

Date / Time		LWD Run No.	Measured Depth (m.)	Mud Type	Density (sg)	Viscosity (cp)	pH	Fluid Loss (cc)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
21/Mar/15	18:00	1	2841	INNOVERT	9.3	75	N/A	5.6	60.0/40.0	Active Pits	71,000	N/A
22/Mar/15	18:00	1	7311	INNOVERT	9.2	58	N/A	5.6	59.7/40.3	Active Pits	78,000	N/A
23/Mar/15	18:00	2	8259	INNOVERT	9.4	88	N/A	3.8	59.6/40.4	Active Pits	79,000	N/A

Mnemonics

Curve	Description	Units
GRAX	Gamma Ray Apparent 0.5 ft AVG	API
GRIX	Gamma Ray Data Density	points
GRSI	Gamma Ray Sliding Indicator	unitless
GRTX	Gamma Ray Time Since Drilled	min.
ROPA	Rate of Penetration, 3.0 ft Avg	ft/hr
TCDX	Downhole Temperature	degF
TVD	True Vertical Depth	ft.
WOBA	Surface Weight on Bit, 1.0 ft Avg	klbs

Equipment and Service Data

LWD Run No.	Tool	Serial Number	Measurement	Bit Offset (m.)	Max O.D. (in.)	Min I.D. (in.)
1	DIR	12546343	Directional	44.80	6.750	3.375
1	SRIG	12041110	Gamma	41.43	6.750	3.375
2	DIR	12546343	Directional	53.41	6.750	3.375
2	SRIG	12041110	Gamma	50.04	6.750	3.375

Service and Tool Mnemonics


Mnemonic	Name	Description
DIR	Directional	Wellbore directional survey
SRIG	Inclination and Gamma	Probe based gamma ray and inclination module

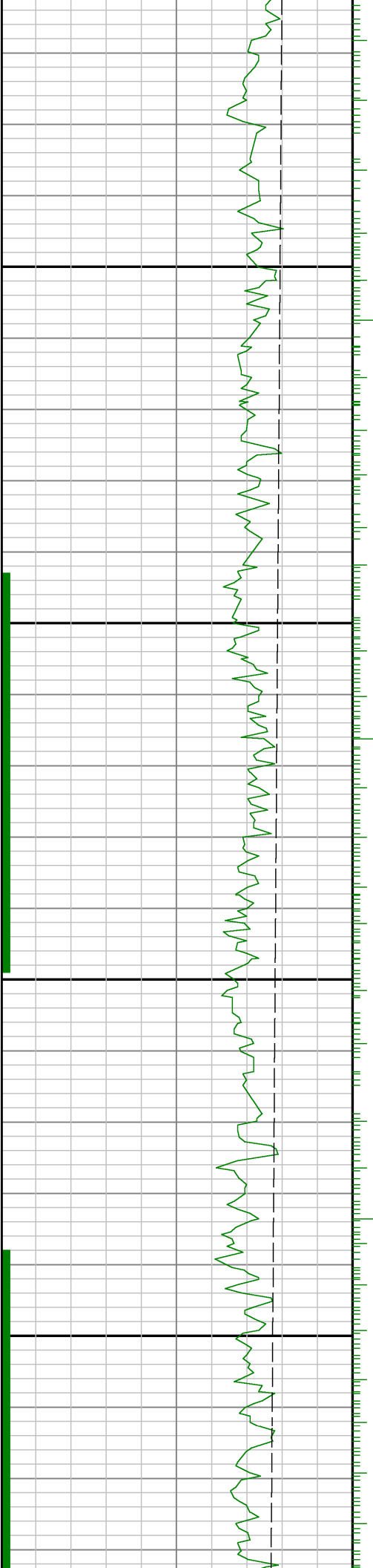
Comments

<p>1.) Baker Hughes Runs 1and 2 utilized a 6 3/4 inch NaviGamma (Directional and Gamma Ray) tool behind an 8 1/2 inch bit and steerable assembly from 6600 feet to 13115 feet MD (6302 feet to 7368 feet TVD).</p> <p>2.) A sliding indicator is shown on the left side of track 1 as a heavy line. This indicator has been depth-shifted to the Gamma Ray sensor offset to correspond with Gamma Ray data acquired while sliding.</p> <p>3.) Depth measurements obtained from a depth control system not supplied or operated by Baker Hughes. Due to the lack of control by Baker Hughes logging engineers, depth calibrations and measurements could not be independently verified.</p>

Remarks

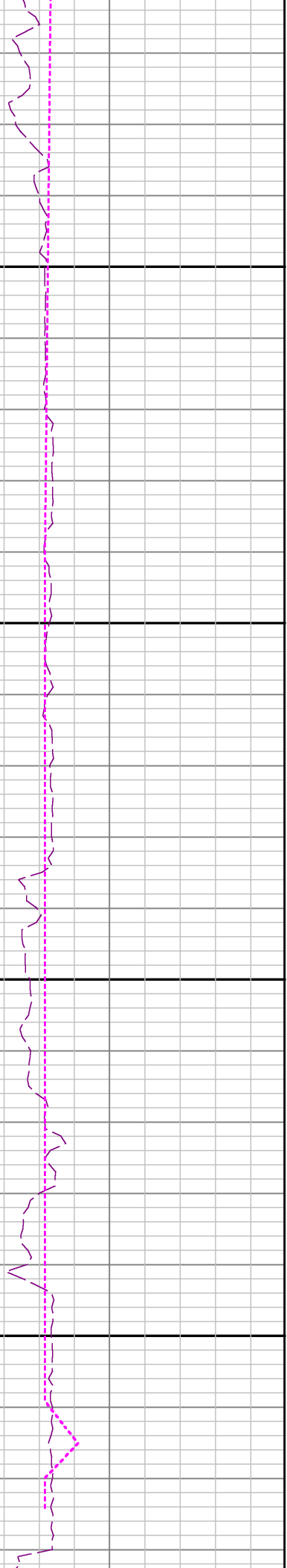
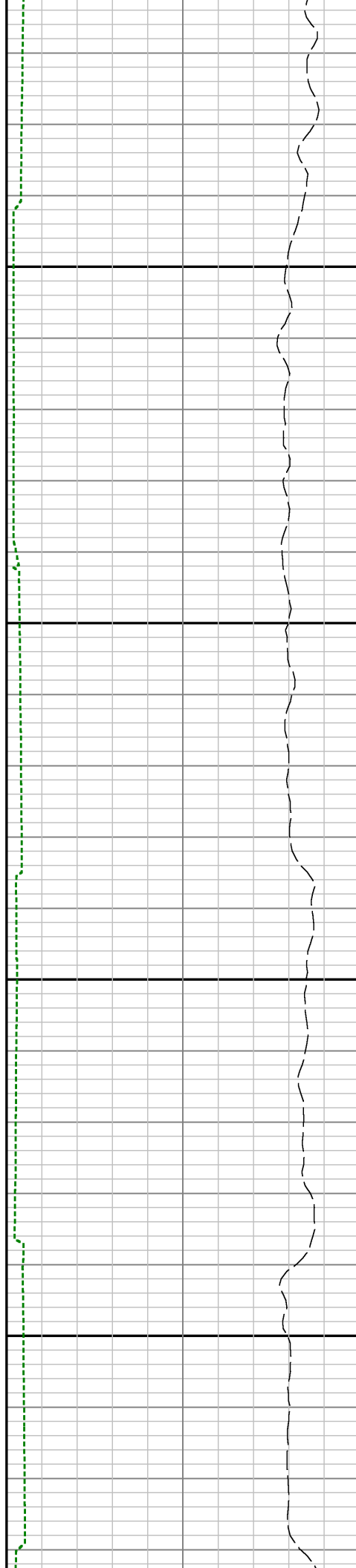
Number	Measured Depth (m.)	Hole Section (in.)	LWD Run No.	Remark
1	6585	8 500	1	The interval from surface to 6600 feet MD (6302 feet TVD) was not logged since logging services began at Kick Off Point

