

Date / Time	Run No.	Depth (ft)	Mud Type	Density (ppg)	Viscosity (cP)	pH	Fluid Loss (cm3)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
2019-09-07 04:30	1	17.00	Water Based Mud	8.3	1	8	N/A	0/99	Active Pit	794	0.00
2019-09-27 18:00	2	2678.00	Diesel-Oil Based Mud	8.8	7	N/A	7.0	79/14	Active Pit	32000	0.00
2019-09-28 18:00	2	9418.00	Diesel-Oil Based Mud	9.4	12	N/A	7.0	78/11	Active Pit	36000	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	NaviTrak	11753283	Directional (mag)	16.69	53.48	8.000	0.000
1	NaviTrak	11753283	VSS	16.69	53.48	8.000	0.000
2	AutoTrak Curve Steering Unit	14316019	Near Bit VSS	5.93	6.73	6.750	4.330
2	AutoTrak Curve Steering Unit	14316019	Near Bit Inclination	5.93	6.73	6.750	4.330
2	AutoTrak Curve MWD	14322612	Gamma (single)	2.76	12.87	6.750	3.250
2	AutoTrak Curve MWD	14322612	Directional (mag)	12.28	22.39	6.750	3.250

Service and Tool Mnemonics

Mnemonic	Name	Description
NTK	NaviTrak	Probe Based Directional Module, NaviTrak Platform
ATC SU	AutoTrak Curve SU	Auto Trak Curve Steering Unit
ATC MWD	AutoTrak Curve MWD	Auto Trak Curve MWD
ATC LCPM	AutoTrak Curve LCPM	Auto Trak Curve LCPM

Comments

1	Depth measurements were obtained from a depth control system not supplied or operated by Baker Hughes. Due to the lack of control by Baker Hughes, depth calibrations and measurements could not be independently verified.
2	Baker Hughes LWD run 1 utilized a 8 inch NaviTrak services (Directional) behind a 13.5 inch bit and rotary steerable assembly from 17 to 1637 feet MD (17 to 1619 feet TVD).
3	Baker Hughes LWD run 2 utilized a 6.75 inch NaviGamma services (Directional and Gamma Ray) behind a 8.5 inch bit and rotary steerable assembly from 1637 to 17251 feet MD (1619 to 6346 feet TVD).
4	The Gamma Ray Apparent (GRAM) data is presented from 0 to 200 API, per customer's request.

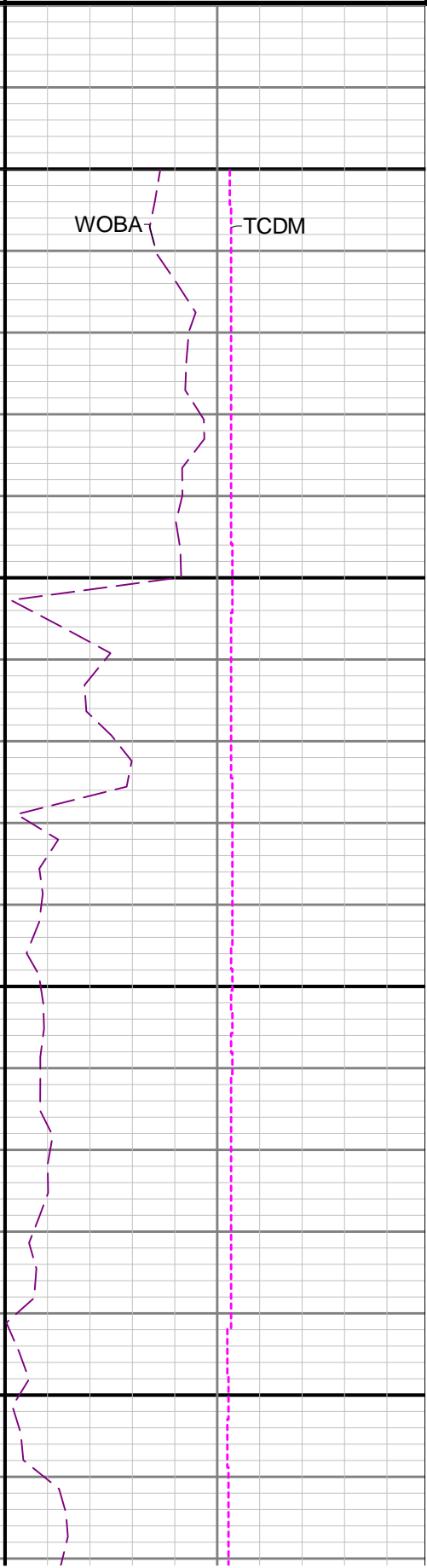
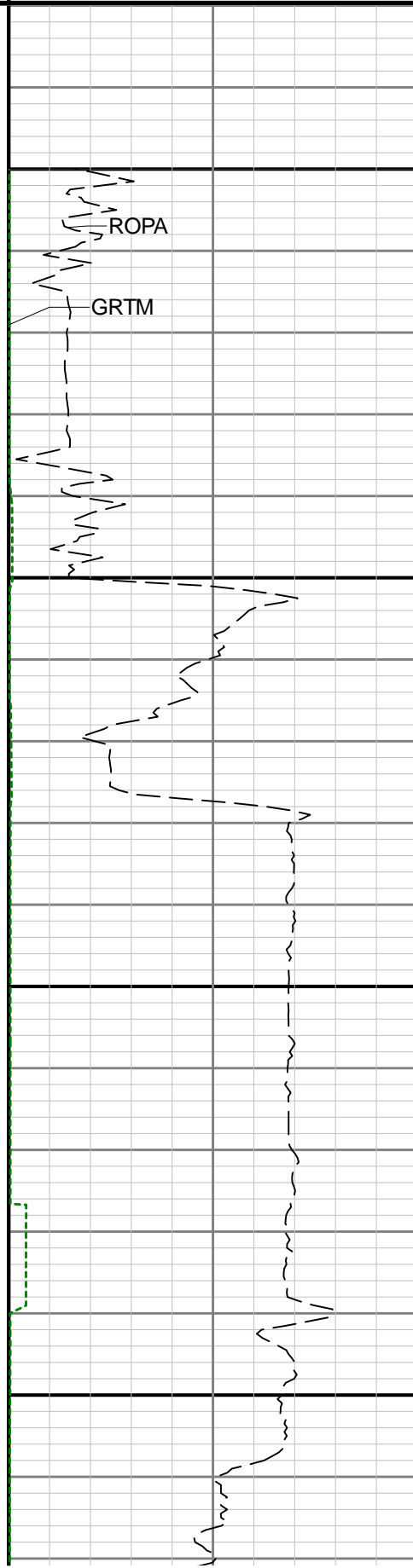
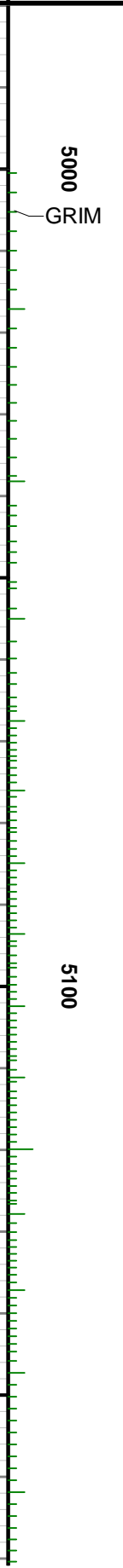
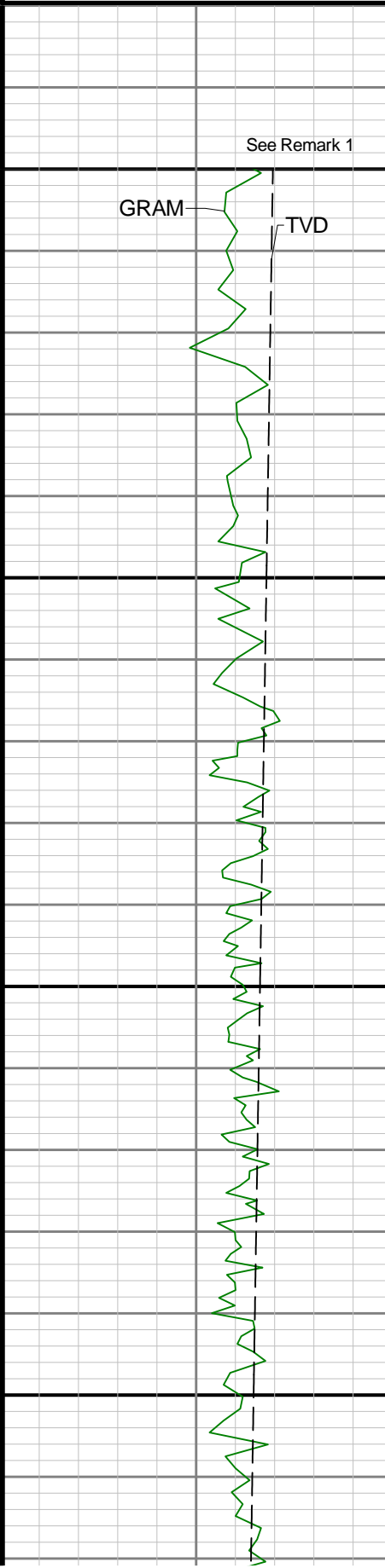
Remarks

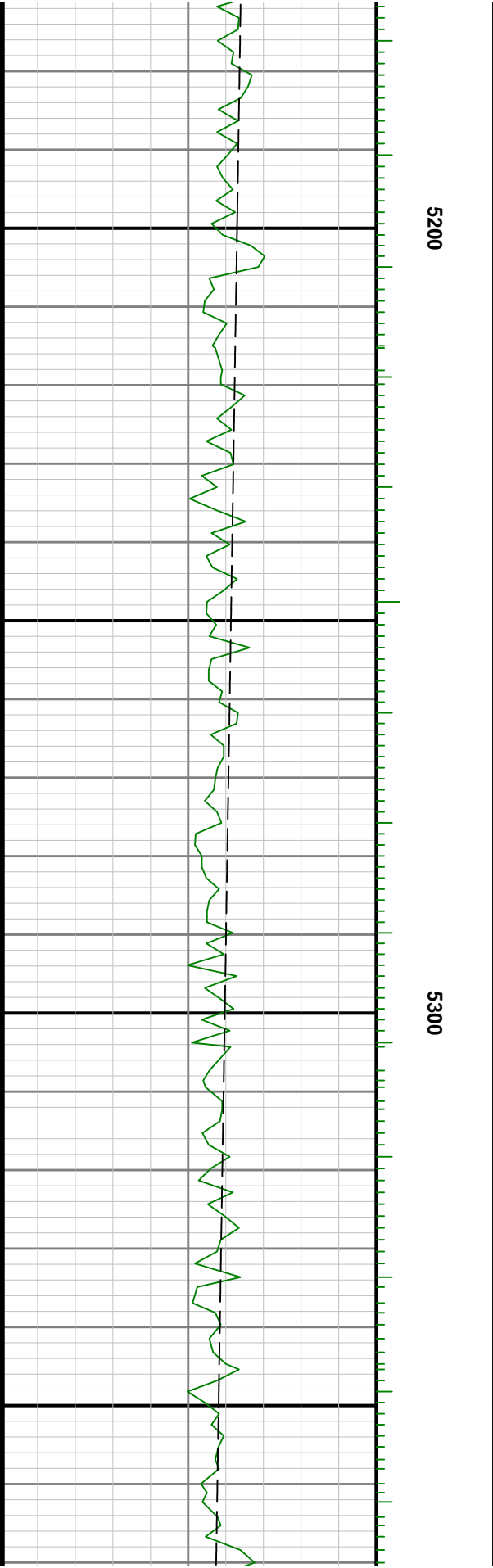
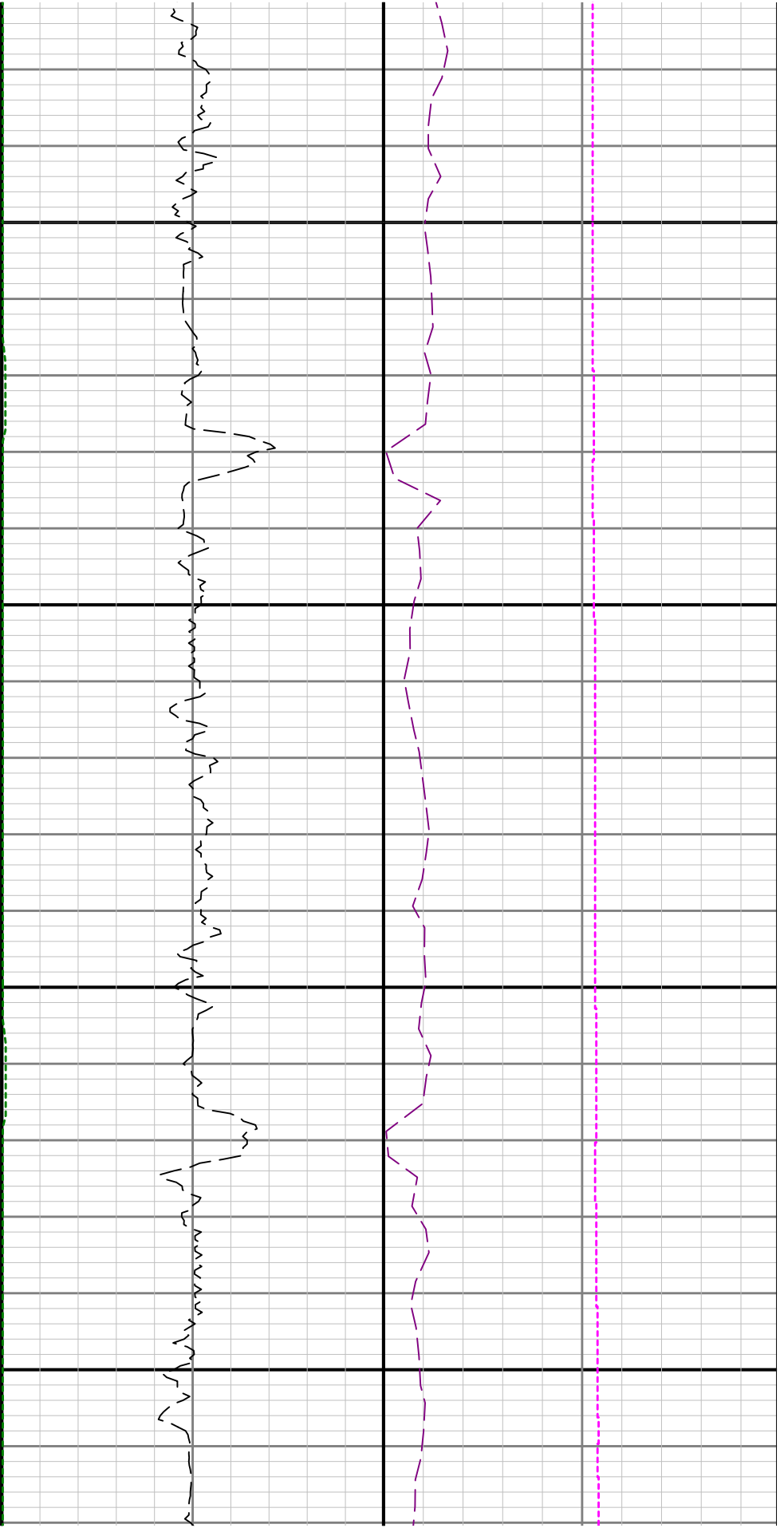
Number	Depth (ft)	Hole Section (in)	Run No.	Remark
1	5000.00	8.500	2	The Gamma Ray Apparent (GRAM) log starts at 5000 feet, per customer's request.
2	17237.00	8.500	2	The interval from 17237 to 17251 feet MD (6346 feet TVD) was not logged after being drilled due to sensor to bit offset at well TD.

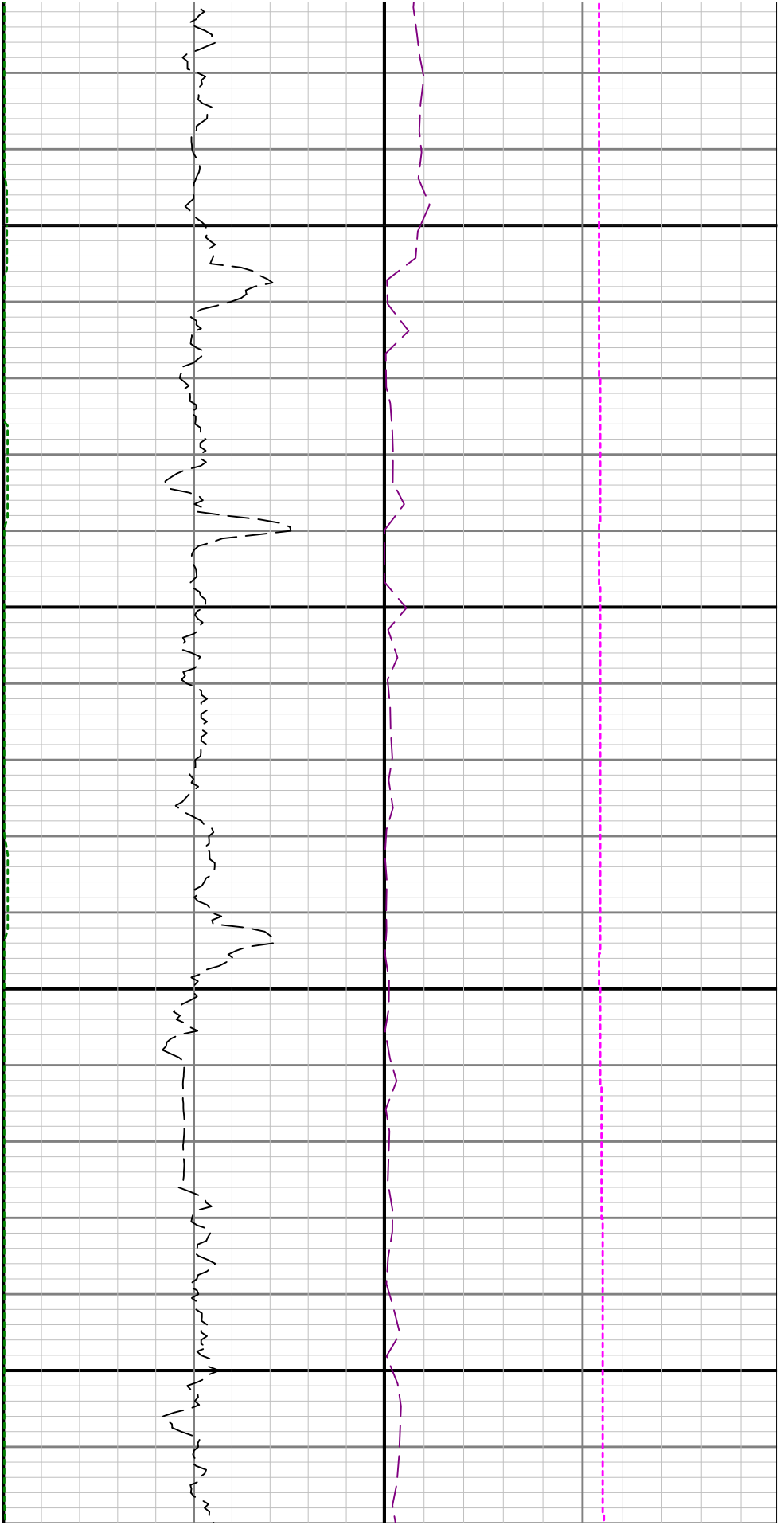
Curve Mnemonics

Presented Curves	Description	Units
WOBA	Weight On Bit, Average	klb
ROPA	Depth Averaged ROP 3 ft Average	ft/h
TVD	True Vertical Depth	ft
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
GRADM	Gamma Ray - Apparent - Down Quadrant - Memory 0.5 ft Average	API
GRAUM	Gamma Ray - Apparent - Up Quadrant - Memory 0.5 ft Average	API
TCDM	Directional Real-Time Survey Temperature	degF

Gamma Ray - Apparent 0.5 ft Average GRAM	MD 1:240 feet	Depth Averaged ROP 3 ft Average ROPA	Downhole Temperature TCDM
0 200		1000 0	0 300
API		ft/h	degF
Azimuthal Gamma Ray - Apparent - Up Quadrant 0.5 ft Average GRAUM		Gamma Time Since Drilled GRTM	Weight On Bit, Average WOBA
0 200		0 600	0 50
API		min	klb
Azimuthal Gamma Ray - Apparent - Down Quadrant 0.5 ft Average GRADM			
0 200			
API			
True Vertical Depth TVD			

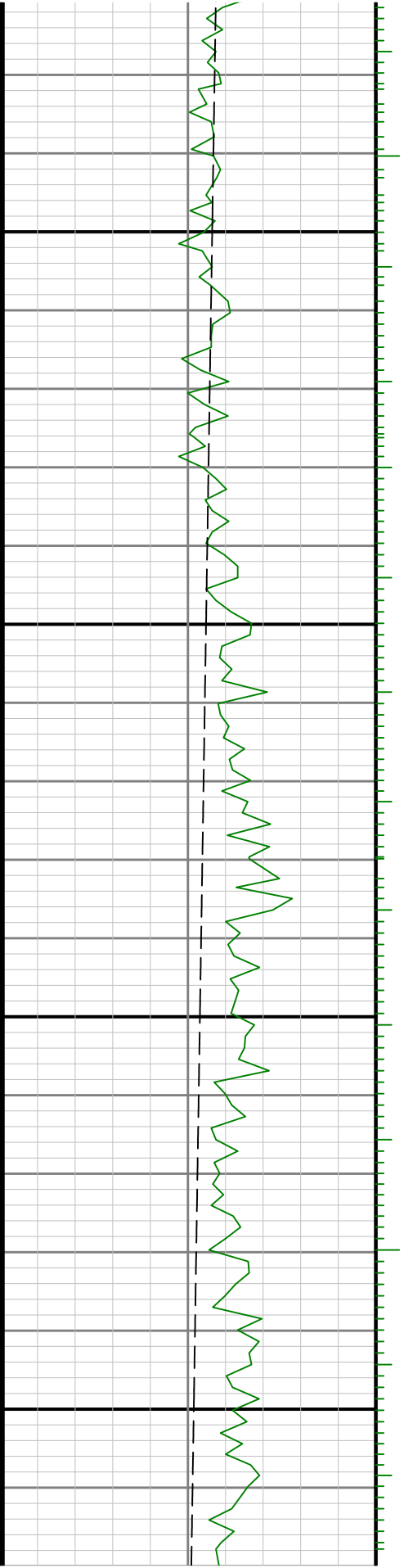


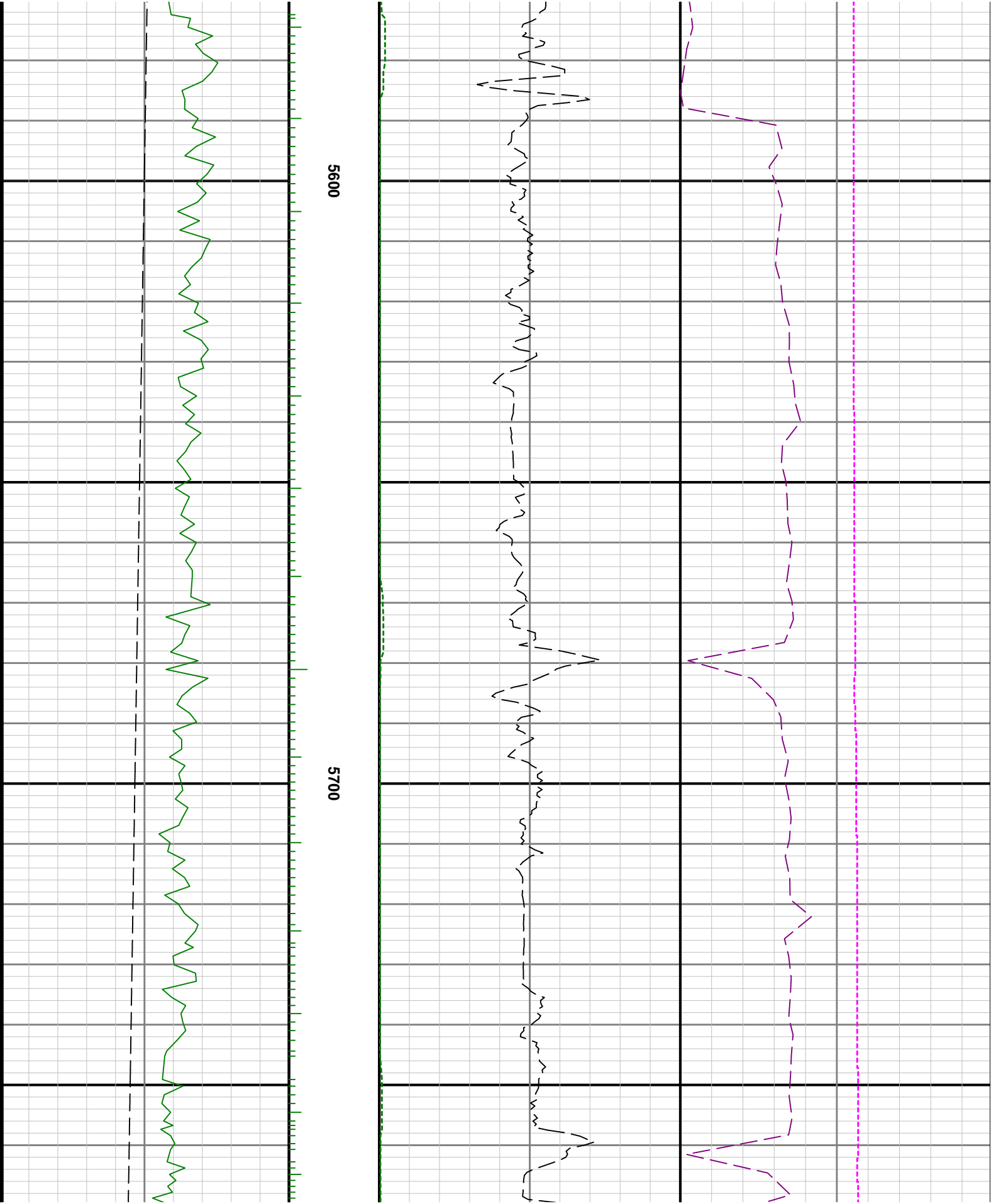


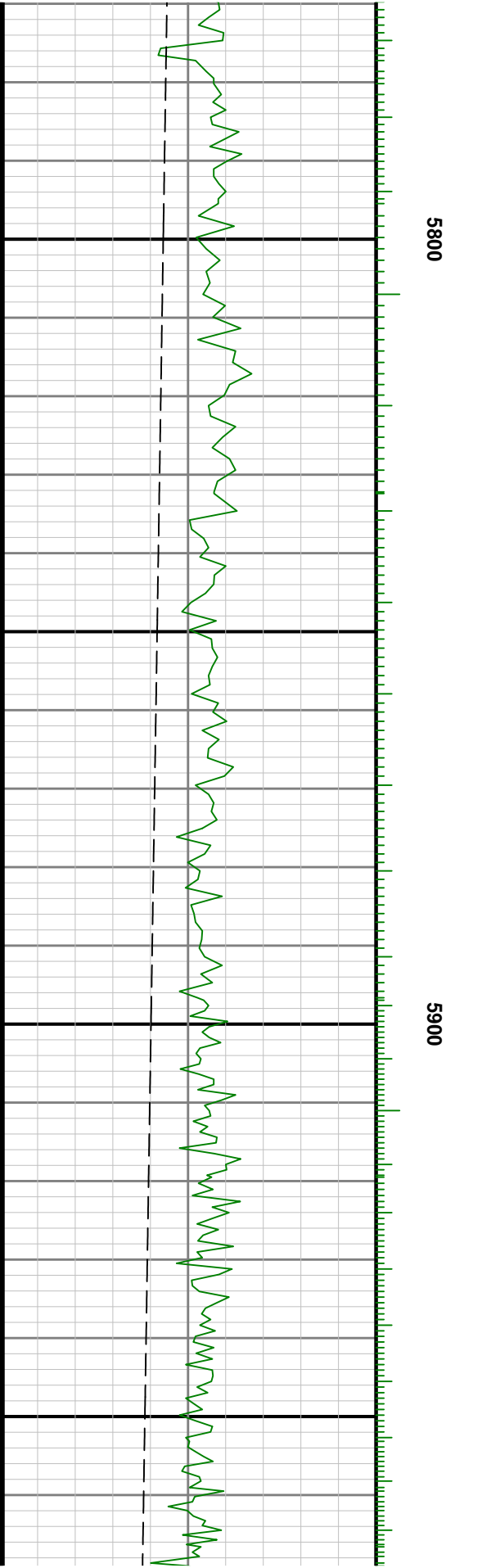
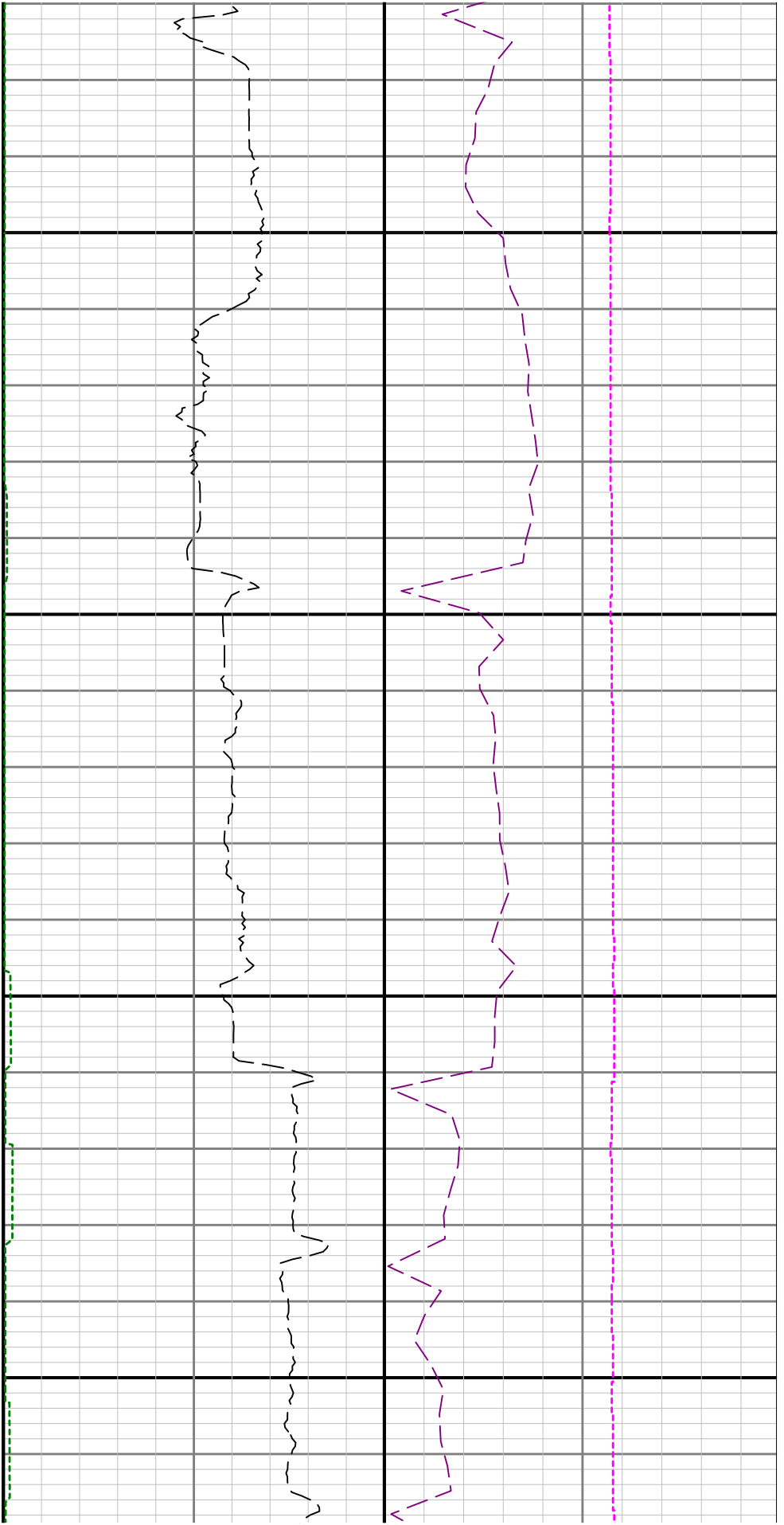


