

Name	Arrive	Depart	Name	Arrive	Depart	Name	Arrive	Depart
	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite
Greg Dore	21/Aug/2014	27/Aug/2014	Bryan Severson	18/Aug/2014	27/Aug/2014	Kevin McGuire	18/Aug/2014	21/Aug/2014

Mud Properties Record

Date / Time	LWD Run No.	Measured Depth (ft)	Mud Type	Density (ppg)	Viscosity (cp)	pH	Fluid Loss (bbls)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
19/Aug/2014 10:00	1	2213.0	Water Based	8.4	1	7.8	N/A	0/99	Active Mud Pit	640	N/A
20/Aug/2014 22:00	1	6860.0	Water Based	9.8	11	9.7	N/A	0/98	Active Mud Pit	3500	N/A
21/Aug/2014 22:00	1	7834.0	Water Based	10.0	11	9.3	N/A	3/88	Active Mud Pit	4000	N/A
22/Aug/2014 22:00	1	7834.0	Water Based	10.0	11	9.3	N/A	3/88	Active Mud Pit	160	N/A
23/Aug/2014 22:00	2	7790.0	Water Based	10.2	13	9.5	N/A	3/87	Active Mud Pit	200	N/A
24/Aug/2014 22:00	2	8903.0	Water Based	9.8	12	9.7	N/A	3/88	Active Mud Pit	3900	N/A
25/Aug/2014 22:00	2	10702.0	Water Based	10.0	13	9.6	N/A	3/87	Active Mud Pit	4300	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	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	12592552	Directional	61.86	6.750	2.750
1	SRIG	12041109	Gamma	58.49	6.750	2.750
2	DIR	10152197	Directional	68.04	4.750	2.688
2	SRIG	10582603	Gamma	64.66	4.750	2.688

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.) 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.) Baker Hughes LWD run 1 utilized 6 3/4 inch NaviGamma services (Gamma Ray and Directional) behind an 8 3/4 inch bit and steerable assembly from 1161 to 7834 feet MD (1160 to 7299 feet TVD).
- 3.) Baker Hughes LWD runs 2 utilized 4 3/4 inch NaviGamma services (Gamma Ray and Directional) behind an 6 1/8 inch bit and steerable assembly from 7834 to 12492 feet MD (7299 to 7302 feet TVD).
- 5.) The solid line on the left side of the gamma ray track indicates the interval over which data was collected while not rotating.

Remarks

Number	Measured Depth (m.)	Hole Section (in.)	LWD Run No.	Remark
1	6700	8.750	1	Gamma ray logging operations began at 6700 feet MD (6534 feet TVD).
2	7776	8.750	1	The interval from 7776 to 7834 feet MD (7294 to 7299 feet TVD) was logged more than 24 hrs after being drilled due to a trip out of the hole for casing and cement operations.
3	12428	6.125	2	The interval from 12428 to 12492 feet MD (7302 feet TVD) was not logged due to sensor to bit offsets at well TD.



Company : Anadarko
Well : Vogl 16C-36HZ
Interval : 6680.41 - 12507.40 feet
Created : 26/Aug/2014 7:51:10 AM

Gamma Ray Apparent 0.5 ft Avg GRAX

0 200

API

True Vertical Depth TVD

7500 6500

ft

MD feet 1:240

Rate of Penetration 3.0 ft Avg ROPA

500 0

ft/hr

Gamma Time Since Drilled GRTX

0 600

min

Surface Weight On Bit 1.0 ft Avg WOBA

0 100

klbf

Downhole Temperature TCDX

100 300

degF

GRAX

TVD

6700

GRIX

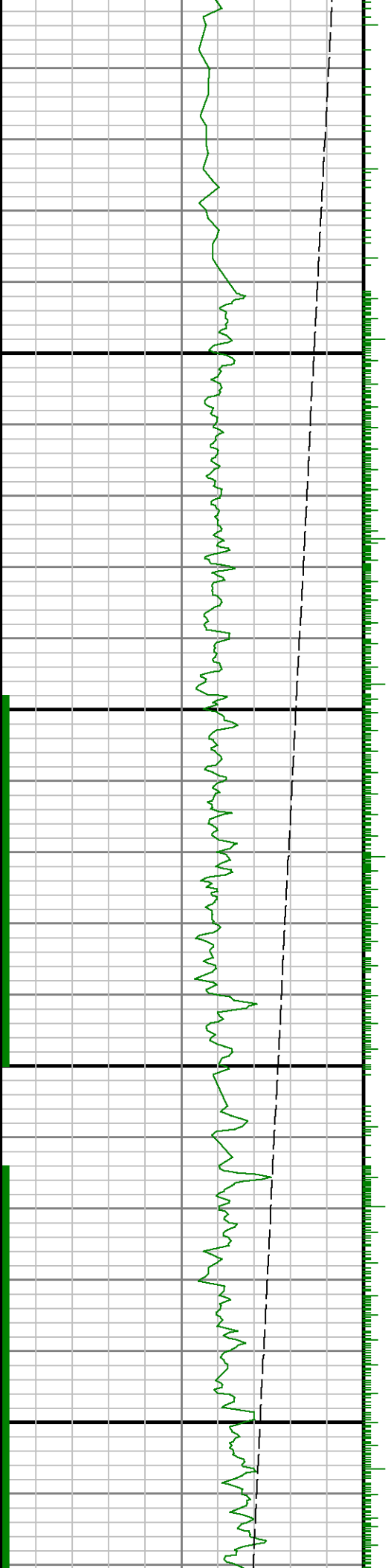
GRTX

ROPA

See Remark 1

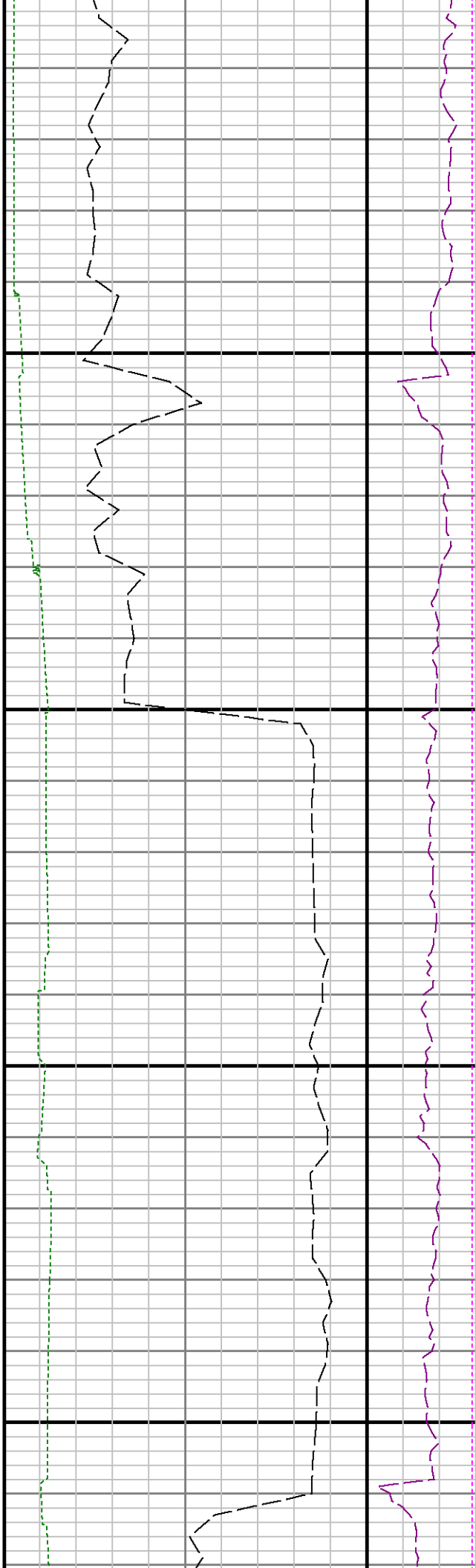
WOBA

TCDX



6800

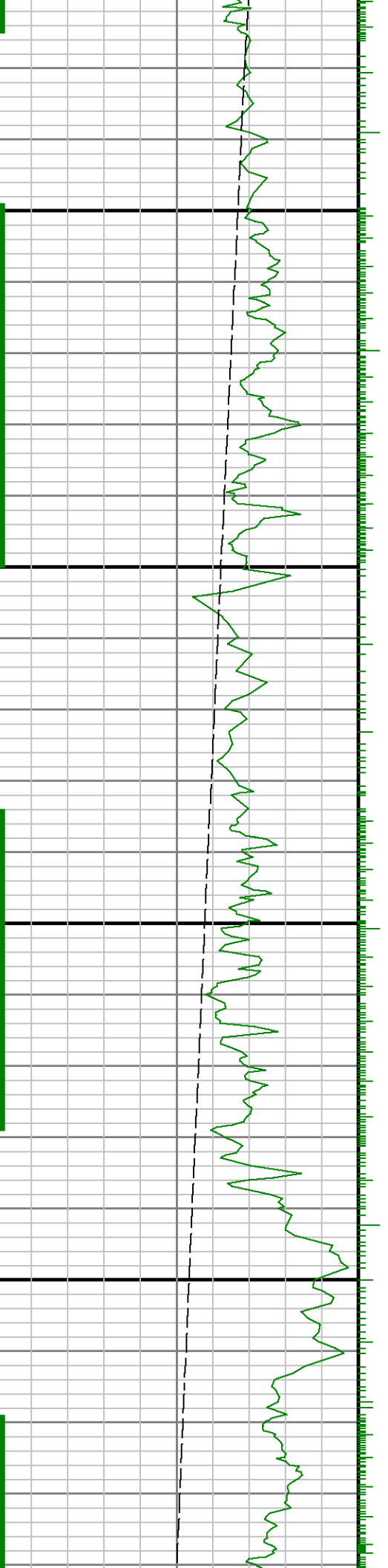
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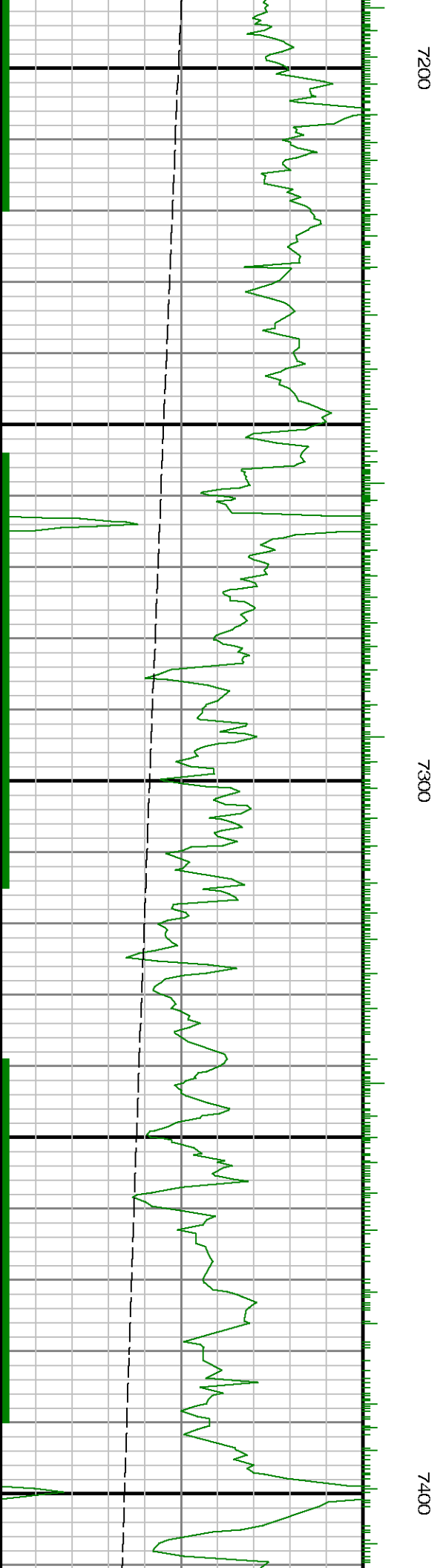
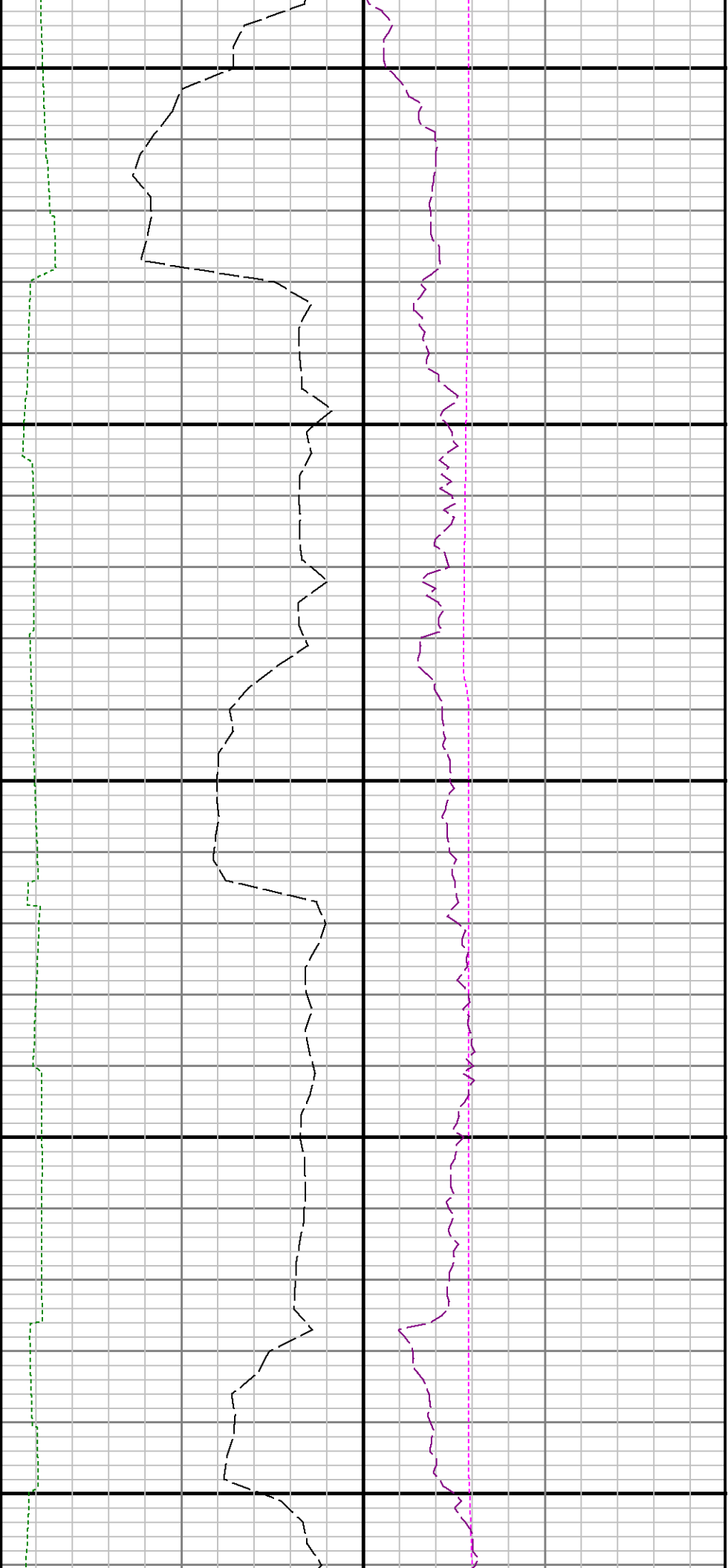


