


LWD MEMORY LOG											
<div></div>				Gamma Ray							
Scale:				Company: SRC Energy							
1:240 MD				Well: Falken 16N-9B-L							
Depth Reference:				Field: Weld County							
Driller's Depth				County: Weld County Country: United States							
State:				Colorado							
Status:				Surface Location:				Other Services:			
Final Print				Latitude: 040° 30' 01.537" N Longitude: 104° 44' 09.416" W				Wellbore Survey			
API No: 05-123-45120				SEC: 11 TWN: 6N RGE: 66W							
Job ID: 8728295				Permanent Datum (P.D.): Ground Level				Elevation: 4810.00 ft			
Log Measured From: Rig Floor				Above P.D.				Elev. KB: 4835.00 ft Elev. DF: 4810.00 ft Elev. GL:			
Dates				Interval Logged				Magnetic Field Reference			
Date From: 2017-11-26				Top: (ft) 1820.00				Azi Reference North: True Dip Angle: (deg) 66.95			
Date To: 2017-12-02				Bottom: (ft) 19002.00				Total Magnetic Field Strength: (nT) 52478			
Spud Date: 2017-09-10								Mag to Reference North Correction: (deg) 7.54 E			
Borehole Record											
Casing Record											
Hole Size (in)		From (ft)		To (ft)		Size (in)		Weight (lb/ft)		From (ft) To (ft)	
13.500		25.00		1820.00		9.625		36.00		25.00 1801.00	
8.500		1820.00		19002.00							
Mud Record											
Deviation Record											
Type		From (ft)		To (ft)		Hole Size (in)		Interval (ft)		Inc Az (Start) Inc Az (End)	
Water Based Mud		135.00		1820.02		13.500		1685.02		0.30 337.16 16.01 128.62	
Diesel-Oil Based Mud		1801.00		19002.00		8.500		17201.00		16.01 128.62 17.16 127.68	
Acquisition System											
Baker Hughes Cadence				Software Version				Other			
PlotStudio				RT 4.1 4.1.7763.3				Rig: PD 562 Precision Drilling Contractor: RMD District: Unit: D&E			

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	ZAPS230939	Gamma (single)	9.99	53.66	8.000	3.250
1	Sensor Sub	ZAPS230939	VSS	11.23	54.90	8.000	3.250
1	Sensor Sub	ZAPS230939	Directional (mag)	11.23	54.90	8.000	3.250
1	Sensor Sub	ZAPS230939	Pressure	31.80	75.47	8.000	3.250
2	ATC_SU	14316004	Near Bit VSS	5.93	6.73	7.000	4.330
2	ATC_SU	14316004	Near Bit Inclination	5.93	6.73	7.000	4.330
2	ATC_MWD	14265696	Gamma (single)	2.74	12.90	7.000	3.250
2	ATC_MWD	14265696	Directional (mag)	12.26	22.42	7.000	3.250
3	ATC_SU	14236912	Near Bit VSS	5.93	6.73	7.000	4.330
3	ATC_SU	14236912	Near Bit Inclination	5.93	6.73	7.000	4.330
3	ATC_MWD	12694813	Gamma (single)	2.20	12.35	7.000	3.250
3	ATC_MWD	12694813	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

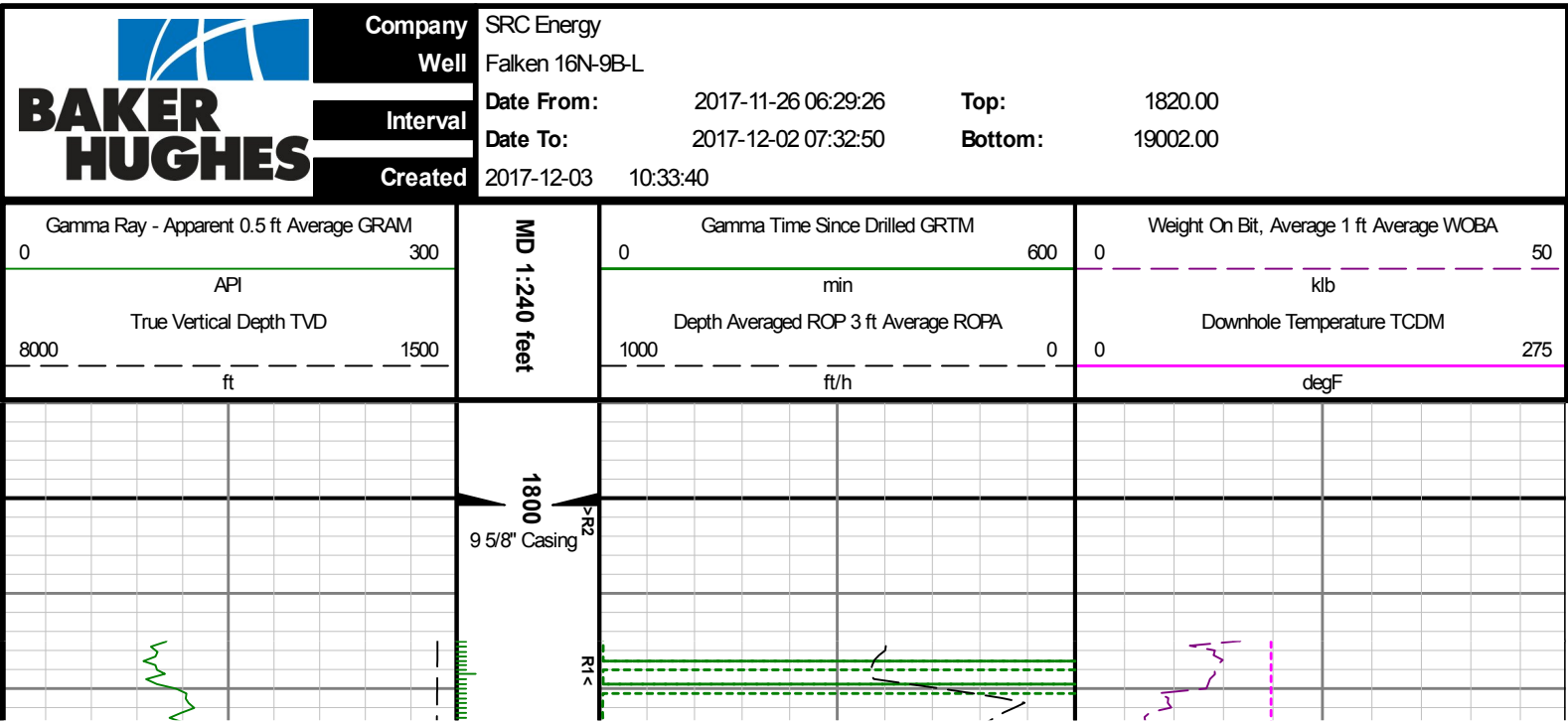
1	Depth measurements obtained from a depth control system not supplied or operated by Baker Hughes. Due to lack of control by Baker Hughes logging engineers, depth calibrations and measurements could not be independently verified.
2	Baker Hughes LWD Run 1 utilized 8 inch NaviTrak service (Directional only) behind a 13 1/2 inch bit and steerable assembly from surface to 1820 feet MD (surface to 1777 feet TVD). No logging data was acquired during this run.
3	Gamma Ray Apparent (GRAM) is presented 0 to 300 API per customer request.
4	Baker Hughes LWD Runs 2 and 3 utilized 6 ¾ inch NaviGamma services (Gamma Ray and Directional) behind an 8 1/2 inch bit and rotary steerable assembly from 1820 to 19002 feet MD (1777 to 7105 feet TVD).

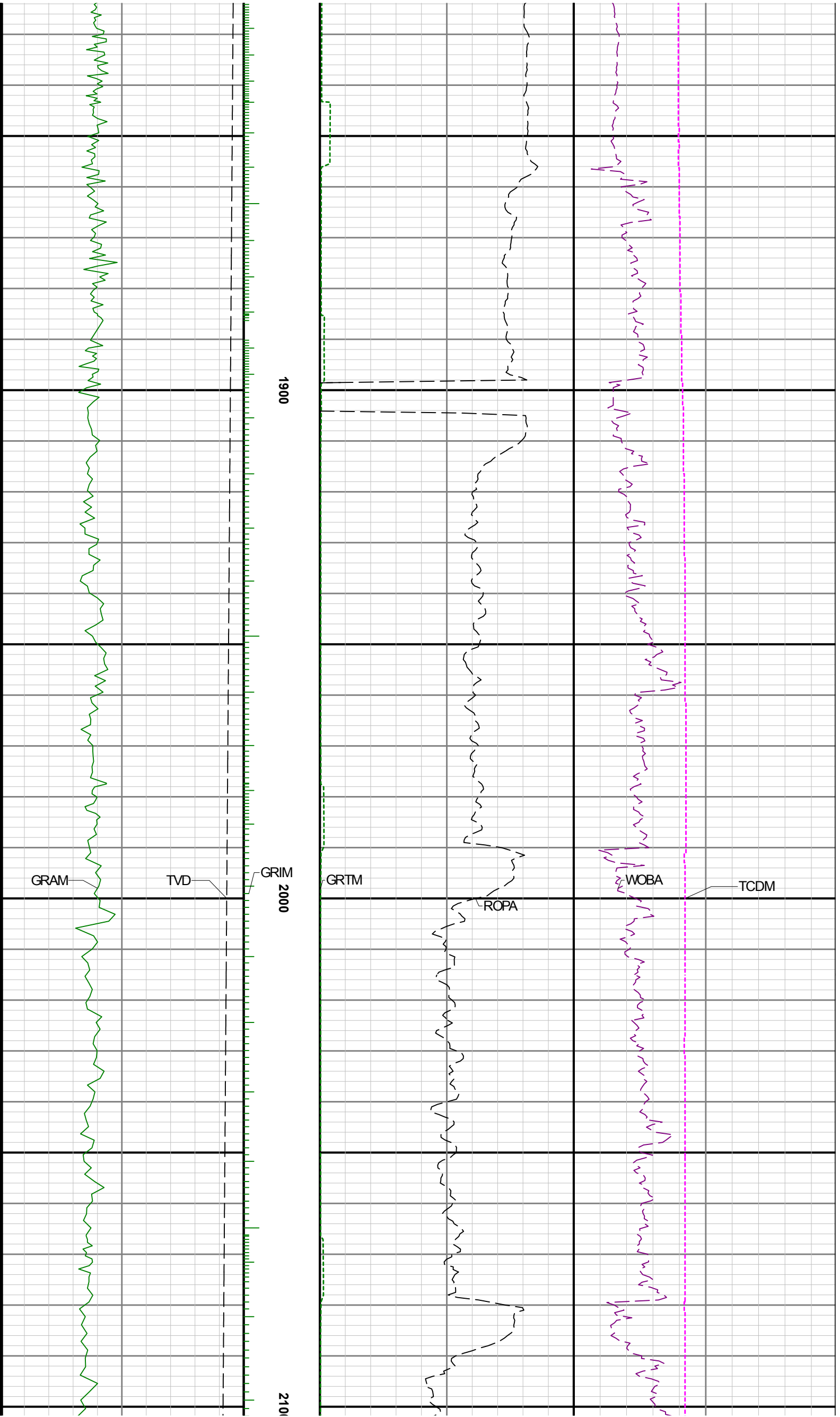
Remarks

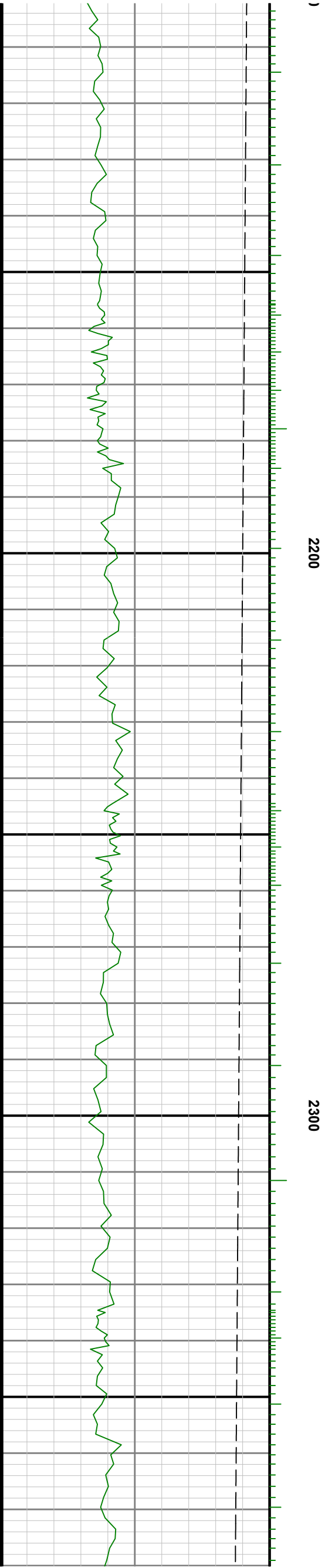
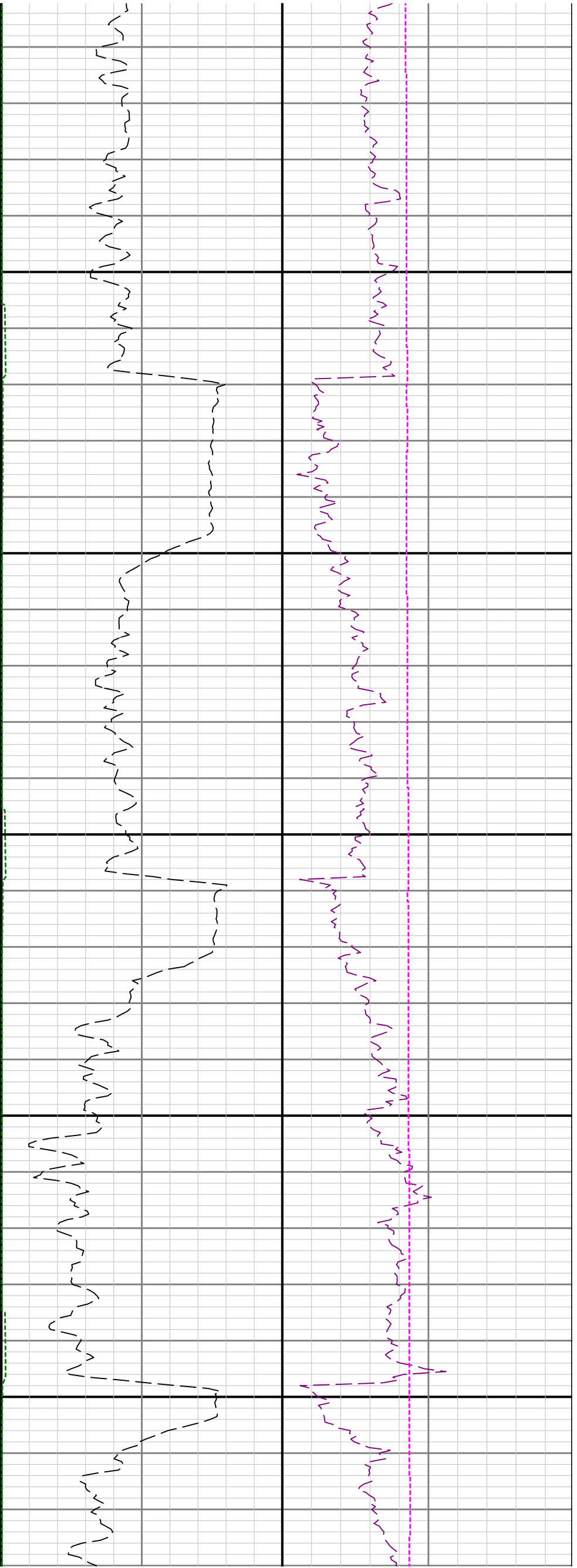
Number	Measured Depth (ft)	Hole Section (in)	Run No.	Remark
1	15657.00	8.500	3	The interval from 15651 to 15665 feet MD (7127 feet TVD) was logged up to 50 hours after being drilled due to a trip out of the hole for fishing operations after the motor parted just above the bit box.
2	18993.00	8.500	3	The interval from 18989 to 19002 feet MD (7105 feet TVD) was not logged due to sensor to bit offset at well TD.

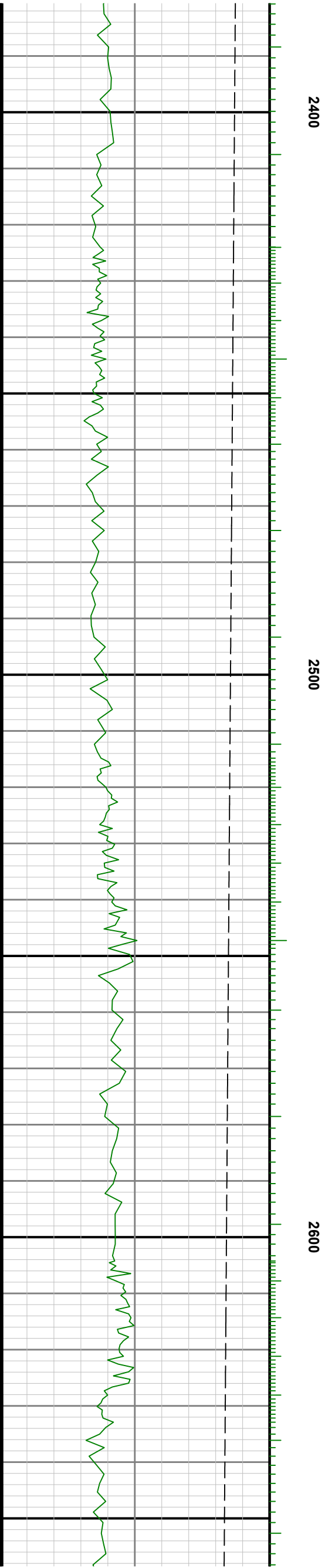
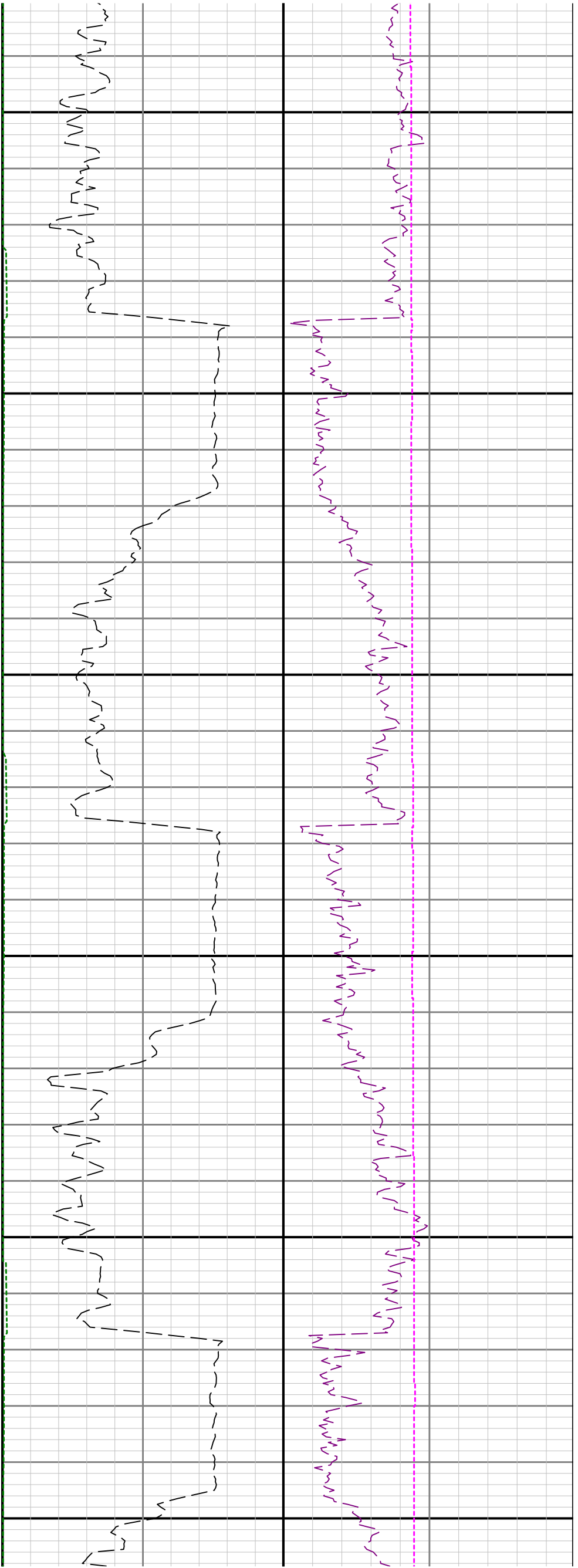
Curve Mnemonics

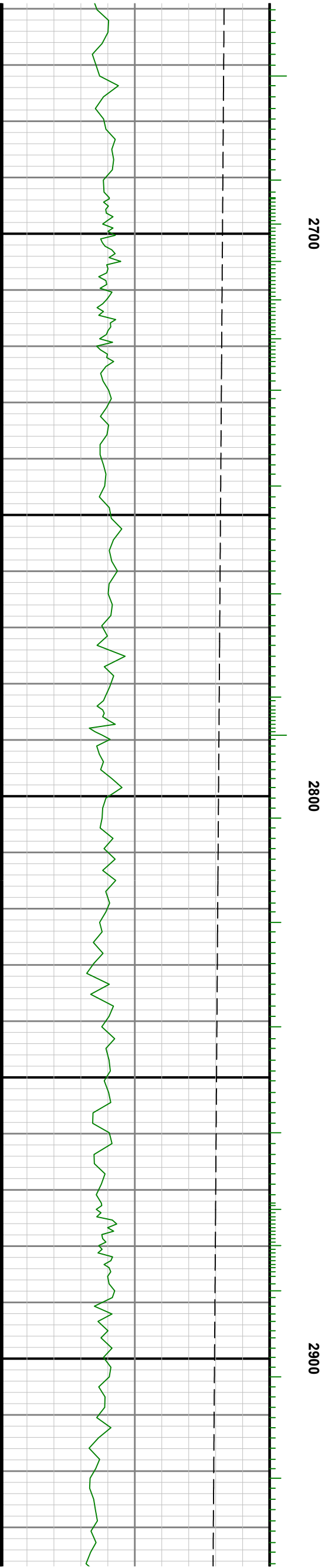
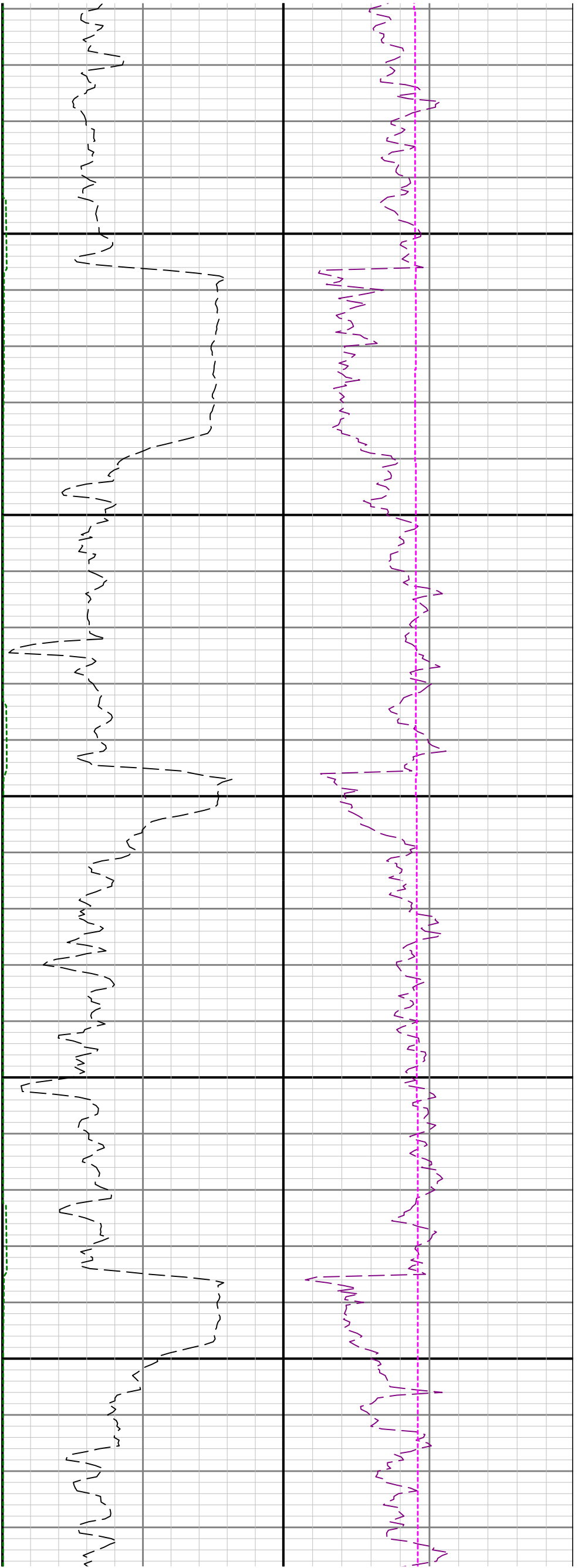
Presented Curves	Description	Units
ROPA	Depth Averaged ROP 3 ft Average	ft/h
TVD	True Vertical Depth	ft
WOBA	Weight On Bit, Average 1 ft Average	klb
GRAM	OnTrak - Gamma Ray - Apparent - Memory 0.5 ft Average	API
GRIM	OnTrak - Gamma Ray - Data Point Indicator - Memory	unitless
GRTM	OnTrak - Gamma Ray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

