marbob
energy corporation

January 23, 1986

Case 8841

Richard L. Stamets
Director
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Stamets:

Enclosed herewith in duplicate is Application of Marbob Energy Corporation for the authority to inject produced water in the F. M. Robinson Well No. 1 located 1850 FNL and 660 FWL of Section 27, Township 17 South, Range 29 East, Eddy County, New Mexico. Application is made pursuant to Rule 701D of the Division in Rules and Regulations for administrative approval for disposal into the Cisco formation. Publication of Marbob's intent to utilize the subject well for water disposal has been made in the Artesia Daily Press and copies of this application have been furnished to each leasehold operator within 1/2 mile of the well. The State of New Mexico is the owner of the surface of the land upon which the well is located.

Your approval of the subject application at the expiration of the required 15 day waiting period is respectfully requested.

Sincerely,

Ron Head

Ron Head
Land Department

RH/rr

Enclosures

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

APPLICATION FOR ADMINISTRATIVE APPROVAL

MARBOB ENERGY CORPORATION

FOR CONVERSION TO WATER DISPOSAL

F. M. ROBINSON WELL NO. 1

Located 1850 FSL & 660 FWL, Sec. 27, T-17S, R-29E
Eddy County, New Mexico

TABLE OF CONTENTS

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

Case 8841

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ yes ☐ no

II. Operator: Marbob Energy Corporation

Address: P. O. Drawer 217, Artesia, NM 88210

Contact party: Ron Head Phone: (505) 748-3303

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? ☐ yes ☒ no
If yes, give the Division order number authorizing the project _____.

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)

* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: John R. Gray Title President

Signature: John R. Gray Date: January 14, 1986

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;

(3) the formation name and depth with expected maximum injection rates and pressures; and

(4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

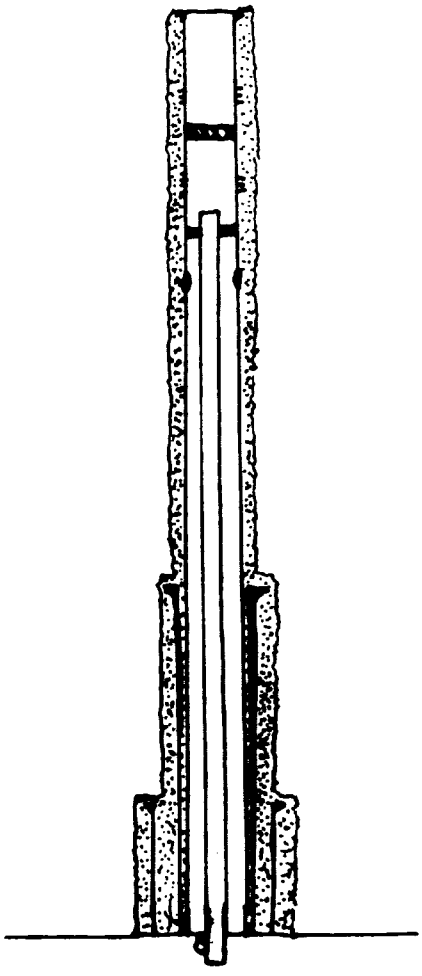
NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

OPERATOR		LEASE		
Marbob Energy Corporation		F. M. Robinson		
1	1850 FNL 660 FWL	27	17S	29E
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE

Schematic



Tabular Data

Surface Casing

Size 13 3/8" Cemented with 640 sx.

TOC Surface feet determined by cement circulated

Hole size 17 1/2"

Intermediate Casing

Size 8 5/8" Cemented with 1225 sx.

TOC Surface feet determined by cement circulated

Hole size 11"

Long string

Size 5 1/2" Cemented with 1020 sx.

TOC 5850 feet determined by ran CBL/GR Collar Log

Hole size 7 7/8"

Total depth 11,062

Injection interval

9270 feet to 9290 feet

(perforated or open-hole, indicate which)

Open-hole

Tubing size 2 3/8" lined with plastic coating (material) set in a

5 1/2" Giberson Uni VI (brand and model) packer at 9215 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Cisco

2. Name of Field or Pool (if applicable) N/A

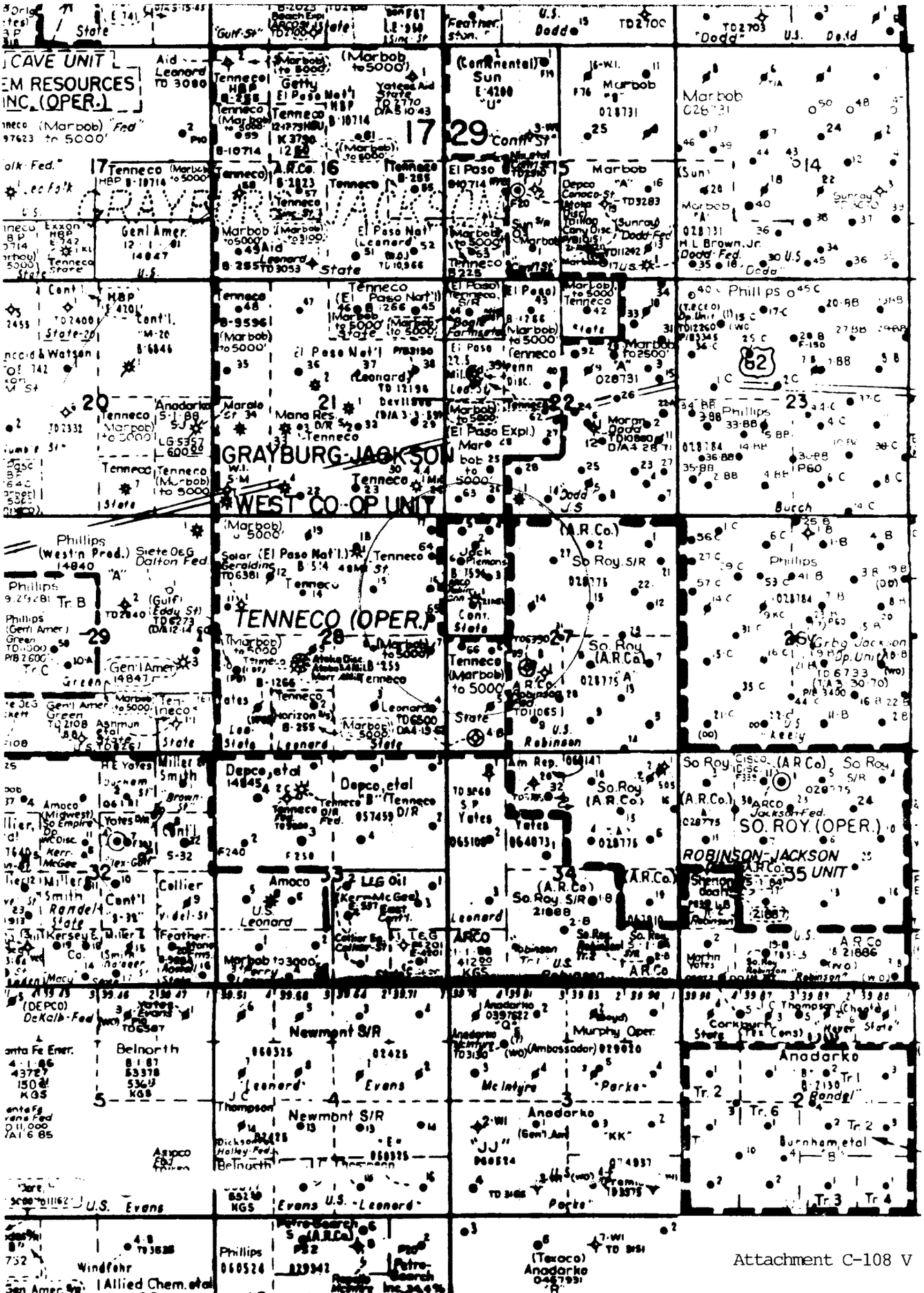
3. Is this a new well drilled for injection? ☐ Yes ☒ No

If no, for what purpose was the well originally drilled? Oil & Gas production

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used)

See attached Exhibit "A"

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Overlying pools are the Queen Grayburg San Andres to approximately 4000'. Underlying zones are Atoka at approx. 10,300' and the Morrow formation at approx. 10,700'.



