

Real Time Log											
<div><div><div><div></div><div>BAKER HUGHES</div></div></div><div>Natural Formation Evaluation Gamma Ray</div></div>											
Scale:				Company: Anadarko							
Measured Depth				Well: Berry Farms 30N-8HZ							
				Field: Weld County							
				Region: RMD Country: U.S.A.							
Status: Final Print		Surface Location:				Other Services:					
API Number: 051 233891 100		Latitude: 40° 14' 38.465" N Longitude: 104° 54' 21.222" W				Directional VSS					
		SEC: 8		TWN: 3N		RNG: 67W					
Permanent Datum (P.D.):		Ground Level		Elevation: 4820.00 ft.		Elevations: N/A					
Log Measured From:		Rig Floor		13.00 ft.		Above P.D.		KB: 4833.00 ft.			
Depth Reference:		Drillers Depth						DF: 4820.00 ft.			
Interval Logged				Dates		Magnetic Field Reference					
Top: 6435.0 ft.		Date From: 09/Jun/2014		Dip Angle: 66.86 °		Azi Reference North:		True			
Bottom: 11337.0 ft.		Date To: 16/Jun/2014		Total		Mag to Reference					
		Spud Date: 09/Jun/2014		Field Strength: 52552.0 nT		North Correction:		8.61 °			
Borehole Record					Casing Record						
Hole Size		From		To		Size		Weight			
13,500 in.		0.0 ft.		820.0 ft.		9.625 in.		36.00 lb/ft			
8,750 in.		820.0 ft.		7408.0 ft.		7.000 in.		26.00 lb/ft			
6,125 in.		7408.0 ft.		11400.0 ft.							
Mud Record					Deviation Record						
Type		From		To		Hole Size		Interval			
Water Based Mud		0.0 ft.		7408.0 ft.		8,750 in.		7408.0 ft.			
Water Based Mud		7408.0 ft.		11400.0 ft.		6,125 in.		3992.0 ft.			
Acquisition System					Other						
Software Version											
Advantage		2.20U4		Rig: / Contractor:		Ensign 145		/ Ensign Drilling			
PATS		6.4.1.34		Job No:		6329762					
				District: / Unit:		RMD		/ D & E			

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Log Run Summary

LWD Run No.	BHA Run No.	Bit Run No.	Bit Size (in.)	Bit Type	Bit Gauge Length (in.)	Assembly Type	Logged Interval		Bit Depth Interval		Date / Time		Circ. Time (hrs.)
							Top	Bottom	From	To	Start	End	
							(ft.)	(ft.)	(ft.)	(ft.)			
1	1	1	8.750	PDC	1.000	Steerable	N/A	N/A	820.0	1004.0	10/Jun/2014 00:00	09/Jun/2014 08:15	1.8
2	2	2	8.750	PDC	1.000	Steerable	6435.0	7352.0	1004.0	7408.0	10/Jun/2014 08:15	12/Jun/2014 05:50	36.1
3	3	3	6.125	PDC	3.000	Steerable	7352.0	11337.0	7408.0	11400.0	14/Jun/2014 01:10	16/Jun/2015 19:00	35.7

Crew

Name	Arrive	Depart	Name	Arrive	Depart	Name	Arrive	Depart
	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite
Donald Delay	10/Jun/2014	16/Jun/2014	Michael Gurnsey	10/Jun/2014	16/Jun/2014			
Jimmy Nguyen	10/Jun/2014	16/Jun/2014	Alexander Janorschke	10/Jun/2014	16/Jun/2014			

			Jason Weltin	10/Jun/2014	16/Jun/2014			
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Mud Properties Record

Date / Time	LWD Run No.	Measured Depth (ft.)	Mud Type	Density (ppg)	Viscosity (cp)	pH	Fluid Loss (cc/30min)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
10/Jun/2014 21:00	2	3319.0	Water Based Mud	8.4	4	9.0	N/A	0 / 99	Active Mud Pits	1600	N/A
11/Jun/2014 21:30	2	6901.0	Water Based Mud	10.1	10	9.5	5.2	0 / 91	Active Mud Pits	1600	N/A
12/Jun/2014 22:00	2	7408.0	Water Based Mud	10.3	9	9.5	4.8	0 / 90	Active Mud Pits	1600	N/A
13/Jun/2014 21:30	2	7408.0	Water Based Mud	10.3	7	9.5	4.8	0 / 90	Active Mud Pits	1600	N/A
14/Jun/2014 22:30	3	8443.0	Water Based Mud	9.8	7	9.5	4.8	0 / 92	Active Mud Pits	1600	N/A
15/Jun/2014 21:30	3	10604.0	Water Based Mud	10.0	10	9.6	5.0	0 / 91	Active Mud Pits	1600	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	deg. F
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 (ft.)	Max O.D. (in.)	Min I.D. (in.)
1	DIR	13099217	Directional	60.66	6.750	2.875
1	SRIG	11703934	Gamma	57.29	6.750	2.875
2	DIR	11954360	Directional	59.32	6.750	2.875
2	SRIG	12600743	Gamma	55.95	6.750	2.875
3	DIR	12323368	Directional	66.03	4.750	2.625
3	SRIG	12283328	Gamma	62.65	4.750	2.625

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. Depth measurements were obtained from a depth tracking system not supplied or operated by Baker Hughes. Due to lack of control by Baker Hughes LWD logging engineers, depth calibrations could not be independently verified and the unverified depths as supplied to Baker Hughes are being used to present logging data.</p> <p>2. Baker Hughes runs 1 and 2 utilized a 6.75 inch NaviGamma (Gamma Ray and Directional) tool behind a 8.75 inch bit and steerable assembly from 820 feet to 7408 feet MD 819.98 feet to 6939.76 feet TVD).</p>
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3. Baker Hughes run 3 utilized a 4.75 inch NaviGamma (Gamma Ray and Directional) tool behind a 6.125 inch bit and steerable assembly from 7408 feet to 11400 feet MD (6939.76 feet to 6931.52 feet TVD).

4. A sliding indicator is shown on the left side of track 1 as a heavy line. This indicator has been shifted to the gamma ray sensor offset to correspond with gamma ray data acquired while sliding.

Remarks

Number	Measured Depth (ft.)	Hole Section (in.)	LWD Run No.	Remark
1	6435	8.750	2	Logging services begin at 6435 feet MD (6318.33 feet TVD) as per client request to begin logging at kickoff point.
2	7352	8.750	2	The interval from 7352 feet to 7408 feet MD (6936.78 feet to 6939.76 feet TVD) was logged up to 56.6 hours after being drilled due to tripping to run casing, cement and lateral assembly.
3	11337	6.125	3	The interval from 11337 feet to 11400 feet MD (6931.68 feet to 6931.52 feet TVD) was not logged due to offset to bit at TD.

