

SCHLUMBERGER

COMPENSATED
FORMATION DENSITY LOG
SCHLUMBERGER OF CANADA Calgary Alberta

PROVINCE YUKON TERRITORIES
FIELD WILDCAT
WELL IOE BLOW RIVER YT
E47-68-50-137-15
COMPANY IMPERIAL OIL ENTERPRISES LTD.

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WELL IOE BLOW RIVER YT
E47-68-50-137-15
FIELD WILDCAT
PROVINCE YUKON TERRITORIES
LOCATION 68° 46' 20" N LAT.
137° 27' 13" W LONG.
Permanent Datum GL Elev. 368
Log Measured From KB 16 Ft. Above Perm. Datum
Other Services: DIL, SLC=GR, CIS, SNP=GR, HOT
ELEV: KB 384
GL 368
CBE

Date	Run No.	First Reading	Last Reading	Feet Measured	Depth Reached	Bottom Driller	Csg. Driller	Mud Nature	Dens. Visc.	Water Loss	Res. Rmf	Rms @ BHT	Rms ppm-Cl	Source to Detector	Spacing	Equipment Type	Oper. Rig Time	Truck No.	Recorded By	Witness
22 JUNE 70	ONE	4139	781	3358	4140	4132	781	GEL	9.5	10.0	2.05 @ 65 %	1.78 @ 64 %	1.15 @ 92 %	12 1/4"	16"	PGT-D	3 HRS	OSU-C 363 REM	KAPJACK	
27 AUG 70	TWO	9986	4048	5938	9987	10027	4048	GEL	9.1	9.5	2.44 @ 44 %	1.91 @ 43 %	0.67 @ 161 %	12 1/4"	16"	PGS-E	-	OSU-C 363 REM	MACRAE	
9 NOV 70	THREE	14004	9999	4005	14005	14000	9999	GEL	8.8	9.8	3.24 @ 60 %	3.55 @ 60 %	1.01 @ 218 %	9 5/8"	16"	PGS-E	4 HRS	OSU-C 363 REM	MACRAE	

24 NOV 1970 CAL KM

REMARKS
Drilling Stopped 0600 / 22nd : Circulation Stopped 0800 / 22nd : Tool on Bottom 1430 / 22nd : 1st Run Service Order # 2942
RUN 2 1700 / 26th B.H.T. 92 °F
168 °F

Panel No.	D 251	D 169
Cartridge No.	A 20	341
Sonde No.	E 90	E 90
Detector No.	D 287	D 399

CALIBRATION:	Background CPS	Test Source CPS	Galvanometer Deflection Div.	Panel Sens. Tap for Cal.
Gamma Ray	35	440	10.0	CAL

RUN 3

REMARKS
Drilling Stopped 2100 / 8th : Circulation Stopped 2300 / 8th : Tool on Bottom 1830 / 9th : 1st Run Service Order # 2942
B.H.T. 218 °F

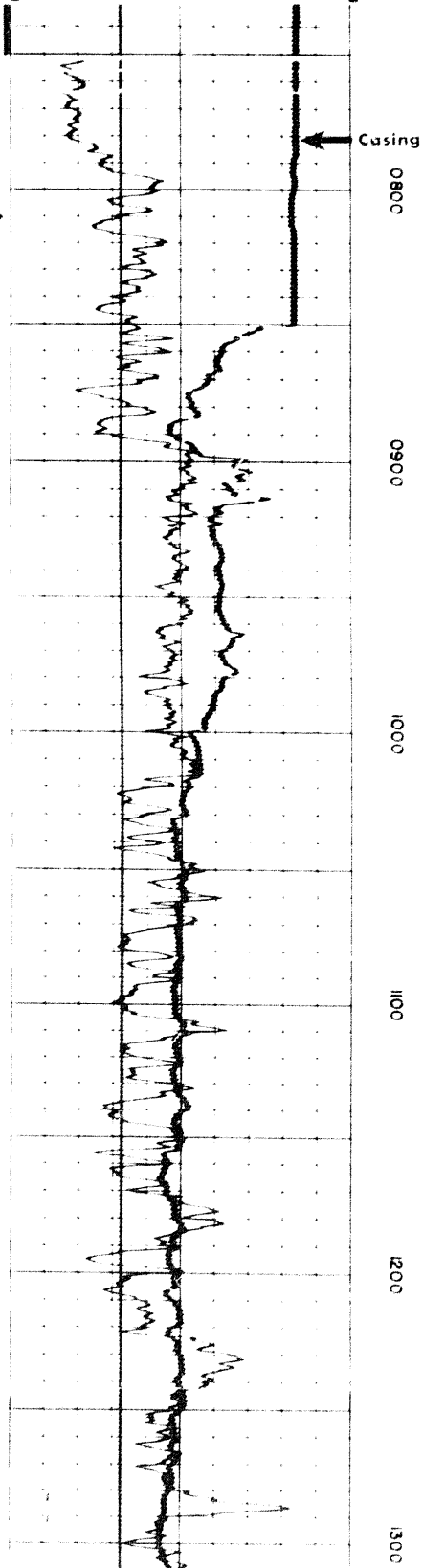
Panel No.	D 169	BOTTOM HOLE TEMPERATURE: THERM. # 1 = 217 °F
Cartridge No.	PGH-A	THERM. # 2 = 219 °F
Sonde No.	E 103	
Detector No.	D 183	

CALIBRATION:	Background CPS	Test Source CPS	Galvanometer Deflection Div.	Panel Sens. Tap for Cal.
Gamma Ray	30	440	10.0	PGP-D

GAMMA RAY API UNITS	DEPTHS	BULK DENSITY P _b - gm/cc
Sans 150 TC 2 Zero 0 div. to left 150 300	2.0	2.5 3.0
CALIPER hole diameter in inches 10 11 12 13 14 15 16 17 18	CORRECTION CURVE CHANGE 4120'	DENSITY CORRECTION Δρ - gm/cc 0.25 0 0.25

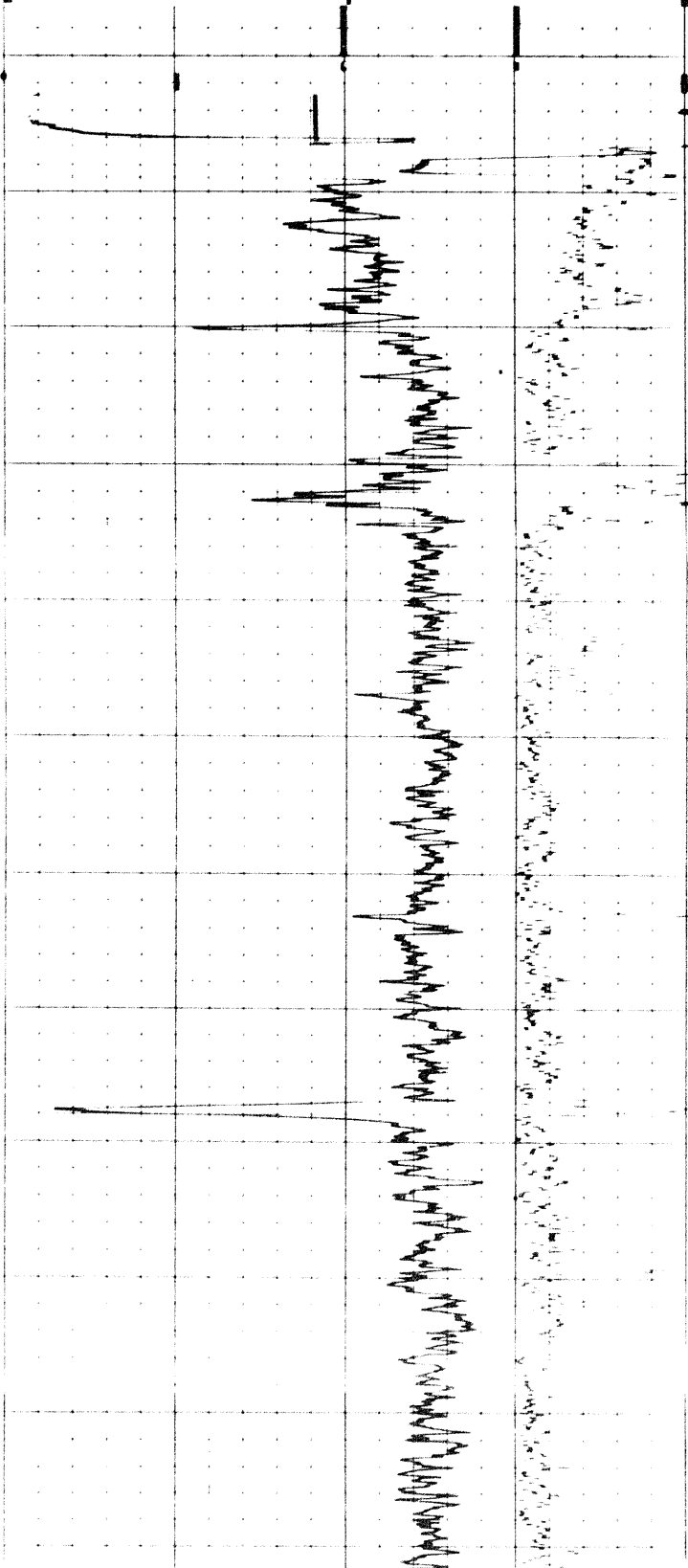
1 of

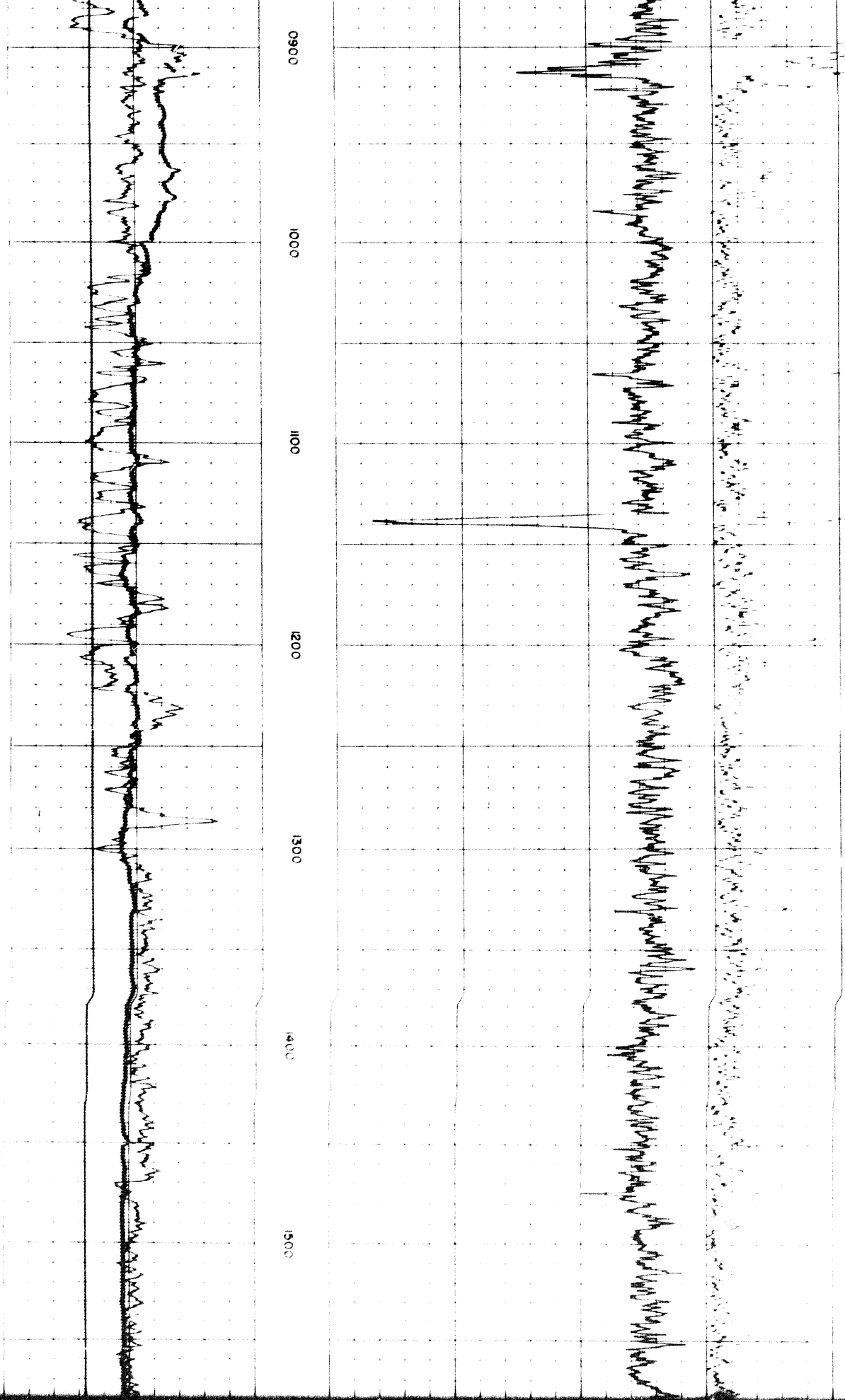
150	300							
CALIPER hole diameter in inches								
10	11	12	13	14	15	16	17	18

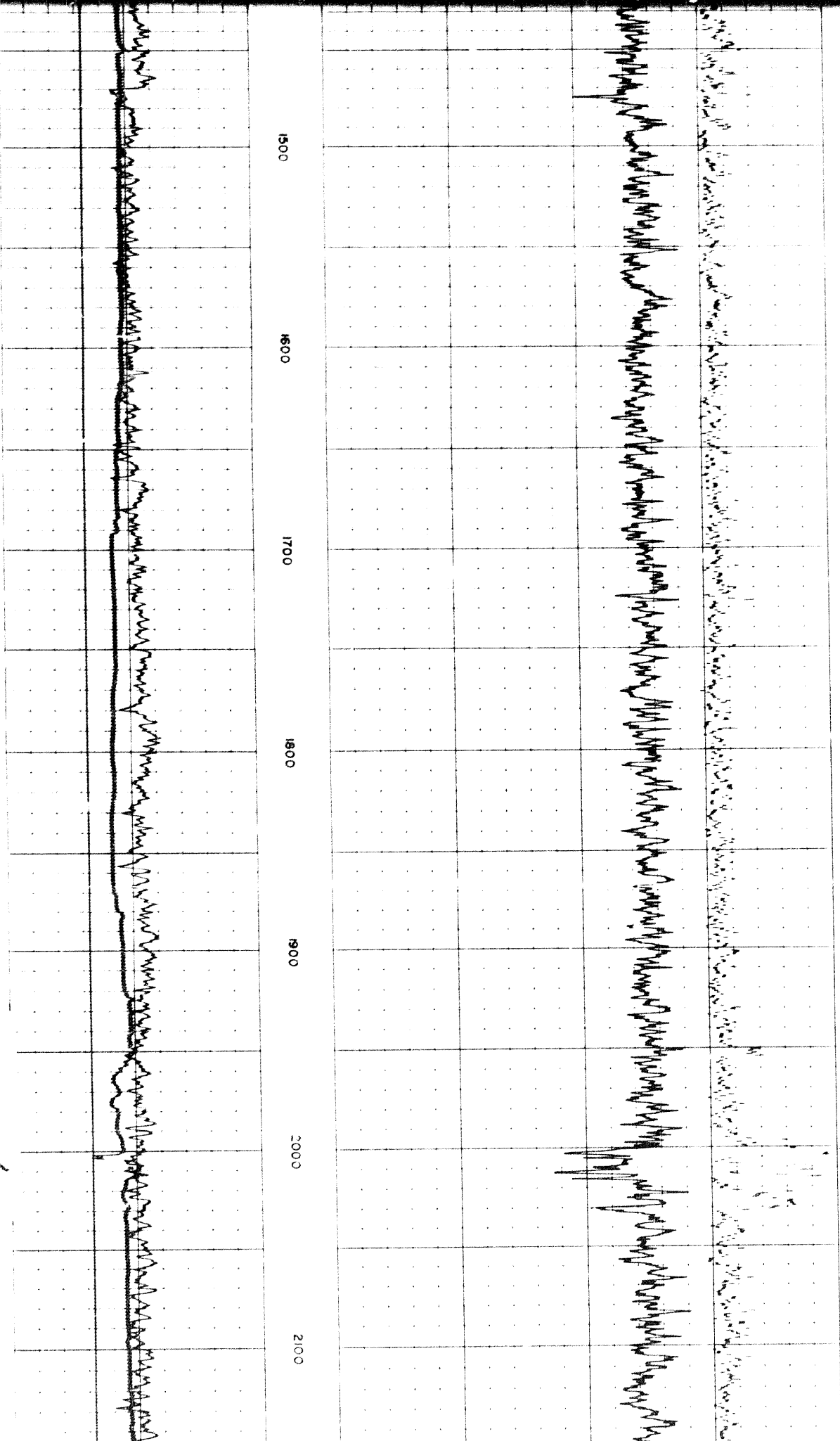


CORRECTION CURVE CHANGE
- 4120'

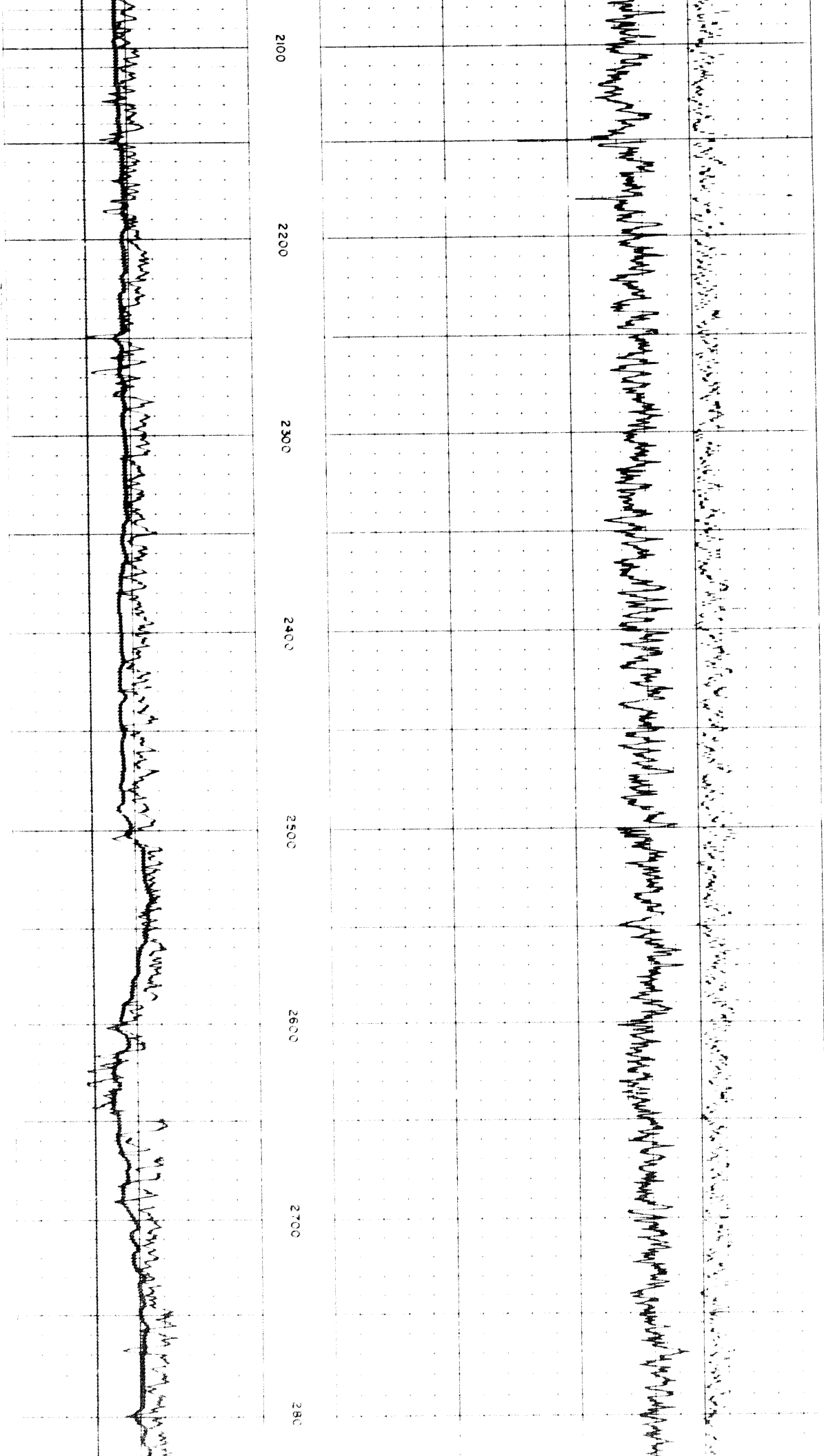
DENSITY CORRECTION $\Delta\rho$ - gm/cc		
0.25 (-)	0	0.25 (+)

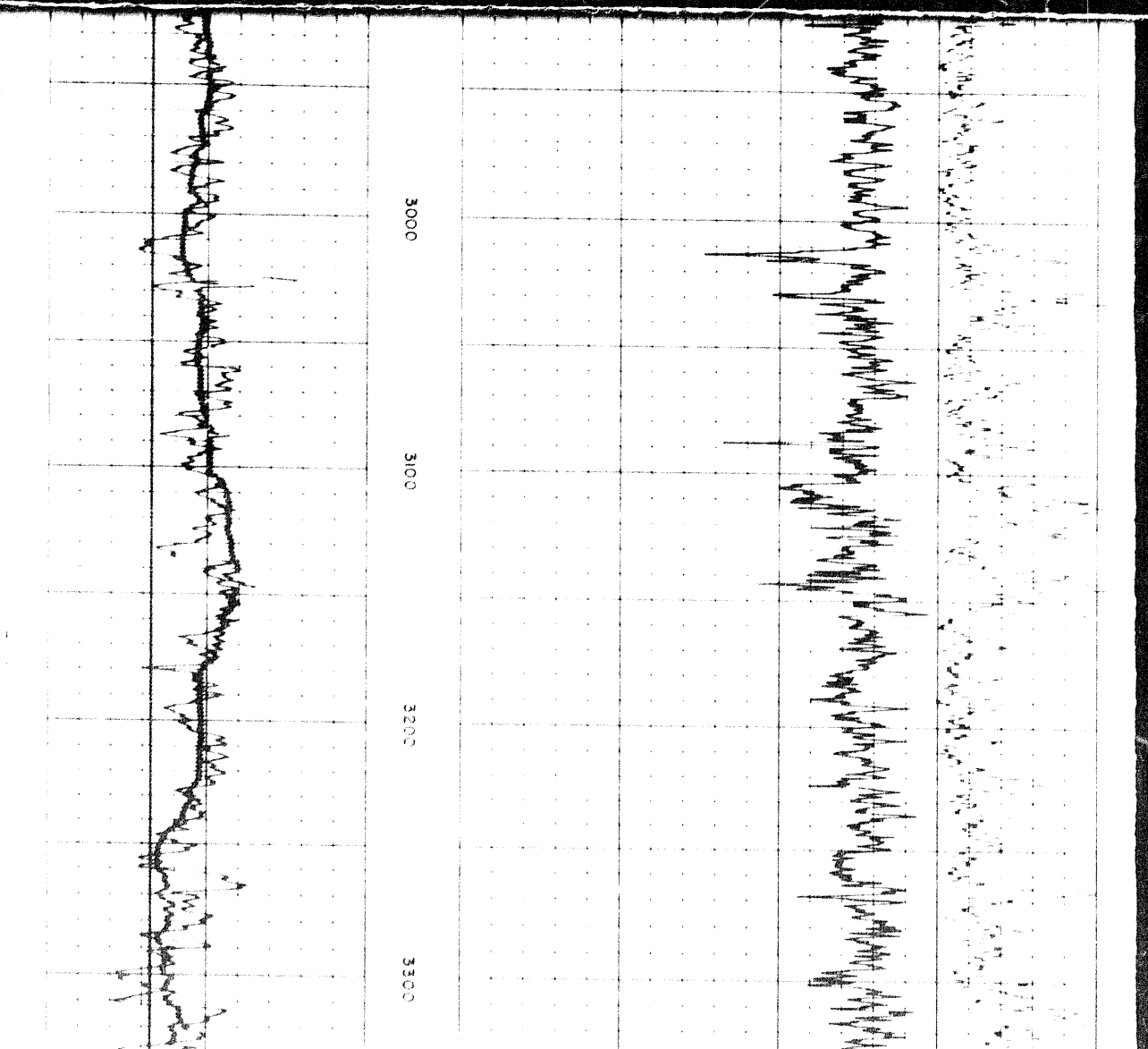
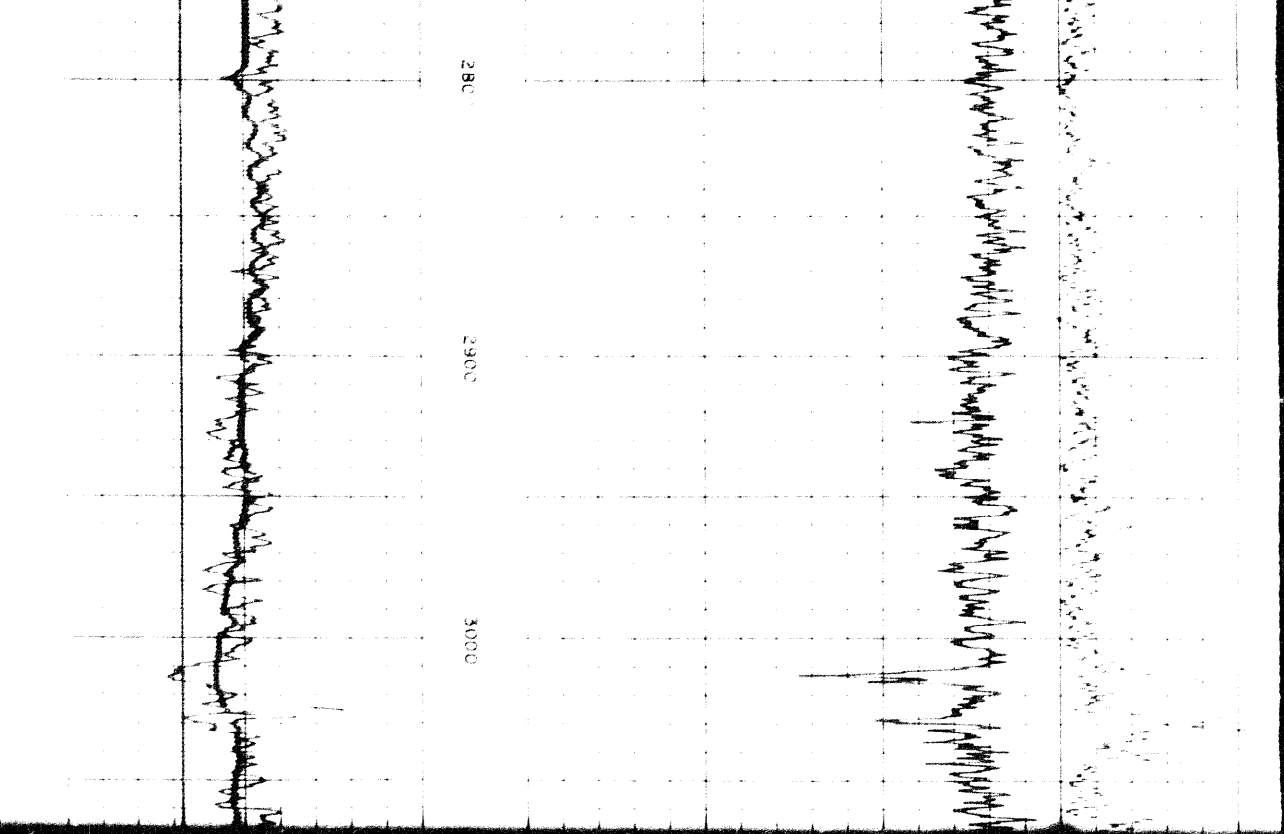


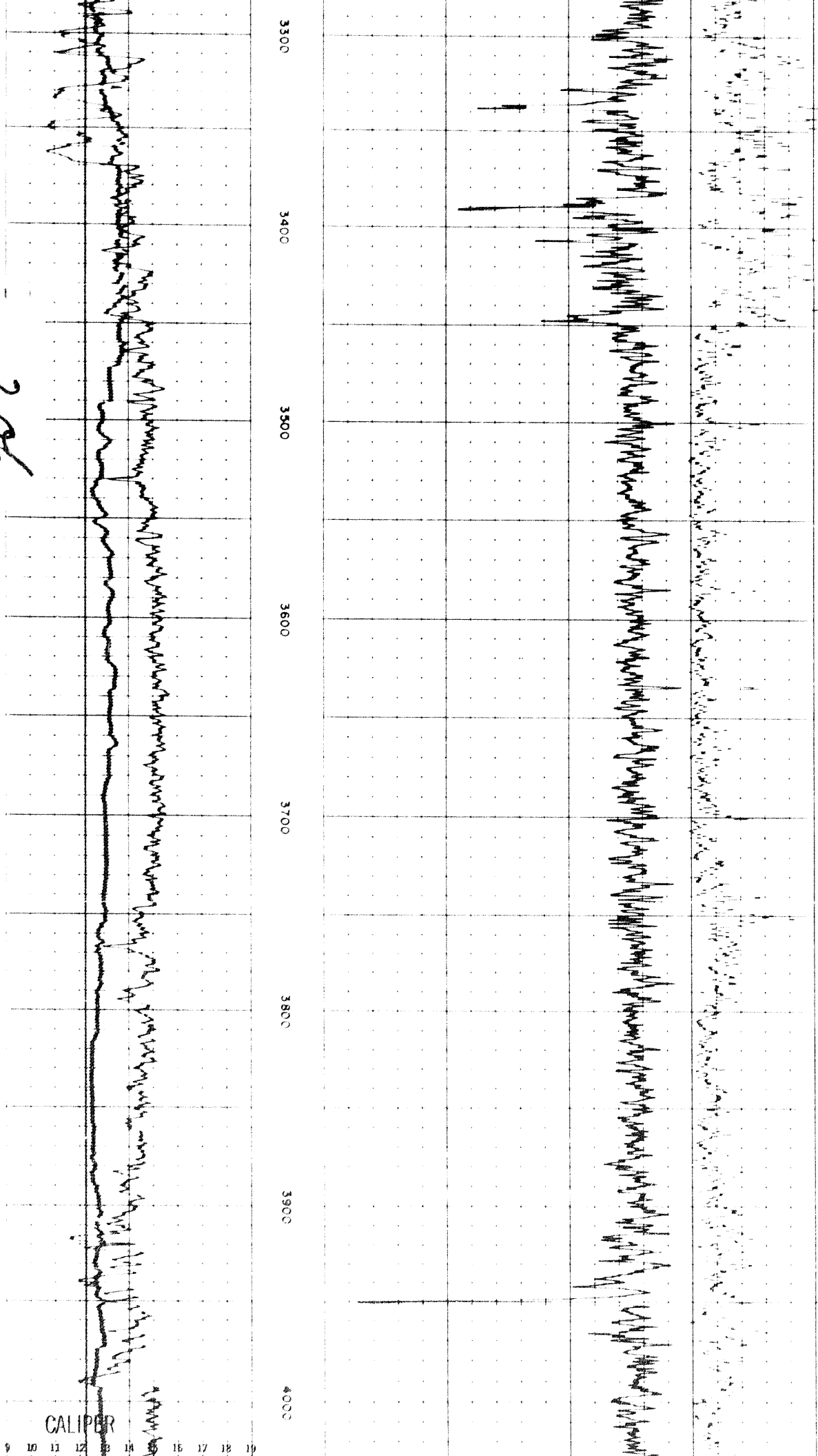




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3 of

CALIPER
9 10 11 12 13 14 15 16 17 18 19

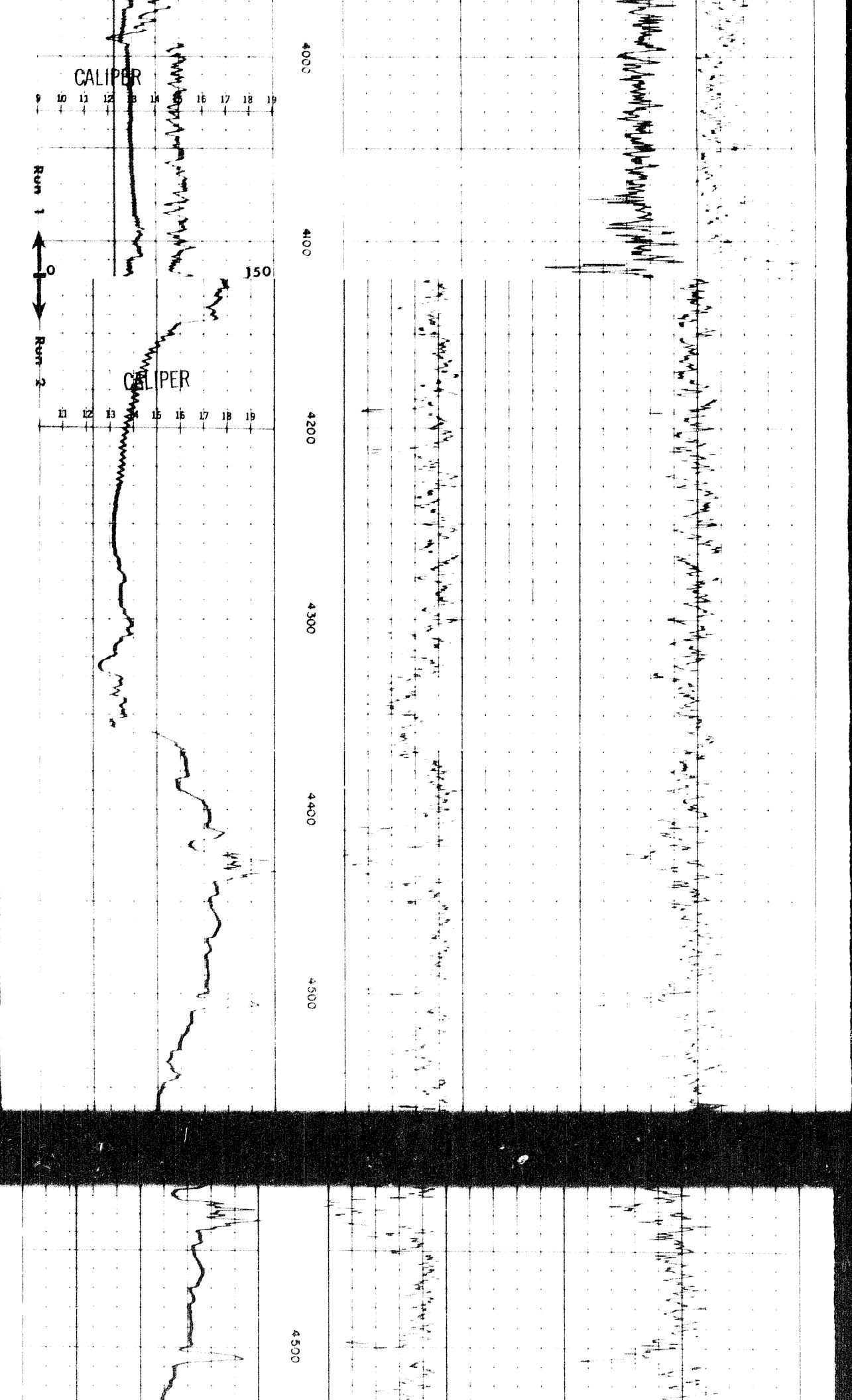
Run 1
0
Run 2

CALIPER
11 12 13 14 15 16 17 18 19

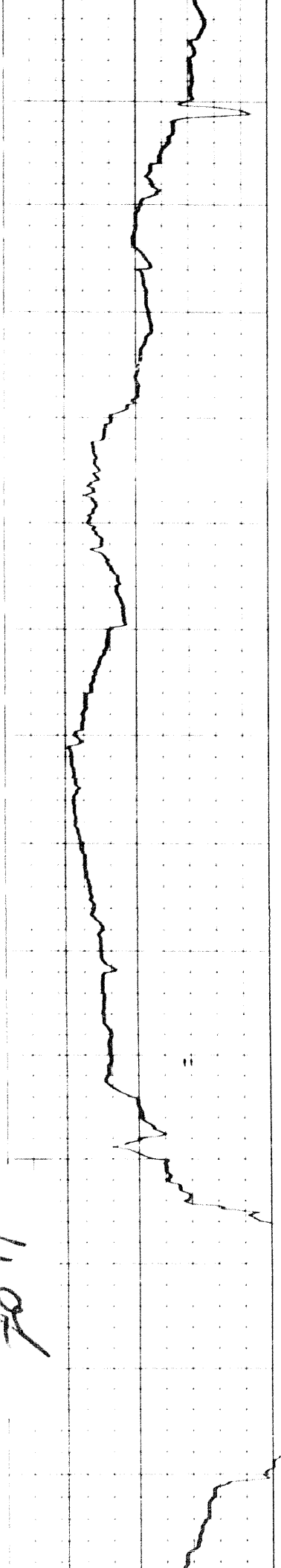
150

4000
4100
4200
4300
4400
4500

4500



4-07



4500

4600

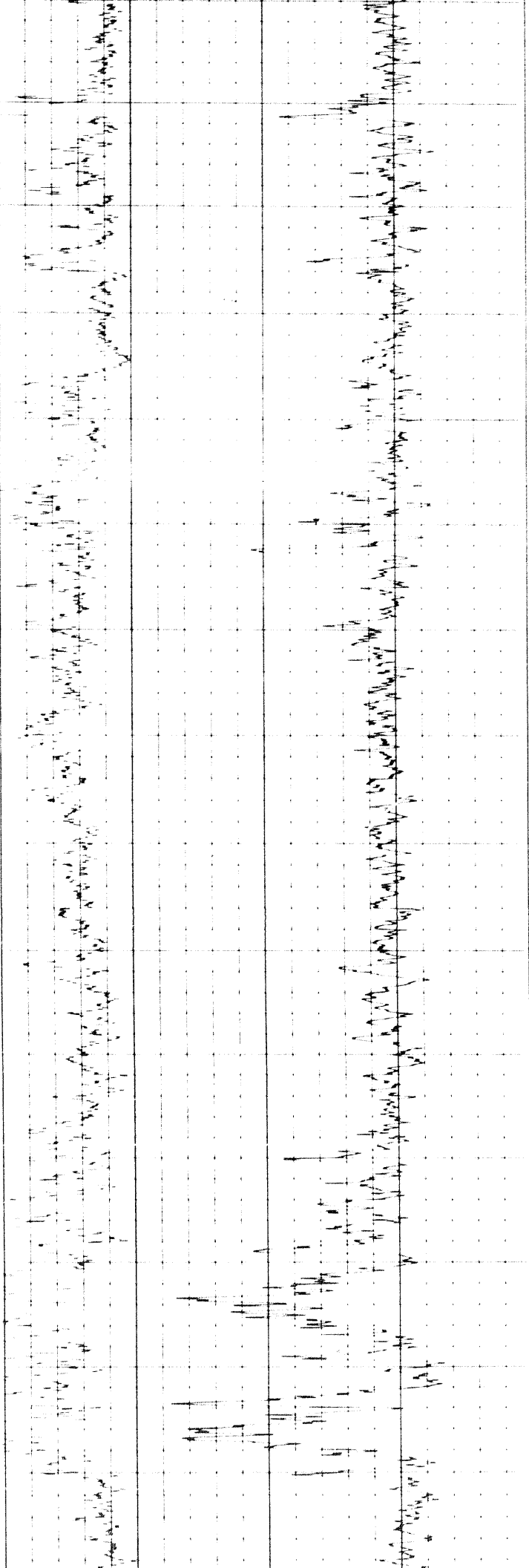
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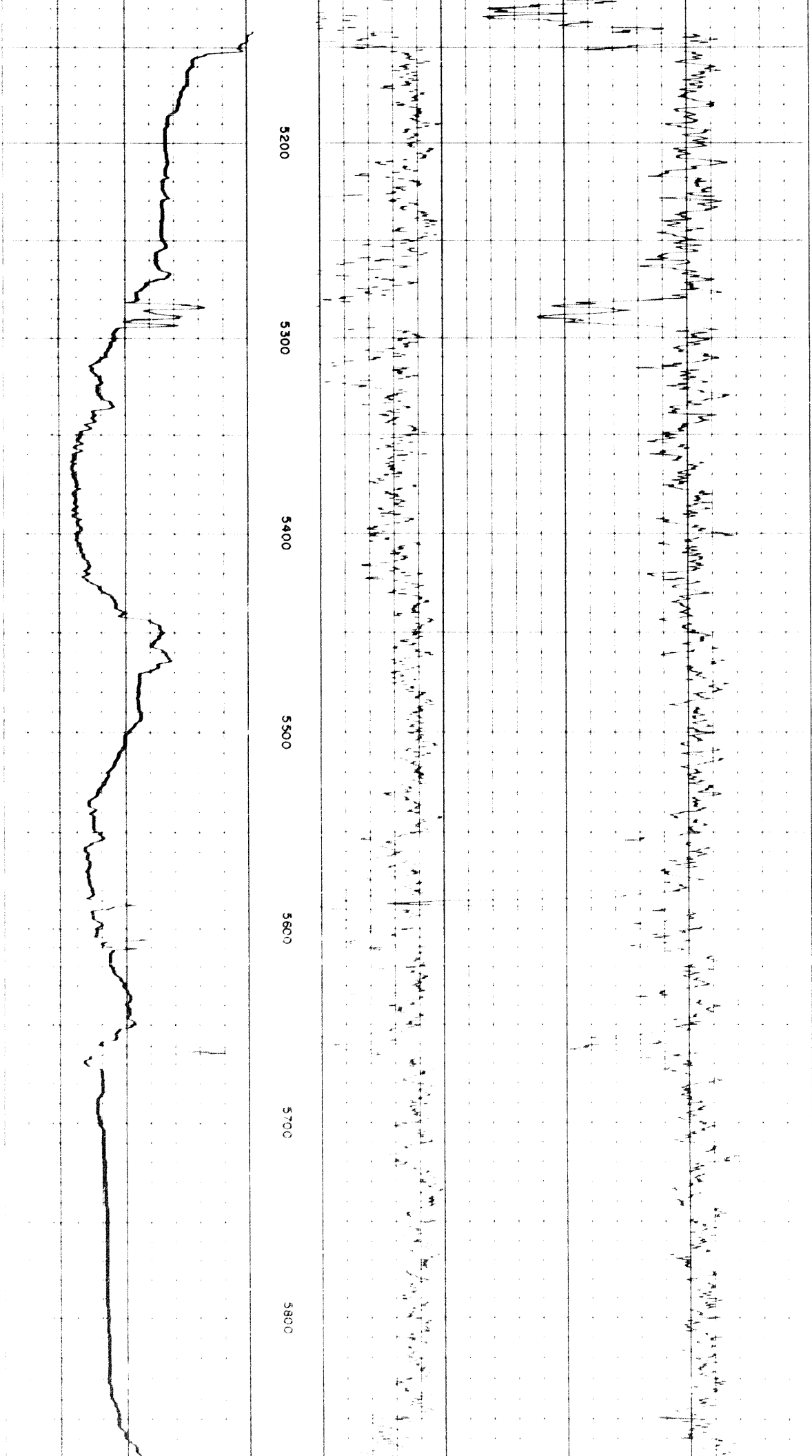
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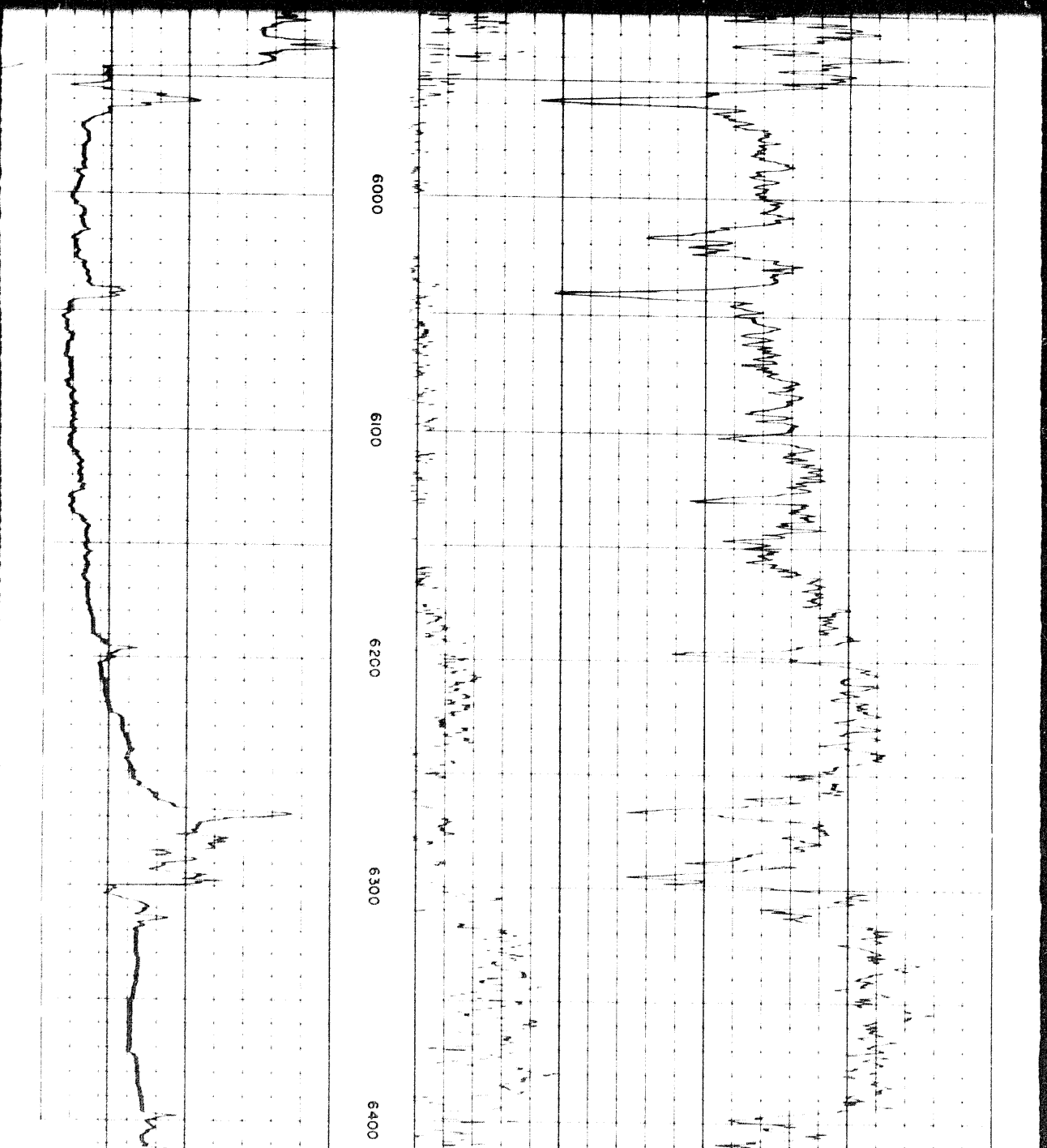
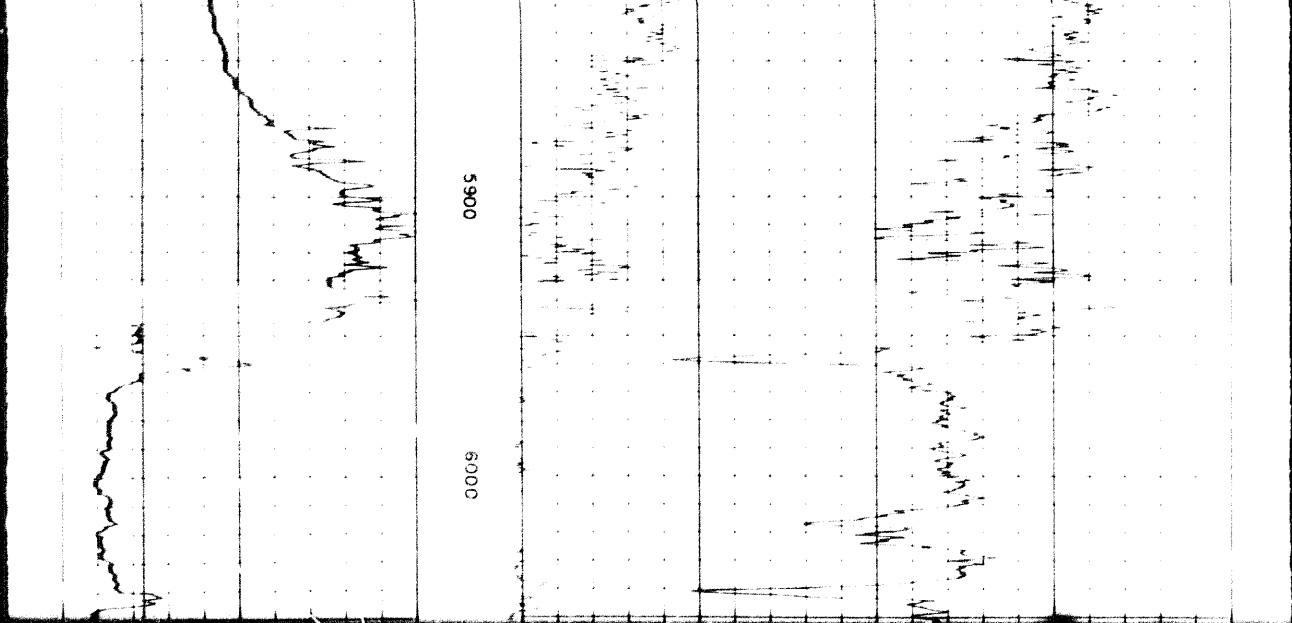
4900

