



Natural Formation Evaluation  
Gamma Ray

Realtime Log

Scale:

1:240

Measured Depth

Company: Anadarko  
Well: Sickler 1N-34HZ  
Field: Weld County (Kerr McGee)  
County: Weld State: Colorado

Status: Final Print

API Number: 05-123-3937600

Surface Location:  
Latitude: 40° 5' 18.974" N  
Longitude: 104° 52' 22.264" W  
SEC: 34 TWP: 2N RNG: 67W

Permanent Datum (P.D.): Ground Level Elevation: 4949.00 ft.  
Log Measured From: Drill Floor 4965.00 ft. Above P.D.  
Depth Reference: Driller's Depth

Other Services:  
Directional VSS  
Elevations: N/A  
KB: 4965.00 ft.  
DF: 4949.00 ft.  
GL:

Interval Logged

Dates

Magnetic Field Reference

Top: 6950.0 ft. Date From: 19/Jul/14 Date To: 25/Jul/14 Dip Angle: 66.71° Azi Reference North: True  
Bottom: 13078.0 ft. Spud Date: 19/Jul/14 Field Strength: 52827.6 nT North Correction: 8.59°

Borehole Record

Casing Record

Hole Size	From	To	Size	Weight	From	To
13.500 in.	0.0 ft.	1283.0 ft.	9.625 in.	36.00 lb/ft	Surface	1273.0 ft.
8.750 in.	1273.0 ft.	7864.0 ft.	7.000 in.	26.00 lb/ft	Surface	7854.0 ft.
6.125 in.	7864.0 ft.	13078.0 ft.				

Mud Record

Deviation Record

Type	From	To	Hole Size	Interval	Inc / Az (Start)	Inc / Az (End)
Water Based - Fresh	8794.0 ft.	12372.5 ft.	13.500 in.	1283.0 ft.	0.0° / 0.0°	0.3° / 229.1°
			8.750 in.	11099.5 ft.	0.3° / 236.2°	89.9° / 3.1°
			6.125 in.	1979.0 ft.	89.9° / 3.1°	91.3° / 359.1°
					/	/
					/	/
					/	/

Acquisition System

Software Version

Other

Advantage	2.20U4	Rig:	Xtreme 6	/ Xtreme Coil Drilling Corp
PATS	6.4.1.34	Job No:	6432319	/ D&E
		District / Unit:	RMD	

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Log Run Summary

LWD	BHA	Bit	Bit	Bit	Bit	Assembly	Logged Interval		Bit Depth Interval		Date / Time				Circ.
Run	Run	Run	Size	Type	Gauge	Type	Top	Bottom	From	To	Start		End		Time
No.	No.	No.	(in.)		(in.)		(ft.)	(ft.)	(ft.)	(ft.)					(hrs.)
1	1	2	8.750	PDC	6.000	Steerable	N/A	N/A	1273.0	2491.0	19/Jul/2014	06:30	19/Jul/2015	21:30	5.6
2	2	3	8.750	PDC	6.000	Steerable	6950.0	7864.0	2491.0	7864.0	19/Jul/2014	22:15	22/Jul/2014	09:30	41.3
3	3	4	6.125	PDC	4.440	Steerable	7864.0	13078.0	7864.0	13078.0	23/Jul/2014	18:39	25/Jul/2014	10:37	36.7

Crew

Name	Arrive	Depart	Name	Arrive	Depart	Name	Arrive	Depart
	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite
Matthew Delmore	18/Jul/2014	22/Jul/2014	Jake Miller	18/Jul/2014	26/Jul/2014	David Campbell	21/Jul/2014	26/Jul/2014

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+ (%)
24/Jul/2014	02:16	3	8794.0	Water Based - Fresh	9.4	44	9.5	0.0	1 / 93	Active Mud Pit	3300	0.0
25/Jul/2014	01:12	3	11812.0	Water Based - Fresh	9.4	47	9.7	0.0	1 / 93	Active Mud Pit	3300	0.0

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	13108409	Directional	46.86	6.750	3.375
1	SRIG	11703934	Gamma	43.49	6.750	3.375
2	DIR	12373467	Directional	47.13	6.750	3.375
2	SRIG	12586753	Gamma	43.75	6.750	3.375
3	DIR	12093880	Directional	48.98	4.750	2.625
3	SRIG	12867701	Gamma	45.61	4.750	2.625

Service and Tool Mnemonics

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

Comments

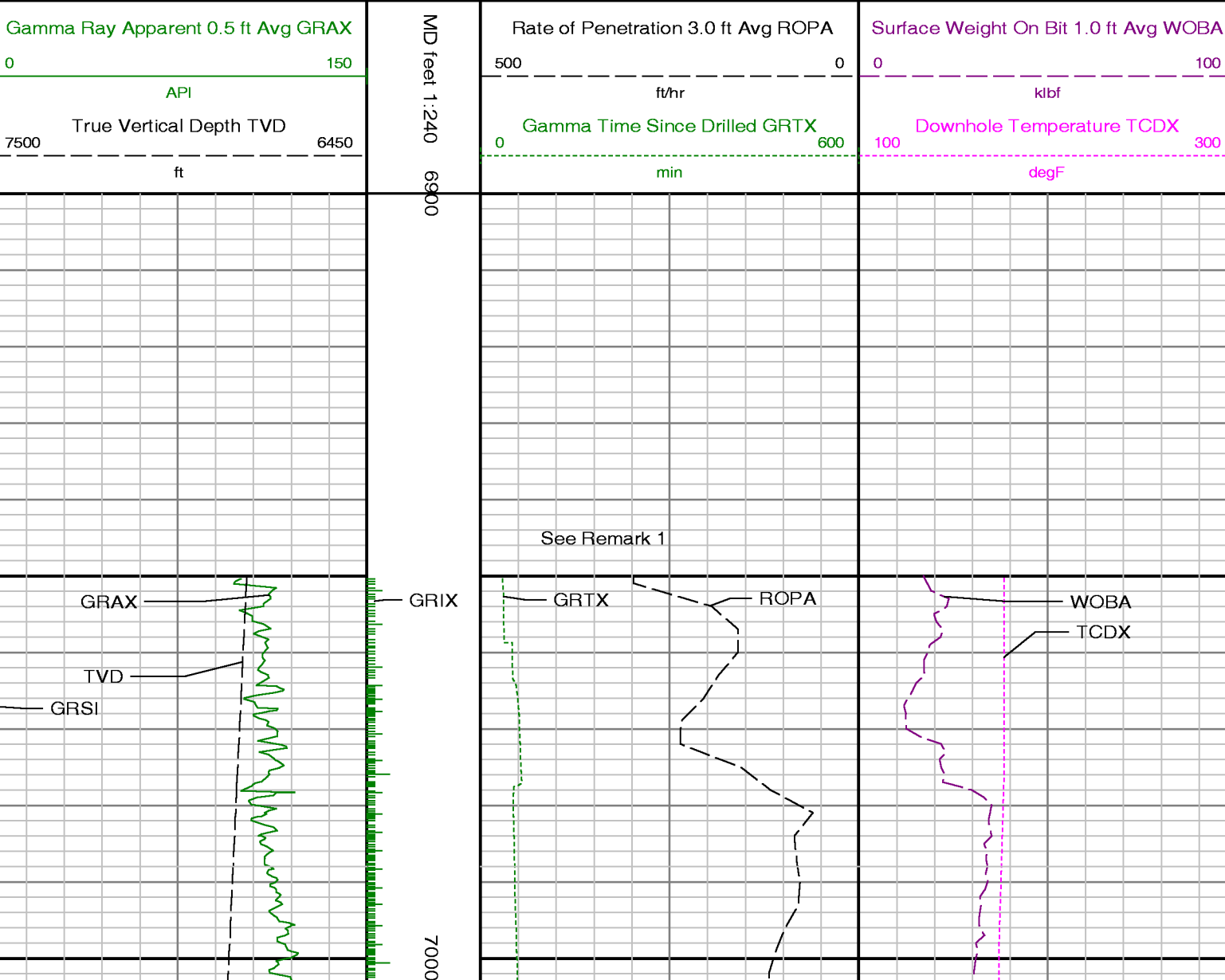
1.) Depth measurements obtained from a depth control system not supplied or operated by Baker Hughes. Due to the lack of control by Baker Hughes logging engineers, depth calibrations and measurements could not be independently verified.
2.) Baker Hughes LWD run 1 utilized 6 3/4 inch NaviTrak Services (VSS, Directional) from 1273 to 2491 ft. MD (1272.98 to 2471.27 ft. TVD) behind an 8 3/4 inch bit and steerable assembly.
3.) Baker Hughes LWD run 2 utilized 6 3/4 inch NaviTrak Services (VSS, Directional) from 2491 to 6950 ft. MD (2471.27 to 6784.69 ft. TVD) and NaviGamma Services (VSS, Directional, Gamma Ray) from 6950 to 7864 ft. MD (6784.69 to 7392.91 ft. TVD) behind an 8 3/4 inch bit and steerable assembly.
4.) Baker Hughes run 3 utilized 6 3/4 inch NaviGamma services (Gamma Ray and Directional) behind an 8 3/4 inch bit and steerable assembly from 7864 to 13078 feet MD (7394.48 to 7362.75 feet TVD).
5.) The interval from 1272 to 6950 feet MD (1272 to 6784 feet TVD) was not logged due to directional only services being provided through the straight-hole and nudge section for Baker Hughes runs 1 and 2.

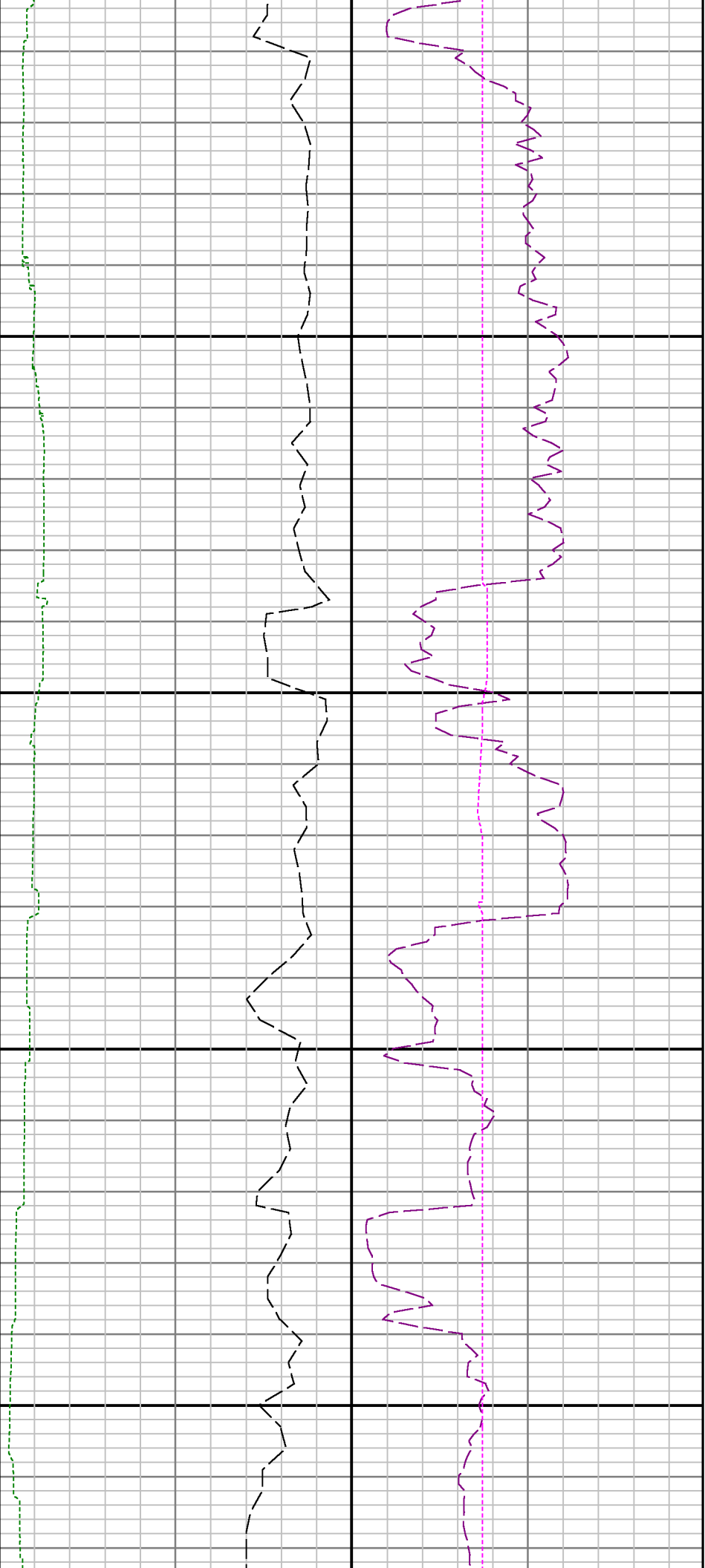
Remarks

Number	Measured Depth (ft)	Hole Section (in.)	LWD Run No.	Remark
1	6950	8.750	2	Begin logging due to directional only service provided thru vertical and nudge section.
2	7820	8.750	2	The interval from 7820 to 7865 feet MD (7394.15 to 7394.46 feet TVD) was relogged up to 24 hours after drilling due to casing and cement ops..
3	13035	6.125	3	The interval from 13035 to 13078 feet MD (7363.79 to 7362.75 feet TVD) was not logged due to sensor to bit offsets at well TD.



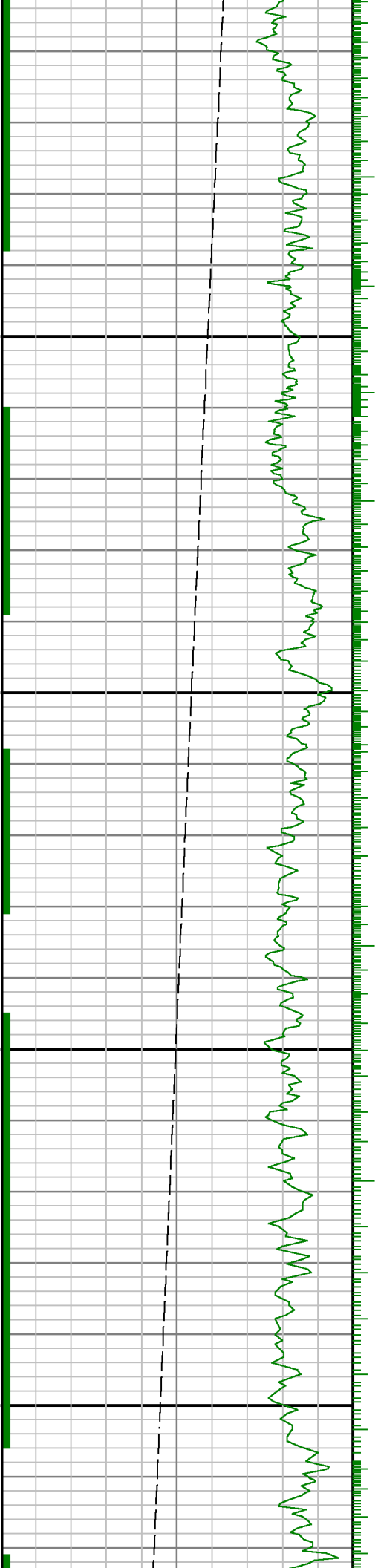
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Well : Sickler 1N-34HZ  
Interval : 6900.00 - 13100.00 feet  
Created : 25/Jul/2014 12:31:40 PM

