

GL02611

Schlumberger

# TEMPERATURE LOG

COMPANY AEROJET NUCLEAR-INEL

**STOKER**

WELL RRGE #1

FIELD RAFT RIVER GEOTHERMAL

COUNTY CASSIA STATE IDAHU

LOCATION NE/4 of SW/4

Other Services: BGT

Sec. 23 Twp. 15S Rge. 26E

Permanent Datum: GL; Elev.: 4835  
 Log Measured From GL, - Ft. Above Perm. Datum  
 Drilling Measured From GL

Elev.: K.B. —  
 D.F. —  
 G.I. 4835

Date	2-9-75	2-9-75	2-9-75
Run No.	Four	Five	Six
Depth-Driller	4632	4632	4632
Depth-Logger	4610	4610	3050
Btm. Log Interval	4610	4610	3050
Top Log Interval	850	875	20
Casing-Driller	20 @ 900	20 @ 900	20 @ 900
Casing-Logger	900	900	90
Casing Size	1 30 To 40 2 20 To 900	1 30 To 40 2 20 To 900	1 30 To 40 2 20 To 900
Casing Weight	1 94 2 94	1 94 2 94	1 94 2 94
Casing Thickness	1 1/2" 2 1/2"	1 1/2" 2 1/2"	1 1/2" 2 1/2"
Bit Size	1 26 To 900 2 12 1/4 To 4632	1 26 To 900 2 12 1/4 To 4632	1 26 To 900 2 12 1/4 To 4632
Type Fluid in Hole	WATER	WATER	WATER
Dens. Visc.	—	—	—
Time Since Circ.	6 Hrs.	8 Hrs.	10 Hrs.
Max Rec. Temp	280	280	250
Equip. Location	7726 RS	7726 RS	7726 RS
Recorded By	SELAN	SELAN	SELAN
Witnessed By	STOKER	STOKER	STOKER

The well name, location and borehole reference data were furnished by the customer.

REMARKS: 5.0. 23855  
 PPU-B 724 #4 3 AM - 4 AM 2/9/75  
 PPU-CB 735 #5 4:45 AM - 5:45 AM 2/9/75  
 PPU-A 736 #6 7 AM - 7:45 AM 2/9/75  
 MTS-AB 737 #7 16:15 PM - 17:15 PM 2/9/75  
 SEC-B 734 #8 18:00 PM - 18:50 PM 2/9/75  
 CCE-A 731 #9 19:02 PM - 19:20 PM 2/9/75  
 #10 19:50 PM - 20:10 PM 2/9/75  
 #11 20:36 PM - 20:55 PM 2/9  
 #12 21:03 PM - 21:10 PM 2/9  
 #13 12:50 PM - 13:46 PM 2/10  
 #14 13:48 PM - 14:42 2/10  
 #15 15:15 PM - 16:00 2/10  
 #16 16:45 PM - 17:46 2/10

Date	2-9-75	2-9-75	2-9-75	2-9-75	2-10-75
Run No.	7	8	9	10	15
Depth-Driller	4632	4632	4632	4632	4632
Depth-Logger	4610	4610	4610	4610	4617
Btm. Log Interval	4610	4610	2100	2100	4616
Top Log Interval	900	900	900	900	1300
Casing-Driller	20 @ 900	20 @ 900	20 @ 900	20 @ 900	20 @ 900
Casing-Logger	900	900	900	900	900
Bit Size	12 1/4	12 1/4	12 1/4	12 1/4	12 1/4
Type Fluid in Hole	WATER	WATER	WATER	WATER	WATER
Dens. Visc.	—	—	—	—	—
pH Fluid Loss	— ml	— ml	— ml	— ml	— ml
Source of Sample	—	—	—	—	— ml
Rm @ Meas. Temp.	— @ °F	@ °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	— @ °F	@ °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	— @ °F	@ °F	@ °F	@ °F	@ °F
Source: Rmf Rmc	—	—	—	—	@ °F
Rm @ BHT	— @ °F	@ °F	@ °F	@ °F	@ °F
TIME SINCE	3 Hrs	5 Hrs	6 Hrs	7 Hrs	@ °F
CIRCULATION					5 1/2 Hrs.
Max. Rec. Temp.	291 °F	291 °F	261 °F	261 °F	291 °F
Equip. Location	7726 RS	7726 RS	7726 RS	7726 RS	7726 RS
Recorded By	SELAN	SELAN	SELAN	SELAN	SELAN
Witnessed By	STOKER	STOKER	STOKER	STOKER	STOKER

SWS-1166-G

Date	2-9-75	2-9-75	2-10-75	2-10-75	2-10-75
Run No.	11	12	13	14	16
Depth-Driller	4632	4632	4632	4632	4632
Depth-Logger	4610	4610	4617	4617	4617
Btm. Log Interval	2200	2200	4616	4616	4616
Top Log Interval	900	1590	900	900	30
Casing-Driller	20 @ 900	20 @ 900	20 @ 900	20 @ 900	20 @ 900
Casing-Logger	900	900	900	900	900
Bit Size	12 1/4	12 1/4	12 1/4	12 1/4	12 1/4
Type Fluid in Hole	WATER	WATER	WATER	WATER	WATER
Dens. Visc.	—	—	—	—	—
pH Fluid Loss	— ml	— ml	— ml	— ml	— ml
Source of Sample	—	—	—	—	— ml
Rm @ Meas. Temp.	— @ °F	@ °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	— @ °F	@ °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	— @ °F	@ °F	@ °F	@ °F	@ °F
Source: Rmf Rmc	—	—	—	—	@ °F
Rm @ BHT	— @ °F	@ °F	@ °F	@ °F	@ °F
TIME SINCE	7 1/2 Hrs.	8 Hrs.	3 Hrs.	4 Hrs.	@ °F
CIRCULATION					6 1/2 Hrs.
Max. Rec. Temp.	270 °F	270 °F	277 °F	277 °F	292 °F
Equip. Location	7726 RS	7726 RS	7726 RS	7726 RS	7726 RS
Recorded By	SELAN	SELAN	SELAN	SELAN	SELAN
Witnessed By	STOKER	STOKER	STOKER	STOKER	STOKER

SWS-1166-G

REMARKS: REDUCED TEMP SCALE WAS NOT RECORDED ON RUNS 5-14. Working on Casing

2-10-75  
 15  
 4632  
 4617  
 4616  
 1300  
 20 @ 900  
 900  
 12 1/4  
 WATER

ml  
 ml  
 @ °F  
 @ °F  
 @ °F  
 @ °F  
 5 1/2 Hrs.  
 291 °F  
 7726 RS  
 SELAN  
 STOKER

2-10-75  
 16  
 4632  
 4617  
 4616  
 30  
 20 @ 900  
 900  
 12 1/4  
 WATER

ml  
 ml  
 @ °F  
 @ °F  
 @ °F  
 @ °F  
 6 1/2 Hrs.  
 292 °F  
 7726 RS  
 SELAN  
 STOKER

REMARKS: REDUCED TEMP SCALE WAS NOT RECORDED ON RUNS 5-17. QUIT WORKING ON RUN 4

TEMPERATURE ° F.

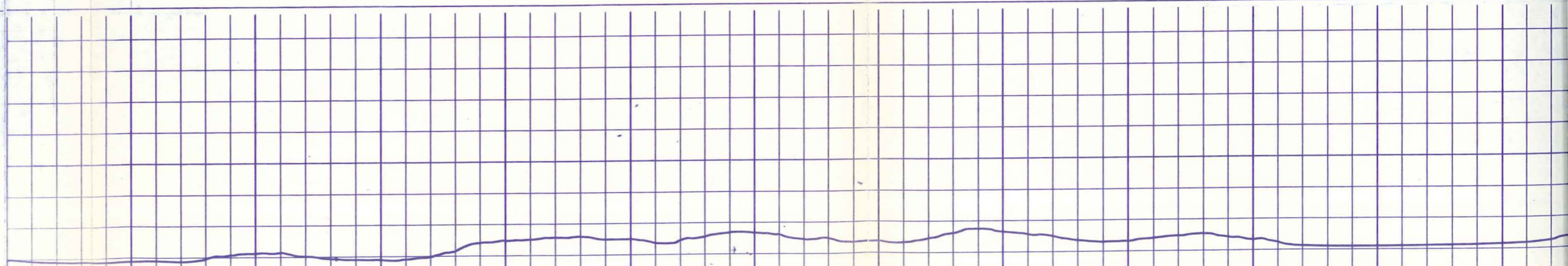
REDUCED SENSITIVITY TEMPERATURE

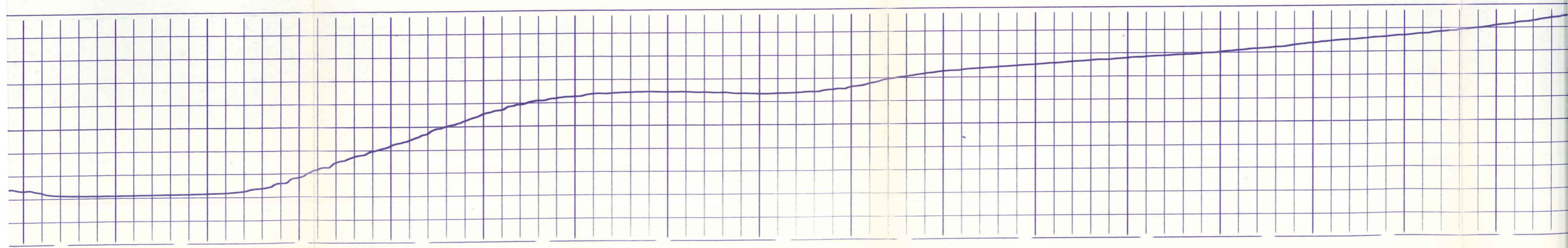
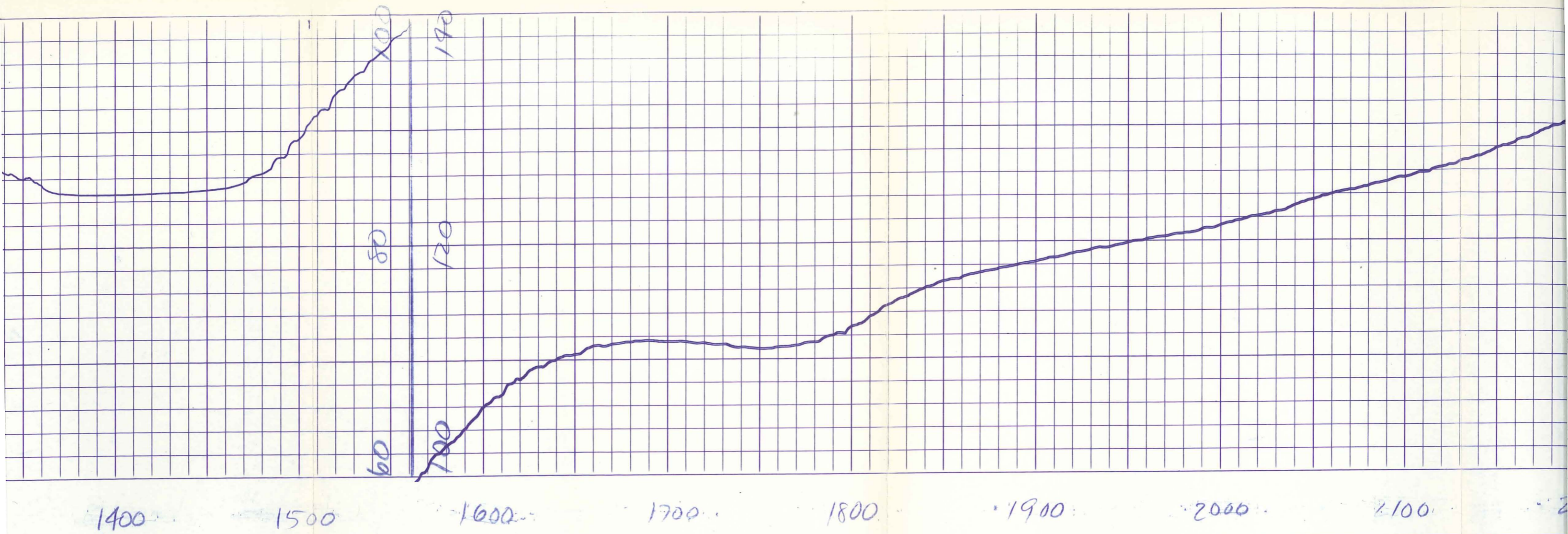
CIRCULATION STOPPED AT 3000' AT 2130  
 CIRCULATION STOPPED IN ANNULUS AT 9200  
 NO CIRCULATION DURING THIS RUN

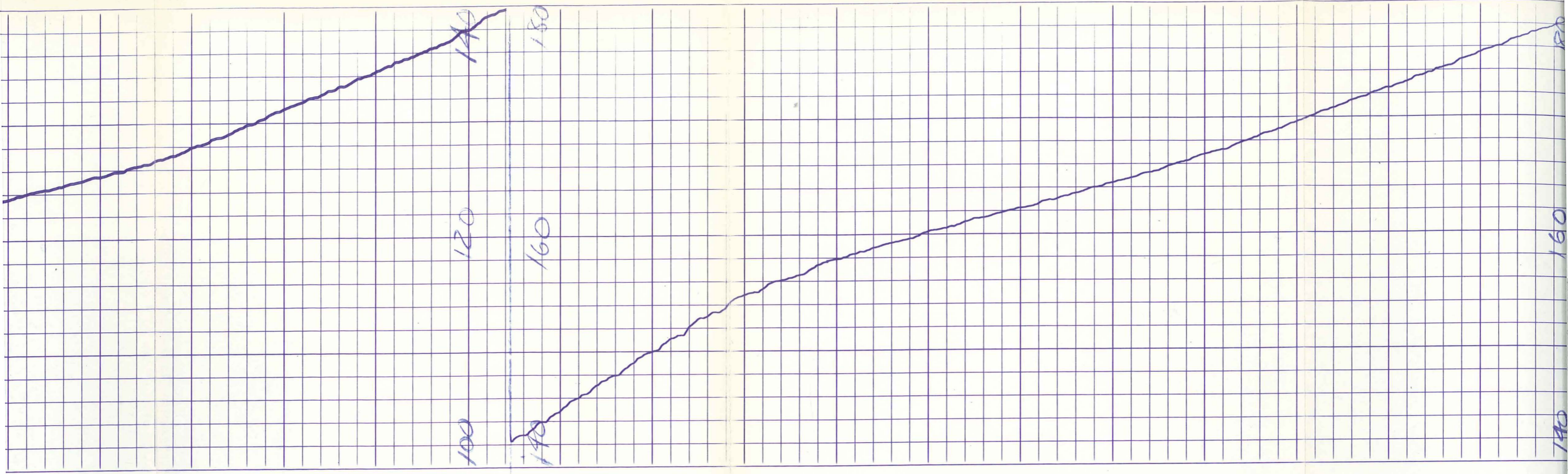
Run 4



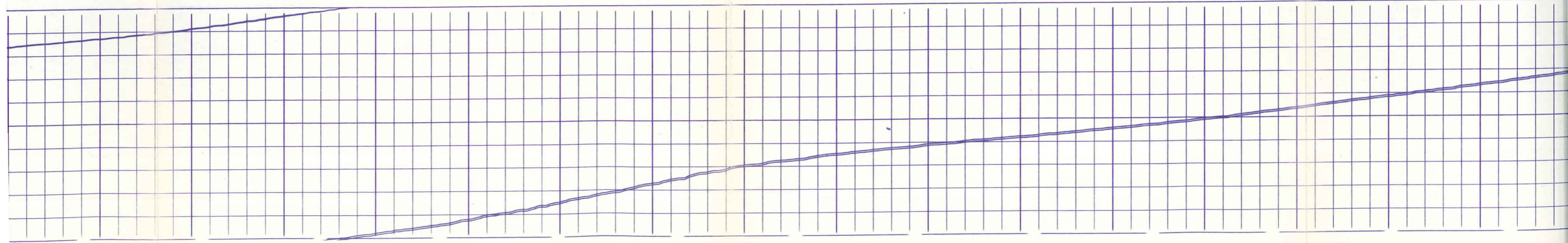
900      1000      1100      1200      1300      1400

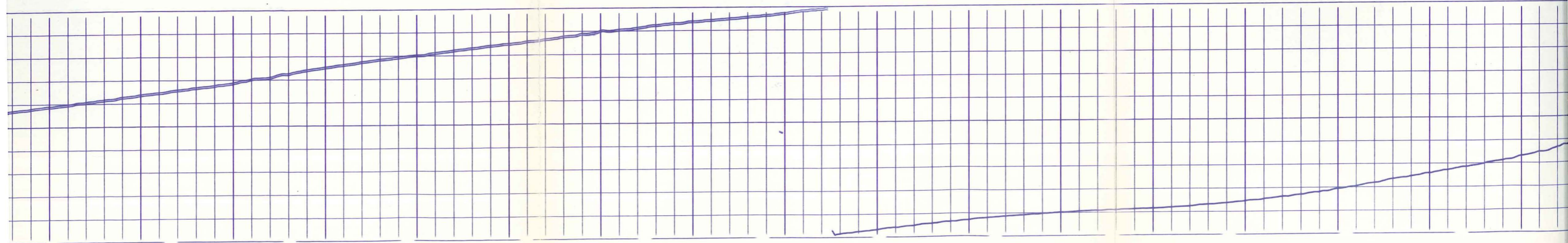
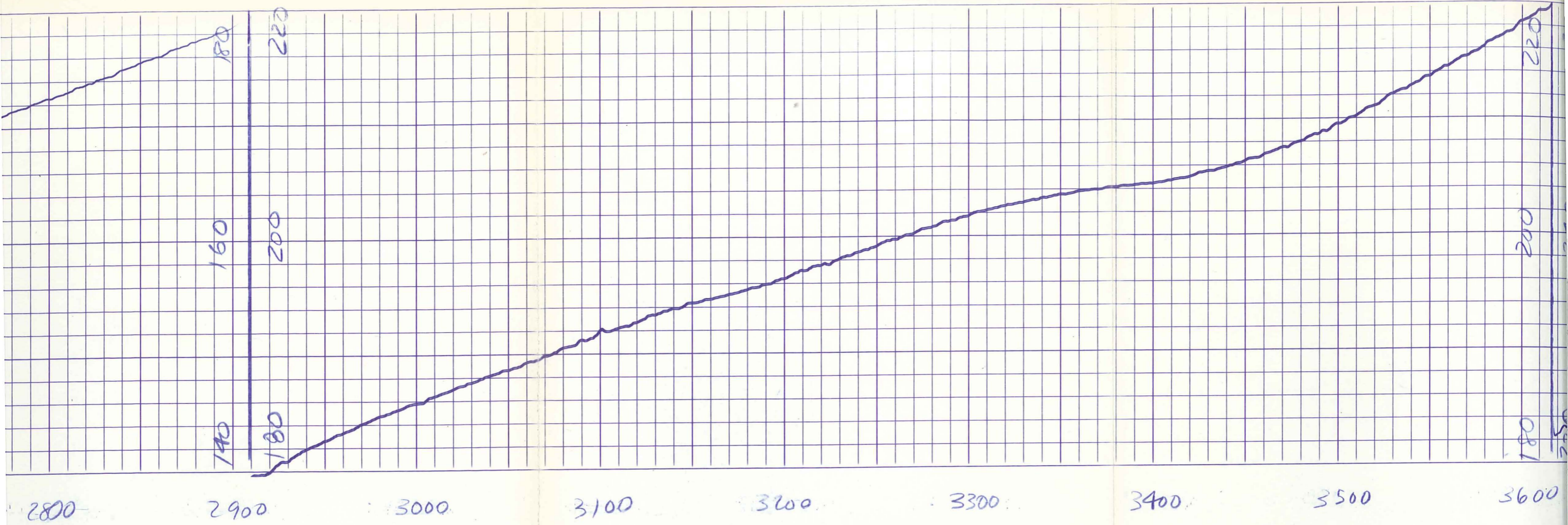


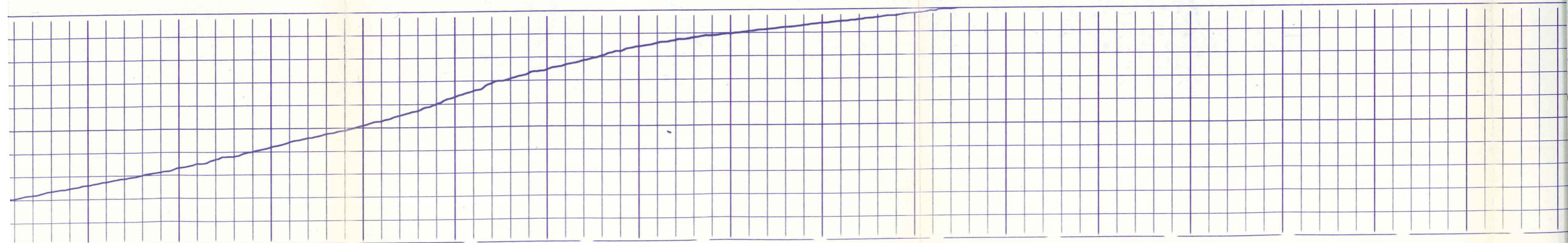
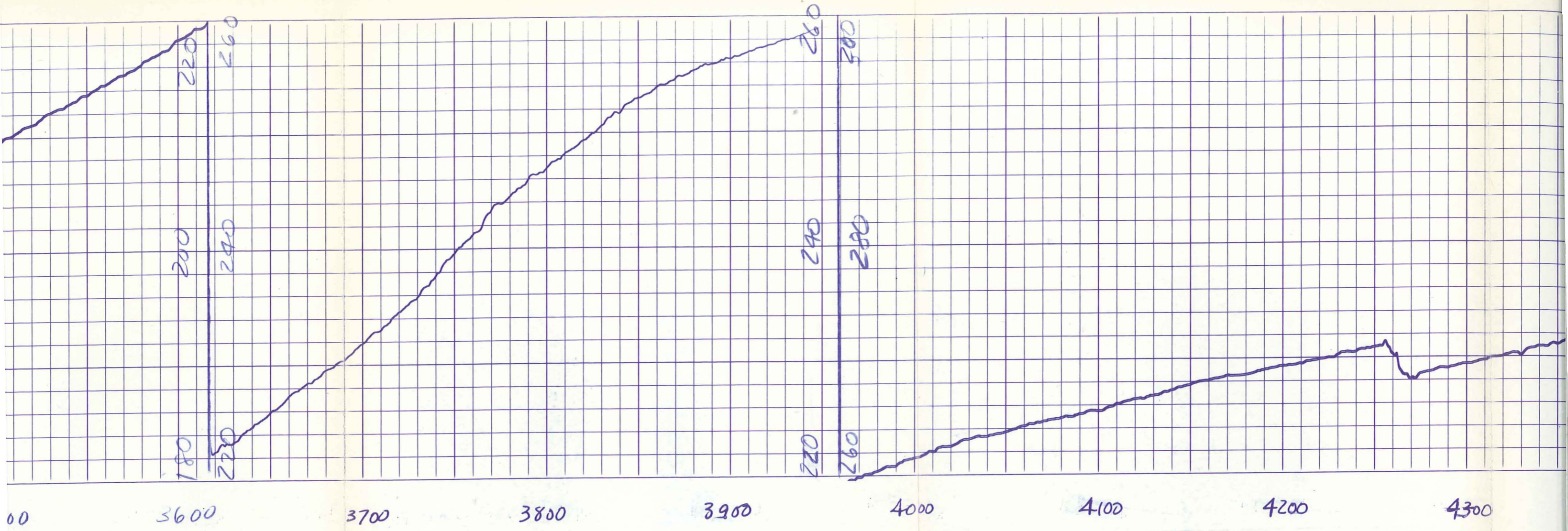


