



	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite
Adam Schlenz	04/Jul/2014	11/Jul/2014	Greg Dore	04/Jul/2014	11/Jul/2014			

Witness

Name	LWD Run Number
Charlie Daigle	1,2 & 3
Wade Mullican	1,2 & 3

Mud Properties Record

Date / Time		LWD Run No.	Measured Depth (ft.)	Mud Type	Density (ppg)	Viscosity (cp)	pH	Fluid Loss (cc)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
04/July/2014	22:00	1	2462.0	Water Based	8.4	1	8.4	N/A	0.3/99.2	Active Mud Pit	3200	N/A
05/July/2014	22:00	1	6548.0	Water Based	9.4	8	9.1	N/A	1.5/92.5	Active Mud Pit	3200	N/A
06/July/2014	22:00	2	7195.0	Water Based	10.0	12	9.5	N/A	2/89	Active Mud Pit	2700	N/A
07/July/2014	22:00	2	7517.0	Water Based	10.6	11	9.5	N/A	2/86.8	Active Mud Pit	2700	N/A
08/July/2014	22:00	3	11221.0	Water Based	9.5	13	9.1	N/A	2.6/90.6	Active Mud Pit	2800	N/A

Mnemonics

Curve	Description	Units
GRAX	Gamma Ray Apparent, 0.5 ft. Avg.	API
GRIX	Gamma Ray Data Density	point
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	11941434	Directional	66.16	6.750	3.250
1	SRIG	12816077	Gamma	62.79	6.750	3.250
2	DIR	11941434	Directional	59.42	6.750	3.250
2	SRIG	12816077	Gamma	56.05	6.750	3.250
3	DIR	12815870	Directional	66.83	4.750	2.688
3	SRIG	11858322	Gamma	63.45	4.750	2.688

Service and Tool Mnemonics

Mnemonic	Name	Description
DIR	Directional	Wellbore directional survey

## Comments

- 1.) 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 LWD logging engineers, depth calibrations and measurements could not be independently verified and the unverified depths as supplied to Baker Hughes are being used to present logging data.
- 2.) The solid line on the left side of the gamma ray track indicates the interval over which data was collected while not rotating.
- 3.) Baker Hughes LWD run 1&2 utilized 6 3/4 inch NaviGamma services (Gamma Ray and Directional) behind an 8 3/4 inch bit and steerable assembly from 1341 to 7517 feet MD (1340 to 7116 feet TVD).
- 4.) Baker Hughes LWD run 3 utilized 4 3/4 inch NaviGamma services (Gamma Ray and Directional) behind an 6 1/8 inch bit and steerable assembly from 7516 to 12439 feet MD (7116 to 7100 feet TVD).

## Remarks

Number	Measured Depth (ft.)	Hole Section (in.)	LWD Run No.	Remark
1	6572	8.750	1	Gamma ray logging operations began at 6572 feet MD (6521 feet TVD).
2	6889	8.750	1	The interval from 6826 to 6889 feet MD ( 6769 to 6826 feet TVD) was logged more than 10 hrs after being drilled due to a trip out of the hole for a new Motor and bit.
3	7517	8.750	2	The interval from 7455 to 7517 feet MD ( 7110 to 7116 feet TVD) was logged more than 10 hrs after being drilled due to a trip out of the hole for casing and cement operations.
4	12439	6.125	3	No sensor data logged from 12373 to 12439 feet MD ( 7100 feet TVD) due to sensor to bit offset at well TD.



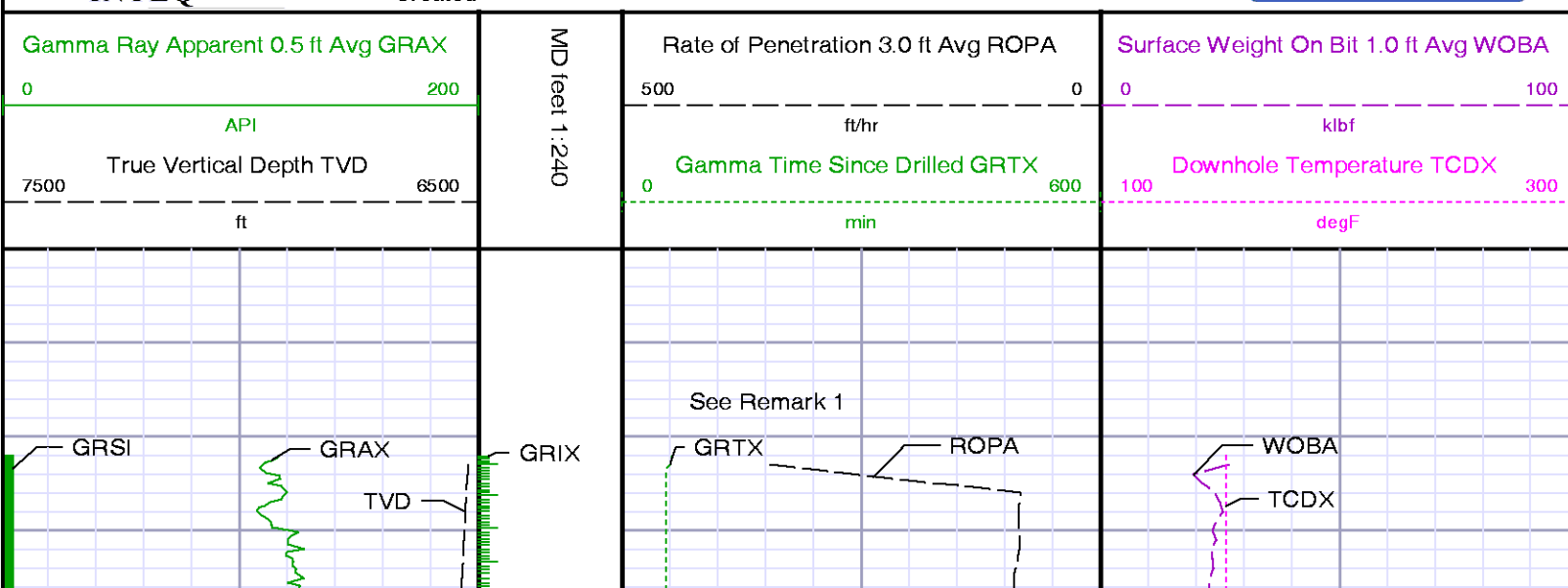
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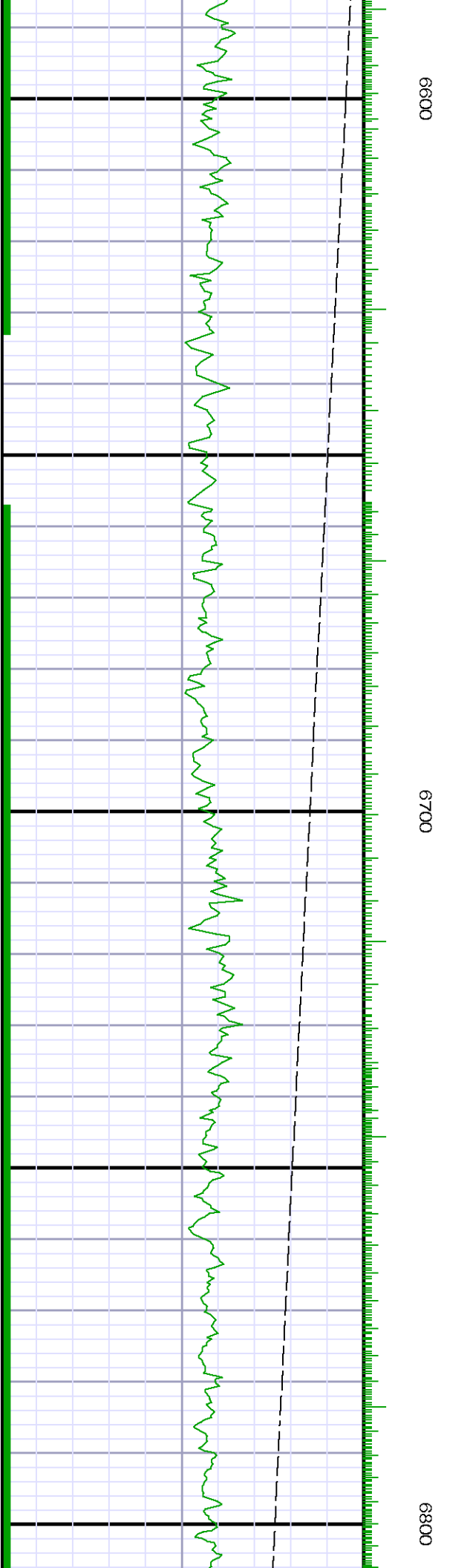
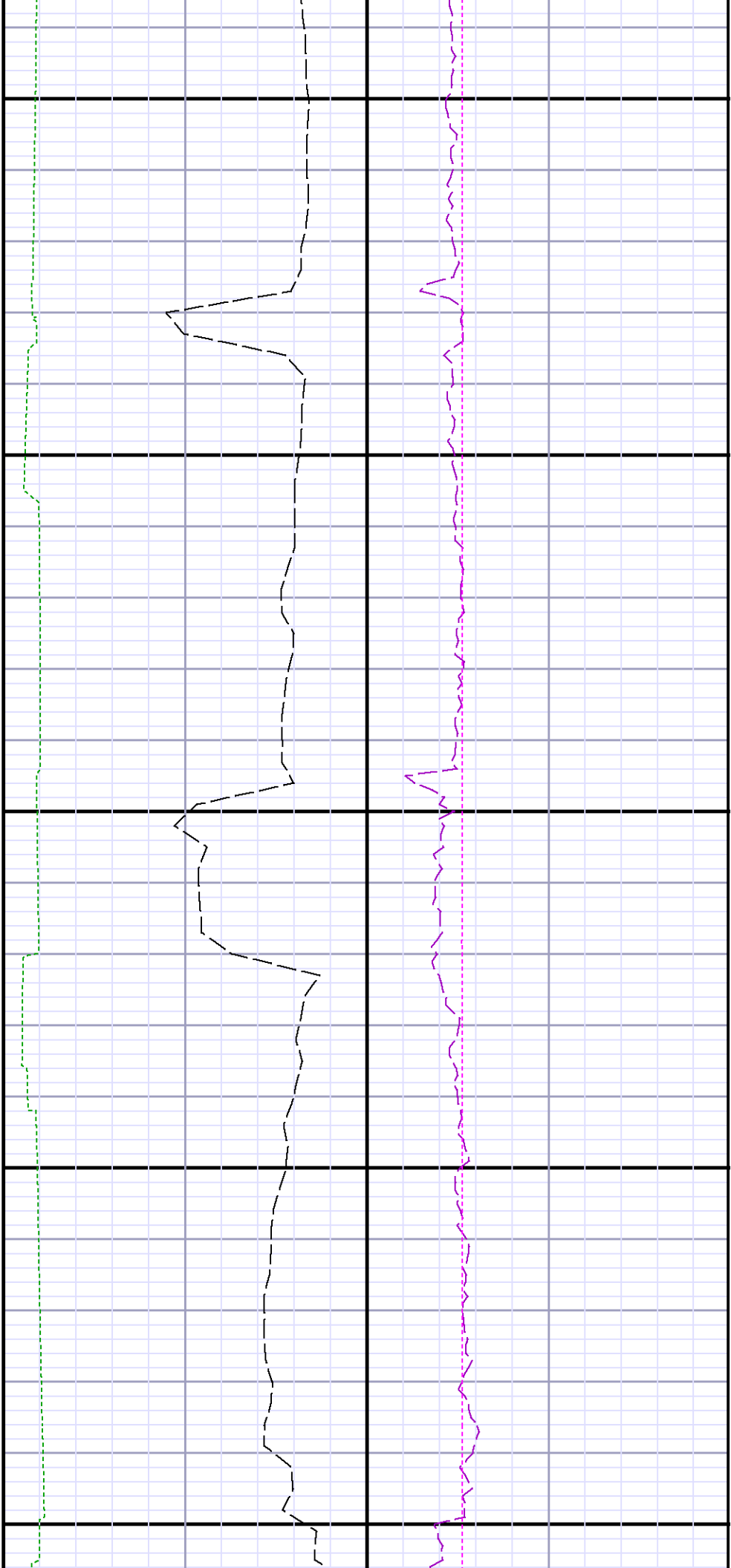
Company : Kerr\_McGee Oil &amp; Gas Onshore LP

