

LWD MEMORY LOG



Gamma Ray

Company: SRC Energy

Well: Troutd 41N-23C-M

Field: DJ Basin

County: Weld County Country: United States

State: Colorado

Surface Location:

Latitude: 040° 27' 52.531" N
Longitude: 104° 46' 02.528" W

Other Services:

SEC:

27 TVN: 6N RGE: 66W

Permanent Datum (P.D.): Ground Level

Elevation: 4719.00 ft

Elev. KB: 4744.00 ft
Elev. DF: 4719.00 ft
Elev. GL:

Above P.D. 25.00 ft

Elev. KB: 4744.00 ft
Elev. DF: 4719.00 ft
Elev. GL:

Dates

Interval Drilled

Date From: 2018-06-01
Date To: 2018-08-22
Spud Date: 2018-06-01

Top: (ft) 1826.00
Bottom: (ft) 15595.00

Azi Reference North: True
Total Magnetic Field Strength: (nT) 52390
Mag to Reference North Correction: (deg) 7.56

Magnetic Field Reference

Borehole Record

Casing Record

Hole Size (in)

From (ft) 25.00

To (ft) 1826.00

Size (in) 9.625

Weight (lb/ft) 36.00

From (ft) 25.00

To (ft) 1816.00

13.500

8.500

1826.00

15595.00

9.625

36.00

25.00

1816.00

Mud Record

Deviation Record

Type

From (ft) 1826.00

To (ft) 15595.00

Hole Size (in) 13.500

Interval (ft) 1801.00

Inc | Az (Start) 0.00 | 106.28

Inc | Az (End) 1.85 | 200.98

1826.00

15595.00

13.500

8.500

13779.00

1.85 | 200.98

90.62 | 89.62

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Run No.	Tool	Serial Number	Measurement	Sensor Offset (ft)	Bit Offset (ft)	Max O.D. (in)	Min I.D. (in)
1	Sensor Sub	ZAPS230925	Pressure	32.84	80.29	8.000	0.000
1	Sensor Sub	ZAPS230925	Directional (mag)	12.26	59.71	8.000	0.000
1	Sensor Sub	ZAPS230925	VSS	12.26	59.71	8.000	0.000
2	ATC_SU	11819474	Near Bit VSS	5.93	6.73	7.000	4.330
2	ATC_SU	11819474	Near Bit Inclination	5.93	6.73	7.000	4.330
2	ATC_MWD	14179565	Gamma (single)	2.22	12.35	7.000	3.250
2	ATC_MWD	14179565	Directional (mag)	12.27	22.40	7.000	3.250

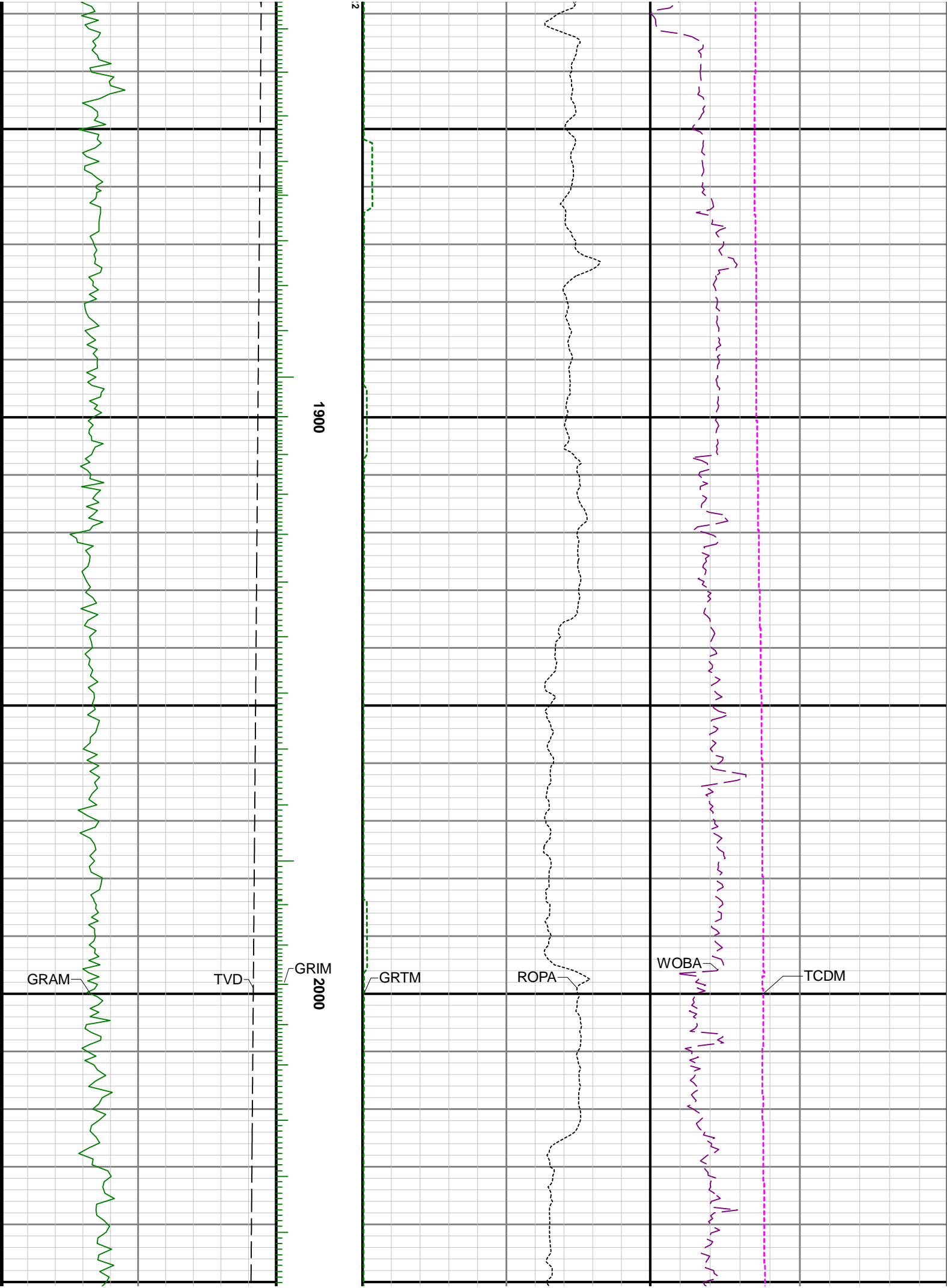
Mnemonic	Name	Description
GAM	APS	APS EM Module
ATC_SU	ATC_SU	Auto Trak Curve Steering Unit
ATC_MWD	ATC_MWD	Auto Trak Curve MWD
ATC_LCPM	ATC_LCPM	Auto Trak Curve LCPM

1	Depth measurements 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.
2	Baker Hughes LWD Run 1 utilized 8 inch NaviTrak service (Directional only) behind a 13 1/2 inch bit and steerable assembly from surface to 1826 feet MD (surface to 1824 feet TVD). No logging data was acquired during this run.
3	Baker Hughes LWD Run 2 utilized 6 3/4 inch NaviGamma services (Gamma Ray and Directional) behind an 8 1/2 inch bit and rotary steerable assembly from 1826 to 15595 feet MD (1824 to 7034 feet TVD).
4	Gamma Ray Apparent (GRAM) is presented 0 to 300 API per customer request.

Number	Measured Depth (ft)	Hole Section (in)	Run No.	Remark
1	1826.00	8.500	2	Gamma Ray logging operations began at 1826 feet (1824 feet TVD).
2	9664.00	8.500	2	The interval from 9664 to 9677 feet MD (7068 feet TVD) data was not logged due tool shutting off and drilling ahead.
3	15592.00	8.500	2	The interval from 15582 to 15595 feet MD (7034 feet TVD) was not logged due to sensor to bit offset at well TD.

Presented Curves	Description	Units
ROPA	Depth Averaged ROP 3 ft Average	ft/h
TVD	True Vertical Depth	ft
WOBA	Weight On Bit, Average 1 ft Average	kIb
GRAM	Gamma Ray - Apparent - Memory 0.5 ft Average	API
GRIM	Gamma Ray - Data Point Indicator - Memory	unitless
GRTM	Gamma Ray - Time Since Drilled - Memory	min
TCDM	Directional Real-Time Survey Temperature	degF

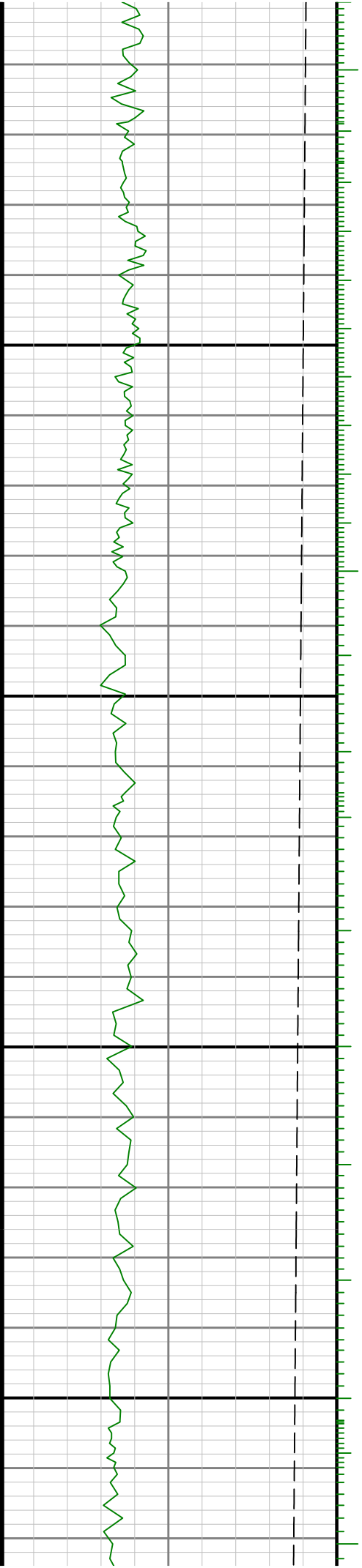
Company		Well		Date From:		Top:	
Interval		Date To:		Bottom:			
Created							
		SRC Energy		2018-06-01 02:13		1826.00 ft	
		Troutd 41N-23C-M		2018-08-22 16:22		15595.00 ft	
		2018-08-22 16:32:21					
True Vertical Depth TVD 7500 ————— 1500 ft Gamma Ray - Apparent 0.5 ft Average GRAM 0 ————— 300 API		MD 1:240 feet	Depth Averaged ROP 3 ft Average ROPA 1000 ————— 0 ft/h Gamma Time Since Drilled GRTM 0 ————— 600 min		Weight On Bit, Average 1 ft Average WOBA 0 ————— 50 klb Downhole Temperature TCDM 0 ————— 300 degF		
		1800					
See Remark 1		9 5/8" Casing					
GRAM	TVD		ROPA	WOBA	TCDM		

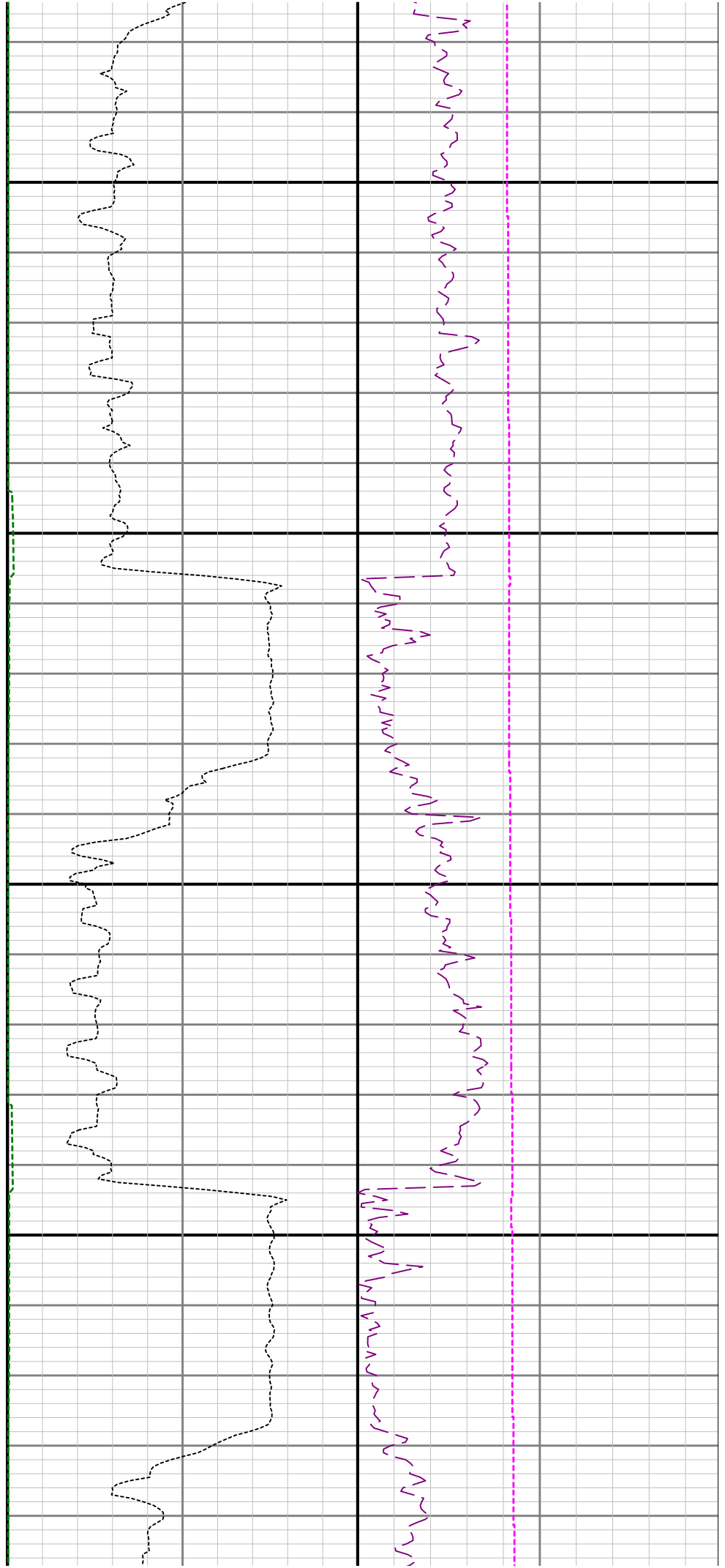




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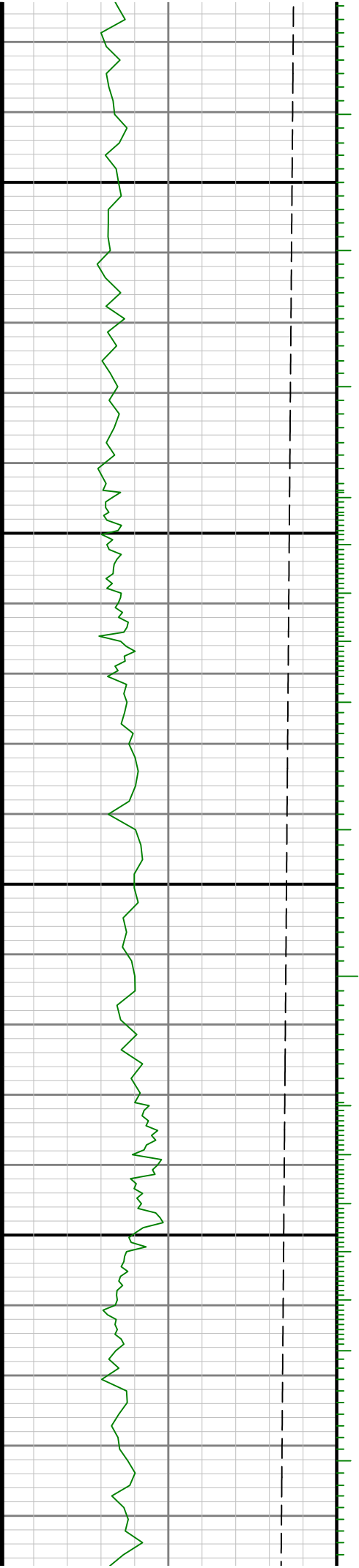
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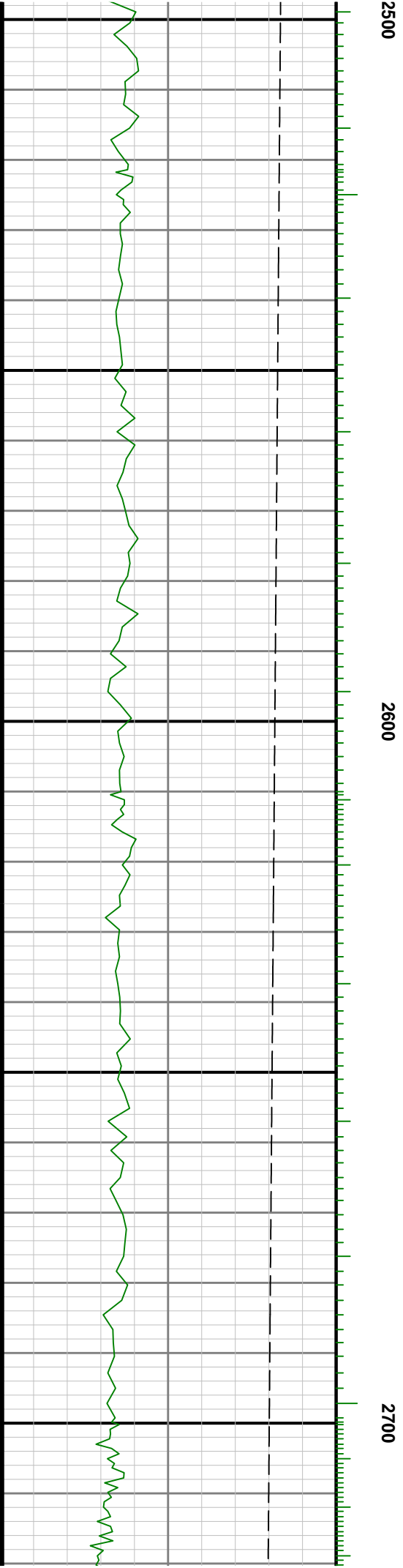
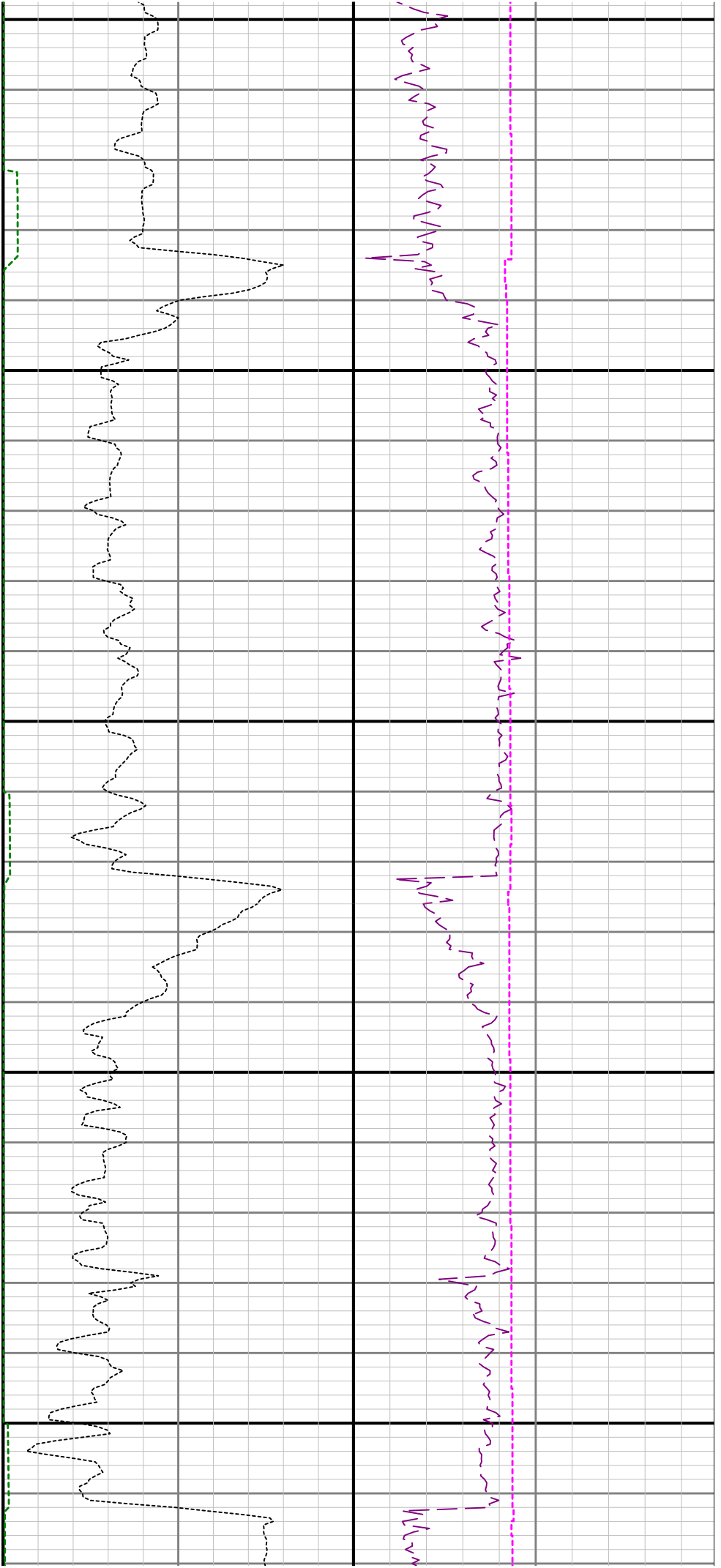


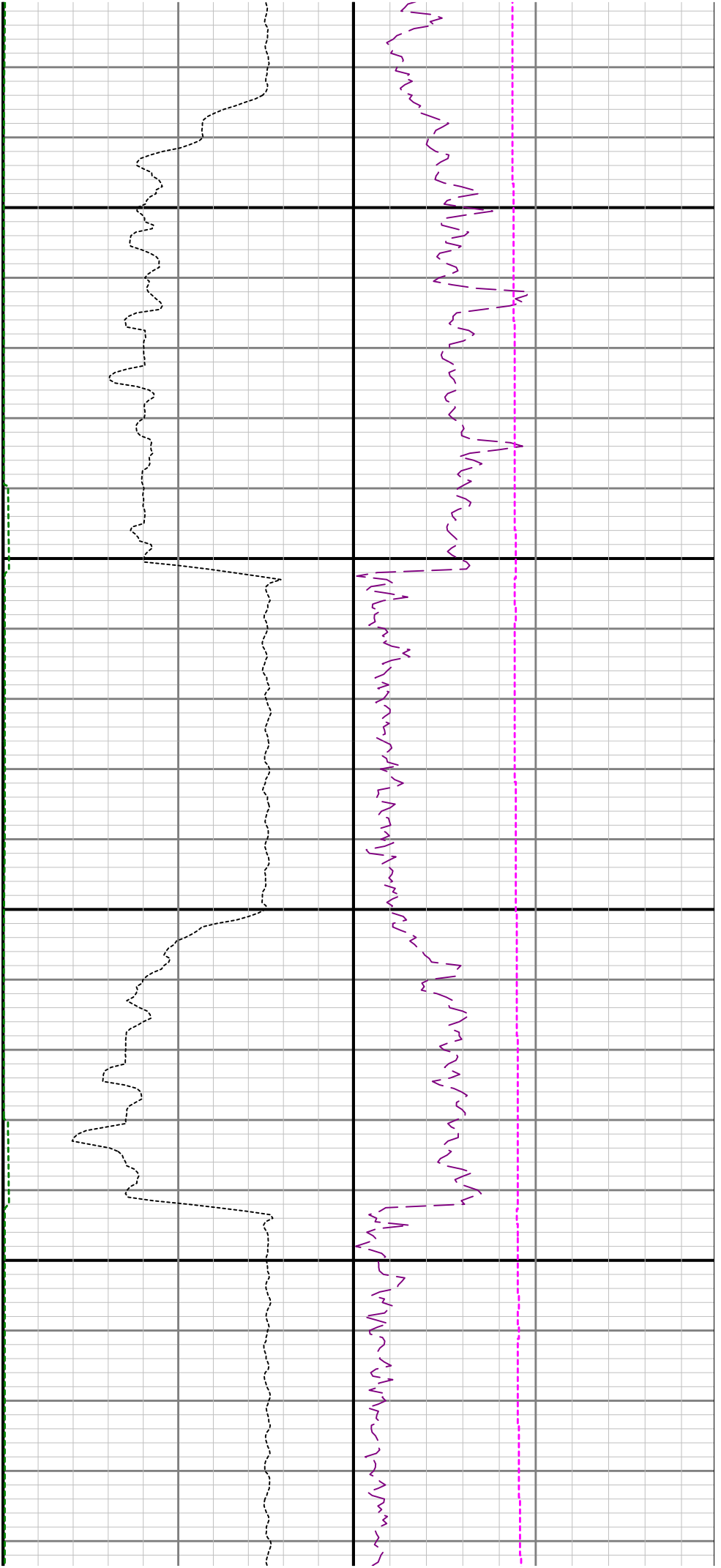


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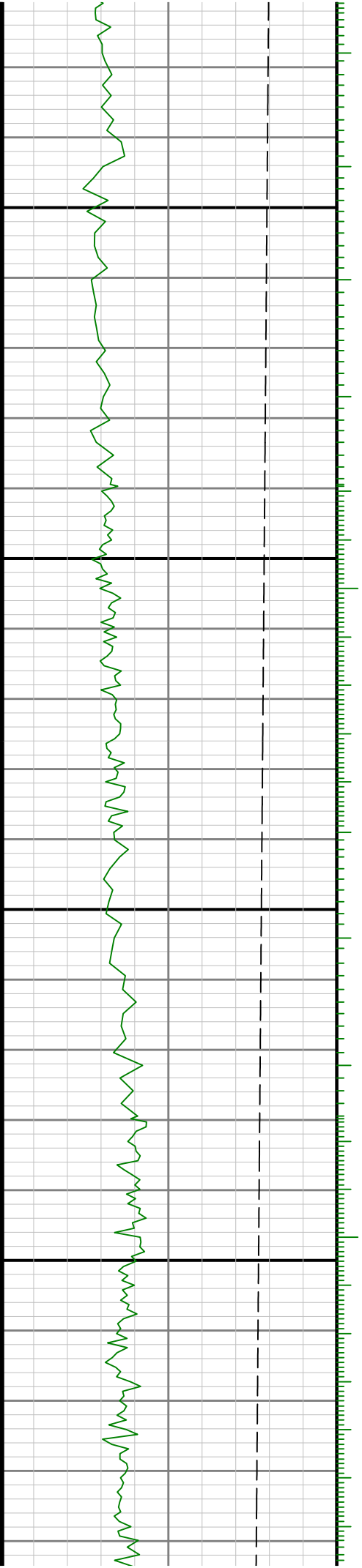


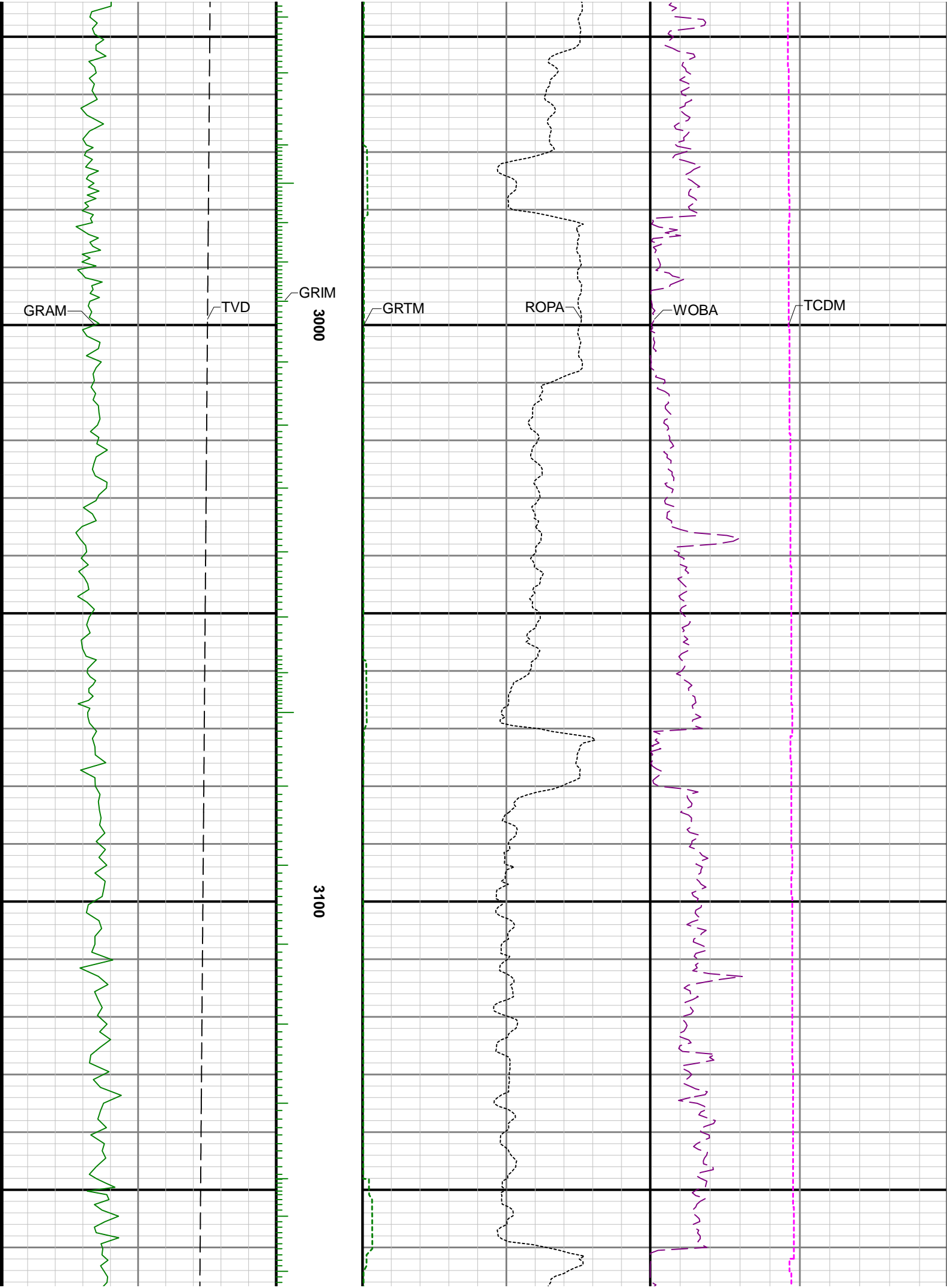




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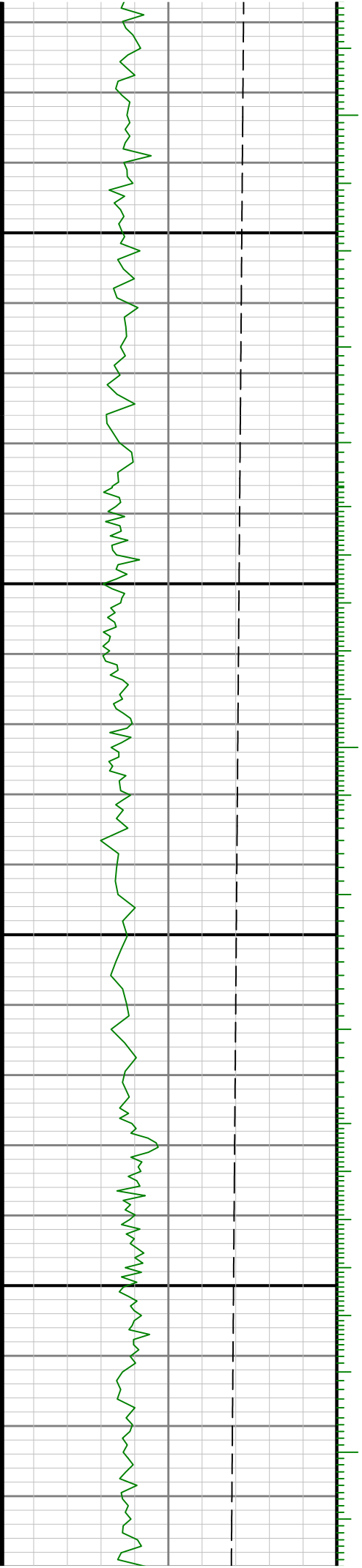


