



LWD REALTIME LOG

Gamma Ray

Scale:	Company: Crestone Peak Resources Operating LLC					
	Well: Echeverria 2G-2H-D267					
	Field: Weld County					
	County: Weld County Country: United States					
Depth Reference:	Driller's Depth	State:	Colorado			
Status:	Final Print	Surface Location:		Other Services:		
API No:	05-123-48745-0000	Latitude: 040° 10' 19.311" N Longitude: 104° 51' 53.122" W		Directional		
Job ID:	109763900	SEC:	2 TWN: 2N RGE: 67W			
Permanent Datum (P.D.):	Mean Sea Level	Elevation:	0.00 ft	N/A		
Log Measured From:	Rig Floor	Above P.D.:	4910.00 ft	Elev. KB: 4910.00 ft Elev. DF: 4882.00 ft Elev. GL:		
Dates	Interval		Magnetic Field Reference			
From: 2019-04-16	Drilled (ft)	Logged (ft)	Azi Reference North:	True Dip Angle: (deg)		
To: 2019-04-19	Top: 2424.00	Top: 2370.00	Total Magnetic Field Strength: (nT)	52133		
Spud: 2019-01-23	Bottom: 12151.00	Bottom: 12099.00	Mag to Reference North Correction: (deg)	8.33		
Borehole Record						
Hole Size (in)	From (ft)	To (ft)	Size (in)	Weight (lb/ft)	From (ft)	To (ft)
13.500	28.00	2424.00	9.625	36.00	28.00	2414.00
8.500	2424.00	12151.00				

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Log Run Summary

Run No	Bit Run No.	Bit Size (in)	Bit Type	Bit Gauge Length (in)	Assembly Type	Logged Interval		Bit Depth Interval		Date / Time		Circ. Hours (h)
						Top	Bottom	From	To	Start Logging	End Logging	
						(ft)	(ft)	(ft)	(ft)			
1	1	8.500	PDC	4.00	Steerable	2370.00	12099.00	2424.00	12151.00	2019-04-17 00:02	2019-04-19 14:38	50.89

Crew

Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite
A. SPRING	2019-04-15	2019-04-20	S. JOHNSON	2019-04-16	2019-04-20			

Mud Properties Record

Date / Time	Run No.	Depth (ft)	Mud Type	Density (ppg)	Viscosity (cP)	pH	Fluid Loss (cm3)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
2019-04-16 18:00	1	2424.00	Synthetic Based Mud	9.5	14	N/A	20.8	68/22	Flow Line	33557	0.00
2019-04-17 17:00	1	5594.00	Synthetic Based Mud	9.6	15	N/A	18.8	67/20	Flow Line	33557	0.00
2019-04-18 17:00	1	9031.00	Synthetic Based Mud	10.0	15	N/A	18.0	67/18	Flow Line	33557	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	EvoOne	14765383	Gamma (single)	8.76	52.17	6.500	2.500
1	EvoOne	14765383	Directional (mag)	9.95	53.36	6.500	2.500

Service and Tool Mnemonics

Mnemonic	Name	Description
MWD	EvoOne - Dir Gamma	EvoOne

Comments

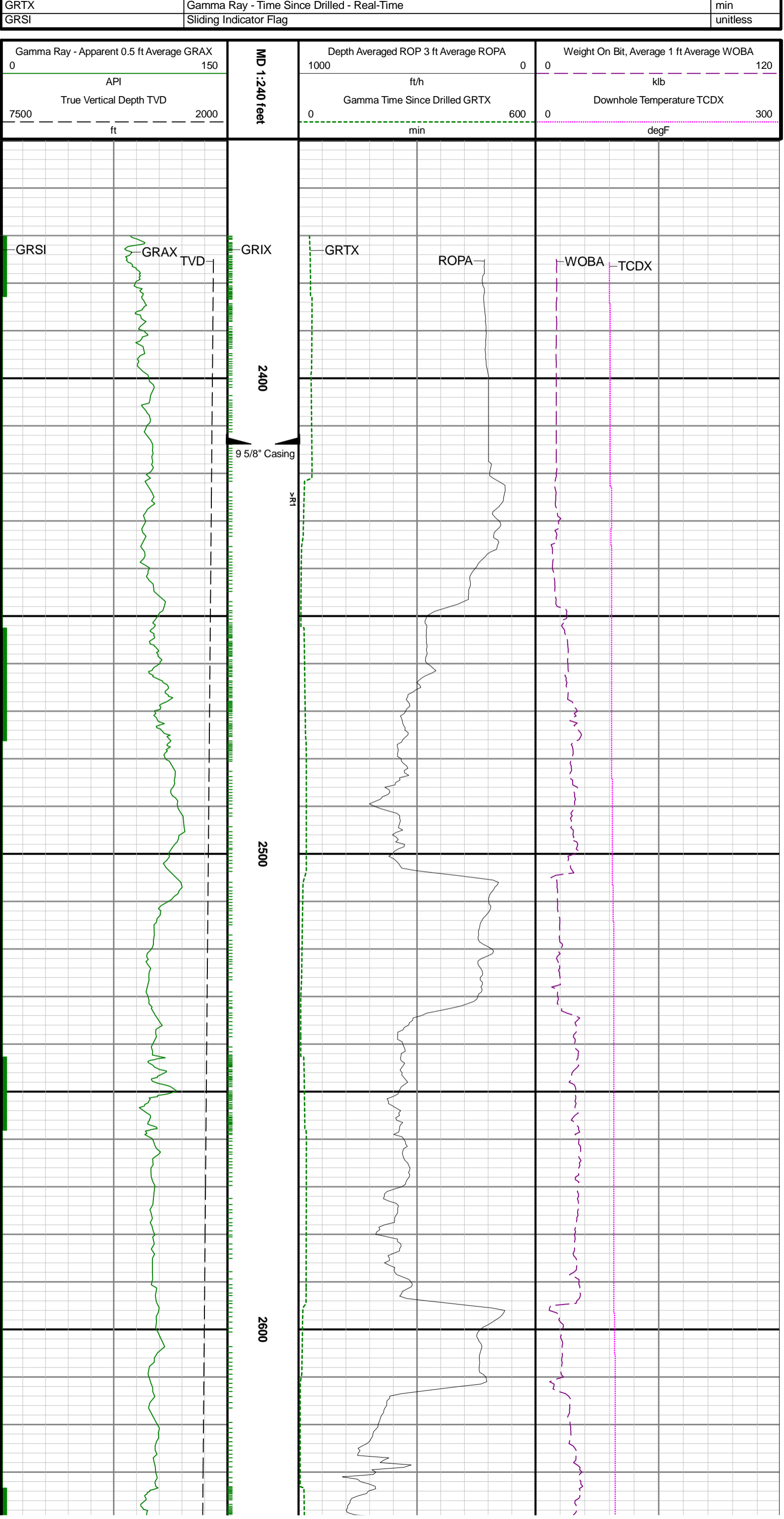
- 1 Depth measurements were obtained from a depth control system not supplied or operated by Baker Hughes. Due to lack of control by Baker Hughes logging
engineers, depth calibrations and measurements could not be independently verified.
- 2 Baker Hughes run 1 utilized 6 1/2 inch NaviTrak UT services (Gamma Ray and Directional) behind a 8 1/2 inch bit and steerable assembly from 2424 to 12151 feet
MD (2388 to 7278 feet TVD).
- 3 A sliding indicator is shown to the left edge of track 1 as a heavy line. The indicator has been depth-shifted to the Gamma Ray sensor offset to correspond with
Gamma Ray data acquired while sliding.