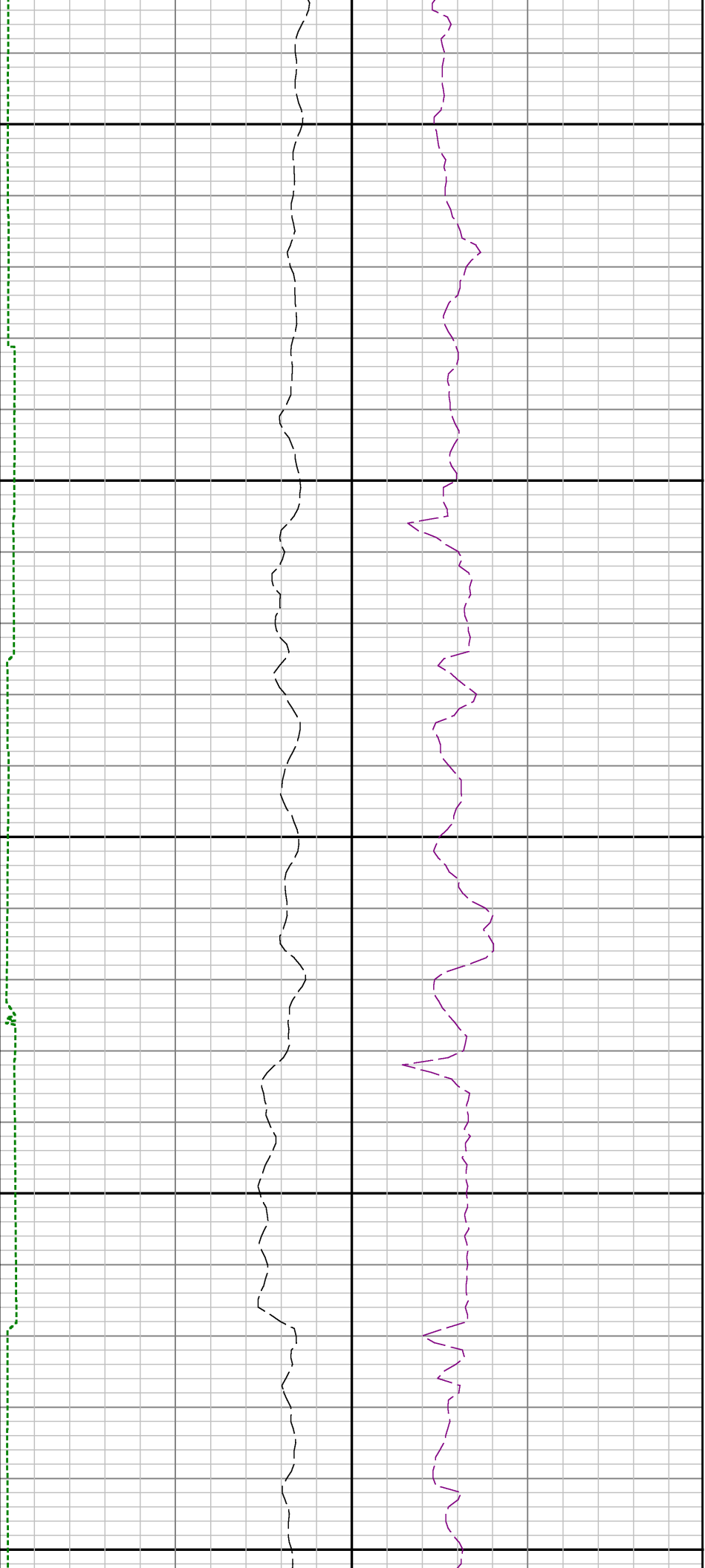
<div> <div>  </div> <div> <p>Company : Kerr-McGee Oil & Gas</p> <p>Well : Butterball 38N-10HZ</p> <p>Interval : 6575.00 - 13115.00 feet</p> <p>Created : 25/Mar/2015 12:22:29 PM</p> </div> </div>			
<div> <div>Gamma Ray Apparent 0.5 ft Avg GRAX</div> <div>0150</div> <div>API</div> <div>True Vertical Depth TVD</div> <div>120005000</div> <div>ft</div> </div>	<div>MD feet 1:240</div>	<div> <div>Gamma Ray Time Since Drilled GRTX</div> <div>0600</div> <div>min</div> <div>Rate of Penetration 3.0 ft Avg ROPA</div> <div>10000</div> <div>ft/hr</div> </div>	<div> <div>Surface Weight On Bit 1.0 ft Avg WOBA</div> <div>0100</div> <div>kibf</div> <div>Downhole Temperature TCDX</div> <div>100300</div> <div>degF</div> </div>
<div> <div>GRAX</div> <div>TVD</div> <div>GRSI</div> </div>	<div> <div>GRIX</div> <div>6600 > Run 1</div> <div>6700</div> </div>	<div> <div>See Remark 1</div> <div>GRTX</div> <div>ROPA</div> </div>	<div> <div>WOBA</div> <div>TCDX</div> </div>



