

**SCHLUMBERGER**

**BOREHOLE COMPENSATED SONIC LOG**

SCHLUMBERGER OF CANADA Calgary, Alberta

COMPANY WESTERN MINERALS LTD.

WELL WESTERN MINERALS N HOPE

YT N53

FIELD WILDCAT

PROVINCE YUKON

LOCATION 66° 33' 22" N LAT  
138° 25' 30" W LONG

Other Services: SNP-GR,  
IES, HDT, FDC-GR,  
CDR, TTR, CL

Permanent Datum GL Elev. 1136  
Log Measured From KB 14 Ft. Above Perm. Datum

ELEV: KB 1150  
GL 1136  
CBF

| 16 JUNE 70   |              | 22 JULY 70   |      | 4 AUG 70 |     |
|--------------|--------------|--------------|------|----------|-----|
| ONE          | TWO          | THREE        | FOUR | FIVE     | SIX |
| 8059         | 13233        | 14013        |      |          |     |
| 1522         | 7800         | 13013        |      |          |     |
| 6537         | 5433         | 1000         |      |          |     |
| 8067         | 13235        | 14015        |      |          |     |
| 8120         | 13248        | 14038        |      |          |     |
| 1522         | 1522         | 1522         |      |          |     |
| 1522         | 1522         | 1522         |      |          |     |
| GEL          | GEL          | GEL          |      |          |     |
| 9.1          | 100          | 9.5          | 116  | 9.7      | 127 |
| 9.5          |              | 10.5         |      | 10.0     |     |
| 9.2          |              | 6.6          |      | 7.8      |     |
| 4.66 @ 58 °F | 2.25 @ 80 °F | 3.36 @ 62 °F |      |          |     |
| - @ 151 °F   | - @ 15 °F    | - @ 227 °F   |      |          |     |
| 4.82 @ 57 °F | 1.40 @ 80 °F | 2.30 @ 62 °F |      |          |     |
| - @ °F       | - @ °F       | - @ °F       |      |          |     |
| 8 3/4"       | 8 3/4"       | 8 3/4"       |      |          |     |
| 2'           | 2'           | 1'           |      |          |     |
| 6 HRS        | 5 HRS        |              |      |          |     |
| OSUC-343 REM | OSUC-343REM  | OSUC-343REM  |      |          |     |
| POR TH       | SAH          | POR TH       |      |          |     |
| GILBREATH    | GILBREATH    | GILBREATH    |      |          |     |

REMARKS 26 AUG 70 CAL CDM

Drilling Stopped 0100 / 4th / Circulation Stopped 0100 / 4th / Tool on Bottom 0930 / 16th / 1st Run Service Order # 2941 / B.H.T. 151 of 215

RUN 2

Caliper No. A 296 A 121  
Cartridge No. C 498 A 155  
Panel No. A 68 A 29  
Sonde No. RUBBERS STAND  
Centralizer Type OFF

GAMMA RAY CALIBRATION:  
Background CPS 440  
42

Test Source CPS: 440  
428

Galv. Increase Divisions 10.0  
10.0

Panel Sens. Tap for Cal. AL  
PG2-D

RUN 3

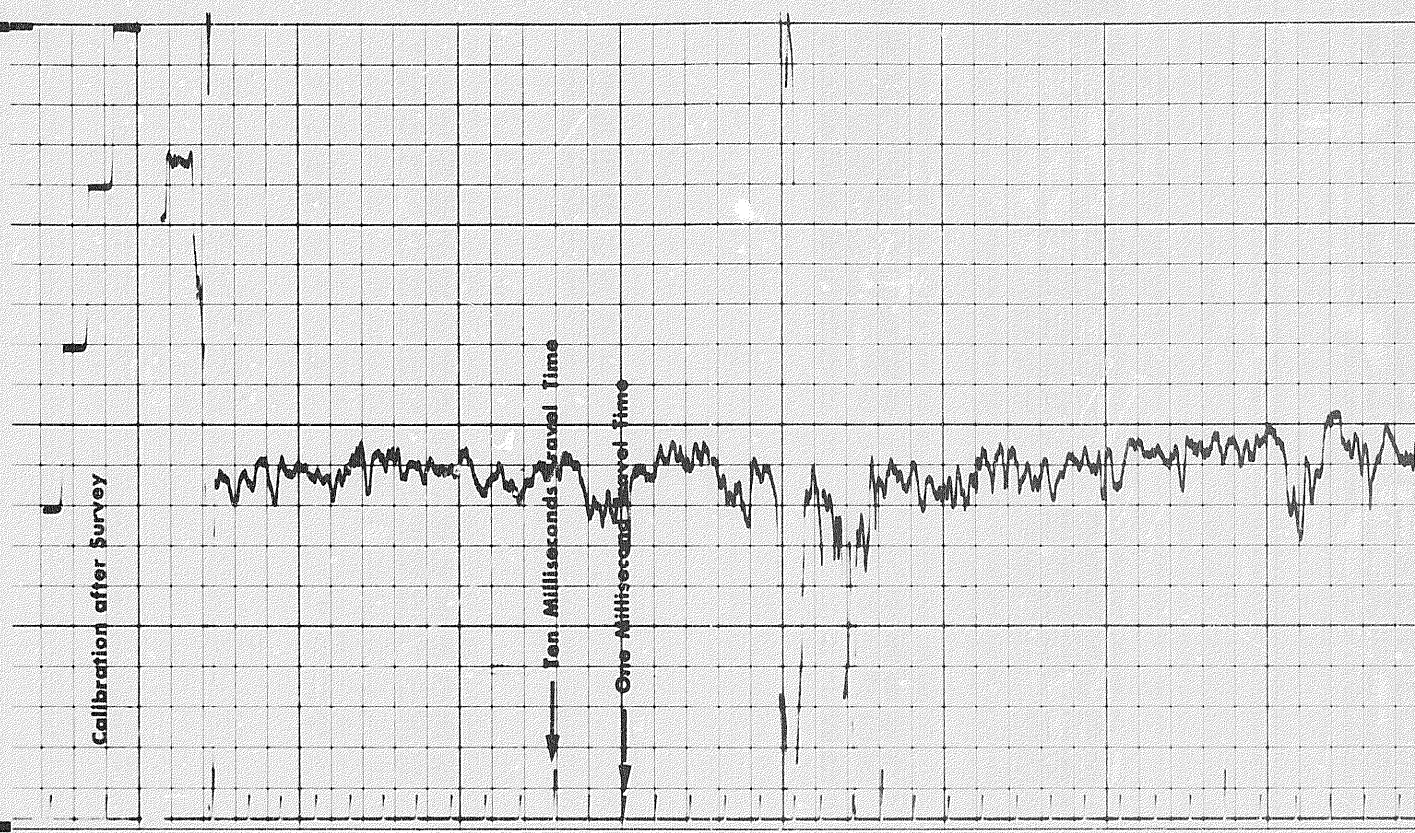
REMARKS 26 AUG 70 CAL CDM

Drilling Stopped 0100 / 4th / Circulation Stopped 0100 / 4th / Tool on Bottom 1230 / 4th / 1st Run Service Order # 2945 / B.H.T. 227 of 227

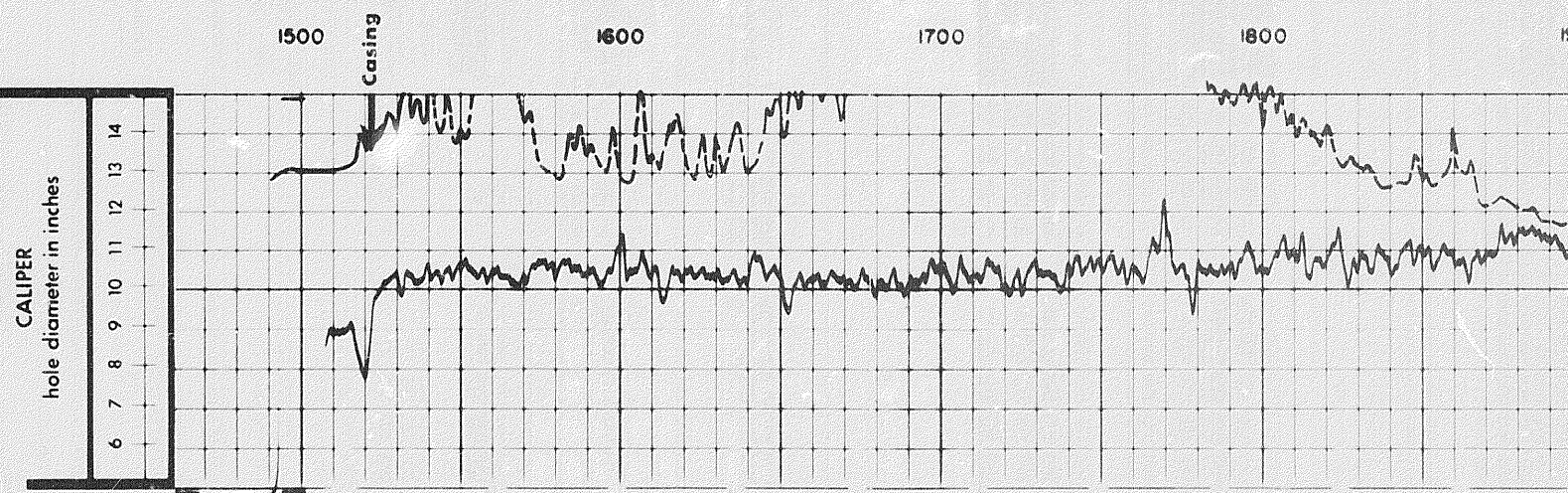
Caliper No. \_\_\_\_\_  
Cartridge No. C 496  
Panel No. \_\_\_\_\_  
Sonde No. \_\_\_\_\_  
Centralizer Type SPRING GUIDE

GAMMA RAY CALIBRATION:

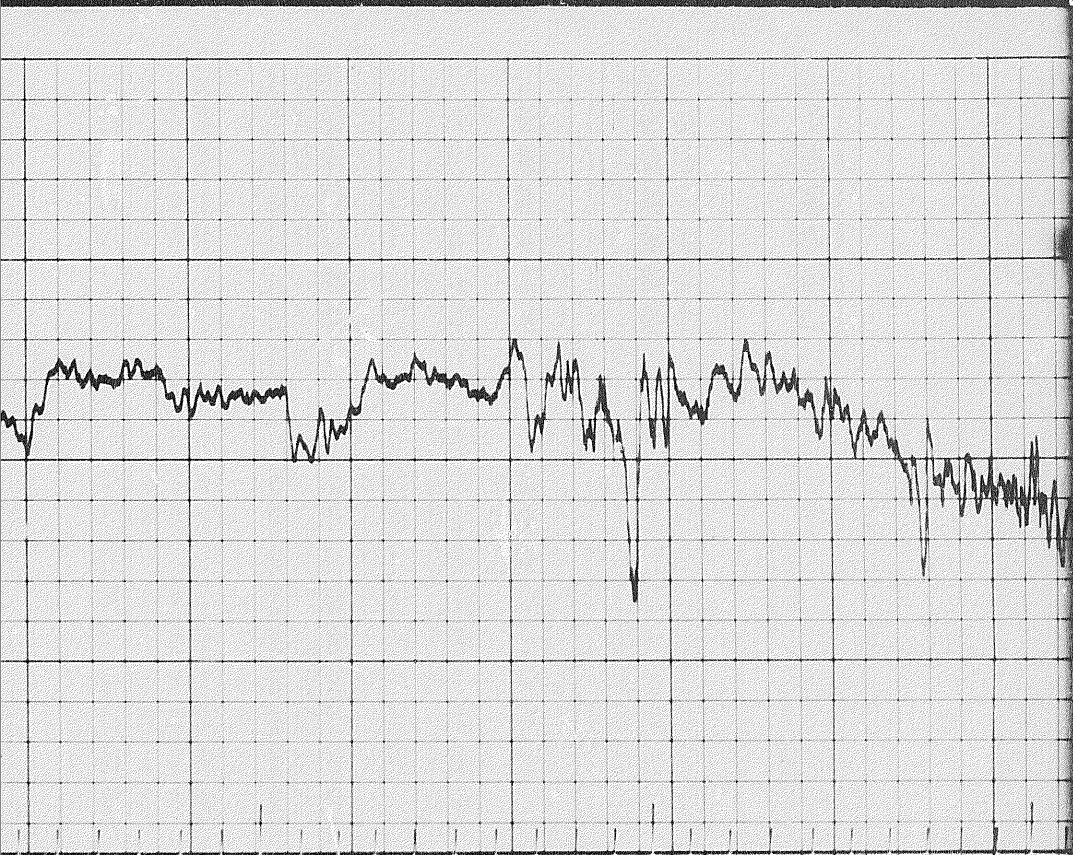
SCALE CHANGE @ 5950'



SCALE CHANGE @ 5950'



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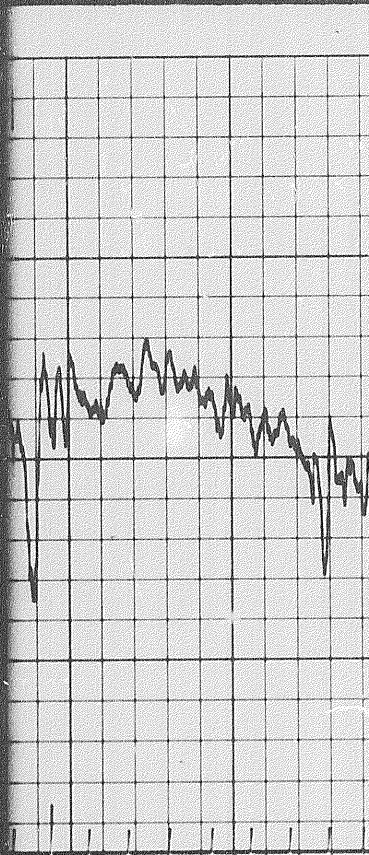
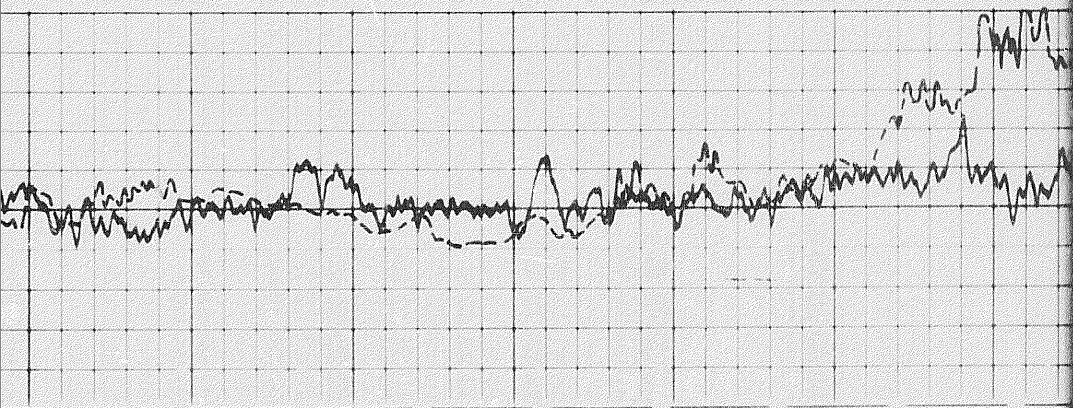


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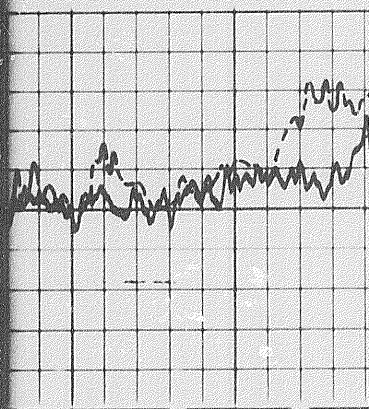
2100

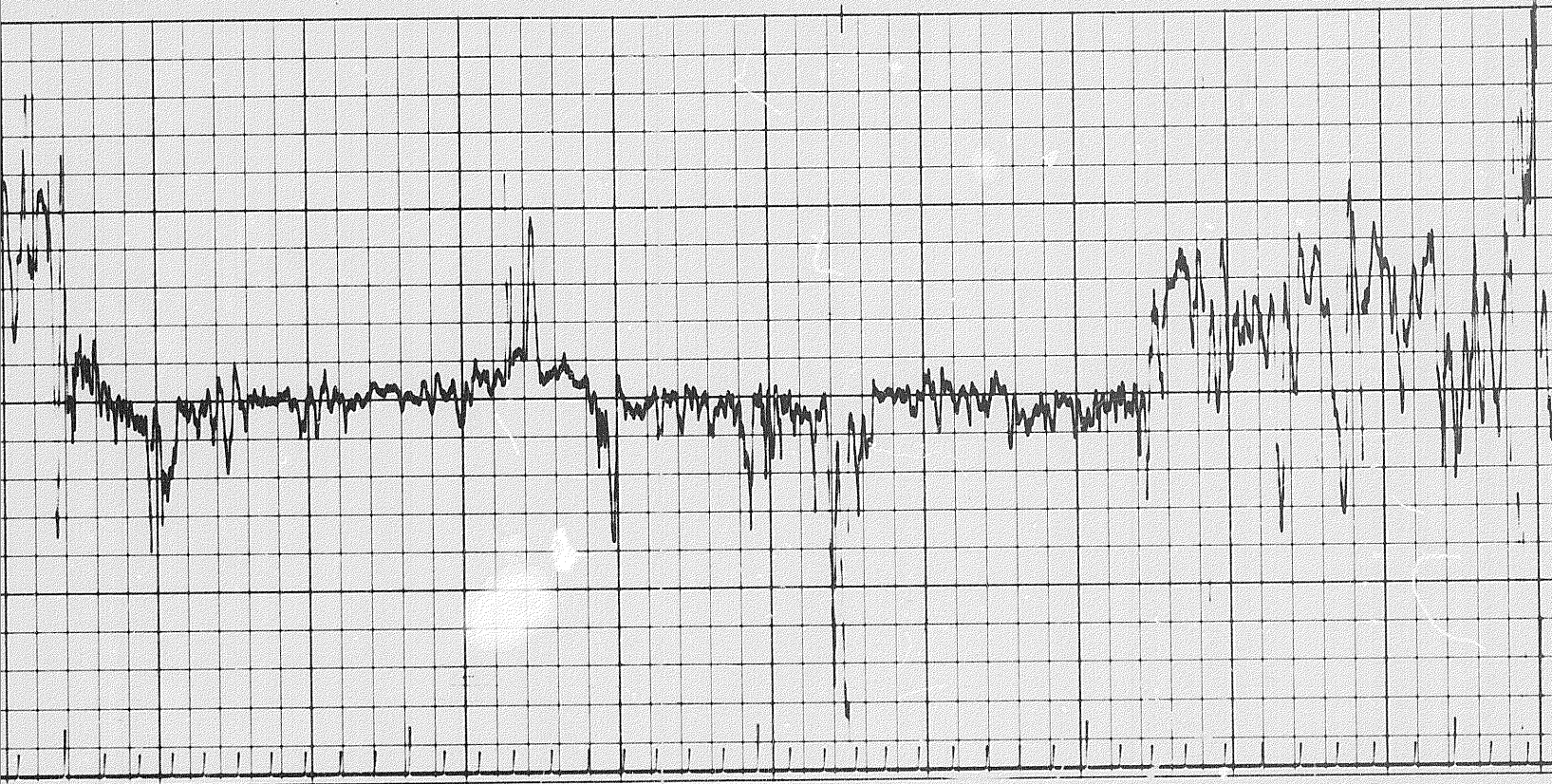
2200

2300

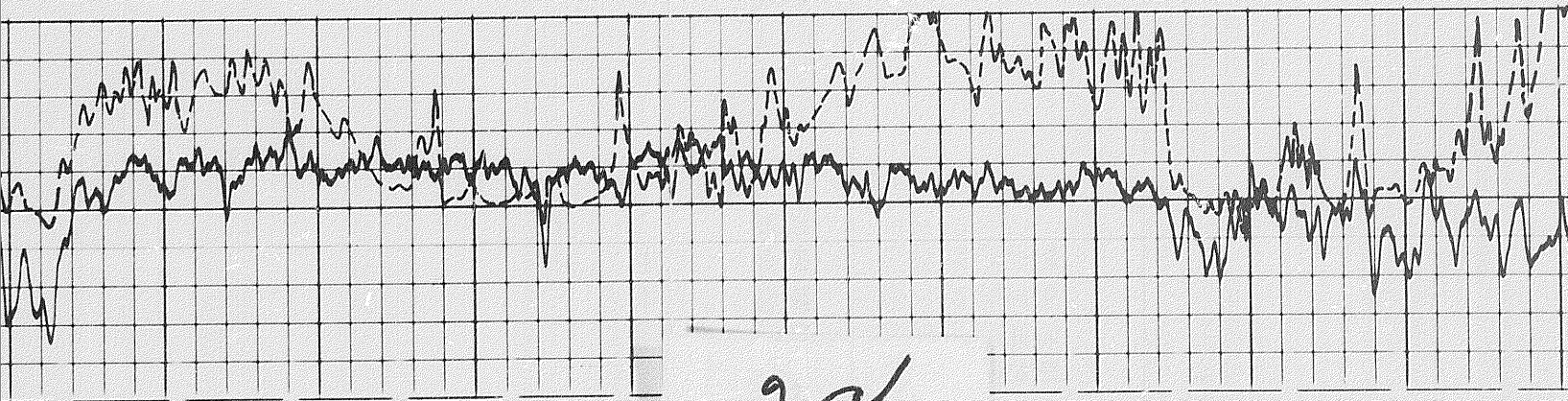


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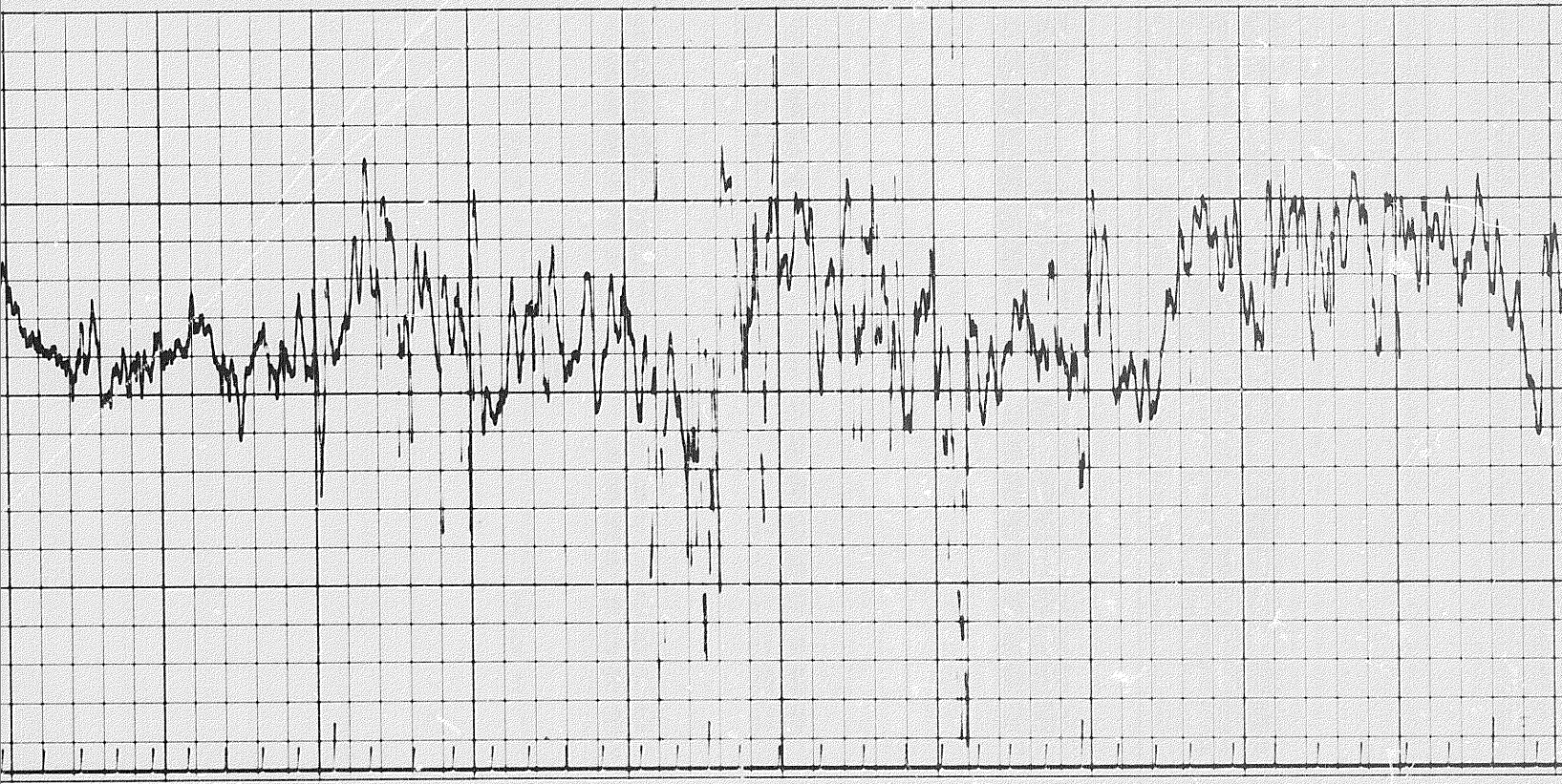




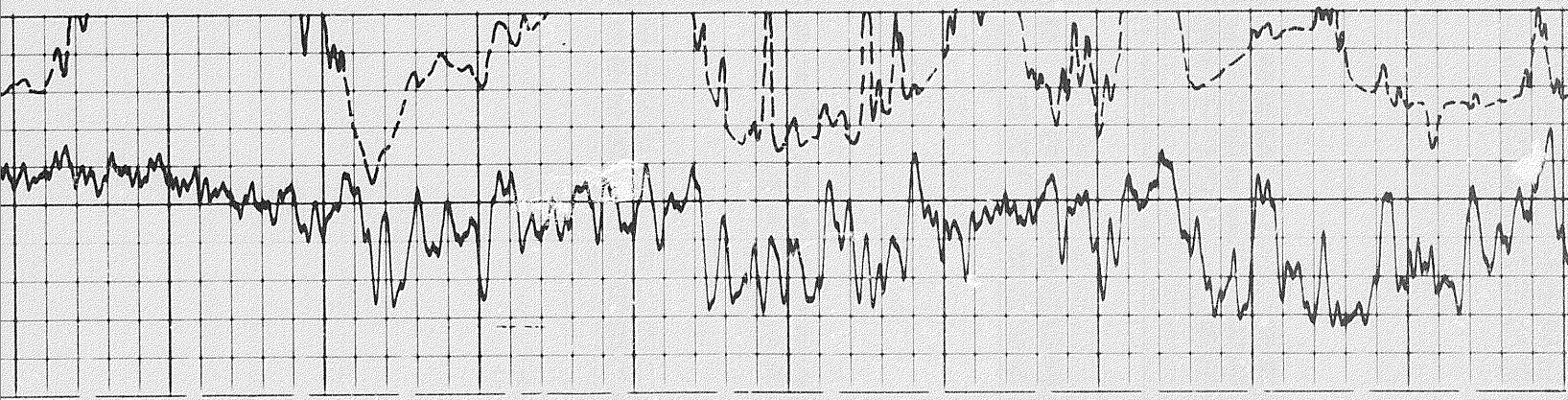
2500 2600 2700 2800 2900

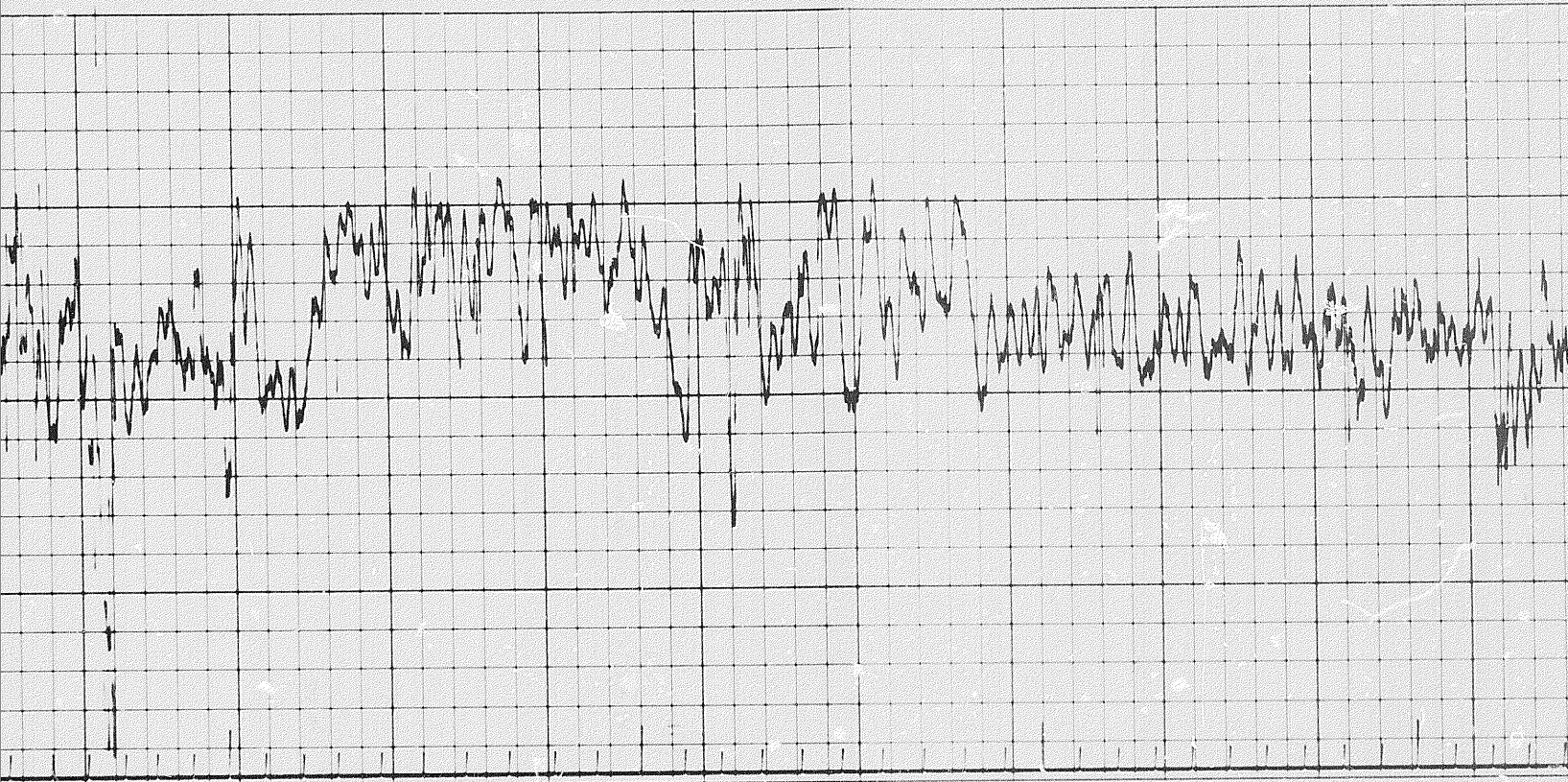


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000                      3100                      3200                      3300                      3400                      3500





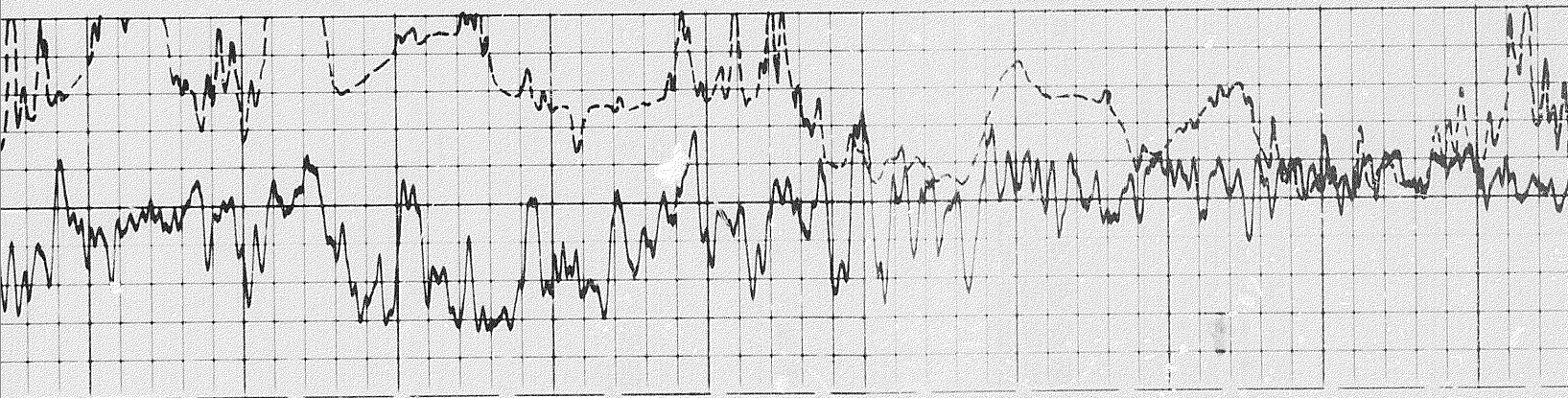
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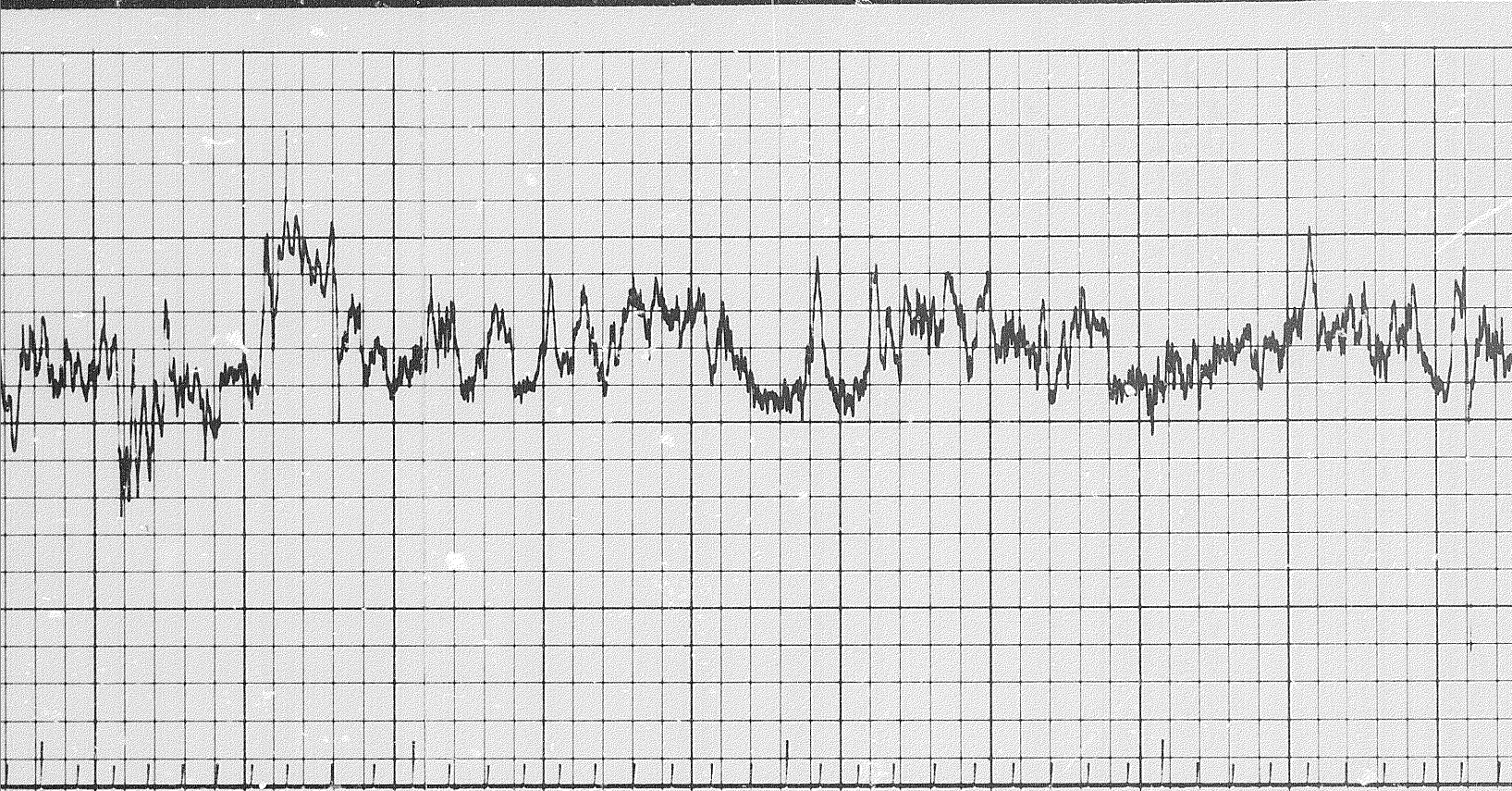
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3300

3600

3700





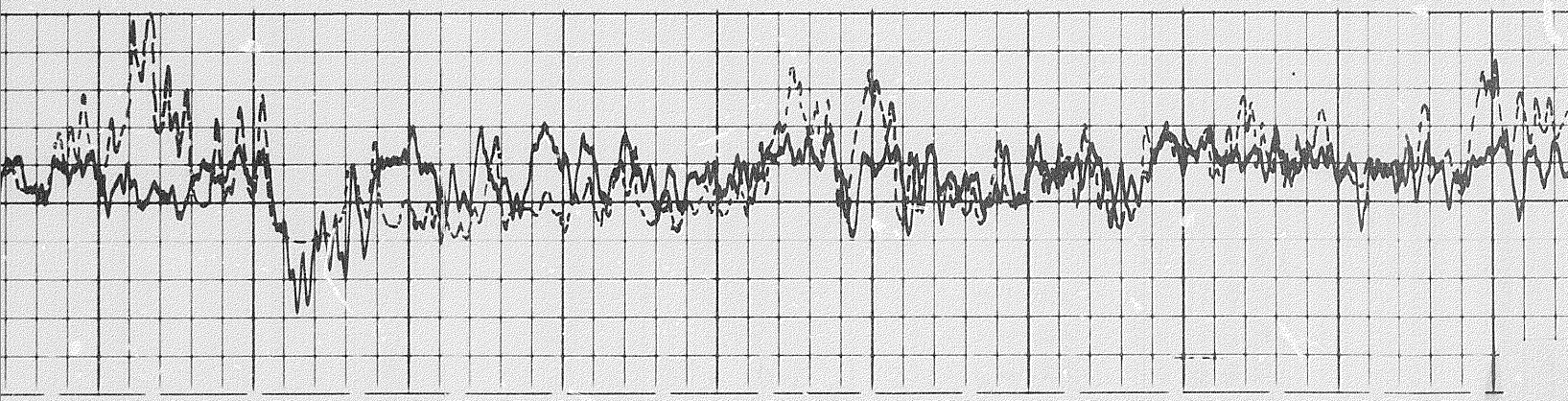
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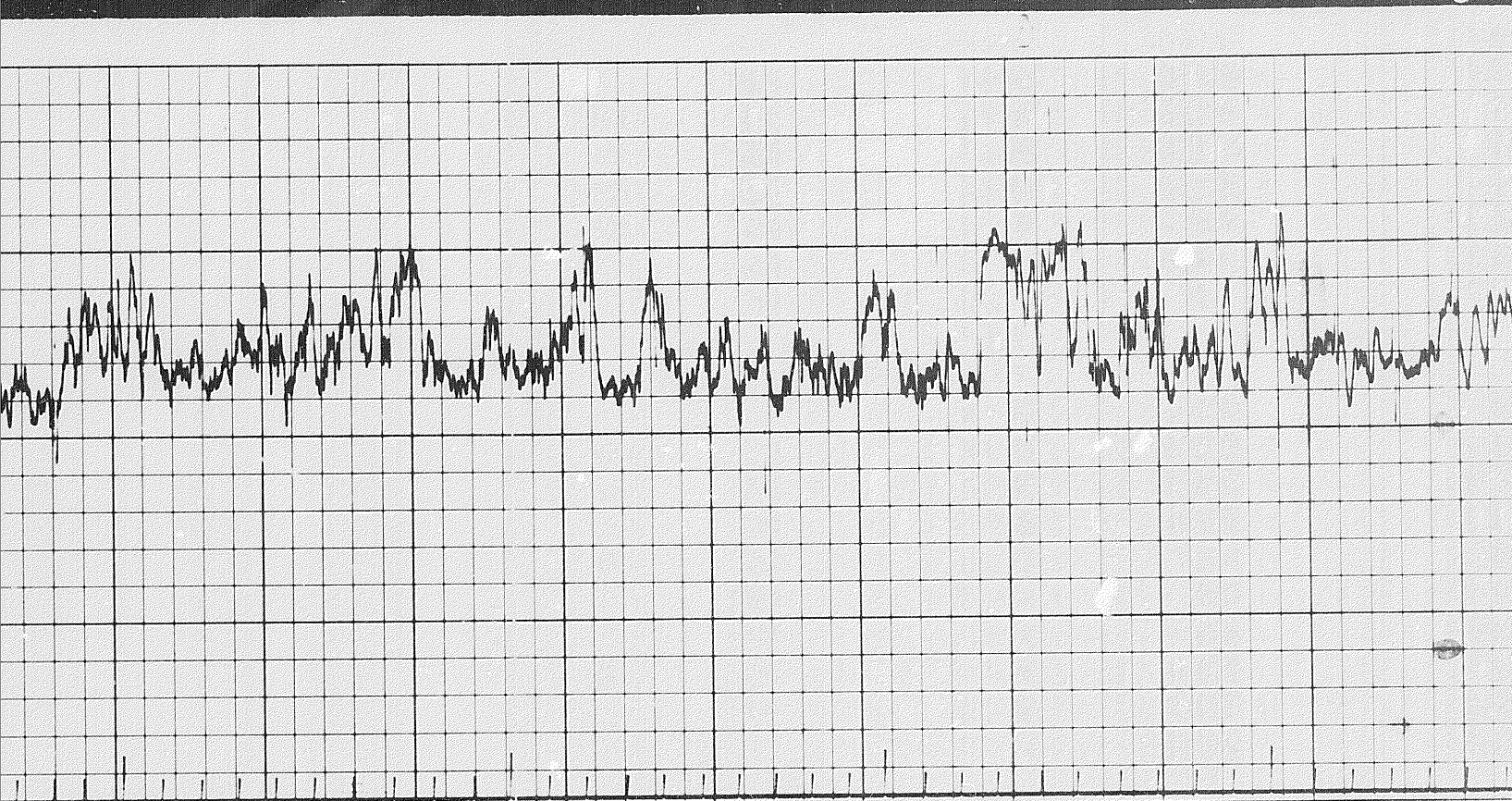
3900

4000

4100

4200





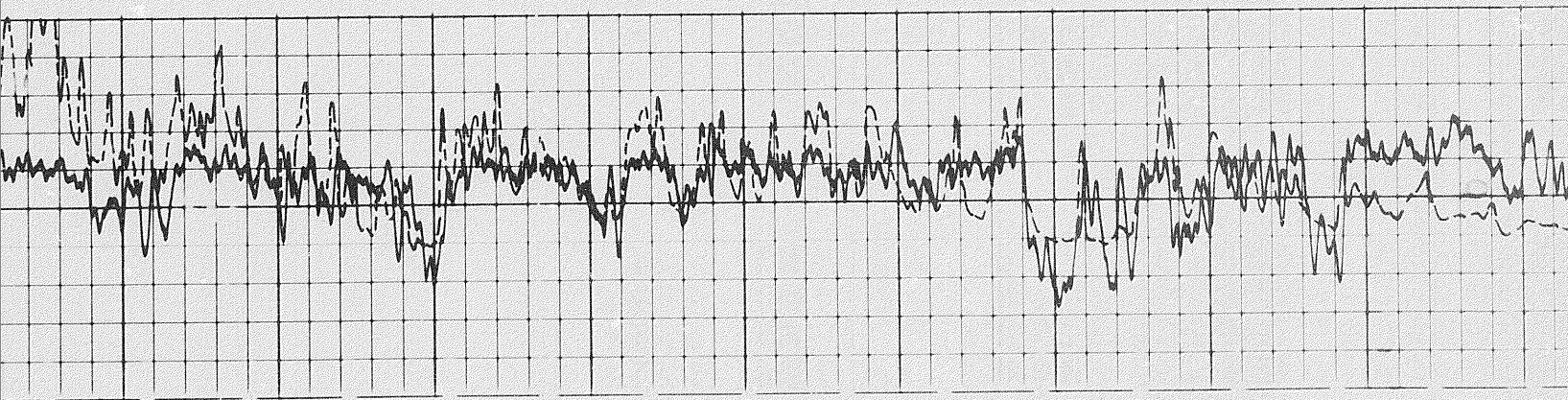
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4500

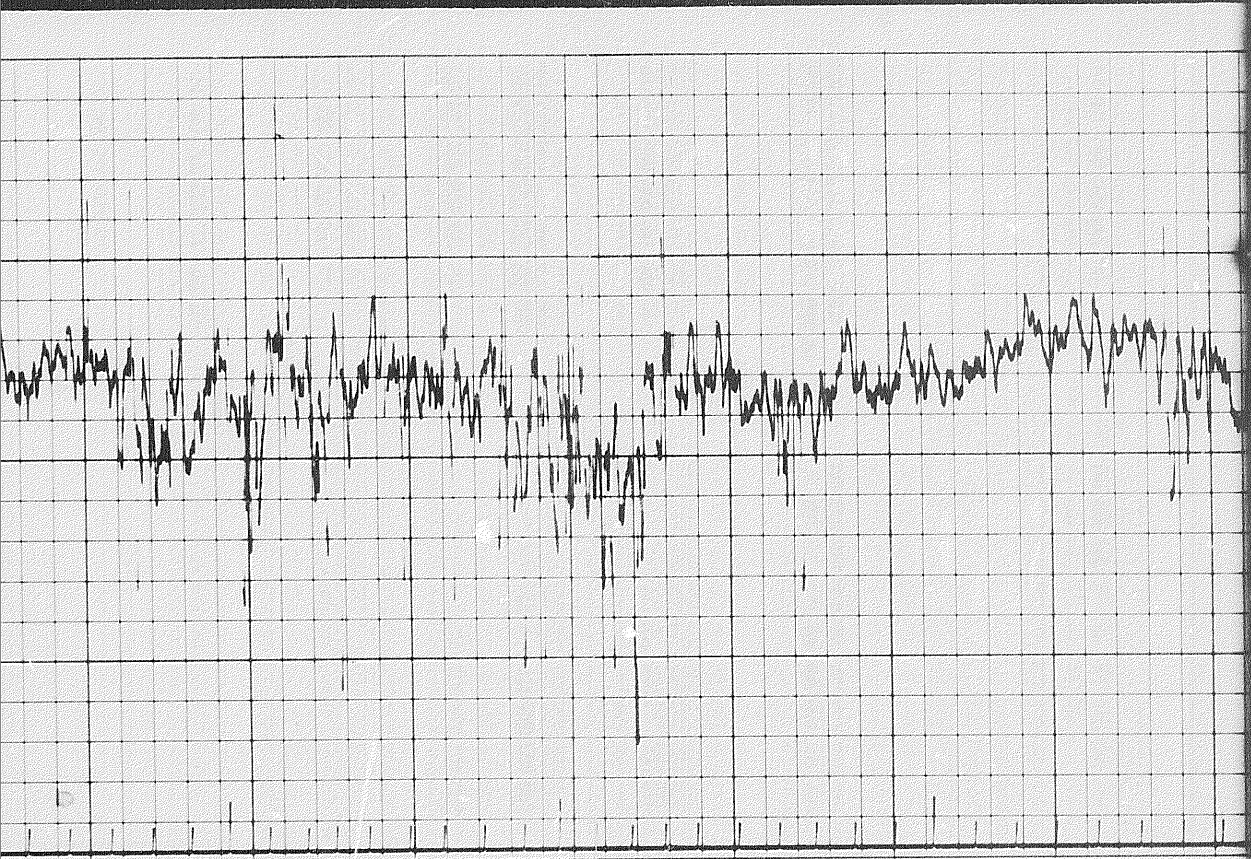
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4700

4800





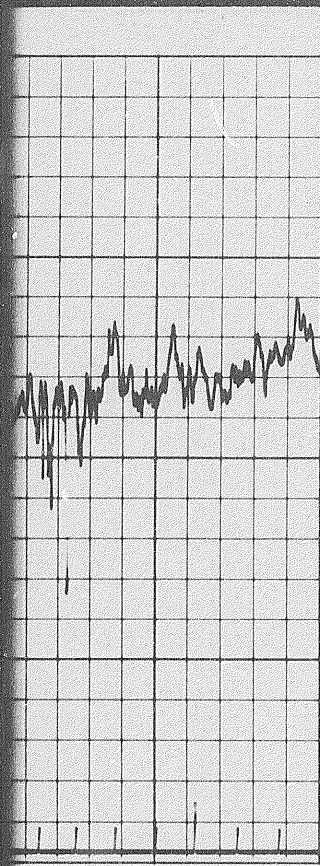
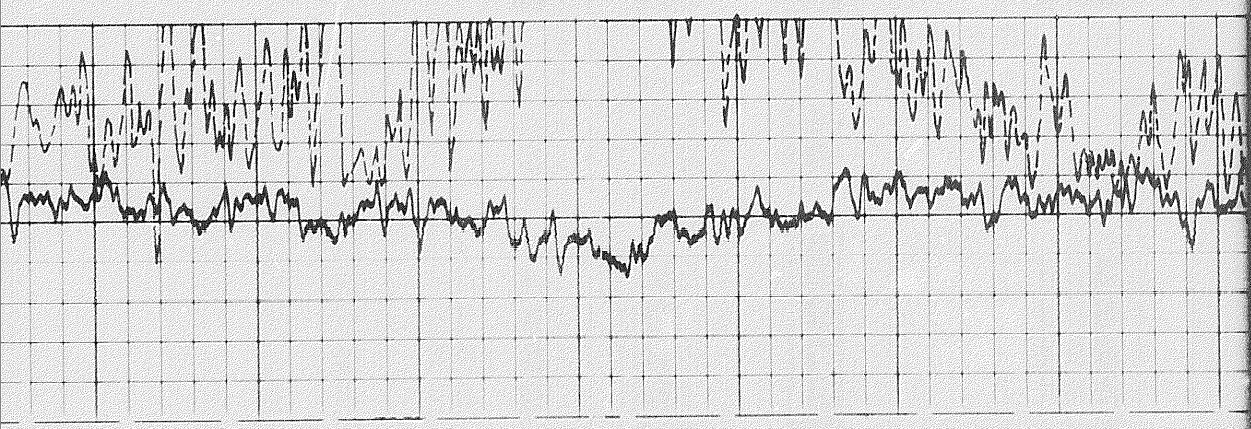