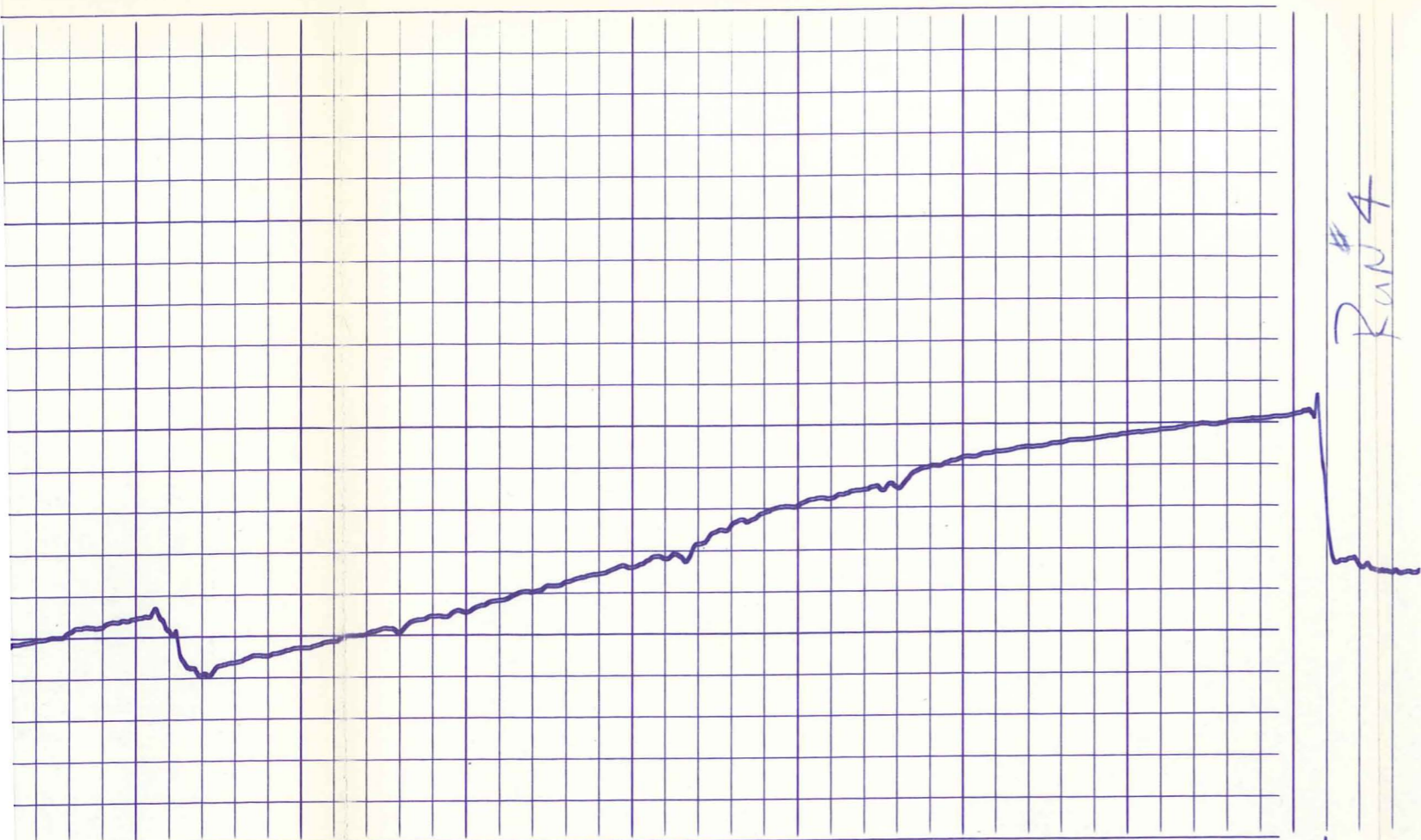


2100 2200 2300 2400 2500 2600 2700 2800 2900









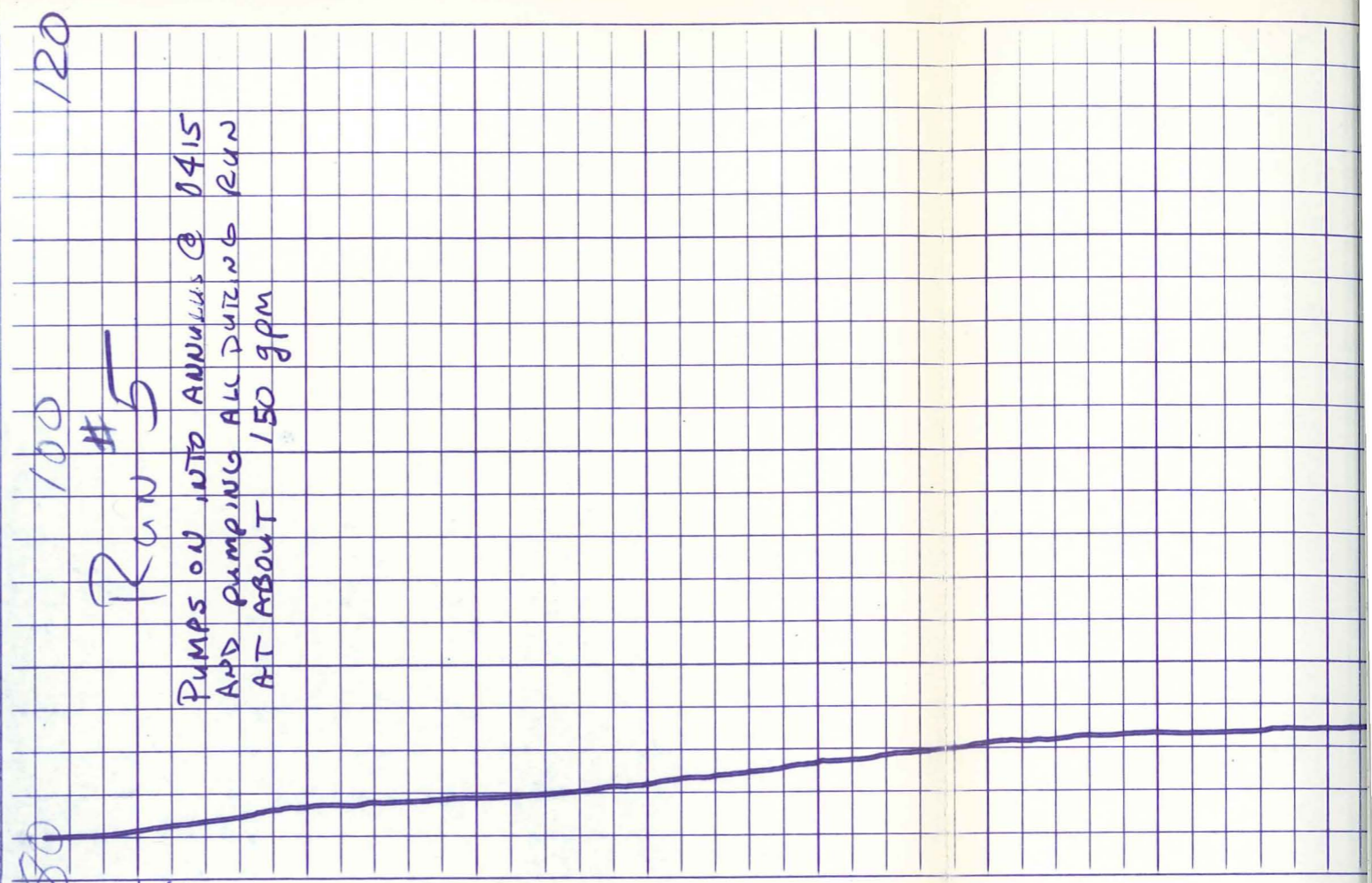
4300

4400

4500

4600

Run #4



80

100

120

Run #5

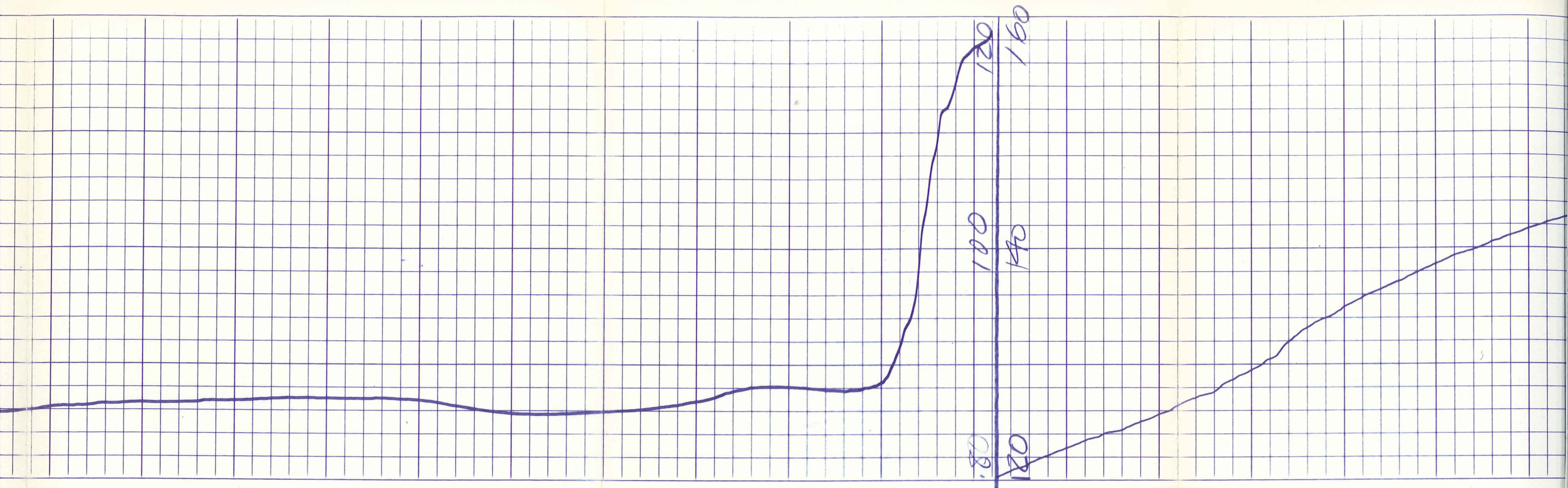
PUMPS ON INTO ANNULARS @ 0415  
AND PUMPING ALL DURING RUN  
AT ABOUT 150 GPM

0900  
CAMPING

1000

1100

1200



1200

1300

1400

1500

1600

1700

1800

1900

120

100

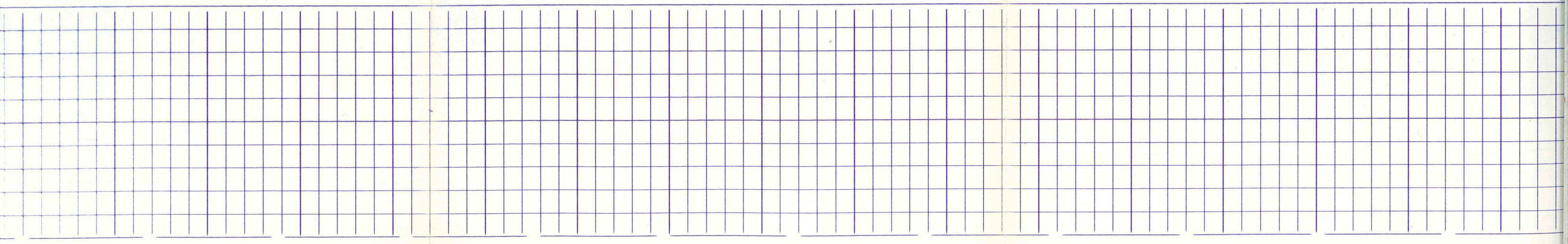
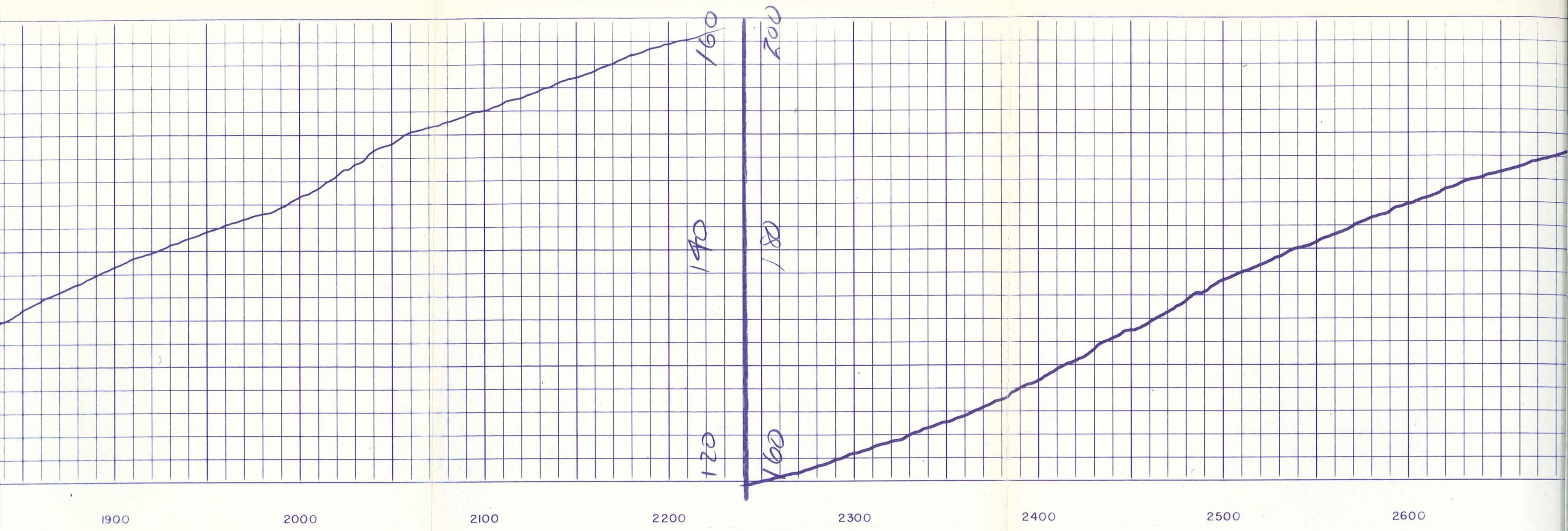
80

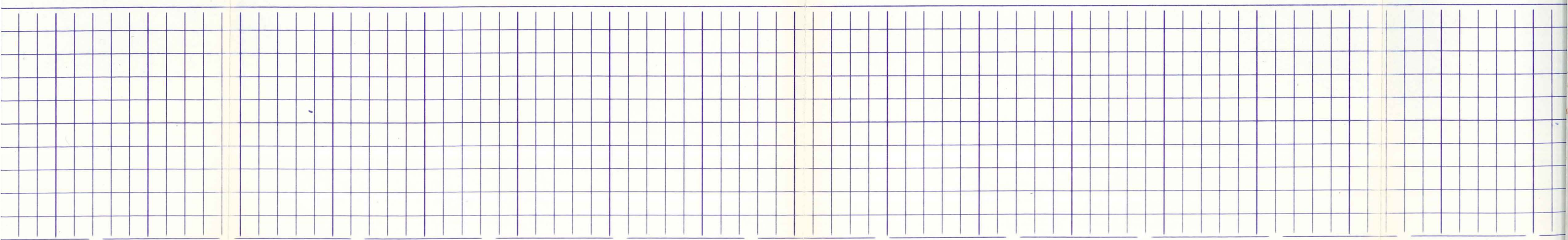
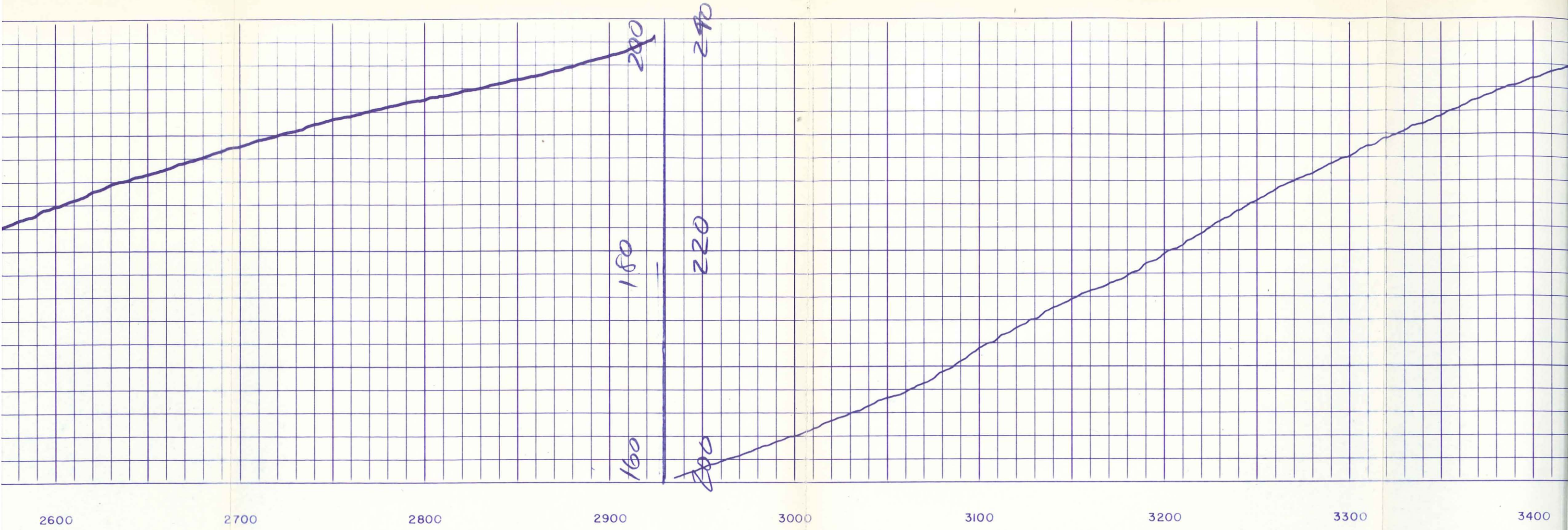
160

