



Realtime Logs

Natural Formation Evaluation
Gamma Ray

Scale:	Company: Anadarko
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1:240
Well: D&C Farms 36C-33HZ

Measured Depth
Field: Weld County (Kerr McGee)

Region: Rocky Mountains Country: United States

Status:	Surface Location:	Other Services:
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Field Print

Latitude: 40° 1' 0.952" N
Longitude: 104° 53' 49.463" W

API Number:

SEC: 28 TWN: 1N RGE: 67W

Directional

Permanent Datum (P.D.): Ground Level Elevation: 5010.00 ft.

Elevations:

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

N/A
5026.00 ft.

Depth Reference: Driller's Depth

GL: 5010.00 ft.

Interval Logged Dates Magnetic Field Reference

Top: 7136 ft. Date From: 23/Sep/2013 Dip Angle: 66.31° Azi Reference North: True

Bottom: 12899 ft. Date To: 28/Sep/2013 Total Mag to Reference

Spud Date: 21/Sep/2013 Field Strength: 52722.0 nT North Correction: 8.47°

Borehole Record

Casing Record

Hole Size	From	To	Size	Weight	From	To
8.750 in.	1146 ft.	8155 ft.	9.625 in.	36.00 lb/ft	Surface	1136 ft.
6.125 in.	8155 ft.	12952 ft.	7.000 in.	26.00 lb/ft	Surface	8145 ft.

Mud Record

Deviation Record

Type	From	To	Hole Size	Interval	Inc / Az (Start)	Inc / Az (End)
Water Based	Surface	12952 ft.	8.750 in.	86 ft.	0.3° / 302.4°	0.6° / 82.4°
			8.750 in.	43 ft.	0.6° / 82.4°	89.3° / 185.0°
			6.125 in.	86 ft.	89.3° / 185.0°	89.8° / 179.8°
					/	/
					/	/
					/	/

Acquisition System Software Version

Other

Advantage	2.20U4	Rig / Contractor:	Xtreme 24	/ Xtreme Coil Drilling Corp	
PATS	6.4.1.34	Job No:	5793067	/ 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	7136	7477	7192	7571	23/Sep/2013	10:10	23/Sep/2013	15:10	25.8
2	2	2	8.750	PDC	2.000	Steerable	7477	8102	7571	8155	24/Sep/2013	03:22	24/Sep/2014	12:30	13.2
3	3	3	6.125	PDC	6.000	Steerable	8102	9495	8155	9542	26/Sep/2013	01:45	26/Sep/2013	17:30	20.4
4	4	4	6.125	PDC	6.000	Steerable	9495	12899	9542	12952	27/Sep/2013	05:10	28/Sep/2013	10:10	31.1

Crew

Name	Arrive	Depart	Name	Arrive	Depart	Name	Arrive	Depart
	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite
Austin Small	20/Sep/2013	29/Sep/2013	Osagie Otoikhine	20/Sep/2013	26/Sep/2013	Marcus Boucher	26/Sep/2013	29/Sep/2013

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+ (%)
23/Sep/2013 18:00	1	7533	LSND	9.7	14	8.1	N/A	0.0/92.7	Active	1400	N/A
25/Sep/2013 18:00	2	8155	LSND	9.8	13	8.5	N/A	0.0/92.2	Active	1200	N/A
25/Sep/2013 18:00	3	8460	LSND	9.1	8	9.2	N/A	0.0/95.0	Active	1400	N/A
23/Sep/2013 18:00	4	9550	LSND	8.8	11	8.1	N/A	0.0/96.3	Active	1500	N/A

Mnemonics

Curve	Description	Units
GRAX	Gamma Ray Apparent 0.5 ft. Avg.	API
GRIX	Gamma Ray Density	Points
GRSI	Gamma Ray Slide 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.	klbf

Equipment and Service Data

LWD Run No.	Tool	Serial Number	Measurement	Bit Offset (ft.)	Max O.D. (in.)	Min I.D. (in.)
1	DIR	12566669	Directional	58.44	6.750	3.250
1	SRIG	12600747	Gamma	55.07	6.750	3.250
2	DIR	12566669	Directional	55.02	6.750	3.250
2	SRIG	12600747	Gamma	51.65	6.750	3.250
3	DIR	13051163	Directional	48.46	4.750	1.750
3	SRIG	11892056	Gamma	45.08	4.750	1.750
4	DIR	12456780	Directional	51.42	4.750	1.750
4	SRIG	12622668	Gamma	48.04	4.750	1.750

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 INTEQ runs 1 and 2 utilized 6 1/2 inch NaviGamma (Gamma Ray and Directional) behind a 8 3/4 inch bit and steerable assembly from 7192 feet to 8155 feet MD (7166 feet to 7761 feet TVD).
2) Baker Hughes INTEQ runs 3 and 4 utilized 4 3/4 inch NaviGamma (Gamma Ray and Directional) behind a 6 1/8 inch bit and steerable assembly from 8155 feet to 12952 feet MD (7761 feet to 7797 feet TVD).
3) A wellbore inclination survey was performed between 7192 feet and 8155 feet. The inclination survey was performed with a 6 1/8 inch bit and steerable assembly.

3) A sliding indicator is shown to the left edge of track 1 as a heavy line. The indicator has been depth-shifted to the gamma sensor offset to correspond with gamma data acquired while sliding.

Remarks

Number	Measured Depth (ft.)	Hole Section (in.)	LWD Run No.	Remark
1	7136	8.750	1	The interval from surface to 7136 feet MD (7110 feet TVD) was not logged since logging services began at kick off point.
2	7571	8.750	2	The interval from 7477 feet to 7571 feet MD (7166 feet to 7528 feet TVD) was logged more than 12 hours after drilling due to tripping out of hole to pick up new motor due to lack of build rates.
3	8155	6.125	3	The Interval from 8102 feet to 8155 feet MD (7761 feet to 7761 feet TVD) was logged more than 37 hours after drilling due to tripping for casing and cement operations and pick up lateral BHA.
4	9542	6.125	4	The interval from 9495 feet to 9542 feet MD (7794 feet to 7793 feet TVD) was logged more than 12 hours after drilling due to tripping out of hole due to MWD failure.
5	12899	6.125	4	Interval from 12899 feet to 12952 feet MD (7797 feet to 7797 feet TVD) was not logged due to gamma ray sensor offset at well TD.



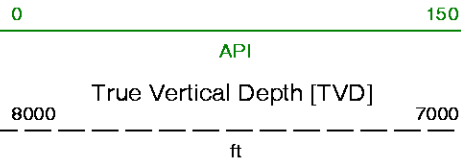
Company : Anadarko

Well : D&C Farms 36C-33HZ

Interval : 7110.00 - 12970.00 feet DOWN

Created : 28/Sep/2013 2:22:03 PM

Gamma Ray Apparent 0.5 ft Avg [GRAX]

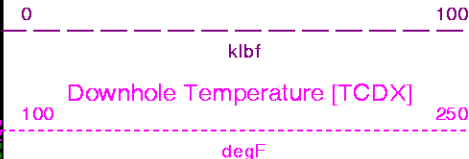


MD feet 1:240

Rate of Penetration 3.0 ft Avg [ROPA]



Surface Weight On Bit 1.0 ft Avg [WOBA]



GRSI

GRAX

GRIX

GRTX

See Remark 1

ROPA

WOBA

TCDX

TVD

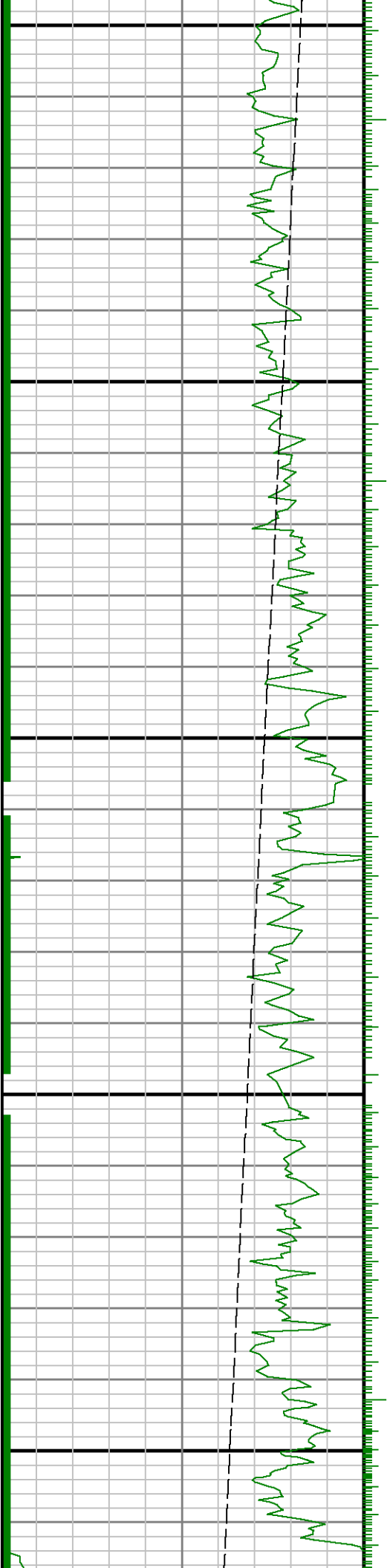
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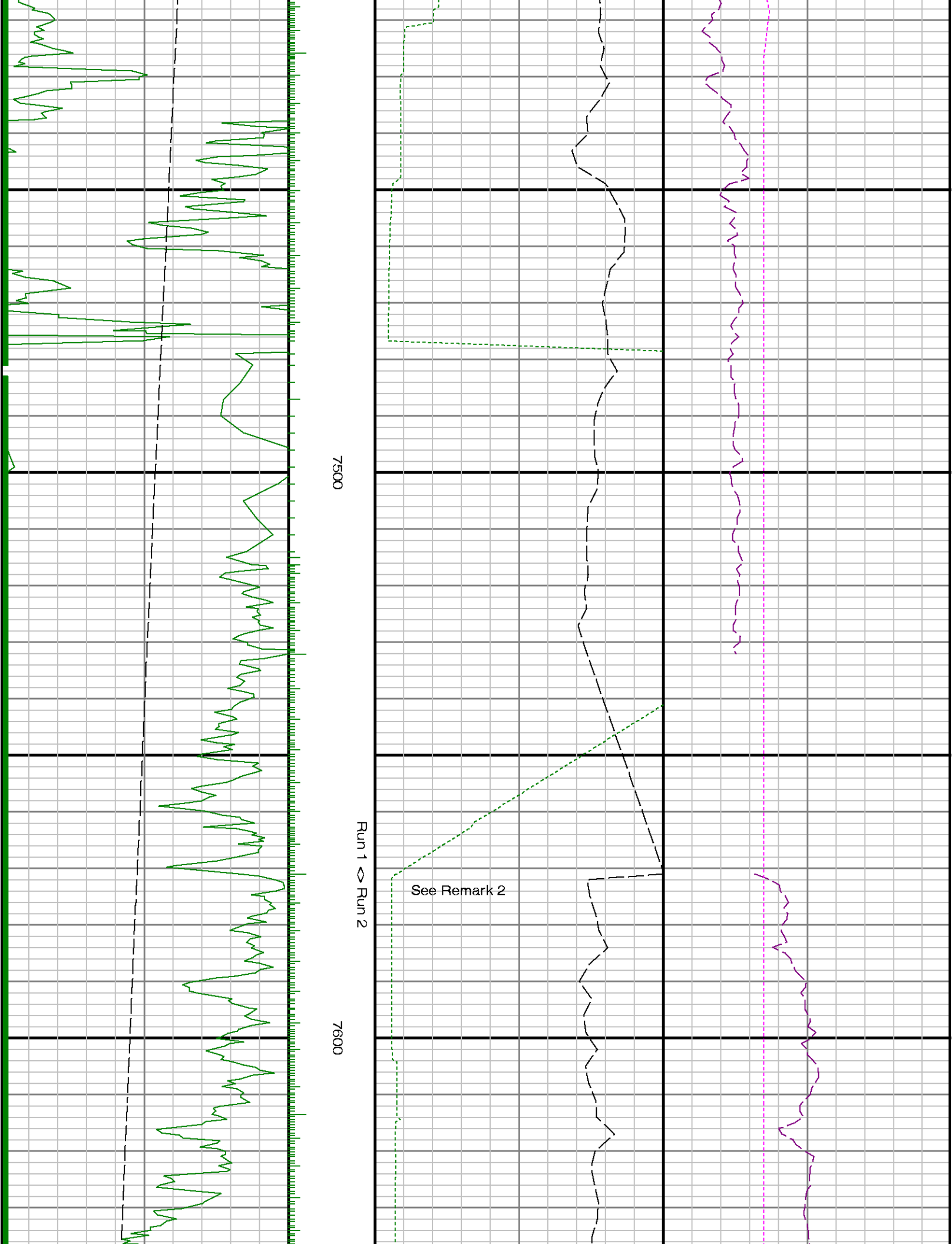