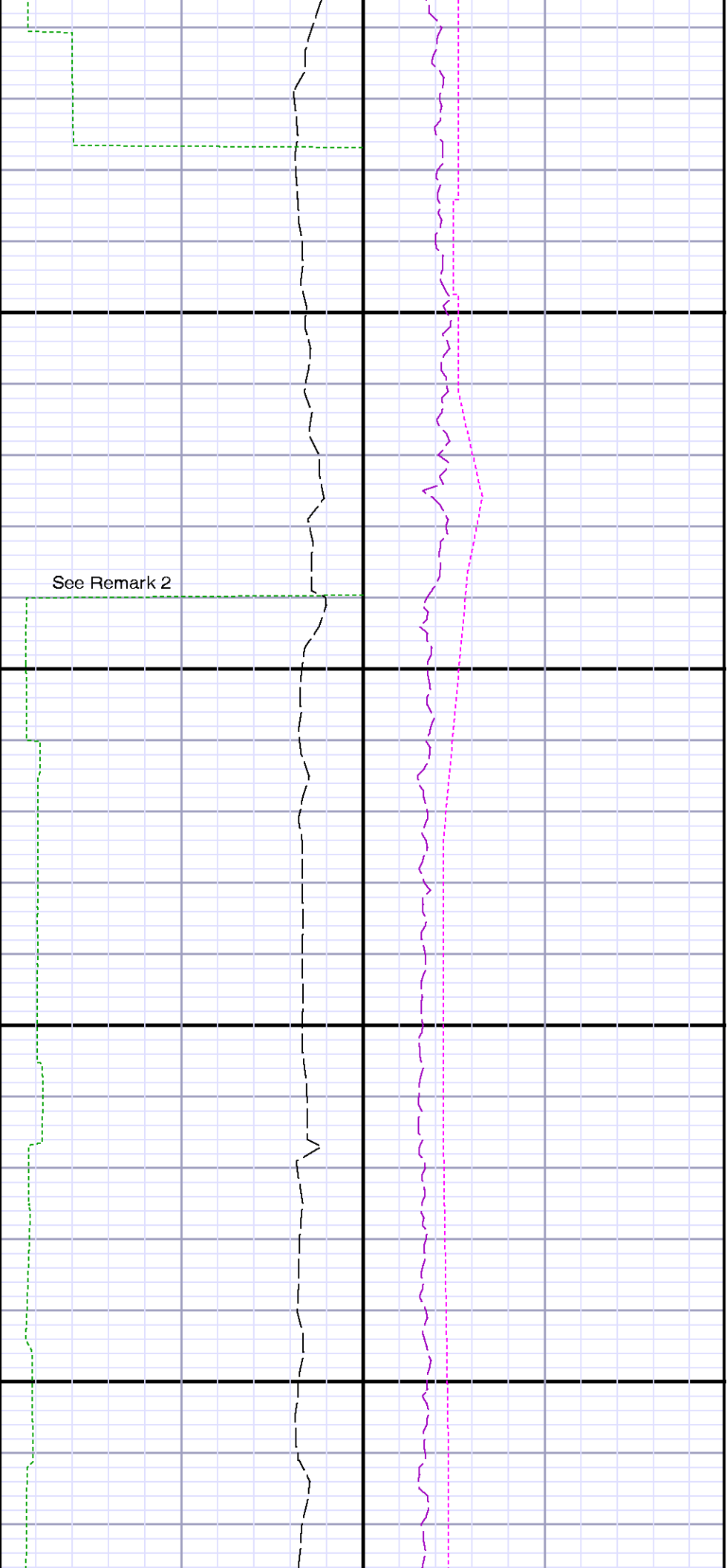
Well : Reynolds Cattle 30N-23HZ

Interval : 6550.00 - 12460.00 feet

Created : 10/Jul/2014 7:46:48 AM

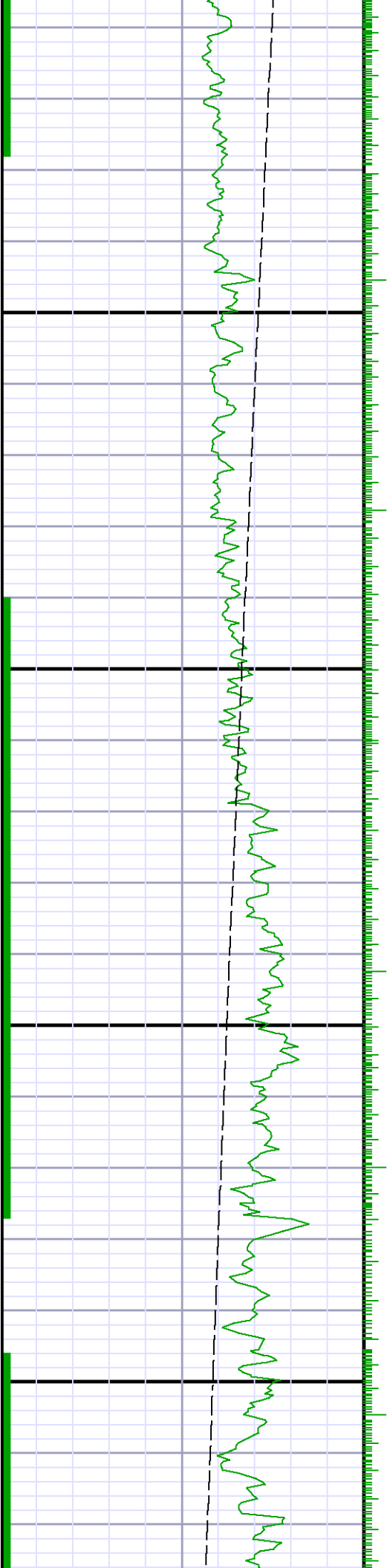






Run 1  $\diamond$  Run 2  
6900

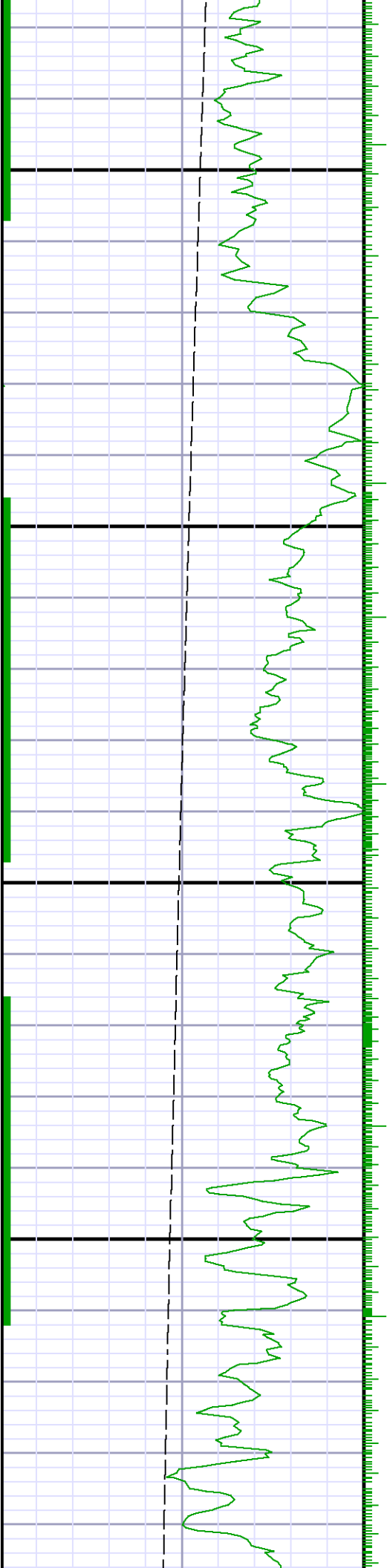
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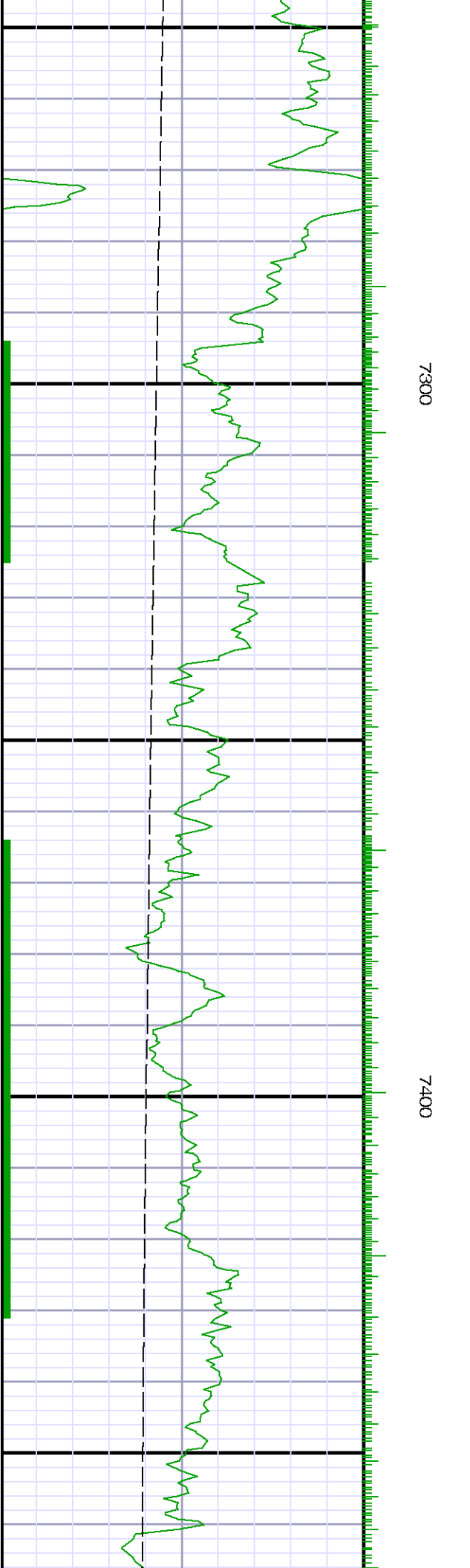


