

part of Baker Hughes. Unless other contract terms have been agreed to by the parties, each party's liabilities and

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.
						Top	Bottom	From	To	Start Logging	End Logging	Hours
						(ft)	(ft)	(ft)	(ft)			
1	1	7.875	PDC	3.00	Motor	6655.37	12681.73	6700.04	12726.40	2015-09-17 07:42	2015-09-18 14:06	39.61

Crew

Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite
Andrew Clancy	2015-09-16	2015-09-19	Sumanth Belawadi	2015-09-16	2015-09-19			

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+ (%)
2015-09-17 18:00	1	8290.14	Diesel-Oil Based Mud	9.3	47	N/A	0.0	67/33	Active Pit	66000	0.00
2015-09-18 06:00	1	11054.31	Diesel-Oil Based Mud	9.3	46	N/A	0.0	67.8/32.2	Active Pit	66000	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	10350731	Gamma (single)	13.74	44.67	6.650	3.250
1	NaviGamma	10350731	VSS	17.15	48.08	6.650	3.250
1	NaviGamma	10350731	Directional (mag)	17.15	48.08	6.650	3.250

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 and the unverified depths as supplied to Baker Hughes are being used to represent logging data.
- 2 Baker Hughes Run 1 utilized a 6 1/2 inch Navigamma (Directional and Gamma Ray) tool behind an 7 7/8 inch bit and steerable assembly from 1877 to 12726 feet MD (1845 to 7336 feet TVD).
- 3 A sliding indicator is shown on the left side of the track 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

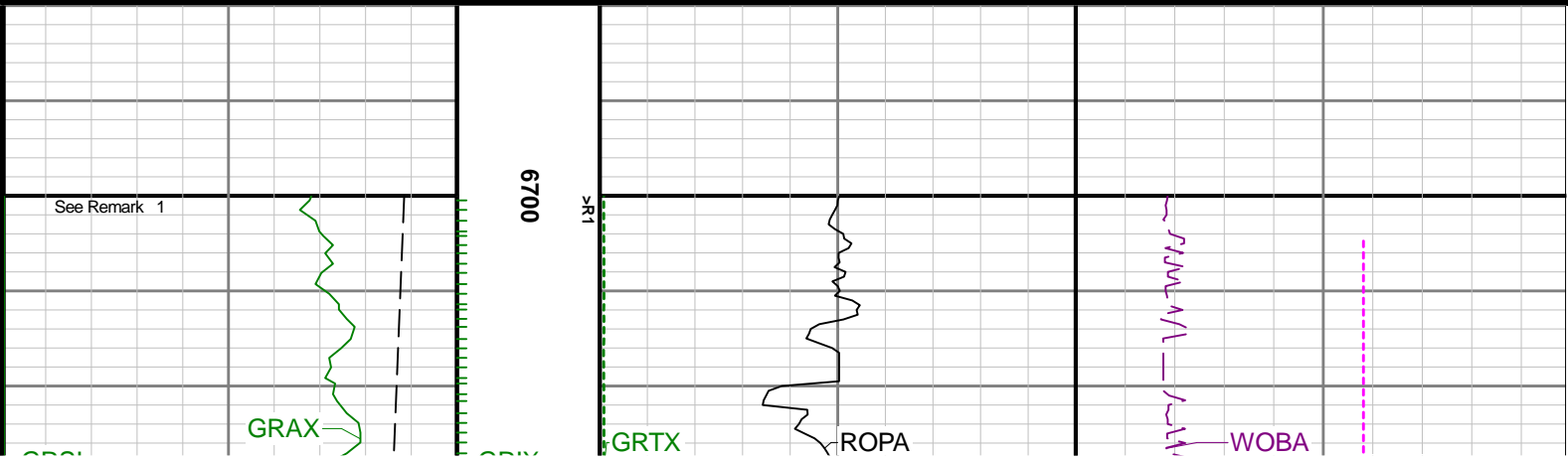
Number	Measured Depth (ft)	Hole Section (in)	Run No.	Remark
1	6700.00	7.875	1	Logging services began at 6700 feet MD. No logging data prior to 6700 feet MD (6538.26 TVD) as per client request.
2	12681.00	7.875	1	The interval between 12681 to 12726 feet (7337 to 7336.66 feet TVD) has no GRAX, GRIX, GRTX values due to Gamma sensor offset to bit after TD.

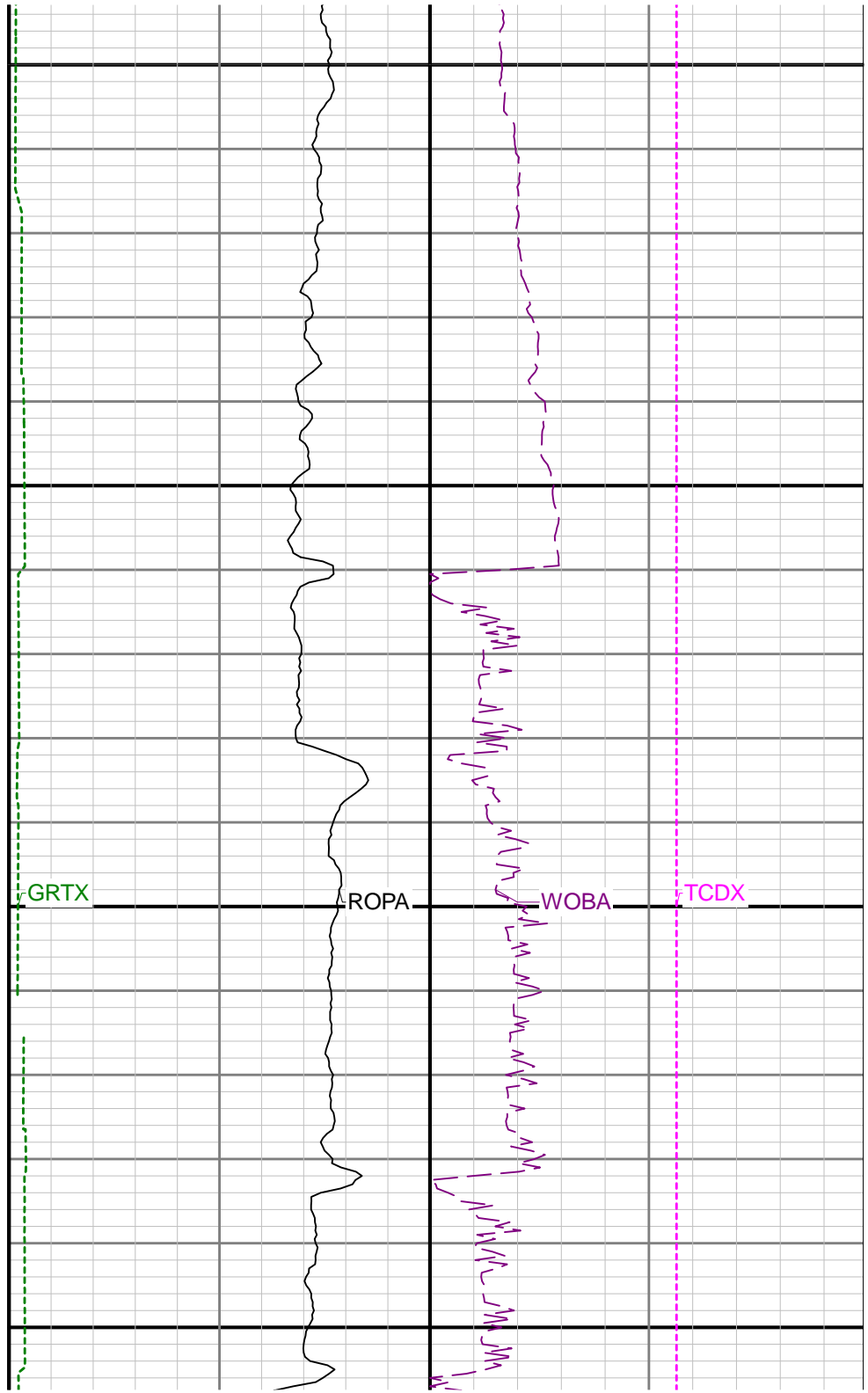
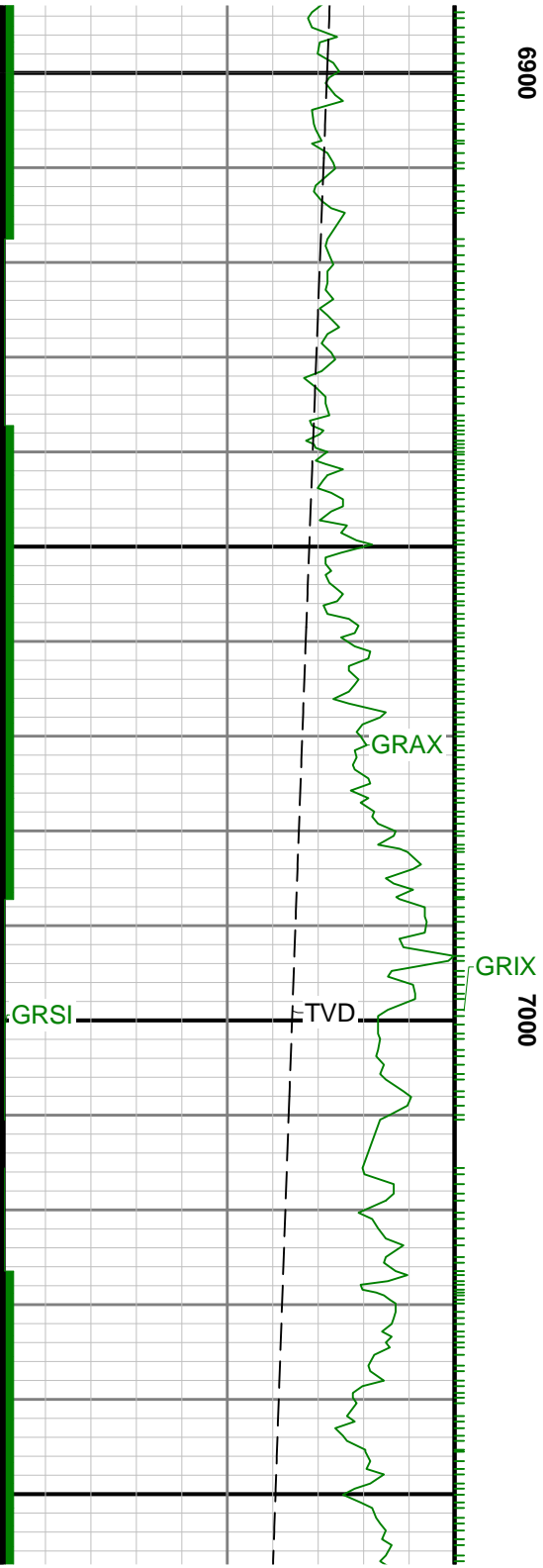
Curve Mnemonics

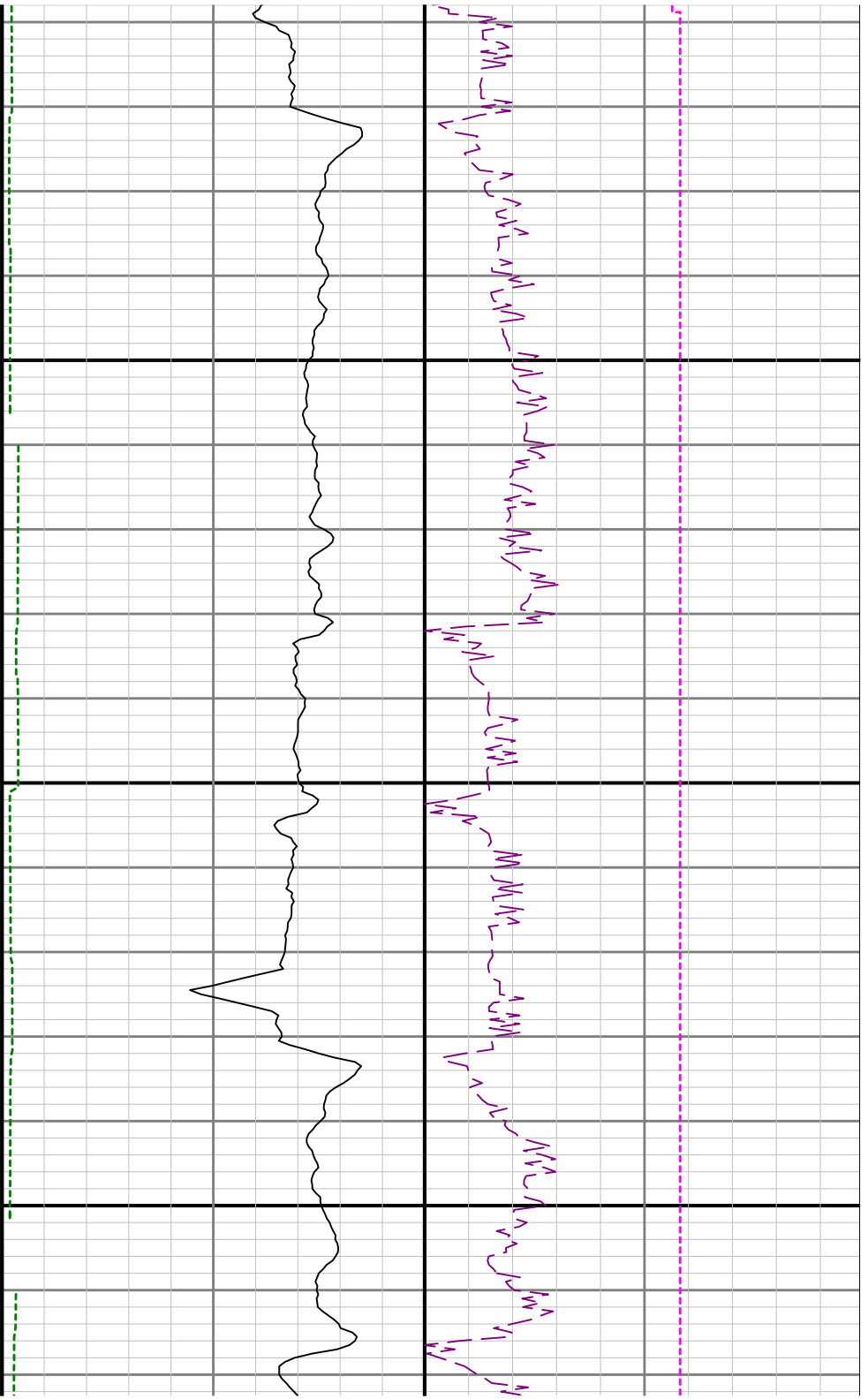
Presented Curves	Description	Units
ROPA	Depth Averaged ROP 3 ft Average	ft/h
GRAX	Gamma Ray - Apparent 0.5 ft Average	API
GRIX	Gamma Ray - Data Point Indicator	unitless
GRTX	Gamma Time Since Drilled	min
GRSI	Sliding Indicator Flag	unitless
TCDX	Downhole Temperature	degF
TVD	True Vertical Depth	ft
WOBA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

	Company	Anadarko			
	Well	Carter 13N-33HZ			
	Interval	Date From:	2015-09-17 07:42	Top:	6700.00
	Created	Date To:	2015-09-18 14:06	Bottom:	12726.00
		Created	2015-09-18 14:50		

Gamma Ray Apparent 0.5 ft Average GRAX	MD 1:240 feet	Rate of Penetration 3 ft Average ROPA	Surface Weight On Bit 1 ft Average WOBA
0 150		1000 0	0 100
API		ft/h	klb
True Vertical Depth TVD		Gamma Ray Time Since Drilled GRTX	Downhole Temperature TCDX
7600 6400		0 600	0 300
ft		min	degF