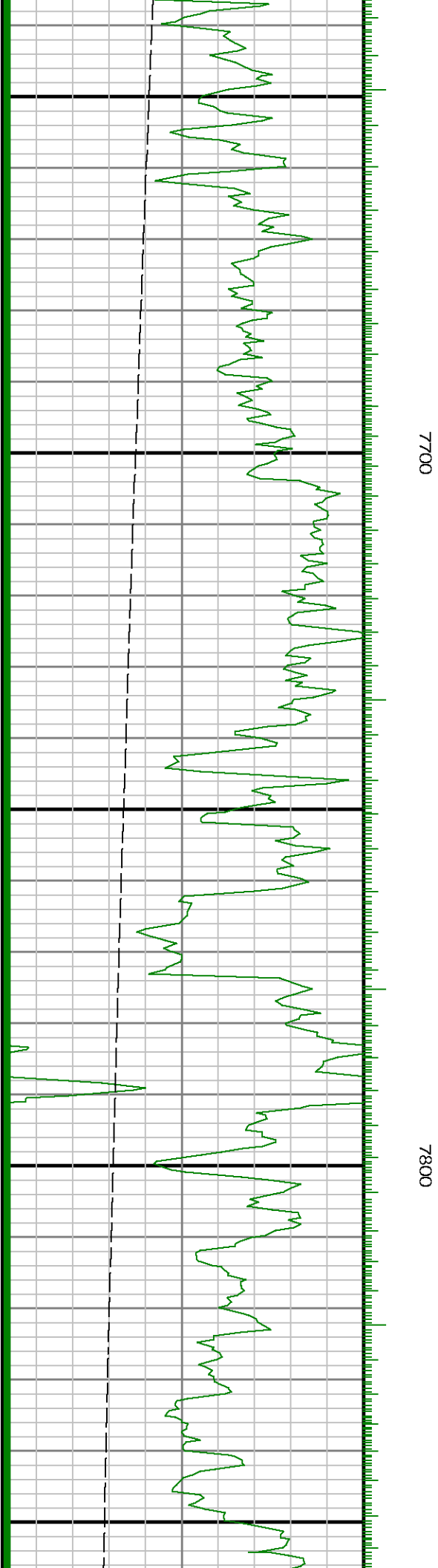
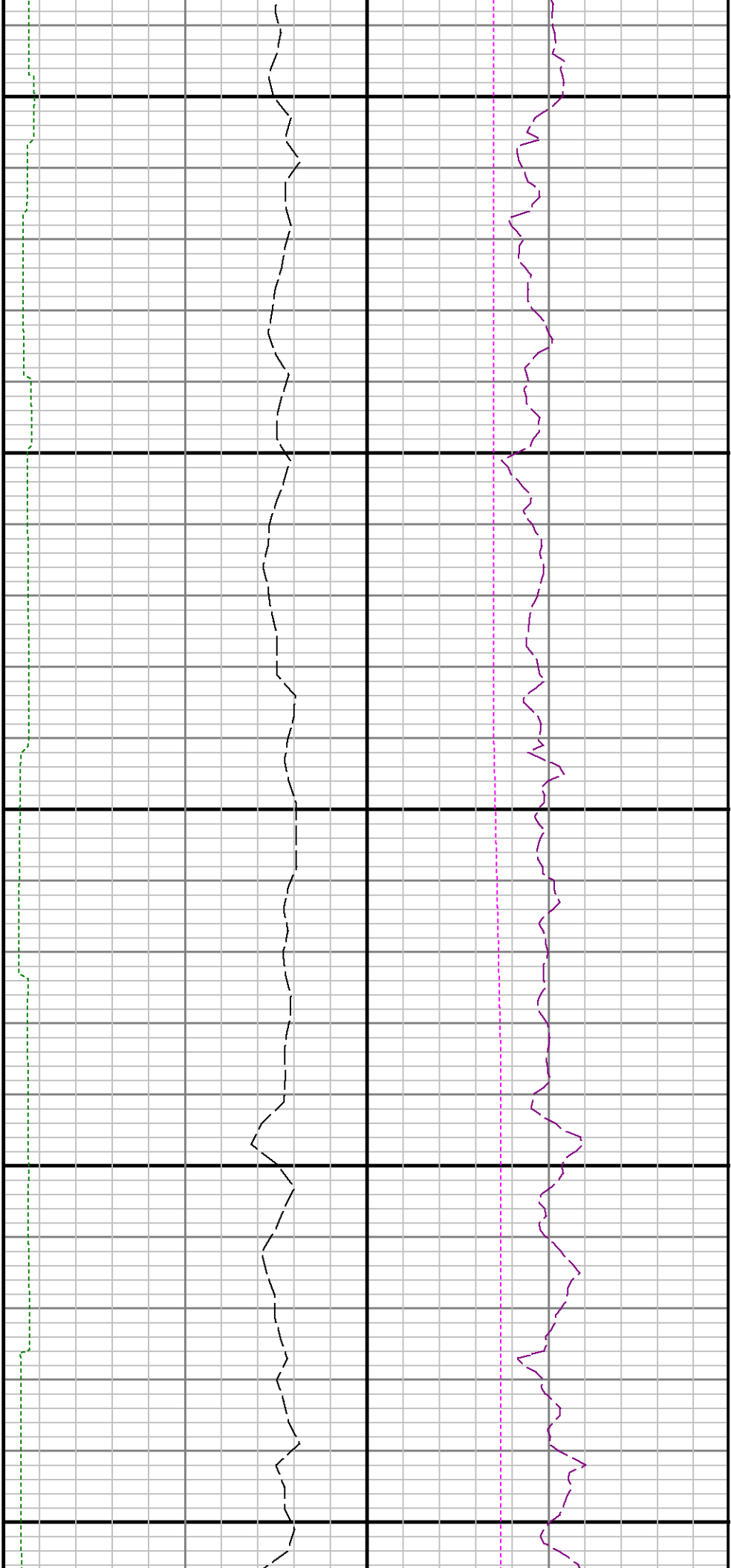
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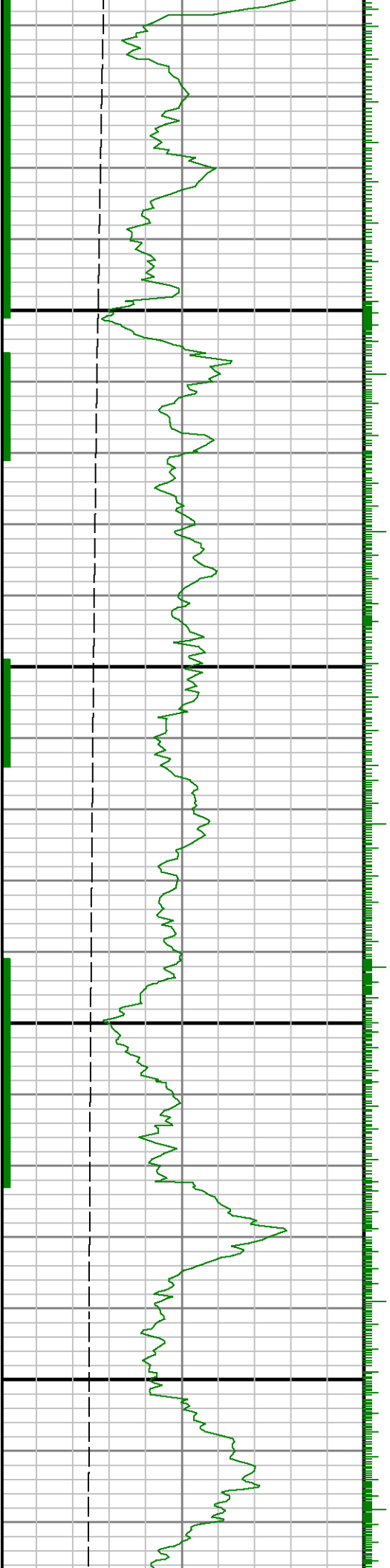
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7400



