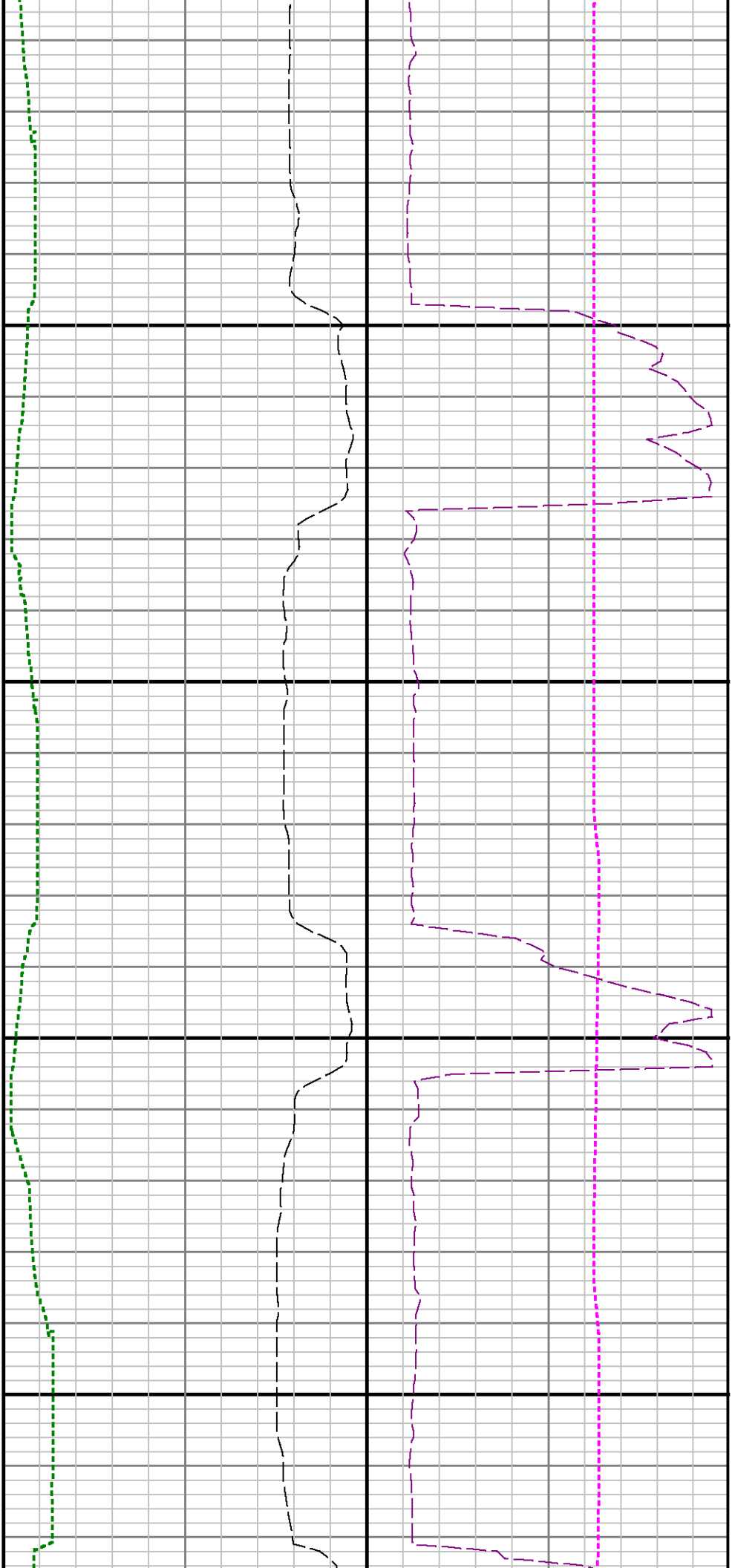






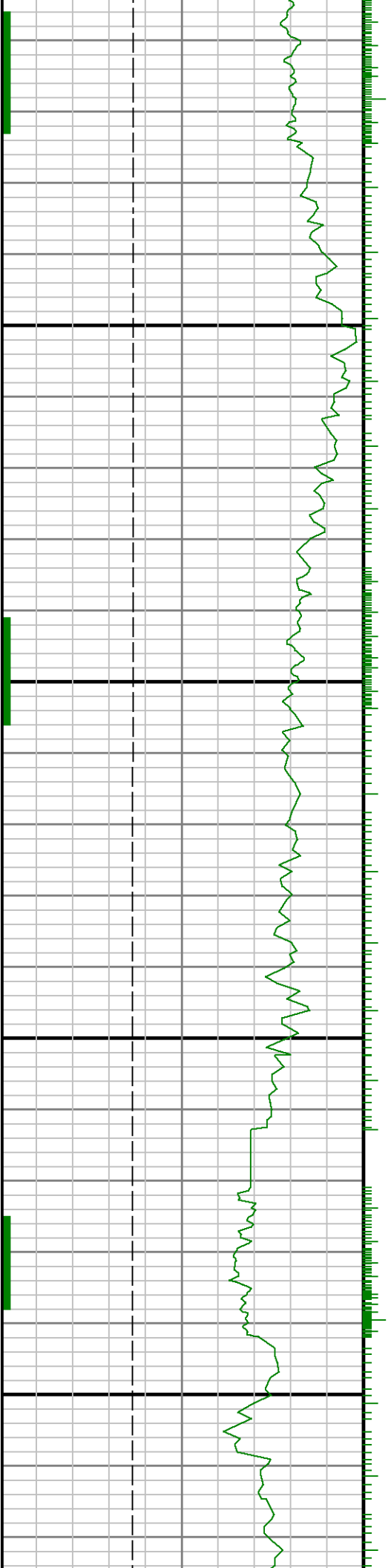


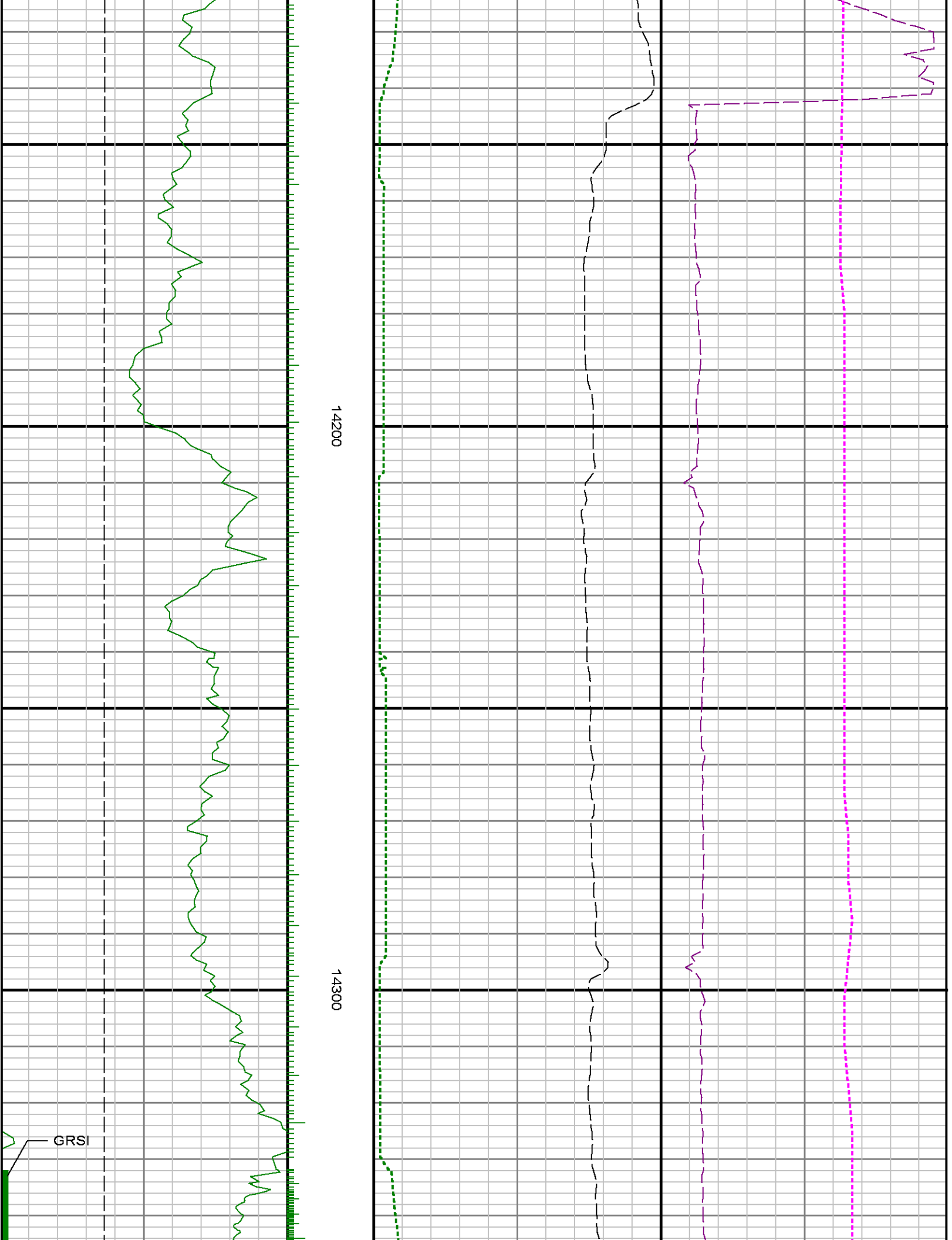