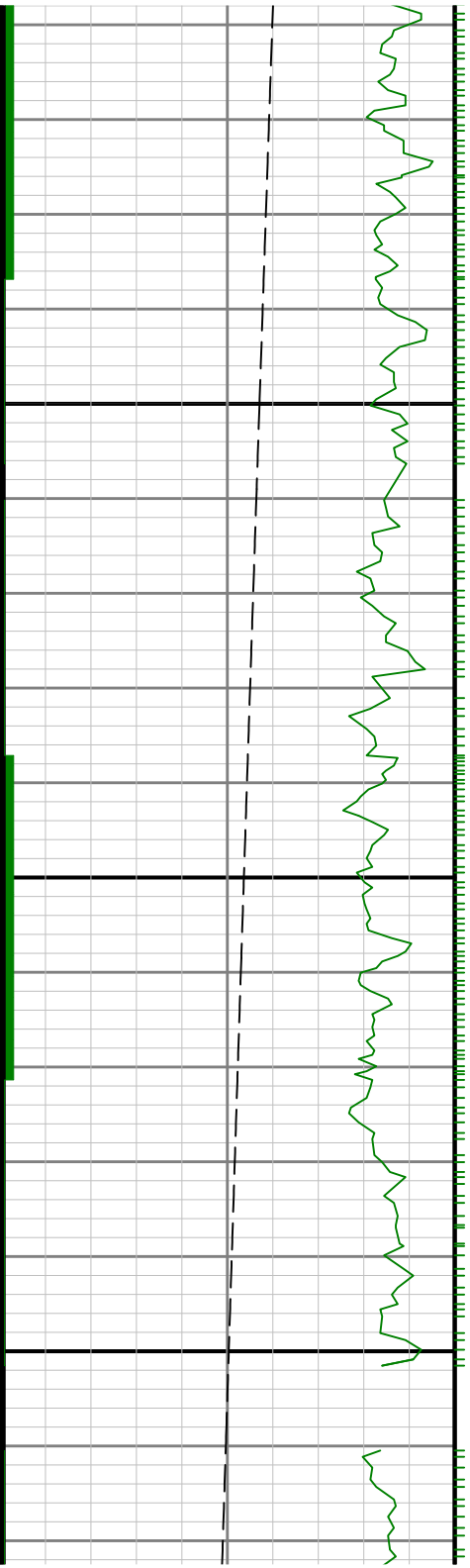


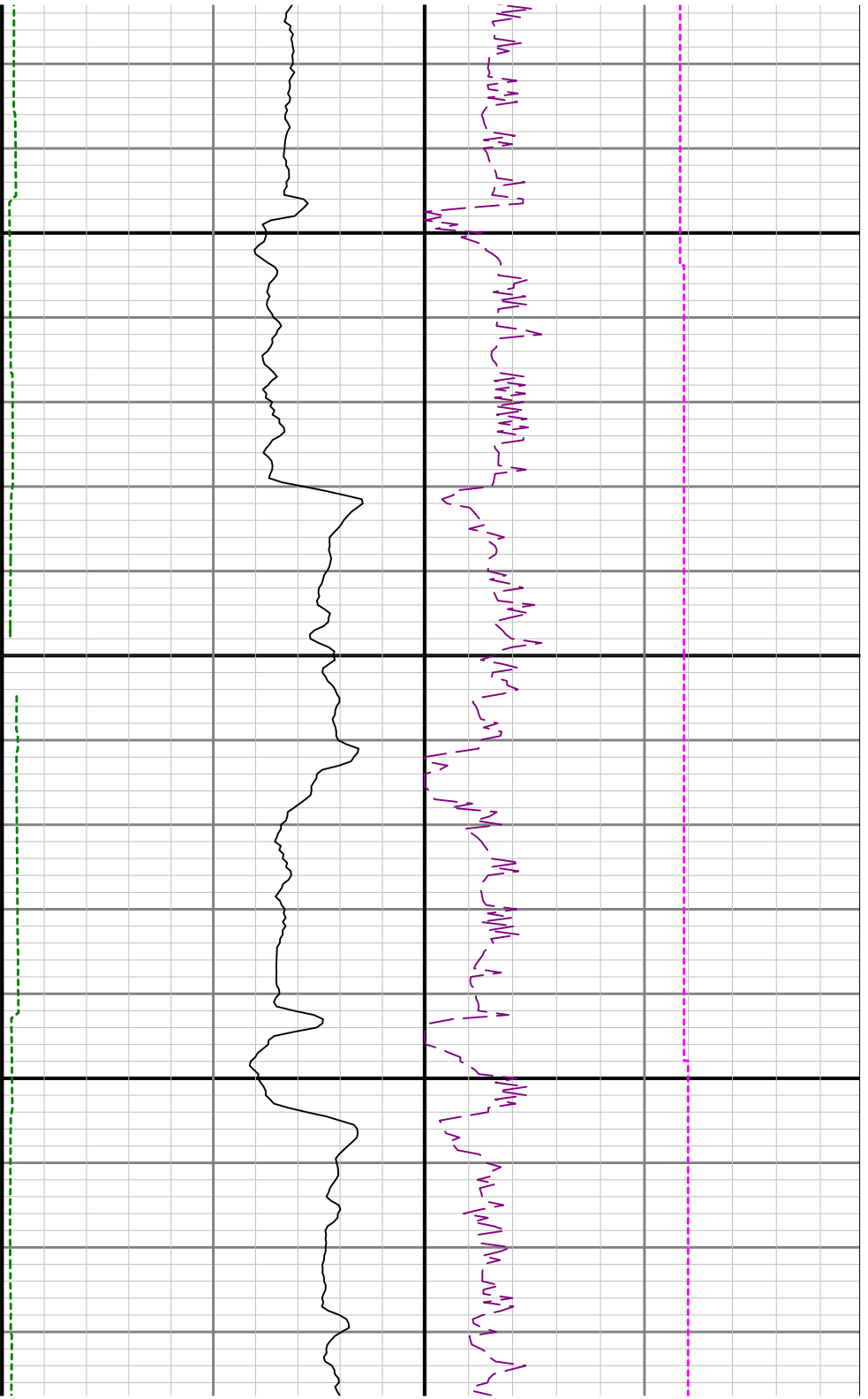


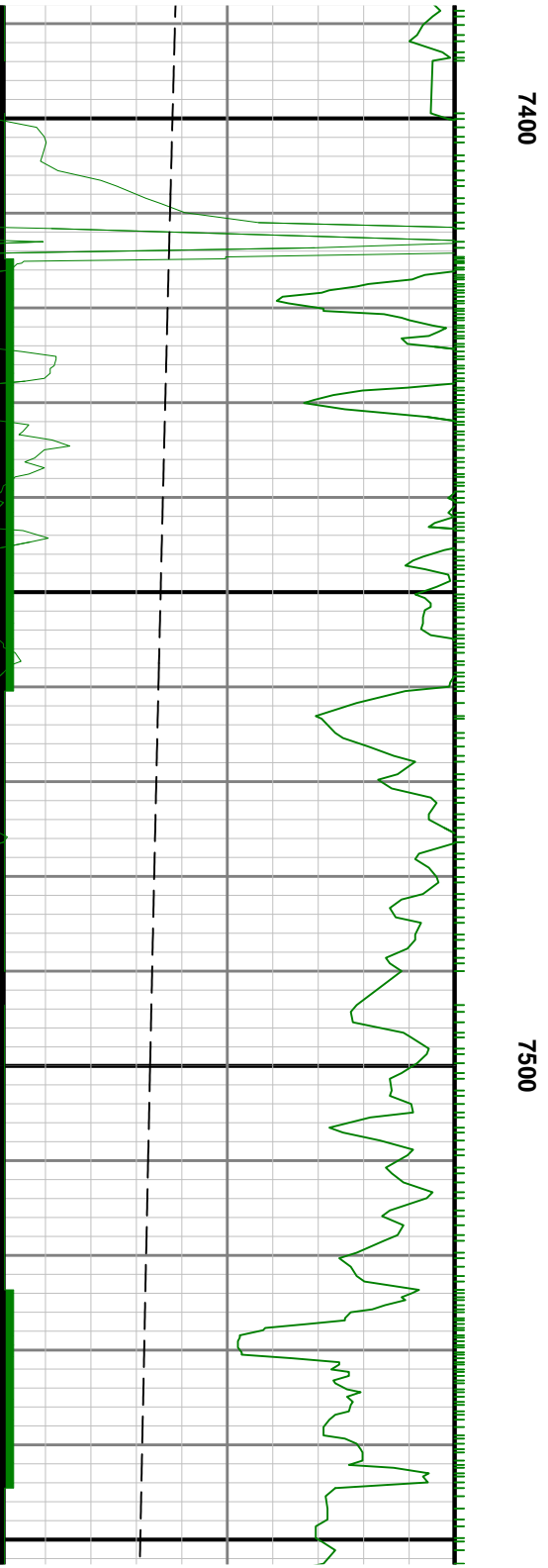
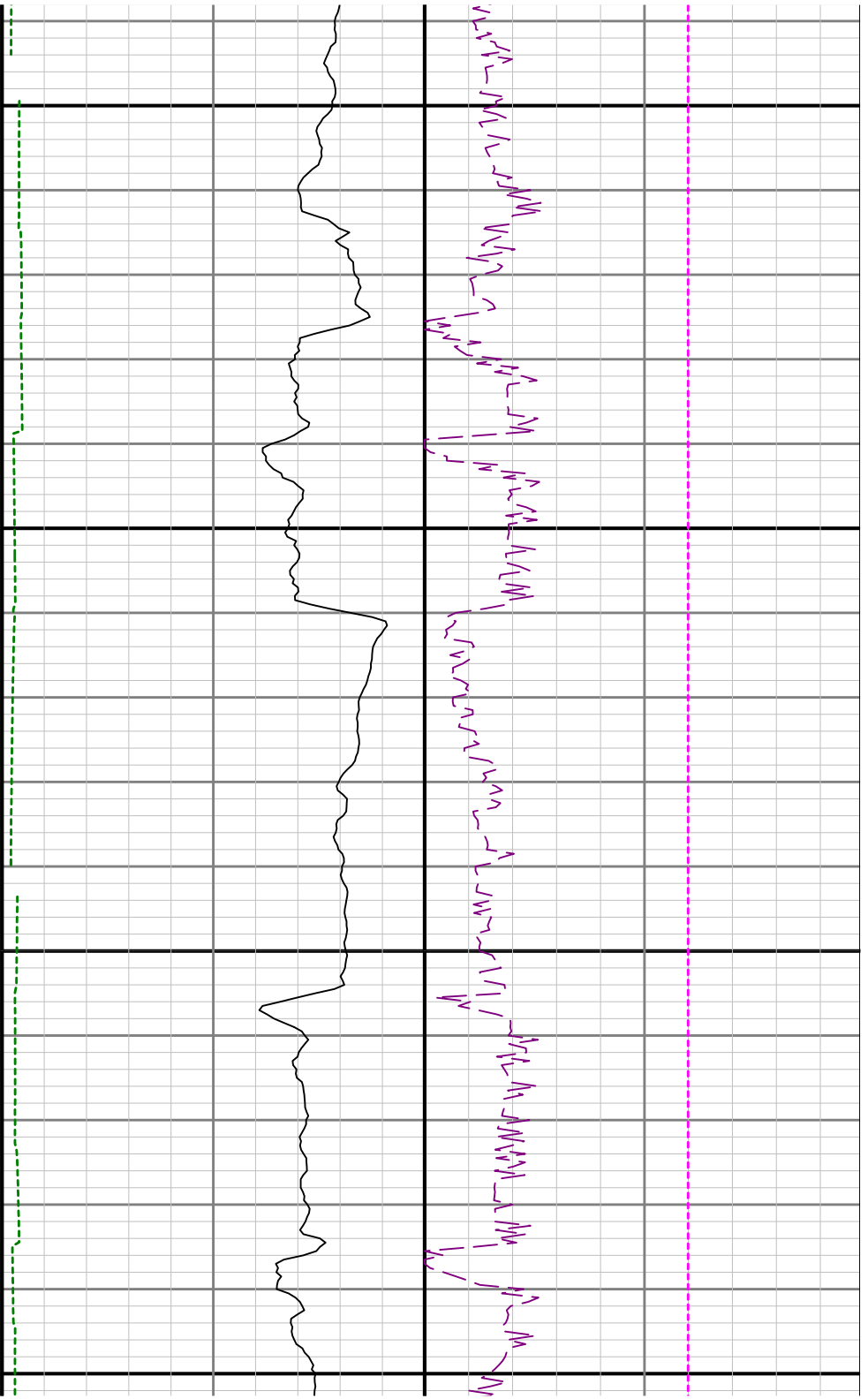


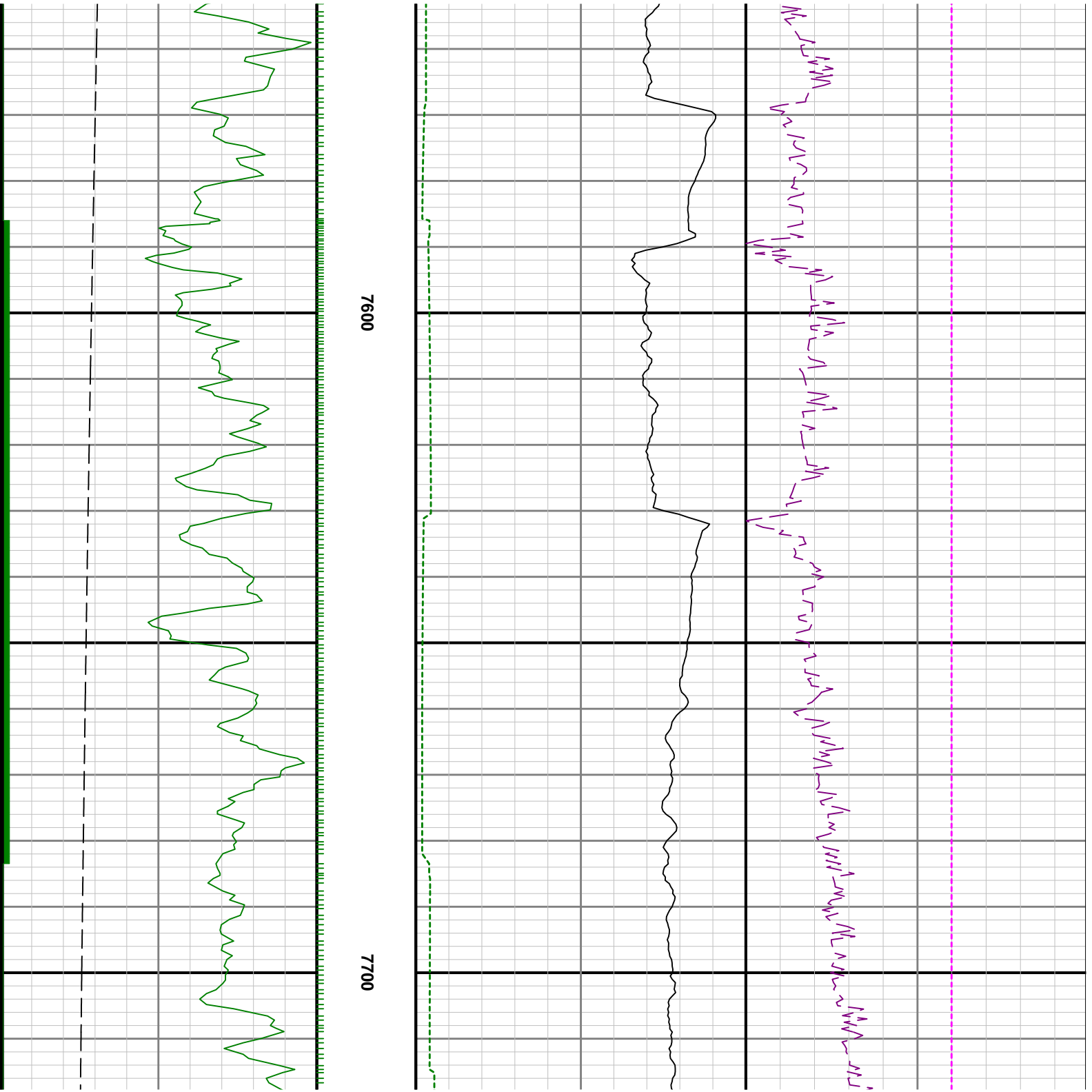
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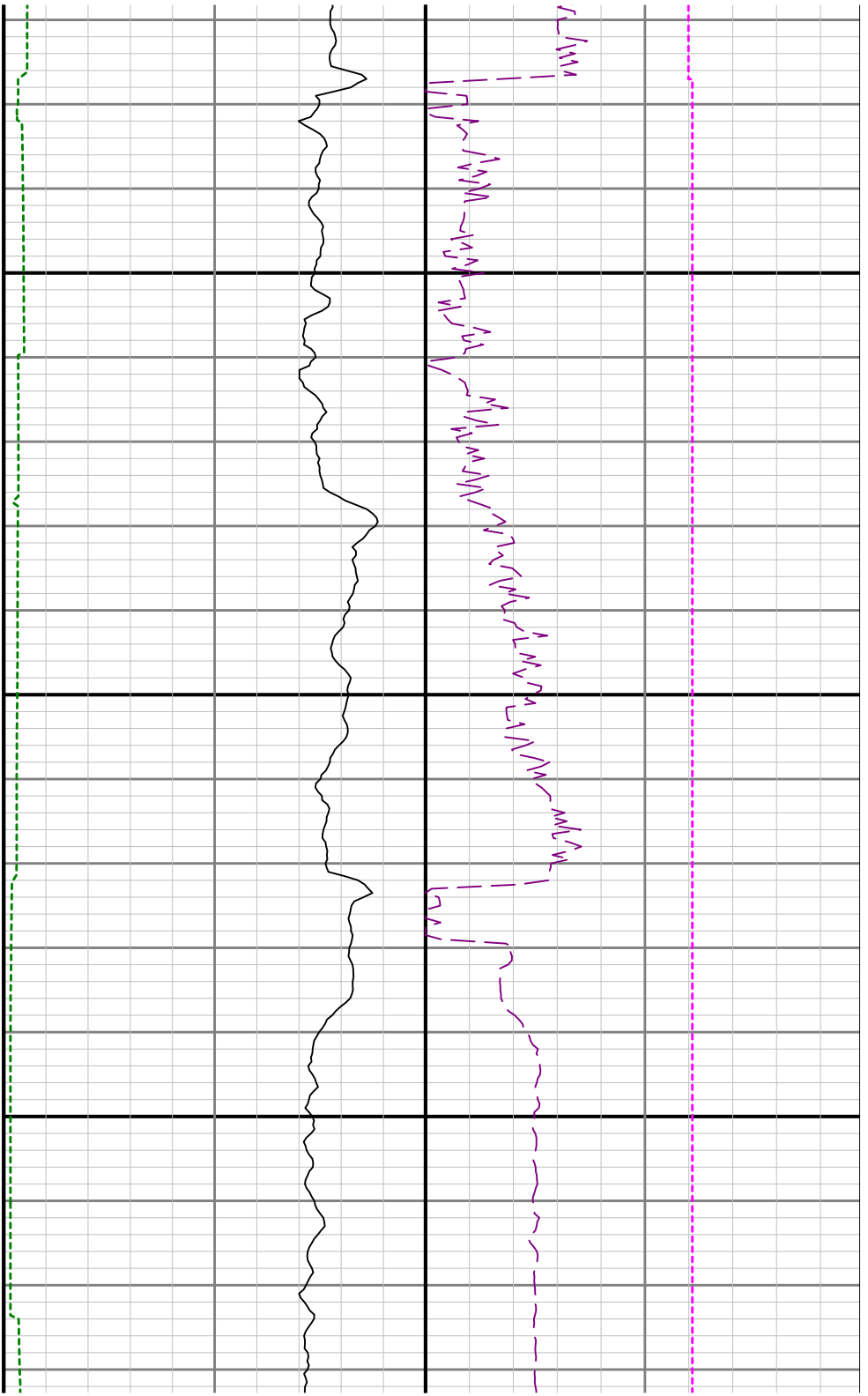
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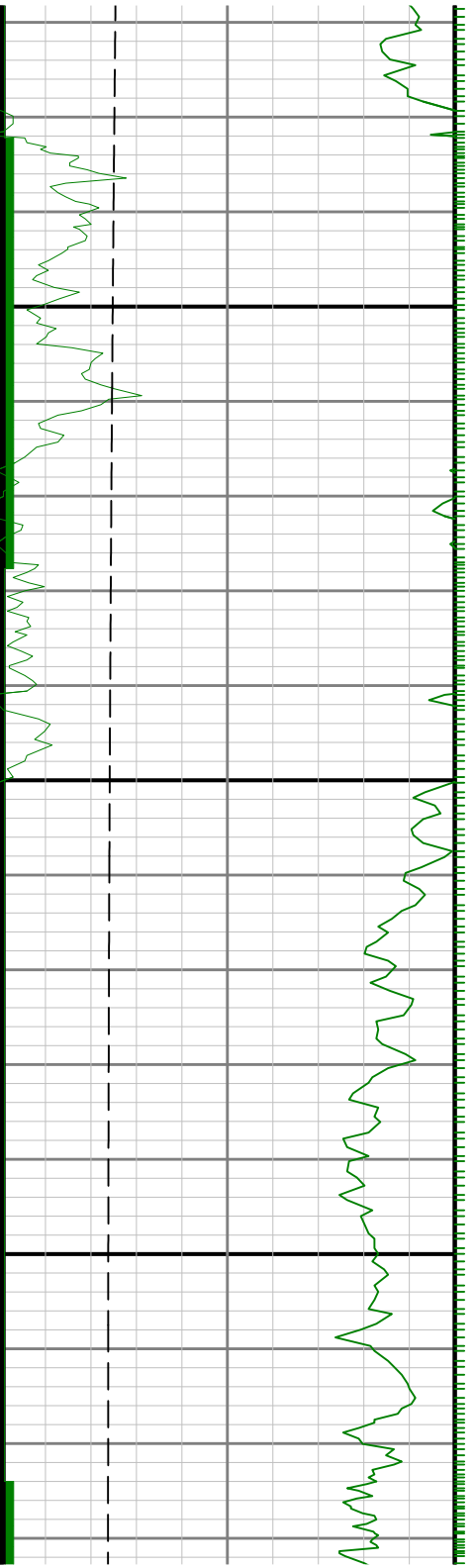


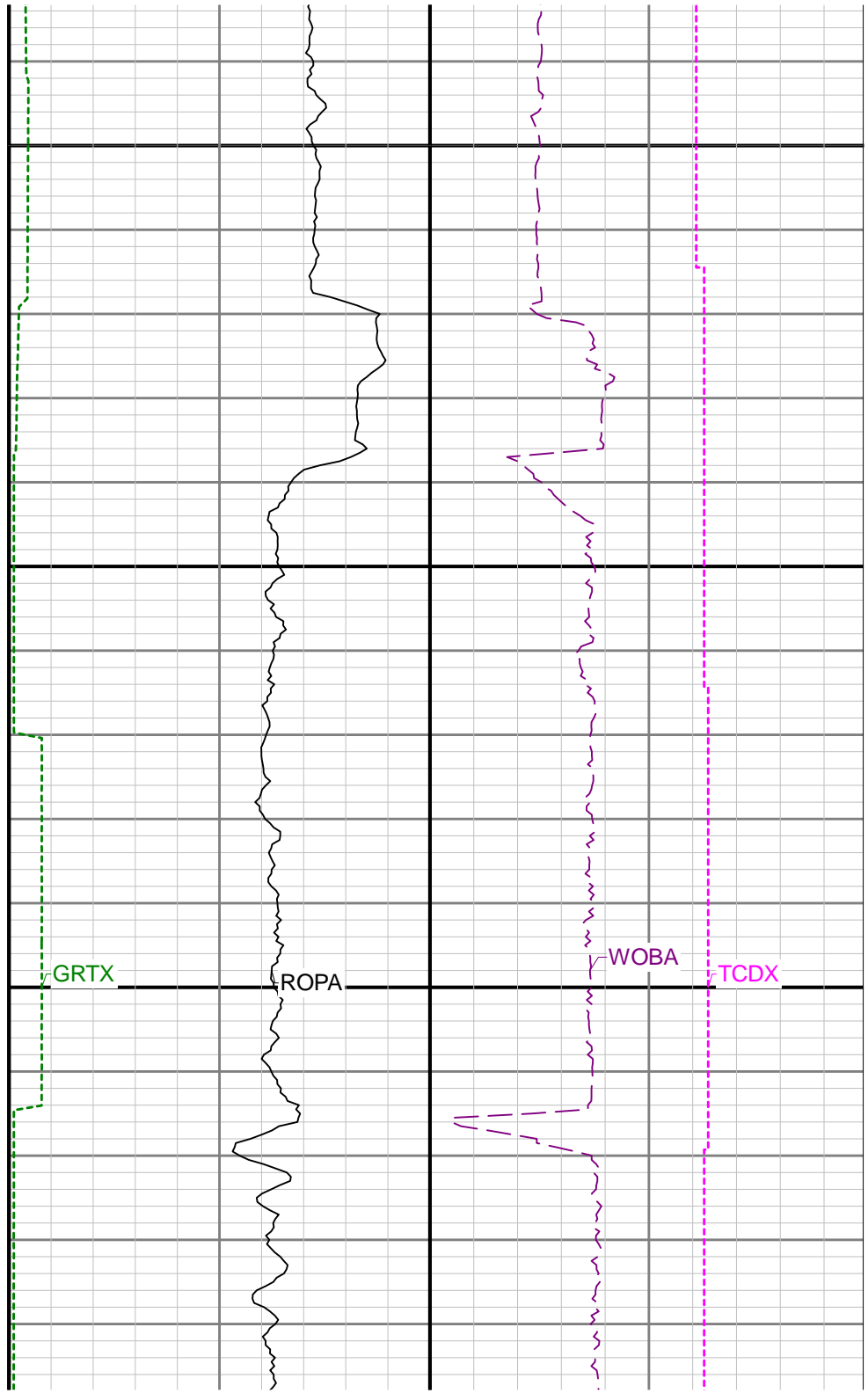
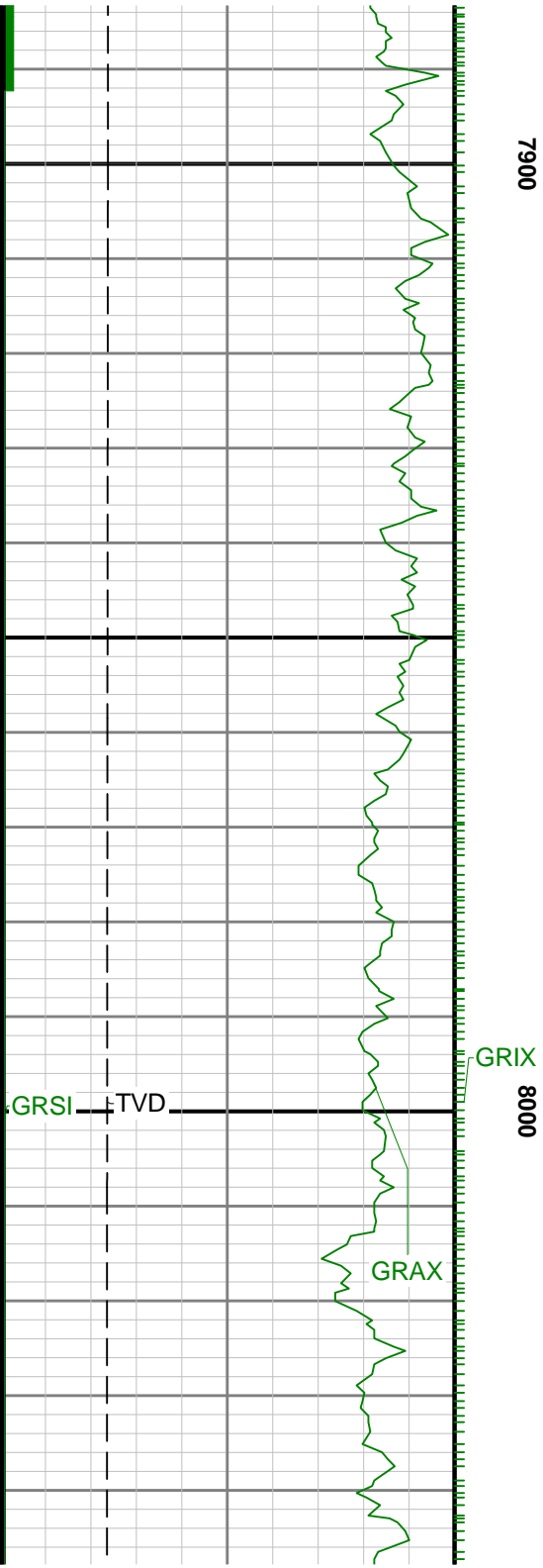


