

BOB  
CEMENT BOND LOG  
PERFS MARKED

COMPANY MESA HYDROCARBONS INC.  
WELL CEDAR SPRINGS RANCH #2-11  
FIELD MAMM CREEK  
COUNTY GARFIELD STATE CO.

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WELL CEDAR SPRINGS RANCH #2-11  
FIELD MAMM CREEK  
COUNTY GARFIELD STATE CO.

API No. 05-045-0764100  
Location 1839' FSL / 2008' FWL  
Sect 2 Twp 7S Rge 93W

Other Services  
Elev. : K.B. 6124  
D.F. ----  
G.L. 6108

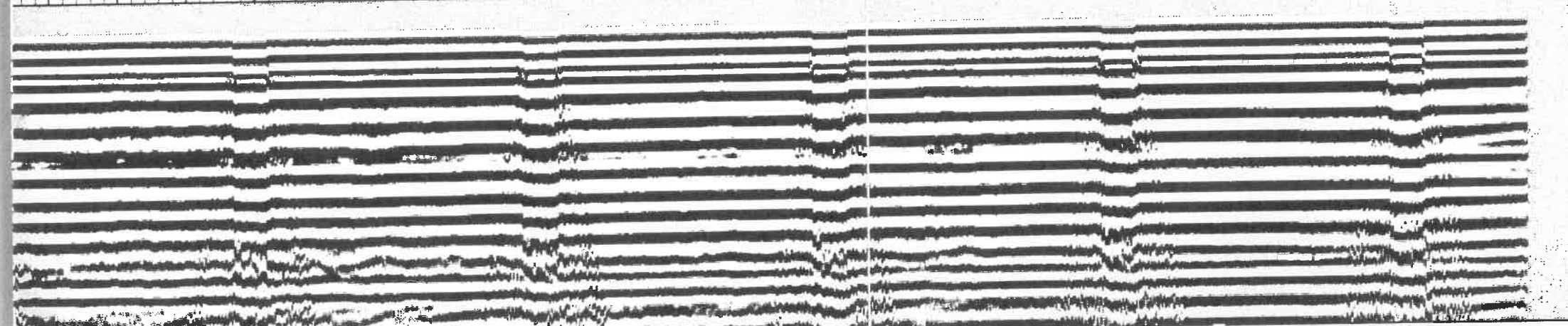
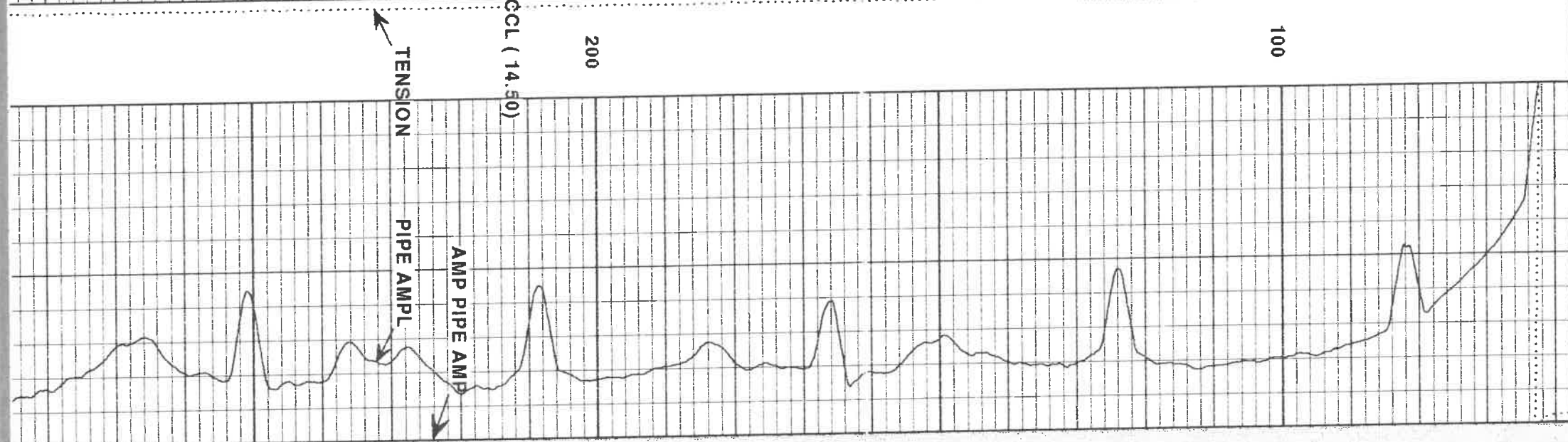
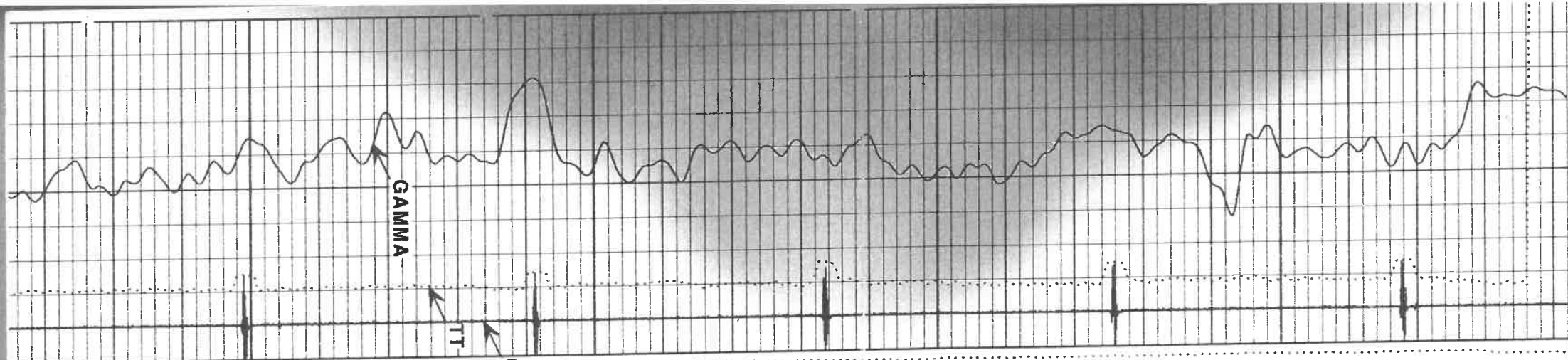
Permanent Datum G.L. Elev 6108  
Log measured from K.B. 16 ft. above perm. datum  
Drilling measured from K.B.

Date @ Time Logged	12/11/00 @ 11:00AM	Type fluid in hole	WATER
Run No.	ONE	Density of Fluid	NA
Depth - Driller	7815	Fluid Level	FULL
Depth - Logger	7747	Cement Top Est. Logged	500
Bottom - Logged Interval	7741	Equipment / Location	54209 / 55685
Top - Logged Interval	0	Recorded by	BOURDEAU
Max. rec. temp., deg F.	NA	Witnessed by	MR ZIES

CEMENTING DATA	Surface	Protection	Production	Liner
	String	String	String	
Date/Time Cemented				
Primary/Squeeze				
Expected				
Compressive Strength	psi@ hrs	psi@ hrs	psi@ hrs	psi@ hrs
Cement Volume				
Cement Type / Weight	/	/	/	/
Formulation				
MUD Type / MUD Wgt.	/	/	/	/

RUN No.	BOREHOLE RECORD			CASING & TUBING RECORD			
	Bit	From	To	Size	Wgt.	From	To
				9 5/8	NA	SURF	1045
				4.5	11.6	SURF	TD.





GAMMA

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TENSION

AMP PIPE AMPL

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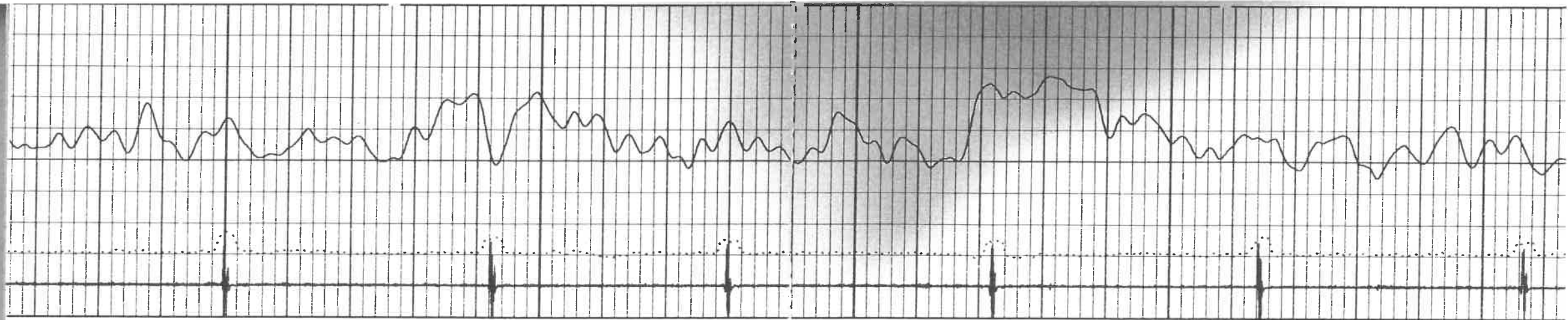
CCL ( 14.50 )

200

100

-50

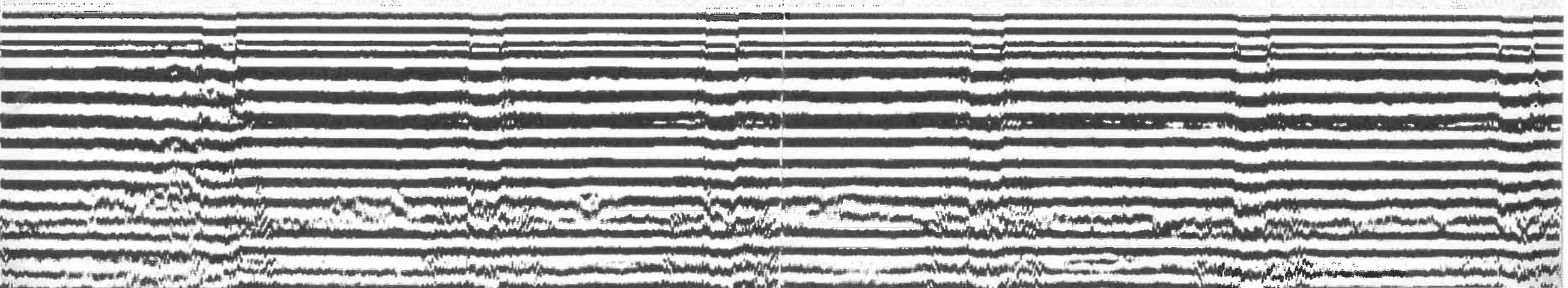
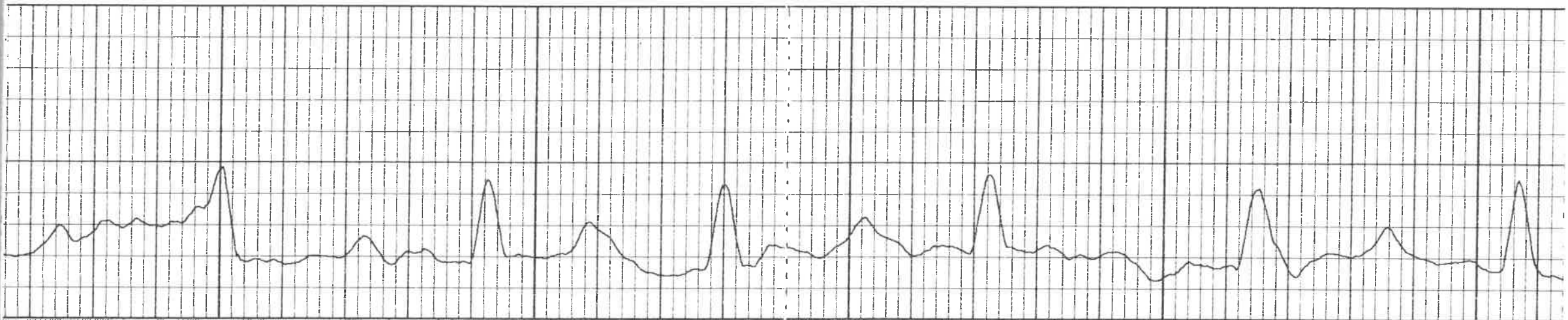
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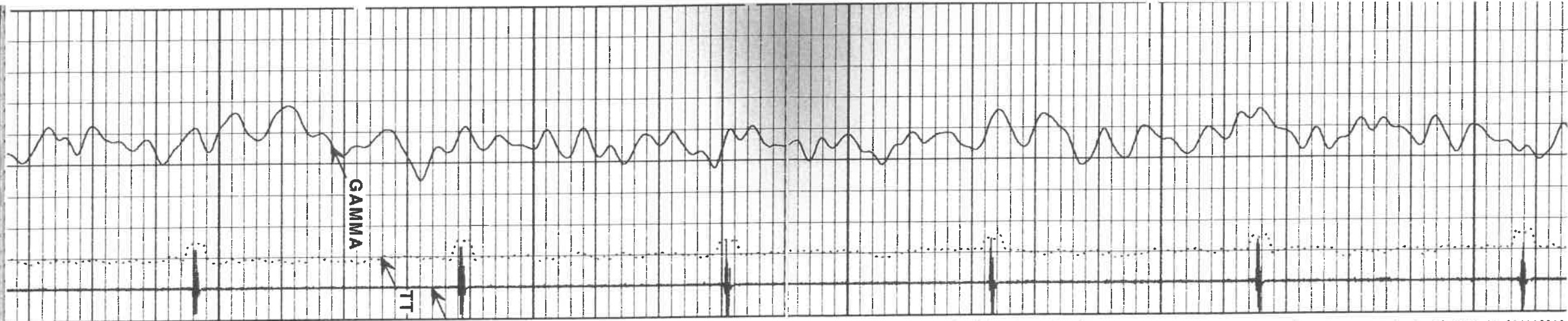


500

400

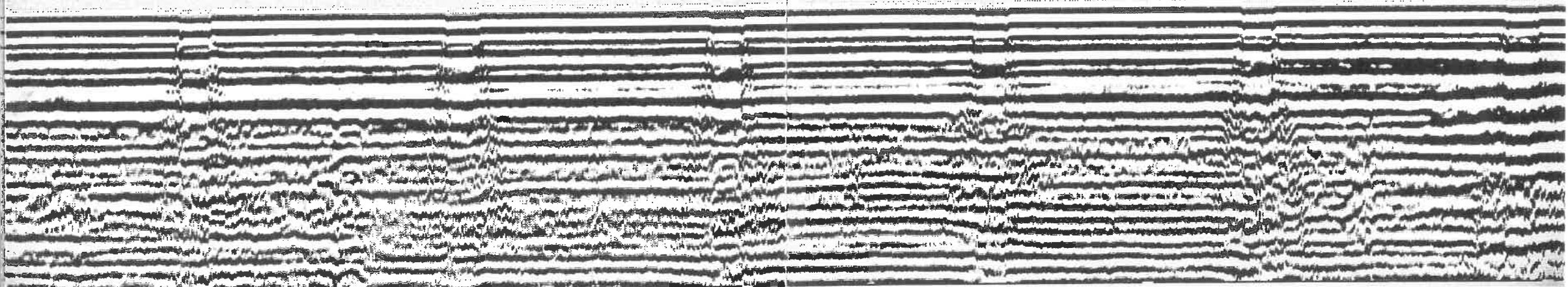
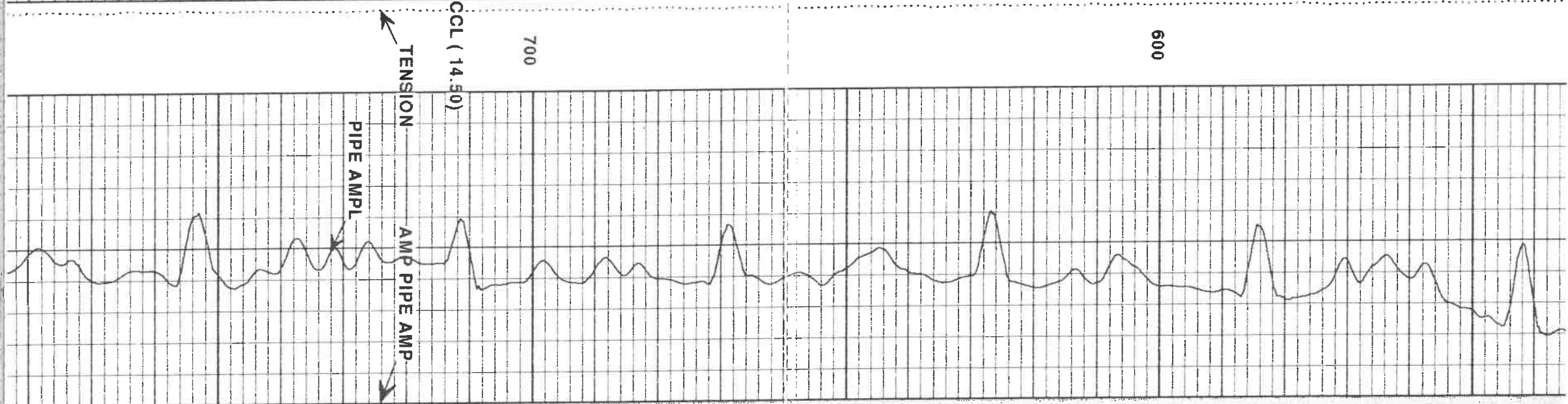
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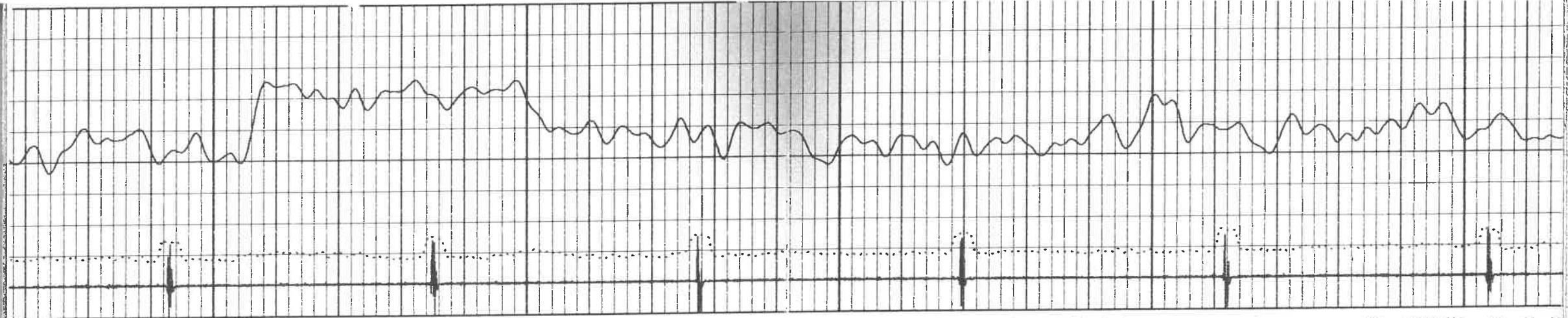




700

600

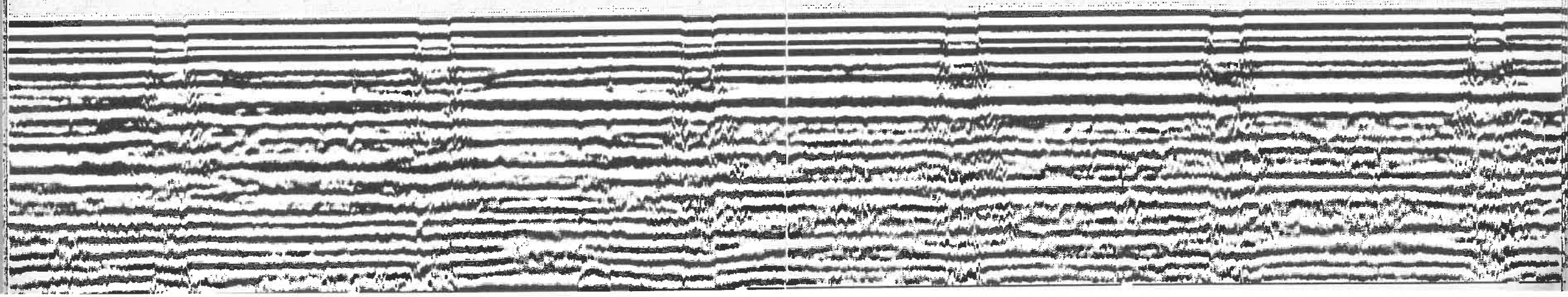
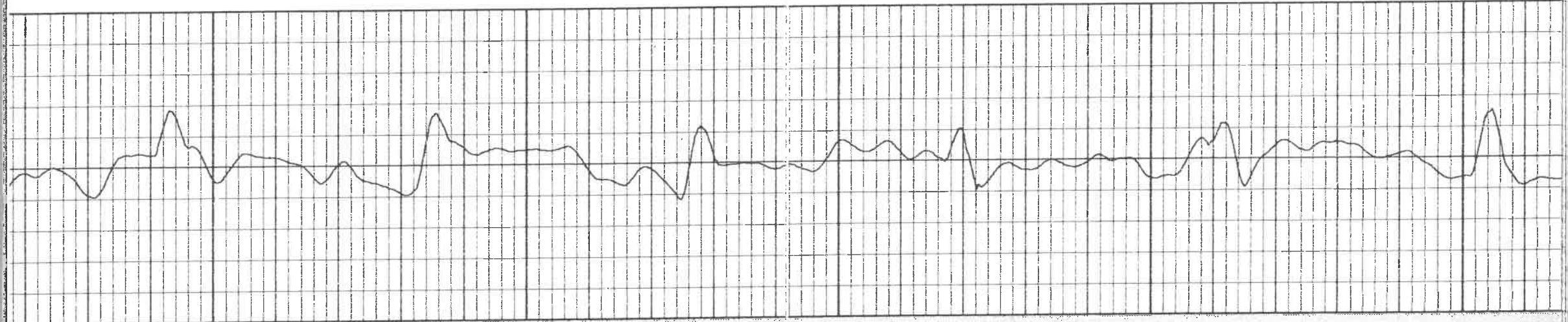