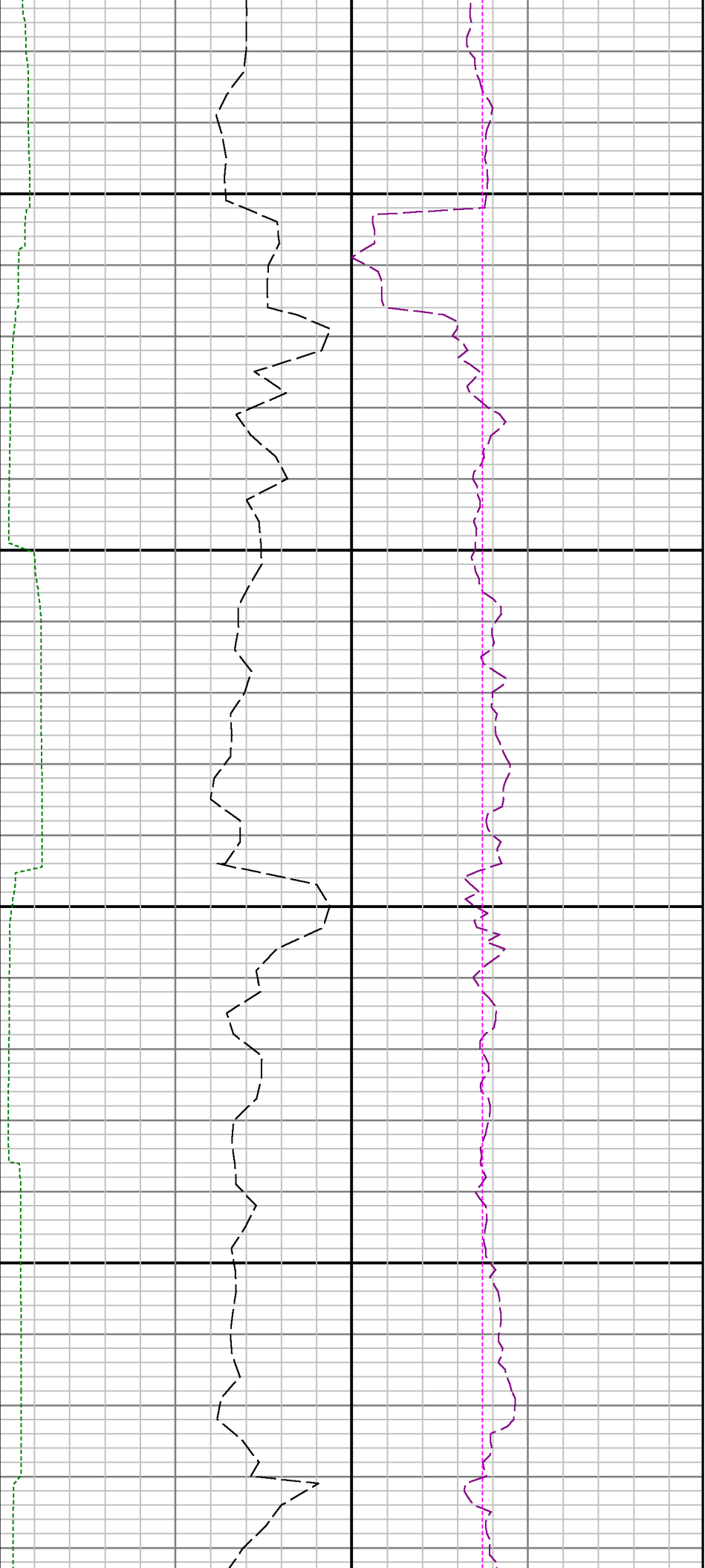




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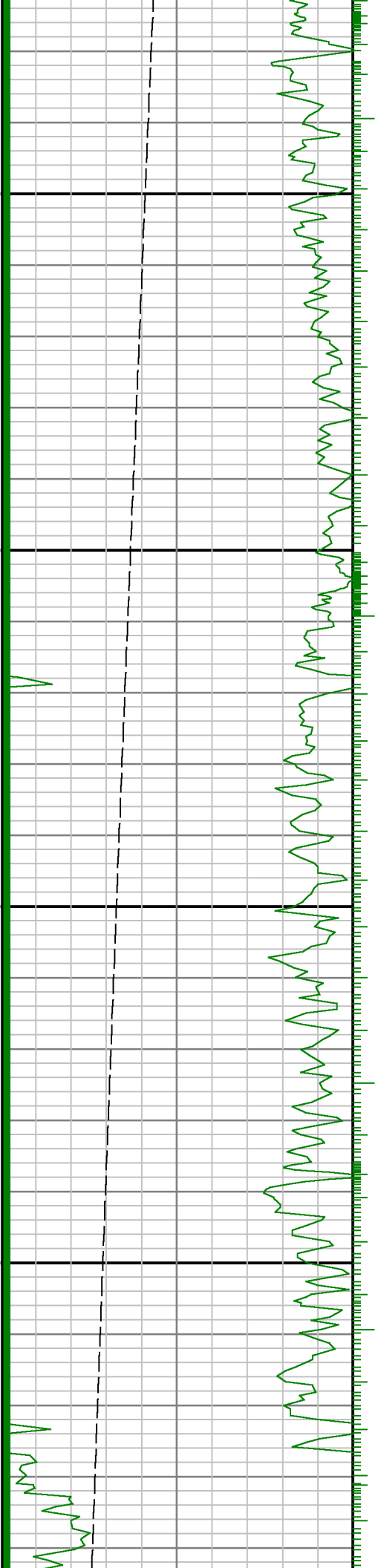
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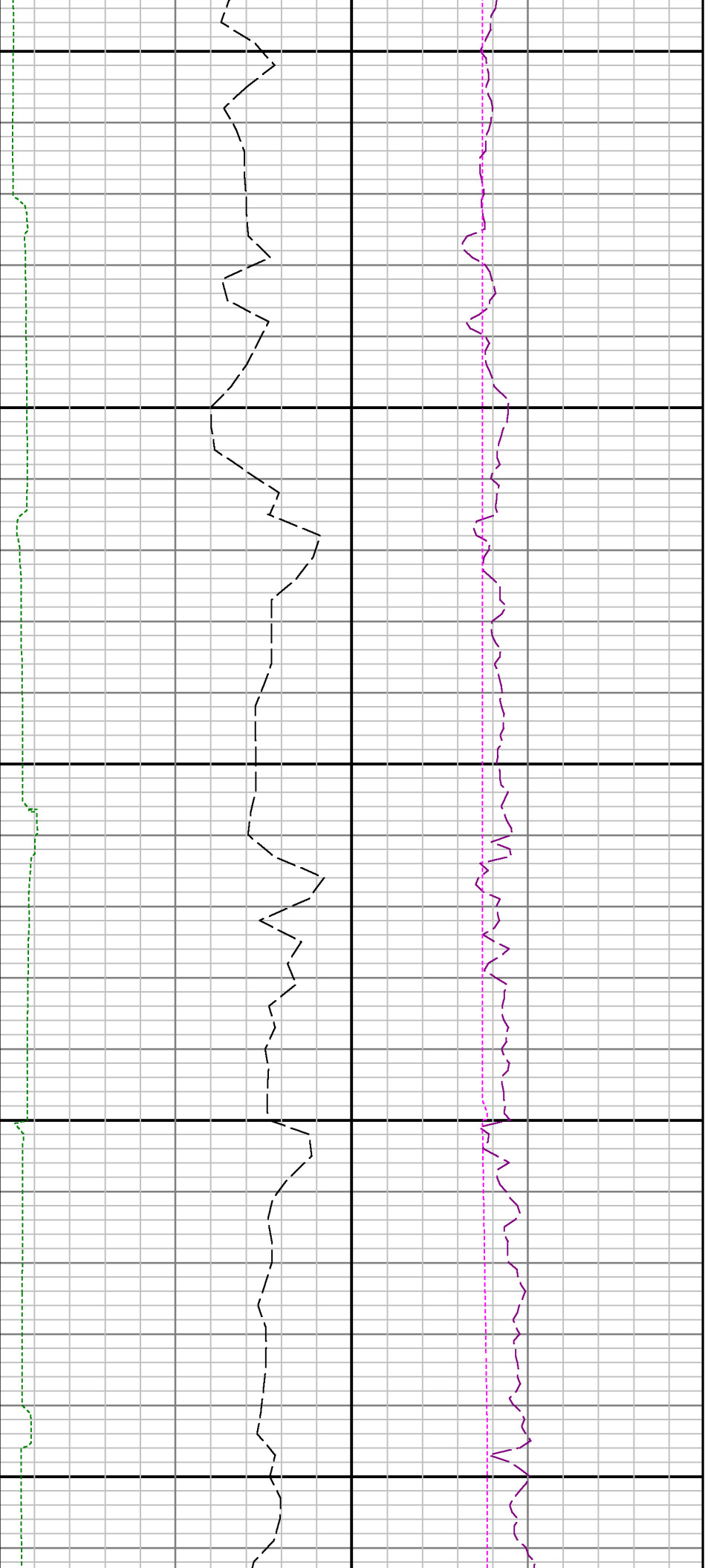




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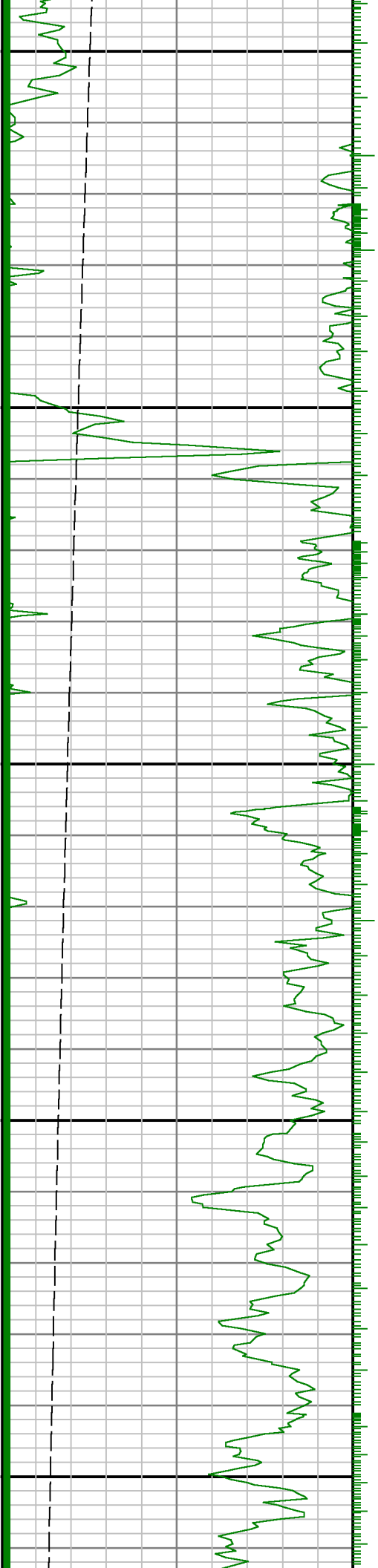
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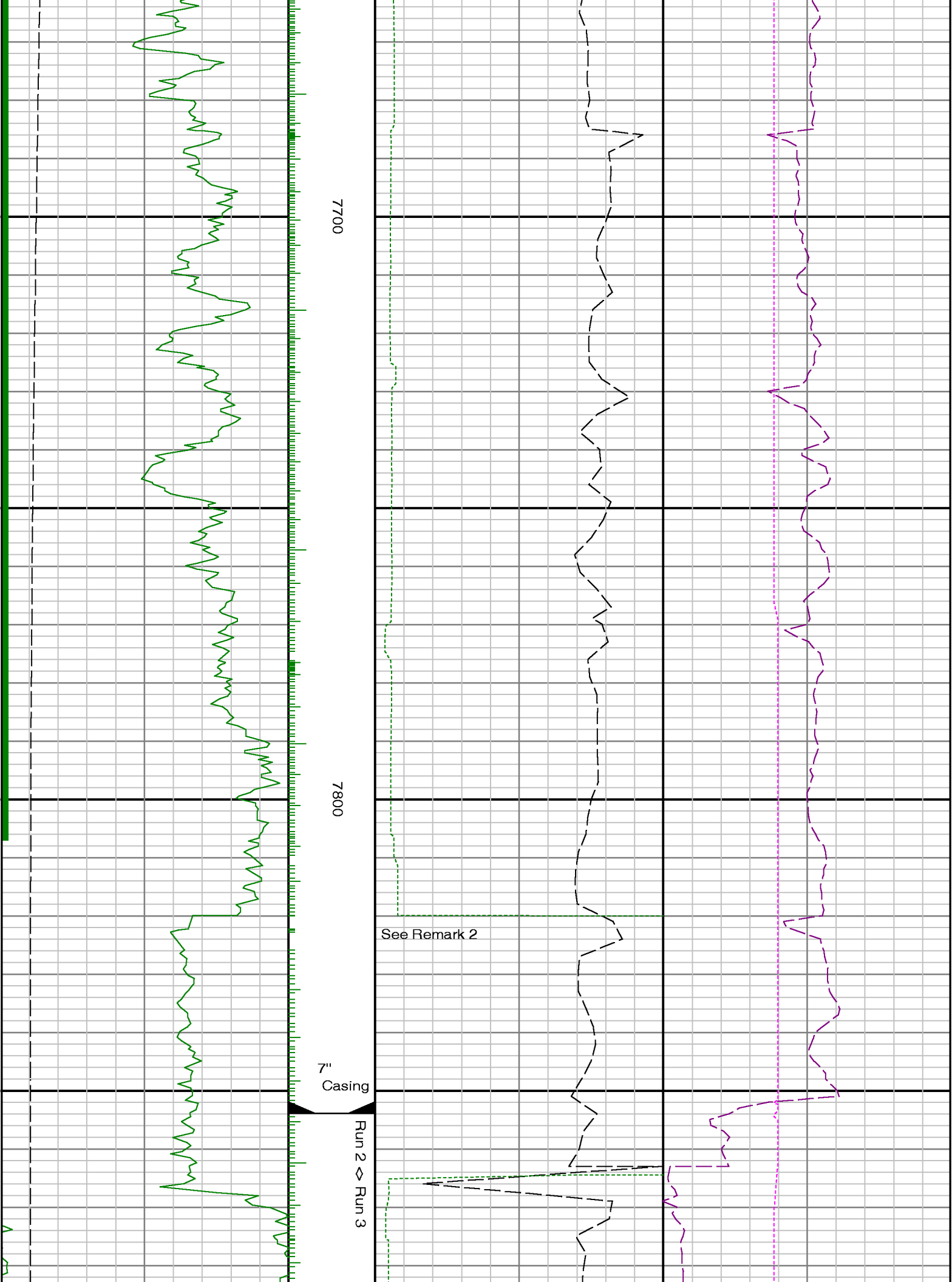