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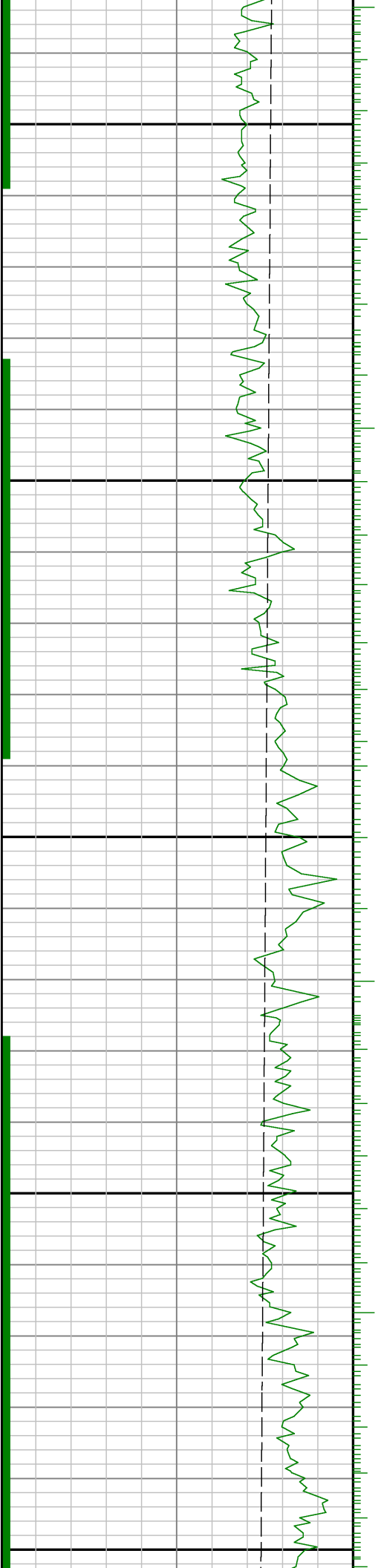
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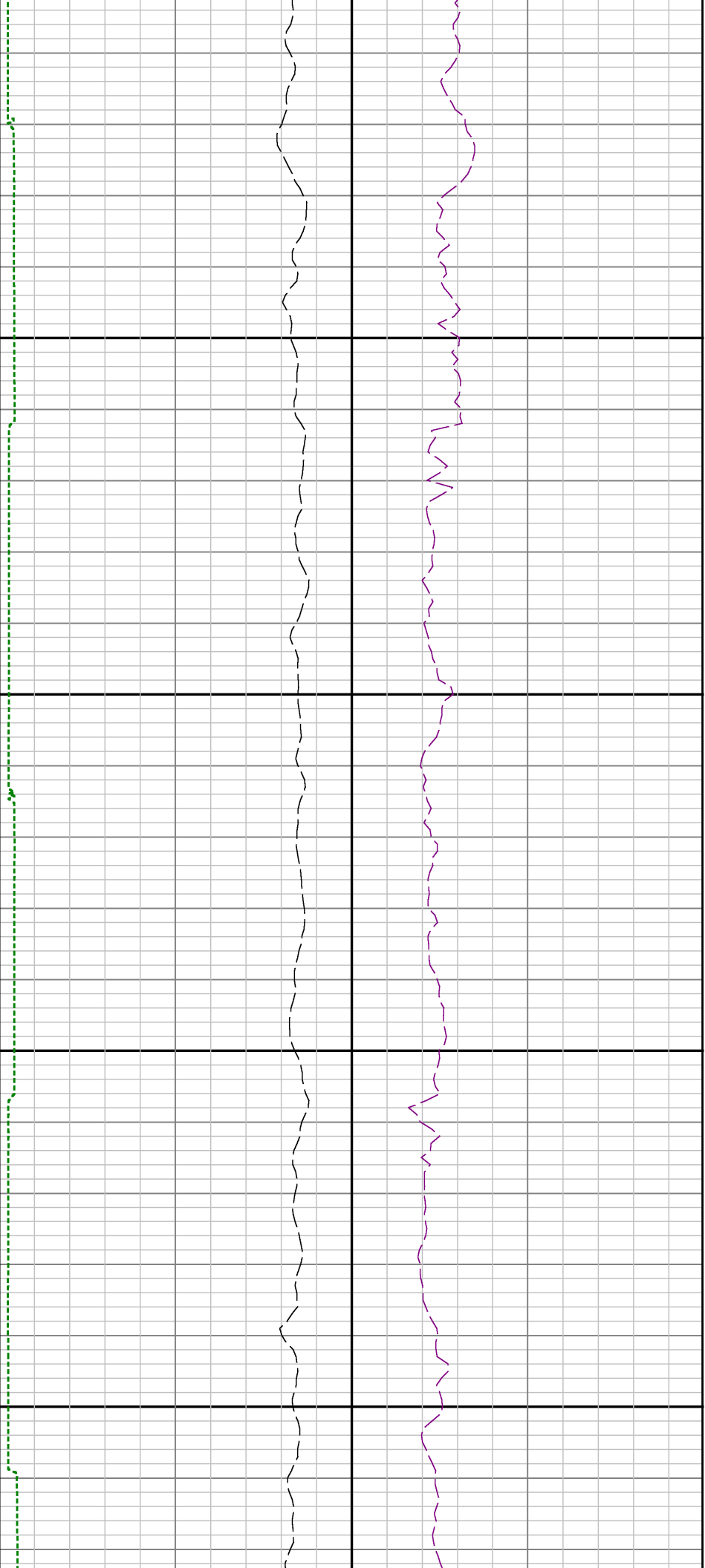