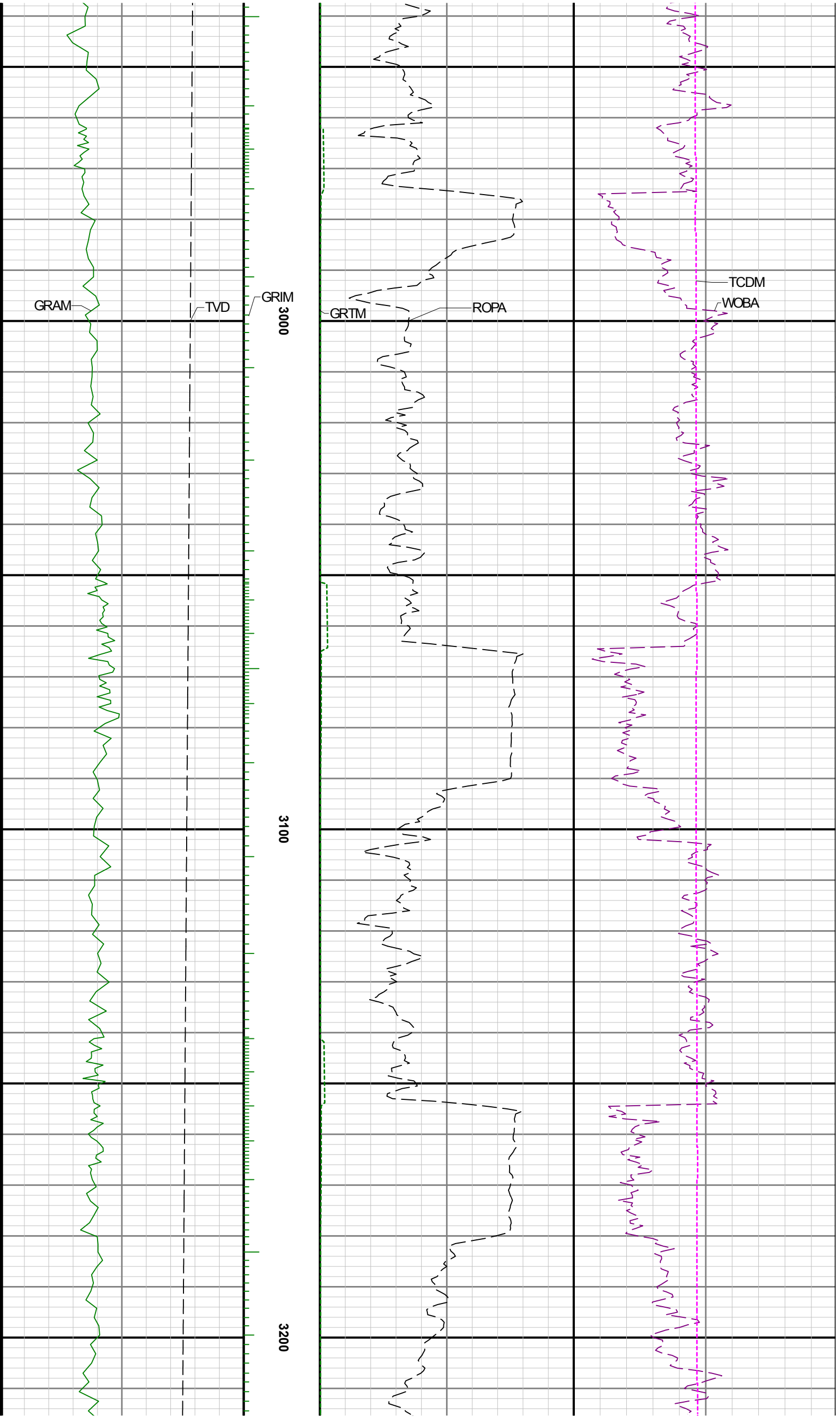


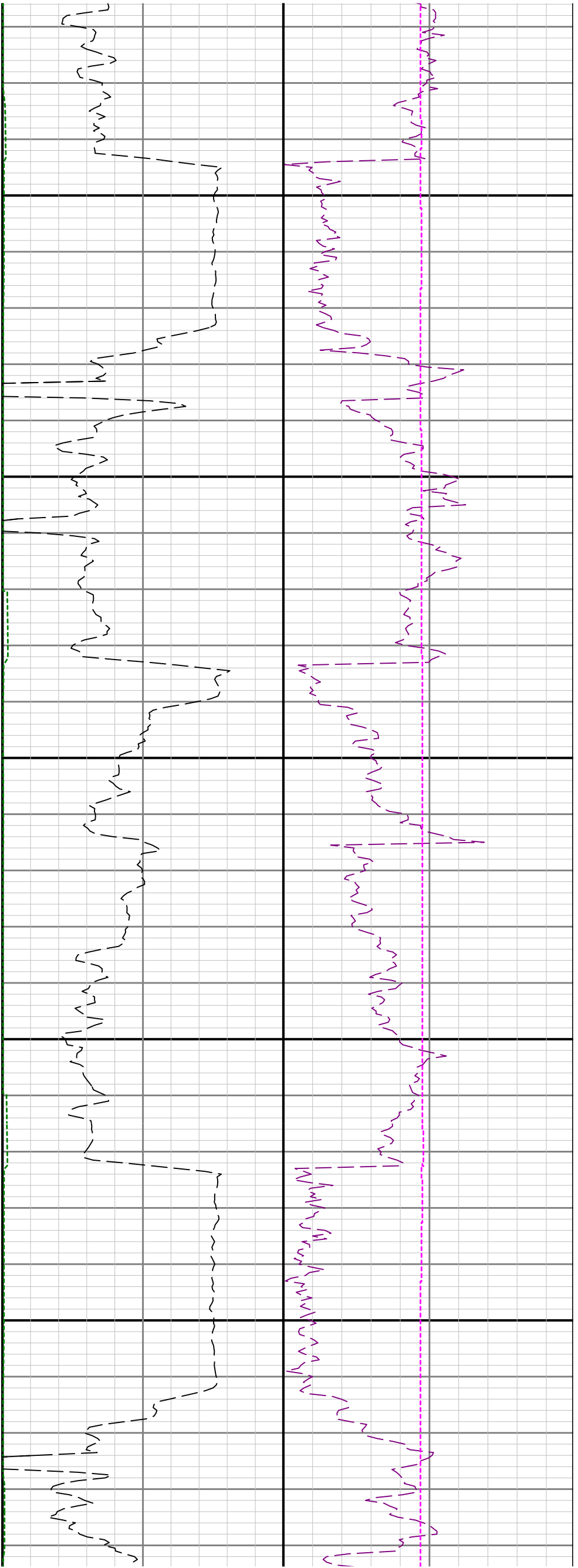






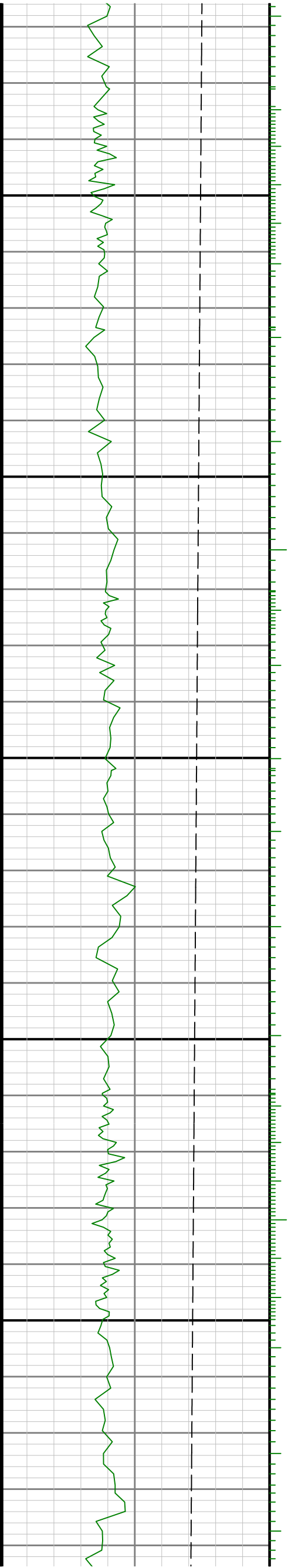


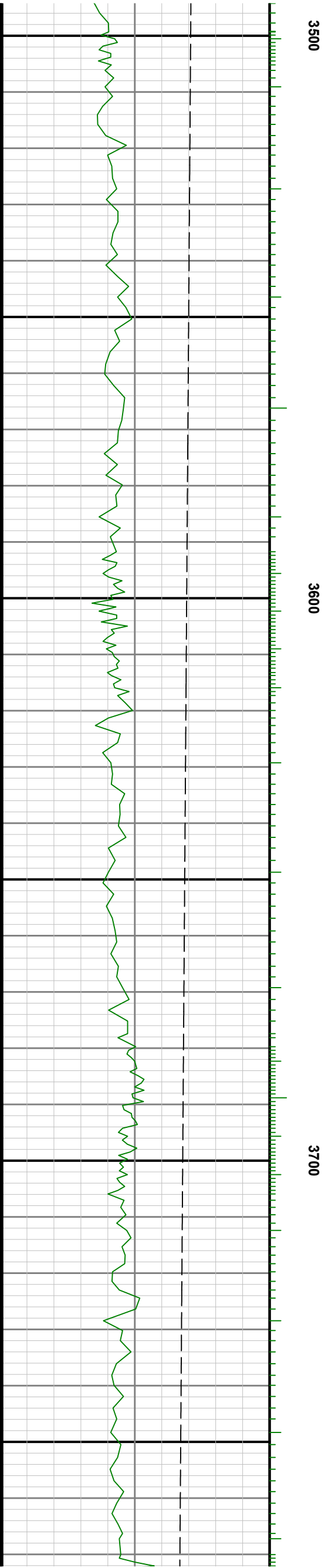
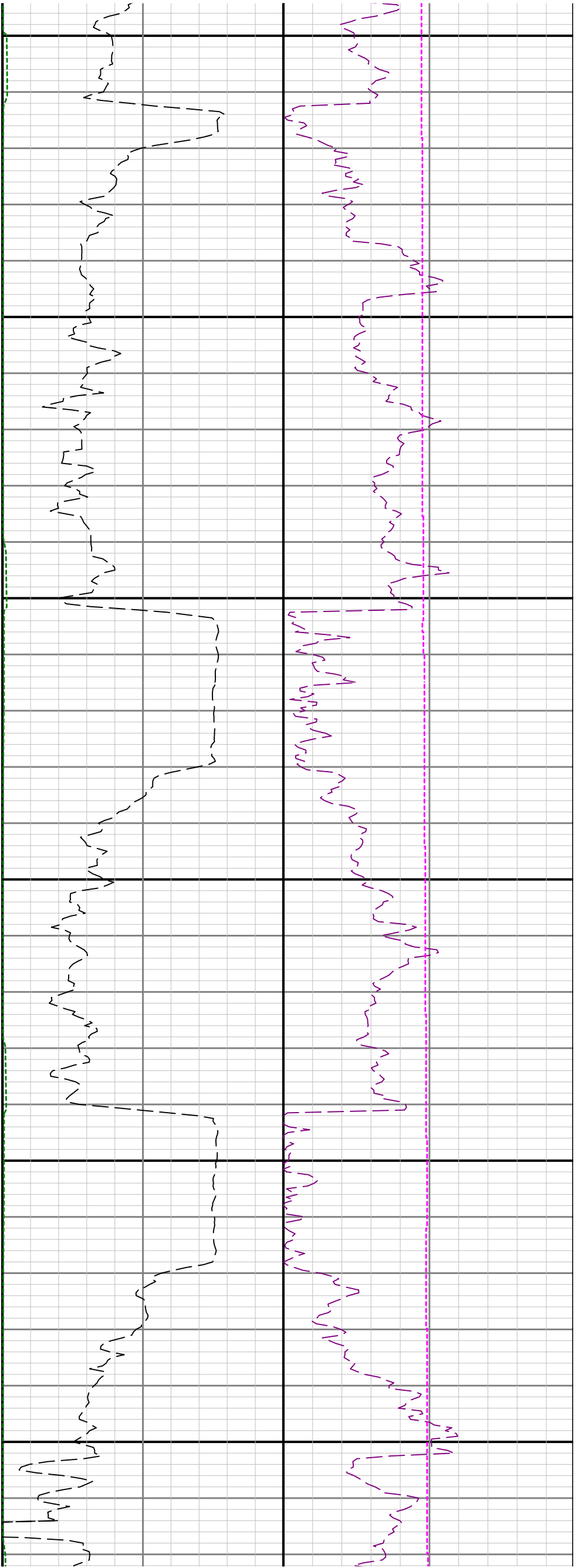


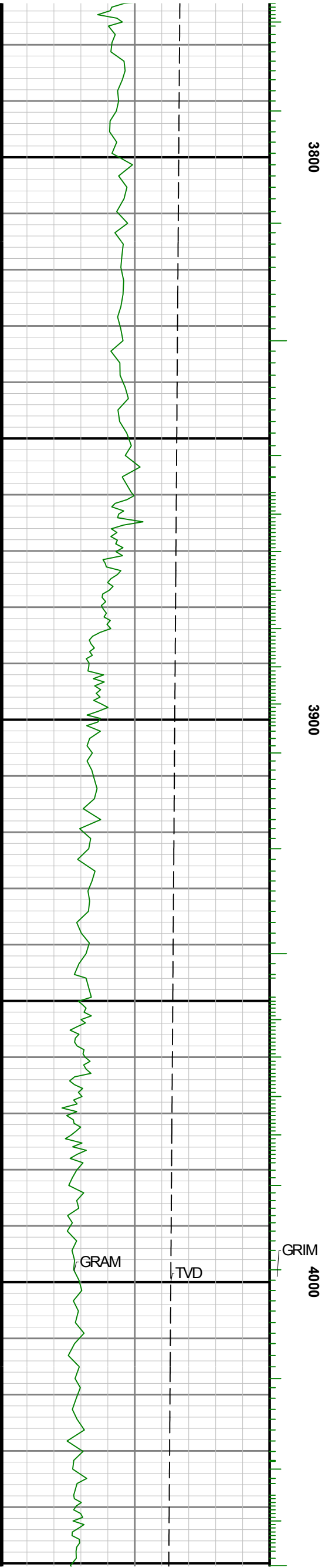
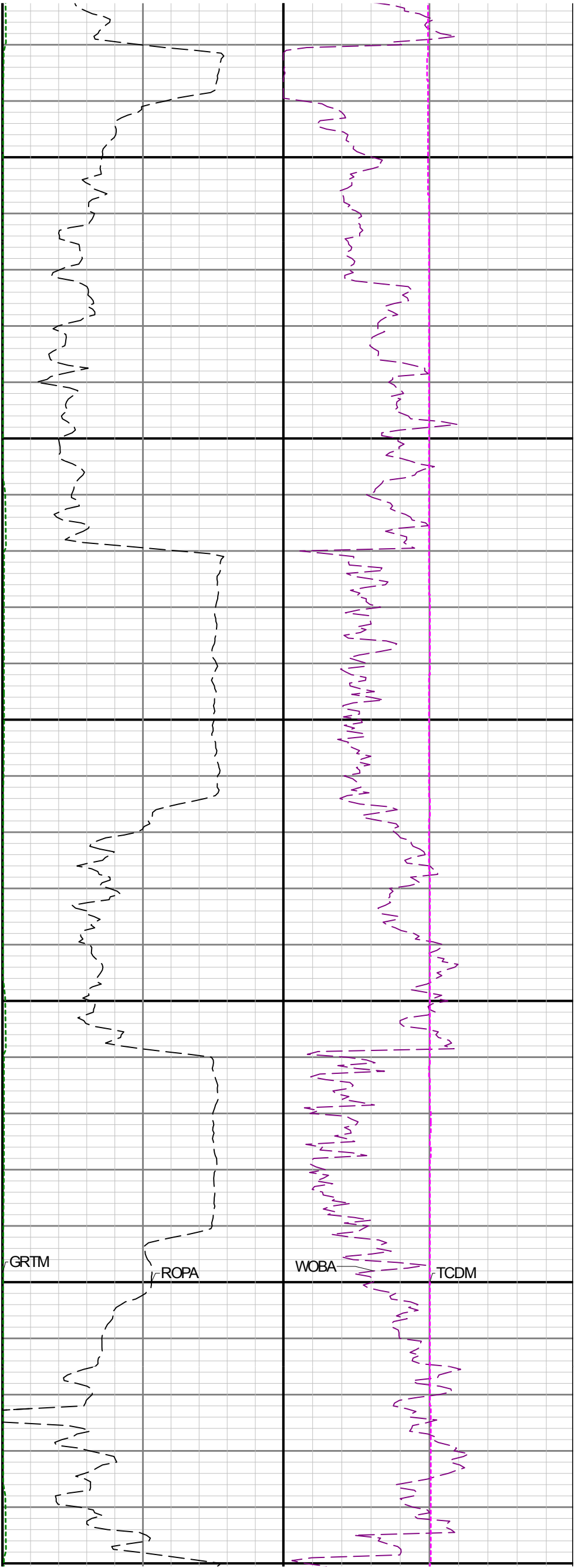


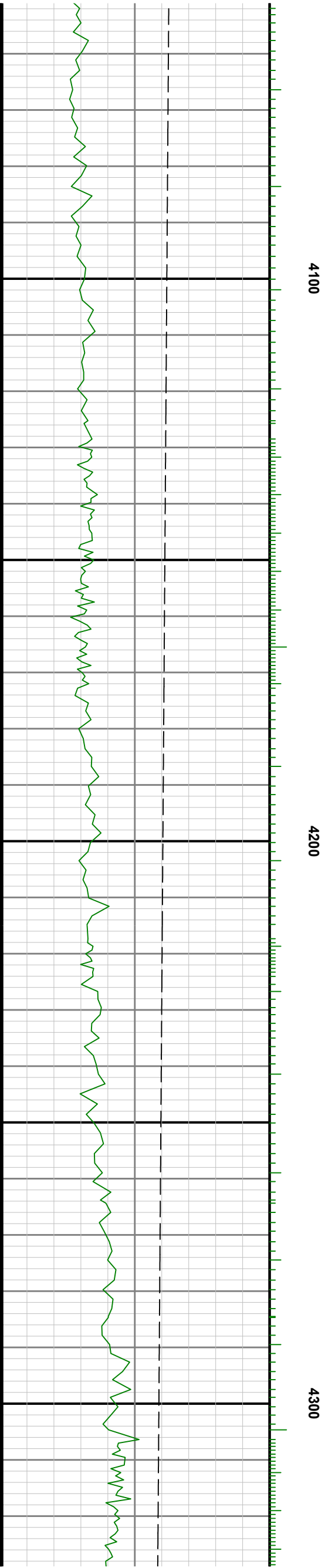
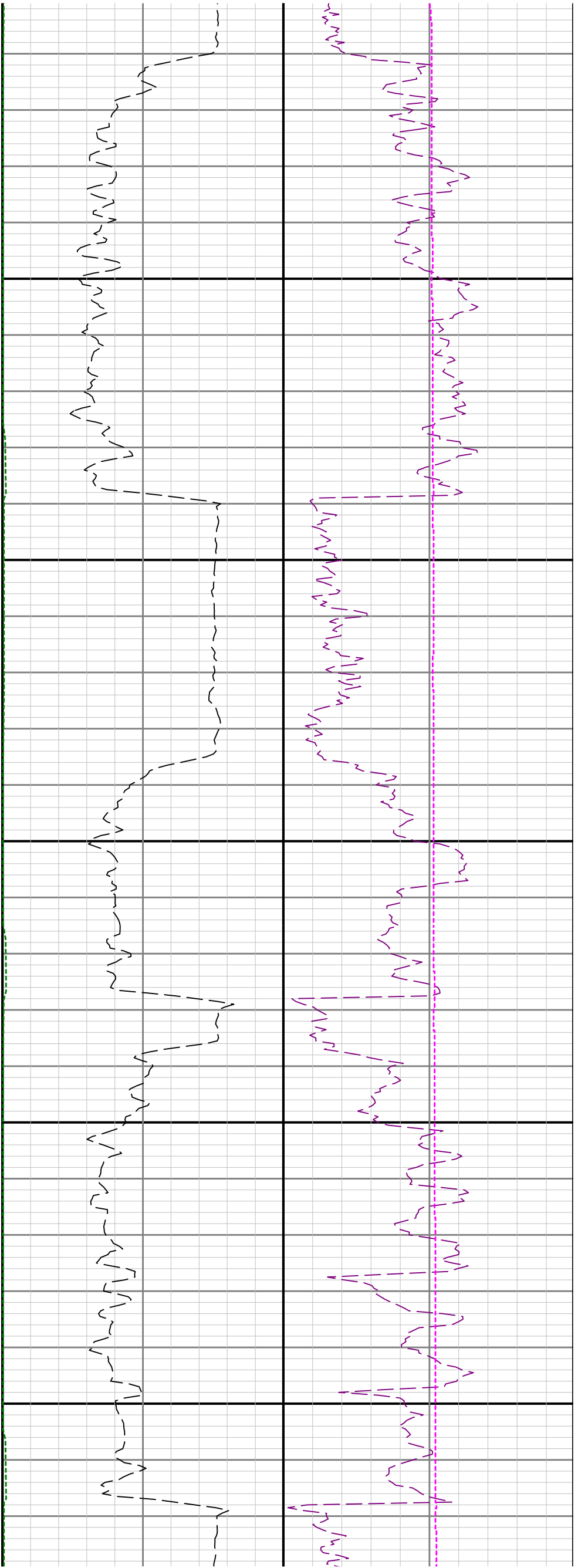
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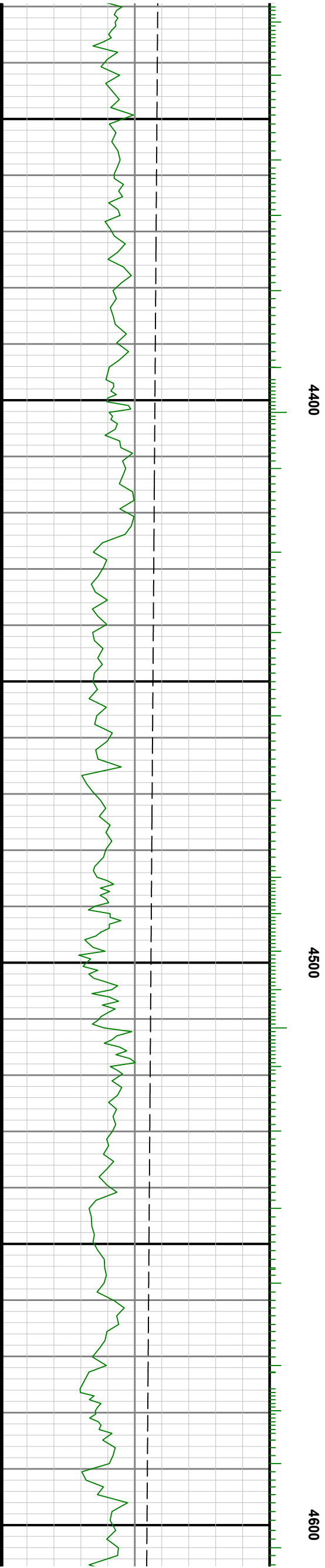
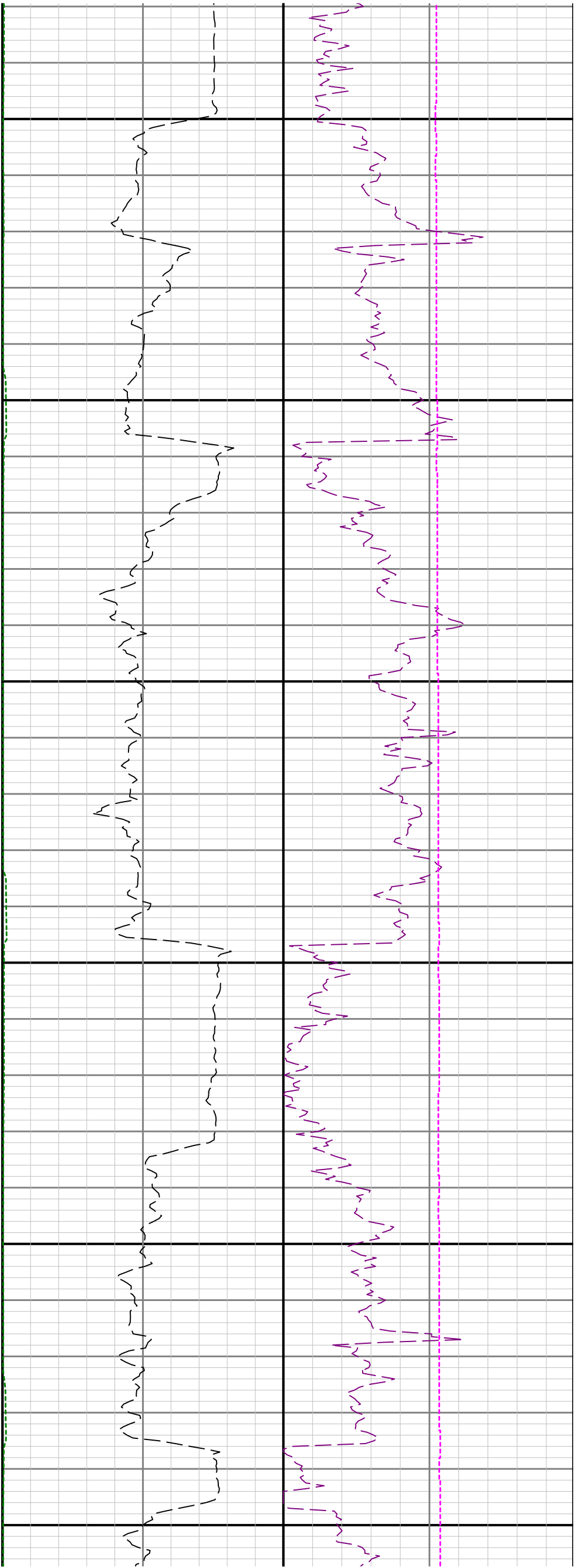
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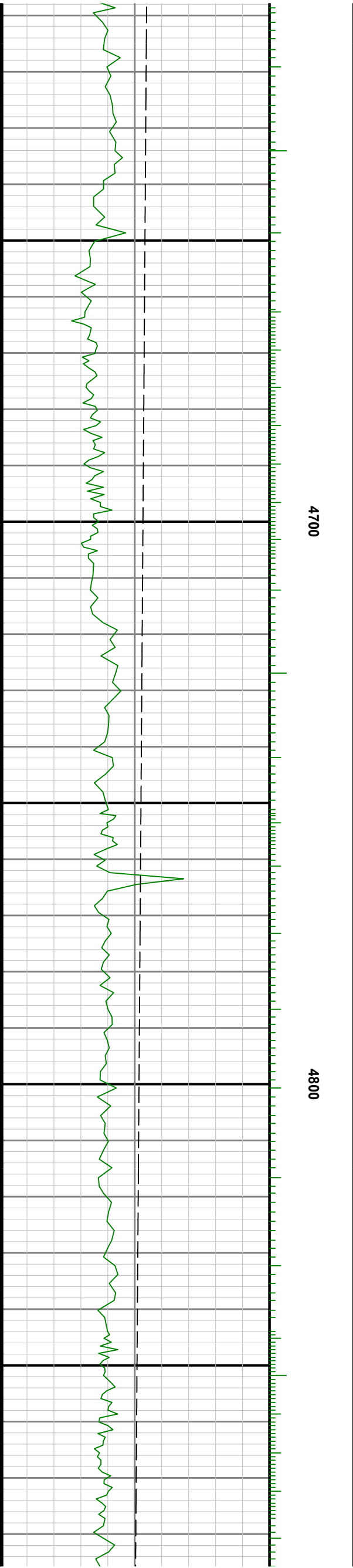
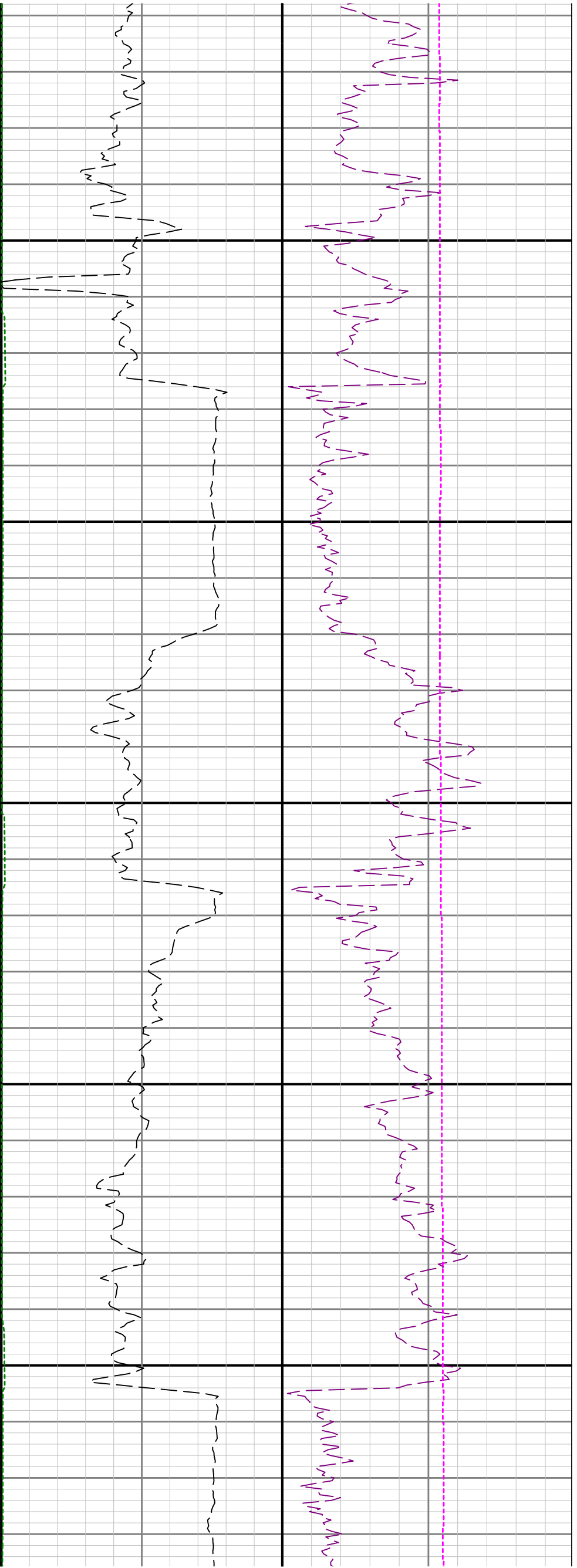