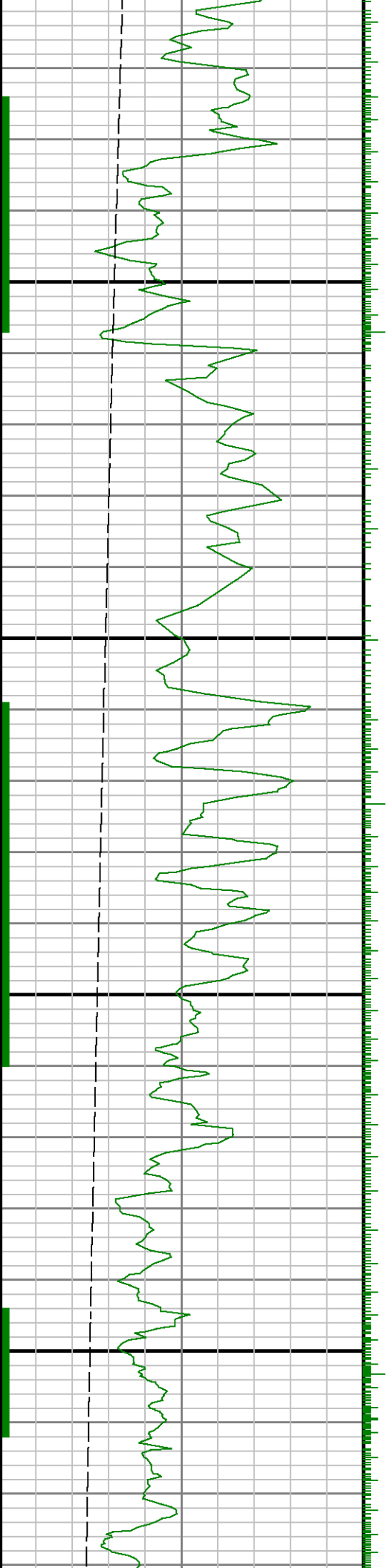


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7100

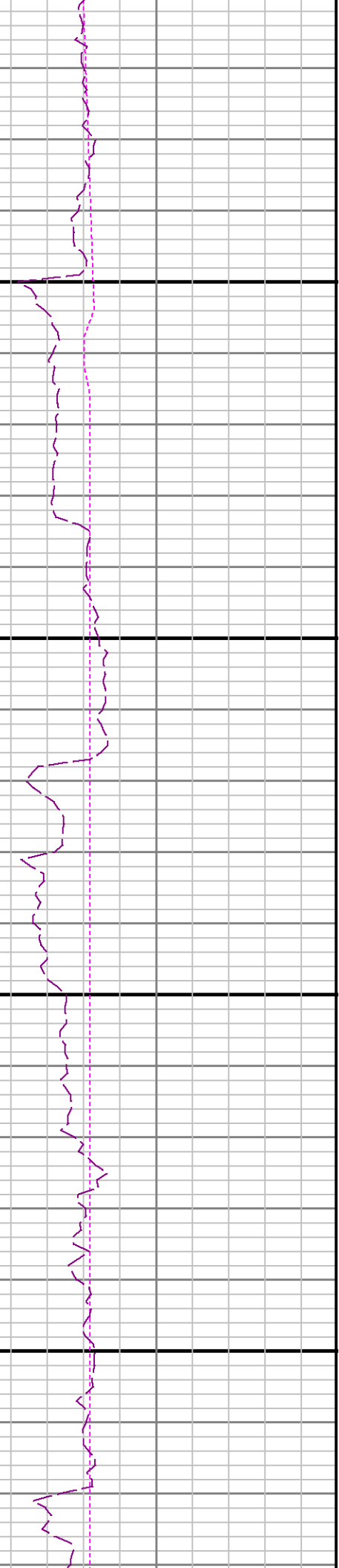
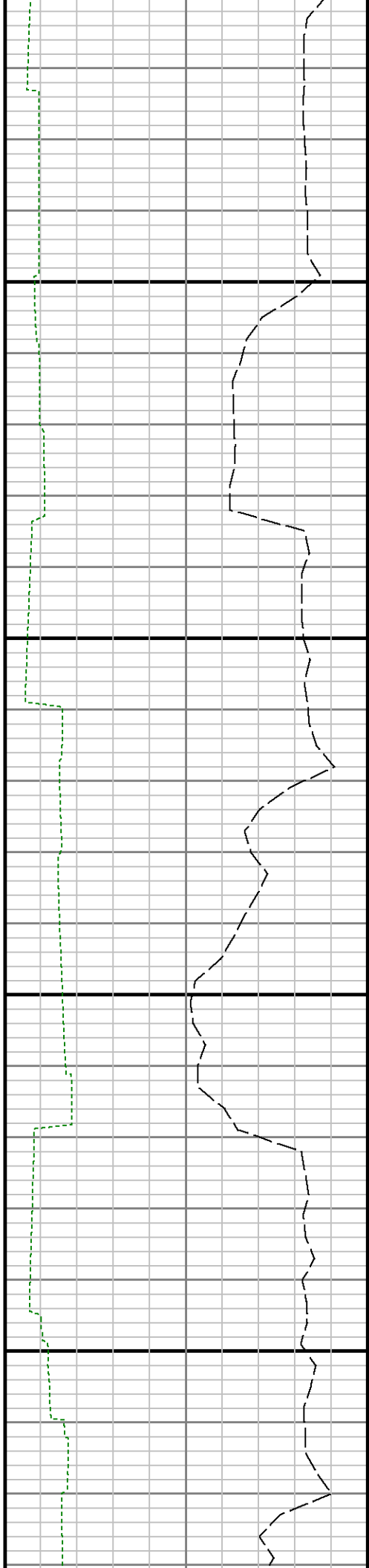


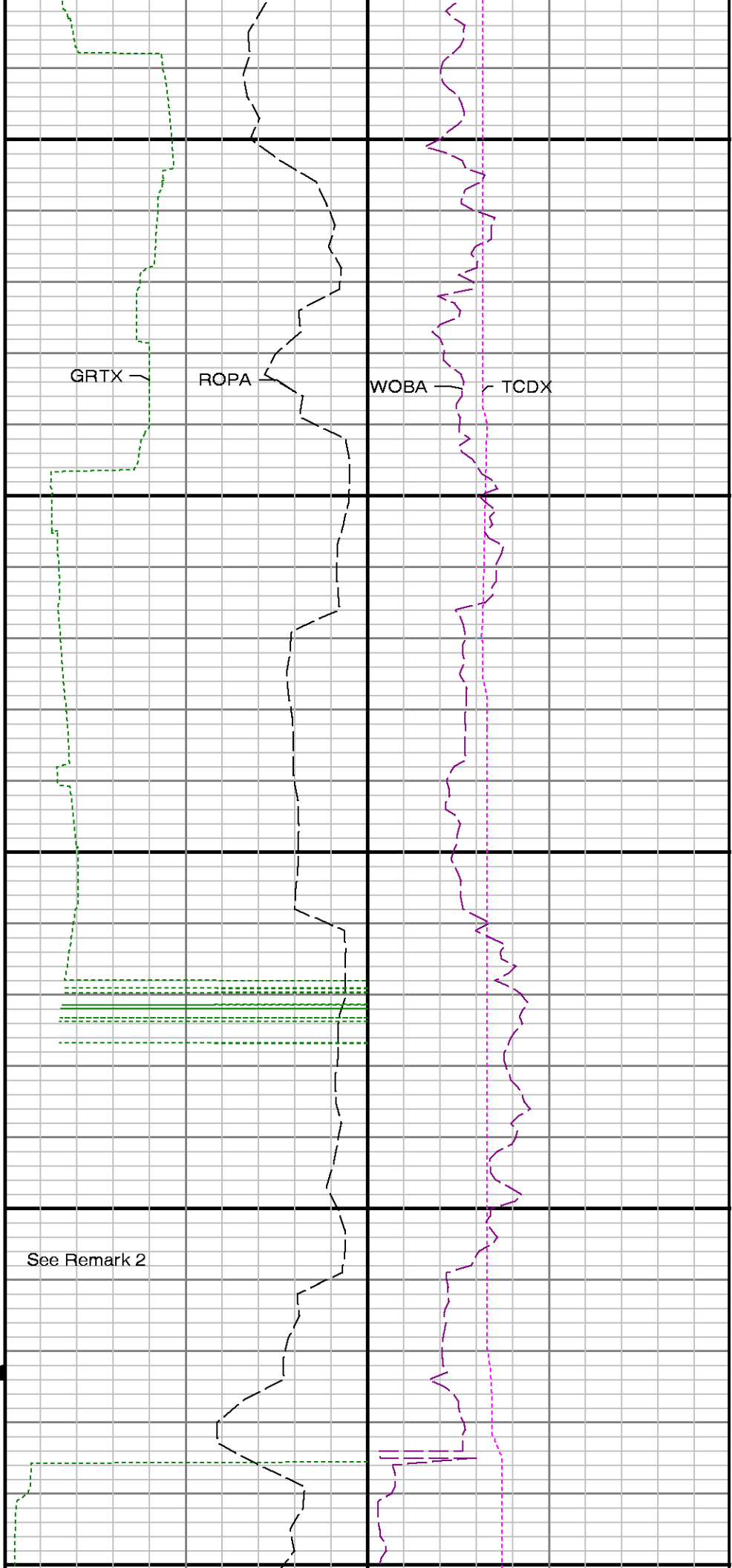
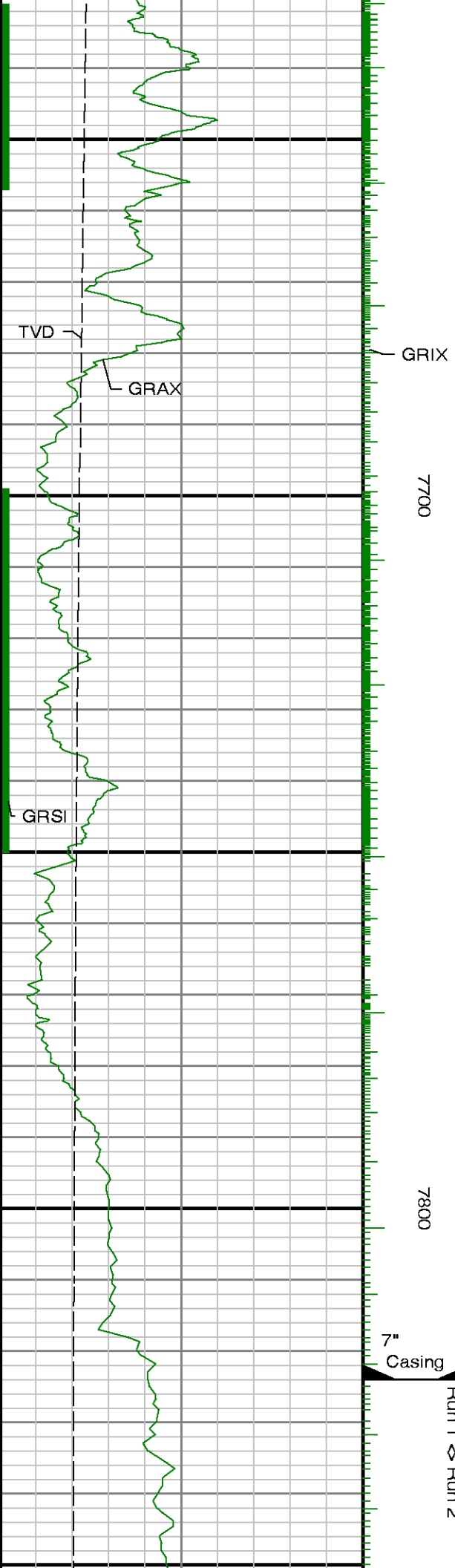


