



BHC
Acoustilog®

GL02664
FILE NO.

COMPANY E.G. & G. IDAHO INC.

WELL RRGP-5

FIELD RAFT RIVER GEOTHERMAL

COUNTY CASSIA STATE IDAHO

LOCATION:

NE-SW

SEC 22 TWP 155 RGE 26E

Other Services
DIFF. TEMP
DIFF.
4-ARM CALIPER
CALS/CPN/GR
LIBRARY TAPE
EPILOG

Permanent Datum G.L. Elev. 4988
Log Measured from K.B. 14 Ft. Above Permanent Datum
Drilling Measured from K.B.

Elevations:
KB 5002
DF
GL 4988

Date	<u>5-29-79</u>
Run No.	<u>ONE</u>
Depth—Driller	<u>3743</u>
Depth—Logger	<u>3744</u>
Bottom Logged Interval	<u>3735</u>
Top Logged Interval	<u>1508</u>
Casing—Driller	<u>13 3/8 @ 1510</u> @
Casing—Logger	<u>1508</u>
Bit Size	<u>12 1/4</u>
Type Fluid in Hole	<u>FLOCCULATED WATER</u>
Density and Viscosity	<u>9.2</u> <u>32</u>
pH and Fluid Loss	— cc
Source of Sample	<u>FRONLINE</u>
Rm @ Meas. Temp.	<u>2.3 @ 62 °F</u>
Rmf @ Meas. Temp.	<u>1.7 @ 68 °F</u>
Rmc @ Meas. Temp.	<u>2.8 @ 68 °F</u>
Source of Rmf and Rmc	<u>MEAS MEAS</u>
Rm @ BHT	<u>0.69 @ 208 °F</u>
Time Since Circ.	<u>21 HRS.</u>
Max. Rec. Temp. Deg. F.	<u>208 °F</u>
Equip. No. and Location	<u>HL-6180 CODY</u>
Recorded By	<u>L. LEBACK / J. WARD</u>
Witnessed By	<u>MR. STEADHAM</u>

FIELD PRINT

THIS HEADING AND LOG CONFORMS TO API RECOMMENDED STANDARD PRACTICE RP-31

REMARKS		Equipment Used	
Date	Sample No.	Series No.	Run No.
		<u>1603</u>	<u>ONE</u>
		<u>1308</u>	<u>ONE</u>
		<u>07829</u>	<u>07829</u>
		<u>31040</u>	<u>34559</u>
		<u>31040</u>	<u>34559</u>
		<u>34738</u>	<u>32546</u>

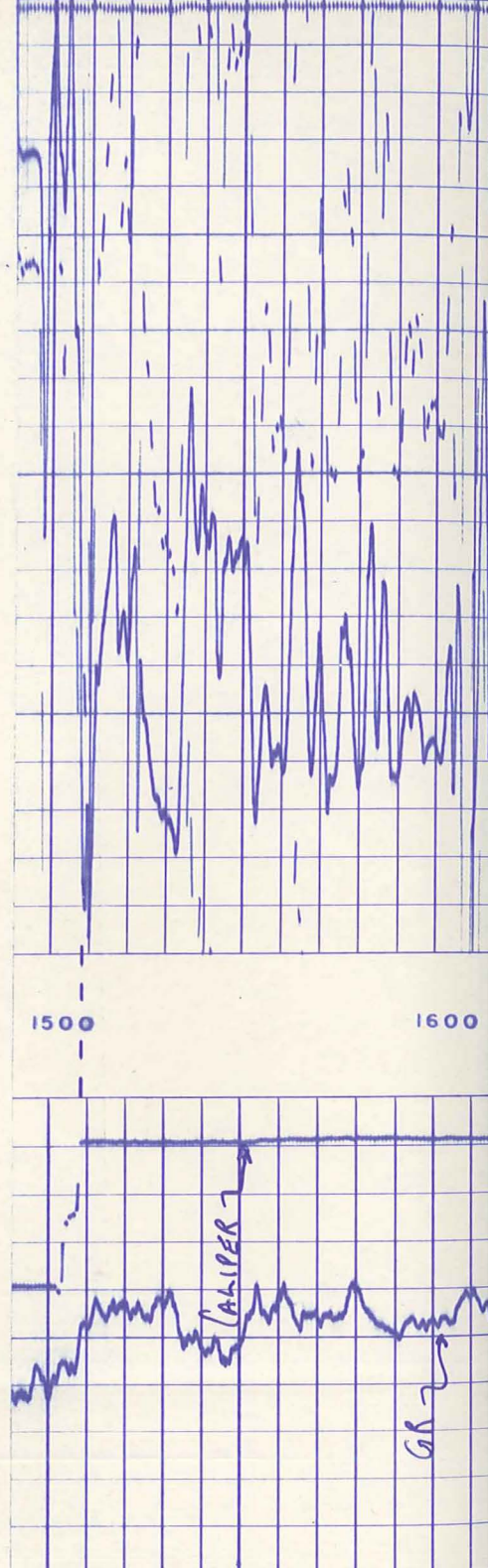
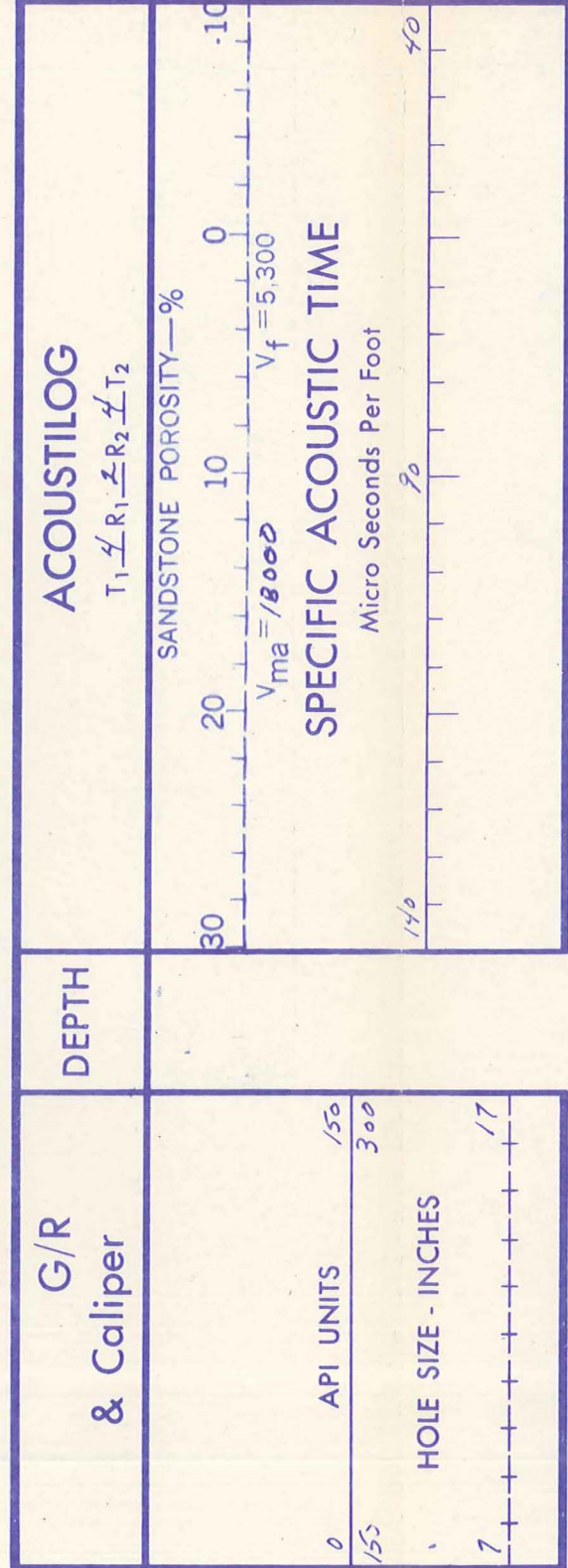
Changes in Mud Type or Additional Samples		Scale Changes	
Date	Sample No.	Scale Up Hole	Scale Down Hole