Attachment C-108 V

WELL DATA-WELLS IN AREA OF REVIEW

Attached as Exhibit "B" is a copy of the Plugging Report for the F.M. Robinson Federal Com. No. 1 Well which appears to be the only well which falls within the area of review and penetrates the proposed injection zone.

Attachment C-108 VI

DISPOSAL WATER ANALYSIS

WATER ANALYSIS REPORT

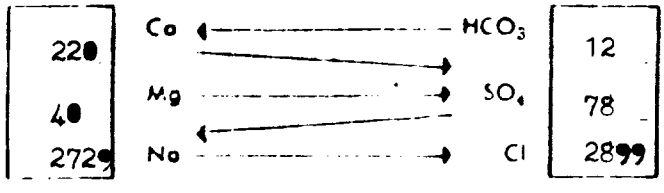
COMPANY Marbob Energy ADDRESS DATE: 12-4-85

SOURCE G J West Fty DATE SAMPLED 12-4-85 ANALYSIS NO.

Analysis		Mg/l		*Meq/l	
1. pH		7			
2. H_2S (Qualitative)		Positive			
3. Specific Gravity		1.105			
4. Dissolved Solids		174,938			
5. Suspended Solids					
6. Phenolphthalein Alkalinity ($CaCO_3$)					
7. Methyl Orange Alkalinity ($CaCO_3$)		600			
8. Bicarbonate (HCO_3)	HCO_3	732	61	12	HCO_3
9. Chlorides (Cl)	Cl	102,908	35.5	2899	Cl
10. Sulfates (SO_4)	SO_4	3750	48	78	SO_4
11. Calcium (Ca)	Ca	4400	20	220	Ca
12. Magnesium (Mg)	Mg	486	12.2	40	Mg
13. Total Hardness ($CaCO_3$)		13,000			
14. Total Iron (Fe)					
15. Barium (Qualitative)					
16. Strontium					

*Milli equivalents per liter

PROBABLE MINERAL COMPOSITION



Compound	Equiv. Wt.	X	Meq/l	=	Mg/l
$Ca(HCO_3)_2$	81.04		12		972
$CaSO_4$	68.07		78		5309
$CaCl_2$	55.50		130		7215
$Mg(HCO_3)_2$	73.17		0		0
$MgSO_4$	60.19		0		0
$MgCl_2$	47.62		40		1905
$NaHCO_3$	84.00		0		0
Na_2SO_4	71.03		0		0
NaCl	58.46		2729		159,537

Saturation Values Distilled Water 20°C

$CaCO_3$	13 Mg/l
$CaSO_4 \cdot 2H_2O$	2,090 Mg/l
$MgCO_3$	103 Mg/l

REMARKS cc: J. Stenzel

Respectfully submitted
PETROLITE CORPANY
Randy Allison

GEOLOGICAL DATA

PHONE OFF. 622-0440

PHONE RES. 622-7764

Jack Ahlen

CONSULTING GEOLOGIST

533 PETROLEUM BUILDING

ROSWELL, NEW MEXICO 88201

January 20, 1986

Marbob Energy Corporation
Post Office Box 304
Artesia, New Mexico 88210

Re: Geological Report,
Water Injection Zone
ARCO #1 F.M. Robinson
Unit E, Sec. 27-T17S-R29E
Eddy Co., NM

Gentlemen:

The operator reports the following geological tops:

Glorieta 4002'

Abo 6119'

Wolfcamp 7323'

Cisco 9018'

Canyon 9593'

Strawn 10016'

Atoka 10284

Morrow 10678'

U. Miss. 11004

You propose to dispose of produced water in the interval 9270'-9290' in the Cisco formation.

The Cisco formation in this part of Eddy County consists of limestone, dolomite and shale. The limestone and dolomite are ususally porous as a result of reef building processes at the time of deposition. The most porous zones have been altered

Attachment Form C-108 VIII

API: 30-015-22037

Atlantic Richfield #1 Robinson Gas Com.

27-17S-29E

NAME: ATLANTIC RICHFIELD CO.

LEASE: #1 Robinson Gas Com.

Location: 1850 FNL & 660 ~~FEL~~ FWL
SEC 27, 17S-29E

Commenced	Completed	Elevation
2-13-77	5-18-77	

Initial Production	Producing Formation	Producing Interval
IPCAOF 7,198,000 CFGPD		

T.D.	Spls start at	Sample Quality
11,063'	4,000' in Glorieta Sandstone	

Casing Record: 20" 190'/350 sx, 13 3/8" 750'/650 sx, 8 5/8" 3470'/975 sx; 5 1/2" 11,062'/1020 sx.

Logged by: FRED DUMAS

PERMIAN BASIN SAMPLE LABORATORY

MIDLAND, TEXAS
401 N. COLORADO
AREA CODE 915
MU 3-3383

© DATE ISSUED

ROSWELL, N.M.
200 W. FIRST
AREA CODE 505
622-6061

This log is issued to PERMIAN ASSOCIATION

for its exclusive and confidential use only.