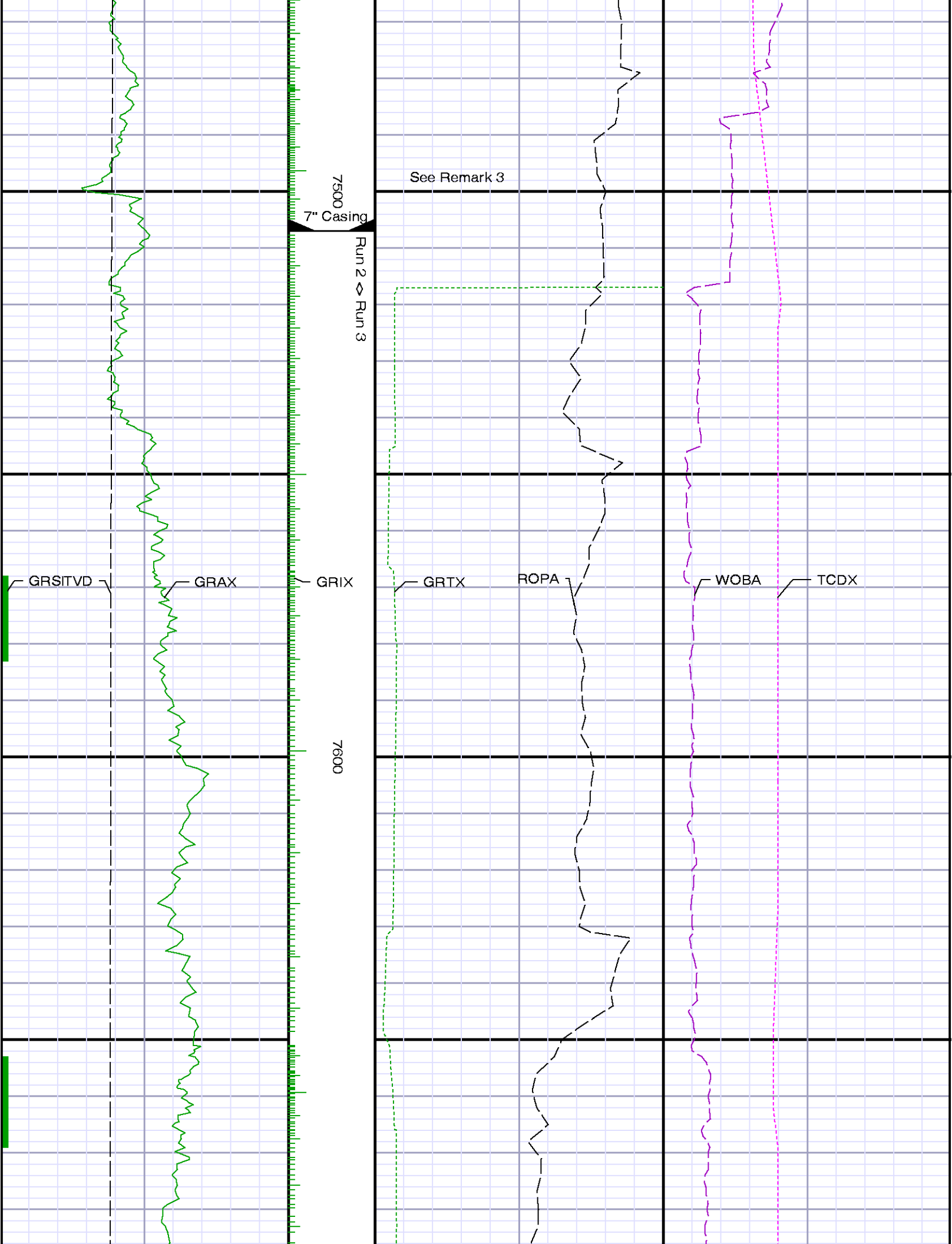


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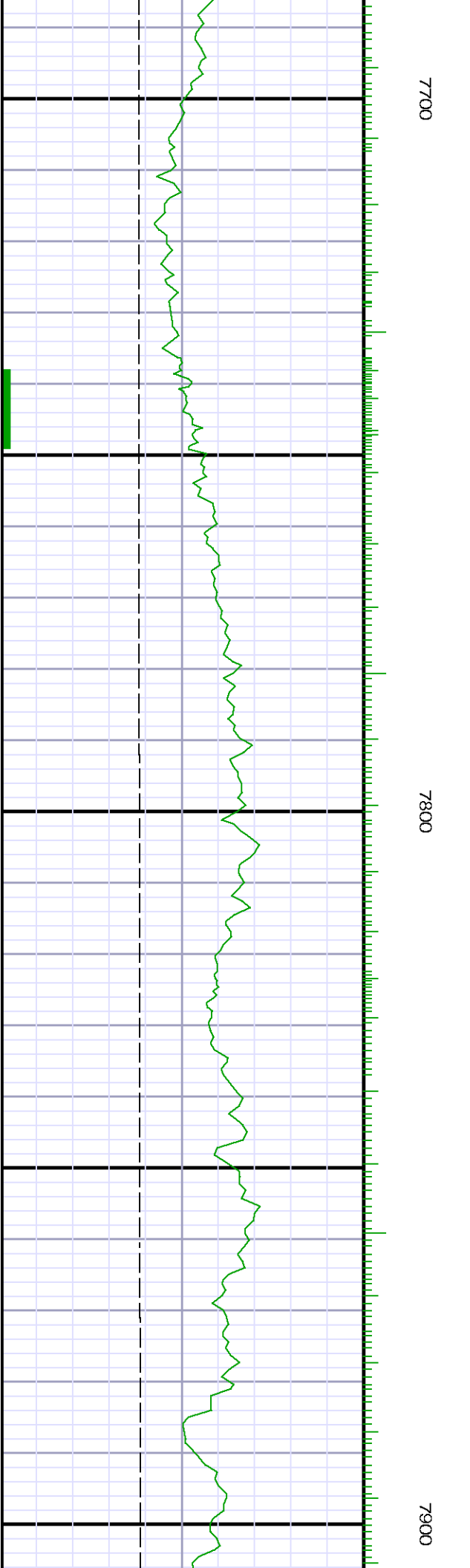
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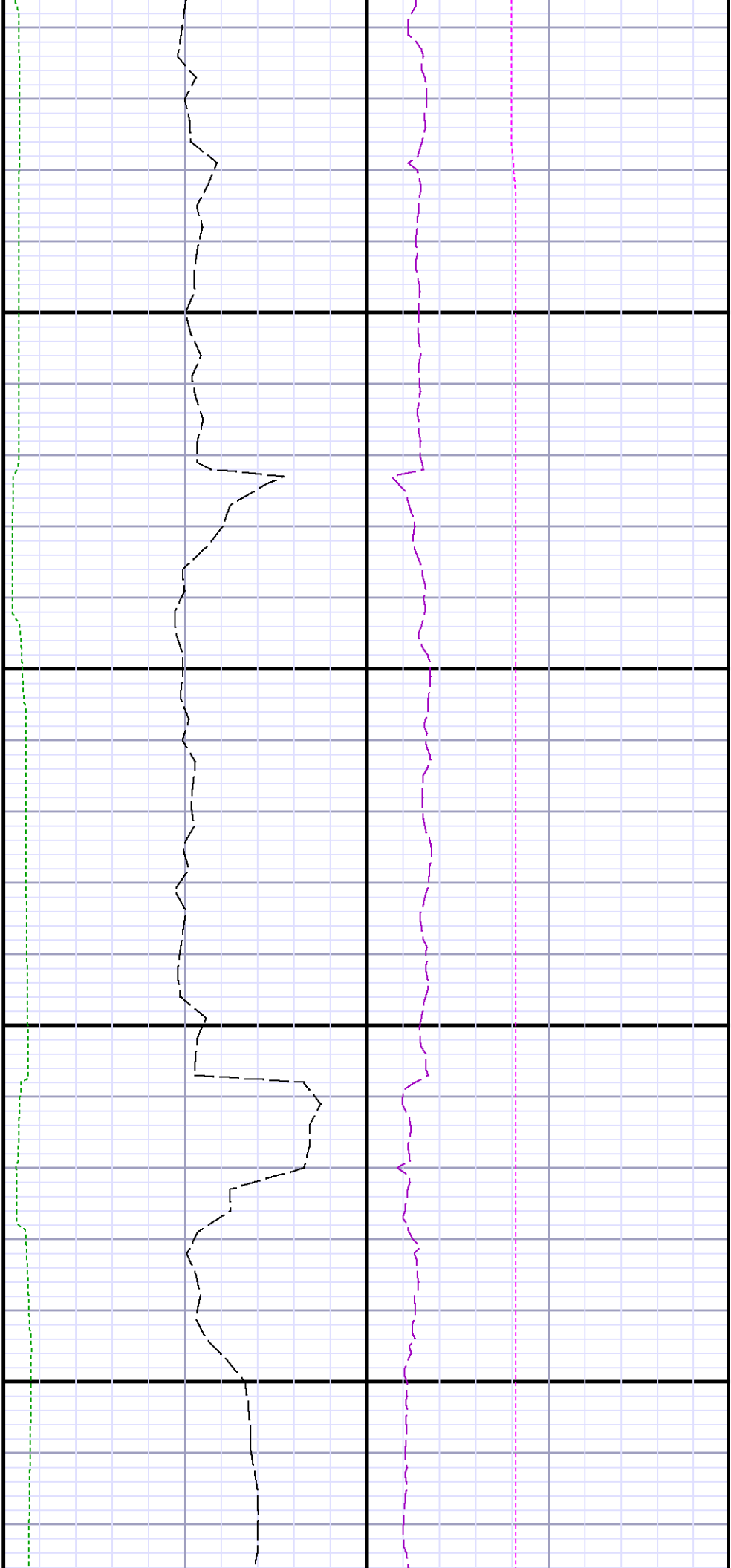