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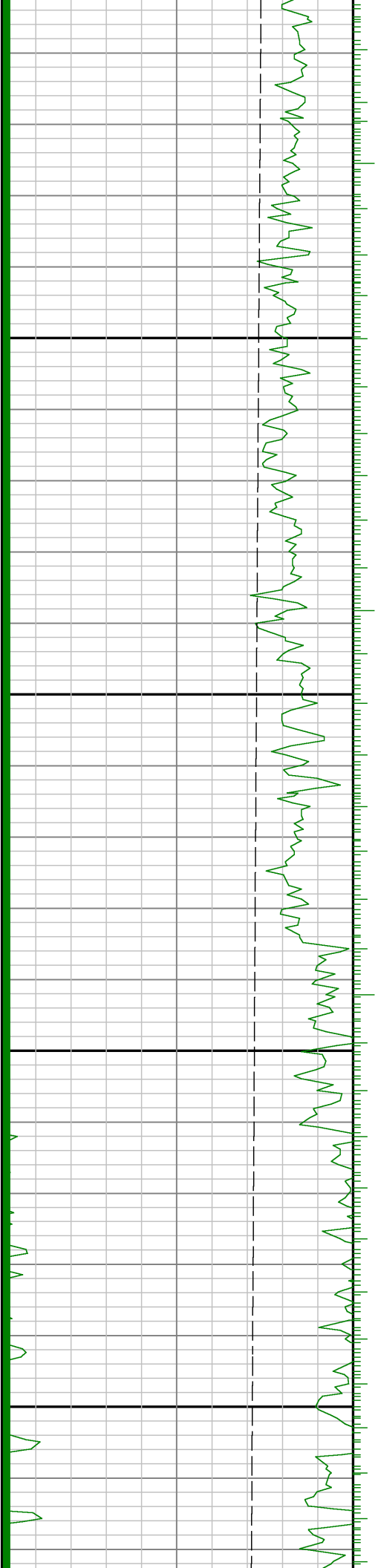
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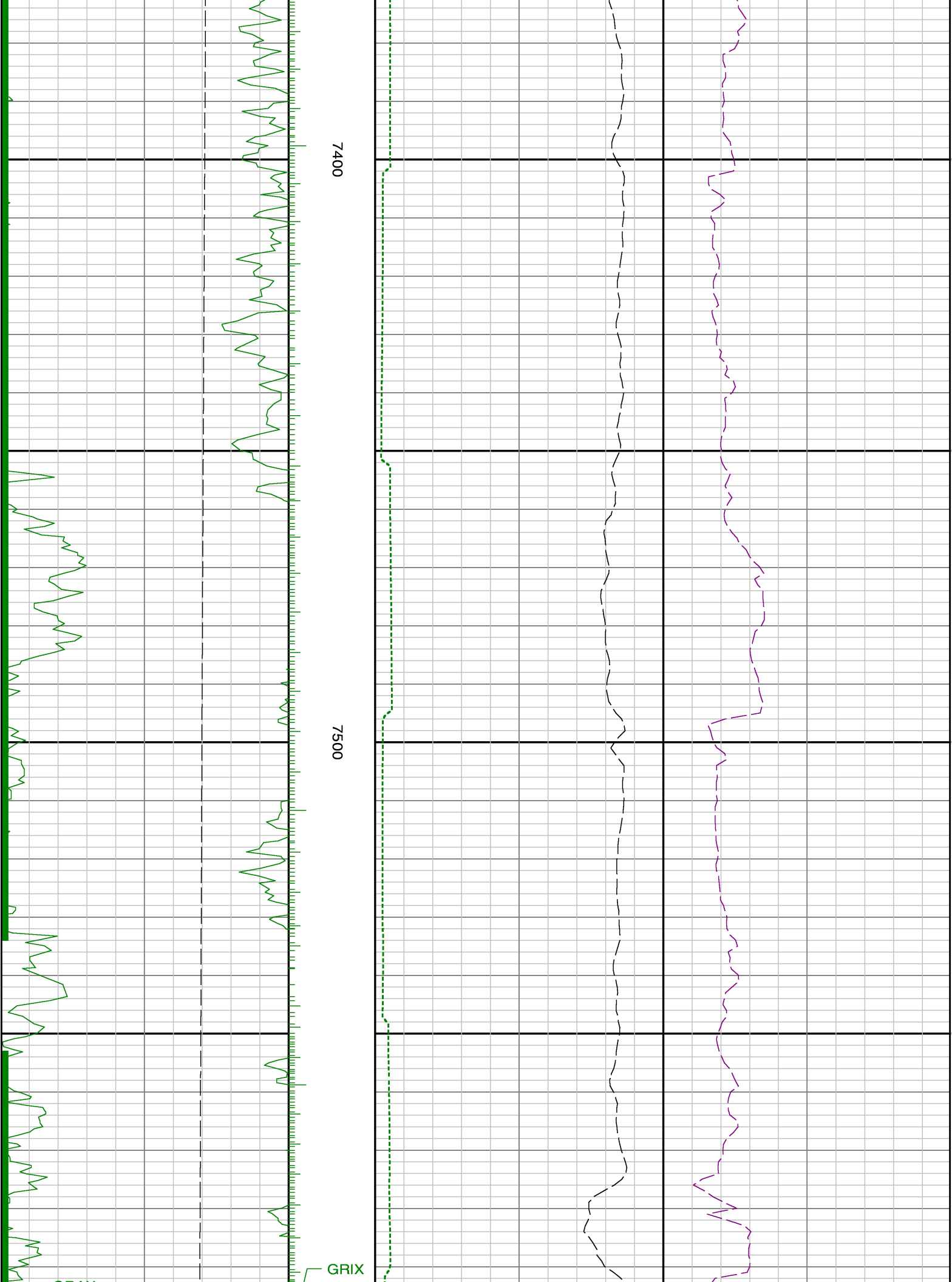