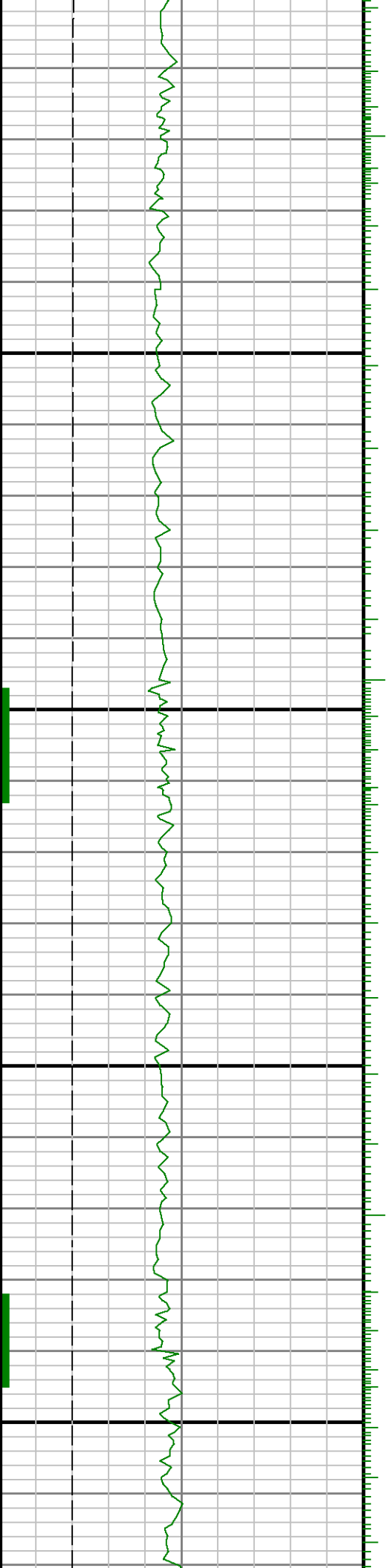


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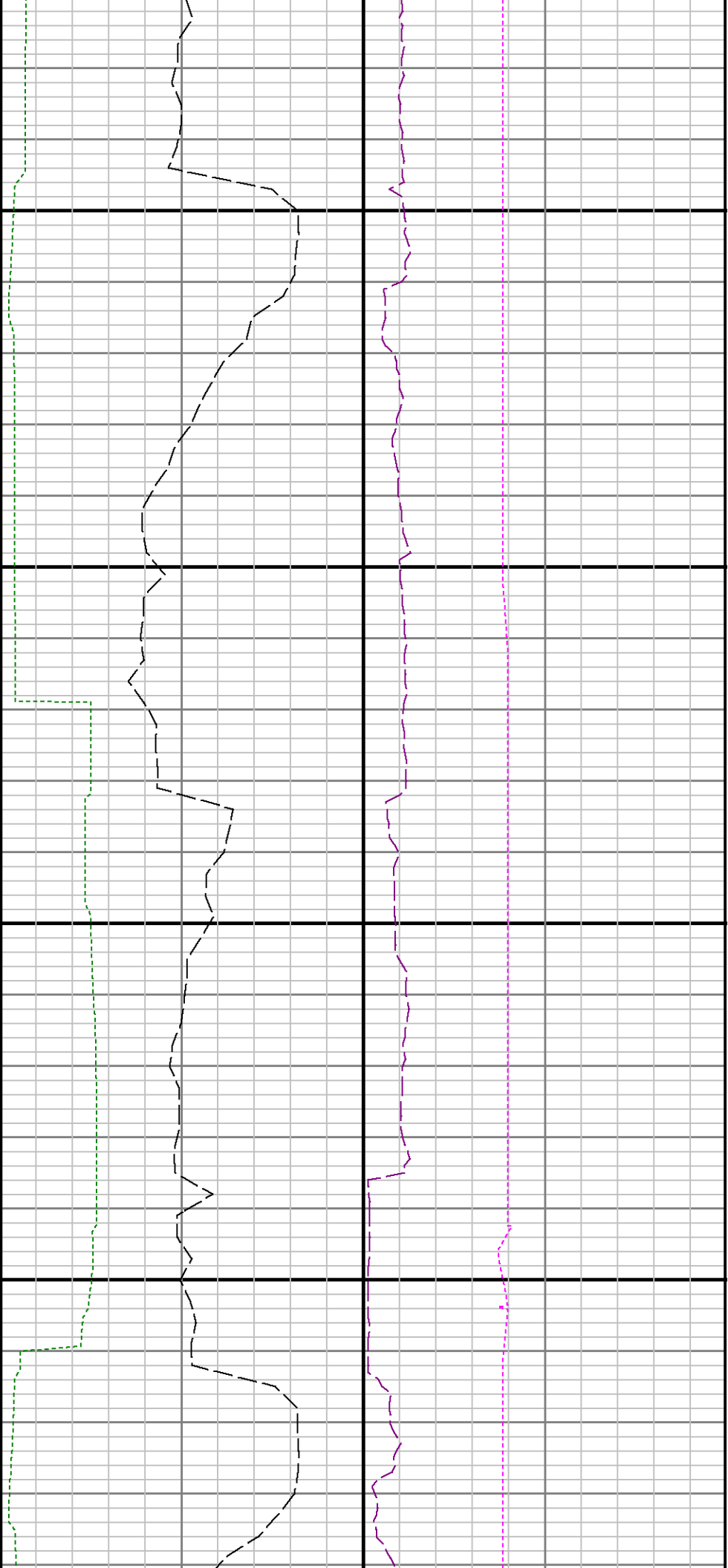




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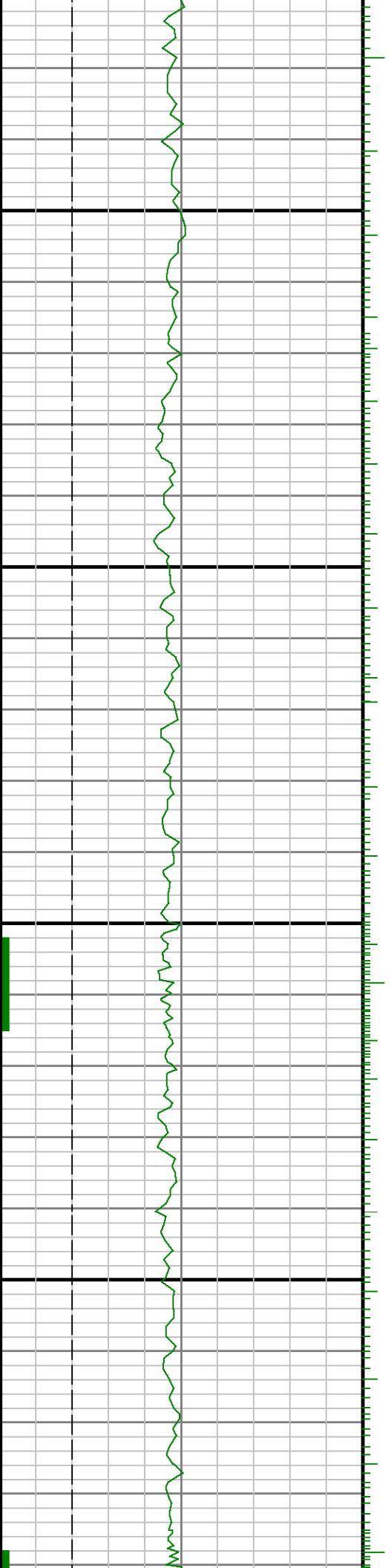
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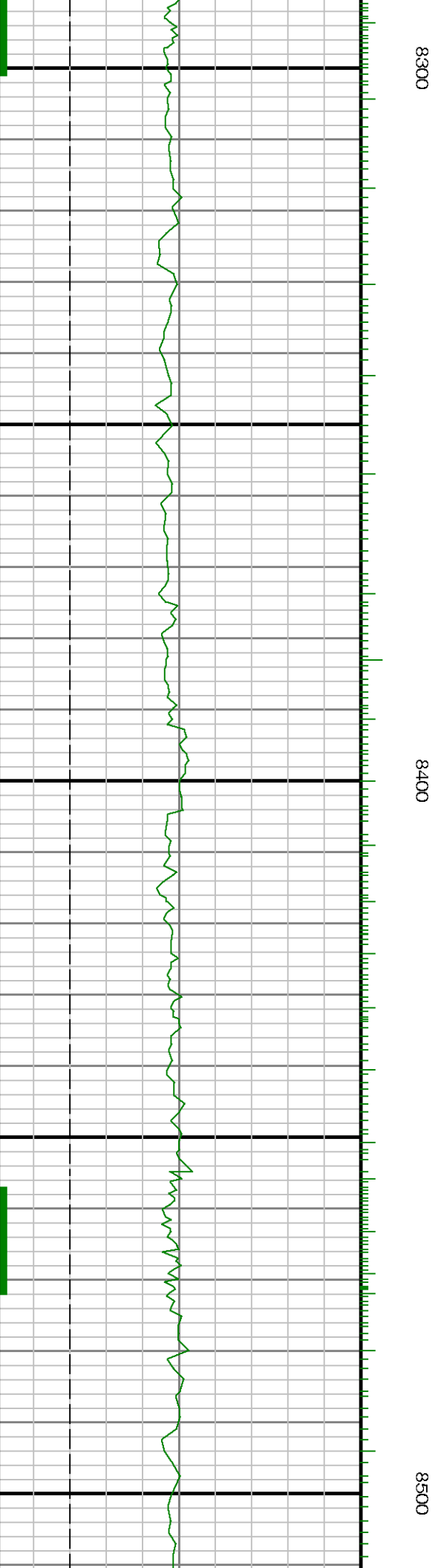
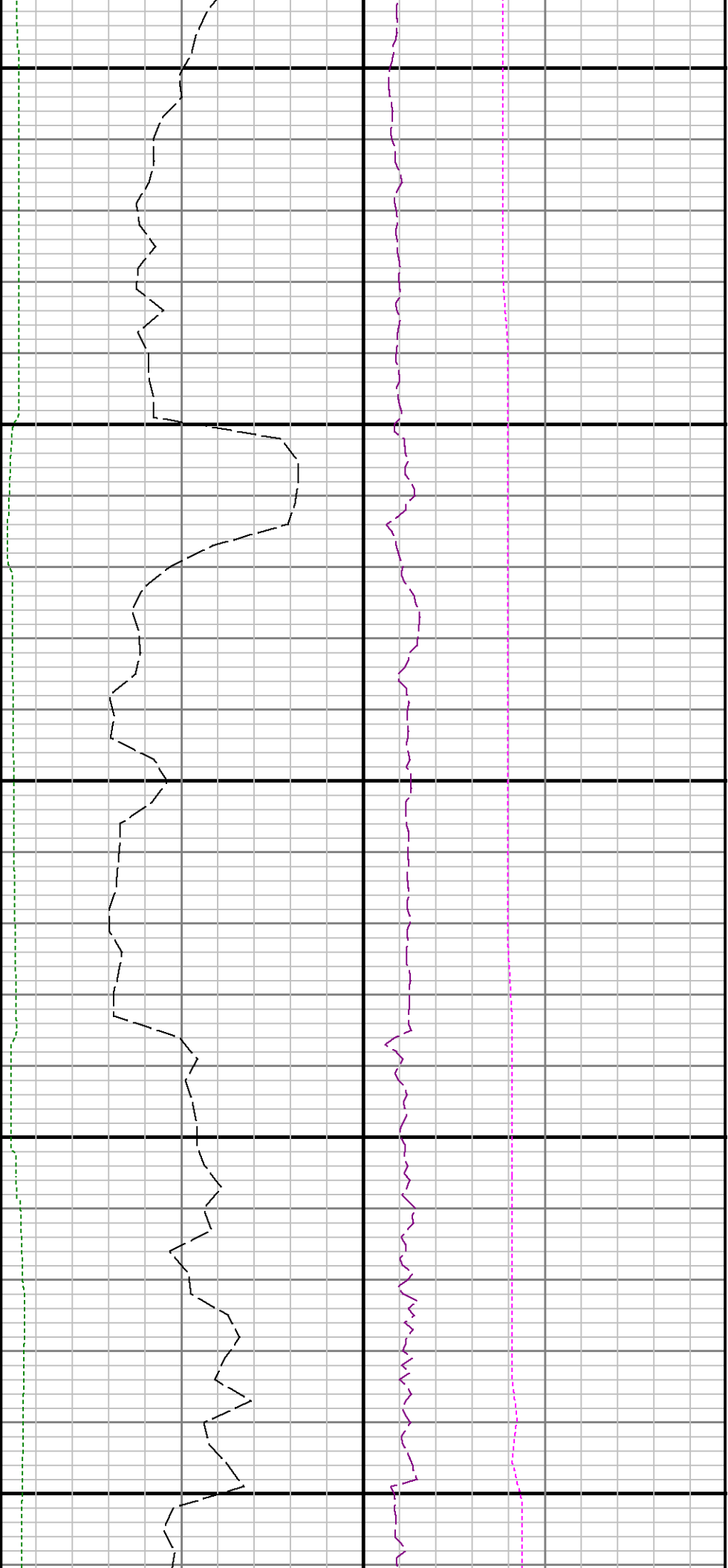