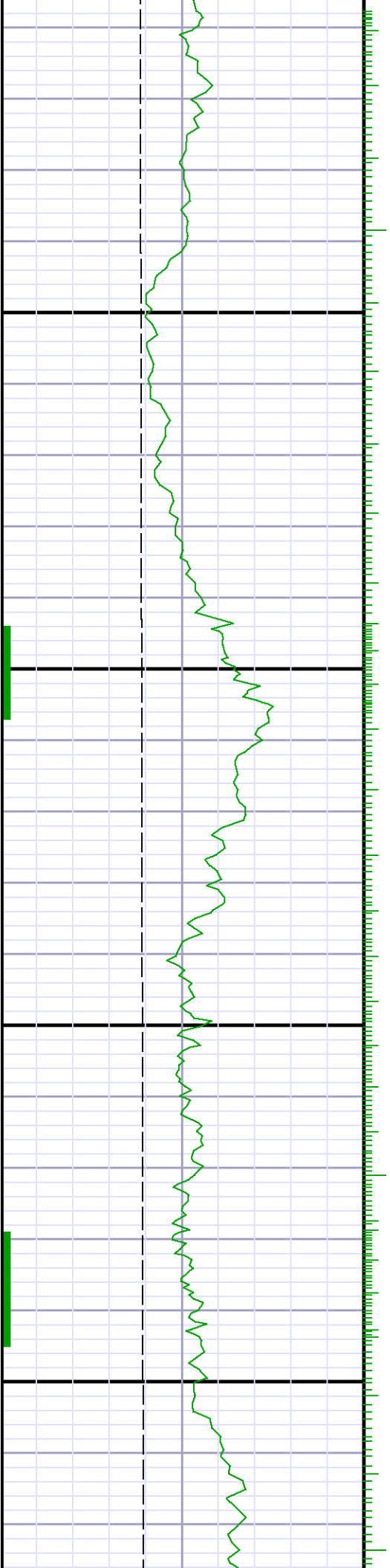


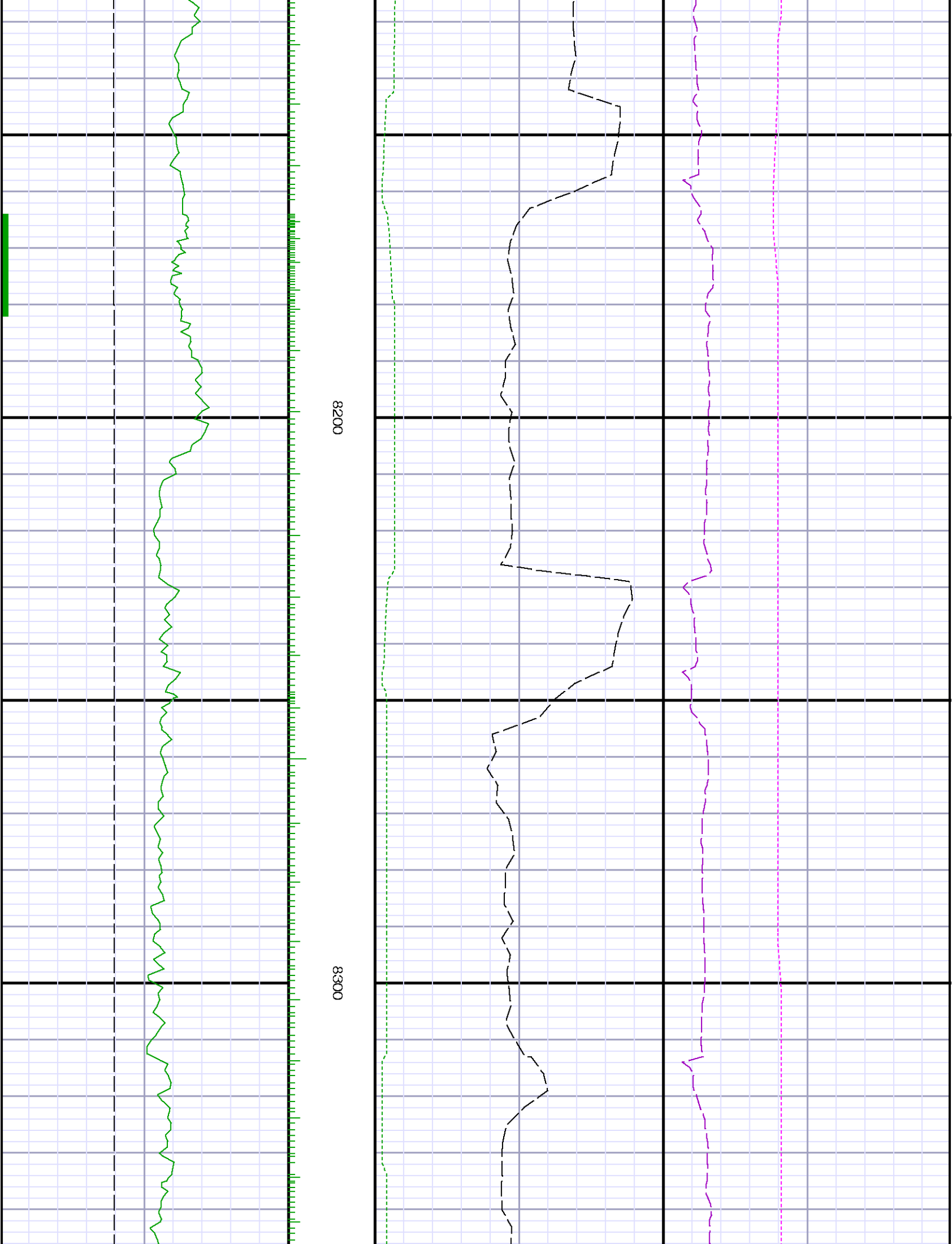


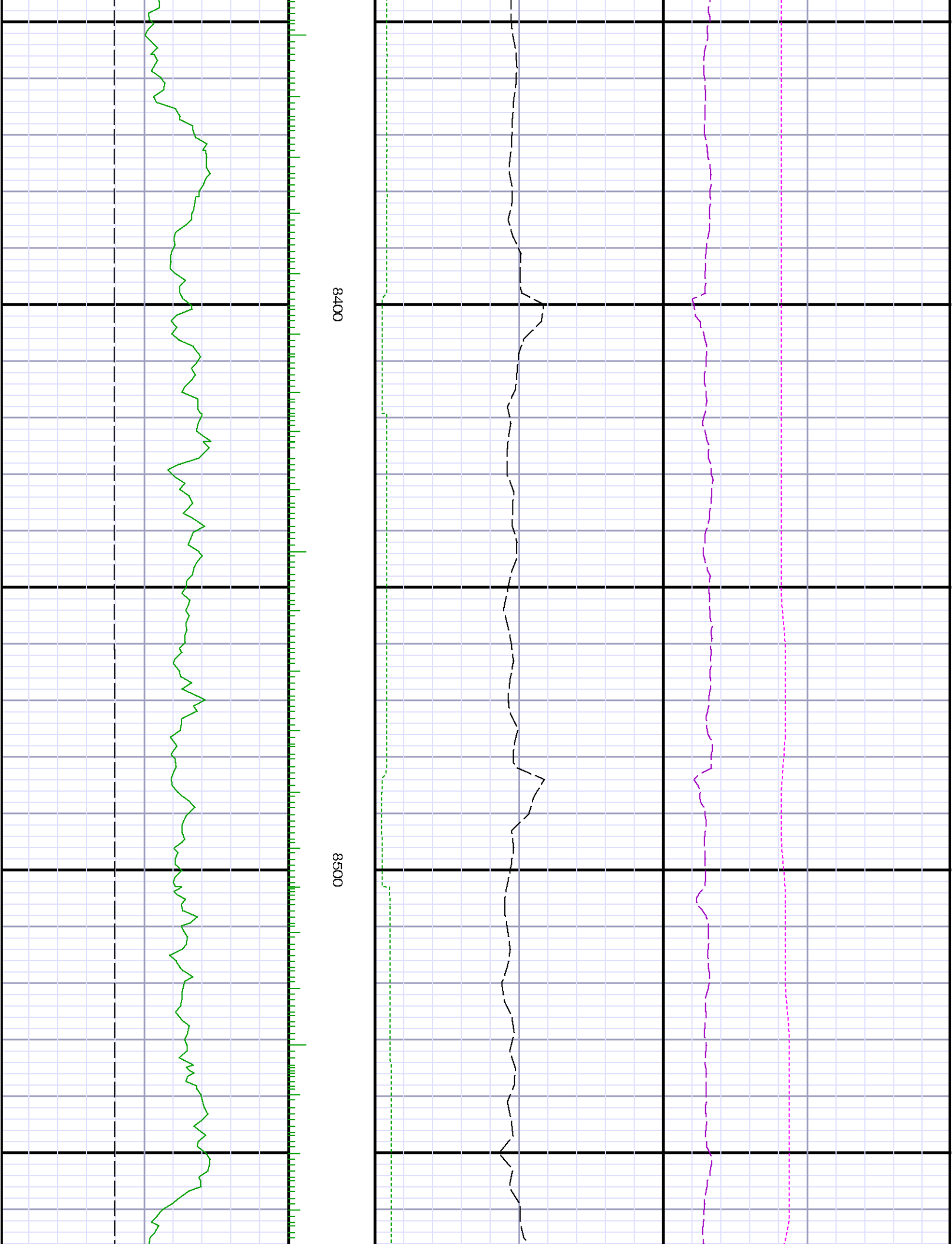


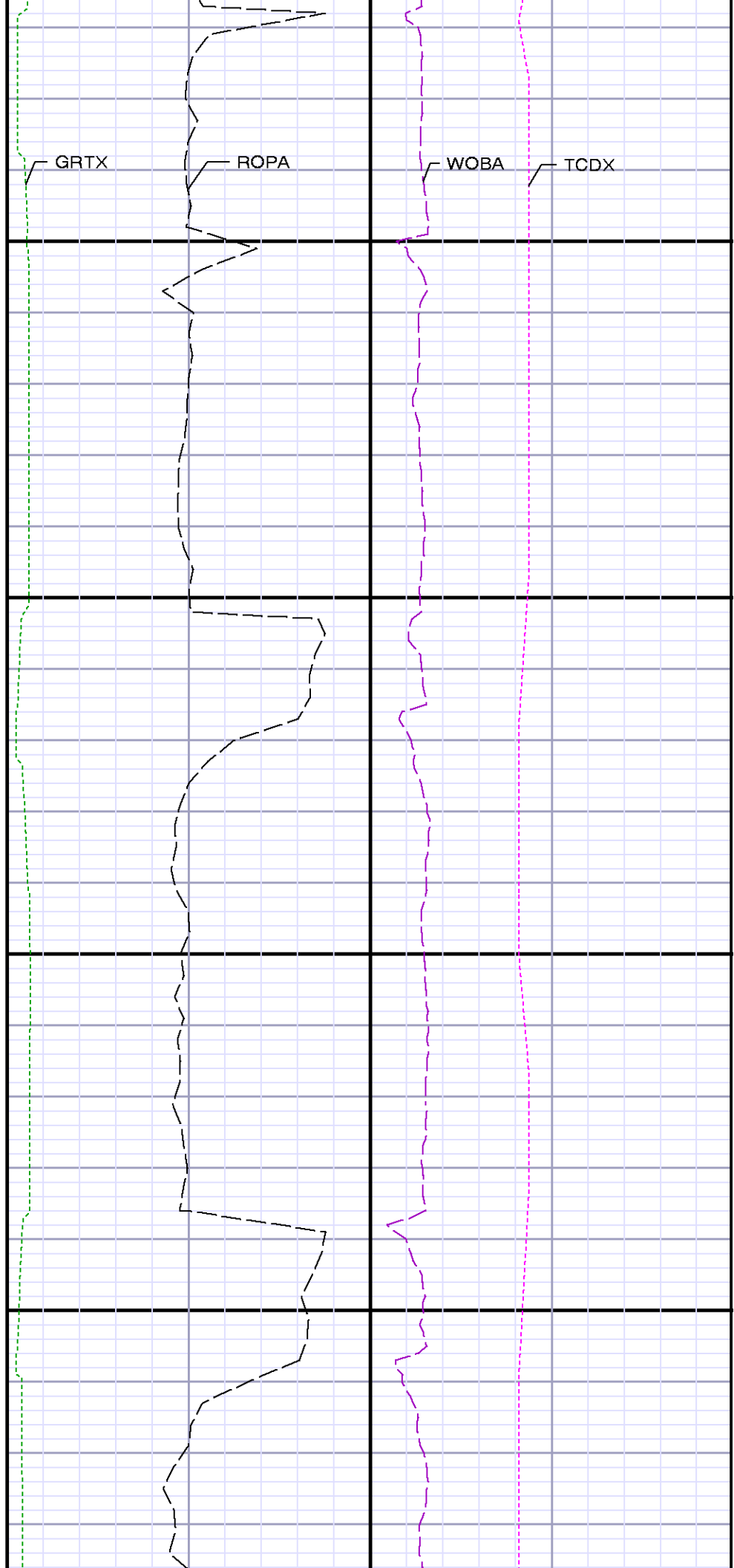
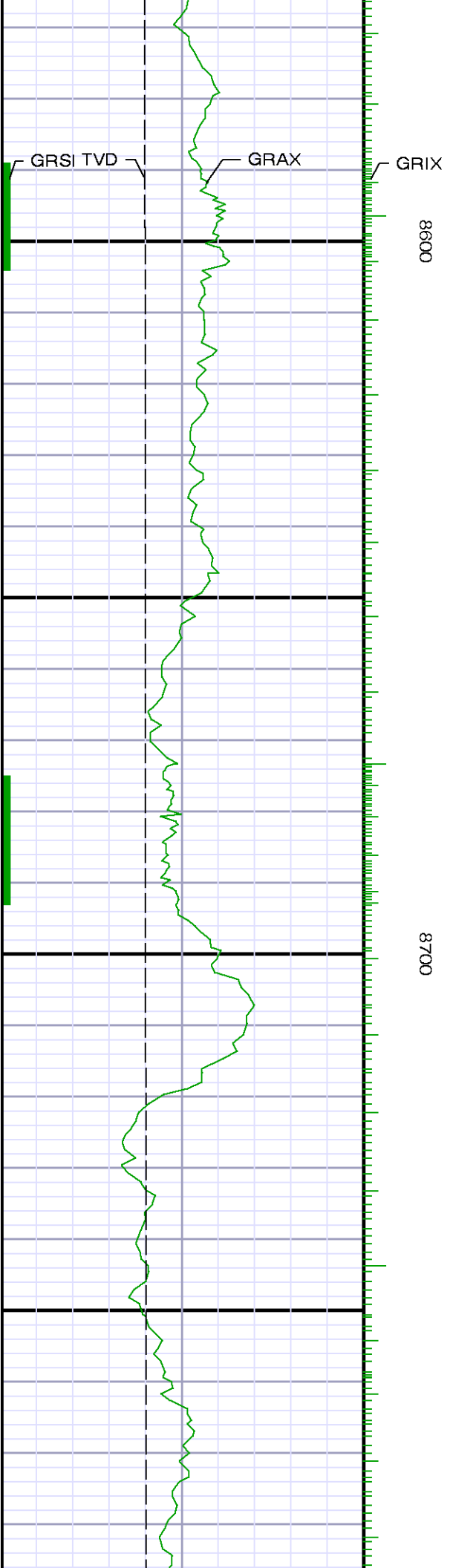
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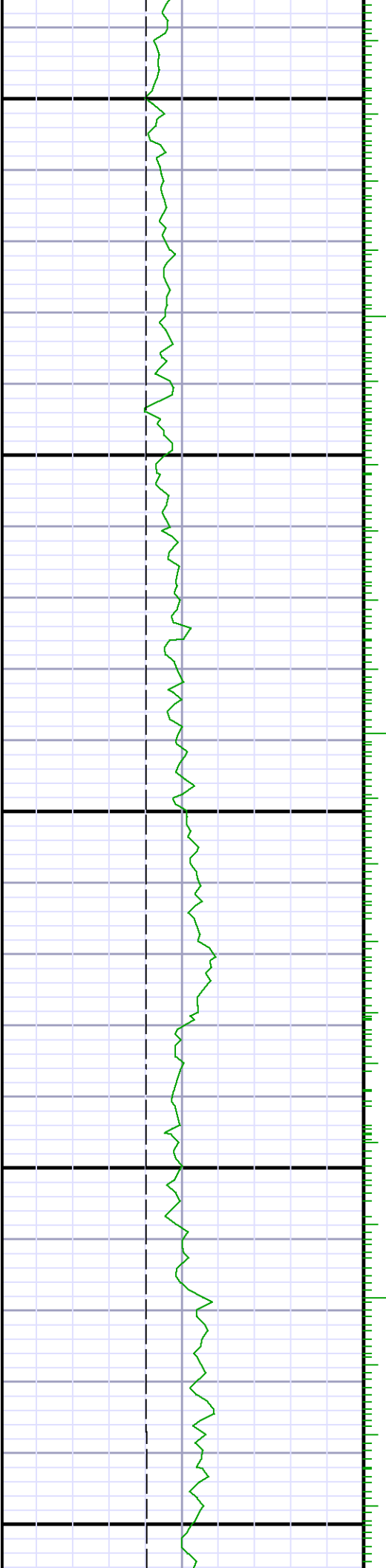
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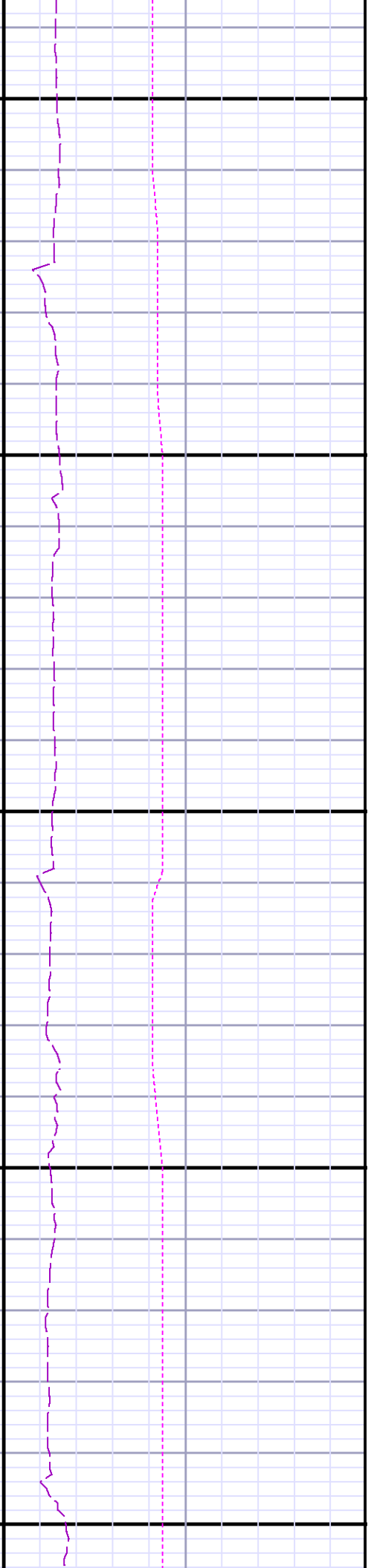