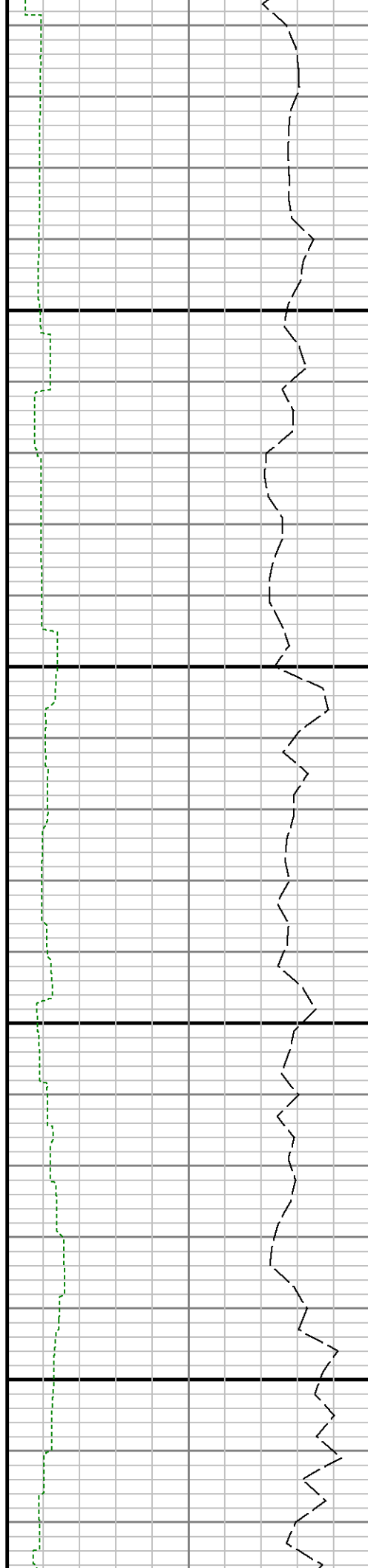


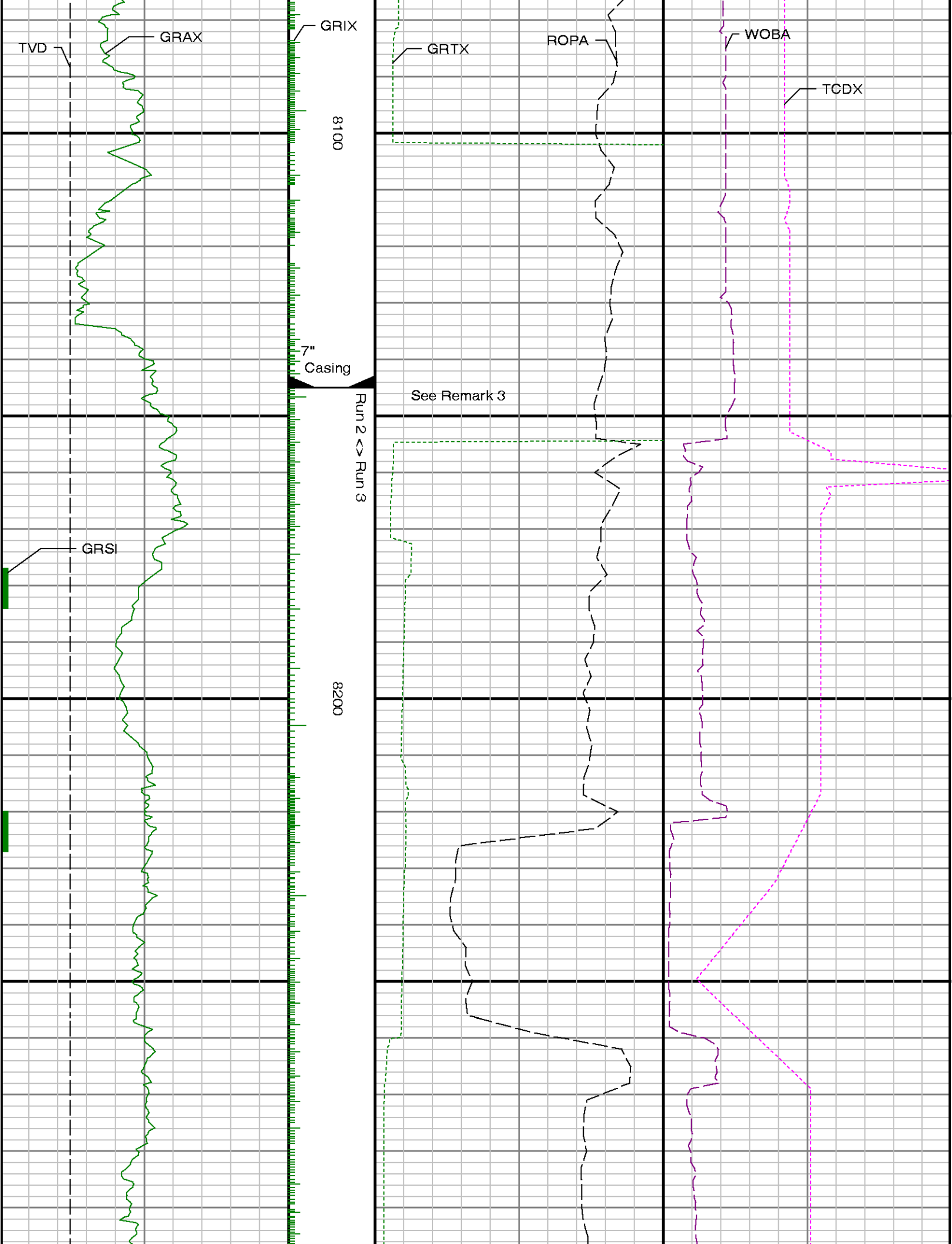


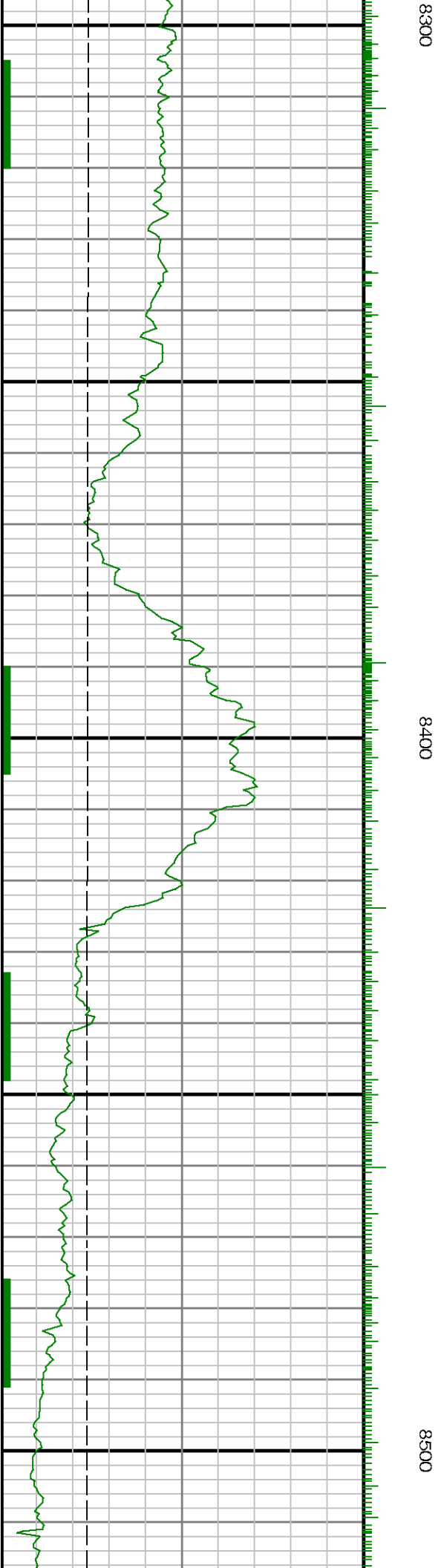
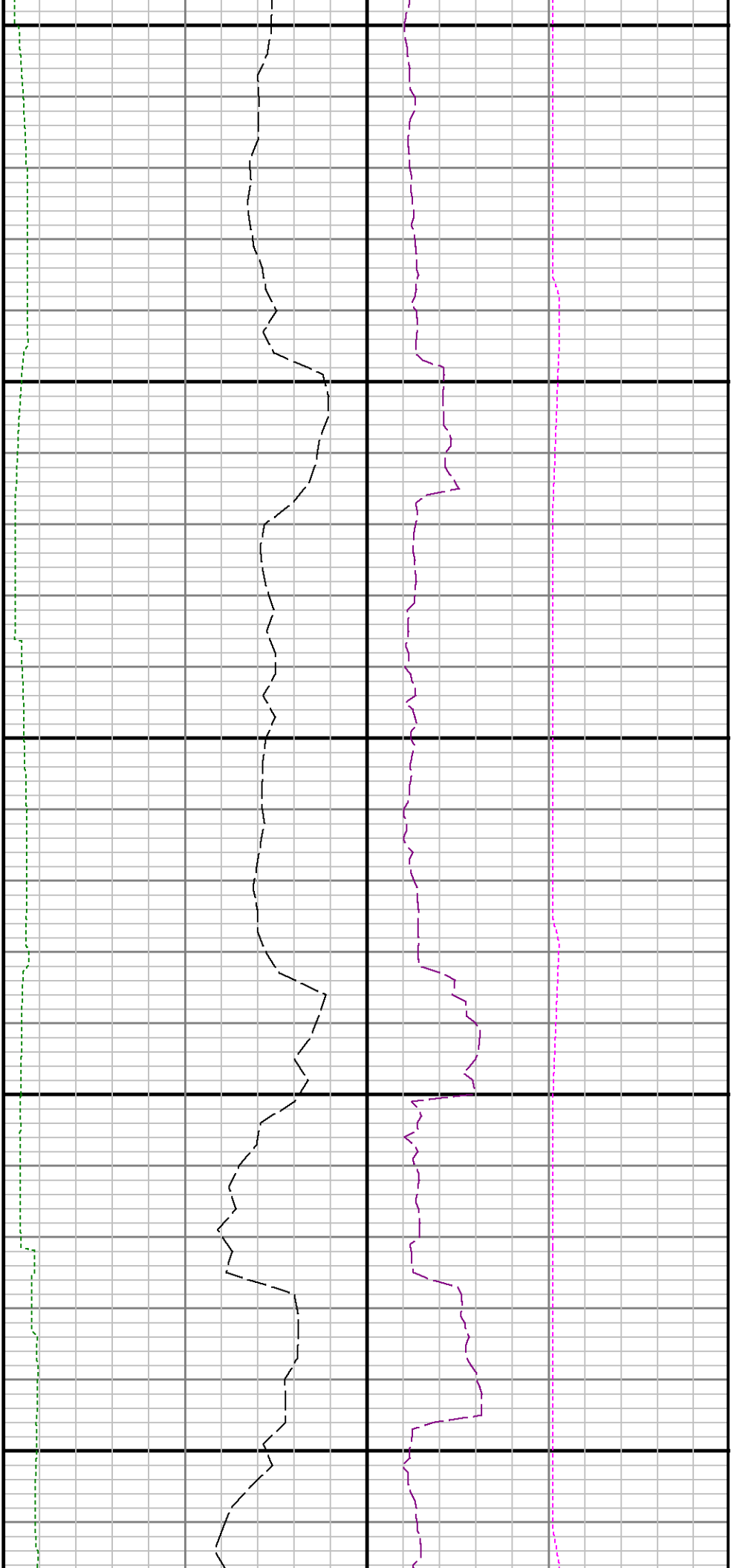


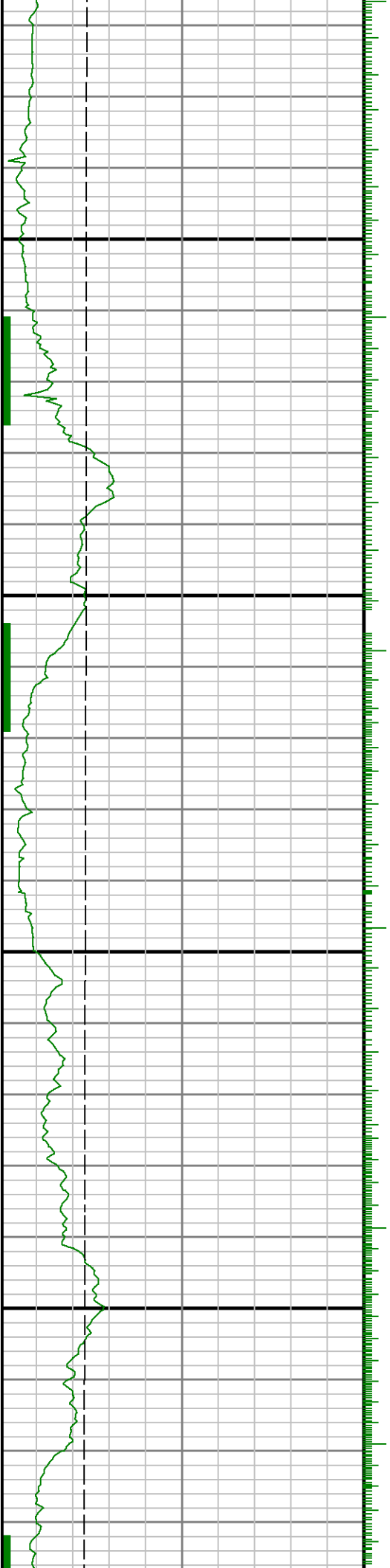
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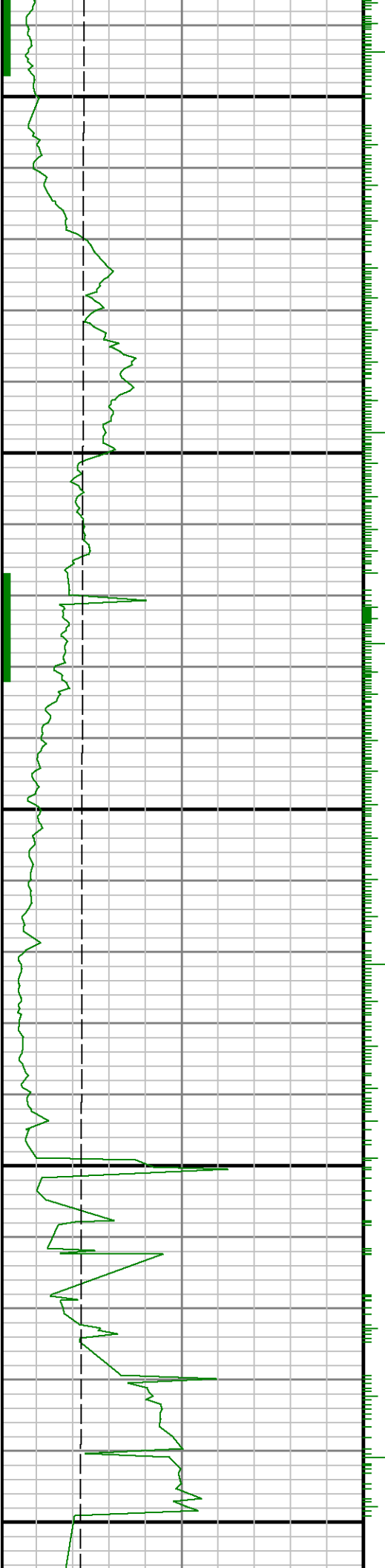




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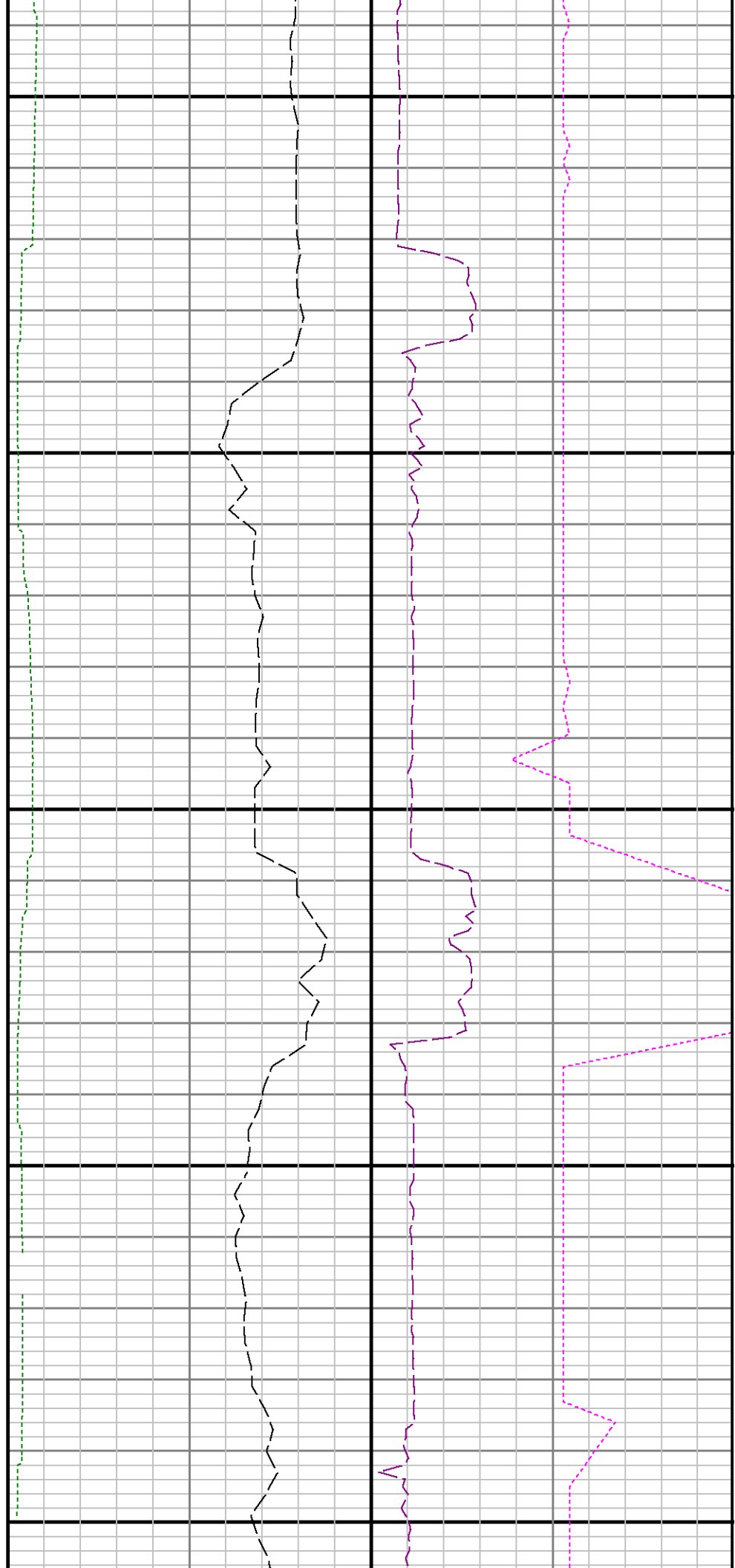
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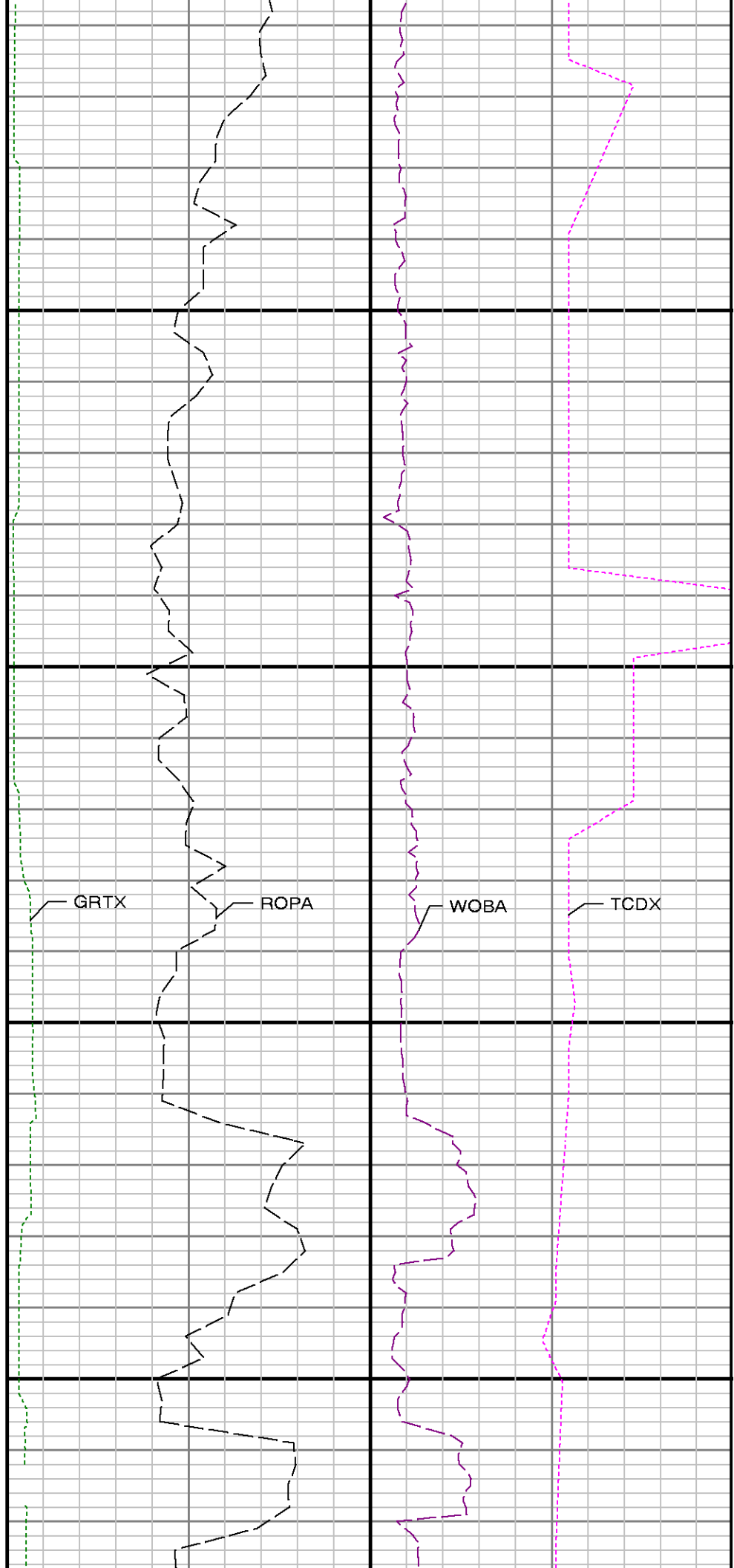
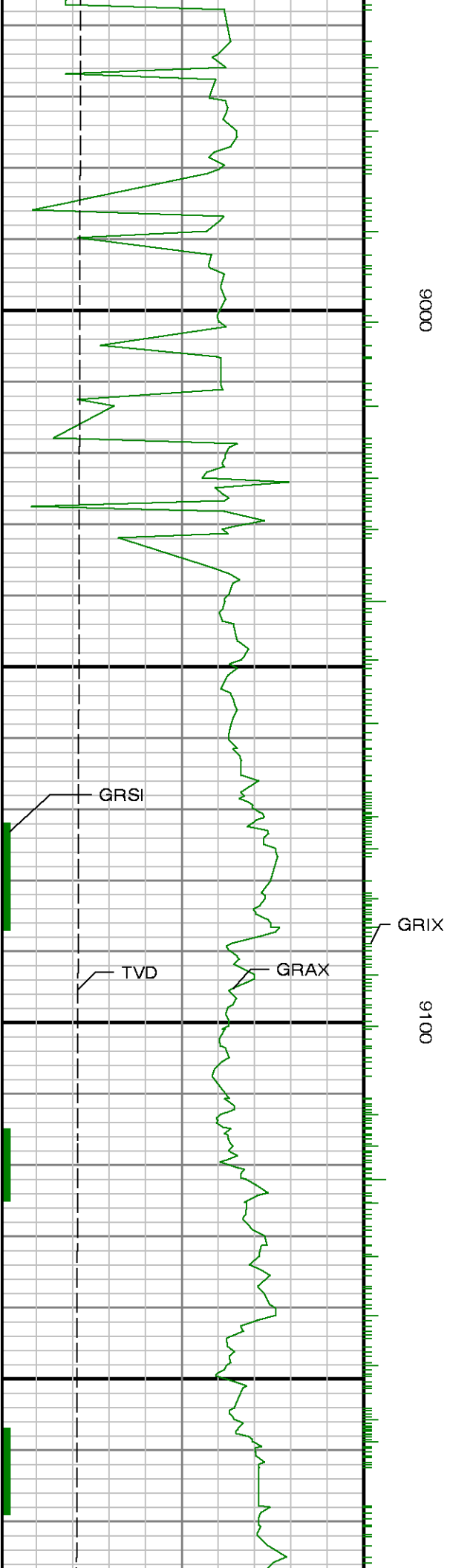


