Realtime Log

BAKER HUGHES

Natural Formation Evaluation
Gamma Ray

Scale: 1:240 Measured Depth

Company: Kerr-McGee Oil & Gas Onshore LP
Well: Barefoot State 34N-25HZ
Field: Weld County (Kerr Mcgee)
Region: Continental US **Country:** United States

Status: **Final Print**

API Number: 05123391850000

Surface Location:
Latitude: 40° 11' 33.765" N
Longitude: 104° 56' 41.366" W
Section 25 TWN: 3N Range 68W

Other Services:
Directional
VSS

Permanent Datum (P.D.):	Ground Level	Elevation:	4864.00 ft.
Log Measured From:	Kelly Bushing	16.00 ft.	Above P.D.
Depth Reference:	Driller's Depth		

Elevations:
KB: 4880.00 ft.
DF: N/A
GL: 4864.00 ft.

Interval Logged		Dates		Magnetic Field Reference			
Top:	6800 ft.	Date From:	03/Aug/14	Dip Angle:	66.88 °	Azi Reference North:	True
Bottom:	12770 ft.	Date To:	10/Aug/14	Total		Mag to Reference	
		Spud Date:	03/Aug/14	Field Strength:	52670.8 nT	North Correction:	8.67 °

Borehole Record			Casing Record			
Hole Size	From	To	Size	Weight	From	To
8.750 in.	1246 ft.	7874 ft.	9.625 in.	36.00 lb/ft	Surface	1236 ft.
6.125 in.	7874 ft.	12829 ft.	7.000 in.	26.00 lb/ft	Surface	7864 ft.

Mud Record			Deviation Record			
Type	From	To	Hole Size	Interval	Inc / Az (Start)	Inc / Az (End)
Drill Water	Surface	7874 ft.	8.750 in.	6628 ft.	0.5 ° / 109.9 °	80.0 ° / 265.4 °
LSND	7874 ft.	12829 ft.	6.125 in.	4955 ft.	91.2 ° / 269.6 °	90.5 ° / 271.0 °
					/	/
					/	/
					/	/
					/	/

Acquisition System	Software Version	Other	
Advantage	2.20U4	Rig: / Contractor:	Xtreme 24 / Xtreme Drilling
PATS	6.4.1.34	Job No:	6563208
		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 Top (ft.)	Logged Interval Bottom (ft.)	Bit Depth Interval From (ft.)	Bit Depth Interval To (ft.)	Date / Time Start	Date / Time End	Circ. Time (hrs.)
1	1	1	8.750	PDC	2.000	Steerable	6800	7815	1246	7874	03/Aug/2014 16:00	05/Aug/2014 15:00	32.6
2	2	2	6.125	PDC	6.000	Steerable	7815	8391	7874	8456	06/Aug/2014 16:40	07/Aug/2014 16:15	9.1
3	3	3	6.125	PDC	6.000	Steerable	8391	8497	8456	8557	07/Aug/2014 15:30	08/Aug/2014 02:00	2.5
4	4	4	6.125	PDC	6.000	Steerable	8497	8497	8557	8557	08/Aug/2014 02:30	08/Aug/2014 05:00	0
5	5	5	6.125	PDC	6.000	Steerable	8497	12770	8557	12829	08/Aug/2014 06:40	10/Aug/2014 51.6	51.6

Crew

Name	Arrive	Depart	Name	Arrive	Depart	Name	Arrive	Depart
	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite

Osagie Otoikhine	03/Aug/2014	11/Aug/2014	Andrew Overbey	03/Aug/2014	11/Aug/2014			

Mud Properties Record

Date / Time	LWD Run No.	Measured Depth (ft.)	Mud Type	Density (ppg)	Viscosity (sec/qt)	pH	Fluid Loss (cc)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
03/Aug/2014 12:52	1	1352	Drill Water	8.5	30	8.5	N/A	2 / 97	Flow Line	1600	N/A
04/Aug/2014 18:00	1	5761	Drill Water	8.9	37	8.8	N/A	0 / 96	Flow Line	1500	N/A
06/Aug/2014 18:00	2	7874	LSND	10.3	45	9.3	N/A	2 / 89	Flow Line	1800	N/A
09/Aug/14 18:00	5	10859	LSND	9.9	47	9.7	N/A	5 / 86.3	Flow Line	1400	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	11954358	Directional	62.04	6.750	2.813
1	SRIG	10266573	Gamma	58.66	6.750	2.813
2	DIR	11730419	Directional	61.61	4.750	2.750
2	SRIG	12595022	Gamma	58.23	4.750	2.750
3	DIR	11730419	Directional	61.58	4.750	2.750
3	SRIG	12595022	Gamma	58.20	4.750	2.750
4	DIR	13051163	Directional	61.87	4.750	2.688
4	SRIG	10658452	Gamma	58.49	4.750	2.688
5	DIR	11698952	Directional	59.94	4.750	2.688
5	SRIG	11703934	Gamma	56.52	4.750	2.688

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.) Baker Hughes Run 1 utilized a 6 1/2 inch NaviTrak (Directional only) tool behind an 8 3/4 inch bit and steerable assembly from 1246 feet to 6800 feet MD (

1246 feet to 6519 feet TVD).

2.) Baker Hughes Run 1 utilized a 6 1/2 inch NaviGamma (Directional and Gamma Ray) tool behind an 8 3/4 inch bit and steerable assembly from 6800 feet to 7874 feet MD (6519 feet to 7182 feet TVD).

3.) Baker Hughes Runs 2, 3, 4 and 5 utilized a 4 3/4 inch NaviGamma (Directional and Gamma Ray) tool behind a 6 1/8 inch bit and steerable assembly from 7874 feet to 12829 feet MD (7182 feet to feet 7080 TVD).

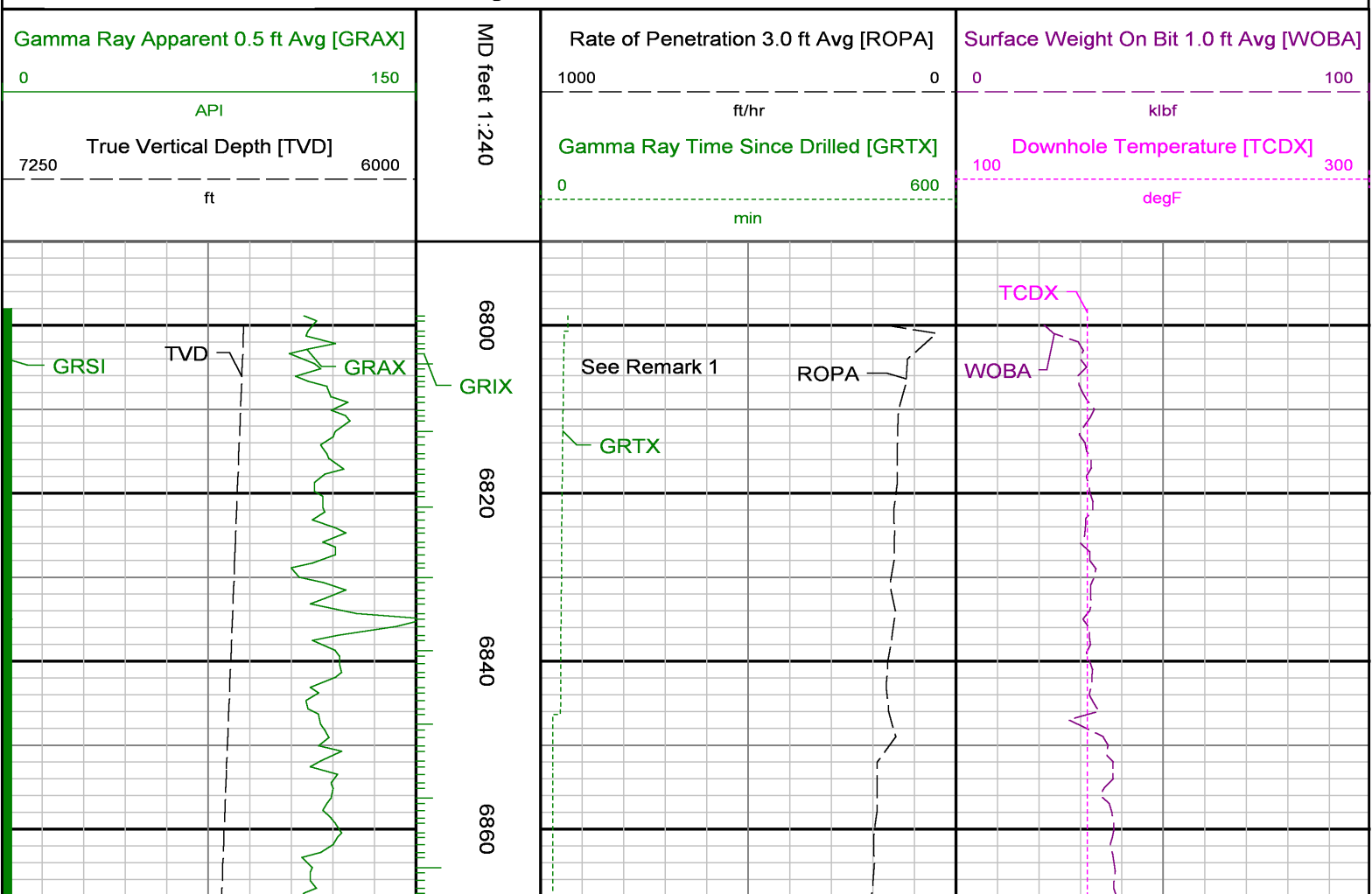
4.) A sliding indicator is shown on the left side of track 1 as a heavy line. This indicator has been depth-shifted to the Gamma Ray sensor offset to correspond with Gamma Ray data acquired while sliding.

Remarks

Number	Measured Depth (ft.)	Hole Section (in.)	LWD Run No.	Remark
1	6800	8.750	1	The interval from surface to 6800 feet MD (6519 feet TVD) was not logged since logging services began at kick off point.
2	7815	8.750	1	The Interval from 7815 feet to 9698 feet MD (7175 feet to 7168 feet TVD) was logged more than 18 hours after drilling due to tripping for casing and picking up lateral BHAs.
3	12770	6.125	5	The interval from 12770 feet to 12829 feet MD (7080 feet to 7080 feet TVD) was not logged due to bit sensor offset at TD.