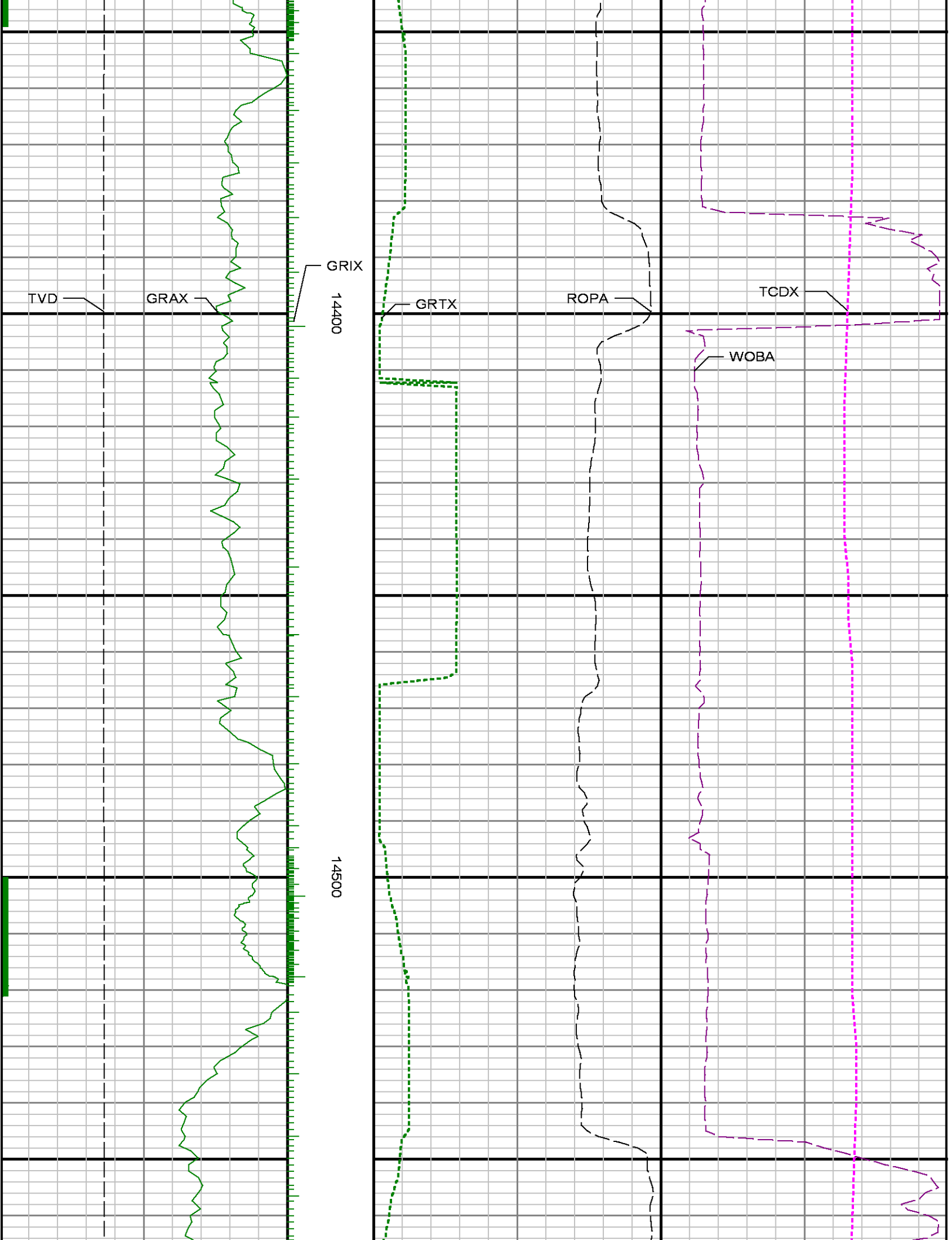


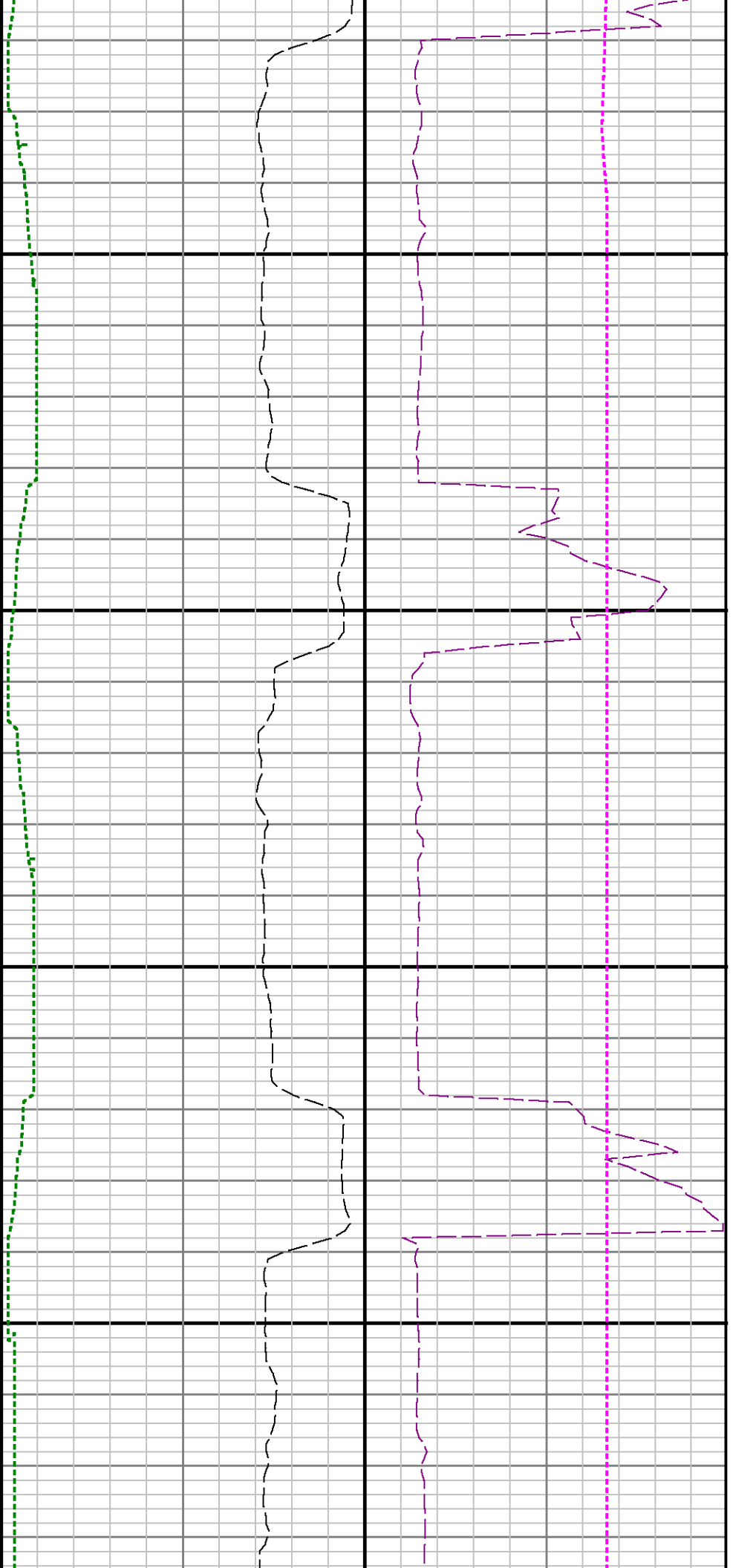