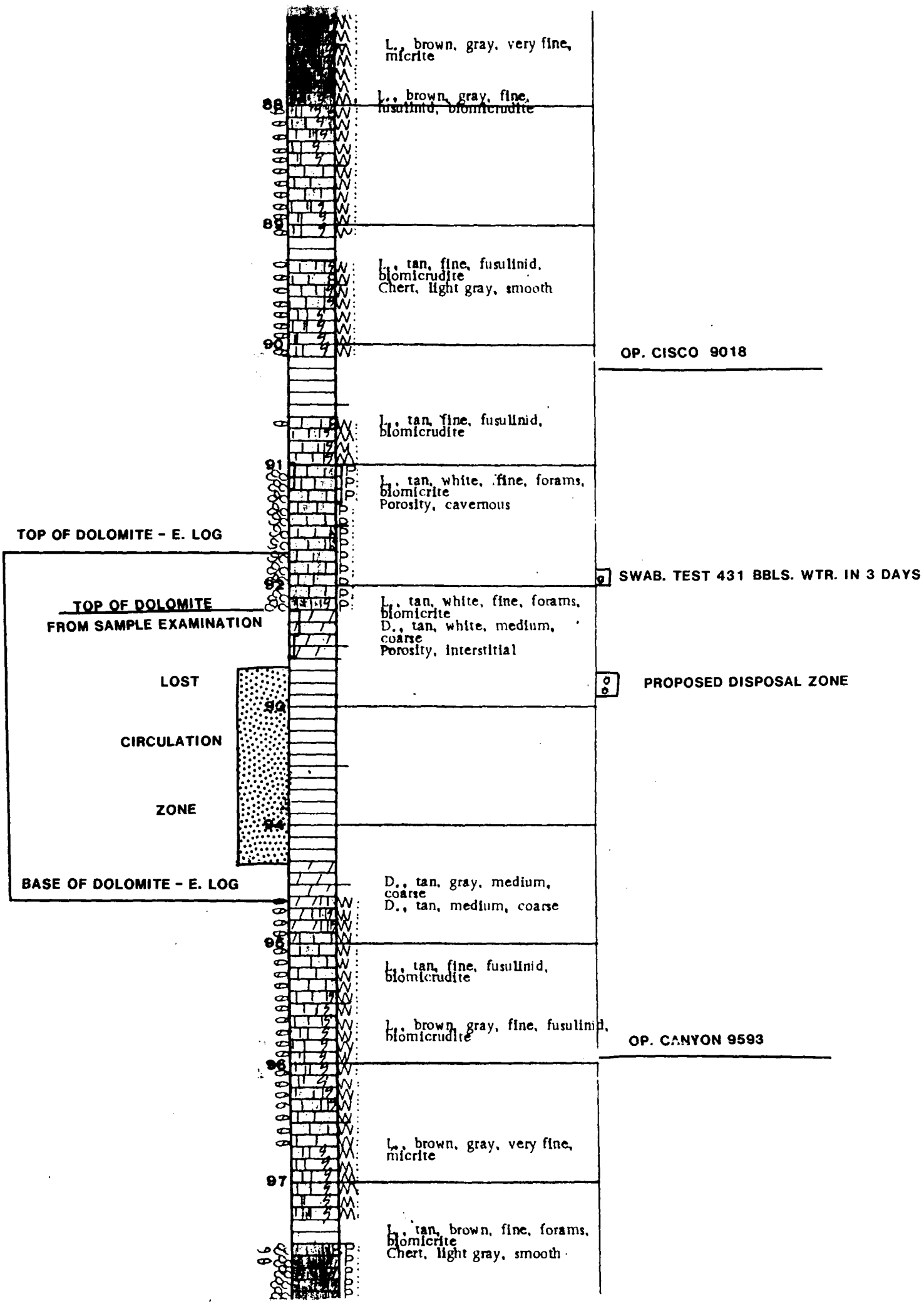
NOTICE TO CUSTOMERS

When available, drilling time, drill stem tests, core descriptions etc. are plotted on our graphic logs. This information is from sources believed to be reliable, but we cannot guarantee accuracy

FORMATIONS	TOPS		DATUM	
	Sample	Elec Log	Sample	Elec Log
ABO	6,100			
HUECO	7,370			
STRAWN L	10,010			
ATOKA Ss.	10,320			
MORROW	10,880			
BARNETT	11,020			

DRILL STEM TESTS & CORES

NO DSTS REPORTED


L., brown, gray, very fine, micrite
L., brown, gray, fine, fusulinid, biomicrudite
88
89
L., tan, fine, fusulinid, biomicrudite
Chert, light gray, smooth
90
OP. CISCO 9018
L., tan, fine, fusulinid, biomicrudite
91
L., tan, white, fine, forams, biomicrite
Porosity, cavernous
TOP OF DOLOMITE - E. LOG
92
SWAB. TEST 431 BBLS. WTR. IN 3 DAYS
TOP OF DOLOMITE FROM SAMPLE EXAMINATION
L., tan, white, fine, forams, biomicrite
D., tan, white, medium, coarse
Porosity, interstitial
LOST CIRCULATION ZONE
PROPOSED DISPOSAL ZONE
93
94
BASE OF DOLOMITE - E. LOG
D., tan, gray, medium, coarse
D., tan, medium, coarse
95
L., tan, fine, fusulinid, biomicrudite
L., brown, gray, fine, fusulinid, biomicrudite
OP. CANYON 9593
96
L., brown, gray, very fine, micrite
97
L., tan, brown, fine, forams, biomicrite
Chert, light gray, smooth
98

STIMULATION PROGRAM

The proposed disposal well was originally drilled in February, 1977 to test the Morrow formation. The well has been plugged back to the Canyon formation which is currently open. (see attached Exhibit "A")

It is proposed to set a cast iron bridge plug at +- 9, 500' with 3 sacks of cement on top of it. Perforations will be made from 9,270' to 9,290' as the disposal zone. Treatment of the interval would consist of 1,000 gallons of 15% NE acid.

Attachment Form C-108 IX

LOGGING DATA

(Section X, Form C-108)

The Schlumberger Dual Laterolog run on the subject well on April 12, 1977 is included here as Exhibit "C" to this Data Sheet, with the proposed disposal interval marked in red thereon.

Attachment 108 X

FRESH WATER ANALYSIS

There are no fresh water wells within 1 mile of the proposed injection well.

Attachment C-108 XI

AFFIRMATIVE STATEMENT

Applicant hereby affirms that he has examined the available geologic and engineering data and finds no evidence of open faults or other hydrologic connections between the disposal zone and any underground source of drinking water.

Attachment C-108 XII

marbob
energy corporation

January 23, 1986

Tenneco Oil Exploration & Production
7990 IH 10 West
San Antonio, Texas 78230

RE: Proposed Disposal Well

Gentlemen:

Enclosed you will find an application for a Proposed Disposal Well located in Section 27, Township 17 South, Range 29 East, Eddy County, New Mexico.

If you have any questions regarding this application, please contact Ron Head at (505) 748-3303. If you have an objection to the application, please sign below and return one copy of this letter to Marbob Energy Corporation and one copy to the Oil Conservation Division, Santa Fe, New Mexico 87501.

Sincerely,

Ron Head

Ron Head
Land Department

RH/rr

Enclc

Tenn & Production has an objection to the prop

BY: _____

TITLE: _____

DATE: _____

Attachment Form C-108 XIV(a)

marbob
energy corporation

January 23, 1986

Conoco, Inc.
P. O. Box 1959
Midland, Texas 79702

RE: Proposed Disposal Well

Gentlemen:

Enclosed you will find an application for a Proposed Disposal Well located in Section 27, Township 17 South, Range 29 East, Eddy County, New Mexico.

If you have any questions regarding this application, please contact Ron Head at (505) 748-3303. If you have an objection to the application, please sign below and return one copy of this letter to Marbob Energy Corporation and one copy to the Oil Conservation Division, Santa Fe, New Mexico 87501.

Sincerely,

Ron Head

Ron Head
Land Department

RH/rr

Enclosures

Conoco, Inc. has an objection to the proposed disposal well.

BY:_____

TITLE:_____

DATE:_____

marbob
energy corporation

January 23, 1986

Southland Royalty Company
21 Desta Drive
Midland, Texas 79705

RE: Proposed Disposal Well

Gentlemen:

Enclosed you will find an application for a Proposed Disposal Well located in Section 27, Township 17 South, Range 29 East, Eddy County, New Mexico.

If you have any questions regarding this application, please contact Ron Head at (505) 748-3303. If you have an objection to the application, please sign below and return one copy of this letter to Marbob Energy Corporation and one copy to the Oil Conservation Division, Santa Fe, New Mexico 87501.

Sincerely,

Ron Head

Ron Head
Land Department

RH/rr

Enclosures

Southland Royalty Company has an objection to the proposed disposal well.

BY: _____

TITLE: _____

DATE: _____

marbob
energy corporation

January 23, 1986

ARCO Oil & Gas Company
P. O. Box 1610
Midland, Texas 79702

RE: Proposed Disposal Well

Gentlemen:

Enclosed you will find an application for a Proposed Disposal Well located in Section 27, Township 17 South, Range 29 East, Eddy County, New Mexico.

If you have any questions regarding this application, please contact Ron Head at (505) 748-3303. If you have an objection to the application, please sign below and return one copy of this letter to Marbob Energy Corporation and one copy to the Oil Conservation Division, Santa Fe, New Mexico 87501.

Sincerely,

Ron Head

Ron Head
Land Department

RH/rr

Enclosures

ARCO Oil & Gas Company has an objection to the proposed disposal well.