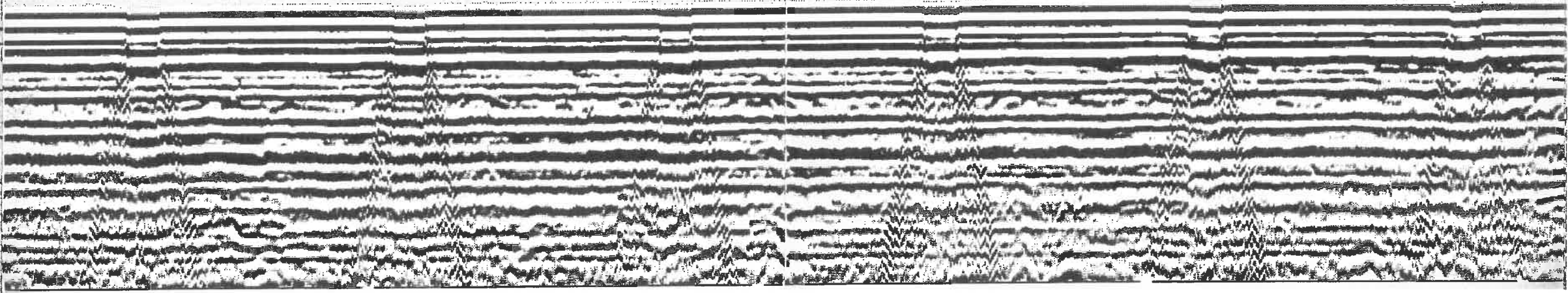
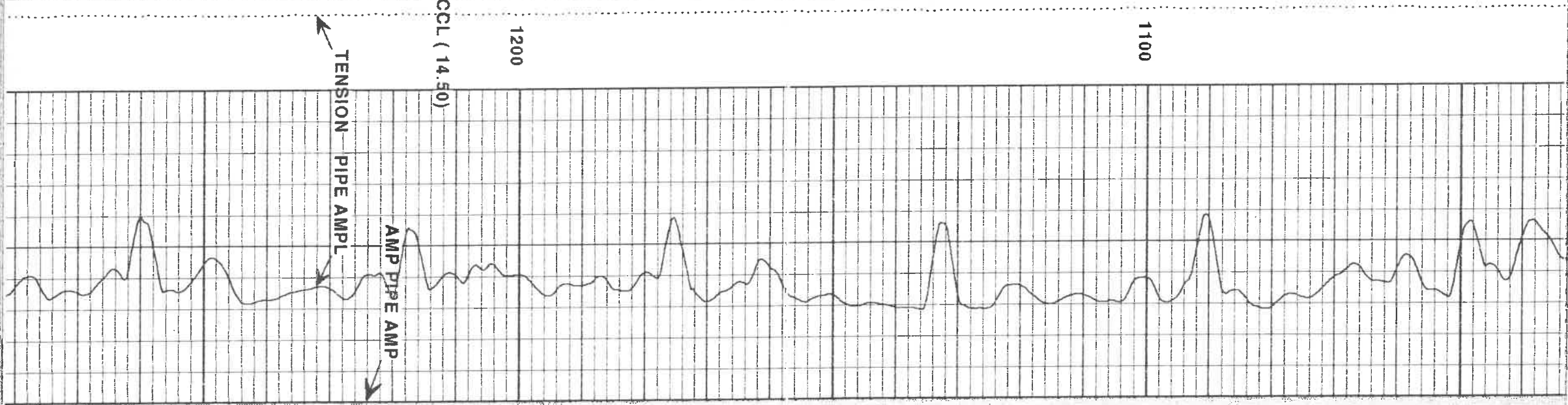
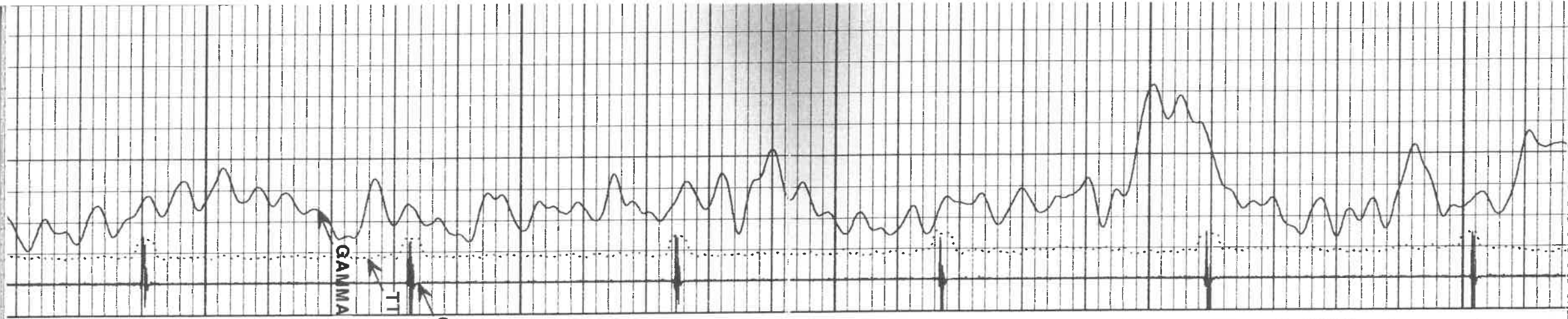


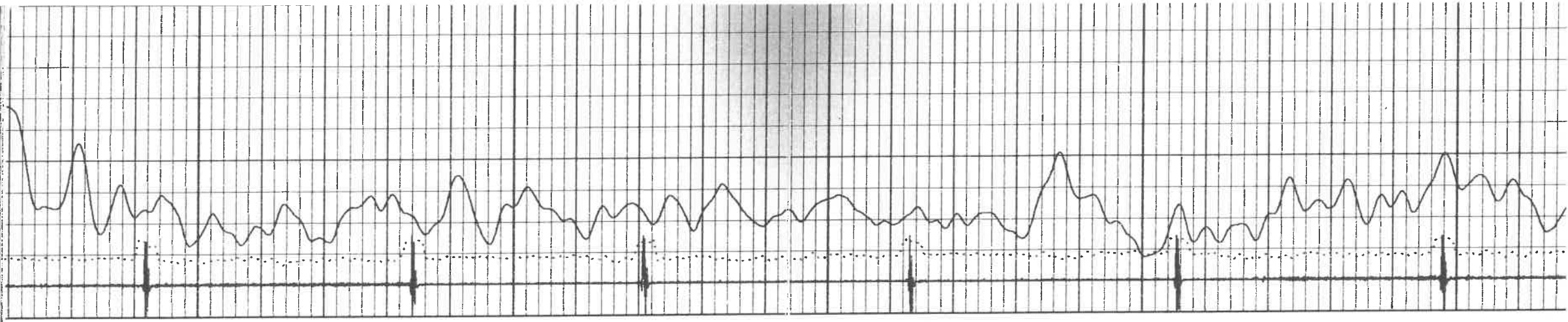
1000

900

800



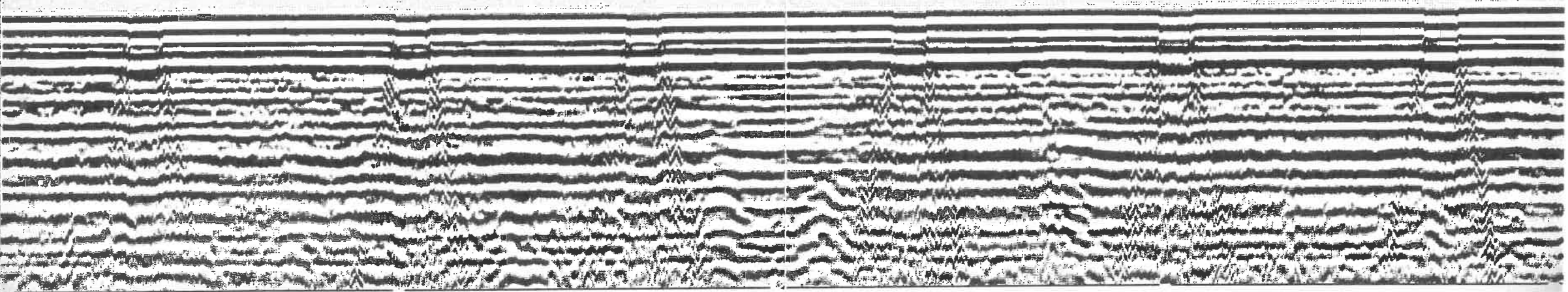
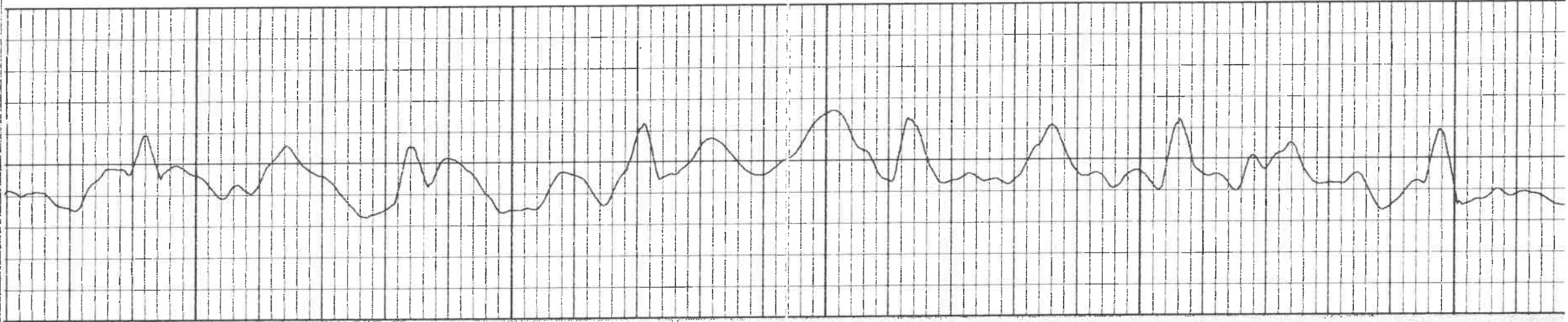


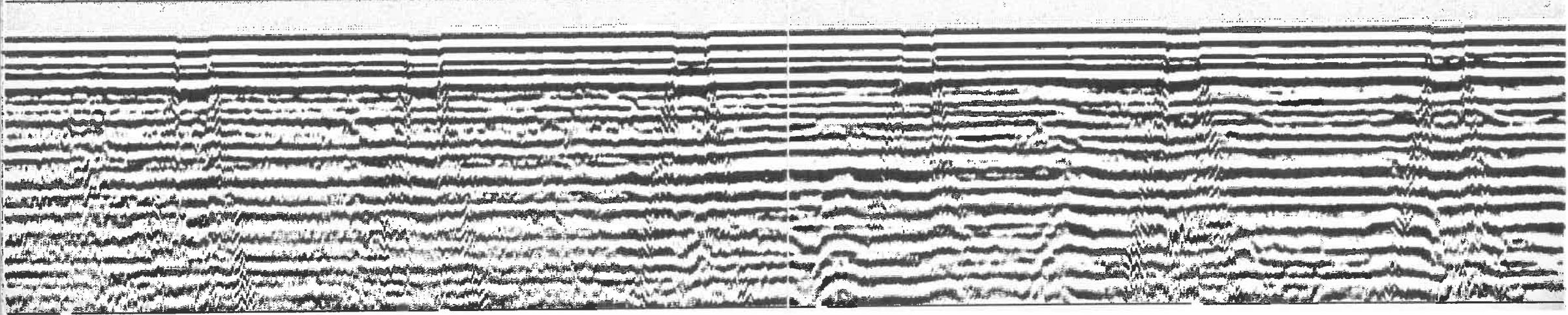
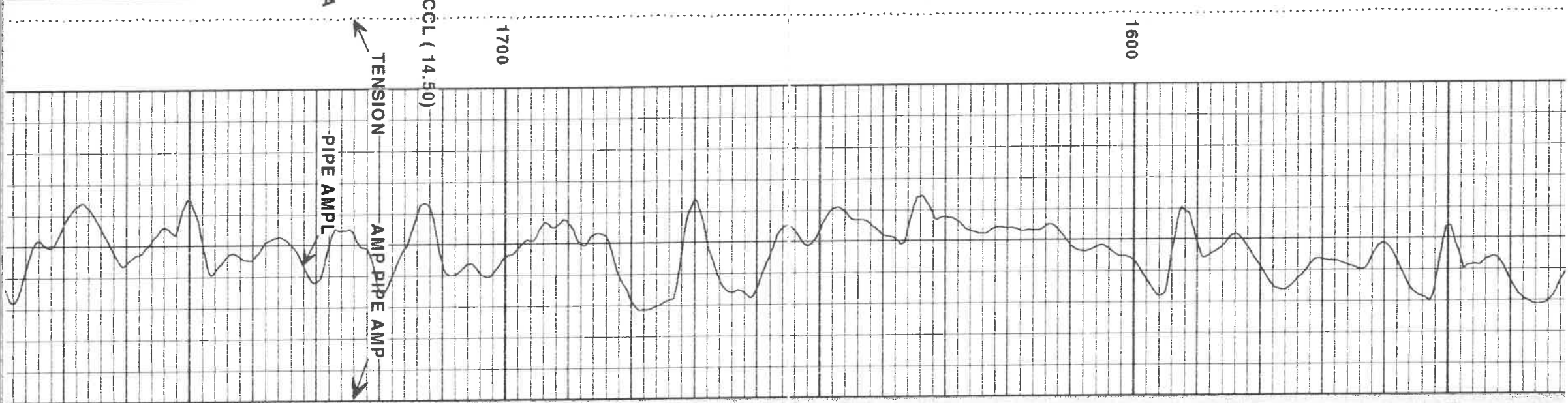
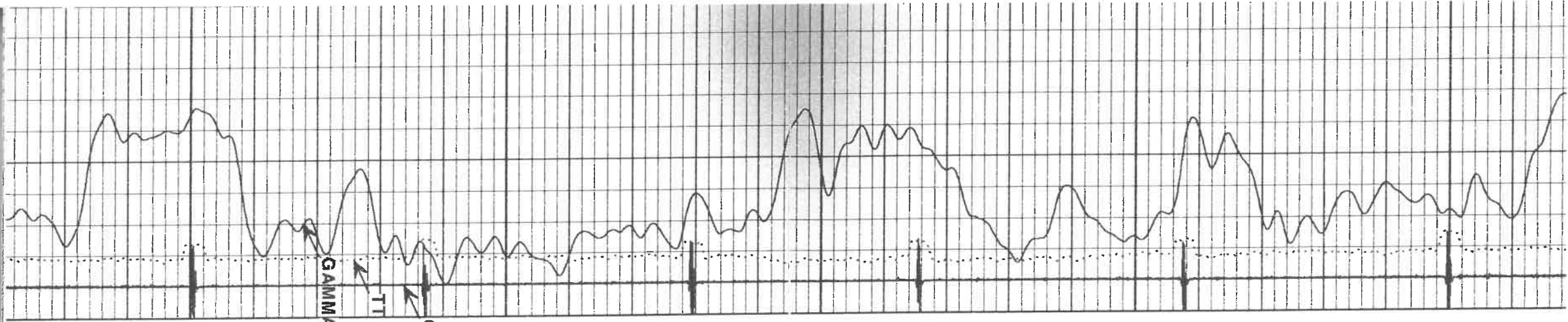


1500

1400

1300





CCL (14.50)

1700

1600

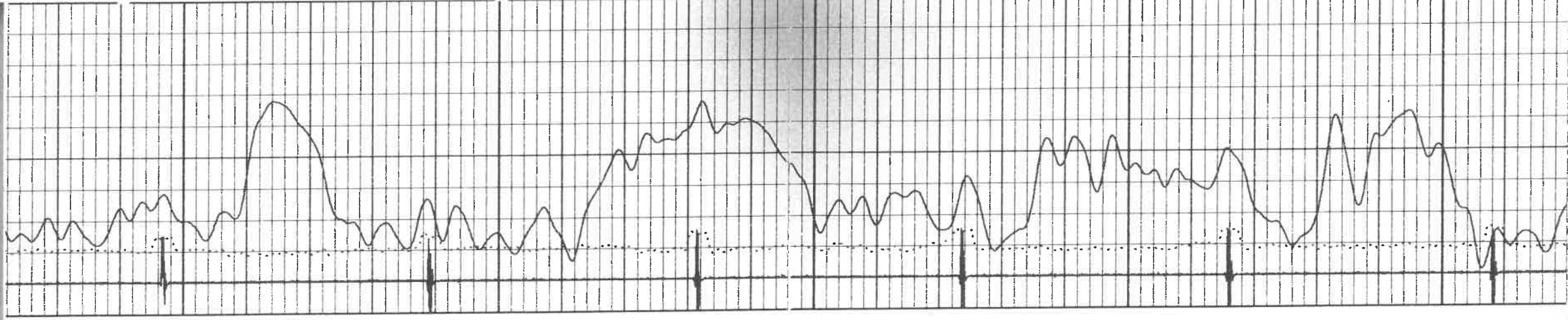
GAMMA

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PIPE AMPL

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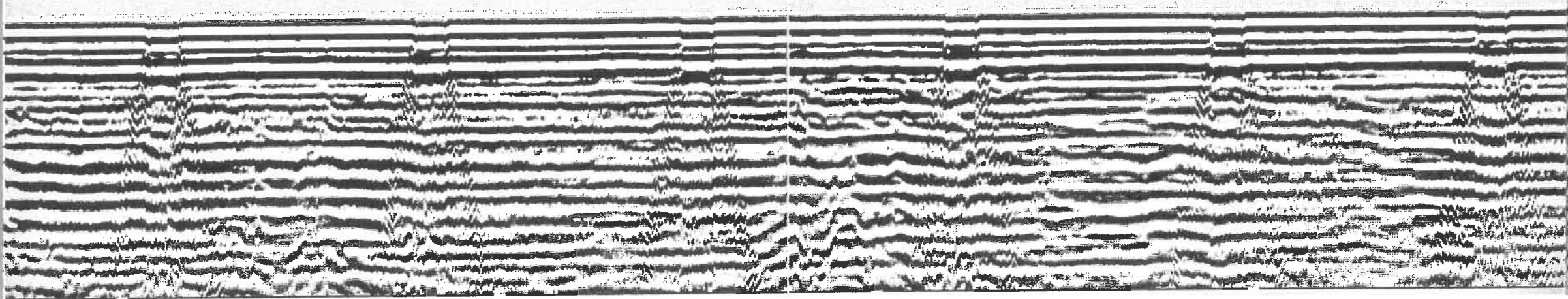
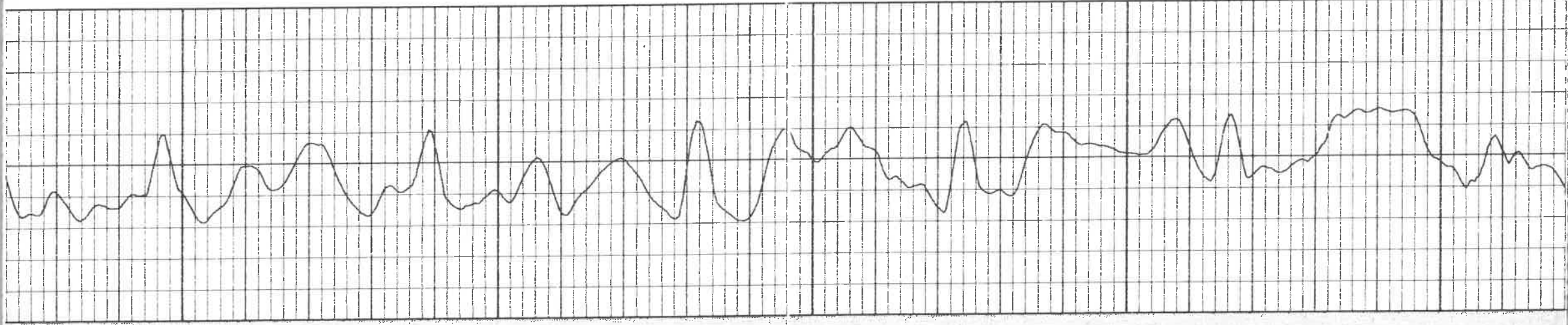
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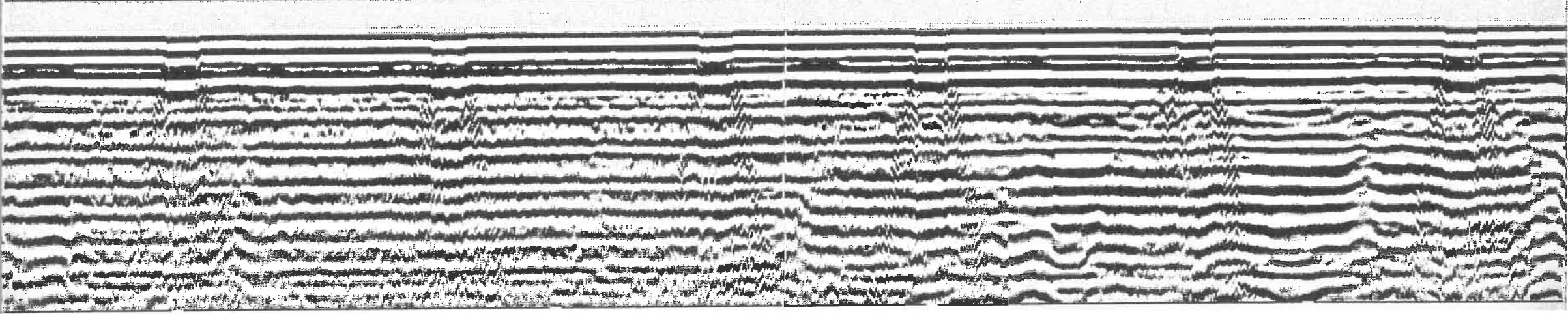
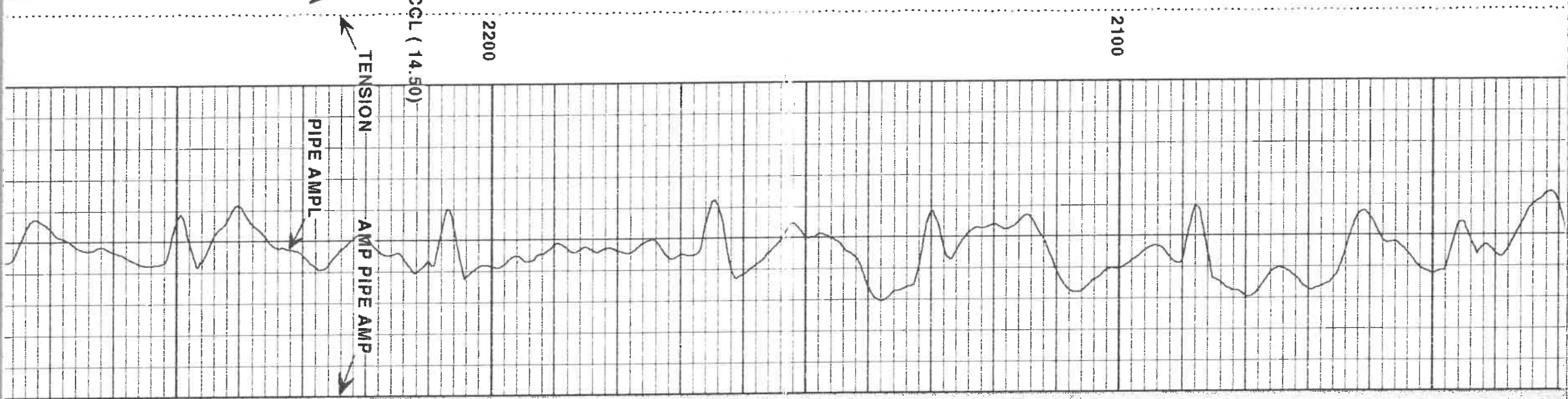
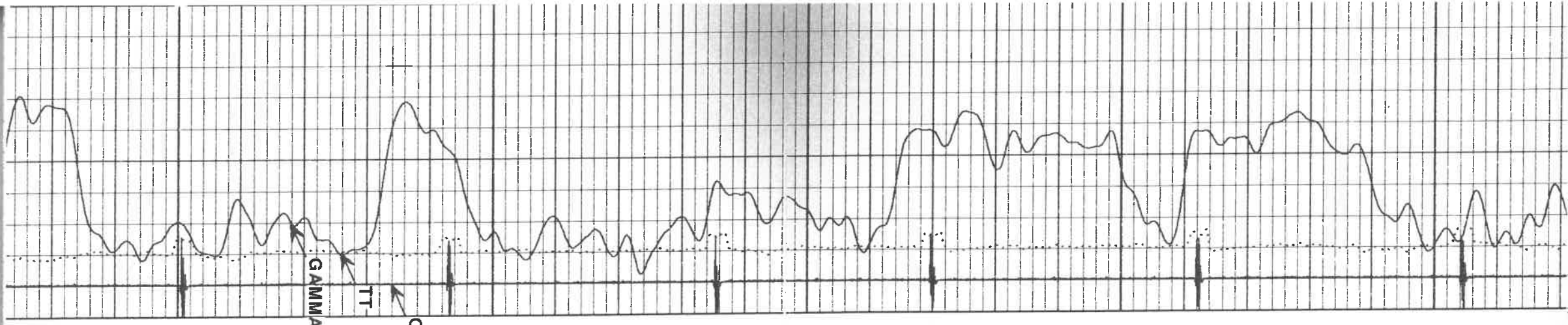


