



Real Time Log

Natural Formation Evaluation
Gamma Ray

Scale:

1:240

Measured Depth

Company: Anadarko

Well: BARCLAY 3N-14HZ

Field: WELD COUNTY (KERR MCGEE)

Region: Continental US Country: United States

Status:

FINAL PRINT

Surface Location:

Latitude: 40° 7' 56.665" N

Longitude: 104° 51' 23.951" W

Other Services:

API Number:

05123390590000

Section: 14

TWN: 2N

Range 67E

Directional
VSS

Permanent Datum (P.D.): Mean Sea Level Elevation: 4948.00 ft.

Elevations: N/A

Log Measured From: Rig Floor 4964.00 ft. Above P.D.

KB: N/A
DF: 4964.00 ft.
GL: 4948.00 ft.

Depth Reference: Driller's Depth

Interval Logged

Dates

Magnetic Field Reference

Top: 6850 ft. Date From: 28/Feb/15 Date To: 09/Mar/16 Dip Angle: 66.85° Azi Reference North: True

Bottom: 12409 ft. Date To: 09/Mar/16 Total Mag to Reference

Spud Date: 28/Feb/15 Field Strength: 52727.0 nT North Correction: 8.57°

Borehole Record

Casing Record

Hole Size	From	To	Size	Weight	From	To
8.750 in.	1184 ft.	7732 ft.	9.625 in.	N/A	Surface	1124 ft.
6.125 in.	7731 ft.	12460 ft.	7.000 in.	N/A	Surface	7686 ft.

Mud Record

Deviation Record

Type	From	To	Hole Size	Interval	Inc / Az (Start)	Inc / Az (End)
Water Based Mud	Surface	12460 ft.	8.750 in.	6548 ft.	0.7° / 67.3°	83.1° / 0.1°
			6.125 in.	4765 ft.	83.1° / 0.1°	90.7° / 359.8°
					/	/
					/	/
					/	/
					/	/
					/	/

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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 (ft.)	Bottom (ft.)	From (ft.)	To (ft.)	Start		End		
1	1	2	8.750	PDC	6.000	Steerable	6850	7008	6893	7051	03/Mar/2015	17:03	03/Mar/2015	18:40	33
2	2	2	8.750	PDC	6.000	Steerable	7009	7665	7052	7732	04/Mar/2015	08:23	04/Mar/2015	18:31	11.5
3	3	3	6.125	PDC	6.000	Steerable	7665	10513	7733	10565	06/Mar/2015	21:54	07/Mar/2015	02:23	29
4	4	4	6.125	PDC	6.000	Steerable	10513	12409	10565	12460	08/Mar/2015	10:46	09/Mar/2015	05:32	12

Crew

Name	Arrive	Depart	Name	Arrive	Depart	Name	Arrive	Depart
	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite
Sumanth Belawadi	28/Feb/2015	09/March/2015	Andrew Clancy	28/Feb/2015	09/March/2015	Robert Bartlett	28/Feb/2015	05/March/2015

Will Drake	28/Feb/2015	09/March/2015	Stephan Martinez	05/March/2015	09/March/2015			
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Mud Properties Record

Date / Time		LWD Run No.	Measured Depth (ft.)	Mud Type	Density (sg)	Viscosity (cp)	pH	Fluid Loss (cc)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
28/Feb/2015	20:00	1	1143	Water Based Mud	8.9	36	12.0	N/A	0.8/95	Halliburton	2800	N/A
02/Mar/2015	20:00	2	4048	Water Based Mud	8.6	28	8.0	N/A	0.0/98	Halliburton	3600	N/A
06/Mar/2015	20:00	3	7731	Water Based Mud	9.5	35	7.5	N/A	2.0/91.8	Halliburton	3200	N/A
08/Mar/2015	20:00	4	11341	Water Based Mud	9.5	43	8.4	N/A	2.3/90.5	Halliburton	3700	N/A

Mnemonics

Curve	Description	Units
GRAX	Gamma Ray Apparent, 0.5 ft. Avg	API
GRIX	Gamma Ray Data Density	points
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	12479870	Directional	46.56	6.750	3.250
1	SRIG	12613300	Gamma	43.18	6.750	3.250
2	DIR	12479870	Directional	39.88	6.750	3.250
2	SRIG	12613300	Gamma	36.50	6.750	3.250
3	DIR	11685175	Directional	52.51	4.750	2.688
3	SRIG	12041110	Gamma	49.13	6.750	2.688
4	DIR	11625186	Directional	53.26	4.750	2.688
4	SRIG	10662886	Gamma	49.88	6.750	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

<p>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.</p> <p>2.) Baker Hughes Runs 1 and 2 utilized a 6 3/4 inch NaviGamma (Directional and Gamma Ray) tool behind an 8 3/4 inch bit and steerable assembly from 1184 to 7732 feet MD (1183.97 to 7320.45 feet TVD).</p>
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3.) Baker Hughes Run 3 and Run 4 utilized a 4 3/4 inch NaviGamma (Directional and Gamma Ray) tool behind a 6 1/8 inch bit and steerable assembly from 7733 to 12460 feet MD (7320.50 to 7267.80 feet TVD).

4.) A sliding indicator is shown on the left side of track 1 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.)	LWD Run No.	Remark
1	6850	8.750	1	Logging services began at 6850. No logging data prior to 6850 feet MD.(6743.78 feet TVD) as per client request.
2	7025	8.750	1	The interval from 7009 to 7052 feet MD(6901.75 to 6943.92 feet TVD) was logged up to 930 minutes after being drilled due to changing out motor with a 2.7 bit to bend.
3	7715	8.750	2	The interval from 7695 to 7733 feet MD(7317.50 to 7320.50 feet TVD) was logged up to 3103 minutes after being drilled due to casing operations
4	10530	6.125	3	The interval from 10514 to 10594 feet MD(7326.47 to 7324.07 feet TVD) was logged up to 935 minutes after being drilled due to changing out MWD, motor and a bit due to slower ROP's.
5	12410	6.125	4	The interval from 12409 to 12460 feet MD (7268.29 to 7267.80 feet TVD) was not logged due to gamma sensor offset to bit at TD