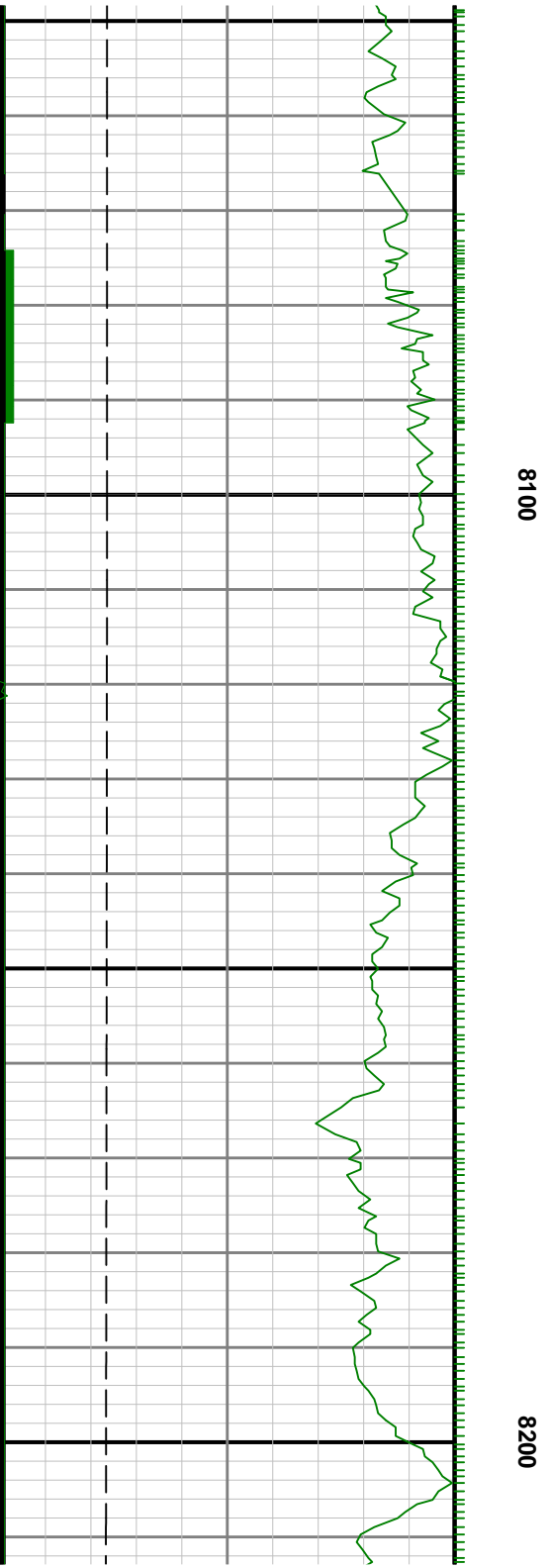


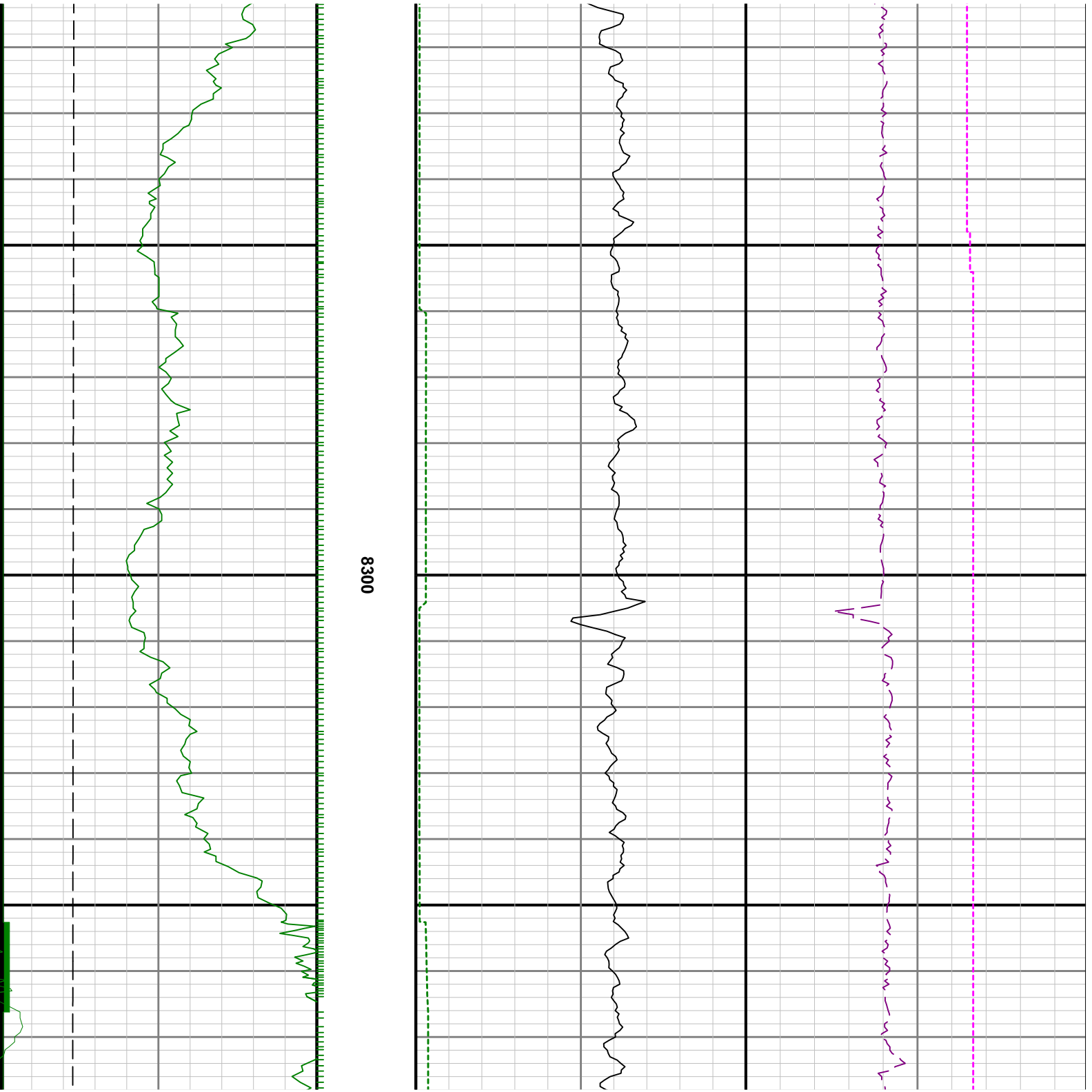


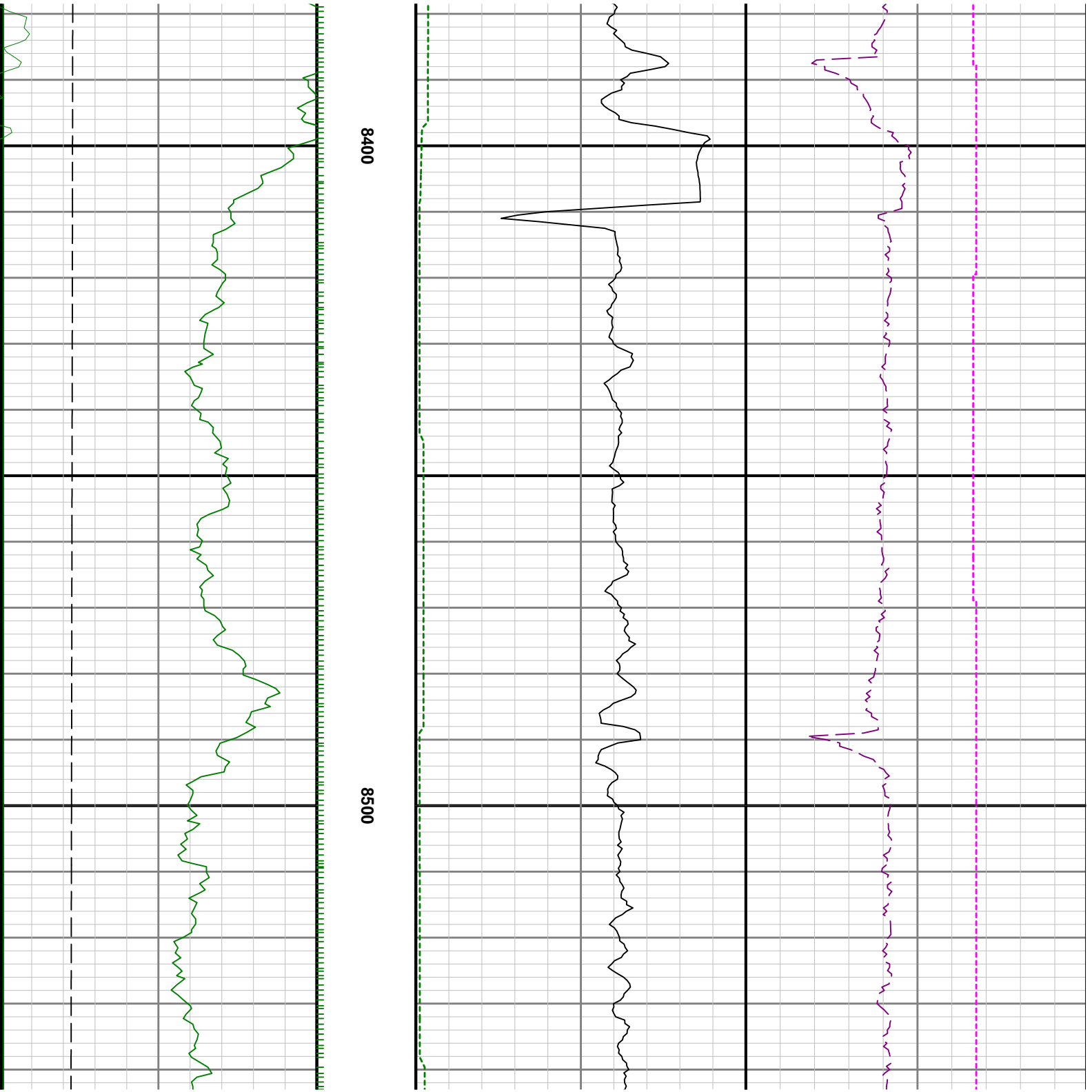
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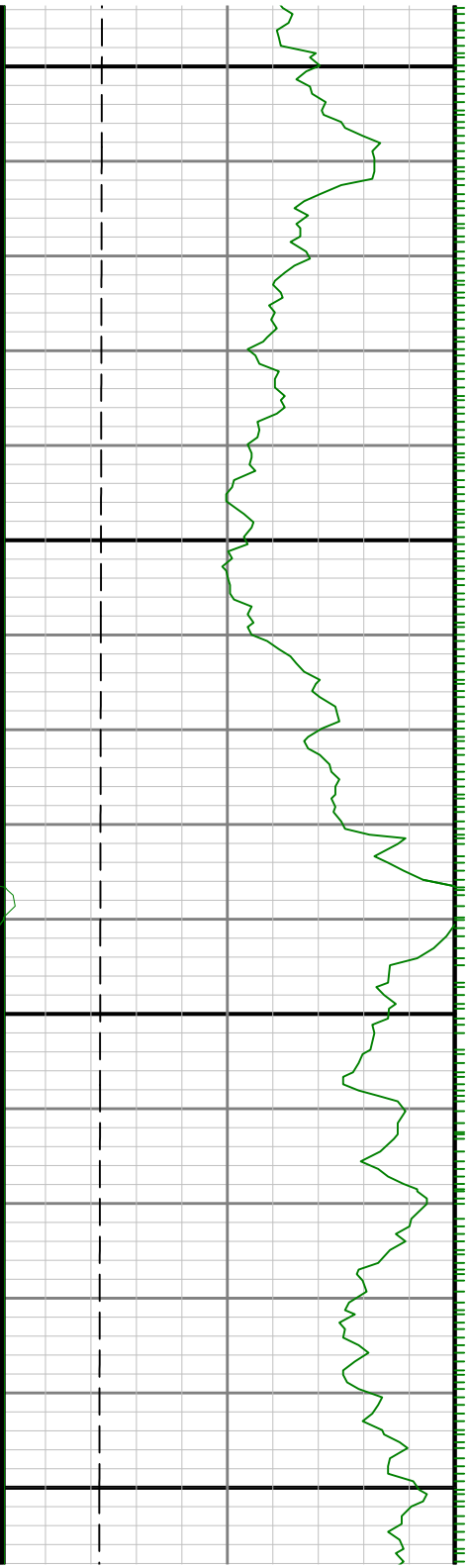






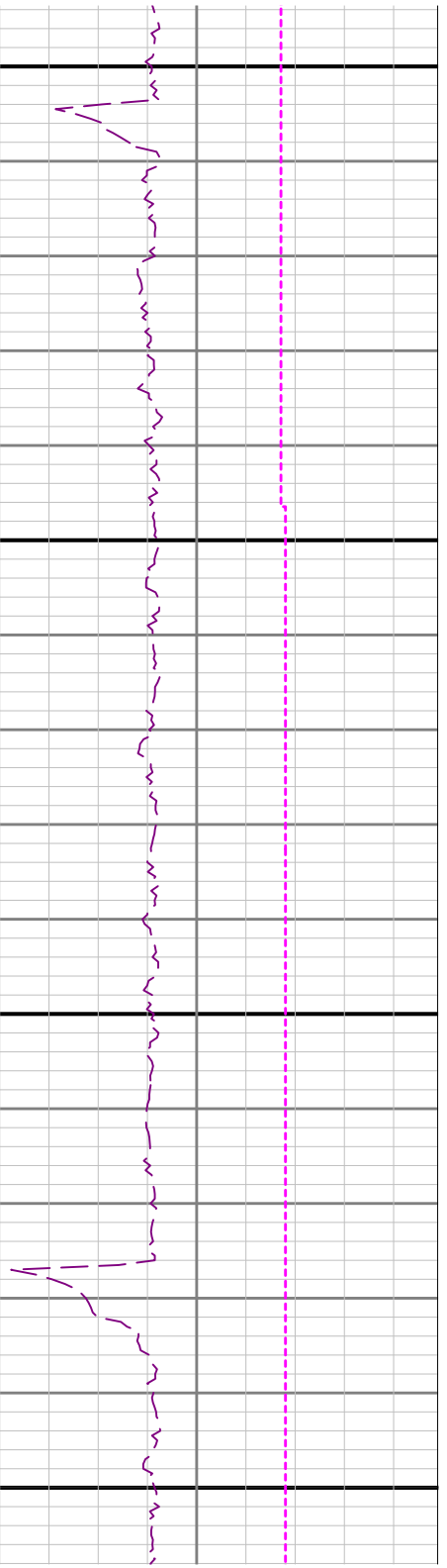
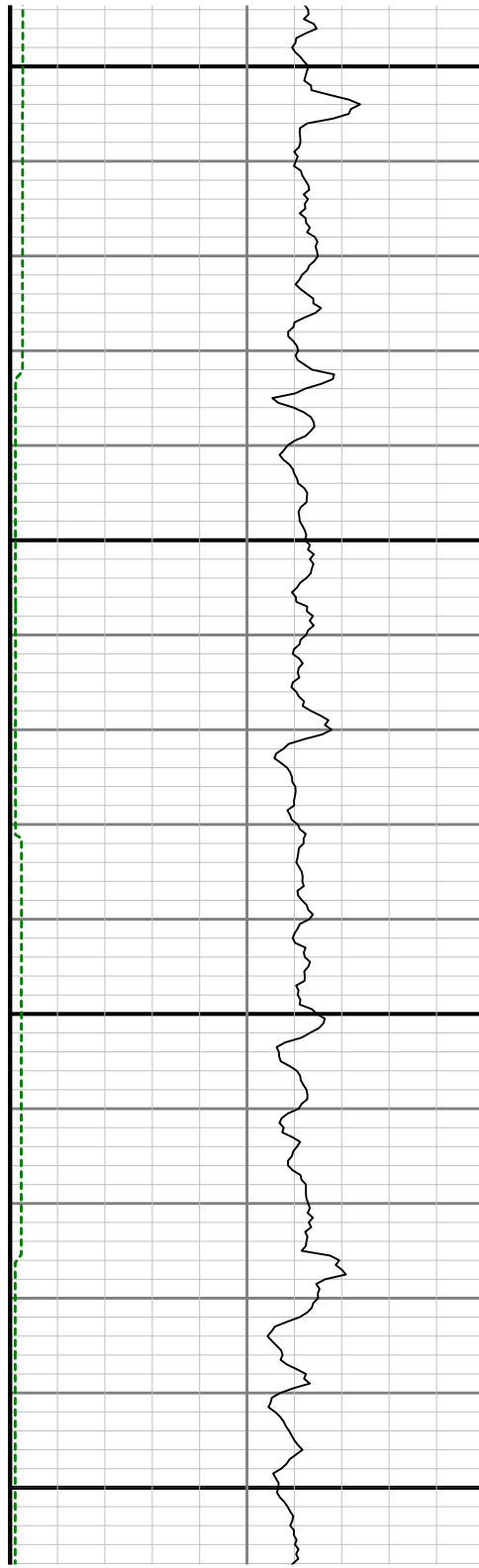


