



DUAL INDUCTION GUARD LOG

OPEN HOLE

MARKED

COMP. PENDULUM PETROLEUM, INC.
 WELL NO. 1 SNIDER
 FIELD
 COUNTY STAFFORD ST. KANSAS
 COMPANY PENDULUM PETROLEUM, INCORPORATED
 WELL NO. 1 SNIDER 'D'
 FIELD
 COUNTY STAFFORD STATE KANSAS
 APT NO. 15-185-22,547
 LOCATION SW - NW - NE
4290 FT. FSL OF SEC:
2310 FT. FEL OF SEC:
 OTHER SERVICES
DIGL
DSN-DENS
CAL
 SEC. 3 TWP. 21S RGE. 11W

PERMANENT DATUM GROUND LEVEL ELEV. ELEV.: K.B. 1776
 LOG MEASURED FROM KELLY BUSHING FT. ABOVE PERH. DATUM D.F.
 DRILLING MEASURED FROM KELLY BUSHING C.L.

DATE	10/12/88		
RUN NO.	ONE		
DEPTH-DRILLER	3410		
DEPTH-MELEX	3410		
BTH. LOG INTER.	3408		
TOP LOG INTER.	0		
CASING-DRILLER	8 5/8" e 254		
CASING-MELEX	254		
BIT SIZE	7 7/8"		
TYPE FLUID IN HOLE	CHEMICAL MUD		
DENS. & VISC.	9.60 : 43.0		
PH & FLUID LOSS	10.0 : 10.4 ML		
SOURCE OF SAMPLE	FLOW LINE		
RH e MERS. TEMP.	1.05 e 64 F		
RMF e MERS. TEMP.	0.89 e 68 F		
RNC e MERS. TEMP.	1.32 e 68 F		
SOURCE RMF PHC	MERS. : MERS.		
RH e BHT	0.61 e 111 F		
TIME CIRC. STOPPED	7:30 PM		
TIME ON BOTTOM	9:30 PM		
BOX REC. TEMP.	111 Fe TD		

INTEGRATED
 FIELD SERVICE

TICKET NO.: MS2389-1 APT SERIAL NO.: 15-185-22,547 PGM VERSION: VL913 01/20/88

IN MUD TYPE OR ADDITIONAL SAMPLES	RESISTIVITY SCALE CHANGES	DEPTH	SCALE UP HOLE	SCALE DOWN HOLE
DRILLER NO		3410	NO CHANGES	
FLUID IN HOLE CHANGES				
VISC.				
FLUID LOSS				
OF SAMPLE				
MERS. TEMP.				
MERS. TEMP.				
MERS. TEMP.				
RNF : RNC				
3HT				
3HT				
3HT				
LE CORRECTIONS:				
3:				
MASTER FLD. ENG. <u>J. GILZINGER</u>				
UNIT <u>451088</u>				
SENIOR EQ. OPER. <u>L. RIGGS</u>				
GT. BEND. <u>KS.</u>				
EQ. OPER. <u>B. ROWE</u>				
316 793-7878				

DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF LOG DATA. CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS, OR RECOMMENDATIONS WHICH MAY BE GIVEN BY WELEX PERSONNEL OR WHICH MAY APPEAR ON THE LOG OR IN ANY OTHER FORM, ANY USER OF SUCH DATA, PREPARATIONS, OR CONVERSIONS, OR RECOMMENDATIONS AGREES THAT WELEX IS NOT RESPONSIBLE, EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR MISCONDUCT FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.

2" = 100'

CONDUCTIVITY	0
MMHO	
CONDUCTIVITY	1000
MMHO	
CONDUCTIVITY	2000
MMHO	

CONV. APP.

1000

CONDUCTIVITY MMHO

0

151
52

2000

CONDUCTIVITY MHO

1000

SHORT GUARD
OHM-M

50

LINE TENSION

0

LESS

SHORT GUARD
OHM-M

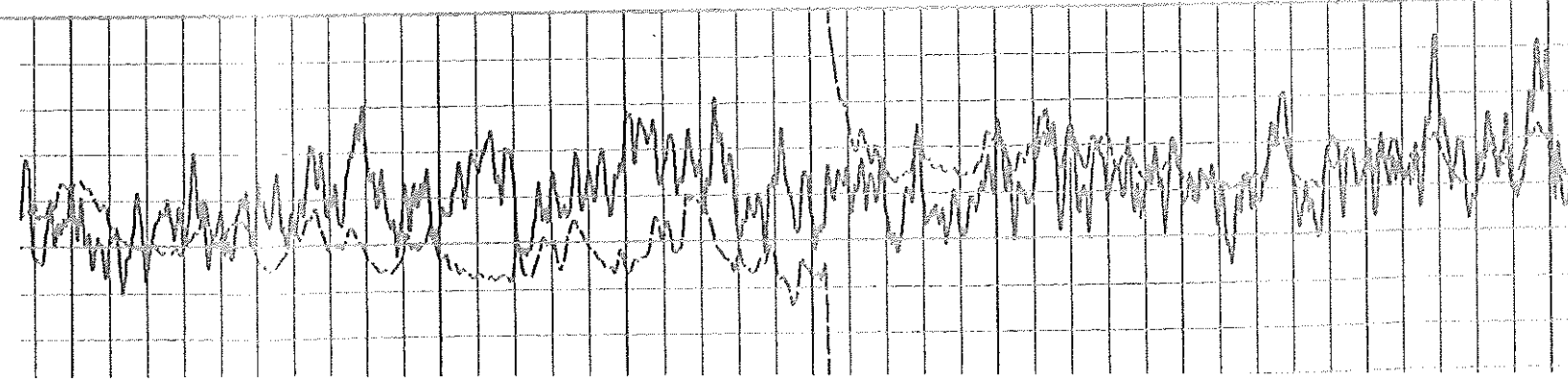
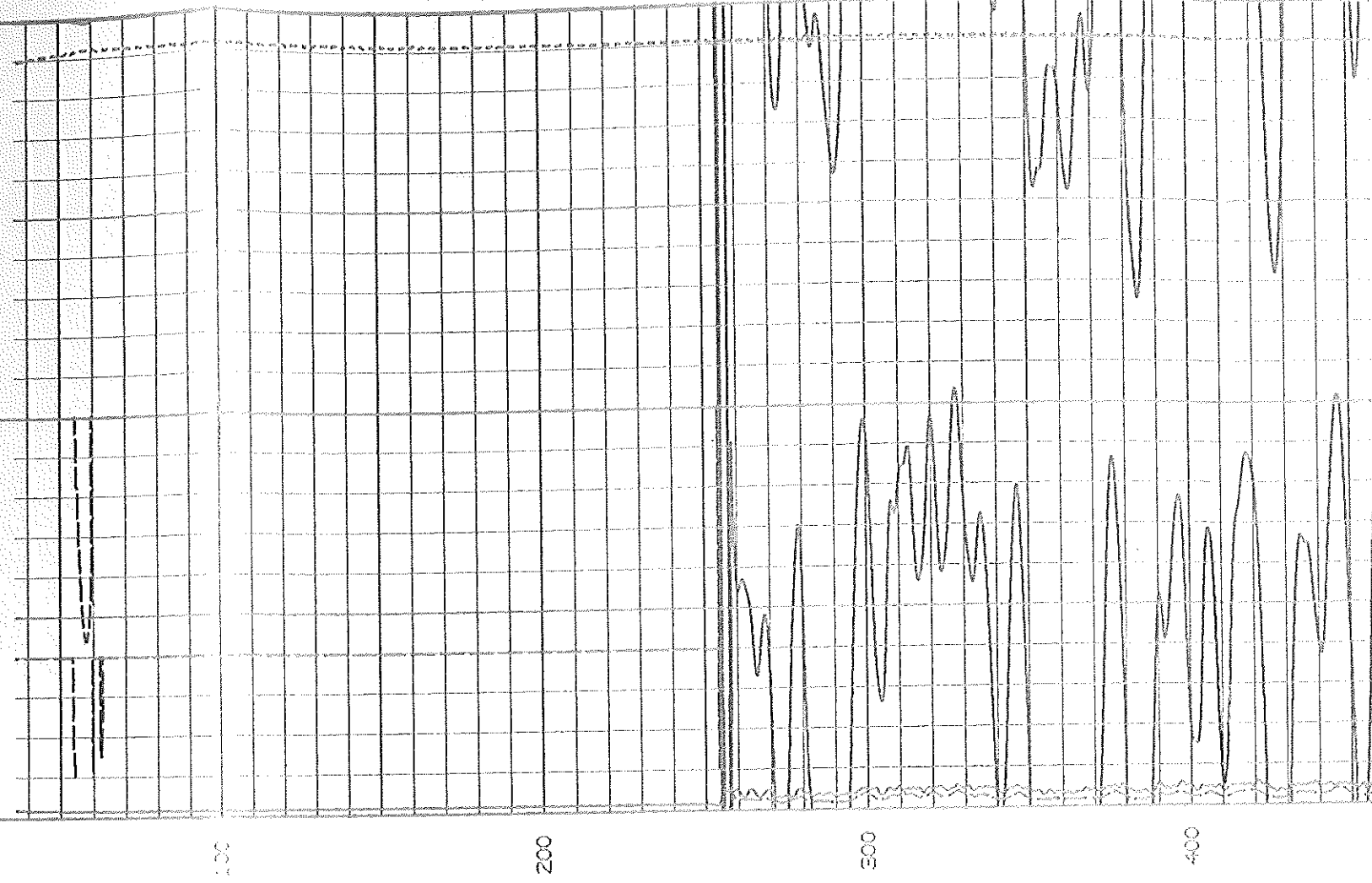
500