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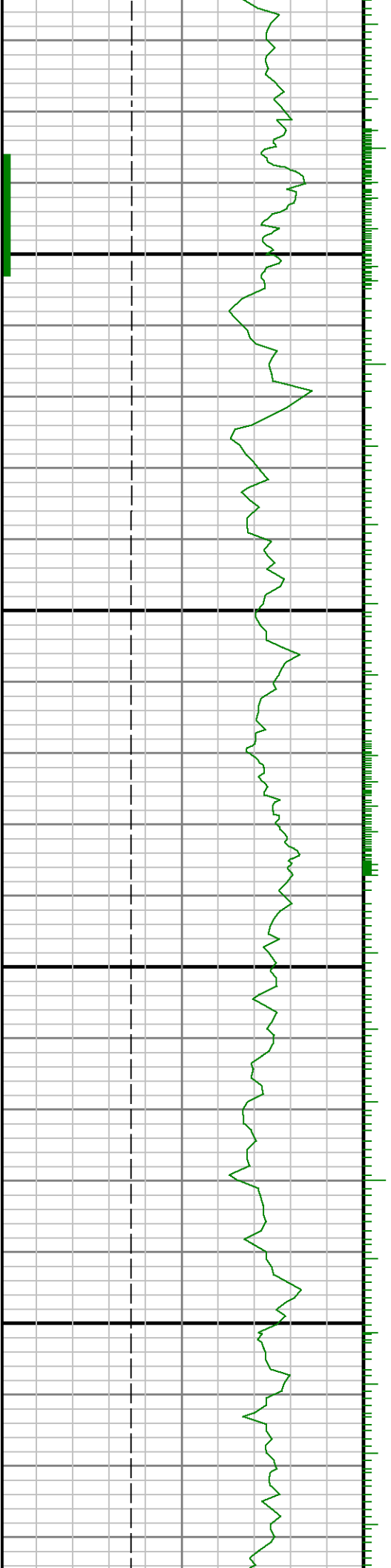


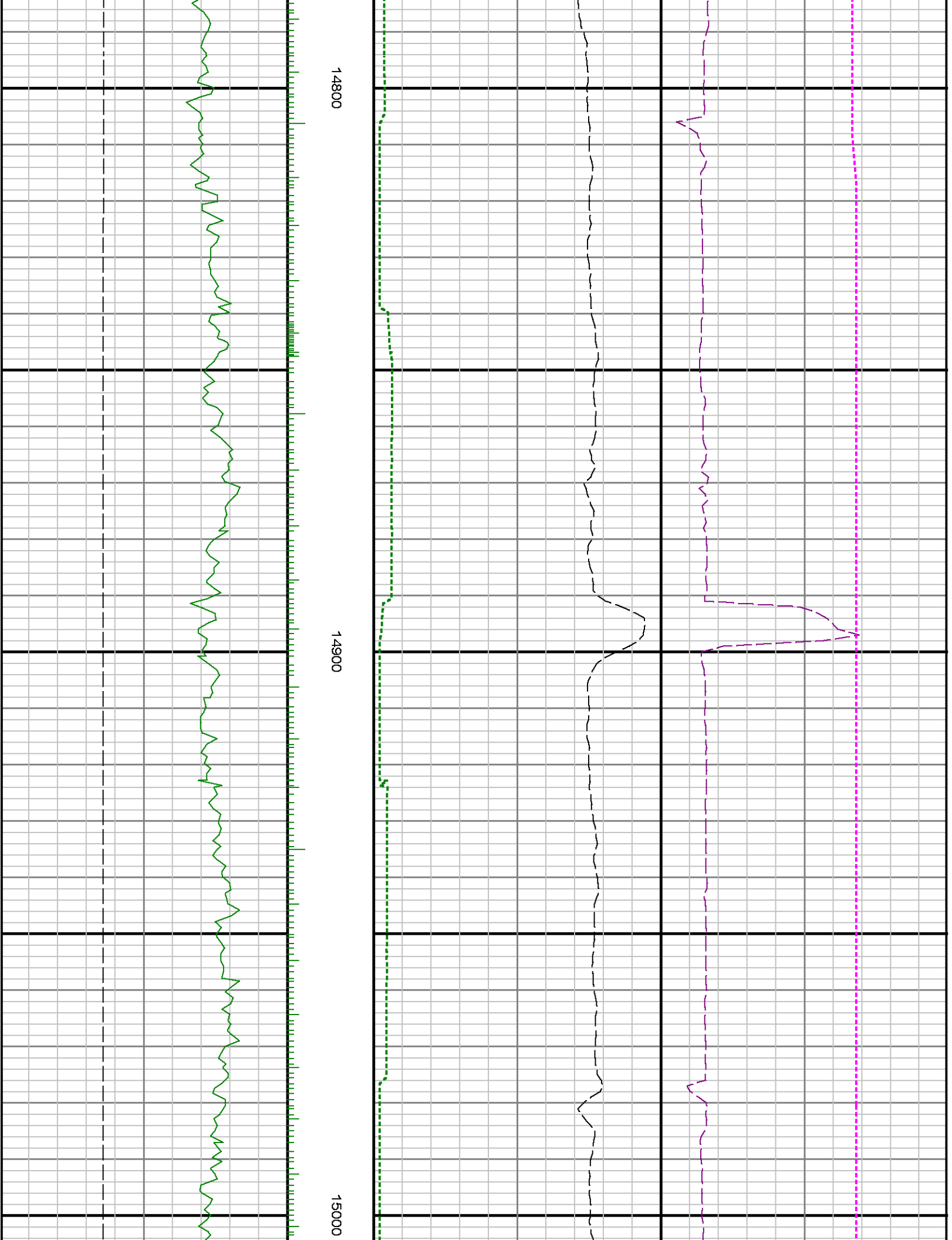