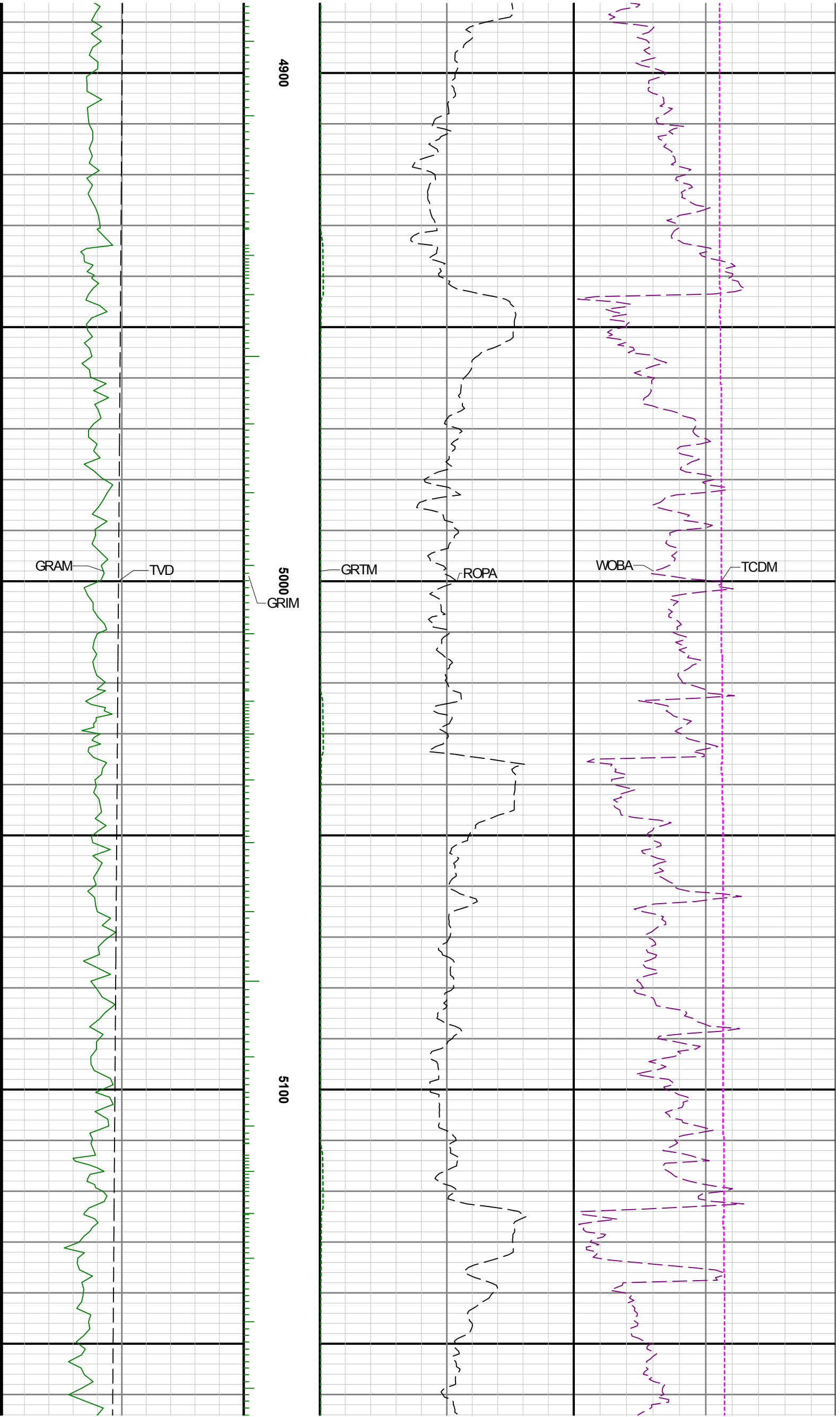


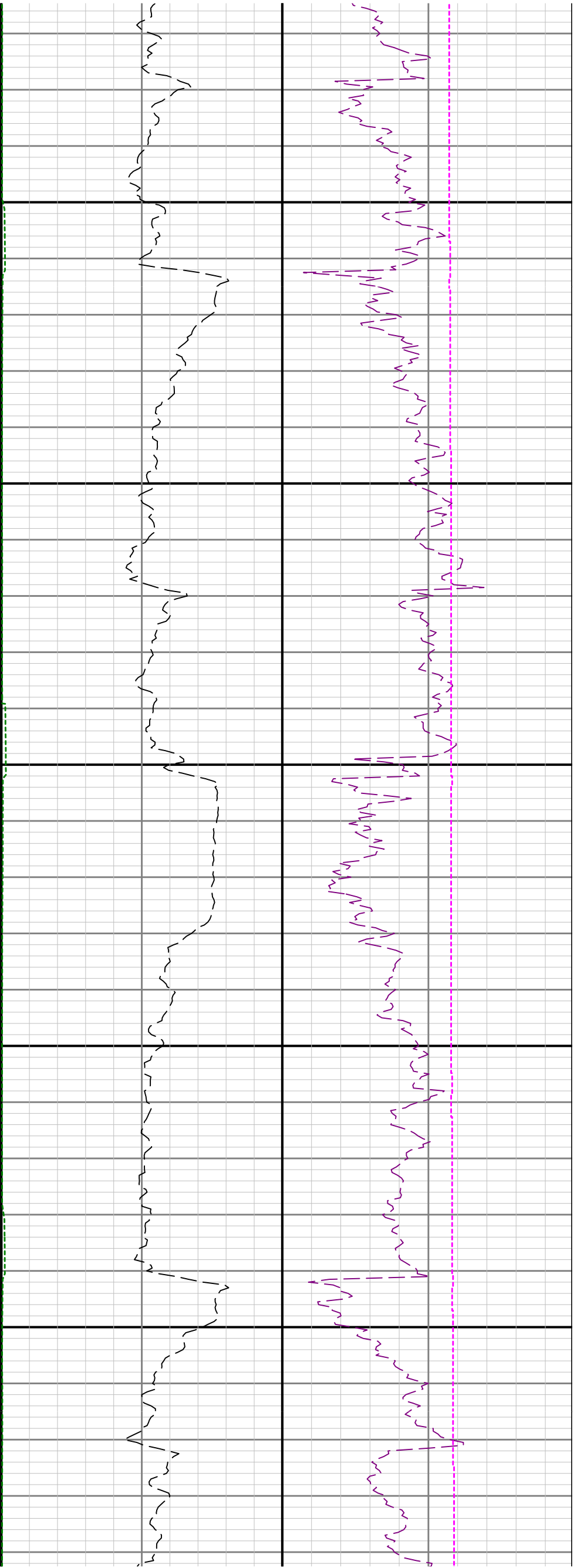








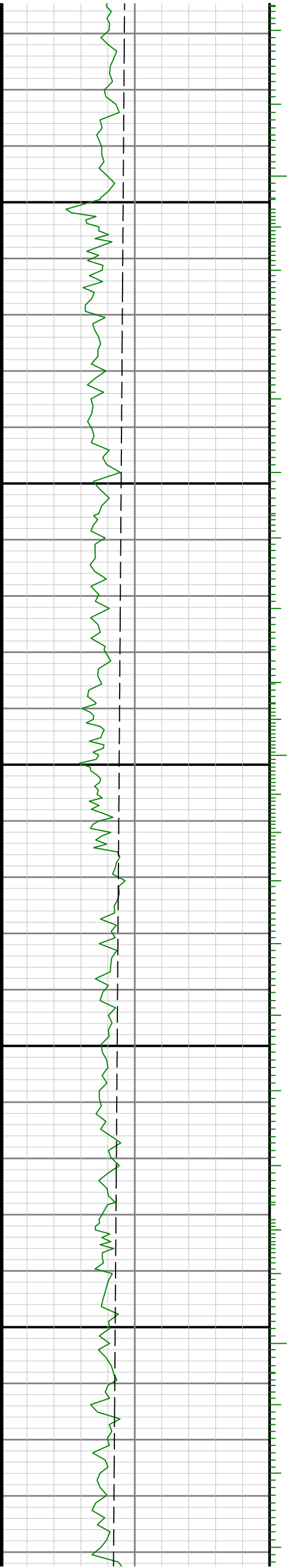


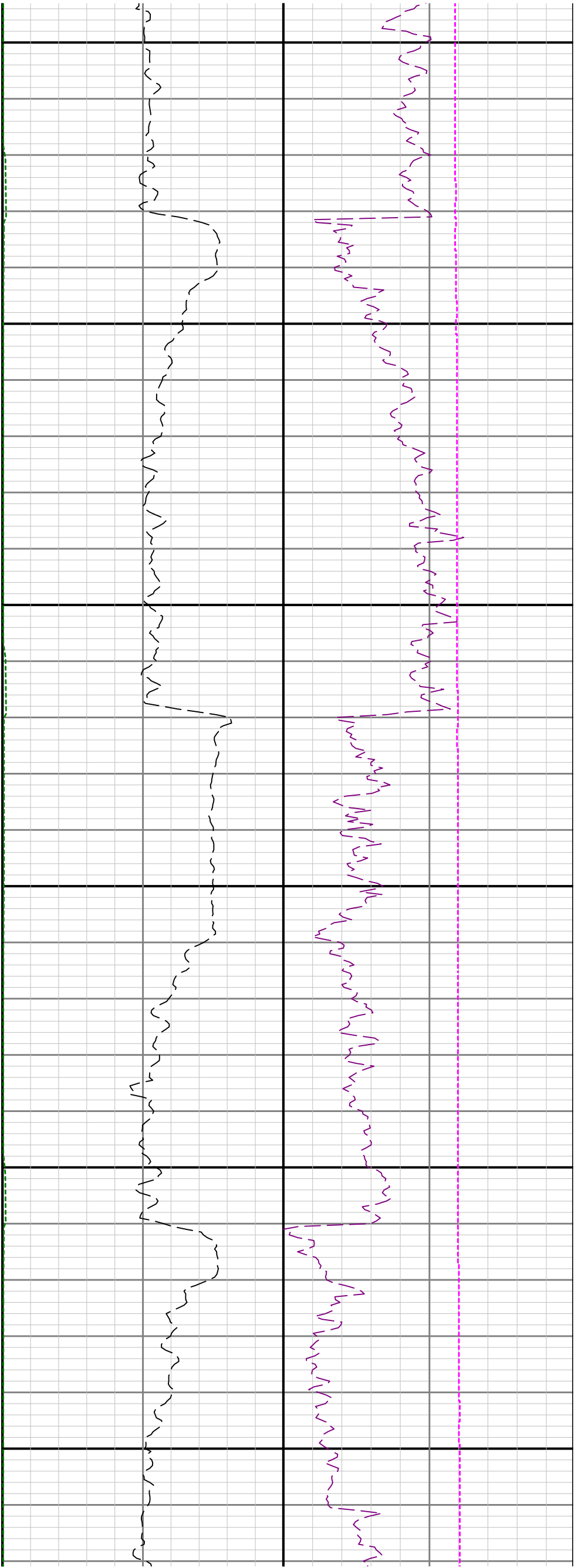


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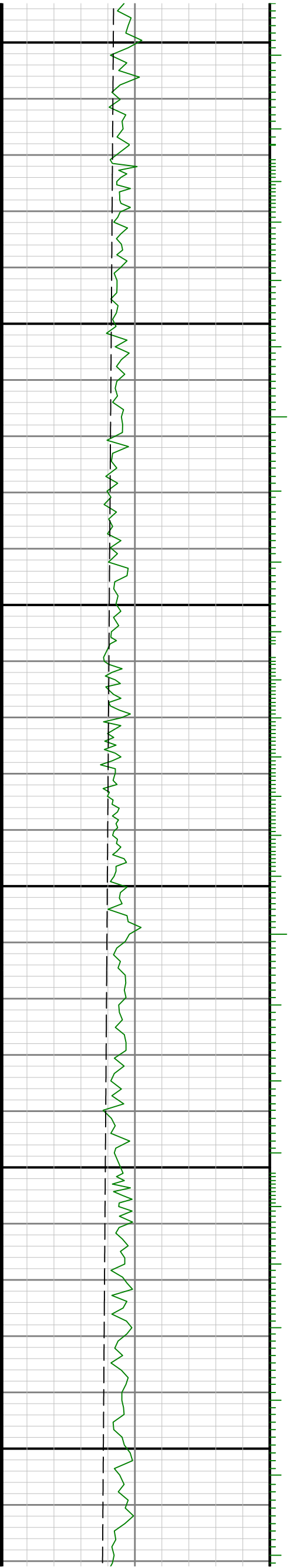


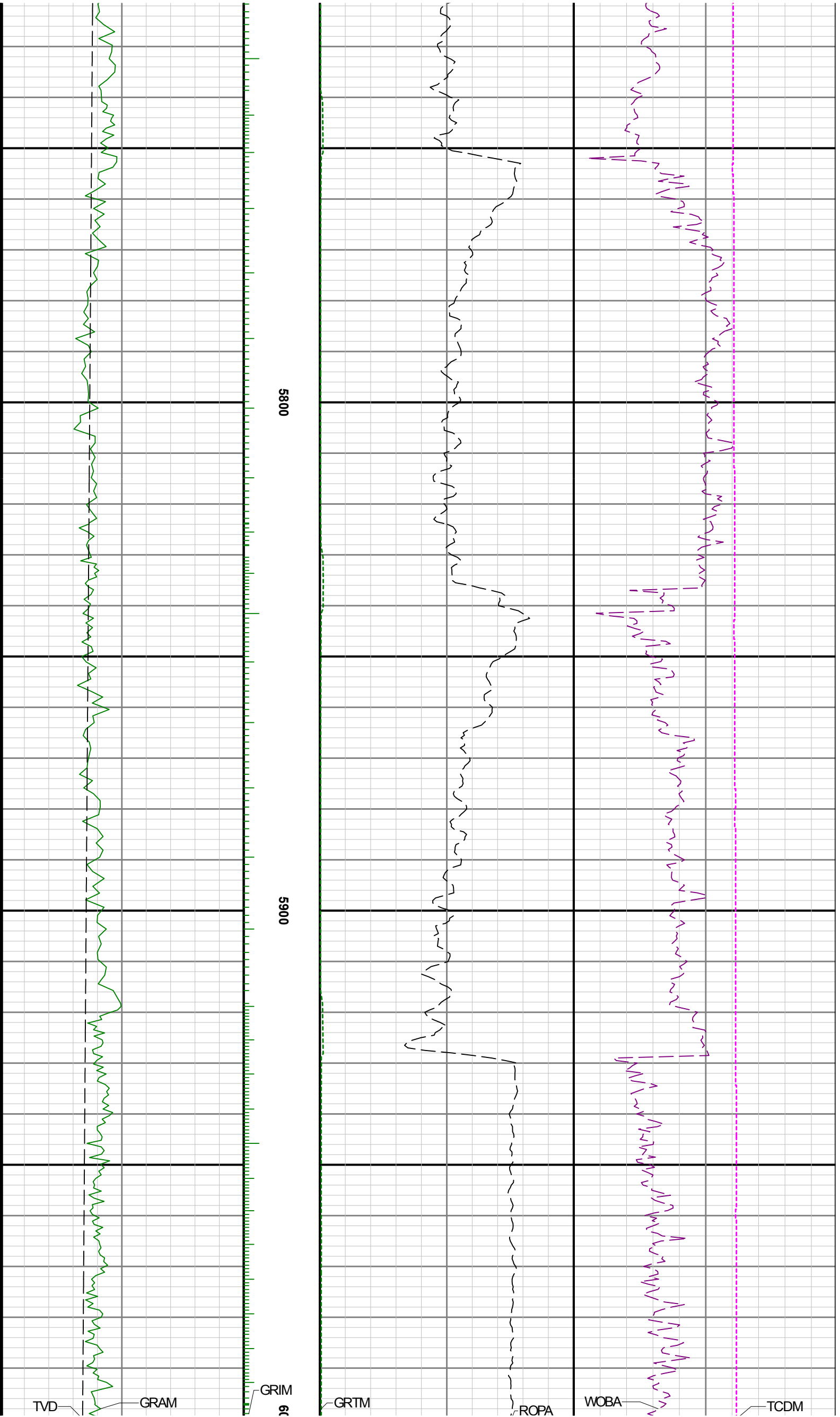


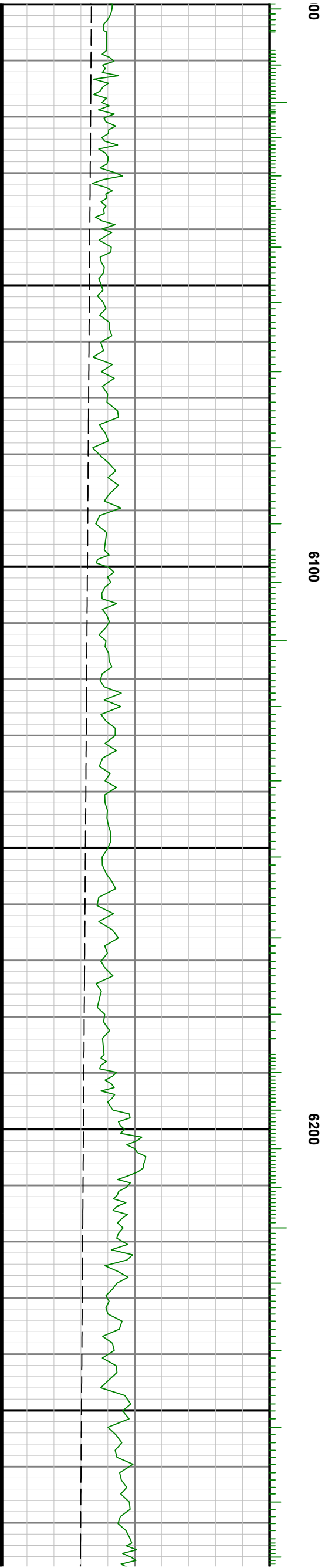
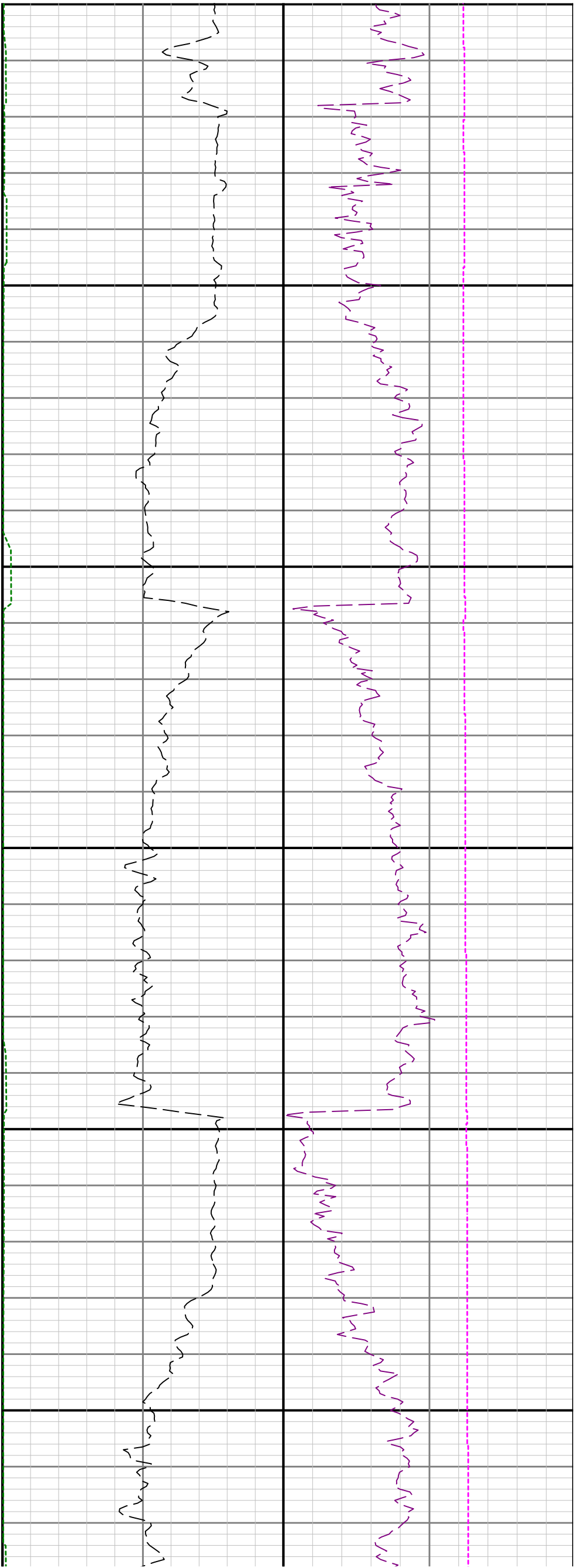
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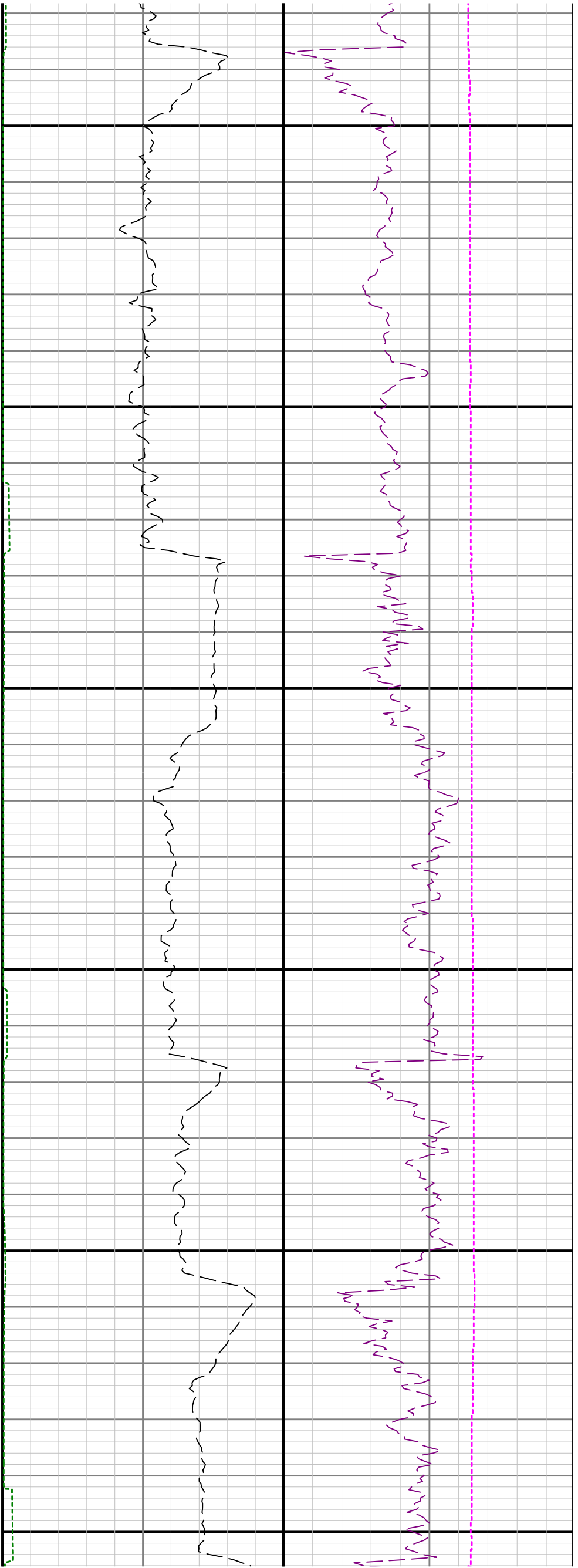
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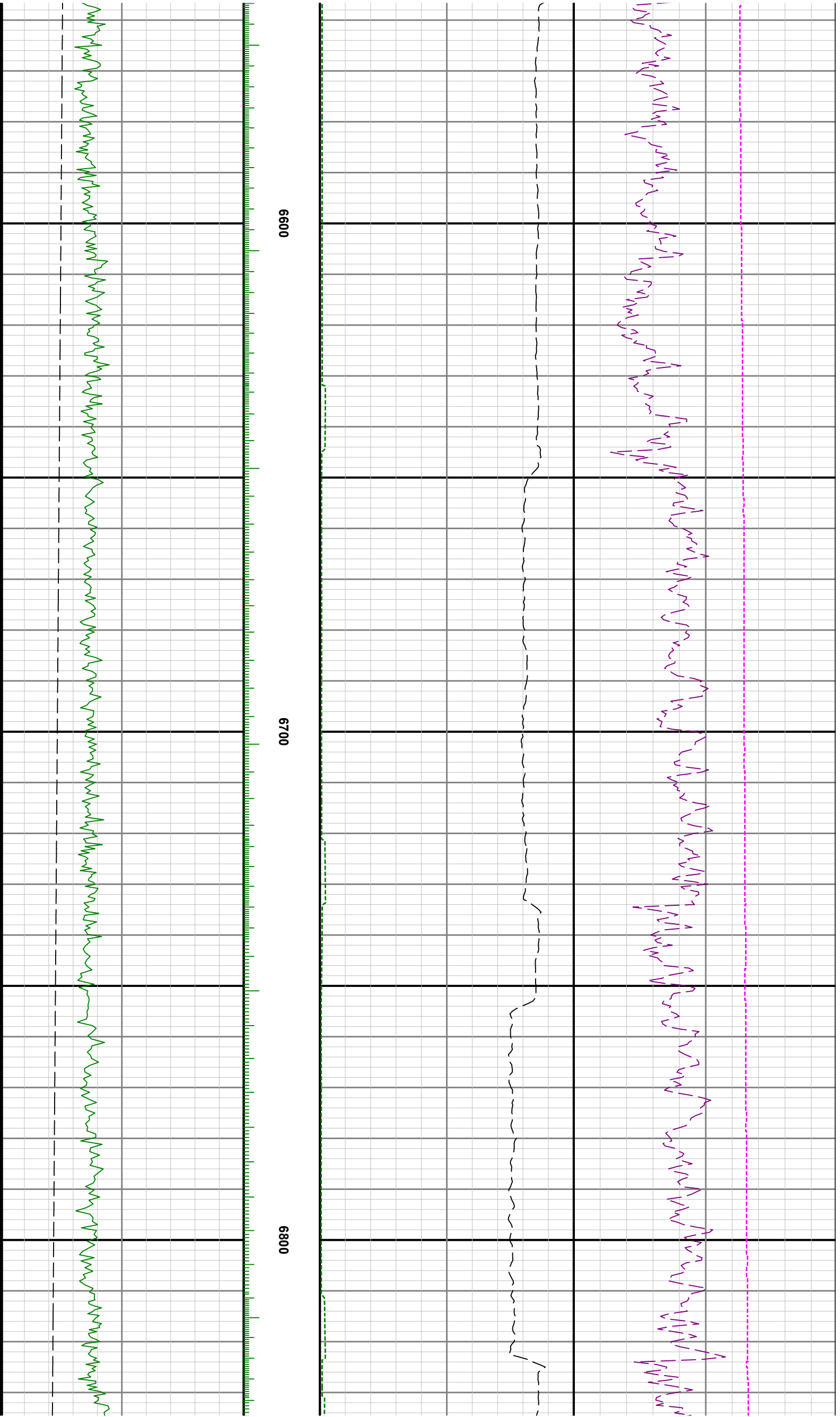


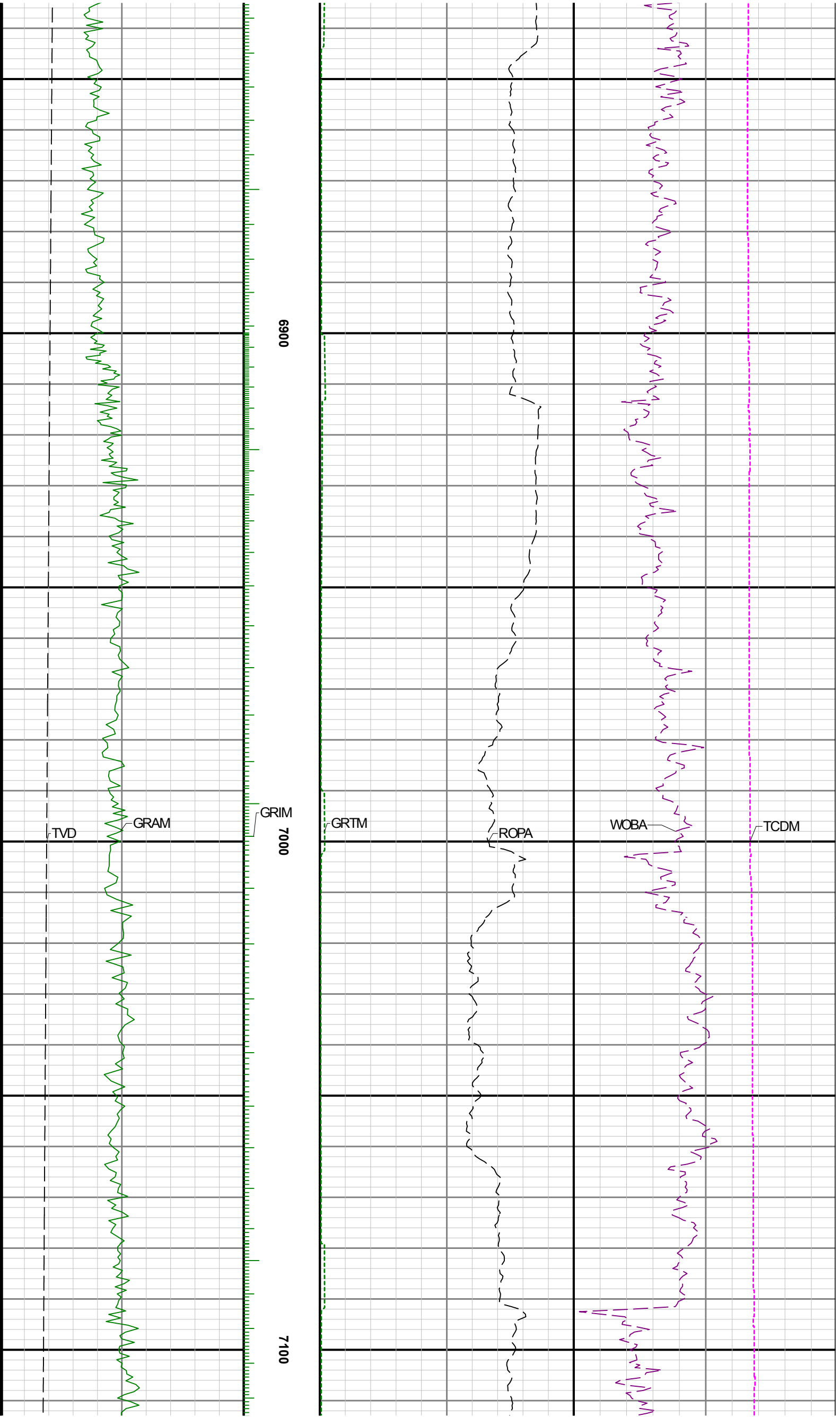


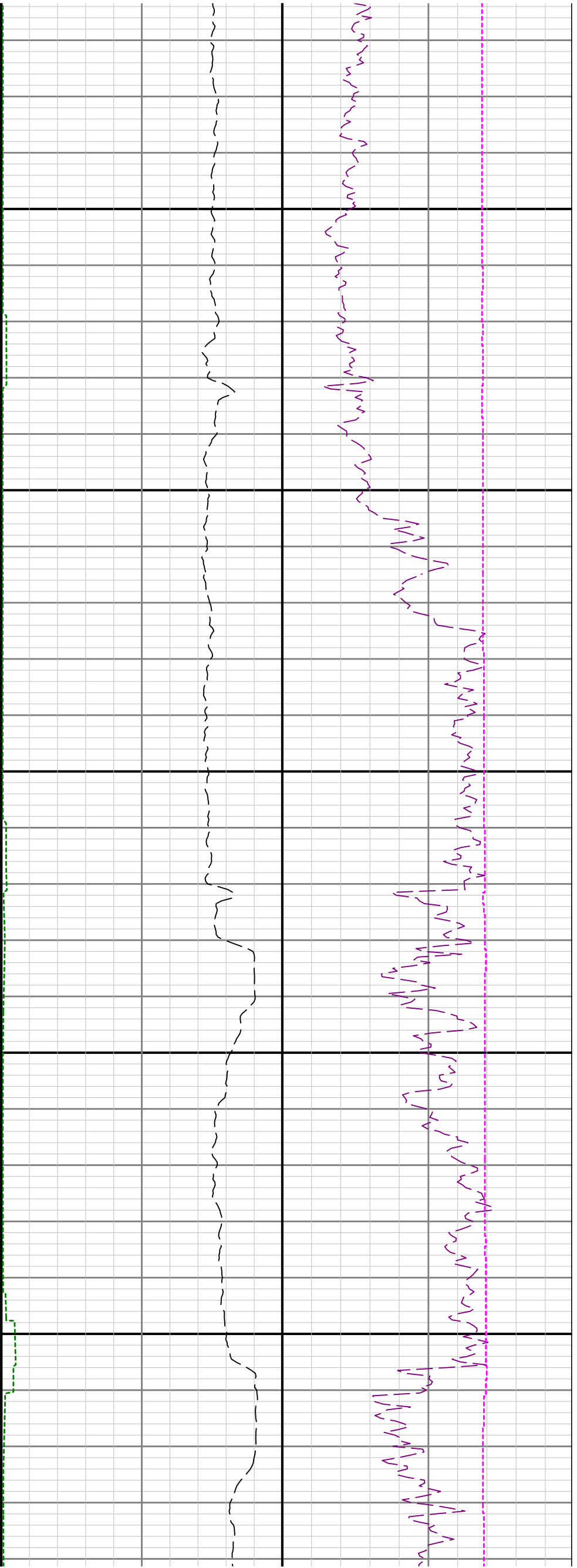
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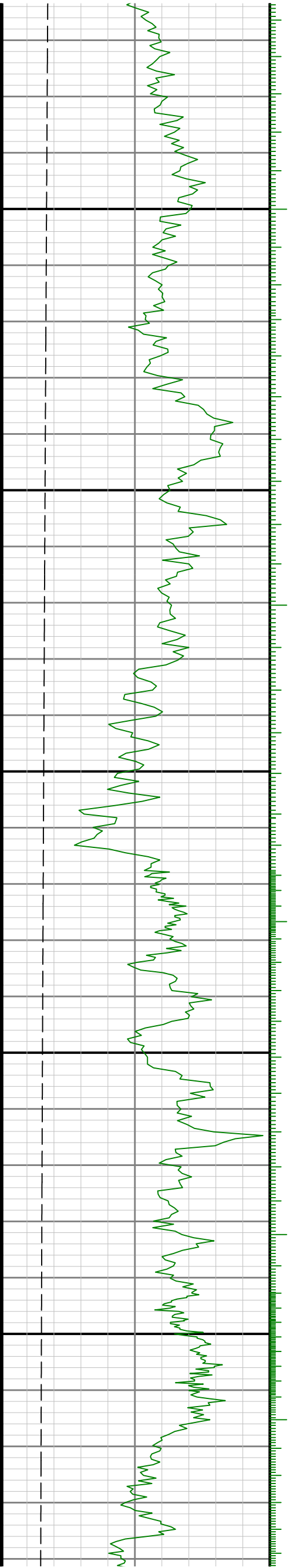


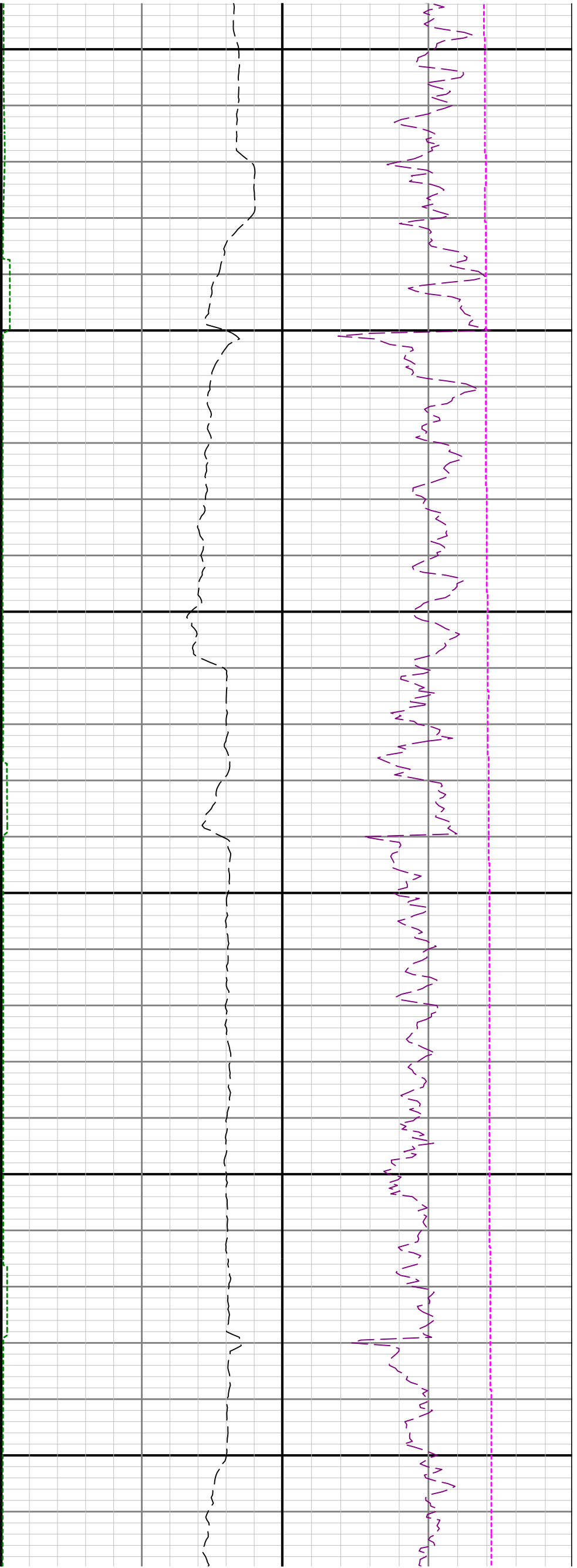




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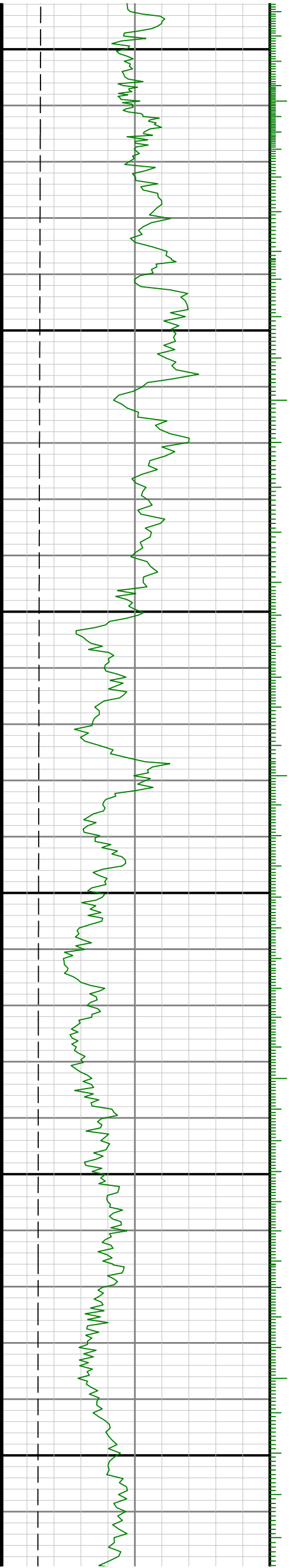