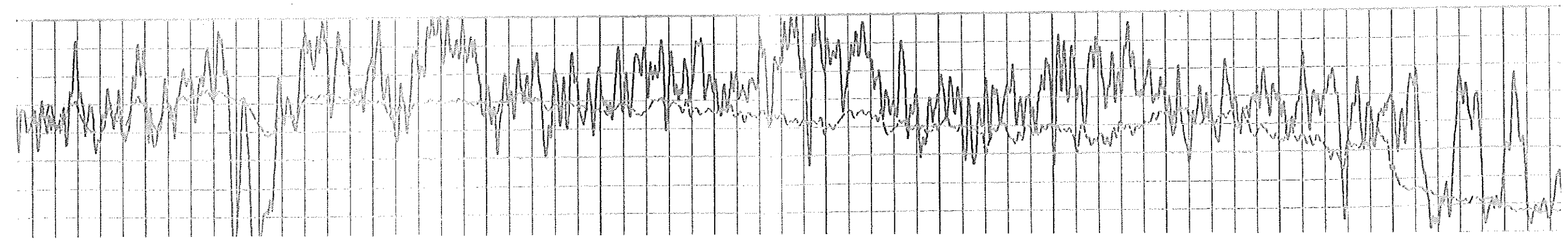
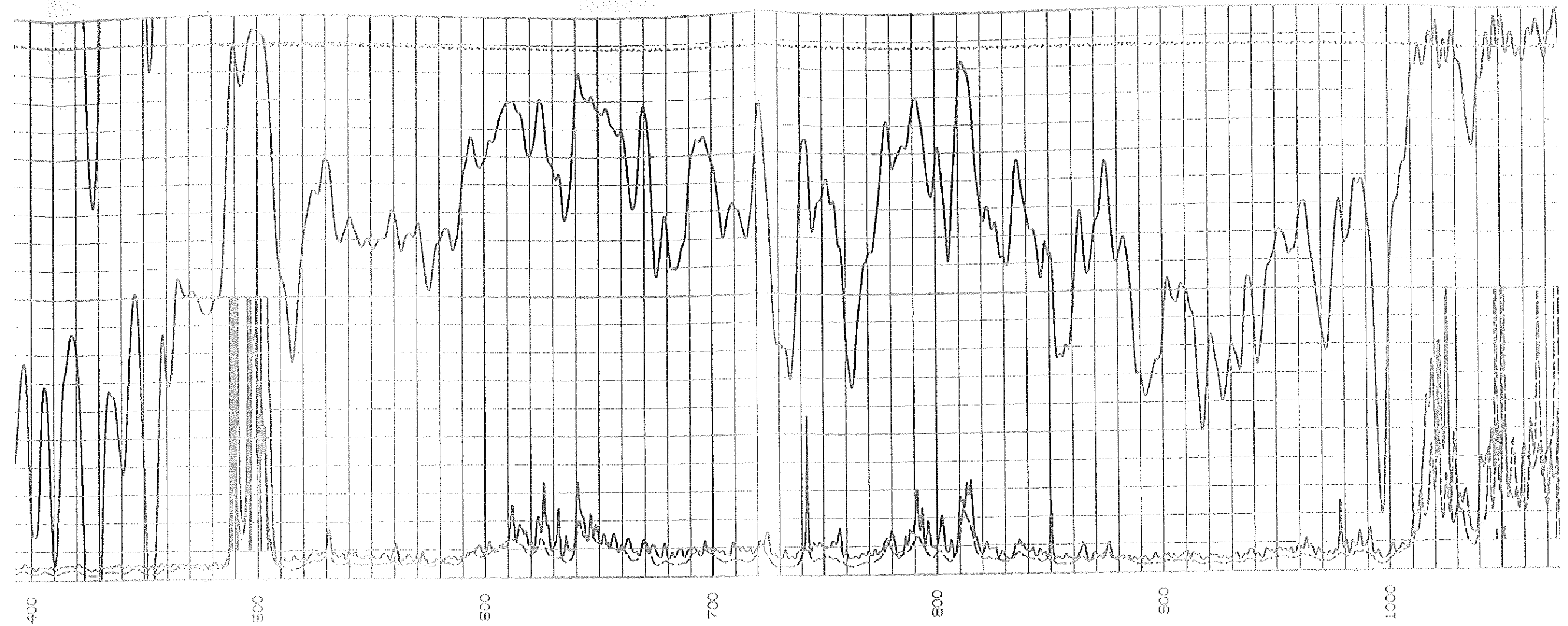
DEEP INDUCTION
OHM-M

