



Realtime Log

Natural Formation Evaluation
Gamma Ray

Scale: 1:240
Measured Depth
Company: Kerr-McGee Oil & Gas Onshore LP
Well: Sickler 26C-34HZ
Field: Weld County (Kerr-McGee)
County: Weld State: Colorado

Status: Final Print
API Number: 05123393790000
Permanent Datum (P.D.): Mean Sea Level
Log Measured From: Drill Floor
Depth Reference: Driller's Depth
Surface Location: Latitude: 40° 5' 19.154" N Longitude: 104° 52' 21.950" W
SEC: 34 TWP: 2N RNG: 67W
Other Services: Directional VSS
Elevations: KB: N/A DF: 4965.00 ft. GL: 4949.00 ft.

Interval Logged
Top: 1292.0 ft. Date From: 27/Jul/14 Date To: 04/Aug/14
Bottom: 13355.0 ft. Date To: 27/Jul/14
Dip Angle: 66.71° Az Reference North: True
Total
Field Strength: 52829.1 nT North Correction: 8.58°

Borehole Record				Casing Record			
Hole Size	From	To	Size	Weight	From	To	
13.500 in.	Surface	1292.0 ft.	9.625 in.	36.00 lb/ft	Surface	1282.0 ft.	
8.750 in.	1292.0 ft.	8245.0 ft.	7.000 in.	26.00 lb/ft	Surface	8245.0 ft.	
6.125 in.	8245.0 ft.	13355.0 ft.					

Mud Record				Deviation Record			
Type	From	To	Hole Size	Interval	Inc / Az (Start)	Inc / Az (End)	
Water Based - Fresh	2037.0 ft.	7165.0 ft.	13.500 in.	1292.0 ft.	0.0° / 344.5°	0.2° / 198.3°	
Water Based	7165.0 ft.	13355.0 ft.	8.750 in.	6953.0 ft.	0.2° / 198.3°	85.8° / 1.2°	
			6.125 in.	6402.0 ft.	85.8° / 1.2°	90.5° / 359.4°	
					/	/	
					/	/	
					/	/	

Acquisition System				Software Version				Other			
Advantage	2.20U4	Rig:	Xtreme 6	6.4.1.34	Job No:	6432126	RMD	/	Kerr-McGee Oil & Gas Onshore LP	D&E	
PATS		District / Unit:									

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Log Run Summary															
LWD	BHA	Bit	Bit	Bit	Bit	Assembly Type	Logged Interval		Bit Depth Interval		Date / Time				Circ. Time (hrs.)
Run	Run	Run	Size	Type	Gauge		Top	Bottom	From	To	Start		End		
No.	No.	No.	(in.)		Lenath (in.)		(ft.)	(ft.)	(ft.)	(ft.)					
1	1	2	8.750	PDC	3.000	Steerable	N/A	N/A	1292.0	7260.0	27/Jul/2014 22:10	29/Jul/2014 13:55	33.5		
2	2	3	8.750	PDC	3.000	Steerable	7260.0	8245.0	7260.0	8243.0	30/Jul/2014 13:37	31/Jul/2014 18:44	30.1		
3	3	4	8.750	PDC	3.000	Steerable	8245.0	13355.0	8245.0	13355.0	02/Aug/2014 15:04	04/Aug/2014 11:15	37.4		

Crew										
Name	Arrive	Depart		Name	Arrive	Depart		Name	Arrive	Depart
	Wellsite	Wellsite			Wellsite	Wellsite			Wellsite	Wellsite
David Campbell	July 27 2014	Aug 06 2014		Jake Miller	July 27 2014	Aug 04 2014				

Mud Properties Record

Date / Time		LWD Run No.	Measured Depth (ft.)	Mud Type	Density (ppg)	Viscosity (cp)	pH	Fluid Loss (cc)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
28/Jul/2014	02:57	1	2037.0	Water Based - Fresh	8.8	28	9.4	0.0	1 / 97	Active Mud Pit	2800	0.0
29/Jul/2014	01:49	1	6078.0	Water Based - Fresh	9.2	47	9.1	0.0	1 / 94	Active Mud Pit	3800	0.0
30/Jul/2014	12:19	2	7165.0	Water Based	10.2	40	9.0	4.8	0 / 90	Active Mud Pit	3700	0.0
31/Jul/2014	00:56	2	7537.0	Water Based	10.5	42	9.3	4.6	1 / 89	Active Mud Pit	3800	0.0
03/Aug/2014	00:49	3	9134.0	Water Based	9.7	46	9.7	4.4	1 / 92	Active Mud Pit	3500	0.0
04/Aug/2014	04:21	3	12580.0	Water Based	9.7	43	9.6	4.2	2 / 92	Active Mud Pit	3400	0.0

Mnemonics

Curve	Description	Units
GRAX	Gamma Ray Apparent, 0.5 ft. Avg.	API
GRIX	Gamma Ray Data Density	point
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

Equipment and Service Data

LWD Run No.	Tool	Serial Number	Measurement	Bit Offset (ft)	Max O.D. (in.)	Min I.D. (in.)
1	DIR	12373467	Directional	47.11	6.750	0.000
1	SRIG	12586753	Gamma	43.74	6.750	0.000
3	DIR	13153787	Directional	49.48	4.750	2.750
3	SRIG	11732967	Gamma	46.10	4.750	2.750

Service and Tool Mnemonics

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

Comments

1.) 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.
2.) Baker Hughes runs 1 utilized 6 3/4 inch NaviTrak services (Directional only) behind an 8 3/4 inch bit and steerable assembly from 1292 to 7260 feet MD (1291.95 to 7016.58 feet TVD).
3.) Baker Hughes run 2 utilized 6 3/4 inch NaviGamma services (Gamma Ray and Directional) behind an 8 3/4 inch bit and steerable assembly from 7260 to 8245 feet MD (7016.58 to 7585.46 feet TVD).
4.) Baker Hughes run 3 utilized 4 3/4 inch NaviGamma services (Gamma Ray and Directional) behind an 8 3/4 inch bit and steerable assembly from 8245 to 13355 feet MD (7585.46 to 7582.79feet TVD).
5.) The interval from 1292to 7260 feet MD (1291.95 to 7016.58 feet TVD) was not logged due to directional only services being provided through the straight-hole

and nudge section for Baker Hughes run 1.

Remarks

Number	Measured Depth (ft)	Hole Section (in.)	LWD Run No.	Remark
1	7220	8.750	2	Begin logging due to directional only service provided through vertical section.
2	8206	8.750	2	The interval from 8206 to 8246 feet MD (7583.38 to 7585.50 feet TVD) was logged up to 24 hrs after being drilled due to casing and cement ops.
3	13305	6.125	3	The interval from 13314 to 13355 feet MD (7583.39 to 7582.79 feet TVD) has No sensor data due to bit to sensor offsets.