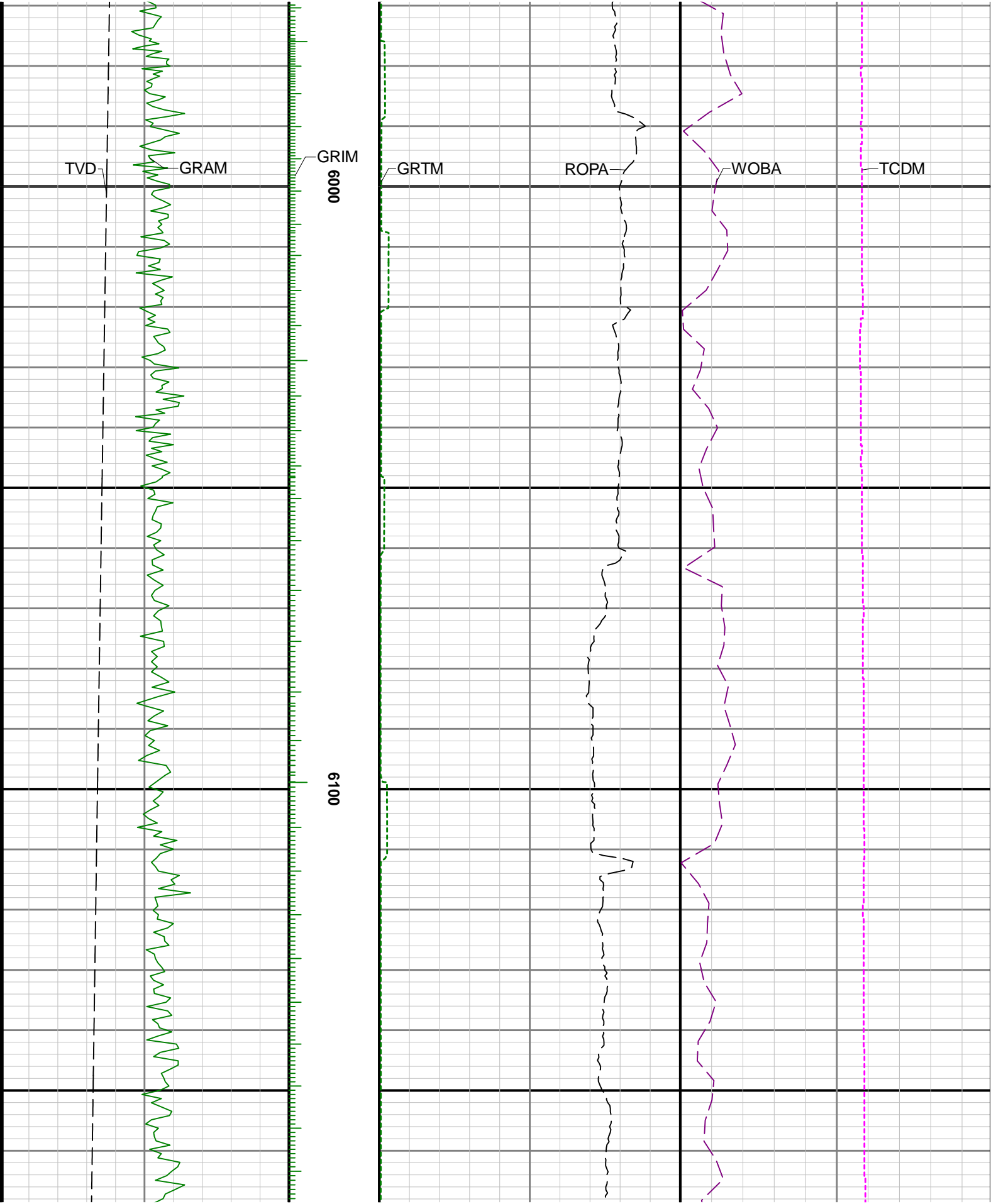
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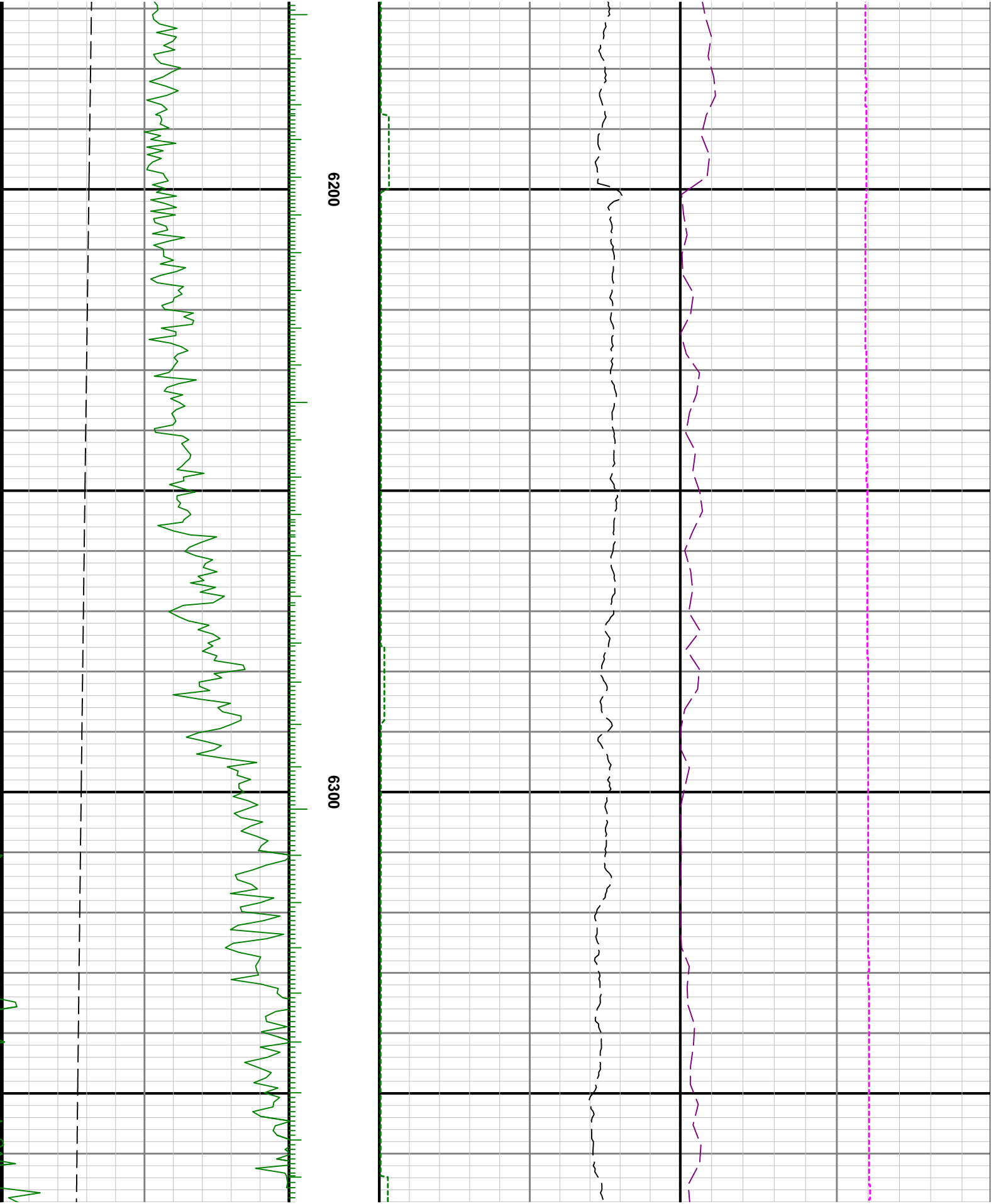
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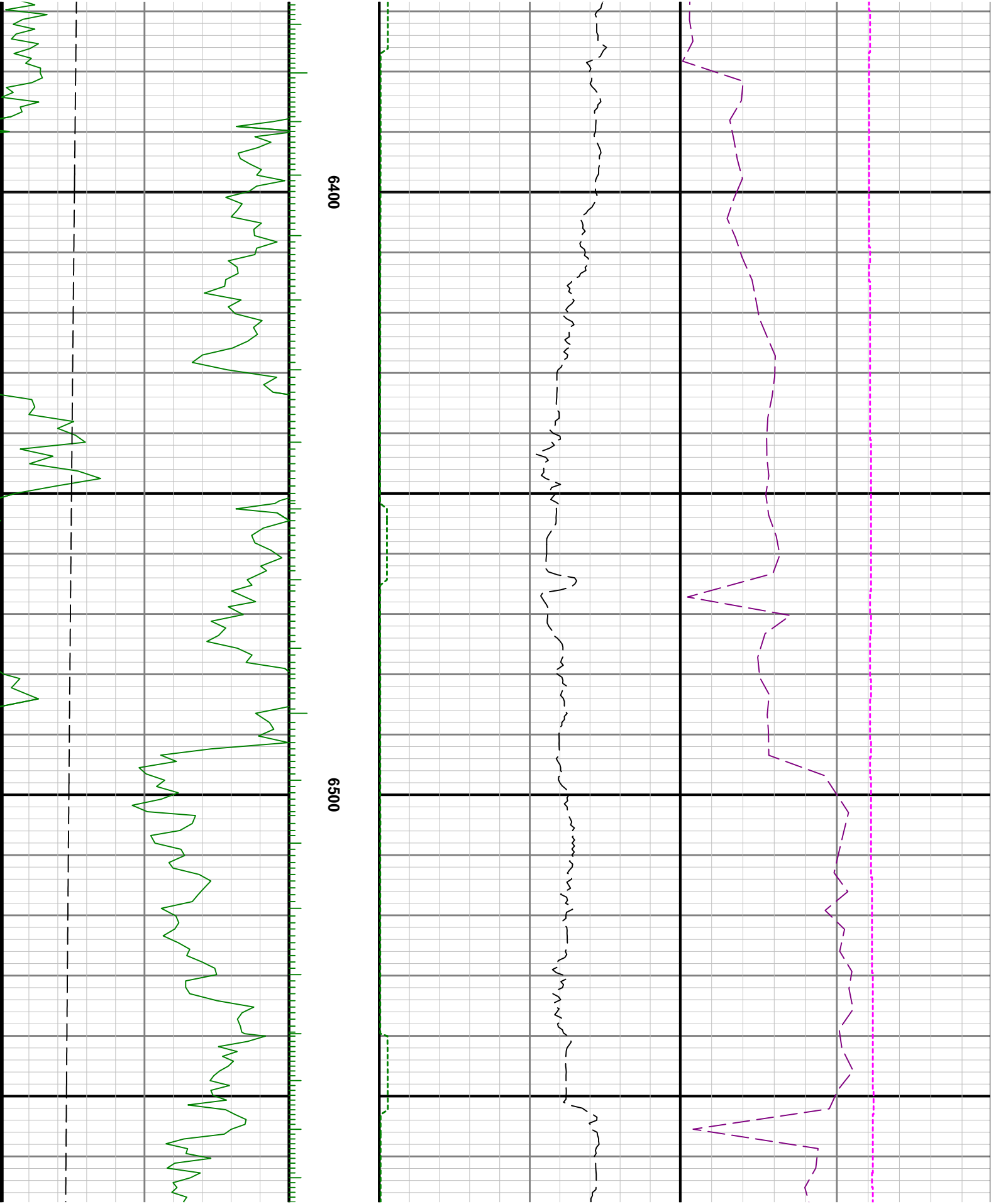


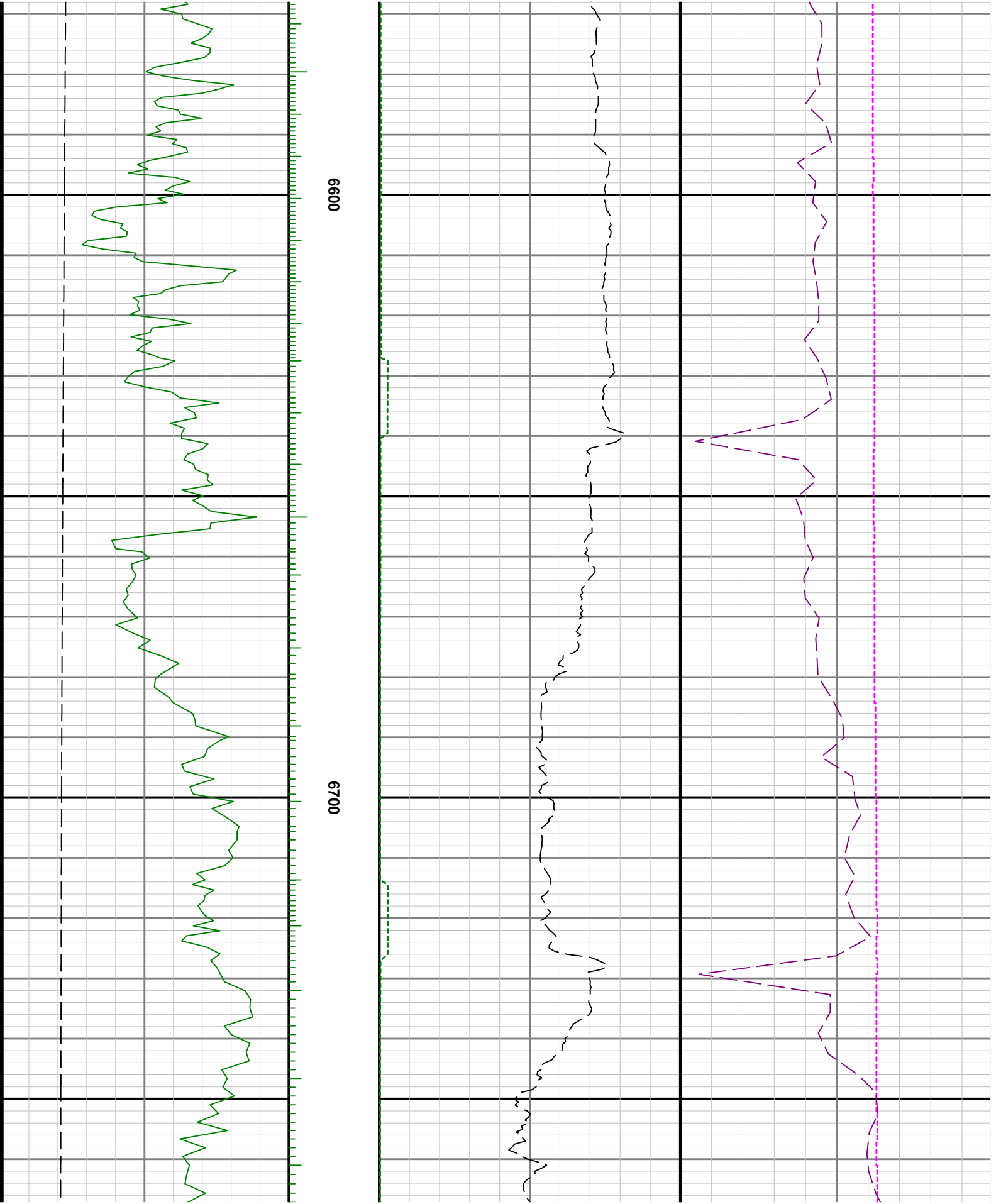


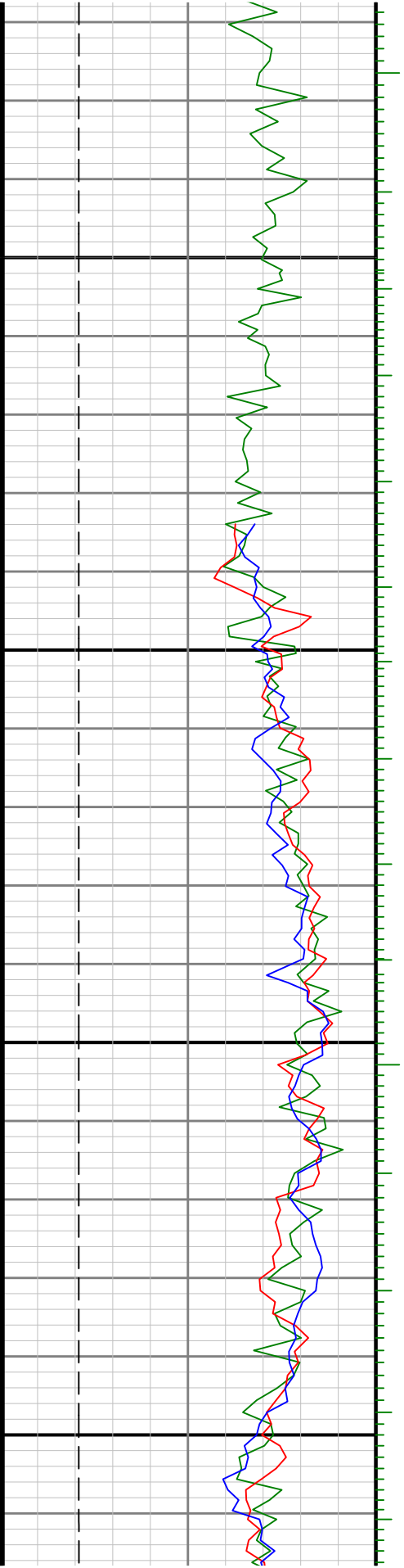






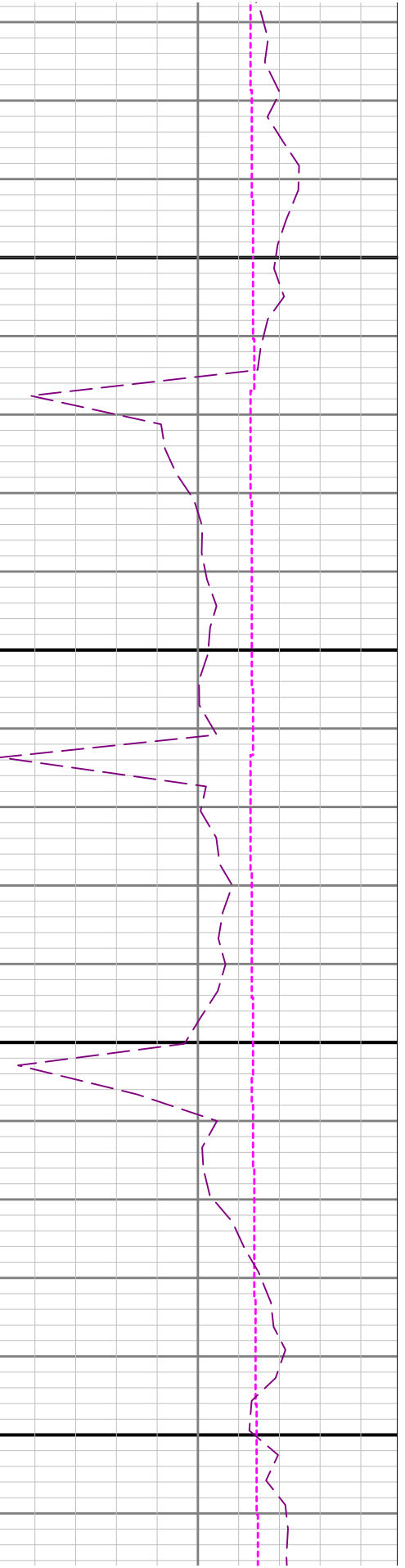
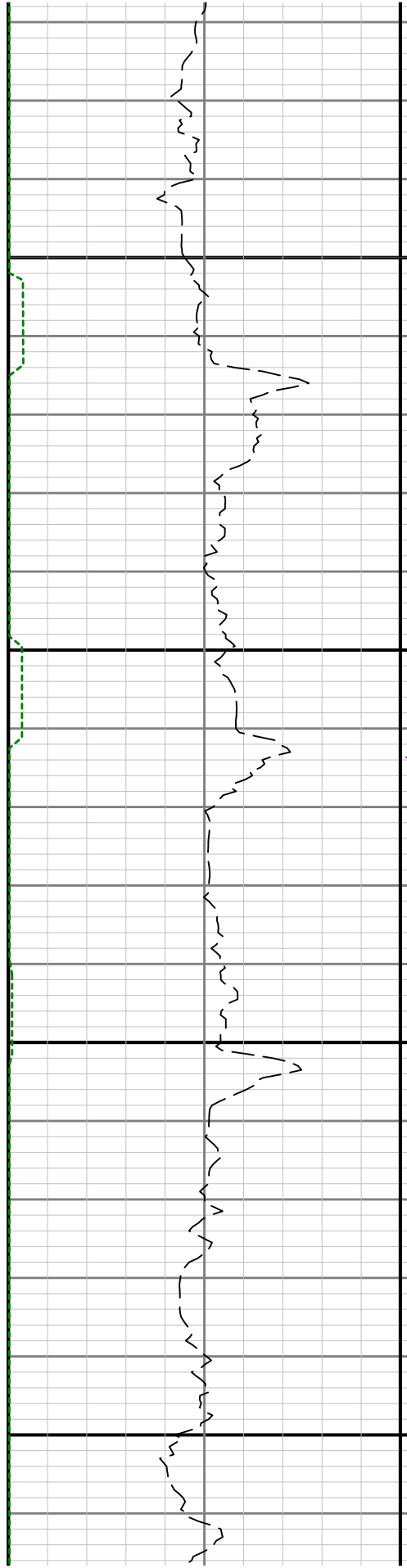


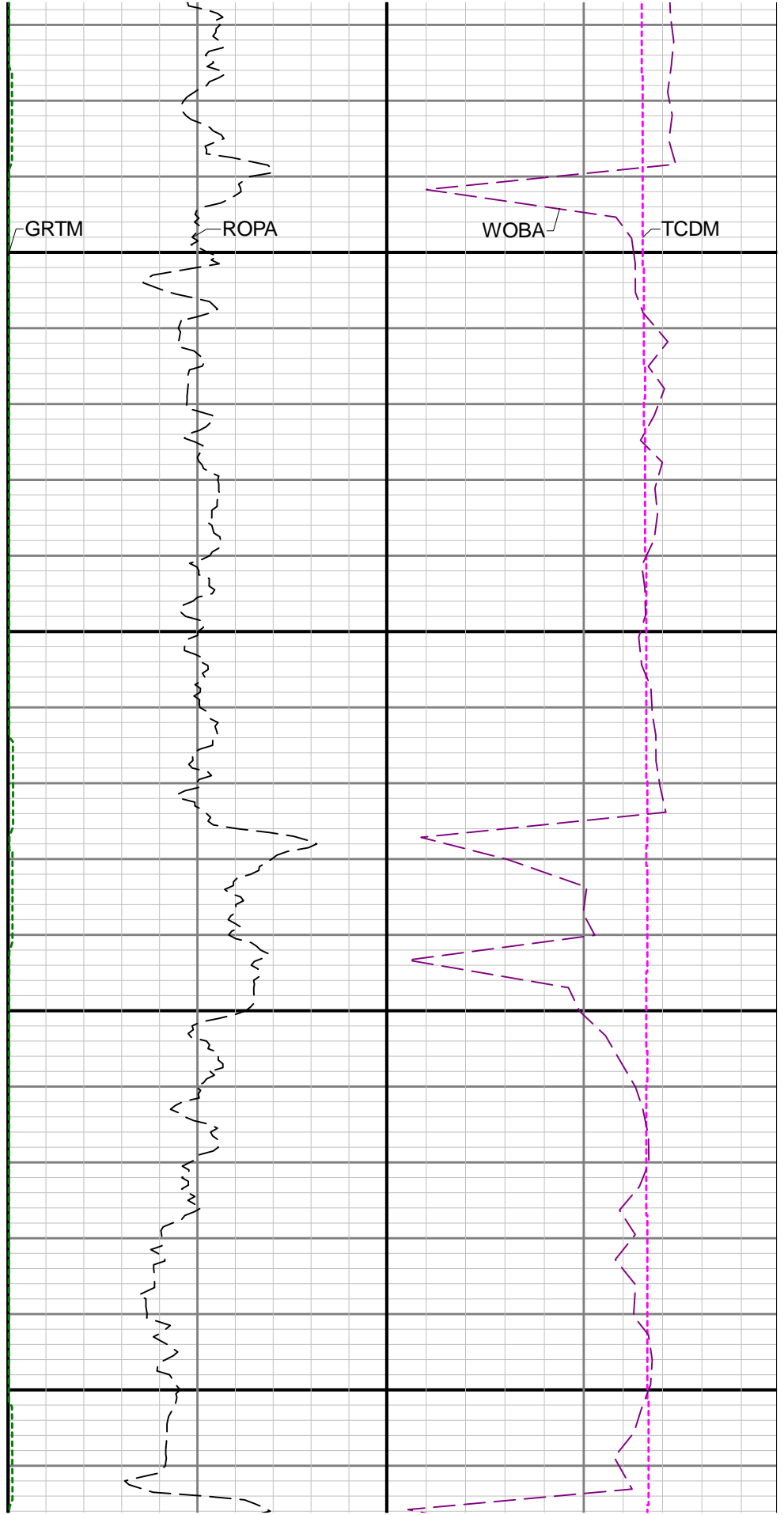
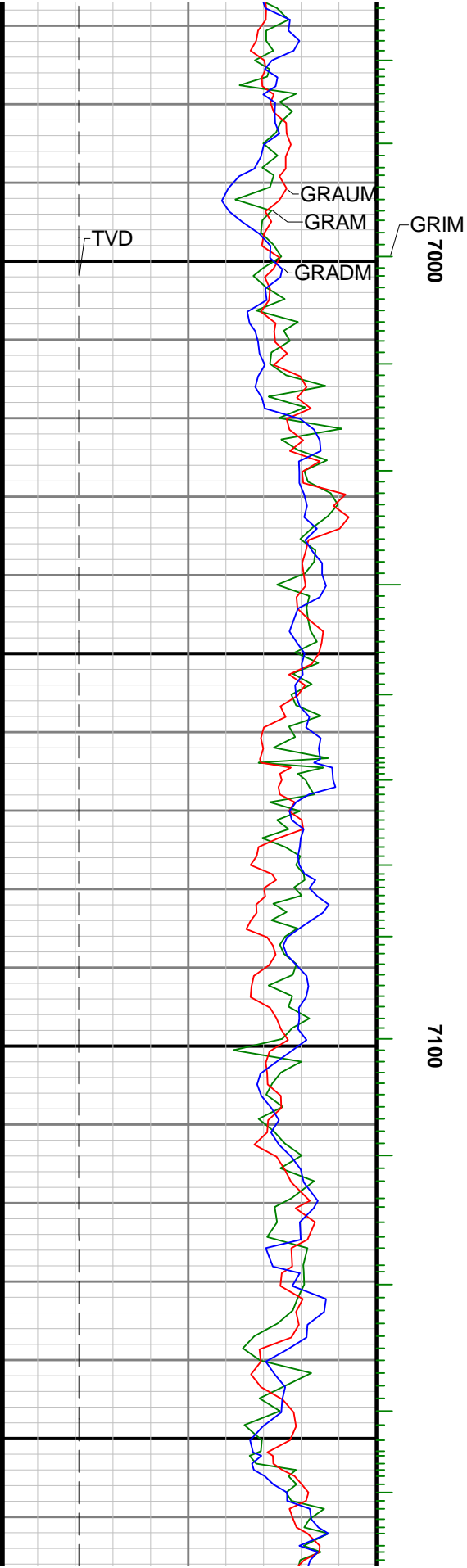


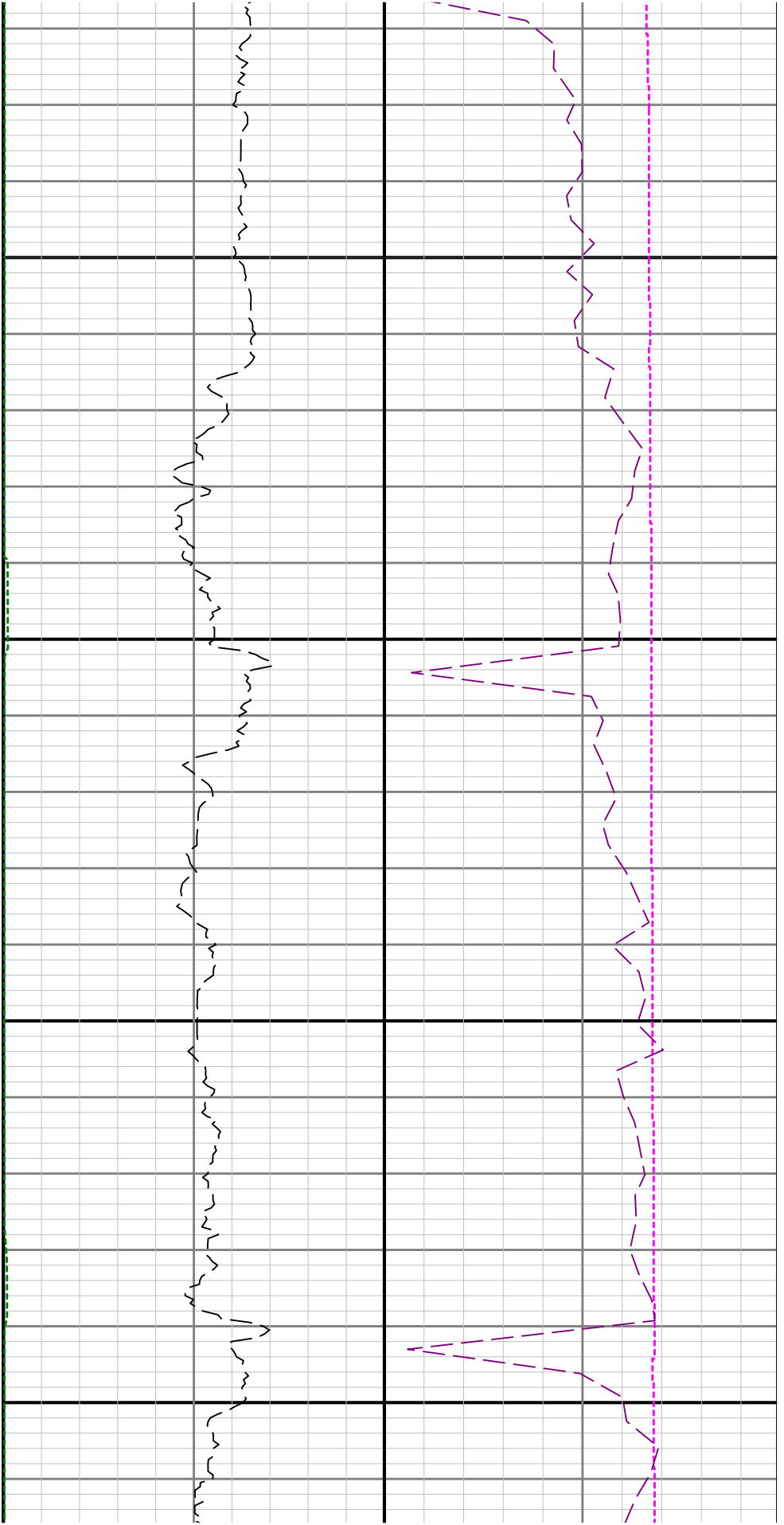


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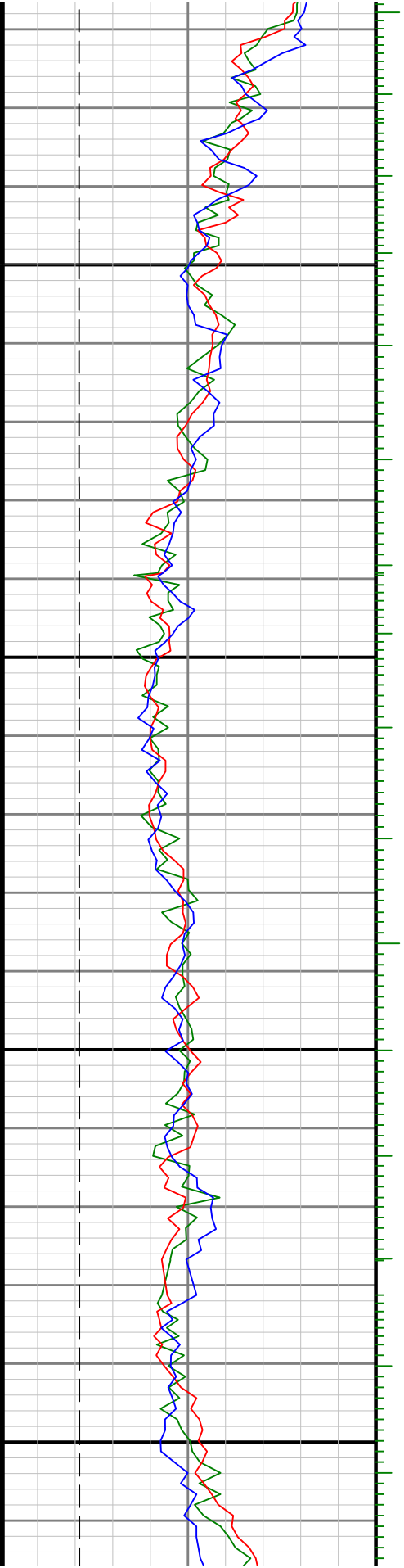