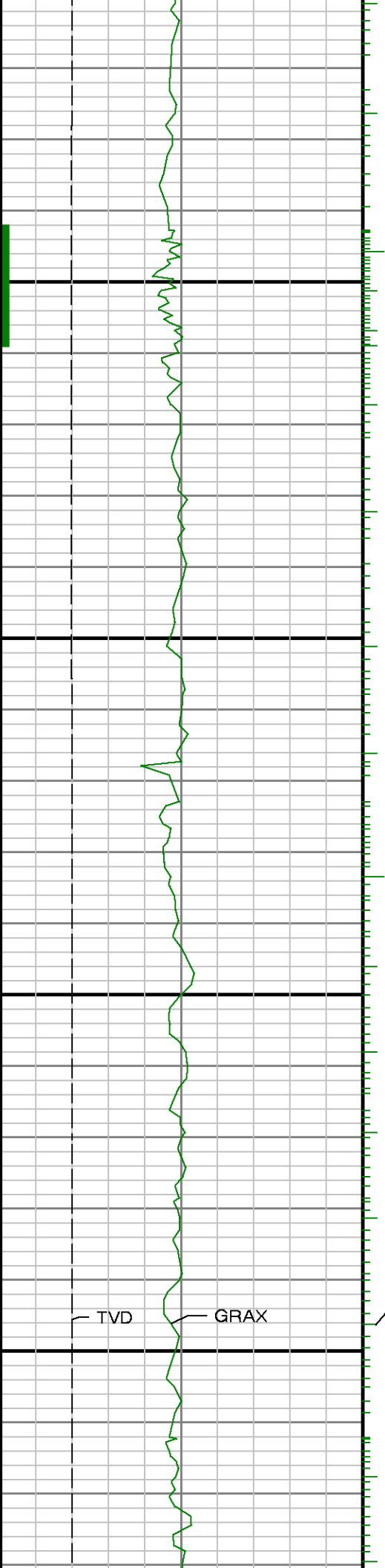


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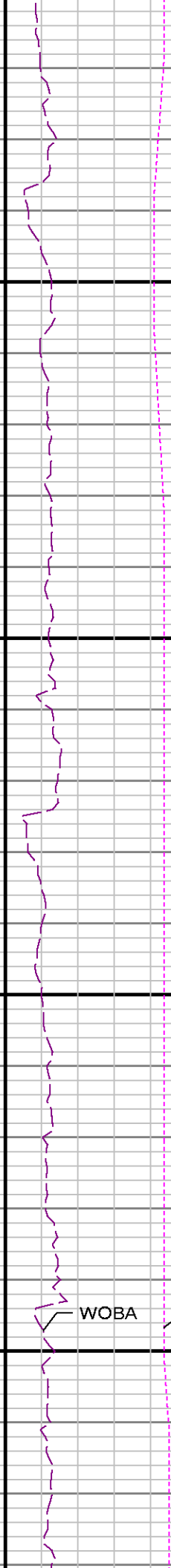
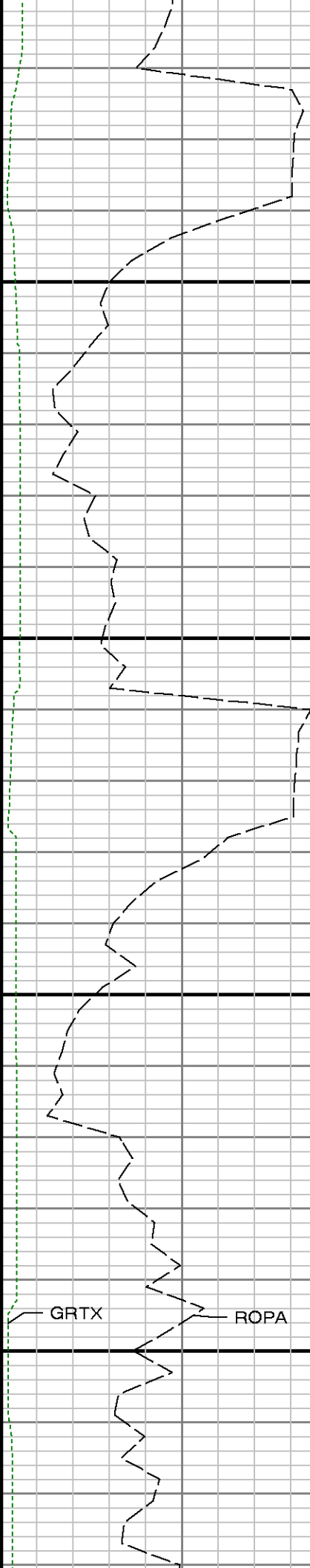


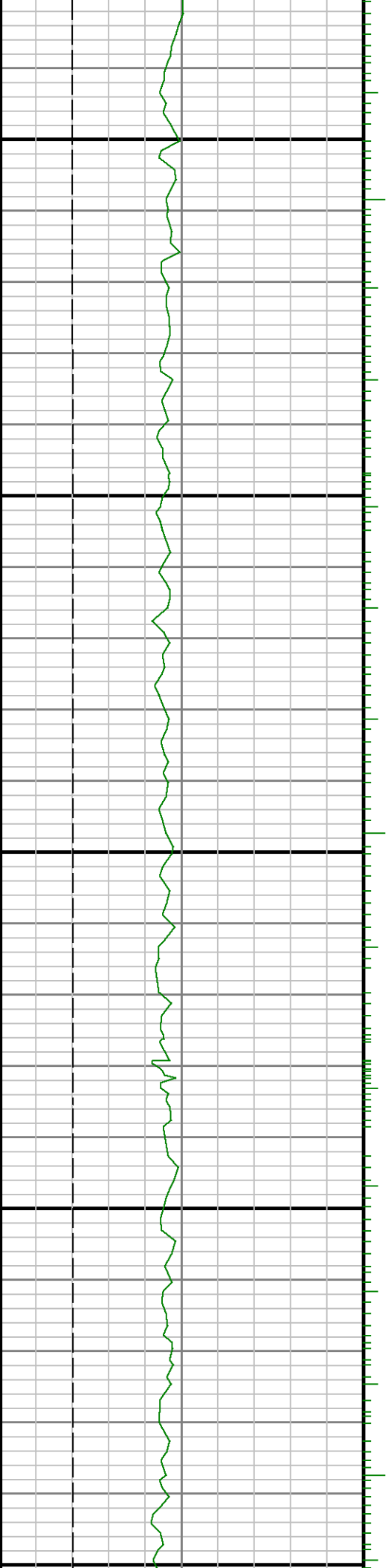




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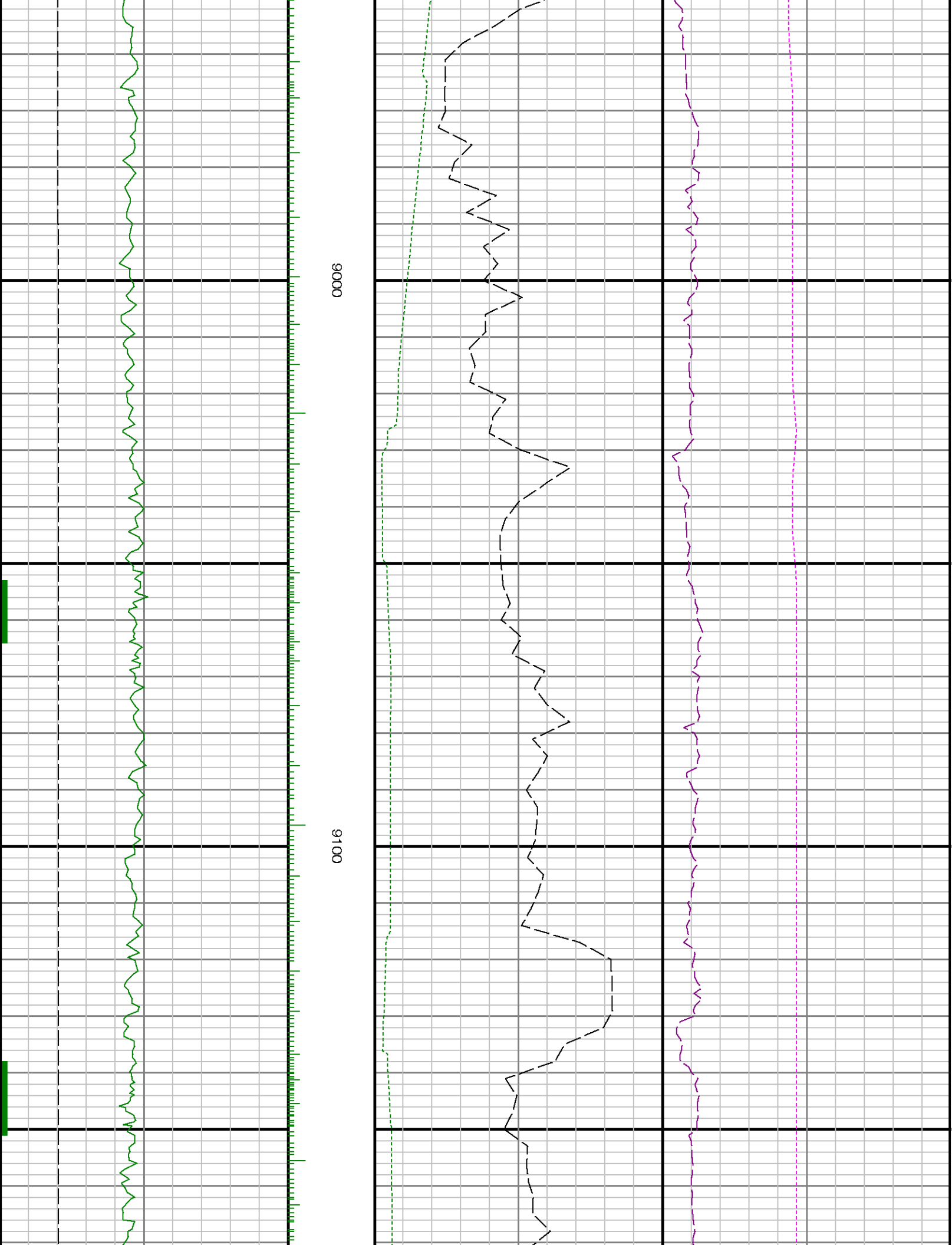


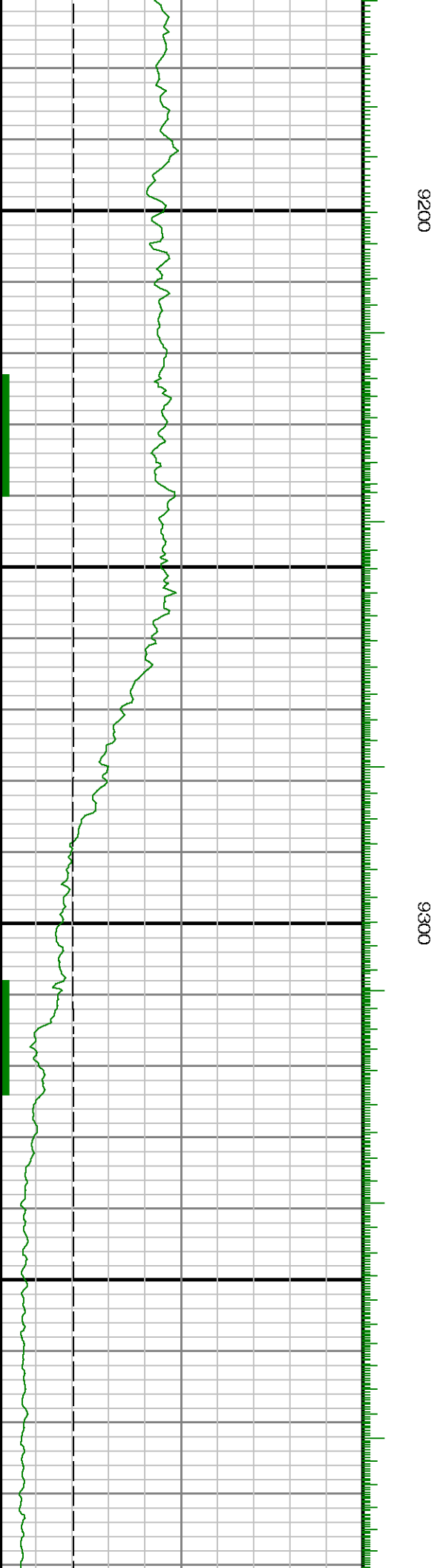
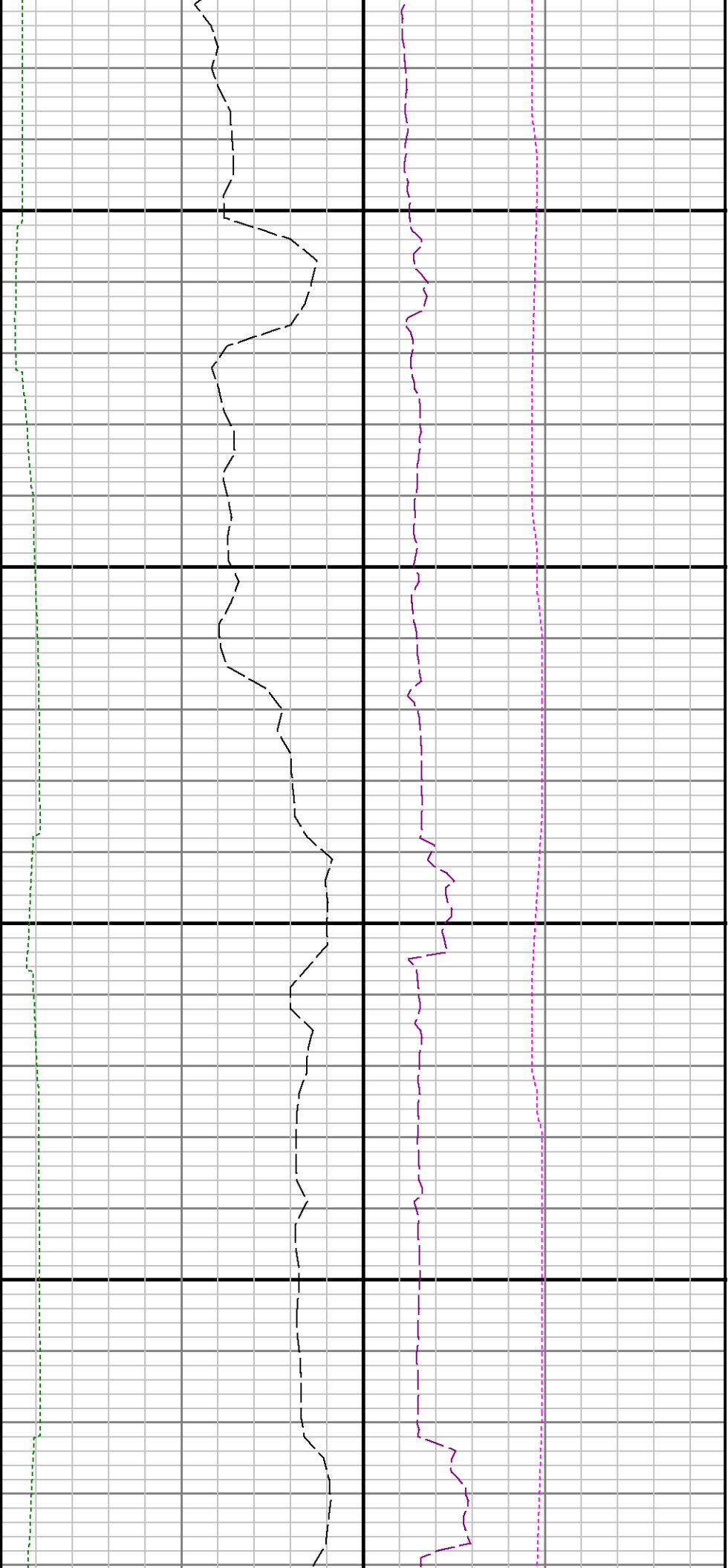