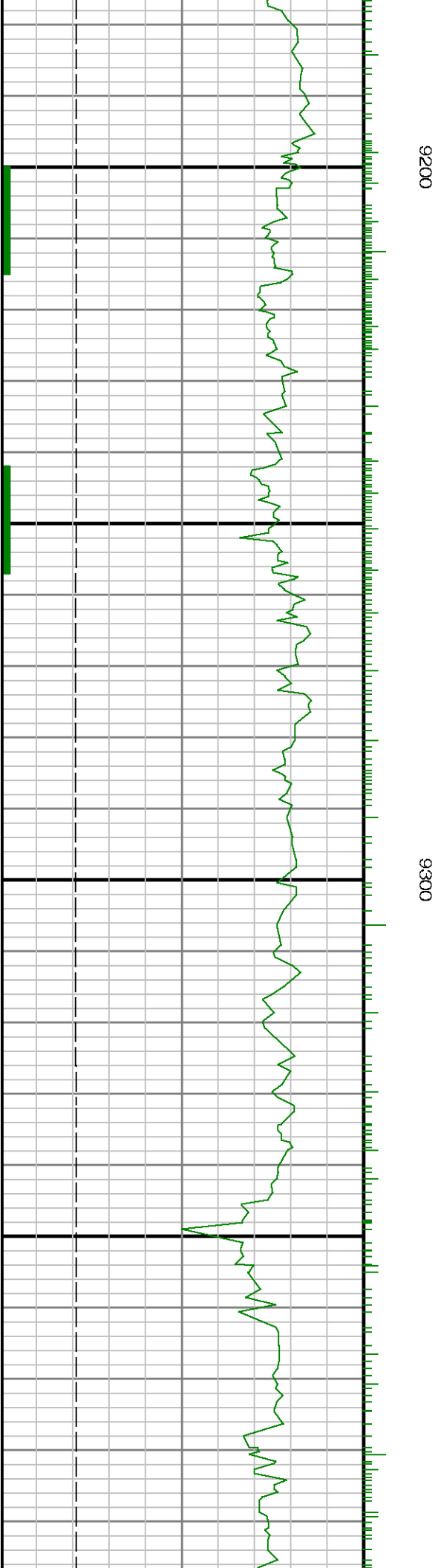
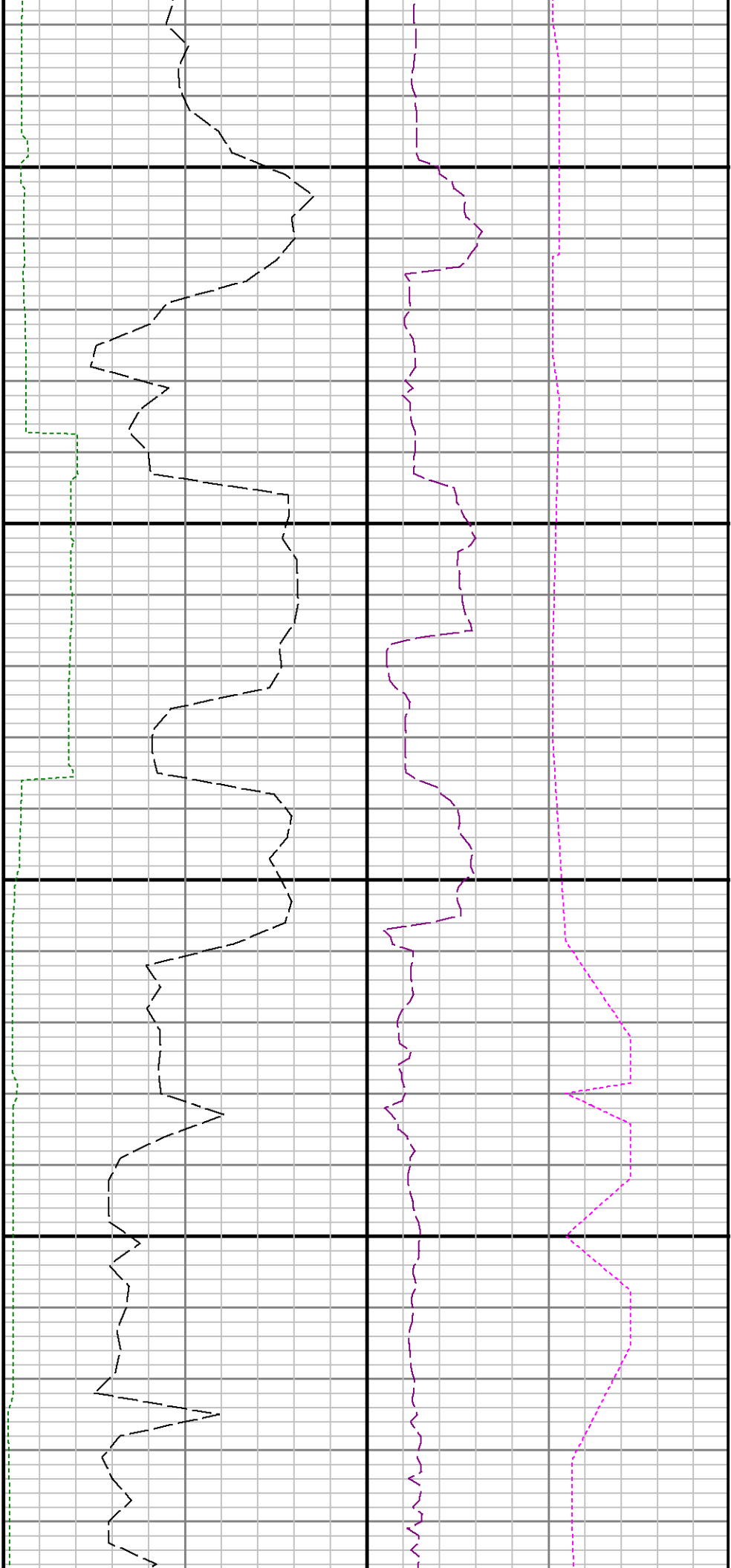