5000

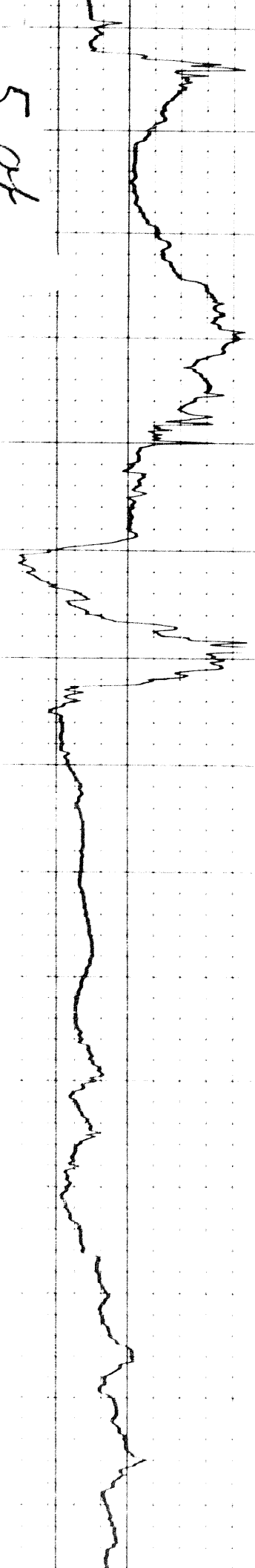
5100



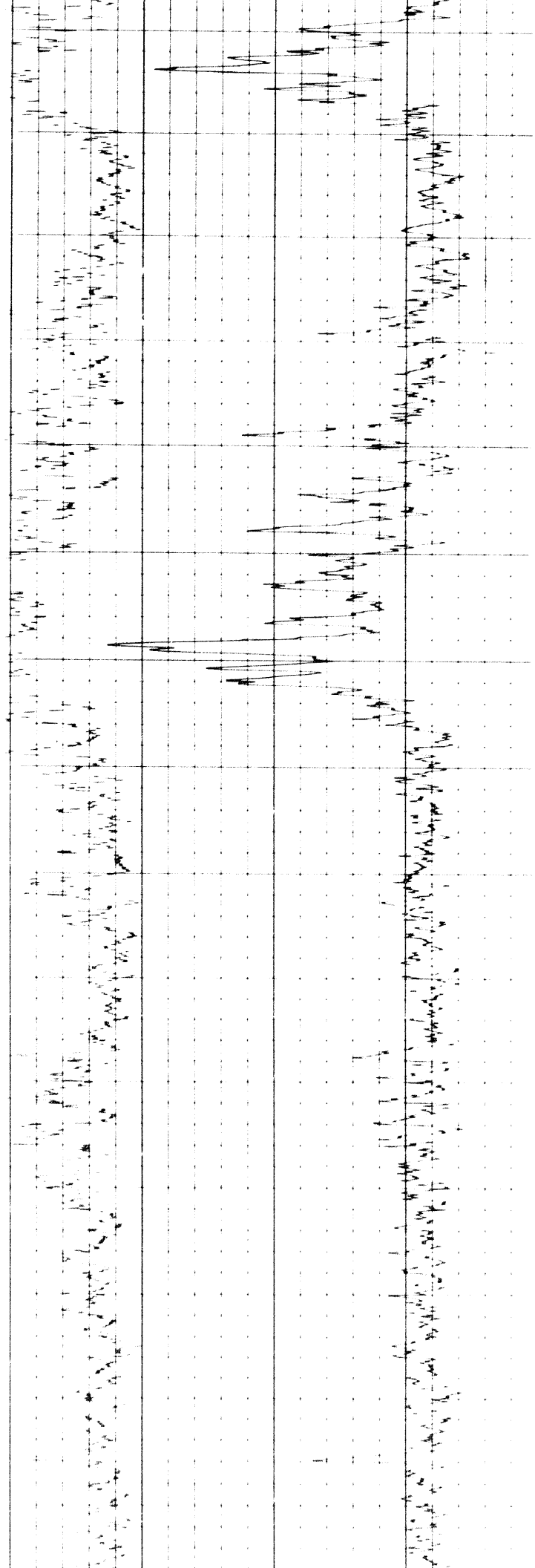


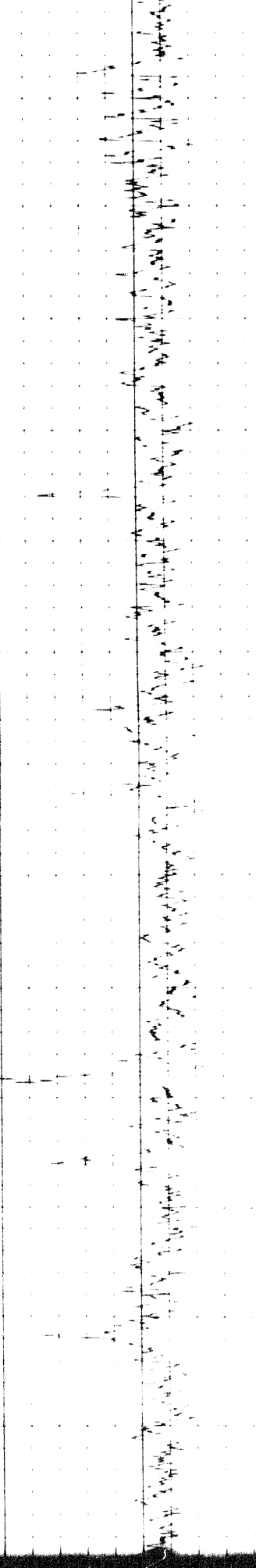


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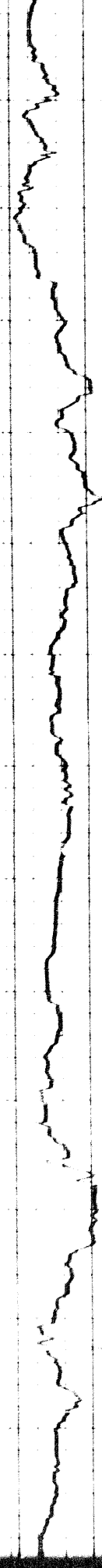
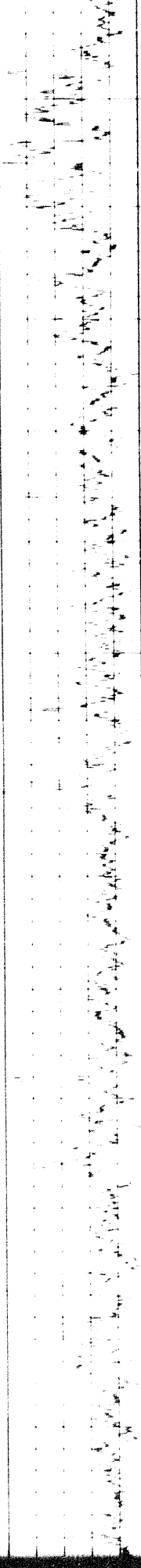


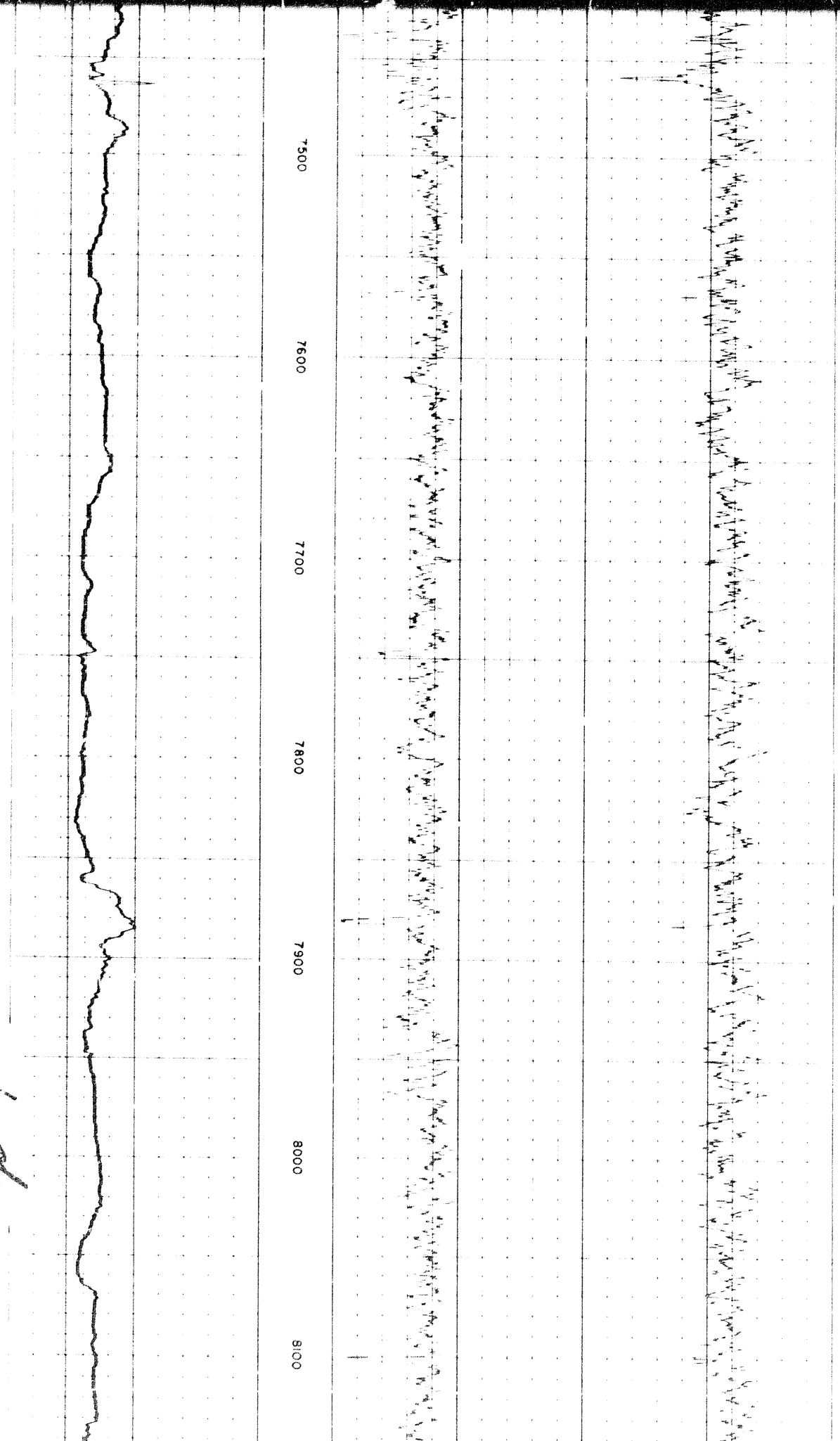
6400 6500 6600 6700 6800 6900 7000 7100





6900 7000 7100 7200 7300 7400 7500





7500

7600

7700

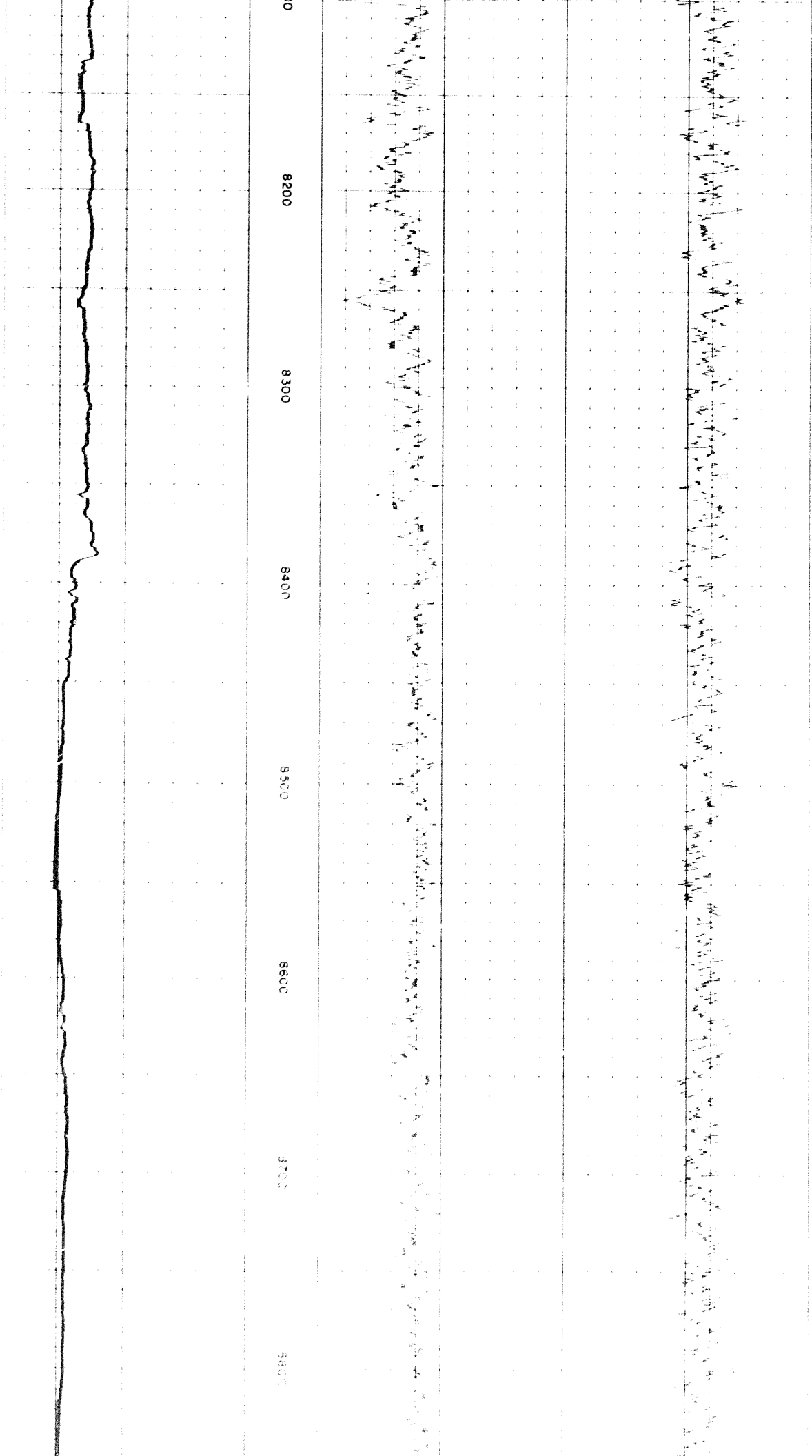
7800

7900

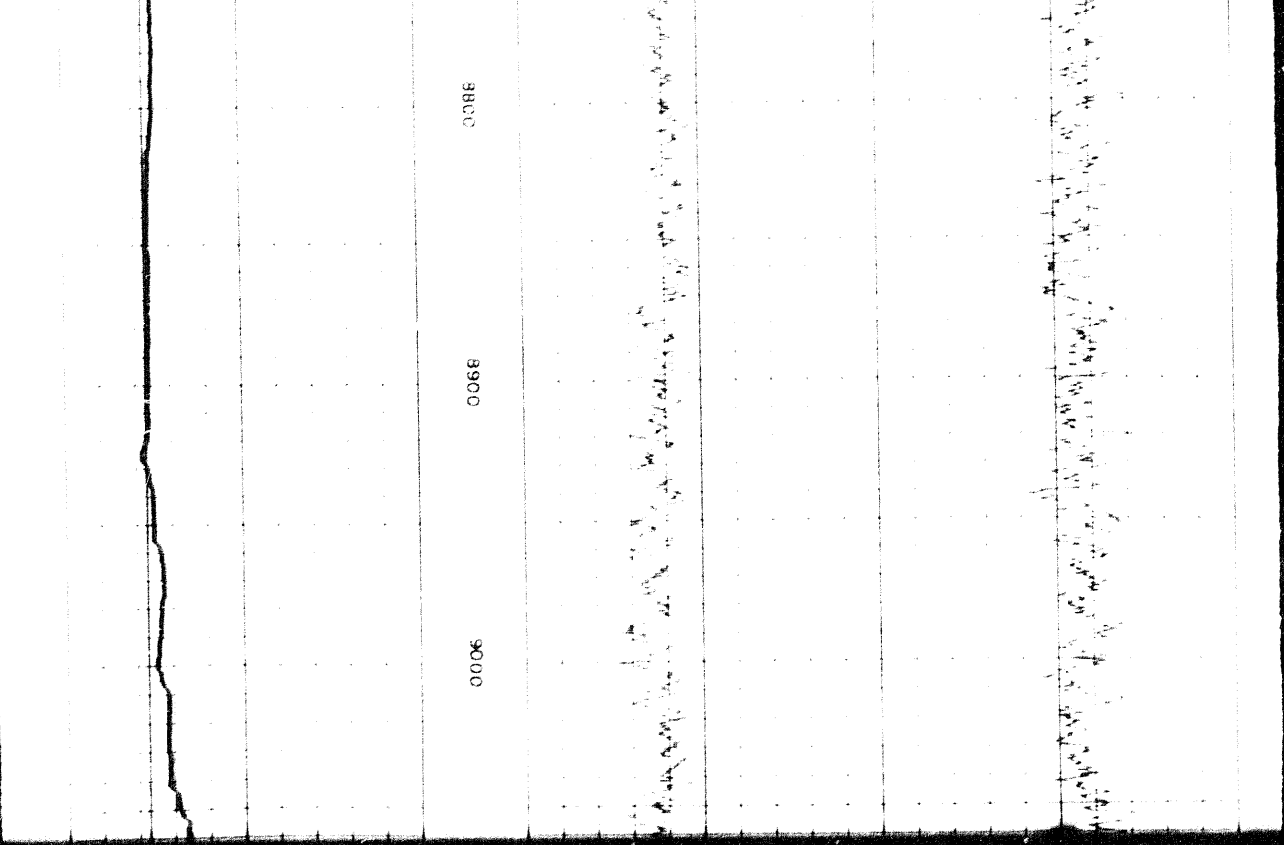
8000

8100

6 of



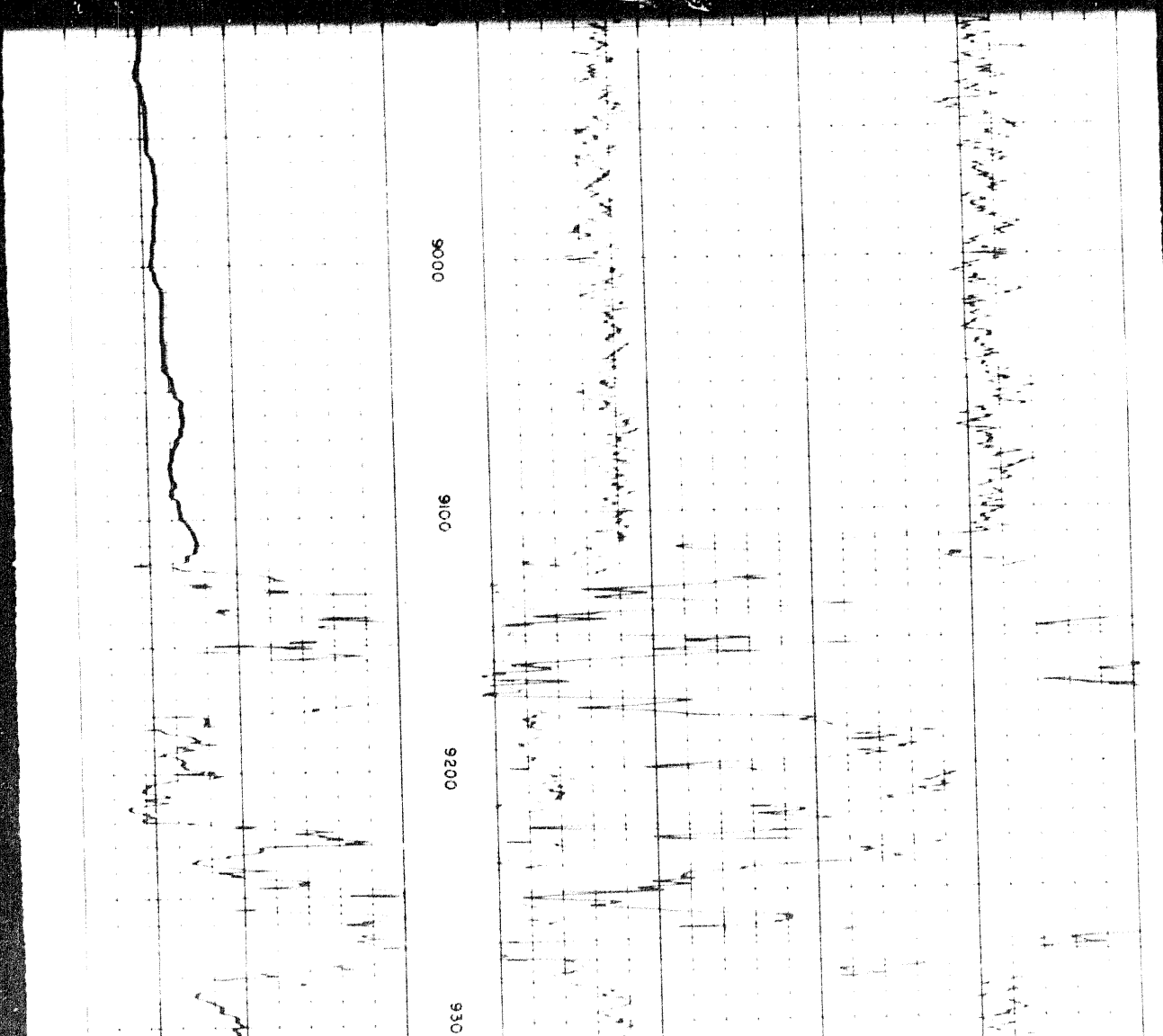
0 8200 8300 8400 8500 8600 8700 8800



8800

8900

9000



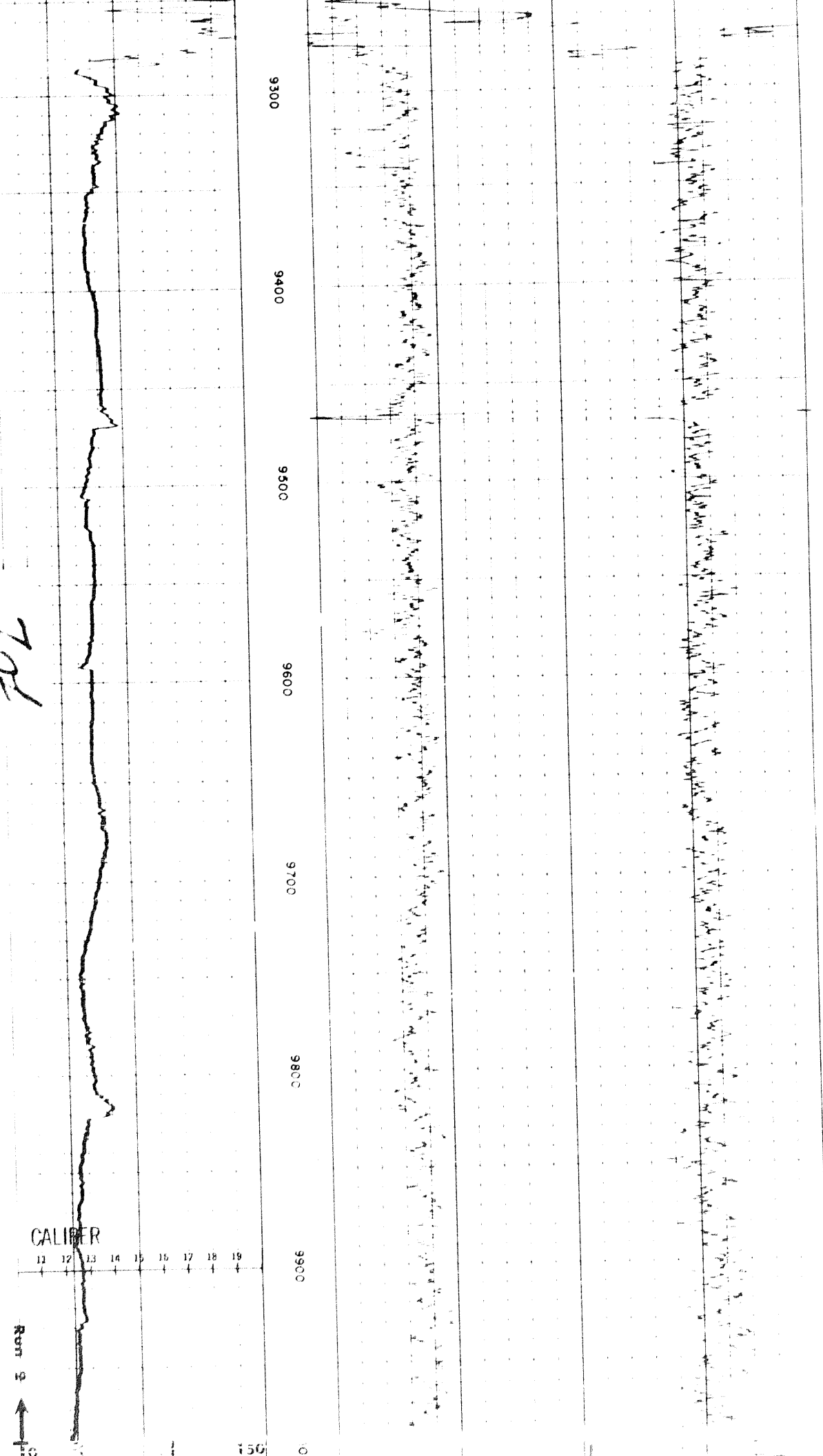
9000

9100

9200

930

707



150 10

CALIPER

13 12 11 10 9 8 7 6 5 4 3 2 1

Run 2



Run 3

4 5 6 7 8 9 10 11 12 13

CALIPER

150

Case

9900

10000

10100

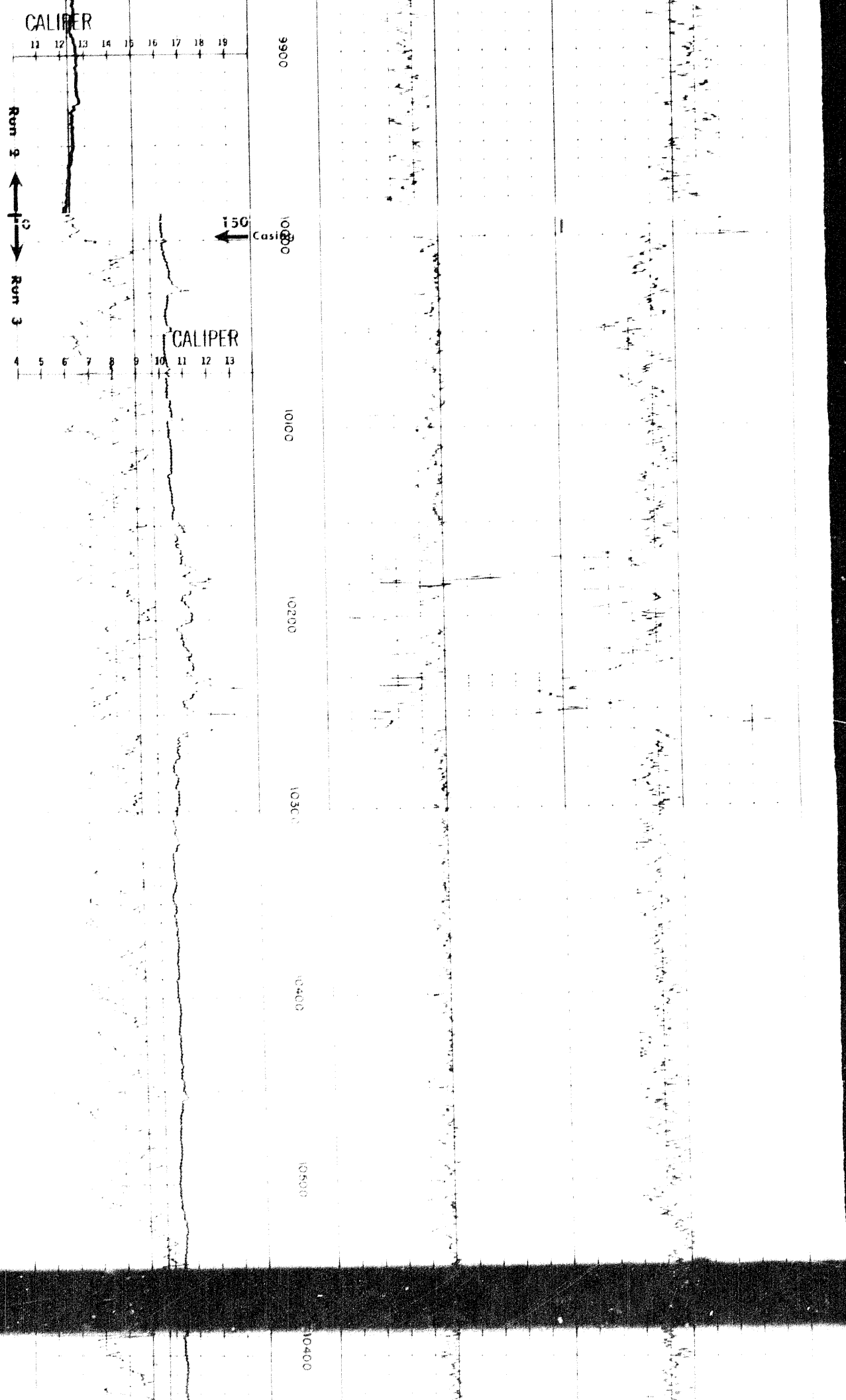
10200

10300

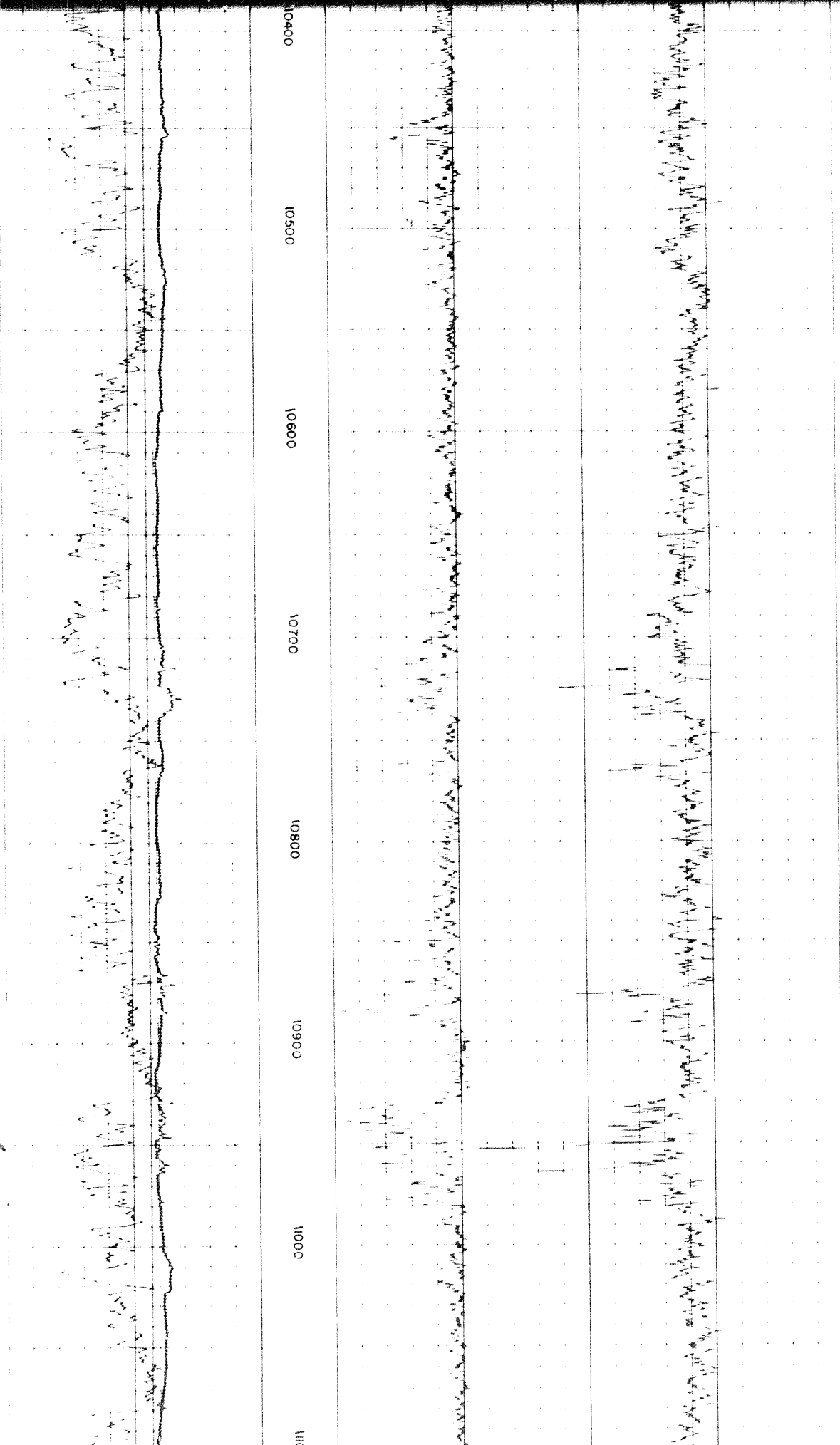
10400

10500

10600

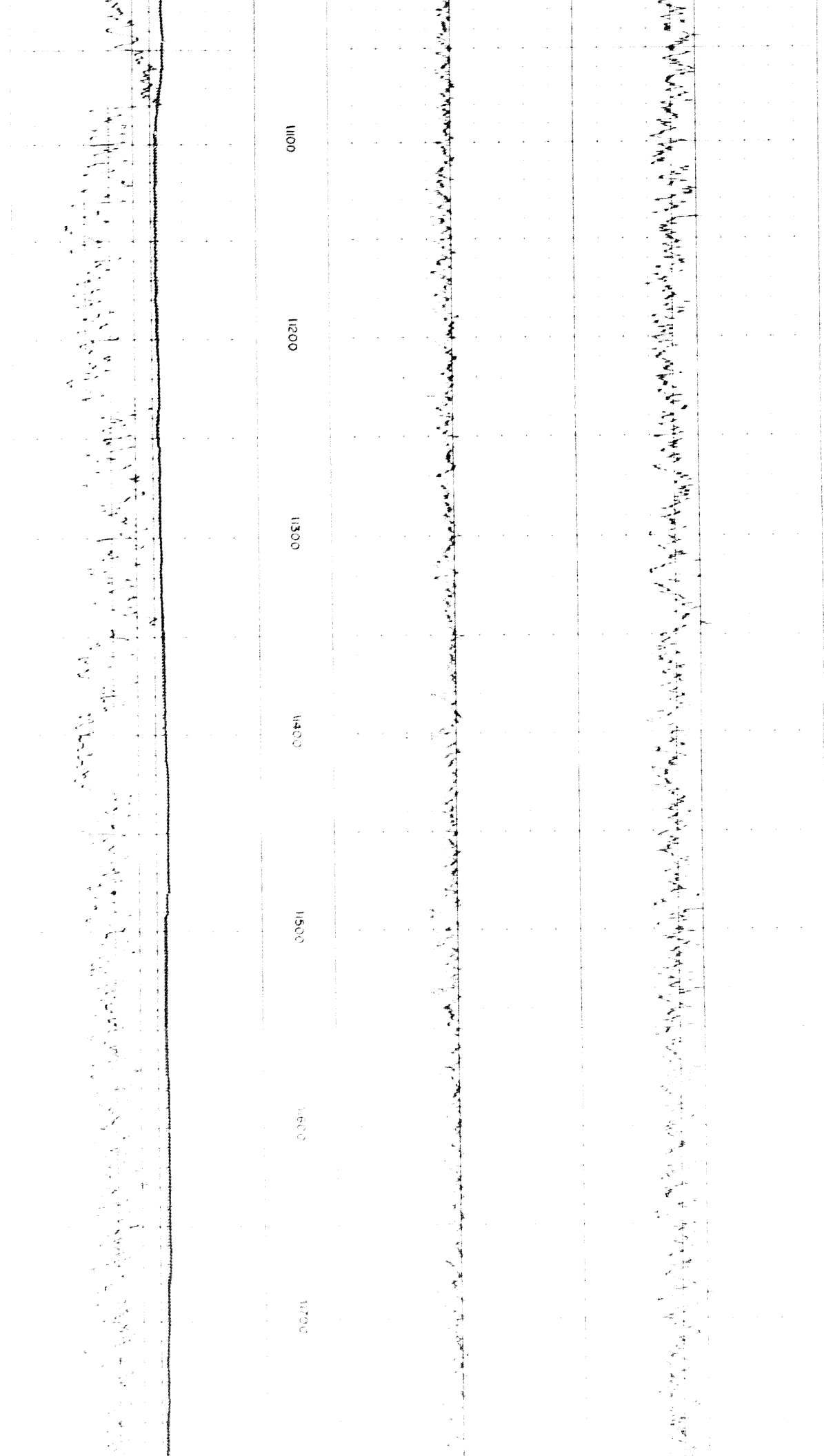


897



10400 10500 10600 10700 10800 10900 11000

100



11700

11800

11900

12000

11900

12000

12100

12200

pat

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12400

12500

12600

12700

12800

12900

12900

13000

13100

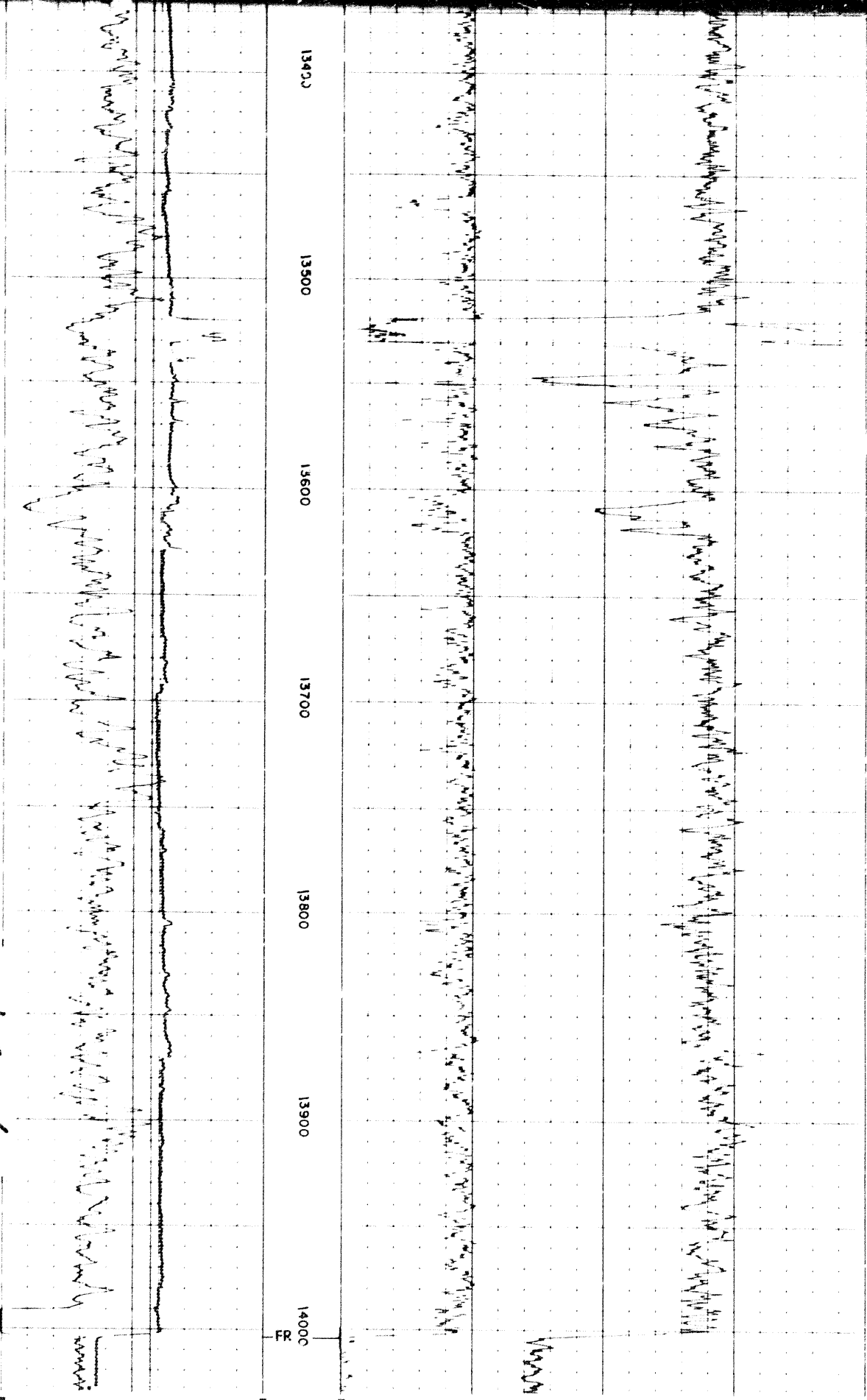
13200

13300

13400

13500

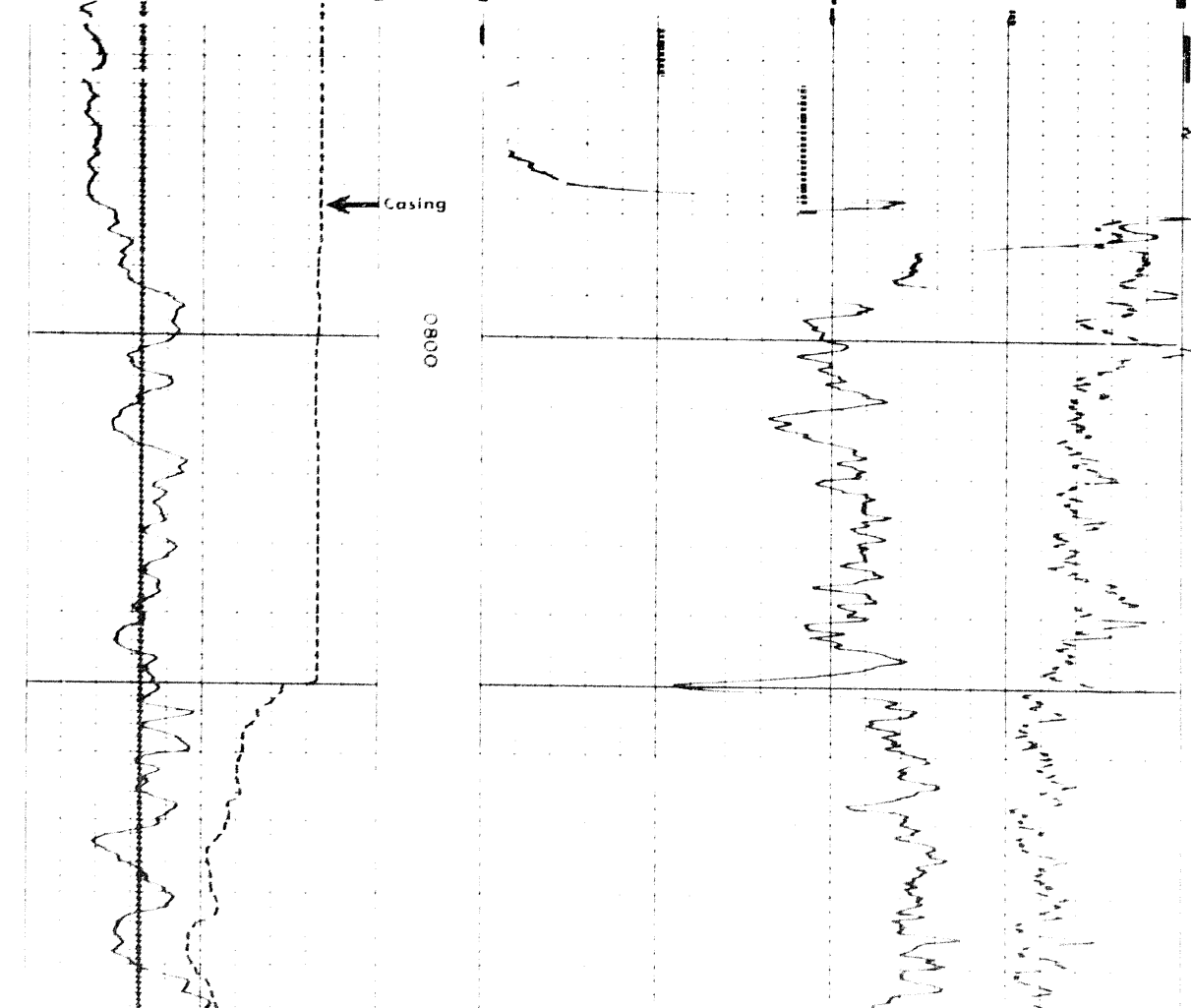
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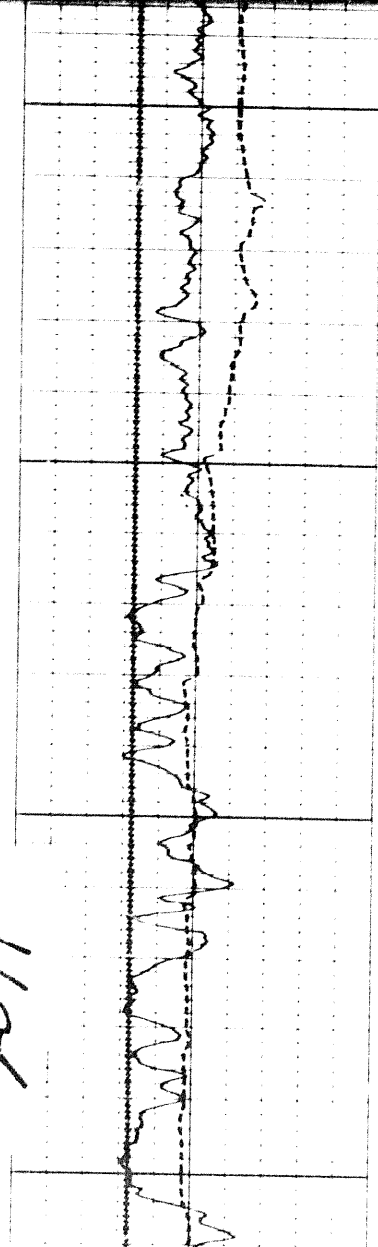
5 6 7 8 9 10 11 12 13 CALIPER hole diameter in inches		(+) 0.25 0 0.25 (-) DENSITY CORRECTION $\Delta\rho$ - gm/cc	
Sens. 150 T.C. 2 Zero 0 div. to left 0 150 150 300		2.0 2.5 3.0	
GAMMA RAY API UNITS		DEPTHS	BULK DENSITY ρ_b - gm/cc