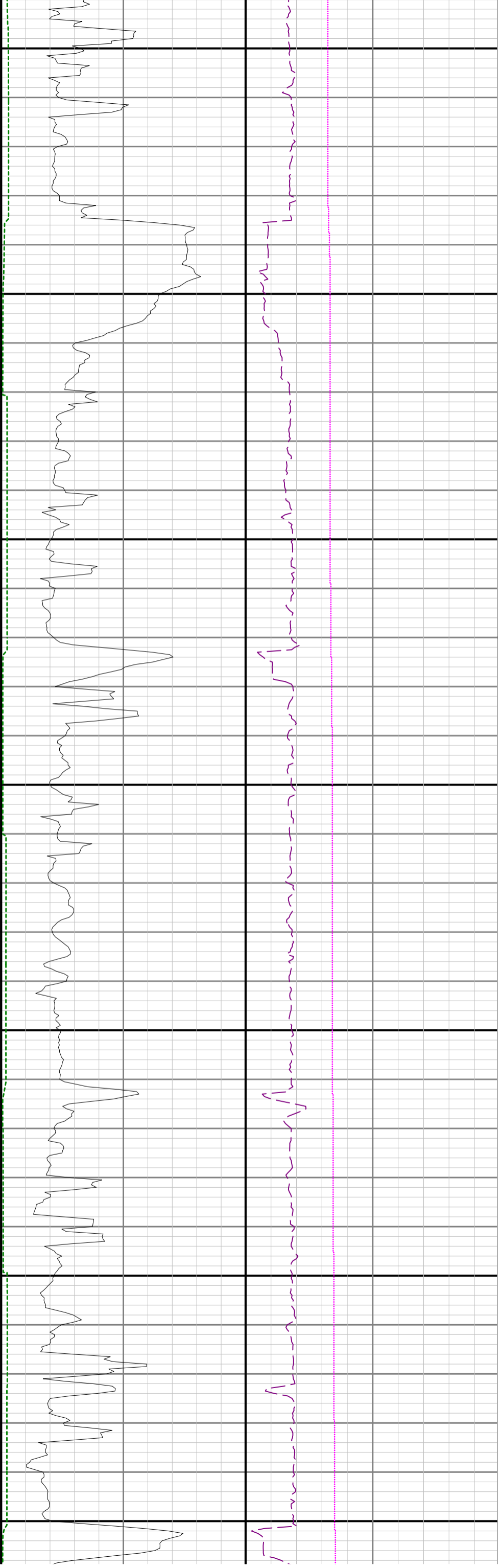
Remarks

Number	Depth (ft)	Hole Section (in)	Run No.	Remark
1	12099.00	8.500	1	The interval from 12099 to 12151 feet MD (7278 to 7279 feet TVD) was not logged due to sensor to bit offset at TD.

Curve Mnemonics

Presented Curves	Description	Units
TCDX	Downhole Temperature	degF
ROPA	Depth Averaged ROP 3 ft Average	ft/h
TVD	True Vertical Depth	ft
WOBA	Weight On Bit, Average 1 ft Average	klb
GRAX	Gamma Ray - Apparent - Real-Time 0.5 ft Average	API
GRIX	Gamma Ray - Data Point Indicator - Real-Time	unitless