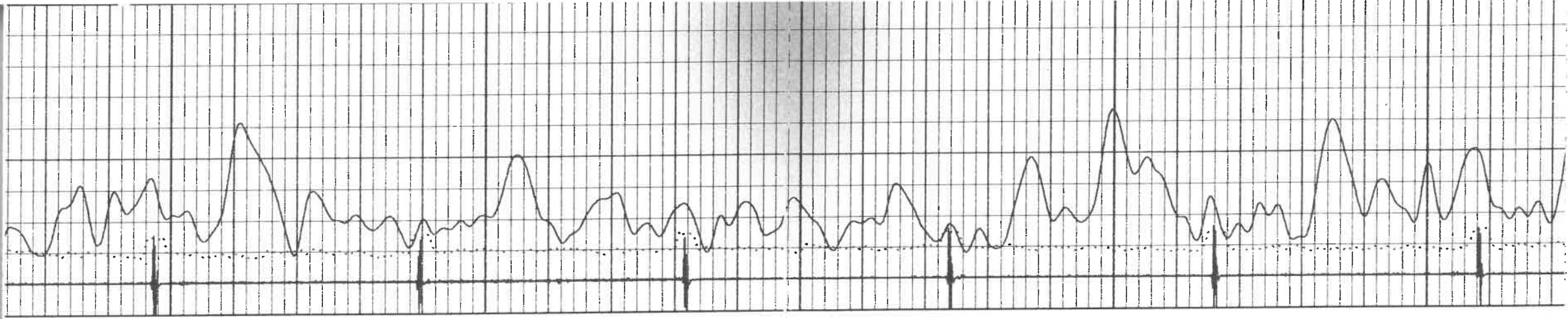
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1900

1800



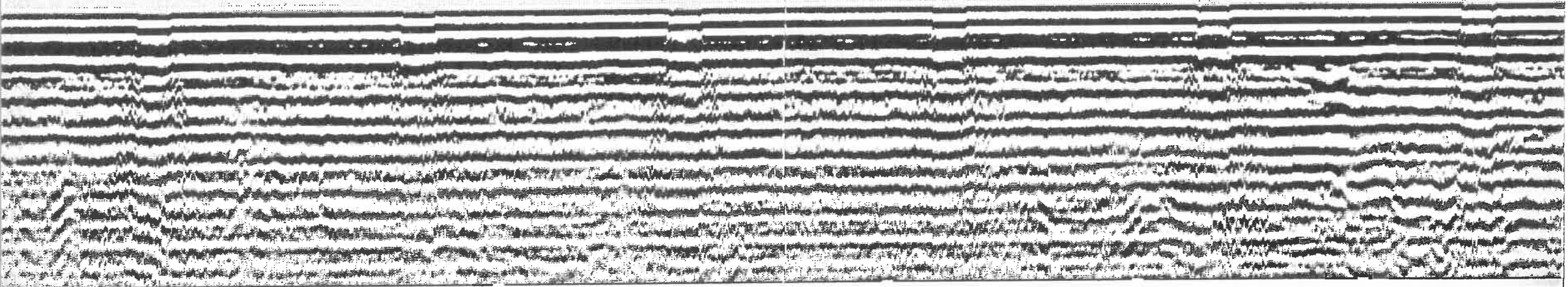
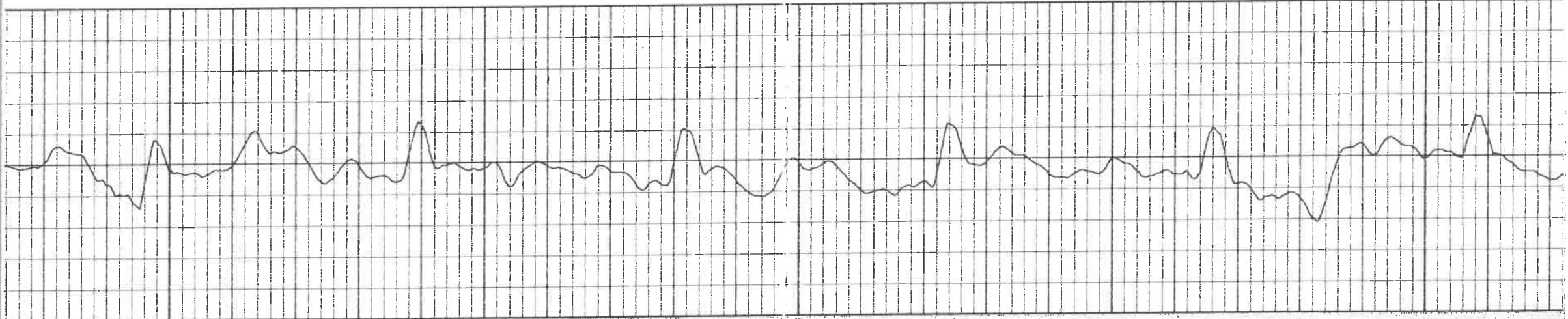


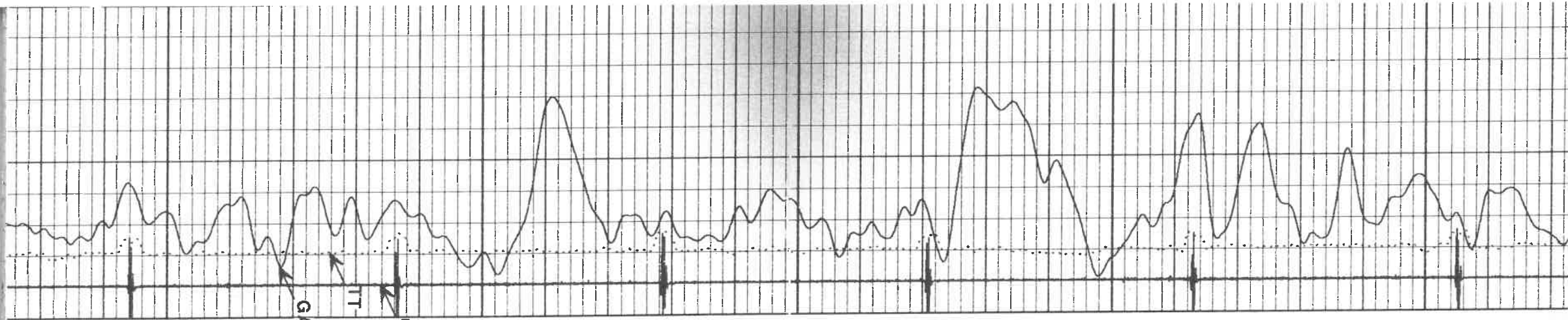


2500

2400

2300



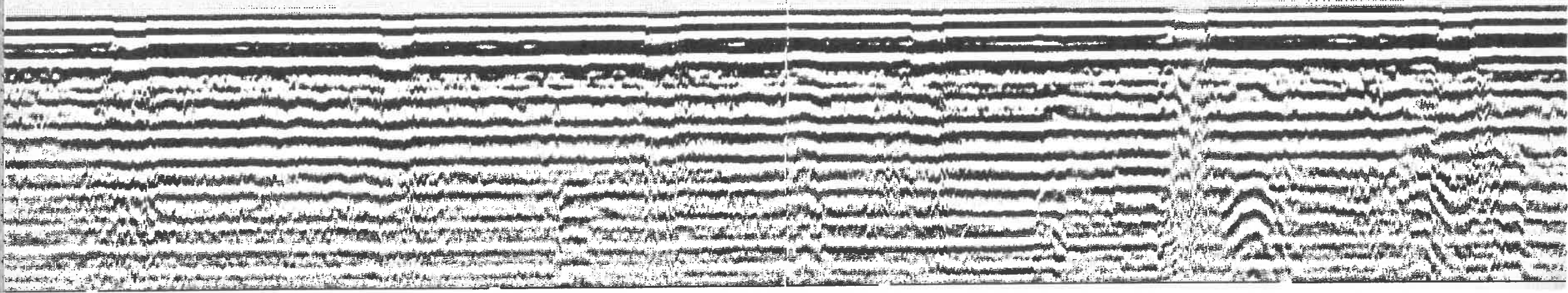
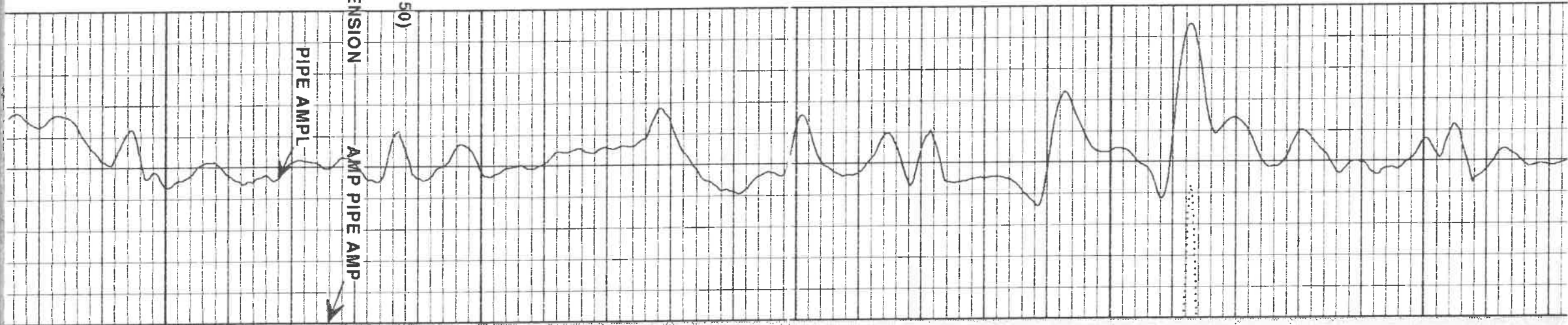


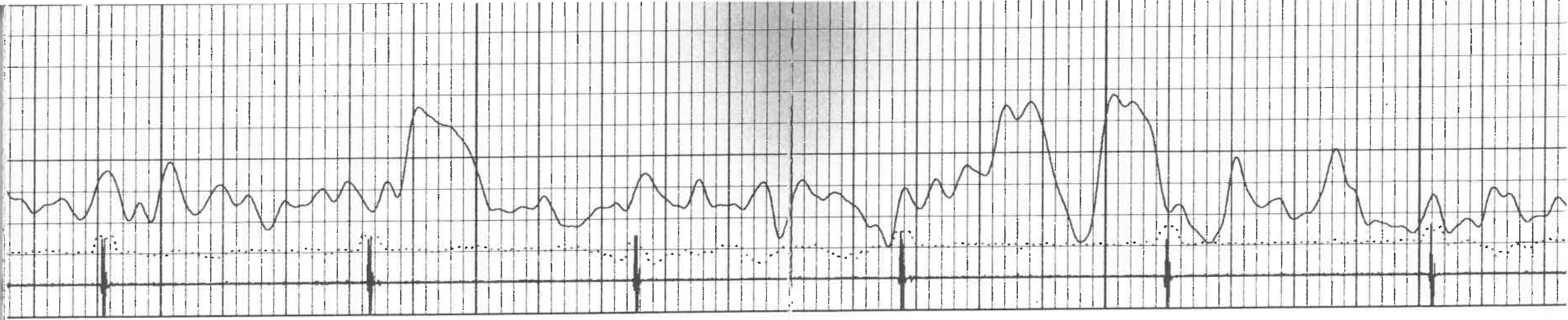
GAMMA  
TT  
CCL (14.50)

2700

2600

PIPE AMPL  
TENSION  
AMP PIPE AMP

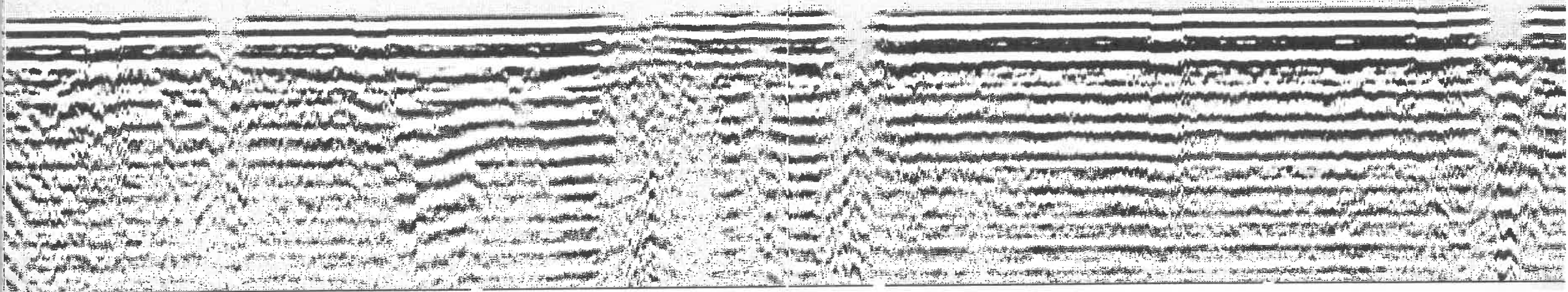
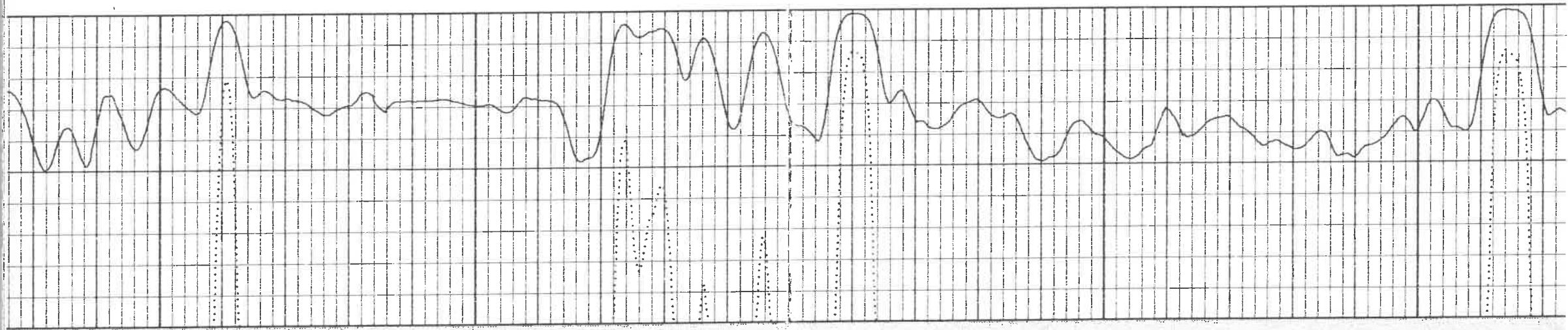


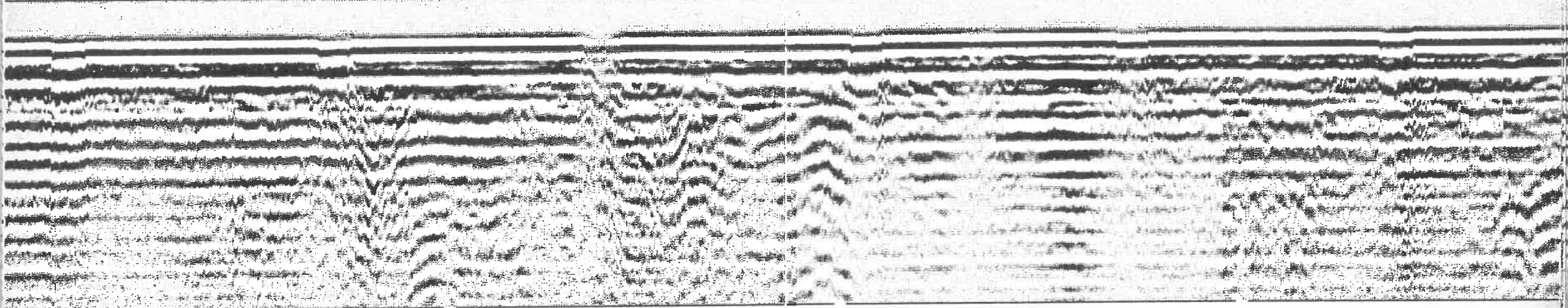
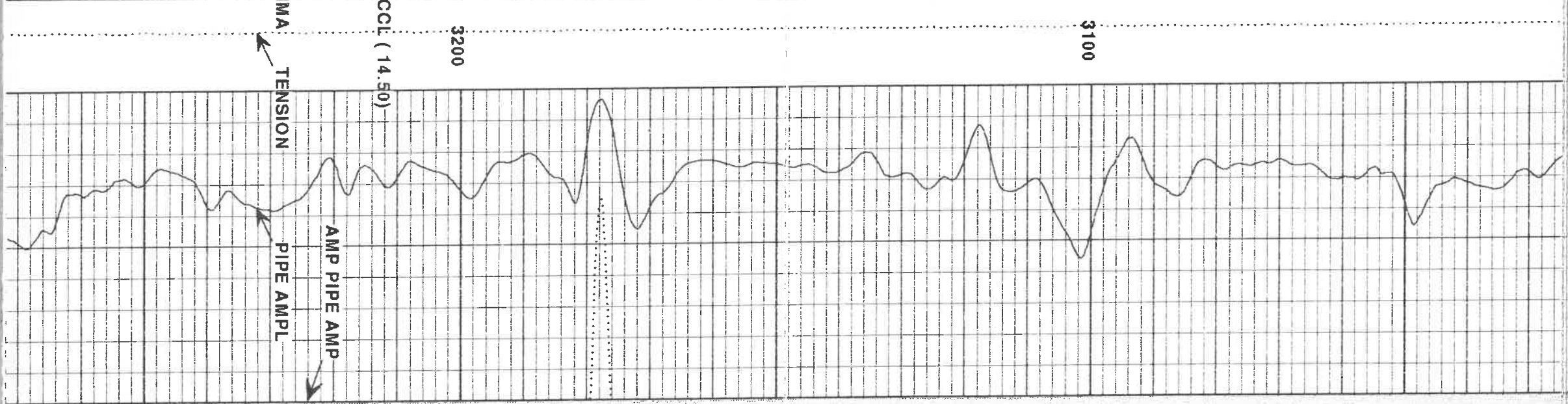
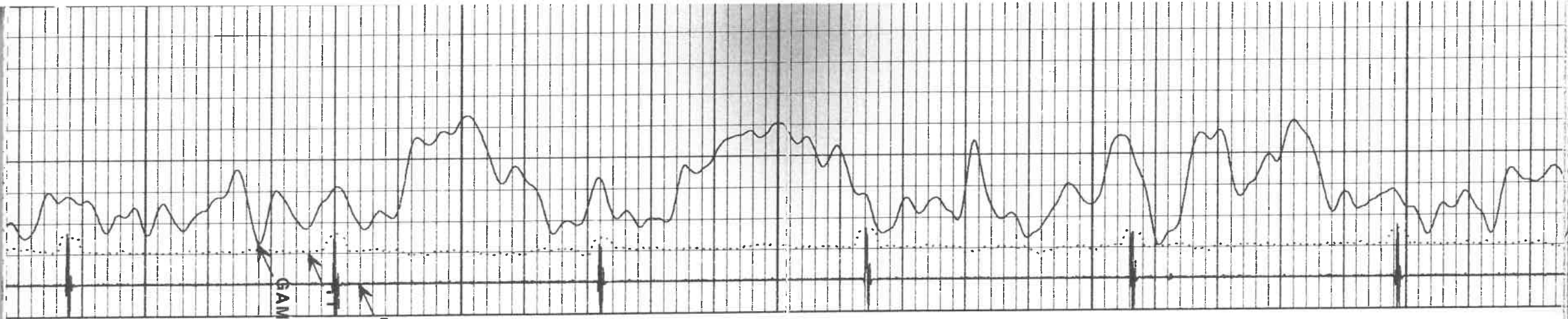


3000

2500

2800





GAMMA

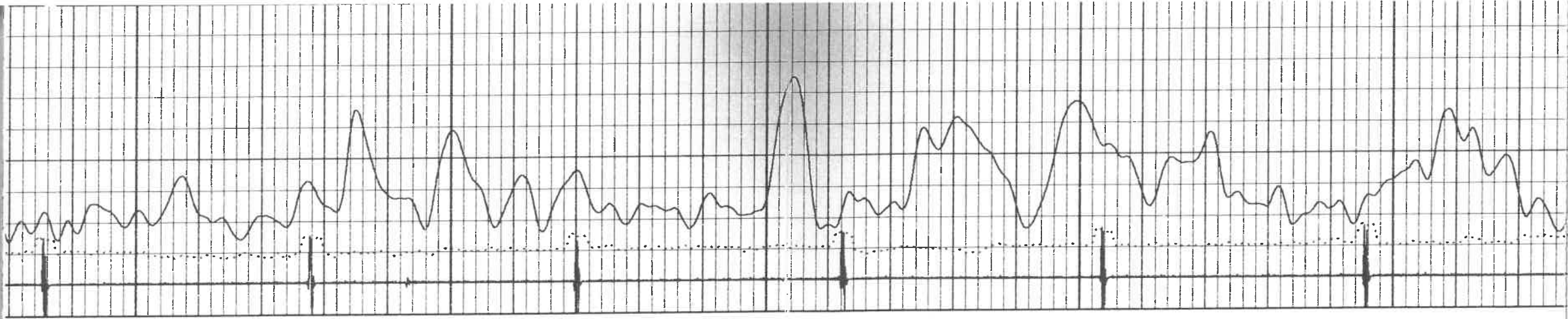
TENSION

AMP PIPE AMPL

CCL ( 14.50 )