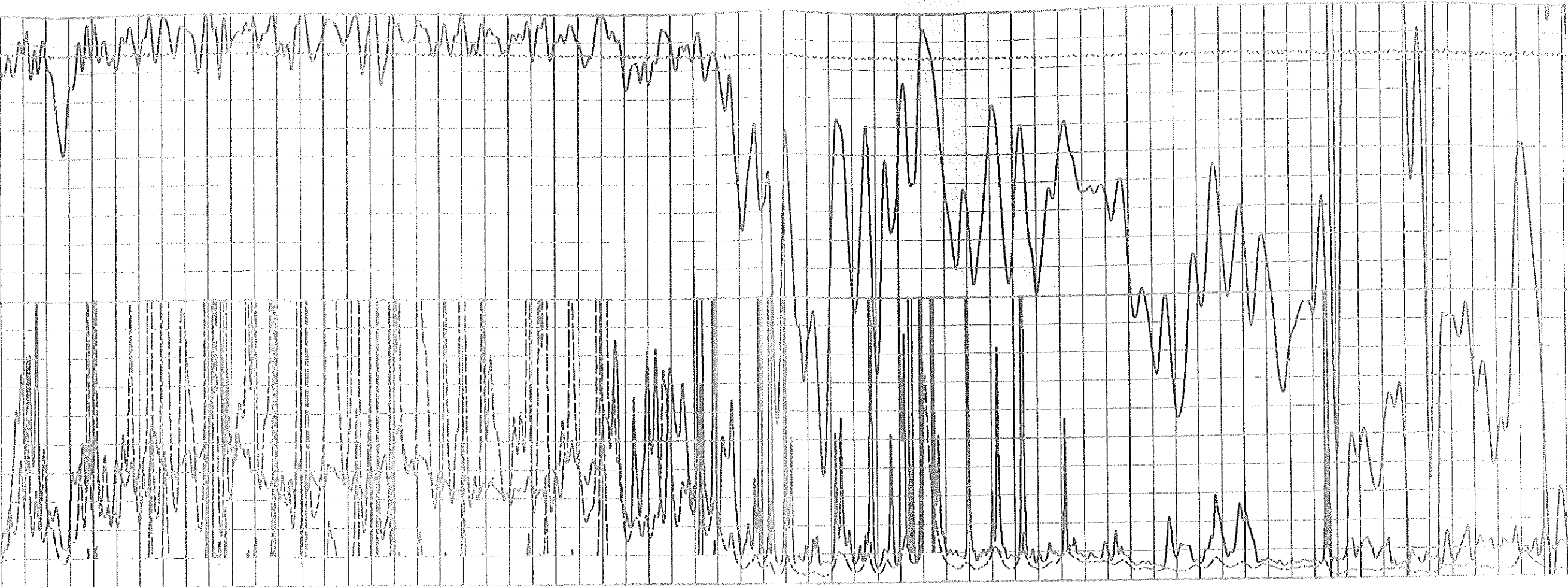
50

DEEP INDUCTION
OHM-M

500







1100

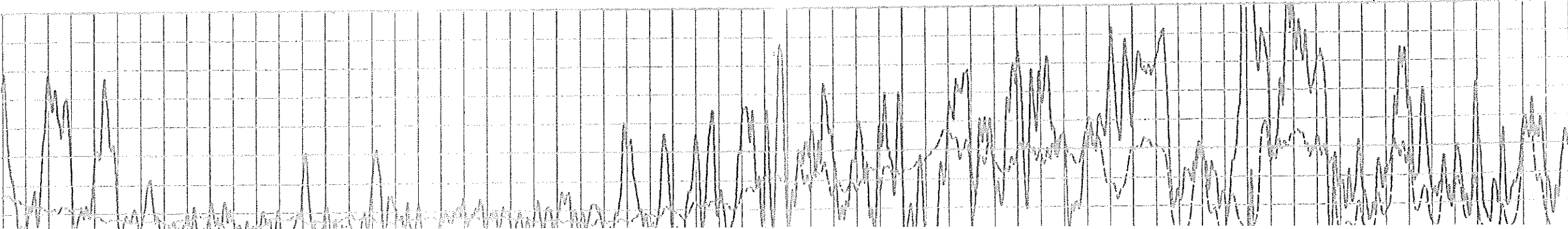
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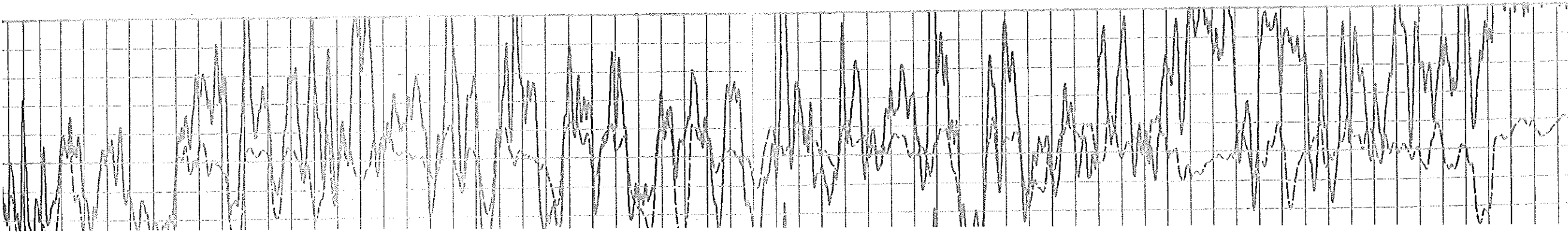
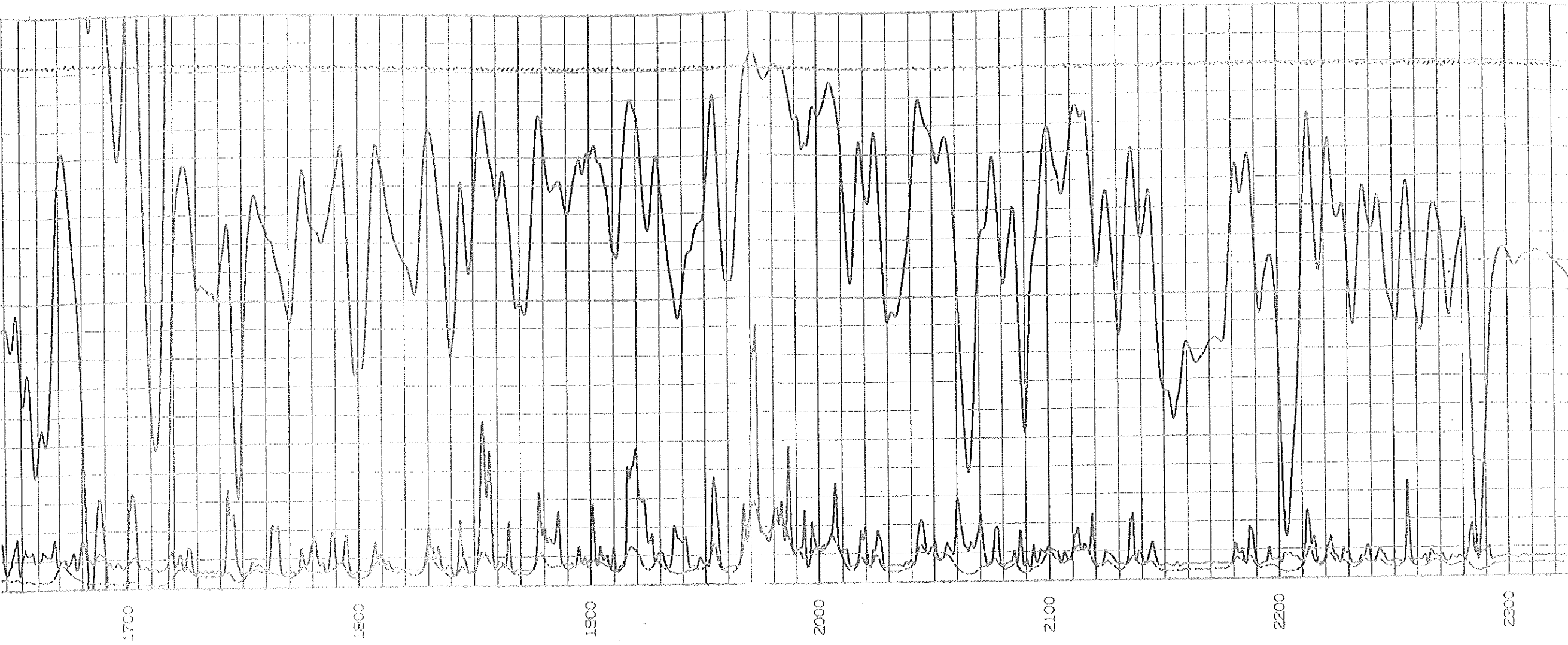
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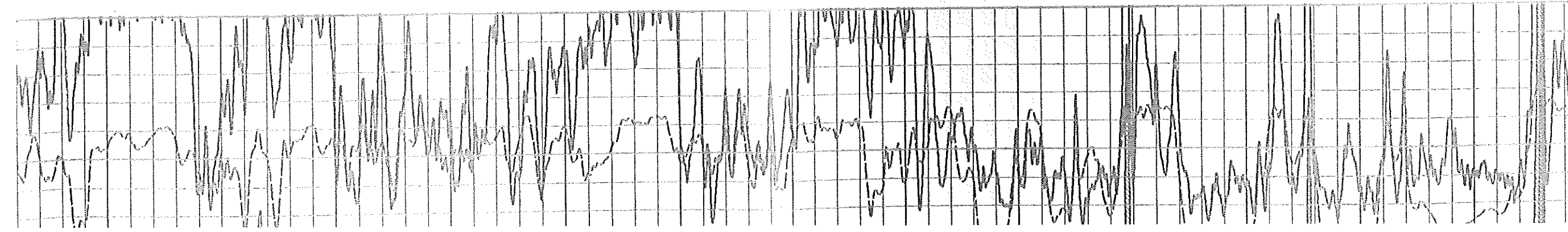
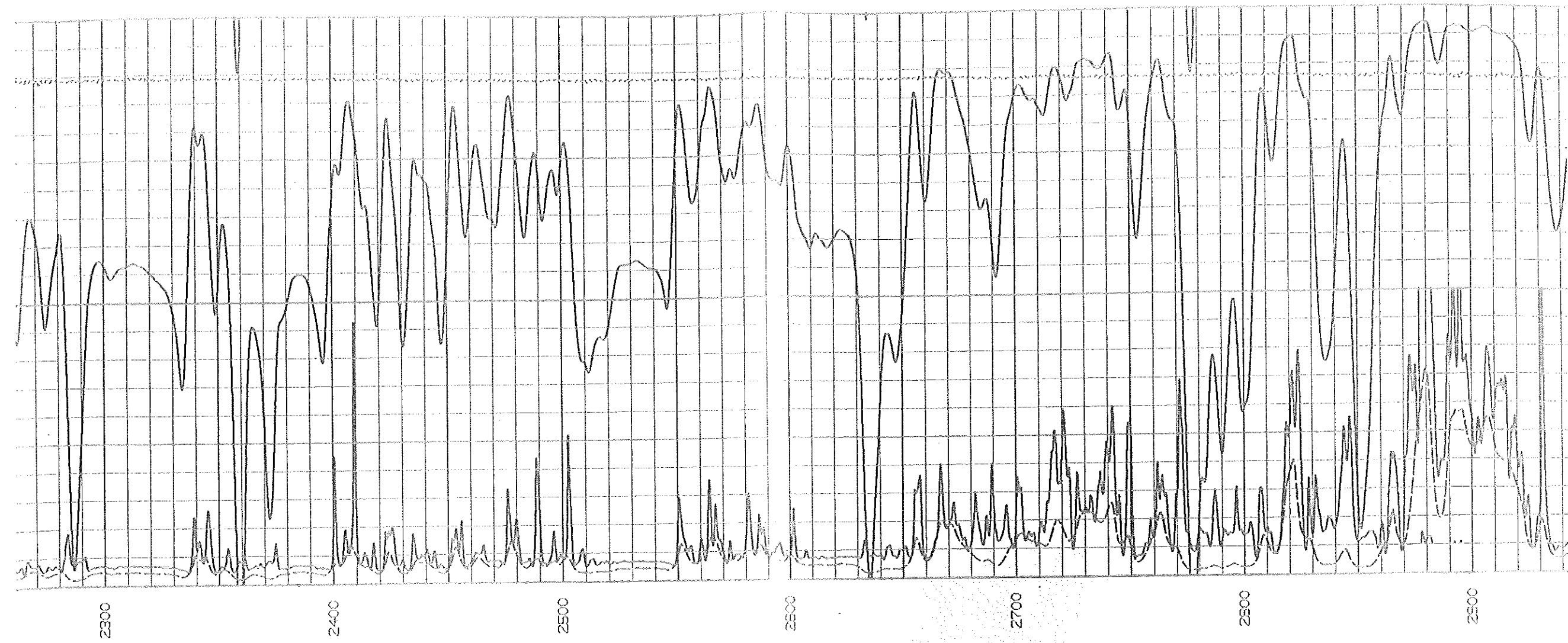
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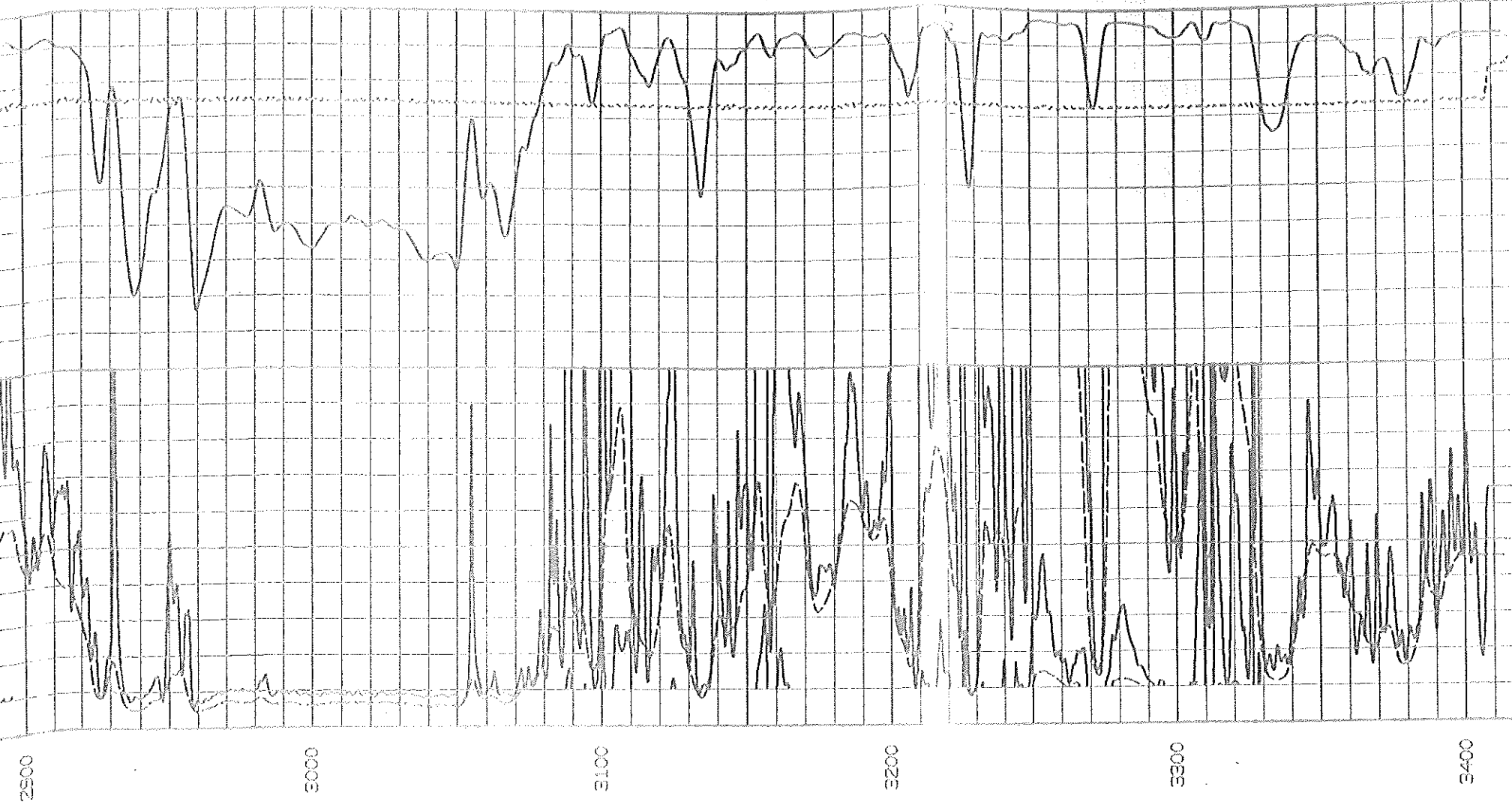
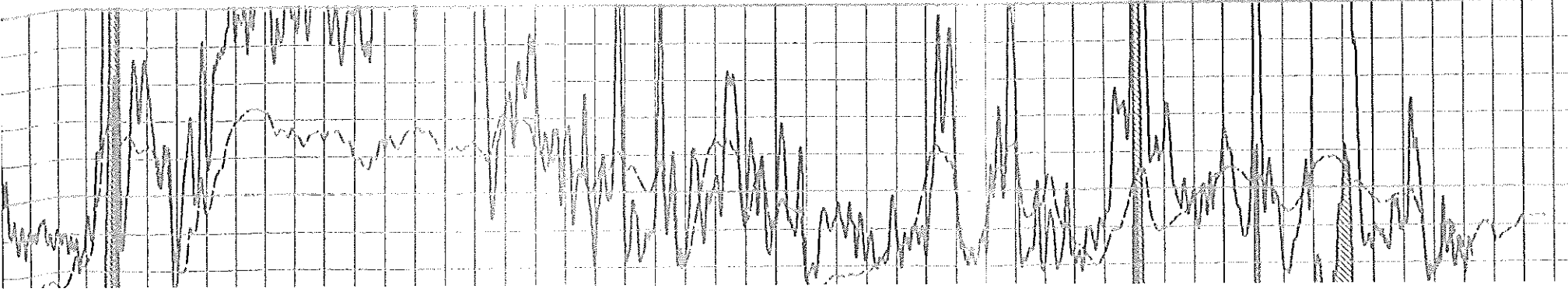
1500