BY: _____

TITLE: _____

DATE: _____

marbob
energy corporation

January 23, 1986

Jack Plemons
1010 West Avenue H
Lovington, New Mexico 88260

RE: Proposed Disposal Well

Gentlemen:

Enclosed you will find an application for a Proposed Disposal Well located in Section 27, Township 17 South, Range 29 East, Eddy County, New Mexico.

If you have any questions regarding this application, please contact Ron Head at (505) 748-3303. If you have an objection to the application, please sign below and return one copy of this letter to Marbob Energy Corporation and one copy to the Oil Conservation Division, Santa Fe, New Mexico 87501.

Sincerely,

Ron Head

Ron Head
Land Department

RH/rr

Enclosures

Jack Plemons has an objection to the proposed disposal well.

BY:_____

TITLE:_____

DATE:_____

marbob
energy corporation

January 23, 1986

El Paso Natural Gas
P. O. Box 1492
El Paso, Texas 79978

RE: Proposed Disposal Well

Gentlemen:

Enclosed you will find an application for a Proposed Disposal Well located in Section 27, Township 17 South, Range 29 East, Eddy County, New Mexico.

If you have any questions regarding this application, please contact Ron Head at (505) 748-3303. If you have an objection to the application, please sign below and return one copy of this letter to Marbob Energy Corporation and one copy to the Oil Conservation Division, Santa Fe, New Mexico 87501.

Sincerely,

Ron Head

Ron Head
Land Department

RH/rr

Enclosures

El Paso Natural Gas has an objection to the proposed disposal well.

BY:_____

TITLE:_____

DATE:_____

marbob
energy corporation

January 23, 1986

New Mexico State Land Office
Surface Bureau
P. O. Box 1148
Santa Fe, New Mexico 87504-1148

RE: Proposed Disposal Well

Gentlemen:

Enclosed you will find an application for a Proposed Disposal Well located in Section 27, Township 17 South, Range 29 East, Eddy County, New Mexico.

If you have any questions regarding this application, please contact Ron Head at (505) 748-3303. If you have an objection to the application, please sign below and return one copy of this letter to Marbob Energy Corporation and one copy to the Oil Conservation Division, Santa Fe, New Mexico 87501.

Sincerely,

Ron Head

Ron Head
Land Department

RH/rr

Enclosures

New Mexico State Land Office has an objection to the proposed disposal well.

BY: _____

TITLE: _____

DATE: _____

P 672 519 367

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to N.M. State Land Office	
Street and No. Surface Bureau P. O. Box 1148	
P.O., State and ZIP Code Santa Fe, NM 87504-1148	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date 1/23/86	

PS Form 3800, Feb. 1982 * U.S.G.P.O. 1983-403-517

P 672 519 366

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to El Paso Natural Gas	
Street and No. P. O. Box 1492	
P.O., State and ZIP Code El Paso, TX 79978	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date 1/23/86	

PS Form 3800, Feb. 1982 * U.S.G.P.O. 1983-403-517

P 672 519 365

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Jack Plemons	
Street and No. 1010 W. Ave. H	
P.O., State and ZIP Code Lovington, NM 88260	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date 1/23/86	

PS Form 3800, Feb. 1982 * U.S.G.P.O. 1983-403-517

P 672 519 364

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to ARCO Oil & Gas Co.	
Street and No. P. O. Box 1610	
P.O., State and ZIP Code Midland, TX 79702	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date 1/23/86	

PS Form 3800, Feb. 1982 * U.S.G.P.O. 1983-403-517

P 672 519 363

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Southland Royalty Co.	
Street and No. 21 Desta Drive	
P.O. State and ZIP Code Midland, TX 79705	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date 1/23/86	

PS Form 3800, Feb. 1982 * U.S.G.P.O. 1983-403-517

P 672 519 362

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Conoco, Inc.	
Street and No. P. O. Box 1959	
P.O. State and ZIP Code Midland, TX 79702	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date 1/23/86	

PS Form 3800, Feb. 1982 * U.S.G.P.O. 1983-403-517

P 672 519 361

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Tenneco Oil Exploration	
Street and No. 7990 IH 10 West	
P.O. State and ZIP Code San Antonio, TX 78230	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date 1/23/86	

Form 3800, Feb. 1982 * U.S.G.P.O. 1983-403-517

ELECTRICAL

CONNOR ELECTRIC
Industrial, commercial, residential wiring. Motors rewound, repaired, rebuilt. 746-3771.

BOATS

FOR SALE
1984 Baja 'FishN' Ski". Fully rigged, 150 Johnson. Beautiful, with cover. $11,500. Call 746-4042.

LEGAL NOTICE

Notice is hereby given pursuant to Rule 701B3 of the New Mexico Oil Conservation Division Rules and Regulations that it is the intent of Marbob Energy Corporation to utilize the F.M. Robinson Well No. 1 located 1850 FNL and 660 FWL of Section 27, Township 17 South, Range 29 East, N.M.P.M., Eddy County, New Mexico for the underground disposal of produced water. Injection will average 2000 barrels per day but could go as high as 5000 barrels per day. Maximum injection pressure will not exceed 1854 PSI. Questions regarding this proposal may be directed to Ron Head, Marbob Energy Corporation, P.O. Drawer 217, Artesia, New Mexico 88210, 748-3303.

Objection to this proposal or request for hearing on the matter together with the reasons, therefore, must be filed in writing with the Oil Conservation Division, P.O. Box 2083, Santa Fe, New Mexico 87501 within 15 days after date of publication of this notice.

Published in the Artesia Daily Press, Artesia, N.M., Jan. 24, 1986.

Attachment Form C-108
XIV(b)

EXHIBIT "A"

RU 5/29/79. Killed well, installed BOP. POH w/compl assy. RIH w/cmt retr, set retr @ 10,800'. Cmt squeezed perfs 10,911-10,929' w/100 sx C1 E cmt cont'g 1/2% Halad followed by 50 sx C1 C Neat cmt. RO 25 sx cmt to pit. Morrow P&A eff 6/3/79.

1. Rigged up 11/18/79, killed well, installed BOP, POH w/comp assy.
2. RIH w/tbg to Mod D pkr @ 10,326'. Squeeze cmtd perfs 10,363-10,365' w/50 sx C1 H w/.05% Halad-9 followed by 25 sx C1 E Neat cmt. Spotted 30' cmt plug on top of pkr @ 10,326'.
3. Ran GR-Collar log, found no cmt on top of pkr @ 10,326'. Ran & set CIBP @ 10,200' dumped 2 sx cmt on top. Atoka zone P&A eff 11/19/79.

1. On 11/20/79 perforated Canyon 9835-9850' w/4 JSPF.
2. RIH w/pkr, set pkr @ 9810'. Swbd tbg dry.
3. Acidized pers 9835-9850' w/3000 gals HCL acid, swbd back 418 BW, flwd 104 Bbls Dist in 2 hrs, 250-300# FTP, 8-10% wtr, SITP 2300#. Killed well, POH w/tbg & pkr.
4. RIH w/comp assy, pkr @ 9809'. Swbd load wtr. Well flwd 8 hrs on 32/64" ch, 40 BNO, 21 BLW, 400# FTP, SITP 1708#.
5. On 24 hr potential test 5/22/80 flwd Canyon perfs 9835-9850' 73 BO, 14 BW, 431 MCFG on 32/64" ck, FTP 180#. 51° gnty, GOR 5904:1. FINAL REPORT.