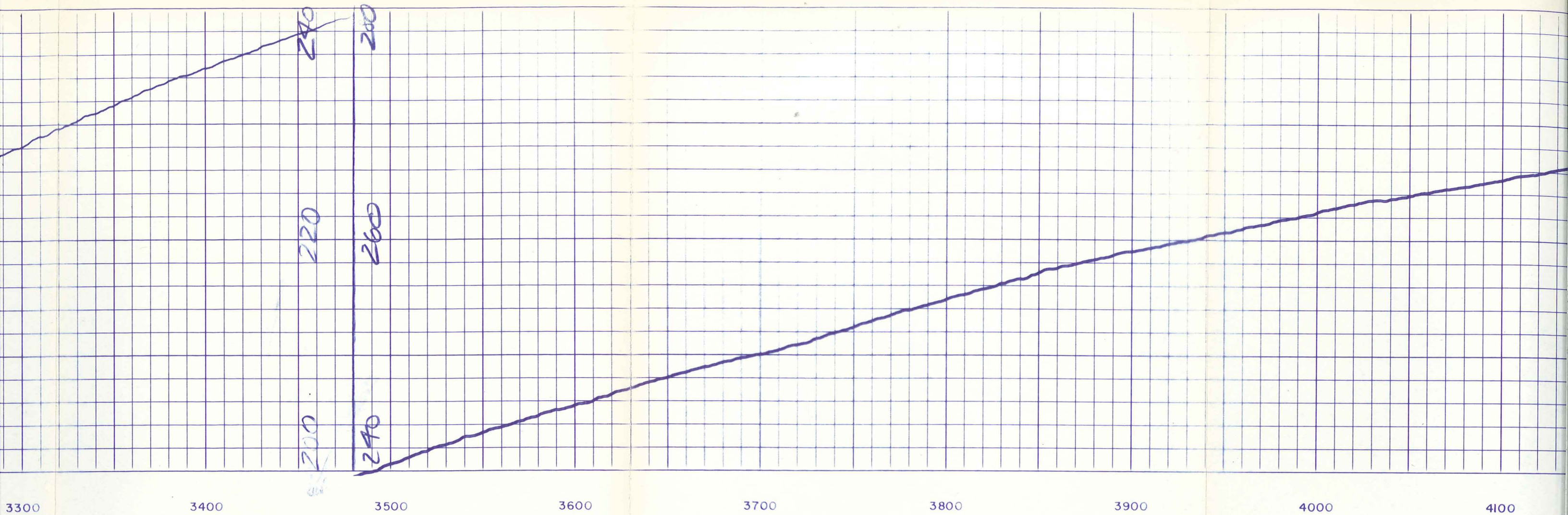
140

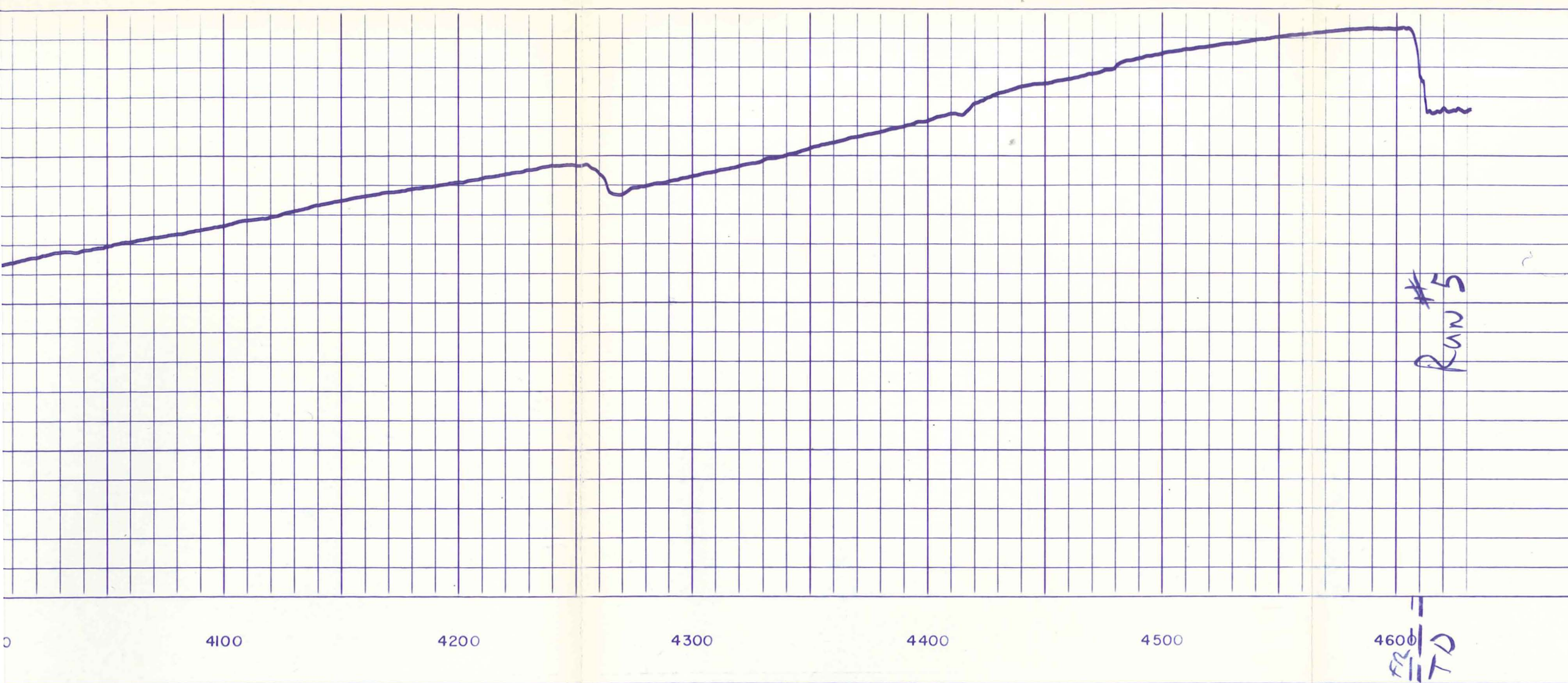
120









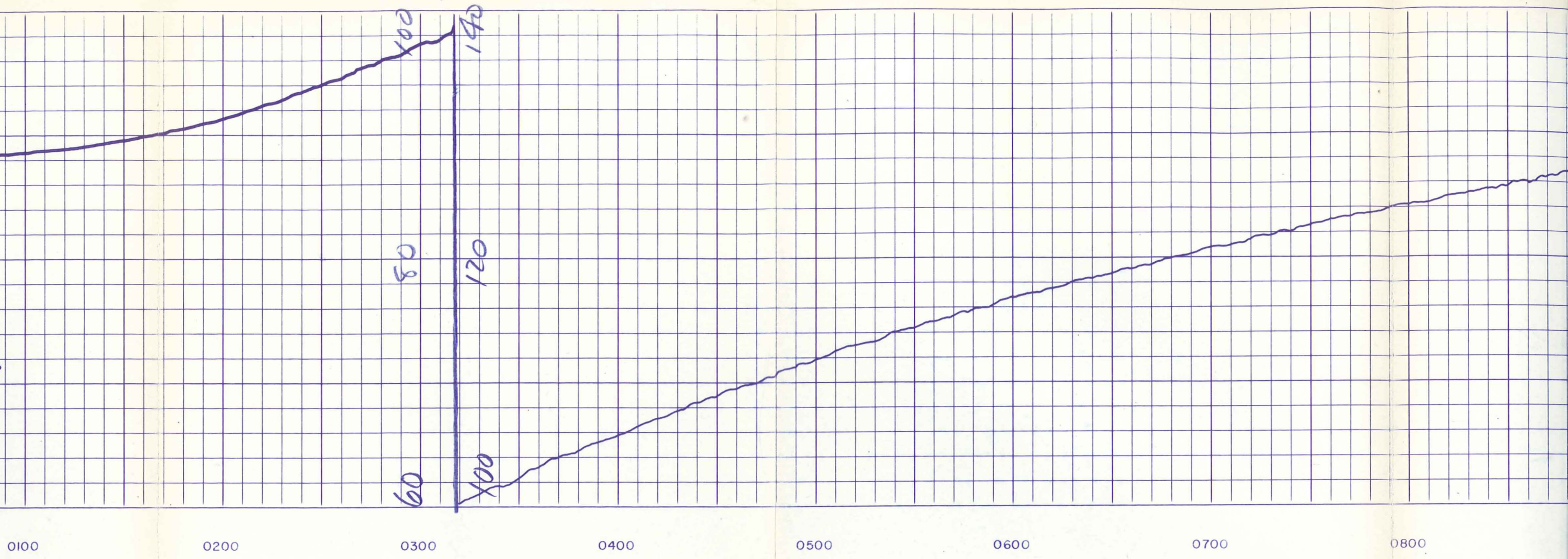


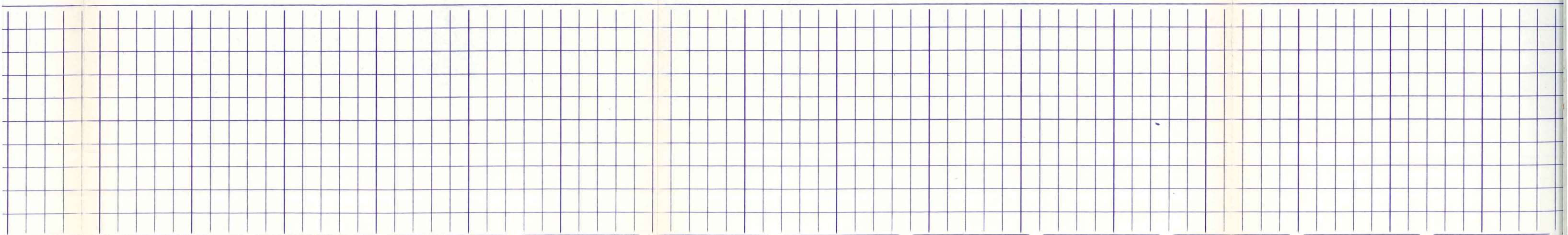
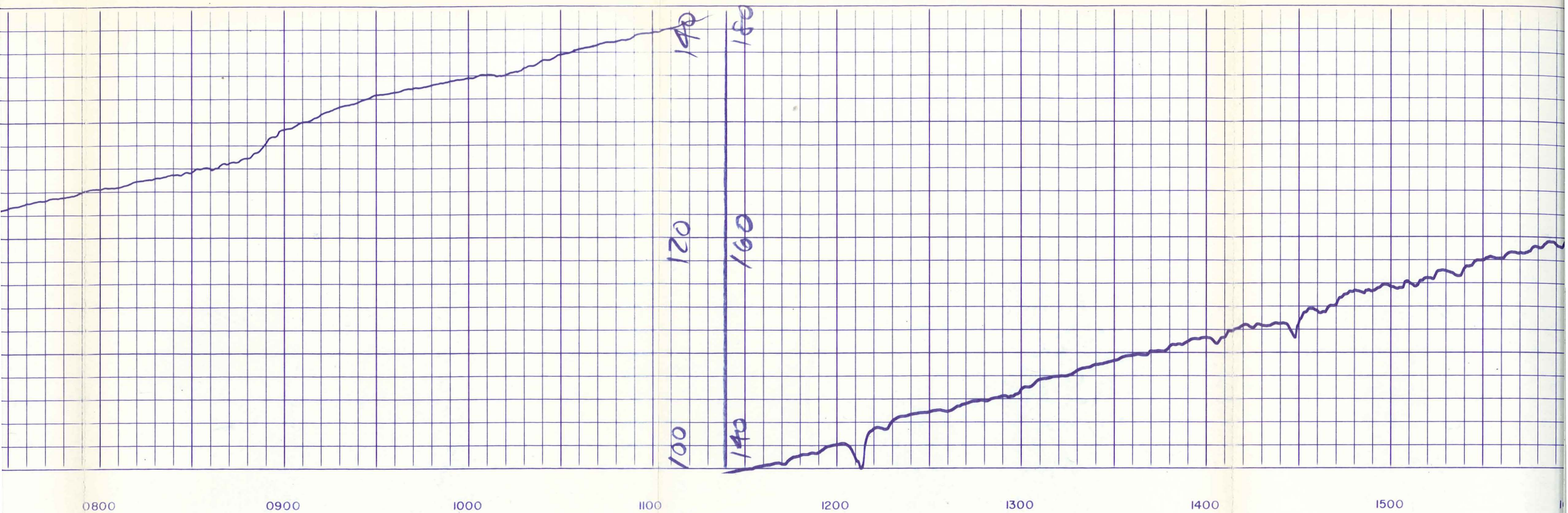
RUN #6  
 WELL FLOWING, BEGAN FLOW AT  
 0625, 270 gpm INCREASED TO  
 335 gpm AT 0750

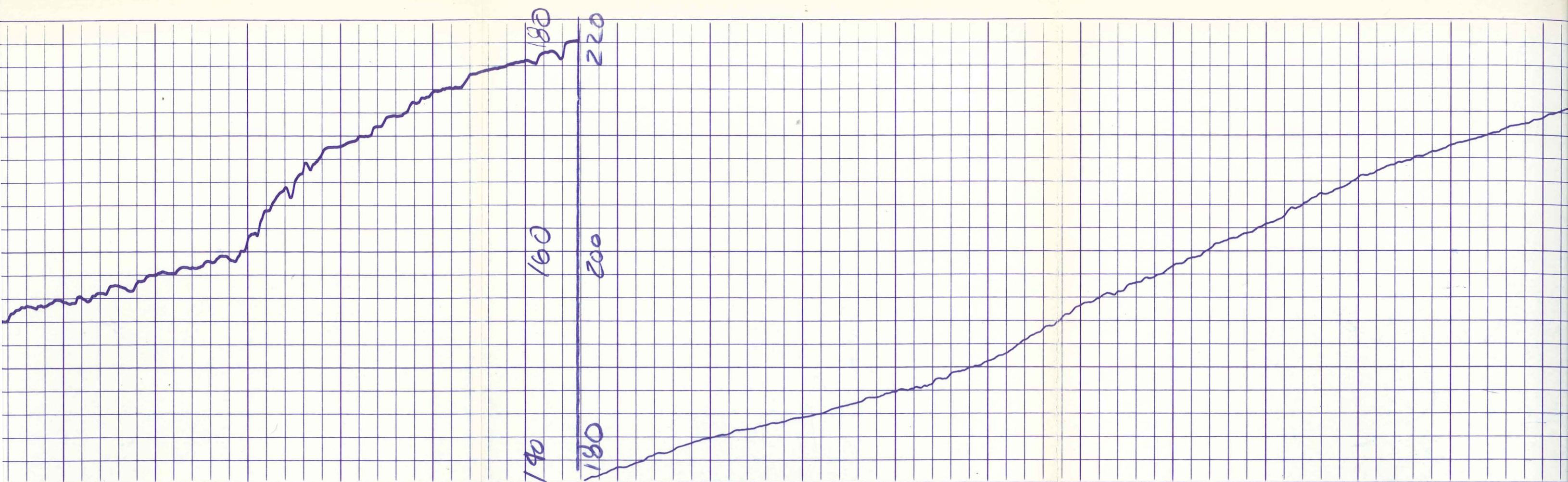
CR      0100

Kup 6

WELL FLOWING, BEGAN FLOW AT  
0625, 270 gpm, INCREASED TO  
335 gpm AT 0750







1500

1600

1700

1800

1900

2000

2100

2200

2300

180

190

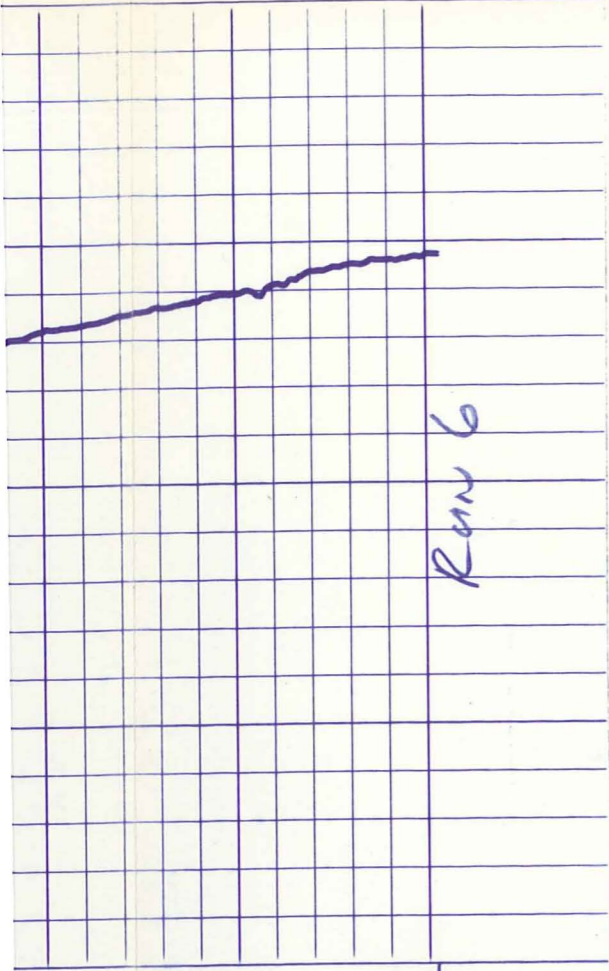
200

220



FR





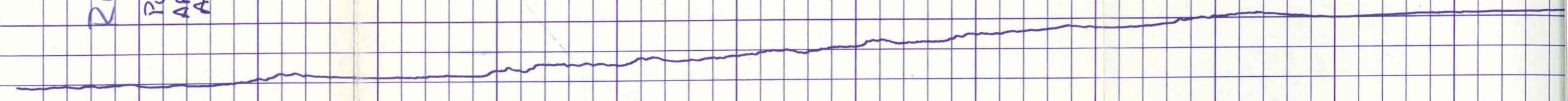
Run 6

3000

FR

RUN # 7

PUMPING INTO ANALYSIS @ 155 gpm  
 AFTER 6:00 pm PUMPED INTO WELL  
 AT 3:00' FOR 33 min.