BAKER HUGHES

Company : Anadarko
Well : Barefoot State 34N-25HZ
Interval : 6790.00 - 12830.00 feet
Created : 10/Aug/2014 10:08:58 PM



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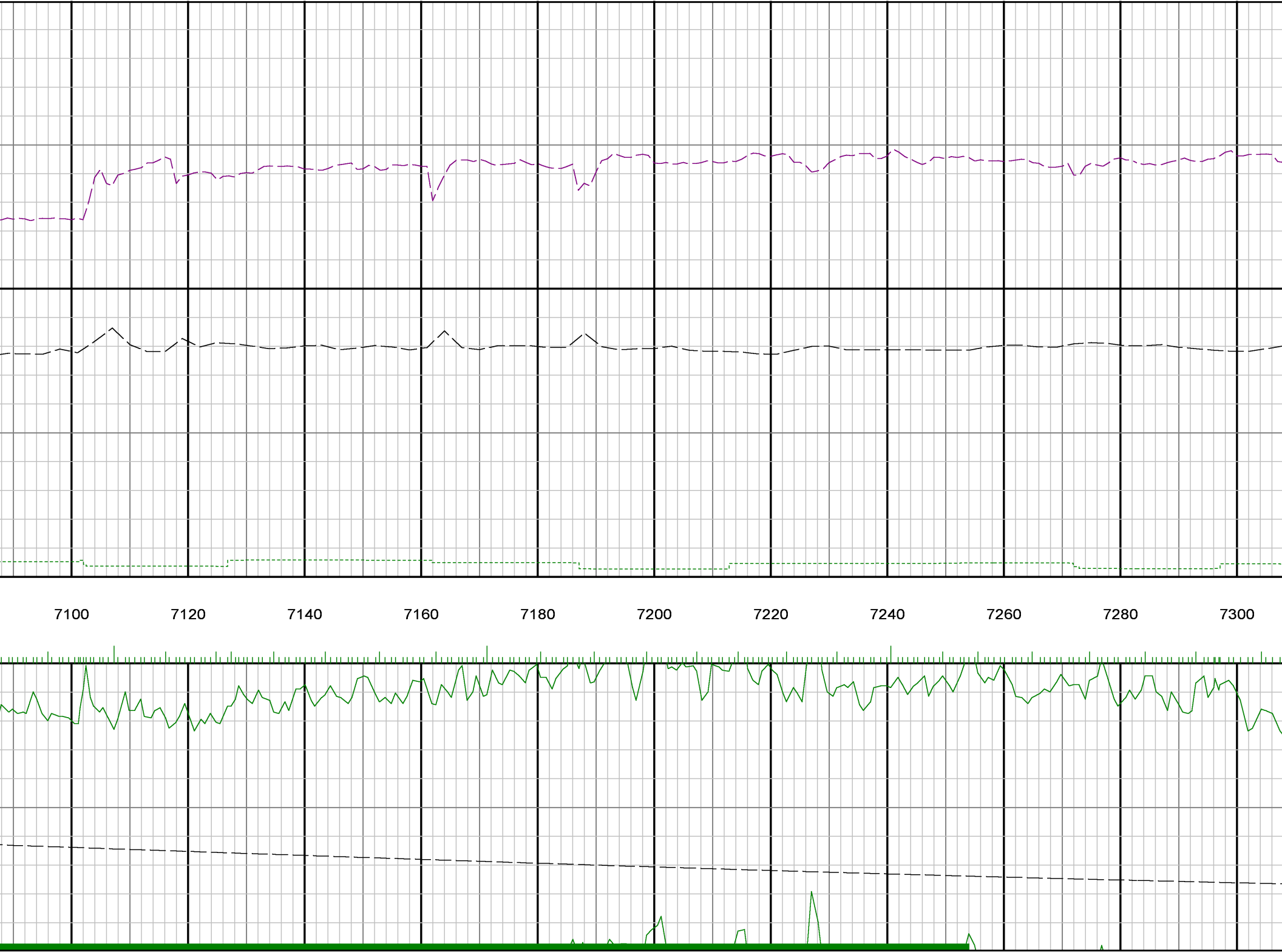
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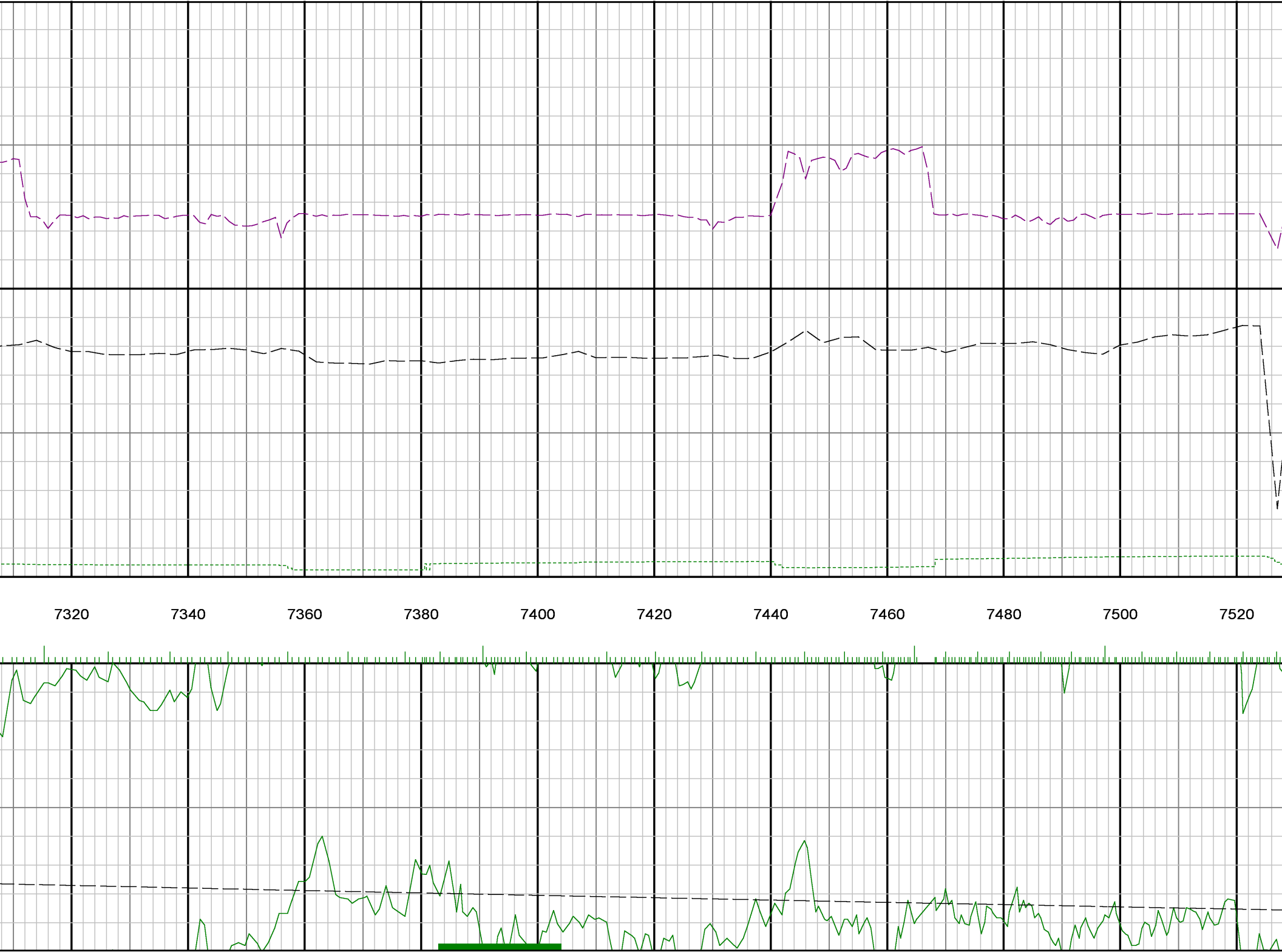
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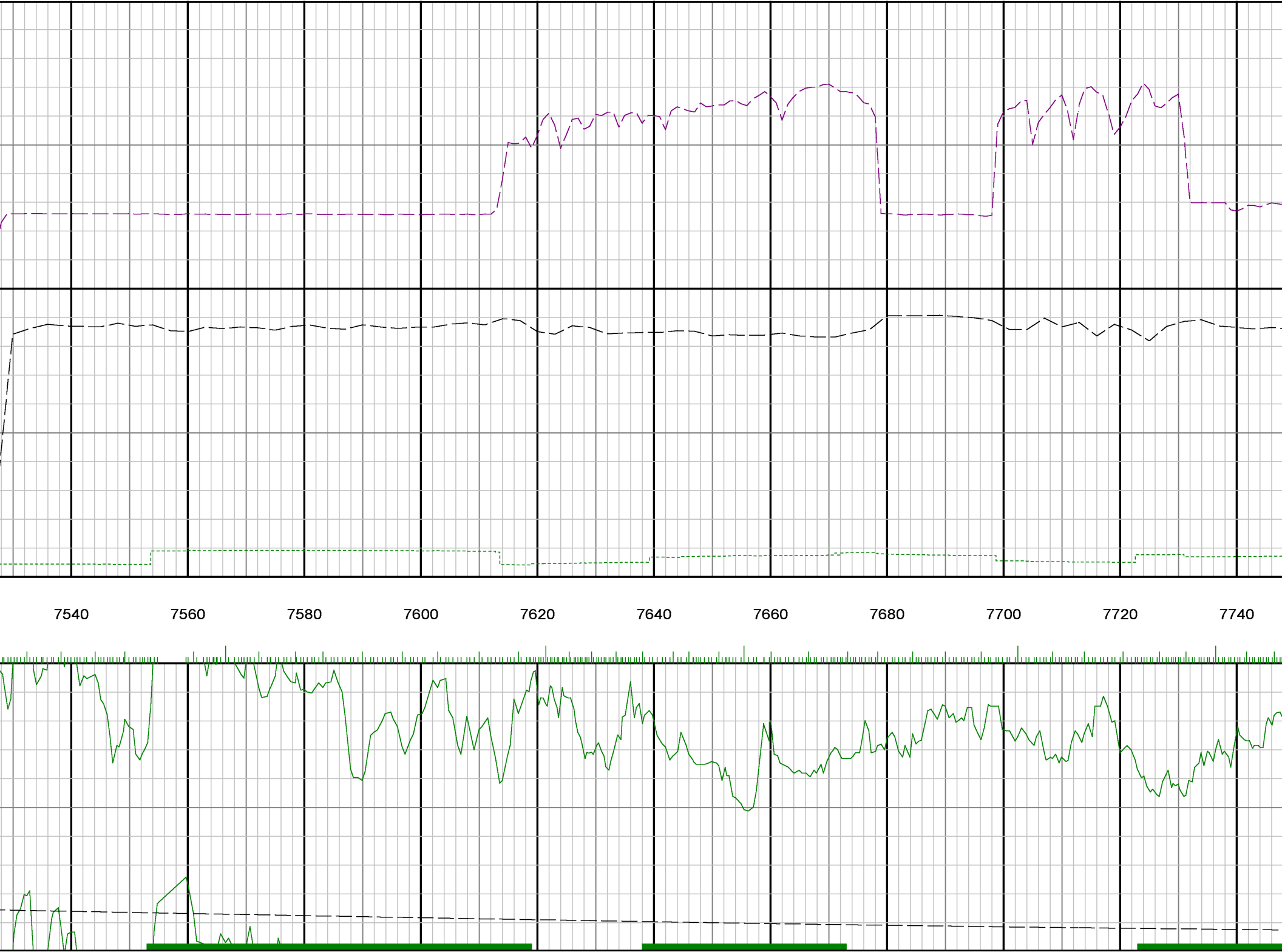
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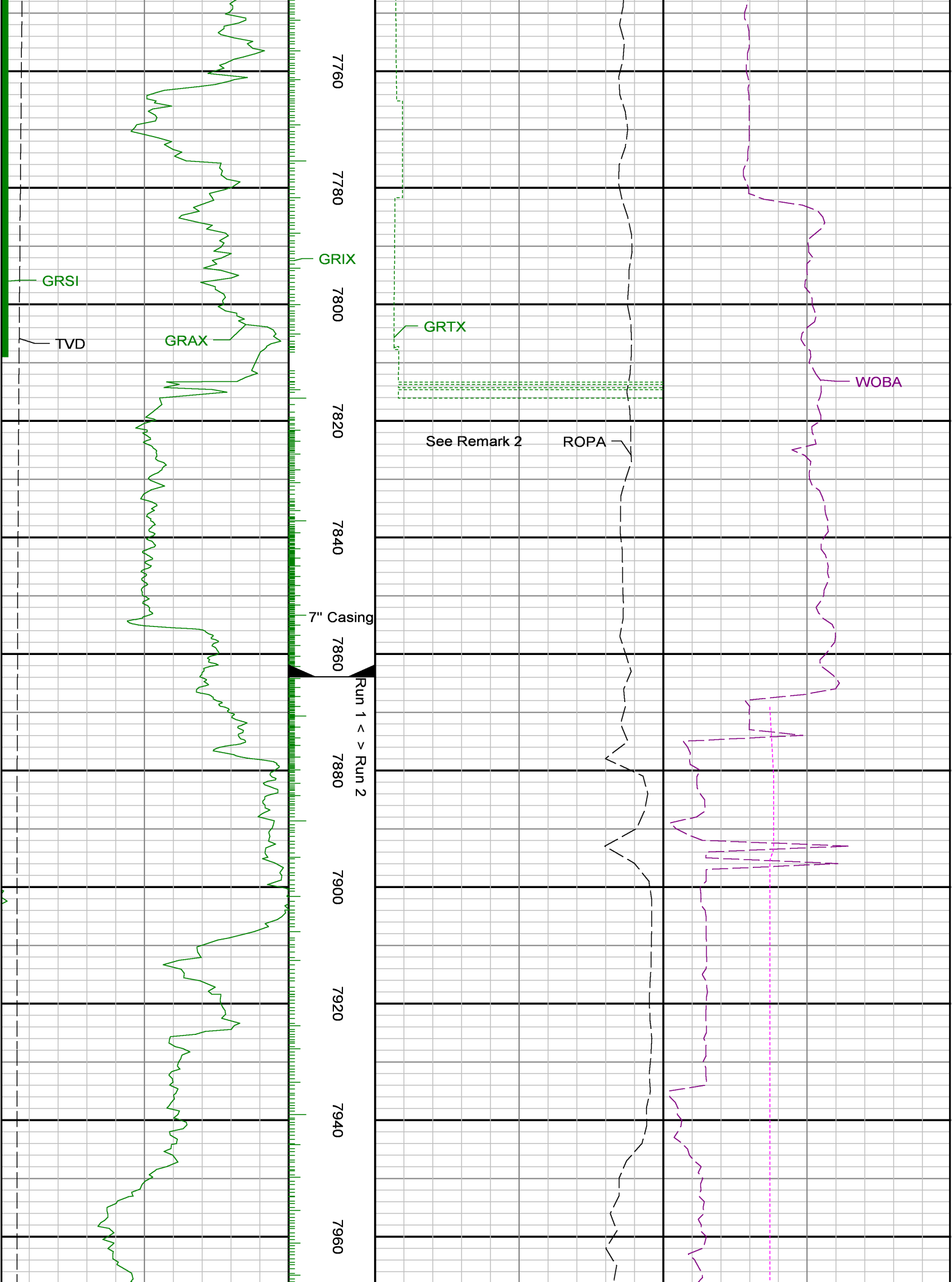
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GRIX