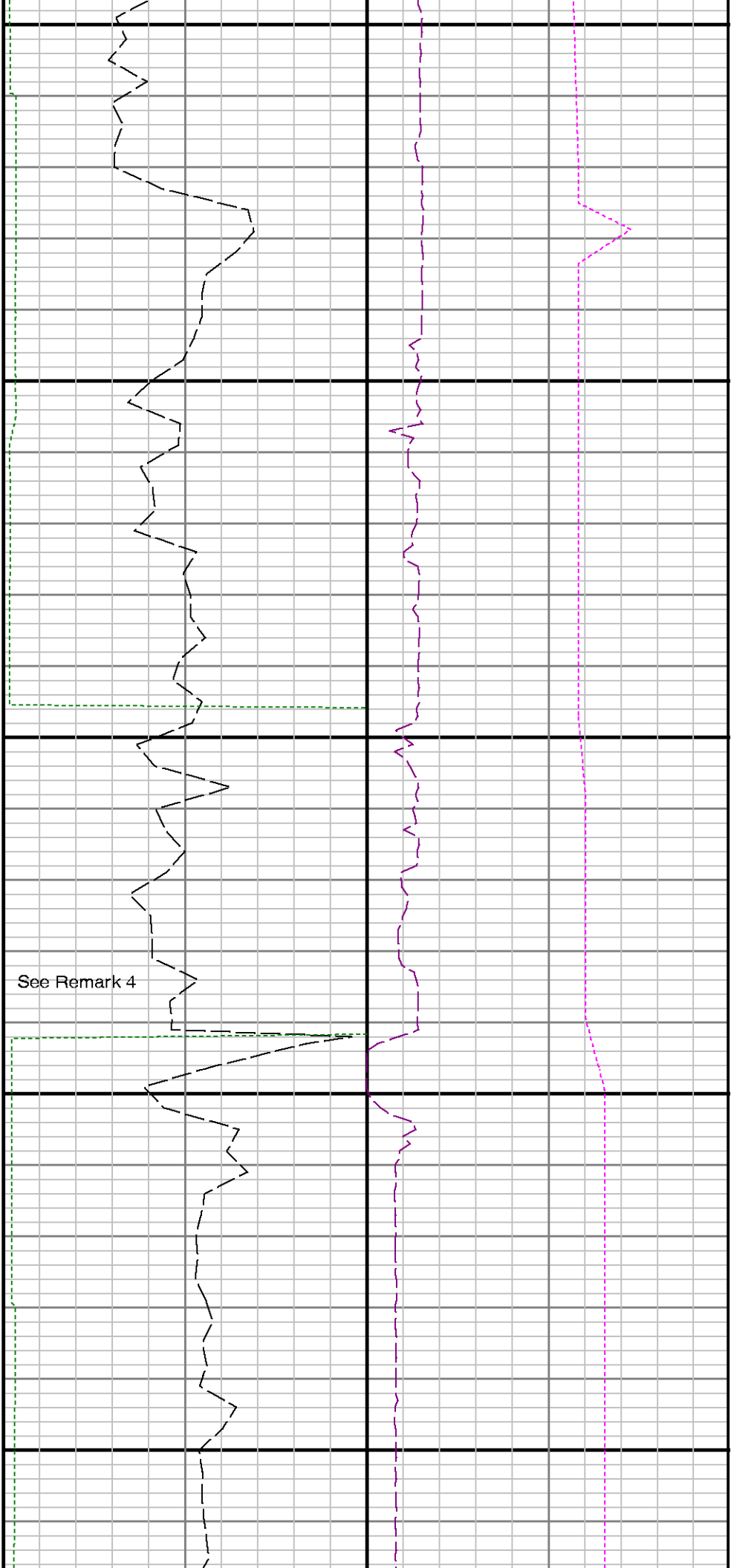
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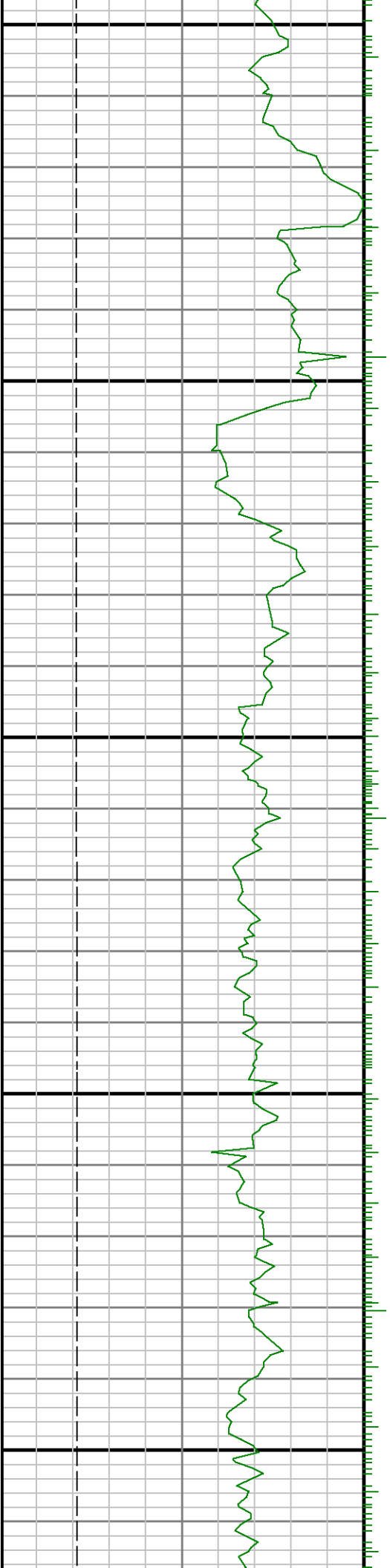
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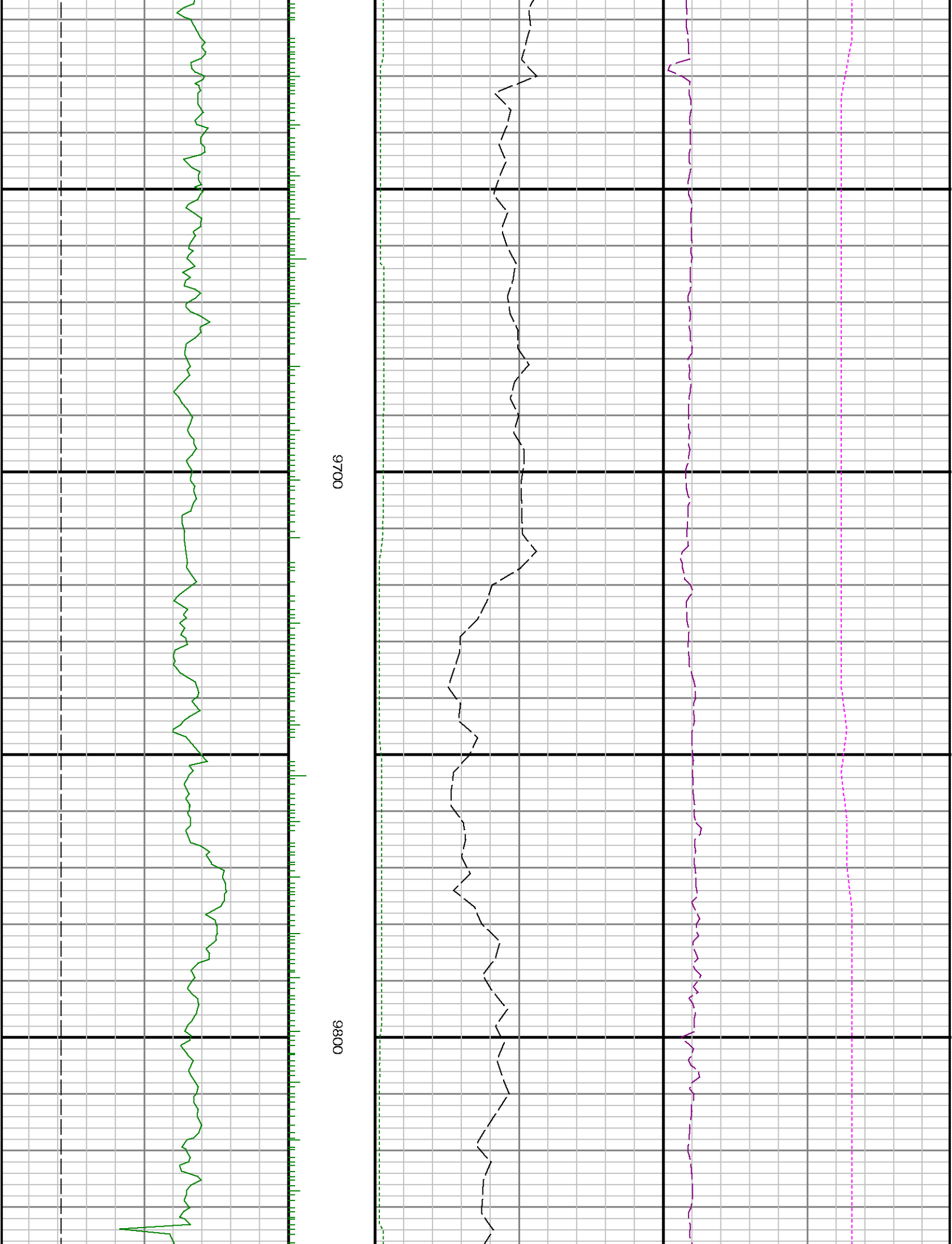
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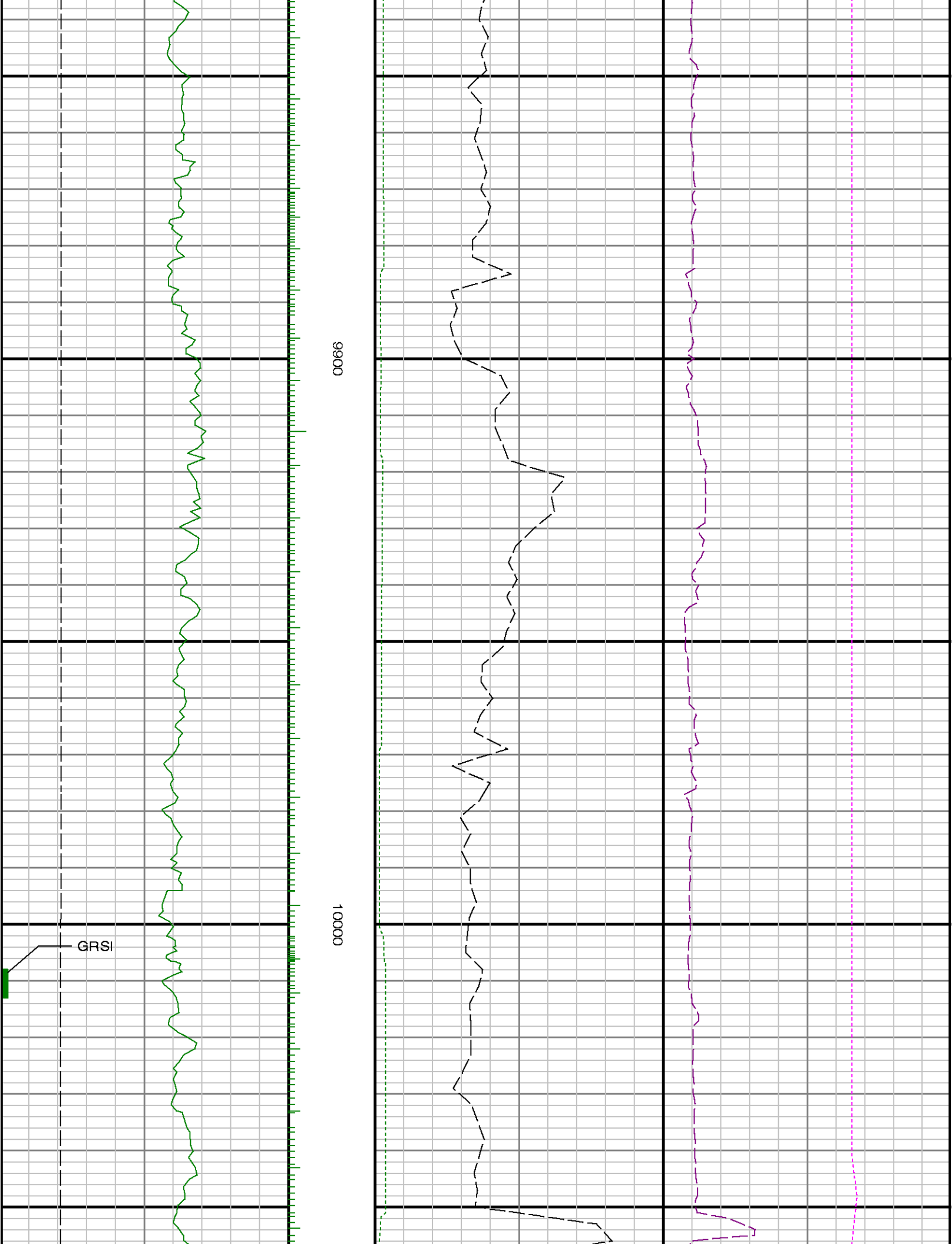
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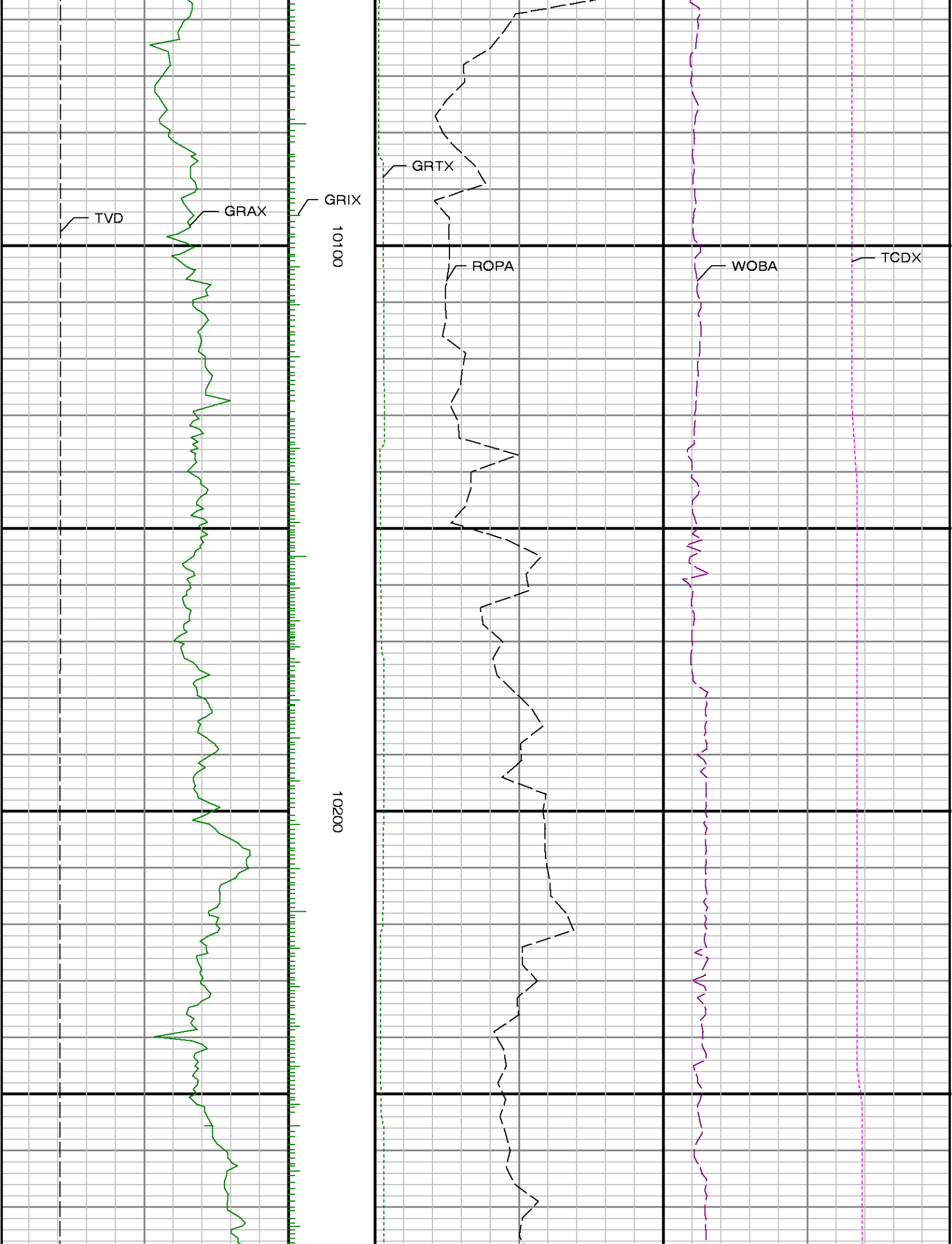
Run 3 <=> Run 4