Company : Kerr-McGee Oil & Gas Onshore LP

Well : Sickler 26C-34HZ

Interval : 7180.00 - 13380.00 feet

Created : 04/Aug/2014 11:50:24 AM

Gamma Ray Apparent 0.5 ft Avg GRAX

0 150

API

True Vertical Depth TVD

7500 6500

ft

MD feet 1:240

Rate of Penetration 3.0 ft Avg ROPA

500 0

ft/hr

Gamma Time Since Drilled GRTX

0 600

min

Surface Weight On Bit 1.0 ft Avg WOBA

0 100

klbf

Downhole Temperature TCDX

100 300

degF

7200

> Run 2

GRSI

TVD

GRAX

GRIX

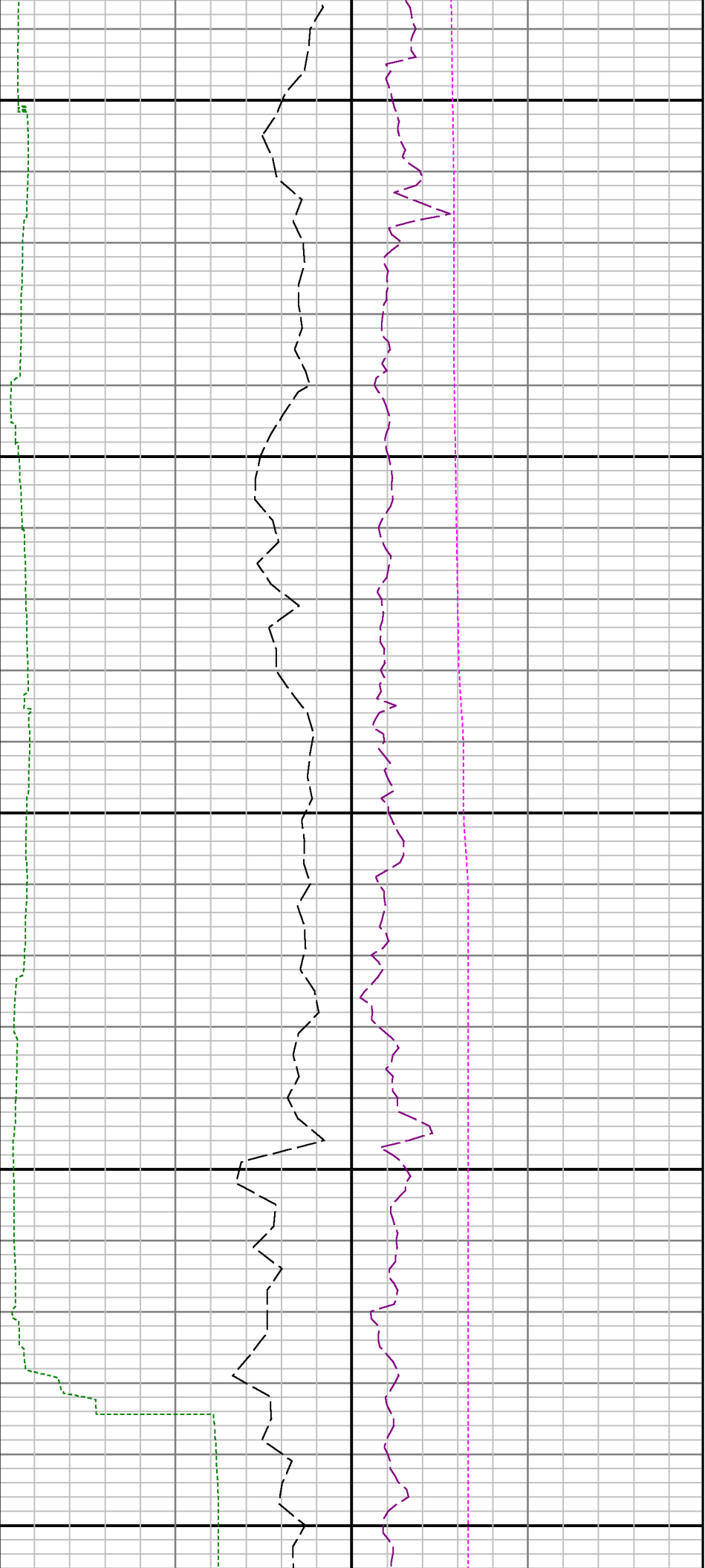
See Remark 1

ROPA

WOBA

GRTX

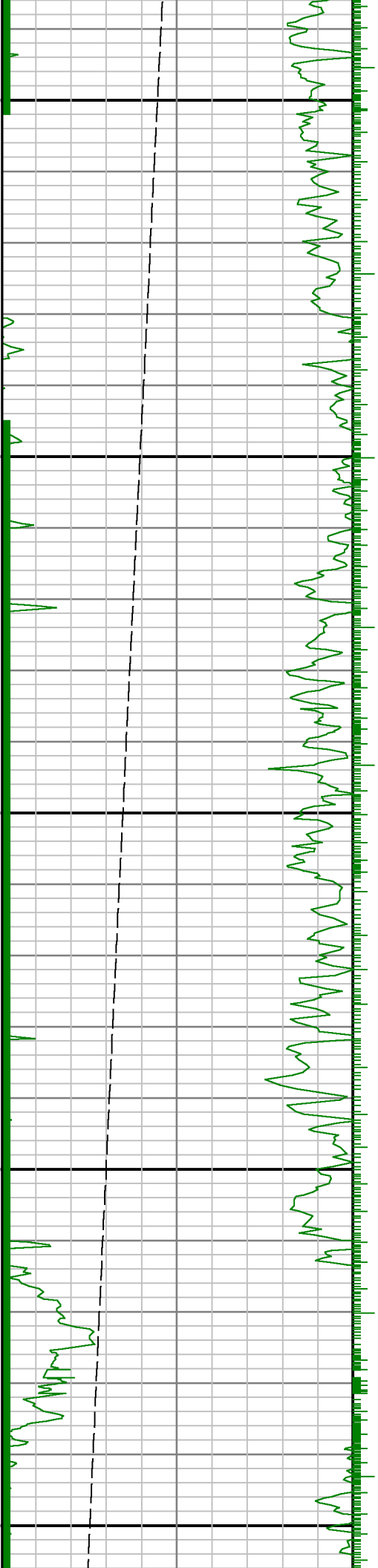
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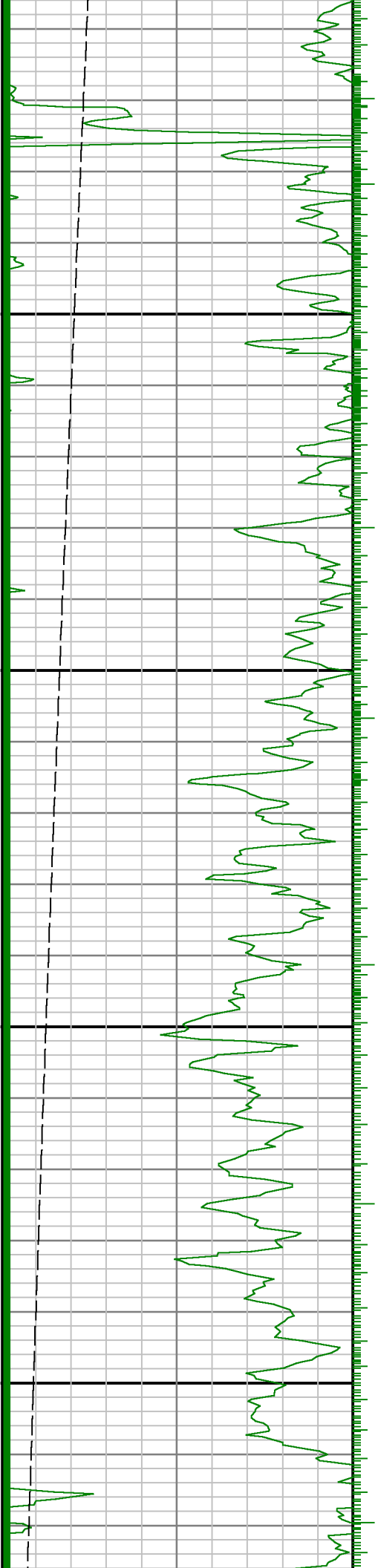
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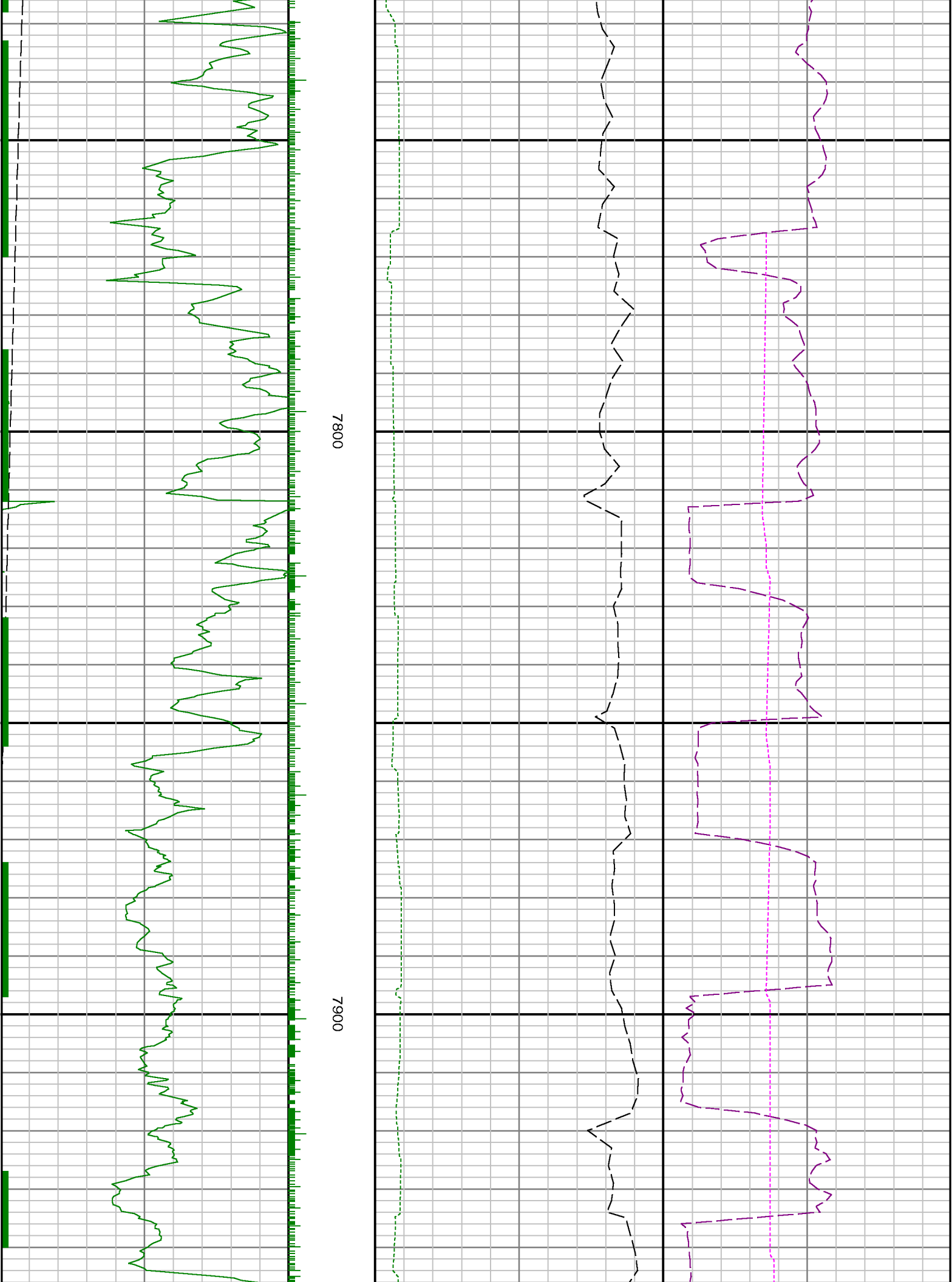


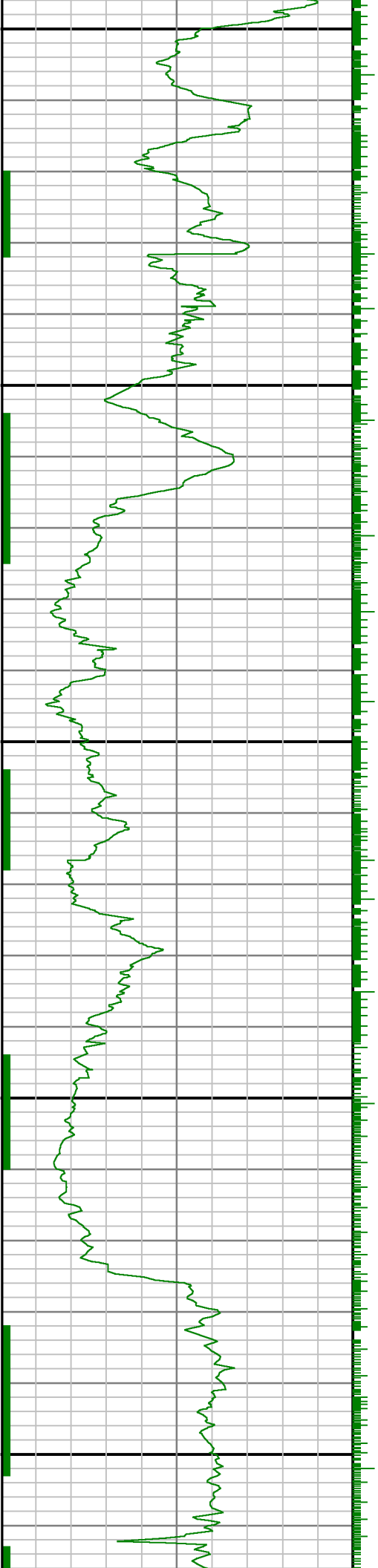


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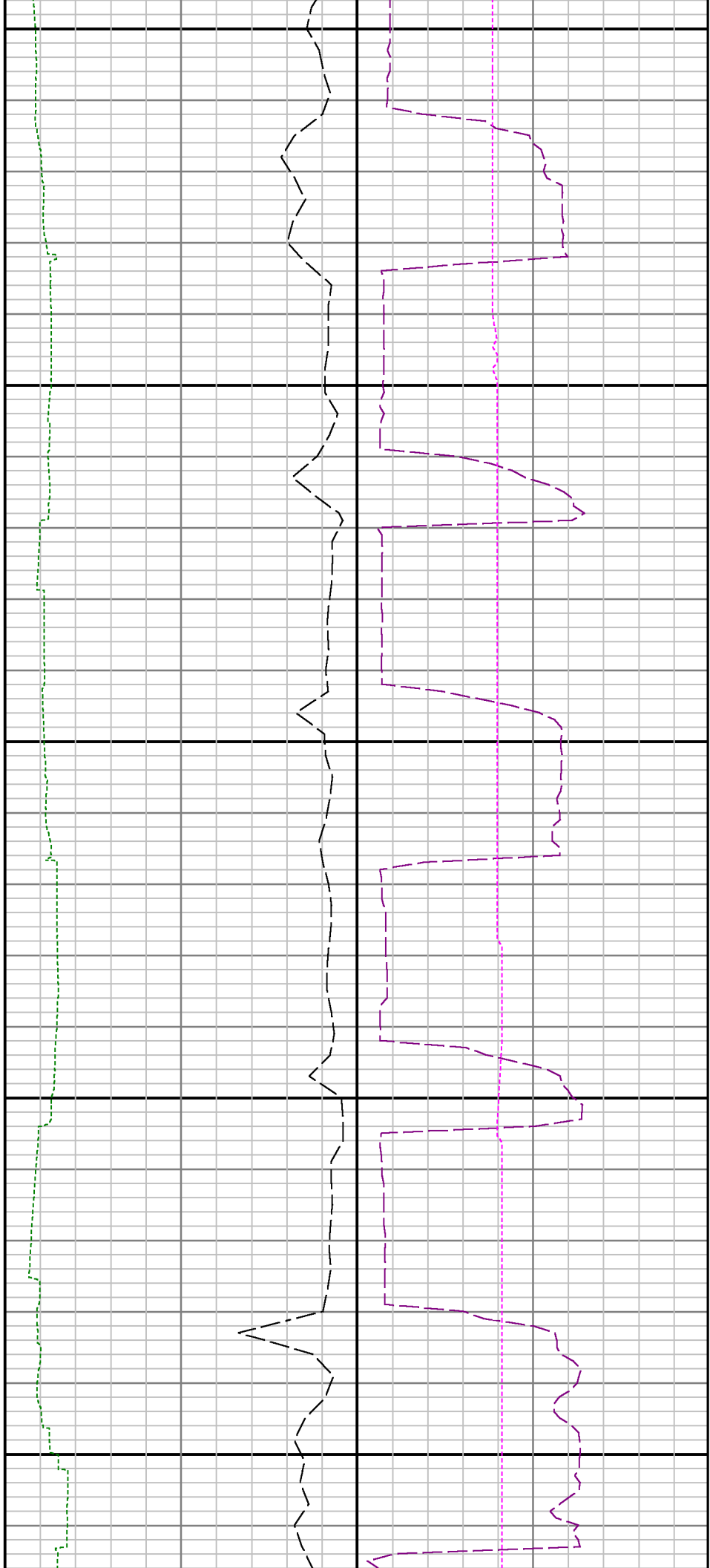