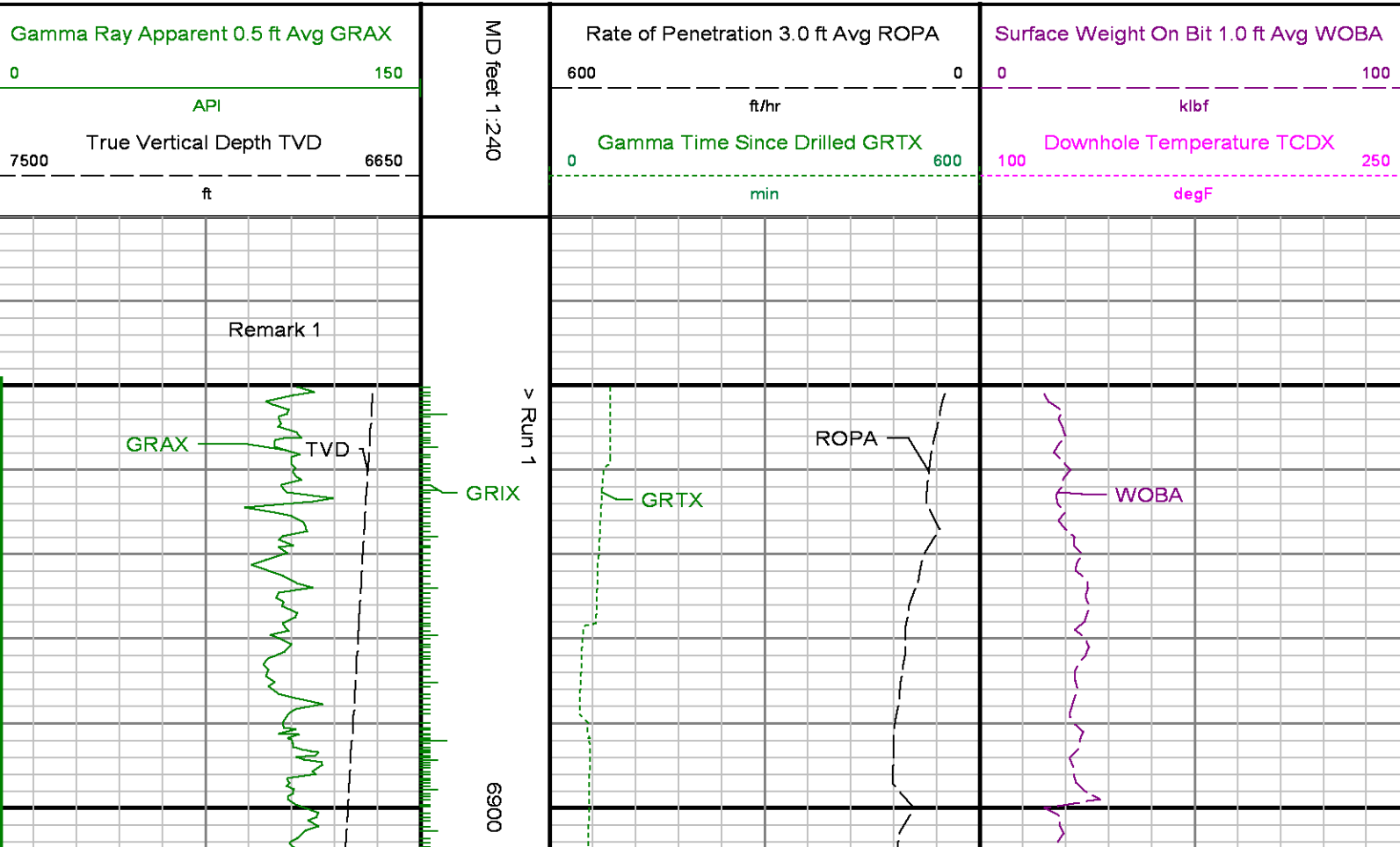


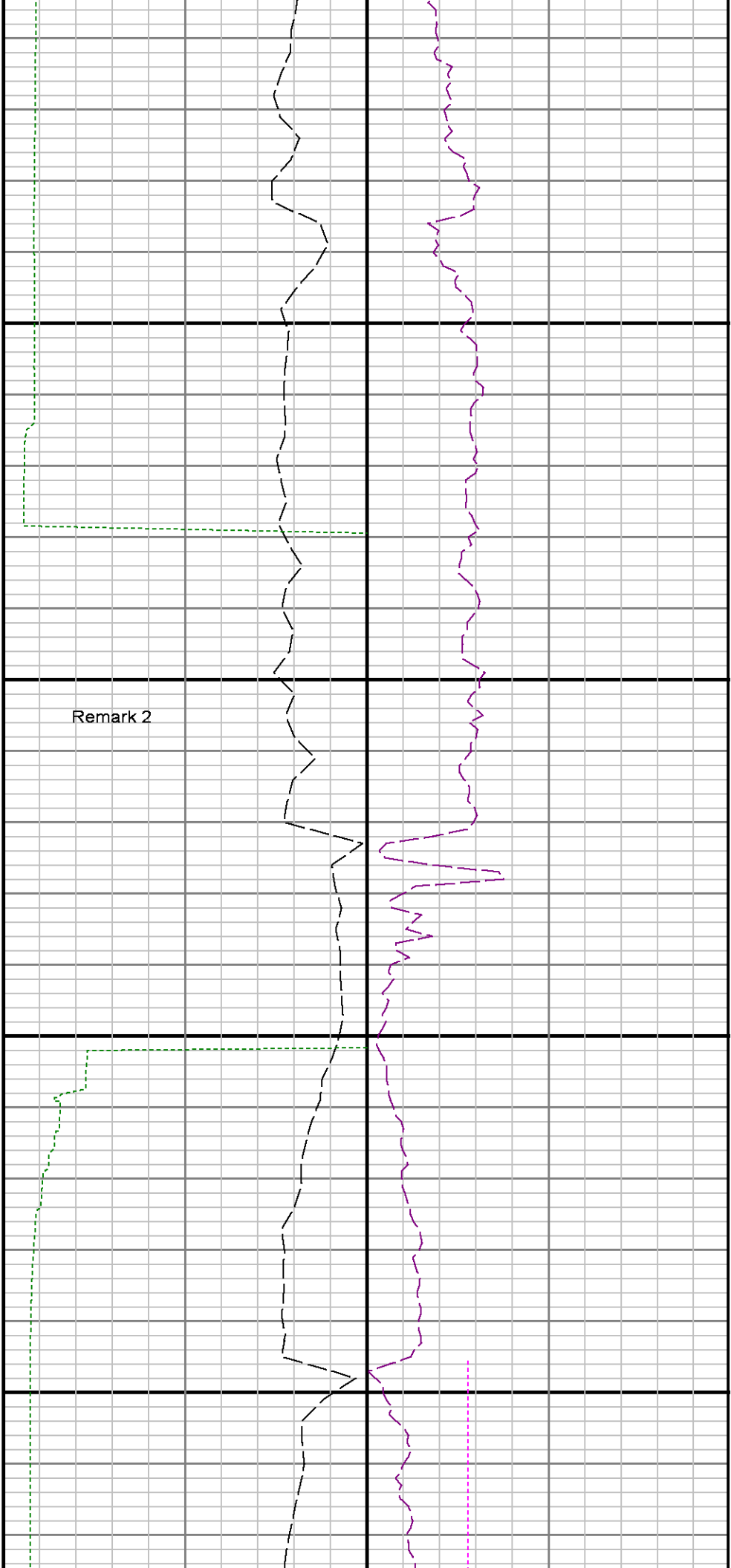
Company : Anadarko

Well : BARCLAY 3N-14HZ

Interval : 6830.00 - 12500.00 feet

Created : 09/Mar/2015 3:46:06 AM



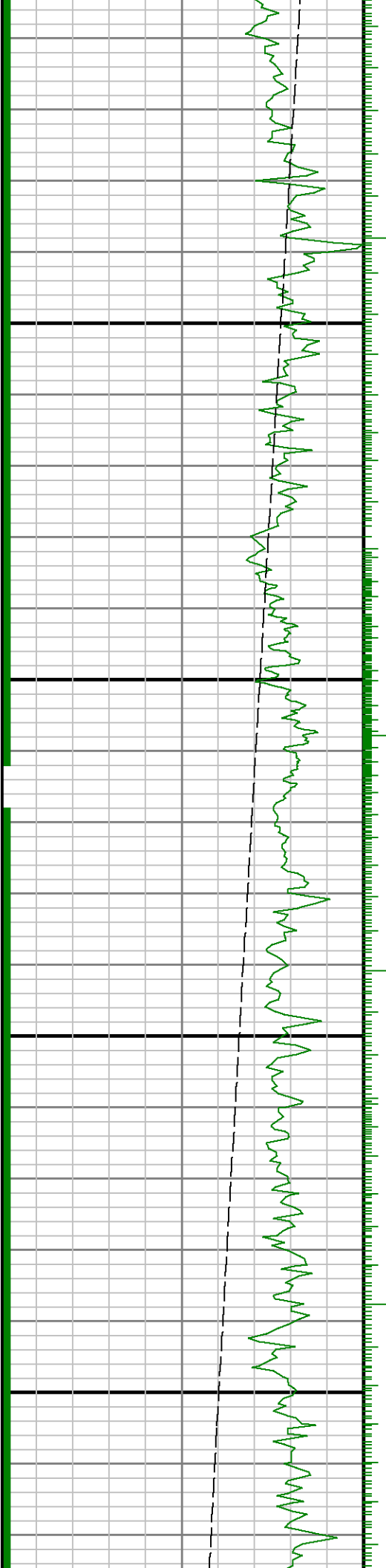


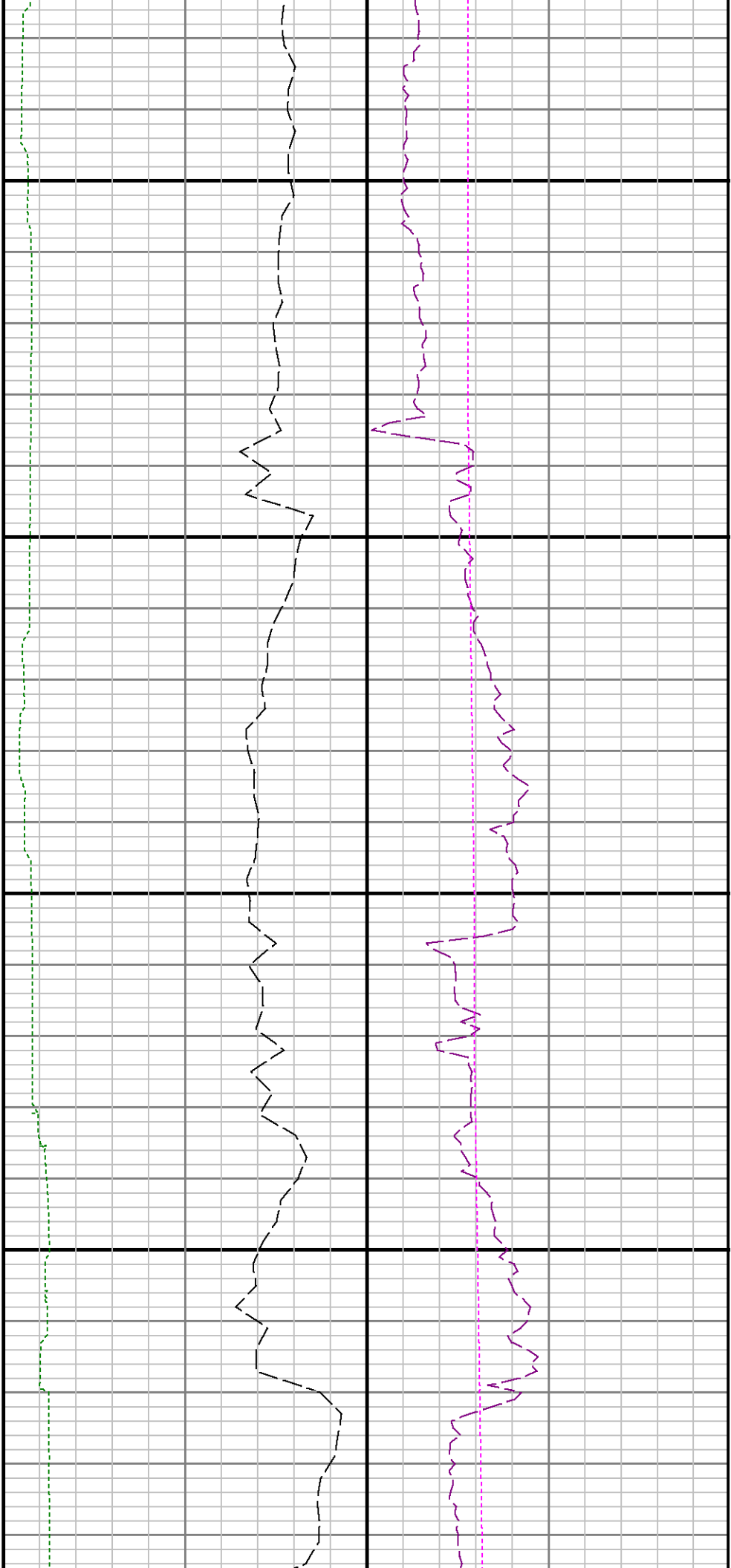
Remark 2

Run 1 < > Run 2

7000

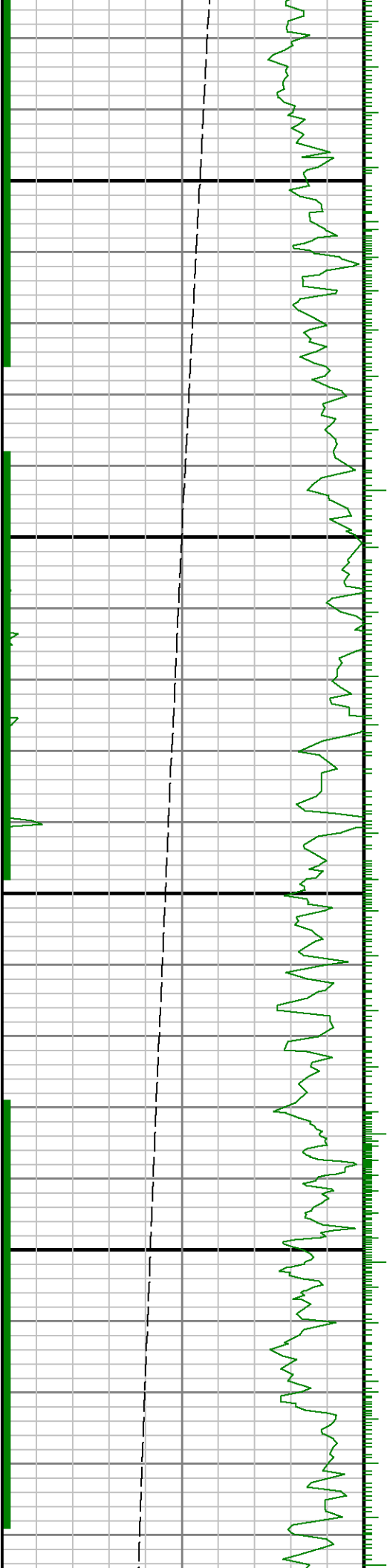
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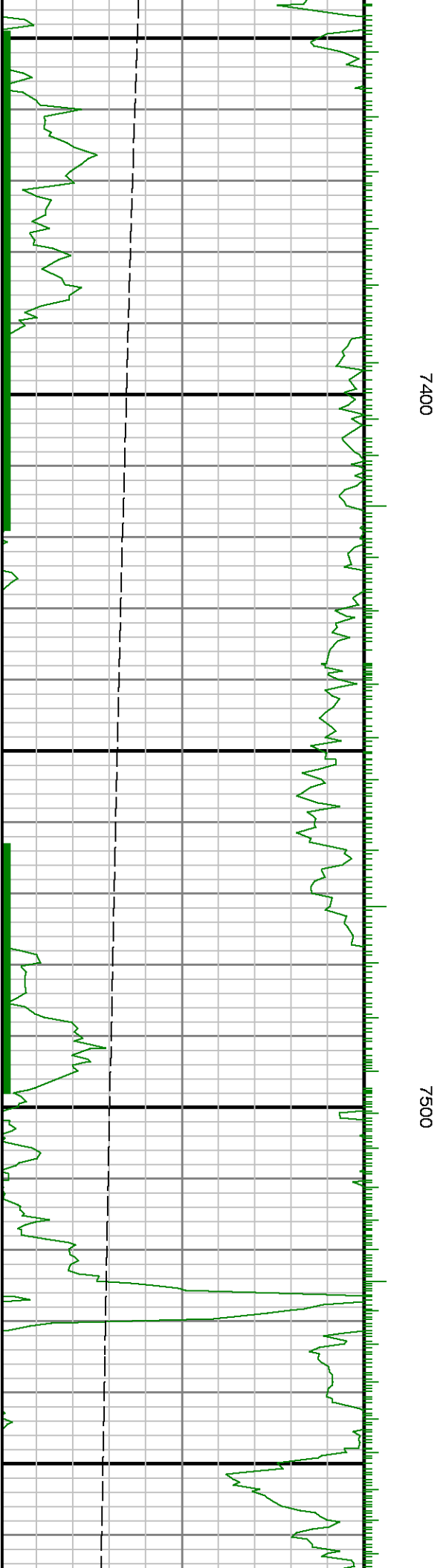
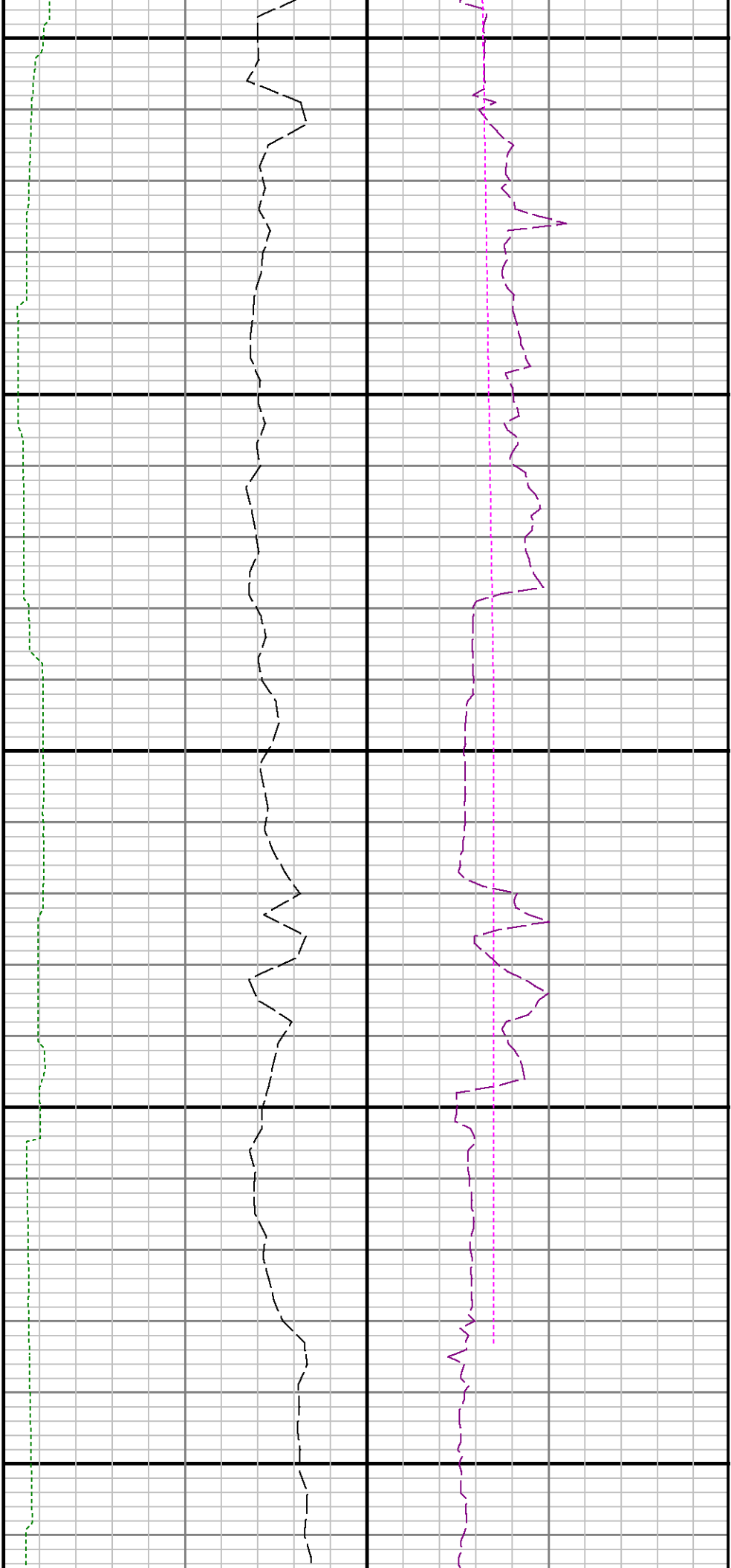