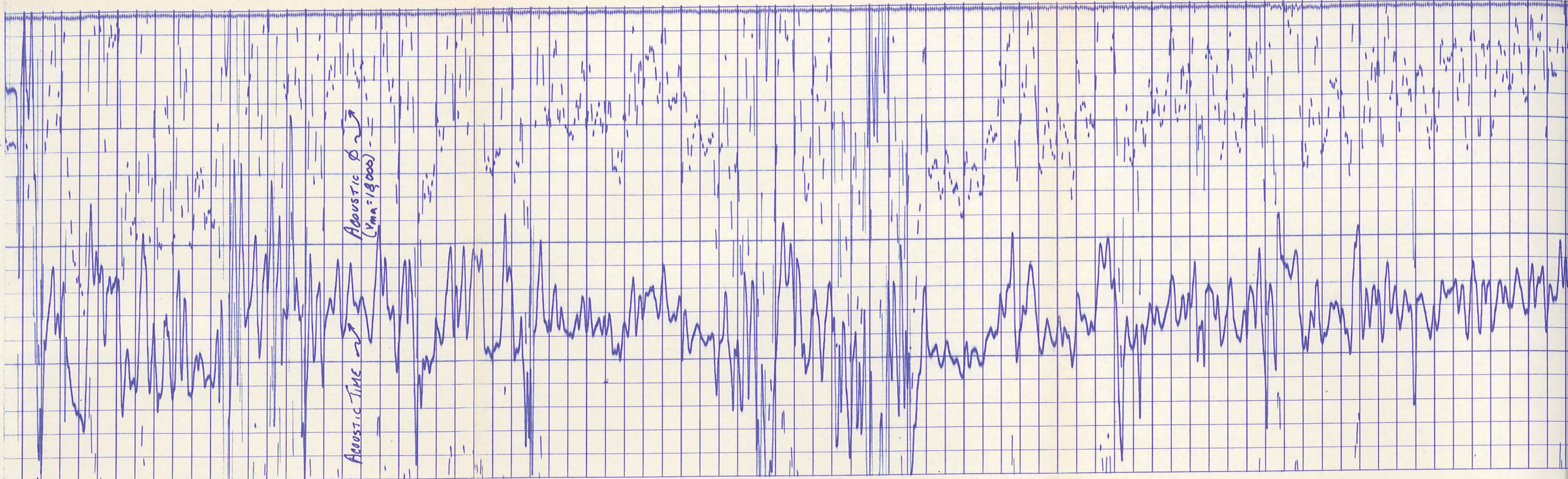
Type Fluid in Hole		Equipment Data	
Depth—Driller	Type	Tool Type	Tool Position
		<u>1603 BMS / 1305 GR</u>	<u>CENTERED</u>

Dens. Visc.		Equipment Data	
pH	Fluid Loss	Run No.	Tool Type
		<u>ONE</u>	<u>1603 BMS / 1305 GR</u>

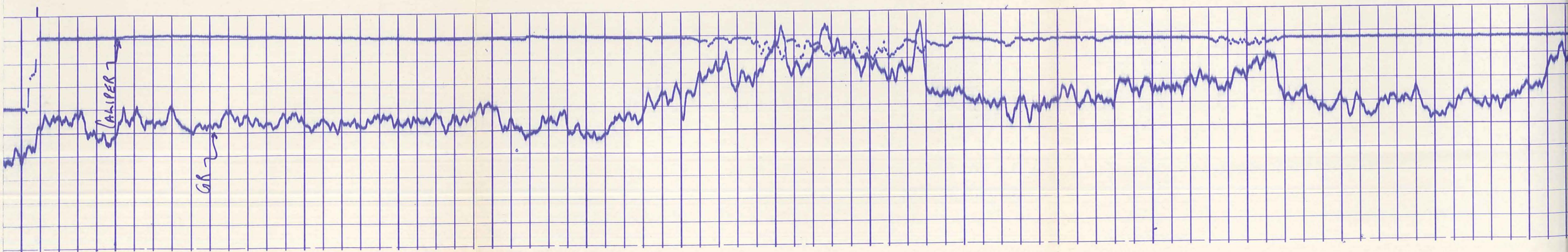
Source of Sample		Equipment Data	
Rm @ Meas. Temp.	Rmf @ Meas. Temp.	Run No.	Tool Type
		<u>ONE</u>	<u>1603 BMS / 1305 GR</u>

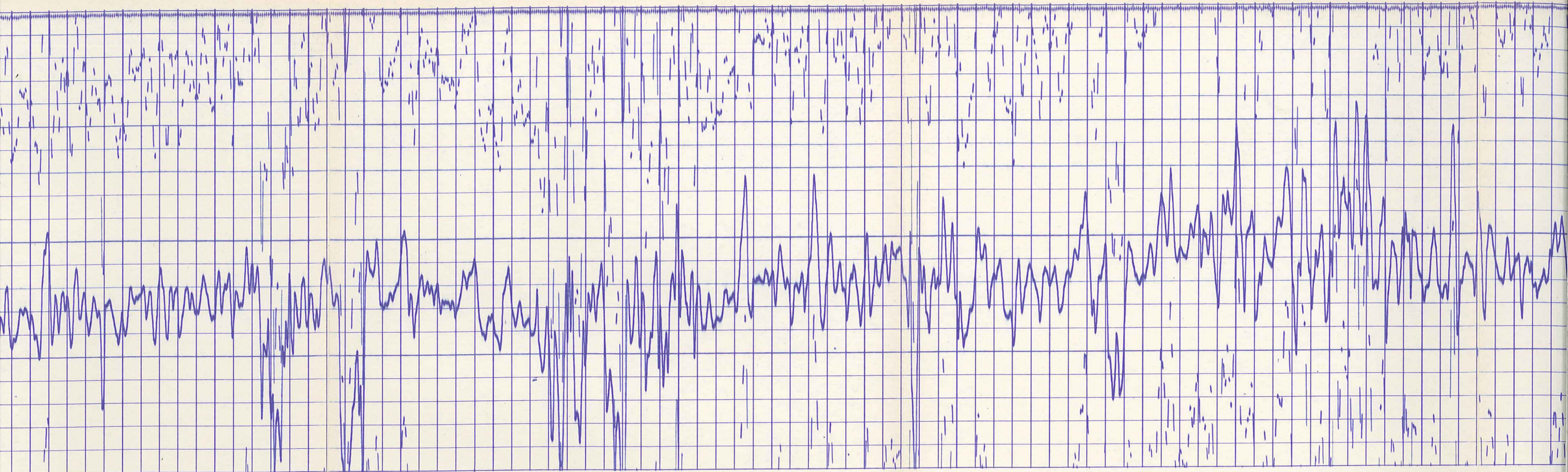
Rmc @ Meas. Temp.		Equipment Data	
Source	Rmf Rmc	Run No.	Tool Type
	<u>0.69 @ 208 °F</u>	<u>ONE</u>	<u>1603 BMS / 1305 GR</u>
	<u>0.56 @ 208 °F</u>		
	<u>0.92 @ 208 °F</u>		