DETAIL LOG
5' = 100' RUN 1

GAMMA RAY API UNITS		DEPTHS	BULK DENSITY ρ_b - gm/cc
Sens. 150 T.C. 2 Zero 0 div. to left 0 150 150 300		2.0 2.5 3.0	
CALIPER hole diameter in inches 10 11 12 13 14 15 16 17 18		DENSITY CORRECTION $\Delta\rho$ - gm/cc (-) 0.25 0 0.25 (+)	

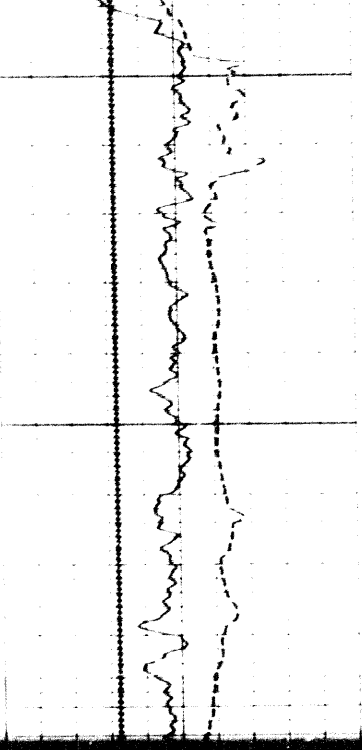
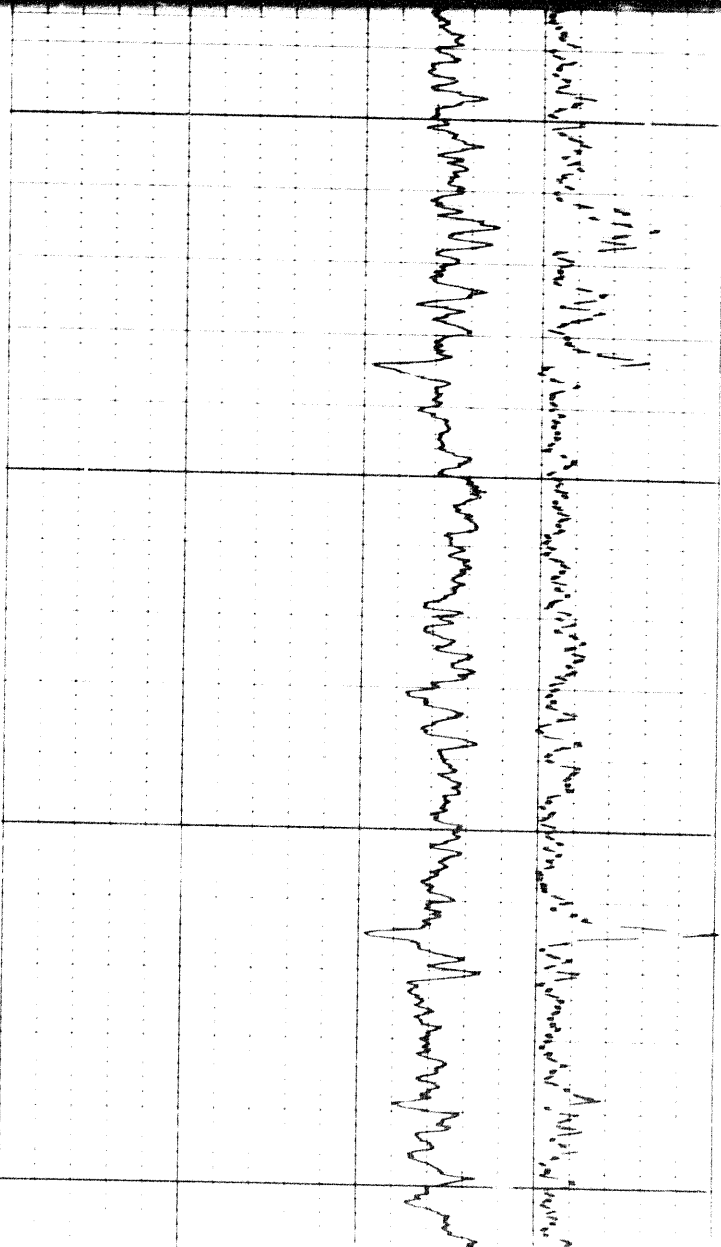


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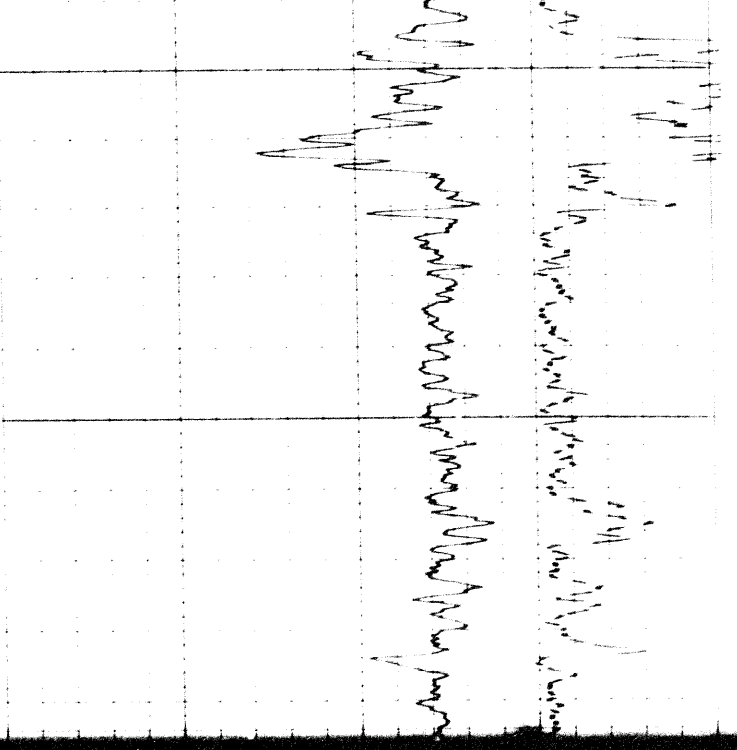


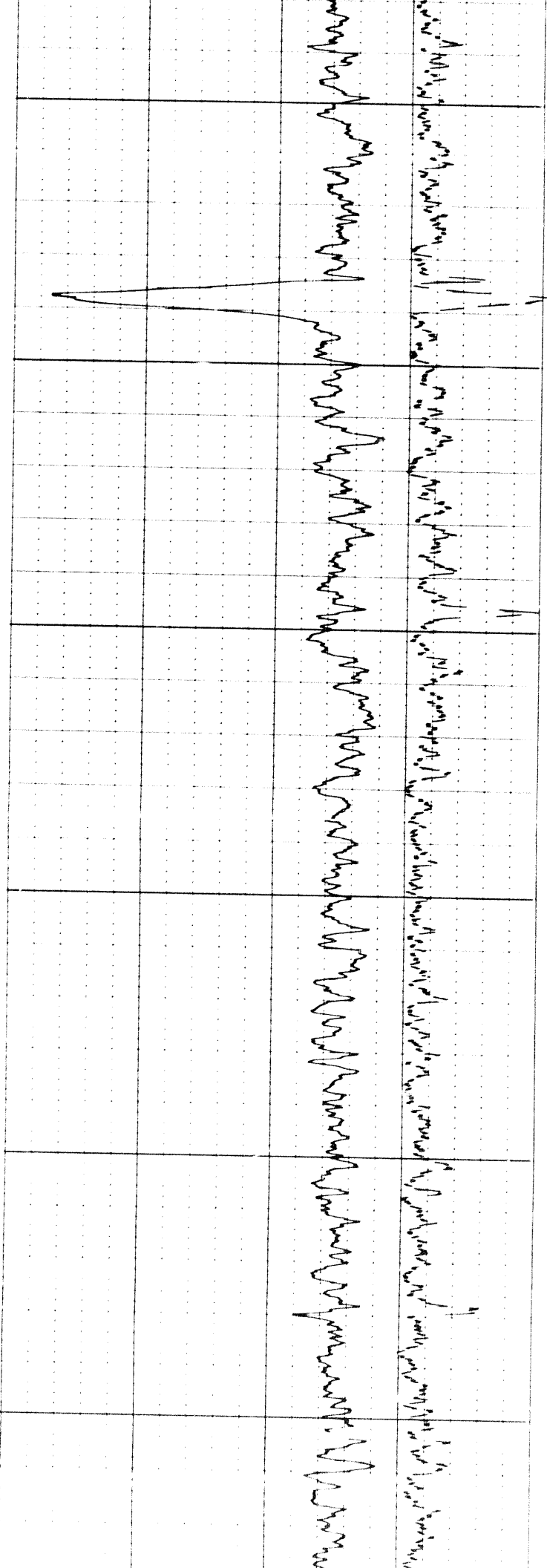
0011

0000



0060

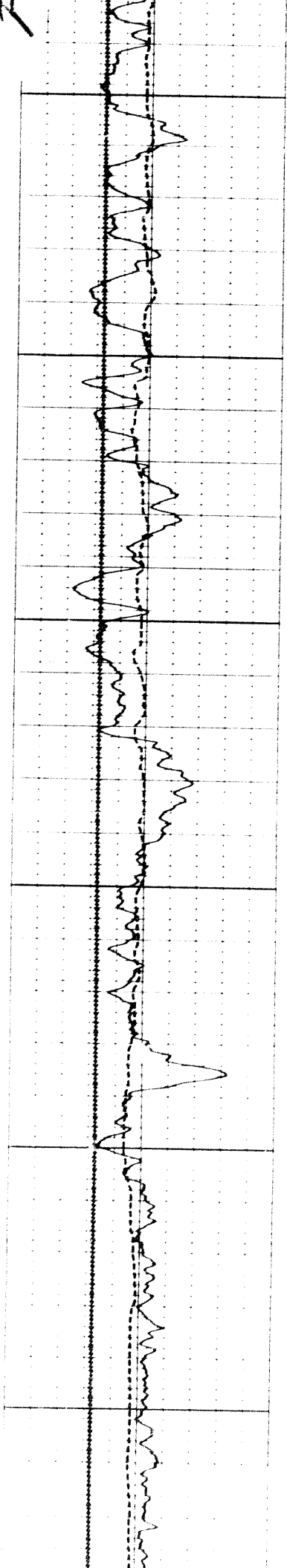


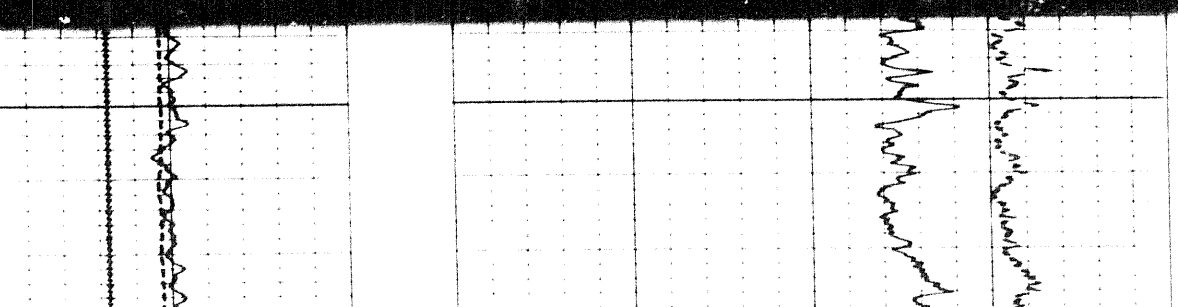
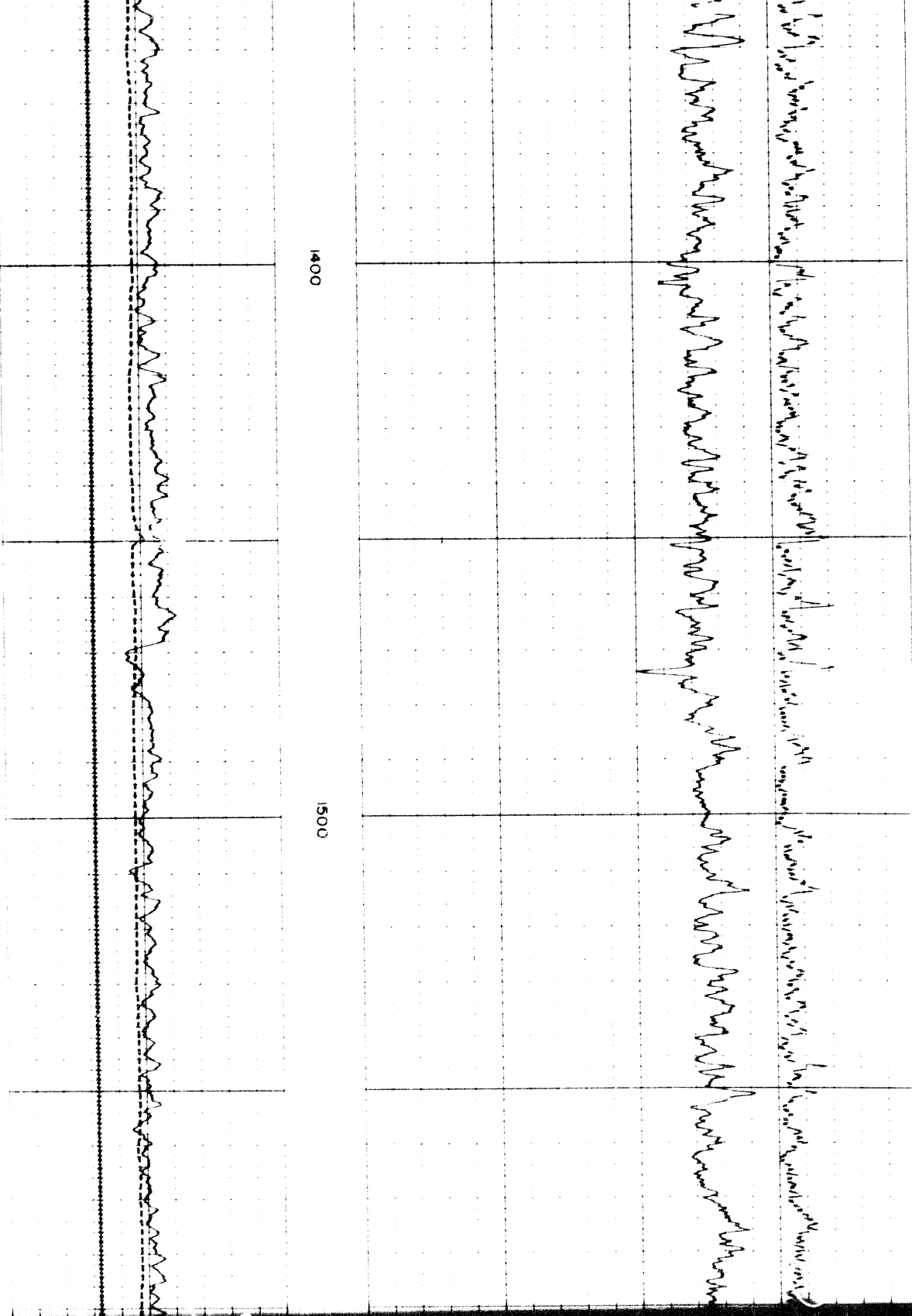


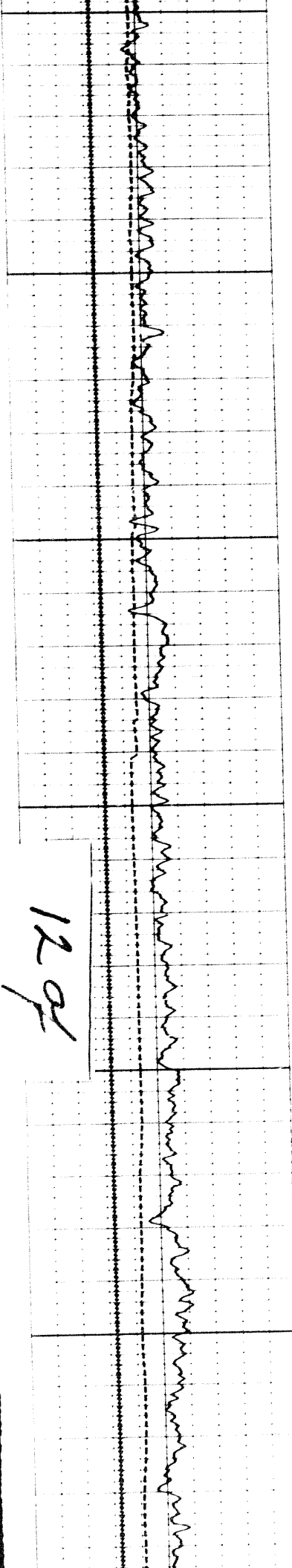
1100

1200

1300



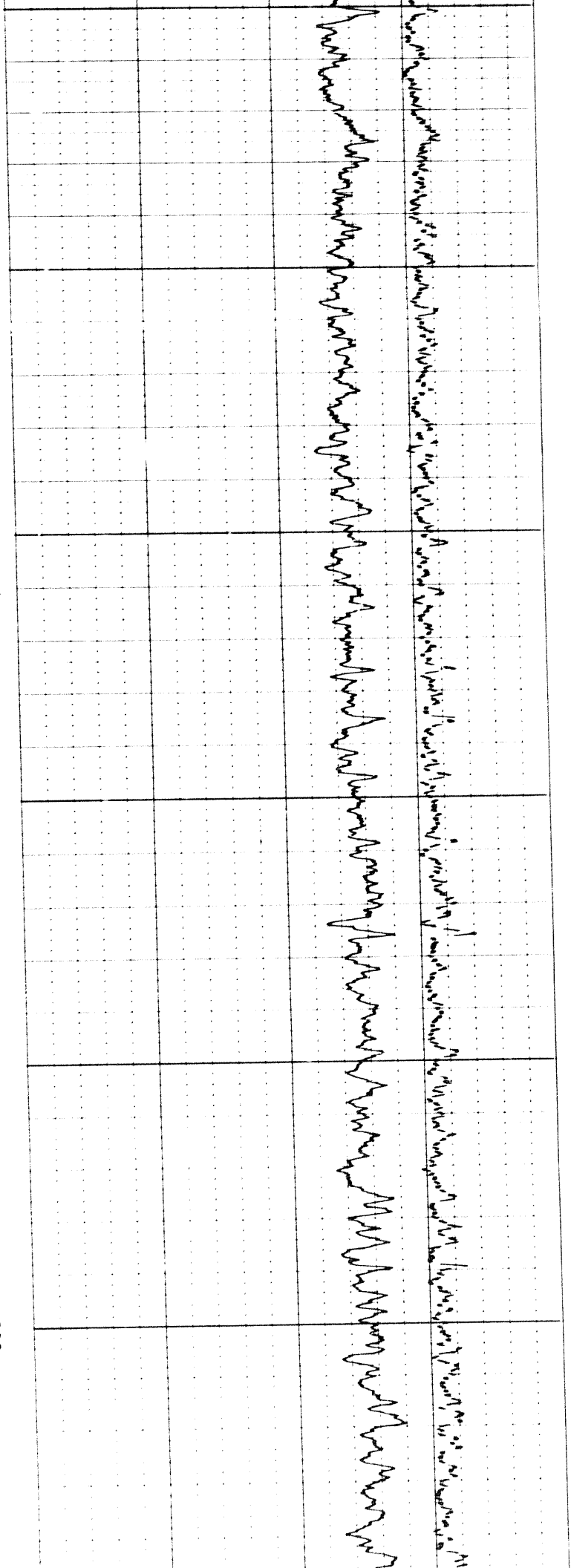


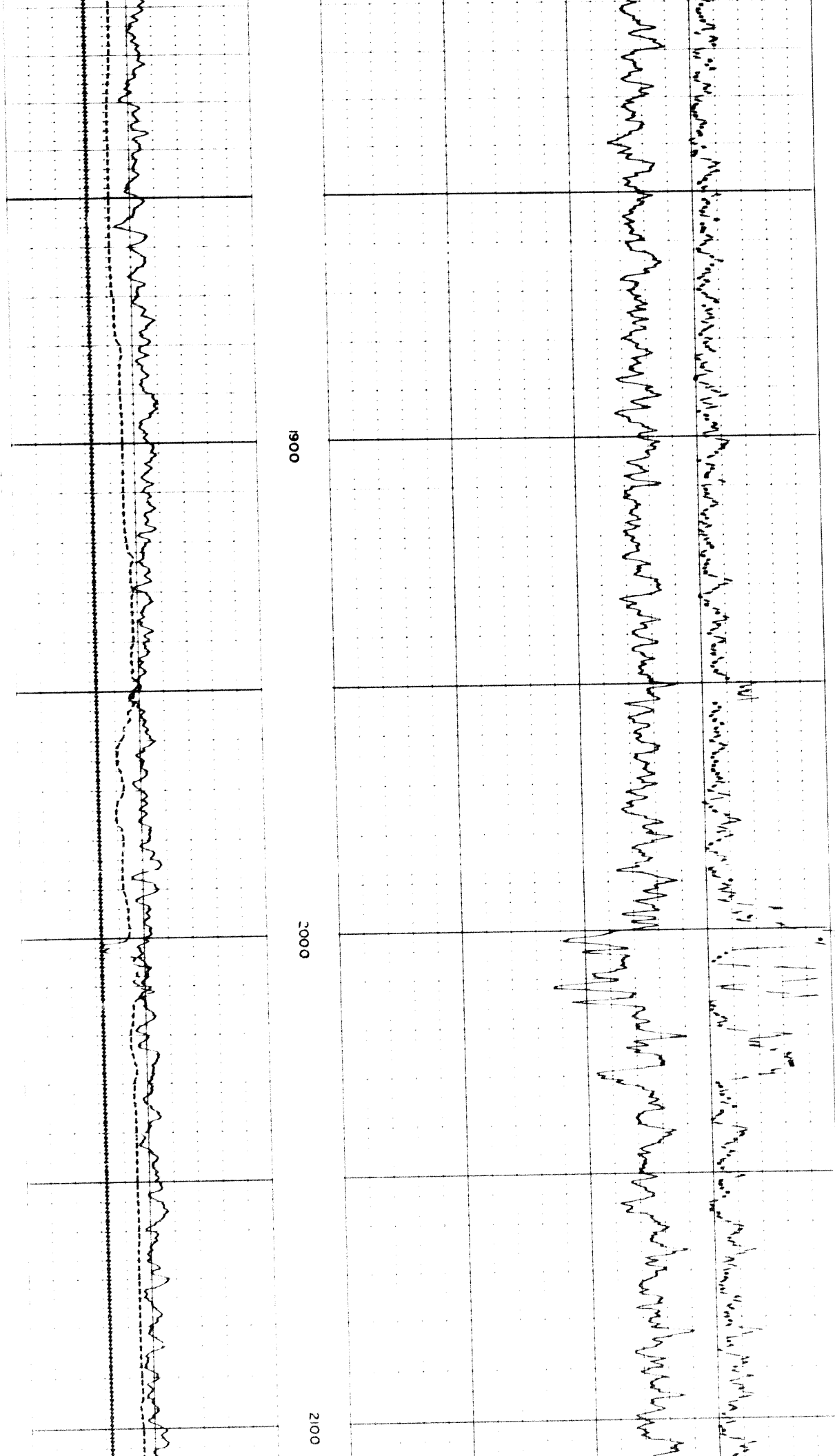


1600

1700

1800

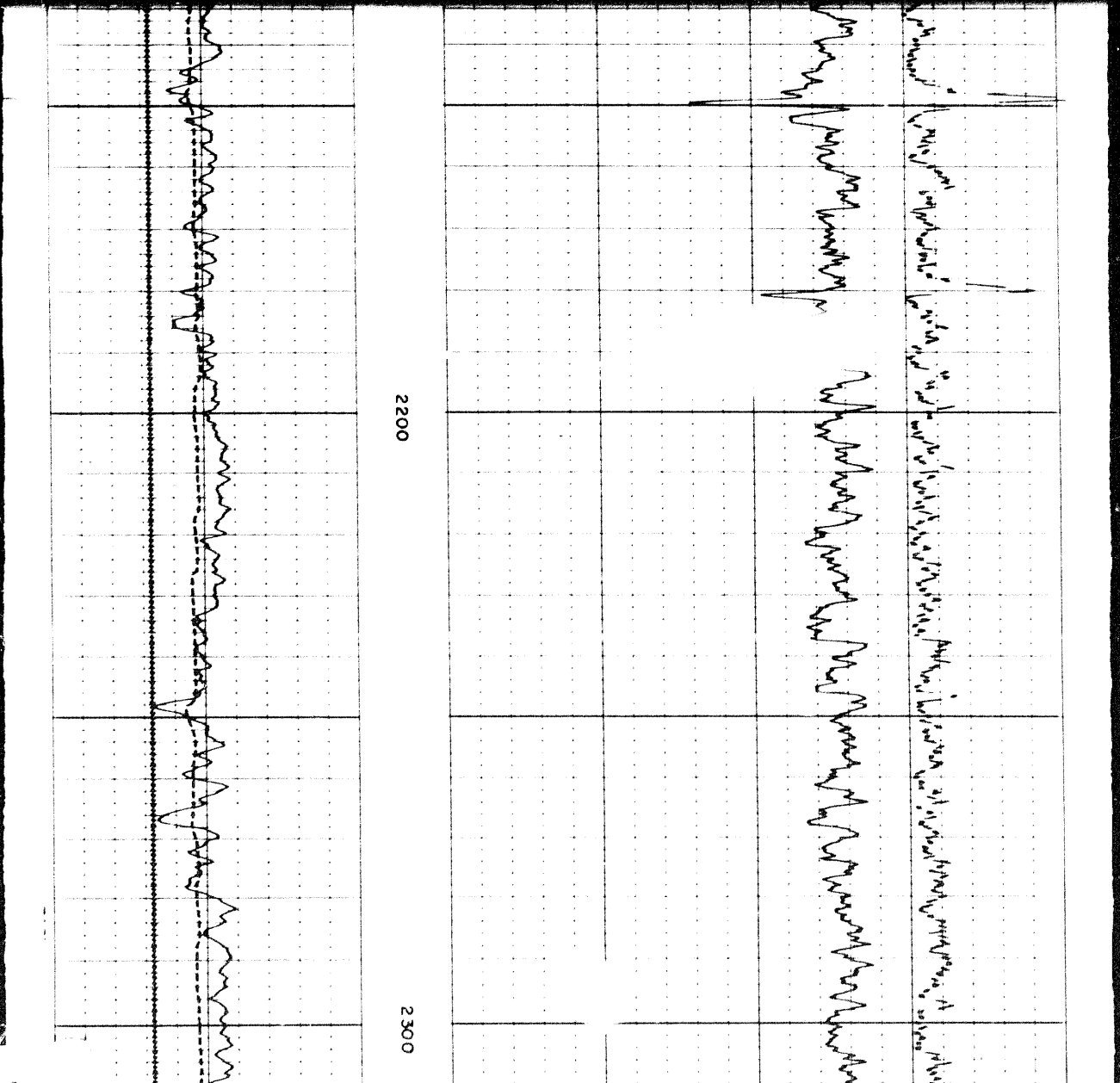
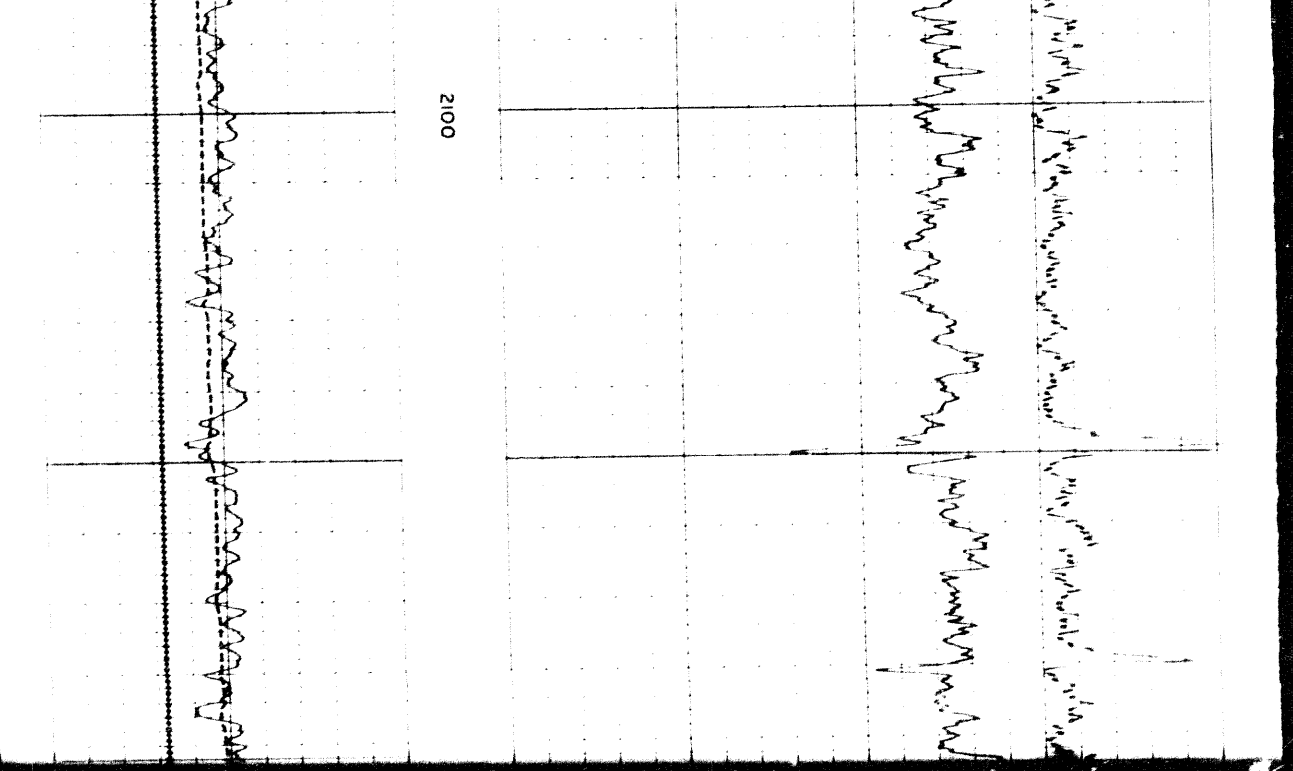