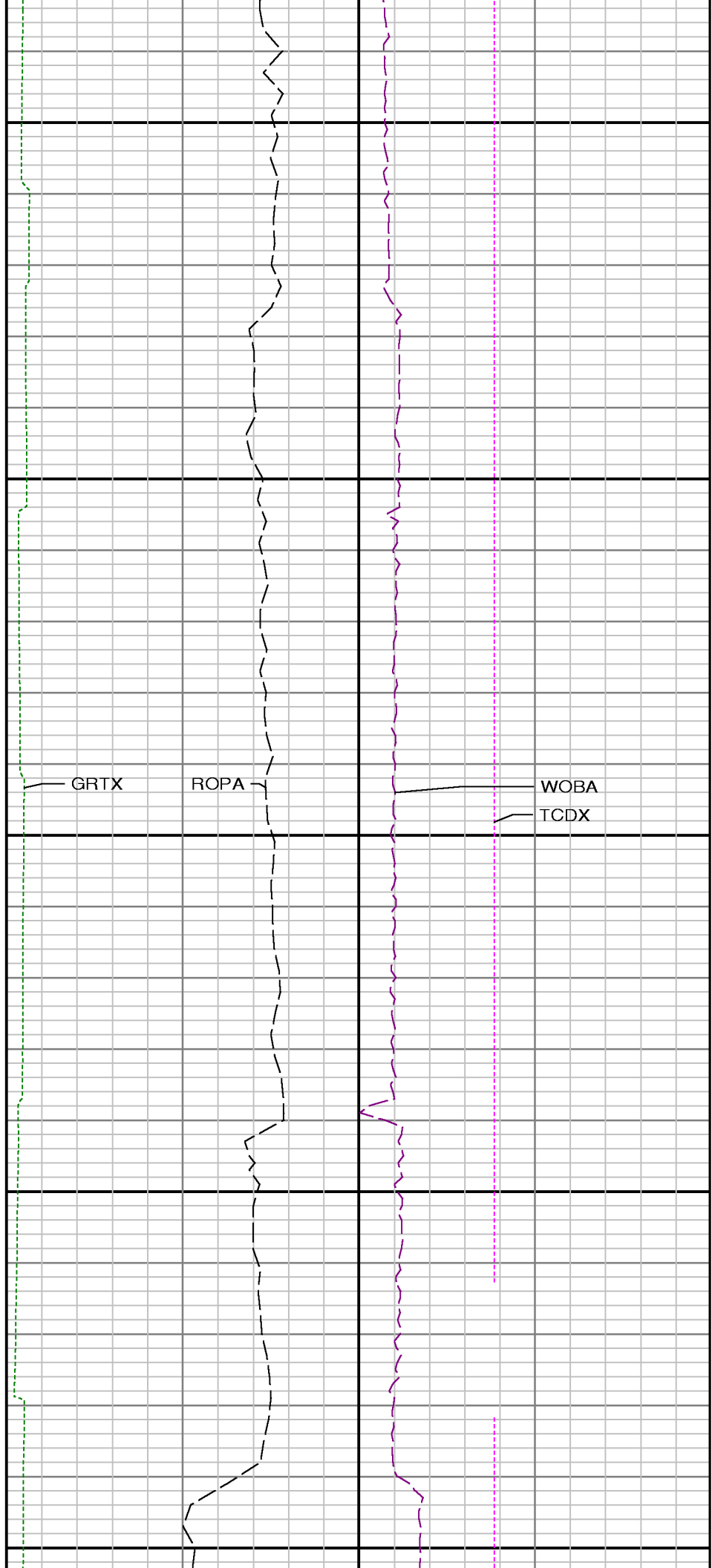
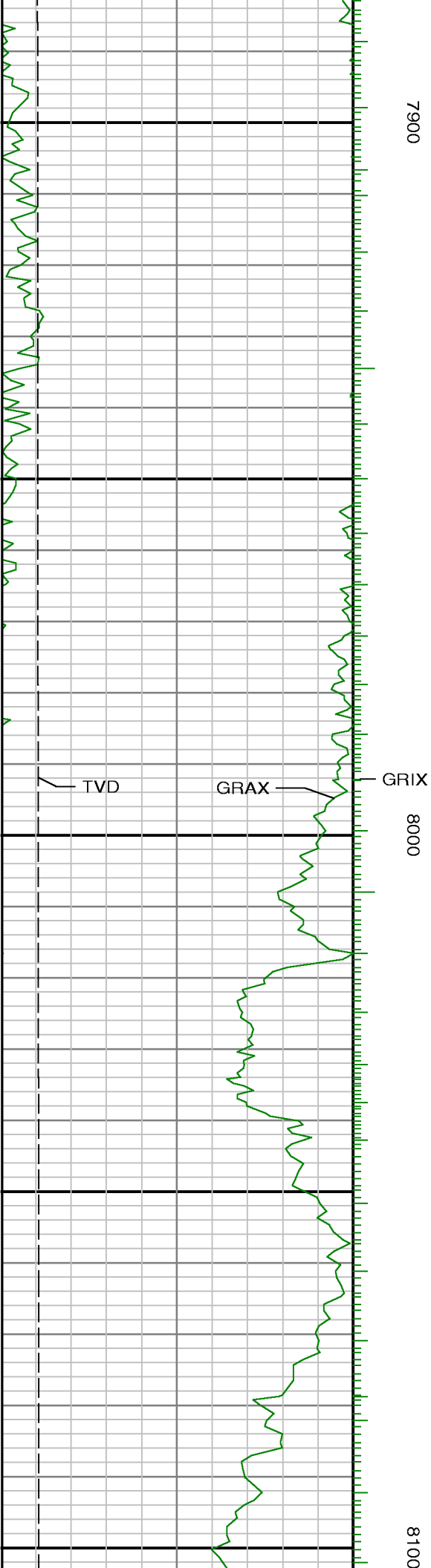


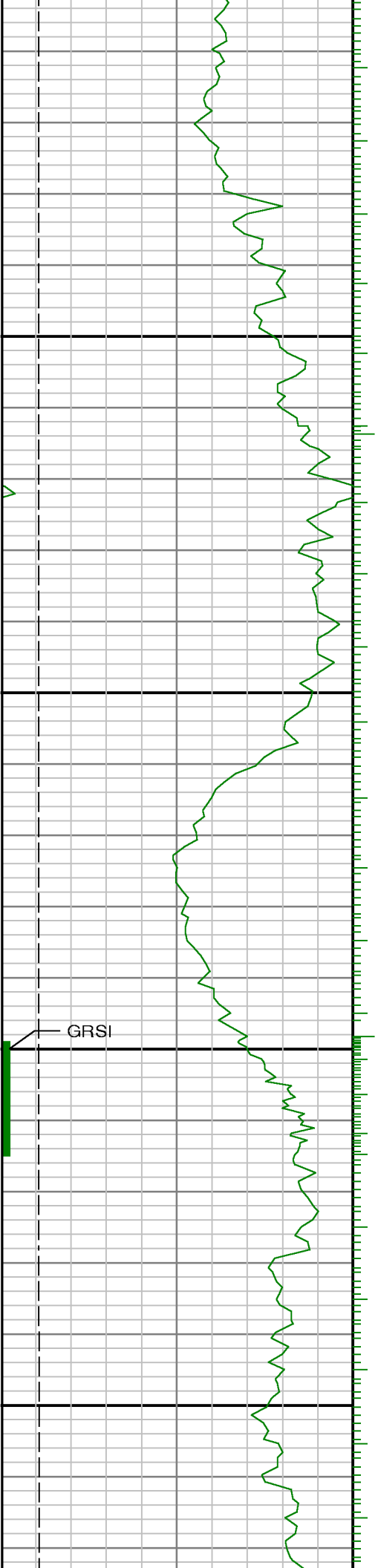
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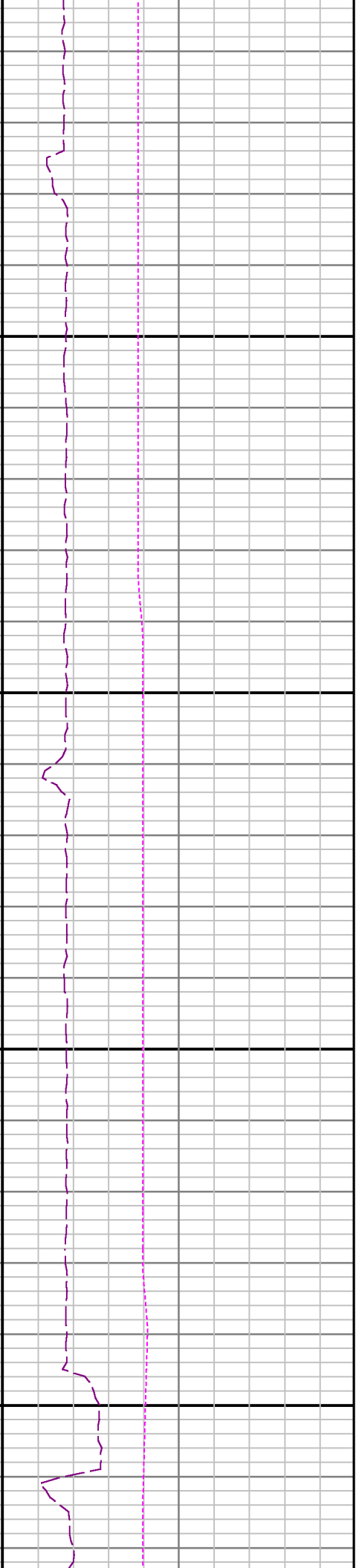


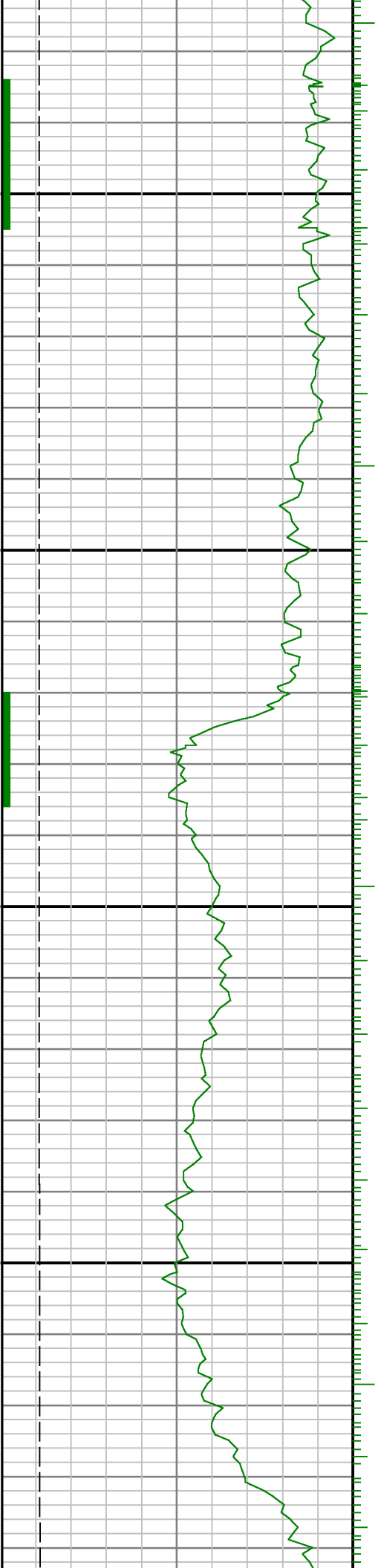




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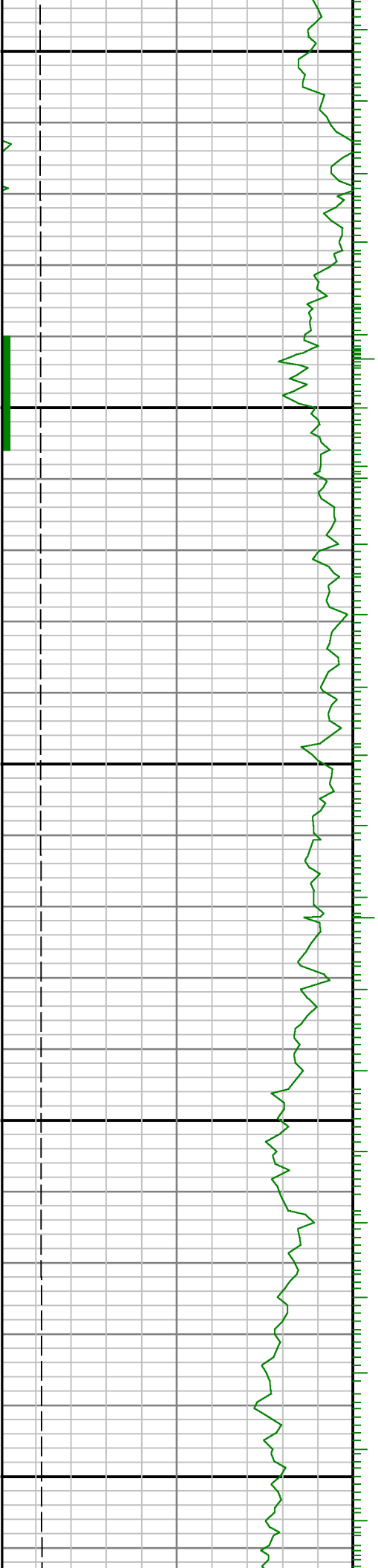




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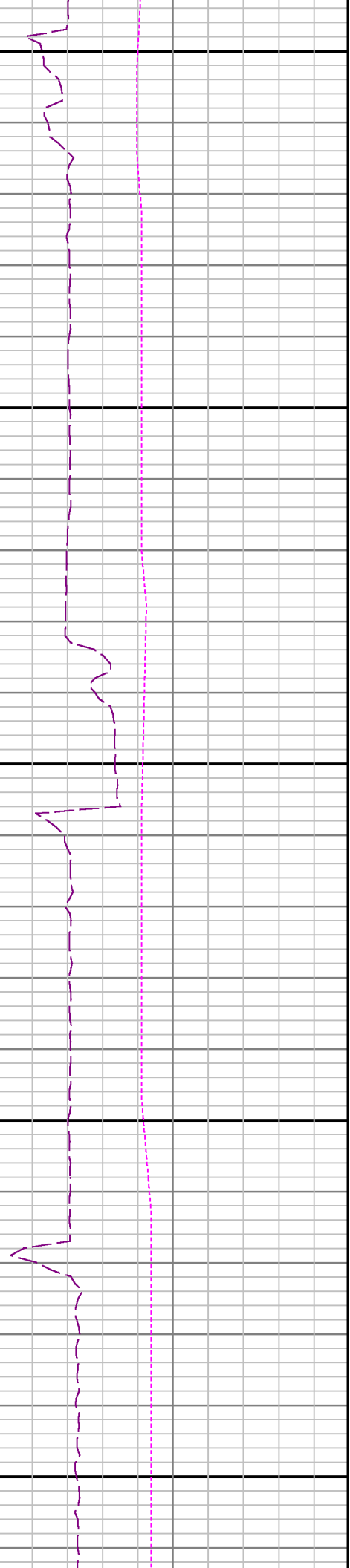
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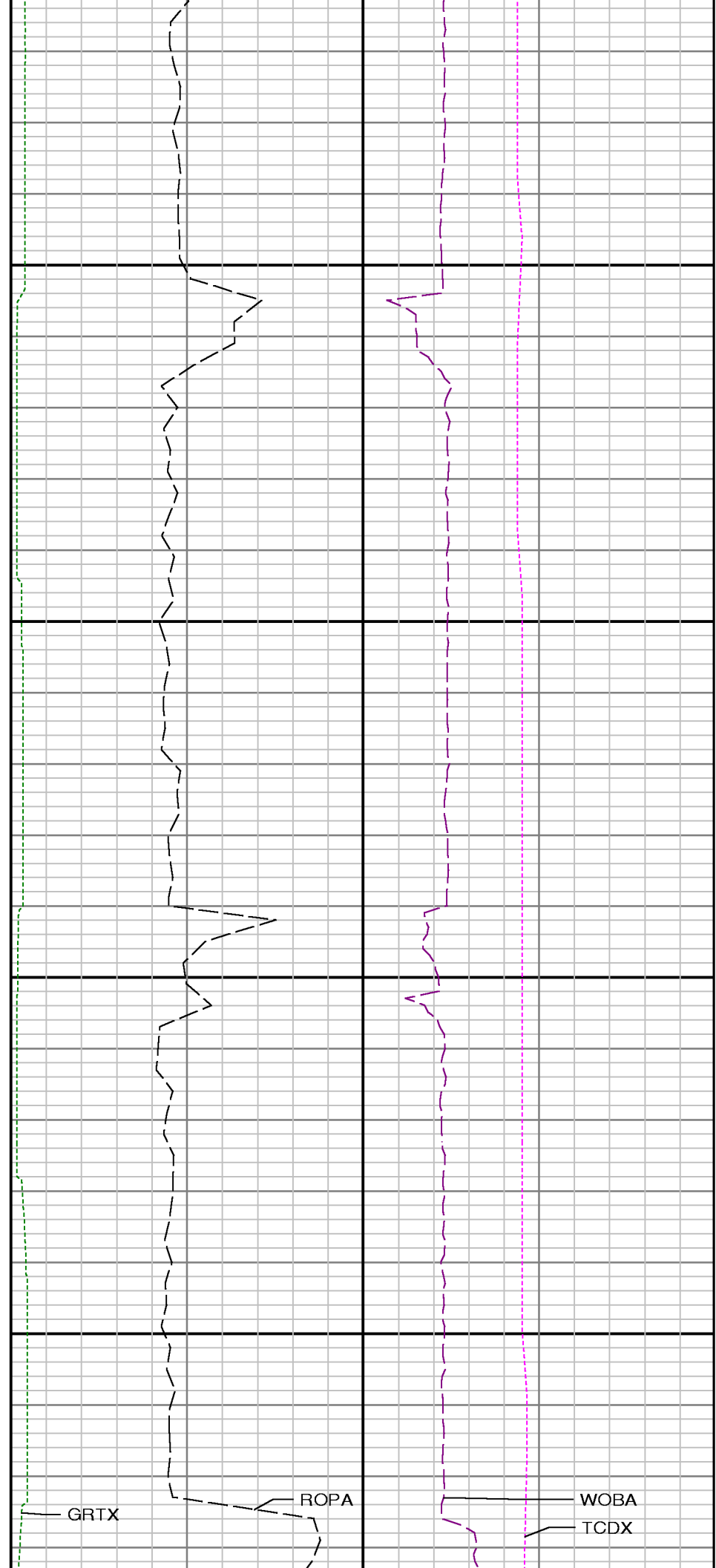
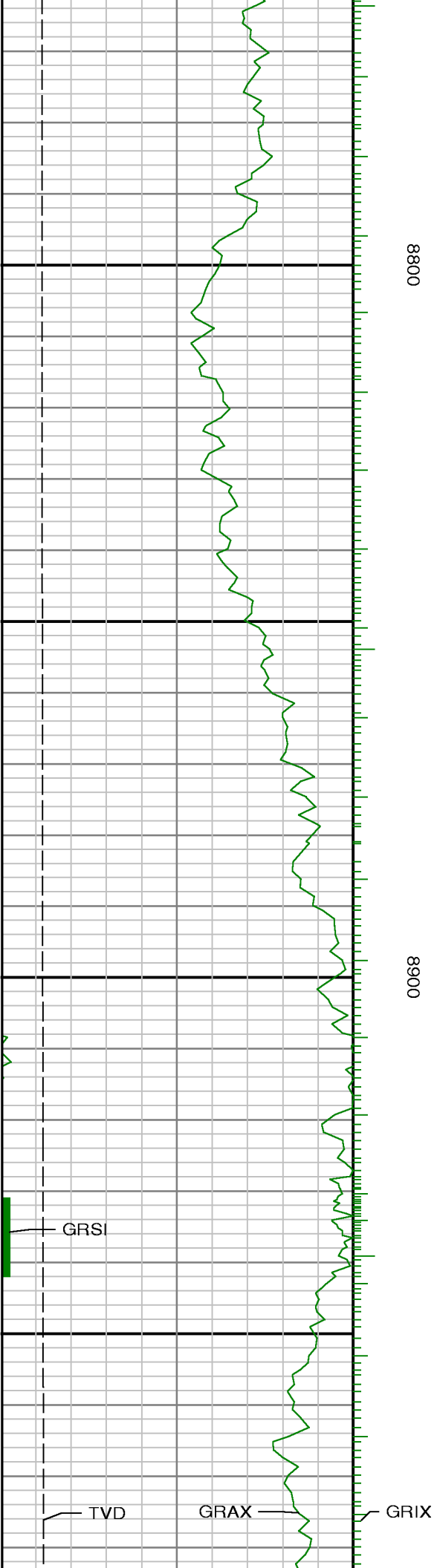