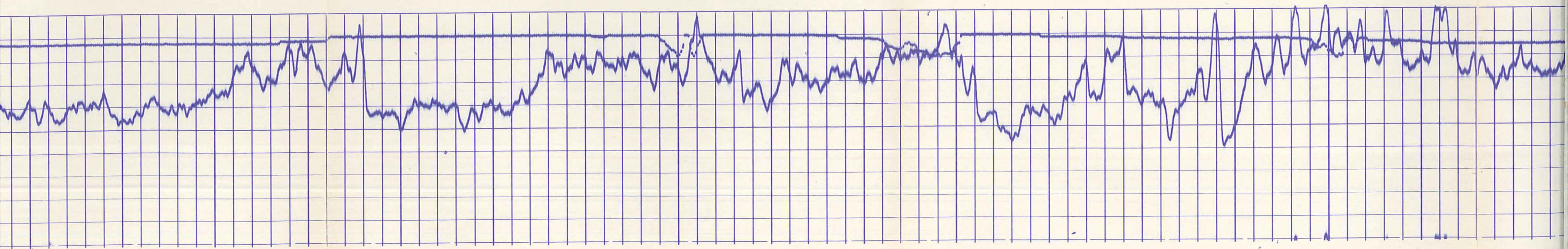


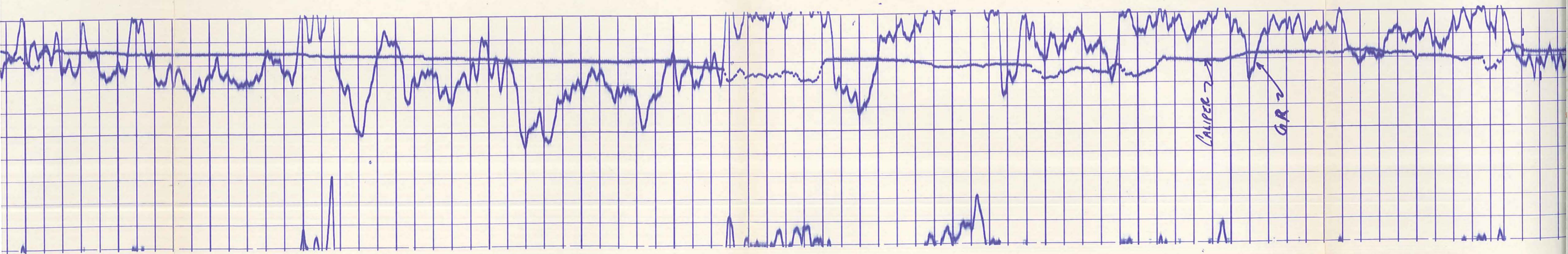
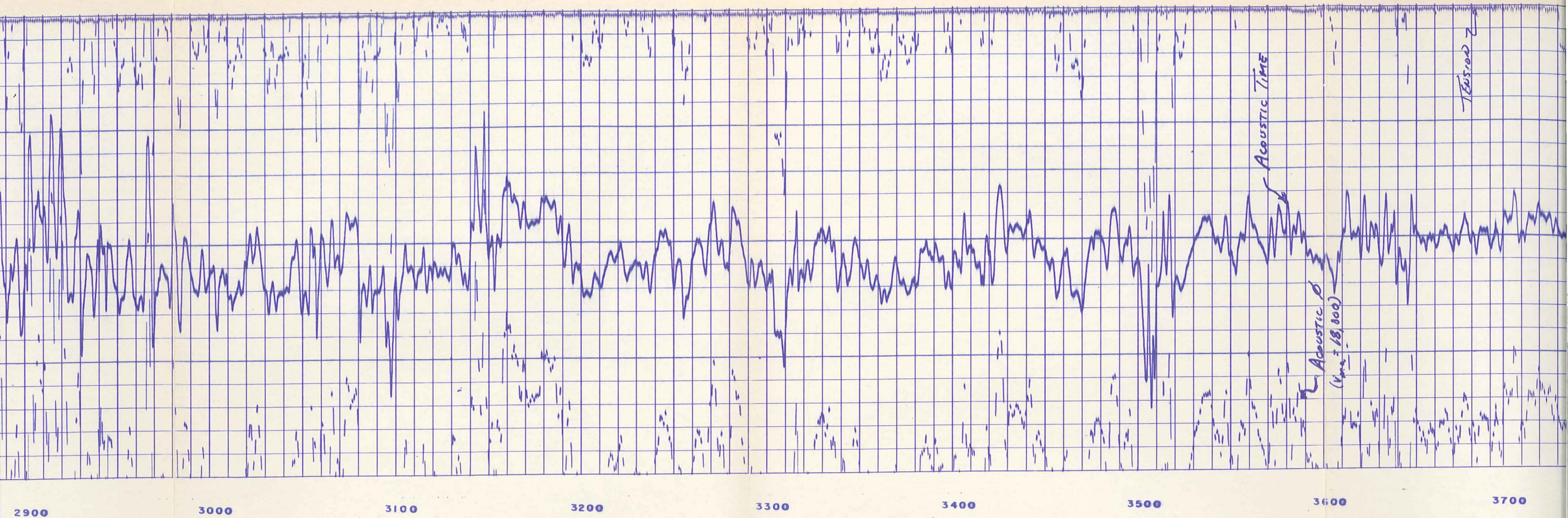
1500 1600 1700 1800 1900 2000 2100 2200 2300

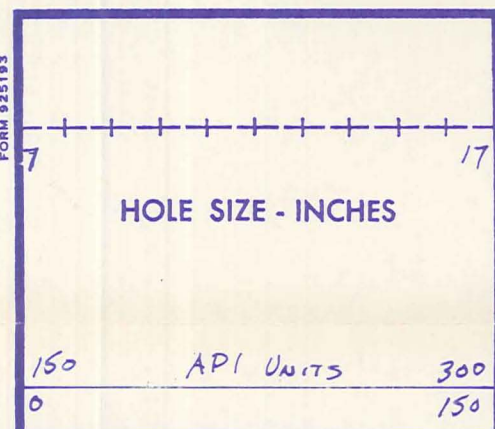
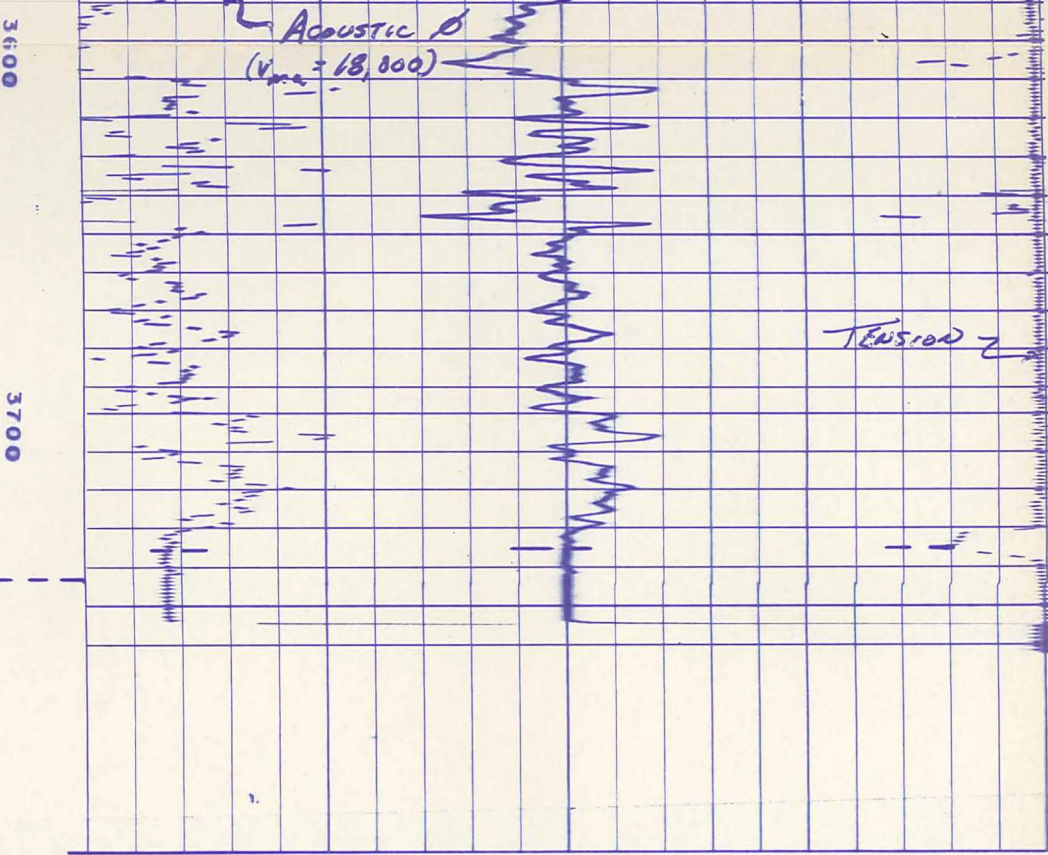
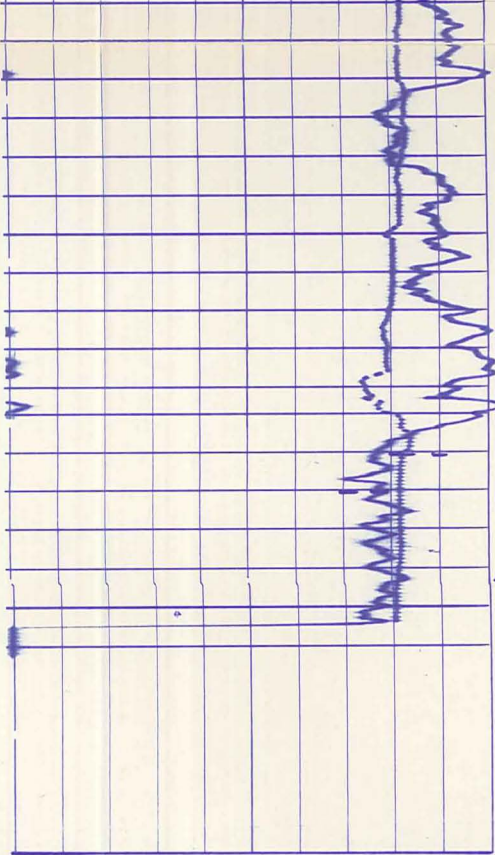