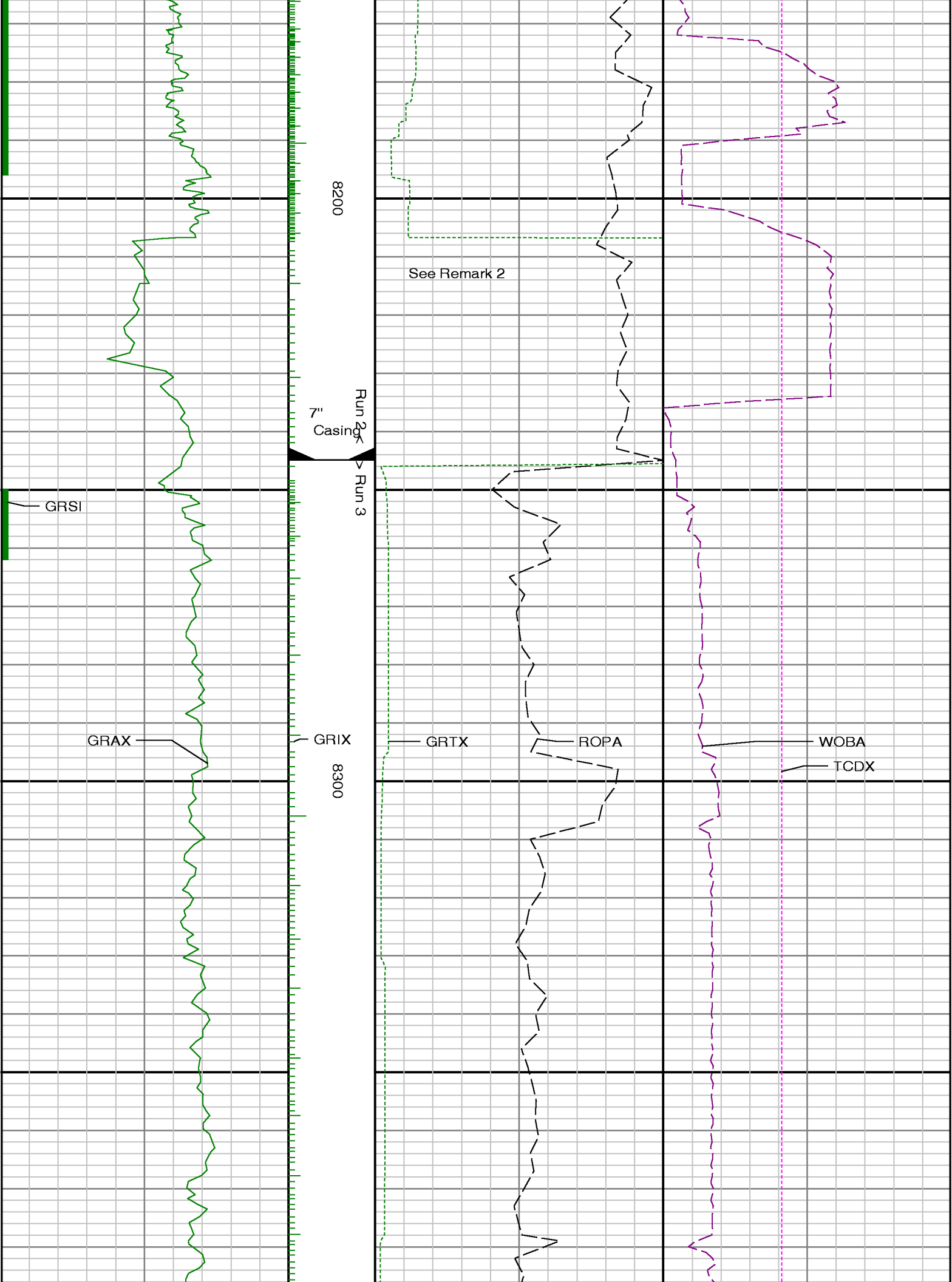


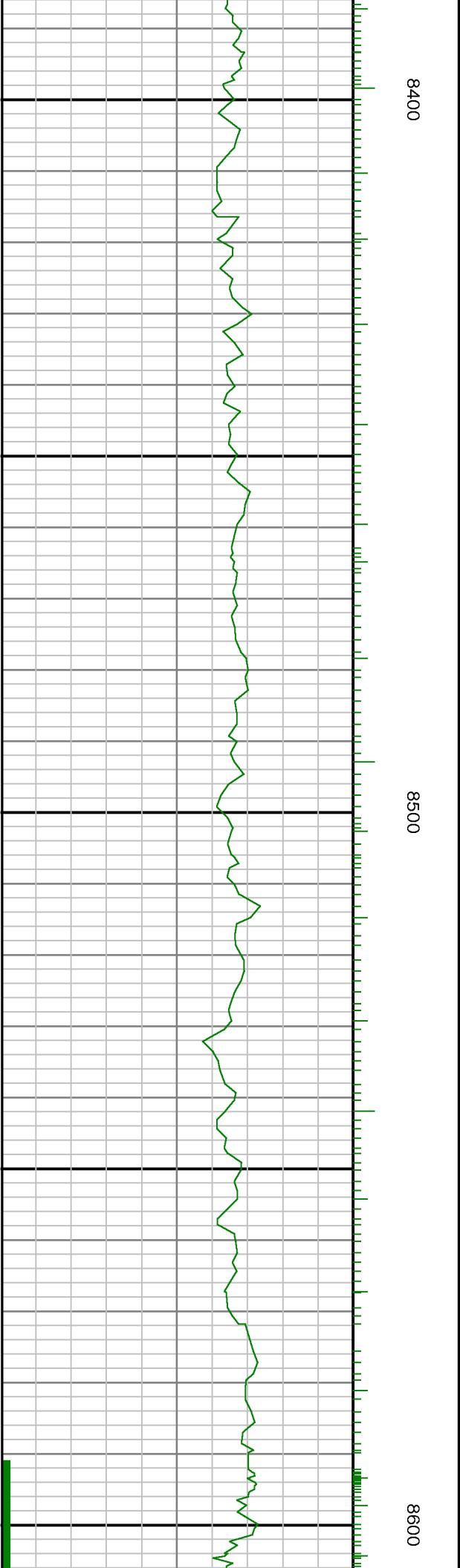
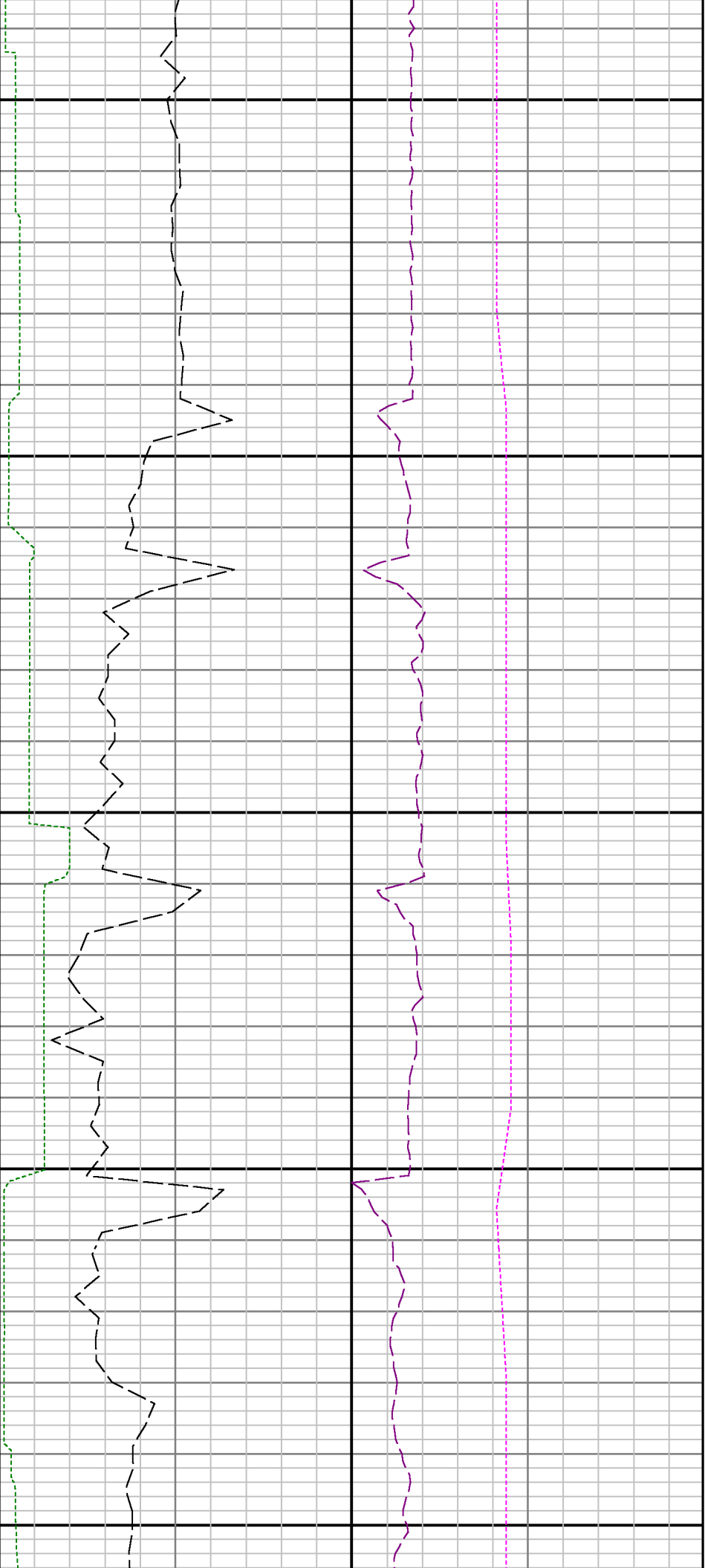


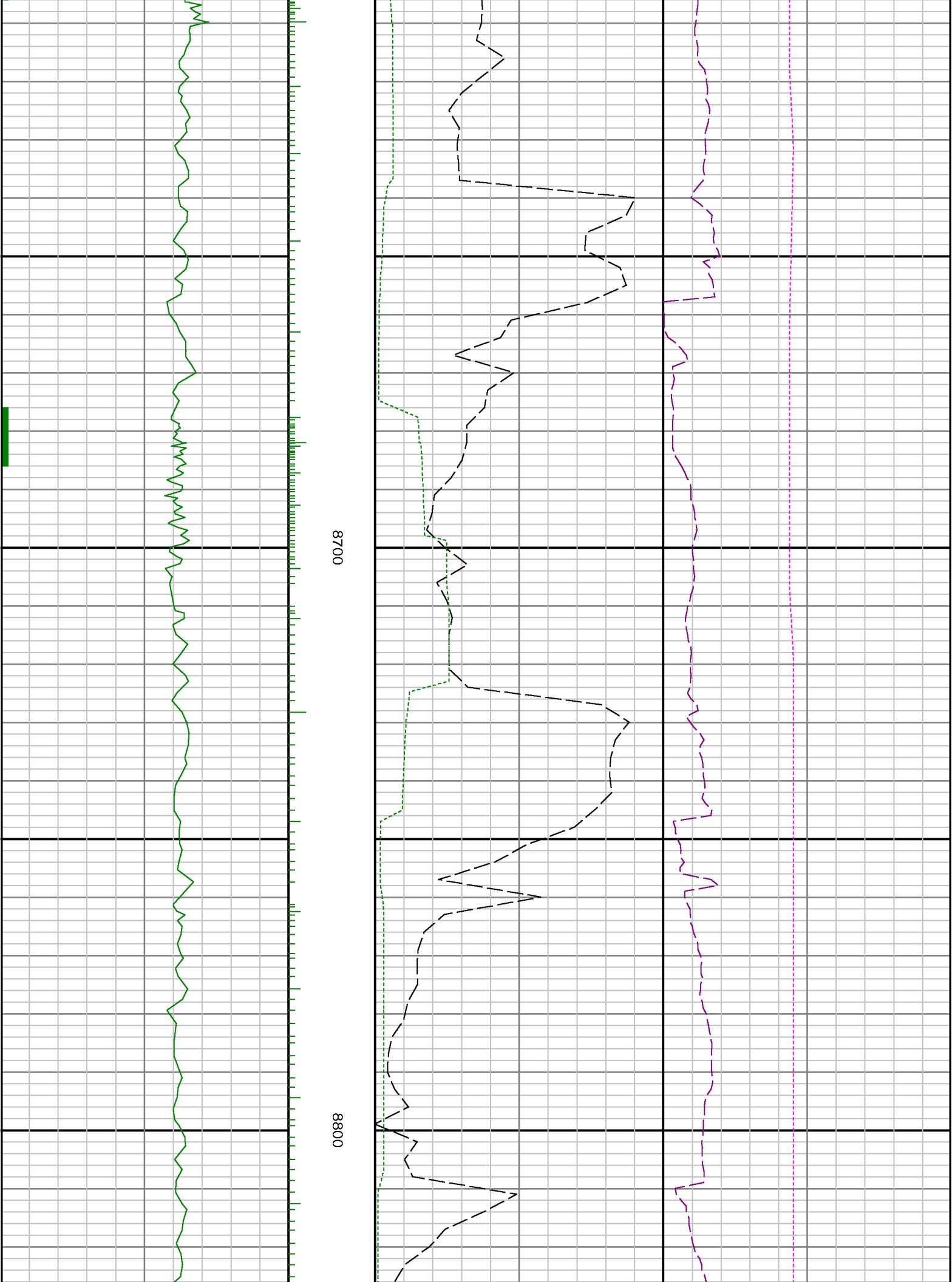
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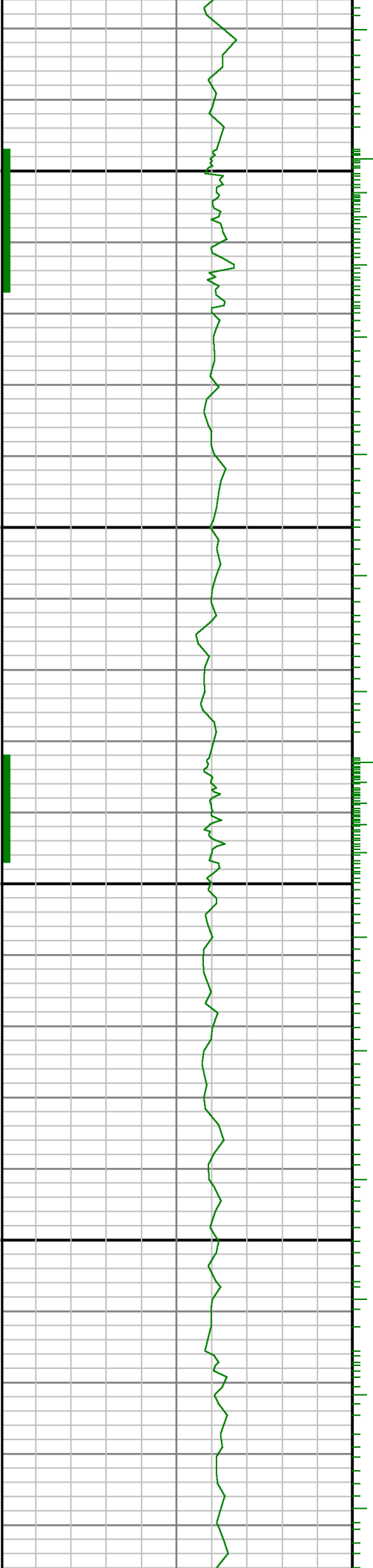
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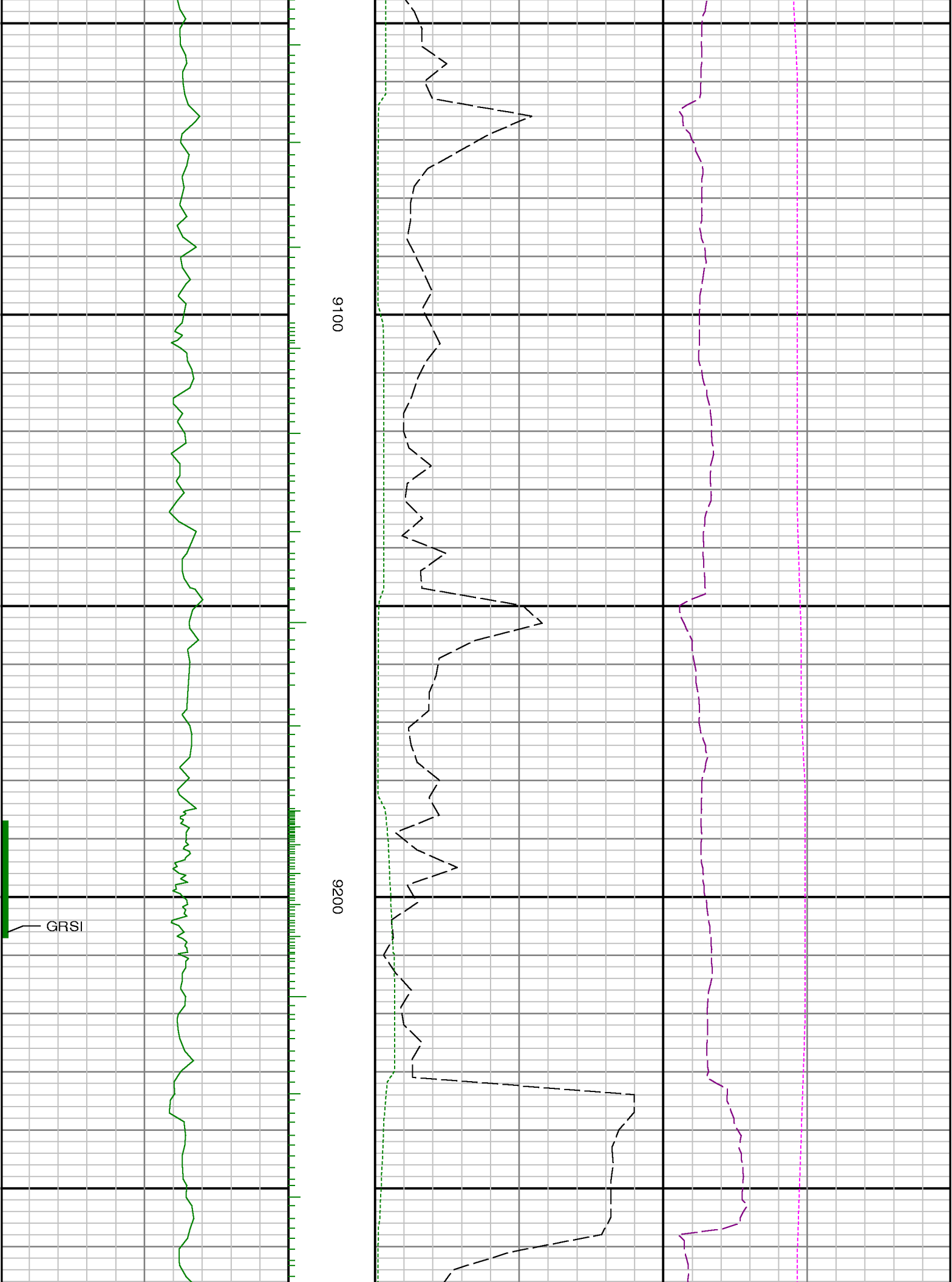