900  
 PAVING 80

1000

1100

1200

1300

1400

1400

1500

1600

1800

1900

2000

2100

2200

00

100

120

120

140

160

160

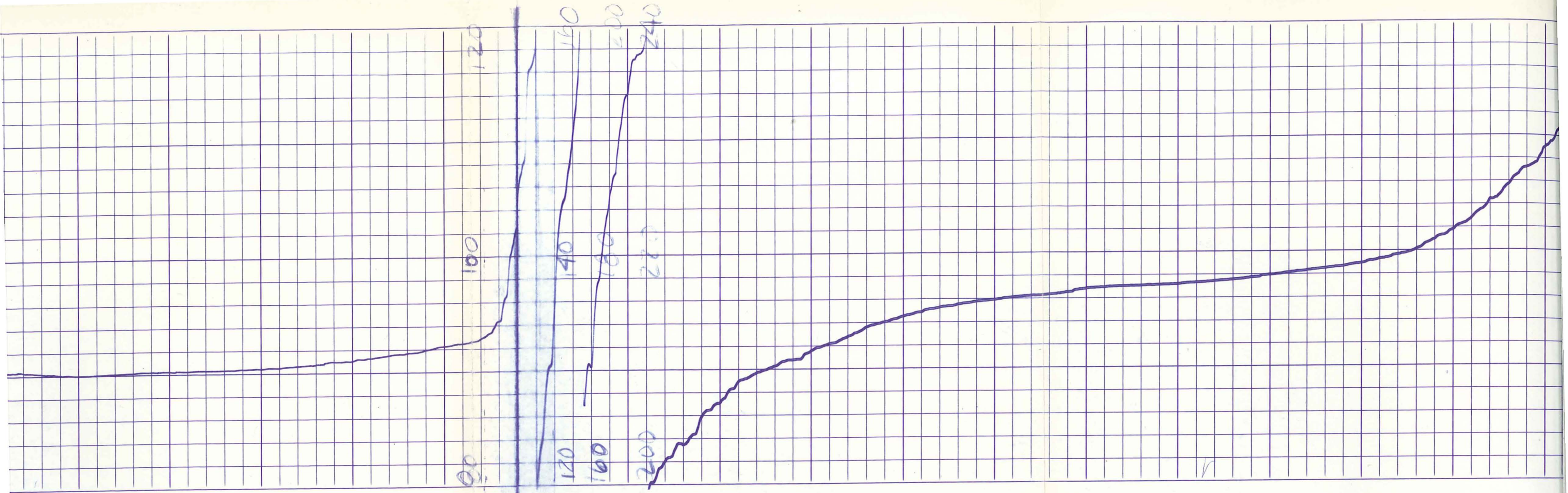
180

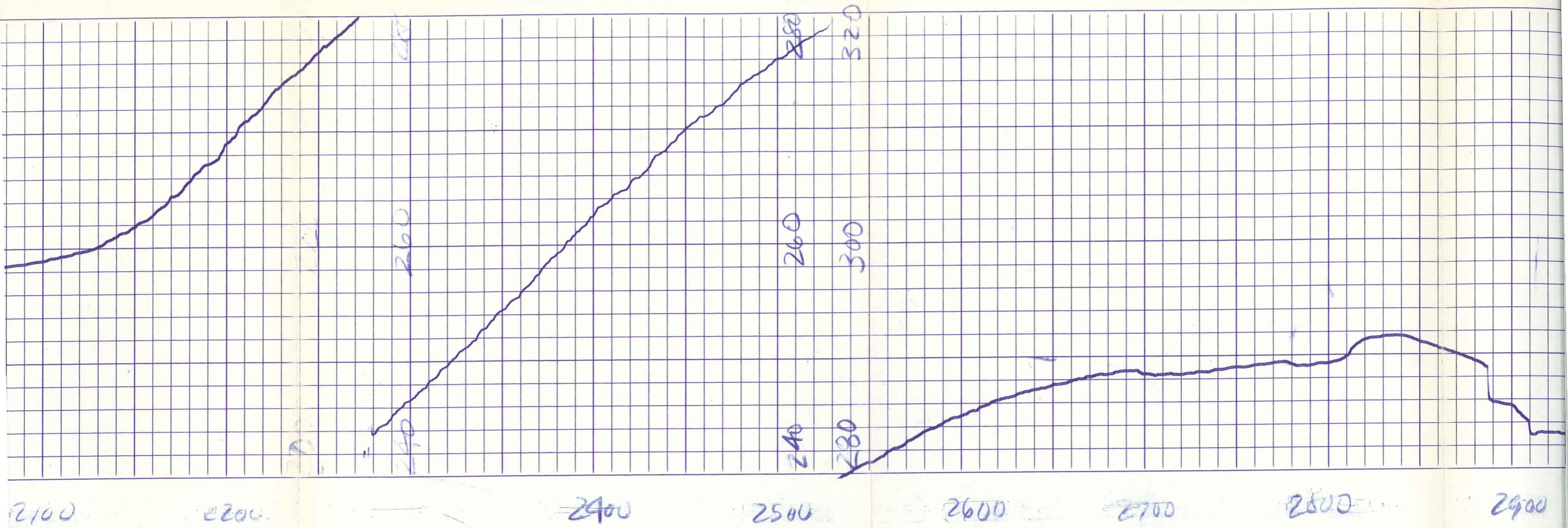
200

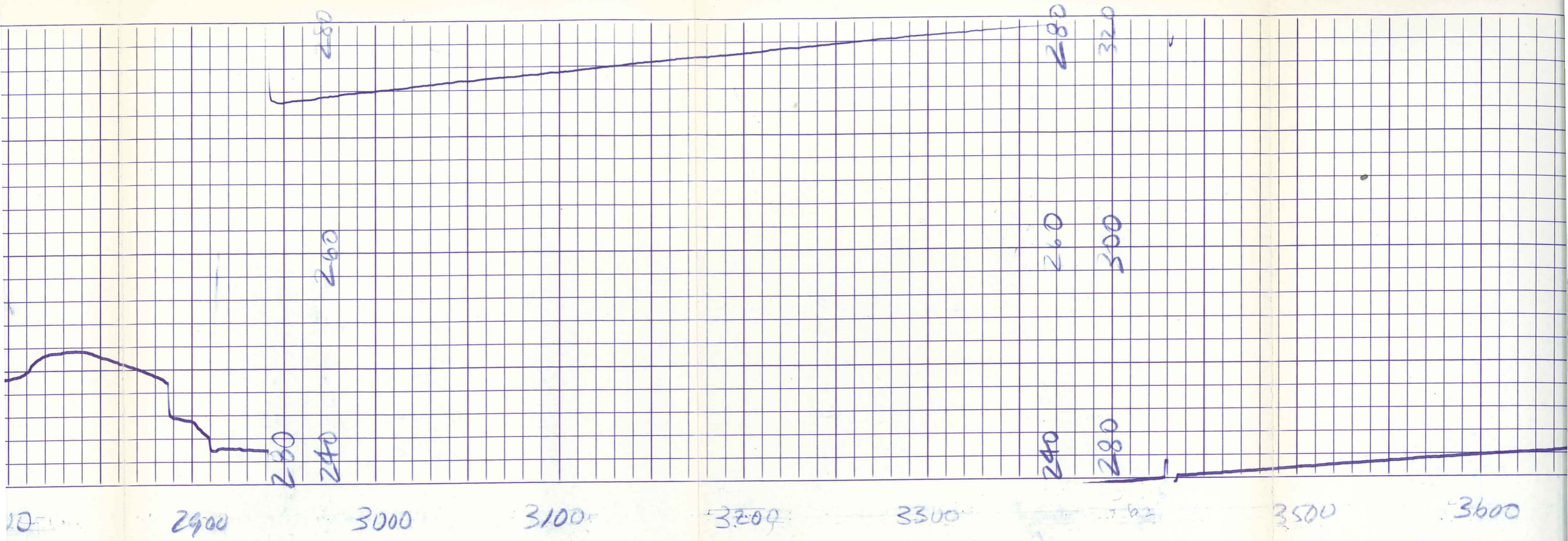
200

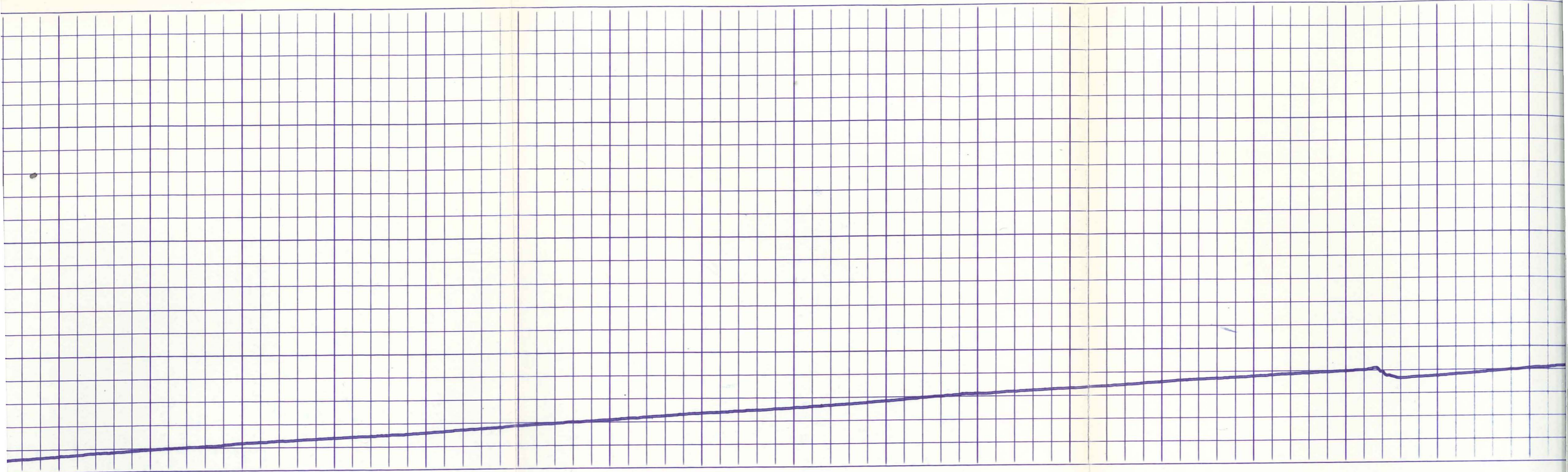
220

240









3600

3700

3800

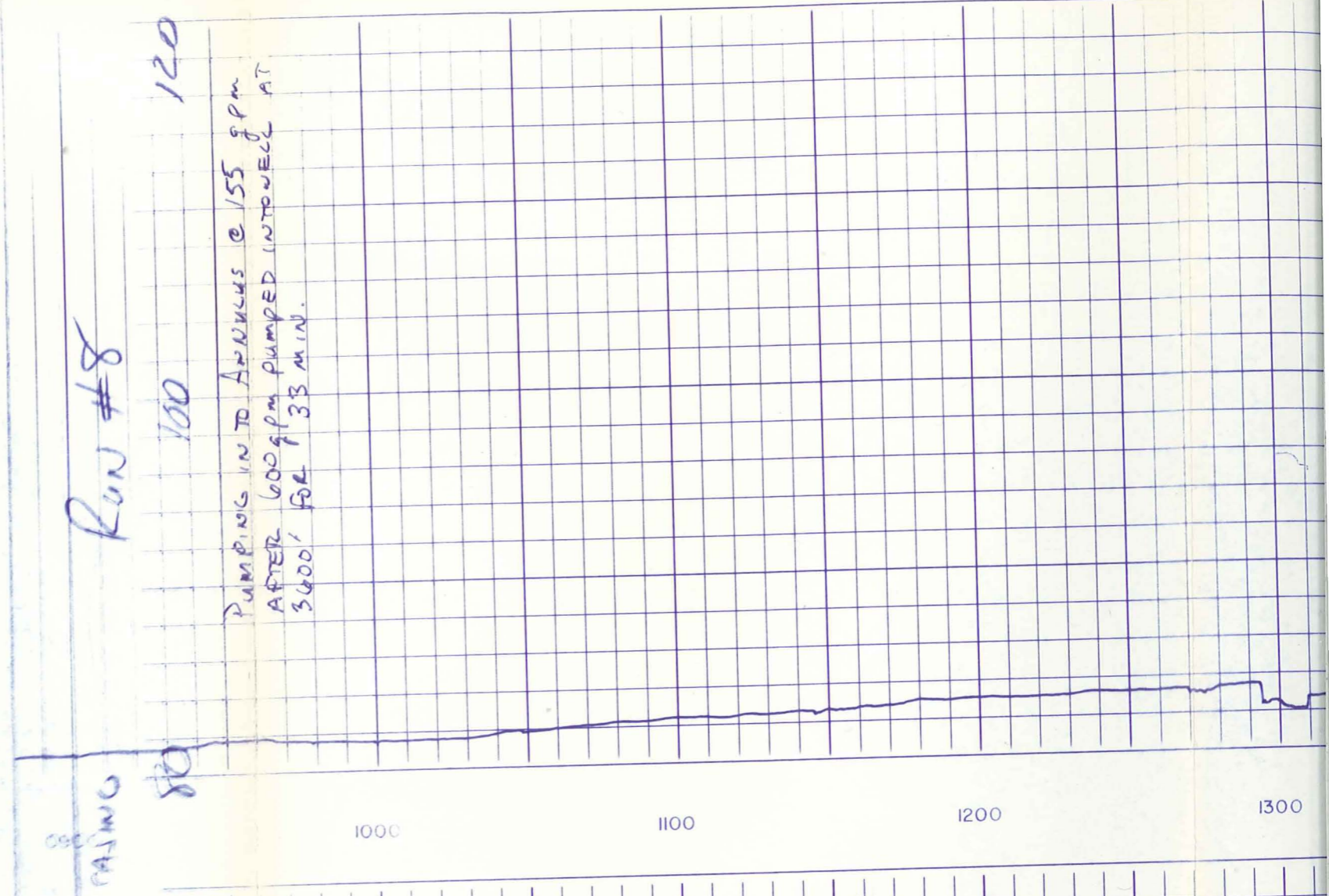
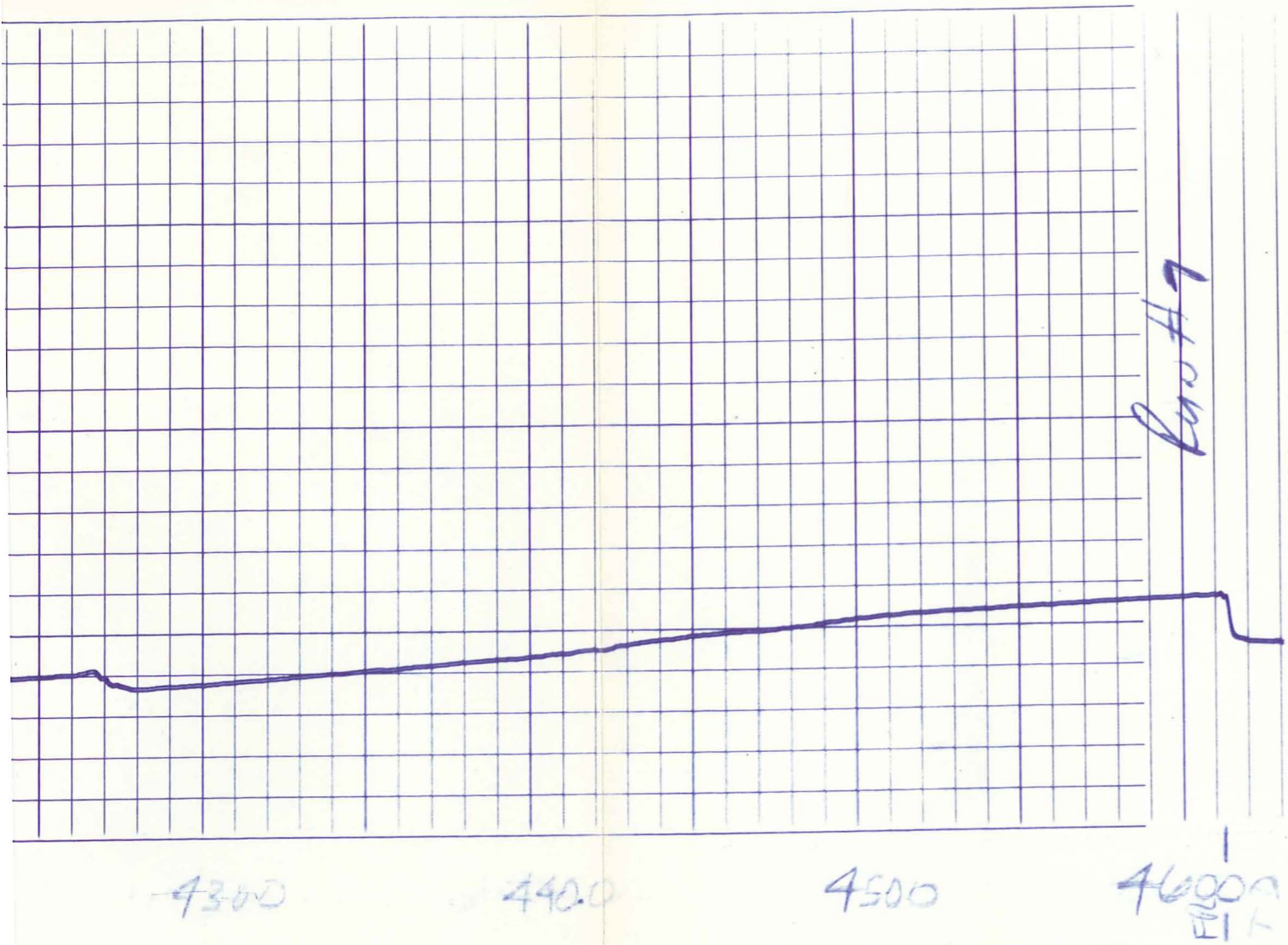
3900

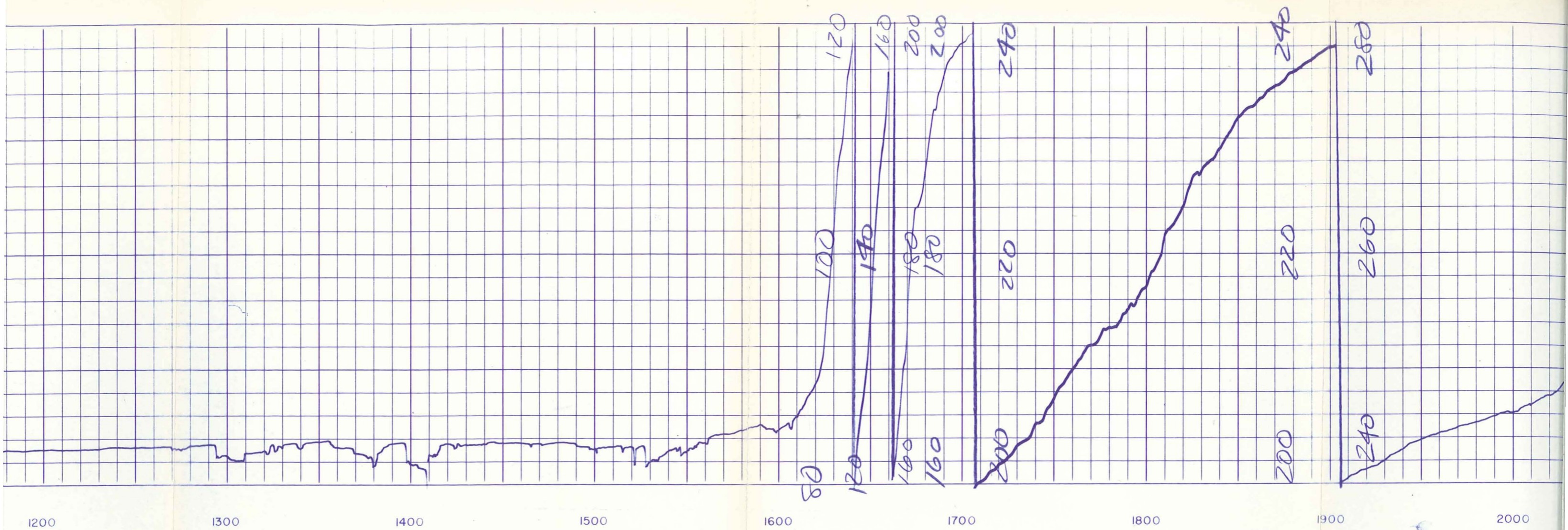
4000

4100

4200

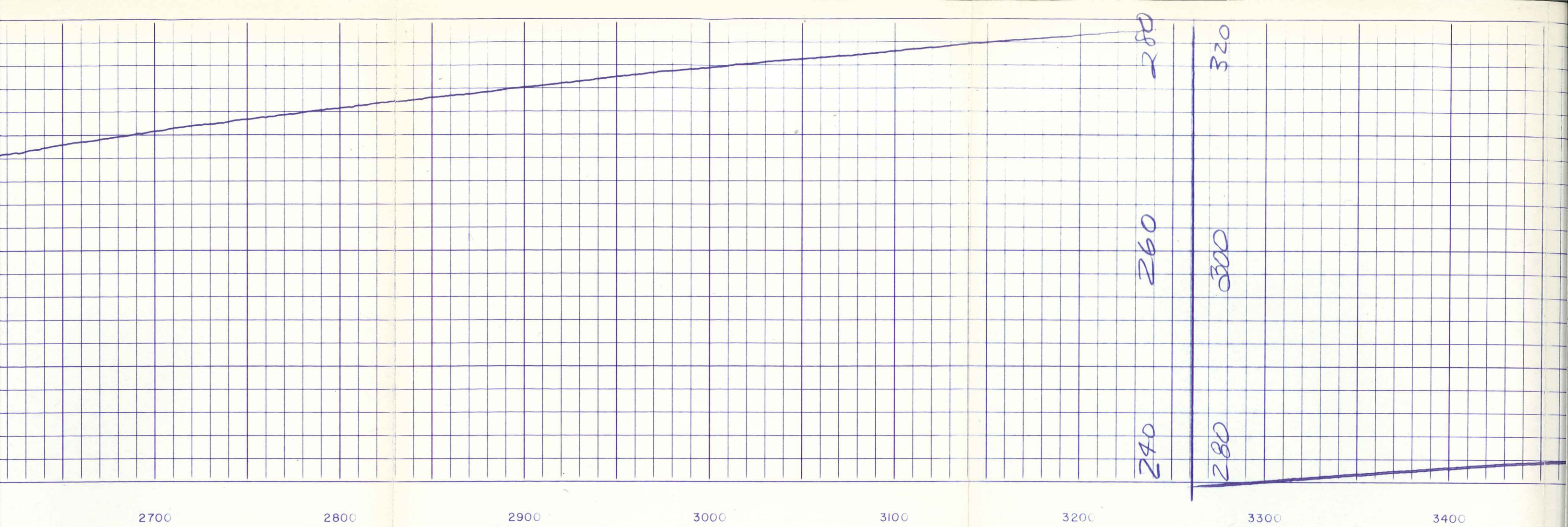
4300











2700

2800

2900

3000

3100

3200

3300

3400

240

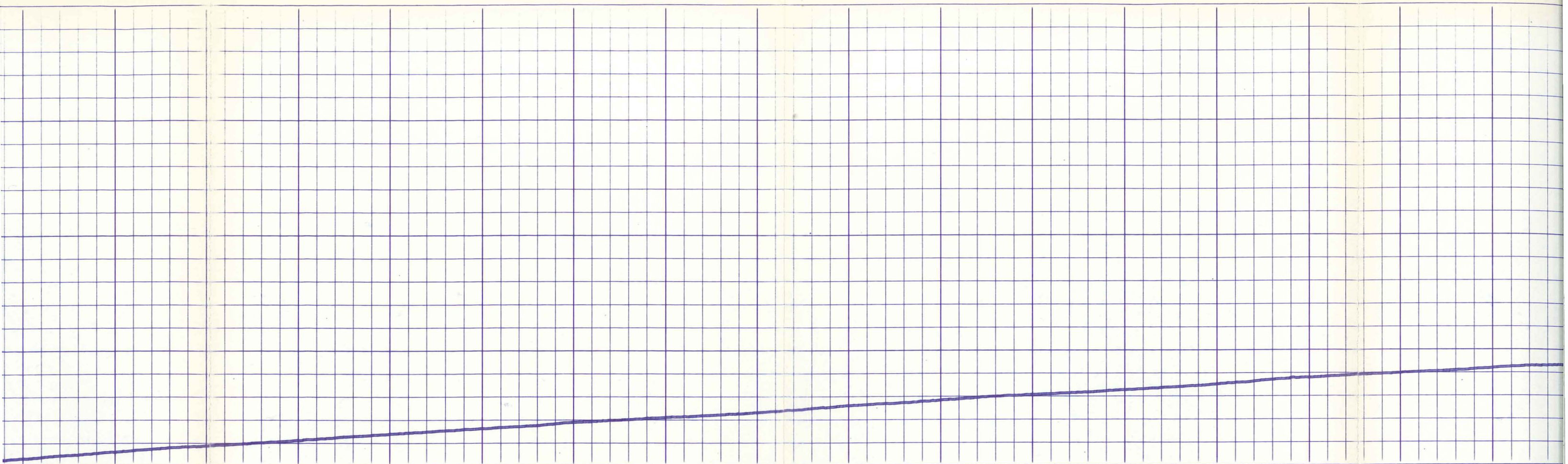
260

280

280

300

320



3400

3500

3600

3700

3800

3900

4000

4100

4100

4200

4300

4400

4500

4600

Run #8

Run #9

80

900

1000

120

PUMPING IN ANNULUS @ 420 gpm AT 18.53



Run #9

80

900

1000

120

PUMPING IN ANNULUS @ 420 gpm AT 18.53

Run #9

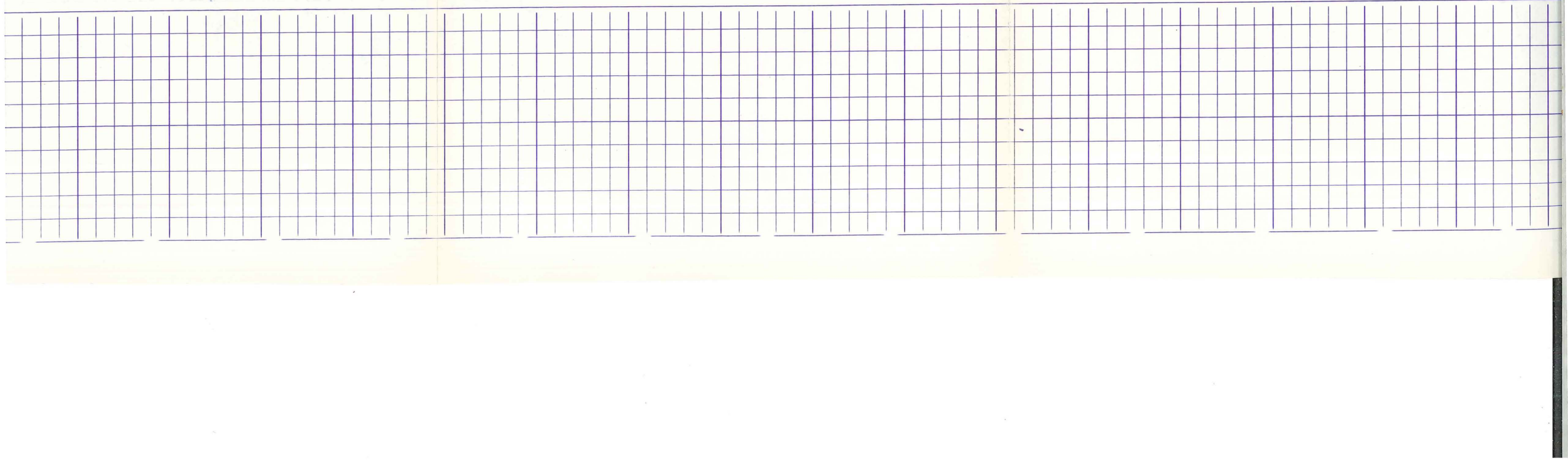
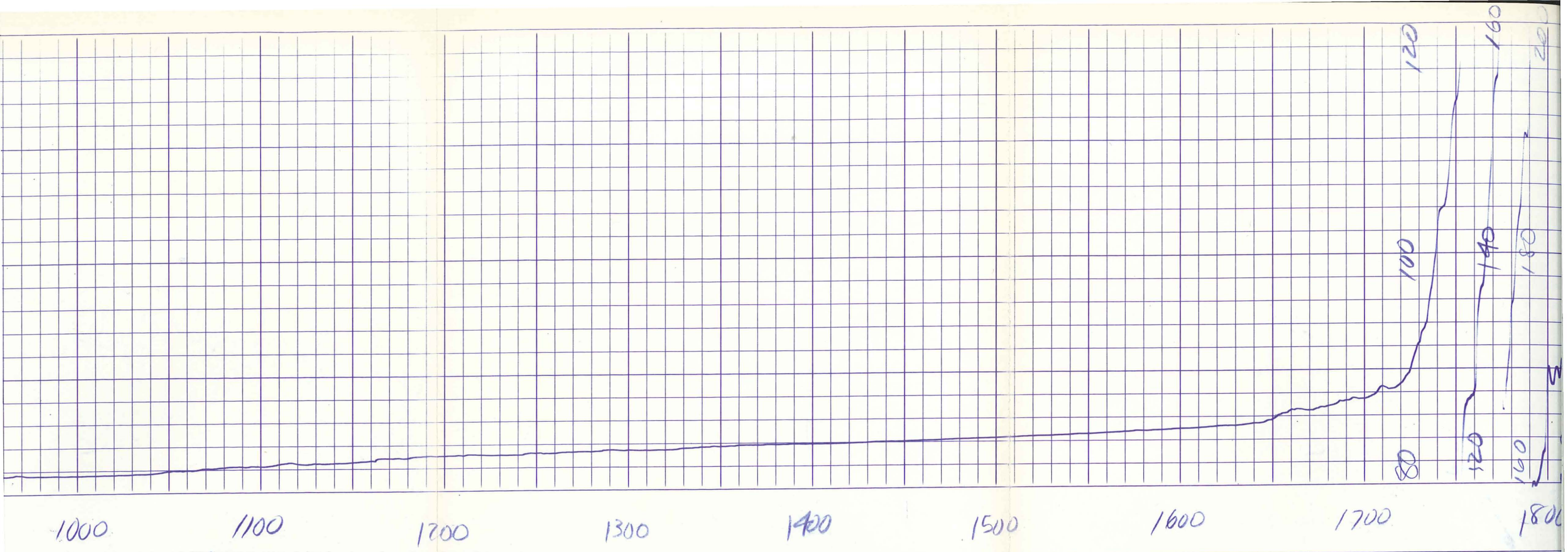
80