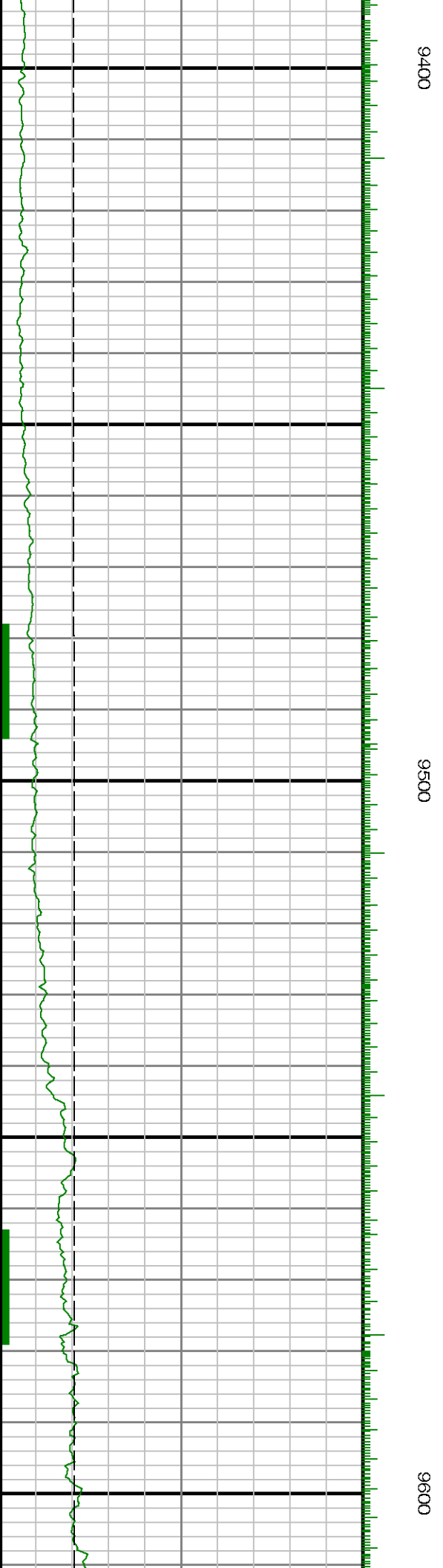
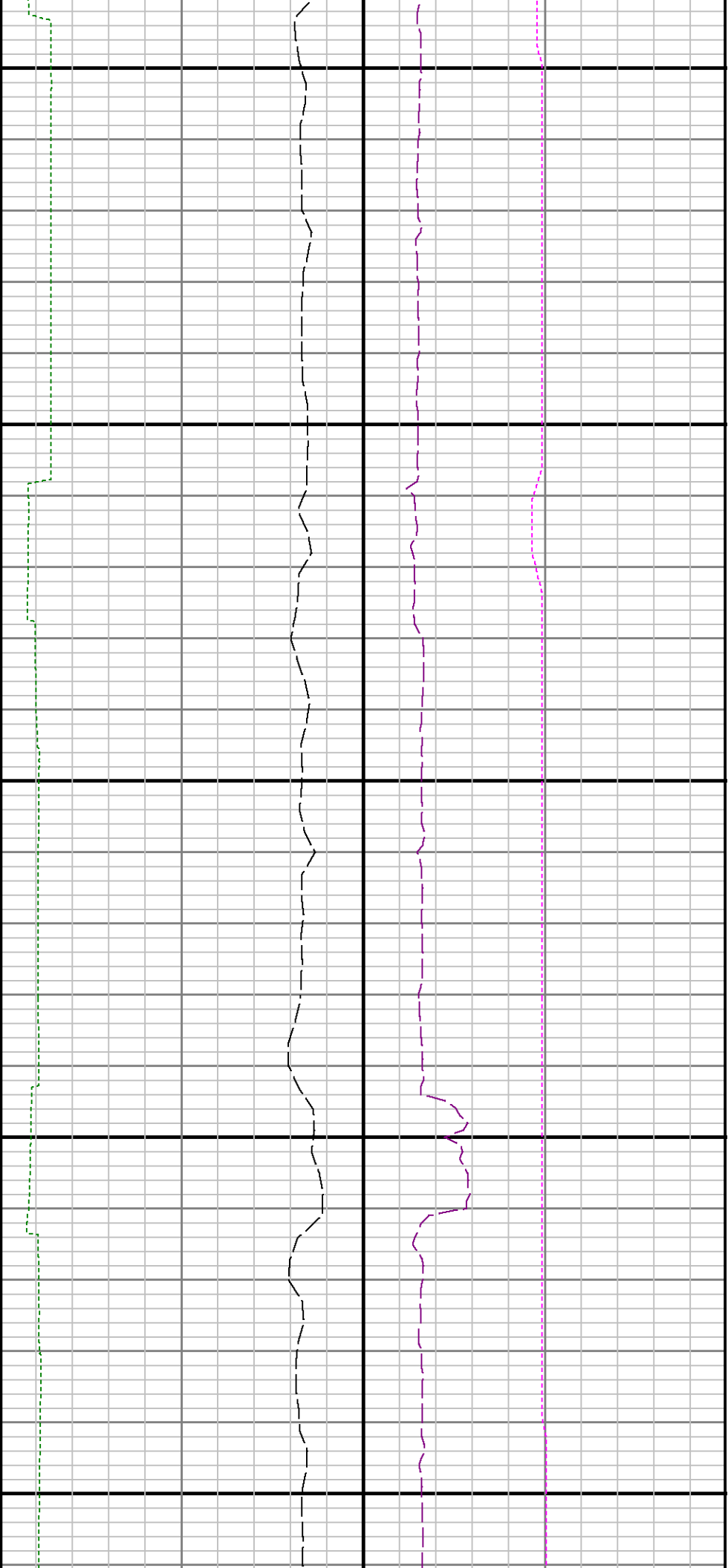
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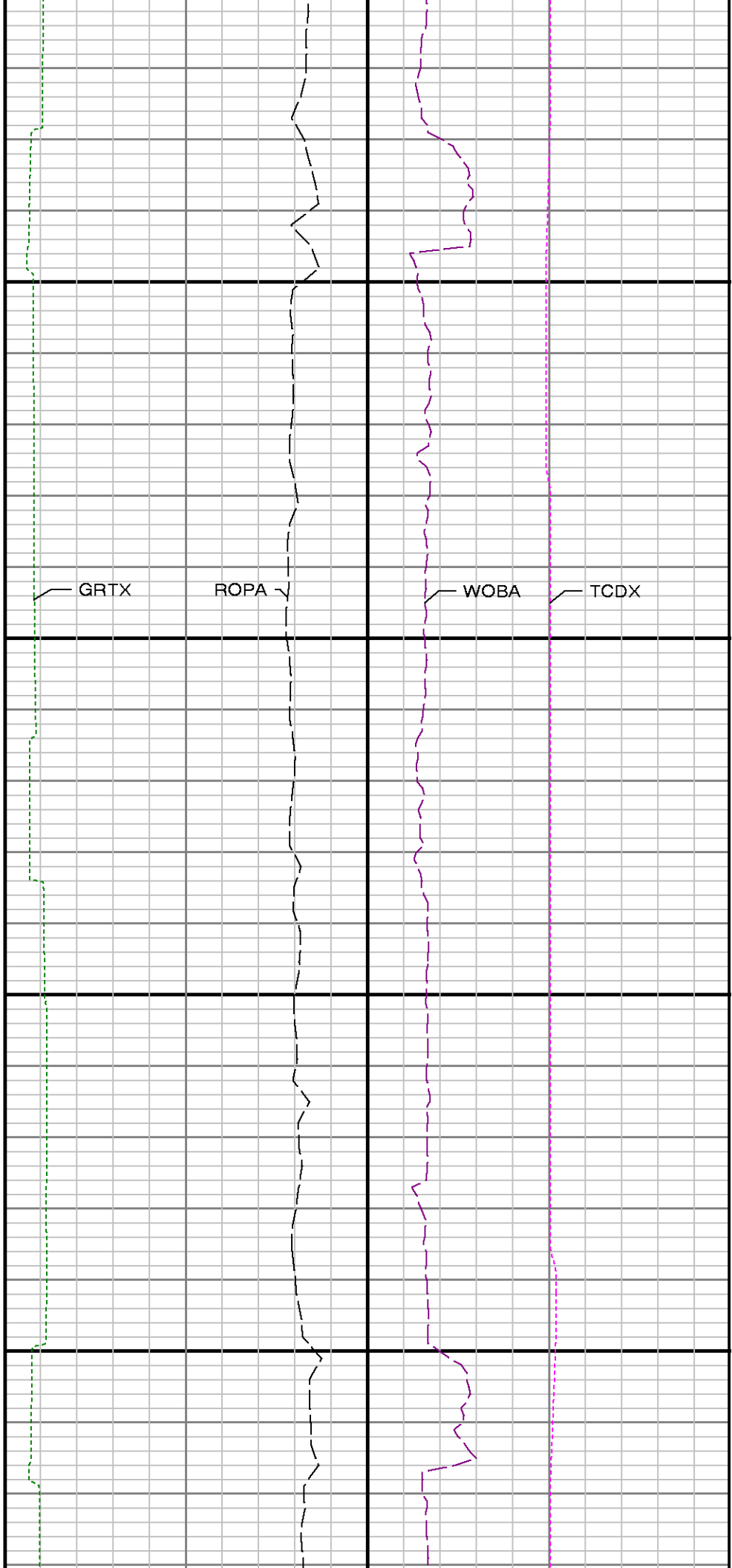
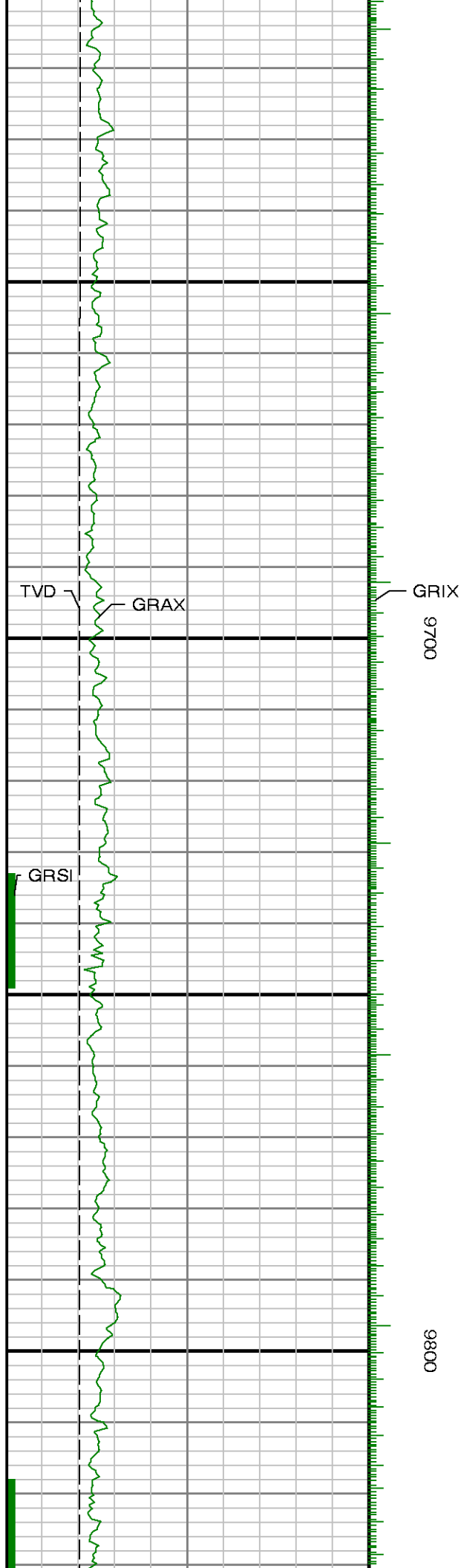
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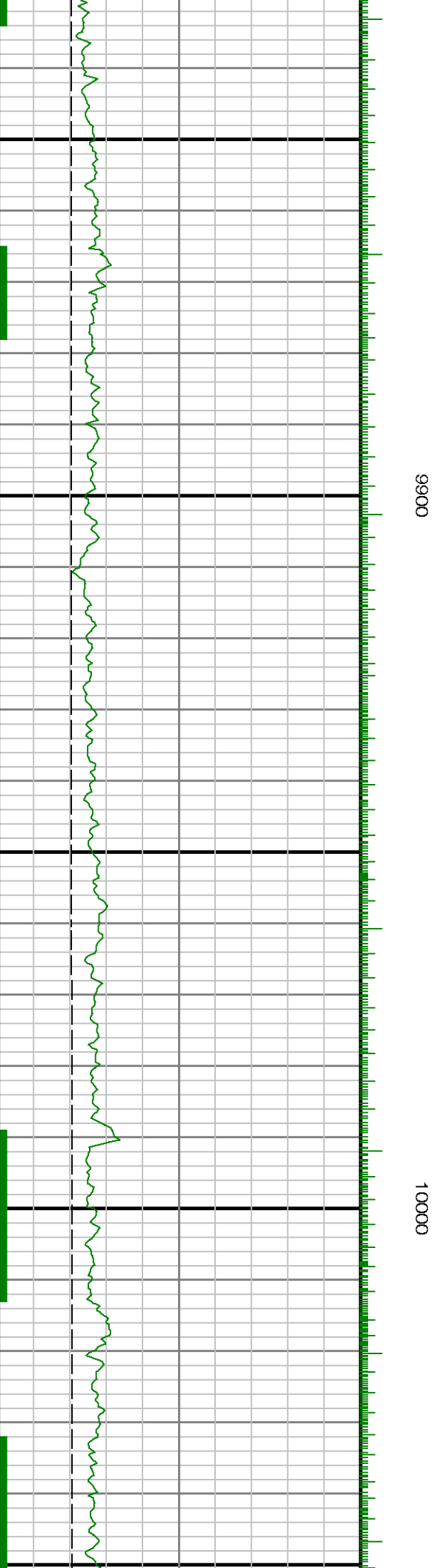
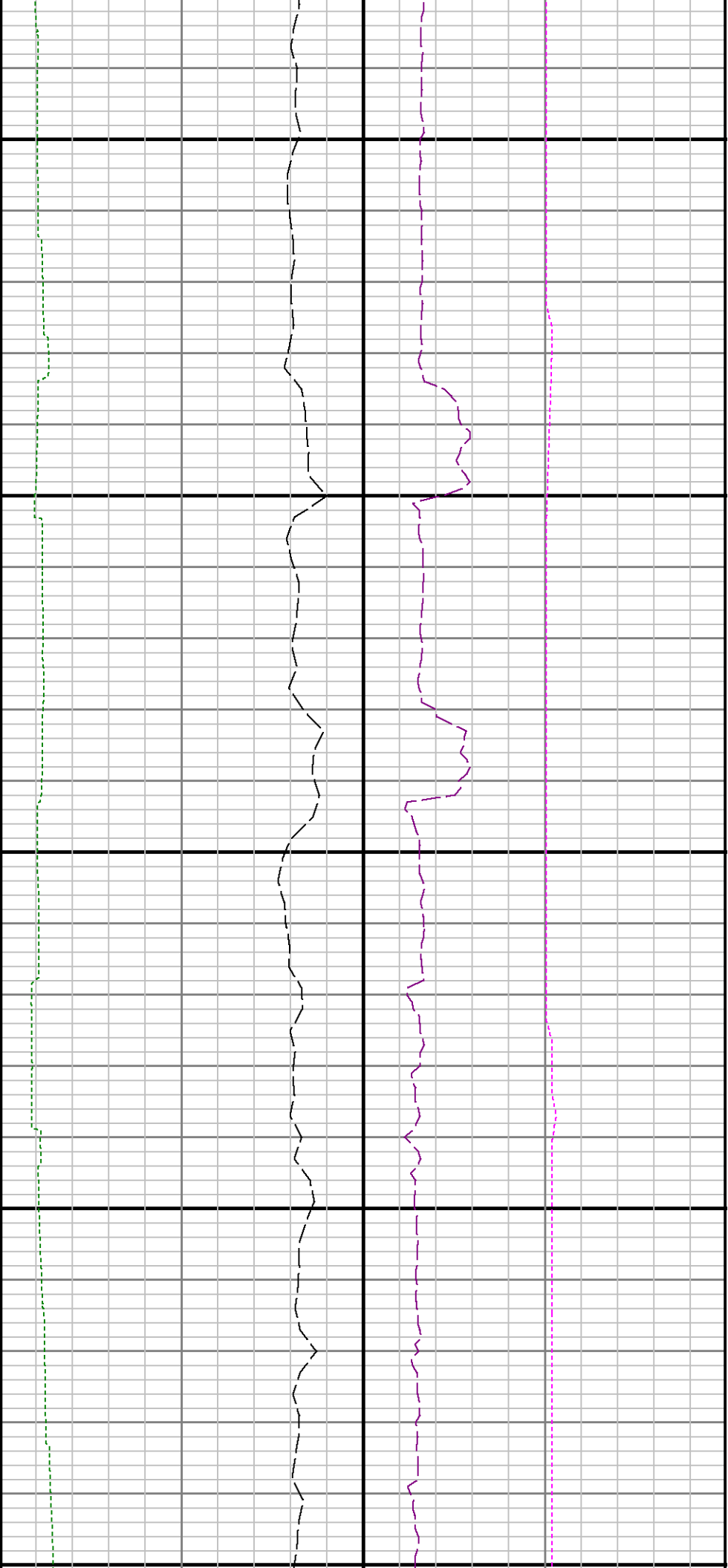