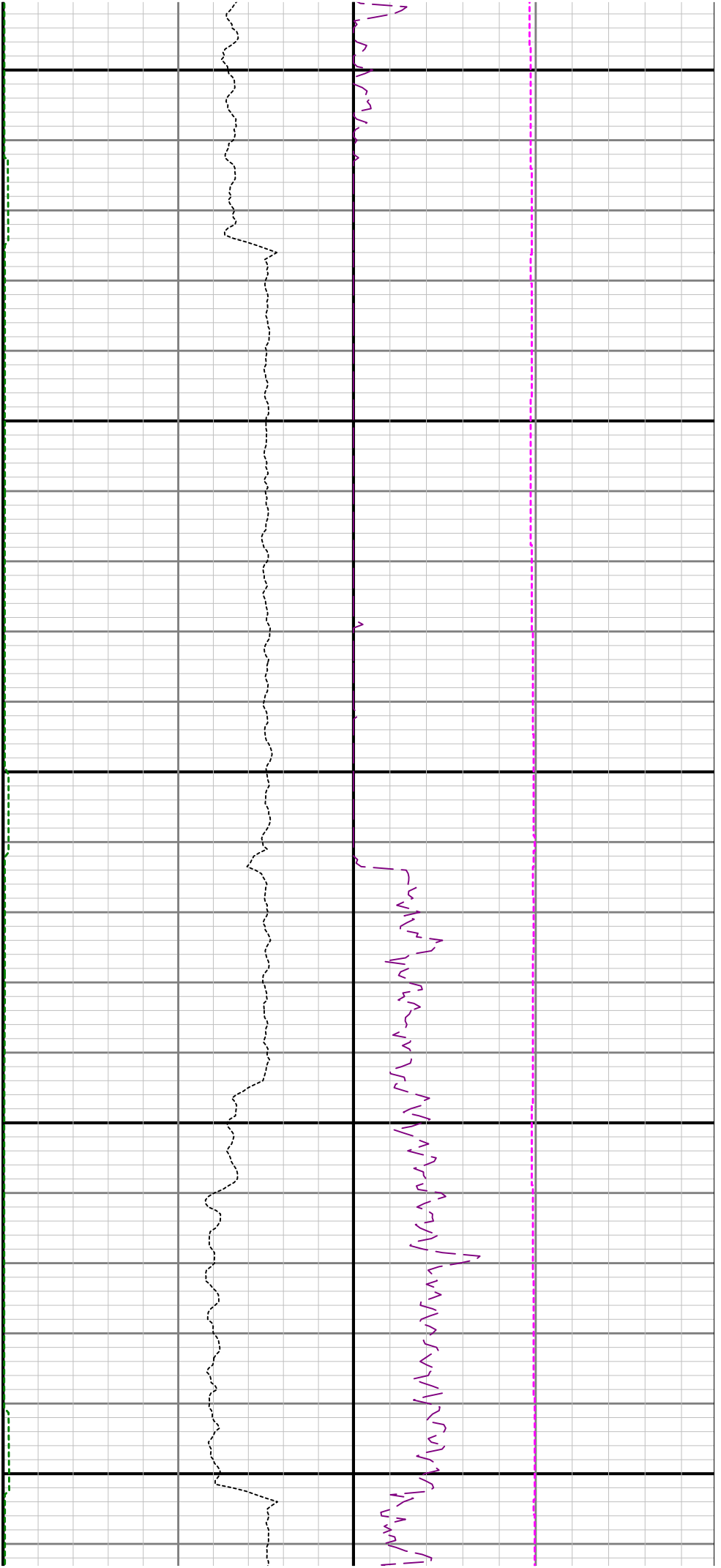




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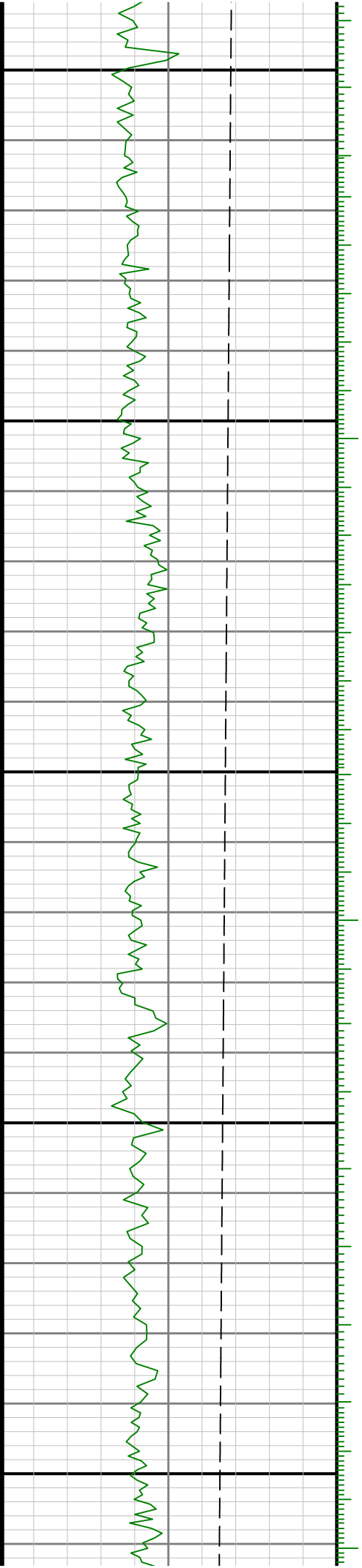


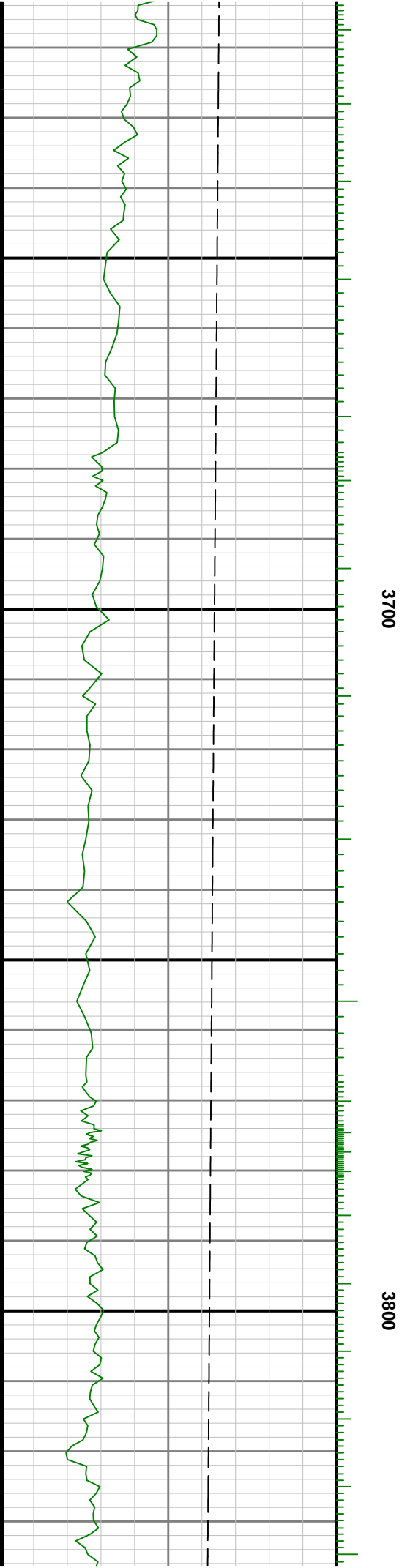
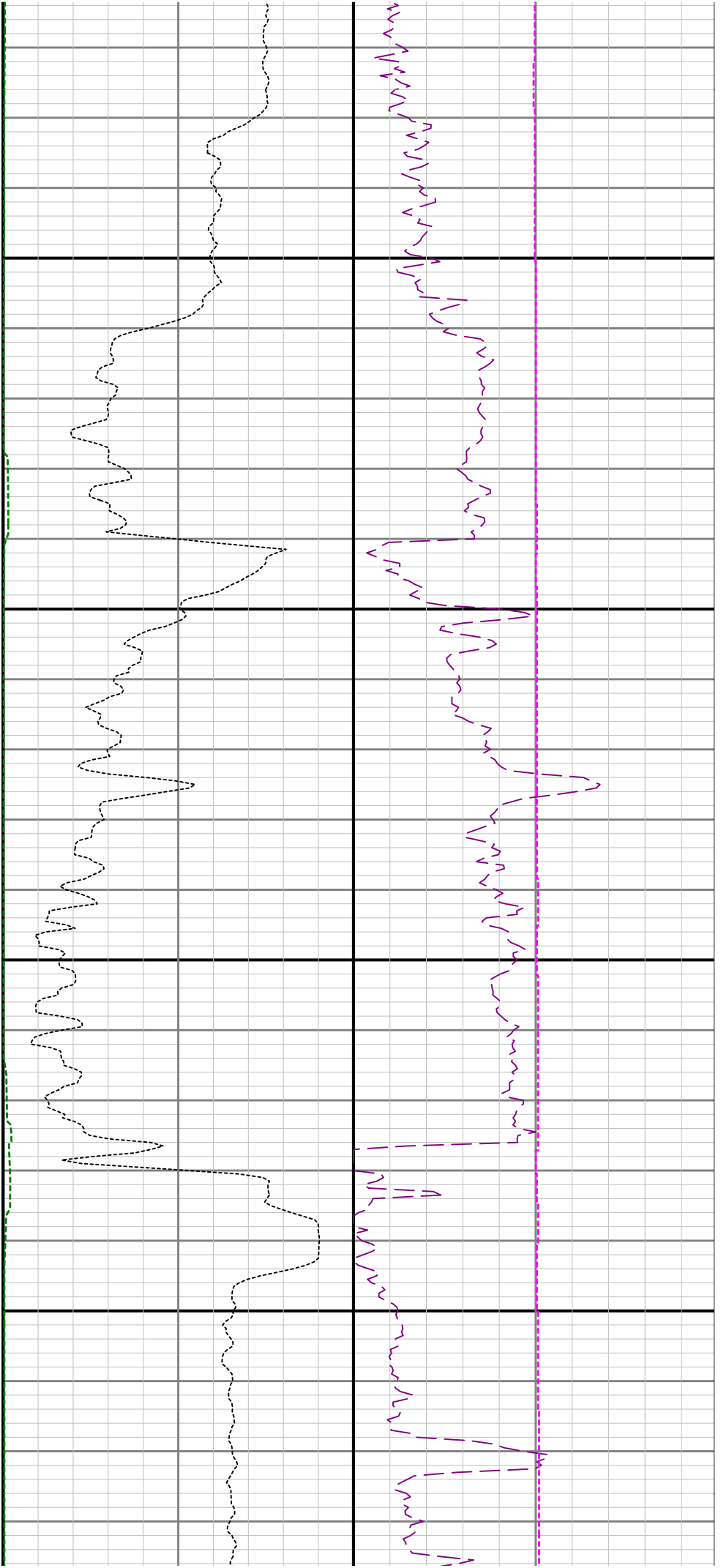


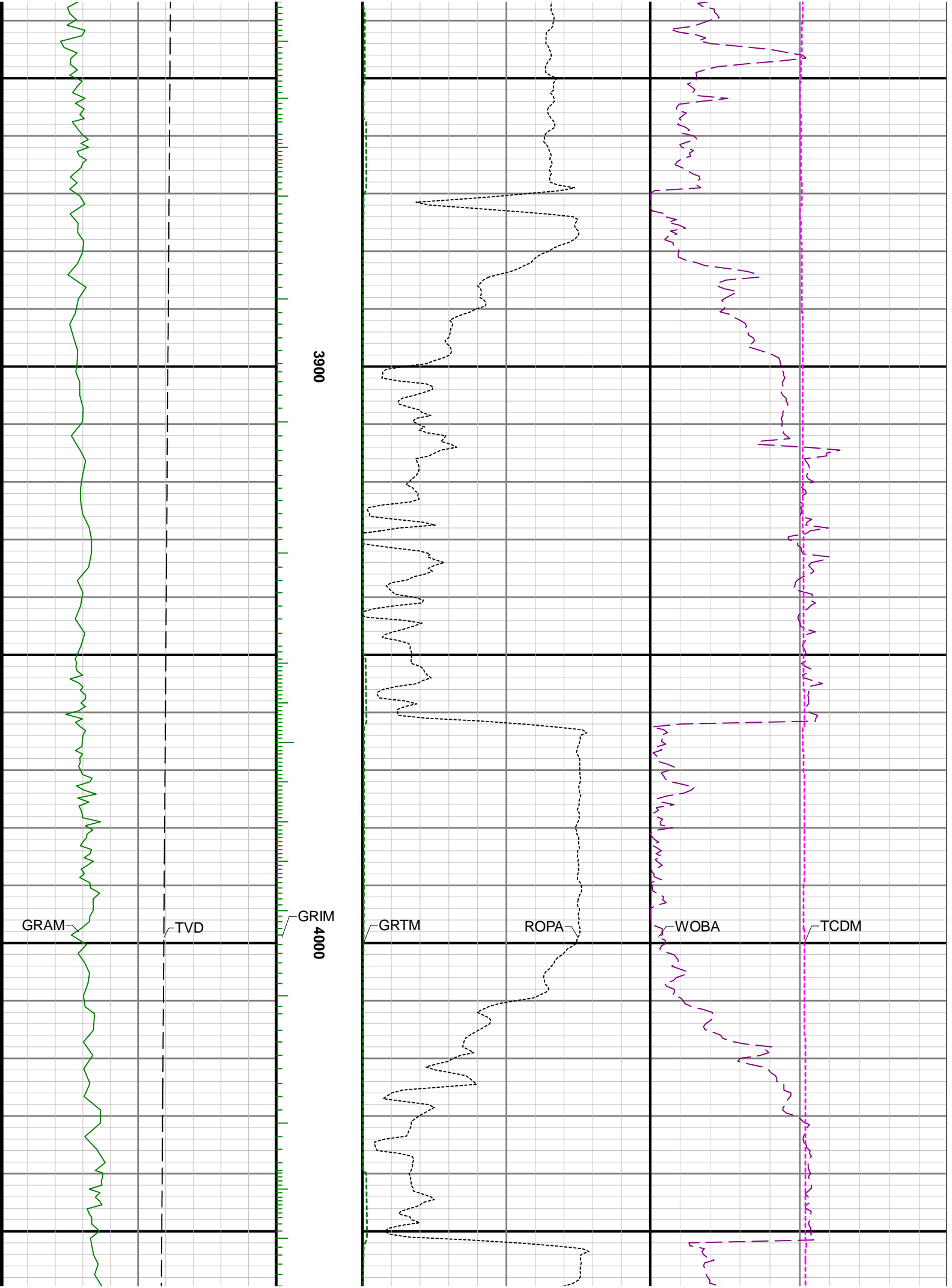
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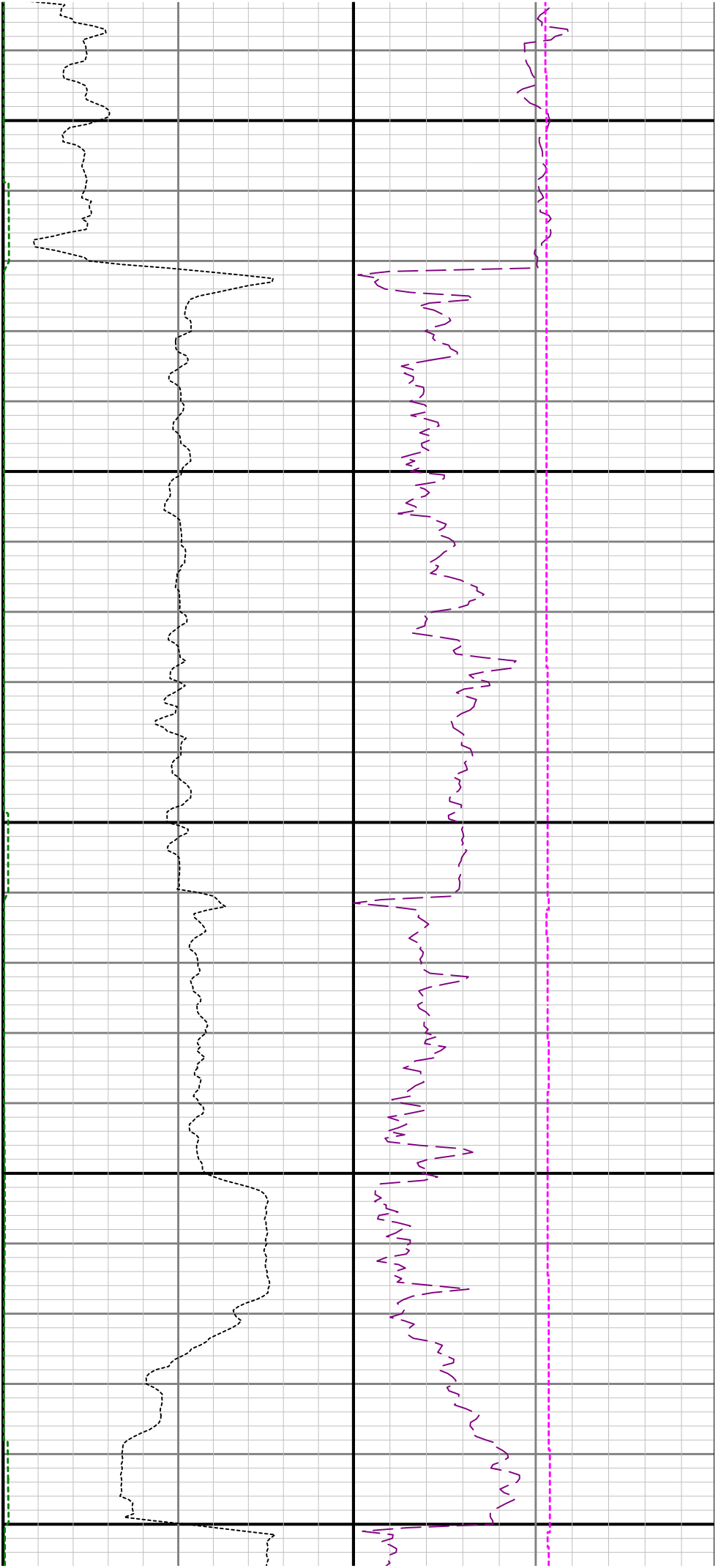
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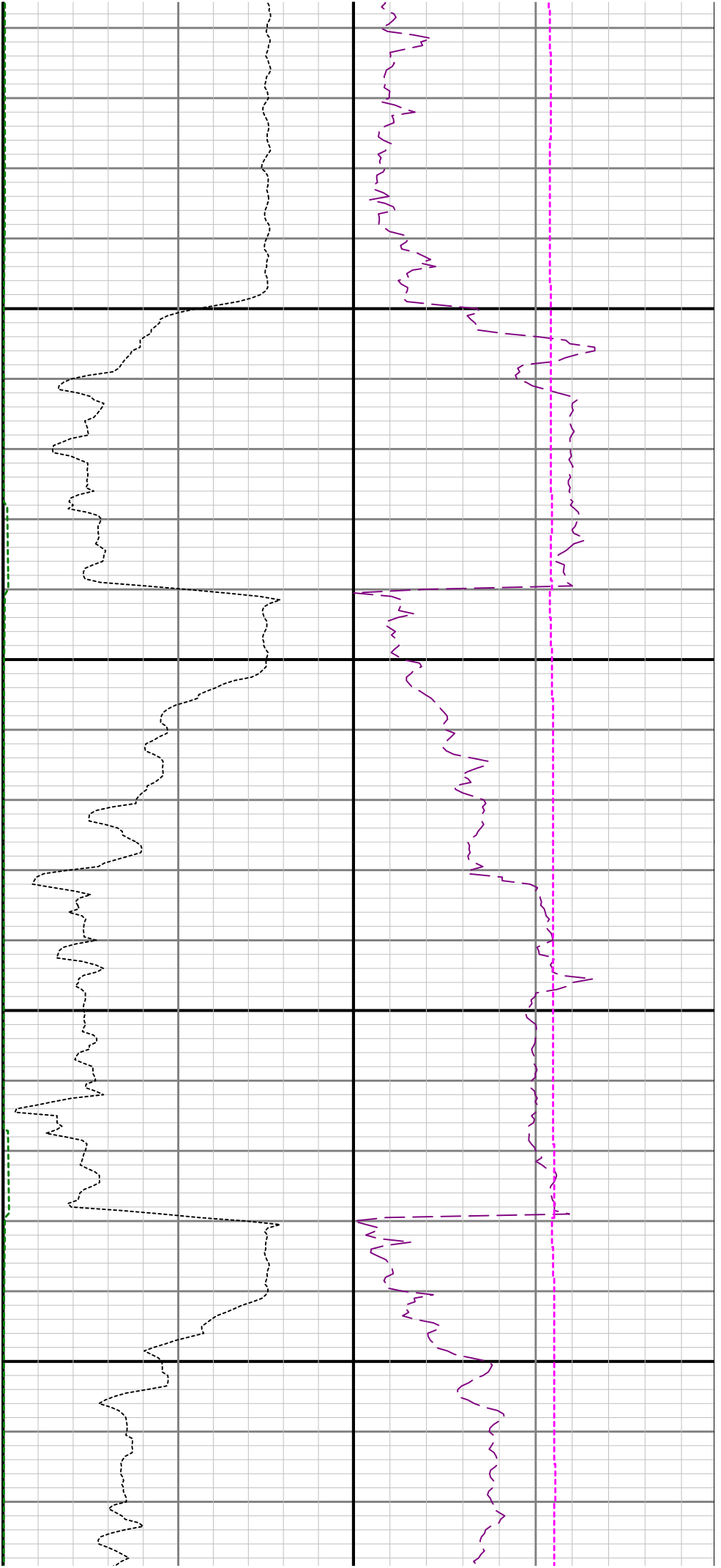


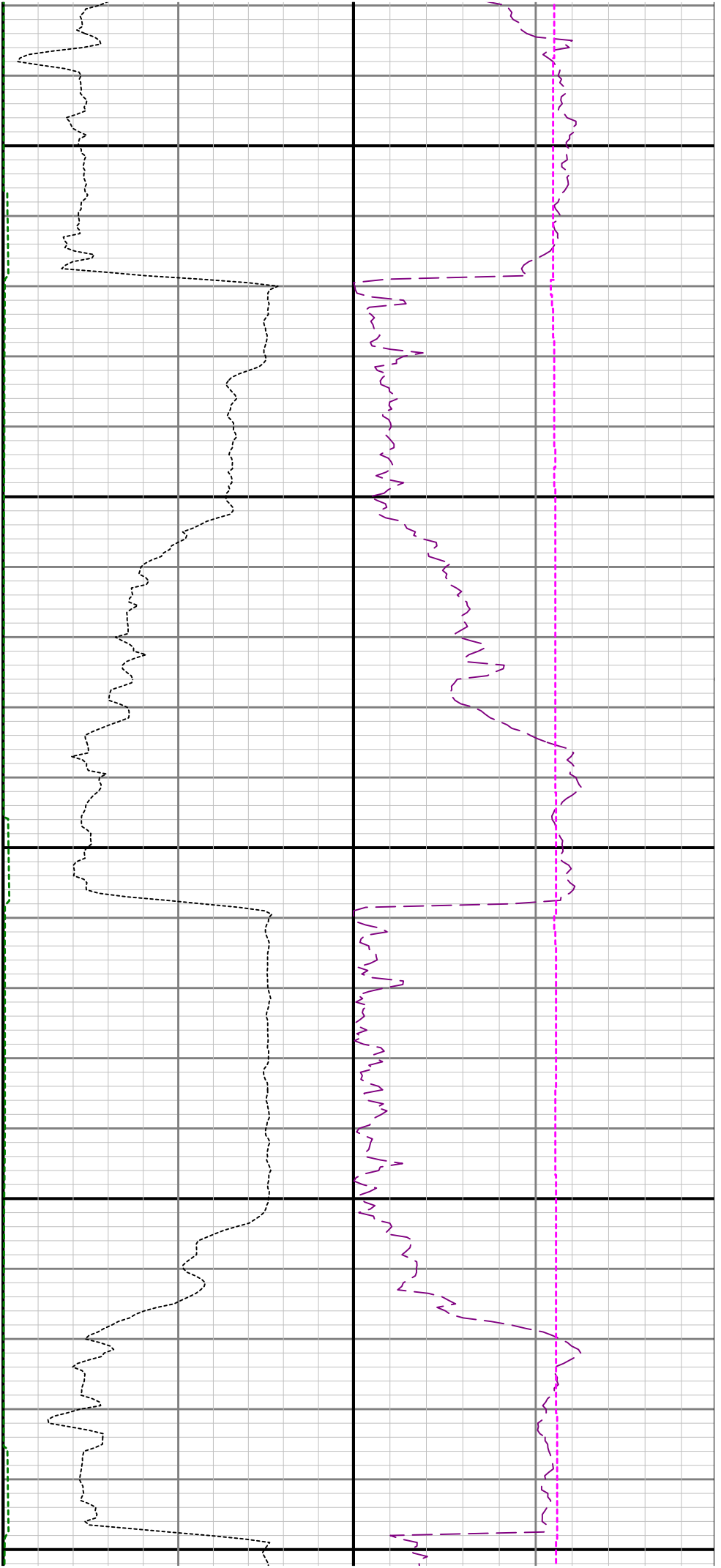


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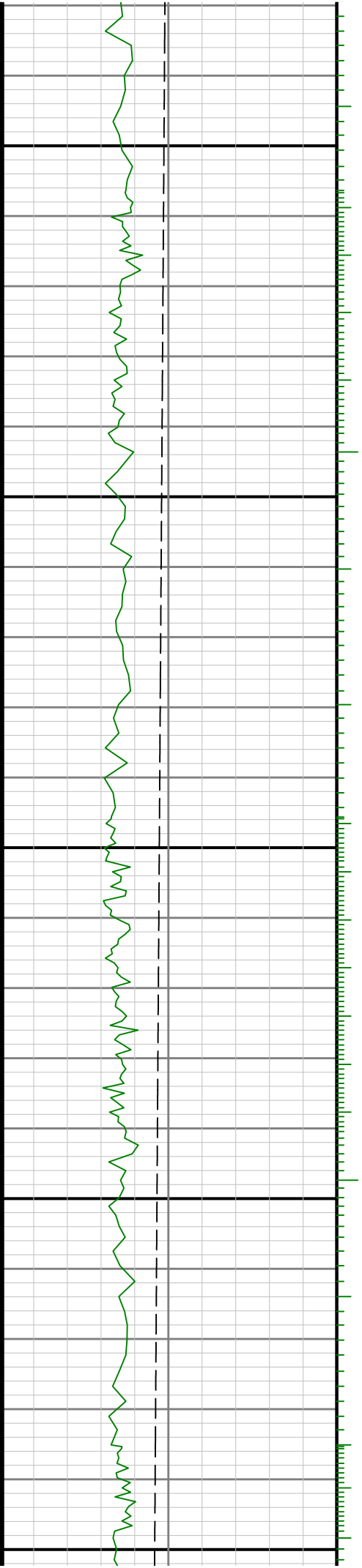
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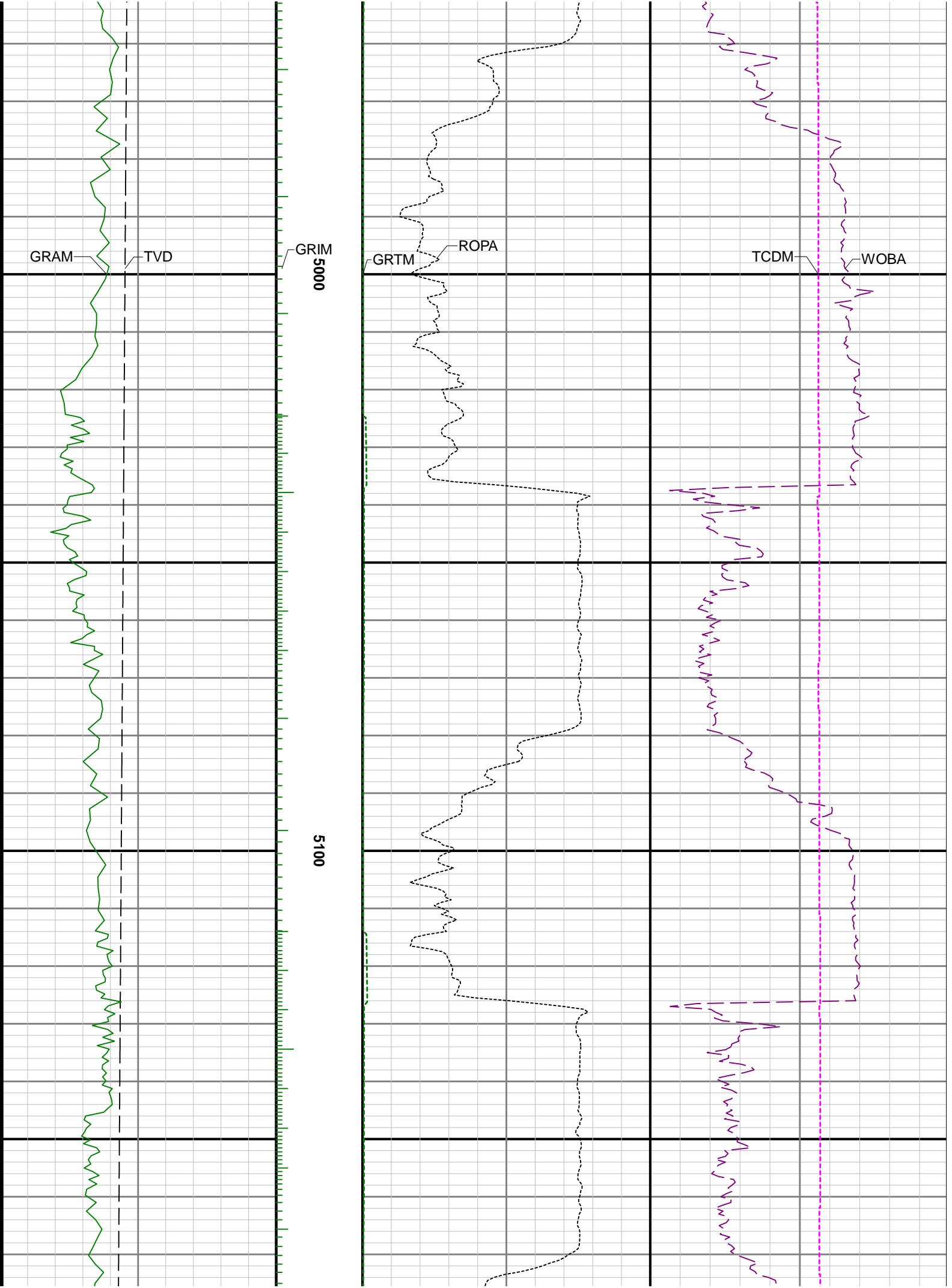