See Remark 4





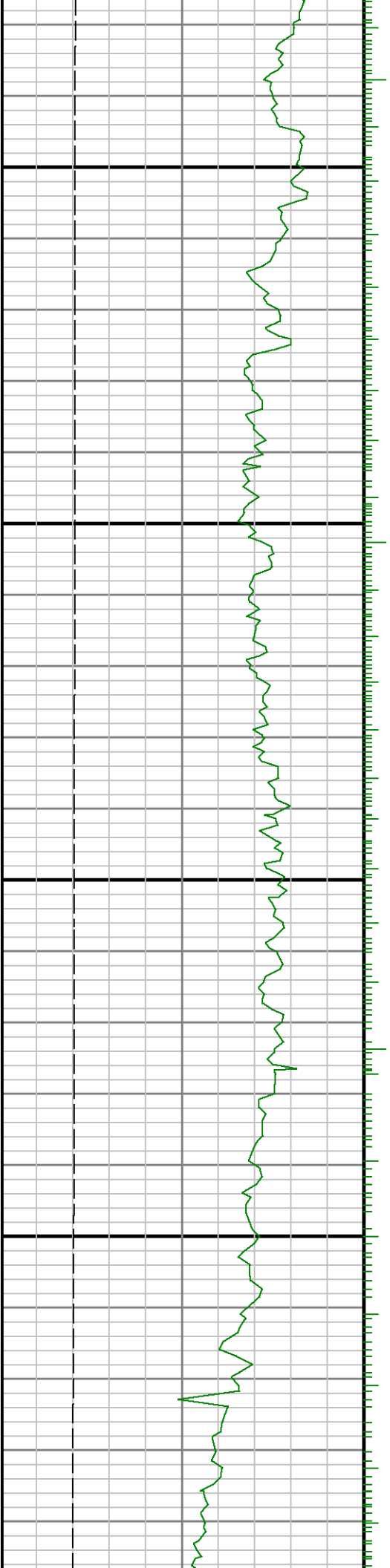


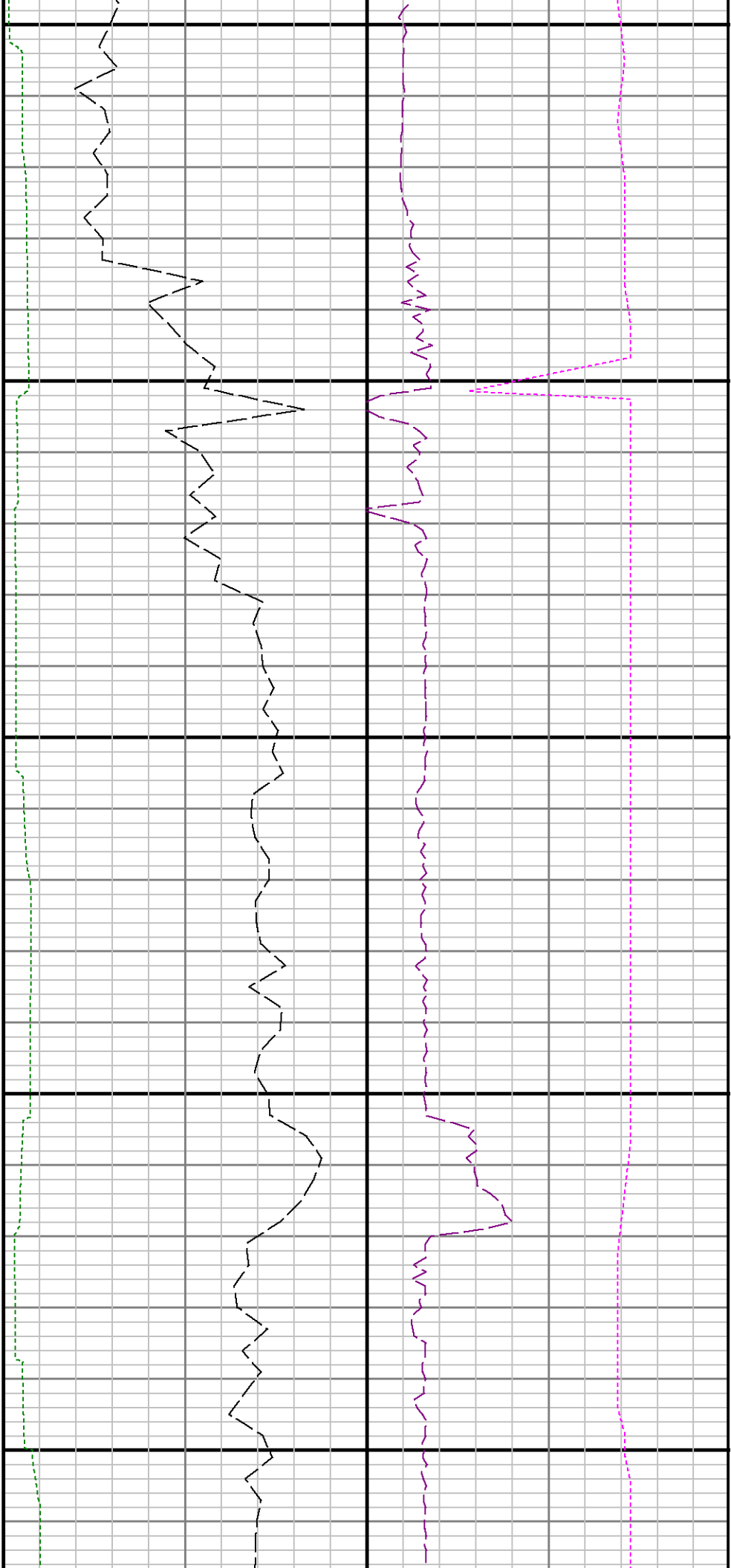




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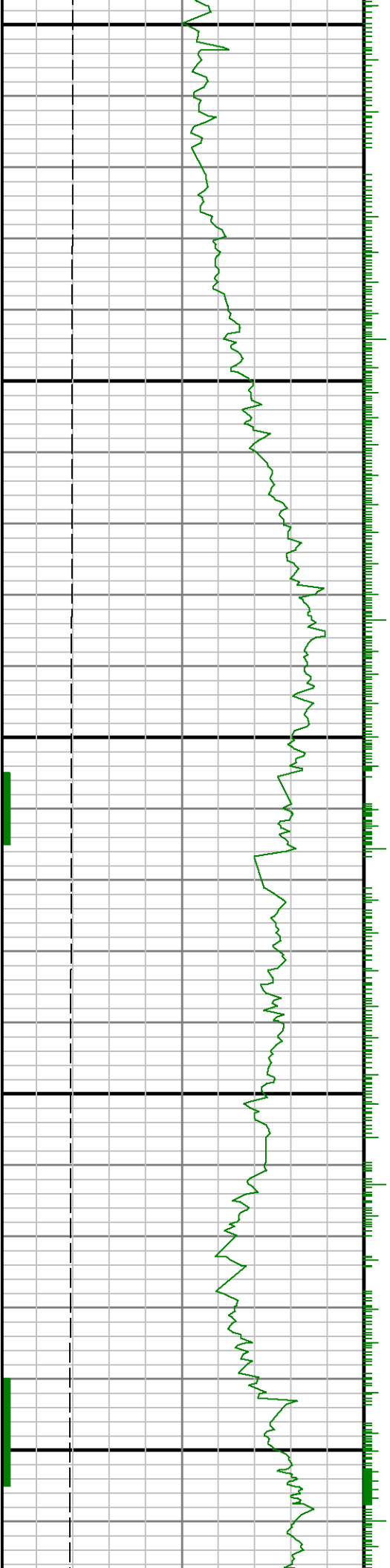


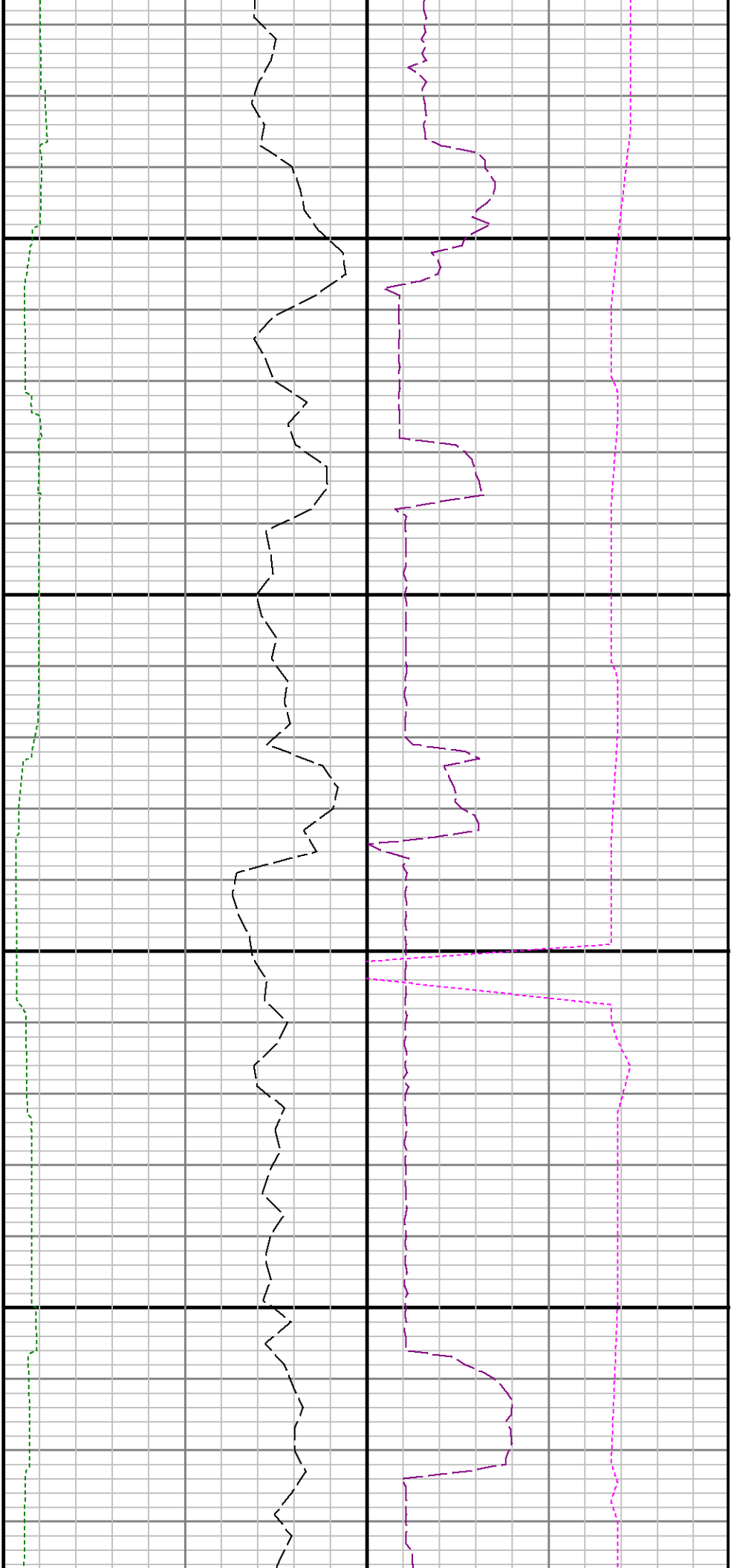


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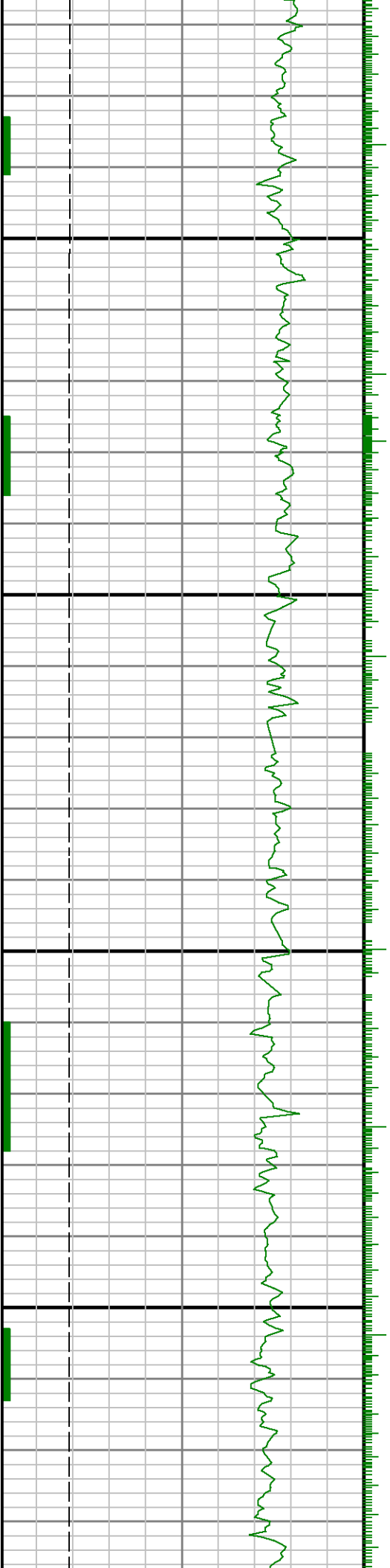
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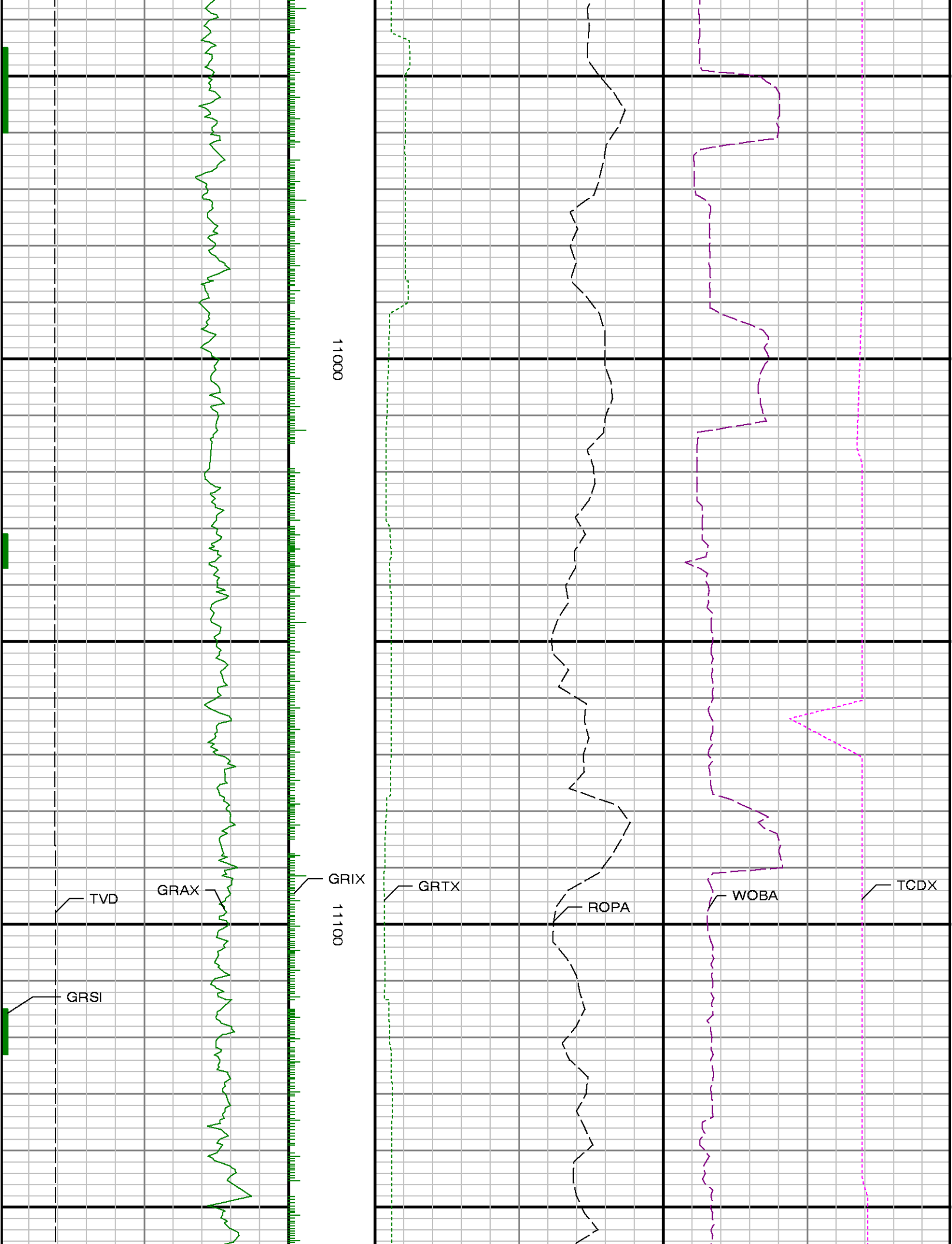