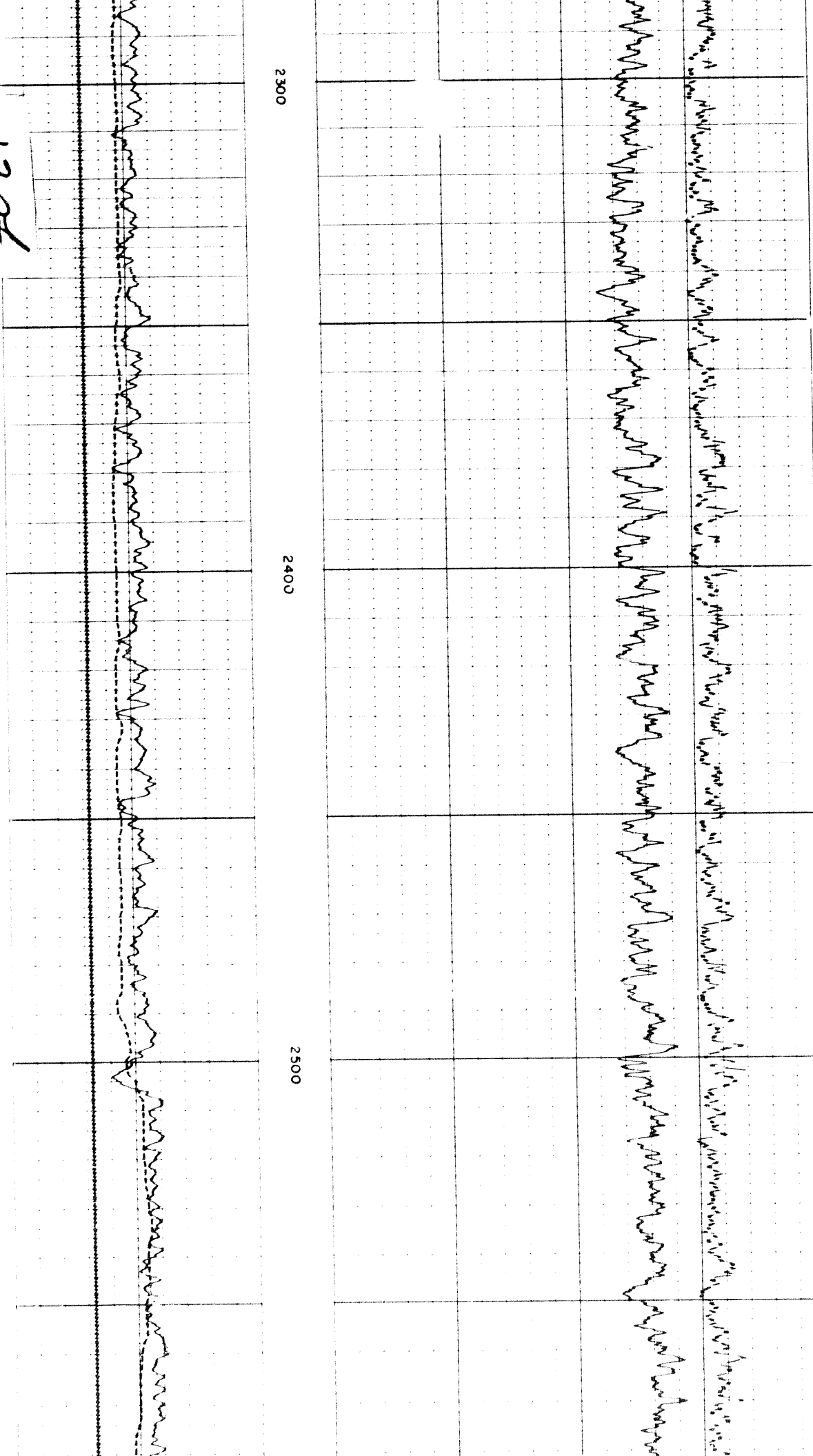
1900

2000

2100



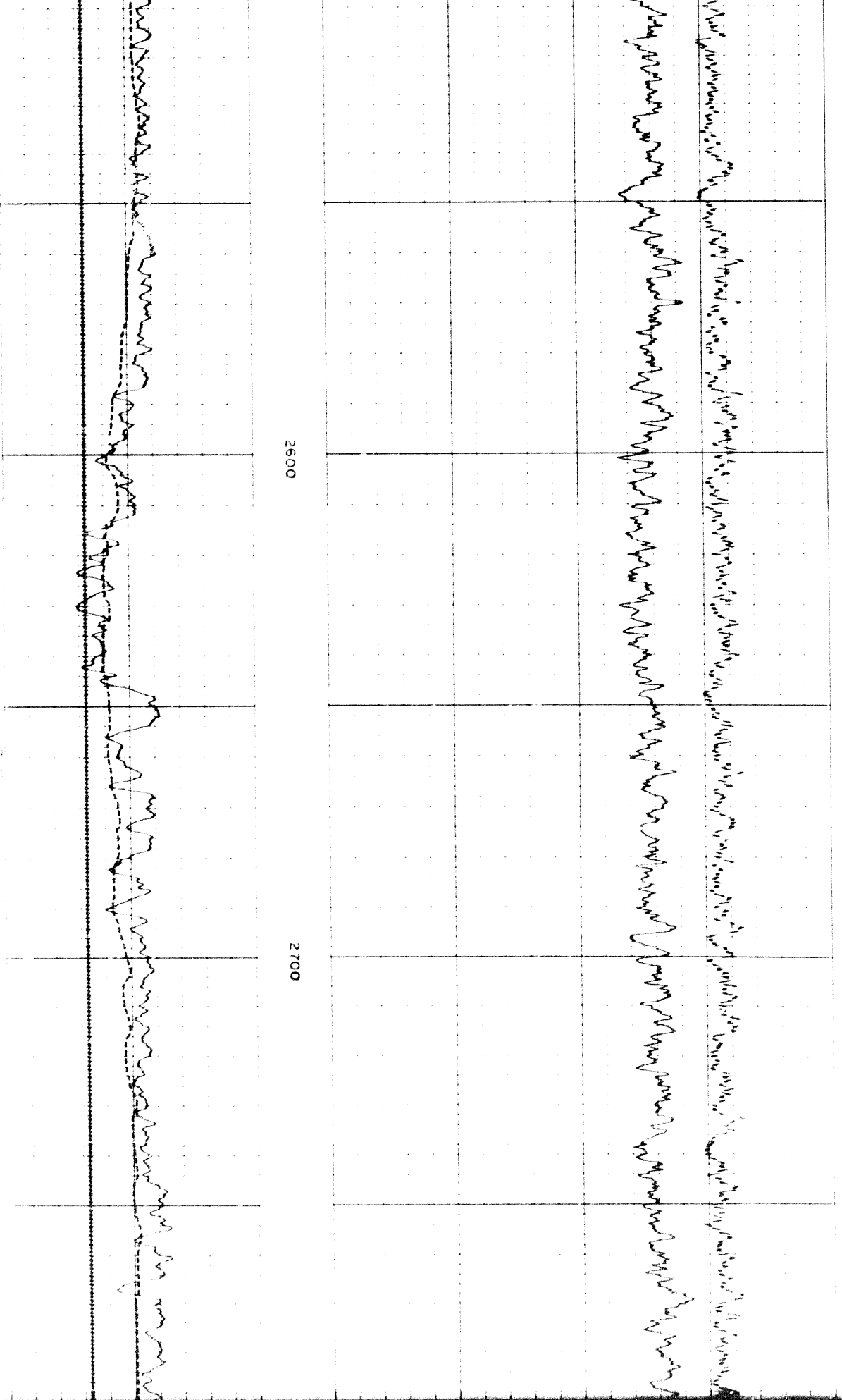
1307



2300

2400

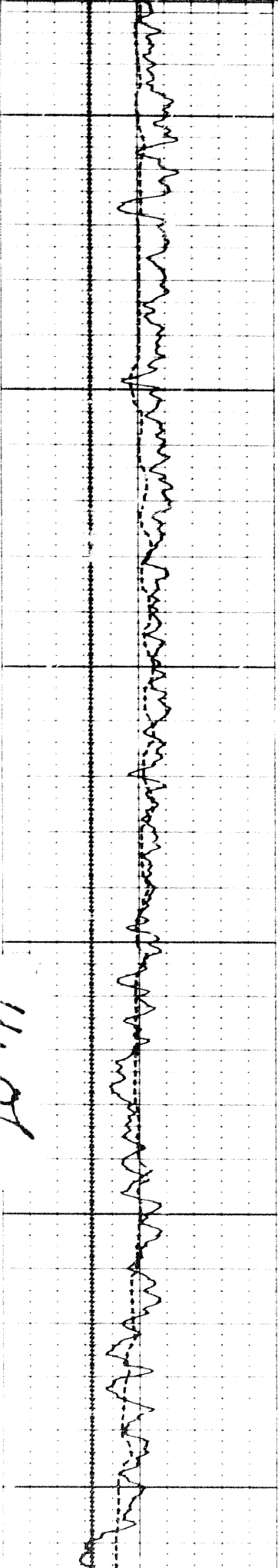
2500



2600

2700

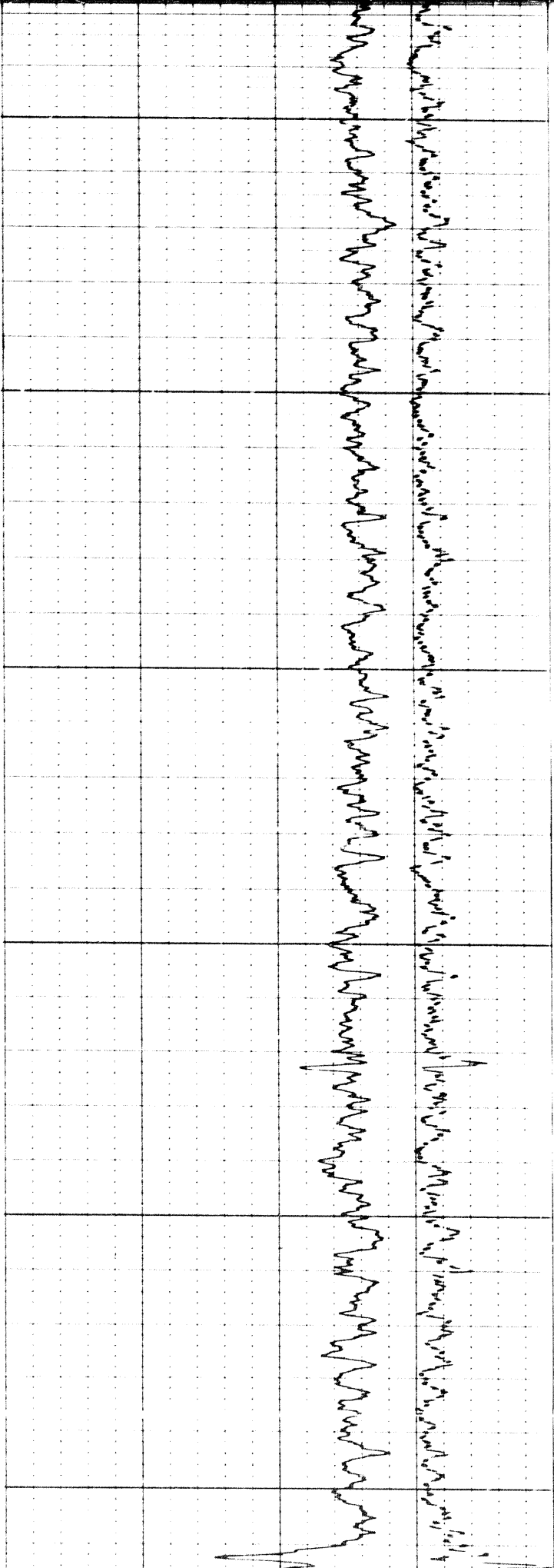
14 of

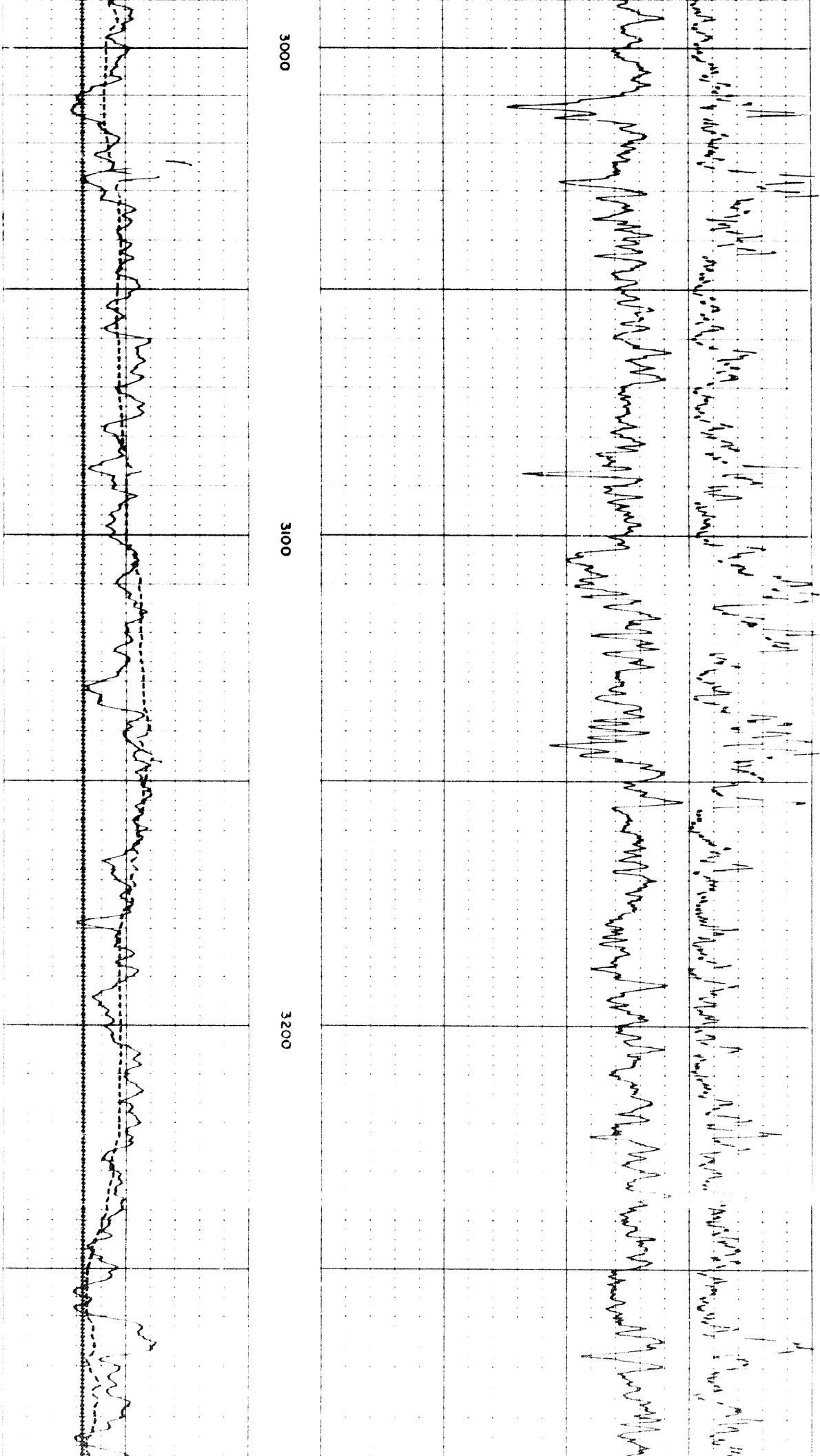


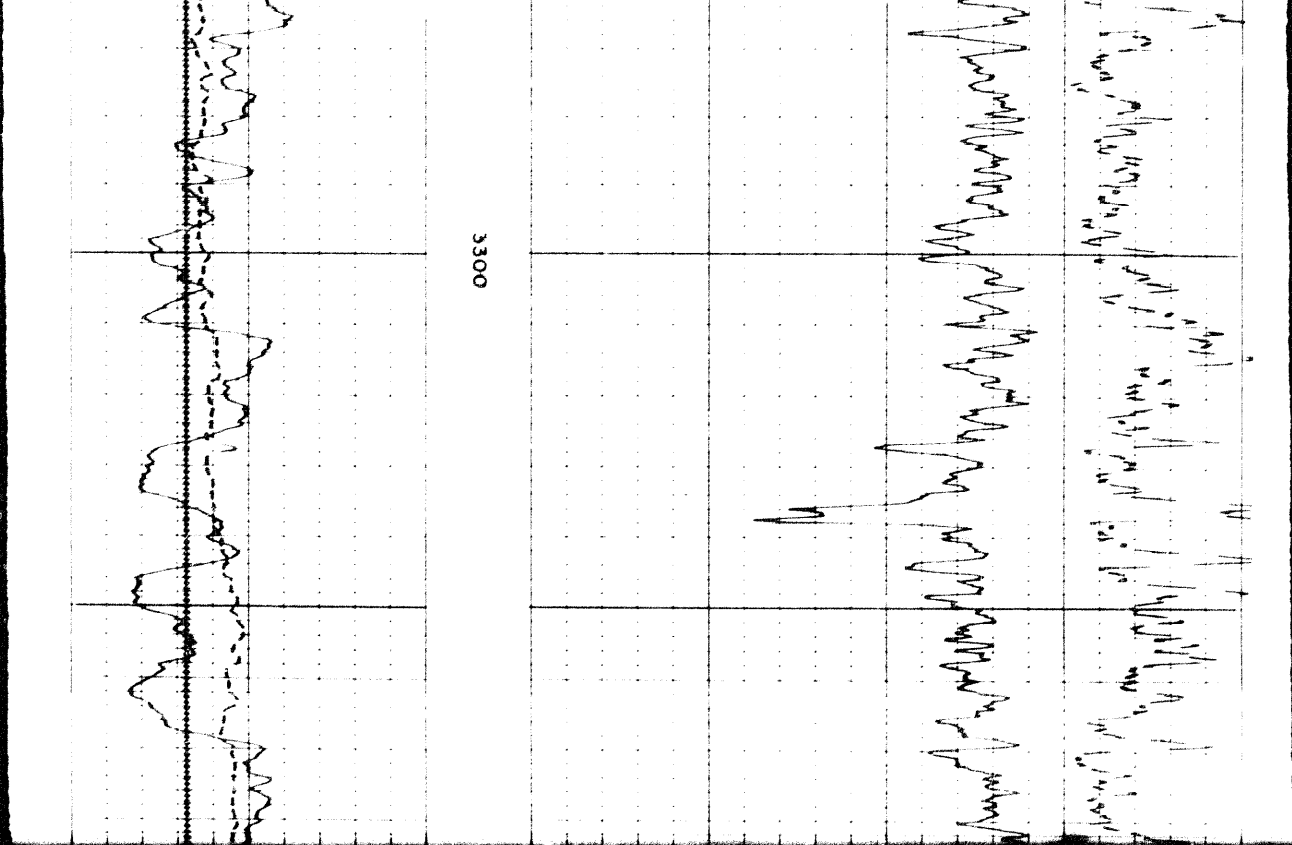
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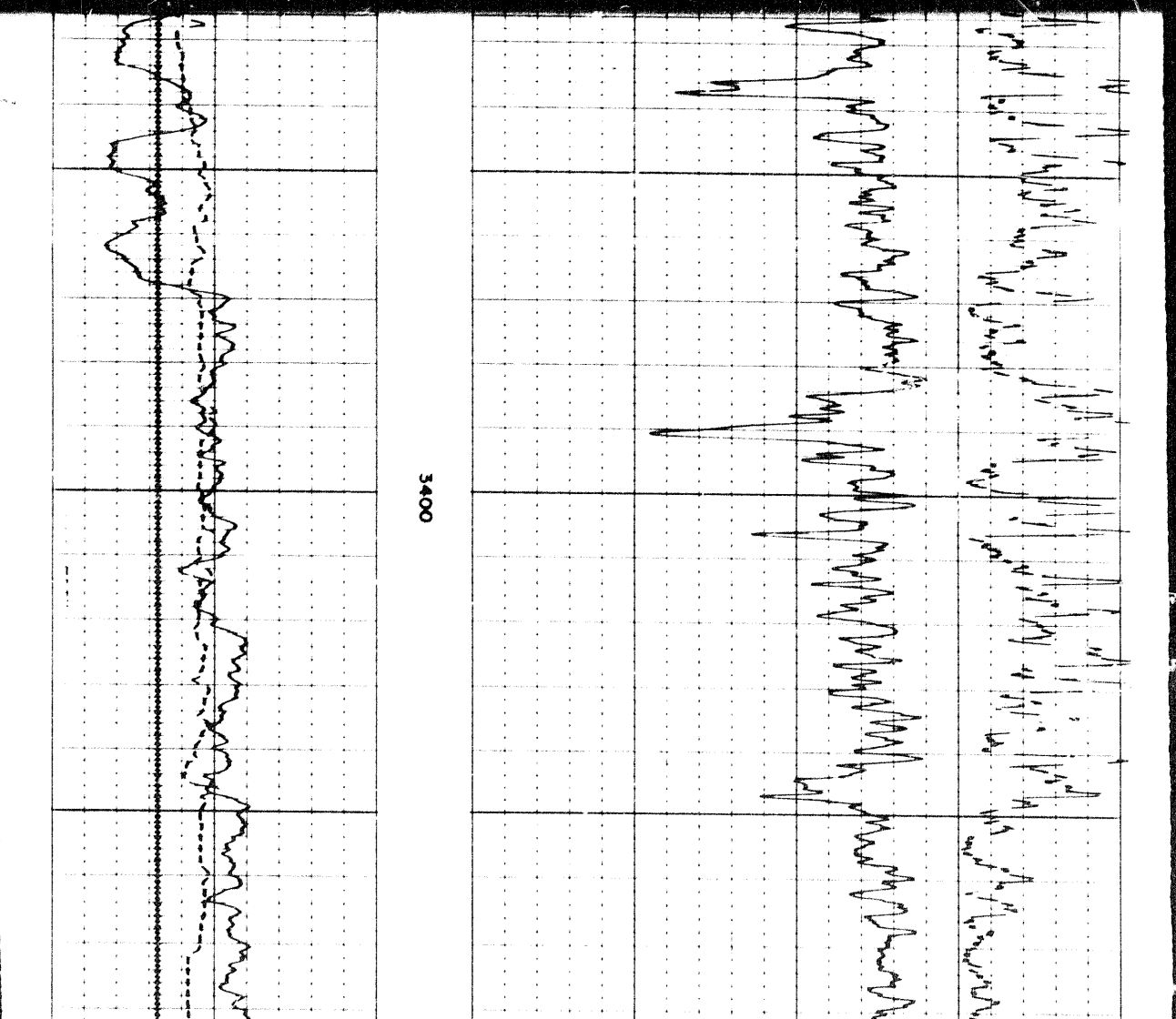
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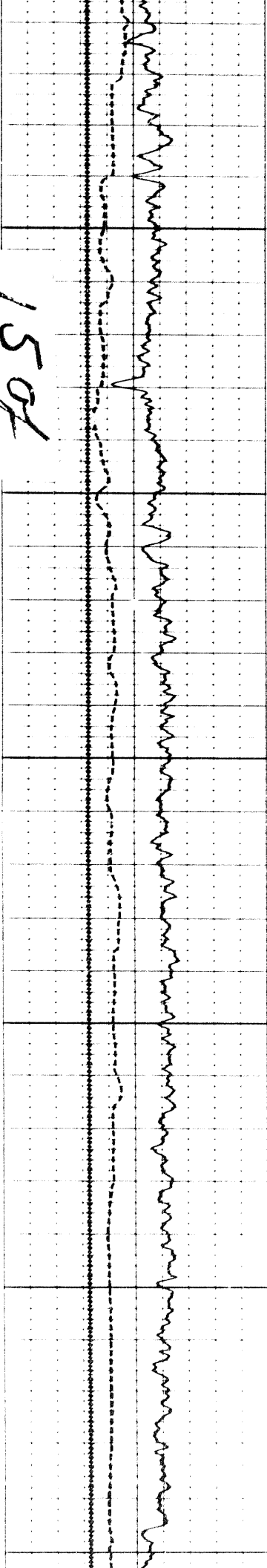


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3400

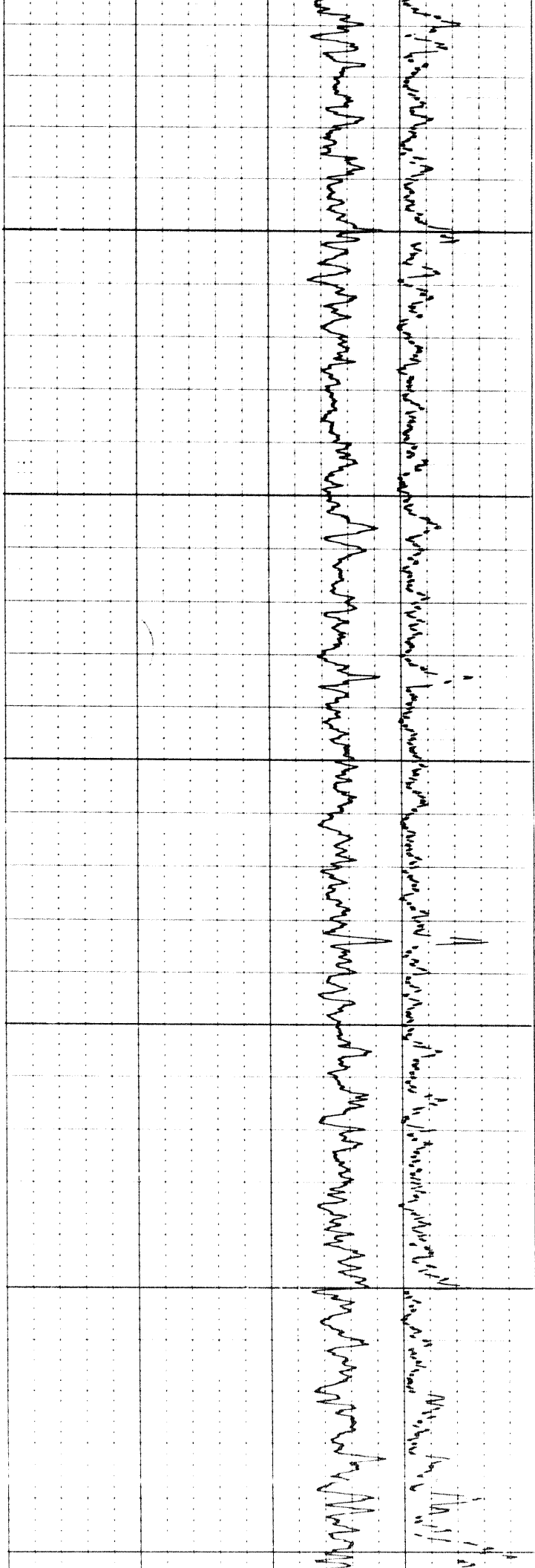
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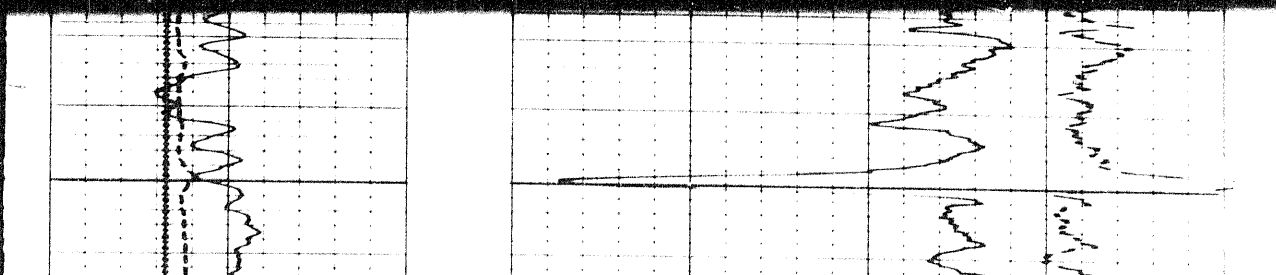
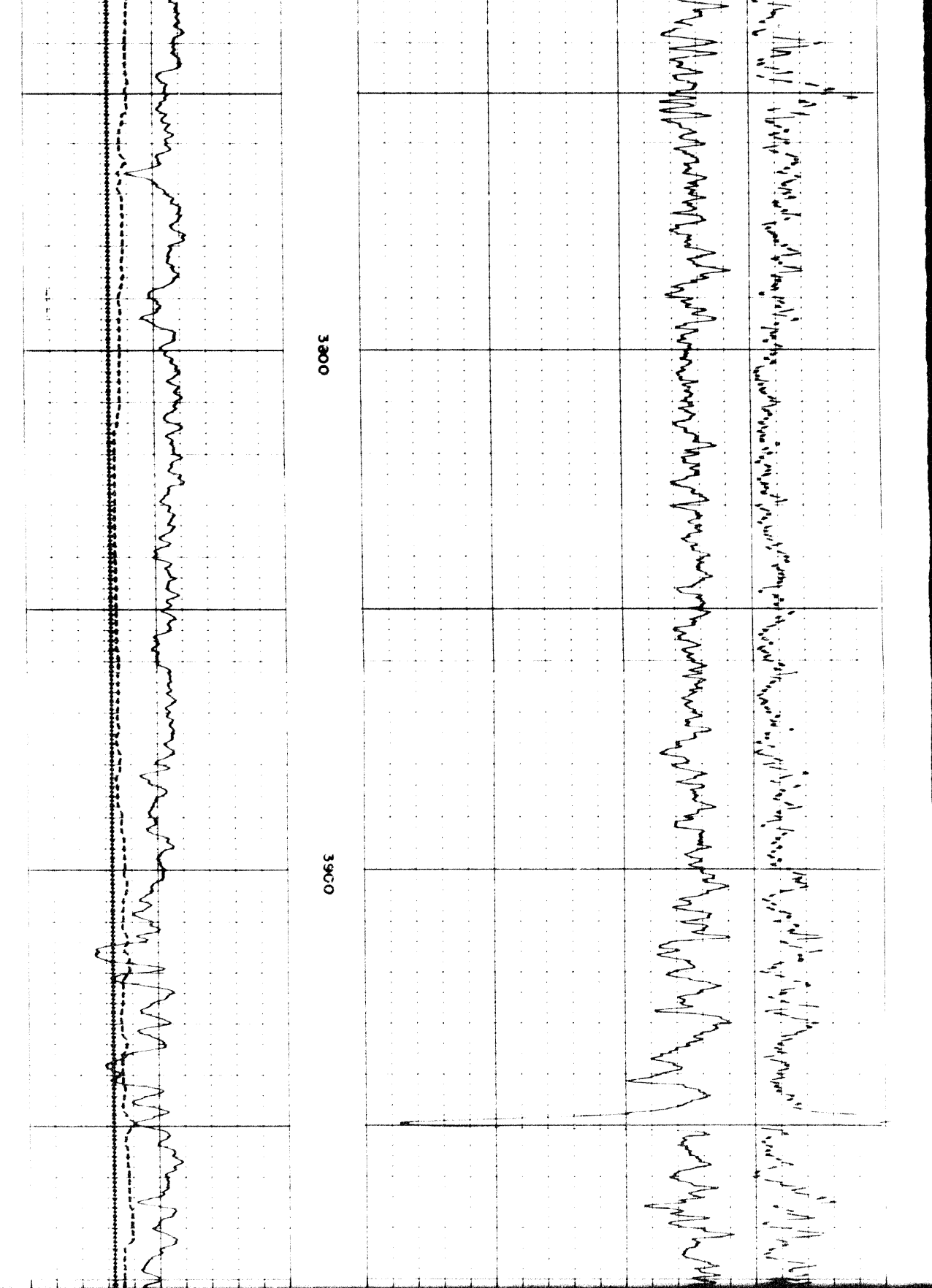


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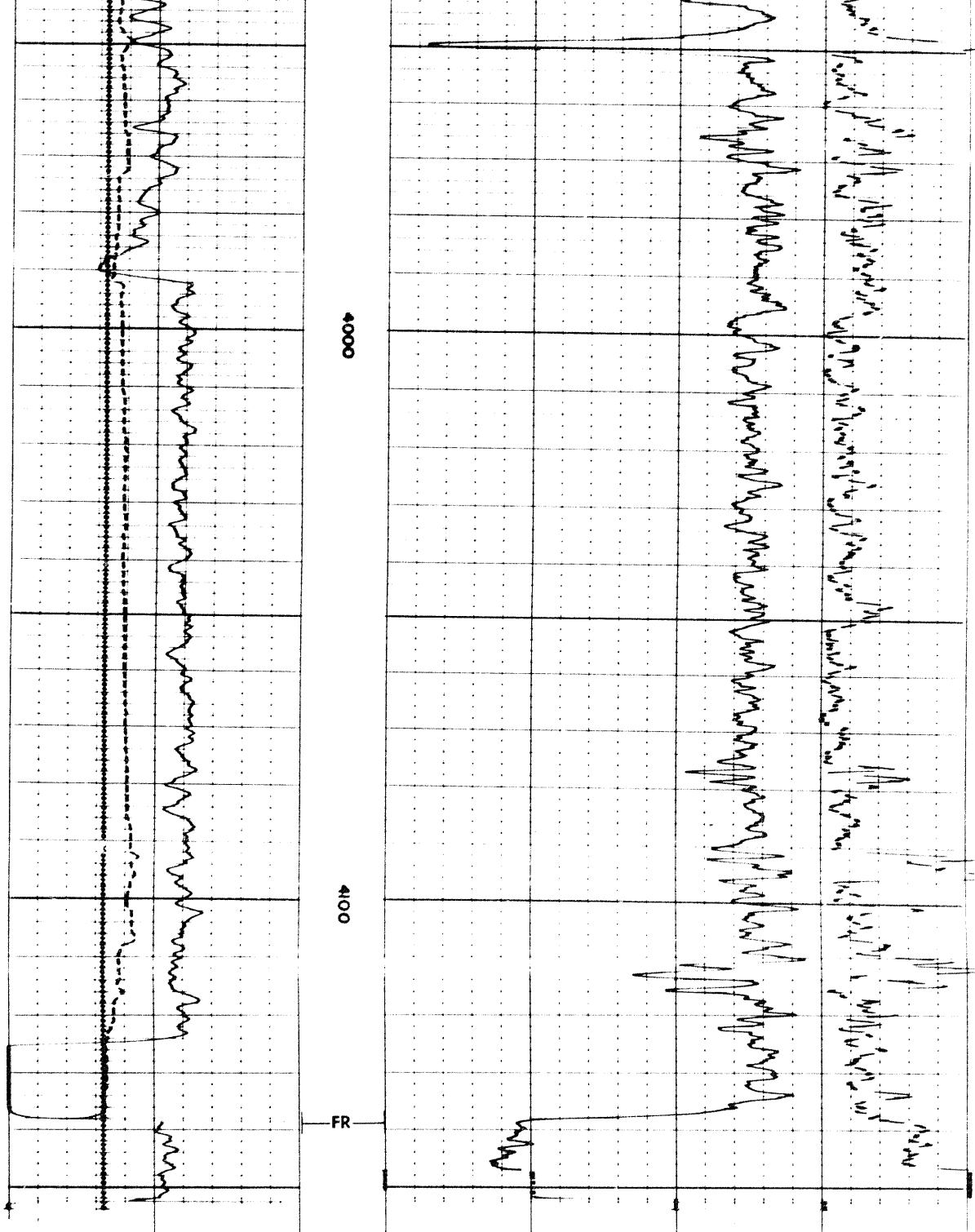
3600

3700

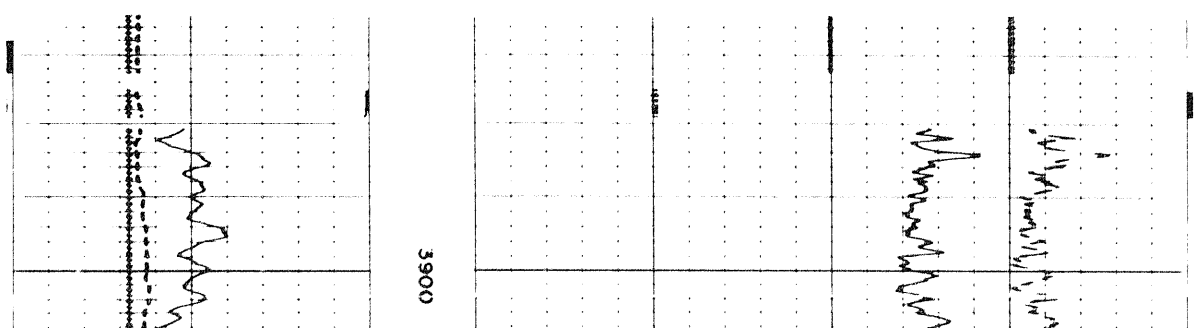


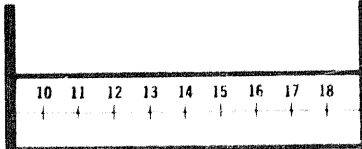
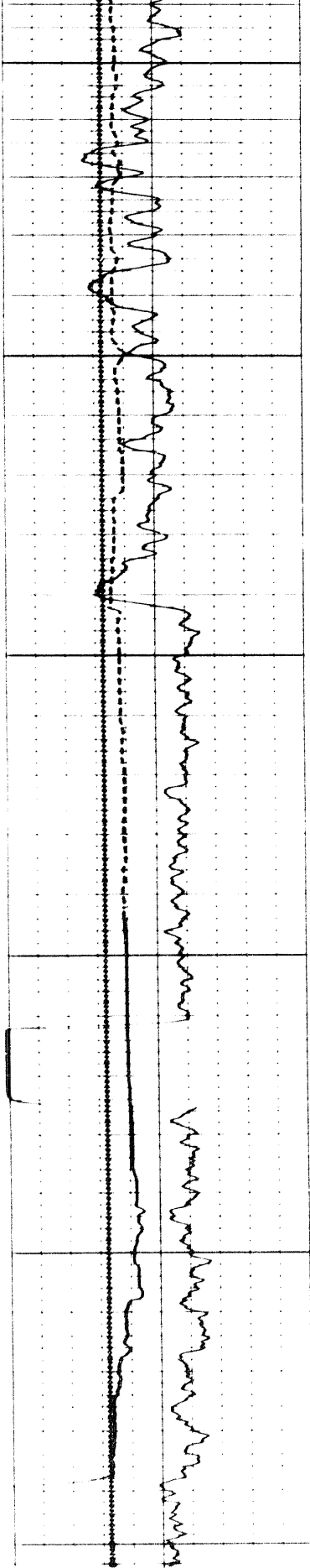


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REPEAT SECTION





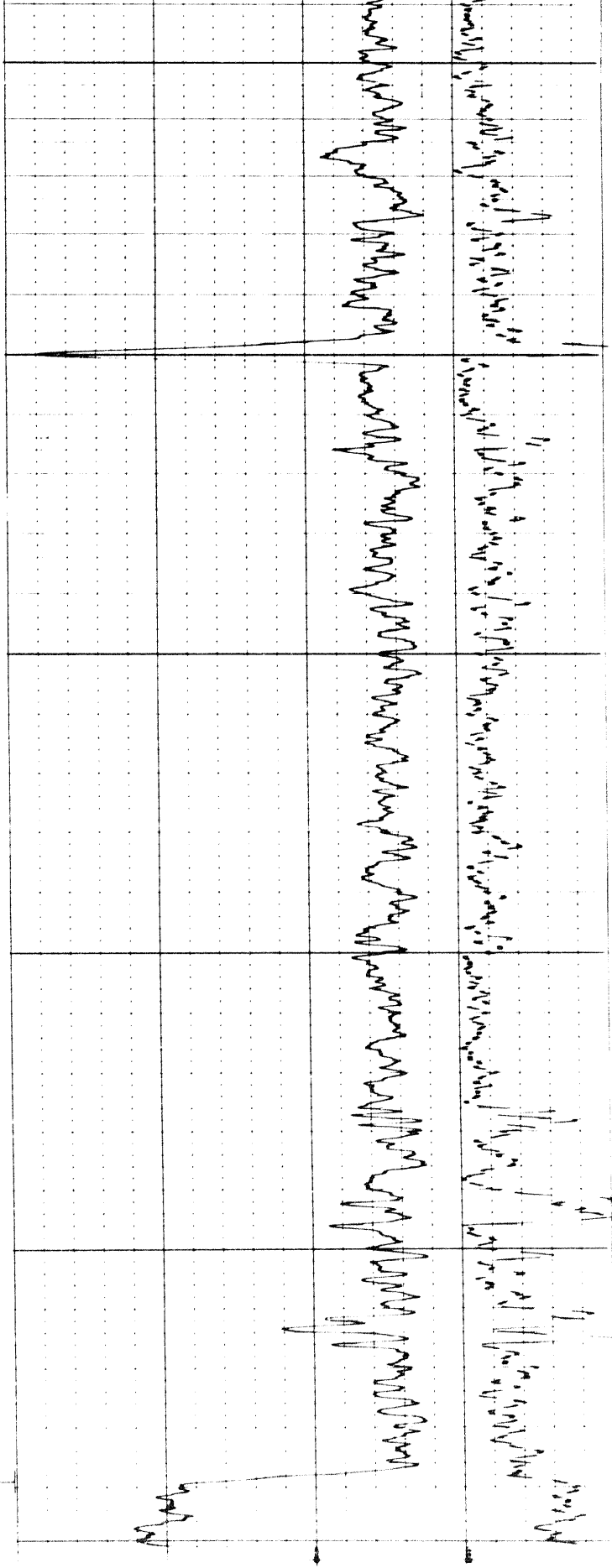
CALIPER
hole diameter in inches

3900

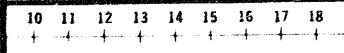
4000

4100

FR

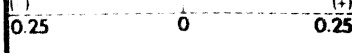


DENSITY CORRECTION
 $\Delta\rho$ - gm/cc



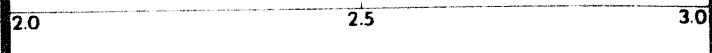
CALIPER
hole diameter in inches

Sens. 150 T.C. 2
Zero 0 div. to left



DENSITY CORRECTION
ΔP - gm/cc

Speed in FPM



GAMMA RAY
API UNITS

DEPTHS

BULK DENSITY
ρ_b - gm/cc

DETAIL LOG
5' = 100' RUN 2

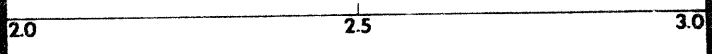
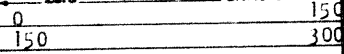
GAMMA RAY
API UNITS

DEPTHS

BULK DENSITY
ρ_b - gm/cc

Speed in FPM

Sens. 150 T.C. 2
Zero 0 div. to left



GAMMA RAY
API UNITS

DEPTHS

BULK DENSITY
ρ_b - gm/cc

DETAIL LOG
5' = 100' RUN 2

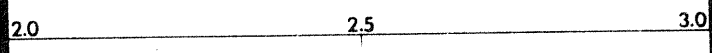
GAMMA RAY
API UNITS

DEPTHS

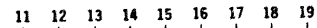
BULK DENSITY
ρ_b - gm/cc

Speed in FPM

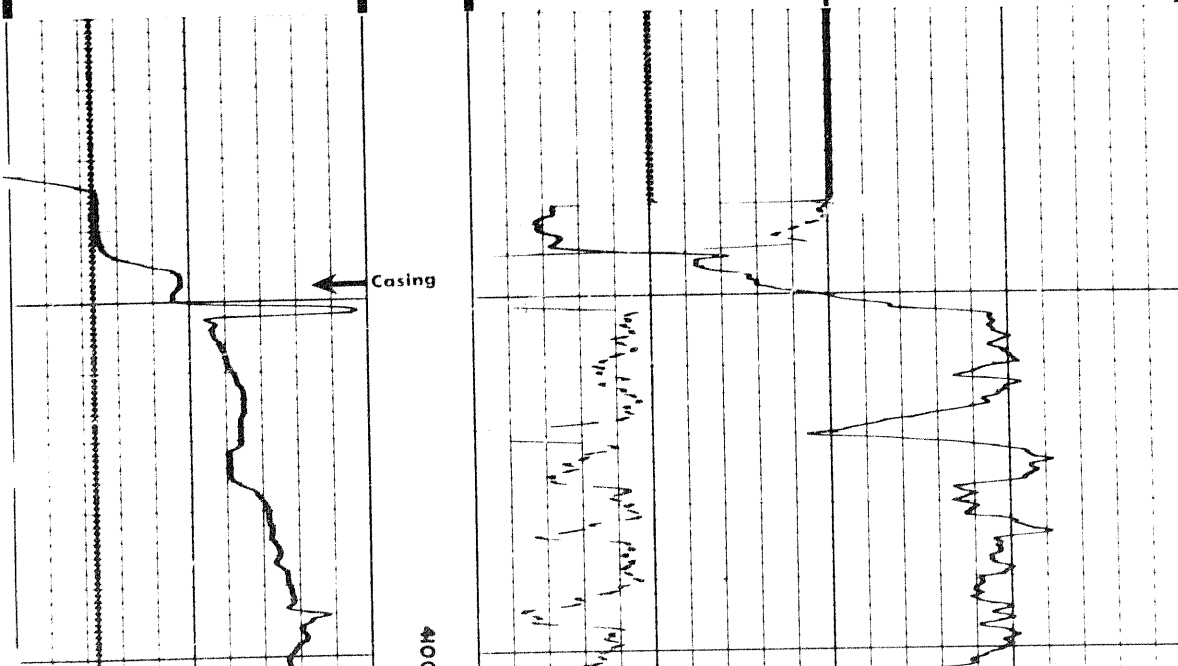
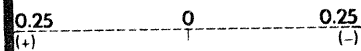
Sens. T.C.
Zero div. to left



CALIPER
hole diameter in inches



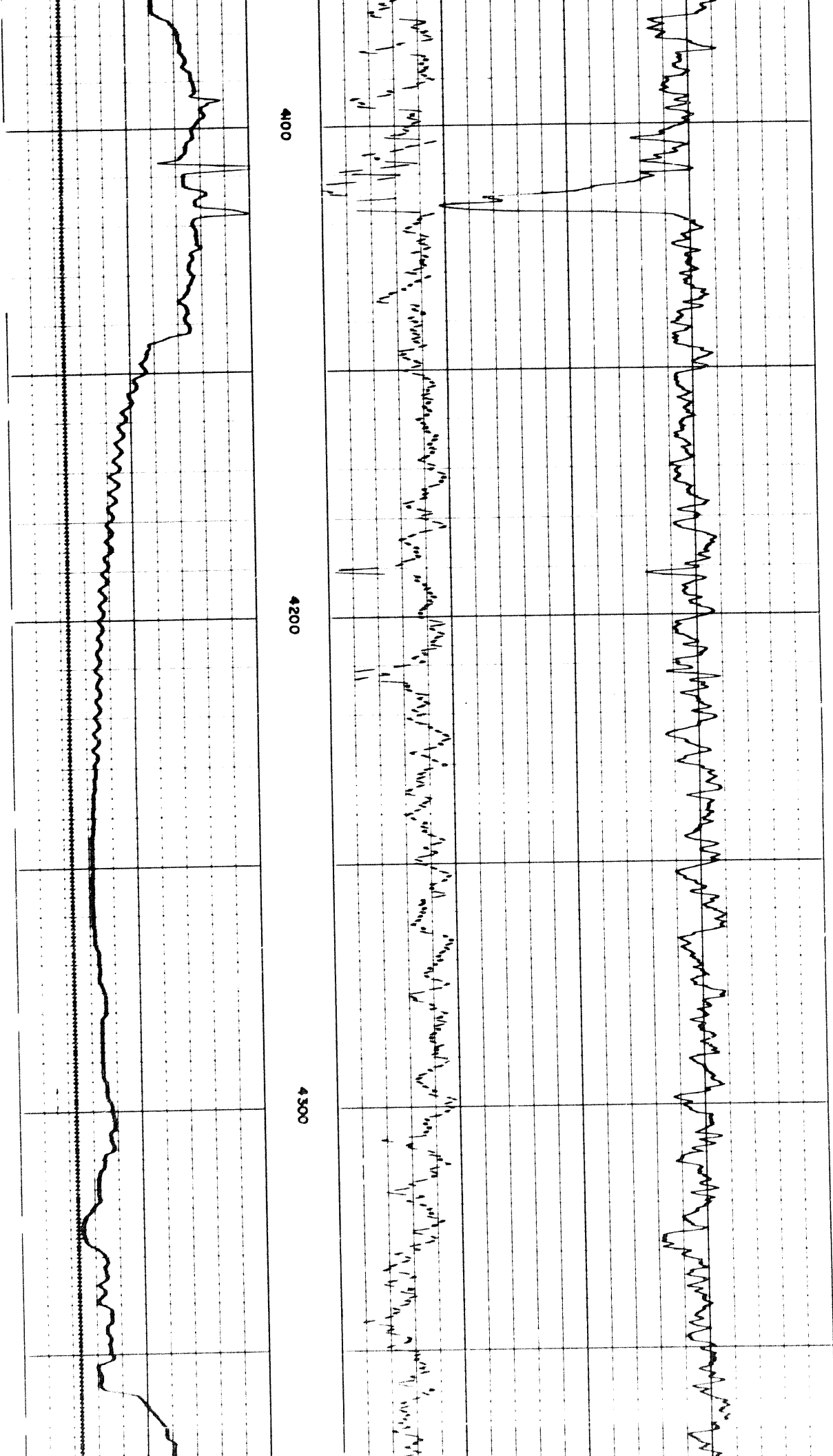
DENSITY CORRECTION
ΔP - gm/cc

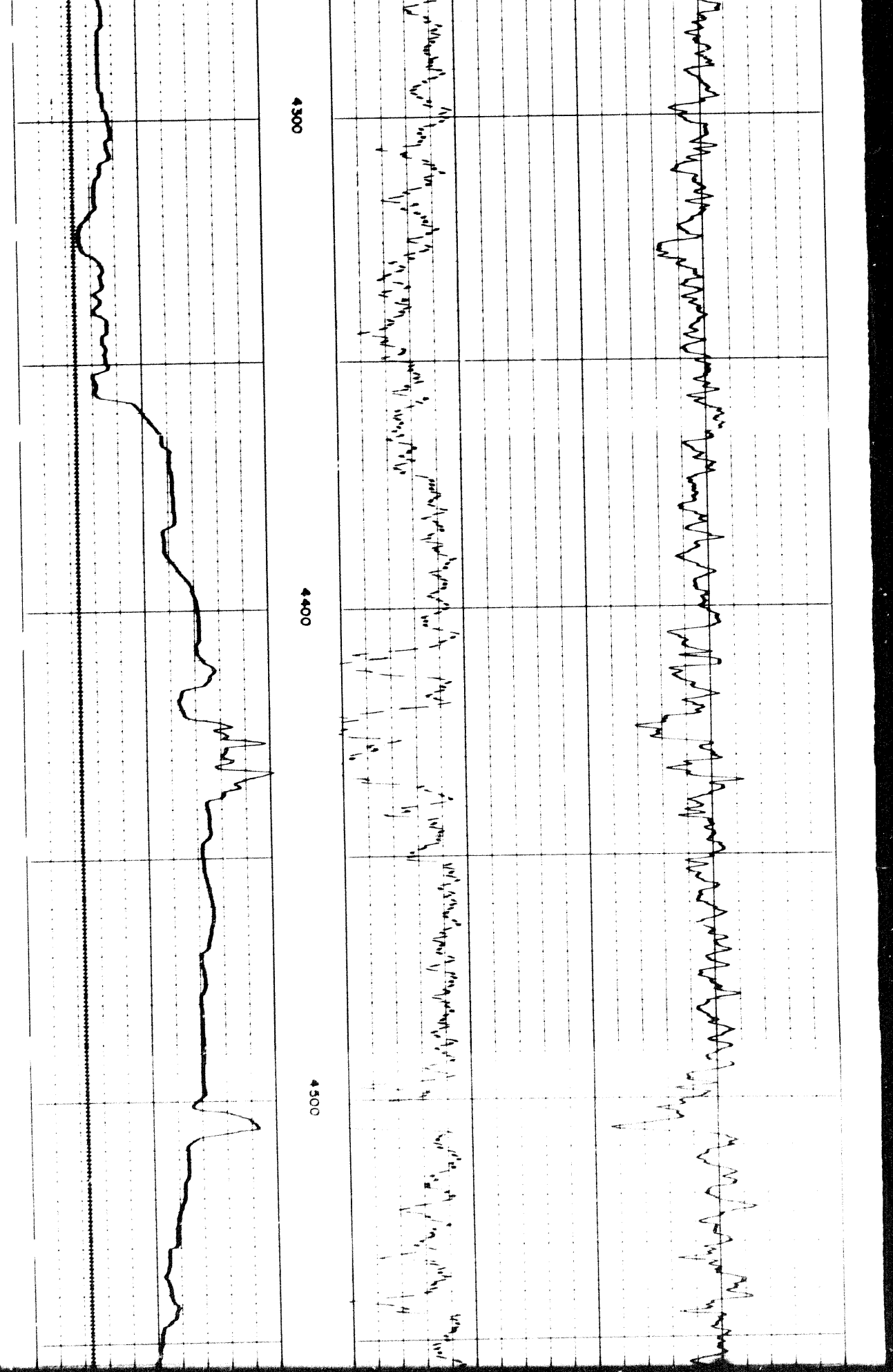


Casing

400

17 of

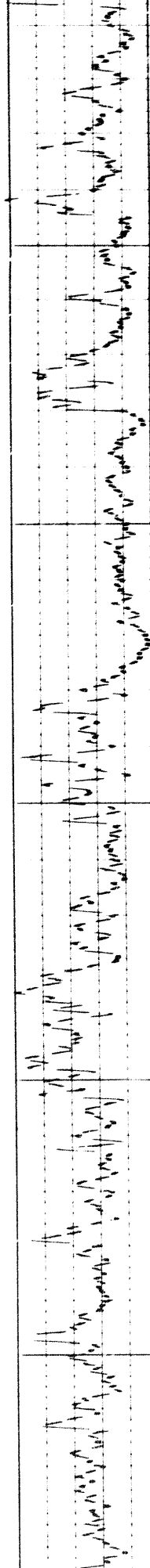
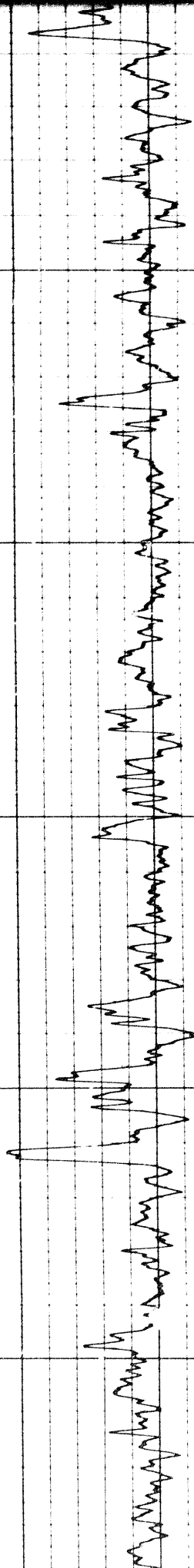




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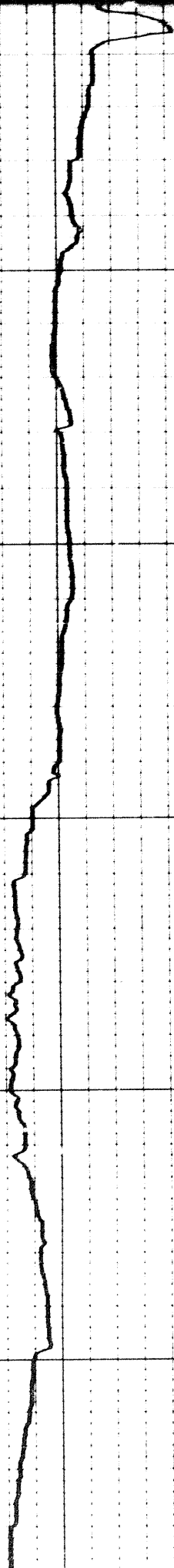
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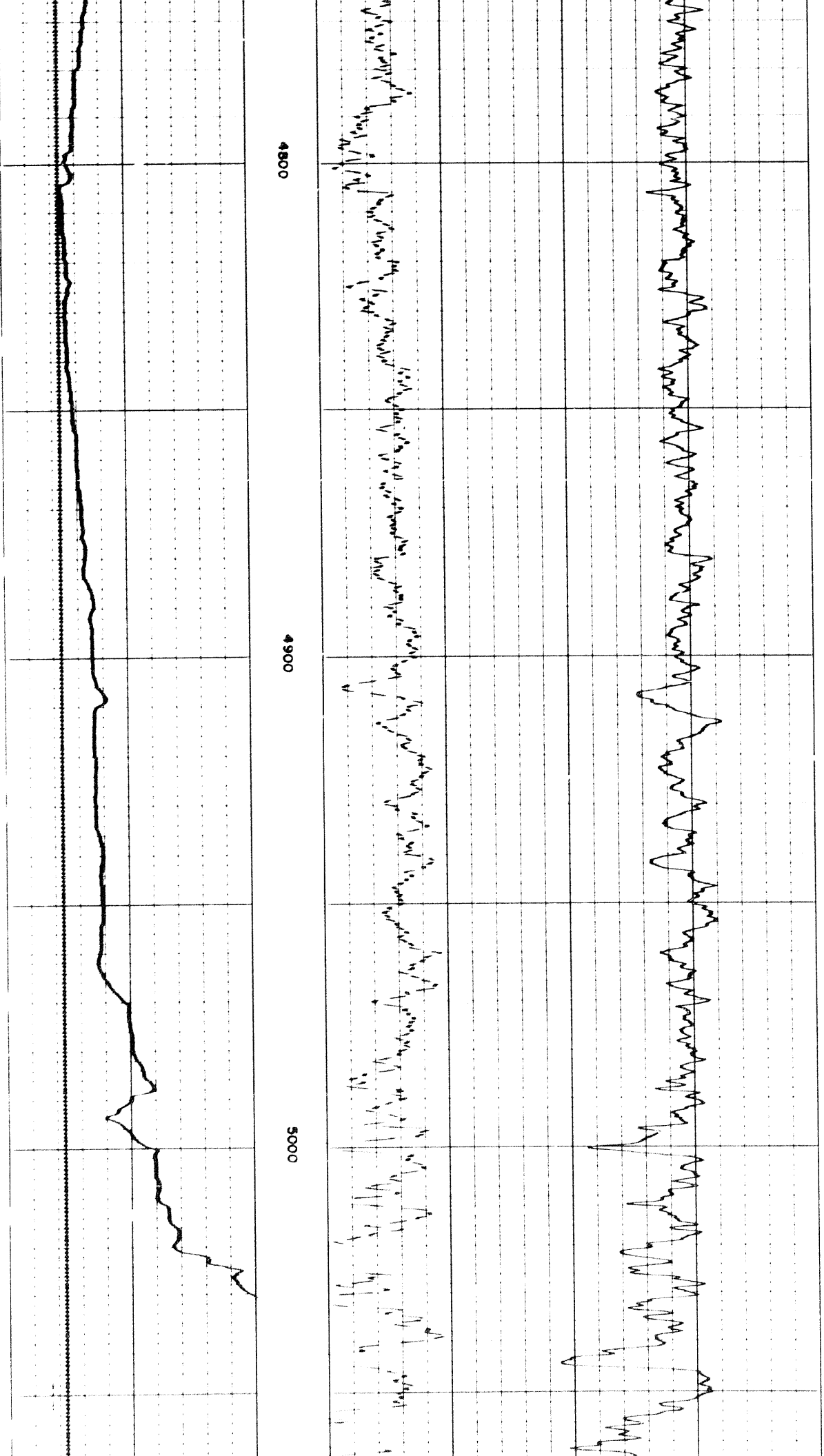