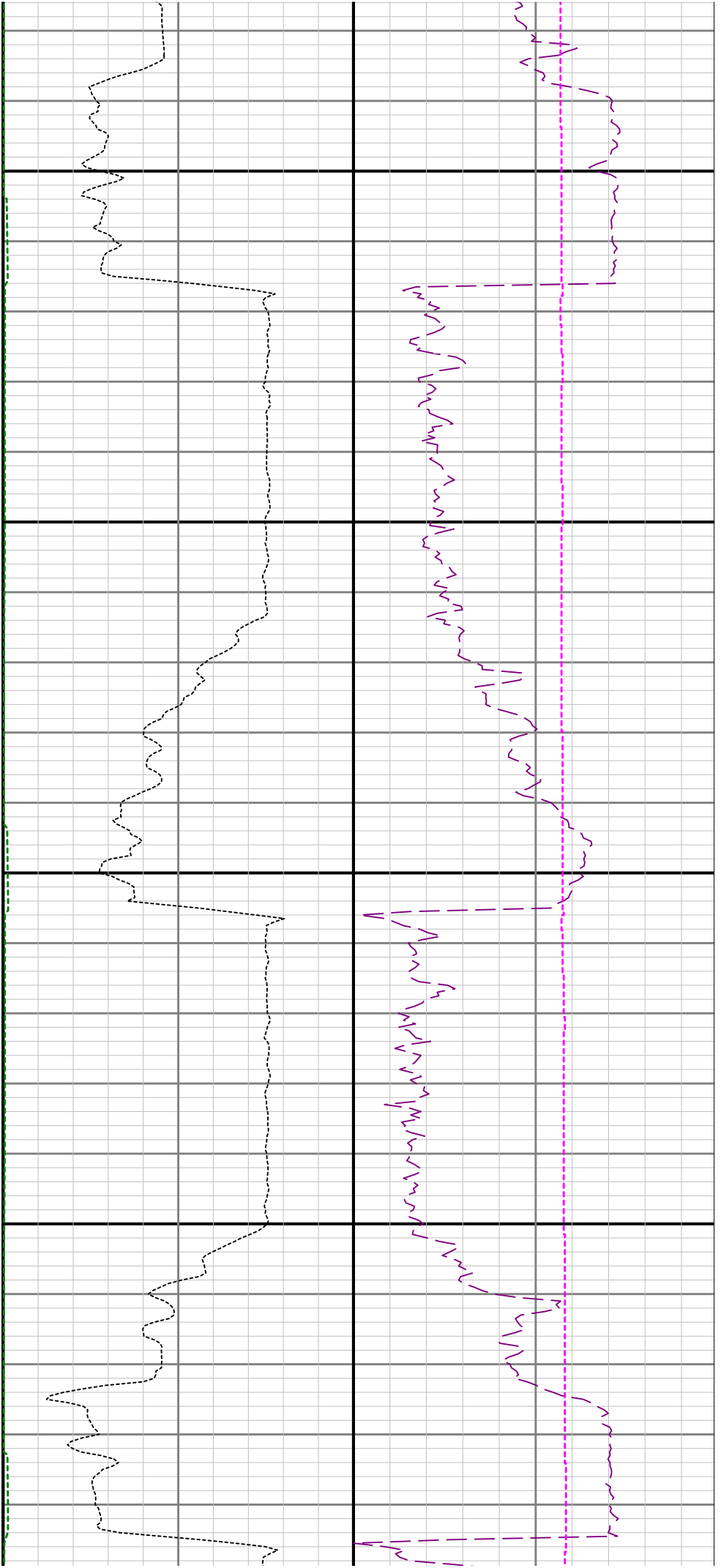


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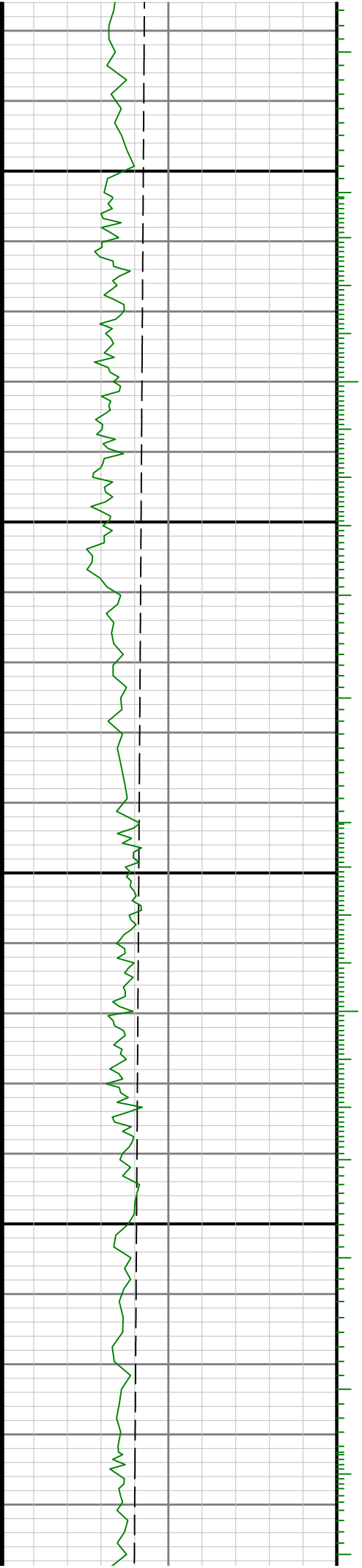


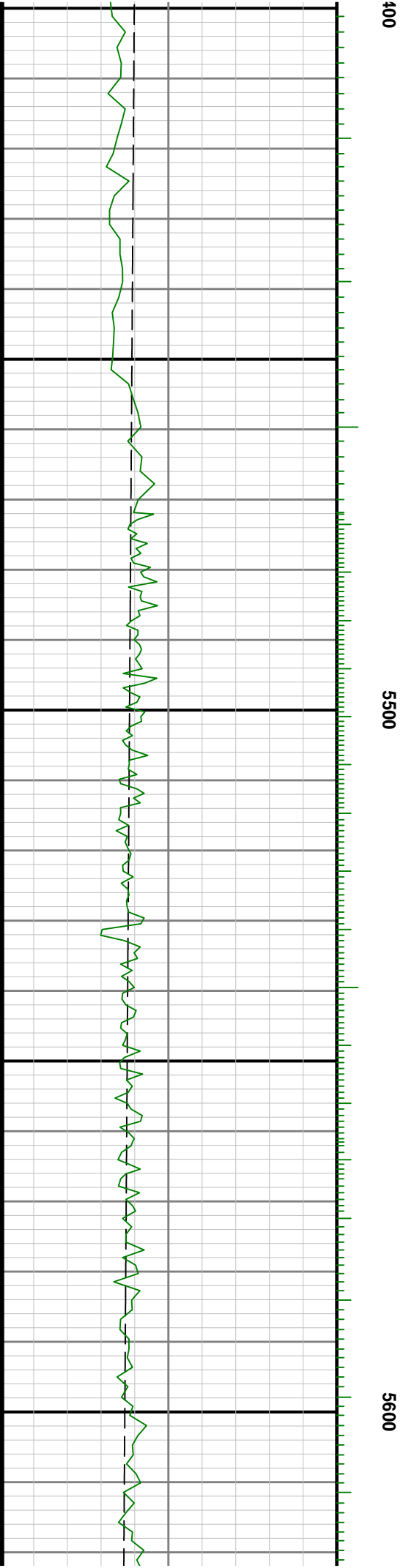
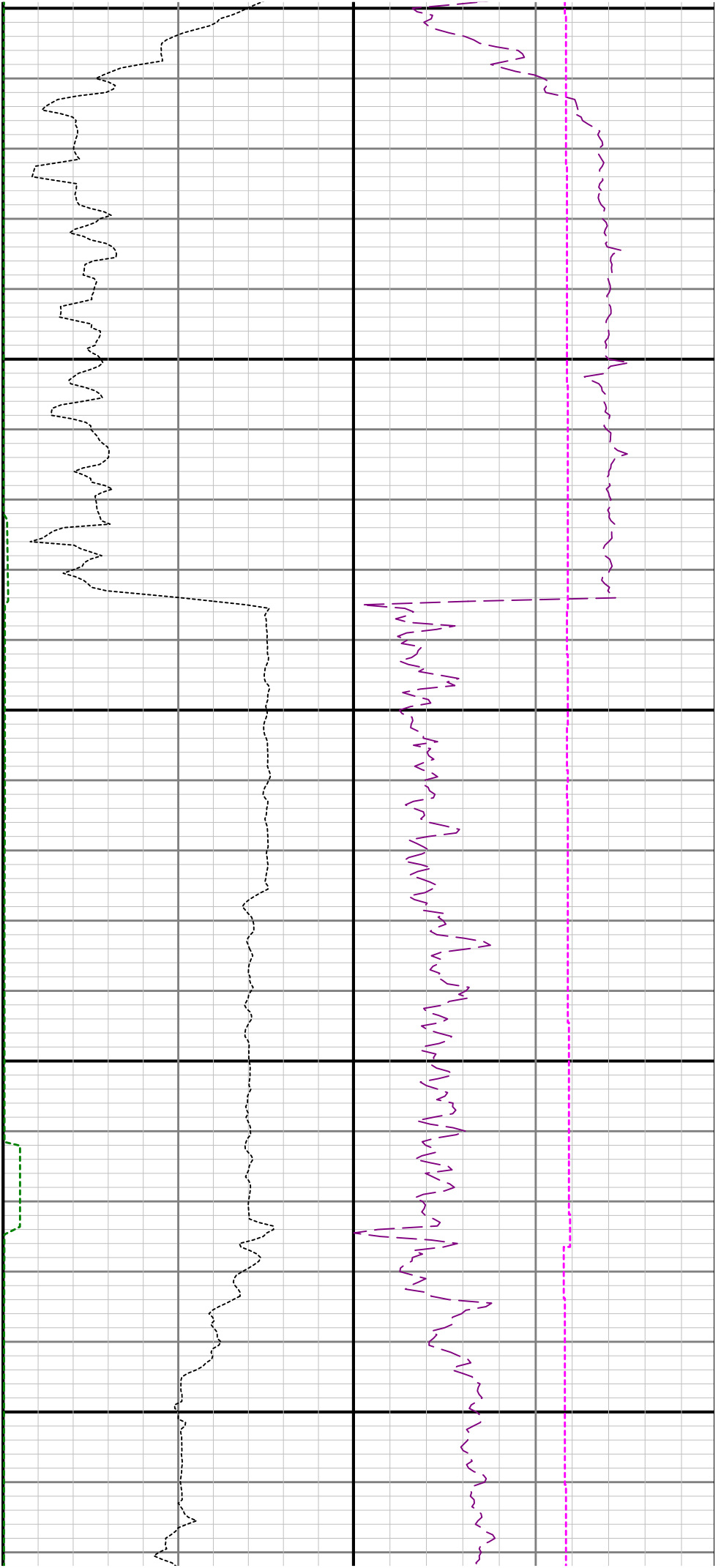


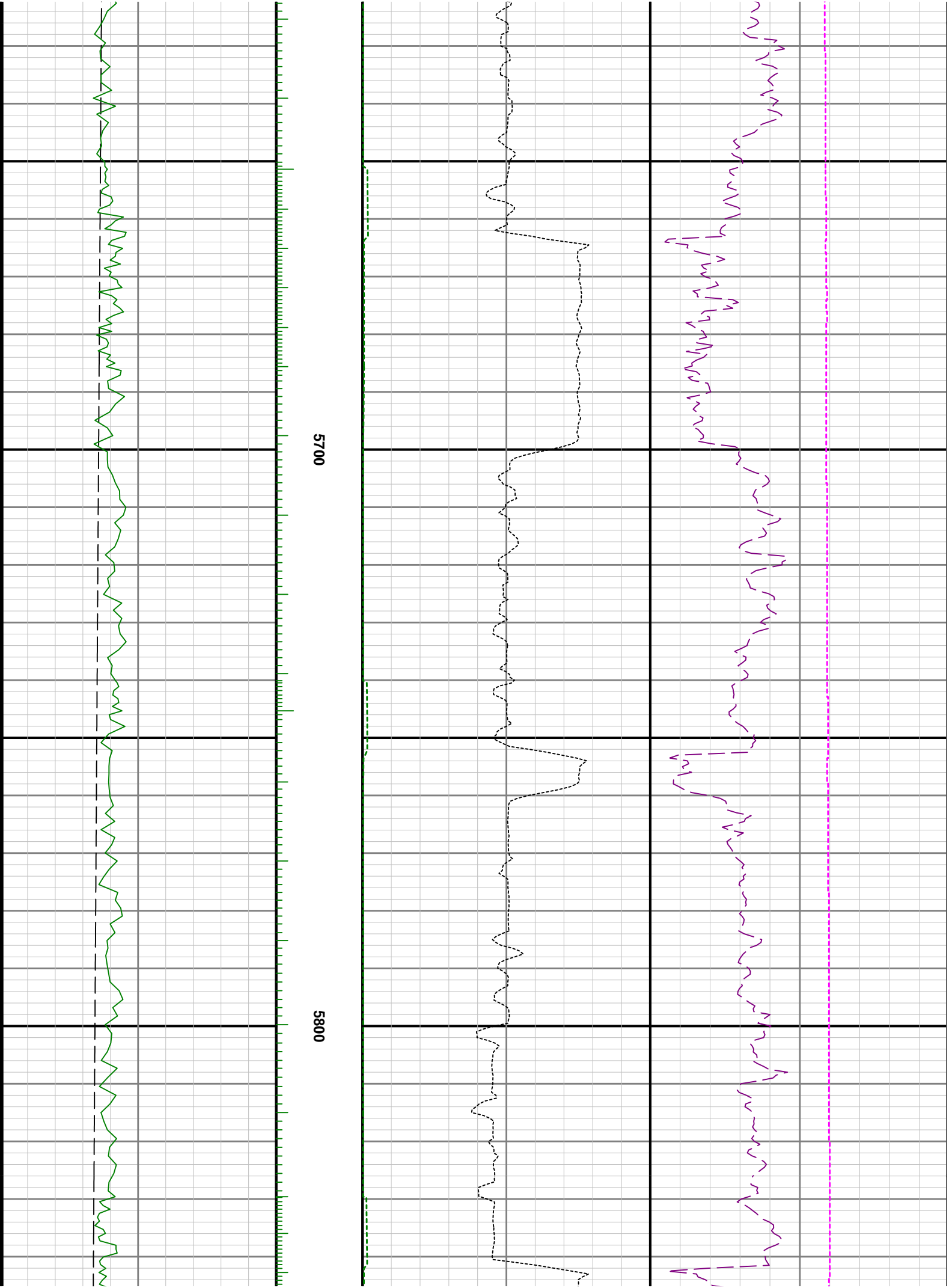
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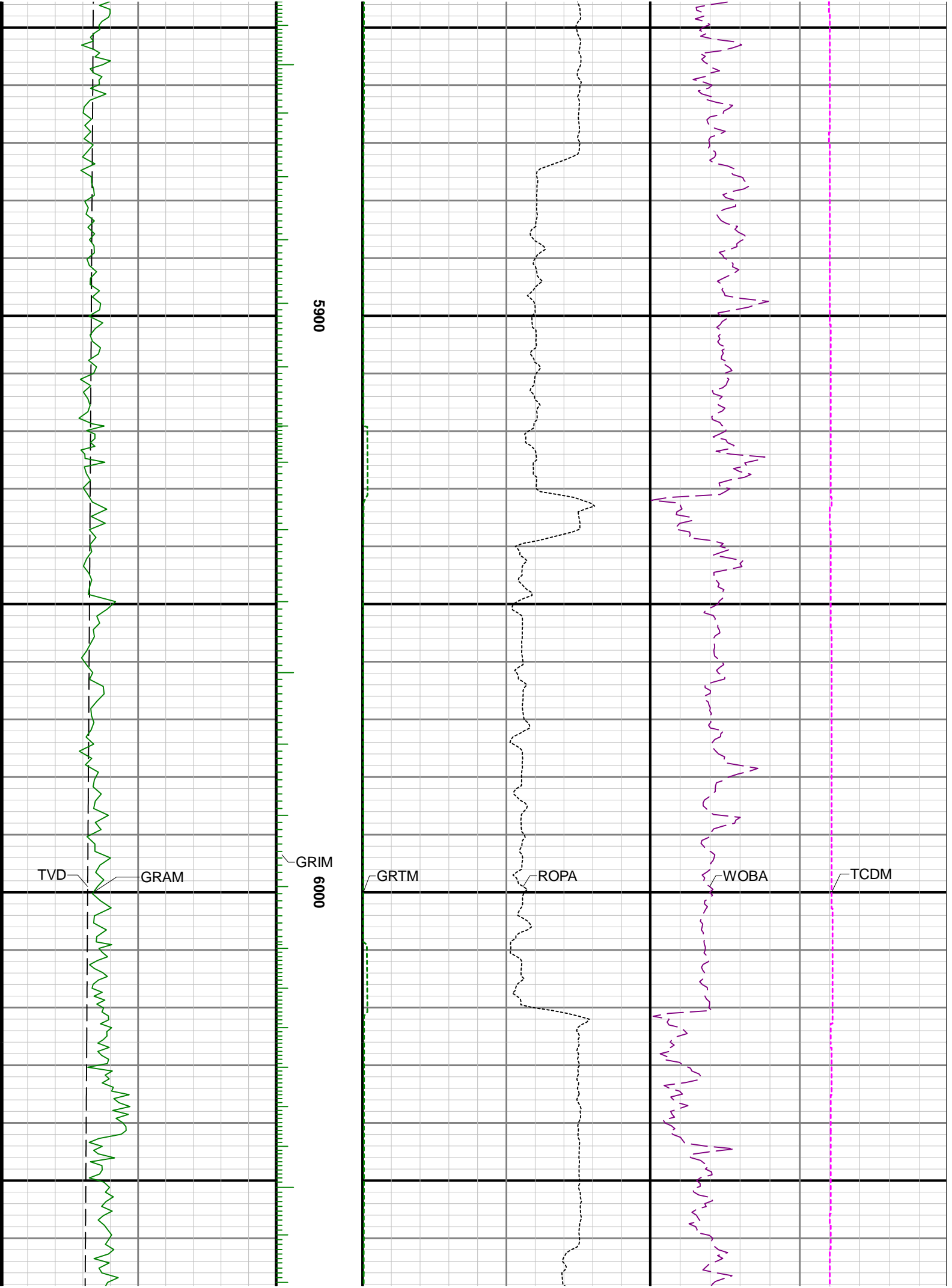
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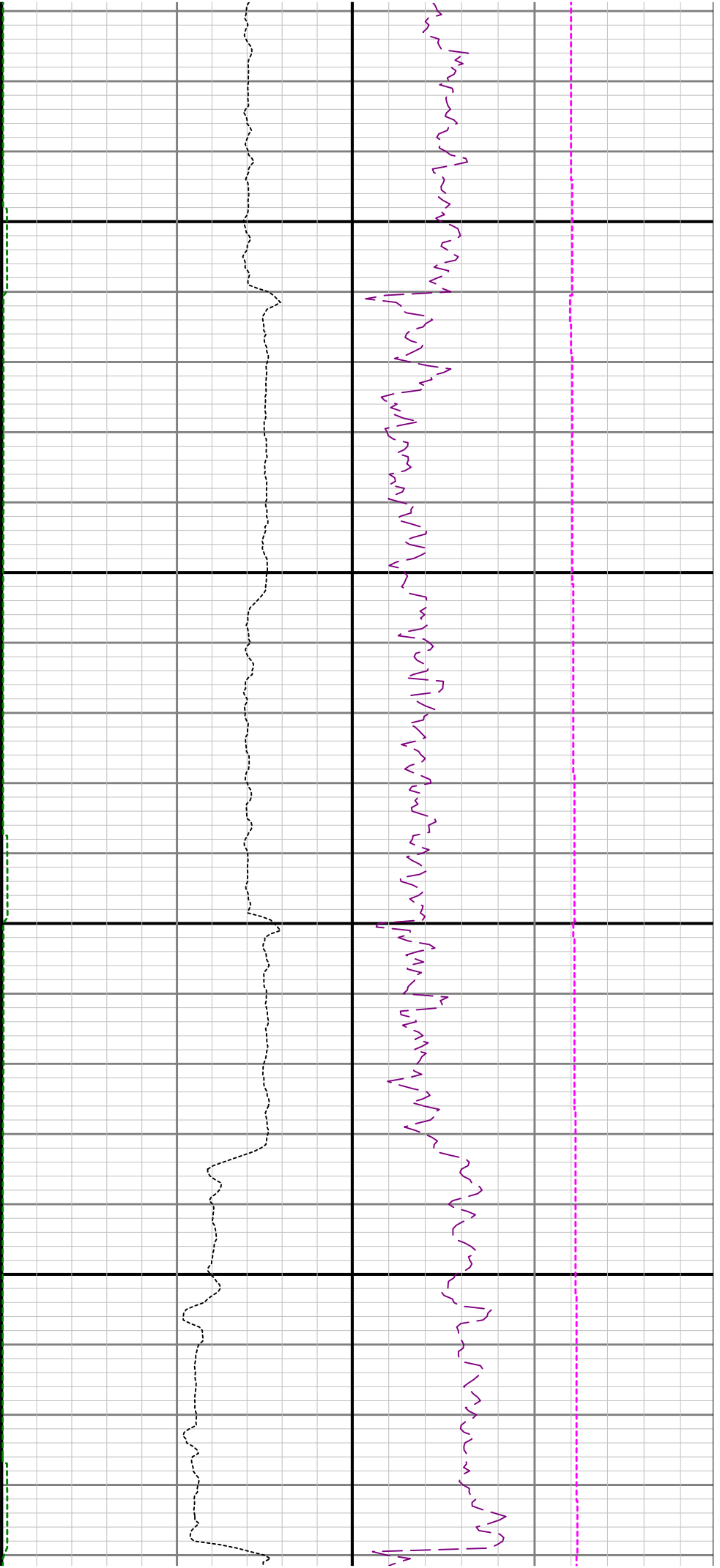
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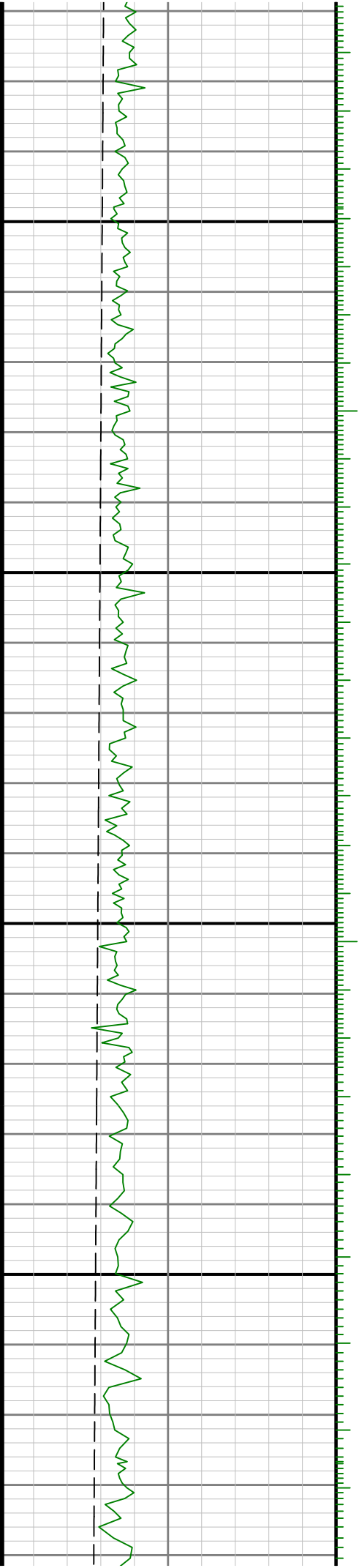


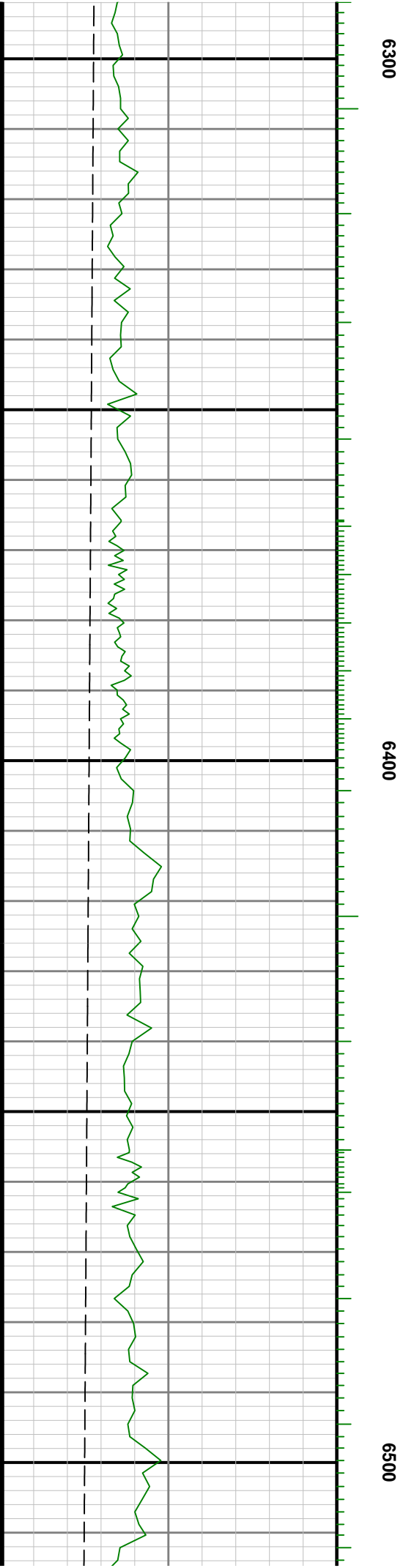
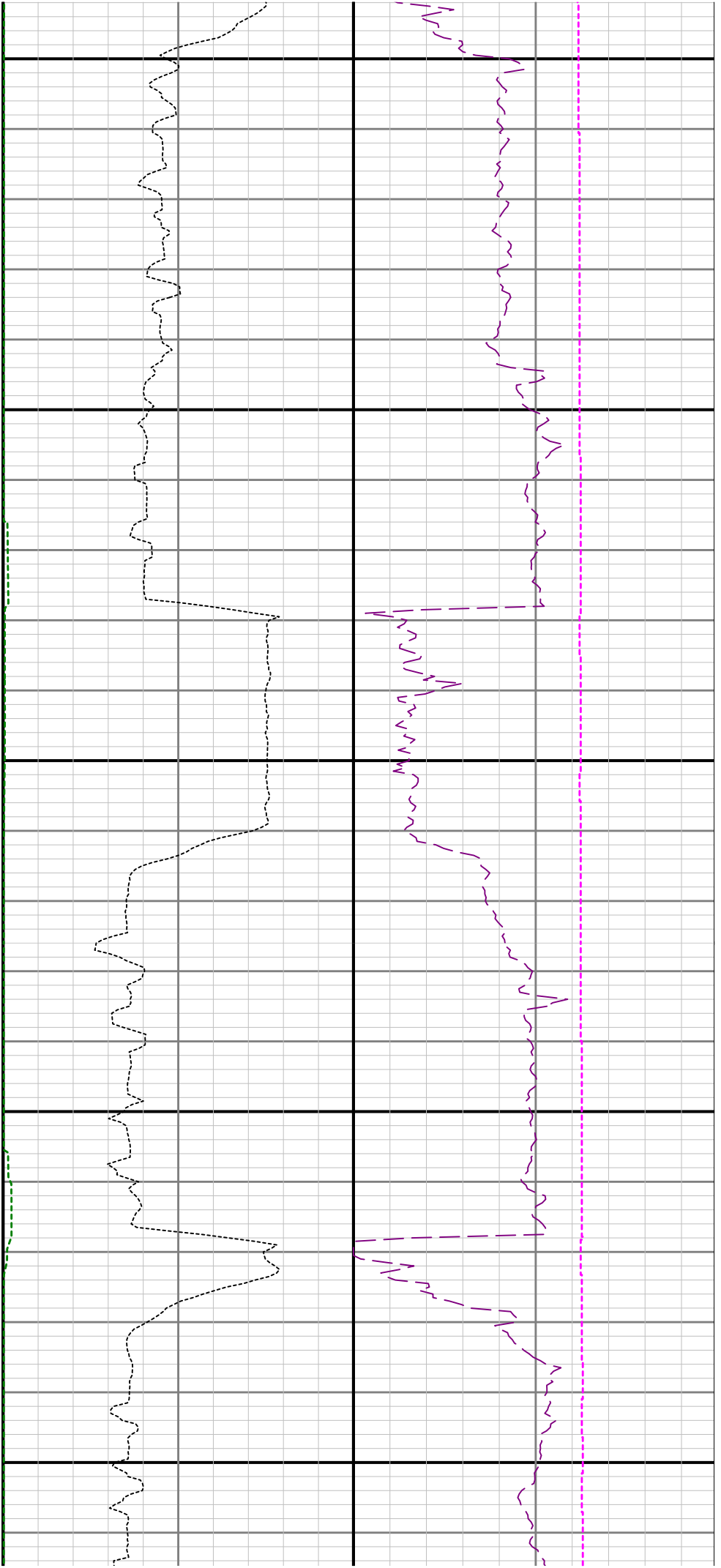