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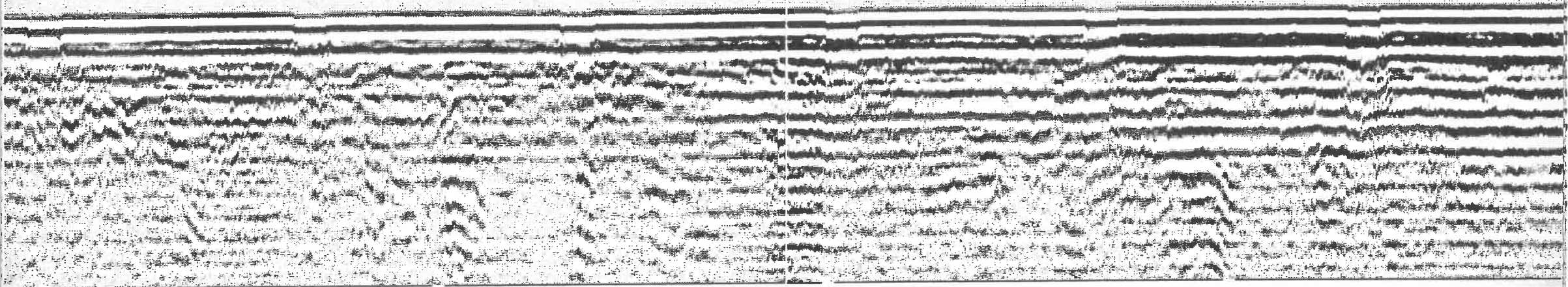
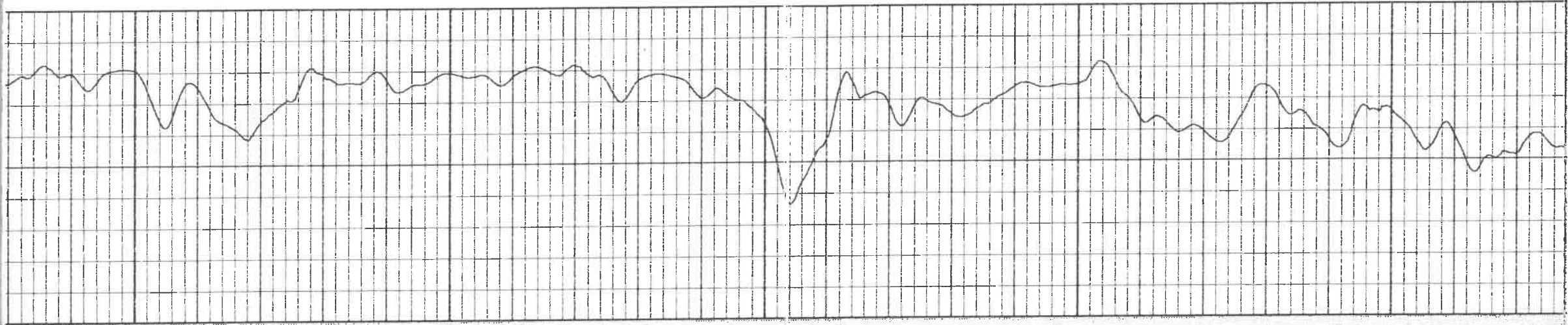
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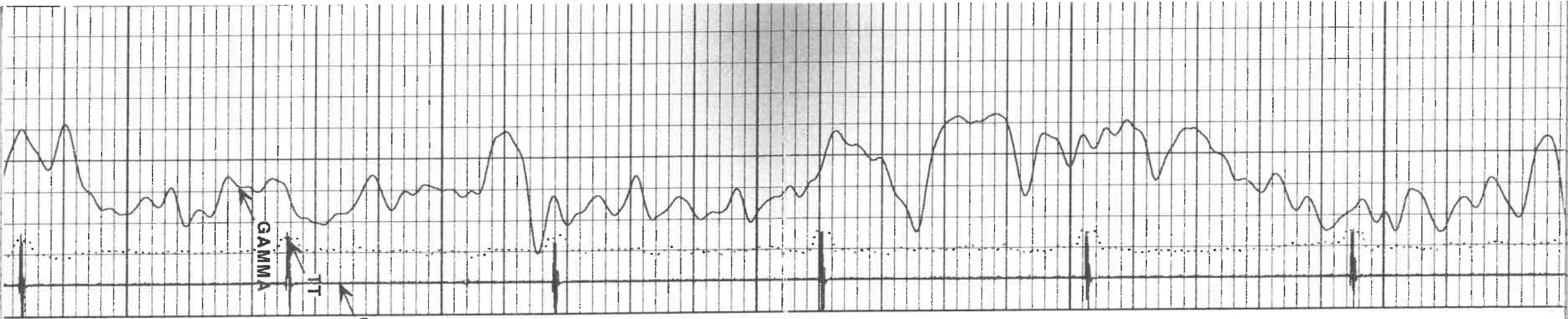


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3400

3300





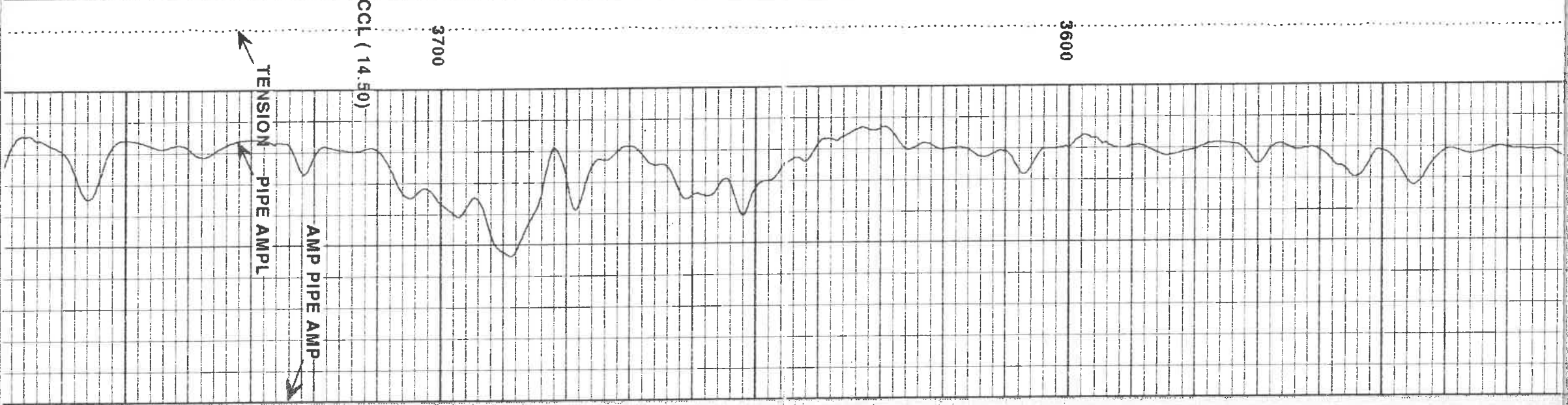
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TT

CCL (14.50)

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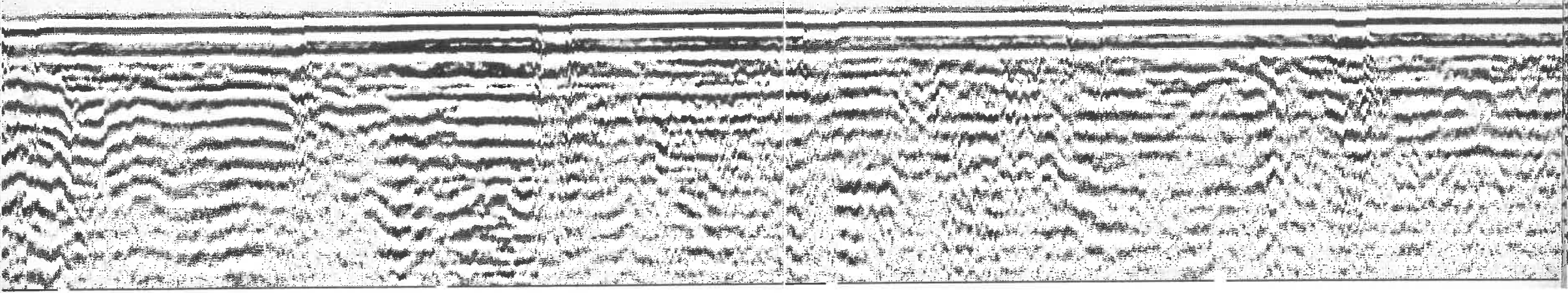
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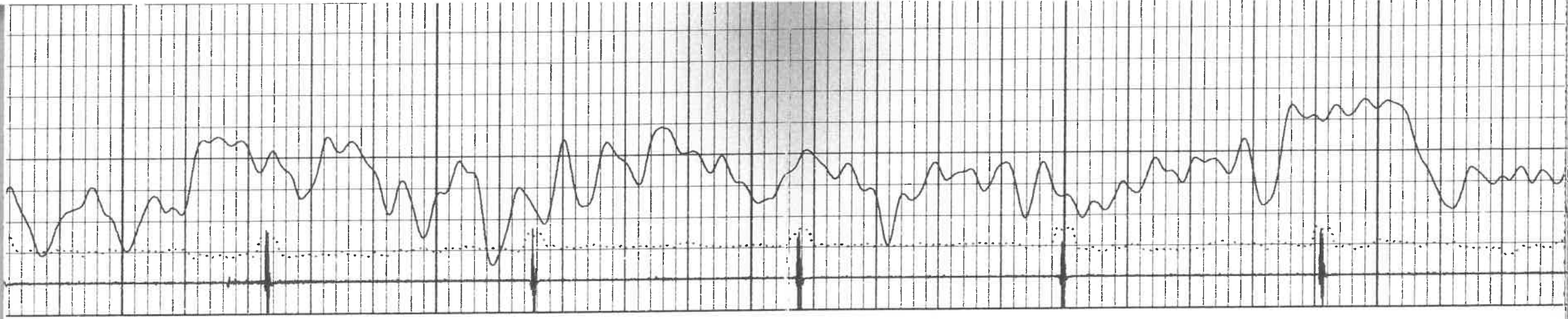


TENSION

PIPE AMPL

AMP PIPE AMP

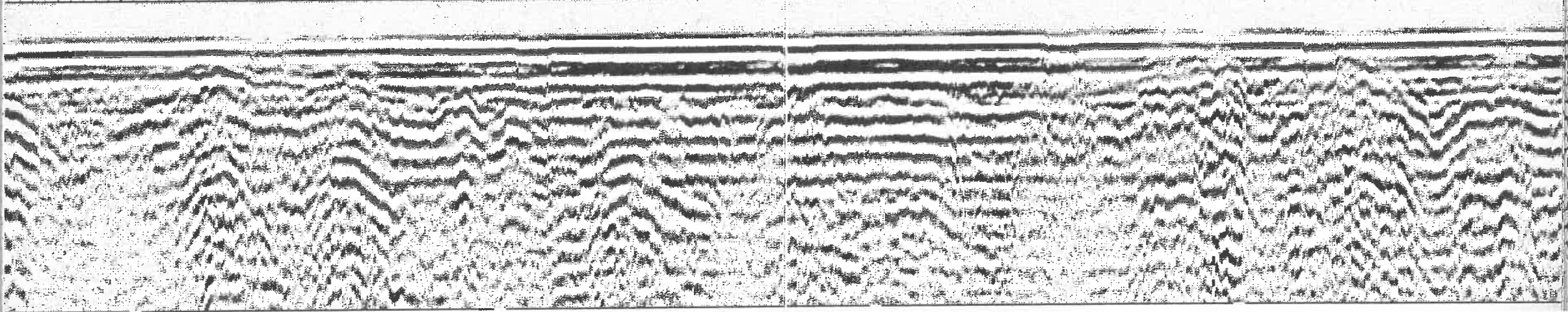
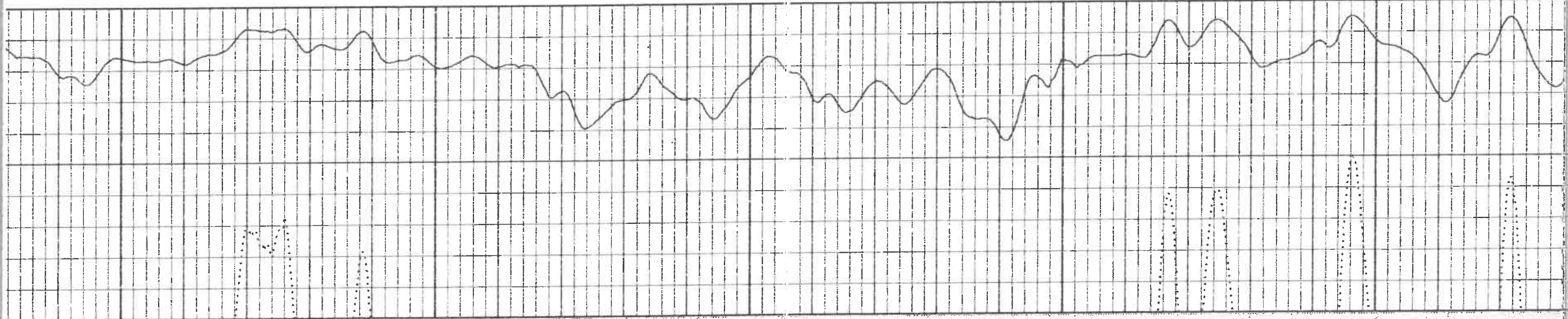


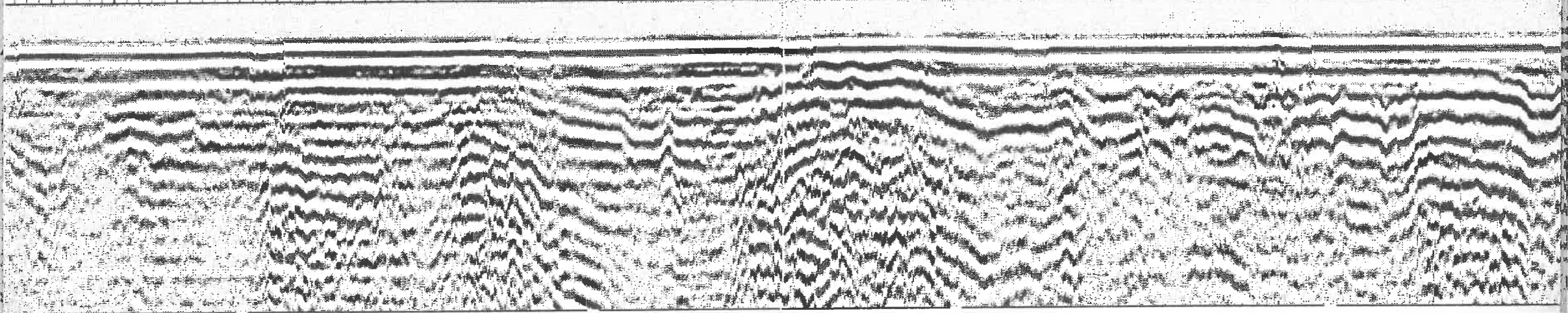
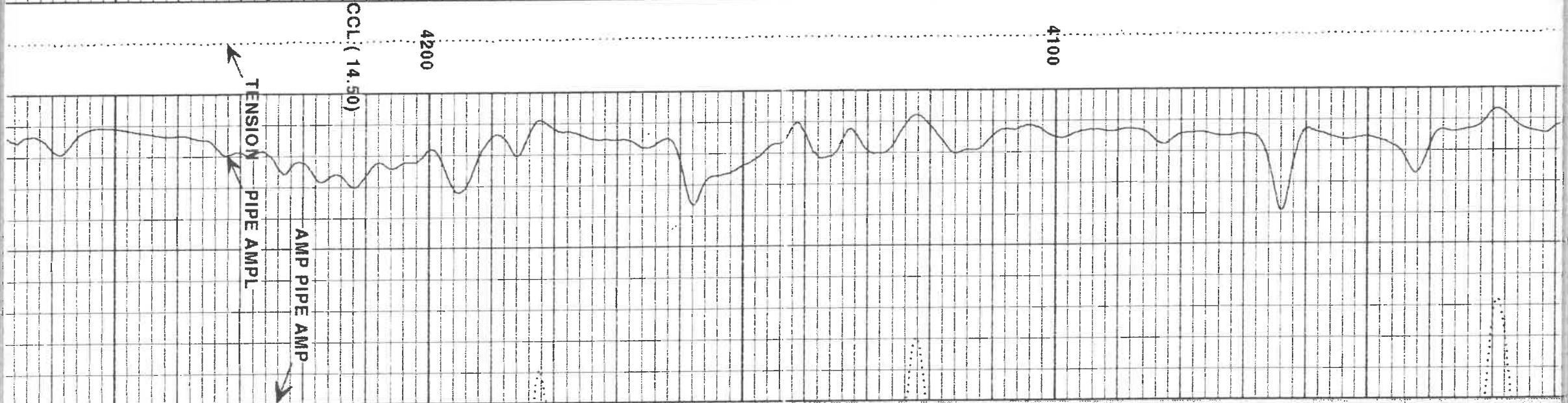
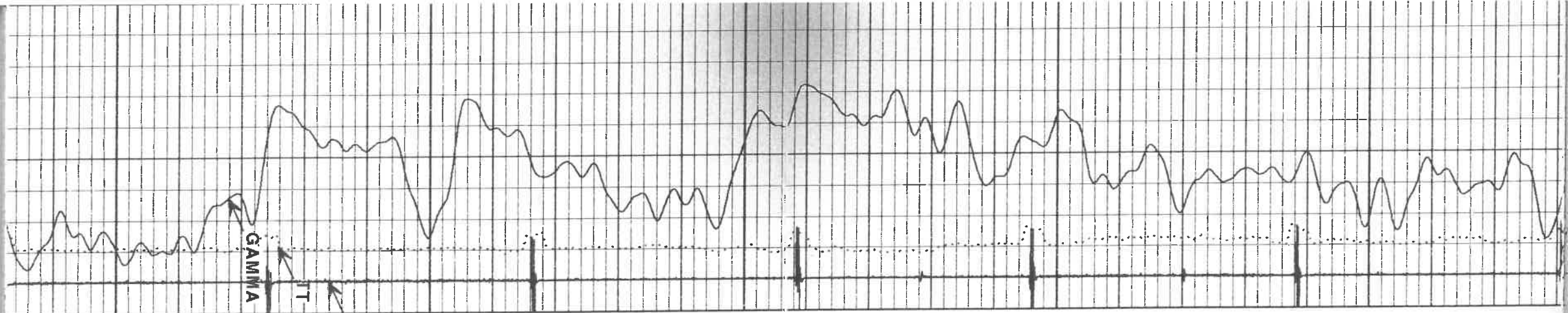


4000

3900

3800

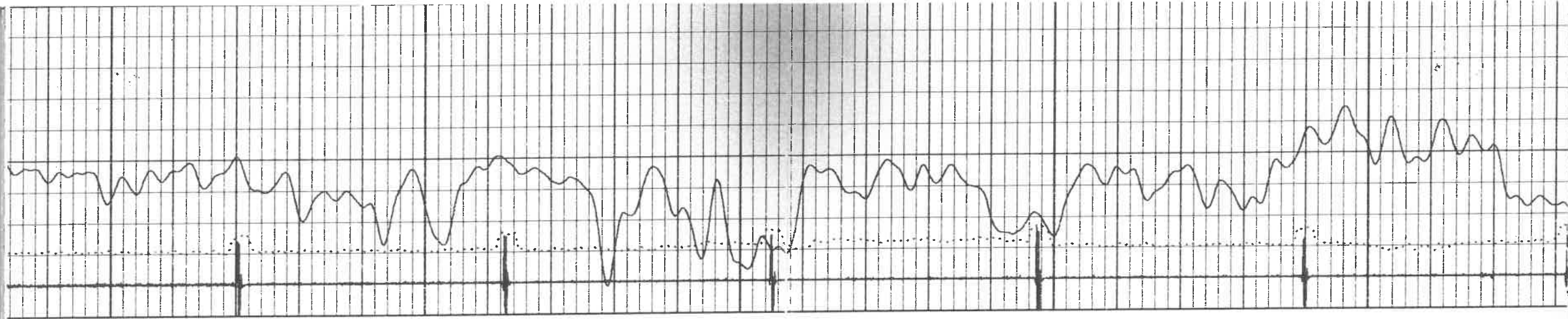




CCL (14.50)