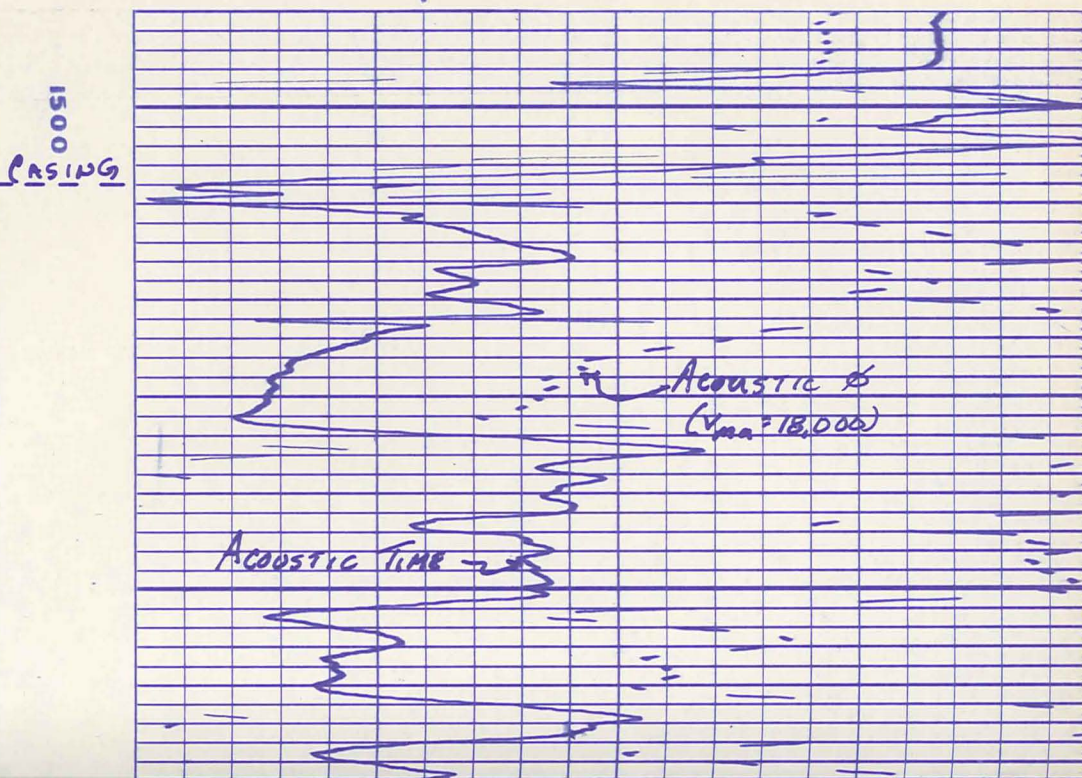
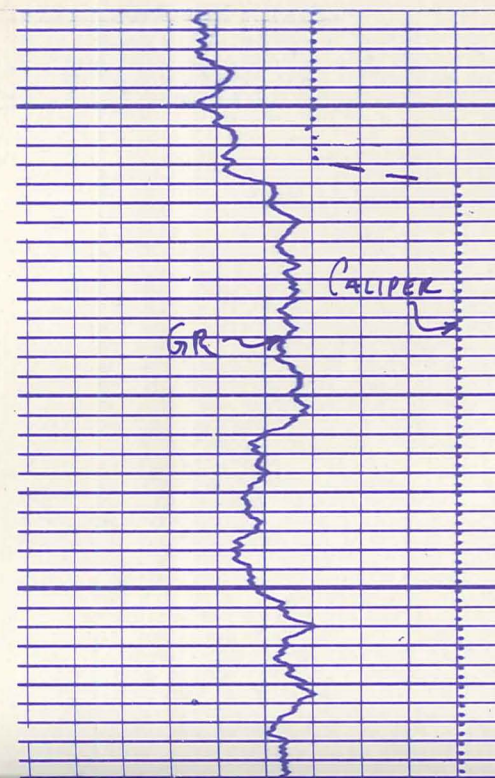
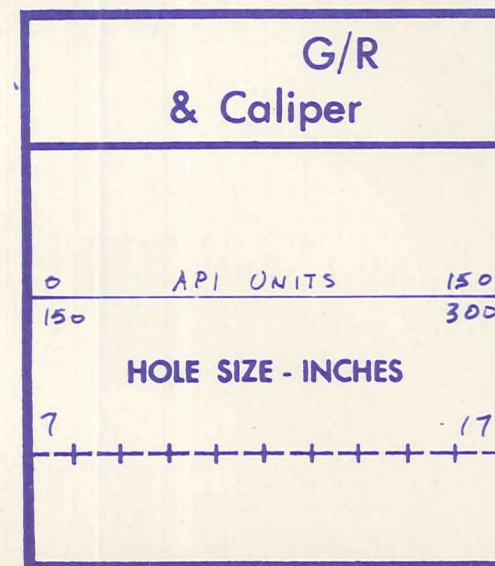
2200 2300 2400 2500 2600 2700 2800 2900 3000







G/R & Caliper	DEPTH	ACOUSTILOG T ₁ ✓ R ₁ ✓ R ₂ ✓ T ₂
Company <i>E.G. & G. IDAHO INC</i>		Drillers T.D. <i>3743</i>
Well <i>RRGP-5</i>		Log F.R. <i>3735</i>
Field <i>RAFT RIVER GEOTHERMAL</i>		Log T.D. <i>3744</i>
County <i>CASSIA</i>		Elevations:
State <i>IDAHO</i>		K.B. <i>5002</i> D.F. <i>—</i> G.L. <i>4988</i>