GRTX
See Remark 2
ROPA
WOBA
7" Casing
Run 1 < > Run 2
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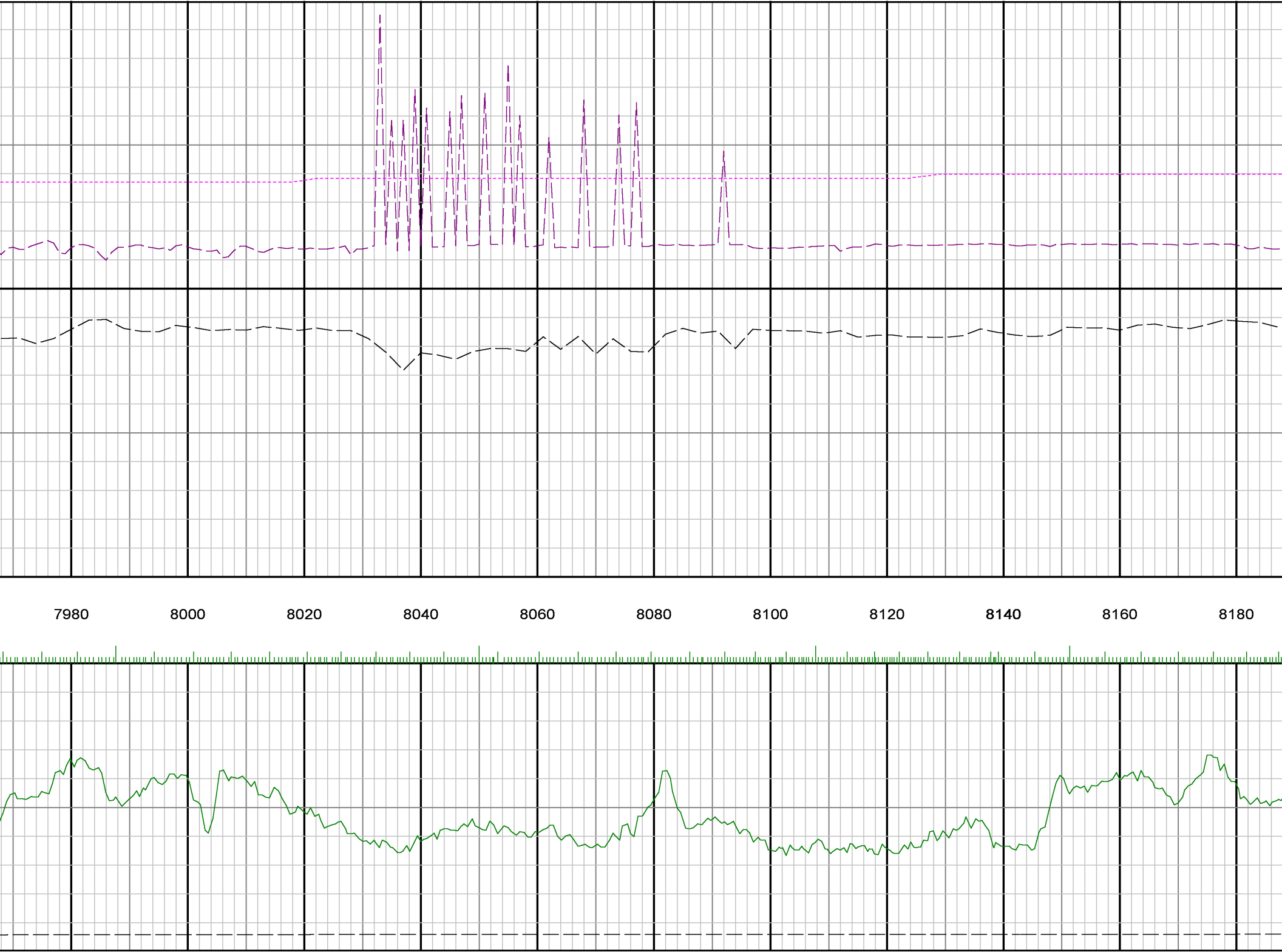
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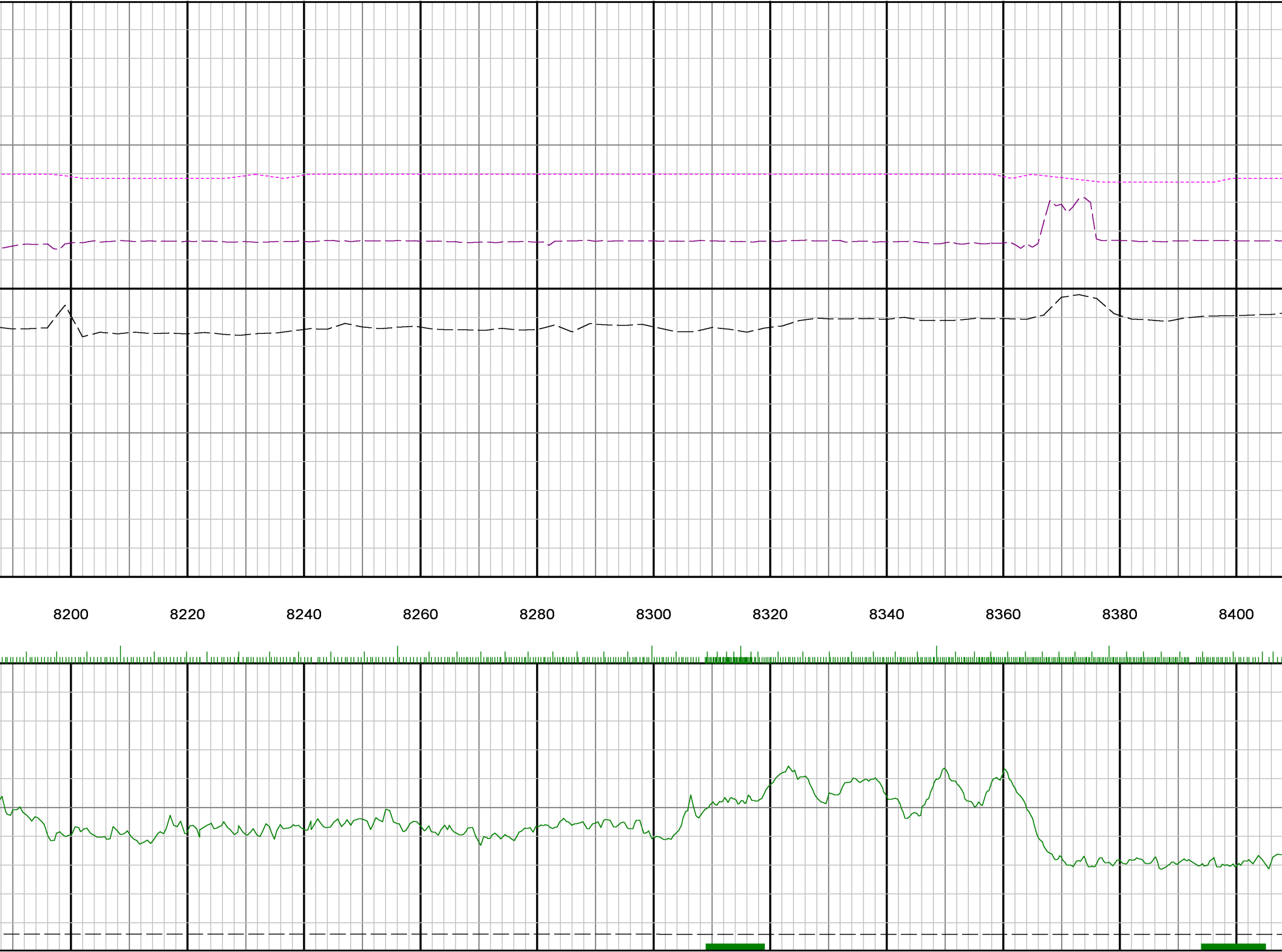
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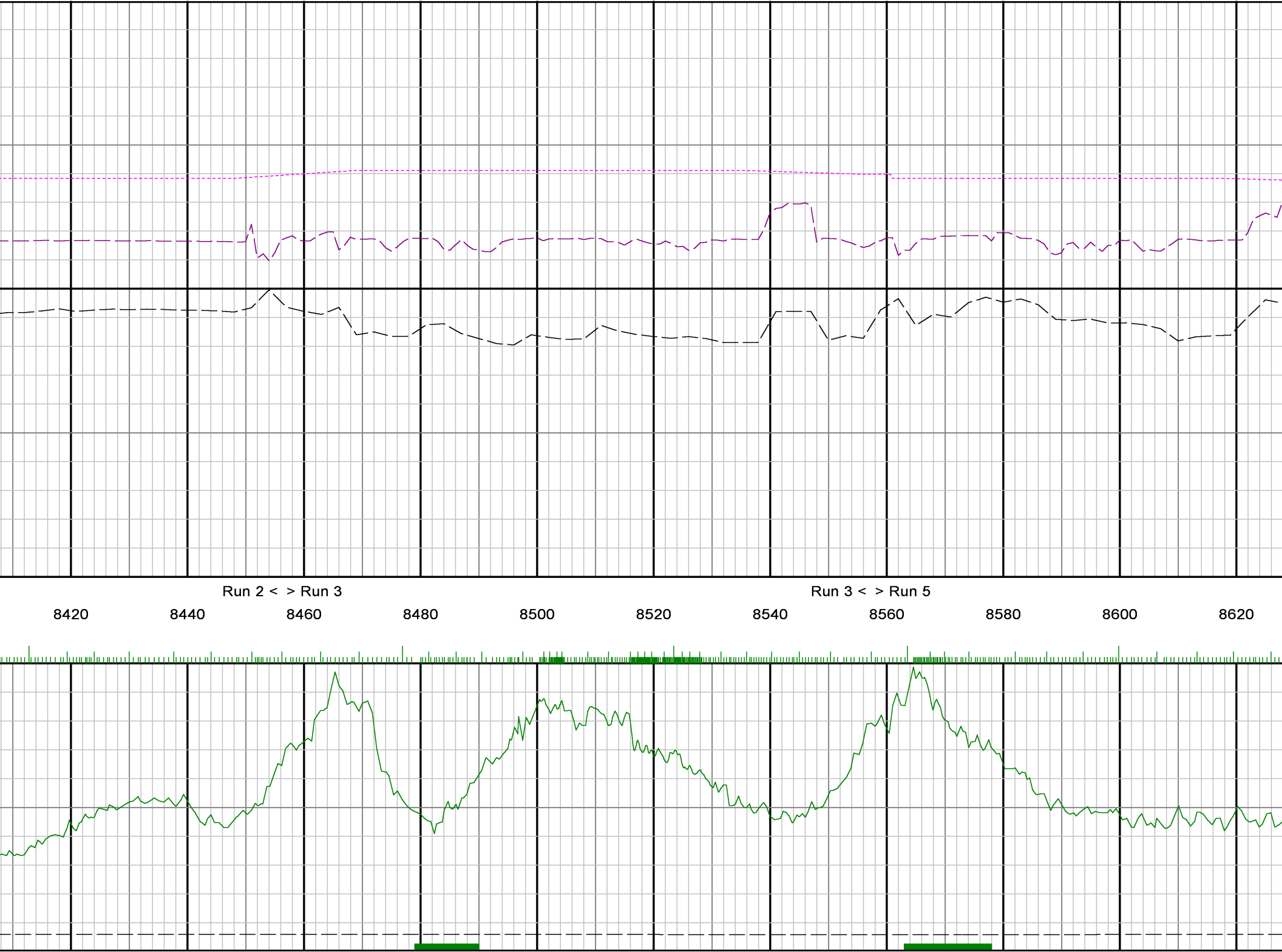
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Run 3 < > Run 5
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TVD
GRIX
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TCDX
WOBA

