

Adam Harris	01/Sep/2015	05/Sep/2015										

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+ (%)
01/Sep/2015	20:44	1	2013	Oil Based Mud	9.5	24	N/A	N/A	60 / 40	Active Mud Pit	72000	N/A
02/Sep/2015	10:15	2	2359	Oil Based Mud	9.1	11	N/A	N/A	65 / 25	Active Mud Pit	68000	N/A
03/Sep/2015	03:17	2	6963	Oil Based Mud	9.1	14	N/A	N/A	64 / 25	Active Mud Pit	71000	N/A
04/Sep/2015	00:05	4	7684	Oil Based Mud	9.3	16	N/A	N/A	62 / 26	Active Mud Pit	78000	N/A

Mnemonics

Curve	Description	Units
GRAX	Gamma Ray Apparent, 0.5 ft. Avg.	API
GRTX	Gamma Ray Time Since Drilled	Min.
GRIX	Gamma Ray Data Density	Unitless
GRSI	Gamma Ray Slide Indicator	Unitless
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.	K. lbs.

Equipment and Service Data

LWD Run No.	Tool	Serial Number	Measurement	Bit Offset (ft.)	Max O.D. (in.)	Min I.D. (in.)
1	CS	13345920	-	68.38	7.020	4.350
1	BCPM	11823270	Telemetry	61.11	7.270	4.350
1	FLEX SUB	13600471	-	54.27	5.000	4.350
1	OTK	12494218	Directional	49.56	7.031	2.165
1	OTK	12494218	Resistivity	43.75	7.031	2.165
1	OTK	12494218	Gamma	39.71	7.031	2.165
1	OTK	12494218	Pressure	38.83	7.031	2.165
1	CS	13270500	-	35.48	7.010	4.350
2	CS	13270773	-	70.96	7.000	3.125
2	BCPM	12761885	Telemetry	60.53	7.000	3.125
2	FLEX SUB	13517312	-	53.44	5.000	3.000
2	OTK	12382038	Directional	48.74	7.031	2.165
2	OTK	12382038	Resistivity	42.93	7.031	2.165
2	OTK	12382038	Gamma	38.90	7.031	2.165
2	OTK	12382038	Pressure	38.01	7.031	2.165
2	CS	12202667	-	35.44	7.000	3.125
3	CS	13270773	-	67.06	7.000	3.125

3	BCPM	12761885	Telemetry	56.63	7.000	3.125
3	FLEX SUB	13517312	-	49.54	5.000	3.000
3	OTK	12382038	Directional	44.84	7.031	2.165
3	OTK	12382038	Resistivity	39.03	7.031	2.165
3	OTK	12382038	Gamma	35.00	7.031	2.165
3	OTK	12382038	Pressure	34.11	7.031	2.165
3	CS	12202667	-	31.54	7.000	3.125
4	DIR	12017345	Directional	51.21	6.750	3.125
4	SRIG	12023992	Gamma	47.79	6.750	3.125

Service and Tool Mnemonics

Mnemonic	Name	Description
BCPM	BCPM	Mud pulse telemetry and downhole tool power module
DIR	Directional	Wellbore directional survey
FLEX SUB	Flex Sub	Flexible sub connection
OTK	OnTrak	Propagation resistivity, propagation conductivity, gamma ray, directional, annular pressure, system memory and VSS
SRIG	Inclination and Gamma	Probe based gamma ray and inclination module
CS	Closure Sub	BHA power ring isolator allowing insertion of inert sub into electrically powered BHA

Comments

<p>1. Depth measurements were obtained from a depth control system not supplied or operated by Baker Hughes INTEQ. Due to lack of control by Baker Hughes INTEQ logging engineers, depth calibrations and measurements could not be independently verified and the unverified depths as supplied to INTEQ are being used to represent logging data.</p> <p>2. Baker Hughes run 1 utilized a 6.75 inch OnTrak services (Multiple Propagation Resistivity, Gamma Ray, and Directional) tool behind a 8.5 inch bit and steerable assembly from 1865 feet to 4378 feet MD (1825 feet to 4182 feet TVD.)</p> <p>3. Baker Hughes run 2 utilized a 6.75 inch OnTrak services (Multiple Propagation Resistivity, Gamma Ray, and Directional) tool behind a 8.5 inch bit and steerable assembly from 4378 feet to 6964 feet MD (4182 feet to 6700 feet TVD.)</p> <p>4. Baker Hughes run 3 utilized a 6.75 inch OnTrak services (Multiple Propagation Resistivity, Gamma Ray, and Directional) tool behind a 8.5 inch bit and steerable assembly from 6964 feet to 7684 feet MD (6700 feet to 7044 feet TVD.)</p> <p>5. Baker Hughes run 4 utilized a 6.75 inch Navigamma (Directional and Gamma Ray) tool behind a 8.5 inch bit and steerable assembly from 7684 feet to 12845 feet MD (7044 feet to 7031 feet TVD)</p> <p>6. A sliding indicator is shown on the left edge of track 1 as a heavy line. This indicator has been depth-shifted to the Gamma Ray sensor offset to correspond with Gamma data acquired while sliding.</p>

Remarks

Number	Measured	Hole	LWD	Remark
	Depth	Section	Run No.	
	(ft.)	(in.)		
1	6490	8.500	2	The interval from surface to xxxx feet MD (xx to xxxx feet TVD) was not logged due to directional only services required up to the curve.
2	6920	8.500	3	The interval from 6920 to 6964 feet MD (6659 to 6700 feet TVD) was logged up to 9 hours after being drilled due to trip out of hole to change BHA.
3	7655	8.500	4	The interval from 7649 to 7684 feet MD (7044 feet TVD) was logged up to 12 hours after being drilled due to trip out of hole to change BHA.
4	12796	8.500	4	The interval from 12796 to 12845 feet MD (7034 to 7031 feet TVD) has no GRAX, GRIX or GRTX due to the Gamma Ray sensor offset to bit.



Company : Anadarko

Well : Sarchet 37N-20HZ

Interval : 6475.00 - 12850.00 feet

Created : 05/Sep/2015 5:40:59 AM

Gamma Ray Apparent 0.5 ft Avg GRAX

0 200

API

True Vertical Depth TVD

8000 6000

ft

MD feet 1:240

Gamma Time Since Drilled GRTX

0 600

min

Rate of Penetration 3.0 ft Avg ROPA

1000 0

ft/hr

Surface Weight On Bit 1.0 ft Avg WOBA

0 100

kibf

Downhole Temperature TCDX

100 275

degF

GRAX

TVD

GRIX

See Remark 1

GRTX

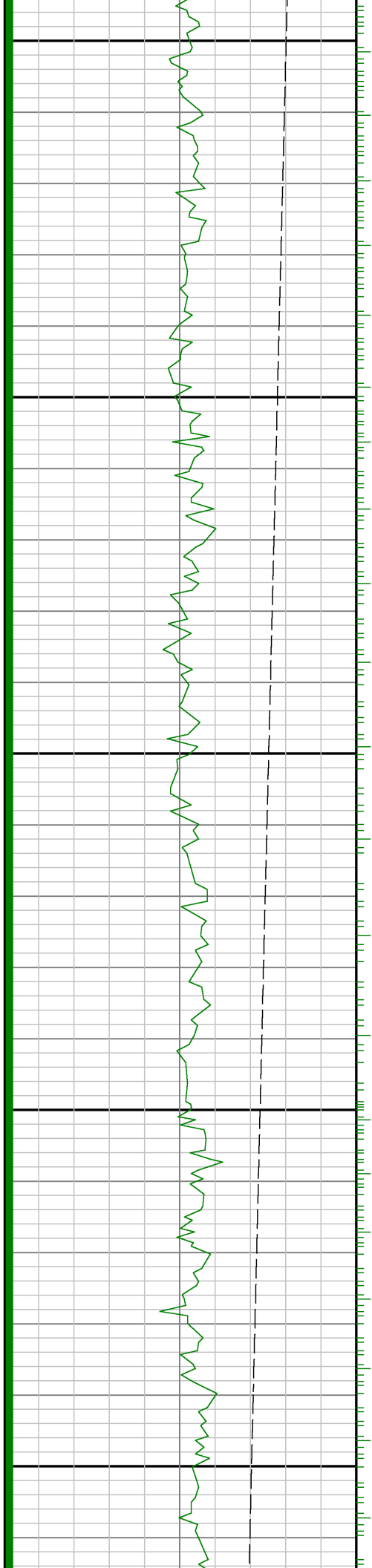
ROPA

WOBA

TCDX

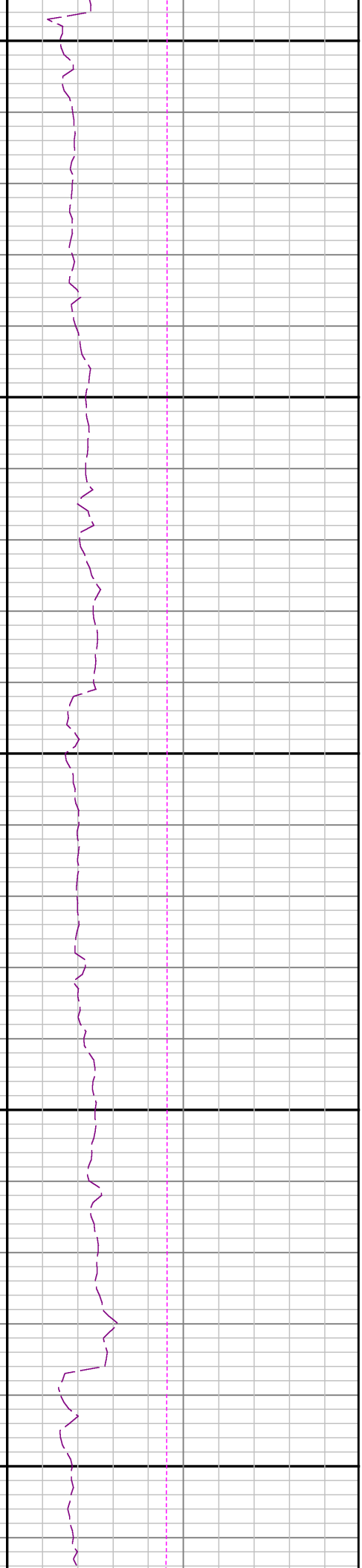
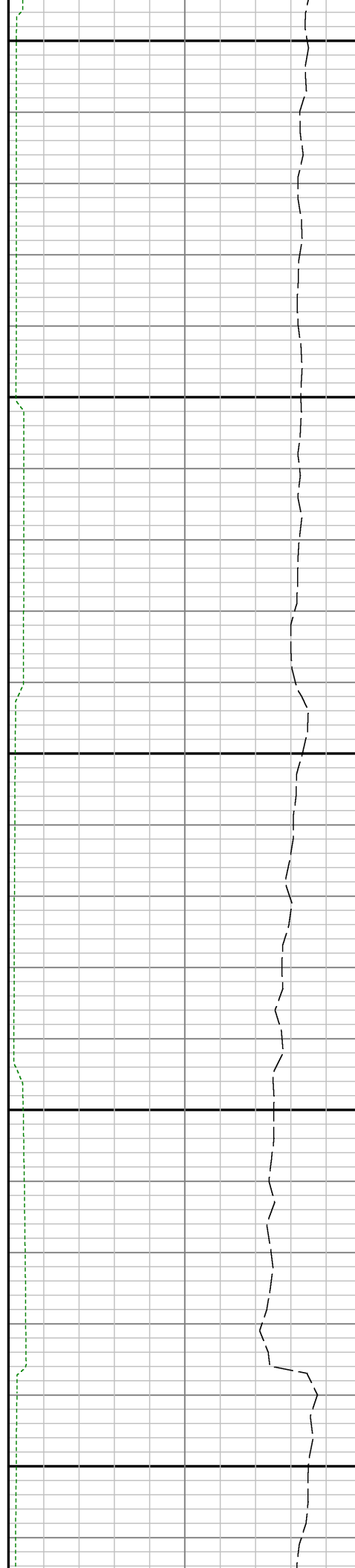
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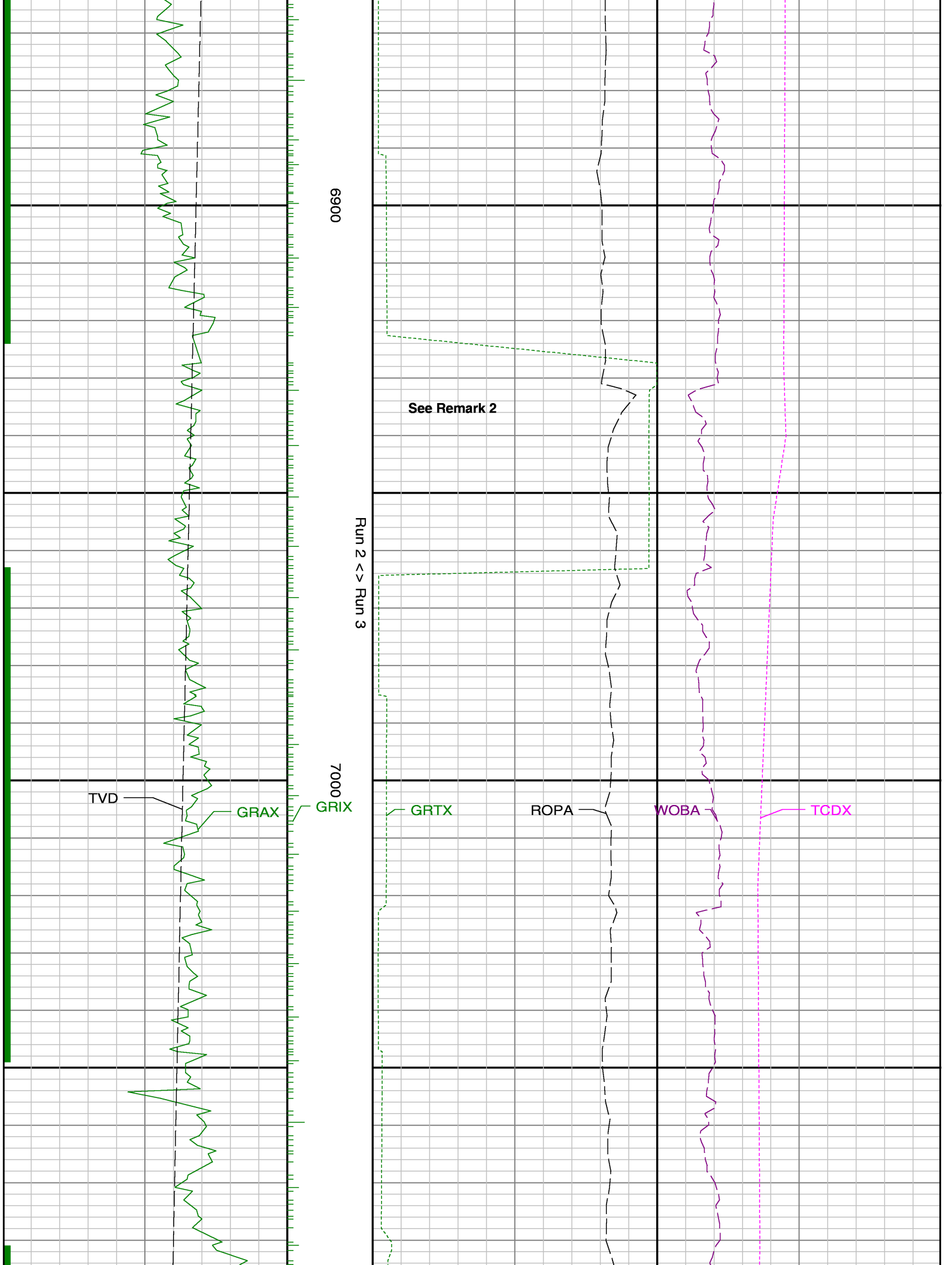
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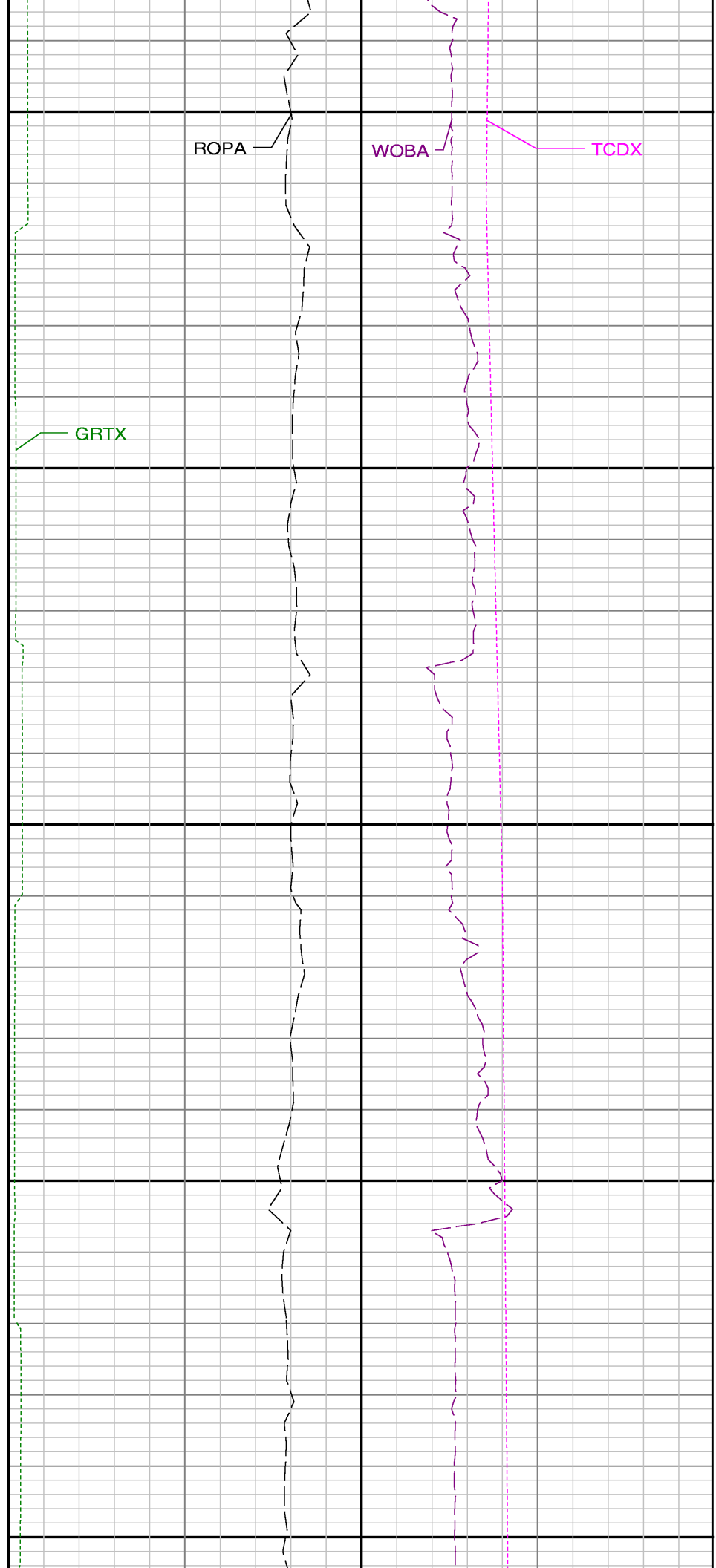
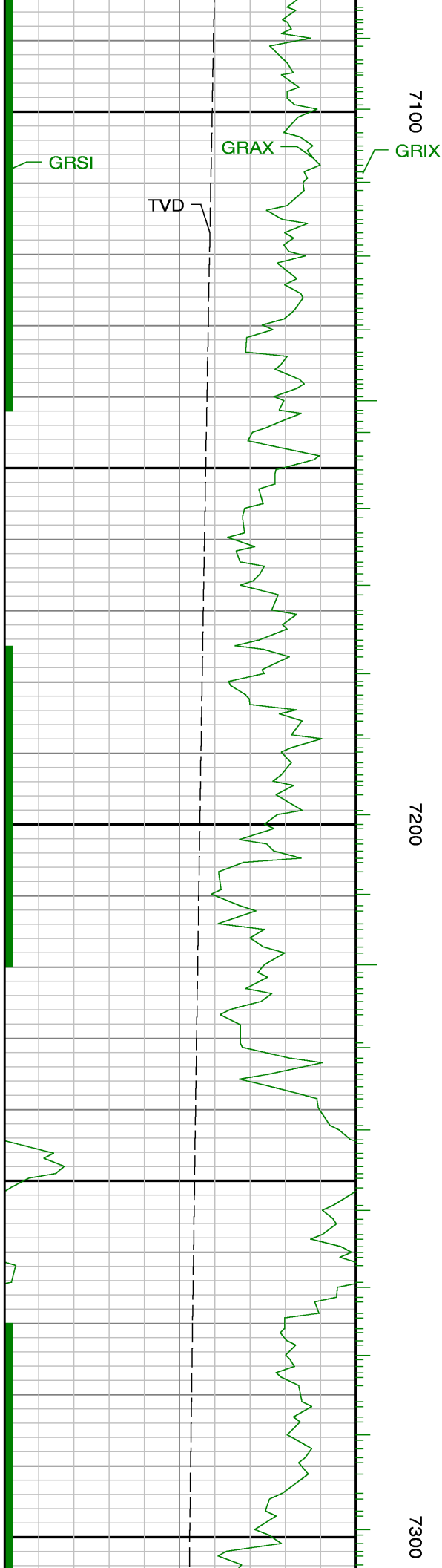