1600









2500

3000

3100

3200

3300

3400

0. DEEP INDUCTION 500
OHM-Y

0. DEEP INDUCTION 50
OHM-Y

0. SHORT GUARD 500
OHM-Y

0. SHORT GUARD

50. 4000.

LINE TENSION

0.

0. SHORT GUARD 500
OHM-M

0. SHORT GUARD 50 4000. LINE TENSION 0.
OHM-M LBS

1.51
50
+

2000. CONDUCTIVITY 10000
MMHO

0.20
AP1

1000. CONDUCTIVITY 10000
MMHO

0.20
AP1

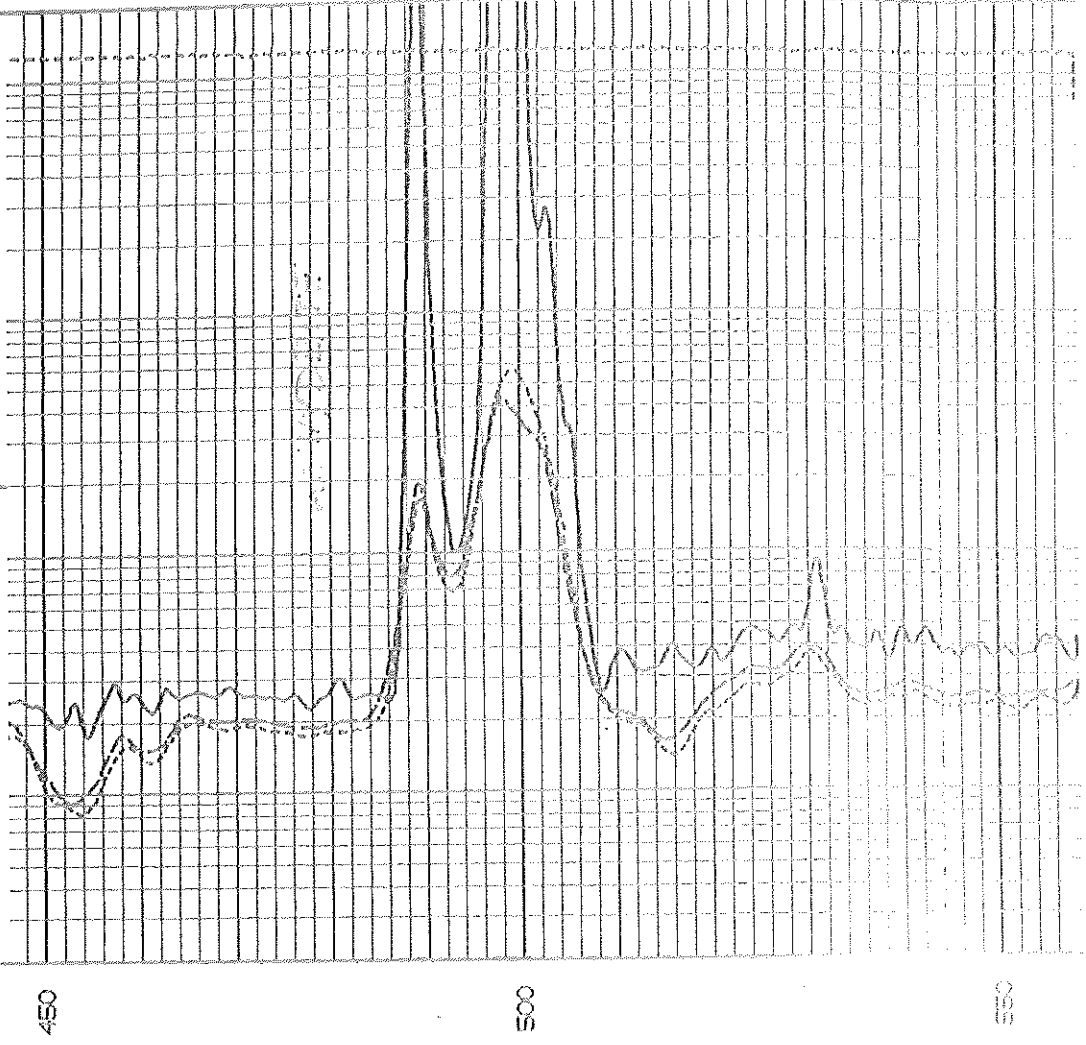
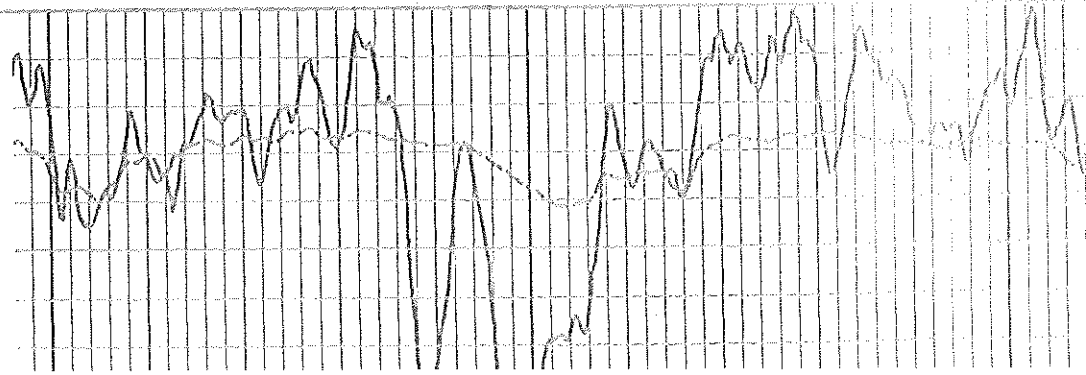
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OHM-M