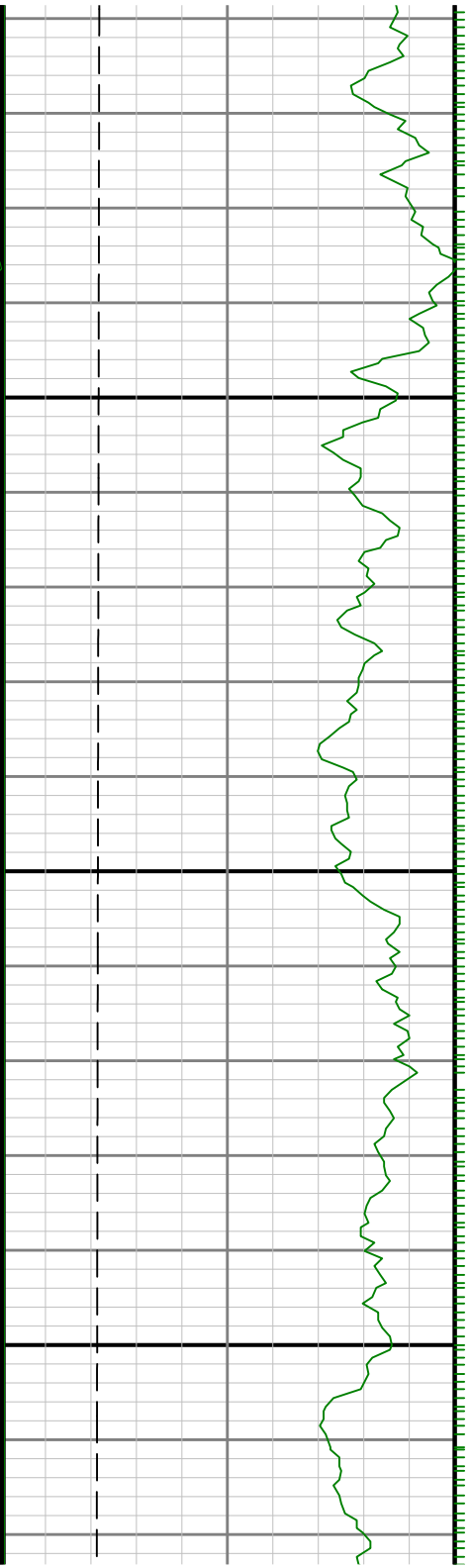




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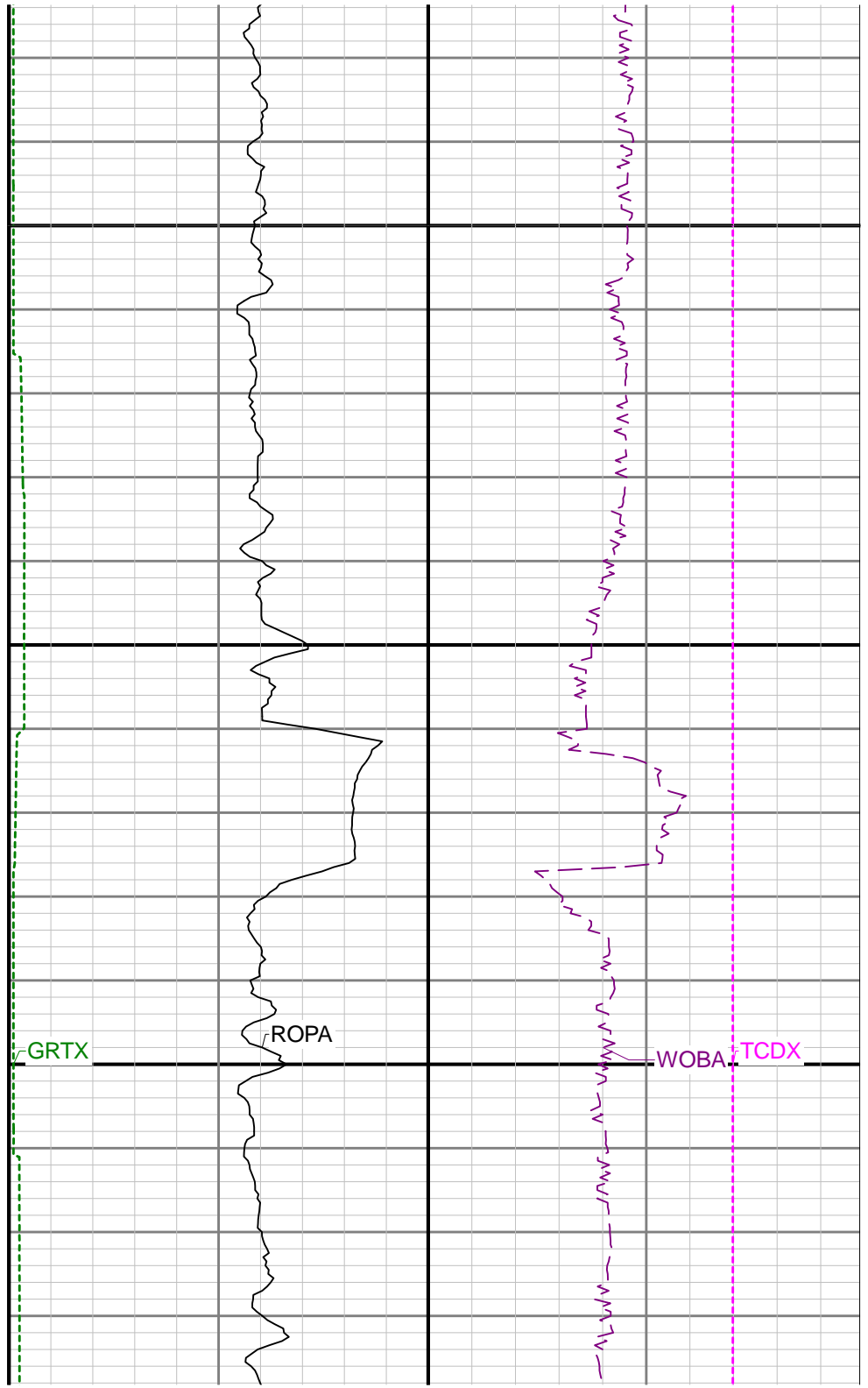
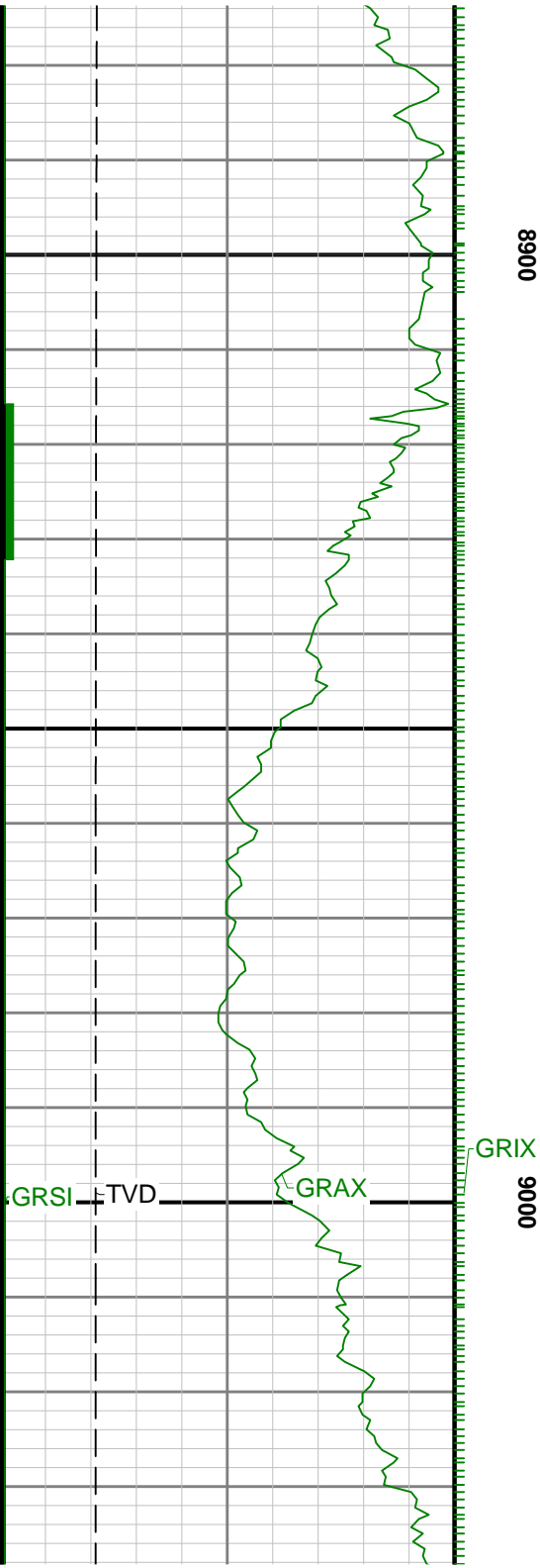
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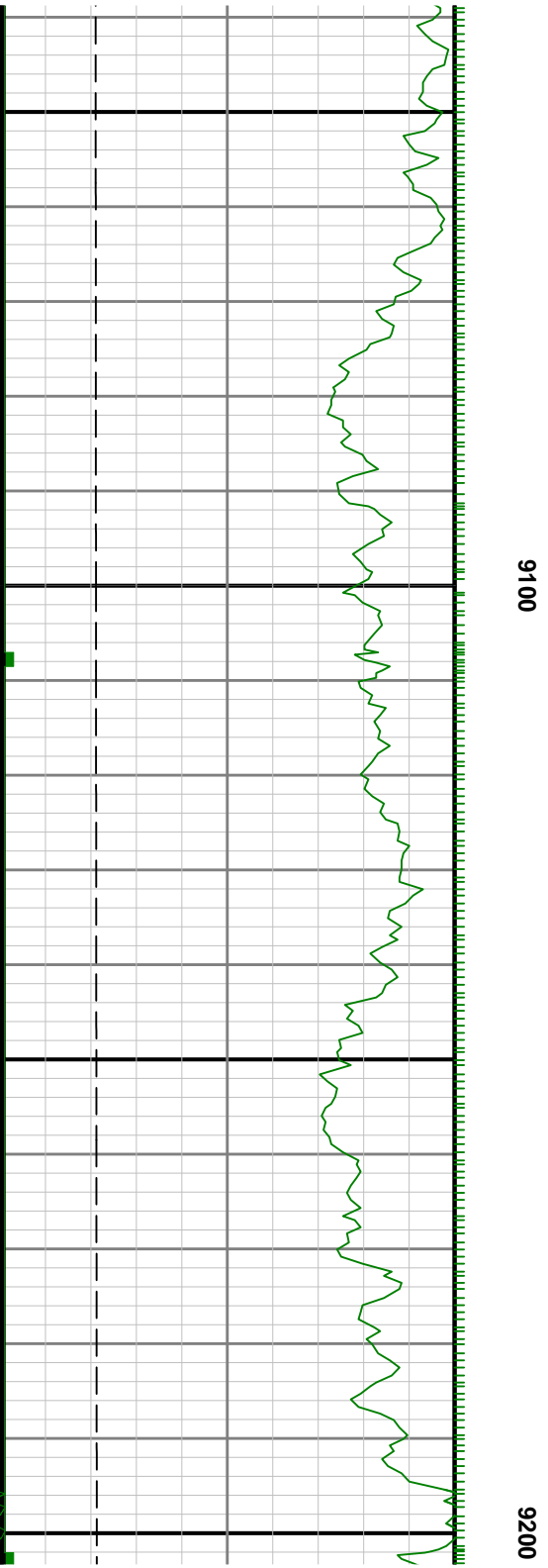
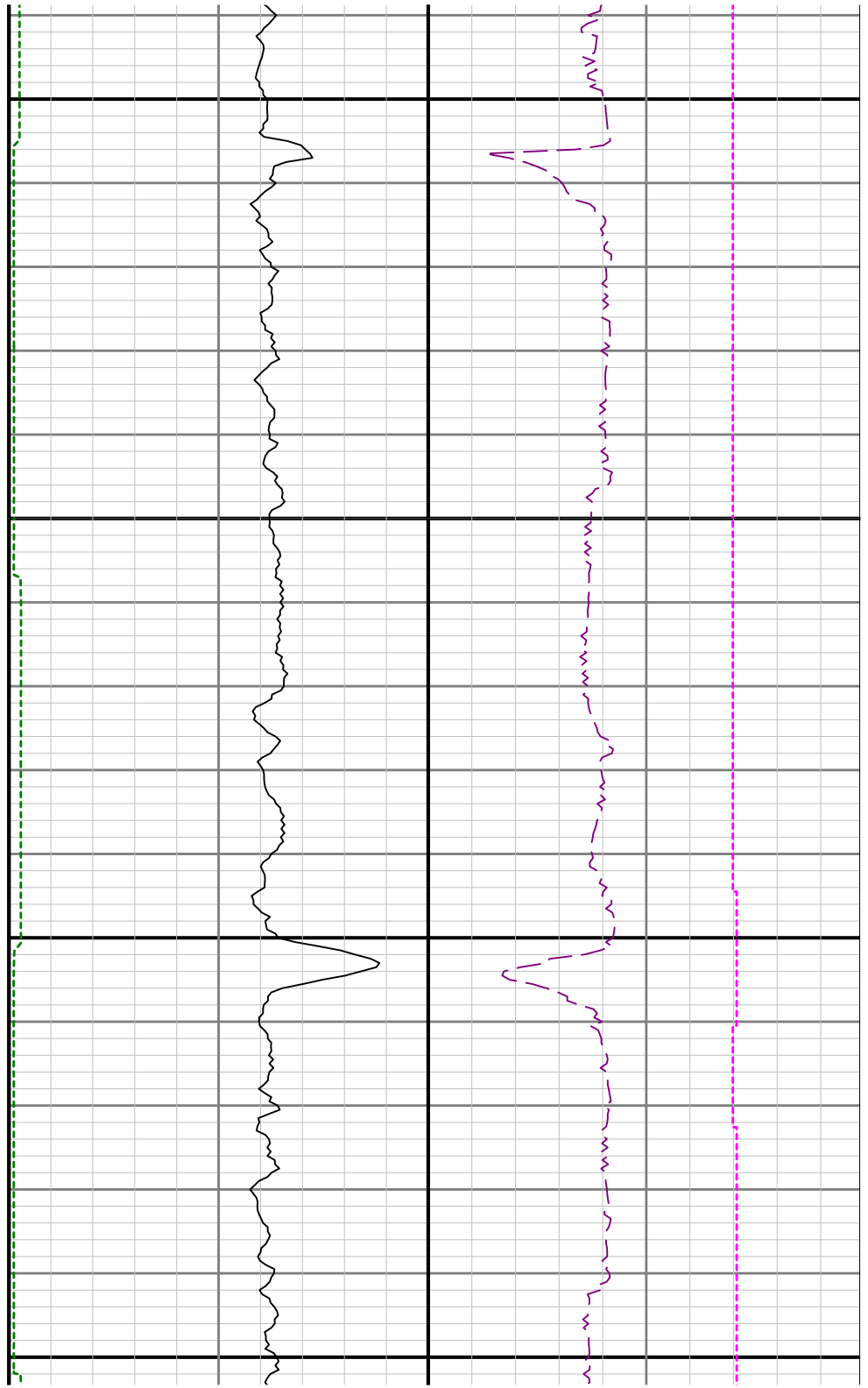


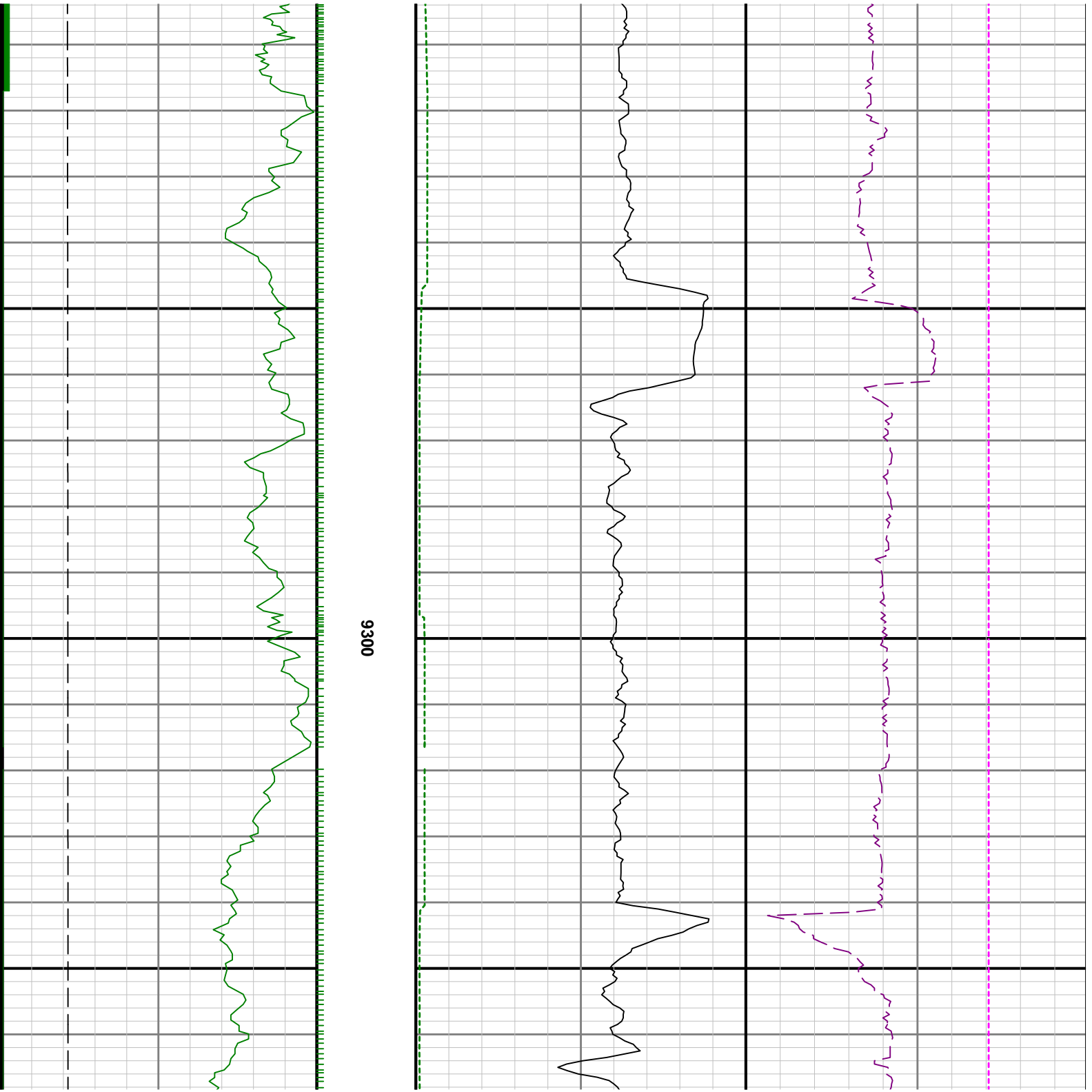


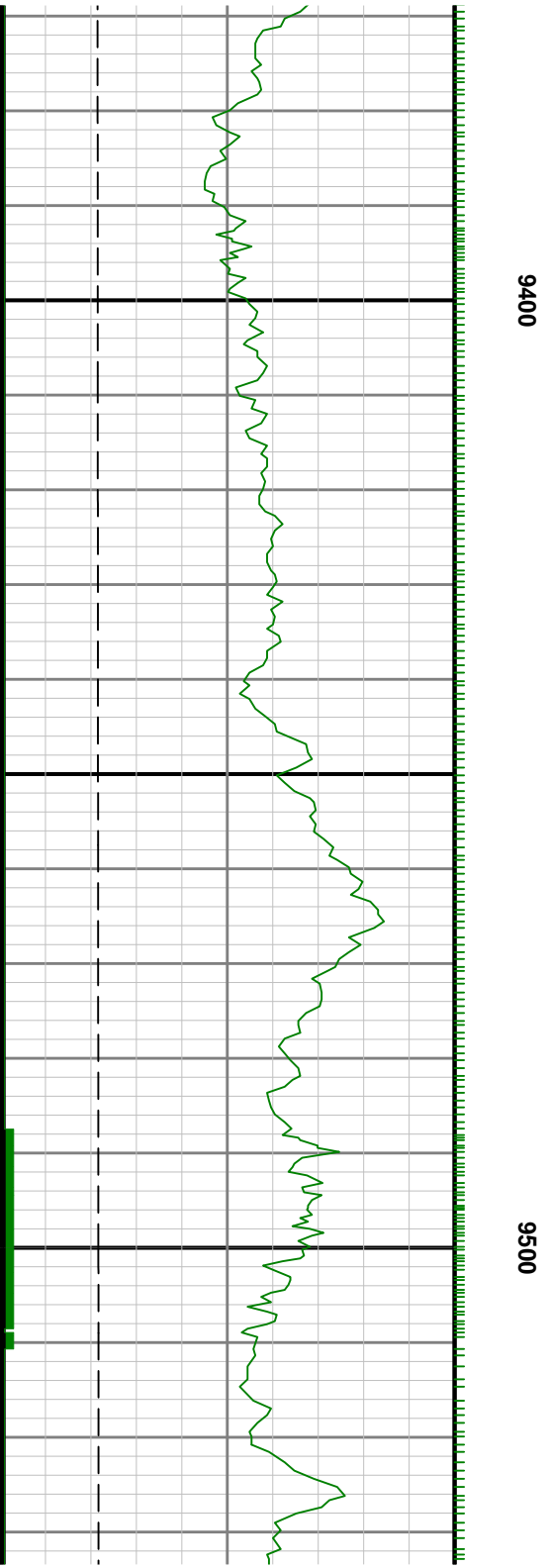
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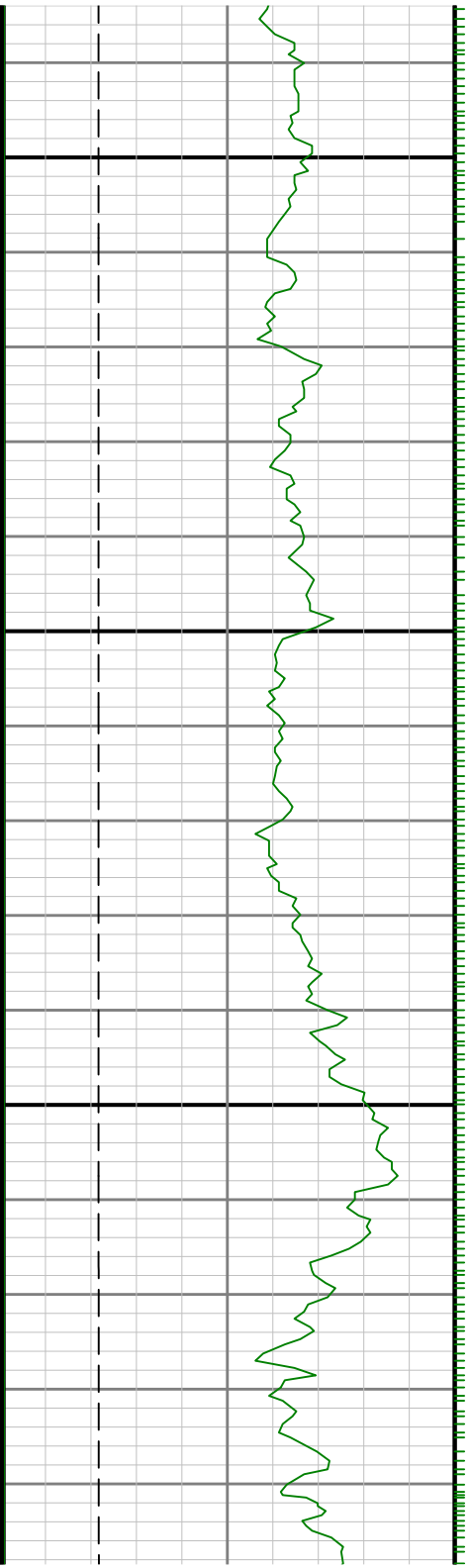