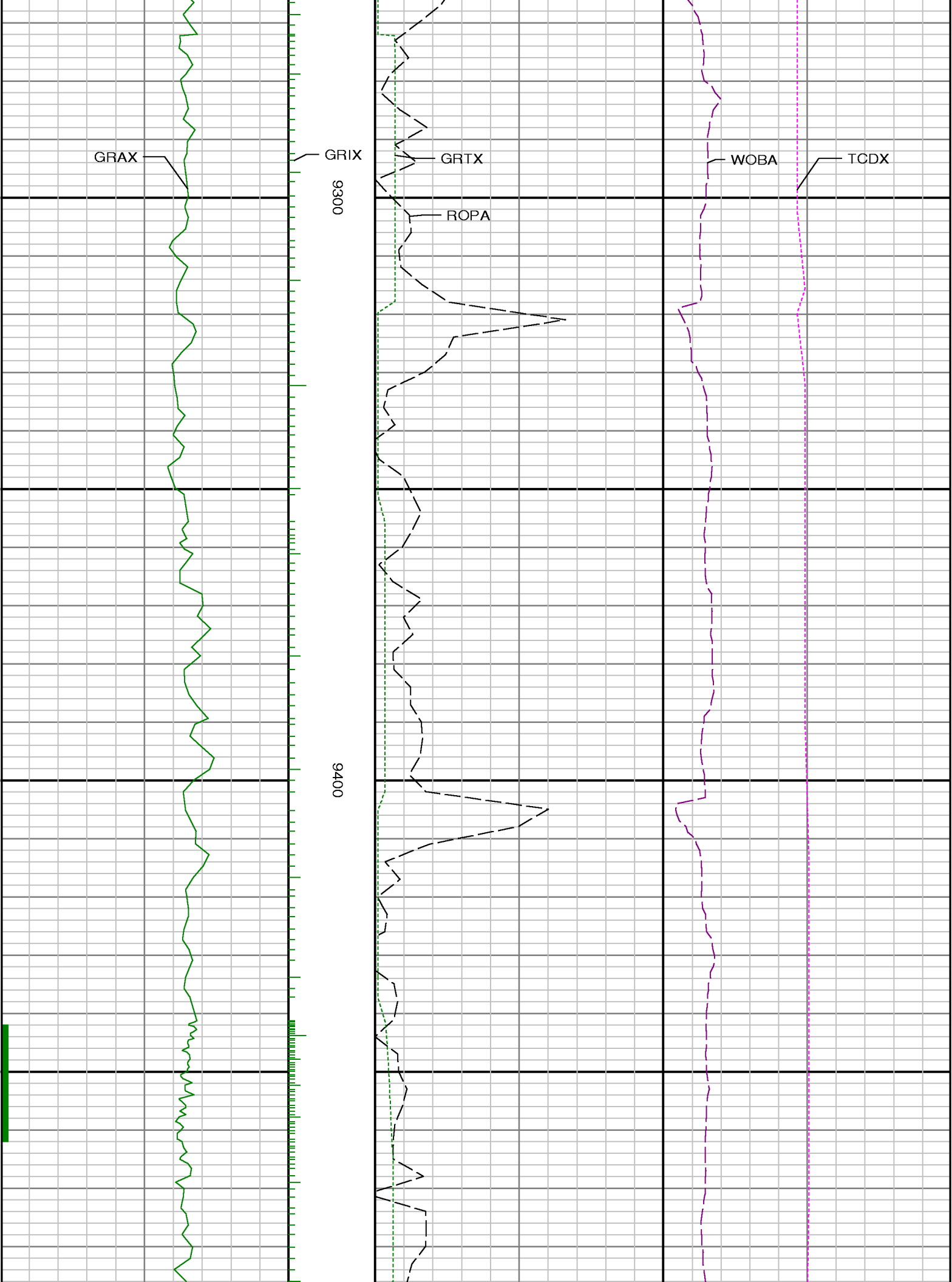


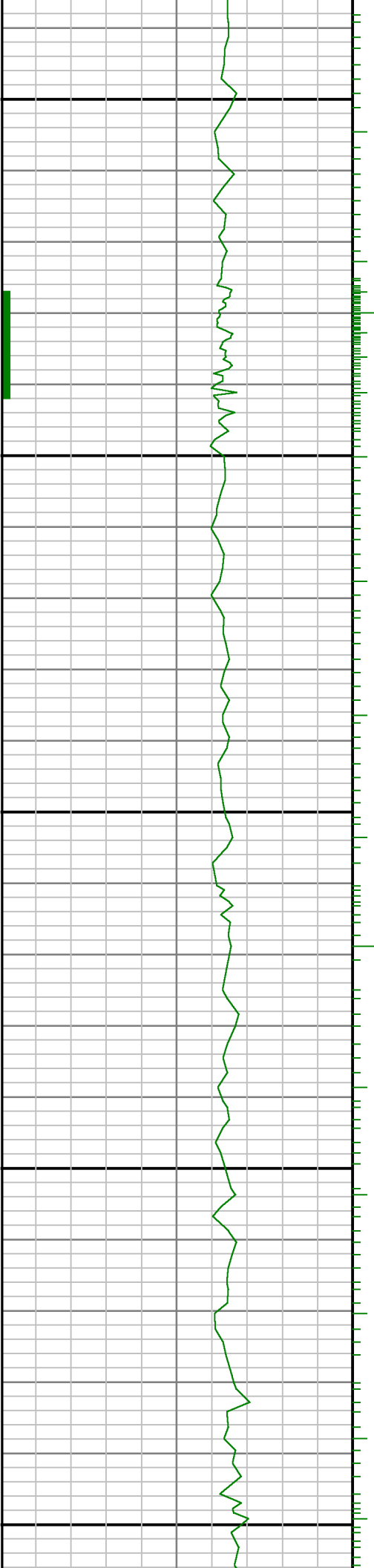
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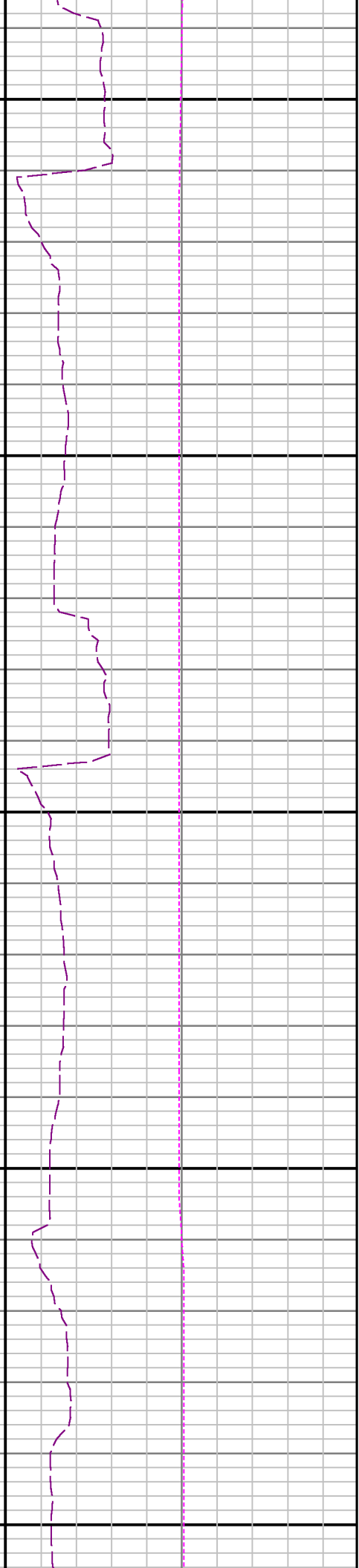
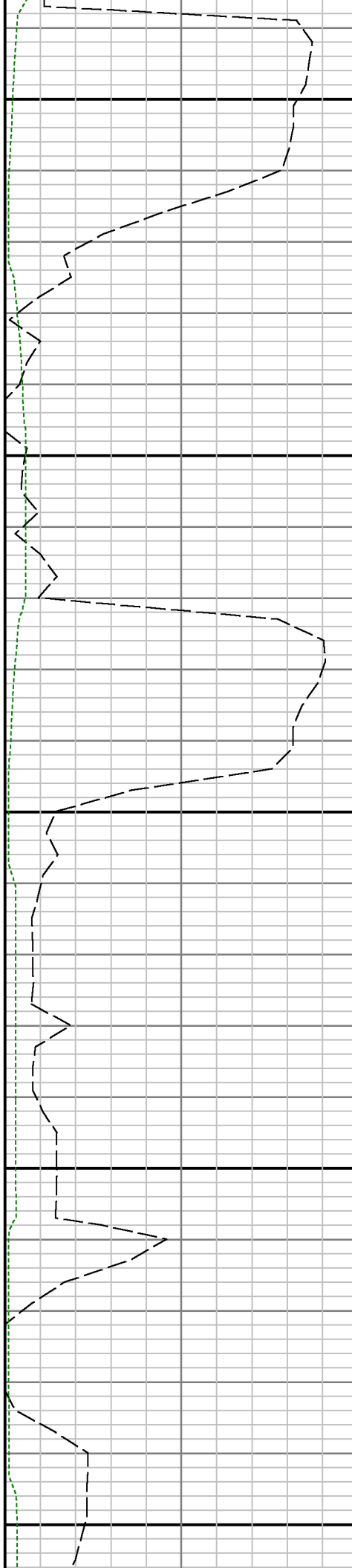