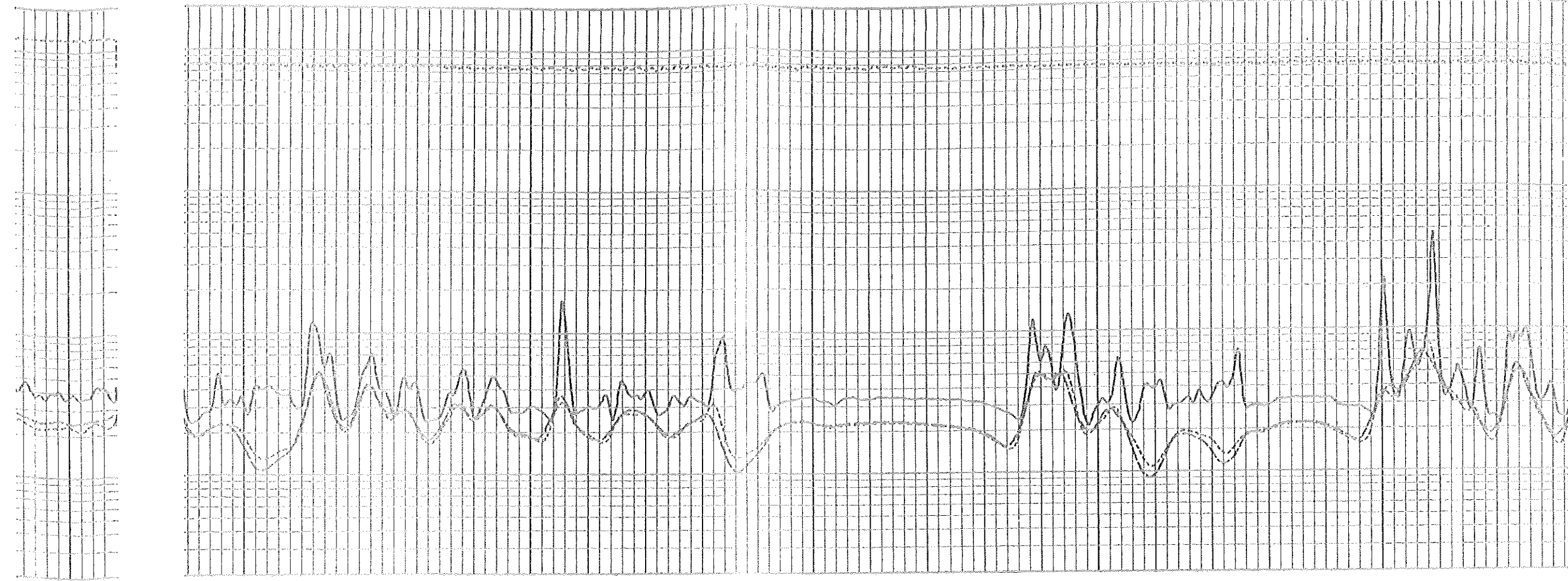
1.51
SP

0.2. MEDIUM INDUCTION 2000.
OHM-M

0.2. SHORT GUARD 2000
OHM-M

4000. LINE TENSION 0.
LBS





150

2200

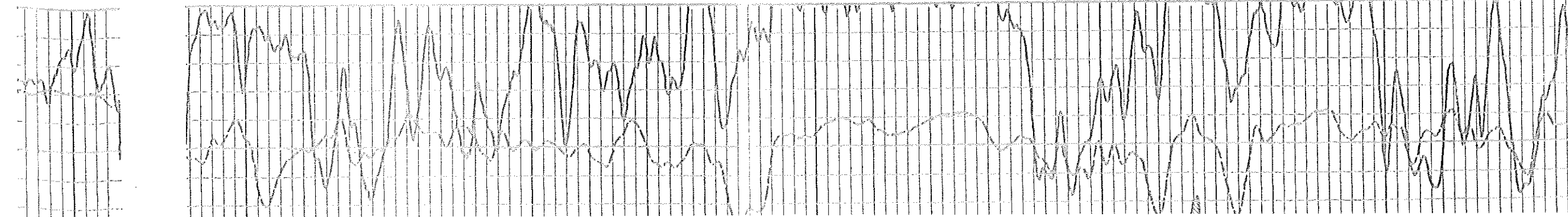
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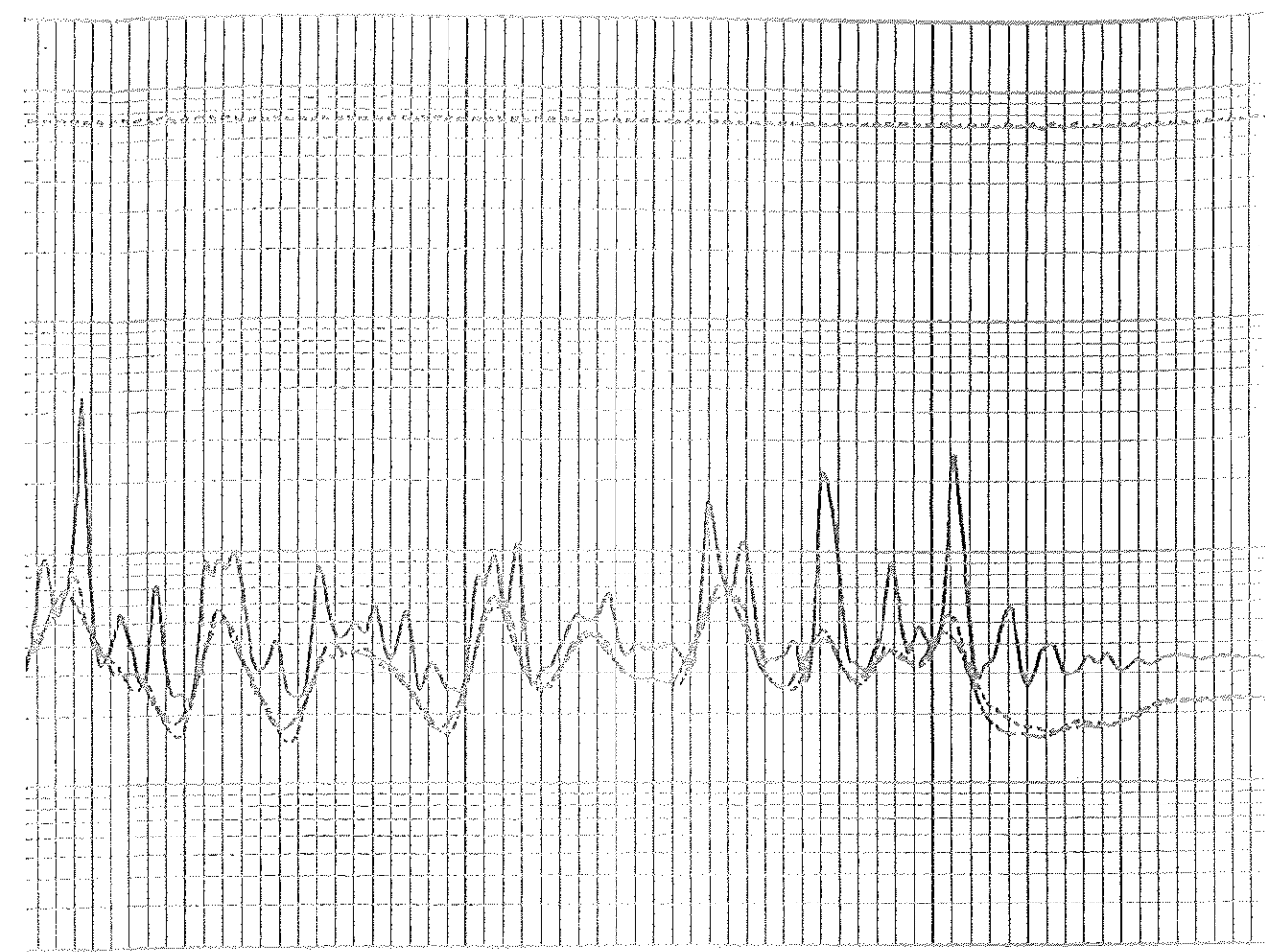
2300