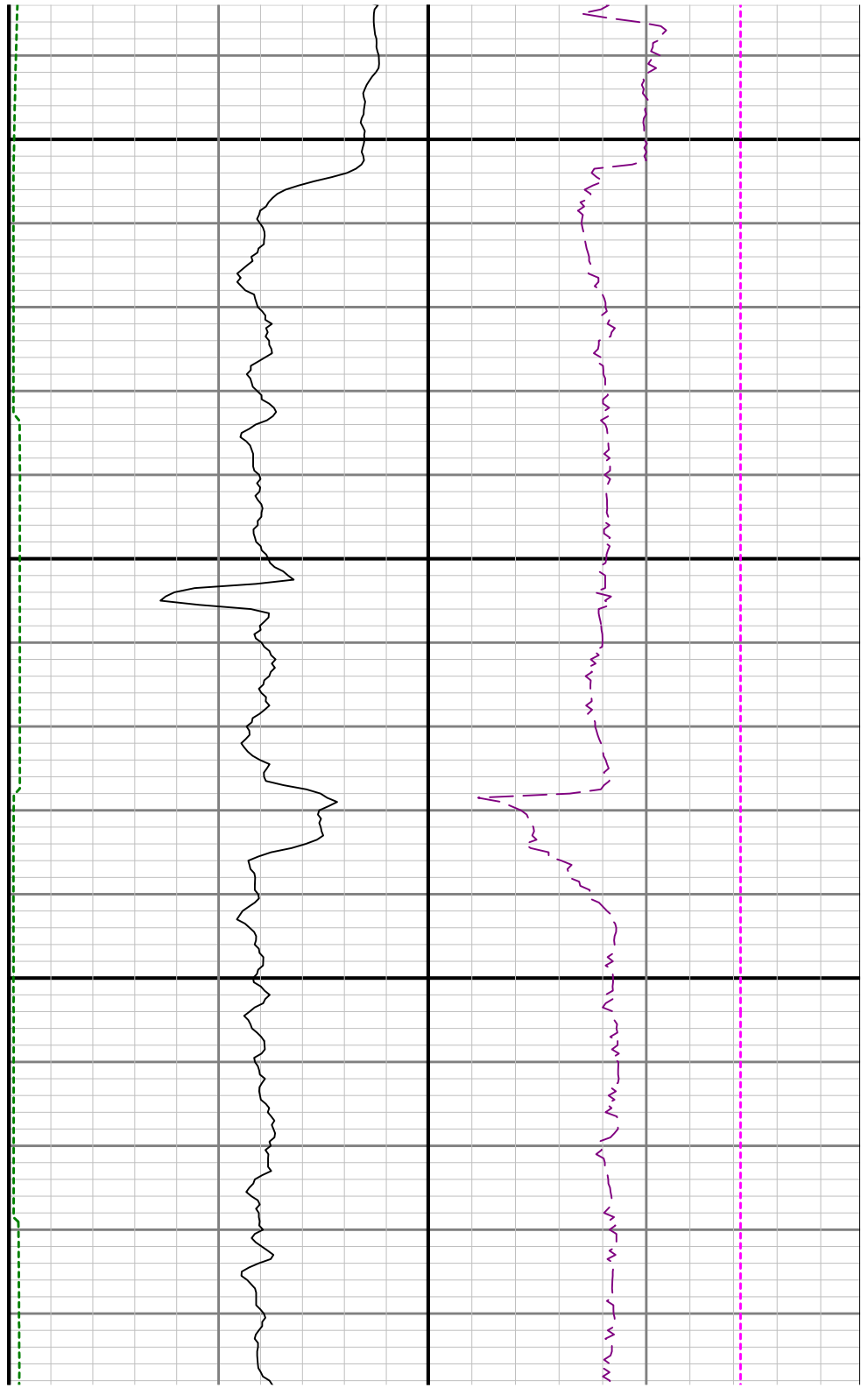


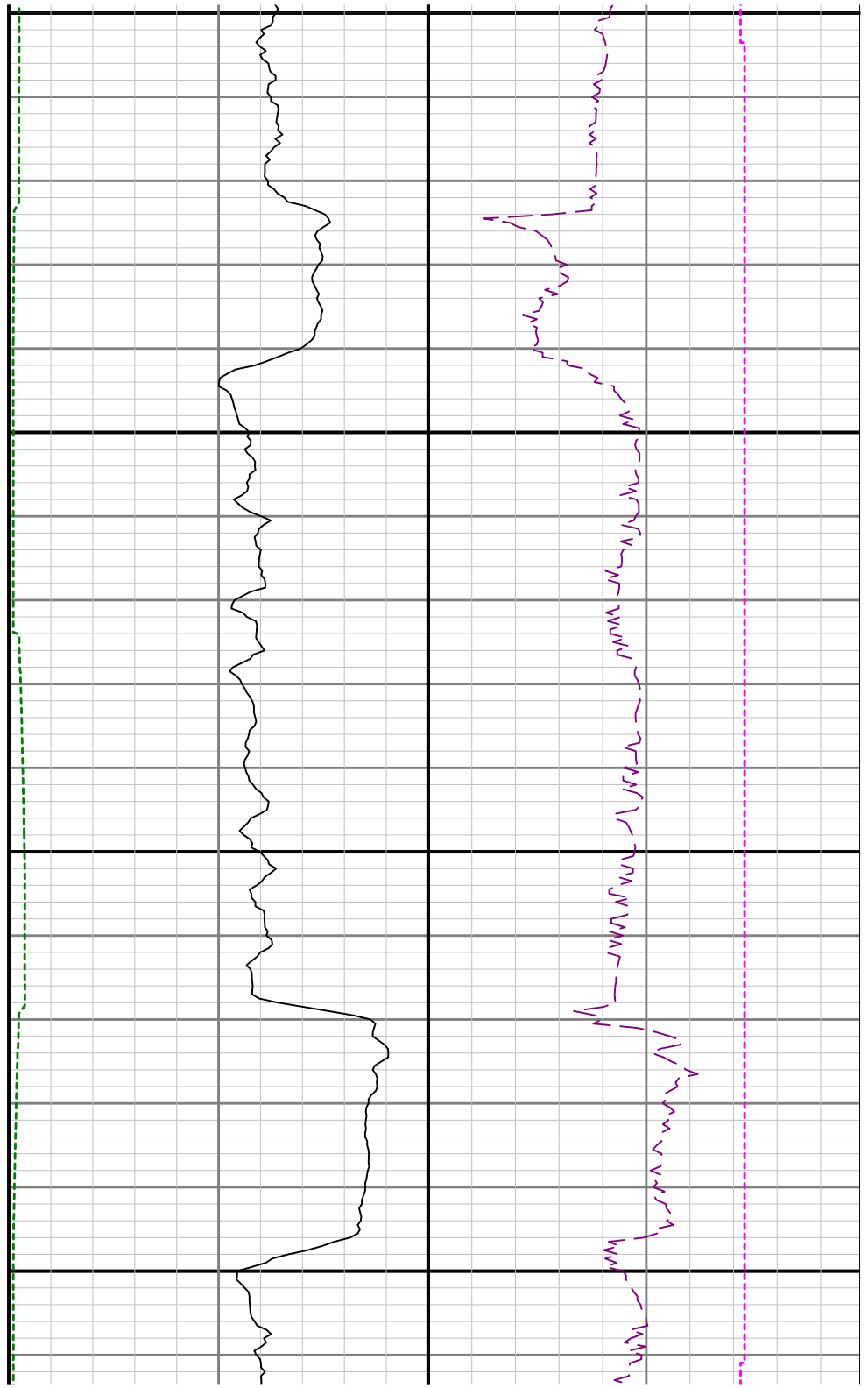
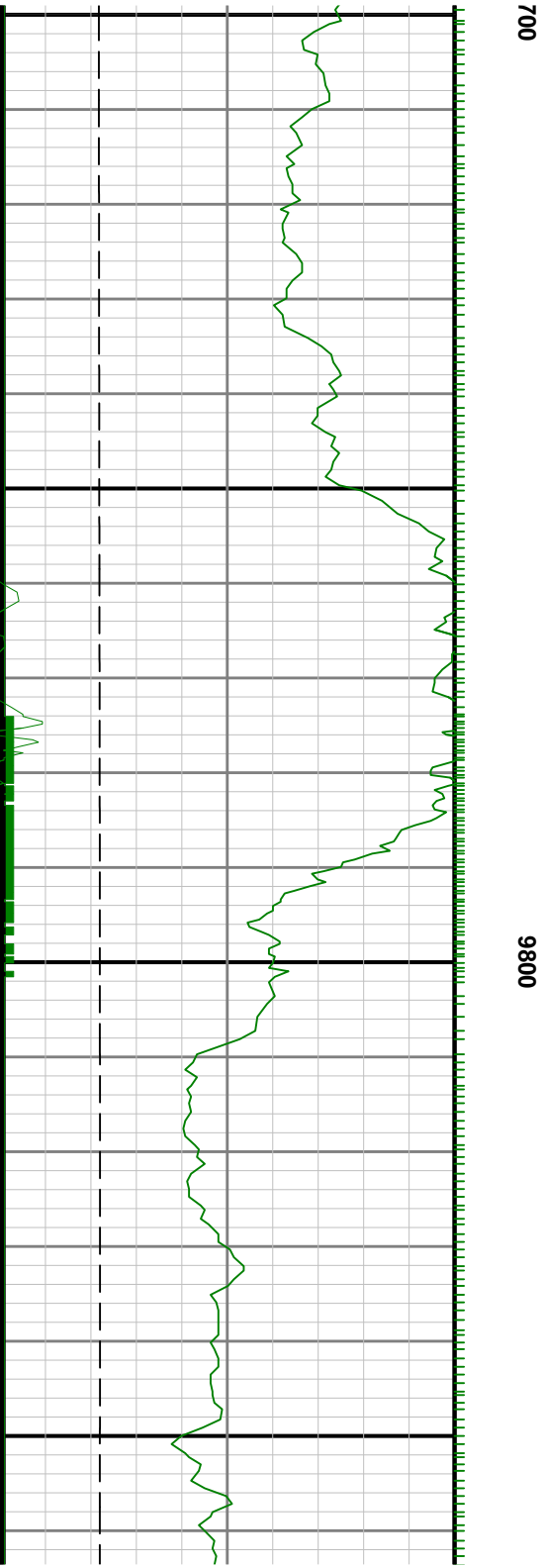


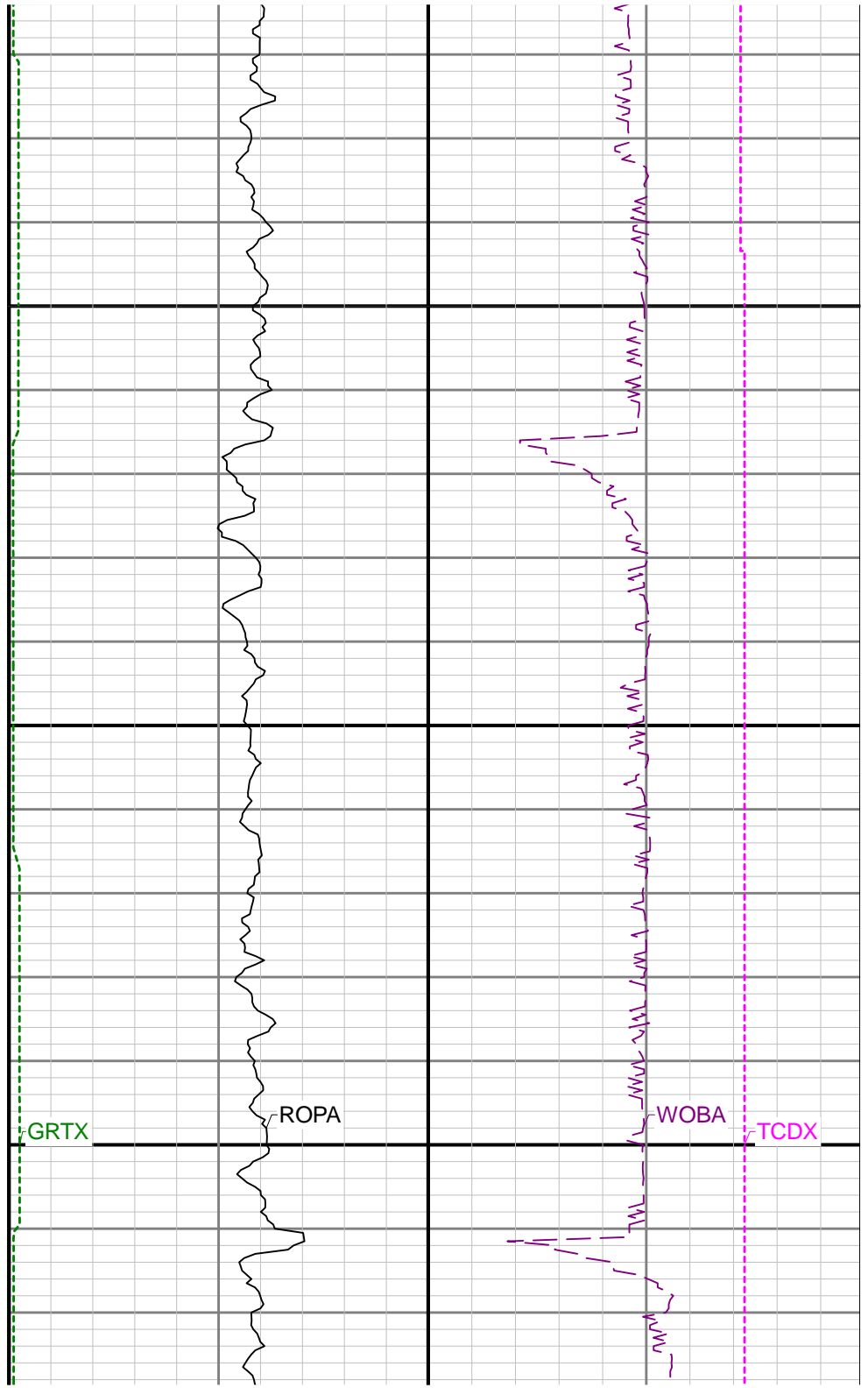
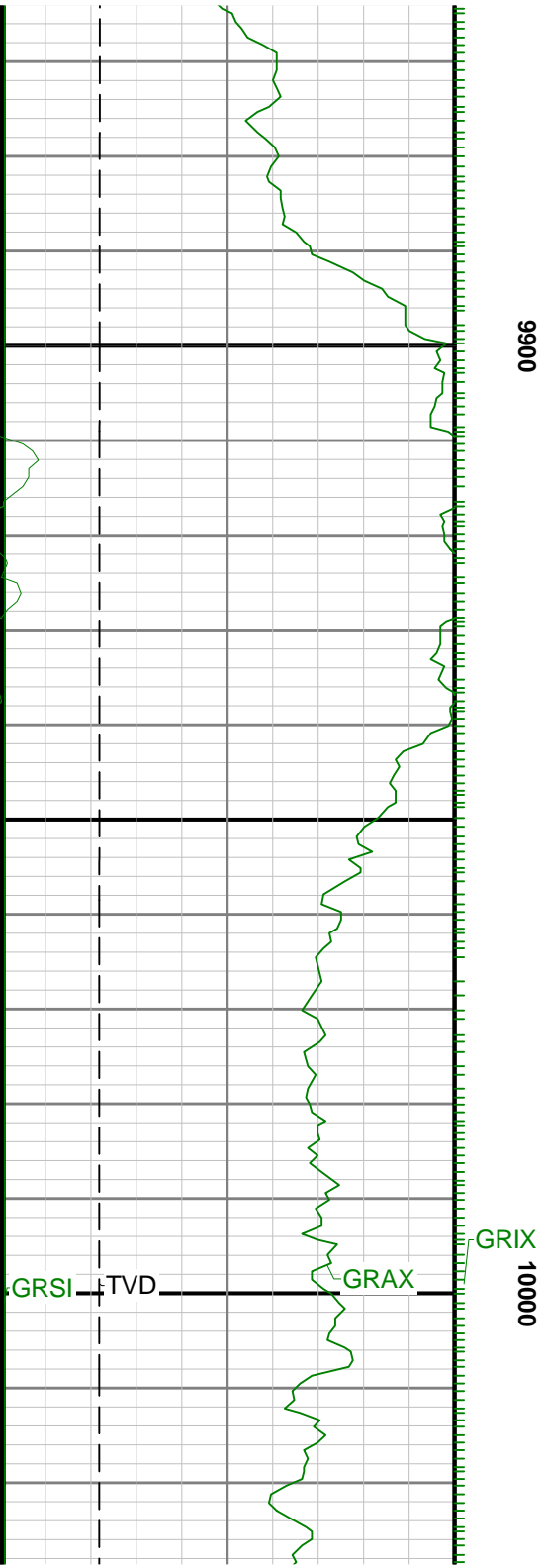


