

Mud Properties Record

Date / Time	Run No.	Measured Depth (ft)	Mud Type	Density (ppg)	Viscosity (cP)	pH	Fluid Loss (cm3)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
2017-12-21 11:10	1	4.00	Water Based Mud	8.4	13	N/A	14.0	5/95	Flow Line	500	0.00
2018-01-21 11:37	2	1845.00	Diesel-Oil Based Mud	9.7	14	N/A	9.8	80/20	Active Pit	30000	0.00
2018-01-22 03:00	2	5036.00	Diesel-Oil Based Mud	9.5	13	N/A	34.0	80/20	Active Pit	33000	0.00
2018-01-22 16:00	2	7860.00	Diesel-Oil Based Mud	9.5	15	N/A	32.0	81/19	Active Pit	27000	0.00
2018-01-23 03:00	2	10288.00	Diesel-Oil Based Mud	9.5	15	N/A	32.0	81/19	Active Pit	27000	0.00
2018-01-23 16:00	2	12725.00	Diesel-Oil Based Mud	9.8	18	N/A	28.0	80/20	Active Pit	35000	0.00
2018-01-24 04:00	2	15333.00	Diesel-Oil Based Mud	9.6	17	N/A	29.0	81/19	Active Pit	30000	0.00

Equipment and Service Data

Run No.	Tool	Serial Number	Measurement	Sensor Offset (ft)	Bit Offset (ft)	Max O.D. (in)	Min I.D. (in)
1	Sensor Sub	ZAPS230925	Gamma (single)	8.52	58.70	8.000	3.250
1	Sensor Sub	ZAPS230925	VSS	9.93	60.11	8.000	3.250
1	Sensor Sub	ZAPS230925	Directional (mag)	9.93	60.11	8.000	3.250
1	Sensor Sub	ZAPS230925	Pressure	30.52	80.70	8.000	3.250
2	ATC_SU	12406997	Near Bit VSS	5.93	6.73	7.000	4.330
2	ATC_SU	12406997	Near Bit Inclination	5.93	6.73	7.000	4.330
2	ATC_MWD	12965732	Gamma (single)	2.75	12.90	7.000	3.250
2	ATC_MWD	12965732	Directional (mag)	12.27	22.42	7.000	3.250

Service and Tool Mnemonics

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

Comments

- 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.
- 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 1841 feet MD (surface to 1822 feet TVD). No logging data was acquired during this run.
- Gamma Ray Apparent (GRAM) is presented 0 to 300 API per customer request.


Remarks

Number	Measured Depth (ft)	Hole Section (in)	Run No.	Remark
1	15623.00	8.500	2	The interval from 15613 to 15626 feet MD (6963 feet TVD) was not logged due to sensor to bit offset at well TD.

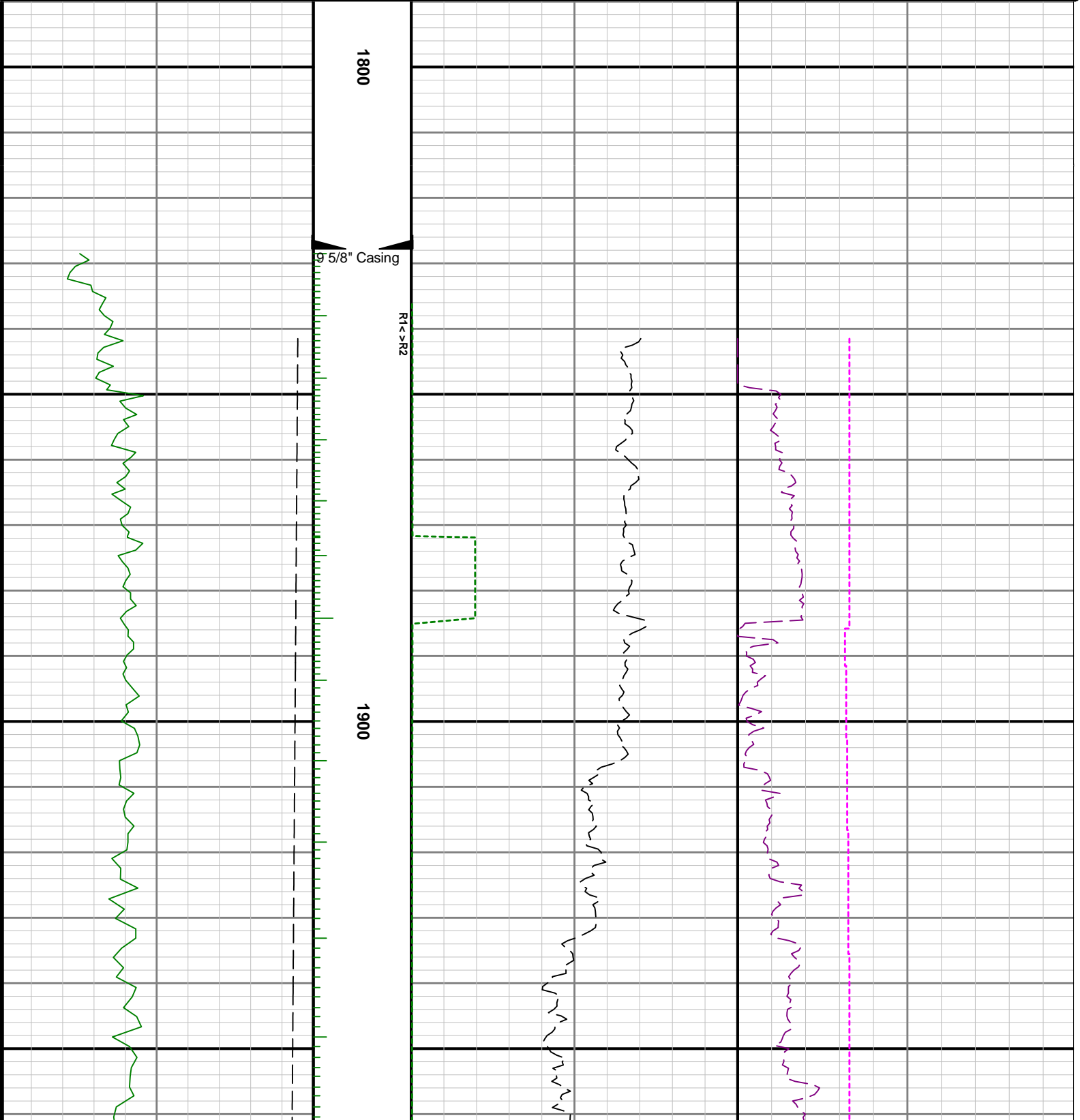
Curve Mnemonics

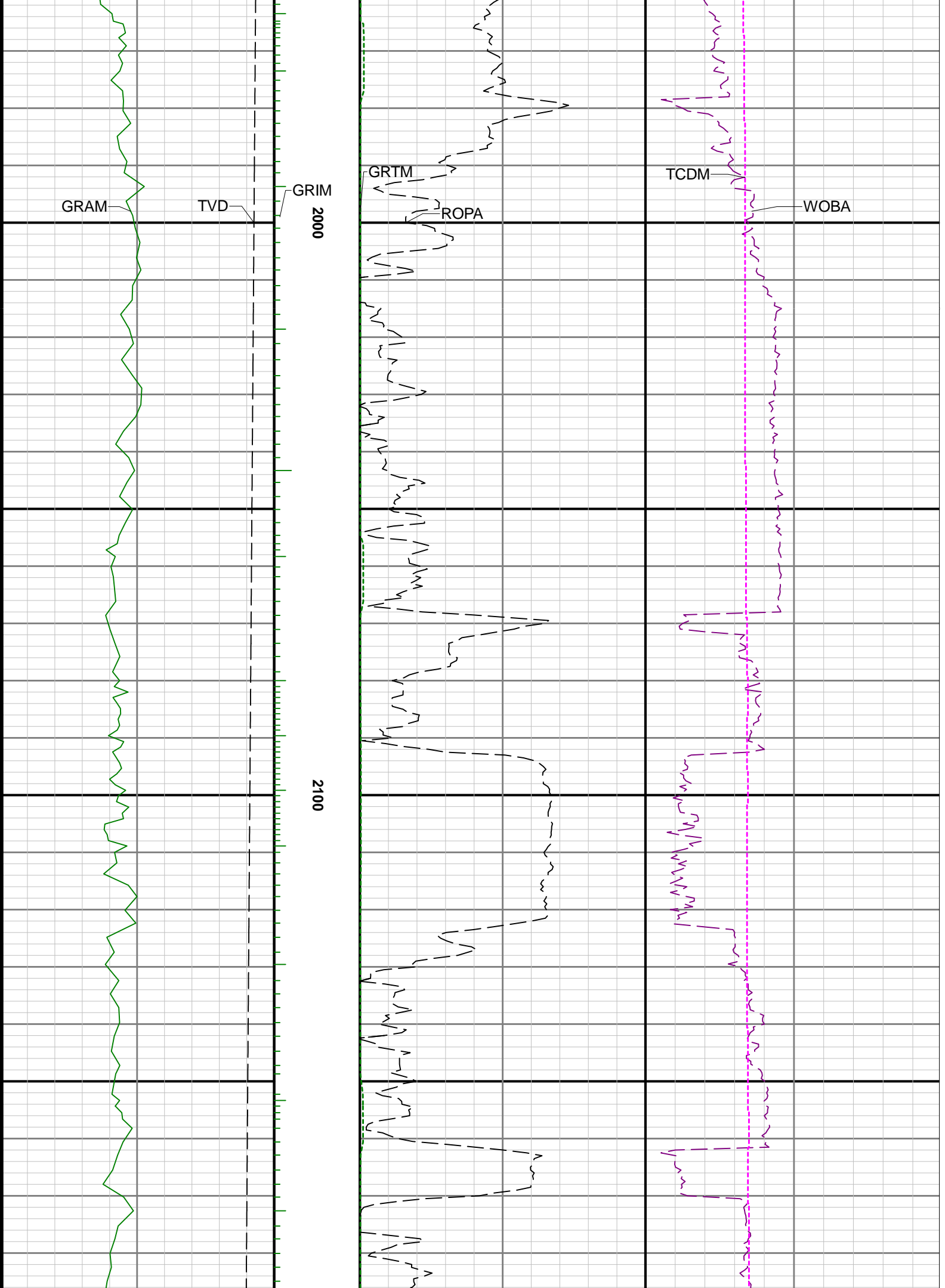
Presented Curves	Description	Units
ROPA	Depth Averaged ROP 3 ft Average	ft/h
TVD	True Vertical Depth	ft
WOBA	Weight On Bit, Average 1 ft Average	klb
GRAM	Gamma Ray - Apparent - Memory 0.5 ft Average	API
GRIM	Gamma Ray - Data Point Indicator - Memory	unitless

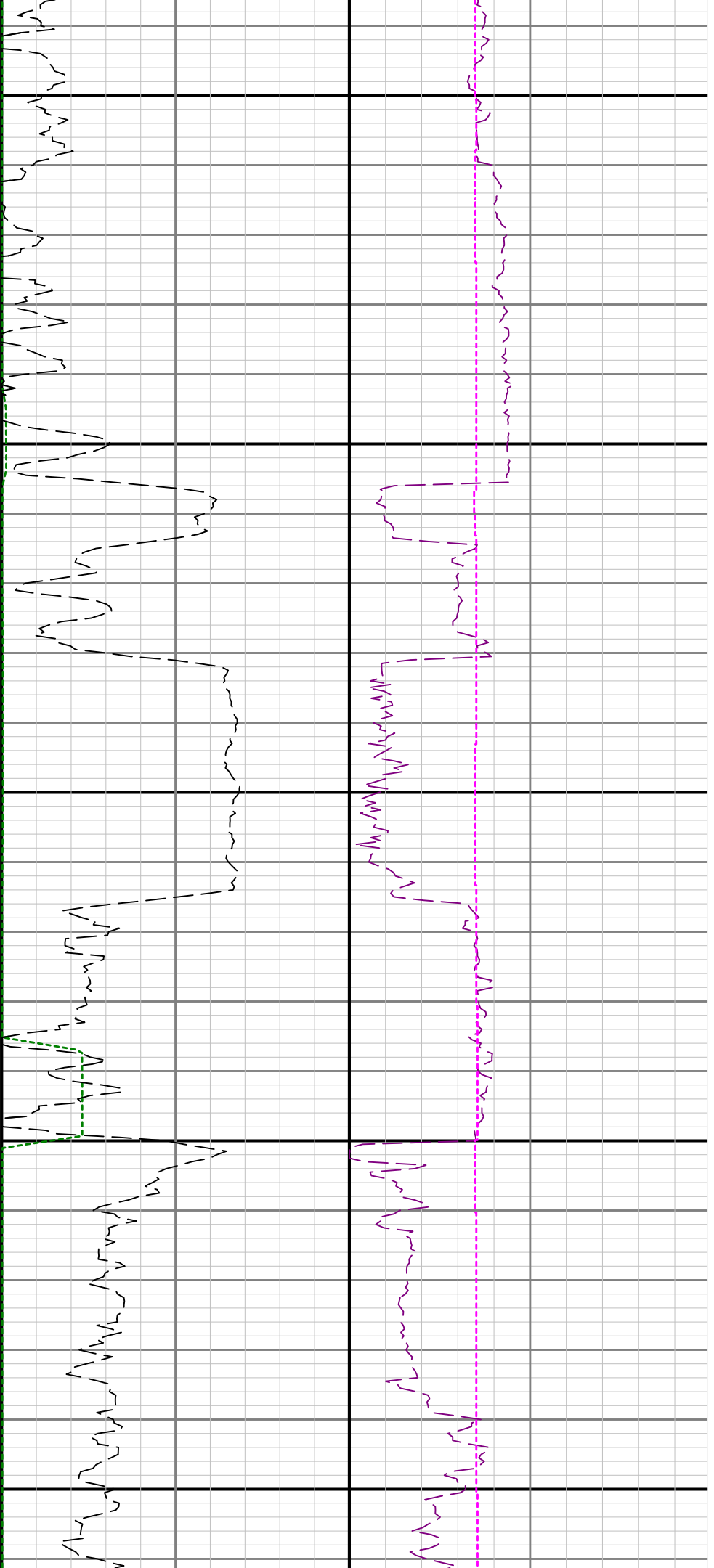
GRTM	Gamma Ray - Time Since Drilled - Memory	min
TCDM	Downhole Temperature	degF

	Company	SRC Energy		
	Well	Boomerang 33N-6C-M		
	Interval	Date From:	2017-12-22 00:58:58	Top: 1841.00
	Created	Date To:	2018-01-23 22:32:47	Bottom: 15626.00
			2018-01-24 18:45:21	

Gamma Ray - Apparent 0.5 ft Average GRAM 0 300	MD 1:240 feet	Gamma Time Since Drilled GRTM 0 600	Weight On Bit, Average 1 ft Average WOBA 0 50
API		min	klb
True Vertical Depth TVD 8000 1500		Depth Averaged ROP 3 ft Average ROPA 1000 0	Downhole Temperature TCDM 0 275
ft		ft/h	degF



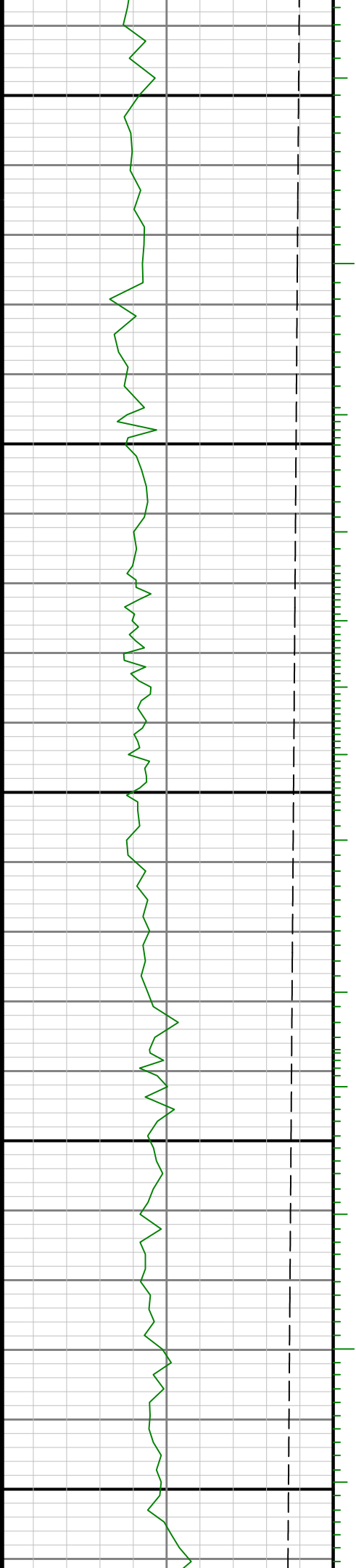


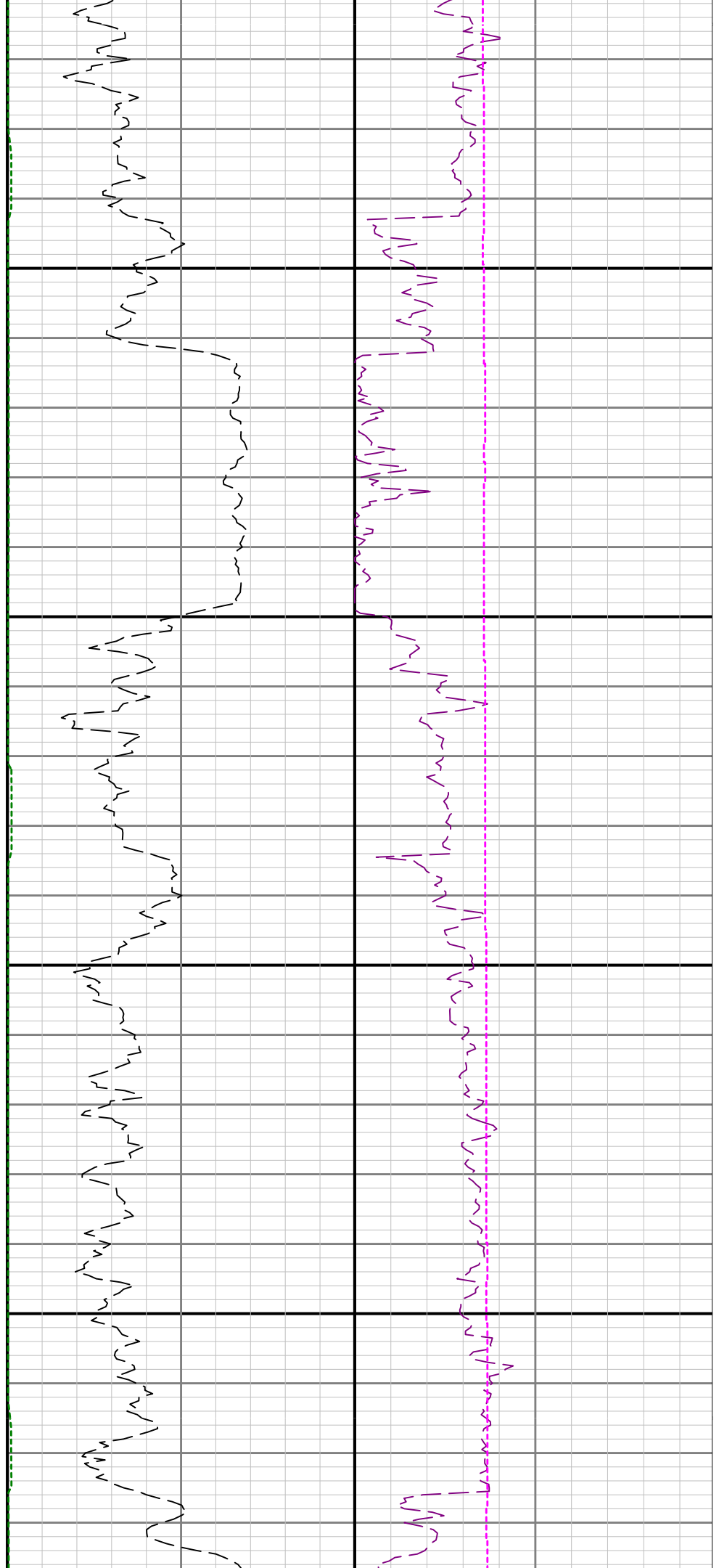


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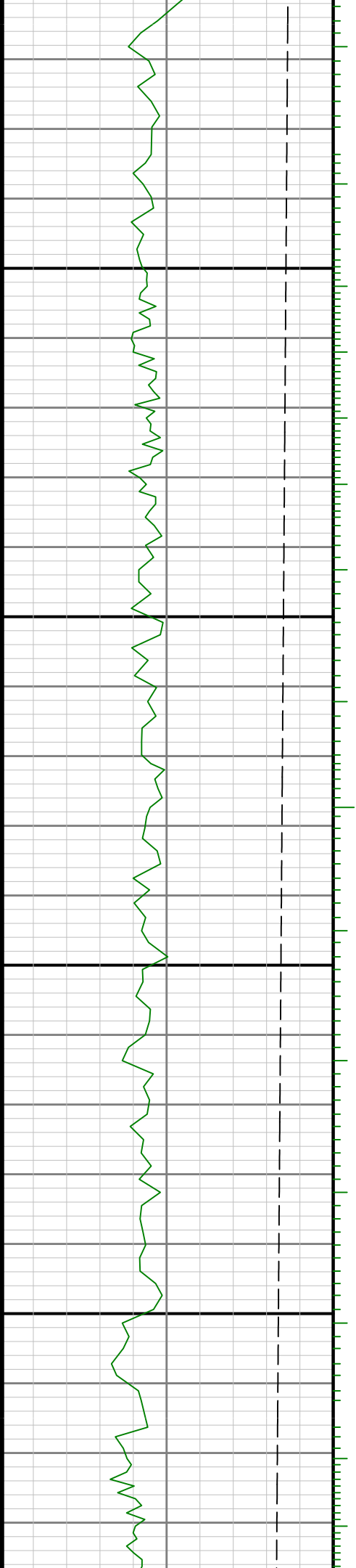
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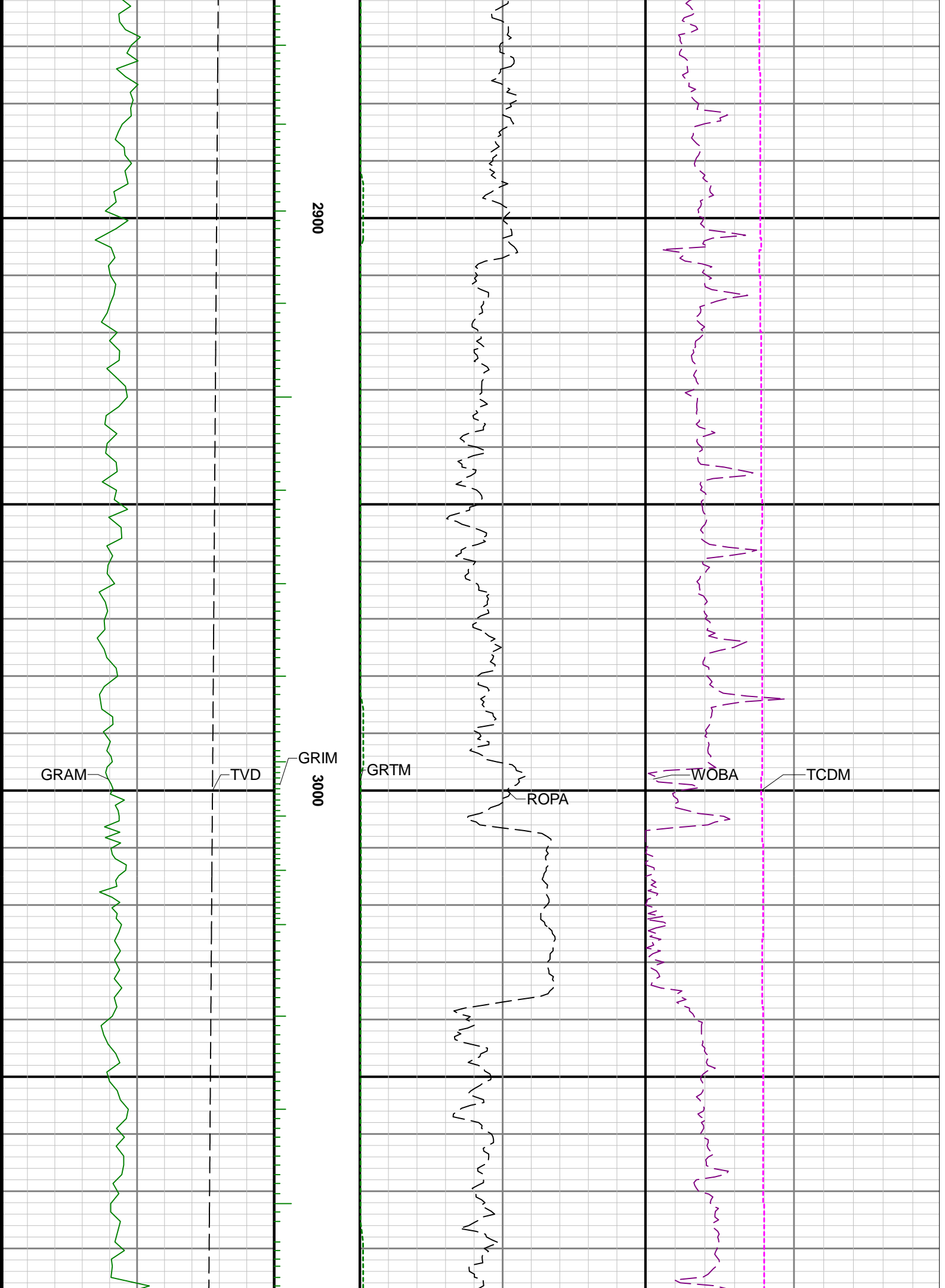
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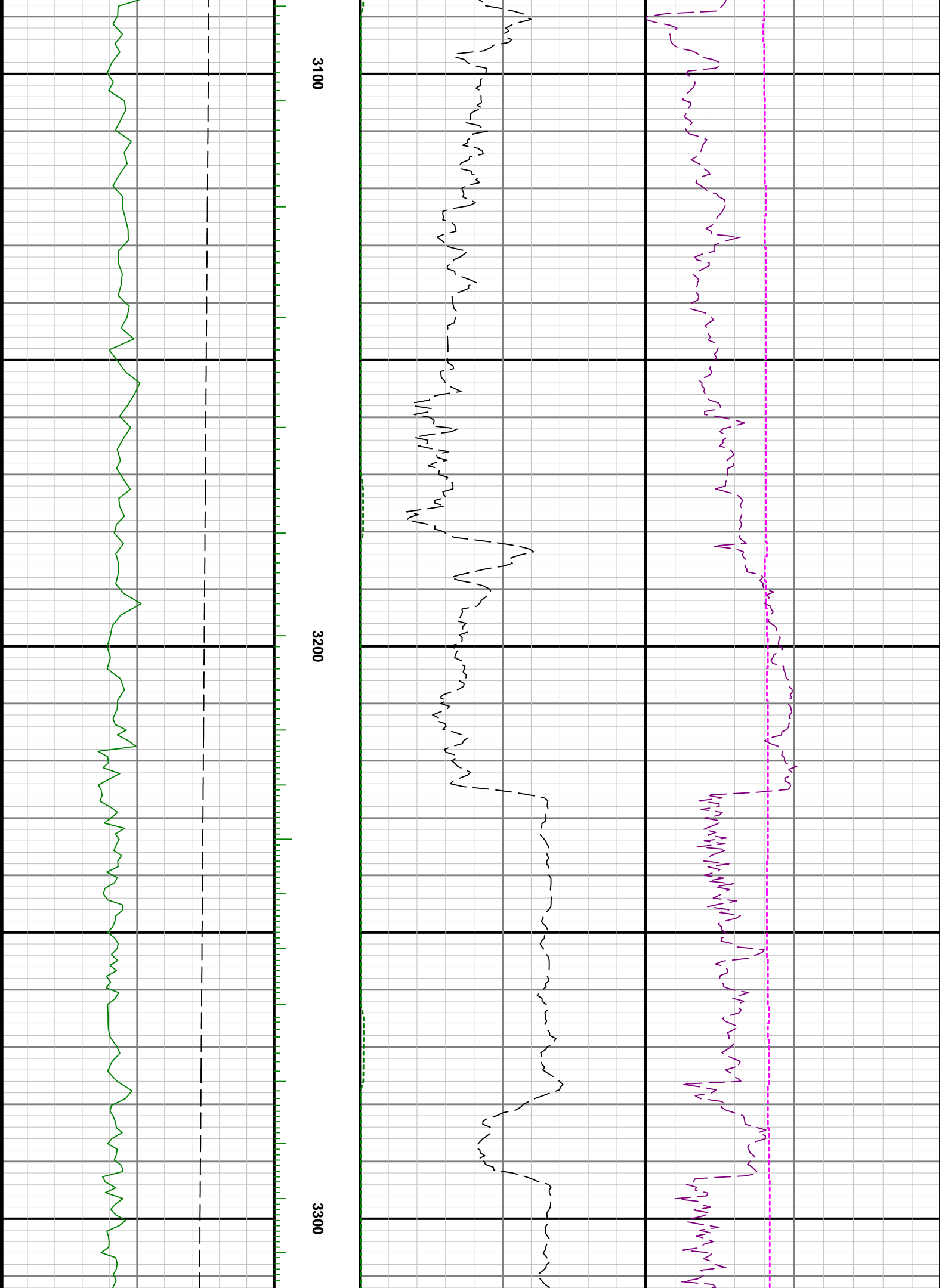