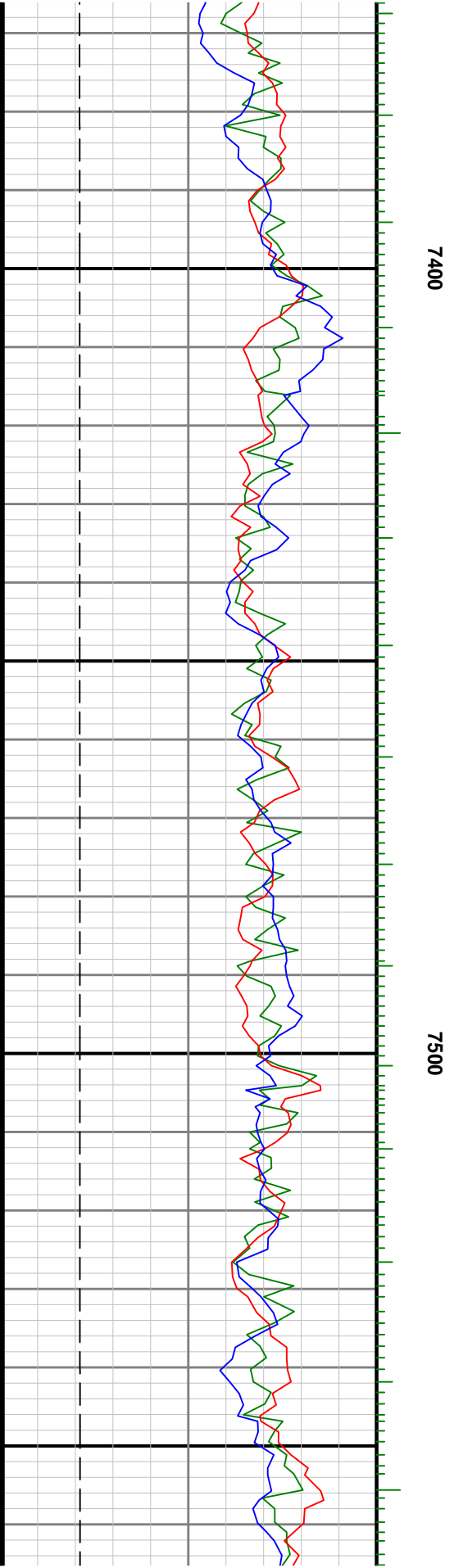
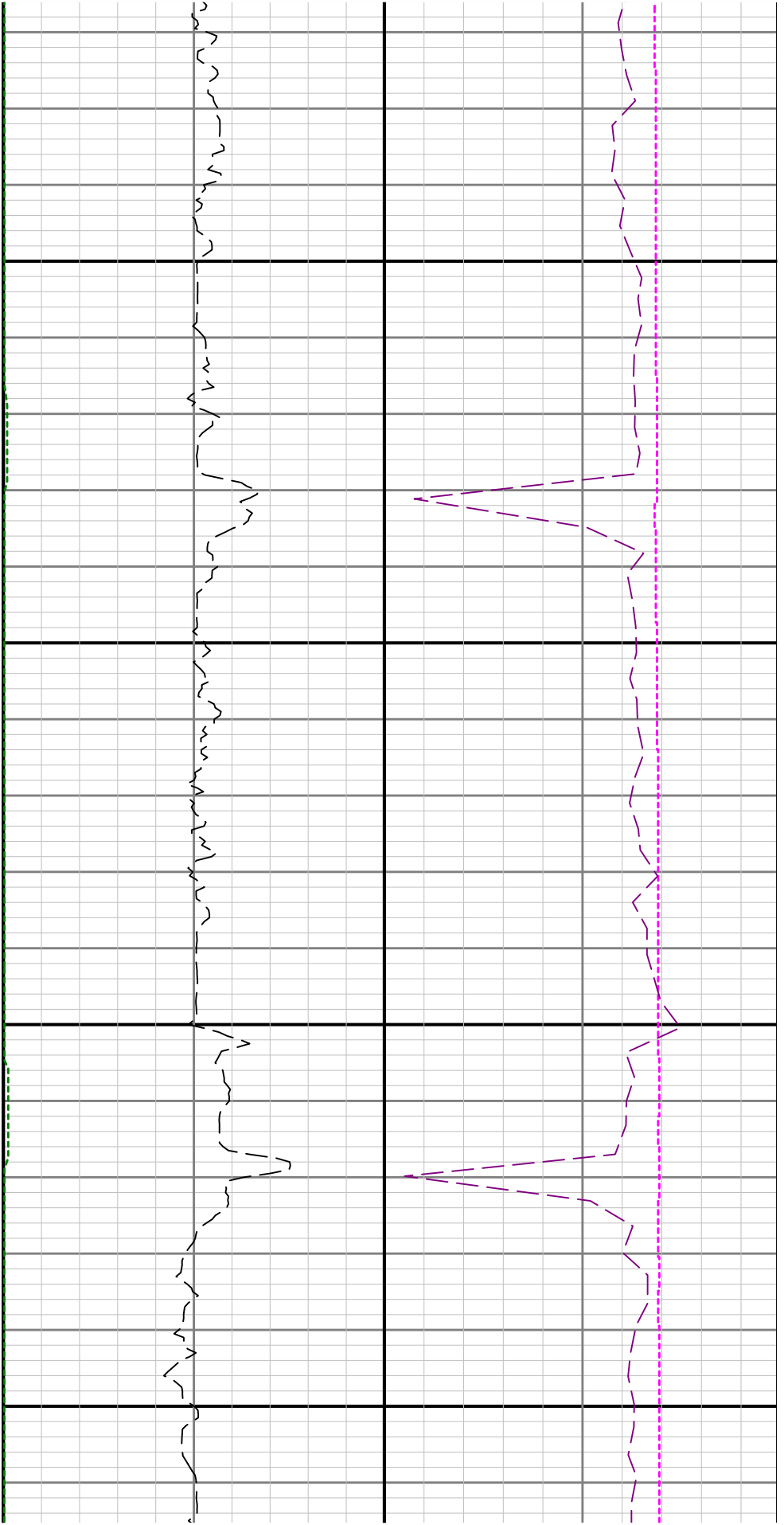


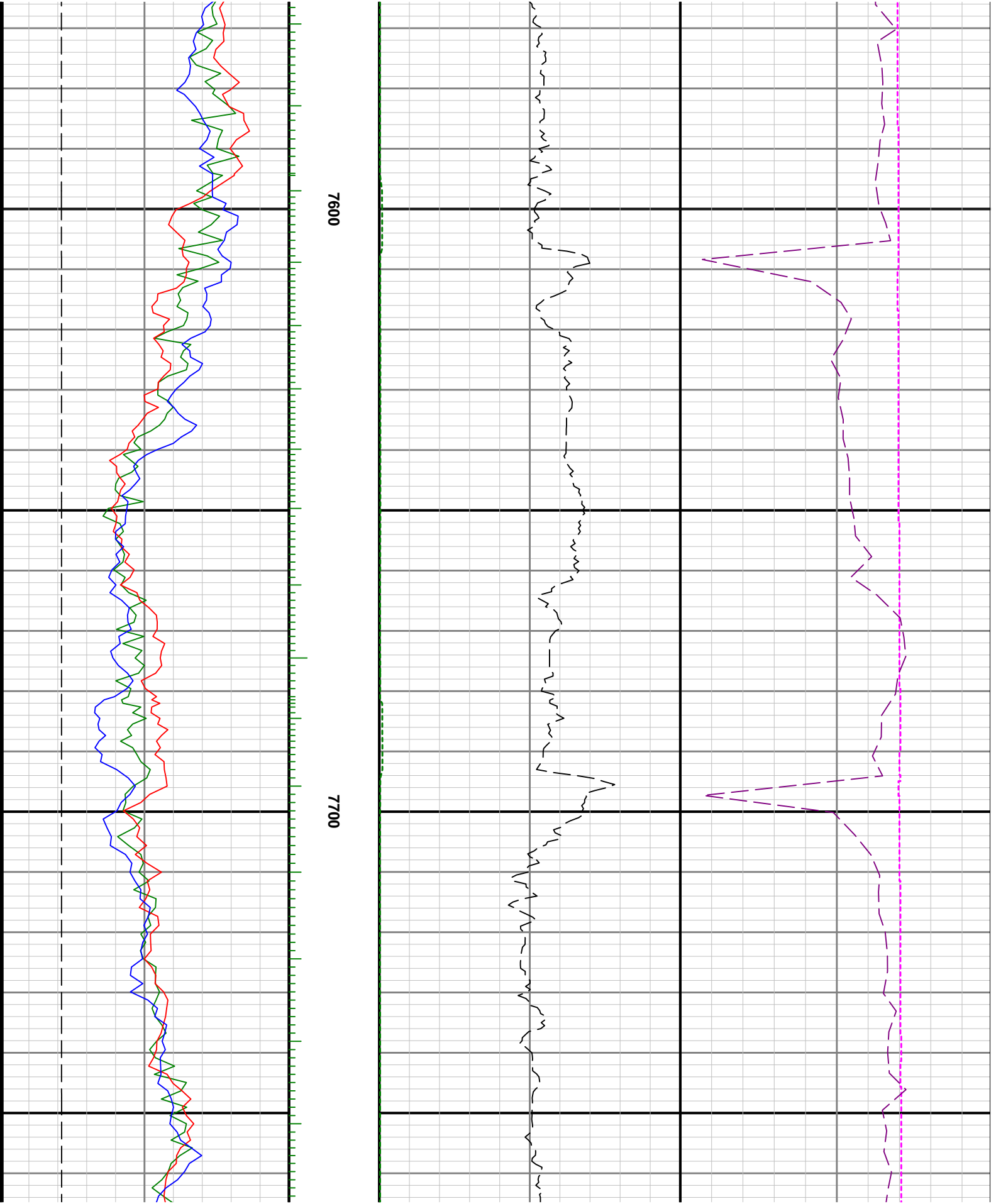


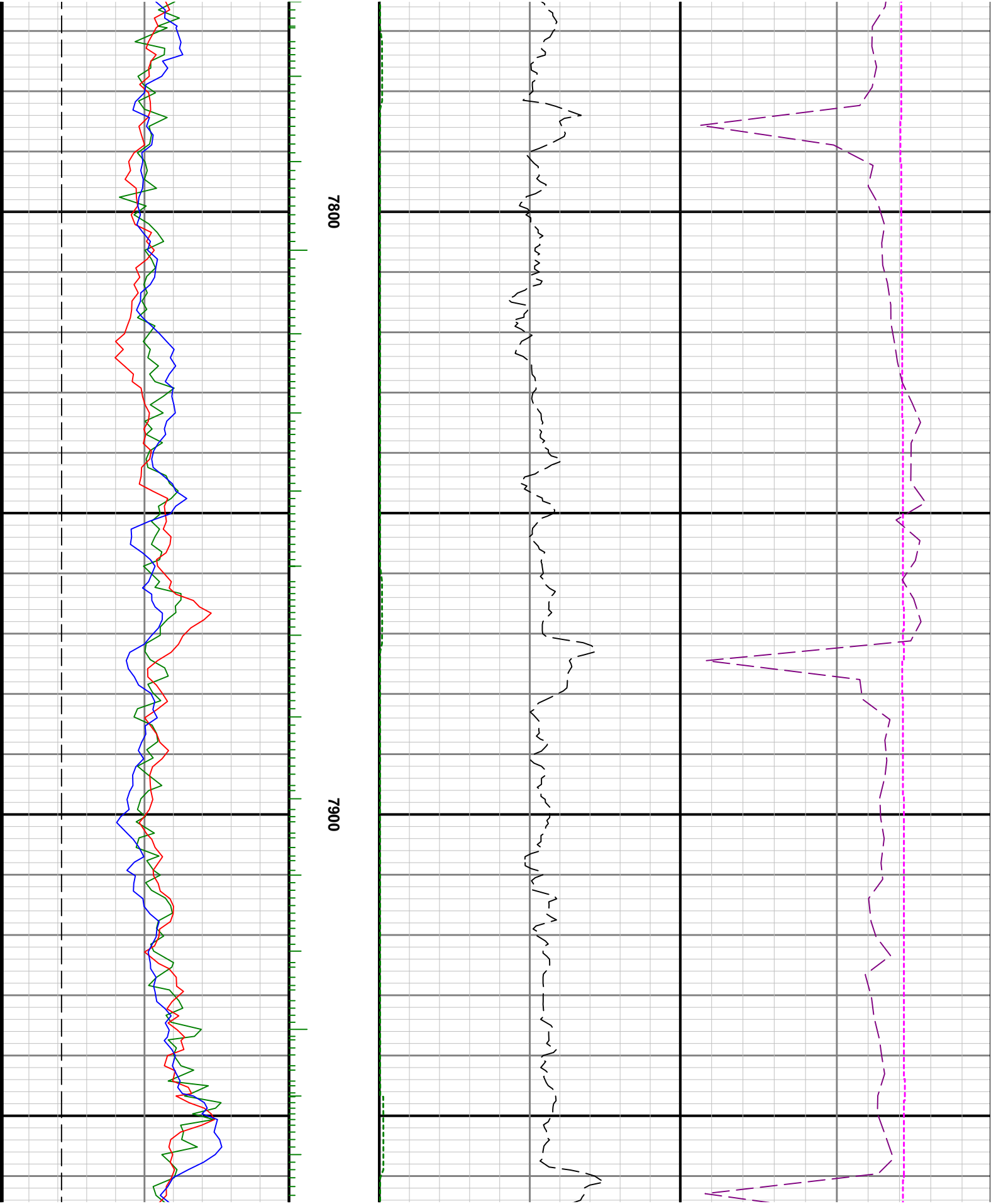
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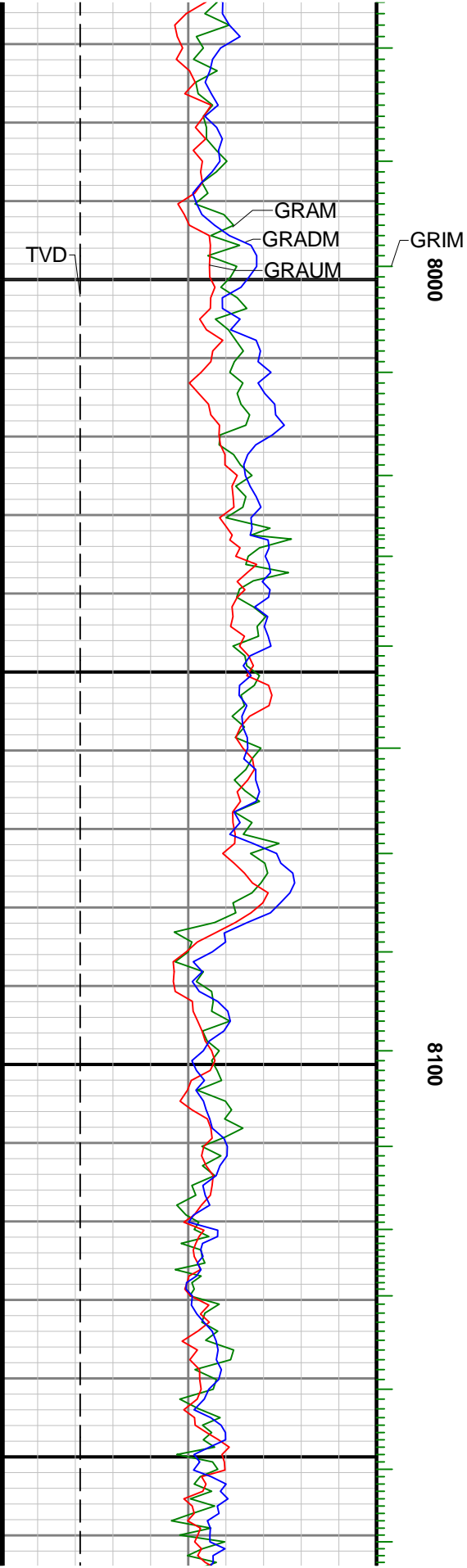
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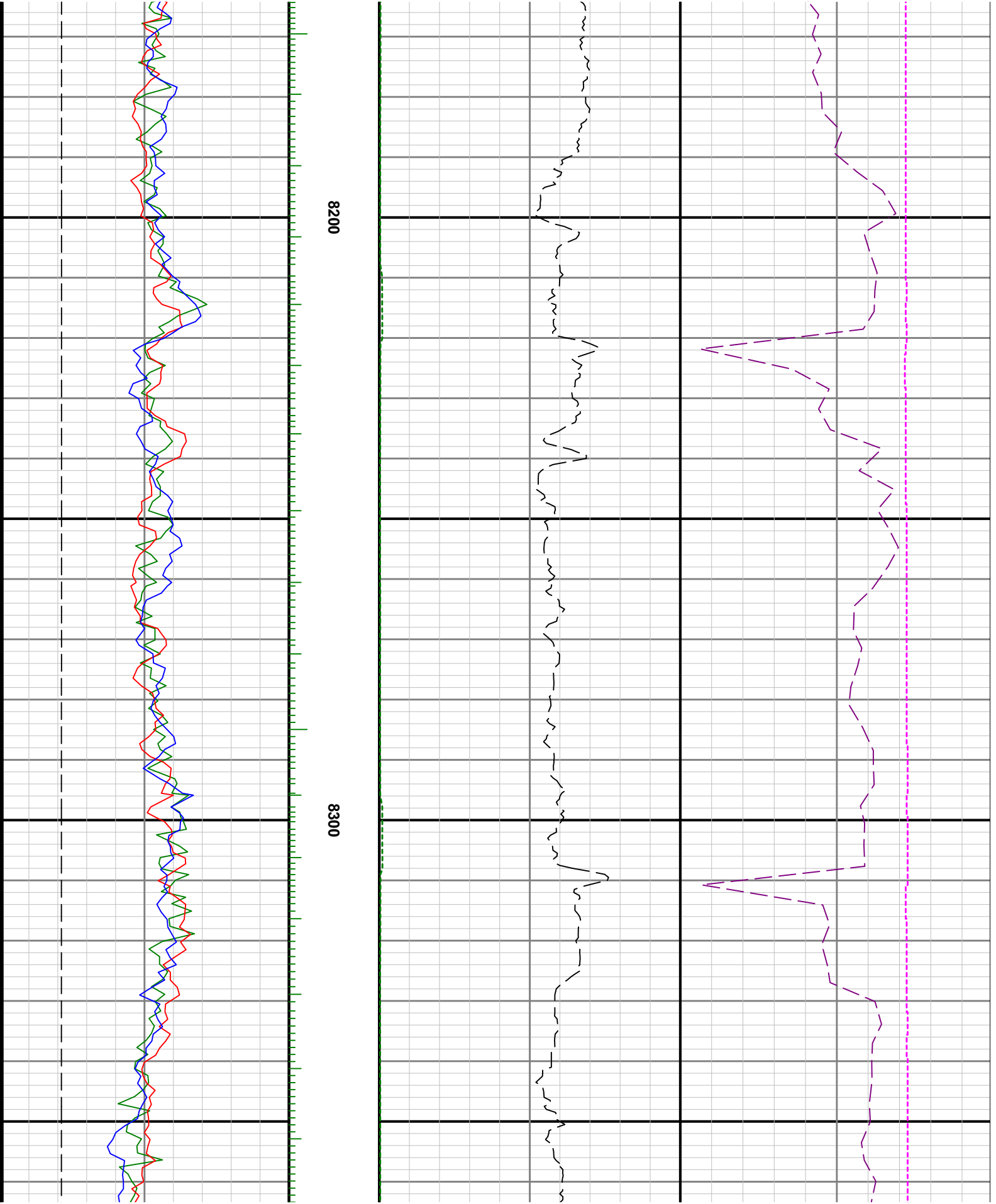


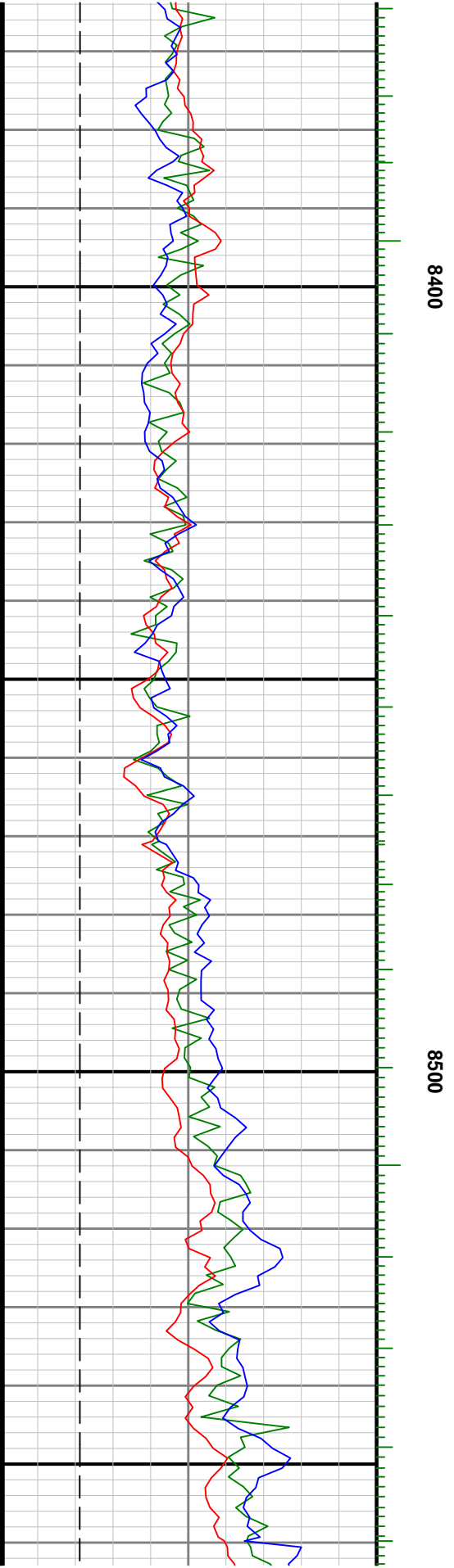
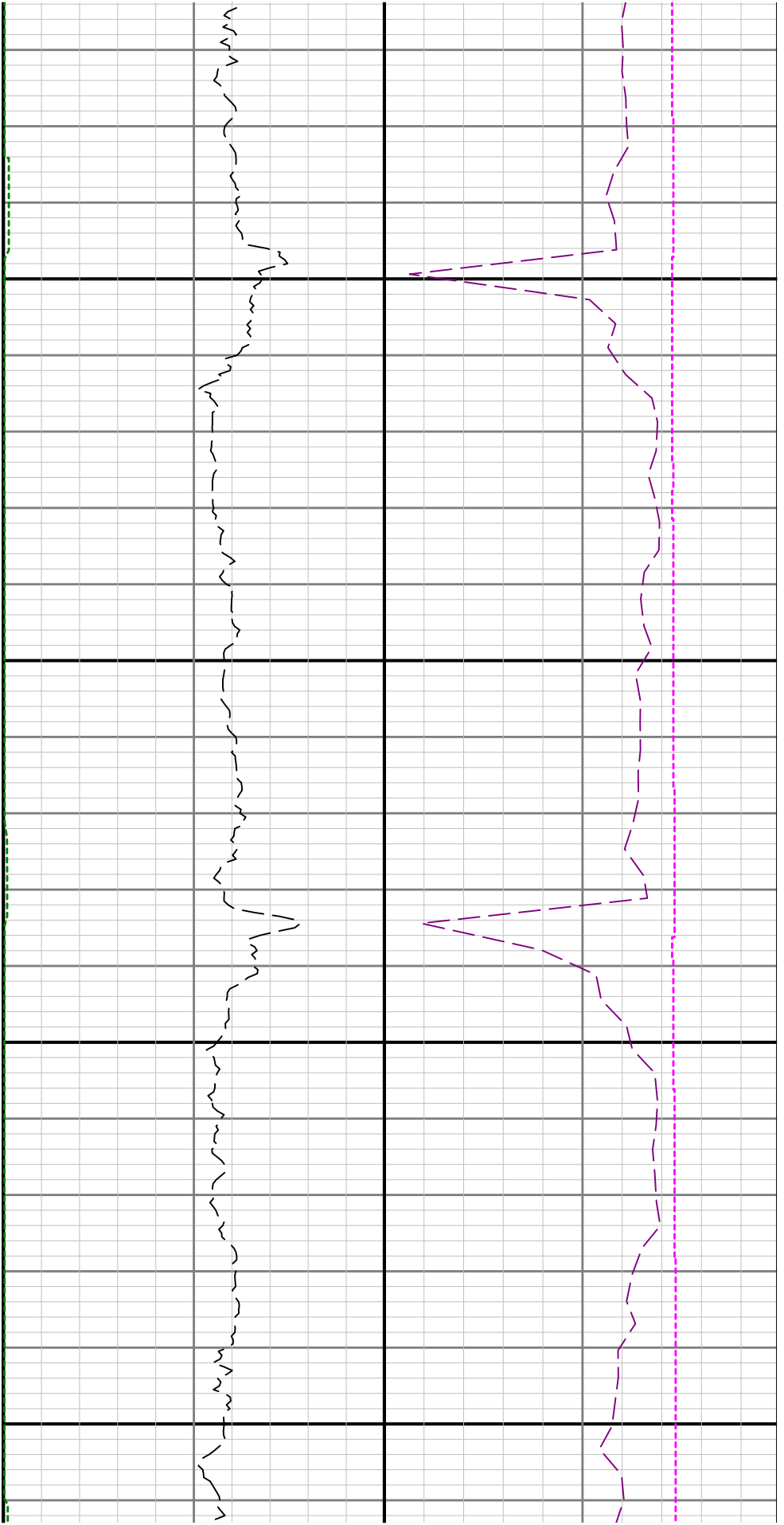


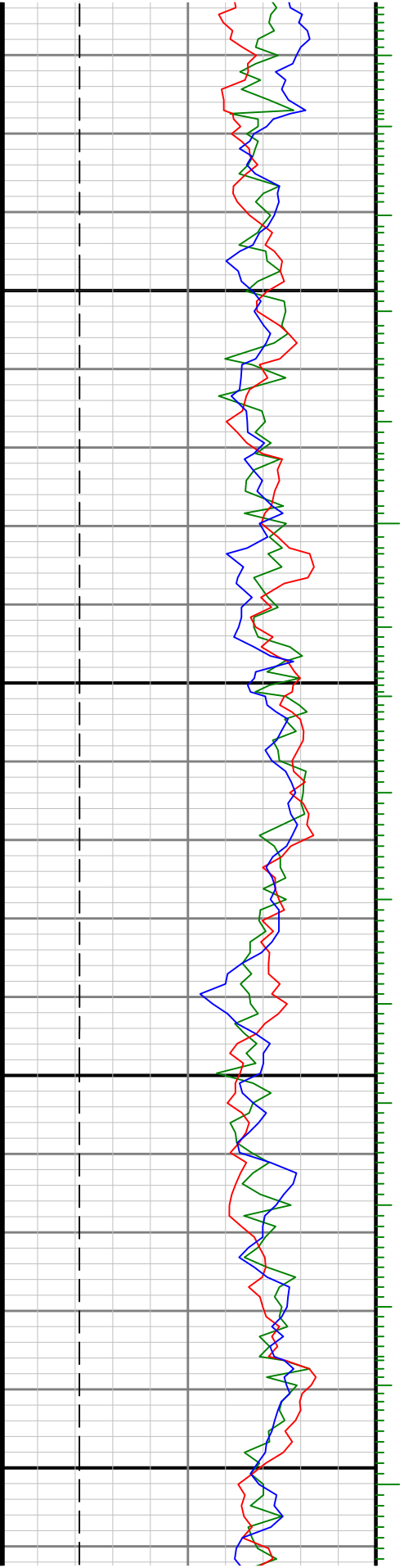






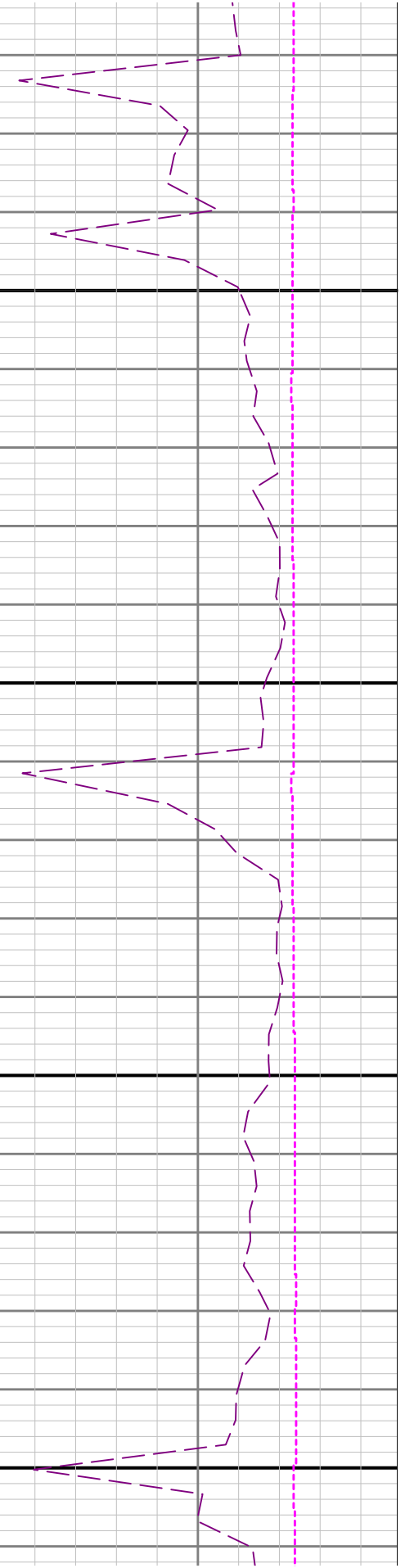
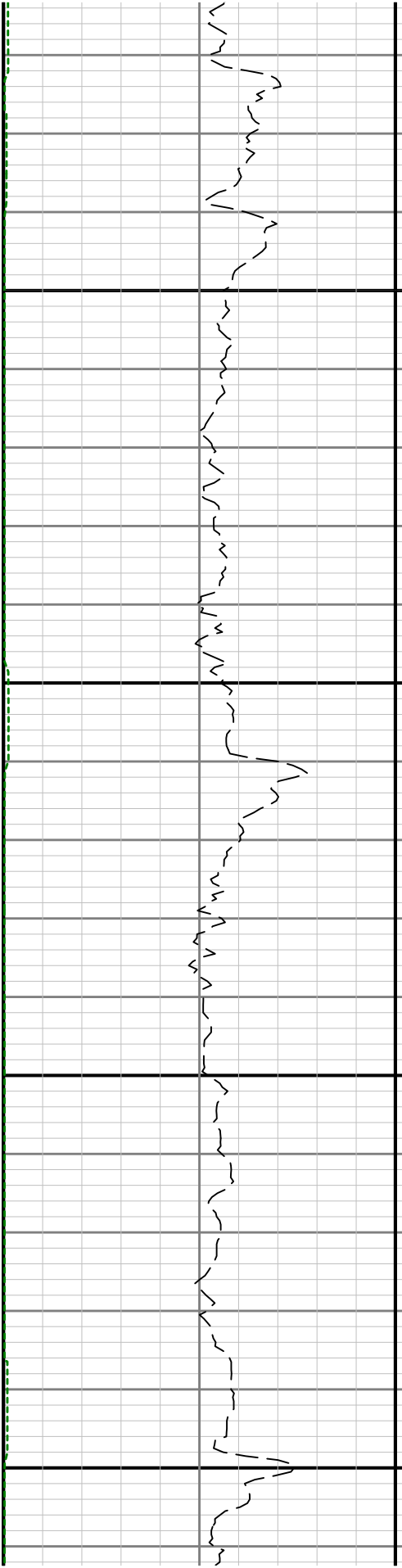