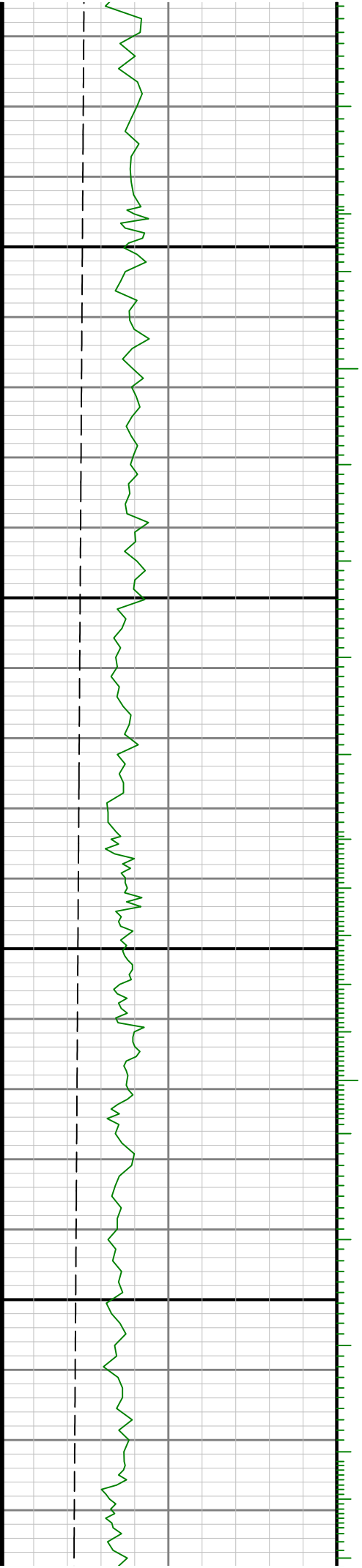


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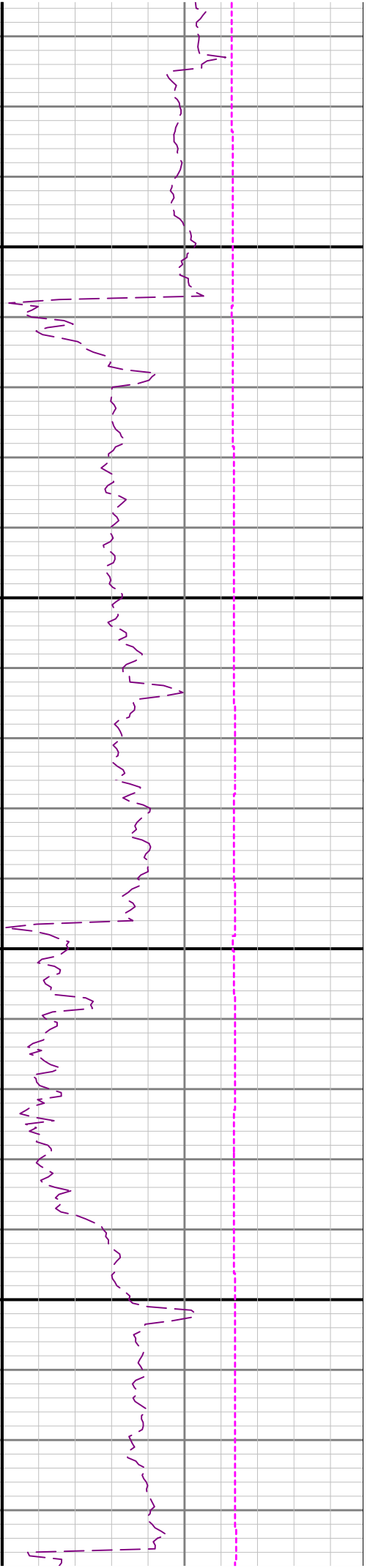
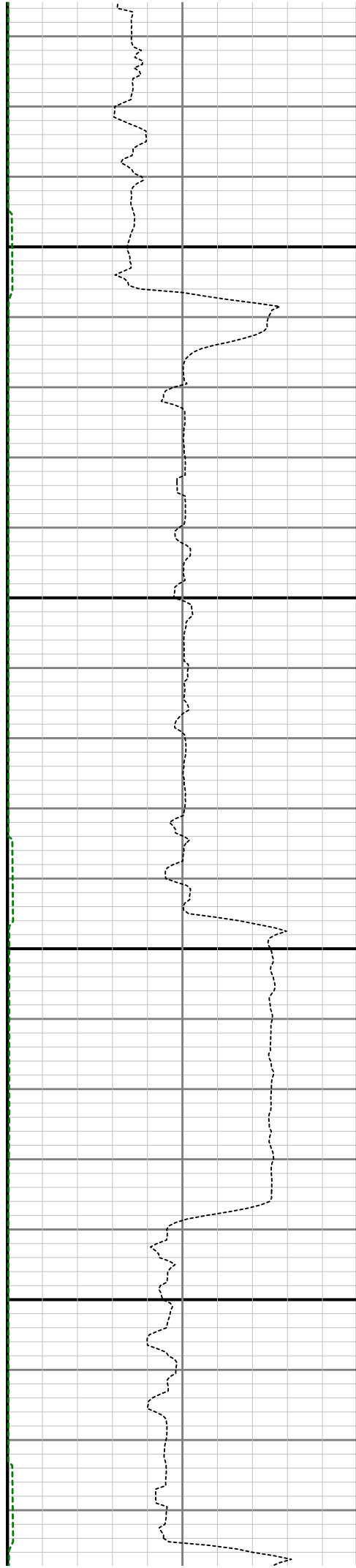


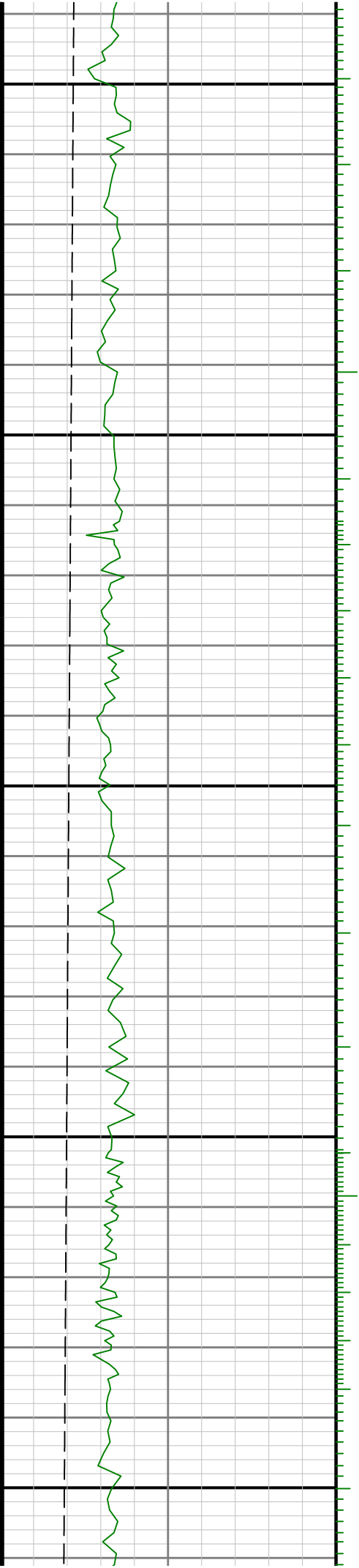




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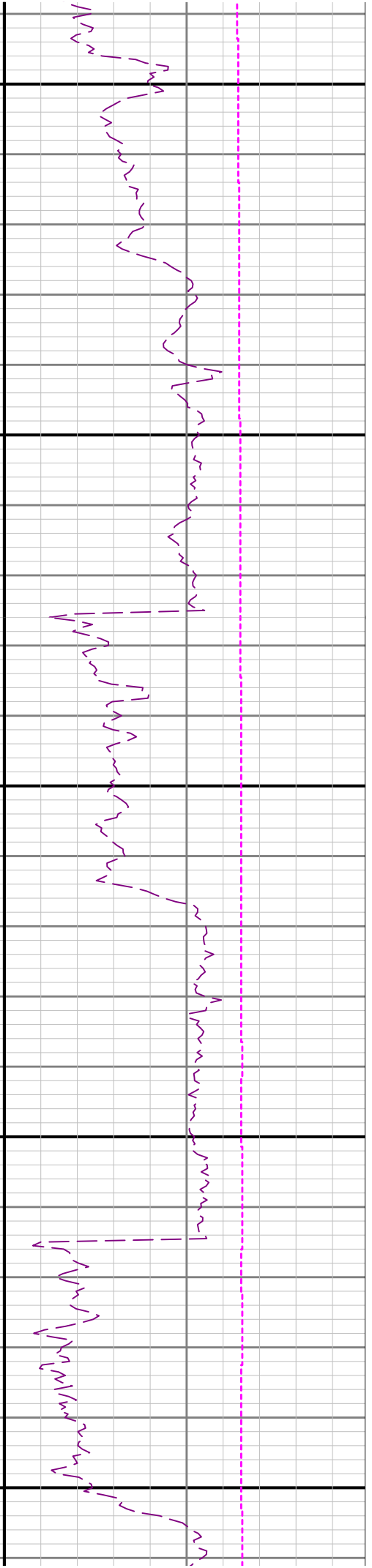
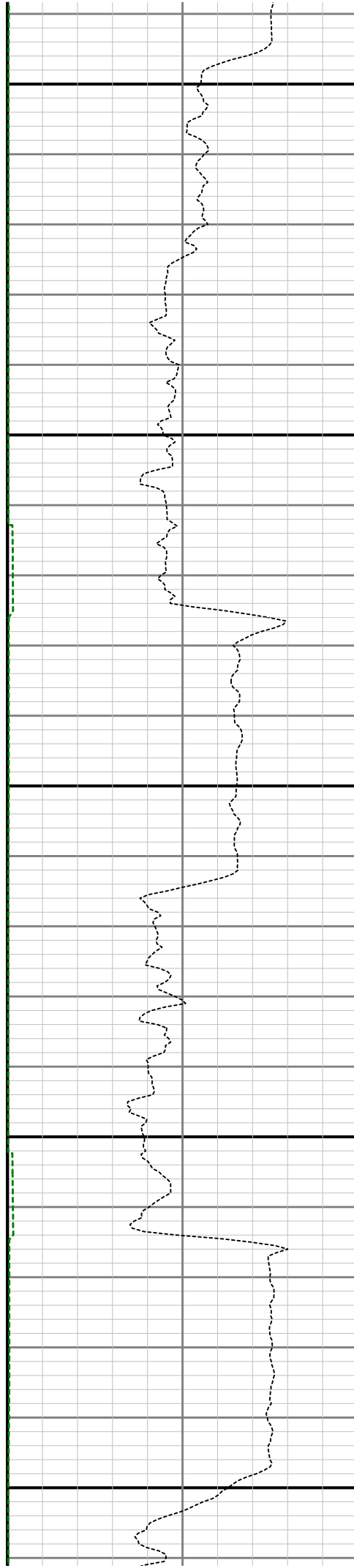
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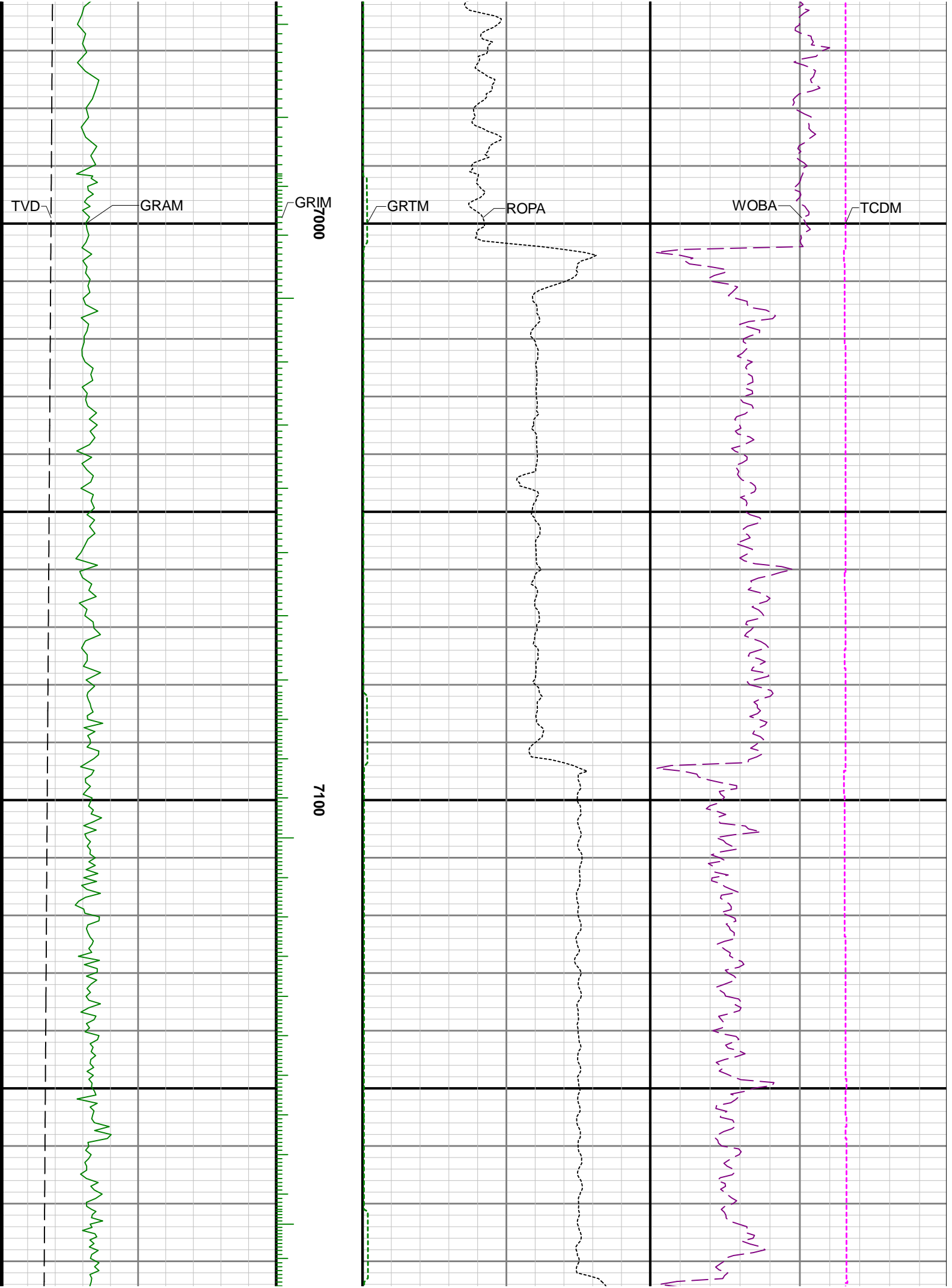


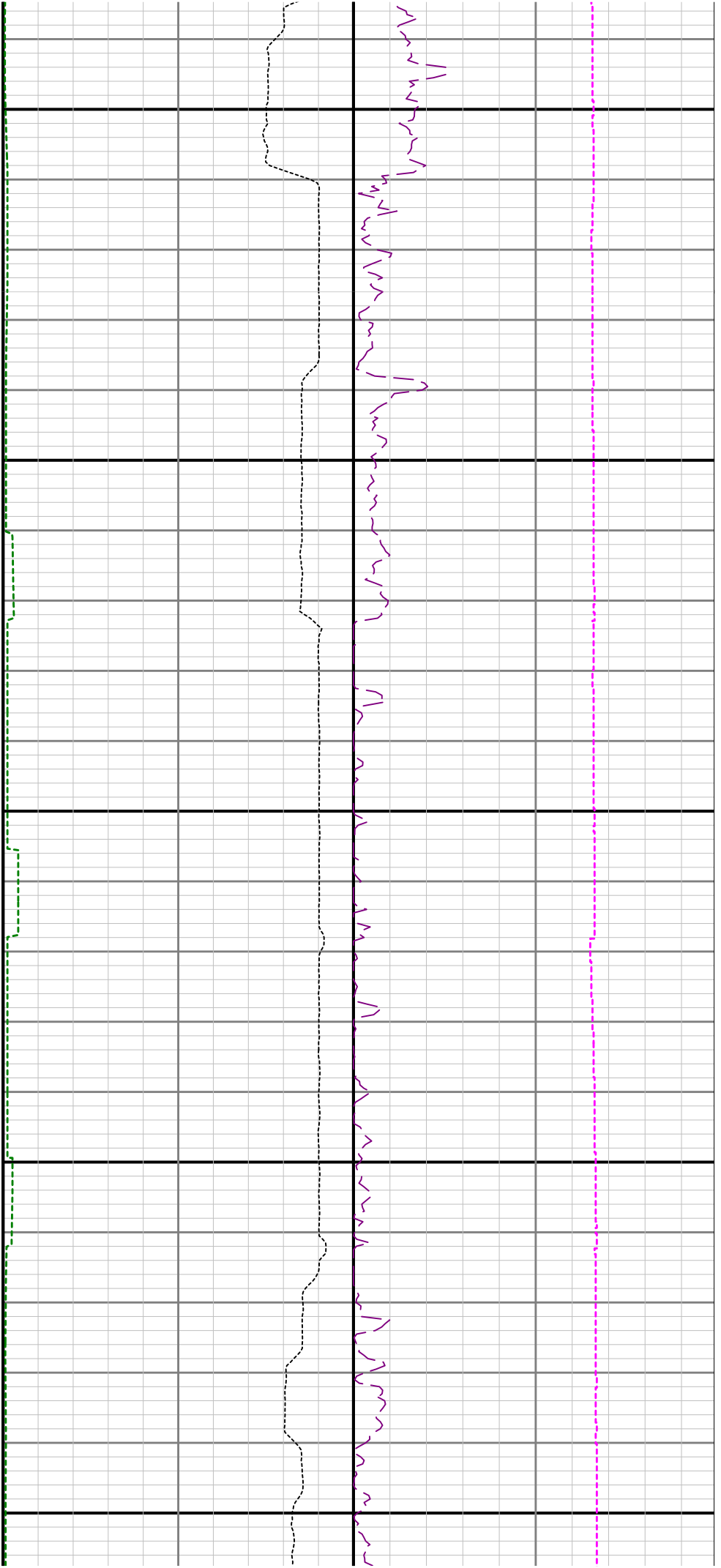


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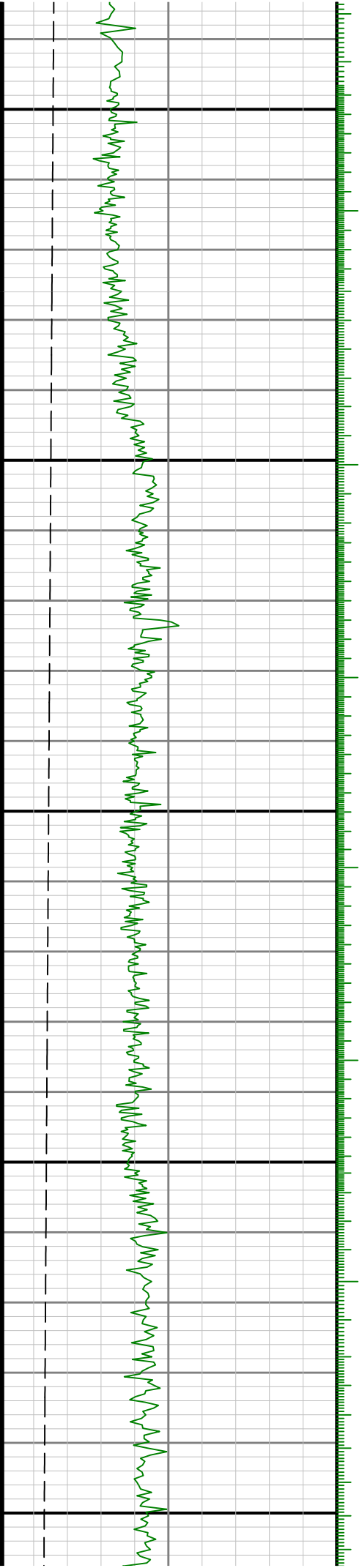


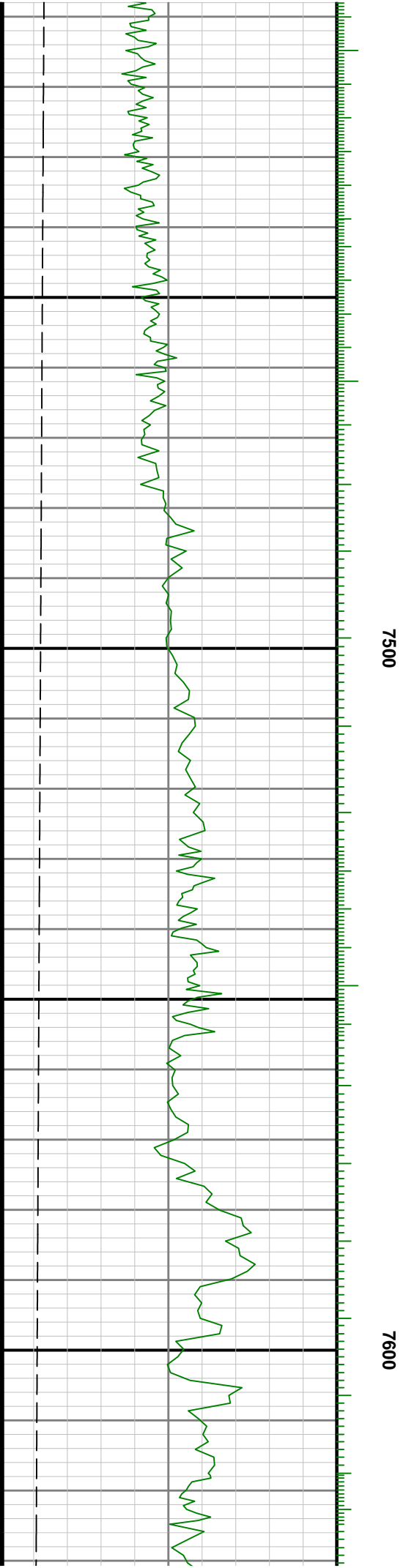
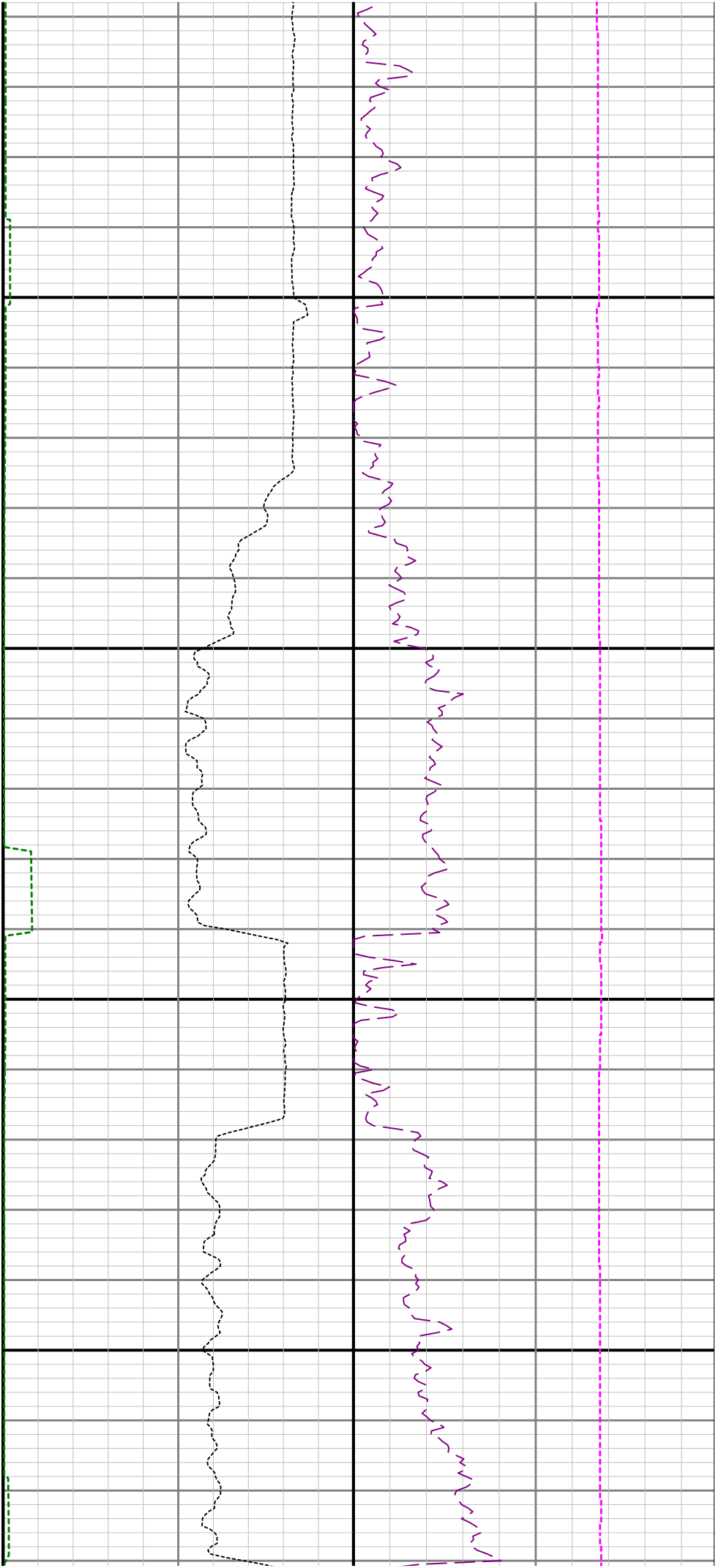