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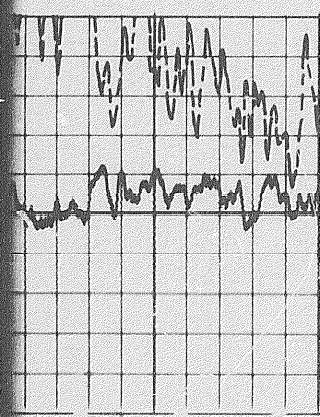
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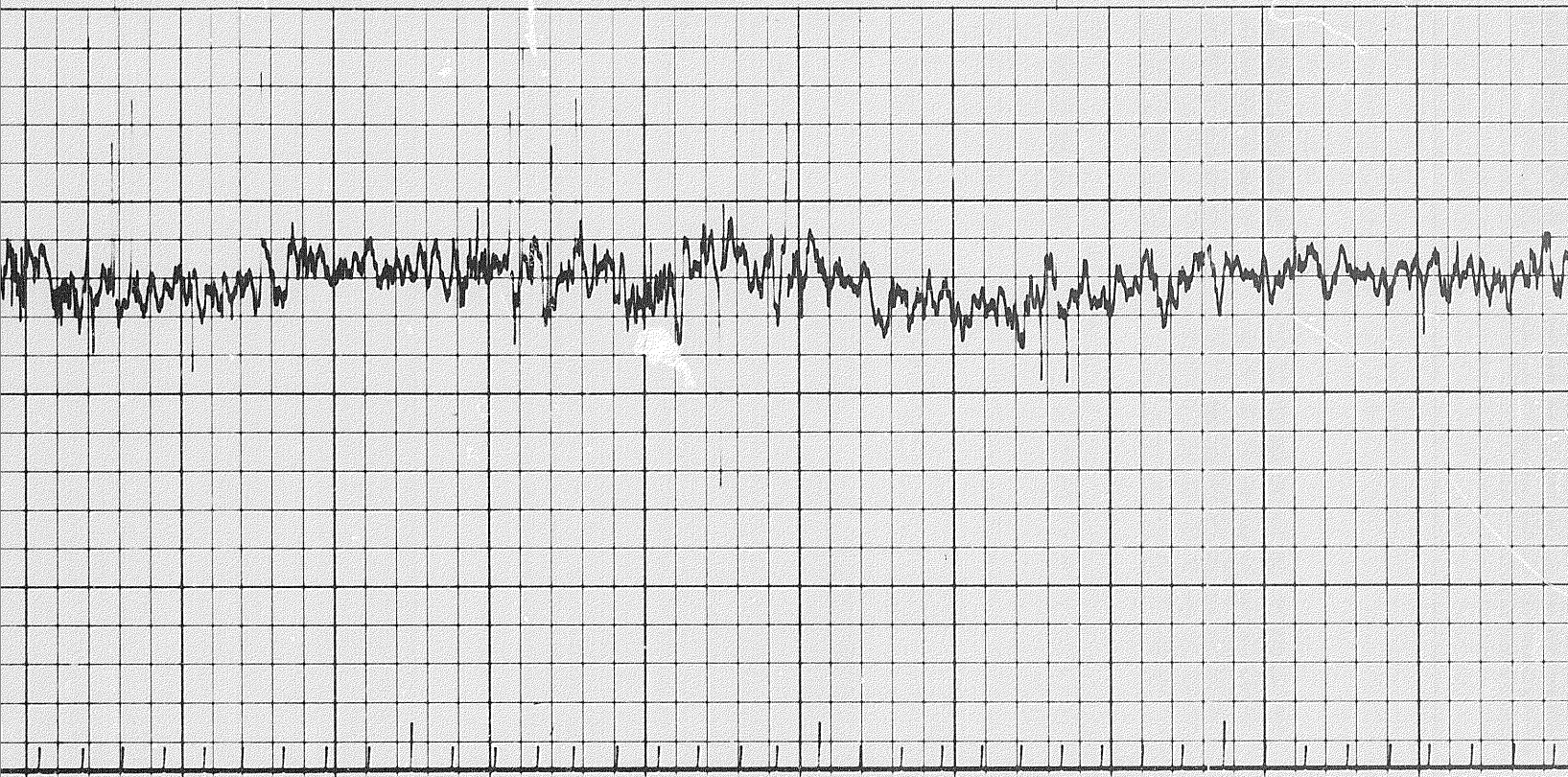
5200

5300



5200





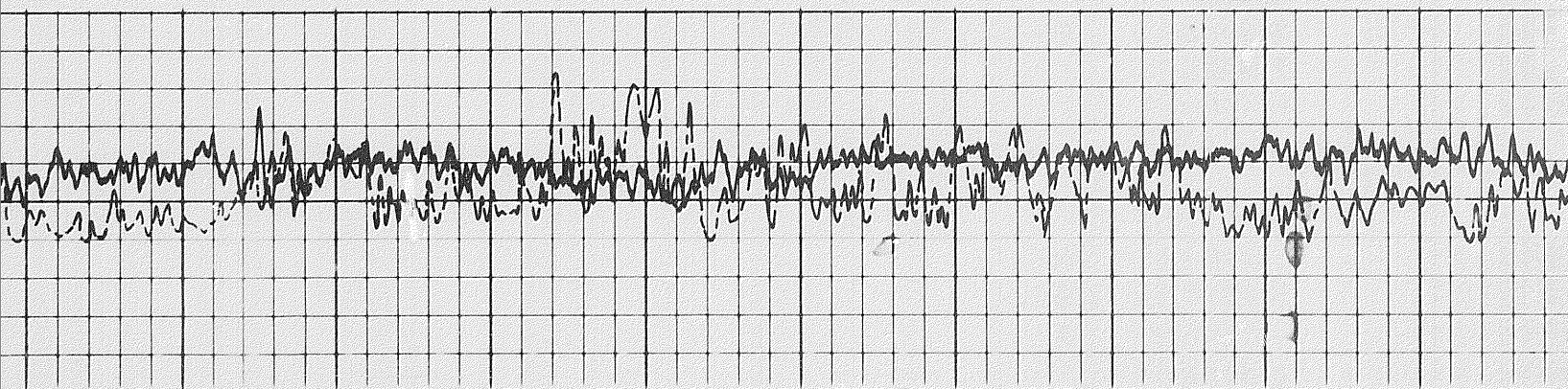
5400

5500

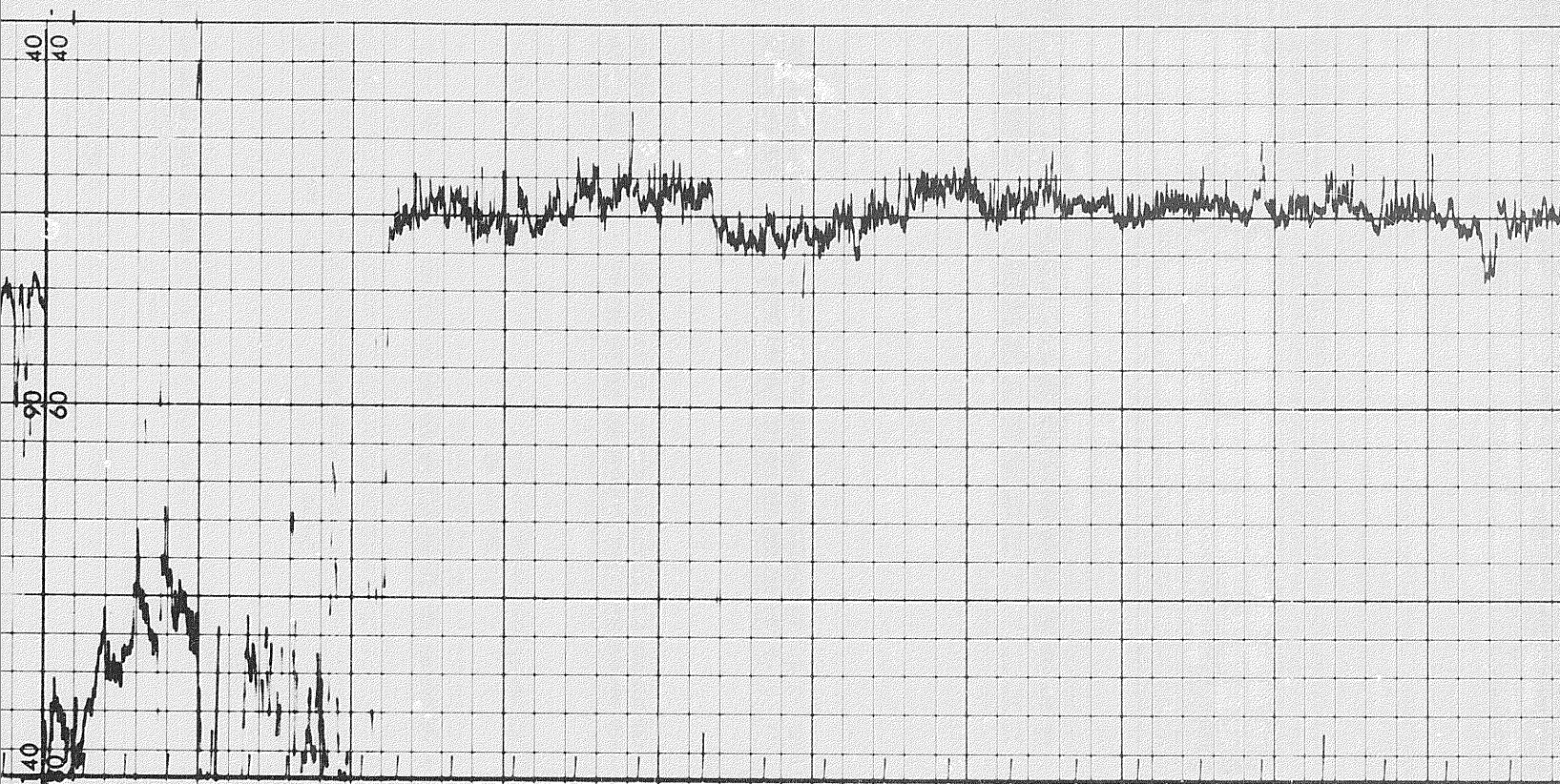
5600

5700

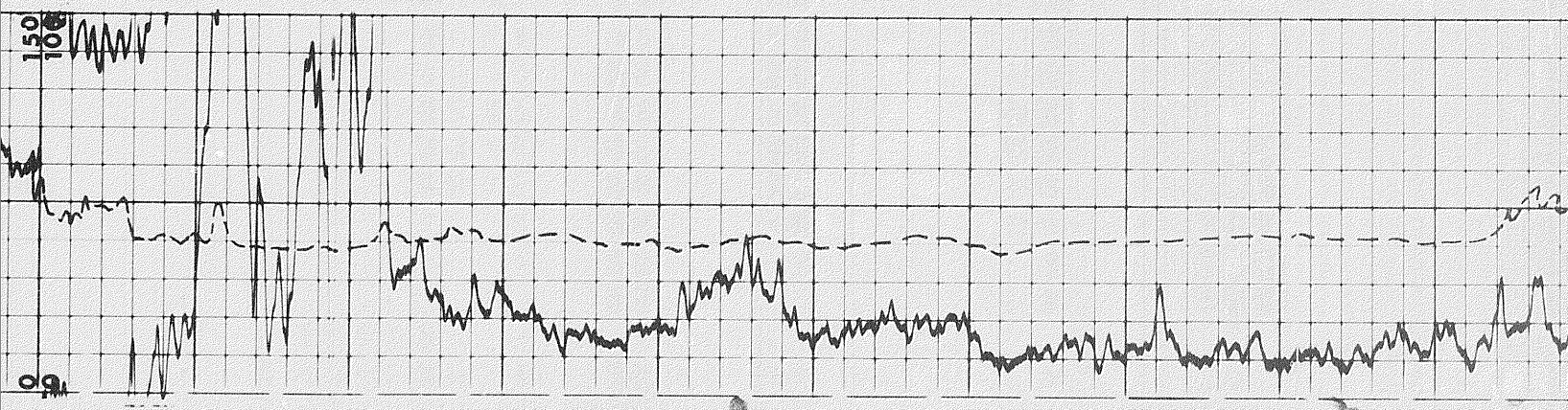
5800

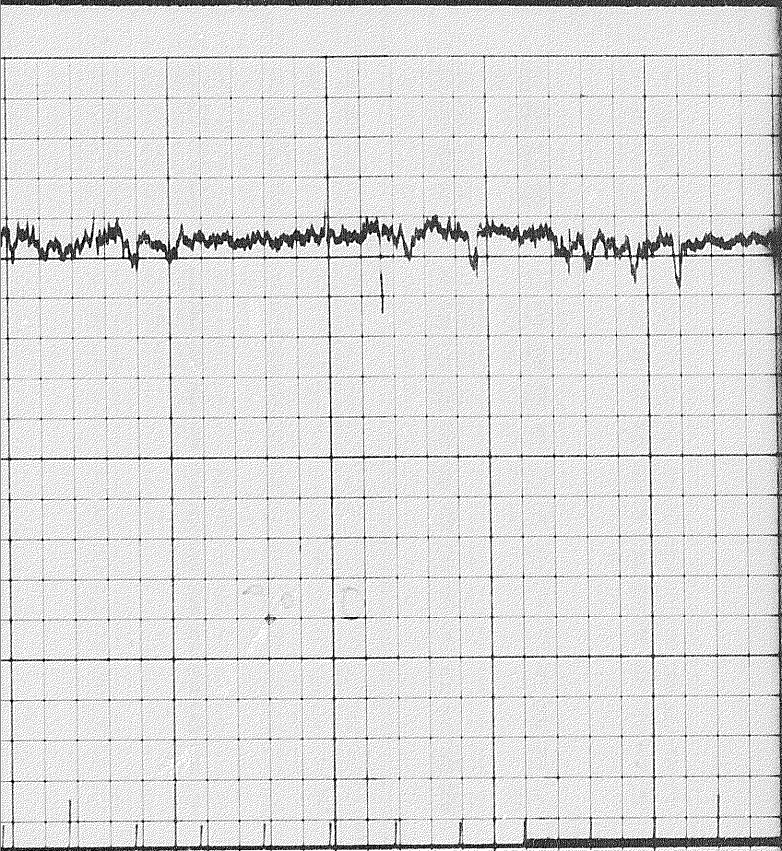


4 of



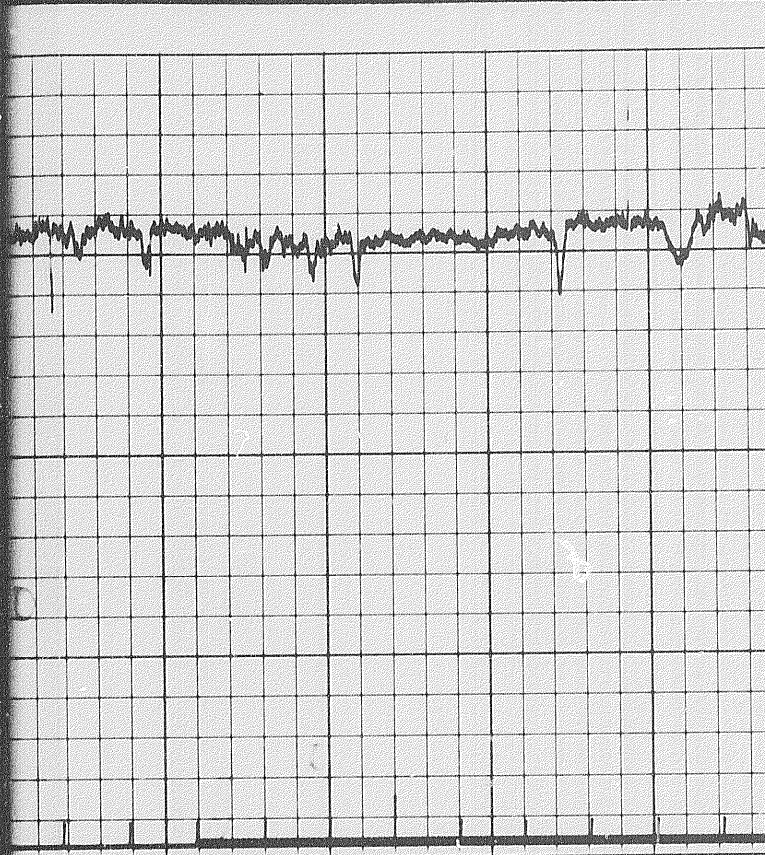
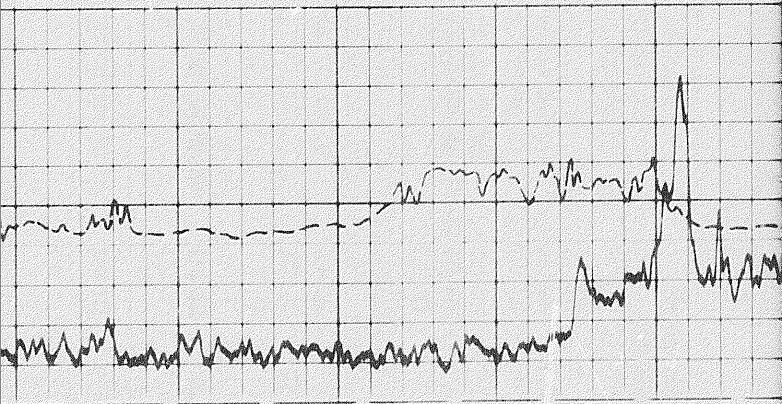
6000                      6100                      6200                      6300                      6400





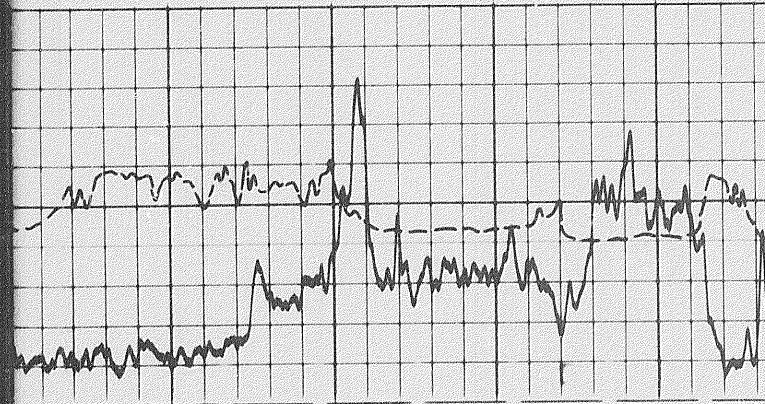
6600

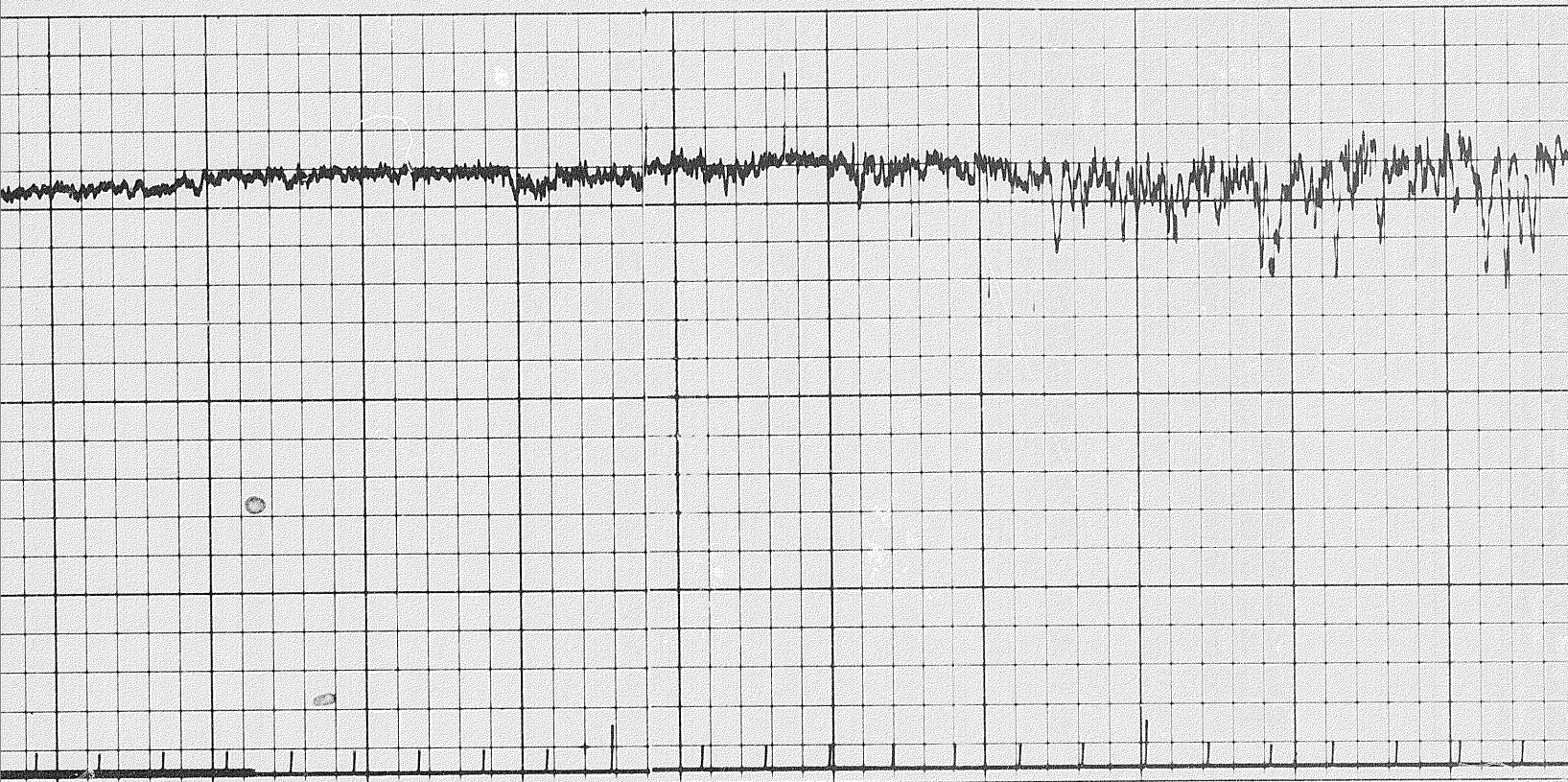
6700



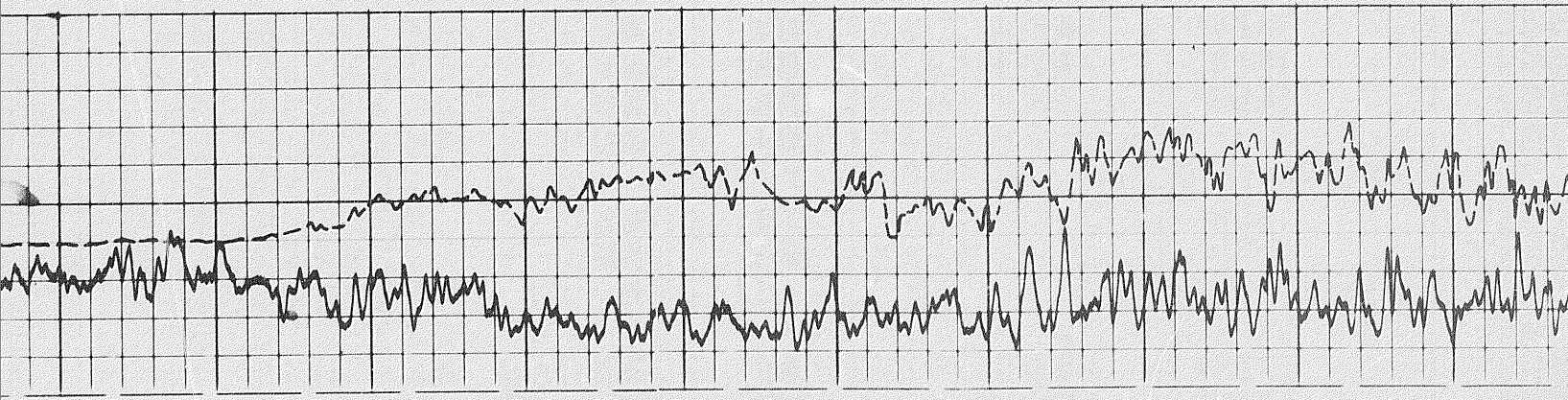
6700

6800

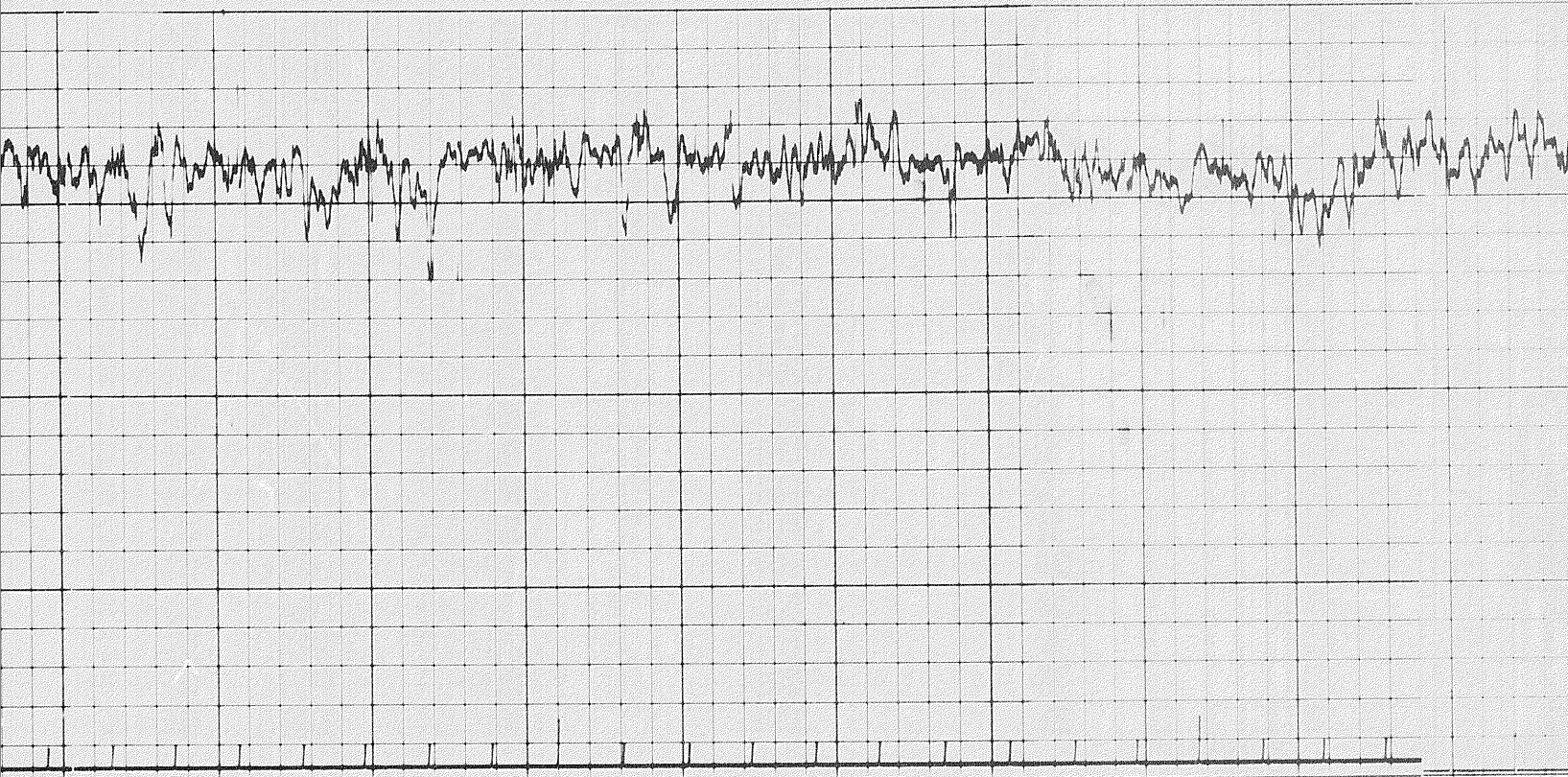




7000                      7100                      7200                      7300                      7400



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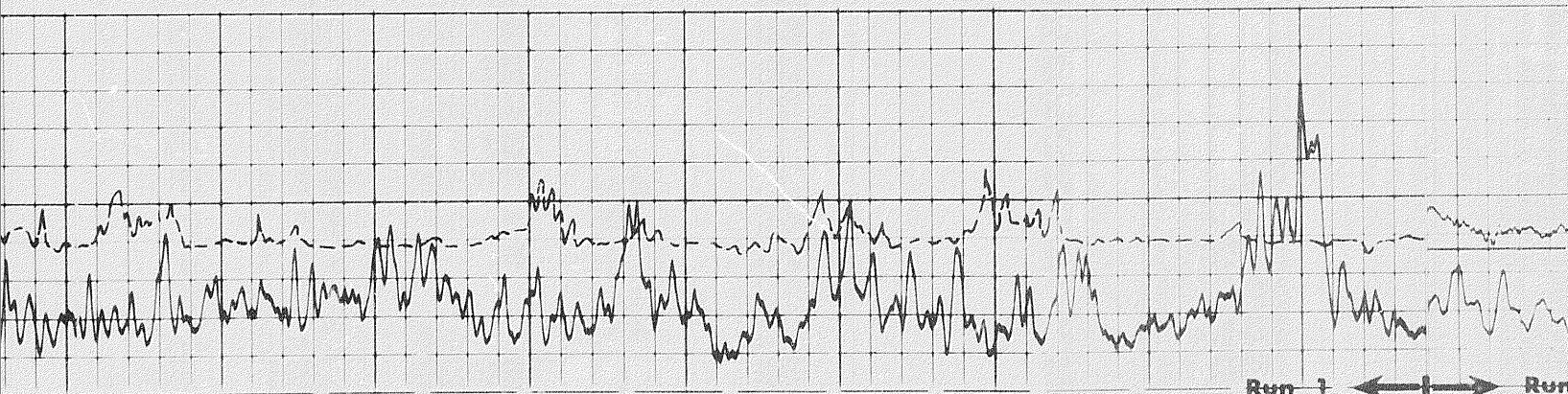
7600

7700

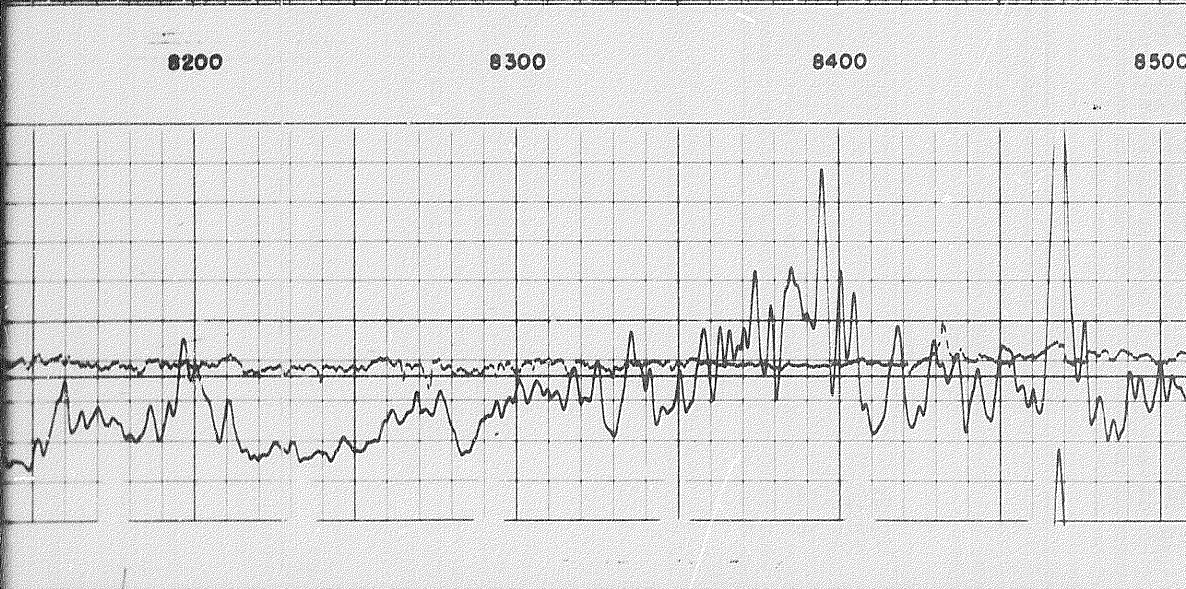
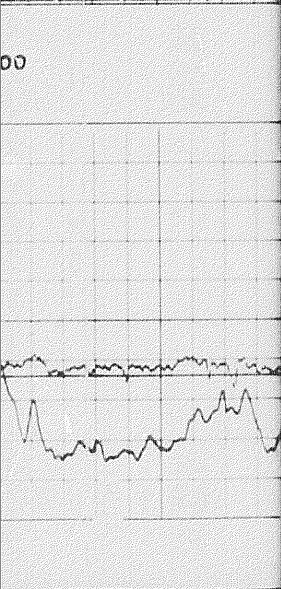
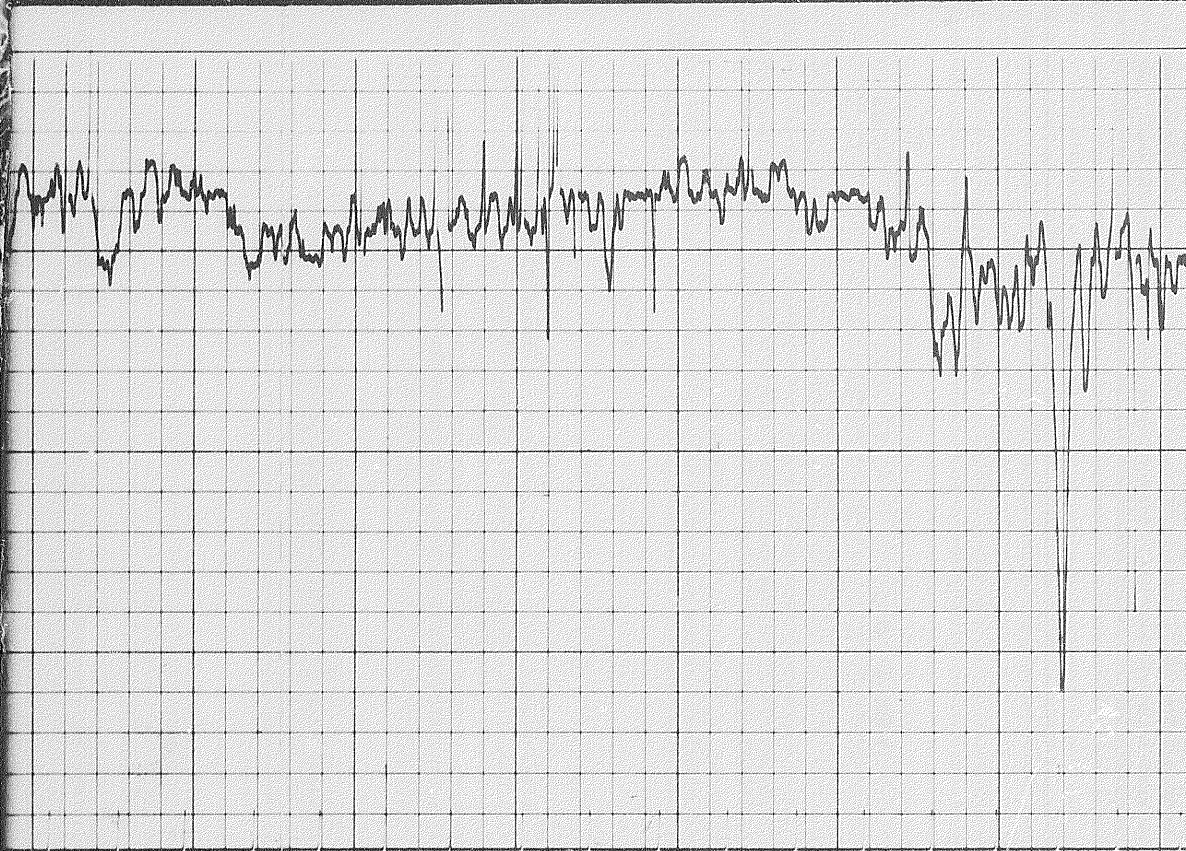
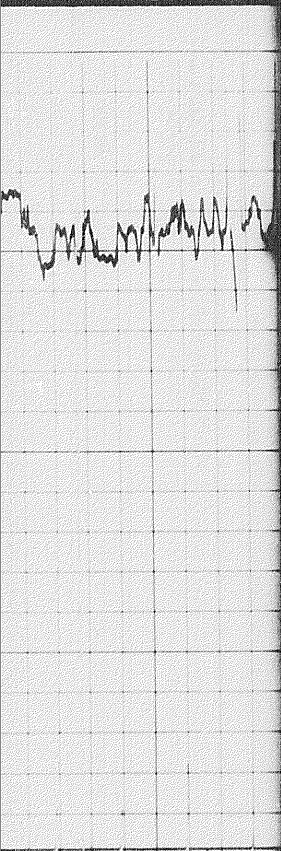
7800

7900

8000



Run 1



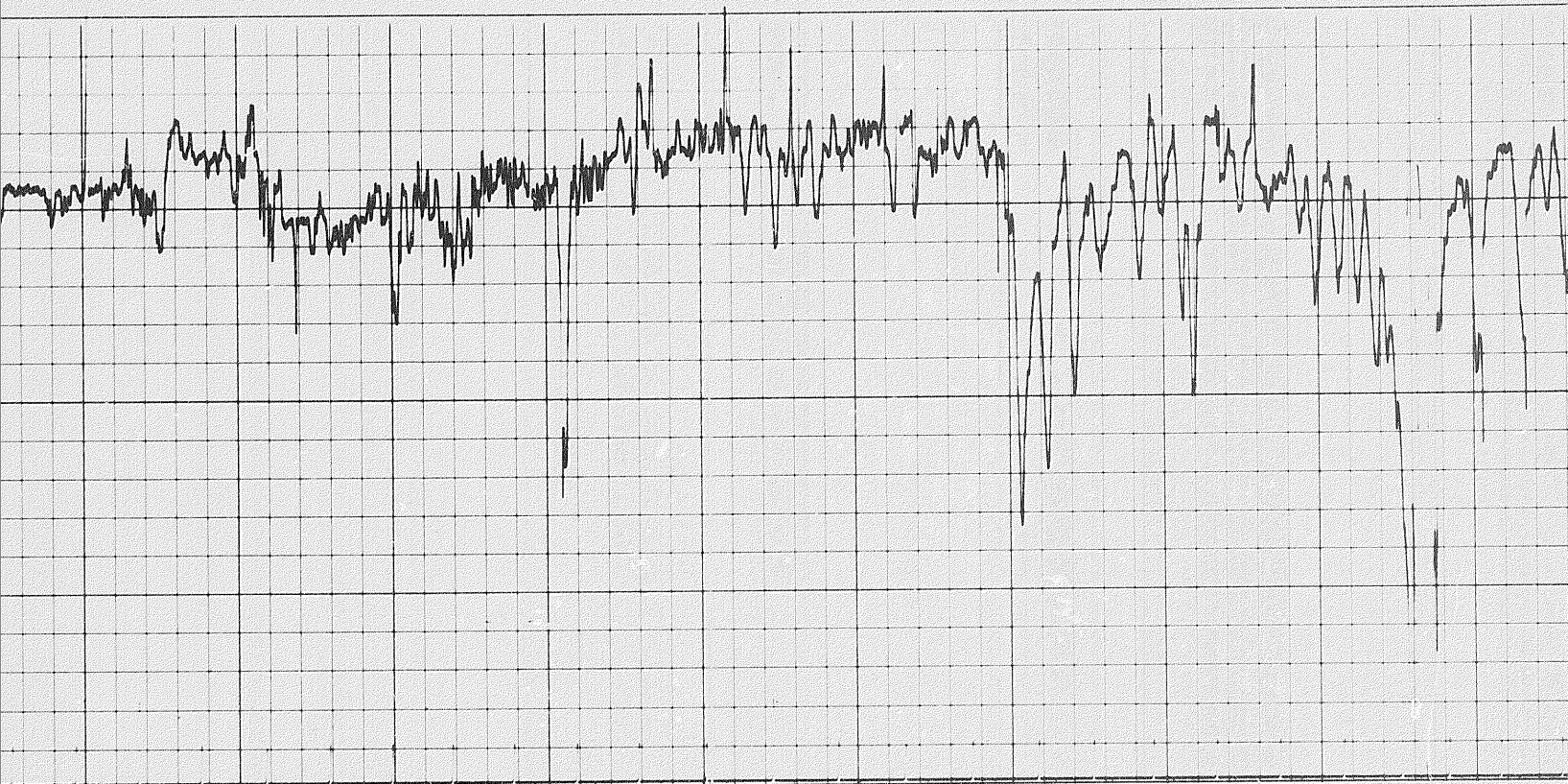
00

8200

8300

8400

8500



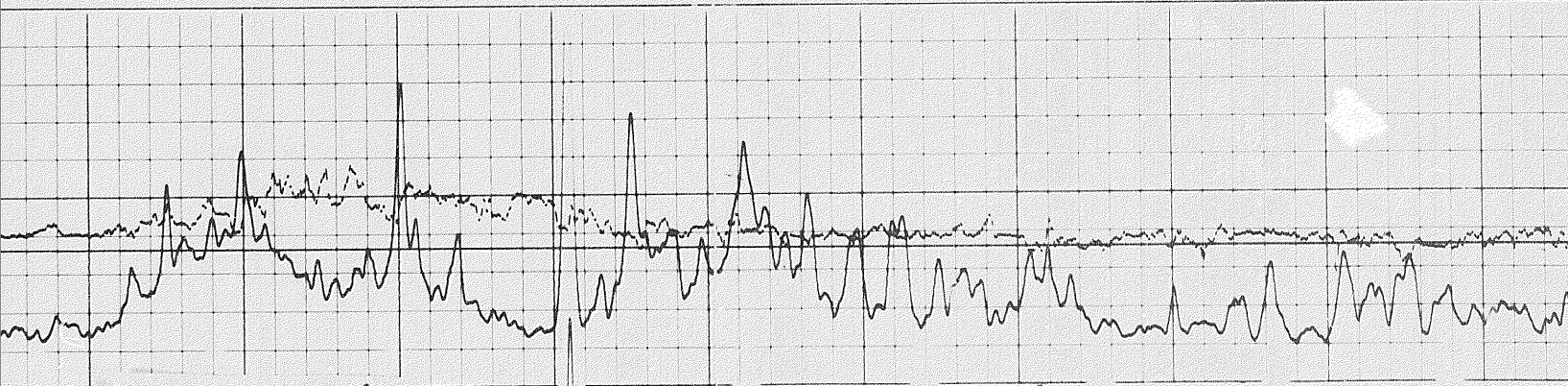
8700

8800

8900

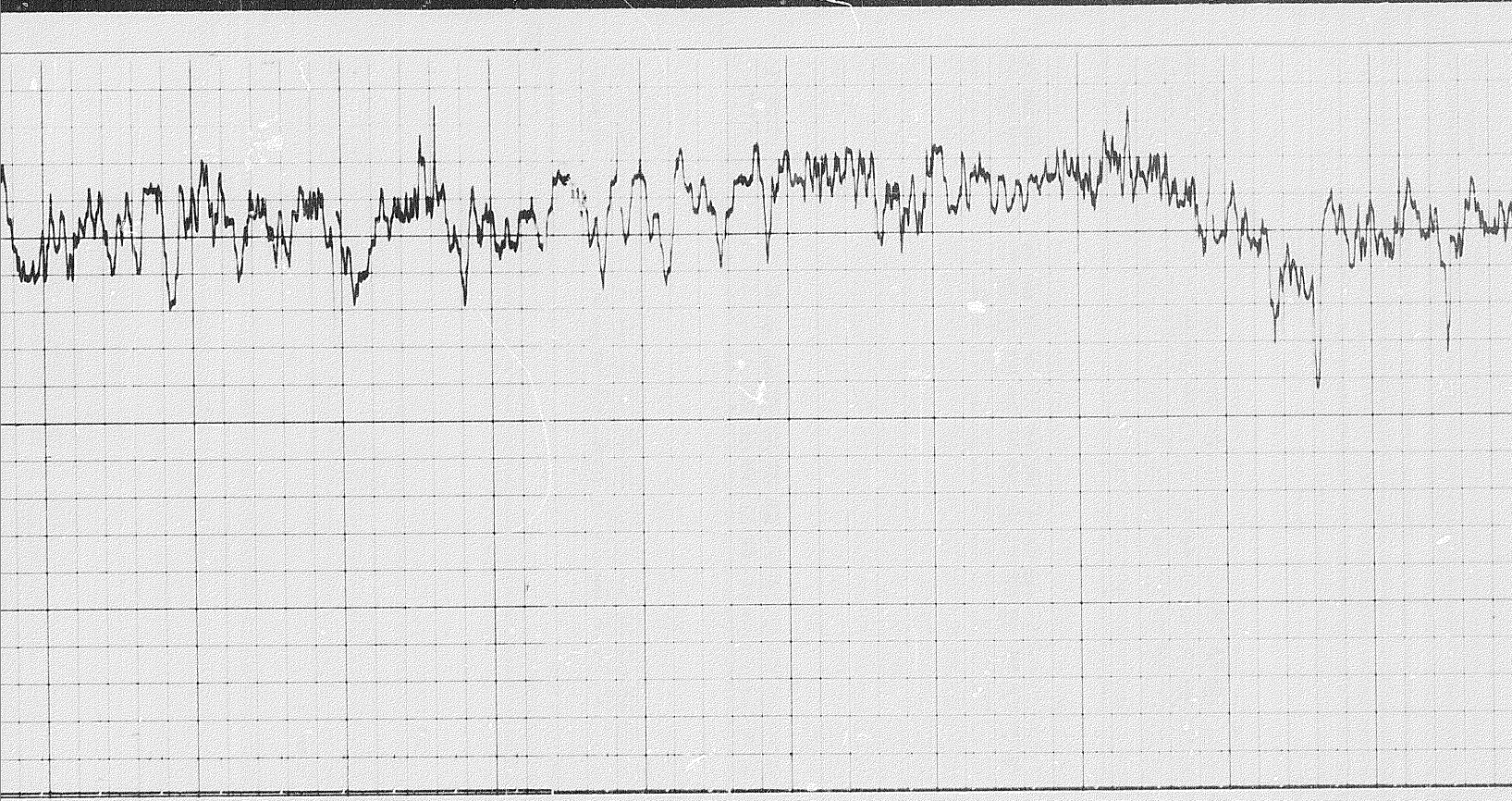
9000

9100



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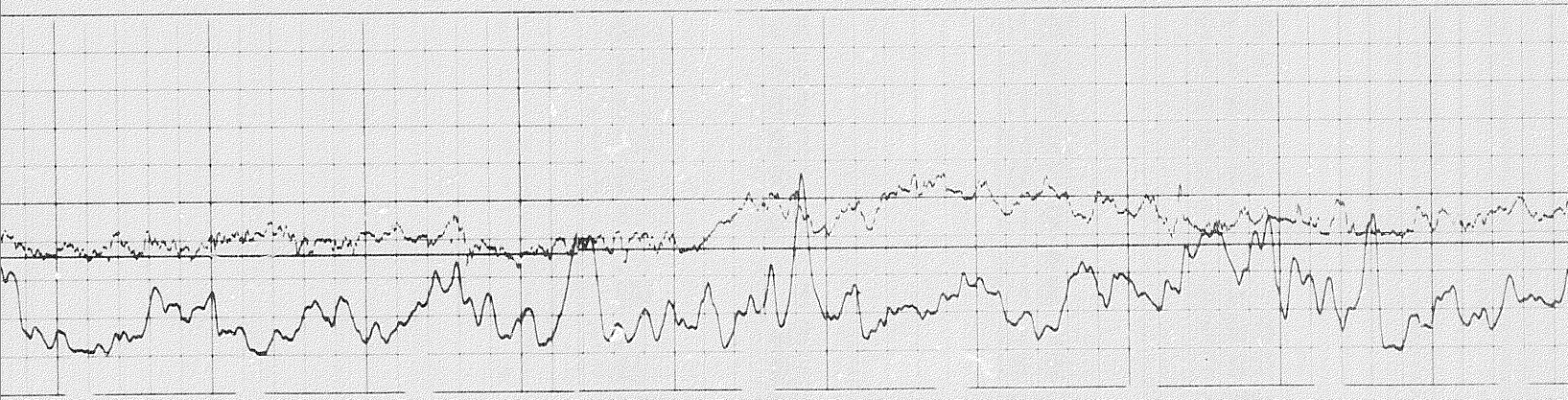
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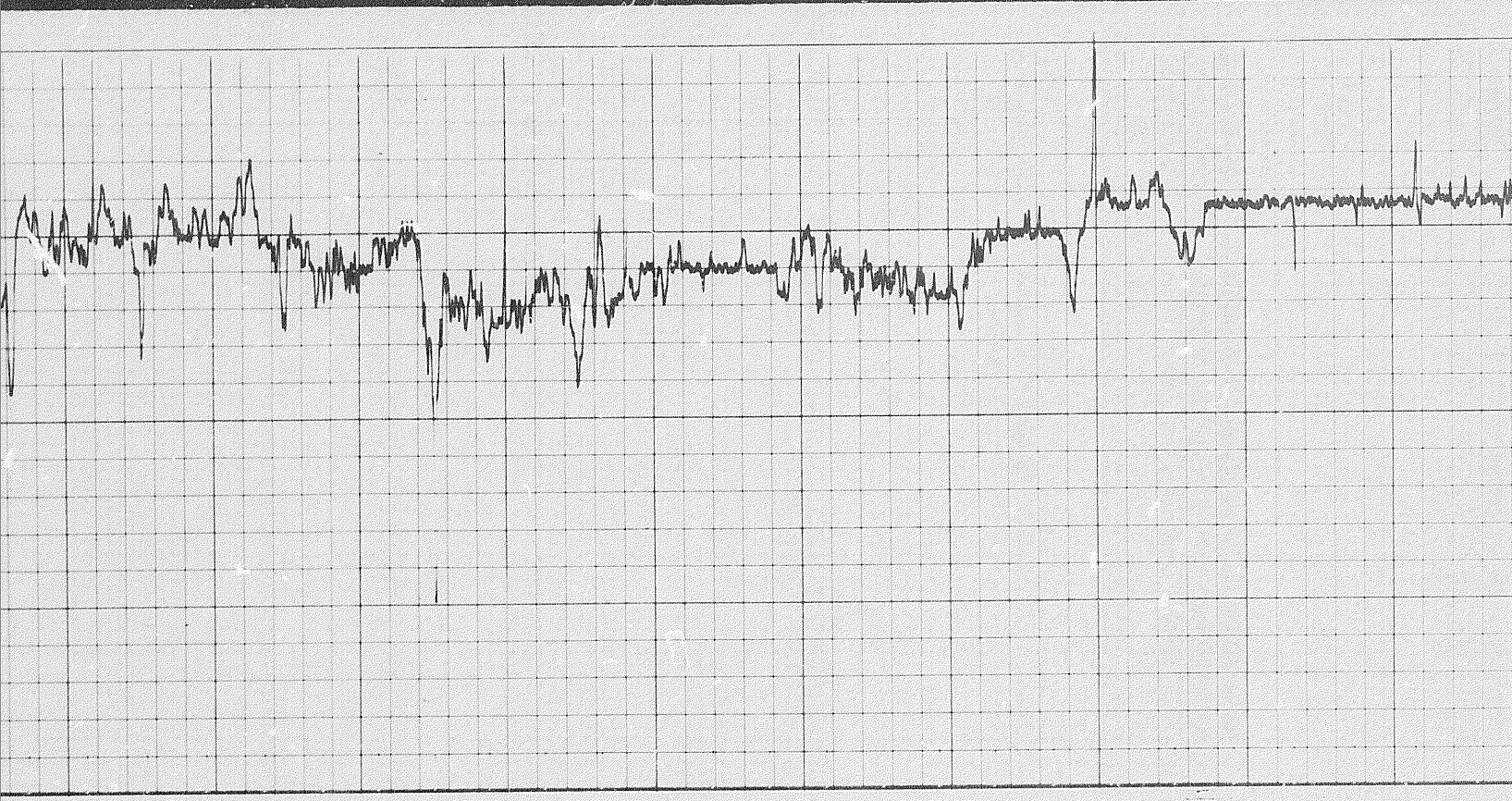
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9500