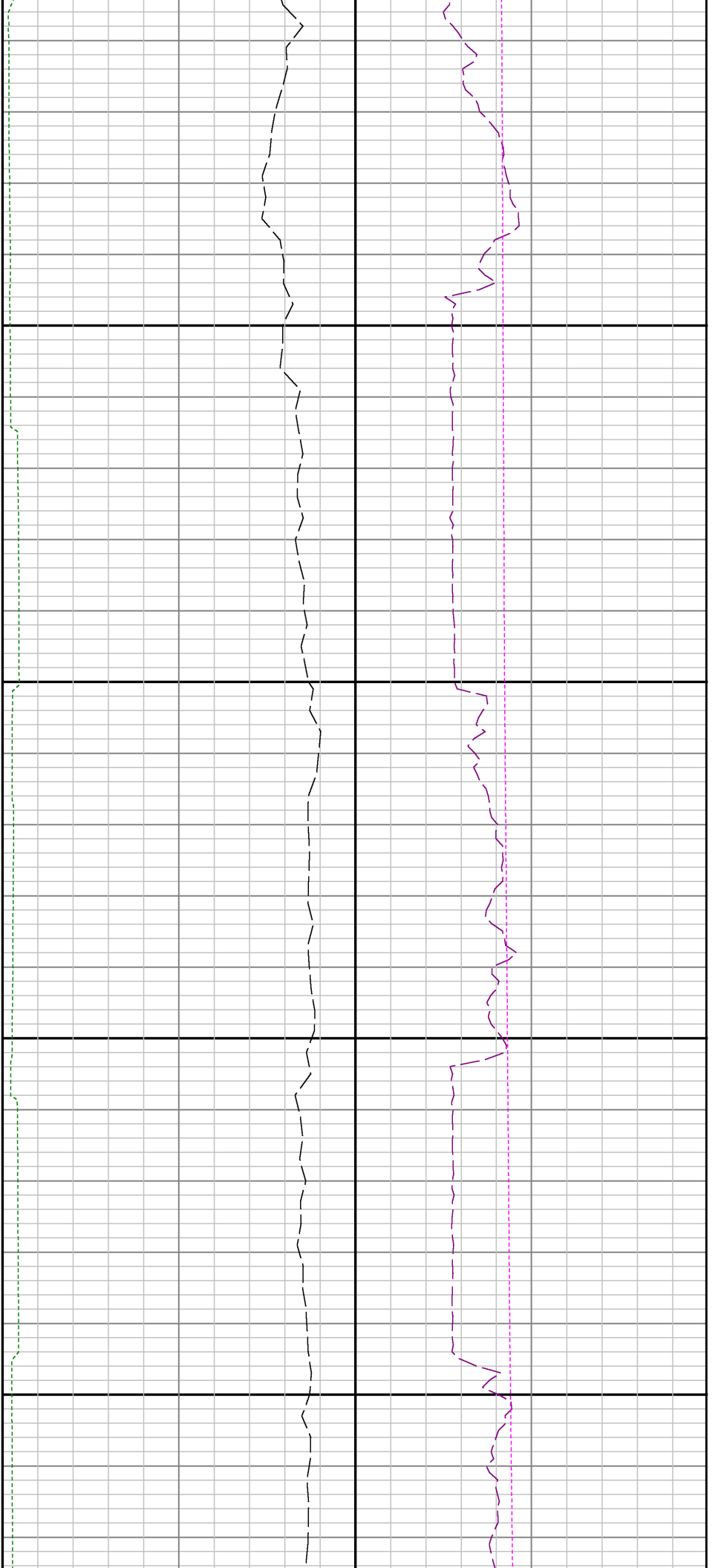
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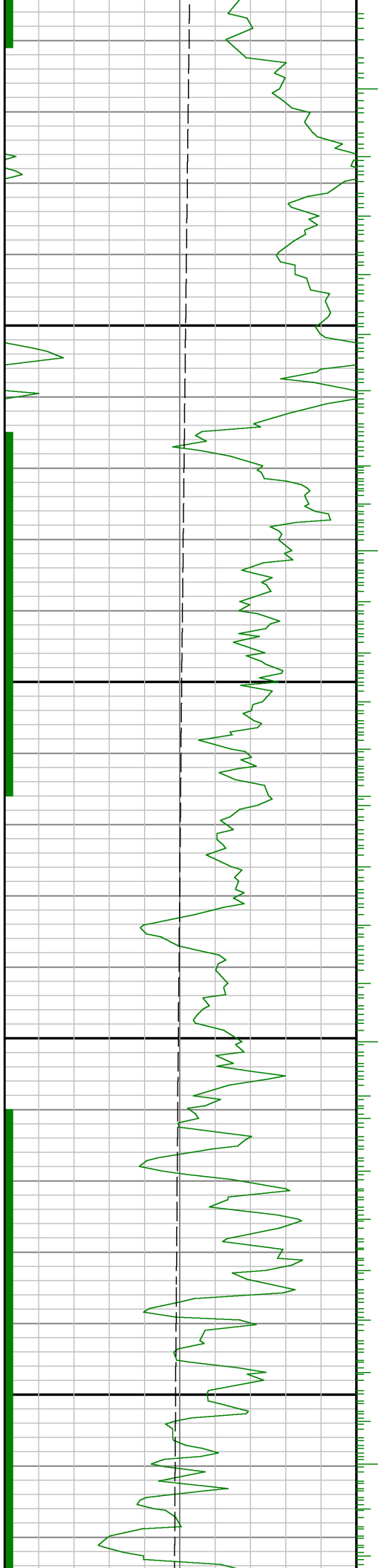


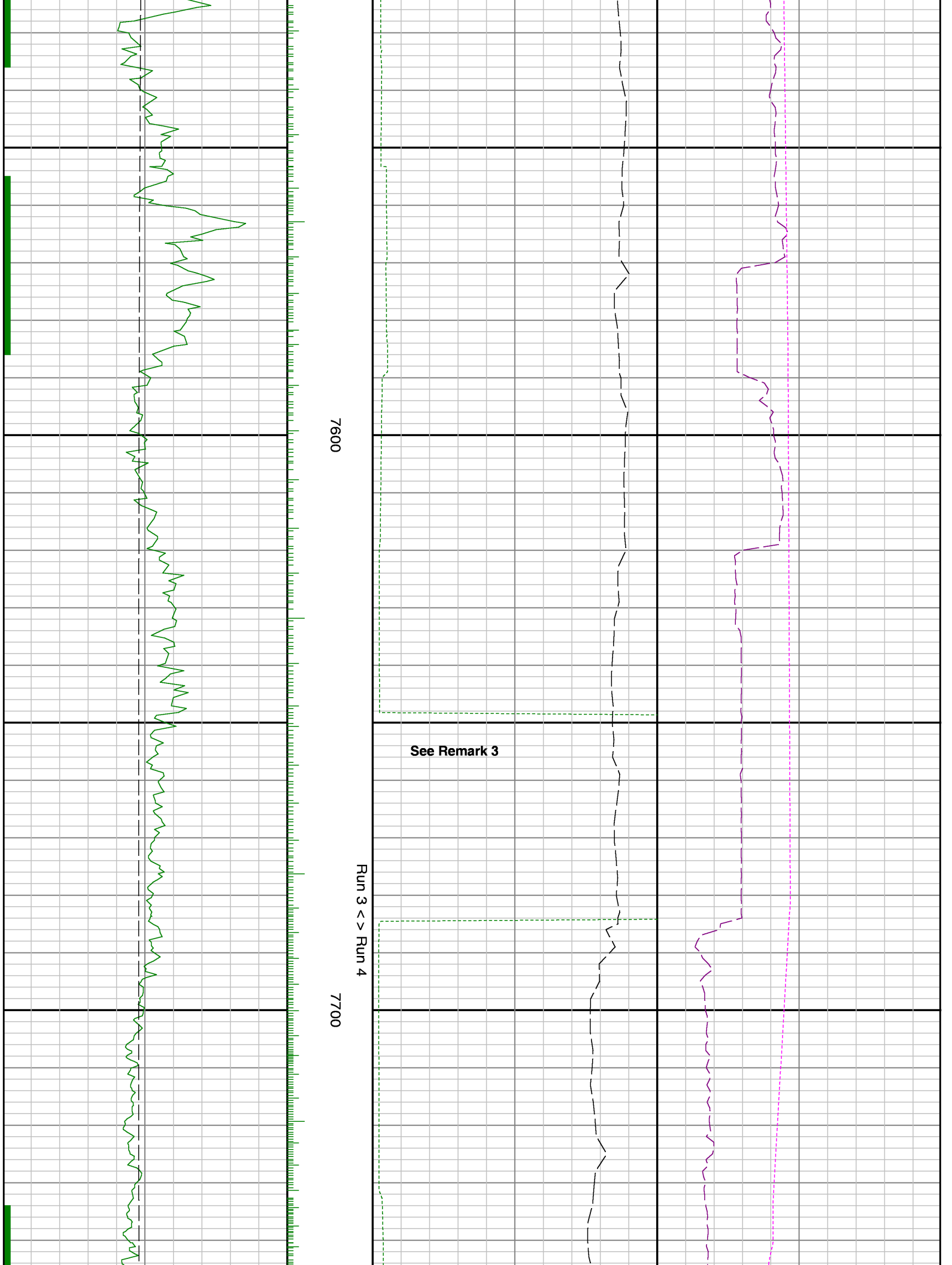


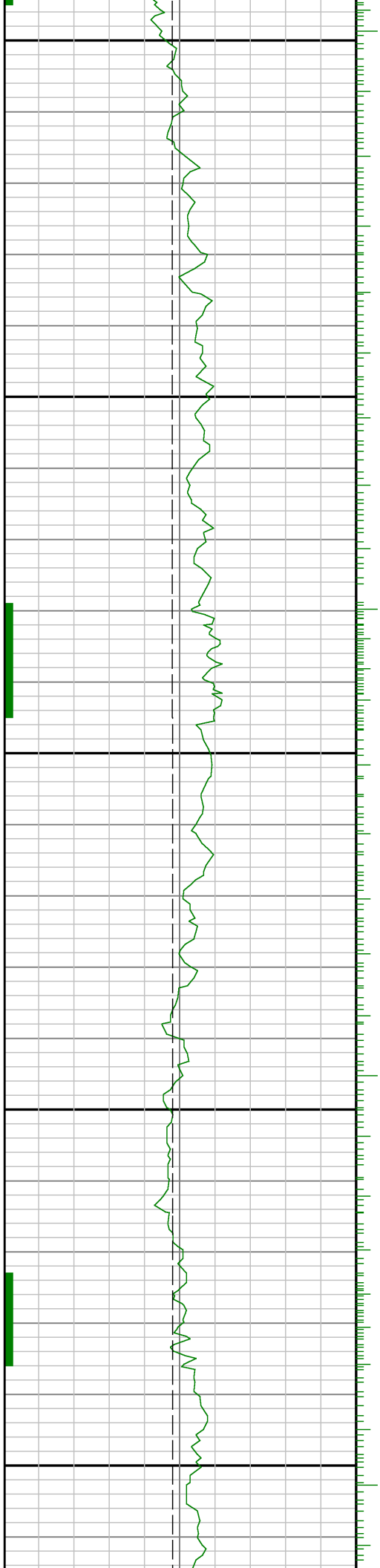


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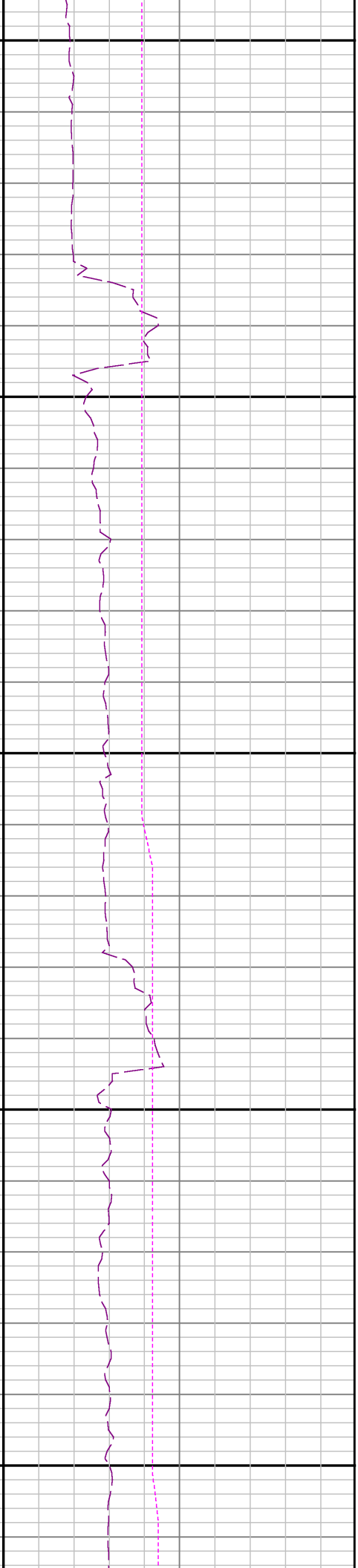