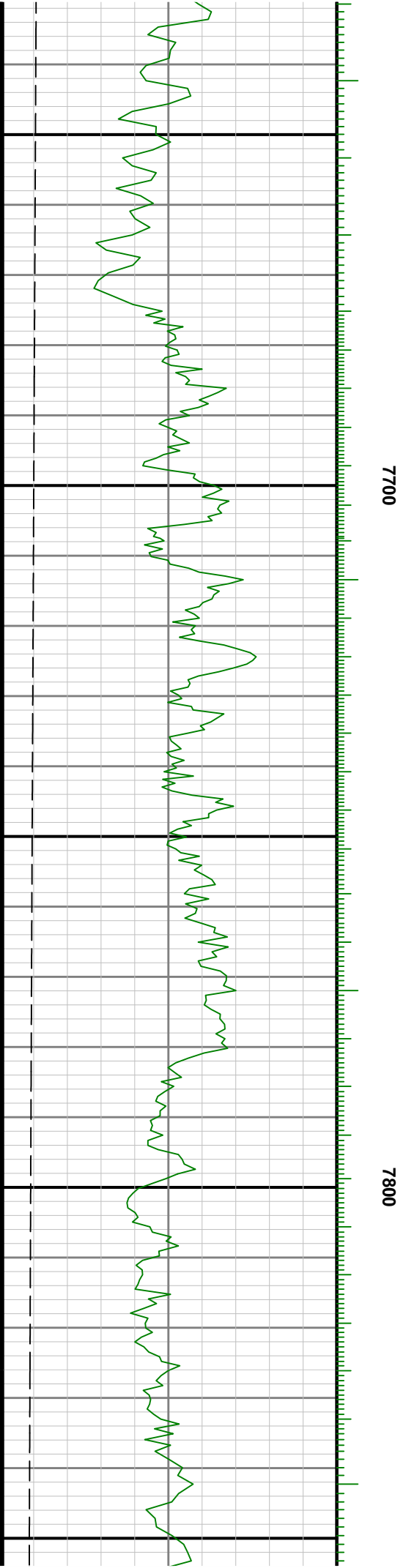
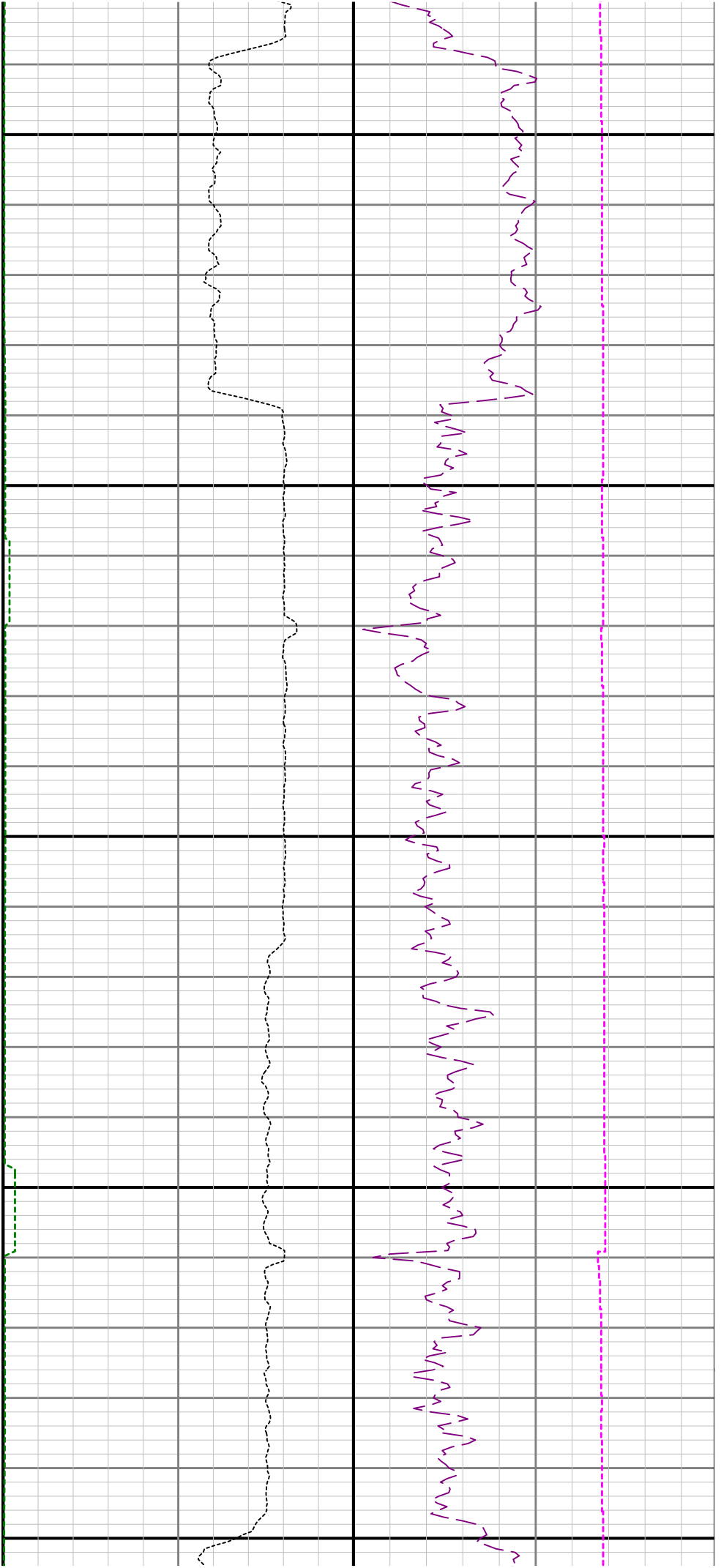
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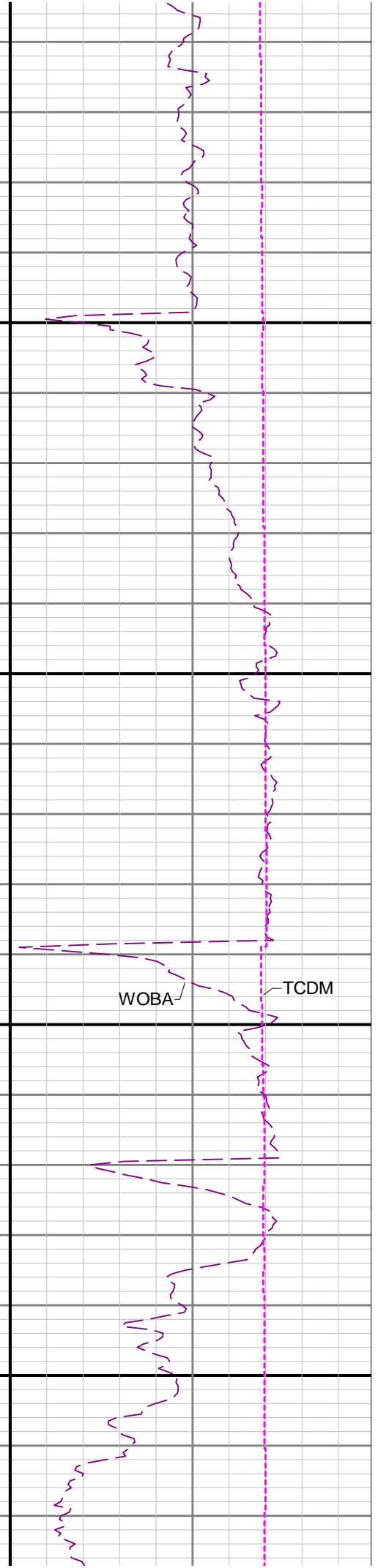
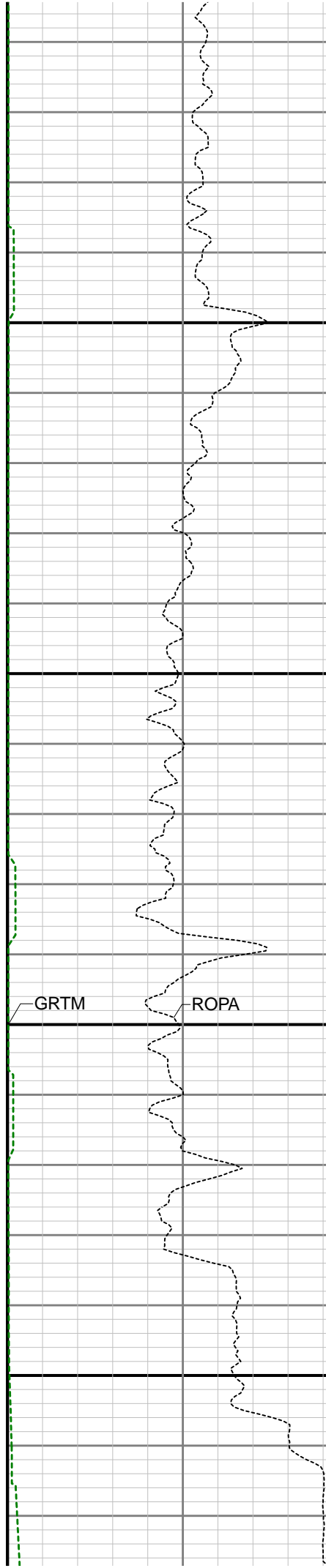
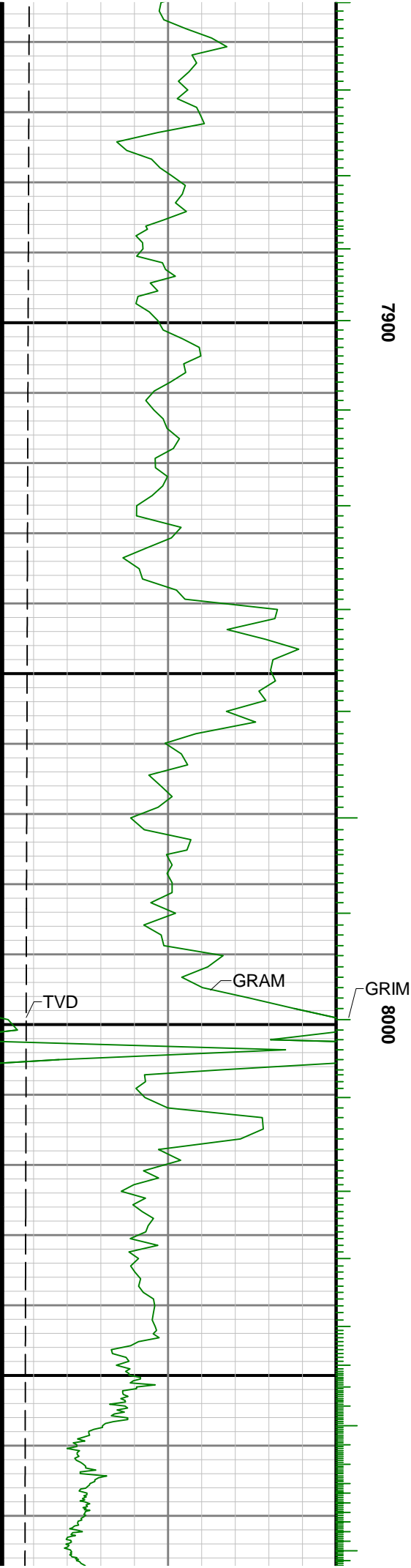
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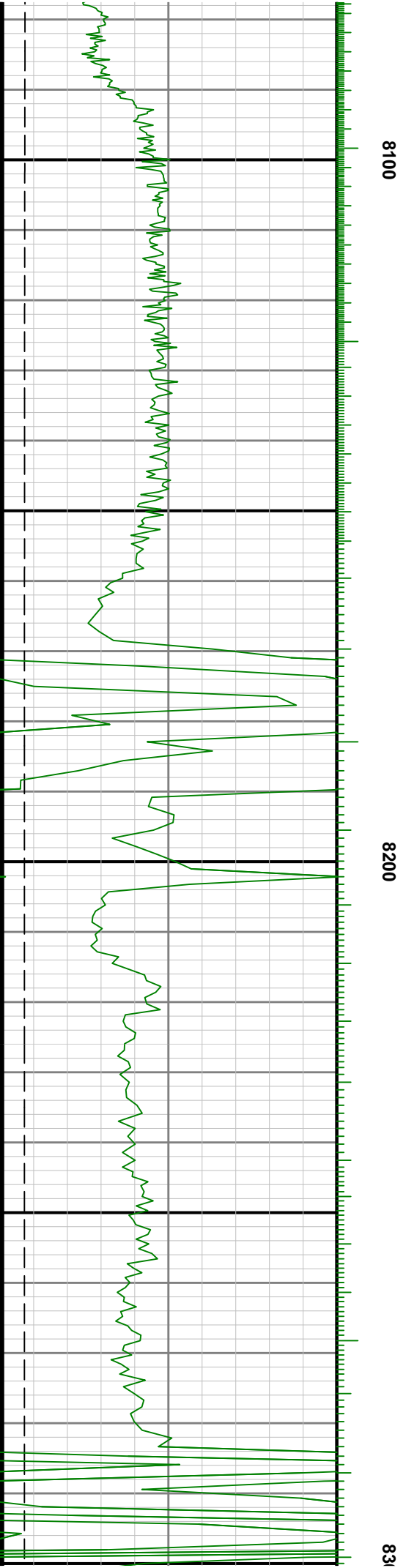
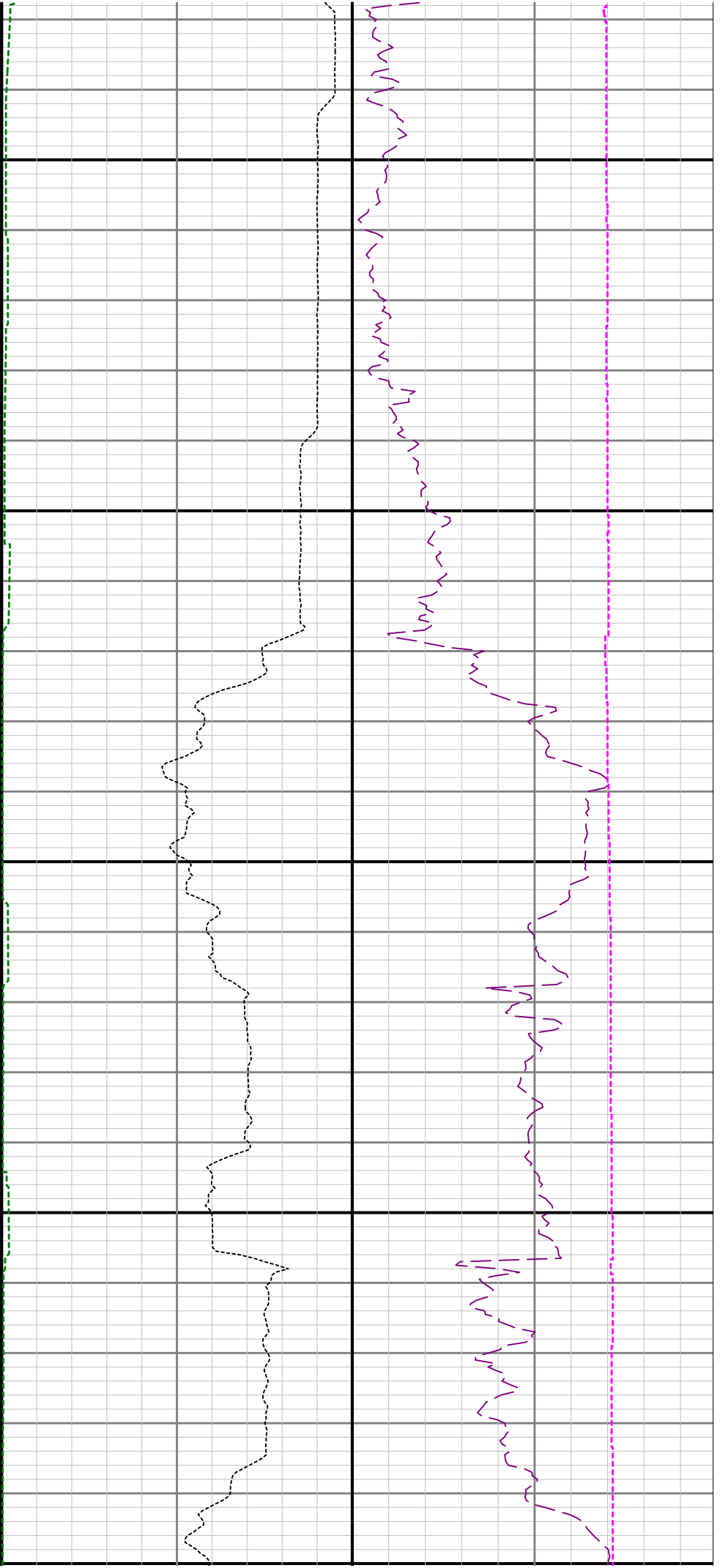
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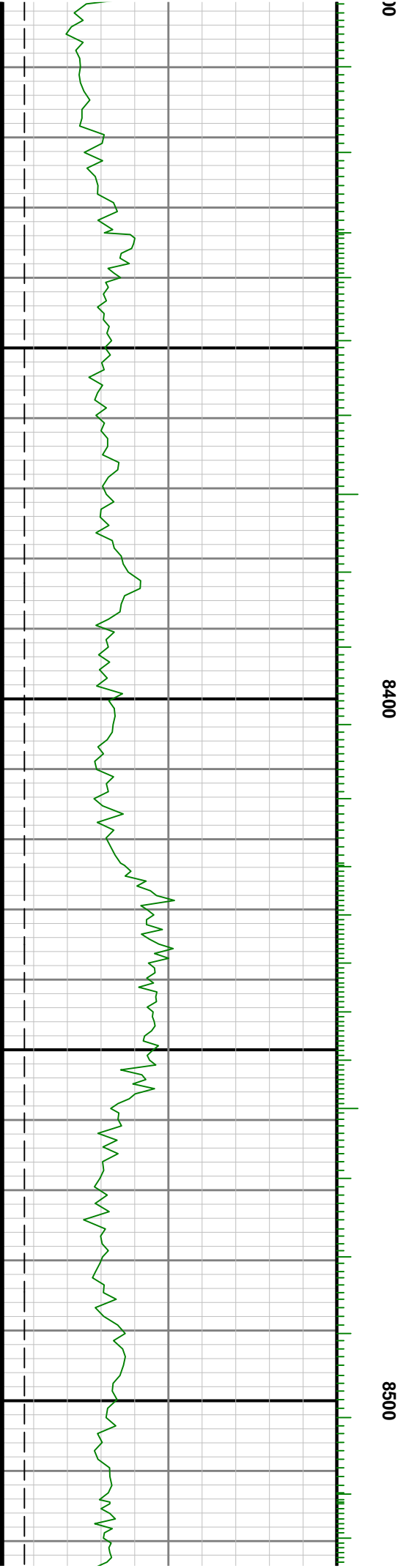
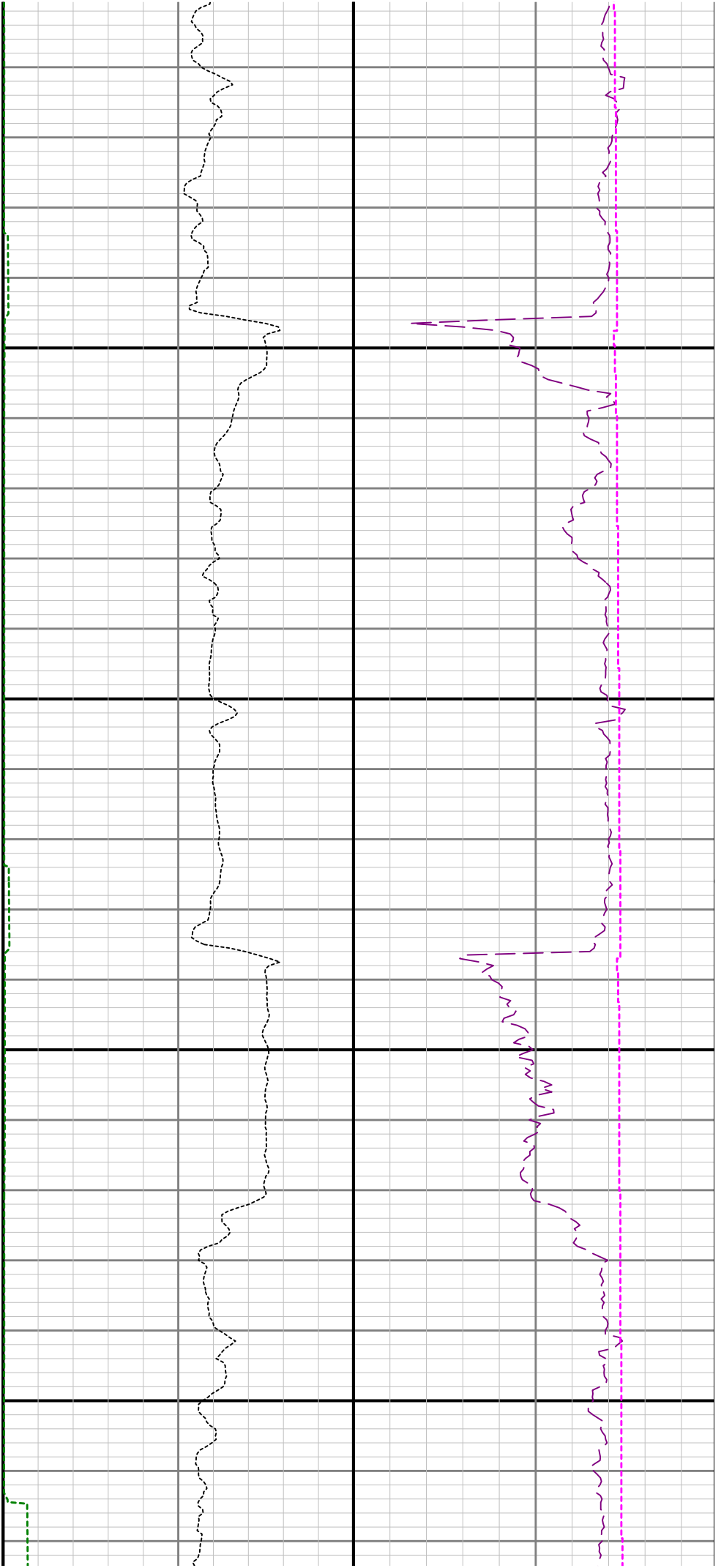


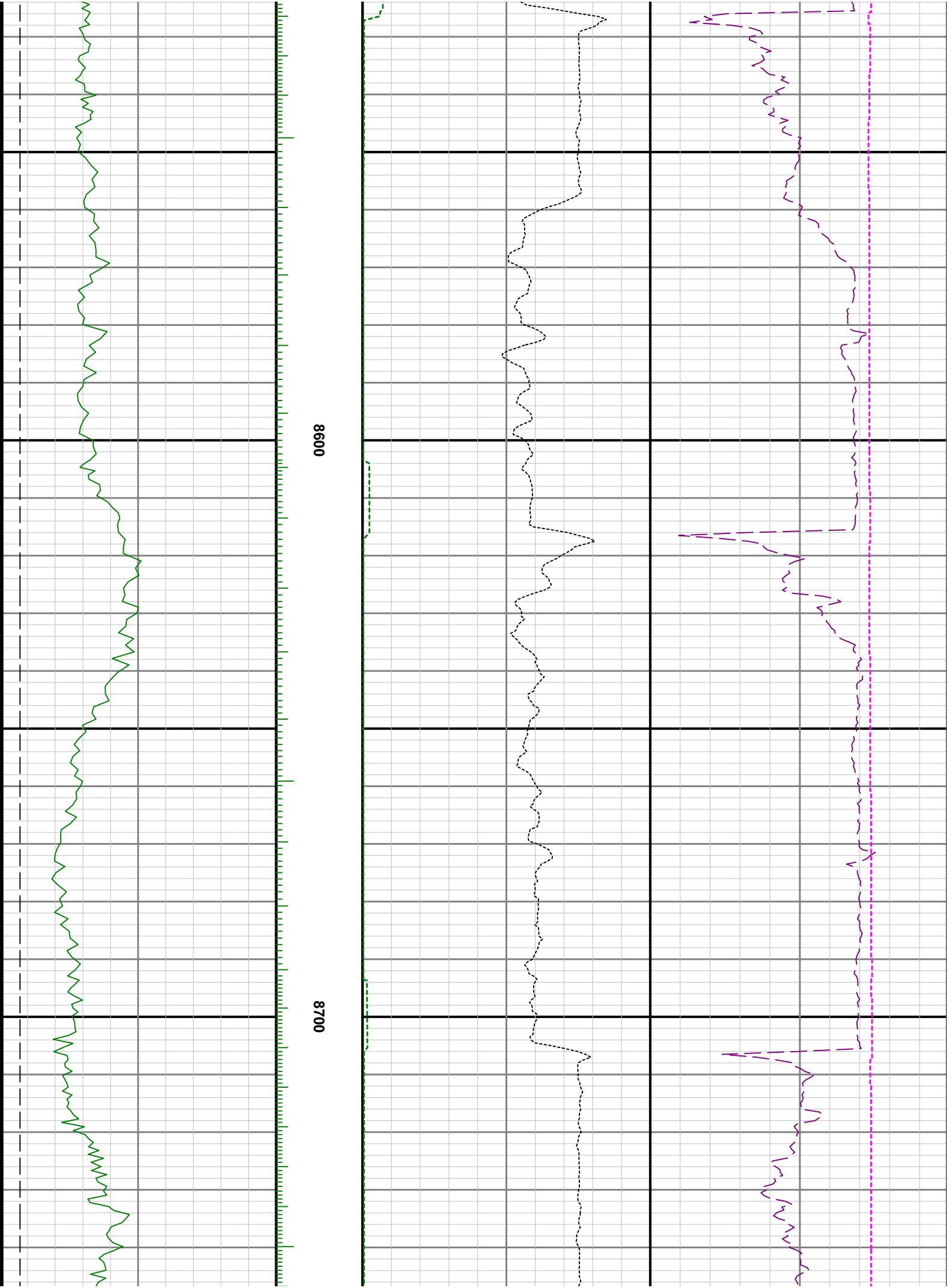


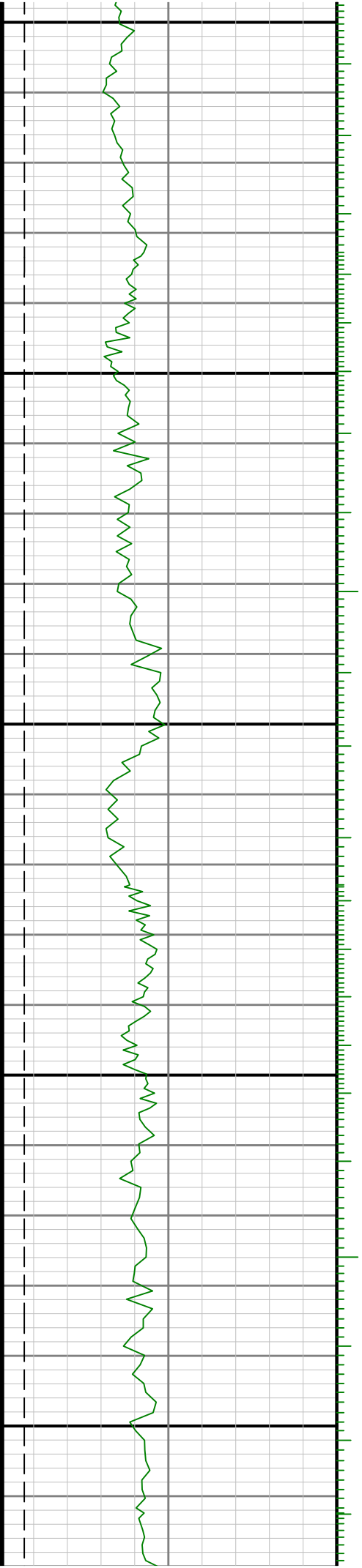






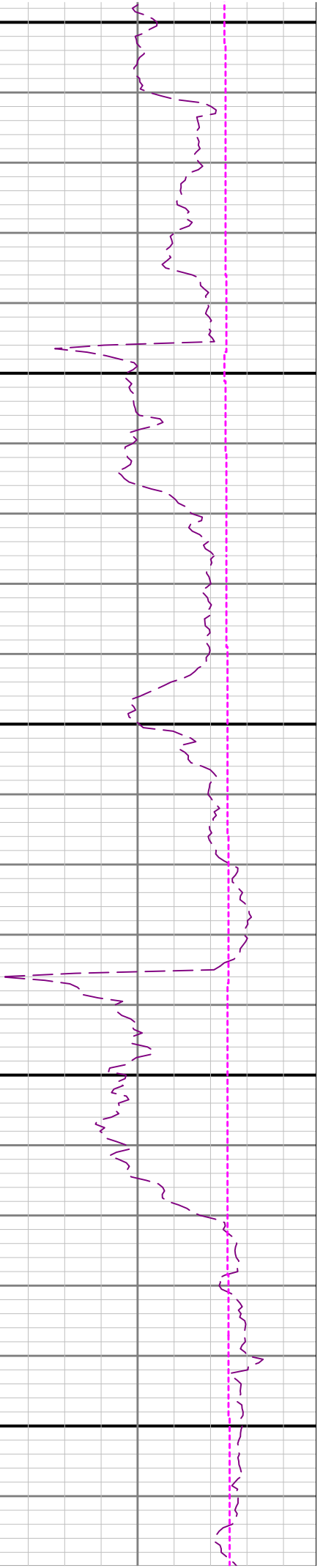
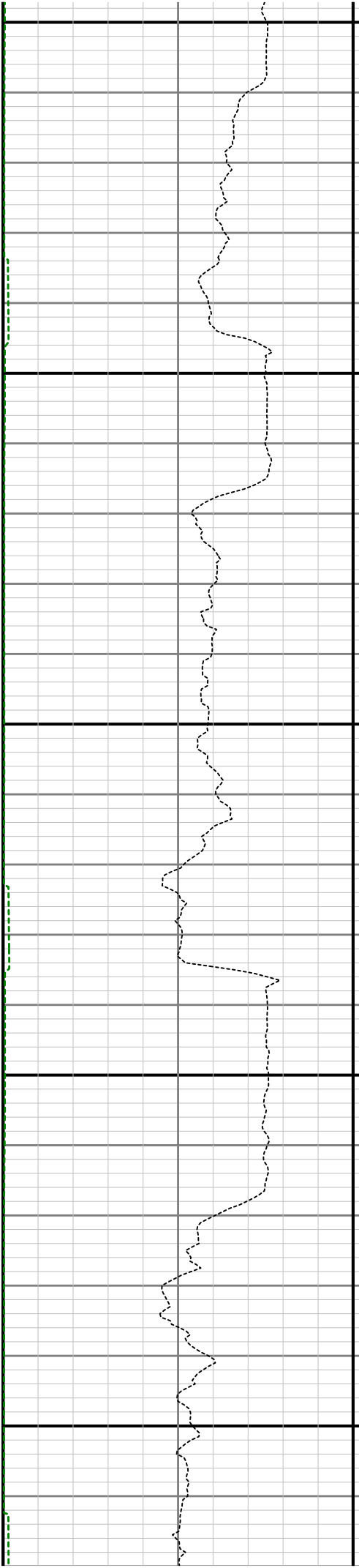