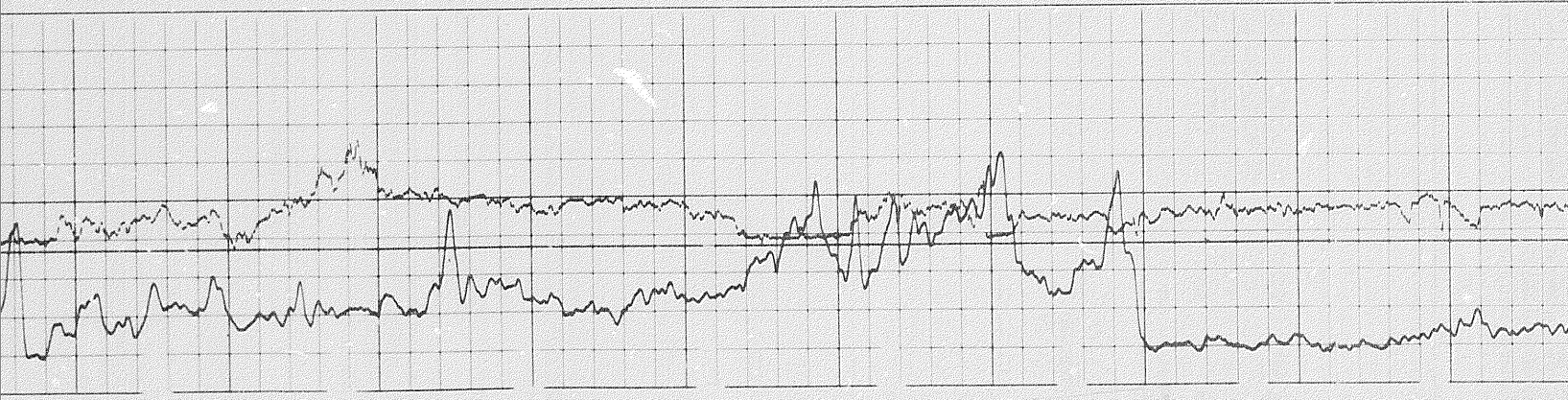
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9700

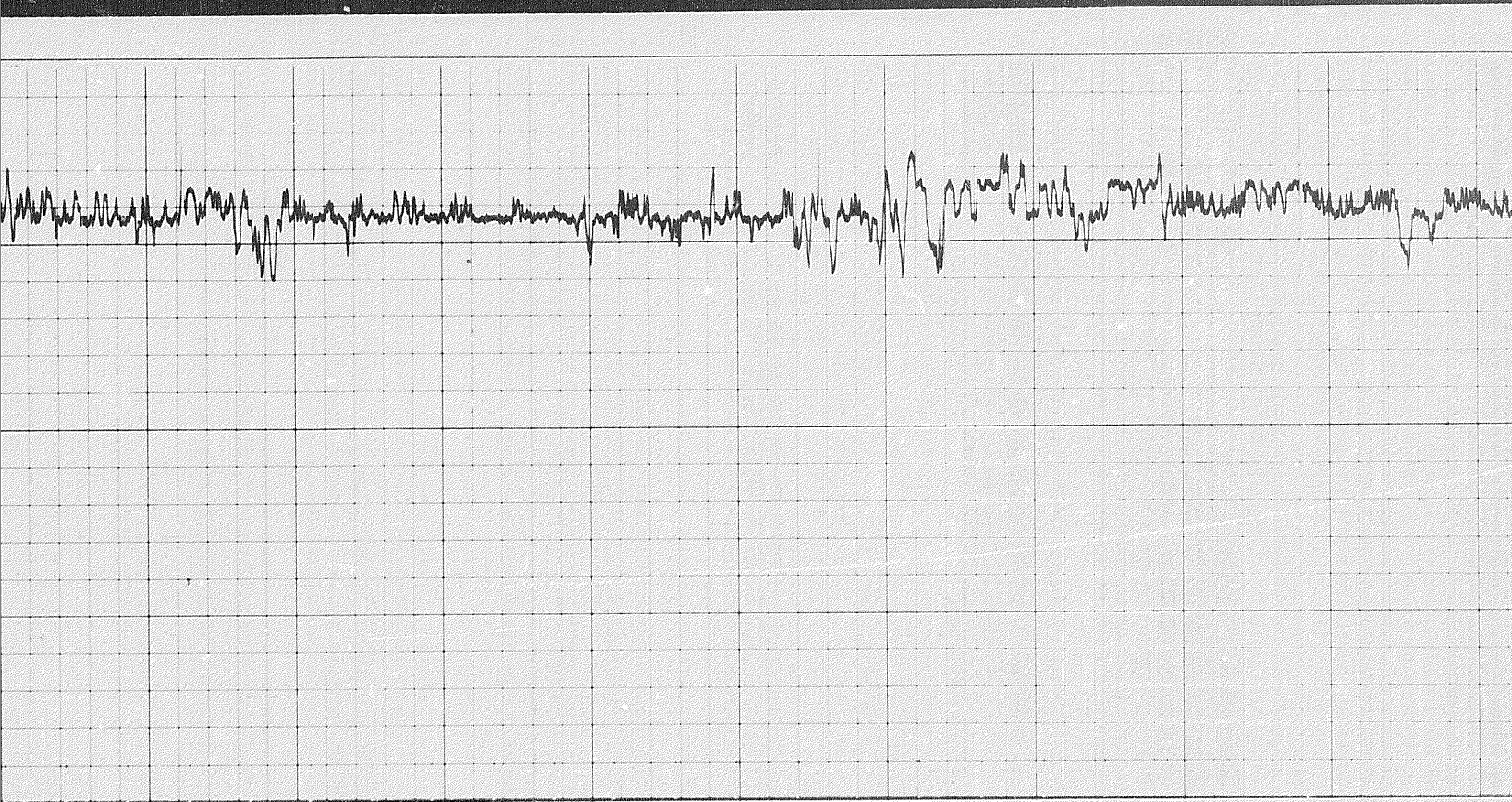




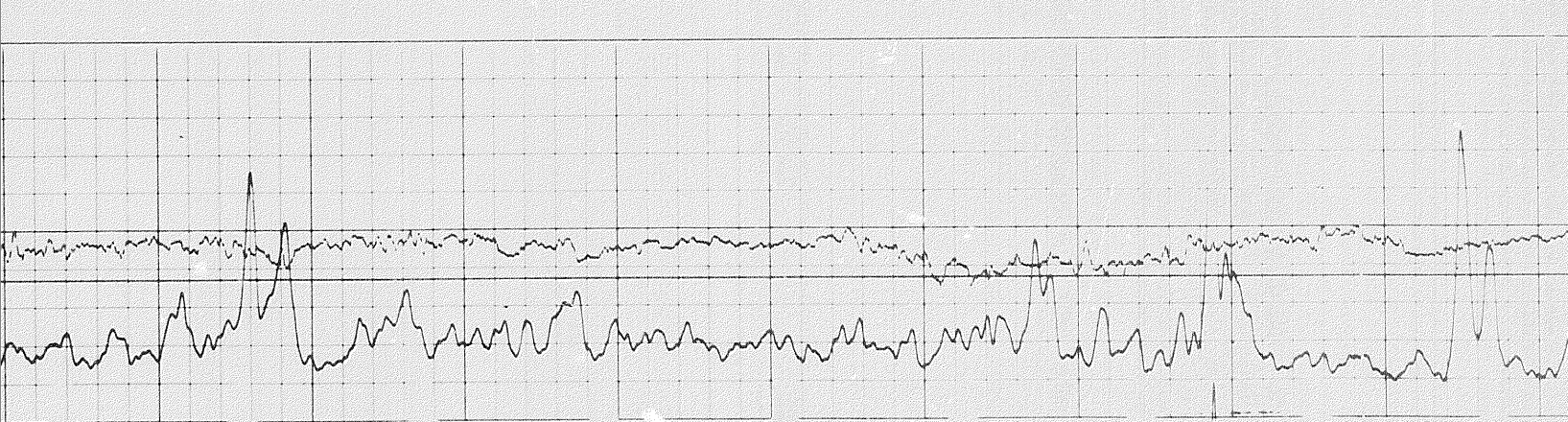
9700                      9800                      9900                      10000                      10100

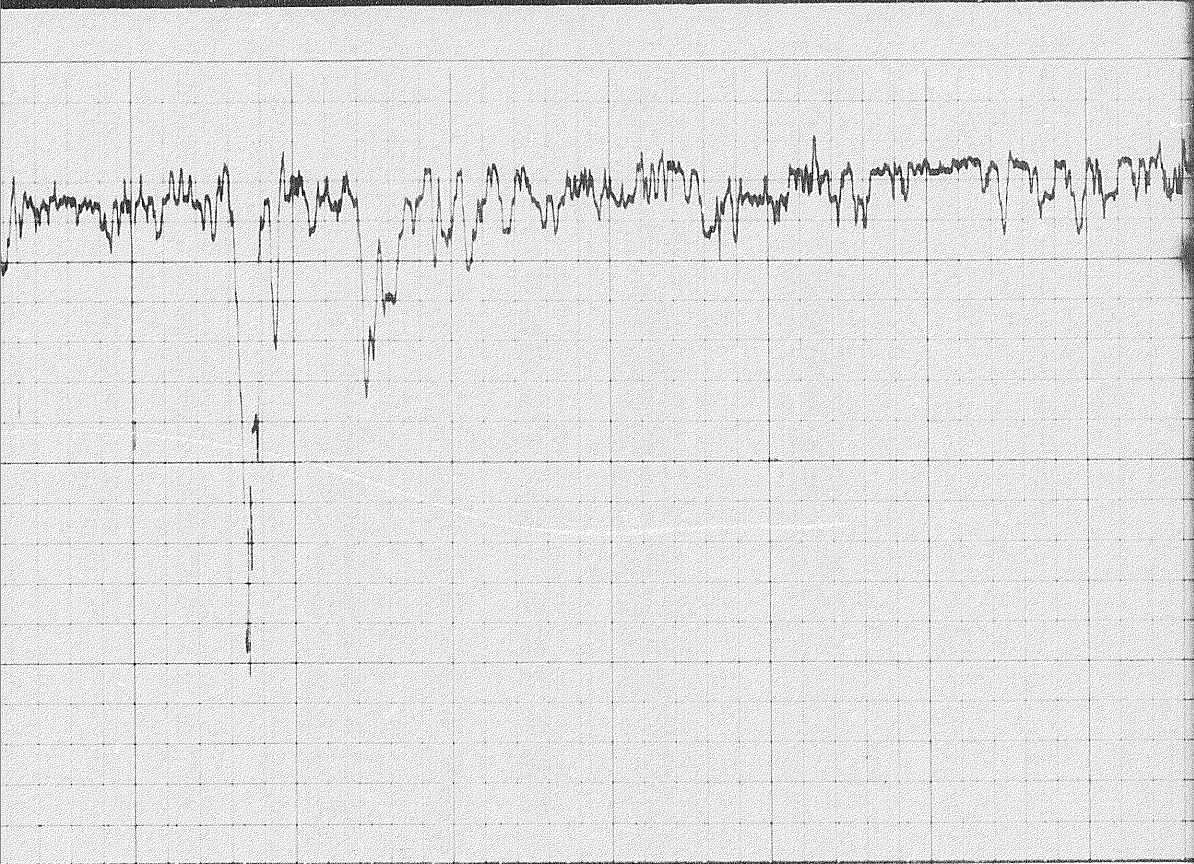


70f



00                      10400                      10500                      10600                      10700                      10800

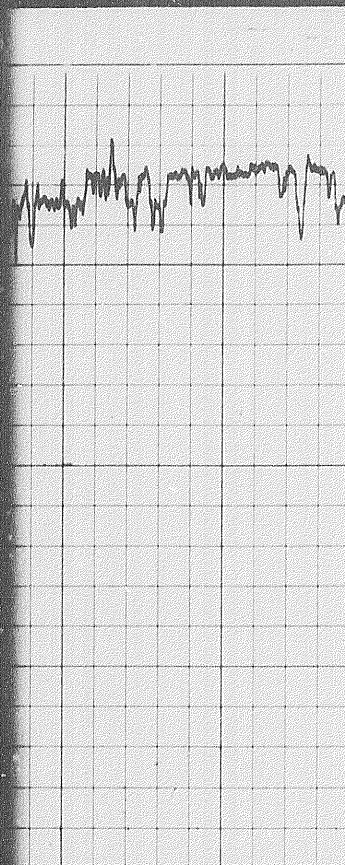
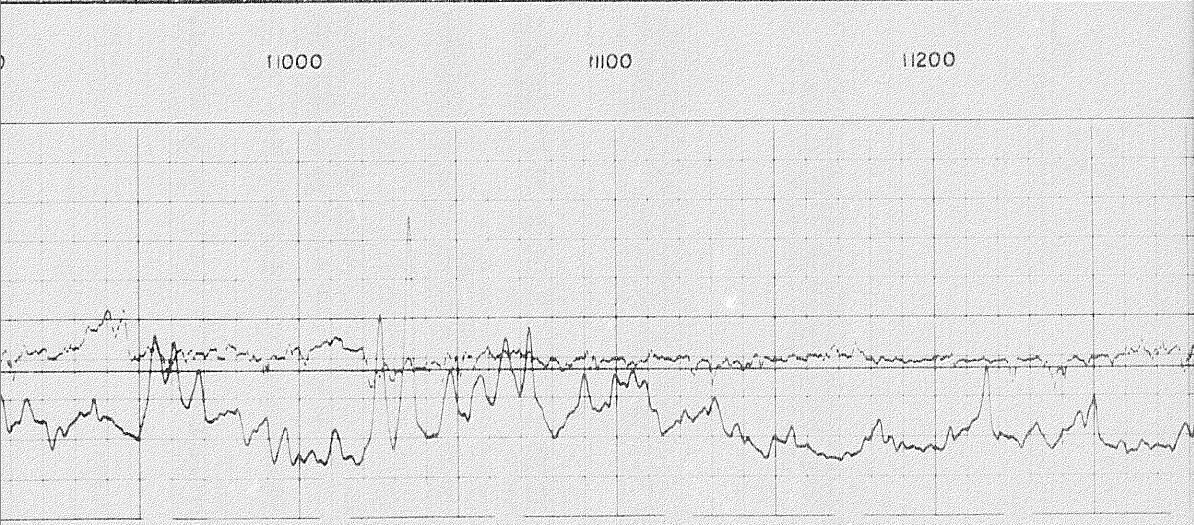




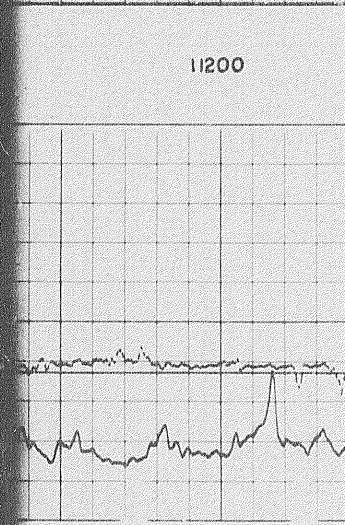
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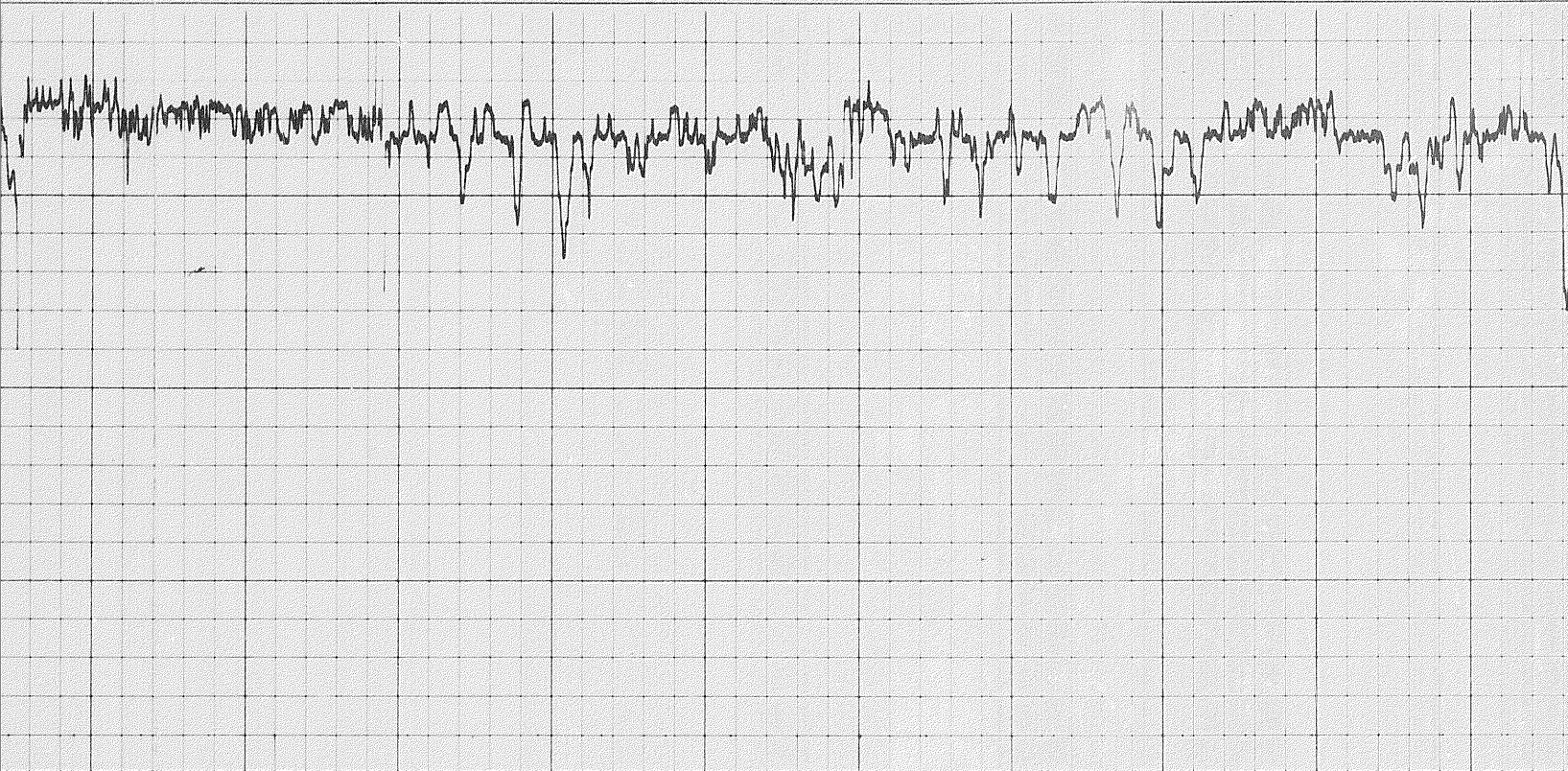
11100

11200



11200





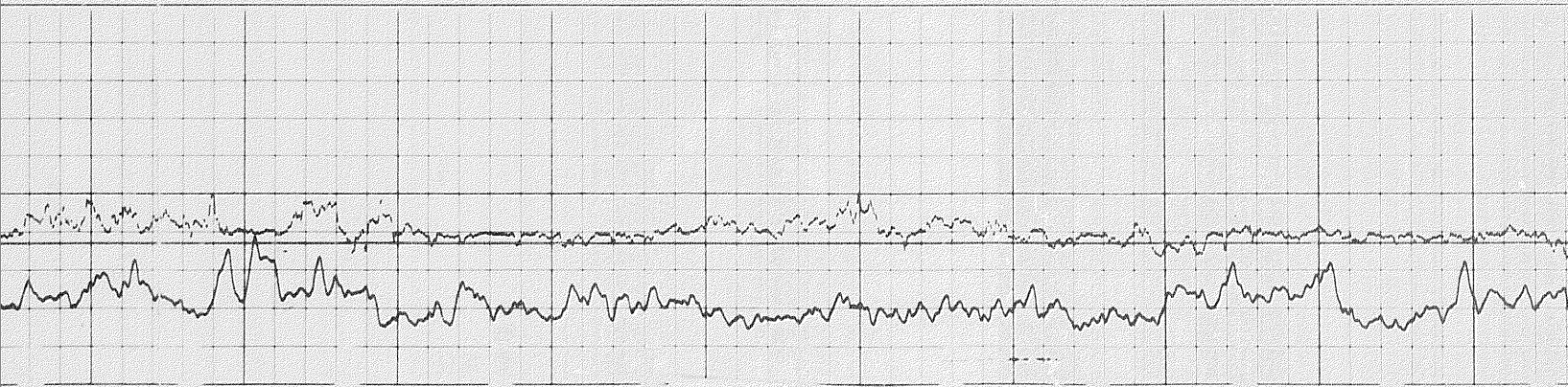
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11500

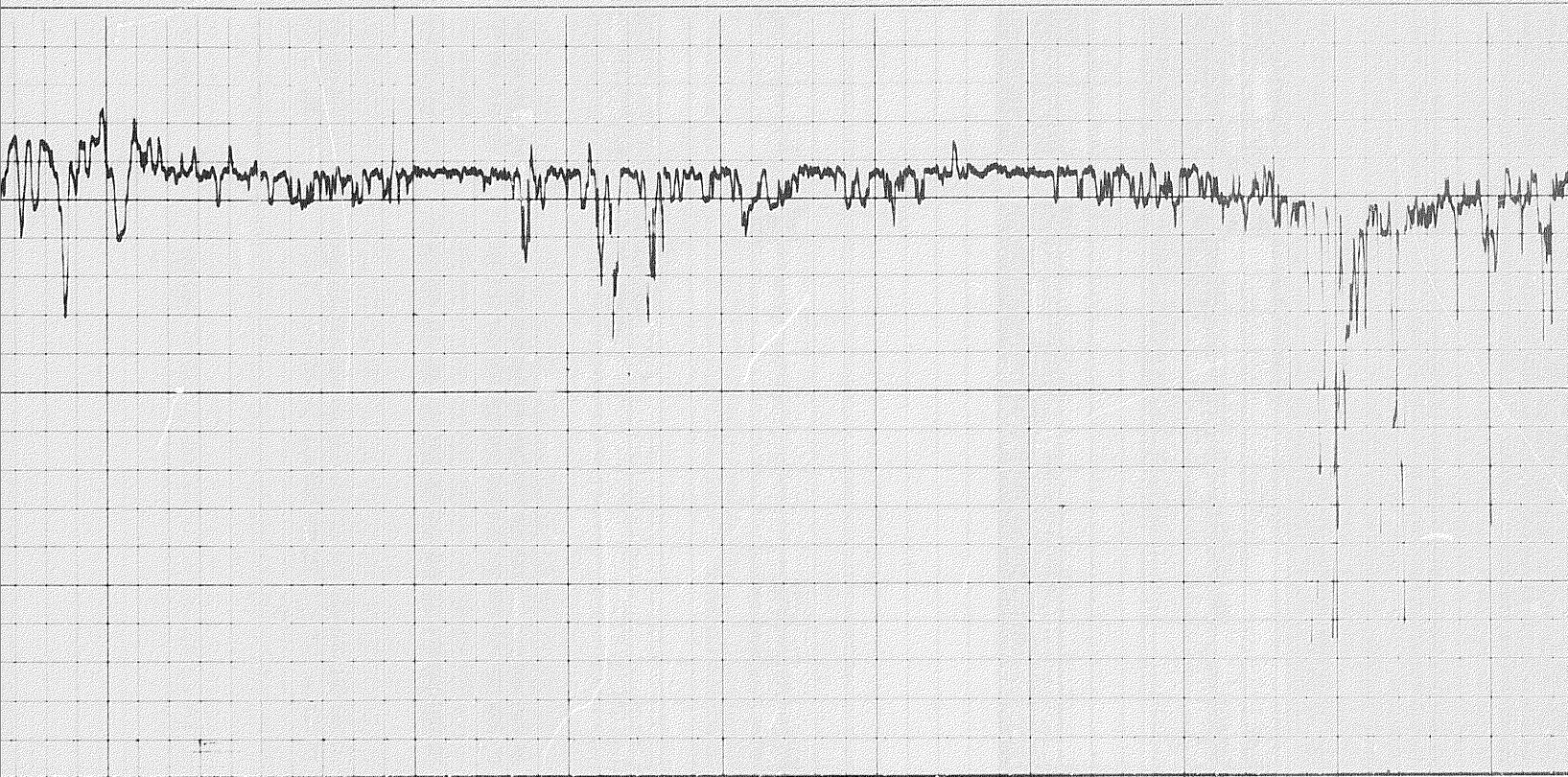
11600

11700

11800



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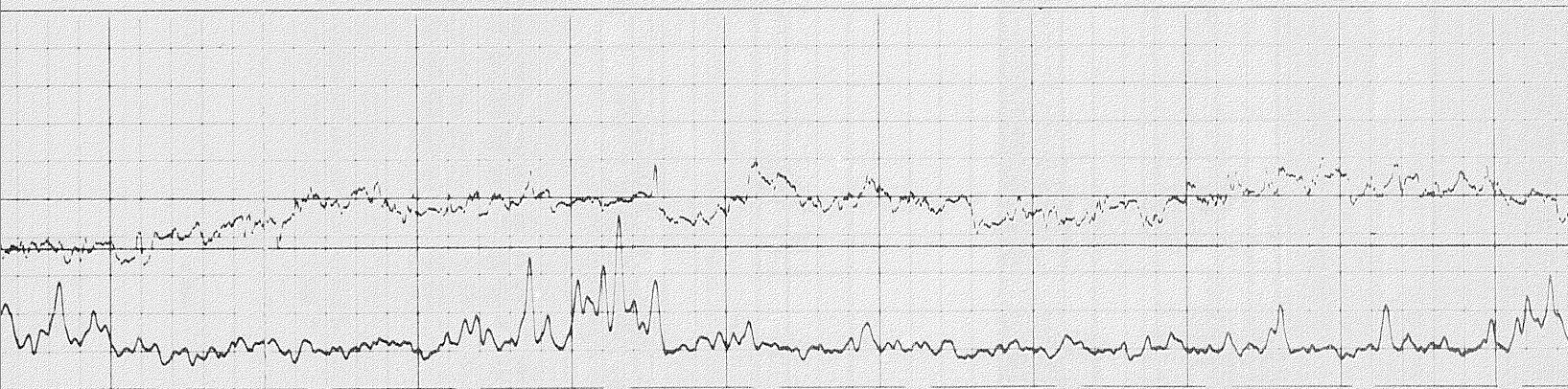
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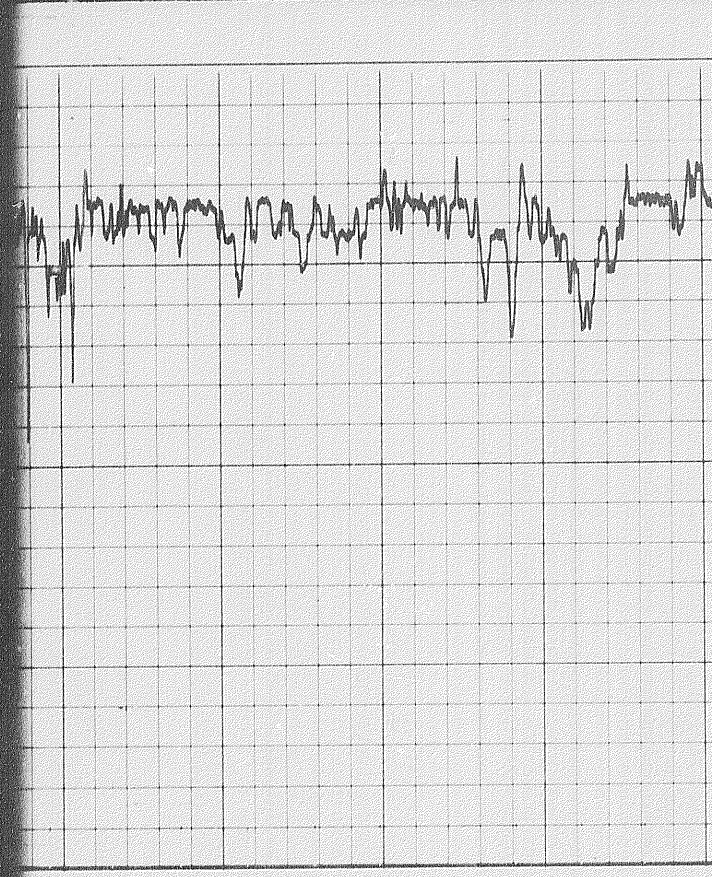
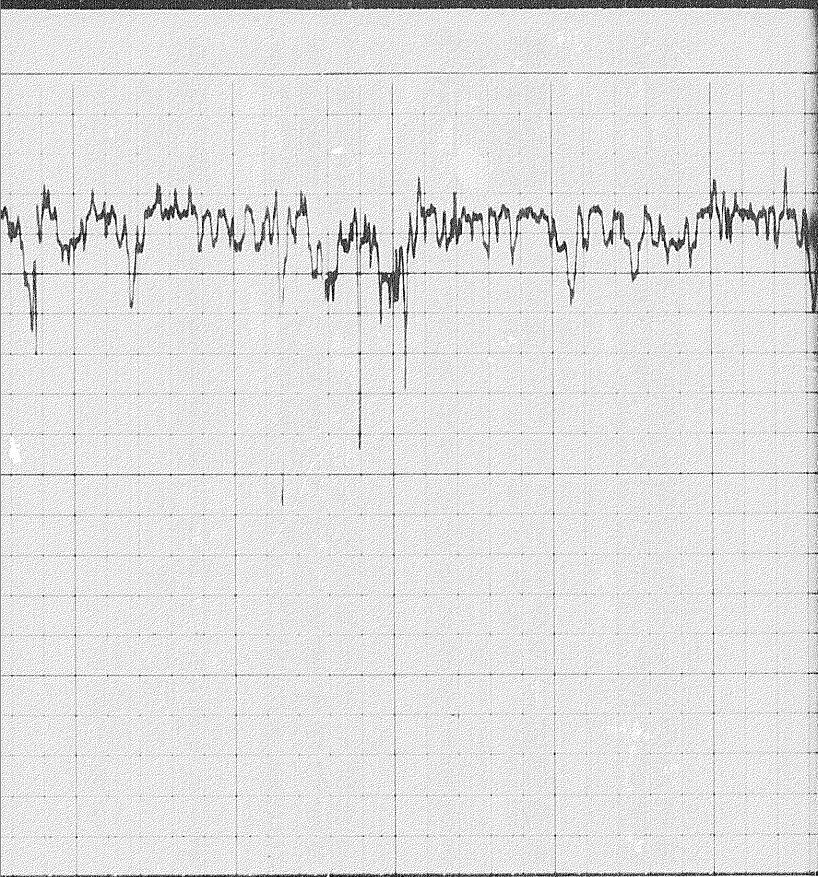
12100

12200

12300

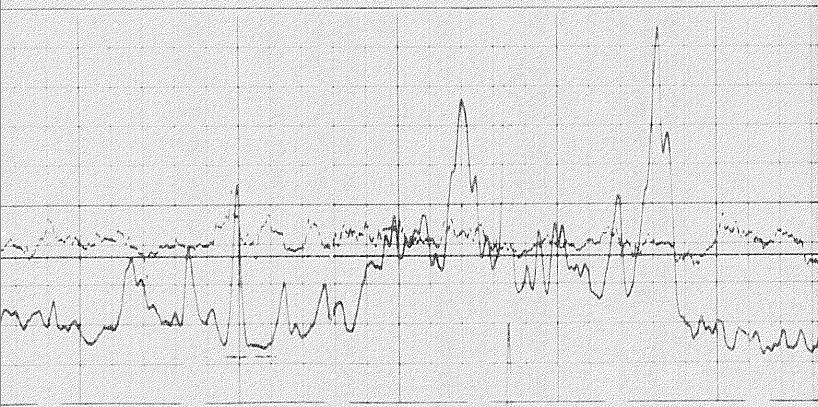
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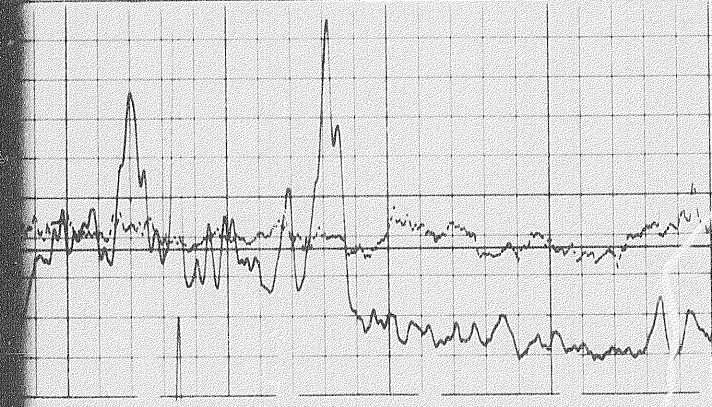
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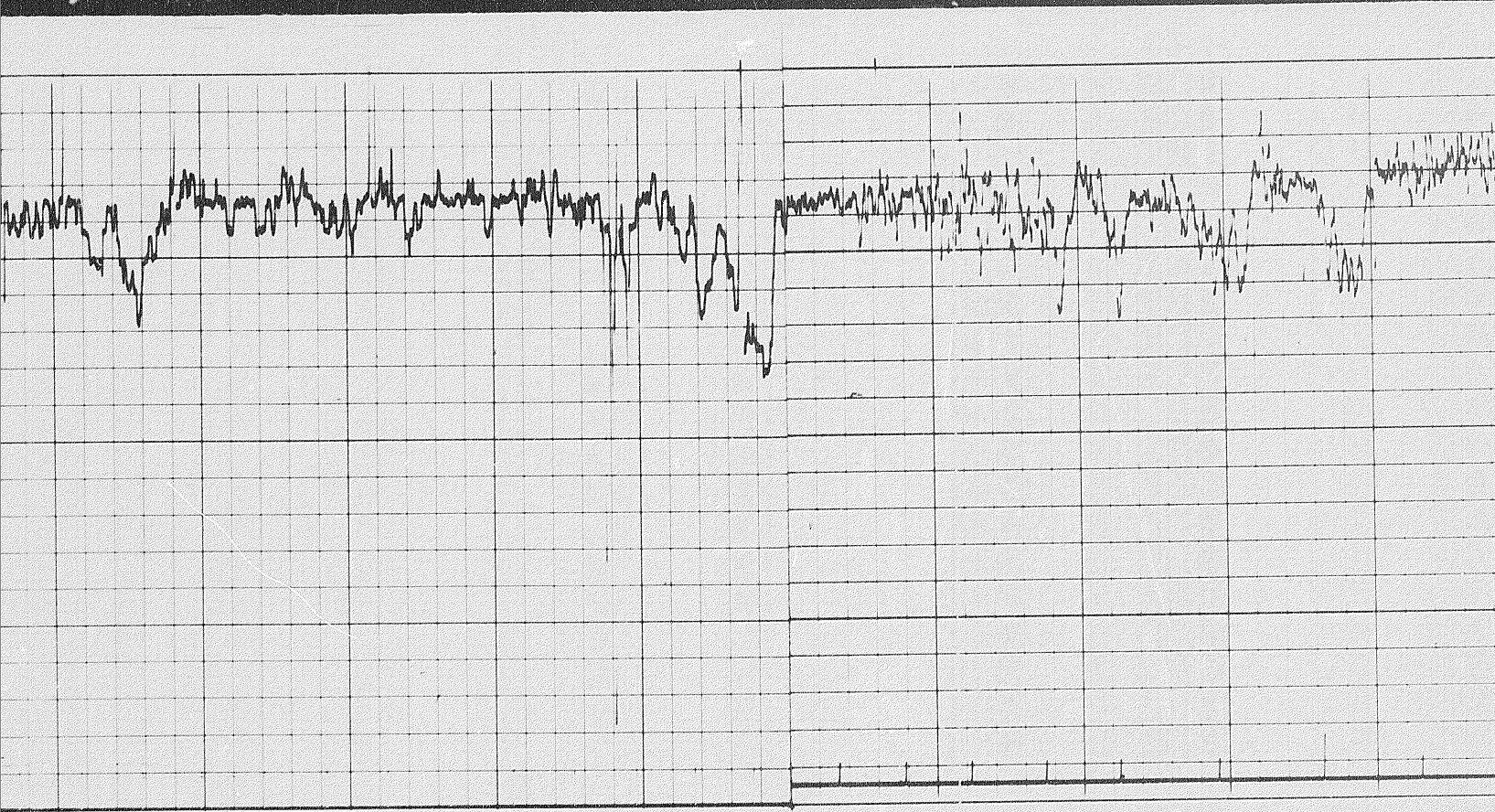
12700



12700

12800





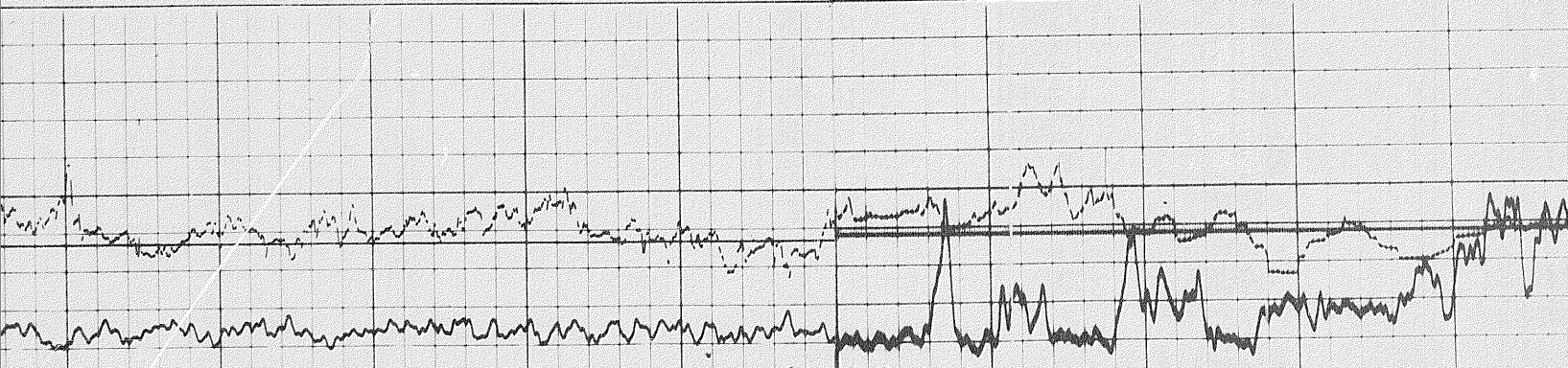
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13100

13200

13300

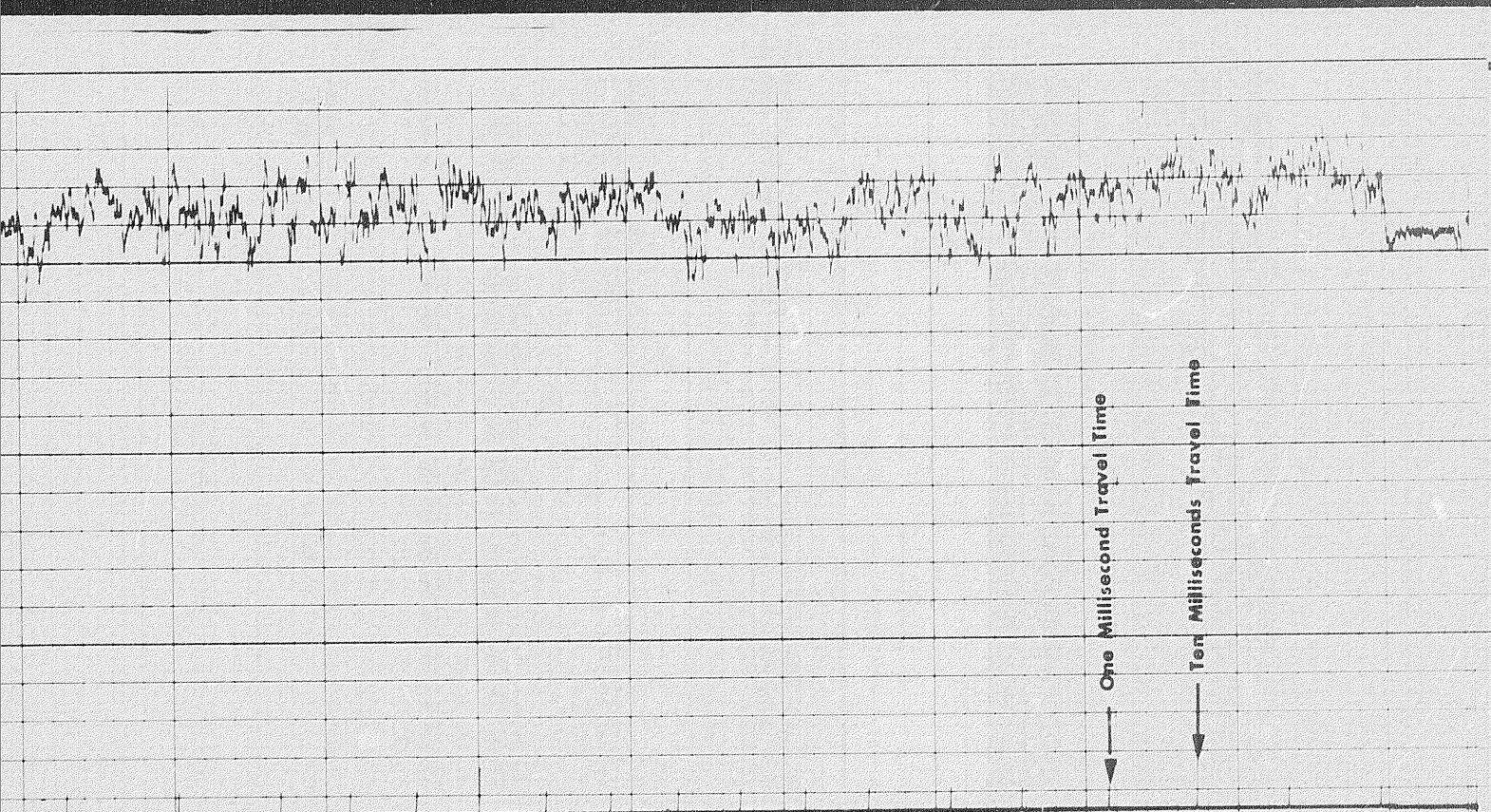
13400



Run 2 ← → Run 3

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13600

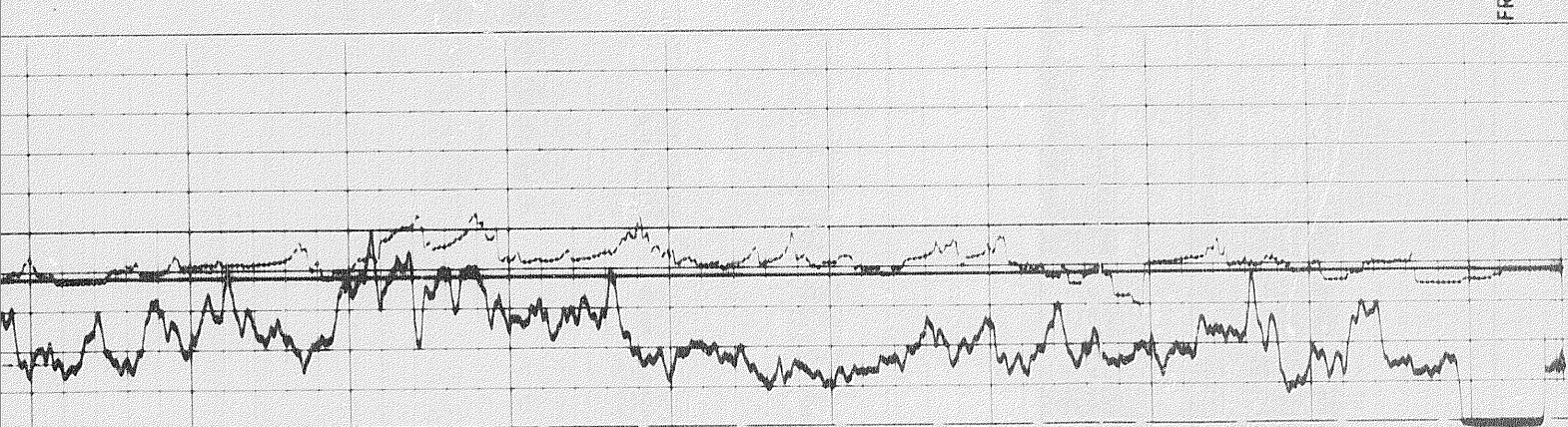
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13800

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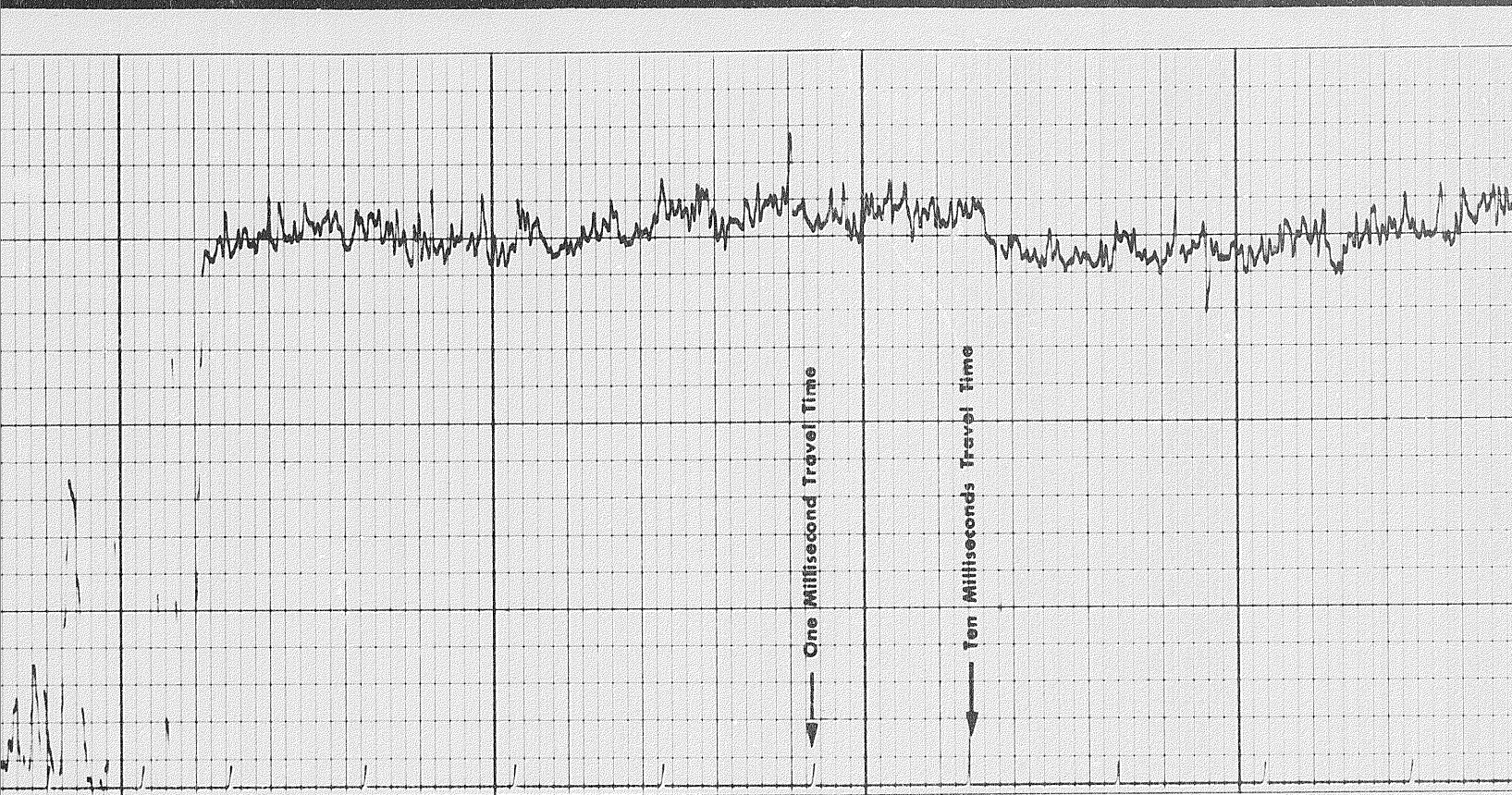
14000