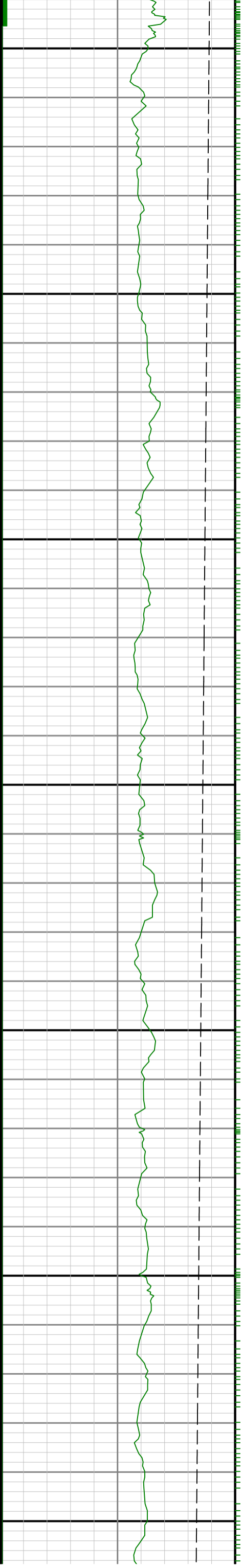


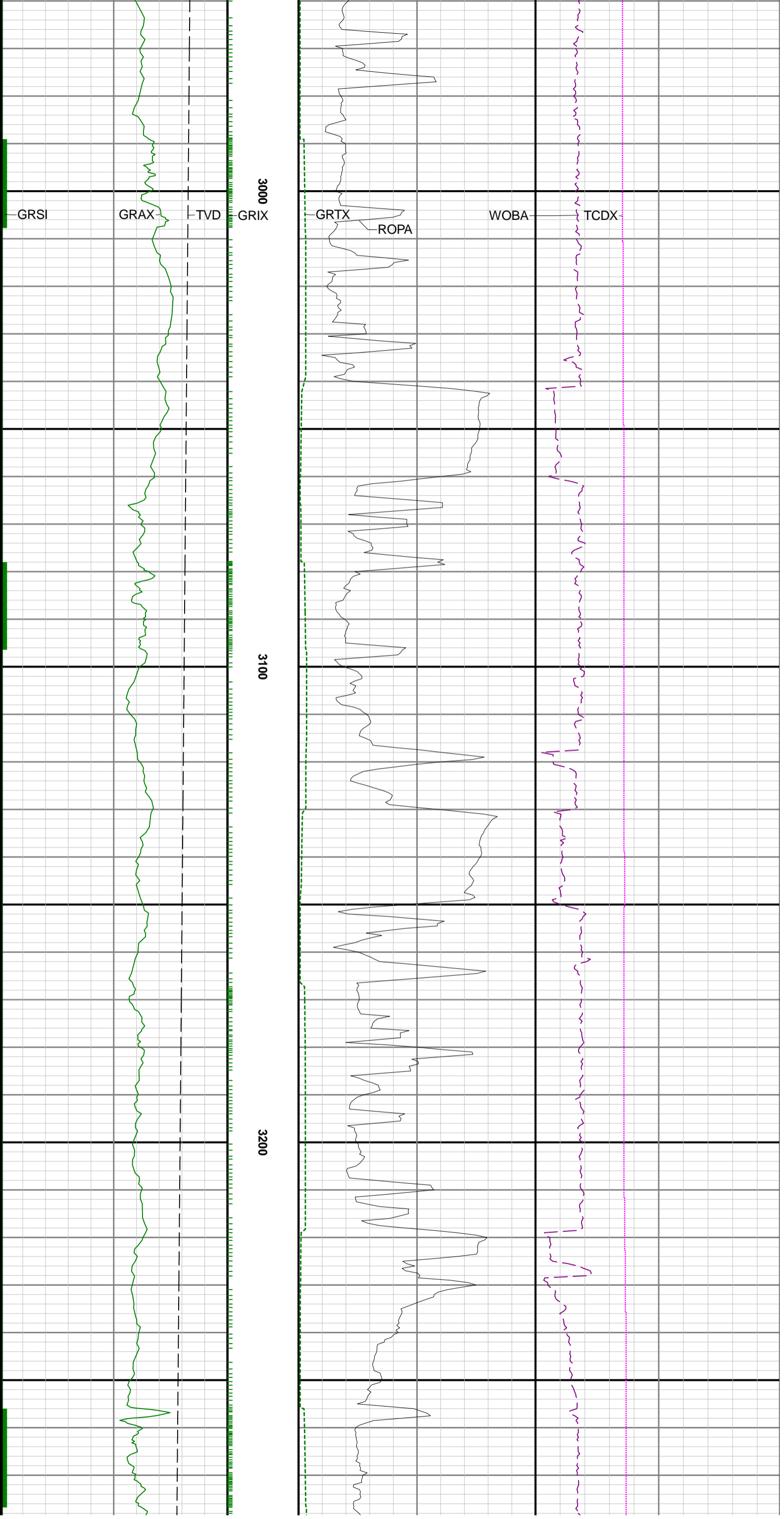


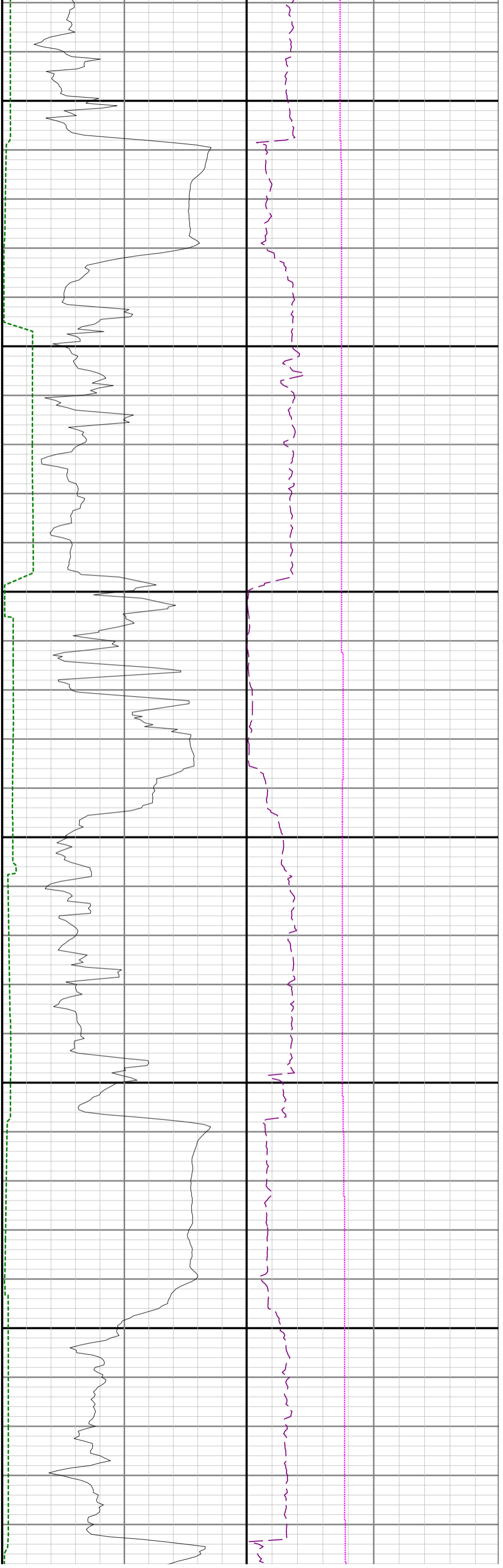
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2800