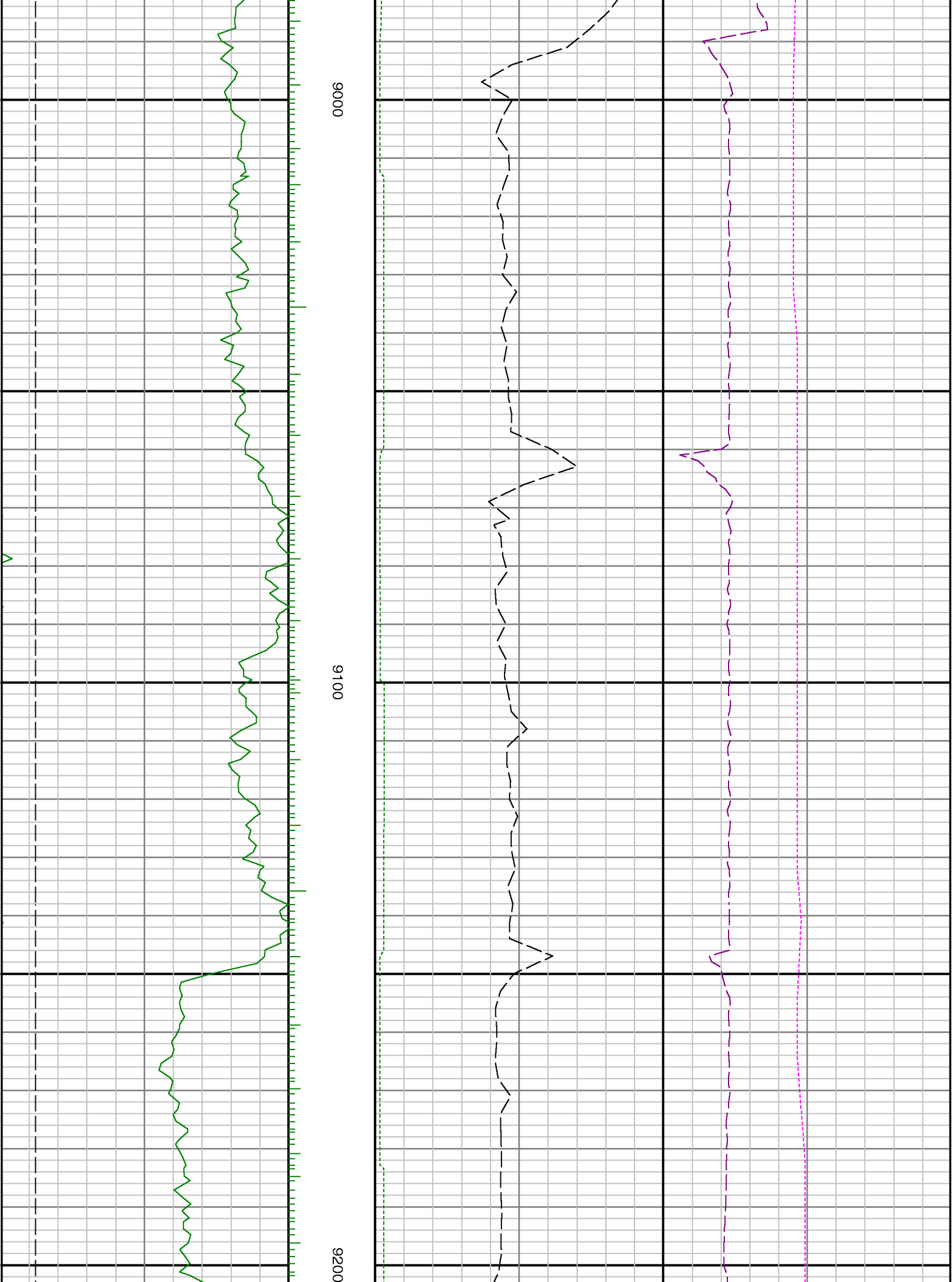


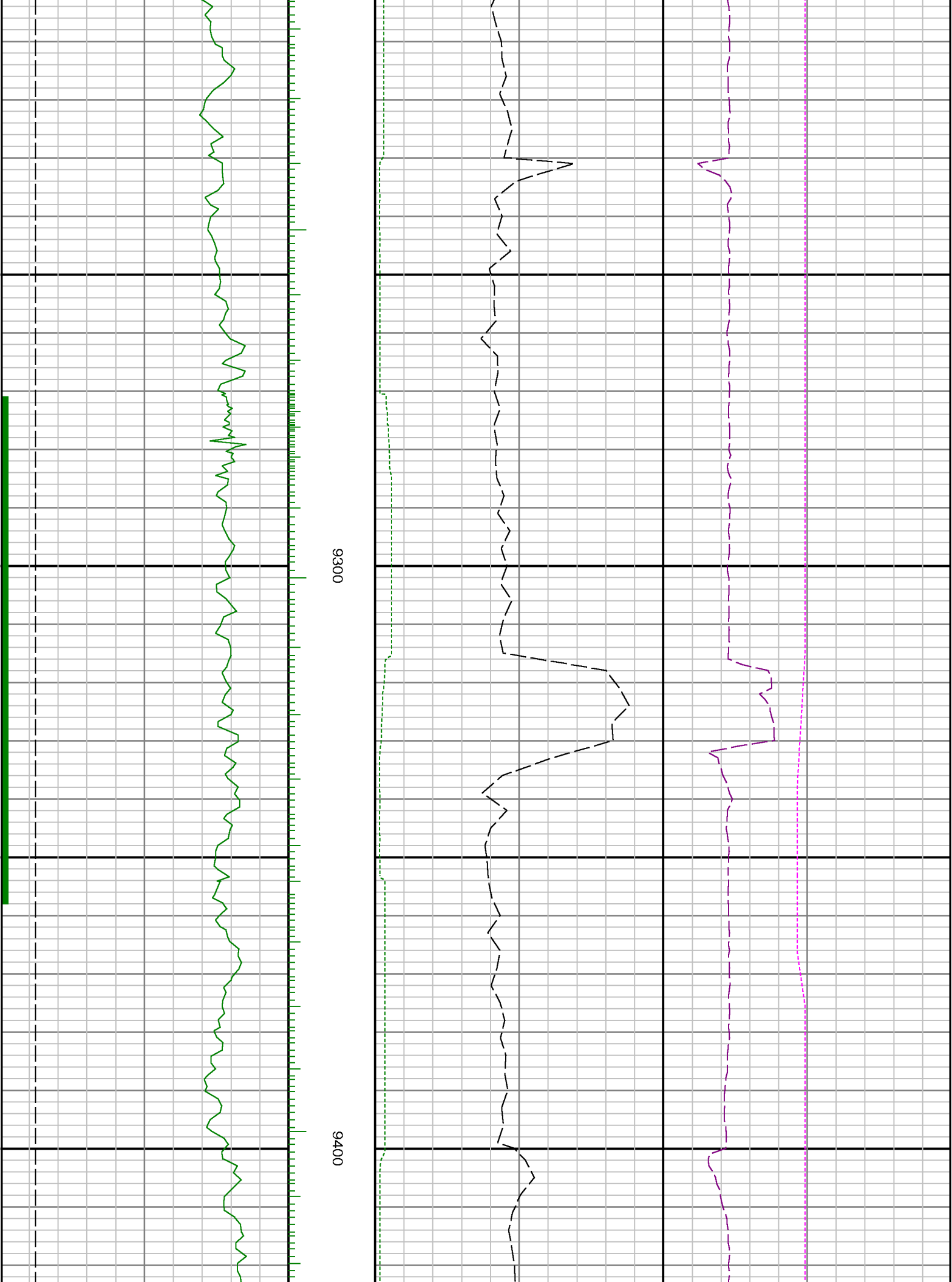
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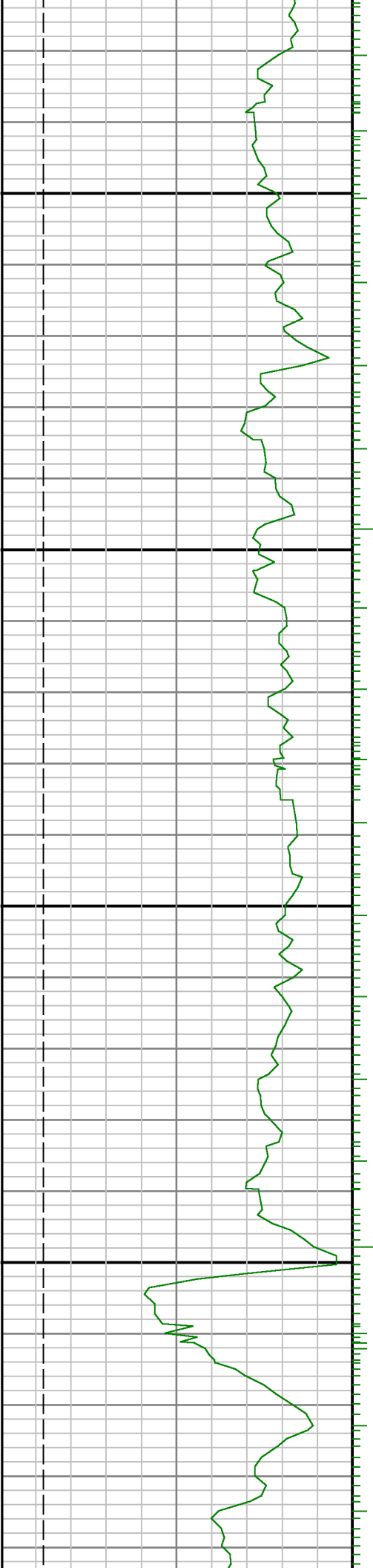
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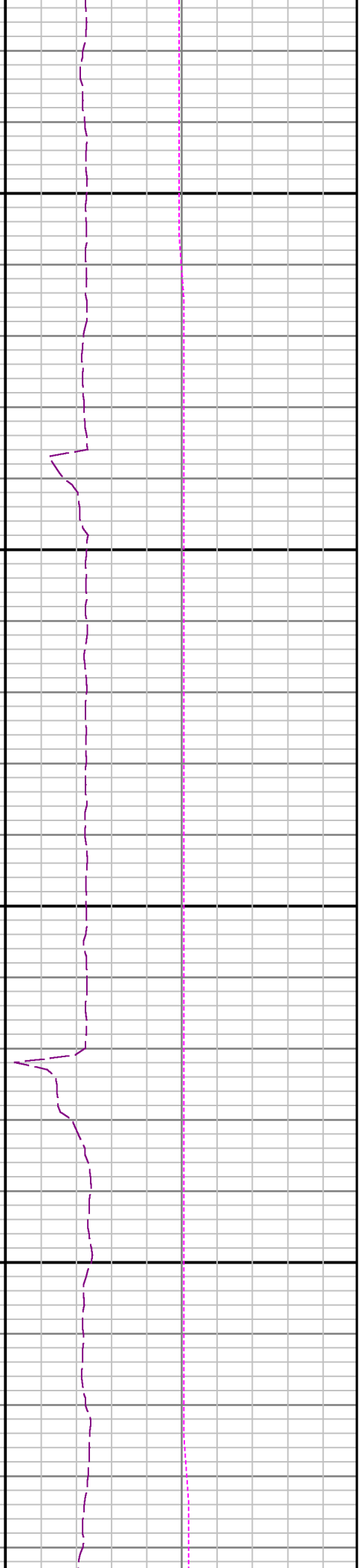
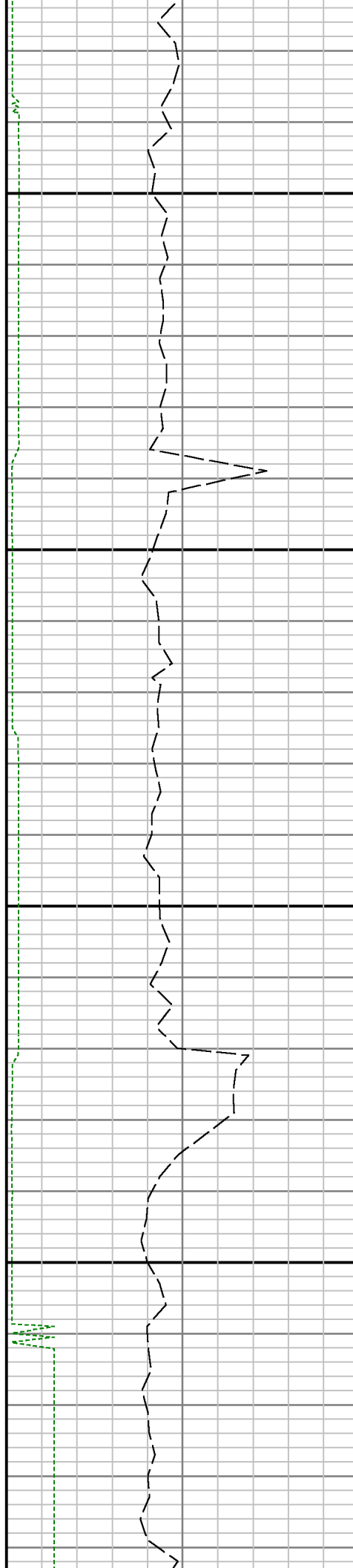