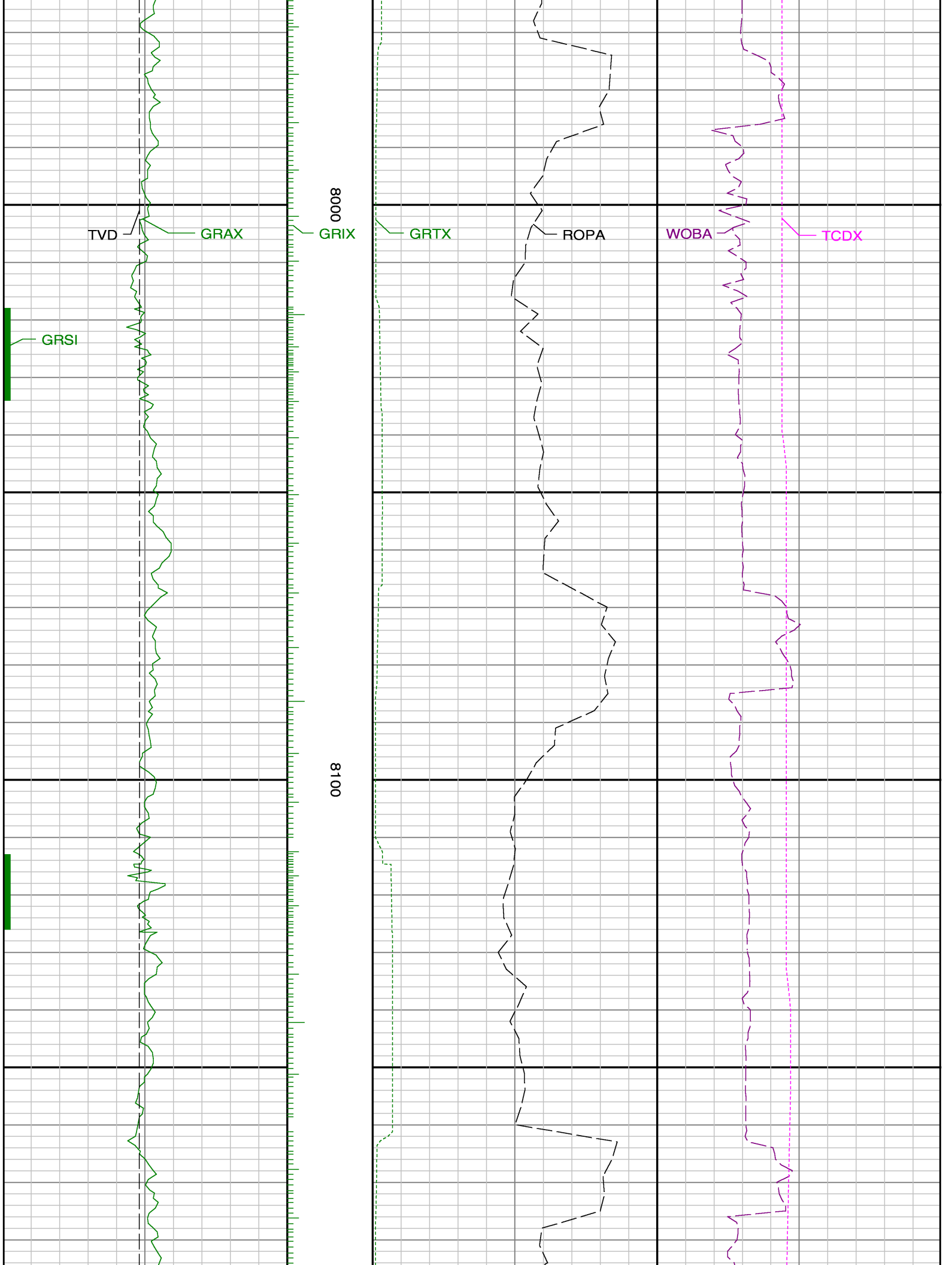


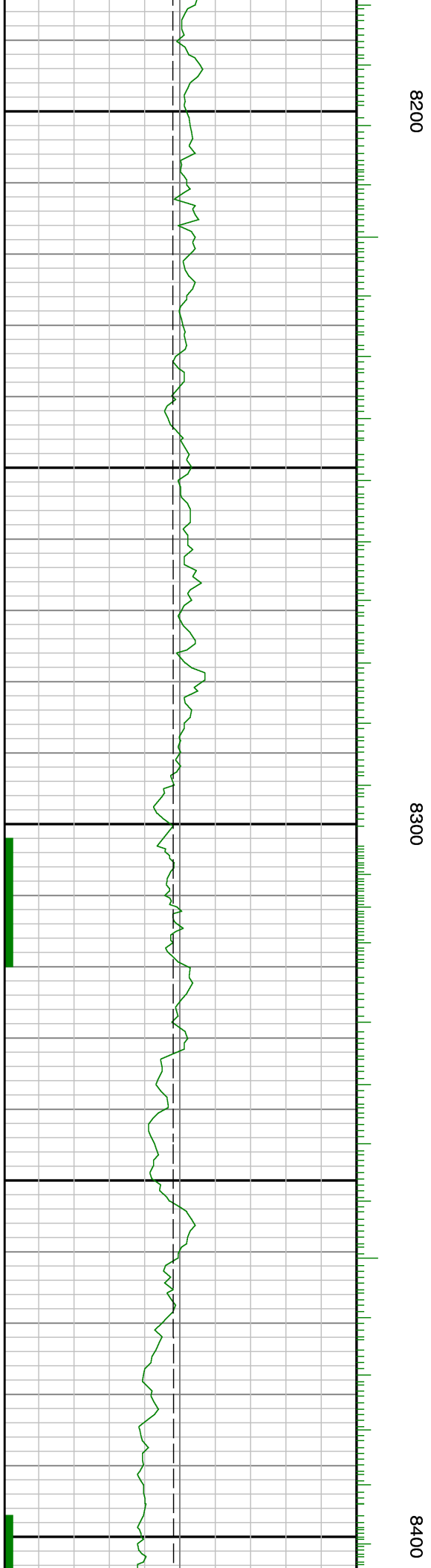
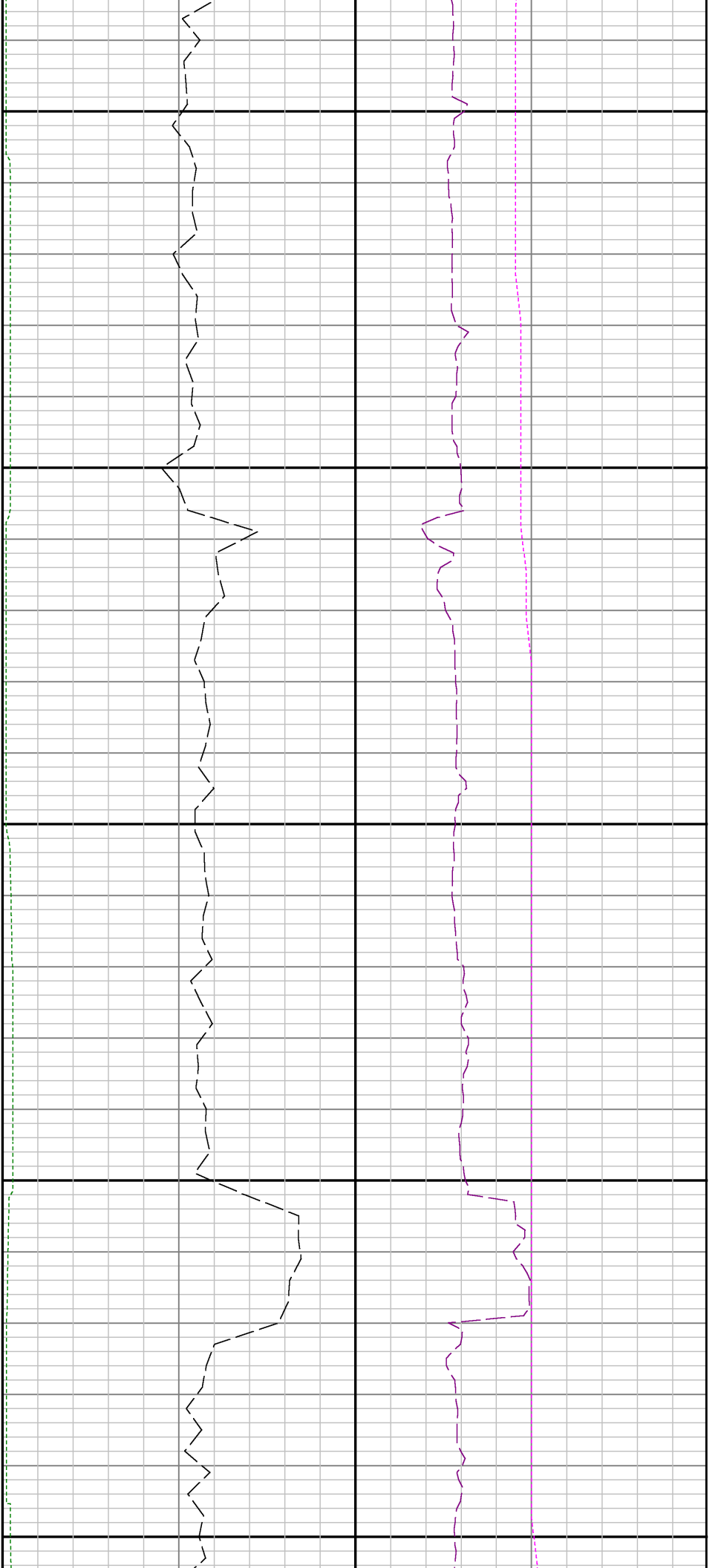


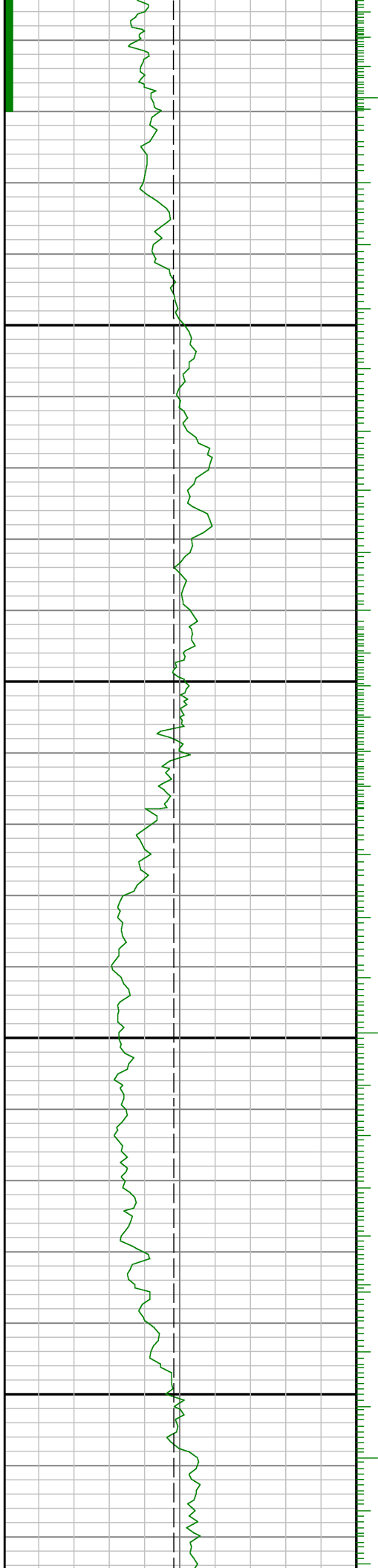
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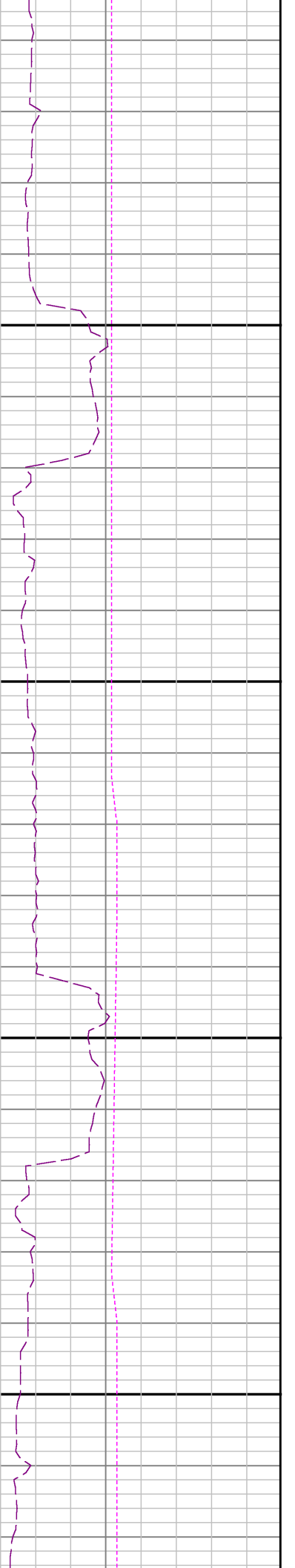
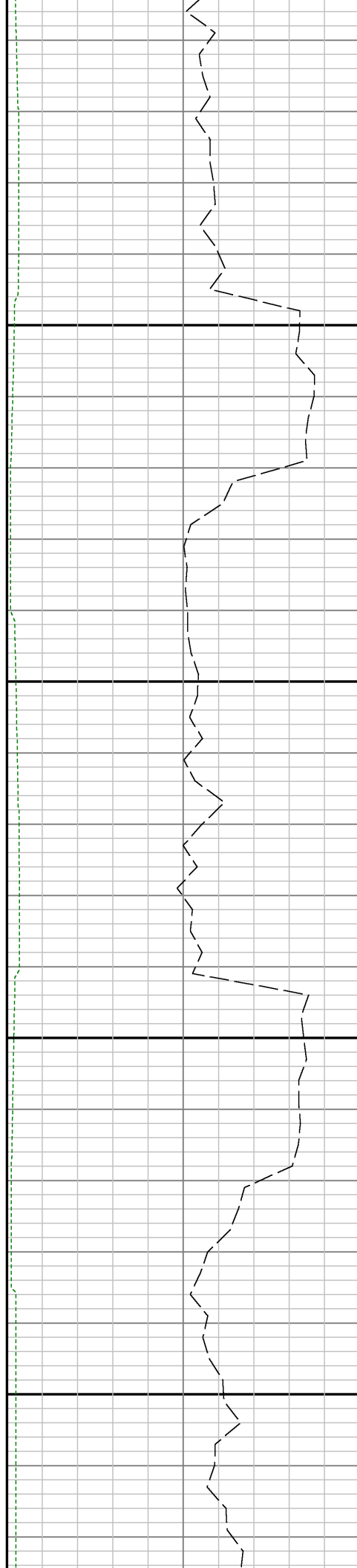