2900





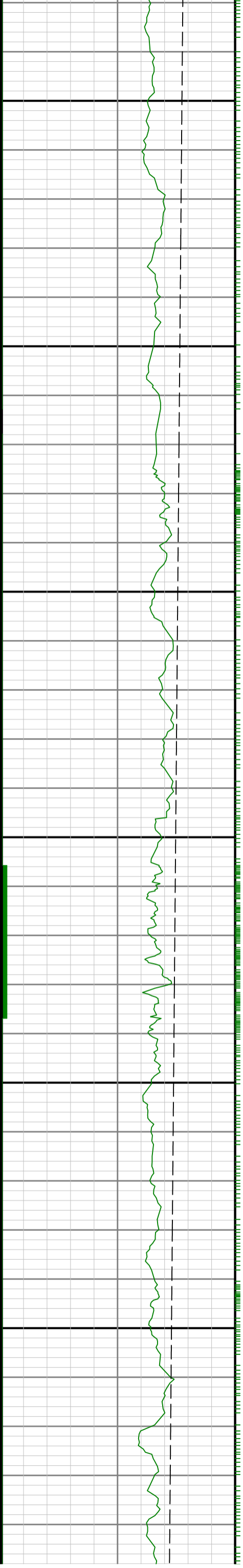


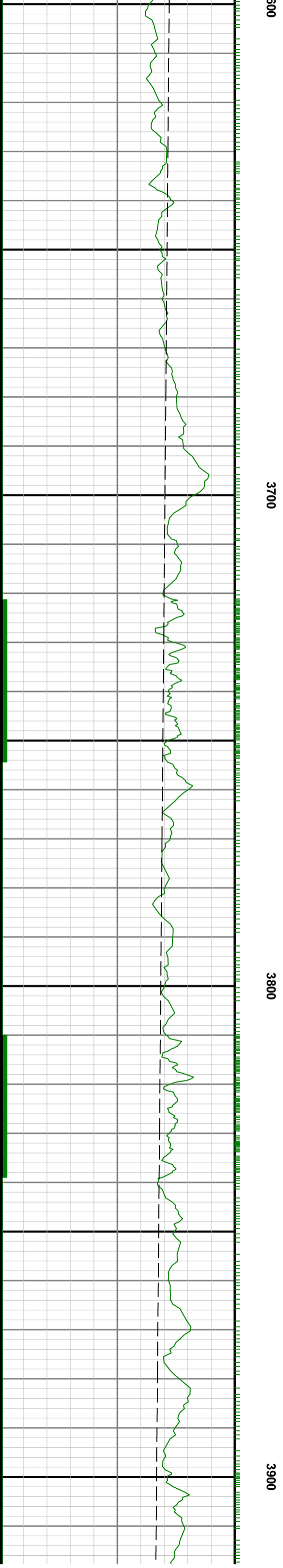
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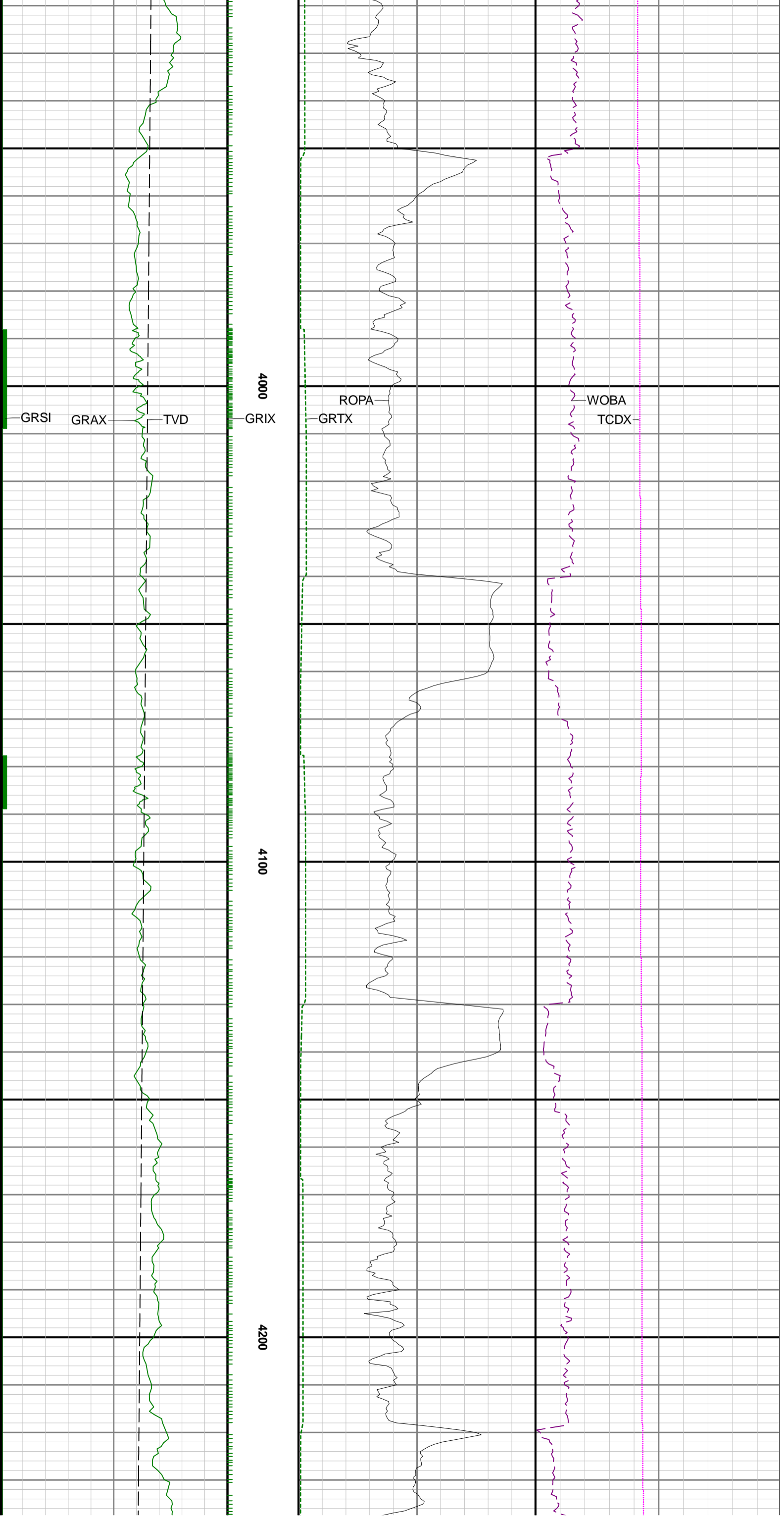
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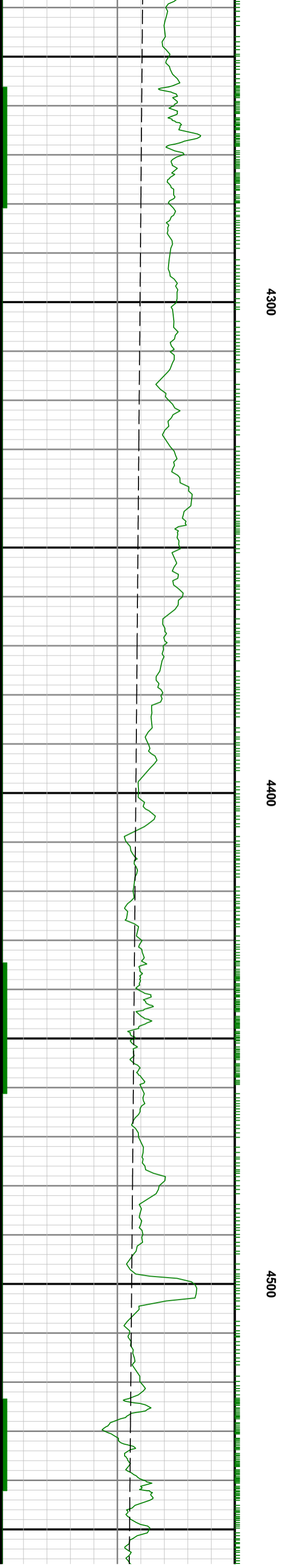