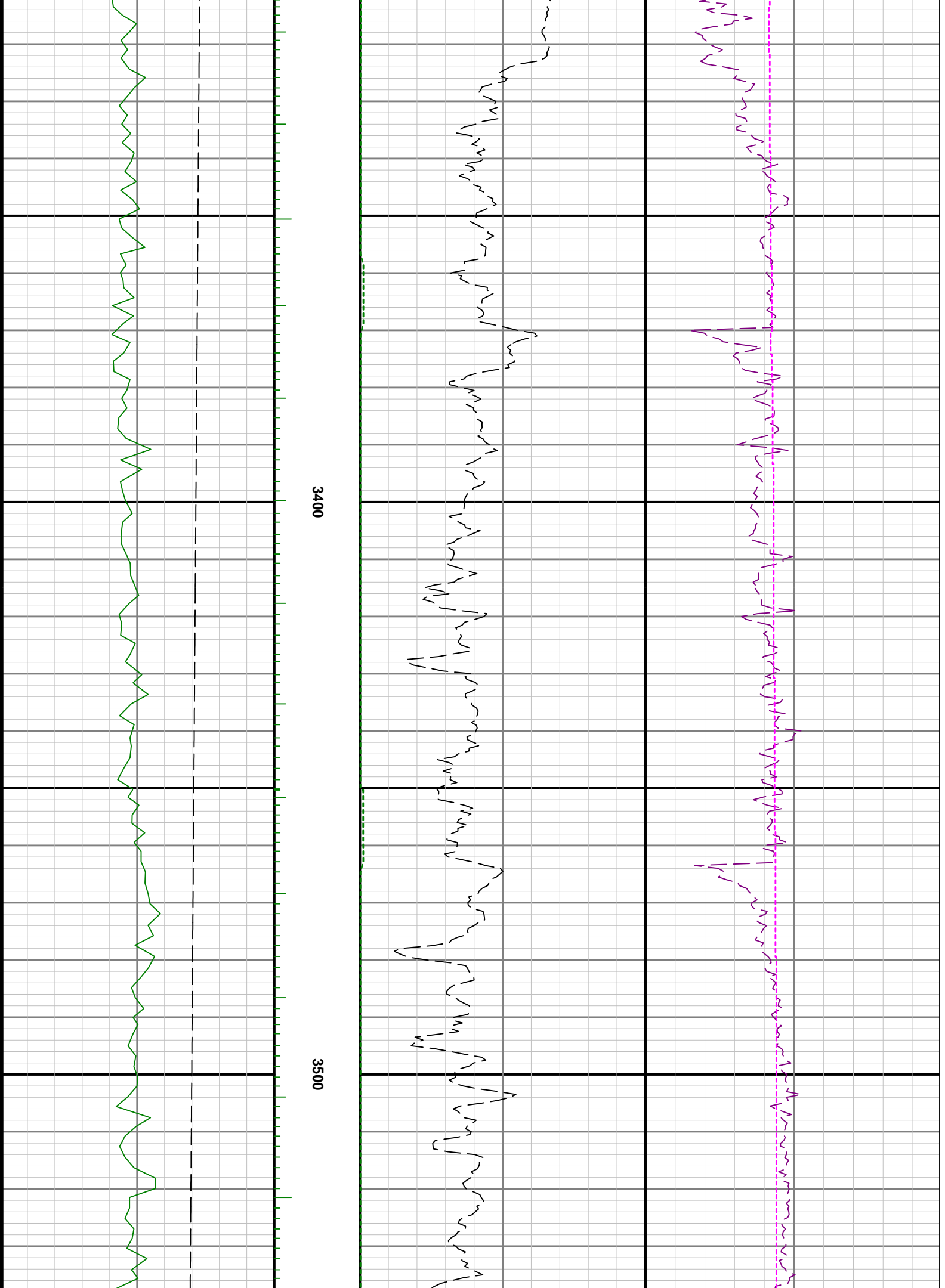


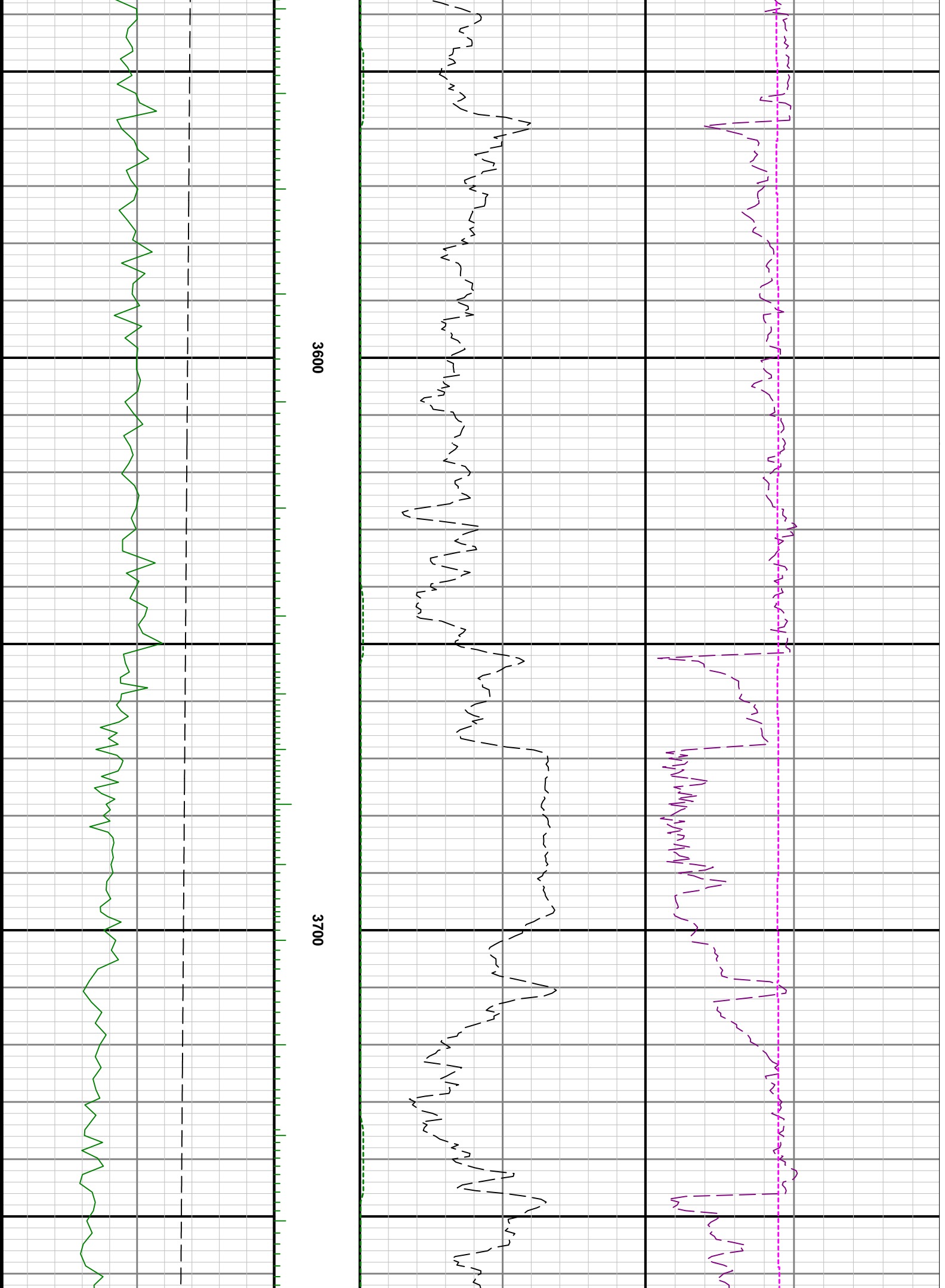
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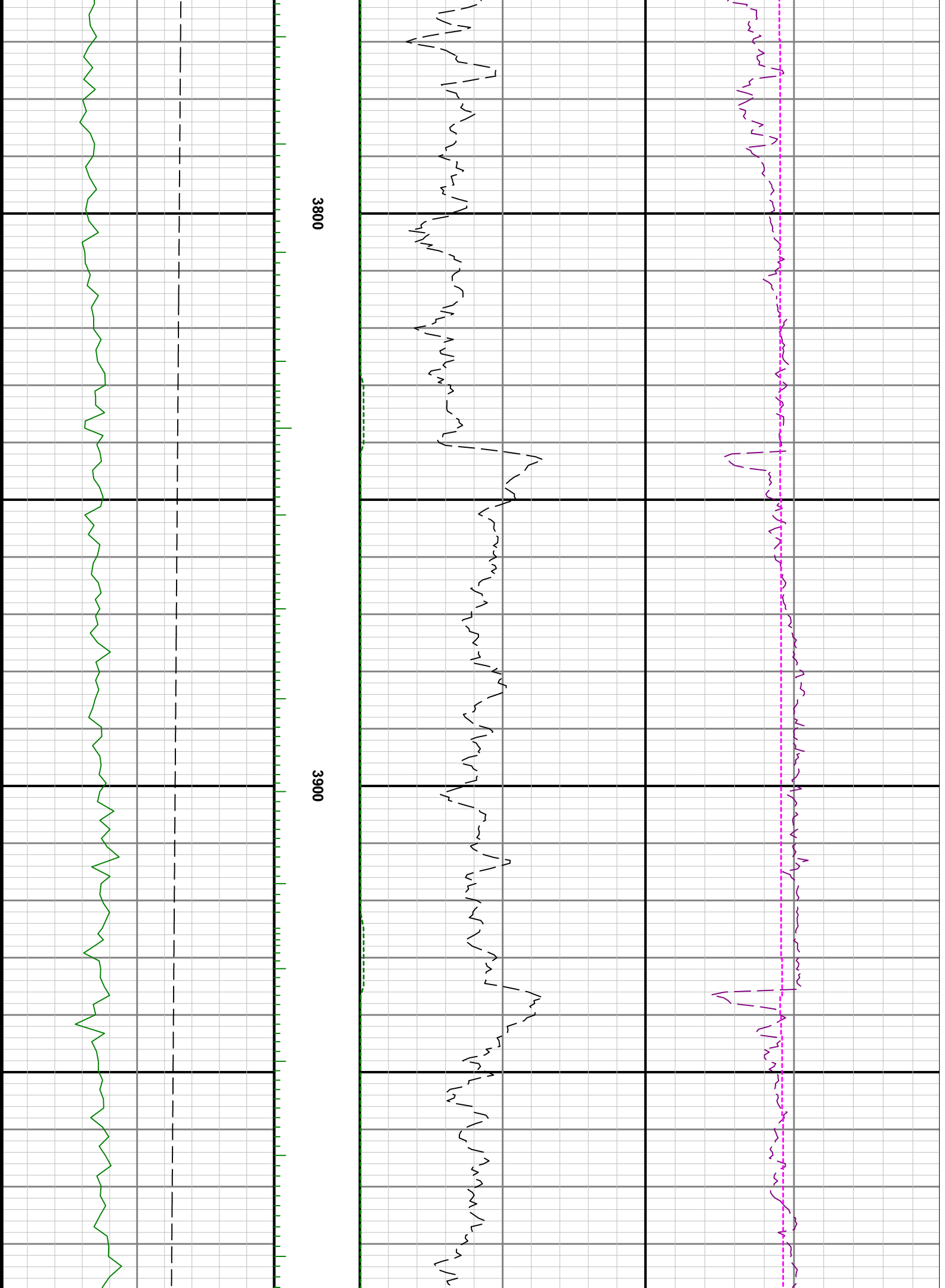
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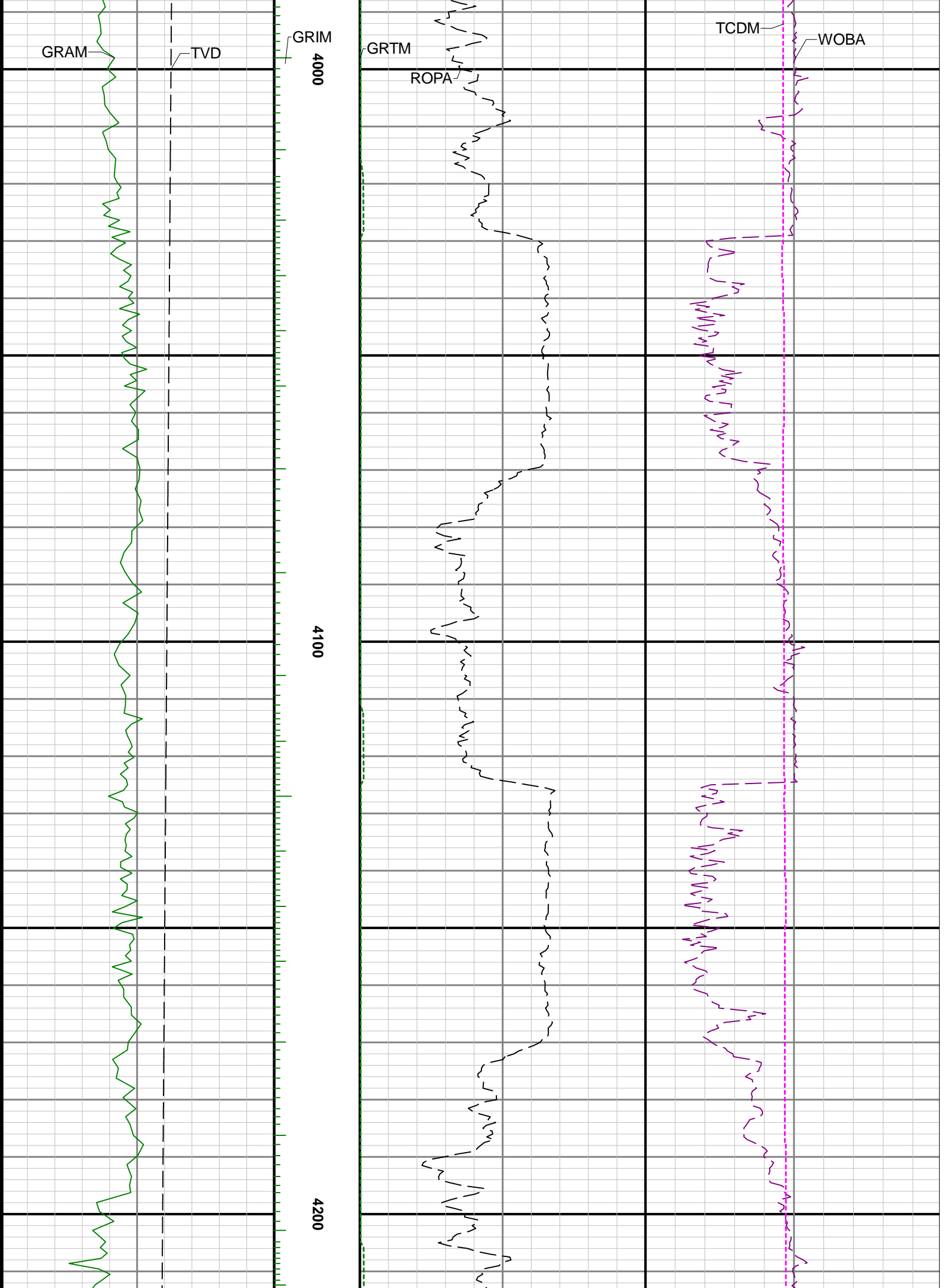