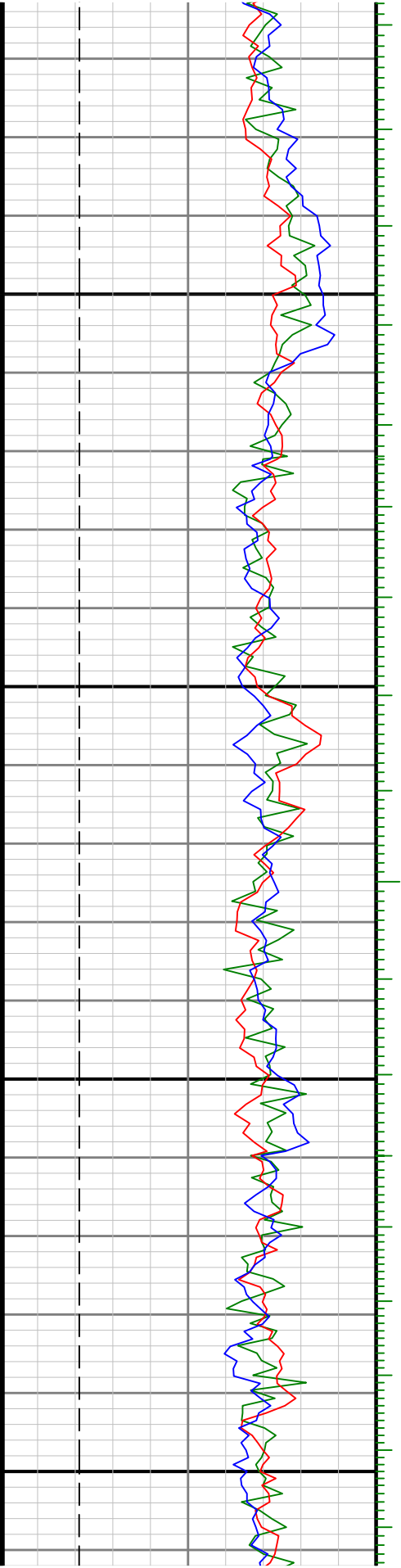




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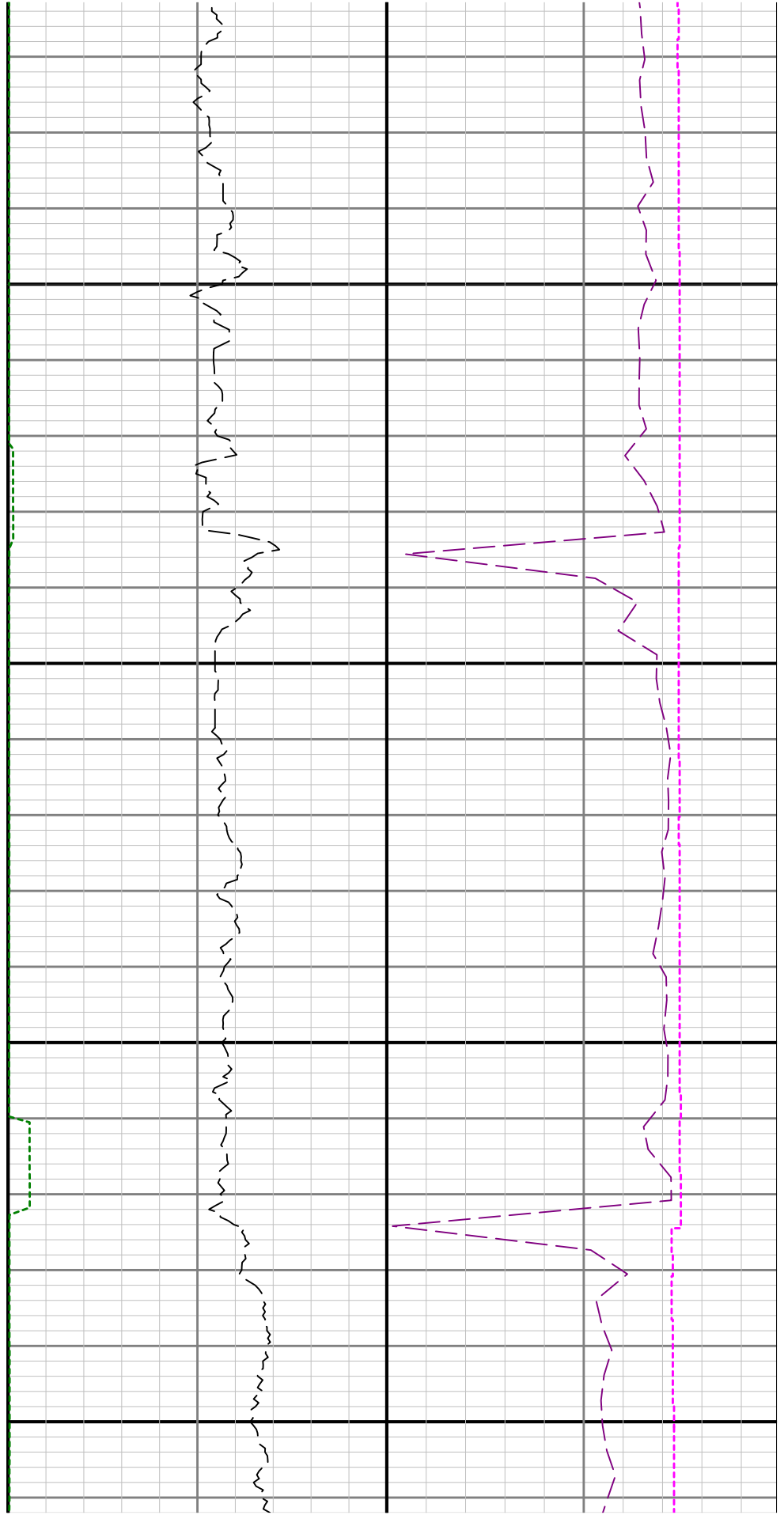
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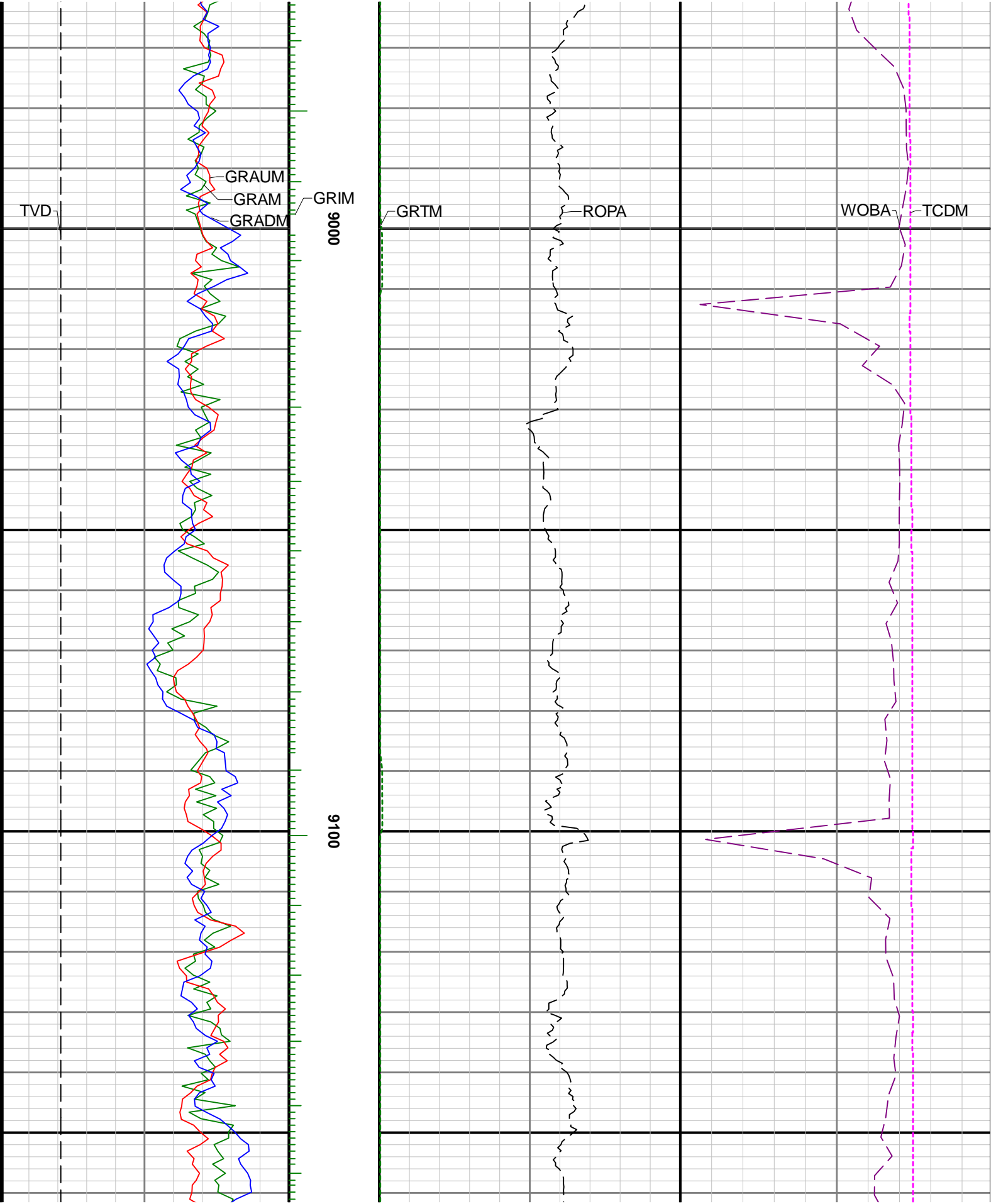


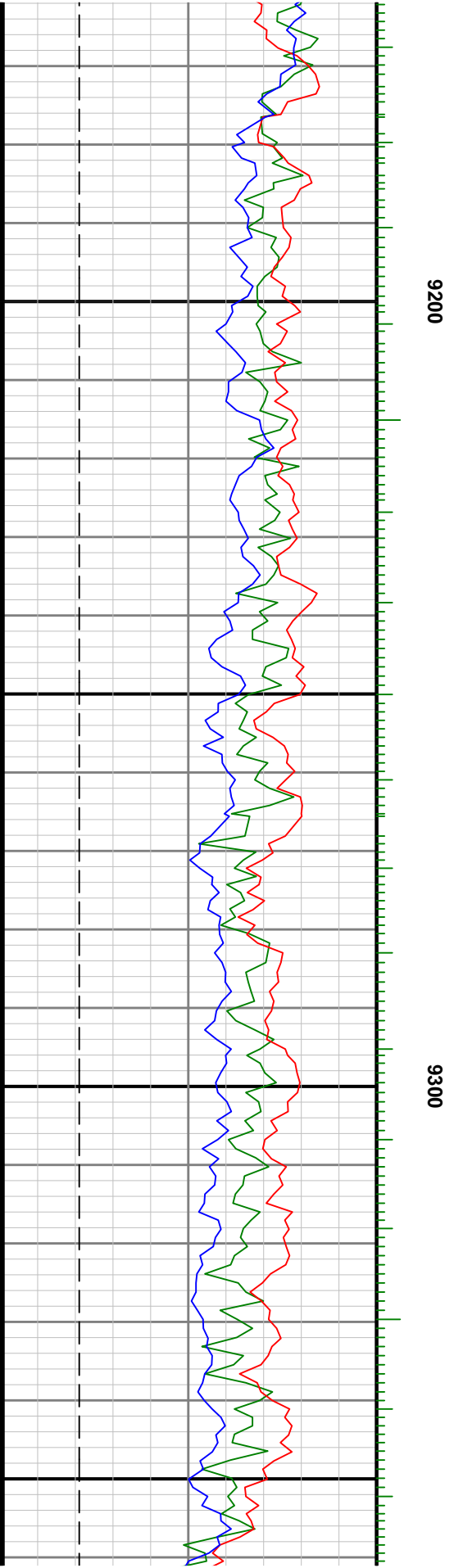


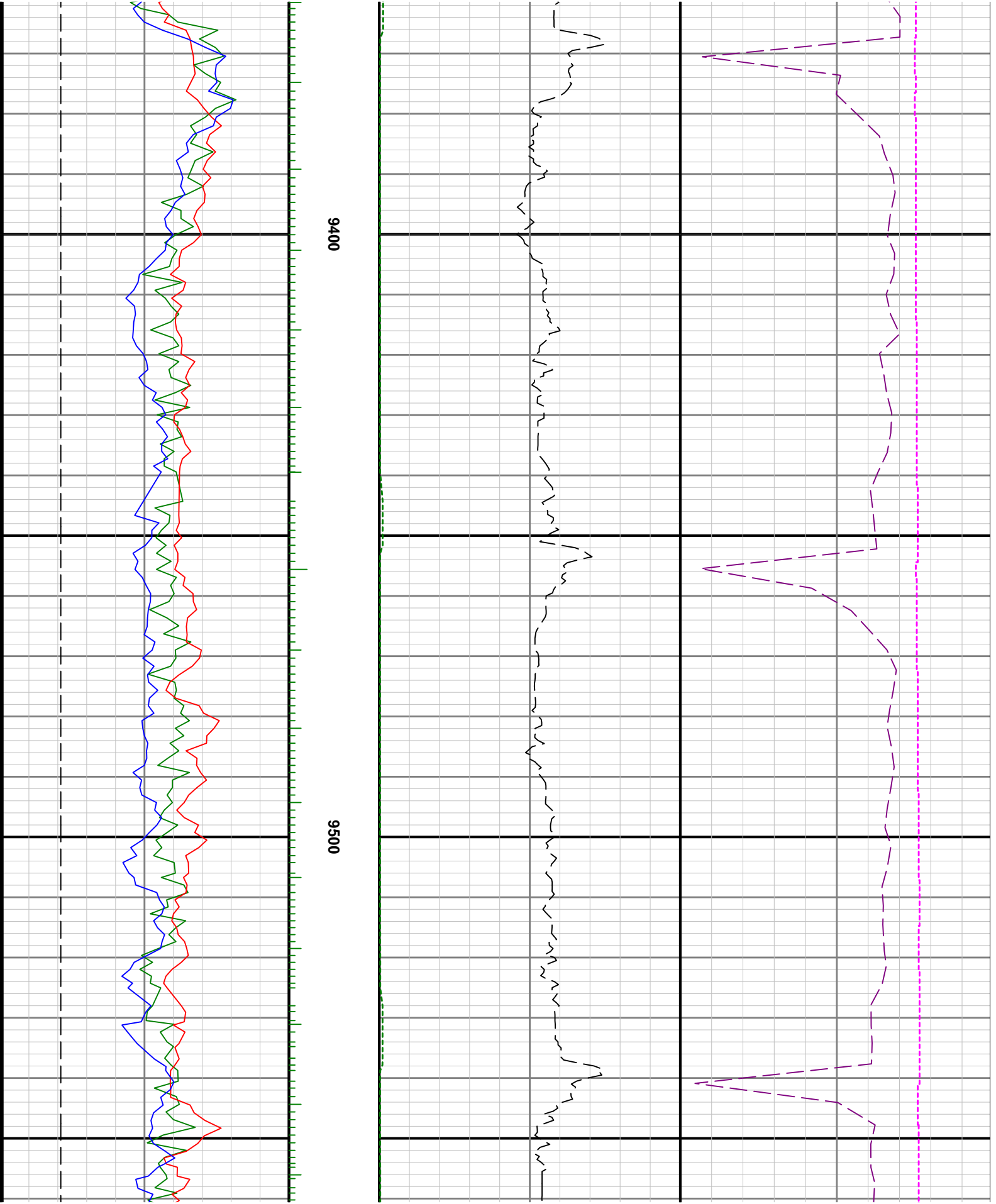
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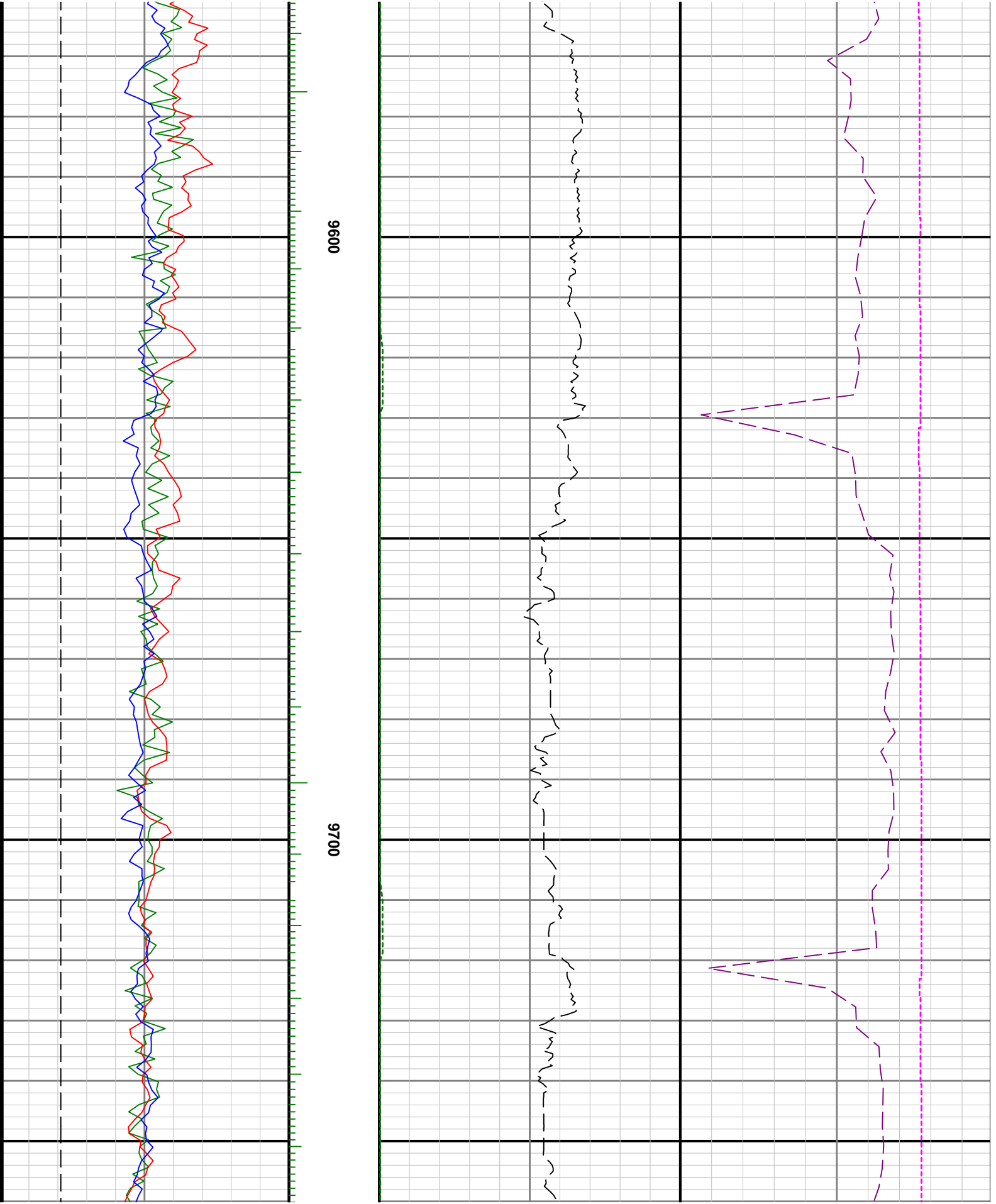
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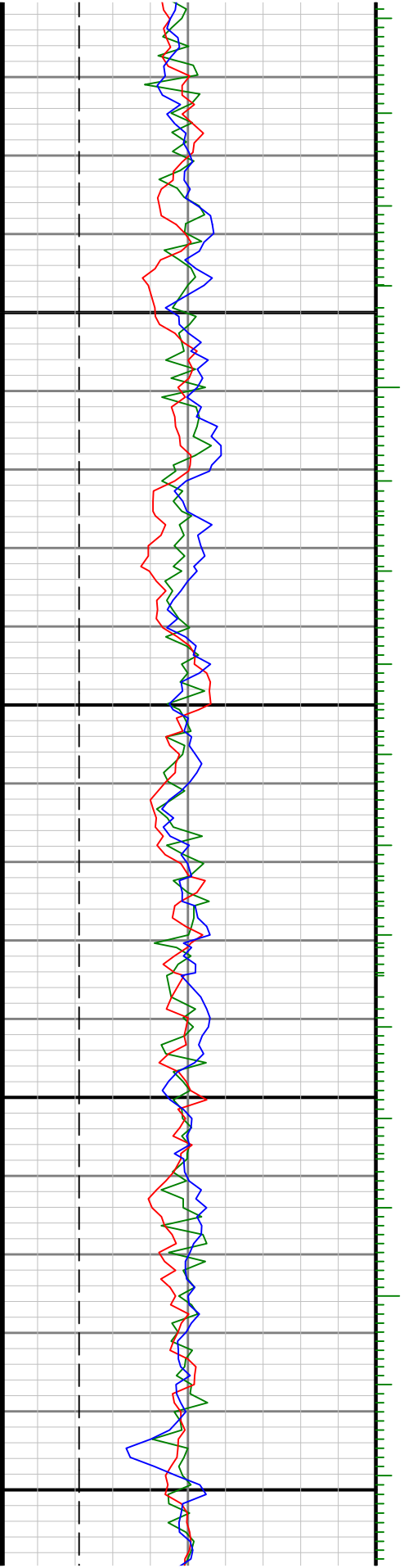






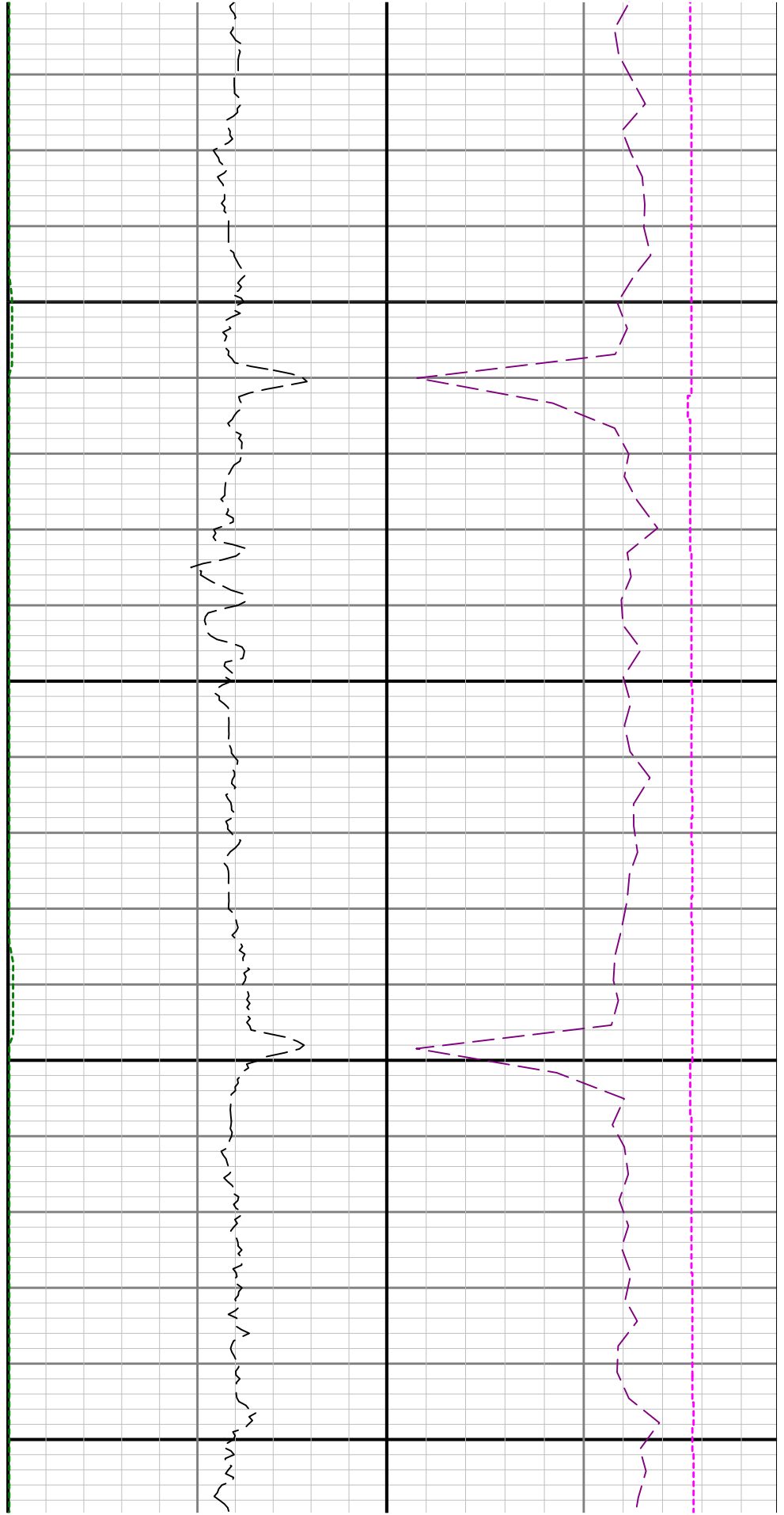


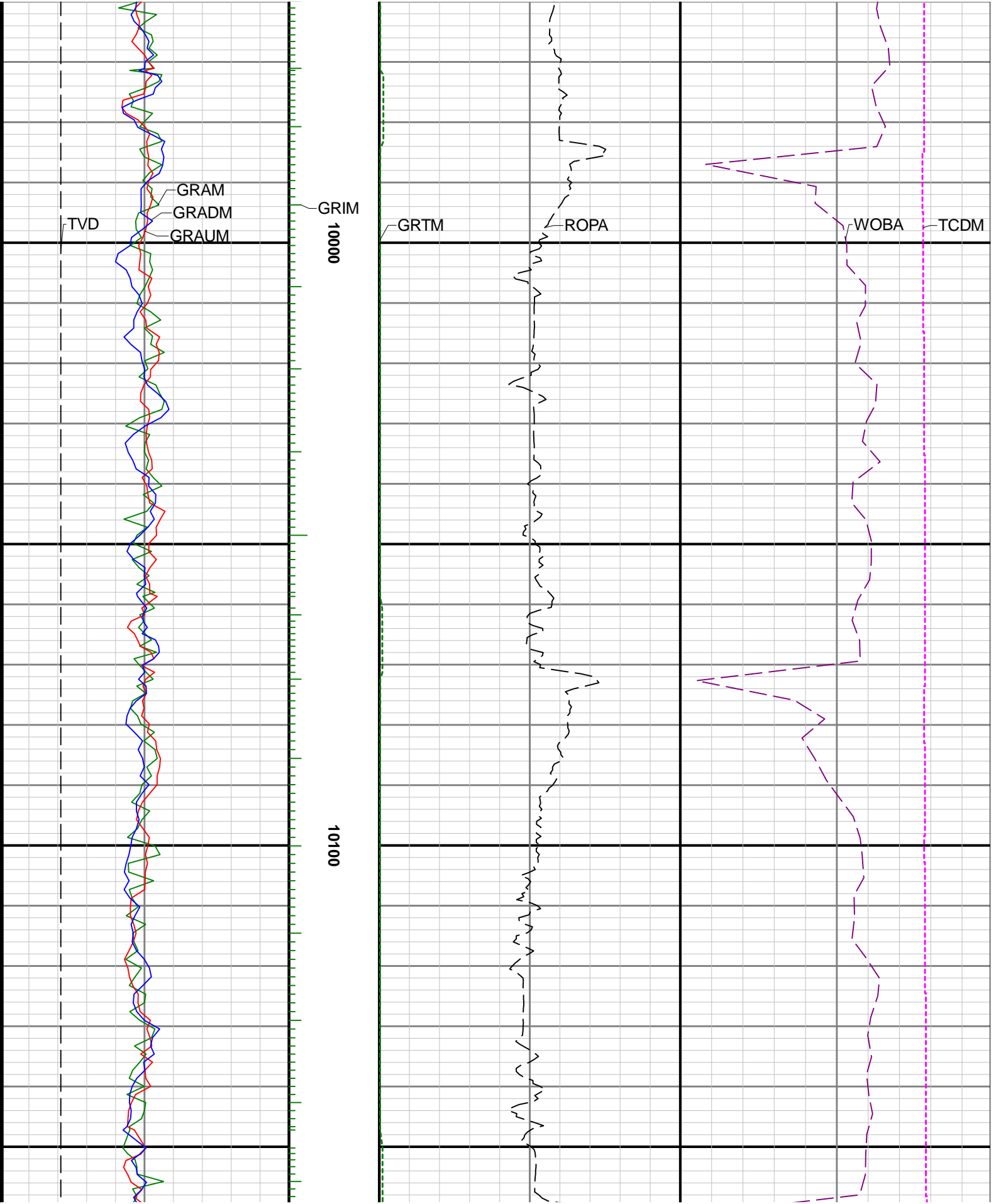


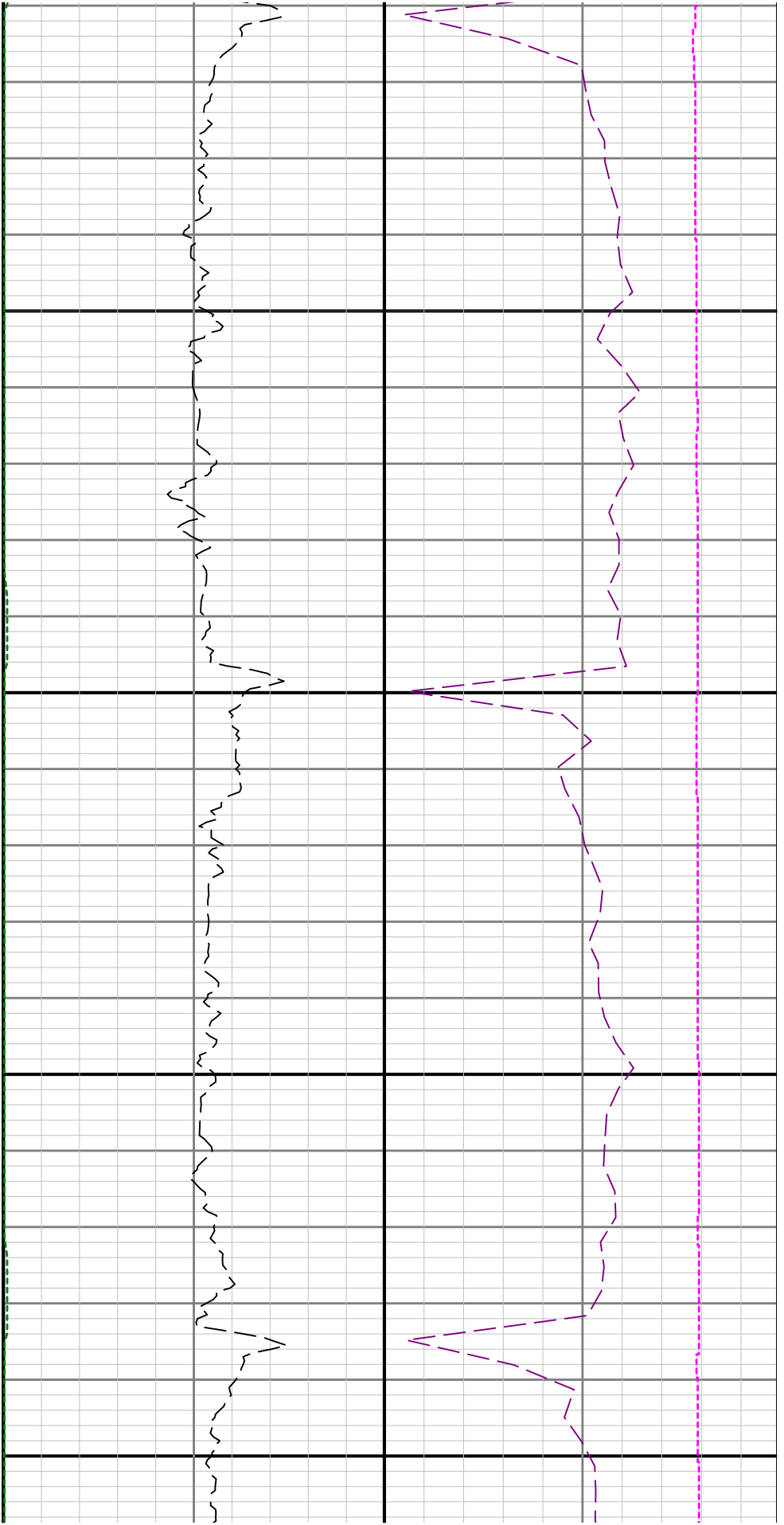


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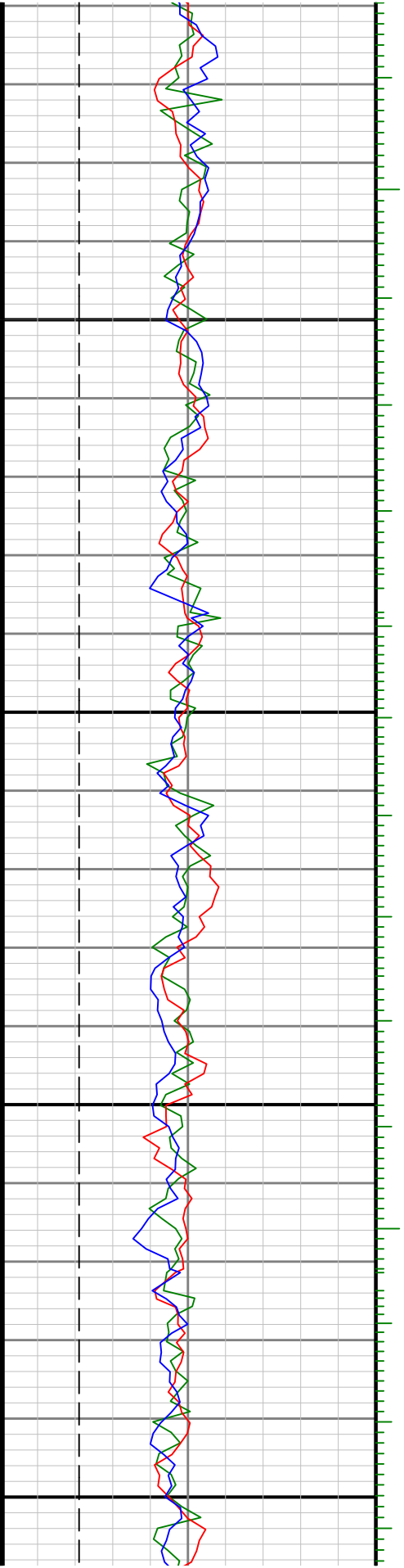