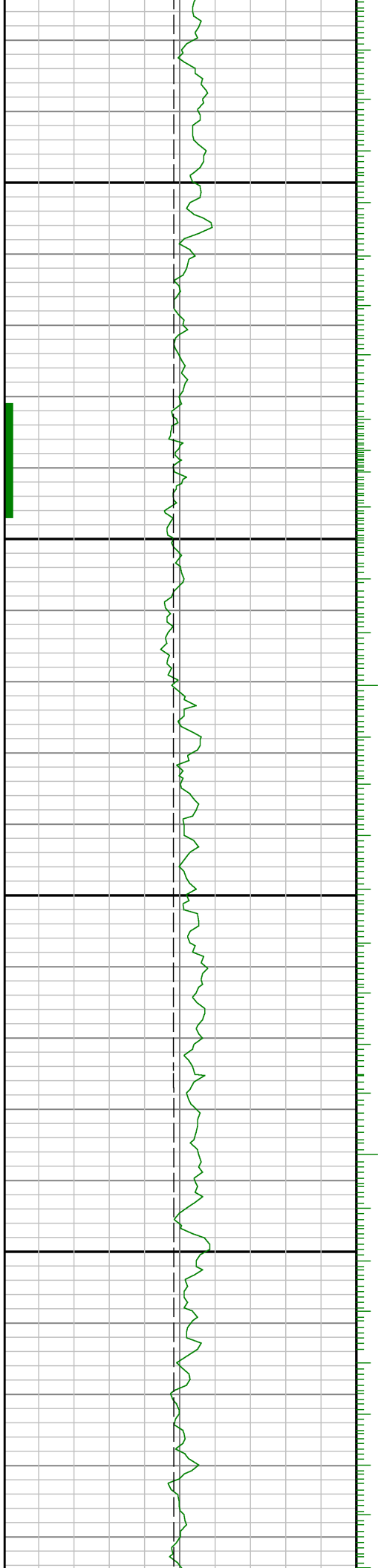




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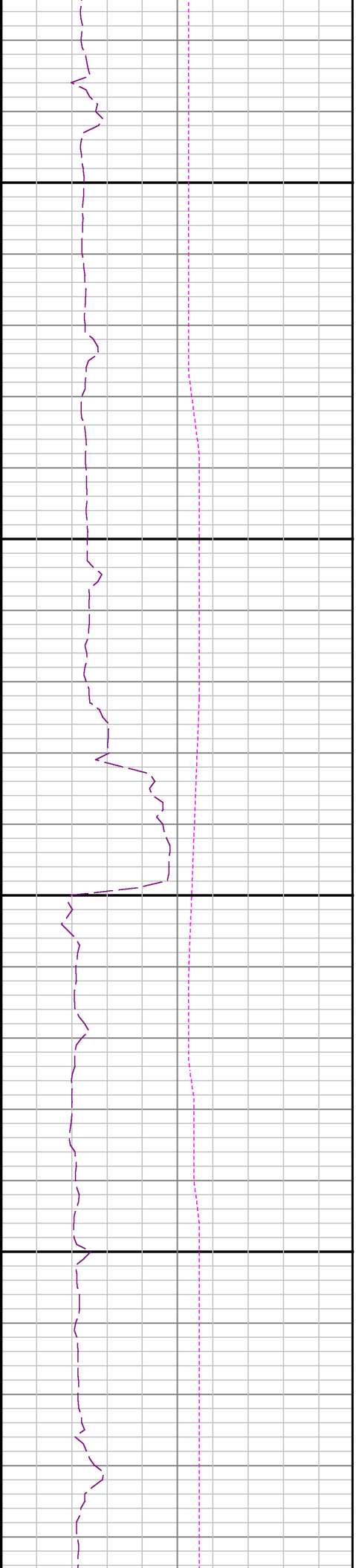
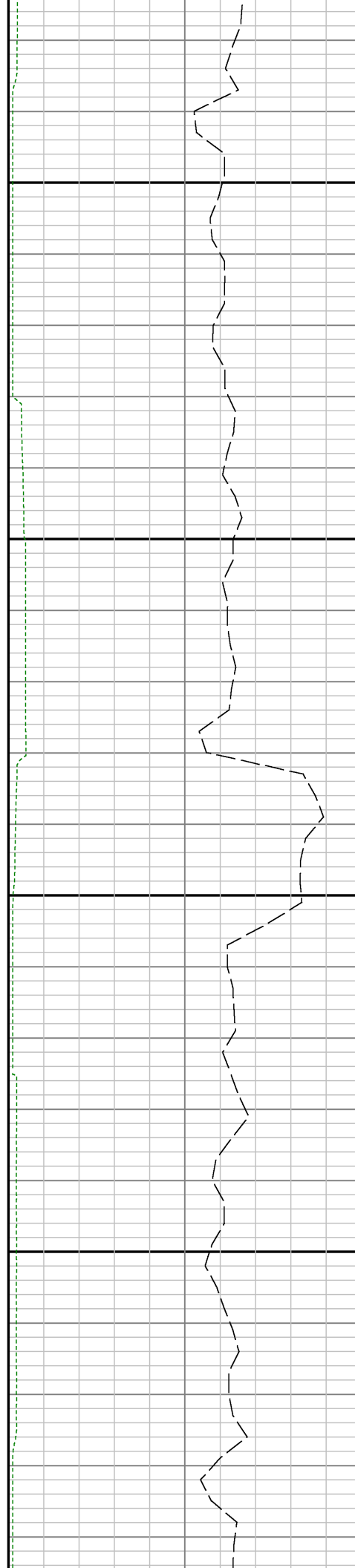
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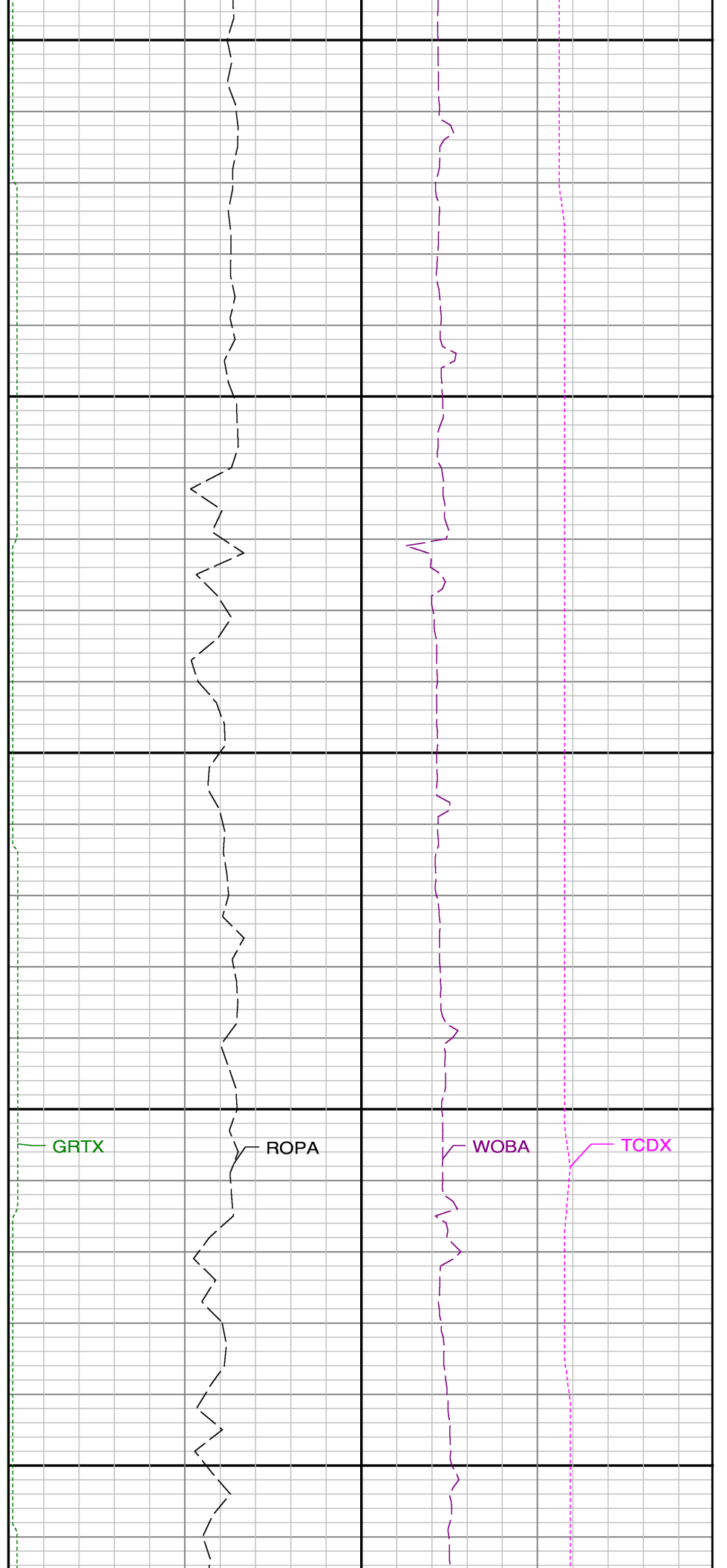
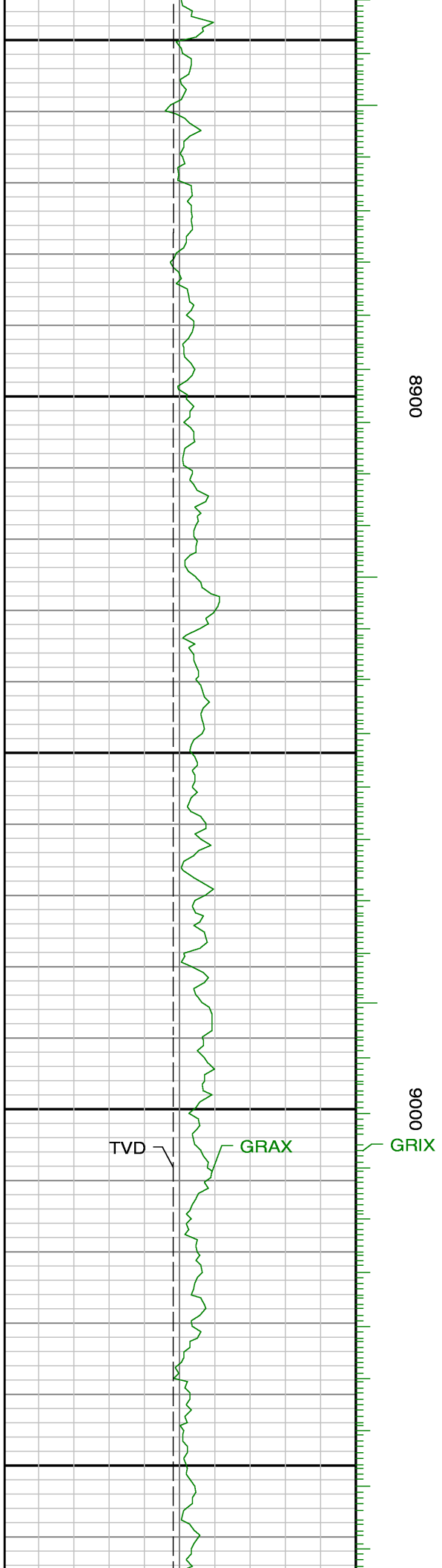


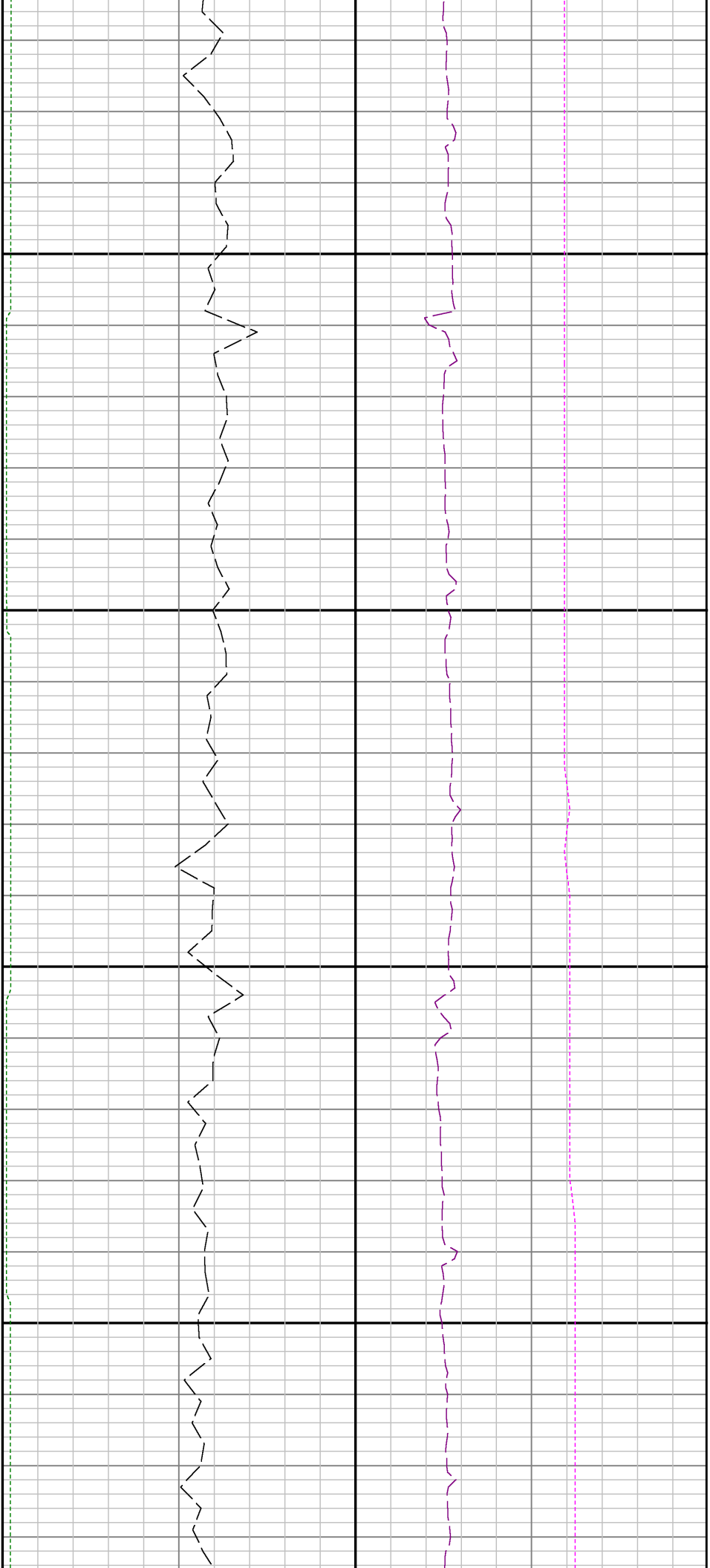


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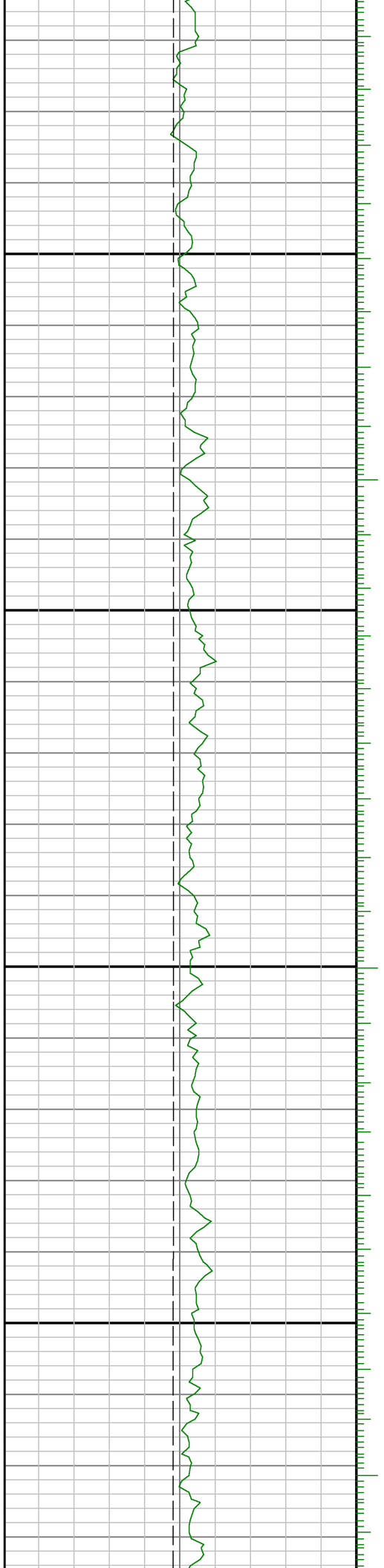