EXHIBIT "B"

NMOCC COPY

C-SF

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.: LC 028775 B

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

RECEIVED
JAN 13 1978
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

RECEIVED
JUN 13 1980
O. C. D.
ARTESIA, OFFICE

1. OIL WELL ☐ GAS WELL ☐ OTHER Dry - P&A

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: Atlantic Richfield Company

8. FARM OR LEASE NAME: F.M.Robinson Fed Com.

3. ADDRESS OF OPERATOR: P. O. Box 1710, Hobbs, New Mexico 88240

9. WELL NO.: 1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface: 1825' FSL & 2220' FWL (Unit Ltr K)

10. FIELD AND POOL, OR WILDCAT: Grayburg Morrow

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 27-17S-29E

14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.)	12. COUNTY OR PARISH	13. STATE
	3527' GR	Eddy	N.M.

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	X
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) DST			X
(Other)			☐	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Drld to 6415' @ 10:00 pm 11/18/77. DST #1, 6355-6415' Abo. TO @ 7:52 AM 11/19/77 for ¼ hr preflow. TO w/strong blow, cont'd thruout, no gas to surface. Closed tool @ 8:07 AM for 1 hr ISIP. Reopen tool @ 9:10 am for 1 hr flow period, op w/good blow, decr to zero. No gas to surface. Closed tool @ 10:10 am for 1½ hr SI. Pld pkr free @ 11:40 am. POH w/test tools. Rec 4318' 8.6# gel slightly gas cut sulphur wtr. IHP 2871#, IFP 825-1691, ISIP 2005, FFP 1741-2005, FSIP 2005, FHP 2858. Resumed drlg @ 8:00 pm 11/19/77. Fin drlg to 7340' @ 2:10 pm 11/22/77. DST #2, 7295-7340' Wolfcamp. TO @ 5:25 am 11/23/77 for ¼ hr preflow. TO w/weak blow incr to good blow. No gas to surf. Closed tool @ 5:40 am for 1 hr SI. Reopen tool @ 6:40 am. TO w/weak blow, incr to good blow. No gas to surf. Shut tool @ 8:40 am for 4 hr final shut in. Pld pkrs free @ 12:43 pm & POH w/test tools. Rec 15' oil & 2882' salt wtr. IHP 3335#, IFP 135-236, ISIP 2595, FFP 273-1290, FSIP not rec. Tool failed to close. FHP 3335. Resumed drlg @ 8:45 pm 11/23/77. Fin drlg to 11,065' TD @ 9:00 am 12/7/77. Ran CNL-Den, DLL w/RXO, BHC Sonic logs. DST #3, 10,758-11,080' Morrow. TO @ 10:40 am 12/9/77 for 15 min IF, fair blow. Closed tool @ 10:55 am for 1 hr ISI. TO @ 11:15 am for 1 hr FFP. SIP 0-3# max. Closed tool @ 12:55 pm for 1½ hr FSIP. Rel pkr @ 2:30 pm, rec 436' DM. Temp 155°. IHP 5452, IFP 382-319, ISIP 597, FFP 306-370, FSIP 509, FHP 5452. DST #4, 8710-8800' Wolfcamp. Set straddle pkrs & test tool opened for 15 min IFP @ 7:03 am 12/10/77. Fair blow in 2 mins. Closed tool @ 7:18 am for 1 hr SIP. SIP 5-10# max. TO @ 8:18 am for 1 hr FFP. Close tool @ 9:18 am for 3 hr FSI. Rel pkrs @ 12:58 pm & POH. Rec 10' oil, 40.2° @ 60° & 390' oil & gas cut drlg mud (5% oil, 40% gas). Temp 132°. IHP 4261, IFP 36-62, ISIP 3144, FFP 74-125, FSIP 2751, FHP 4261. On 12/11/77 ran in hole w/DP OE, spotted cmt plugs as follows: 200'

(cont'd on attached page #2)

18. I hereby certify that the foregoing is true and correct

SIGNED _____ TITLE Dist. Drlg. Supt. DATE 1/12/78

(This space for Federal or State office use)

APPROVED BY (Orig. Sgd.) GEORGE H. STEWART TITLE ACTING DISTRICT ENGINEER DATE JUN 12 1980

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form 9-331
R. M. Robinson Fed Com #1
1/12/78

plug (75 sx) 10,790-10,590', 200' plug (75 sx) 9120-8920', 150' plug (55 sx) 7285-7135', 150' plug (55 sx) 5400-5250', 100' plug (40 sx) 3590-3490'. Spotted 10 sk cmt plug @ surface. Installed regulation dry hole marker. Cleaned & leveled location. Plugged & abandoned eff 12/21/77. Final Report.

Petroleum Information

COUNTY EDDY FIELD Grayburg STATE NM

OPR ATLANTIC RICHFIELD CO. API 30-015-22238

NO. 1 LEASE Robinson, F. M. Federal Com. MAP

Sec 27, T17S, R29E 2220/W COORD

1825 ~~1650~~' FSL, ~~1980' FWL~~ of Sec 2-2-10 NM

4 mi. W/Loco Hills SPD 10-29-77 CMP 12-21-77

SIG.

20" at 203' w/400 sx
13 3/8" at 825' w/770 sx
9 5/8" at 3535' w/932 sx

WELL CLASS: INIT D FIN D ELEV. F. & S.

FORMATION	DATUM	FORMATION	DATUM

TD 11,065' (MRRW) PBD

DRY & ABANDONED

CONTR McVay #7 OPRS ELEV 3525' GL PD 11,100' RT

F.R. 7-4-77
(Morrow)

11-4-77 Drlg 2200'

11-11-77 TD 3550'; WOC

11-23-77 TD 7340'; On DST 7295-7340'
DST (ABO) 6355-6415', open 1 hr 15 mins, rec 4318' sli GC Sul Wtr, 1 hr ISIP 2005#, FP 825-2005#, 1 hr 30 min FSIP 2005#, HP 2871-2858#, BHT 107 deg

12-2-77 Drlg 10,310'
DST (WFMP) 7295-7340', open 2 hr 15 mins, rec 15' oil + 2882' SW, 1 hr ISIP 2596#, FP 135-1290#, 4 hr FSIP failed, HP 3335-3335#, BHT 112 deg

12-9-77 TD 11,065'; On DST

2-2-10 NM

12-15-77 TD 11,065'; D&A (Hold)
DST (MRRW) 10,758-11,080', open 1 hr 15 mins, rec 436' DM, 1 hr ISIP 597#, FP 382-319#, 2 hr FSIP 509#, HP 5452-5452#
DST-SP (WFMP) 8710-8800', open 1 hr, rec 10' FO + 390' O&GCM, 1 hr ISIP 3144#, FP 74-125#, 3 hr FSIP 2751#, HP 4261-4261#, BHT 132 deg

2-6-78 TD 11,065'; Dry & Abandoned
SAMPLE TOP: Wolfcamp 7192'
LOGS RUN: CNL, DENL, DILL, BHC, SONL

2-11-78 COMPLETION ISSUED

2-2-10 NM
IC 30-015-70225-77

Schlumberger

DUAL LATEROLOG MICRO-SFL

COUNTY EDDY
FIELD GRAYBERY-MORROW
LOCATION
WELL ROBINSON GAS COM #1
COMPANY ATLANTIC RICHFIELD

COMPANY ATLANTIC RICHFIELD COMPANY
WELL ROBINSON GAS COM #1
FIELD GRAYBERY - MORROW
COUNTY EDDY STATE NEW MEXICO

LOCATION: 1850' FNL & 660' FWL
API SERIAL NO. | SEC 27 | TWP 17-S | RANGE 29-E

Other Services: CNL-FDC

Permanent Datum: G.L. Elev.: 3544
Log Measured From K.B. 23 Ft. Above Perm. Datum
Drilling Measured From K.B.