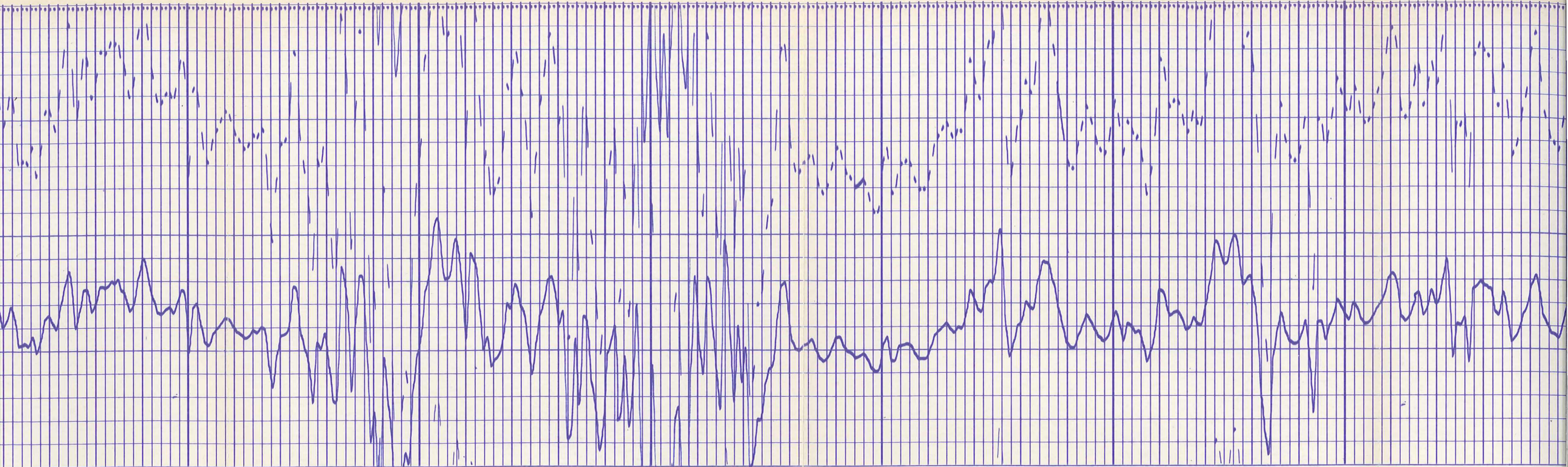


1600

1700

1800

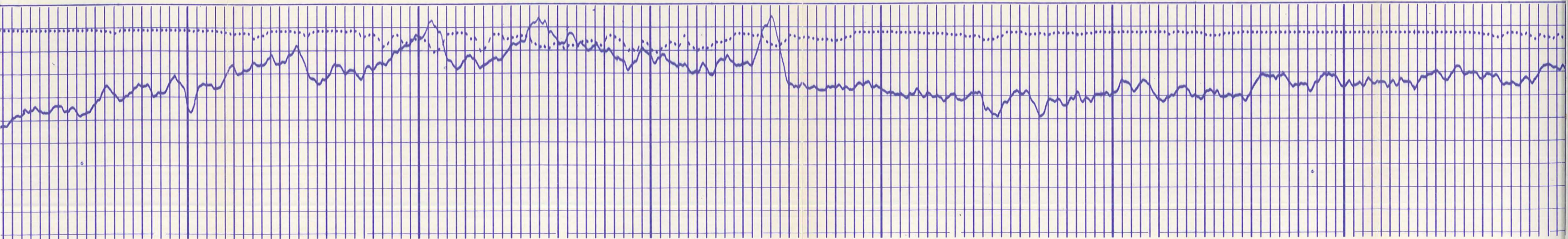


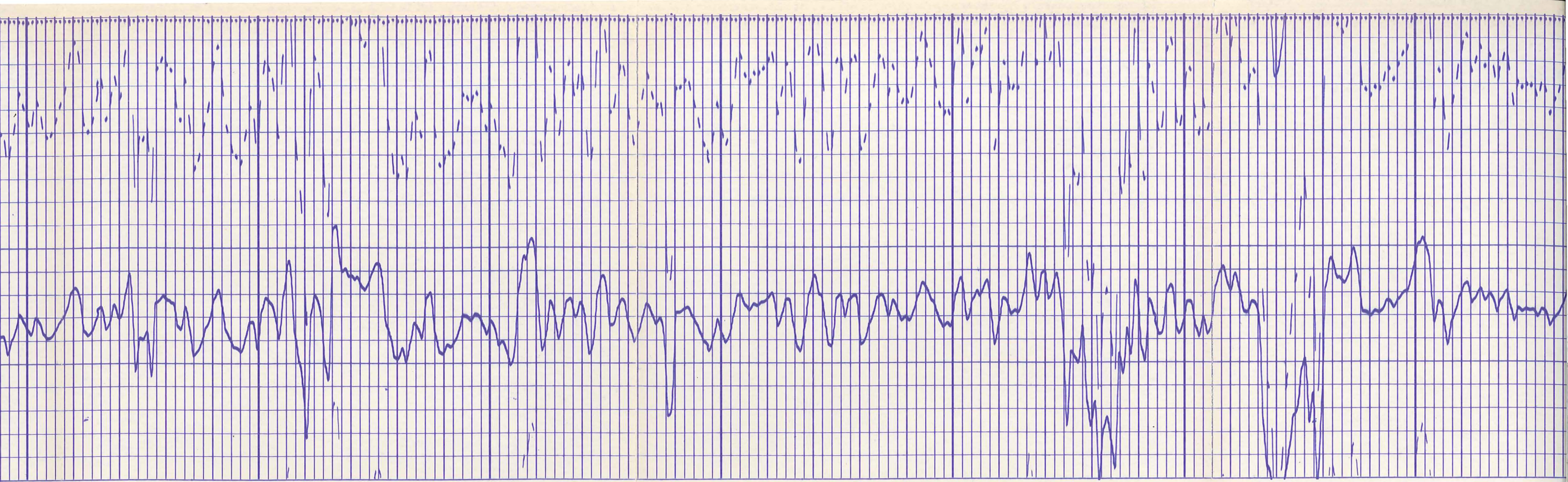


1900

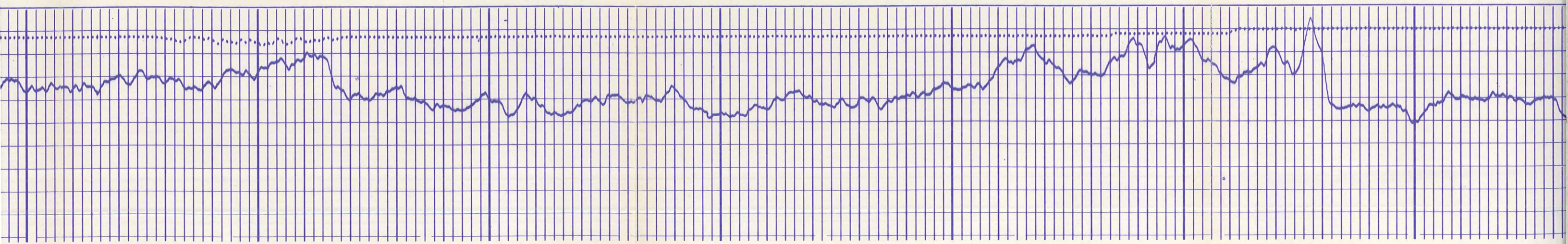
2000

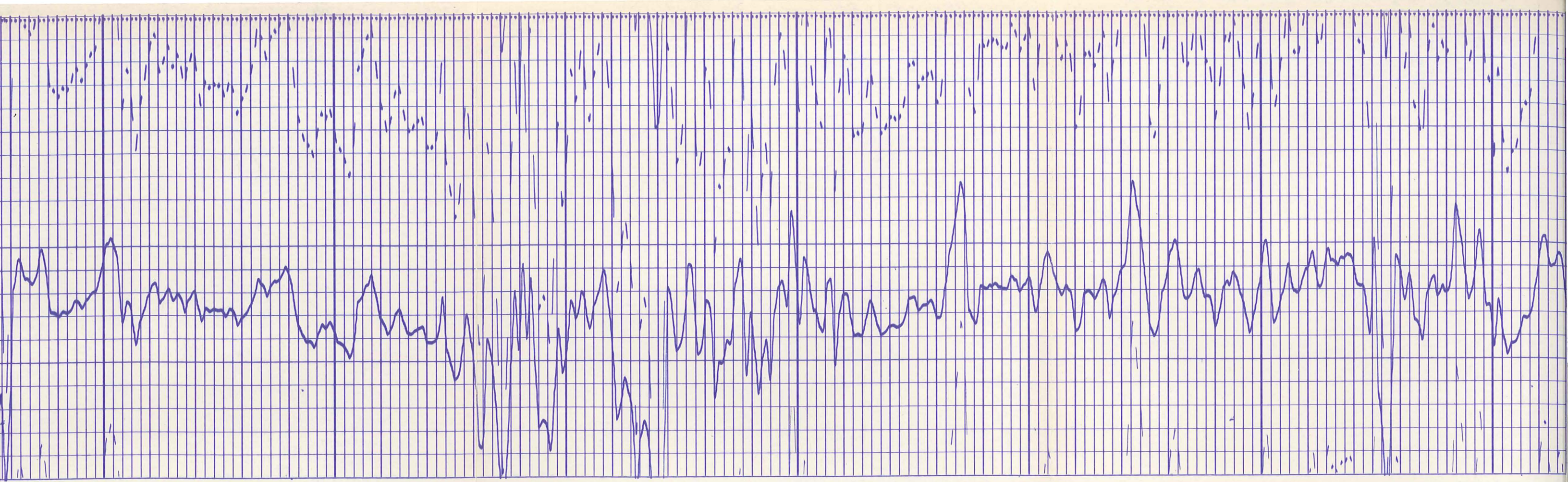
2100





2100 2200 2300 2400



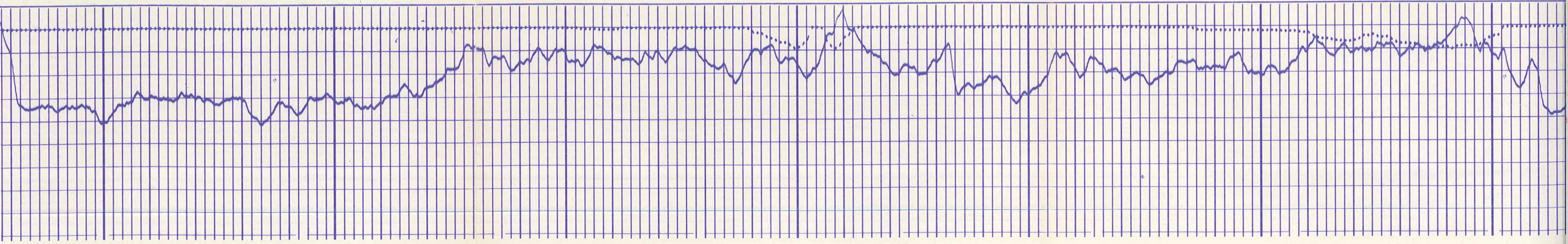


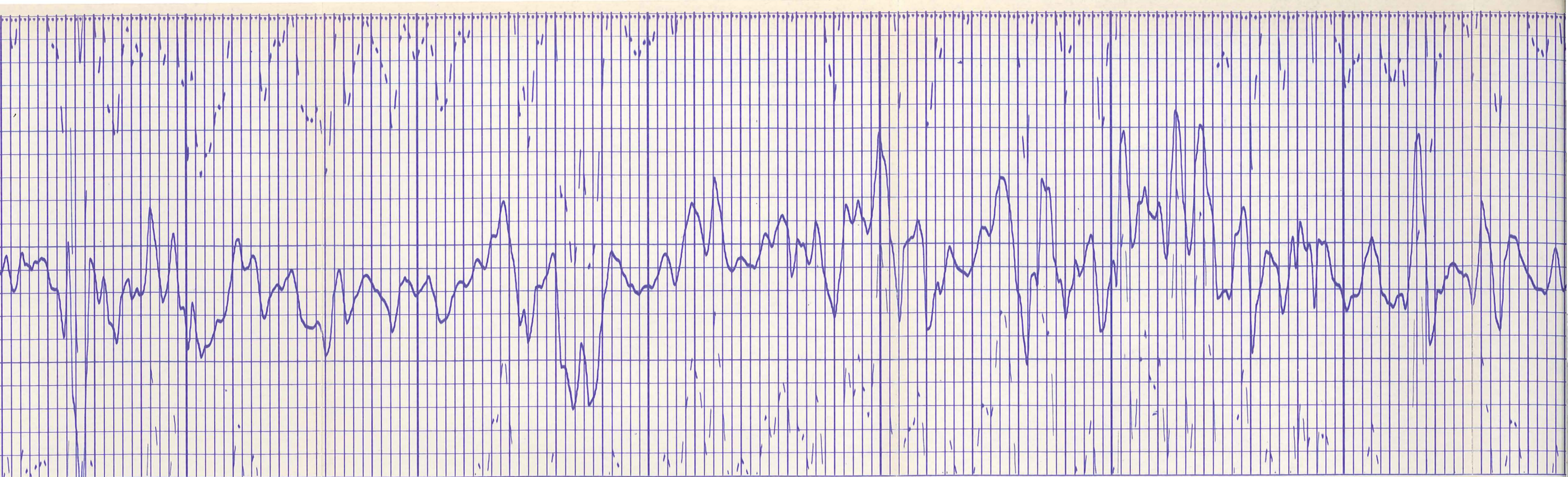