2350

2400

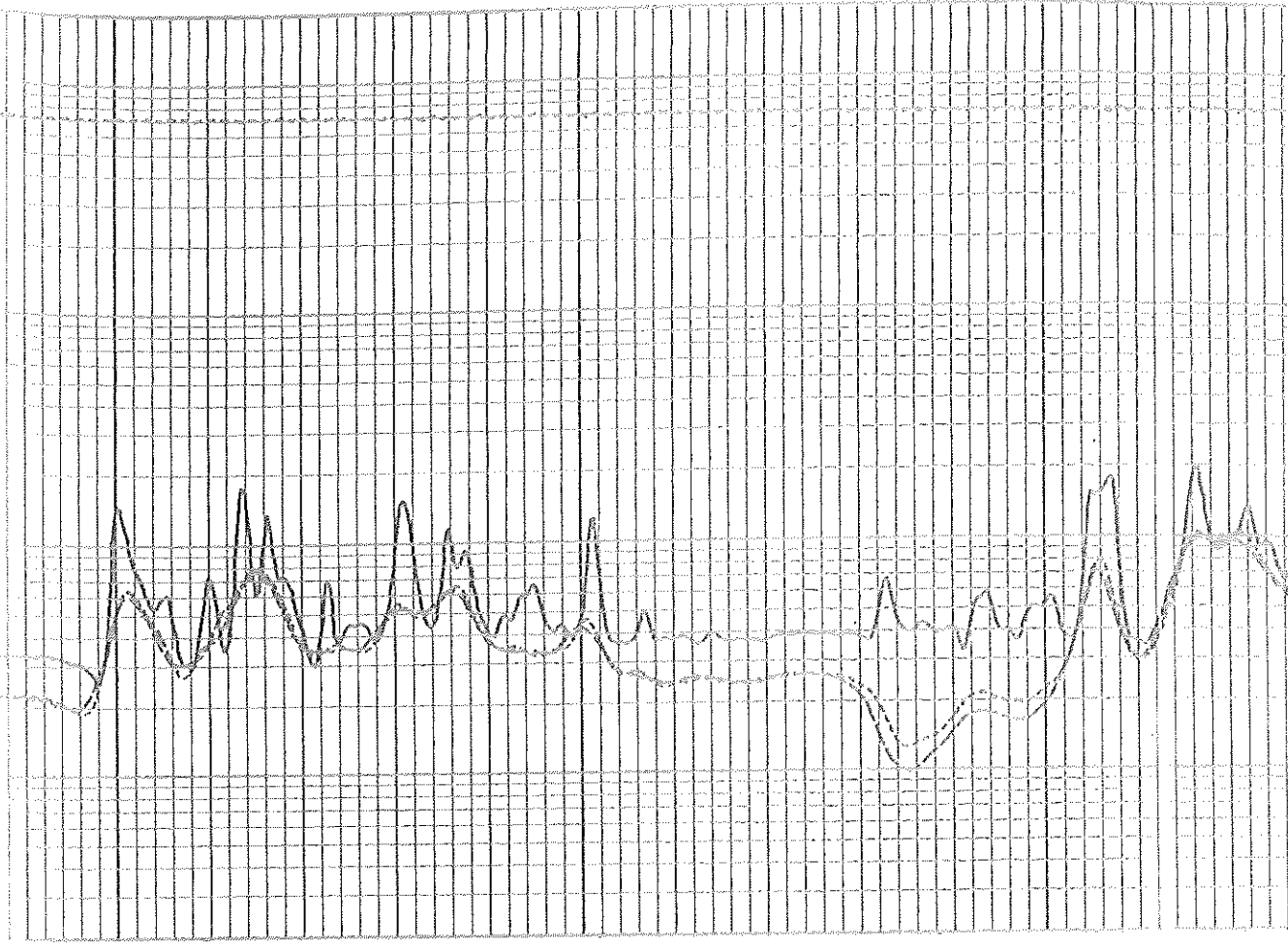
1-0 5-1-1
Solvent
300 mg





2450

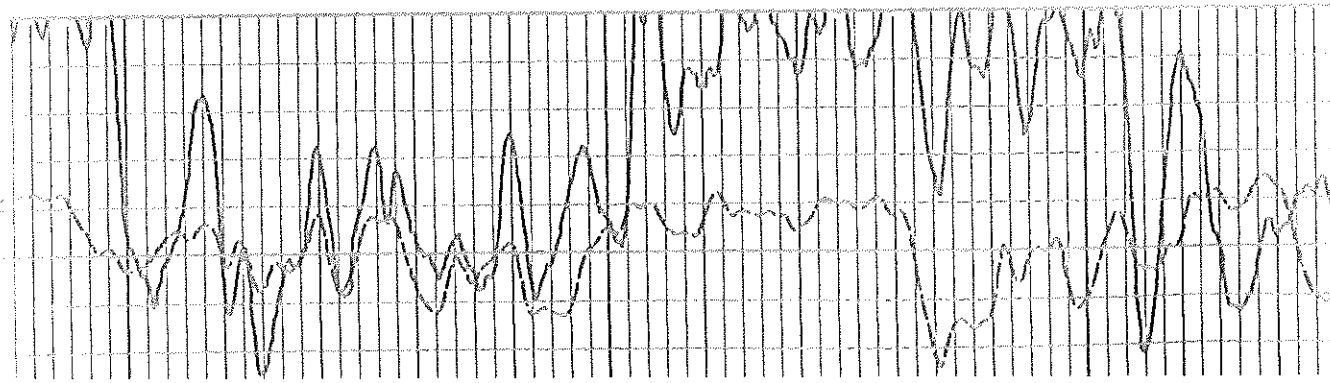
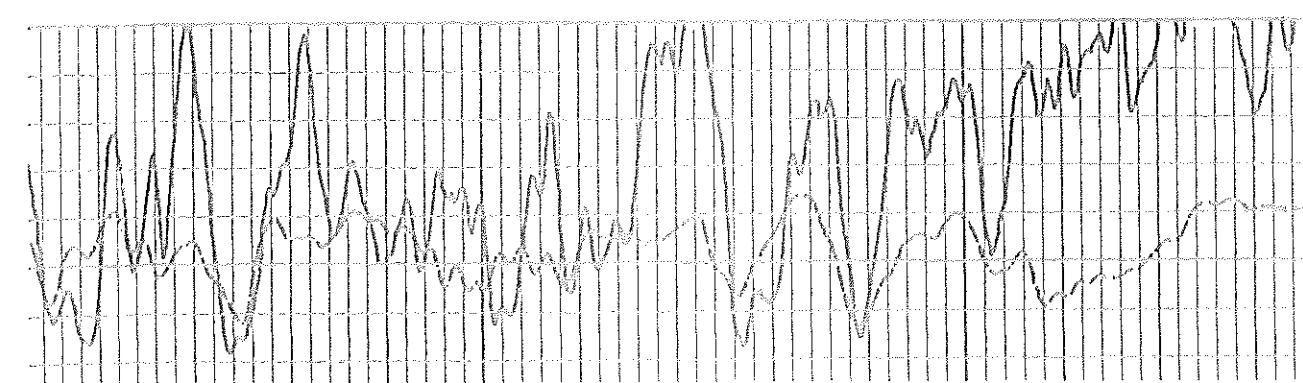
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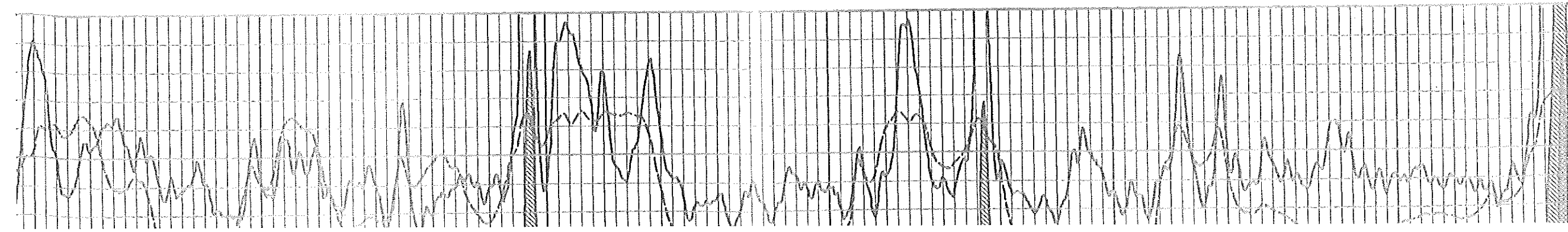
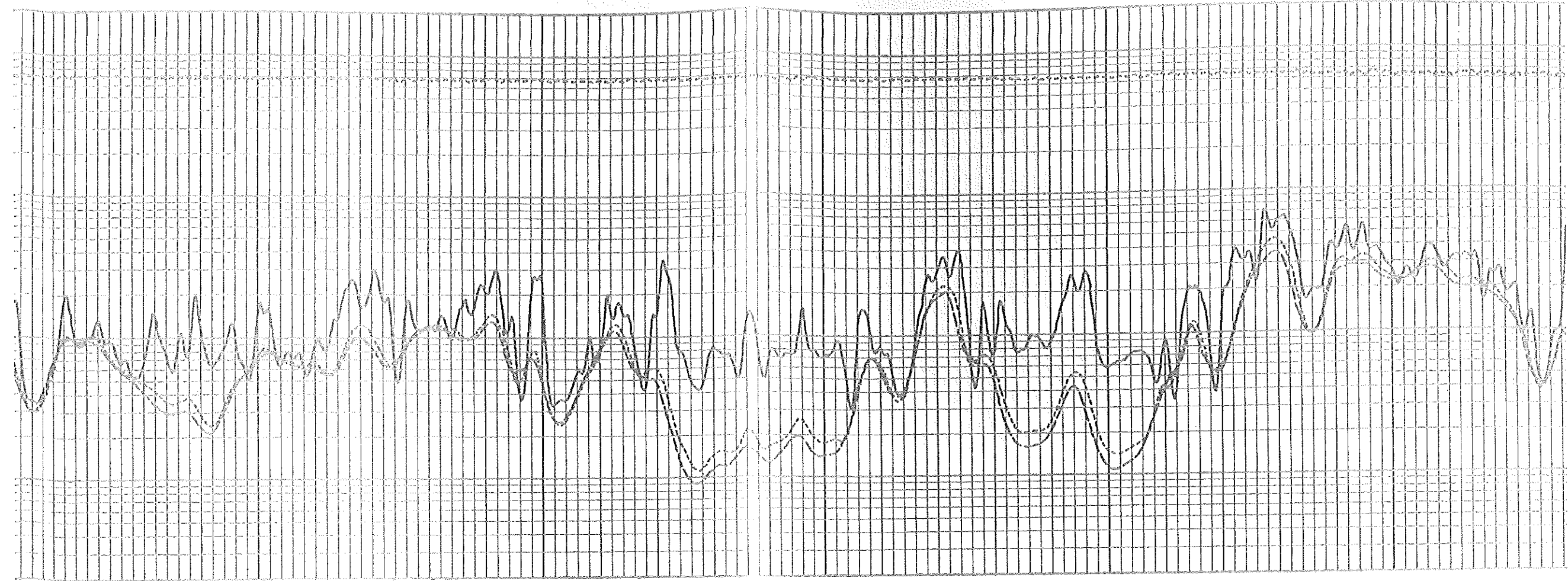