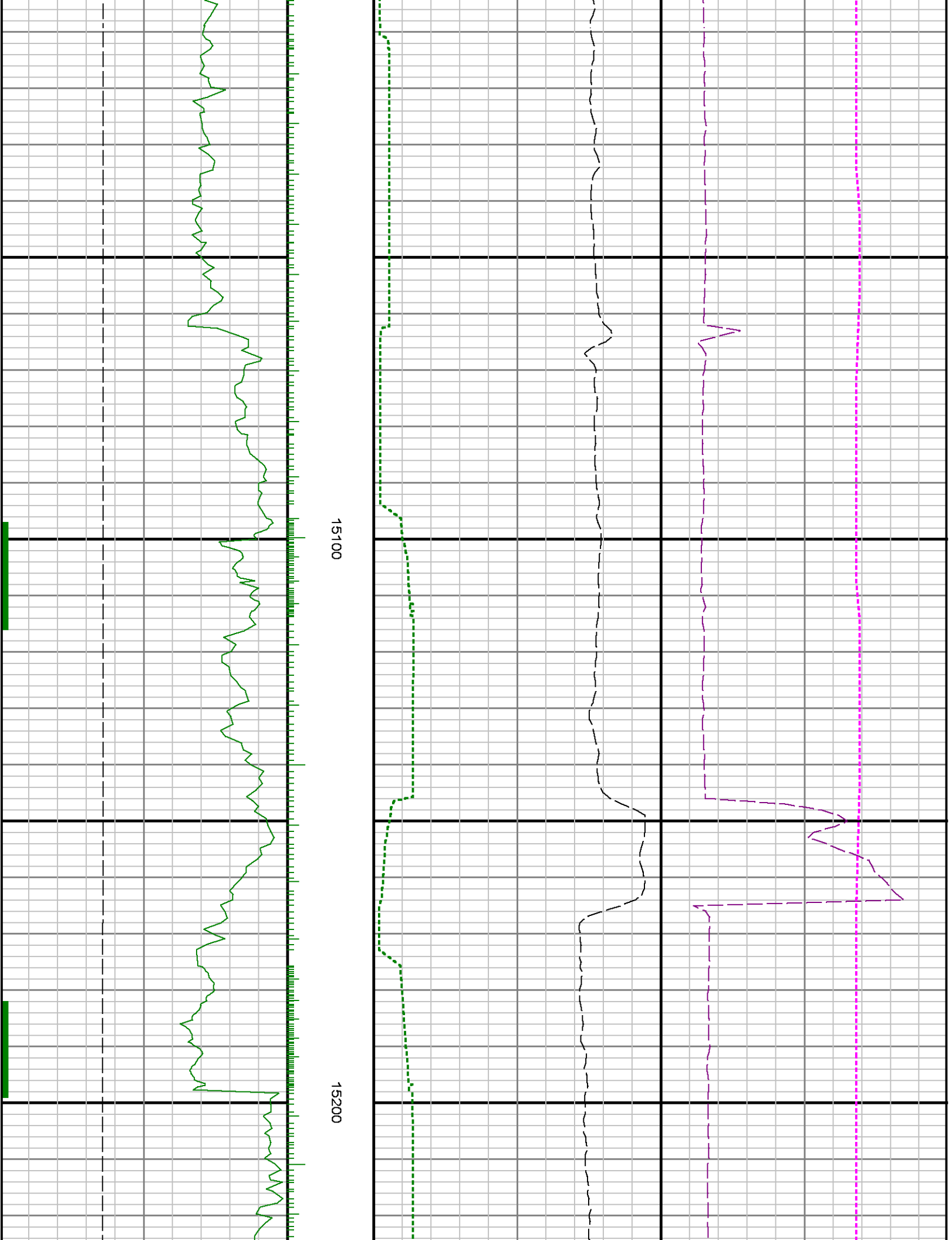


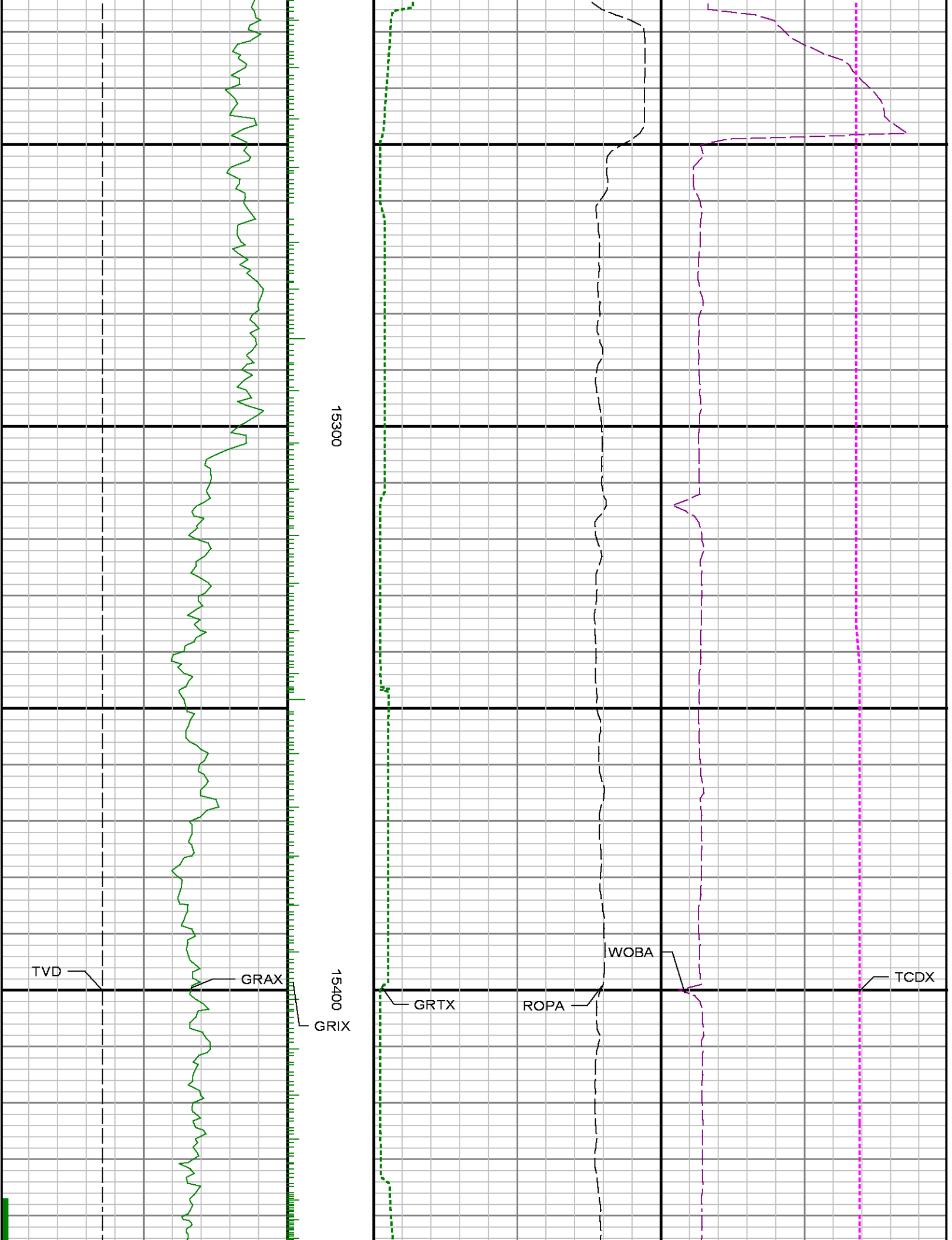