2400

2500

2600

2700

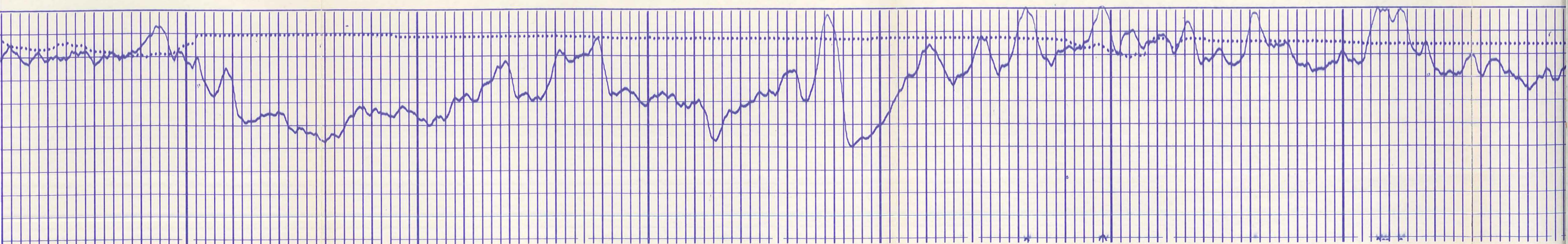


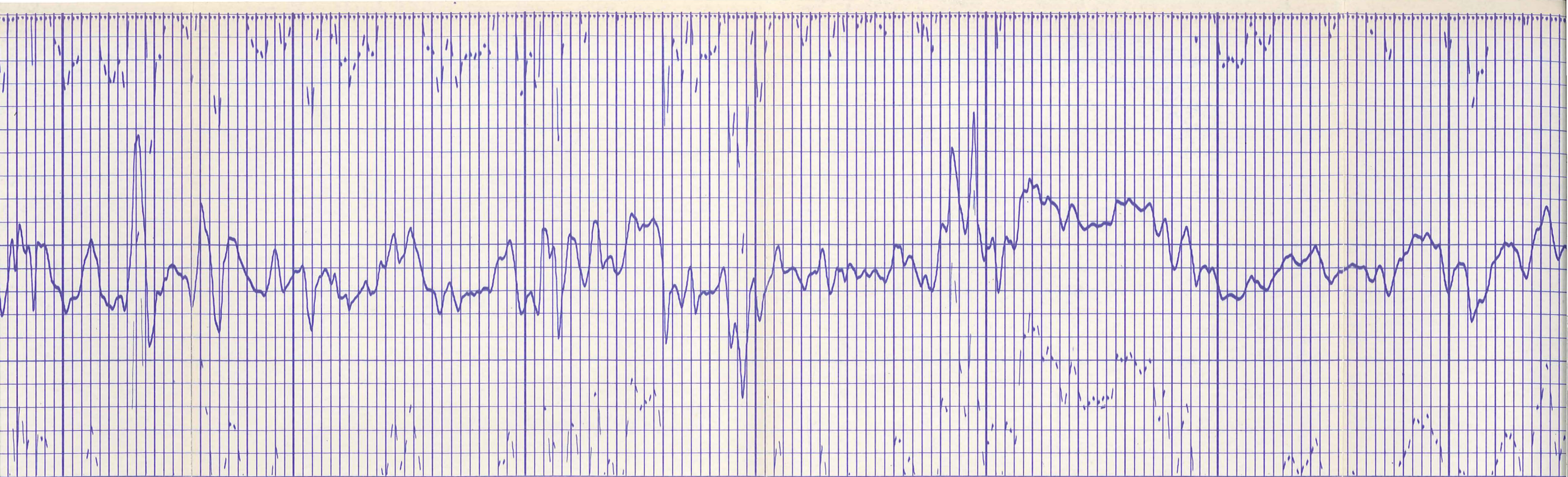


2700

2800

2900

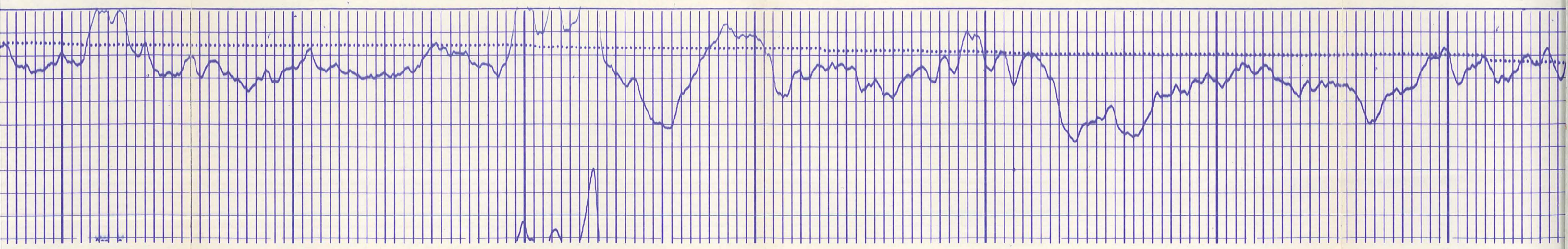


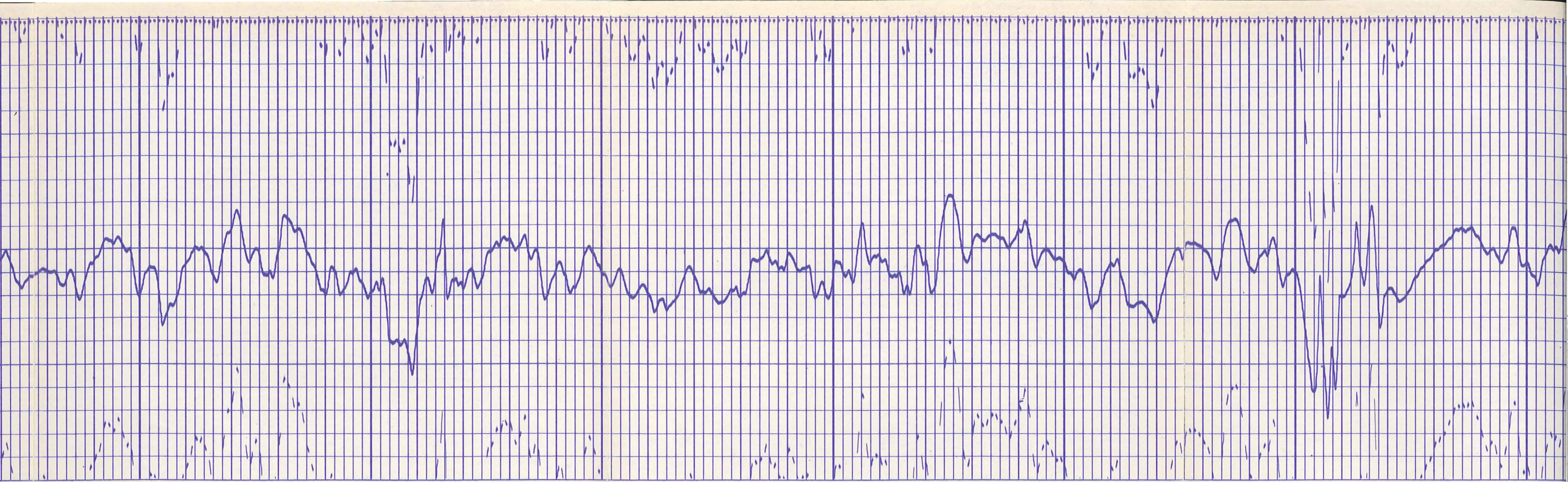


3000

3100

3200



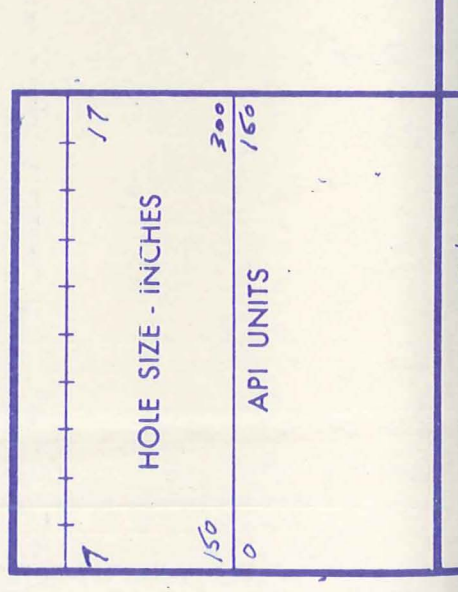
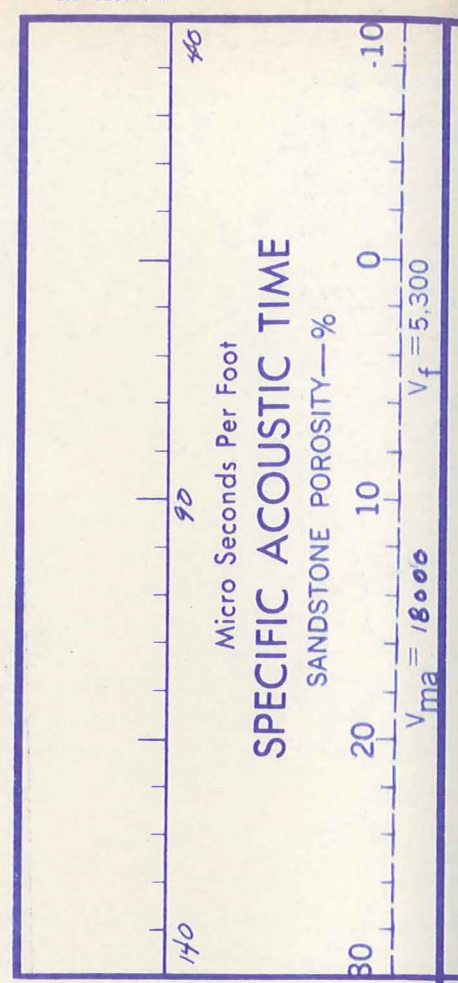
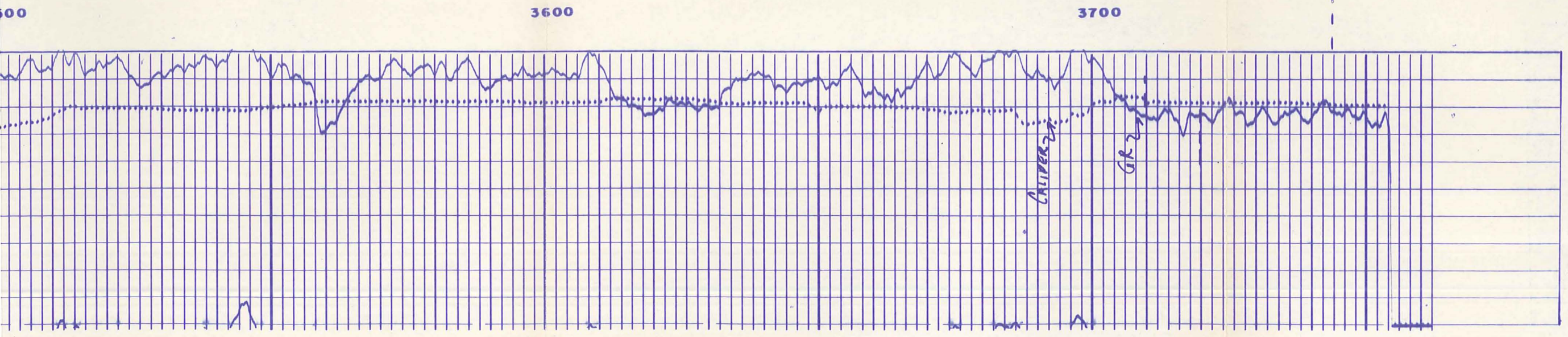