FR



6 7 8 9 0 11 12 13 14



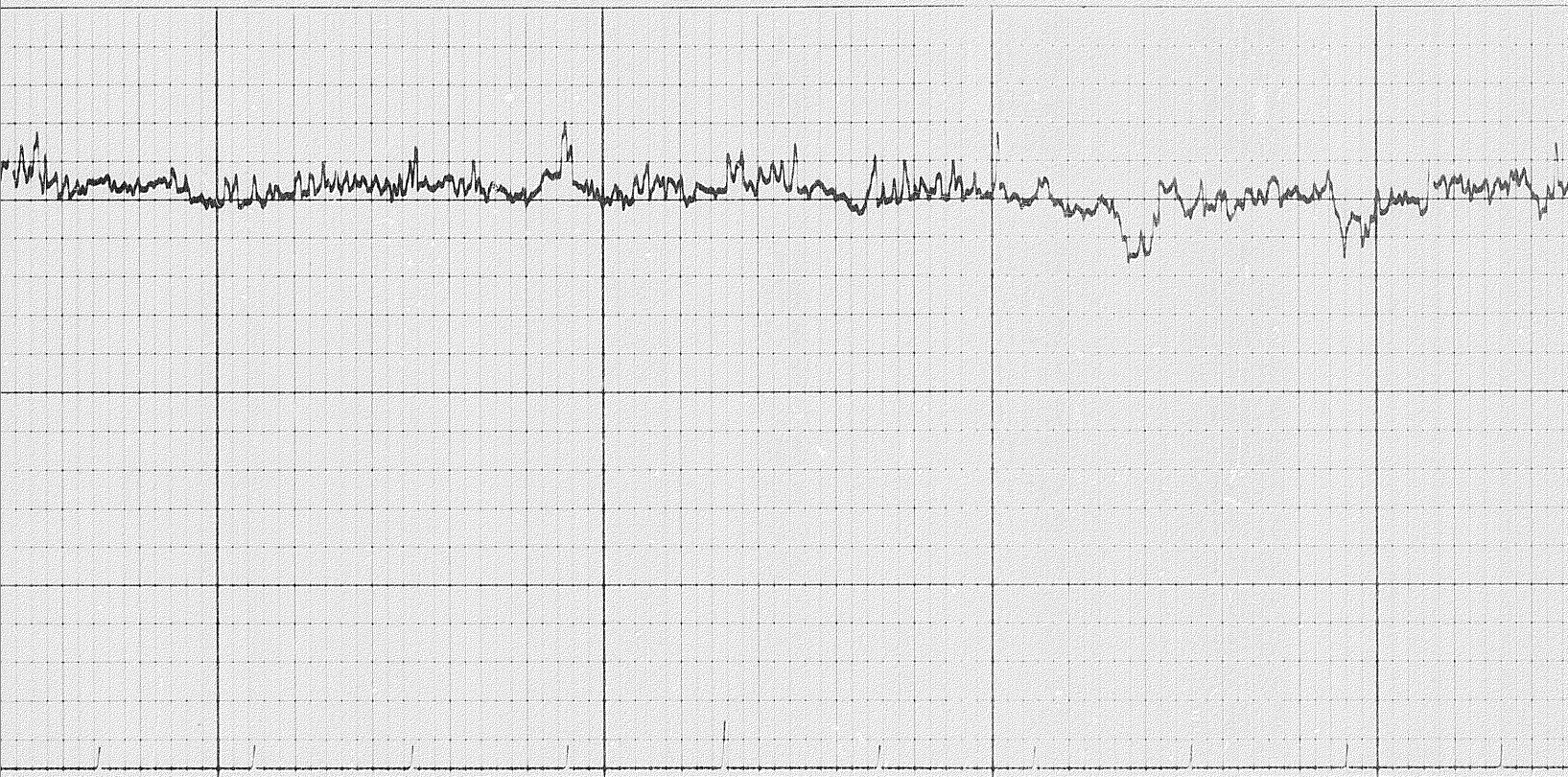


6100

6200

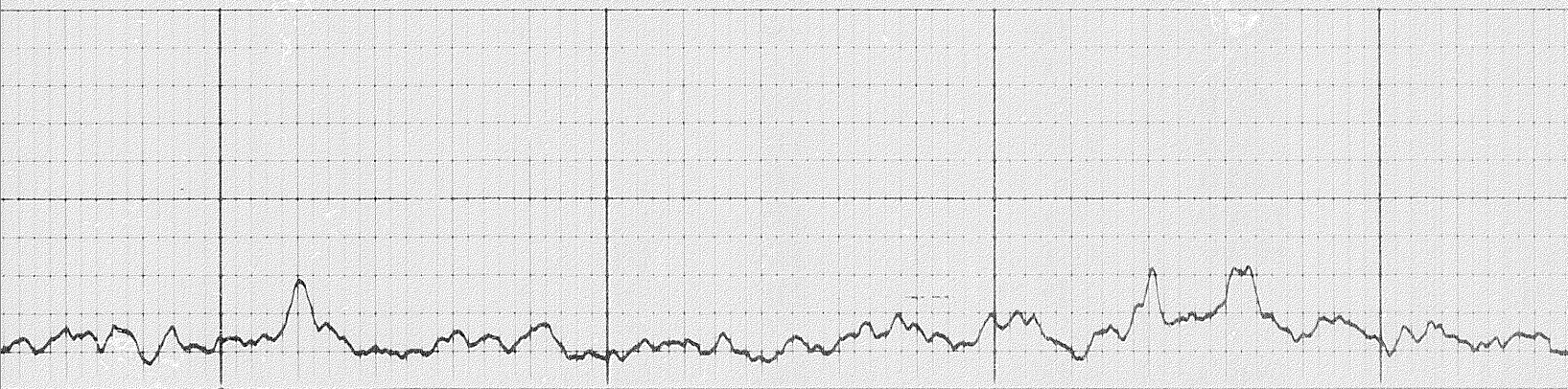


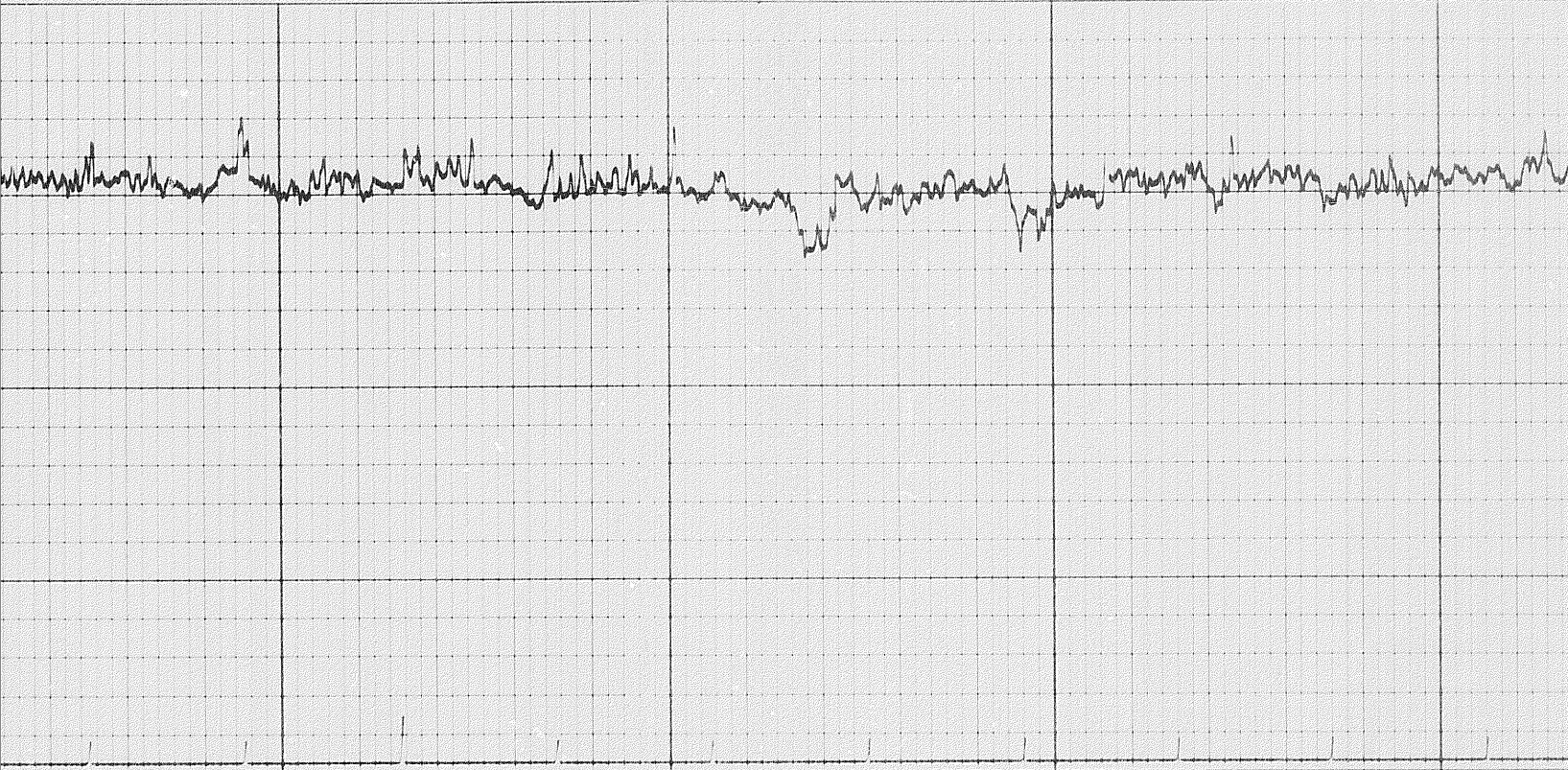
10 of



6300

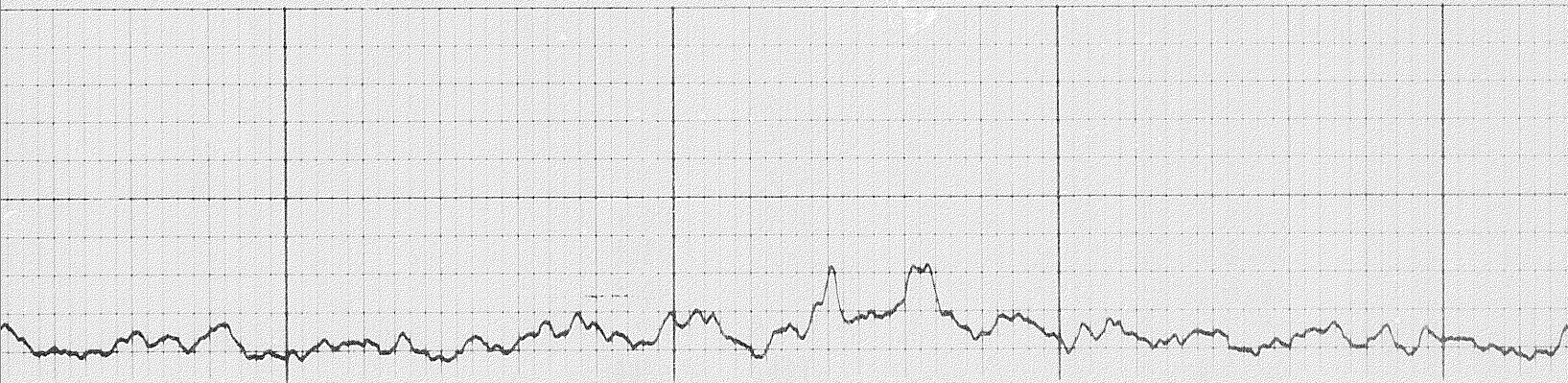
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6400

6500



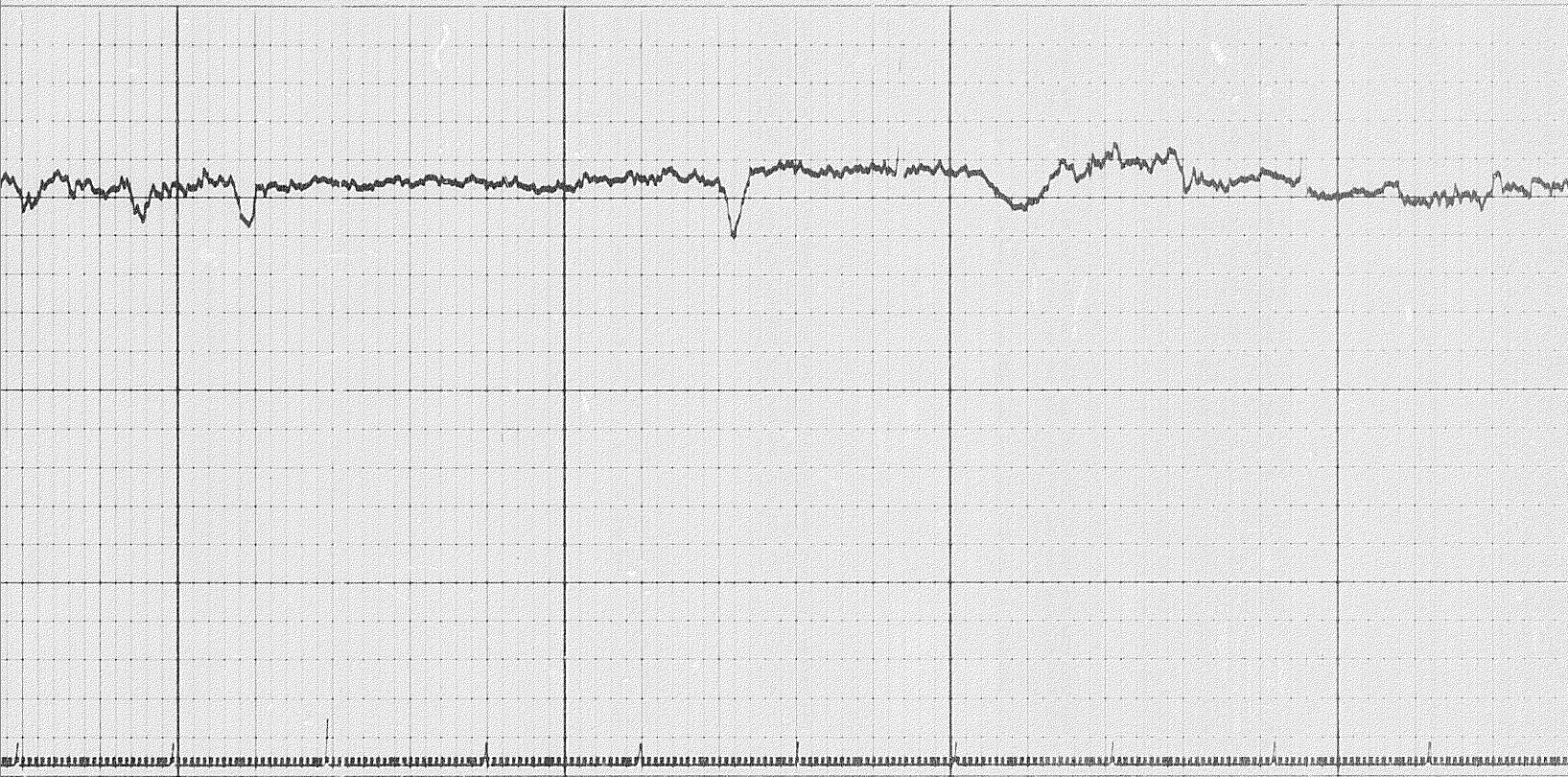


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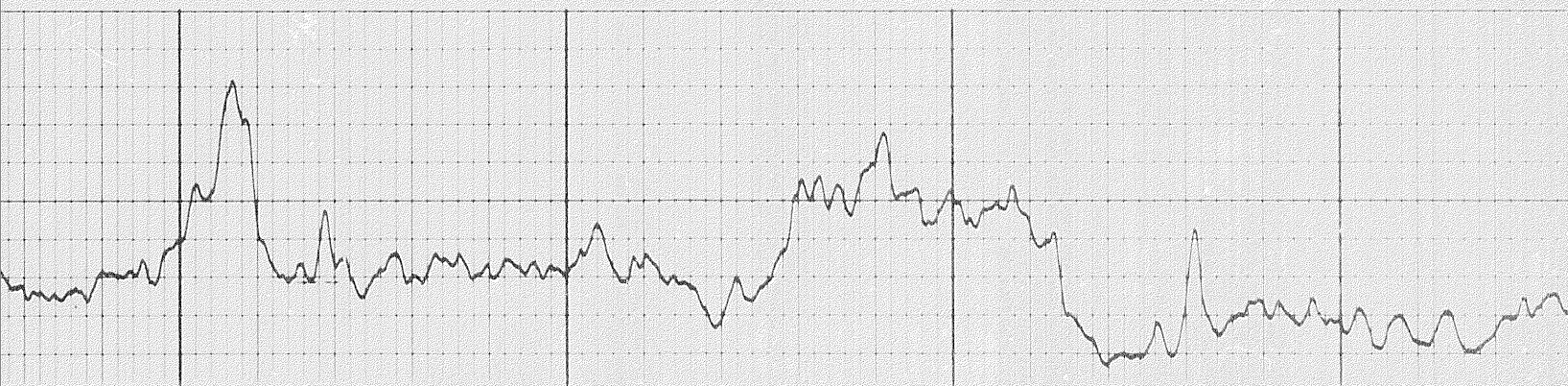


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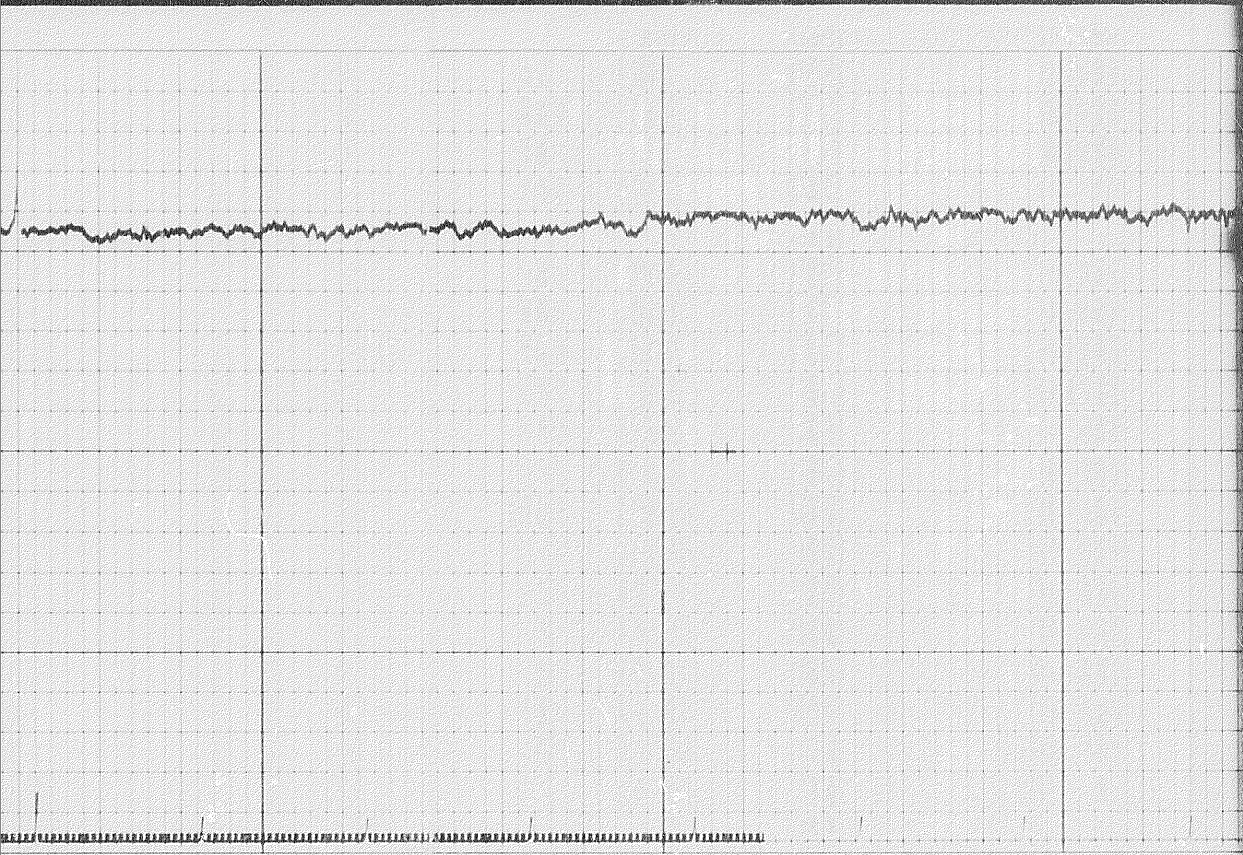


6800

6900

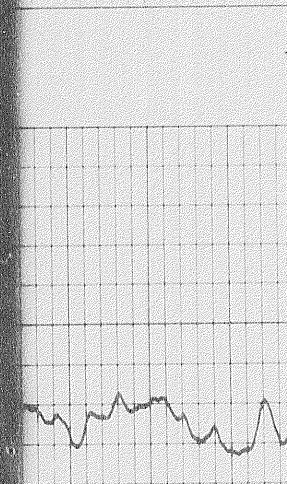
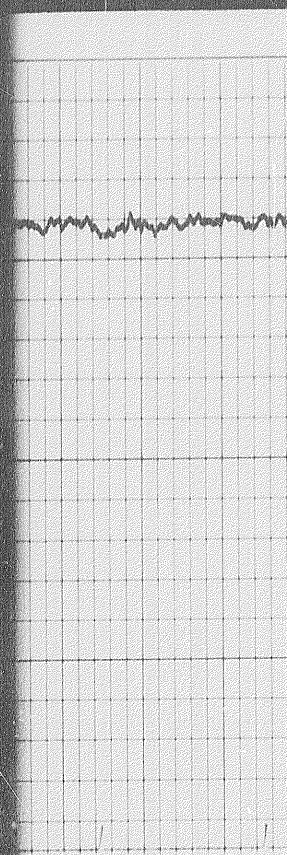
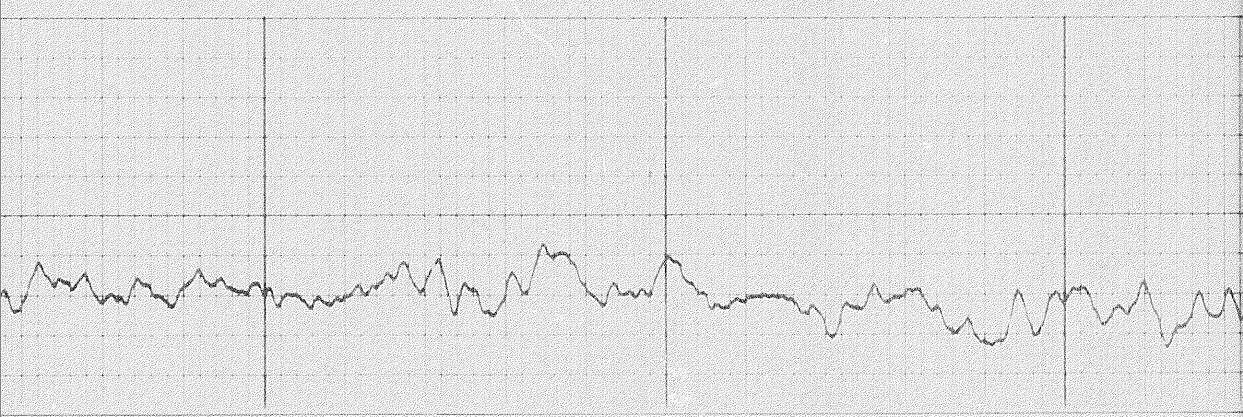


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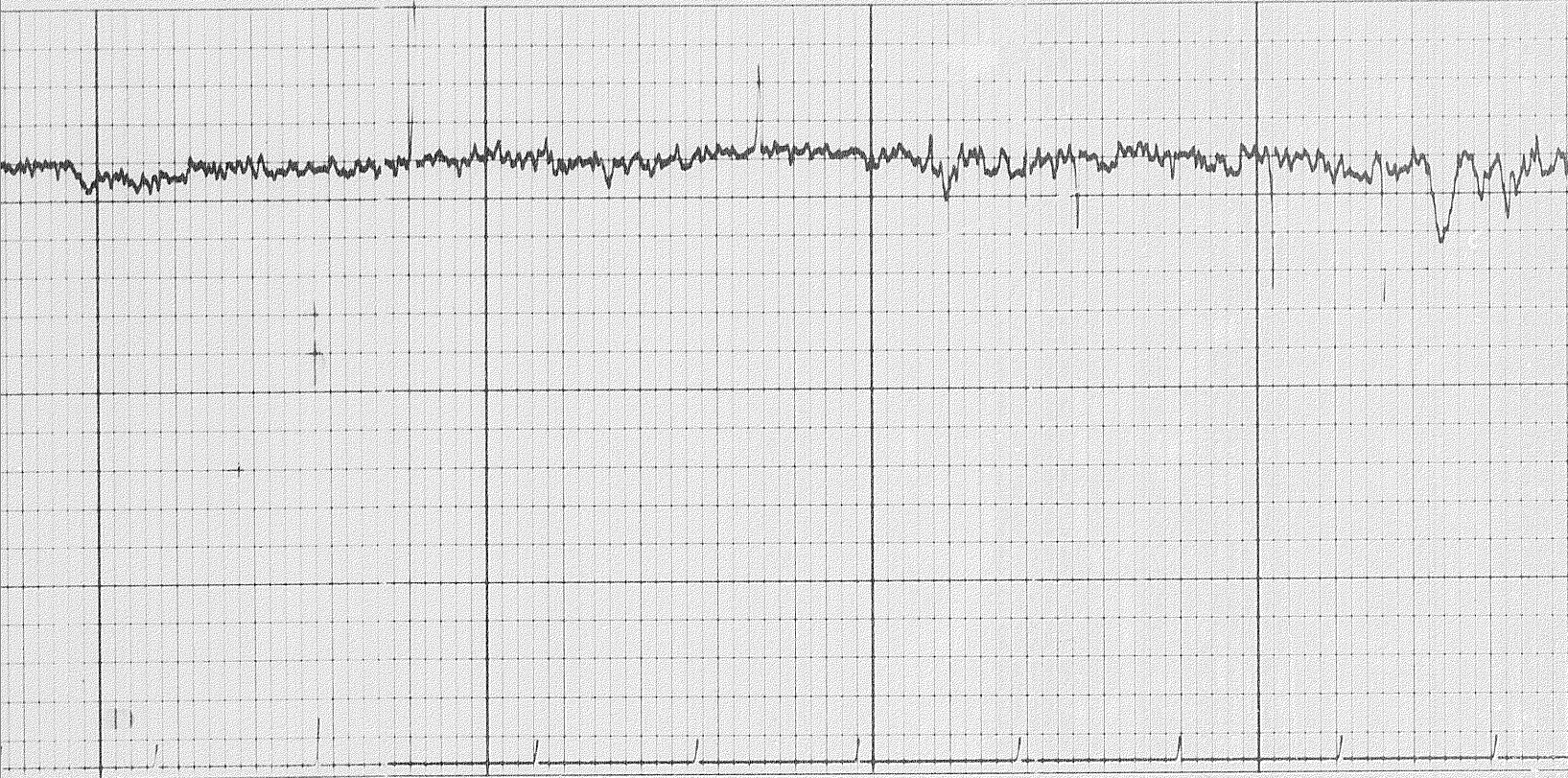


7000

7100

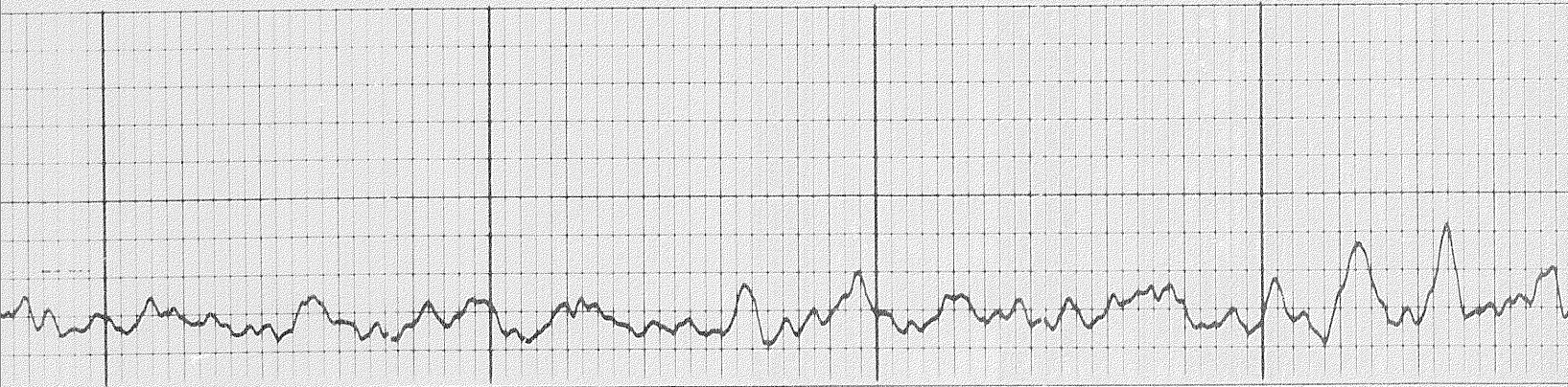




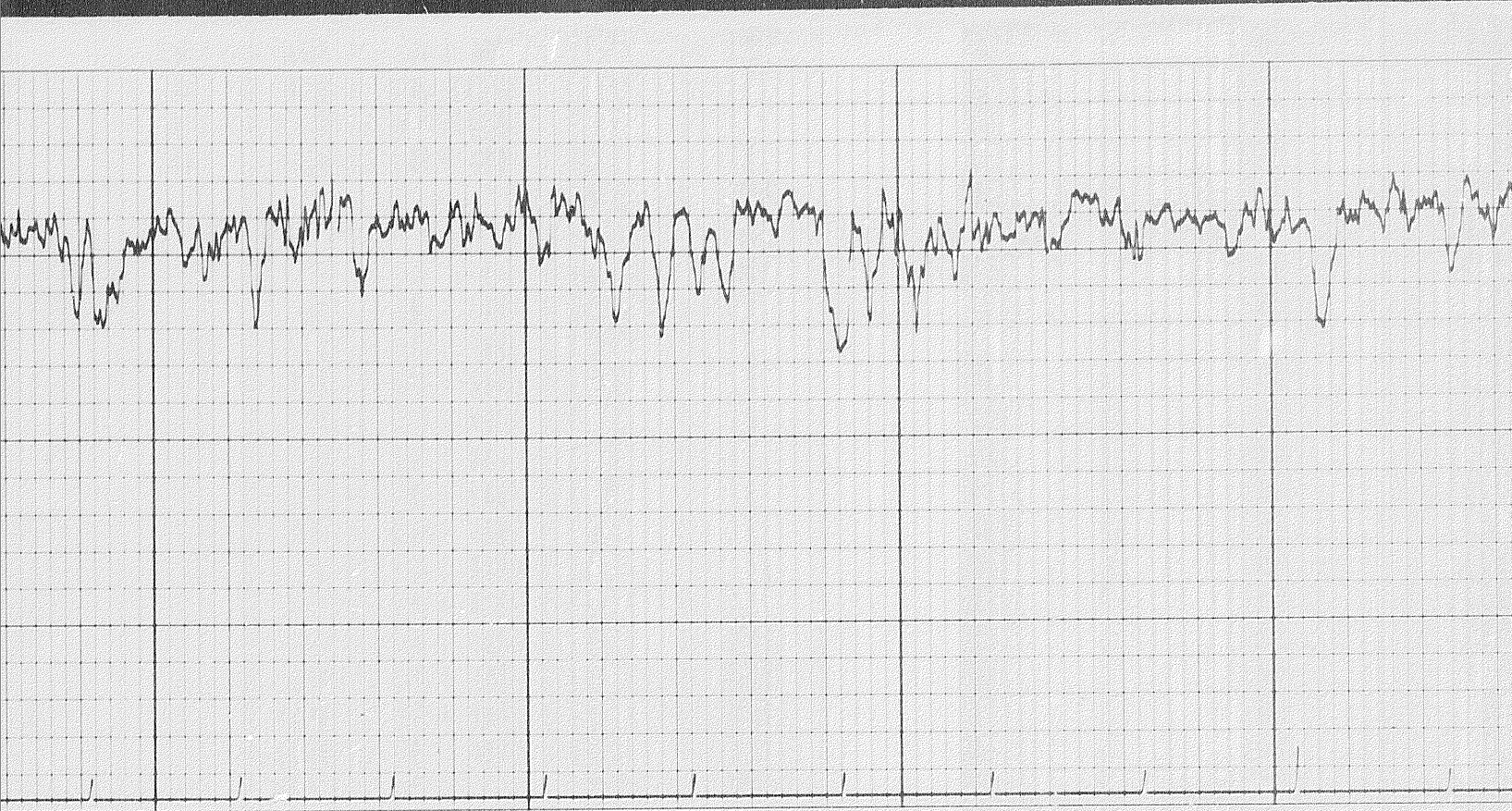


7200

7300

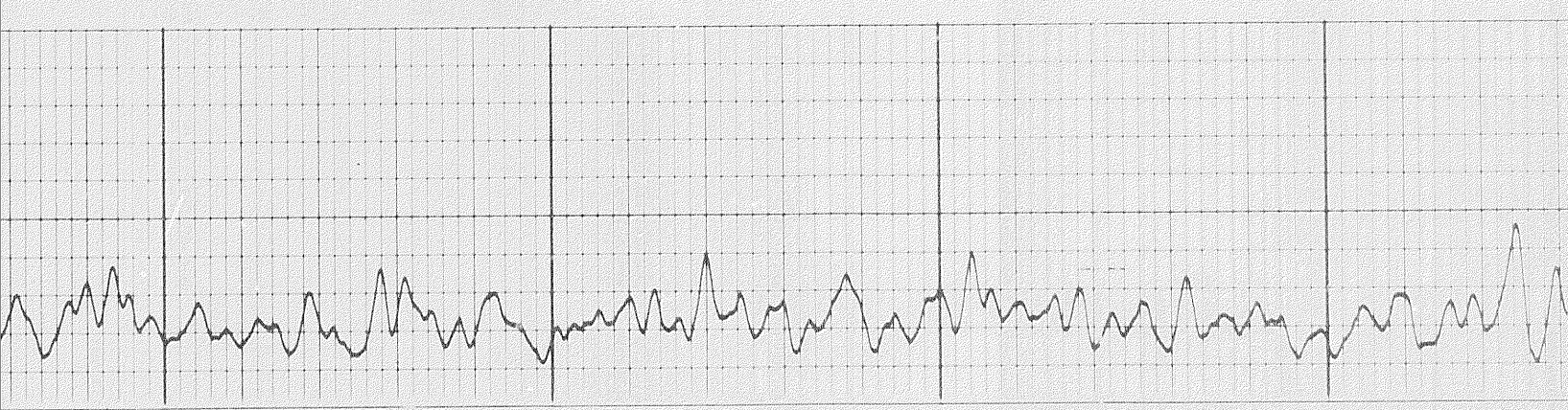


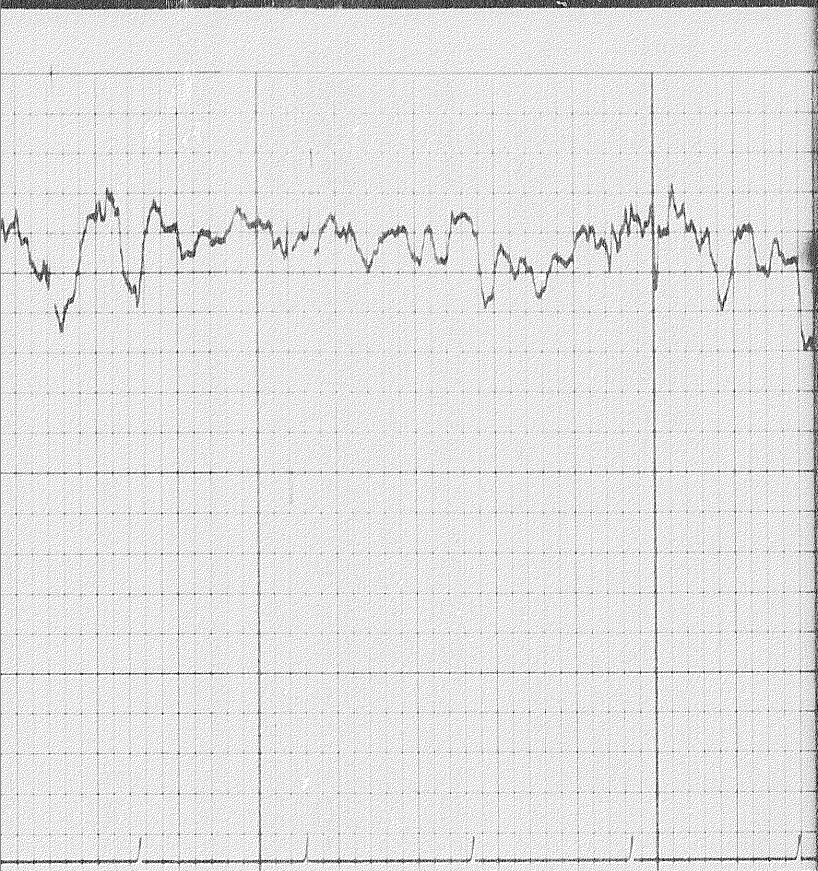
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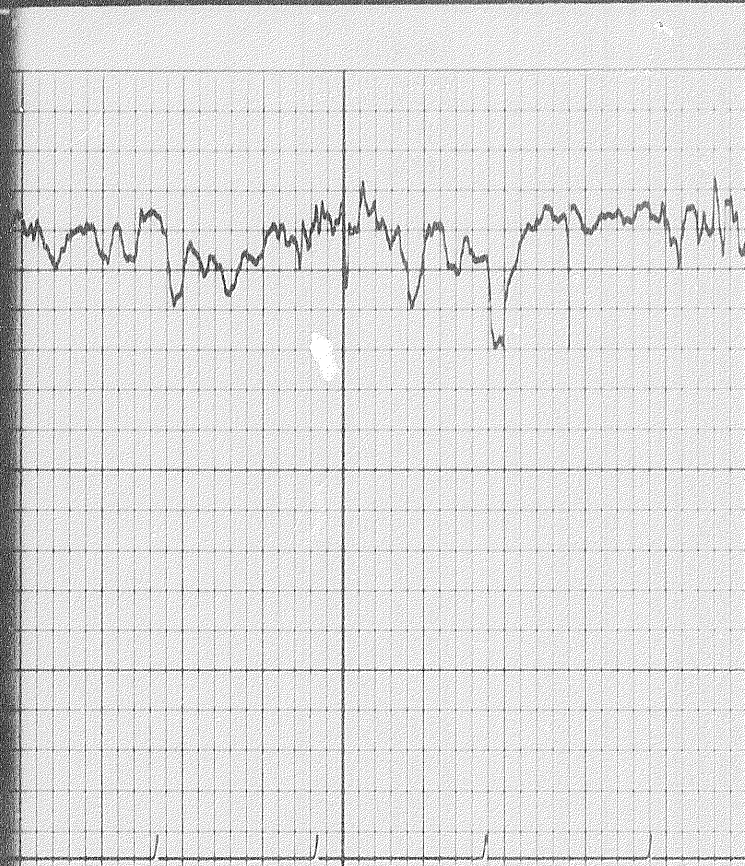
7400

7500

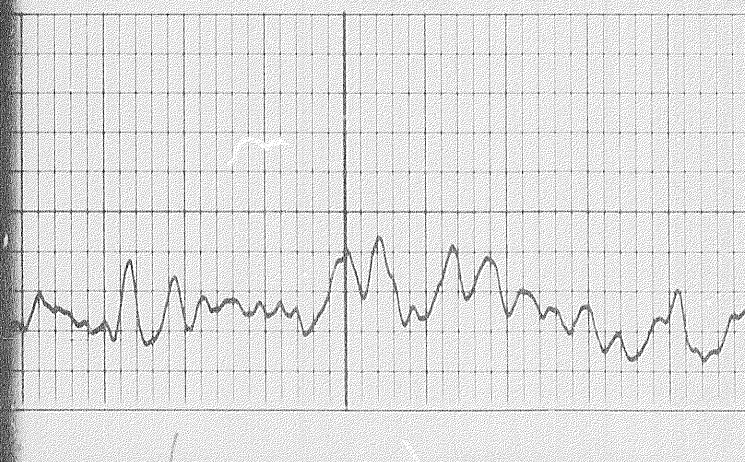
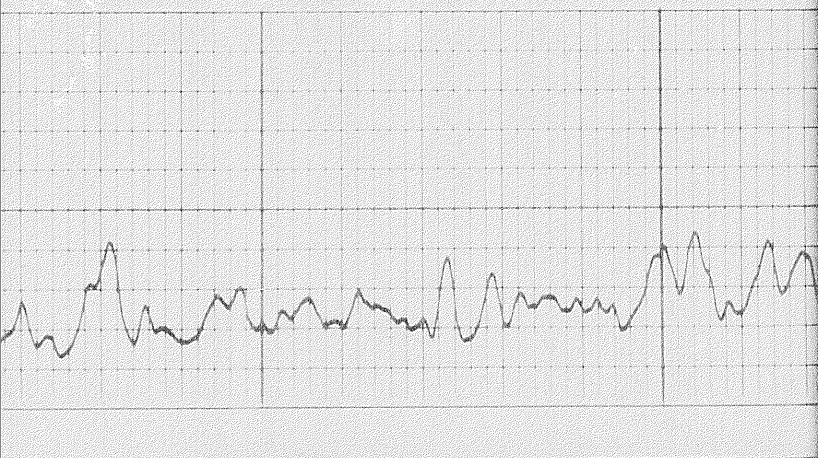




7700



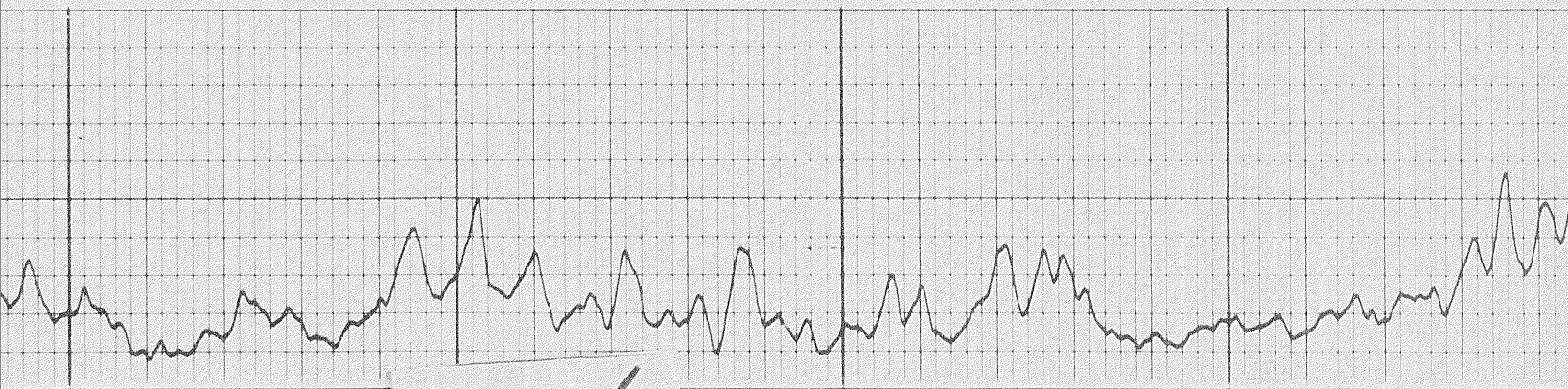
7700



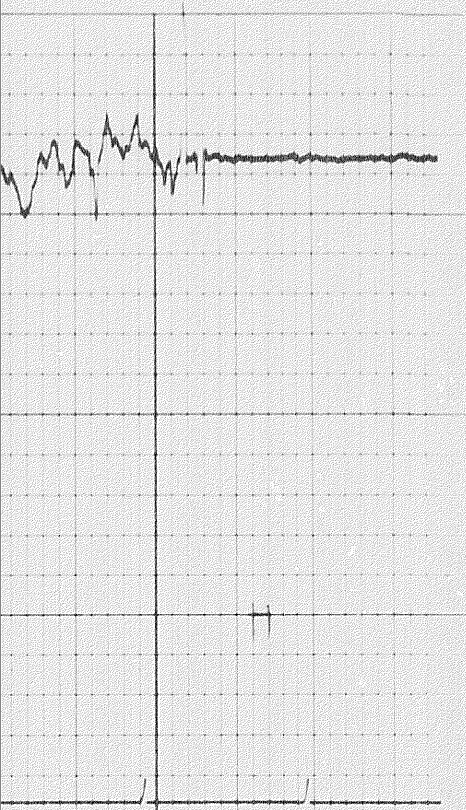


7800

7900



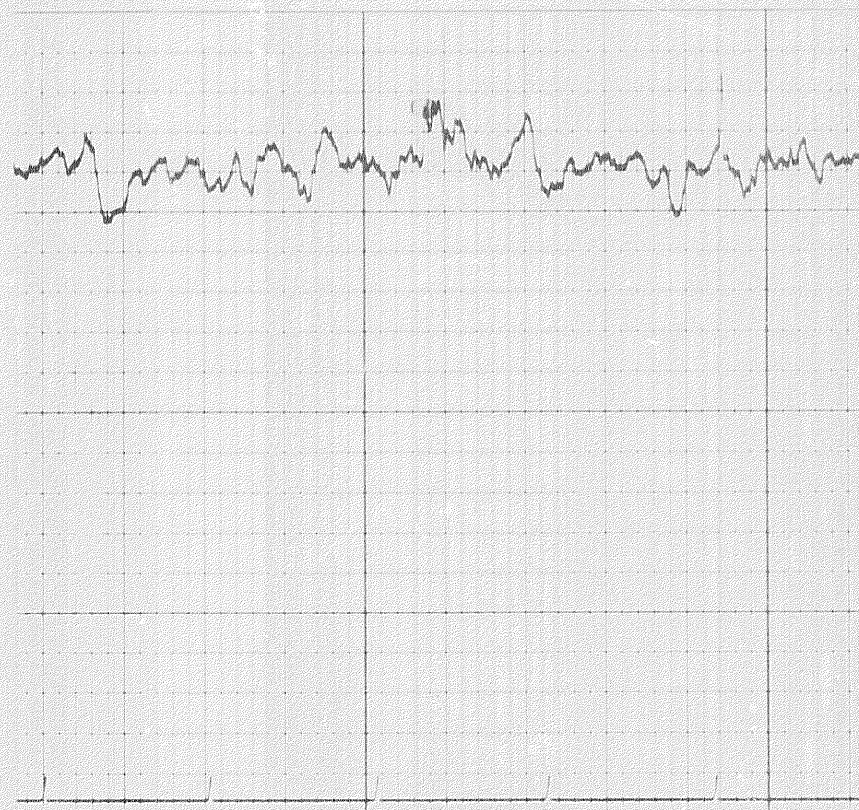
13 of



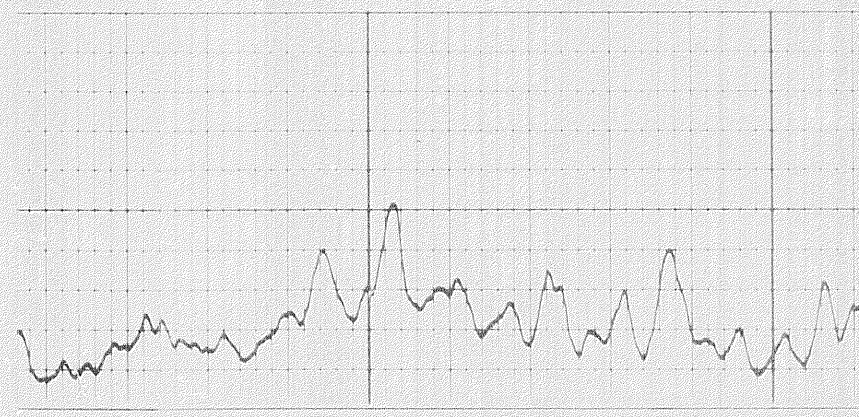
FR

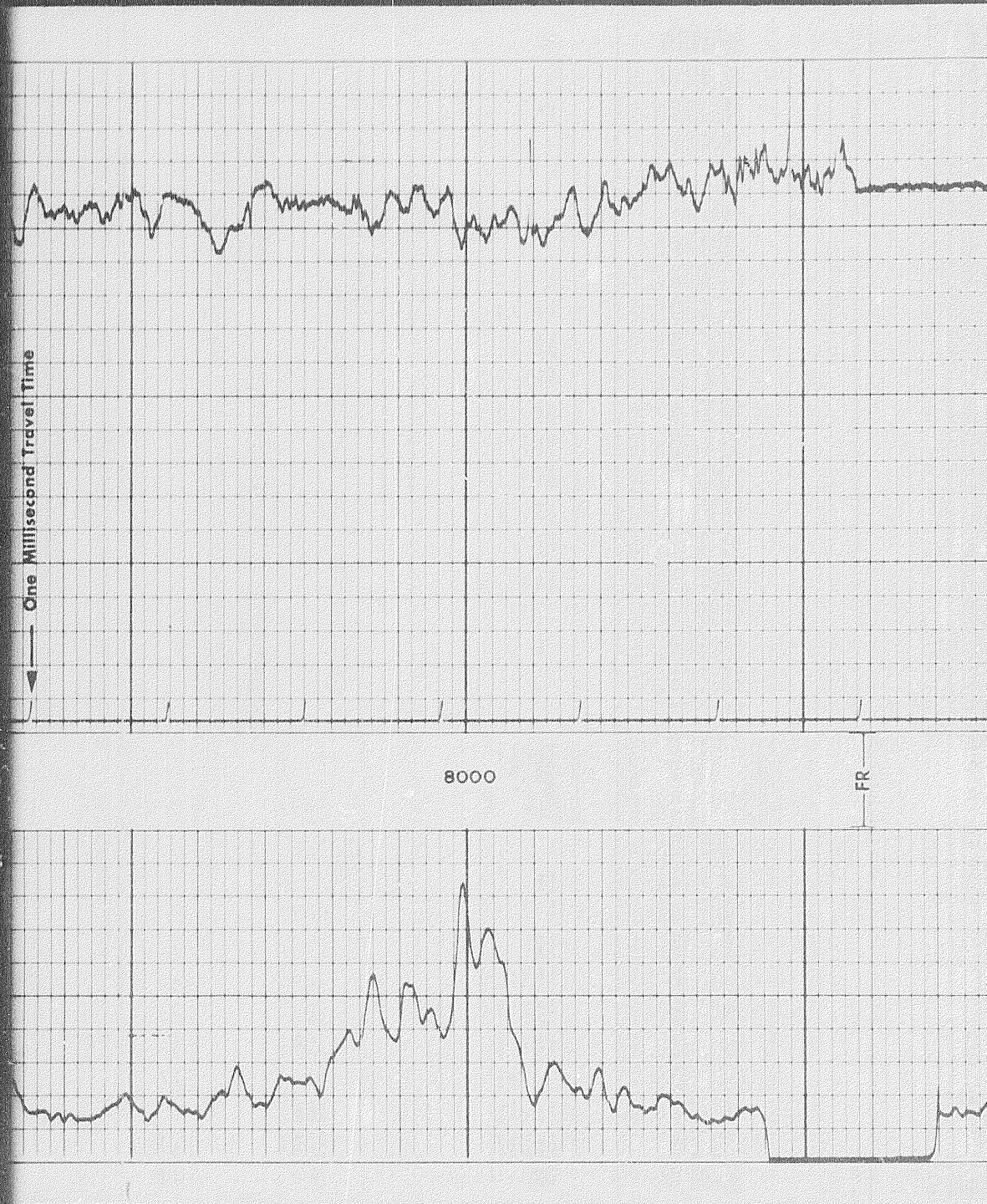
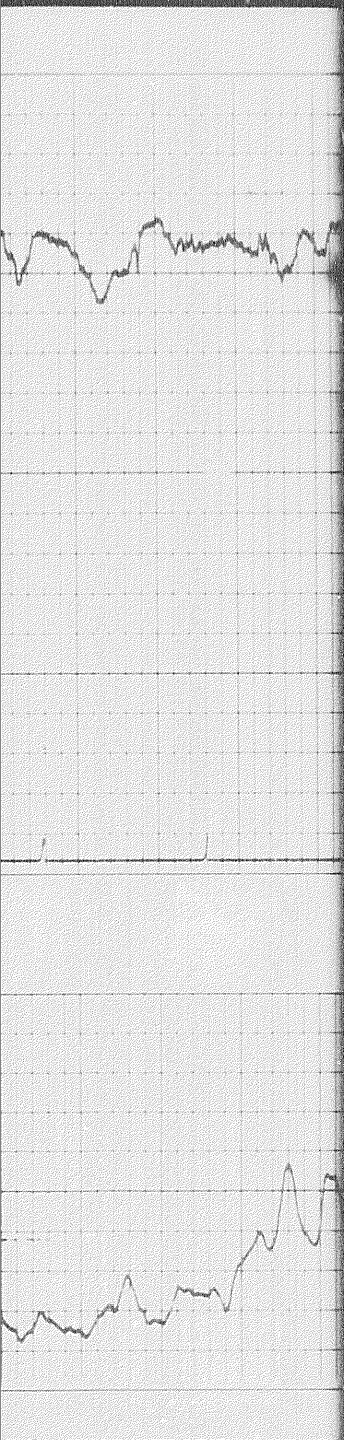