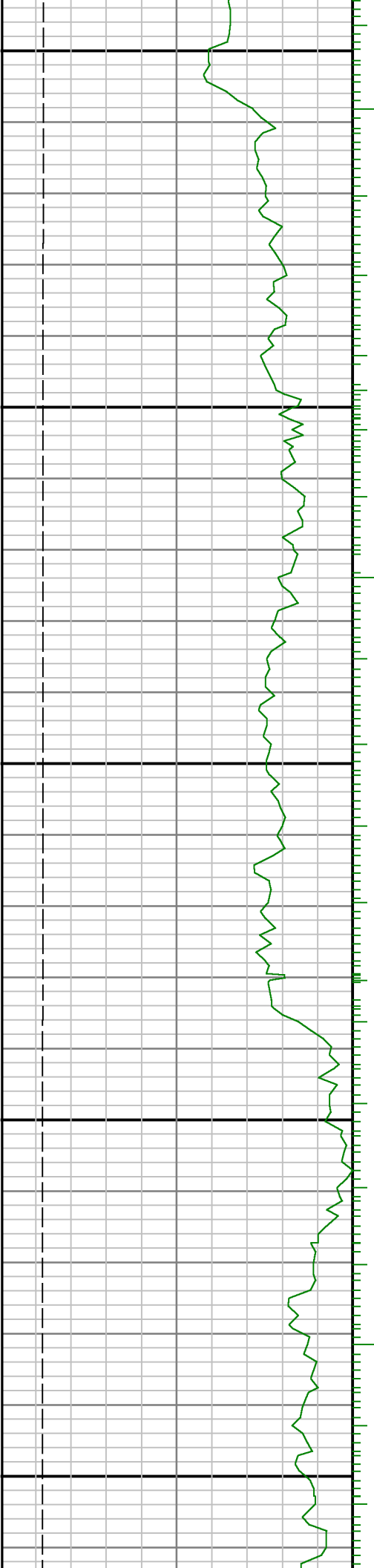




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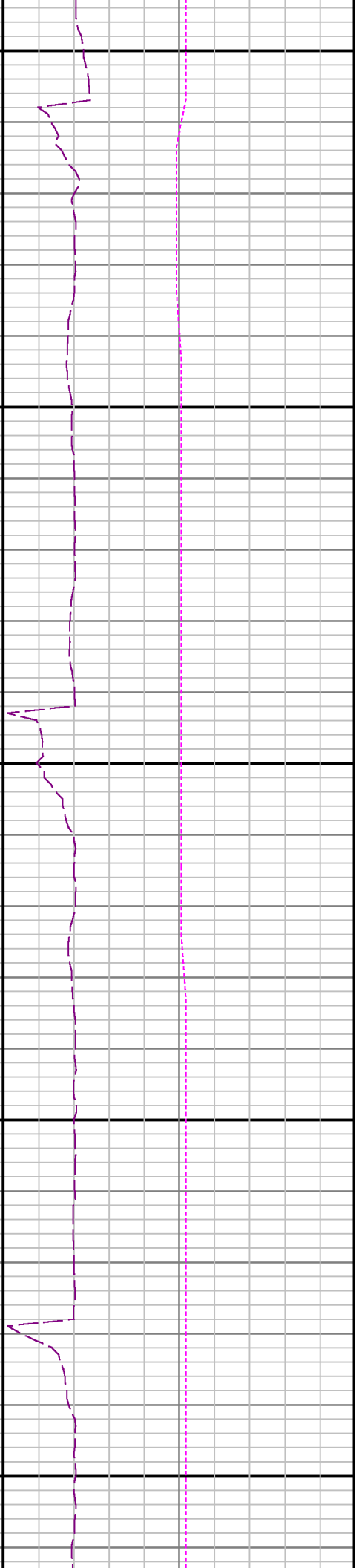
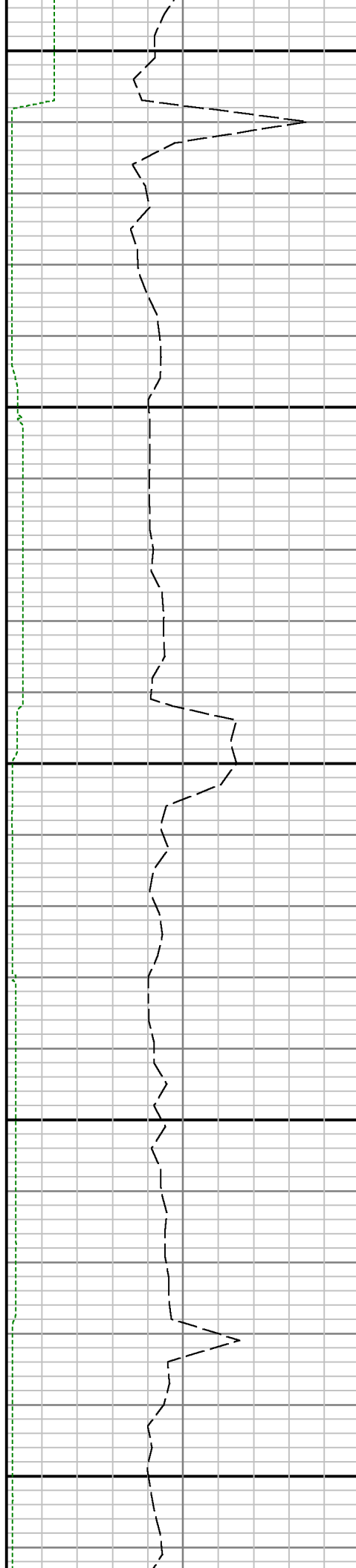
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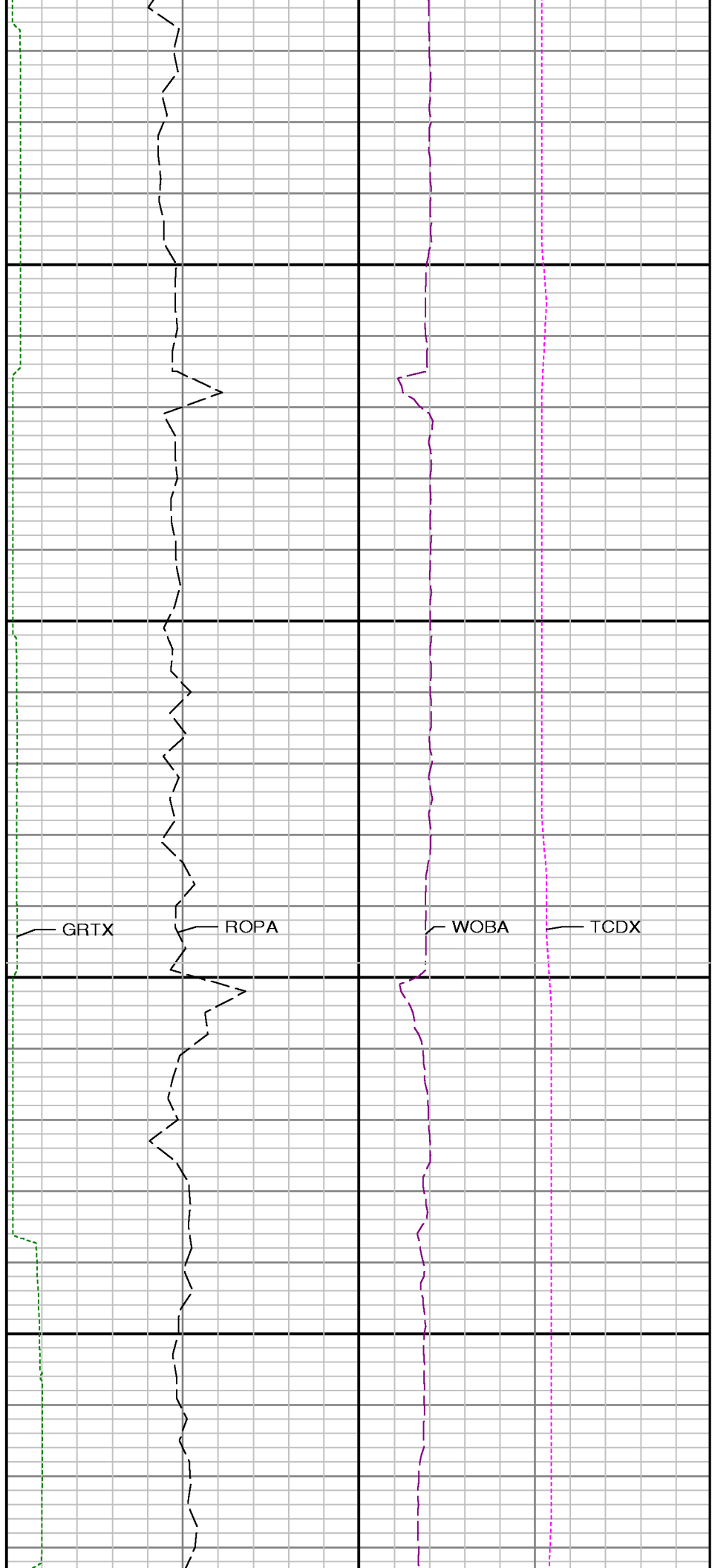
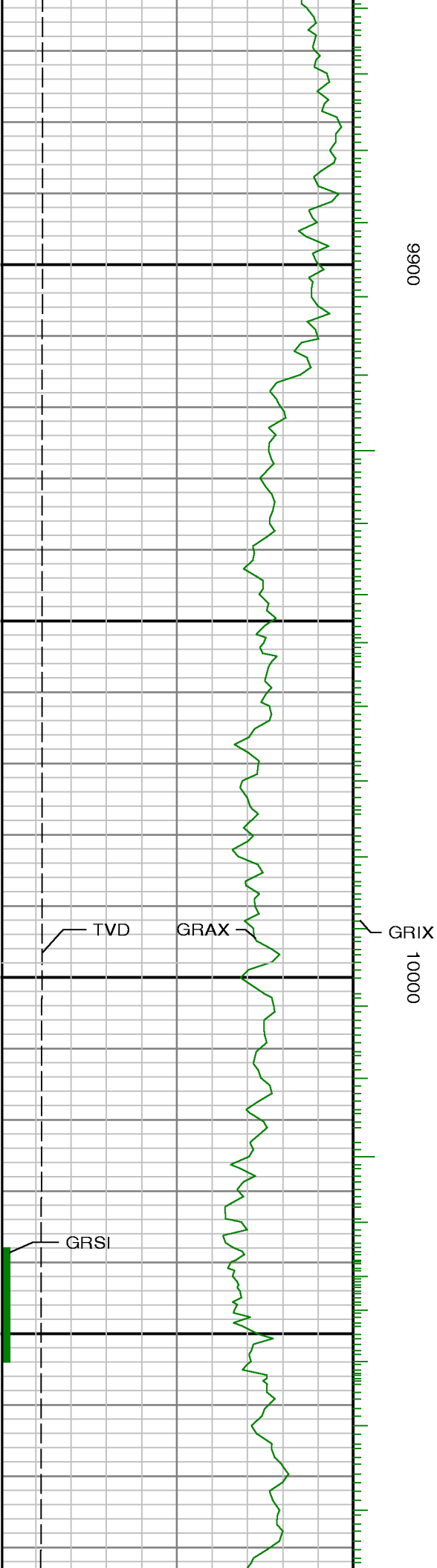


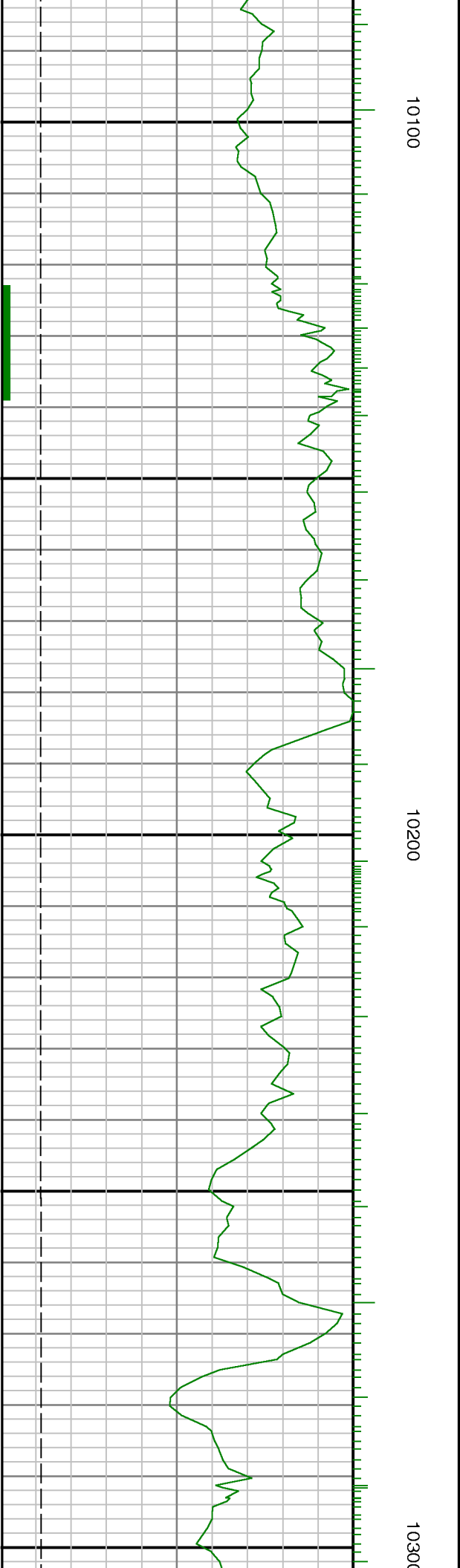
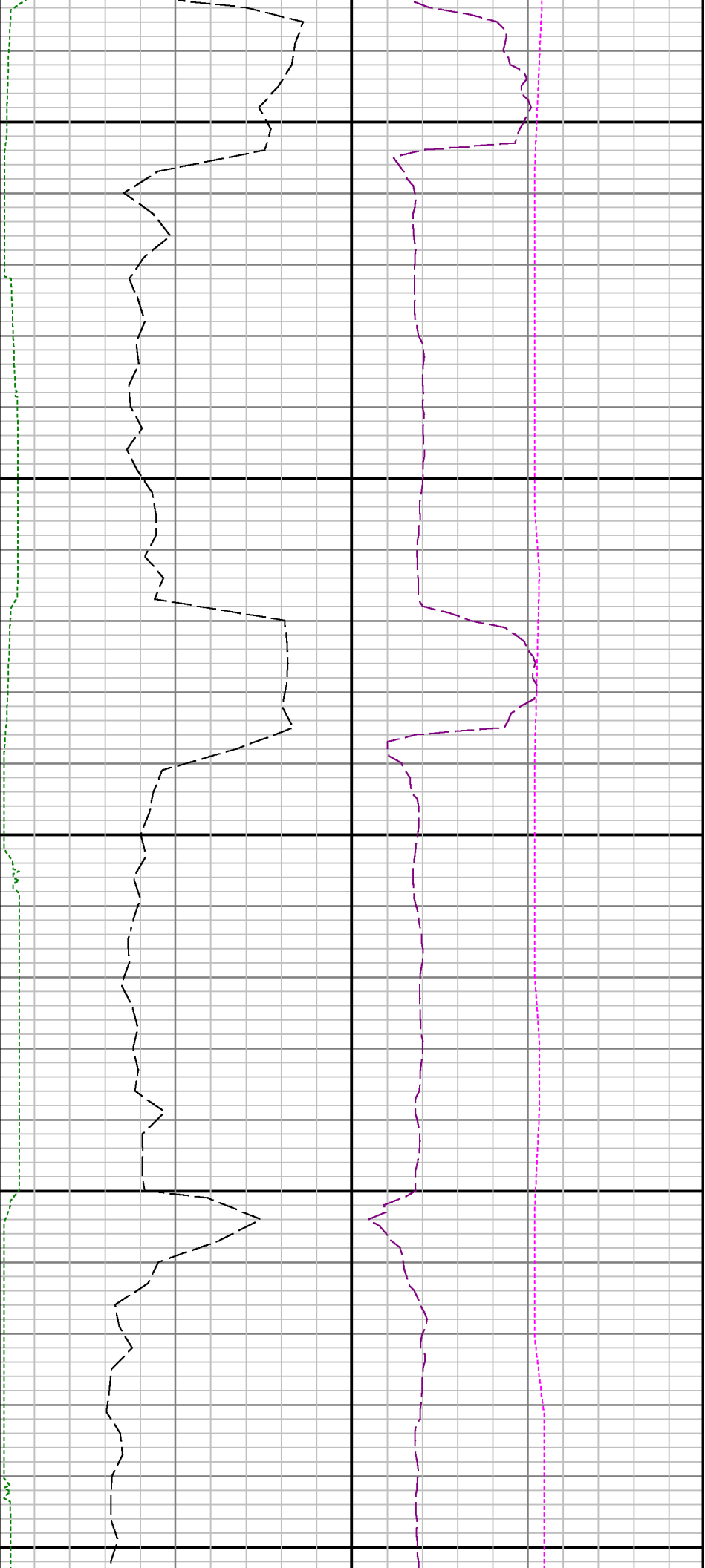