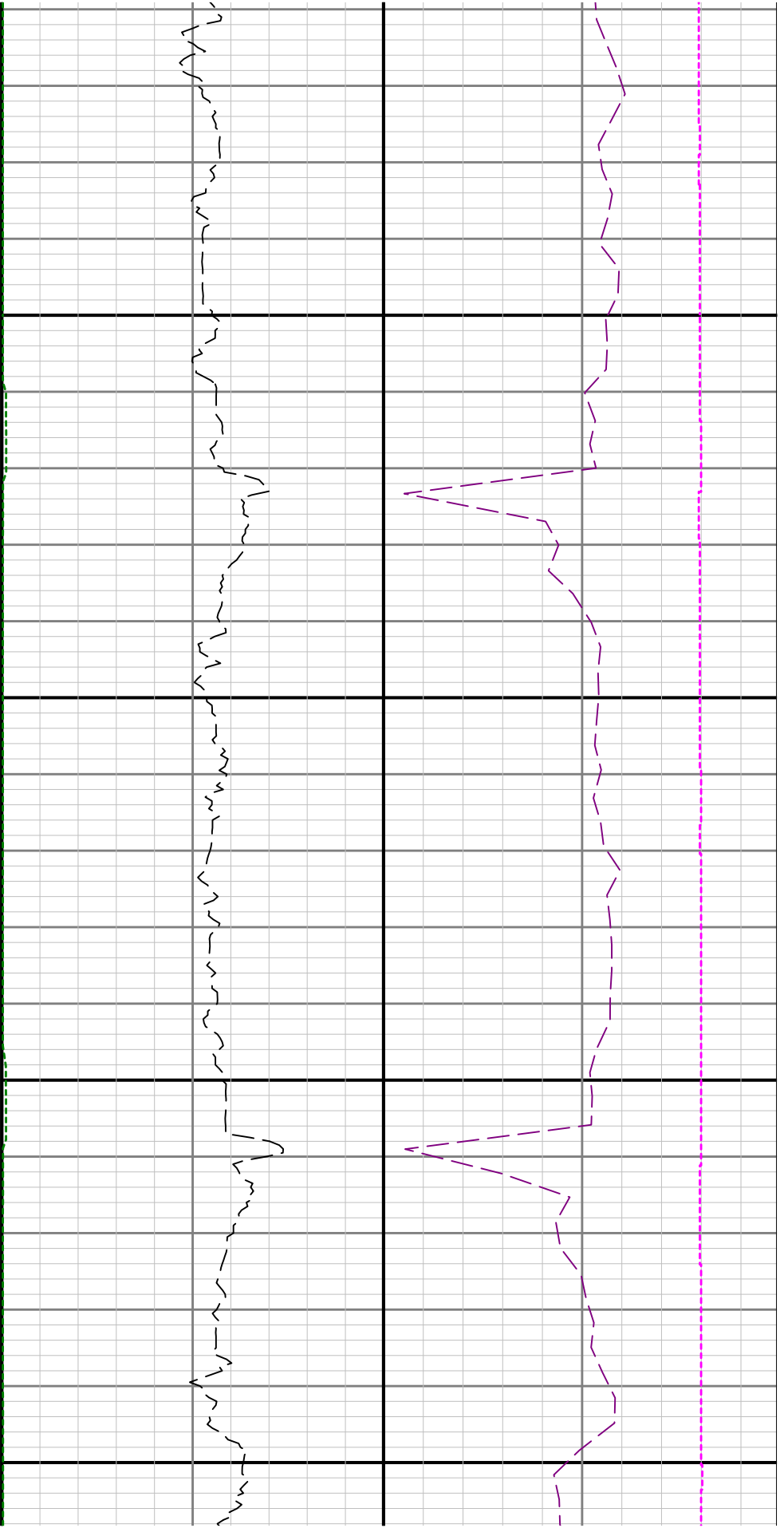




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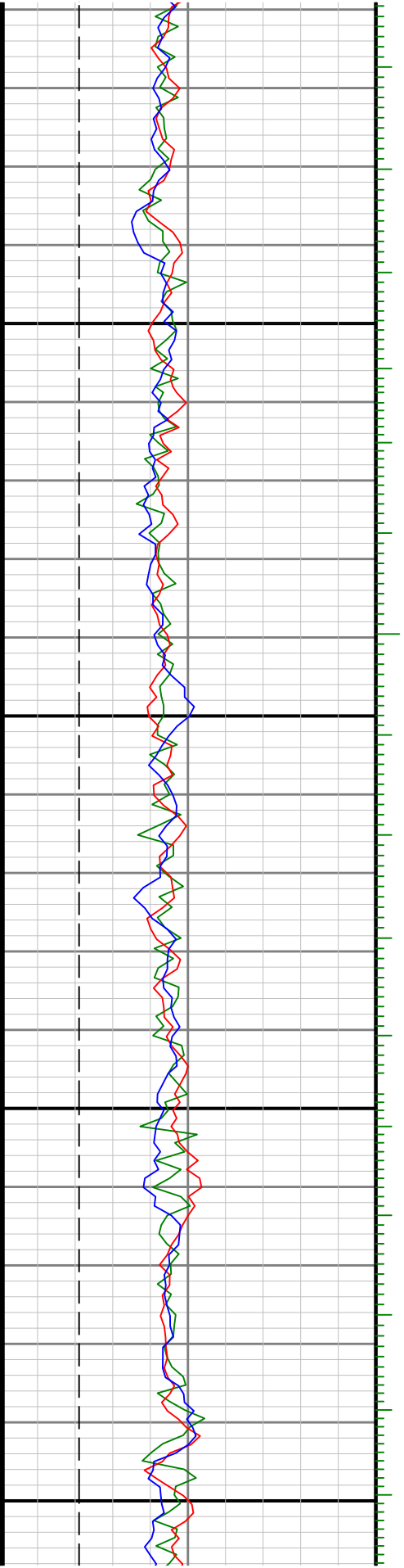
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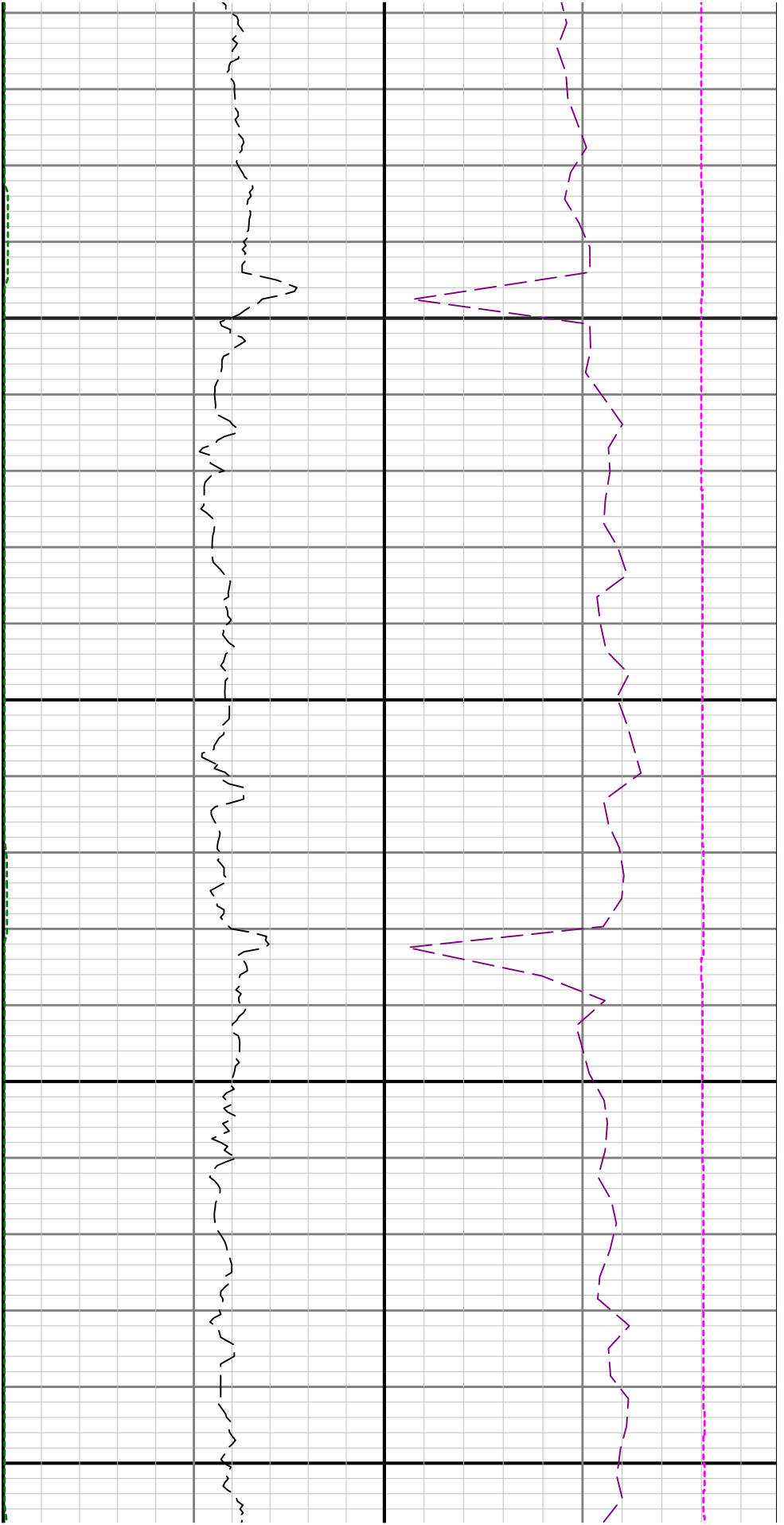




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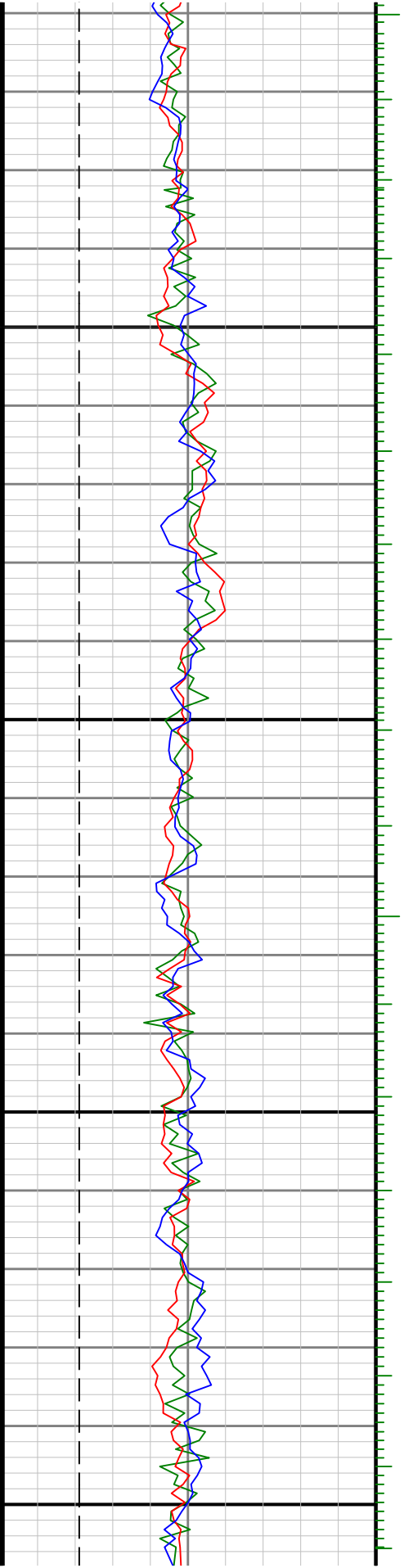
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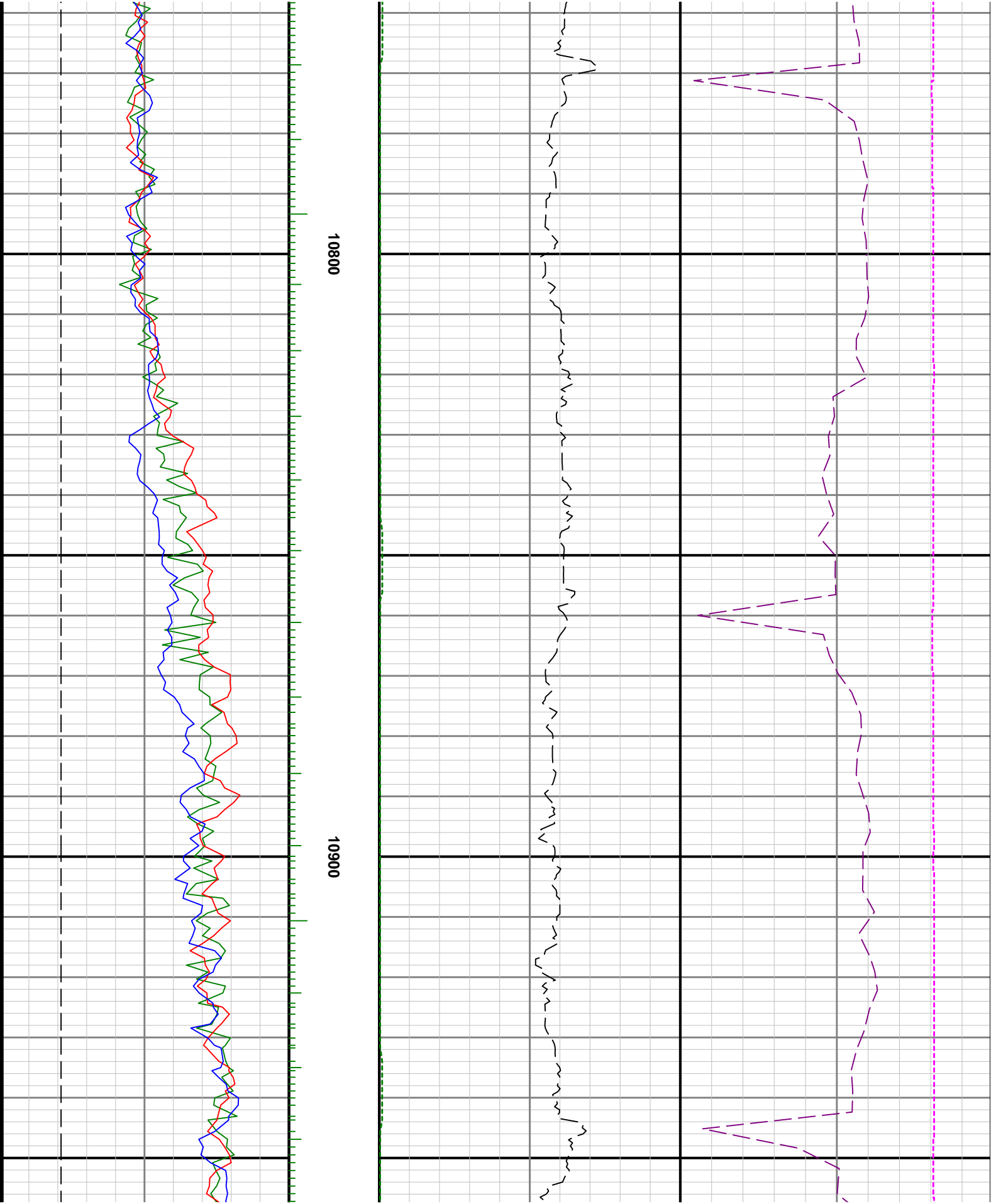


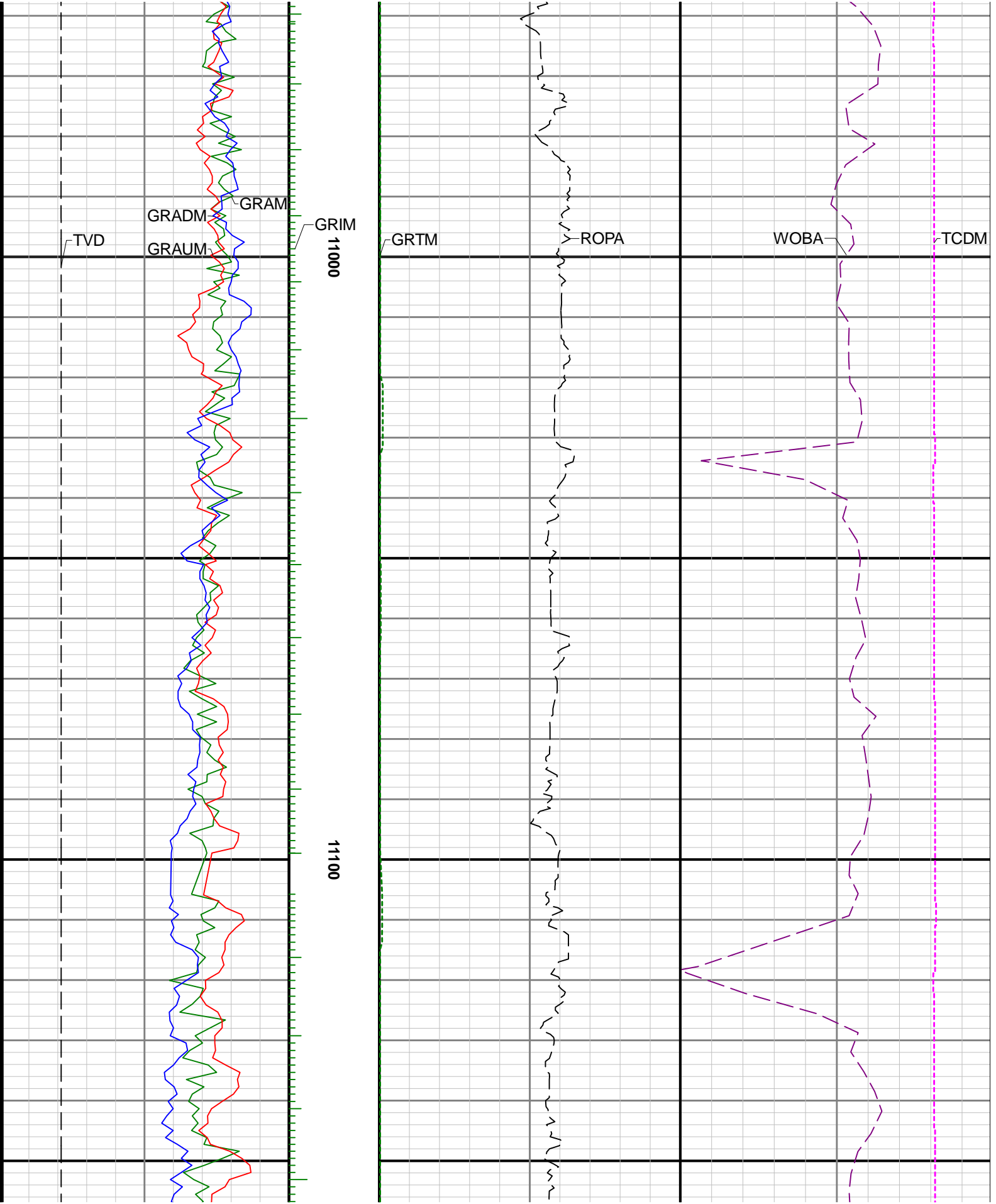


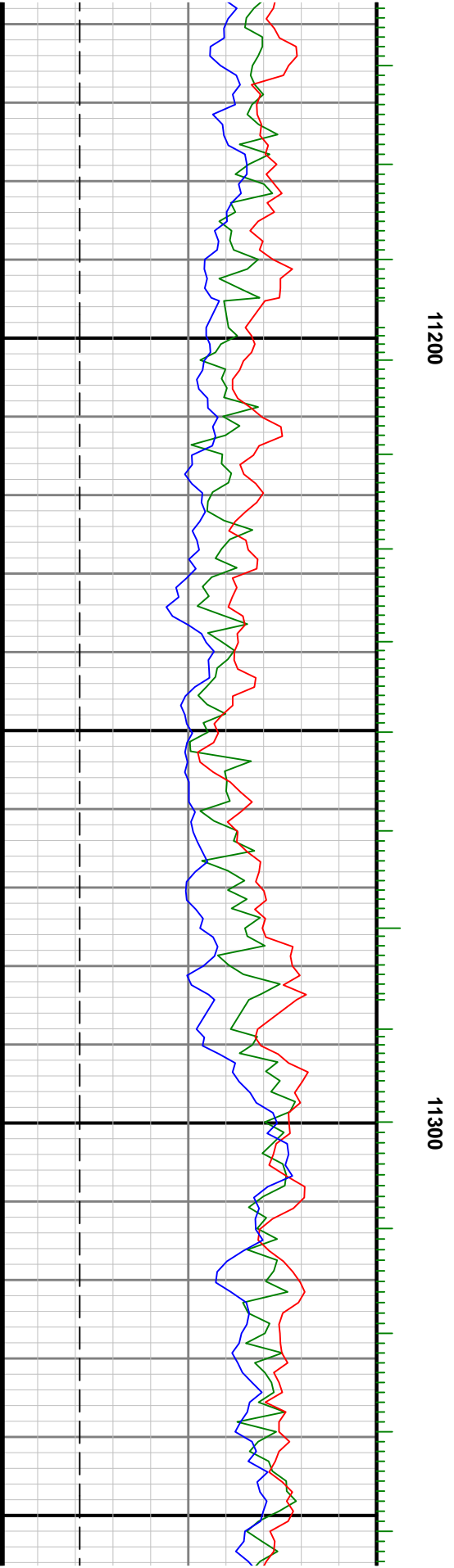
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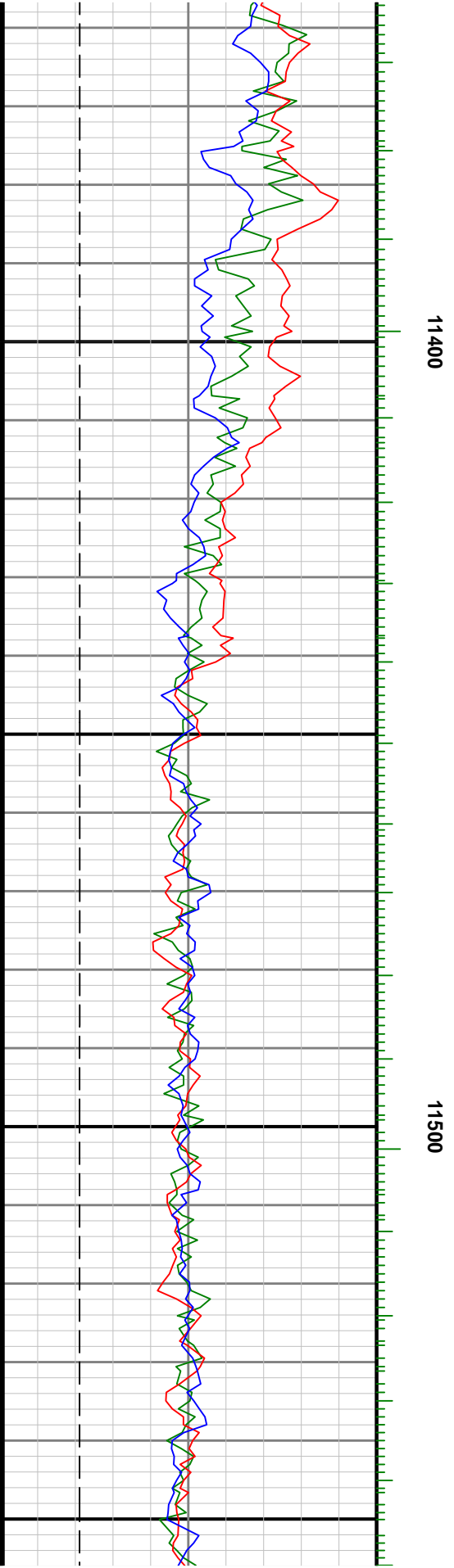
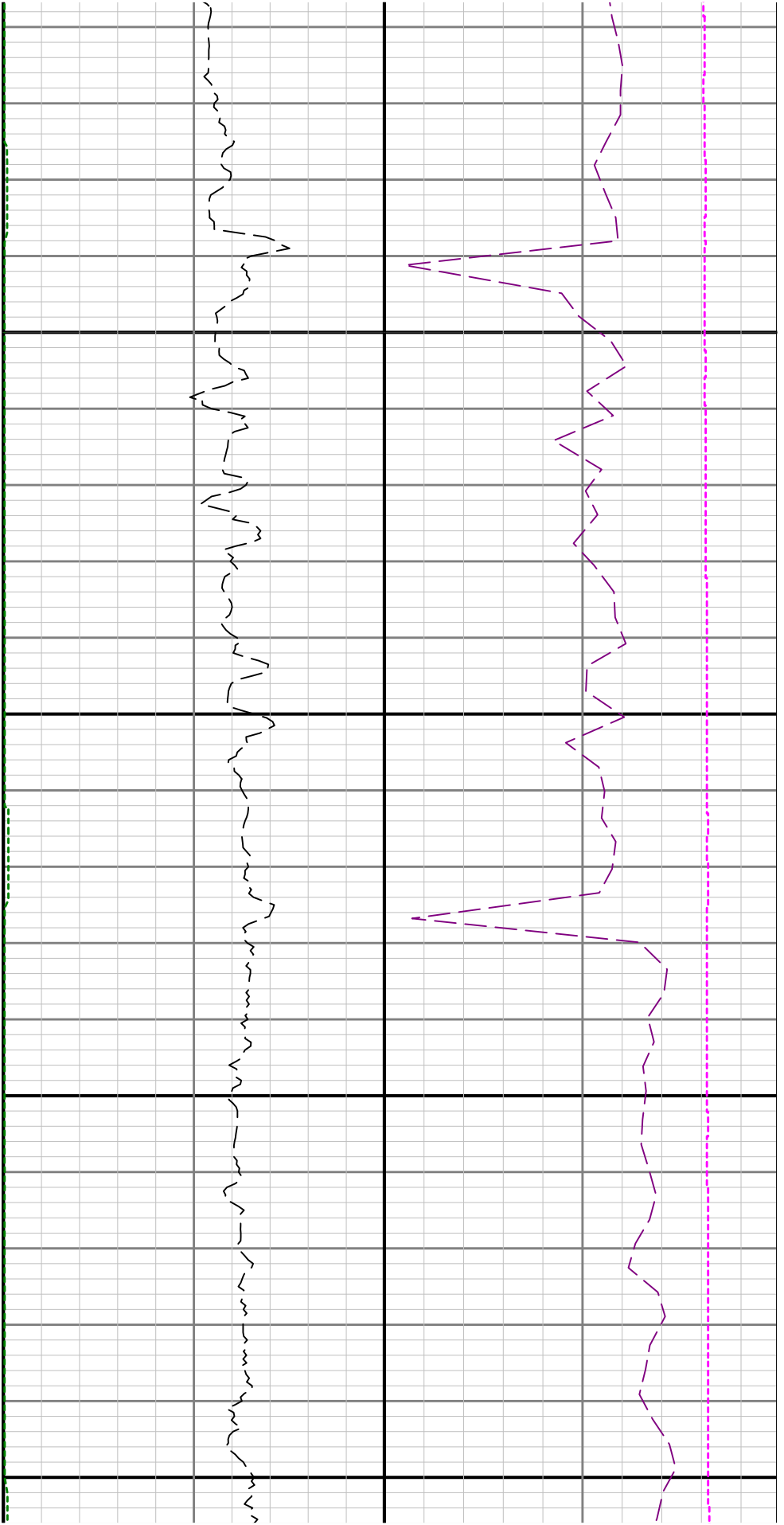
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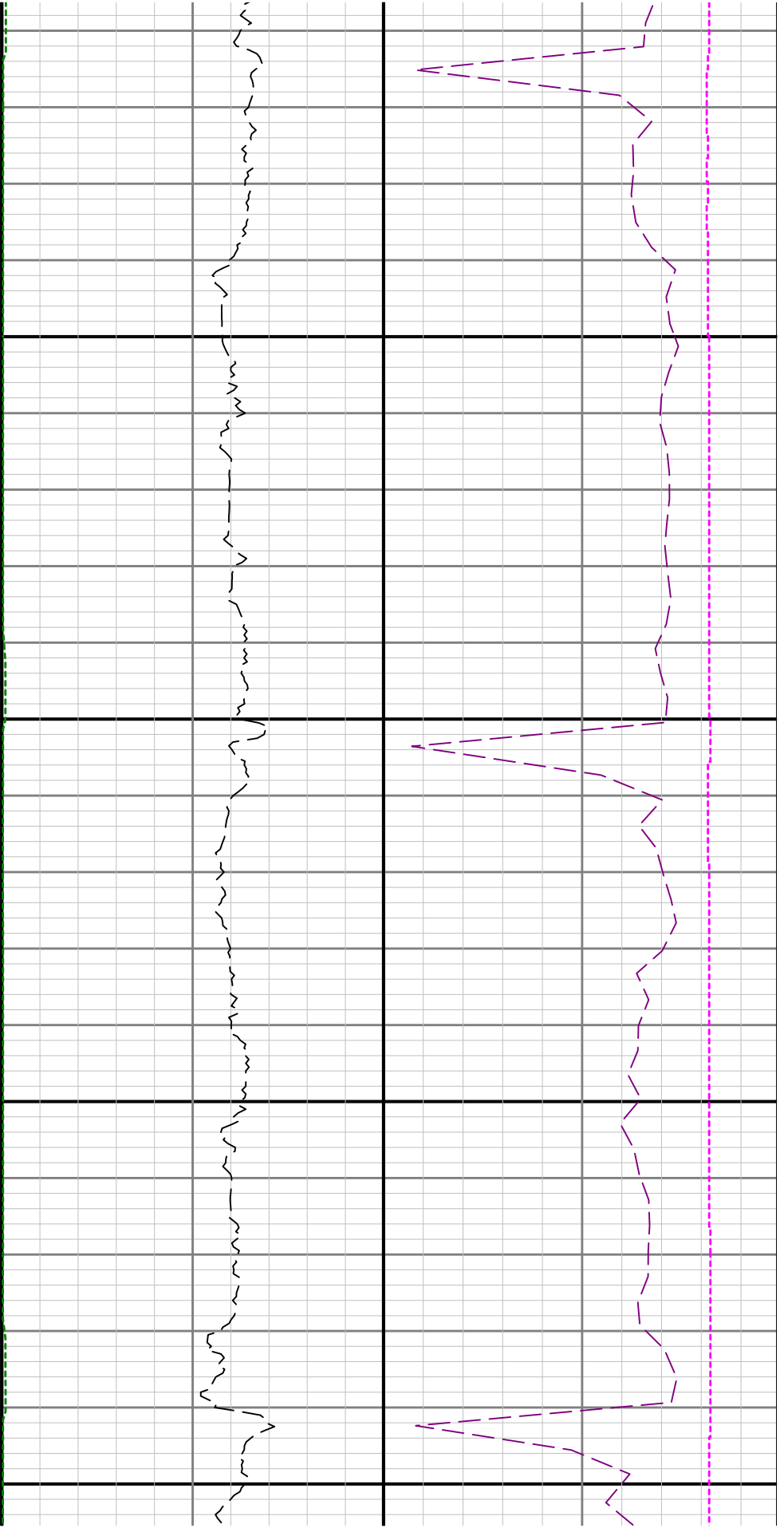