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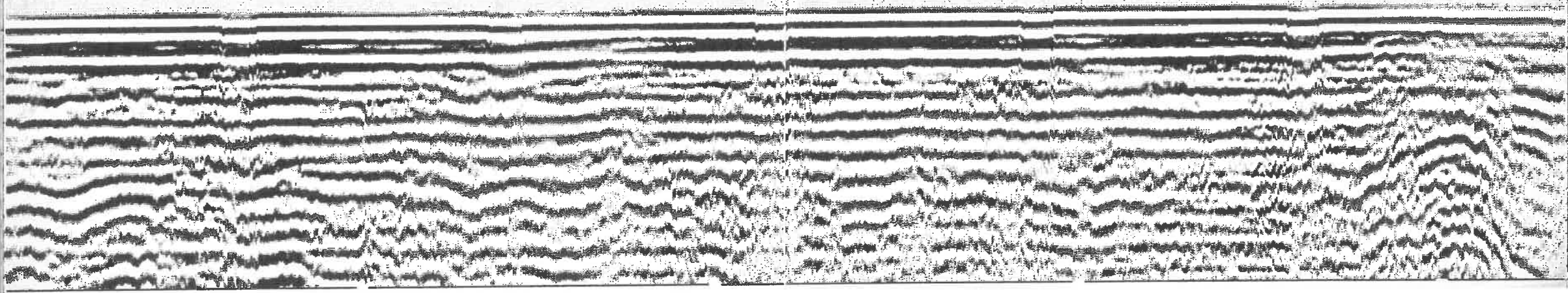
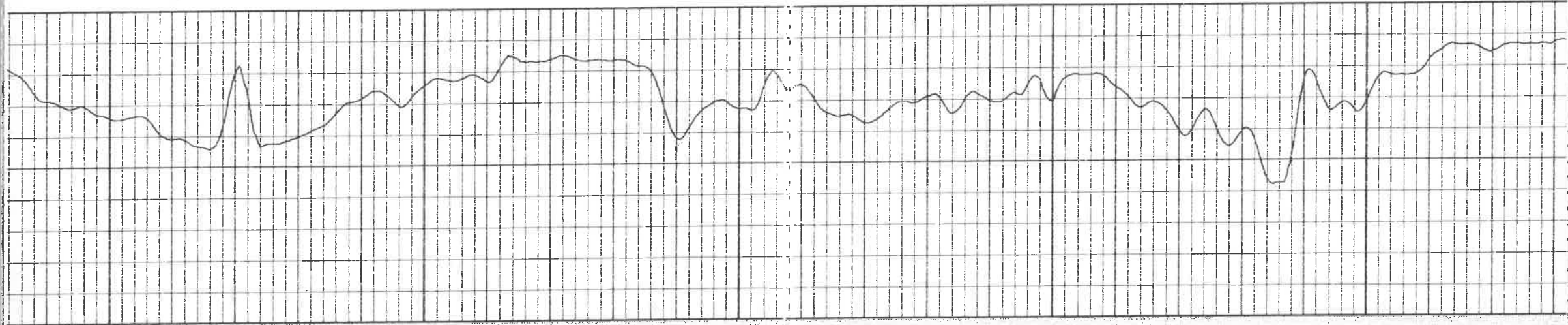
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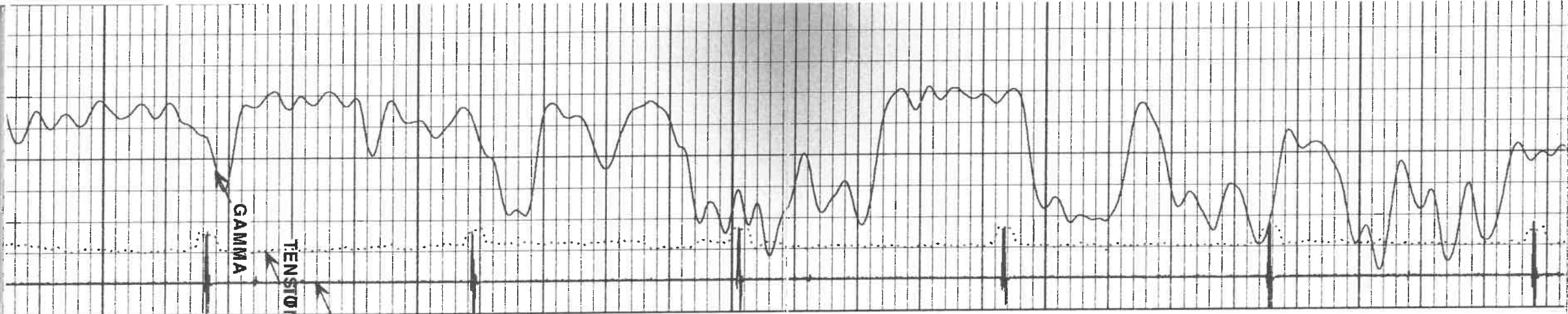


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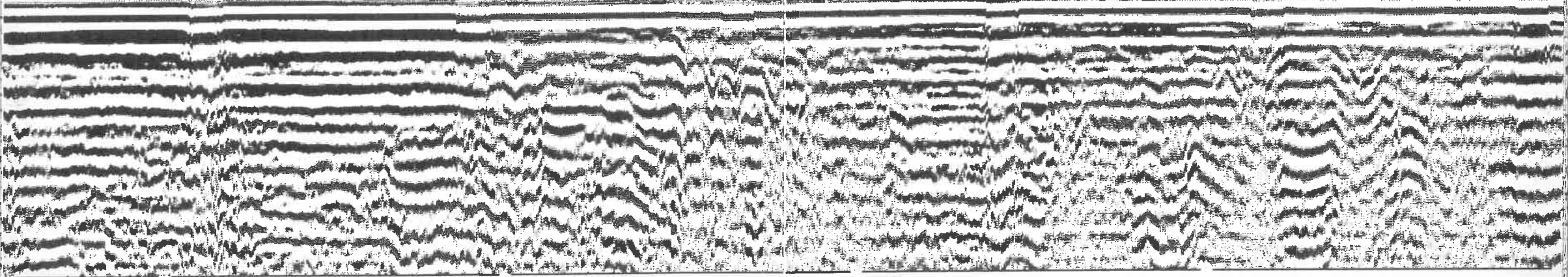
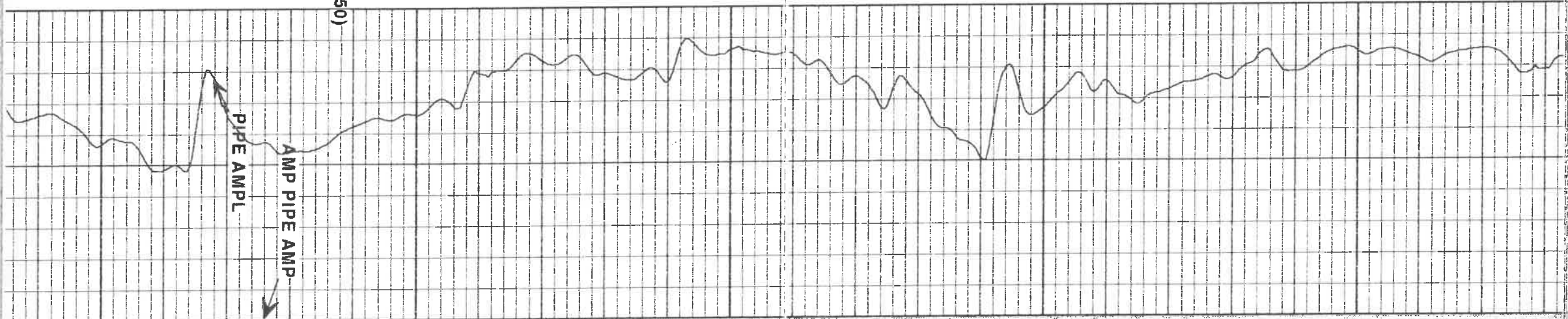
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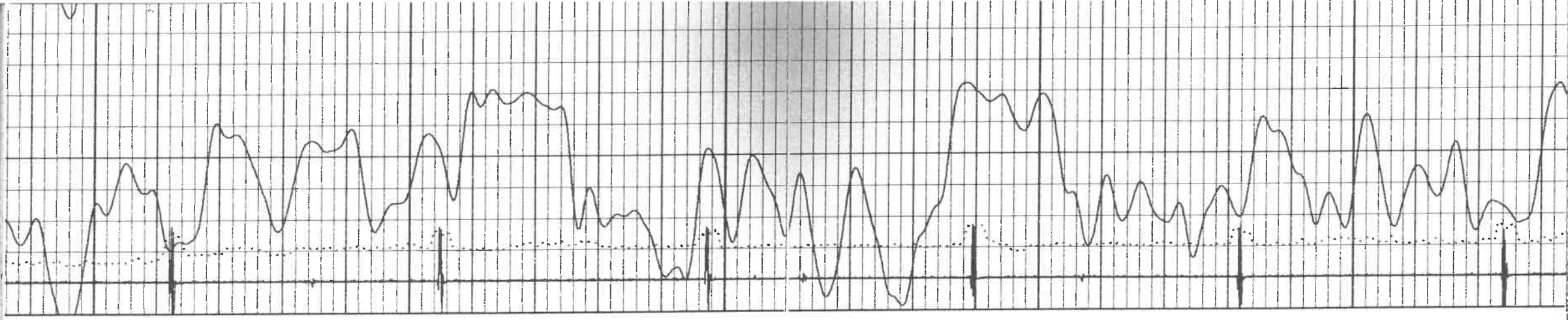




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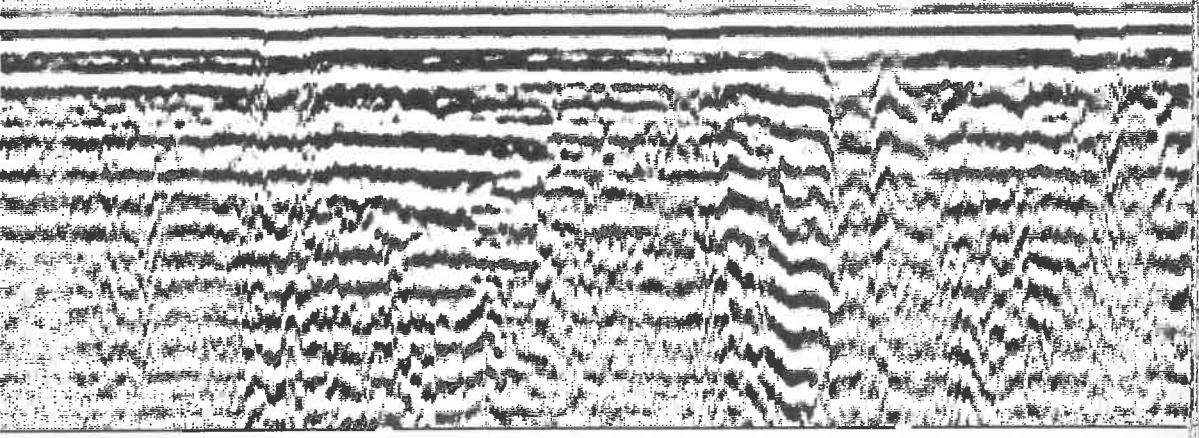
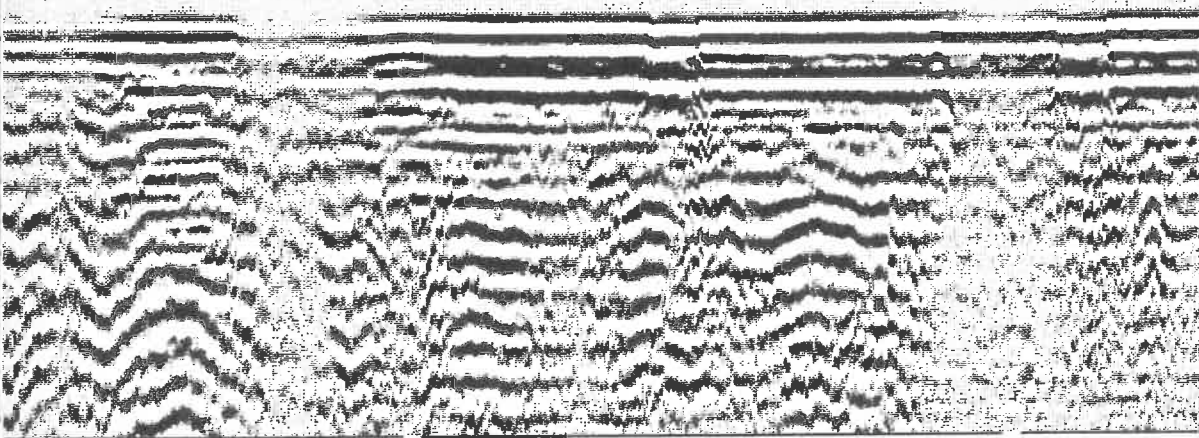
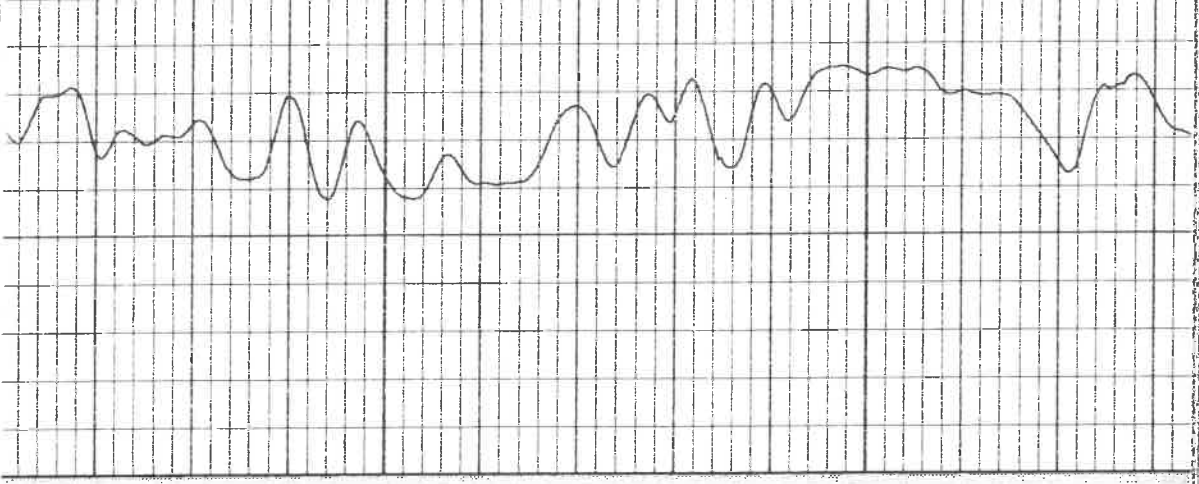
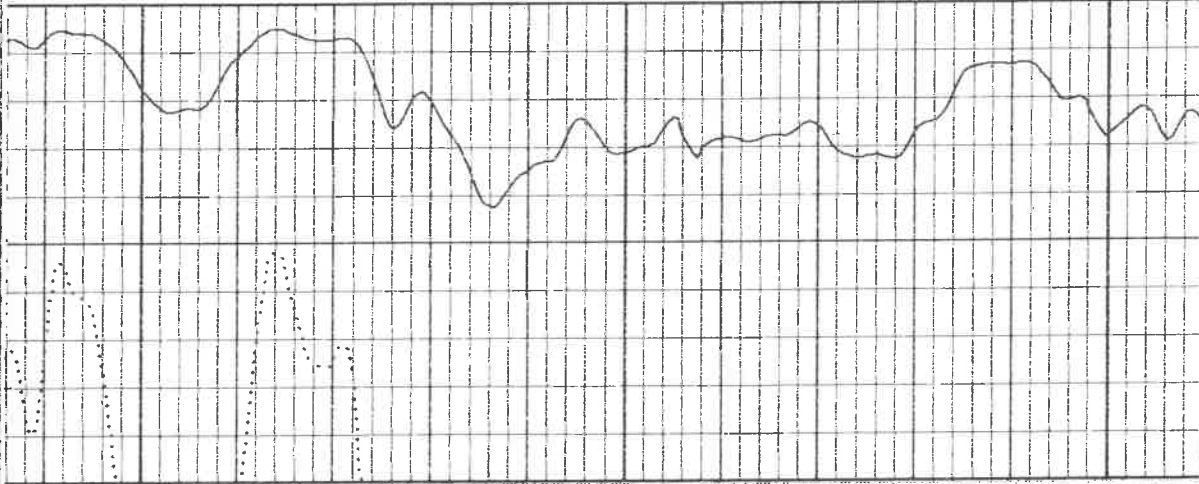


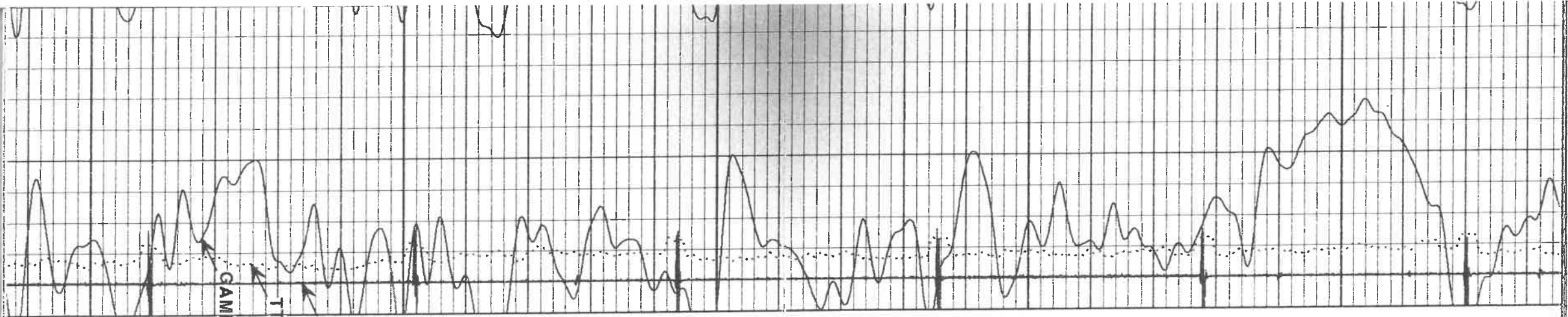


5000

4900

4800





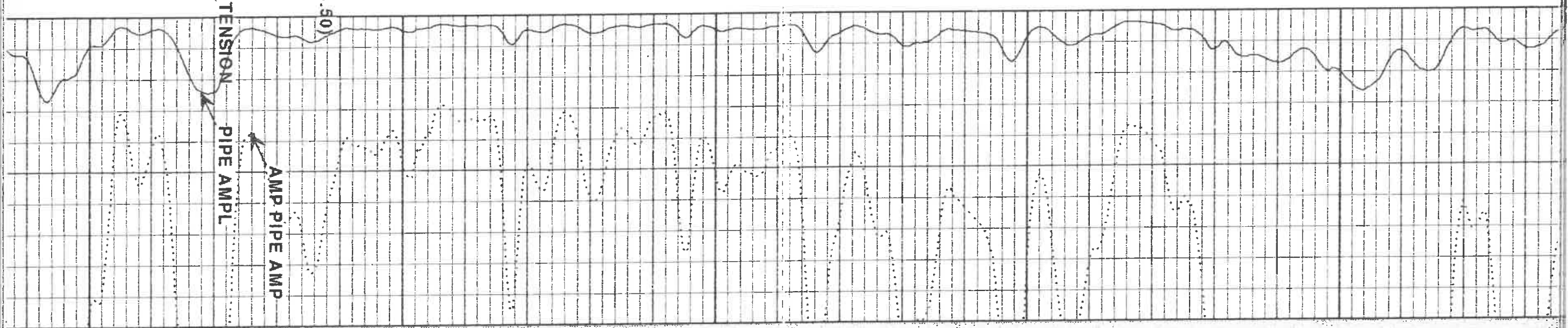
CAMMA

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CCL (14.50)

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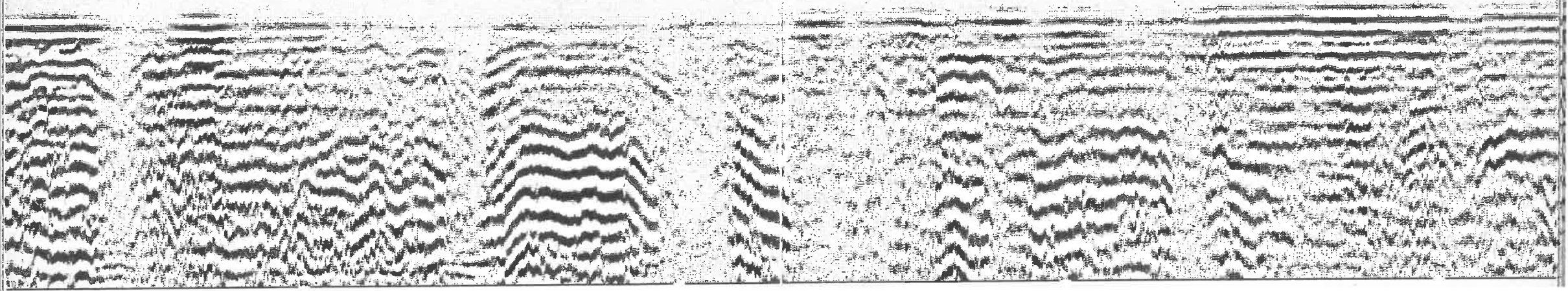
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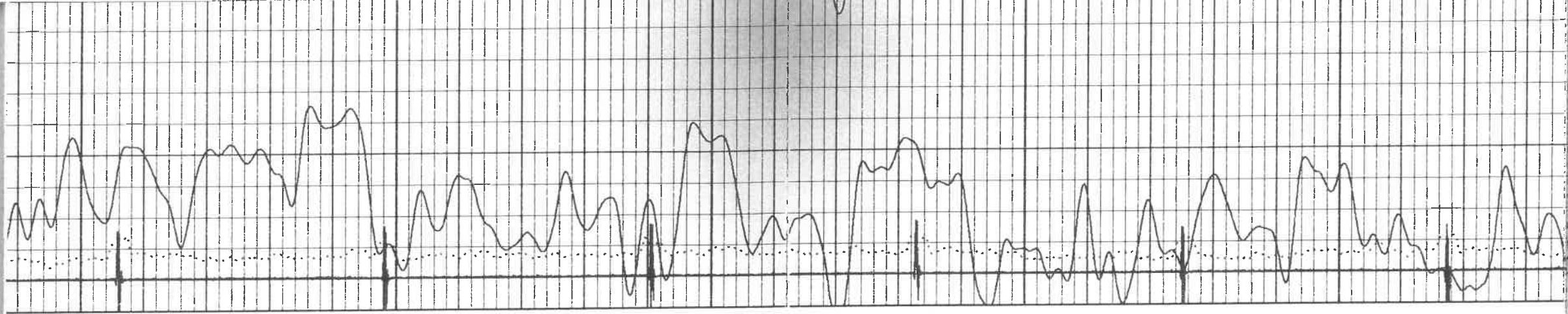