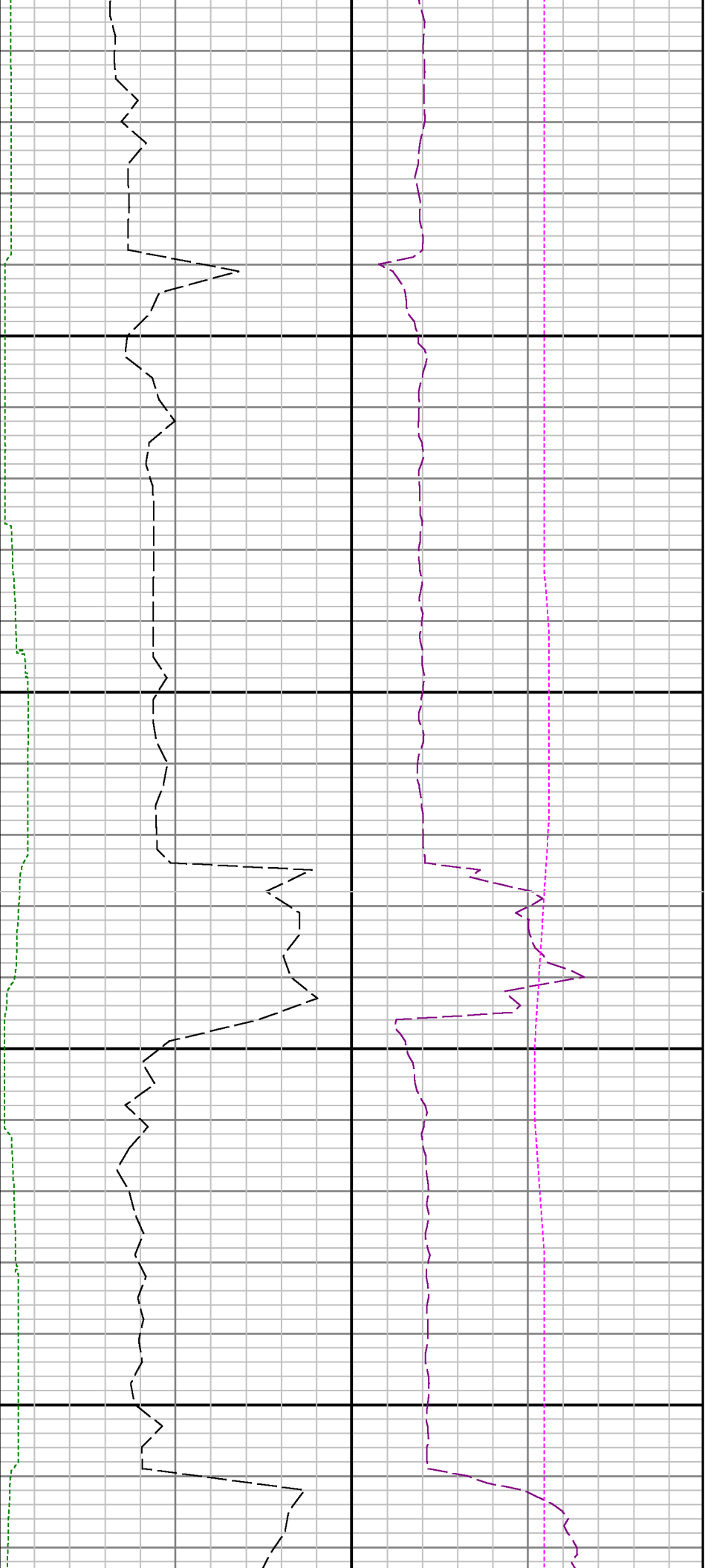
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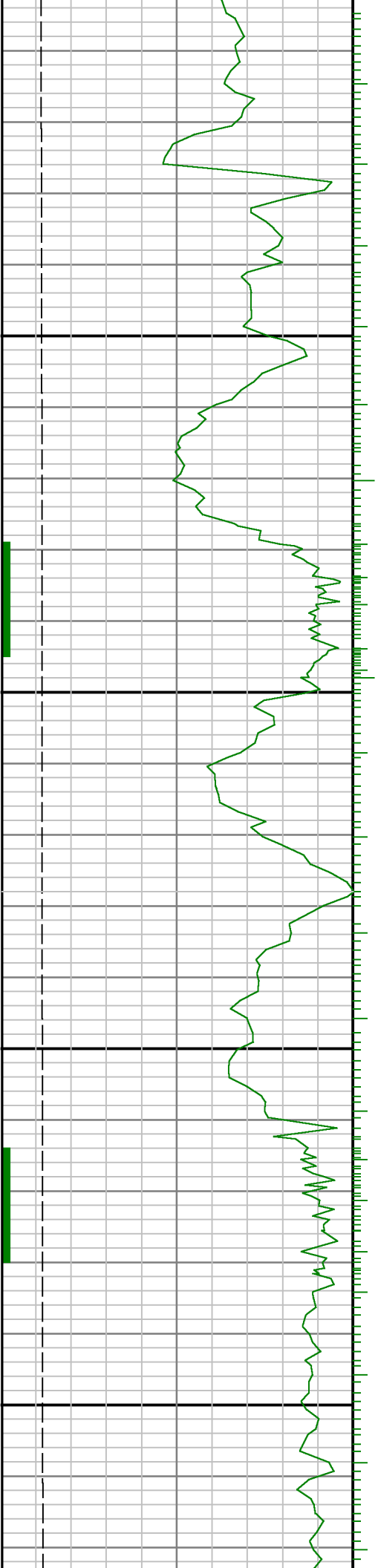


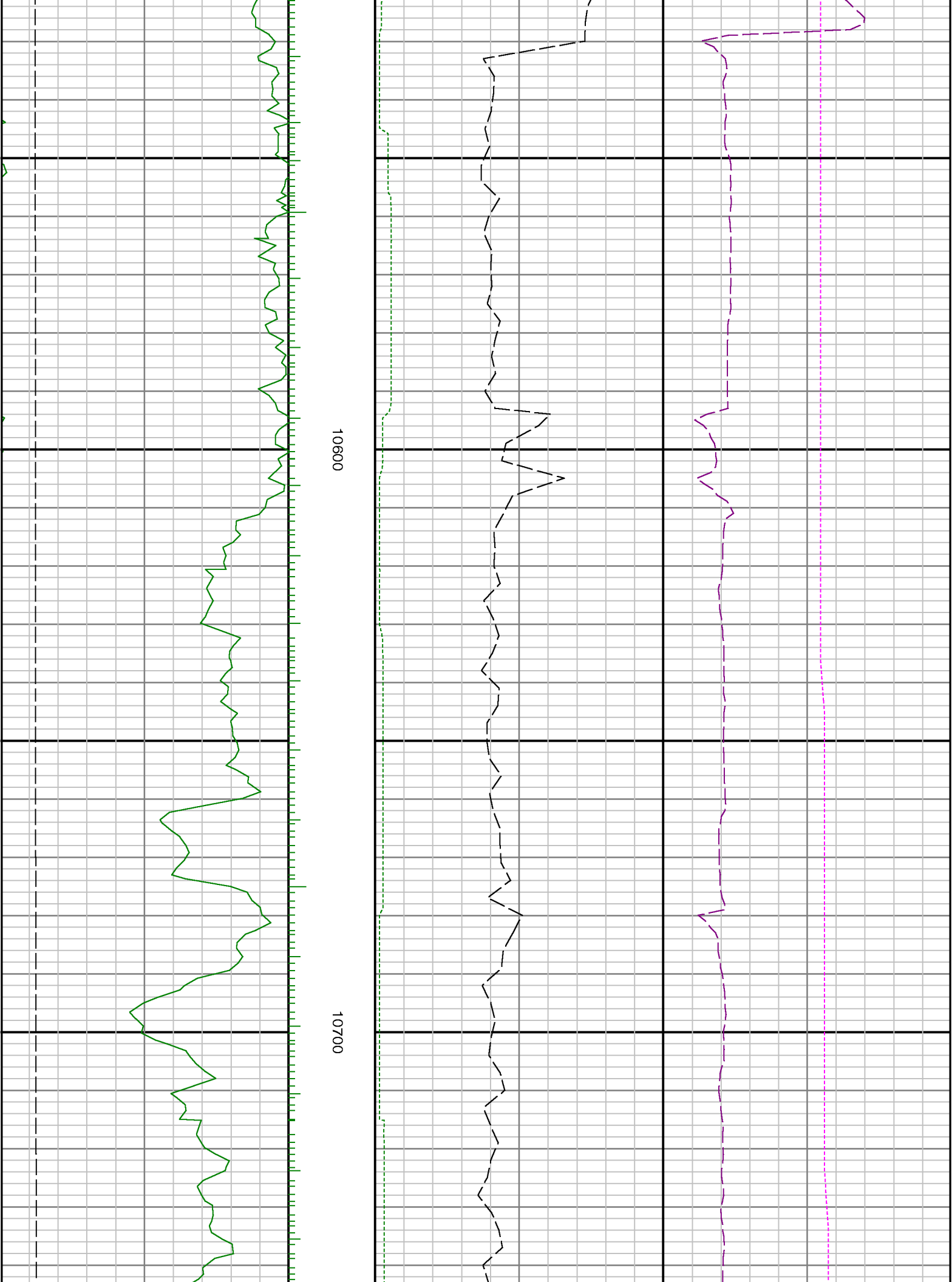


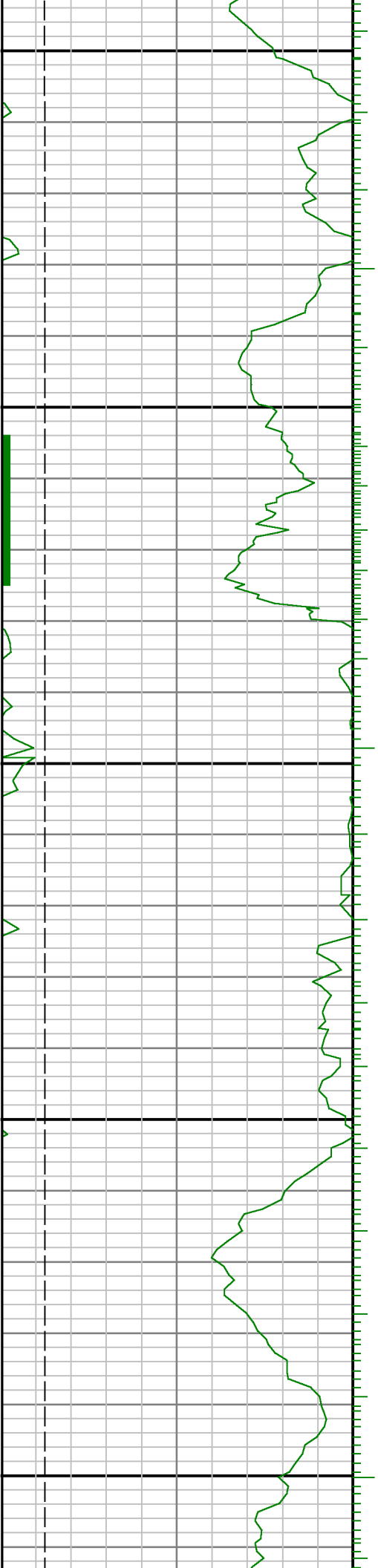


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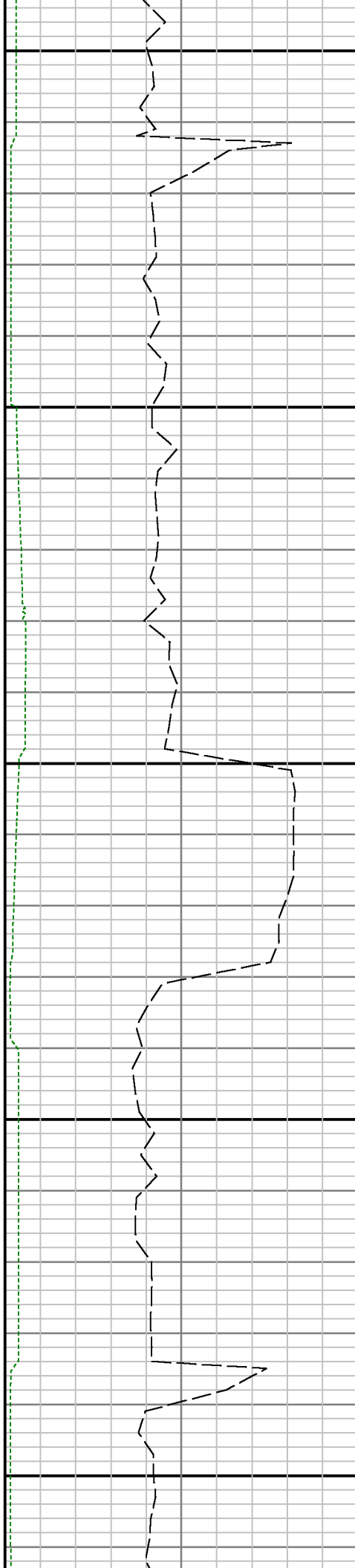


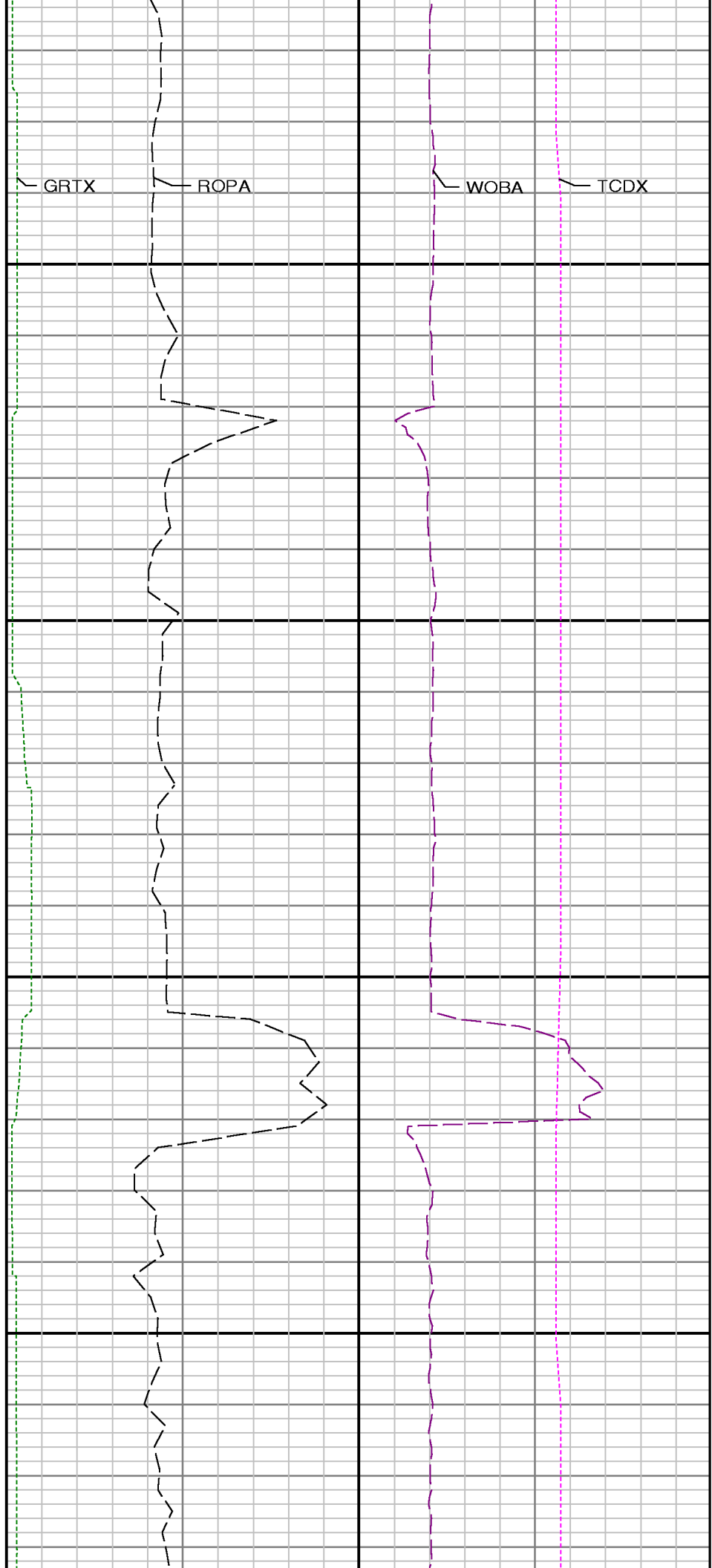
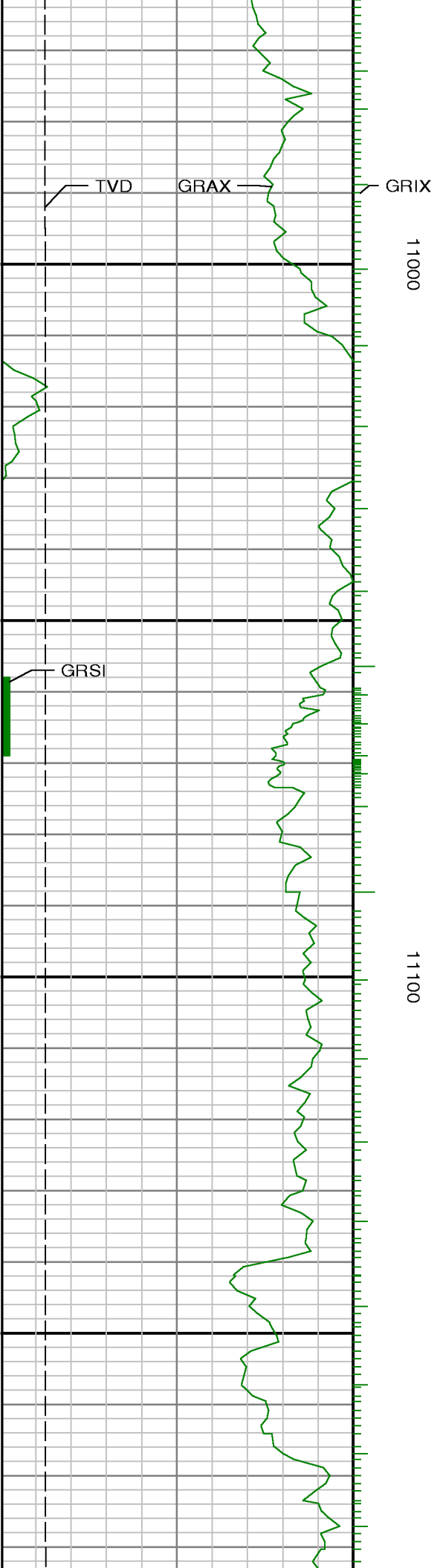