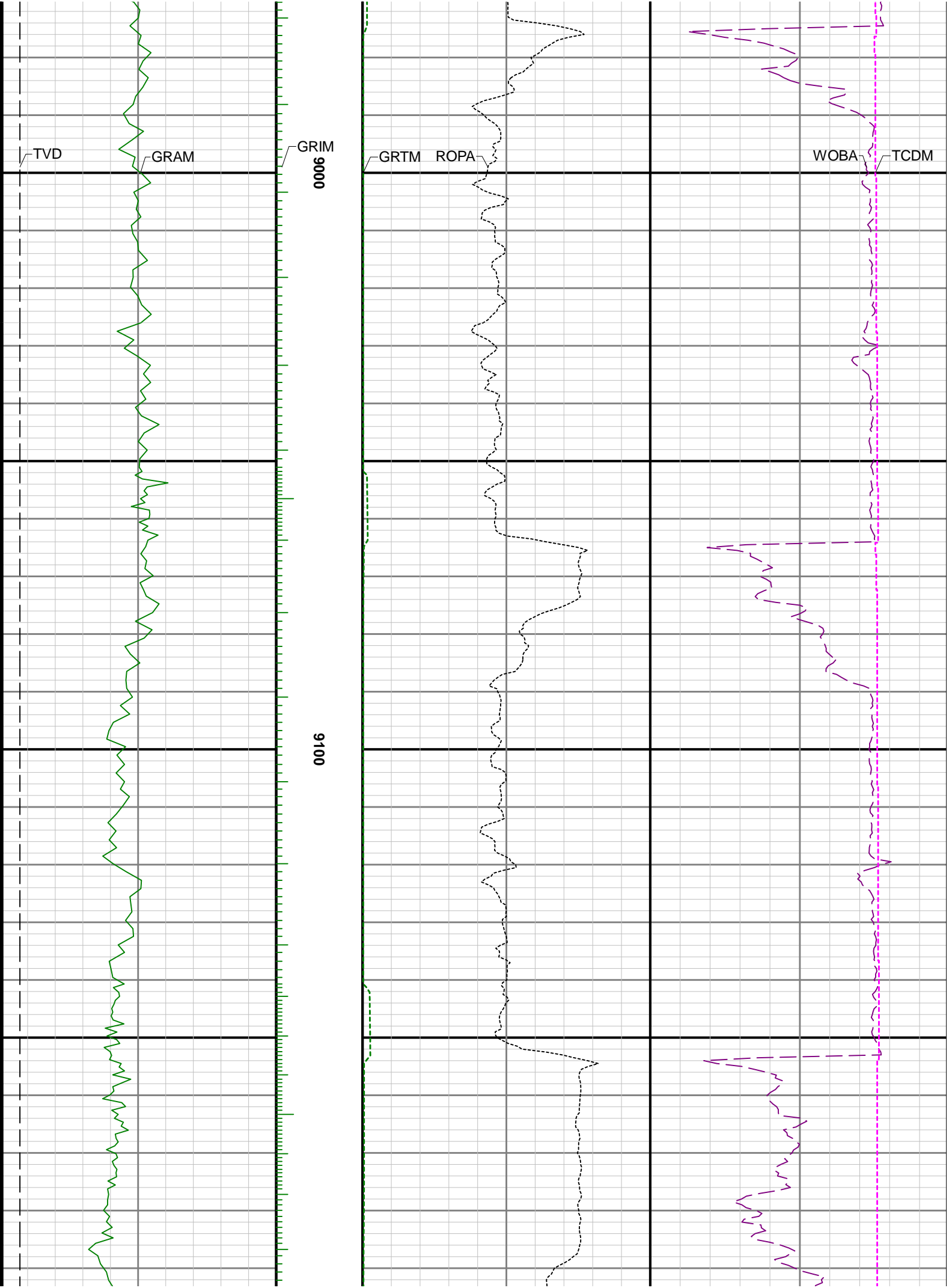


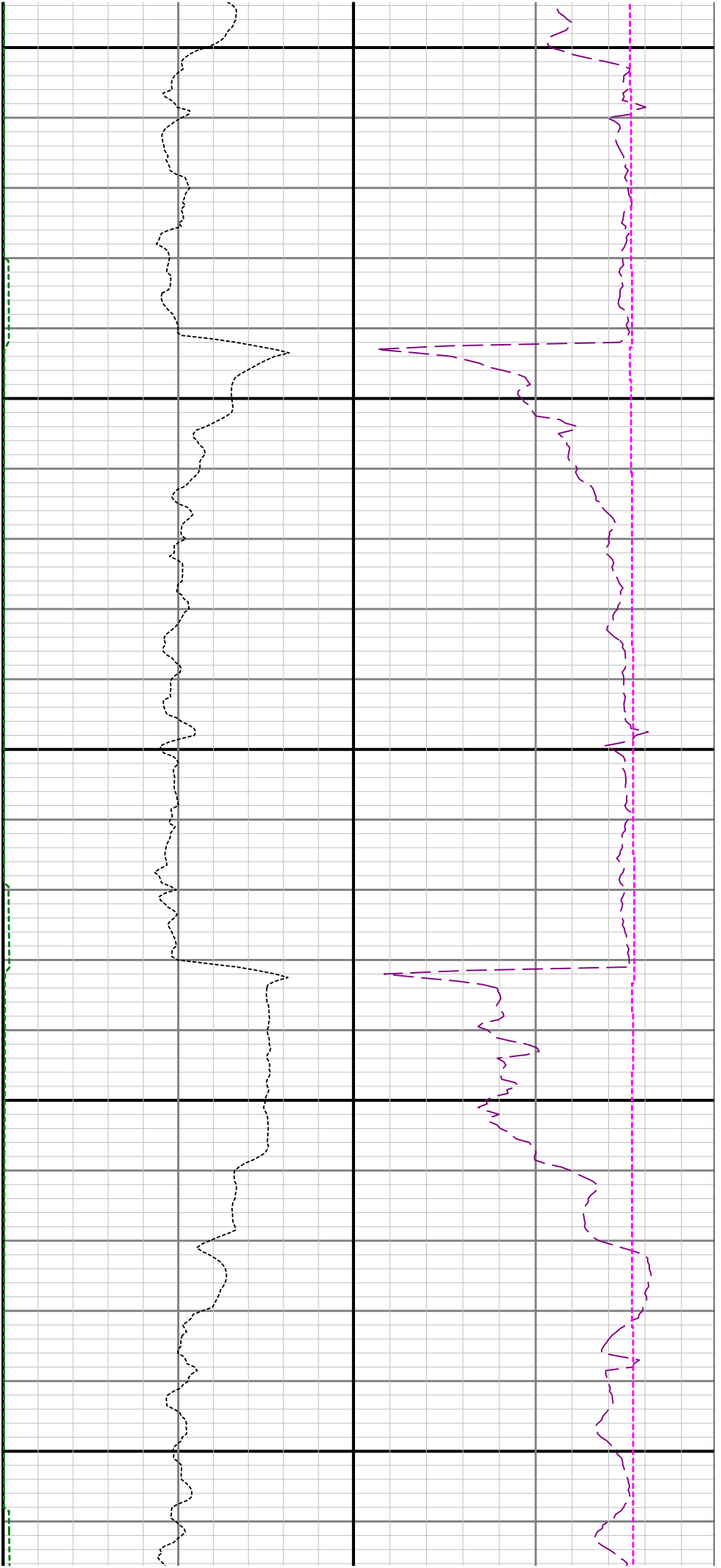


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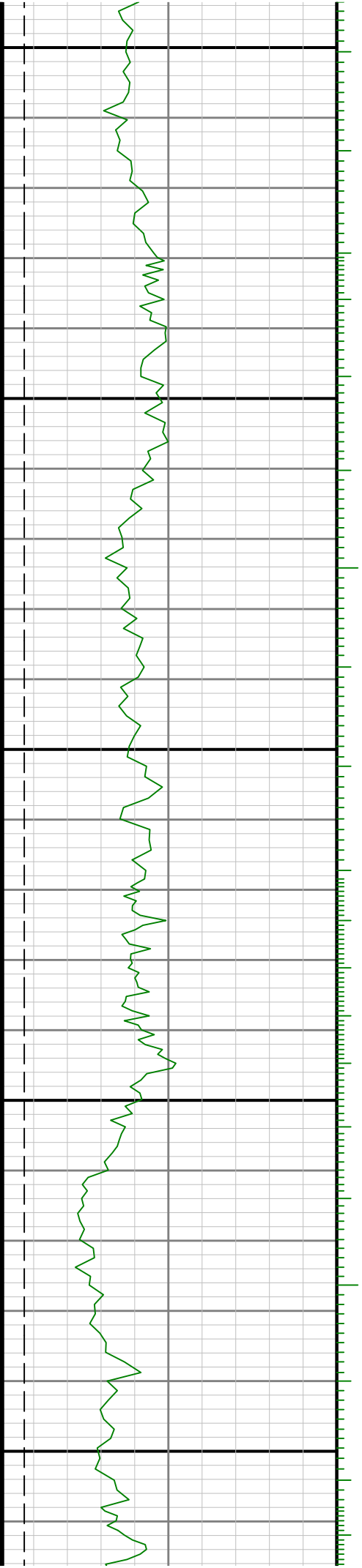


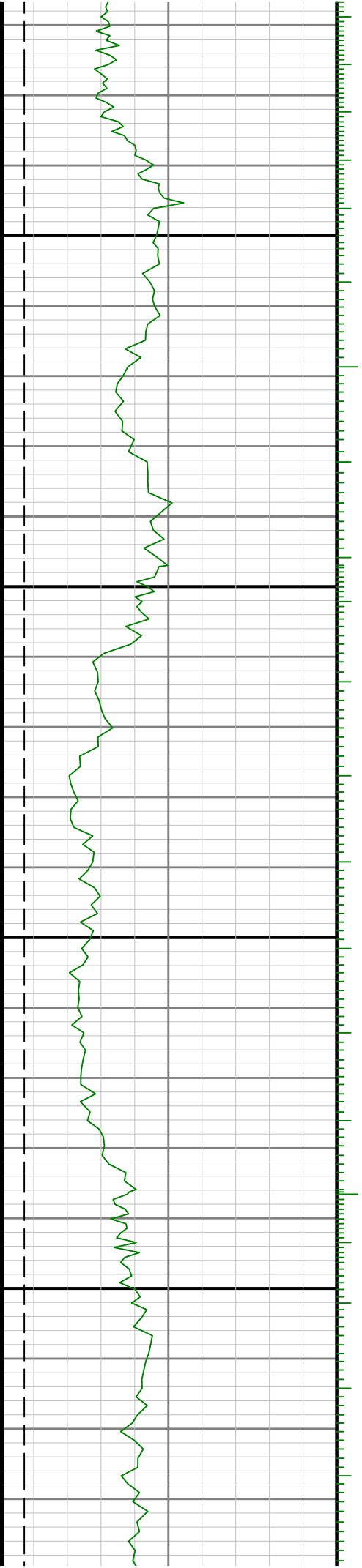


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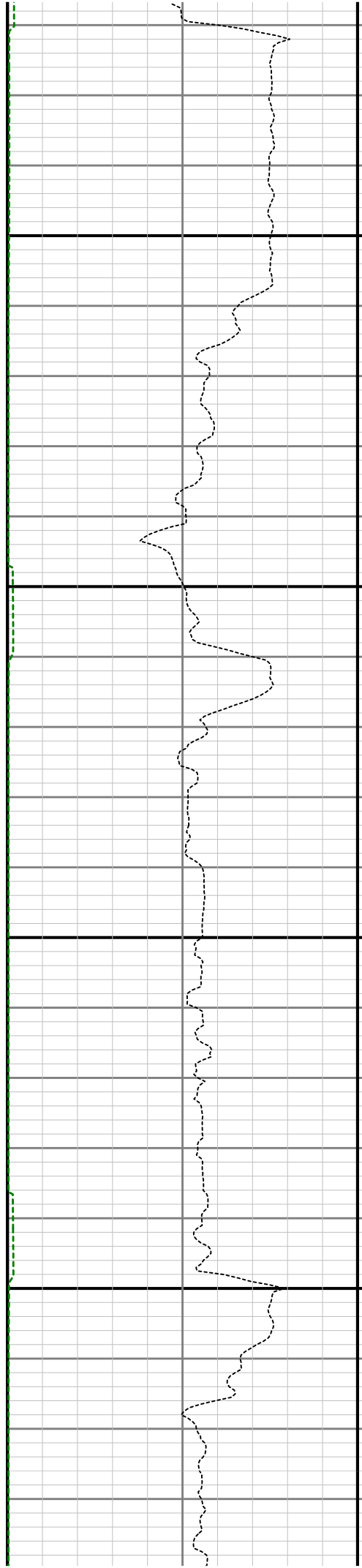
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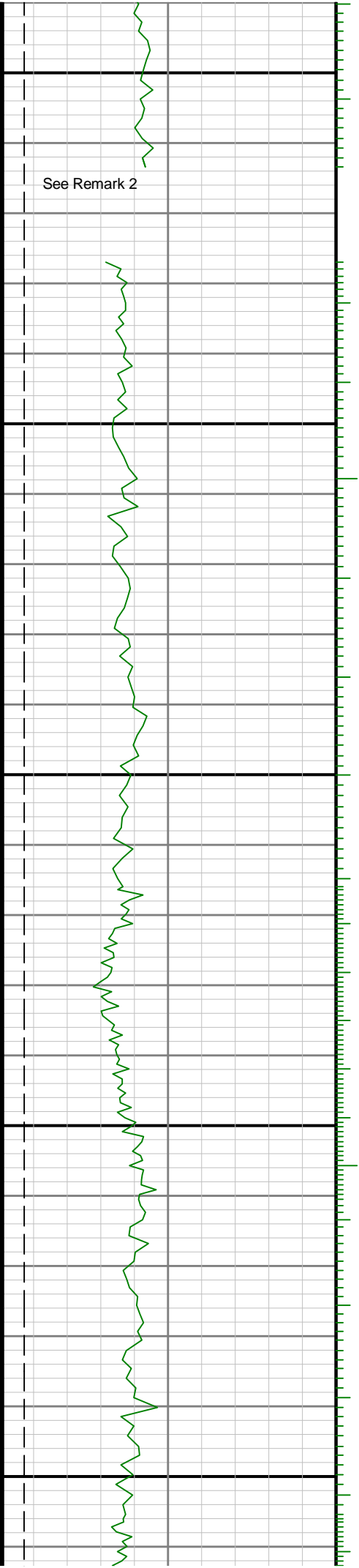




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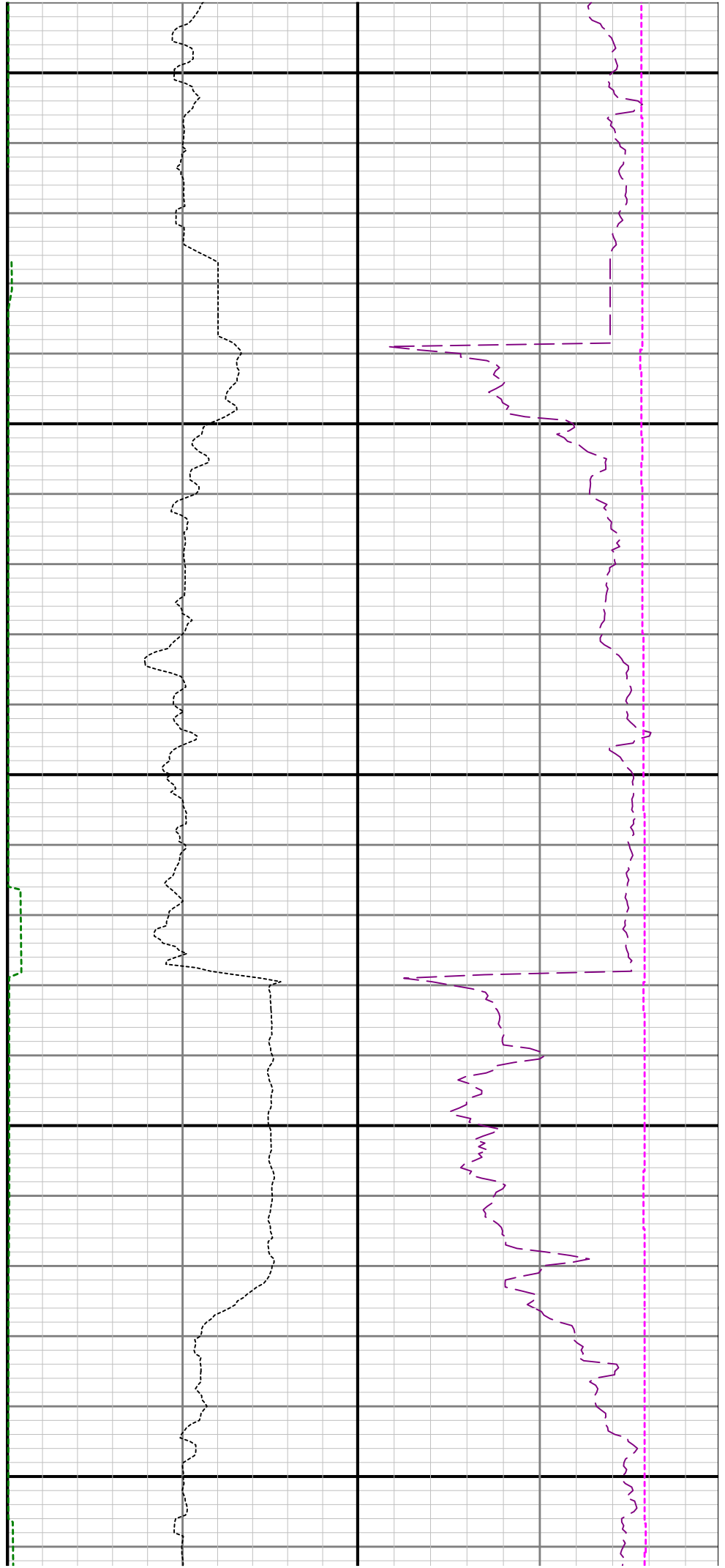
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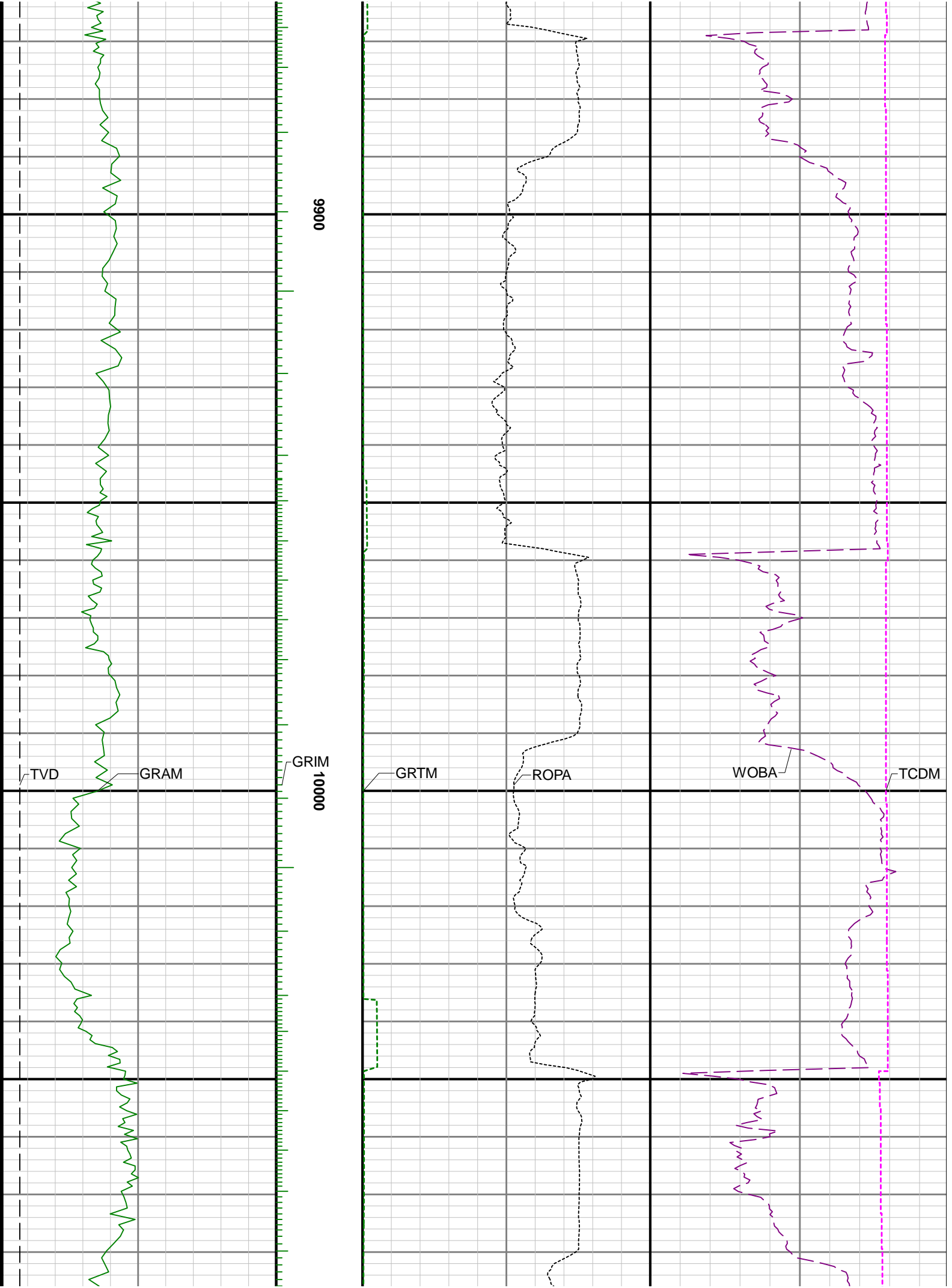


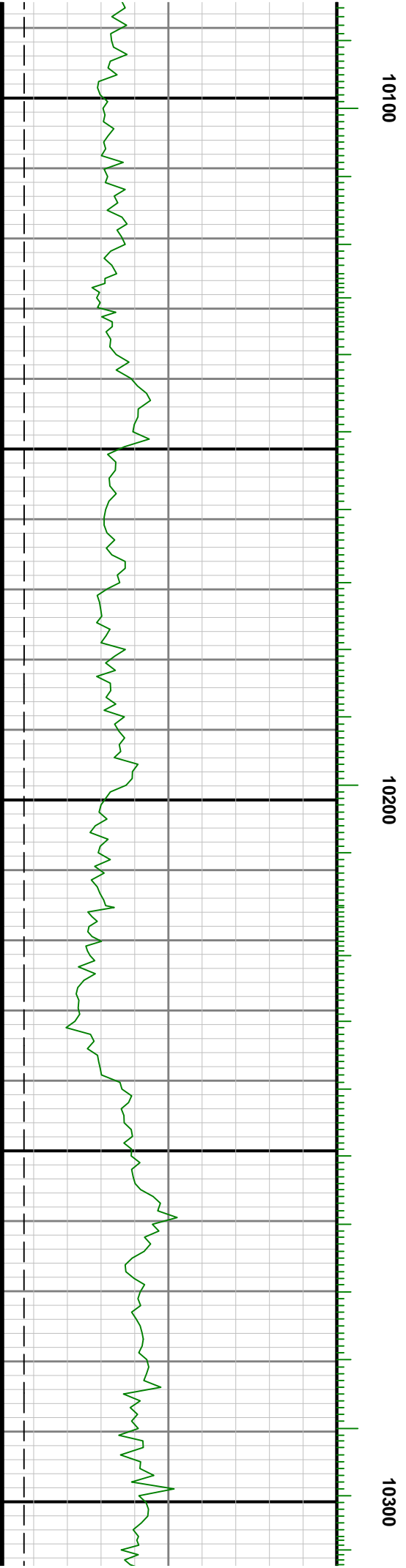
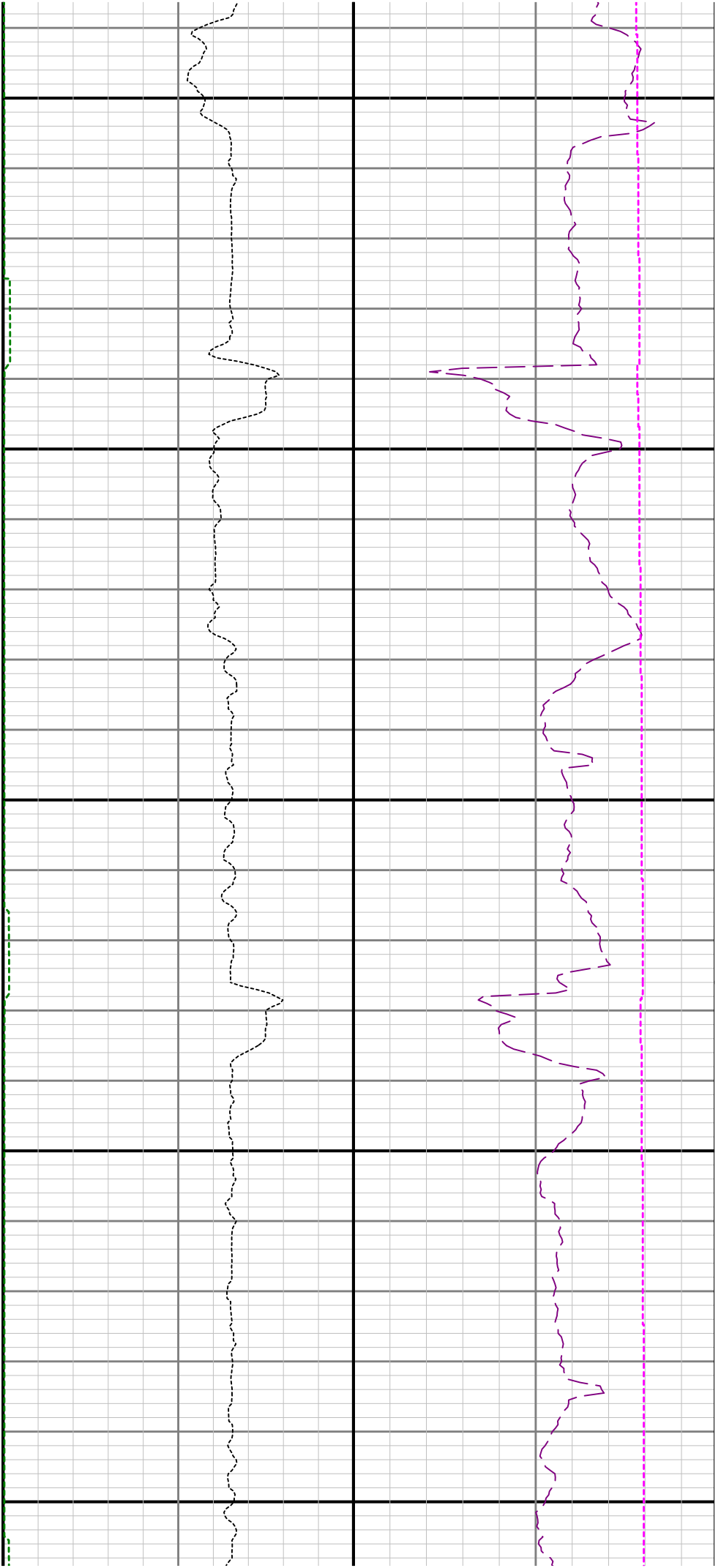


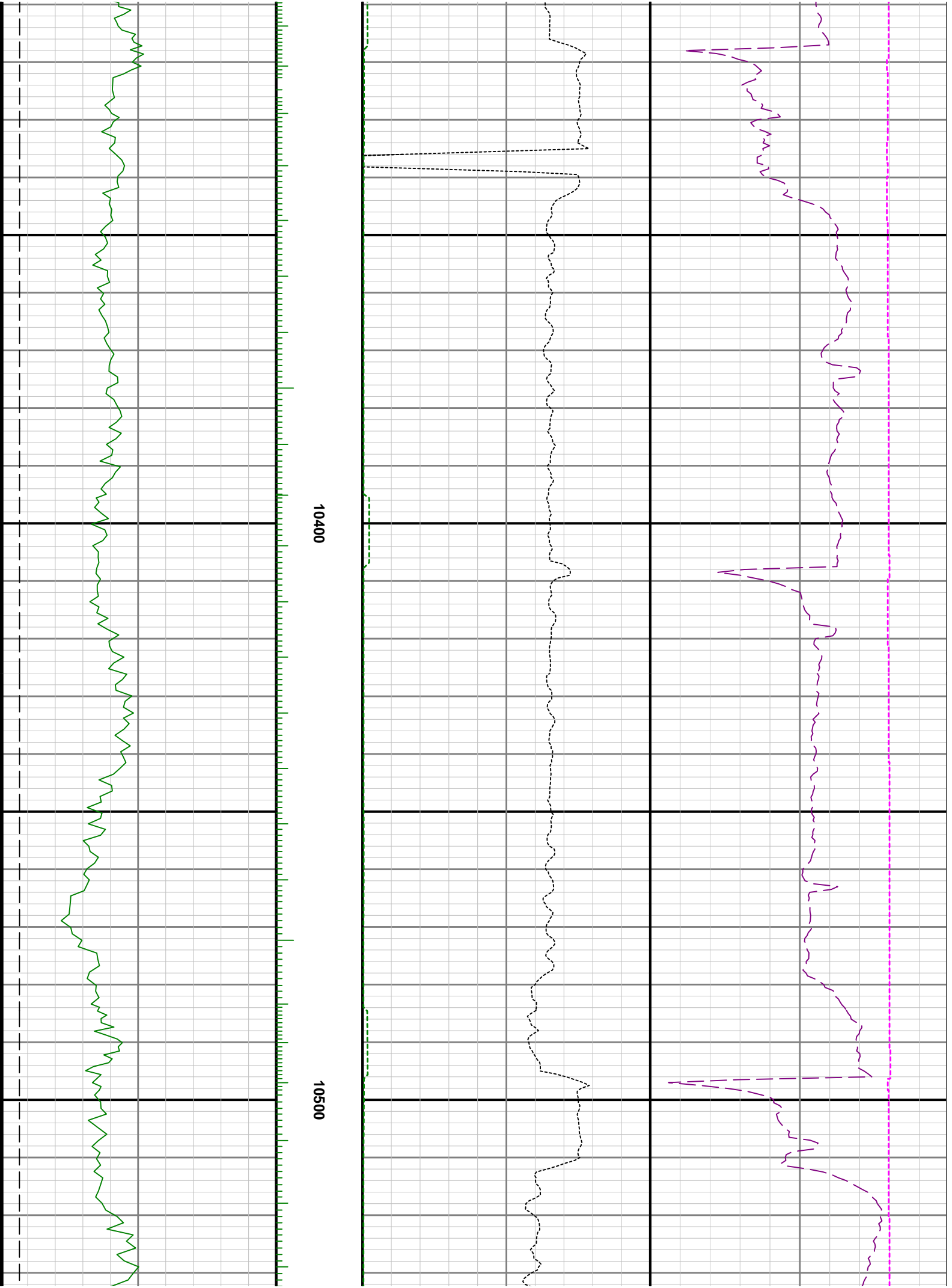
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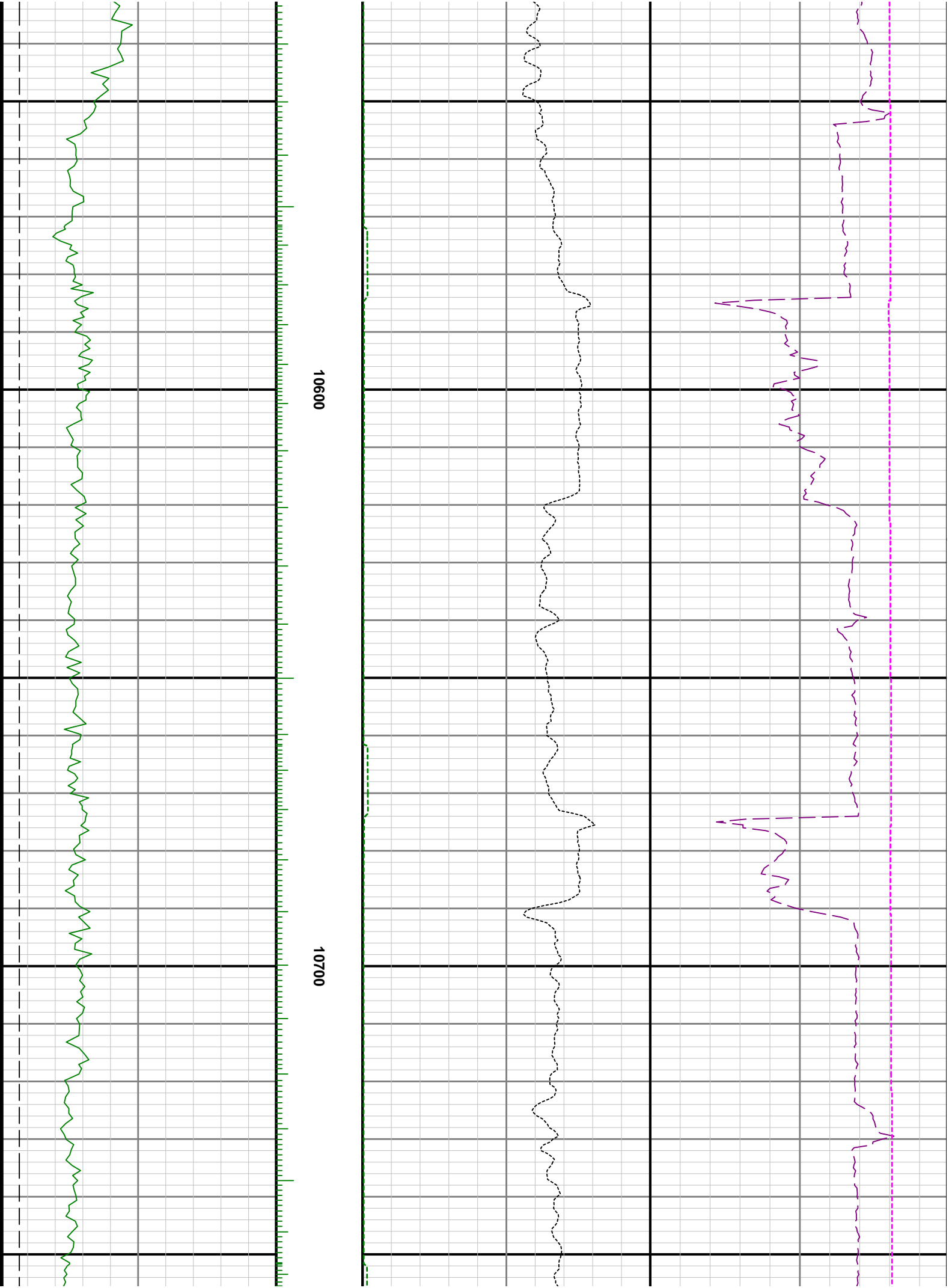
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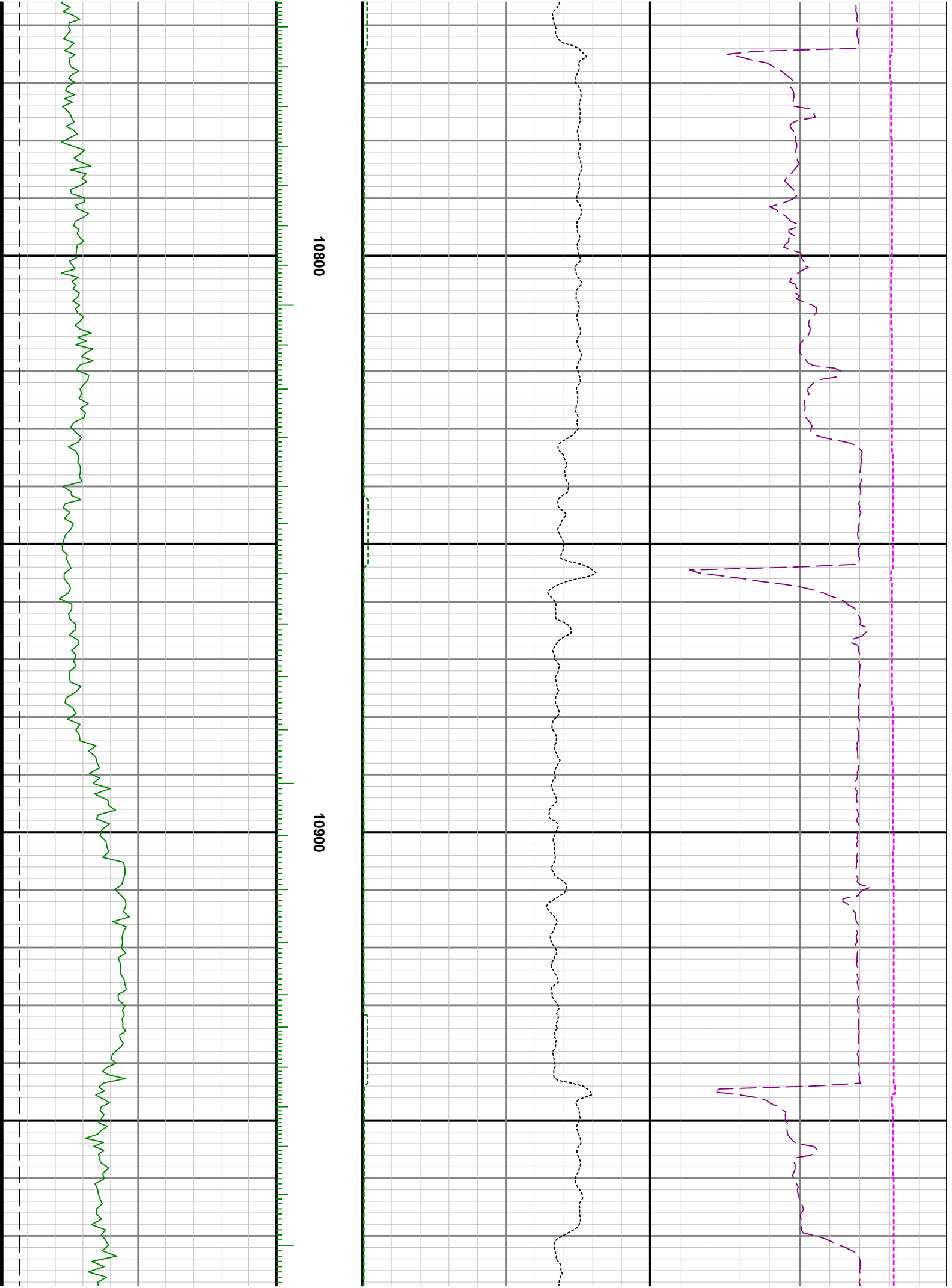