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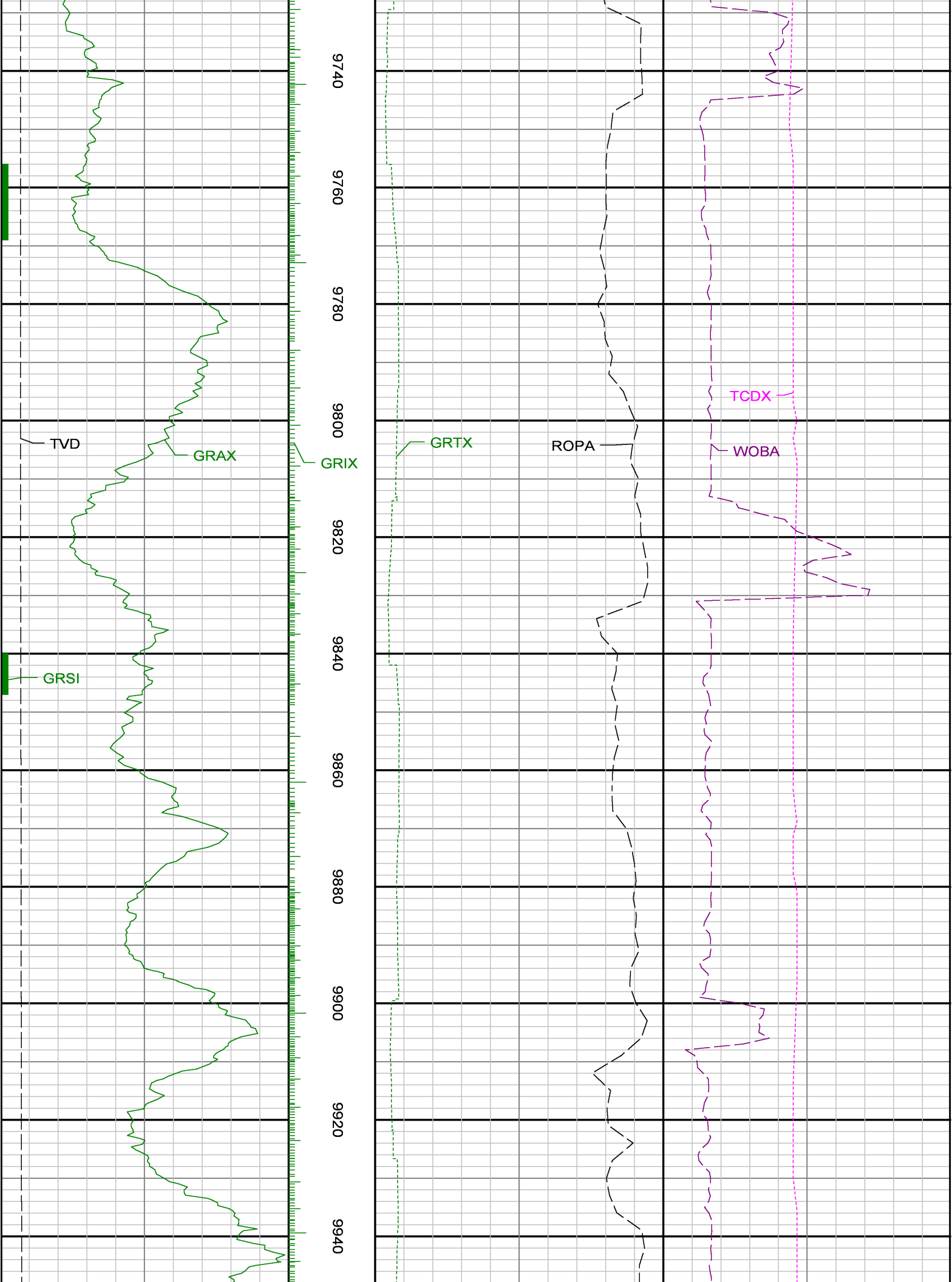
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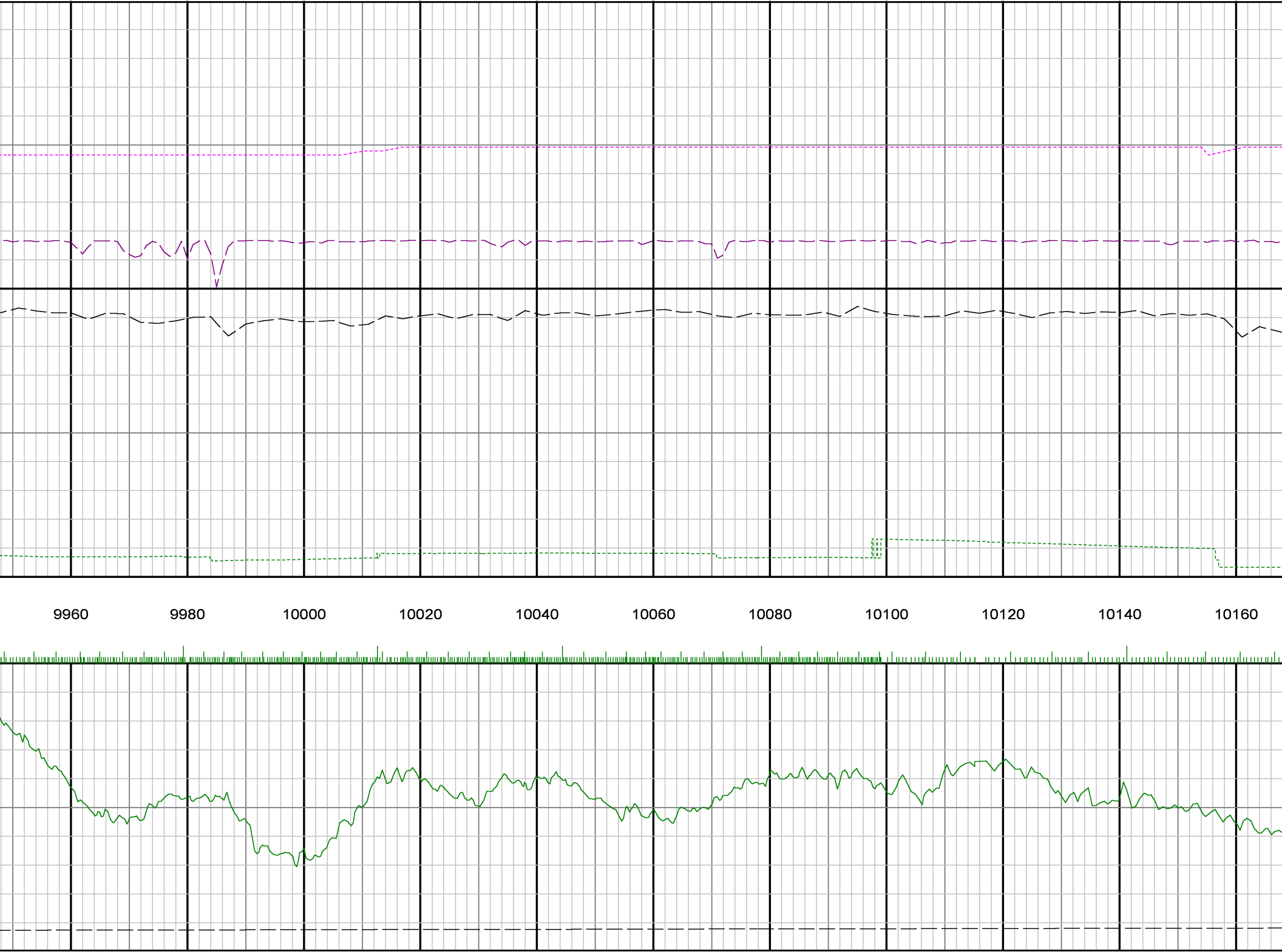
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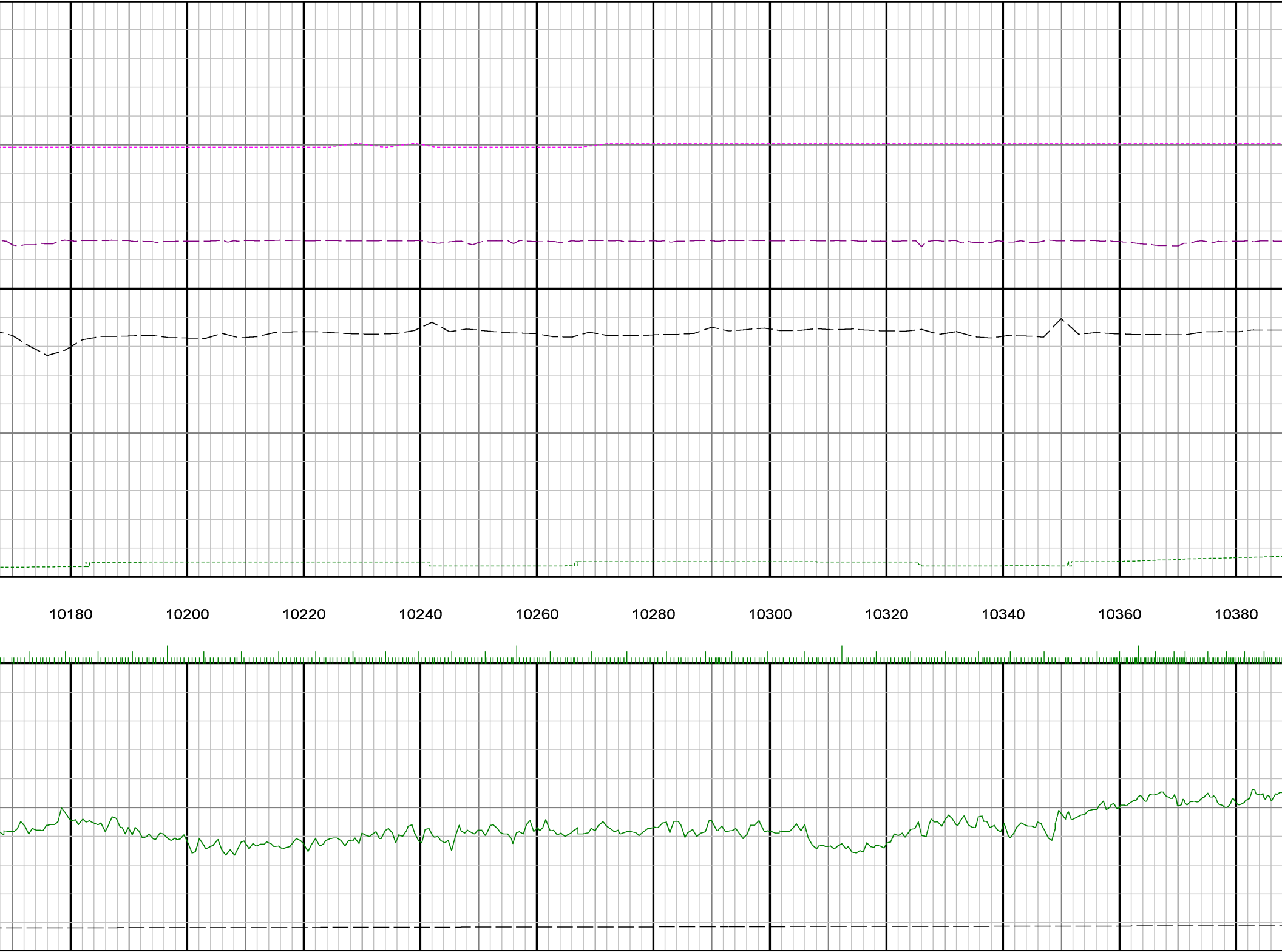
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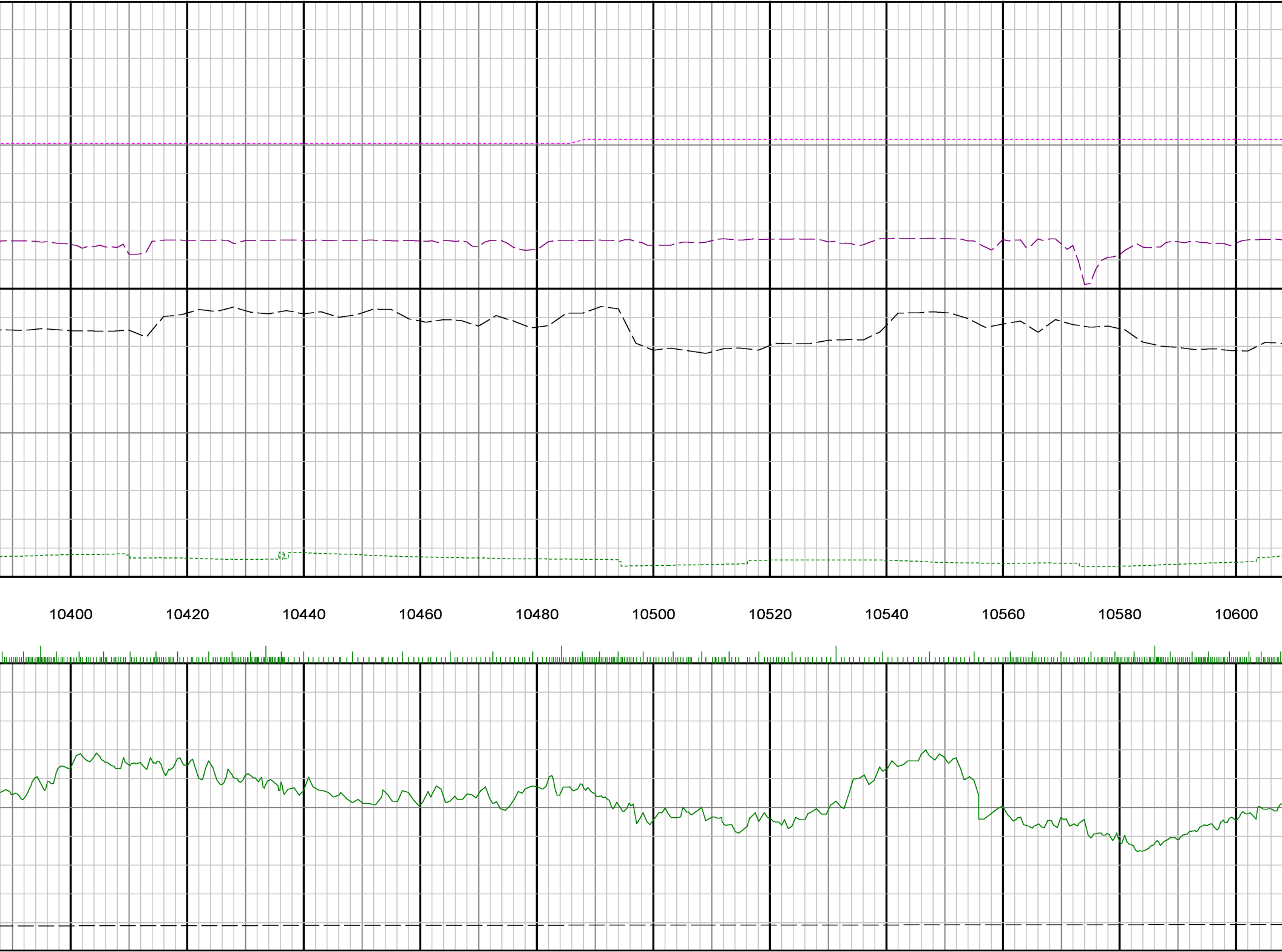