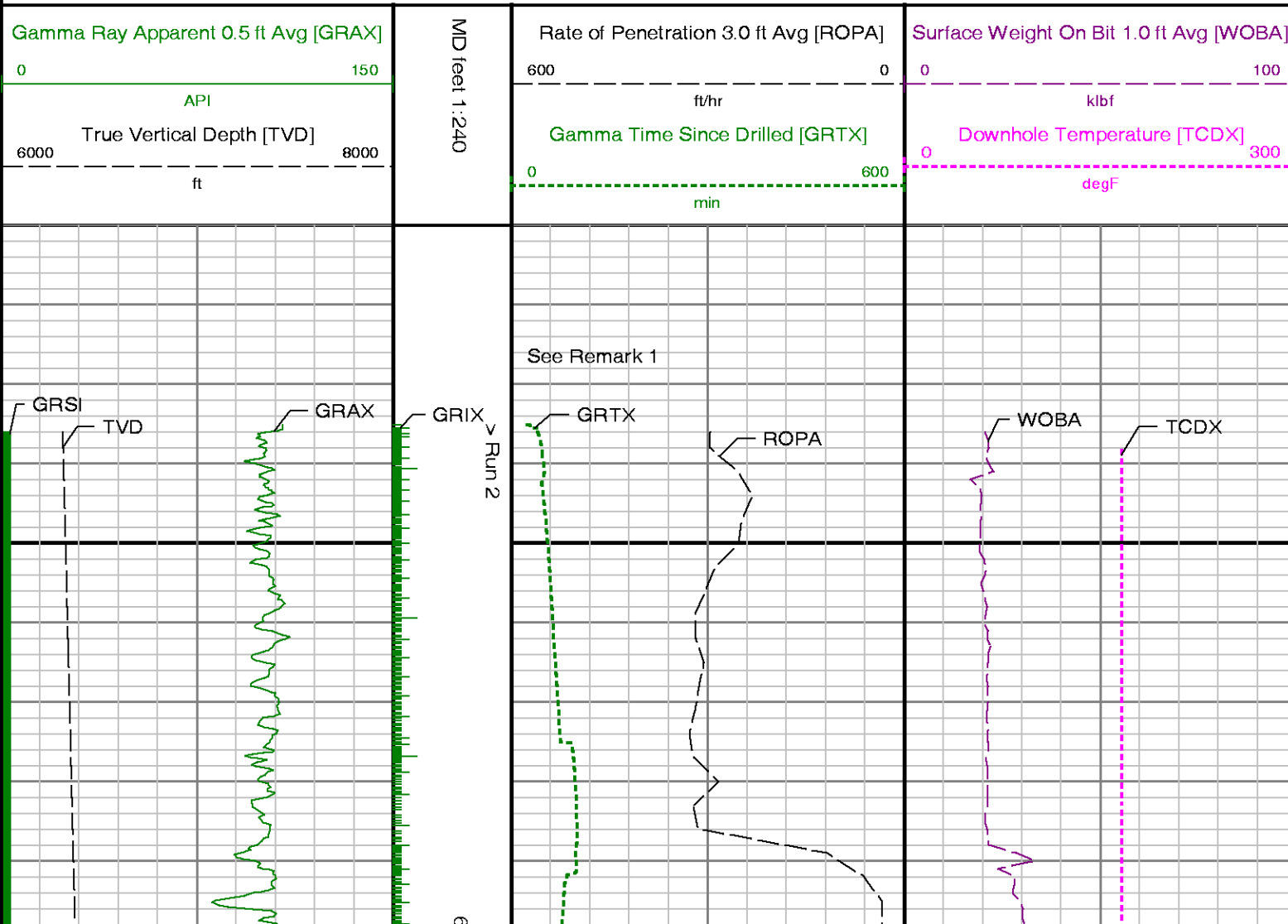


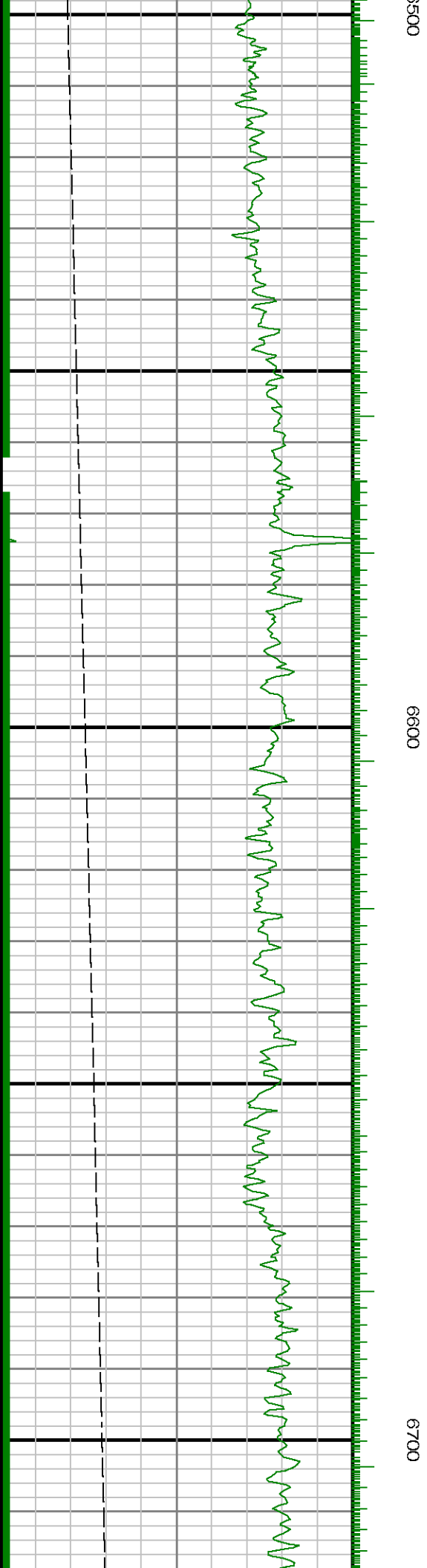
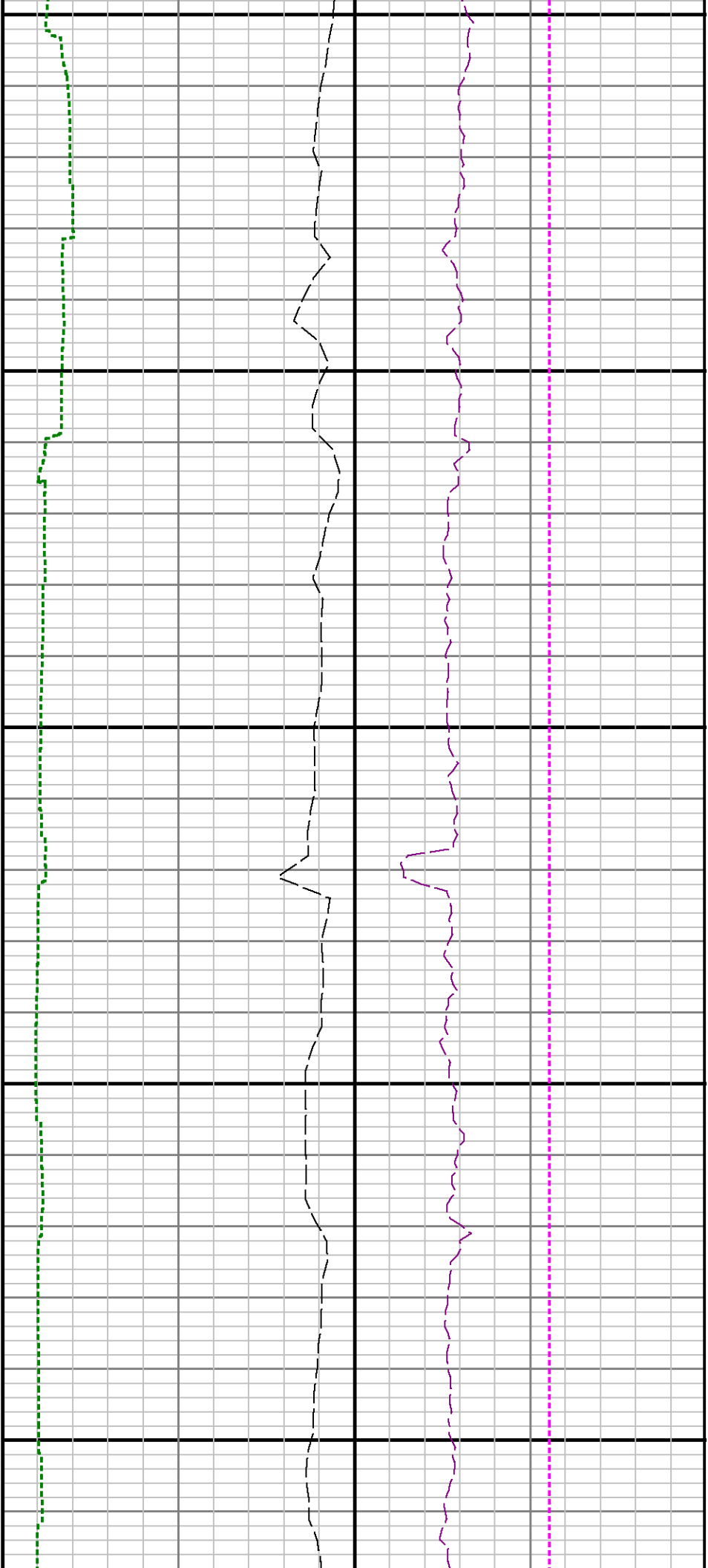
Company : Anadarko

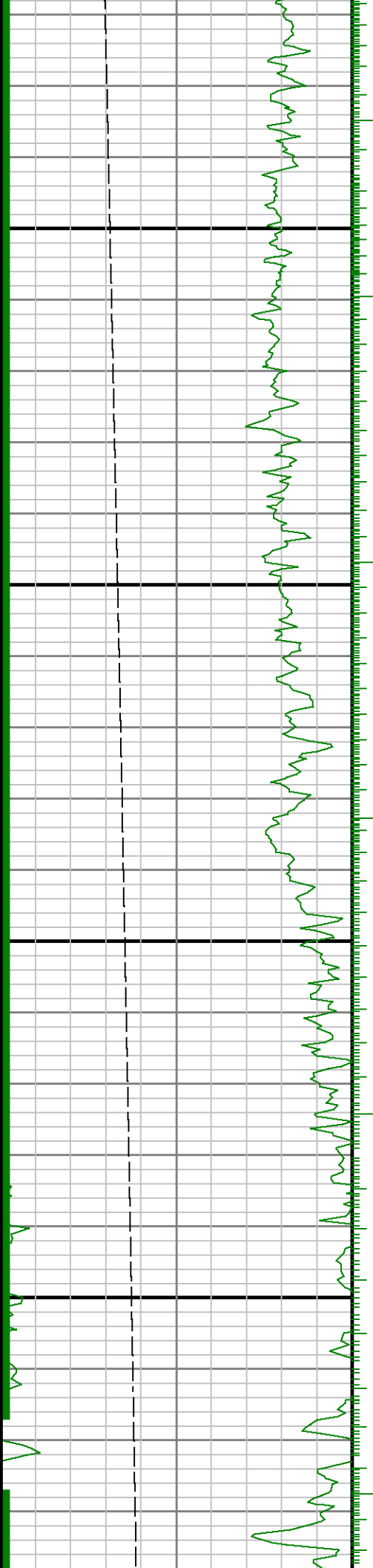
Well : Berry Farms 30N-8HZ

Interval : 6410.00 - 11420.00 feet

Created : 16/Jun/2014 5:46:57 AM



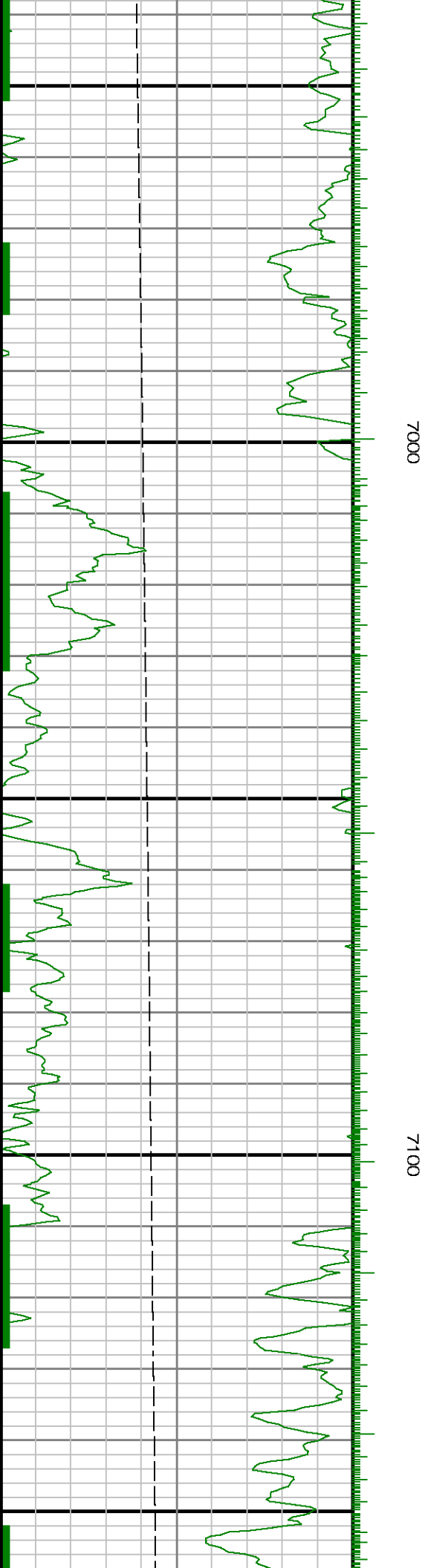
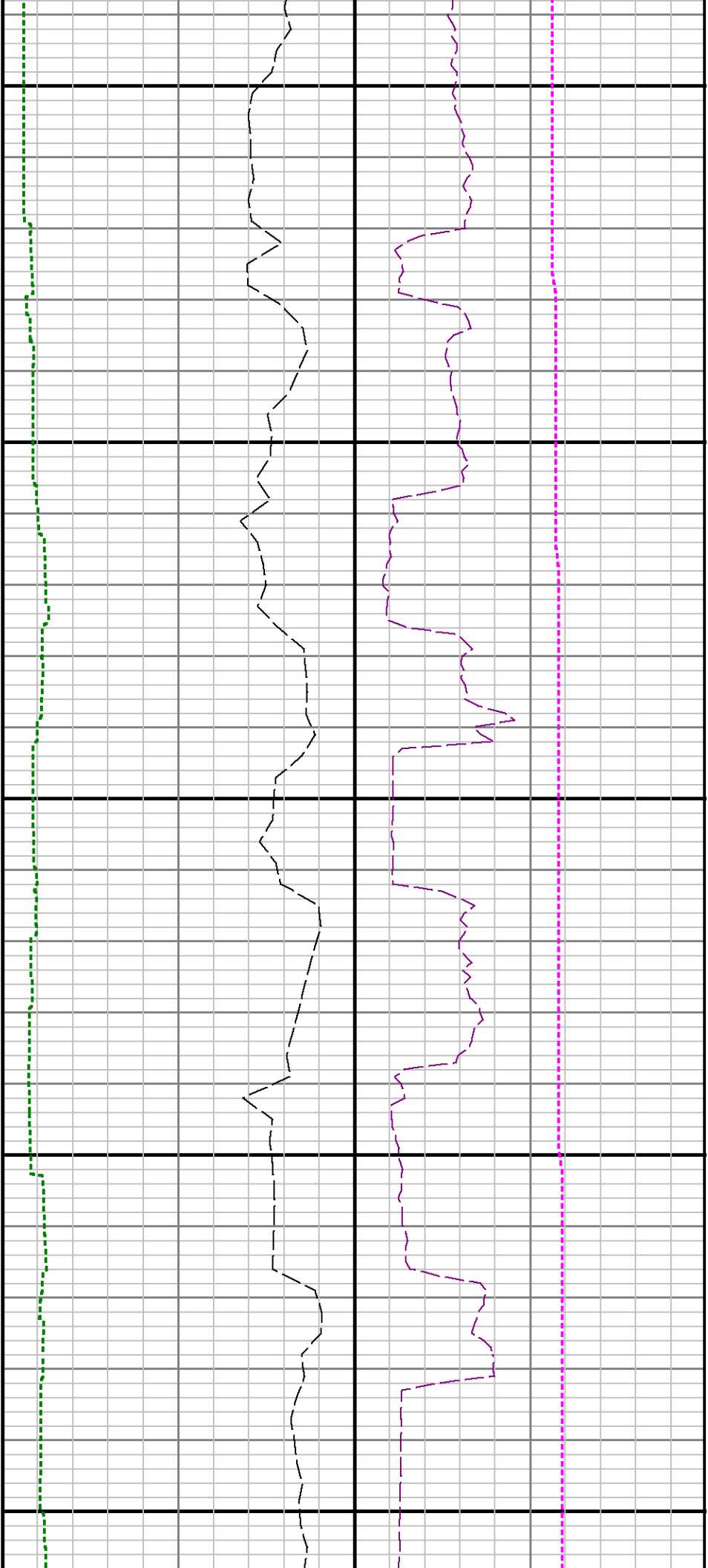