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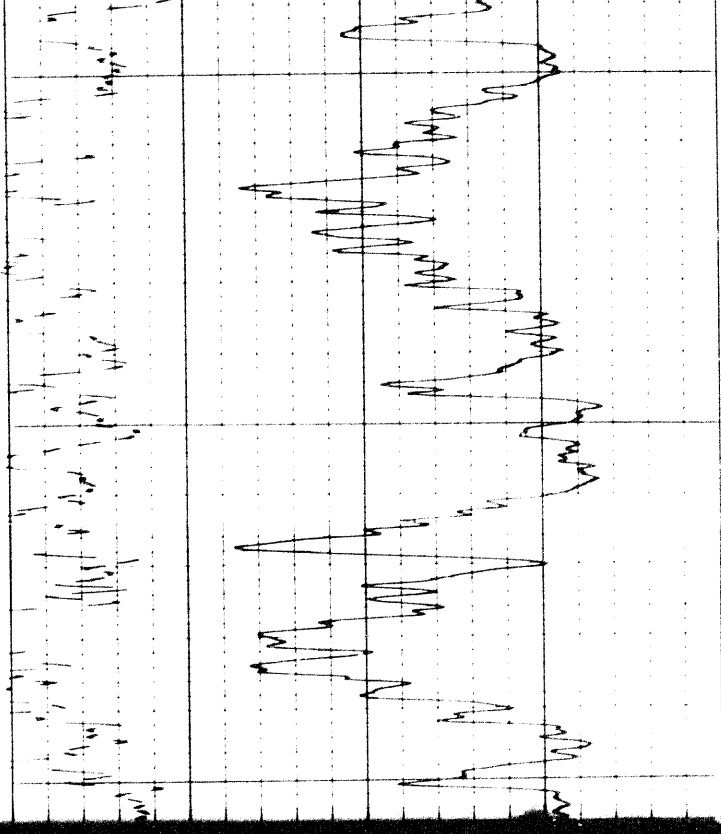
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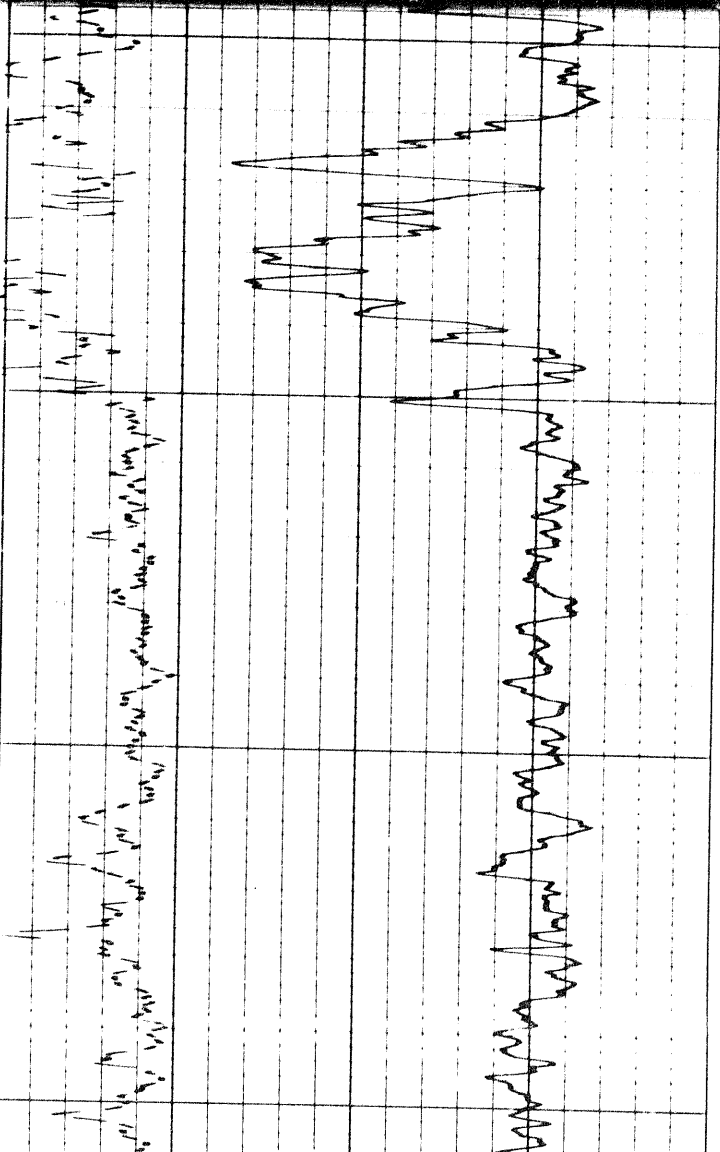
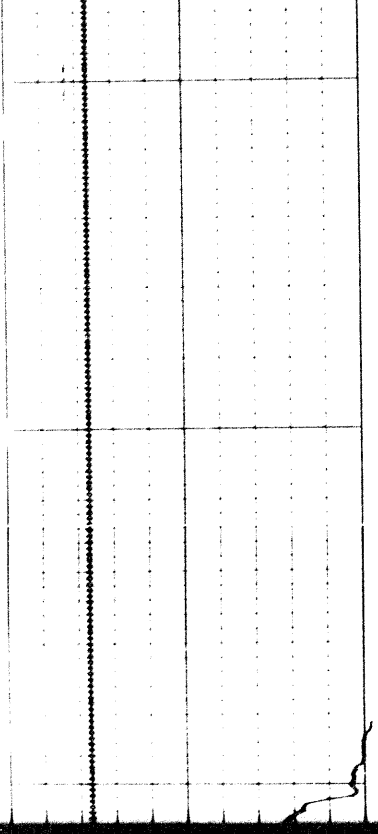
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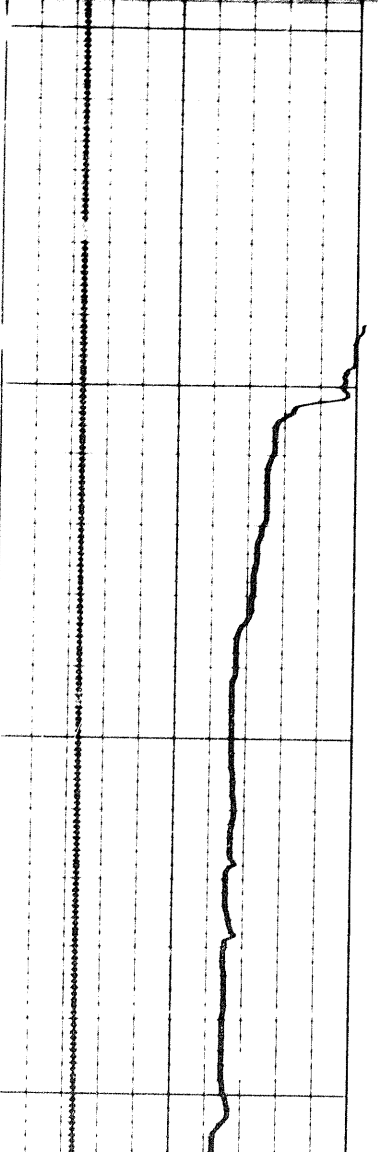


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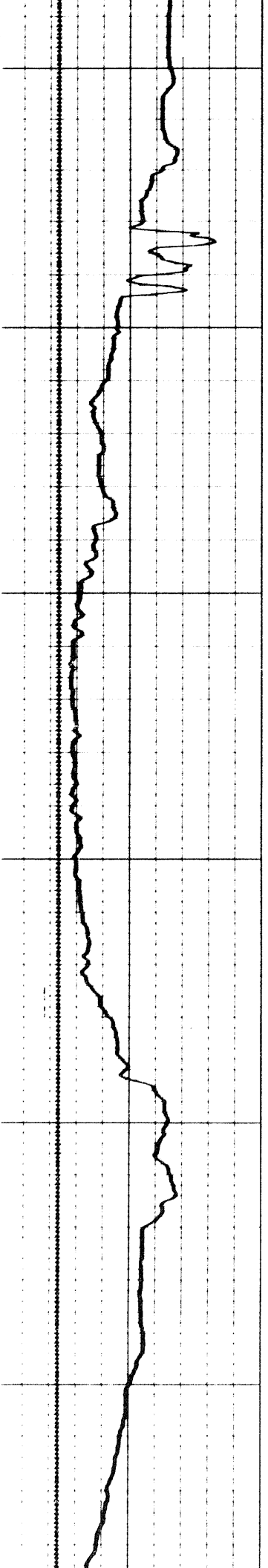
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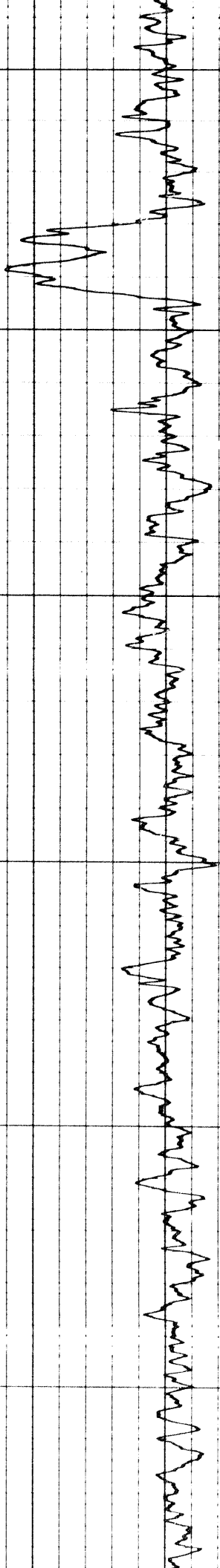
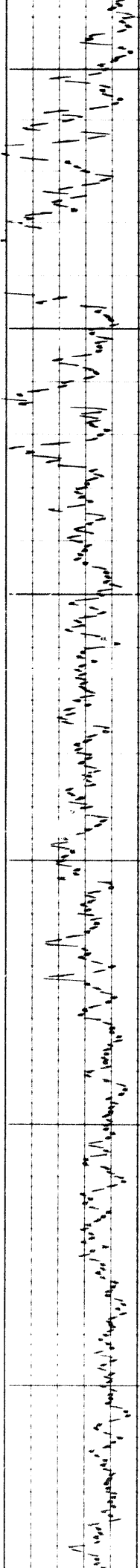
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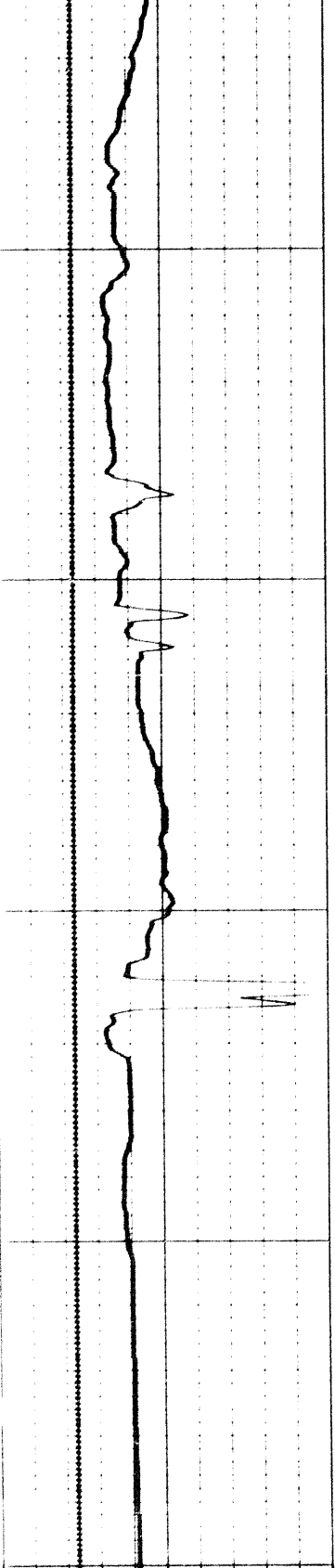
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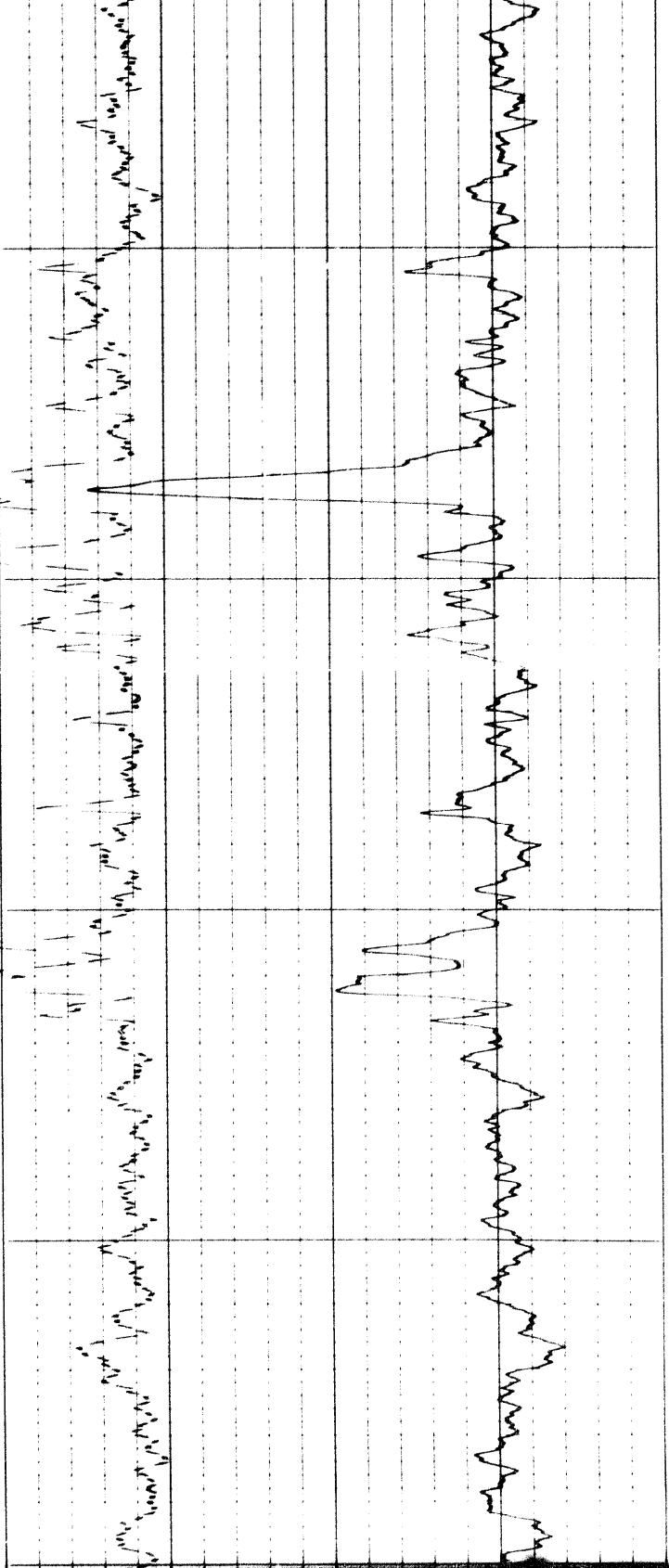
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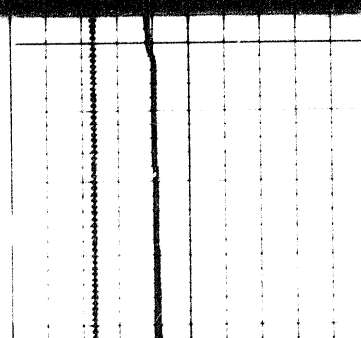
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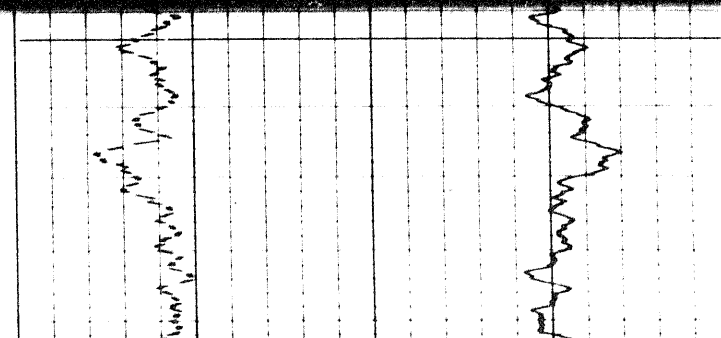
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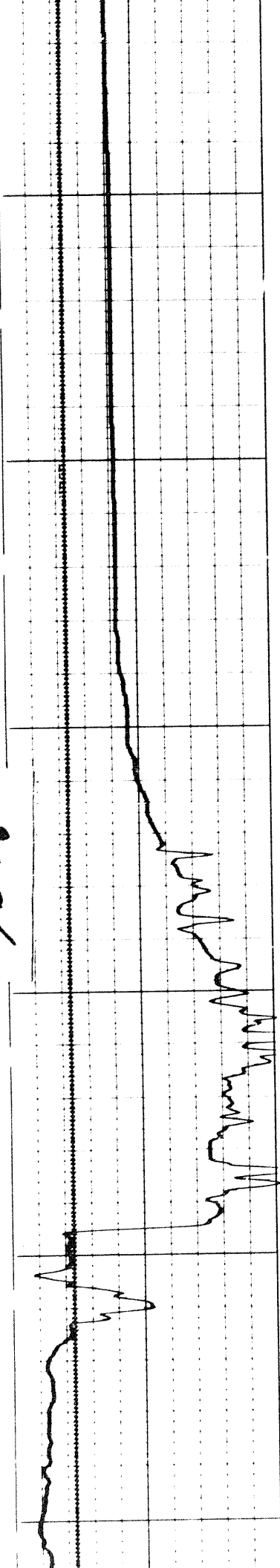
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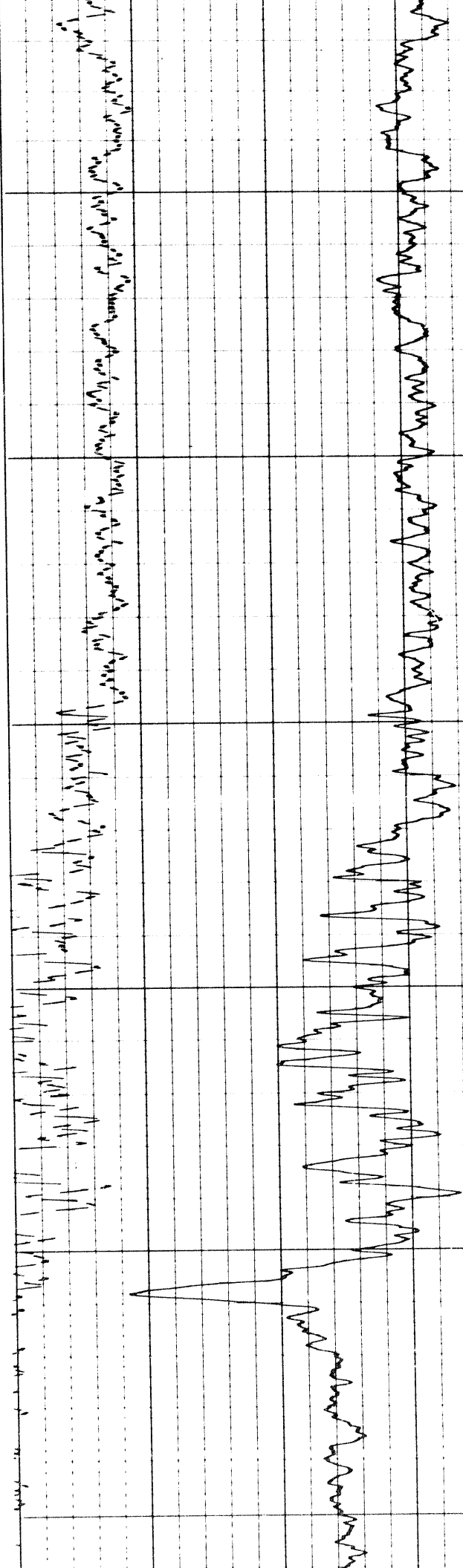
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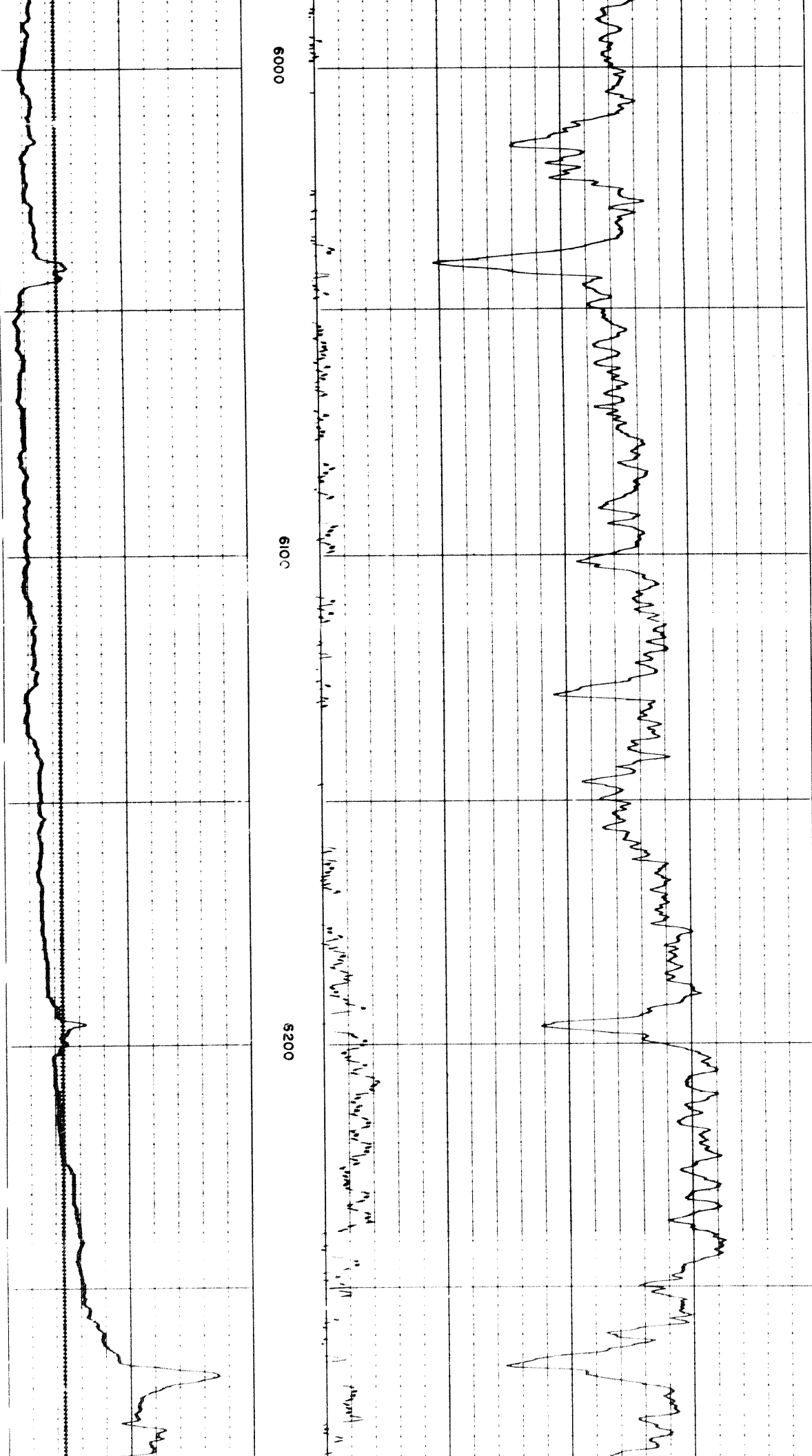


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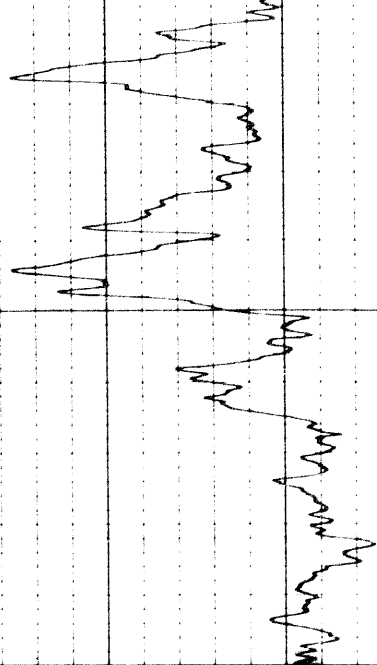




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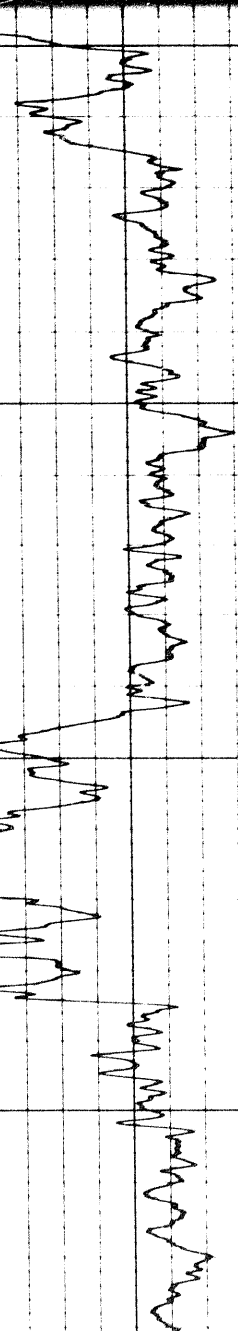
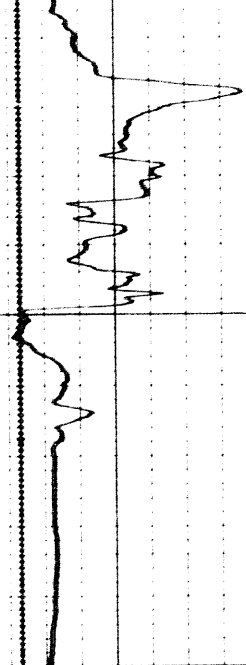
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Handwritten notes on the top right, including "Normal sinus rhythm" and "Rate 70-80 bpm".

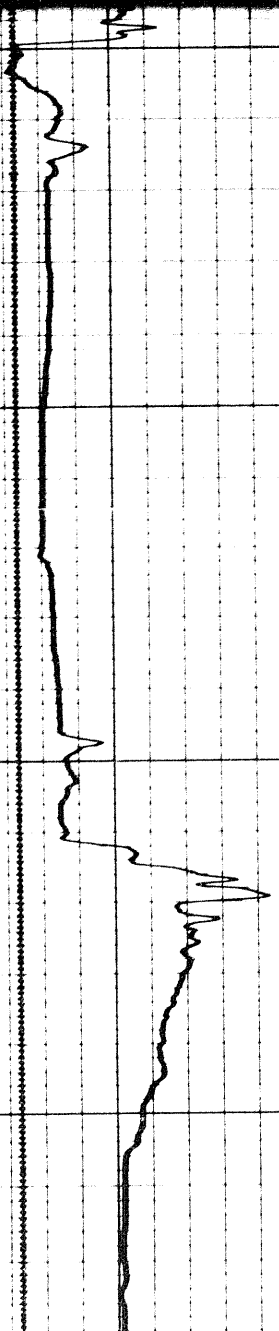
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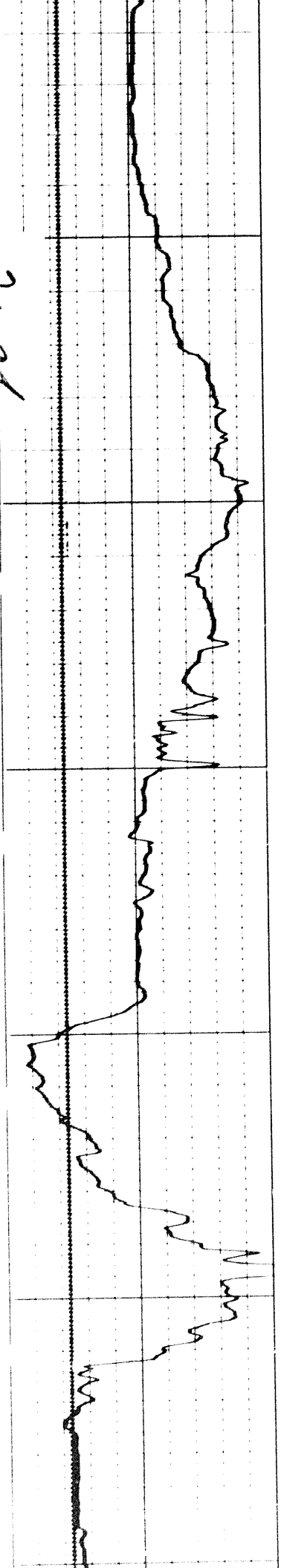
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6300

6400



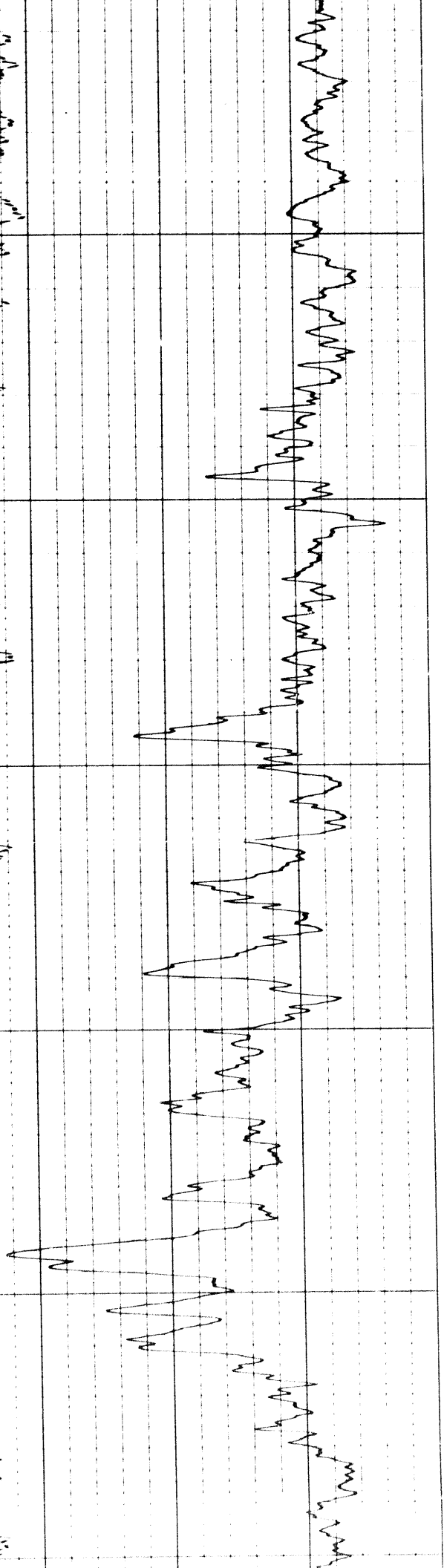
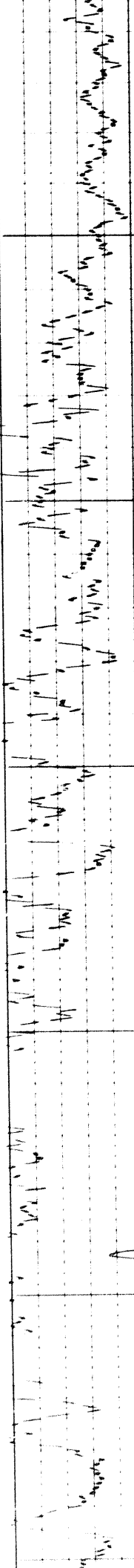
21 of

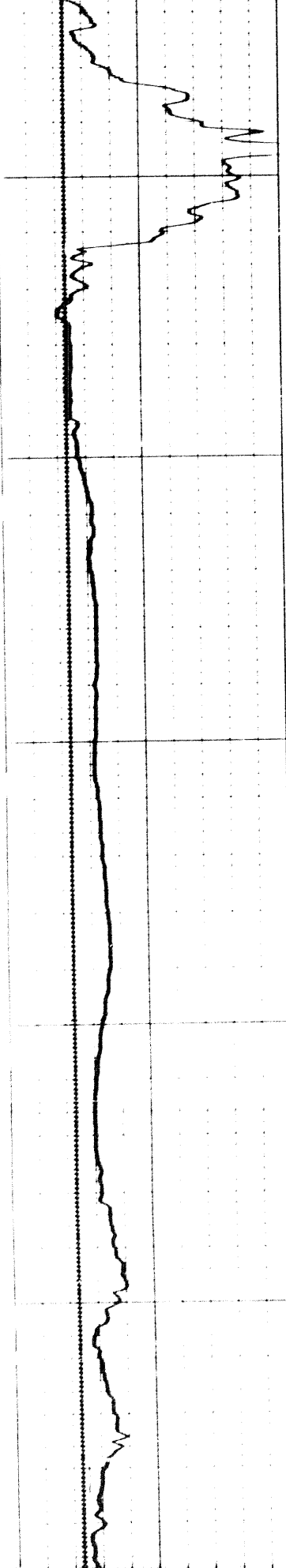


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6600

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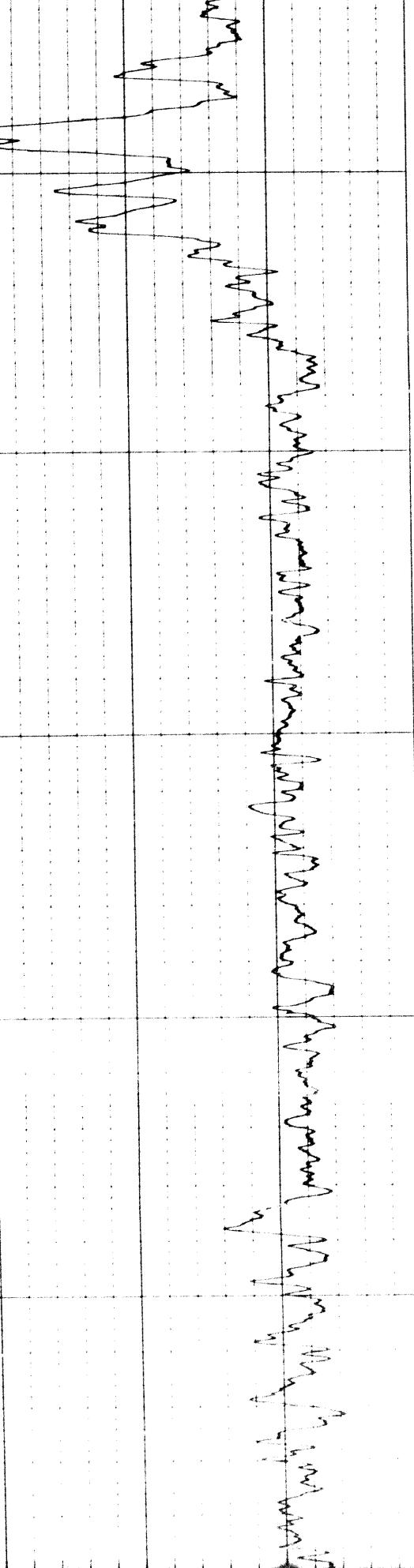
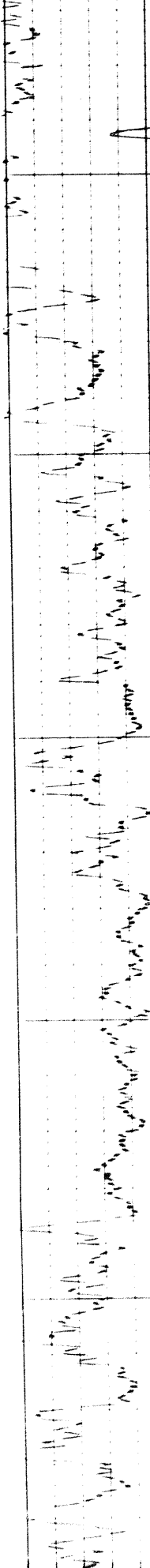


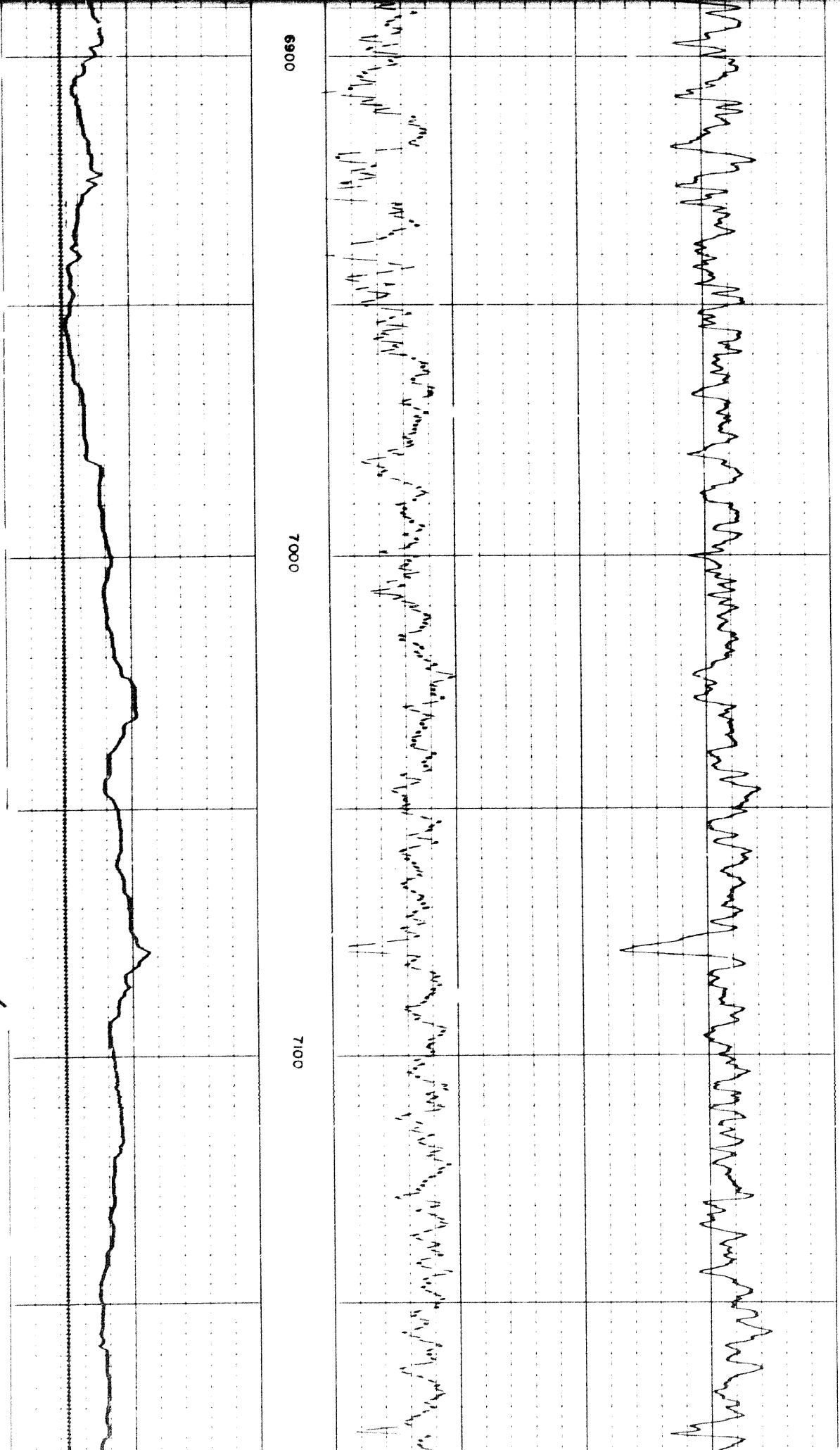


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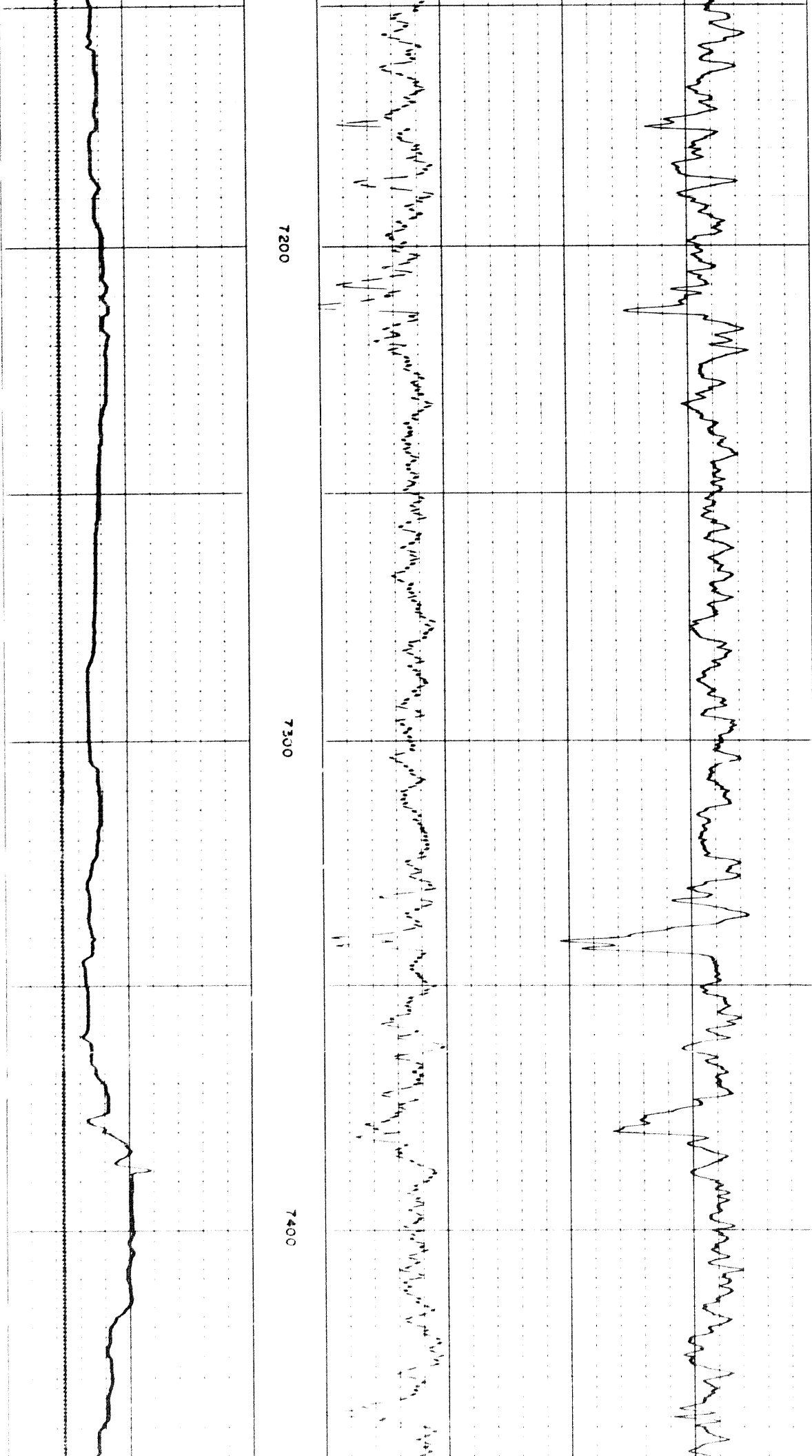


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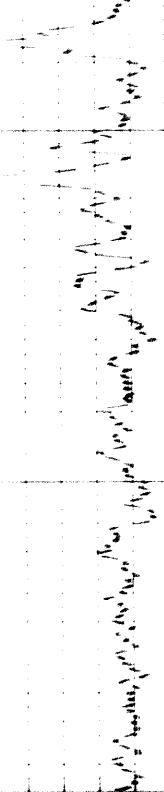
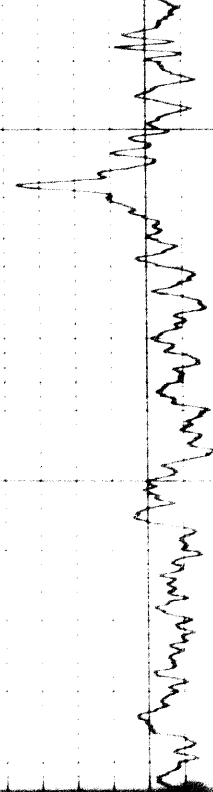
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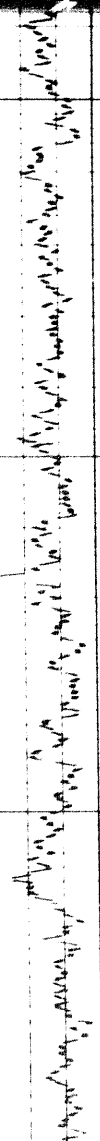
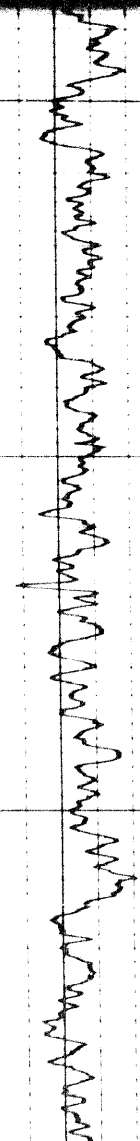
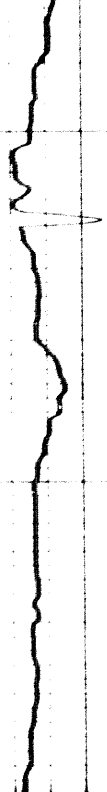
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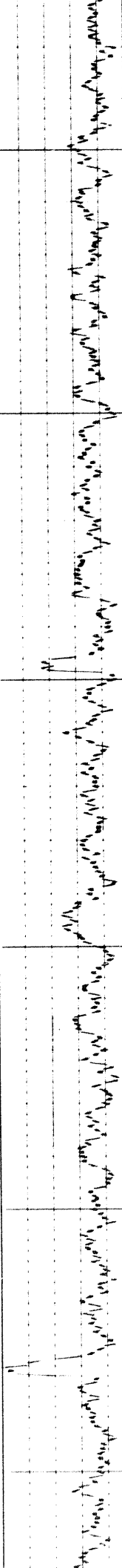
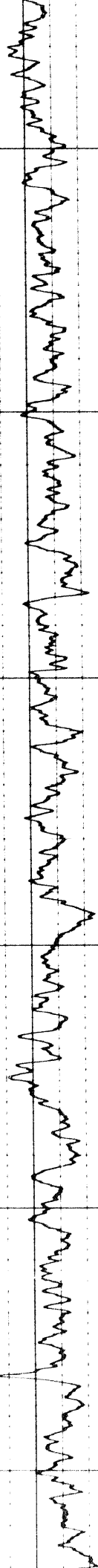
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7500