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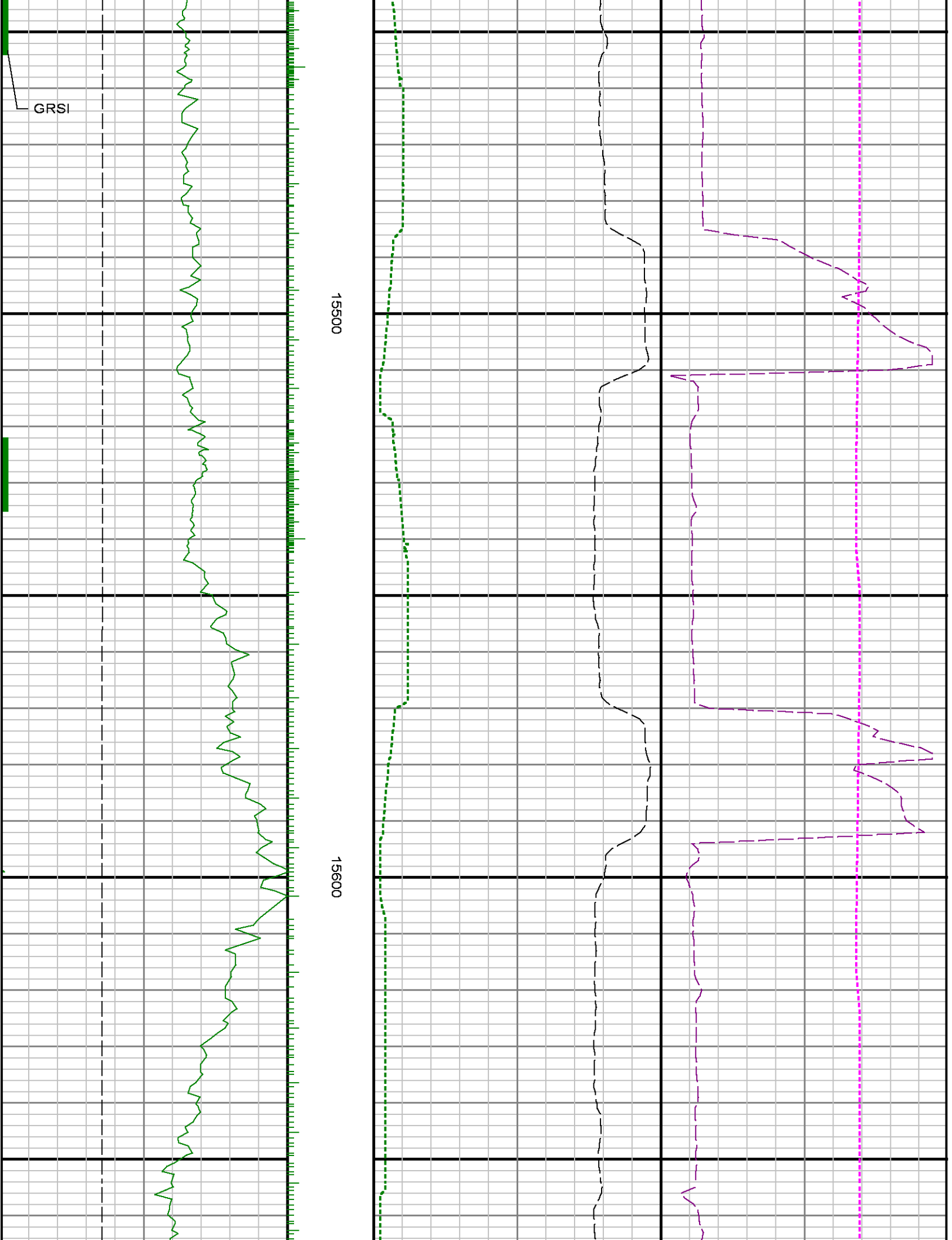
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