REPEAT SECTION



7900





|                        |     |   |    |    |
|------------------------|-----|---|----|----|
| 100                    | 200 | 80  | 60 | 40 |
| GAMMA RAY<br>API UNITS |     | SONIC<br>INTERVAL TRANSIT TIME<br>microseconds per foot |    |    |
| DEPTHS                 |     | DEPTHS  |    |    |

DETAIL LOG  
5' = 100'

RUN 2

|                        |     |   |    |    |
|------------------------|-----|---|----|----|
| 100                    | 200 | 80  | 60 | 40 |
| GAMMA RAY<br>API UNITS |     | SONIC<br>INTERVAL TRANSIT TIME<br>microseconds per foot |    |    |
| DEPTHS                 |     | DEPTHS  |    |    |

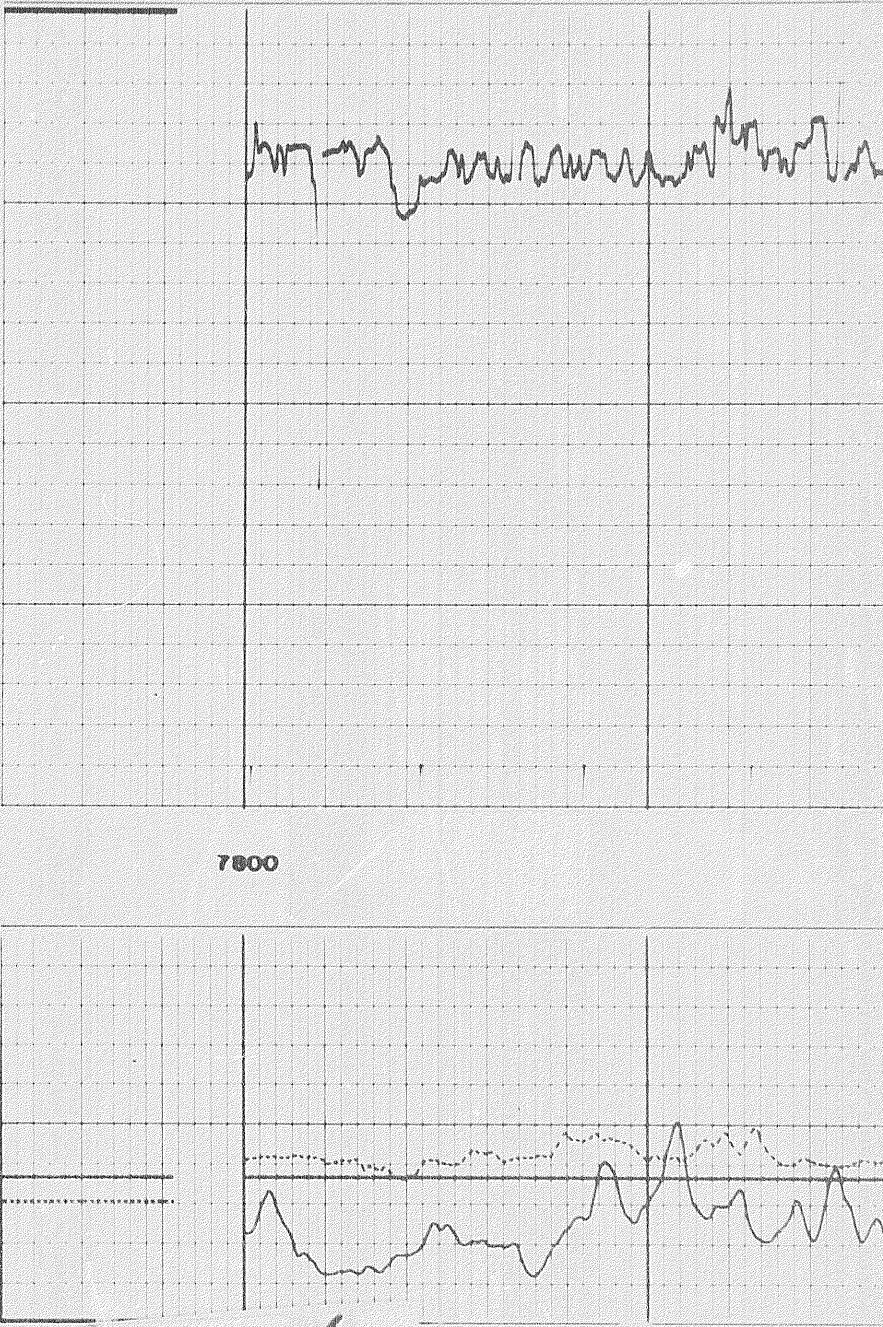
Sens. 100 T.C. 2  
Zero 0 div to left

100  
200

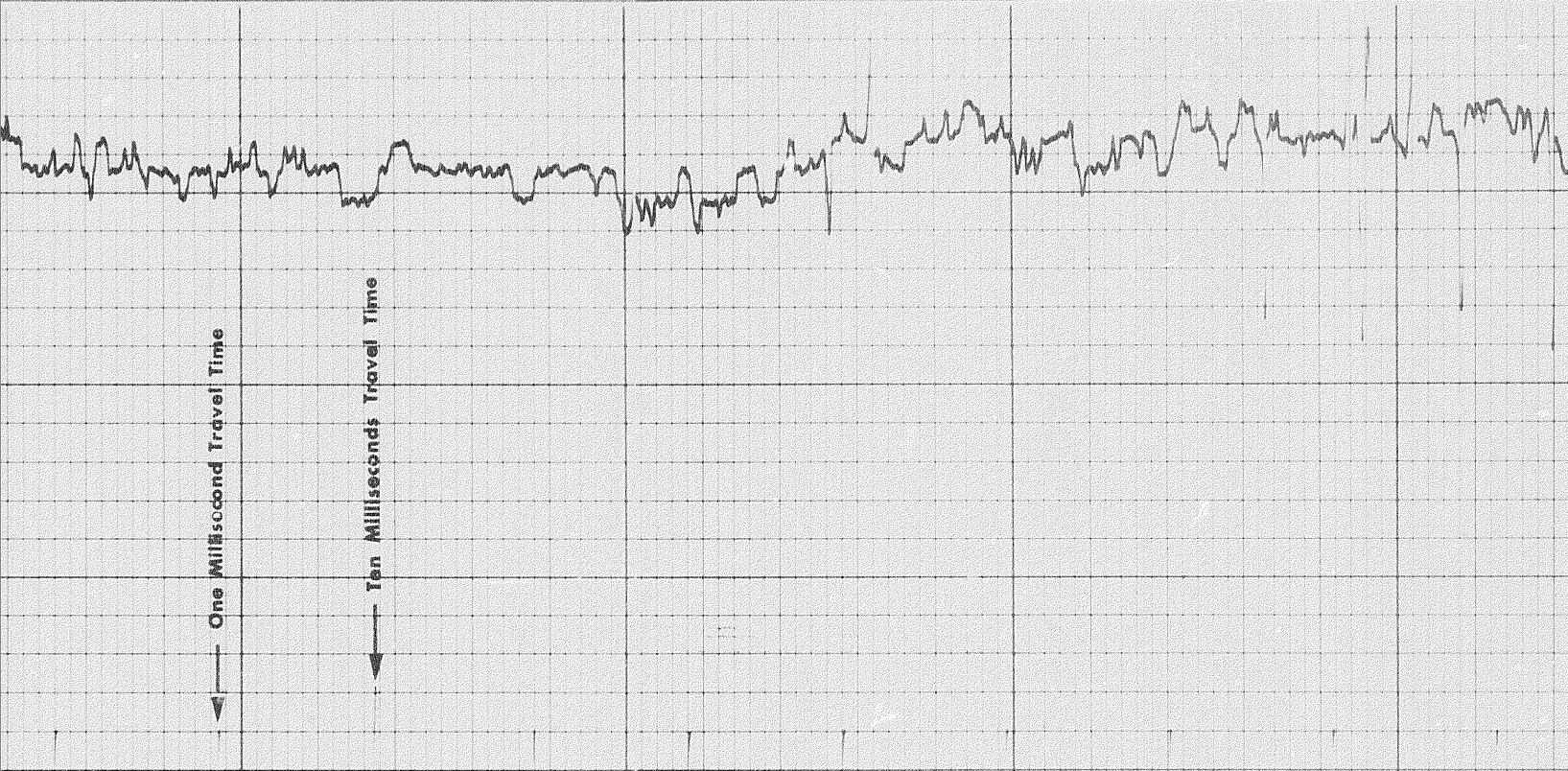
Speed in FPM

CALLIPER  
hole diameter in inches

6 7 8 9 10 11 12 13 14

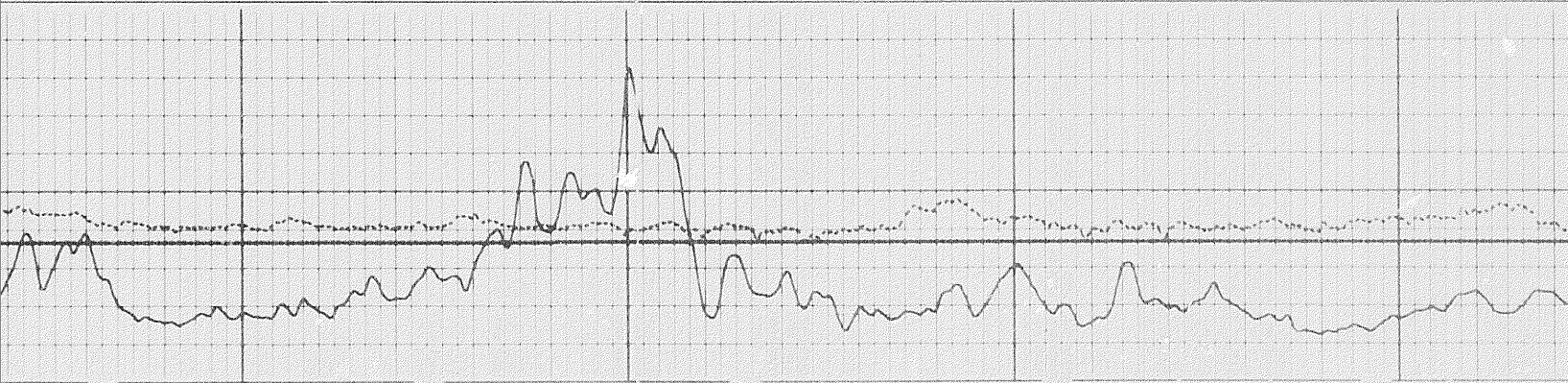


14 OF

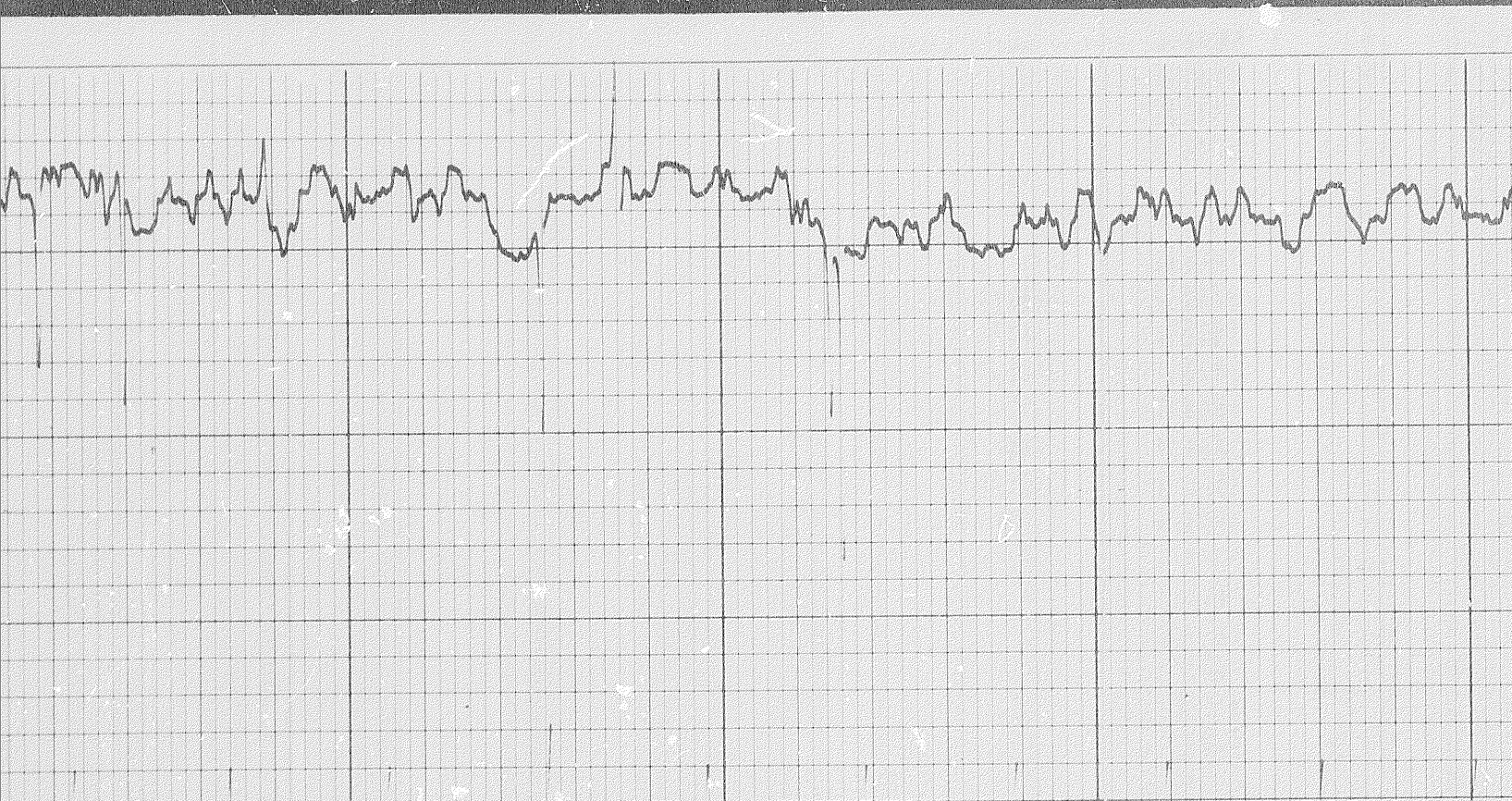


8000

8100





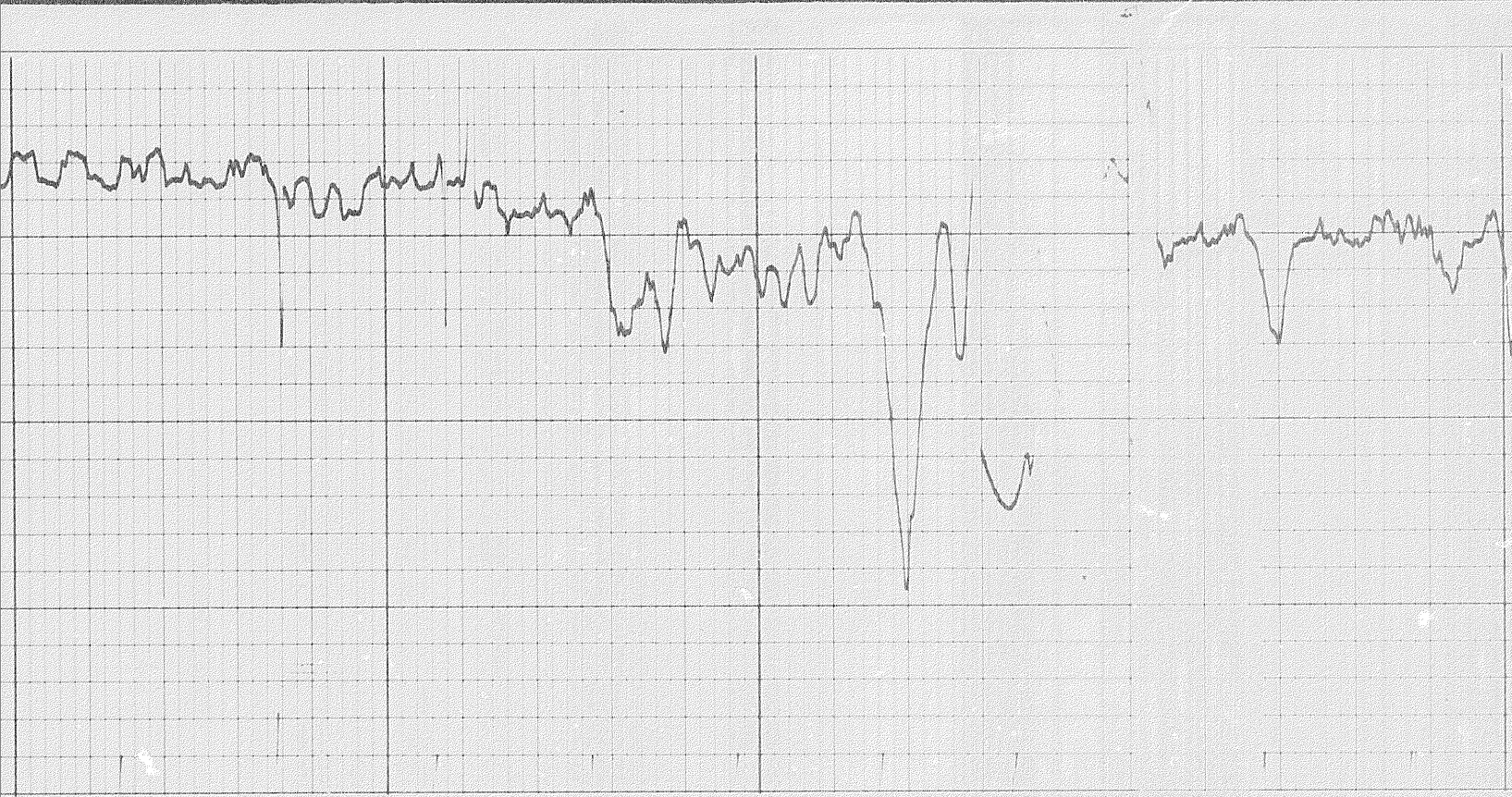


8200

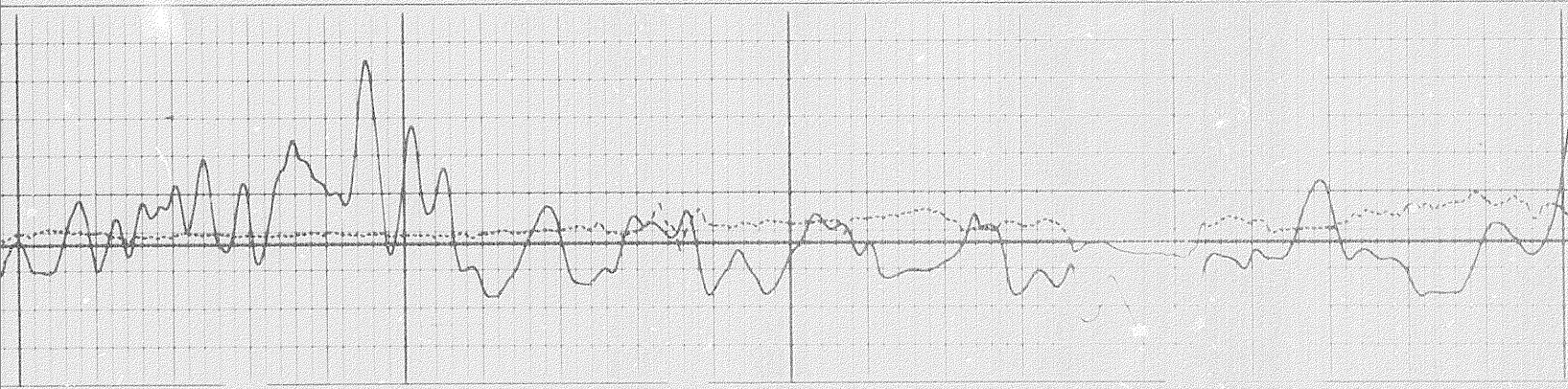
8300

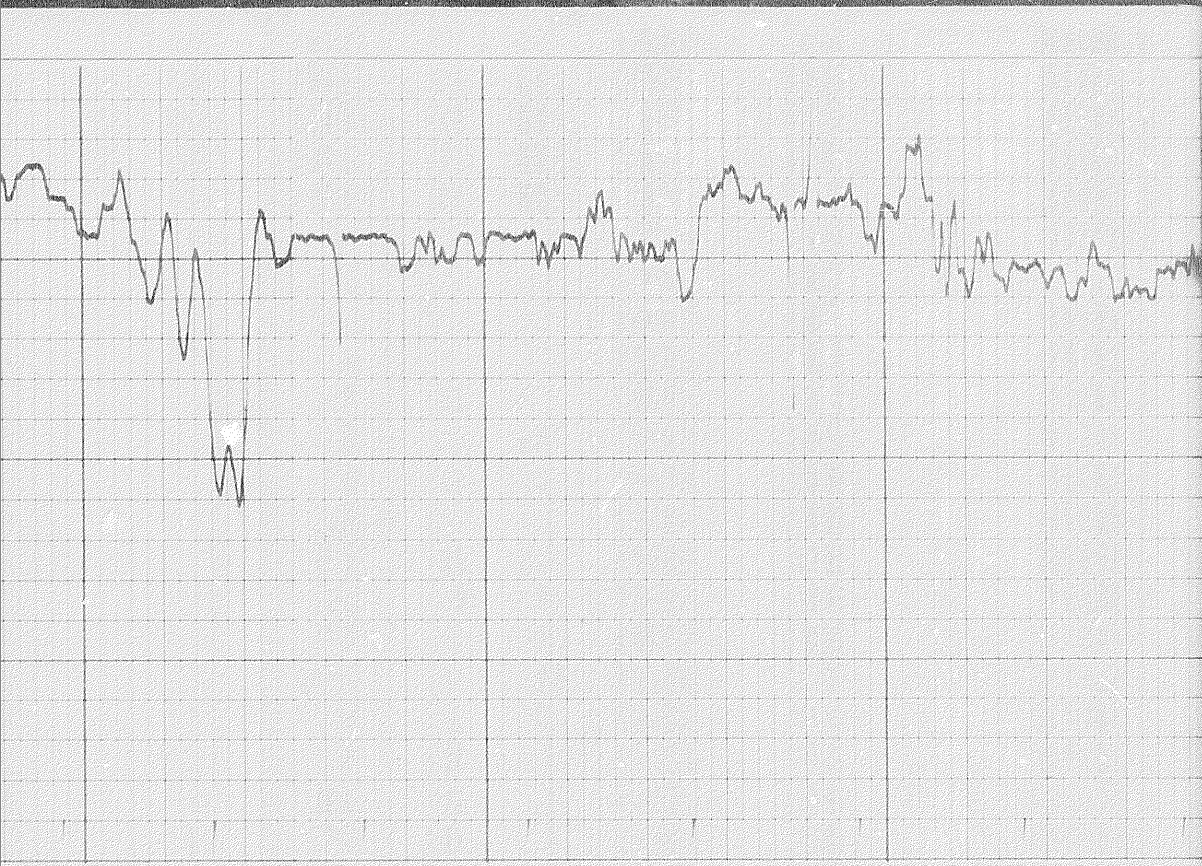


150f



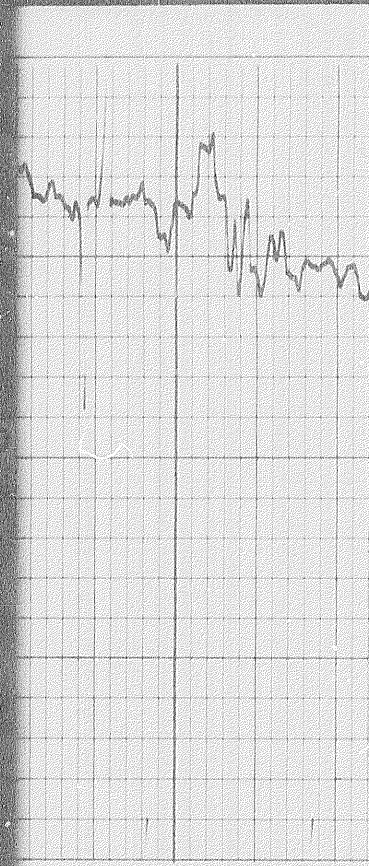
8400



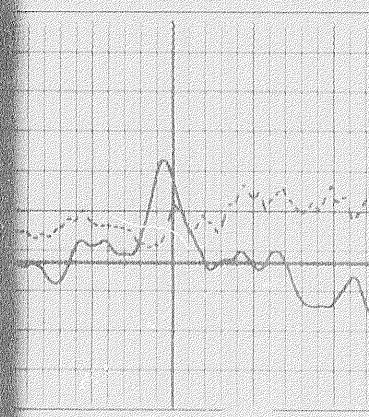
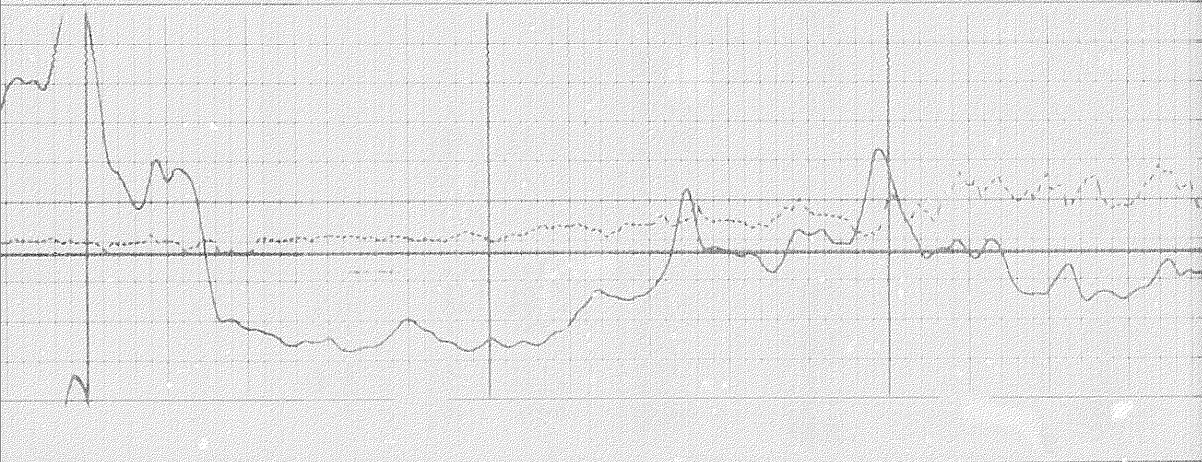


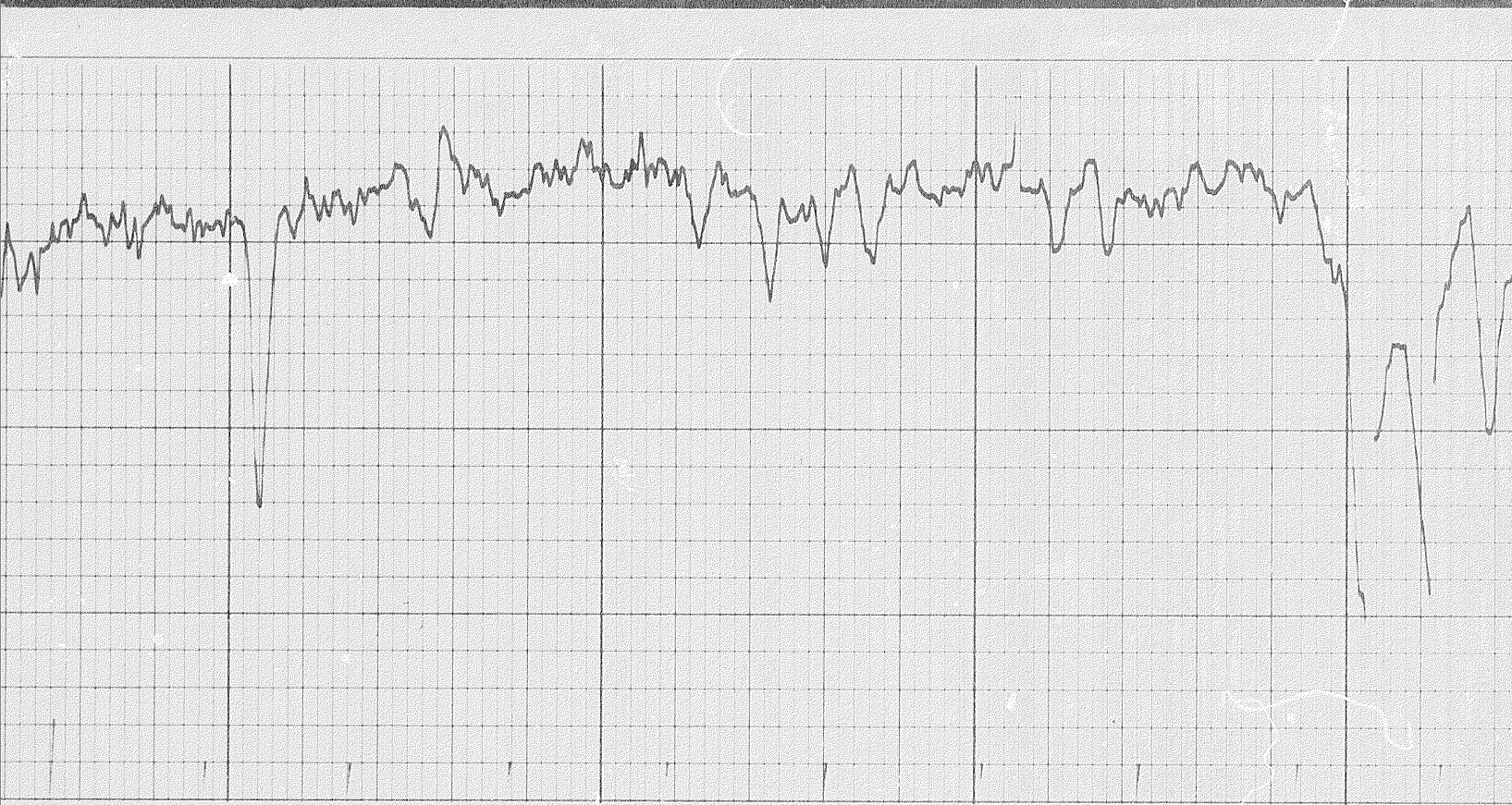
8600

8700



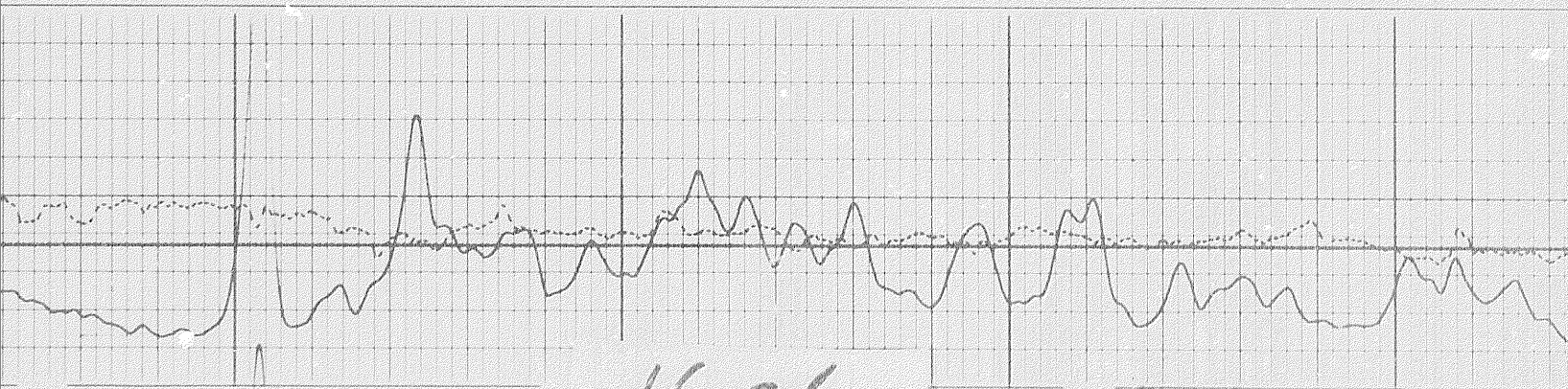
8700



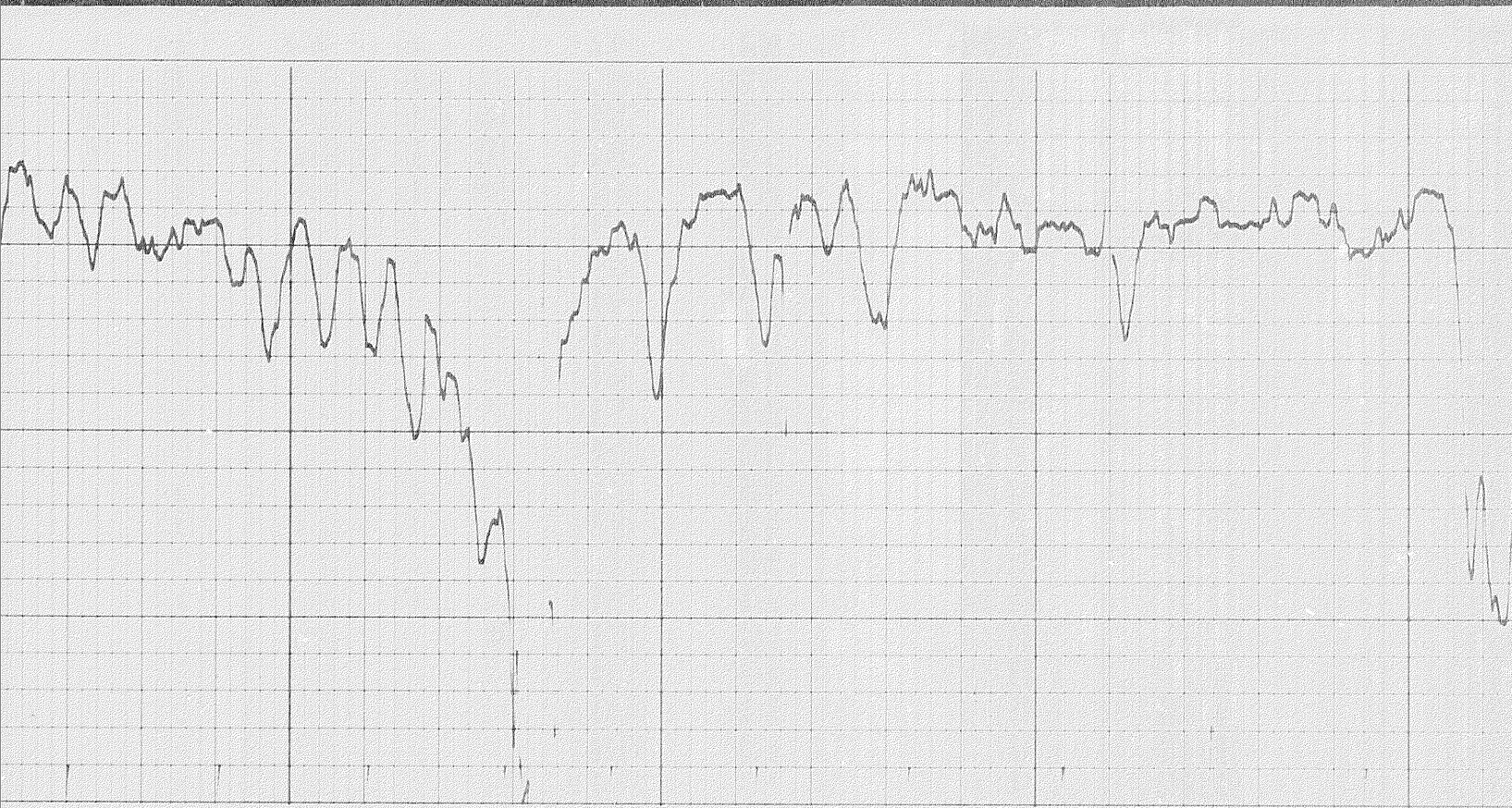


8800

8900

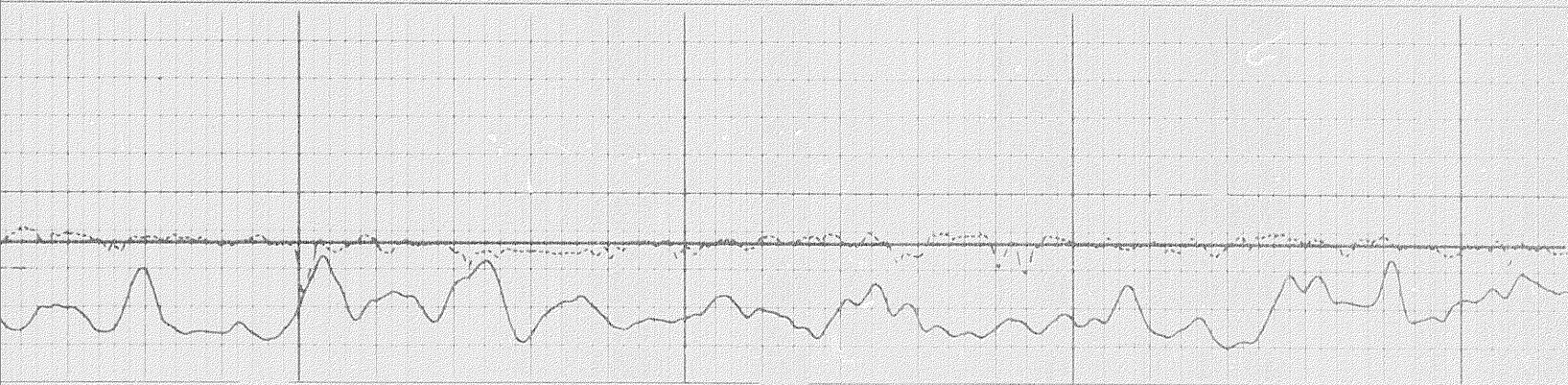


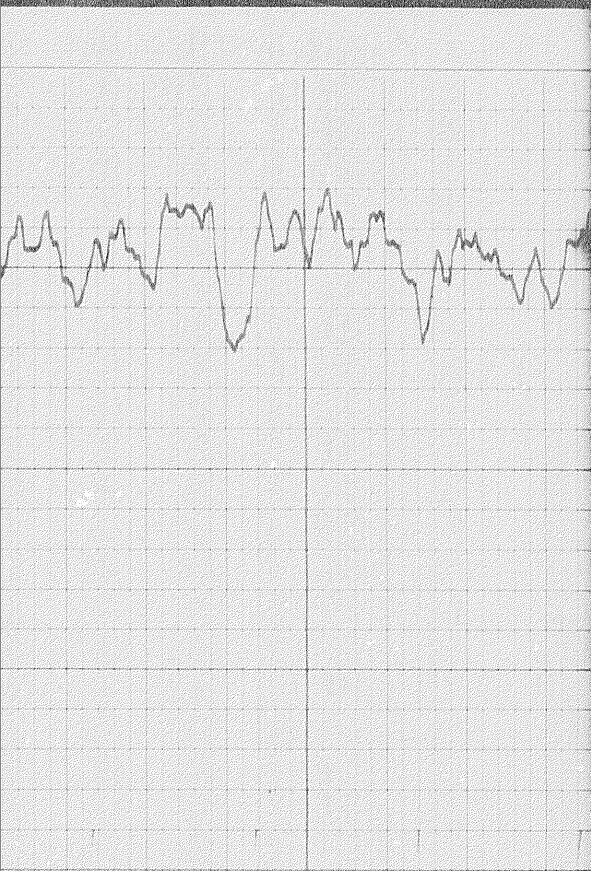
16 of



9100

9200

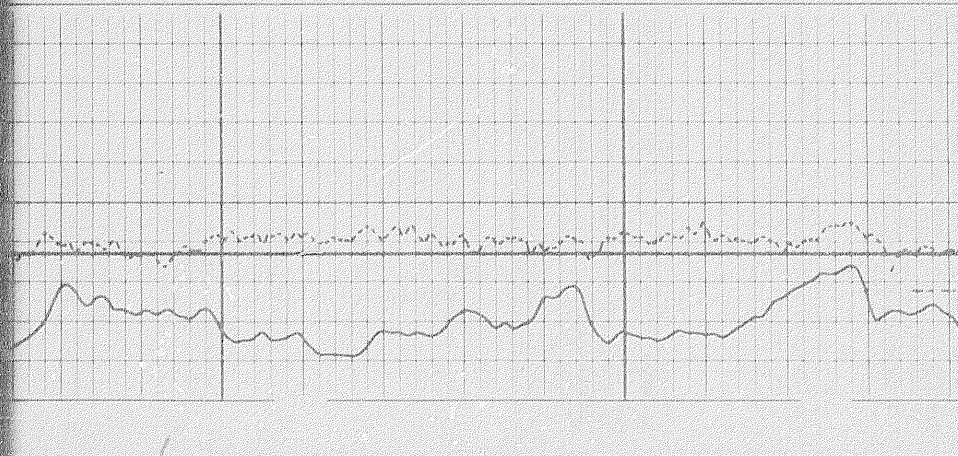
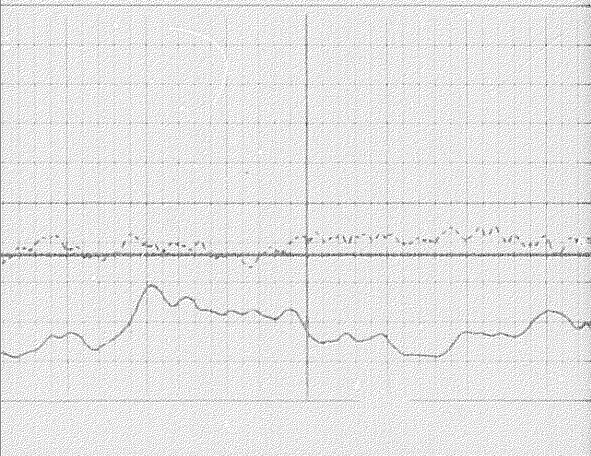