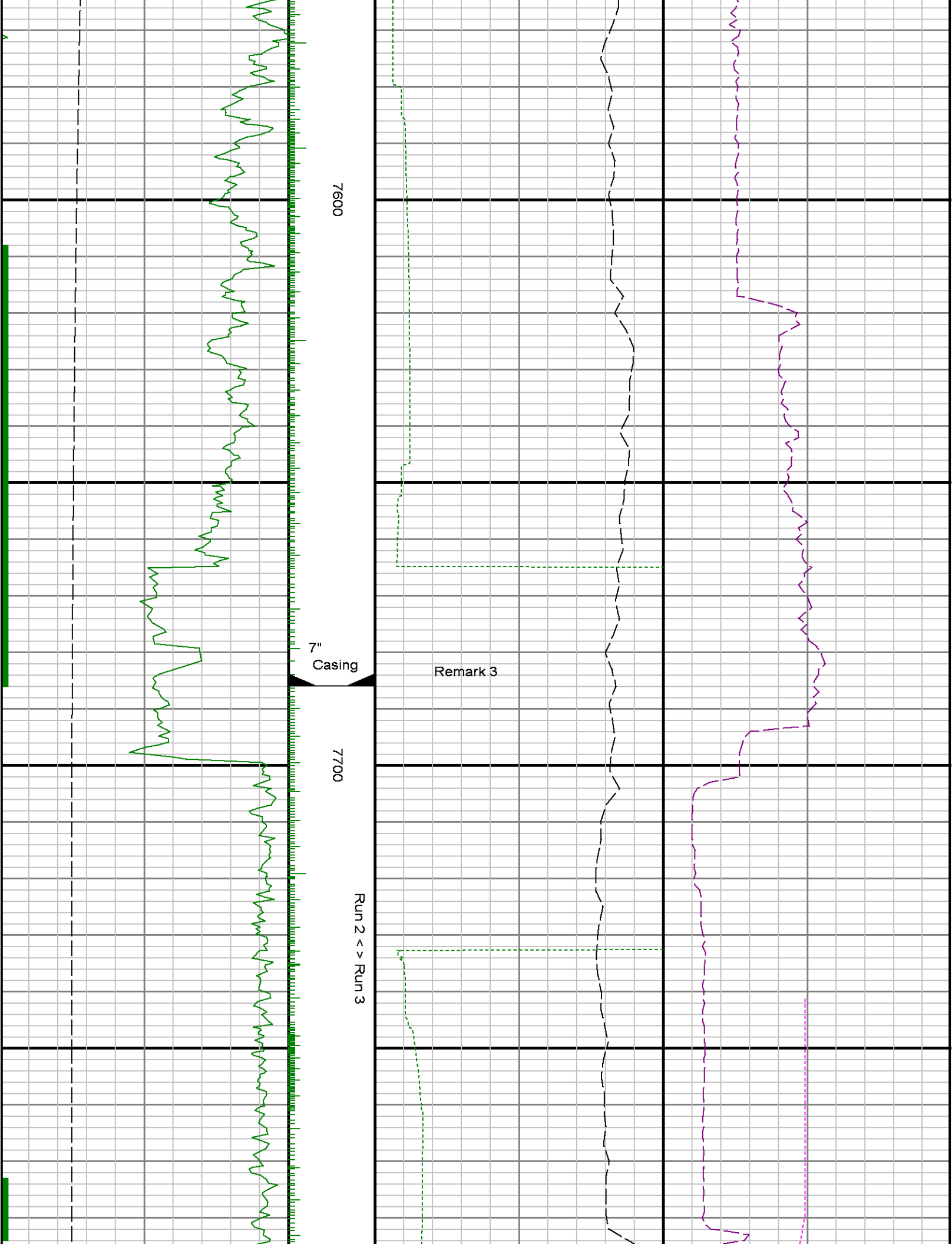


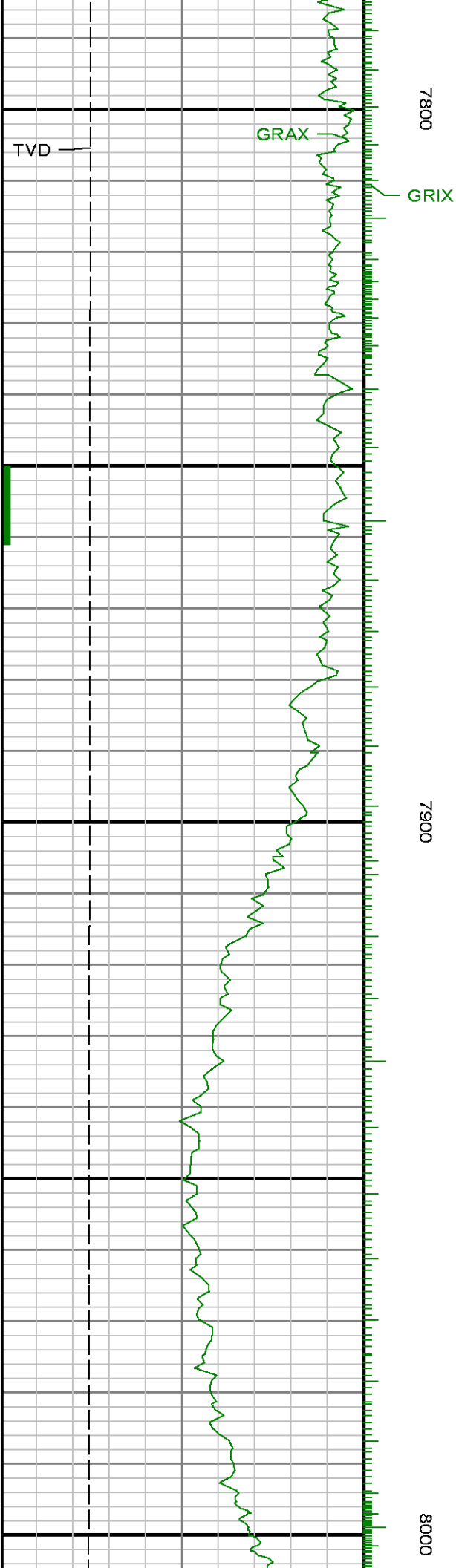
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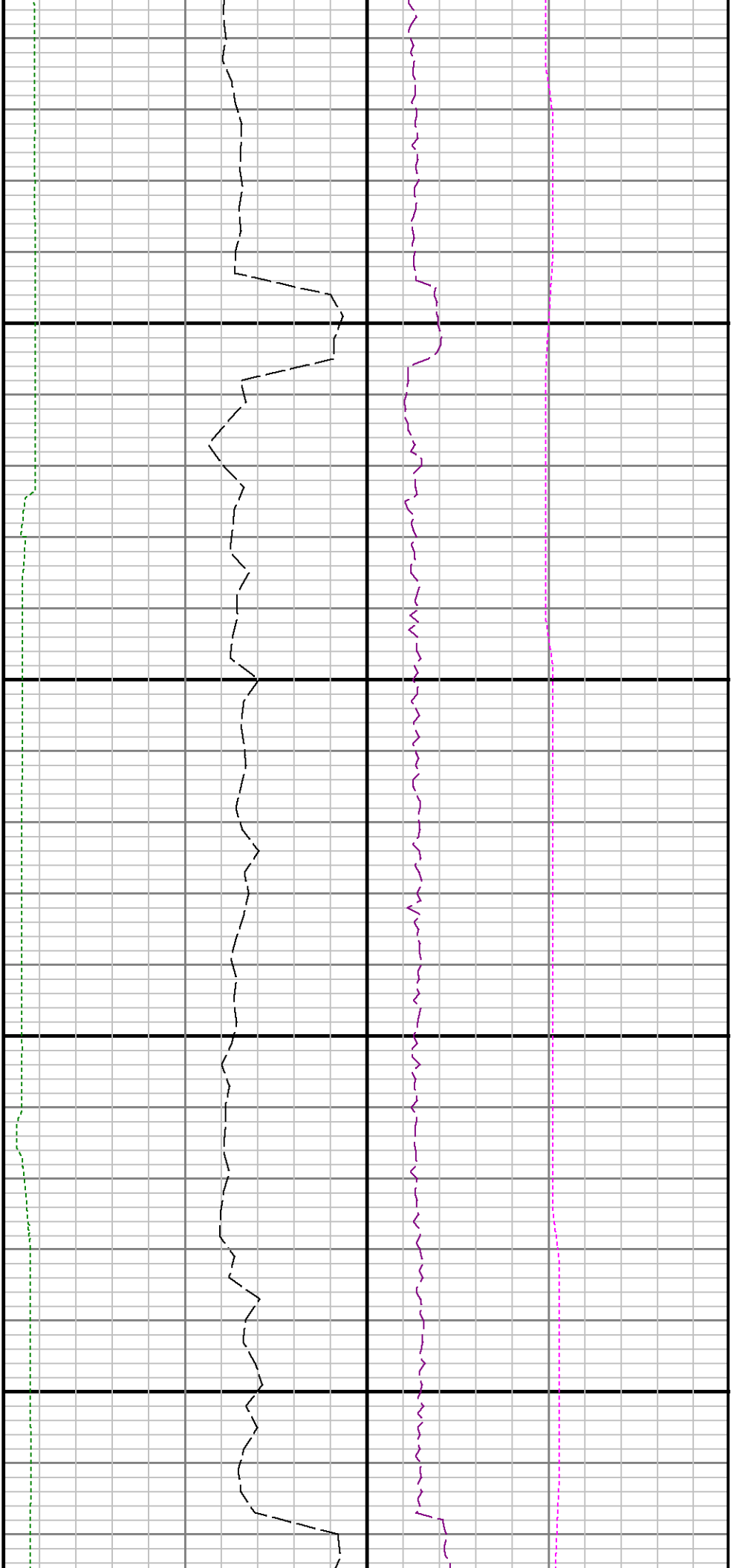
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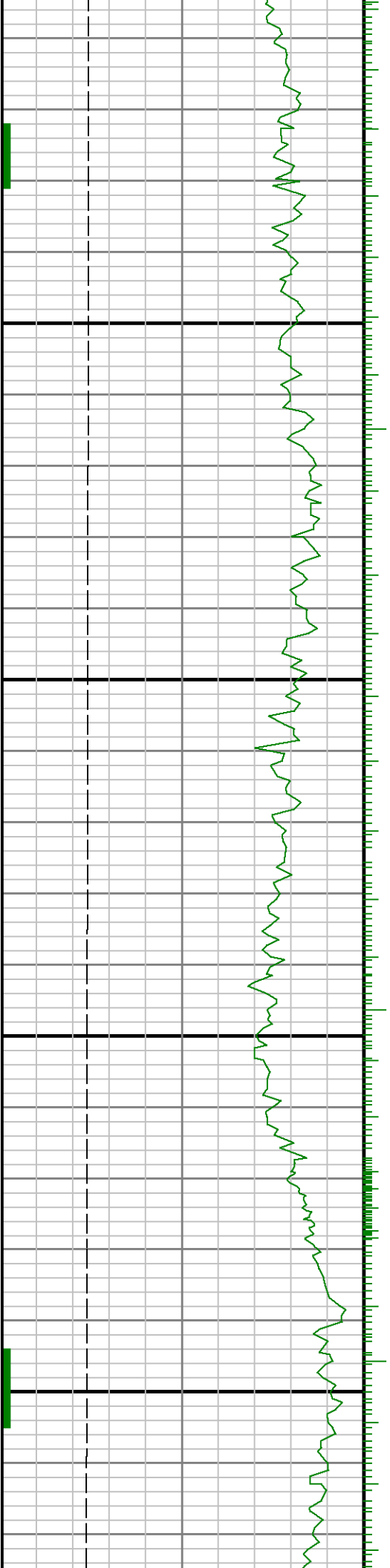