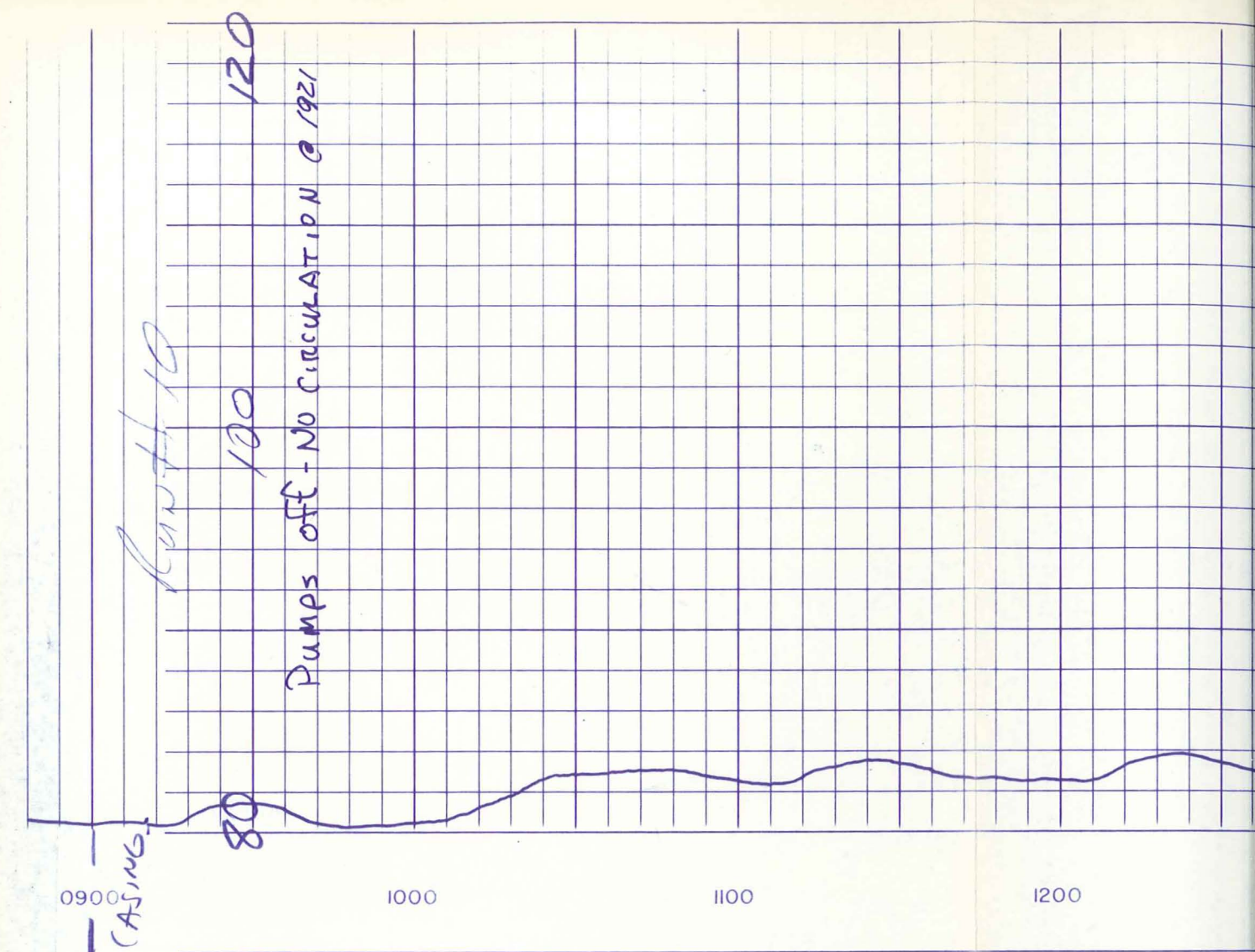
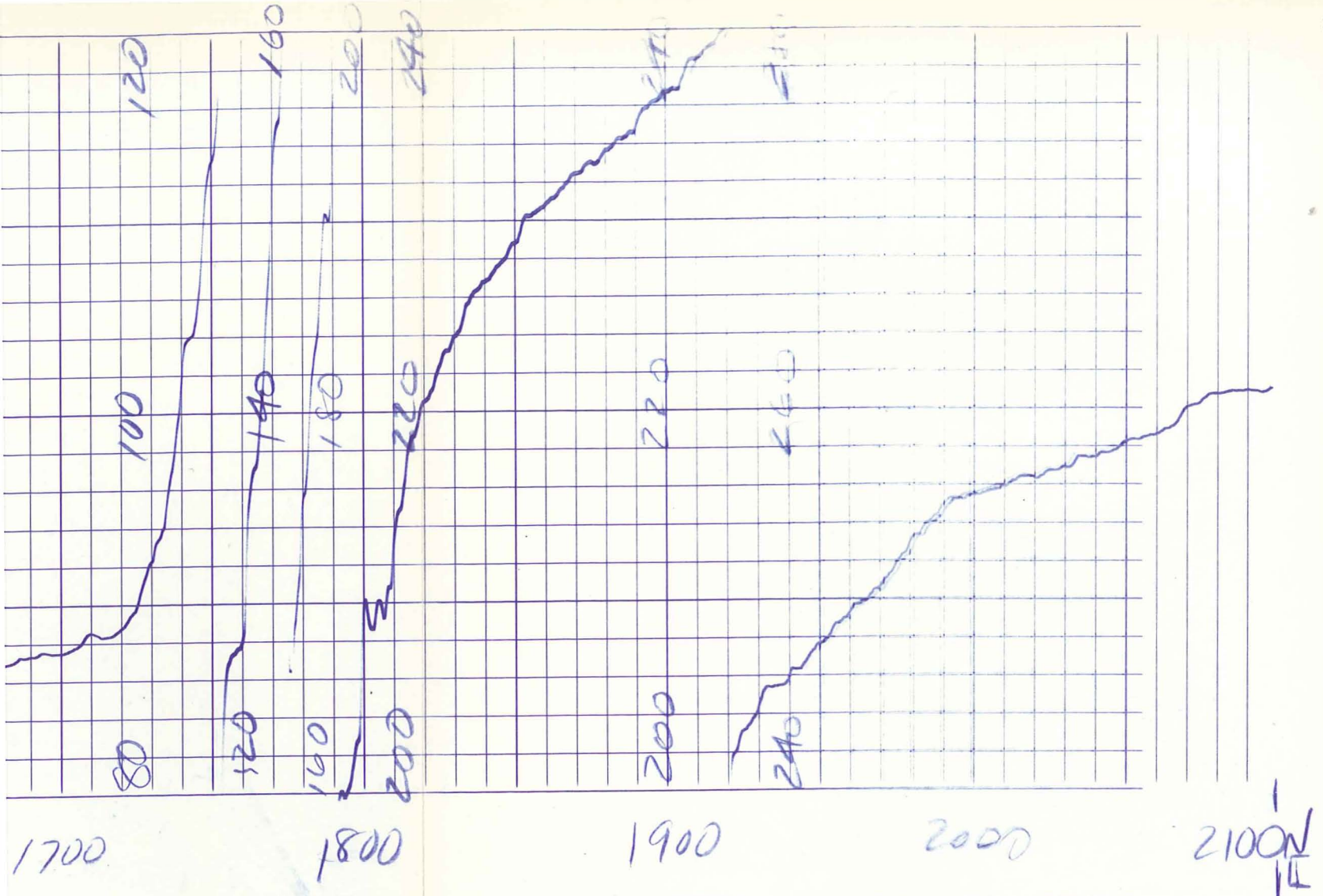
900

1000

120

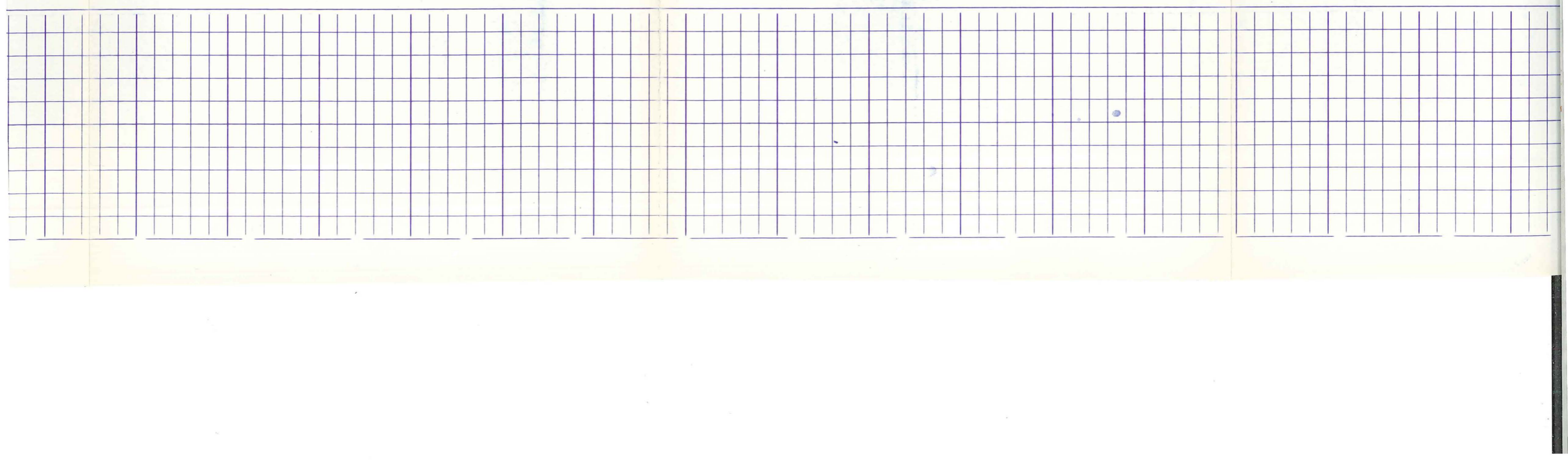
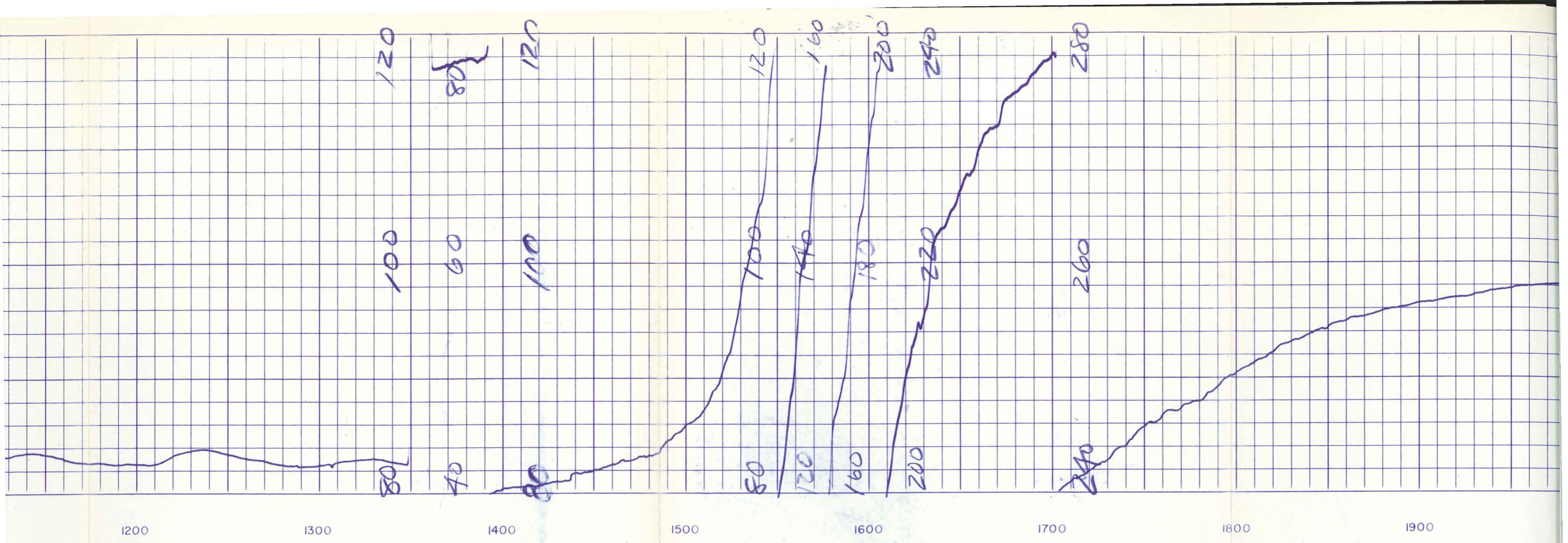
PUMPING IN ANNULUS @ 420 gpm AT 18.53





0900  
CASING

Pumps off - No circulation @ 1921



1900

2000

FR 2100

120

100

80

900

CASING

Run # 11

Pumping into Annulus @ 520 gpm  
AT 2038

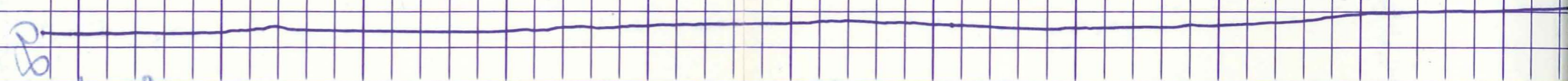
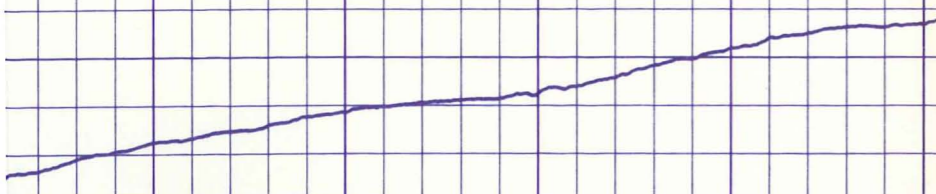
1000