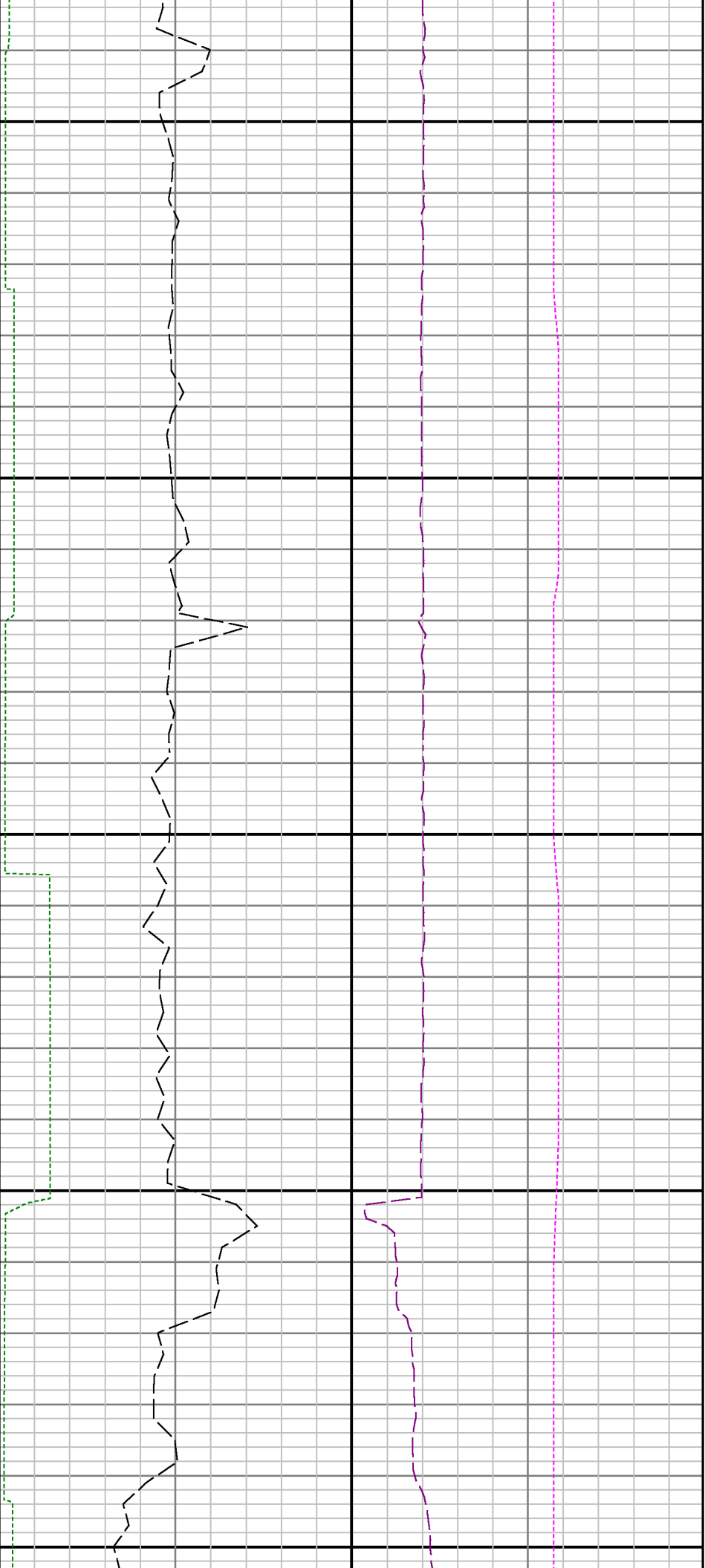


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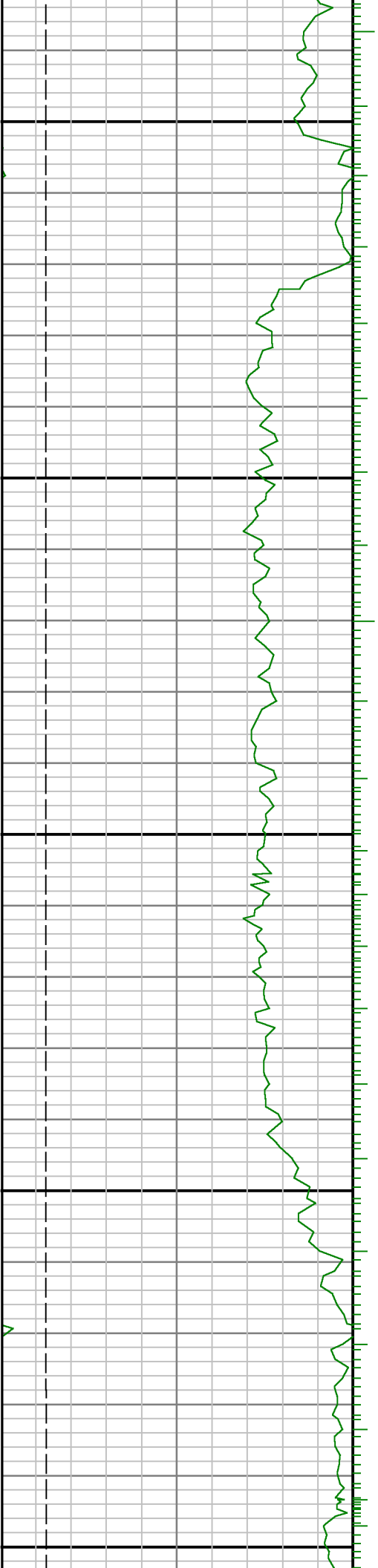


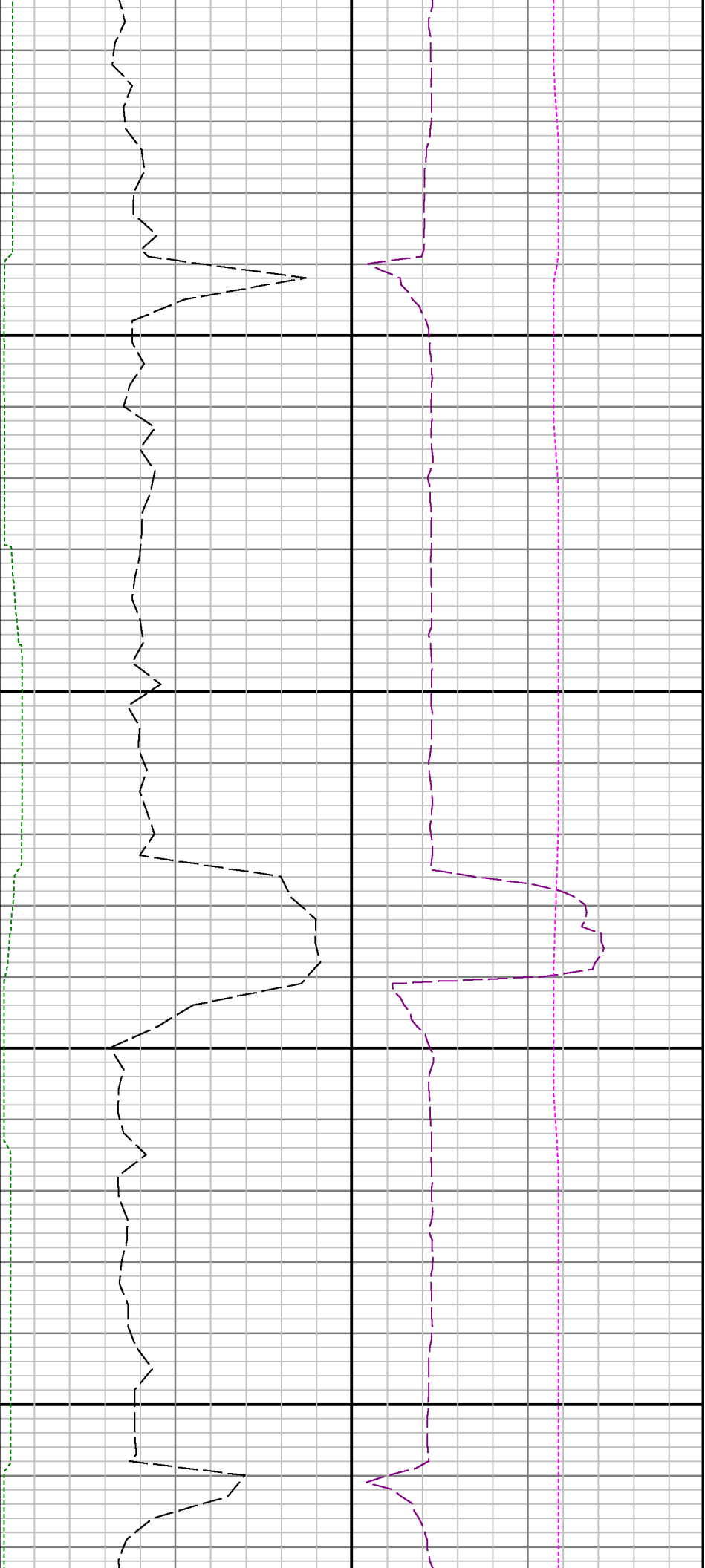


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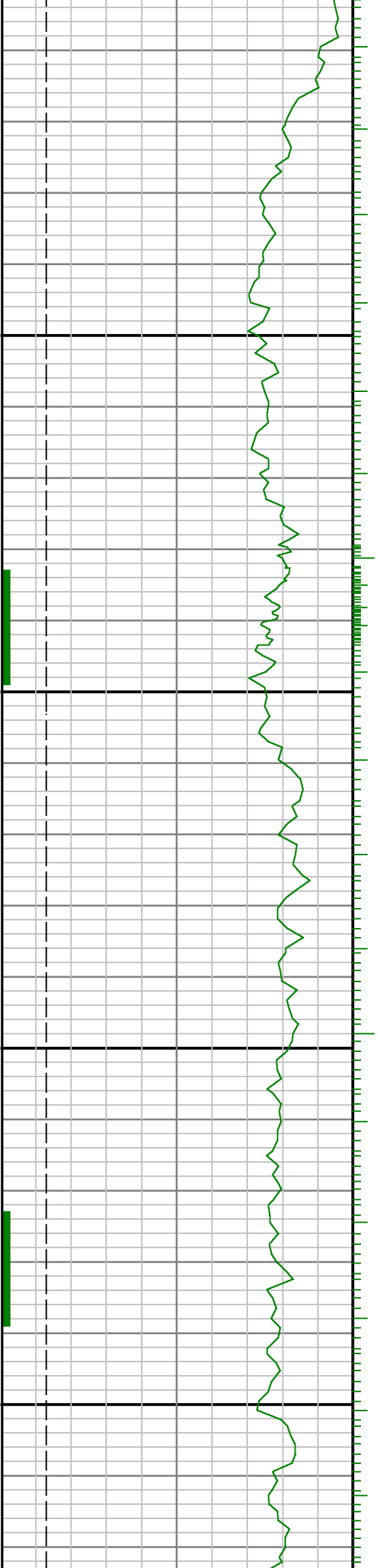
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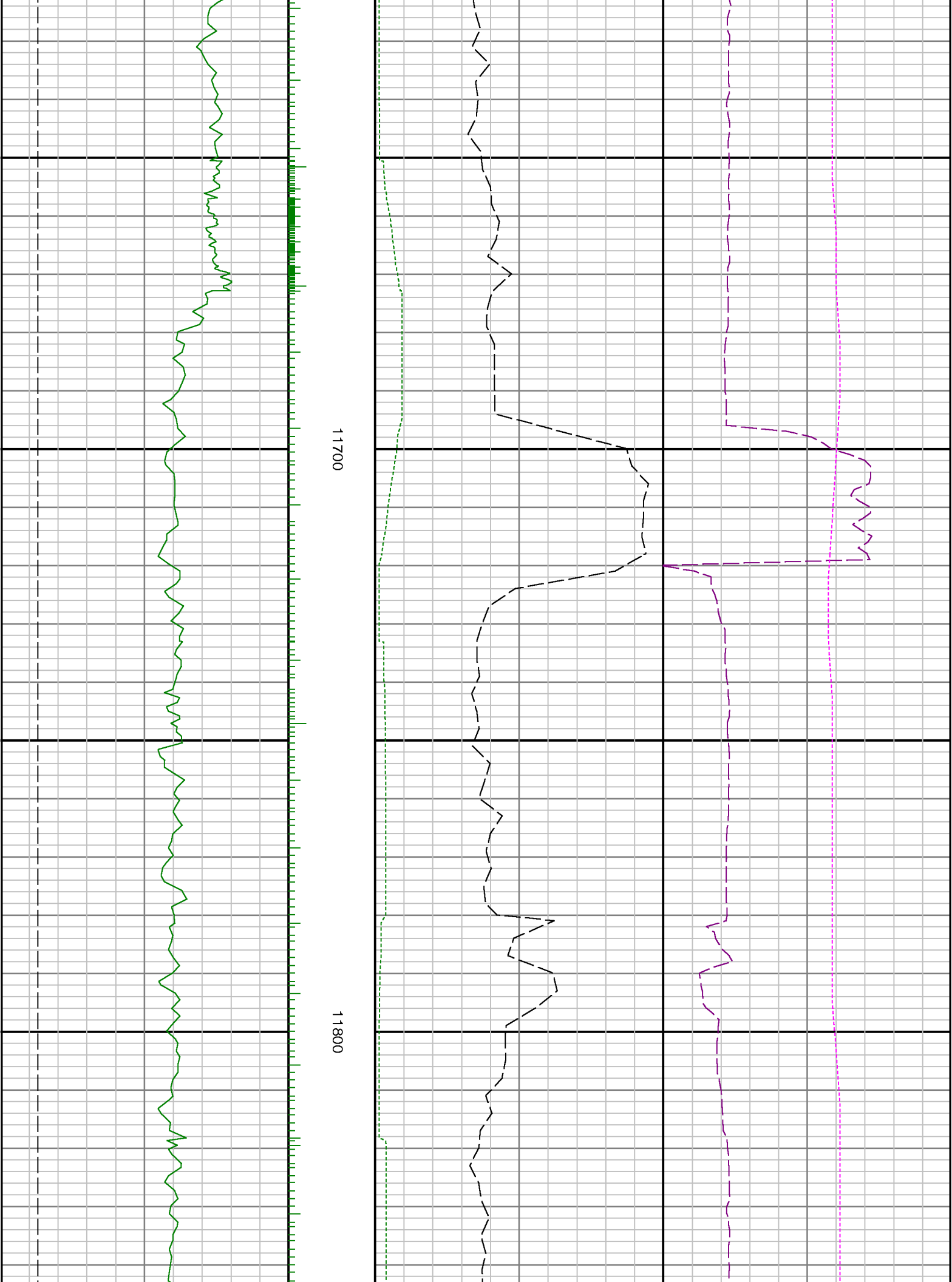