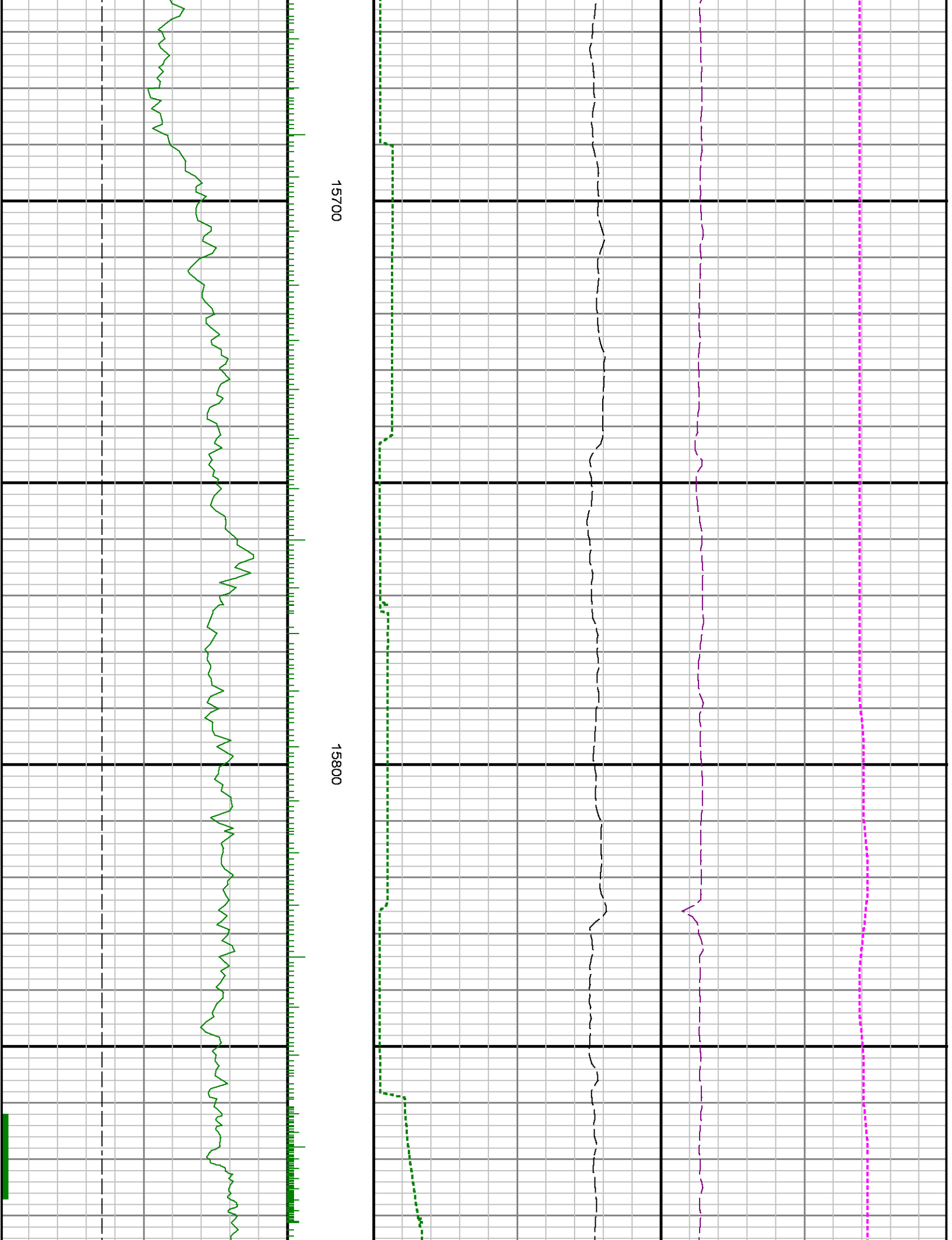


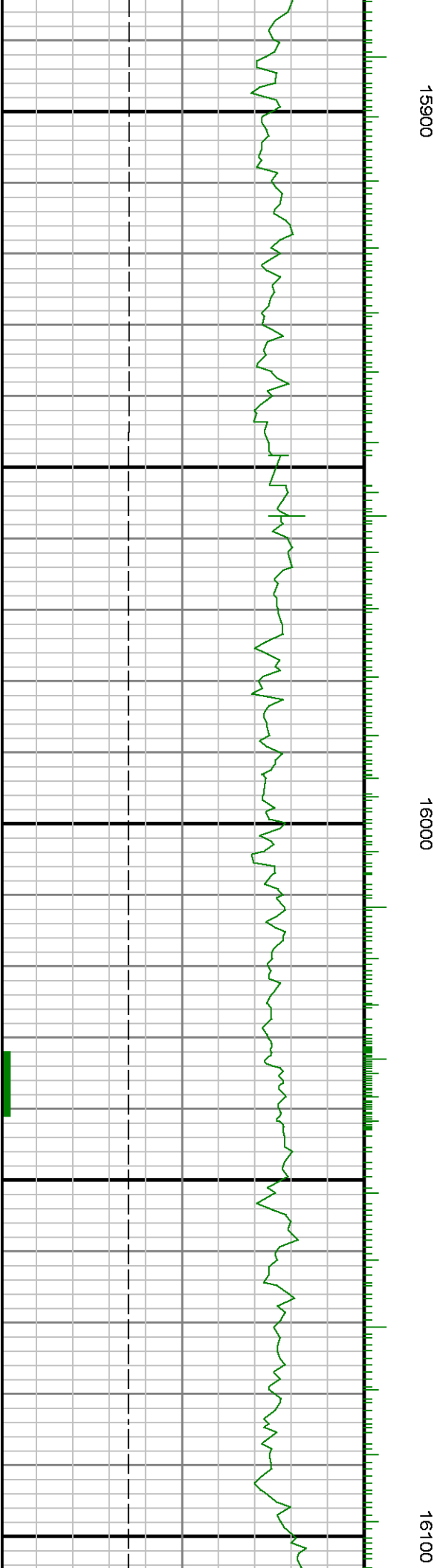