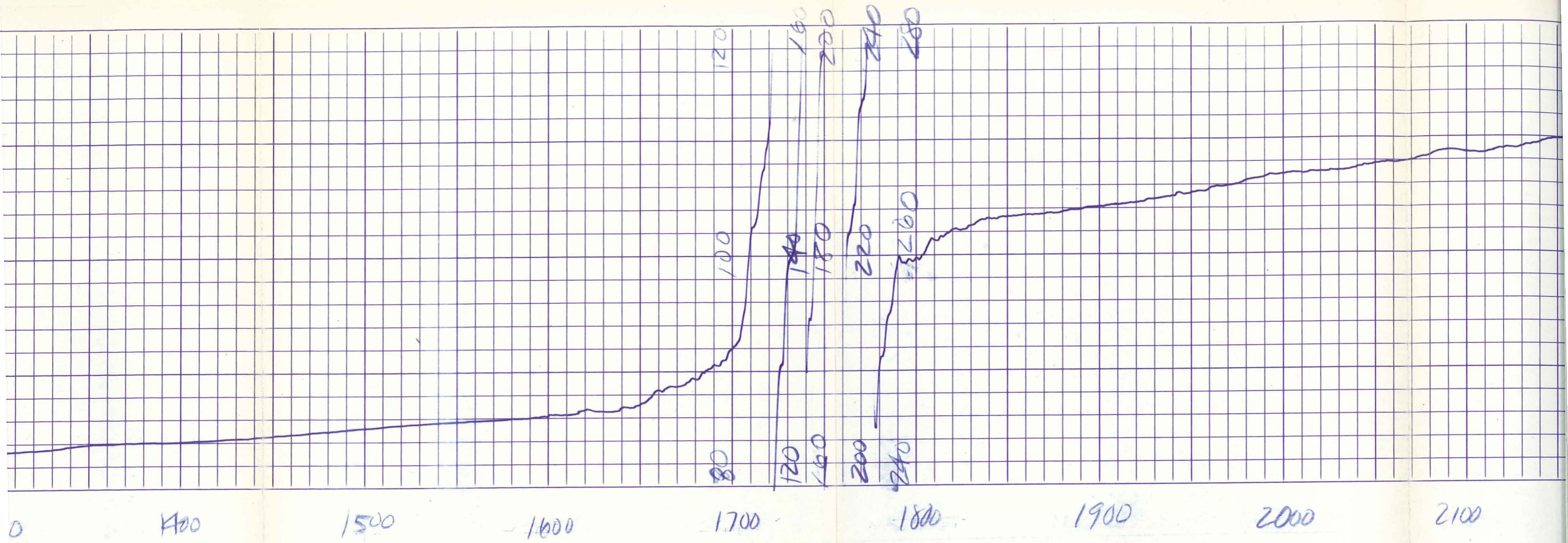
1100

1200

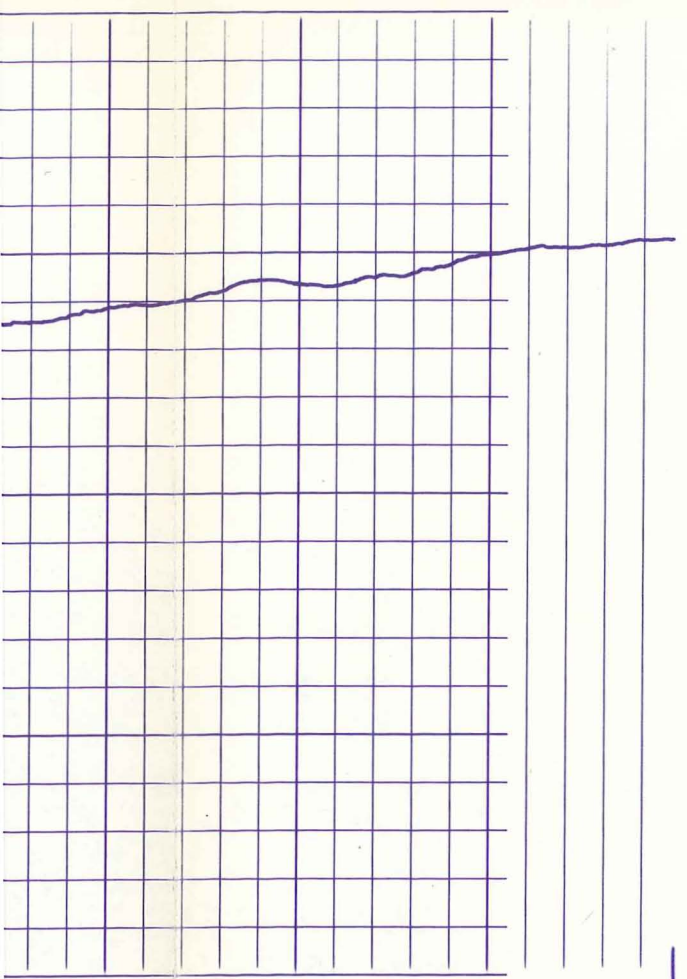
1300

1400







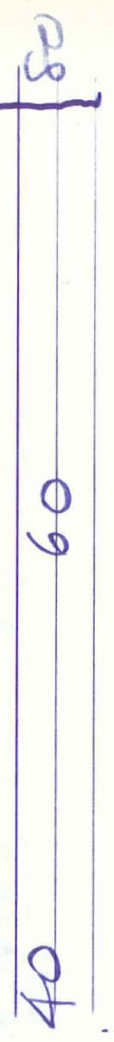


2100

2200  
FR

Run #12

LR



120  
140  
160  
180  
200  
220  
240  
260  
280

Pumping into Annulus @ 520gpm  
AT 2038

1700

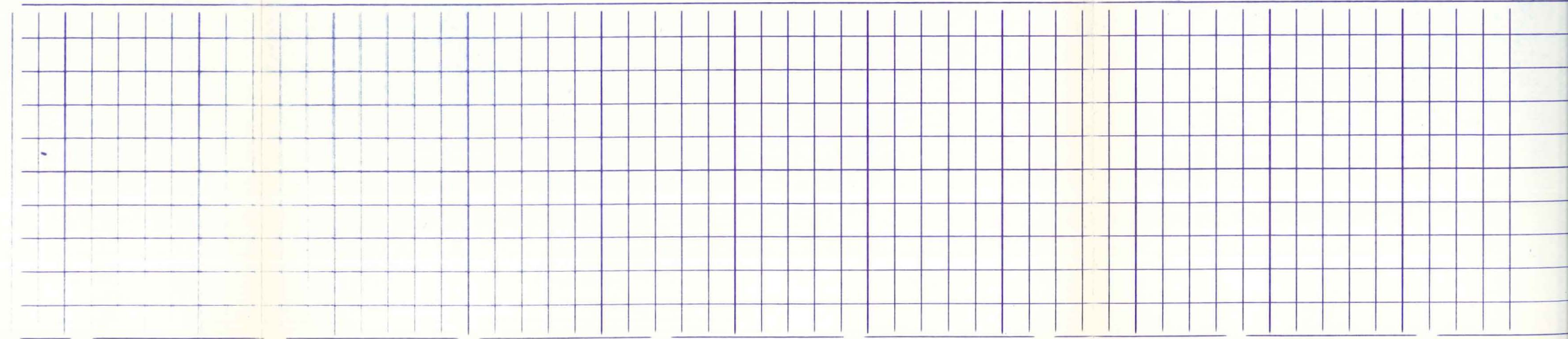
1800

1900

2000

2100

FR



2100

FR

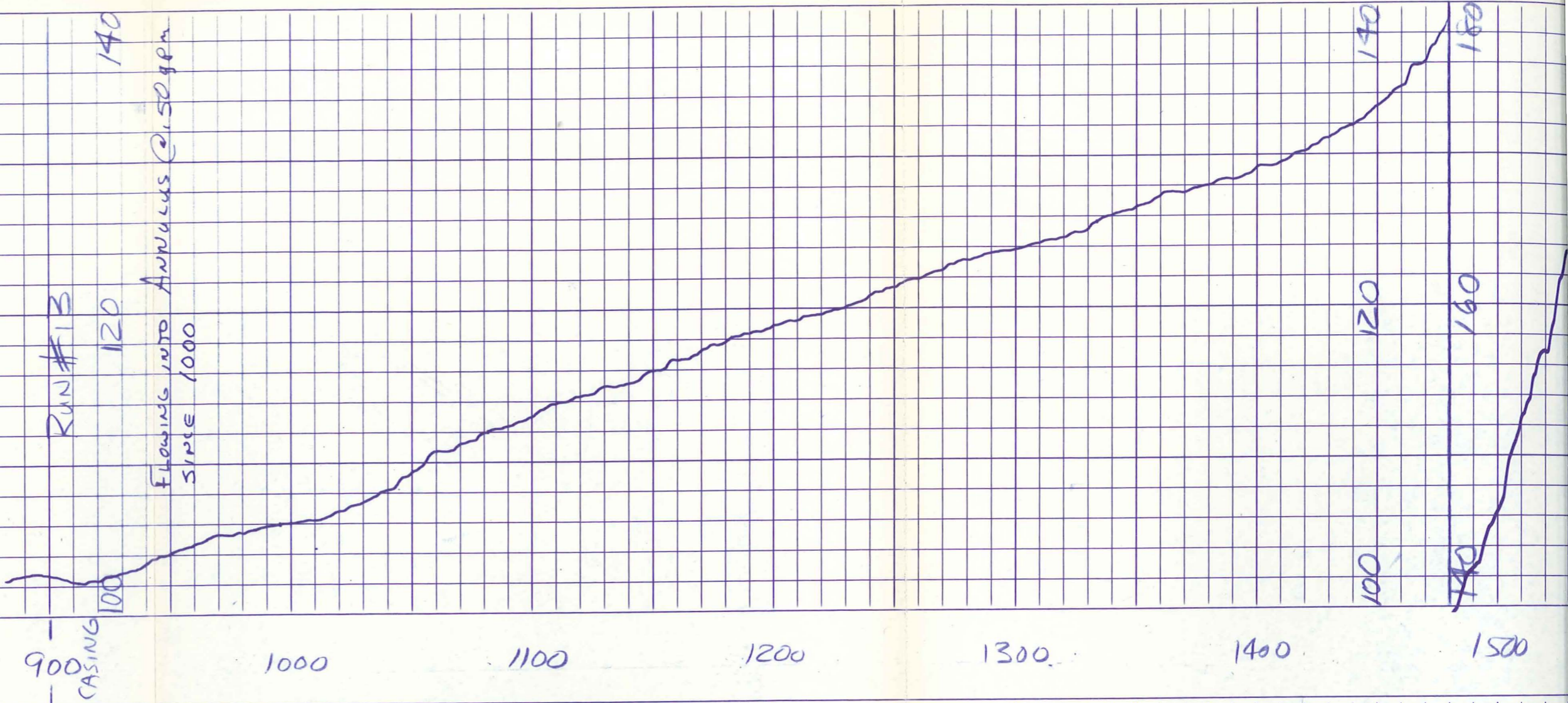
900  
CASING

RUN #13

120

140

Flowing into Annulus @ 150 gpm  
since 1000



1500

1400

1300

1200

1100

1000

140

120

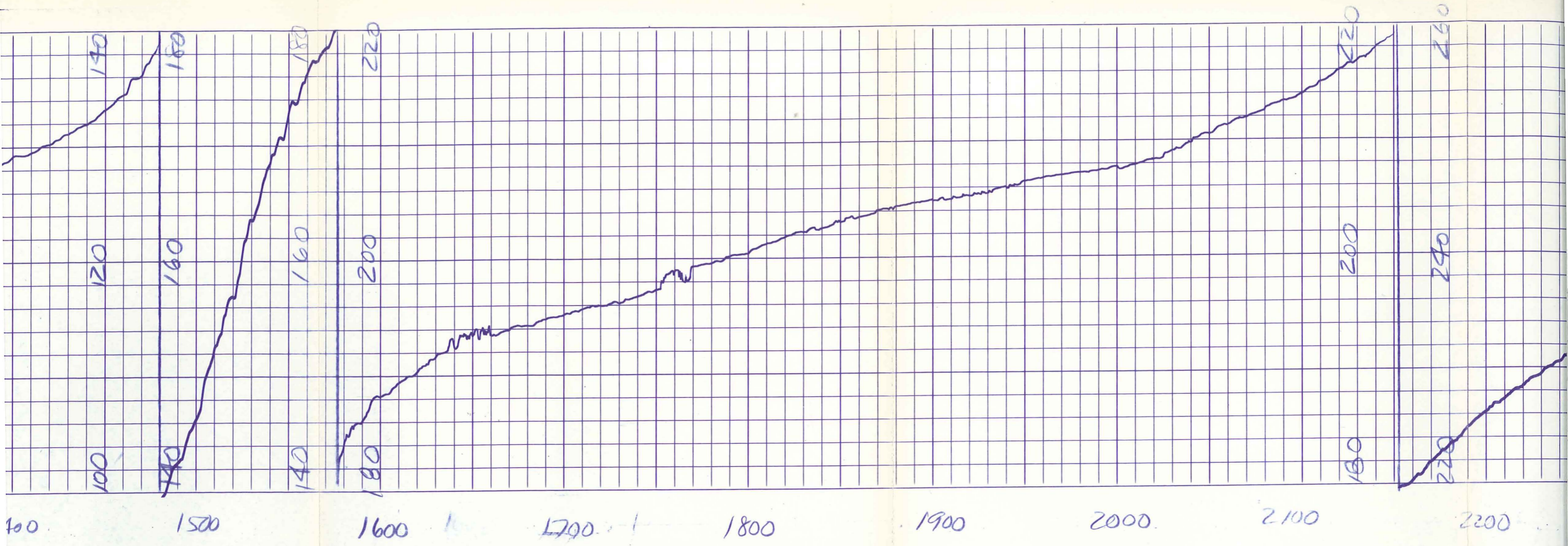
100

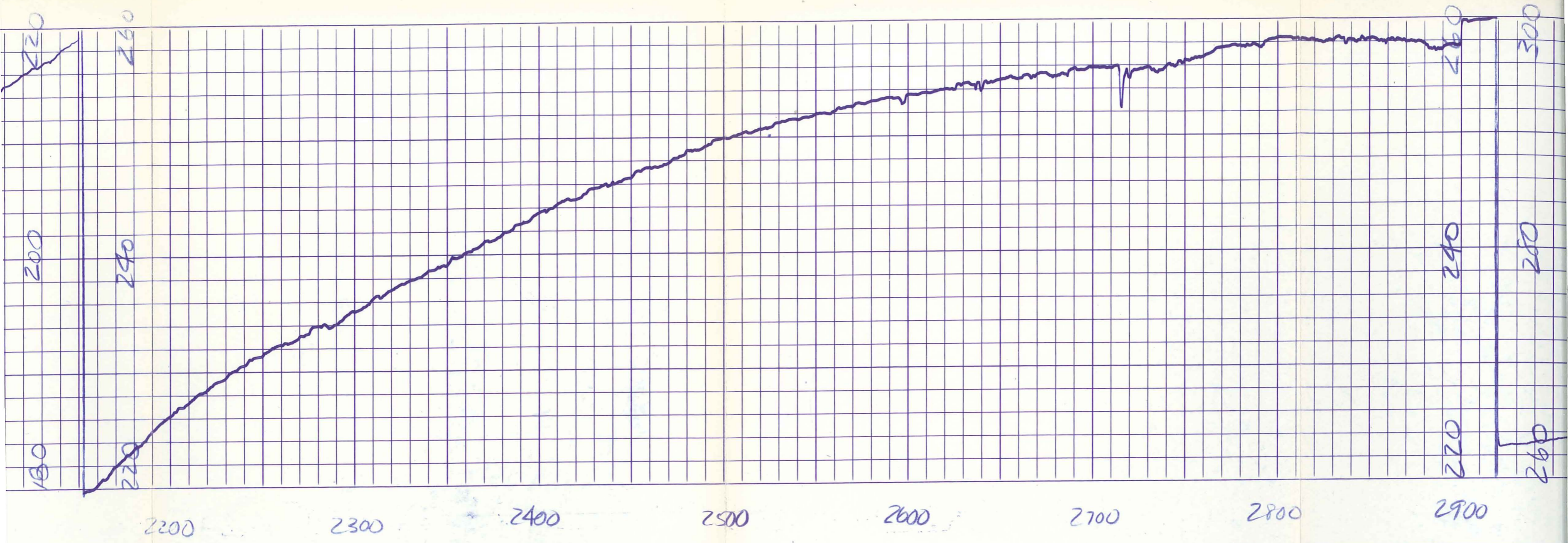
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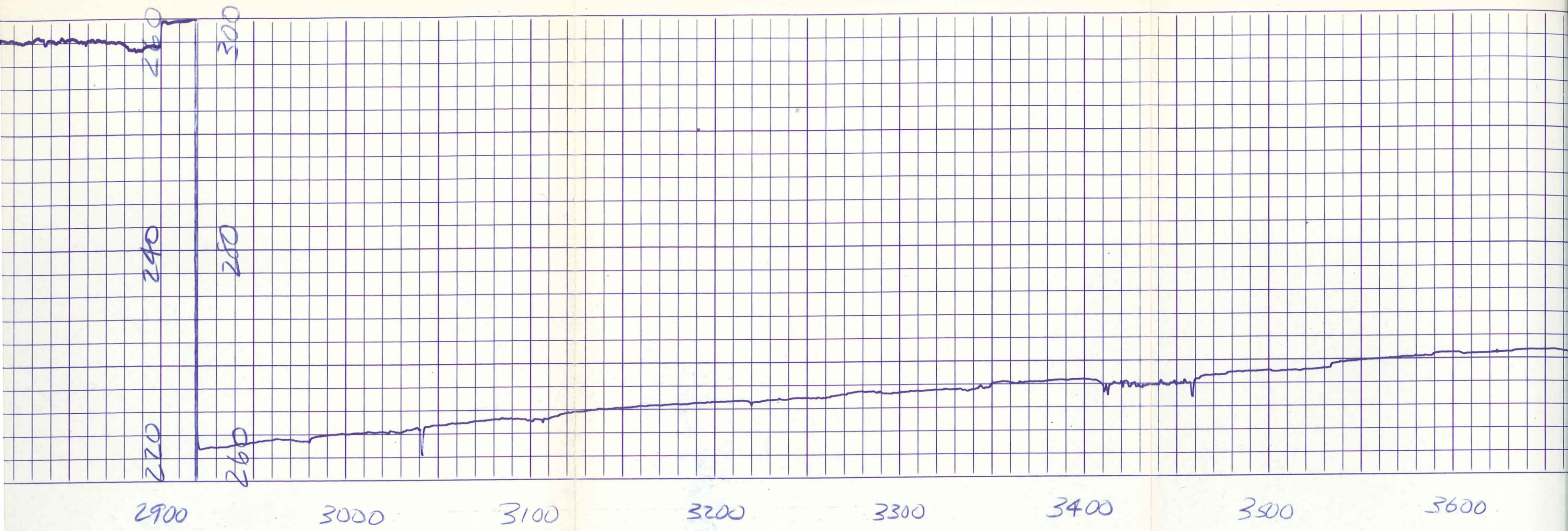
140

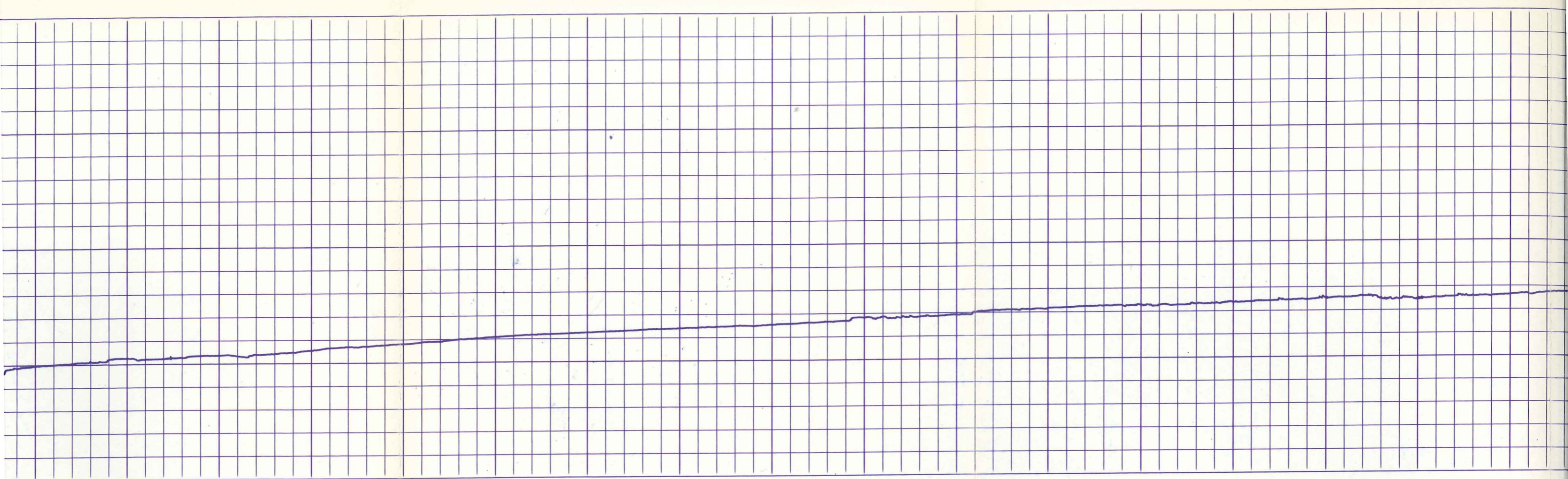
120

140









3600

3700

3800

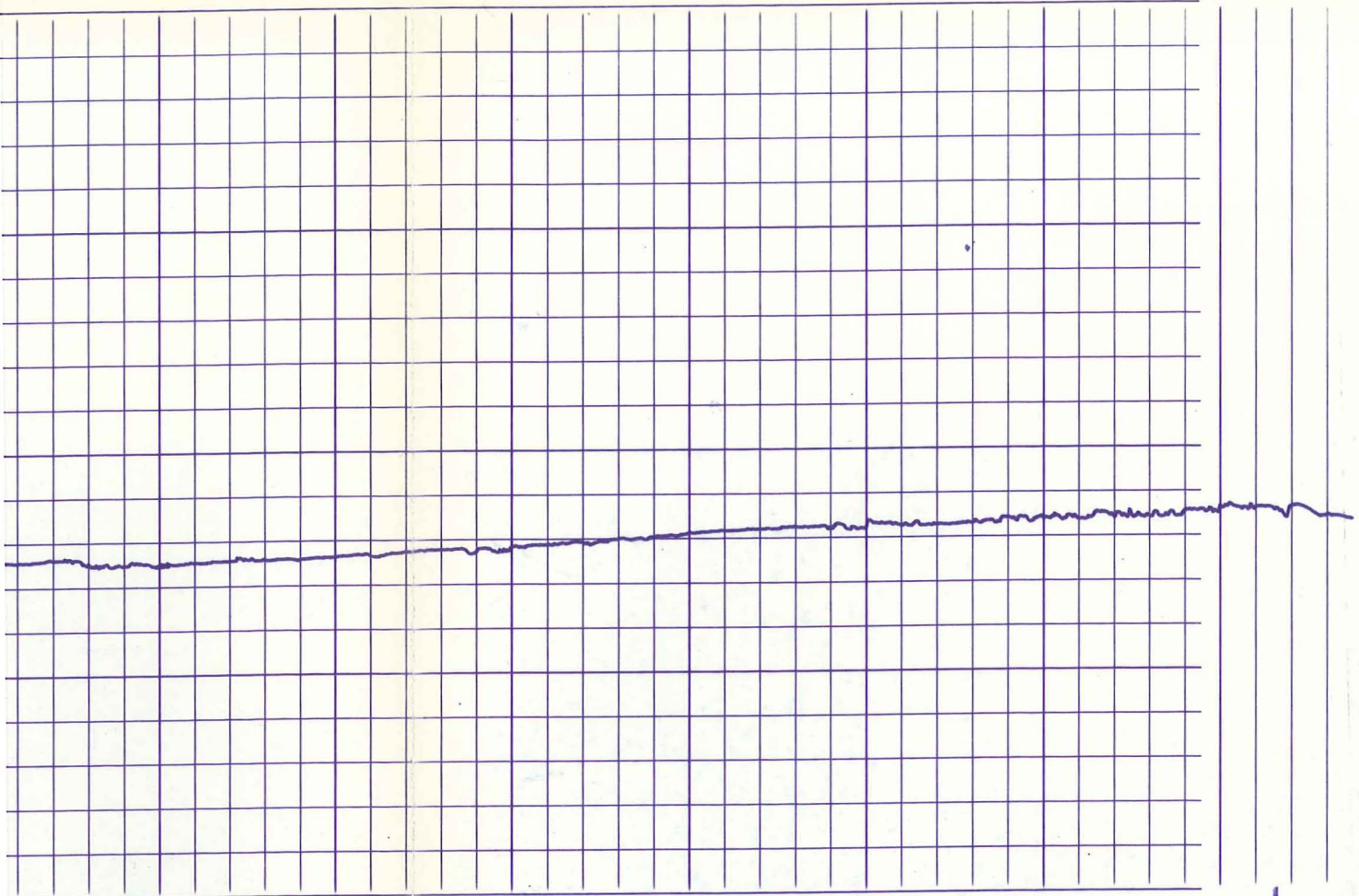
3900

4000

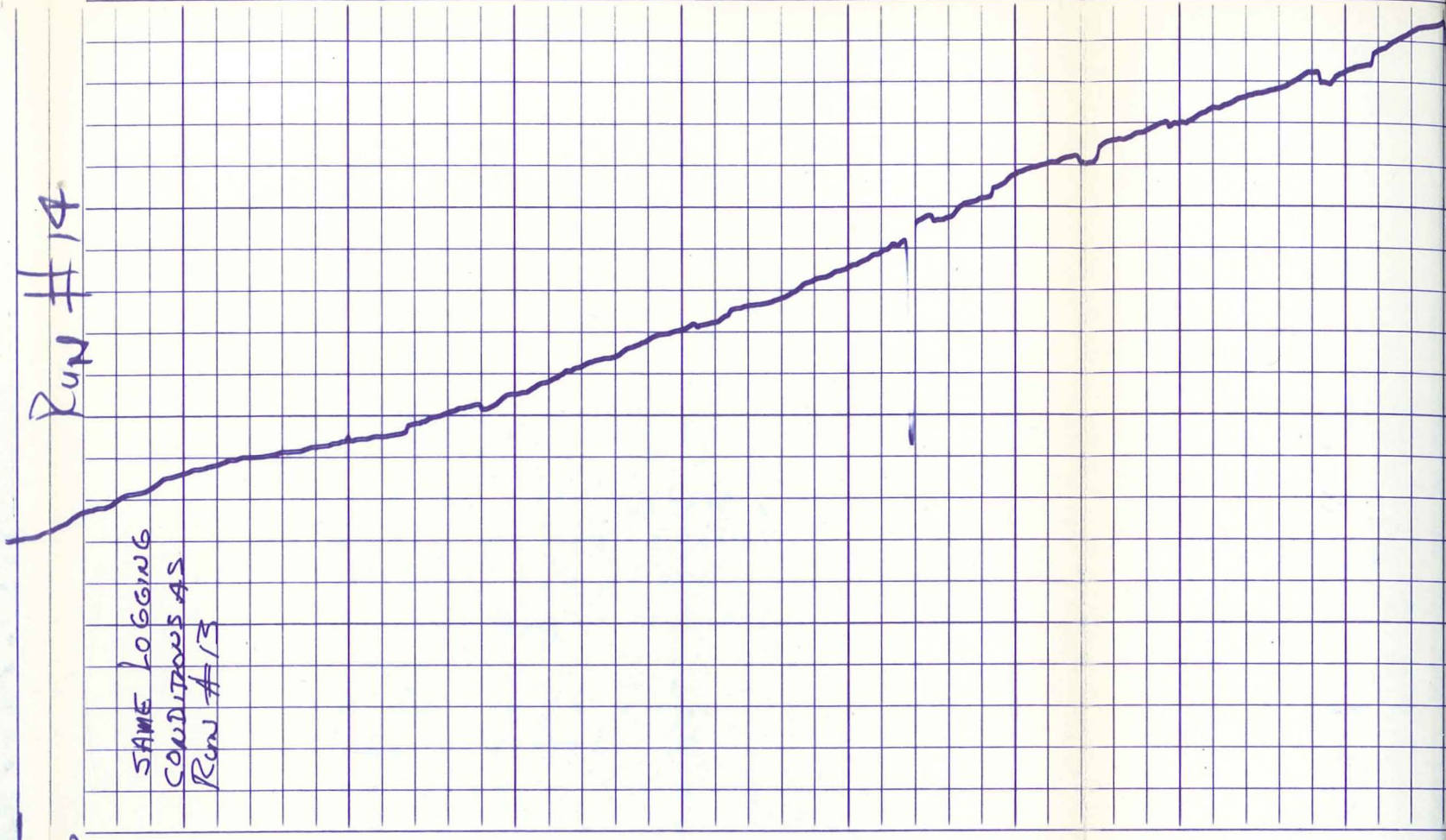
4100

4200

4300



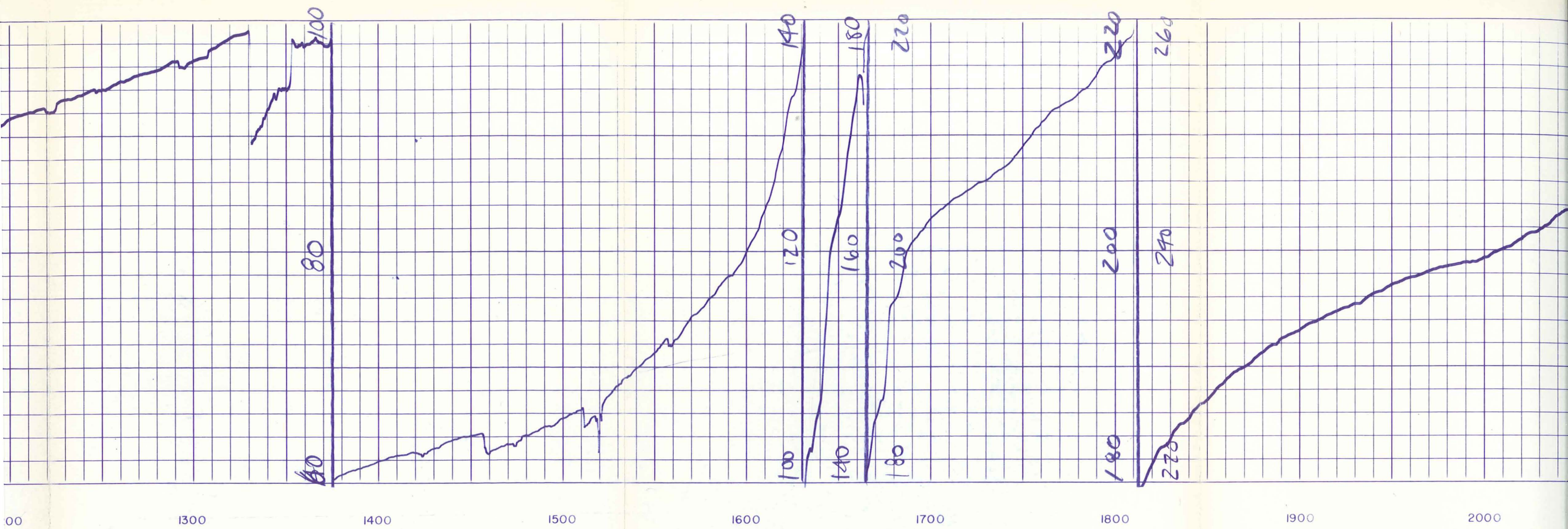
4300      4400      4500      4600  
 FR TD