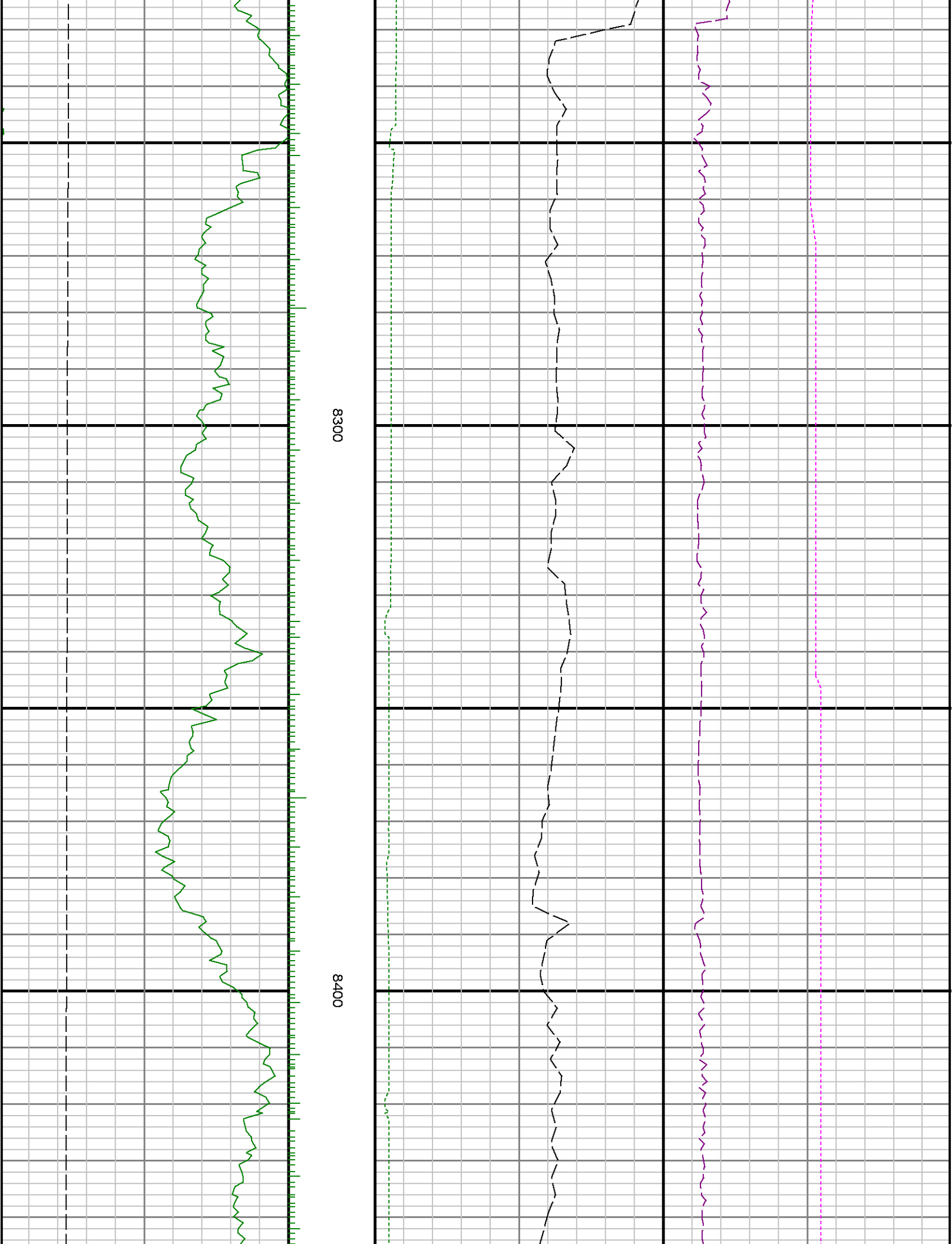


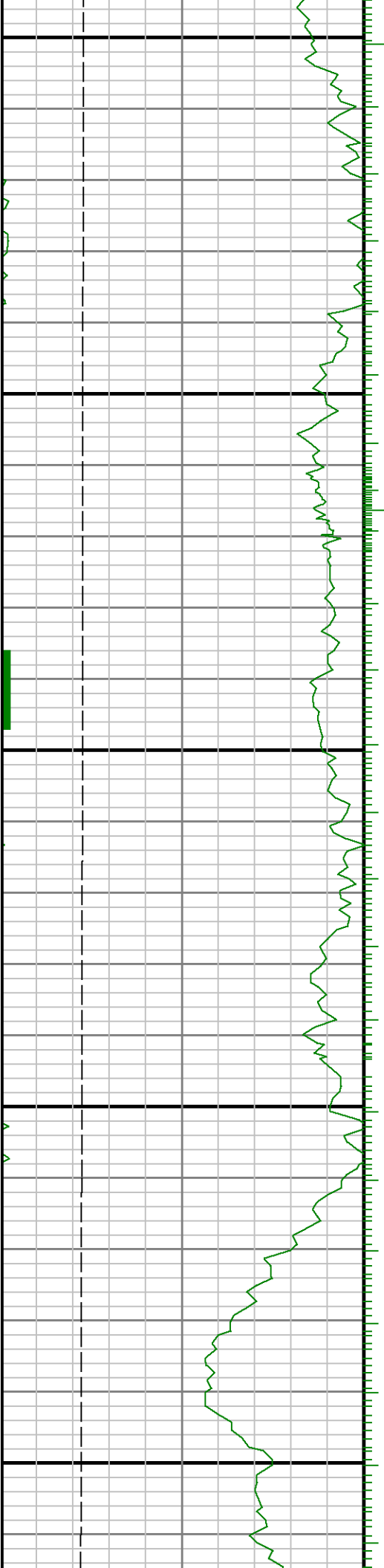


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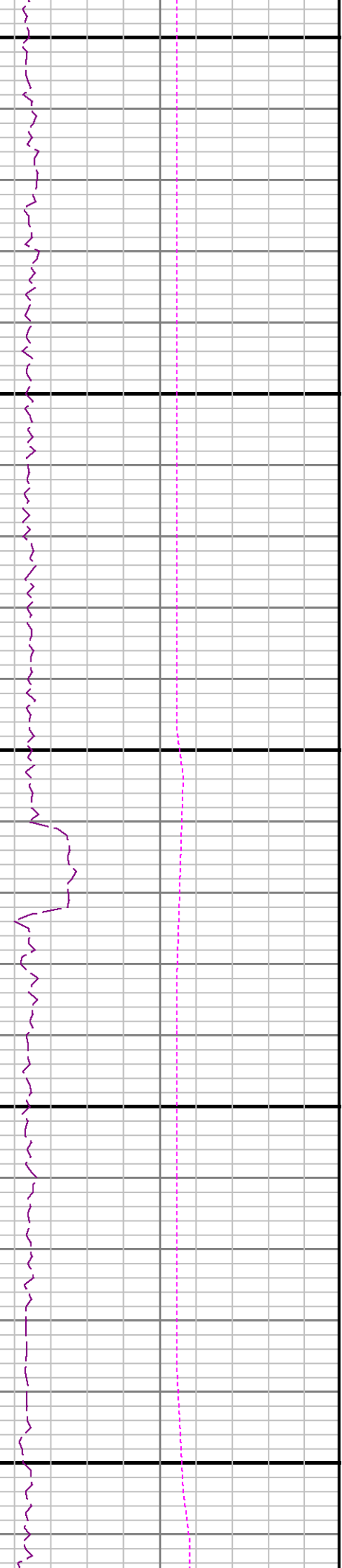
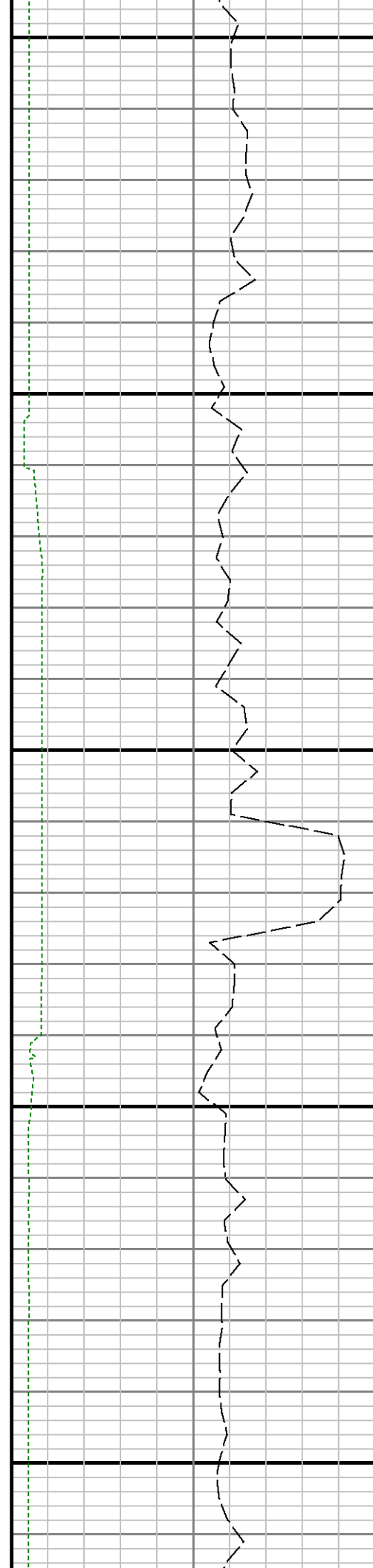


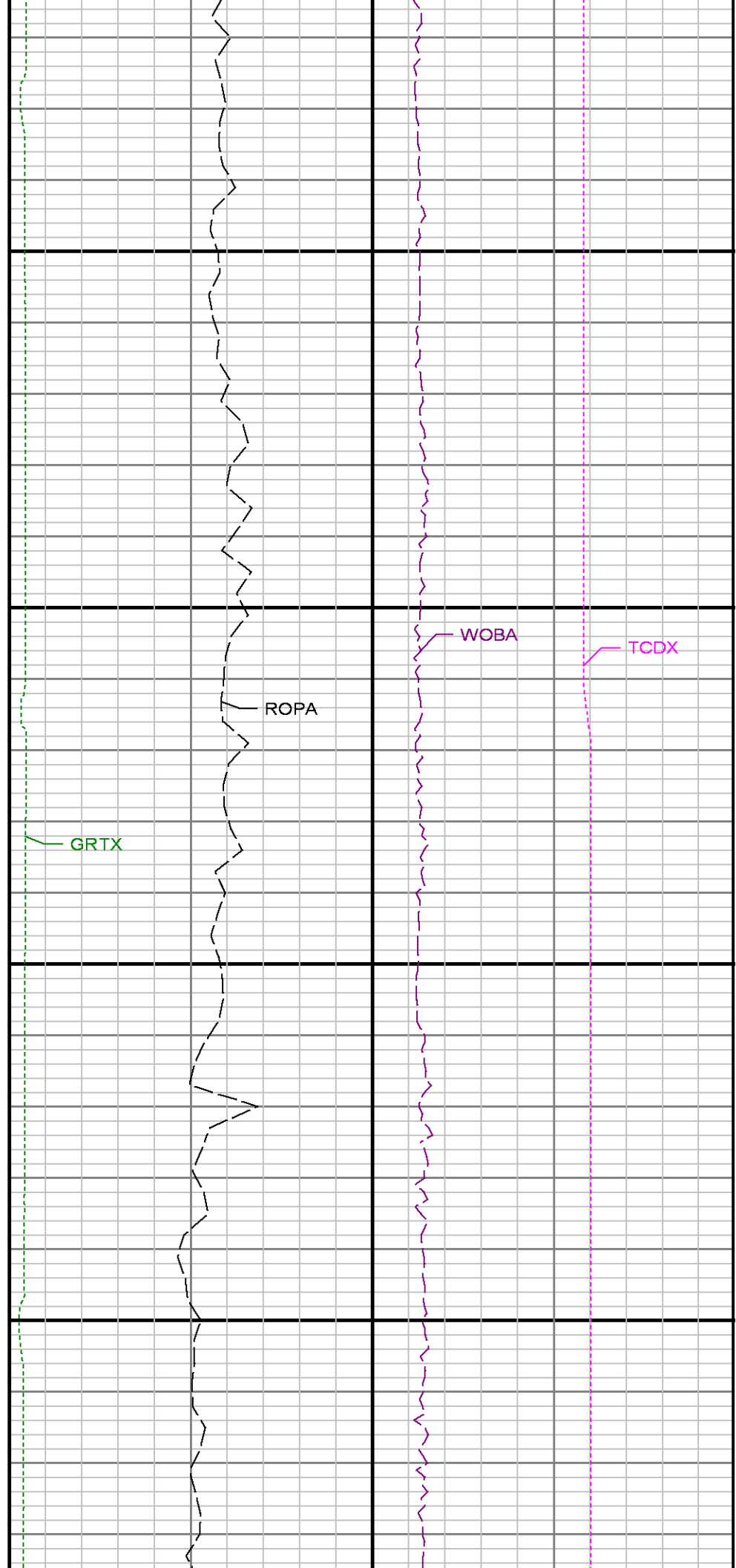
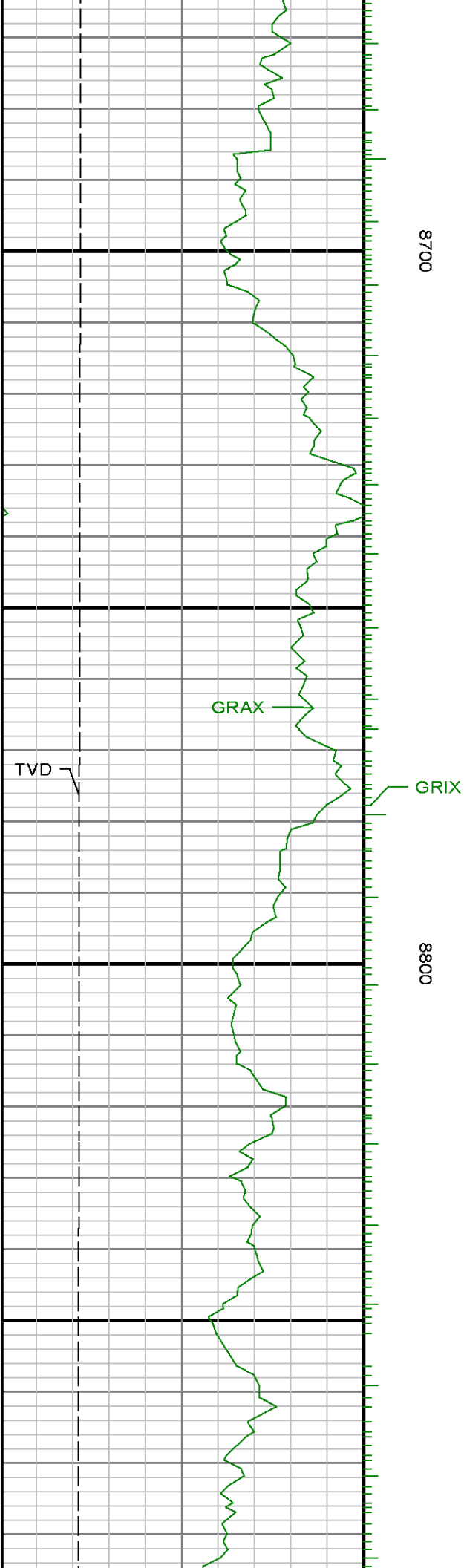


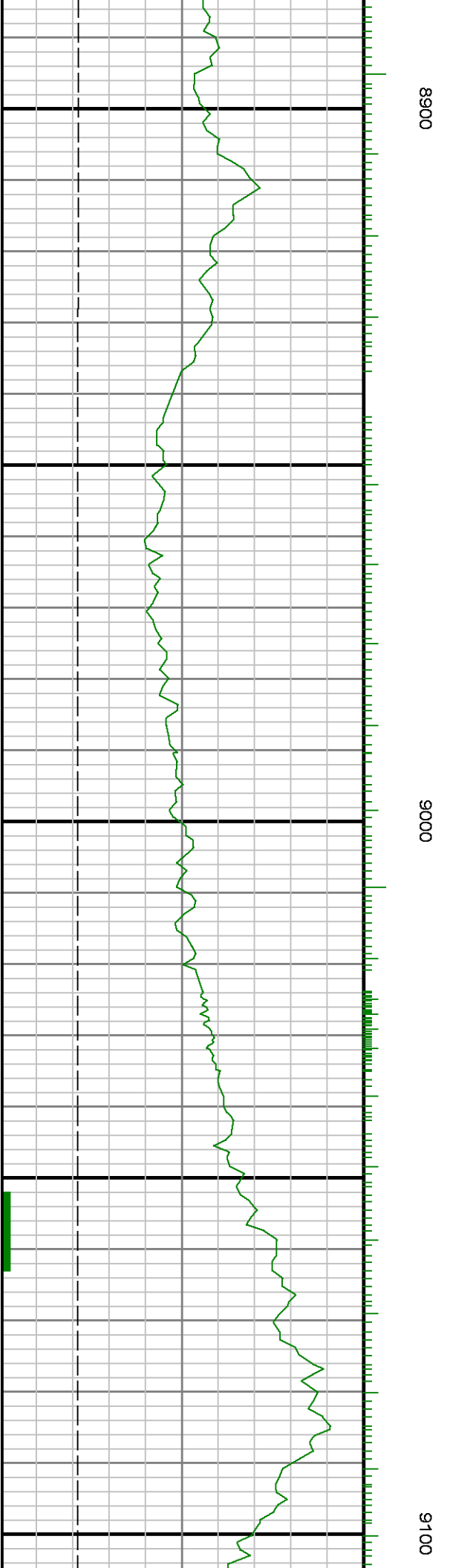
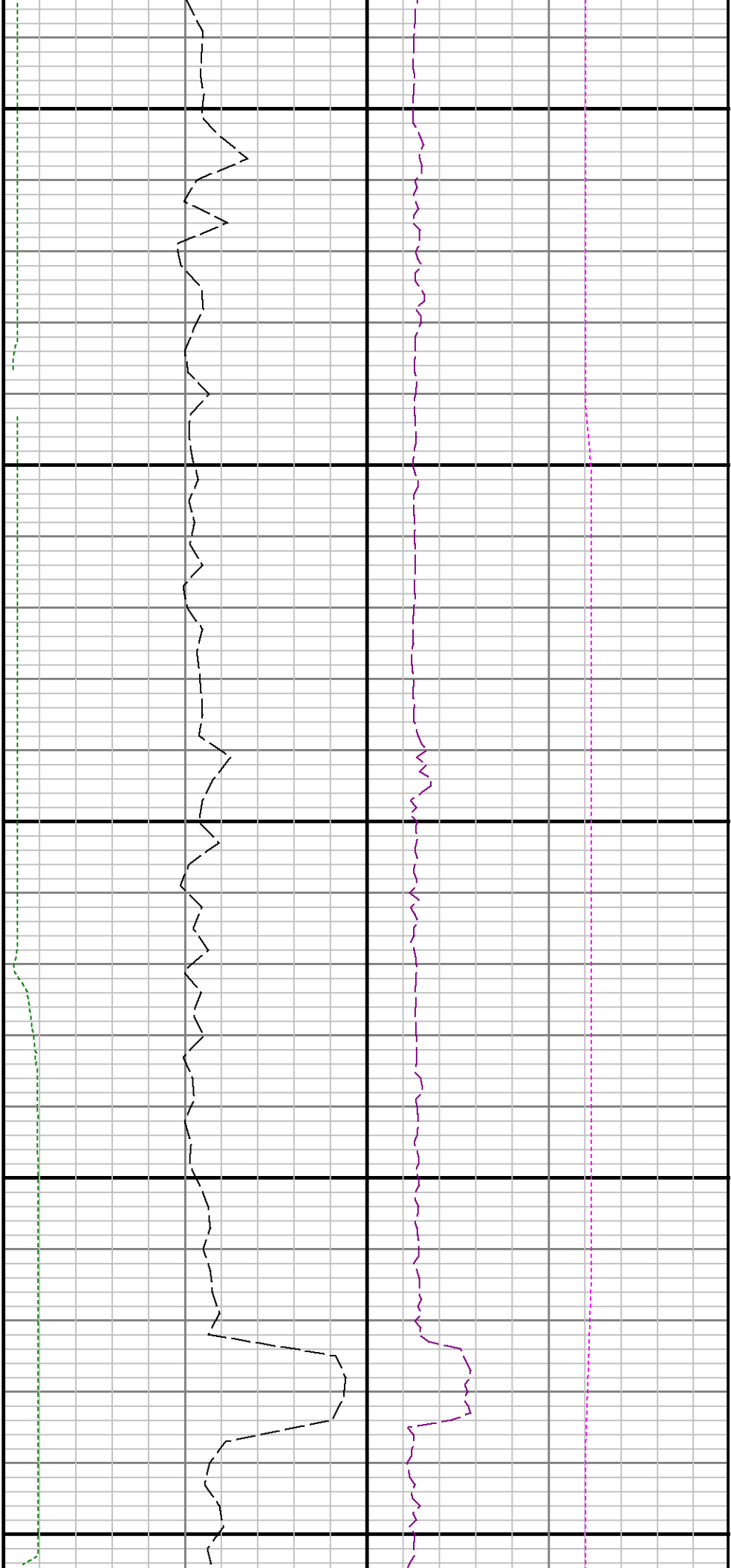