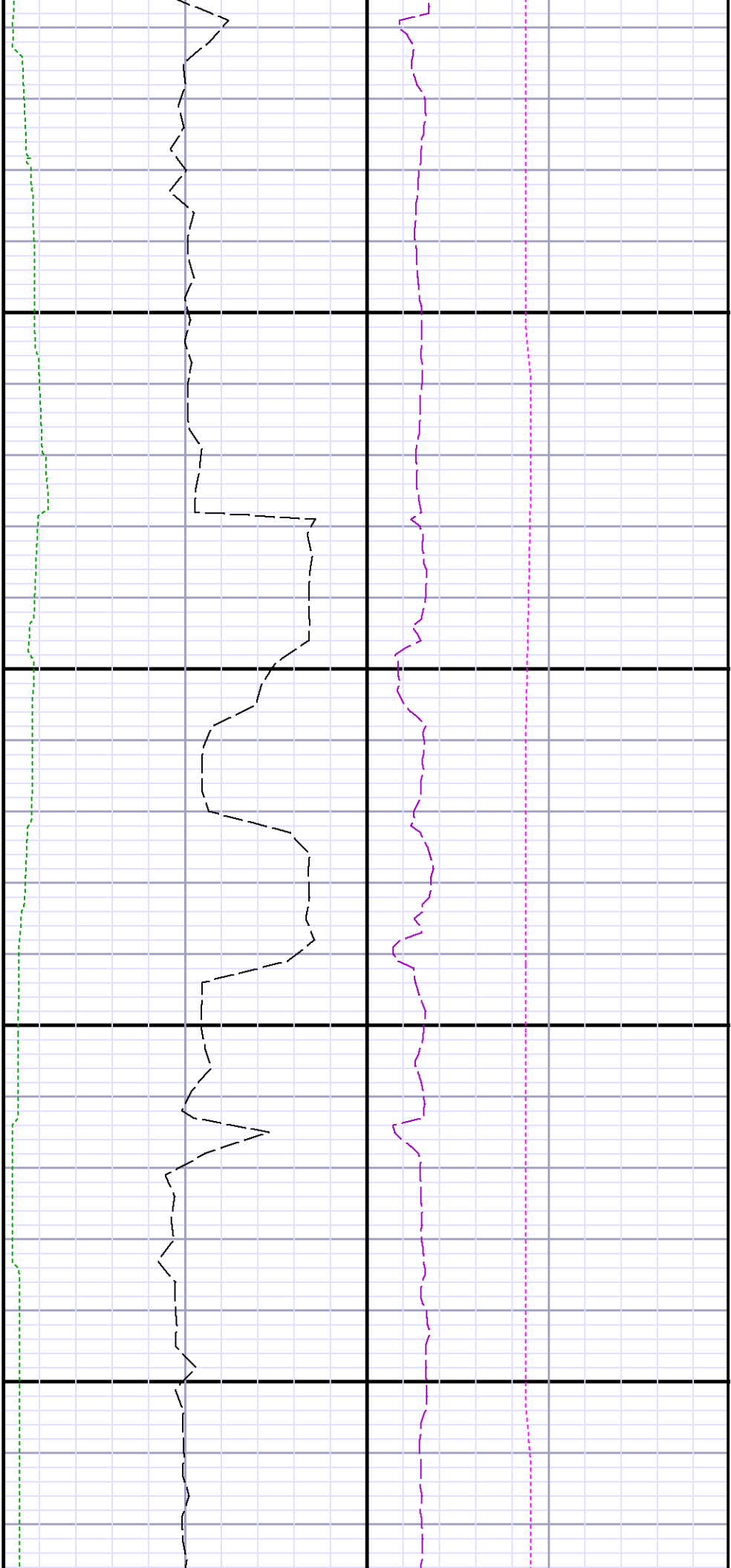


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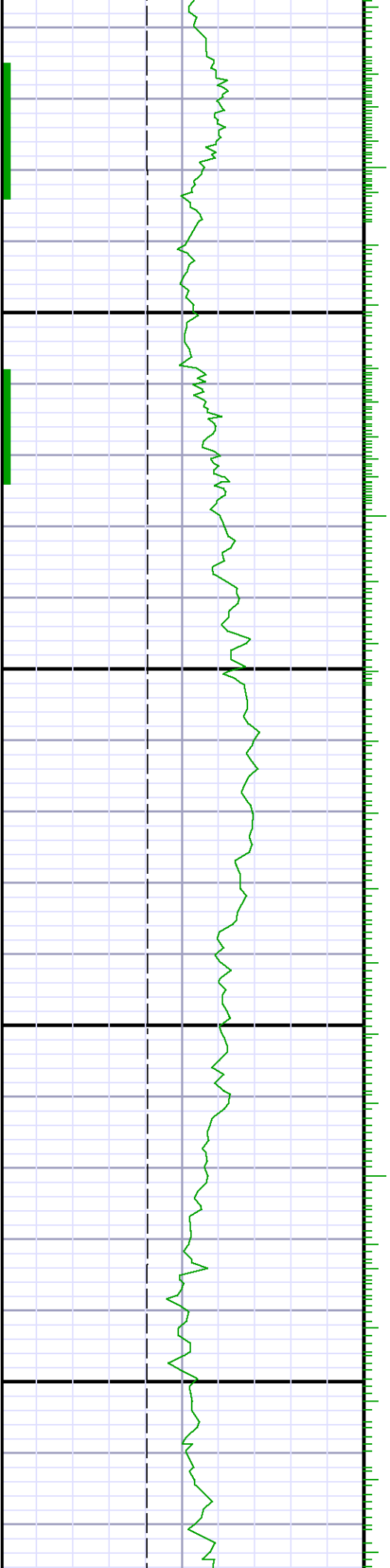
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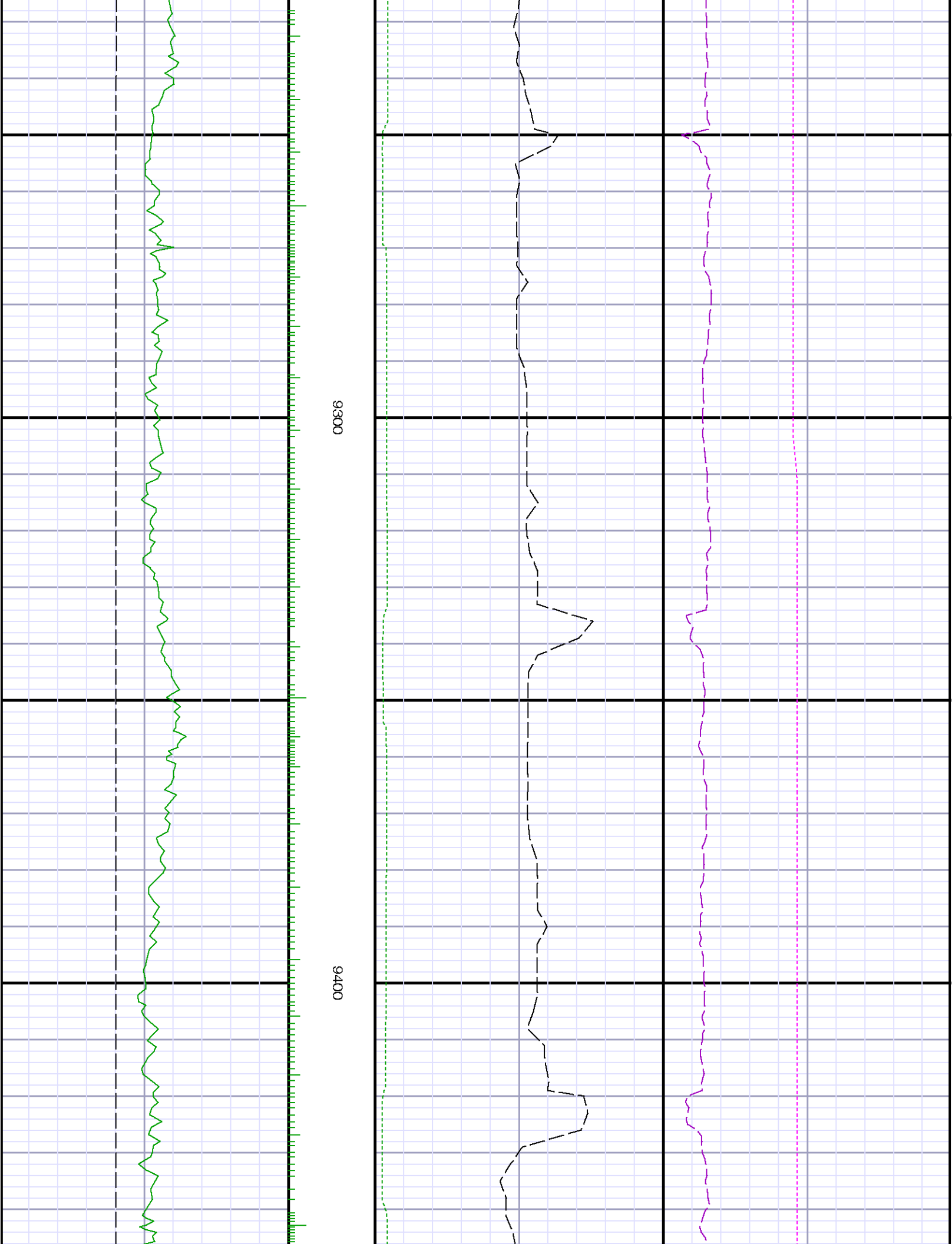




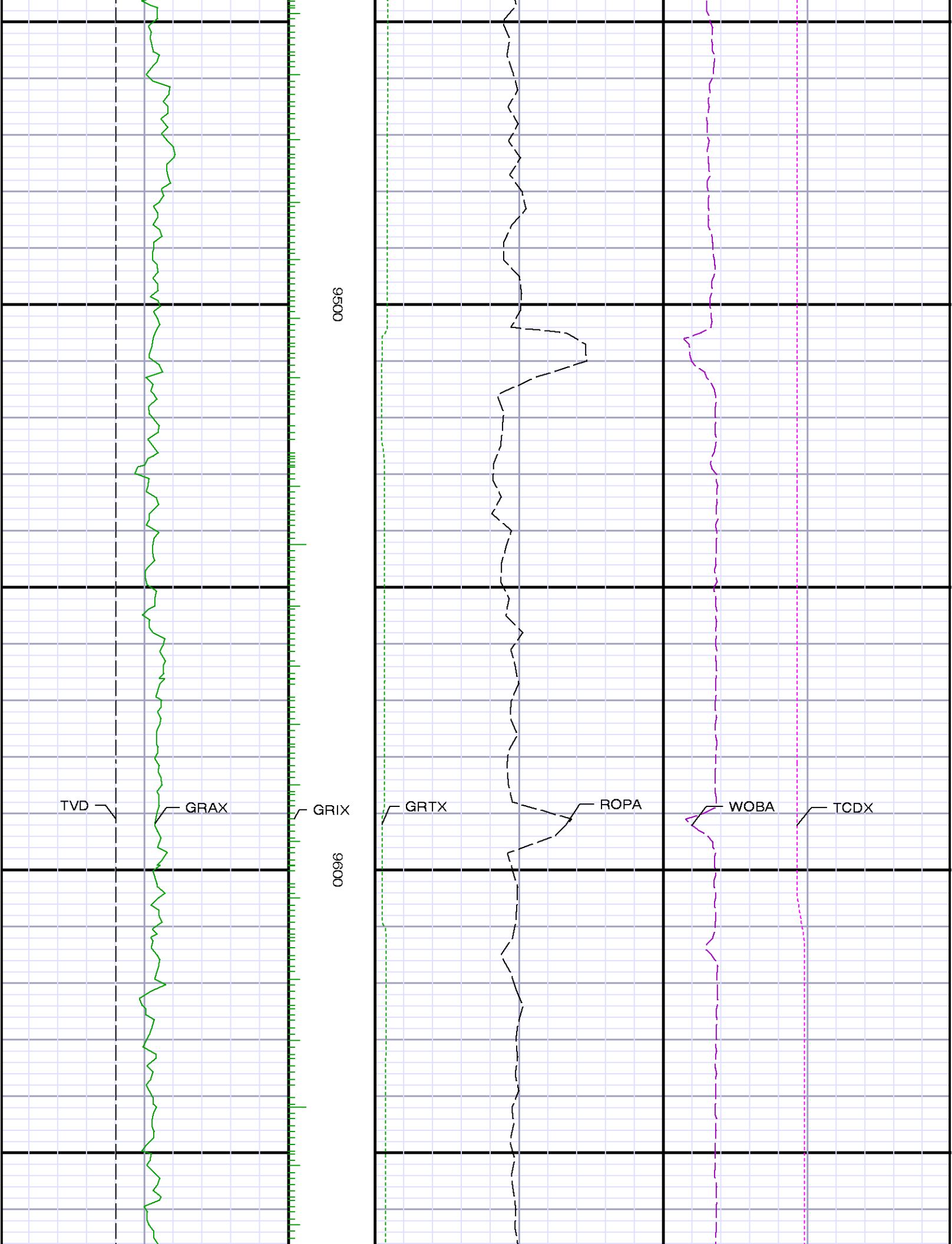
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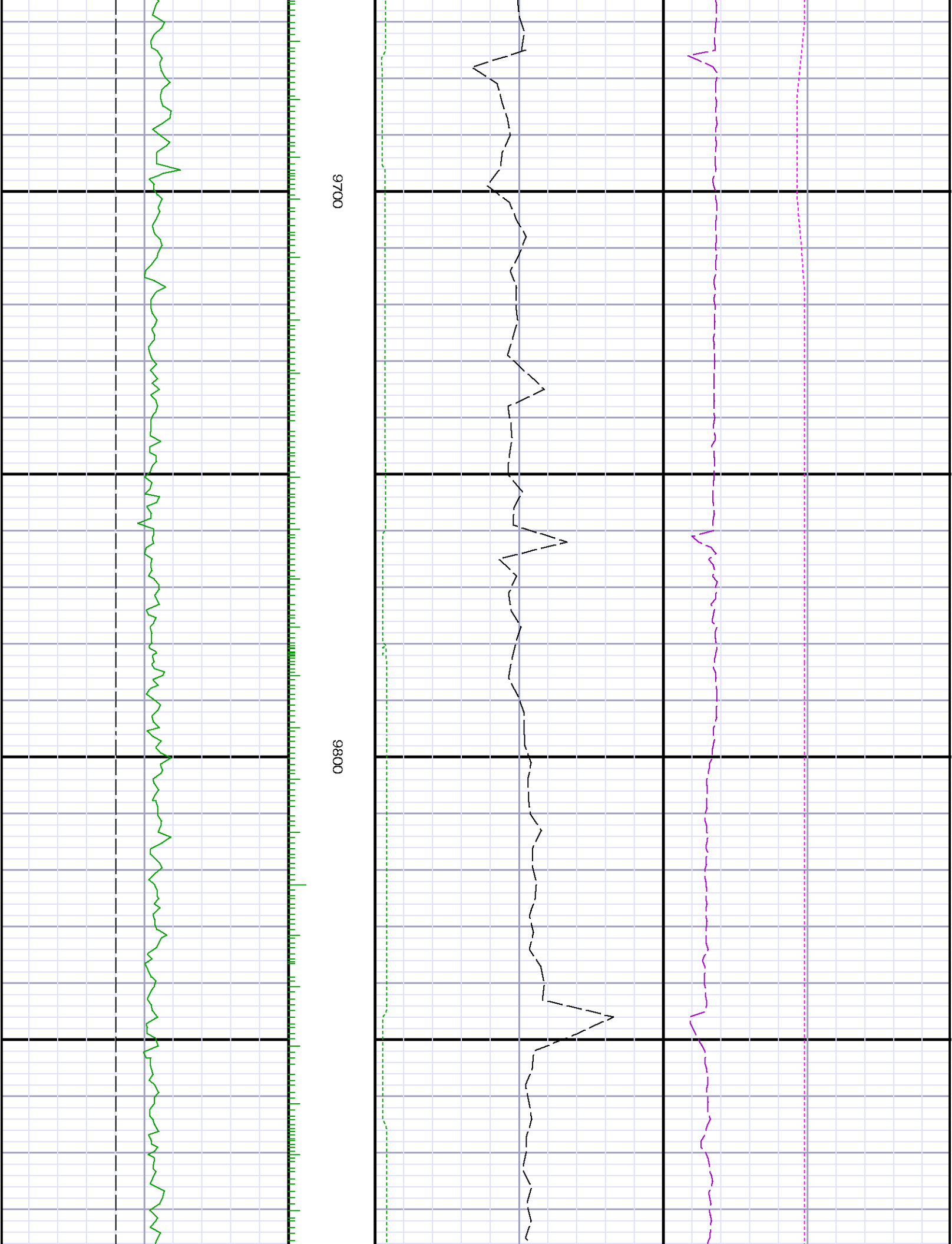
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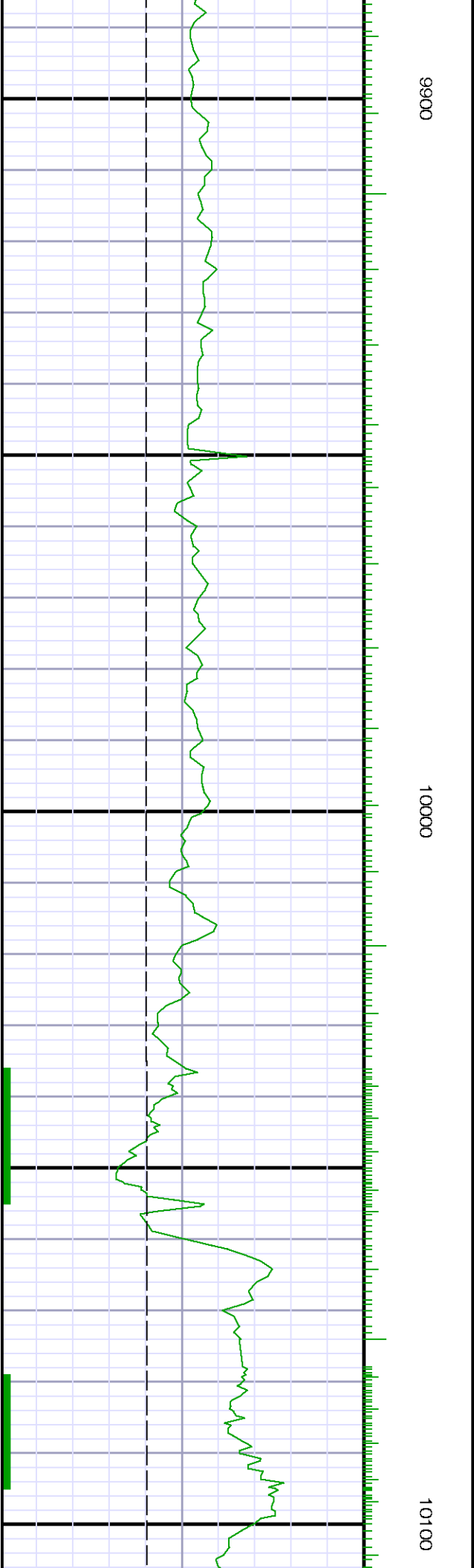