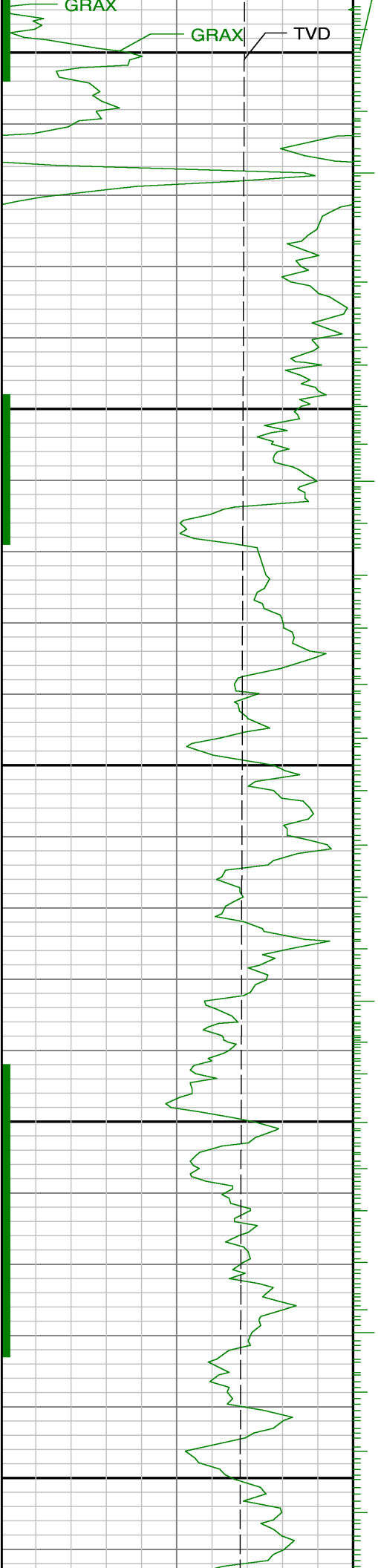


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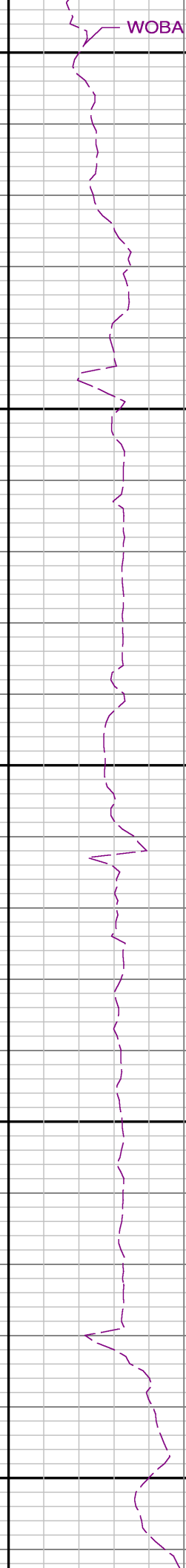
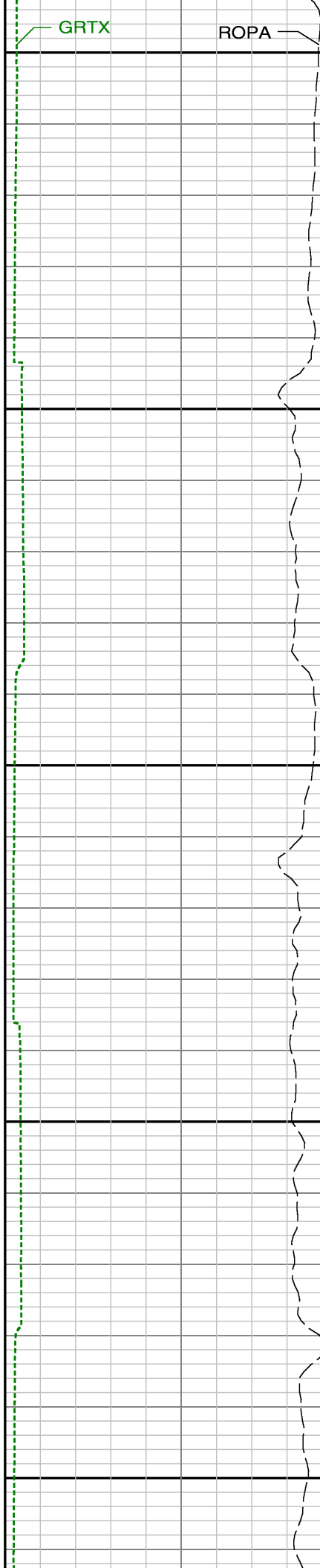