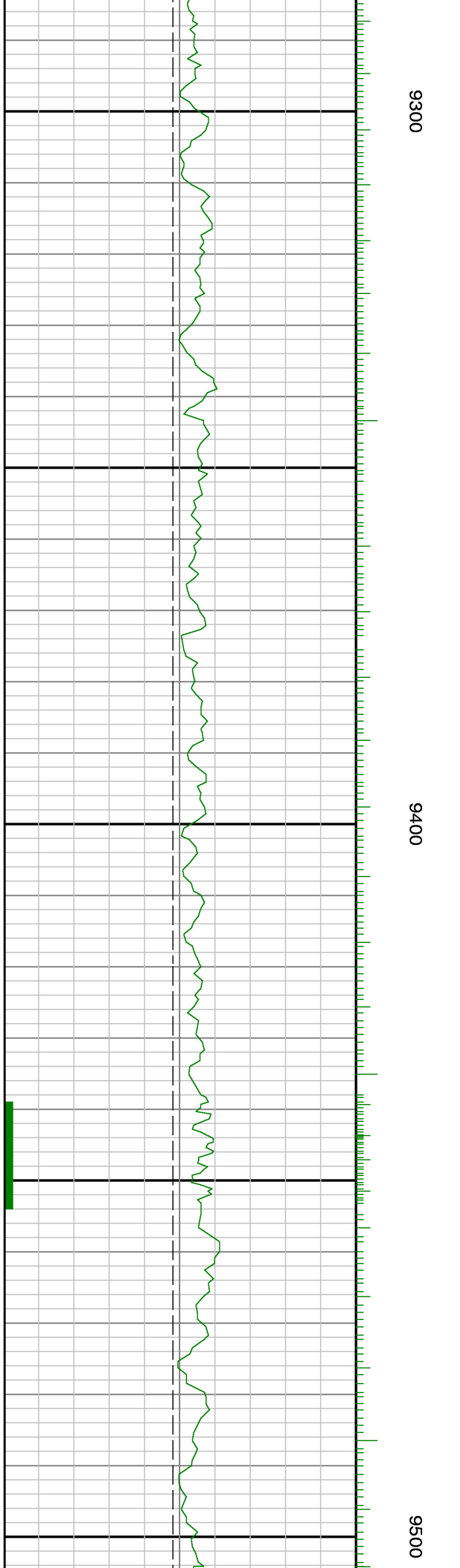


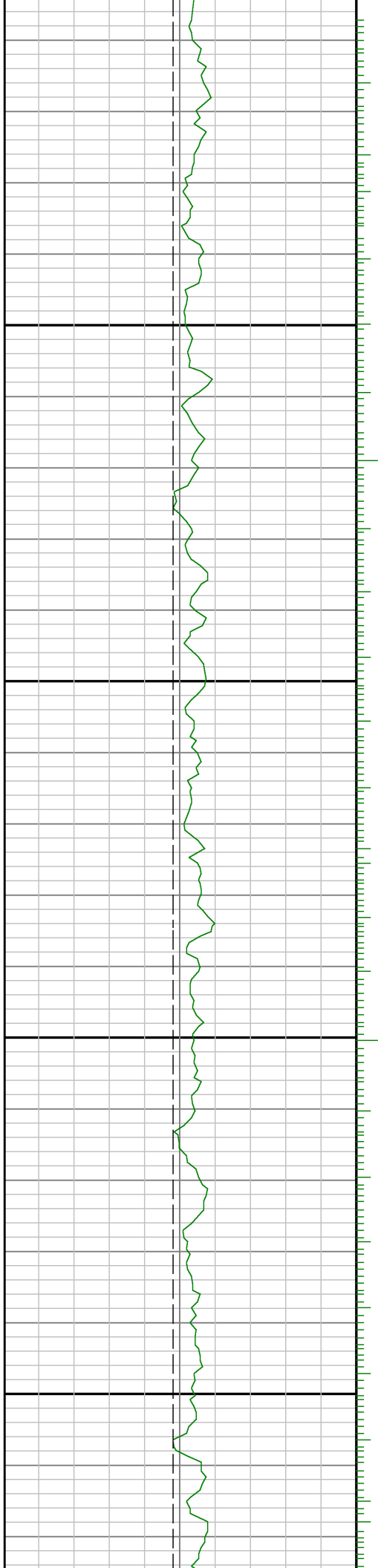


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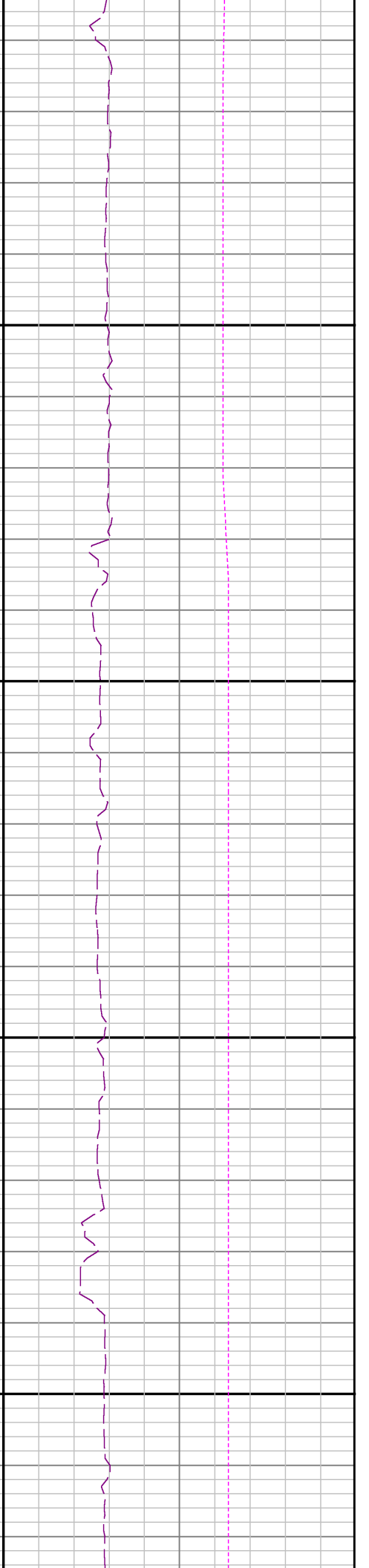
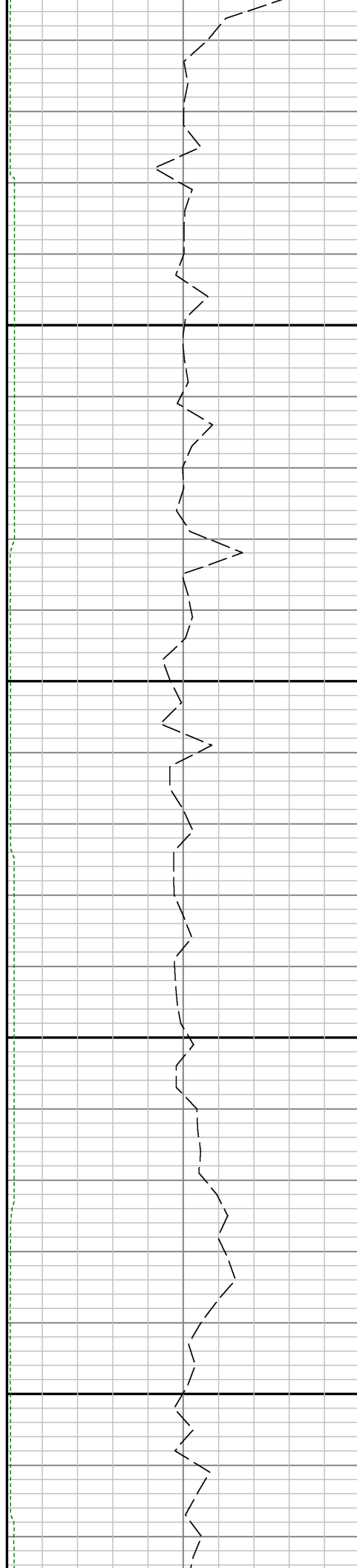


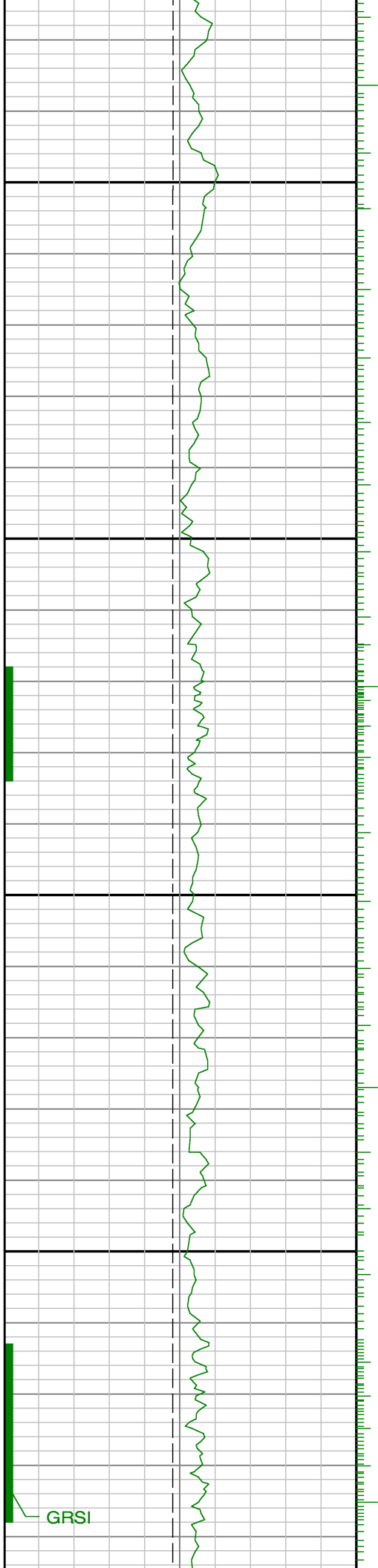




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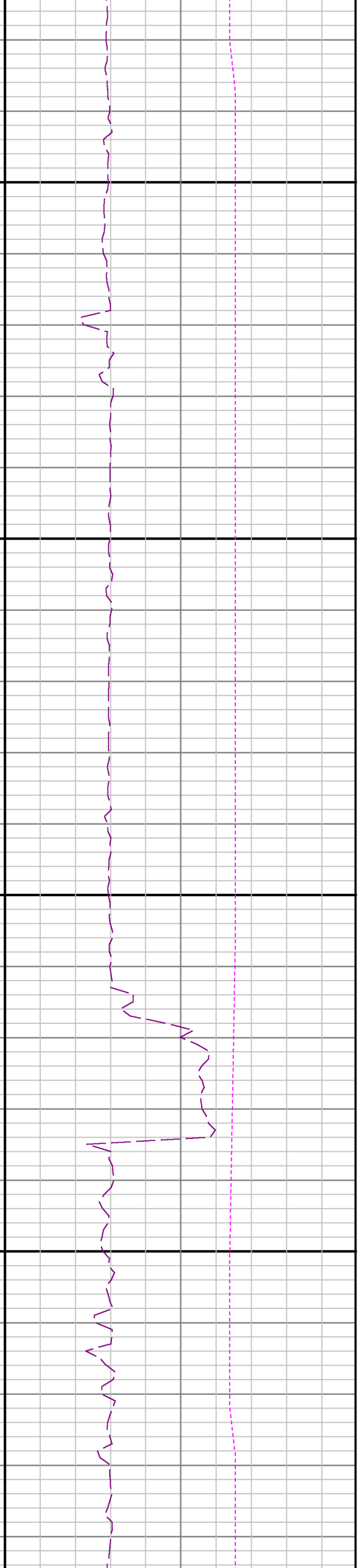
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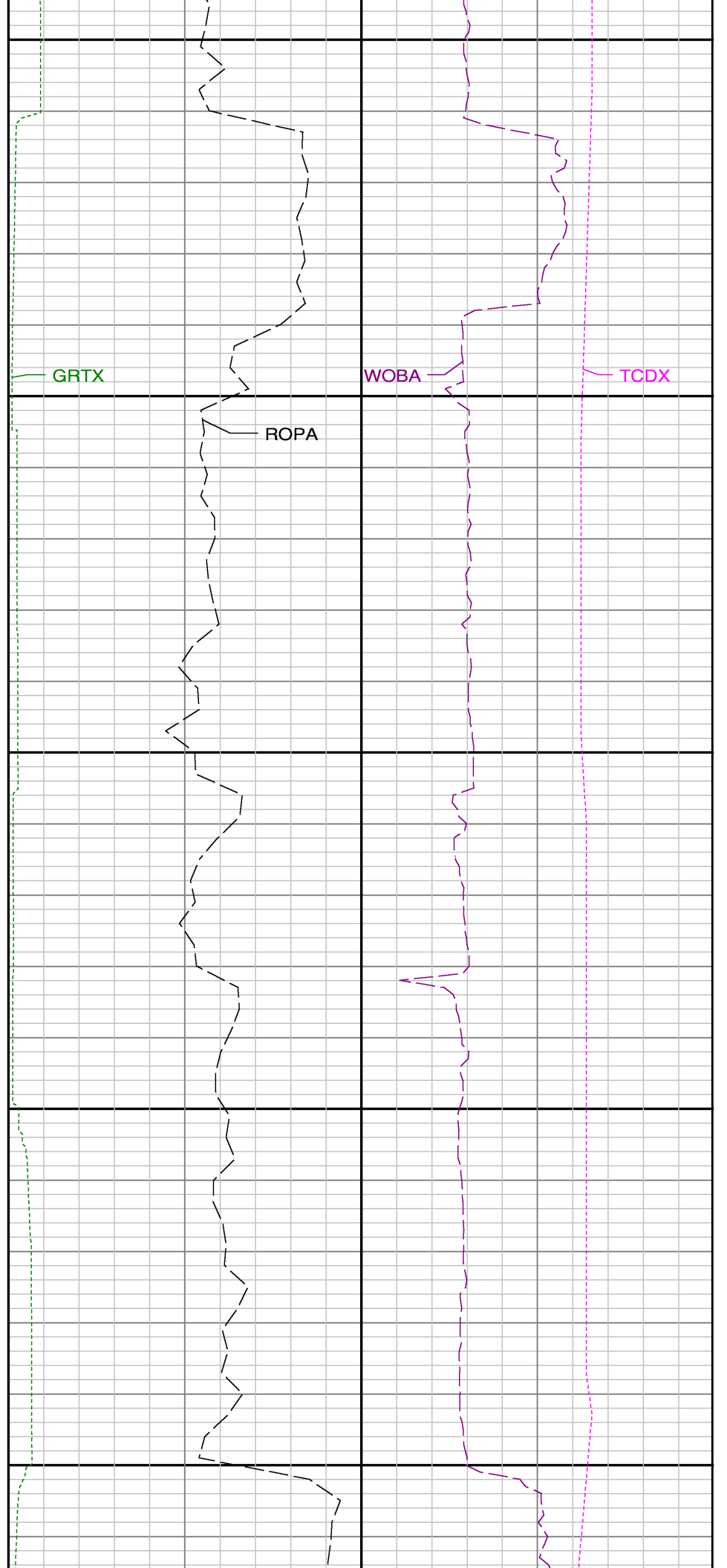
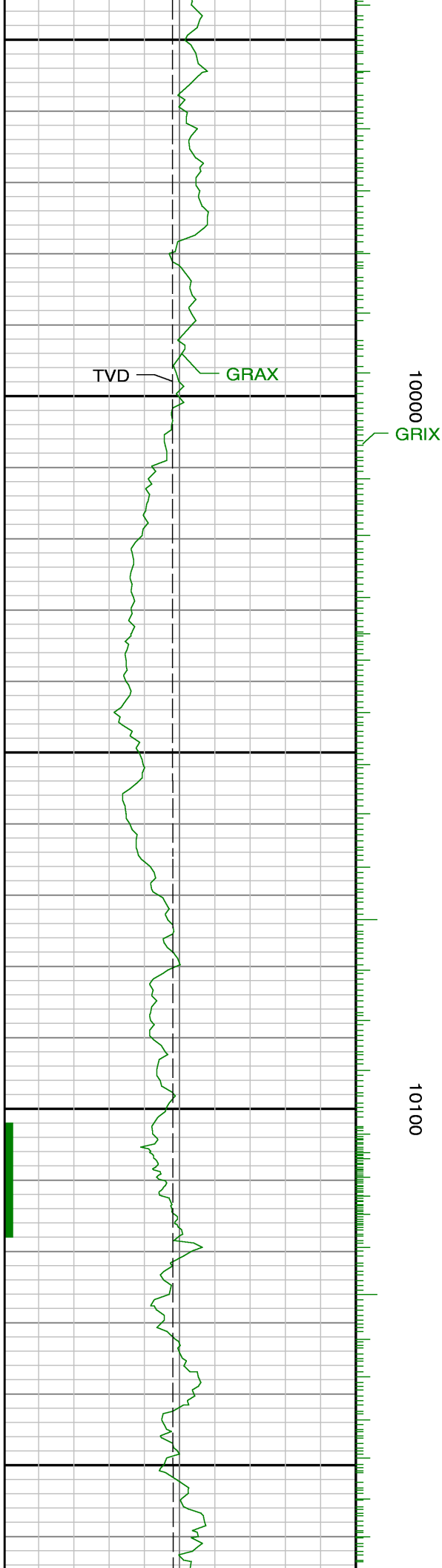