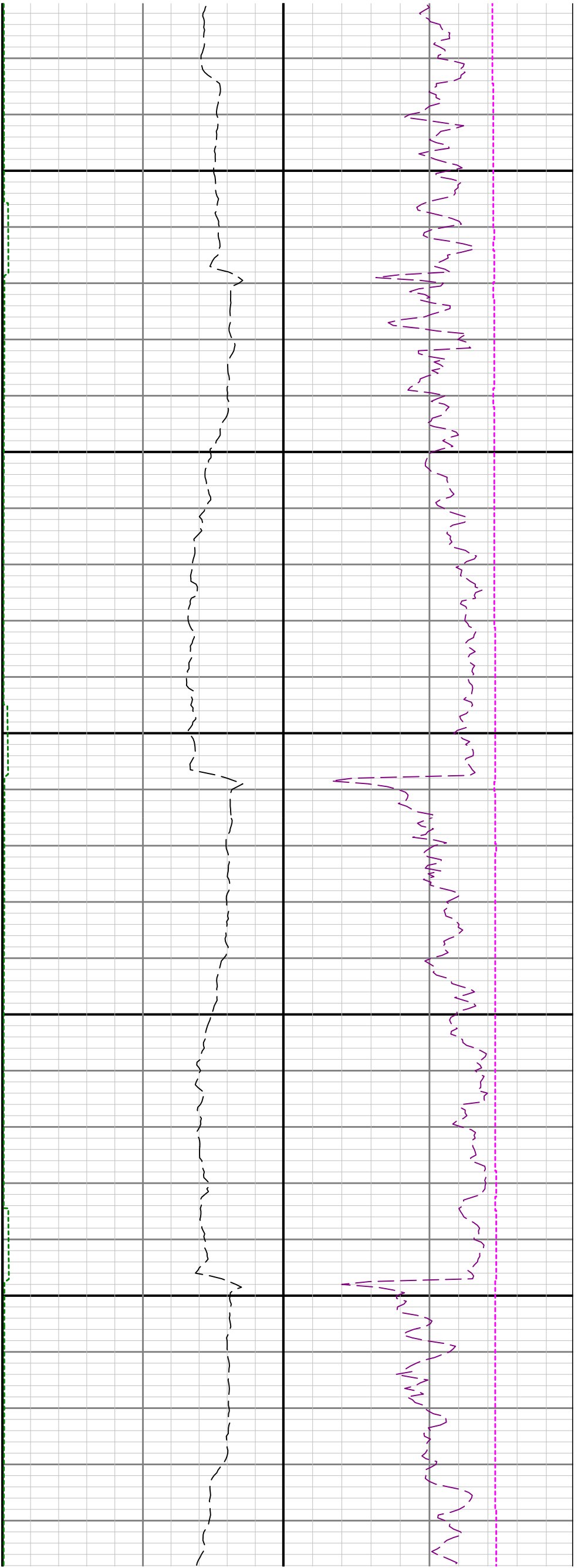


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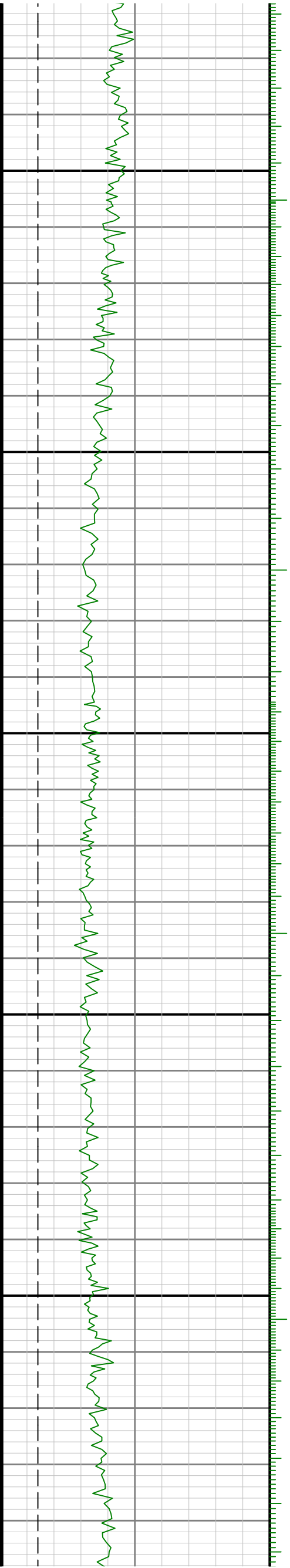


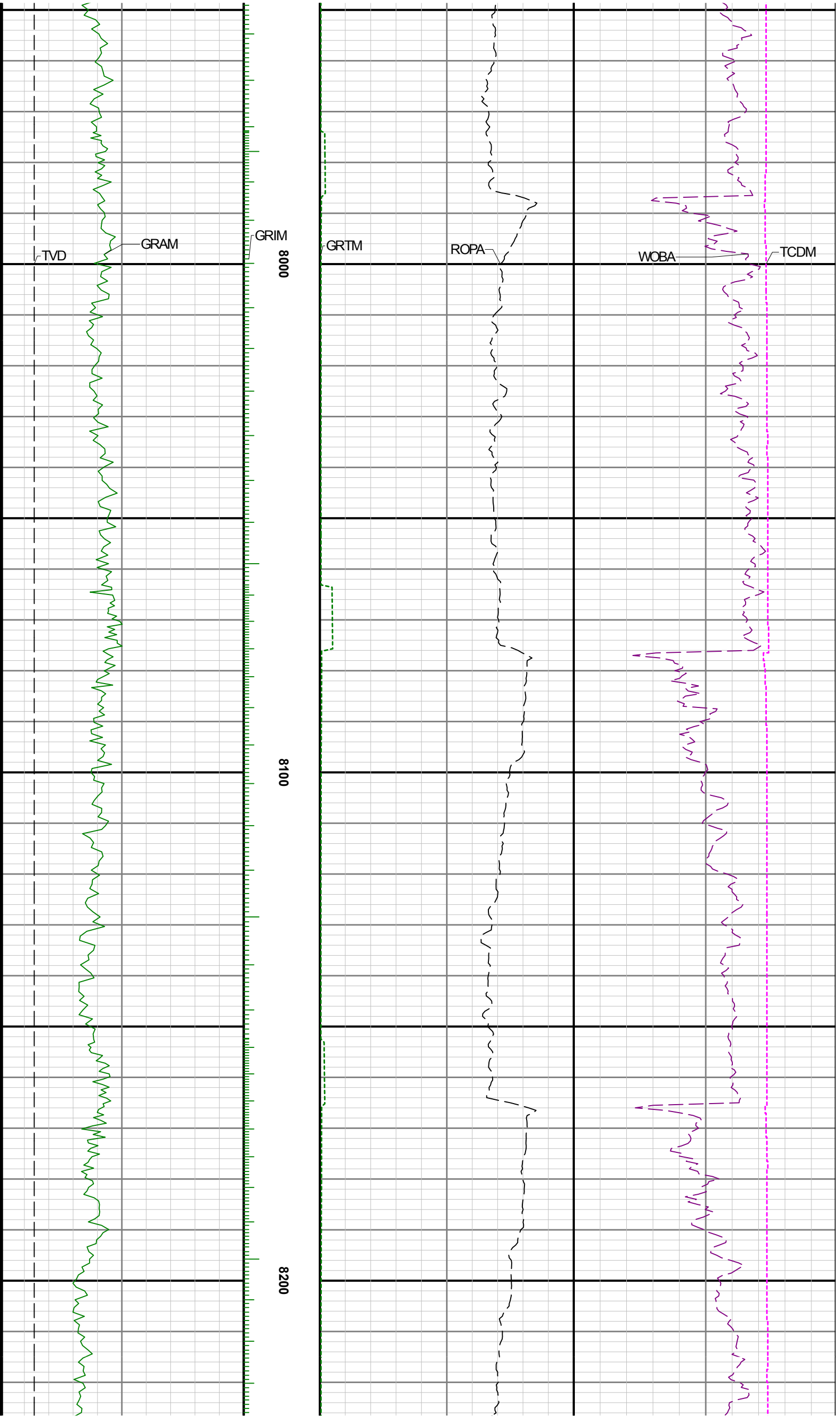


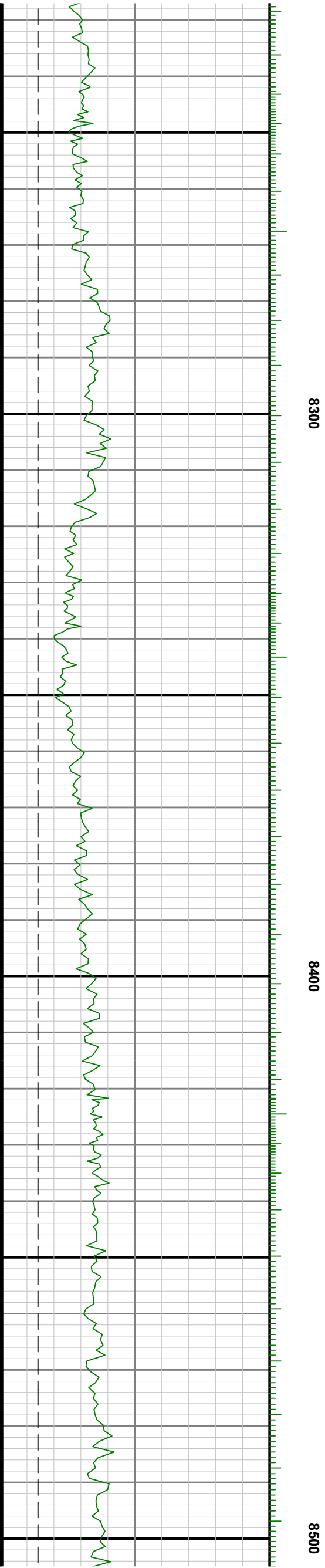
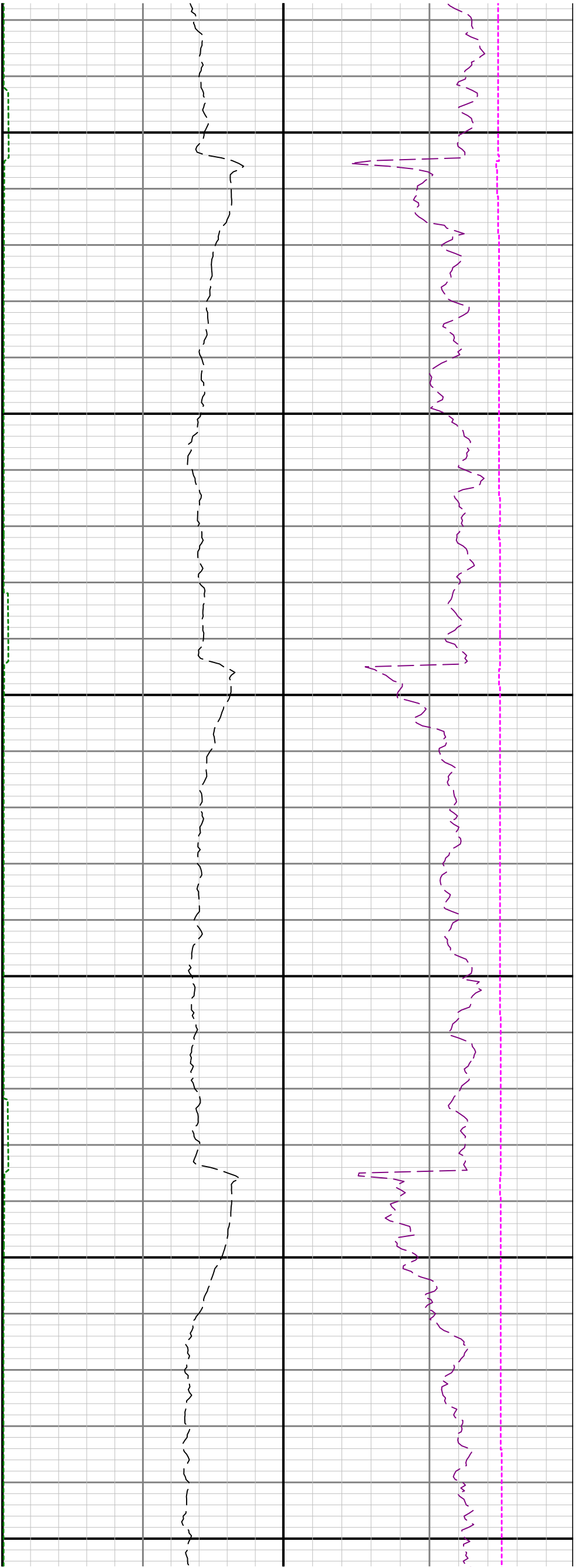
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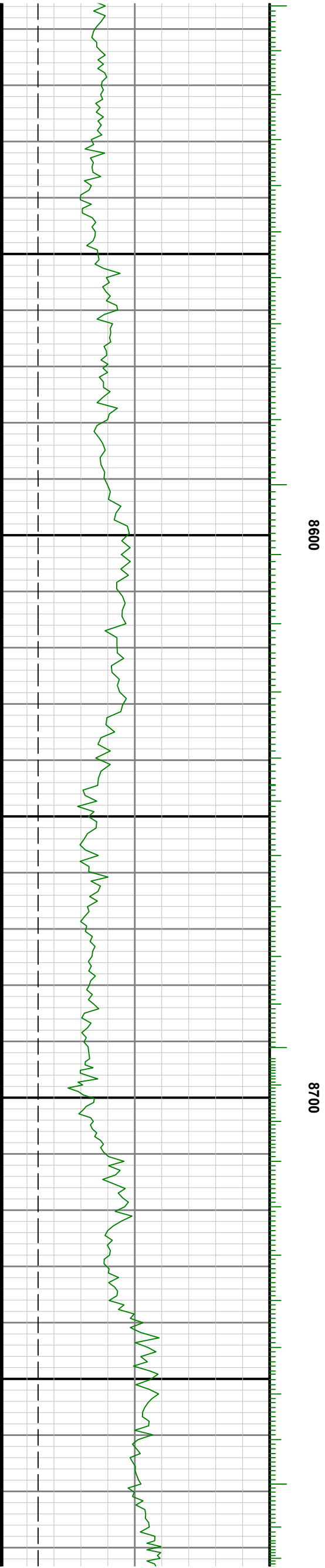
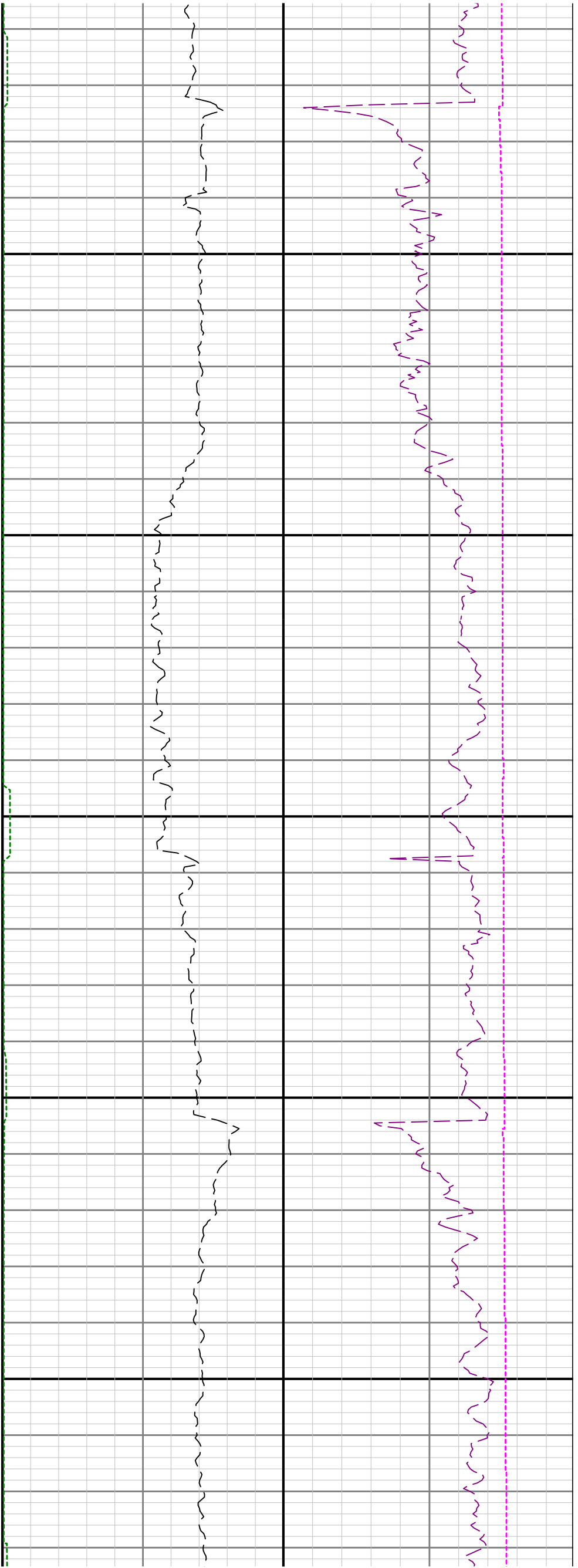
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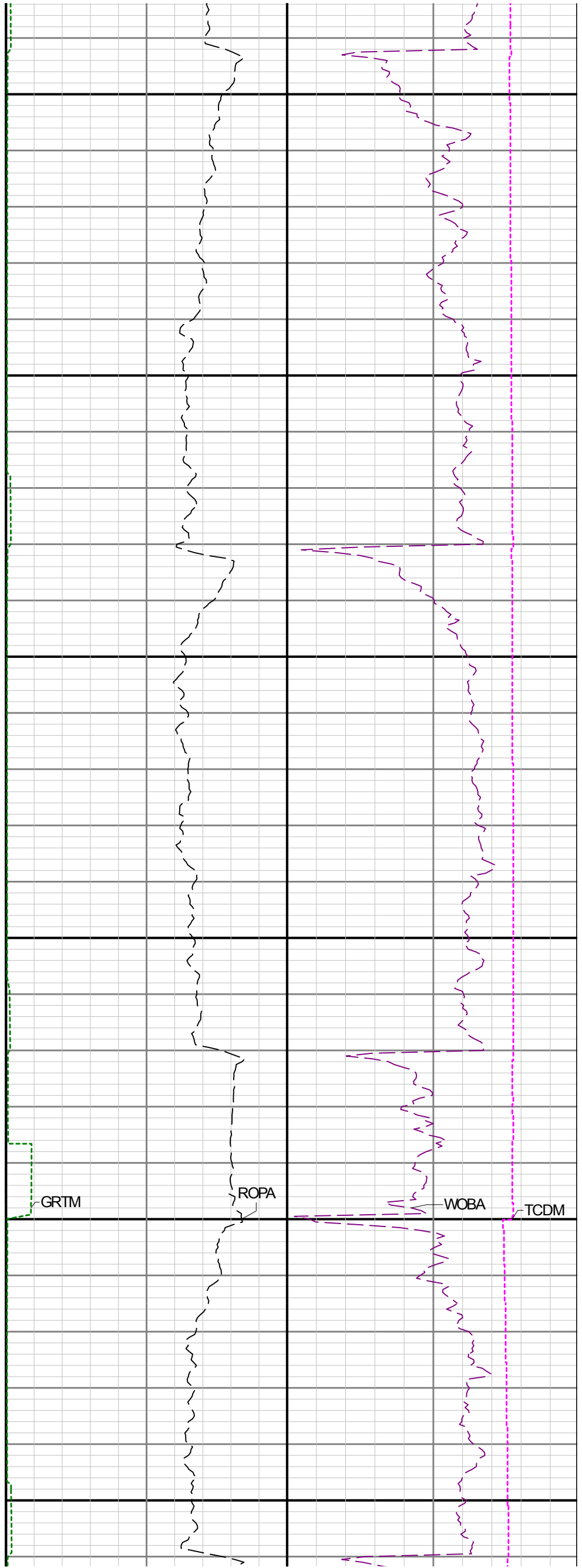
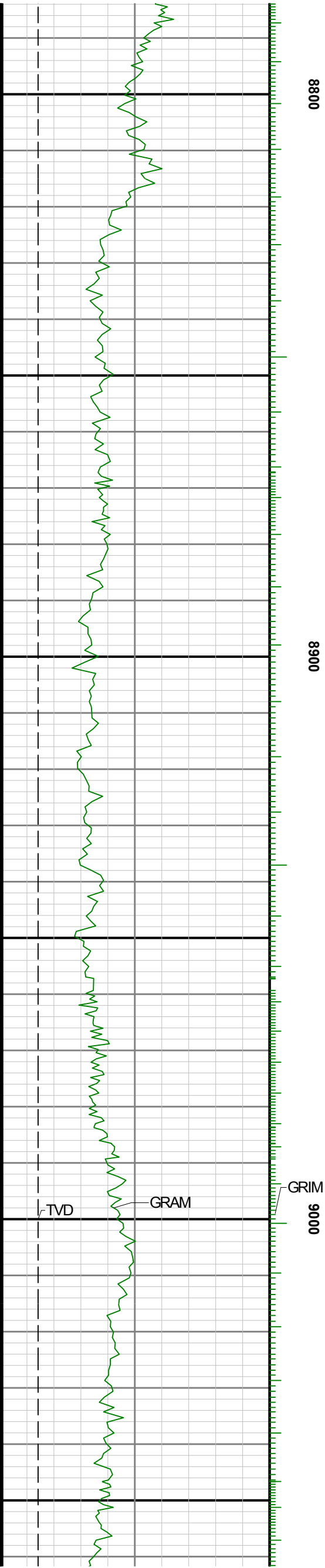
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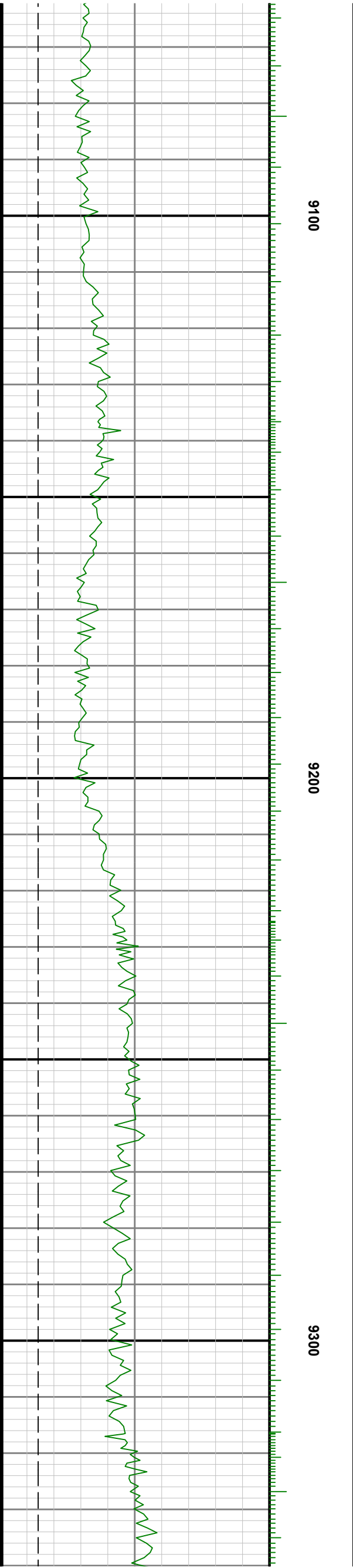
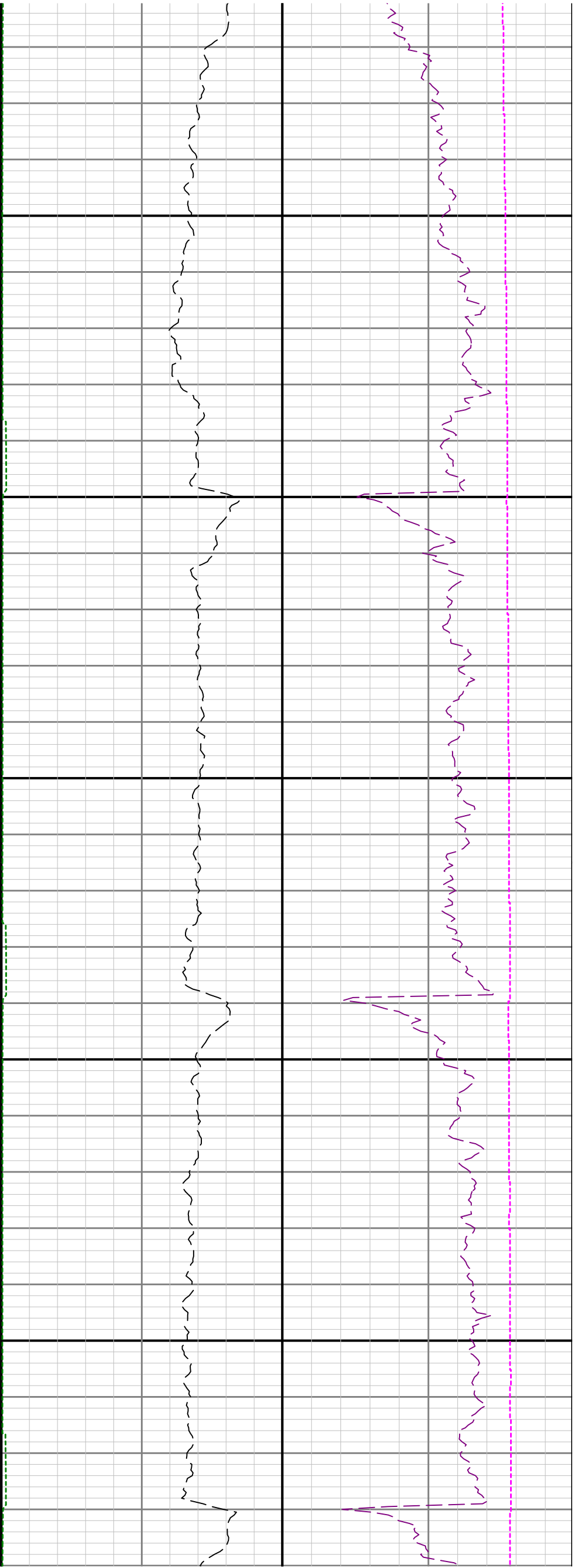


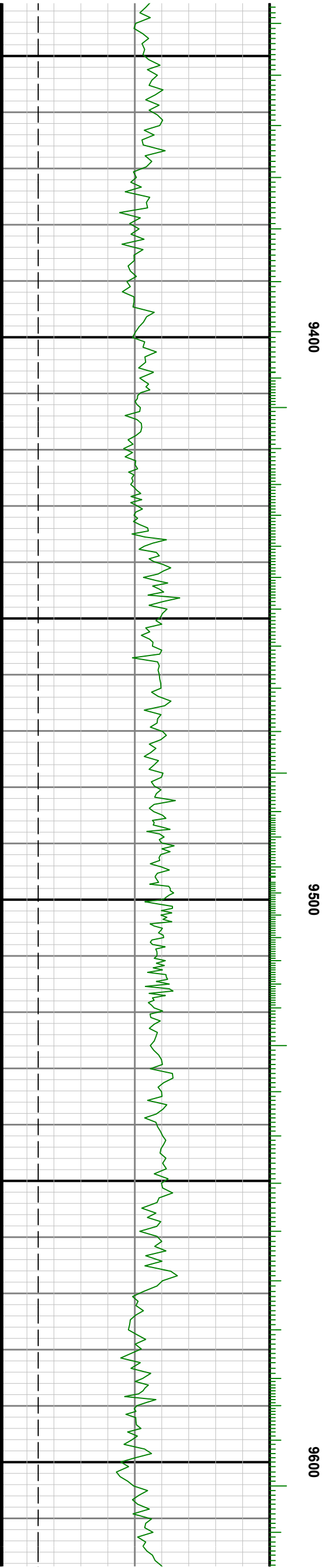
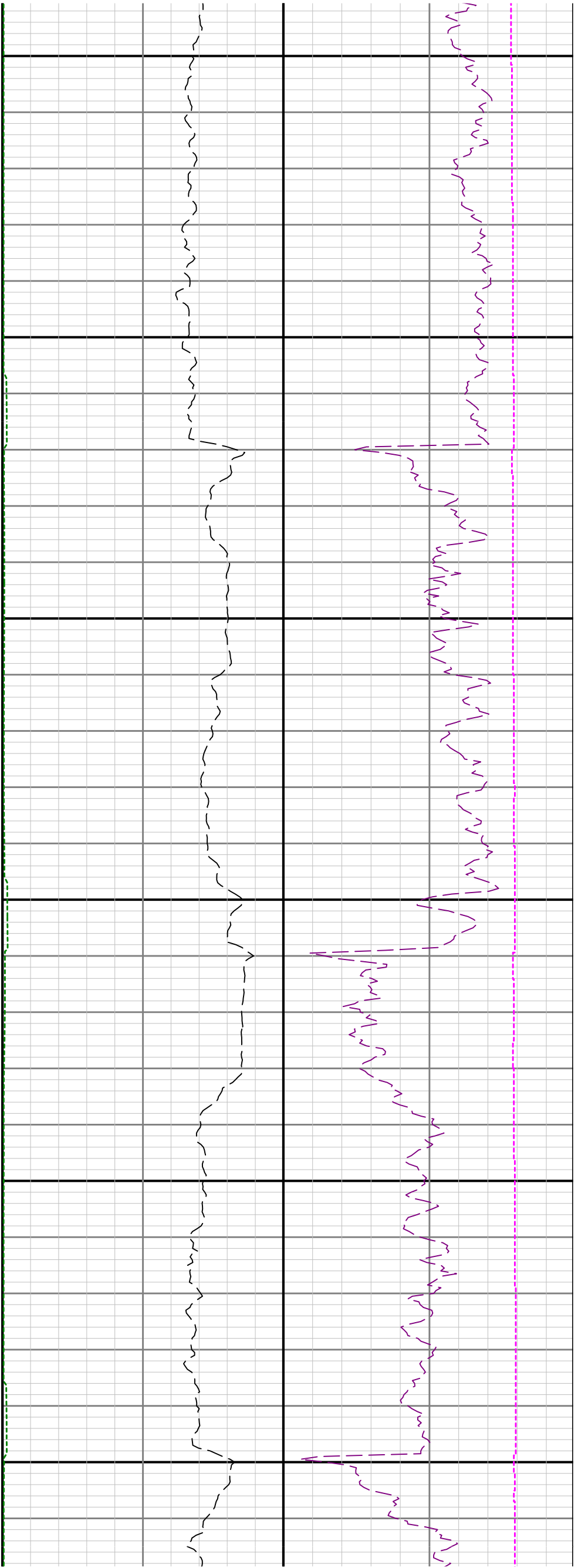