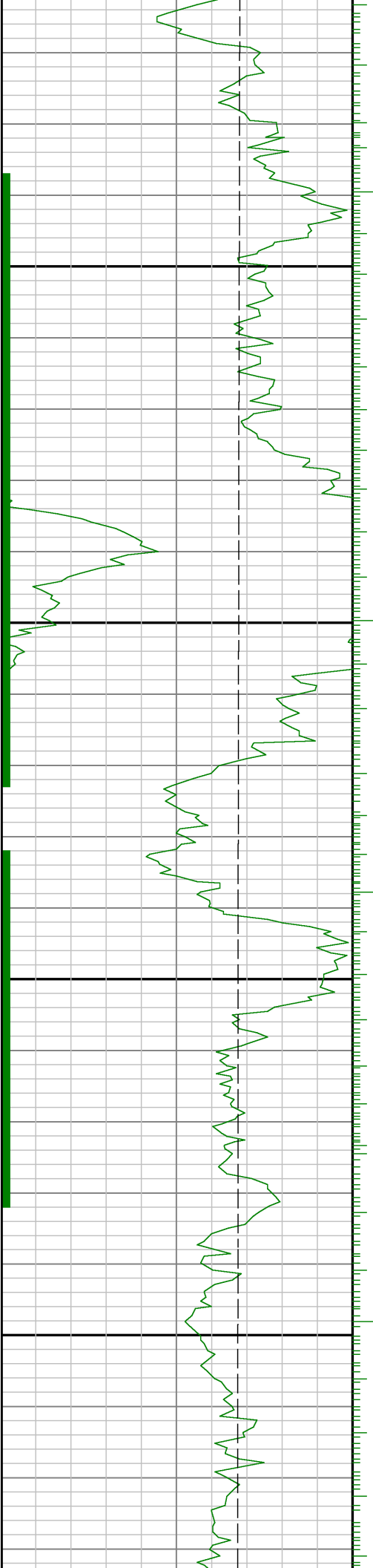


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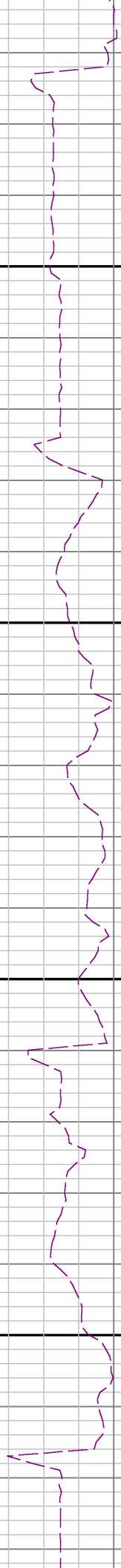
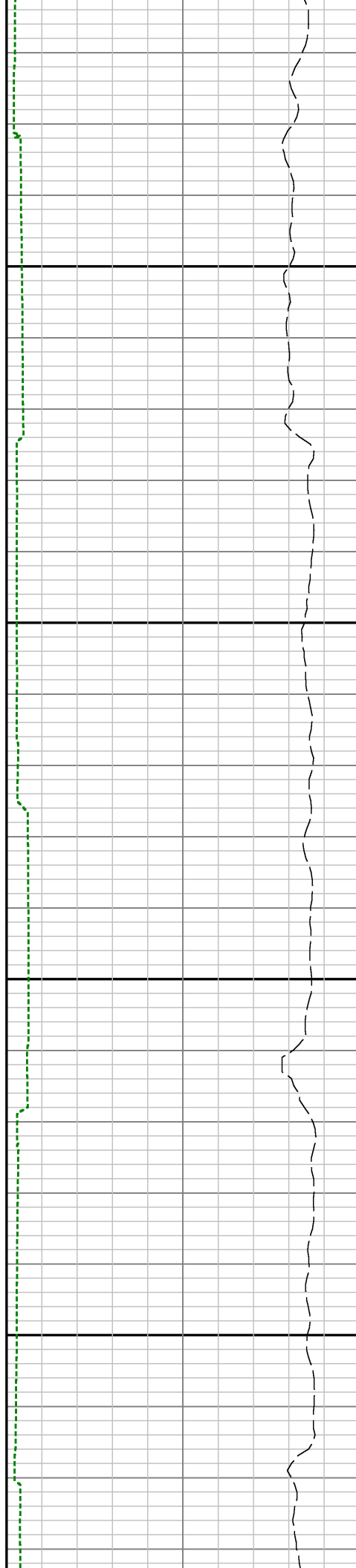
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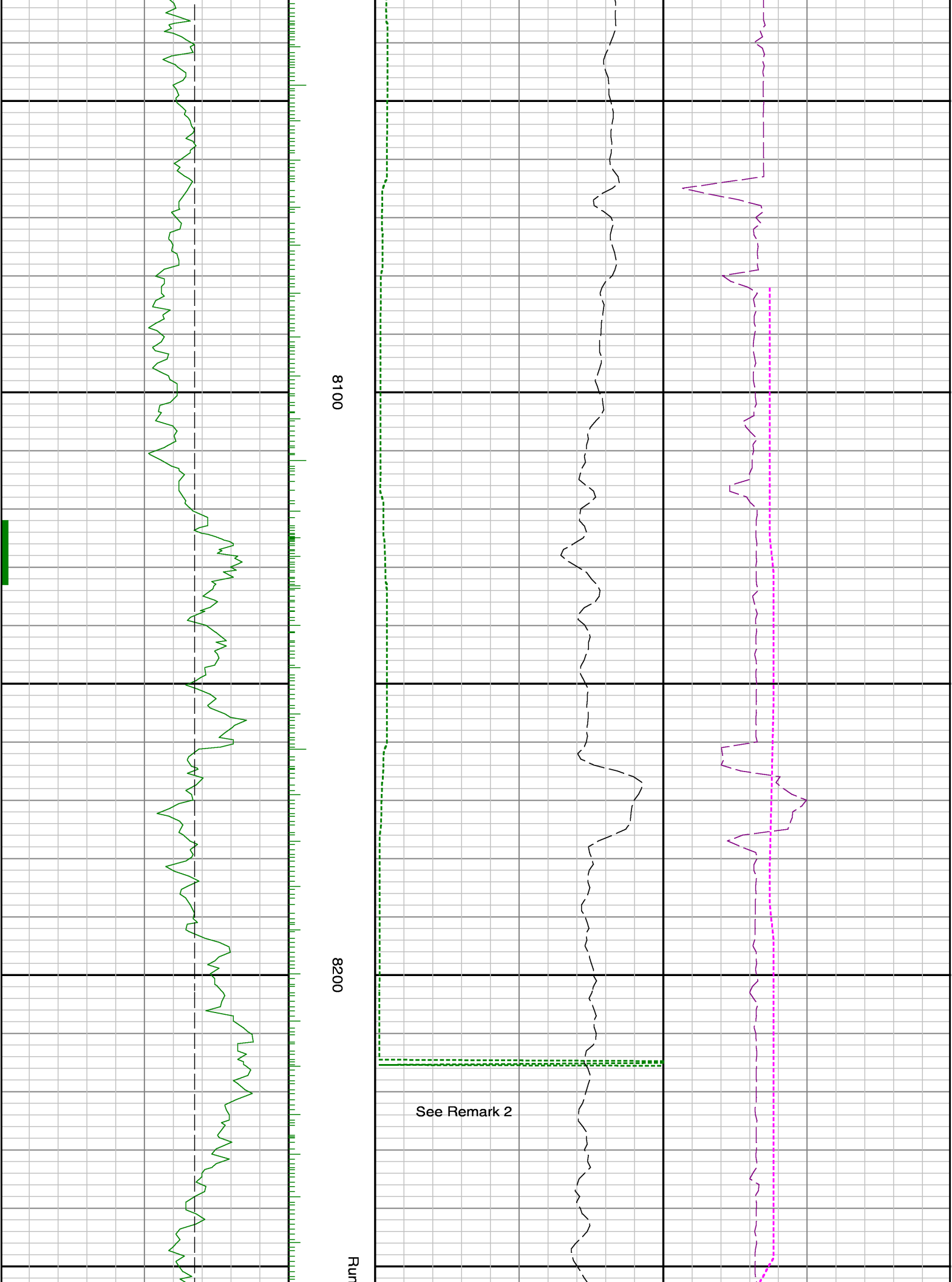