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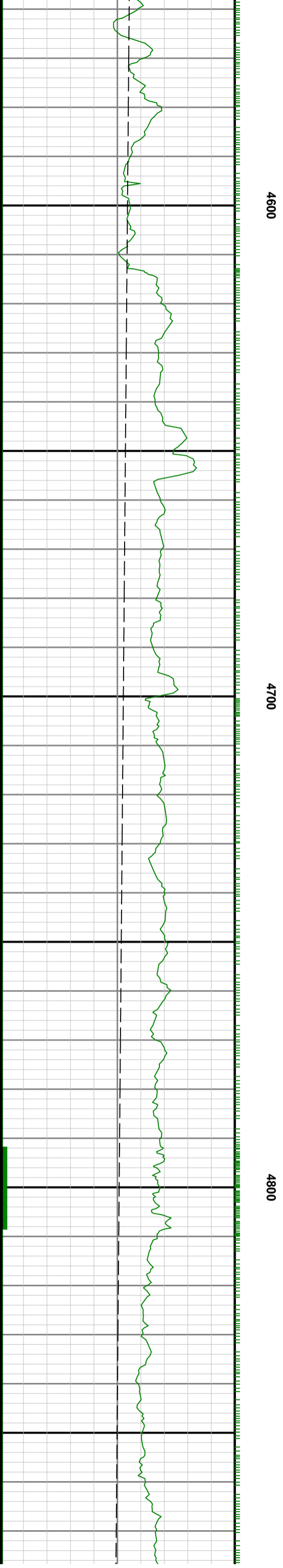
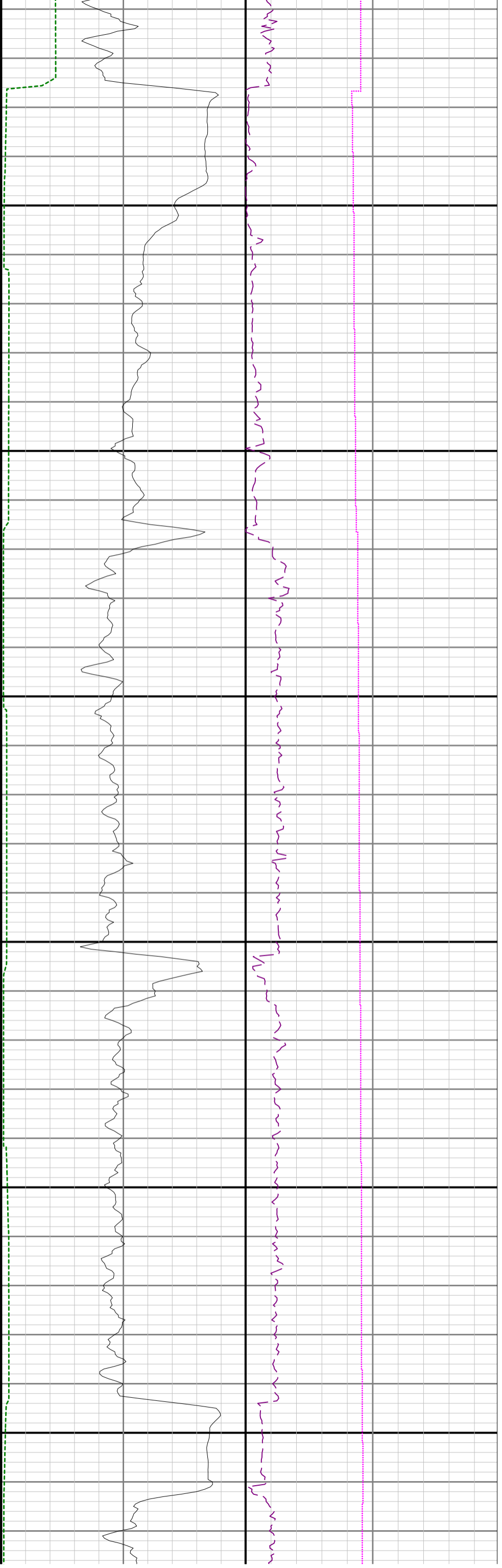
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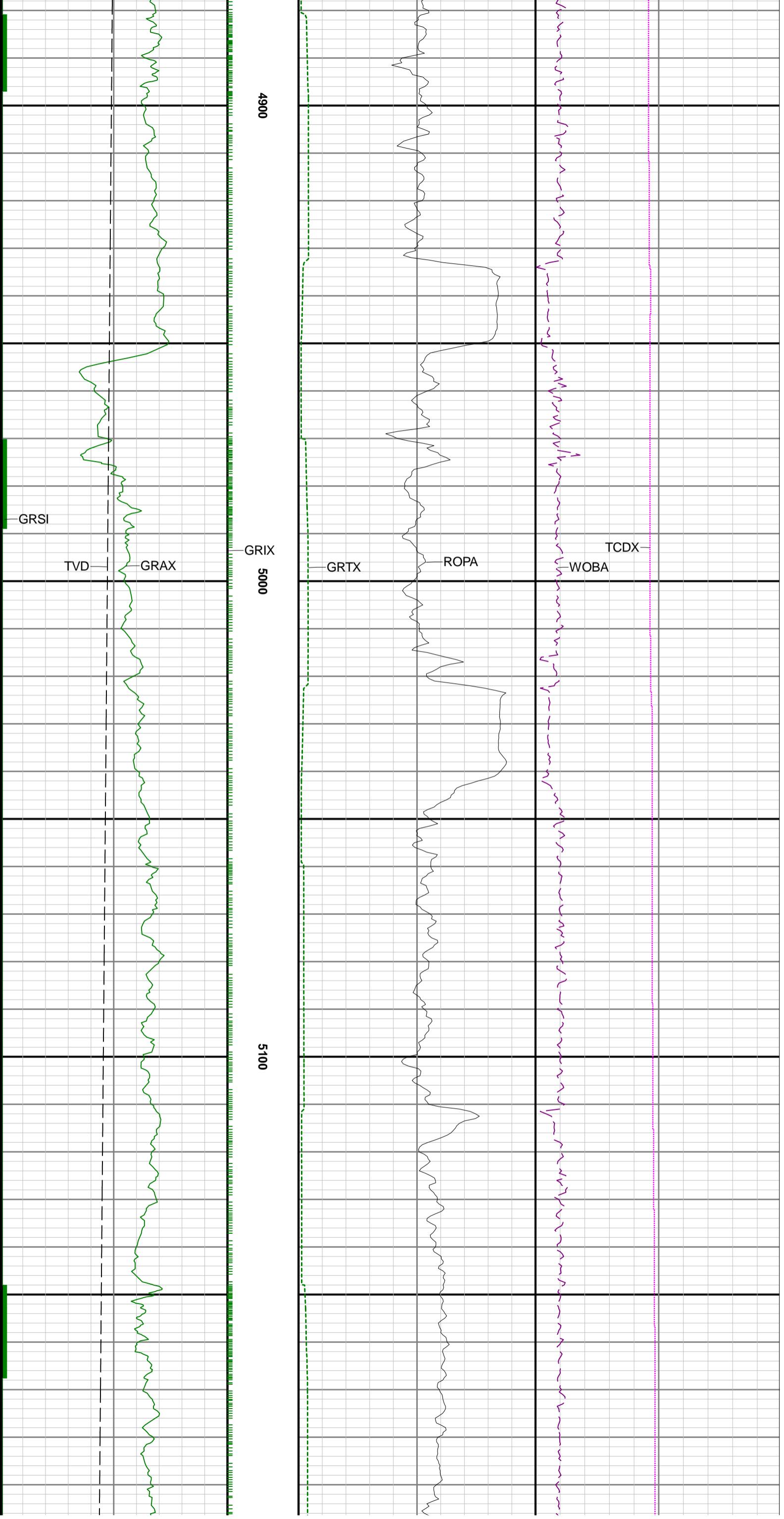