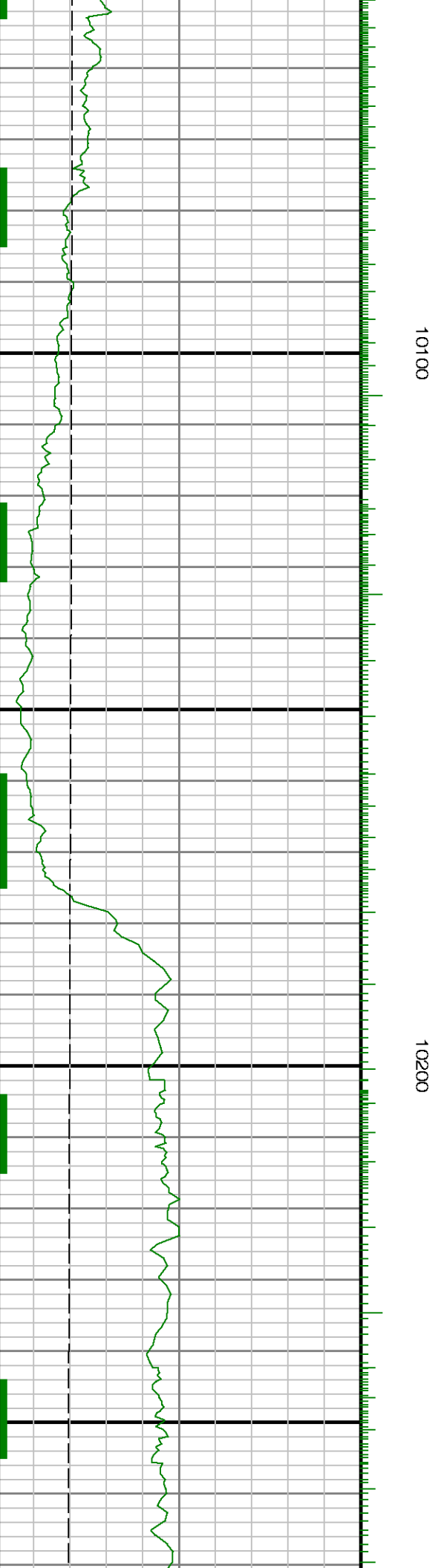
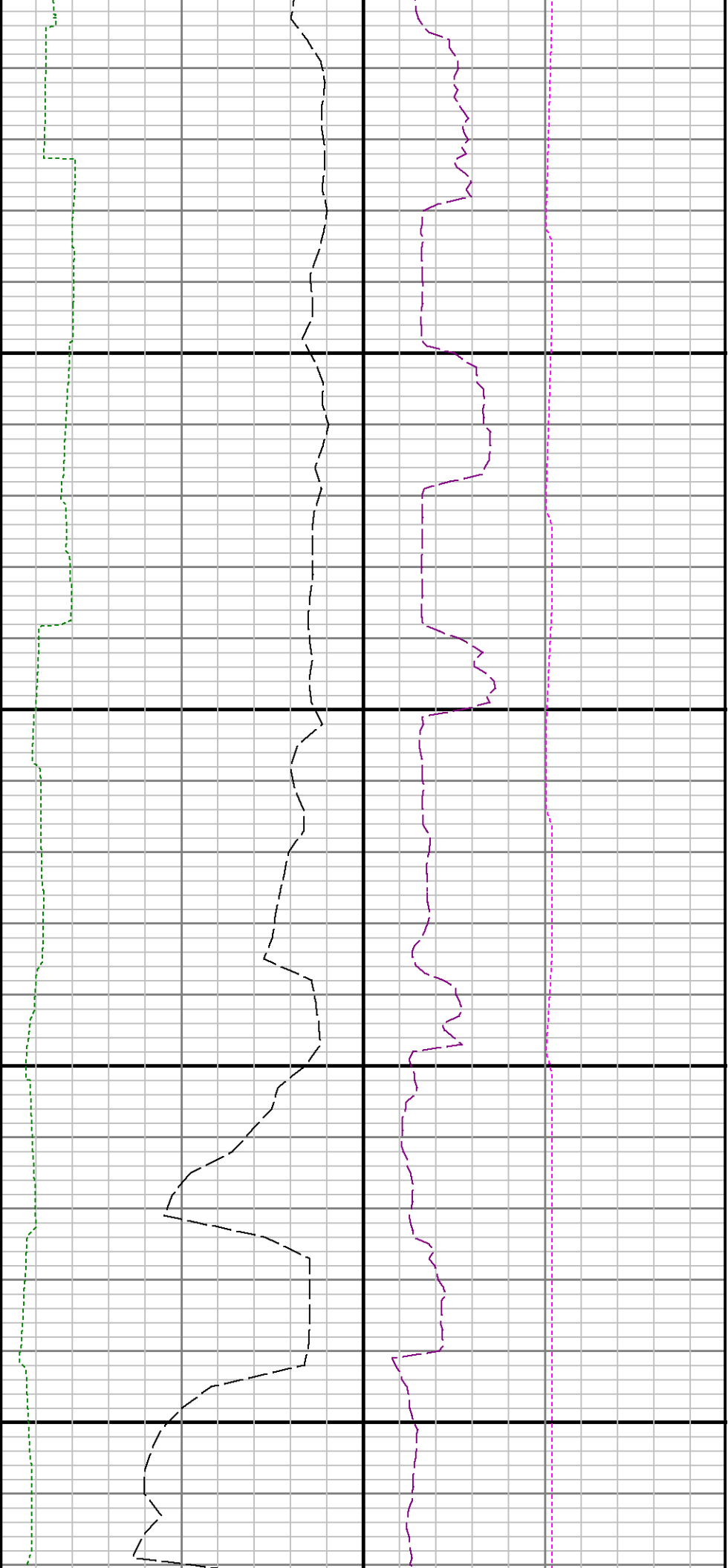