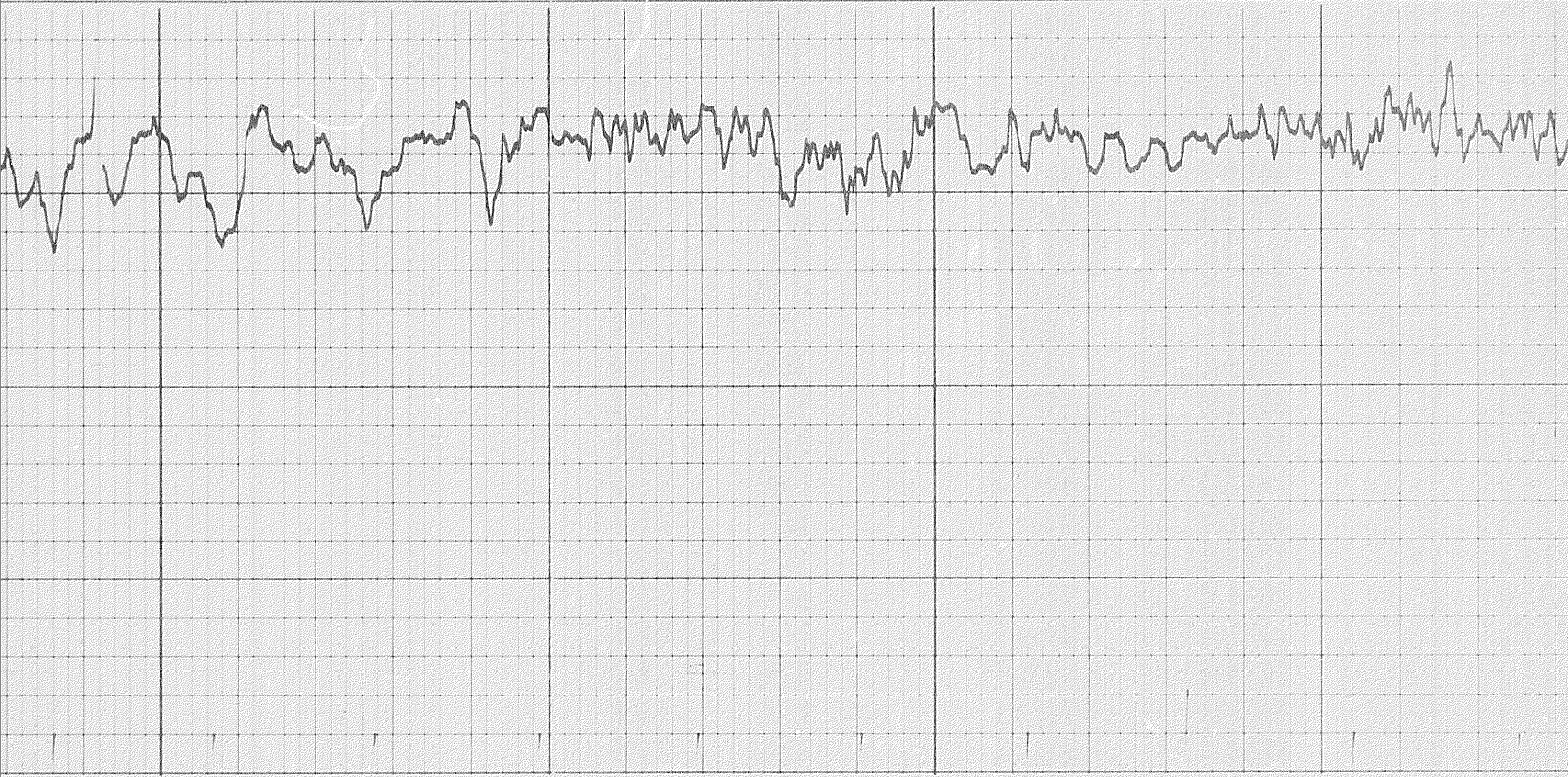


9300



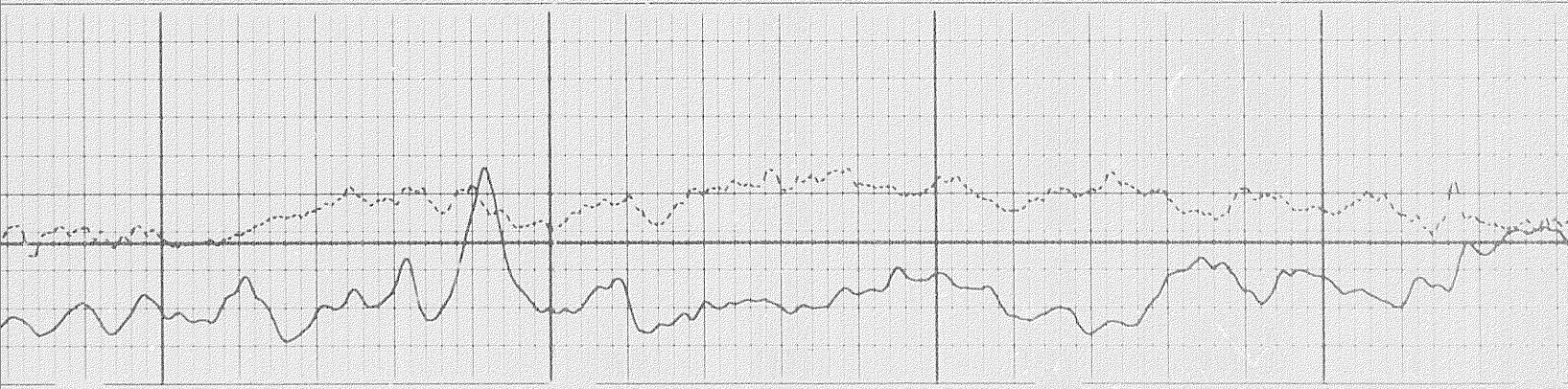
9300



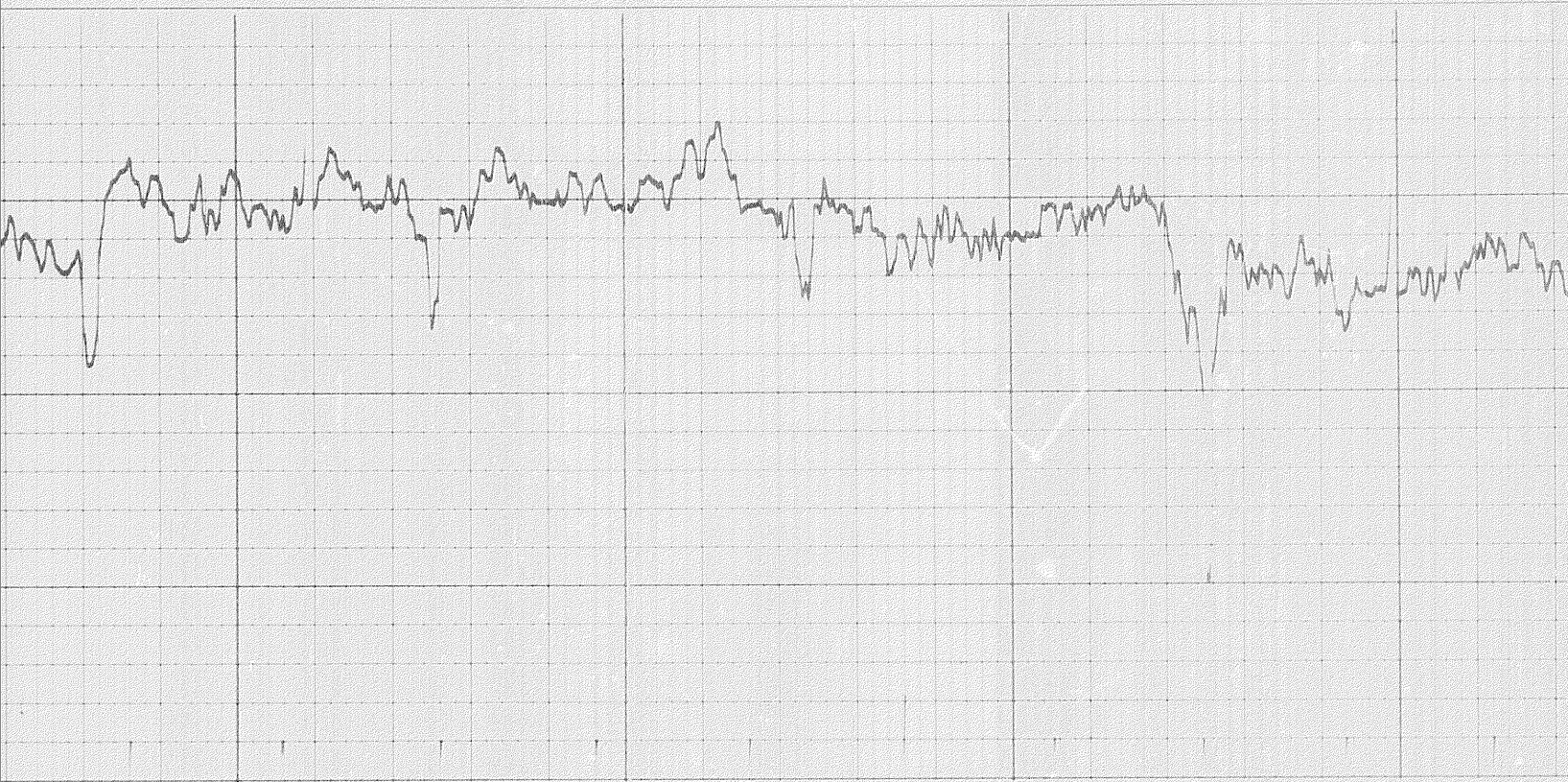


9500

9600

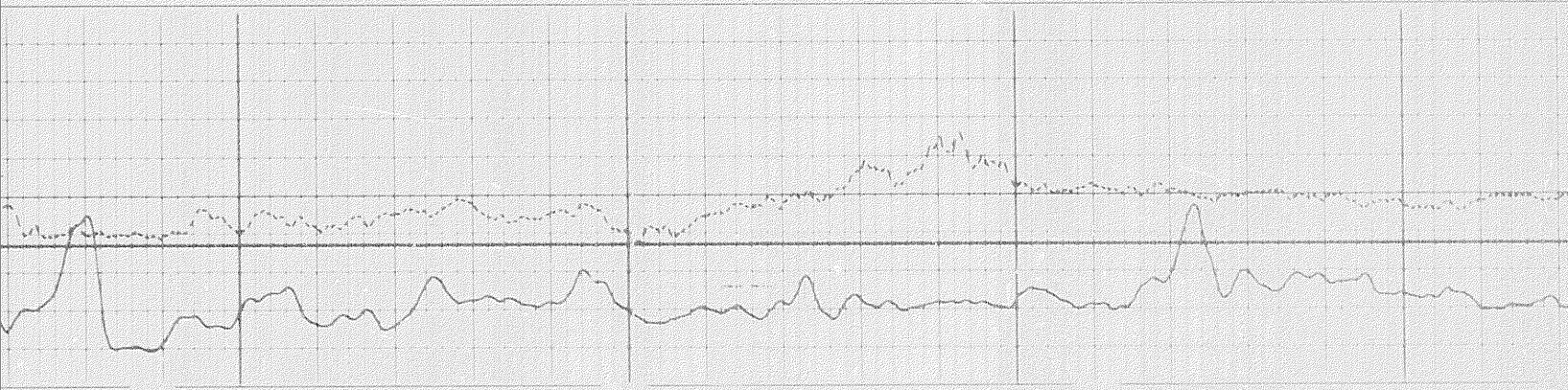


17 of

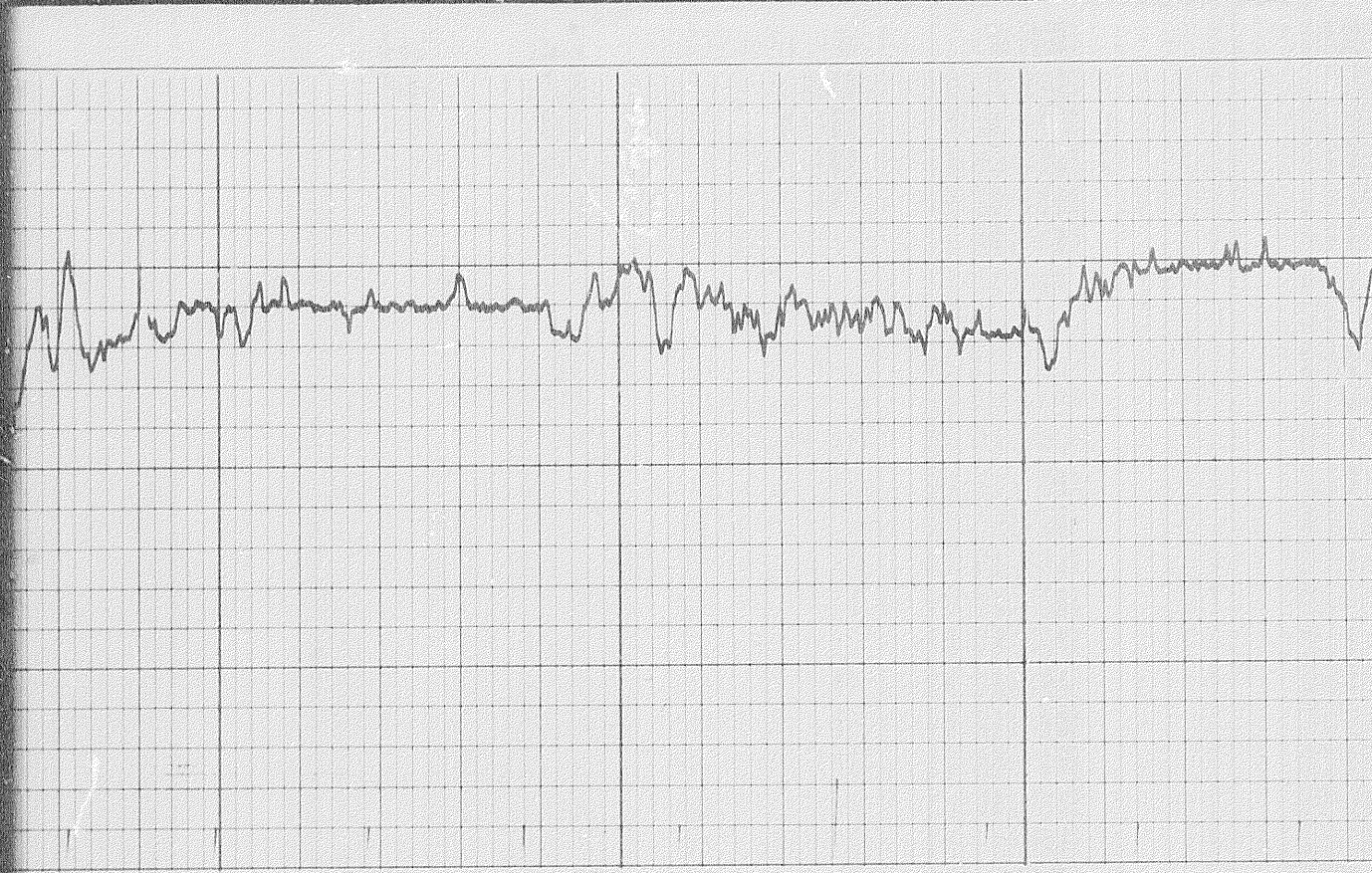


9700

9800

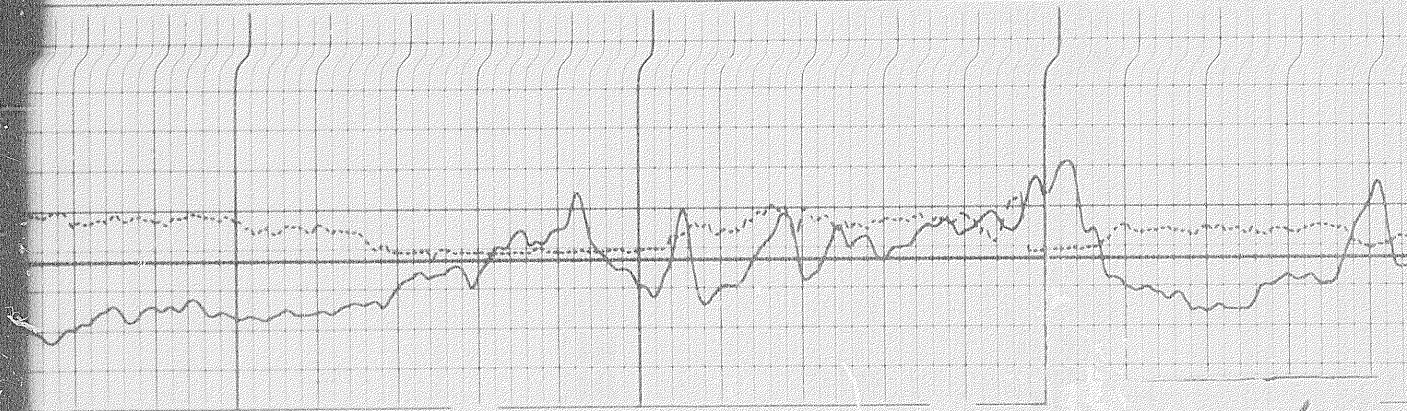




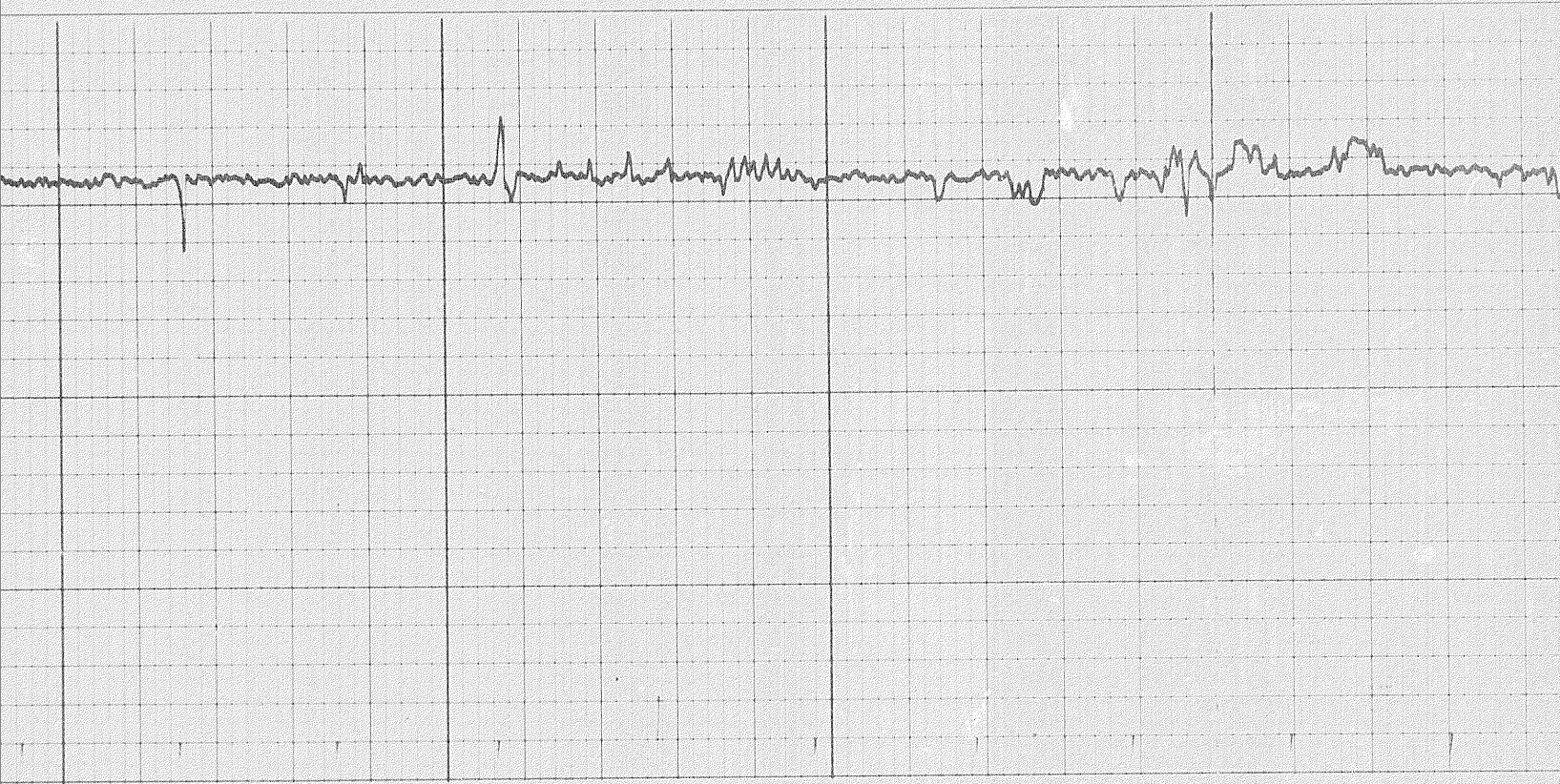


9900

10000



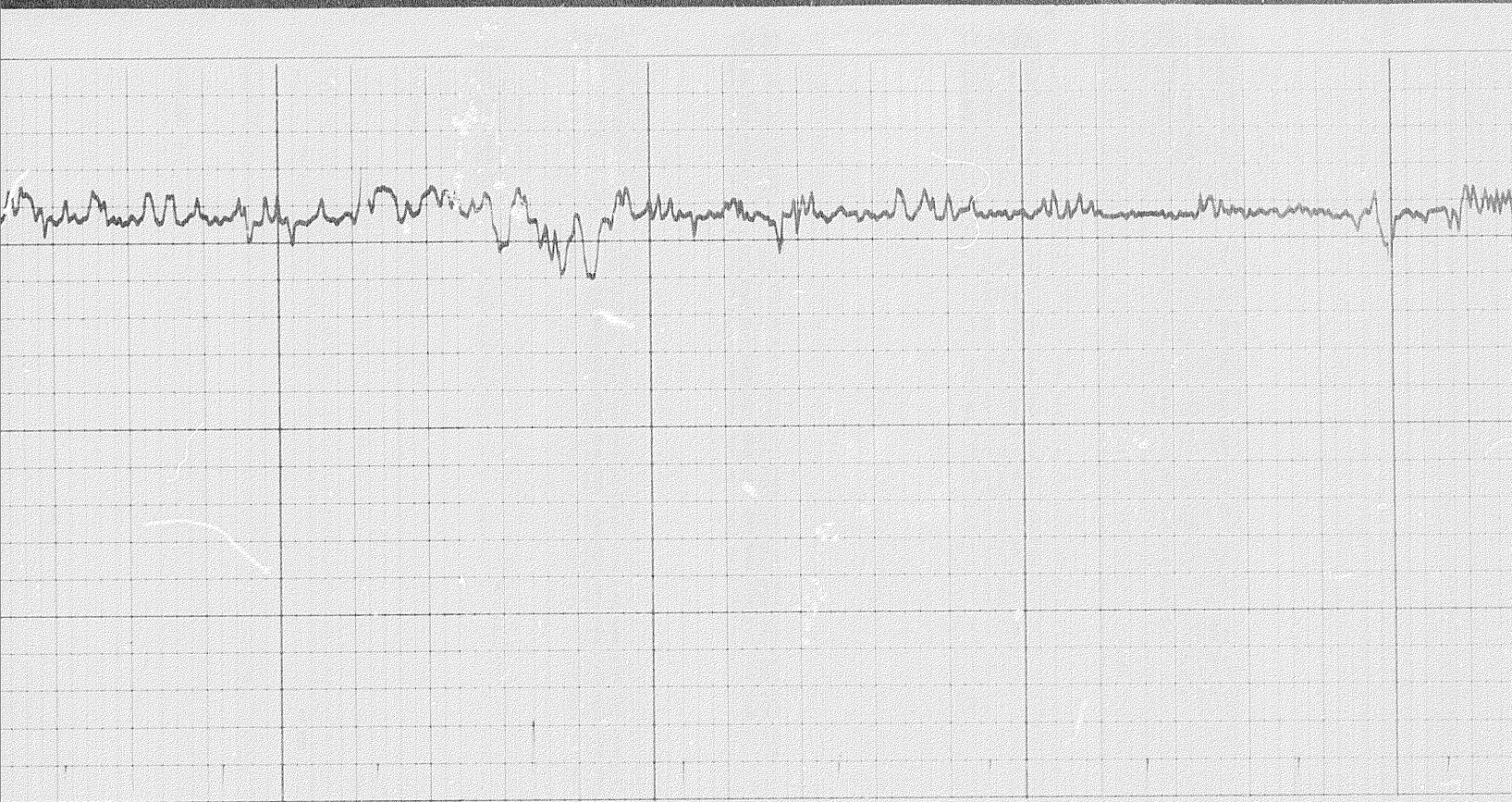
18 of



10100

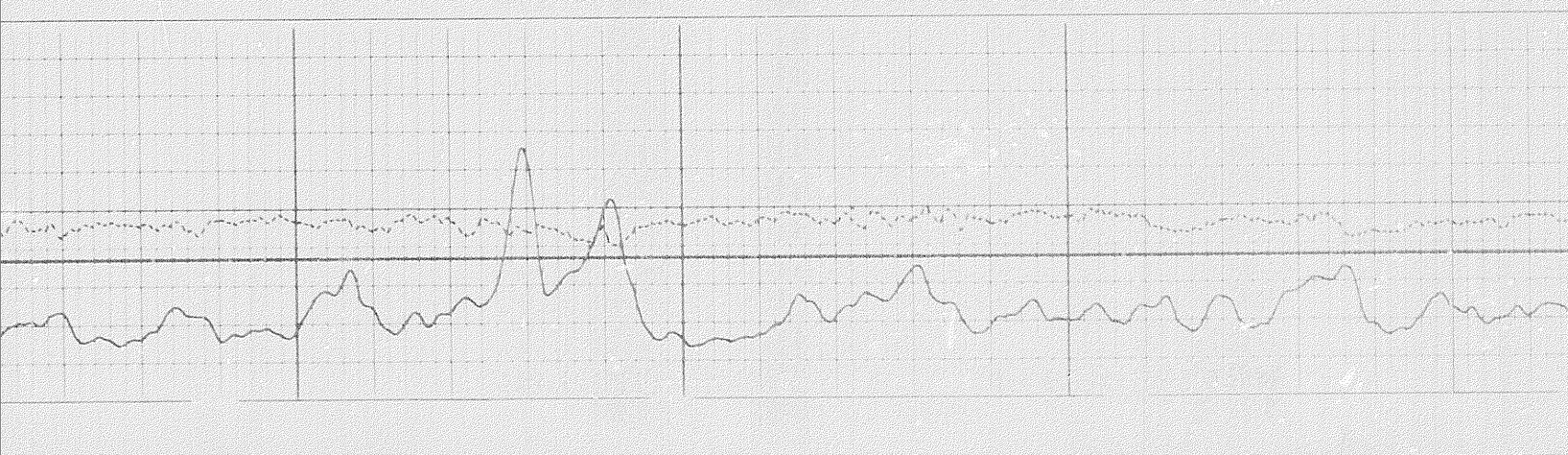
10200

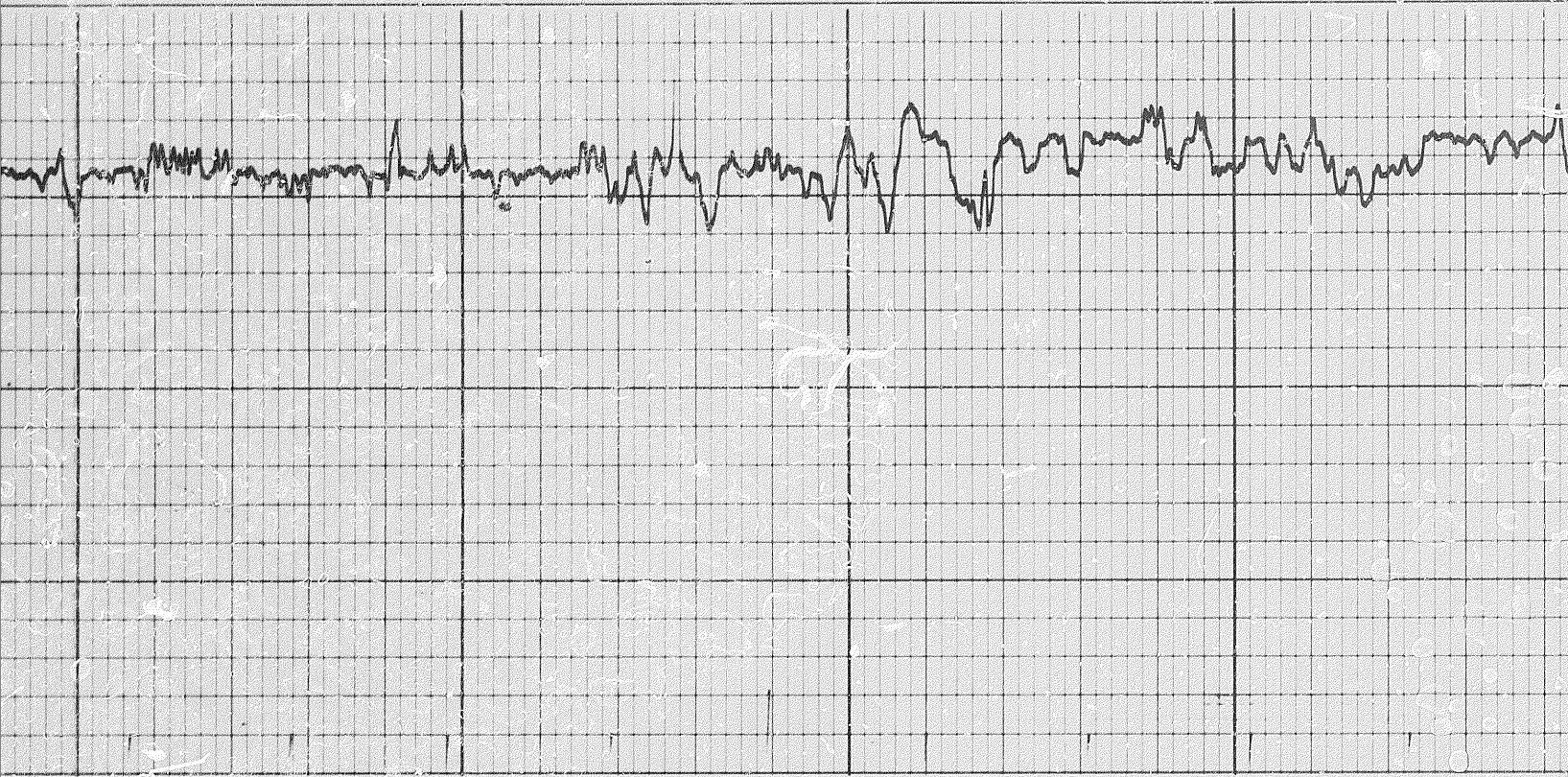




10400

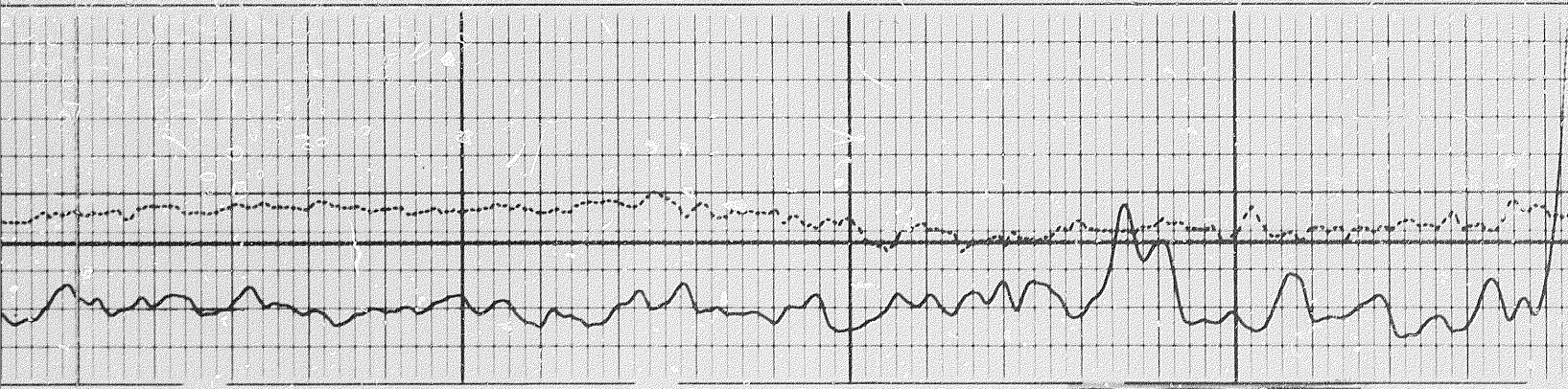
10500



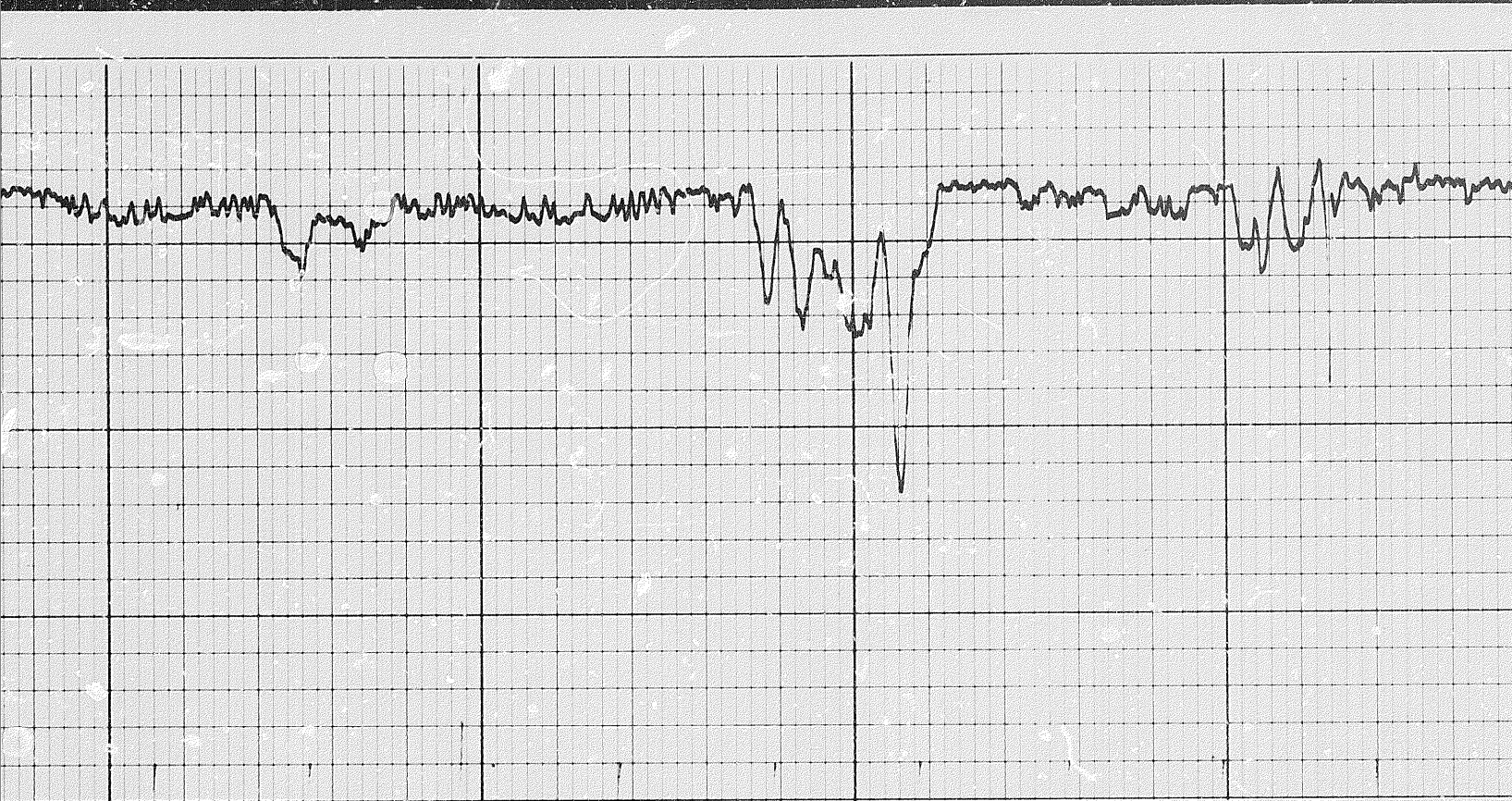


10500

10600

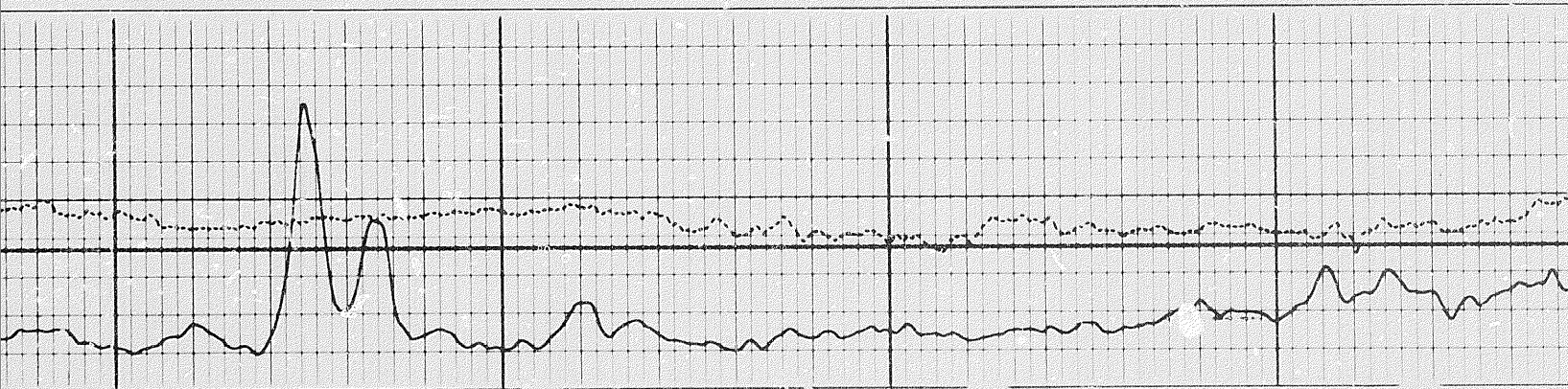


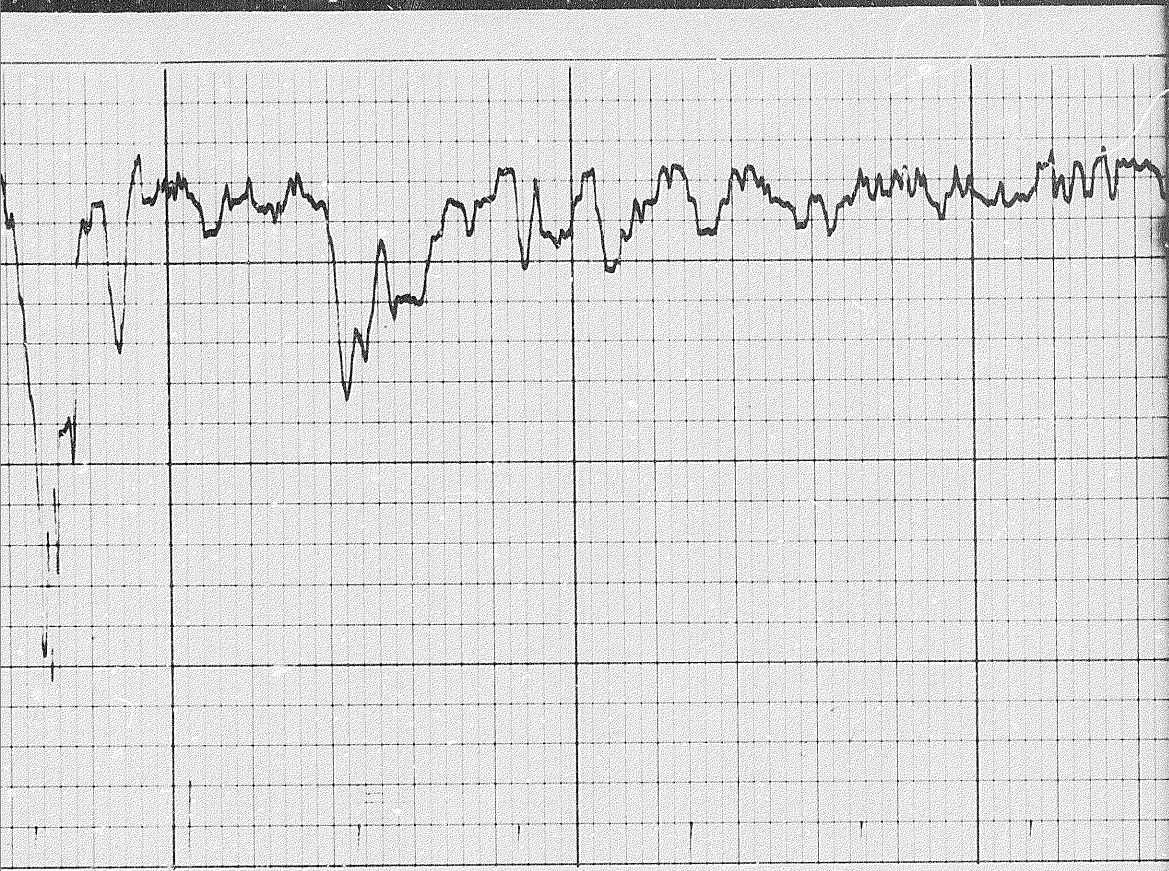
19 of



10800

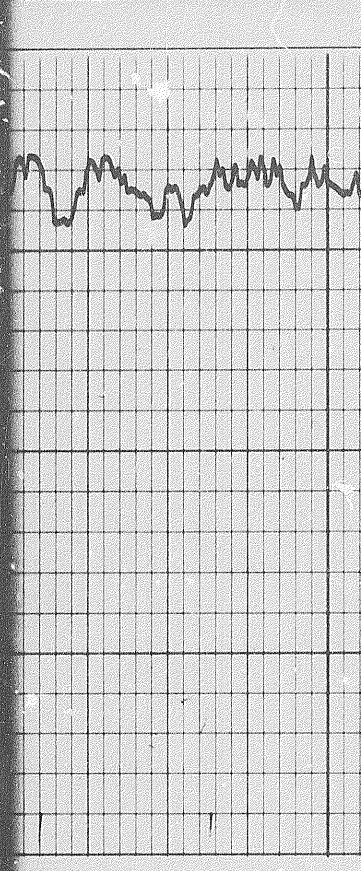
10900



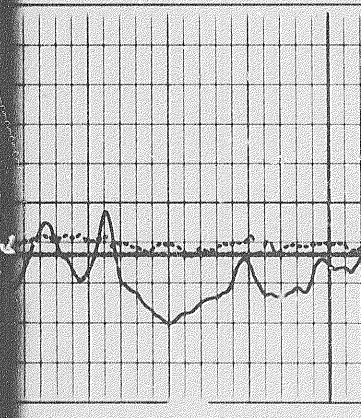
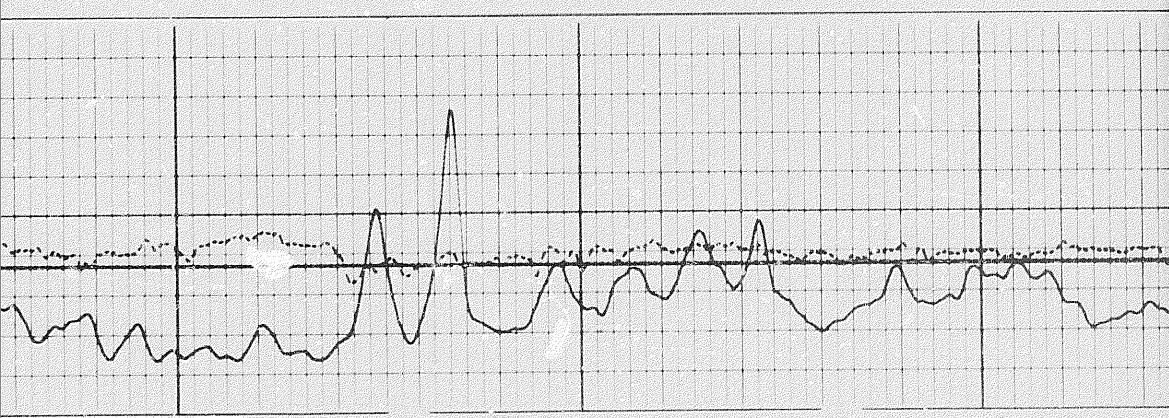