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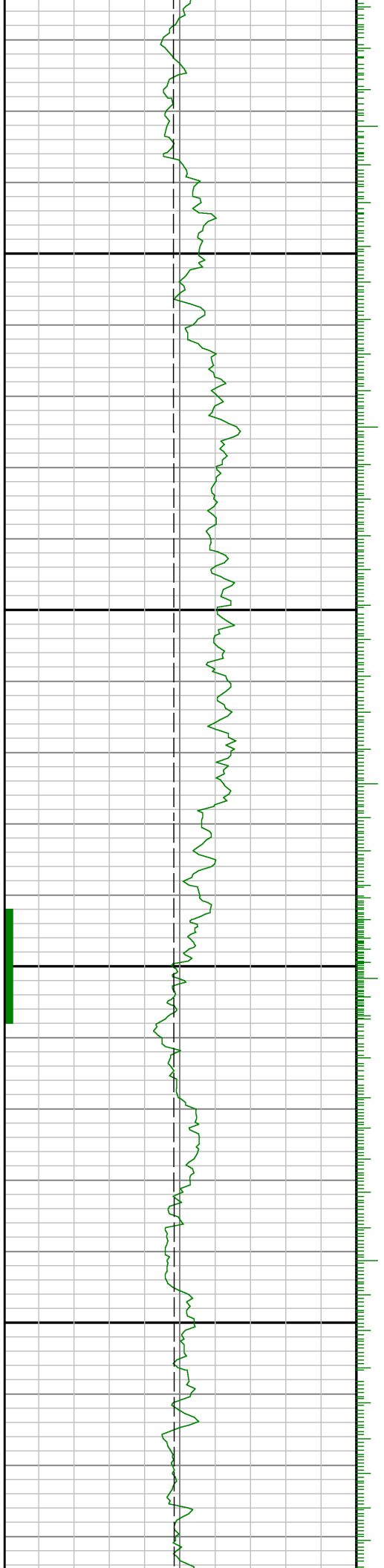
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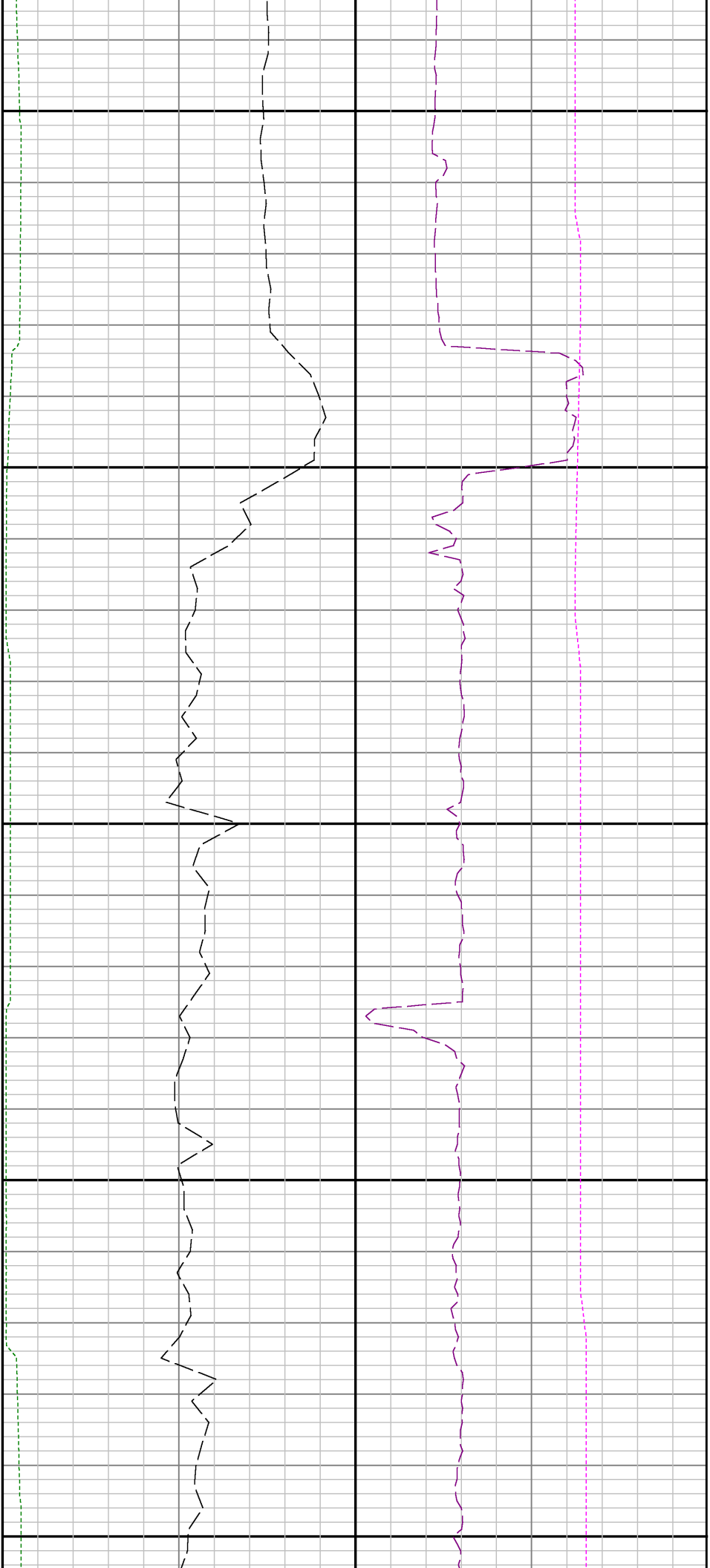




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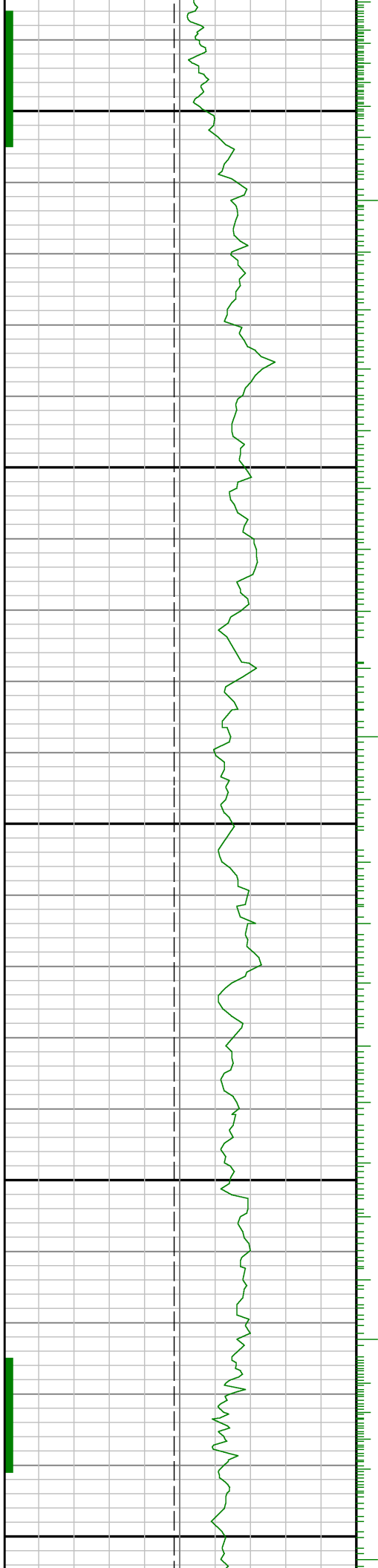


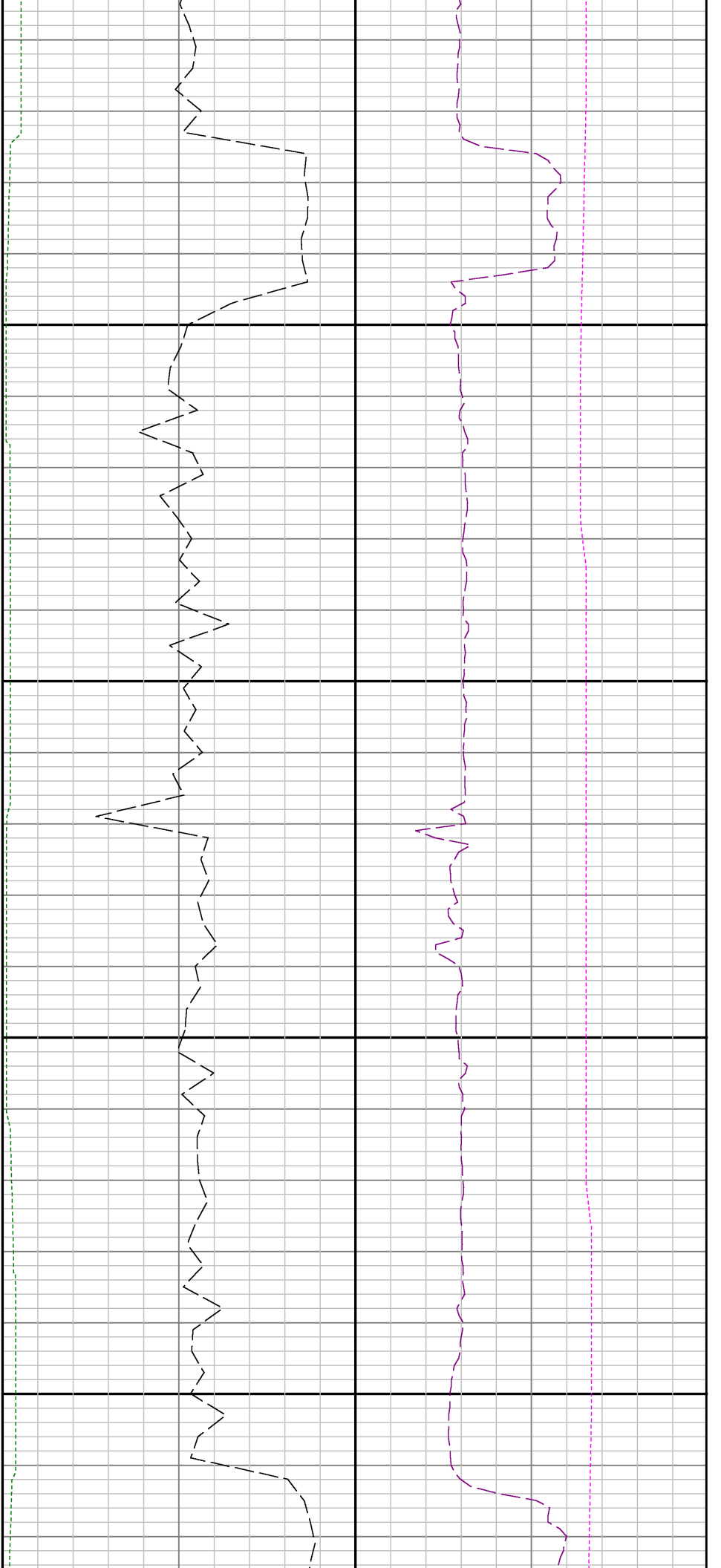


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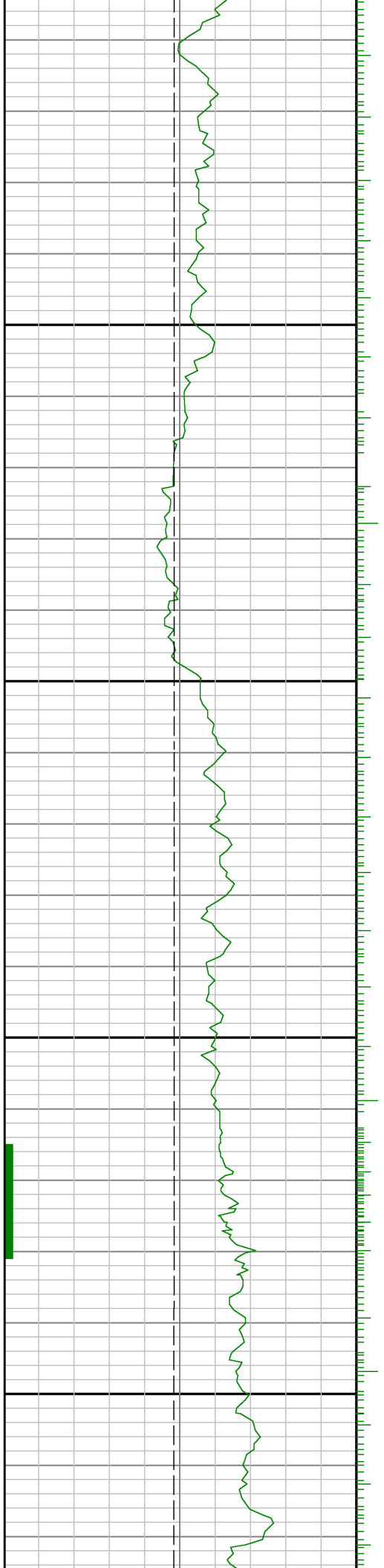
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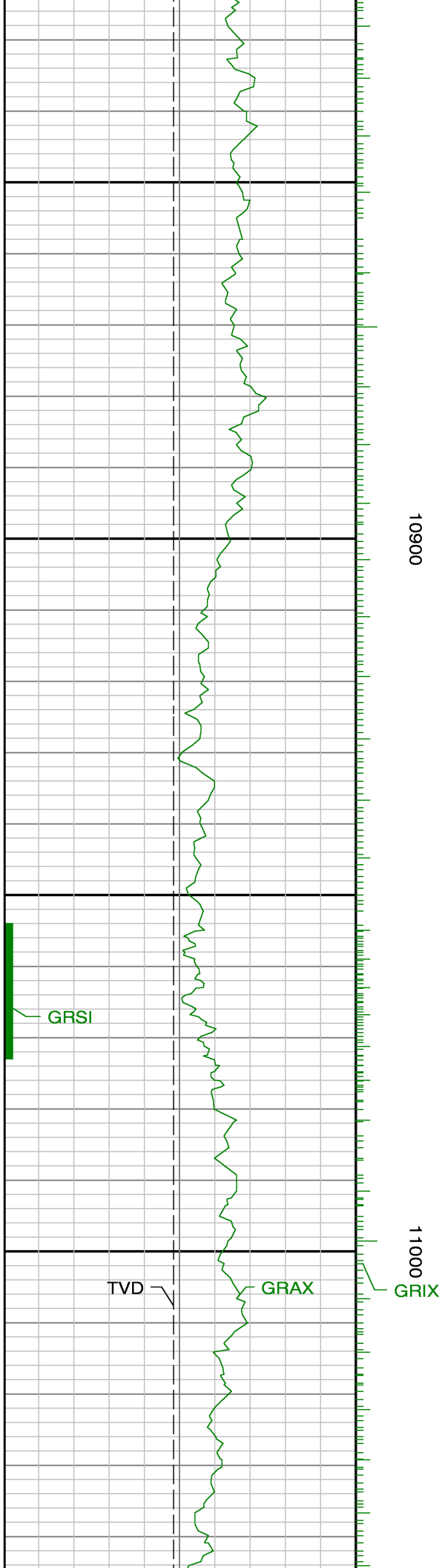