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8500



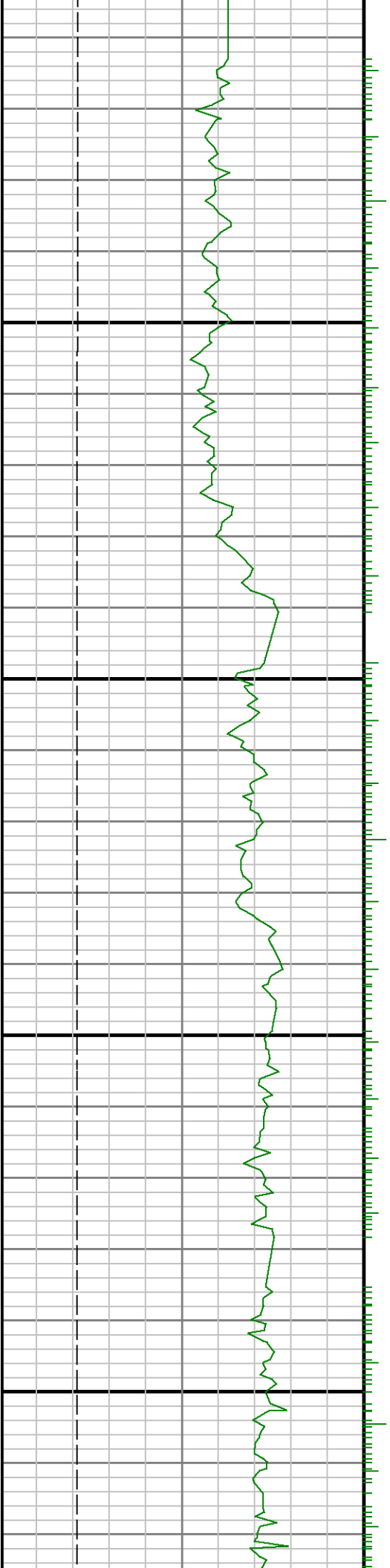


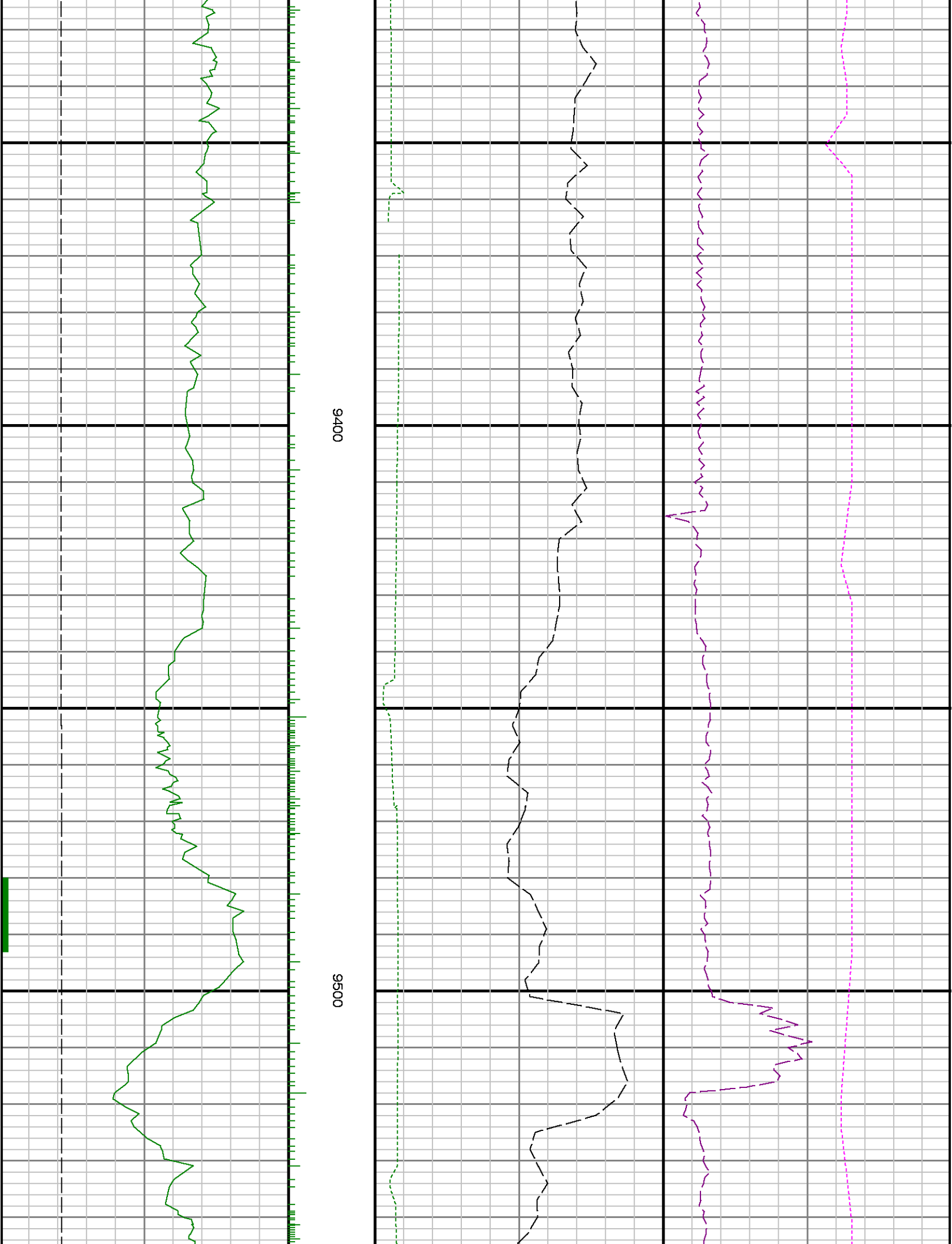


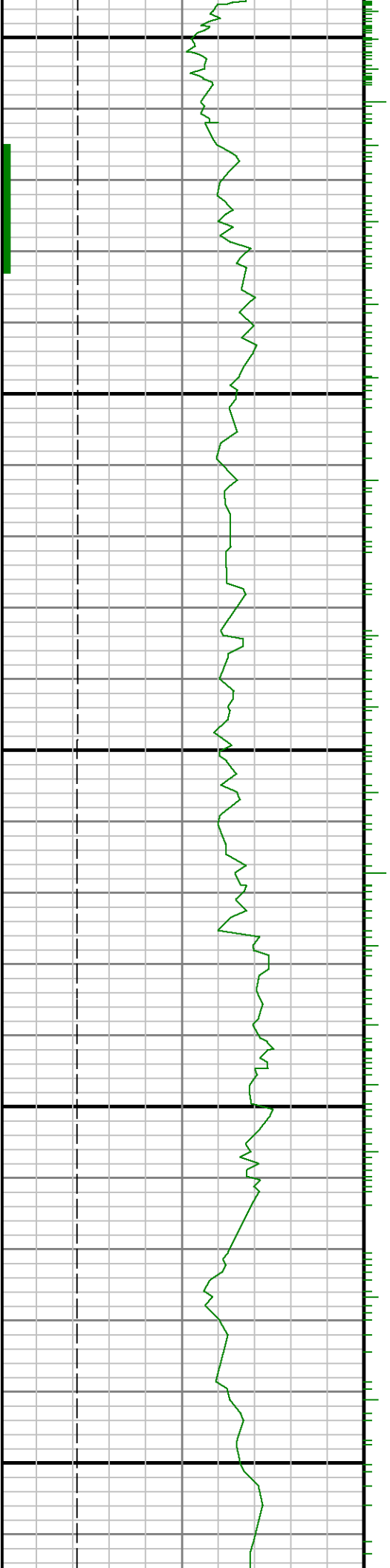


9200

9300

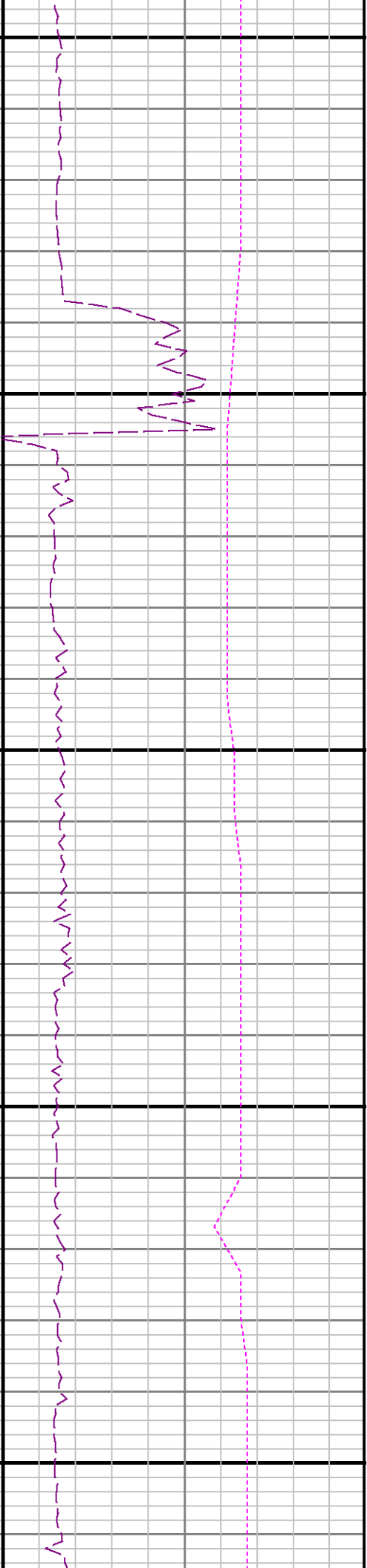
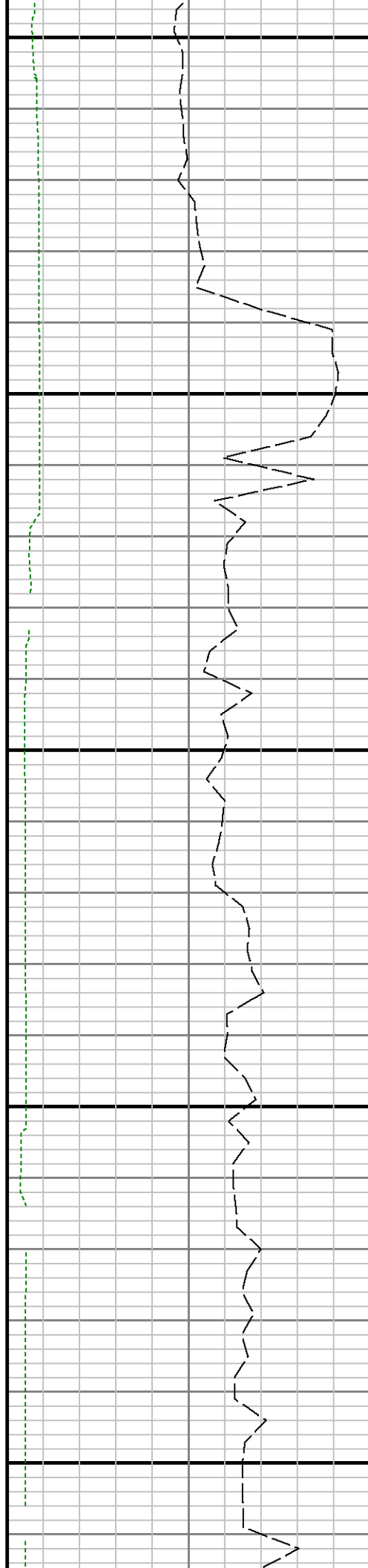