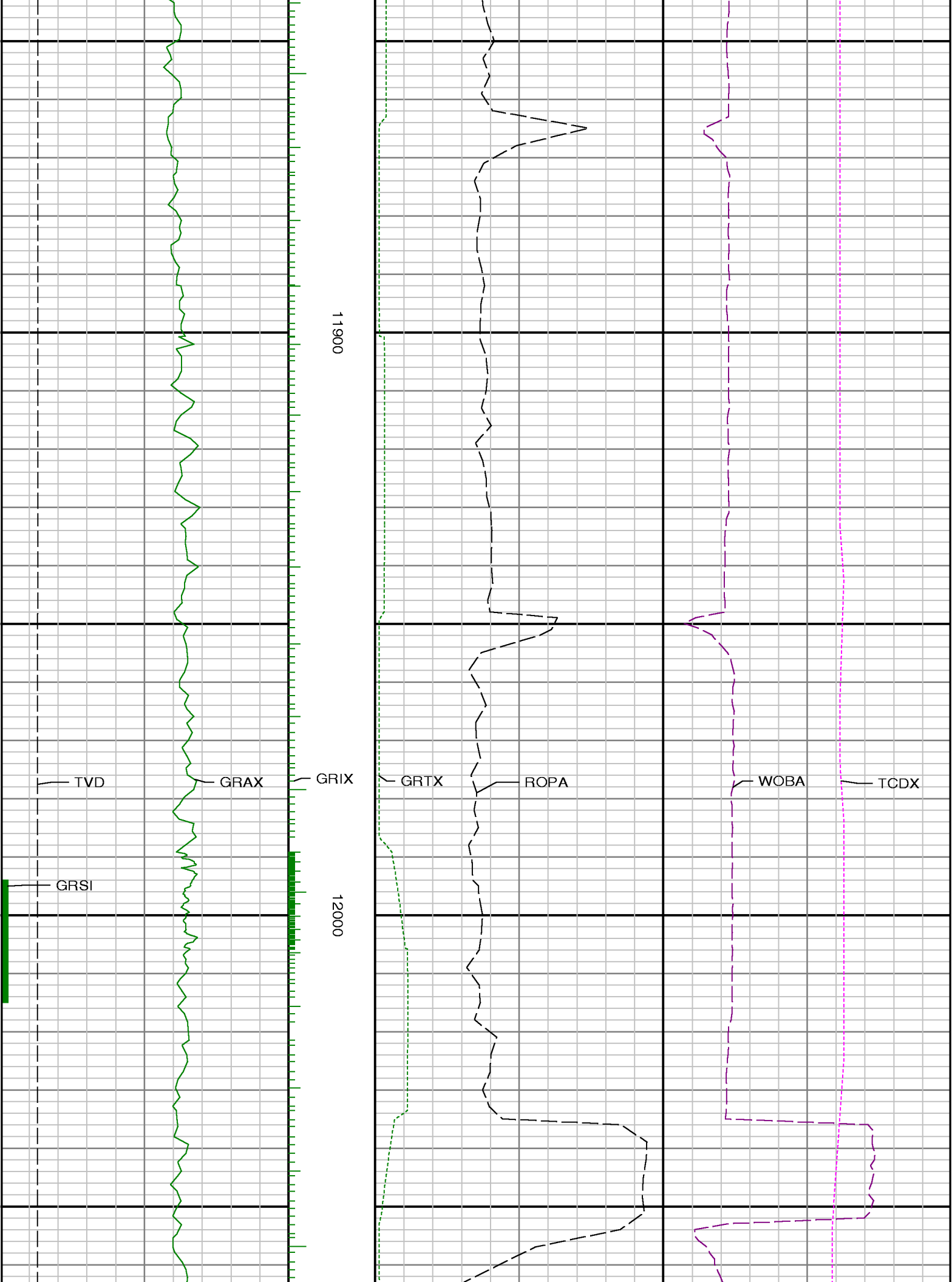


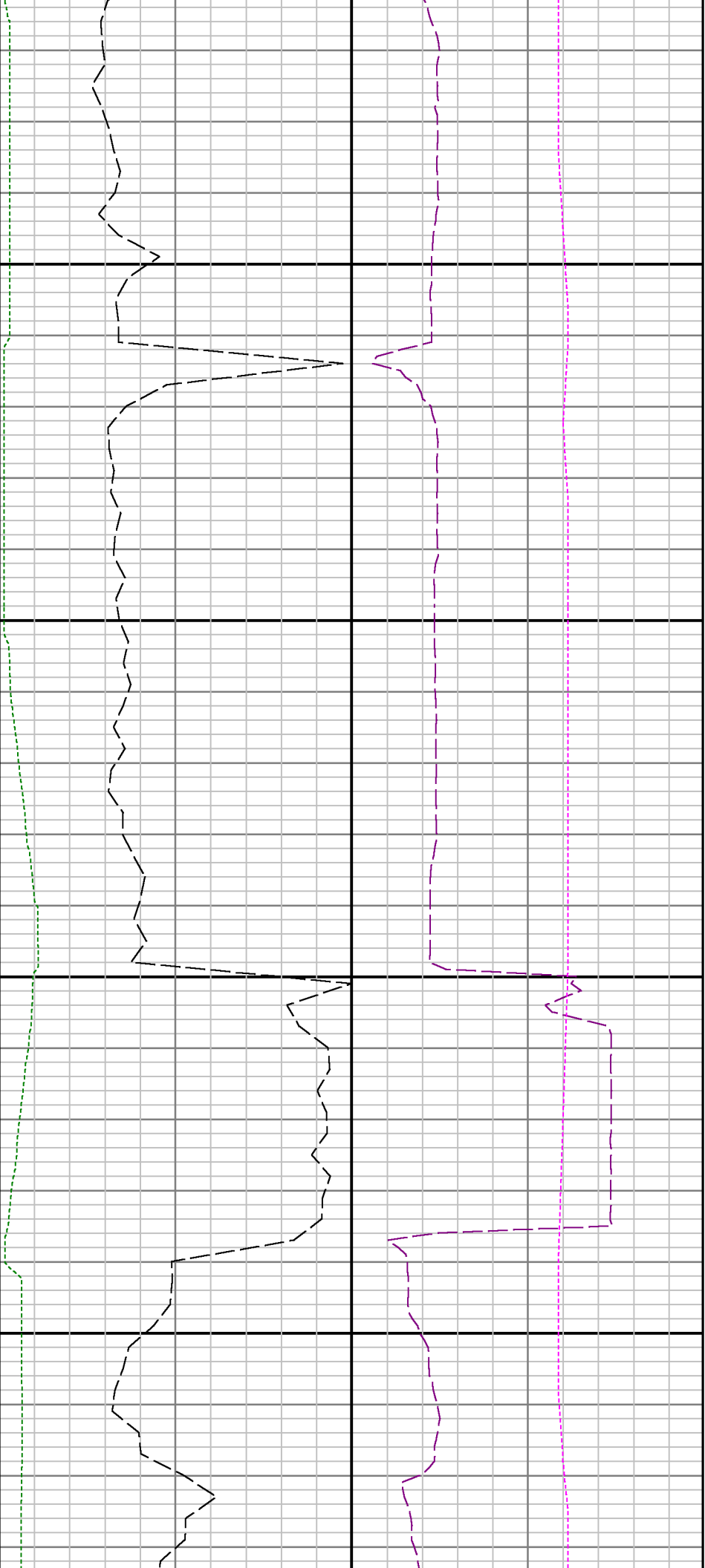
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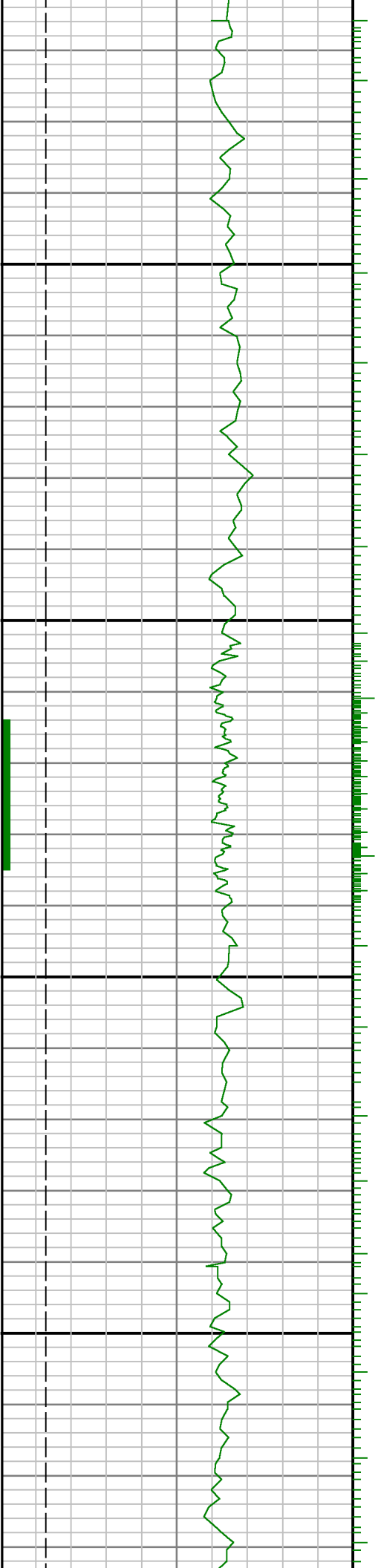






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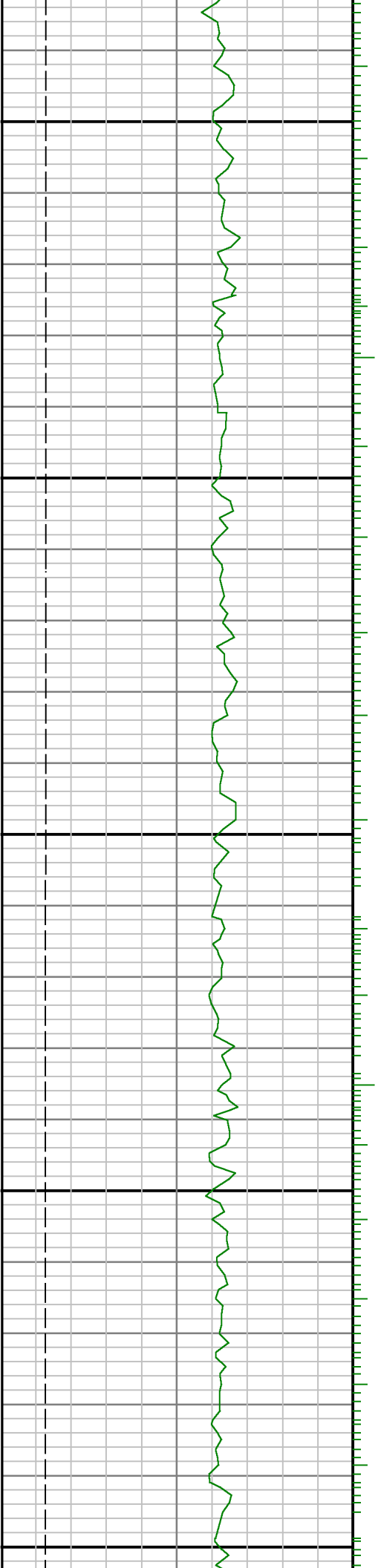


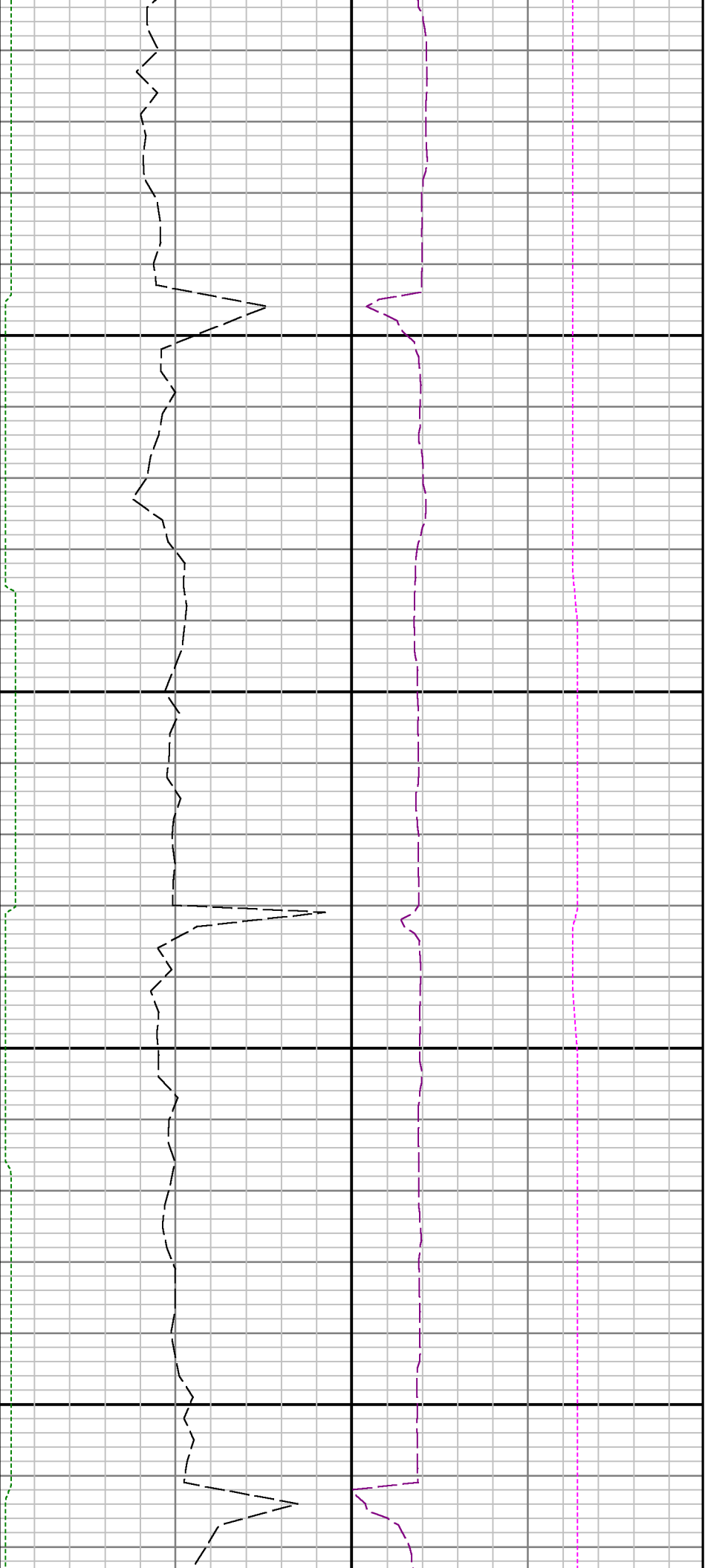


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