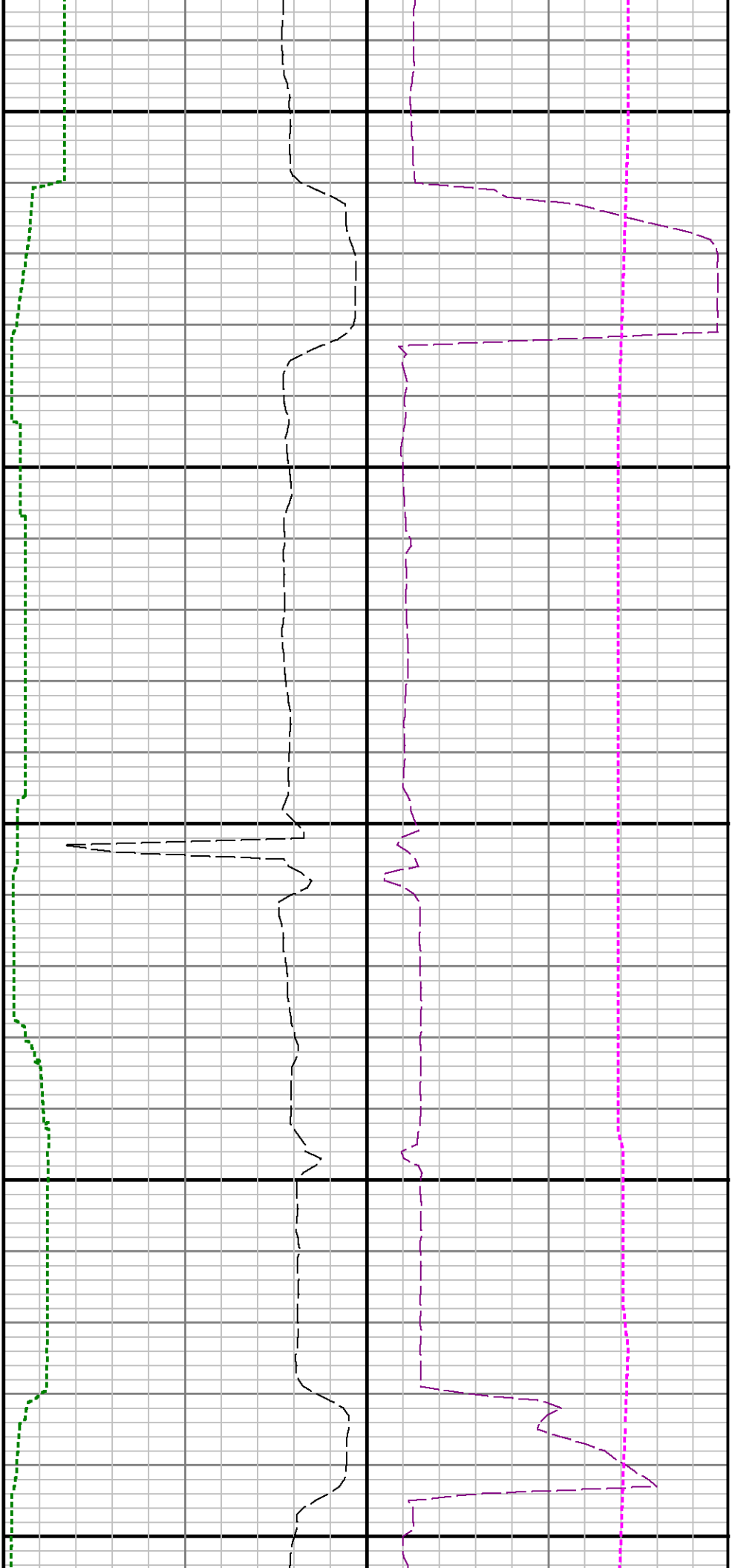


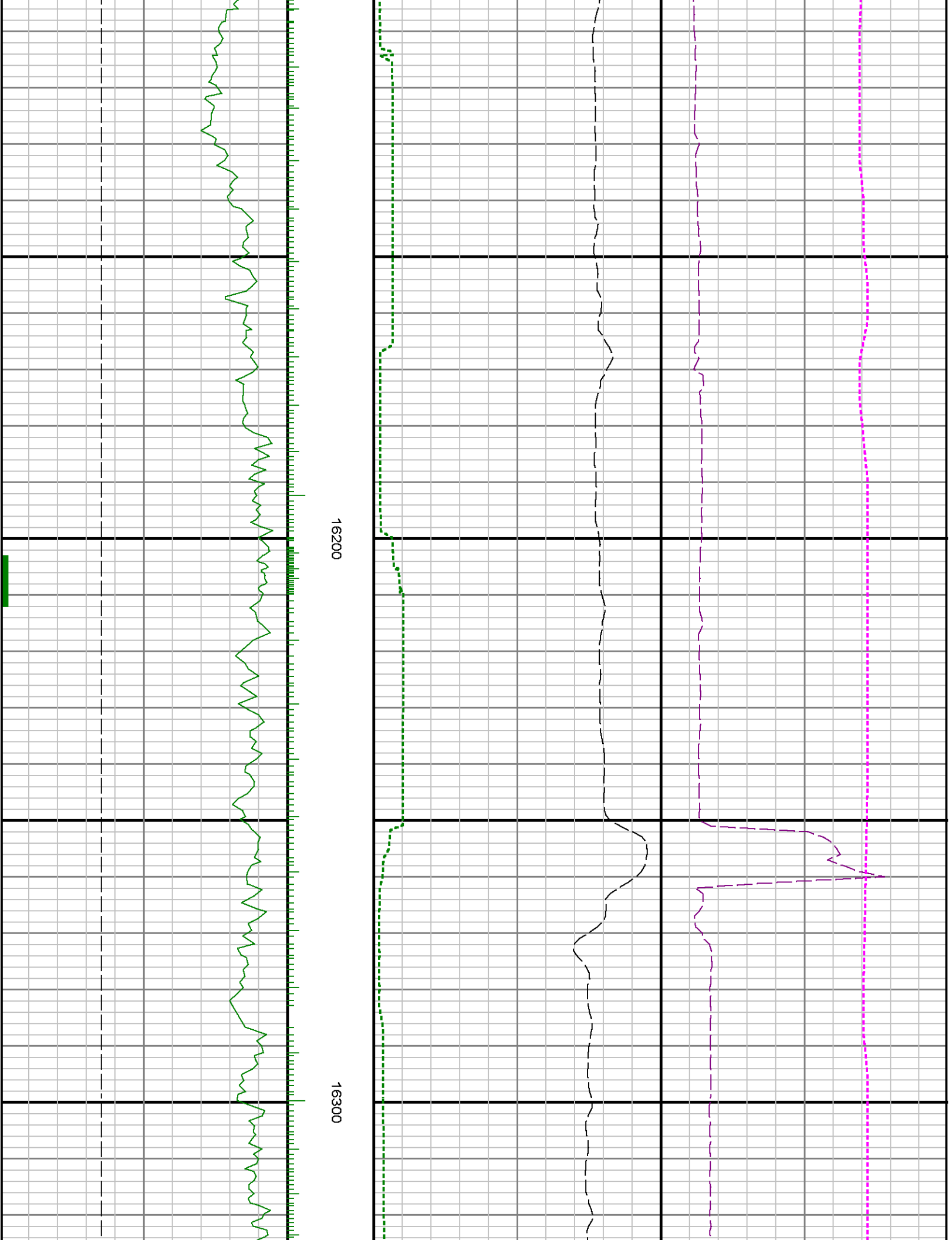


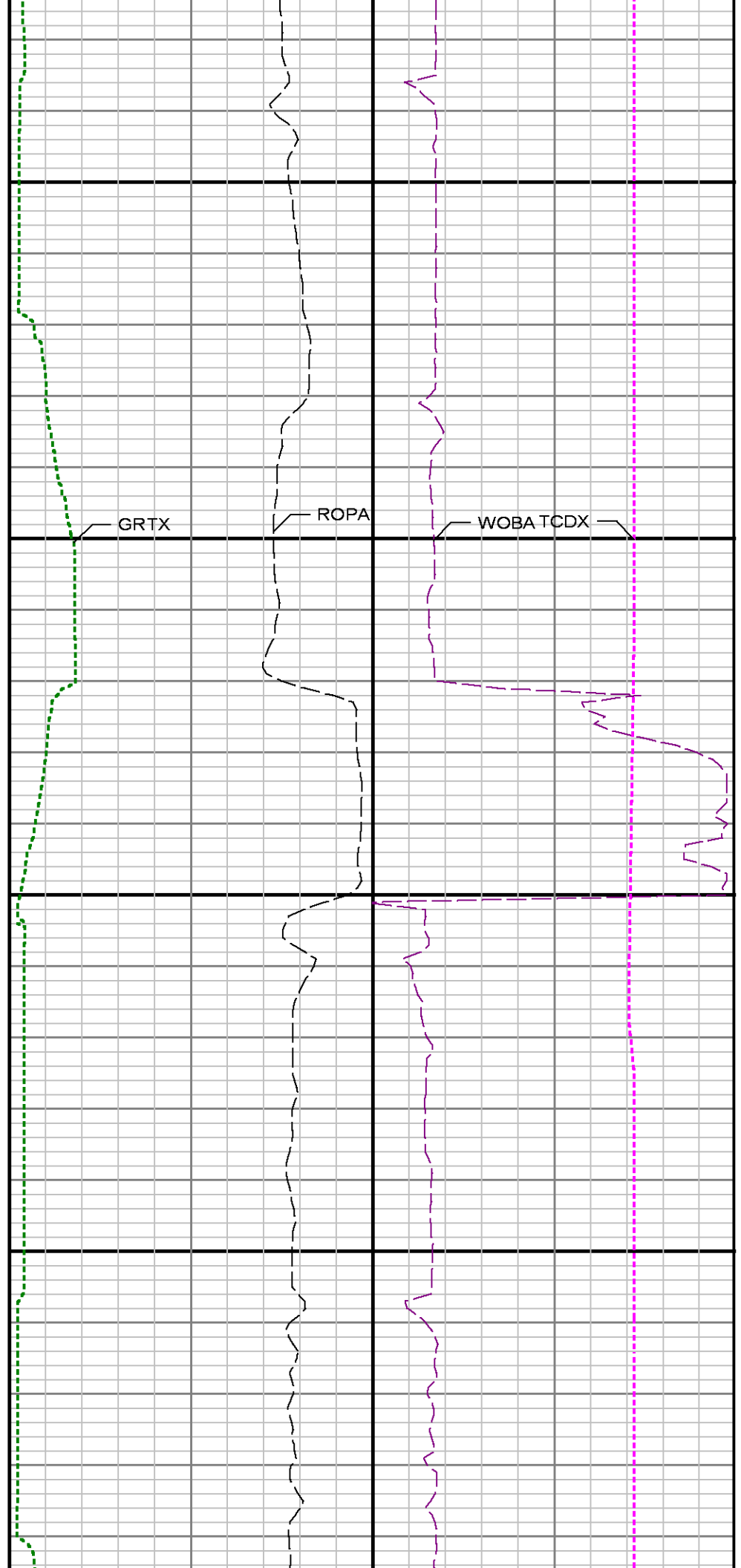