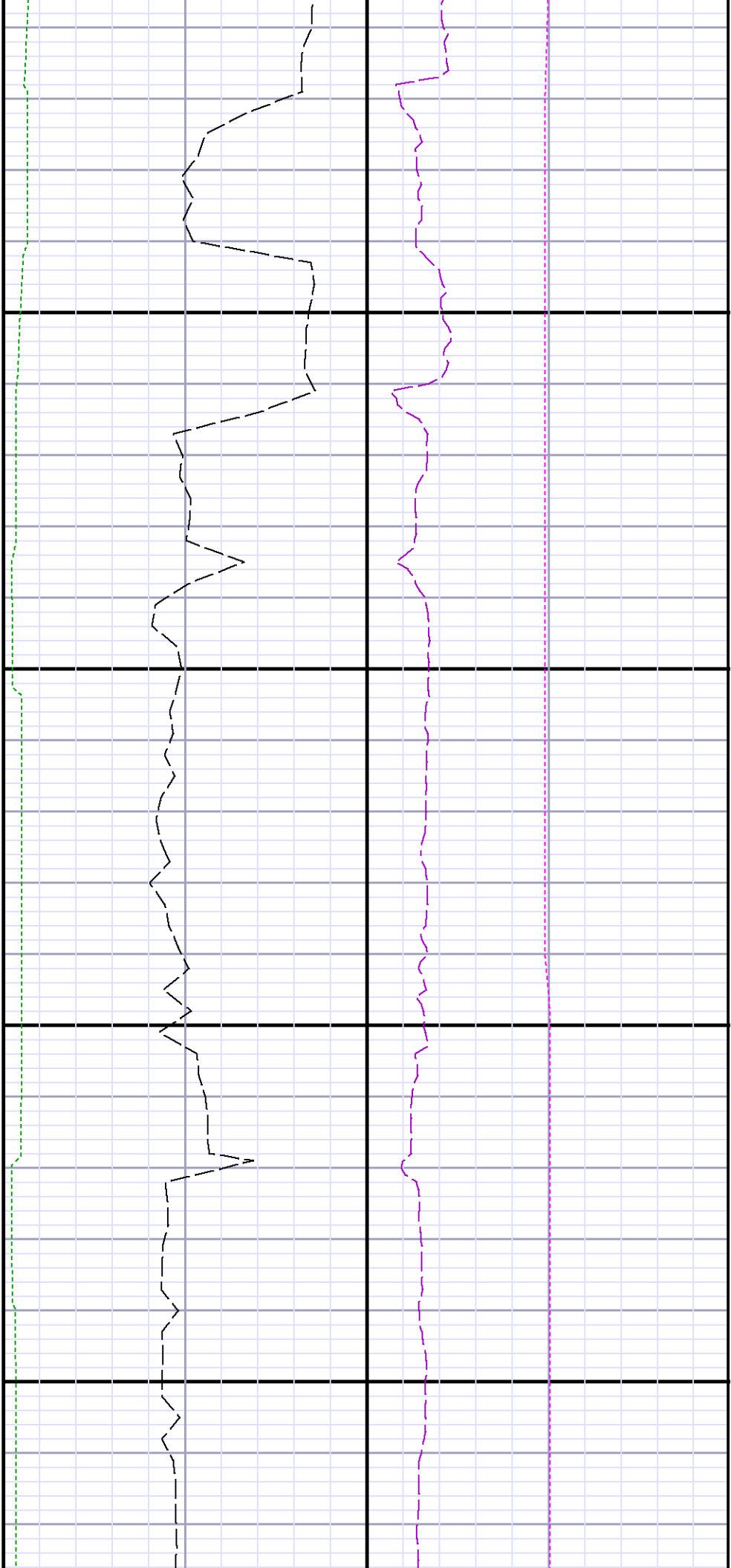






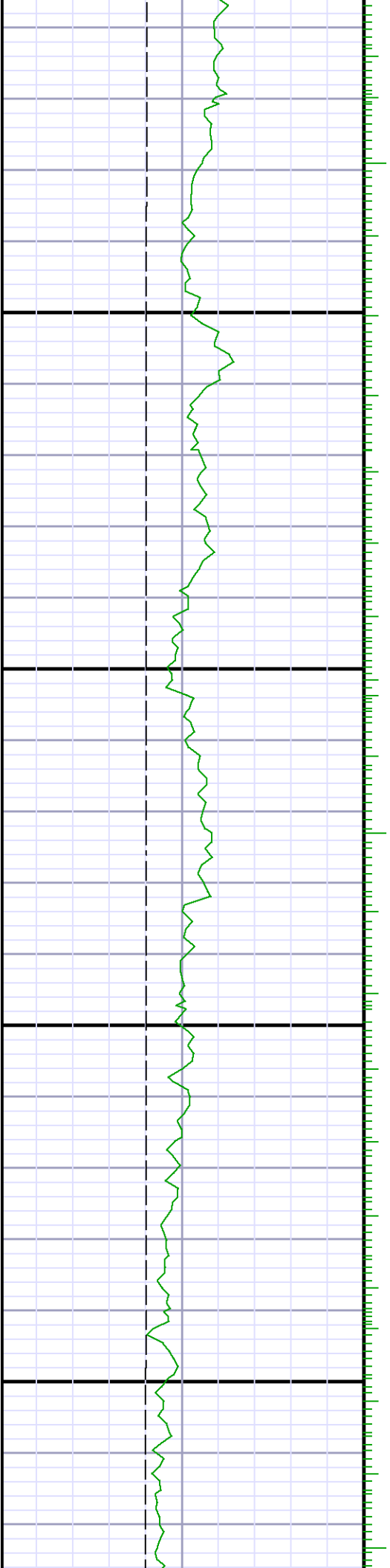


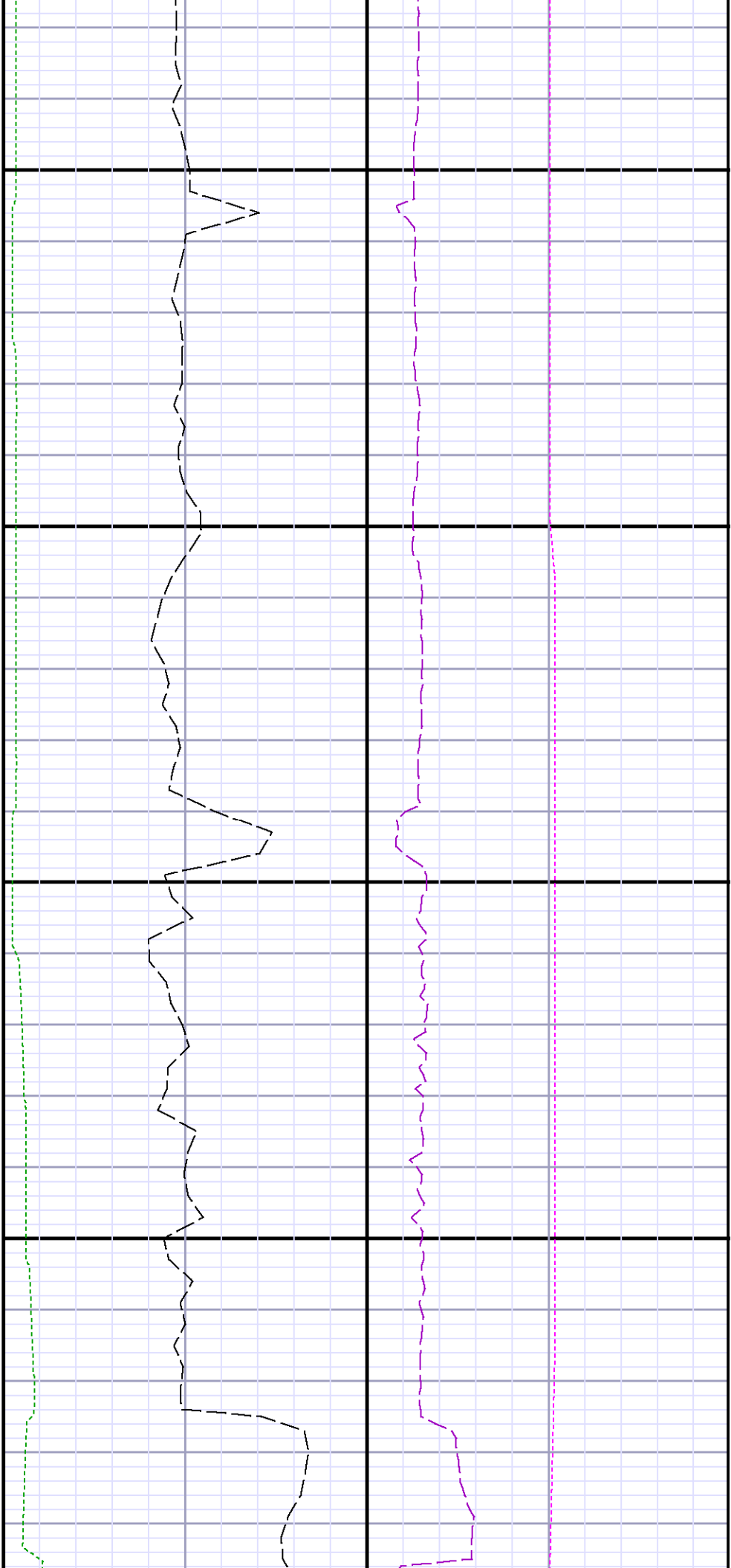




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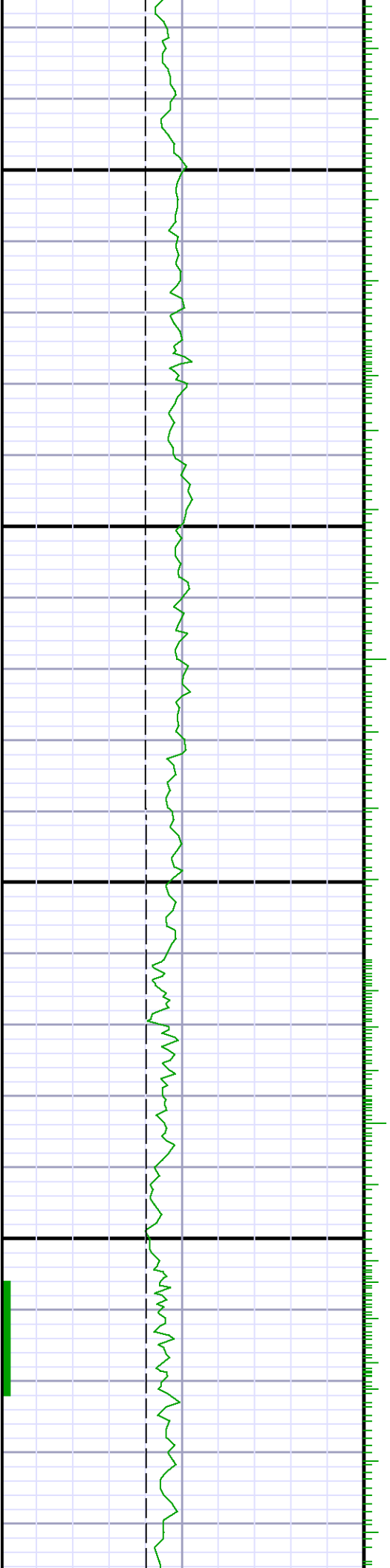
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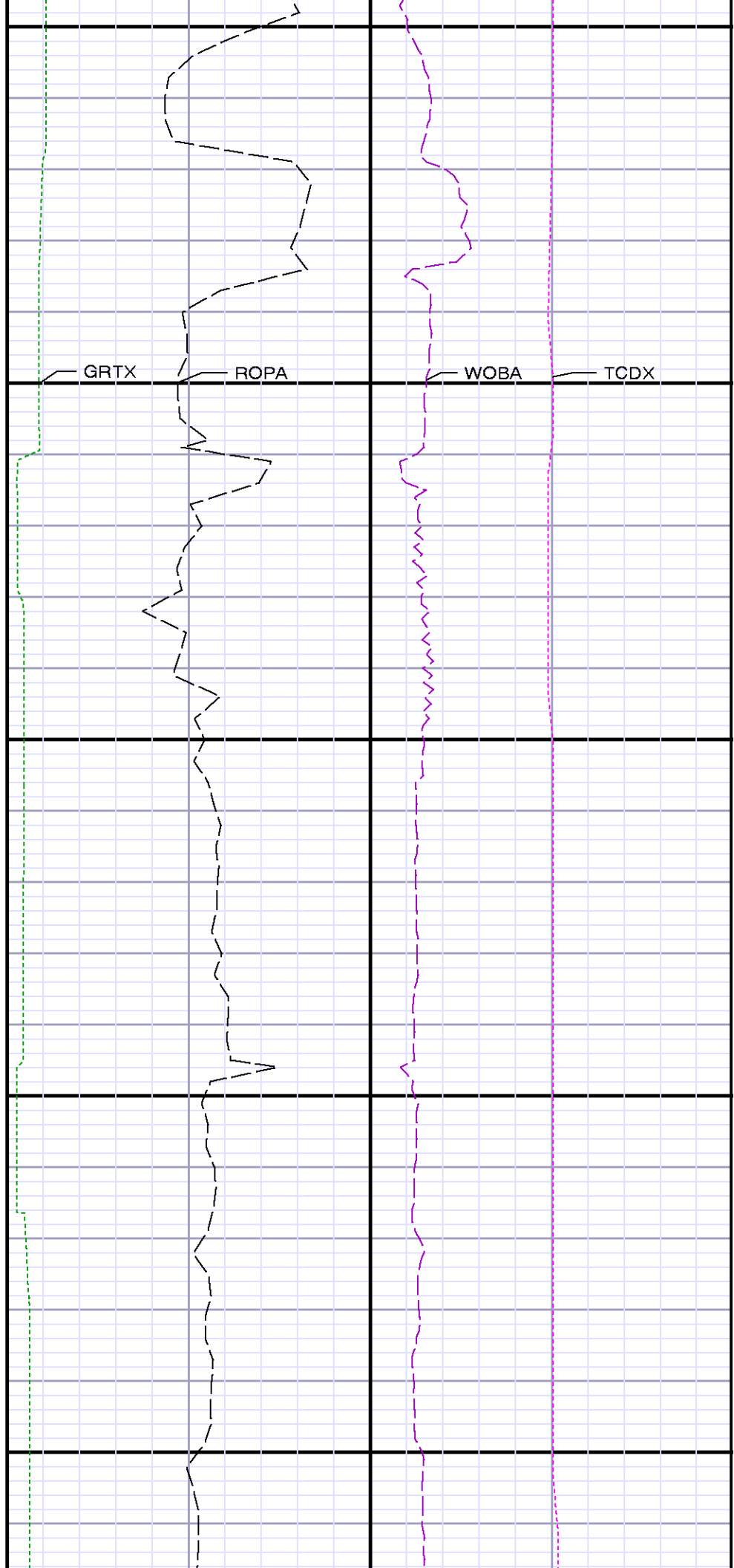
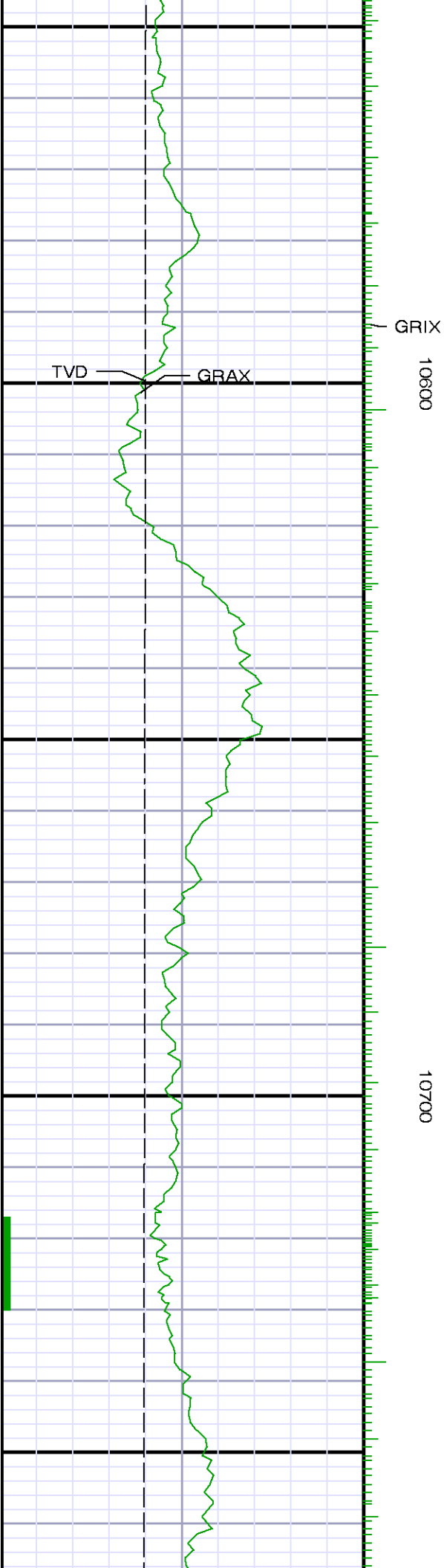