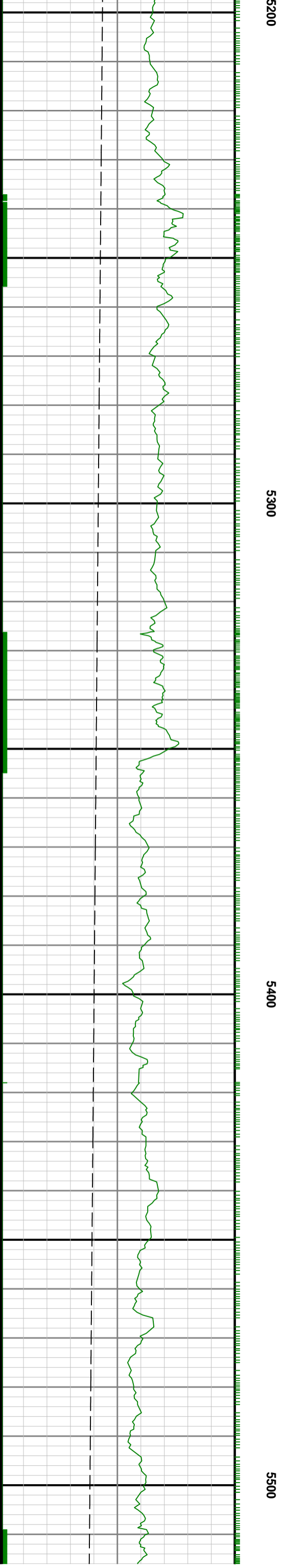
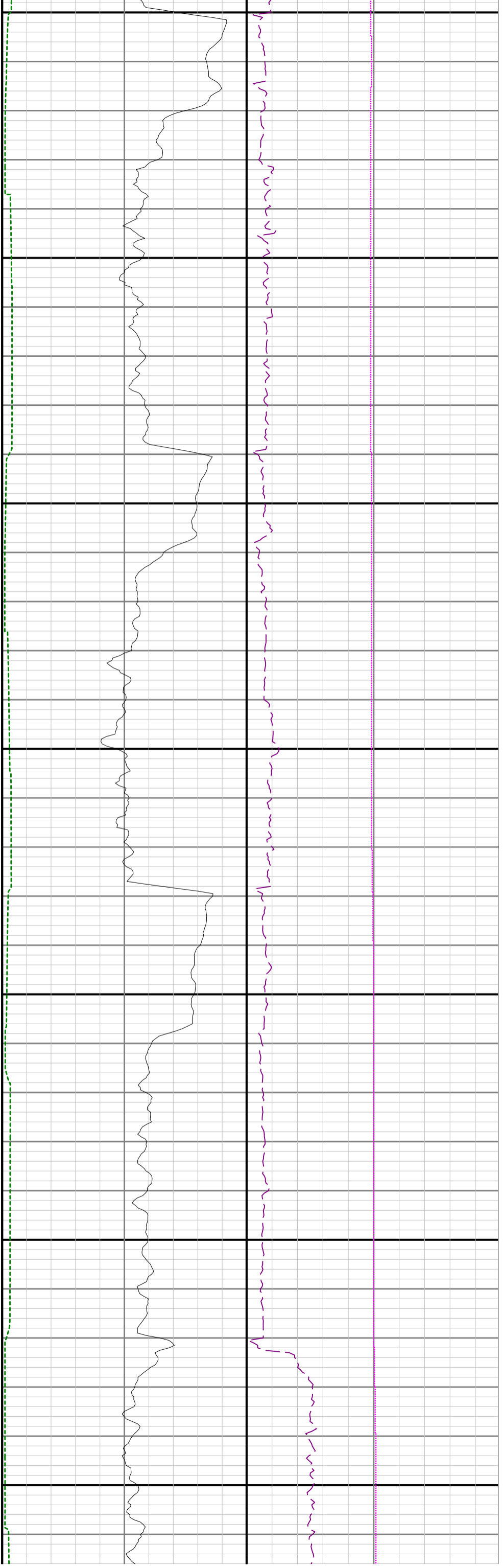