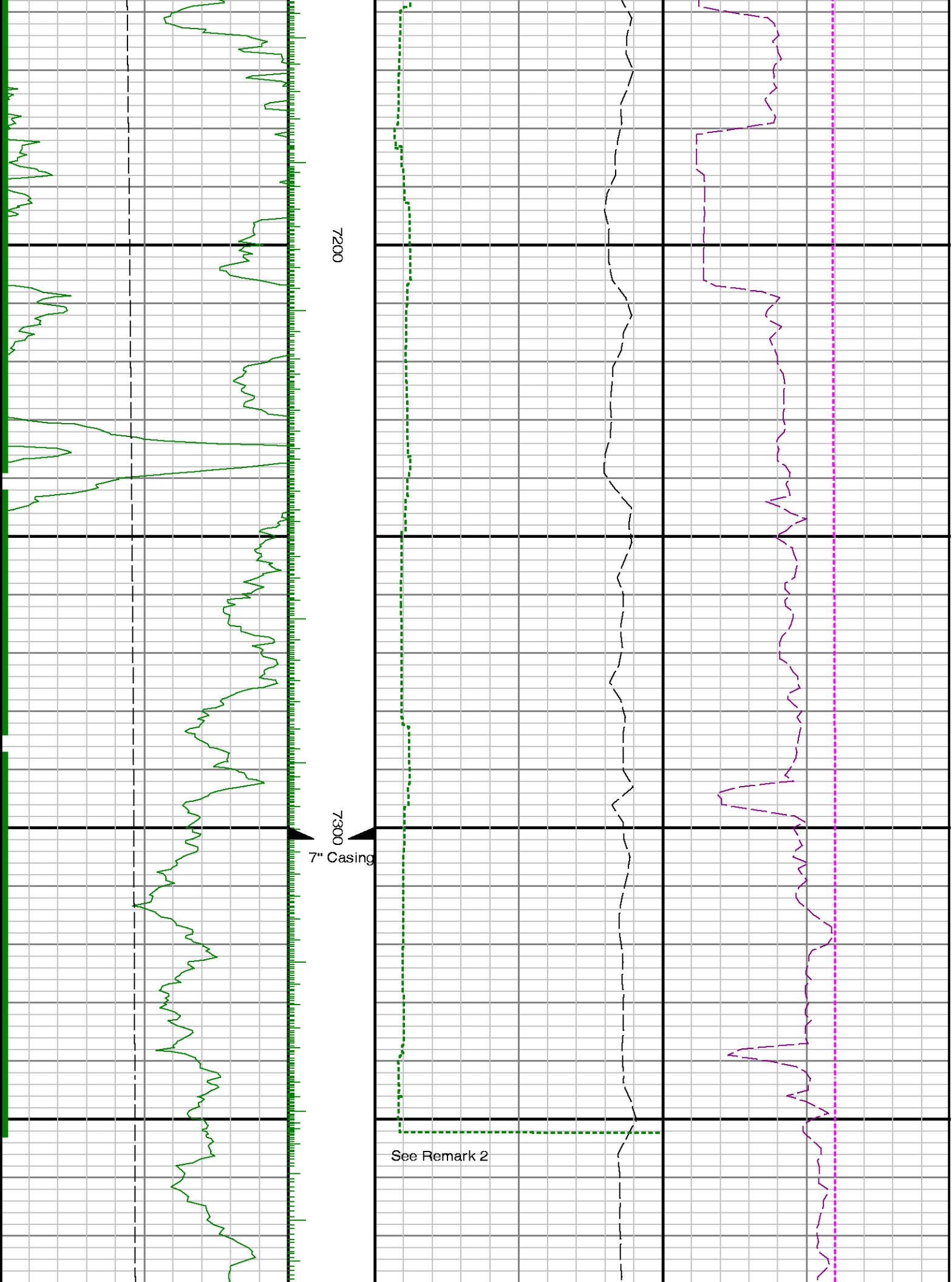


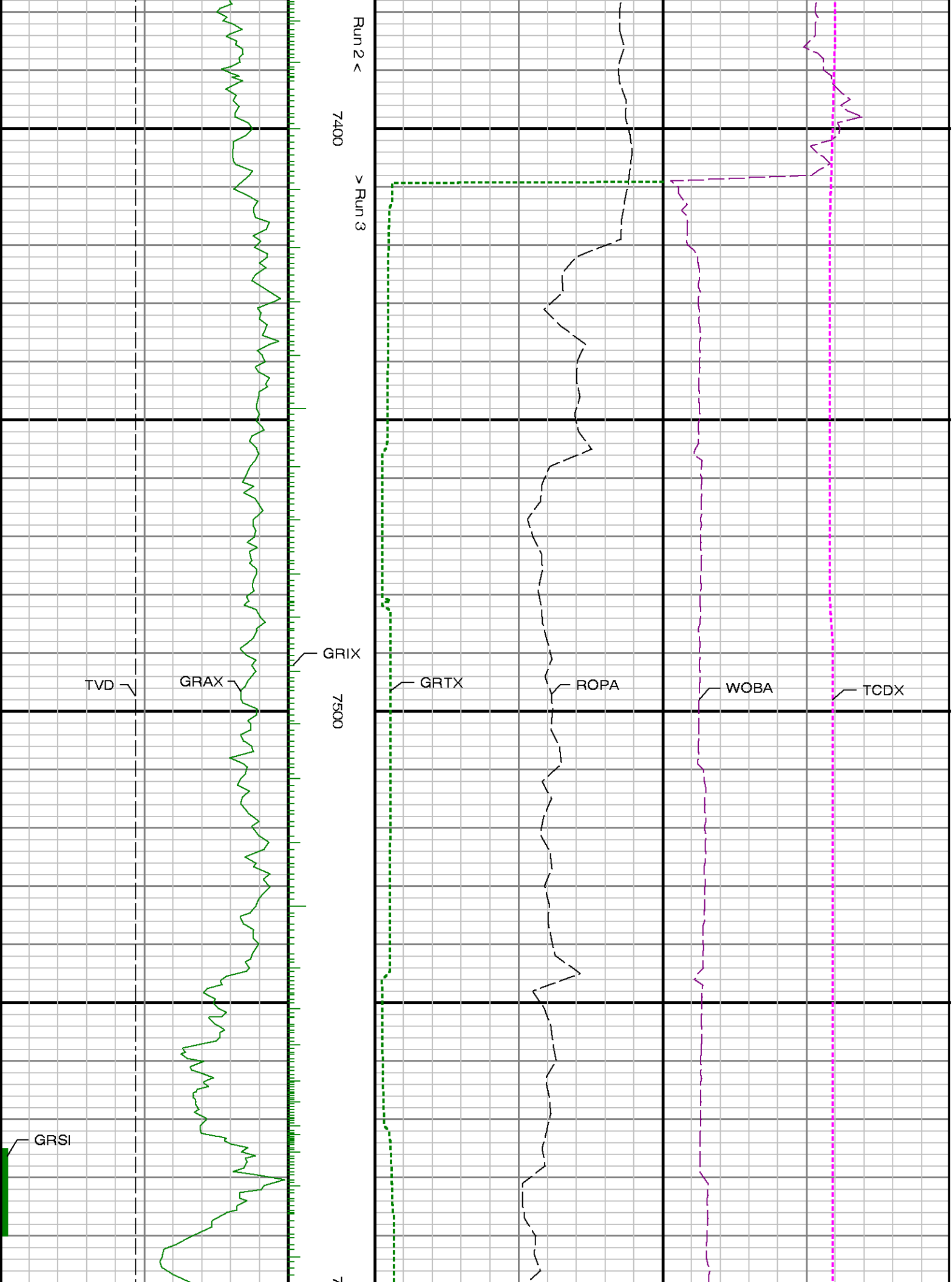
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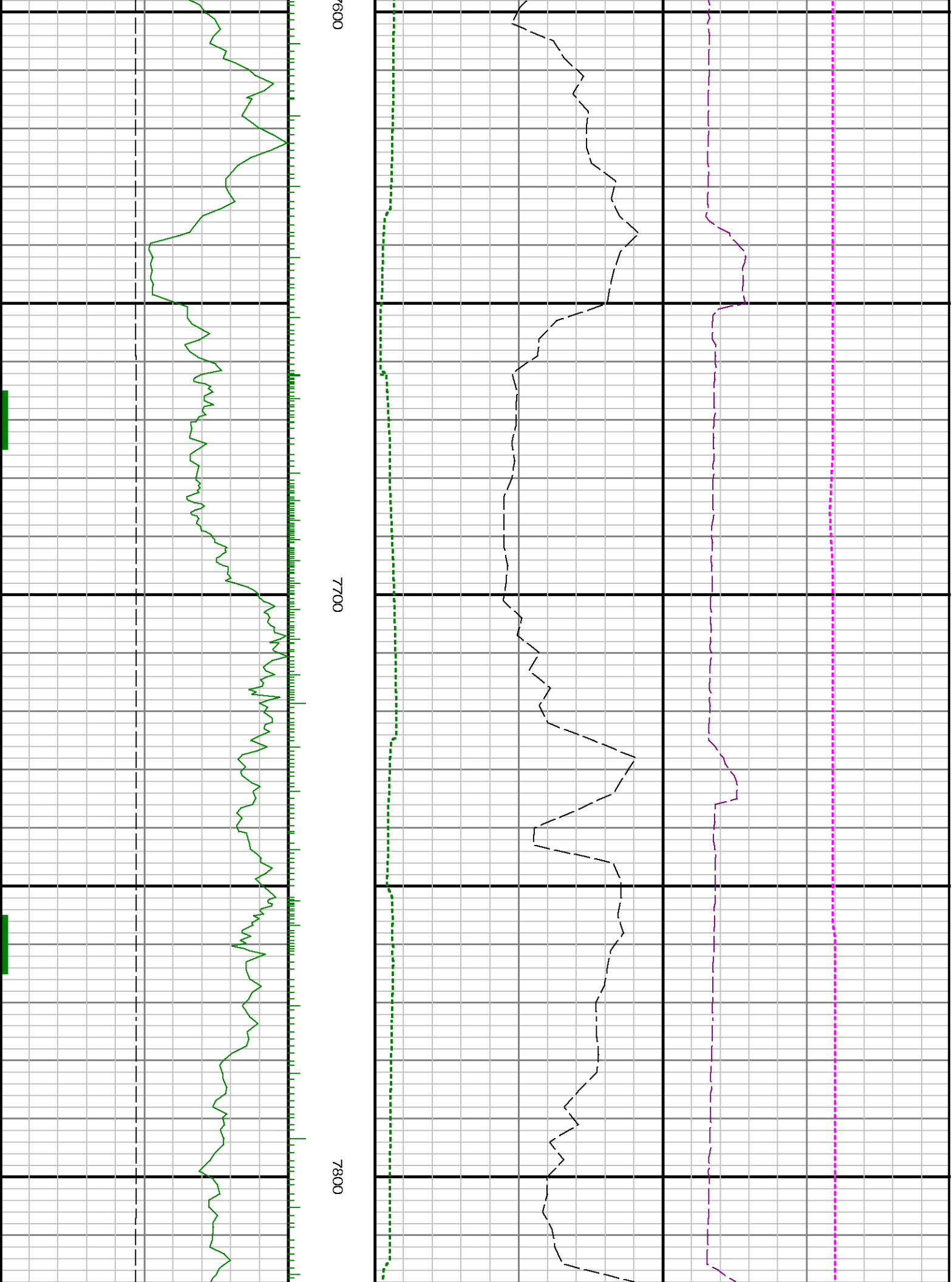
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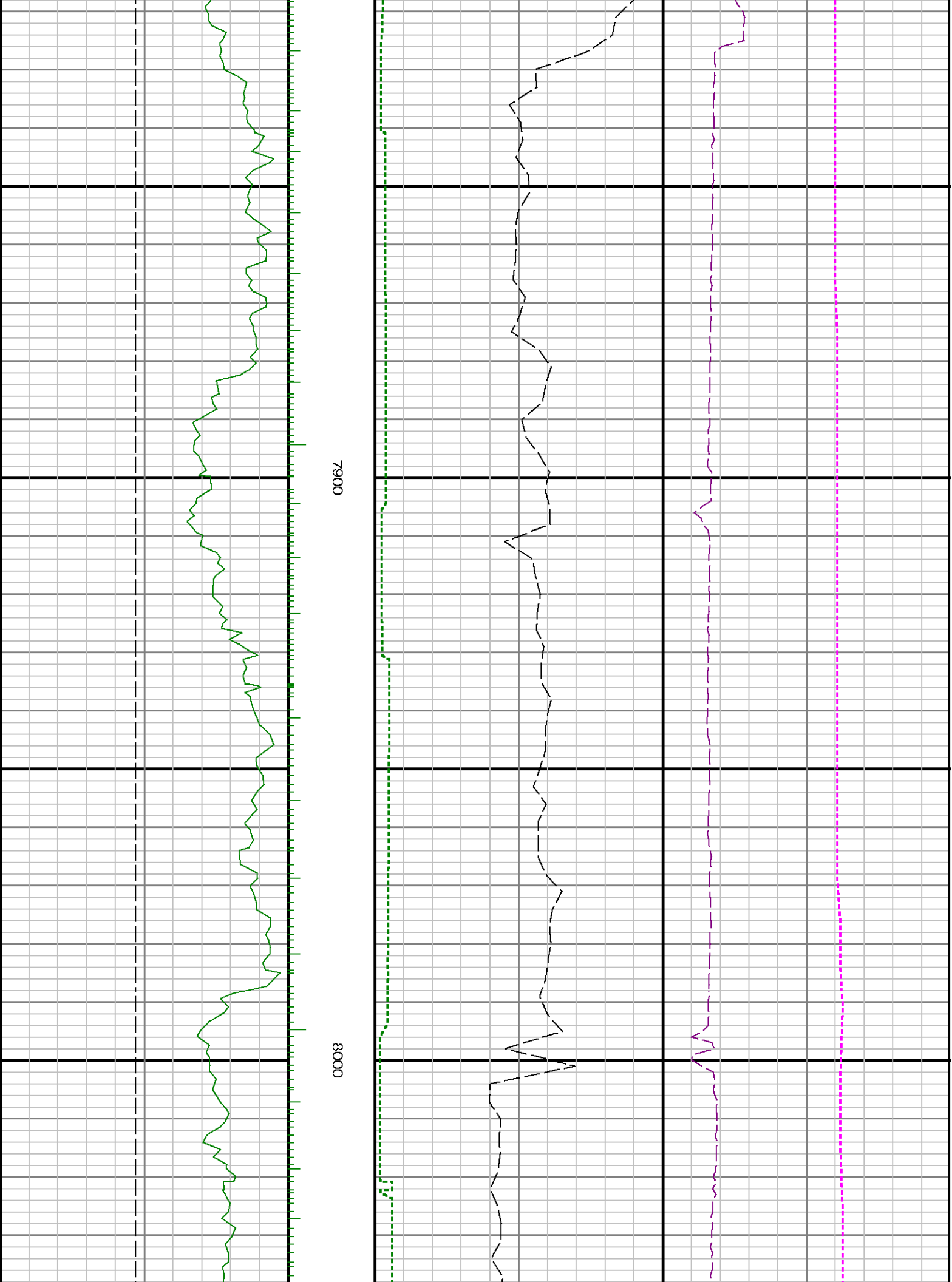