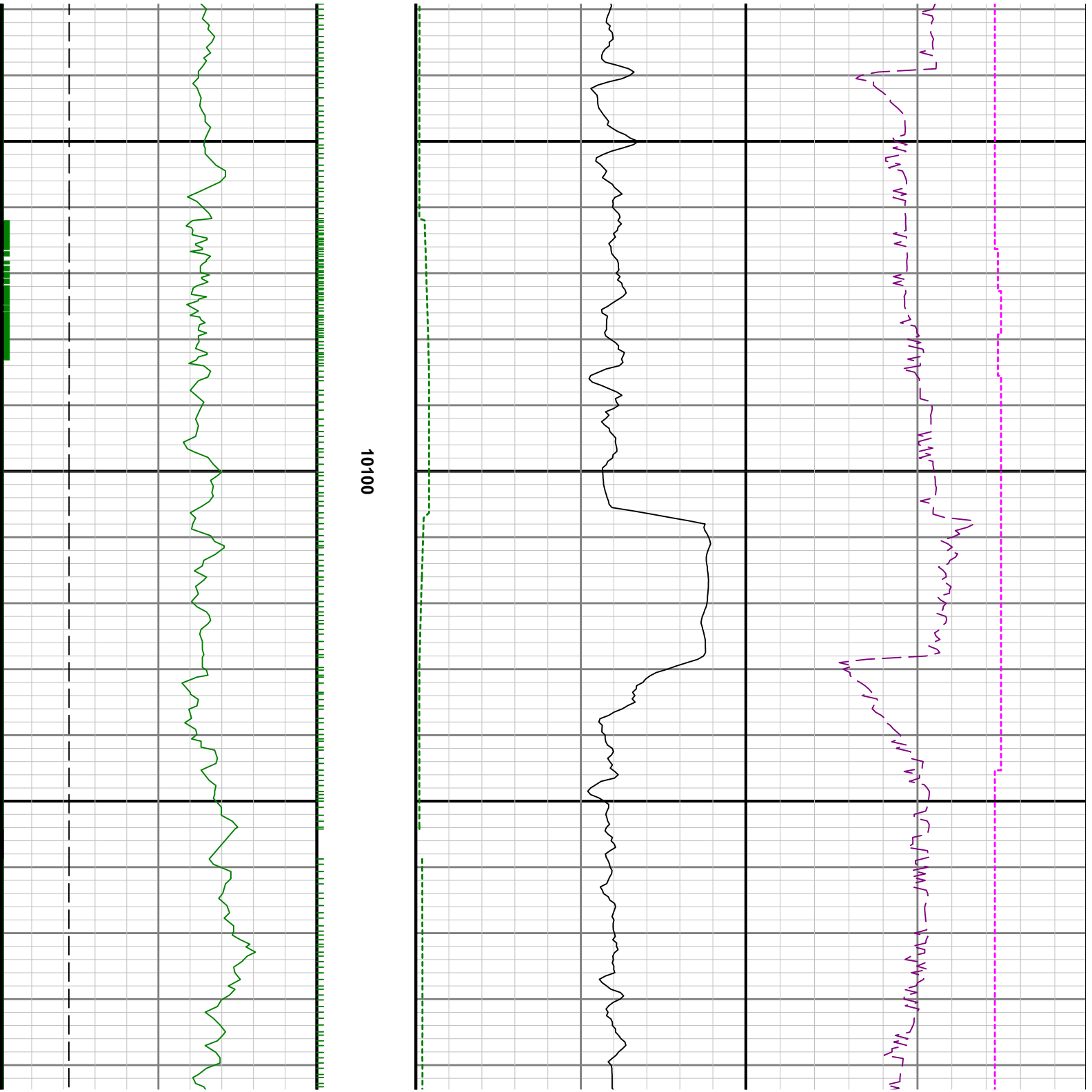
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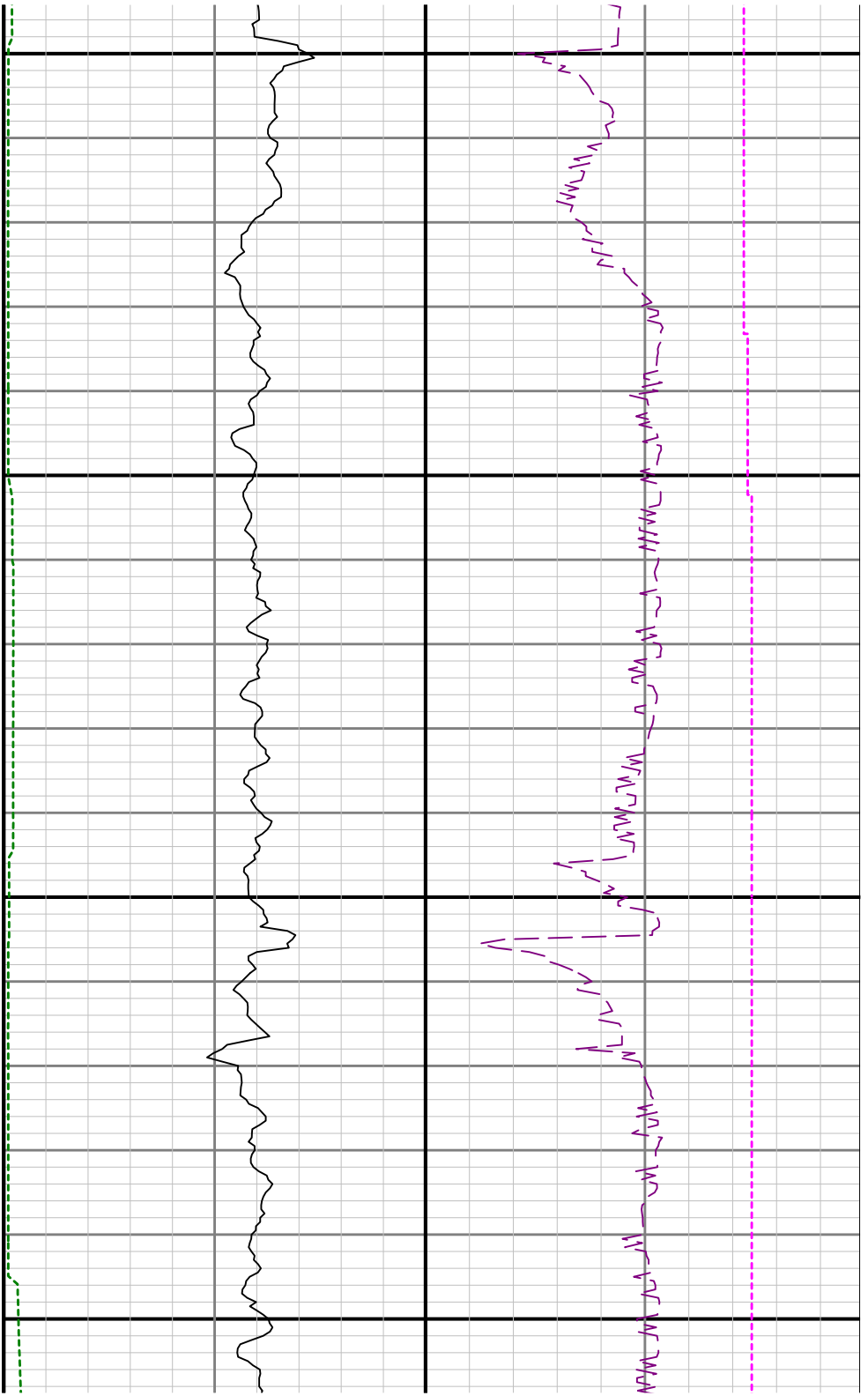
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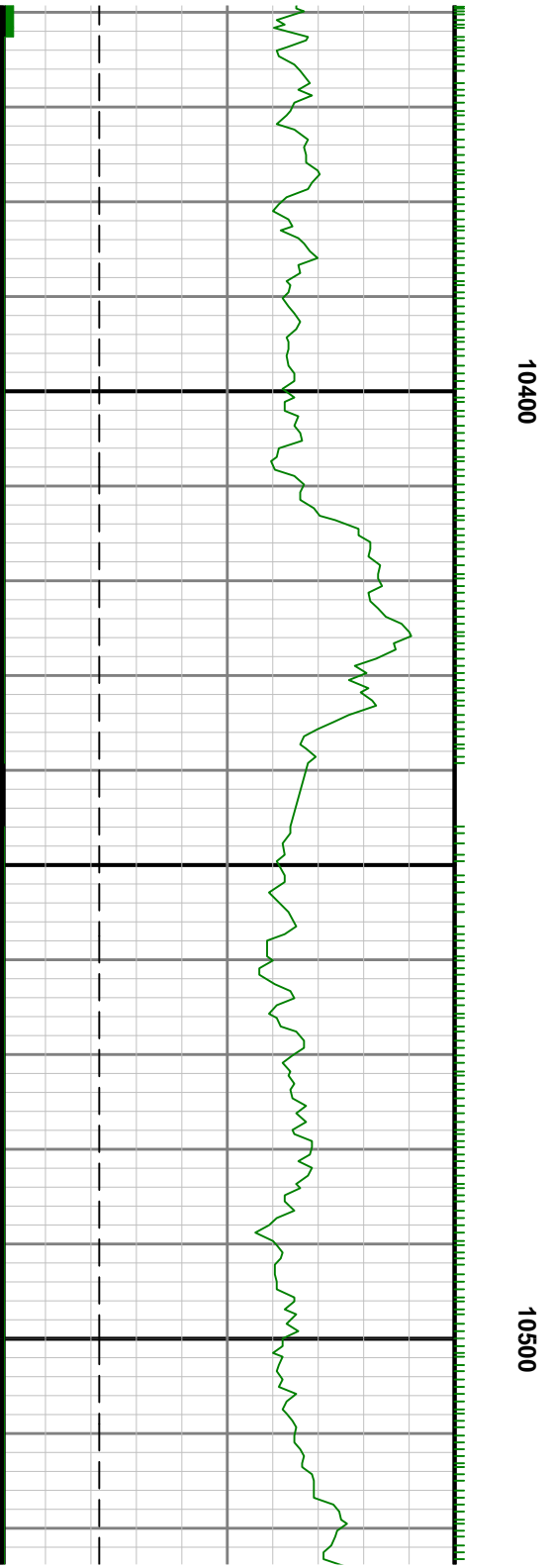
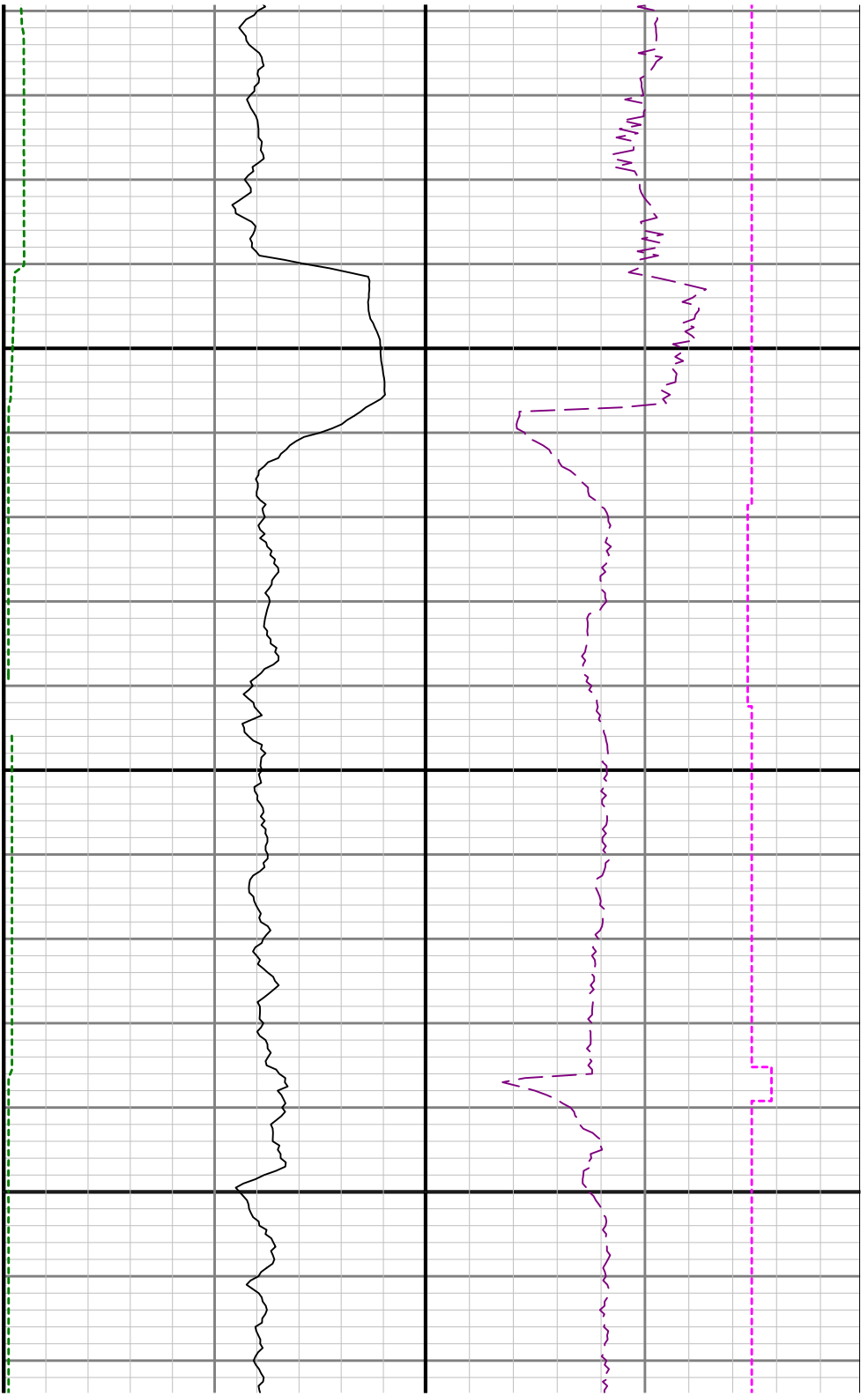


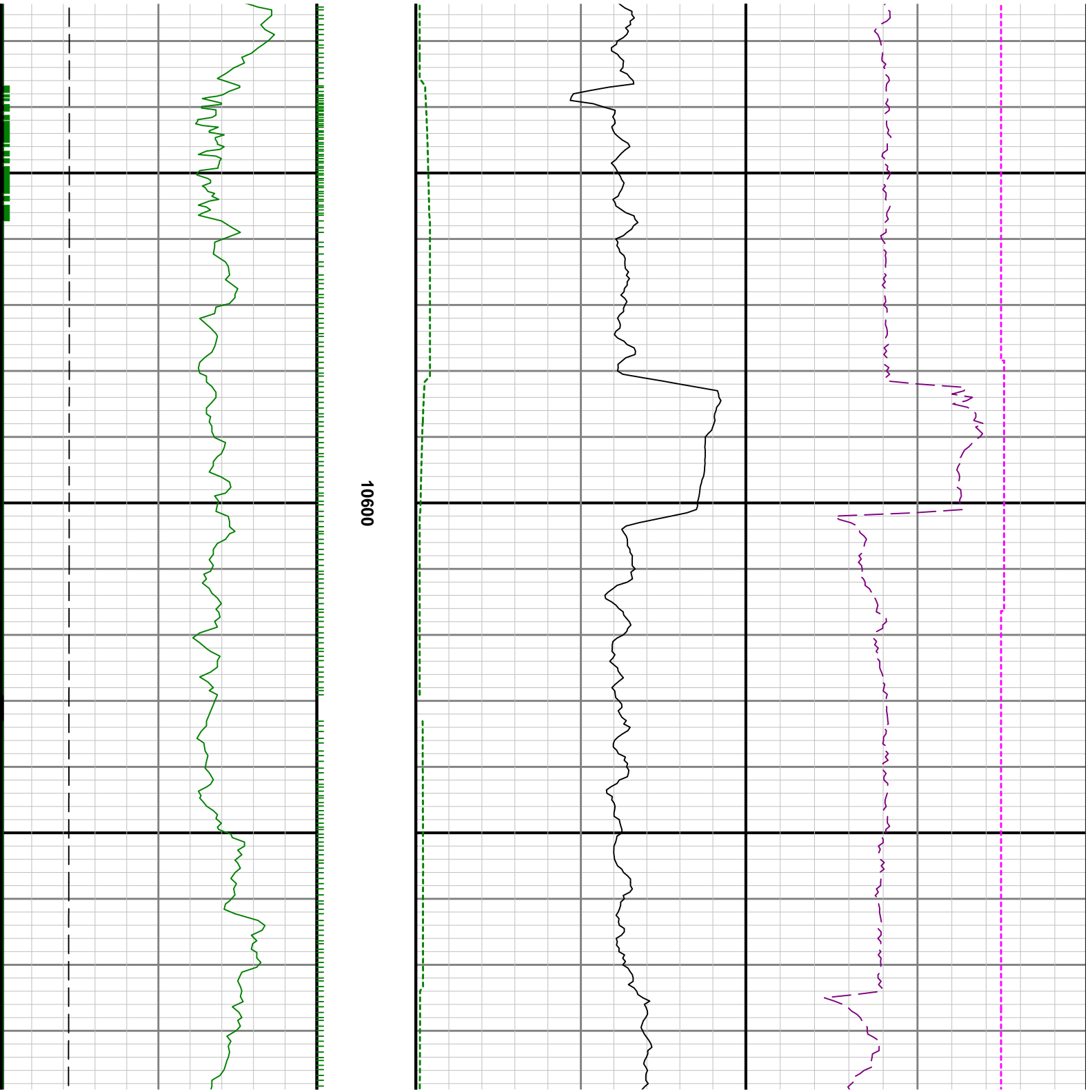


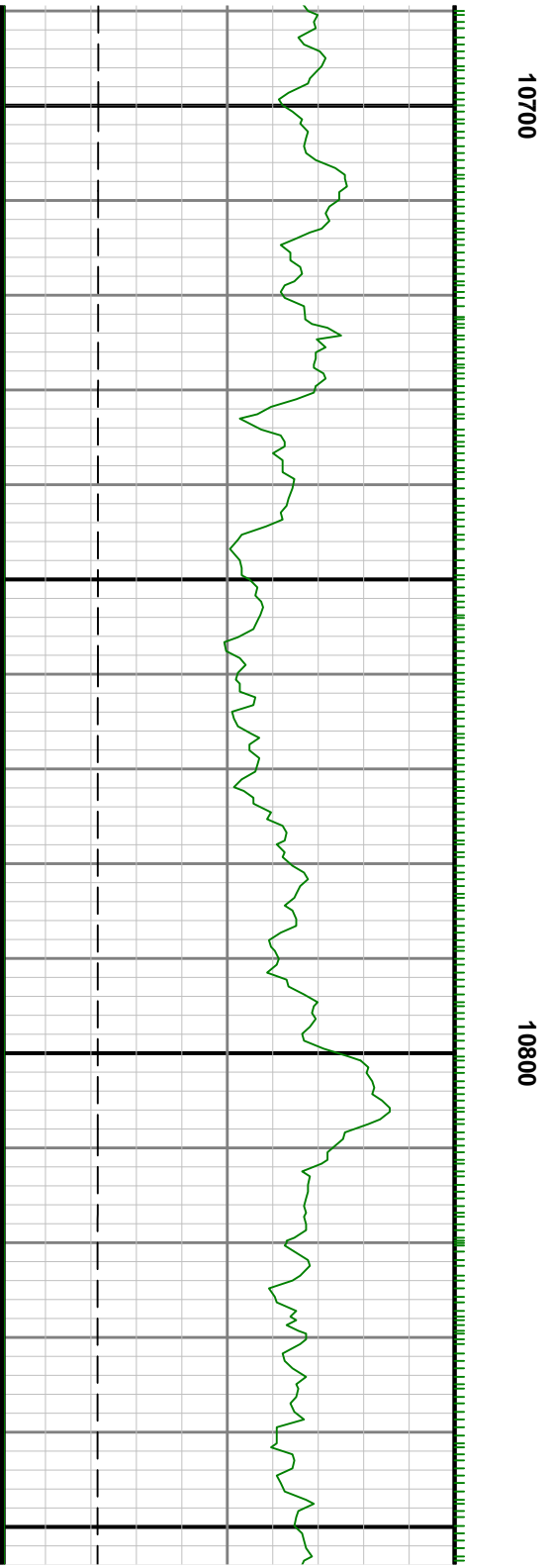
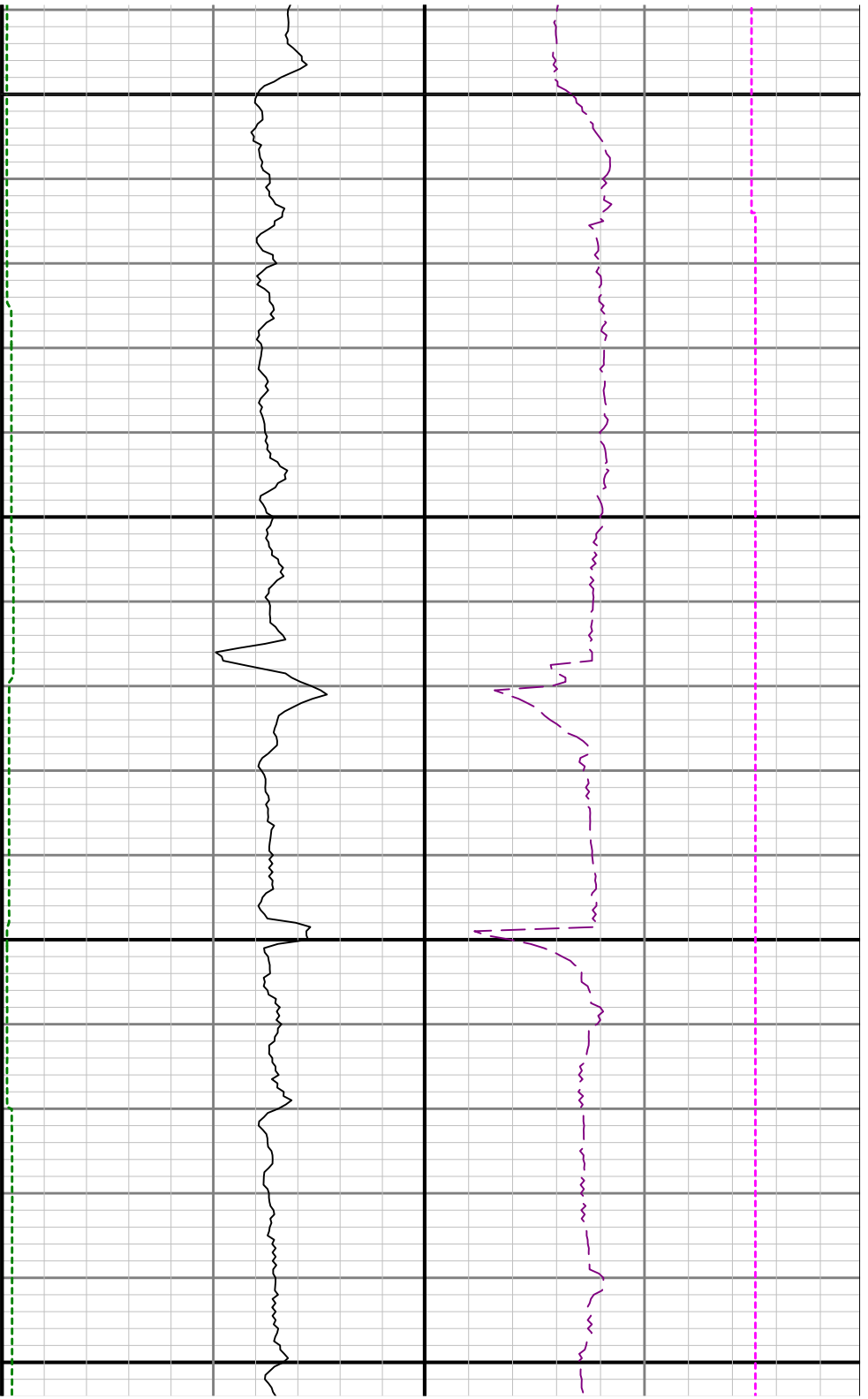