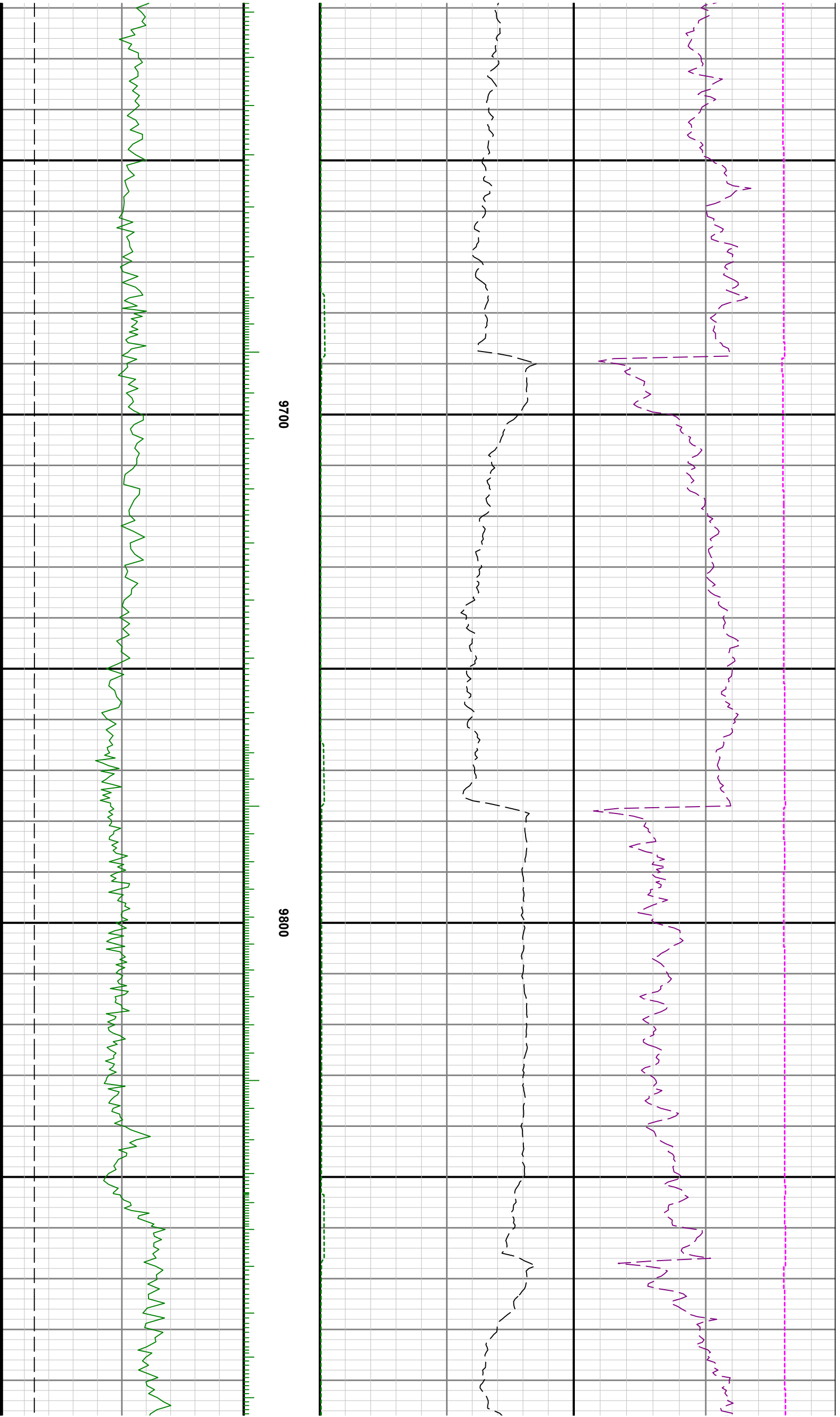


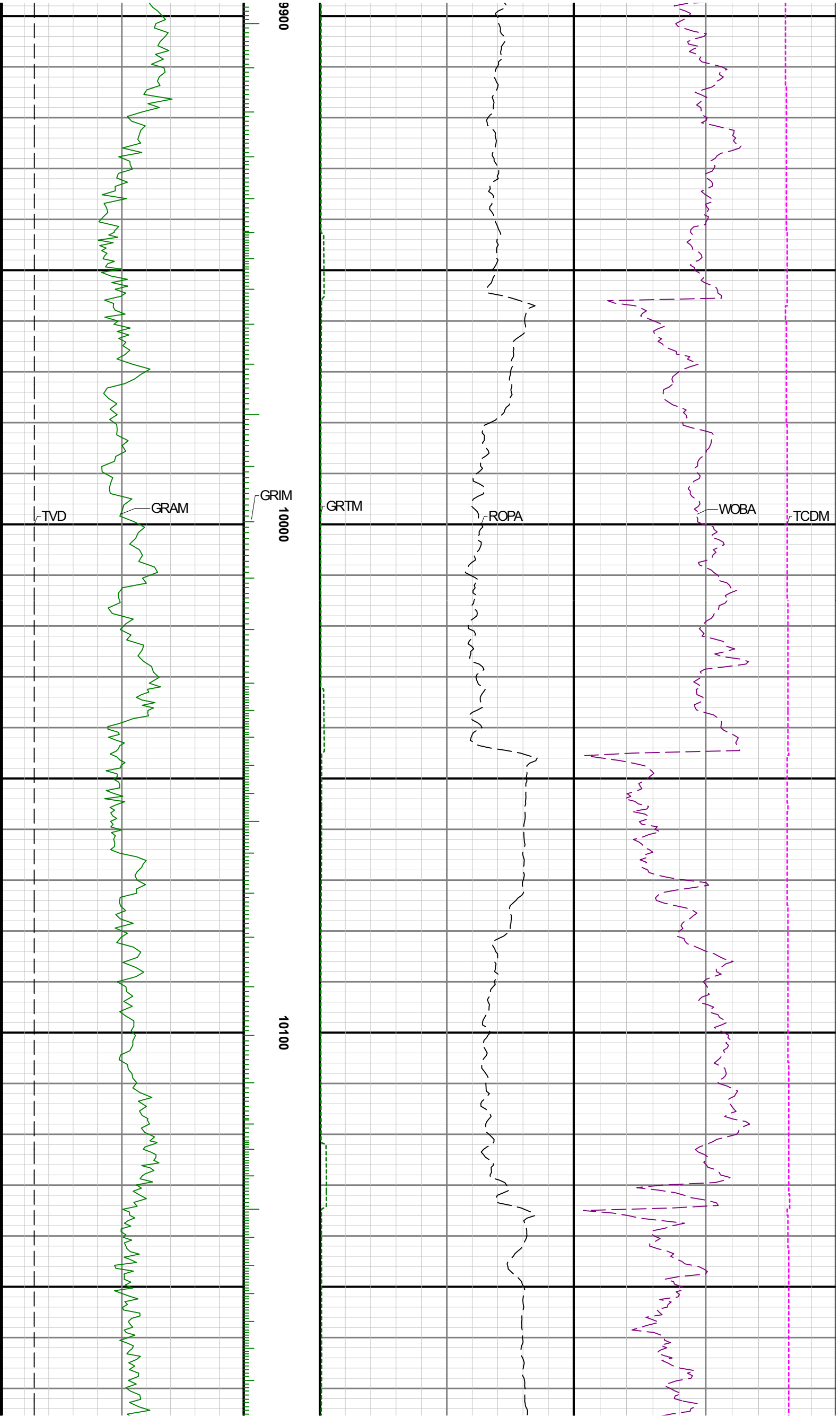


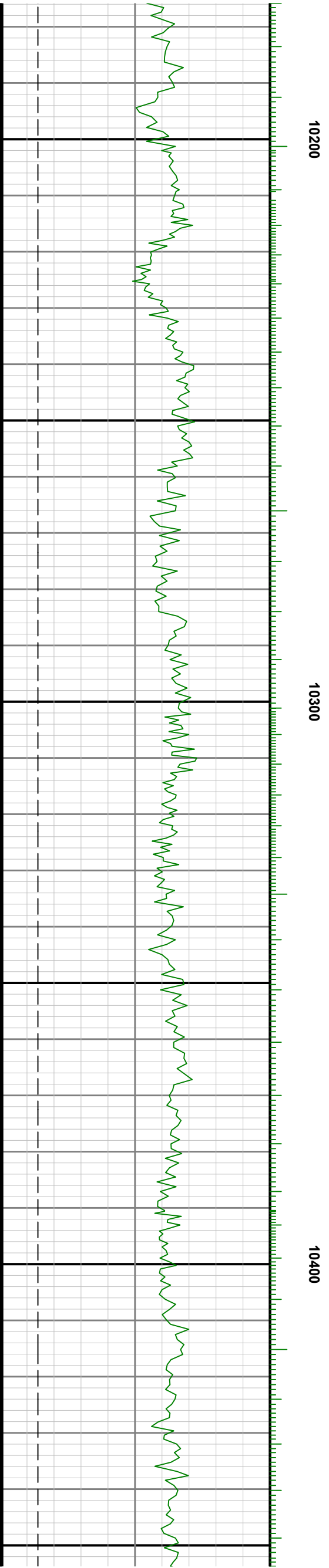
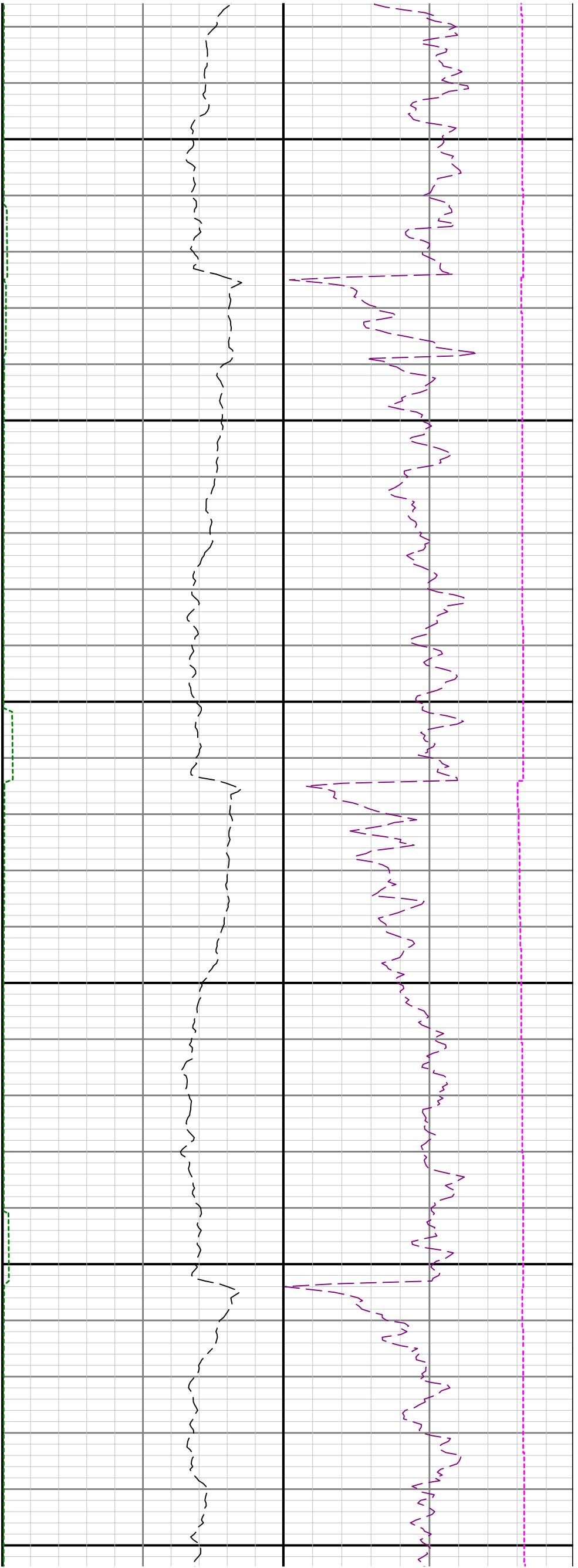


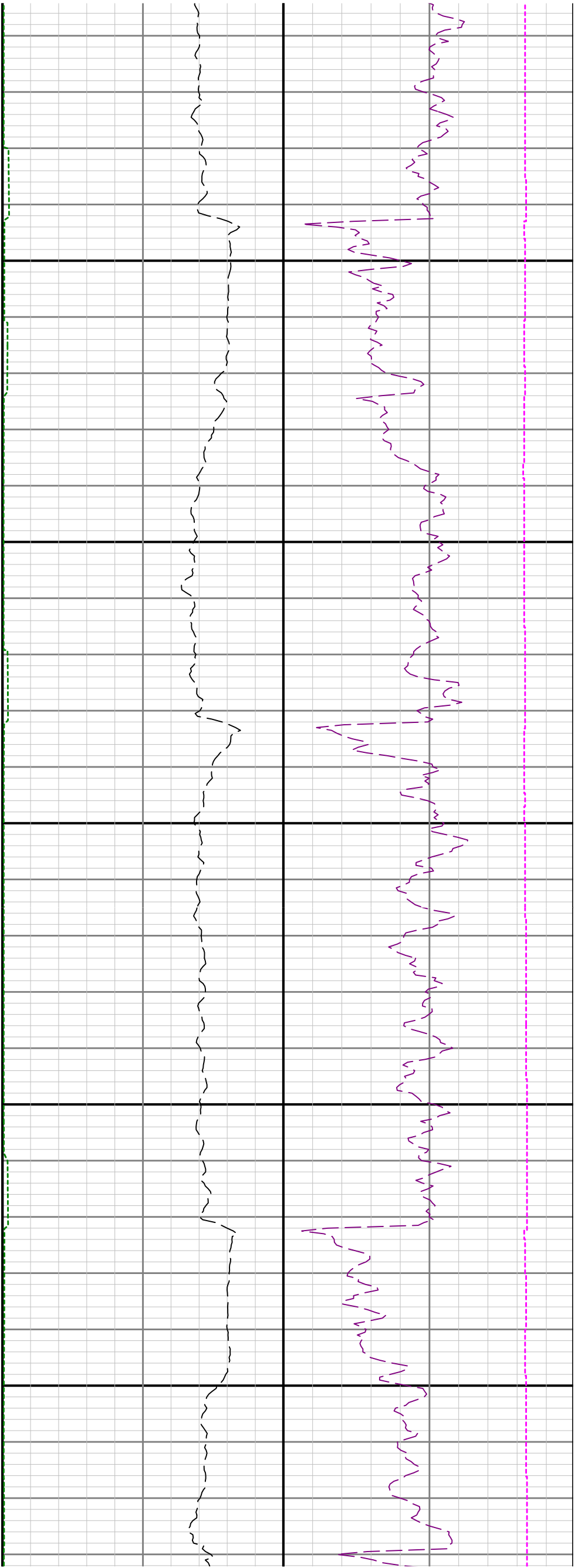








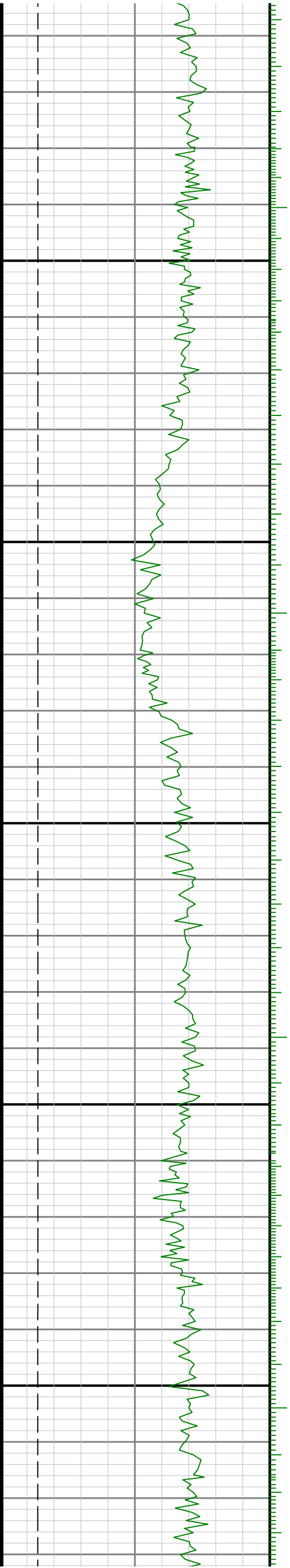


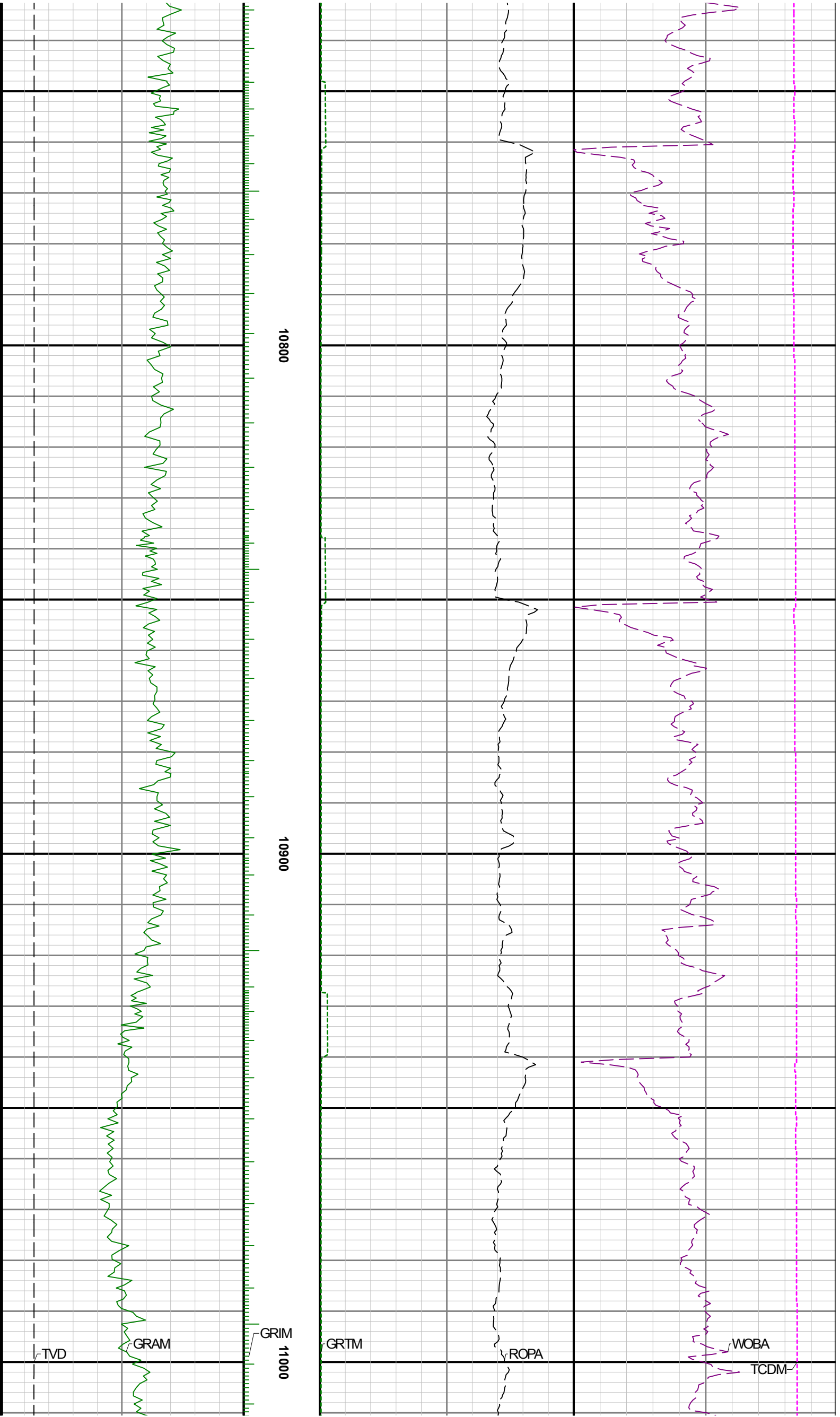


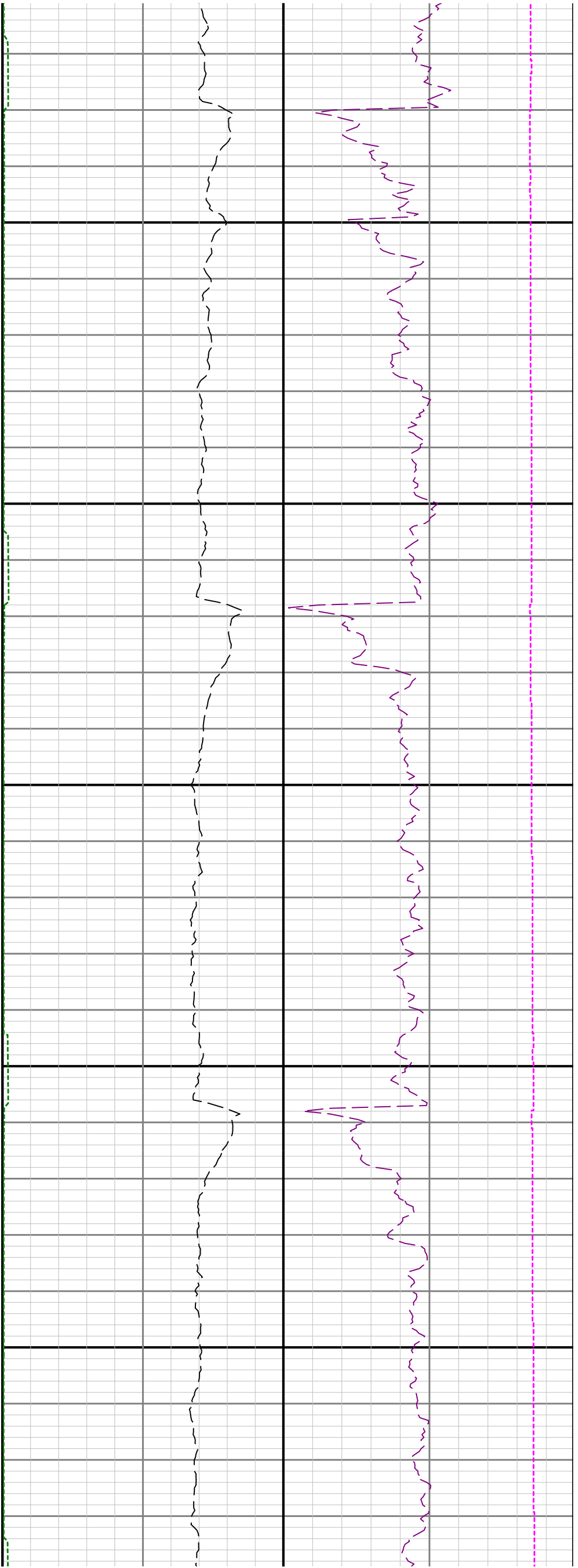
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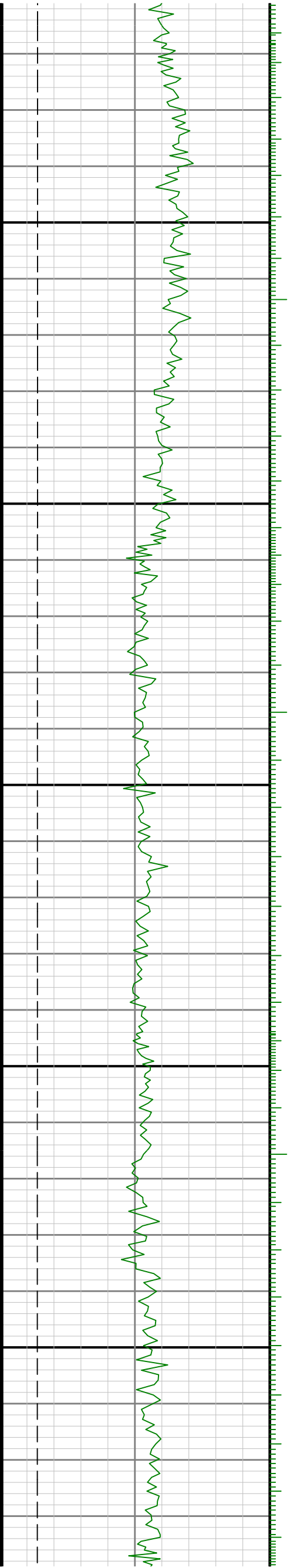


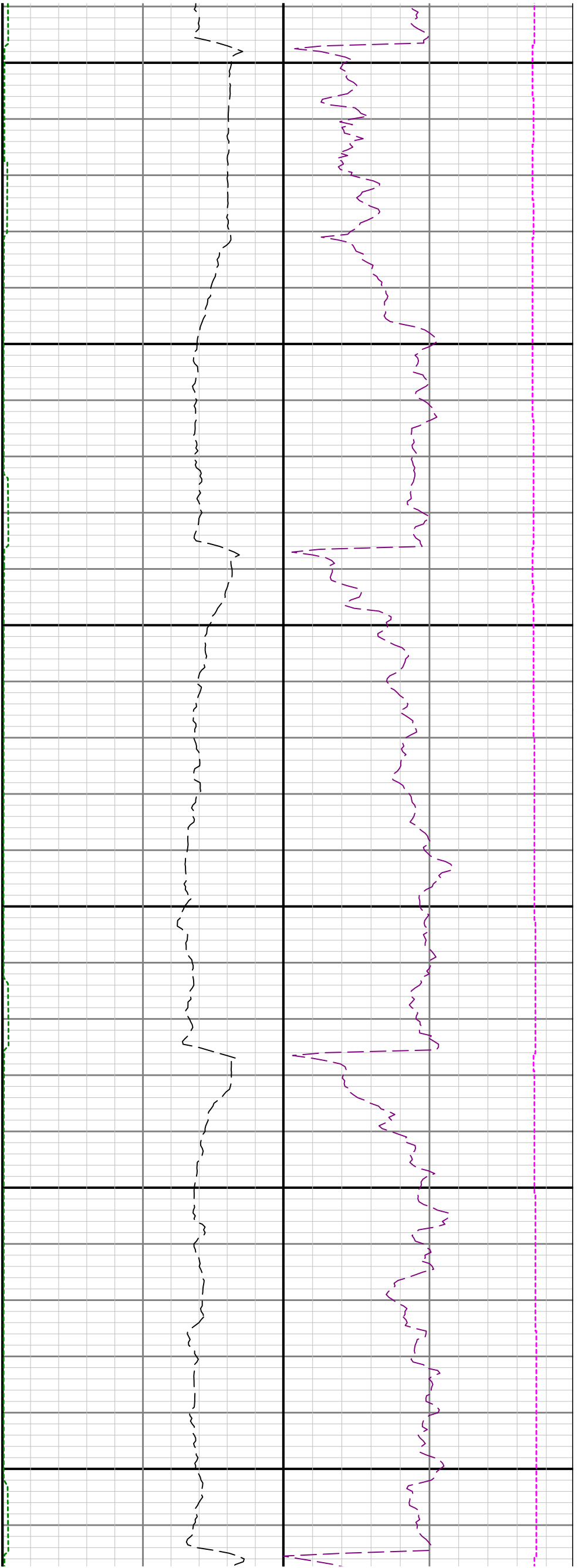




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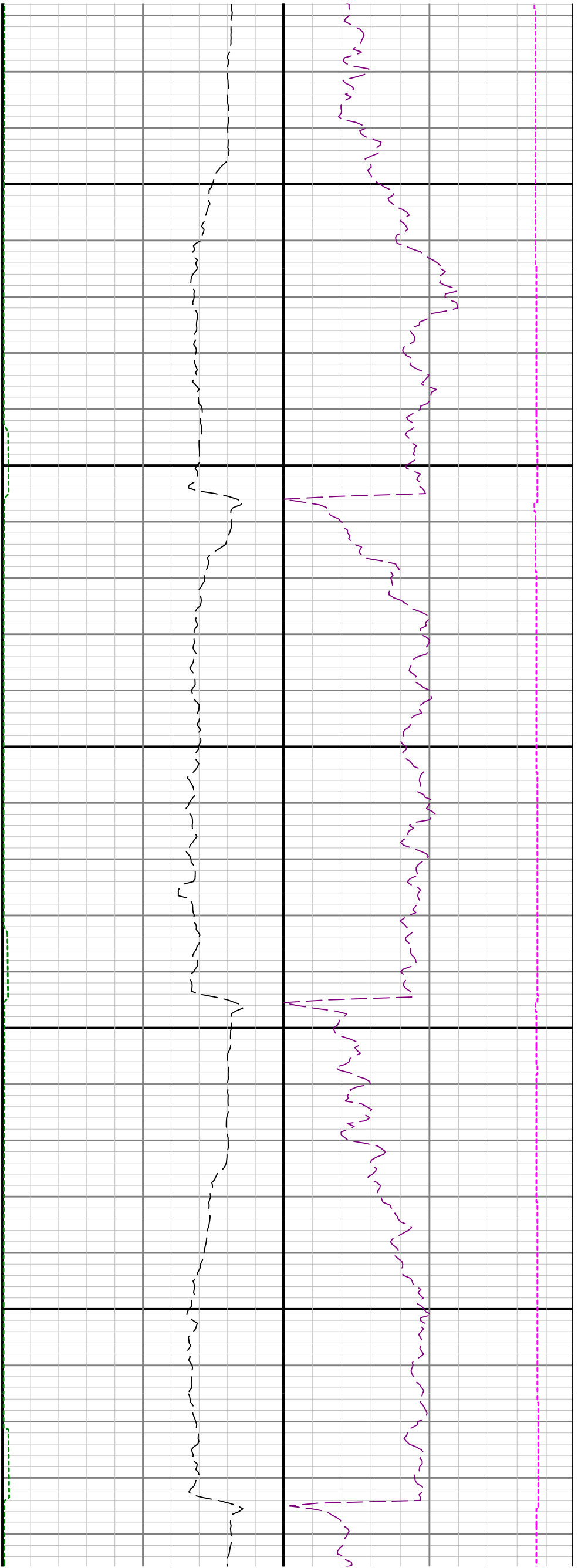