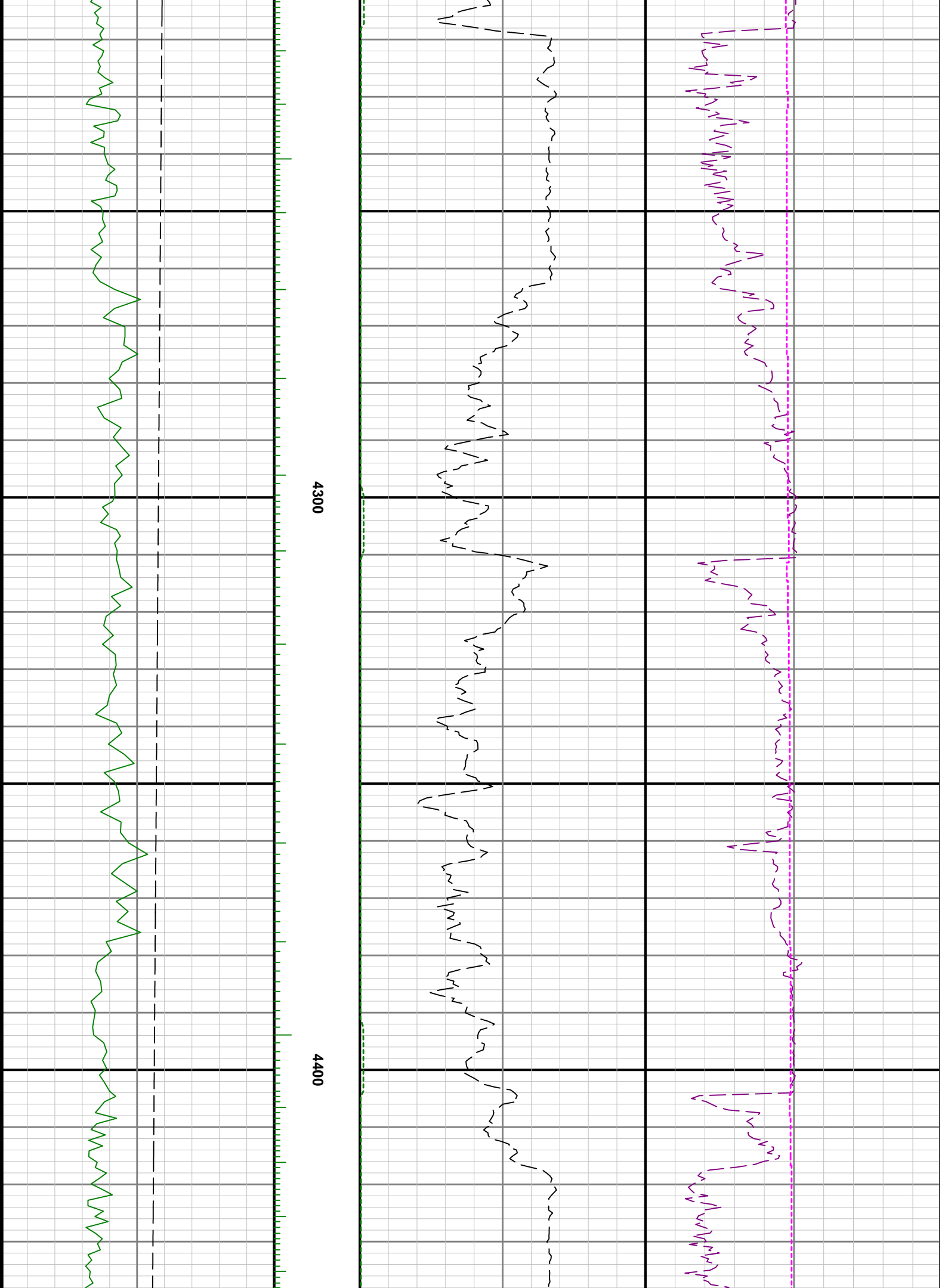


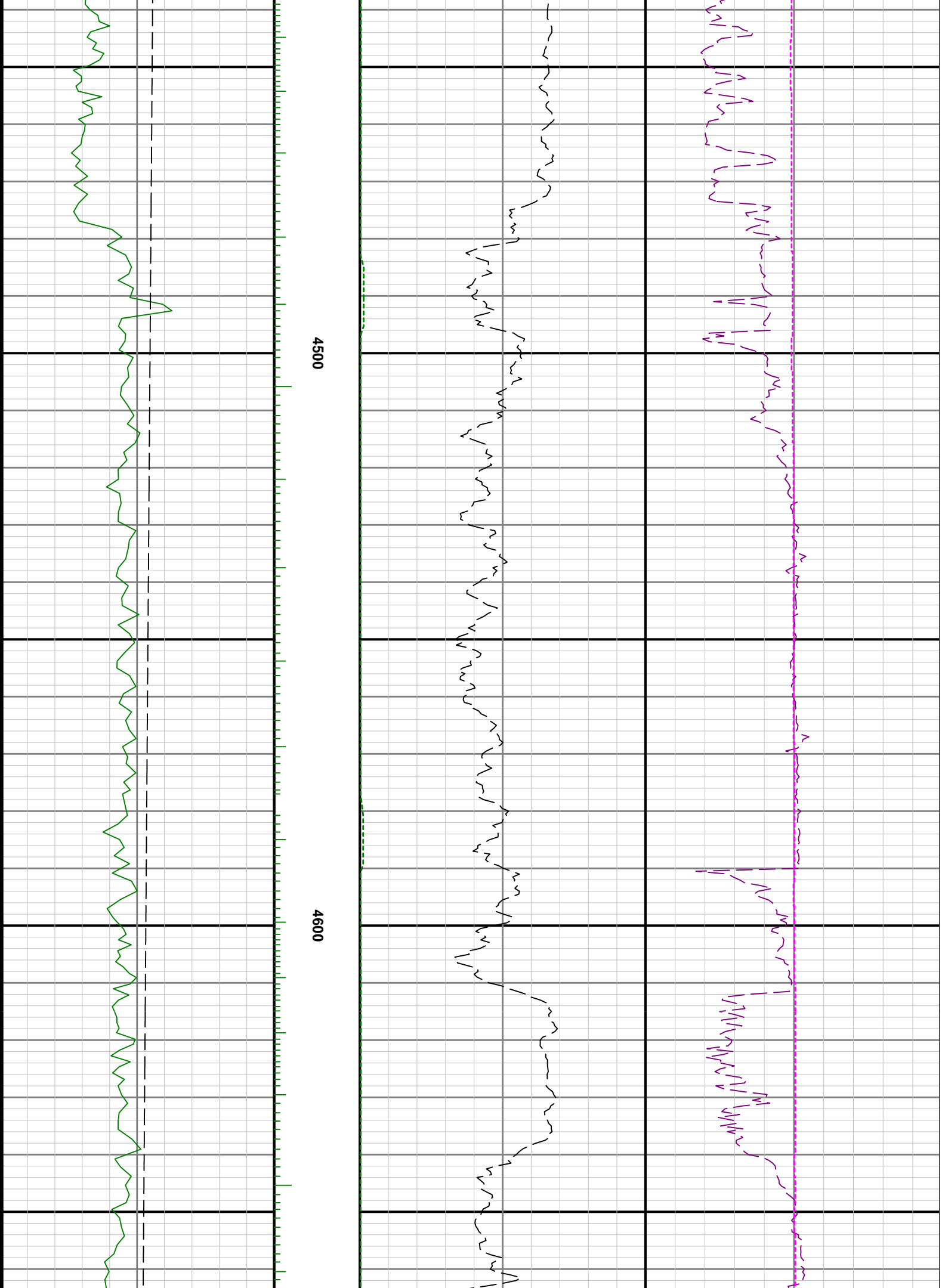


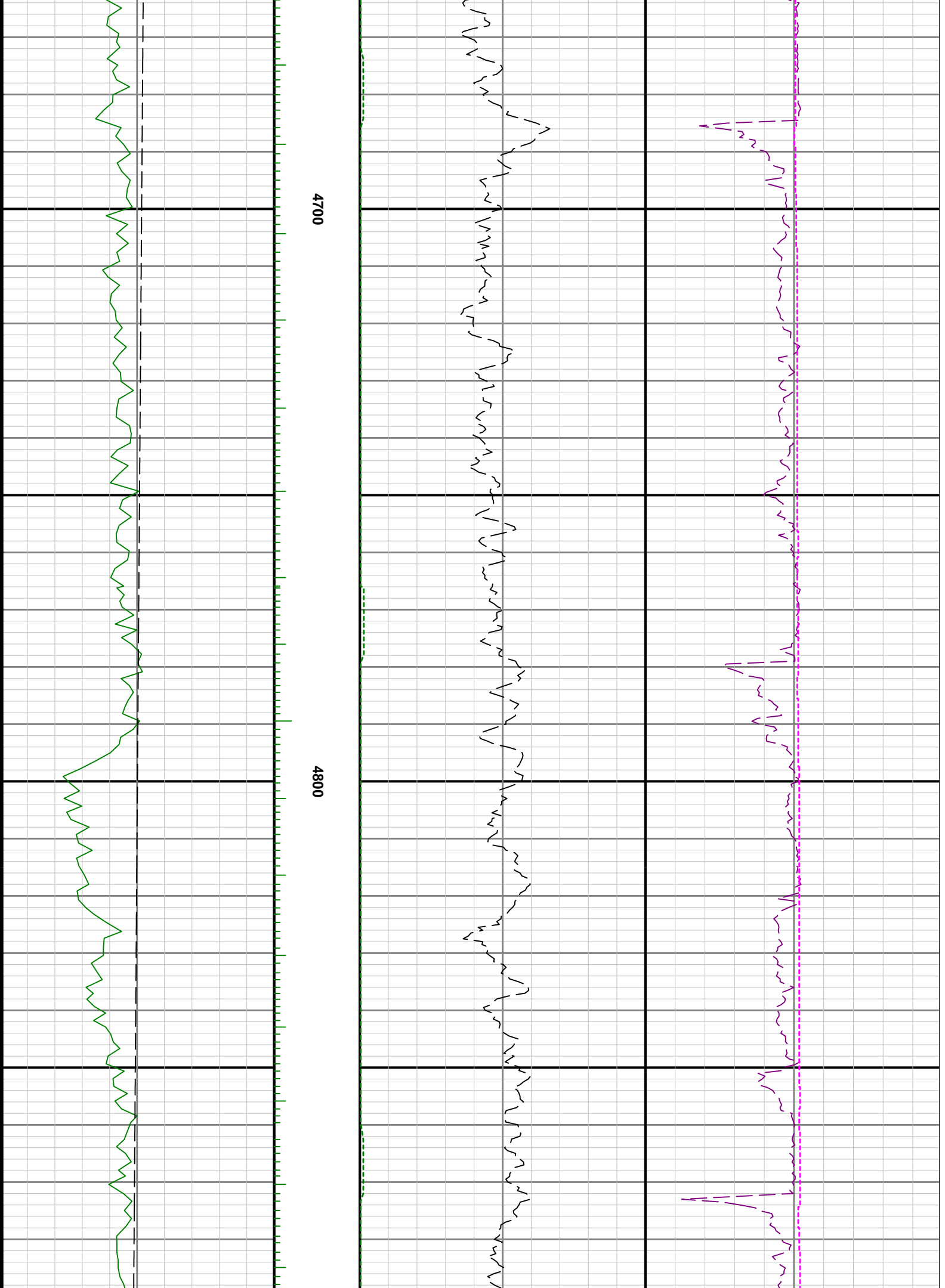






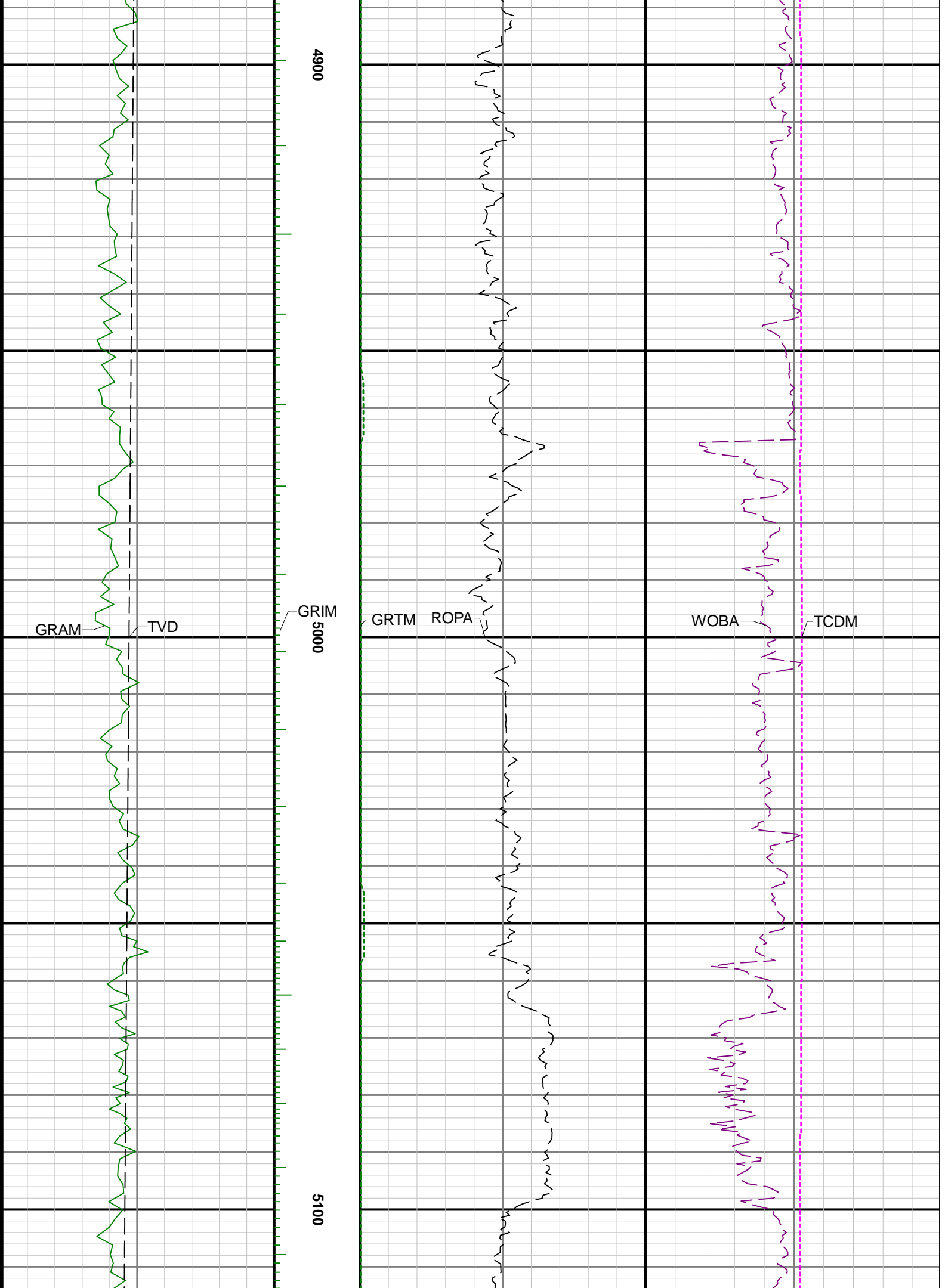


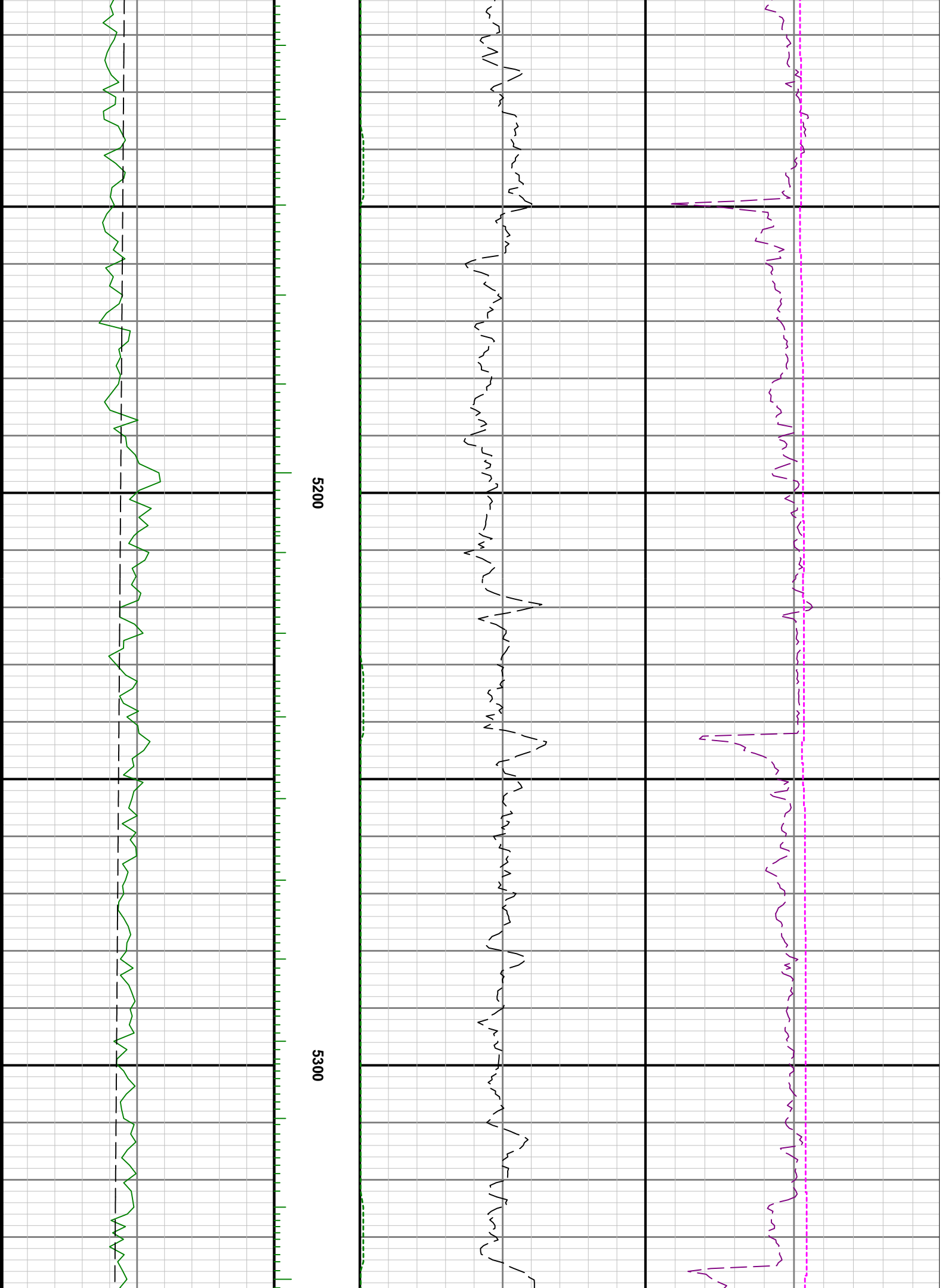




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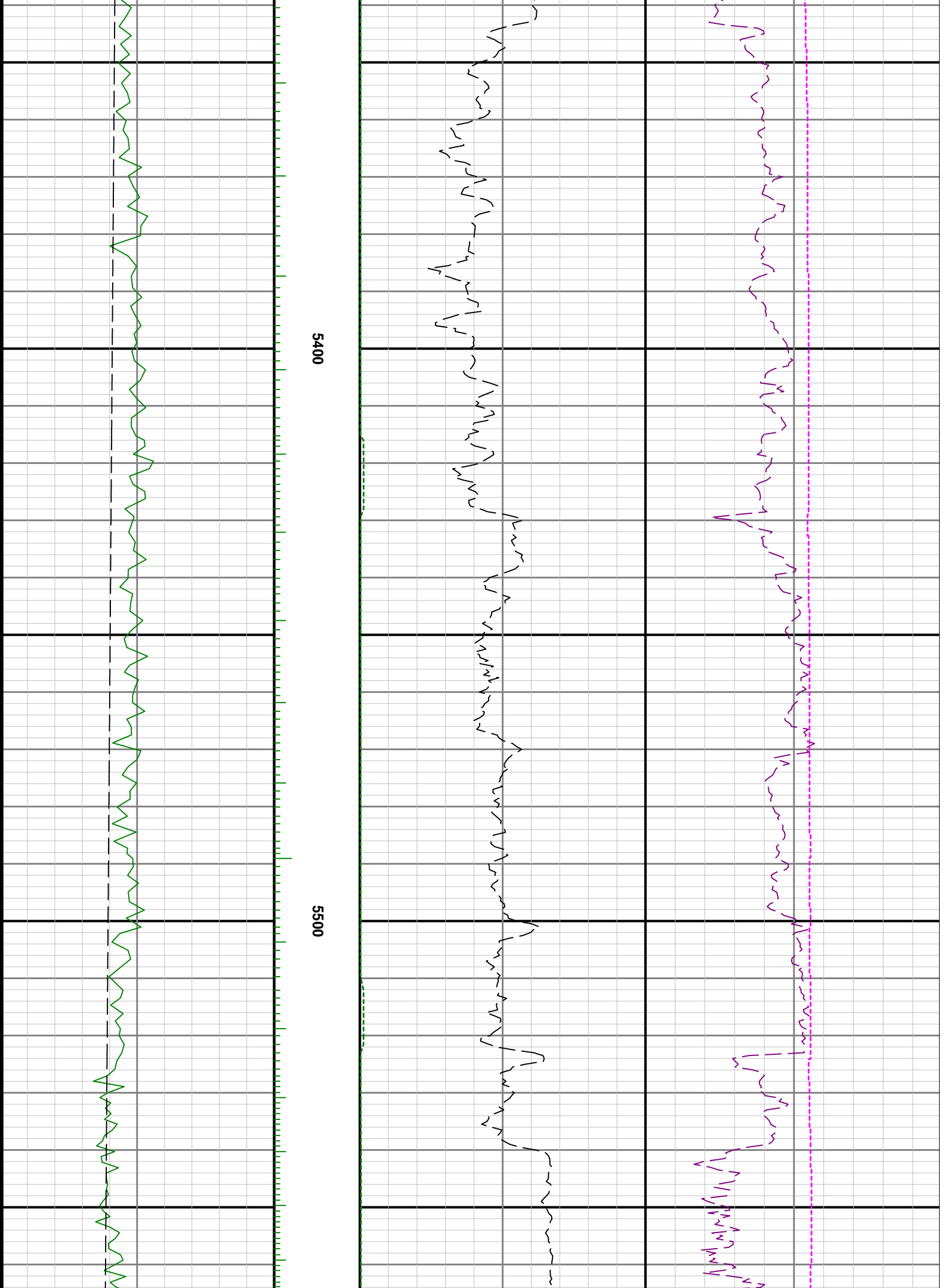
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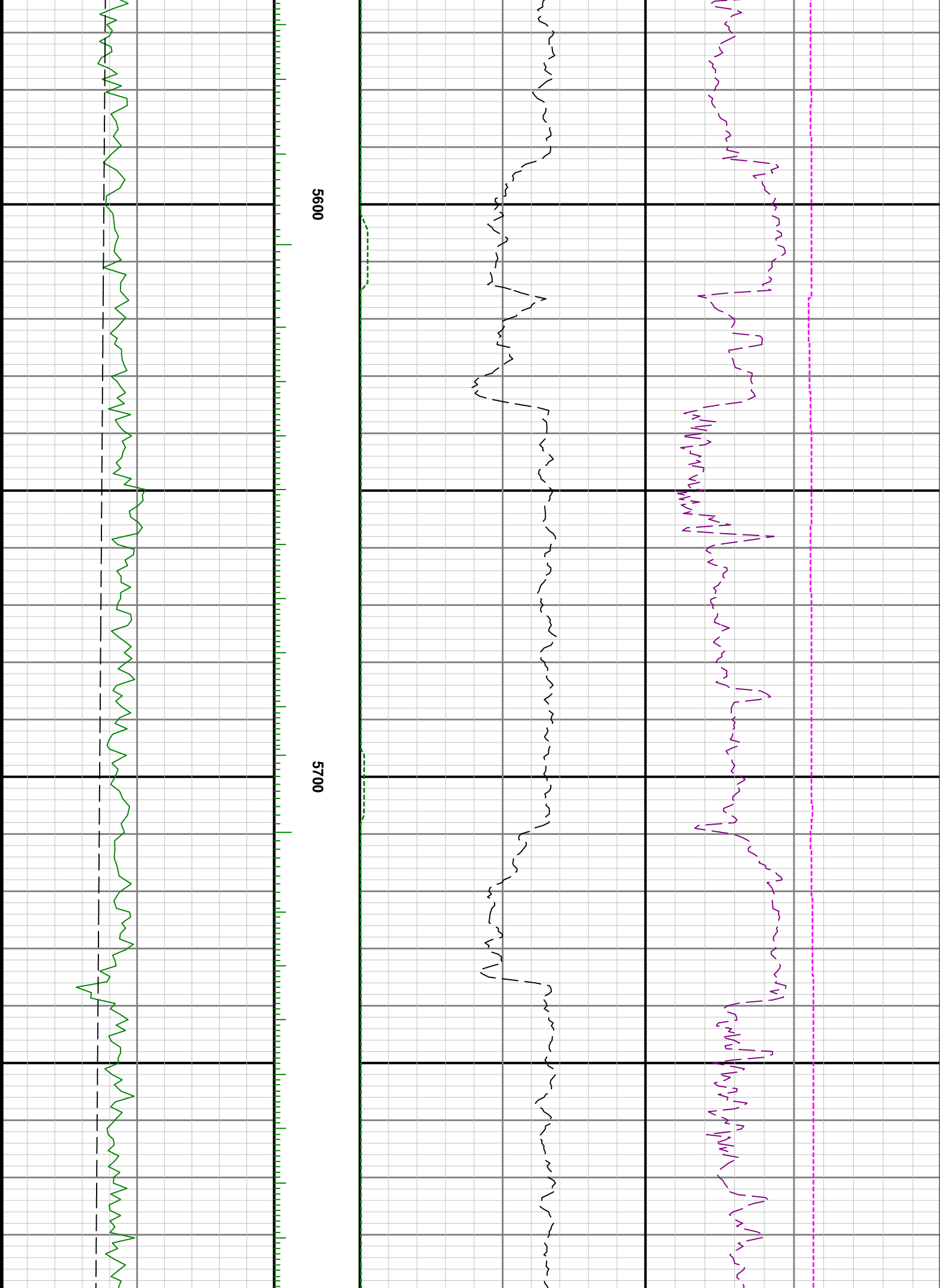


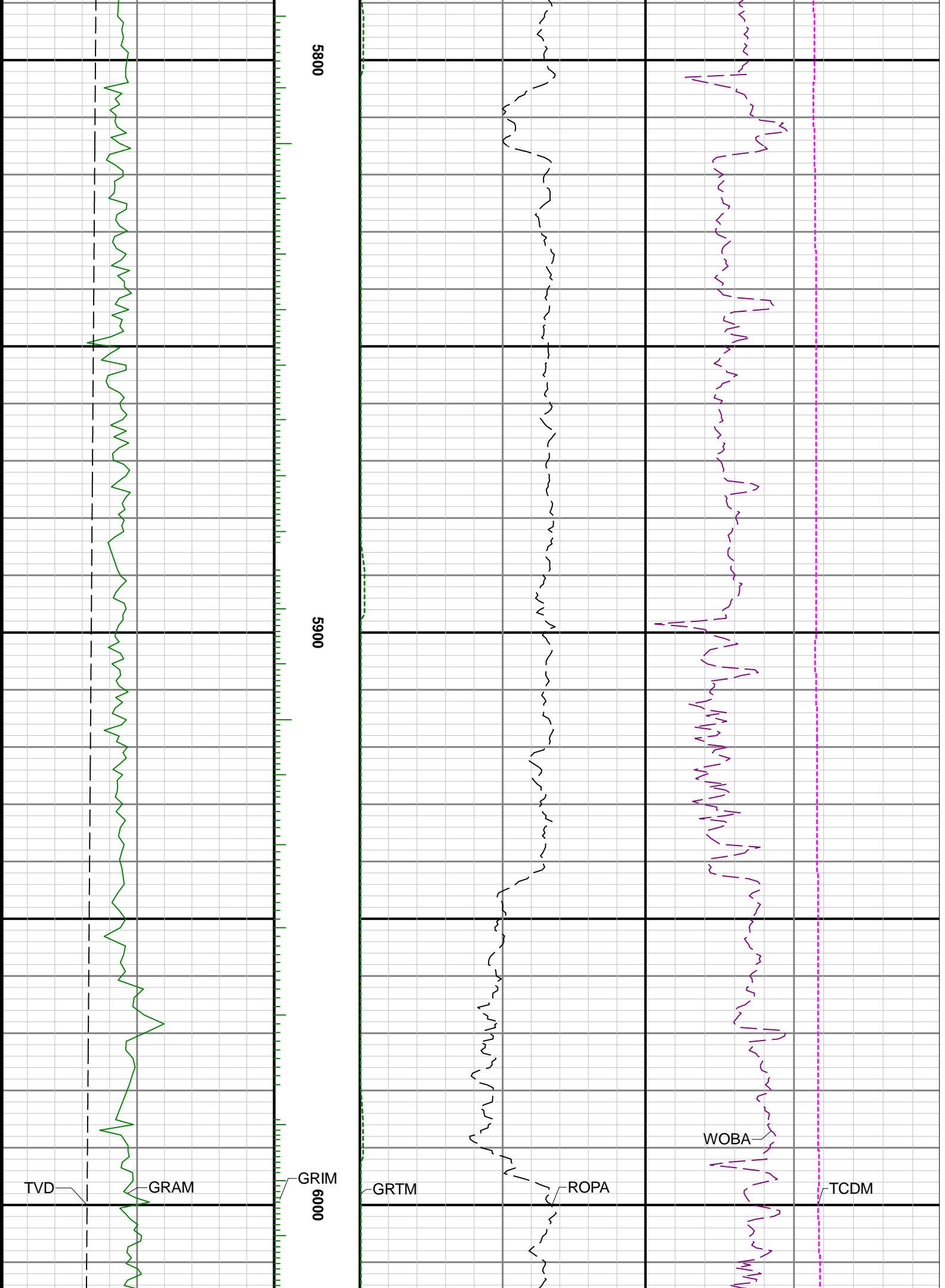


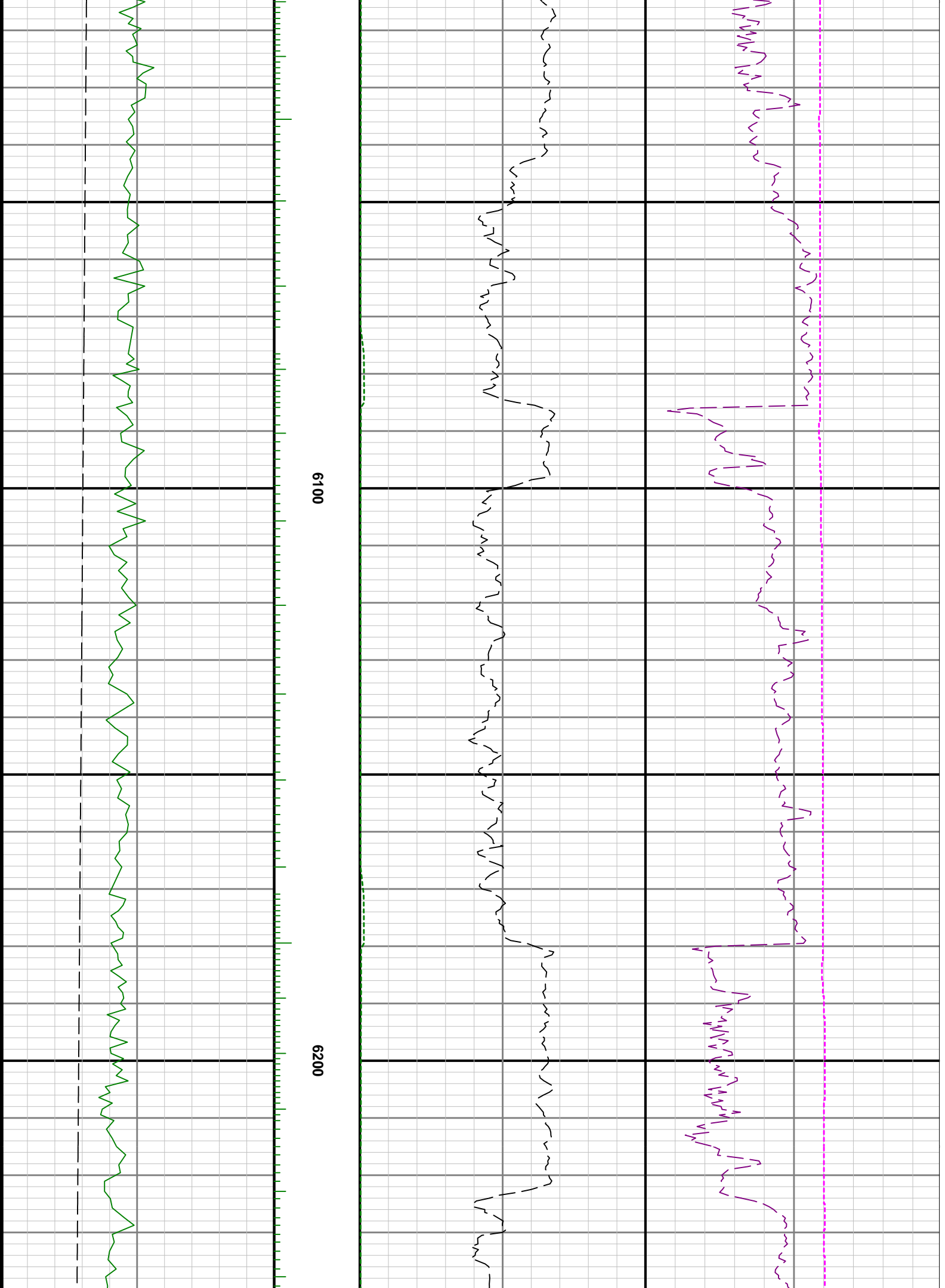
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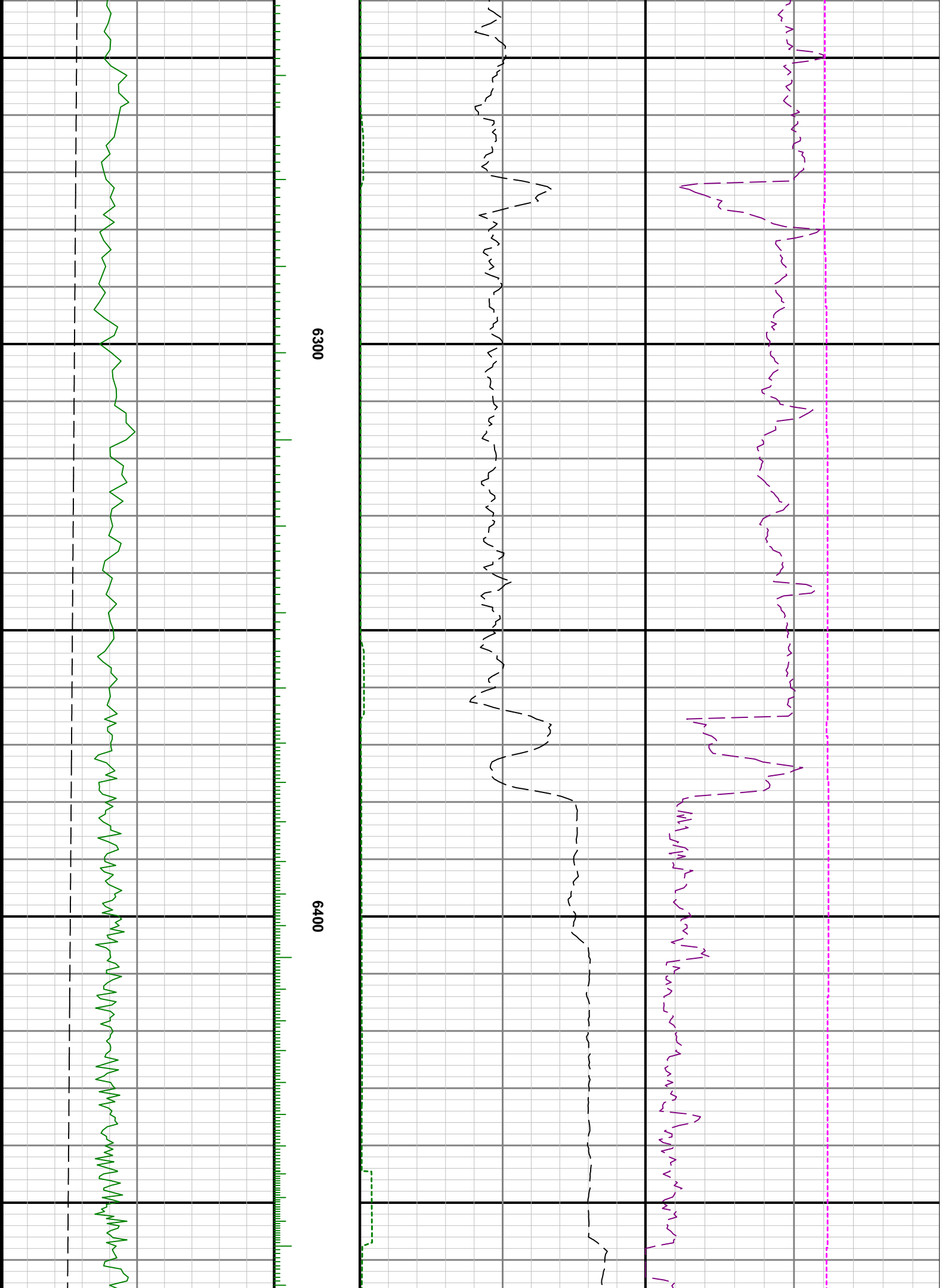