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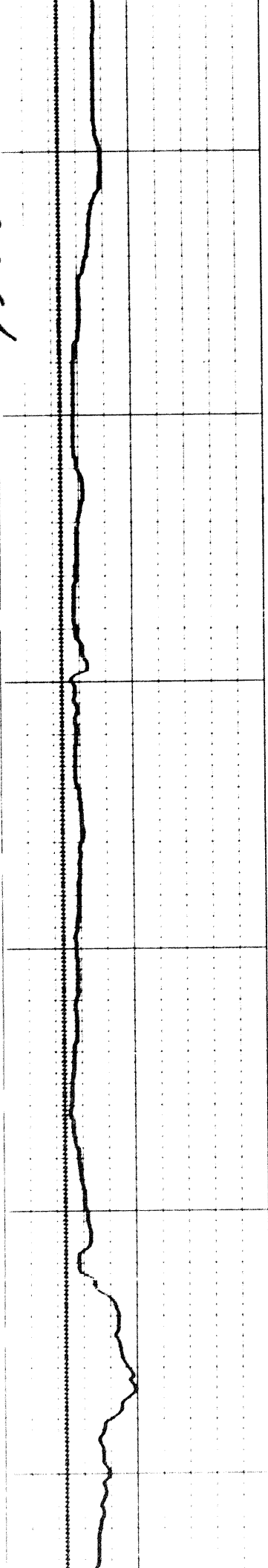


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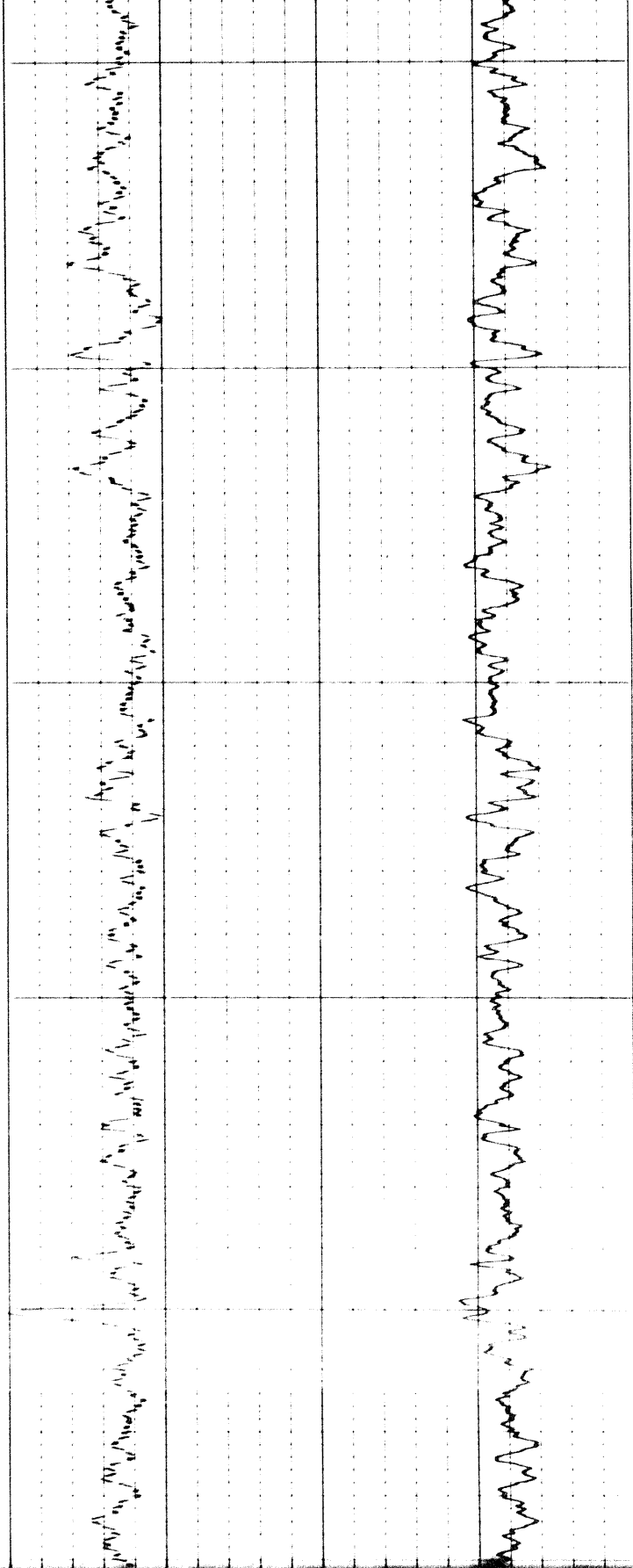
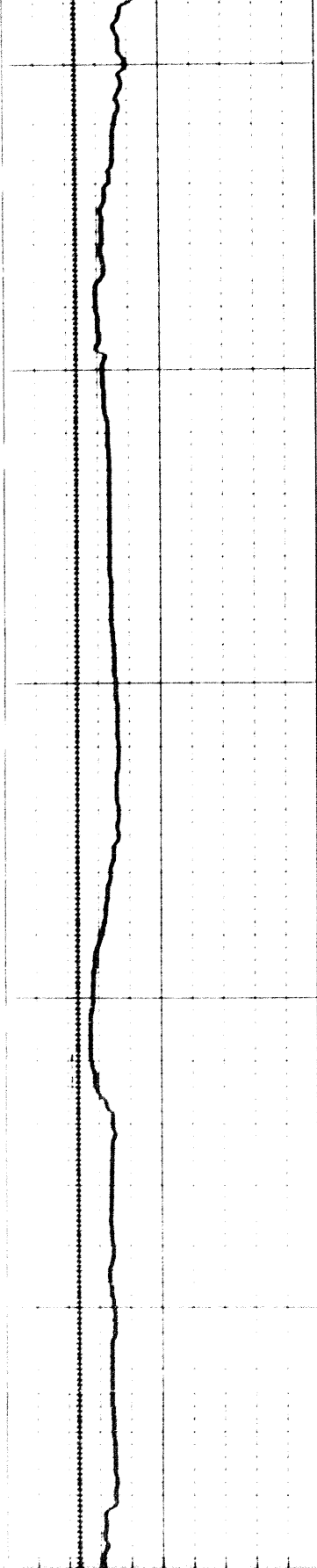
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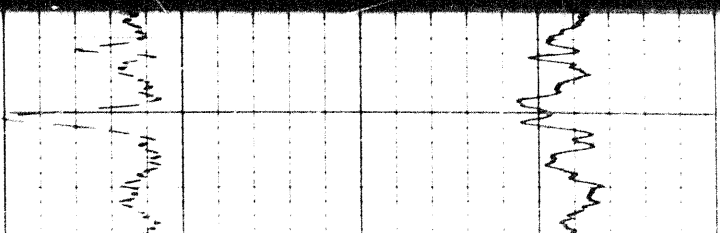
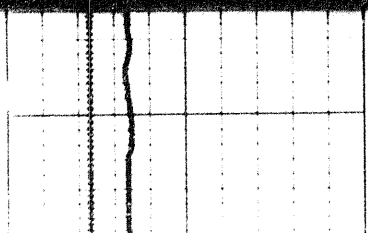
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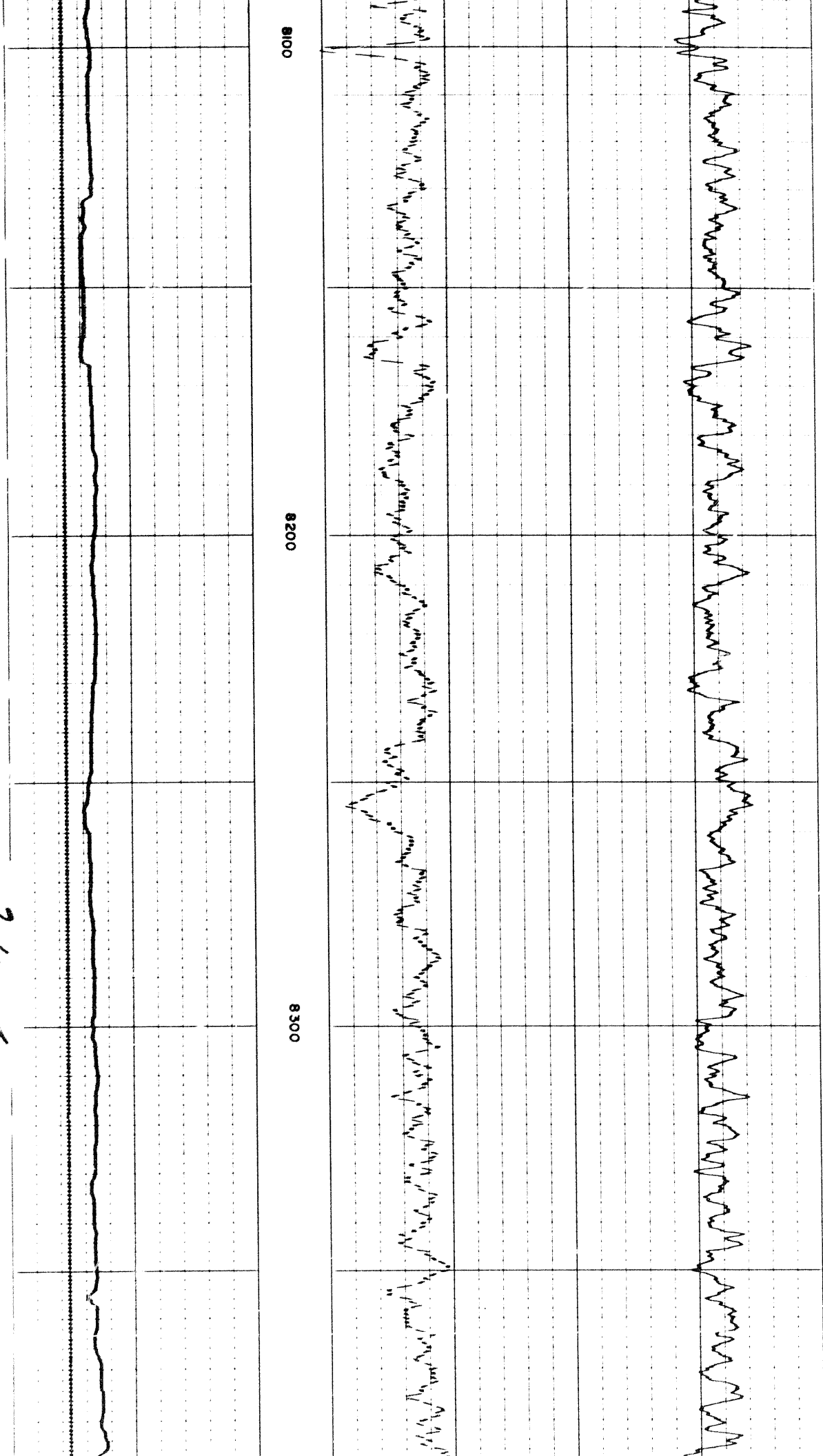
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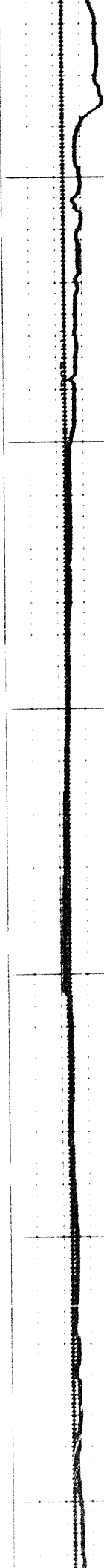
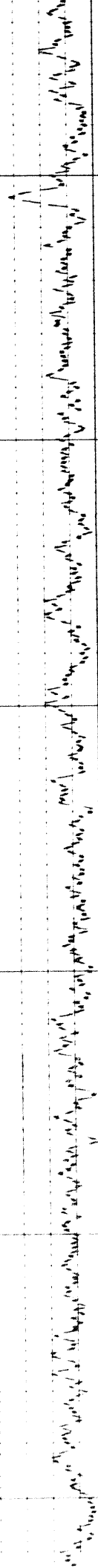
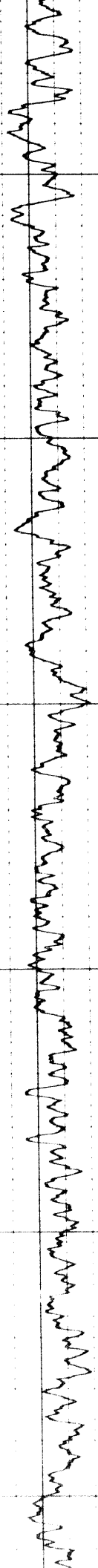


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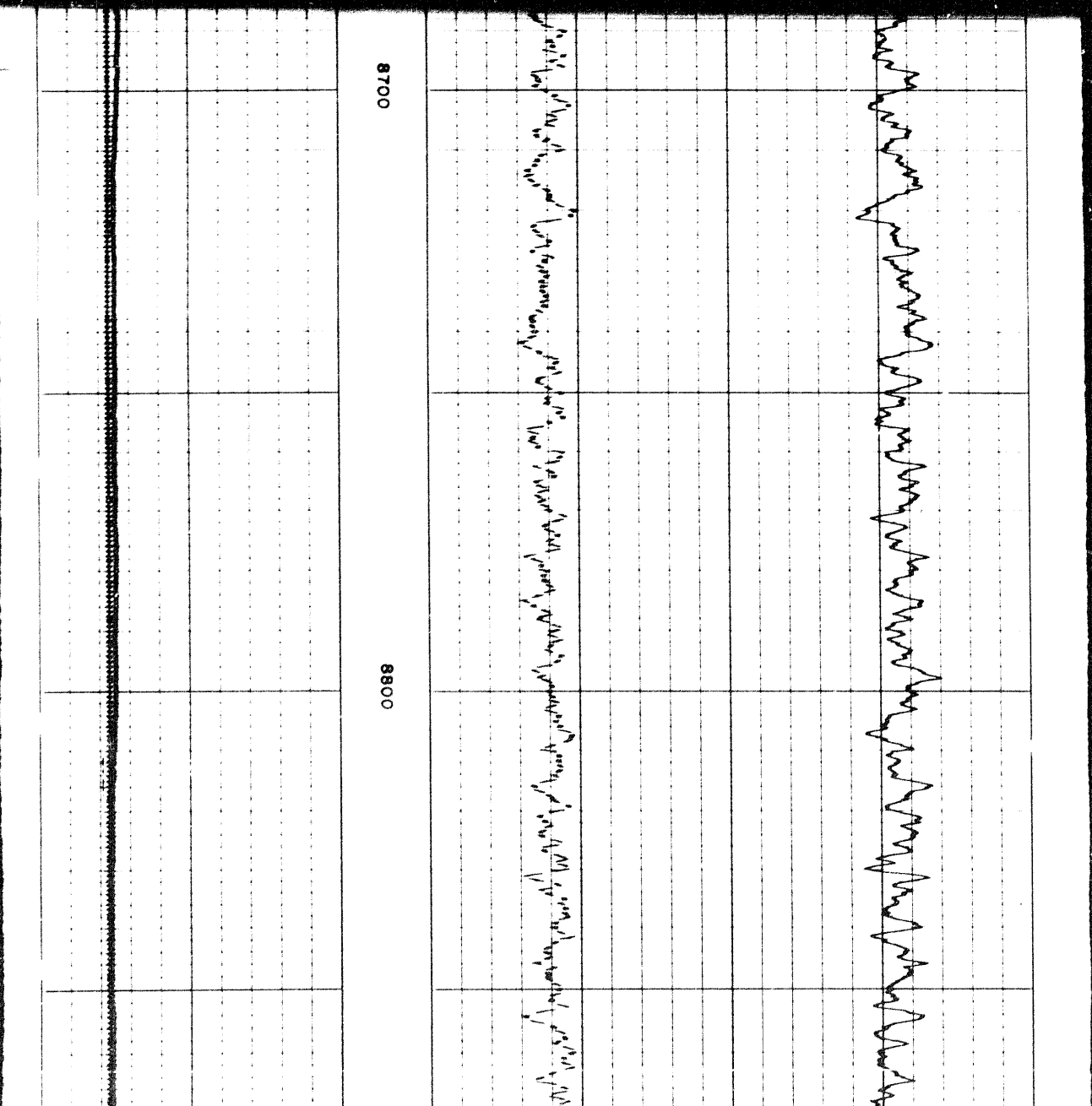
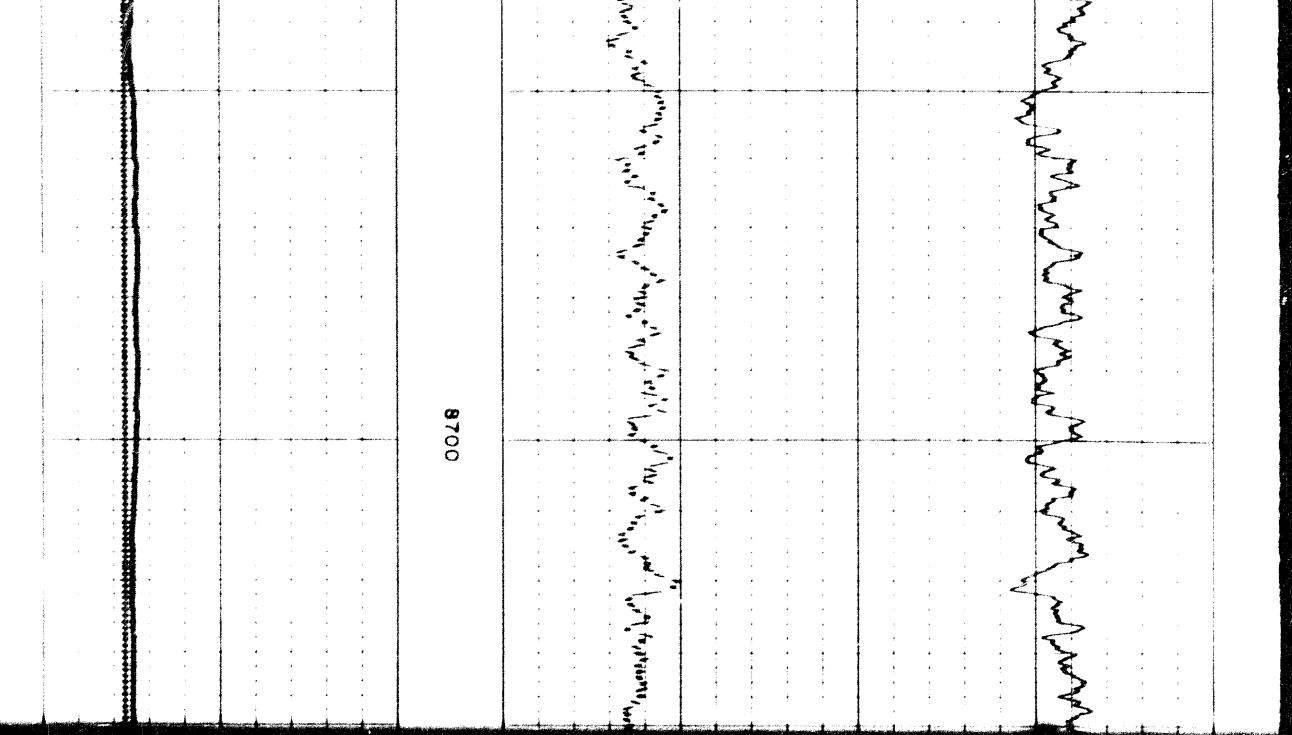
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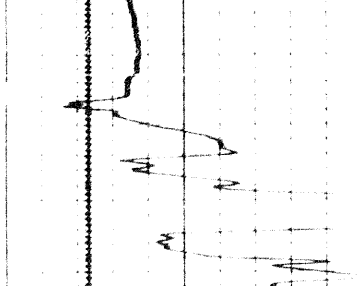
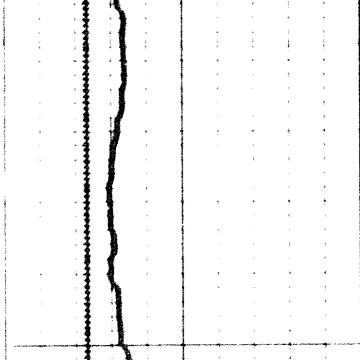
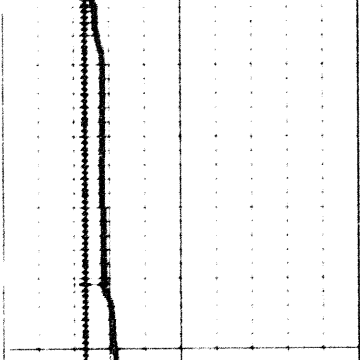
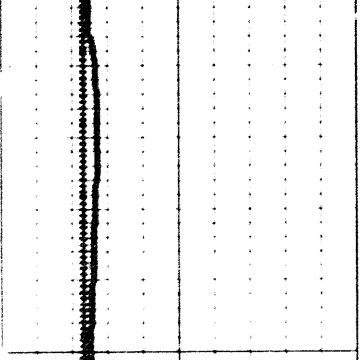
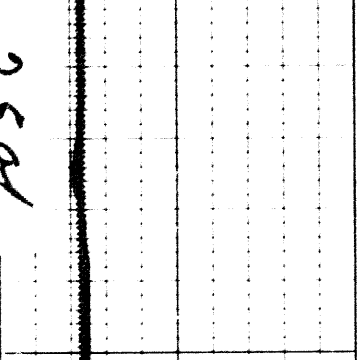
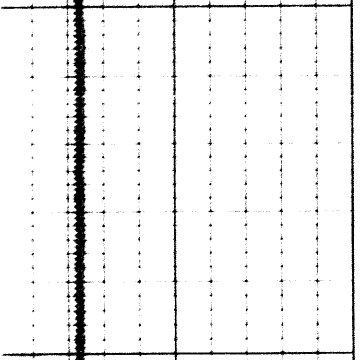
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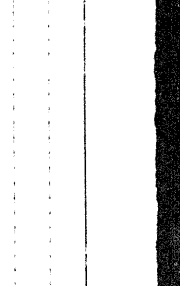
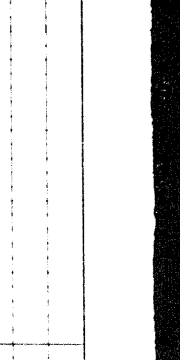
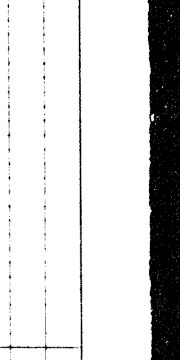
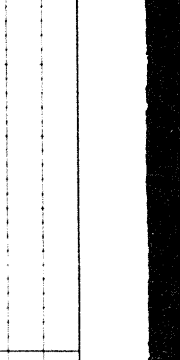
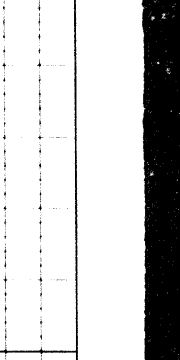
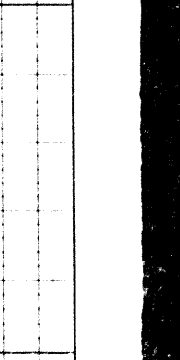
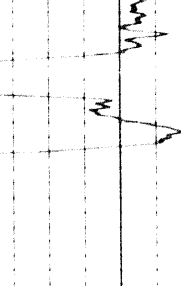
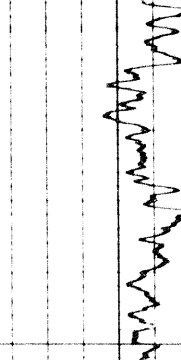
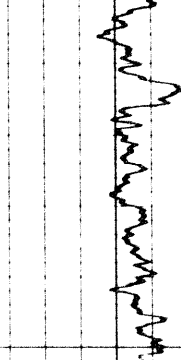
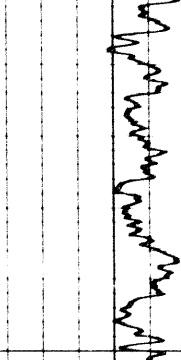
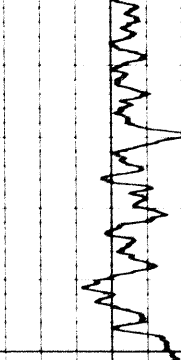
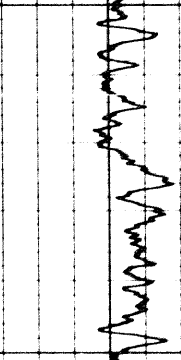
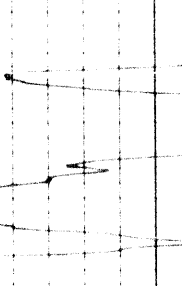
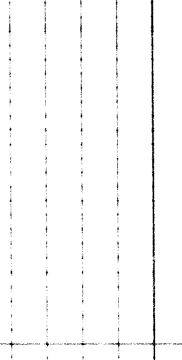
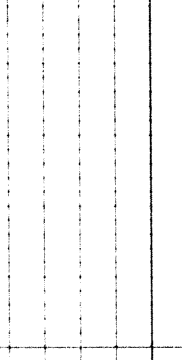
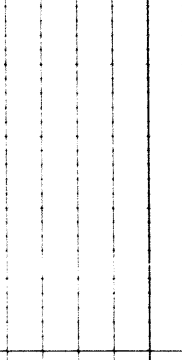
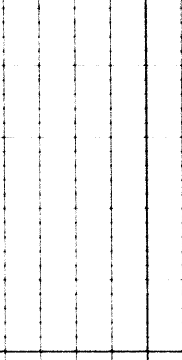
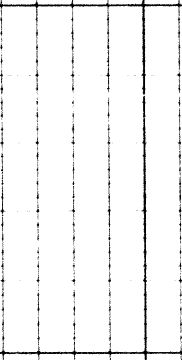
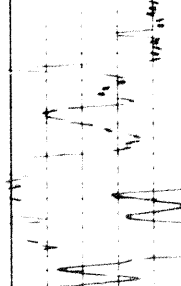
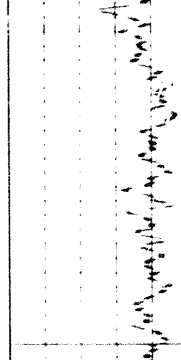
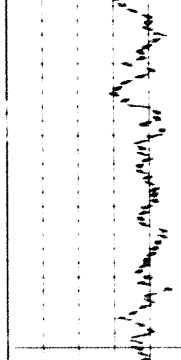
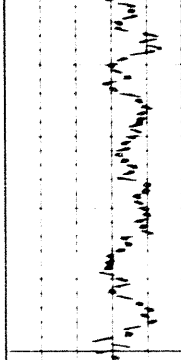
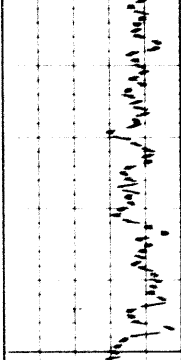
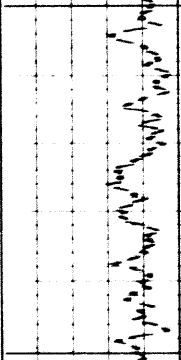
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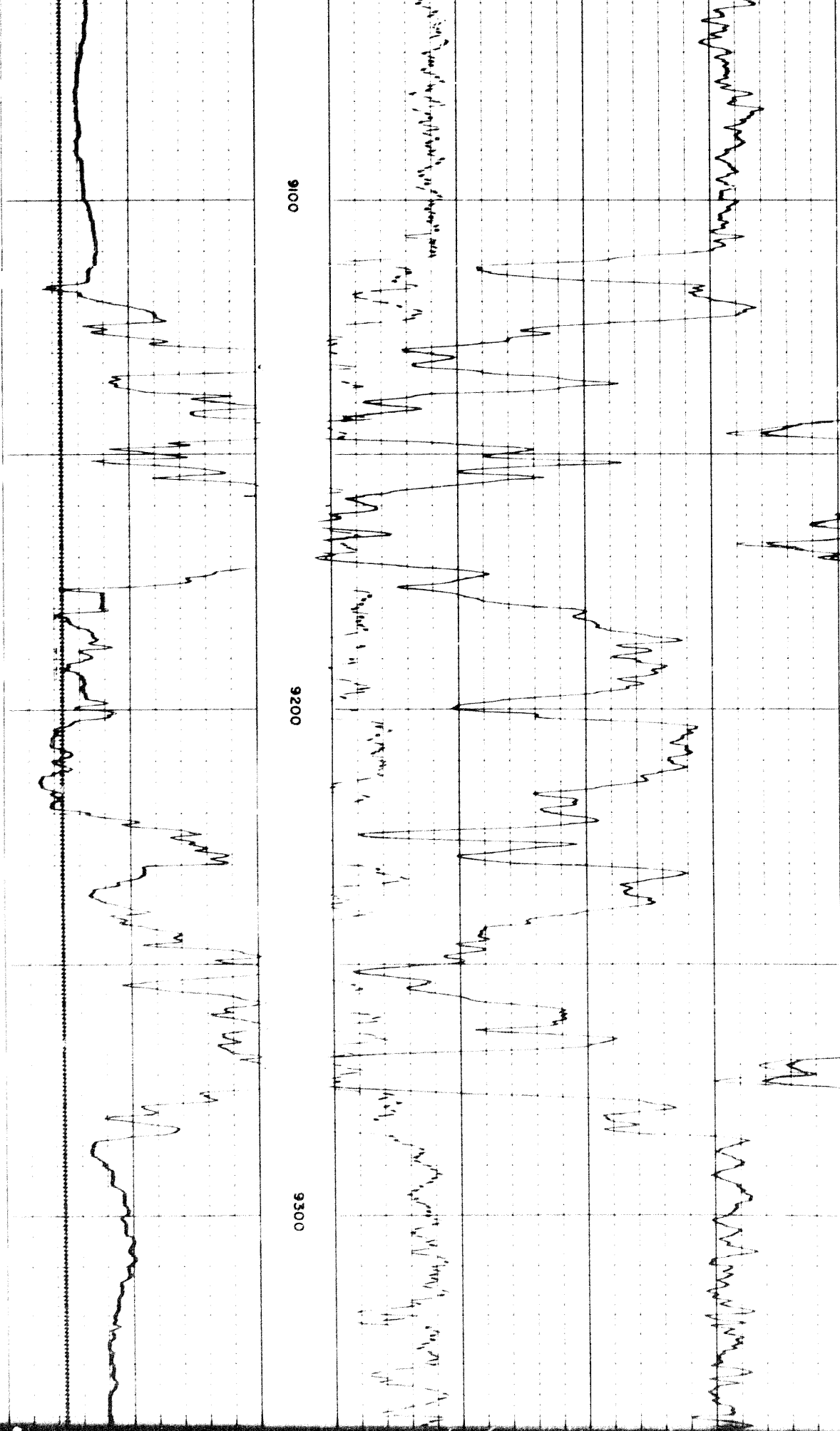


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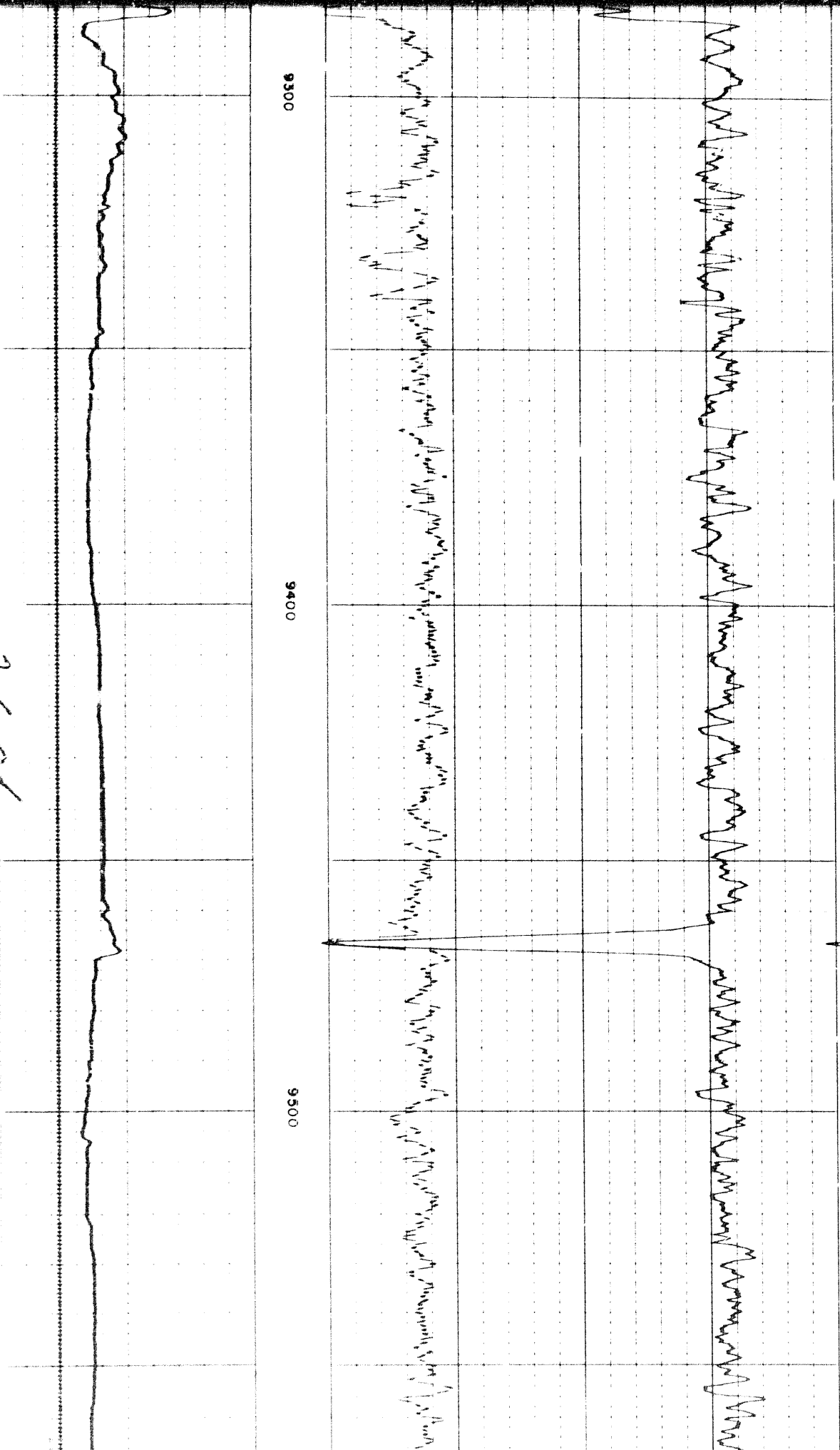




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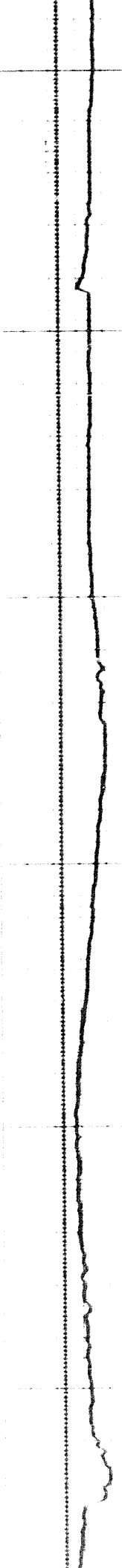
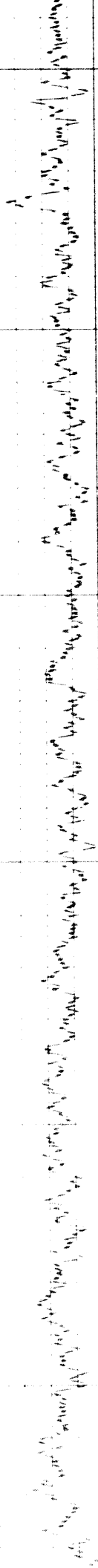
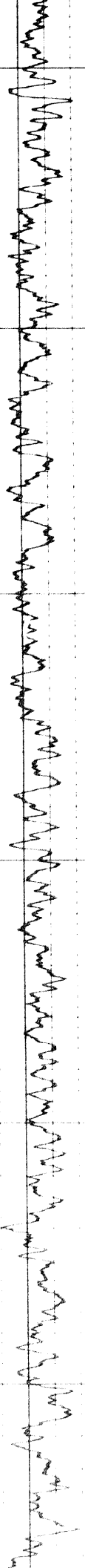


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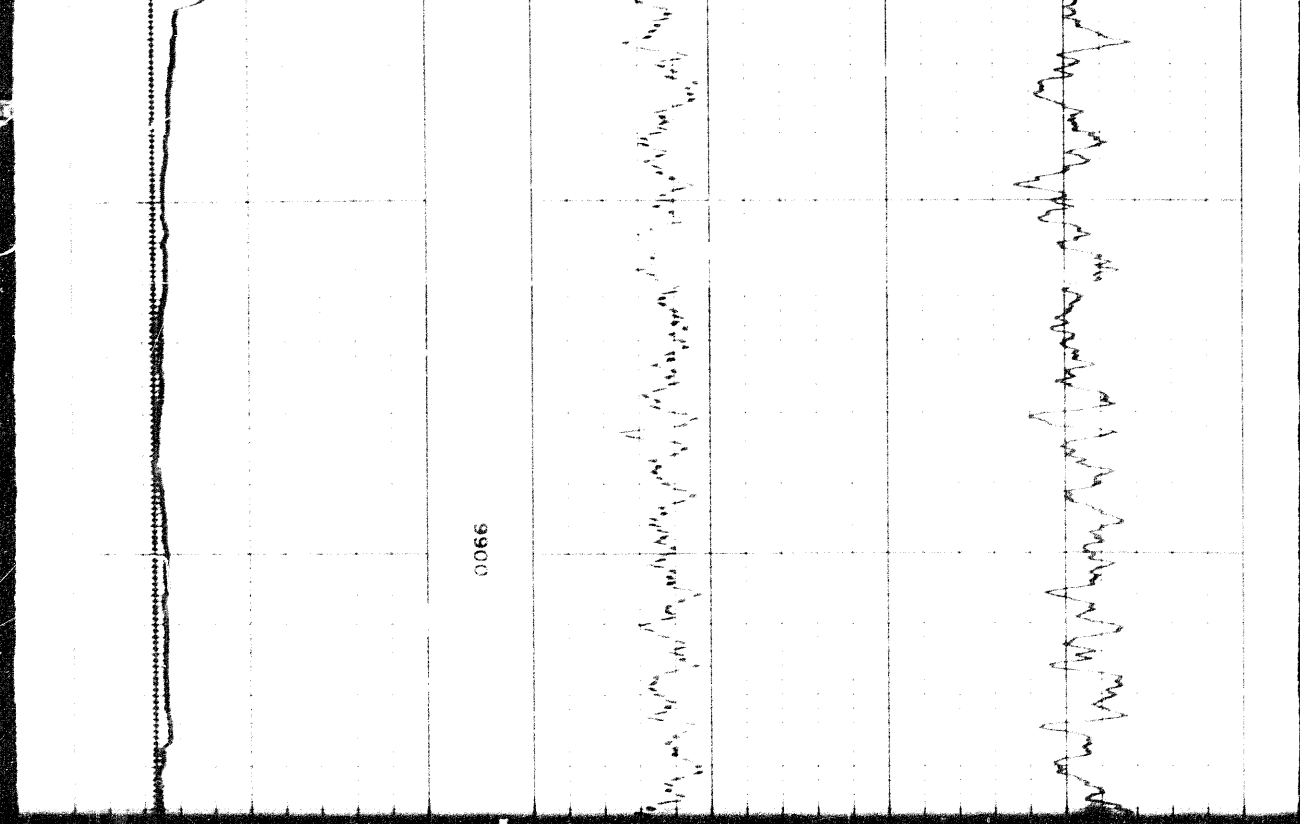
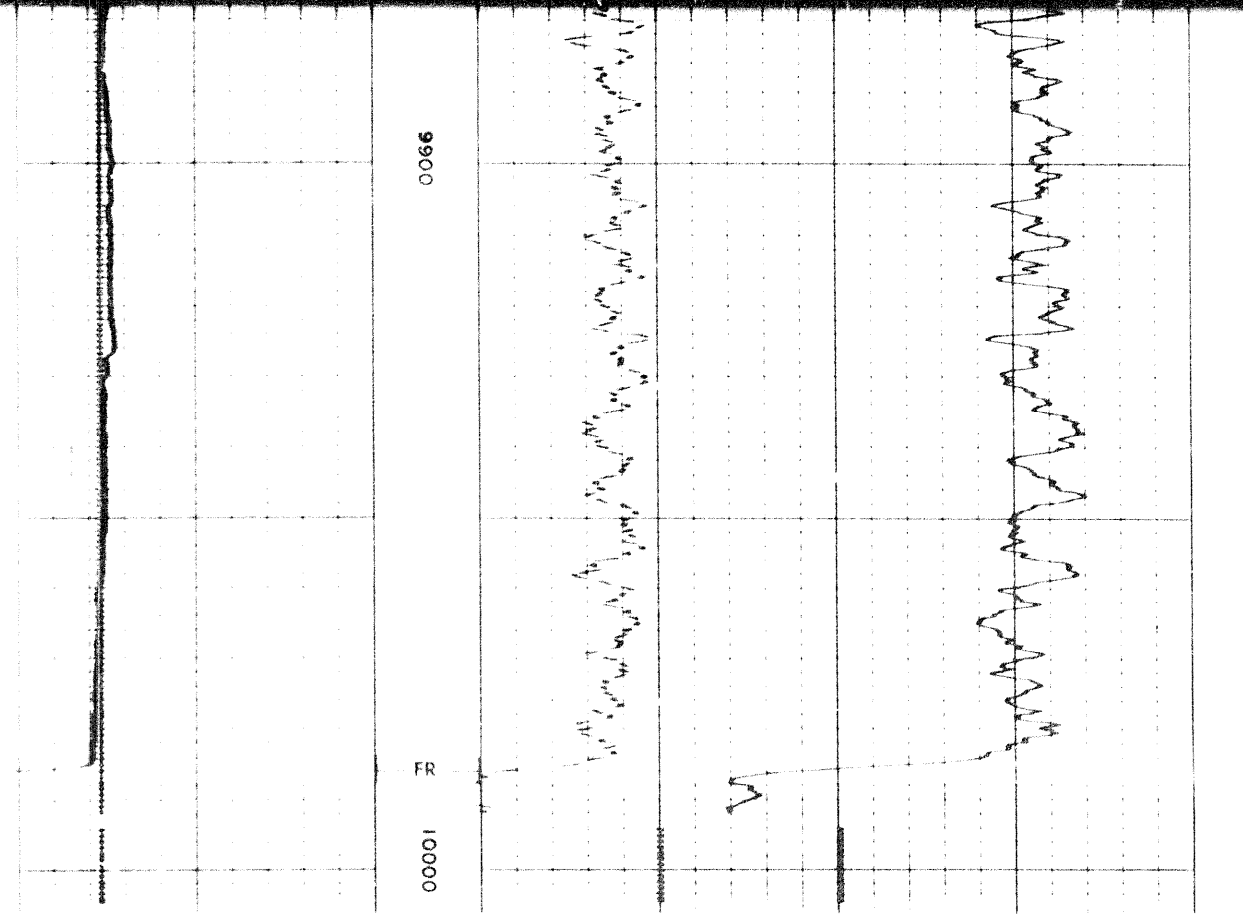


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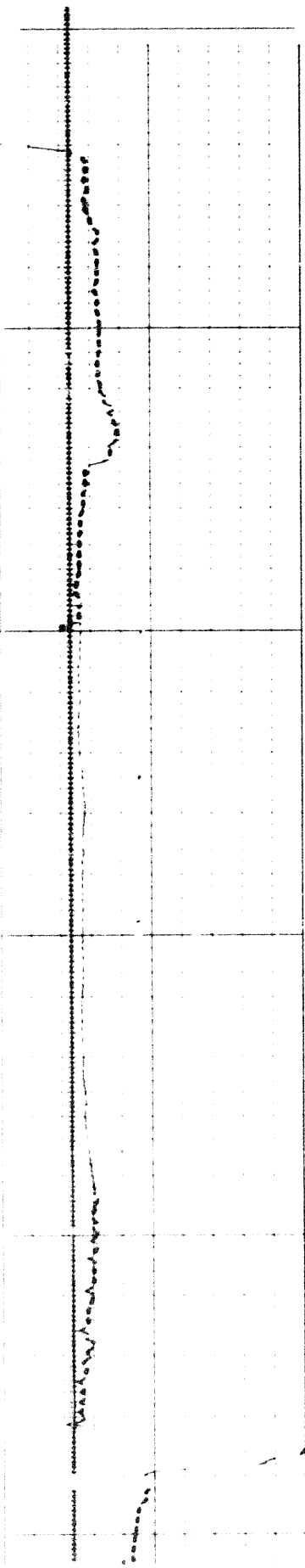
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2. 20