Elev.: K.B. 3565
D.F. 3563
G.L. 3544

Date	4-12-77			
Run No.	ONE			
Depth—Driller	11060			
Depth—Logger (Schl.)	11069			
Btm. Log Interval	11068			
Top Log Interval	6000			
Casing—Driller	8 5/8 @ 3470	@	@	@
Casing—Logger	BIT			
Bit Size	7 7/8			
Type Fluid in Hole	SALT MUD			
Dens. / Visc.	9.4 / 43			
pH / Fluid Loss	9 / 5 ml	ml	ml	ml
Source of Sample	PIT			
Rm @ Meas. Temp.	.09 @ 77°F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	.088 @ 77°F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	.12 @ 77°F	@ °F	@ °F	@ °F
Source: Rmf / Rmc	M / C			
Rm @ BHT	.05 @ 138°F	@ °F	@ °F	@ °F
TIME: Circulation Stopped	2100 4-11			
TIME: Logger on Bottom	0400 4-12			
Max. Rec. Temp.	138 °F	°F	°F	°F
Equip. / Location	7732 HOBBS			
Recorded By	MULLEN			

FOLD HERE

The well name, location and borehole reference data were furnished by the customer.

Run No.		ONE			
Service Order No.		2481			
Fluid Level					
Salinity, PPM CL.		65000			
EQUIPMENT DATA					
Panel (DLP)		939			
Panel (SRP)		970			
Cartridge (DLC)		795			
Cartridge (SRE)		931			
Sonde (DLS)		939			
Sonde (SRS)		878			
Lower Electrode (DLE)					
Memorizer Panel		792			
Tape Recorder (TTR)		794			
Depth Encoder (DRE)		1897			
Pressure Wheel (CPW)		1743			
Centralizers: After Spring, Standoffs, Wireline, or None	Type	CME-H, CALIPER			
	No.	1 EACH			
	S. O. Inches				
CALIBRATION DATA					
GR	BKG. CPS				
	Source CPS				
LOGGING DATA					
GR	Sensitivity	100			
	Scale -100 Div.	100			
	T. C. - sec	1			
Speed FPM		40			
BOTTOM HOLE TEMPERATURE					
Time Entering Hole					
Time Bottom Reached					
Time Last Off Bottom					
Time Out of Hole					
Distance TD to Therm.					
Thermometer #1		°F	°F	°F	°F
Thermometer #2		°F	°F	°F	°F
Thermometer #3		°F	°F	°F	°F
Rw FROM DRILL STEM TEST					
DST #1 - Rw @ 100 °F		ΩM	ΩM	ΩM	ΩM
DST #2 - Rw @ 100 °F		ΩM	ΩM	ΩM	ΩM

SCALE CHANGES

Type Log	Depth	Scale Up Hole	Scale

GAMMA RAY API | DEPT | **RESISTIVITY** OHMS. M² M

Thermometer #3	°F	°F	°F	°F	
w FROM DRILL STEM TEST					
ST #1 - Rw @ 100 °F	ΩM	ΩM	ΩM	ΩM	
ST #2 - Rw @ 100 °F	ΩM	ΩM	ΩM	ΩM	