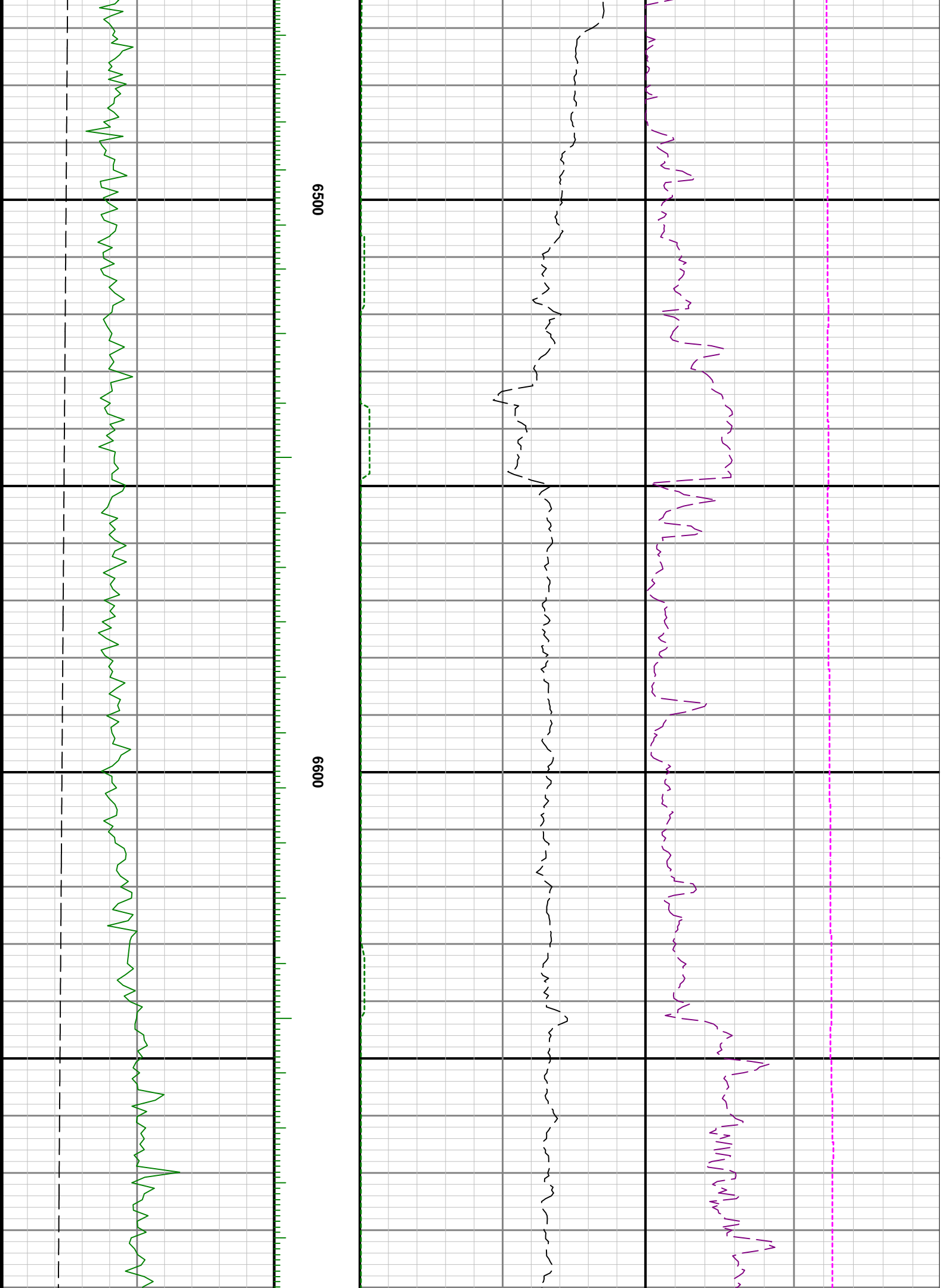




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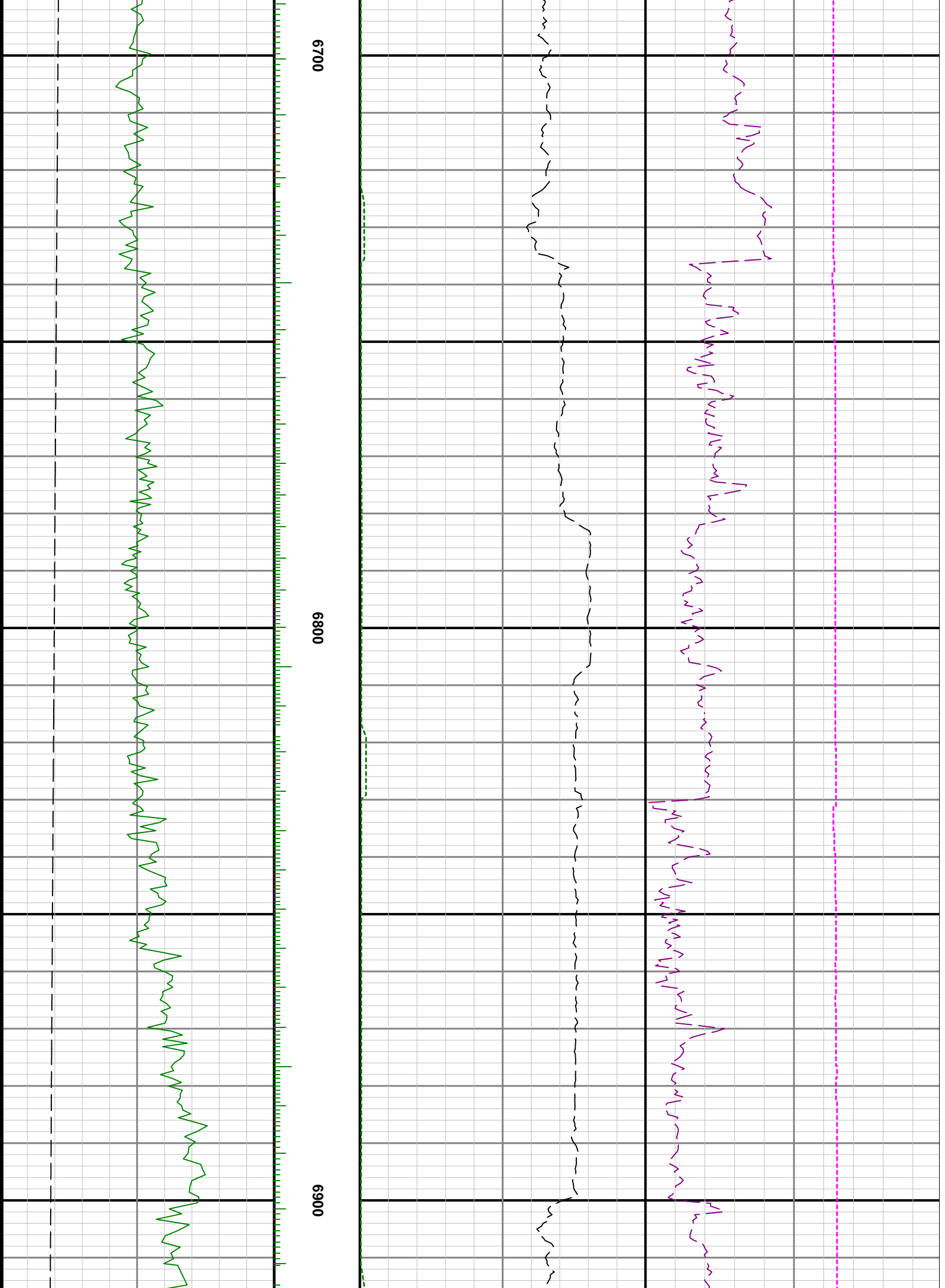
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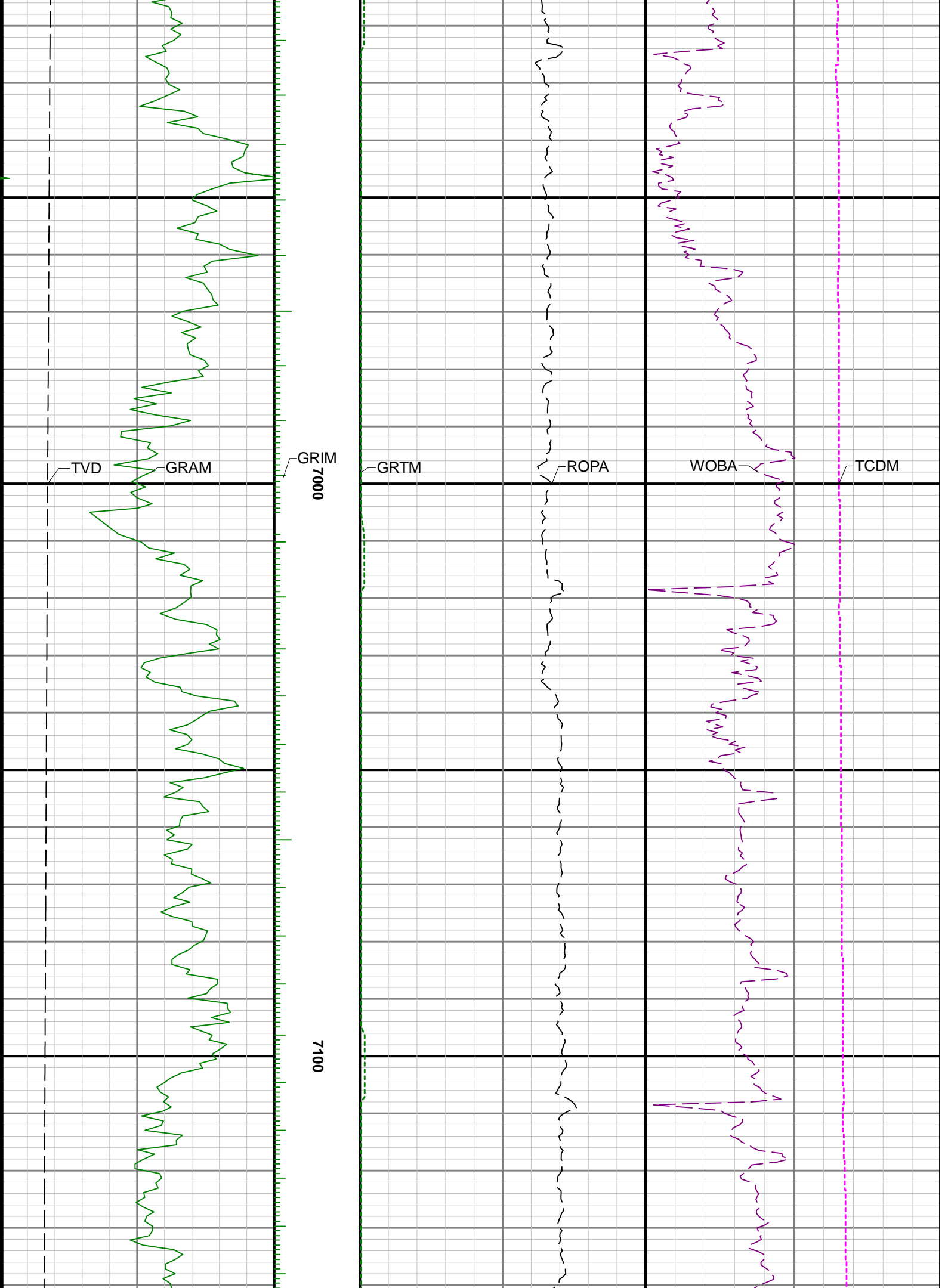
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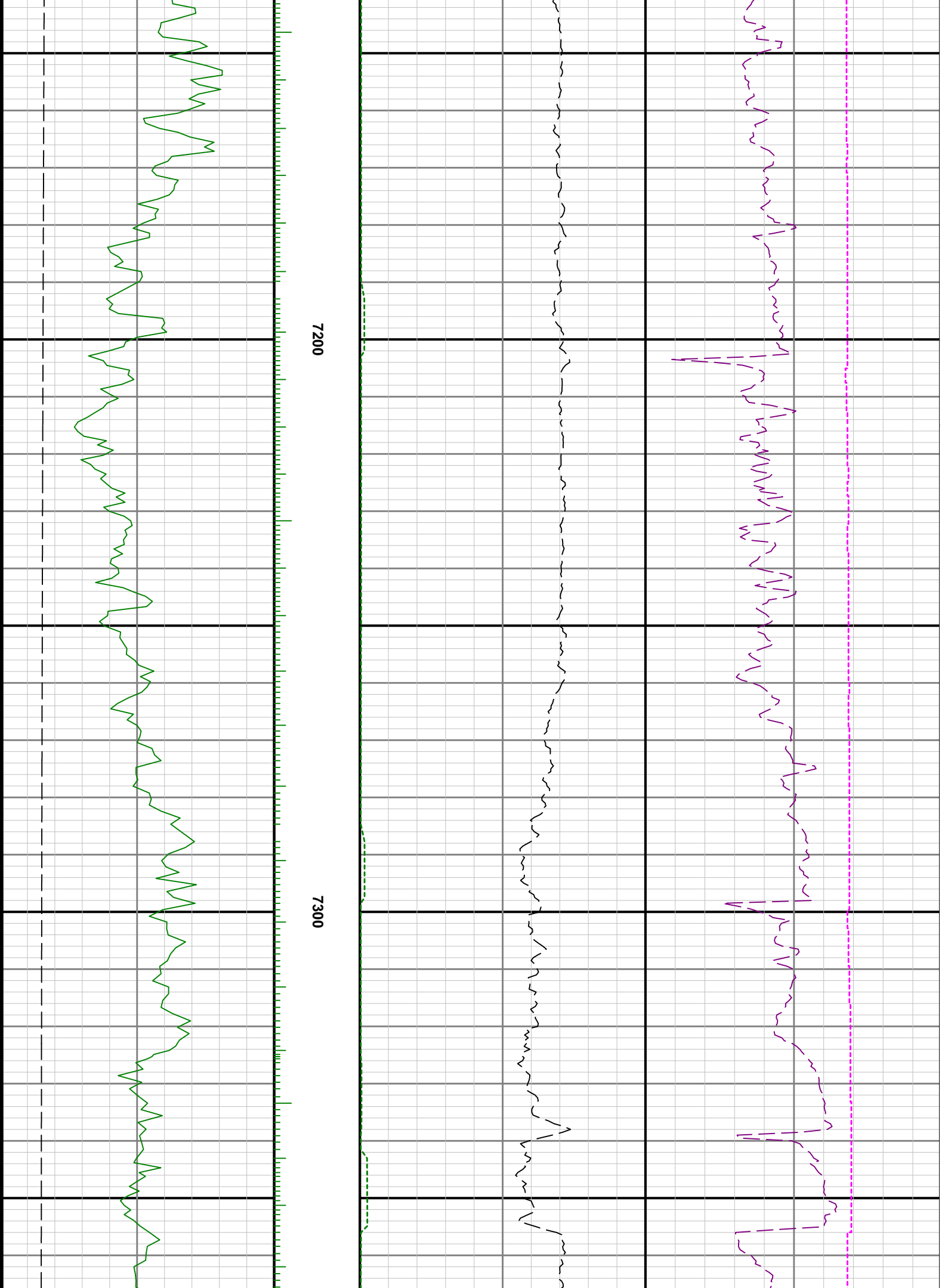


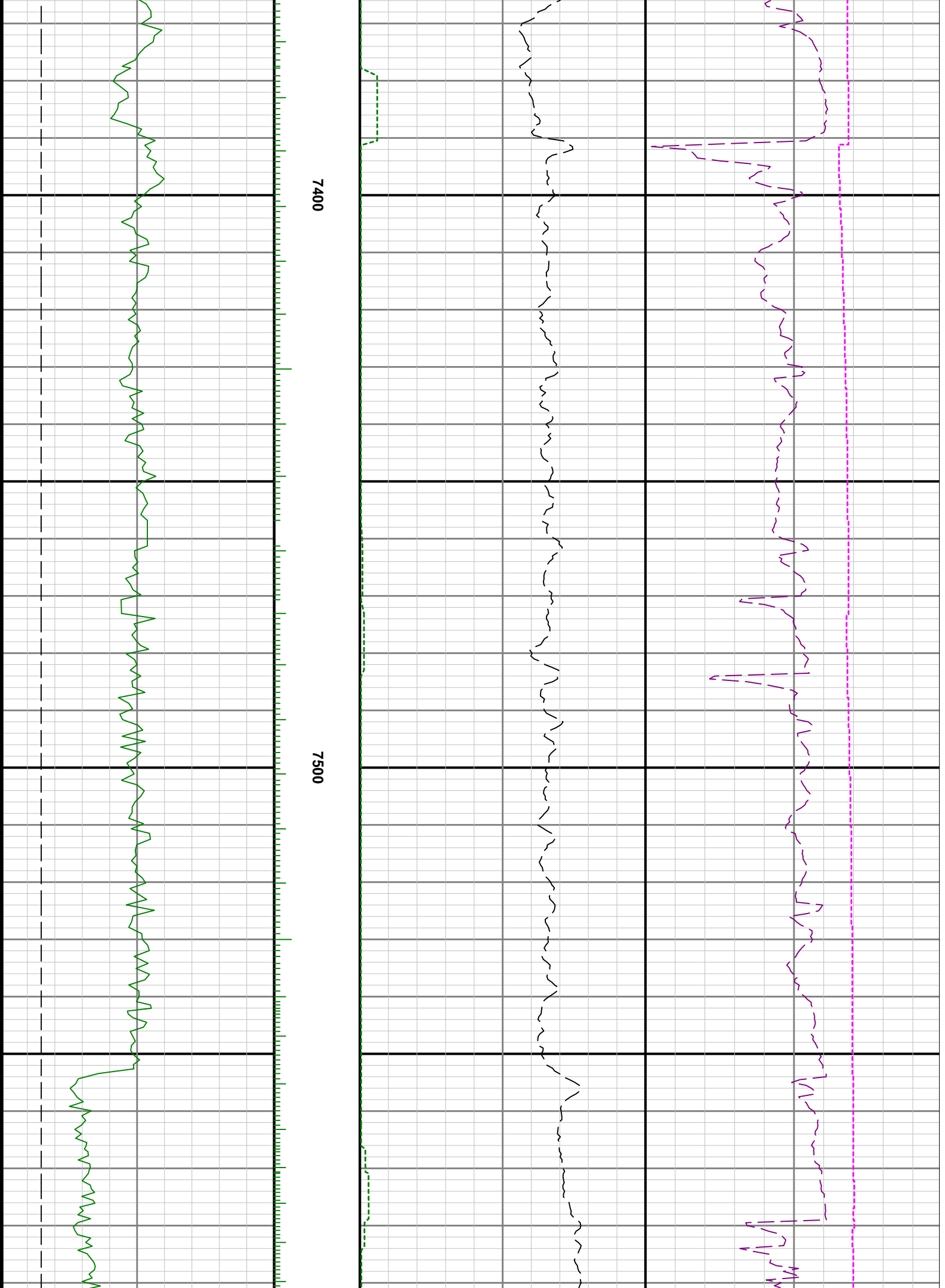
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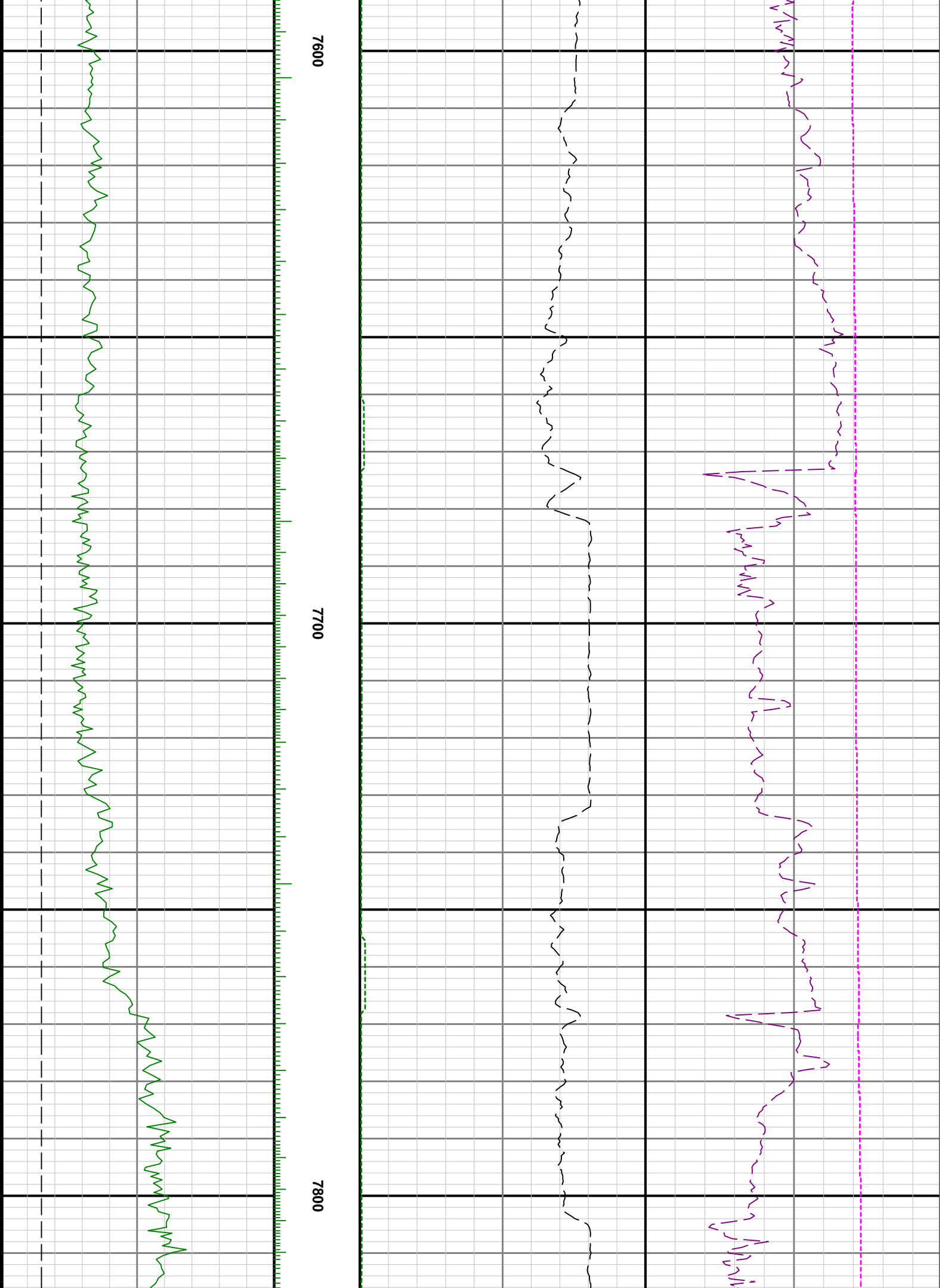
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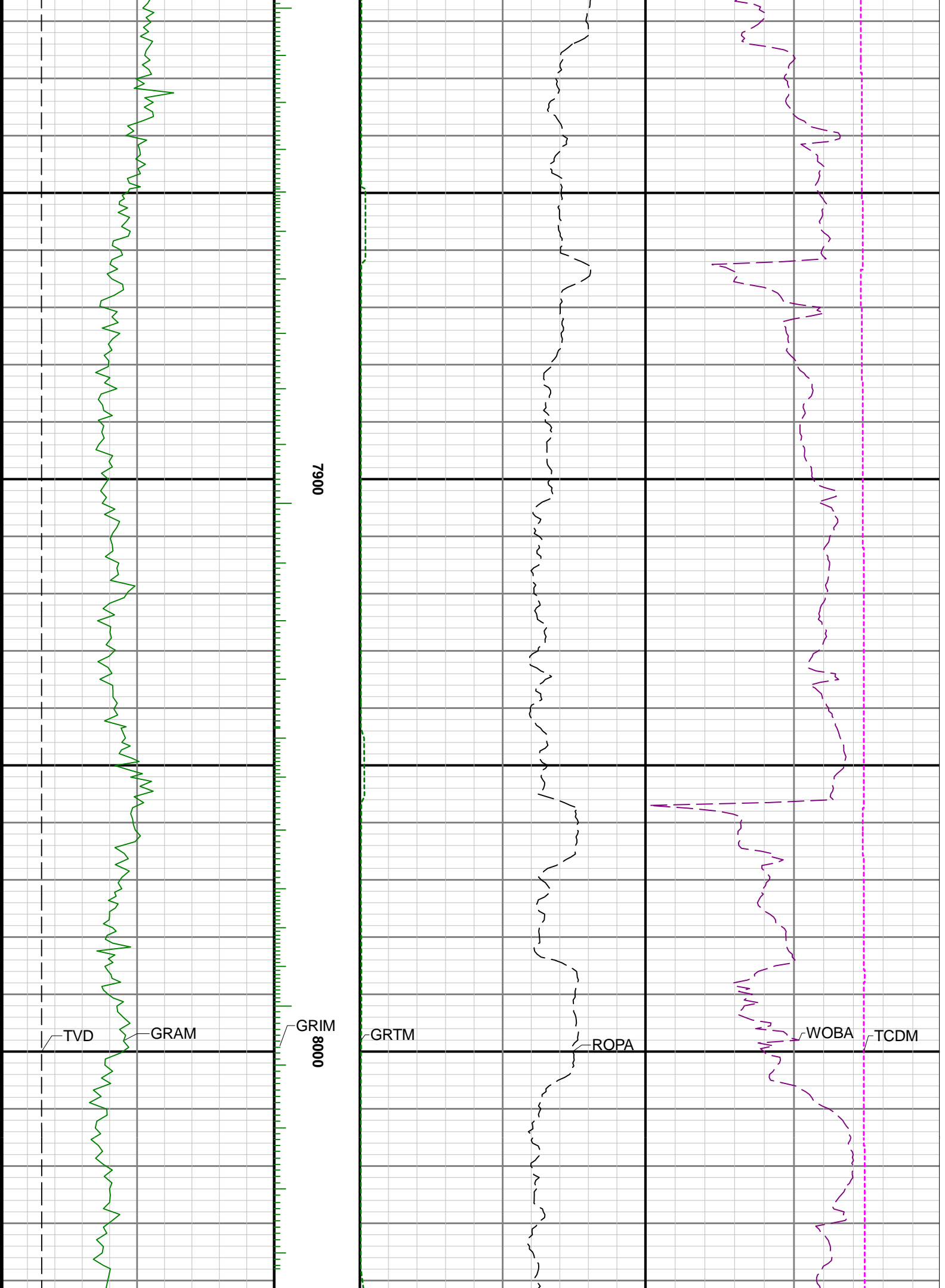
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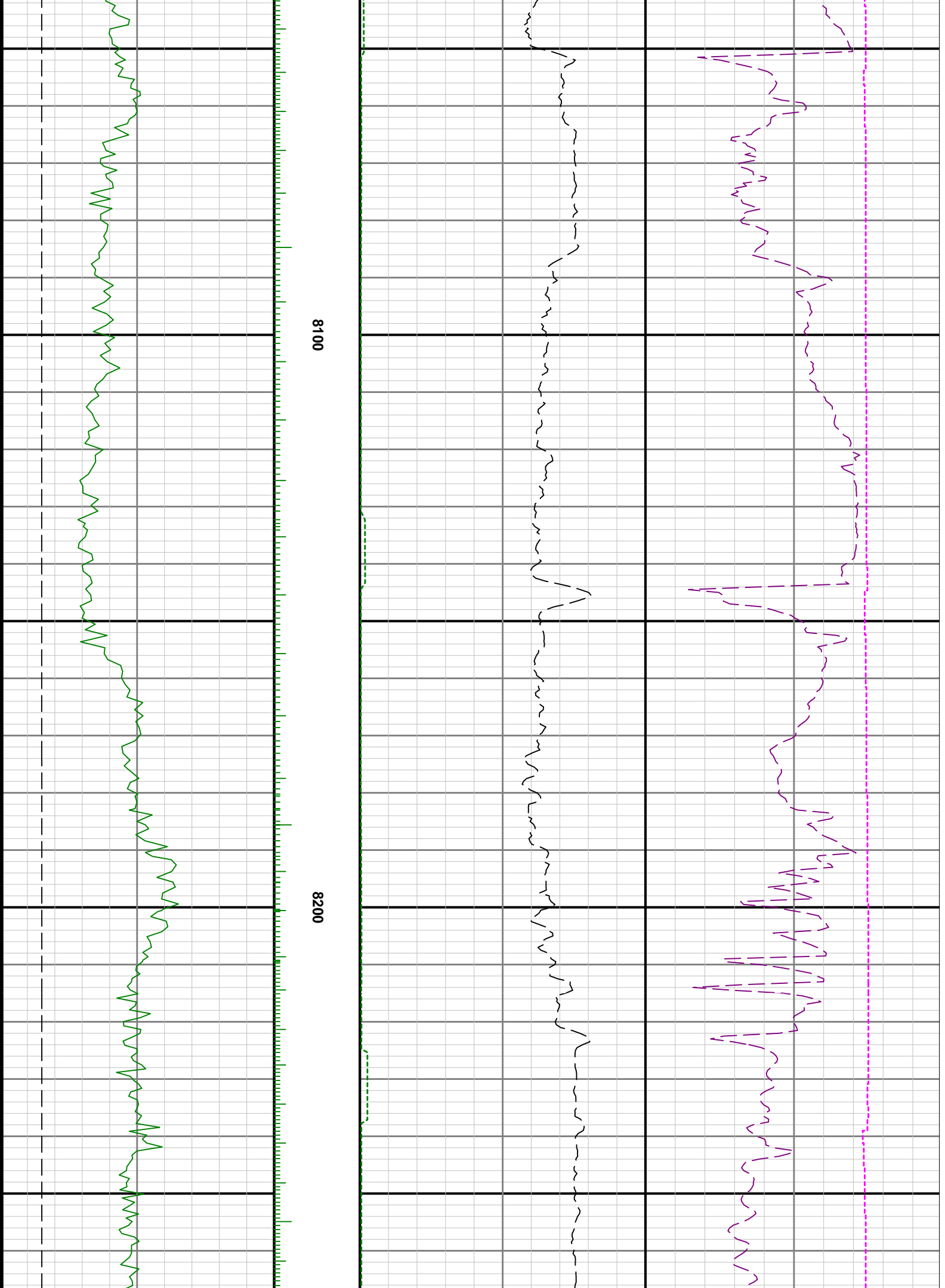