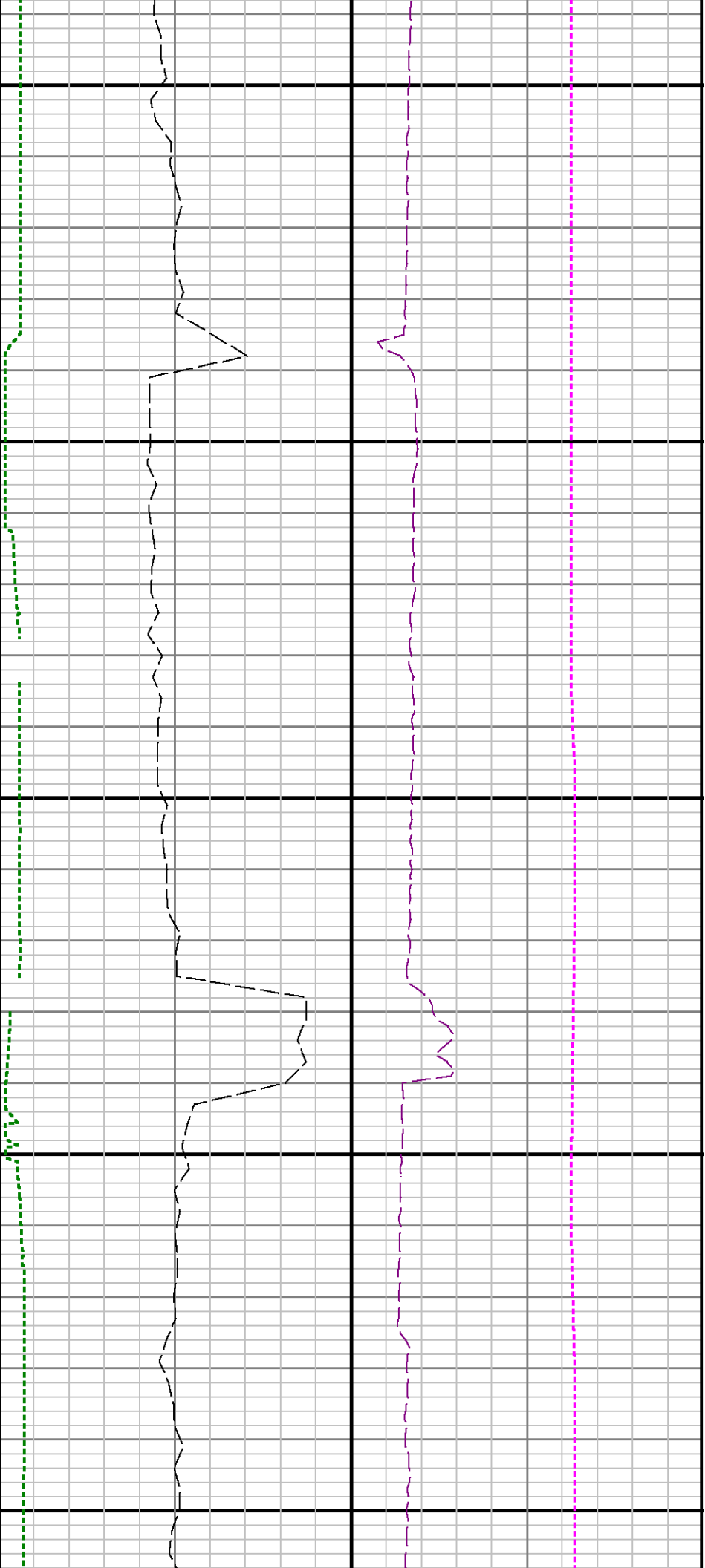






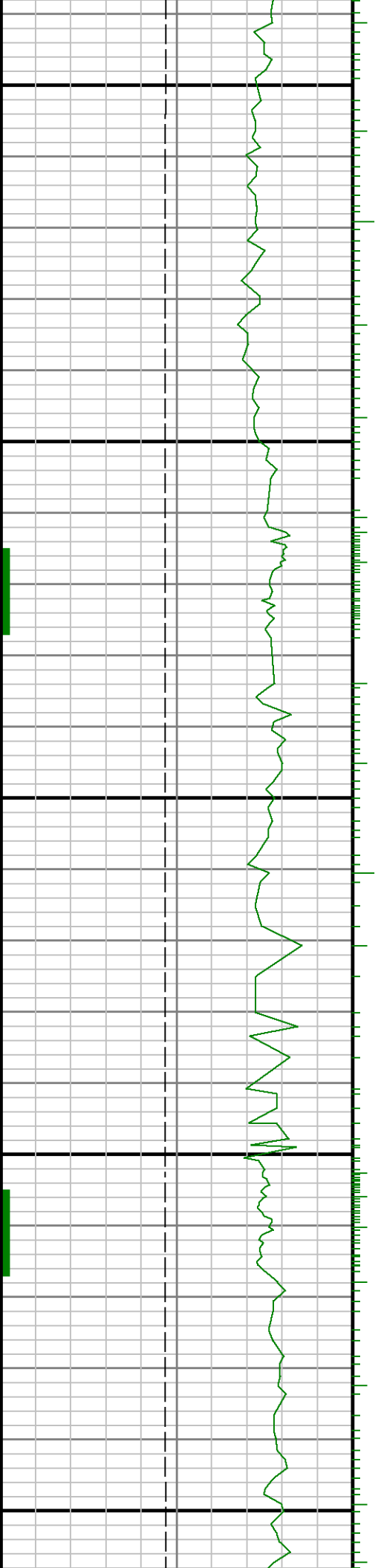


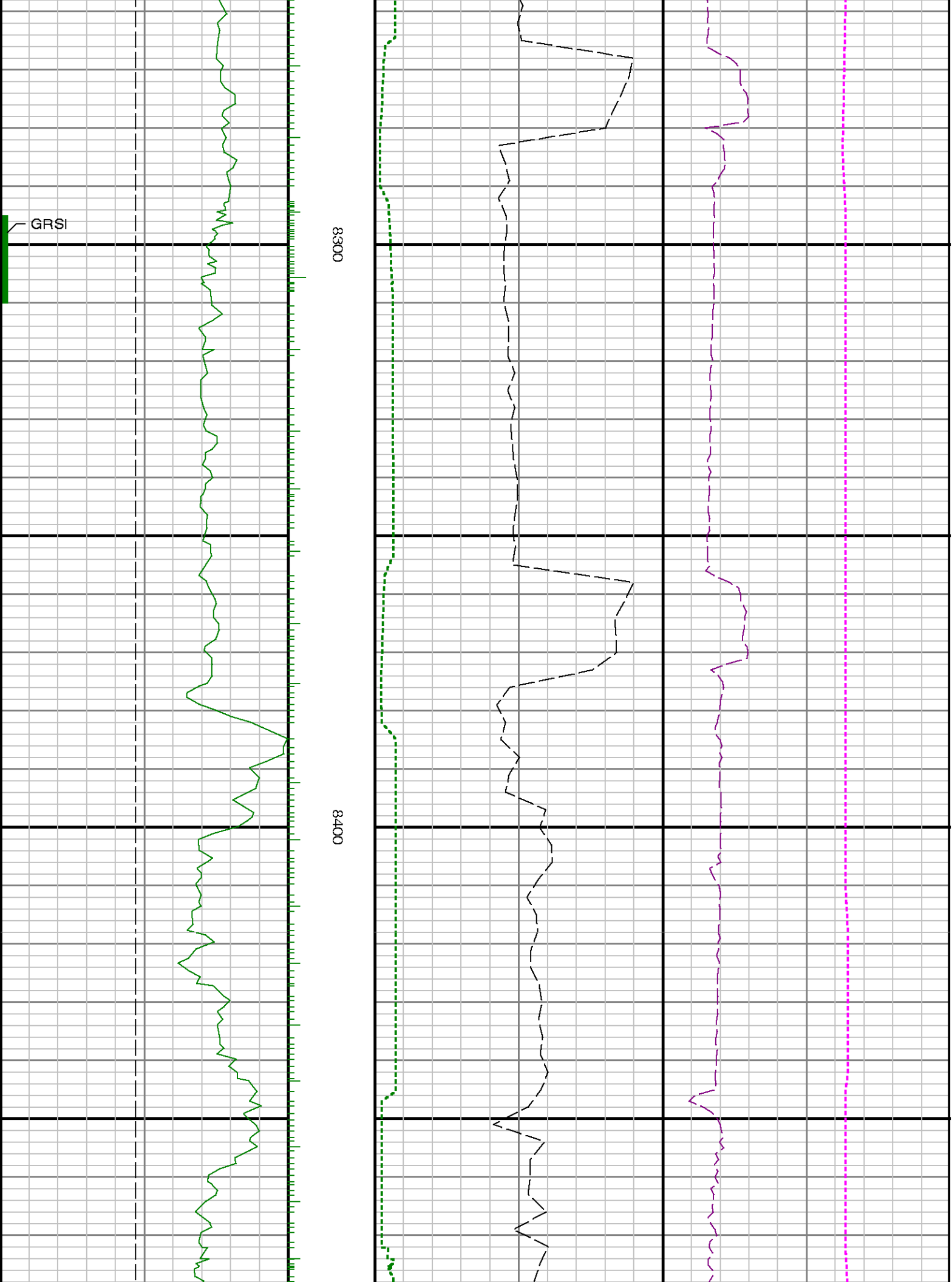


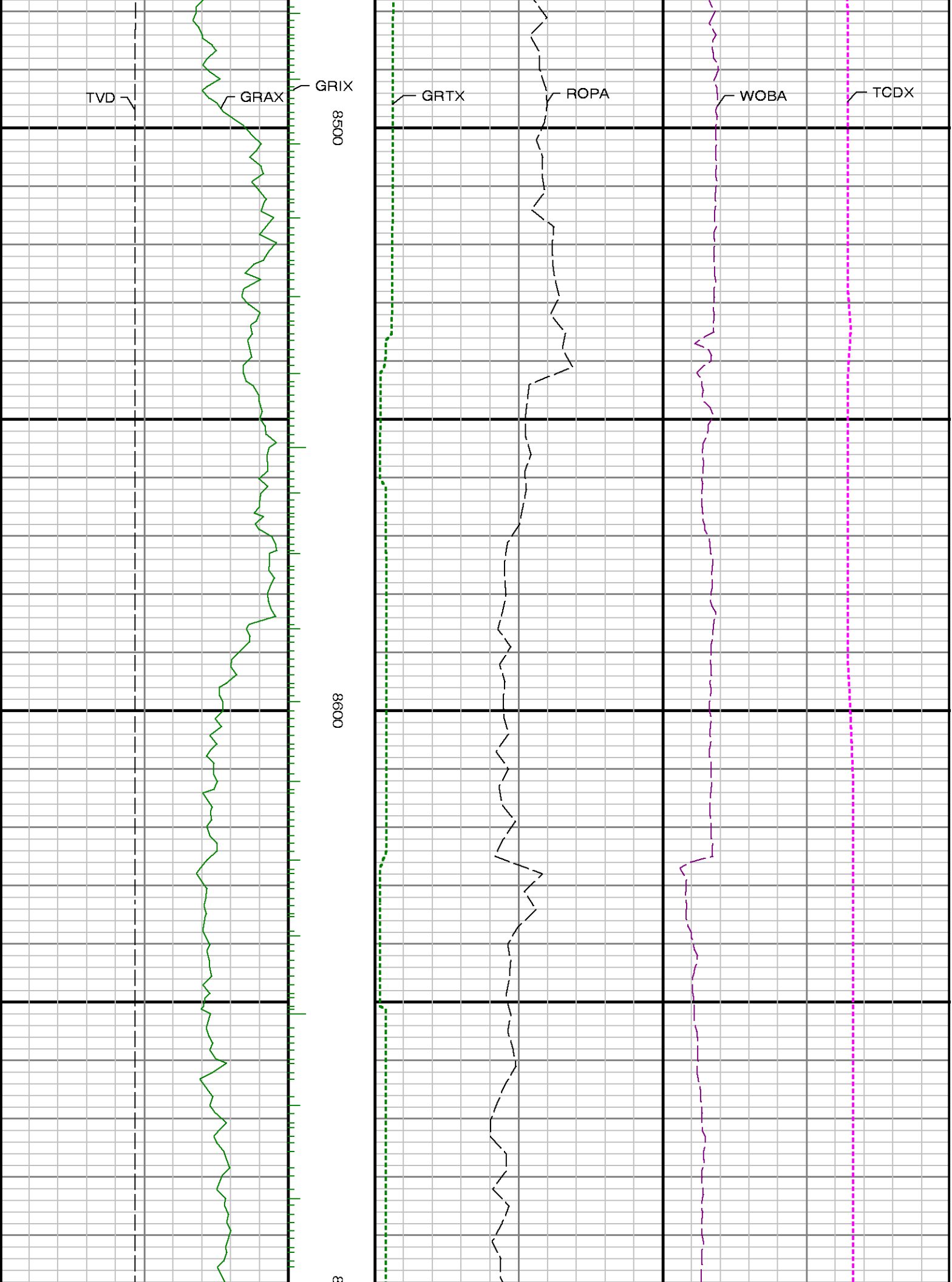