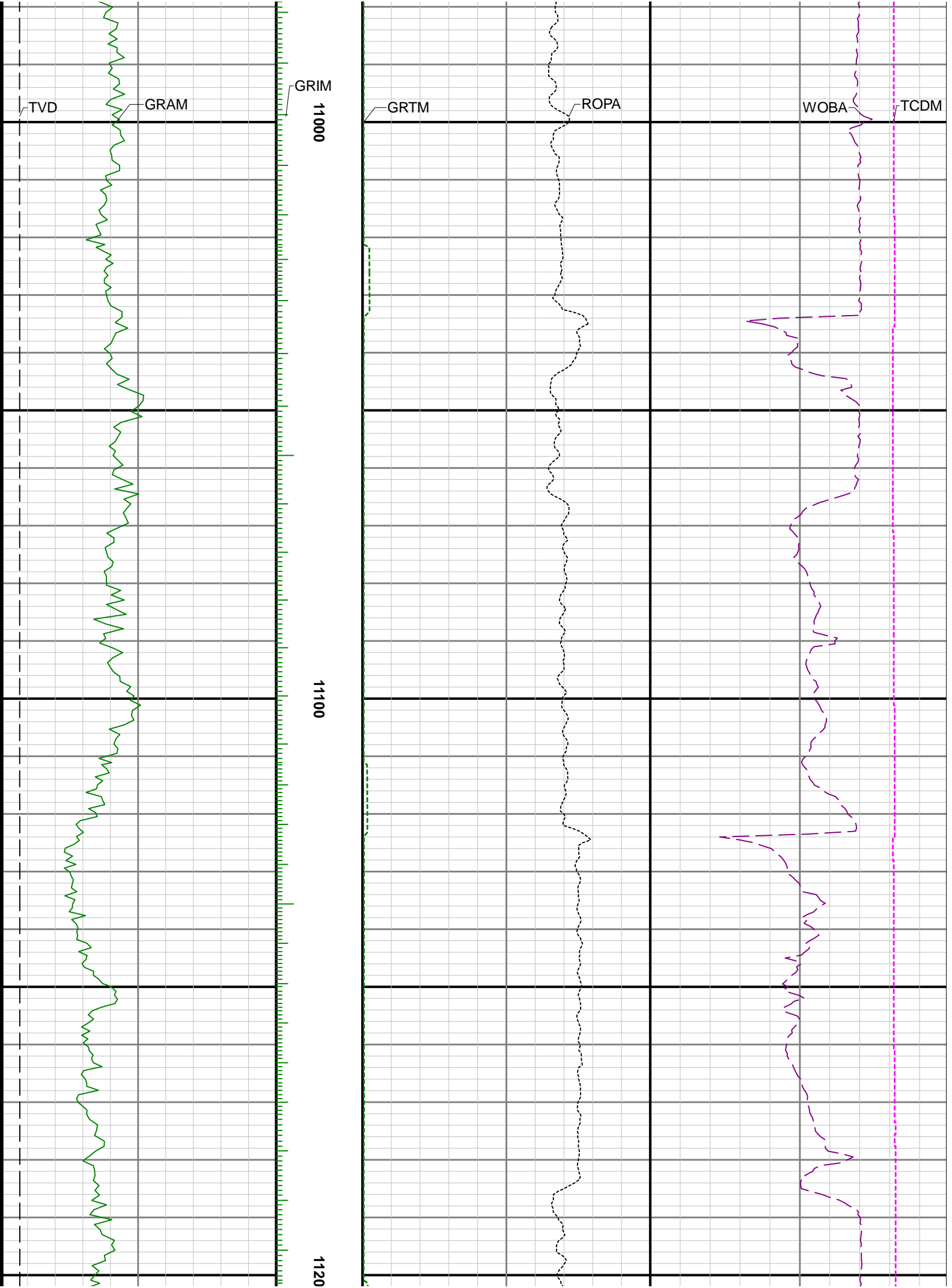


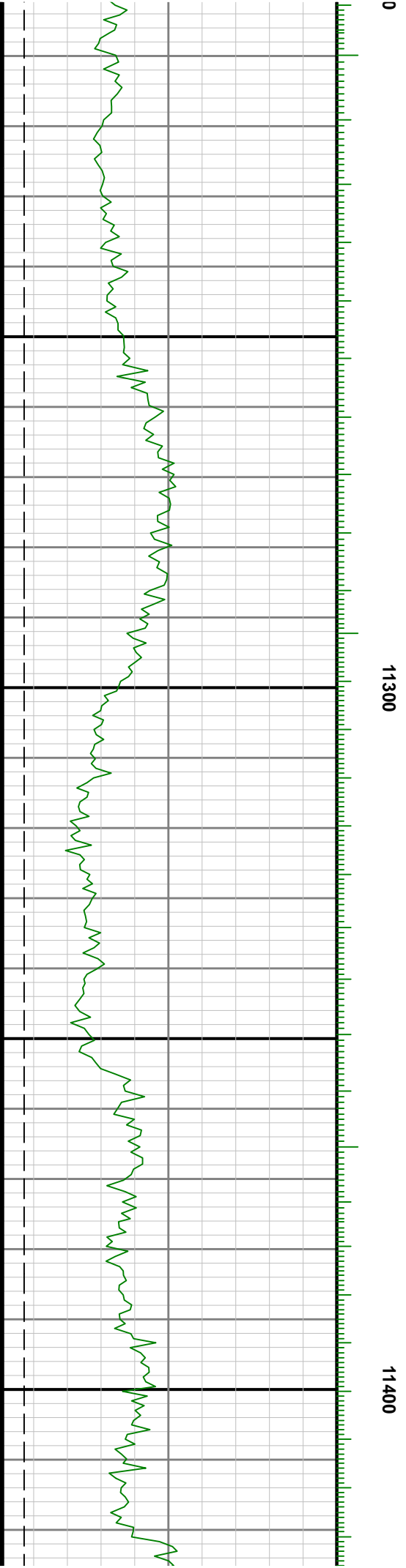


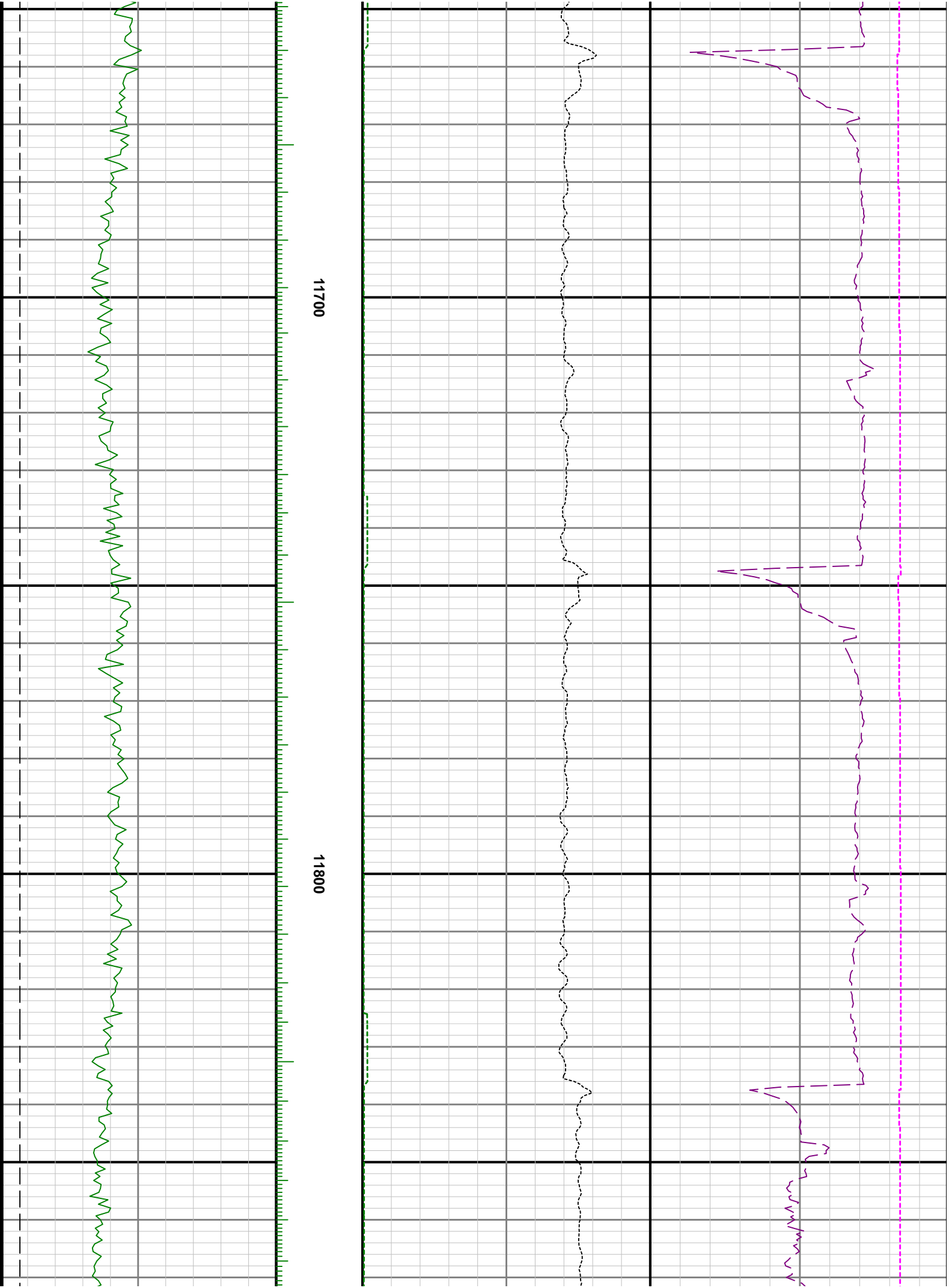


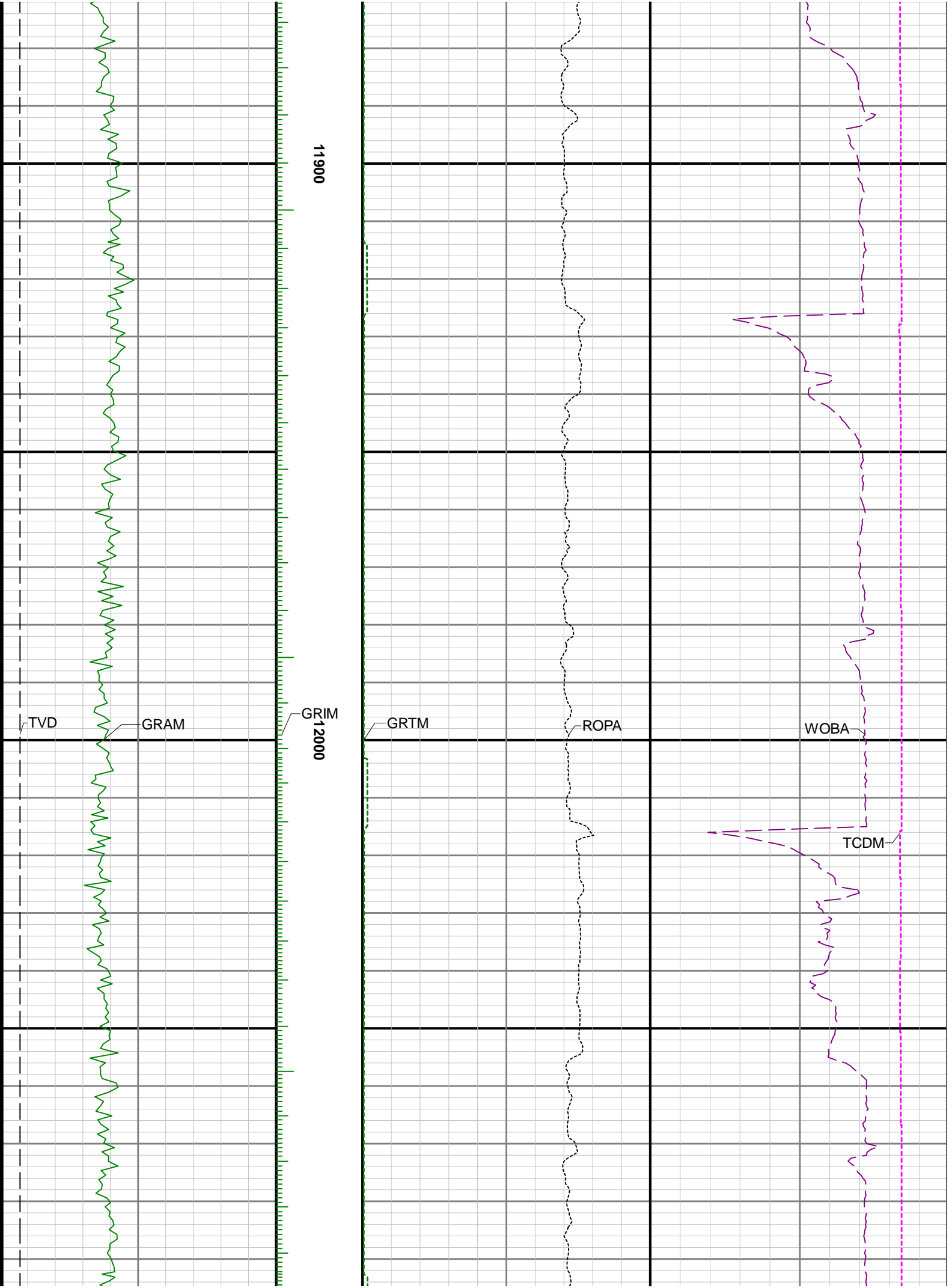


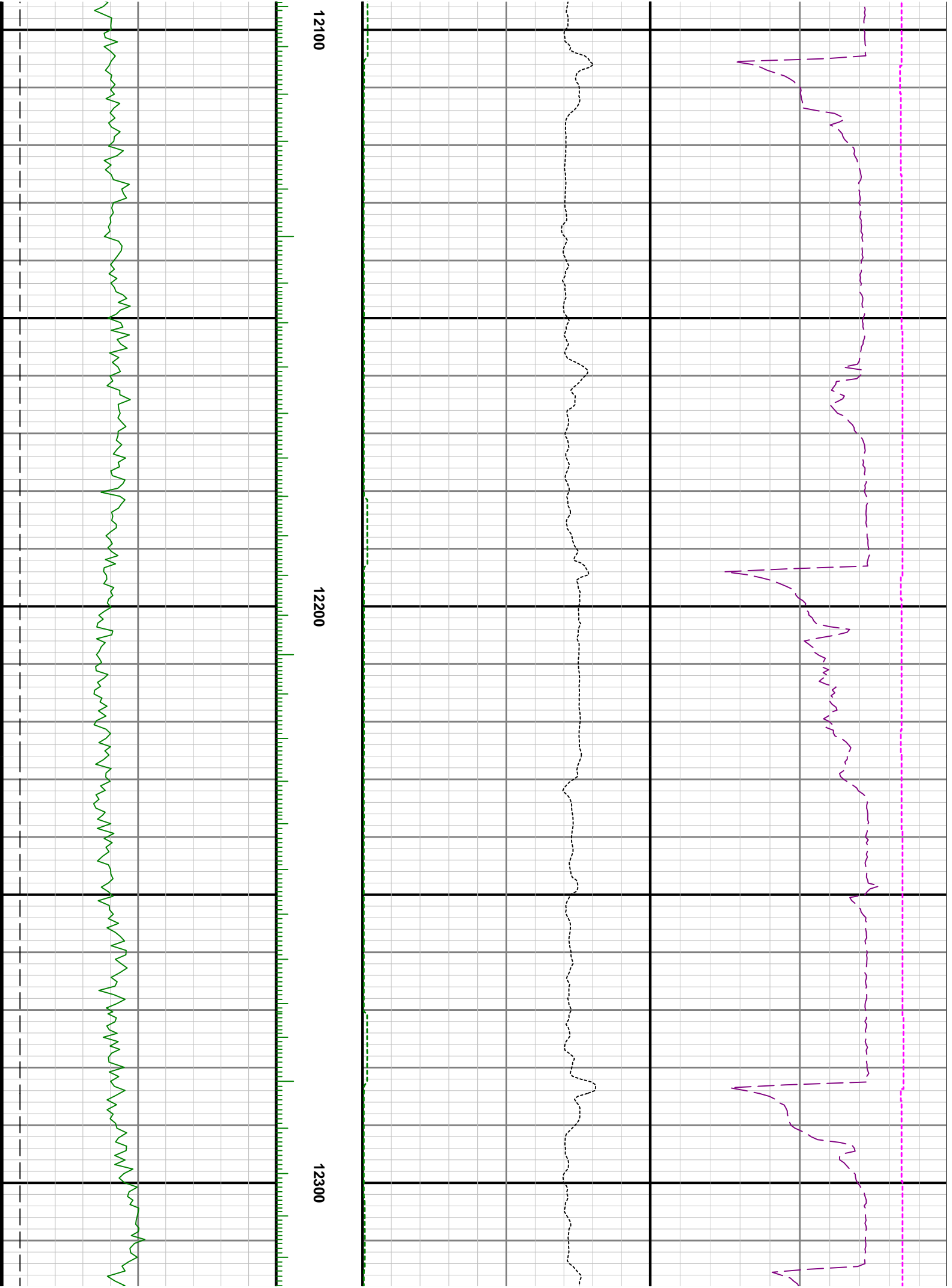


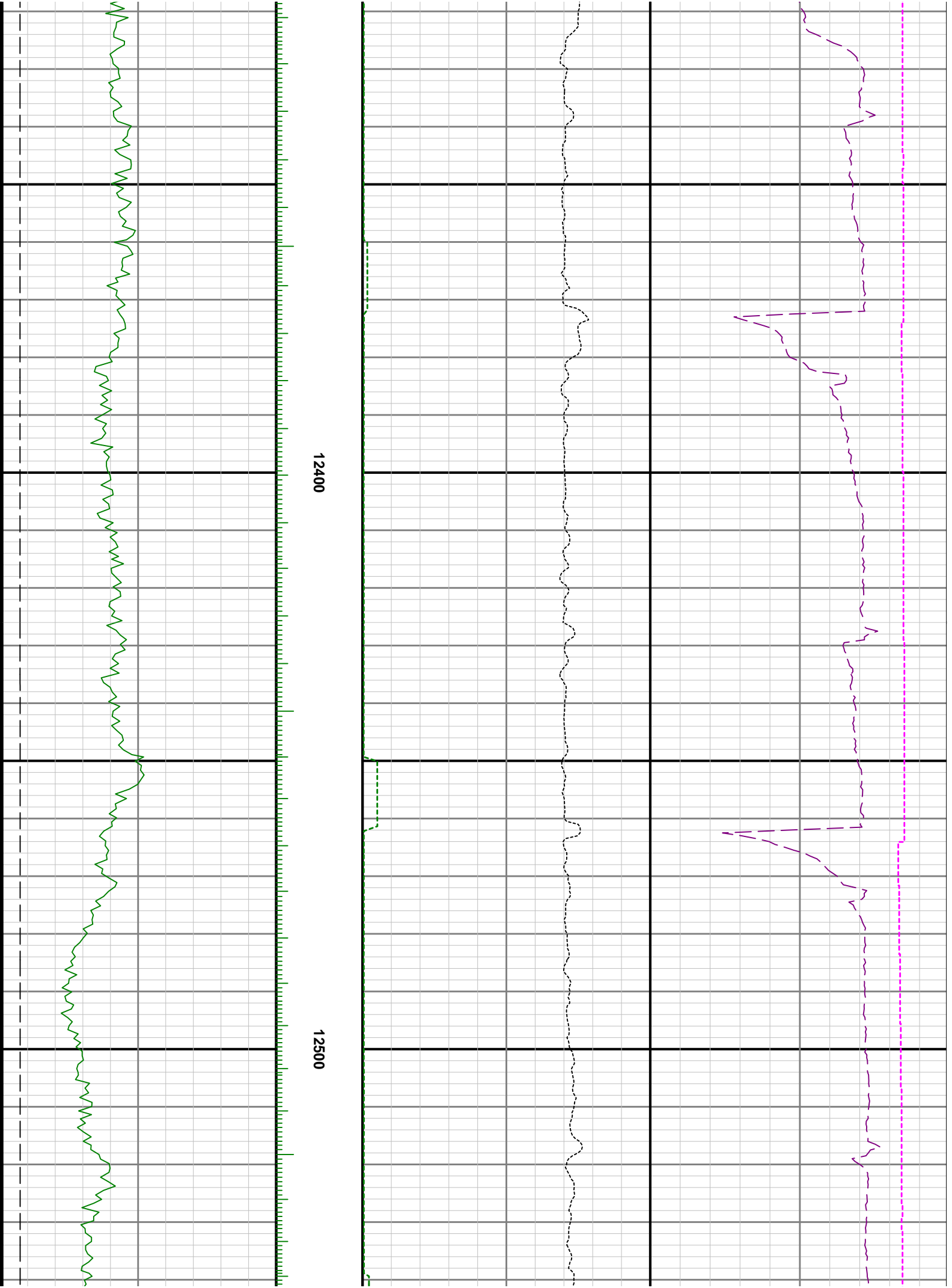


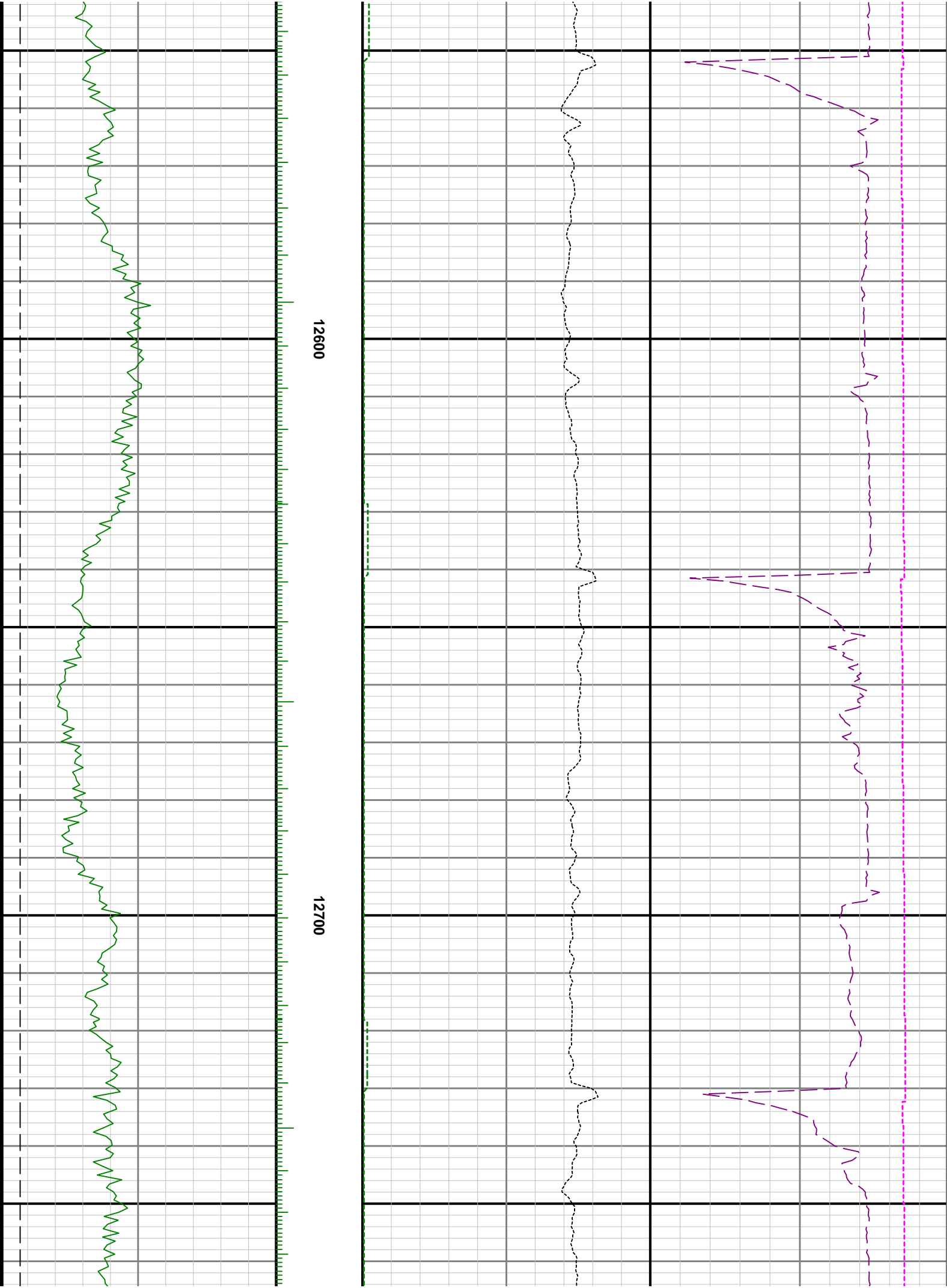


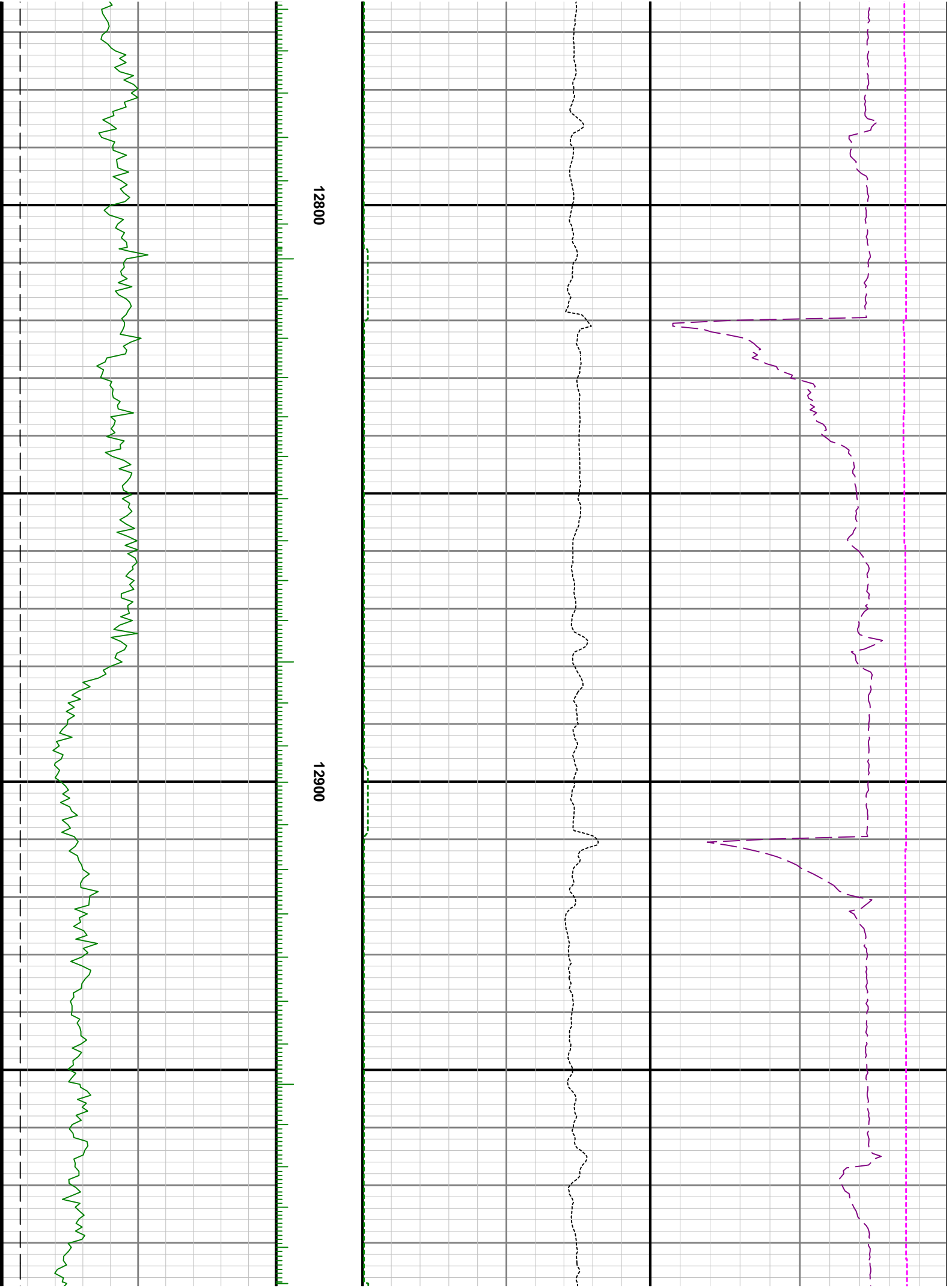


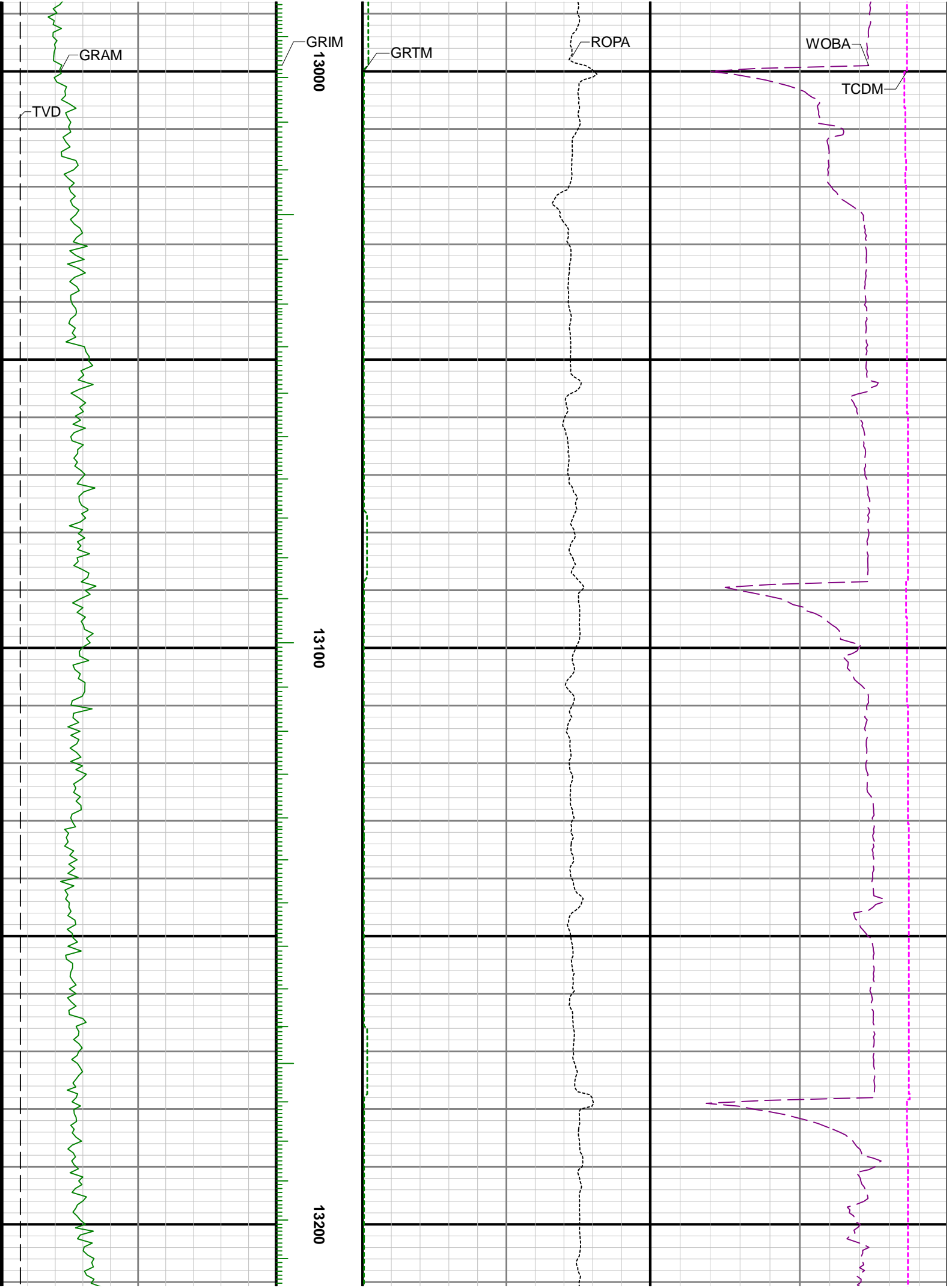


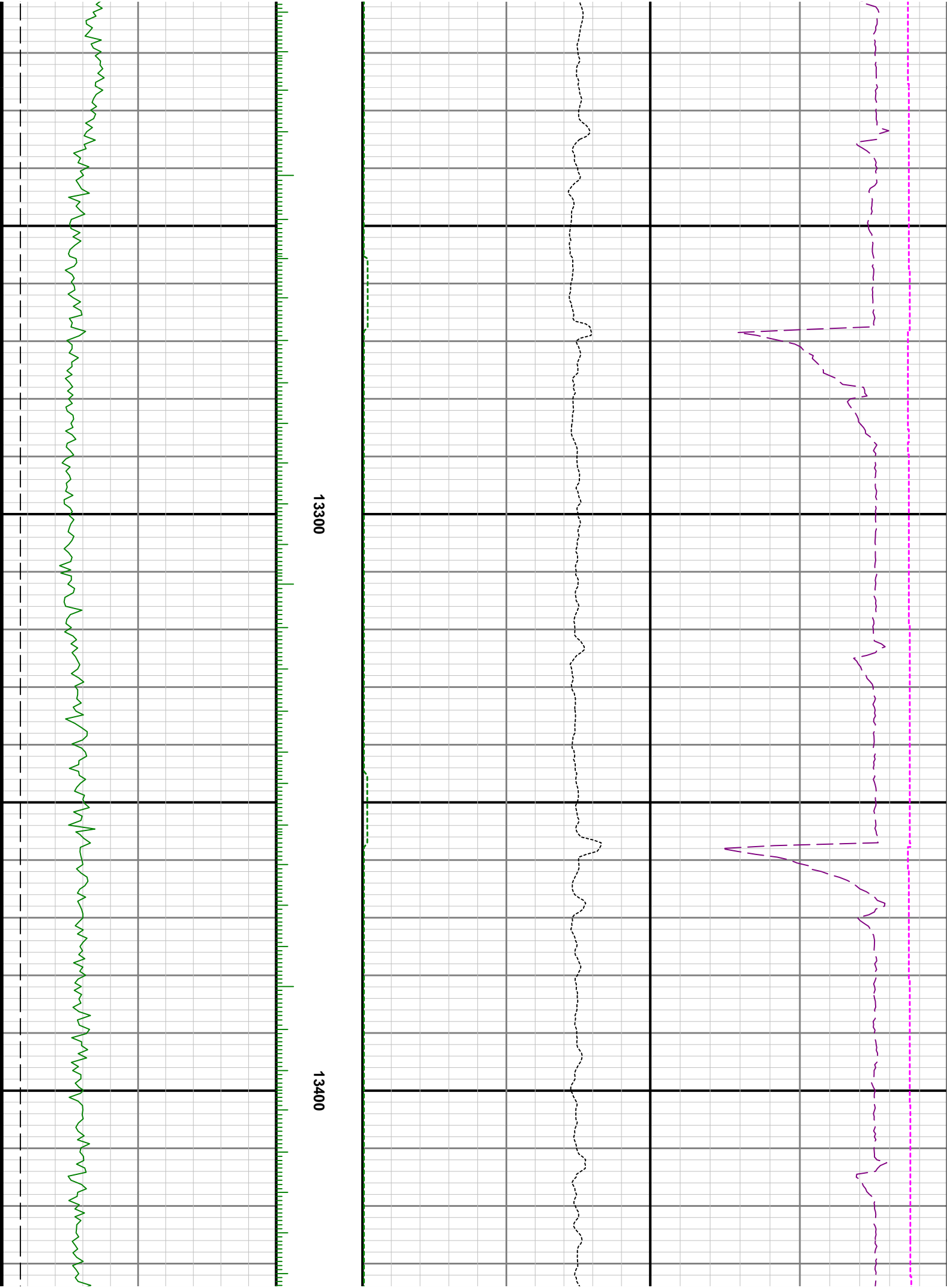