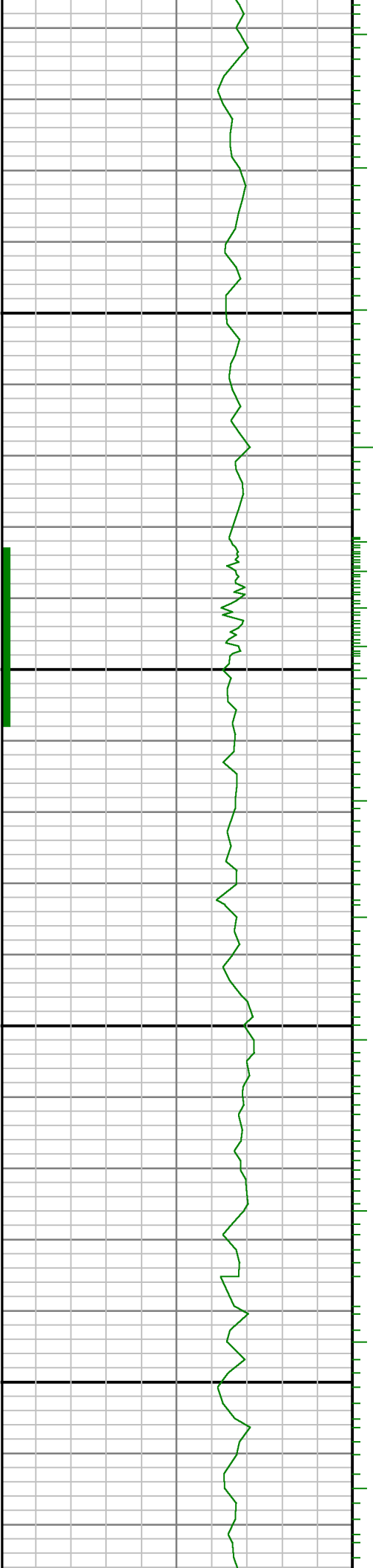


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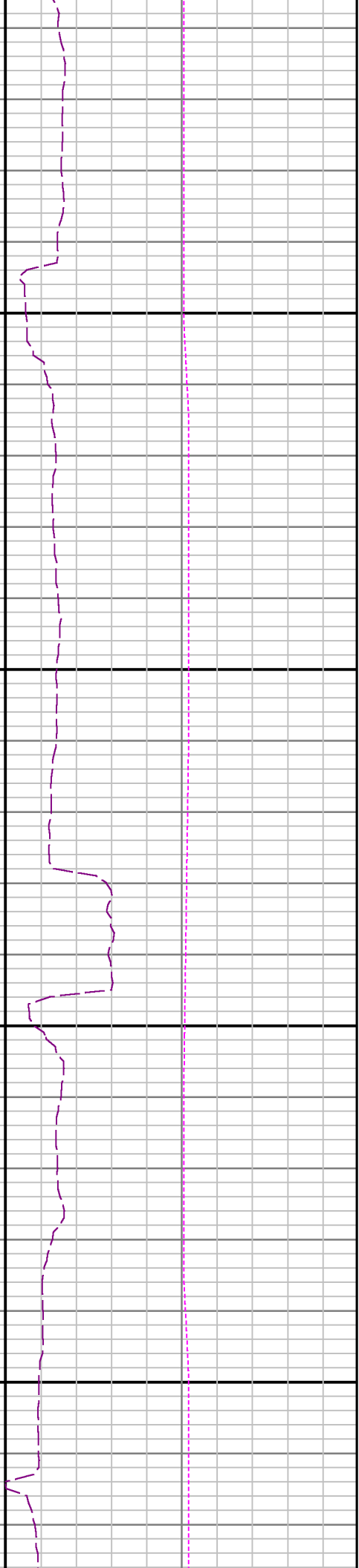
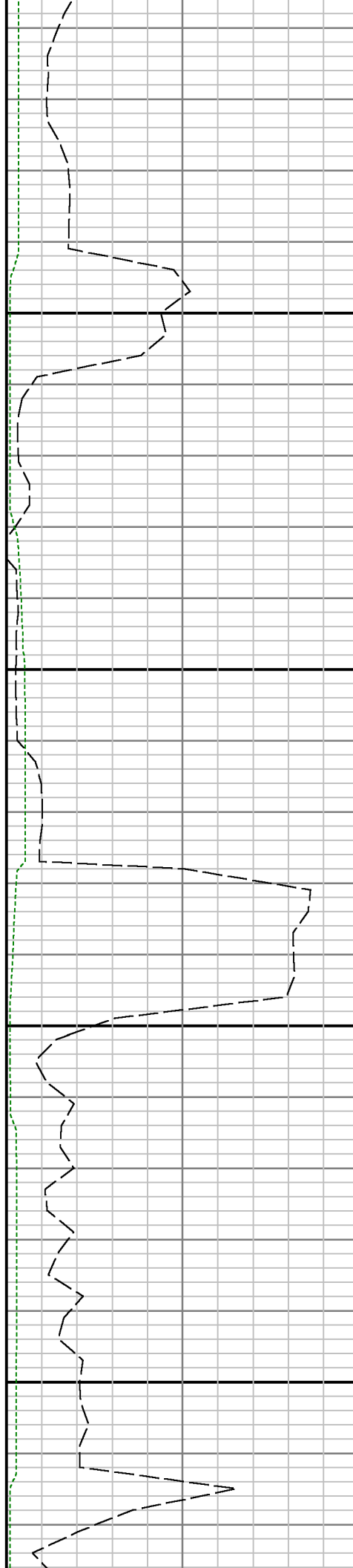
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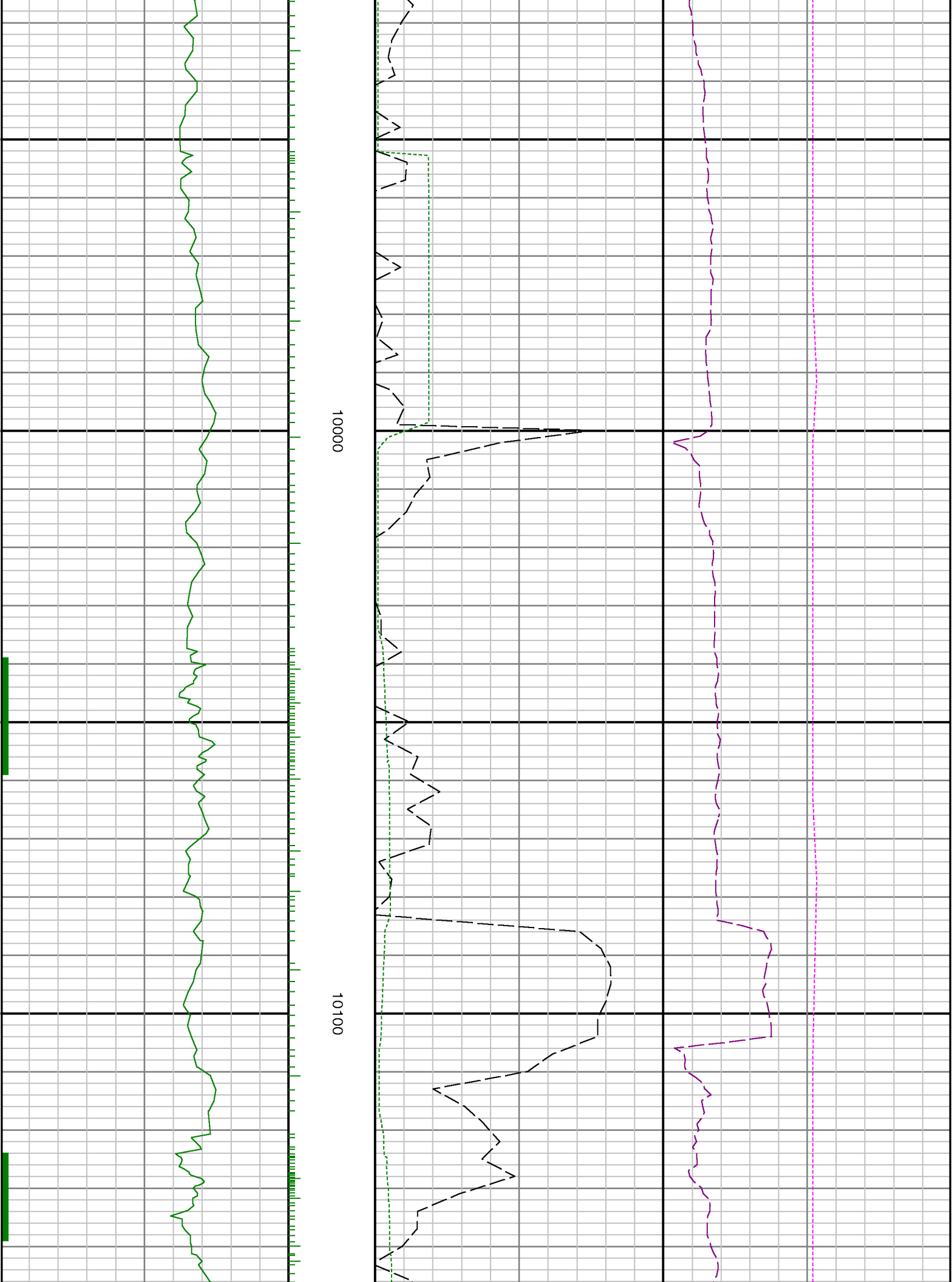