GAMMA RAY API UNITS

0 100

100 200

CALIPER DIAM. IN INCHES

6 16

DEPTH

RESISTIVITY OHMS. M^2 M

SHALLOW LATEROLOG – LL_S

0.2 1.0 10 100 1000

DEEP LATEROLOG – LL_D

0.2 1.0 10 100 1000

LR

GR

Caliper

6000

6100

6200

6300

6400

7000 6900 6800 6700 6600 6500 6400

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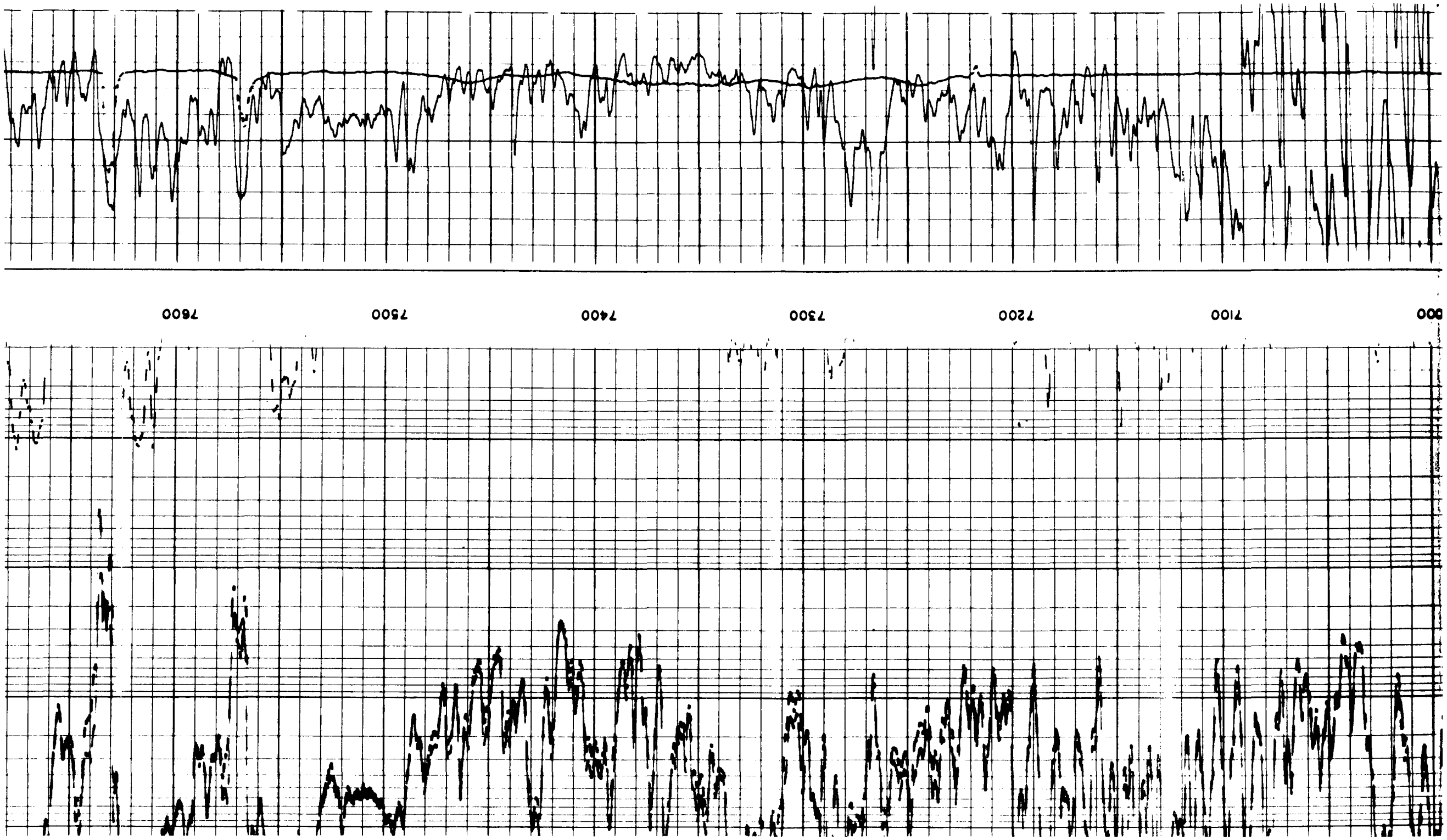