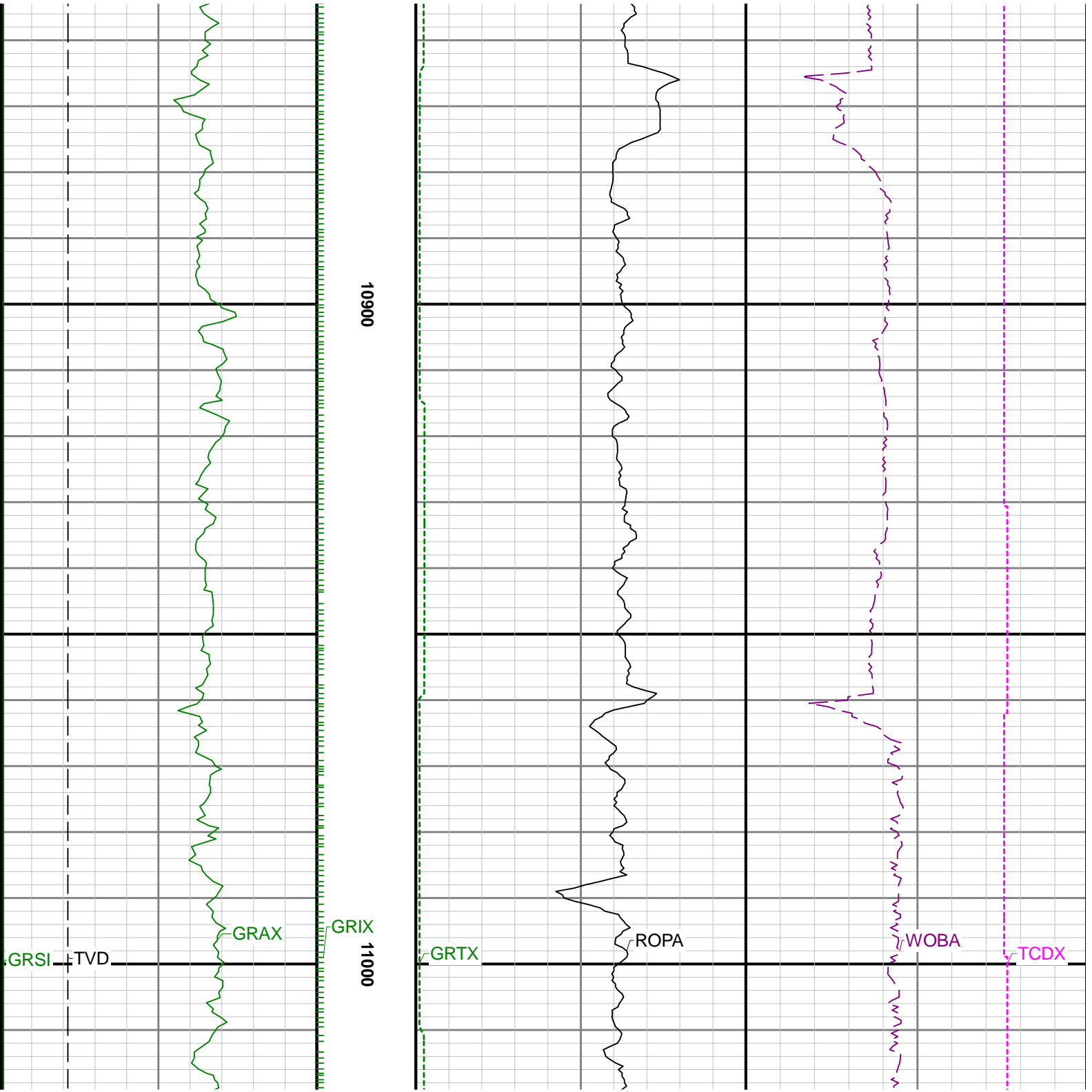
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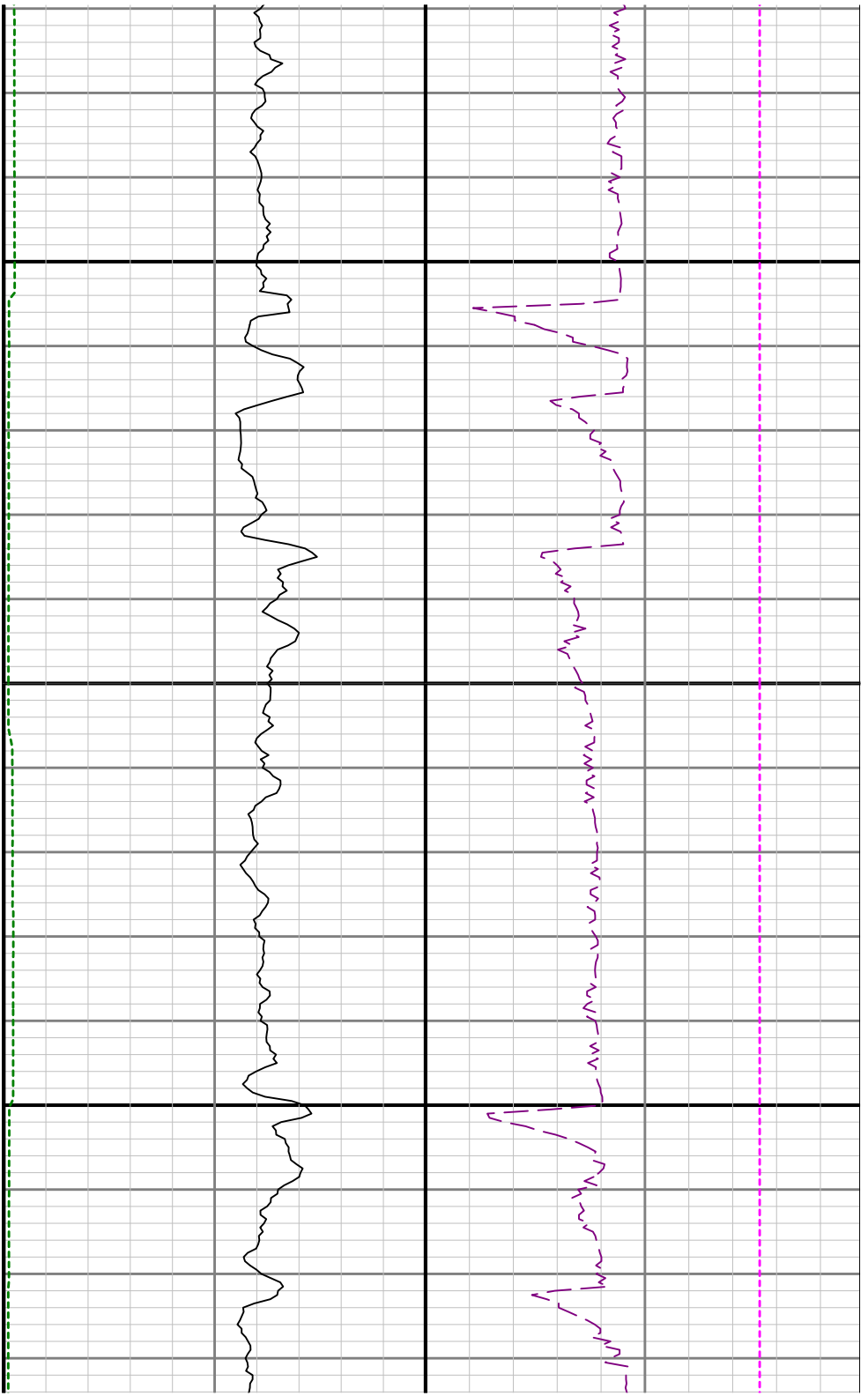
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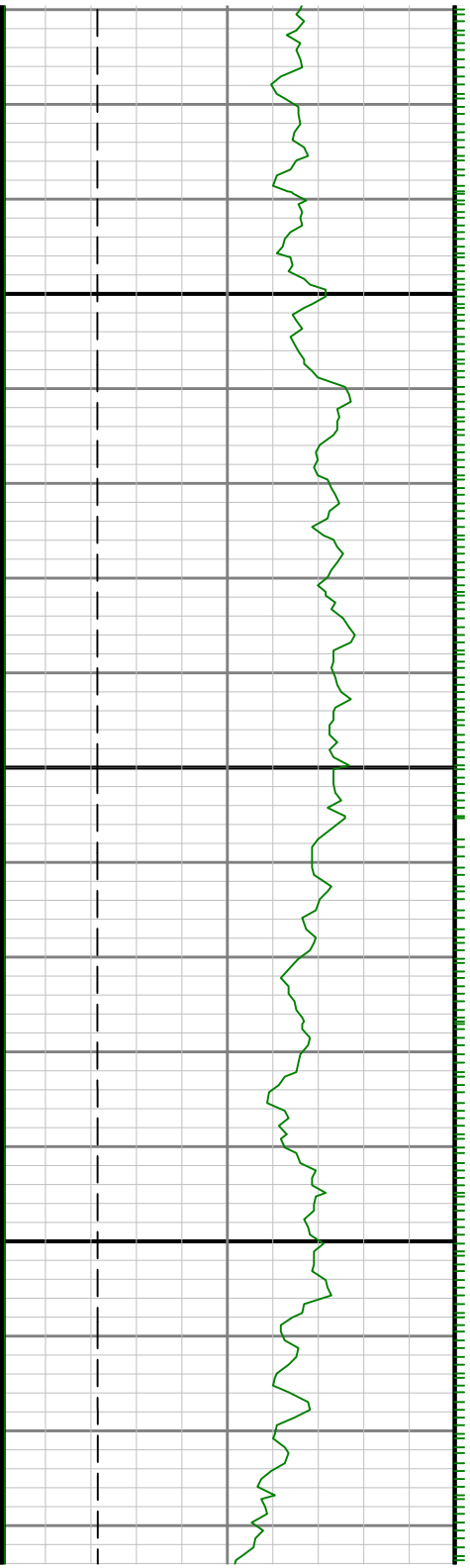


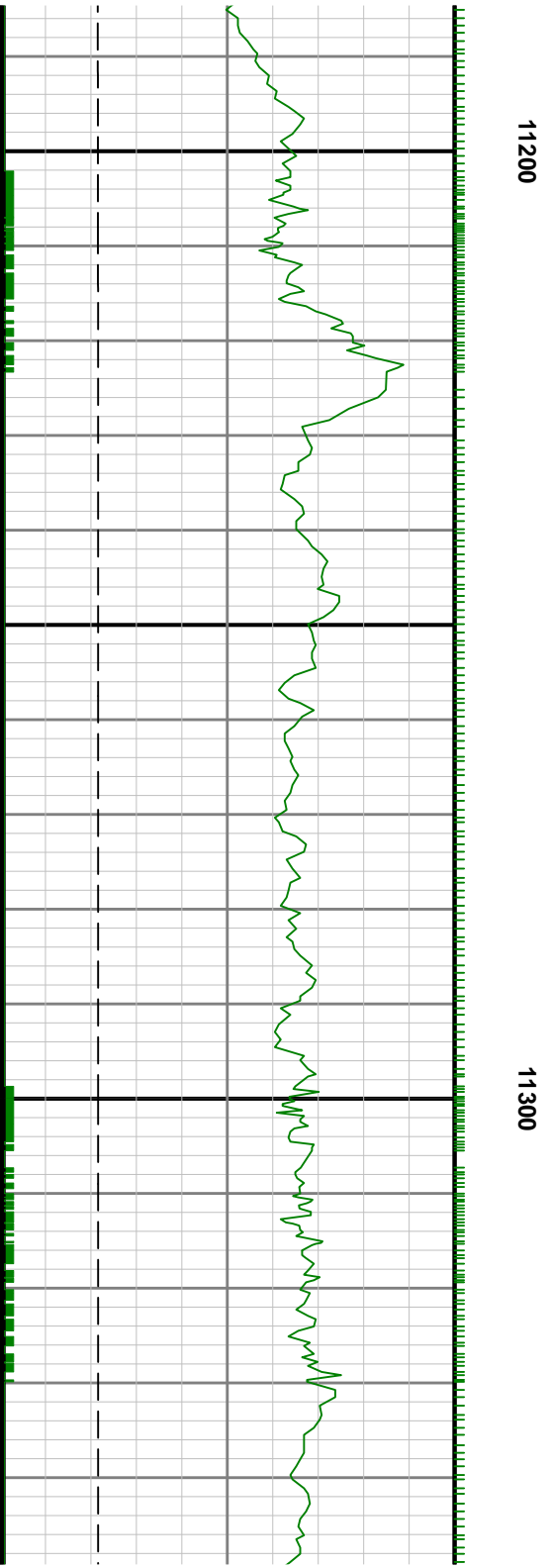
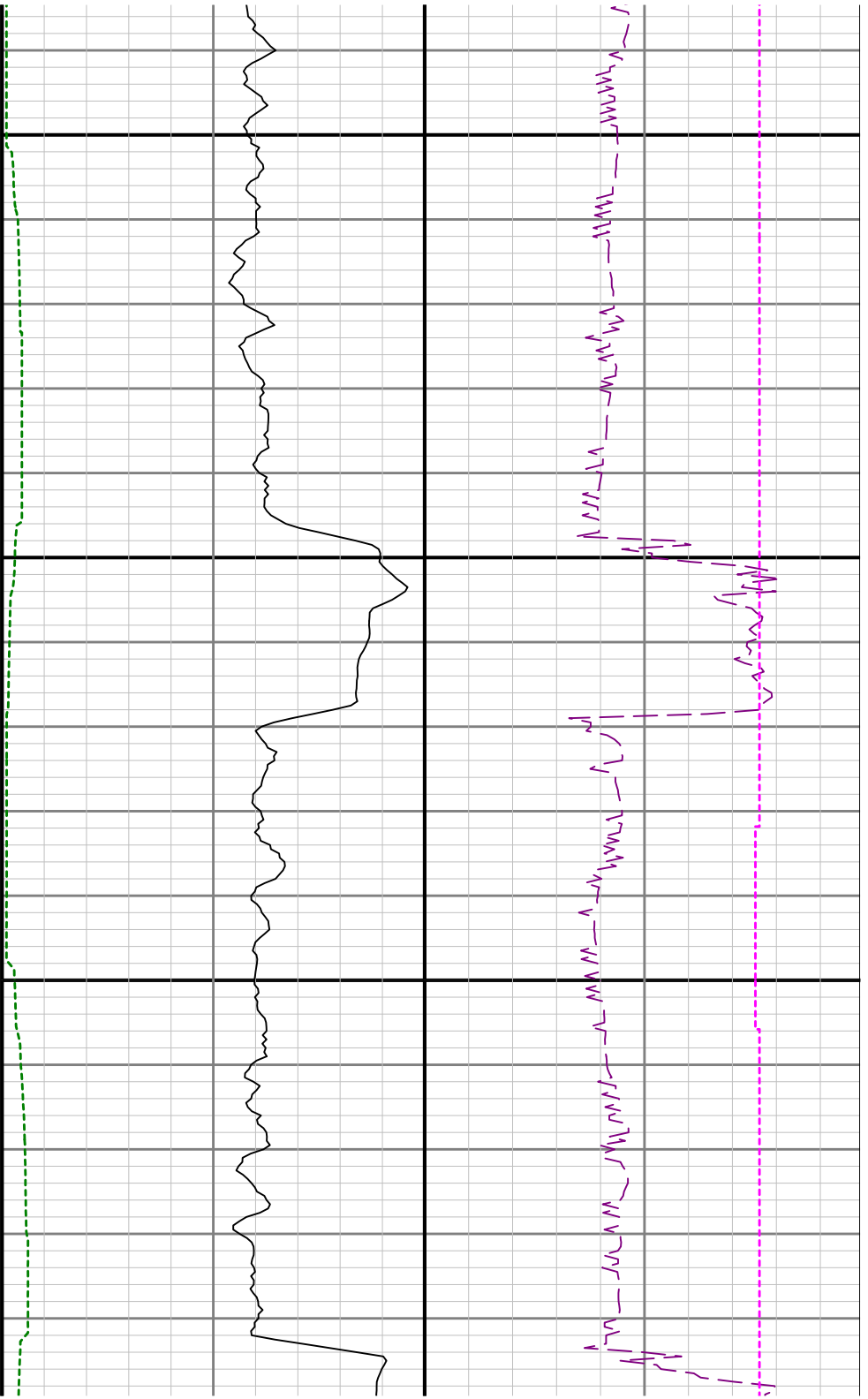