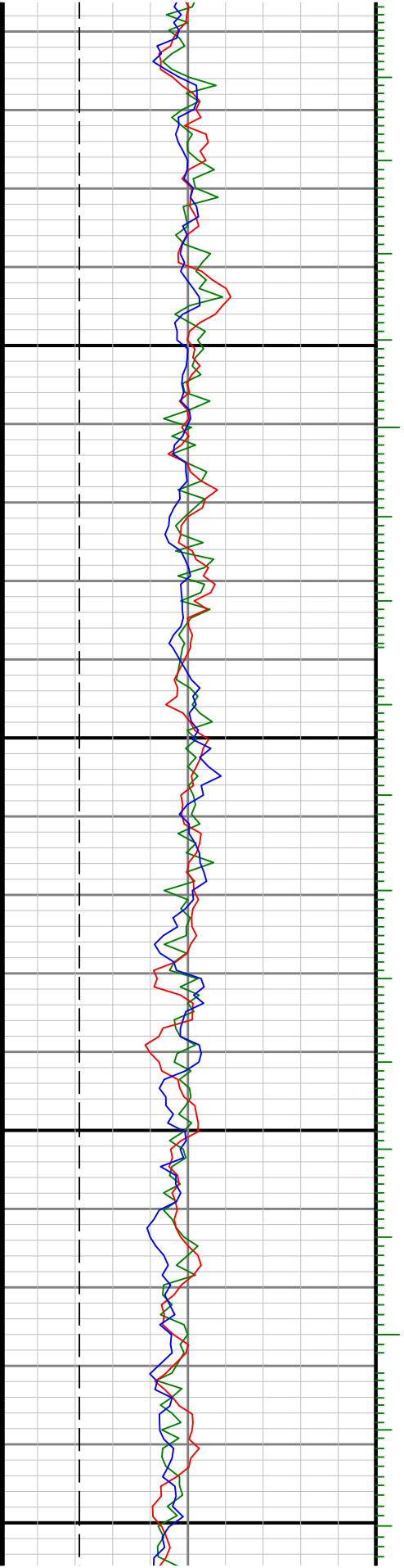


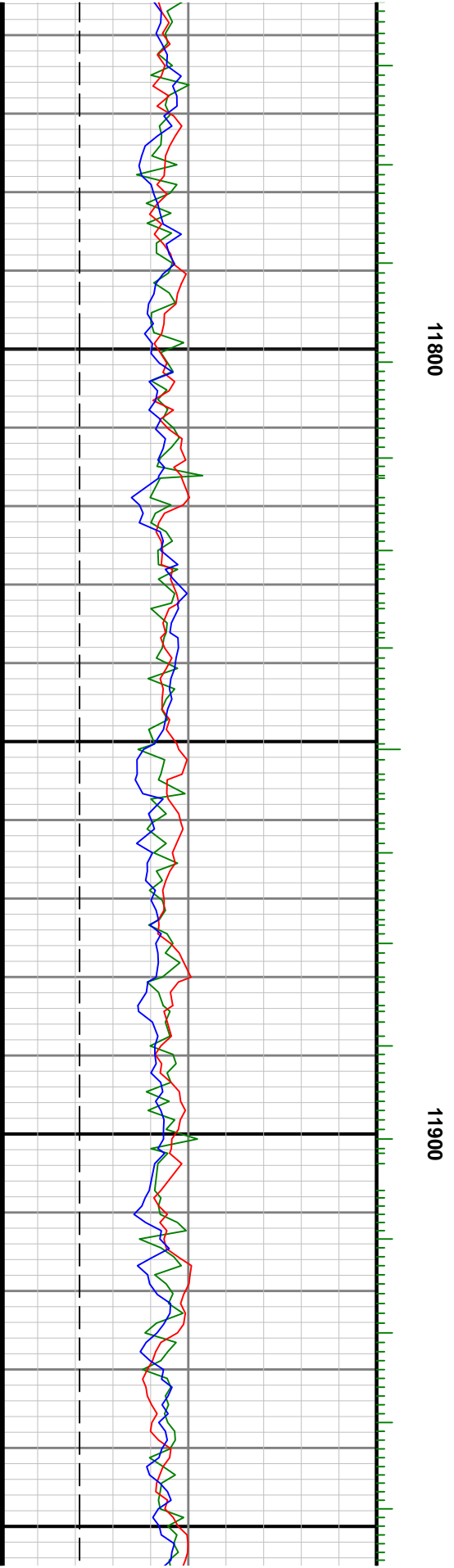


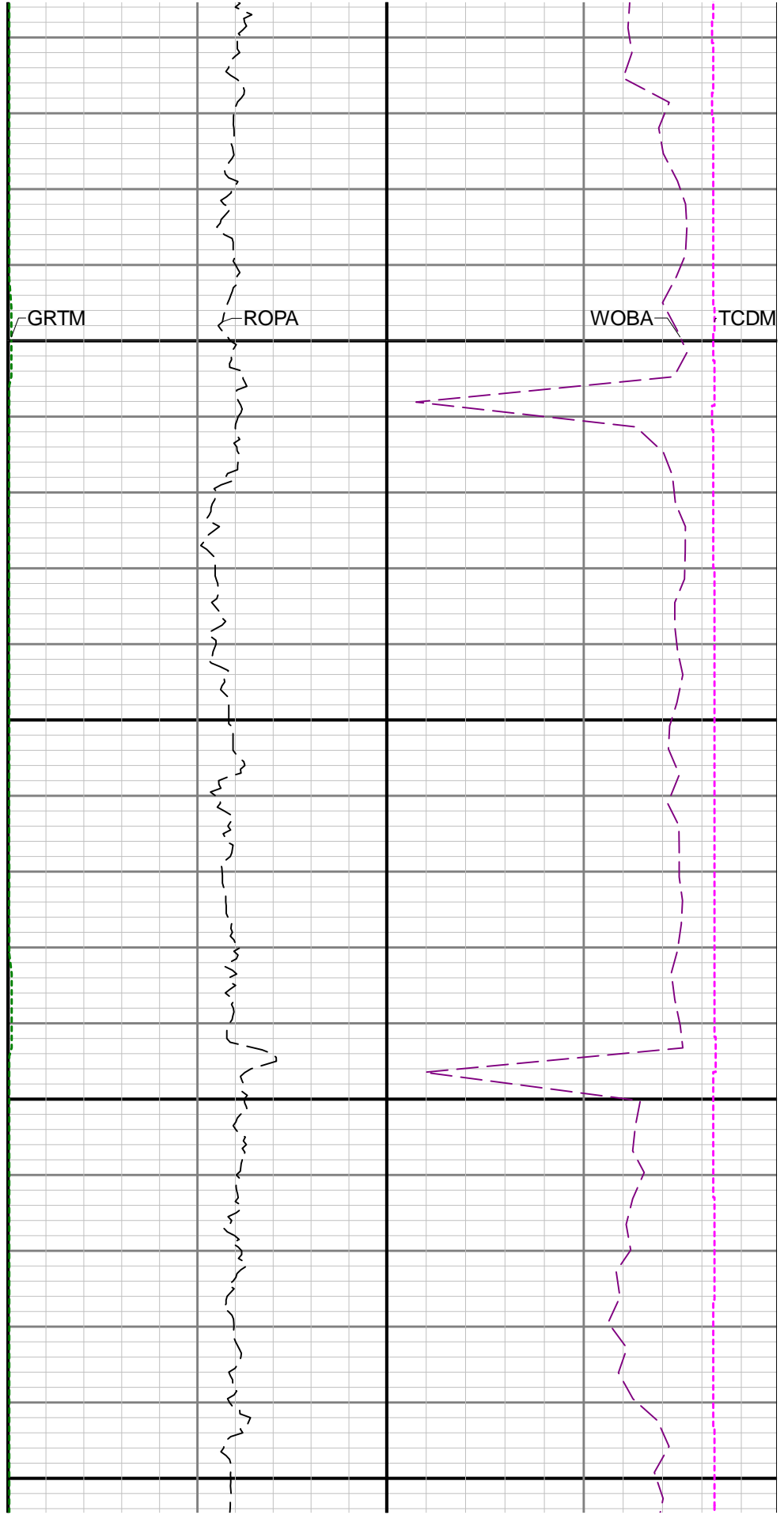
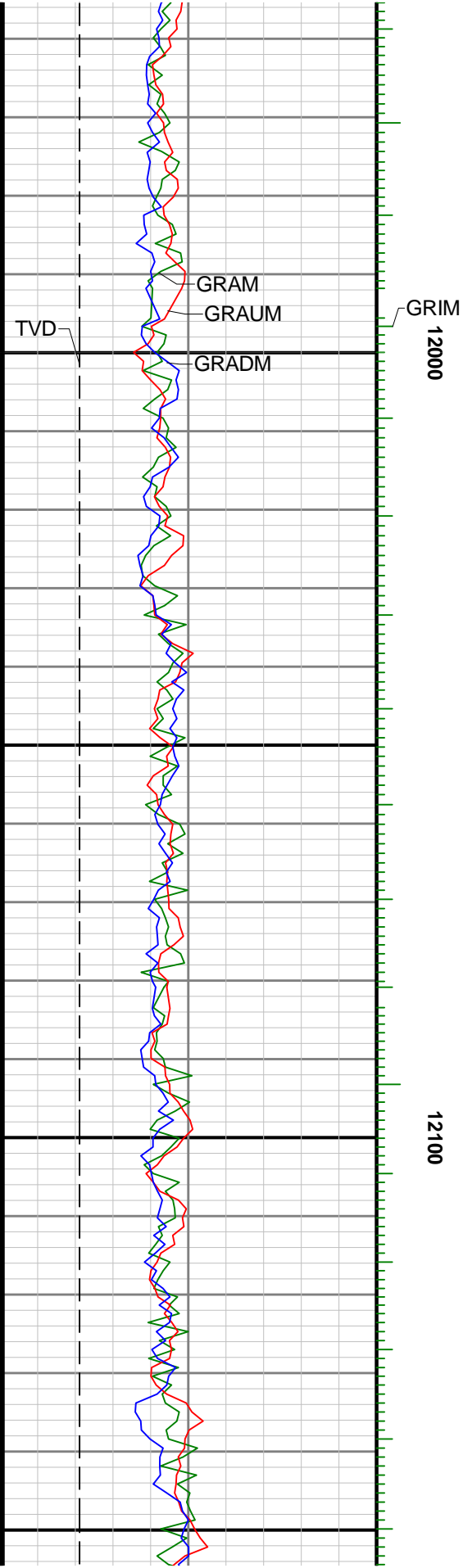


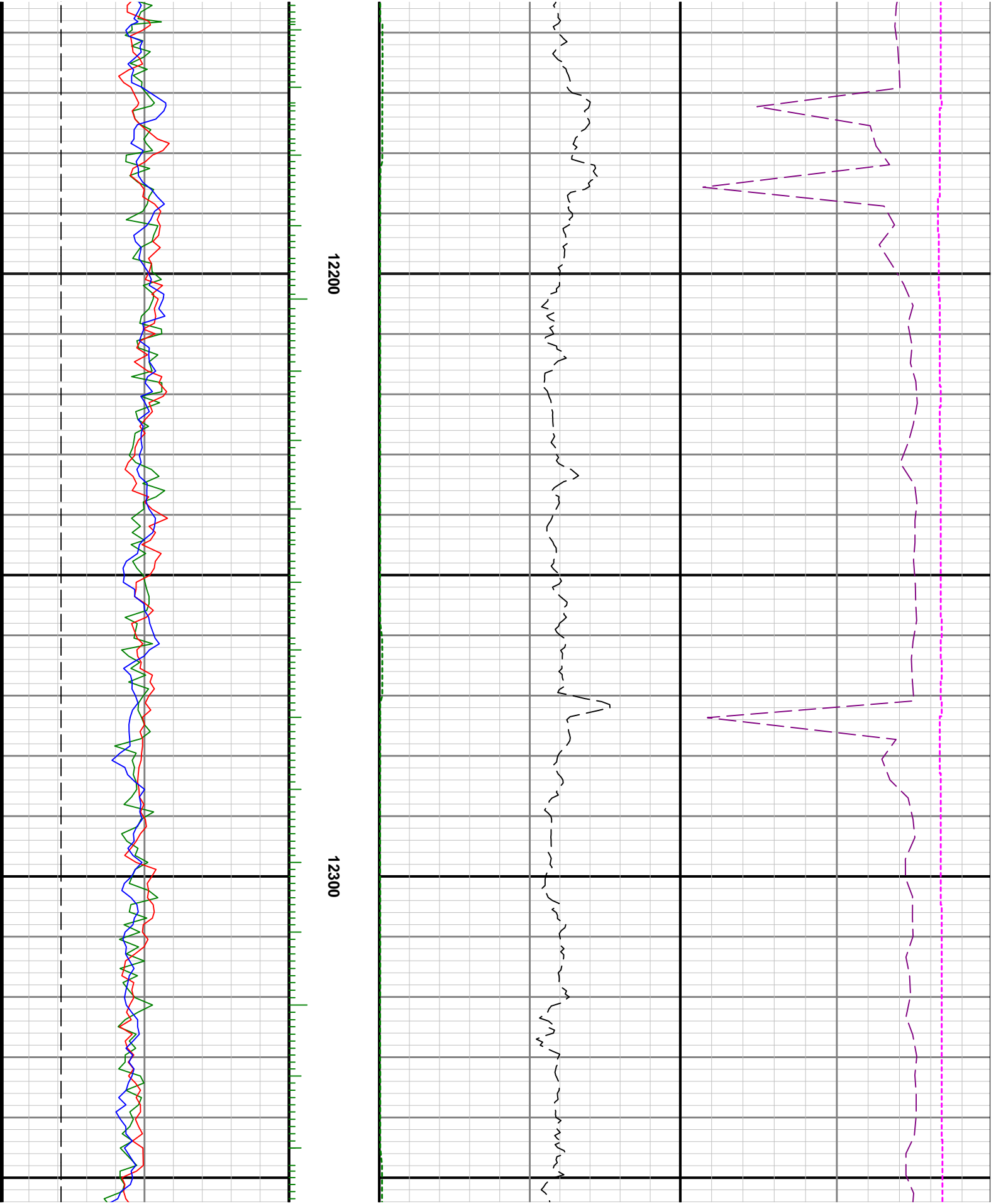
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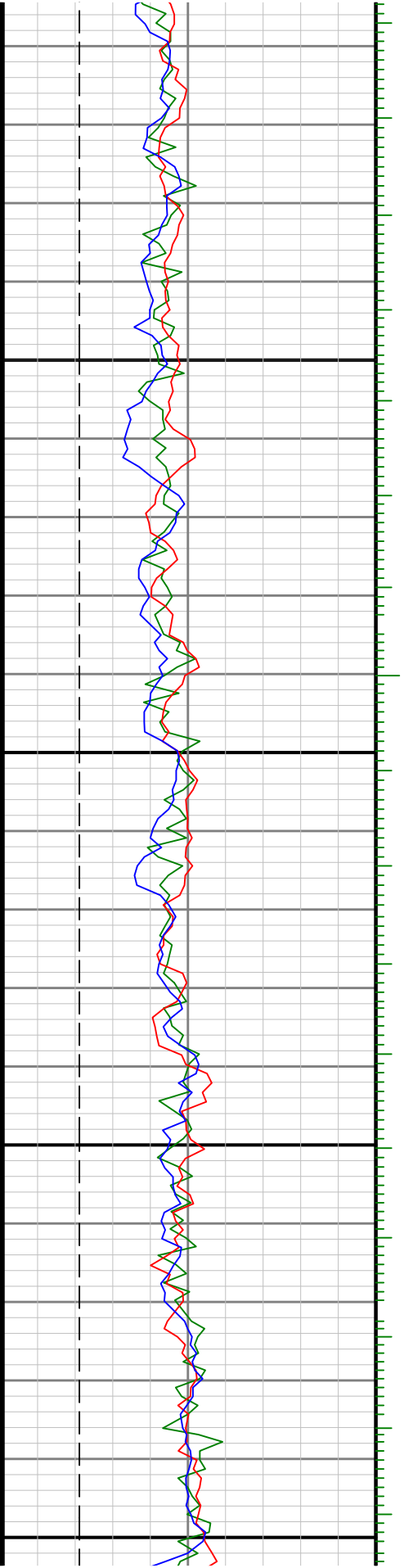


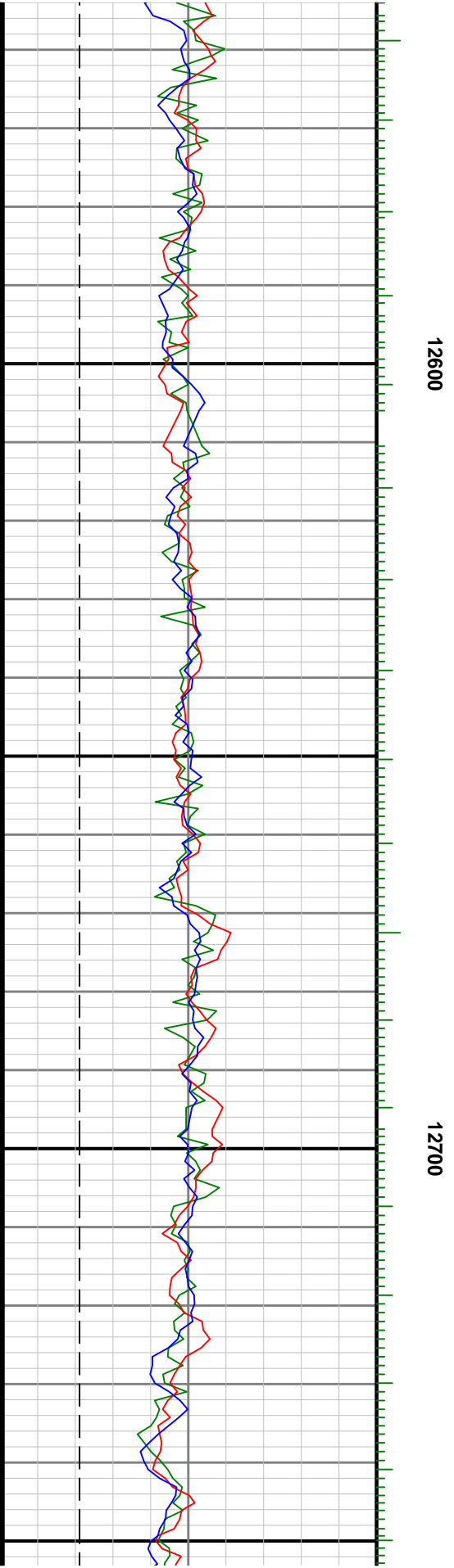


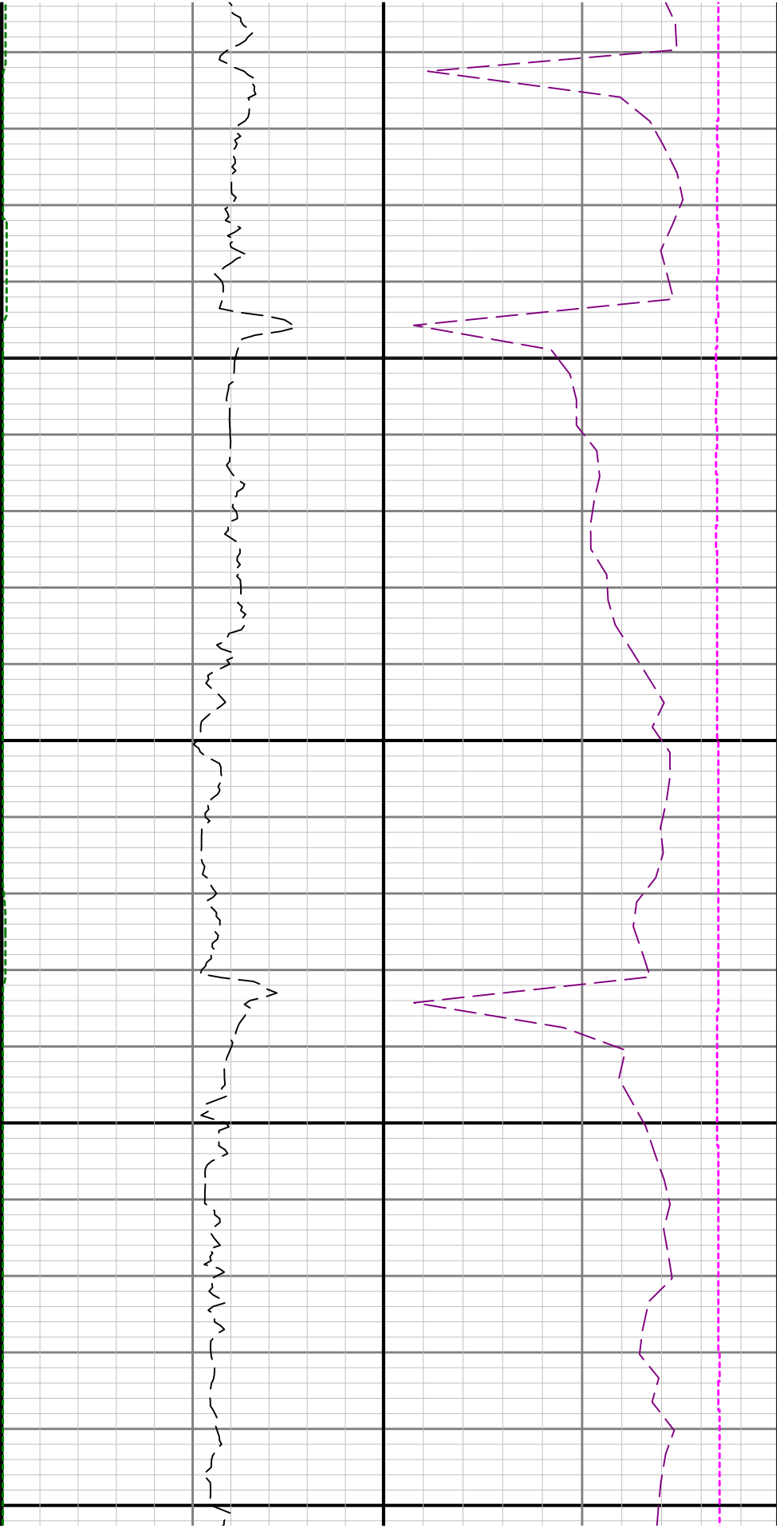


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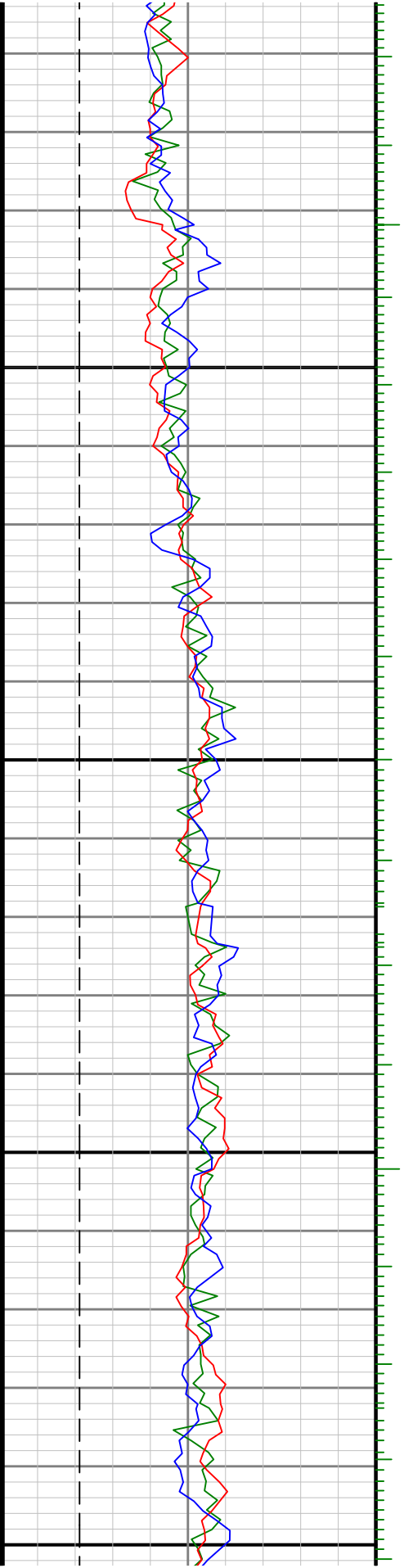


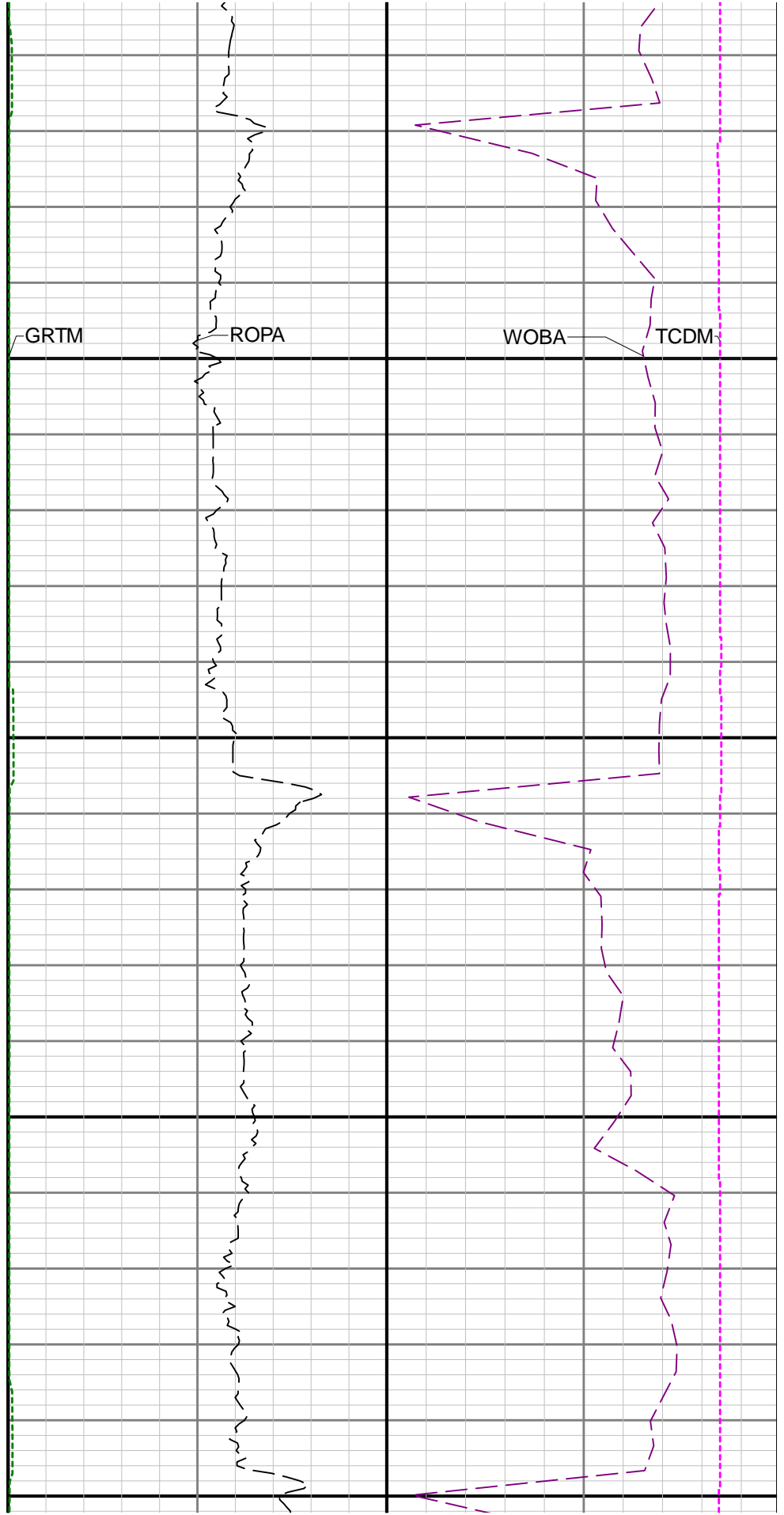
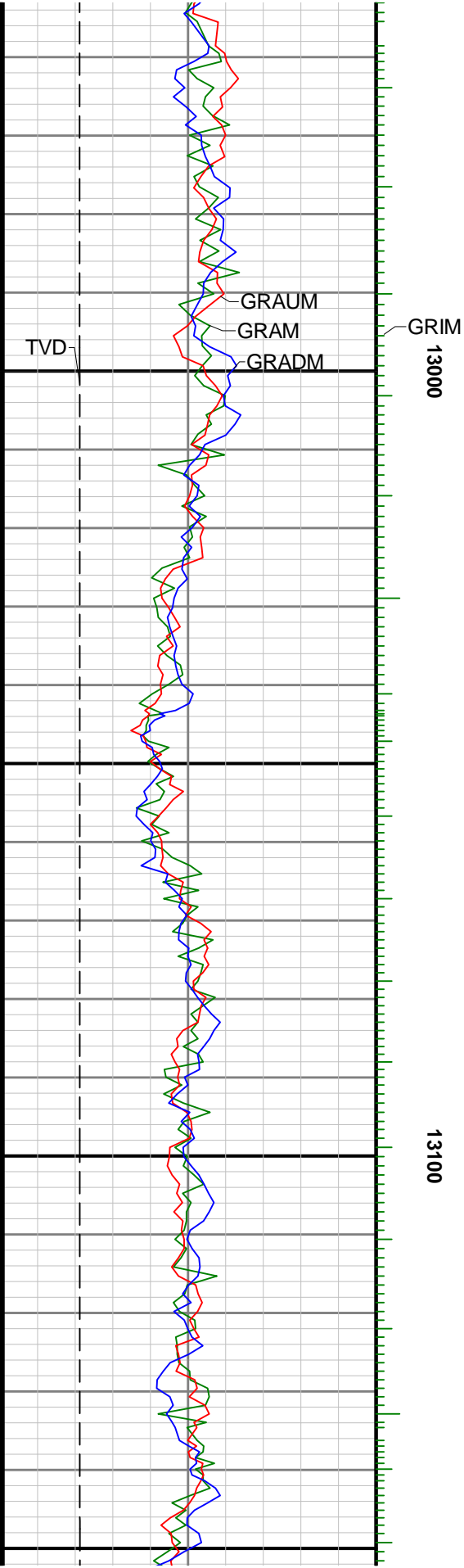


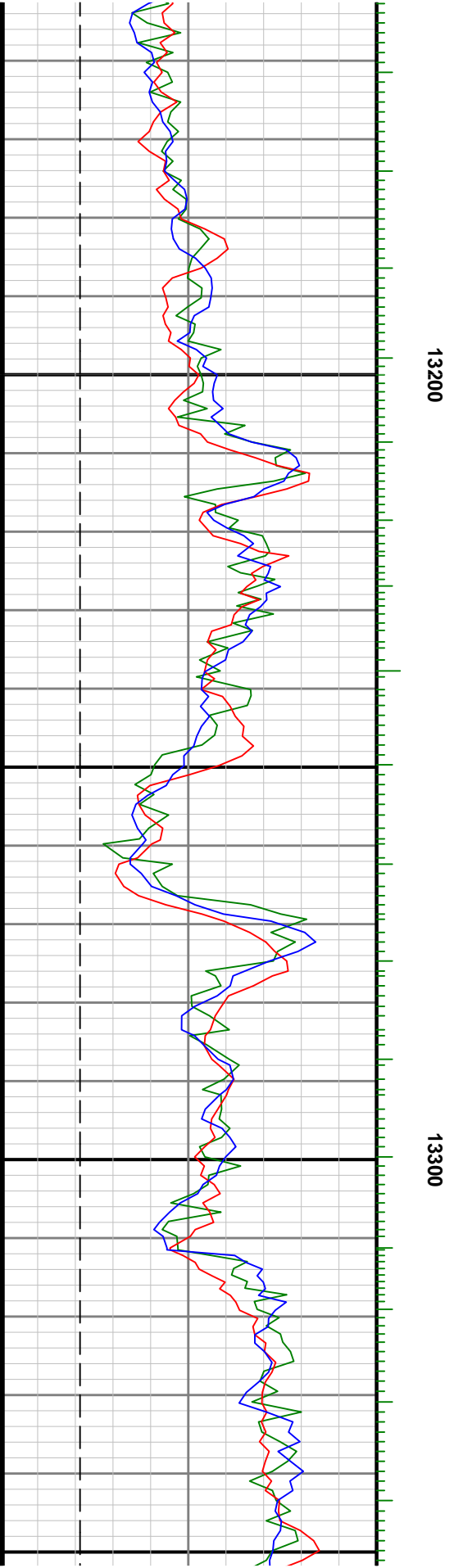
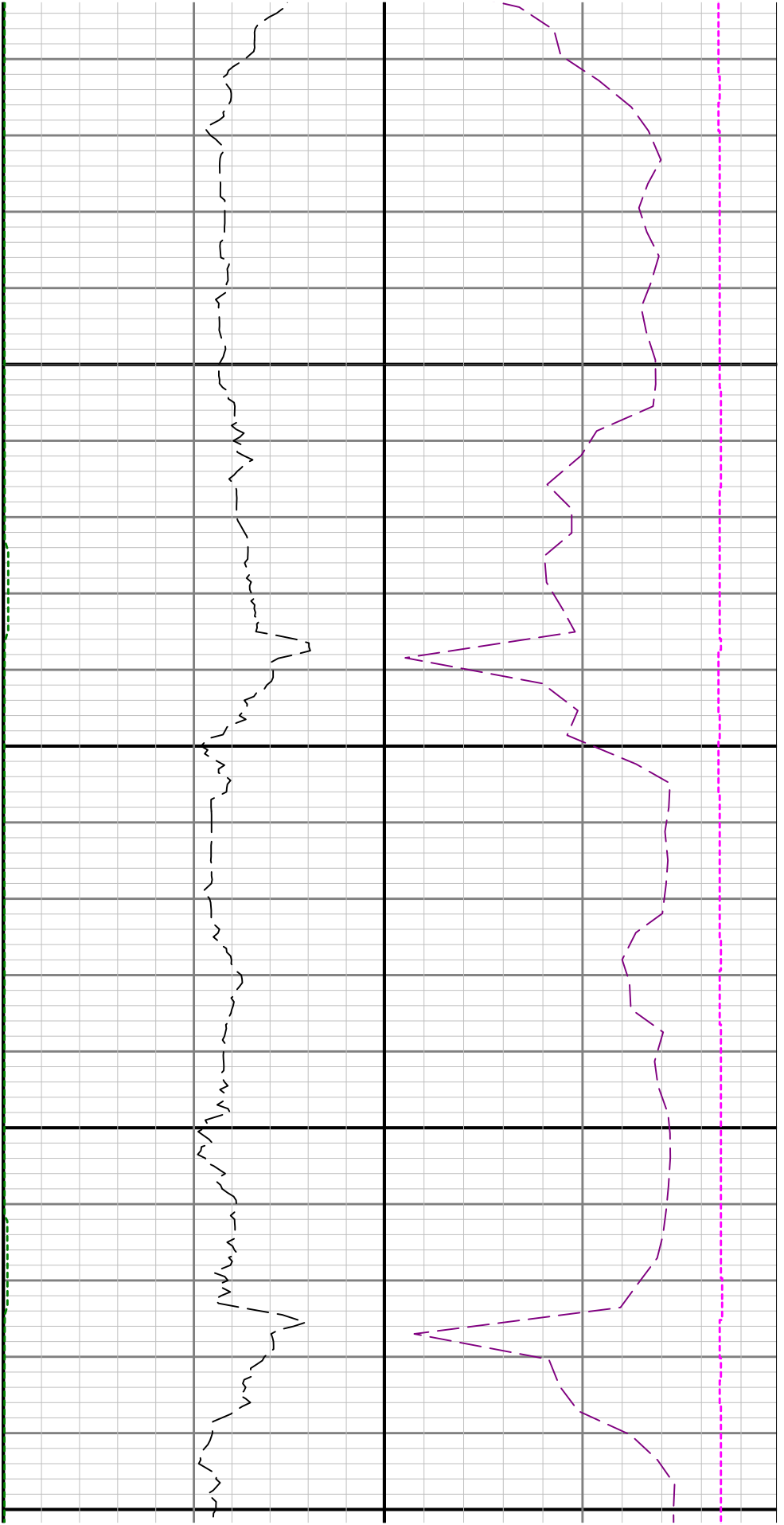