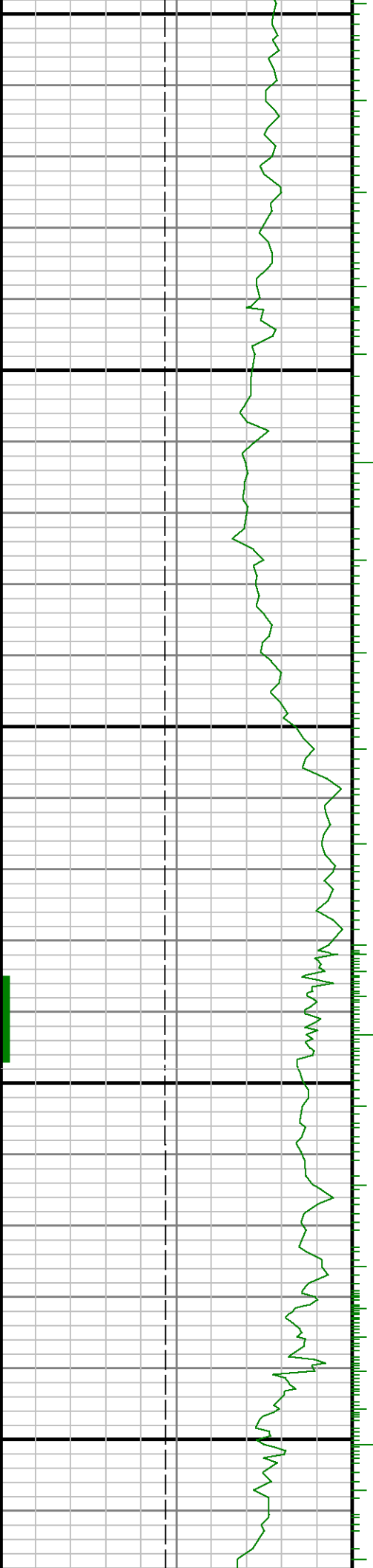
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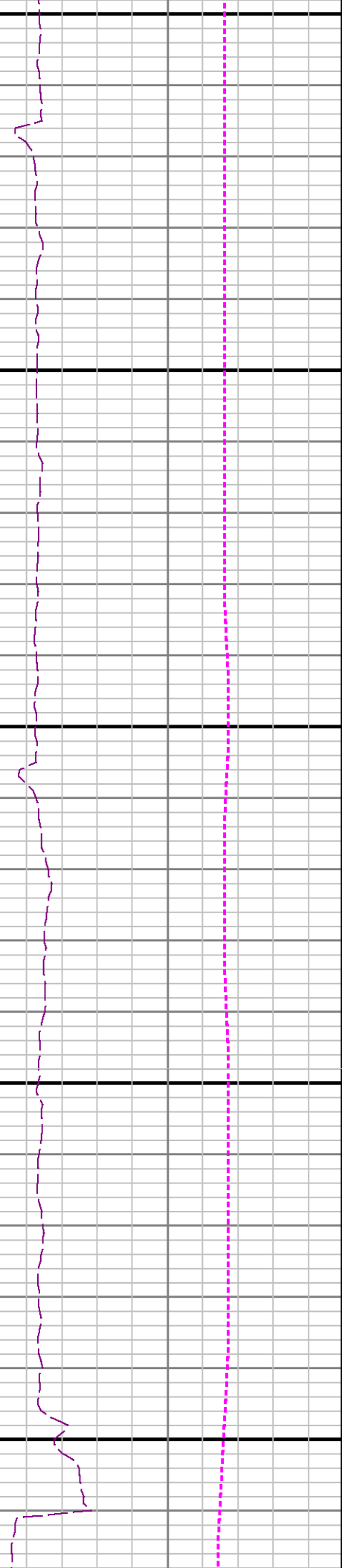
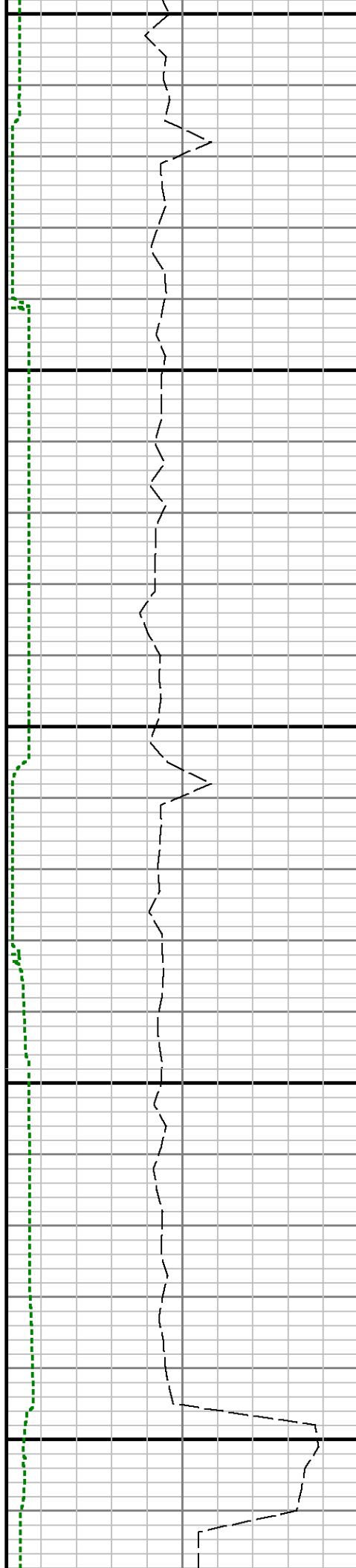