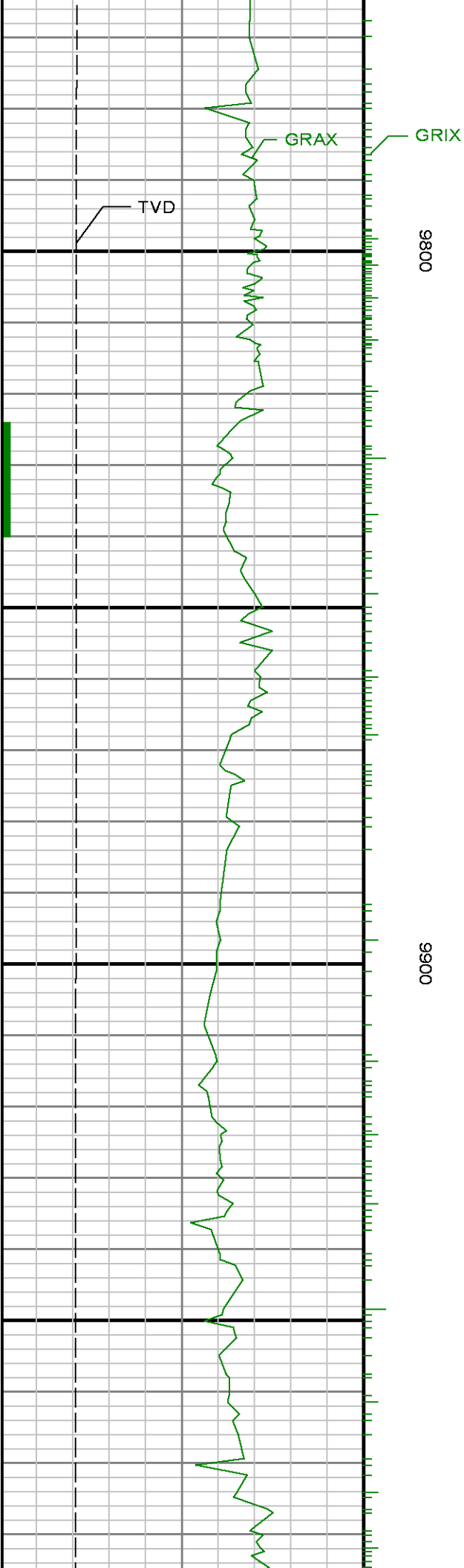


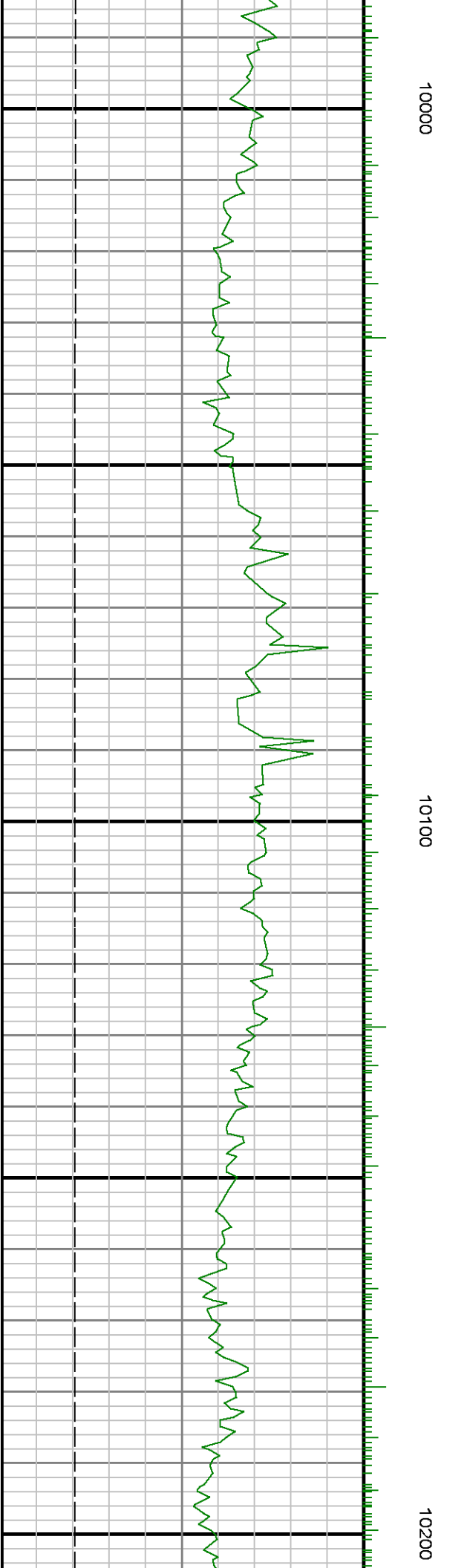
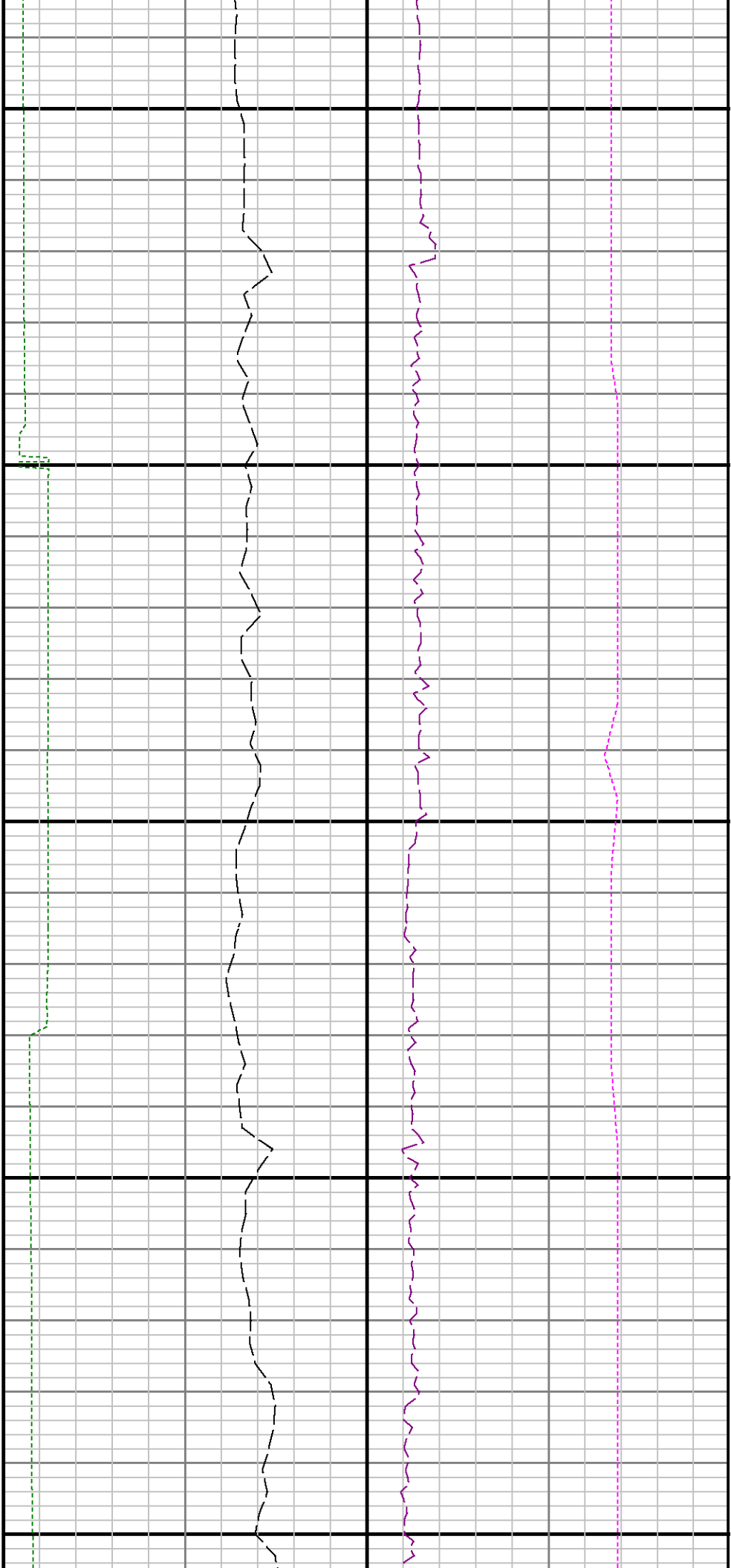


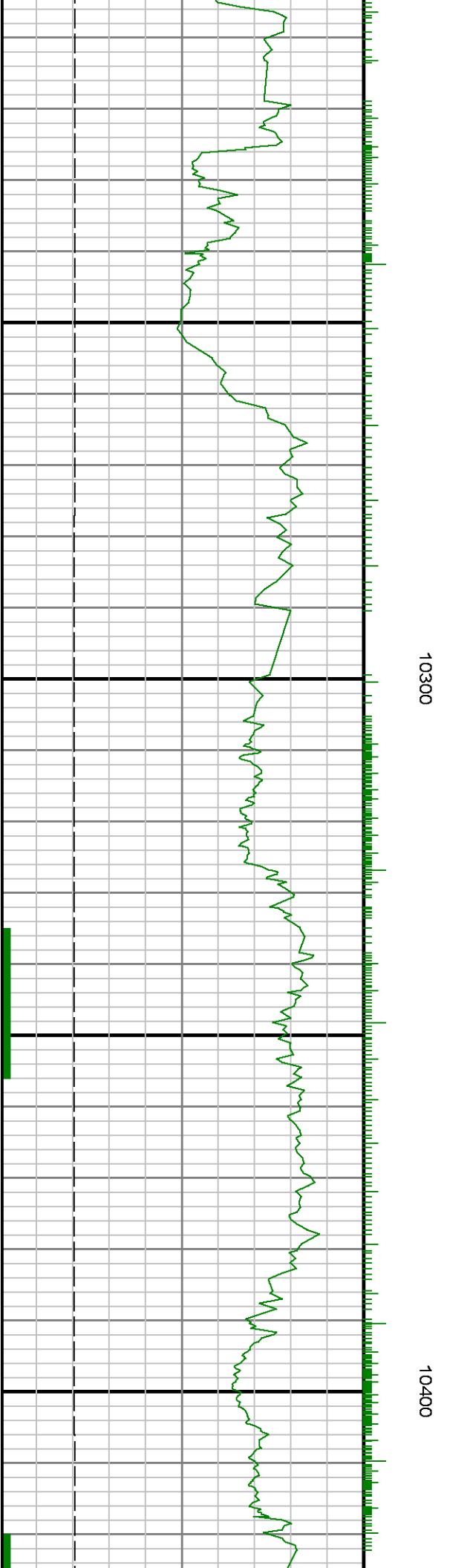
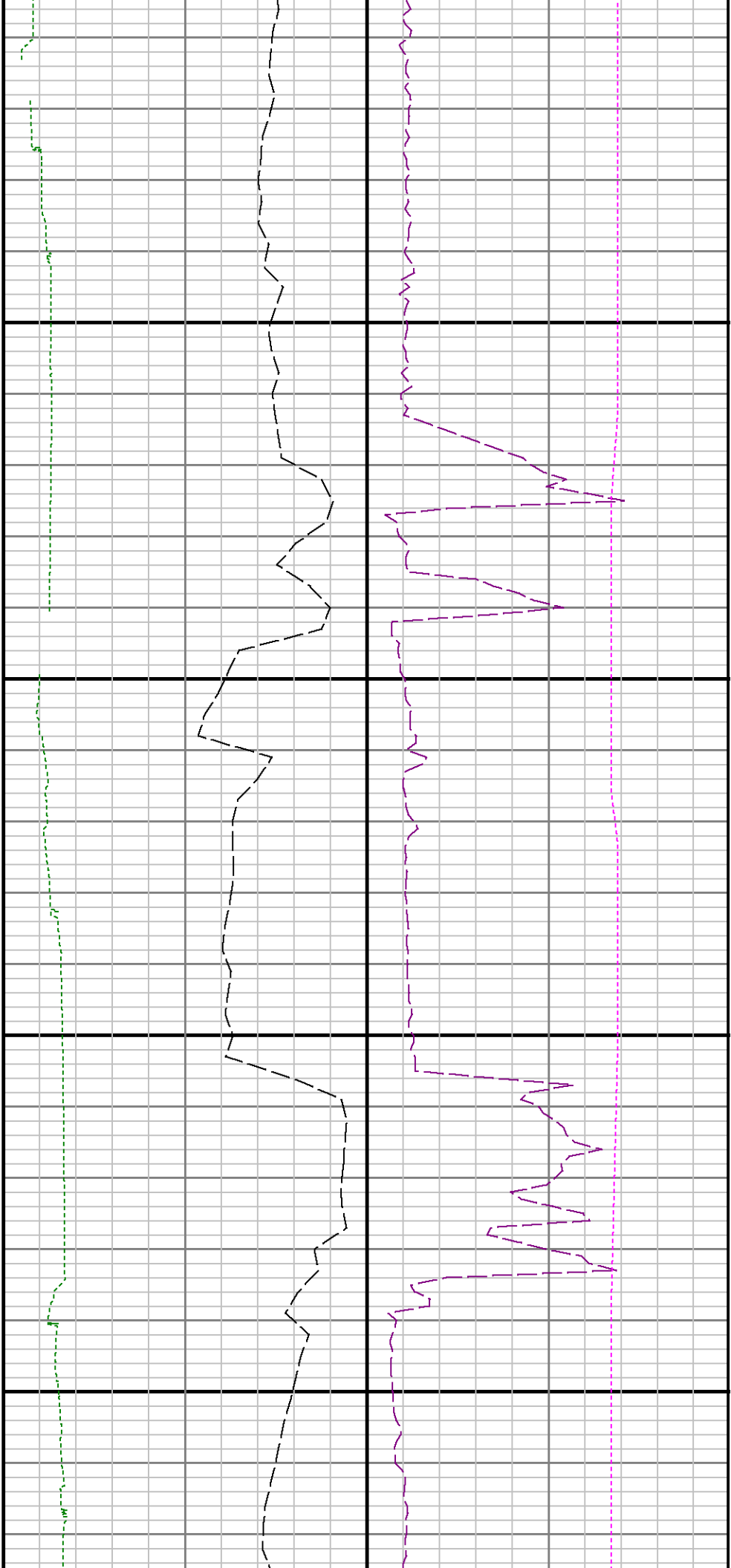
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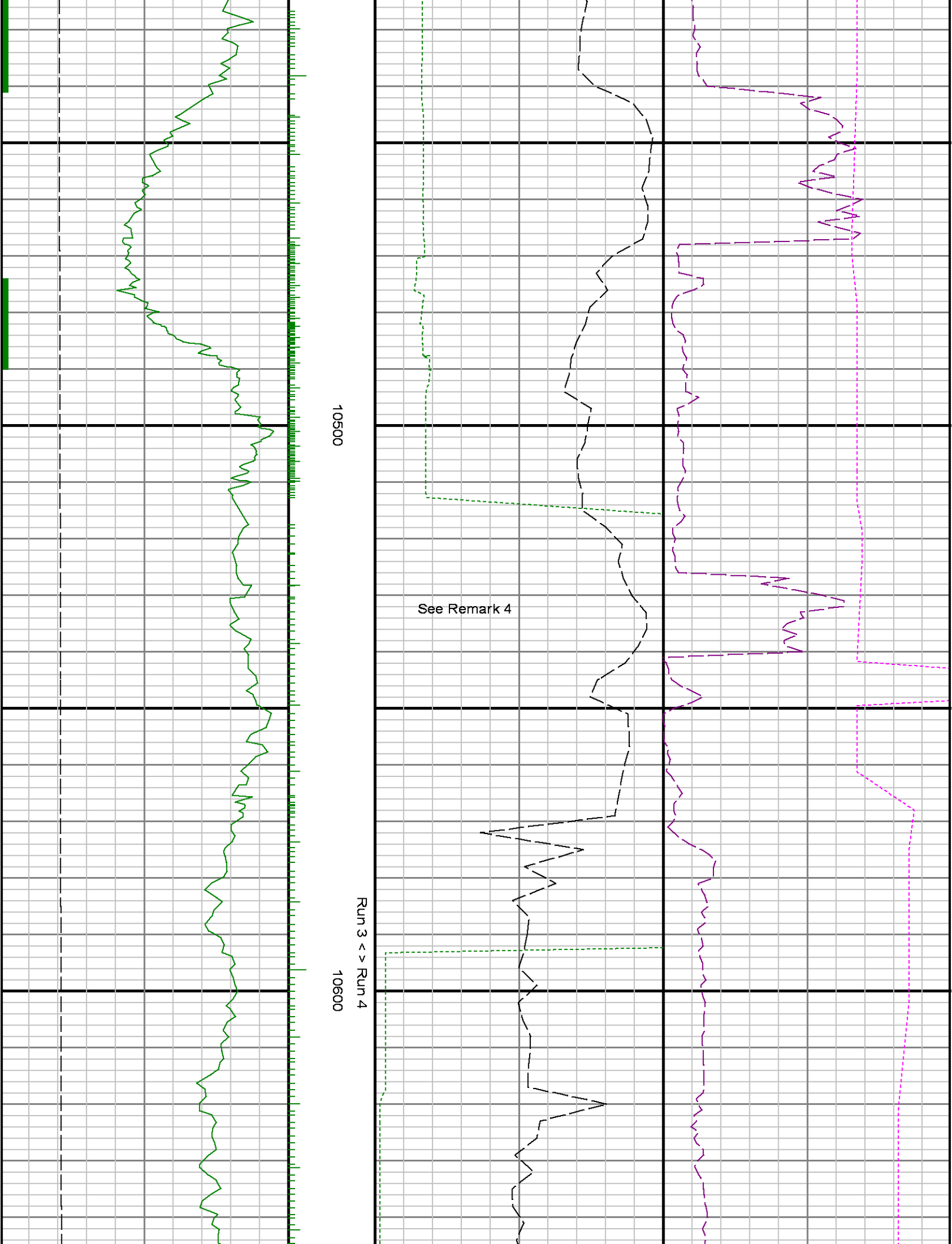
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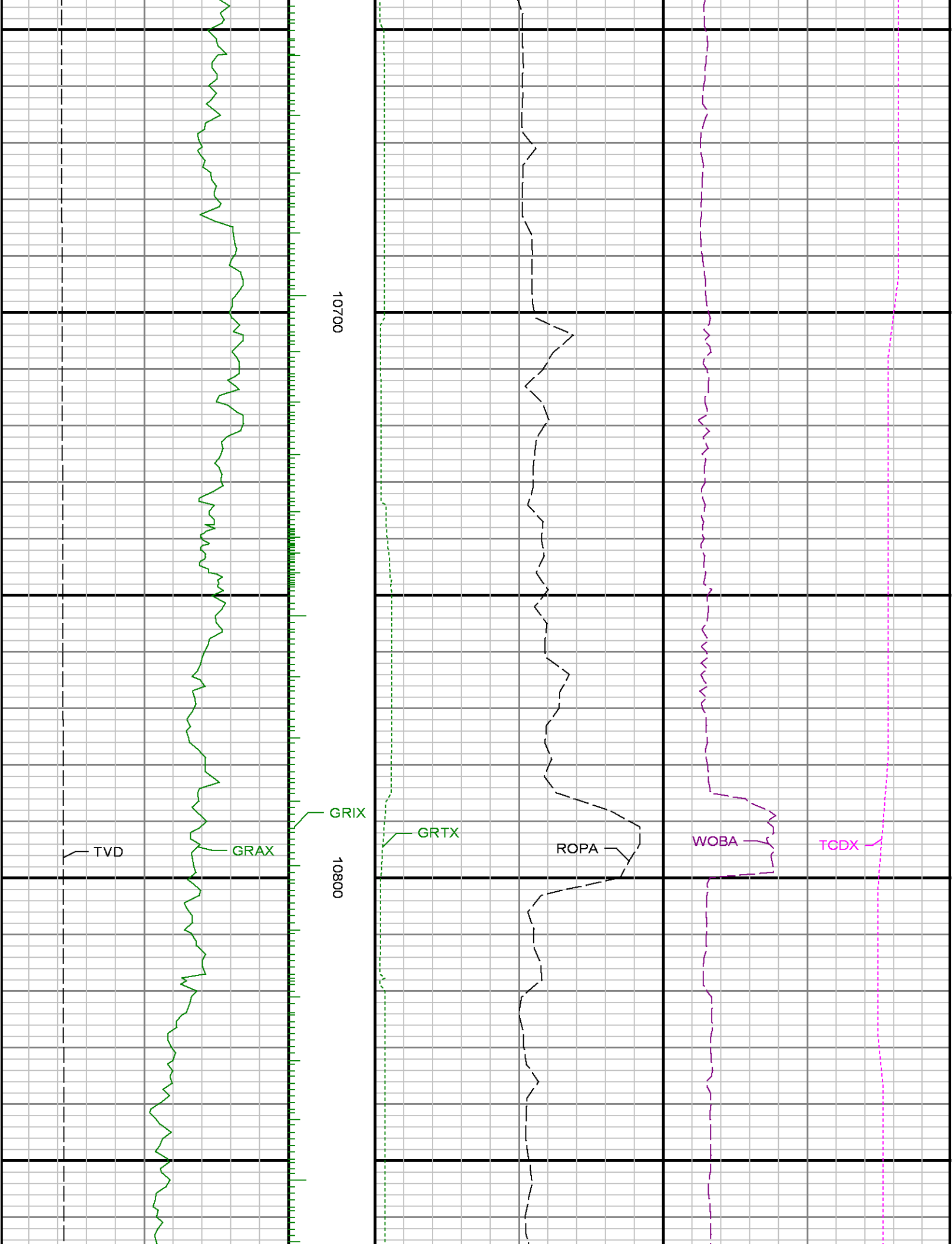