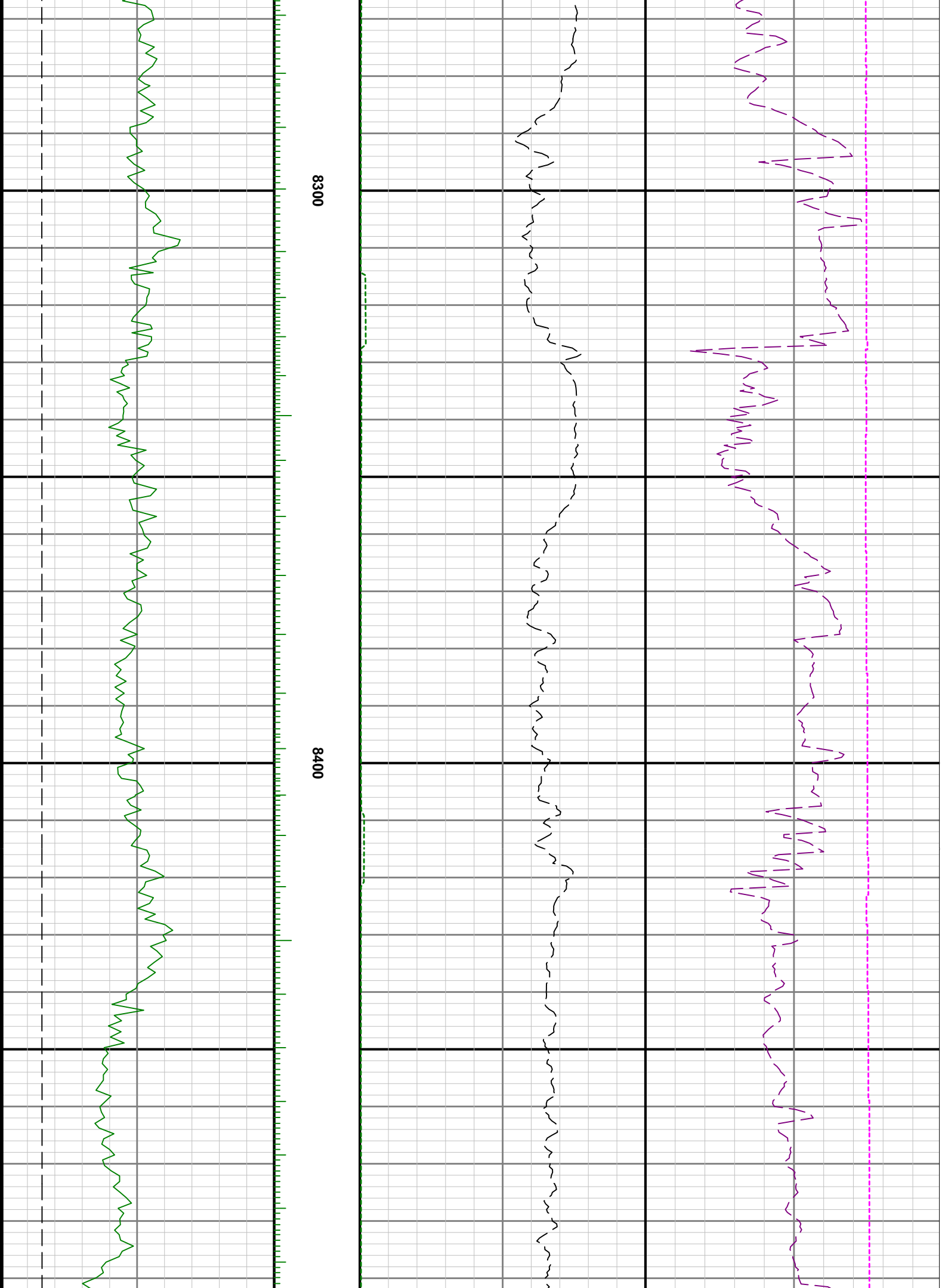


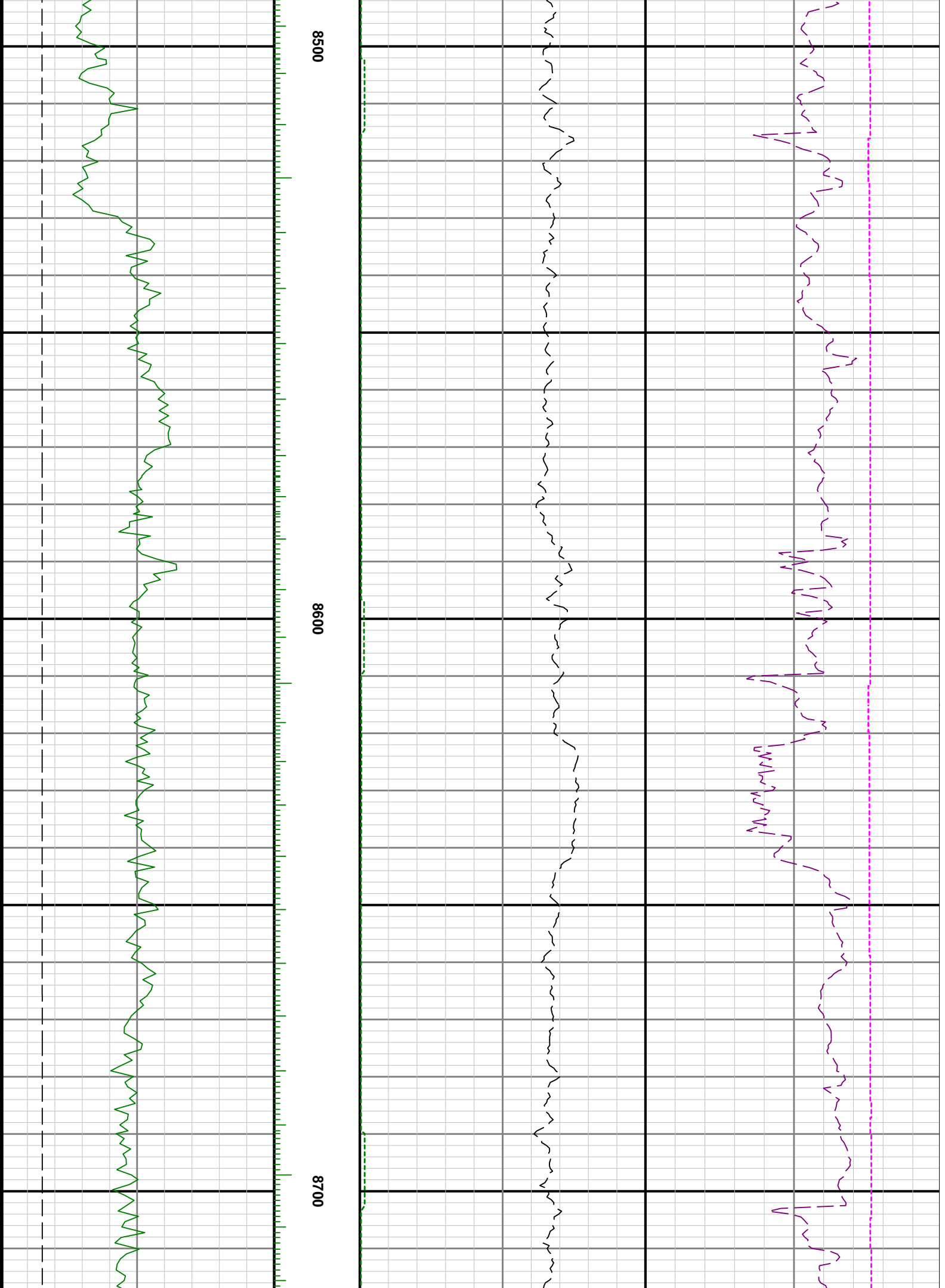


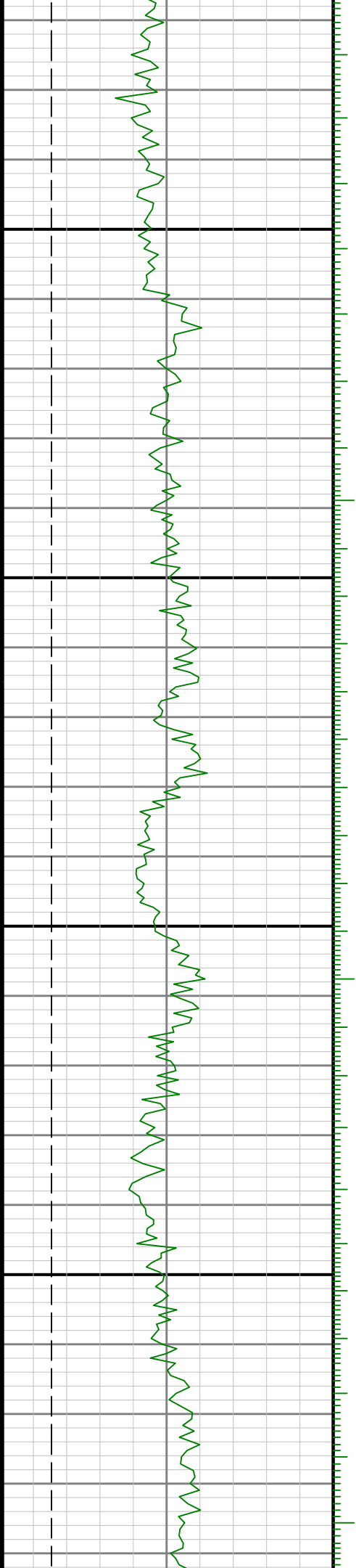






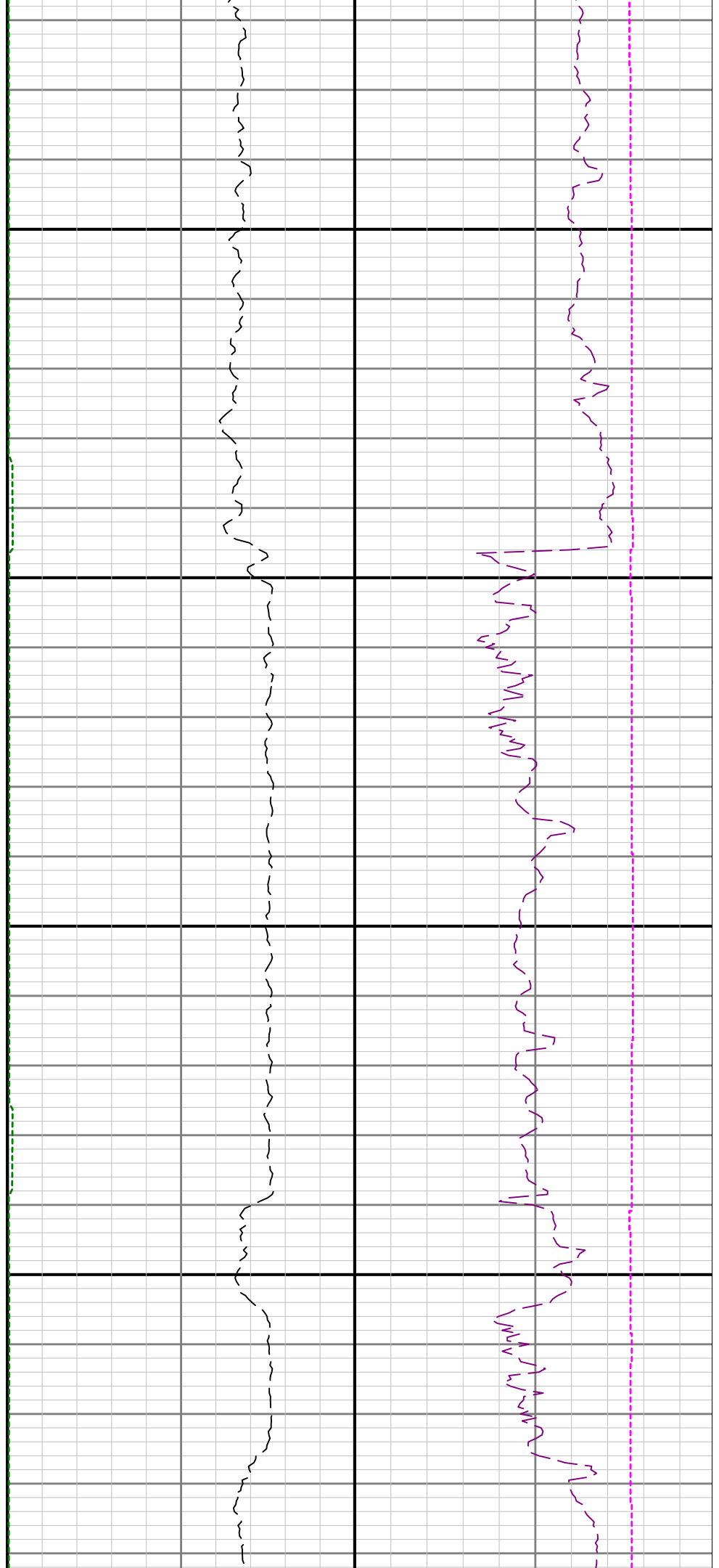


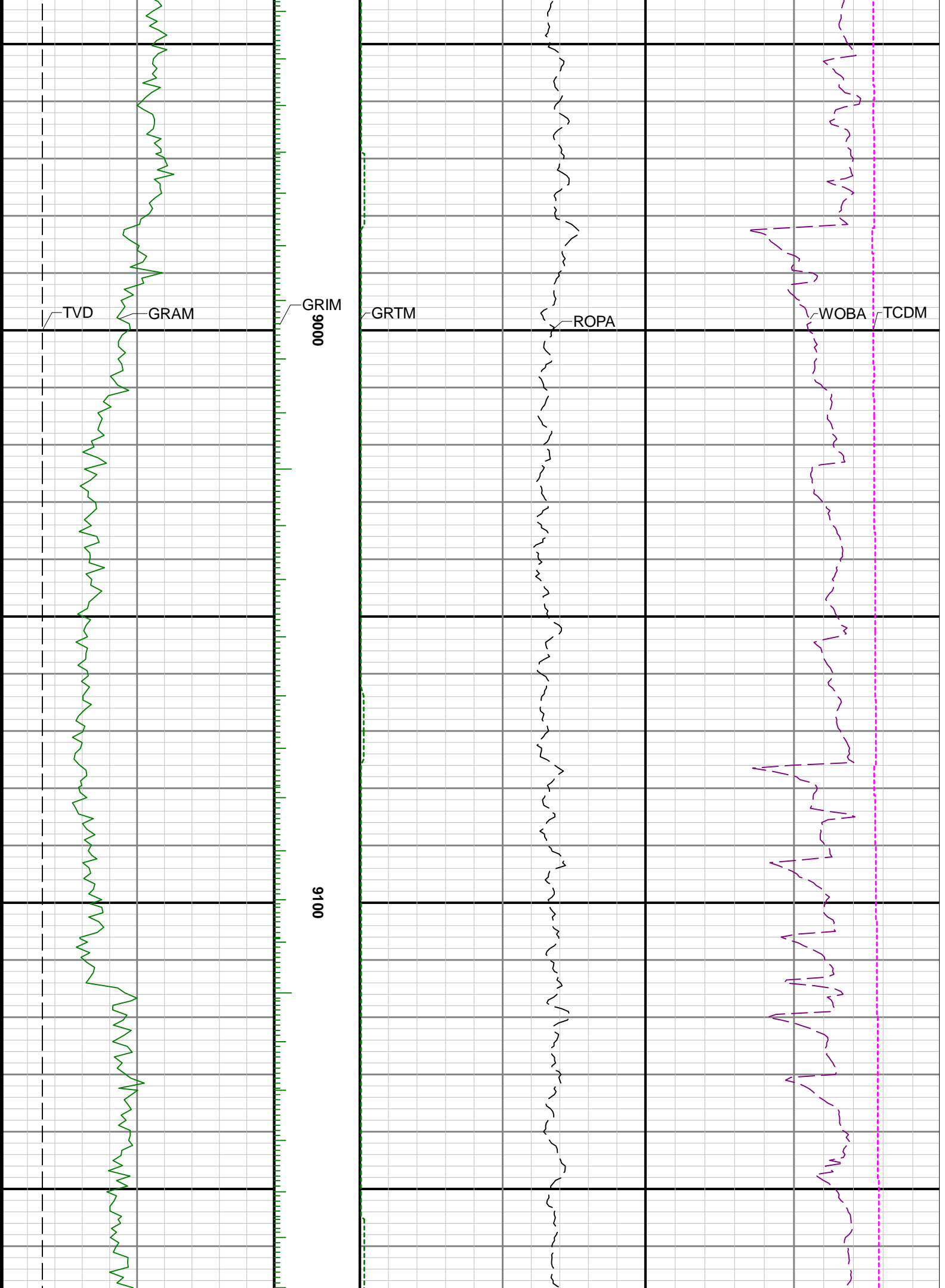


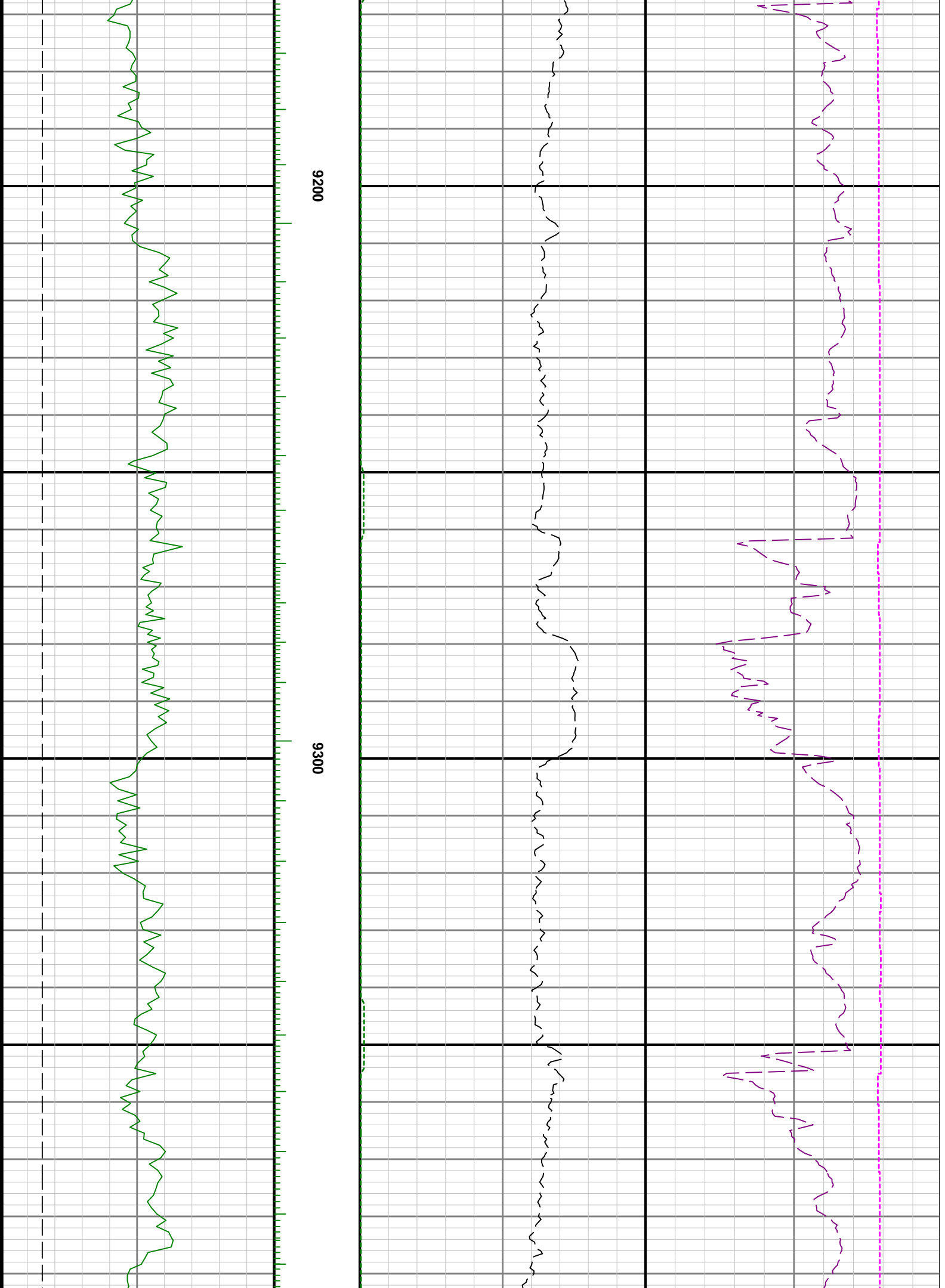


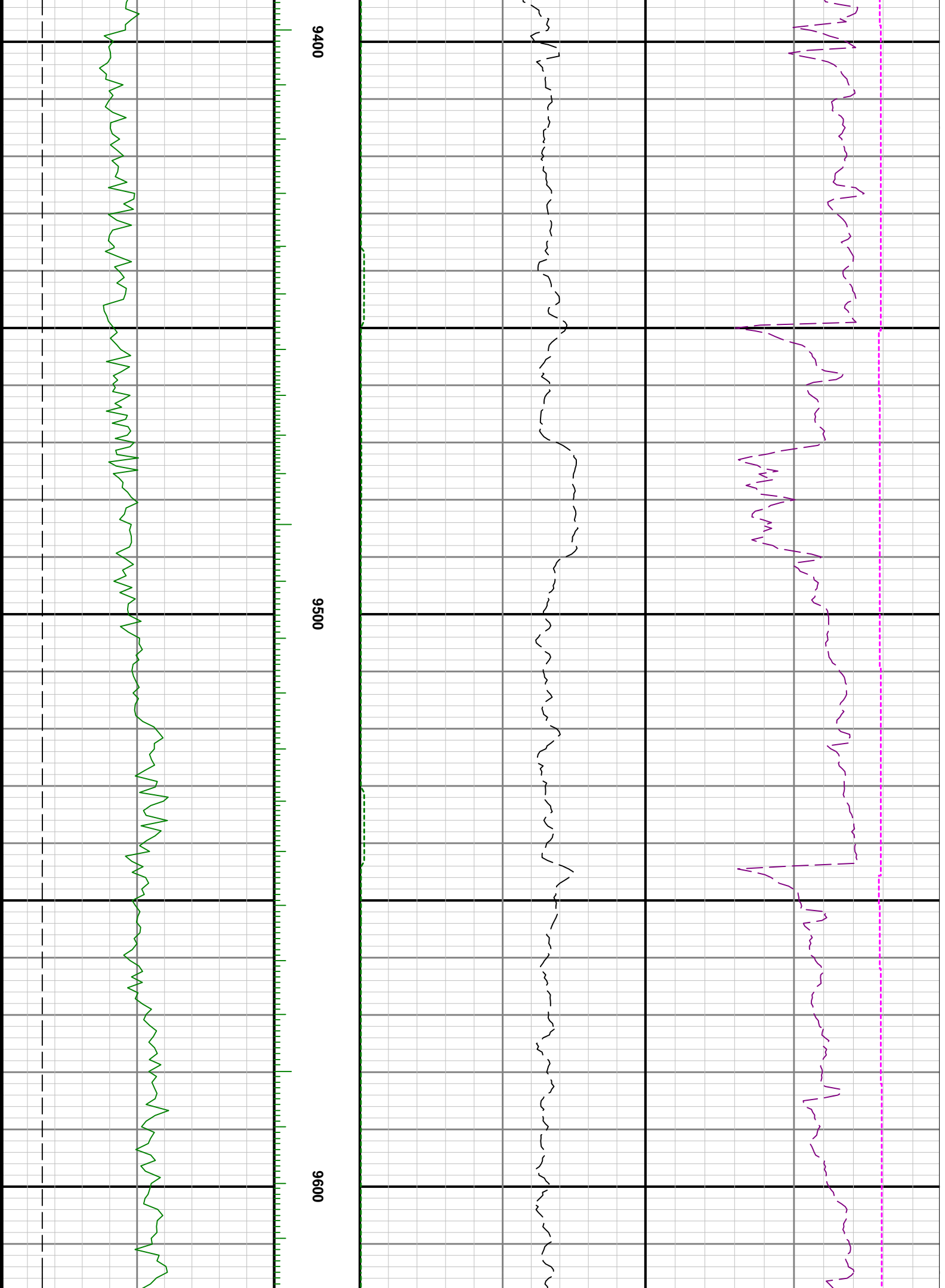
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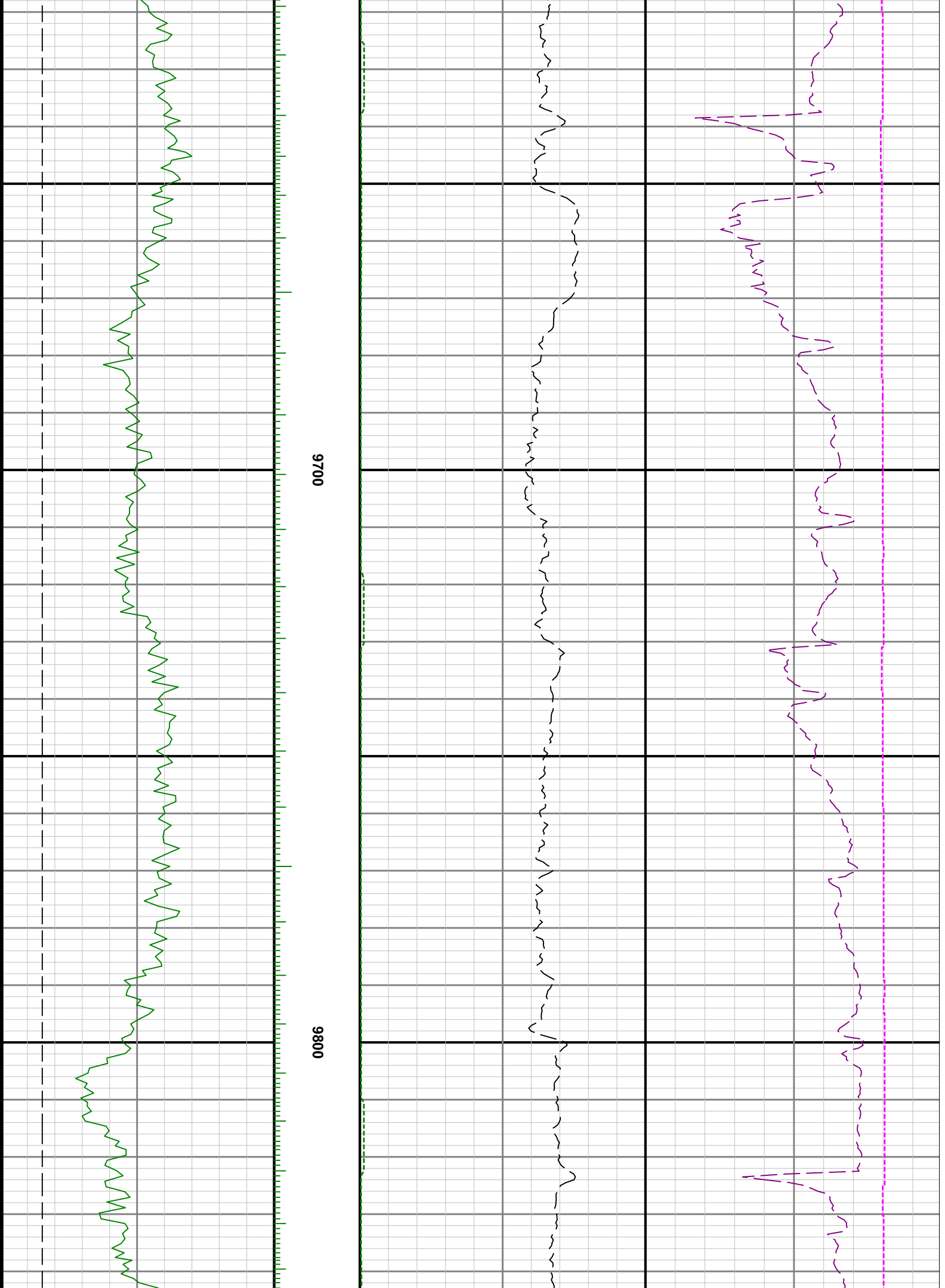
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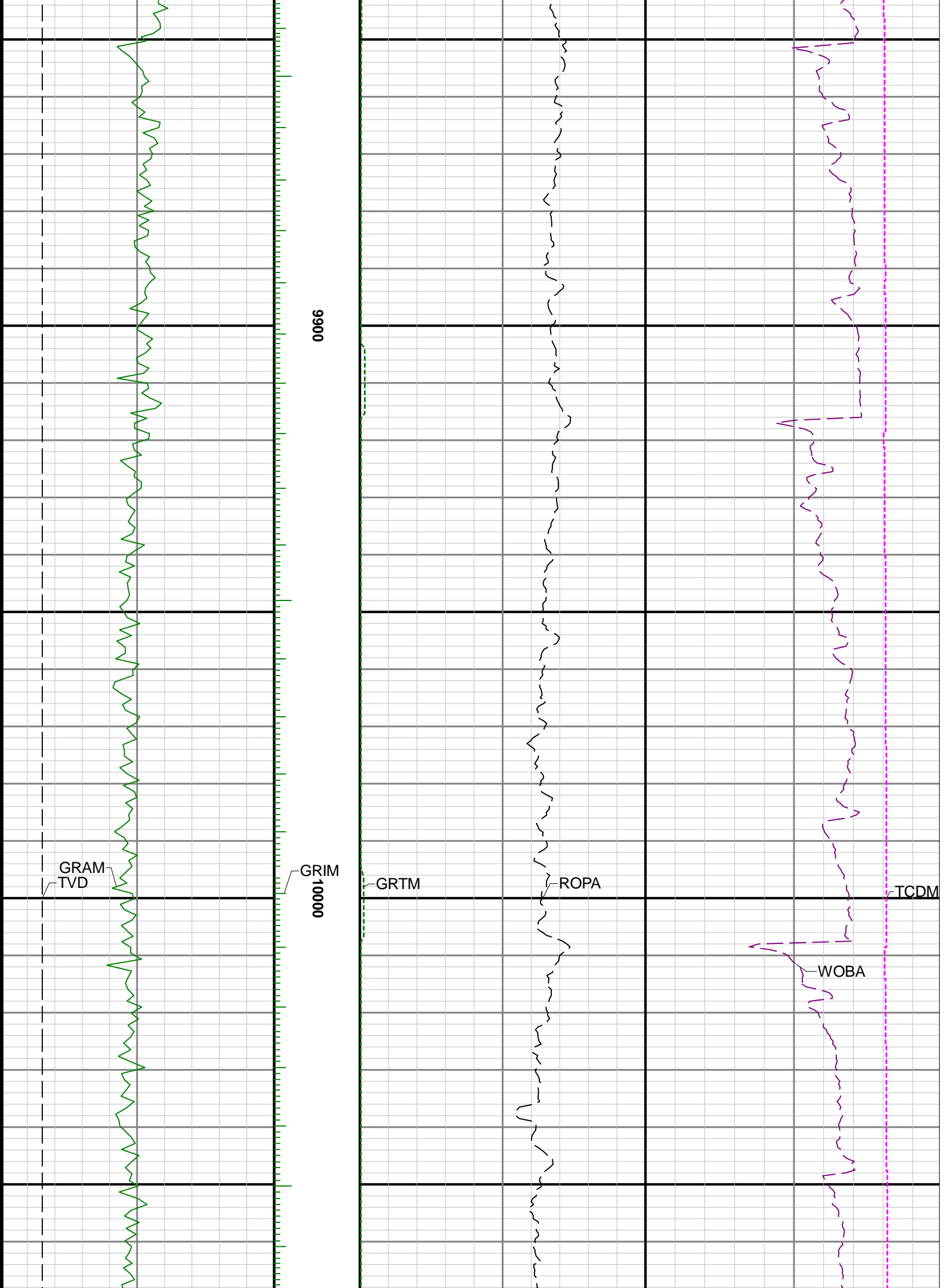