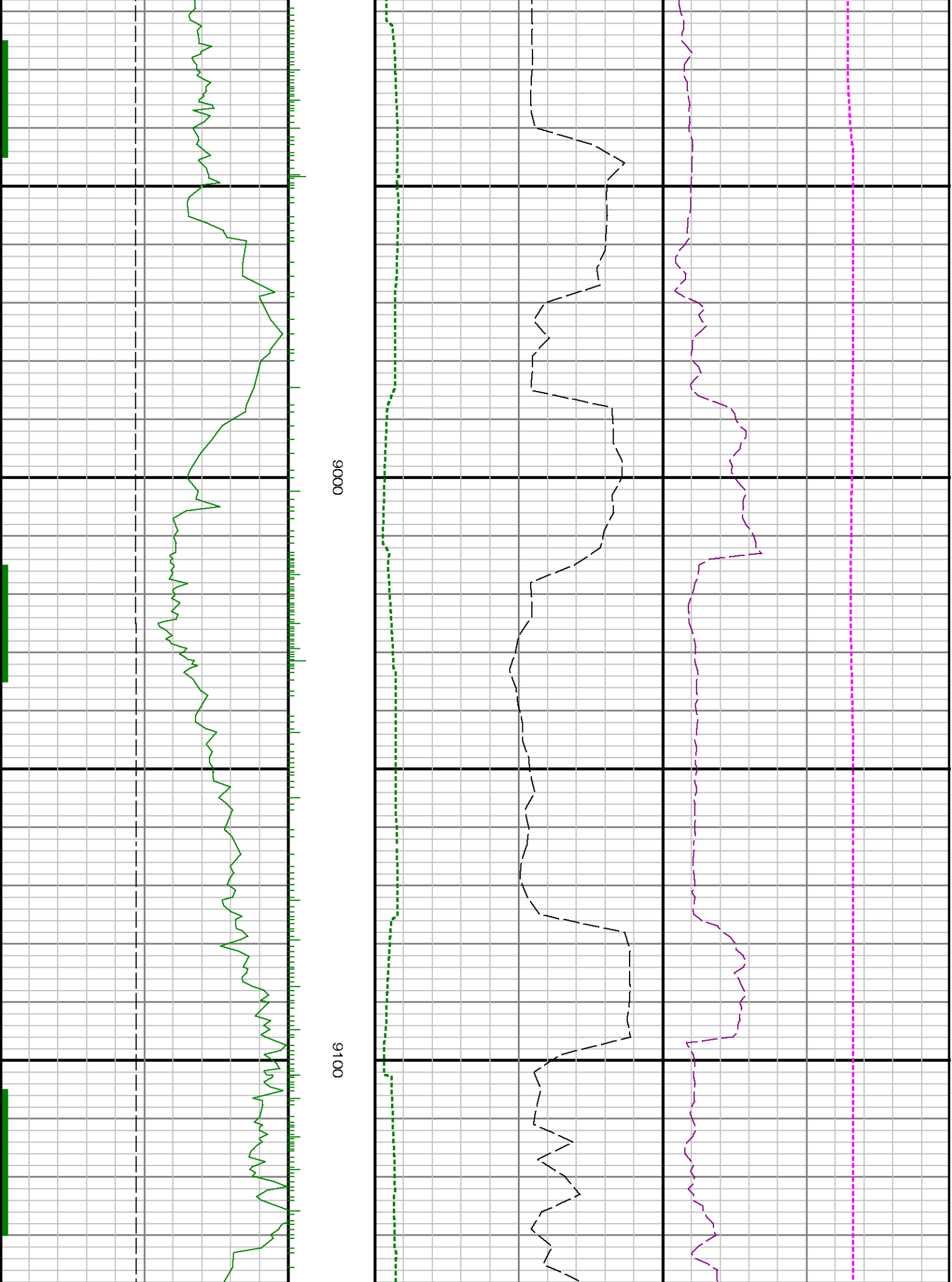


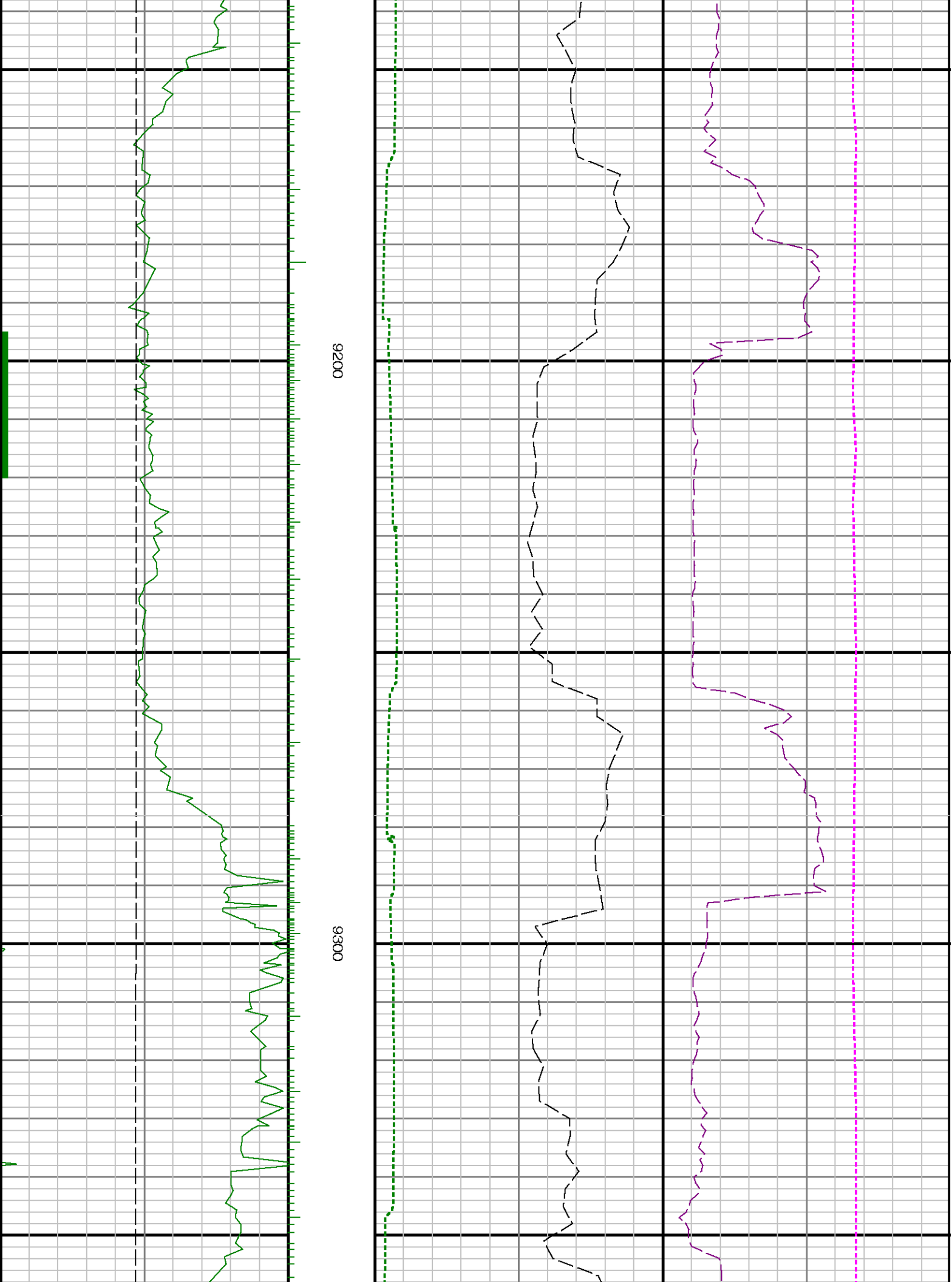
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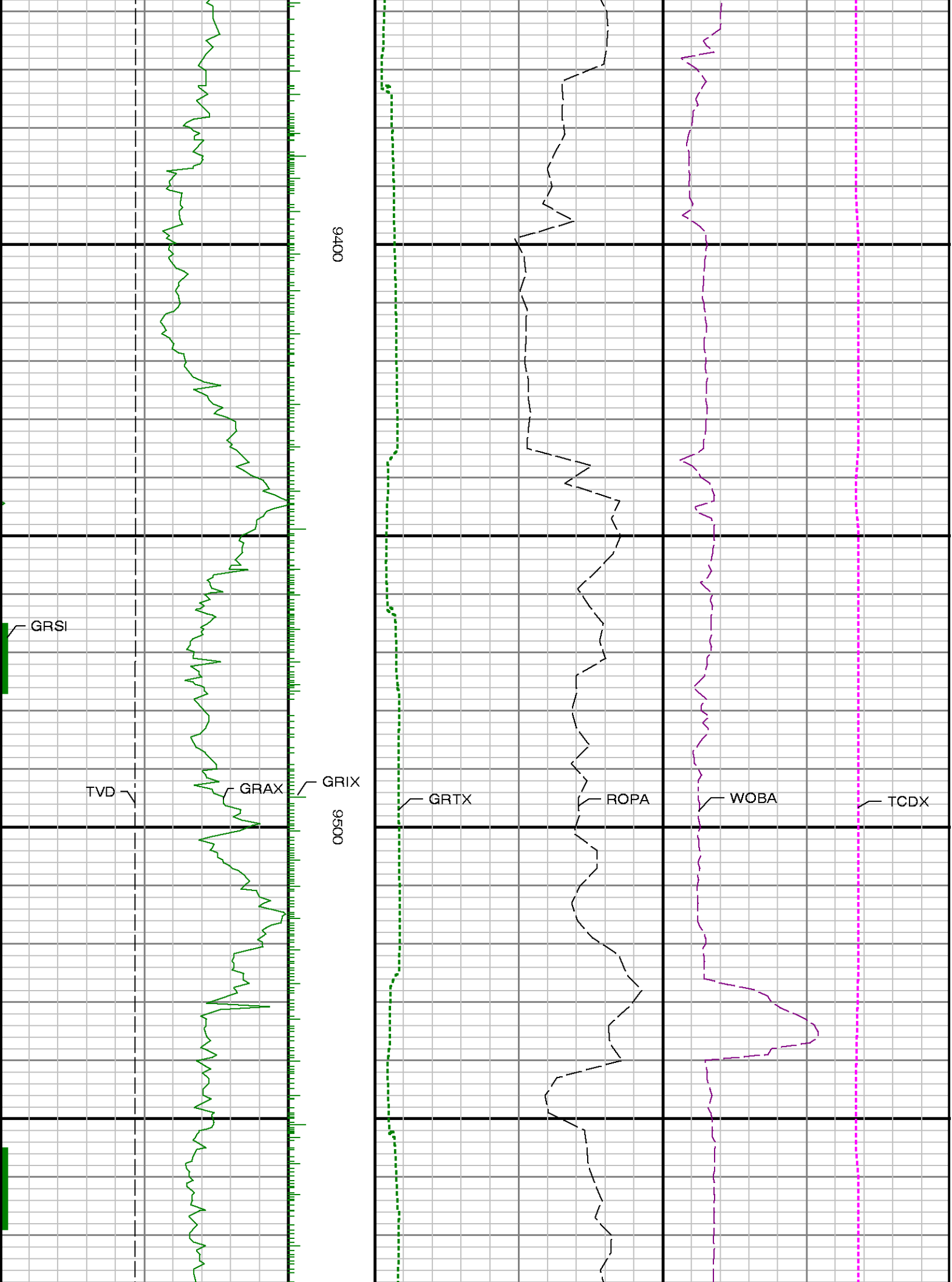