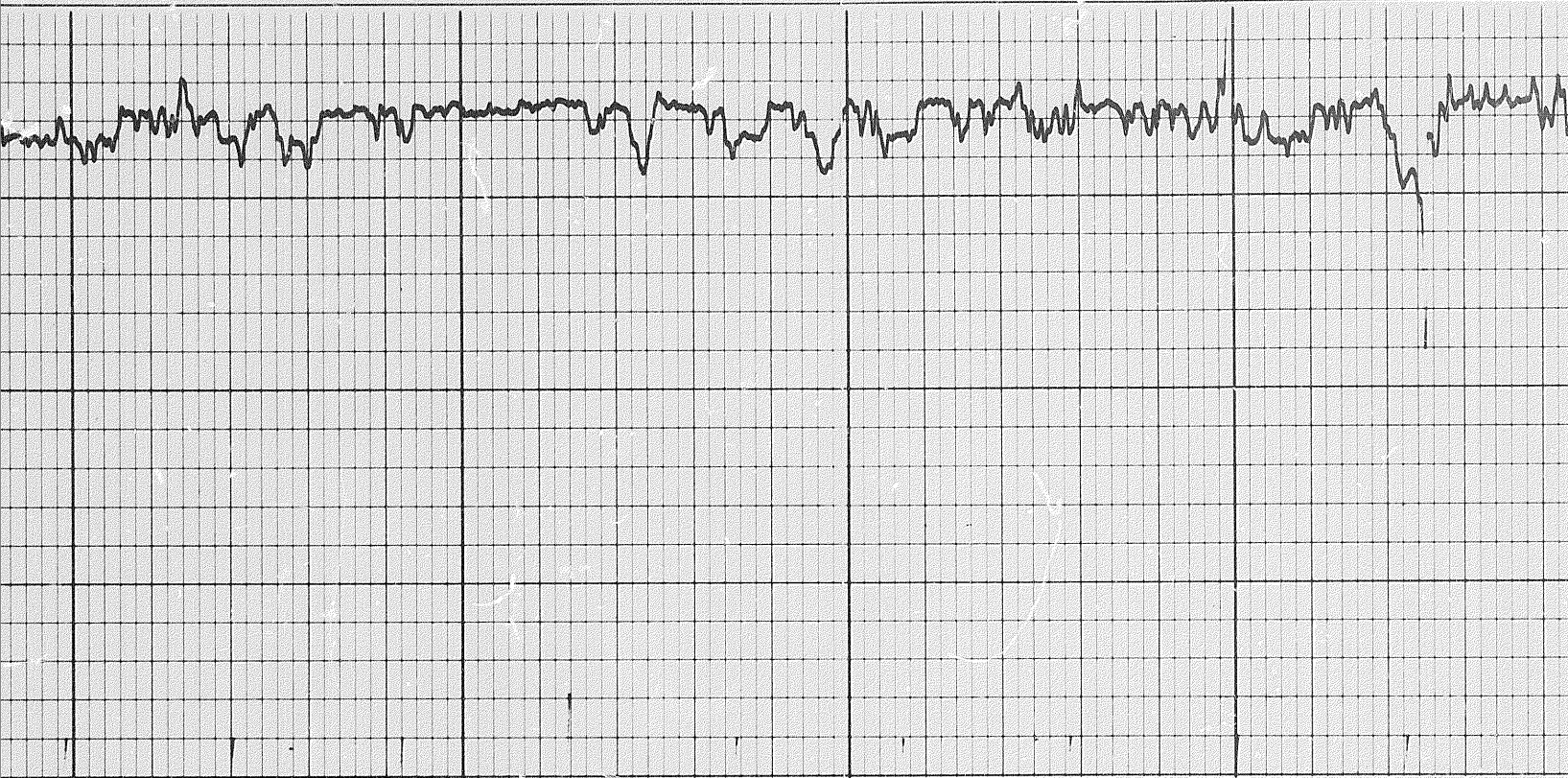
1000

1100



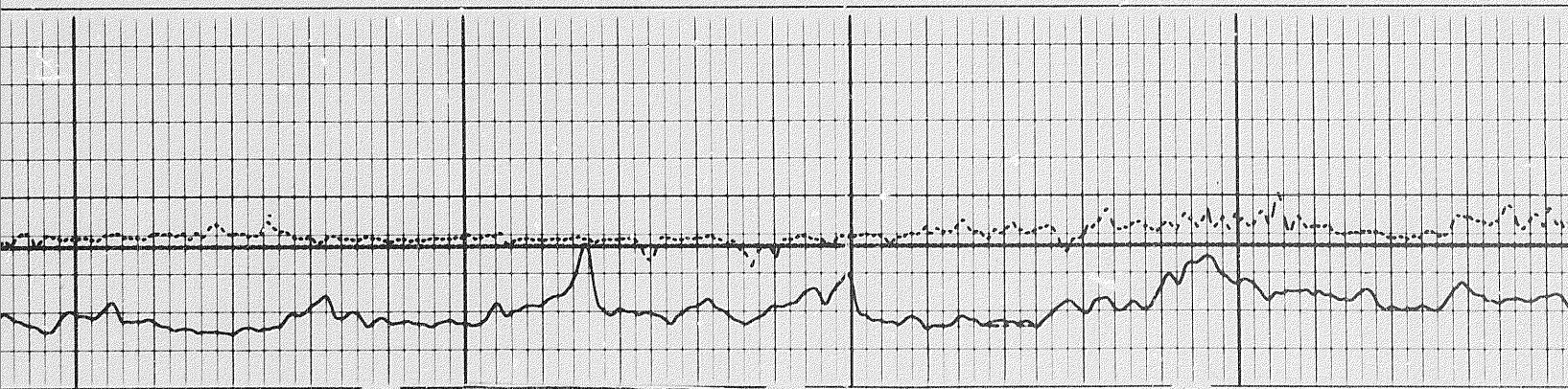
1200



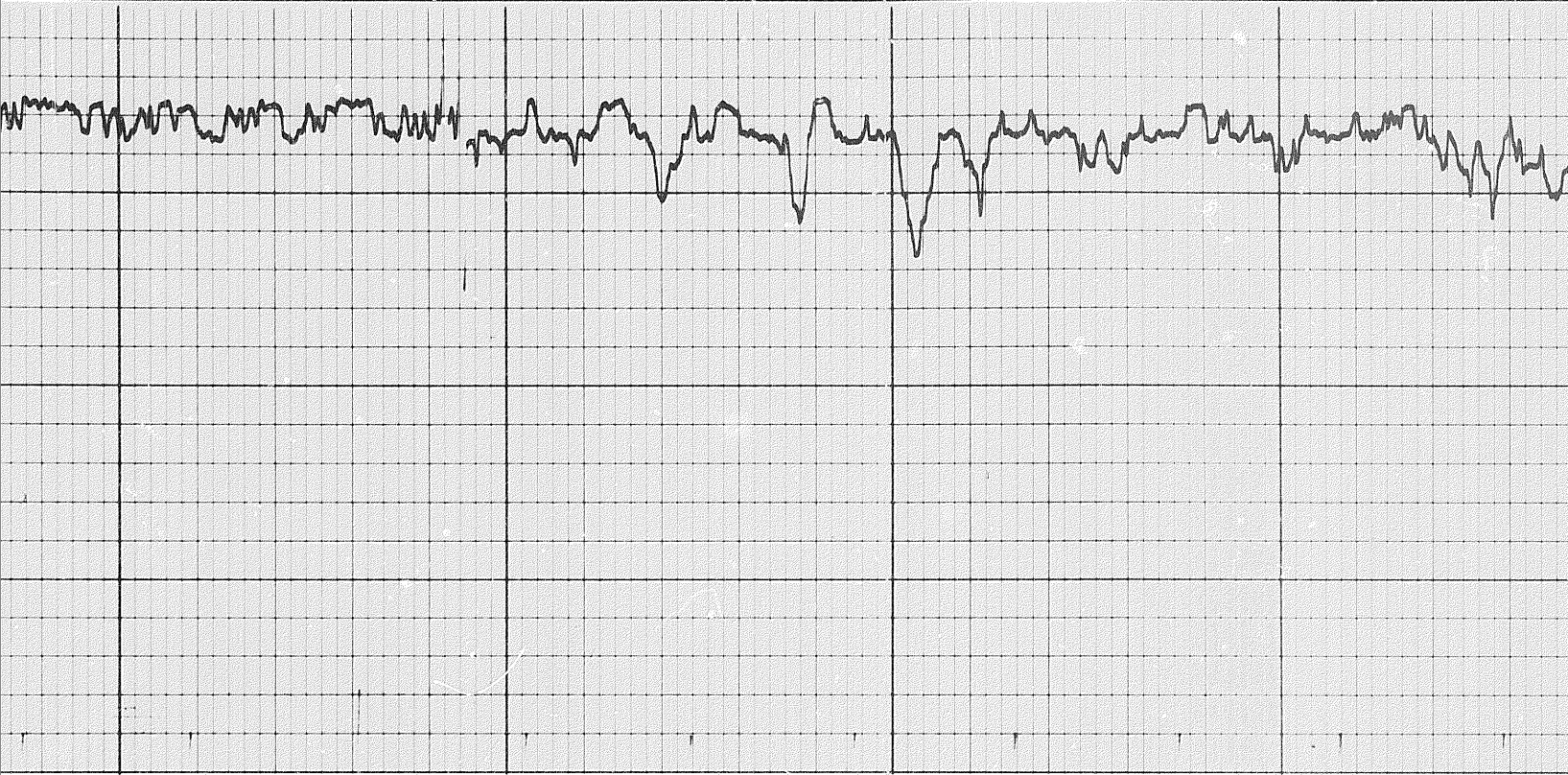


1200

1300



20 of

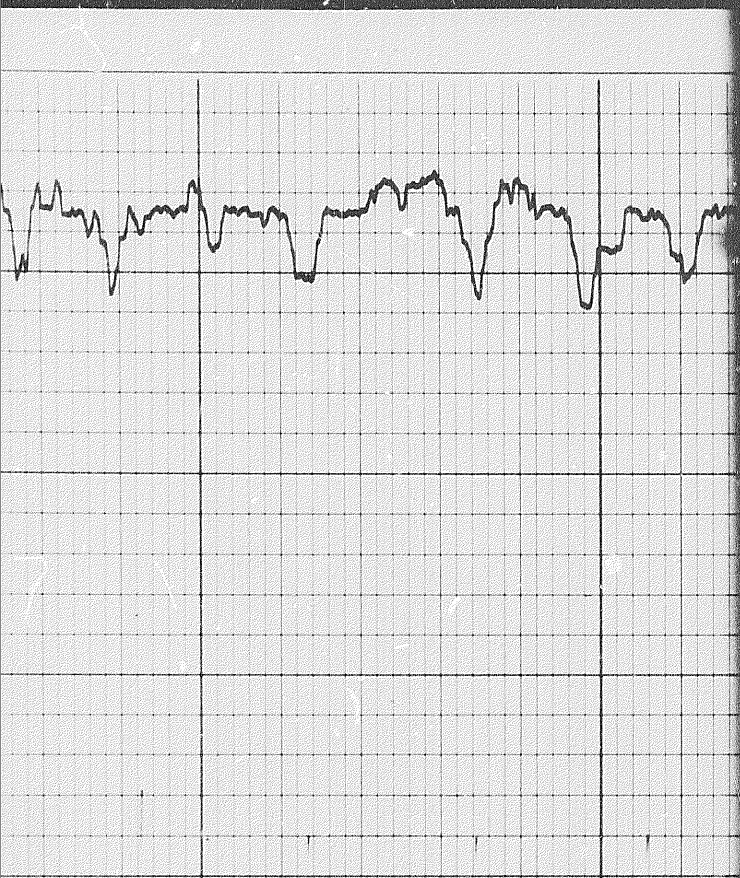


1140

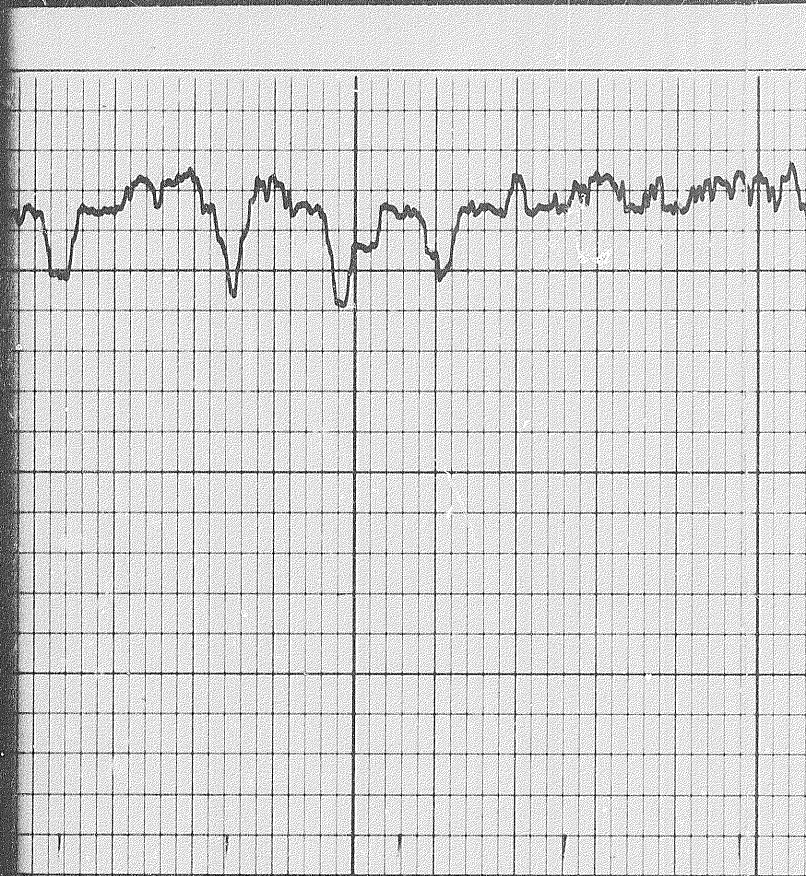
1150



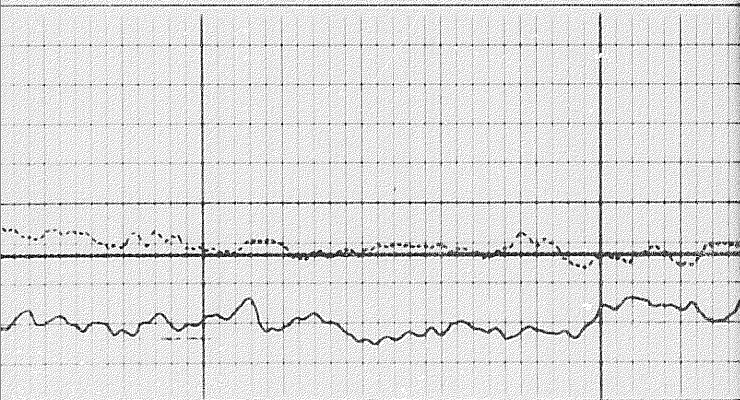


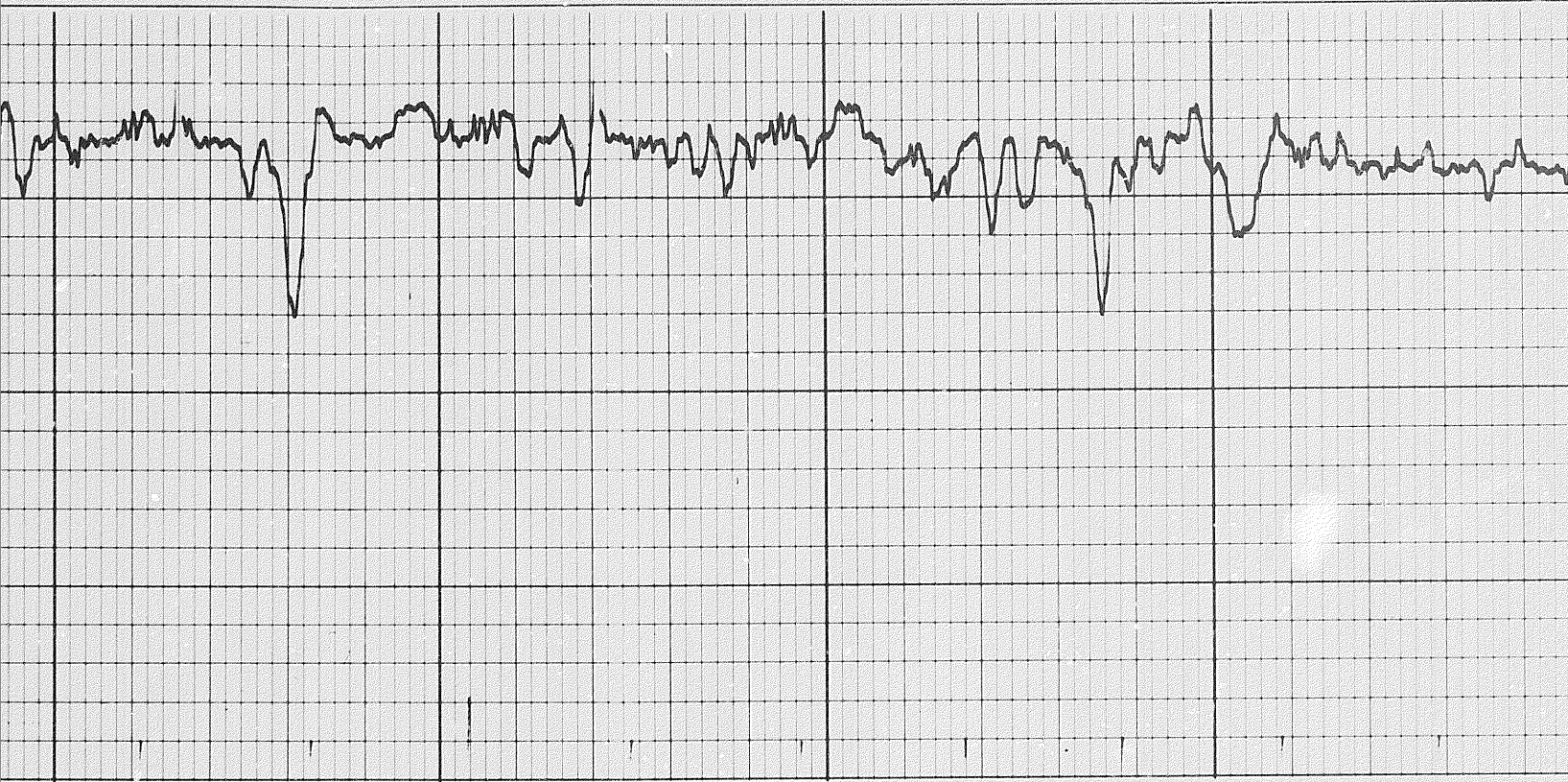


11700



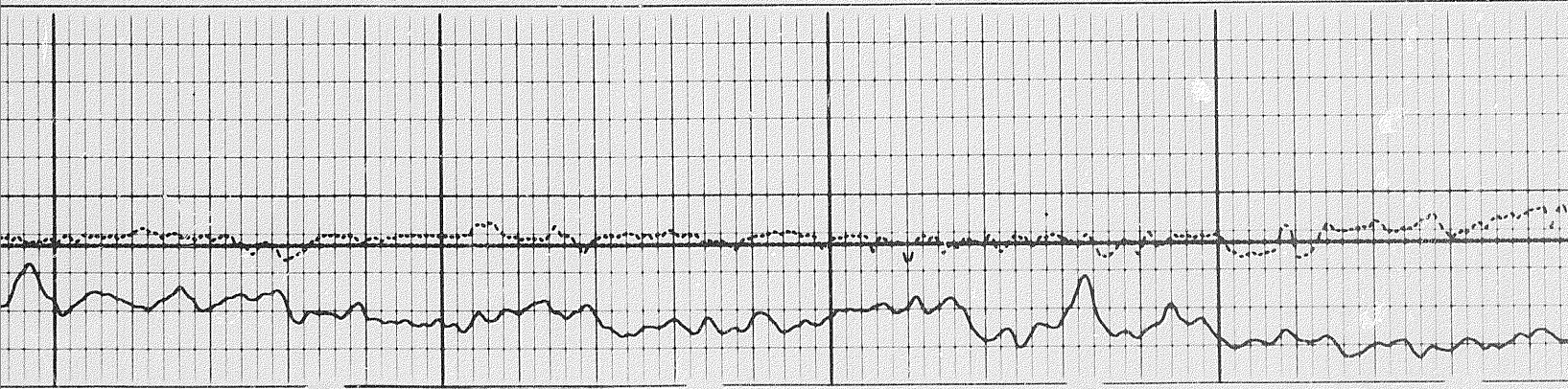
11700



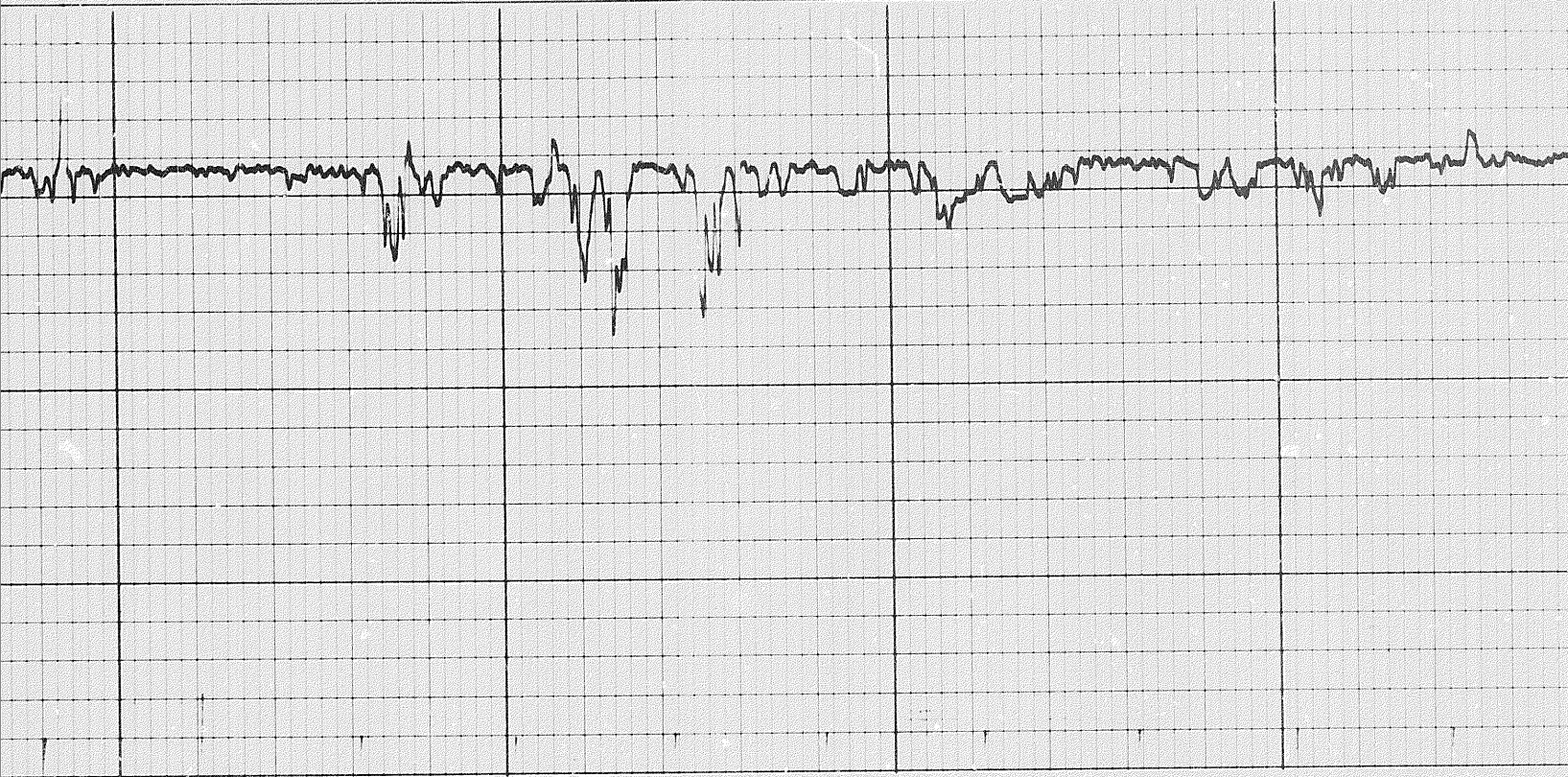


11800

11900



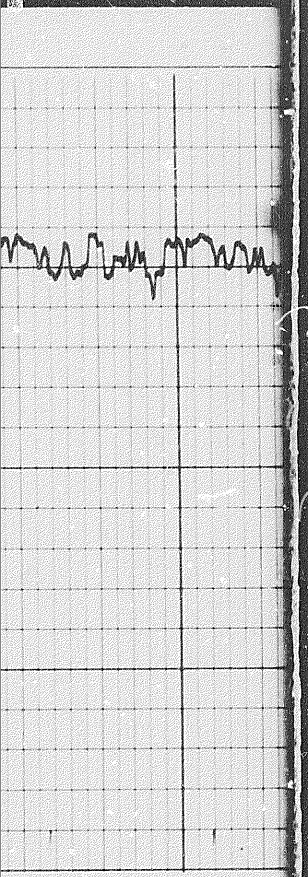
21 of



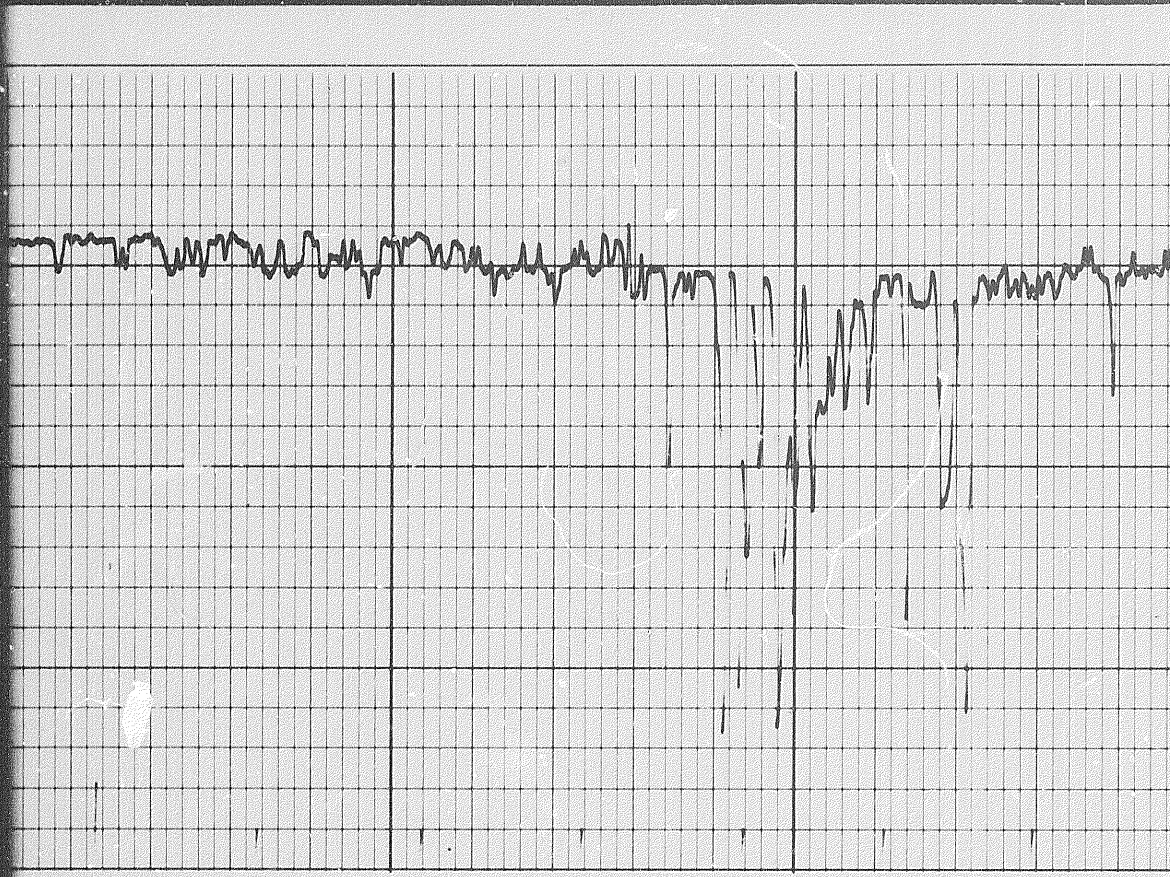
| 2100

| 2200



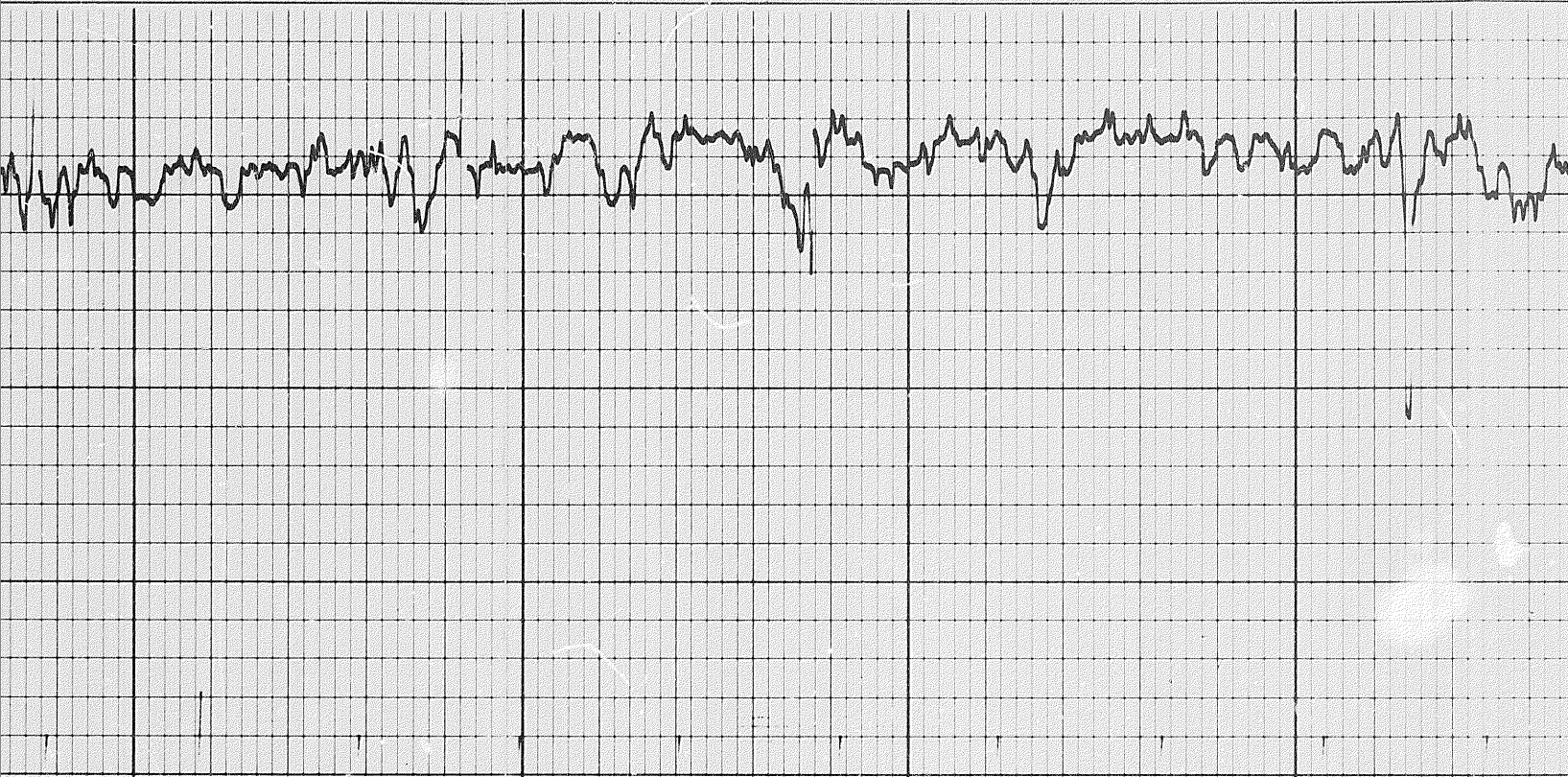


12300



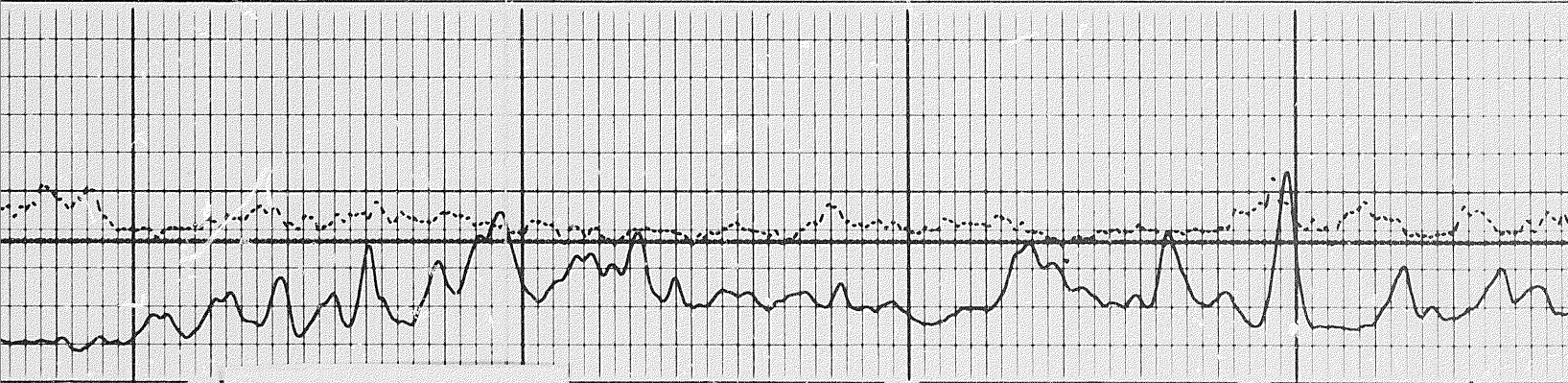
12300



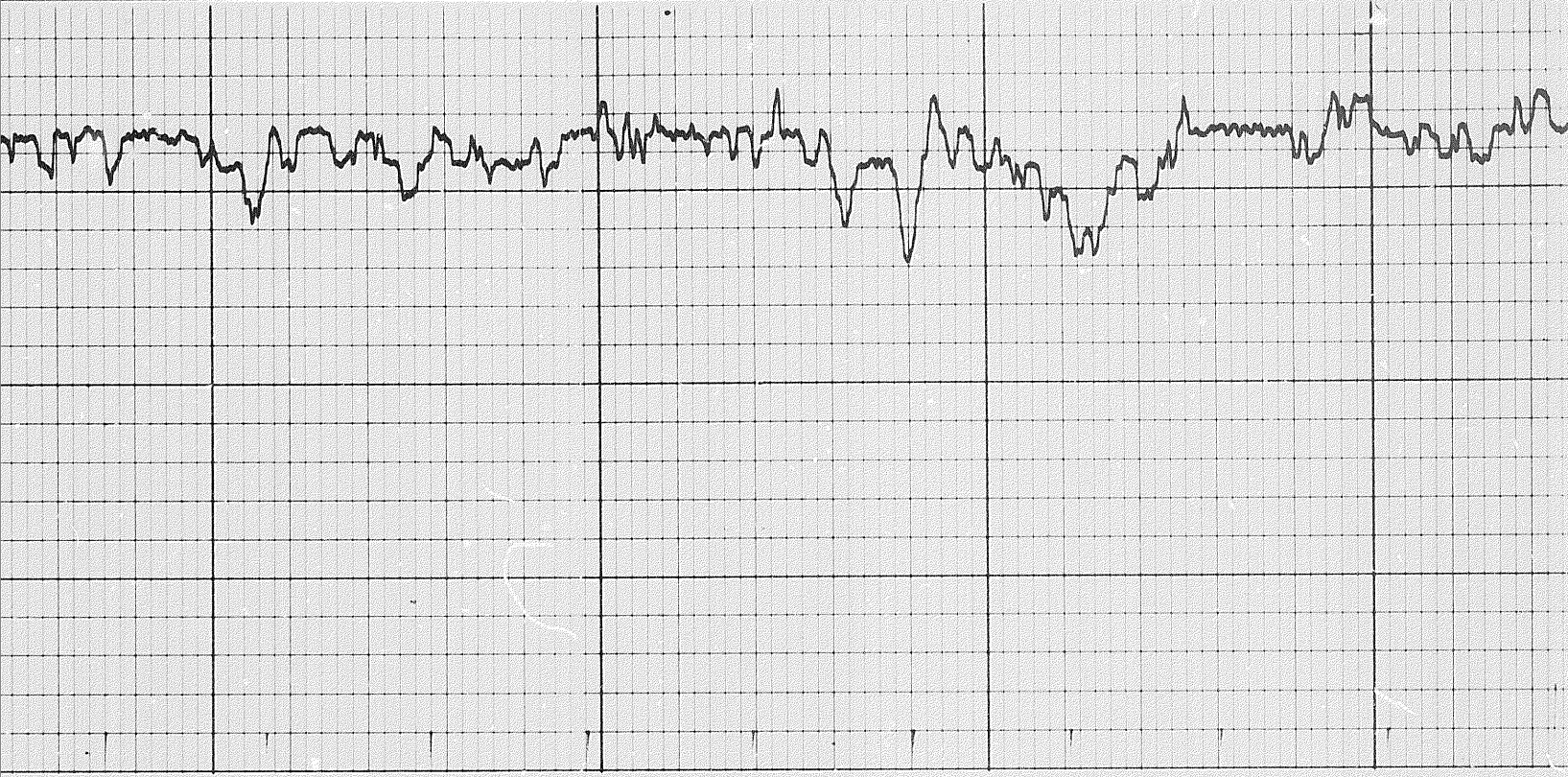


12500

12600

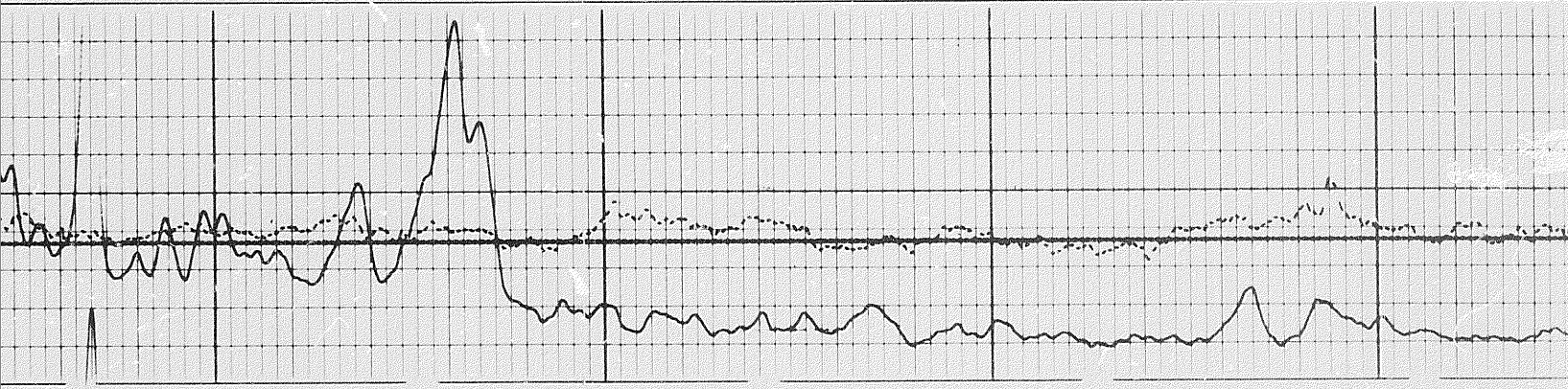


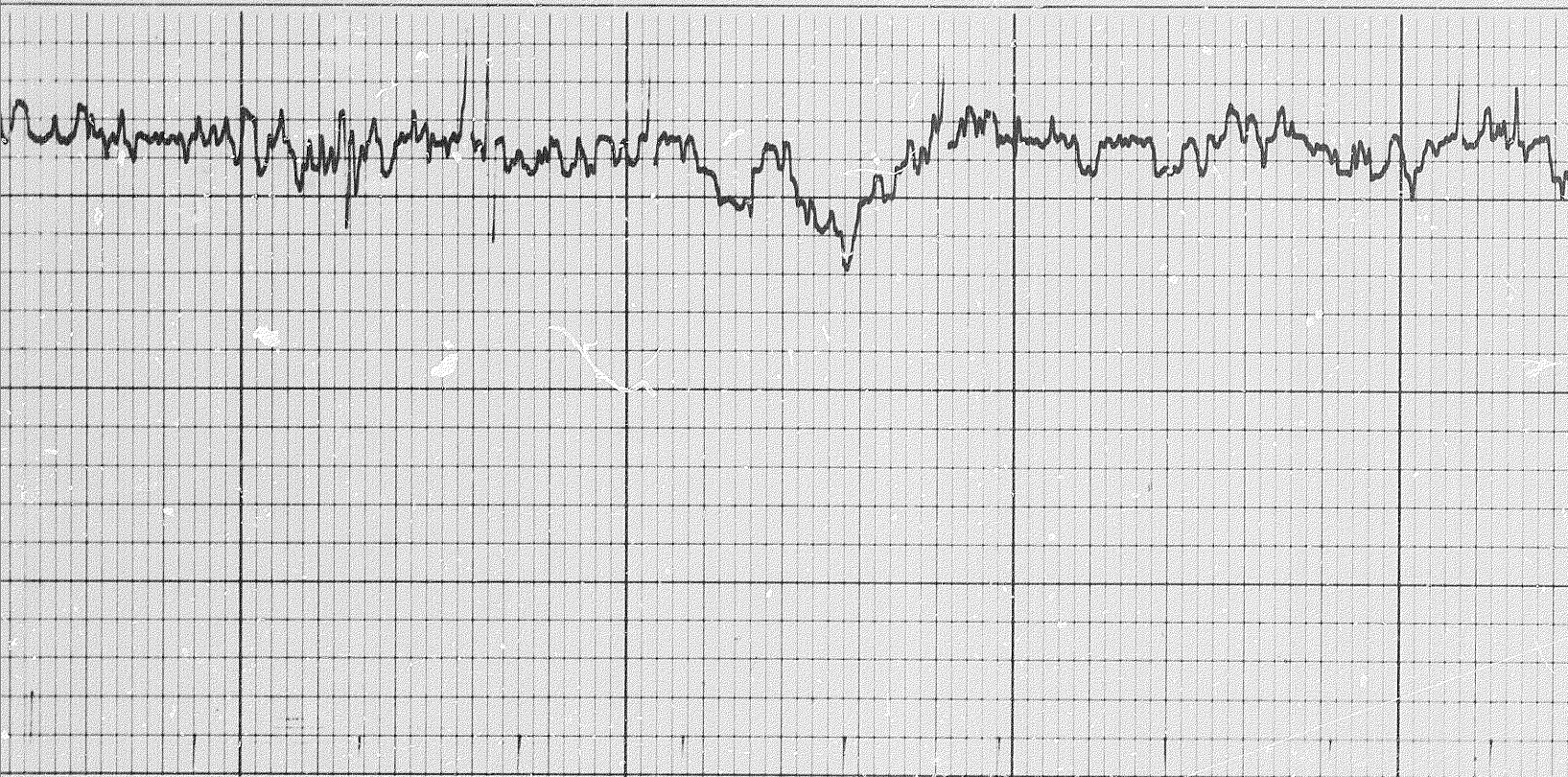
2201



12700

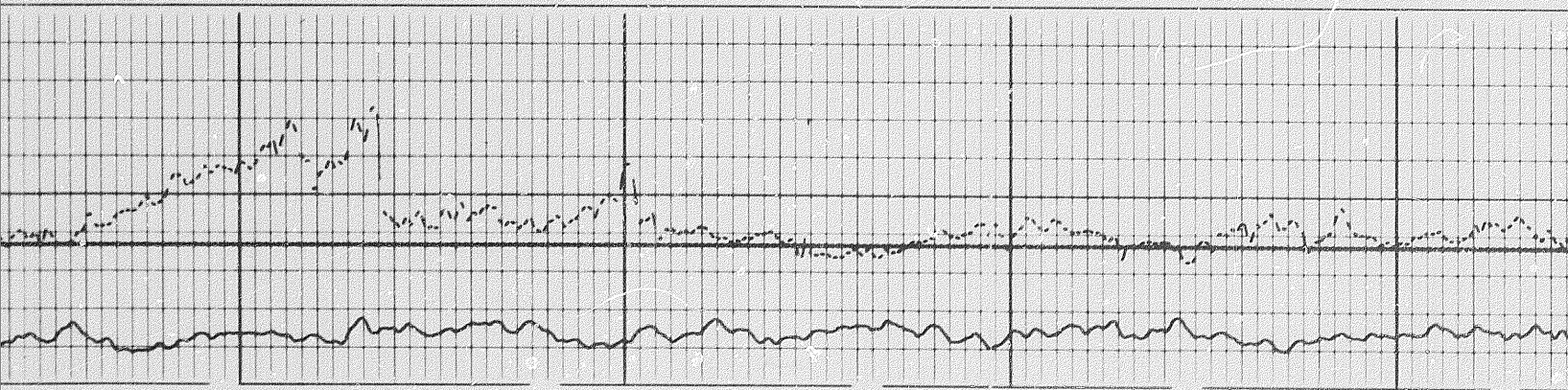
12800



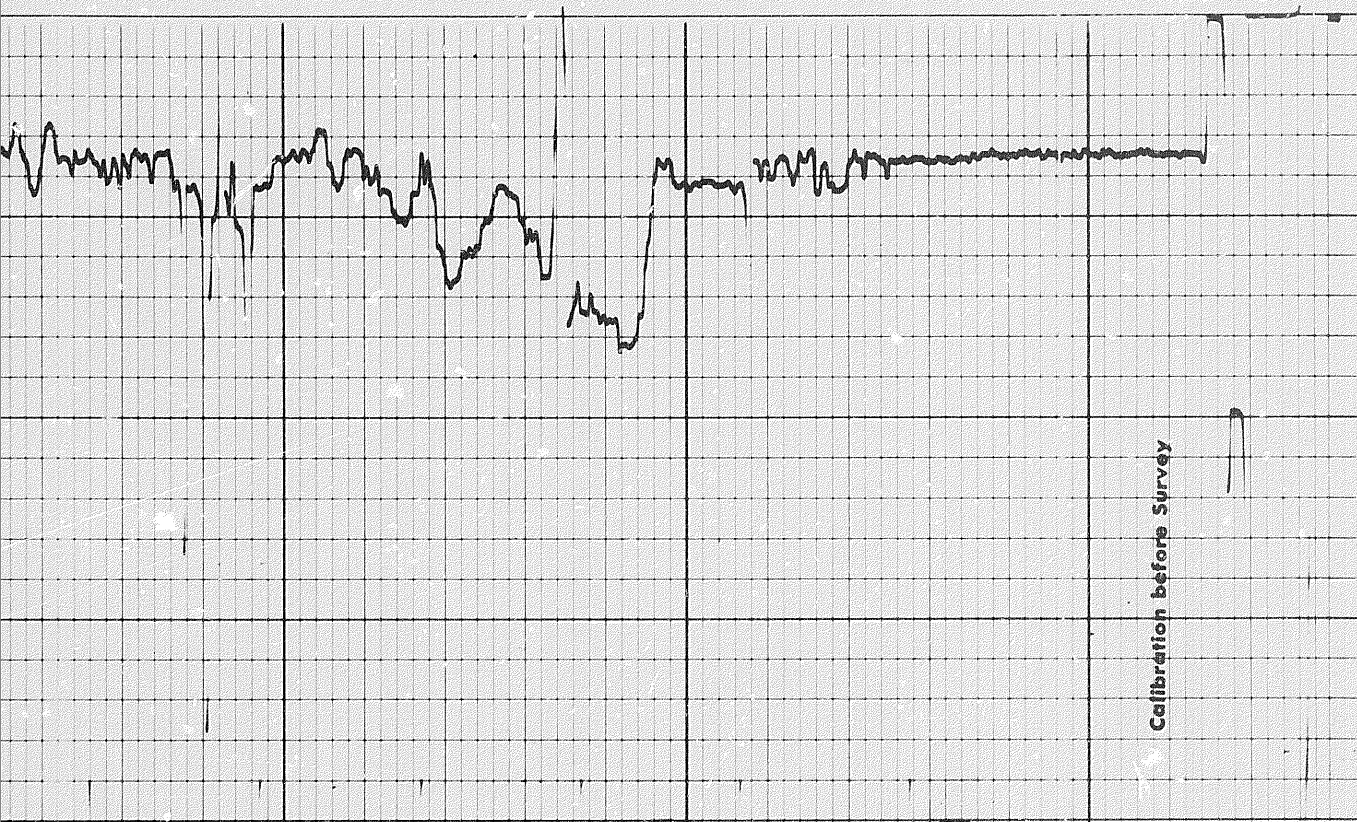


12900

13000



2307



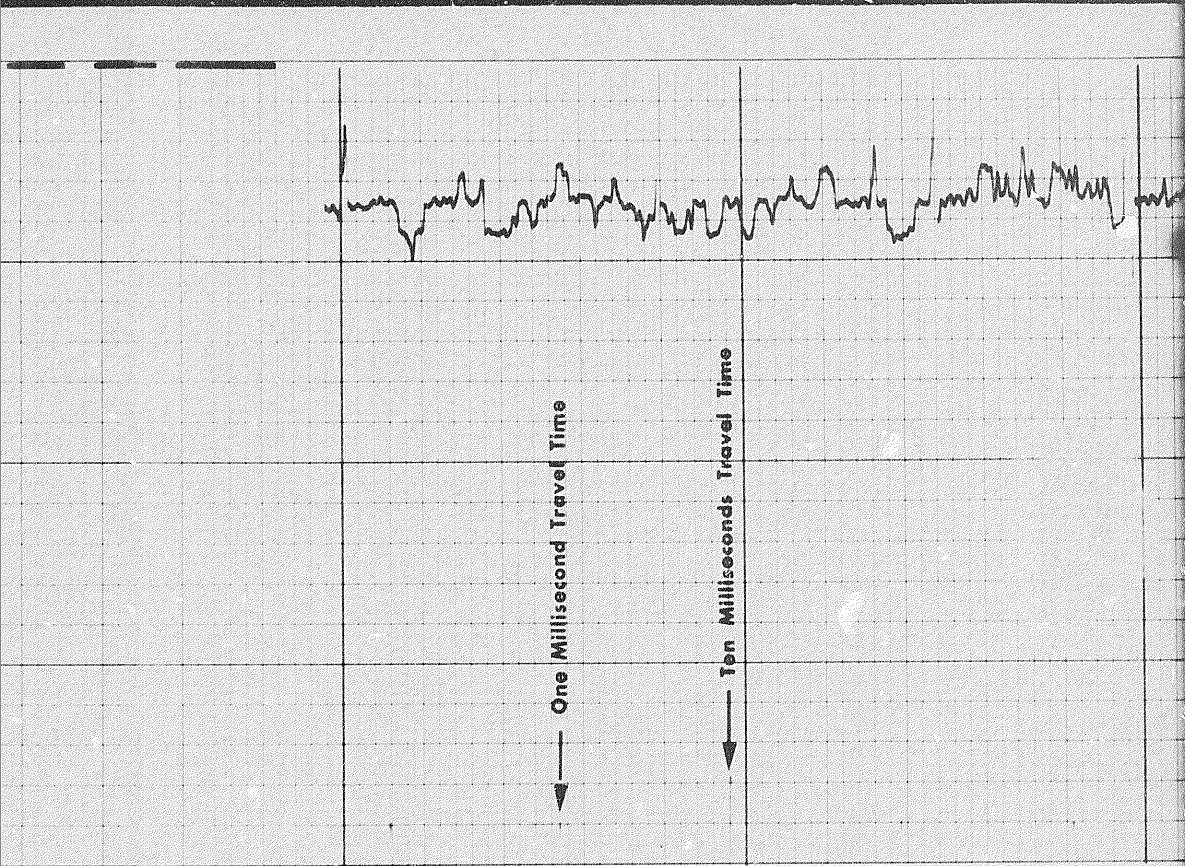
13200

24

Calibration before Survey

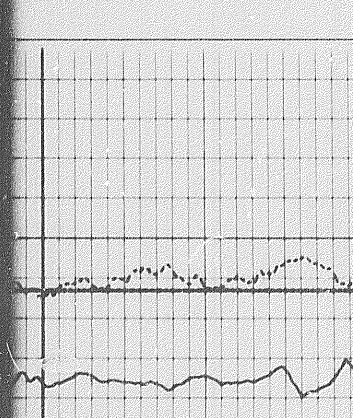
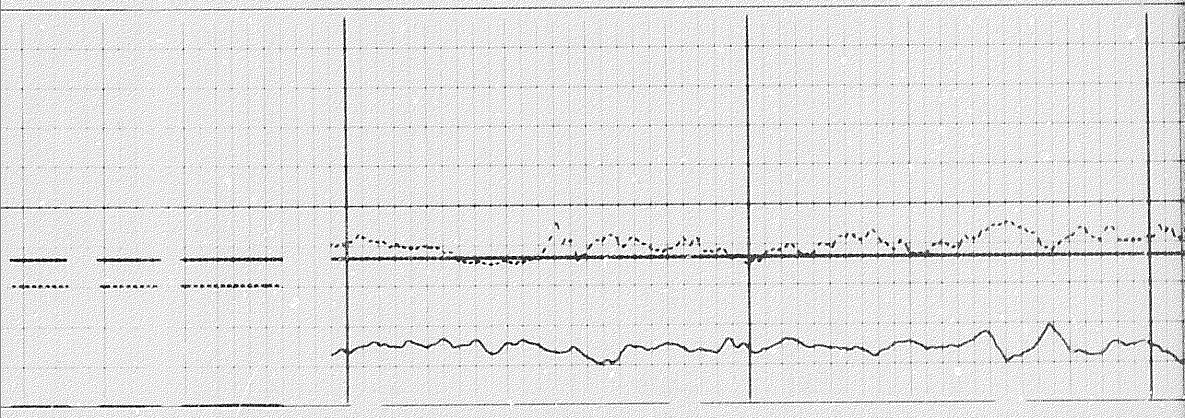
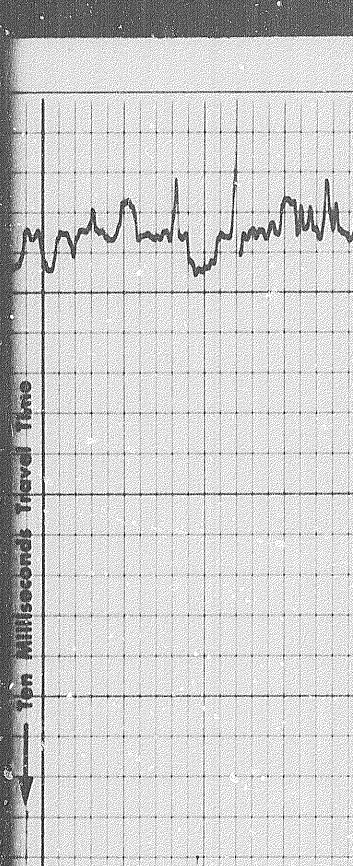