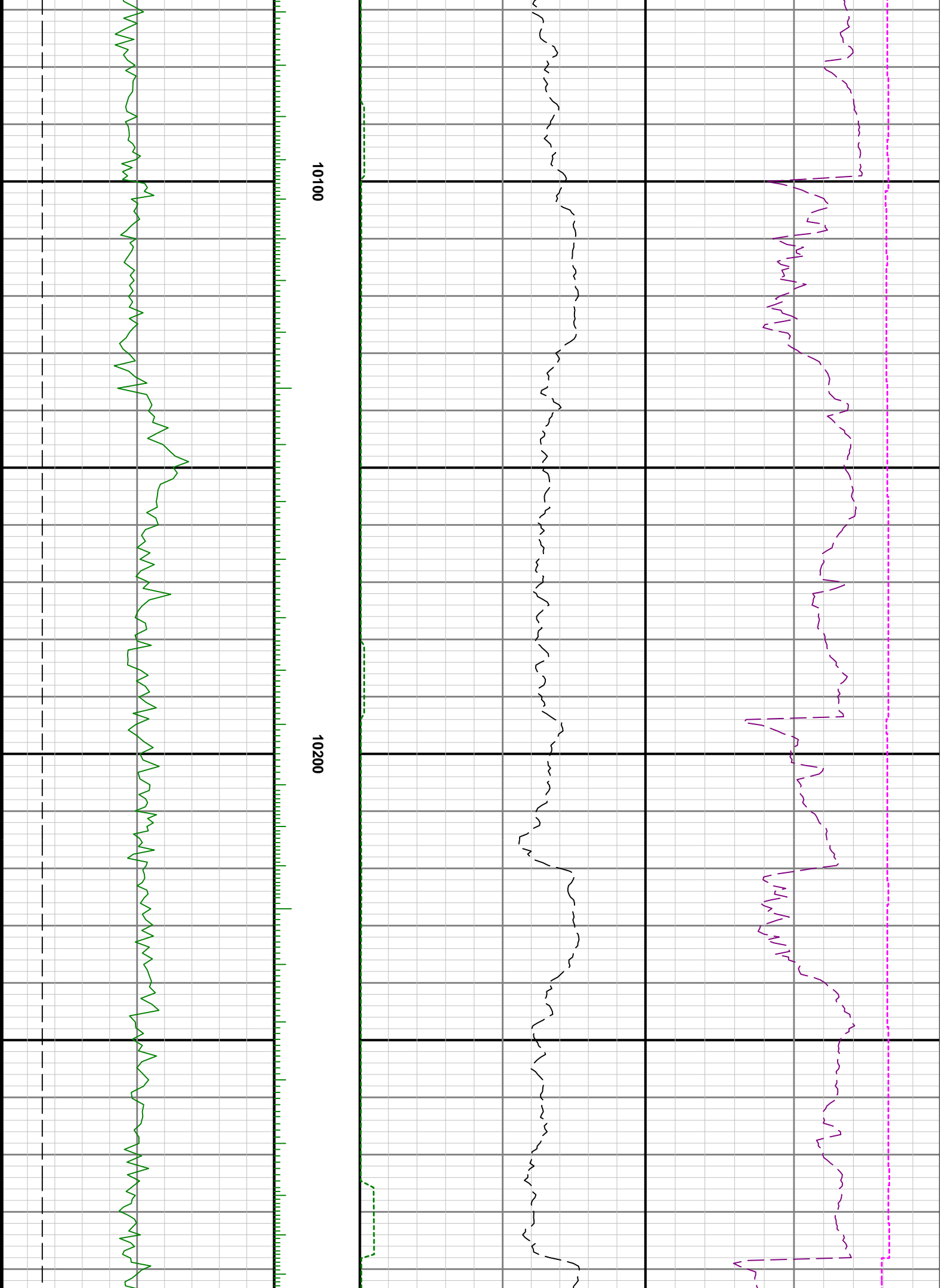


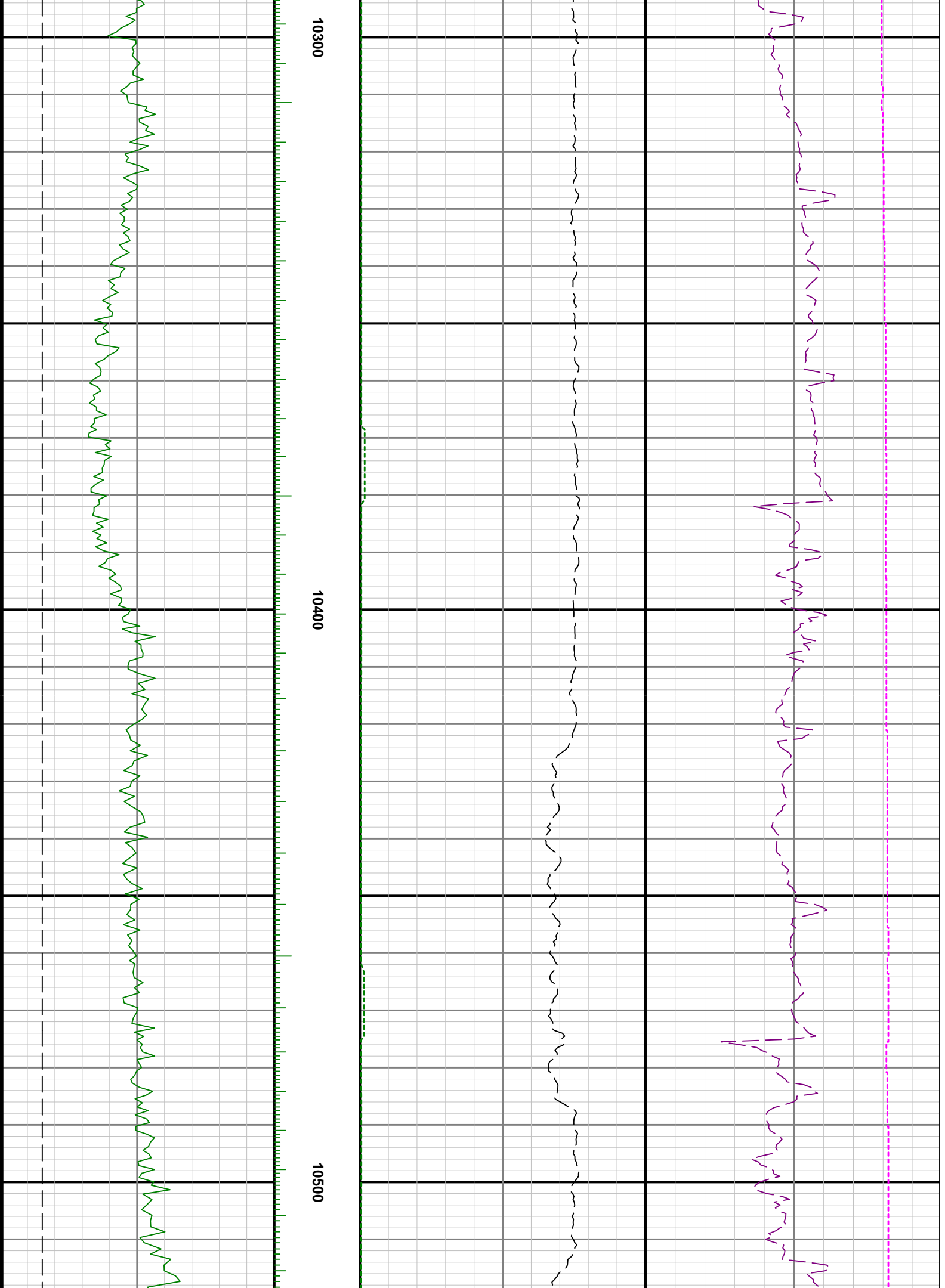


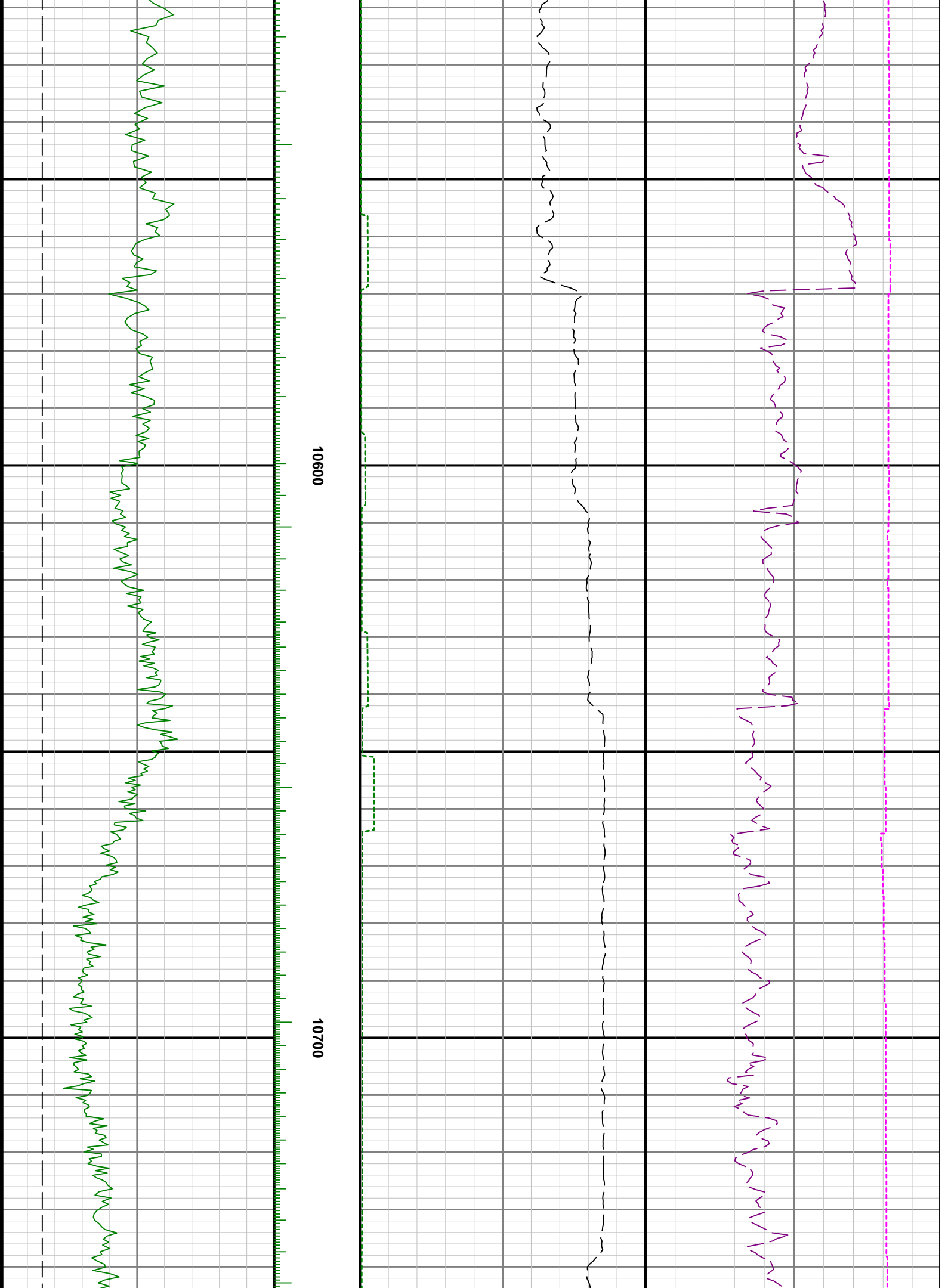


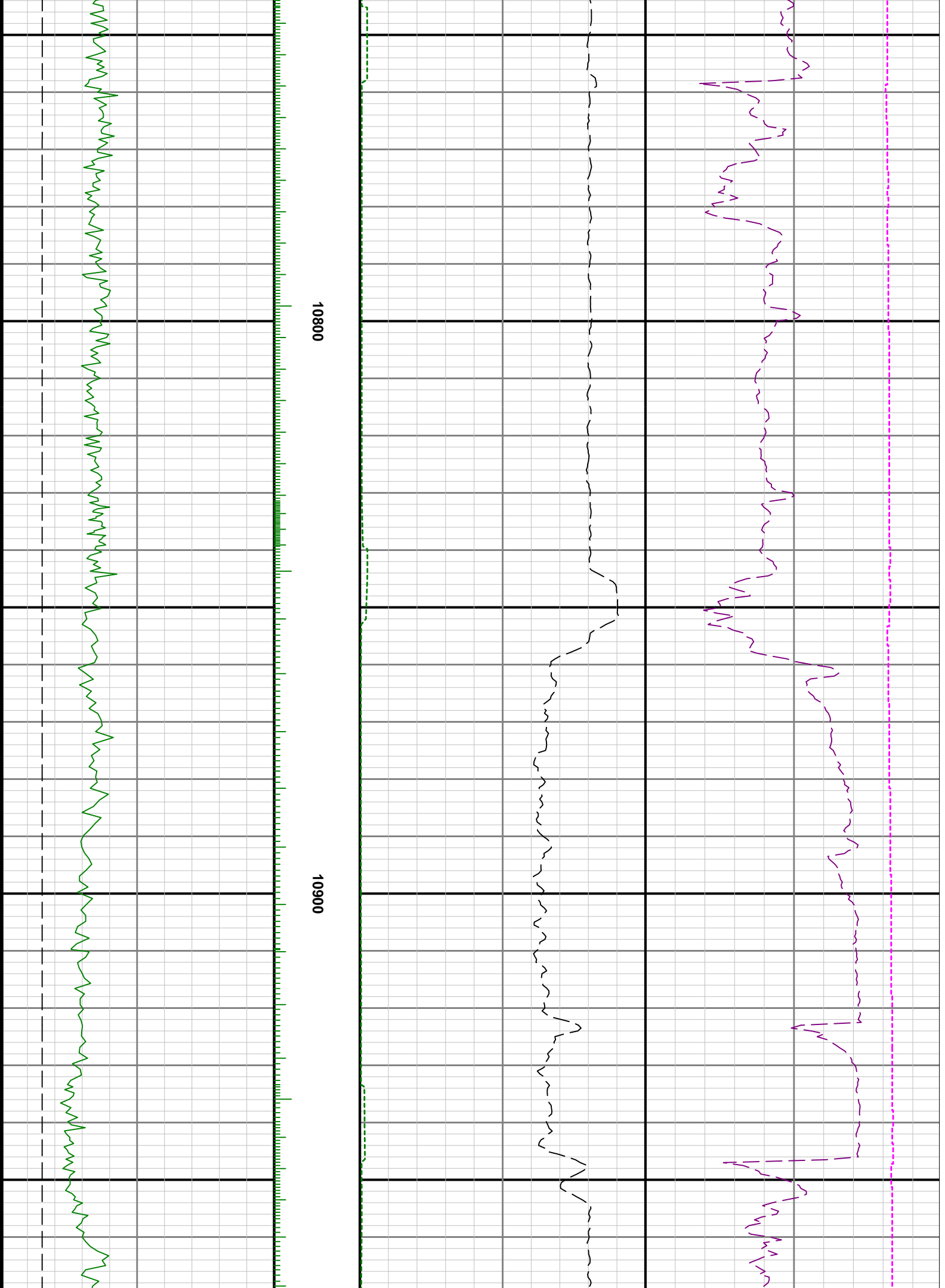


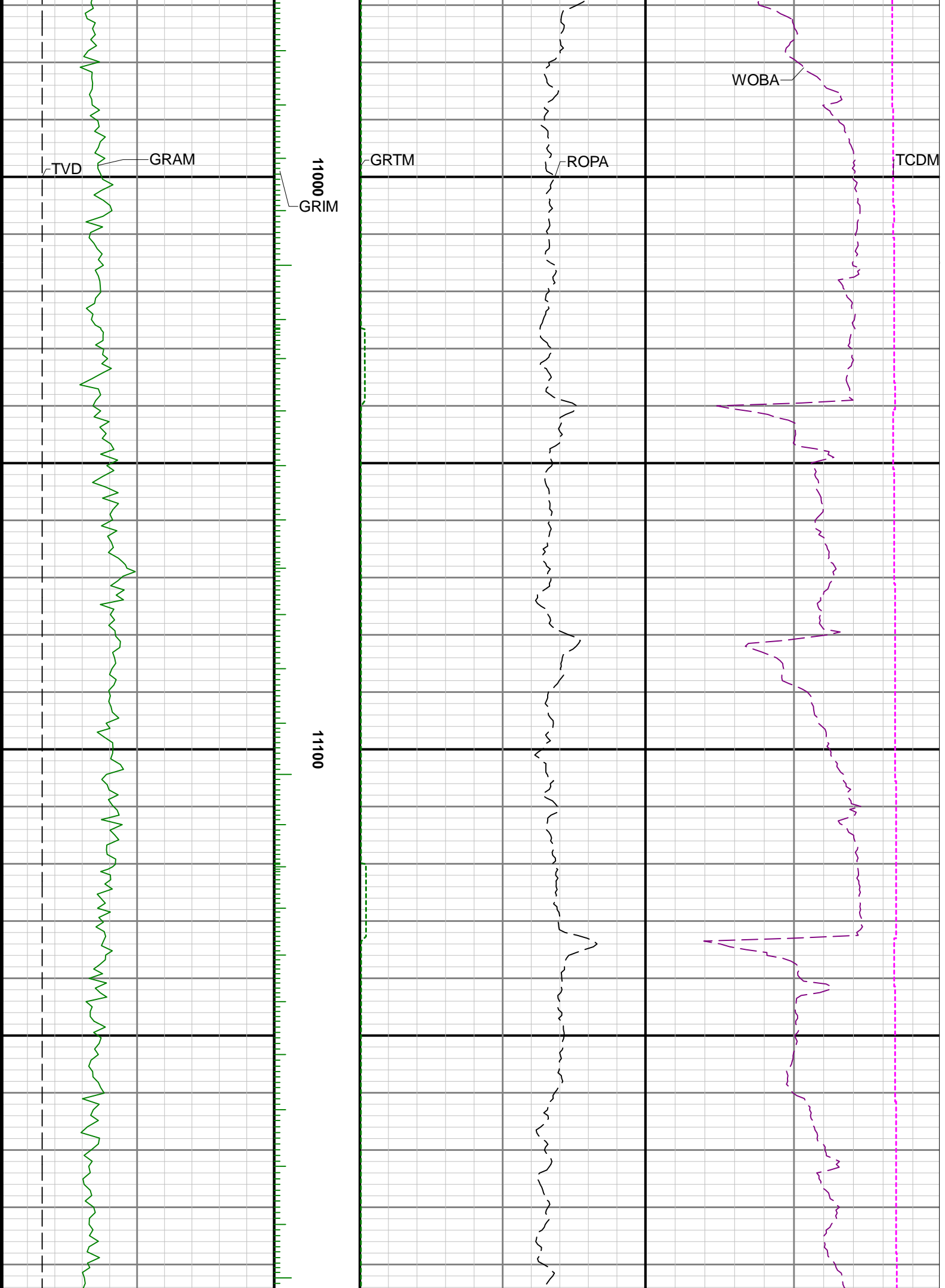


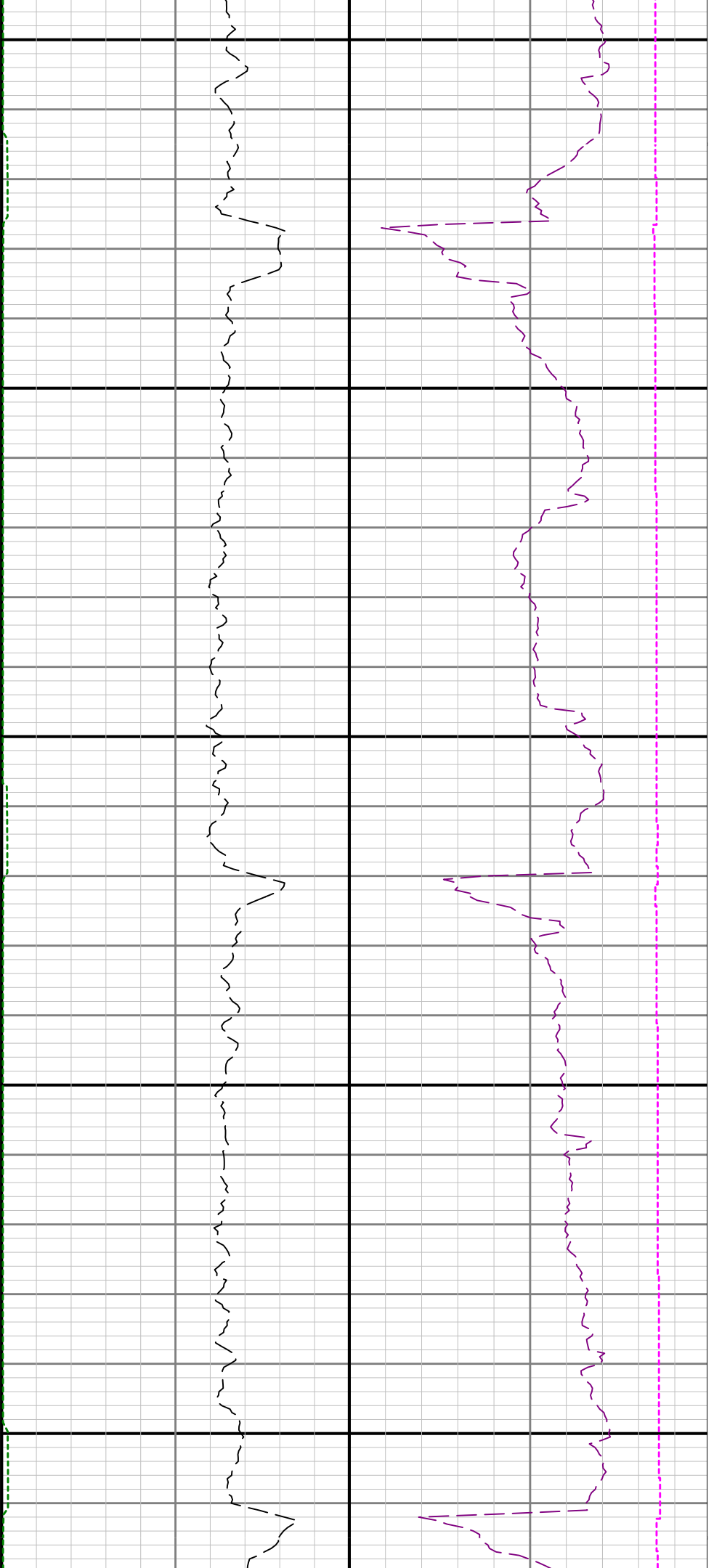








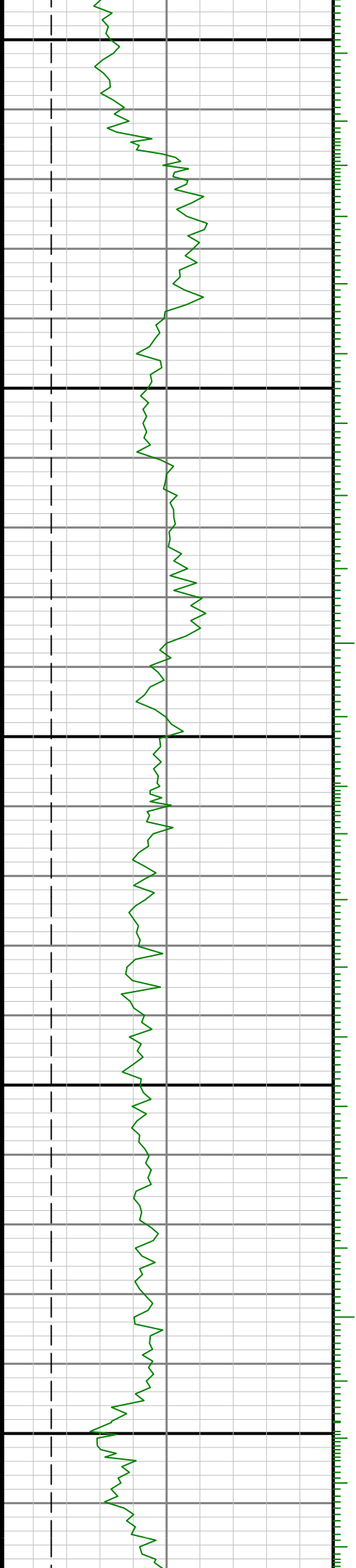


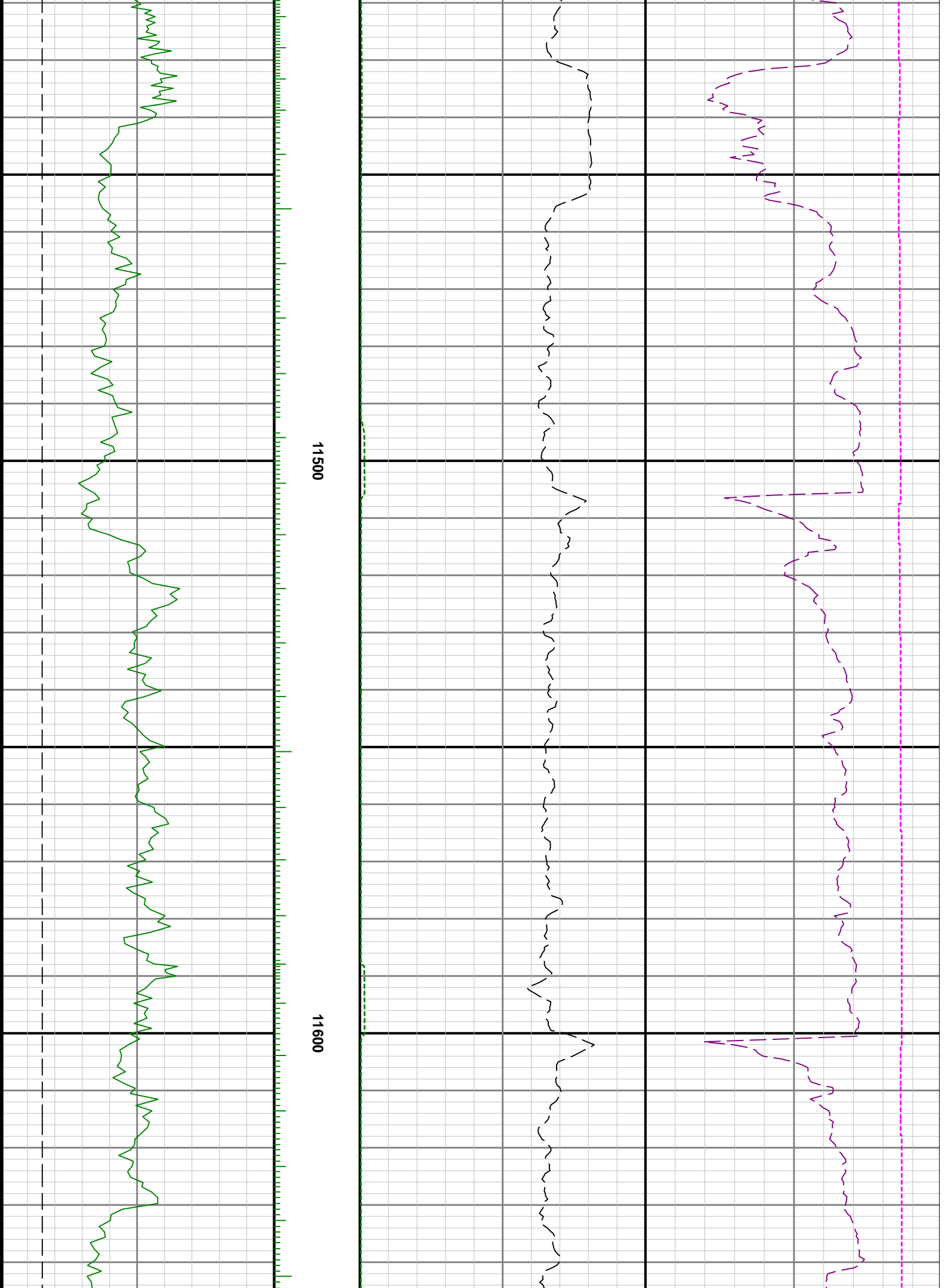


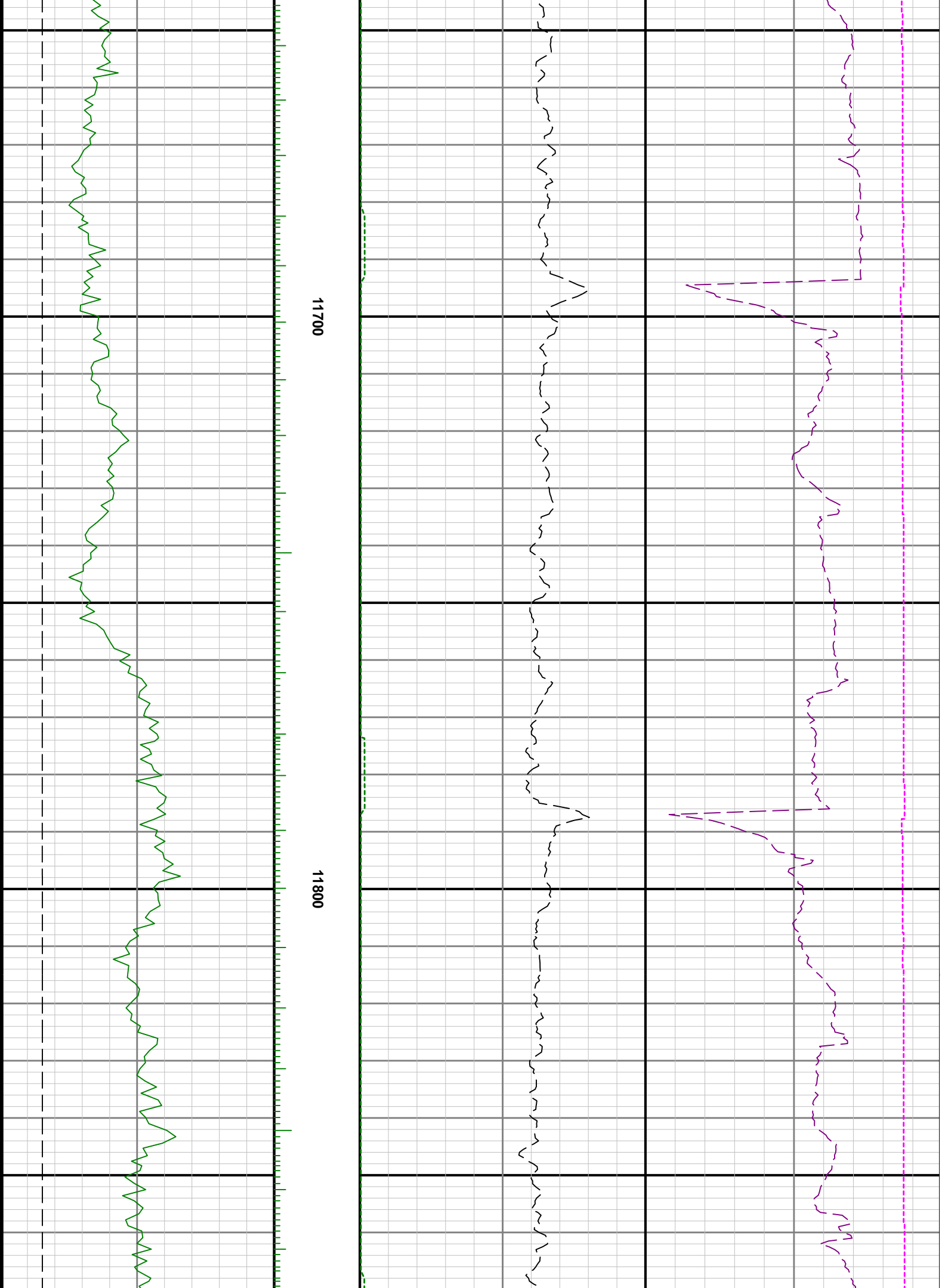
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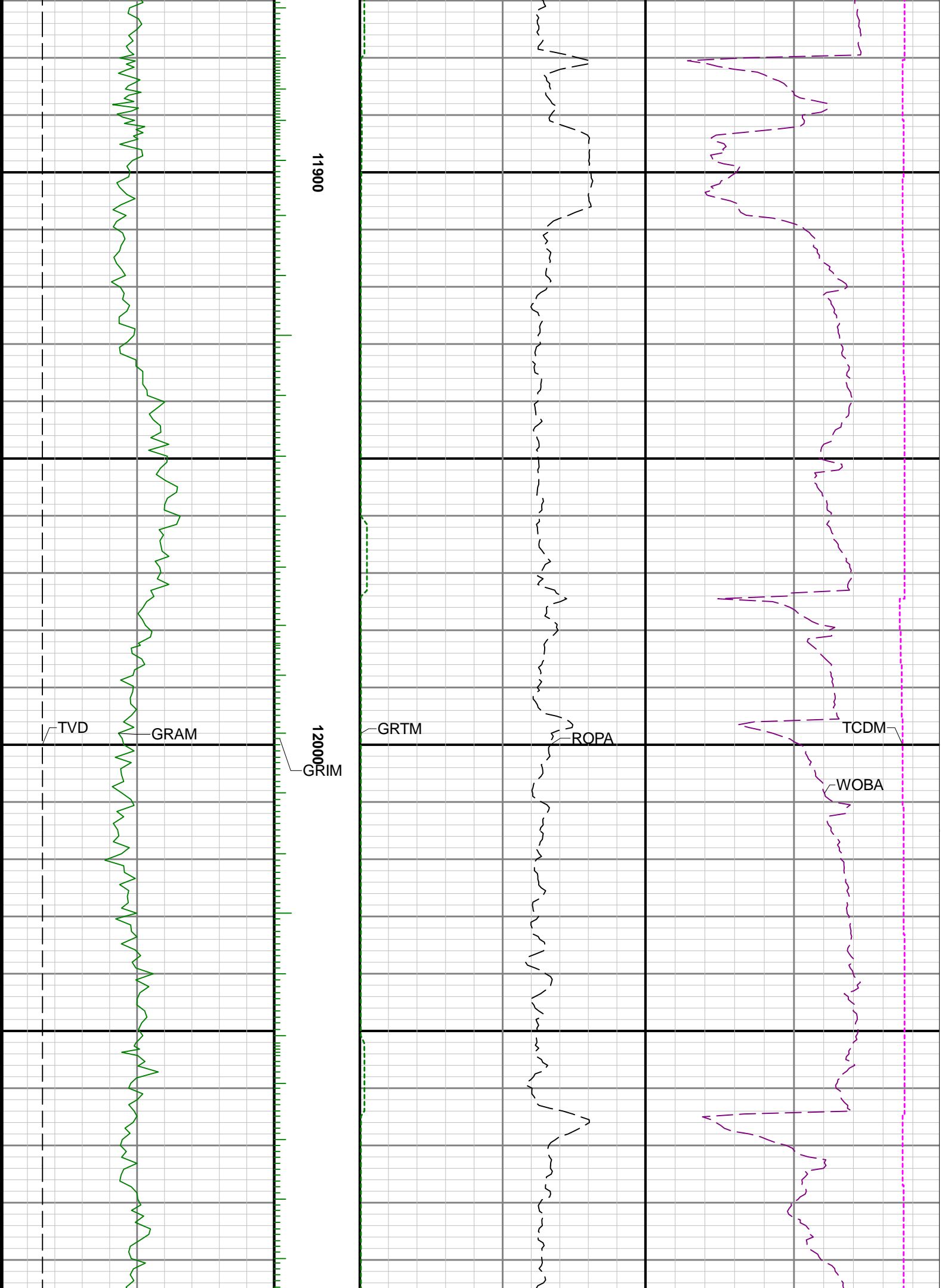
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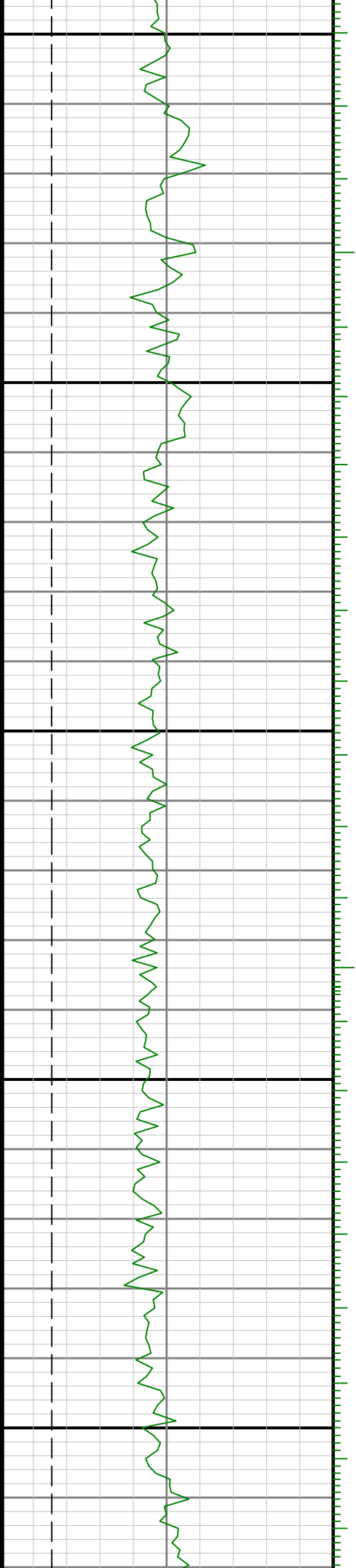