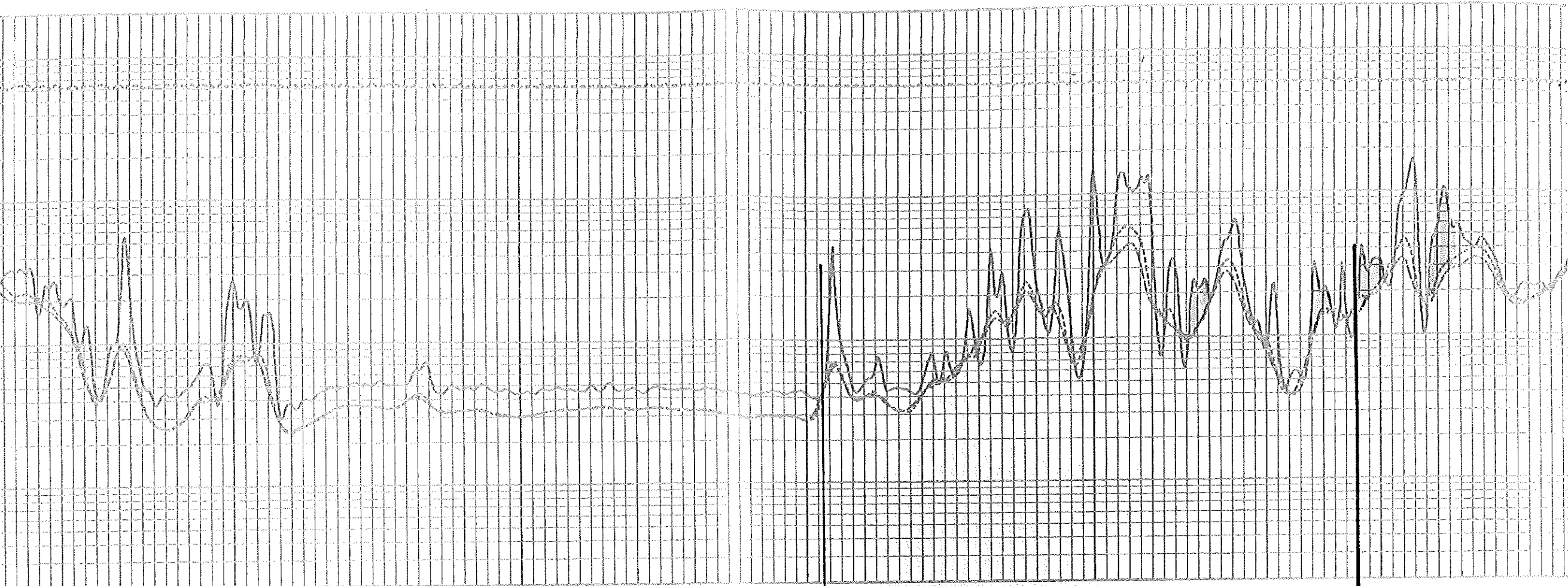
2550

2600

2650







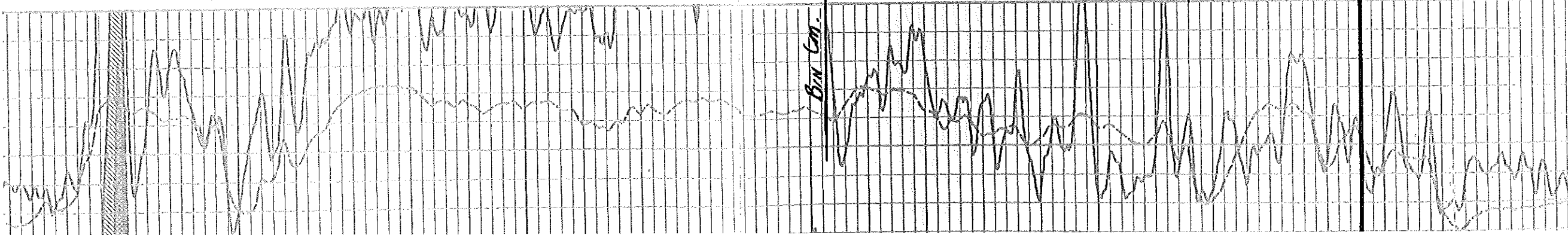
2950

3000

3050

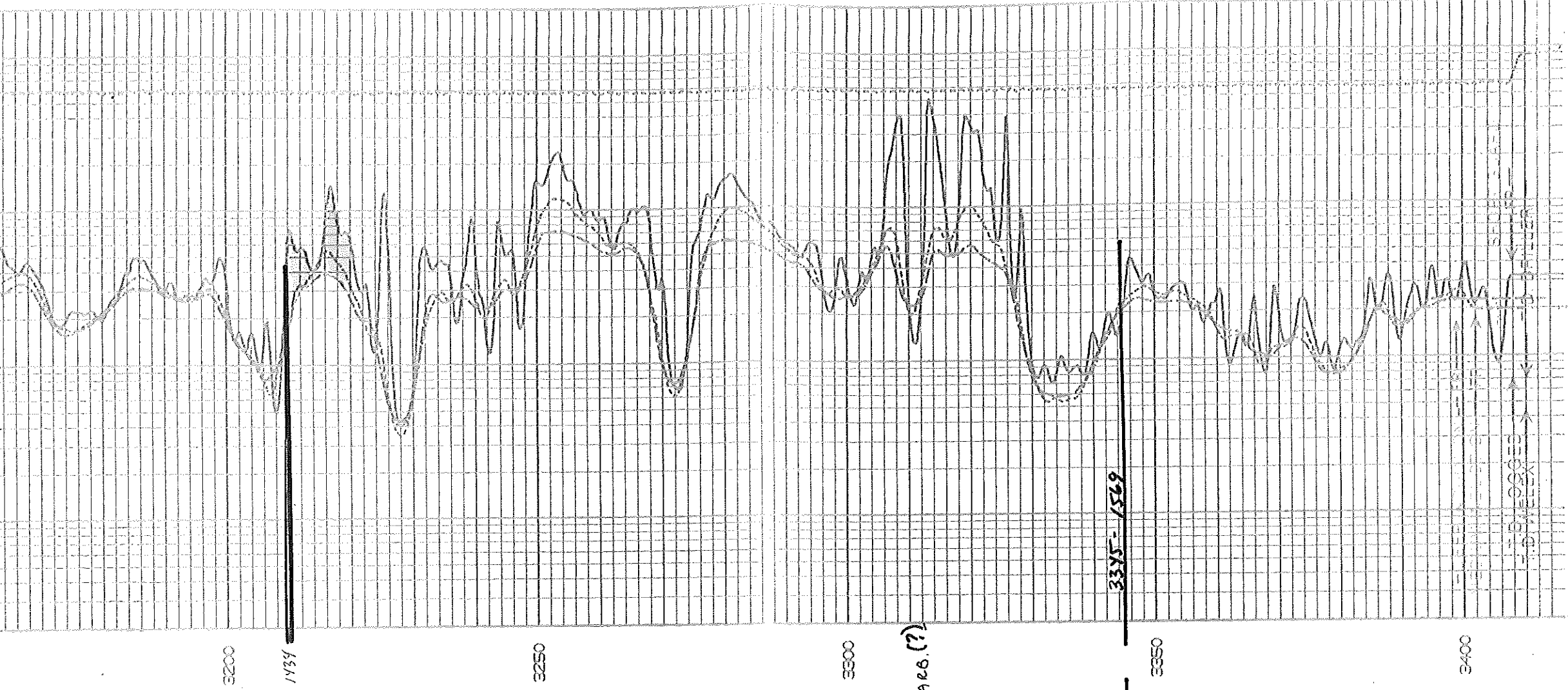
3100

3150



3050 cm⁻¹

3150



3200

1934

3250

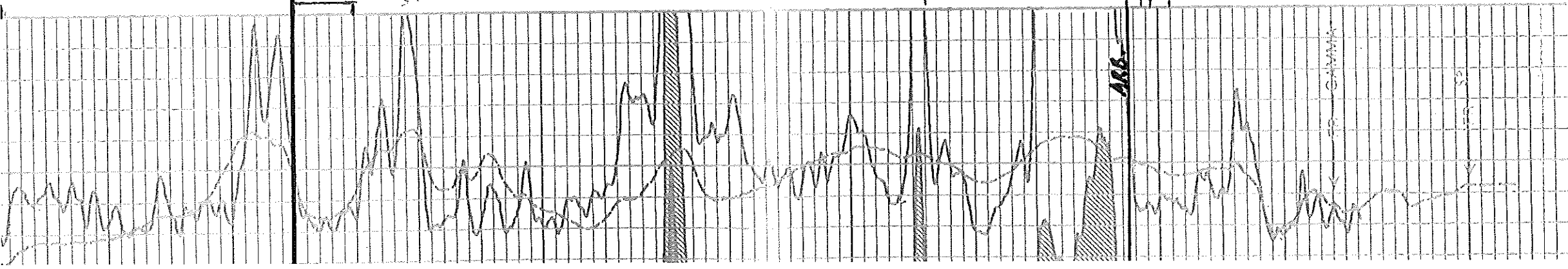
3300

- 1966 (?)

3345-1549

3350

3400



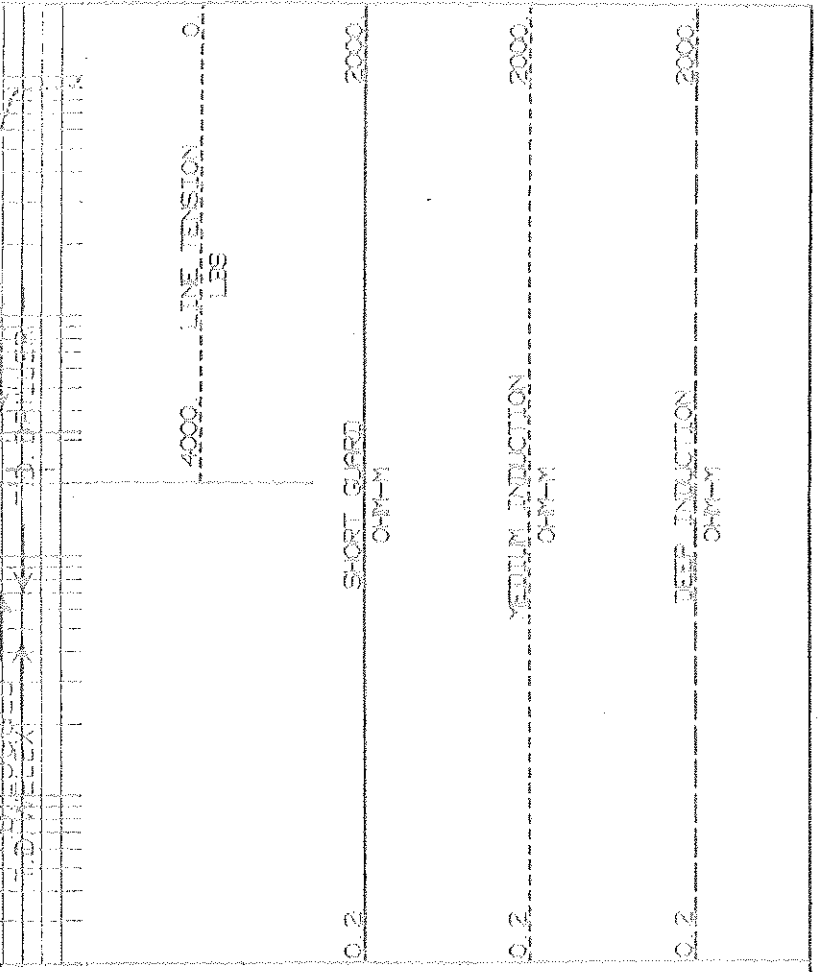
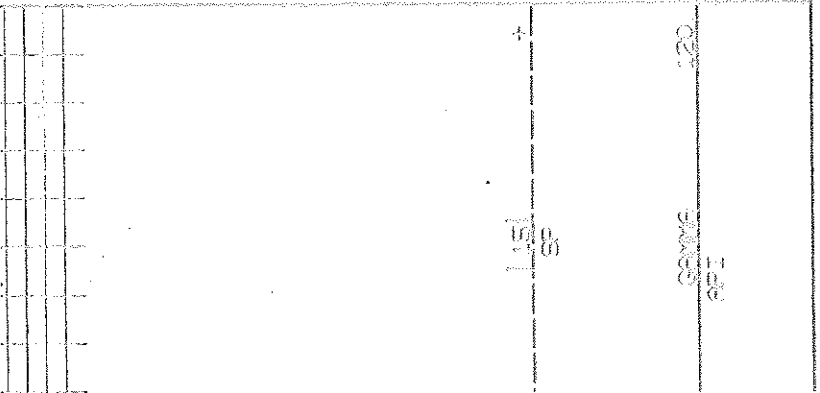
ARR