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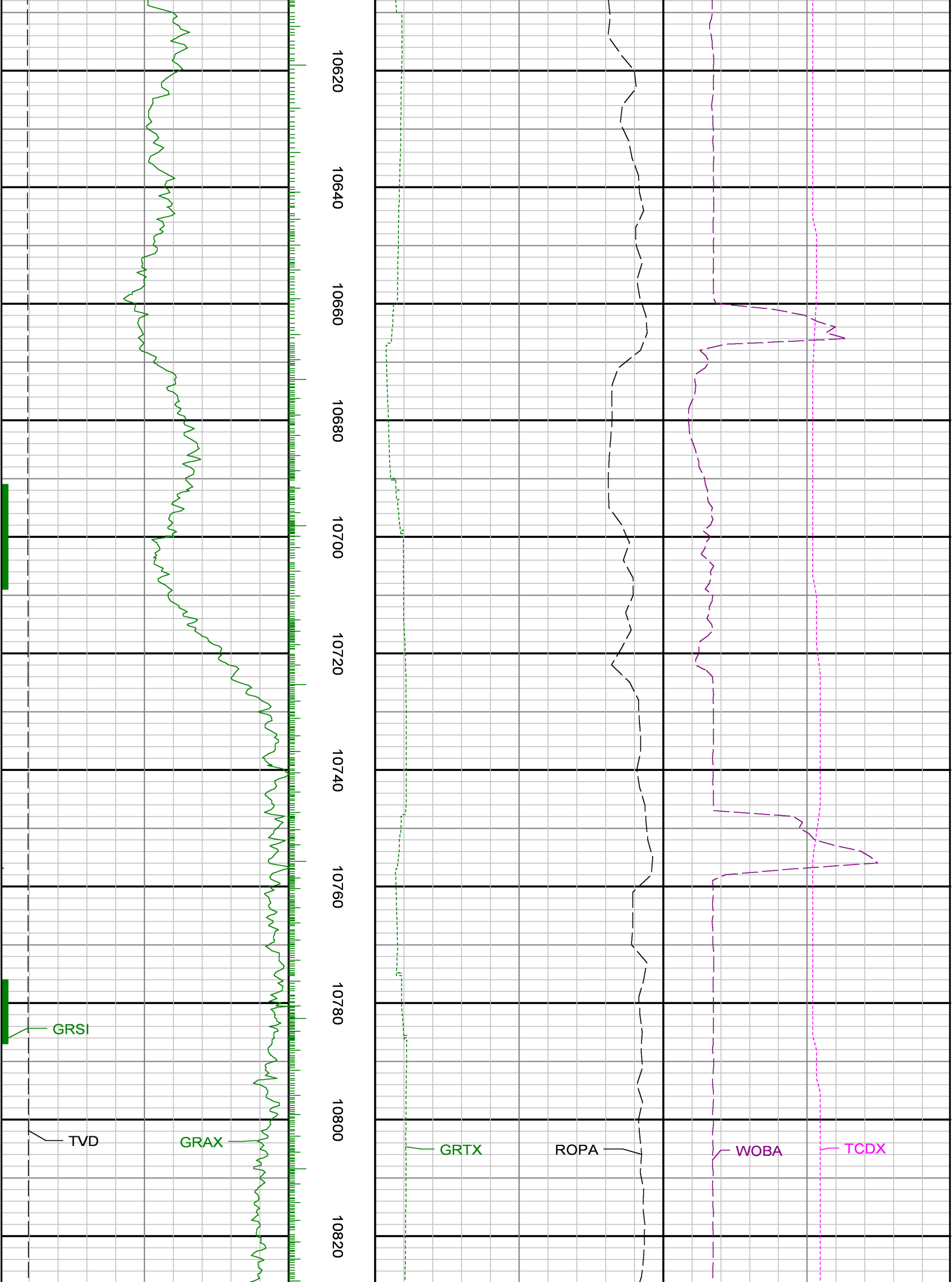
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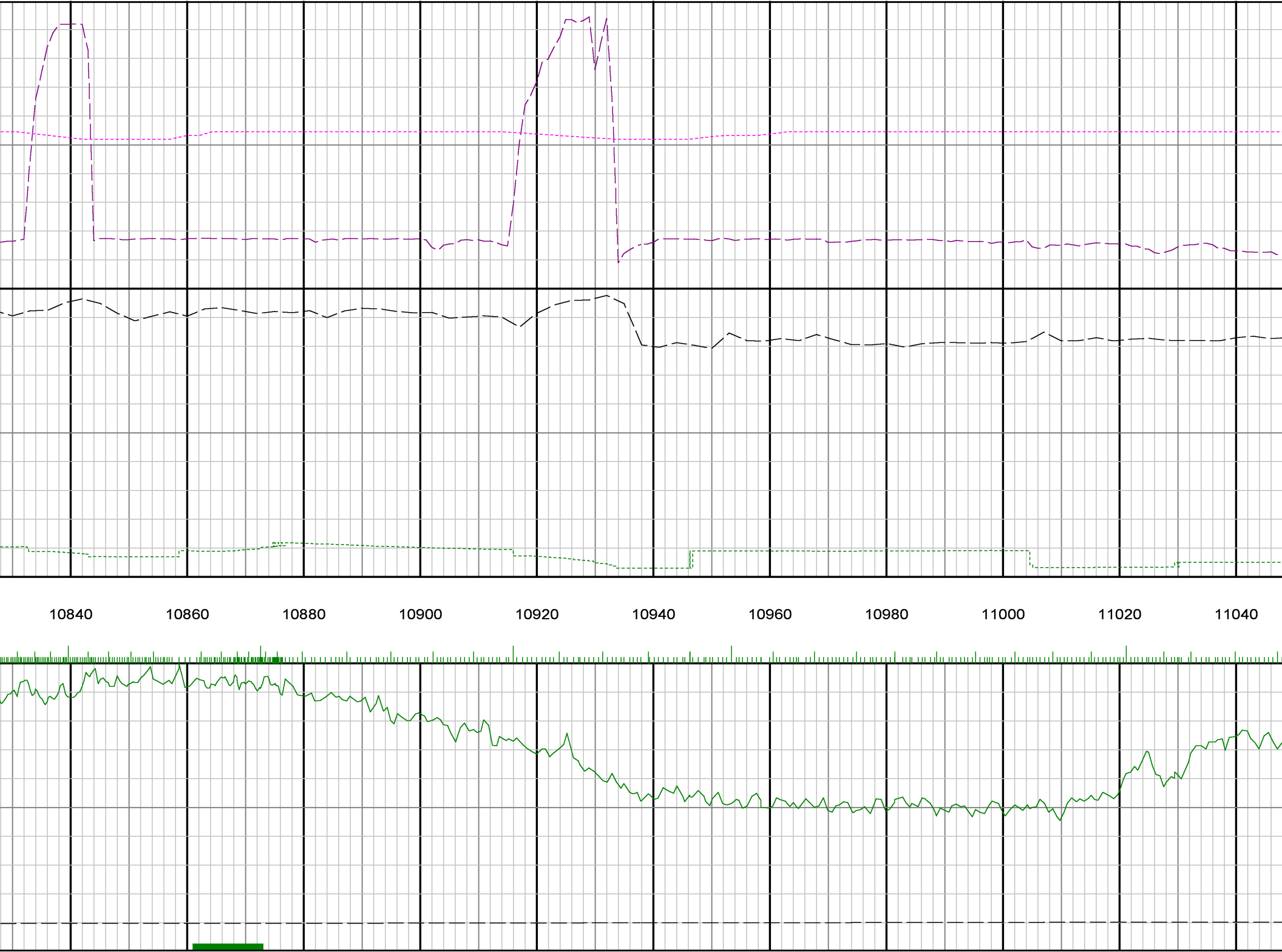
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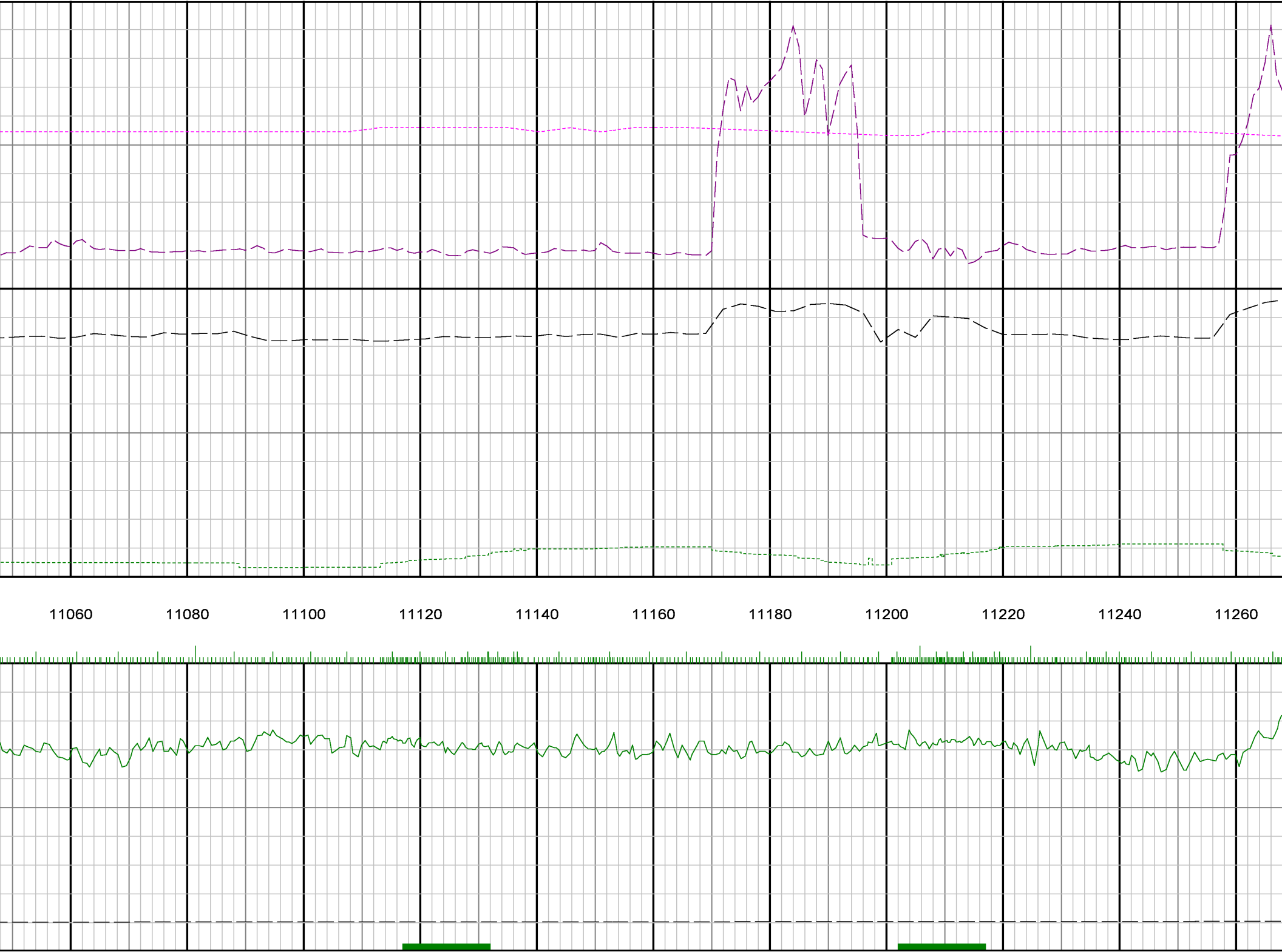