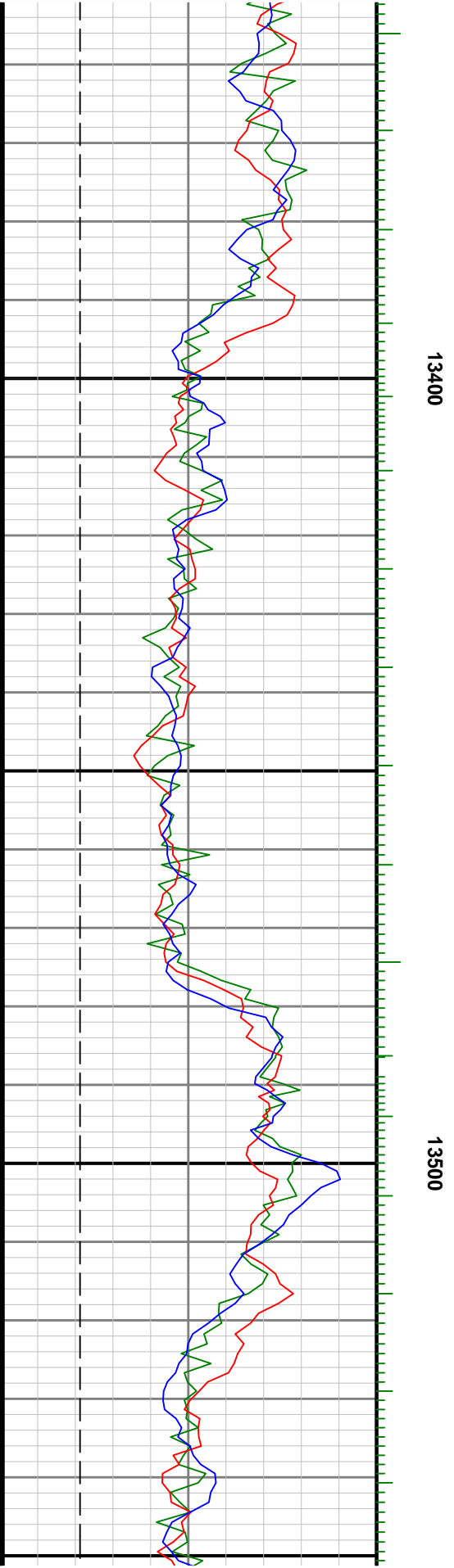
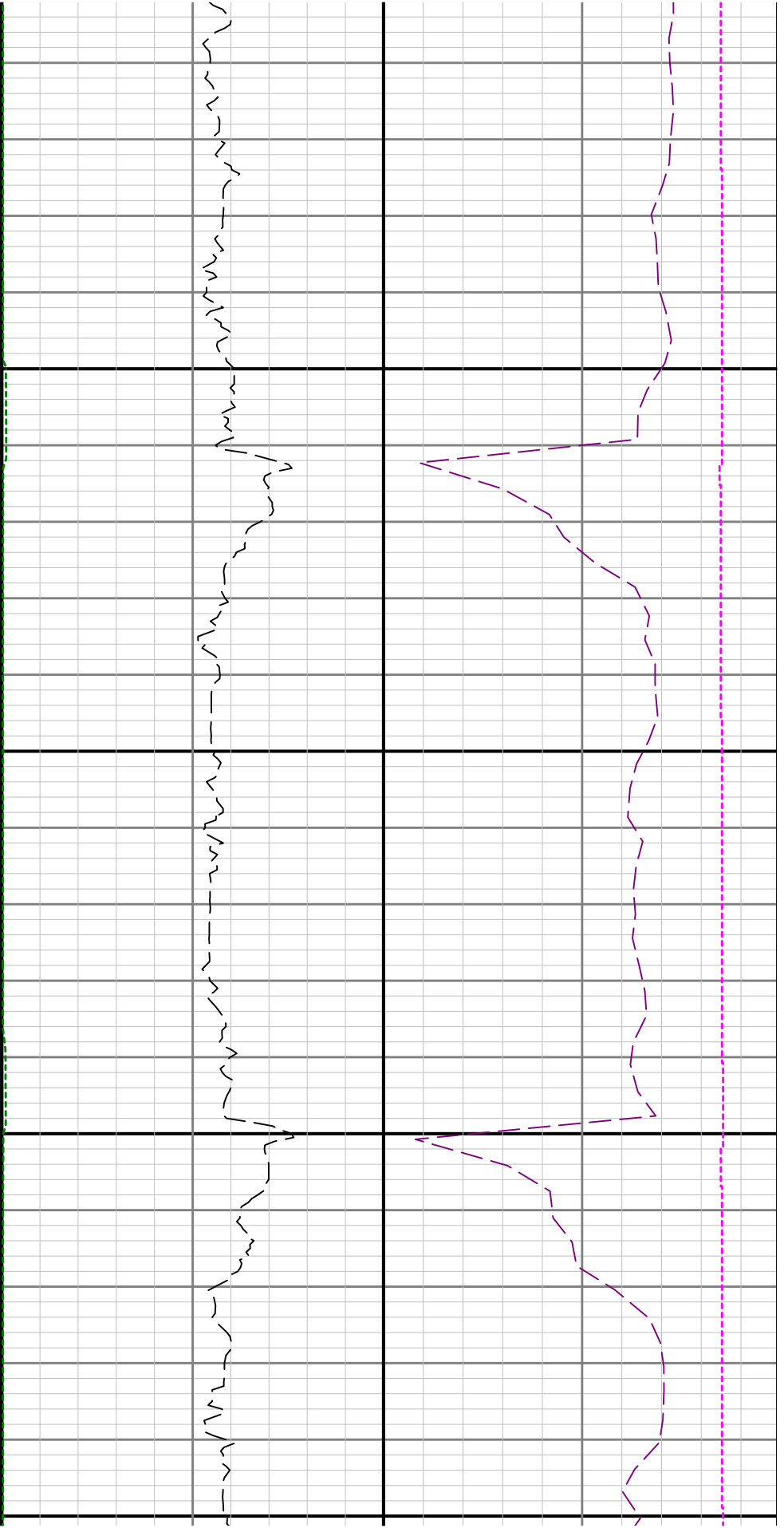
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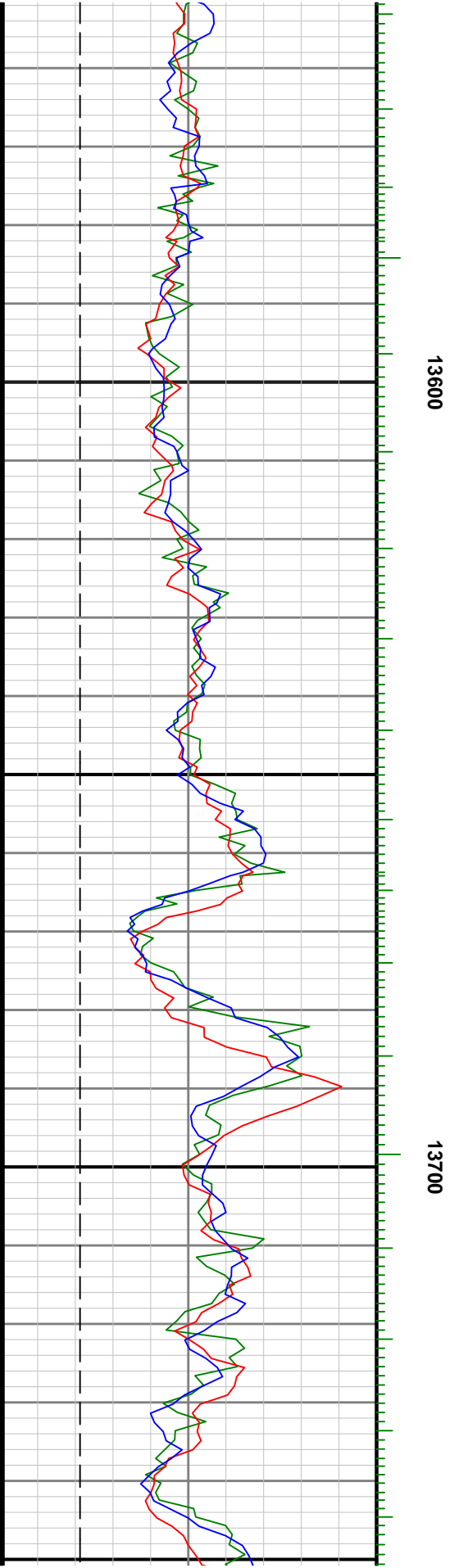
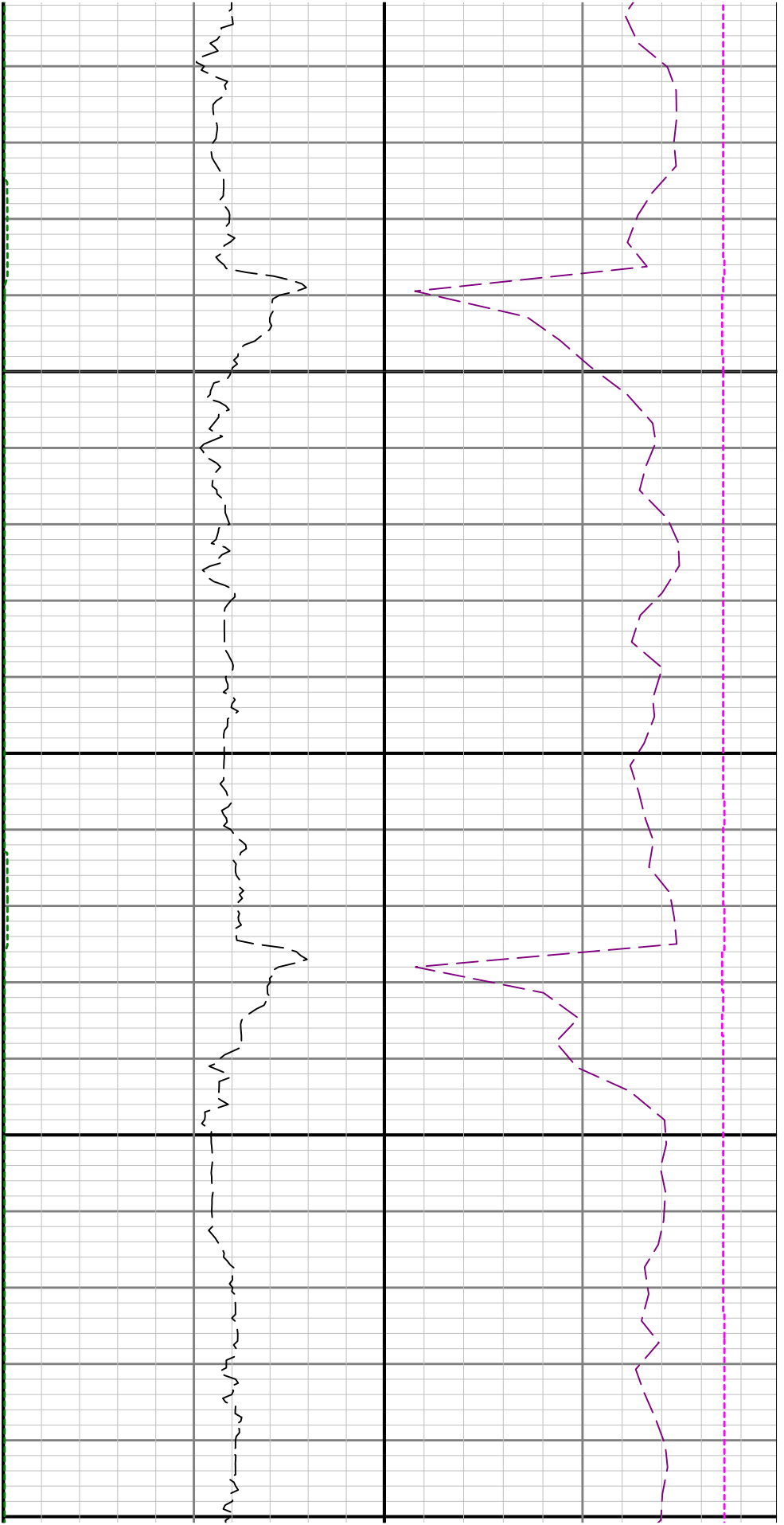
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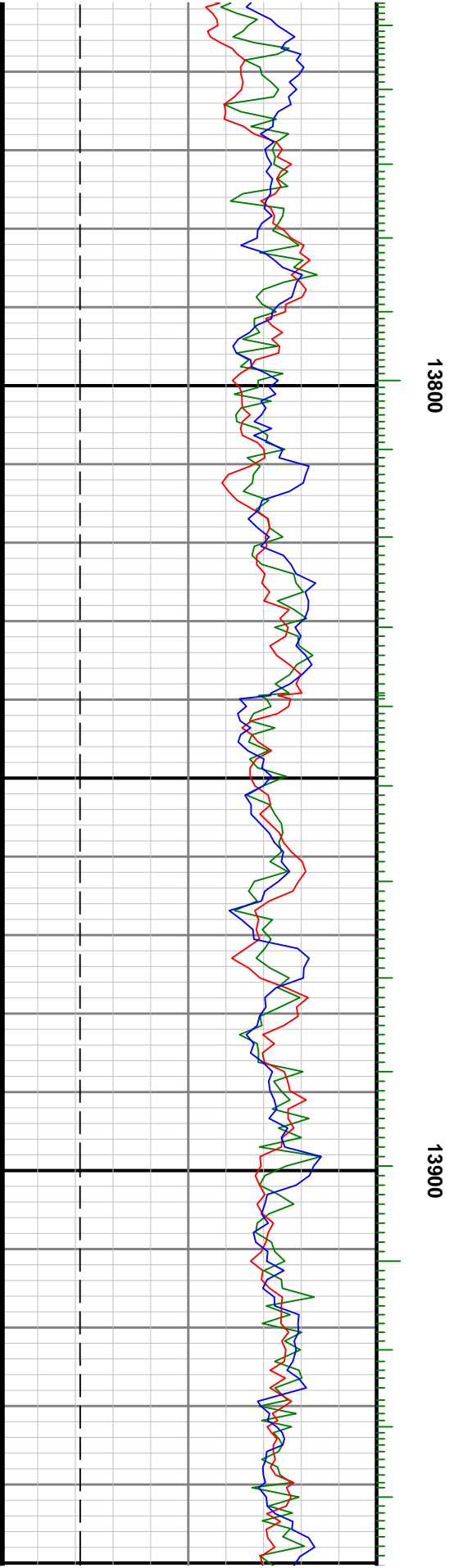
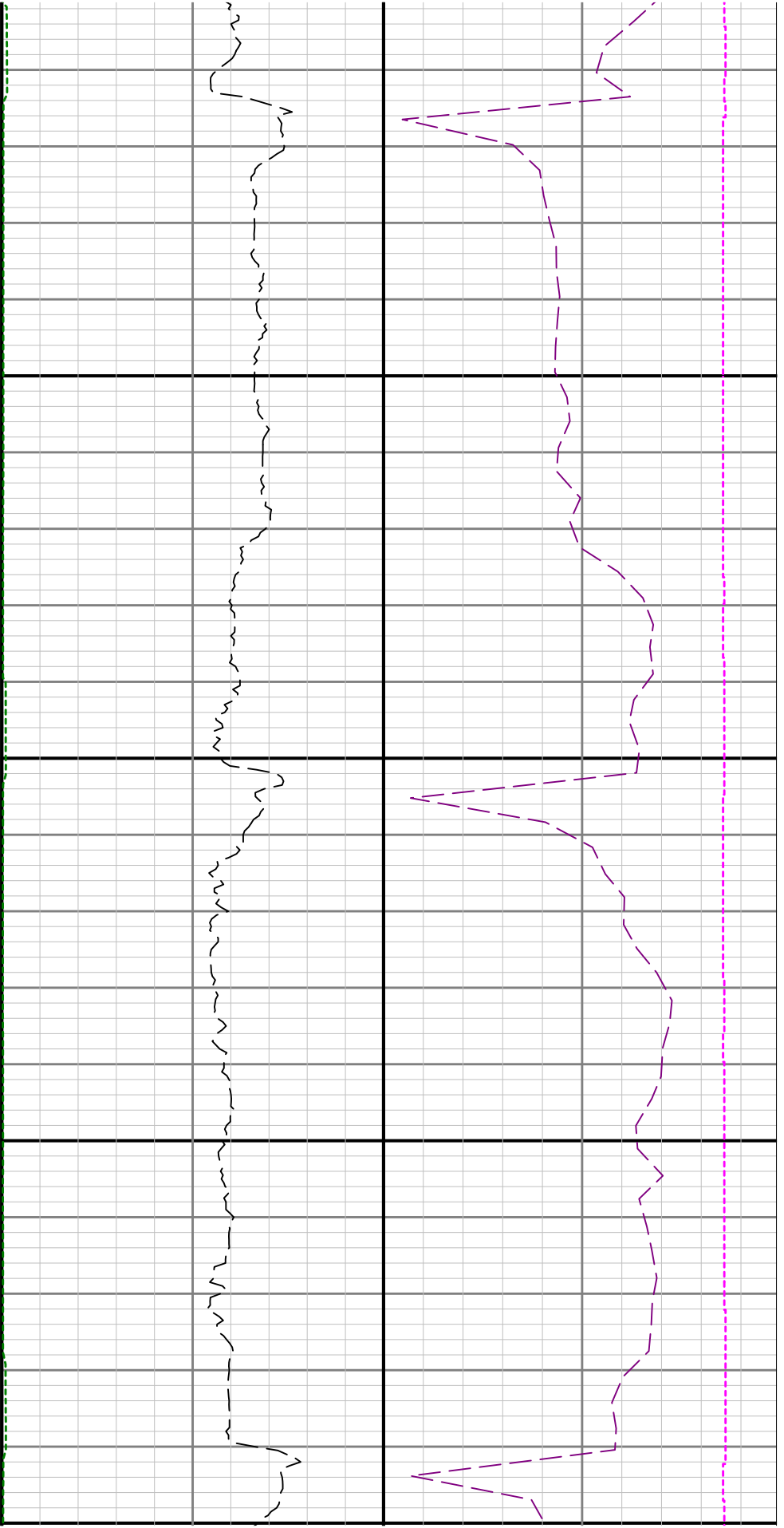


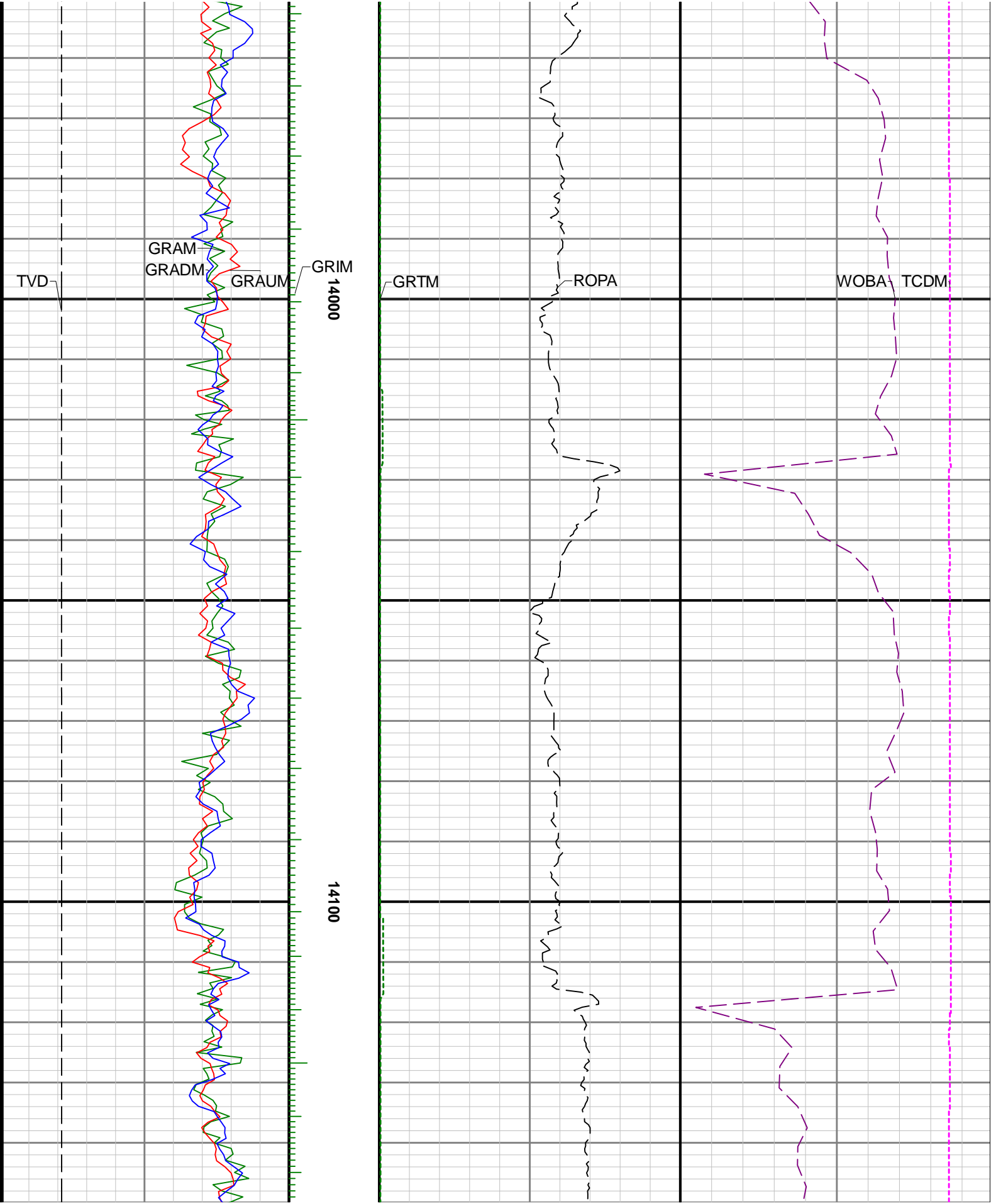


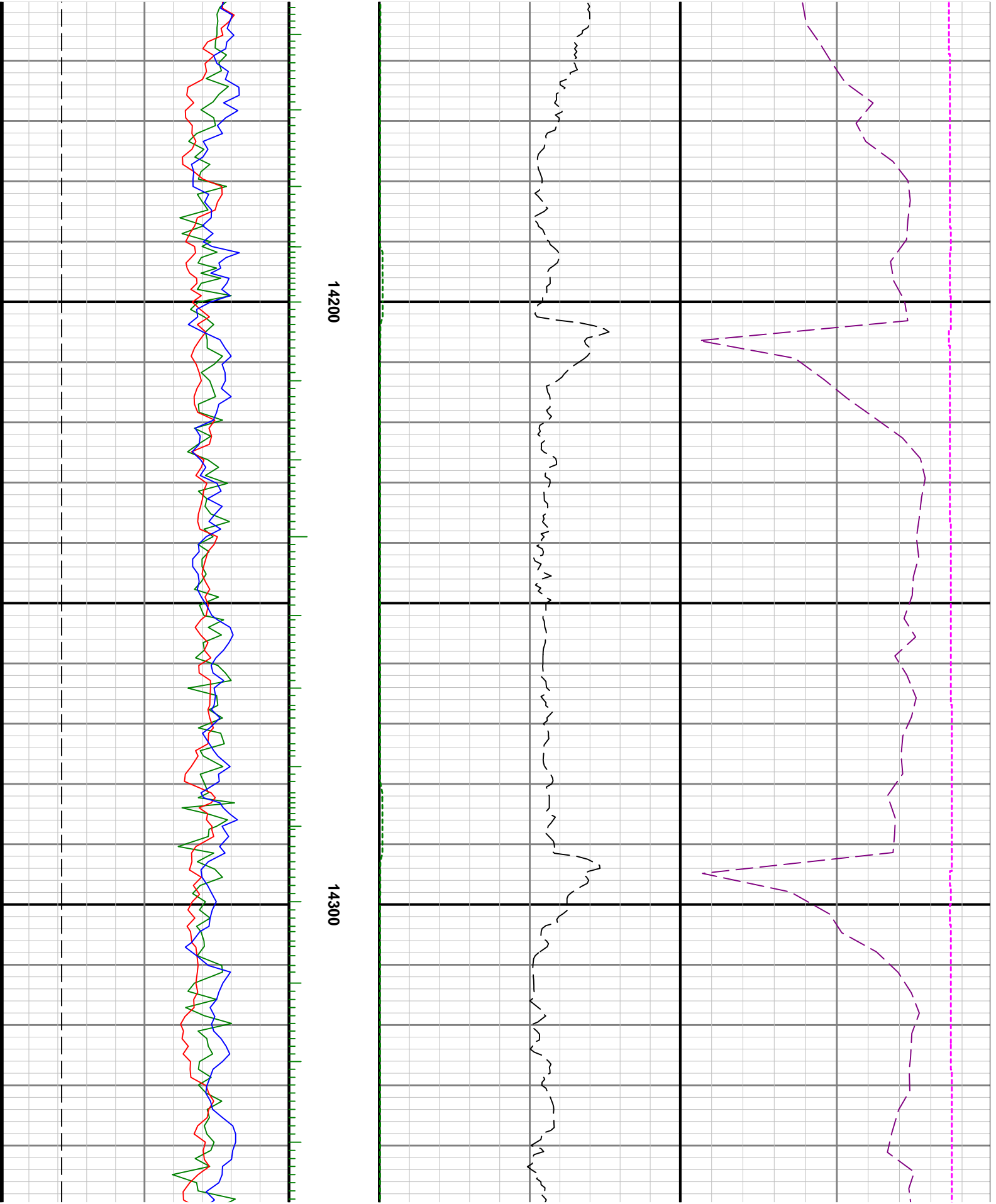


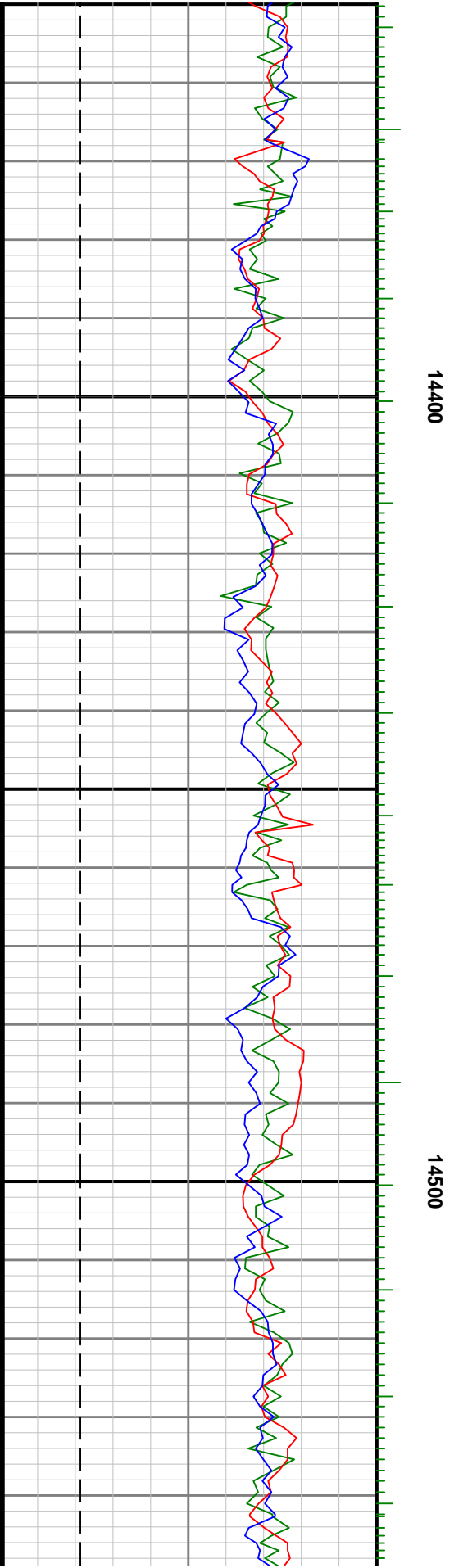
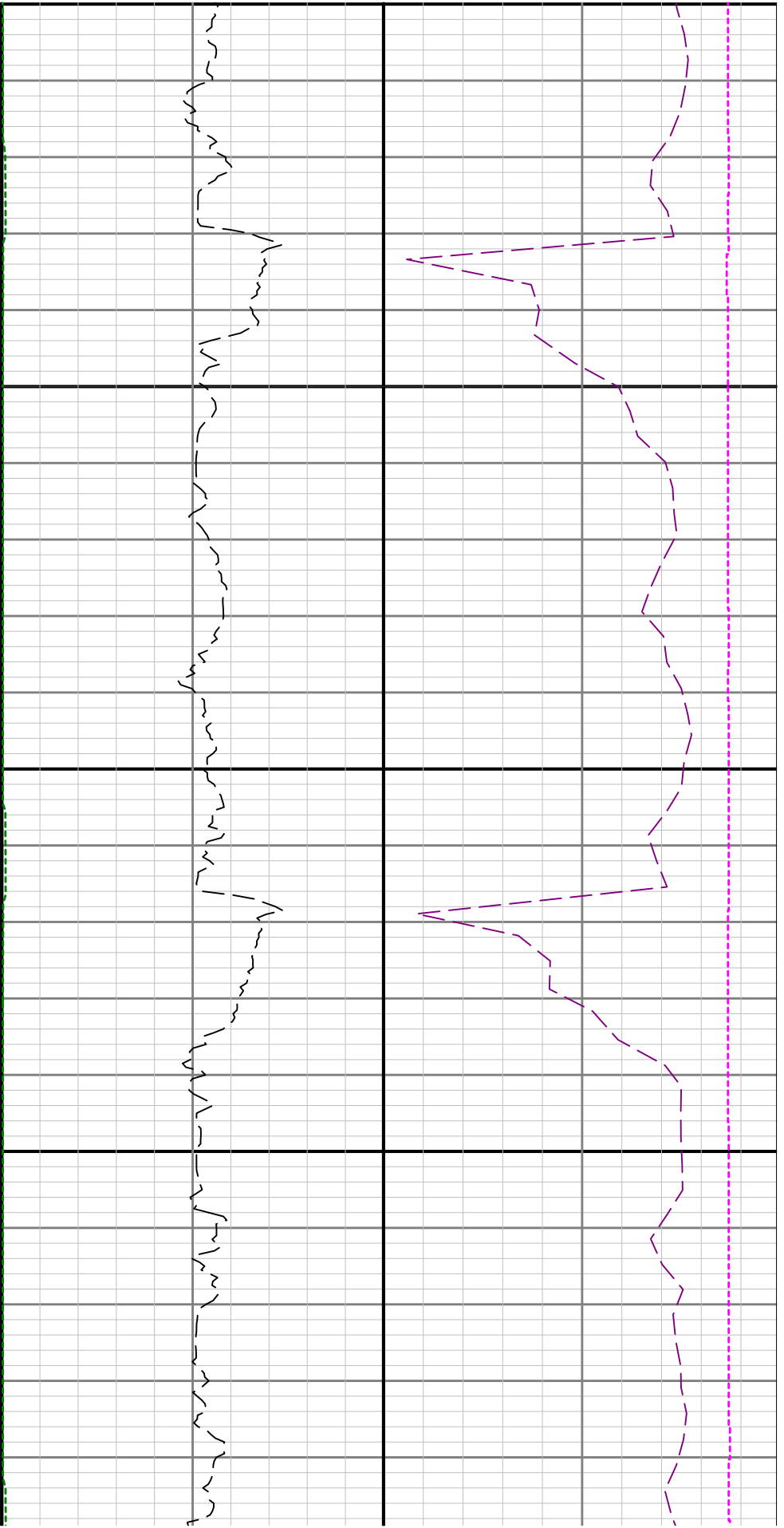