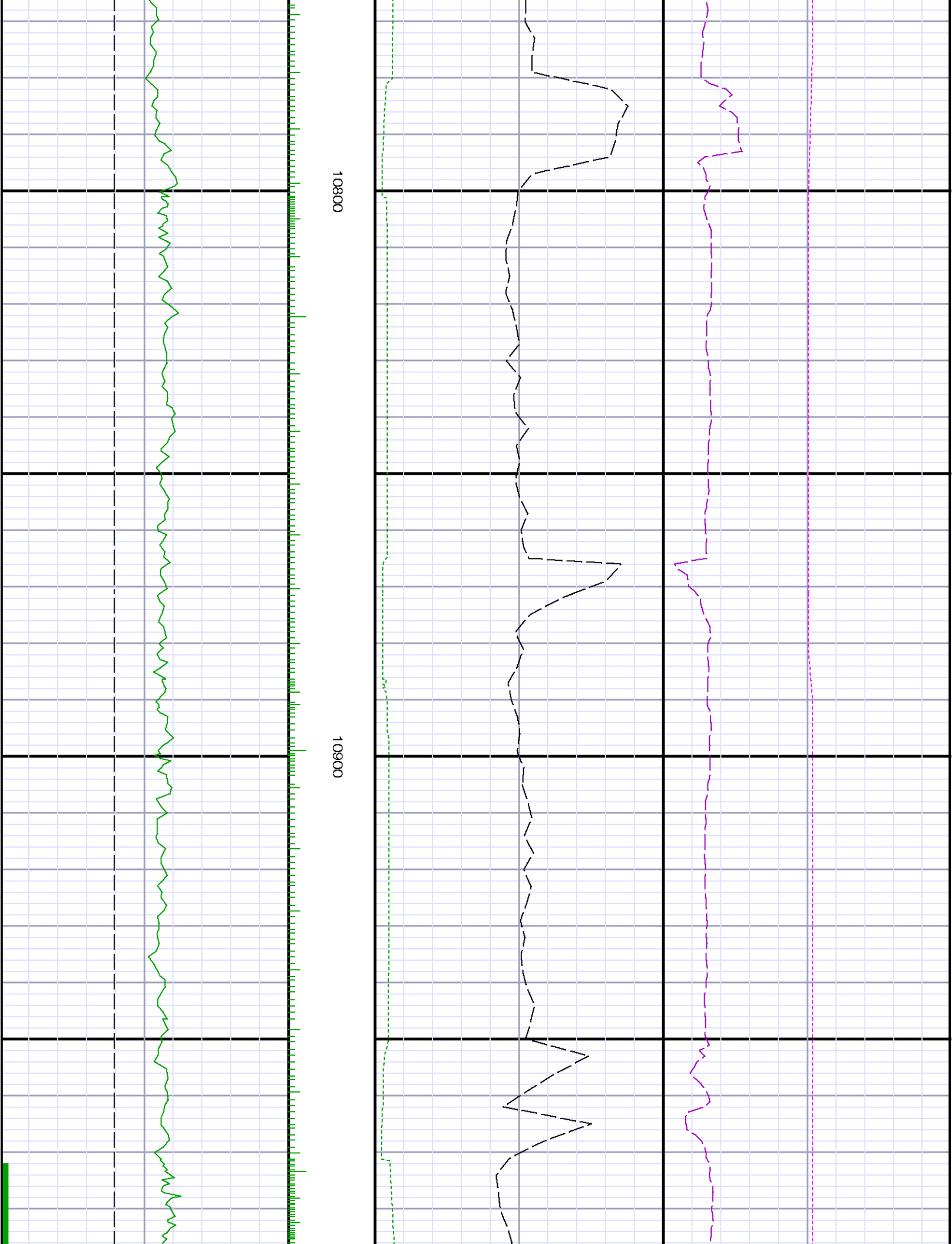


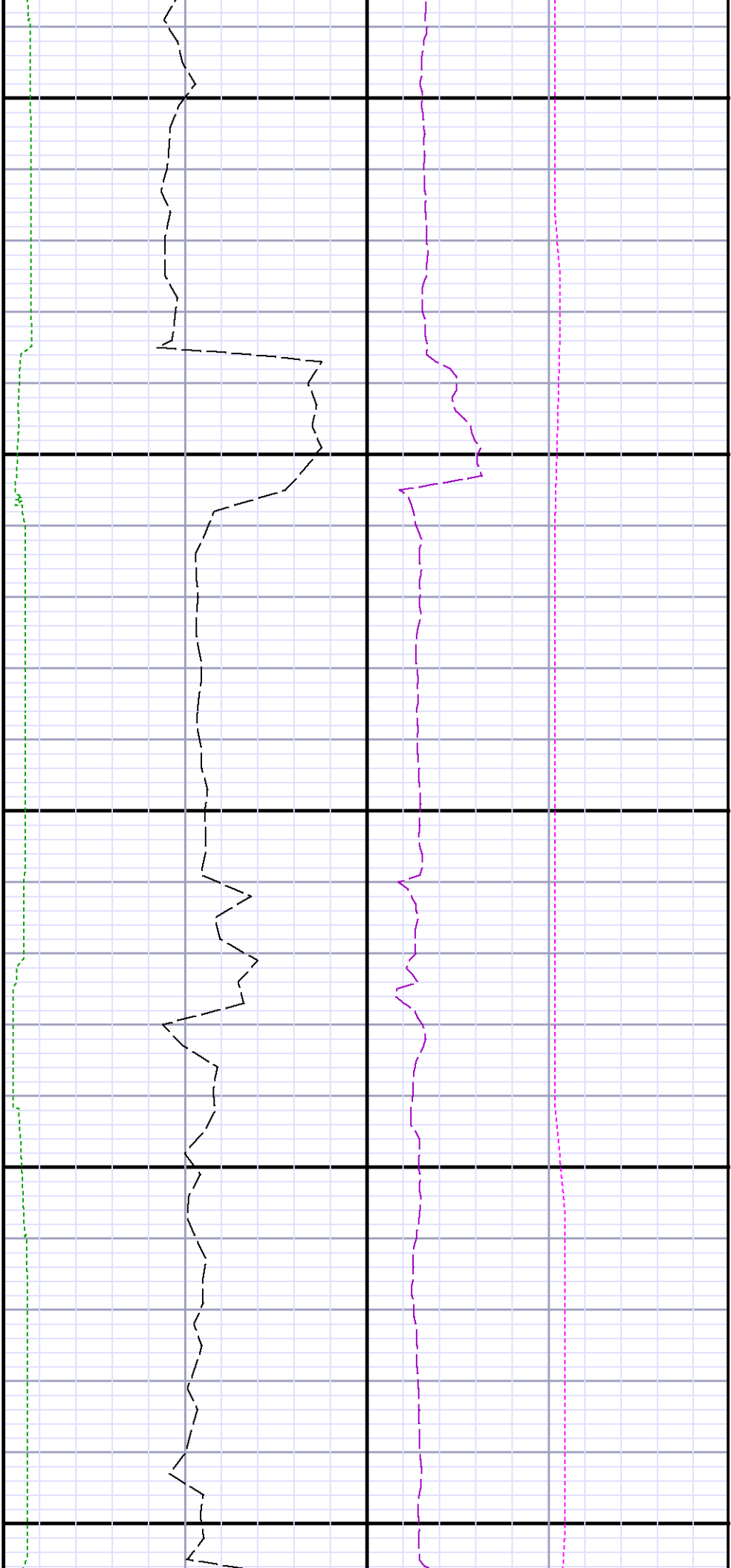
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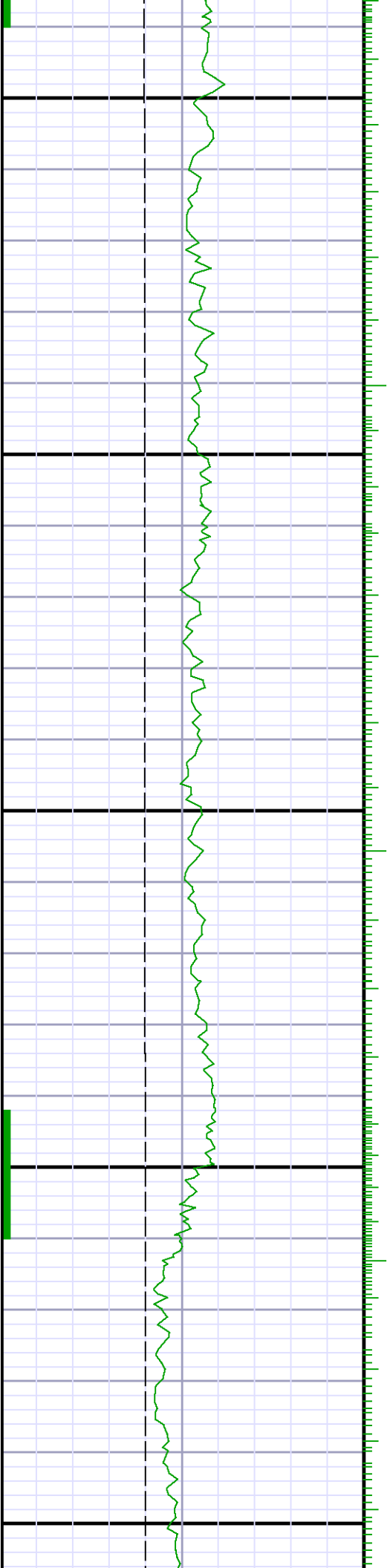