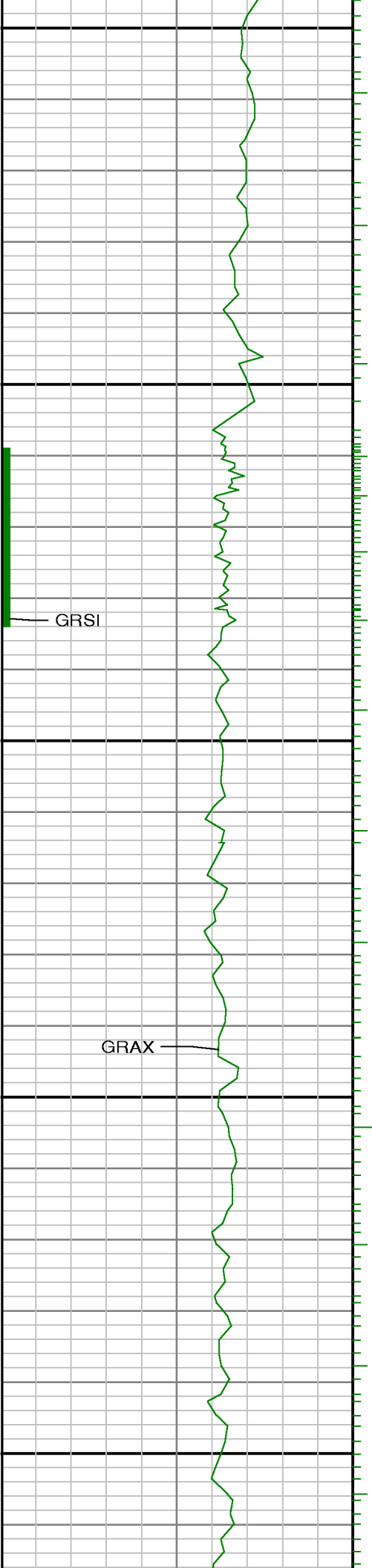


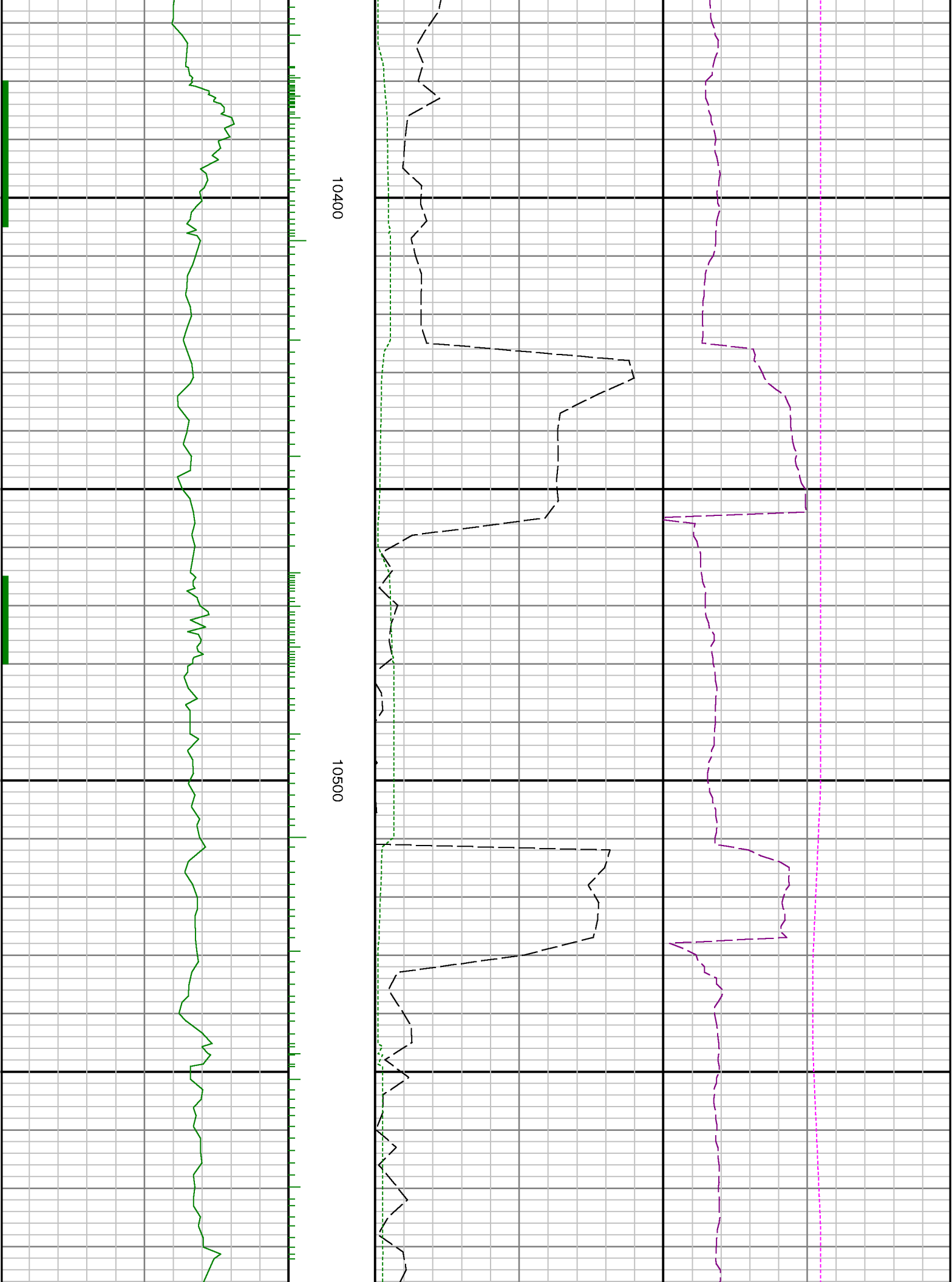
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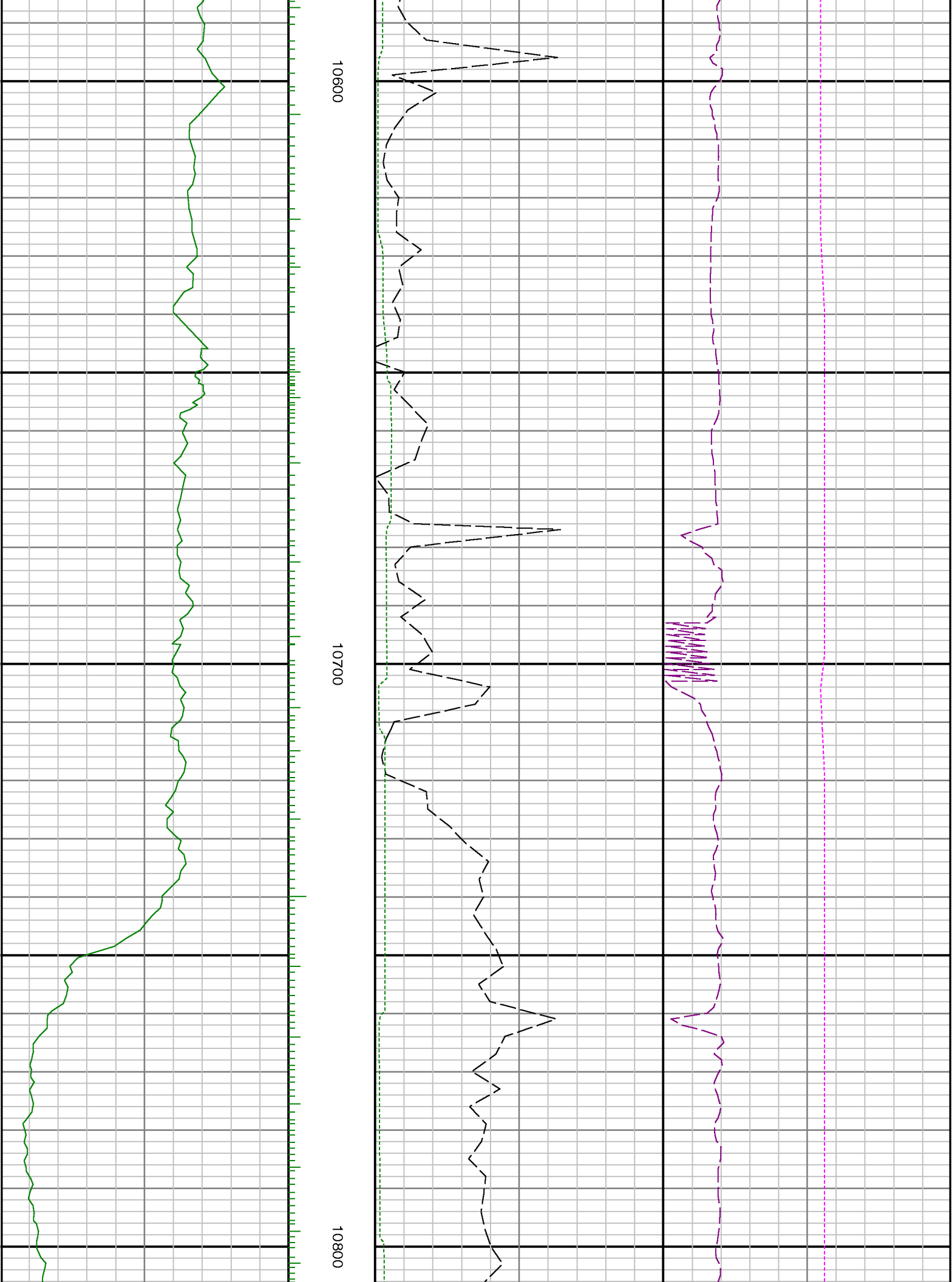
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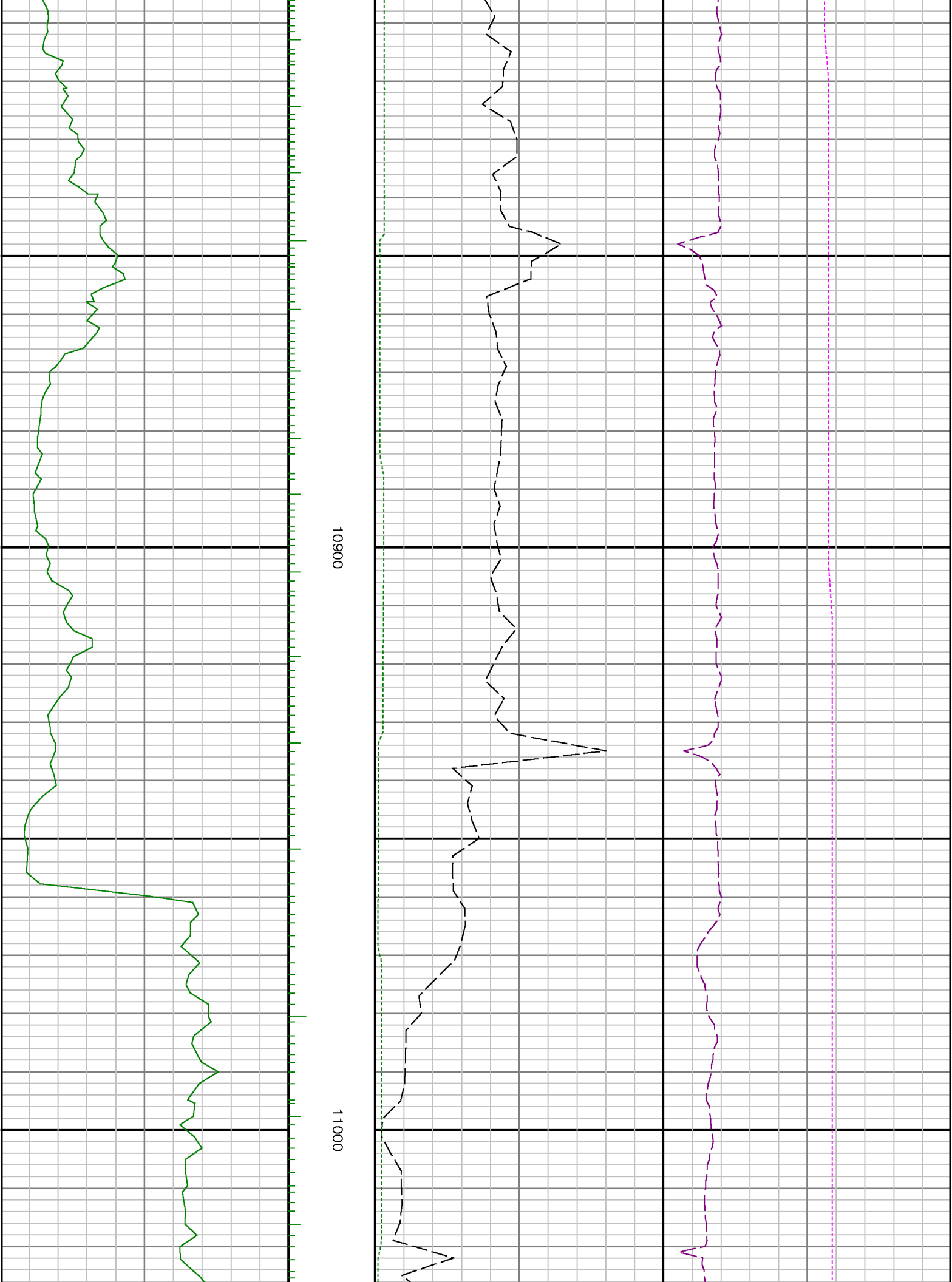