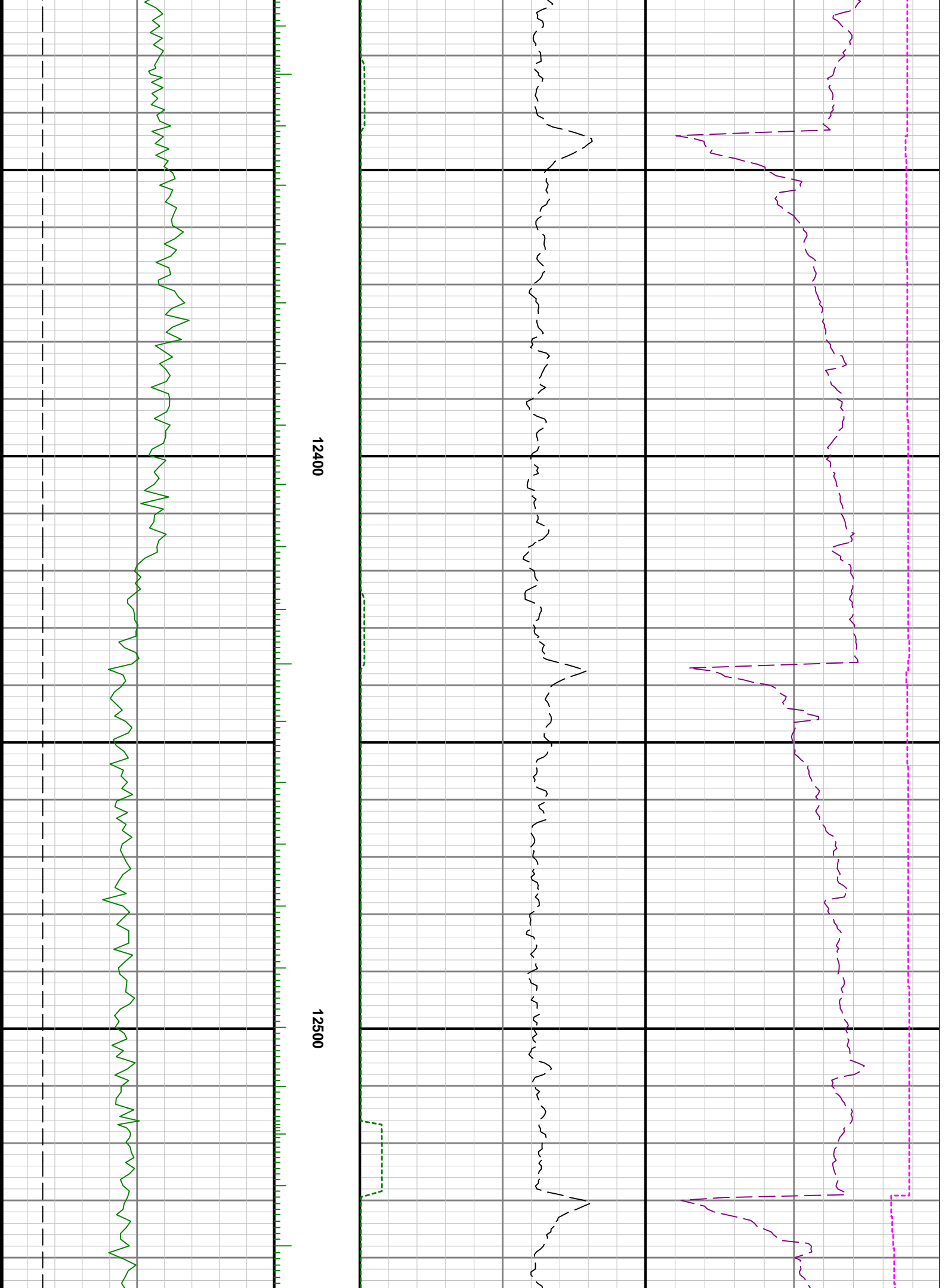


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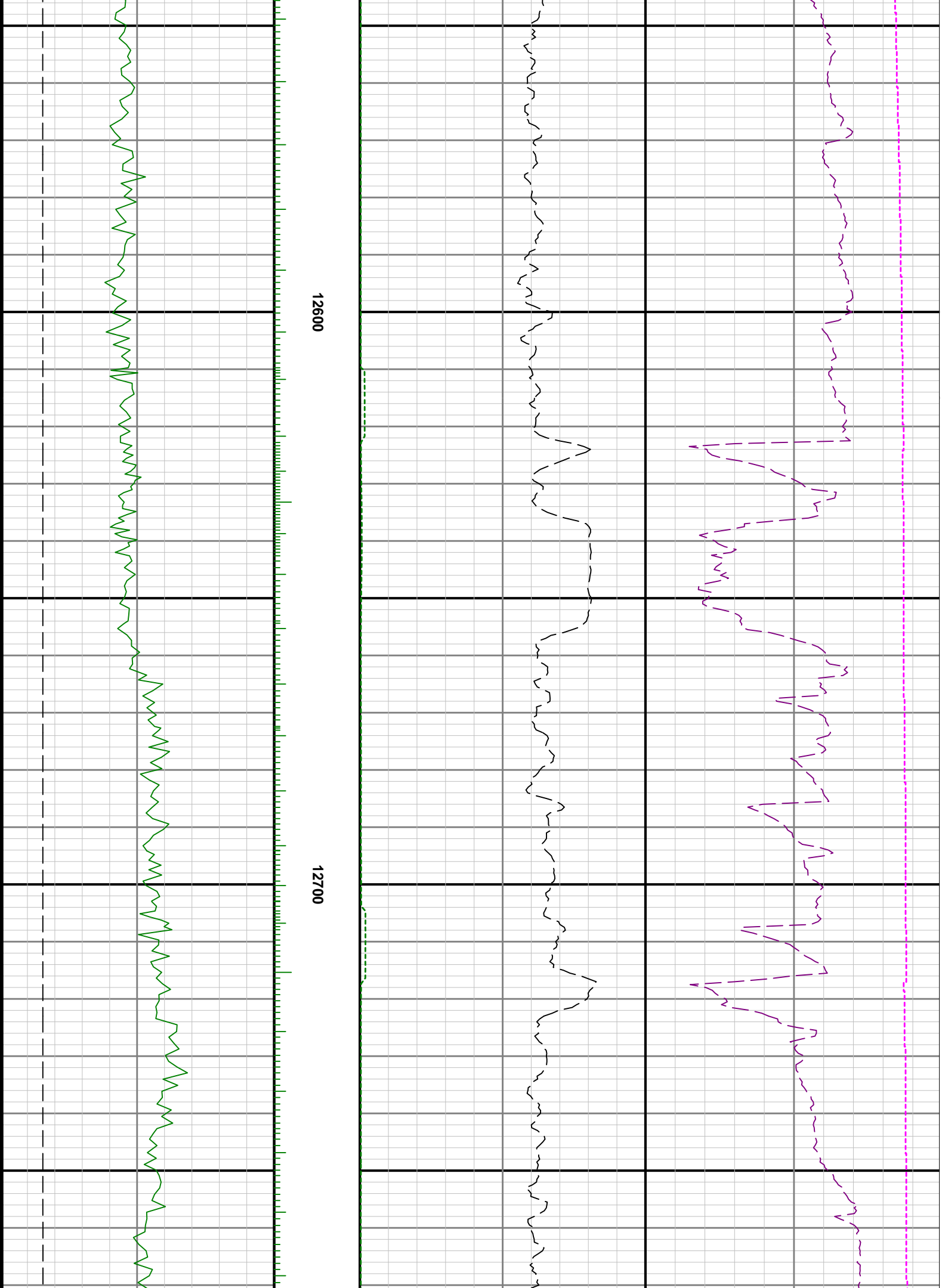
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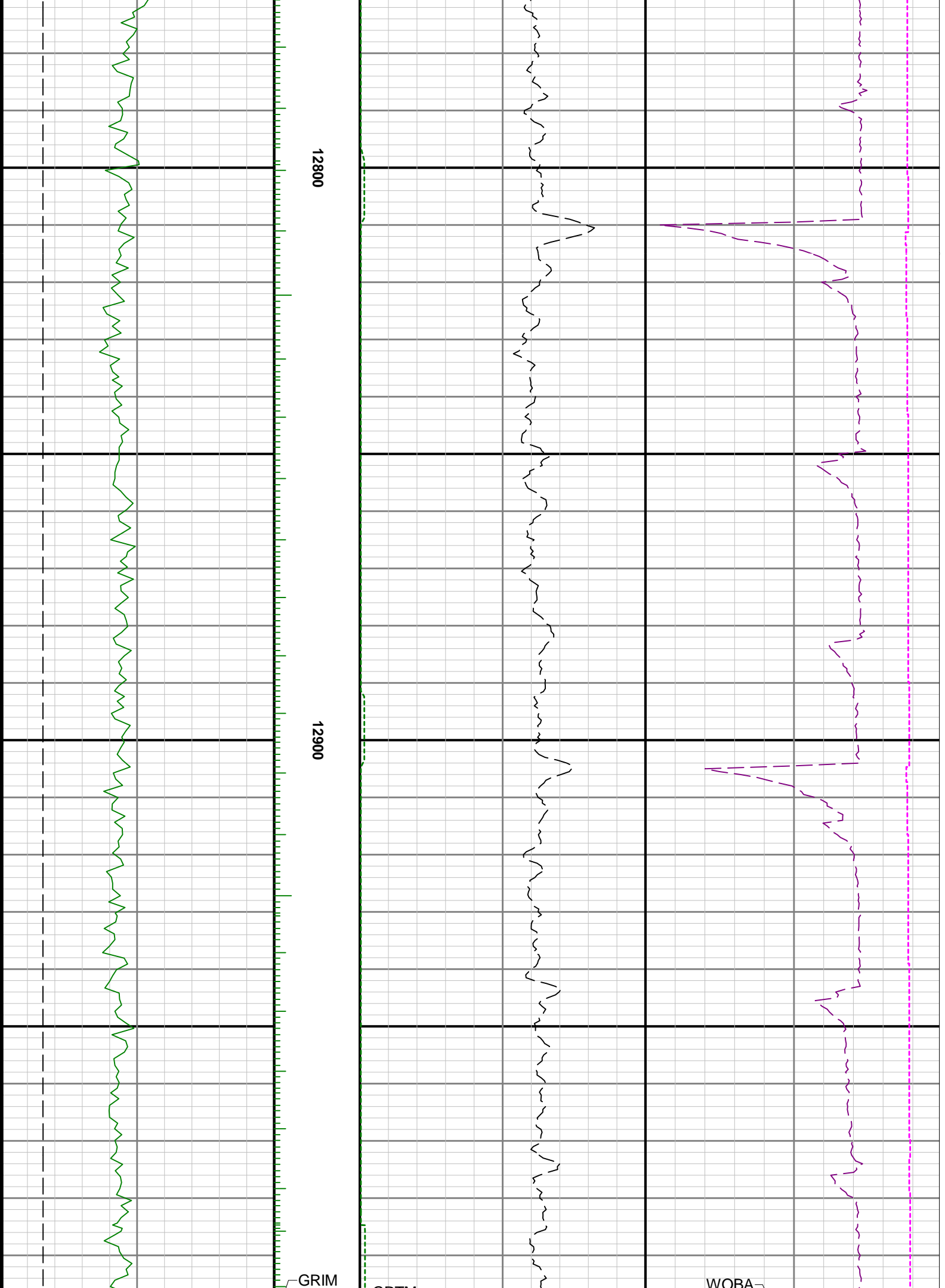
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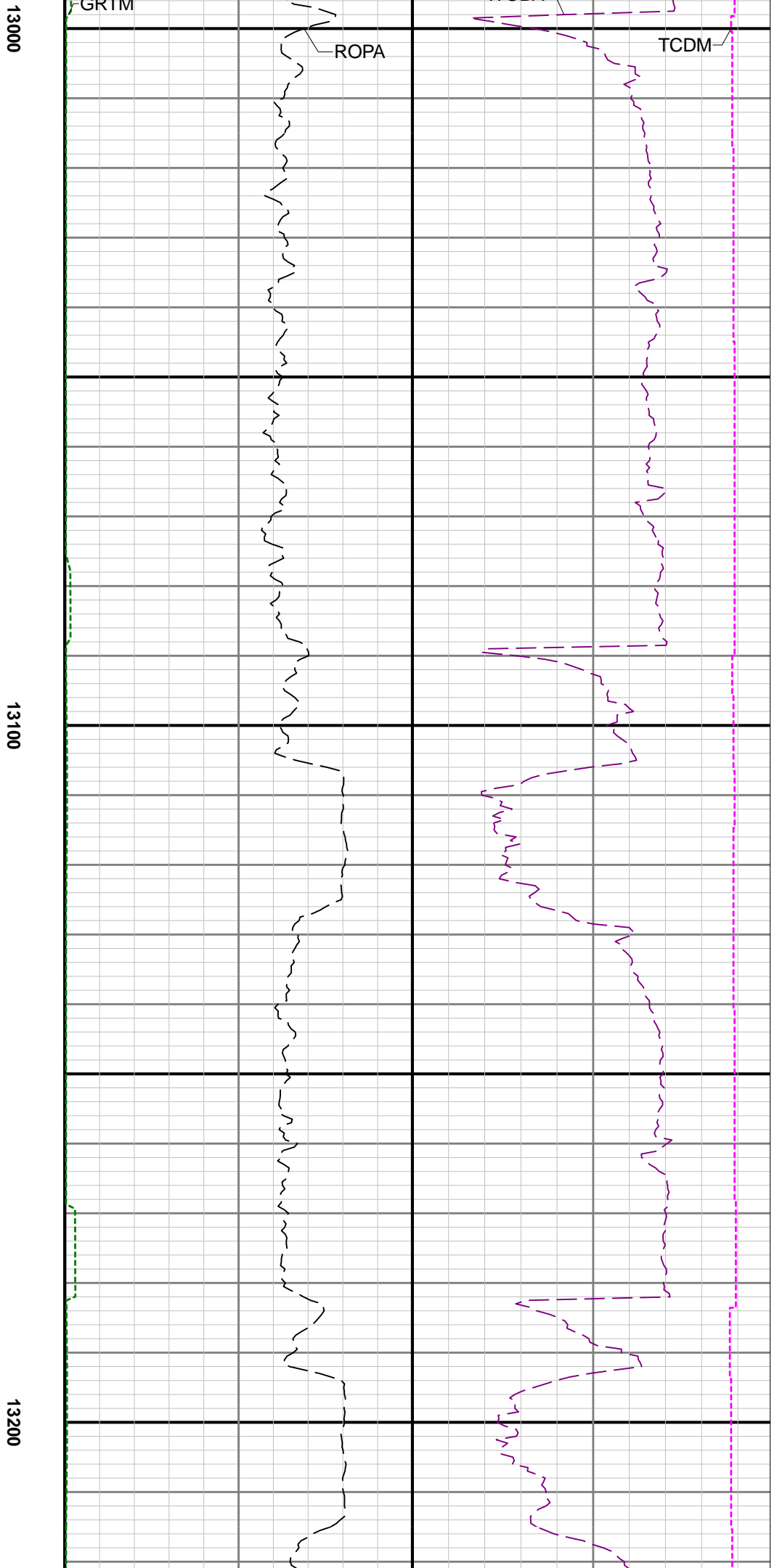
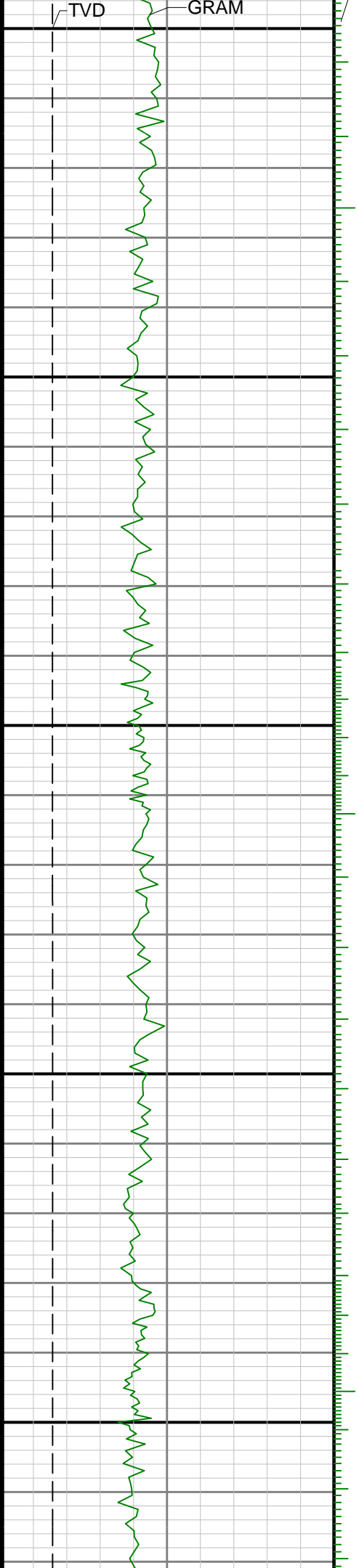


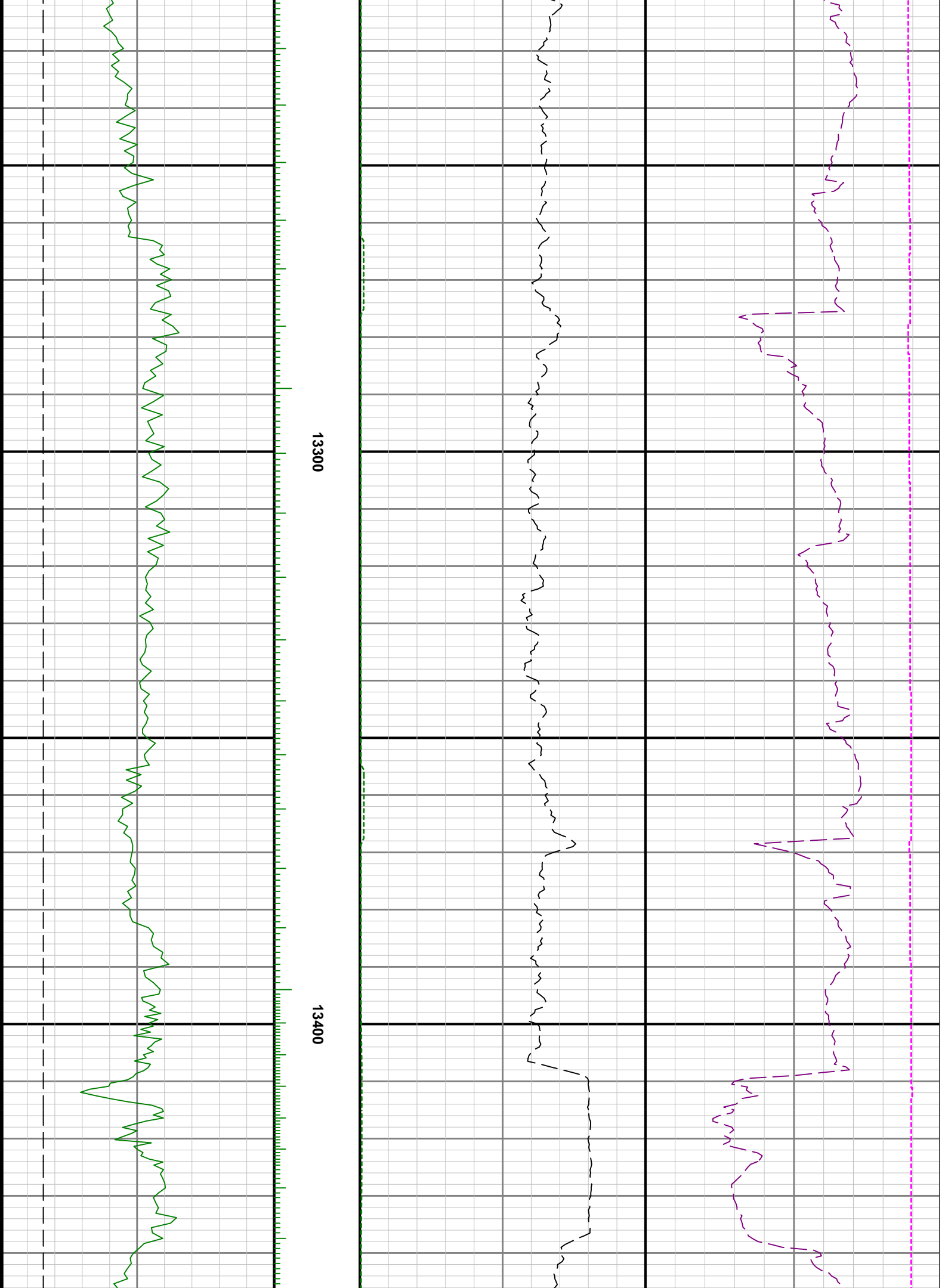
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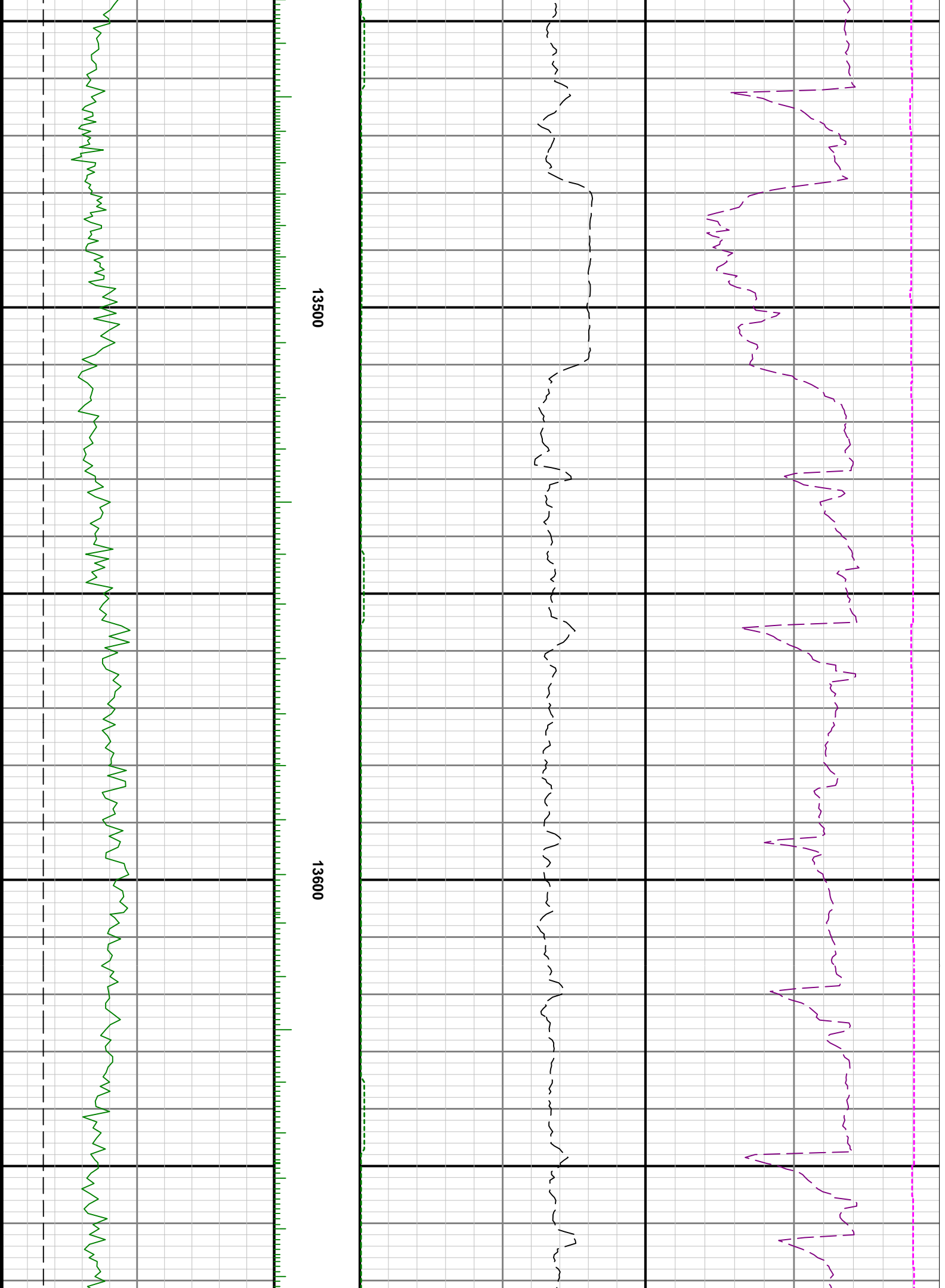
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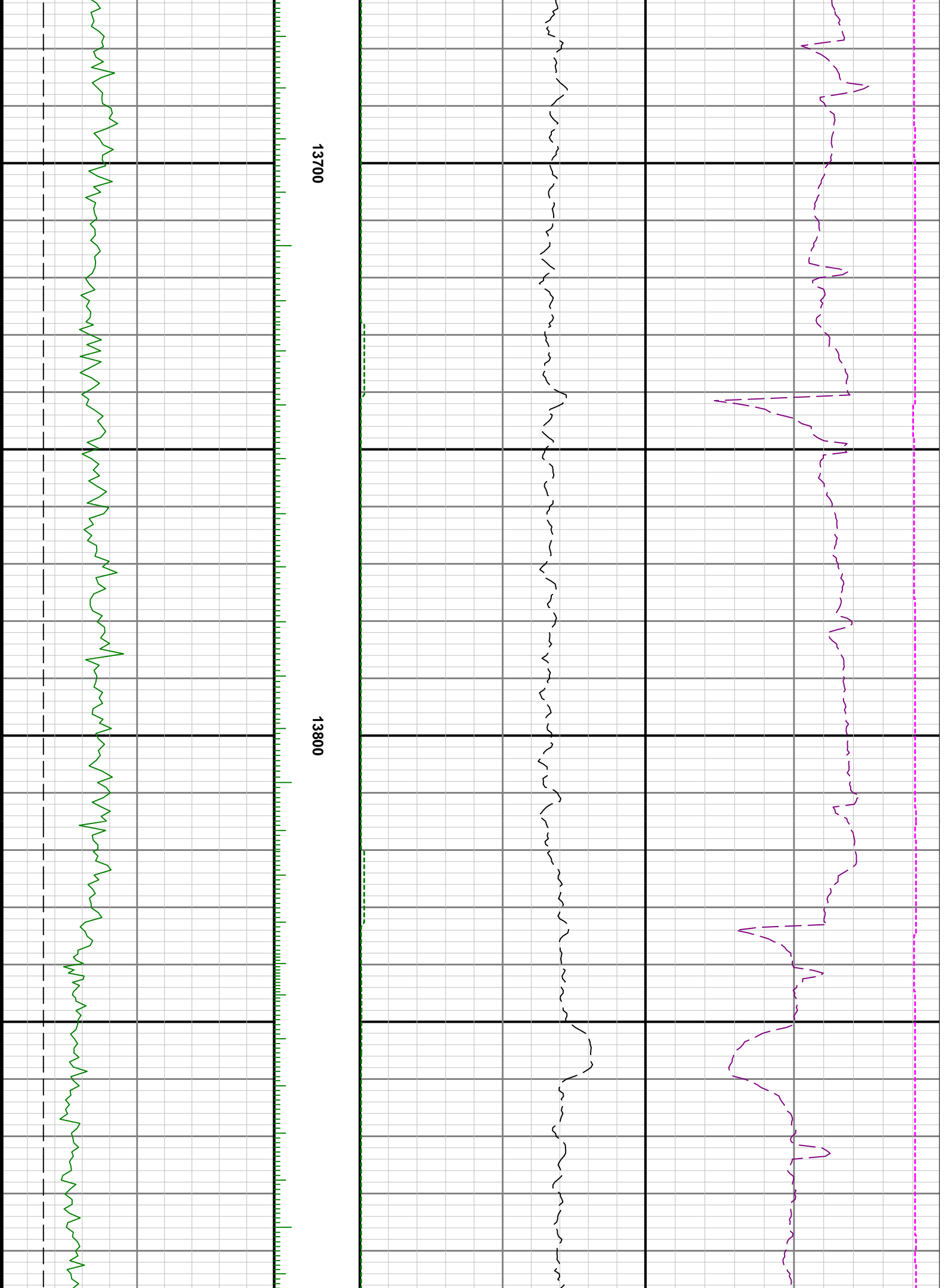
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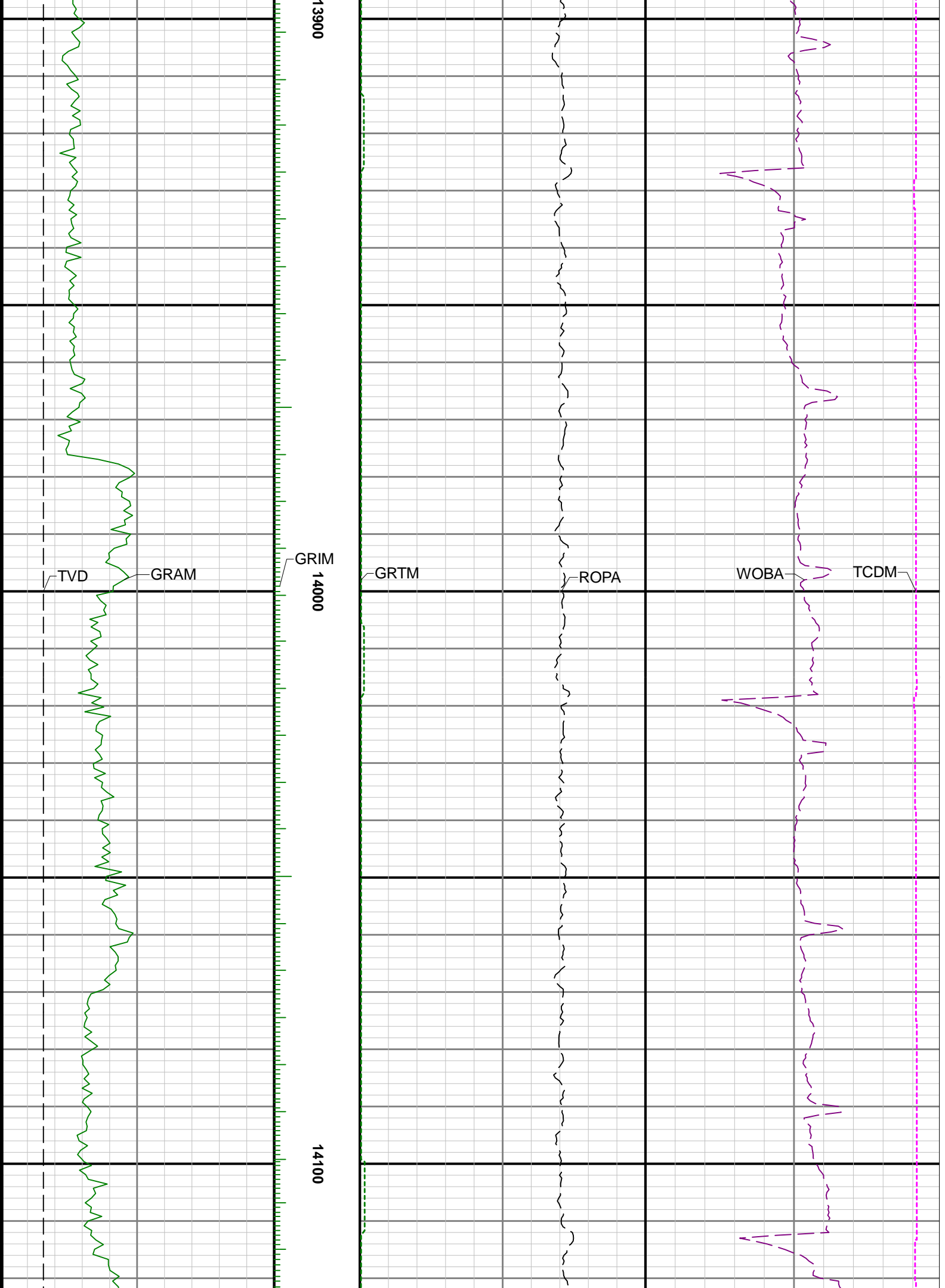
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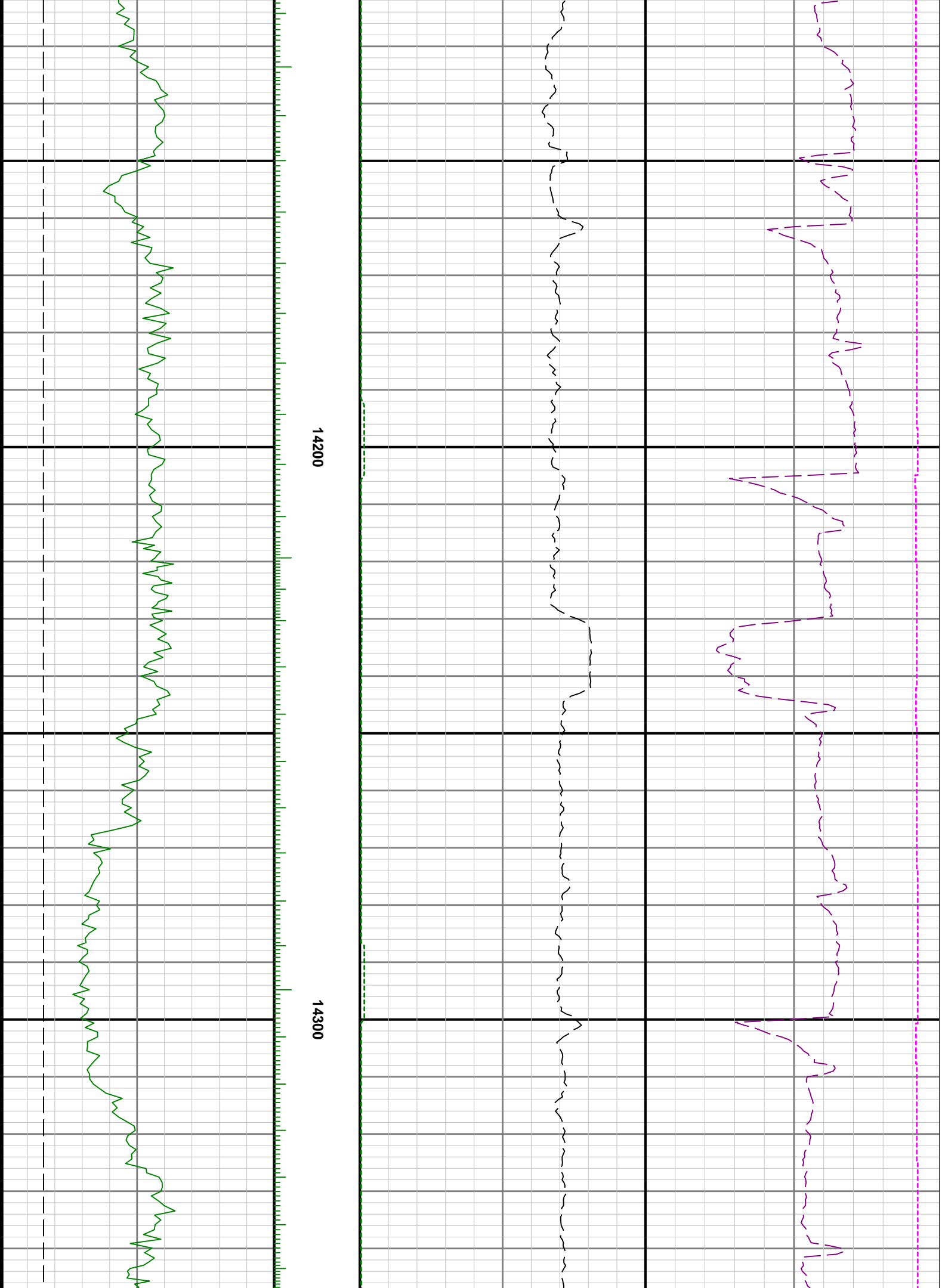