TENSION

PIPE AMPL

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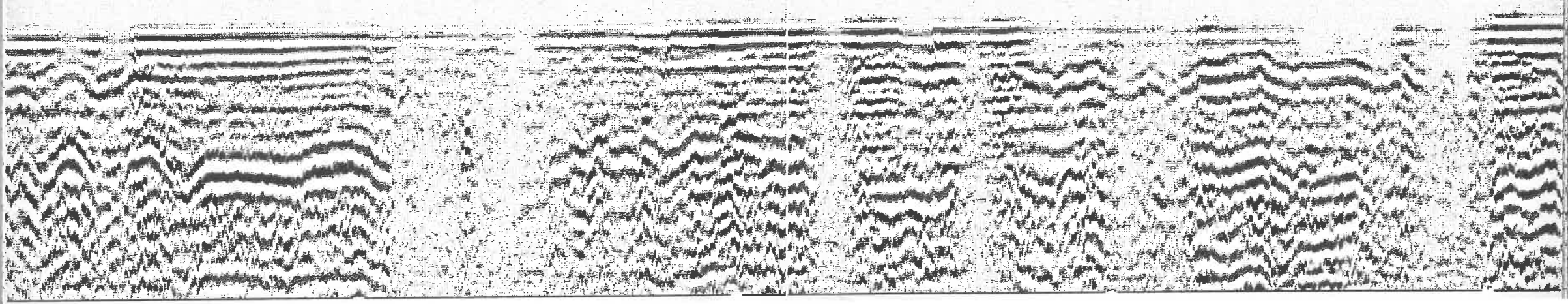
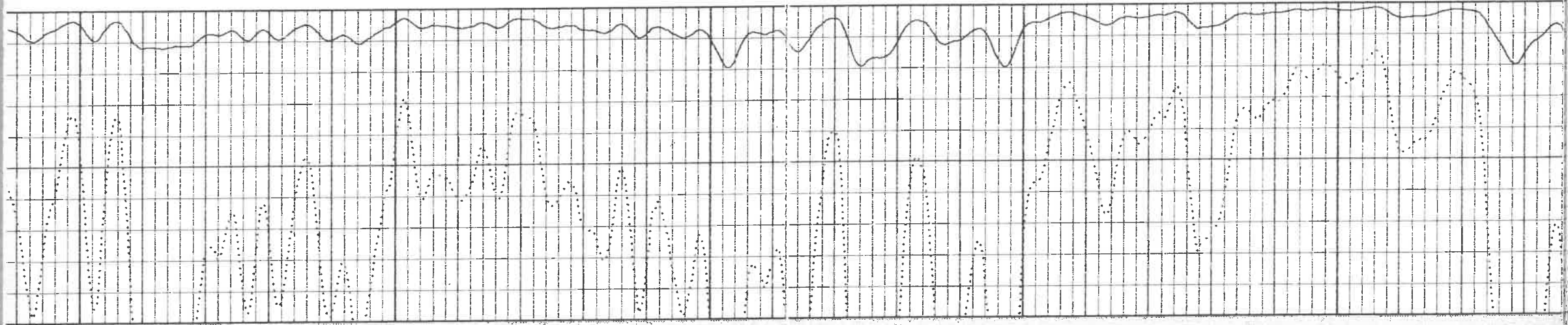


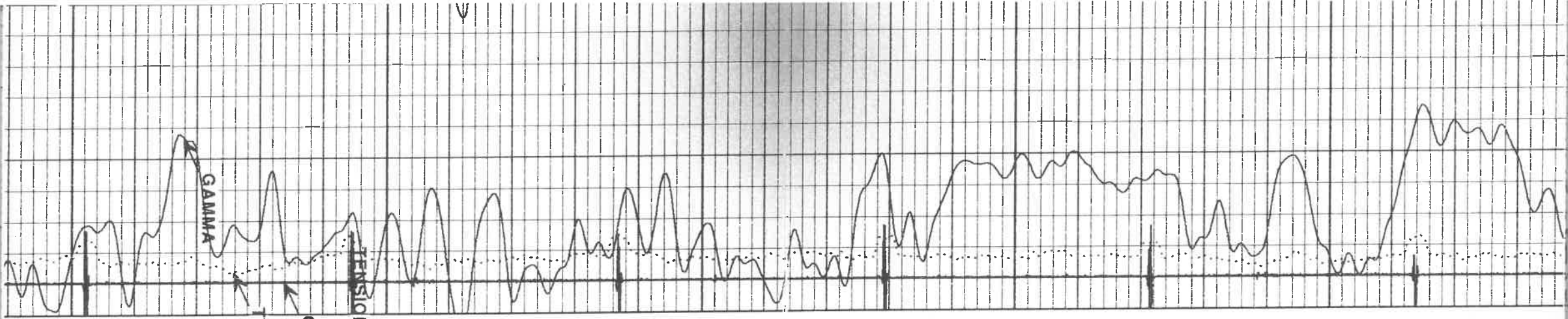


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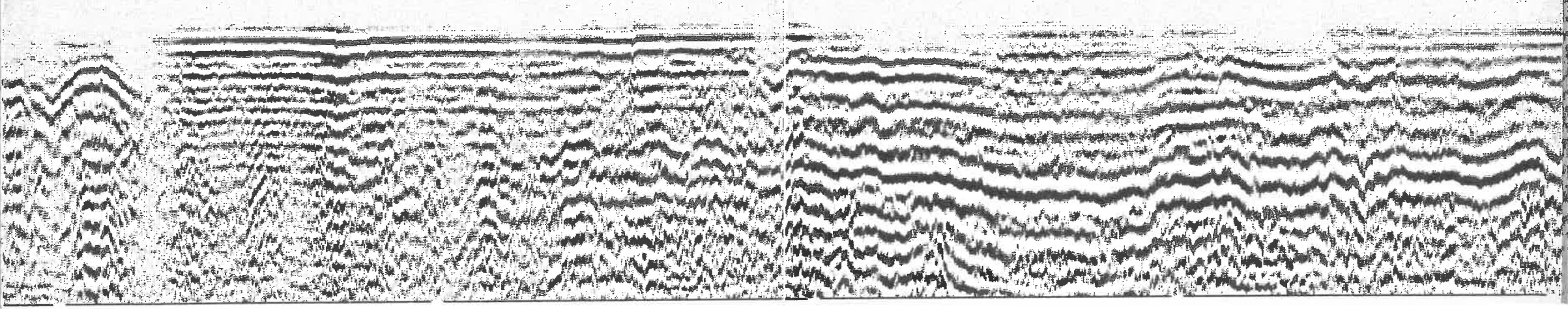
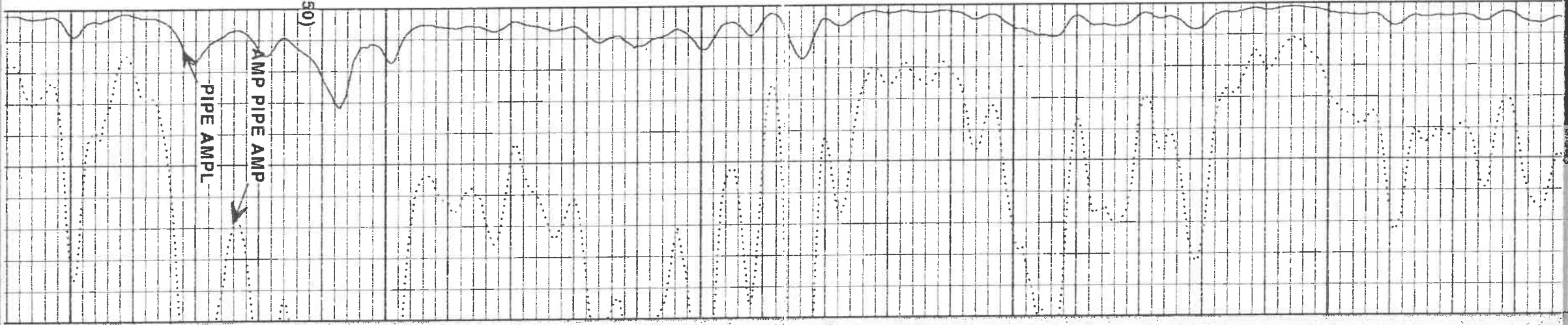
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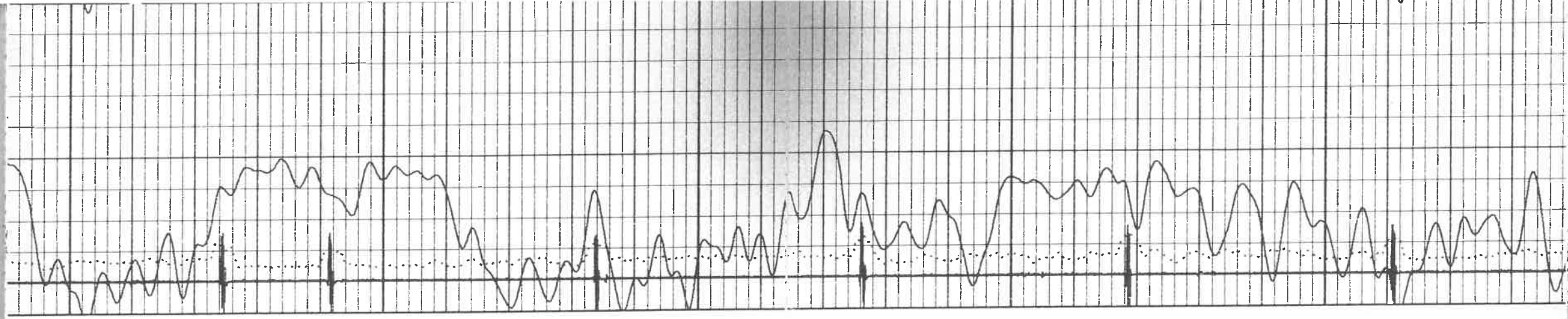




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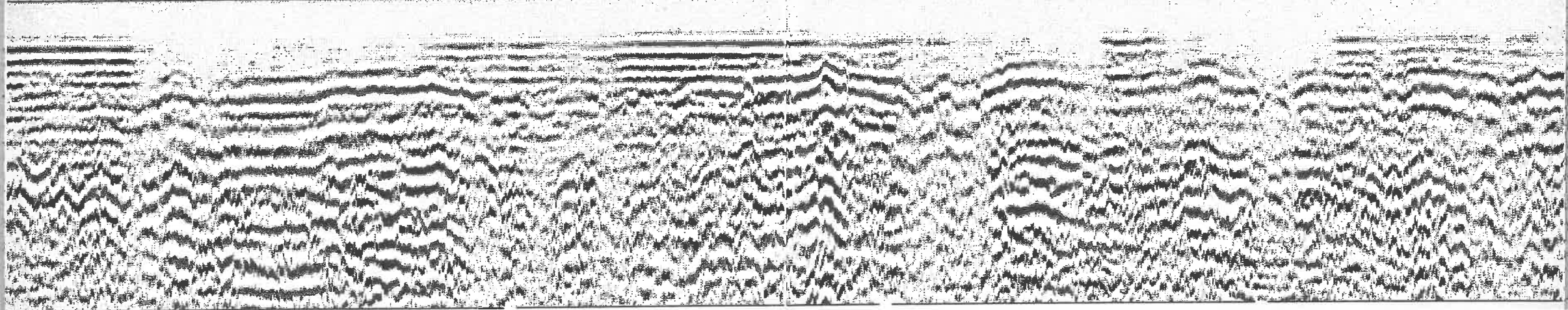
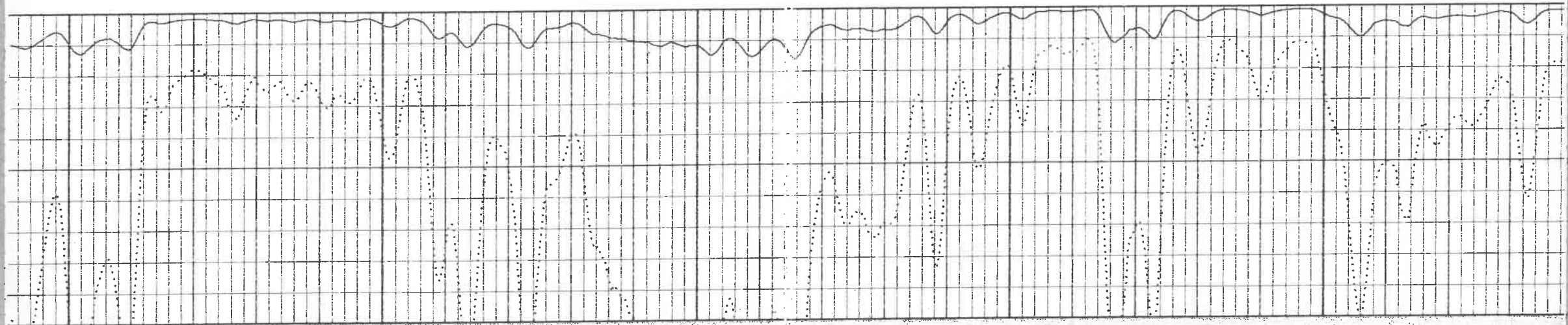


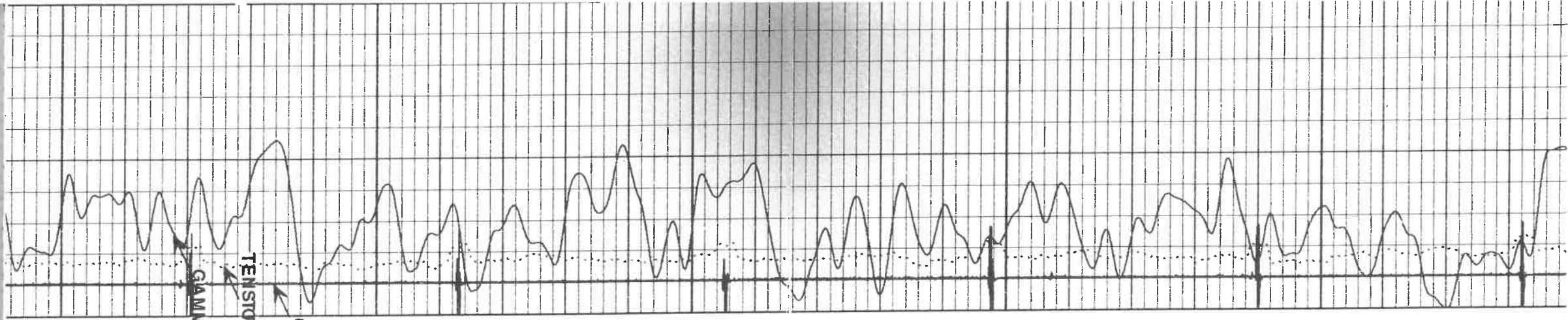


6000

5900

5800





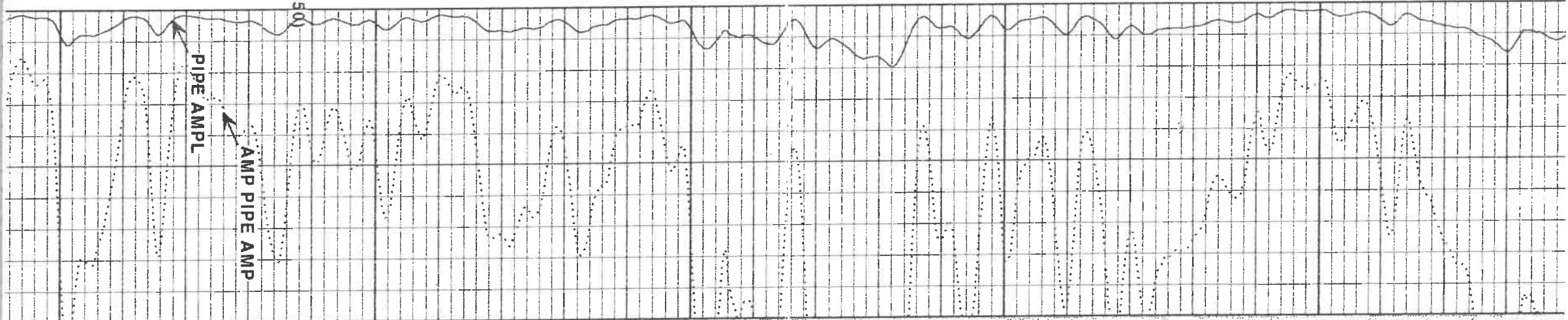
GAMMA

TENSION

CCL (14.50)

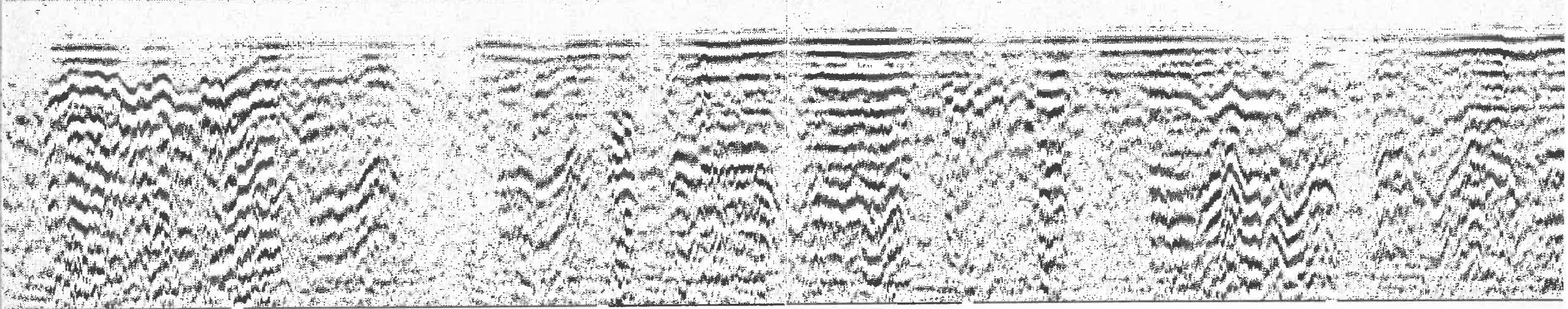
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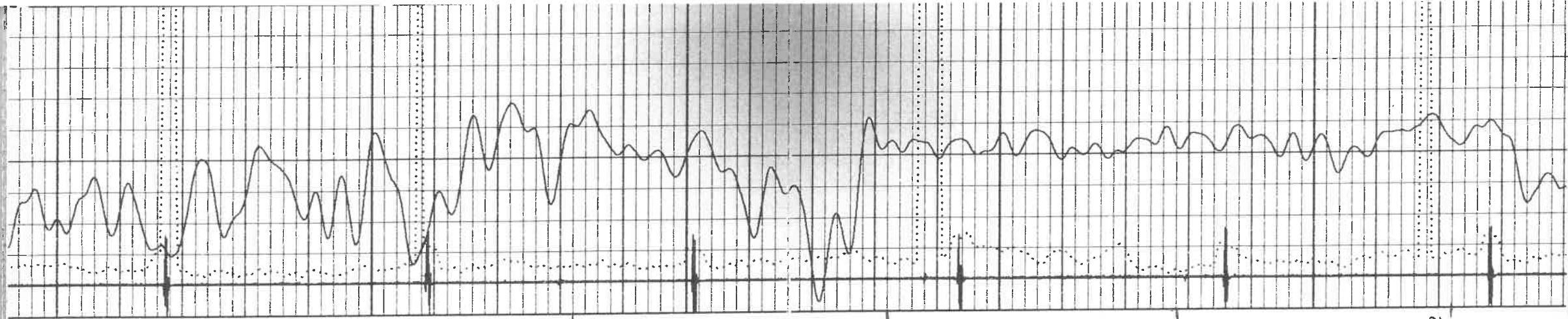
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PIPE AMPL