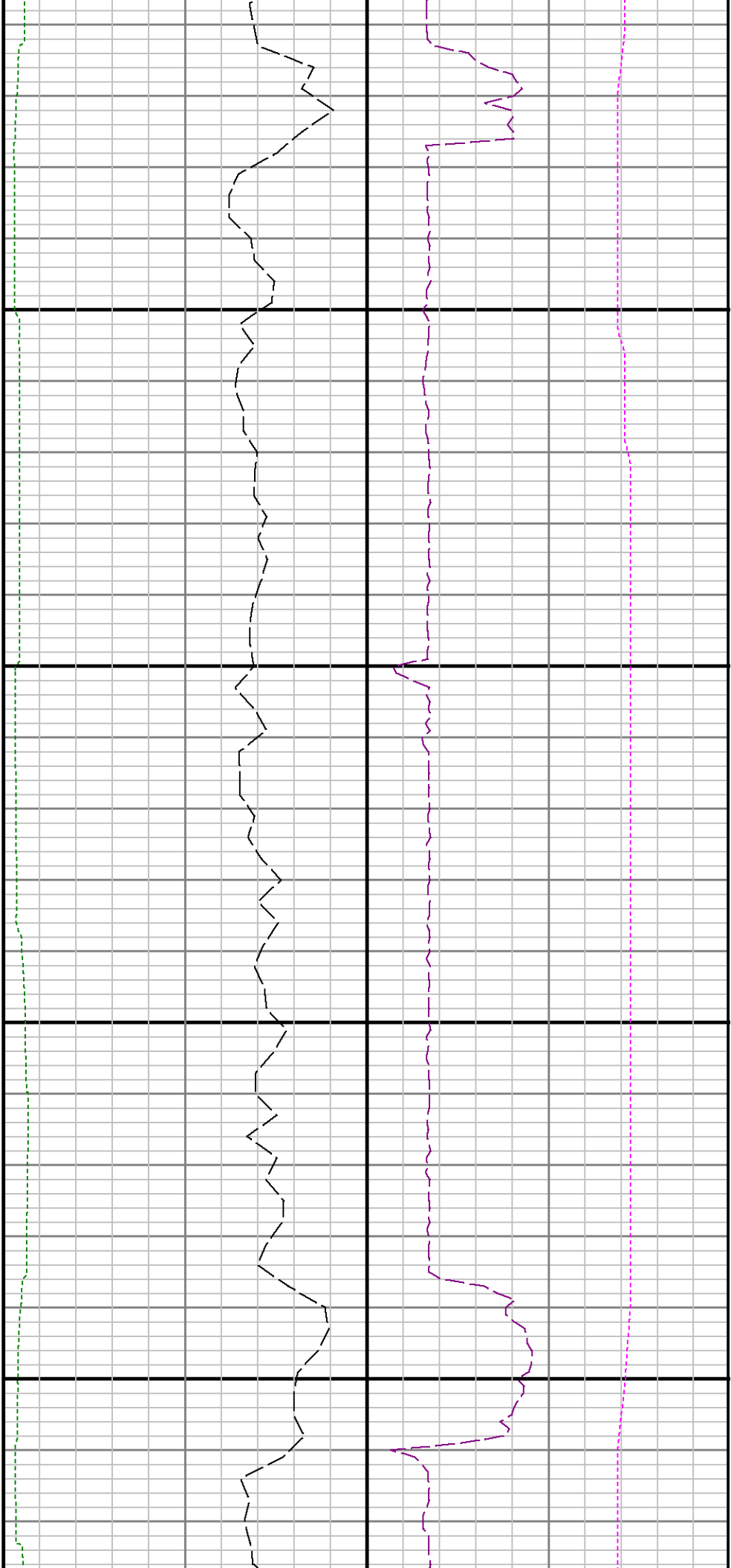


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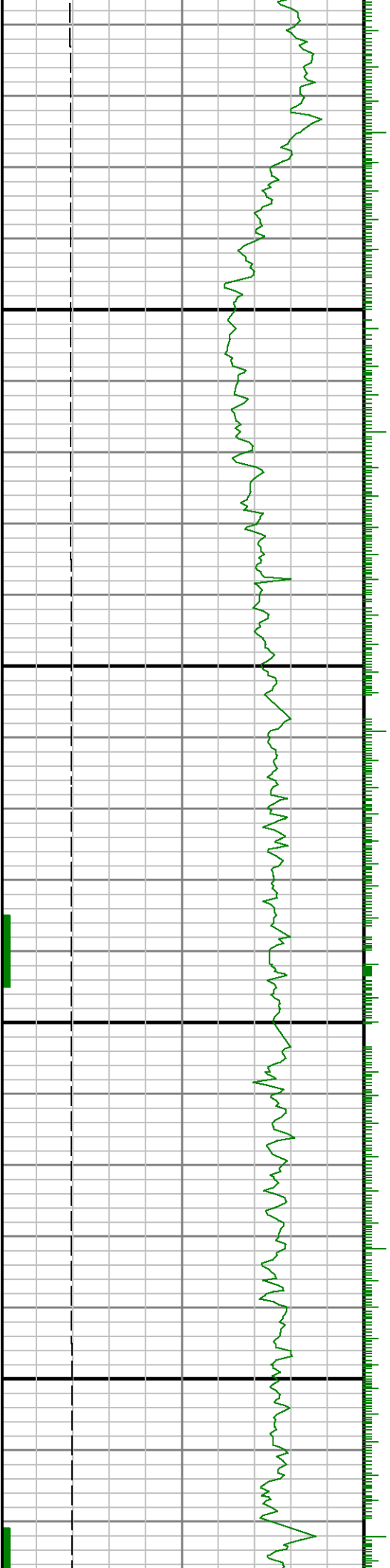


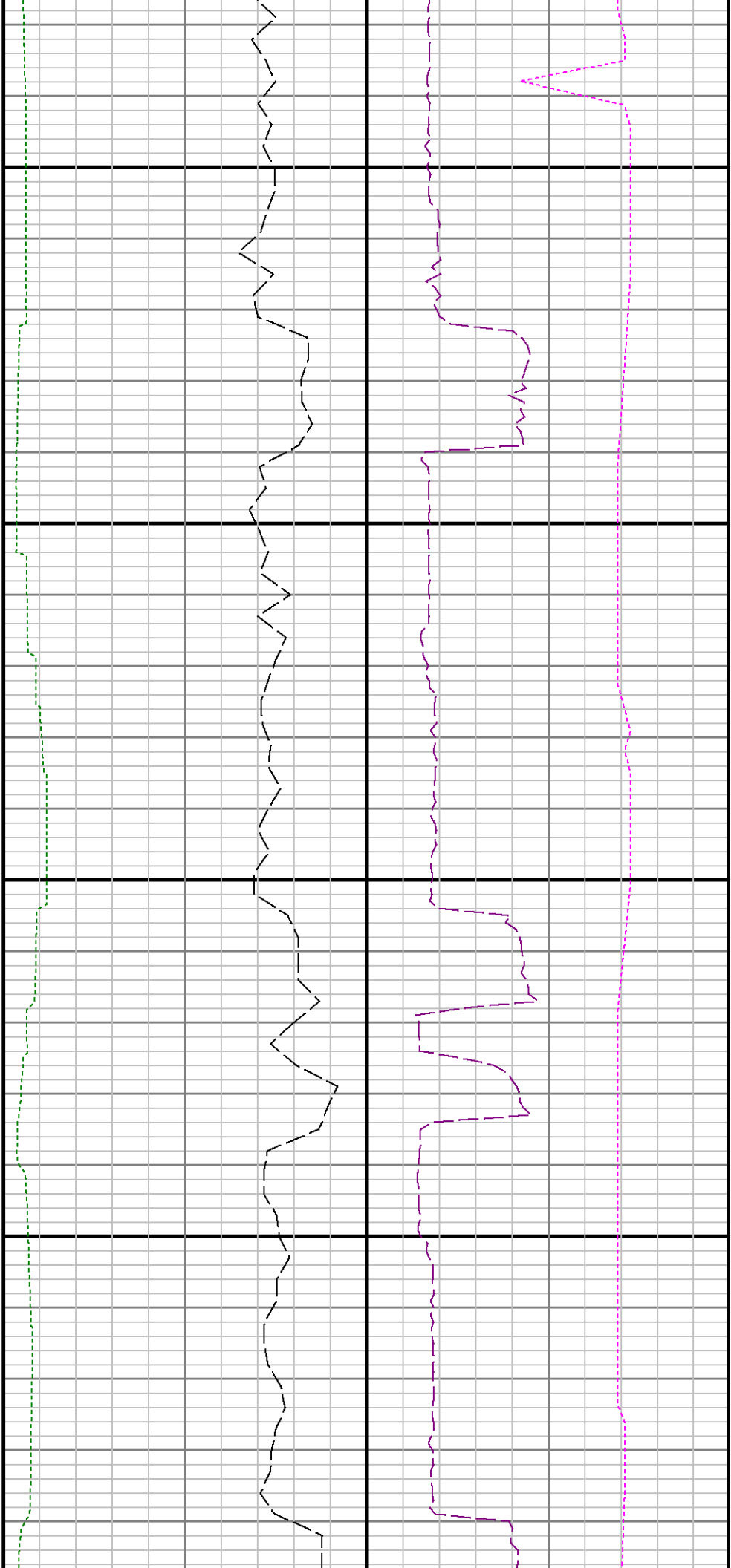




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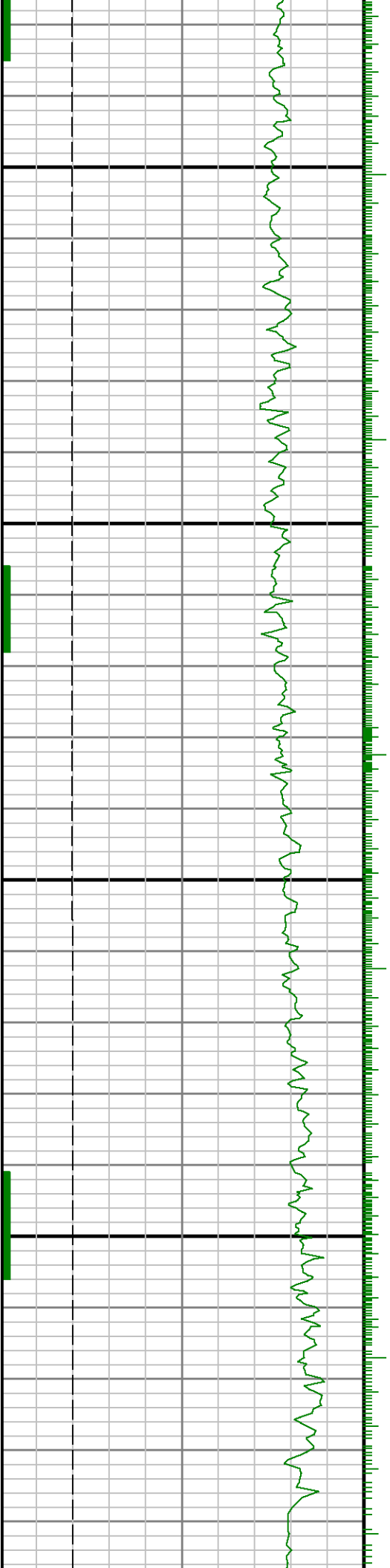
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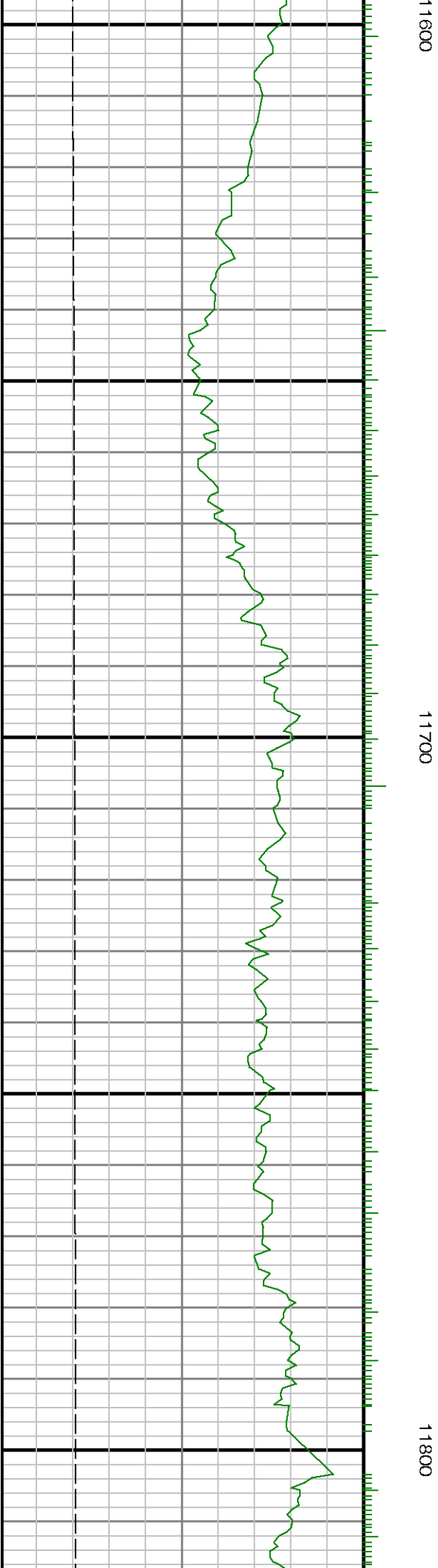
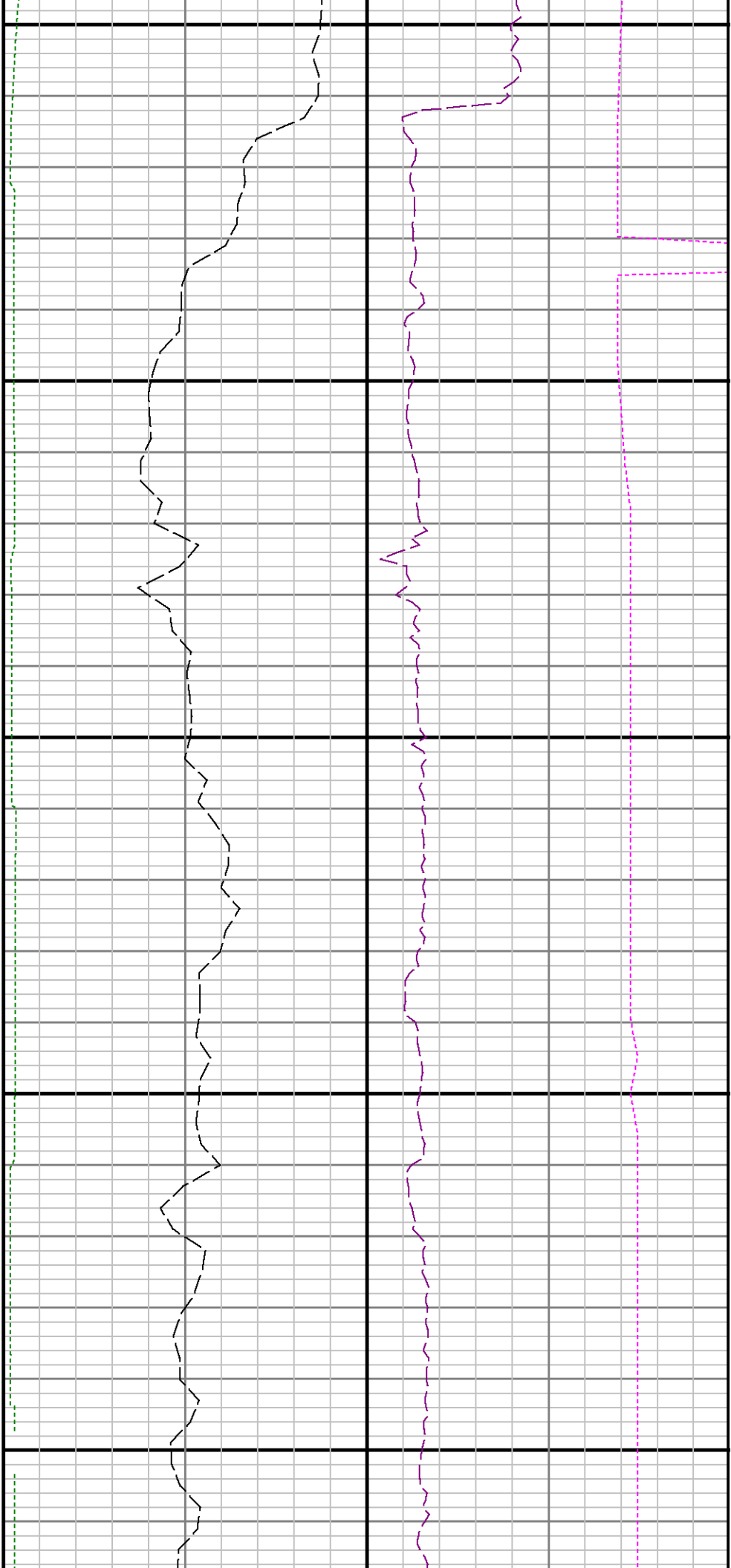