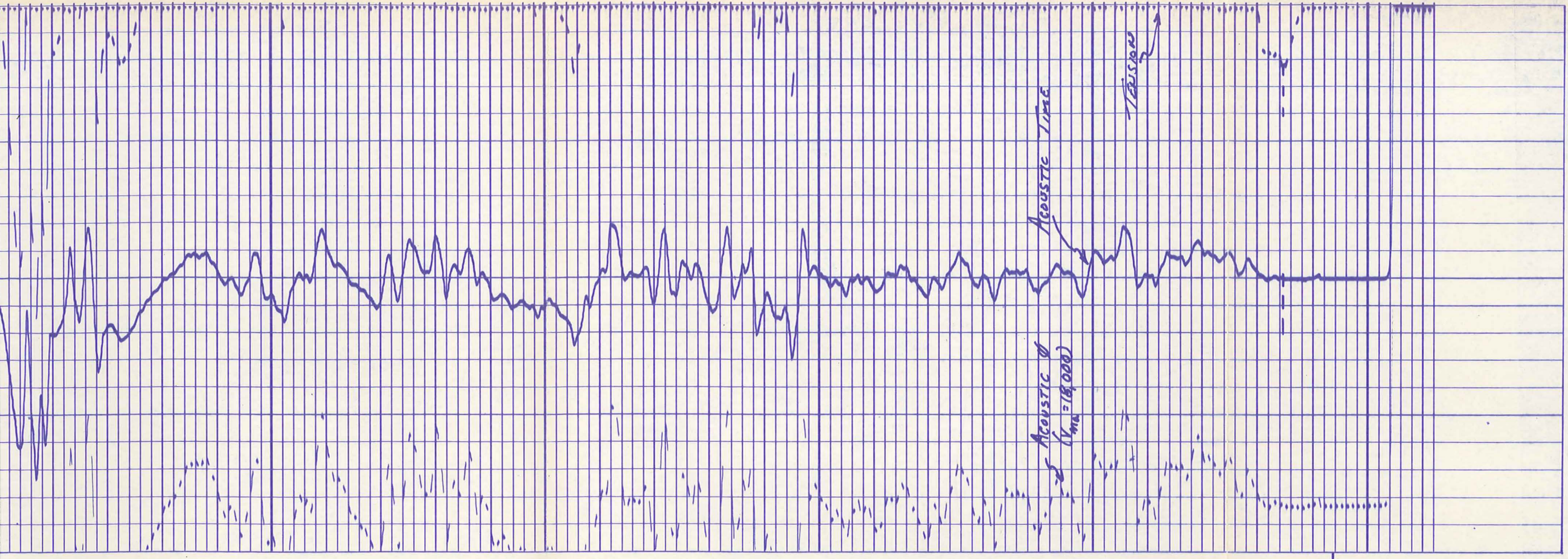


3300

3400

3500





3600

3700

7	17
HOLE SIZE - INCHES	
150	300
API UNITS	
0	150

140	90	40
Micro Seconds Per Foot		
SPECIFIC ACOUSTIC TIME		
SANDSTONE POROSITY—%		
30	20	10
0	0	-10
$V_{ma} = 18000$		$V_f = 5.300$

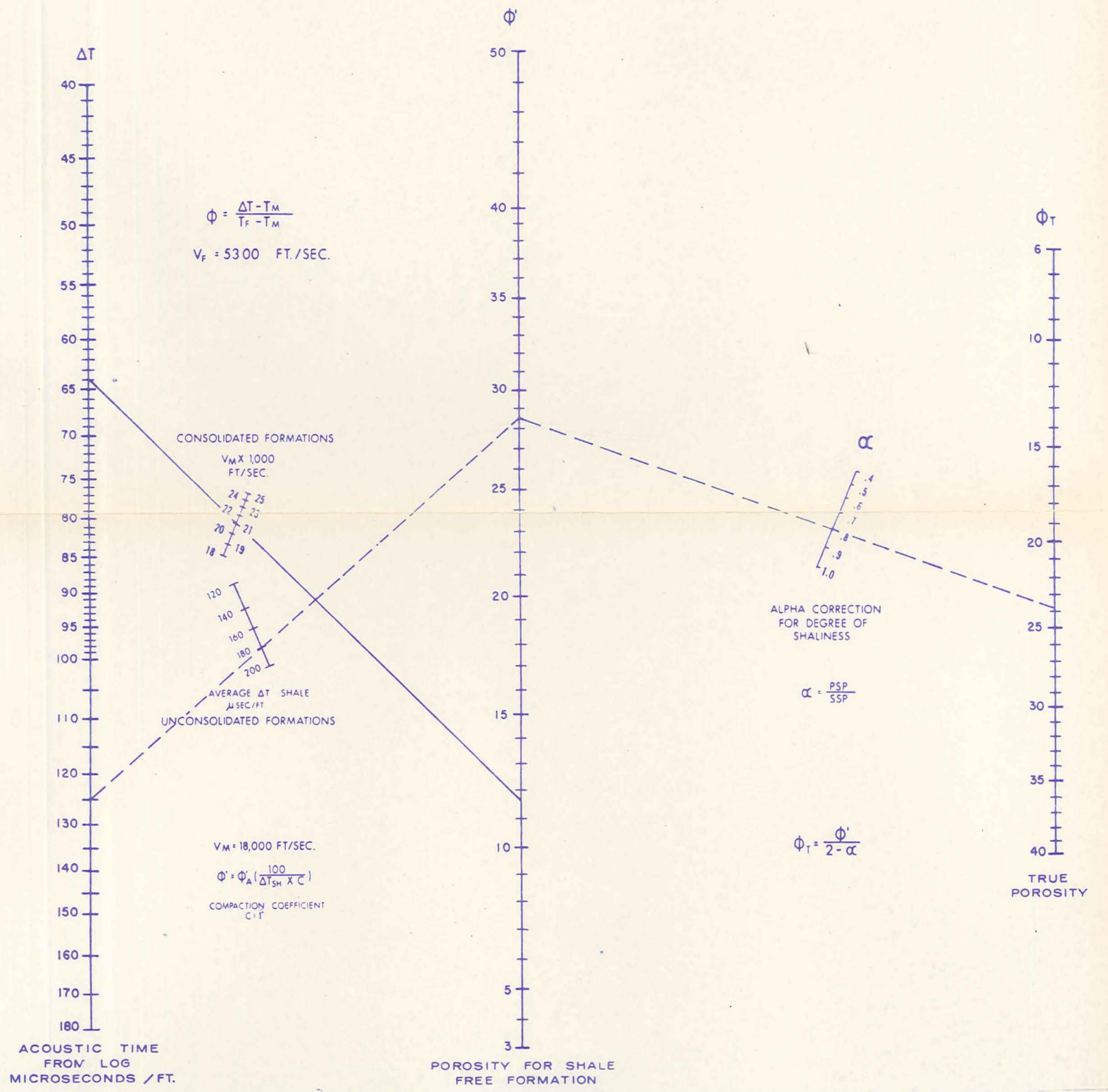
G/R & Caliper	DEPTH
------------------	-------