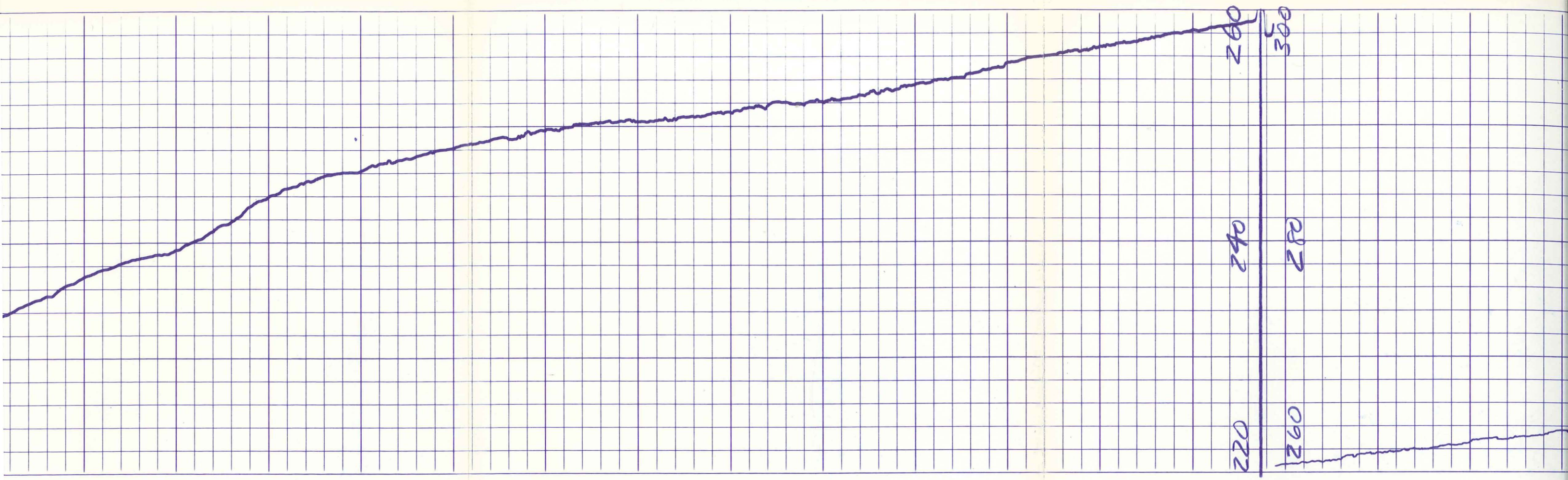
Run #14

SAME LOGGING  
 CONDITIONS AS  
 Run #13

0900 CASING      1000      1100      1200      1300







2000

2100

2200

2300

2400

2500

2600

2700

220

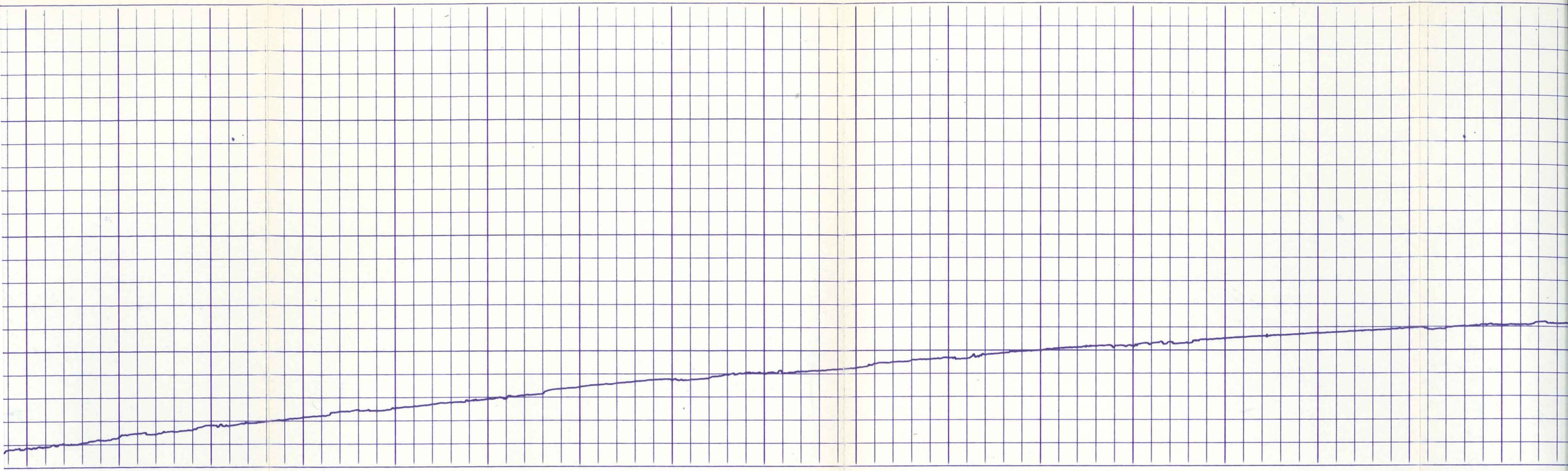
240

260

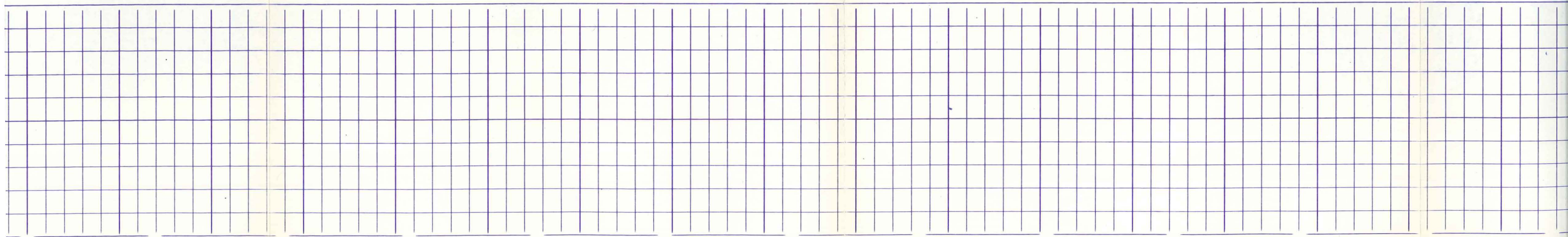
260

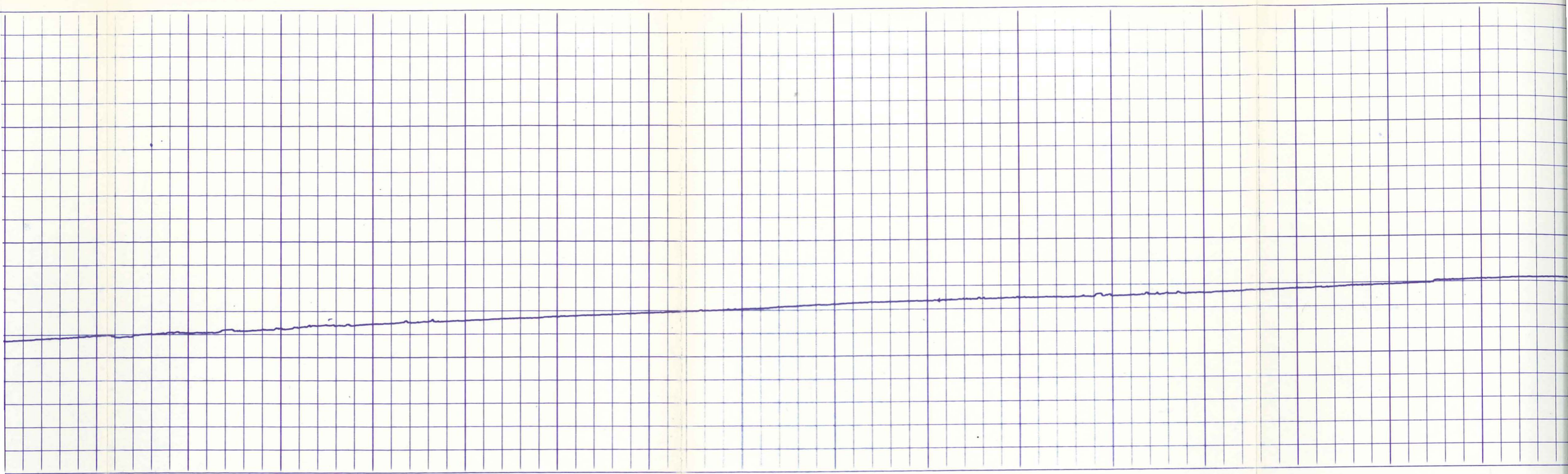
280

300

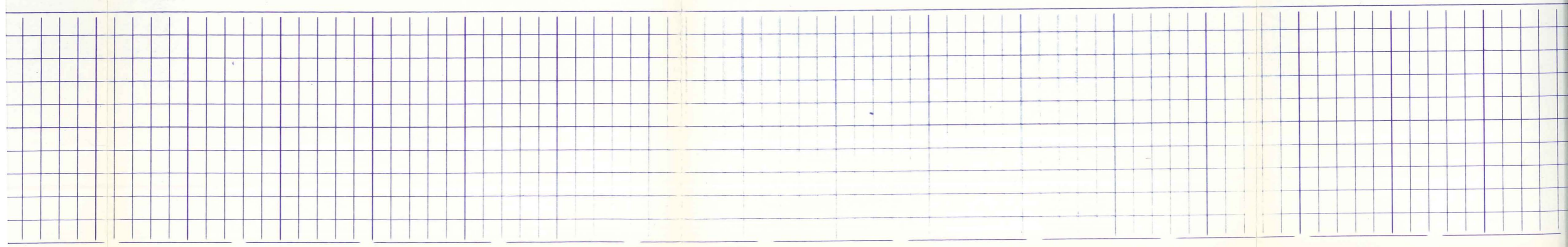


2700                      2800                      2900                      3000                      3100                      3200                      3300                      3400