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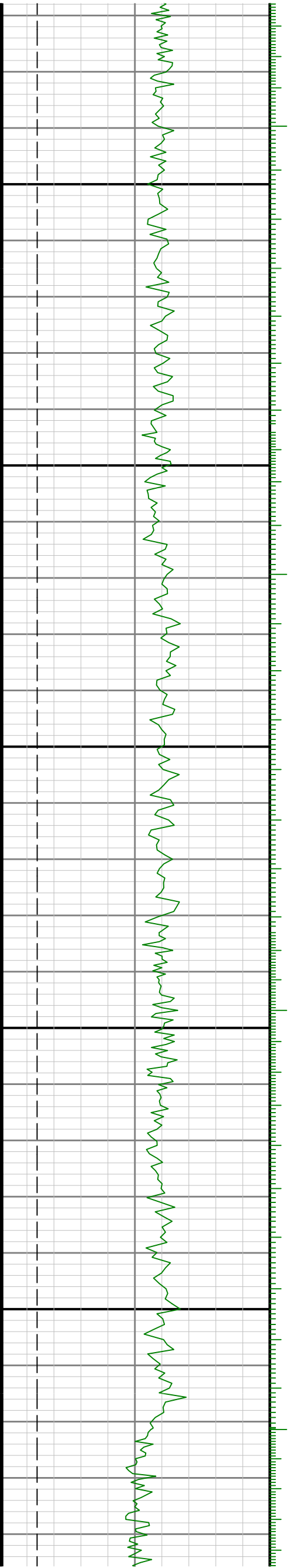
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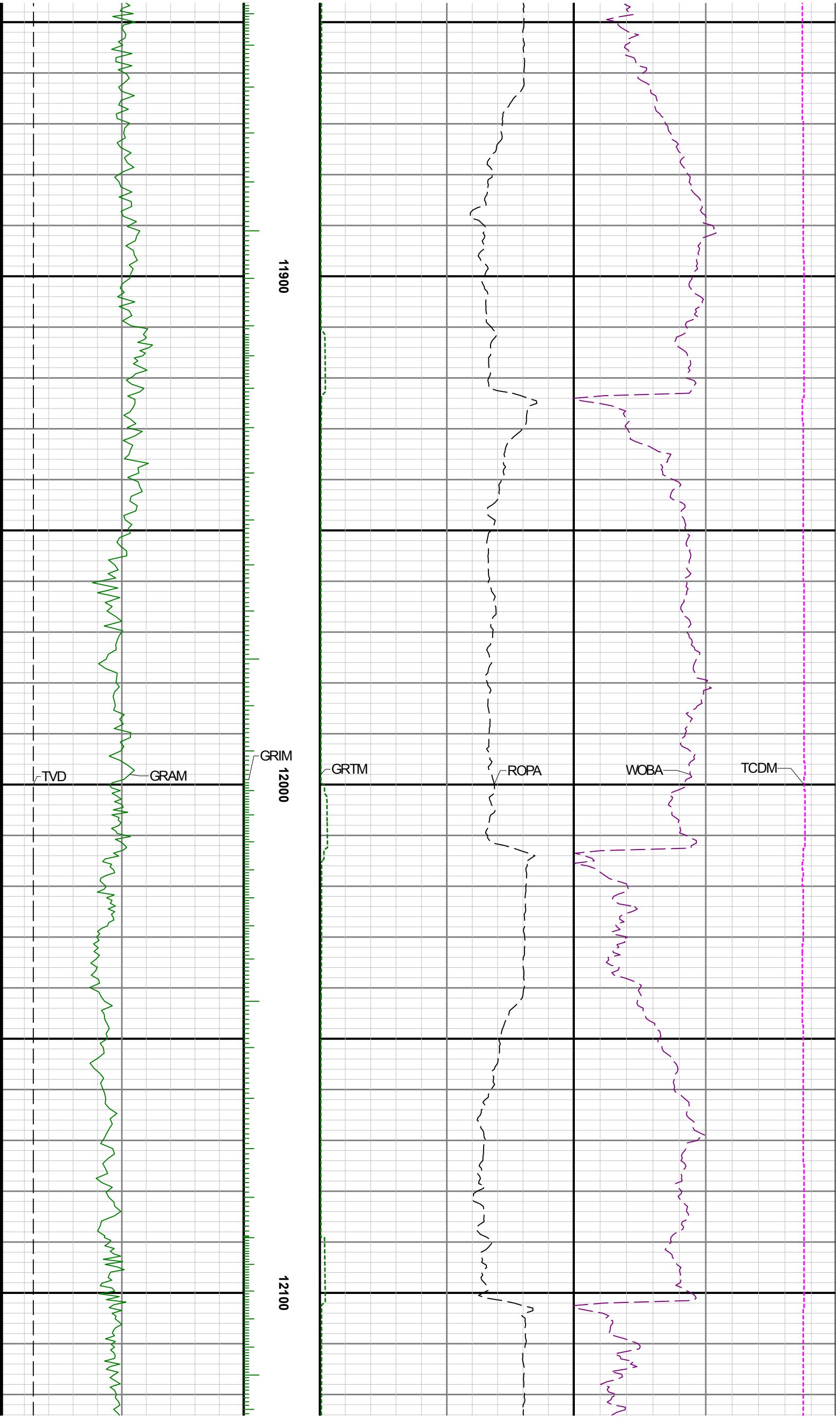


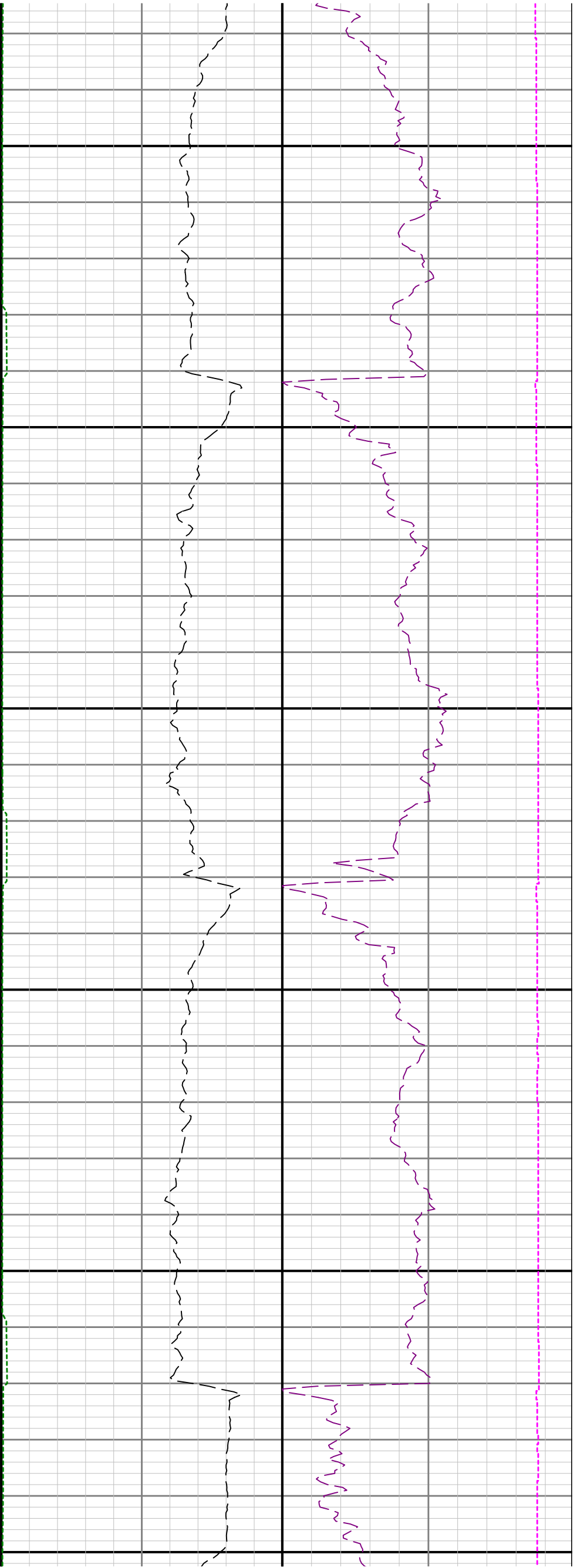
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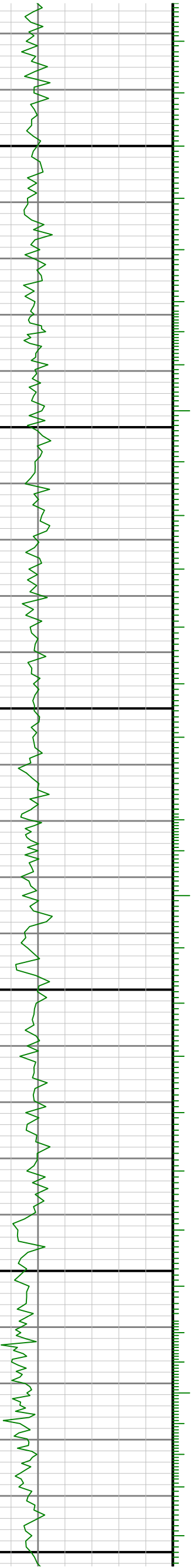


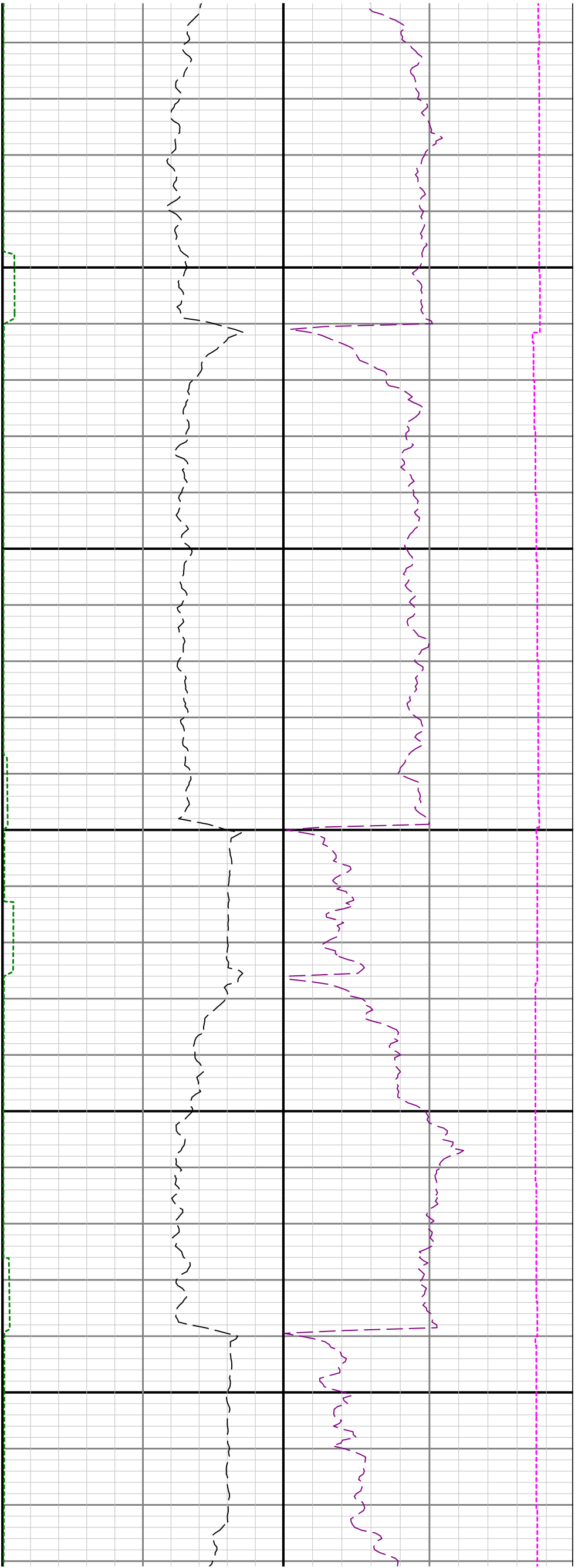


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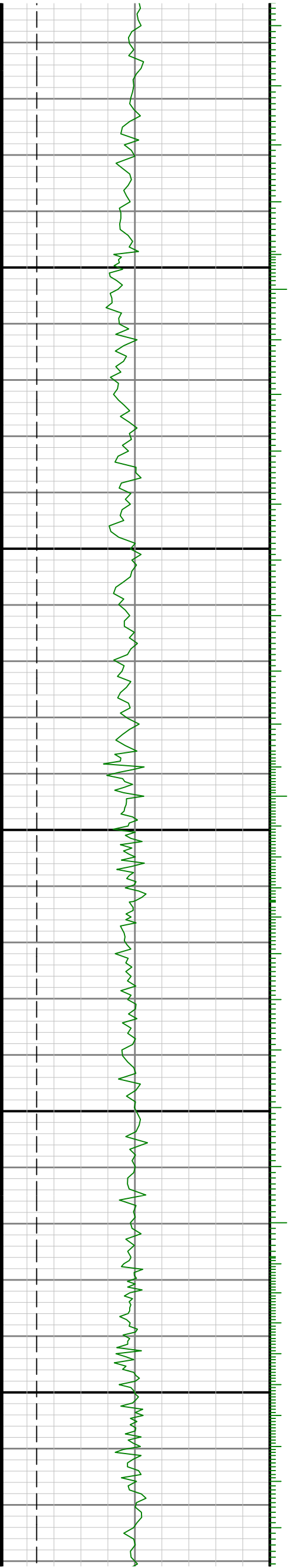
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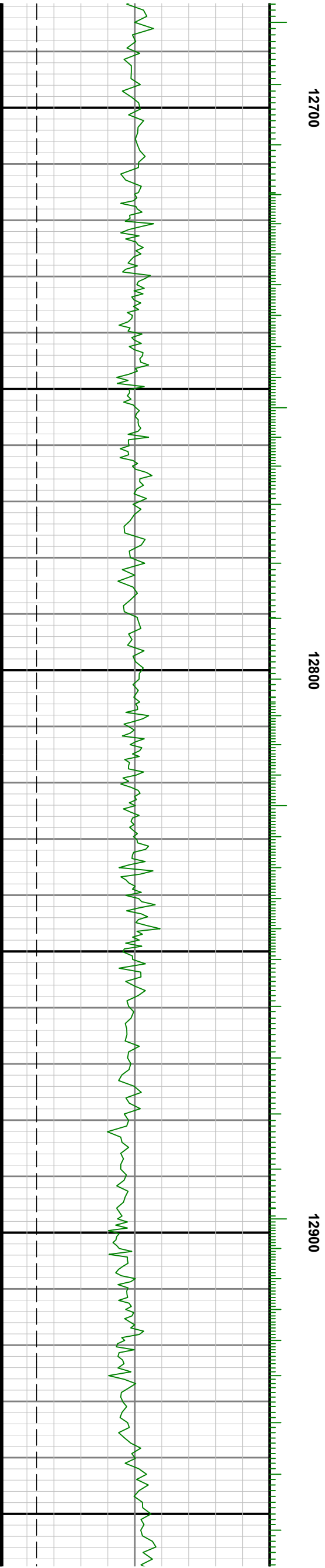
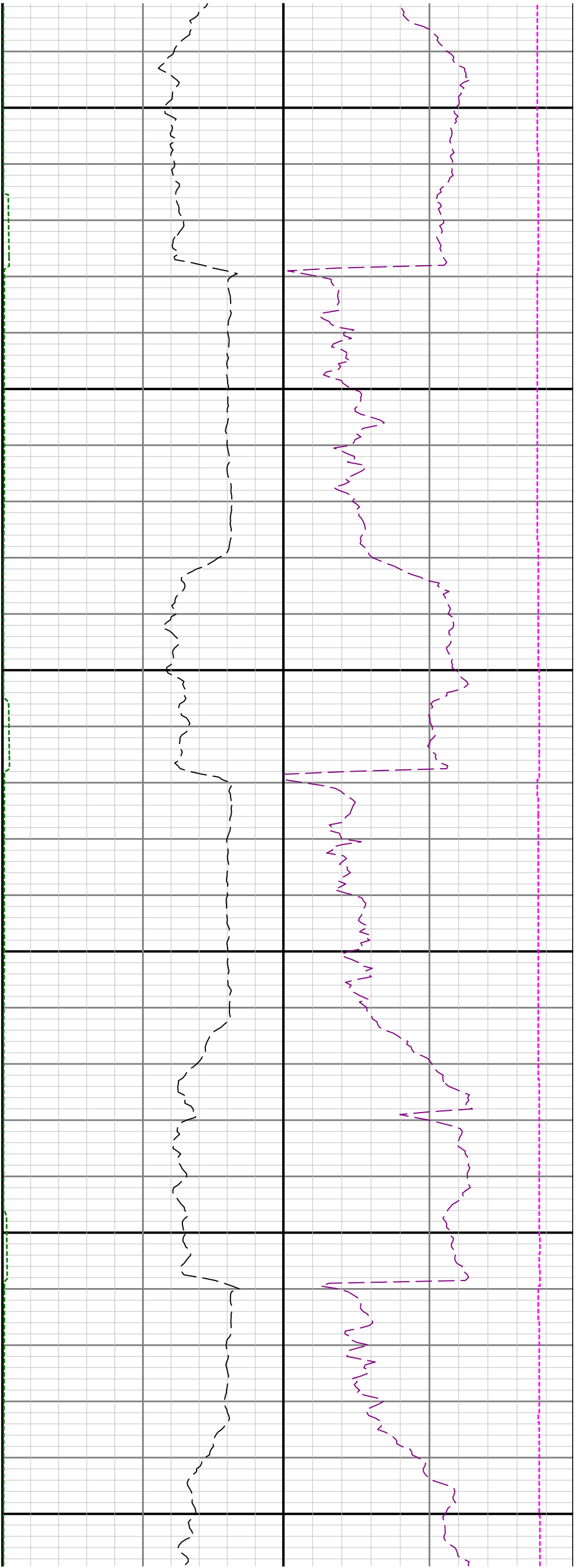


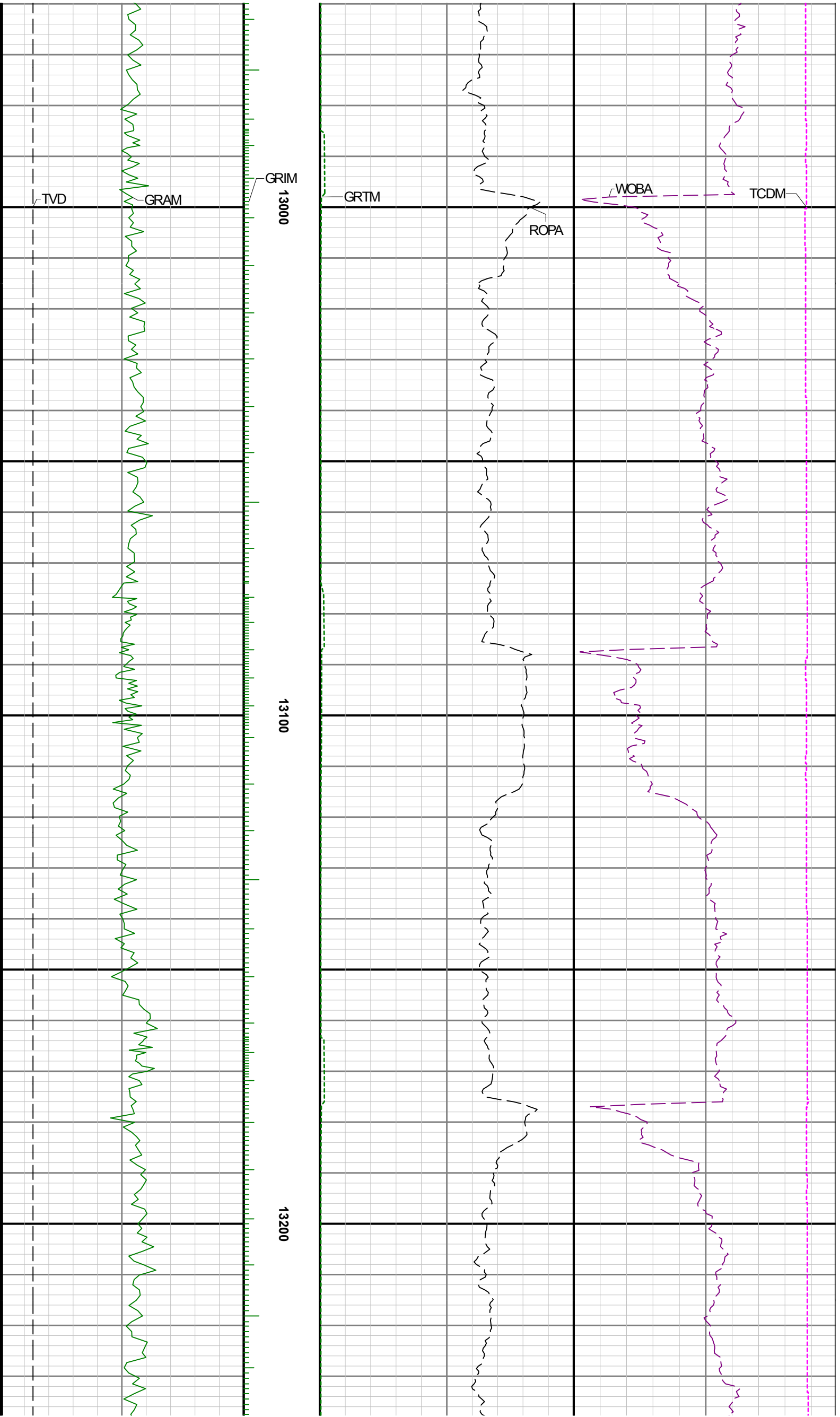


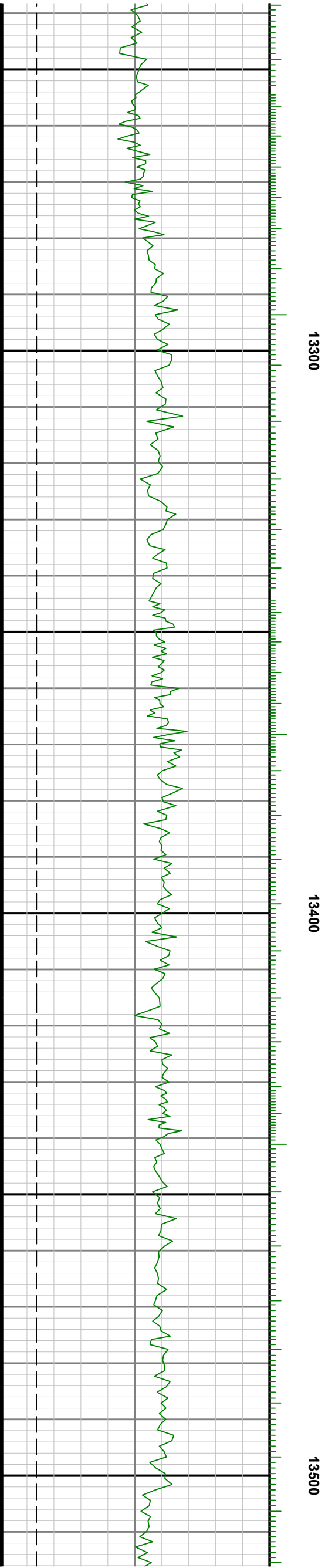
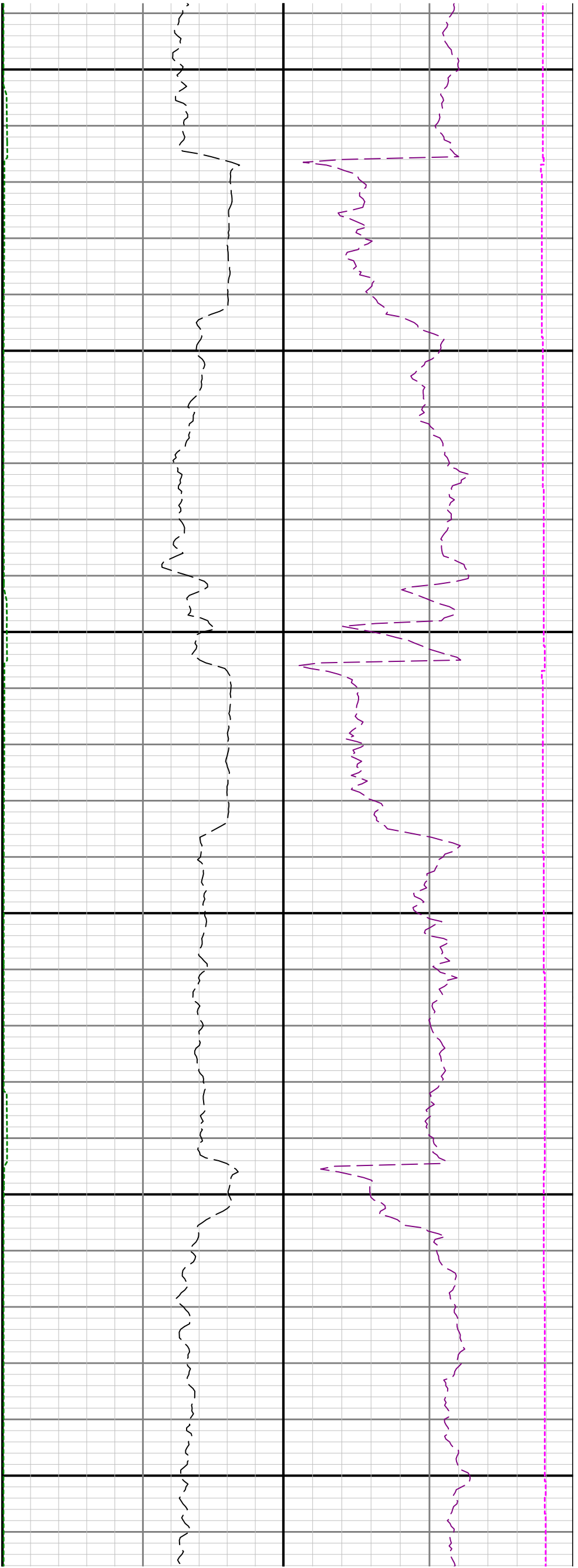
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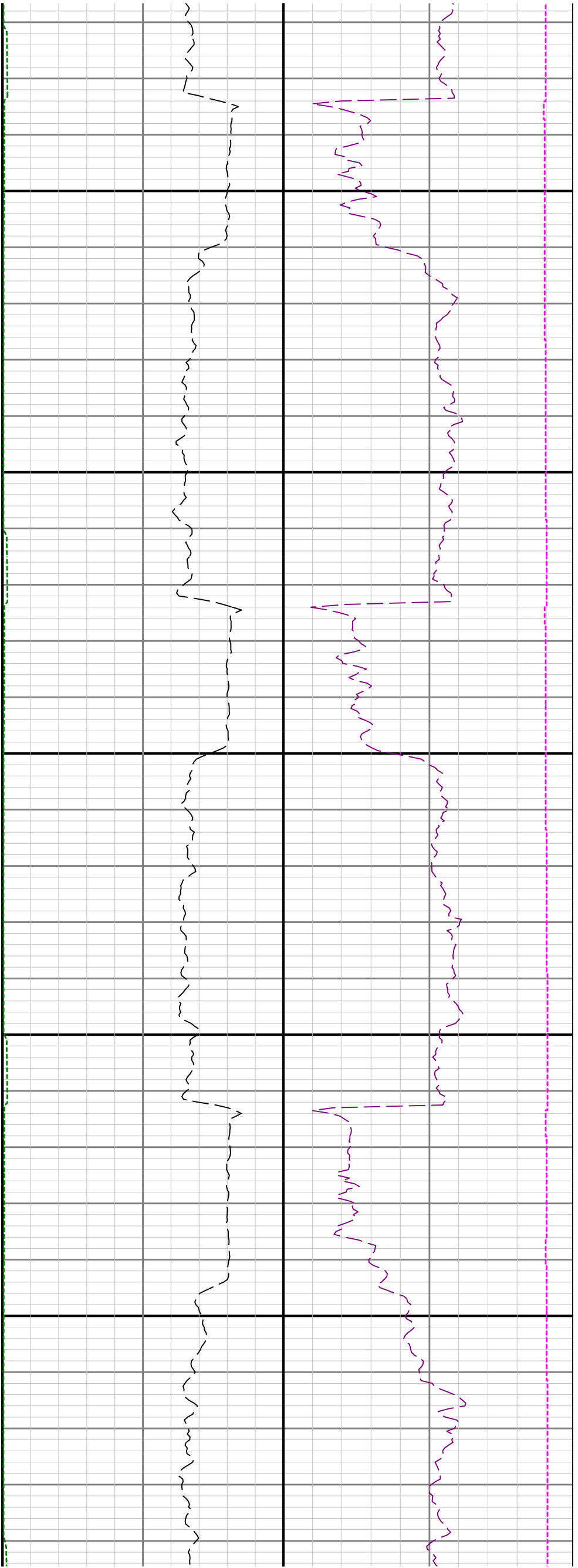
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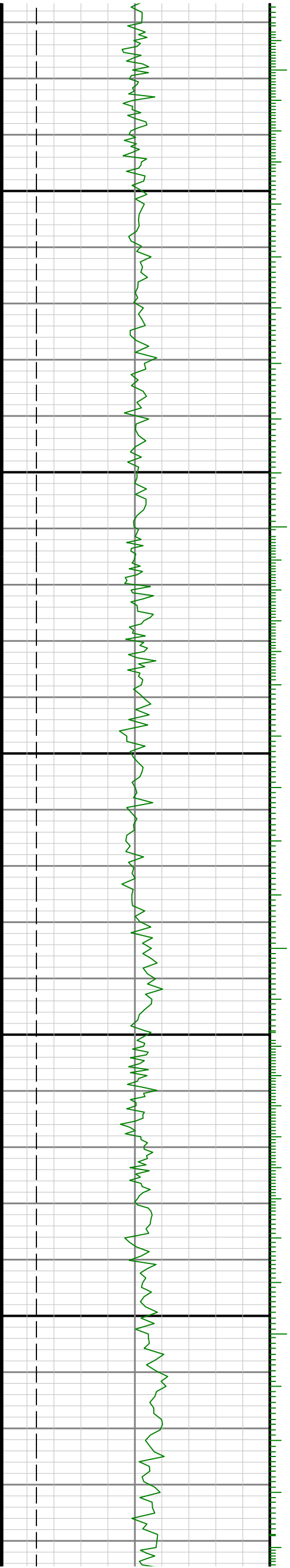