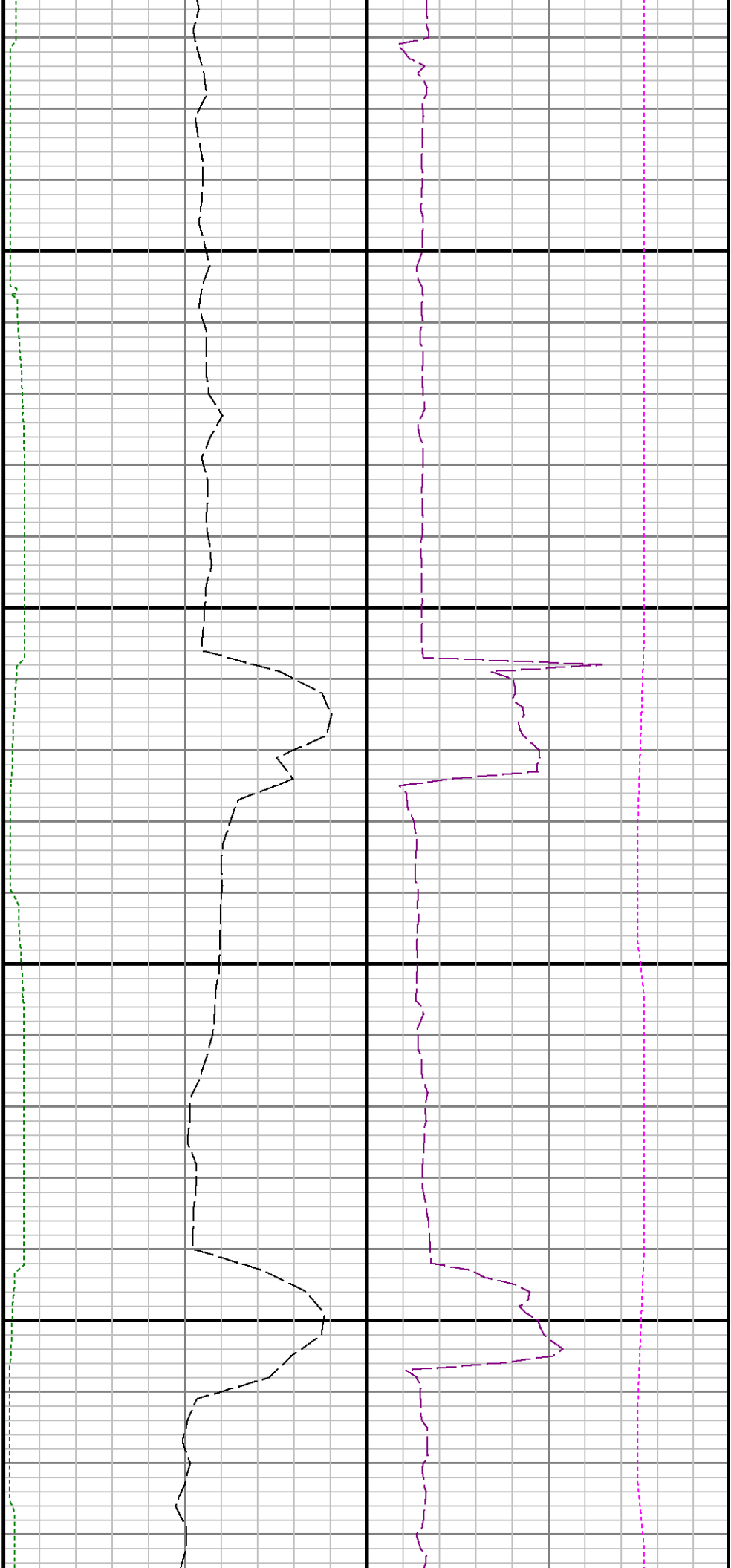


See Remark 4

10500

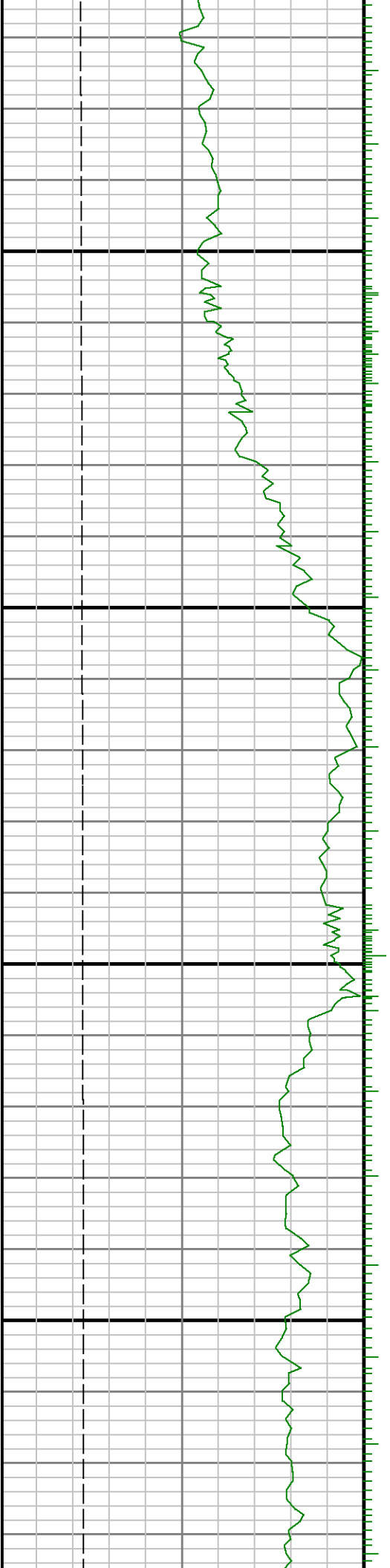
Run 3 < > Run 4
10600

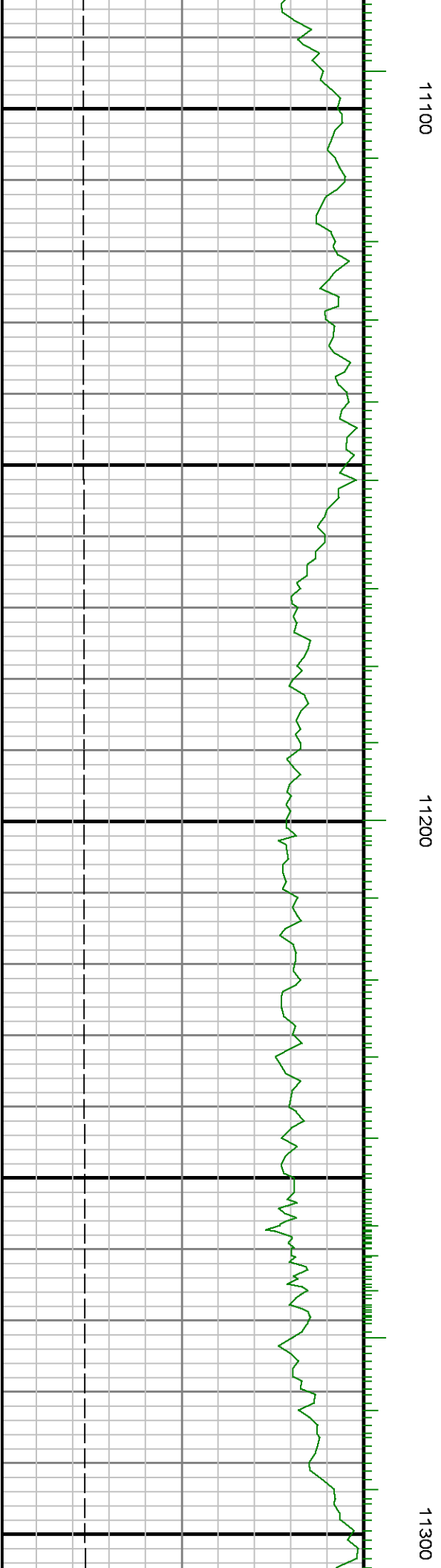
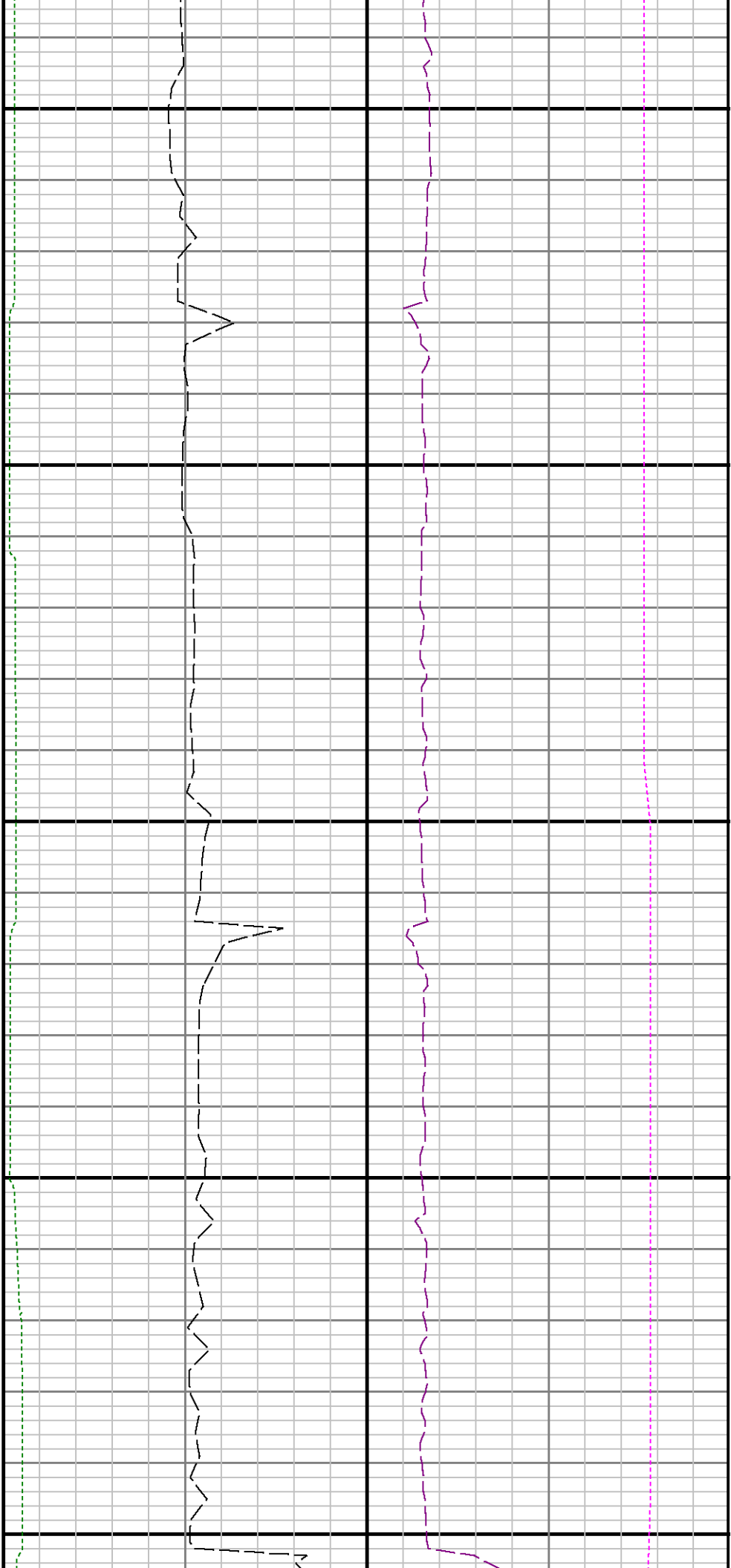