AMP PIPE AMP





6500

85

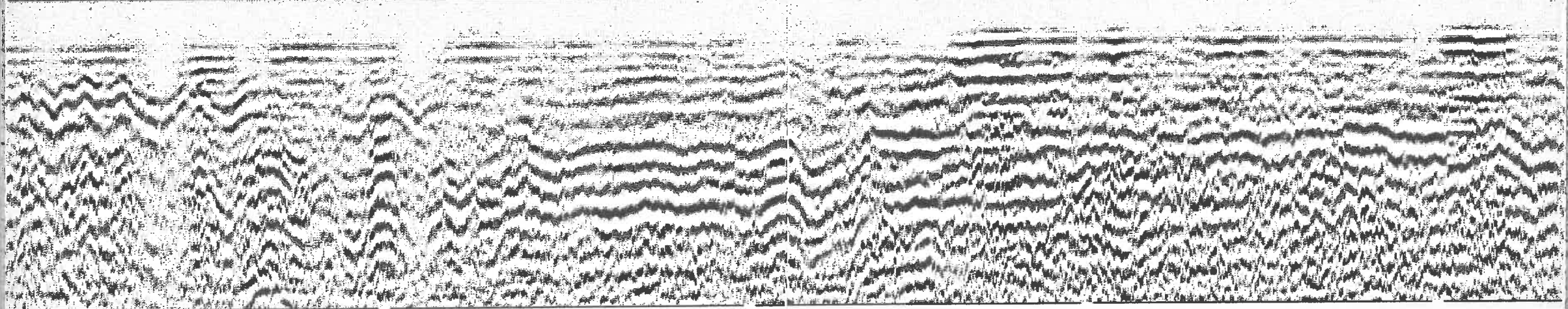
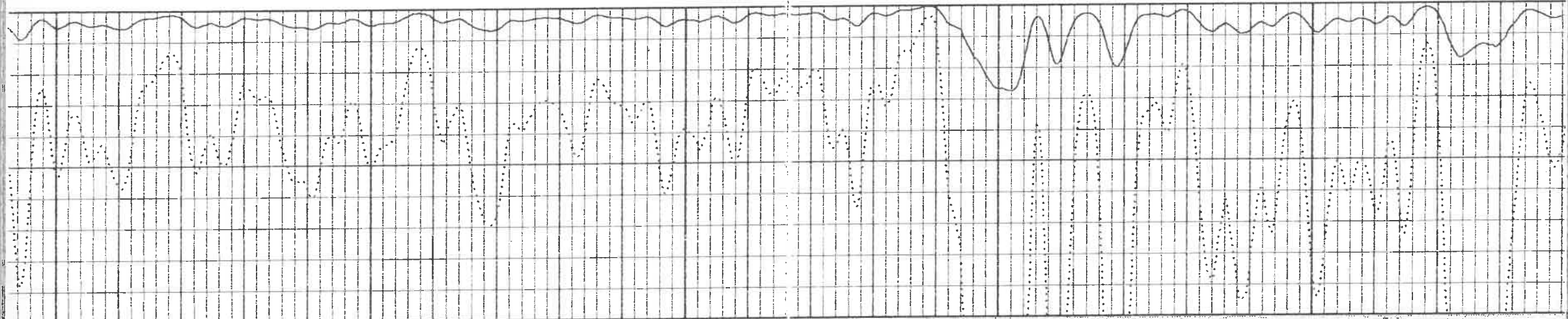
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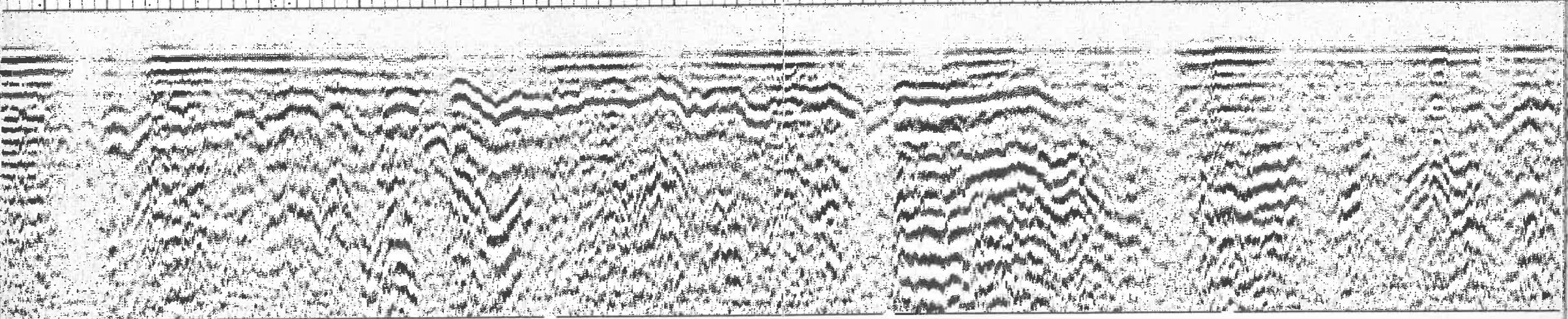
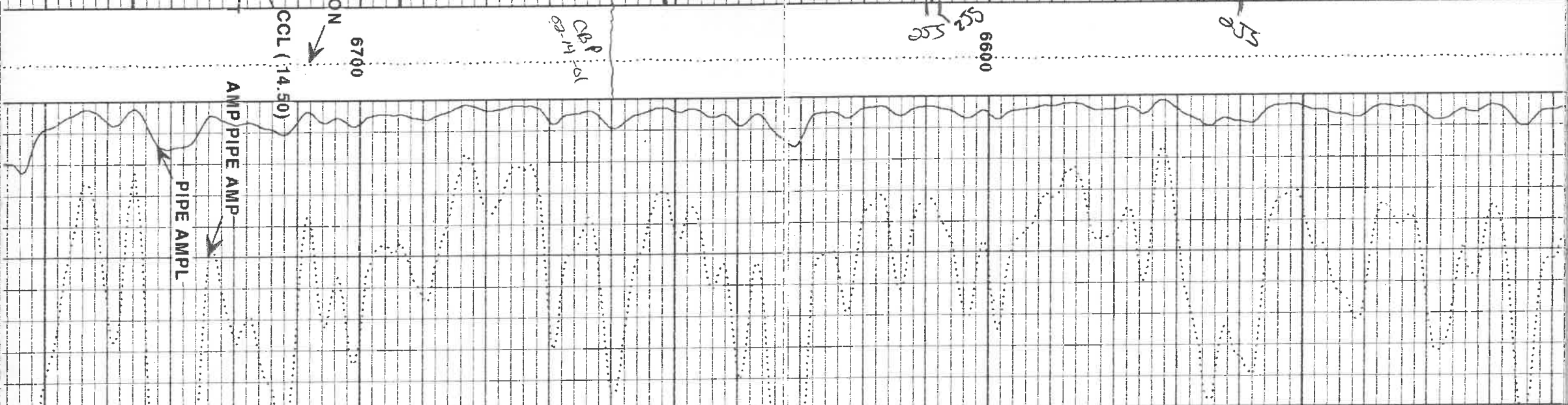
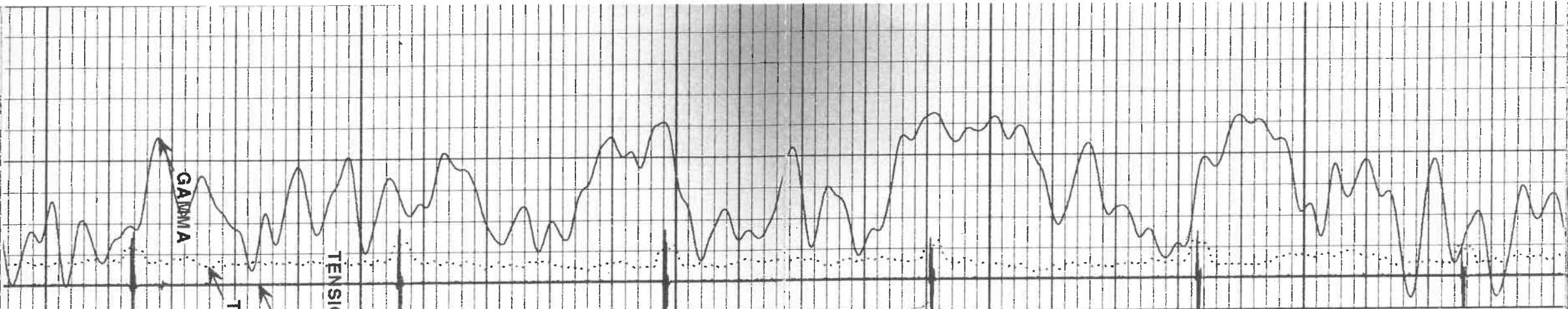
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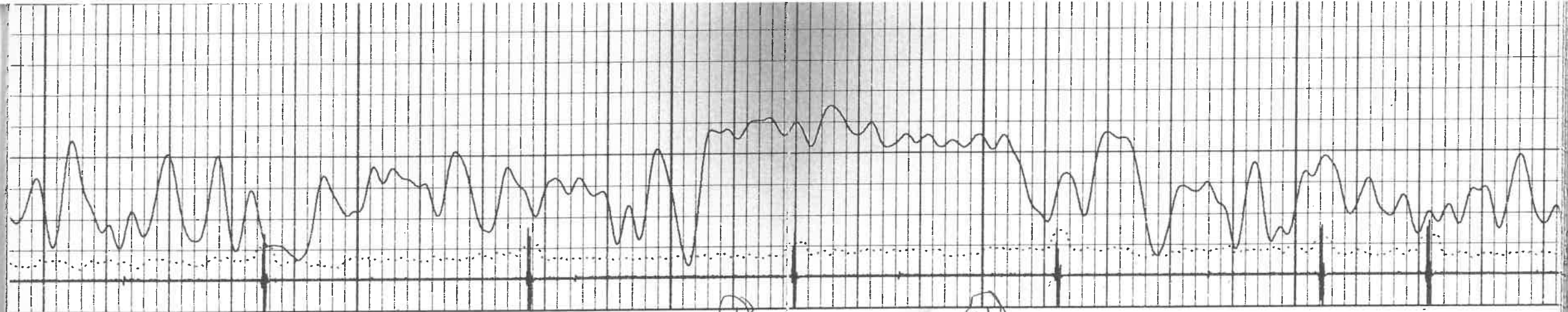
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6300

85







7000

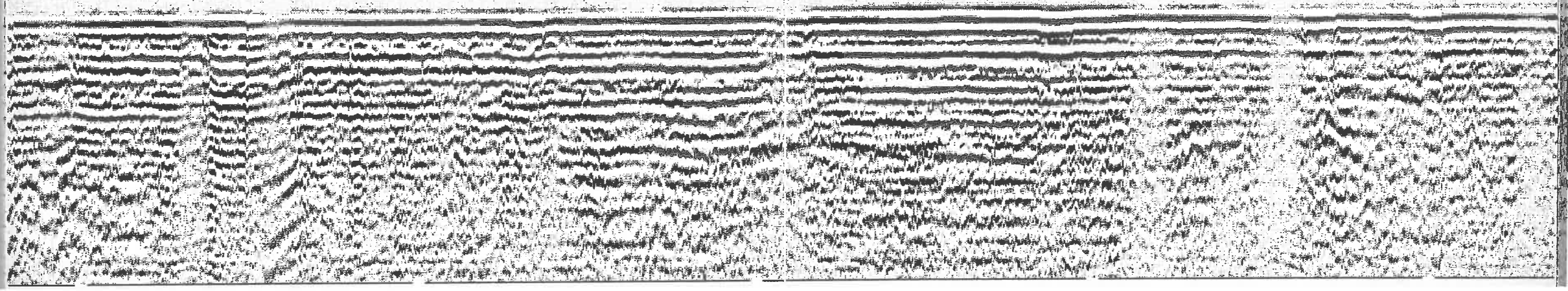
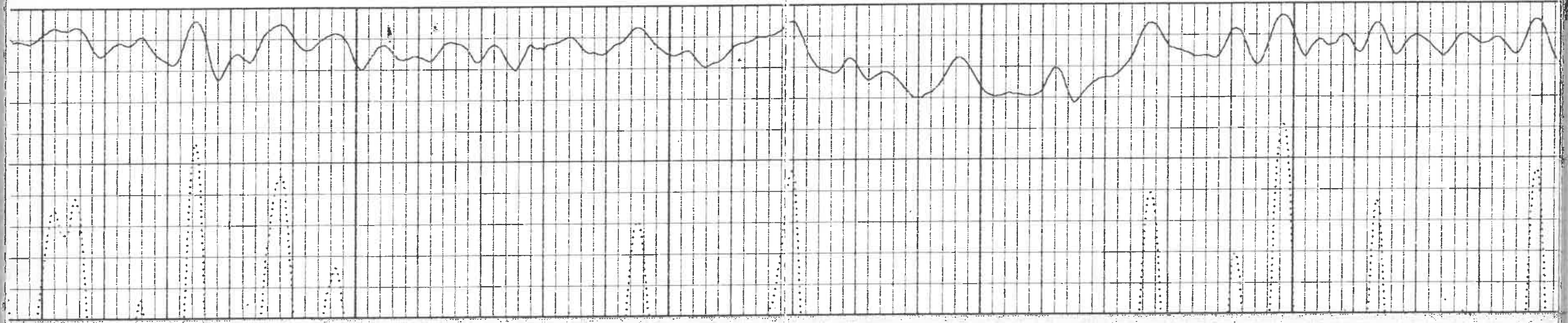
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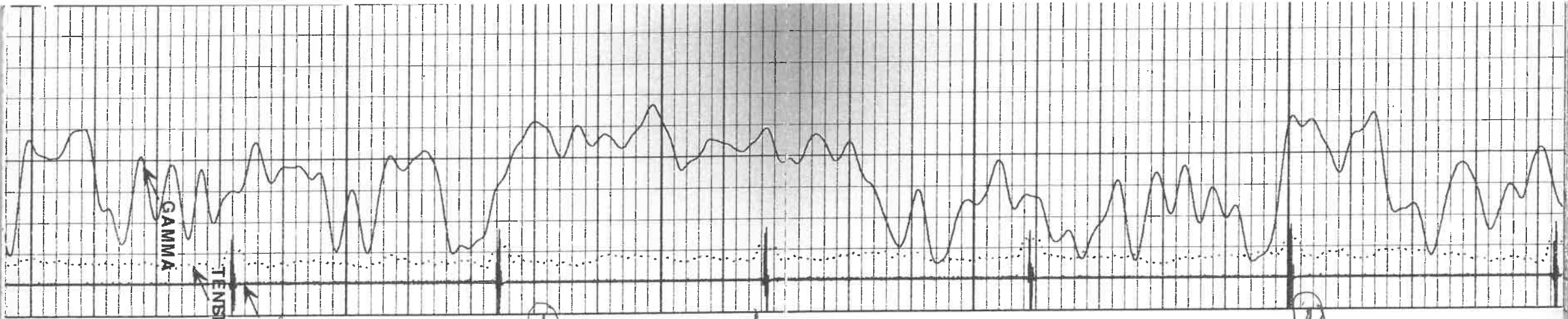
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6900

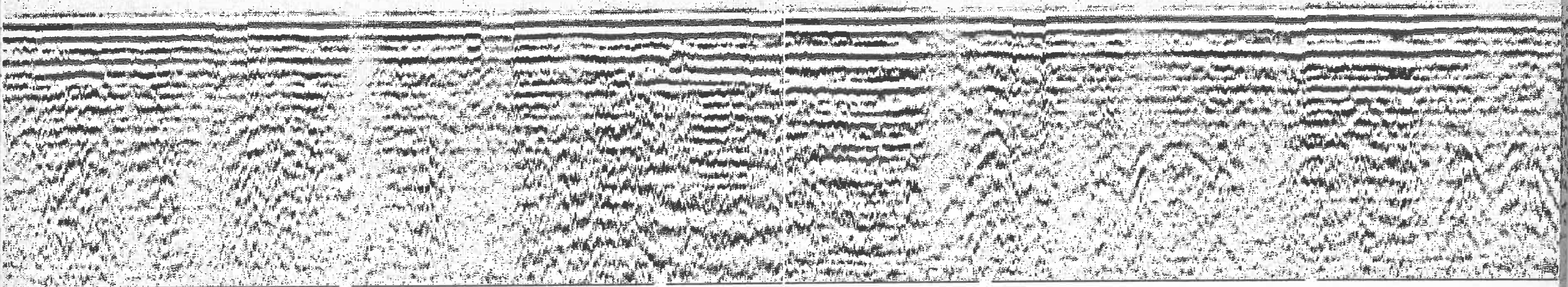
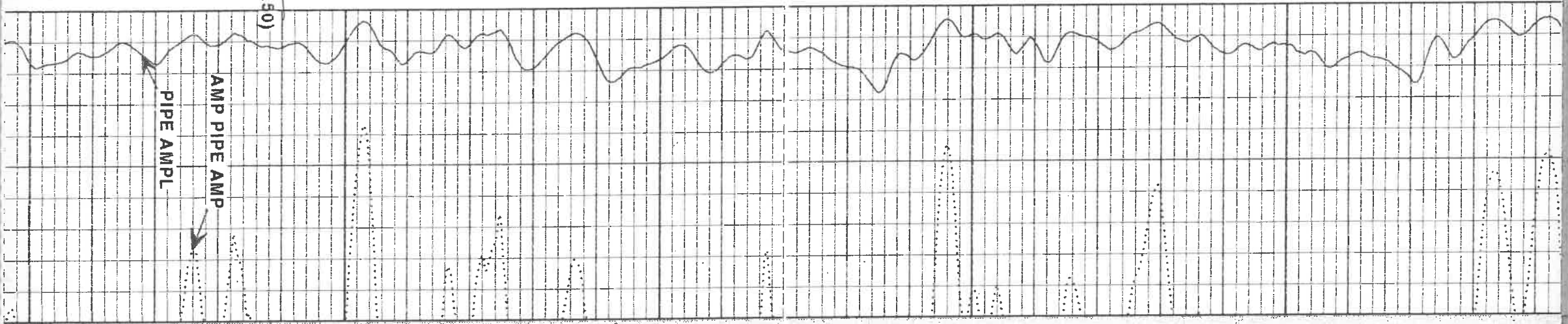
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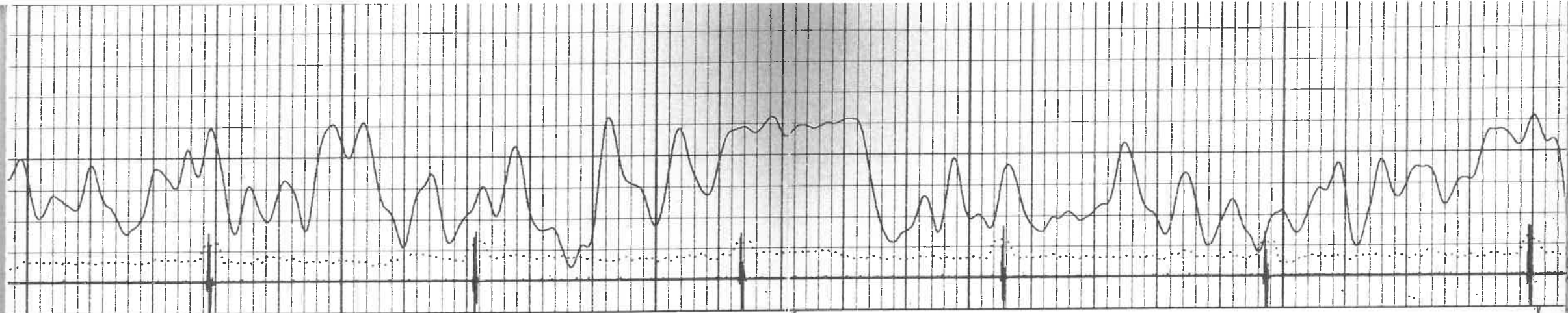
6800





7200  
CCL (14.50)  
7100





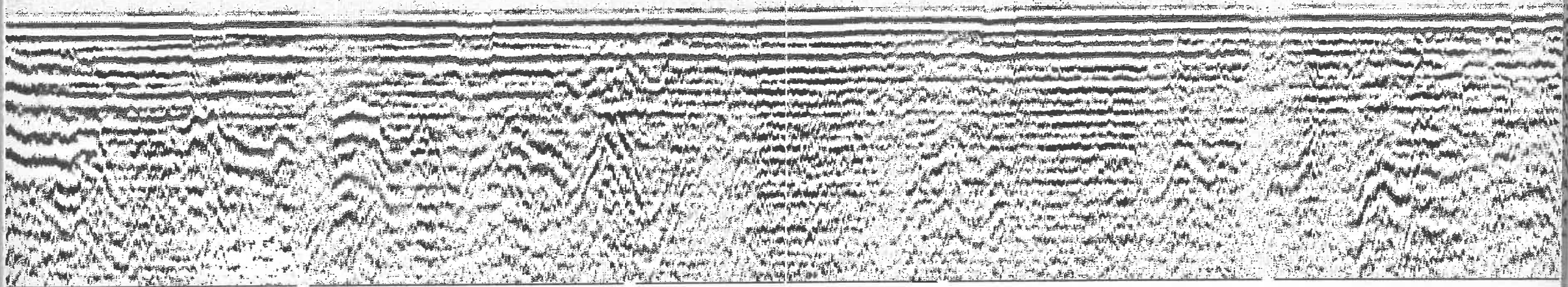
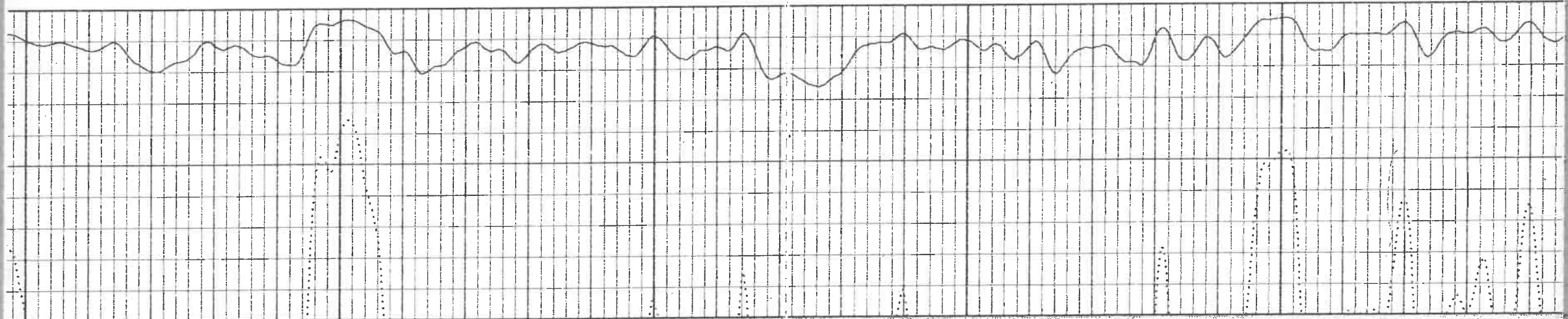
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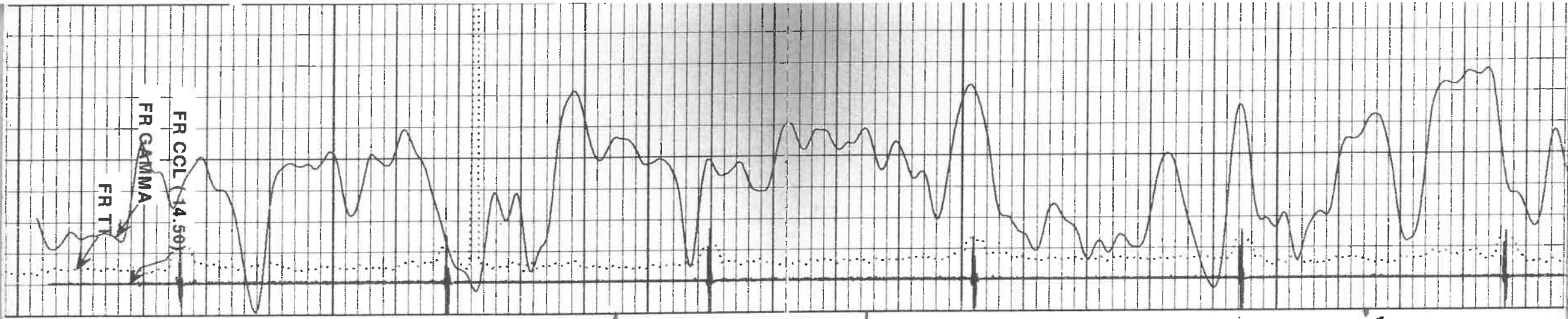
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055

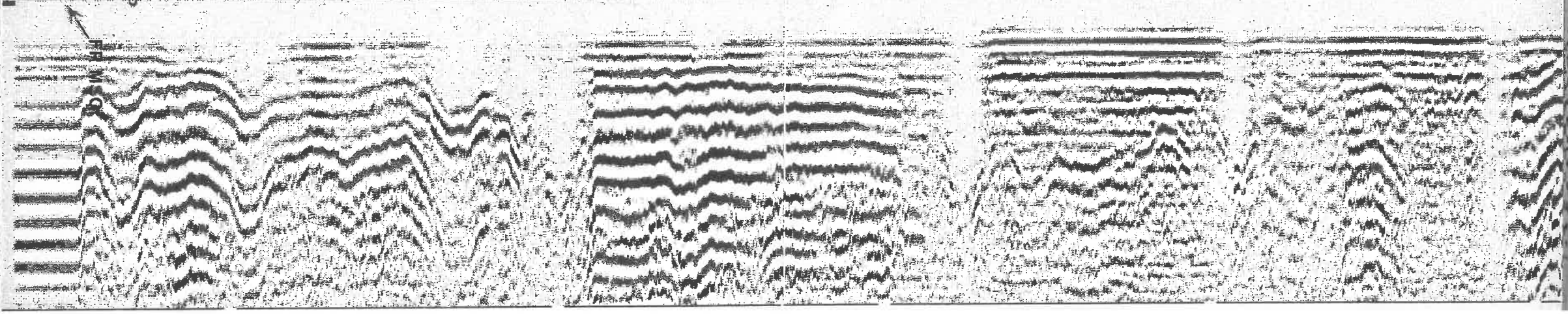
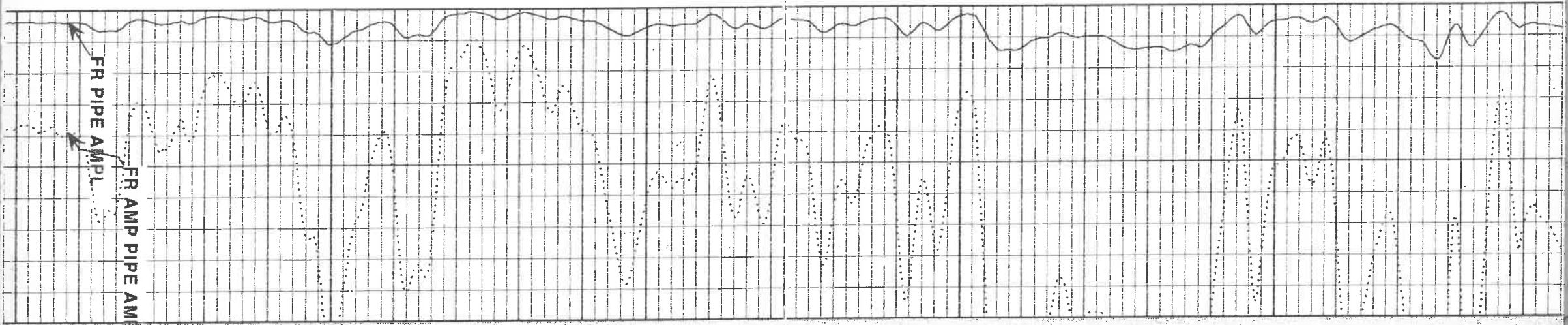
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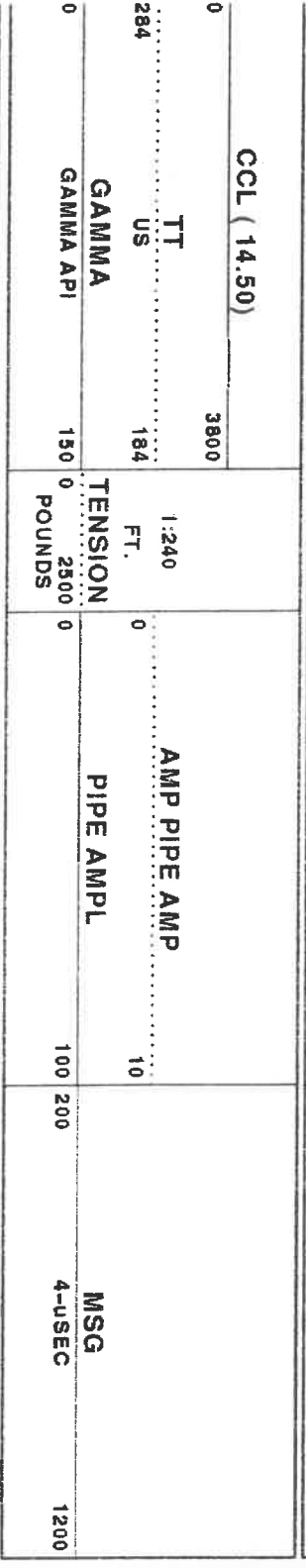
055