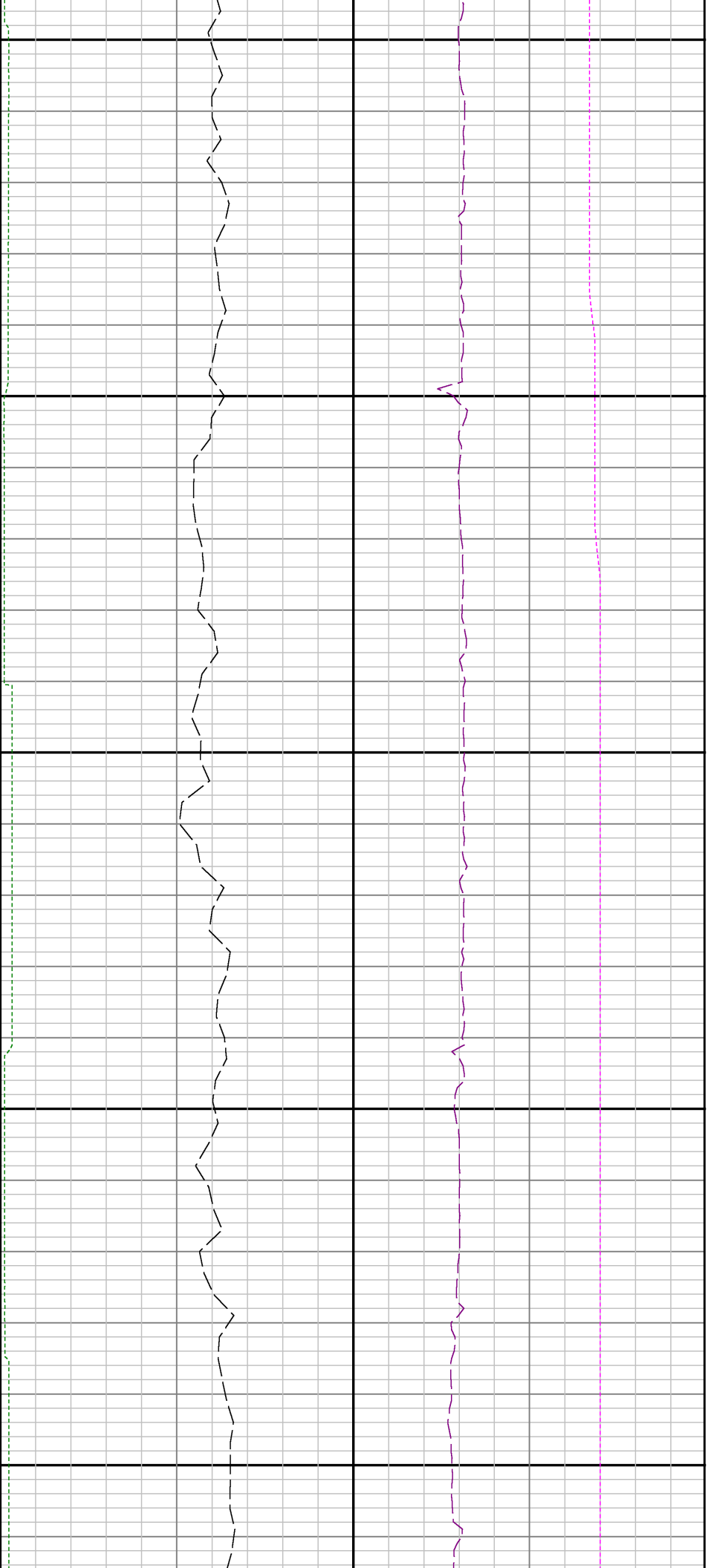


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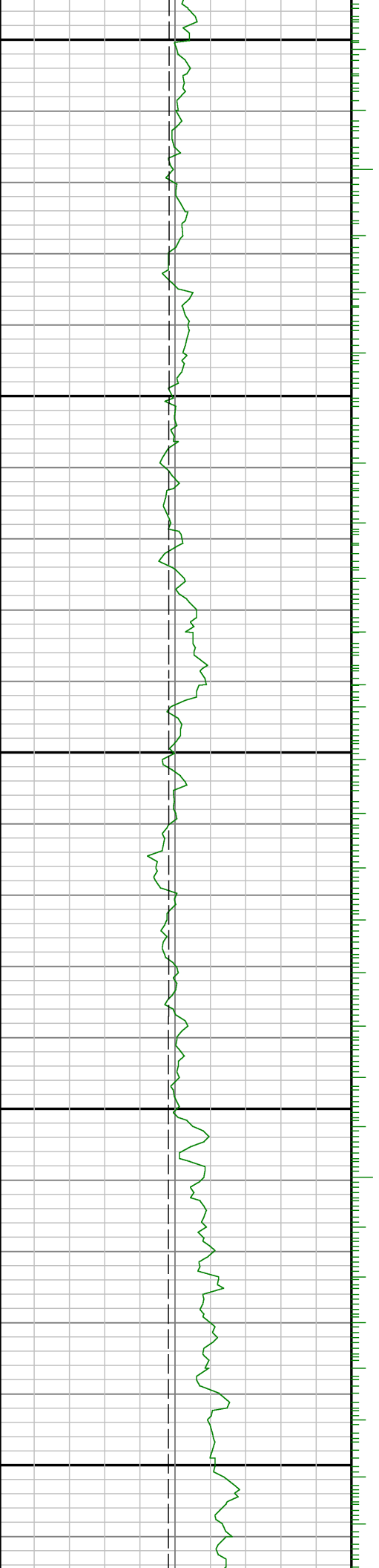


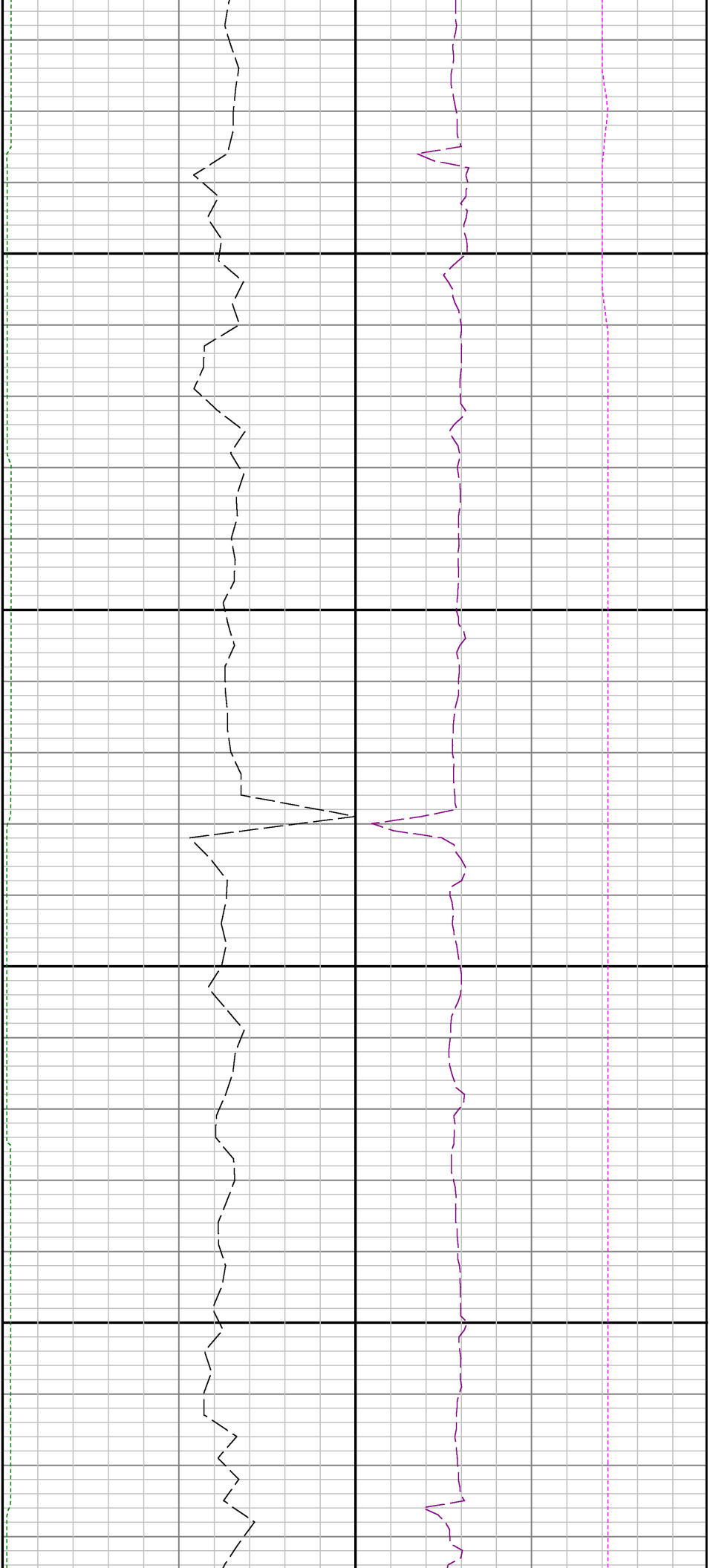




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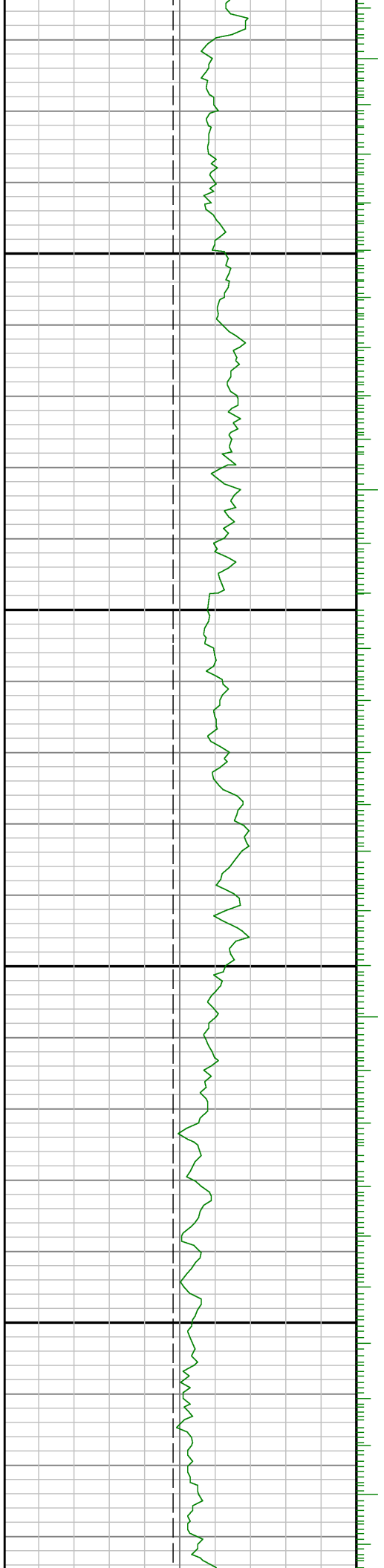
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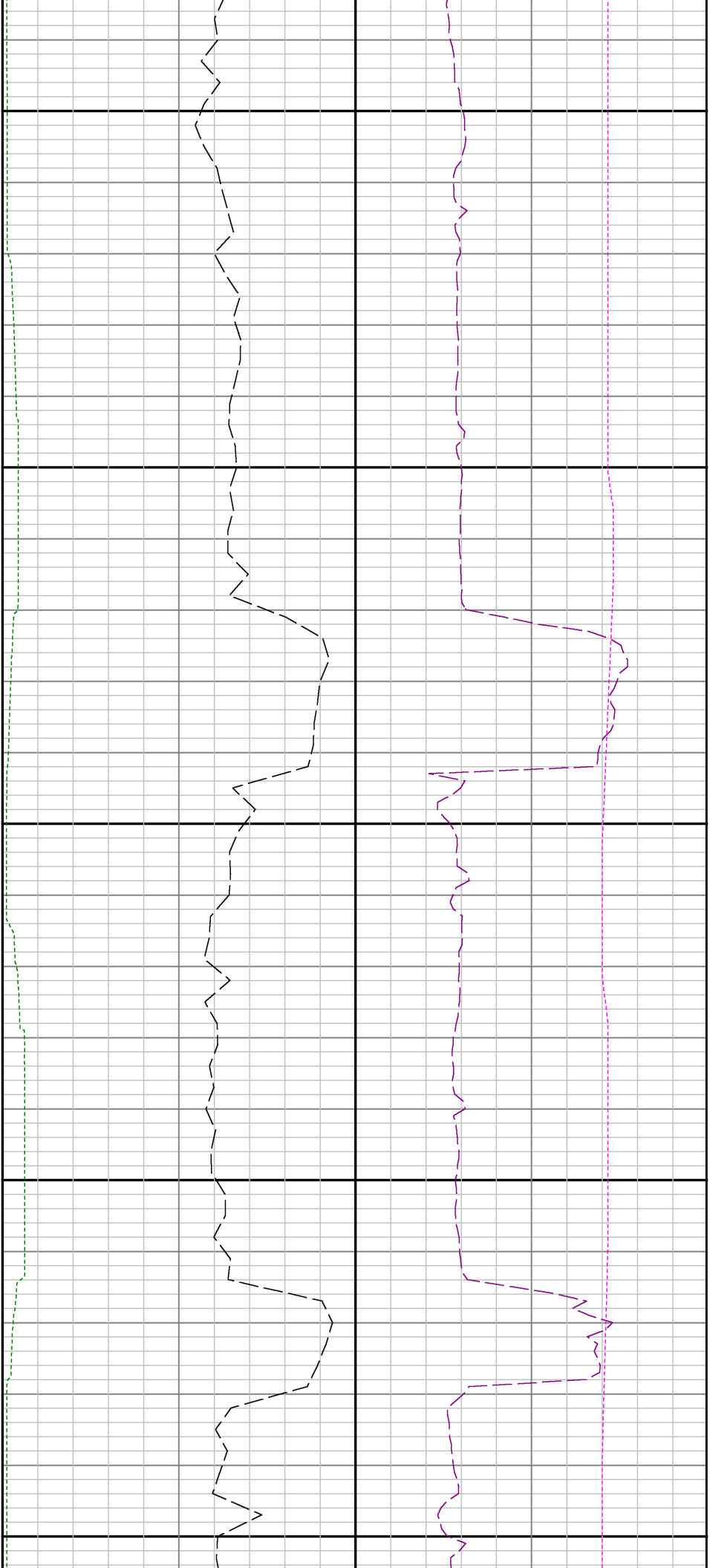




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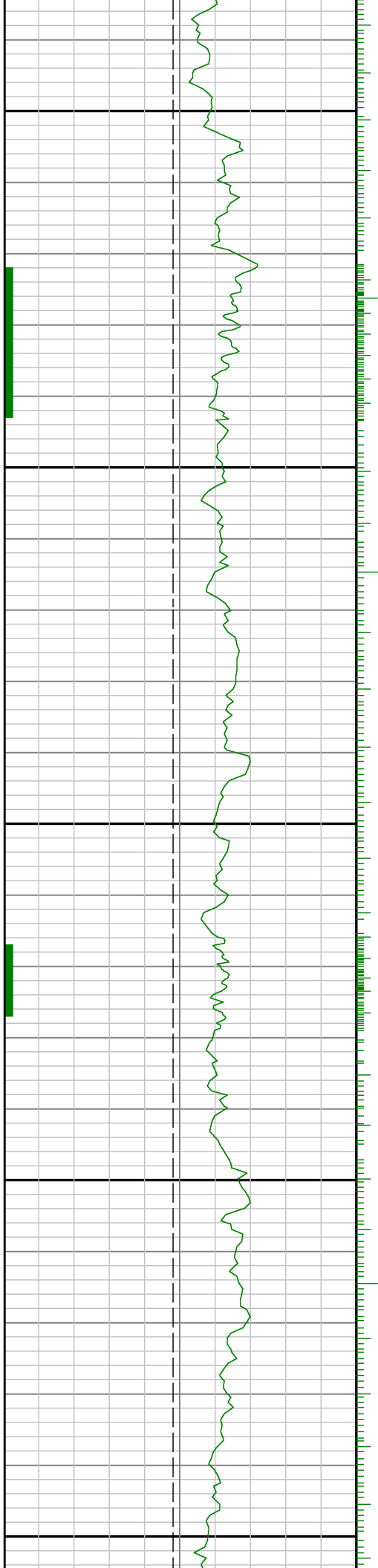