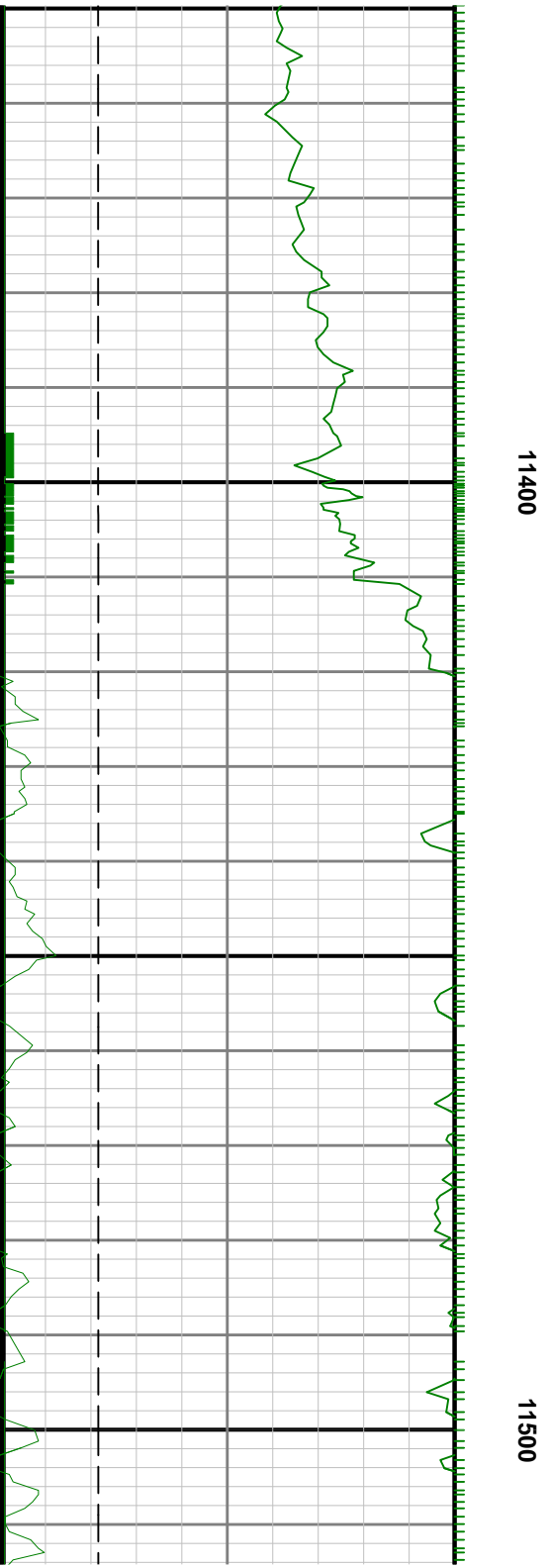
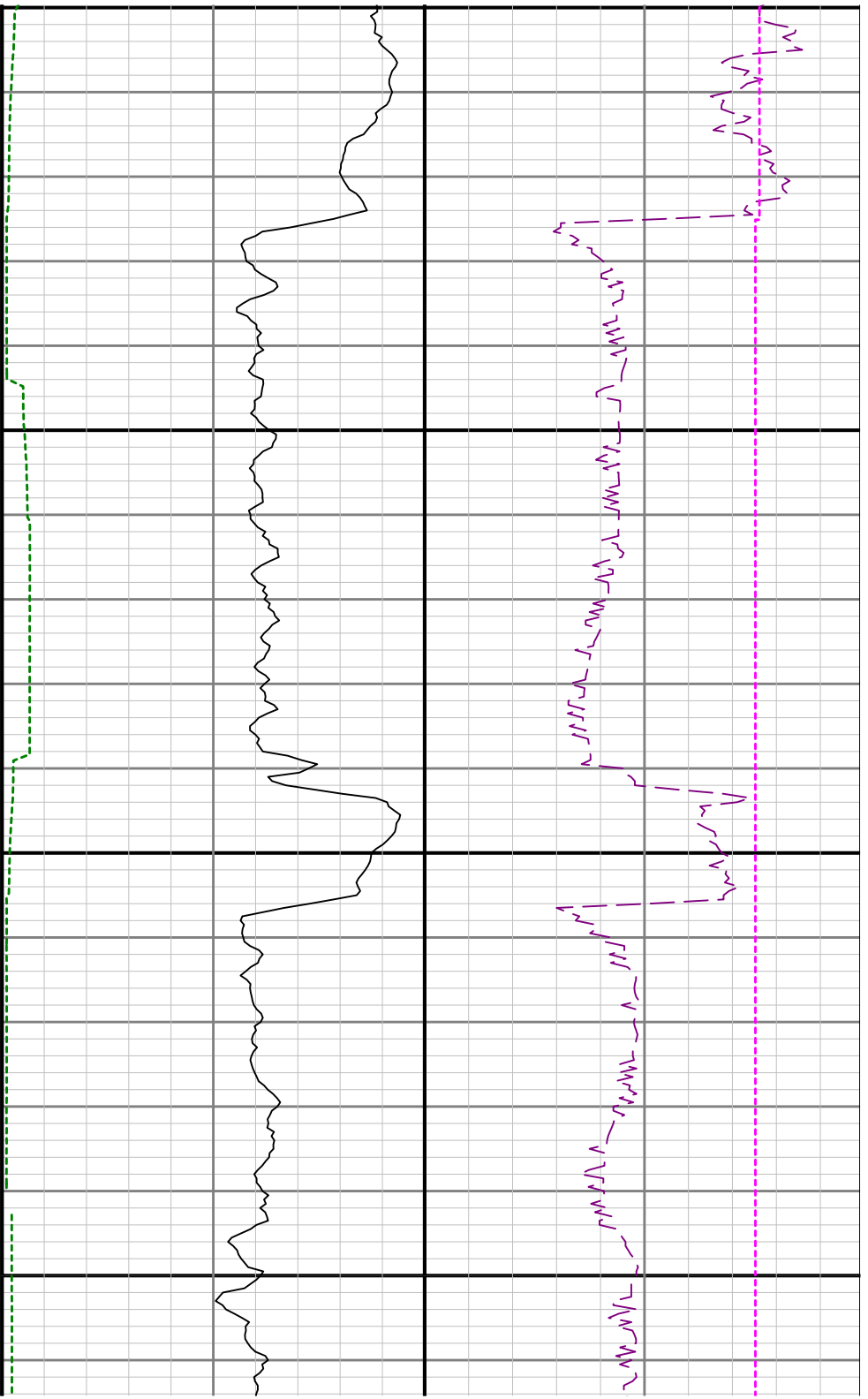


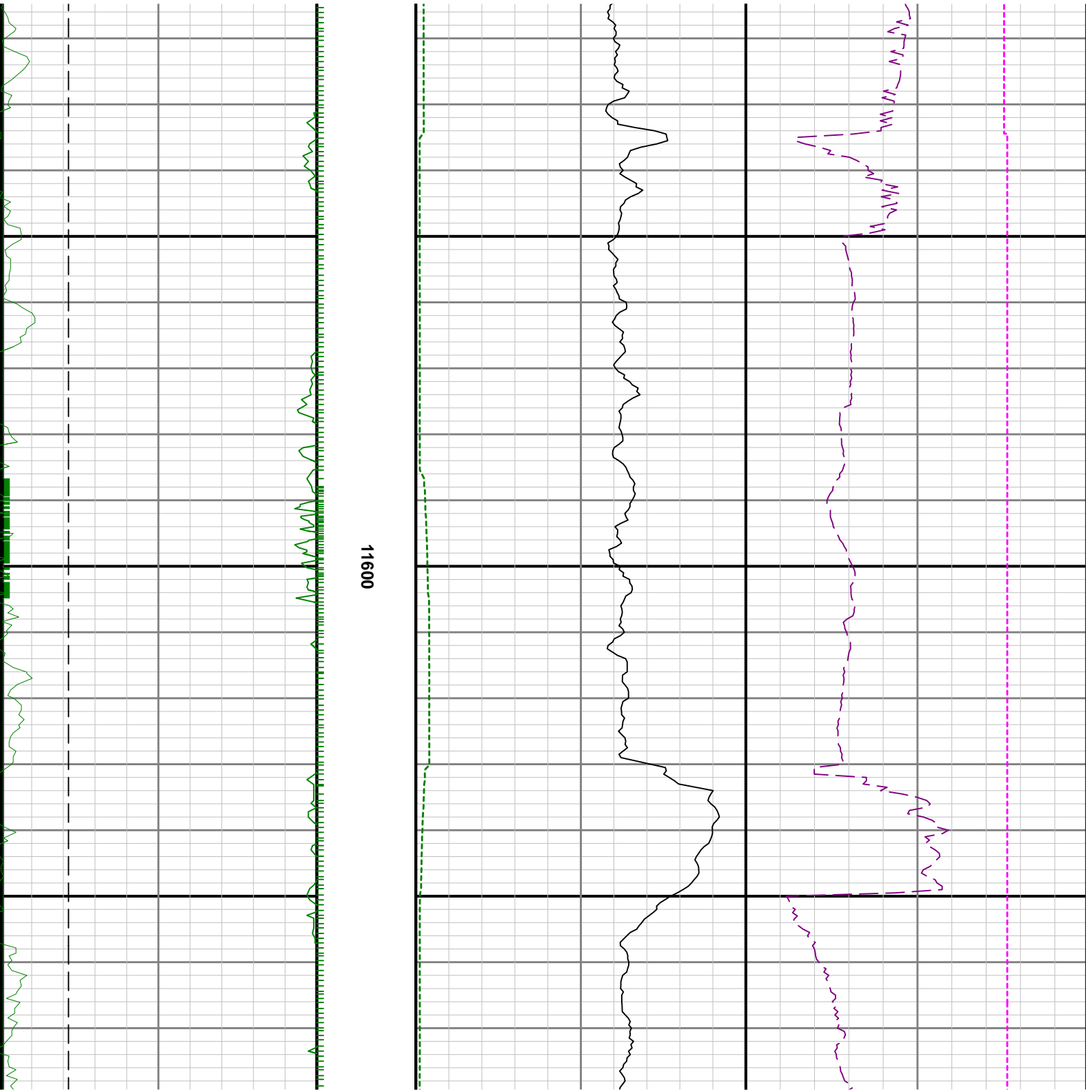


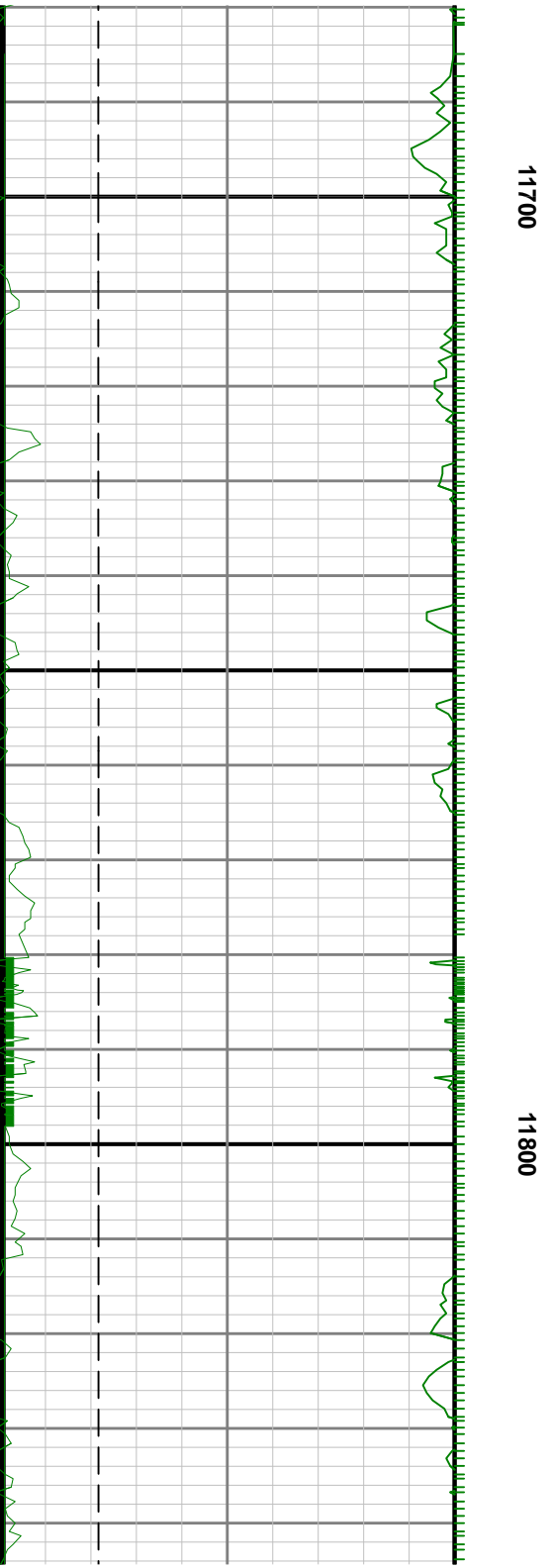
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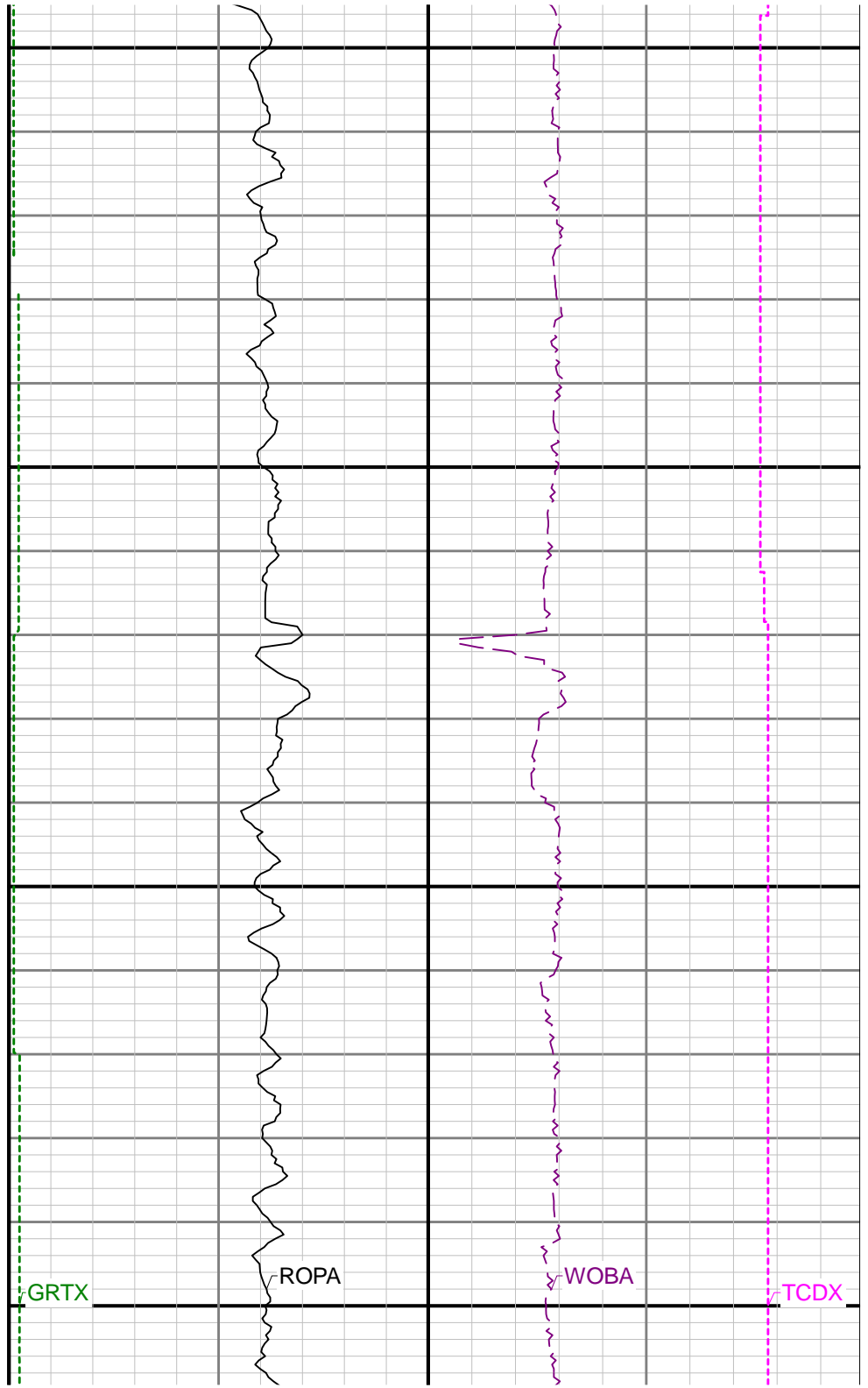
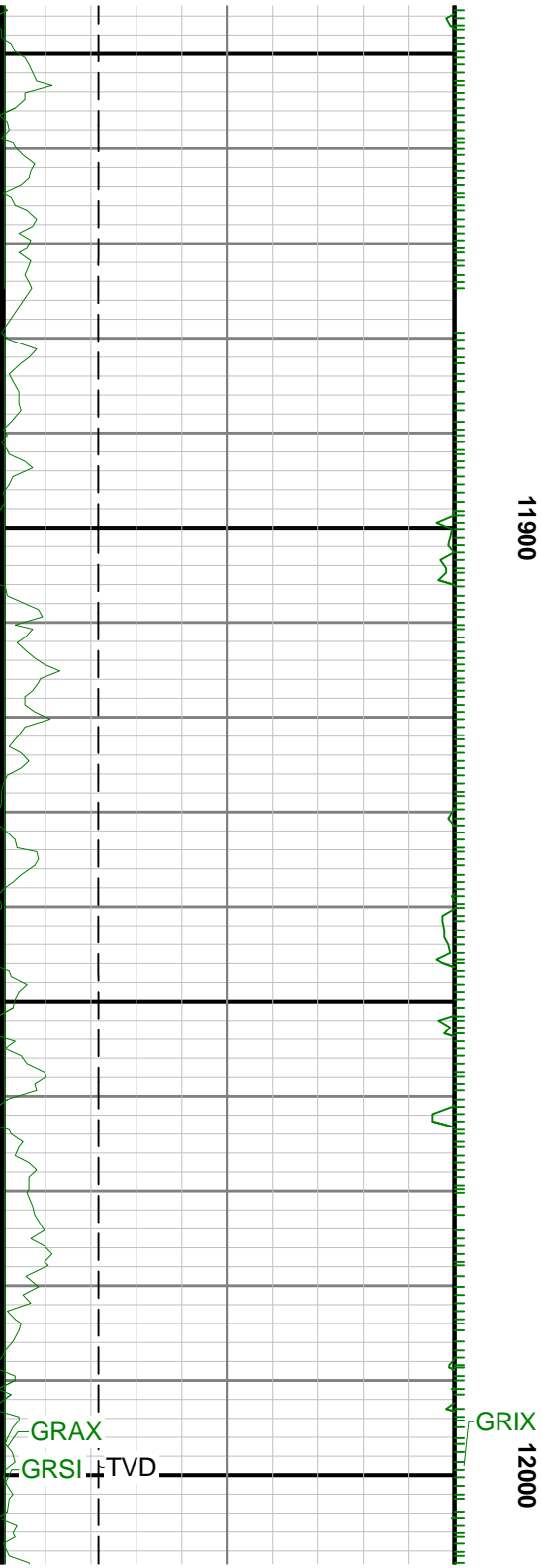


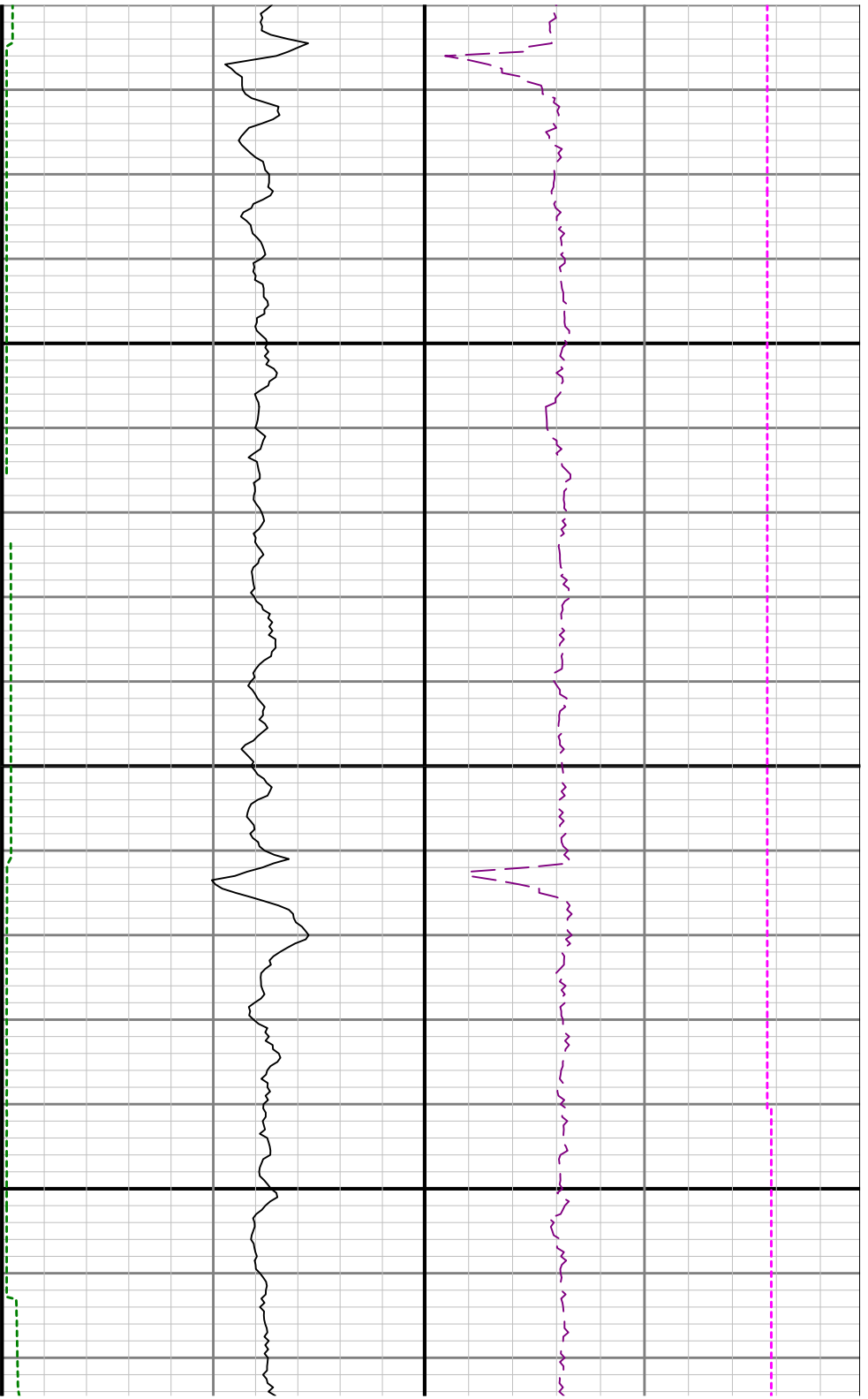












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