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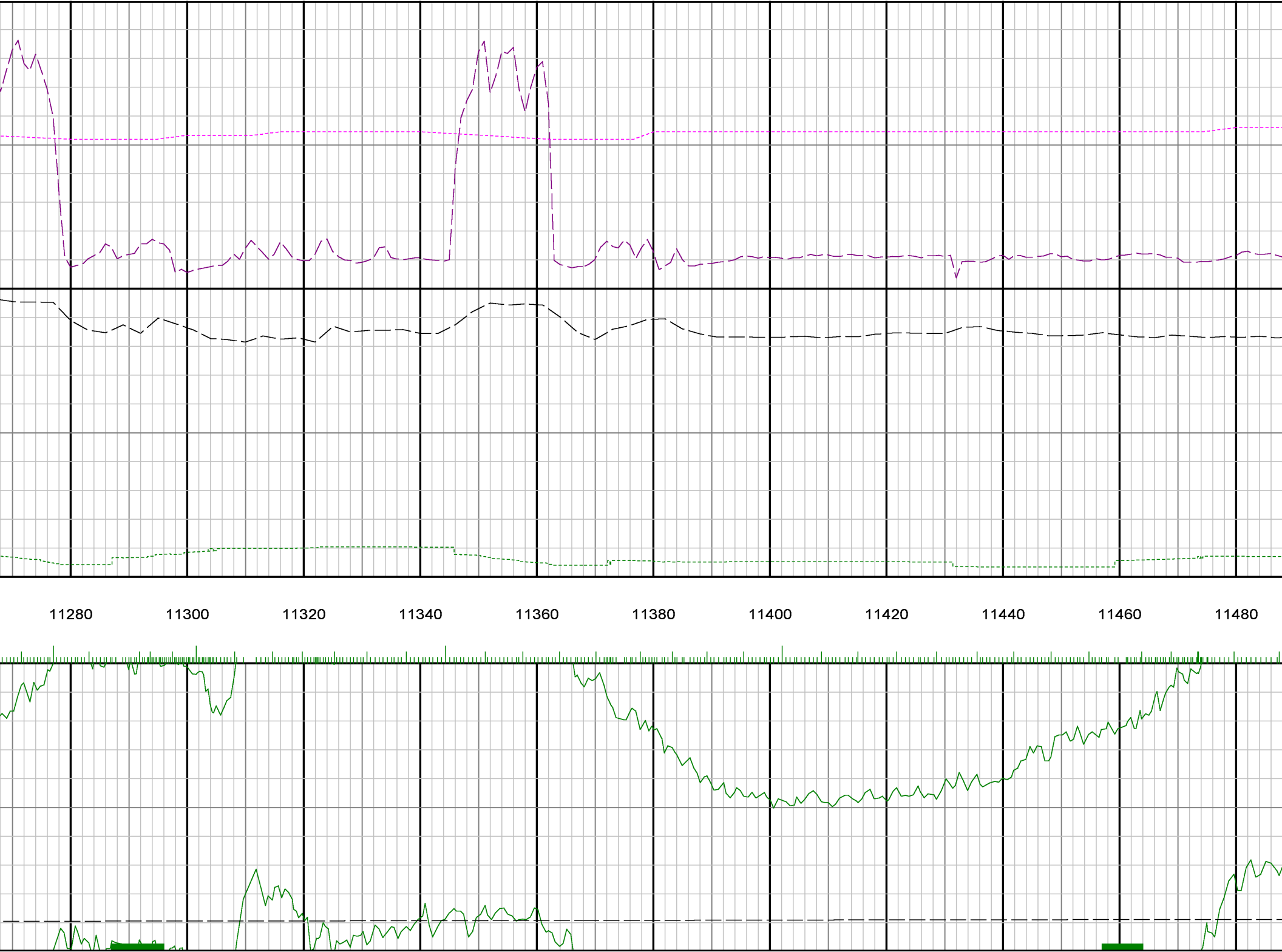
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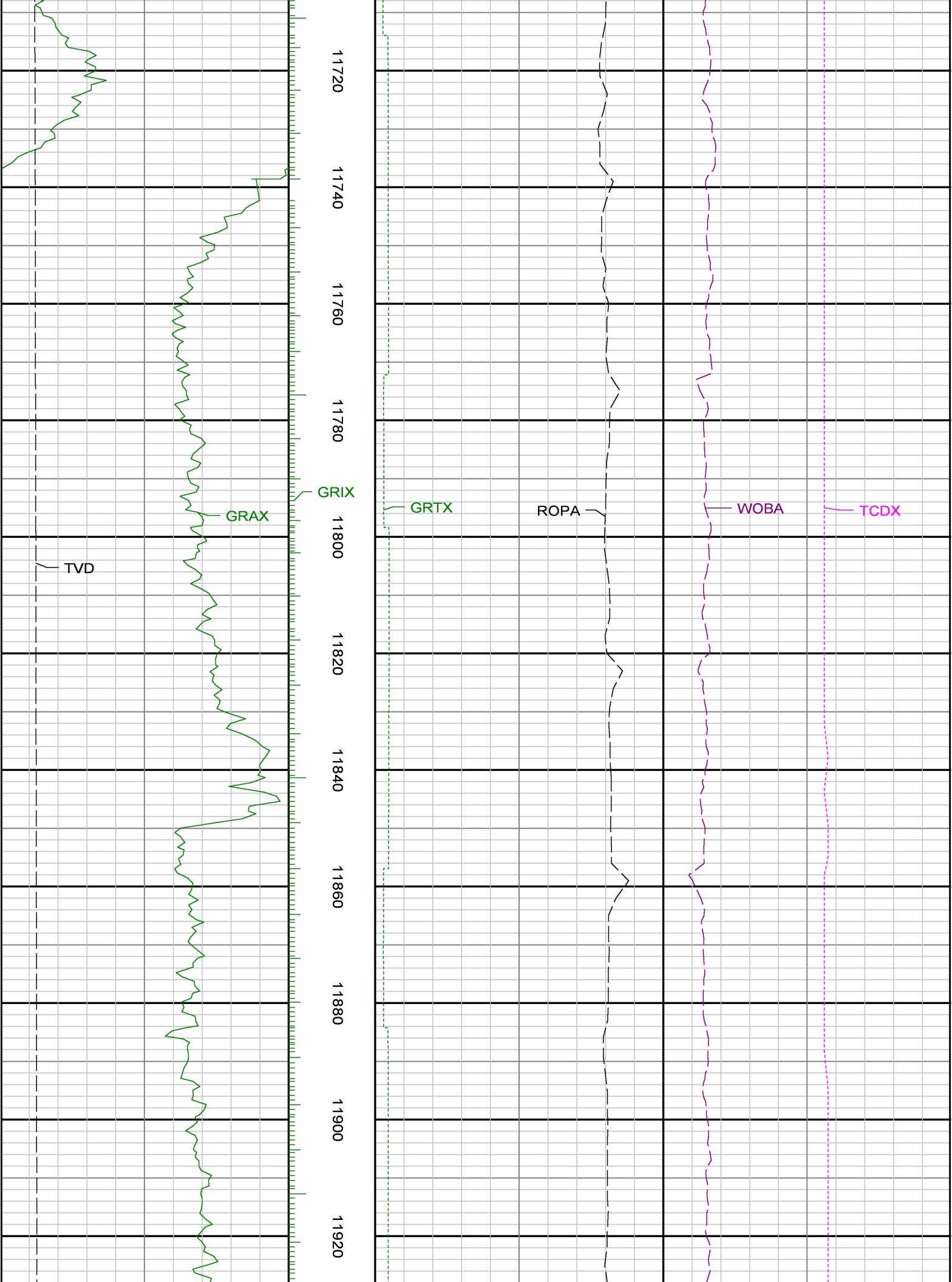
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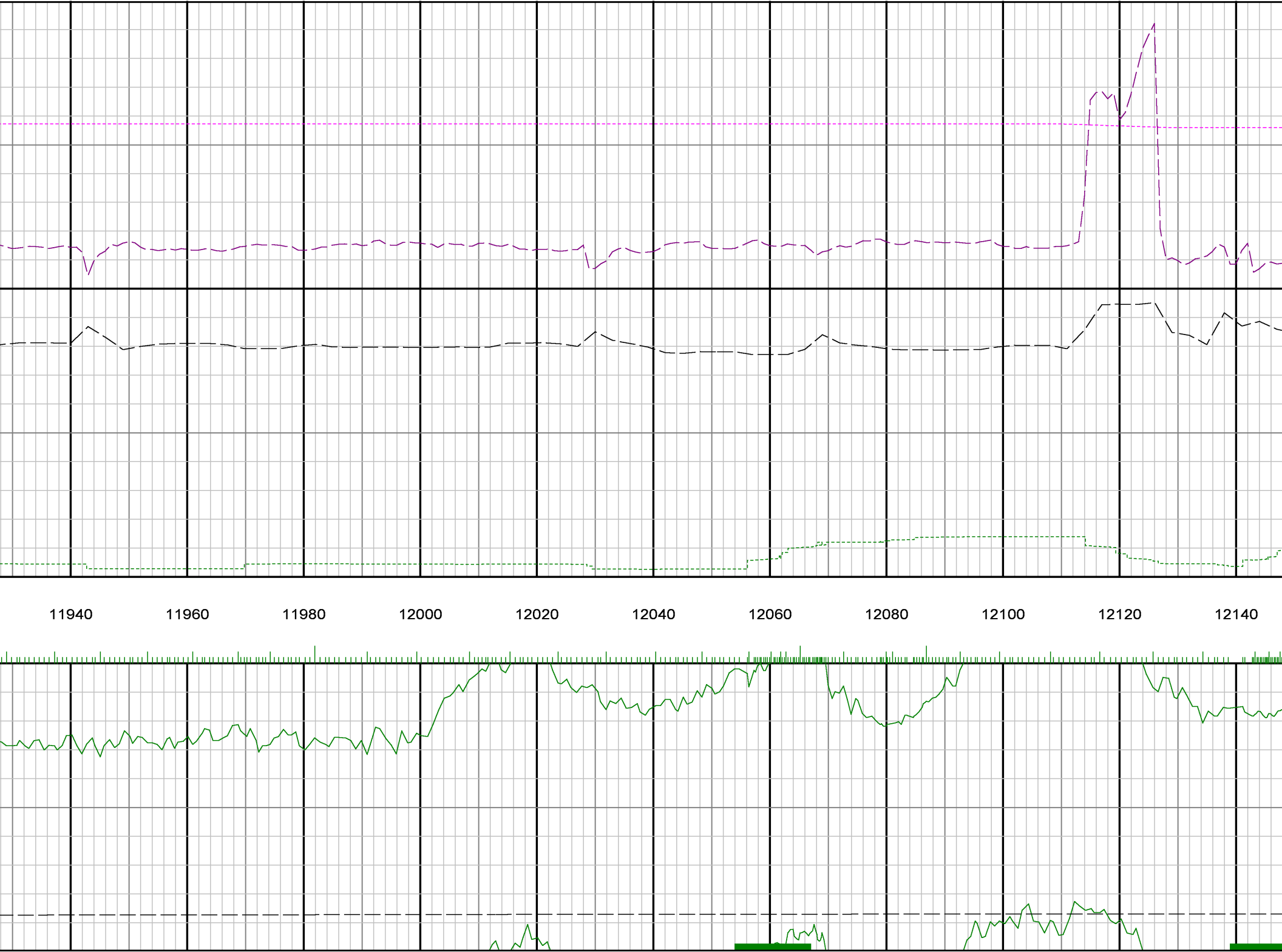
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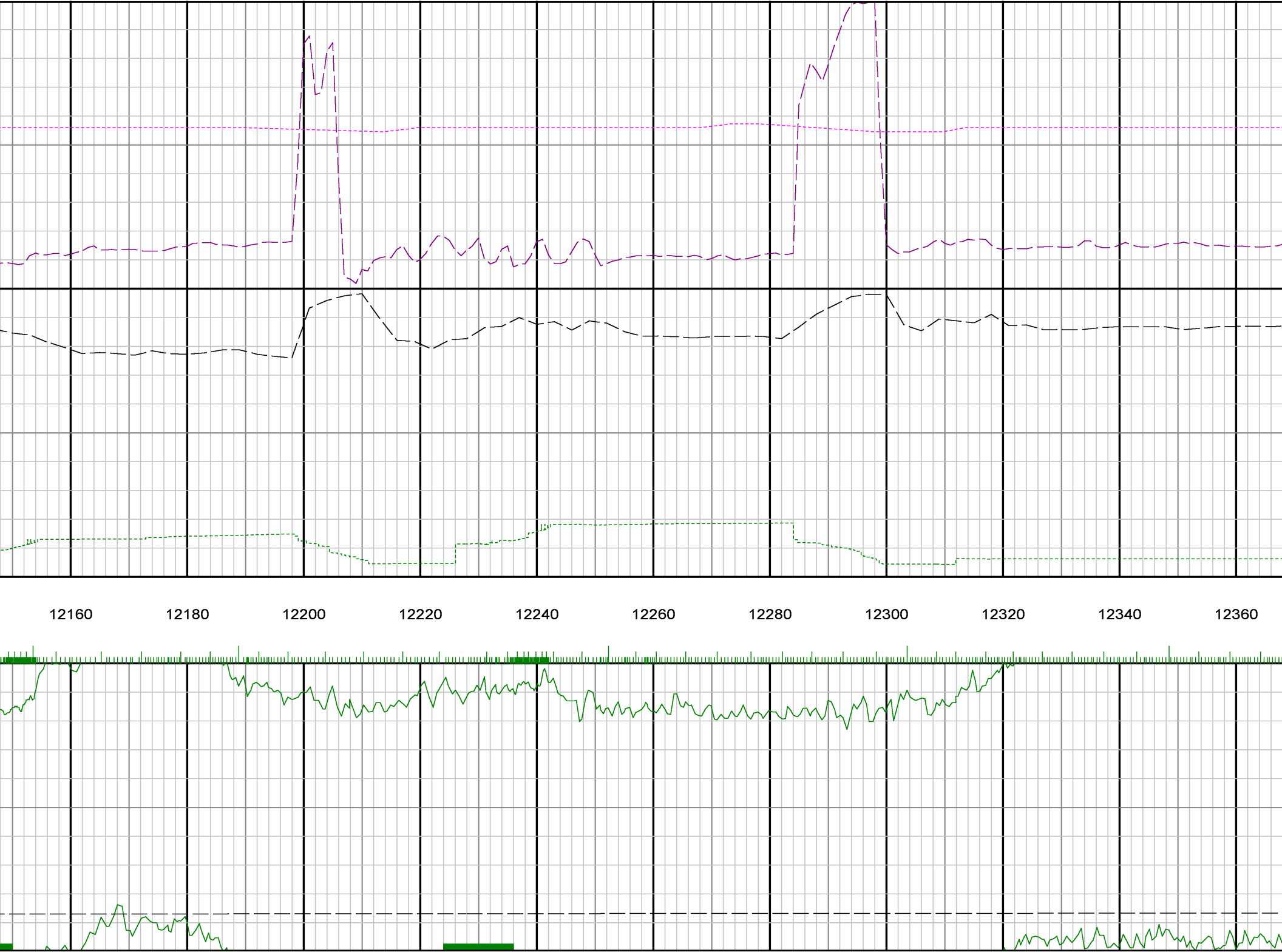