3400 3500 3600 3700 3800 3900 4000 4100 4200



4100

4200

4300

4400

4500

4600

FM TD

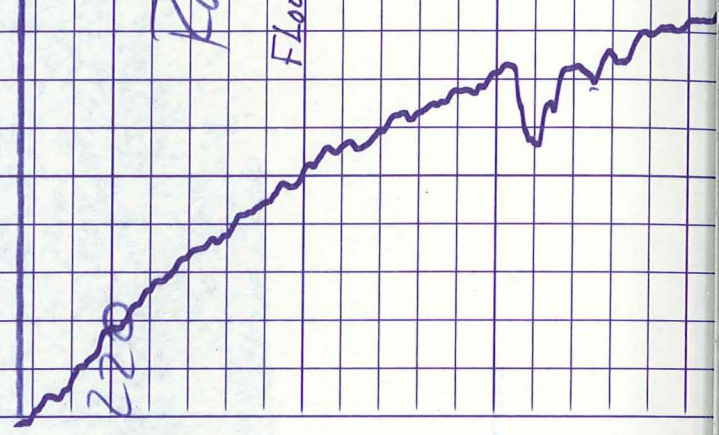
1300

1400

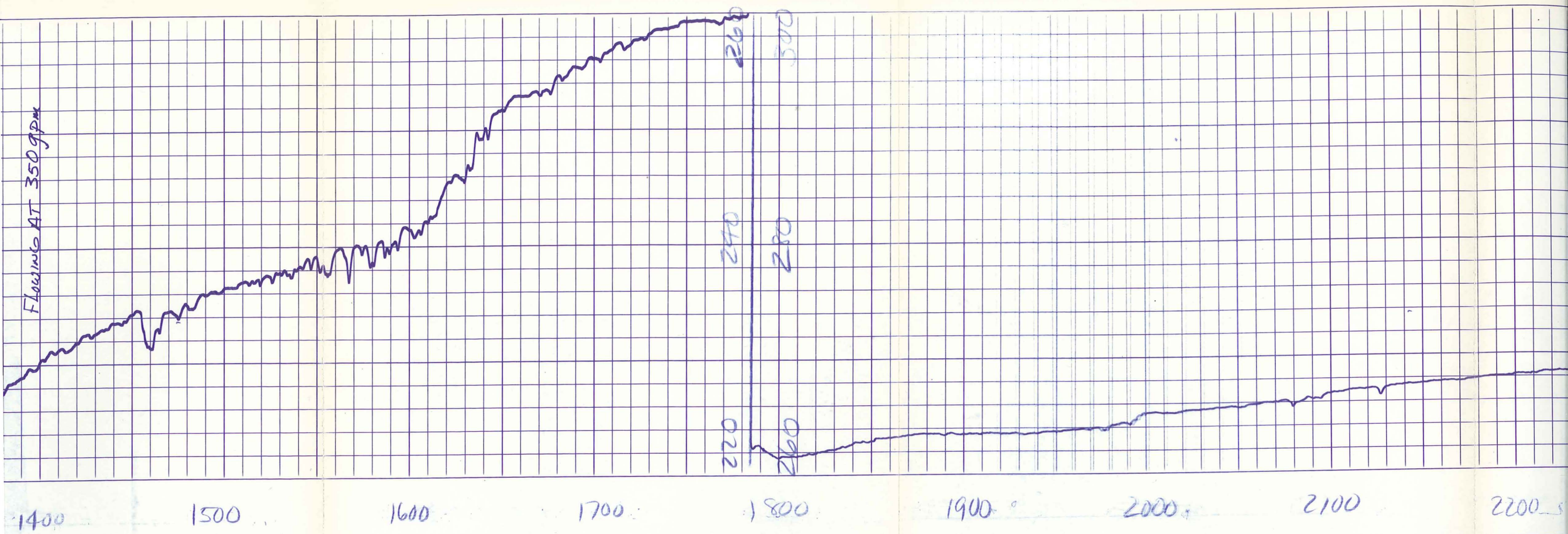
1500

220  
200  
180  
240  
260

Run #15  
Flowing AT 350 gpm



Flowing AT 350 gpm





00

2200

2300

2400

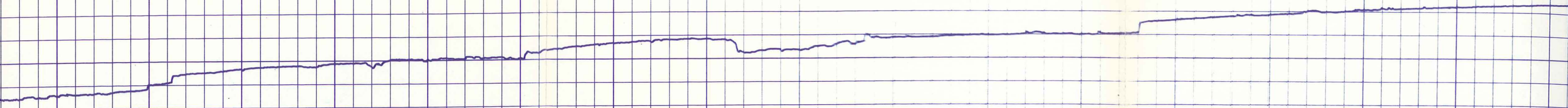
2500

2600

2700

2800

2900



2900 -

3000

3100

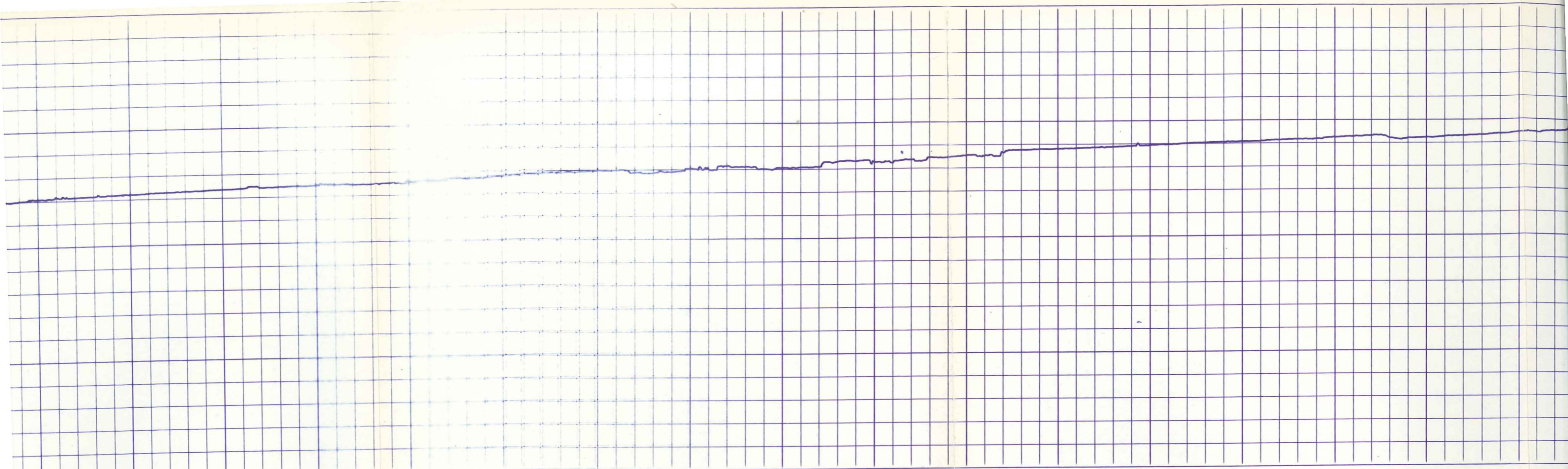
3200

3300

3400

3500

3600



3600

3700

3800

3900

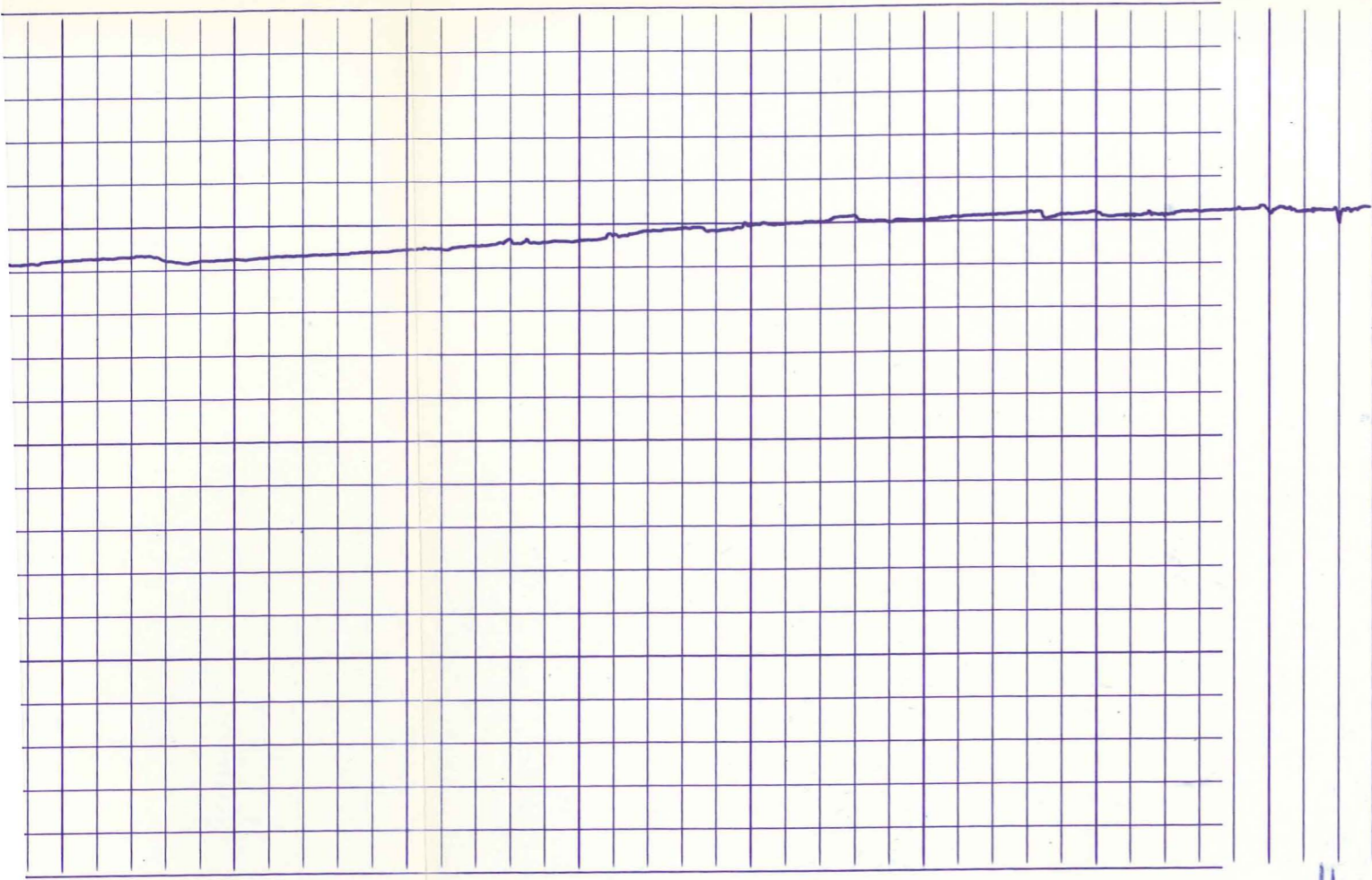
4000

4100

4200

4300





4300

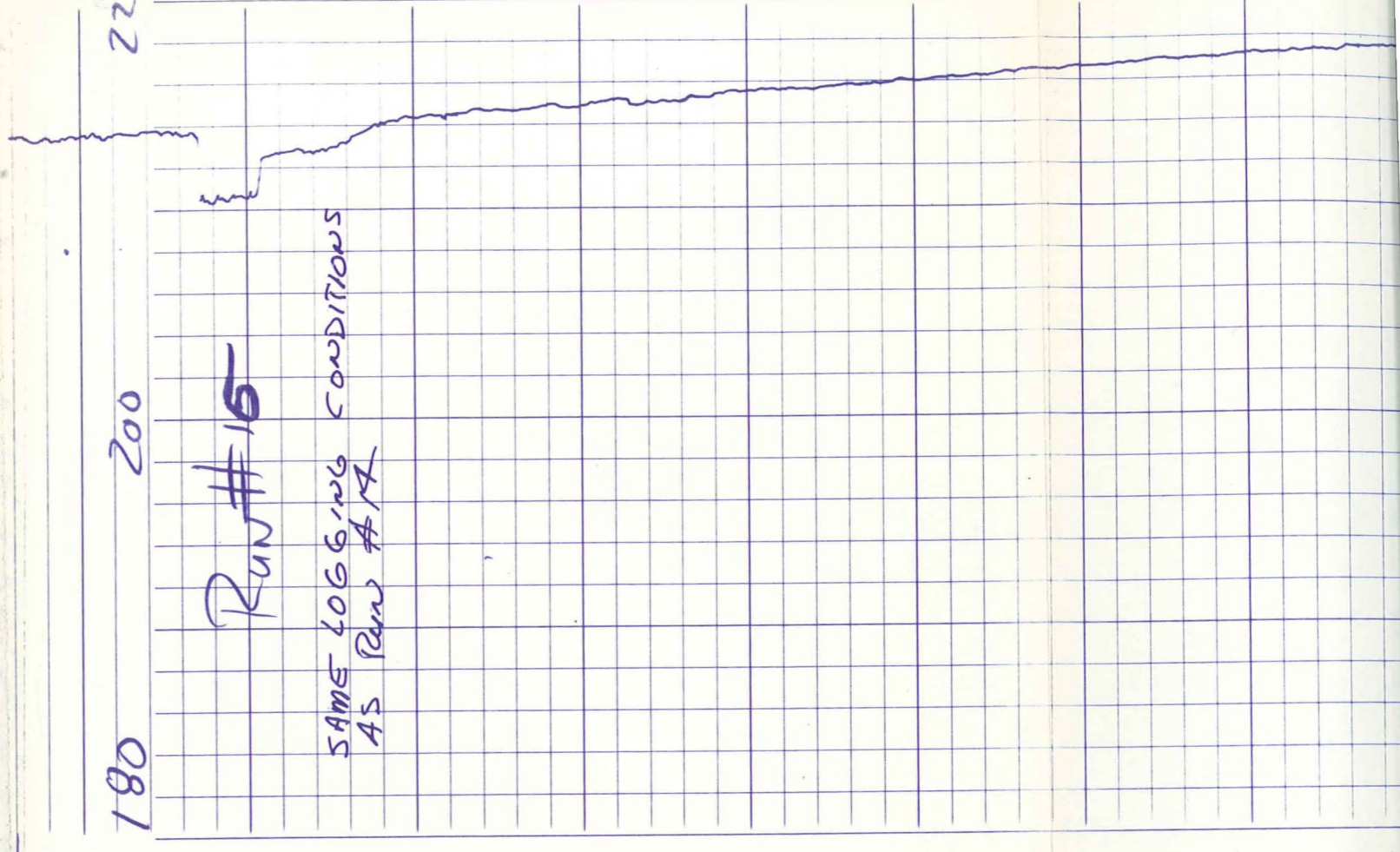
4400

4500

4600

EPD  
TD

LR



180

200

220

Run # 16

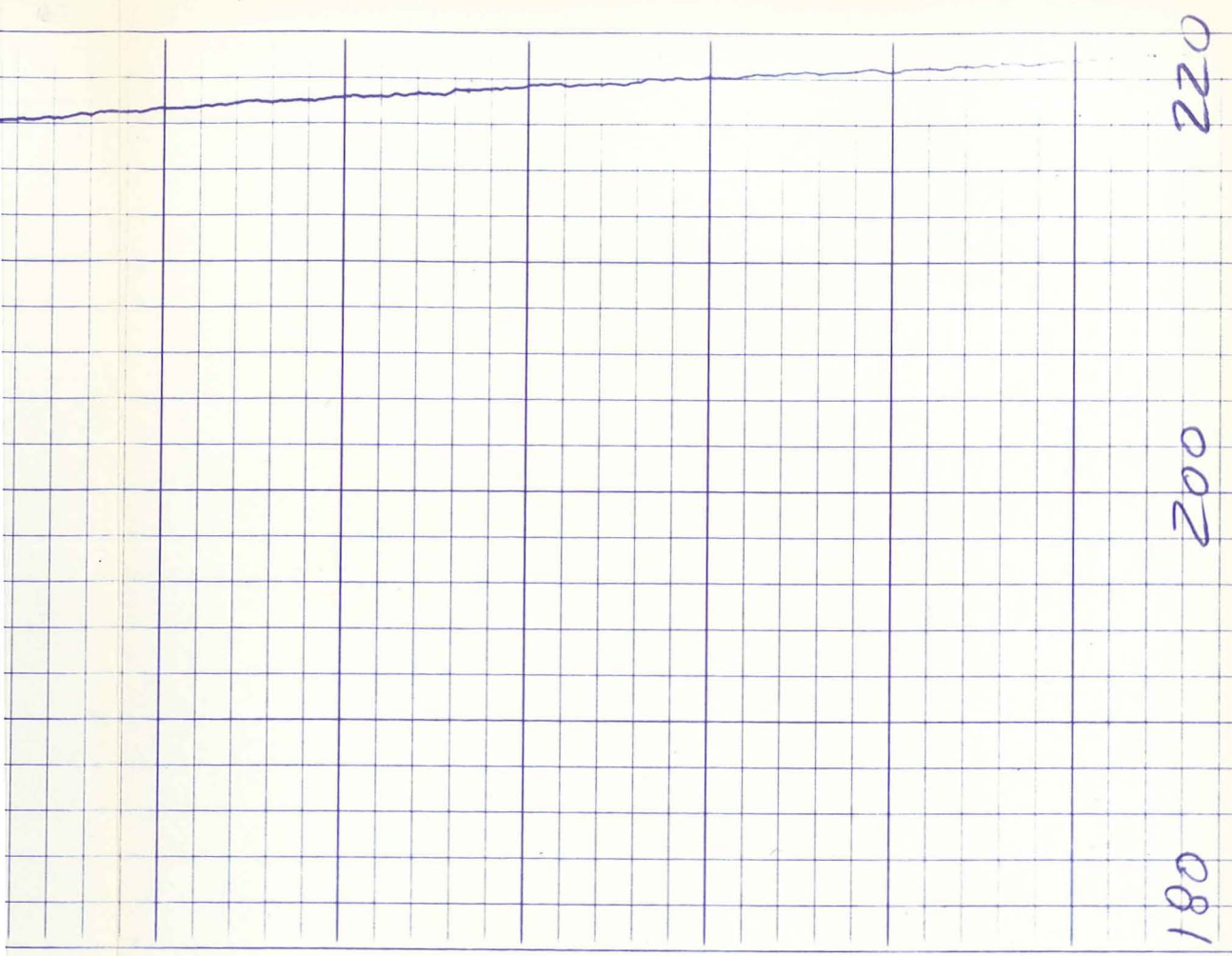
SAME LOGGING CONDITIONS  
AS Run # 15

0100

0200

0300

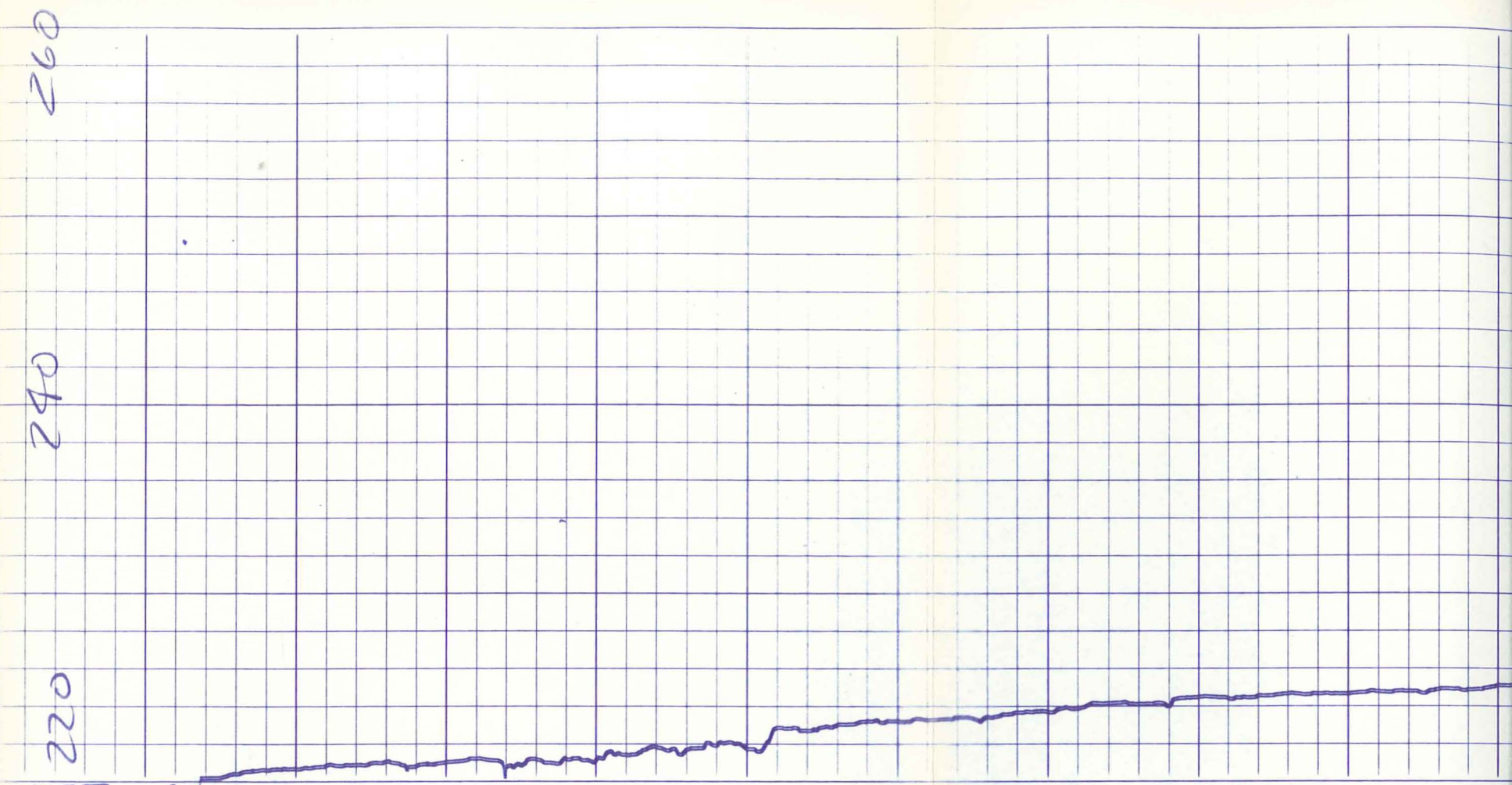
0400



0400

0500

0600



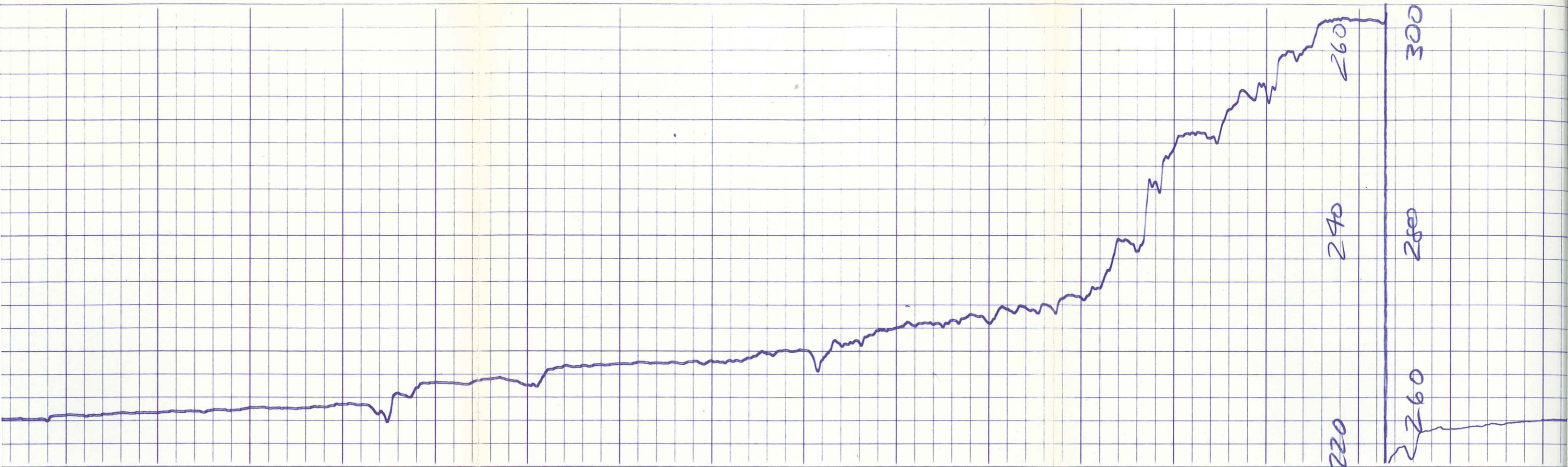
0700

0800

0900

1000

1100



1100

1200

1300

1400

1500

1600

1700

1800

220

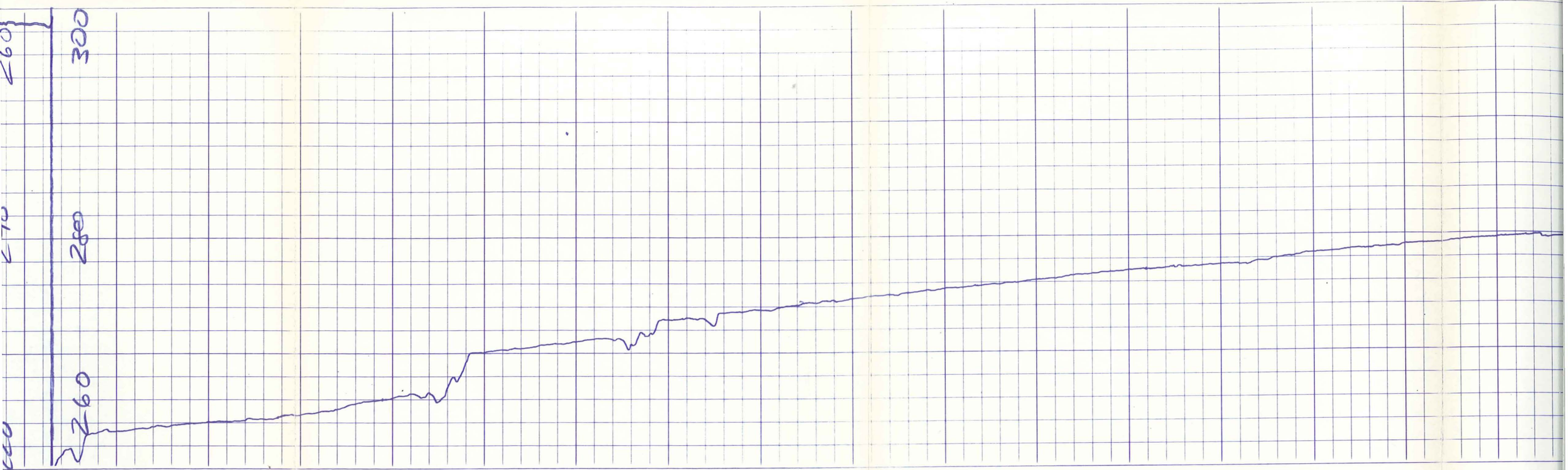
240

260

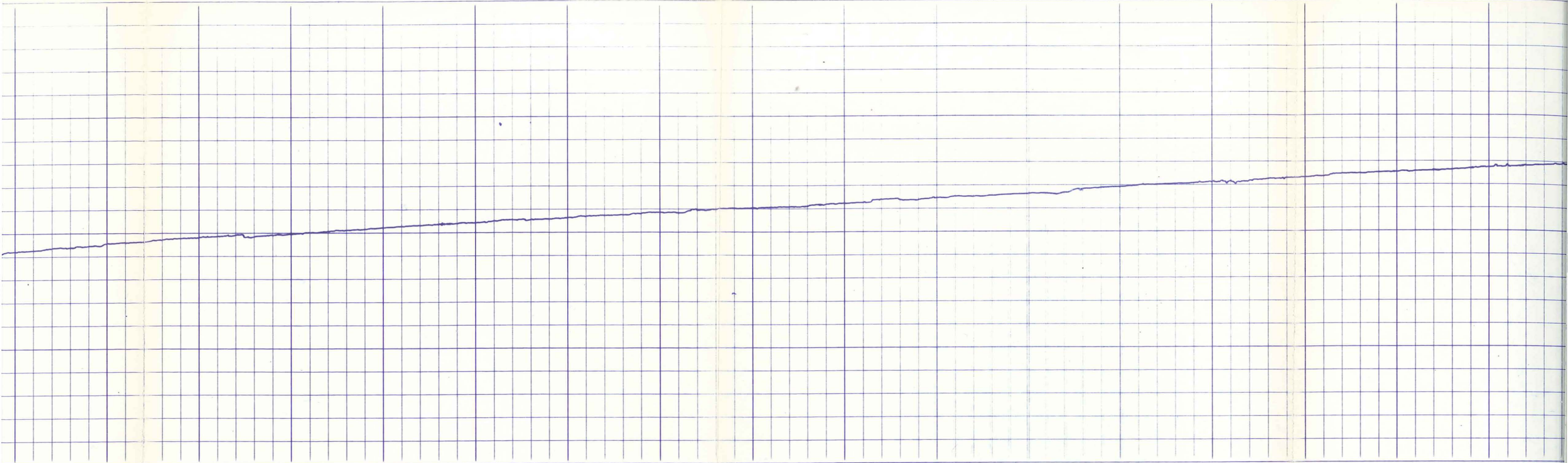
260

280

300



1800 1900 2000 2100 2200 2300 2400 2500



2500

2600

2700

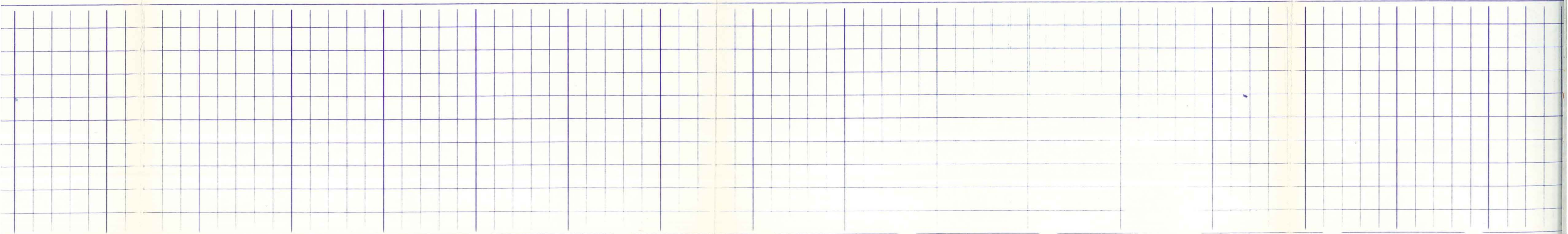
2800

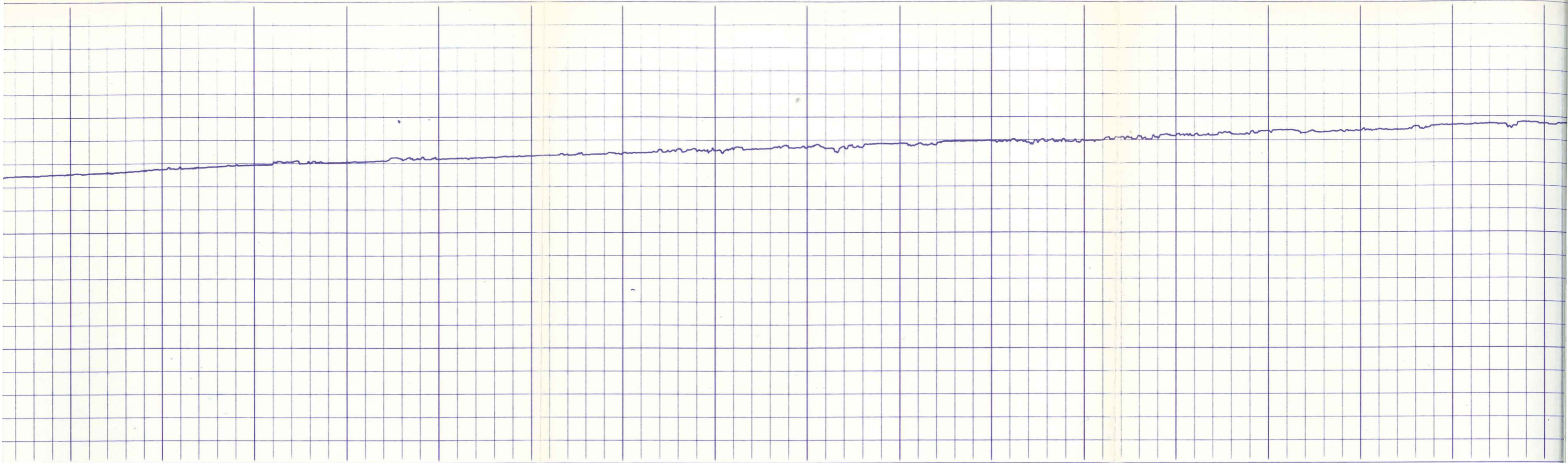
2900

3000

3100

3200





3200

3300

3400

3500

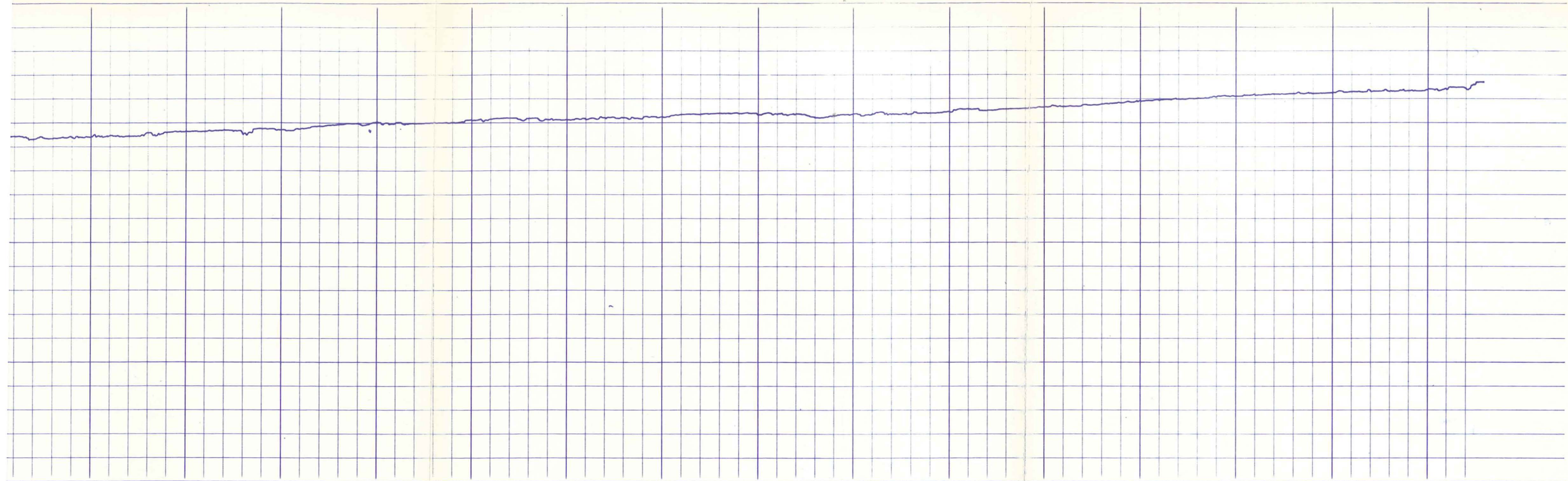
3600

3700

3800

3900

4000



3900

4000

4100

4200

4300

4400

4500

4600

417