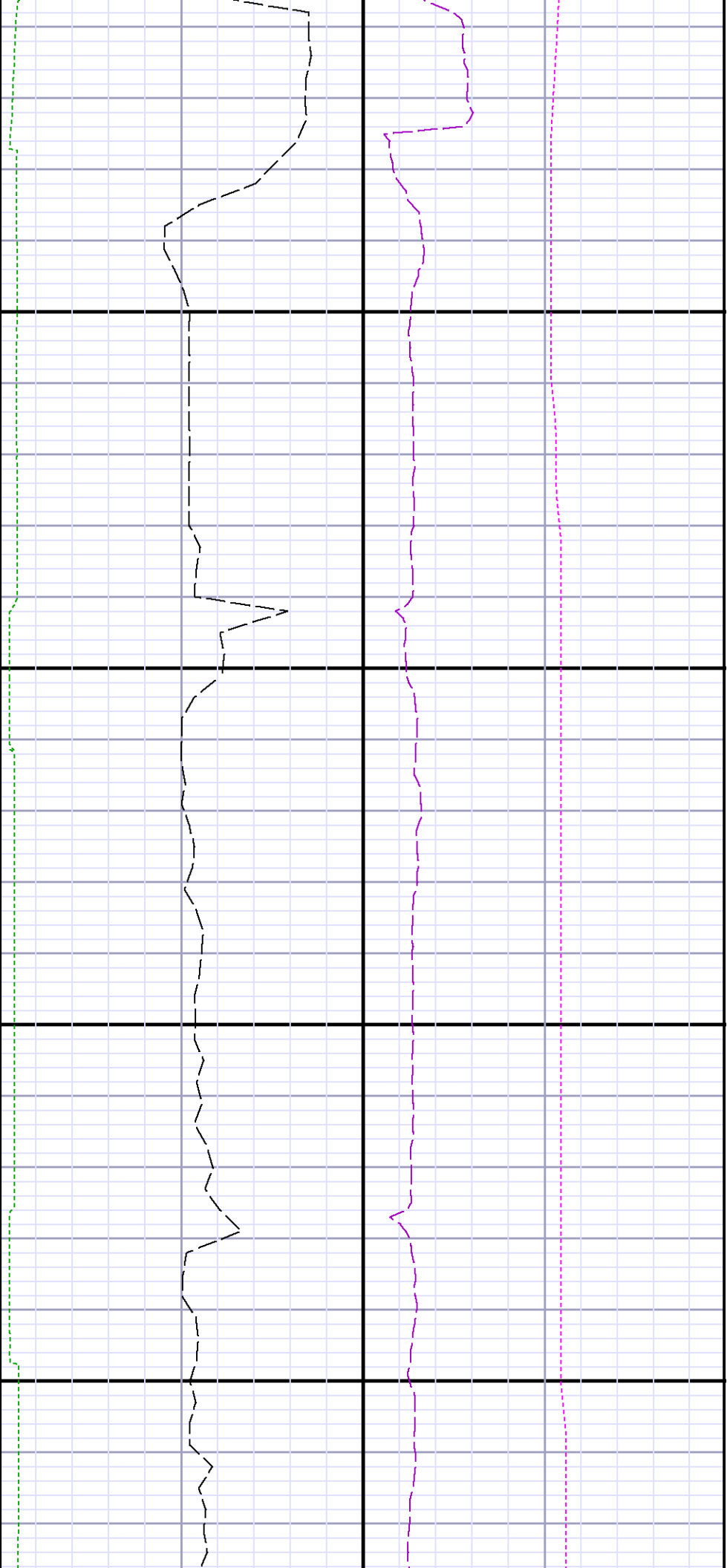
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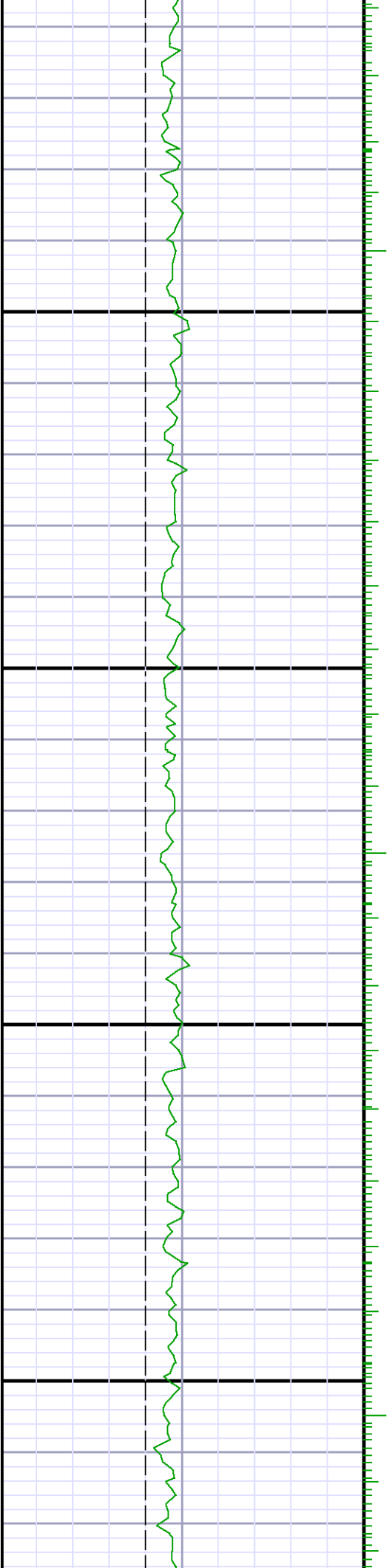


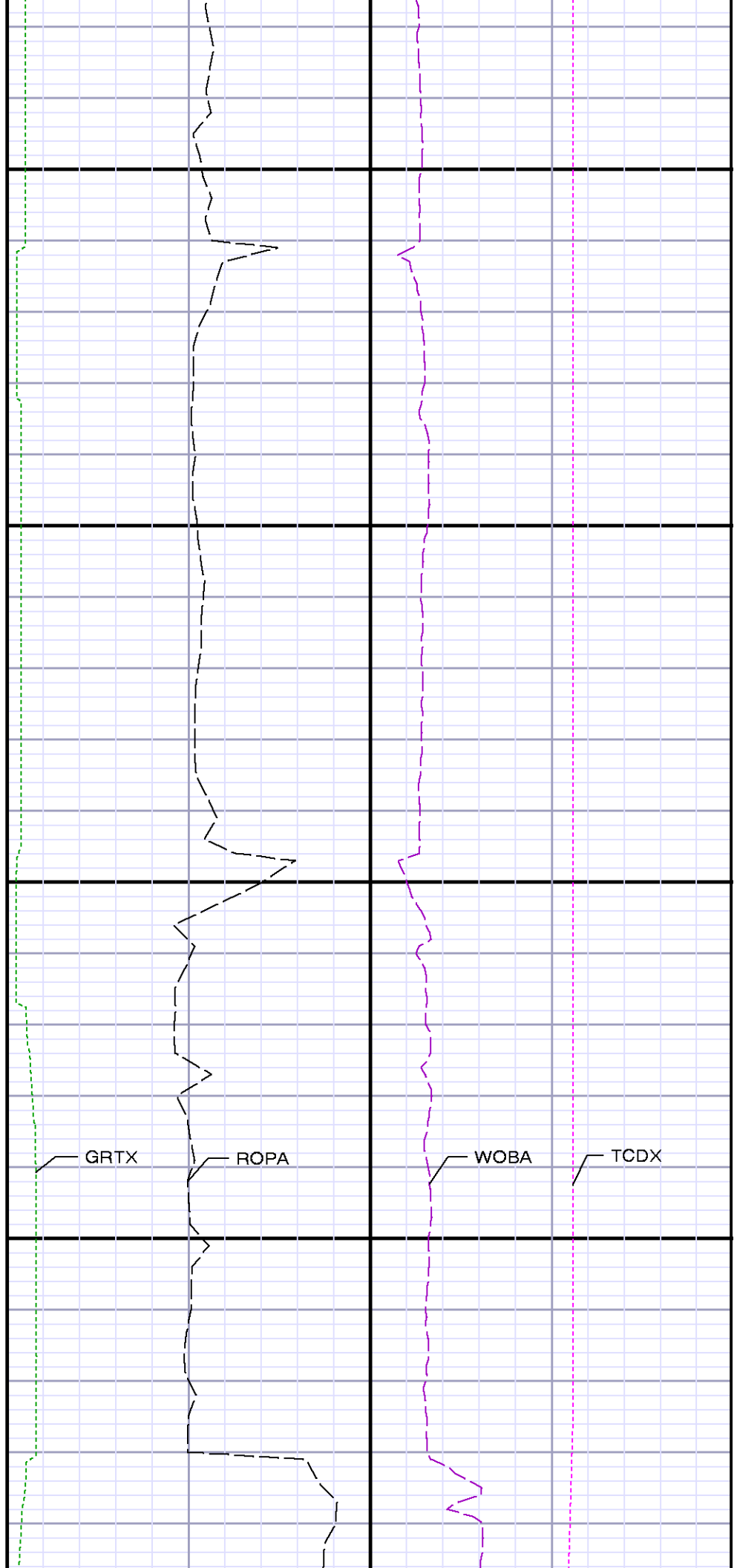
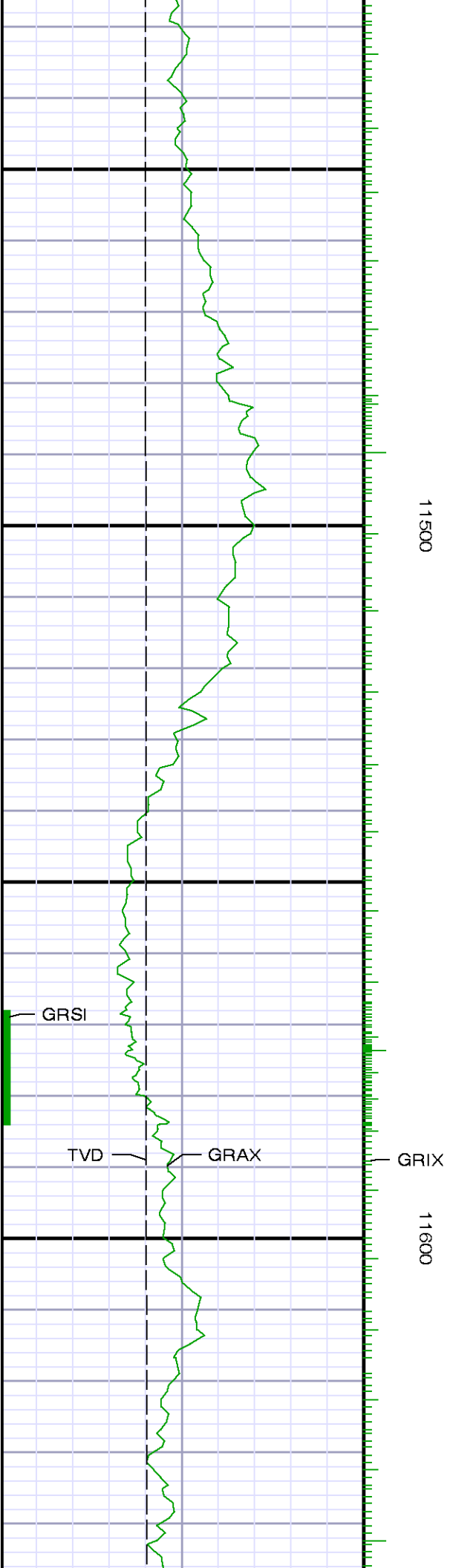


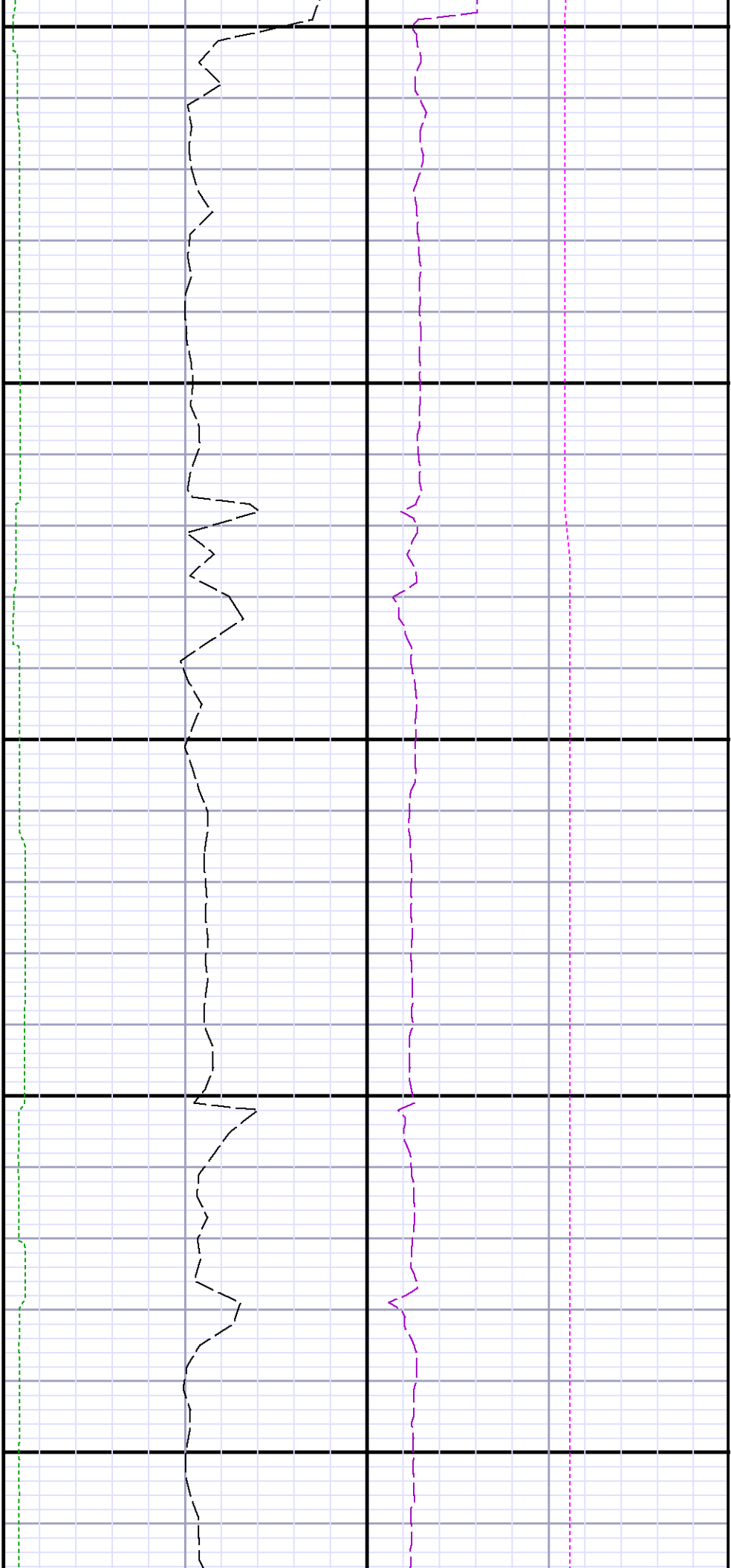


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