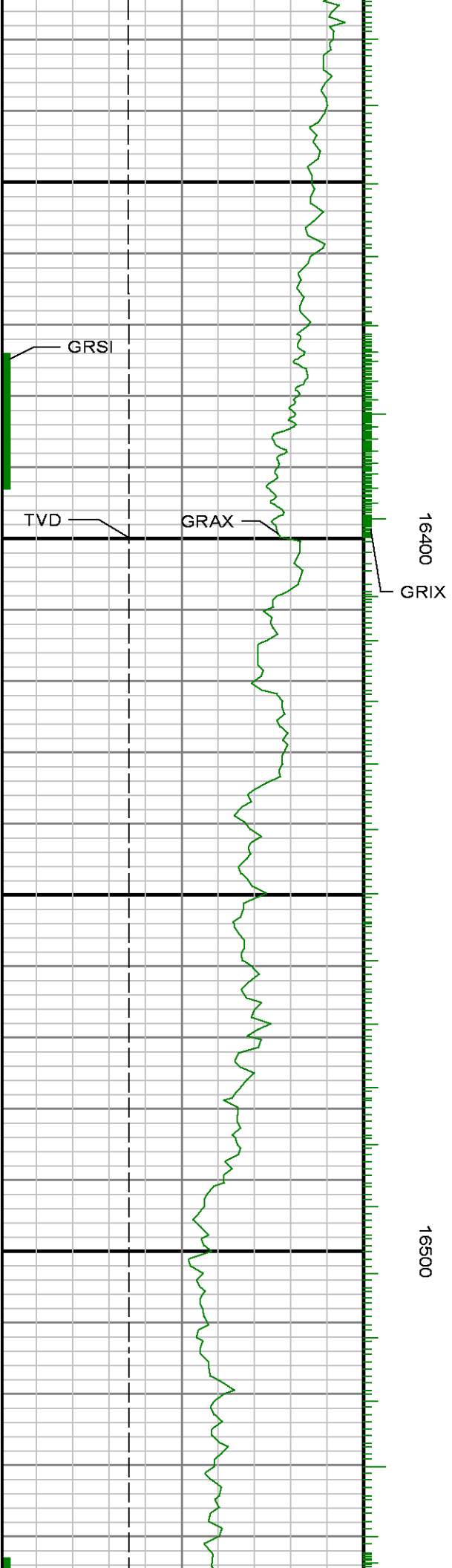














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