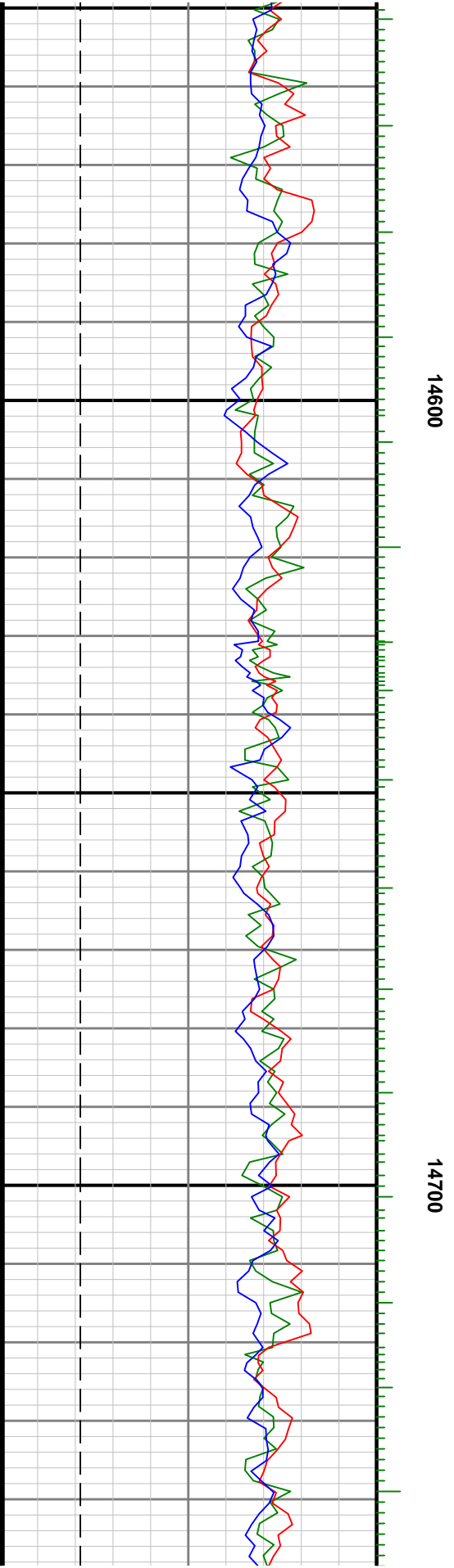
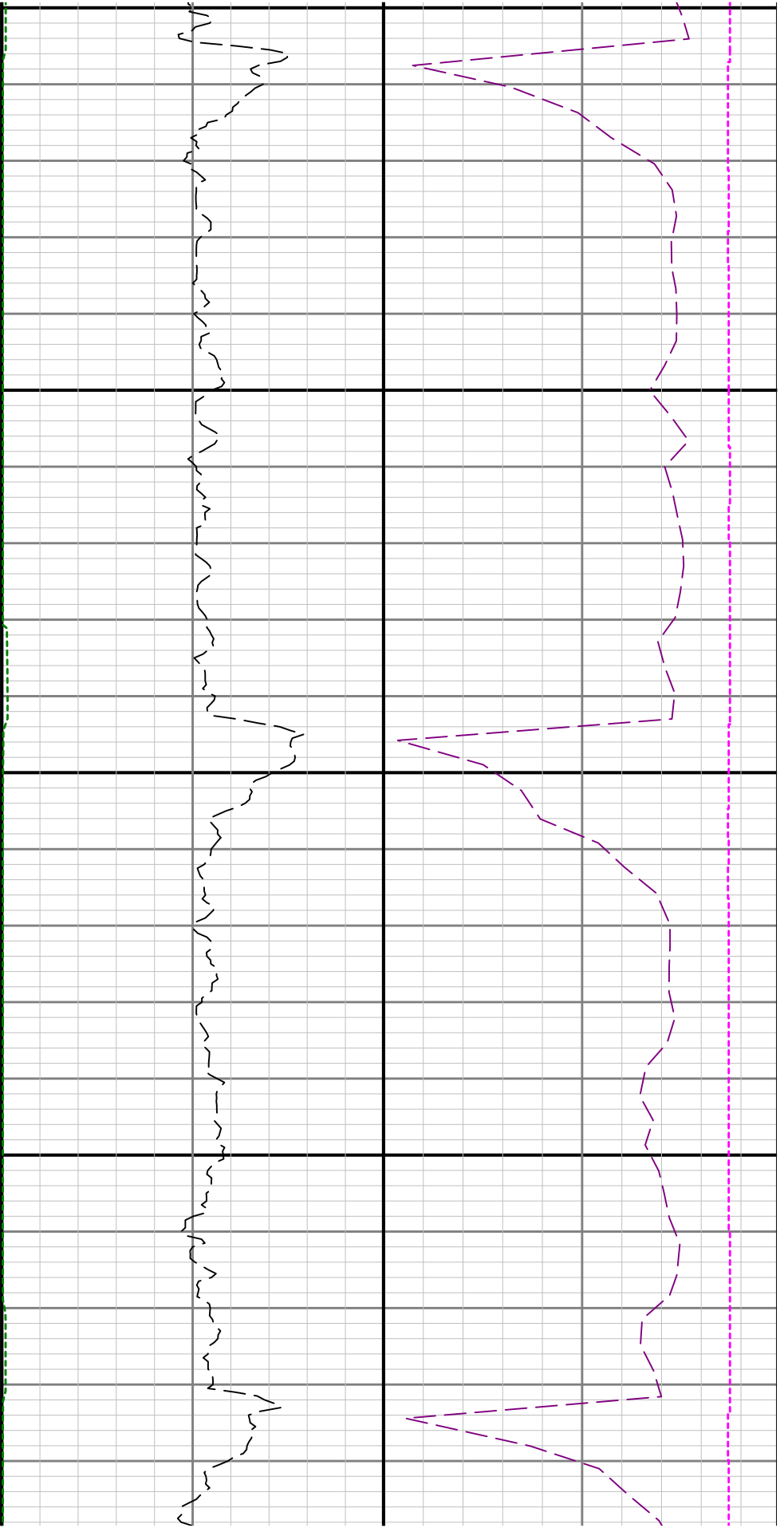


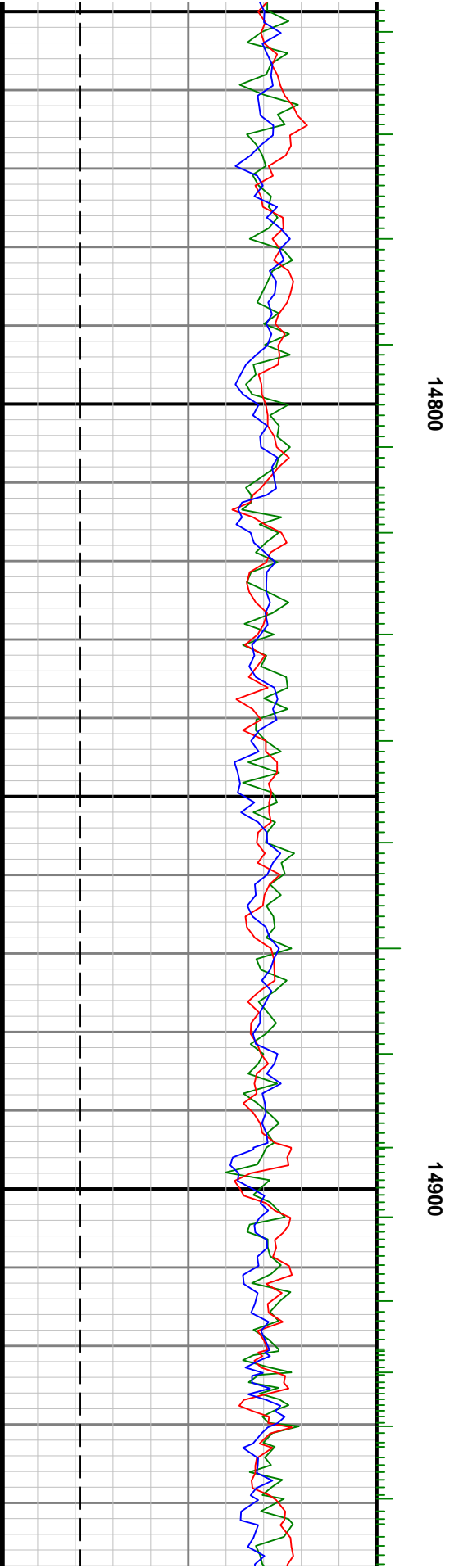
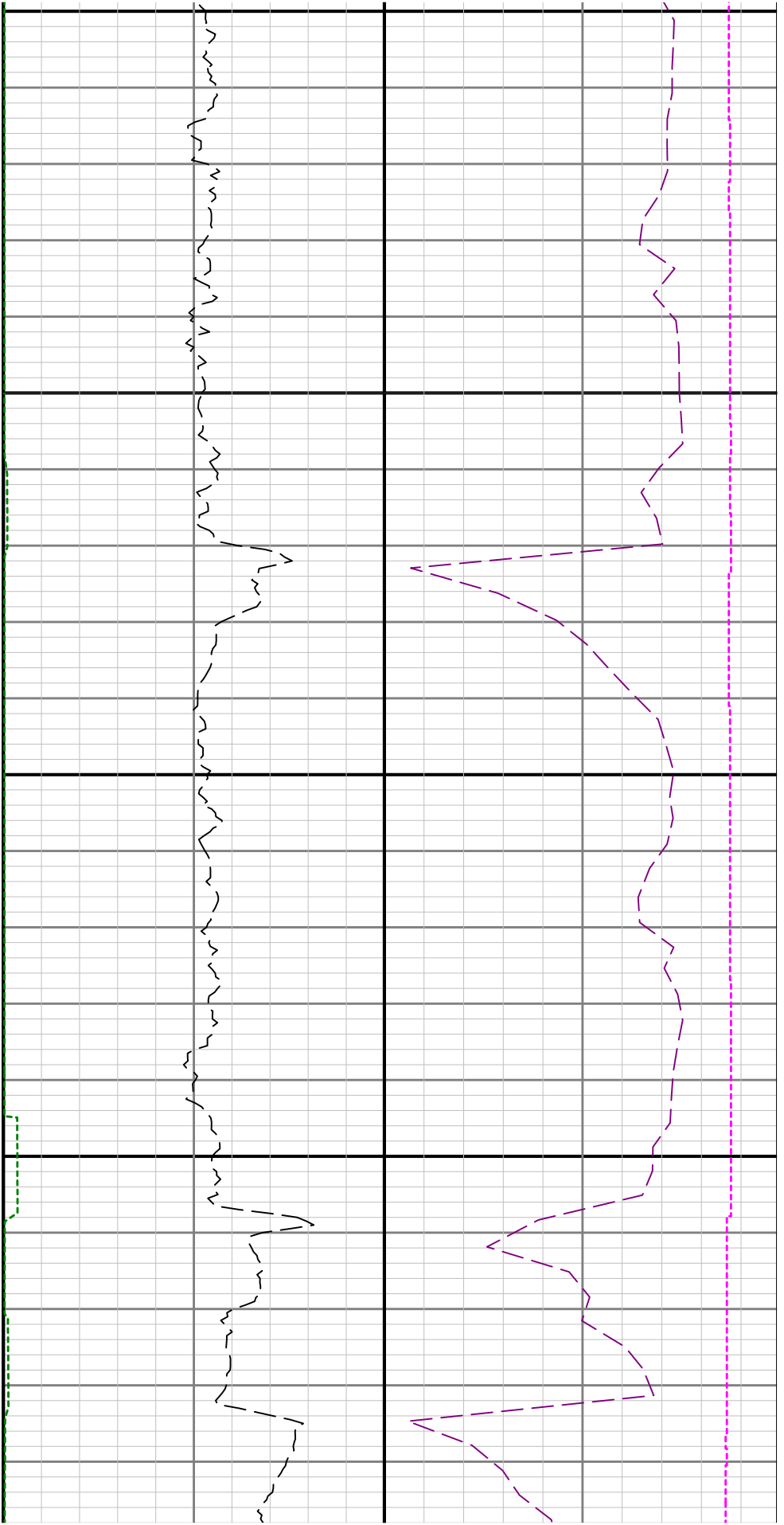


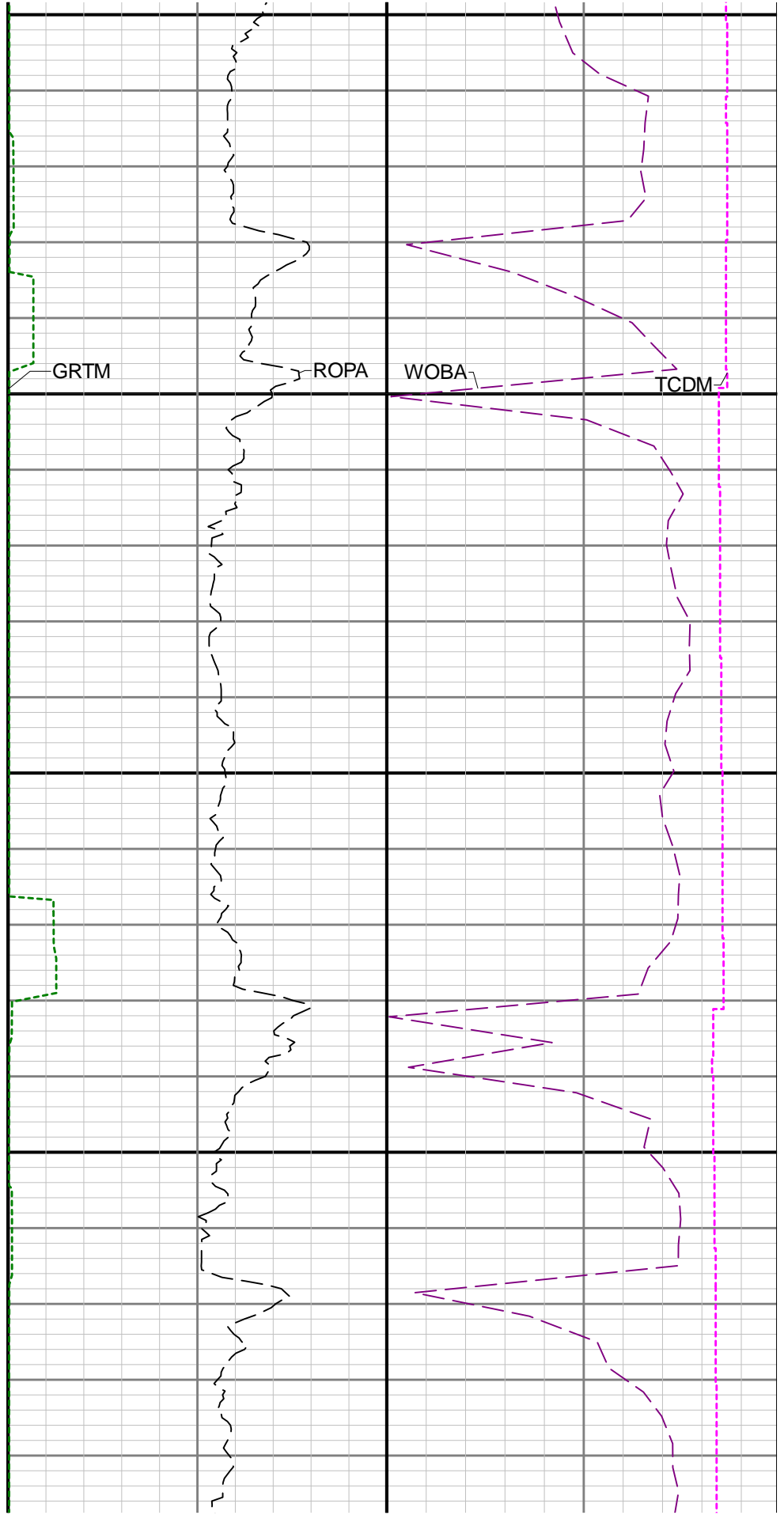
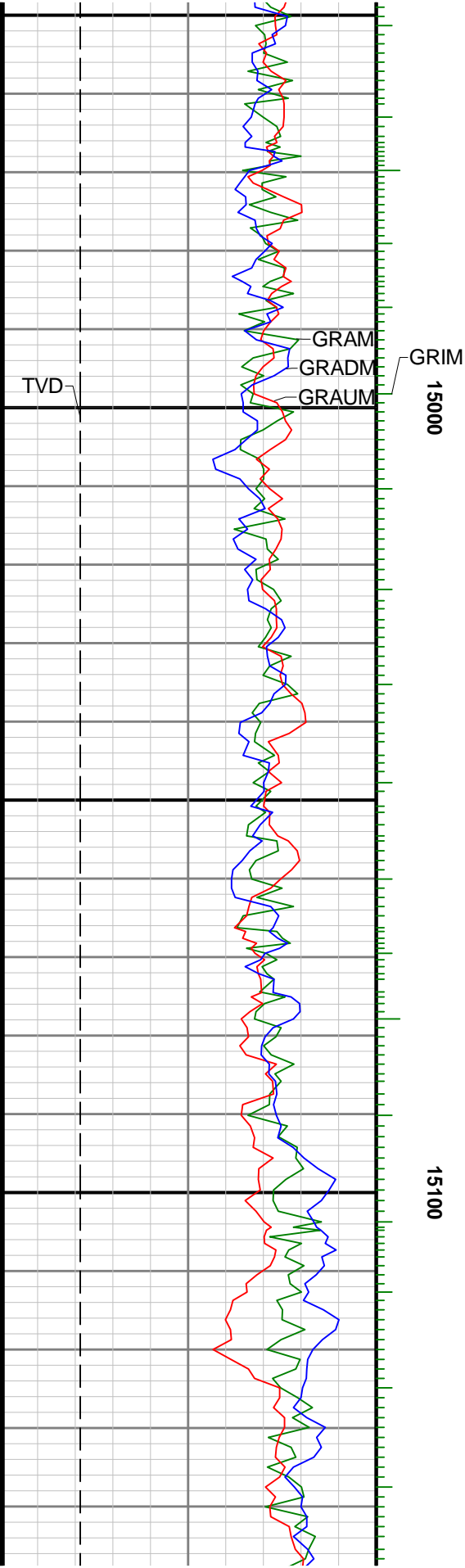


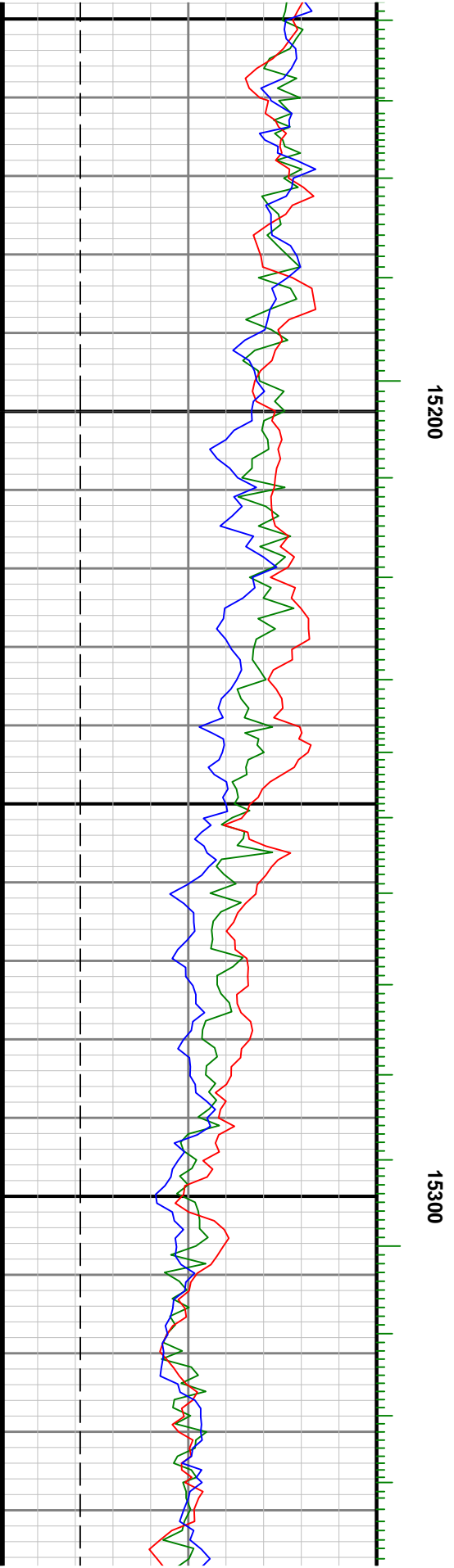
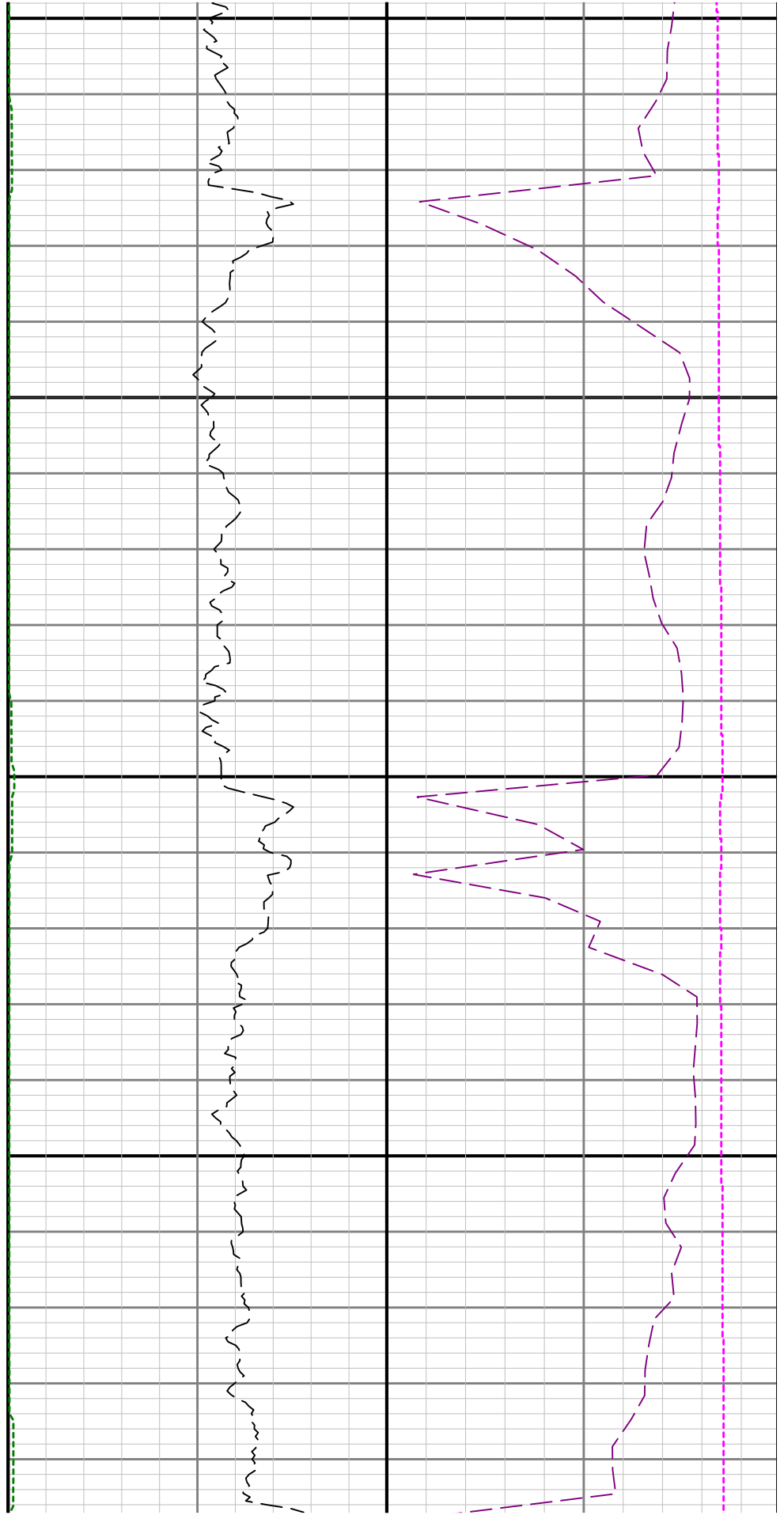


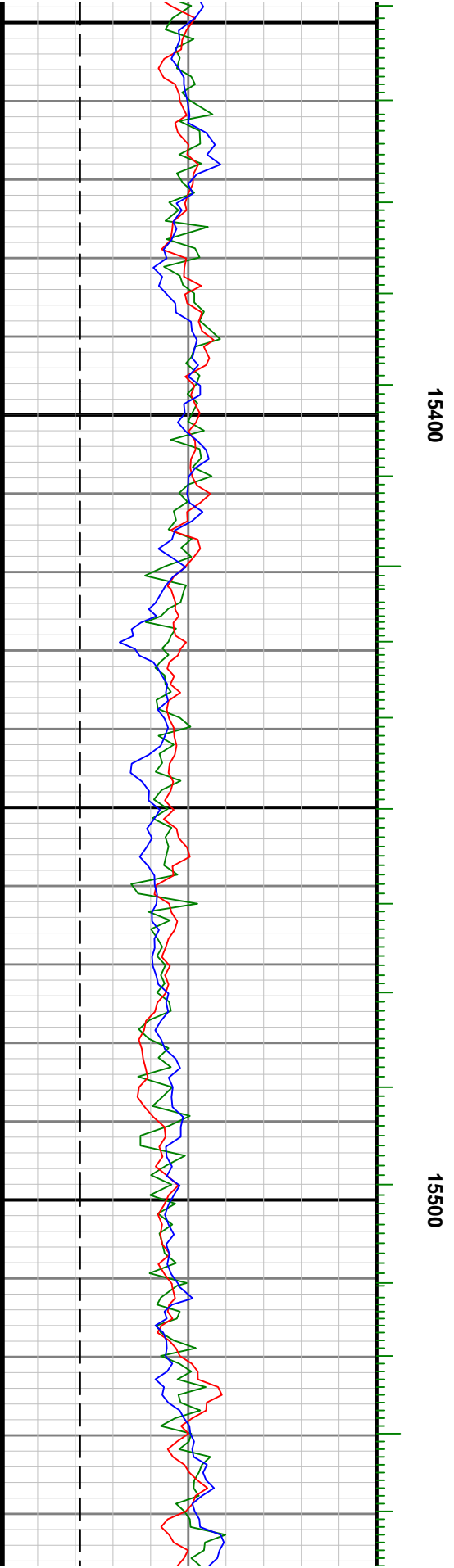
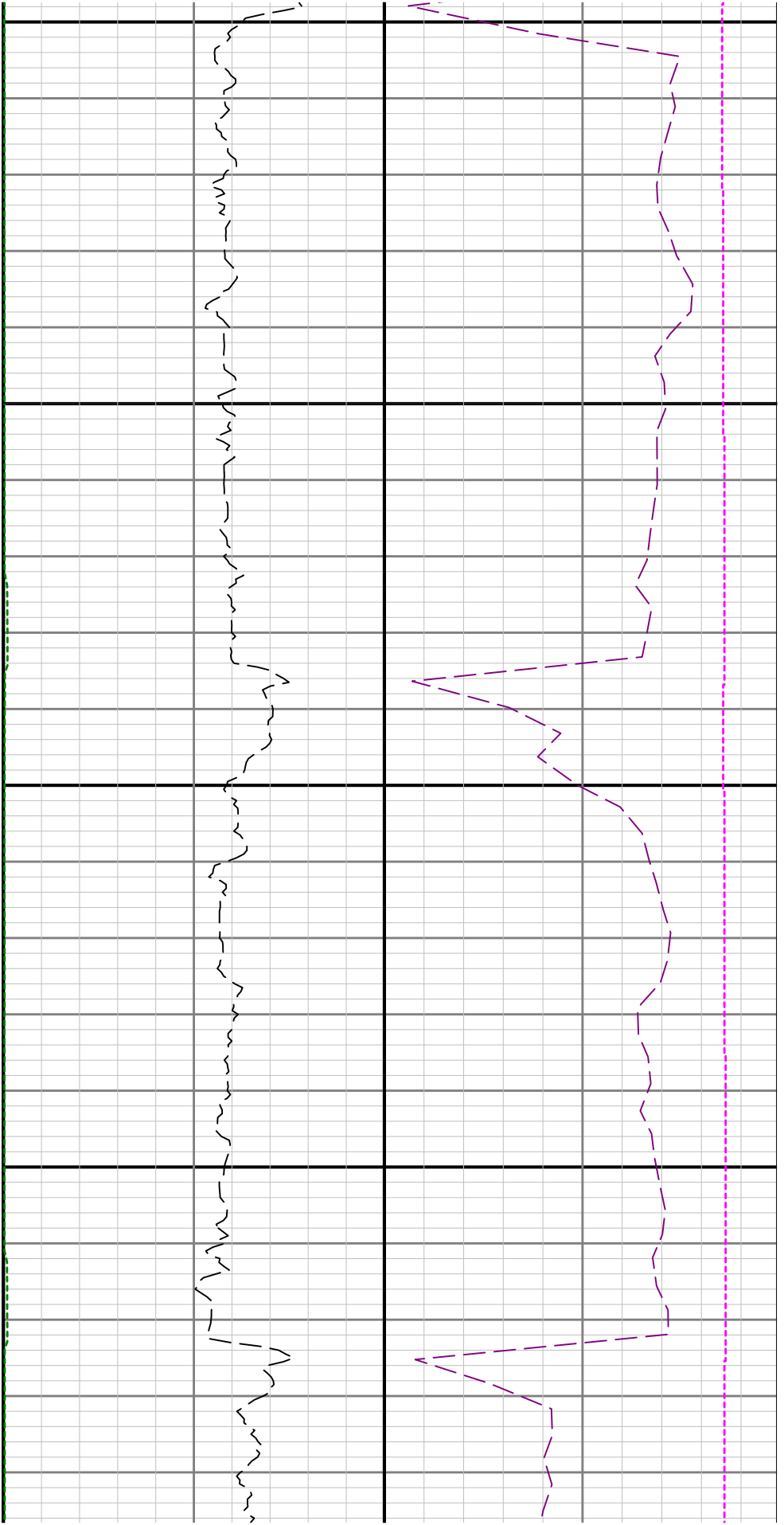


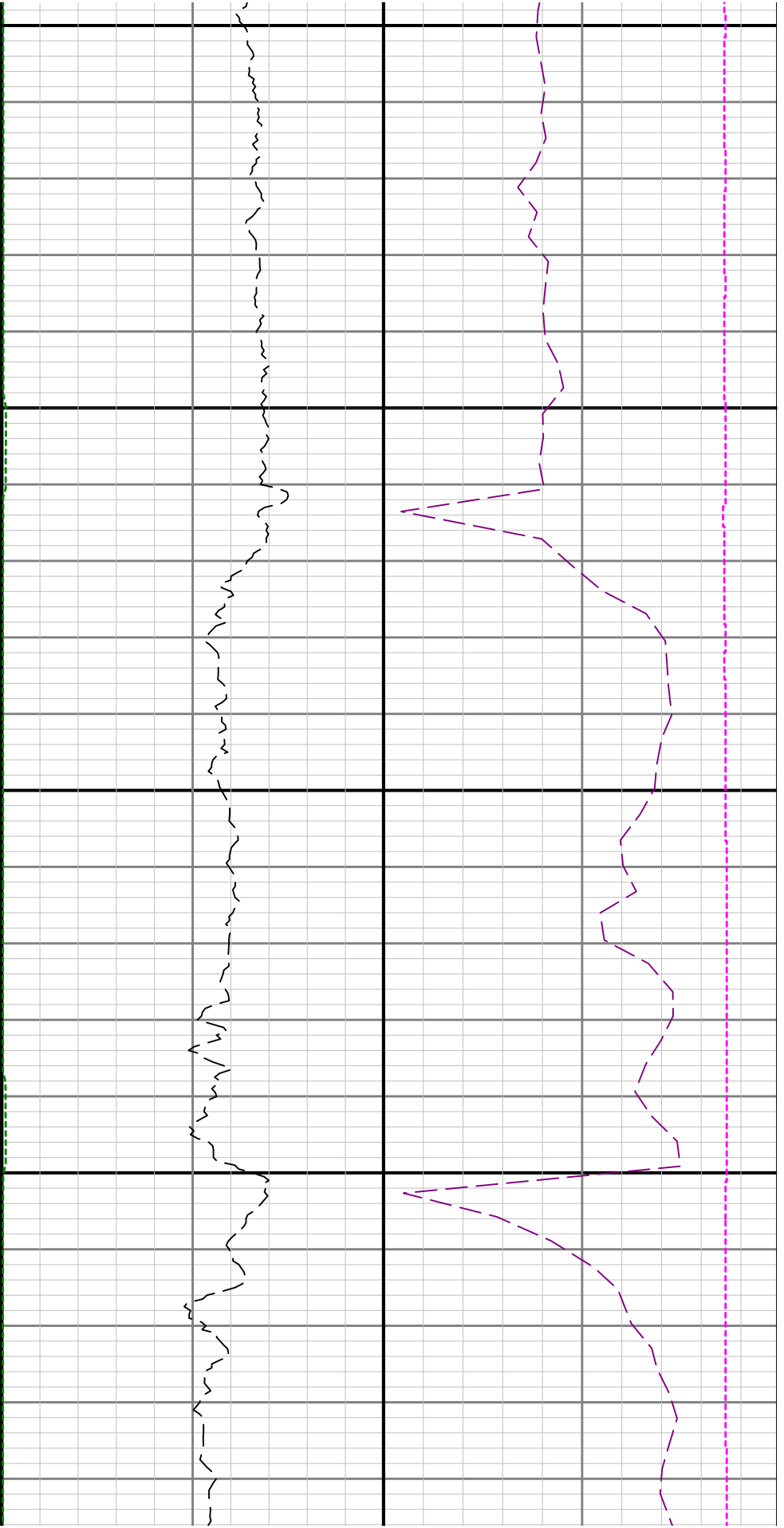












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