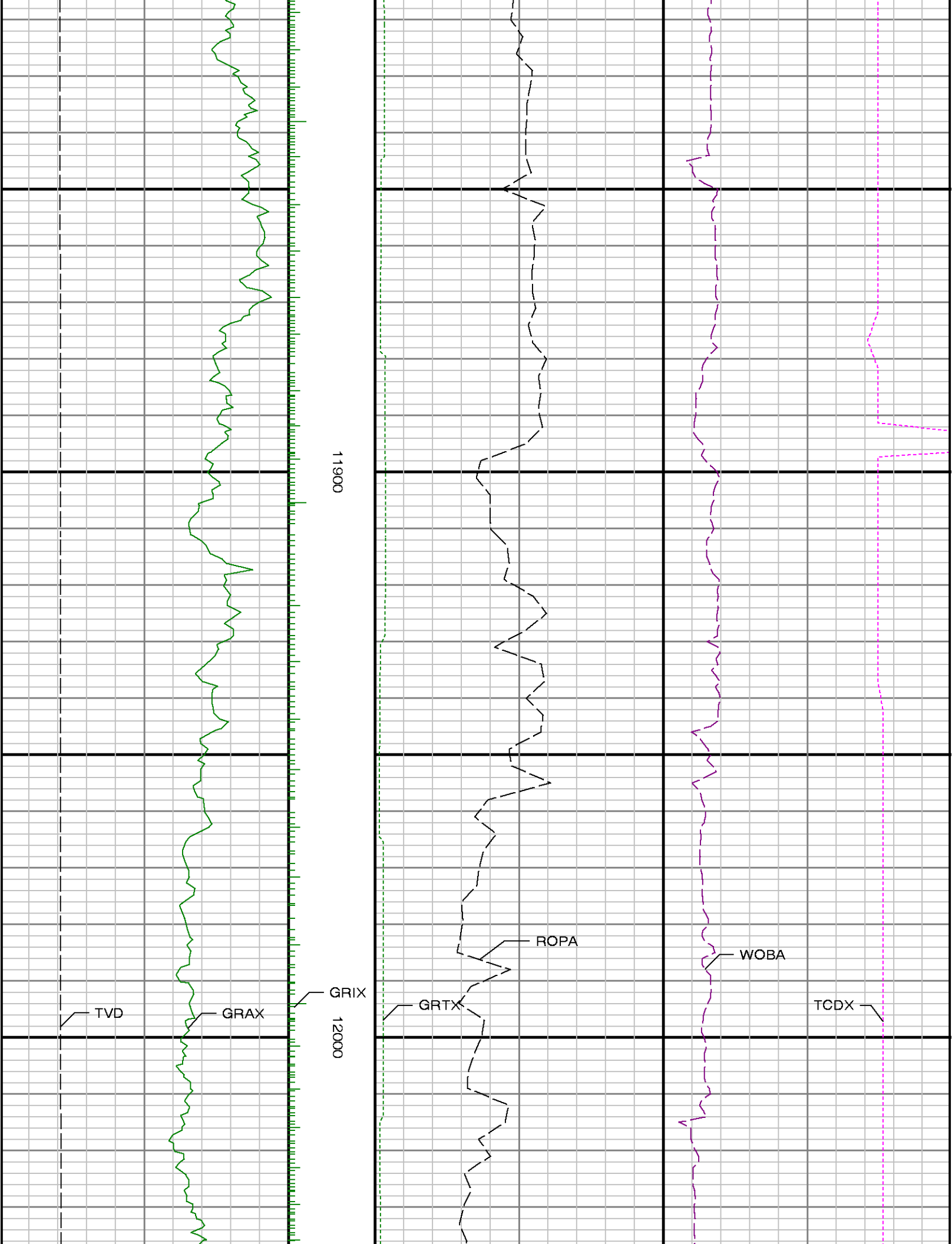


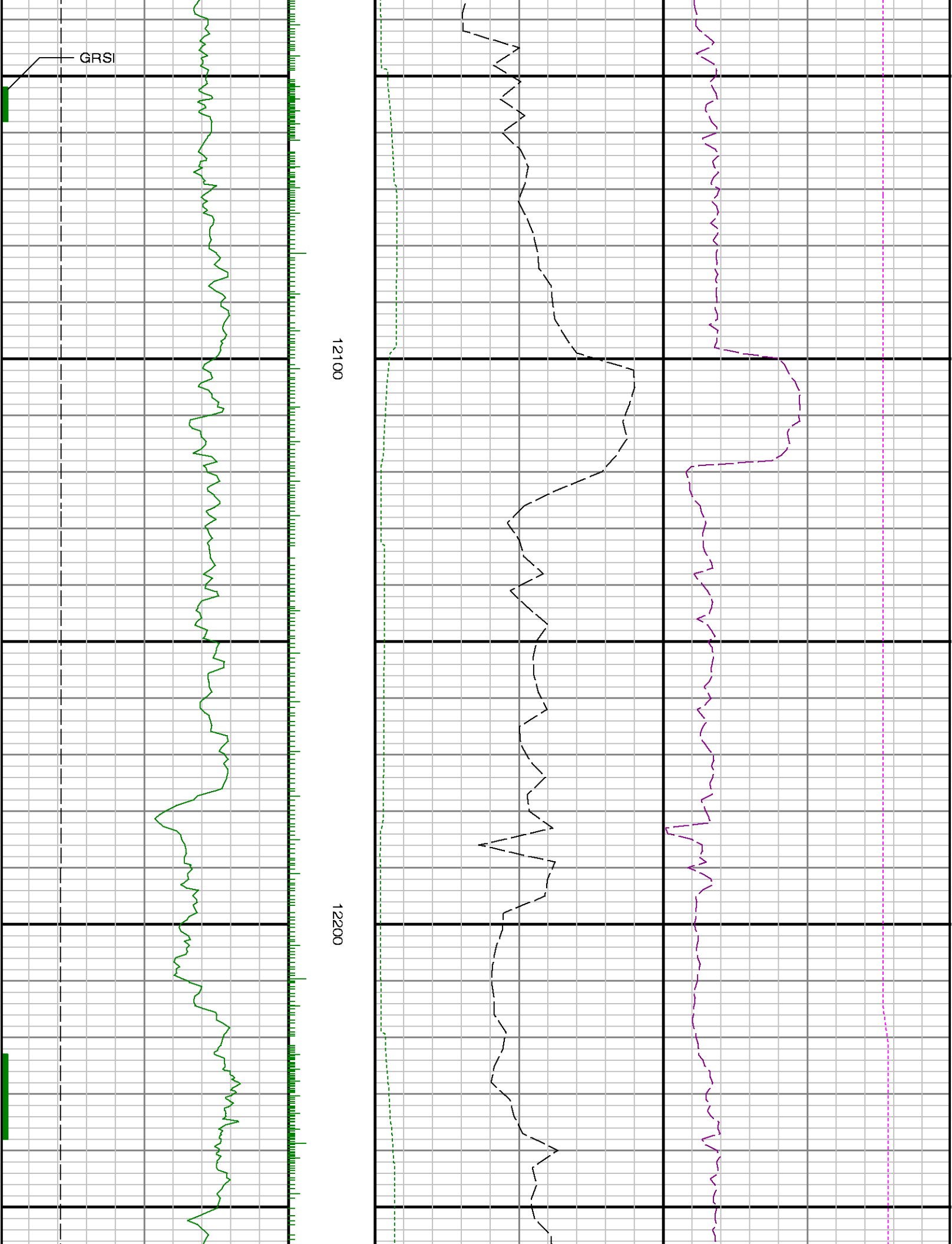
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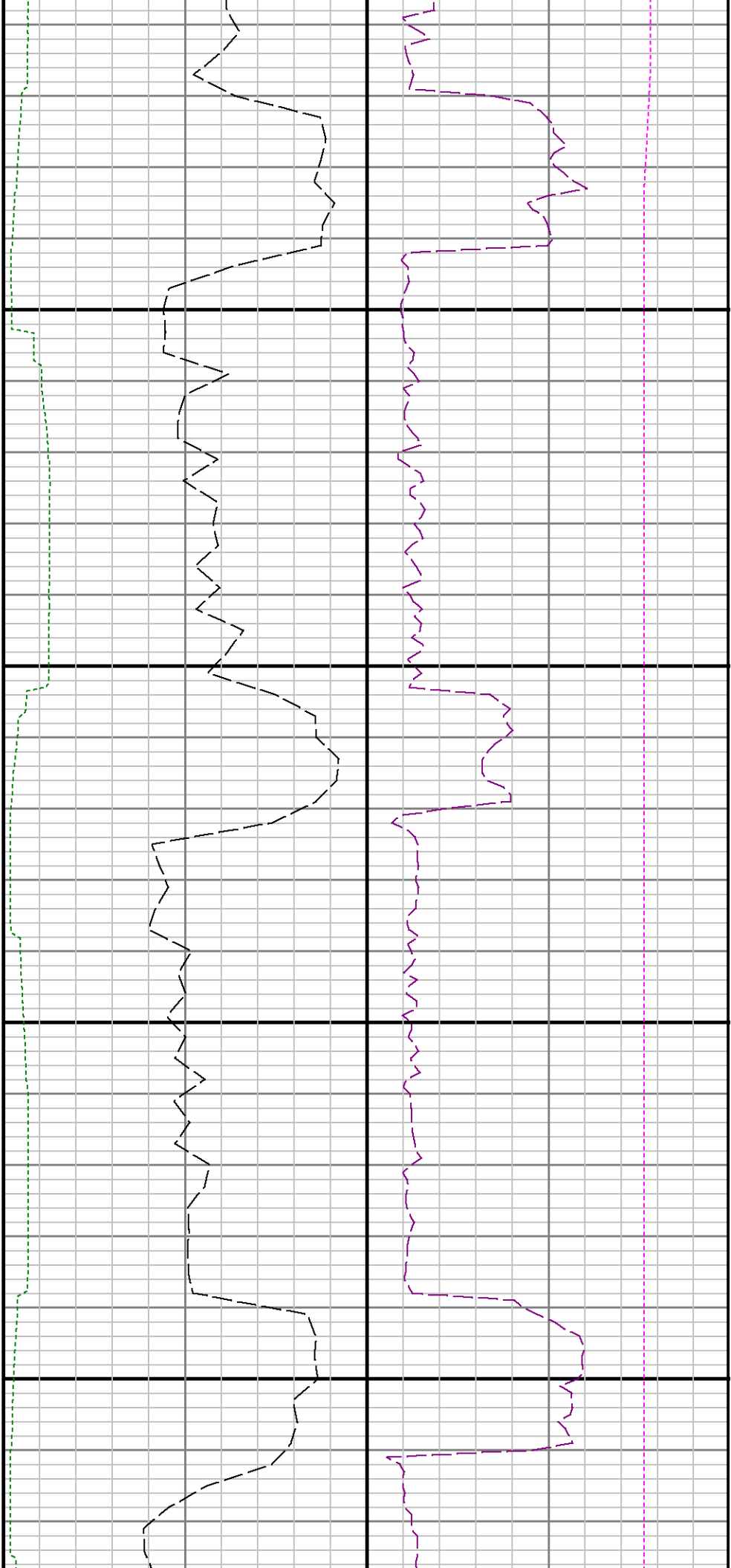
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