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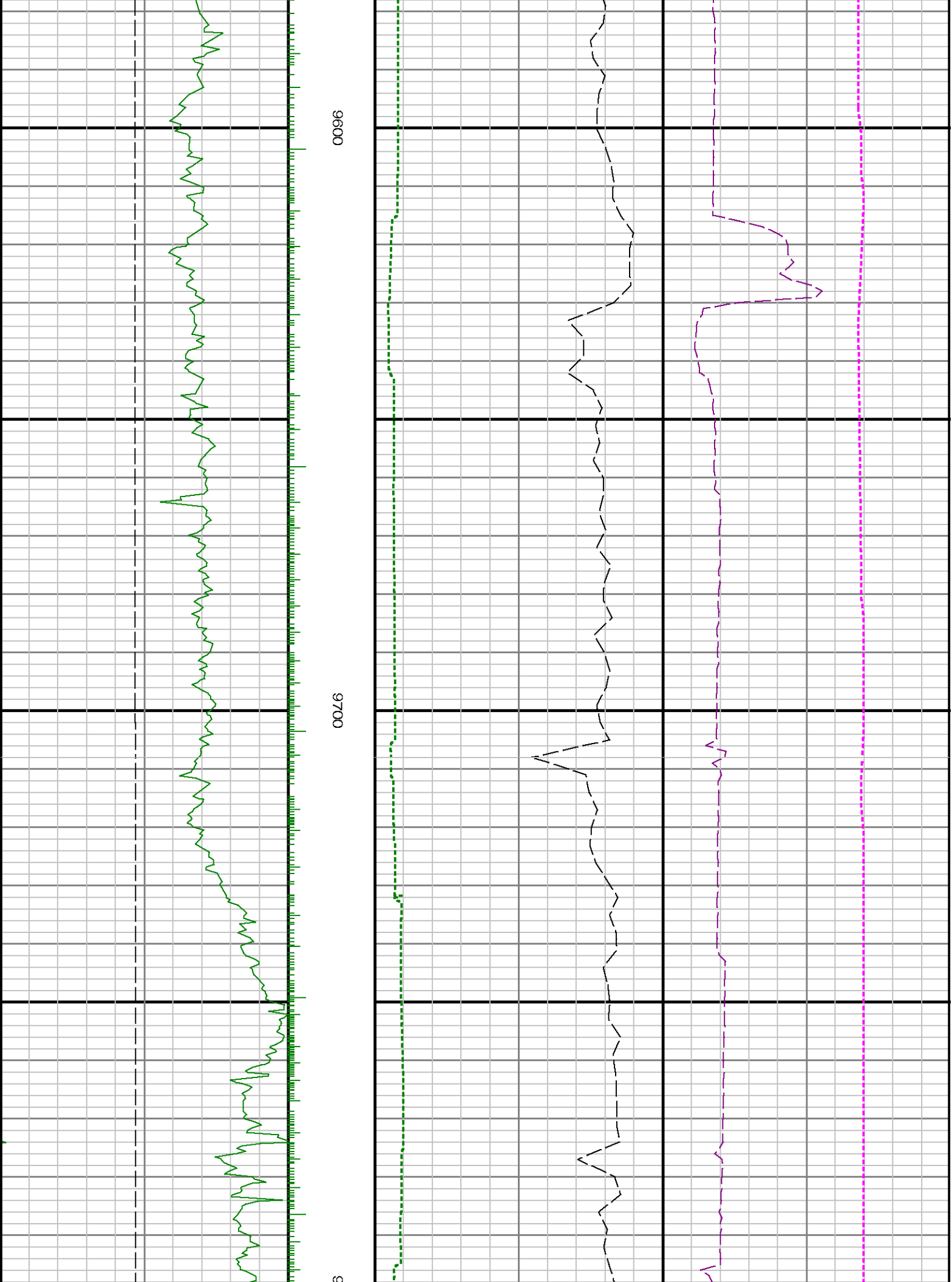
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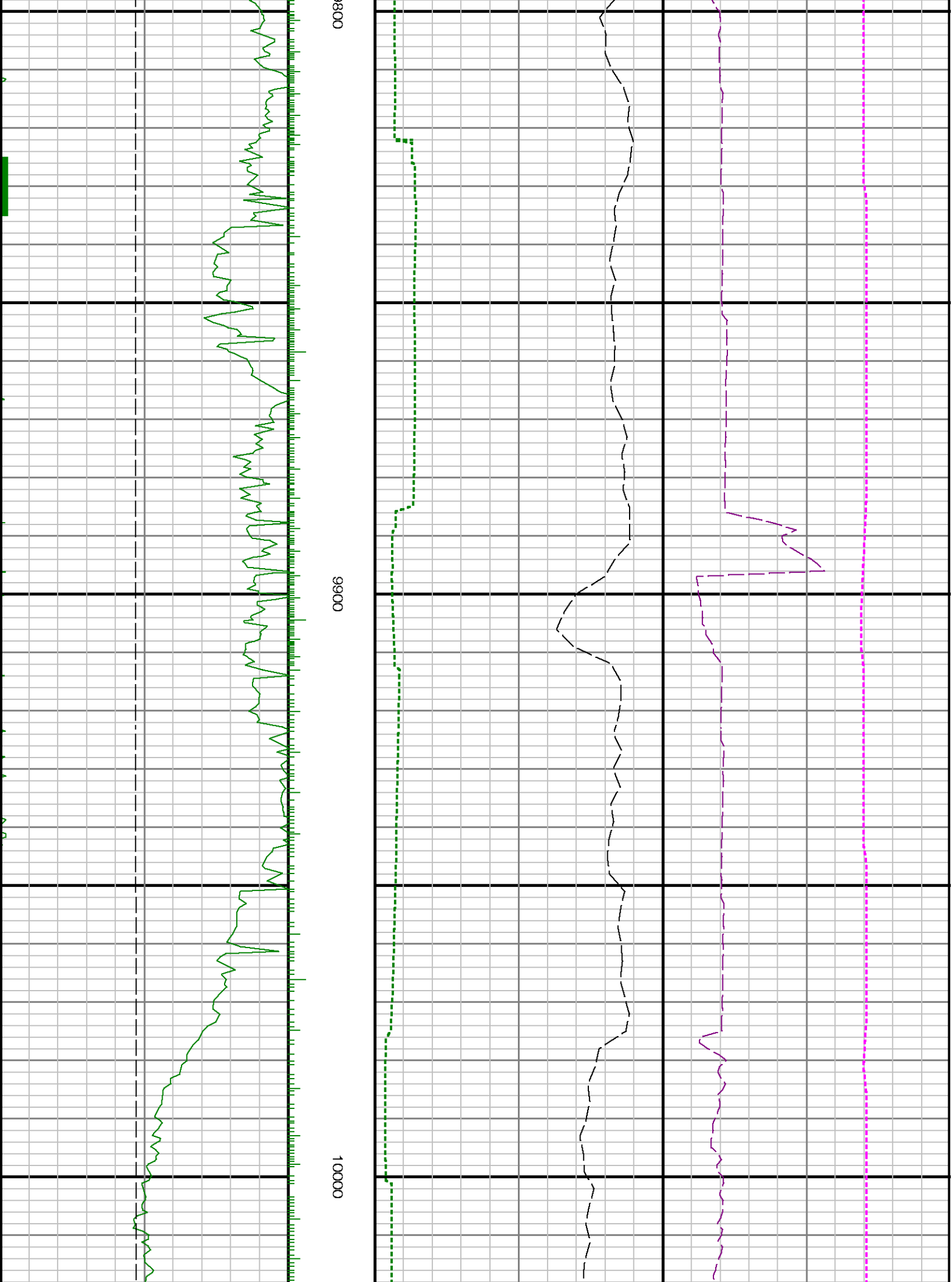