REPEAT SECTION

70

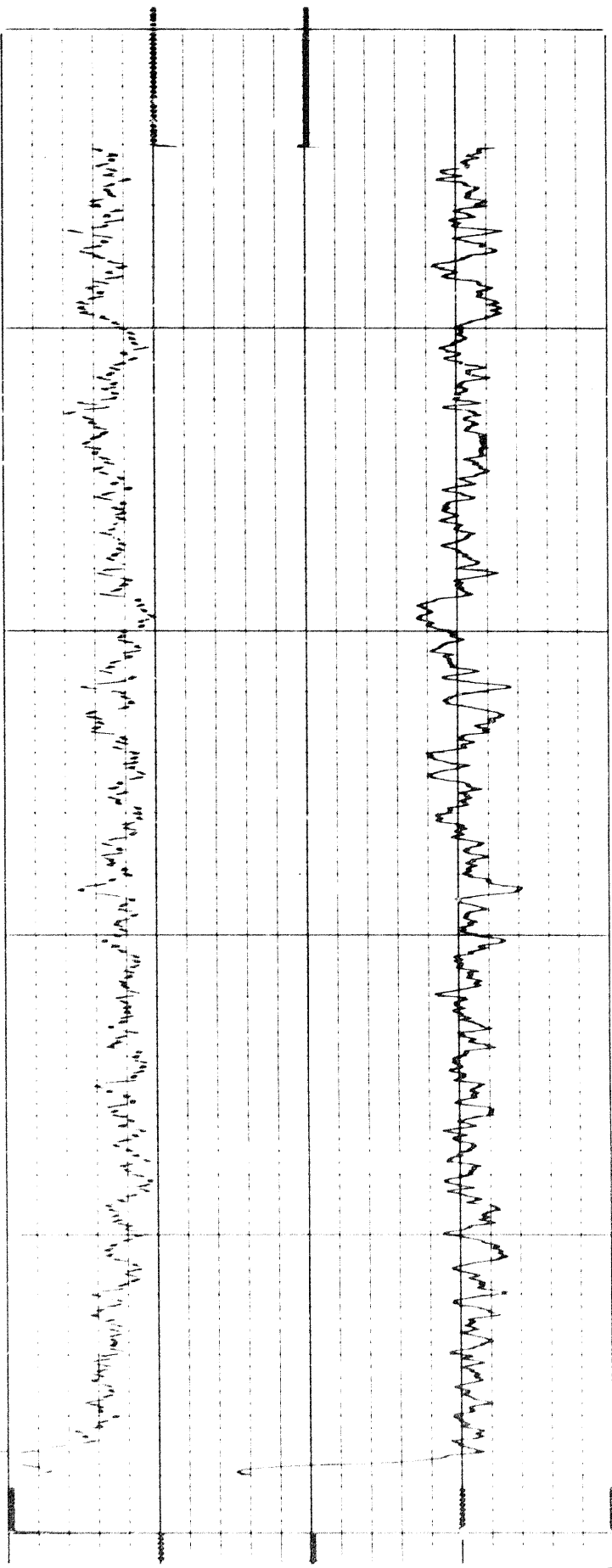


0086

0066

FR

00001



0.25 0 0.25

DENSITY CORRECTION

11 12 13 14 15 16 17 18 19

0.25 0 0.25

CALIPER
hole diameter in inches

DENSITY CORRECTION
 $\Delta\rho$ - gm/cc

Sens 1 C
Zero div to left

2.0 2.5 3.0

GAMMA RAY
API UNITS

DEPTH

BULK DENSITY
 ρ_b - gm/cc

DETAIL LOG
5" = 100'

GAMMA RAY
API UNITS

DEPTH

BULK DENSITY
 ρ_b - gm/cc

Sens 1 C
Zero 2 div to left

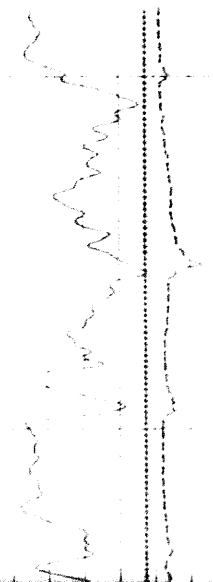
2.0 2.5 3.0

CALIPER
hole diameter in inches

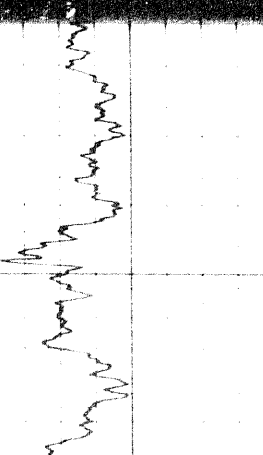
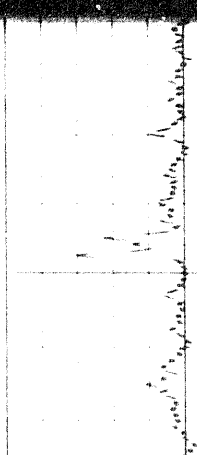
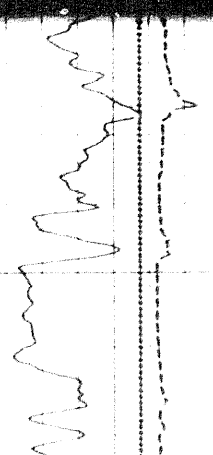
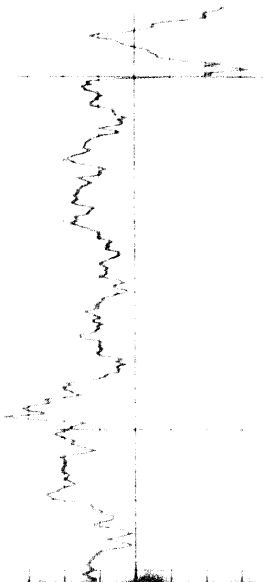
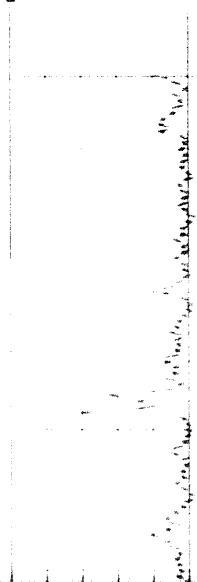
DENSITY CORRECTION
 $\Delta\rho$ - gm/cc

5 6 7 8 9 10 11 12 13

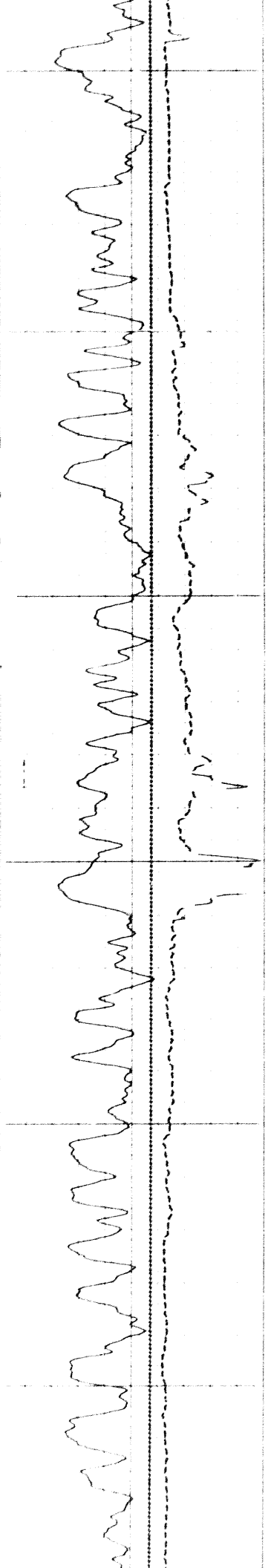
0.25 0 0.25



100 Feet
Casing



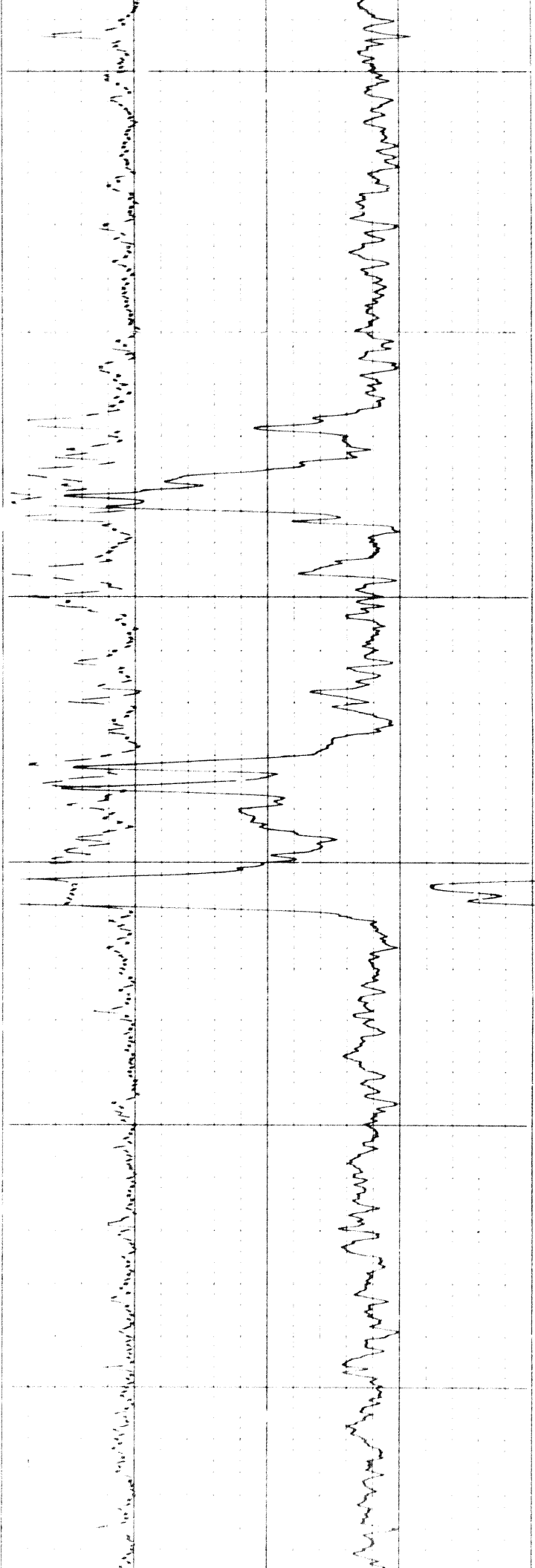
2802

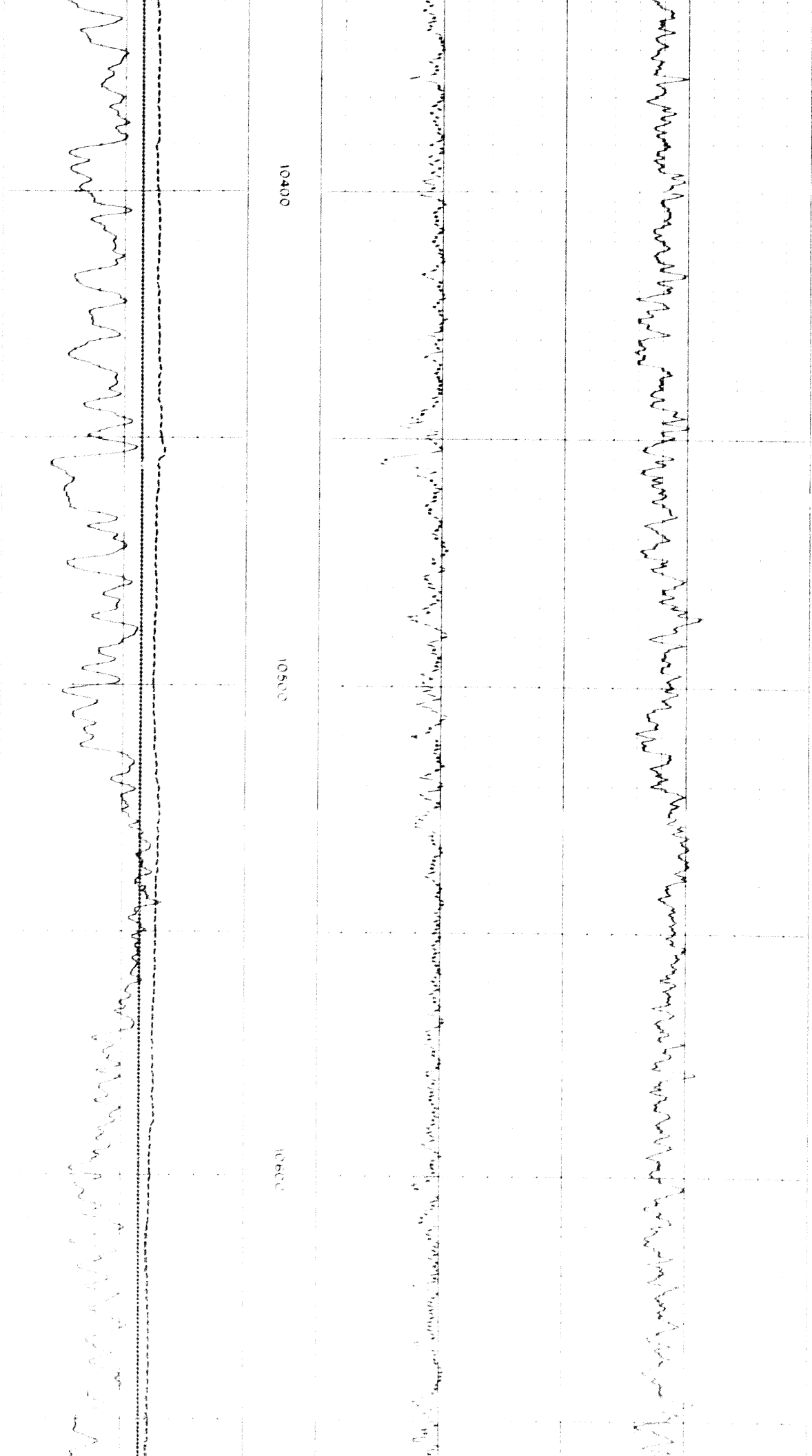


10100

10200

10300





10400

10500

10600

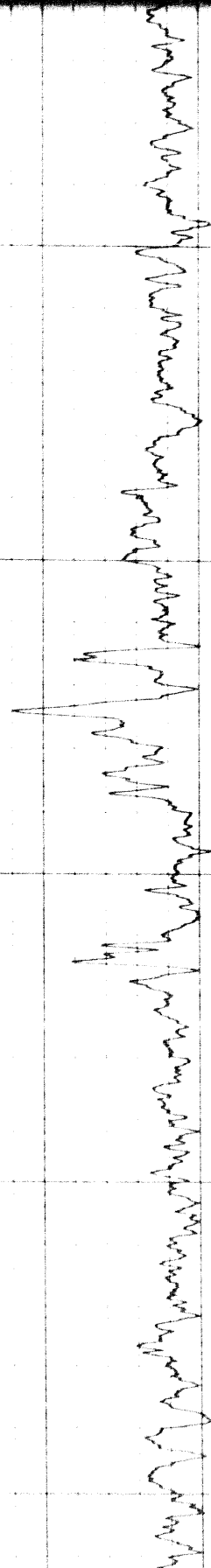
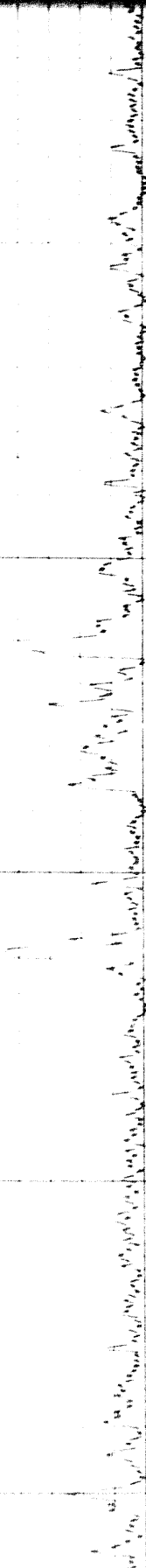
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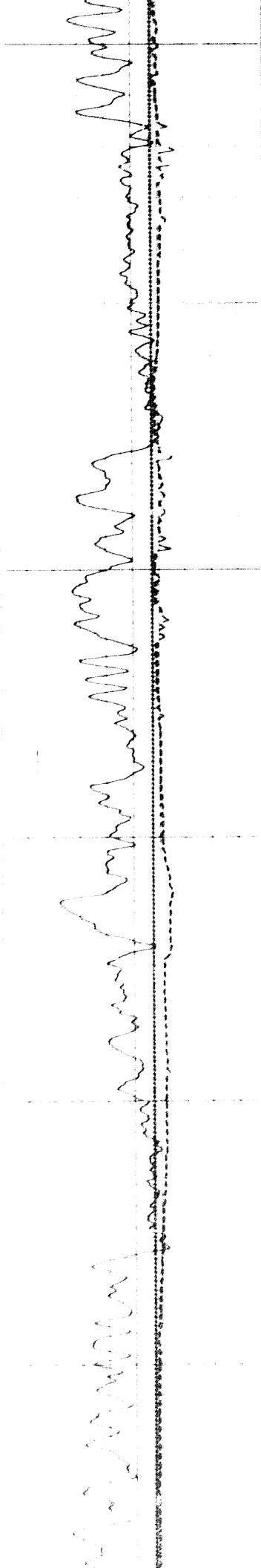
2994



10800

10700

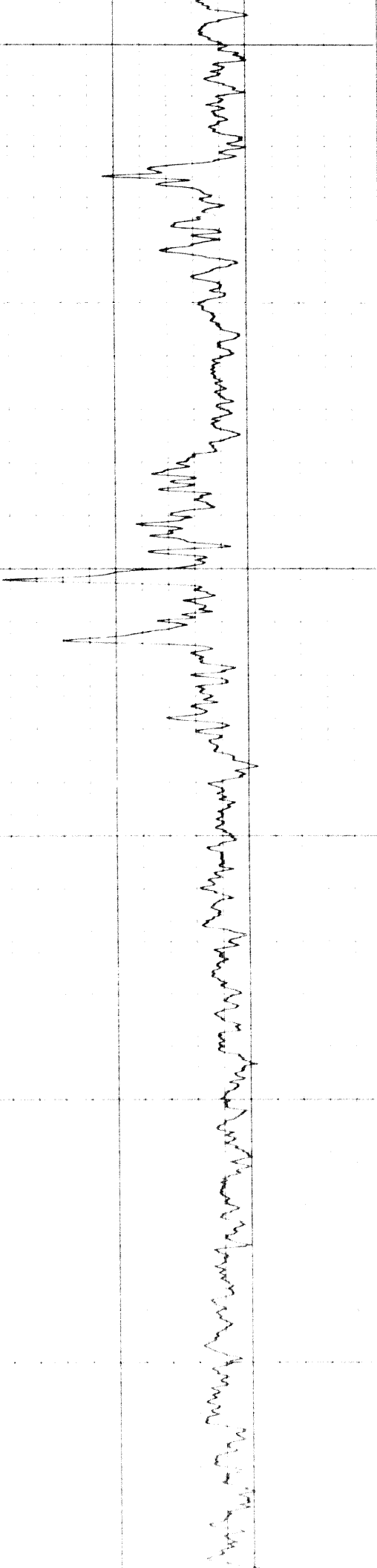
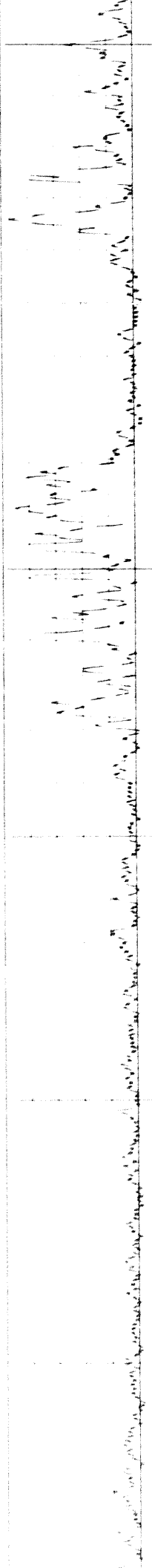


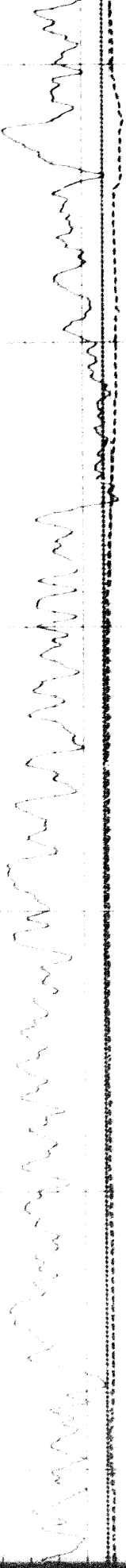


00601

00011

00111

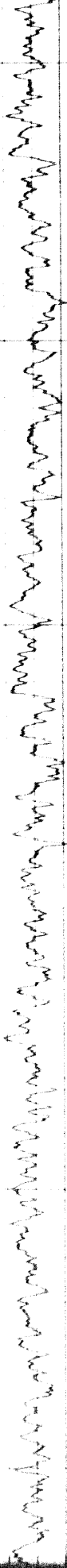
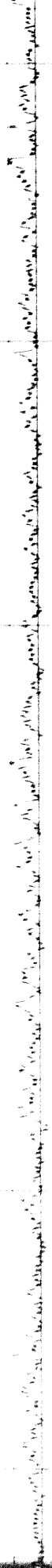




11000

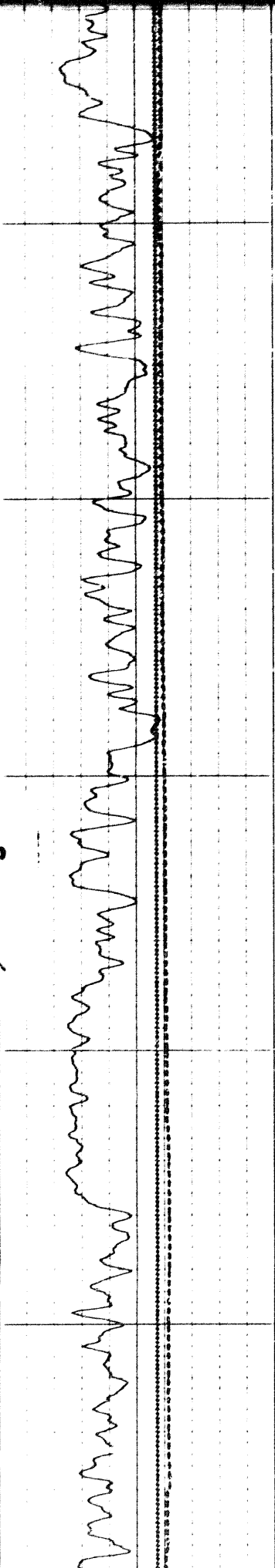
11000

11000



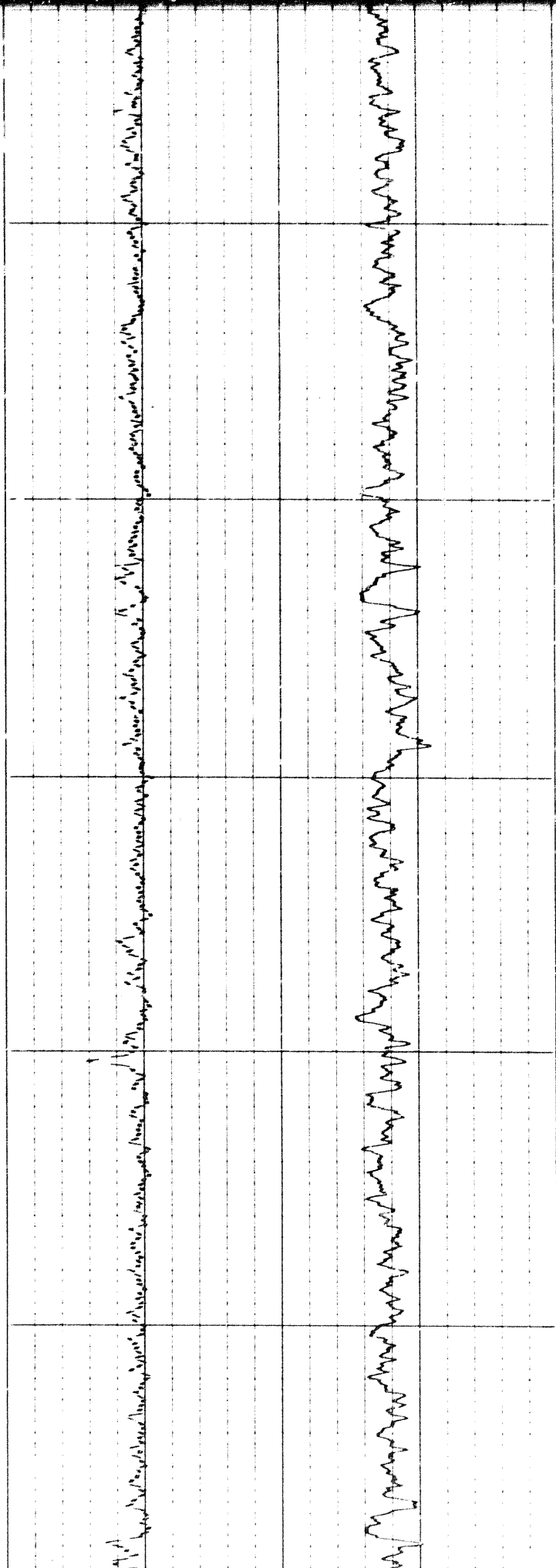
11

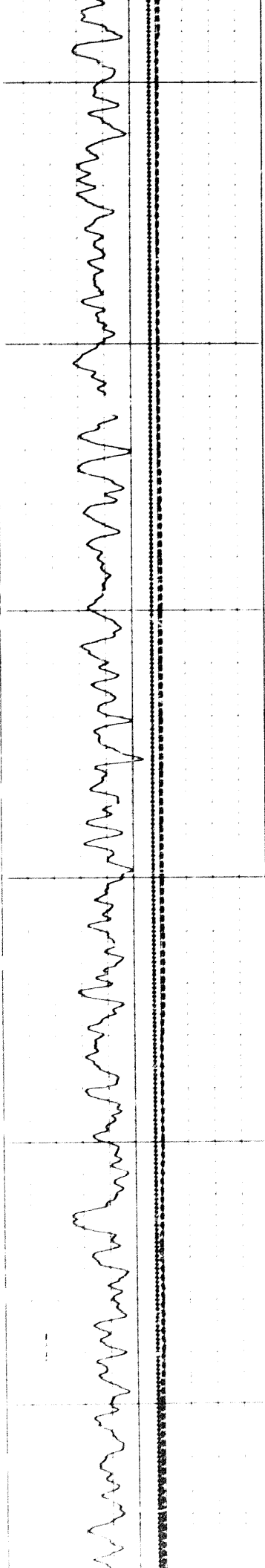
309



11300

11400

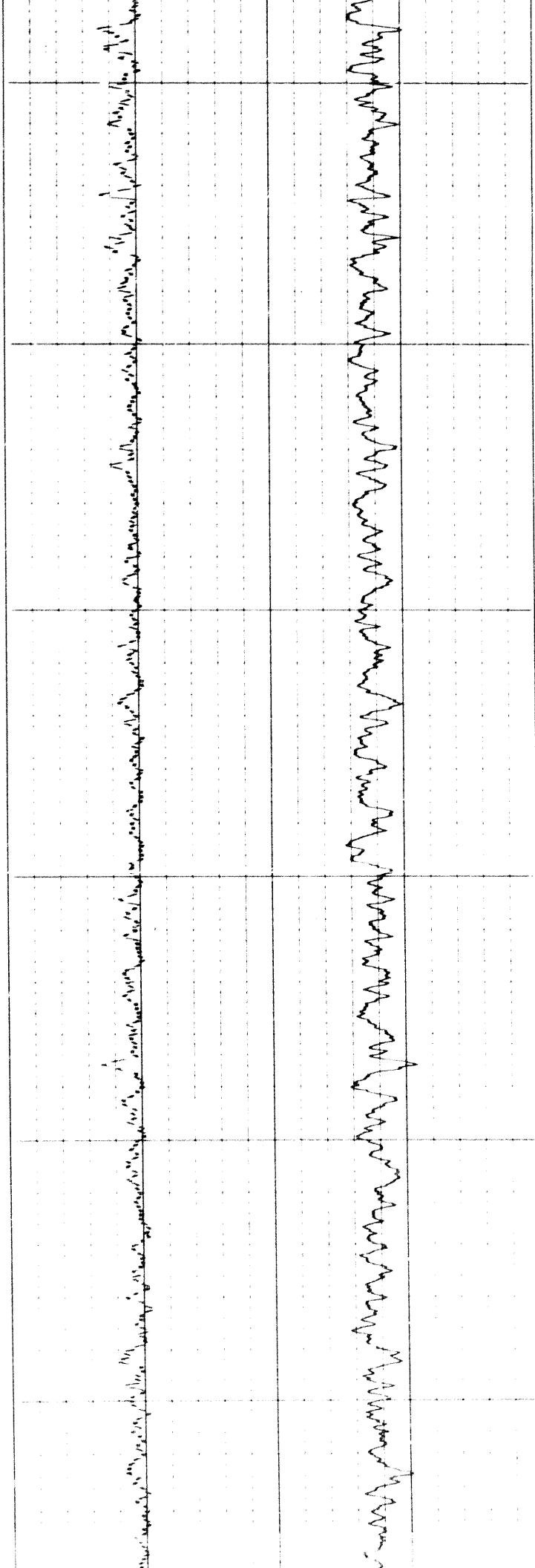




11500

11600

11700

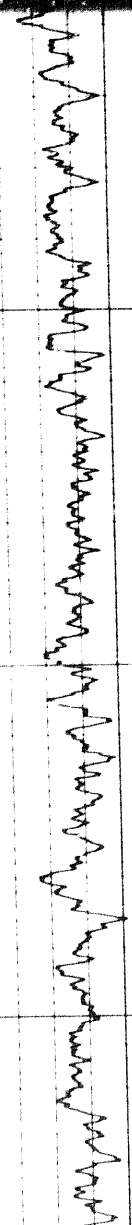




11800



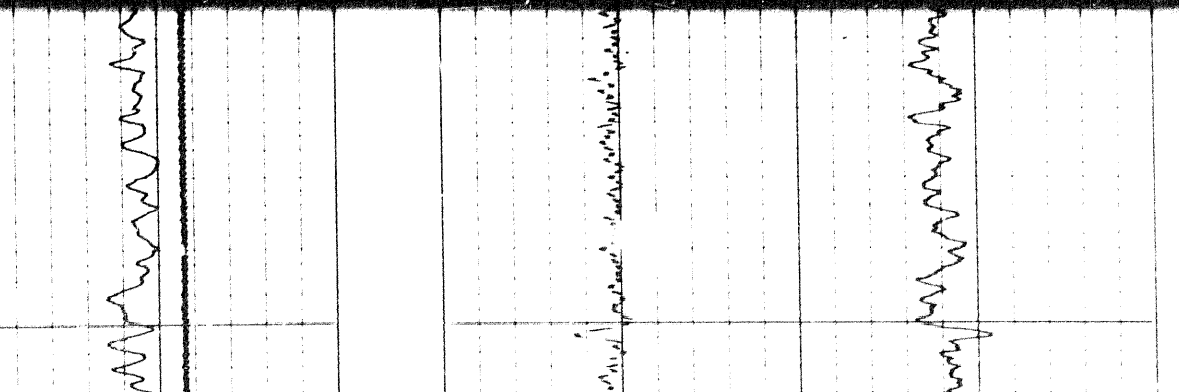
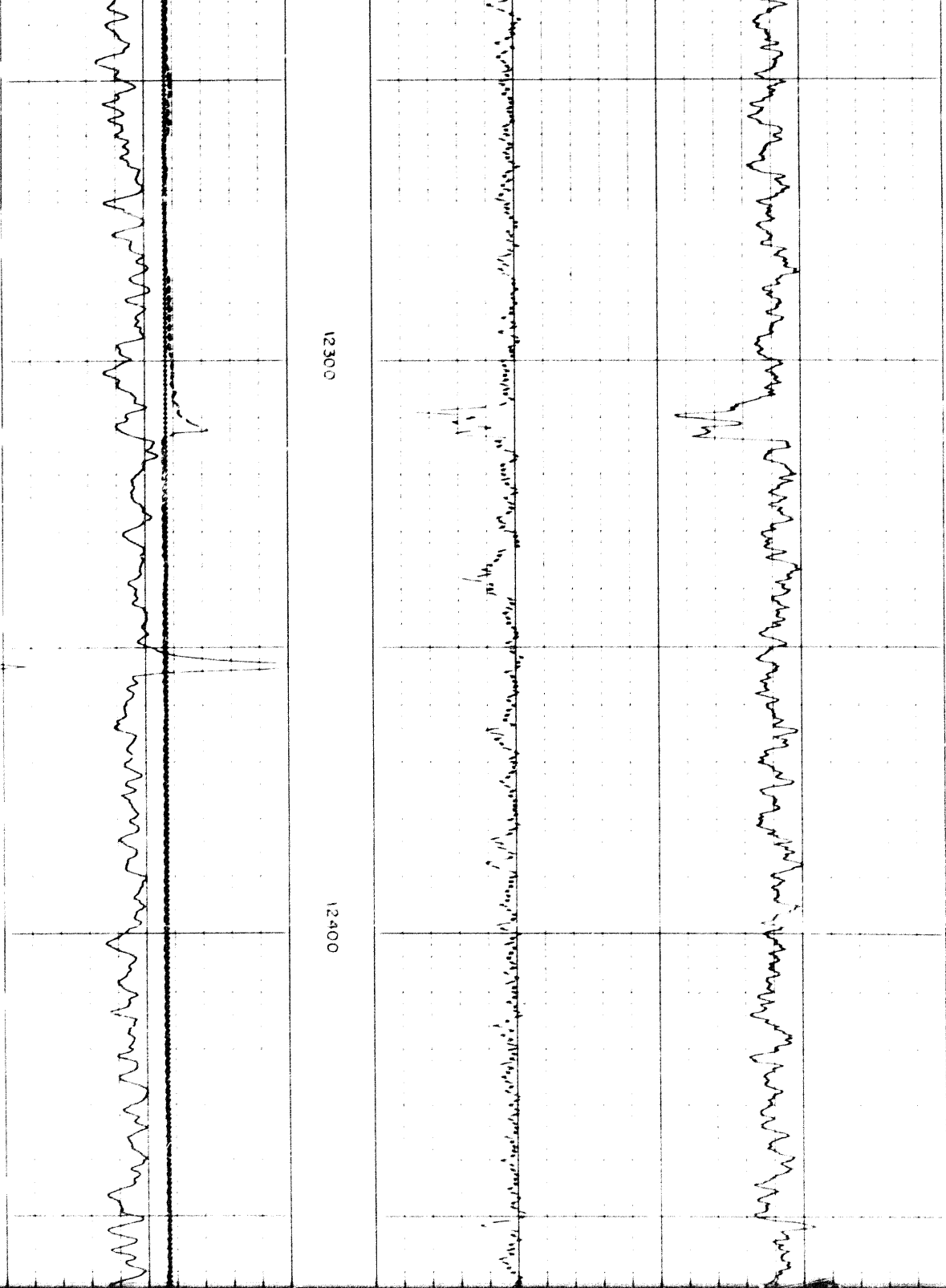
11900

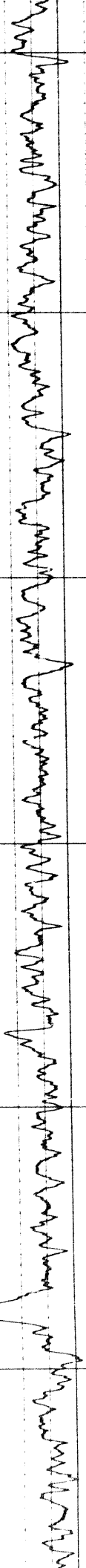


319

3197





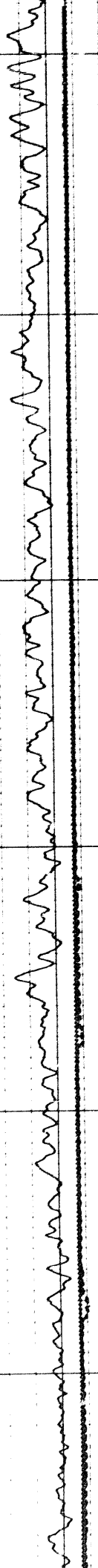


ECG tracing showing a regular rhythm with narrow QRS complexes and a PR interval of approximately 160ms. The rhythm is sinus.