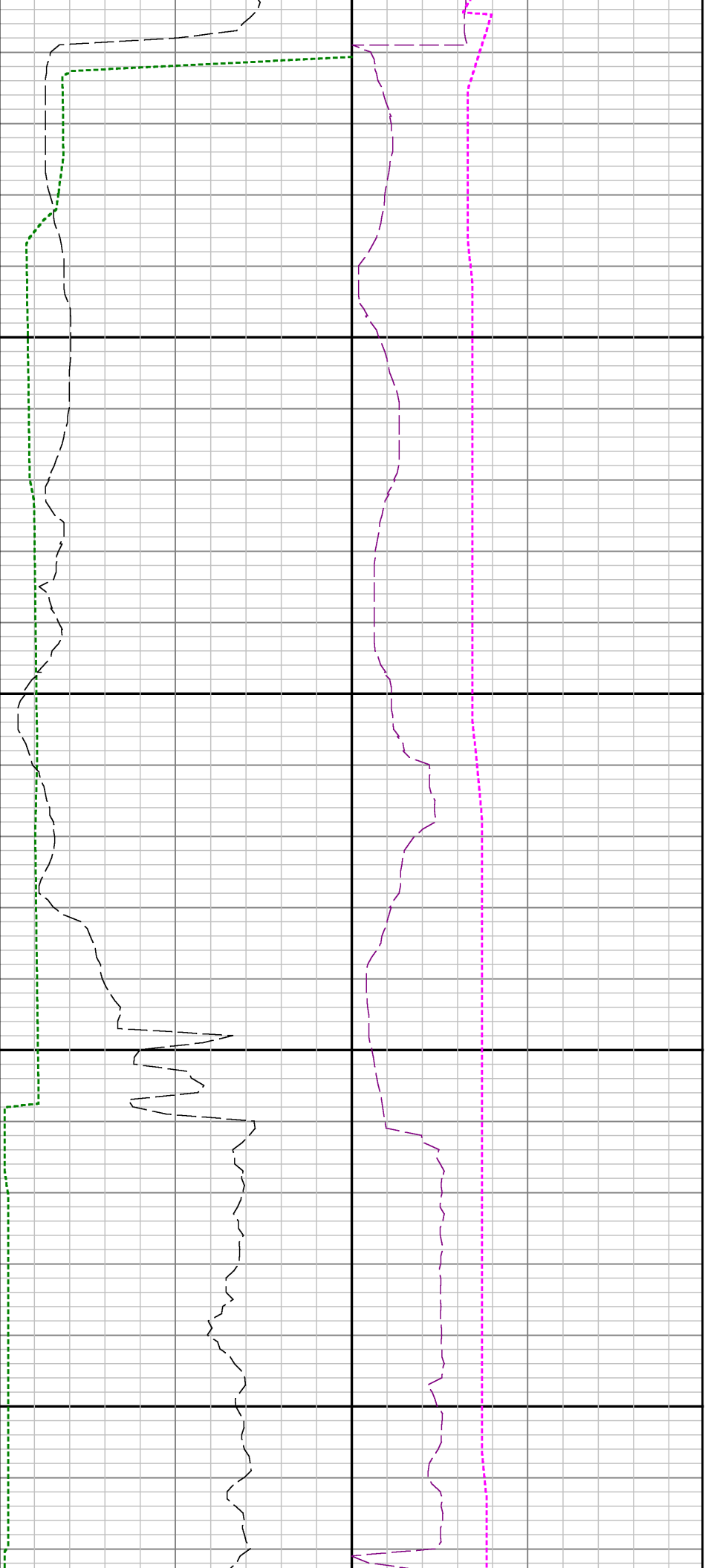


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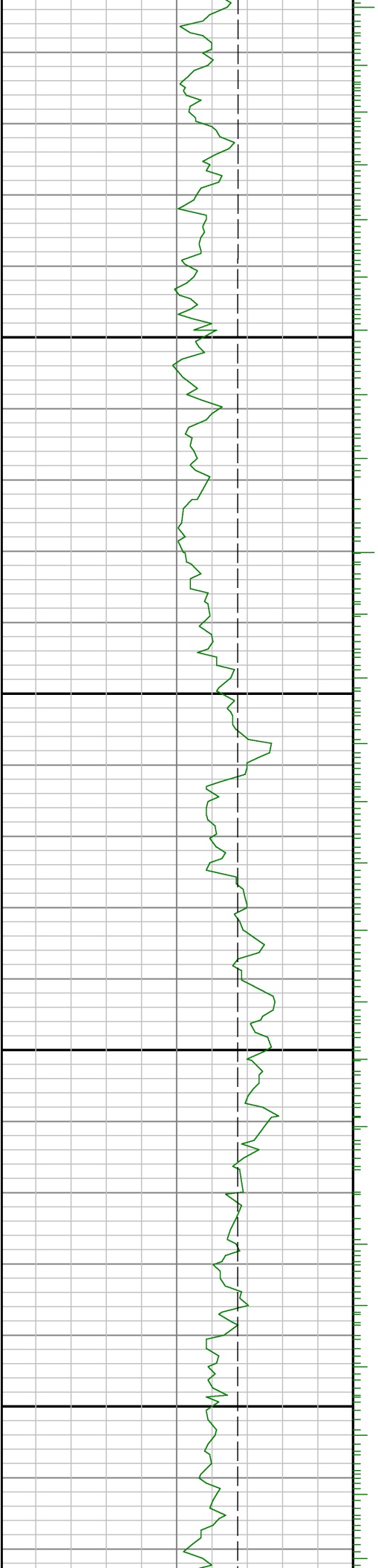