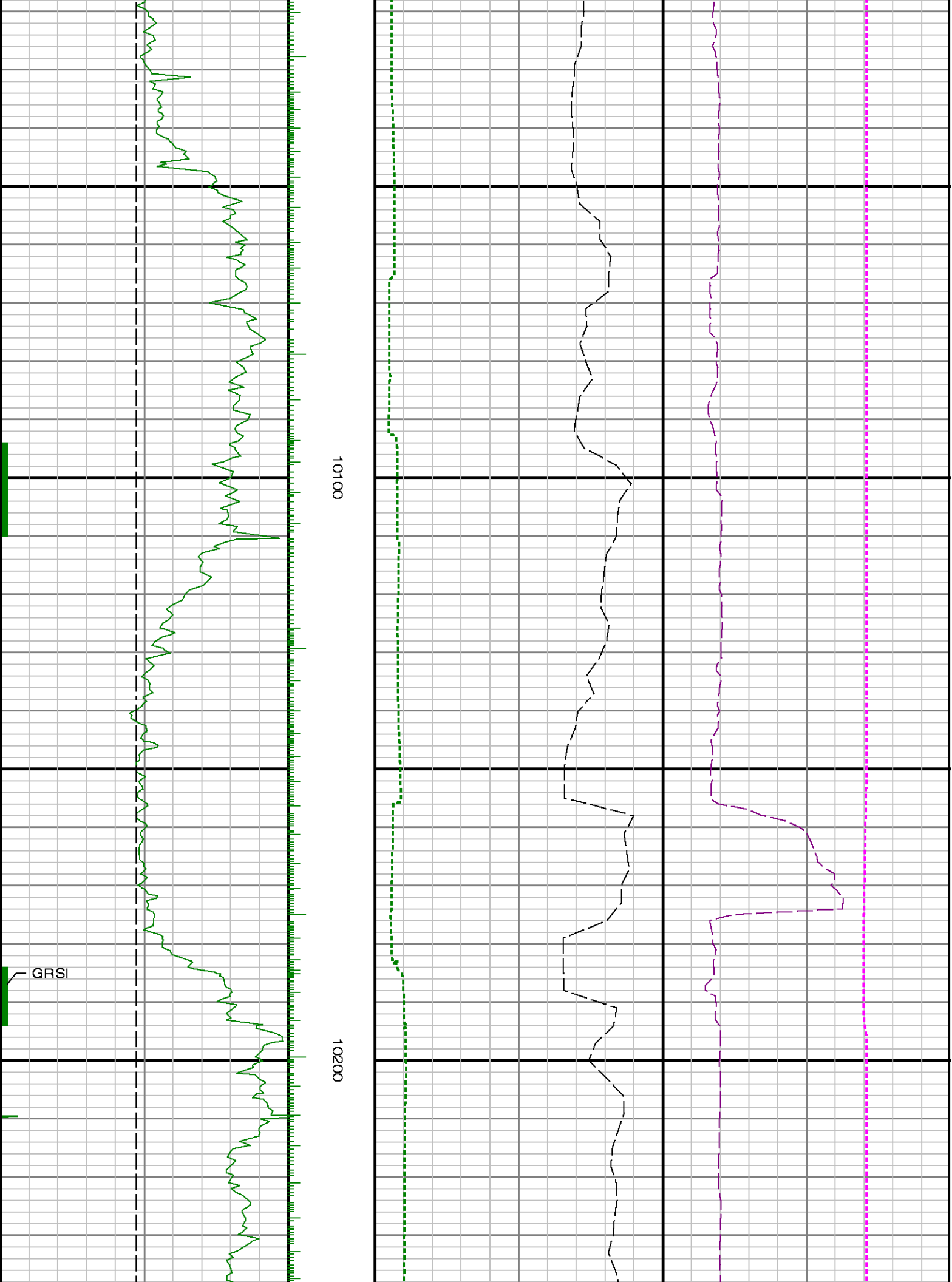


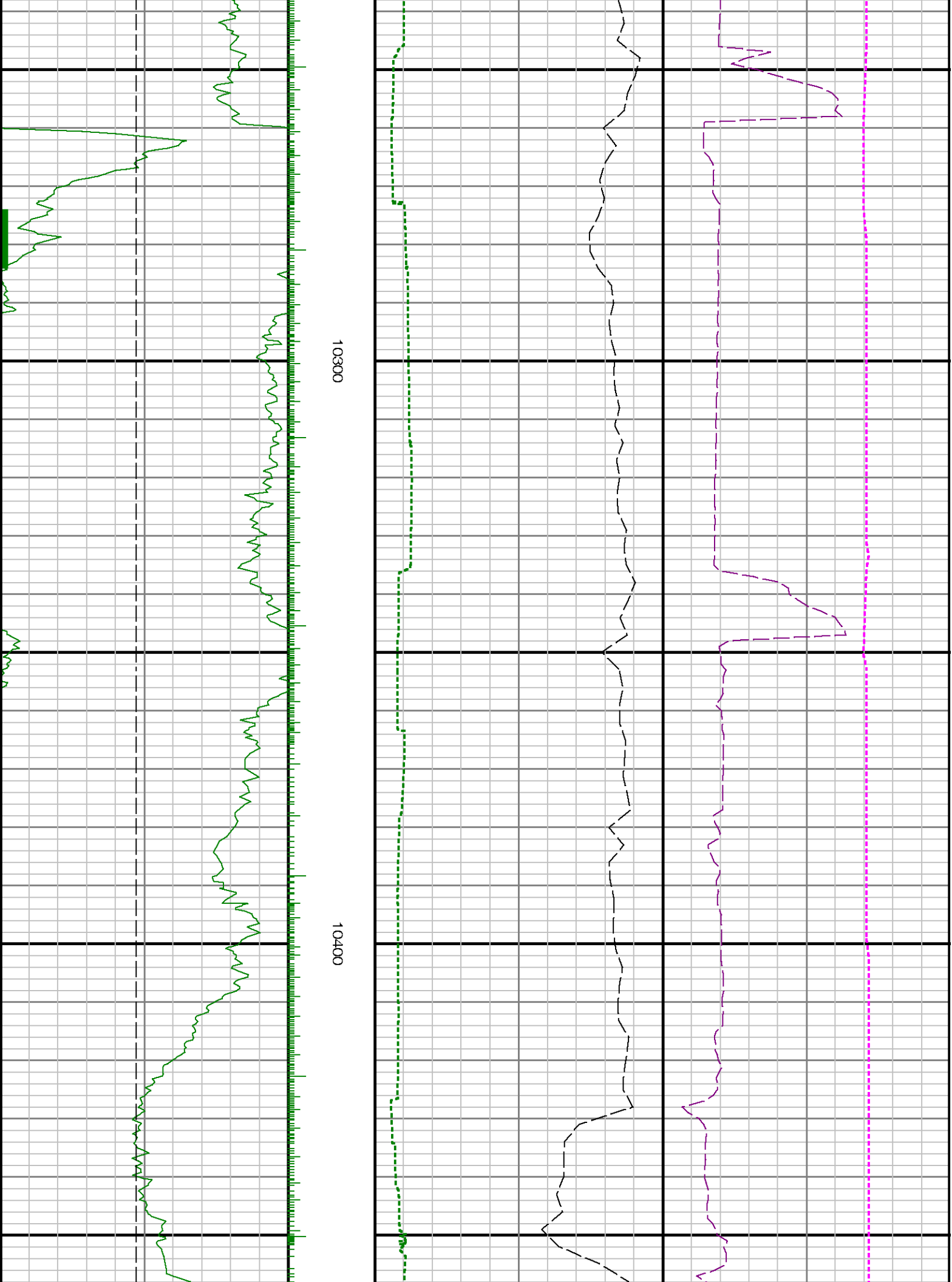


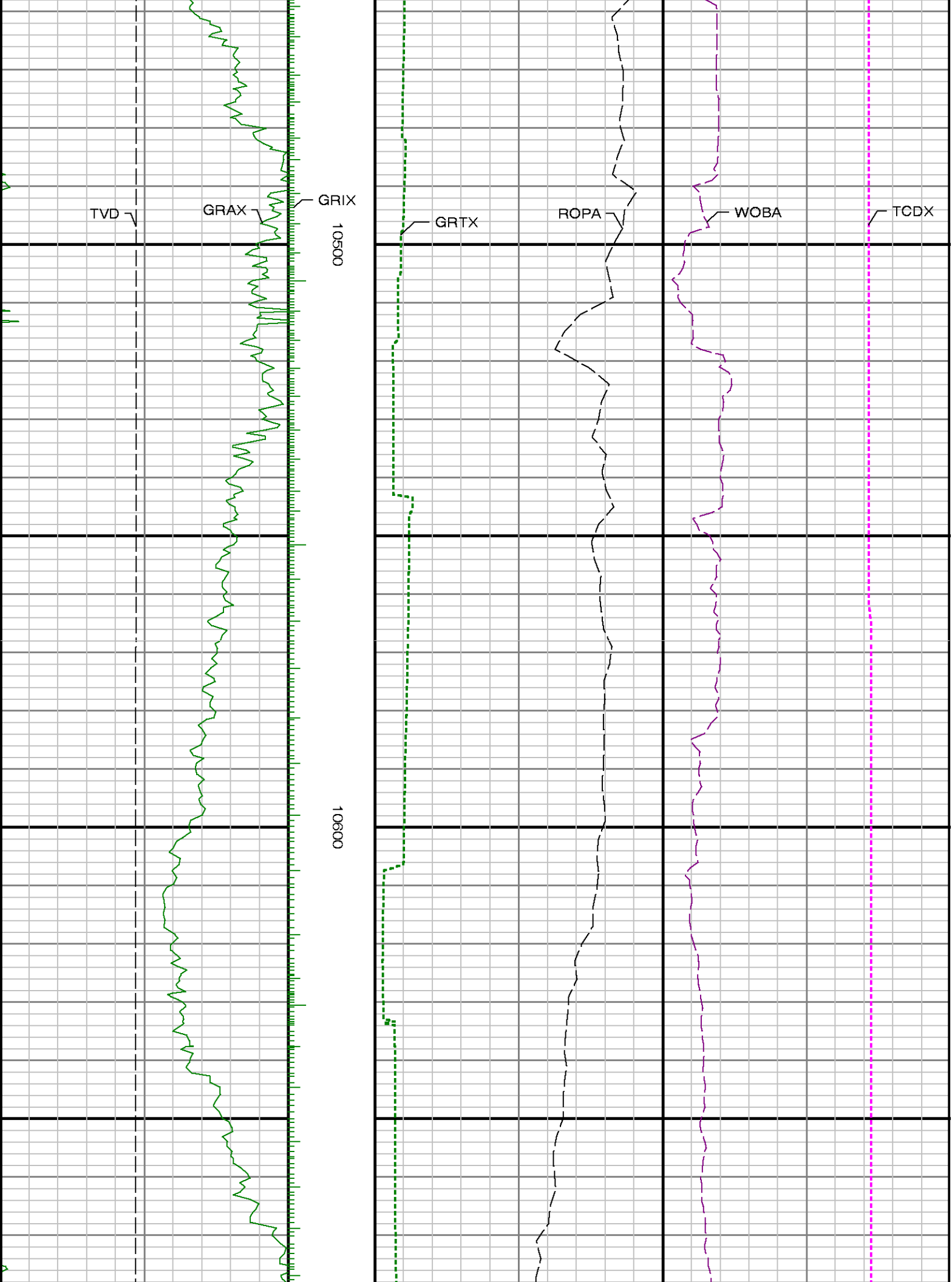


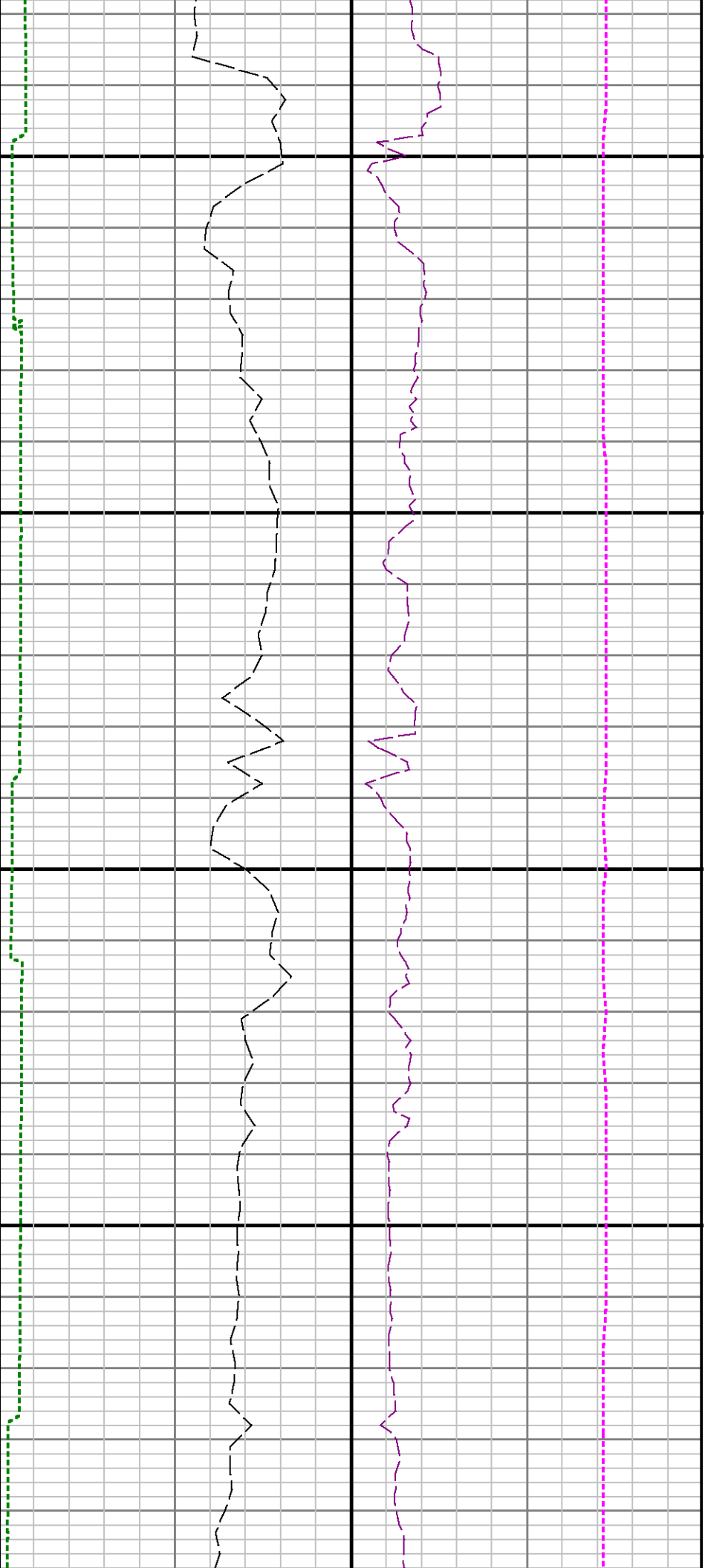












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