SP - CANADA

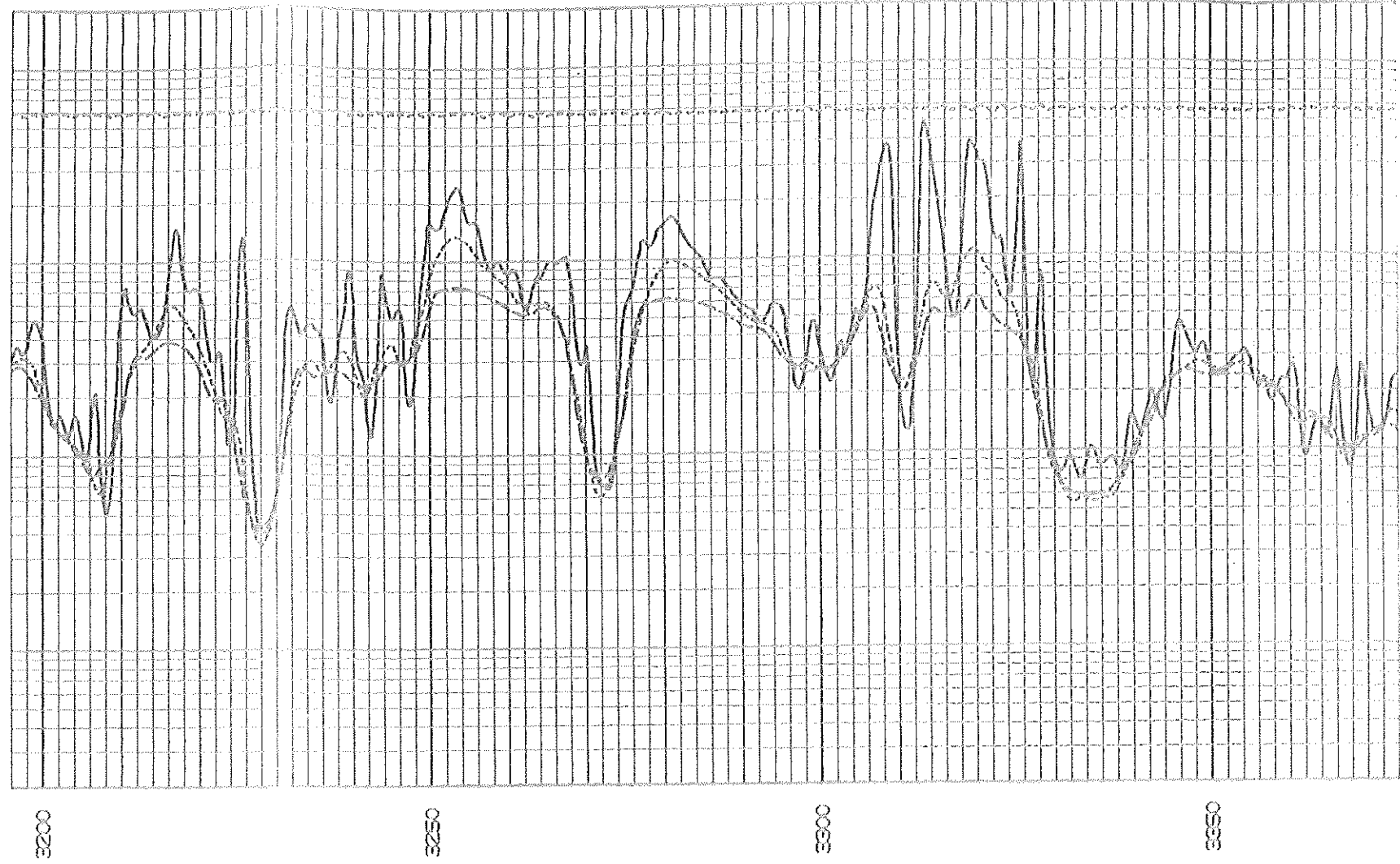
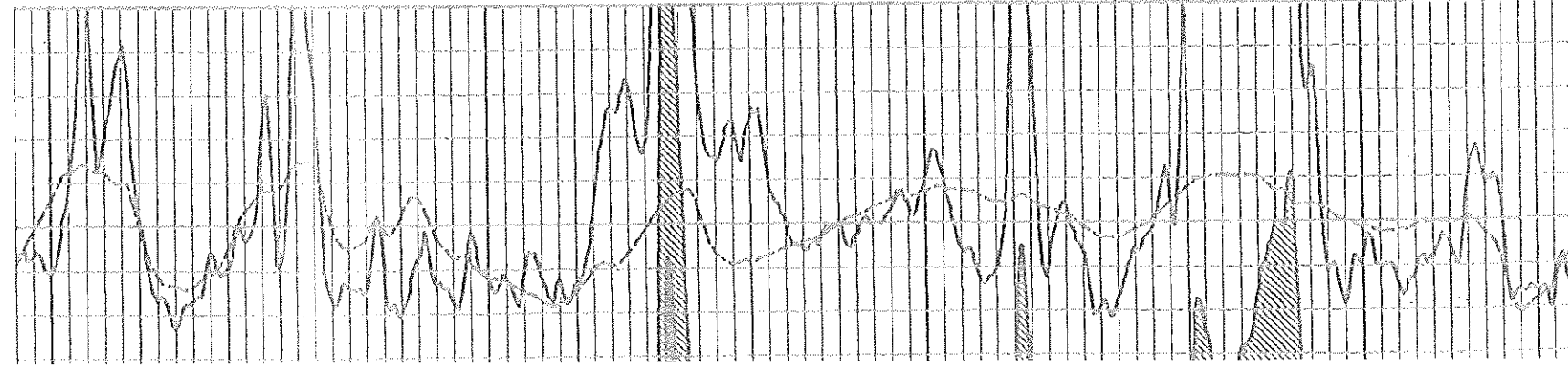
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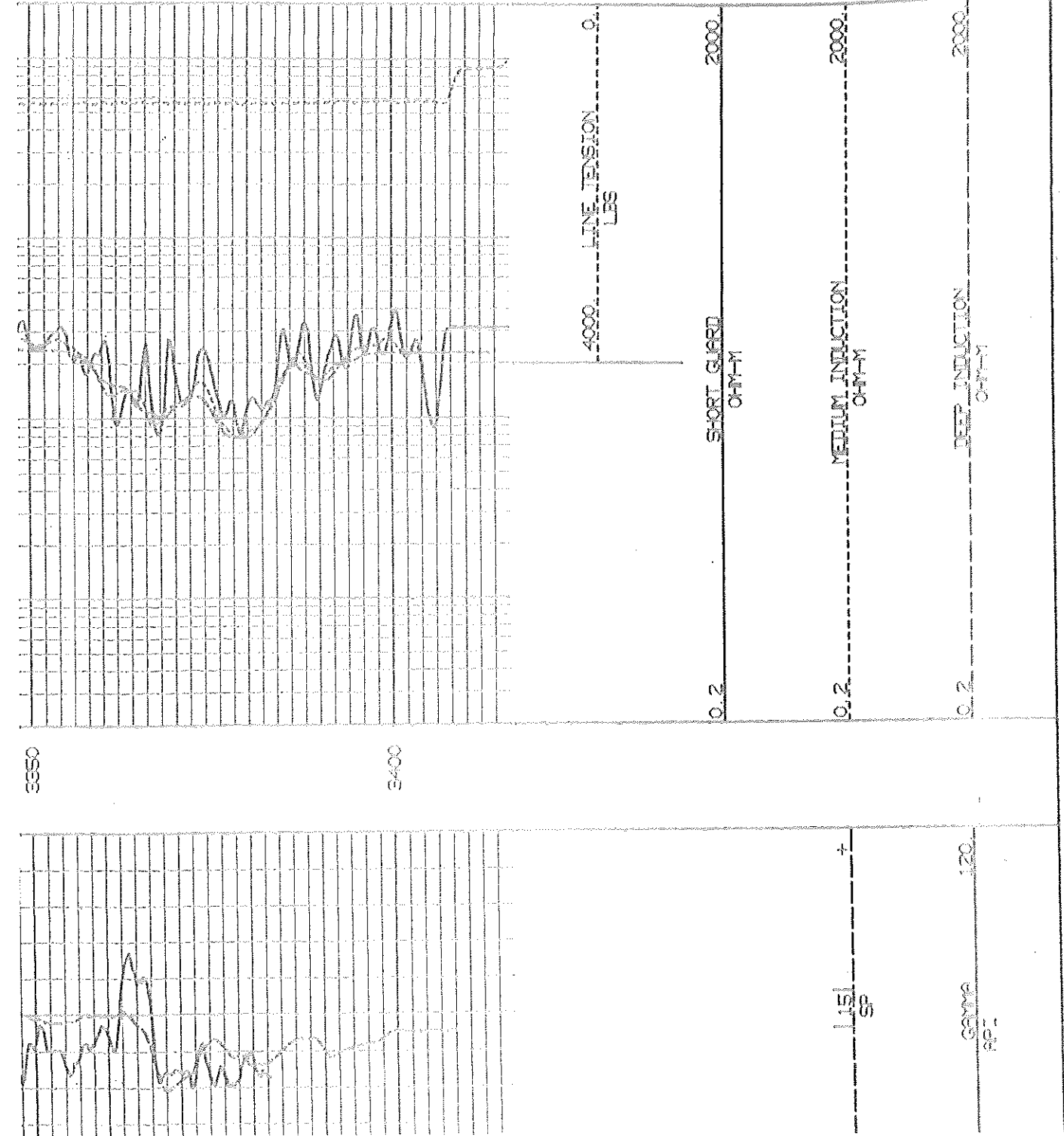
4000 LINE TENSION
LSE

RECORDED BY J. J. HALL
CORRECTED BY J. J. HALL



REPEAT SECTION





AFTER LOG GAMMA RAY CALIBRATION SUMMARY

PERFORMED 12/ 12/ 88
PROGRAM VERSION VLA13 01/20/88

	BEFORE	AFTER	UNITS
BACKGROUND CALIBRATE	55.55	53.32	CHYM
	149.00	142.88	GAPI

SER # 995Z9W MOD. # 0 SRC. # 0 FLD CAL. # 0

BEFORE LOG GAMMA RAY CALIBRATION

PERFORMED 12/ 12/ 88
PROGRAM VERSION VLA13 01/20/88

	MEASURED	CALIBRATED	UNITS
BACKGROUND CALIBRATE	57.77	55.55	CHYM
	152.24	149.00	GAPI

SER # 995Z9W MOD. # 0 SRC. # 0 FLD CAL. # 0

SHORT GUARD(NORMAL) AFTER SURVEY CALIBRATION

PERFORMED 12/ 12/ 88
PROGRAM VERSION VLA13 01/20/88

	BEFORE	AFTER	UNITS
LOW INT CAL	2.925	2.881	CHYM
HIGH INT CAL	200.53	200.31	CHYM

SER # 2705ER MOD. # 0 SRC. # 0 FLD CAL. # 0

PERFORMED 10/ 12/ 88
PROGRAM VERSION VLA13 01/20/88

	BEFORE	AFTER	UNITS
LOW INT CAL	2.125	2.1291	OHM
HIGH INT CAL	200.33	200.31	OHM

SER # 27858R MOD. # 0 SRC. # 0 FLD CAL. # 2

AFTER LOG FIELD CALIBRATION SUMMARY

PERFORMED 10/ 12/ 88
PROGRAM VERSION VLA13 01/20/88

ITEM	DEEP INDUCTION AFTER	DEEP INDUCTION BEFORE	MEDIUM INDUCTION AFTER	MEDIUM INDUCTION BEFORE
TOOL ZERO	0.	0.	0.	0.
INT. CALIB.	500.22	500.23	500.45	500.42
MANDREL ERROR	5.	5.	5.	5.

SER # 24236R MOD. # 0 SRC. # 0 FLD CAL. # 2