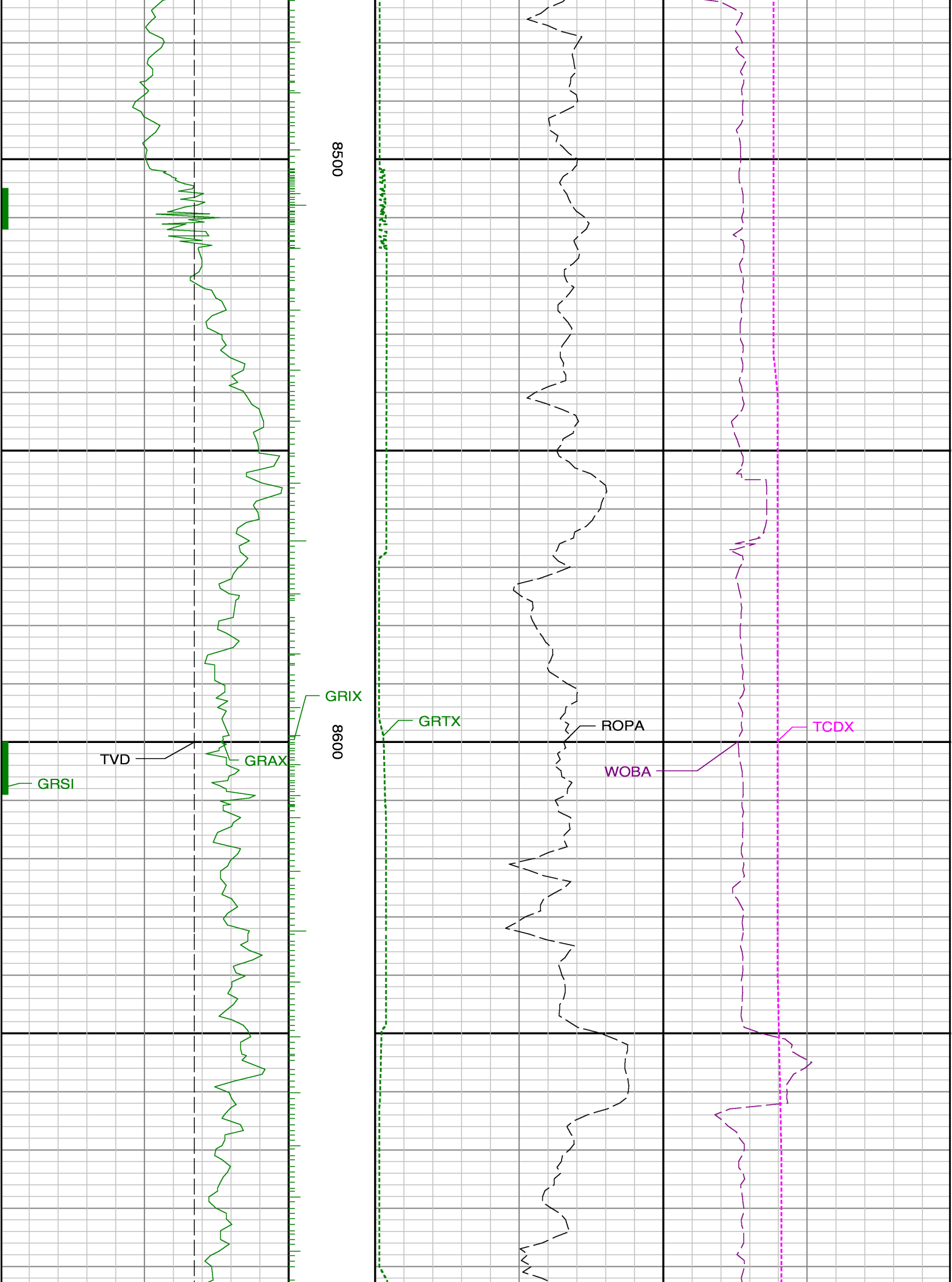


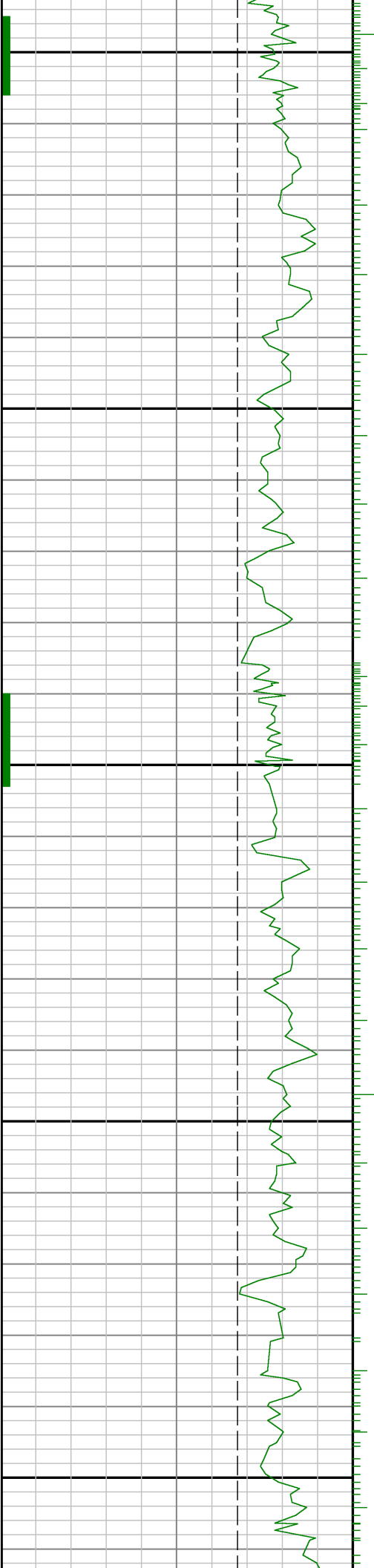
1 <> Run 2

8300

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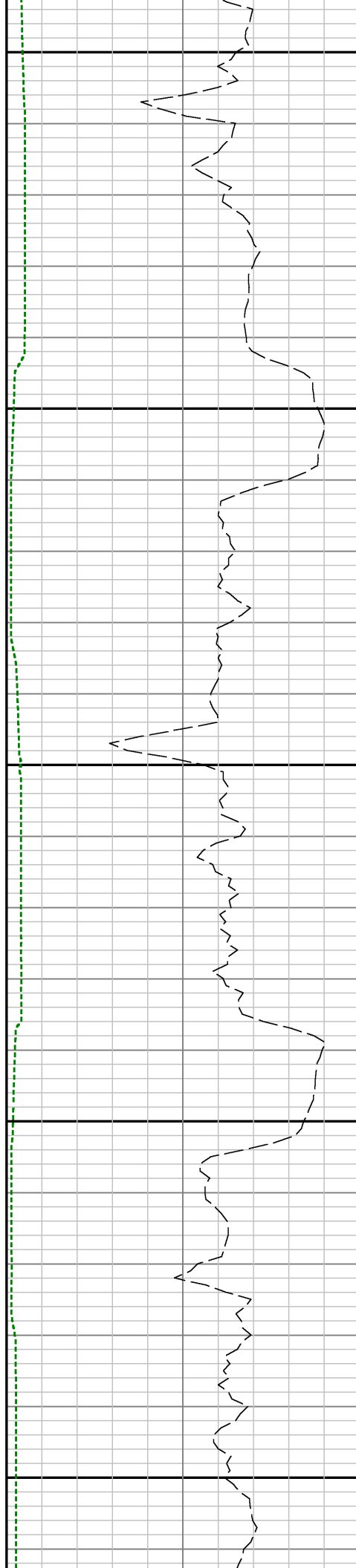


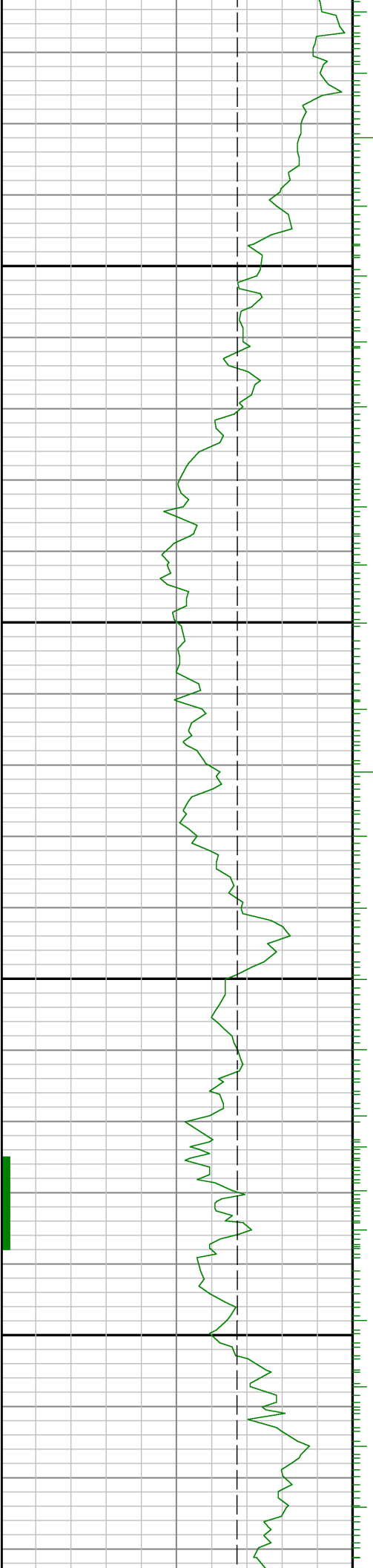


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