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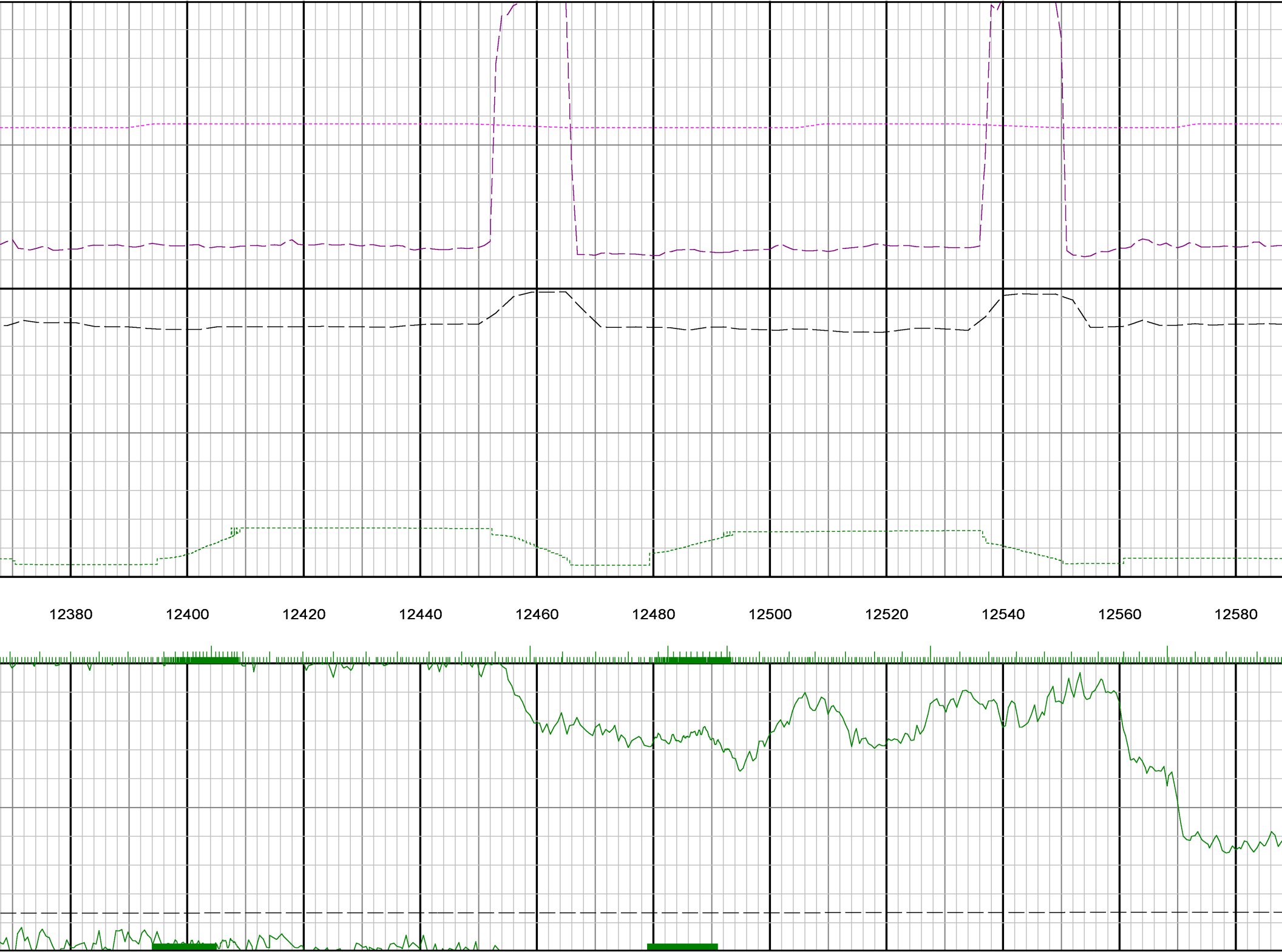
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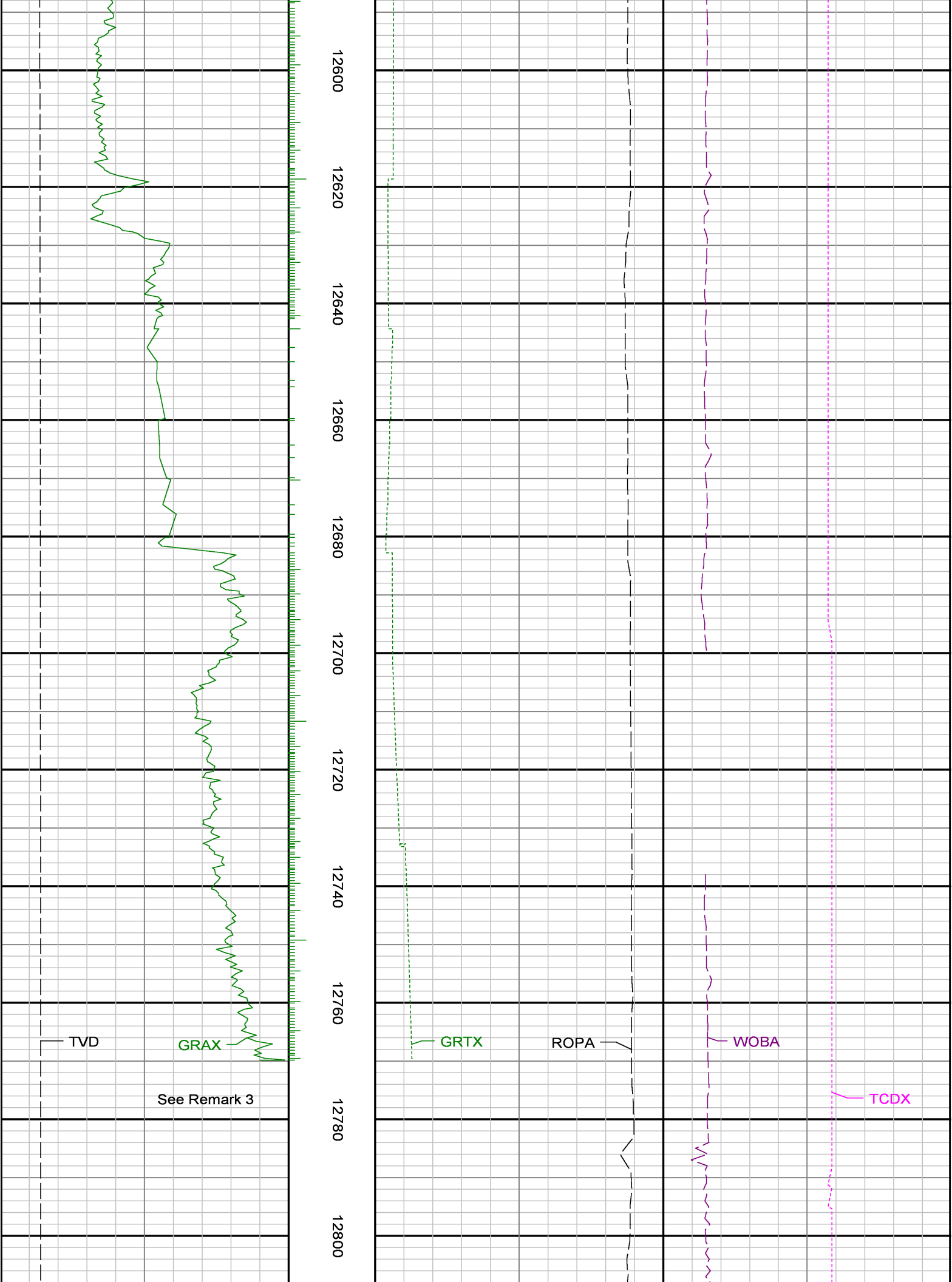
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See Remark 3
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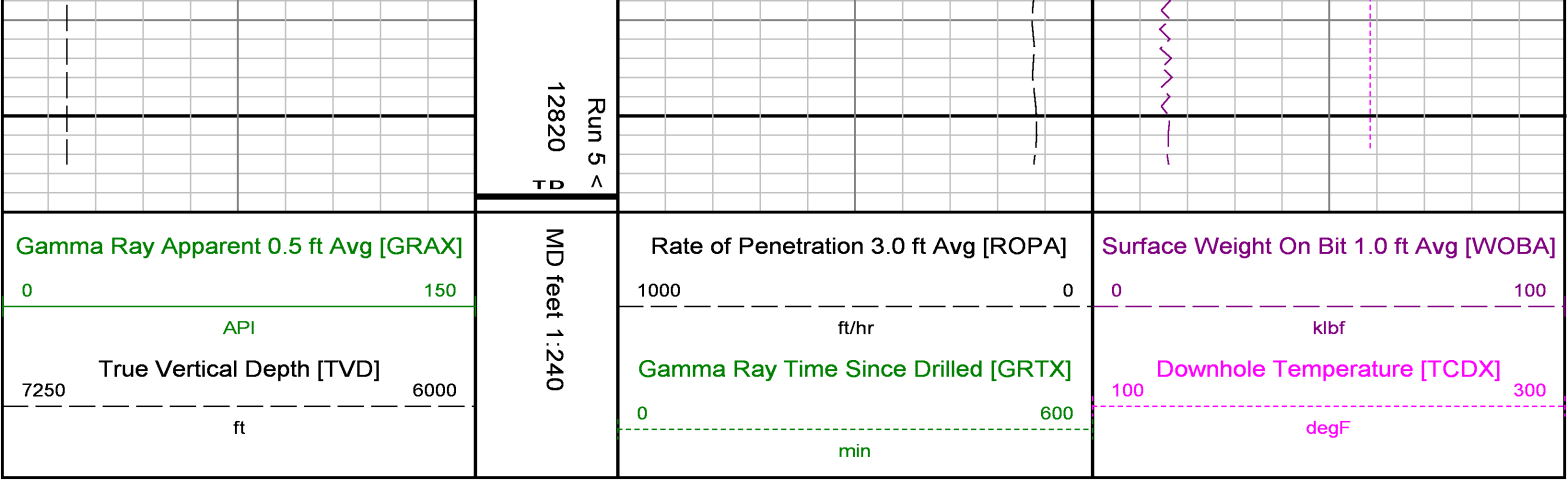
Run 5 <
12820 B
Gamma Ray Apparent 0.5 ft Avg [GRAX]
0
150
API
True Vertical Depth [TVD]
7250
6000
ft
MD feet 1:240
Rate of Penetration 3.0 ft Avg [ROPA]
1000
0
ft/hr
Gamma Ray Time Since Drilled [GRTX]
0
600
min
Surface Weight On Bit 1.0 ft Avg [WOBA]
0
100
klbf
Downhole Temperature [TCDX]
100
300
degF