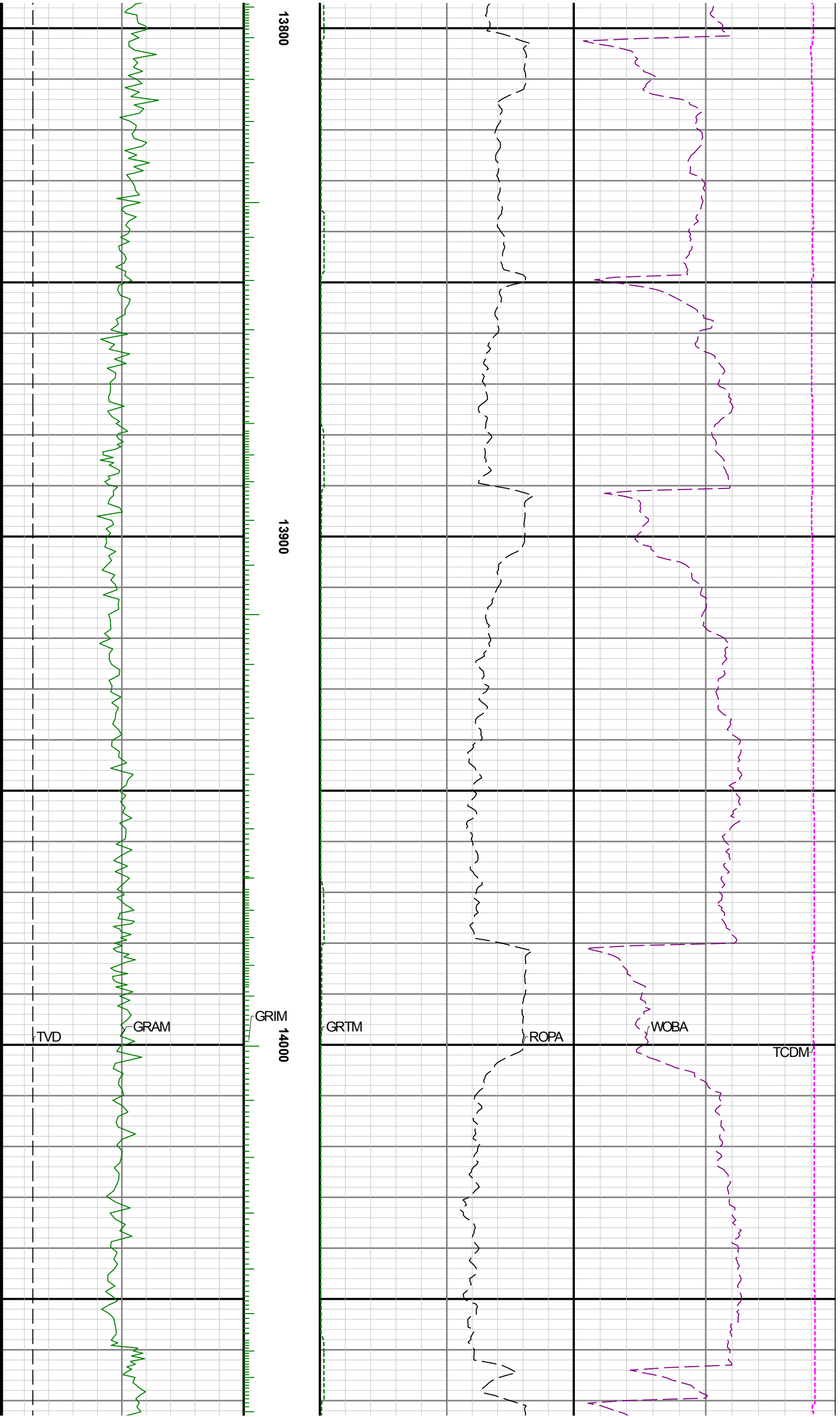


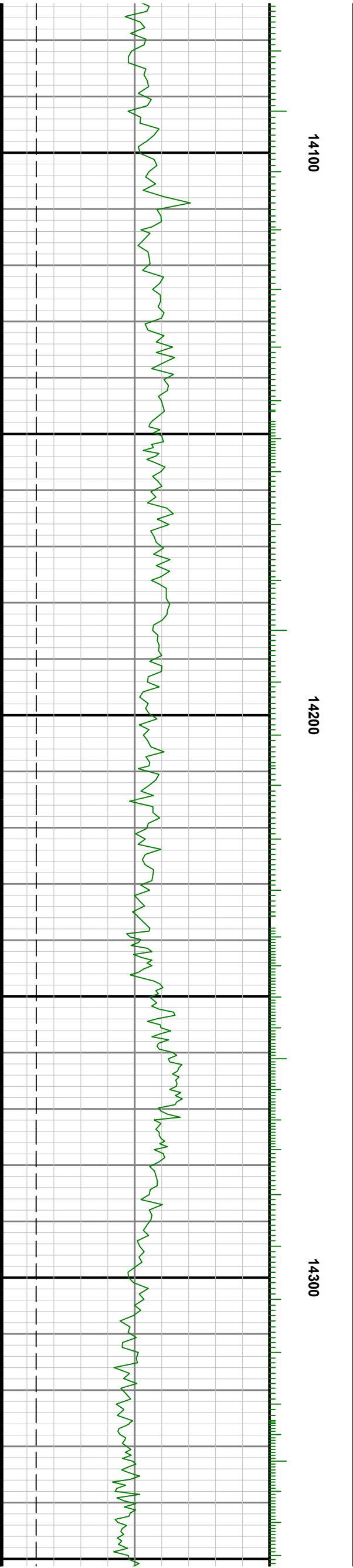


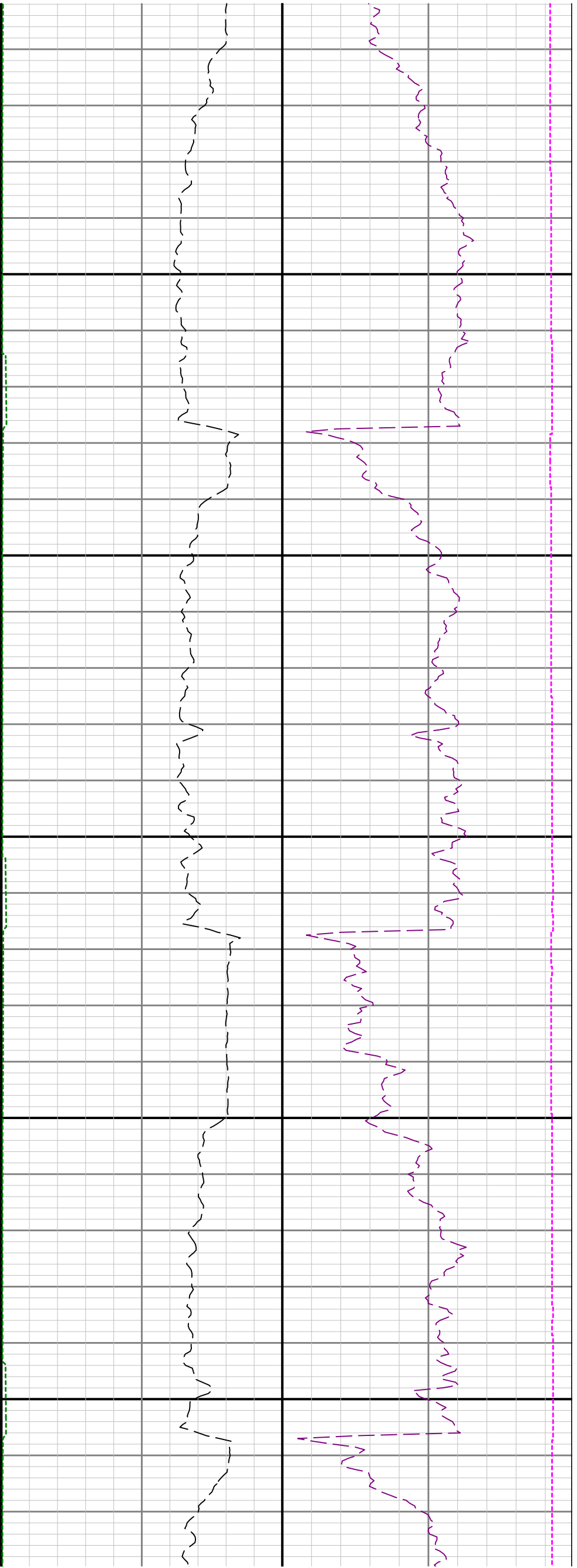
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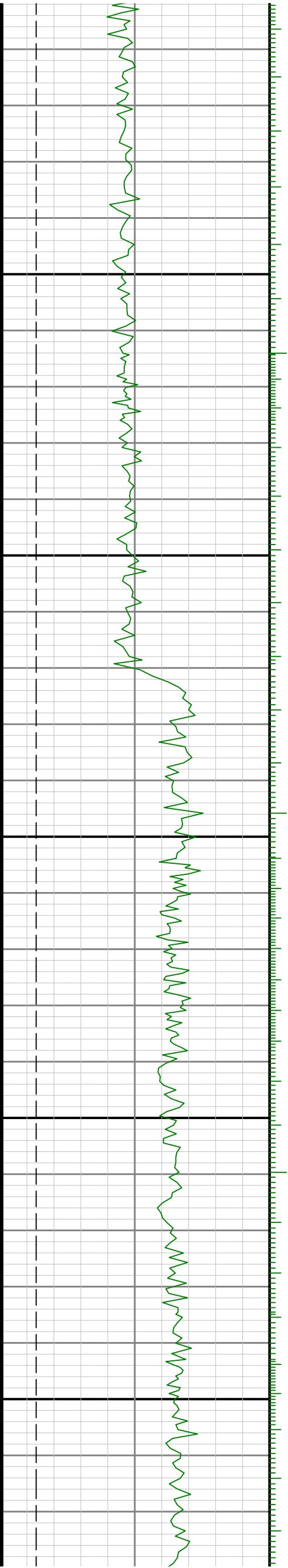


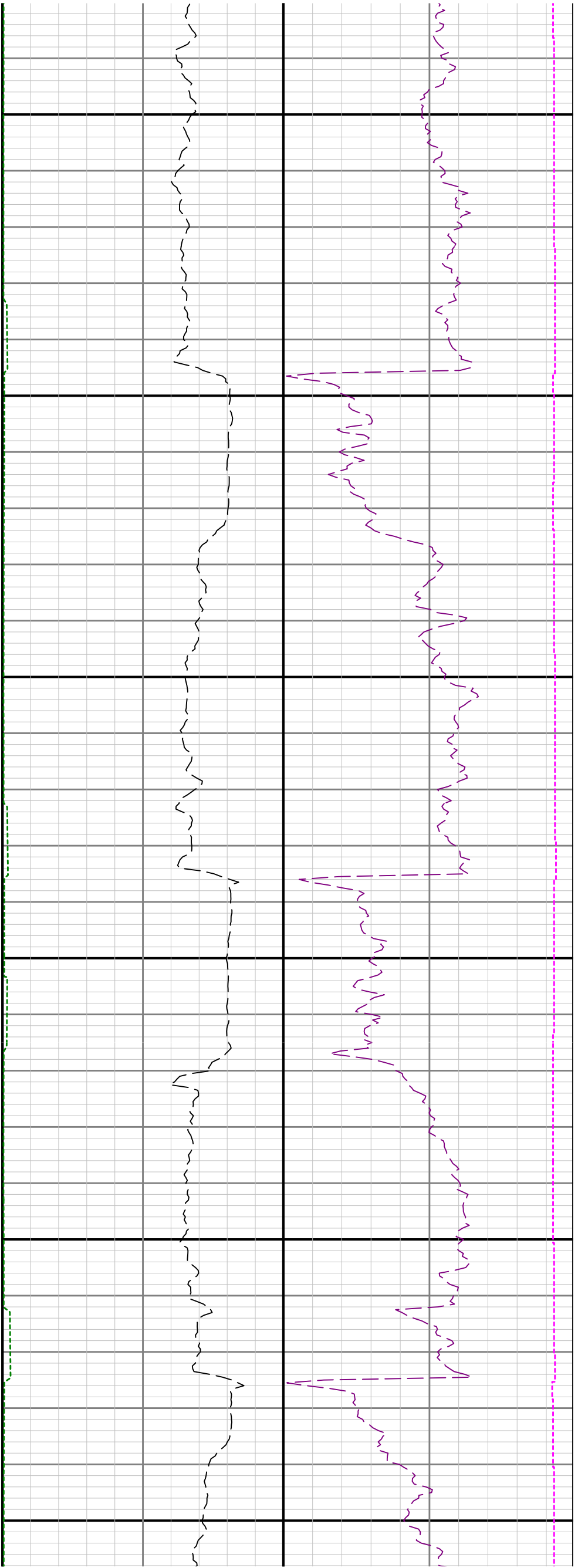


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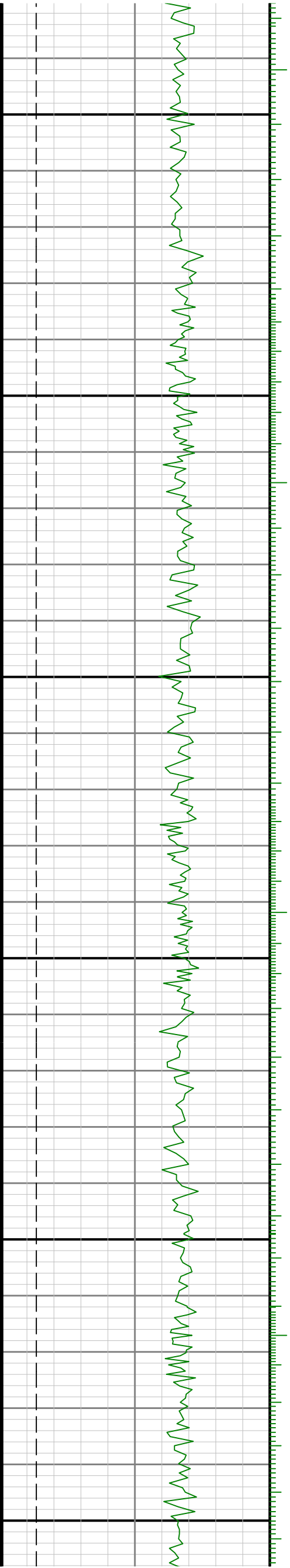


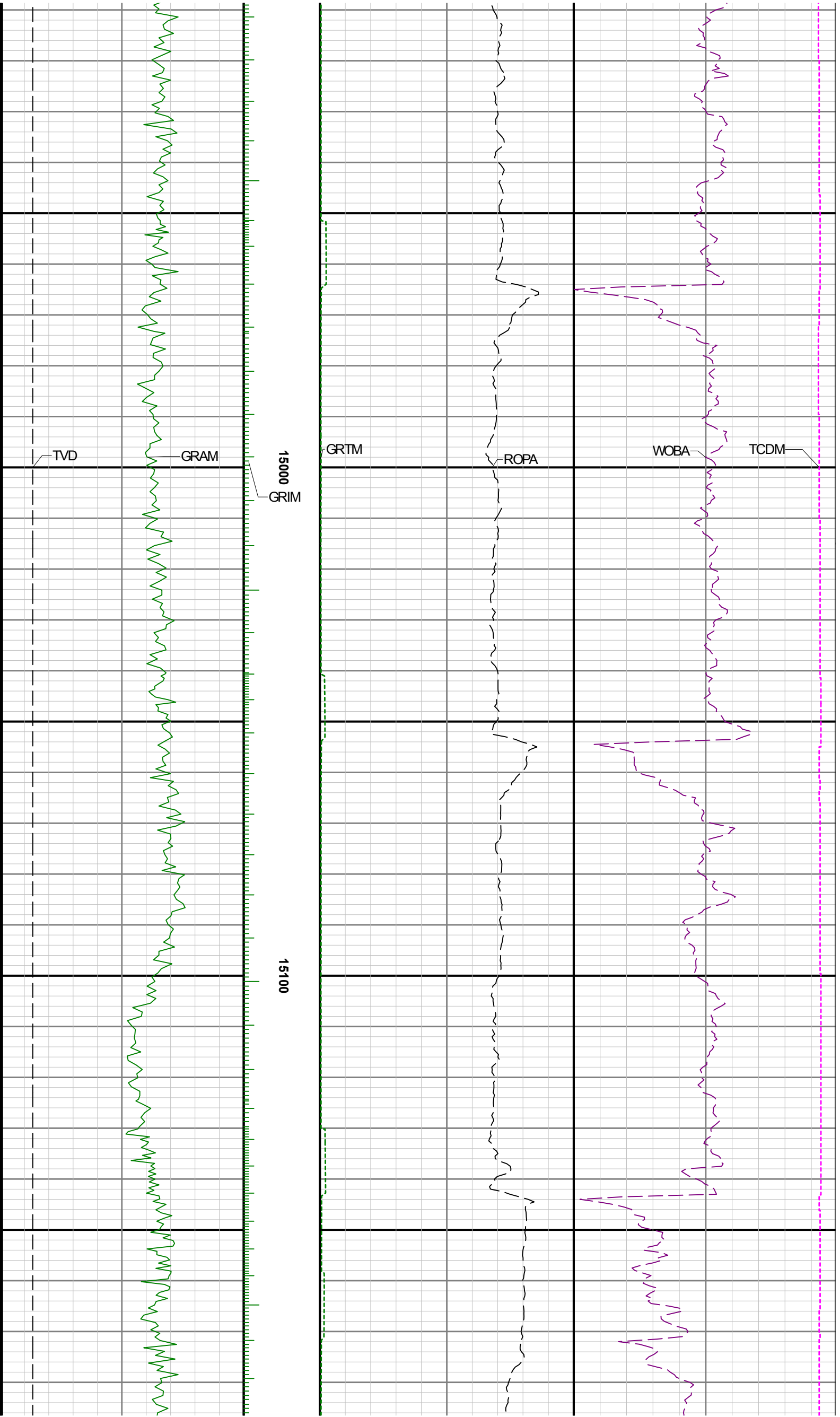


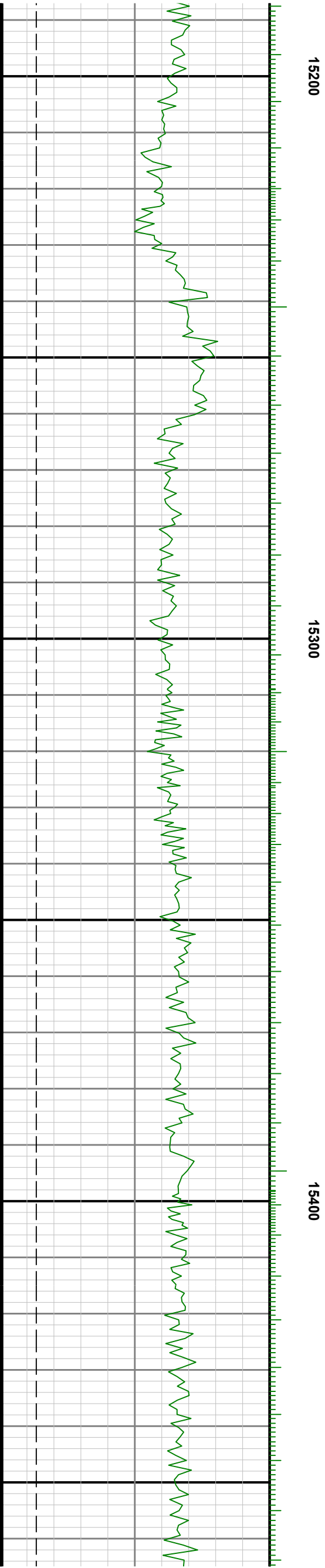
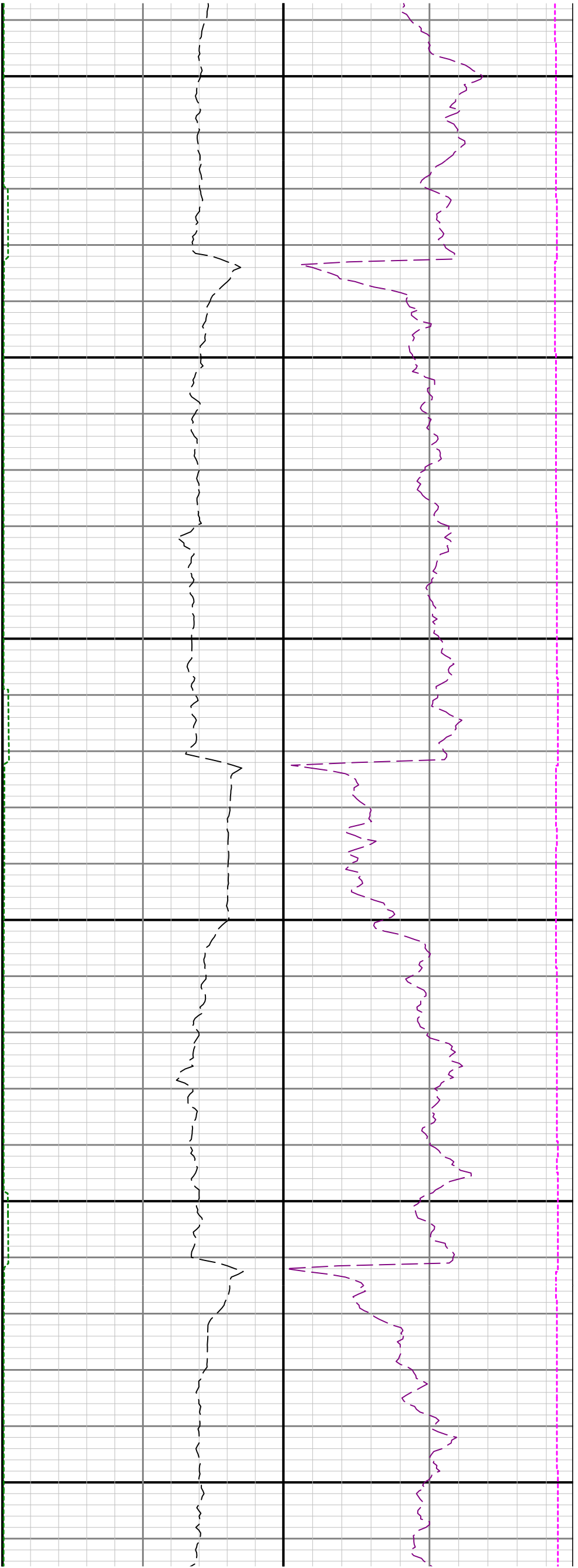
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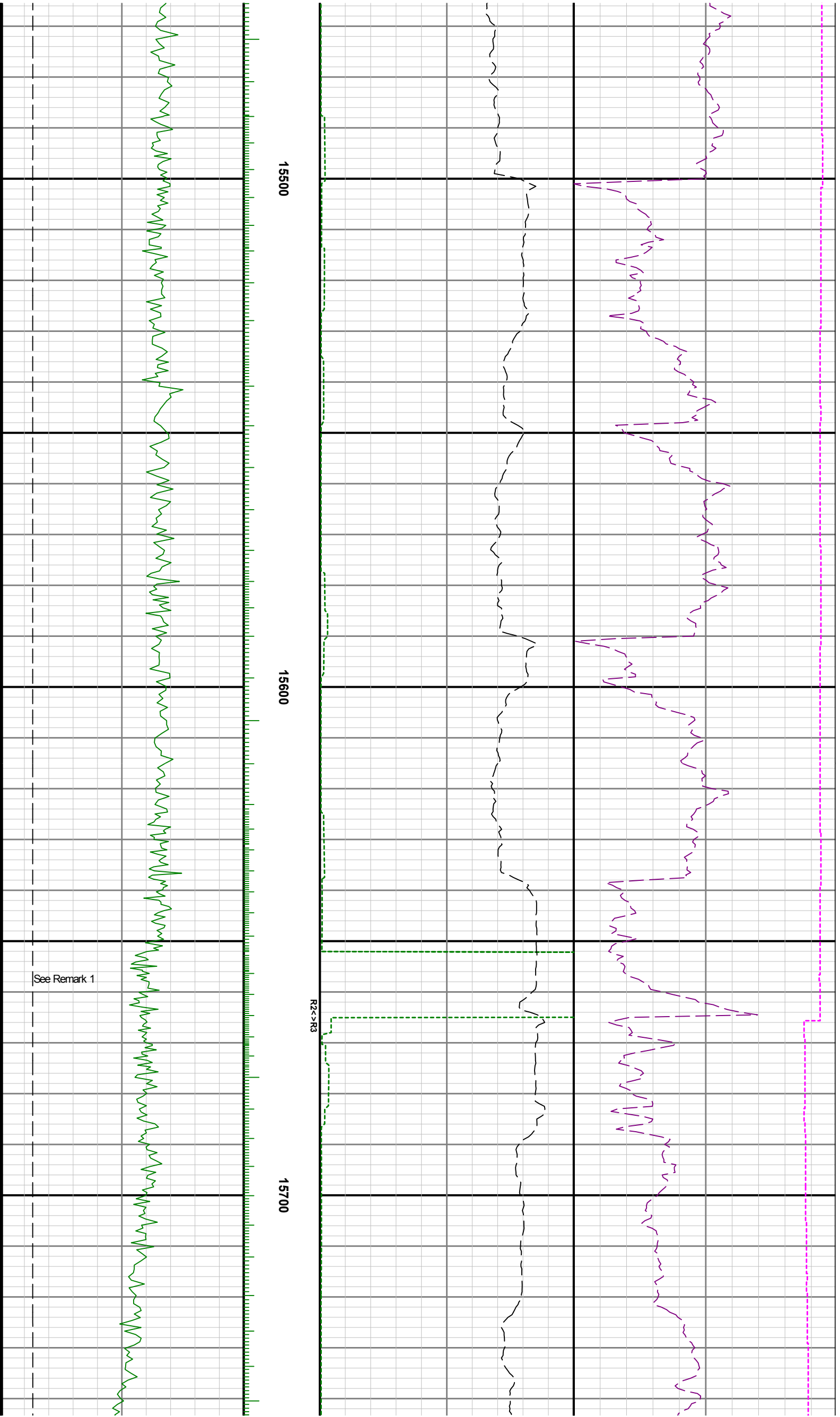
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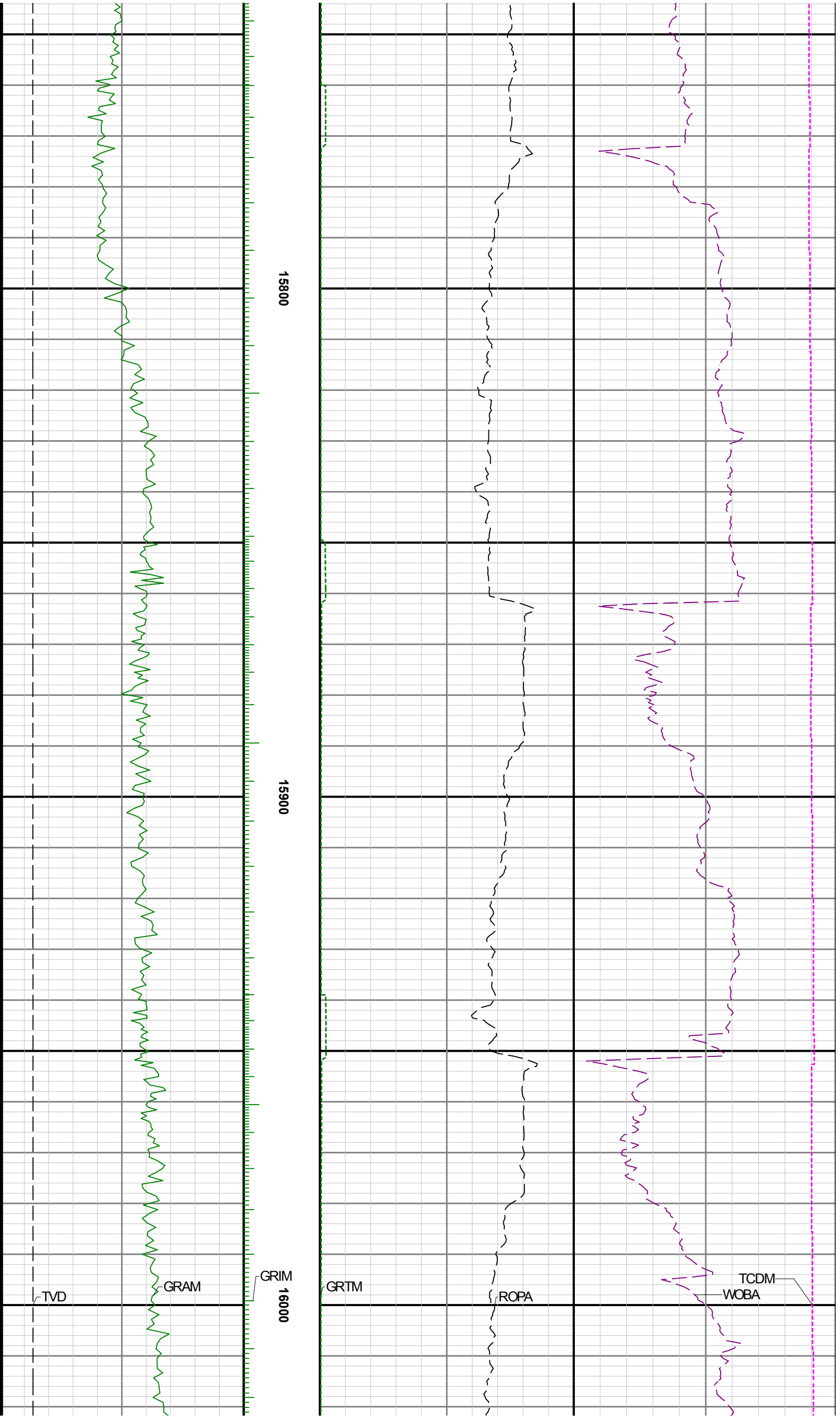
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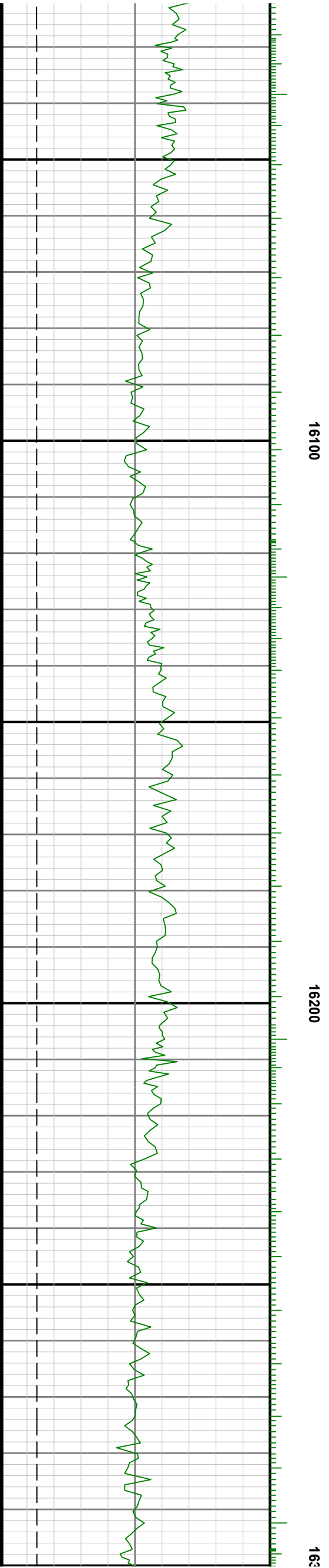
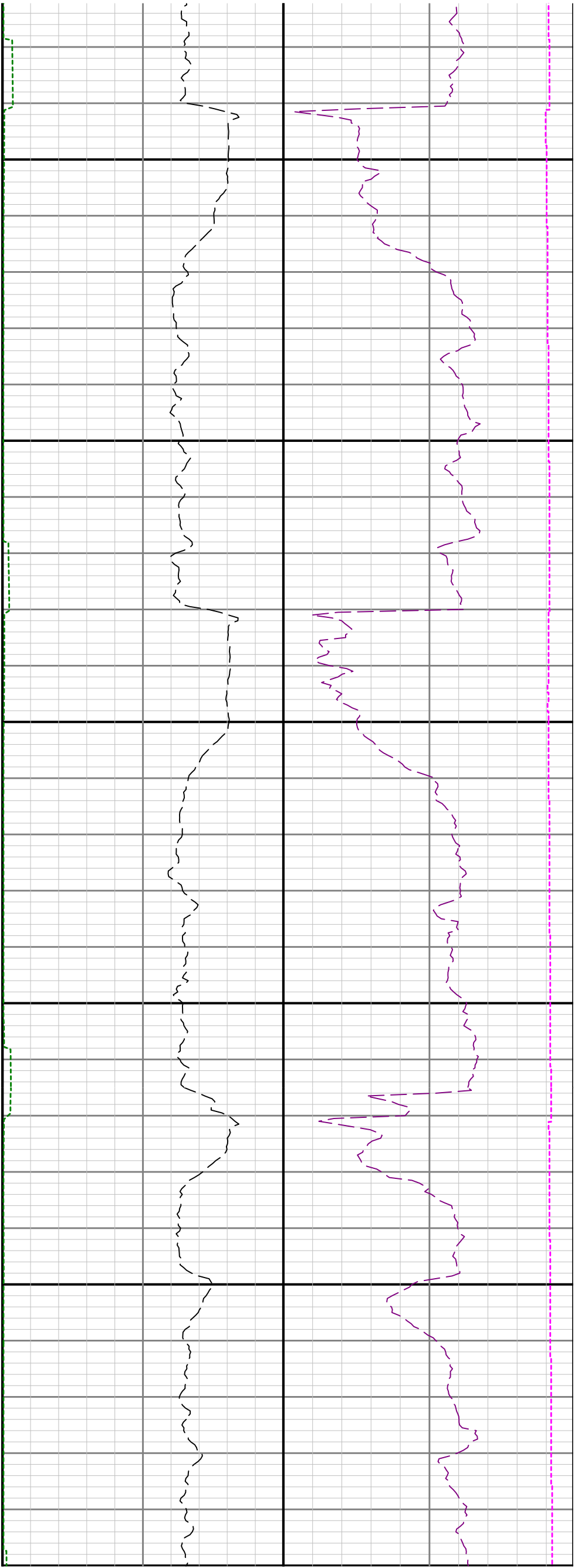