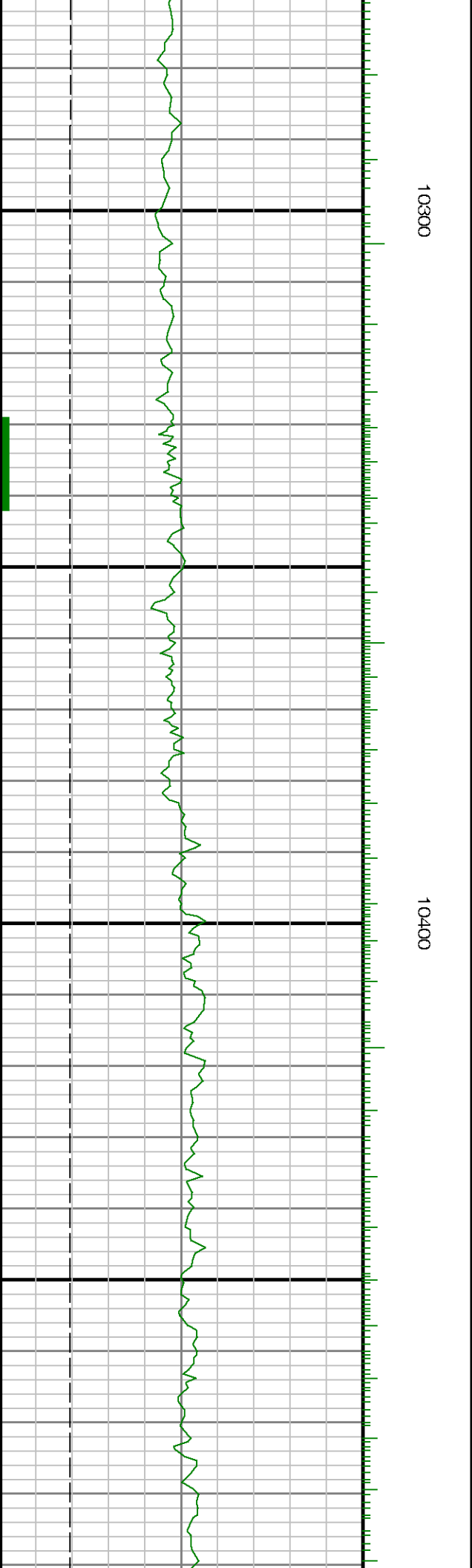


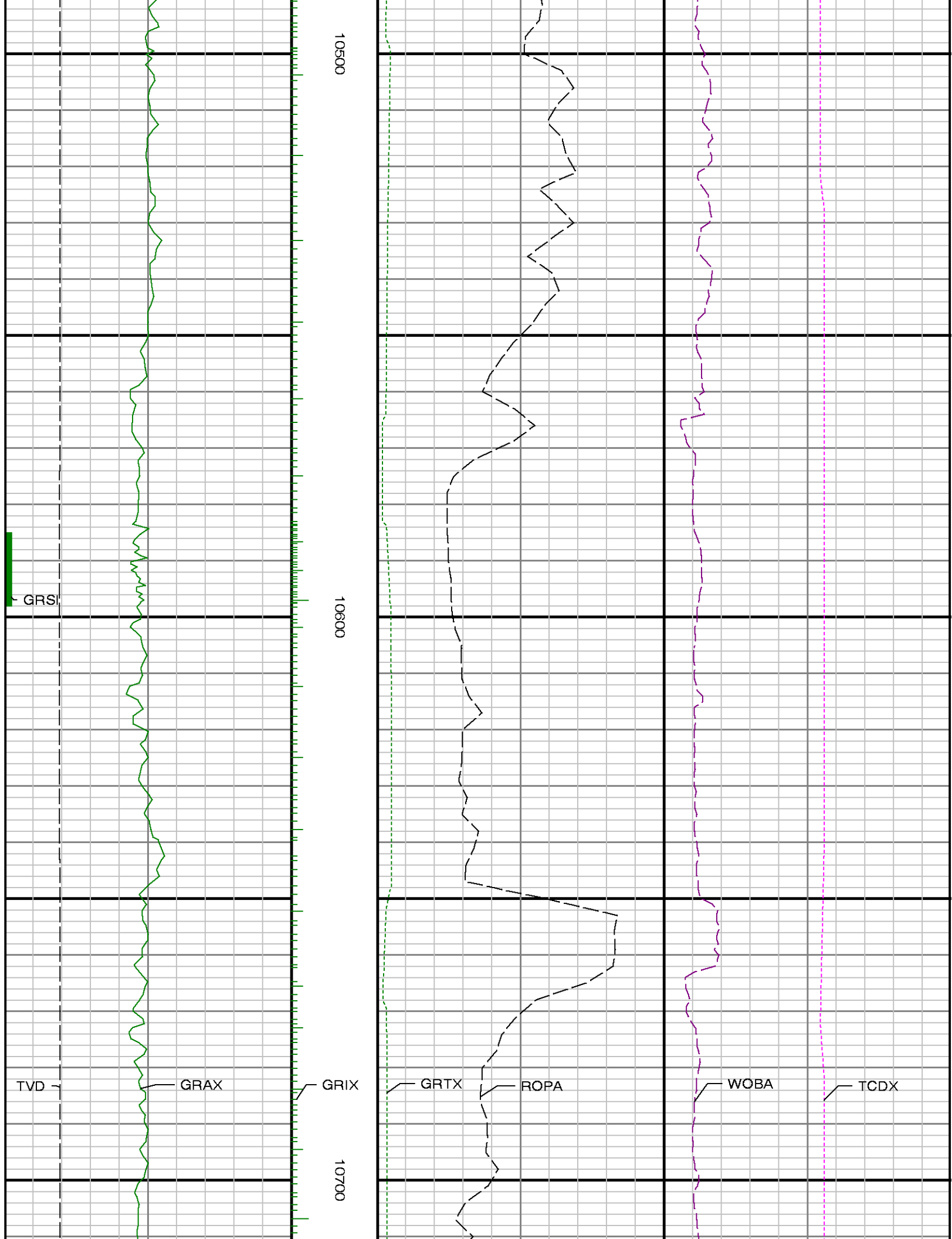


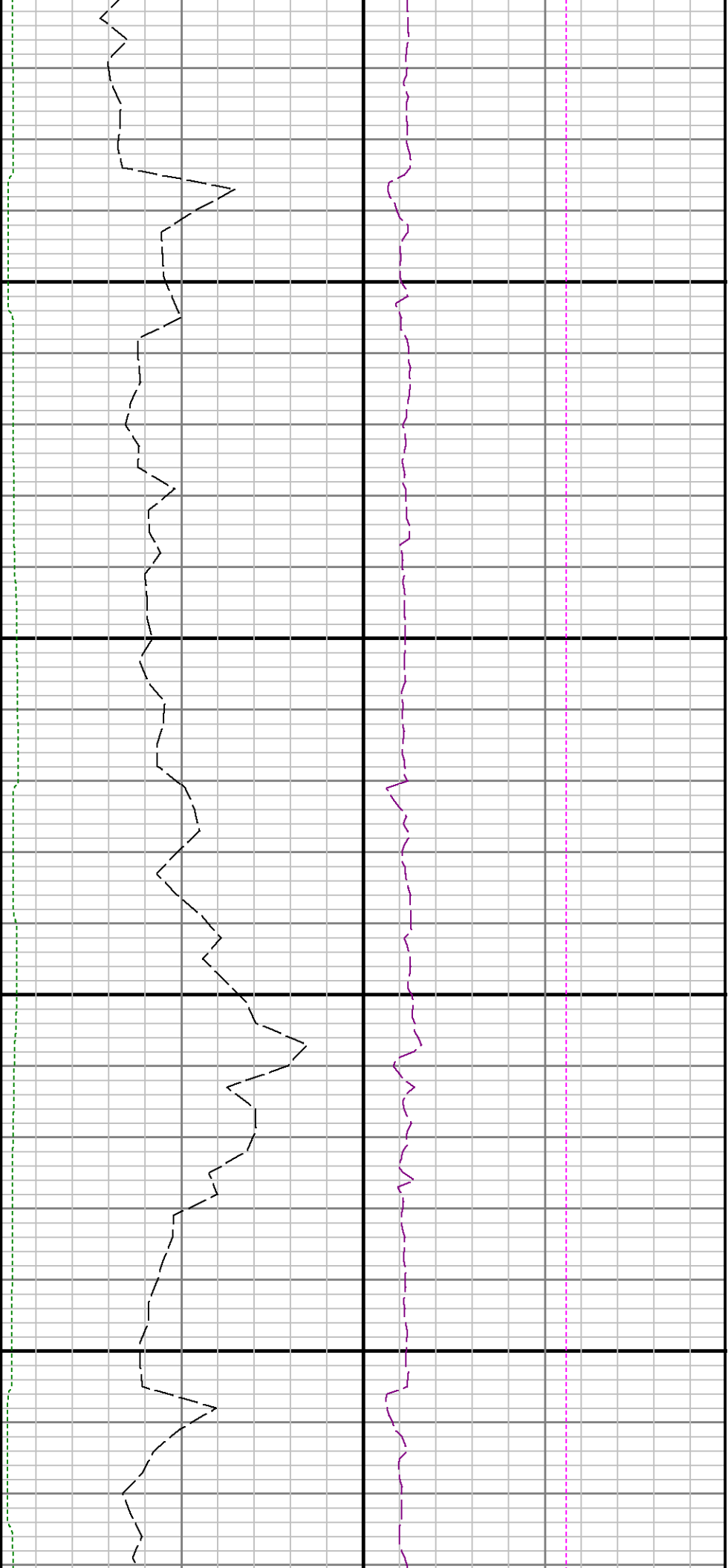






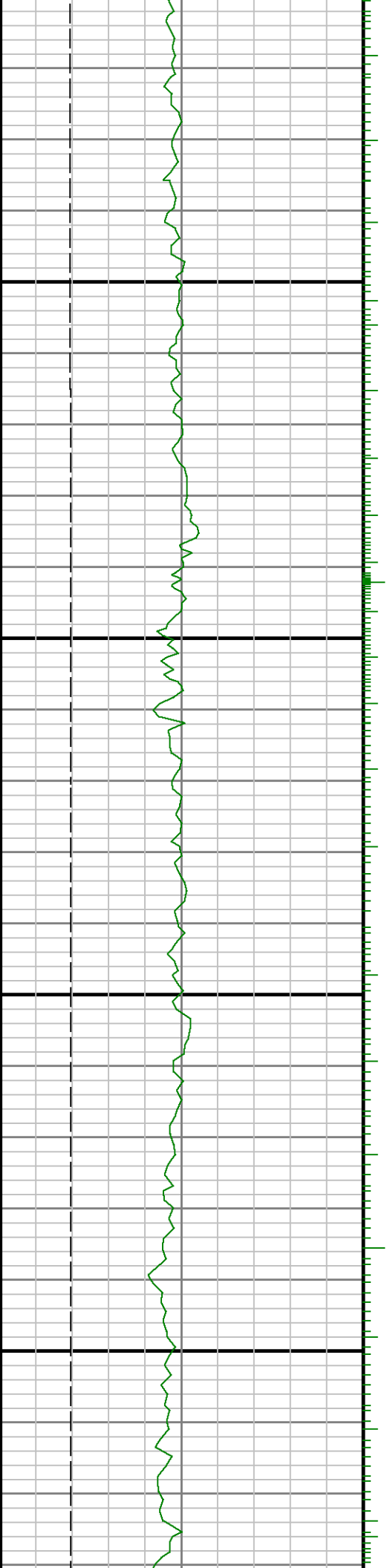


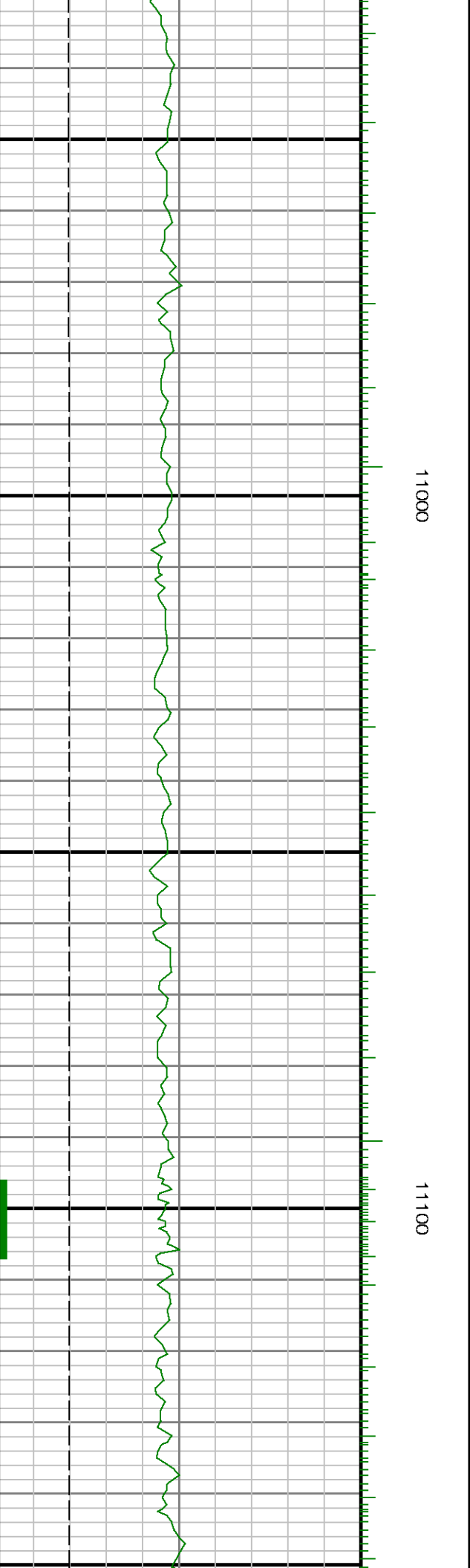
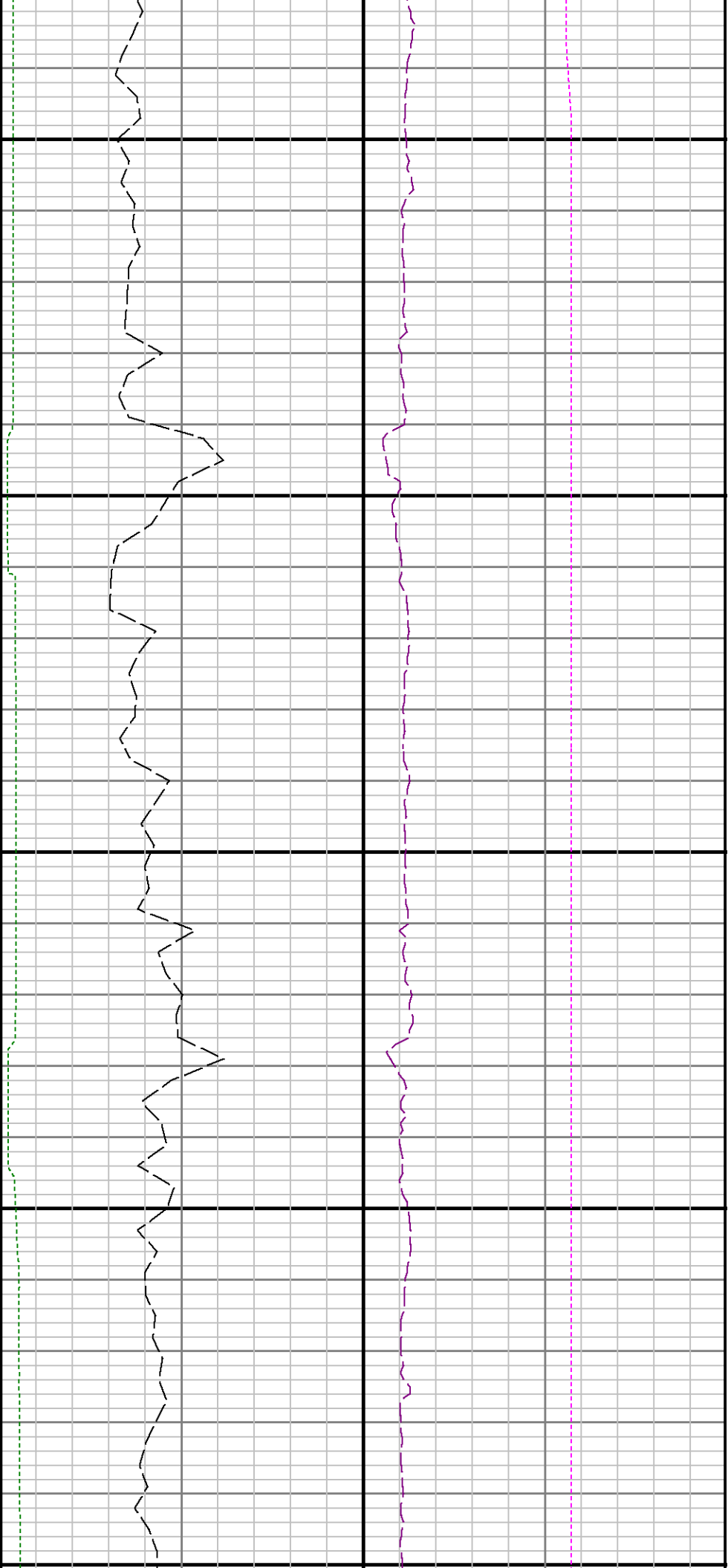