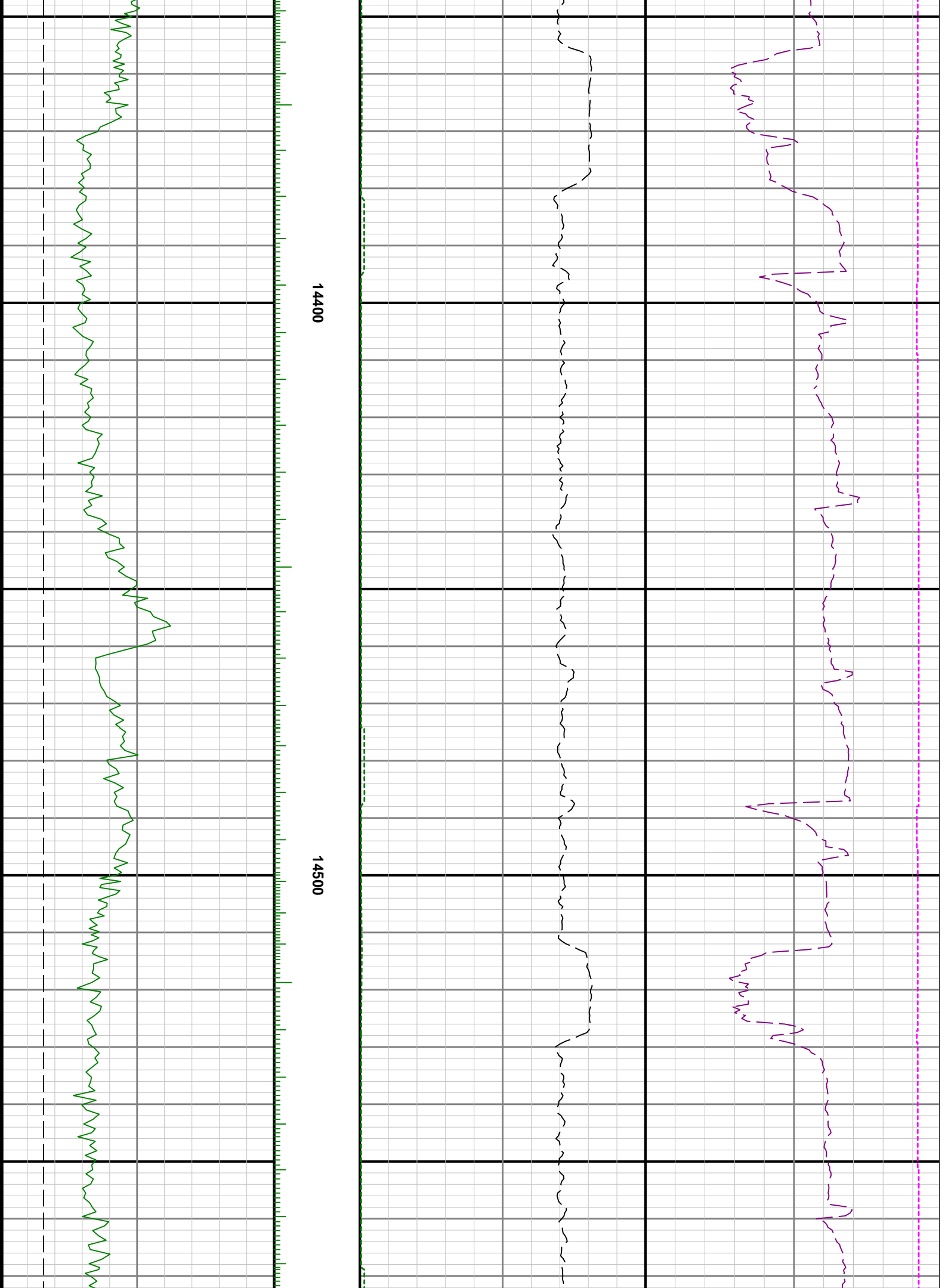
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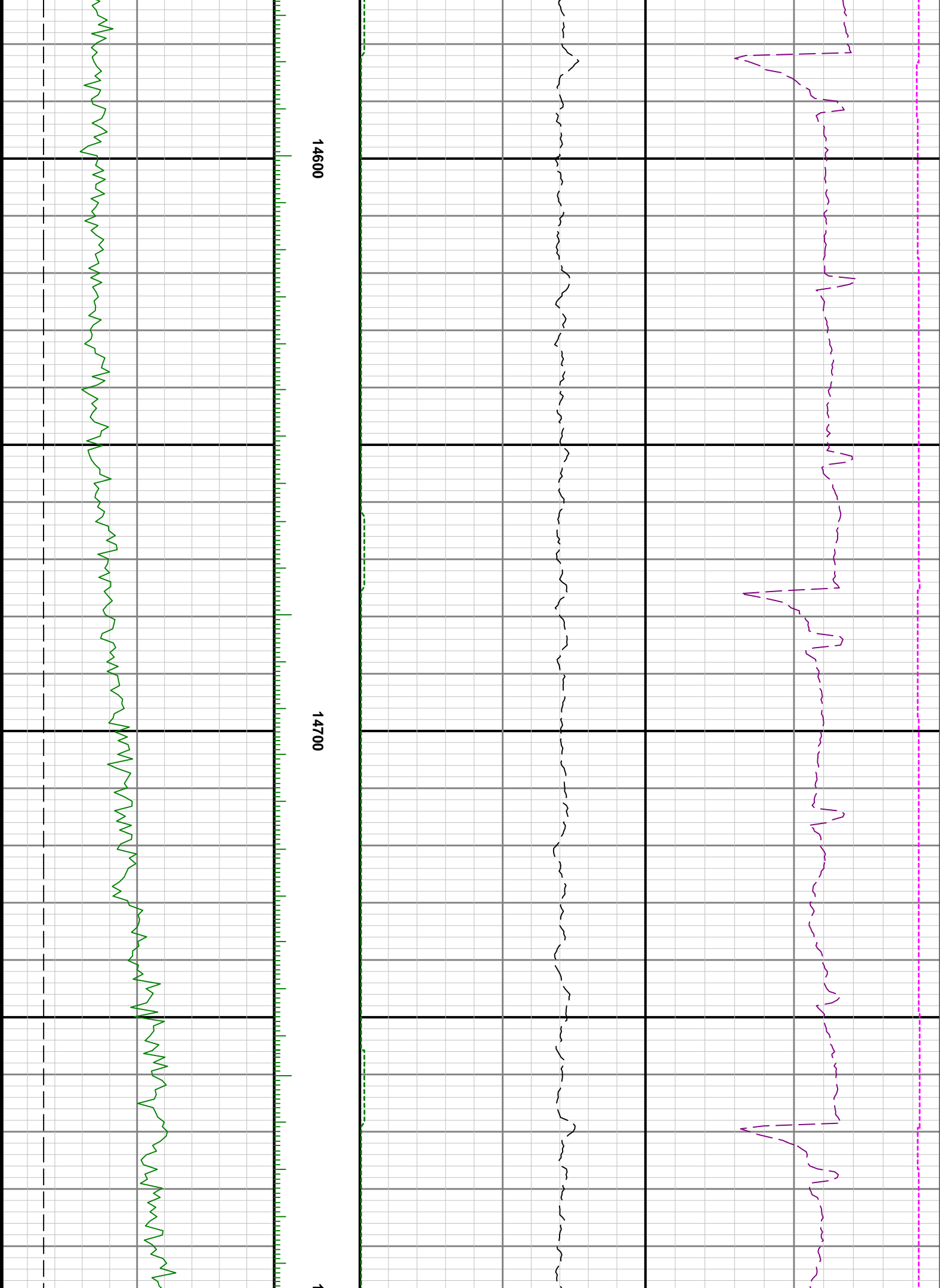
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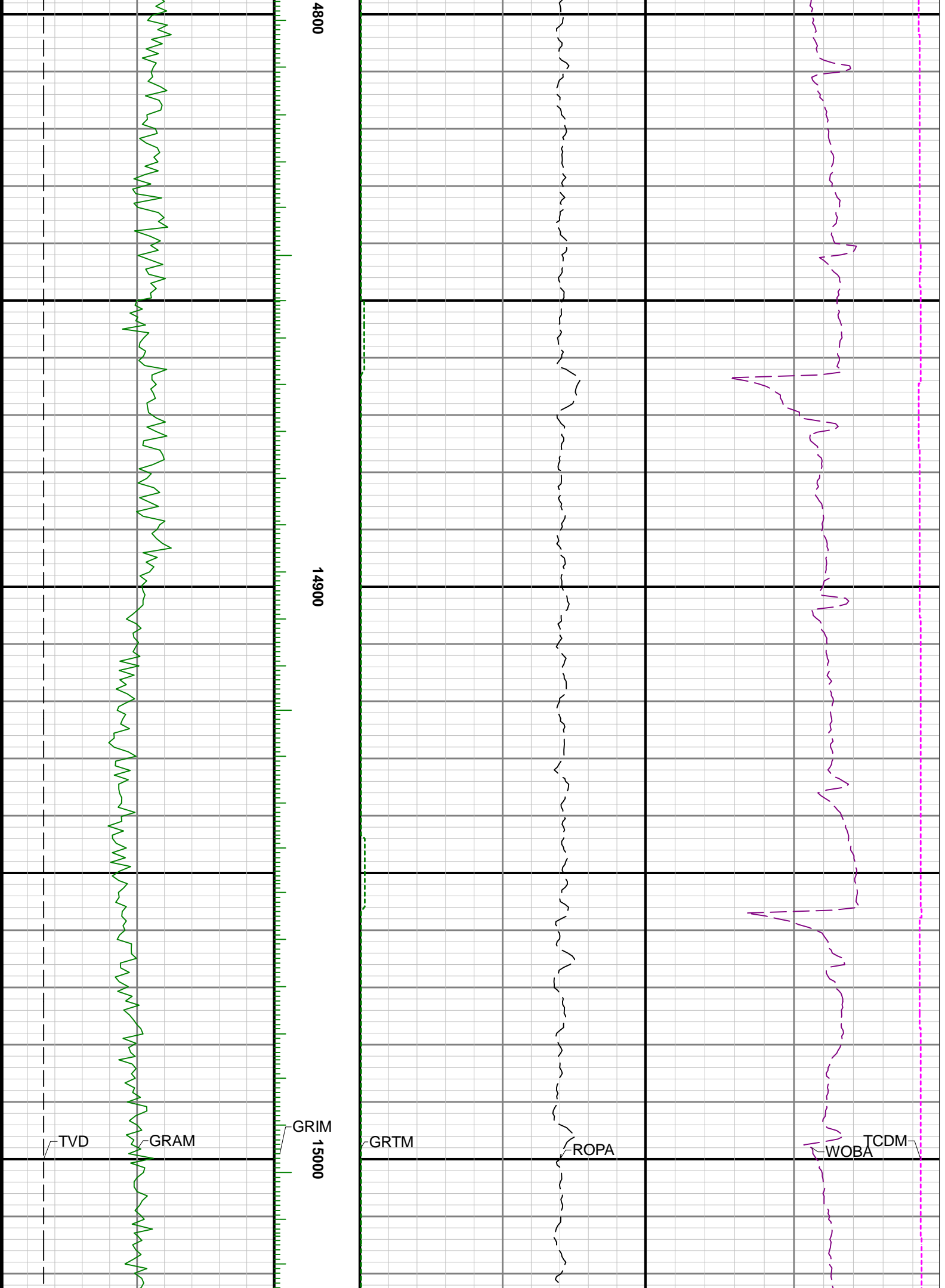












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15000

TVD

GRAM

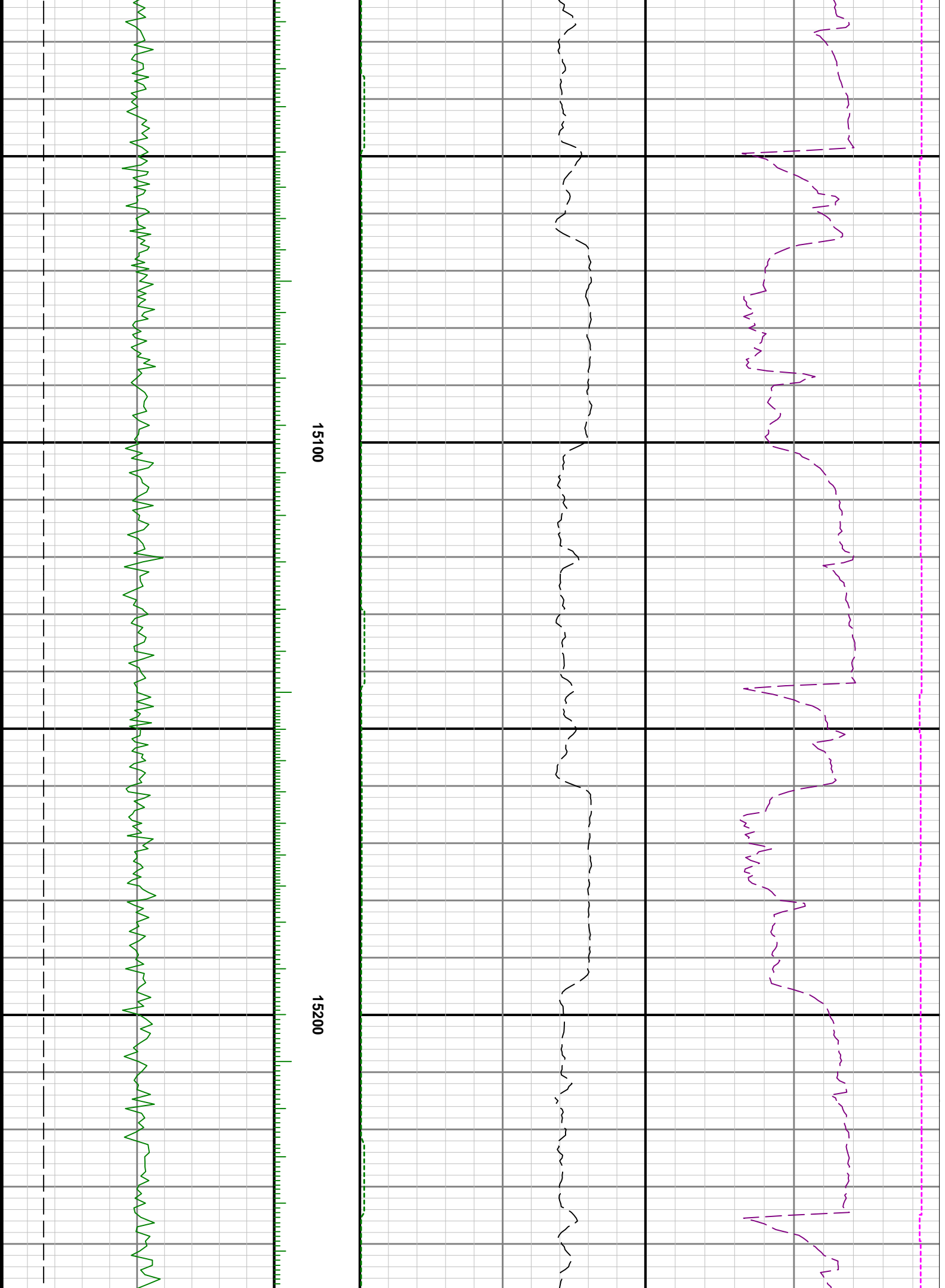
GRIM

GRTM

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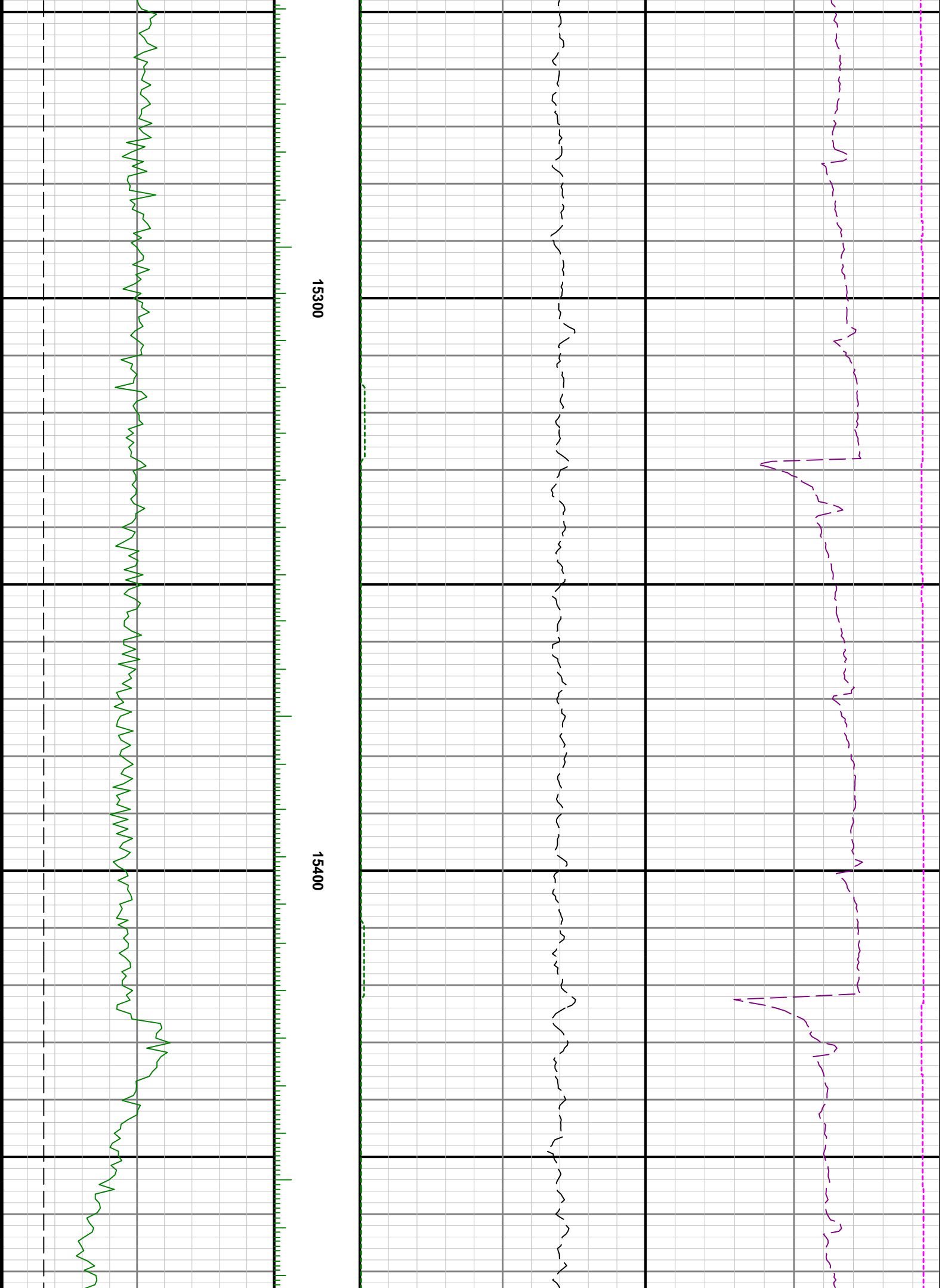
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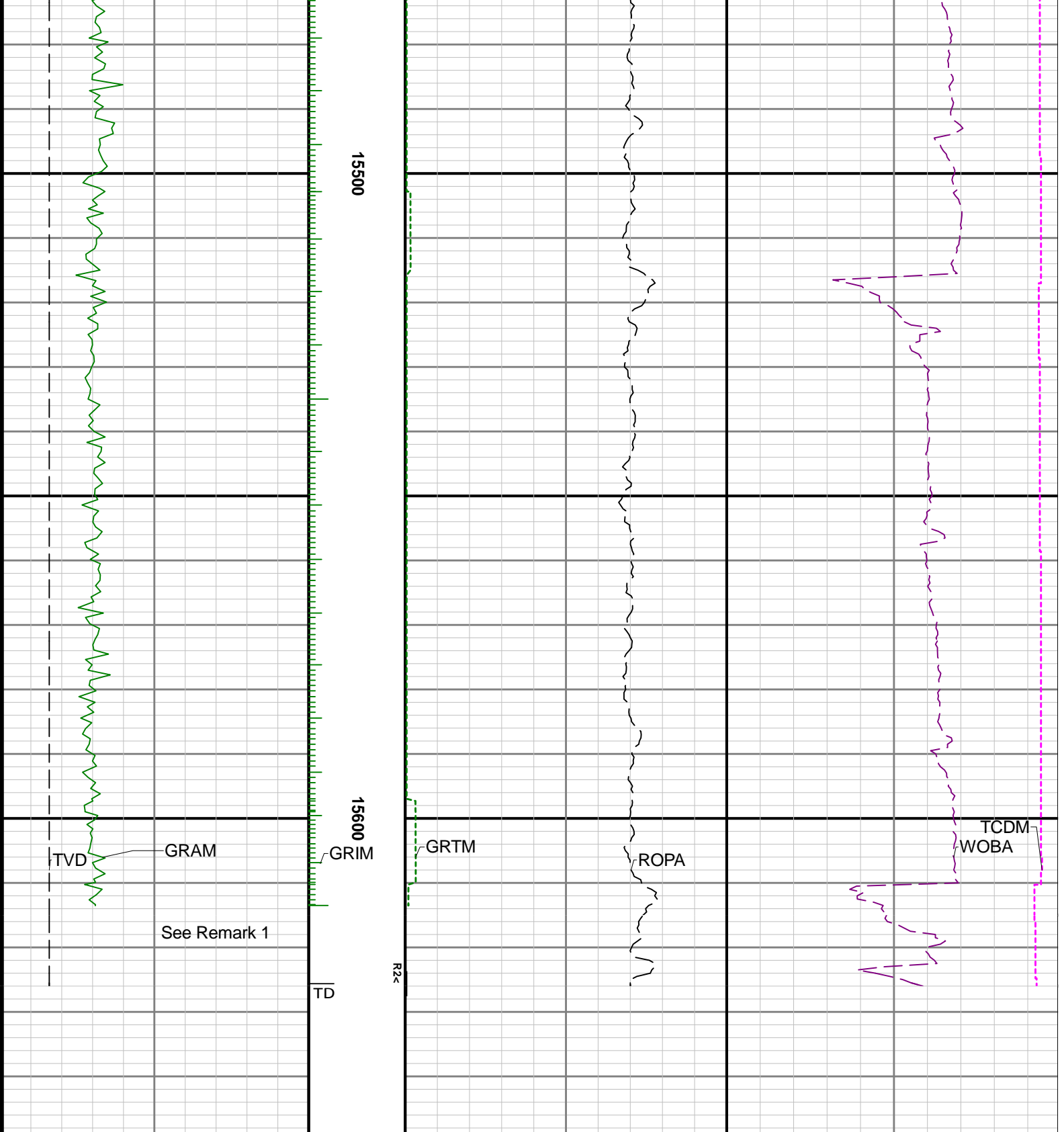
TCDM



15100

15200





Gamma Ray - Apparent 0.5 ft Average GRAM 0 300	MID 1:240 feet	Gamma Time Since Drilled GRTM 0 600	Weight On Bit, Average 1 ft Average WOBA 0 50
API True Vertical Depth TVD 8000 1500 ft		min Depth Averaged ROP 3 ft Average ROPA 1000 0 ft/h	klb Downhole Temperature TCDM 0 275 degF