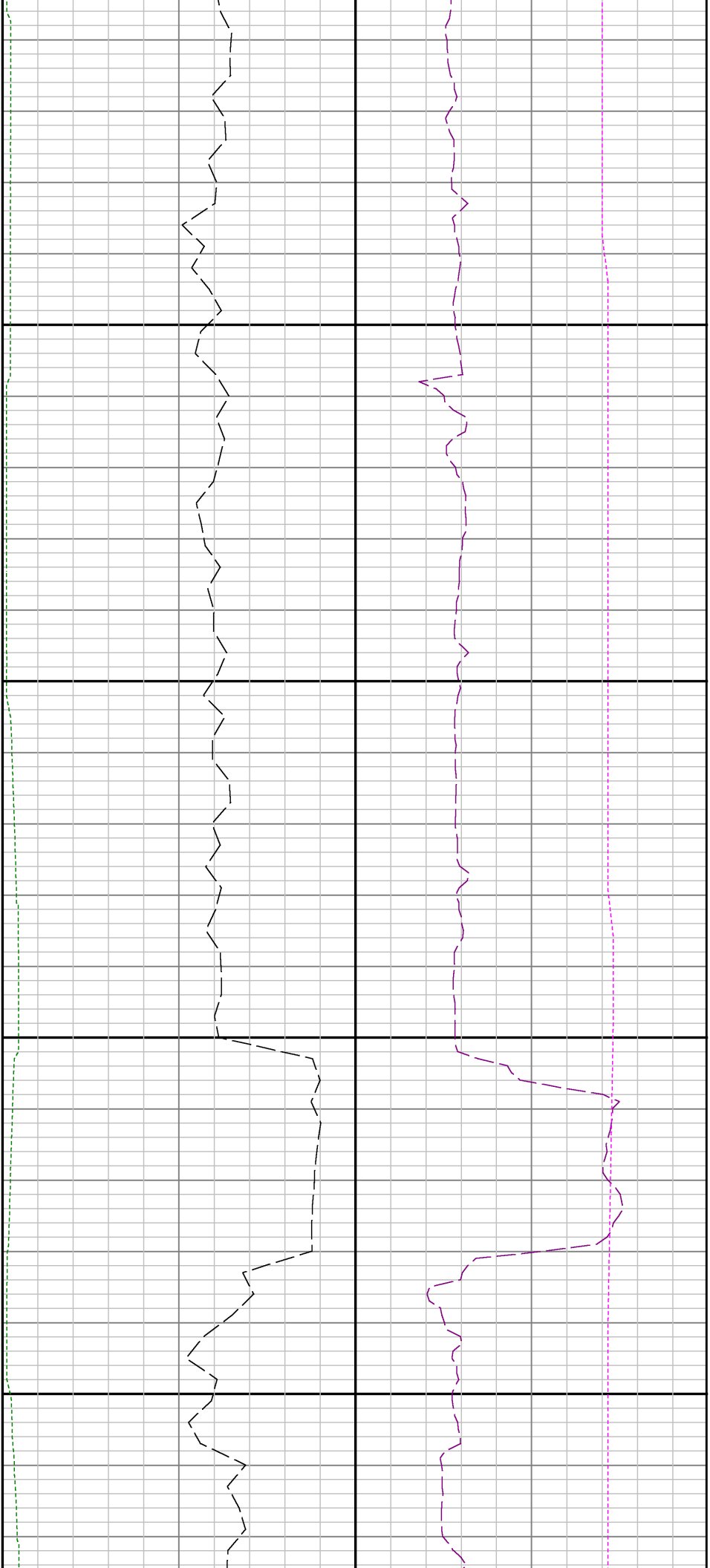


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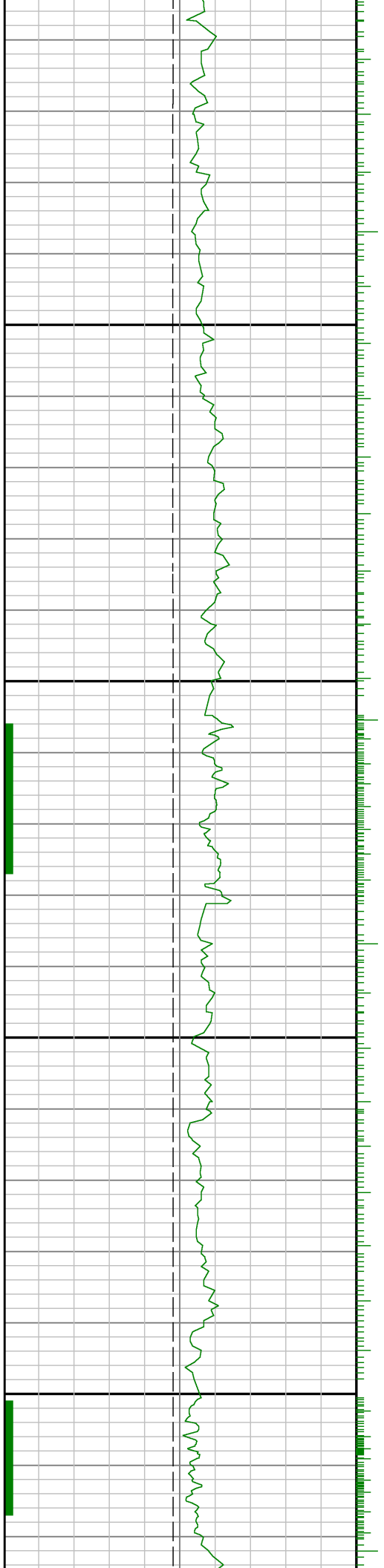
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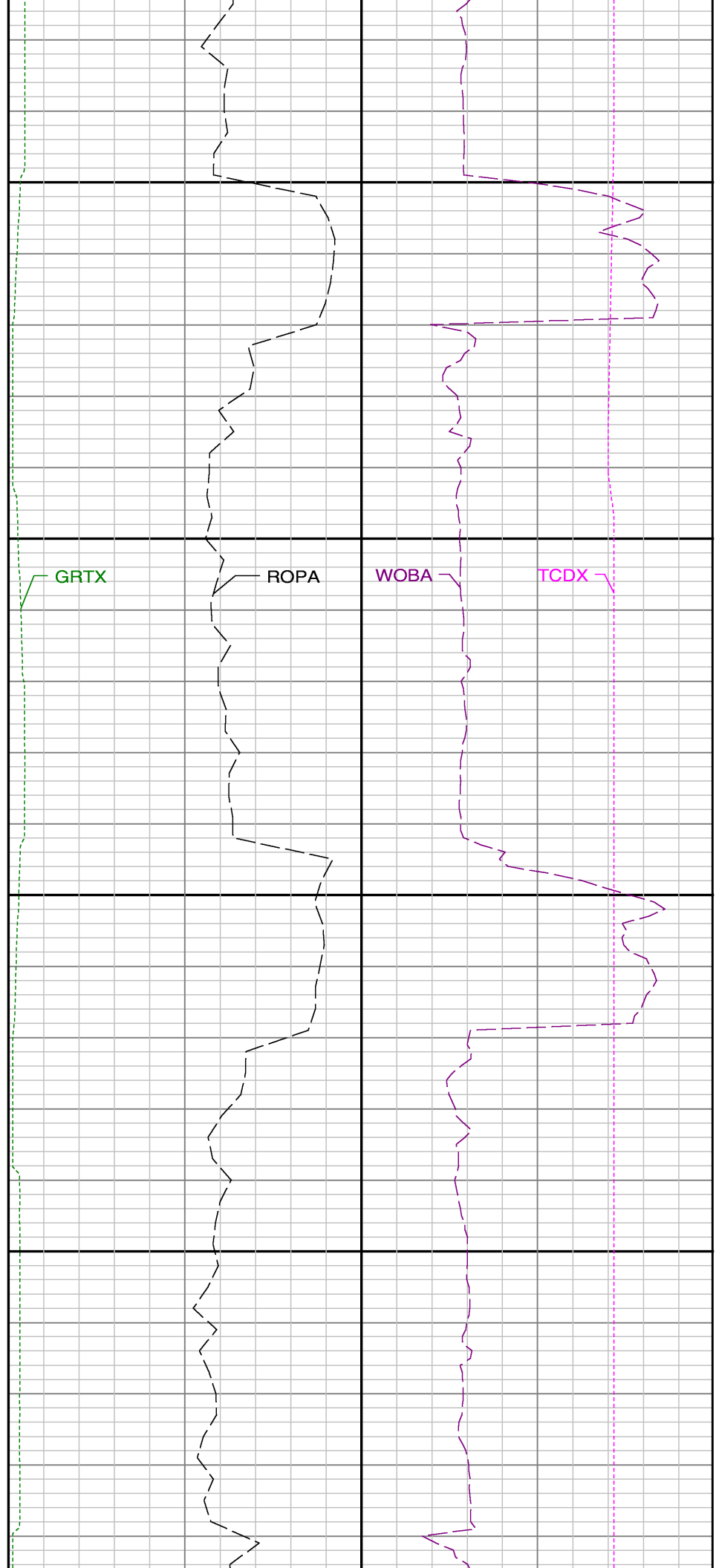
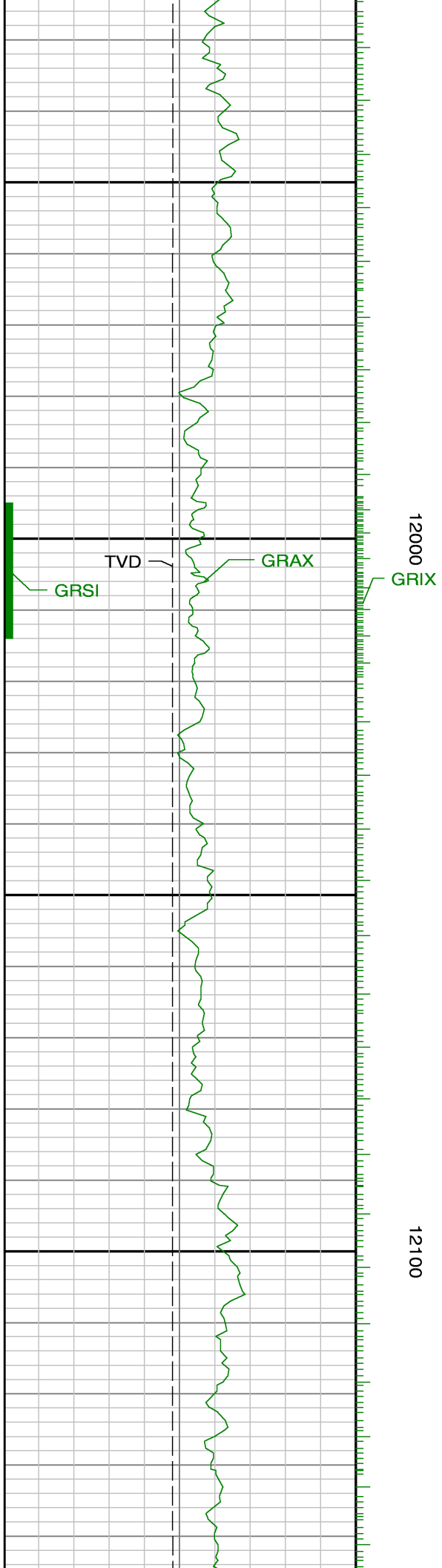


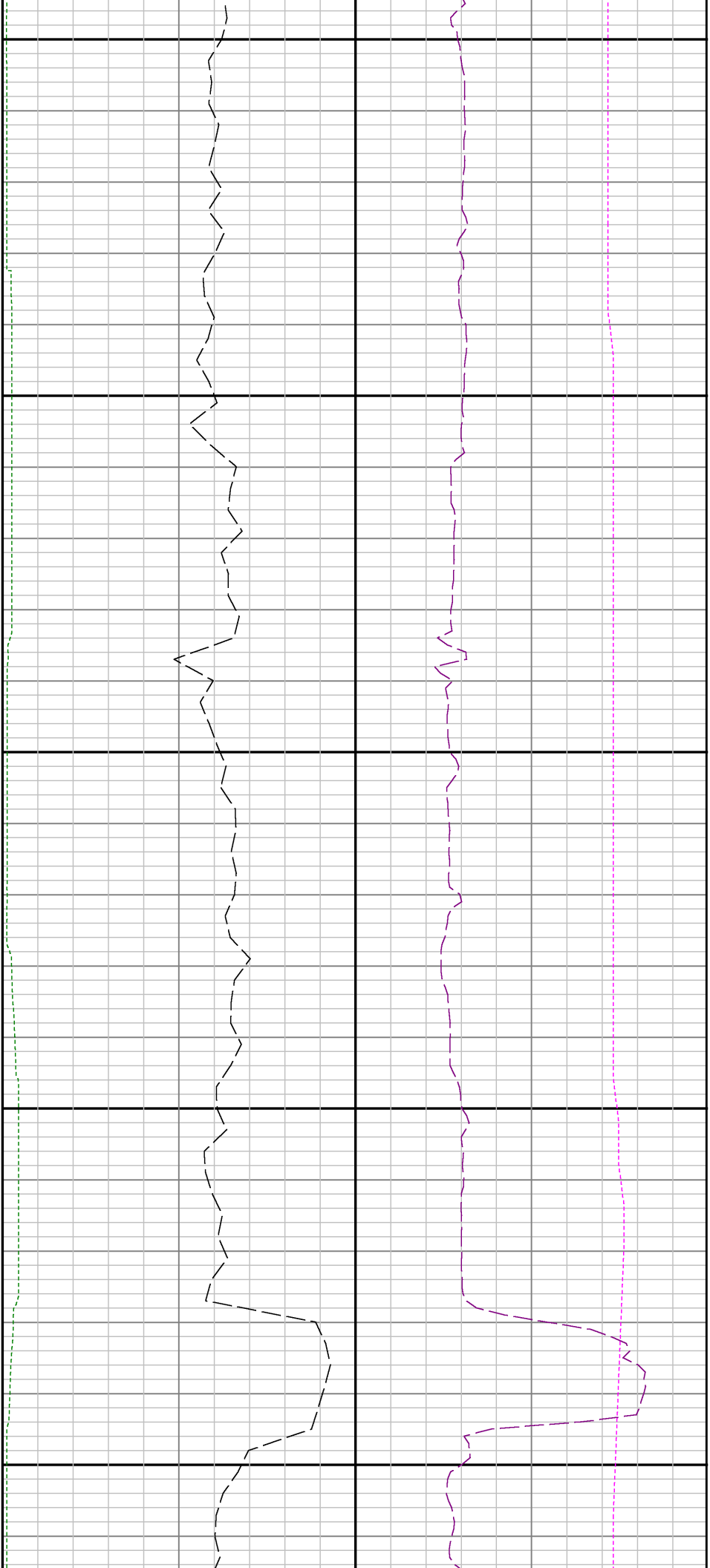


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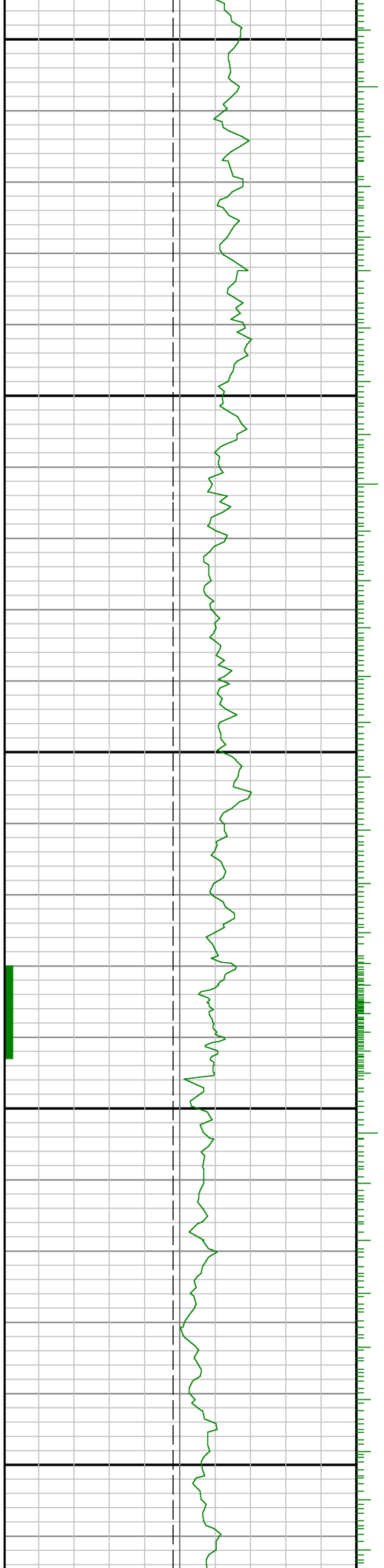






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