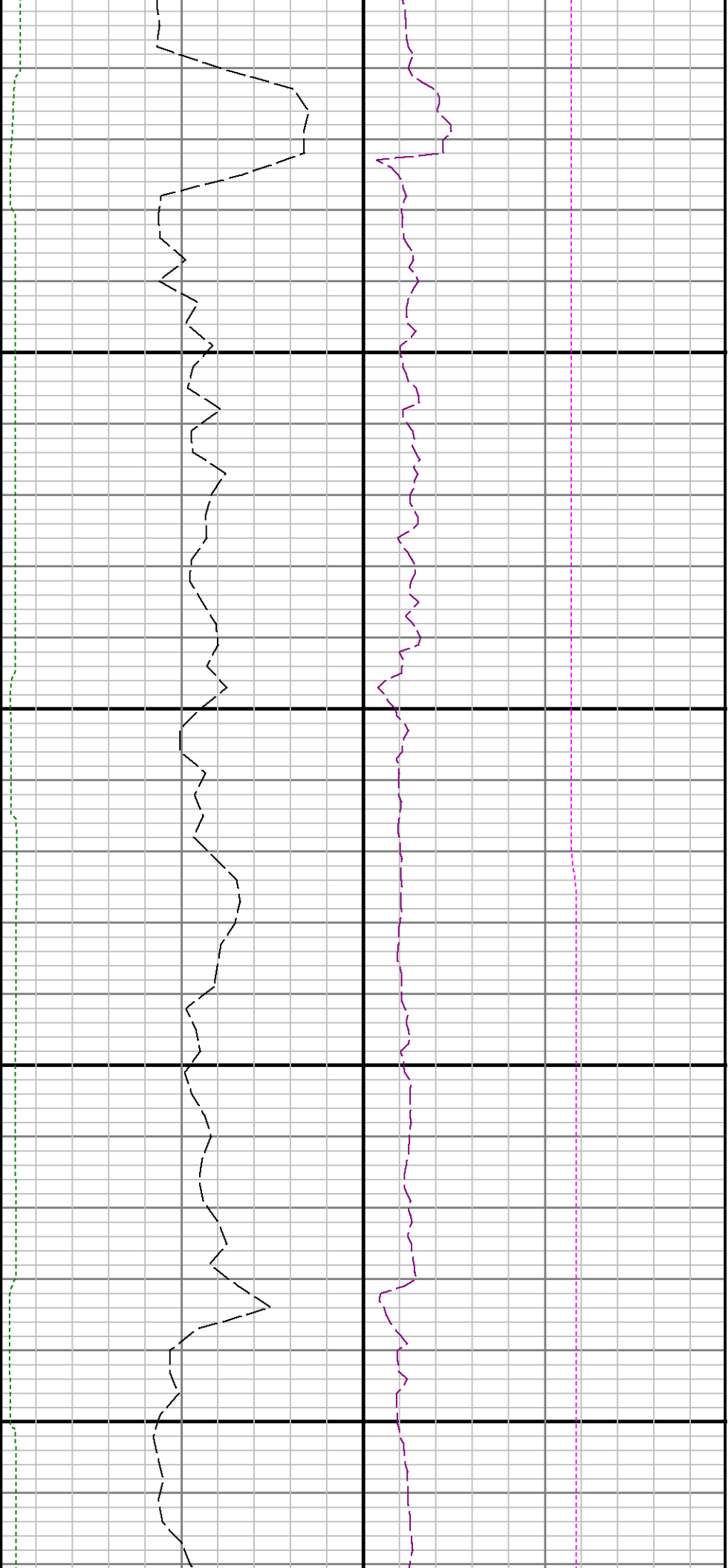


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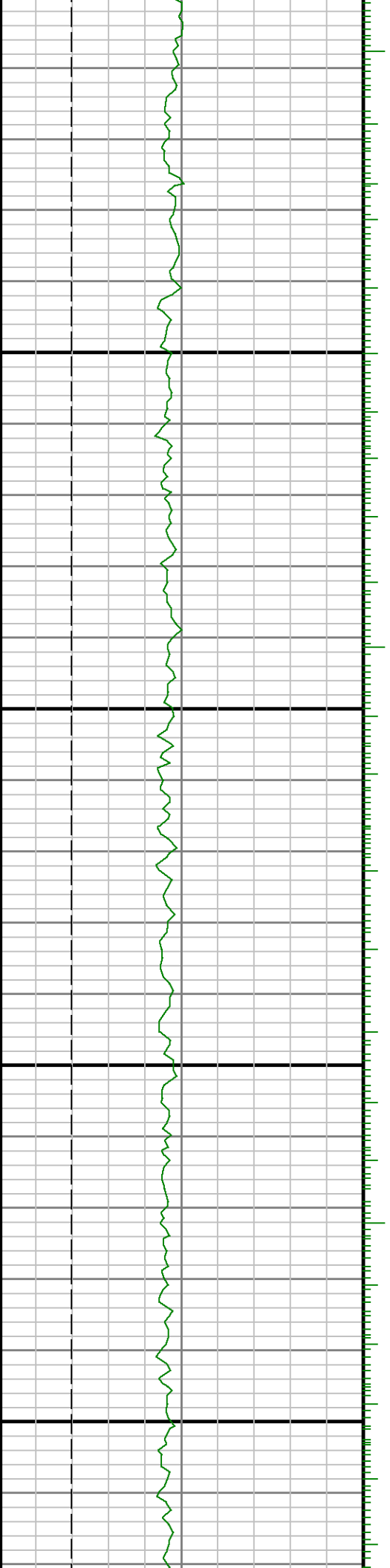


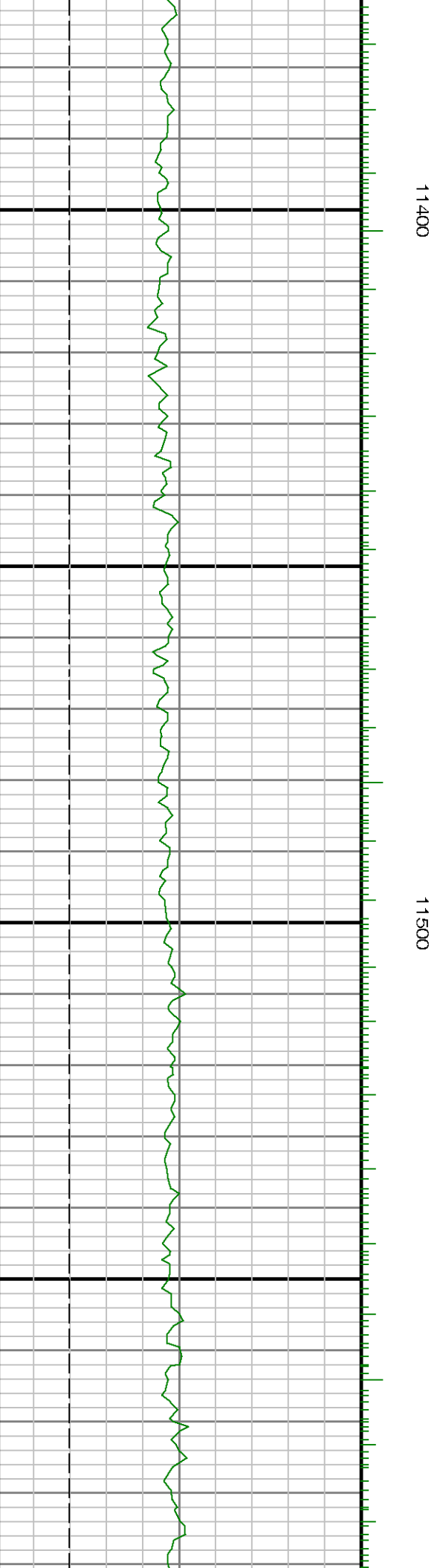


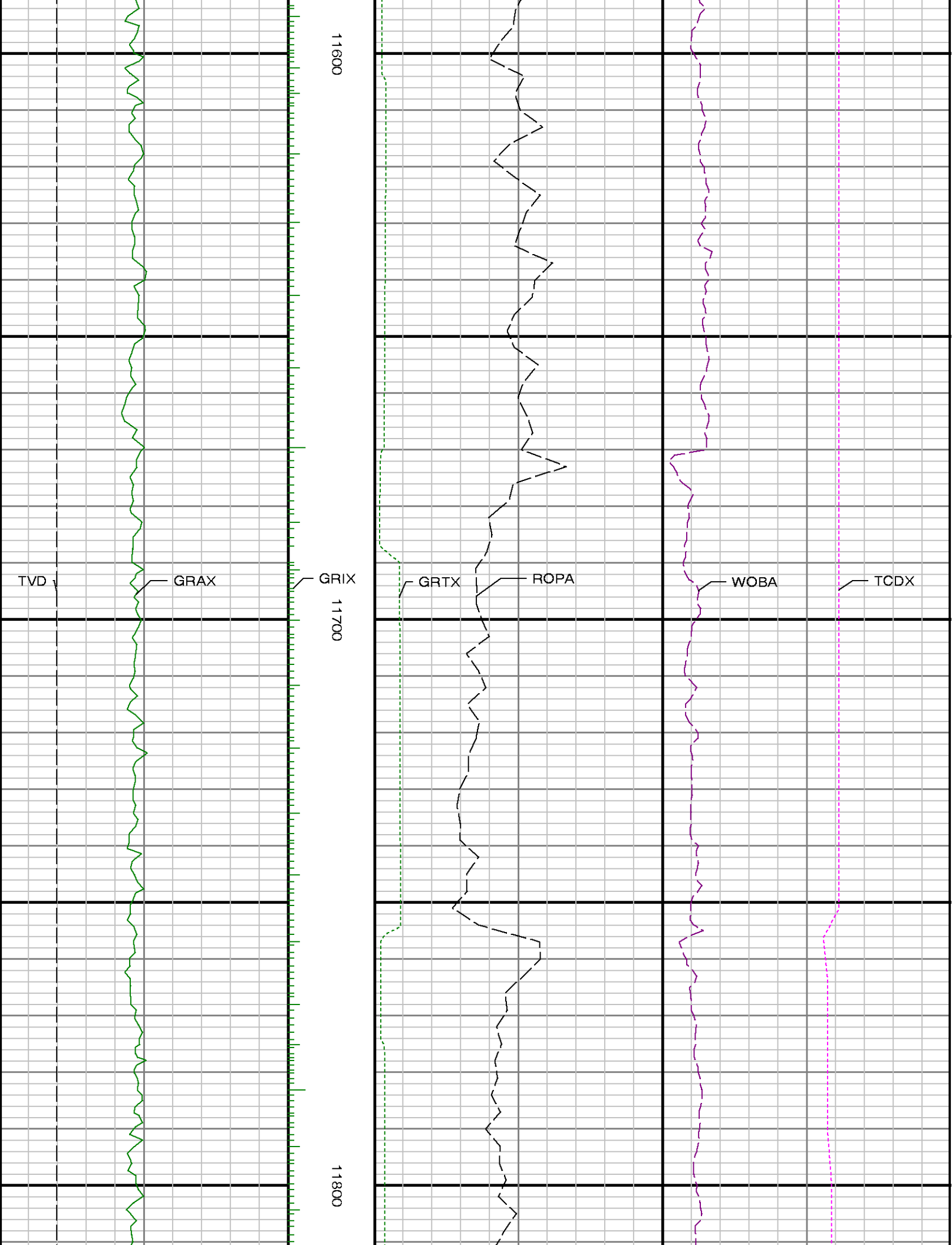


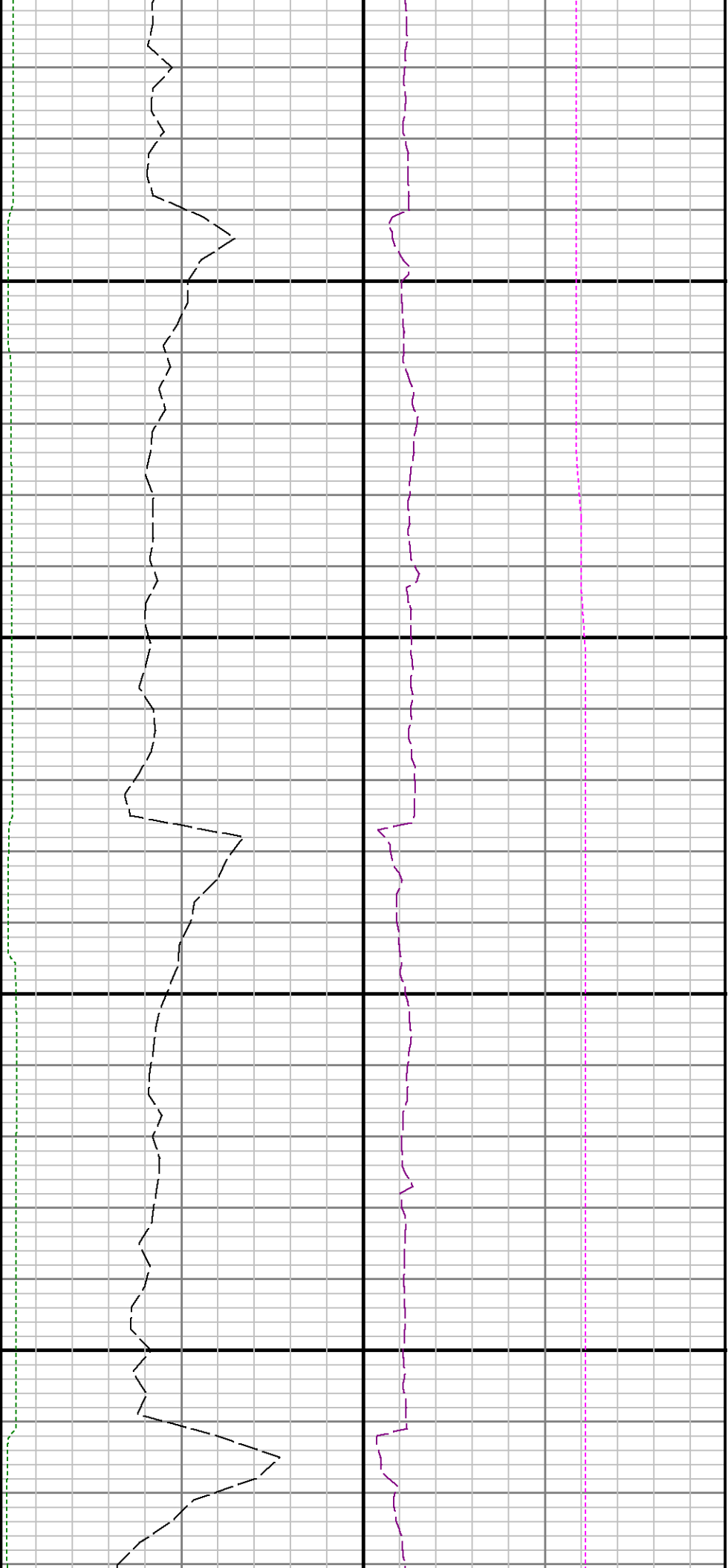
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