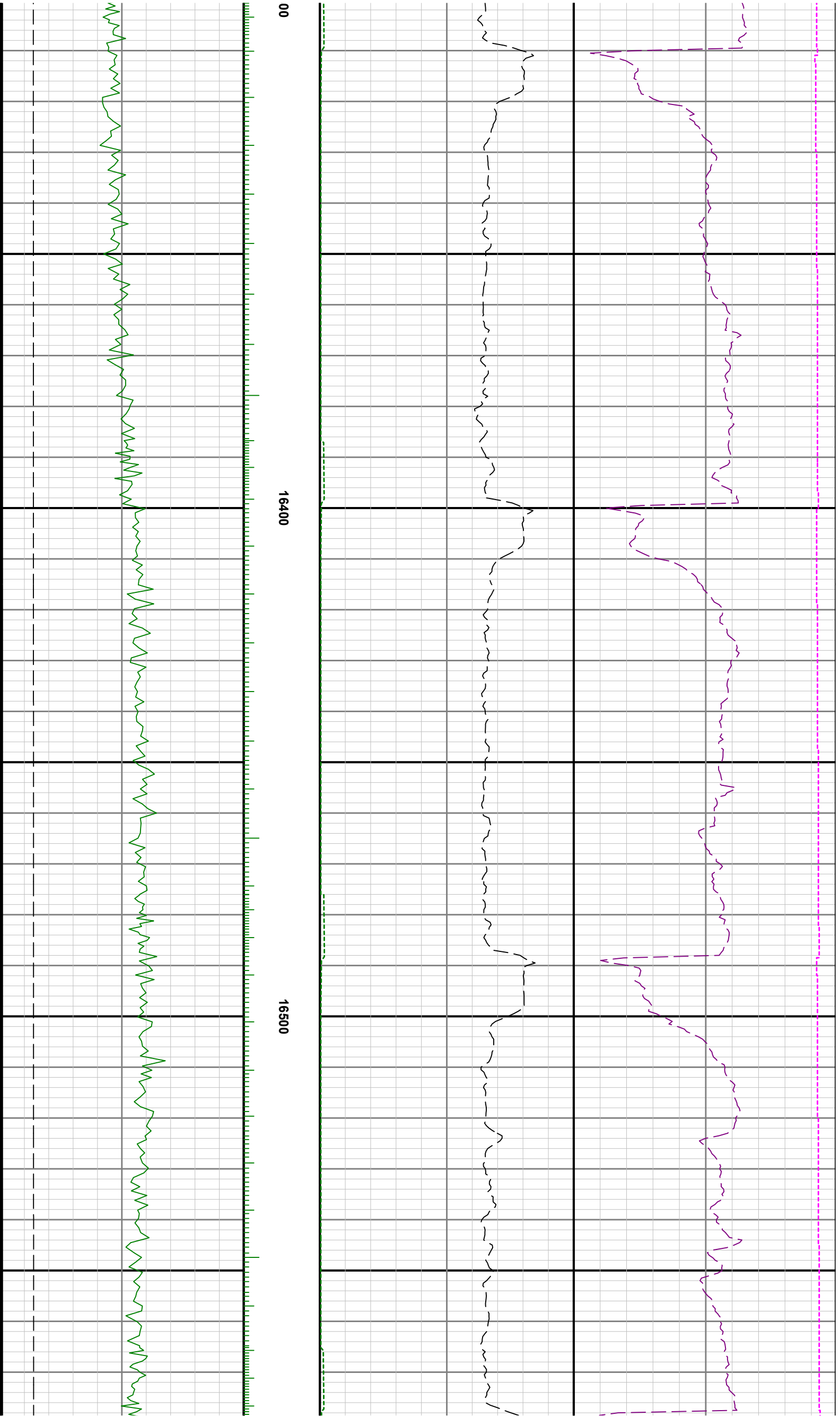


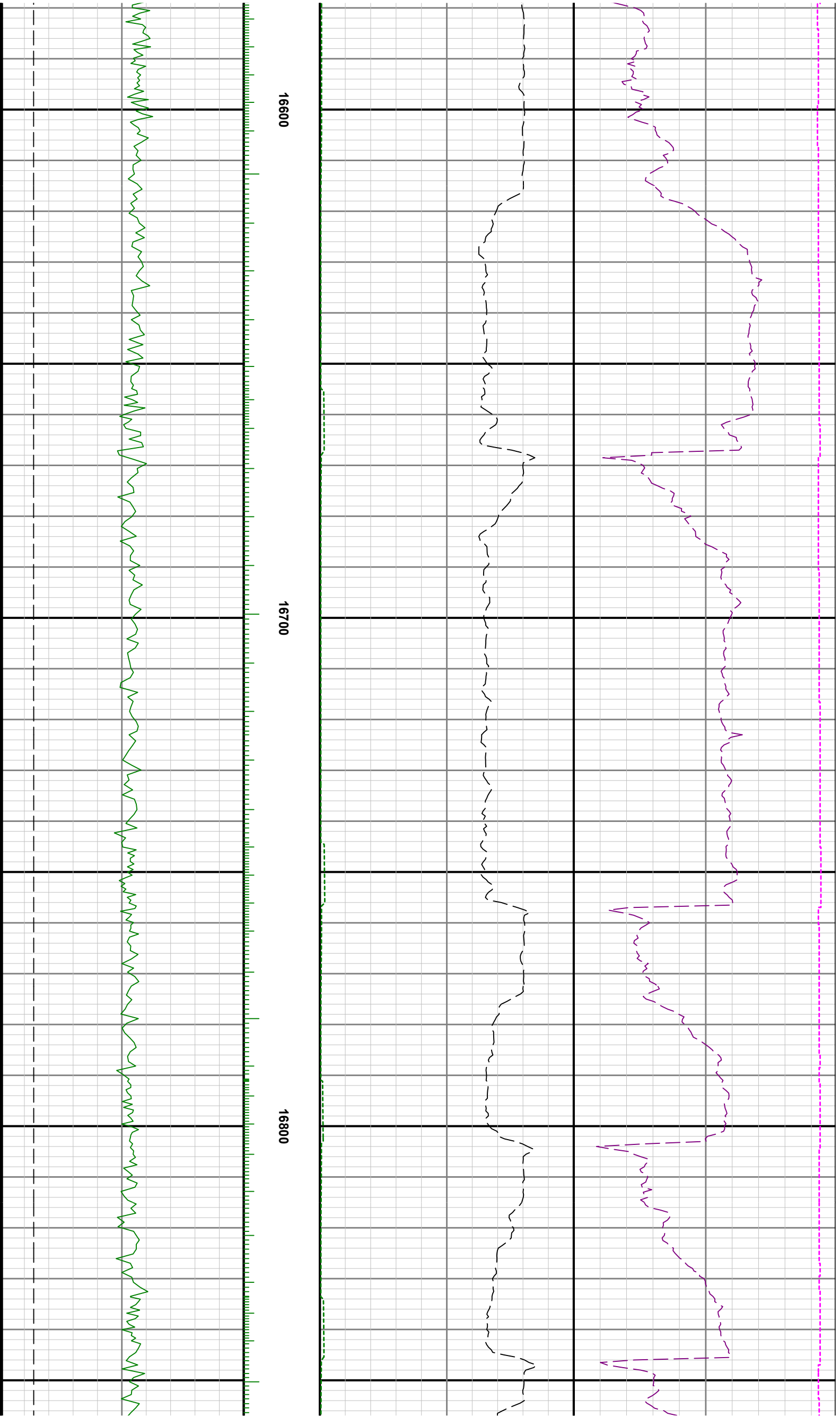


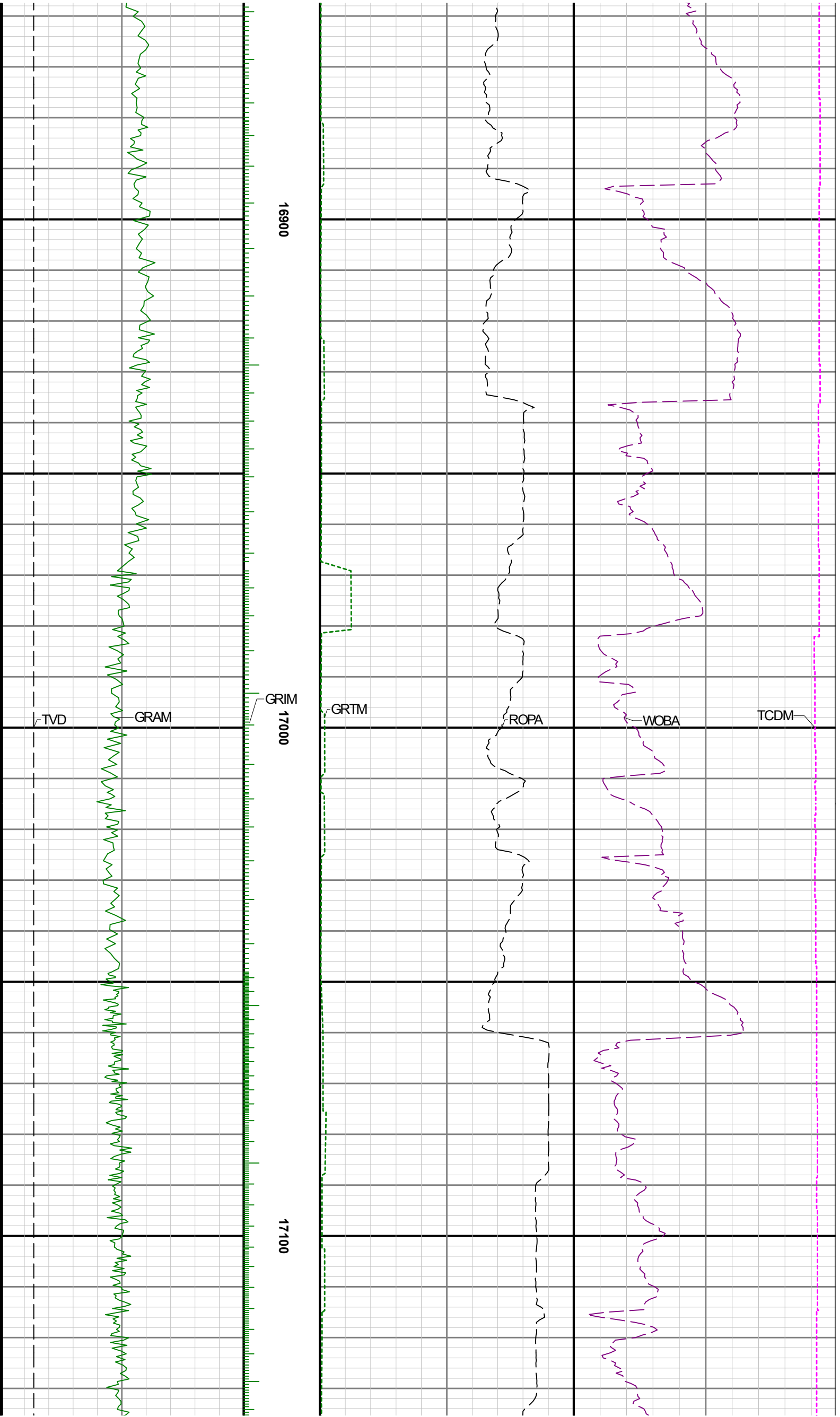


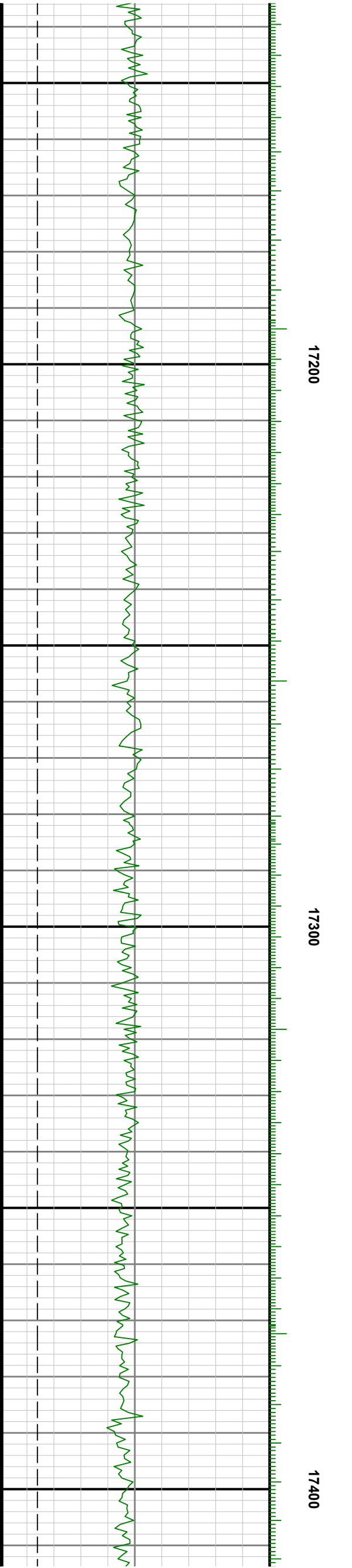
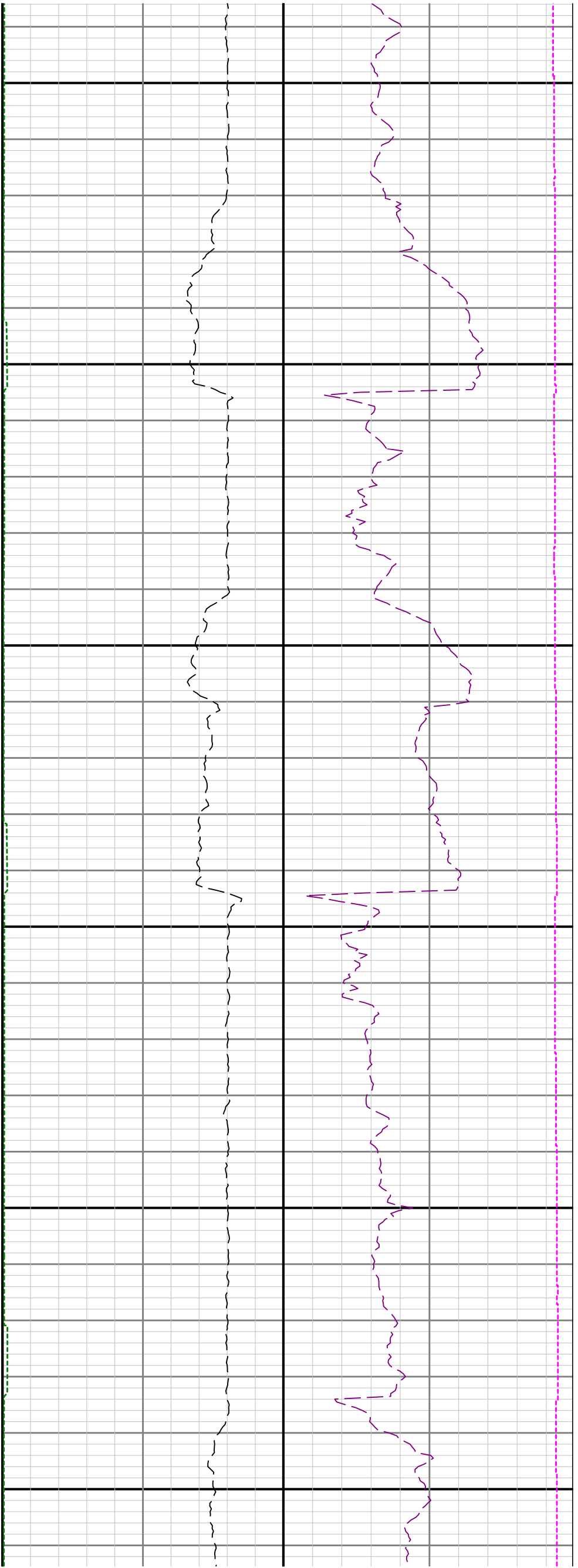


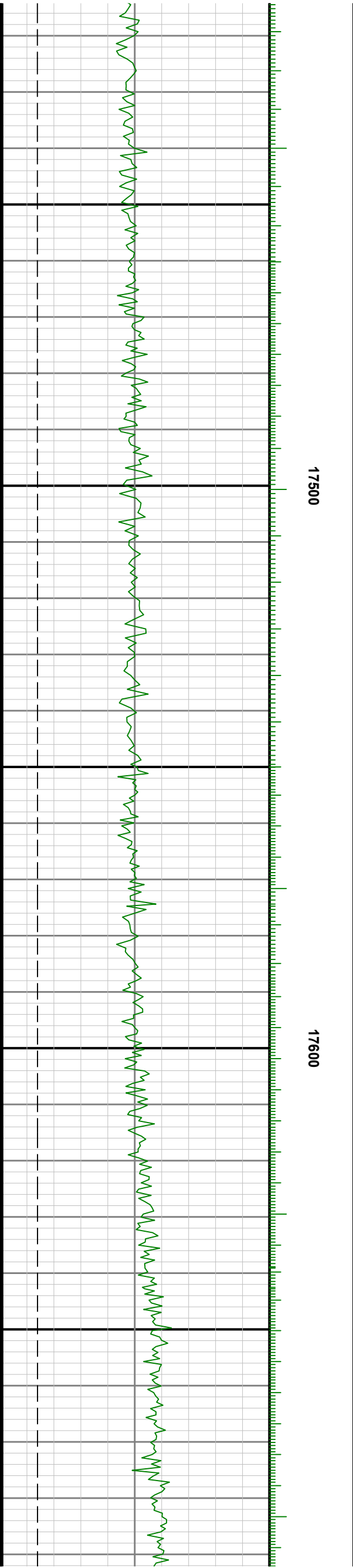
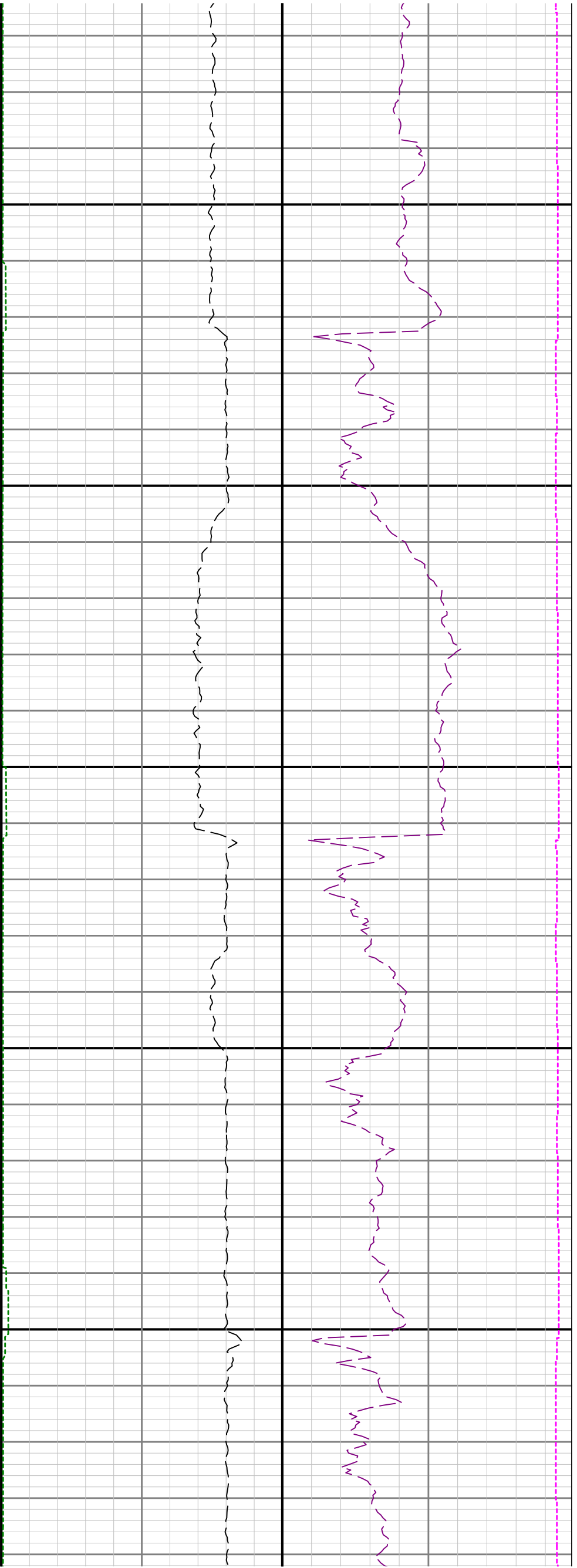


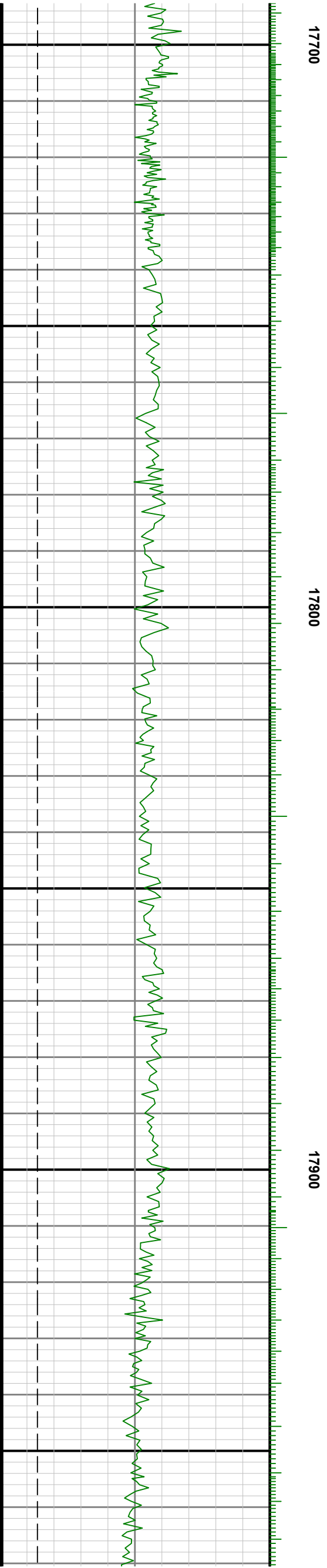
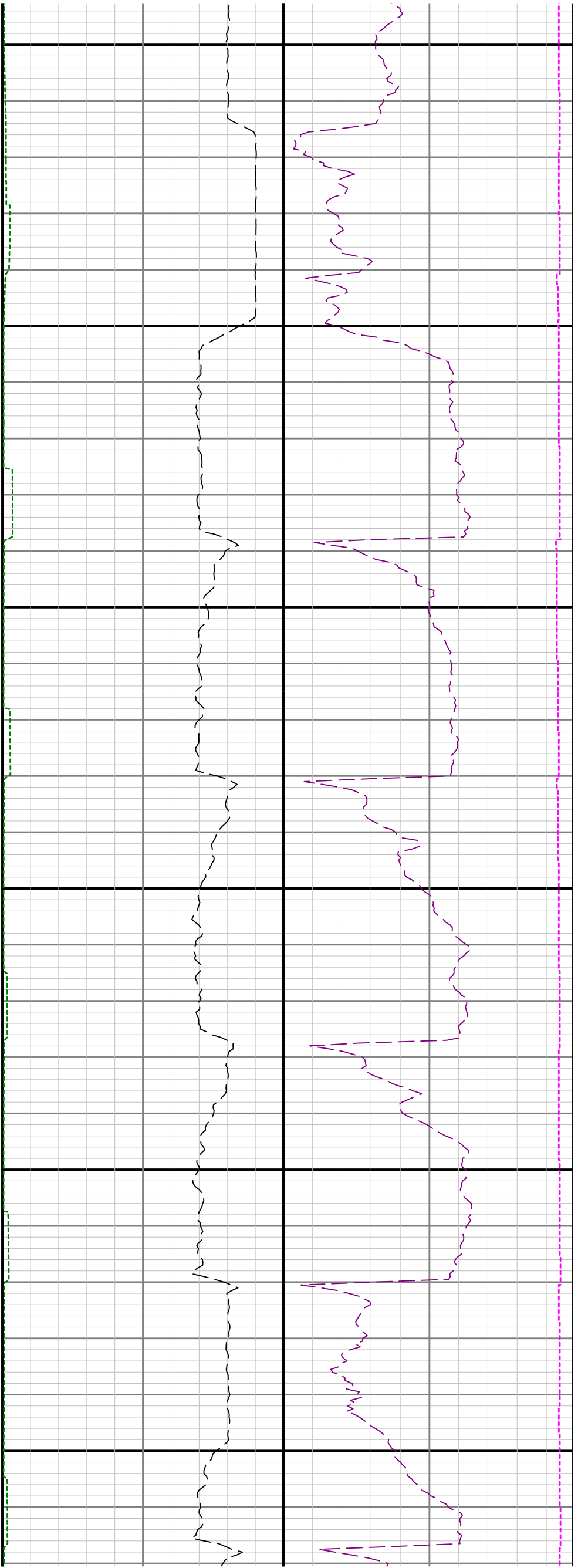


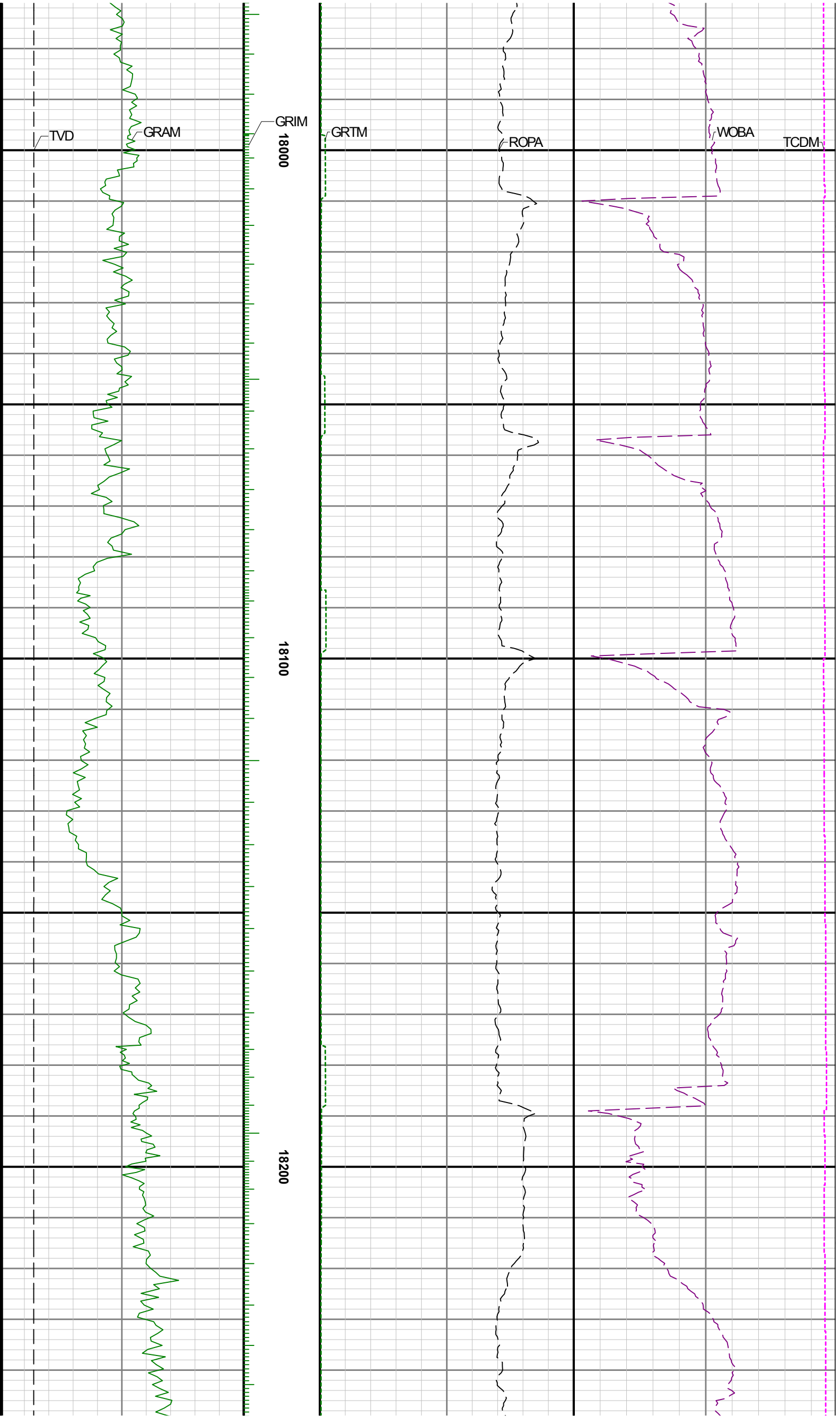


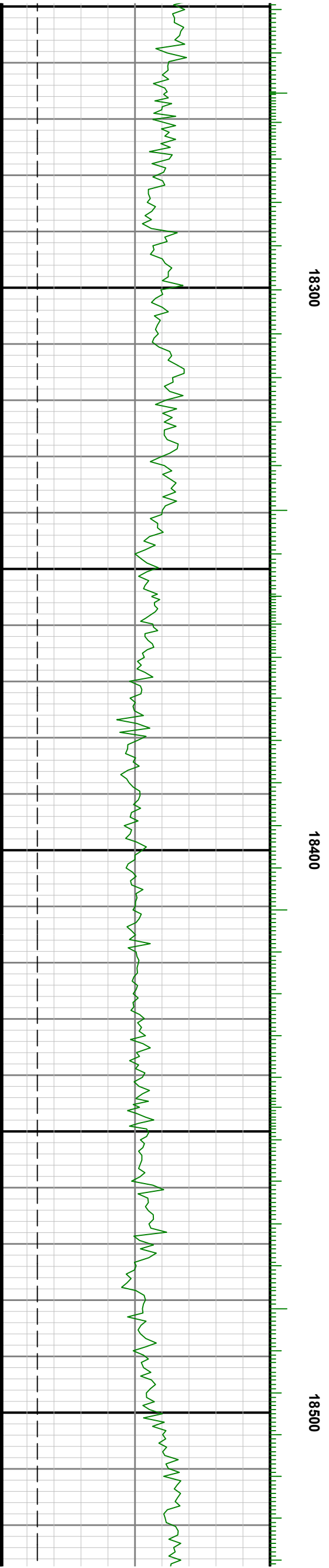
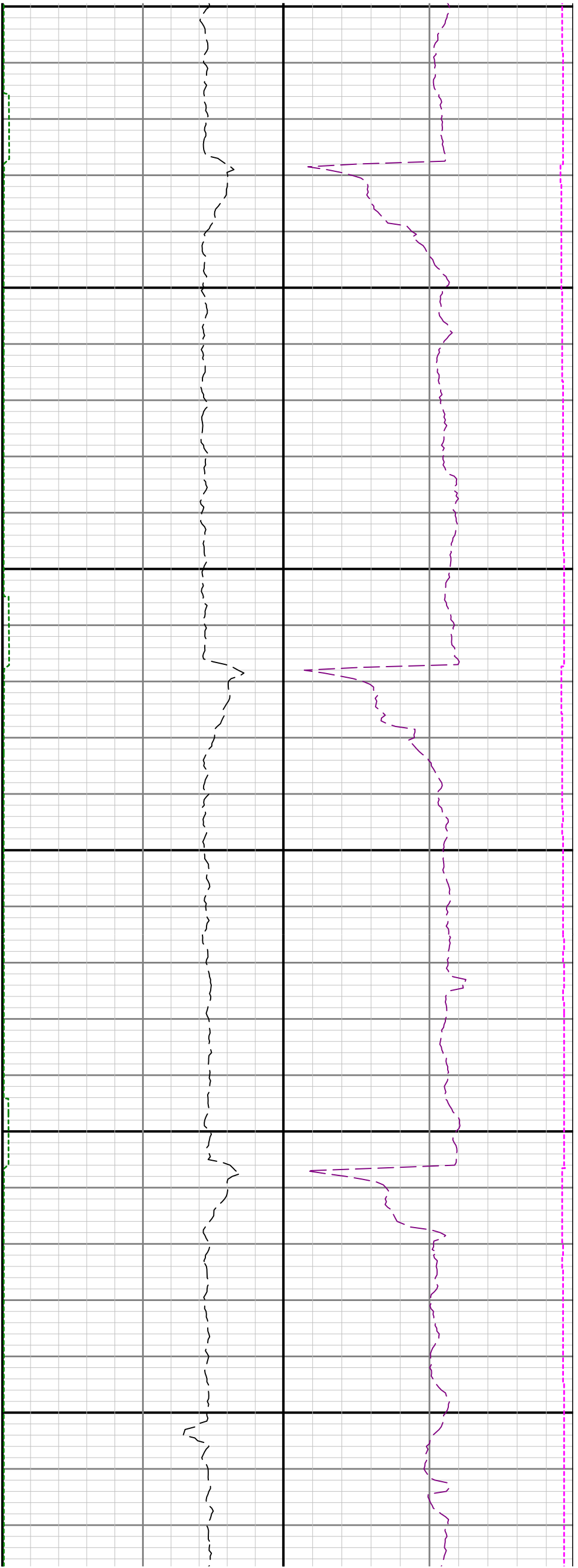














18600

18700

18800