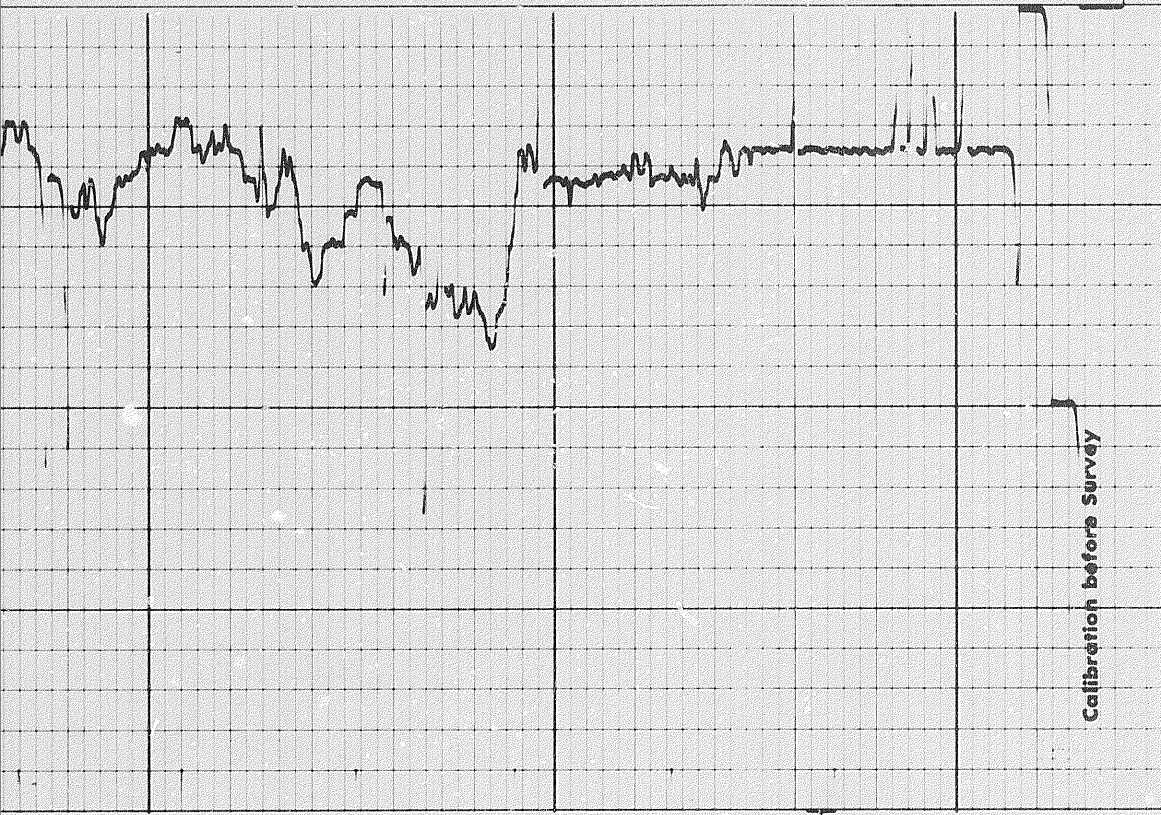




13000

13100





Calibration before Survey

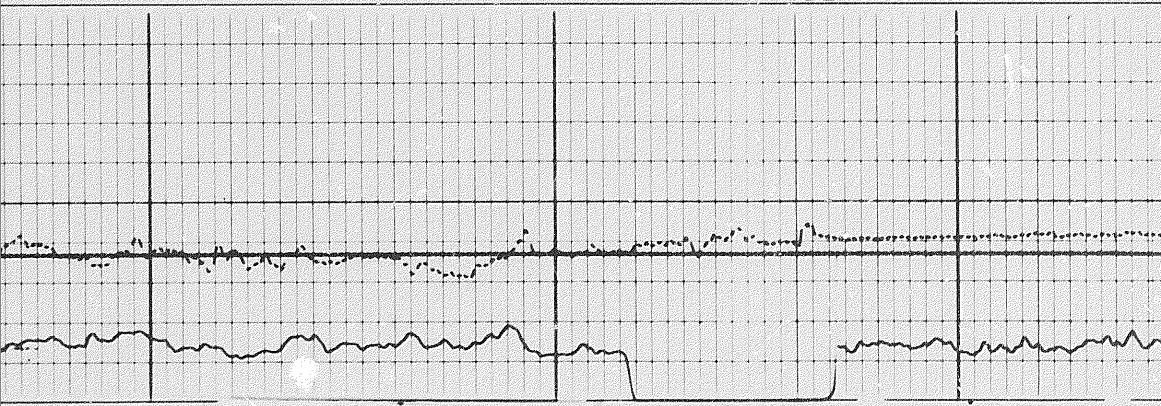
13200

FR

120  
80  
100  
60  
80  
40

SONIC  
INTERVAL TRANSIT TIME  
microseconds per foot

DEPTH



6 7 8 9 10 11 12 13 14

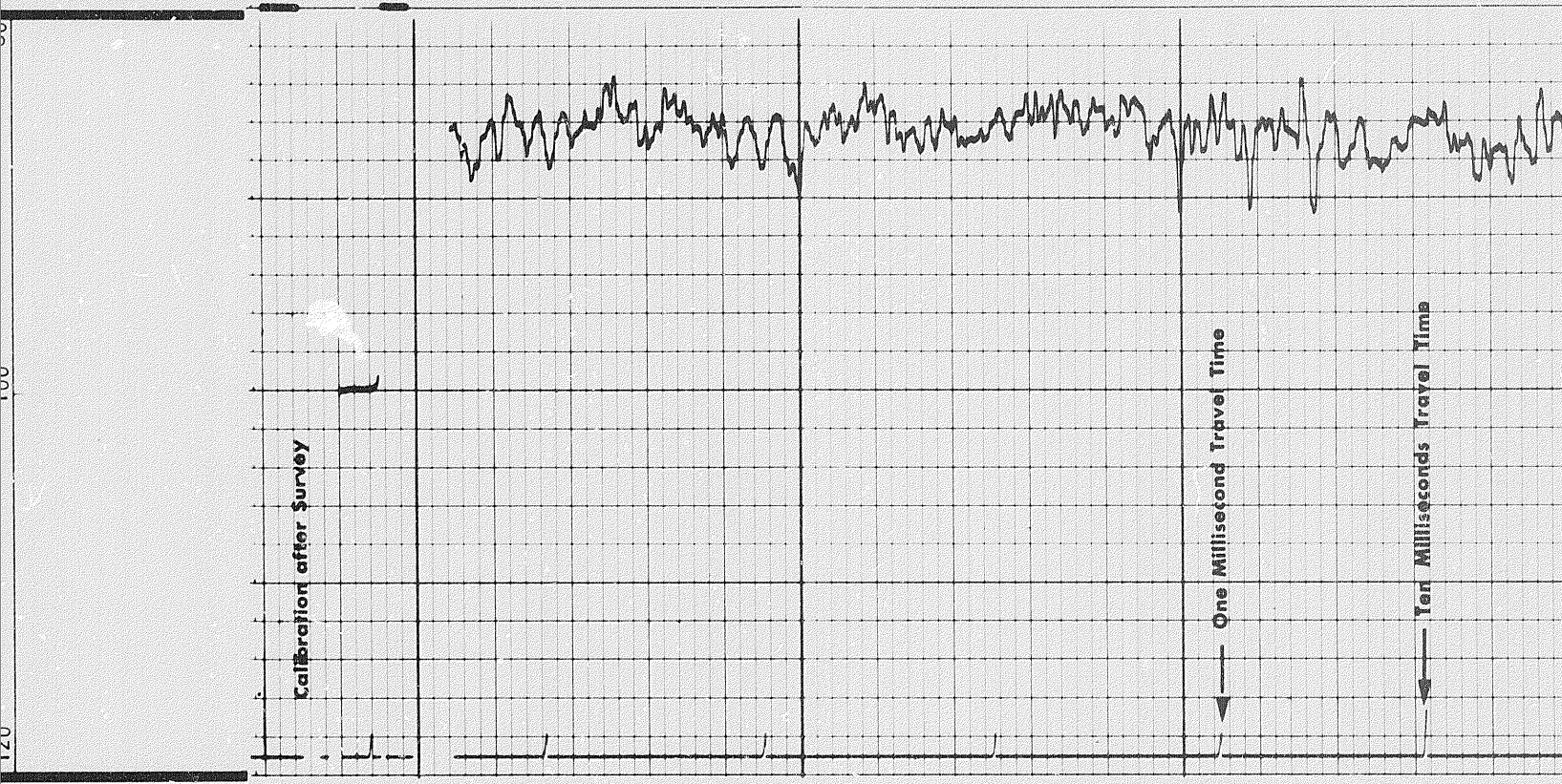
CALIPER  
hole diameter in inches

Sens. 100 T.C. 2  
Zero 0 div. to left  
100  
200

GAMMA RAY  
API UNITS

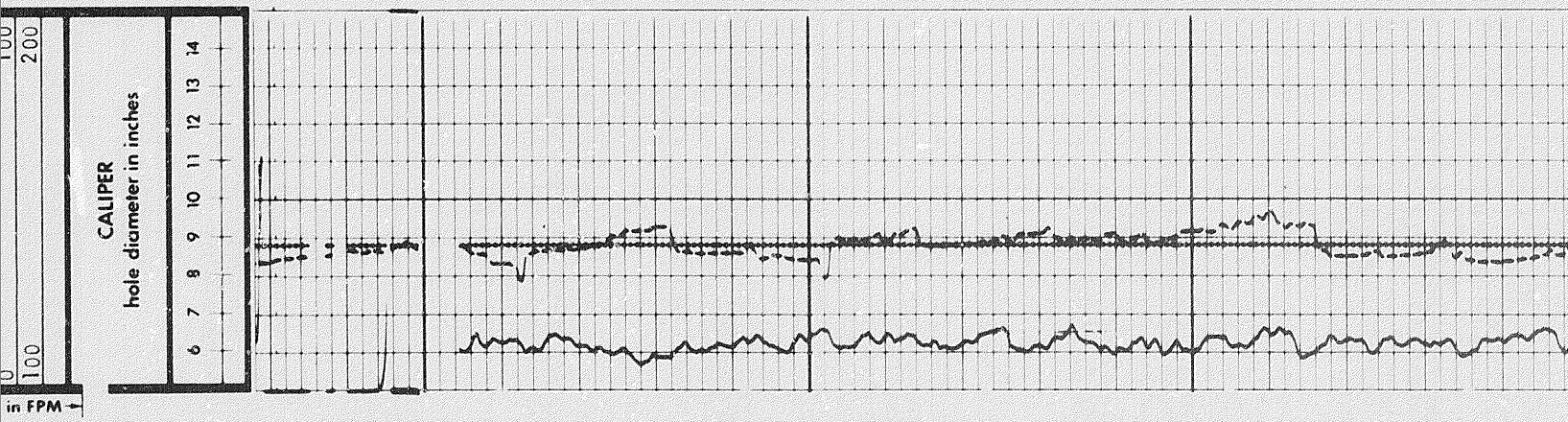
Speed in FPM

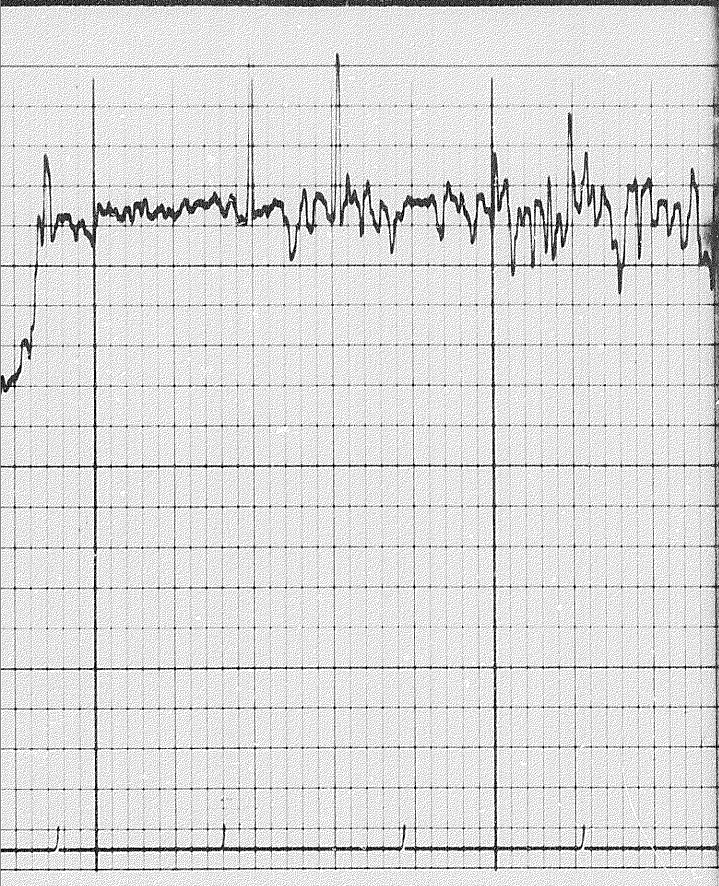
24 of



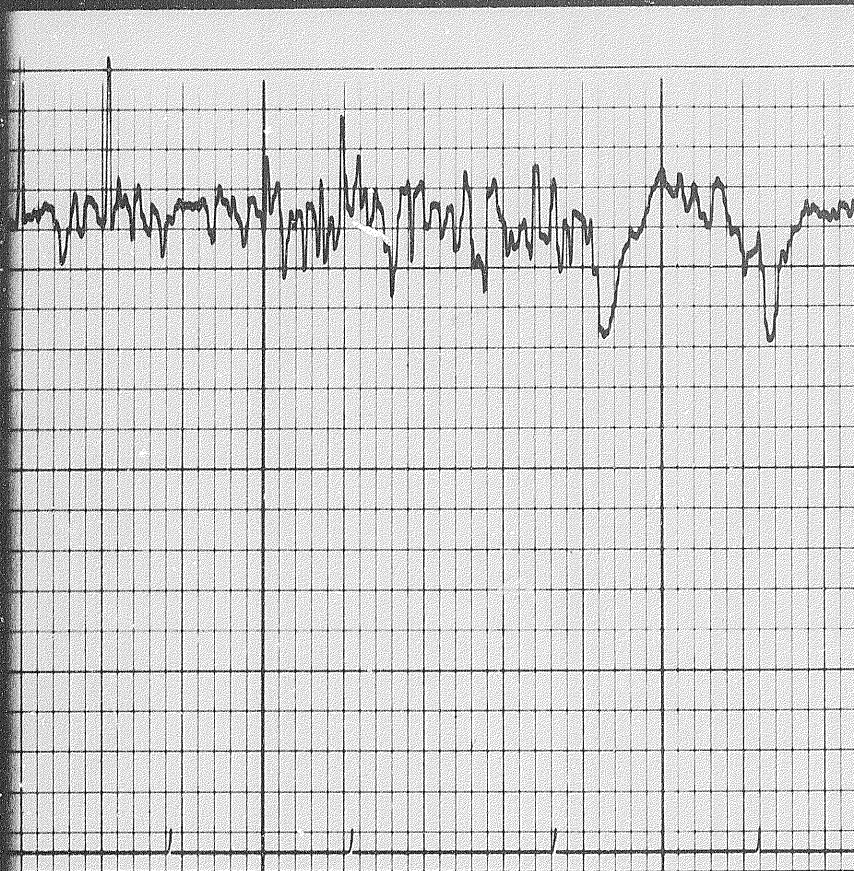
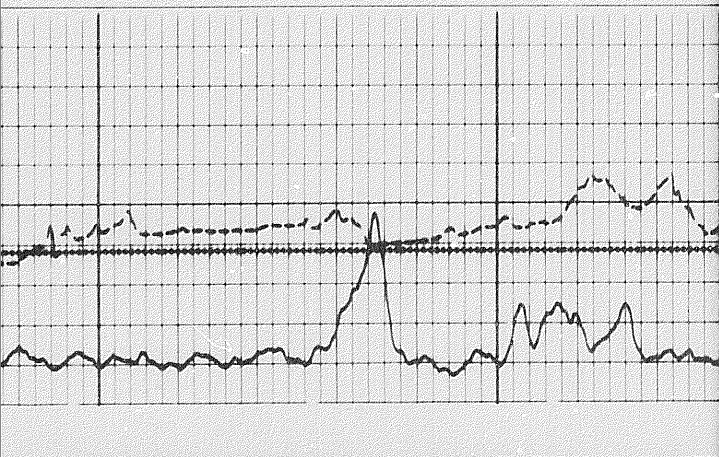
13000

13100

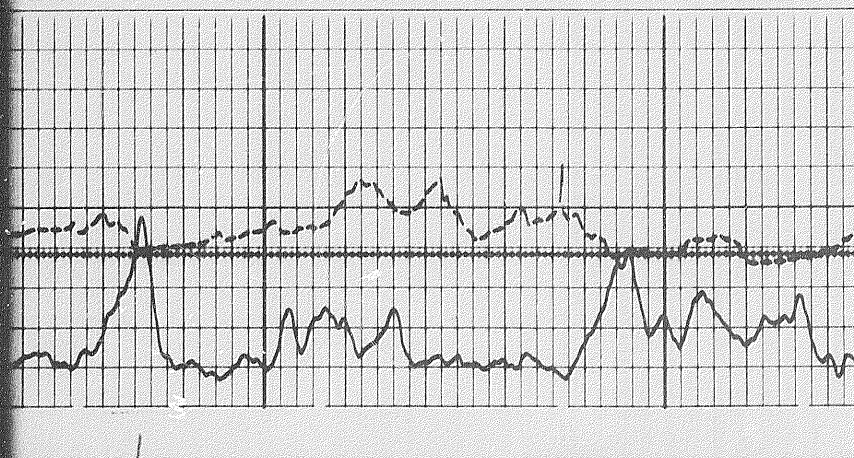


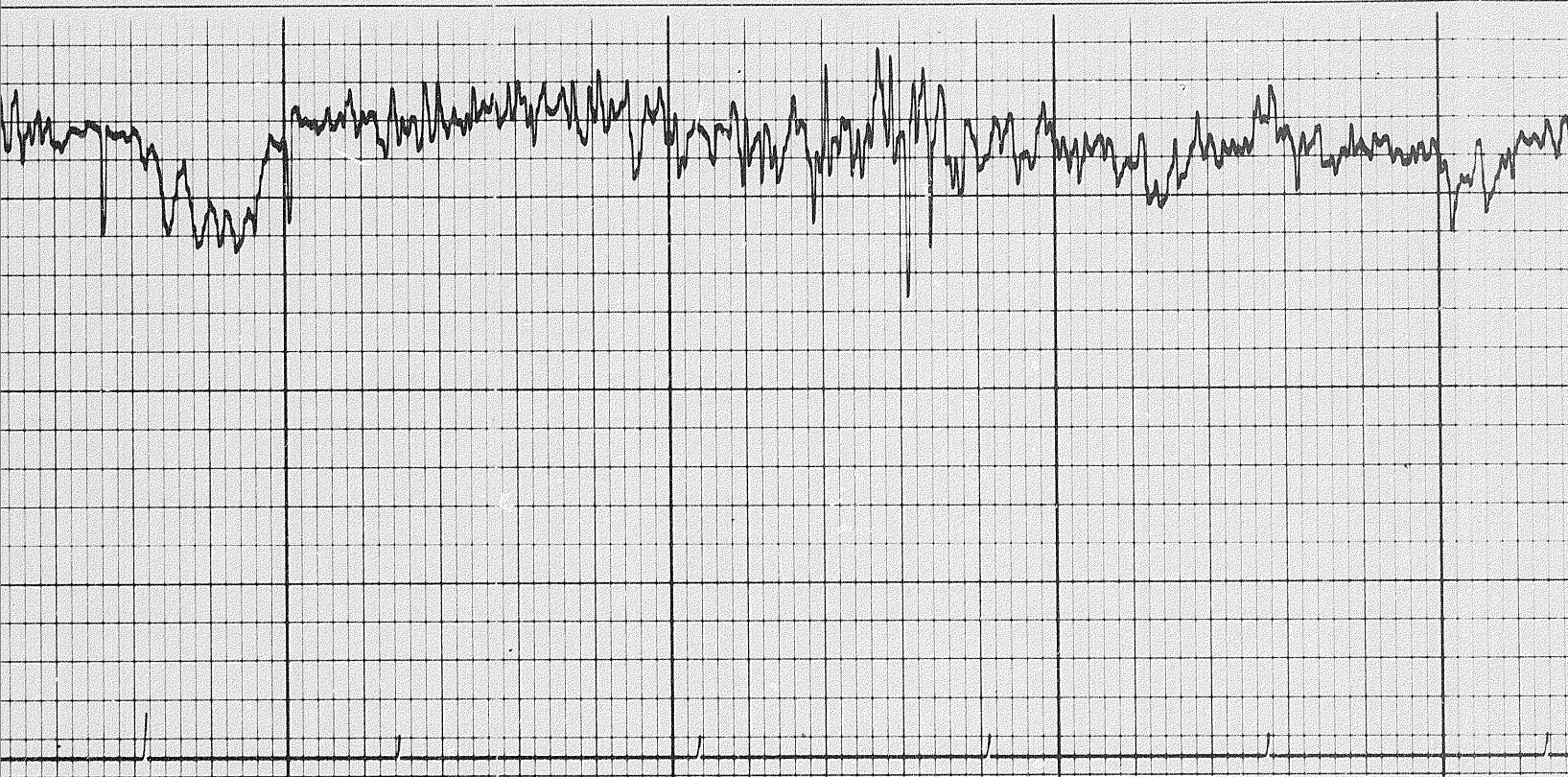


13200



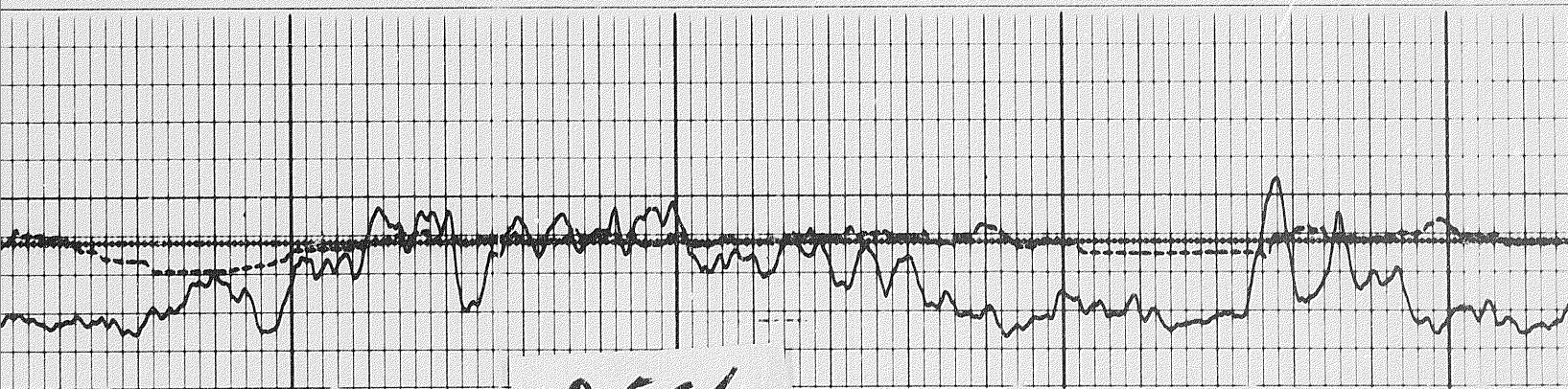
13300



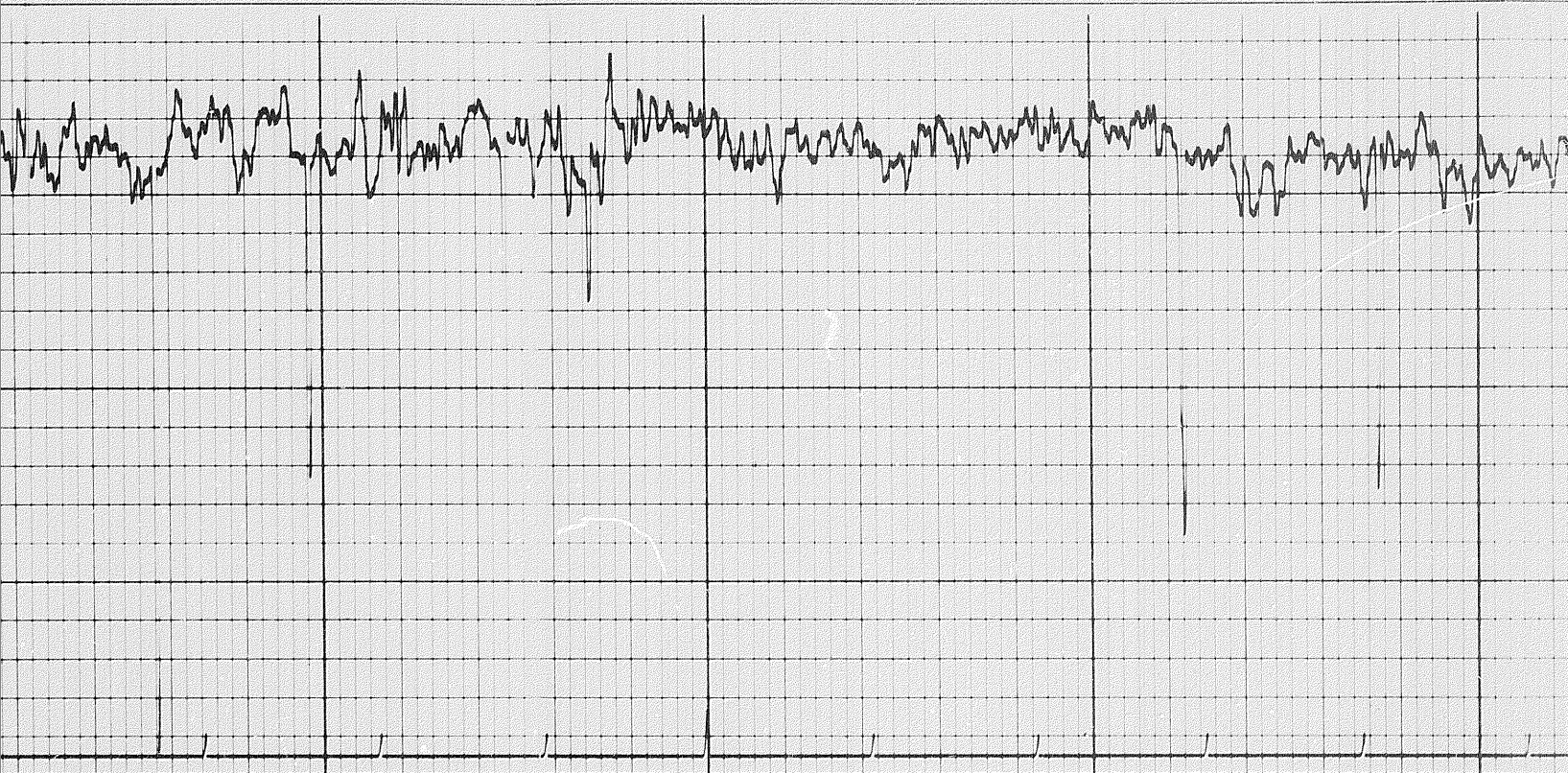


13400

13500

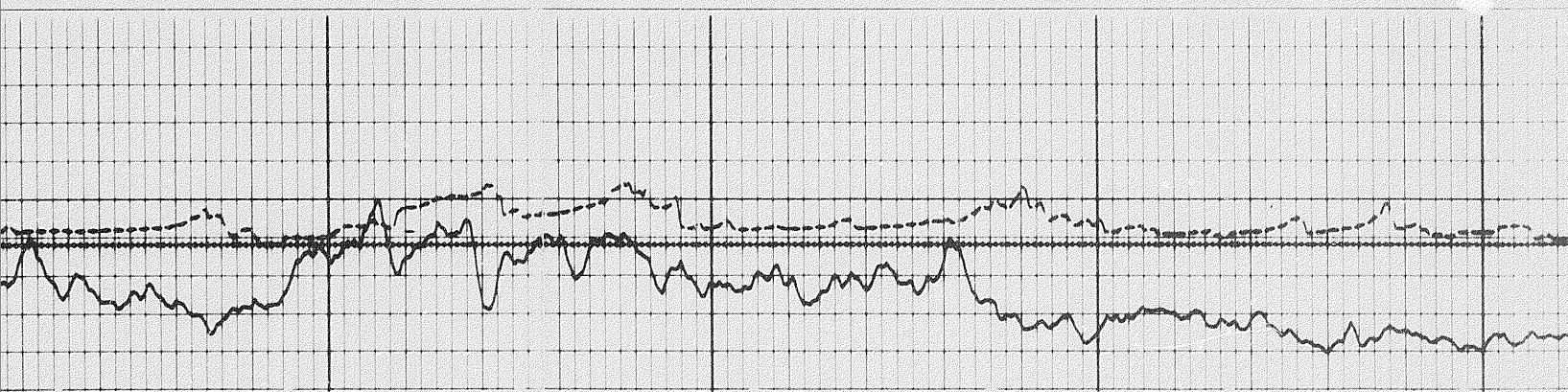


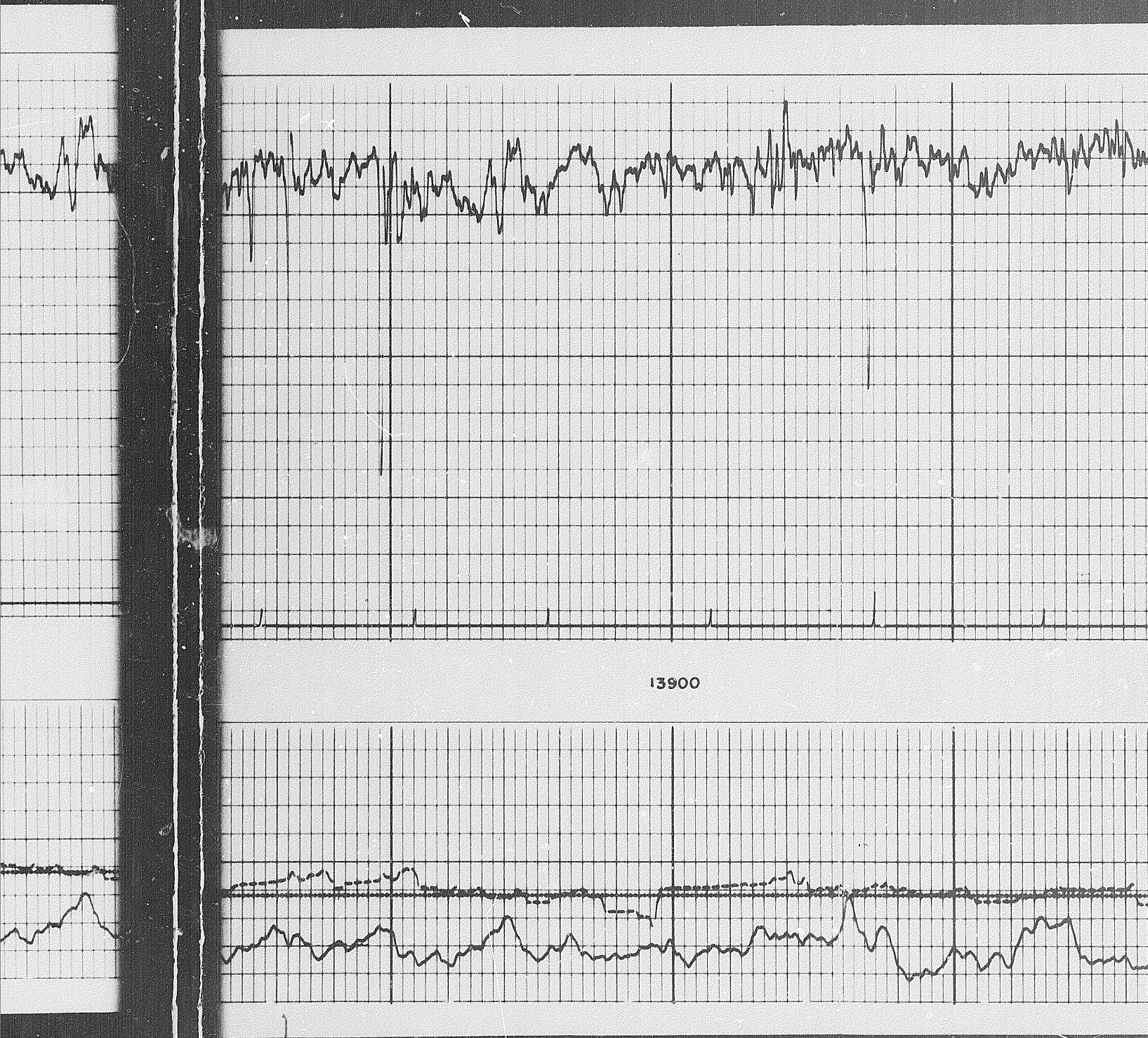
250/



13700

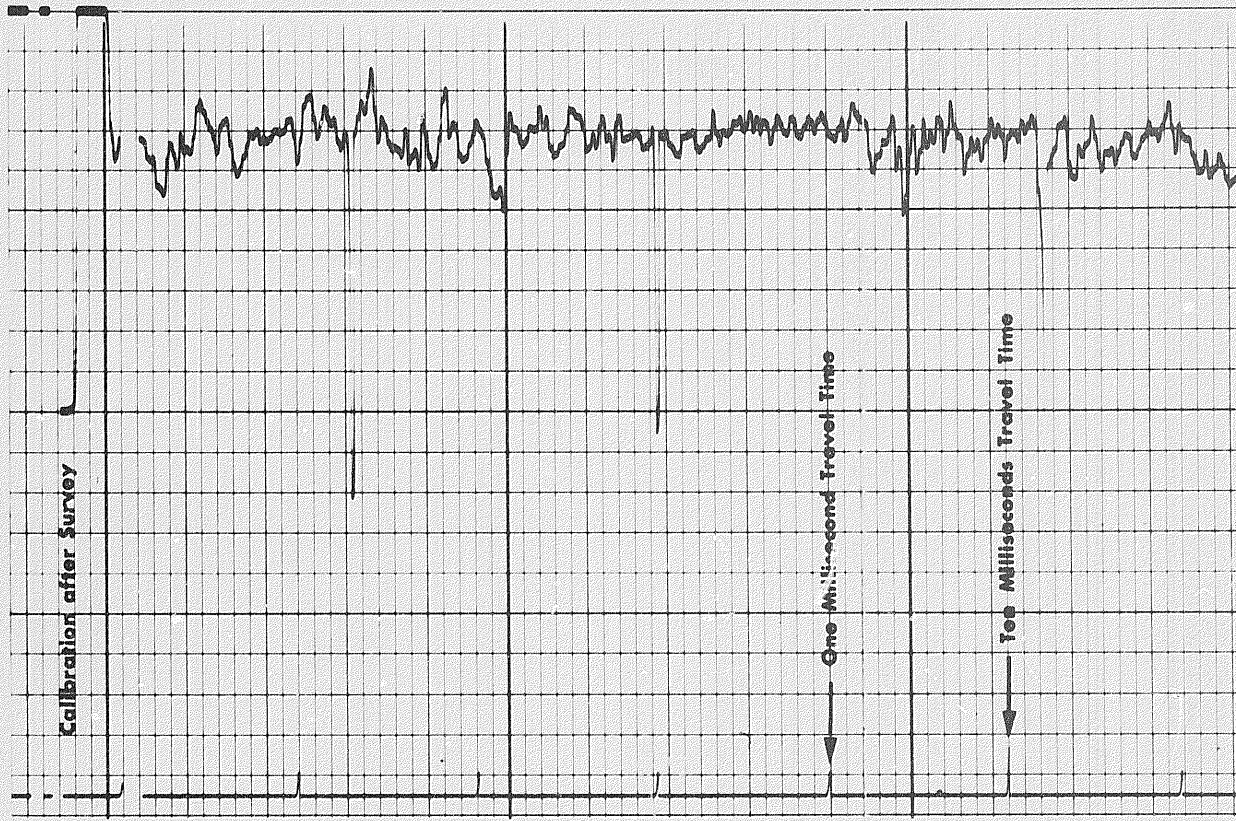
13800





13900

REPEAT SECTION



13000

13100

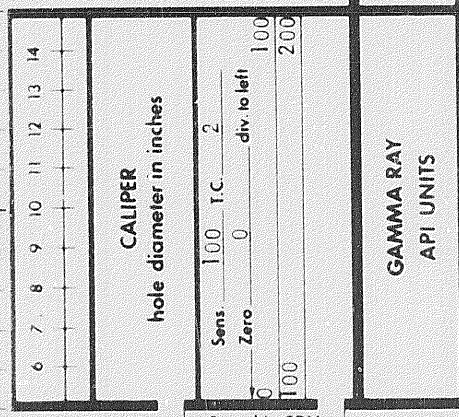
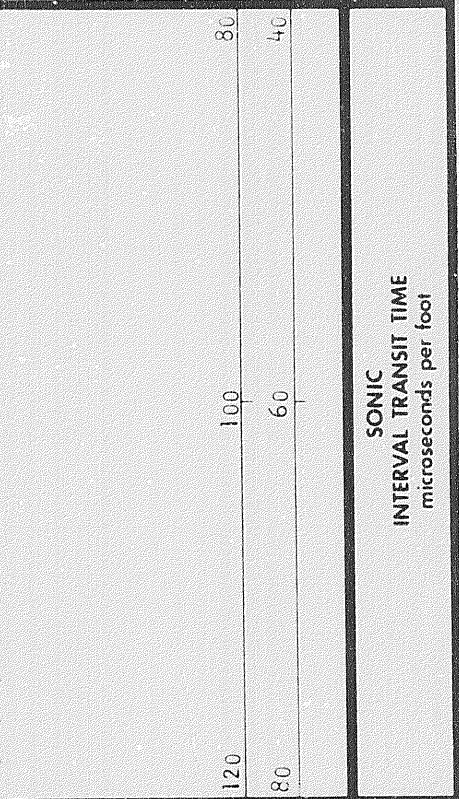
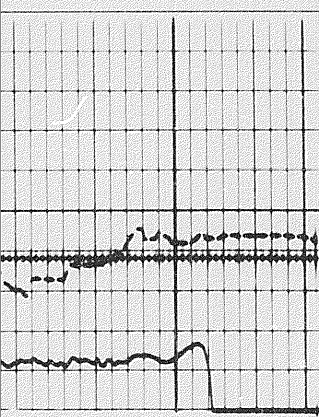


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13200



Speed in FPM  
 0 100 200  
 Zero 0 100 200  
 Sens: 100 T.C. 2  
 div to left

6 7 8 9 10 11 12 13 14  
**CALIPER**  
 hole diameter in inches

**SONIC**  
 INTERVAL TRANSIT TIME  
 microseconds per foot

**DEPTHS**

**GAMMA RAY**  
 API UNITS

Run 1

Calibration before Survey

Calibration after Survey

Run 2

7800

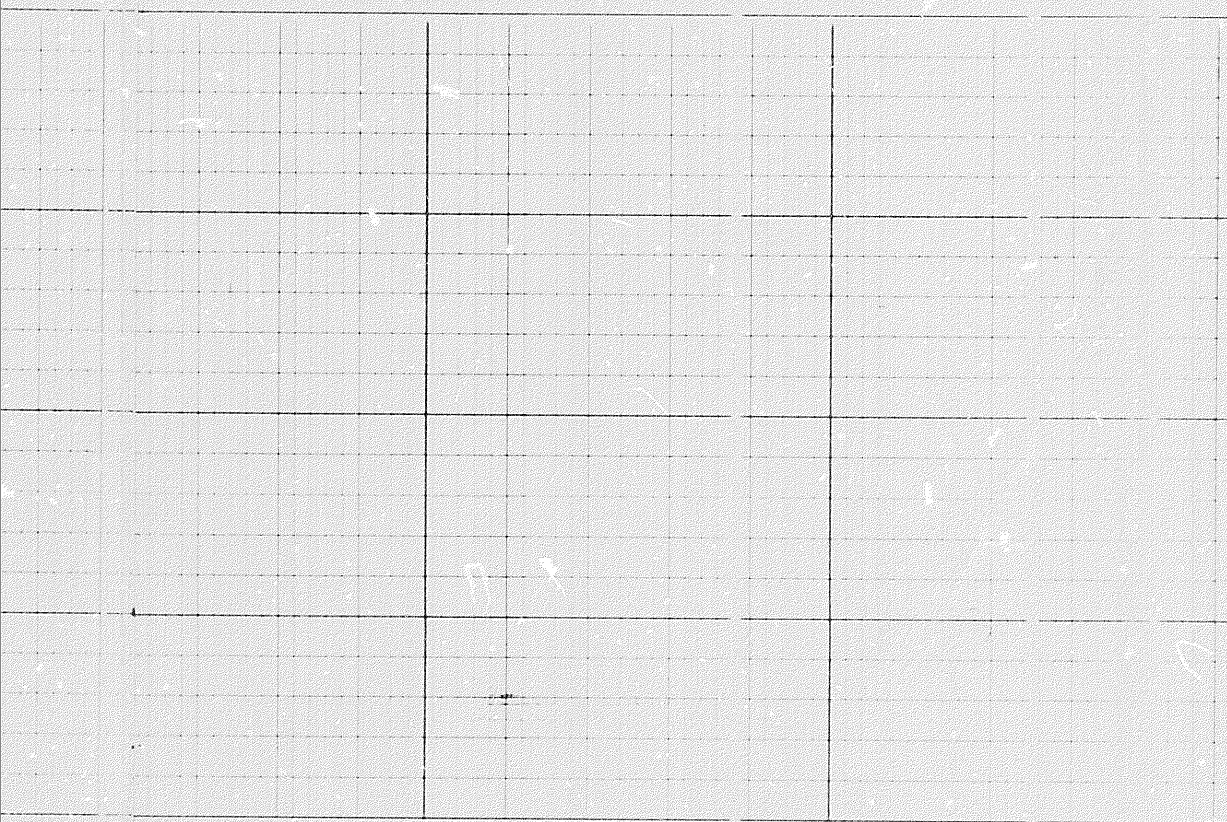
7700

0200

SURFACE CALIBRATION

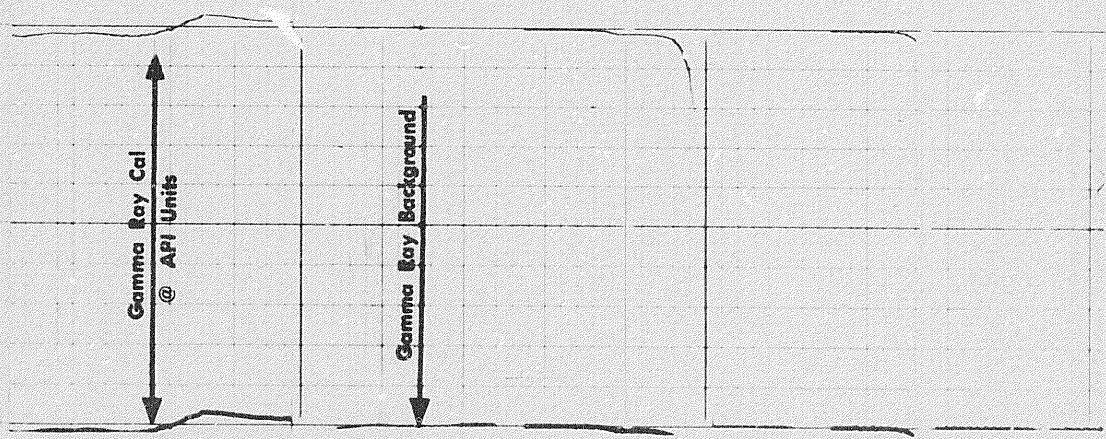
8" RING

27



0200

010



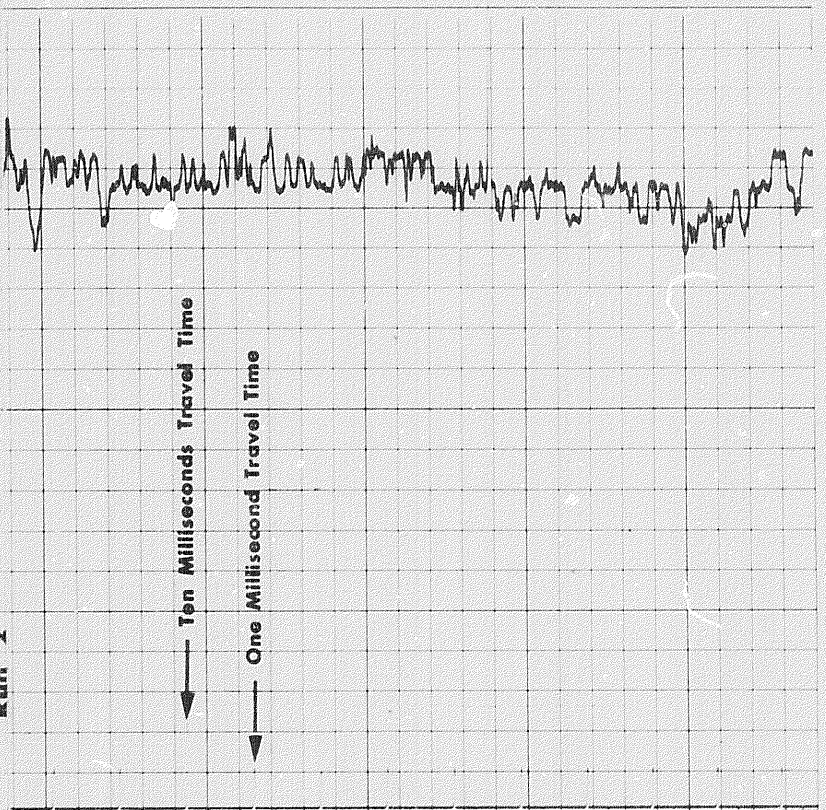
OVERLAP



Run 2

Ten Milliseconds Travel Time

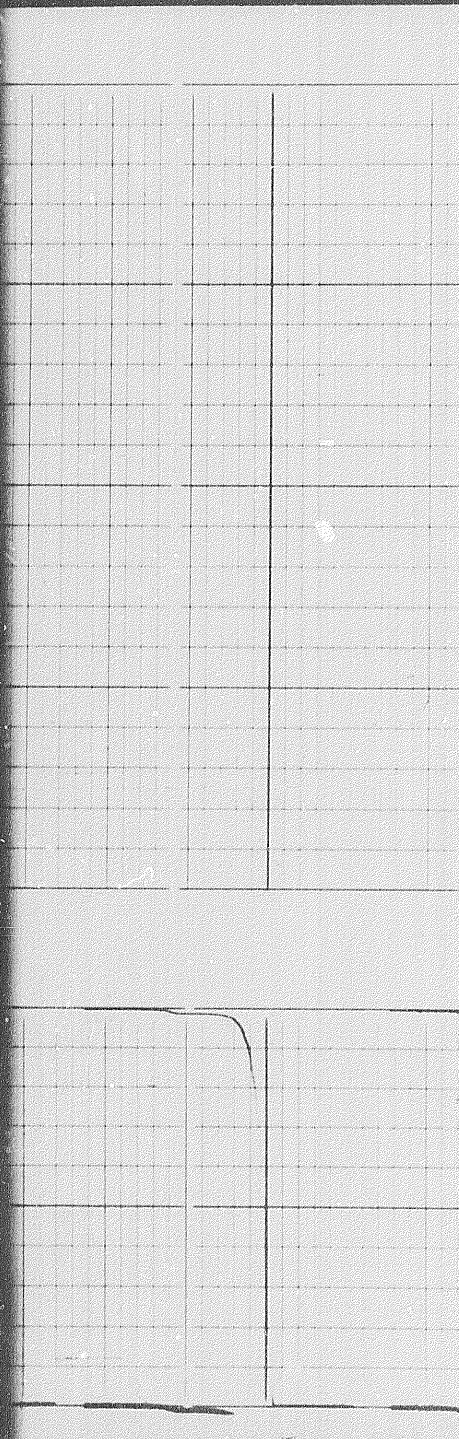
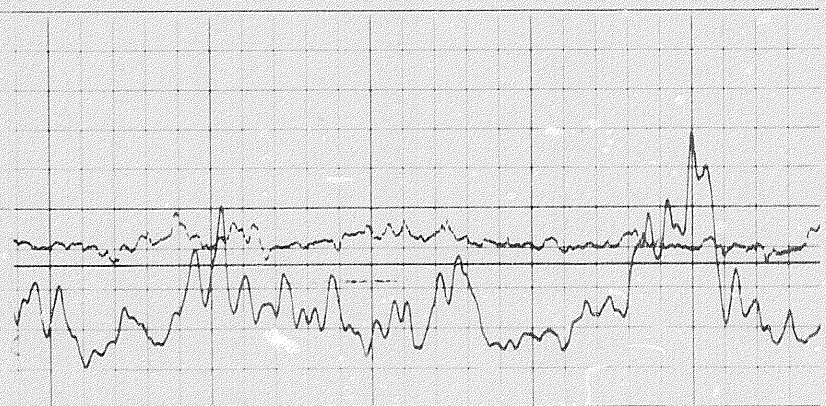
One Millisecond Travel Time



7800

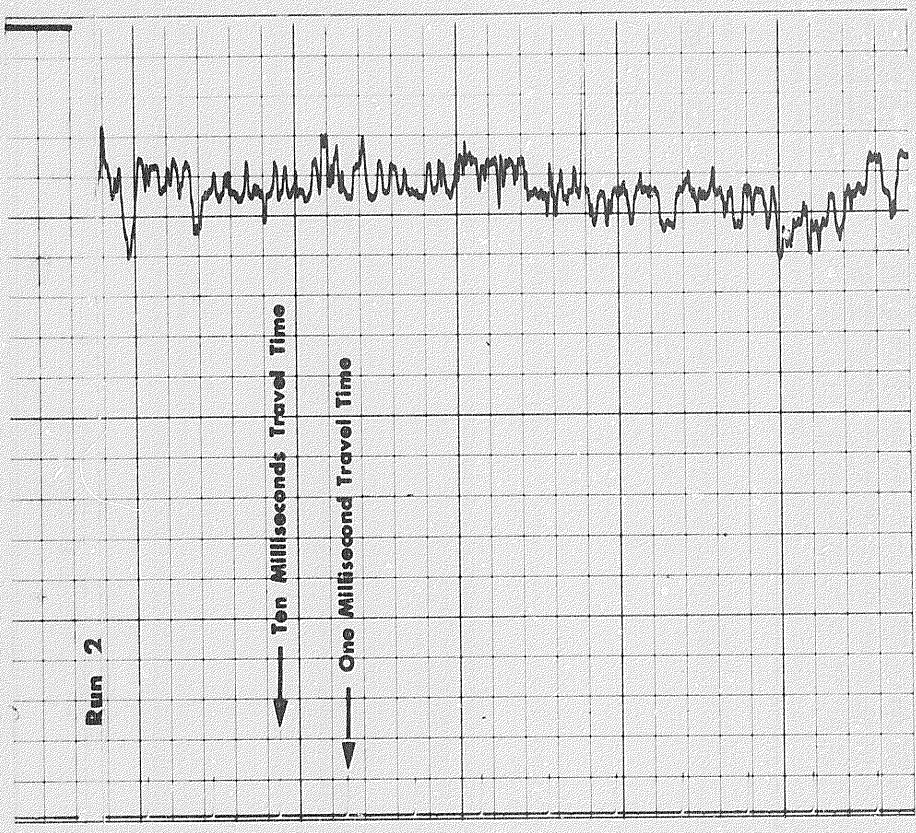
7900

8000





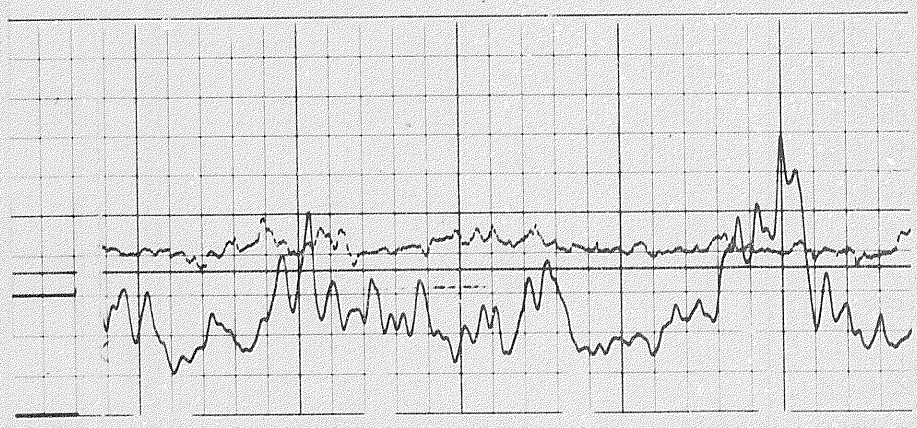
OVERLAP



7800

7900

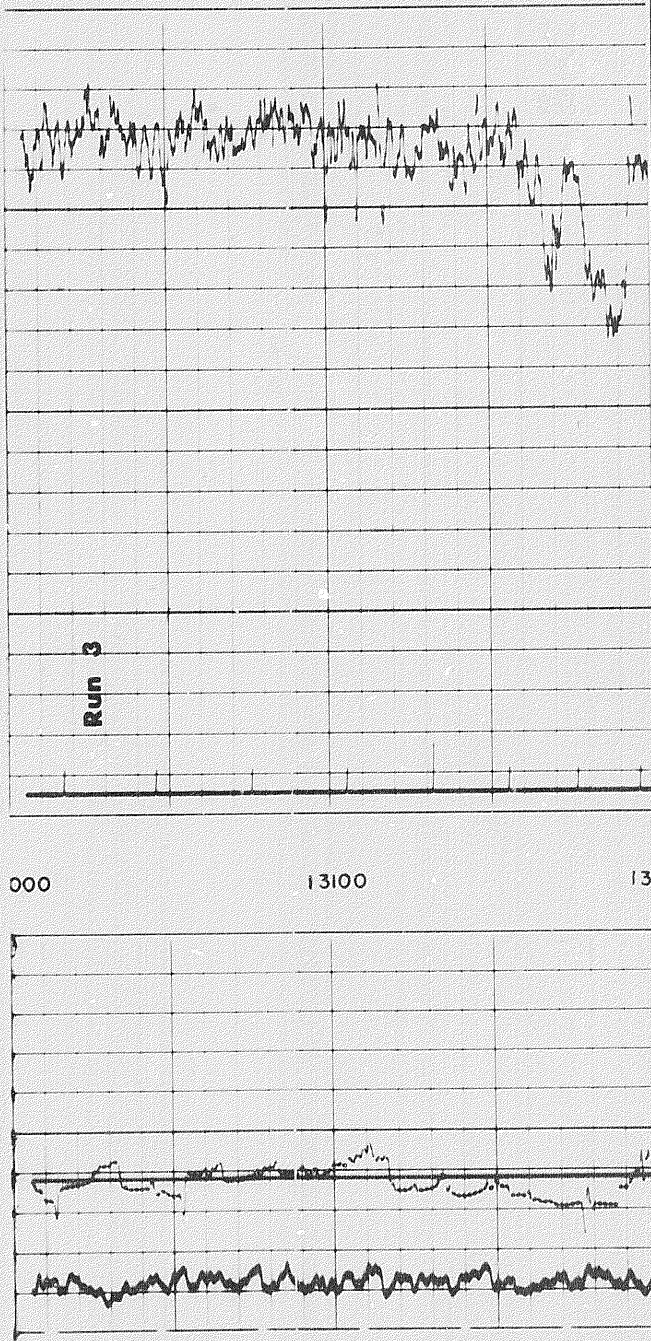
8000



OVERLAP

280/28

OVERLAP



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