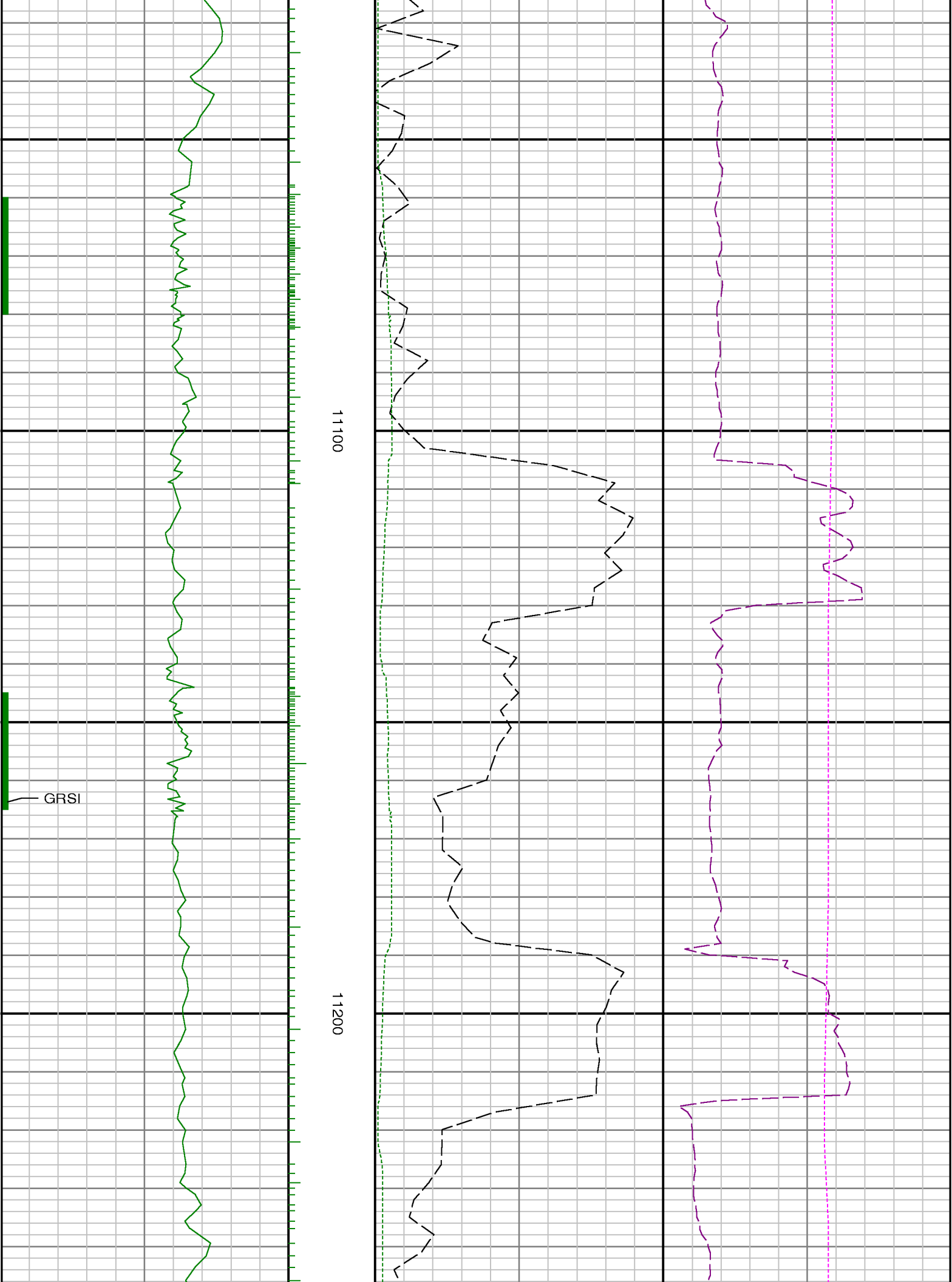


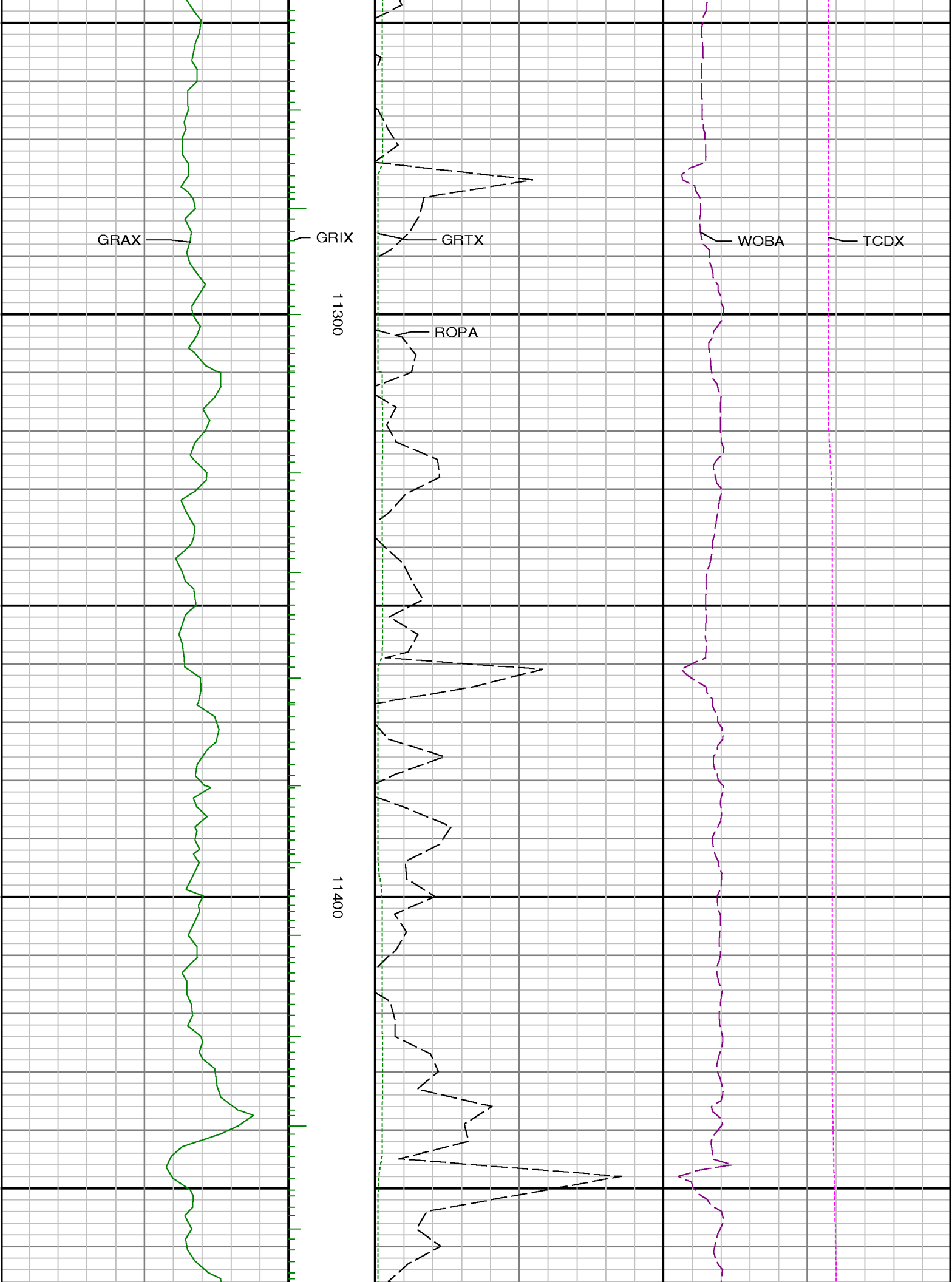


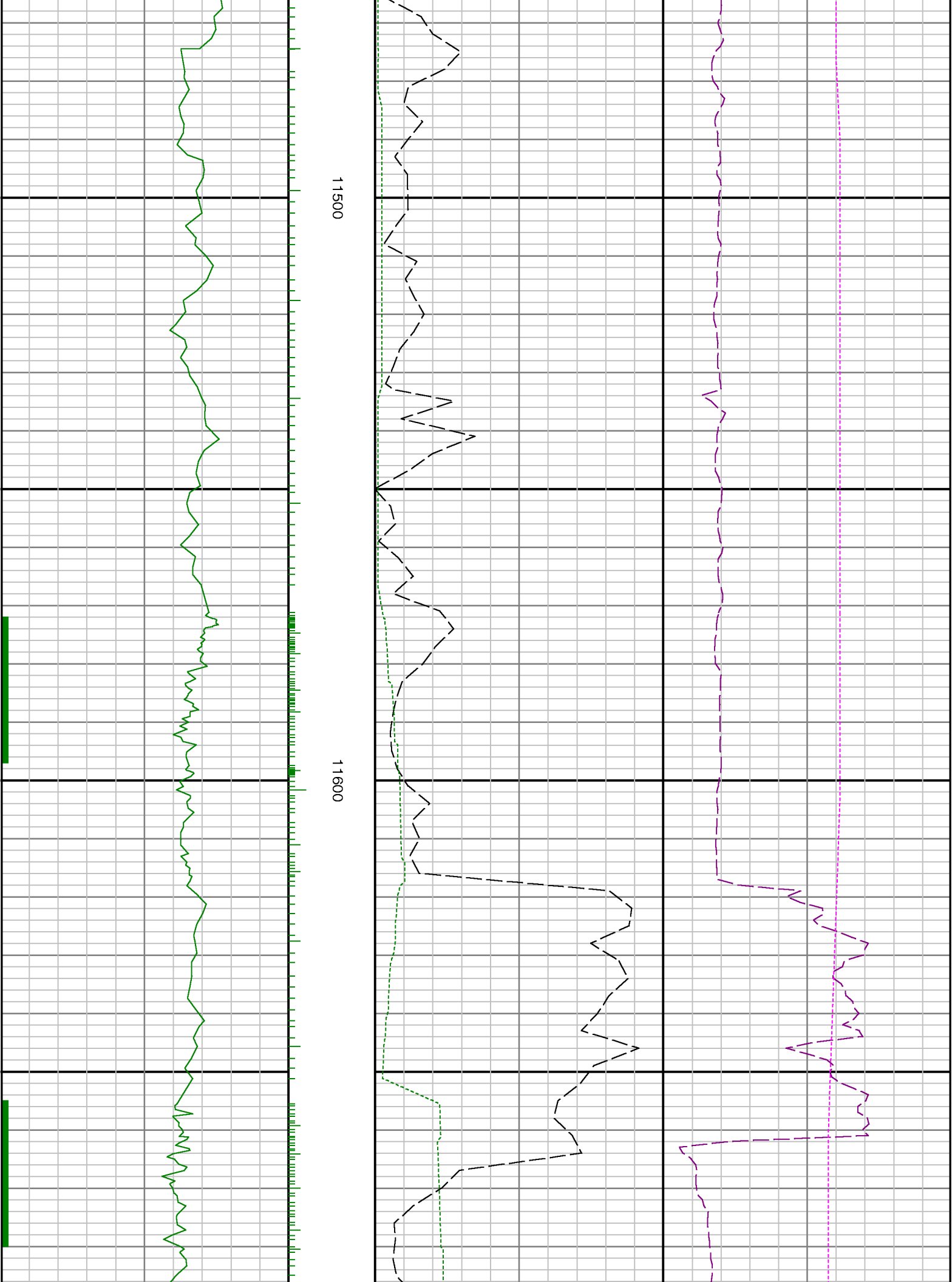


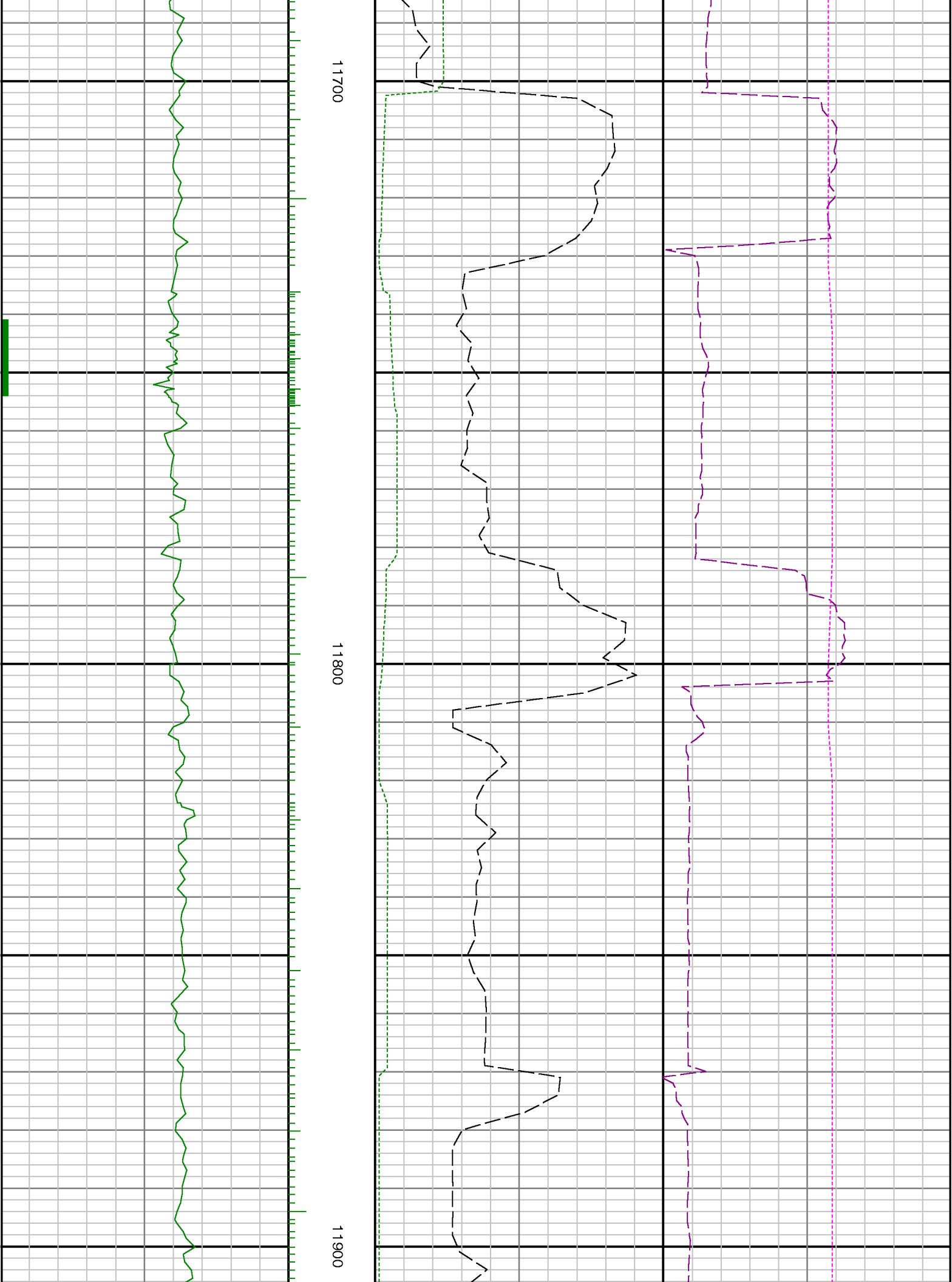


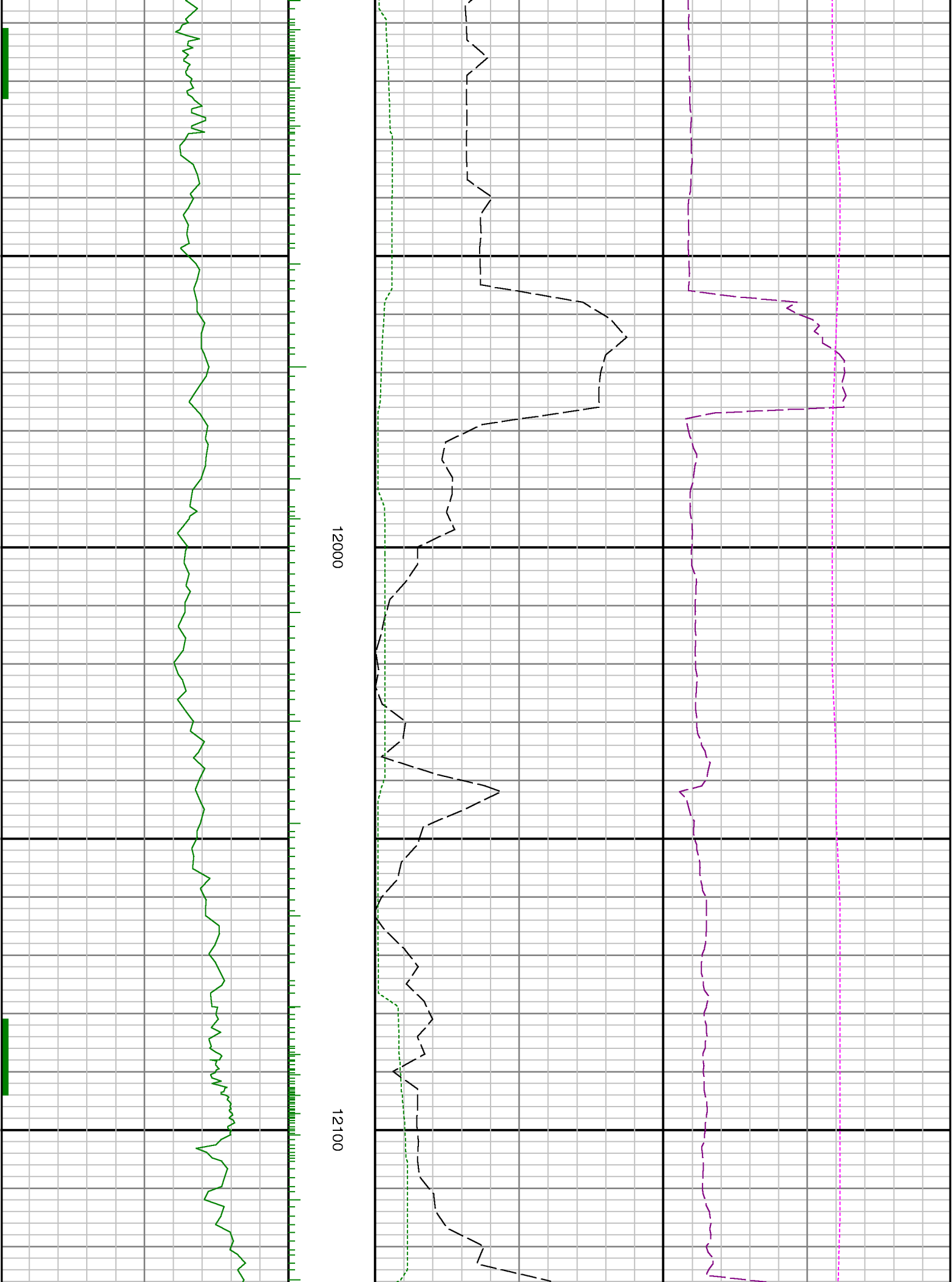


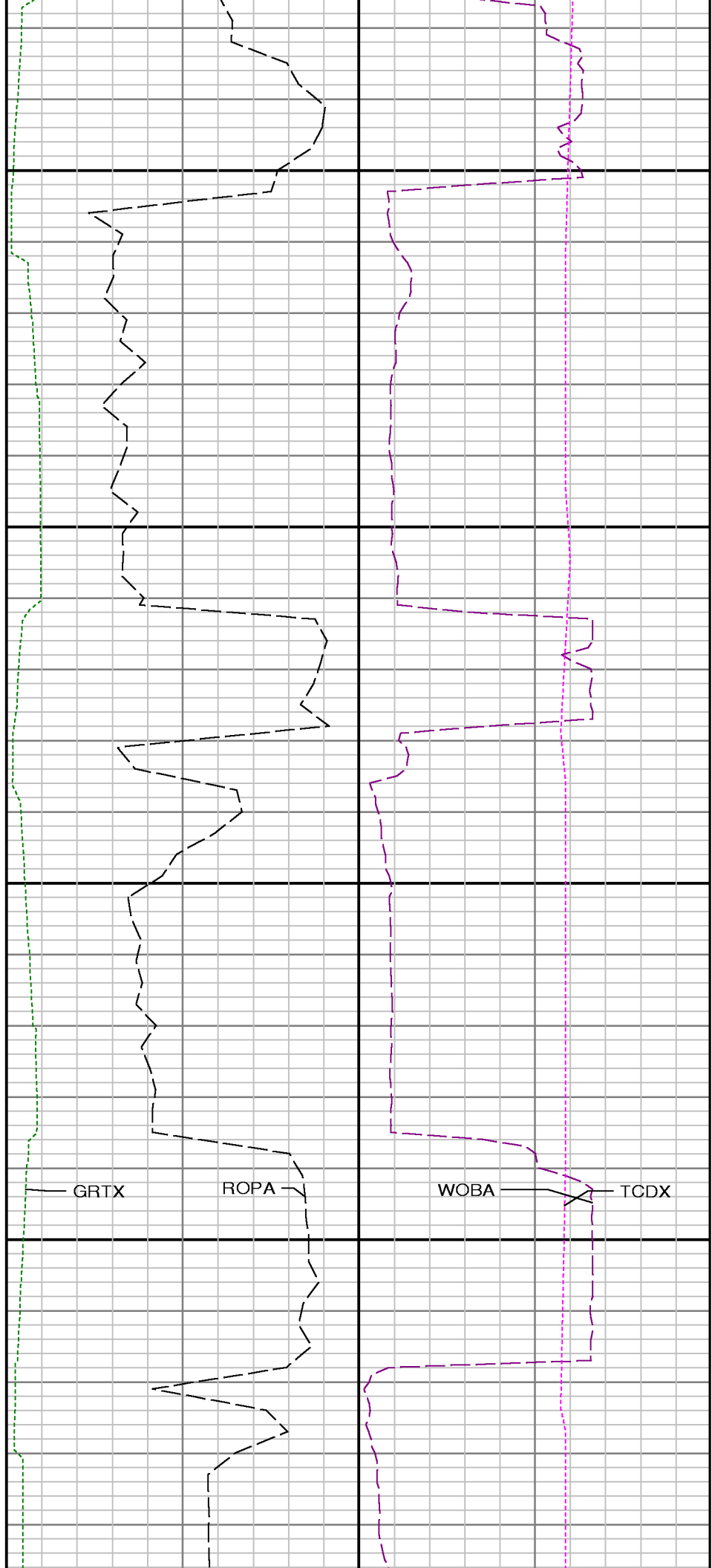