ACOUSTILOG
$T_1 \text{ } \cancel{R_1} \text{ } \alpha \text{ } R_2 \text{ } \cancel{T_2}$

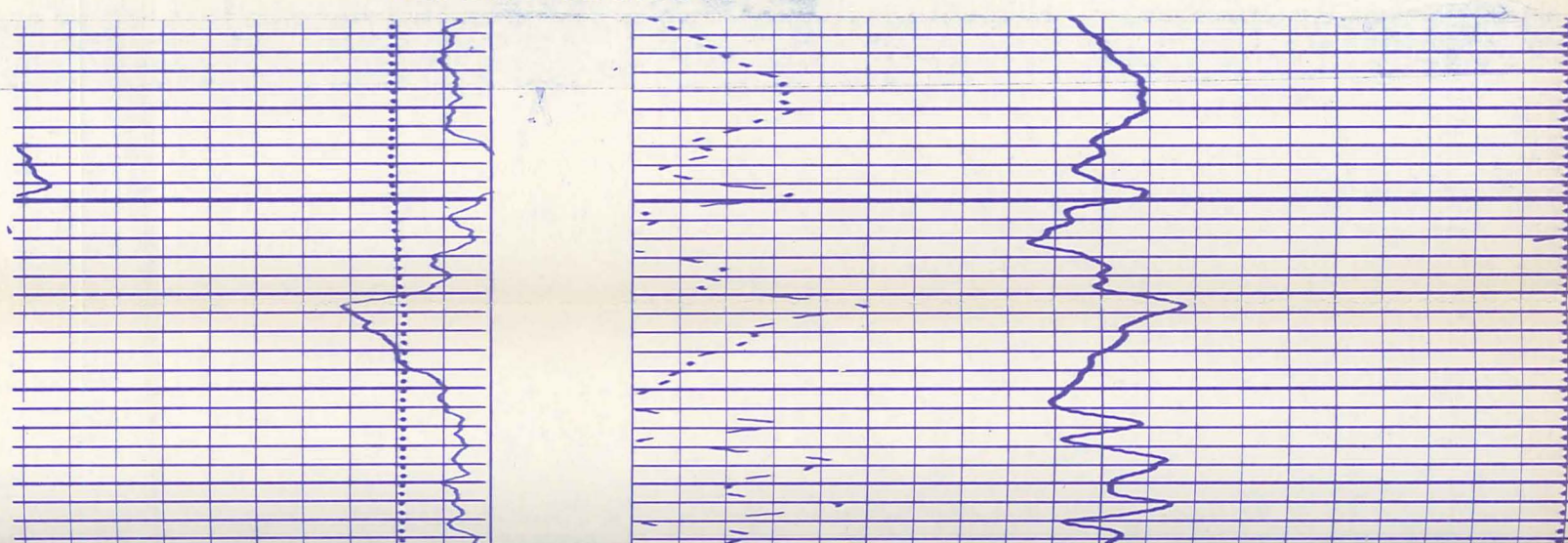
Company *E.G. & G. IDAHO INC.*
 Well *RRGP-5*
 Field *RAFT RIVER GEOTHERMAL*
 County *CASSIA*
 State *IDAHO*

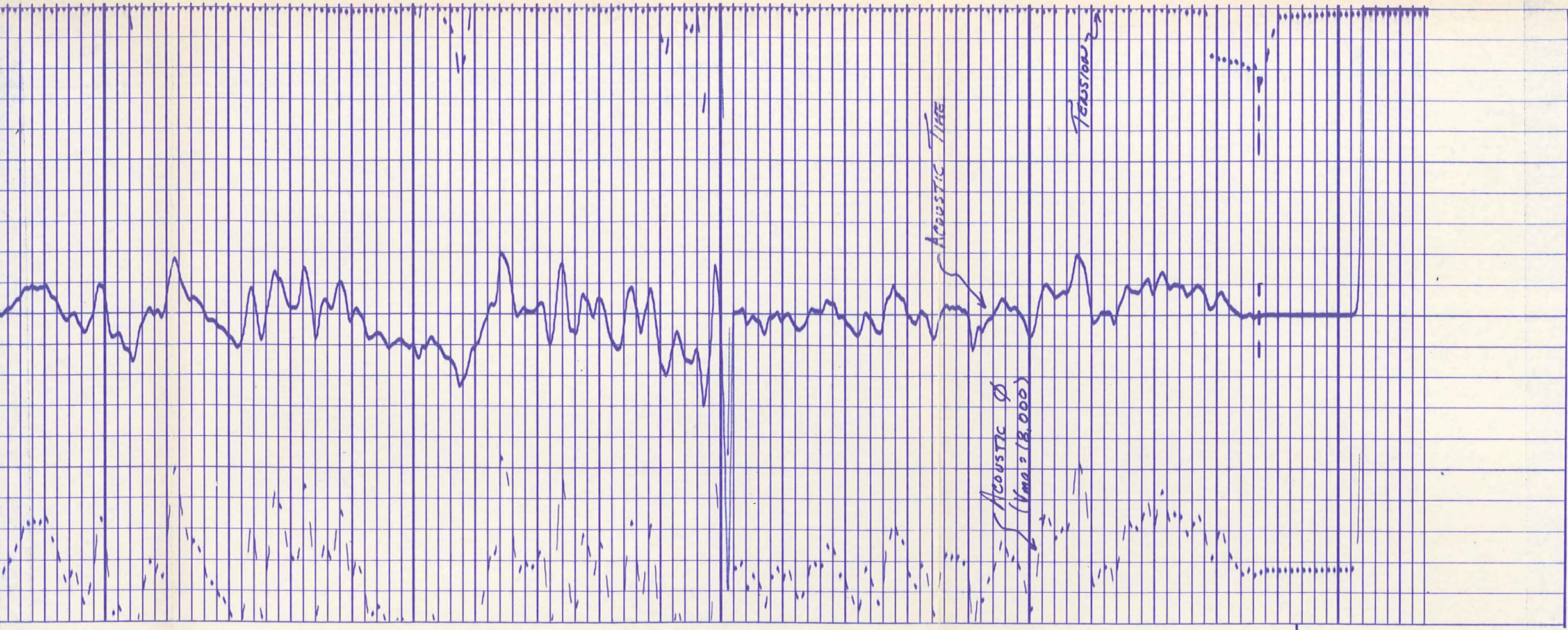
Drillers T.D. *3743*
 Log F.R. *3735*
 Log T.D. *3744*
 Elevations:
 K.B. *5002* D.F. *—* G.L. *4988*

POROSITY DETERMINATION FROM ACOUSTILOG



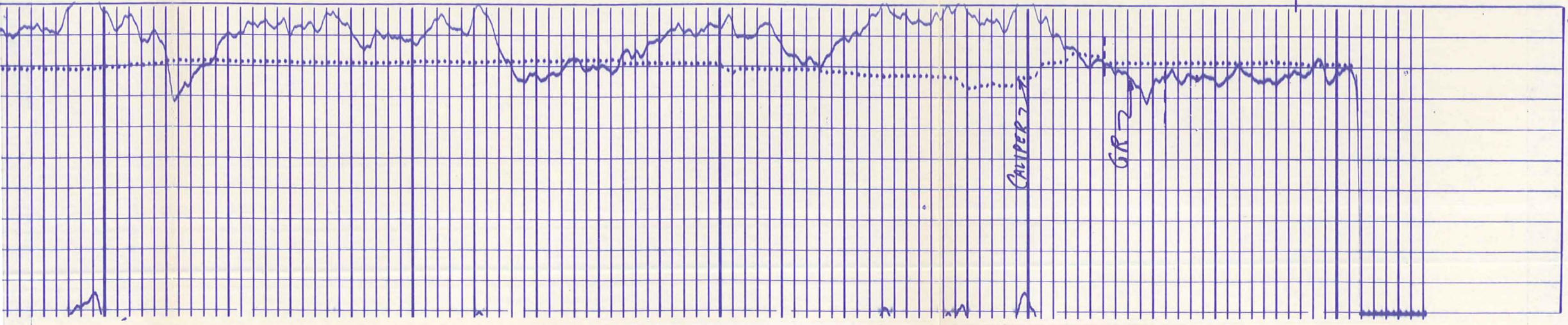
REPEAT SECTION





3600

3700



Acoustic Downhole (Calibration)
AFTER LOG

Calibration Signal

140 MS/FT Calibration Signal

100 MS/FT Calibration Signal

80 MS/FT Calibration Signal

140 MS/FT Calibration Signal

100 MS/FT Calibration Signal

80 MS/FT Calibration Signal

40 MS/FT Calibration Signal

Acoustic Downhole Calibration
BEFORE LOG

Calibration Signal

140 MS/FT Calibration Signal

100 MS/FT Calibration Signal

80 MS/FT Calibration Signal

40 MS/FT Calibration Signal

GR Calibration
After Log

API UNITS OF CALIB. STD.	2.00
SENSITIVITY READING	300
MULTIPLIER	X
ZERO SUPPRESSION	0
TIME CONSTANT	2
MEASURED CHART DIVISIONS	6.5