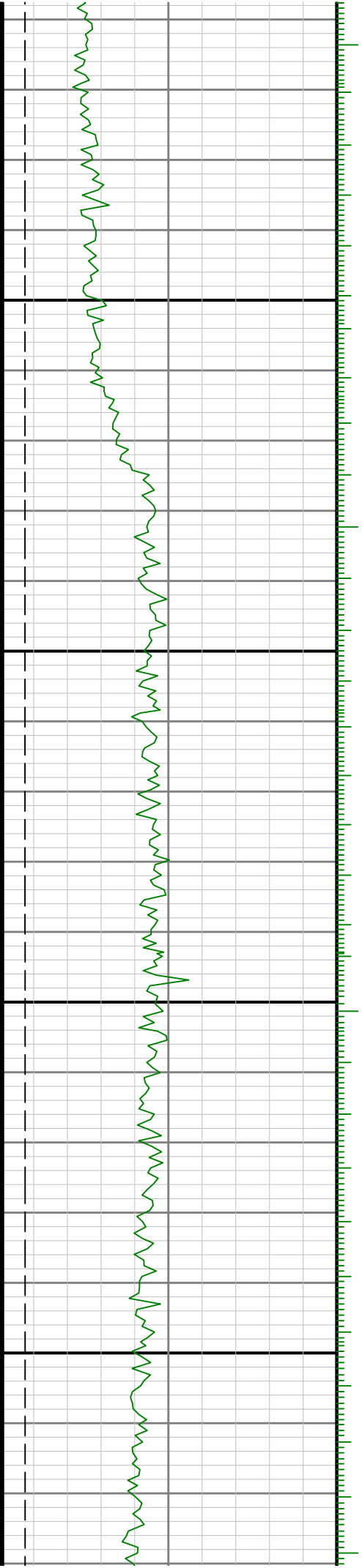


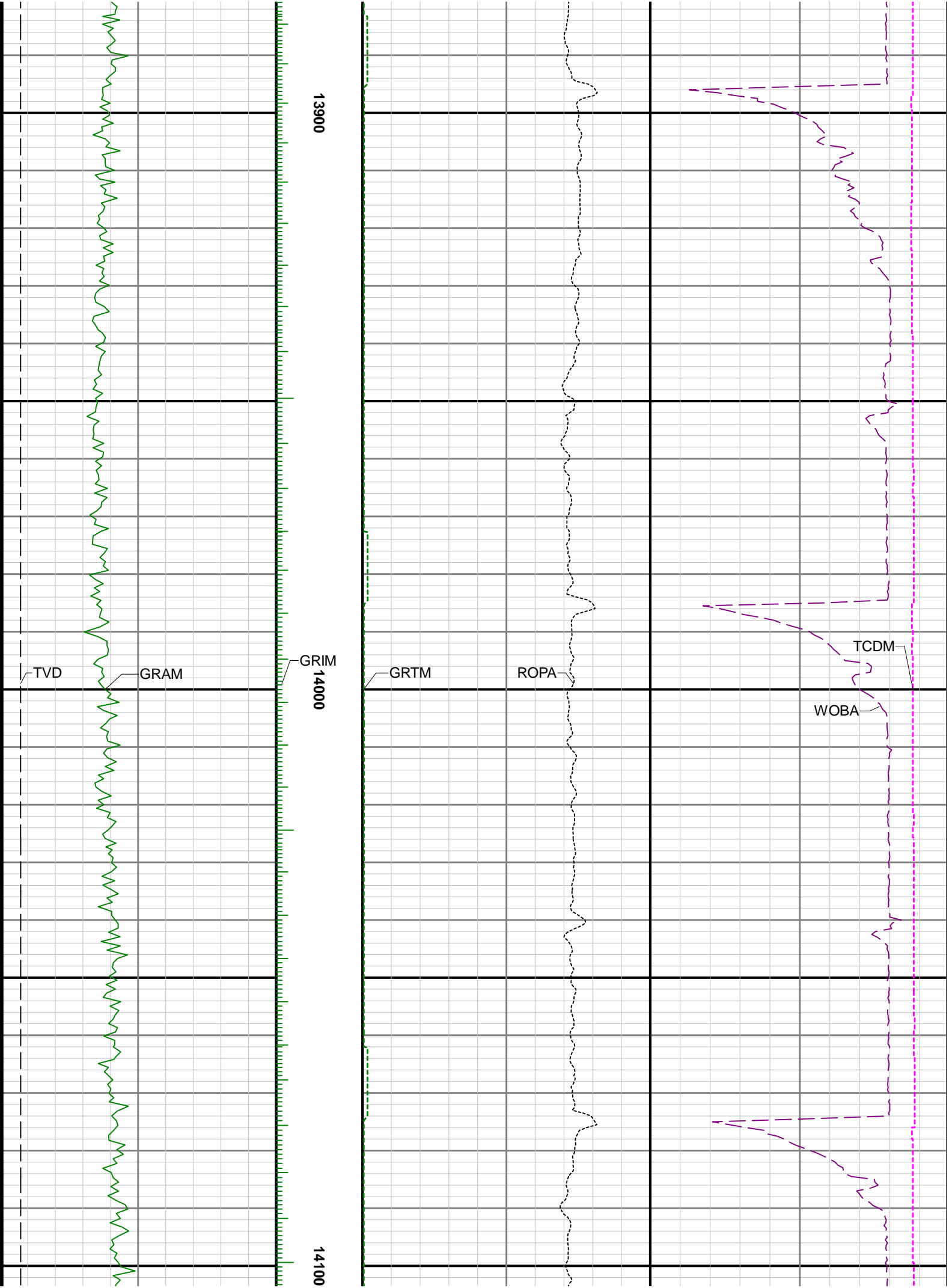


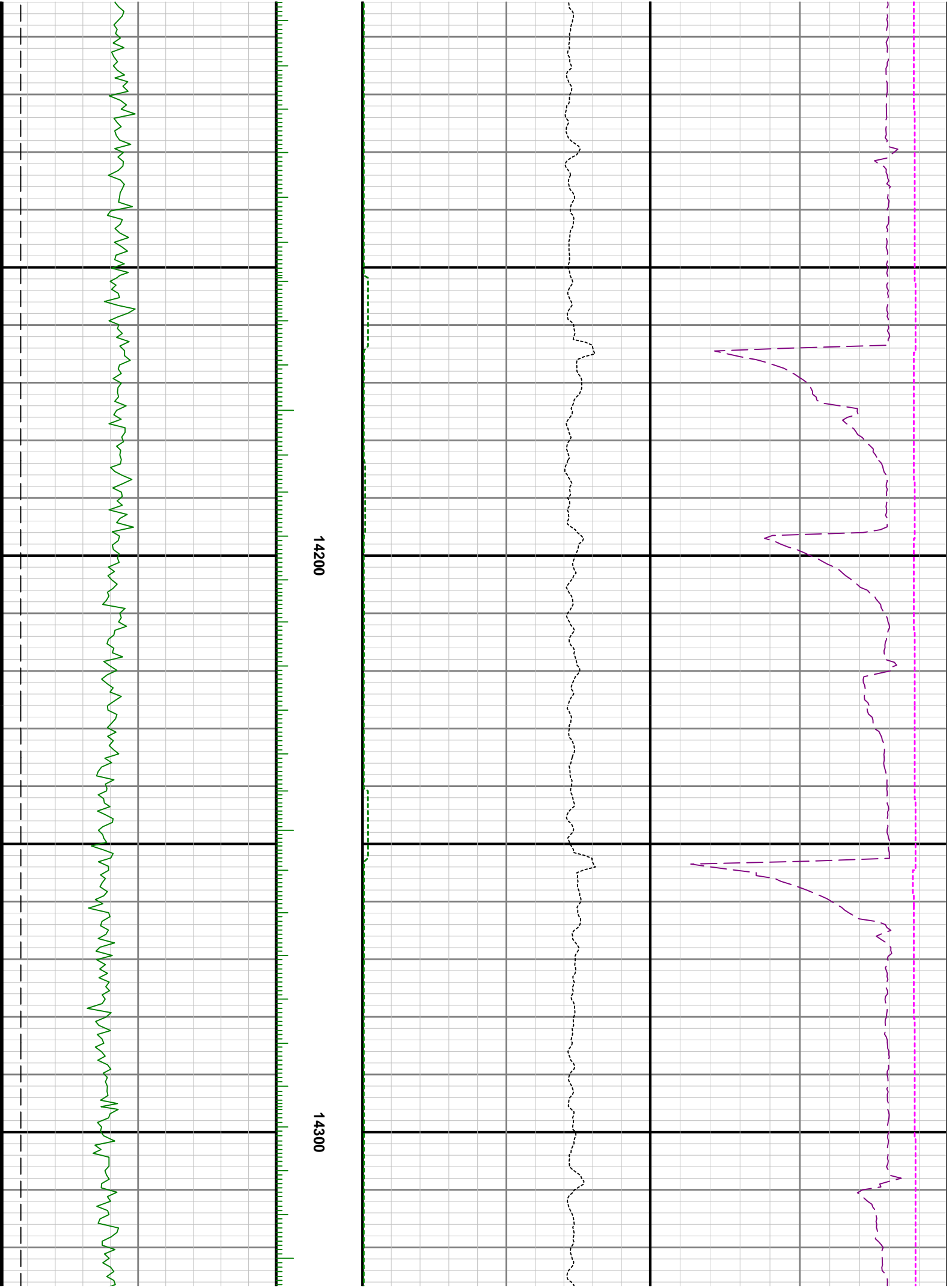


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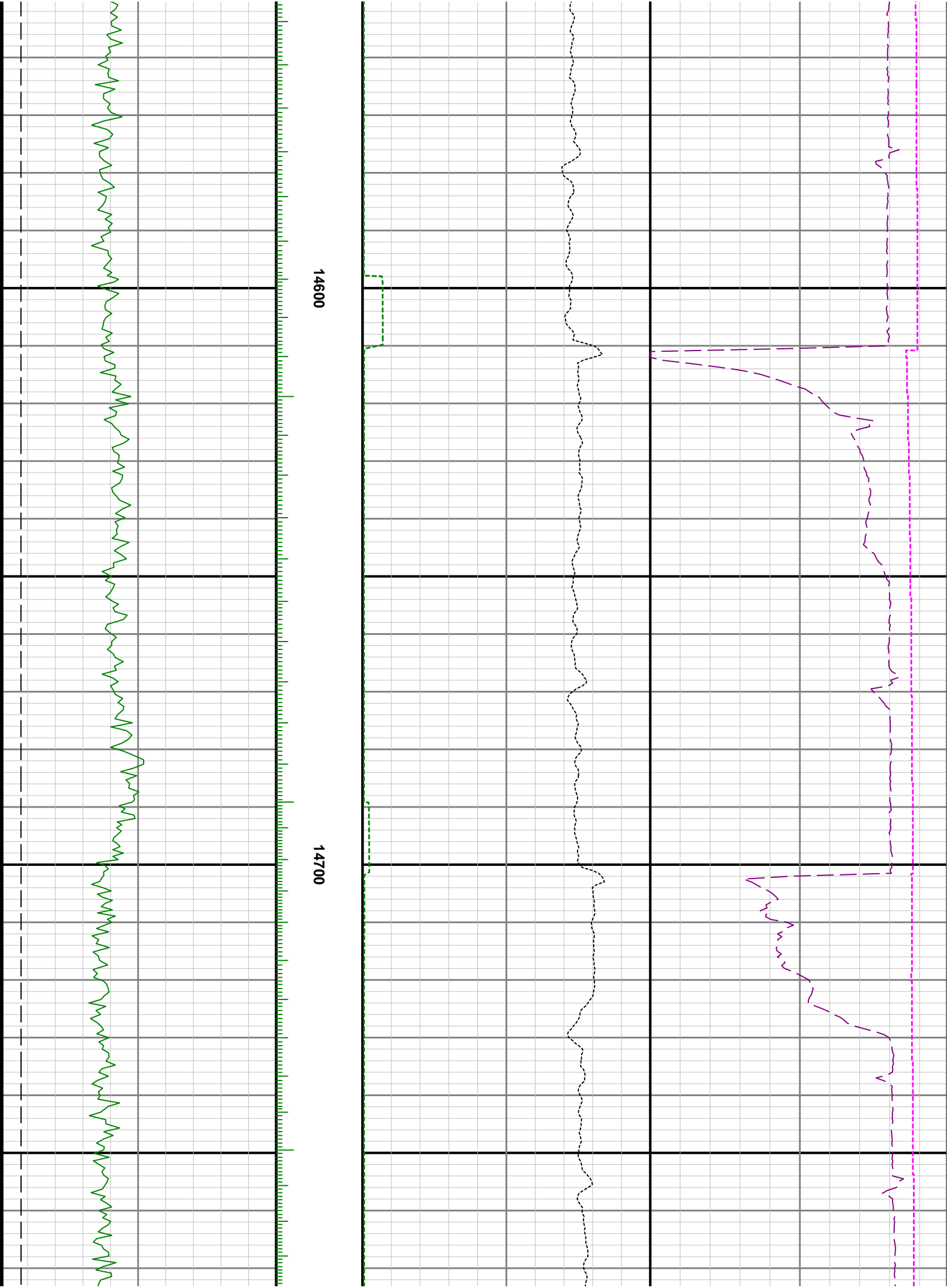
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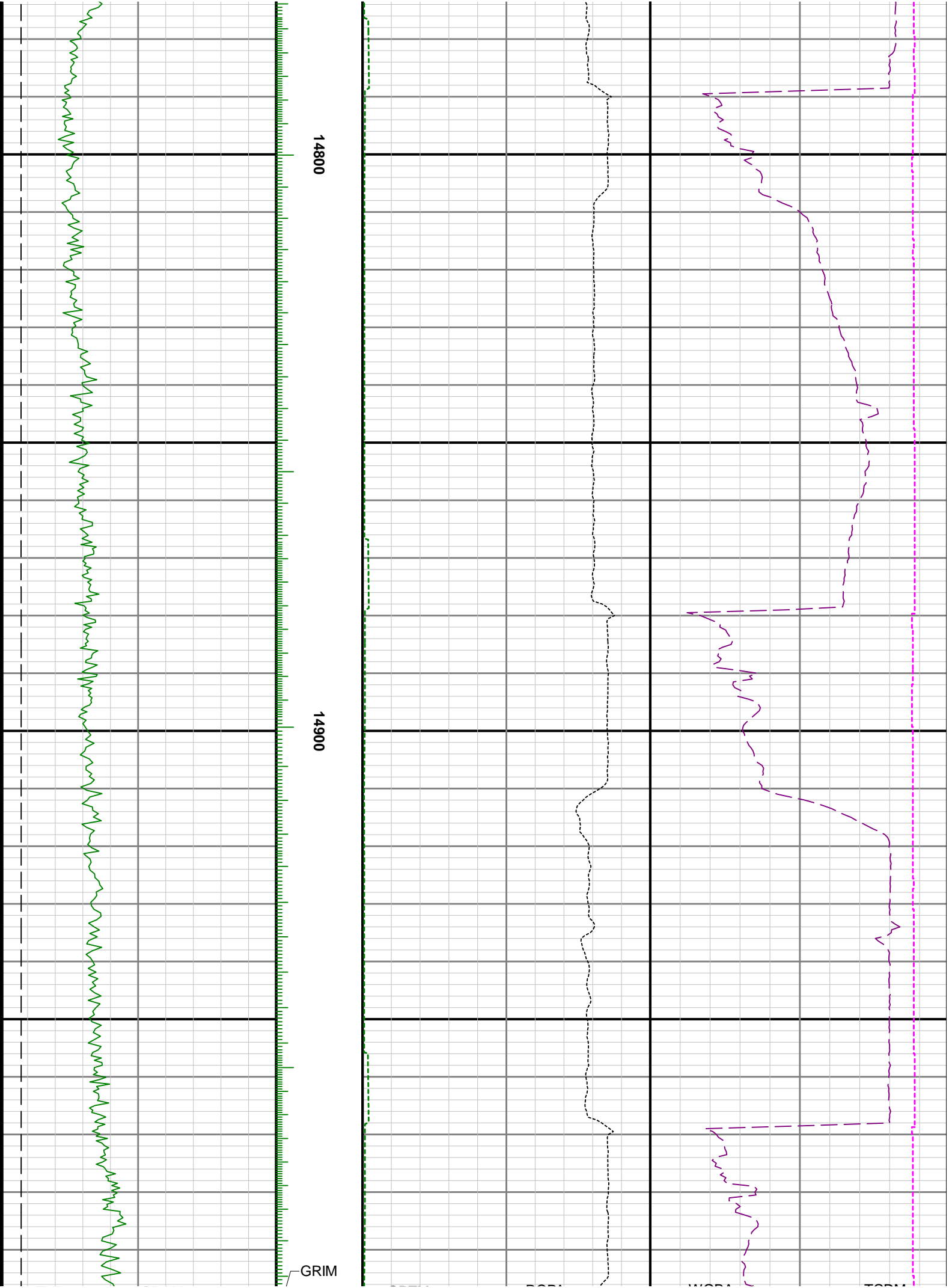


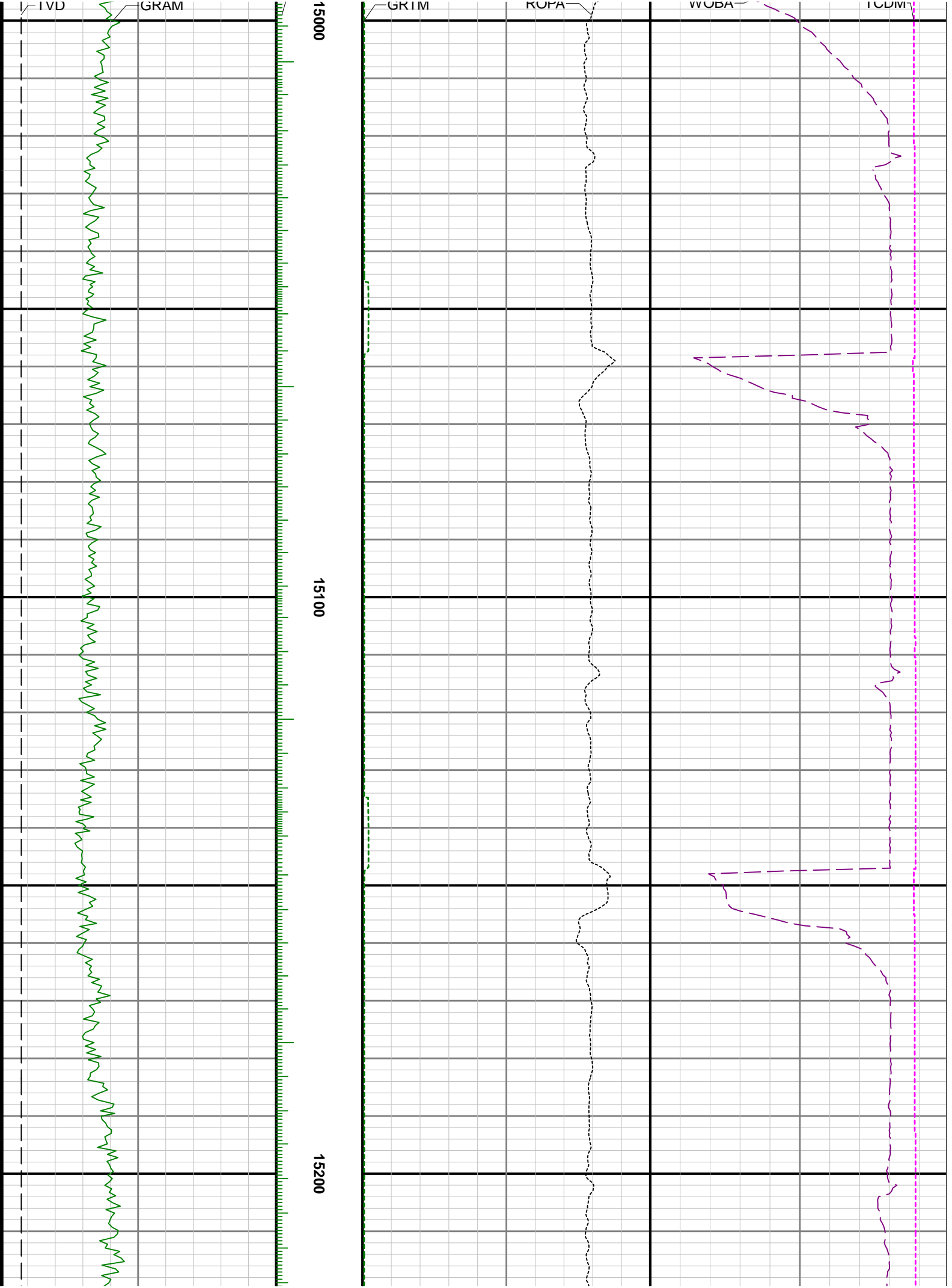














15300

15400