I.D. 7700 5/5 FR 7600 5/5

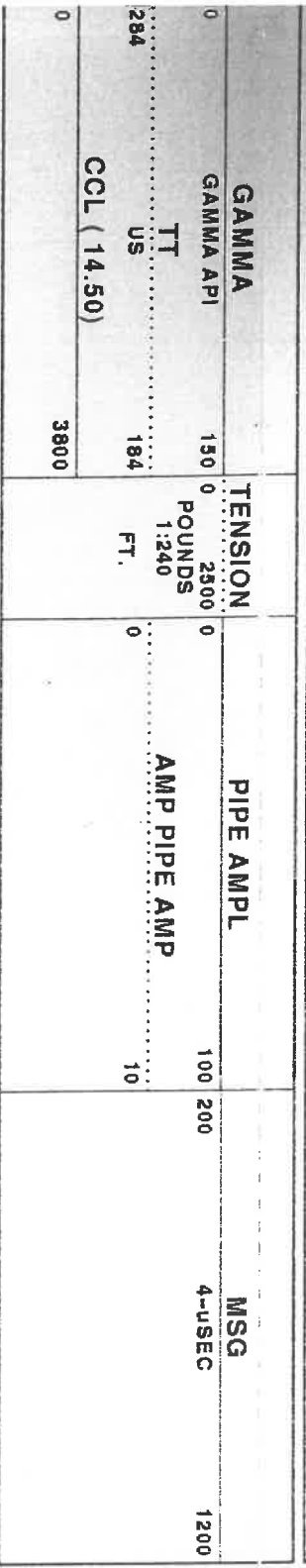




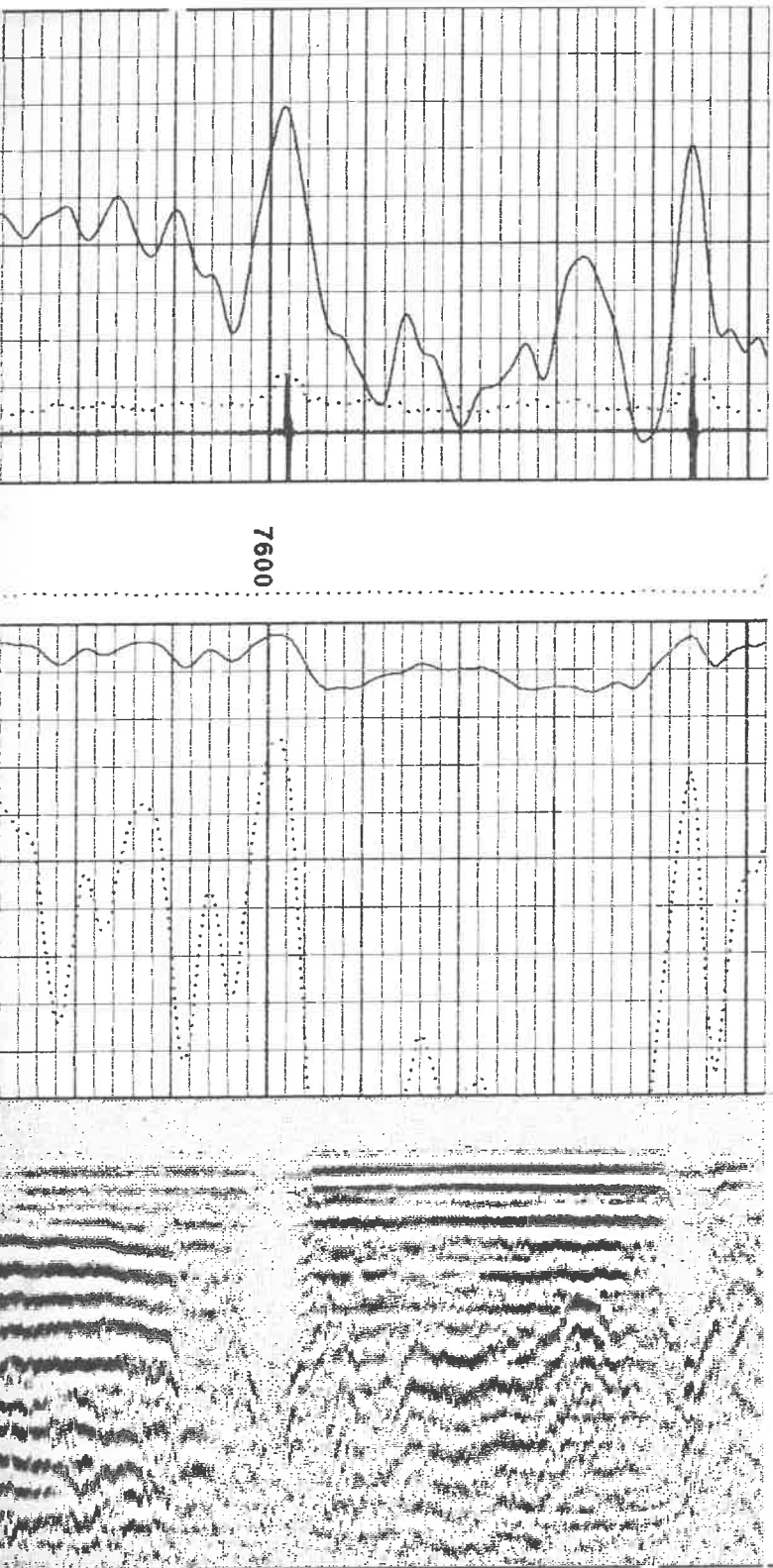
Version No: 4.40 | hc:3.0  
 Data File: 1211\_1009\_s6284.6.cis  
 Format File: plot\_01\_1.spc  
 Plot Time: 12-11-2000 11:25:18  
 Log Time: 12-11-2000 11:25:09  
 Top Depth: -----  
 Bottom Depth: 7760.75

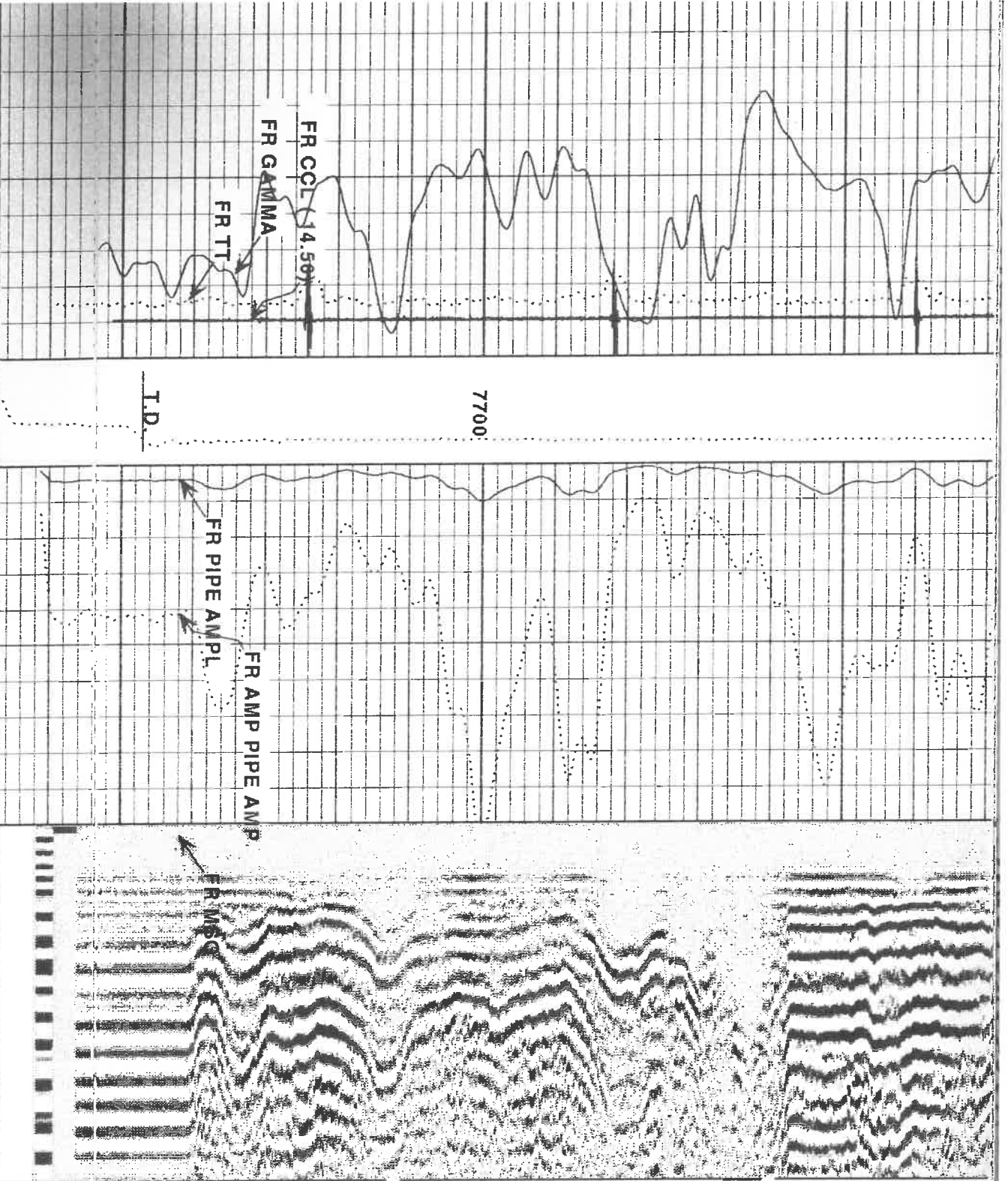
MAIN LOG

REPEAT SECTION



Version No: 4.40 | hc:3.0  
 Data File: 1211\_1009\_s6284.5.cis  
 Format File: plot\_01\_1.spc  
 Plot Time: 12-11-2000 11:23:38  
 Log Time: 12-11-2000 11:19:13  
 Top Depth: 7347.50  
 Bottom Depth: 7767.00





-50 300

CCL ( 14.50)		
0	3800	
TT	1:240	
US	FT.	
284	184	
GAMMA		
GAMMA API	150	
TENSION		
	0	2500
	POUNDS	
AMP PIPE AMP		
	0	10
PIPE AMPL		
	100	200
MSG		
	4-USEC	1200

**H** HALLIBURTON

Version No: 4.40 | hc:3.0  
 Data File: 1211\_1009\_s6284.5.cis  
 Format File: plot\_01\_1.spc  
 Plot Time: 12-11-2000 11:19:16  
 Log Time: 12-11-2000 11:19:13

Top Depth: -----  
 Bottom Depth: 7767.00

**EXCELL-2000 Calibration Report**  
 Date: 11-Dec-2000 13:41

CEMENT BOND TOOL - CBL-DC SHOP CALIBRATION SUMMARY

PERFORMED: 11-Dec-2000 10:34    LAST SHOP CALIBRATION: 11-Dec-2000 10:28  
 SERIAL NUMBER: 614  
 TRUCK UNIT NUMBER: 54209    MODEL: CBL-DC  
 PERFORMED BY: BOURDEAU    PROGRAM VERSION: 4.40

	MEASURED	CALIBRATED	UNITS
ZERO PIPE AMP NEAR	0.05	0.50	API PU
PIPE REFERENCE AMP NEAR	99.63	81.20	API PU
ZERO PIPE AMP FAR	-0.73	0.00	API PU
PIPE REFERENCE AMP FAR	89.97	81.20	API PU
PIPE REFERENCE TT_N		204.67	USECS

DC NATURAL GAMMA SHOP CALIBRATION SUMMARY  
 PERFORMED: 11-Dec-2000 10:18 LAST SHOP CALIBRATION:  
 SERIAL NUMBER: 614 MODEL:  
 TRUCK UNIT NUMBER: 54209 PROGRAM VERSION: 4.40  
 PERFORMED BY: BOURDEAU

	MEASURED	CALIBRATED	UNITS
BACKGROUND	0	53	API
BACKGROUND+CALIBRATOR	0	267	API
CALIBRATOR	0	214	API

DC NATURAL GAMMA BEFORE SURVEY FIELD CHECK SUMMARY  
 PERFORMED: 11-Dec-2000 10:21 LAST SHOP CALIBRATION: 11-Dec-2000 10:18

	SHOP	FIELD	UNITS
BACKGROUND	53.24	54.32	API
BACKGROUND+CALIBRATOR	267.24	270.56	API
CALIBRATOR	214.00	216.24	API

EXCELL-2000 Calibration Summary Table  
 Date: 11-Dec-2000 13:41

Service or Signal	Shop	Before	After	Change	Tolerance
GAMMA	214.00	216.24	0	-2.24	+/- 9.0

EXCELL-2000 CUSTOMER EVENT LOG  
 Date: 11-Dec-2000 13:40

Event	Time	Section	Depth	Event Description	Data	Repeat
0001	10:06:03	0	0.00	Engineer ts: BOURDEAU		
0002	10:10:18	0	0.00	CASEOD PARAM CHANGE	5.5 -->FP	4.5000
0003	10:10:18	0	0.00	CASEWT PARAM CHANGE	17. -->FP	11.6000
0004	10:10:18	0	0.00	TTLVL PARAM CHANGE	5. -->FP	0.5000
0005	10:10:18	0	0.00	GWDT PARAM CHANGE	50 -->IP	
0006	10:25:21	0	102.66	INWVVF PARAM CHANGE	FALSE -->LP	TRUE
0007	10:25:32	0	104.08	INWVVF PARAM CHANGE	TRUE -->LP	FALSE
0008	10:28:57	0	113.58	Exiting EXCELL-2000 tool calibrations.		SHOP
0009	10:34:44	0	5126.75	Exiting EXCELL-2000 tool calibrations.		SHOP
0010	11:10:12	1	7751.25	Beginning new Uplog section.		SHOP
0011	11:13:02	1	7623.83	End logging section		1
0012	11:15:22	2	7766.25	Beginning new Uplog section.		1
0013	11:16:47	2	7696.08	TD PARAM CHANGE	0. -->FP	2
0014	11:17:45	2	7677.75	End logging section		7745.0000
0015	11:17:58	2	7702.83	TD PARAM CHANGE	7745. -->FP	2
0016	11:19:14	3	7768.25	Beginning new Uplog section.		7747.0000
0017	11:23:37	3	7568.33	End logging section		3
0018	11:25:10	4	7760.91	Beginning new Uplog section.		3
0019	13:36:47	4	55.50	End logging section		4

Current EXCELL-2000 Parameter Values  
 Depth: 39.917  
 Date: 11-Dec-2000 13:40  
 Service Number: 6284  
 Software Version: 4.40

Mnemonic	Tool	Parameter Description	Value	Units

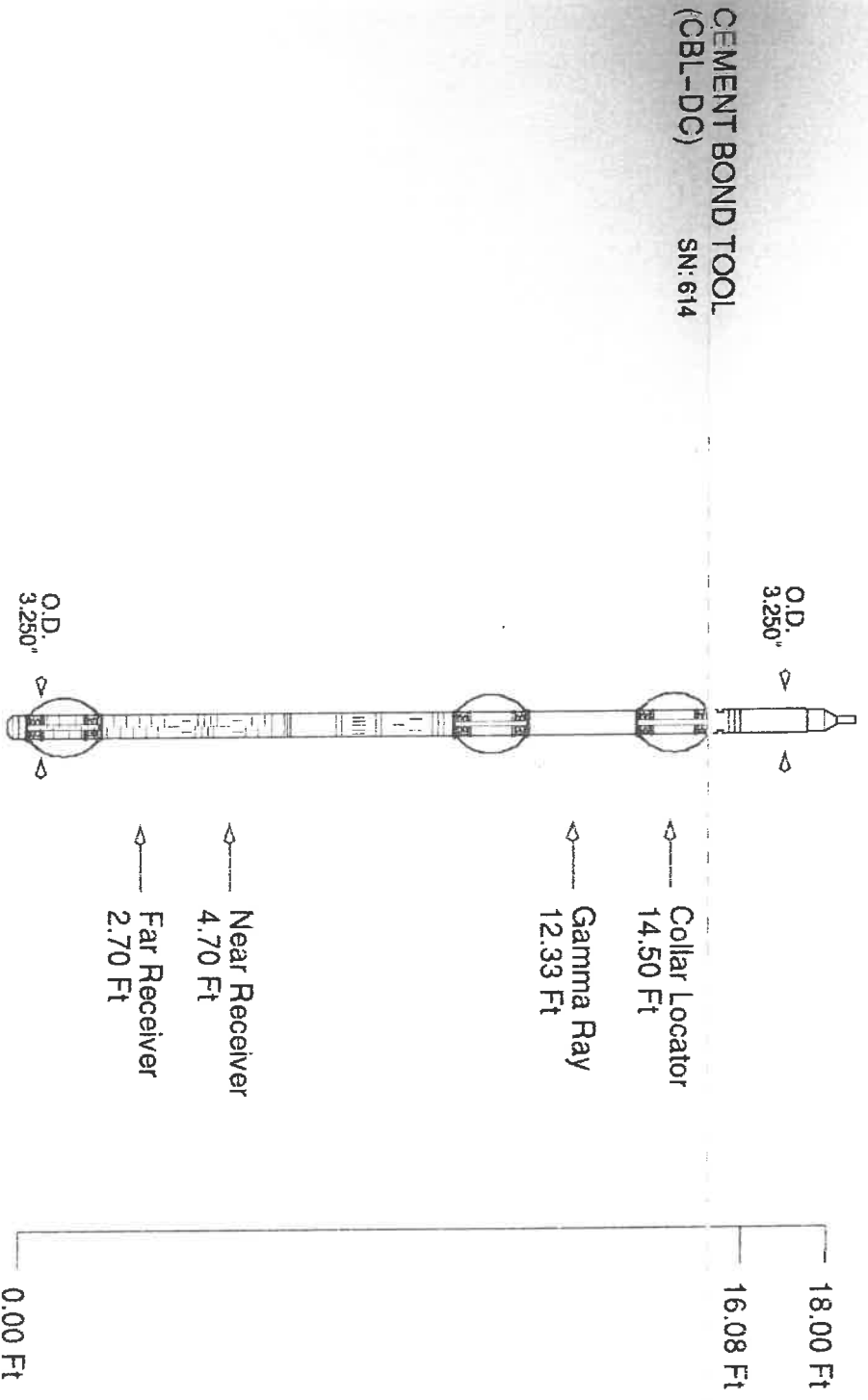
PERF TD	AN_HD AN_HD	PERFORATED INTERVAL TOTAL DEPTH	NO	FT
BONDOK	AN_HD	TOTAL DEPTH	7747.	
INWVWF	CBL_DC	DO BOND CALCULATIONS?	YES	
SELA	CBL_DC	INVERT WAVEFORMS?	NO	
SELM	CBL_DC	AMP RECEIVER SELECTED	NEAR	
SELT	CBL_DC	MSG RECEIVER SELECTED	FAR	
S_GATE	CBL_DC	TT RECEIVER SELECTED	NEAR	
BI_OK	CBL_DC	SHOW PIPE GATE ON MSG ?	YES	
BIMT	CBL_DC	DO BOND INDEX CALCULATION?	YES	
CASEOD	CBL_DC	BONDINDEX CALCULATION METHOD	CHRT	Inches
CASEWT	CBL_DC	CASING DIAMETER (OD)	4.5	Lbs/Ft.
CSTR	CBL_DC	CASING WEIGHT	11.6	PSI
ISFOAM	CBL_DC	COMPRESSIVE STRENGTH	1000.	
ISMUD	CBL_DC	IS THE CEMENT TYPE FOAM?	NO	
MUDWT	CBL_DC	IS FLUID IN HOLE DRILLING MUD?	NO	
TTLVL	CBL_DC	BOREHOLE FLUID WEIGHT	9.5	Pounds/Gal.
GWDT	CBL_DC	TRAVEL TIME THRESHOLD MV.?	0.5	
FPEAK	CBL_DC	PIPE GATE WIDTH (USEC) ?	30	USEC
TDU_OK	CBL_DC	STOP SEARCHING AT FIRST PEAK?	NO	
CLOSEL	CLEA	USE TDU DISPLAY CONTROLS?	YES	
CLOSEL	CLEA	CCL PROCESSING SELECTION	RAW	
GR_OK	GR_EA	CCL PERFORATION OFFSET	0	
CASED	GR_EA	DO GAMMA CALCULATIONS	YES	
		IS THIS A CASED HOLE	YES	



HALLIBURTON

Excell 2000 Tool String Diagram

CEMENT BOND LOG



Tool Mnemonic	Length (Ft)	Weight In Air (lbs)	Logging Speed (Ft/min)
CBL-DC	16.08	215.00	30.00
Tool String	16.08	215.00	30.00