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11000

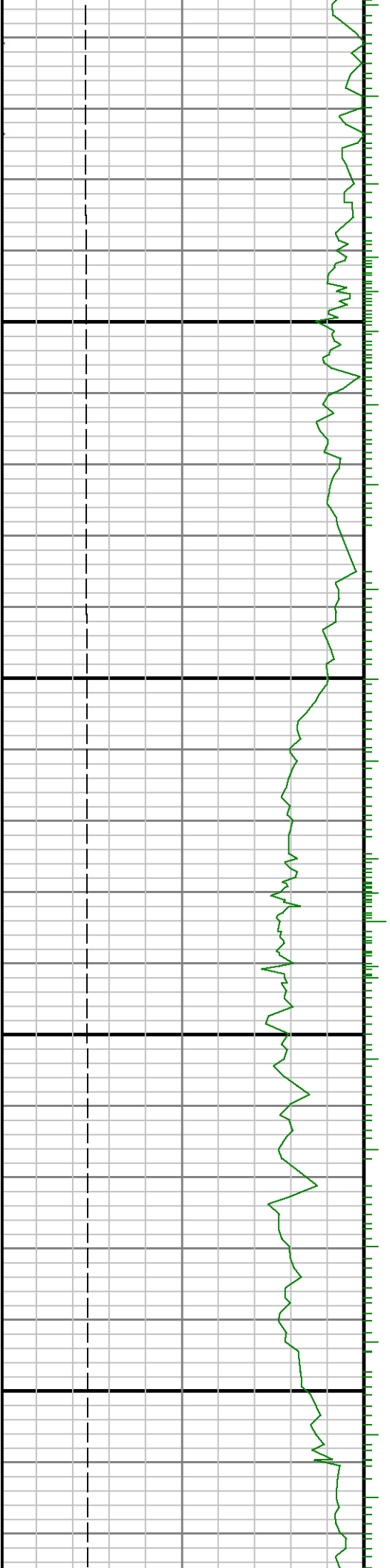






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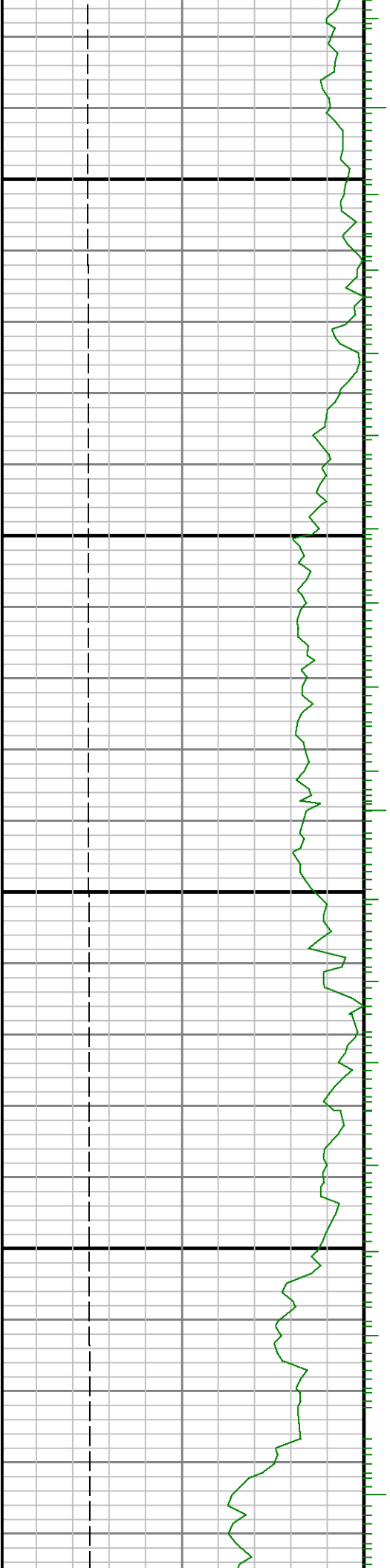
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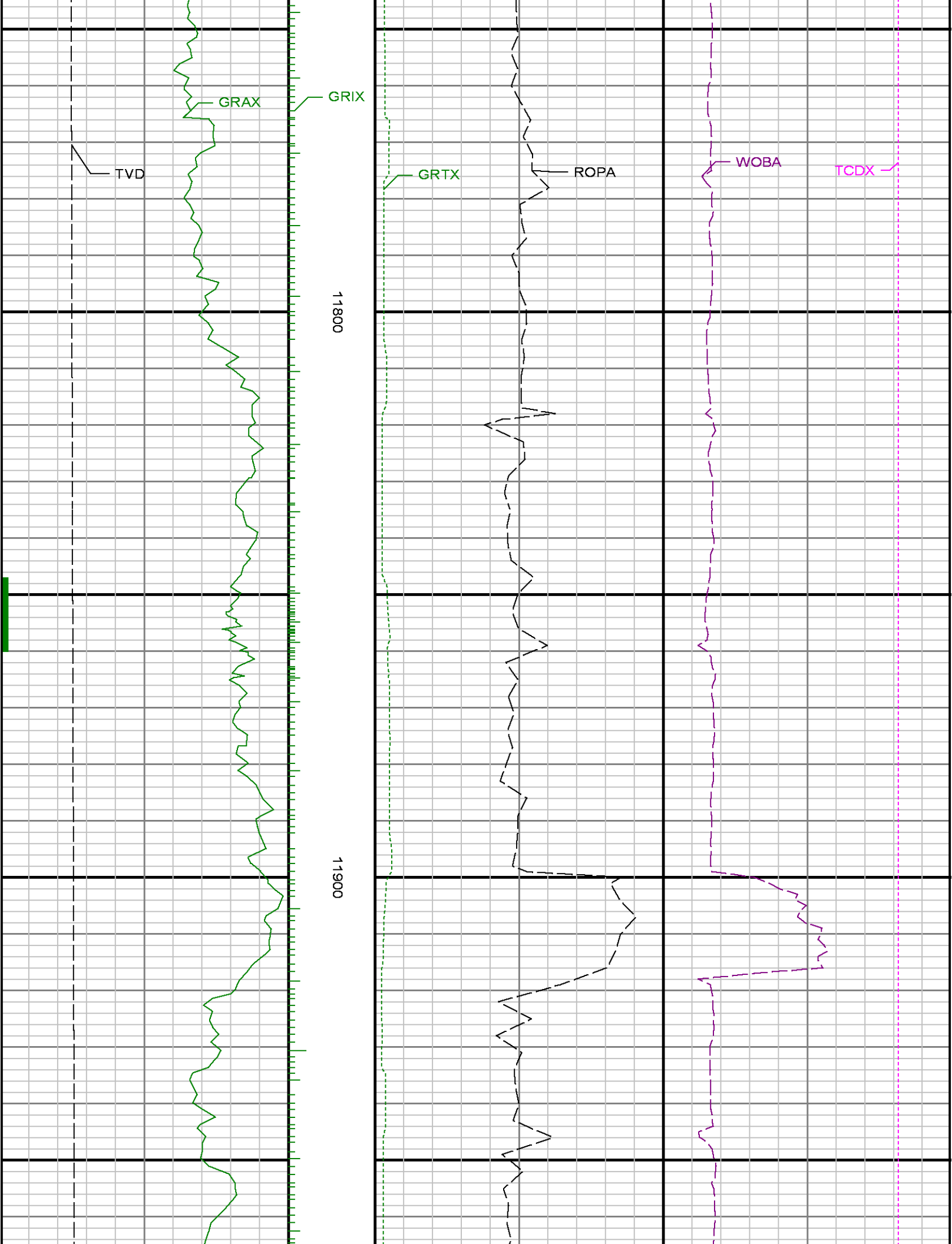


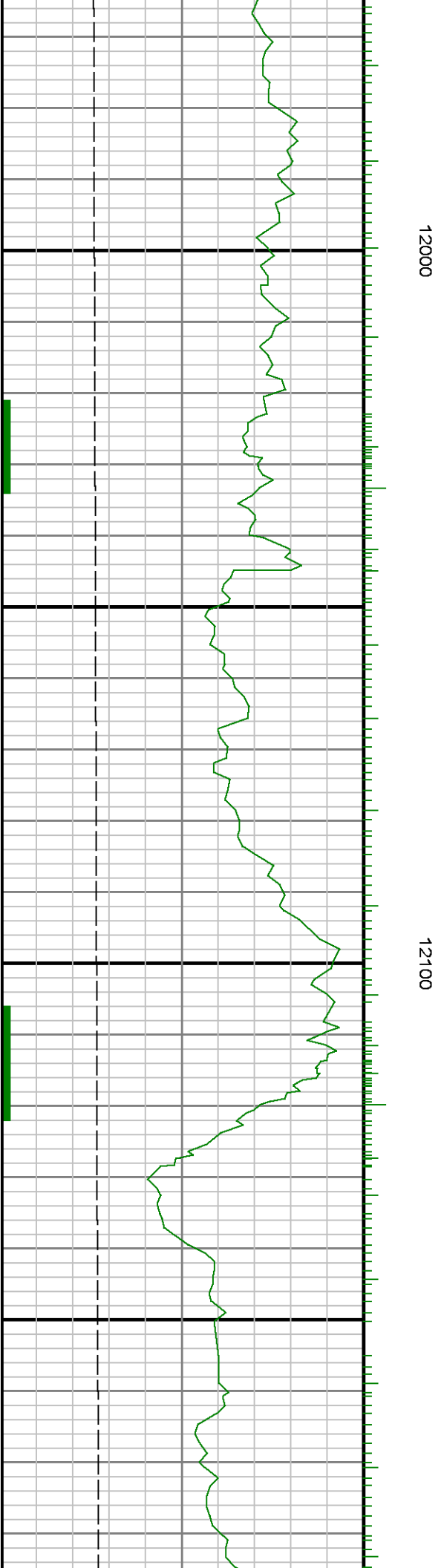
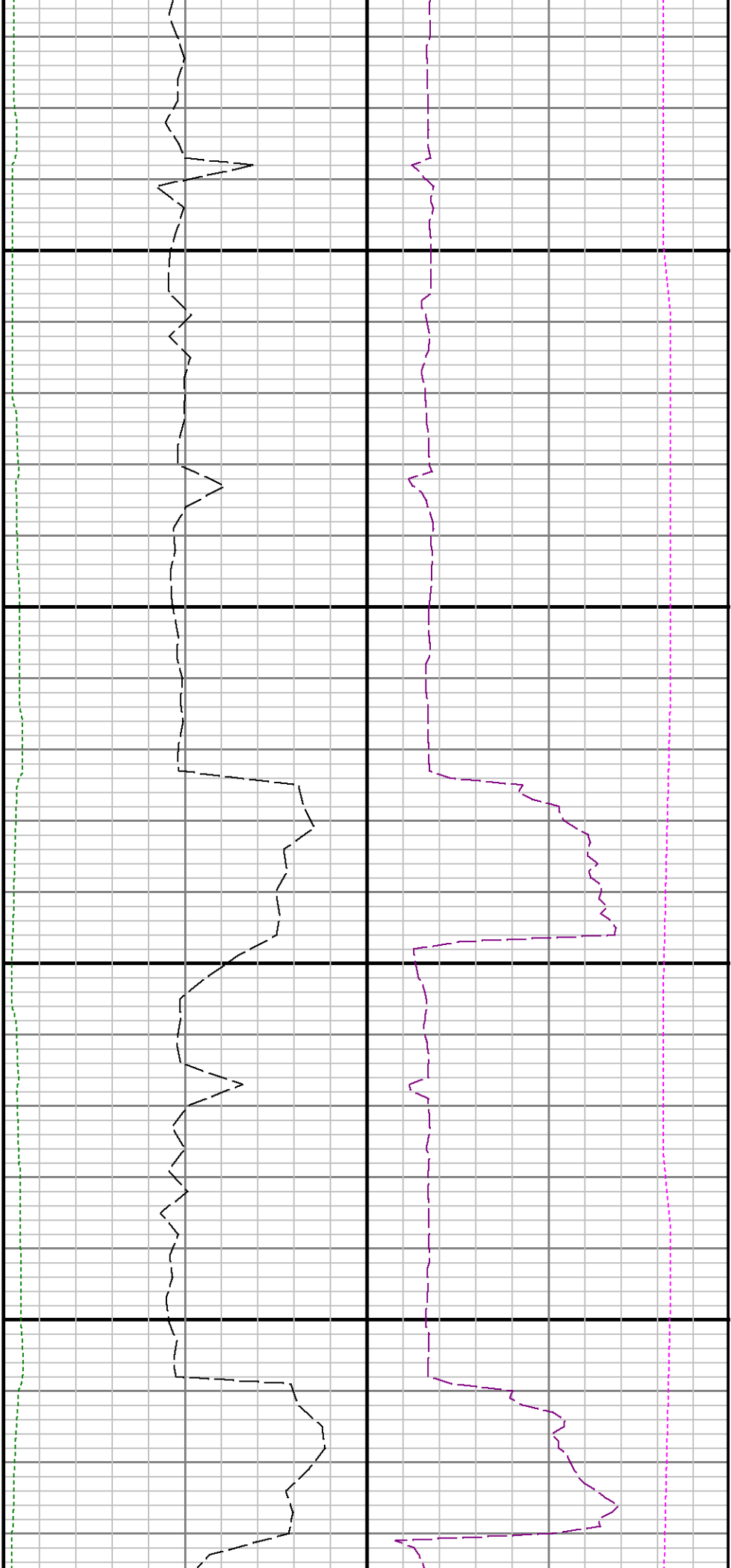


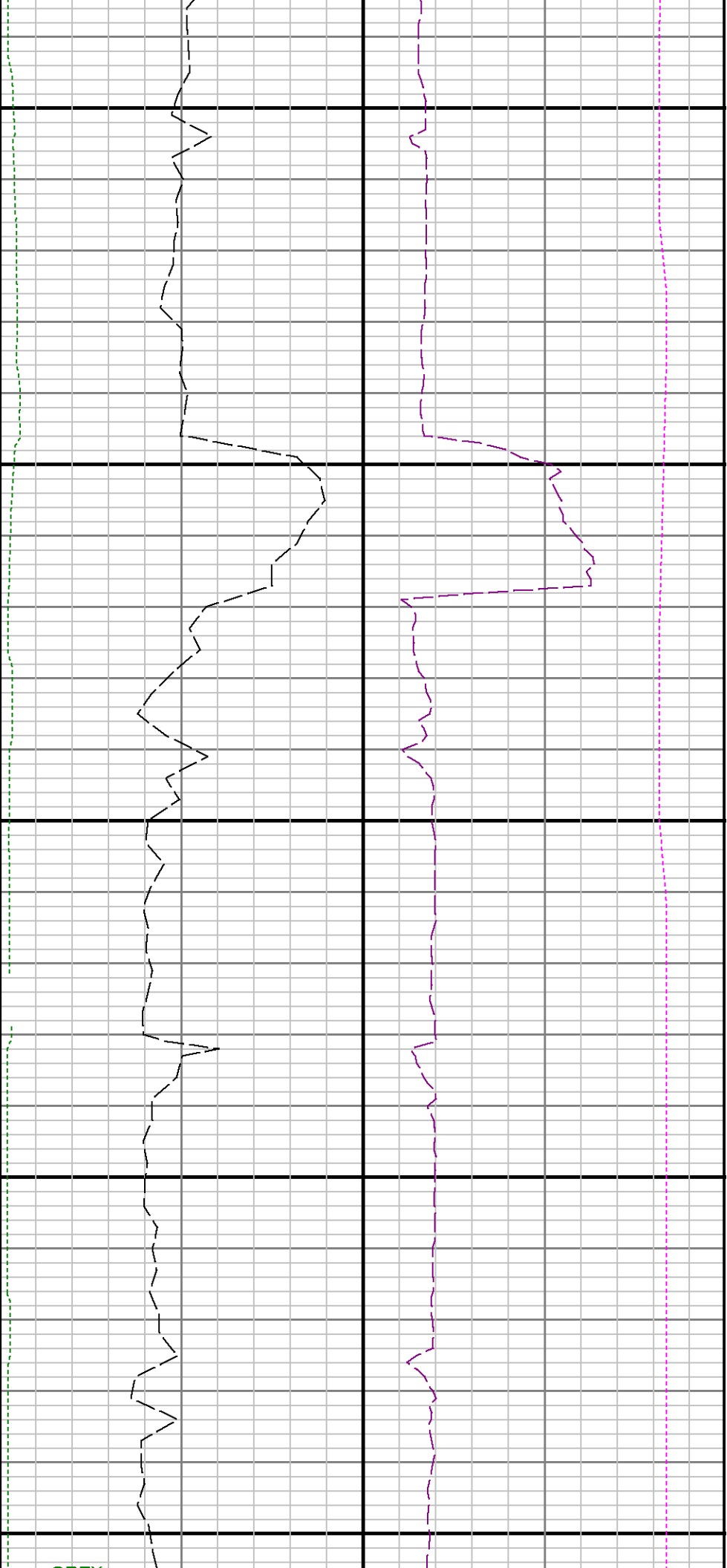
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11700









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12300

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