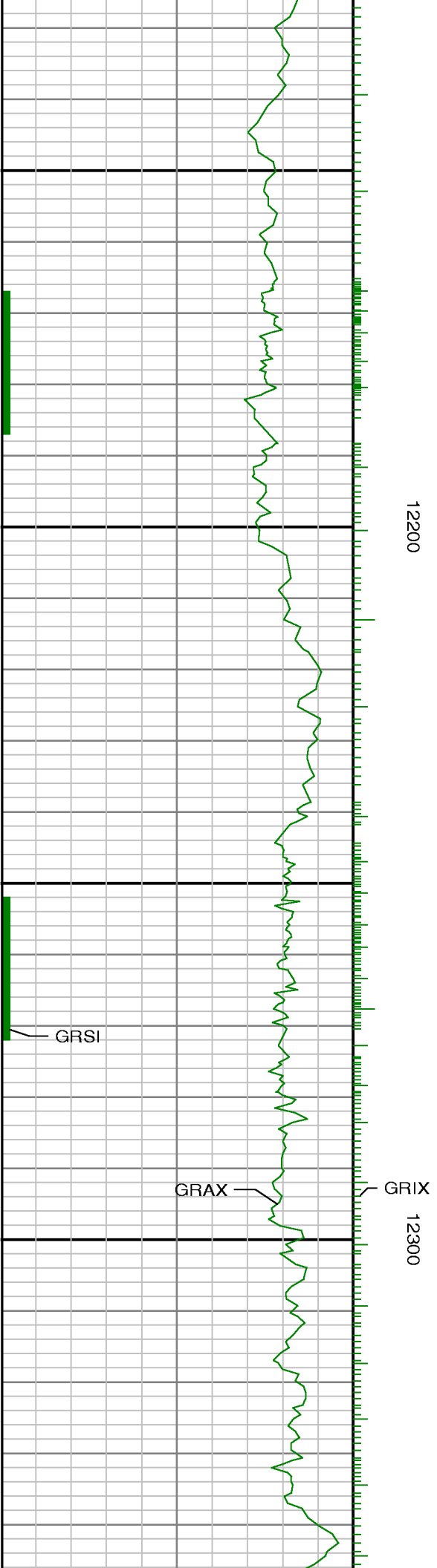








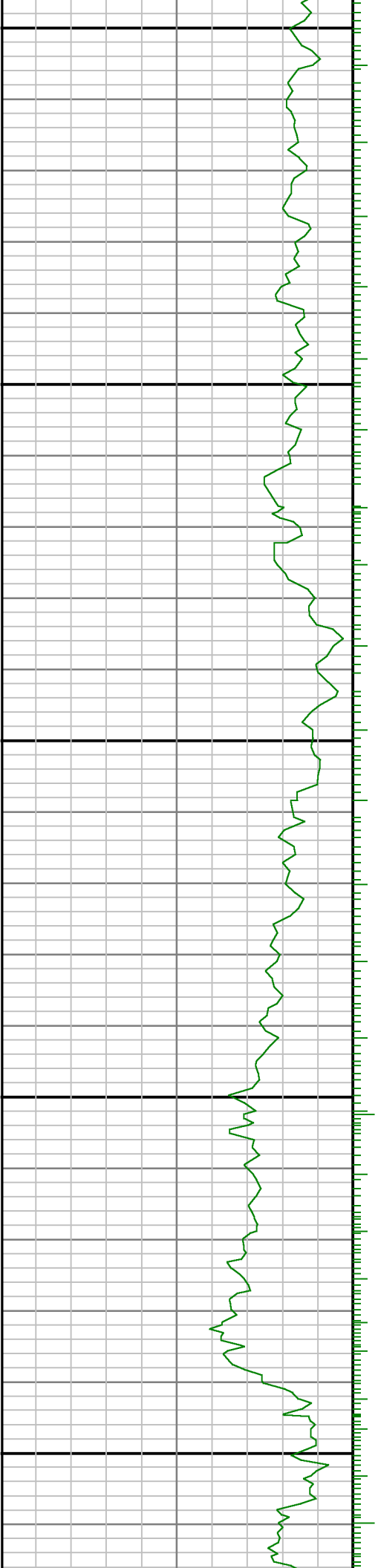


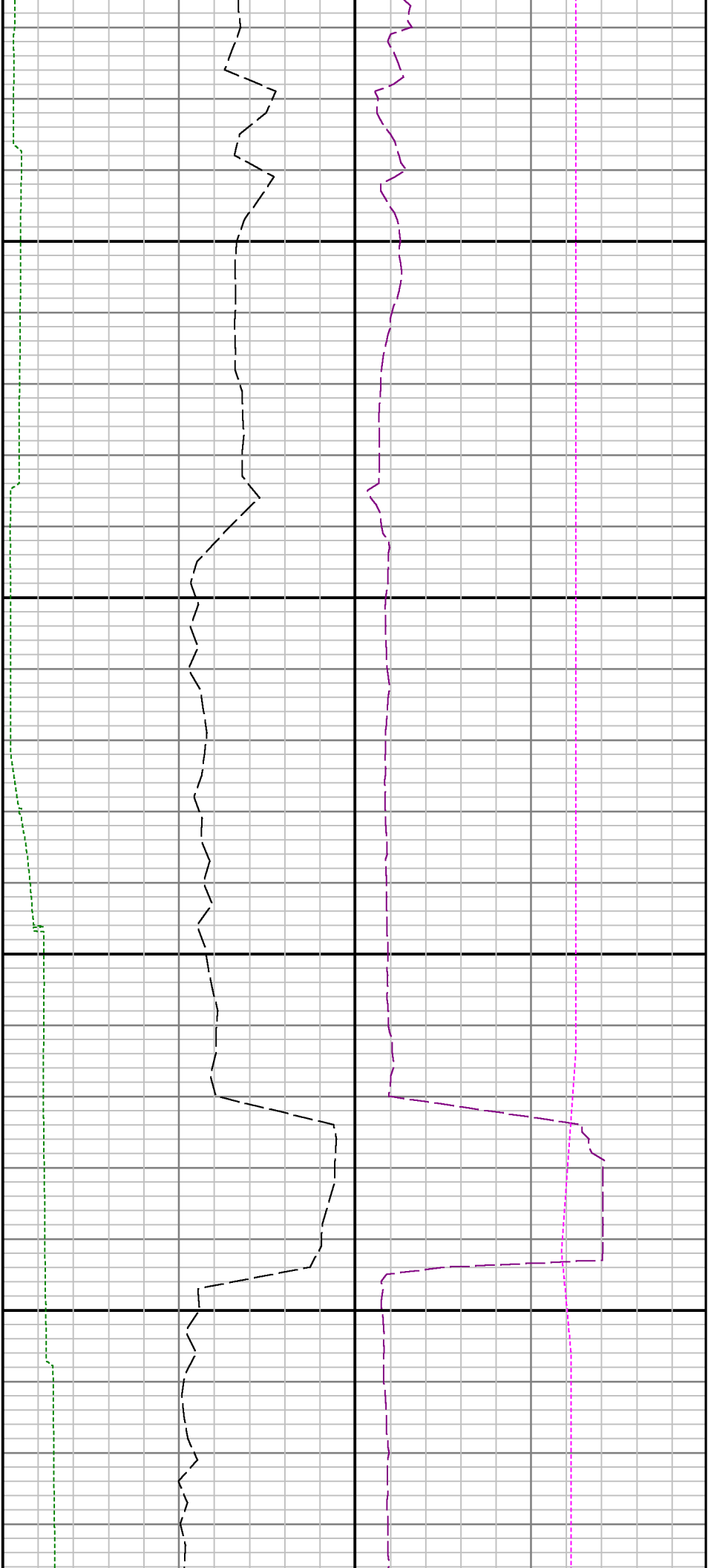




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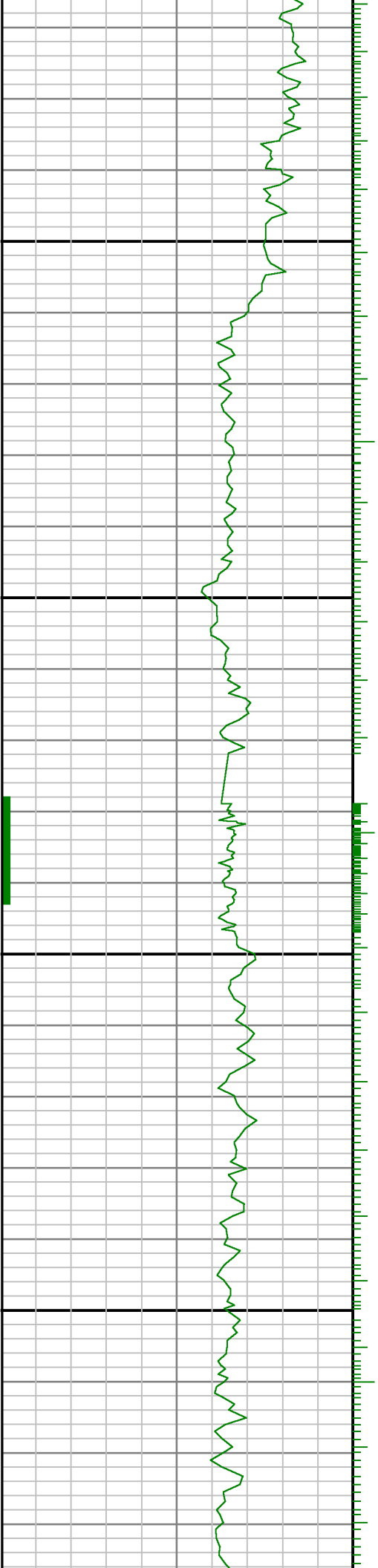
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