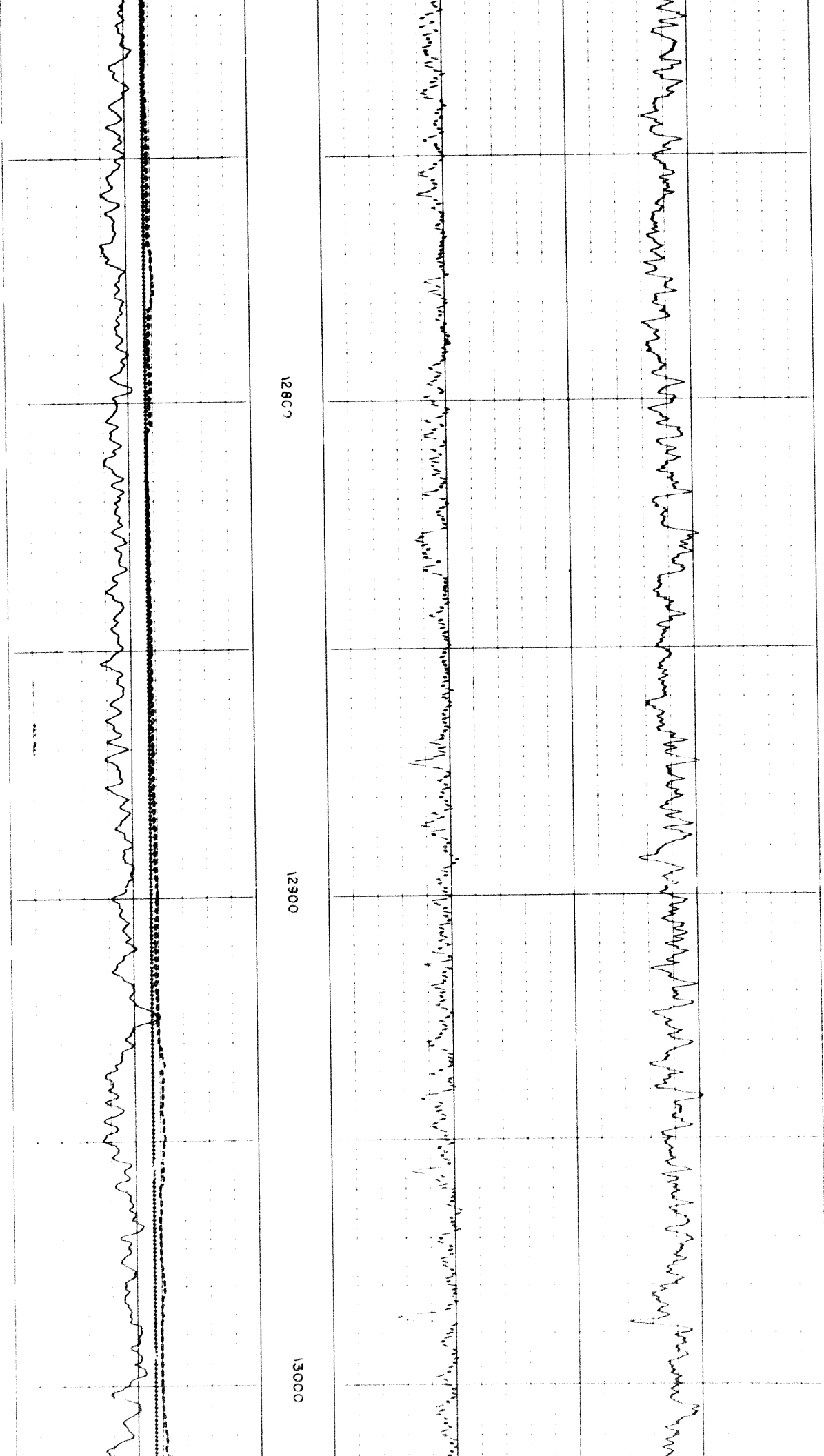
12500

12600

12700



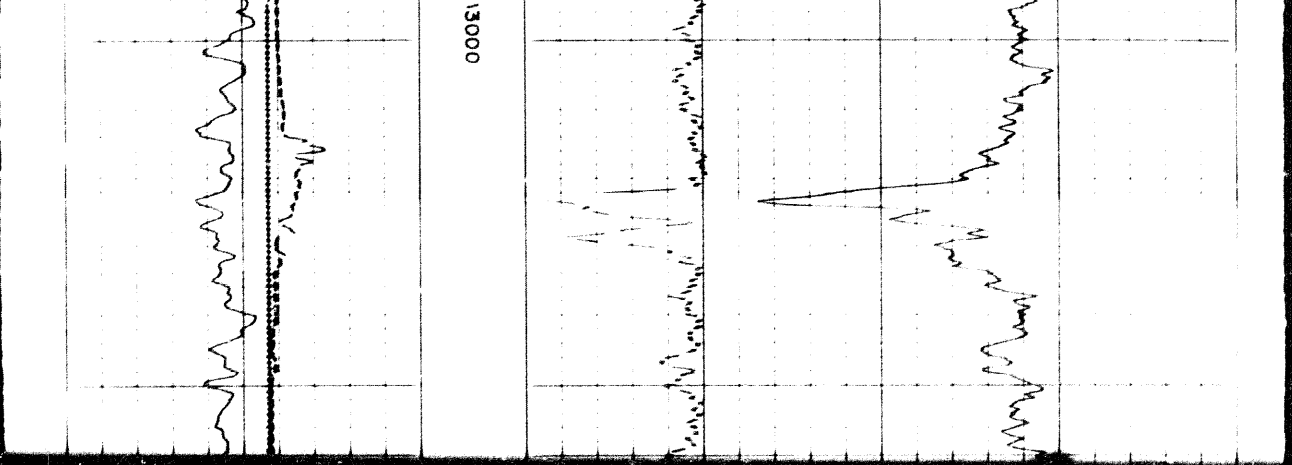
32 of



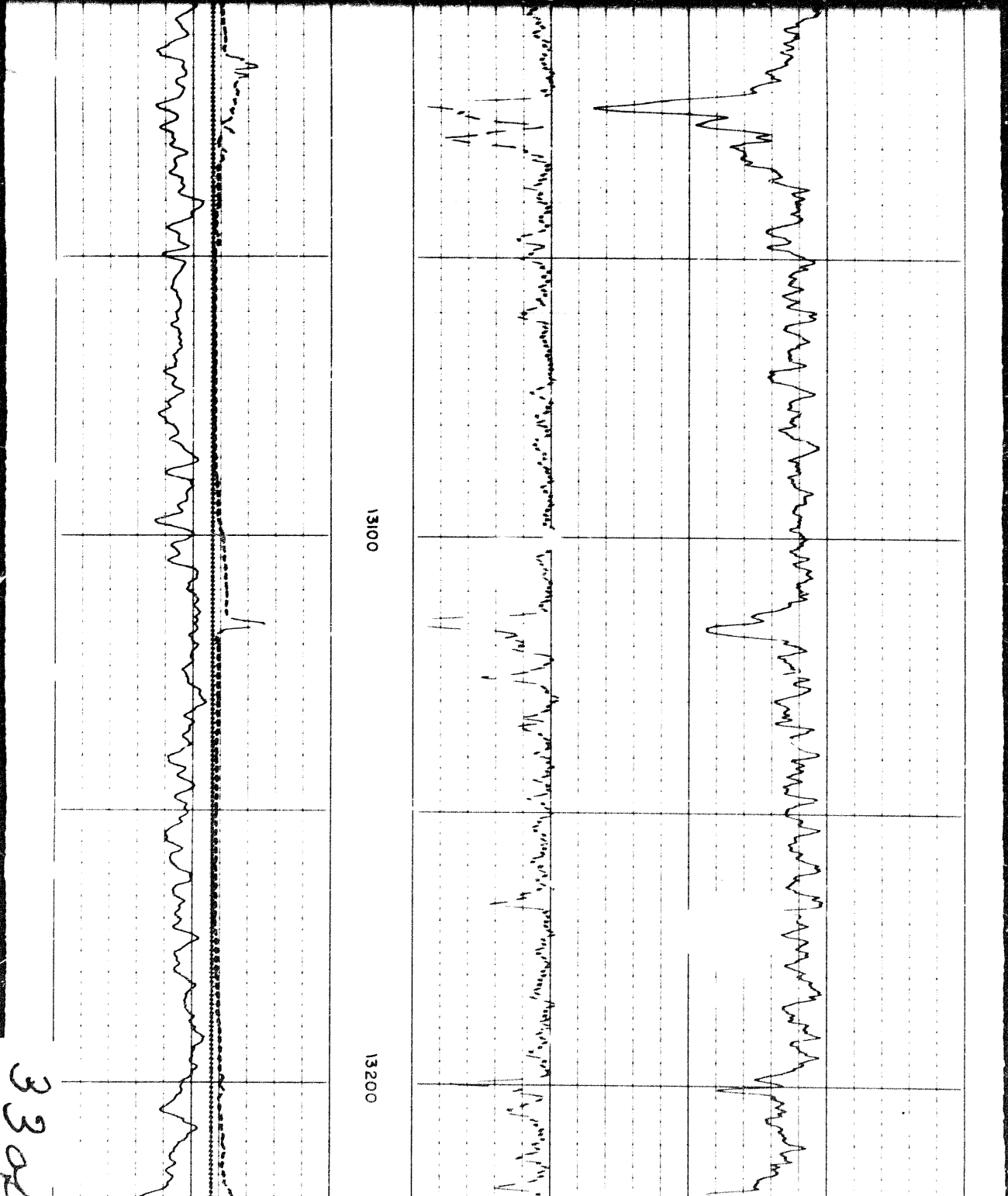
12800

12900

13000



13000

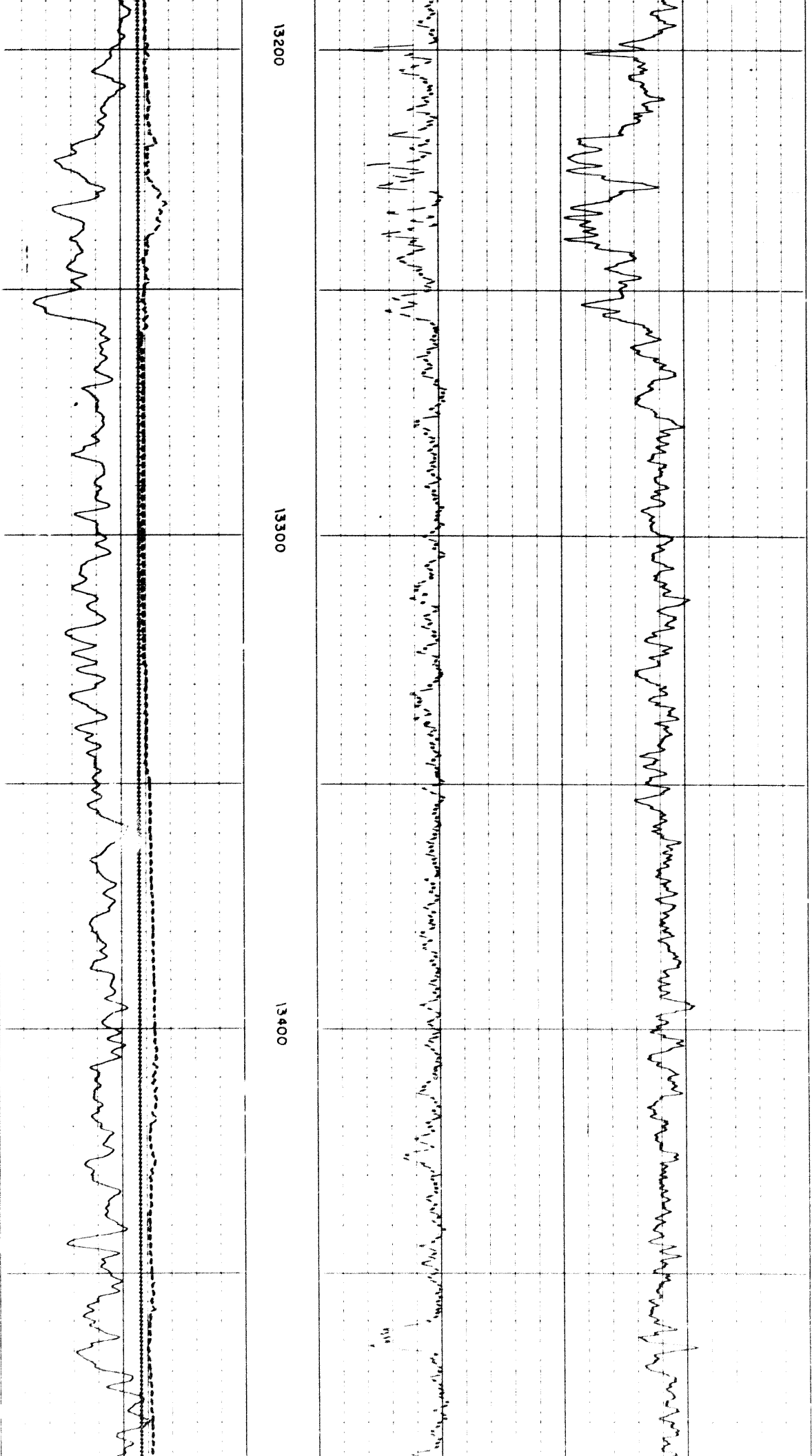


13100

13200

330

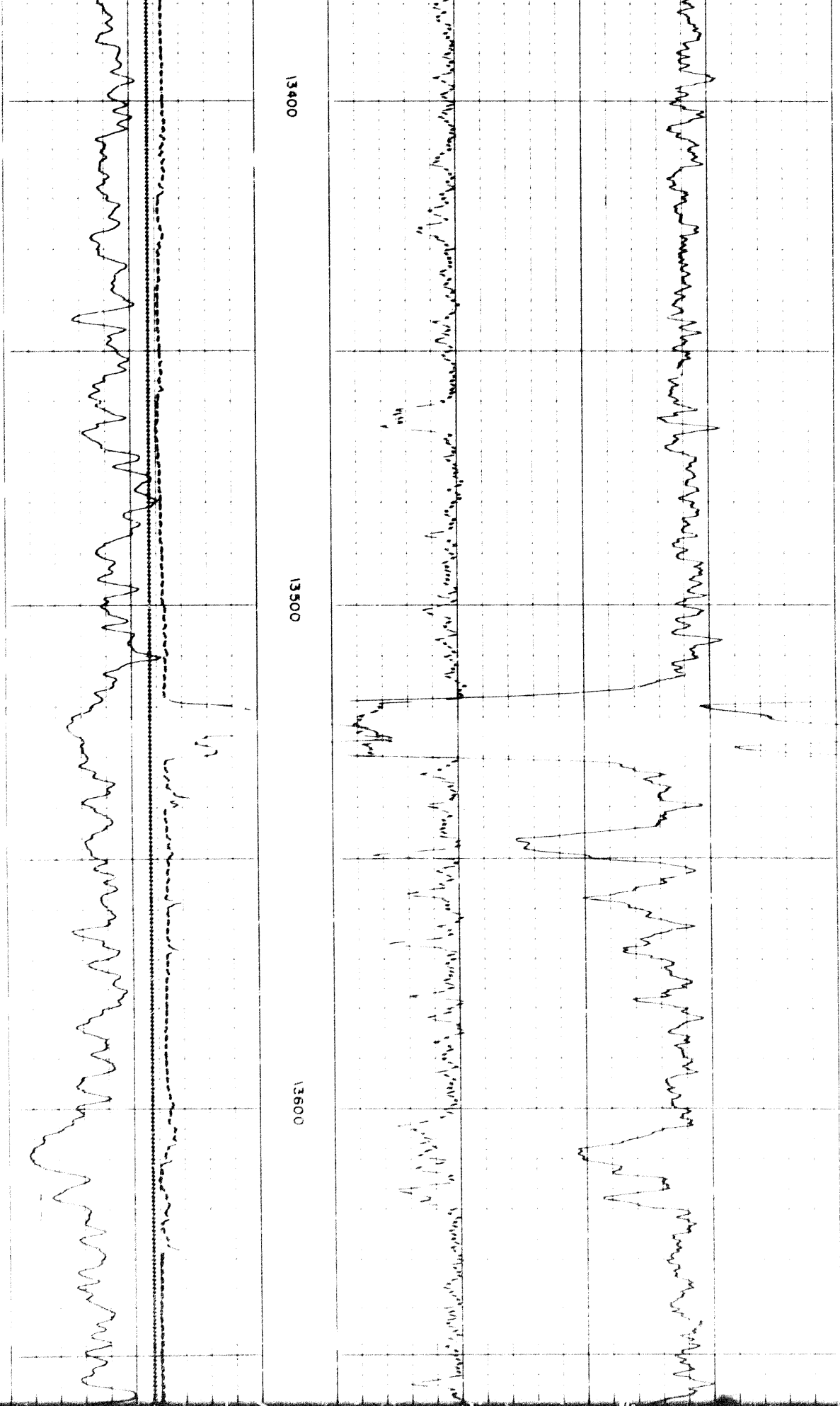
3302



13200

13300

13400

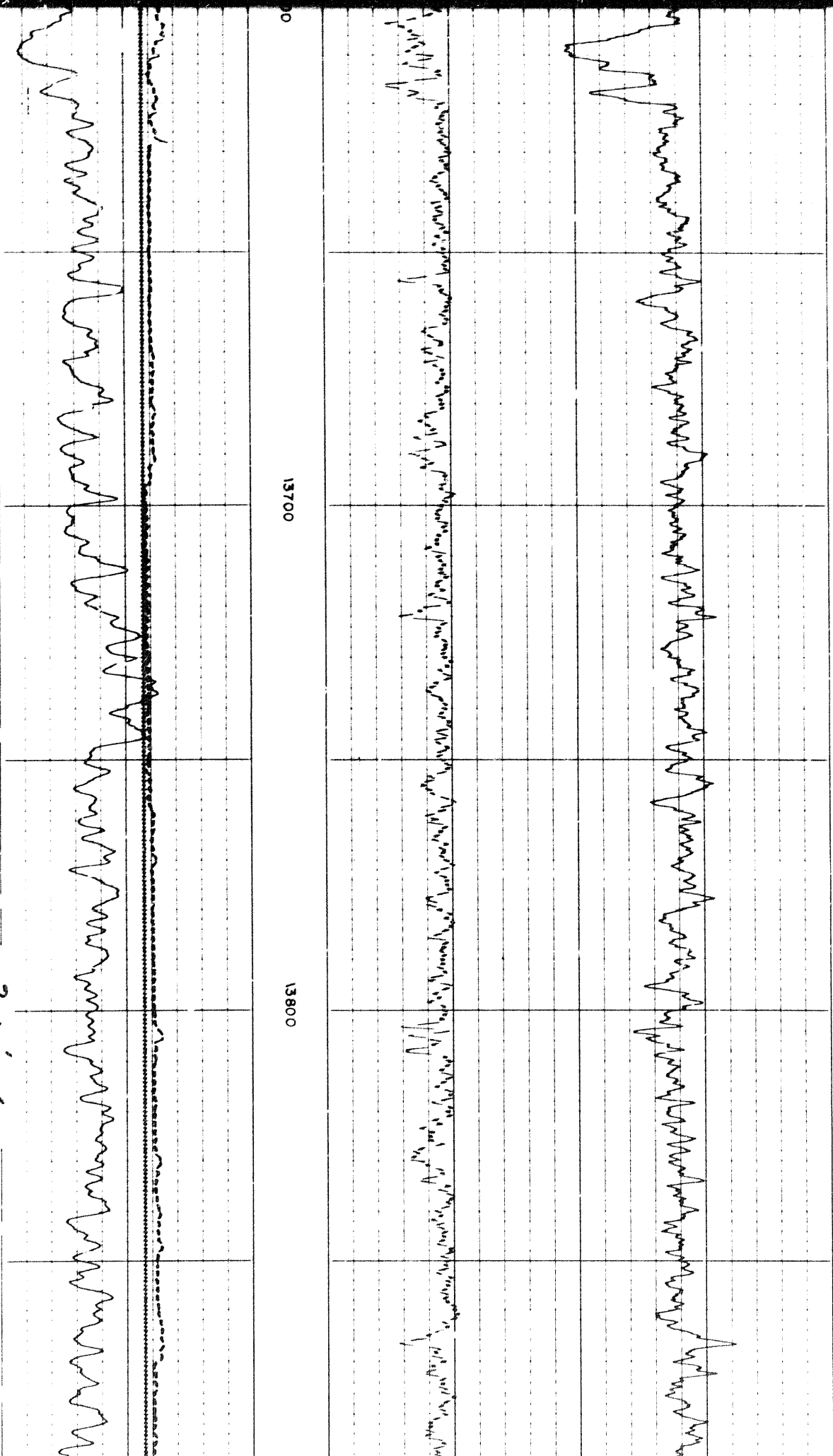


13400

13500

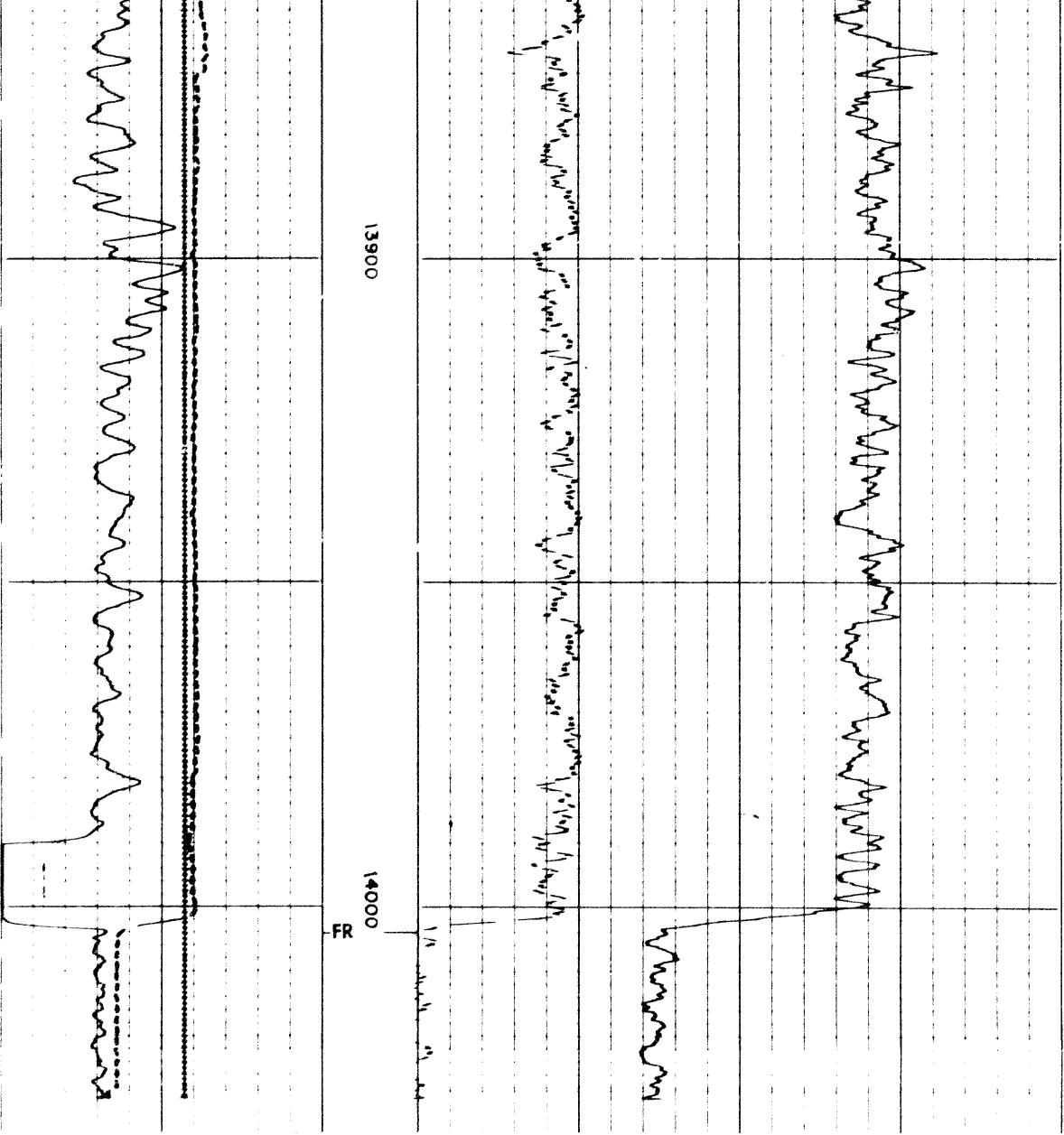
13600

34 of

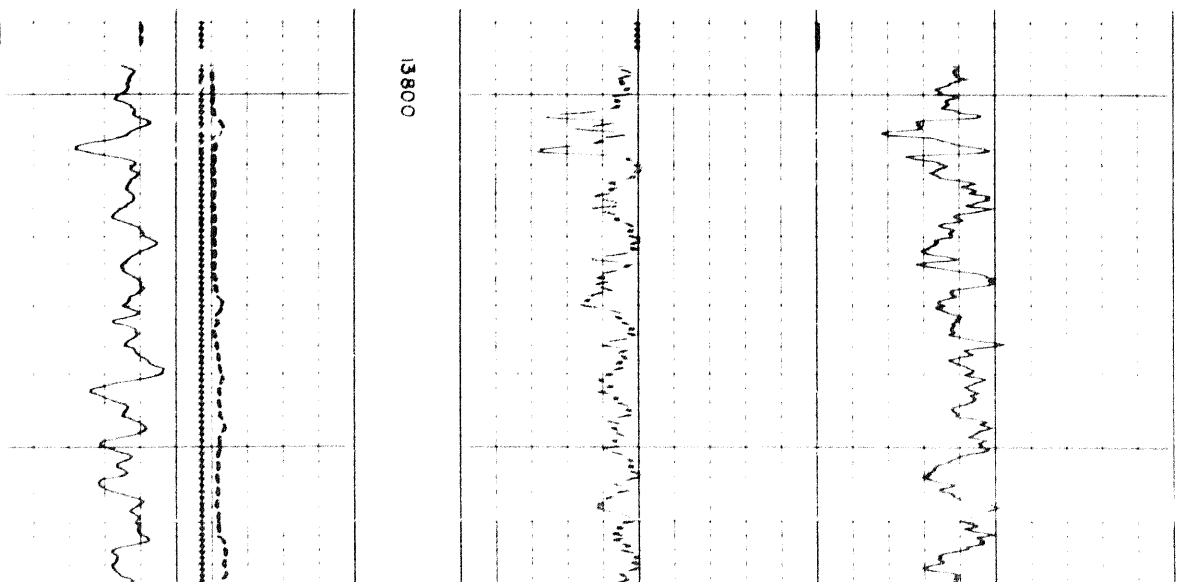


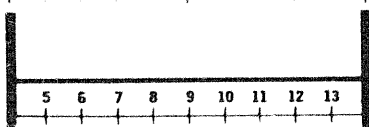
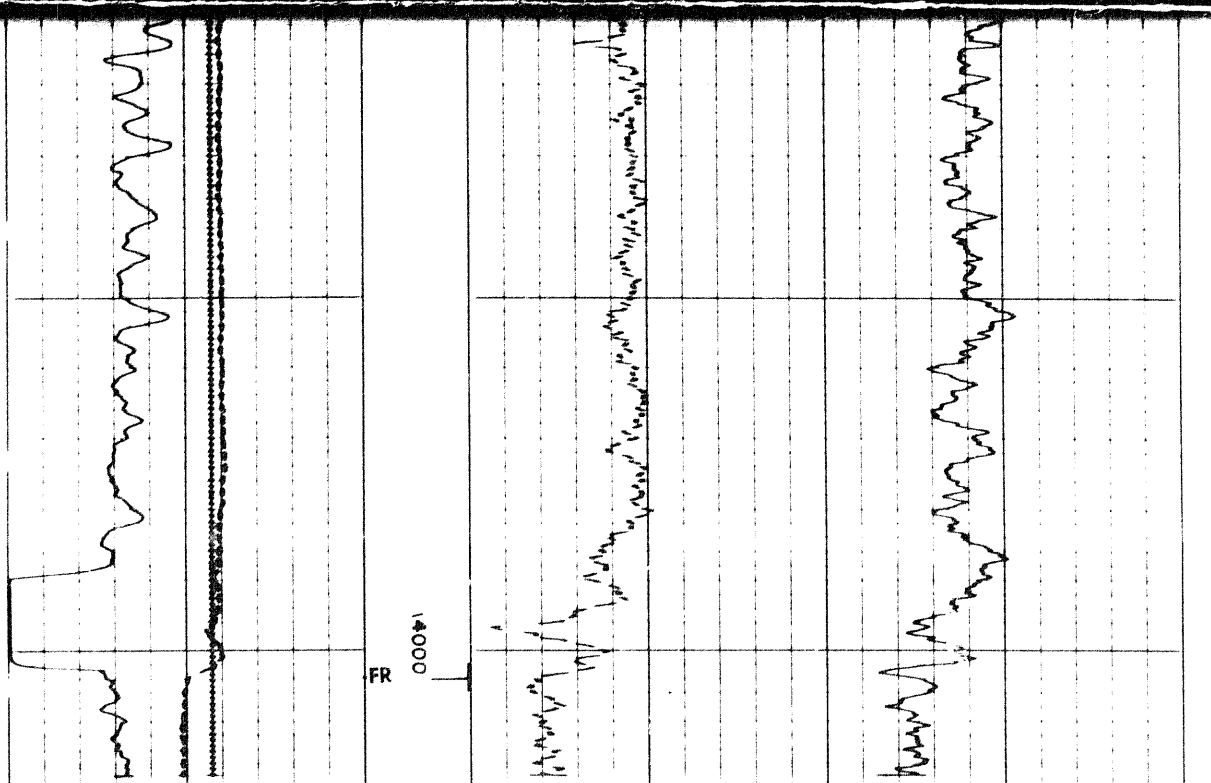
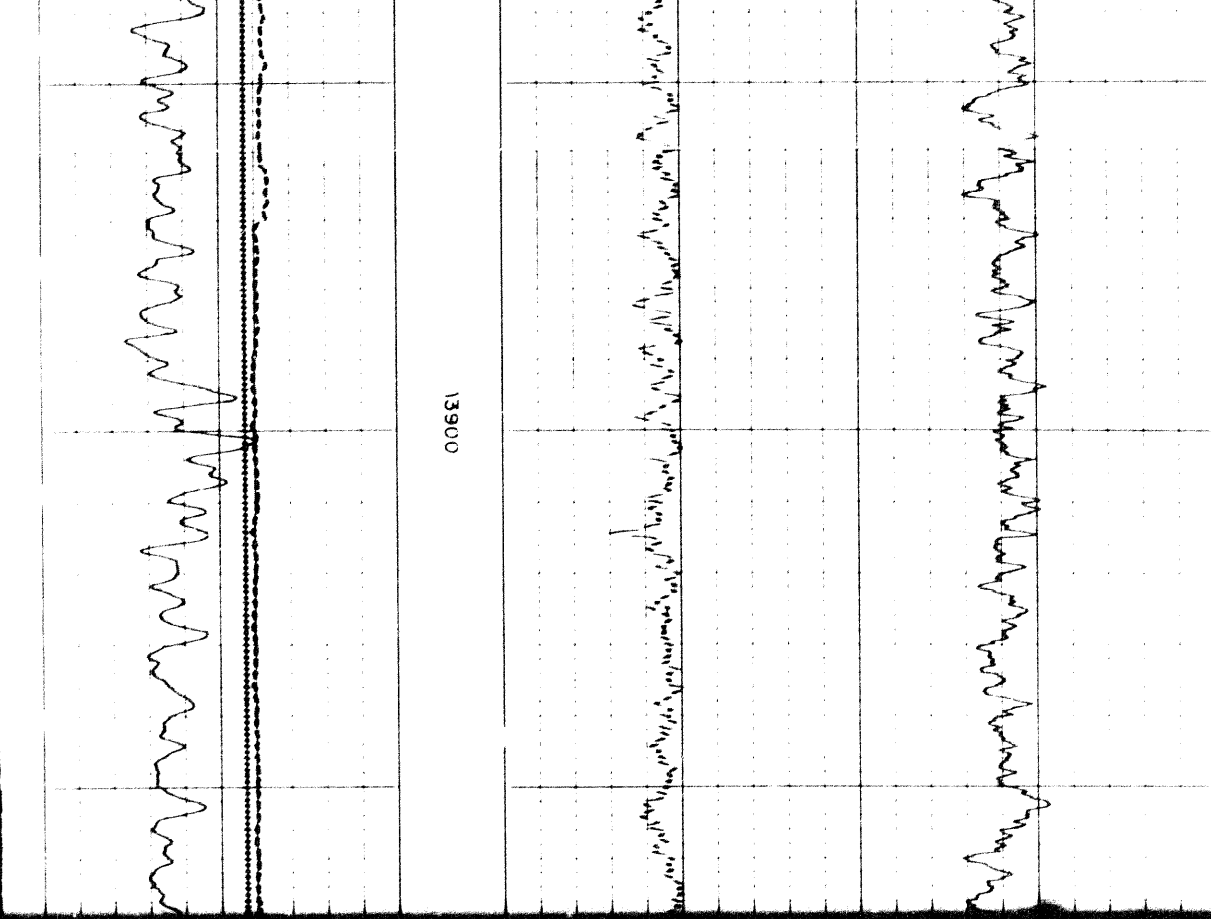
13700

13800



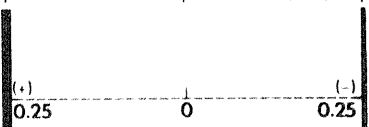
REPEAT SECTION





CALIPER
hole diameter in inches

Sens. 150 T.C. 2
Zero 0 div. to left



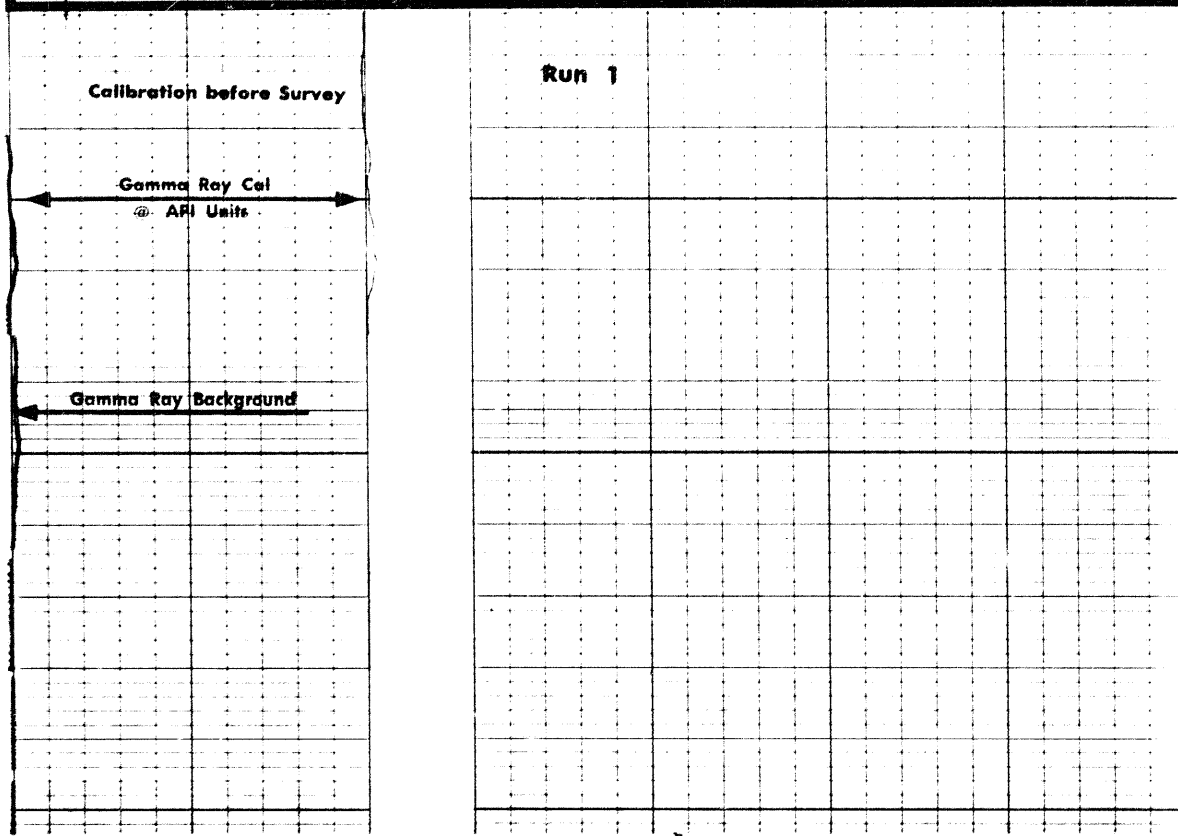
DENSITY CORRECTION
 $\Delta\rho - \text{gm/cc}$

(+) 0.25 0 0.25 (-)

Speed in FPM
 Sens. 150 T.C. 2
 Zero 0 div. to left
 0 150
 150 300

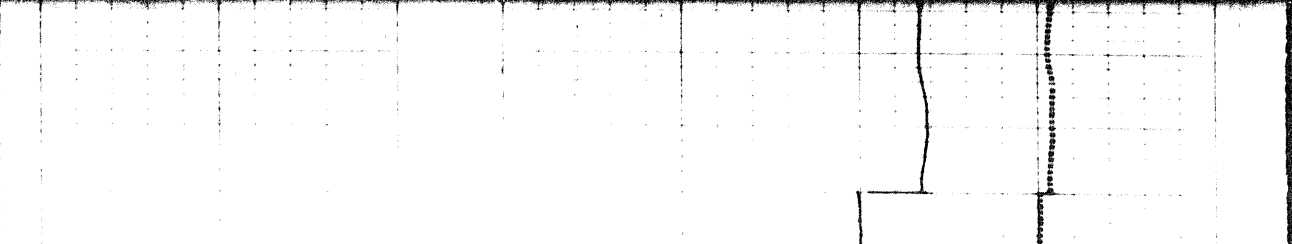
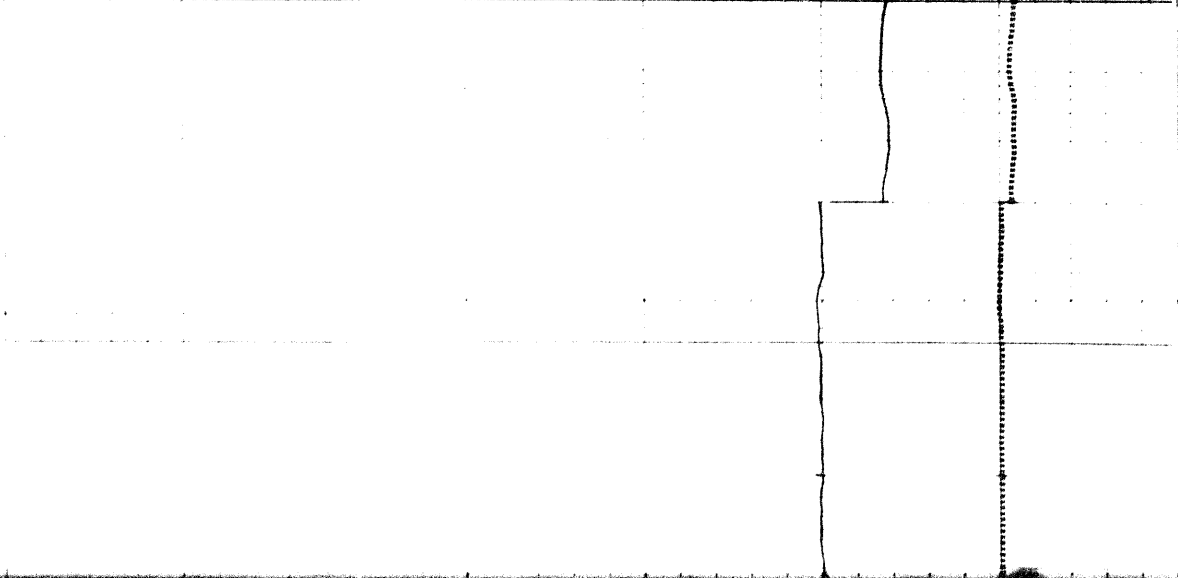
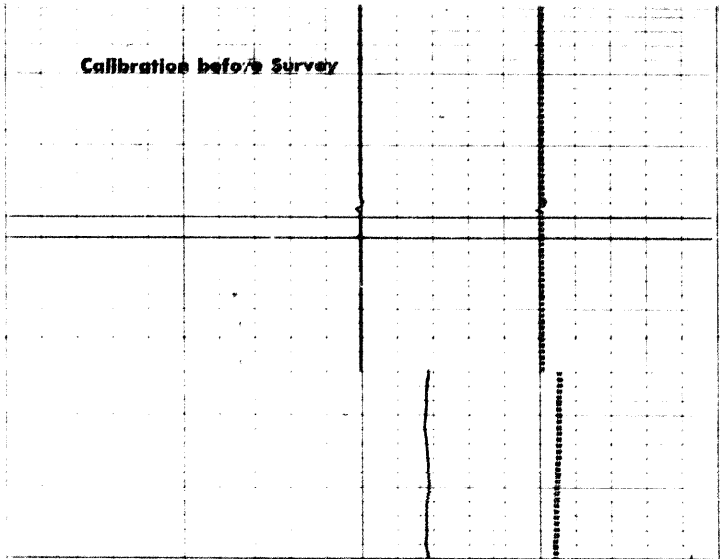
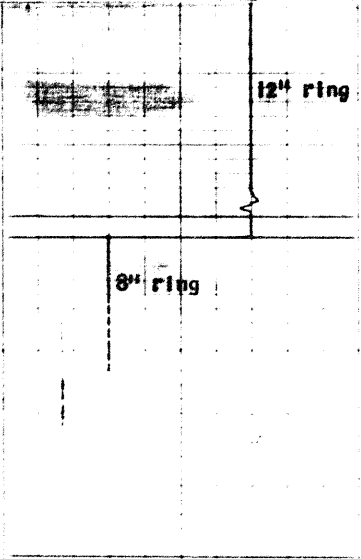
2.0 2.5 3.0

GAMMA RAY API UNITS DEPTHS BULK DENSITY ρ_b - gm/cc



Calibration after Survey

3509

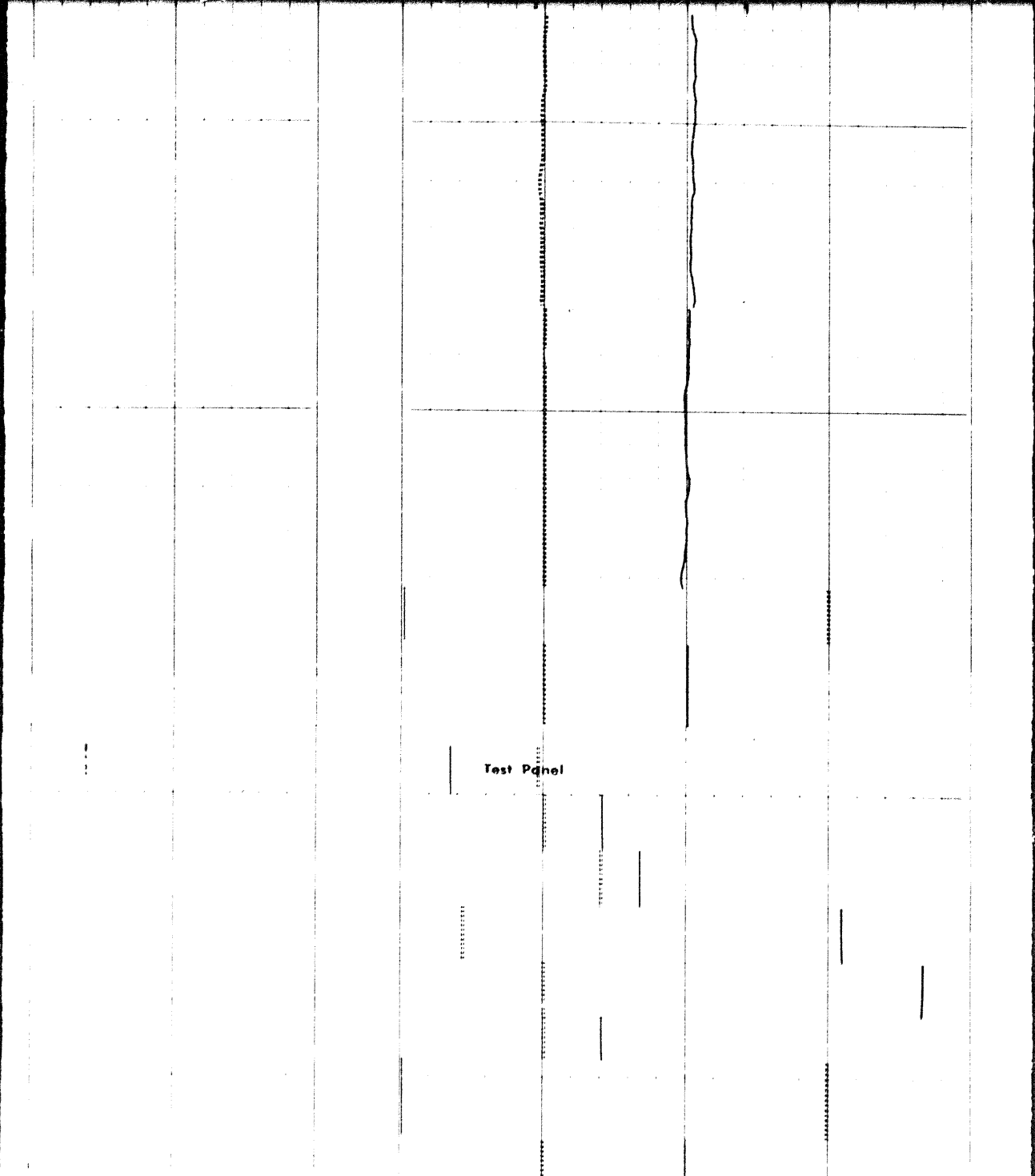
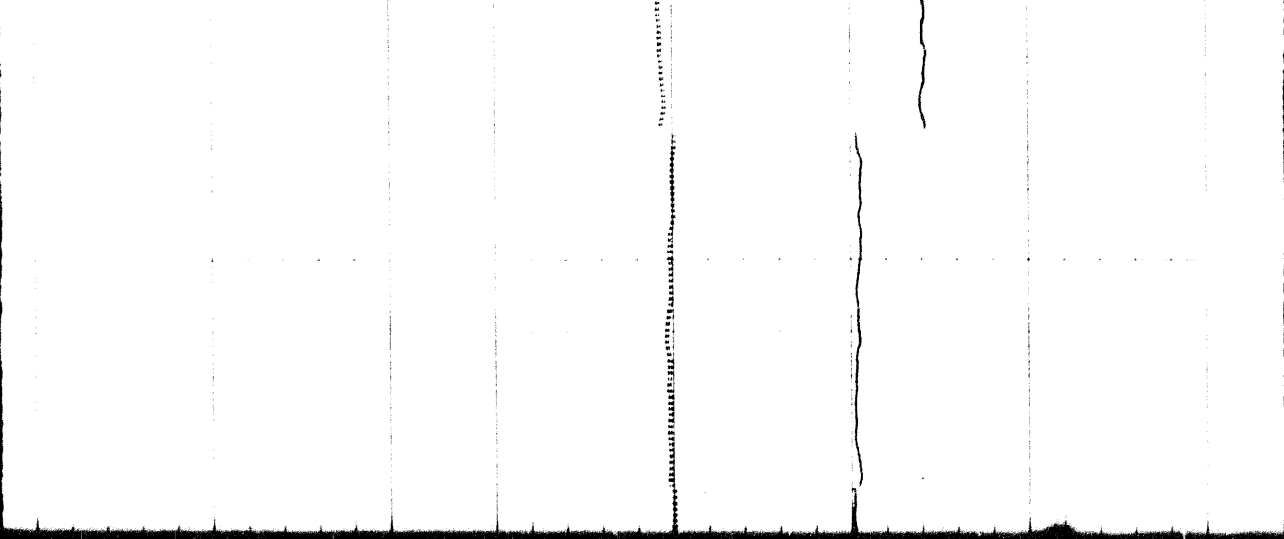


Calibration before Survey

Calibration before Survey

Run 3

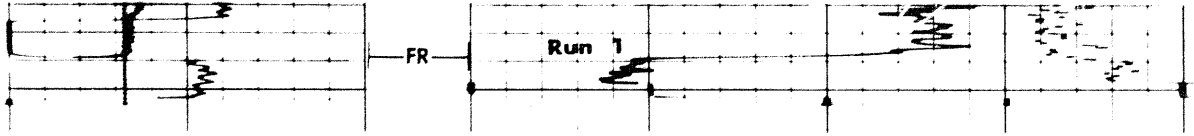
Calibration after Survey



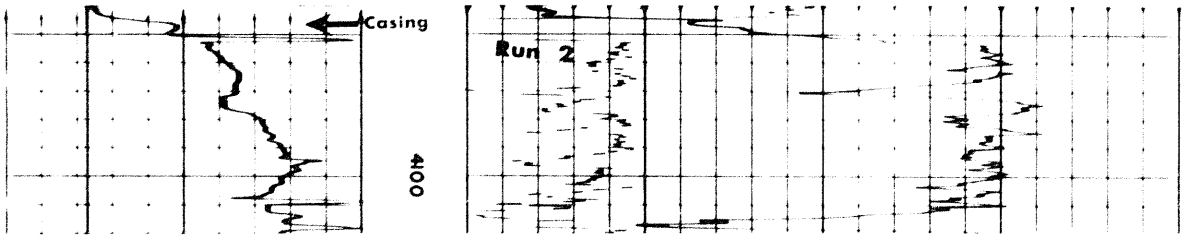
Test Panel

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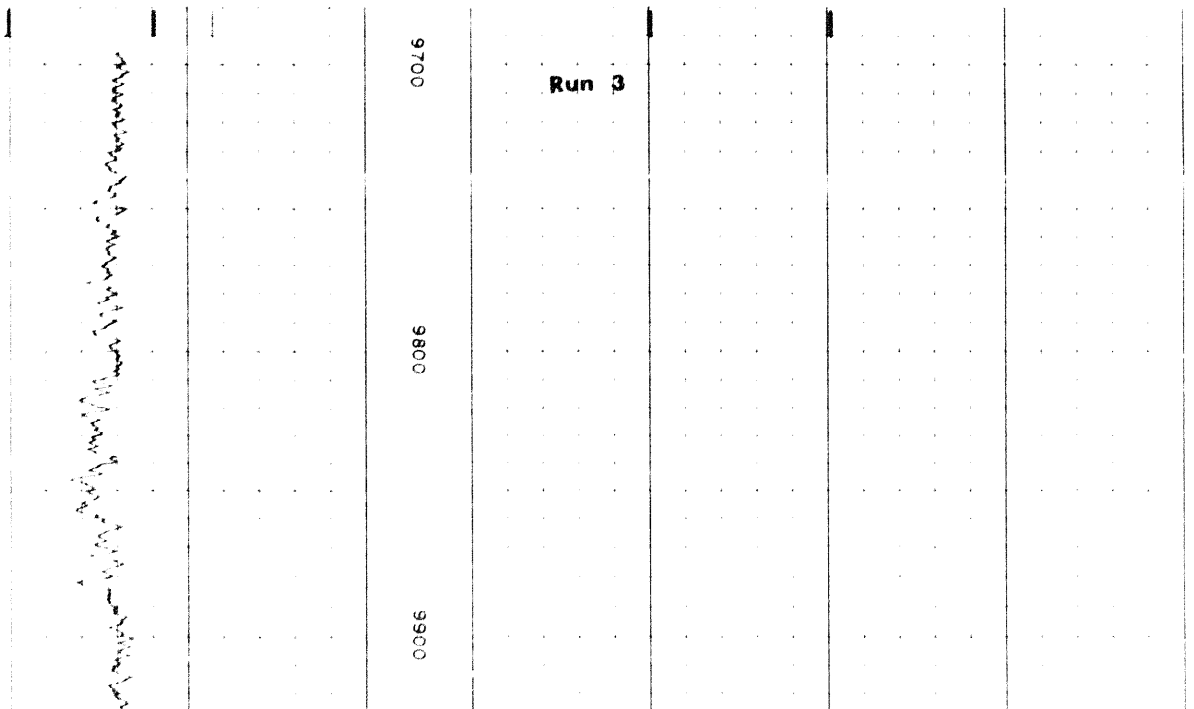
OVERLAP



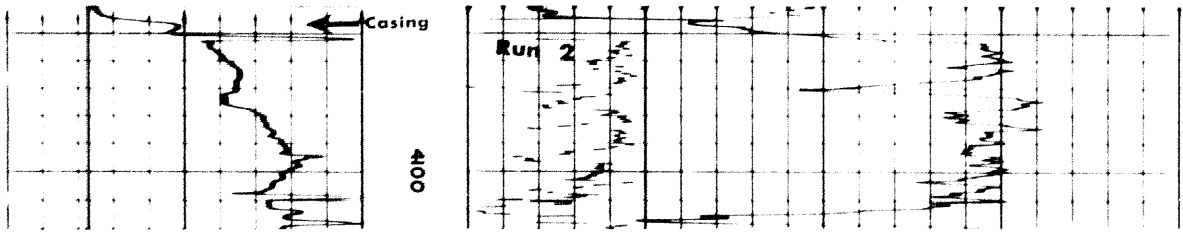
OVERLAP



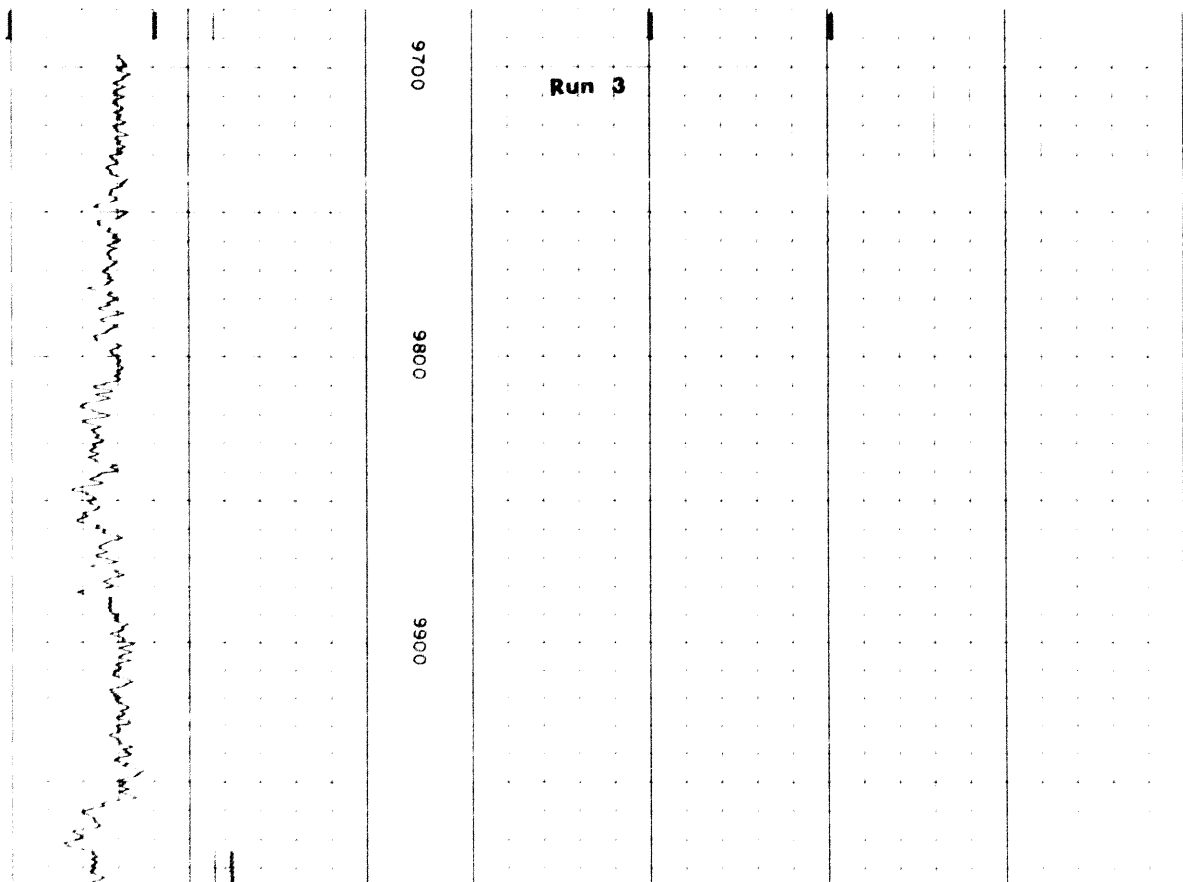
OVERLAP



OVERLAP



OVERLAP



COMPANY

IMPERIAL OIL ENTERPRISES LTD.

WELL

THE BLOW PIPE #1

157-20-10-132-10

FIELD

44-20-10

PROVINCE

ALBERTA