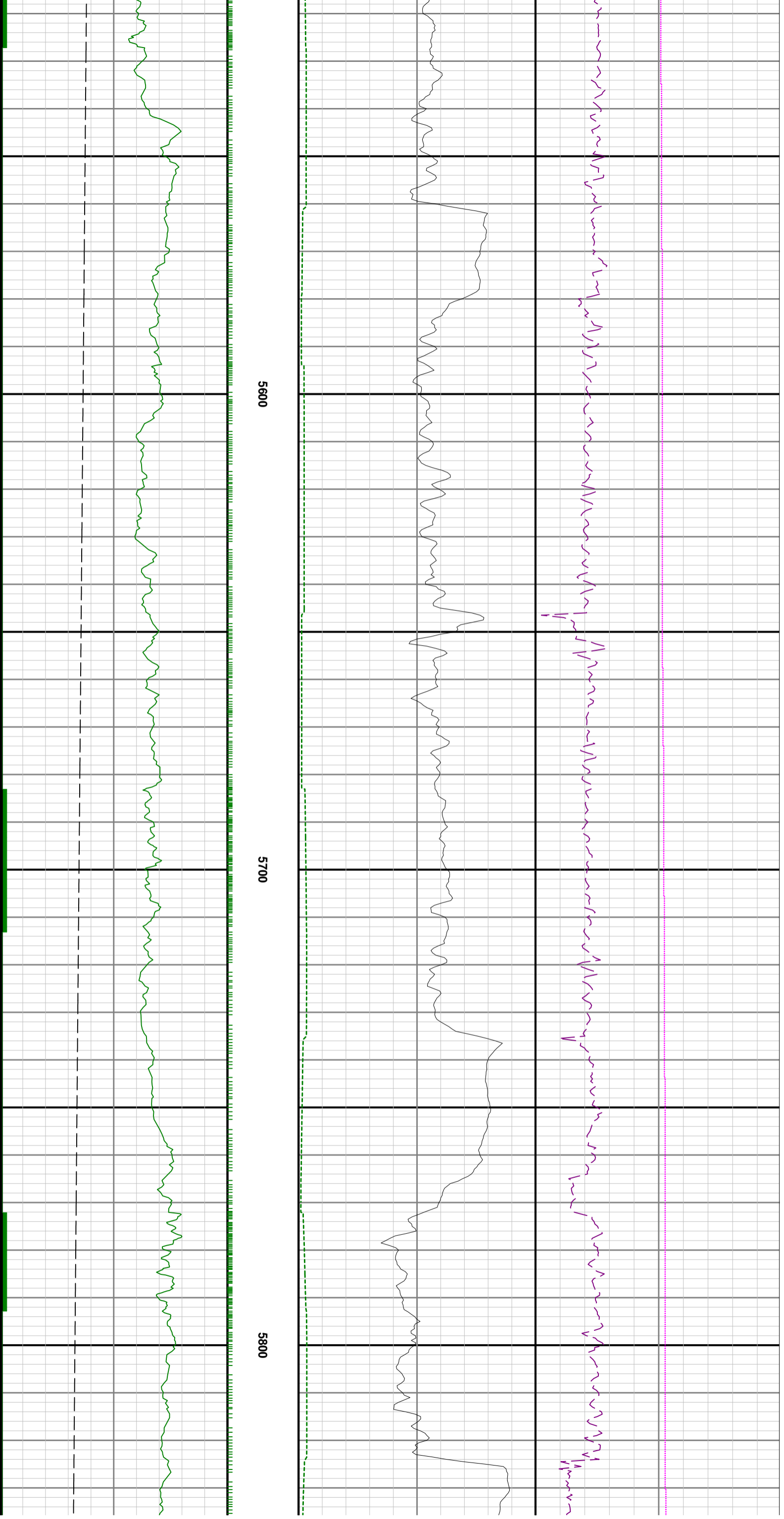


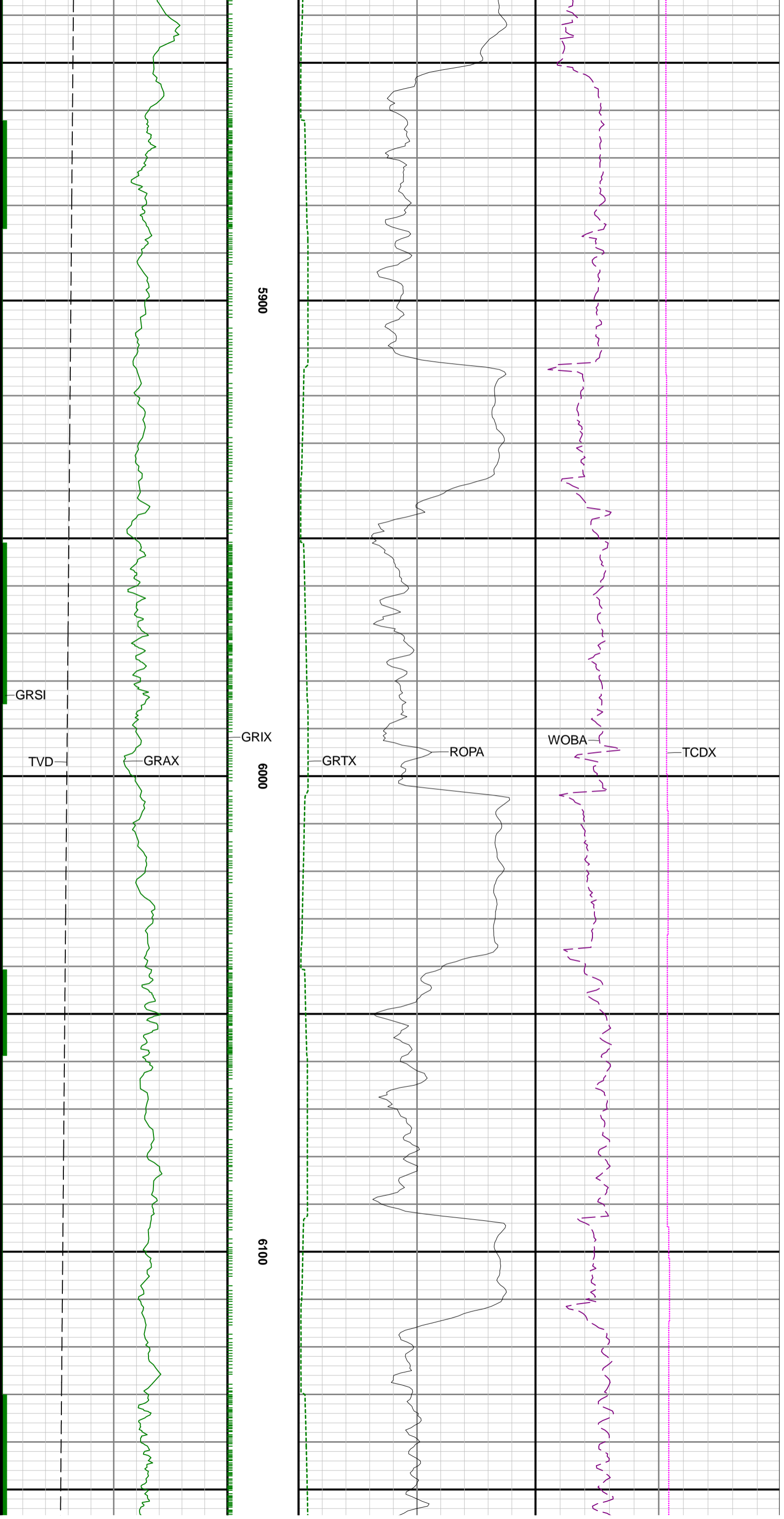


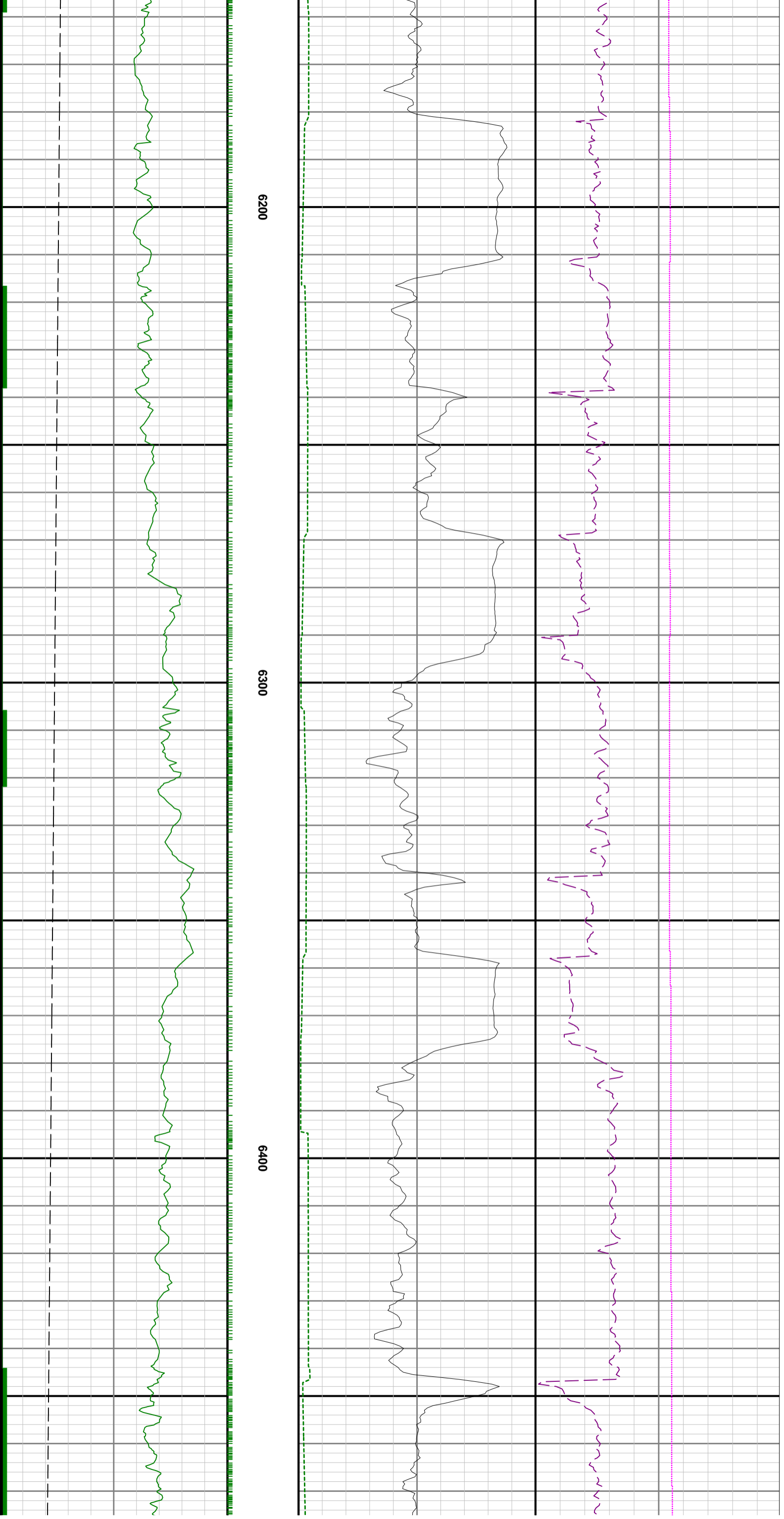


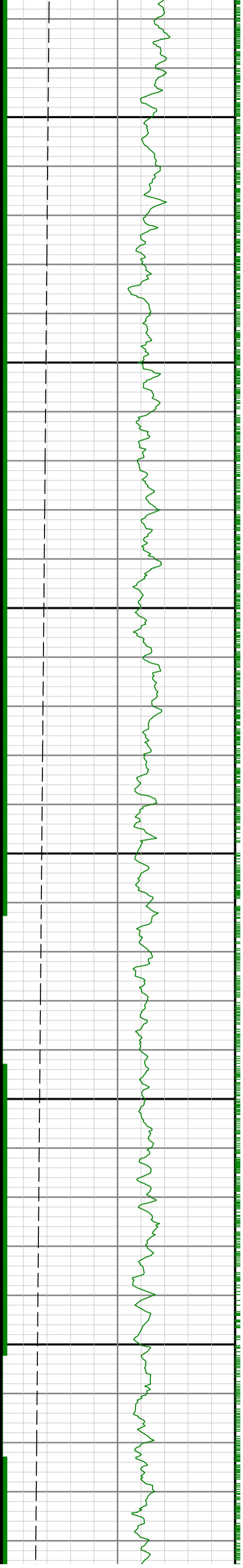












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