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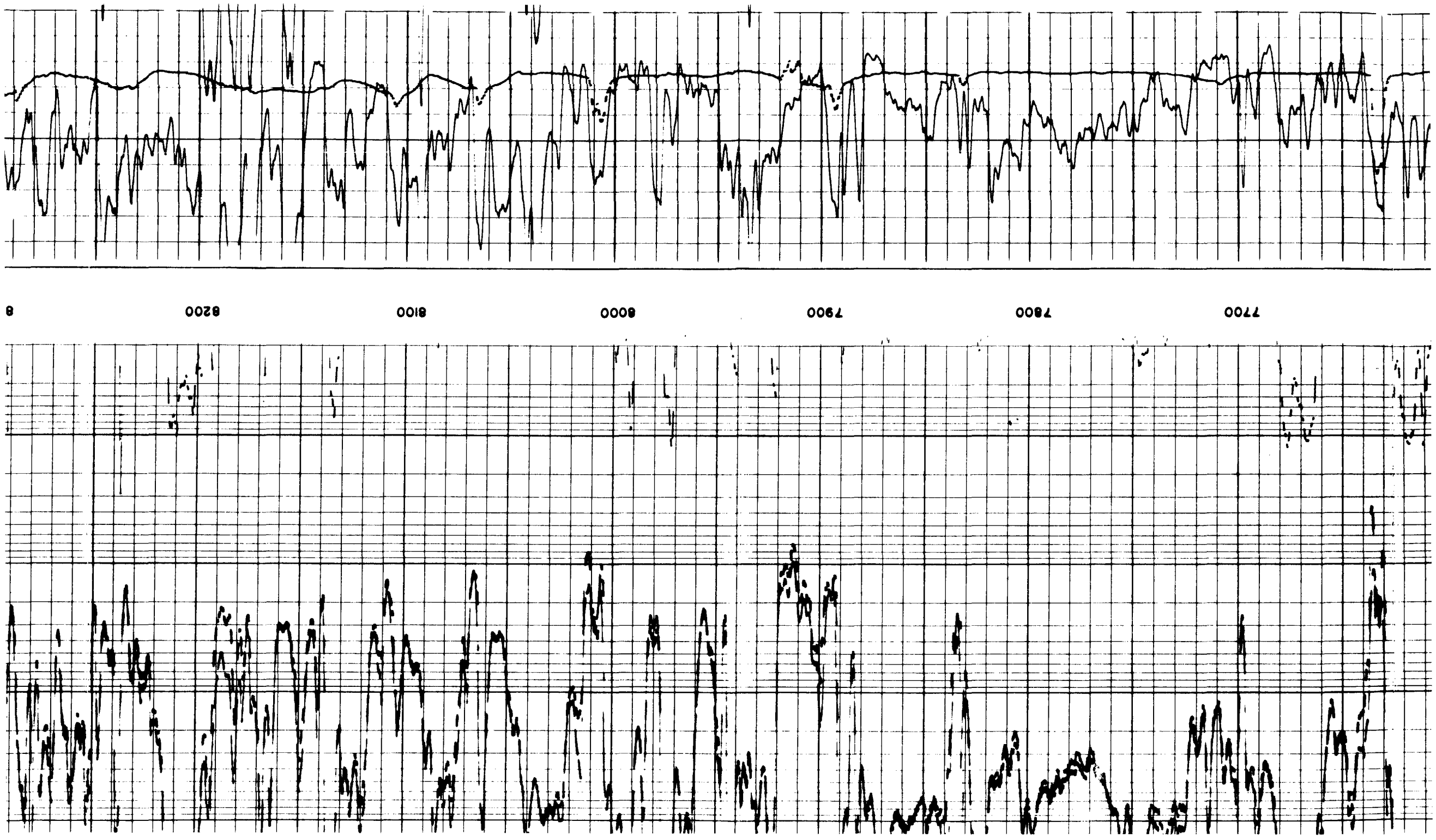
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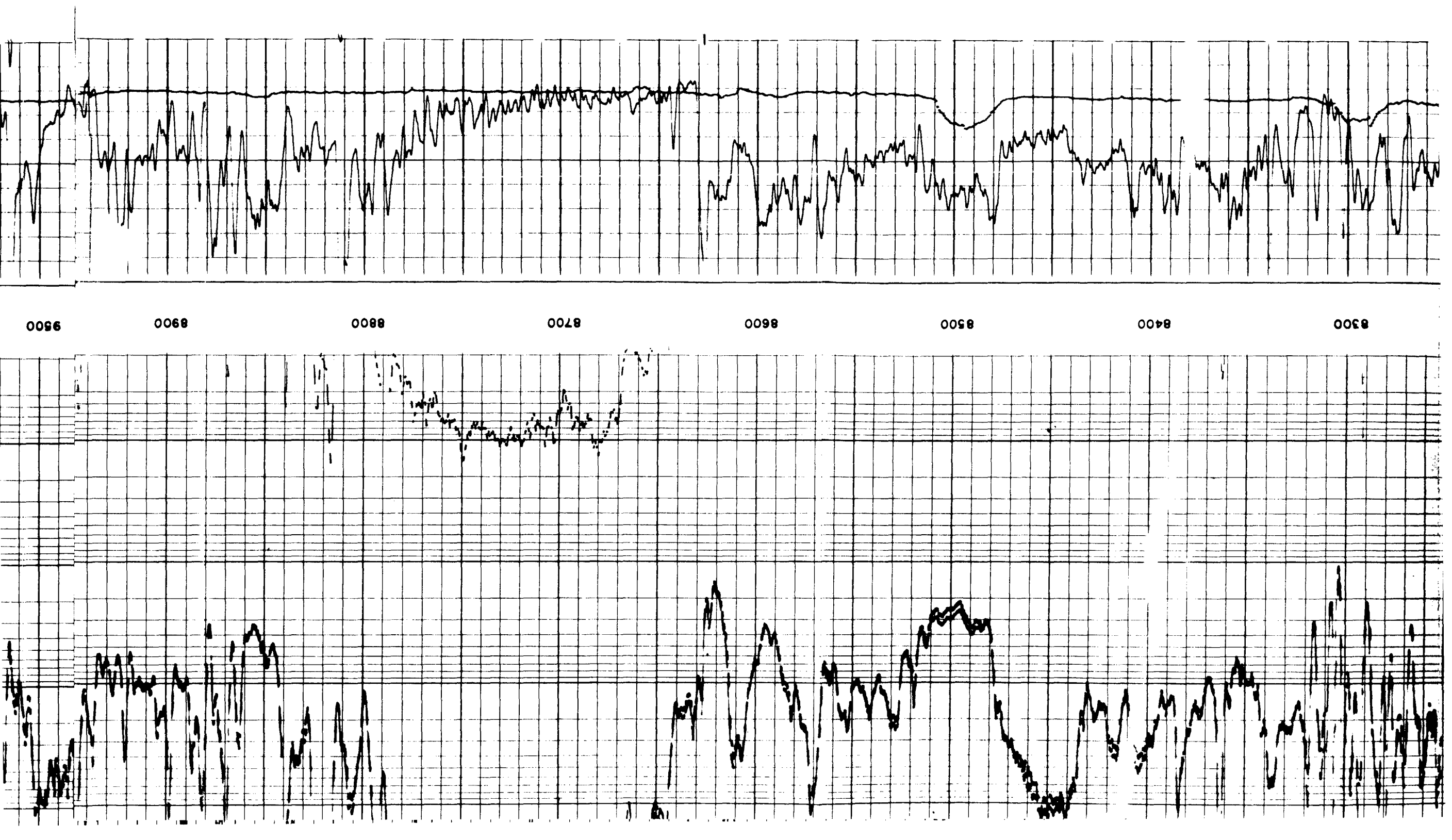
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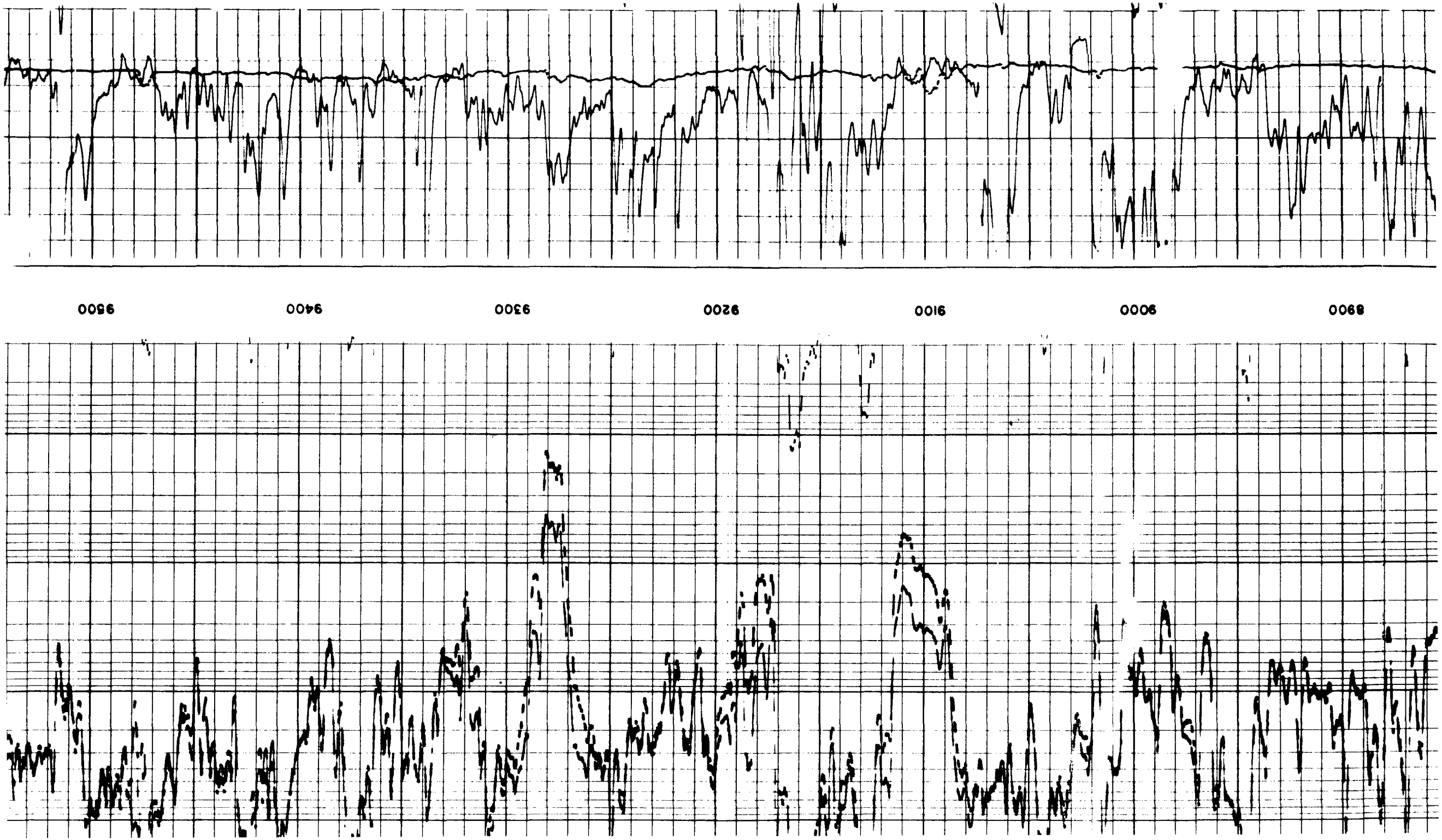
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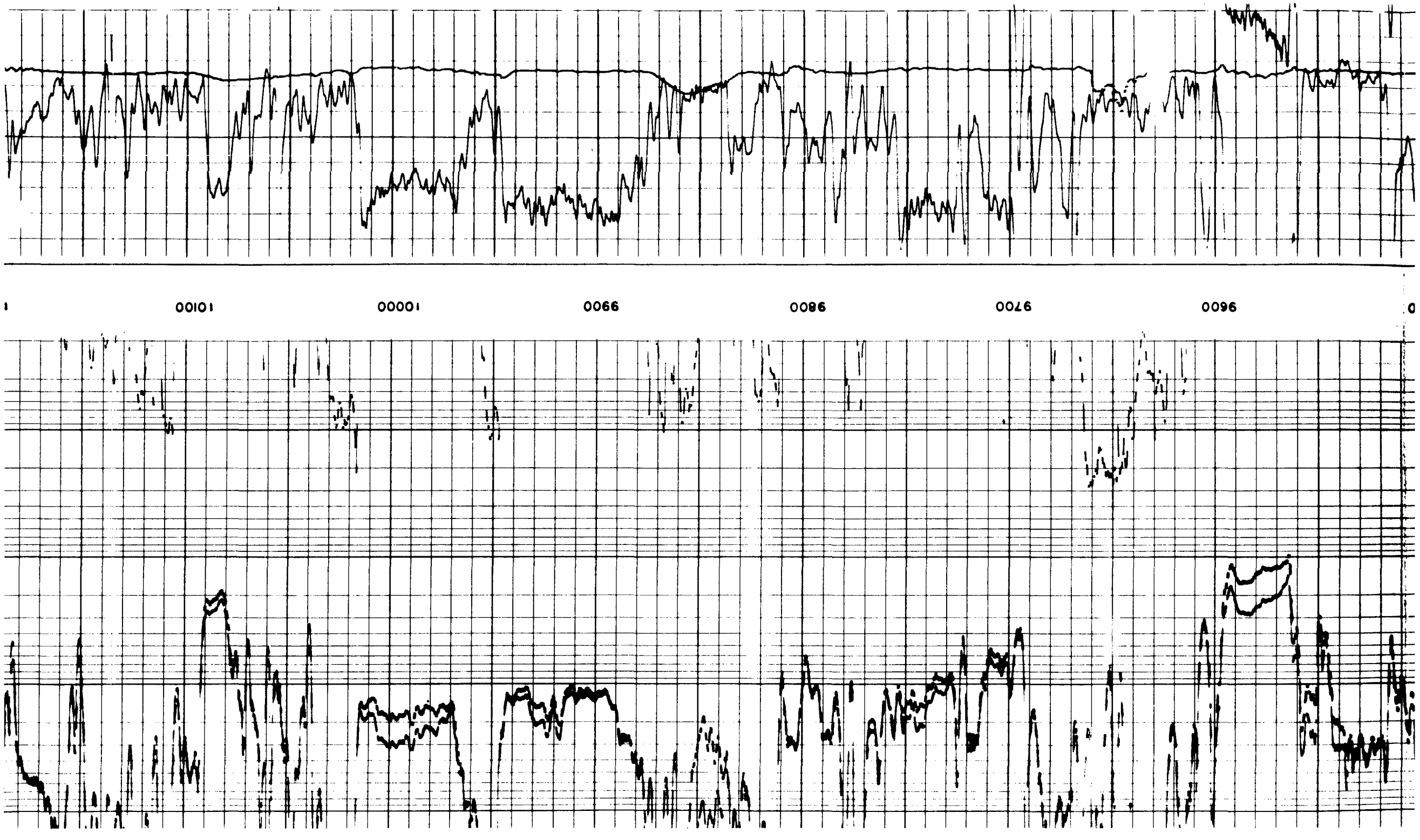
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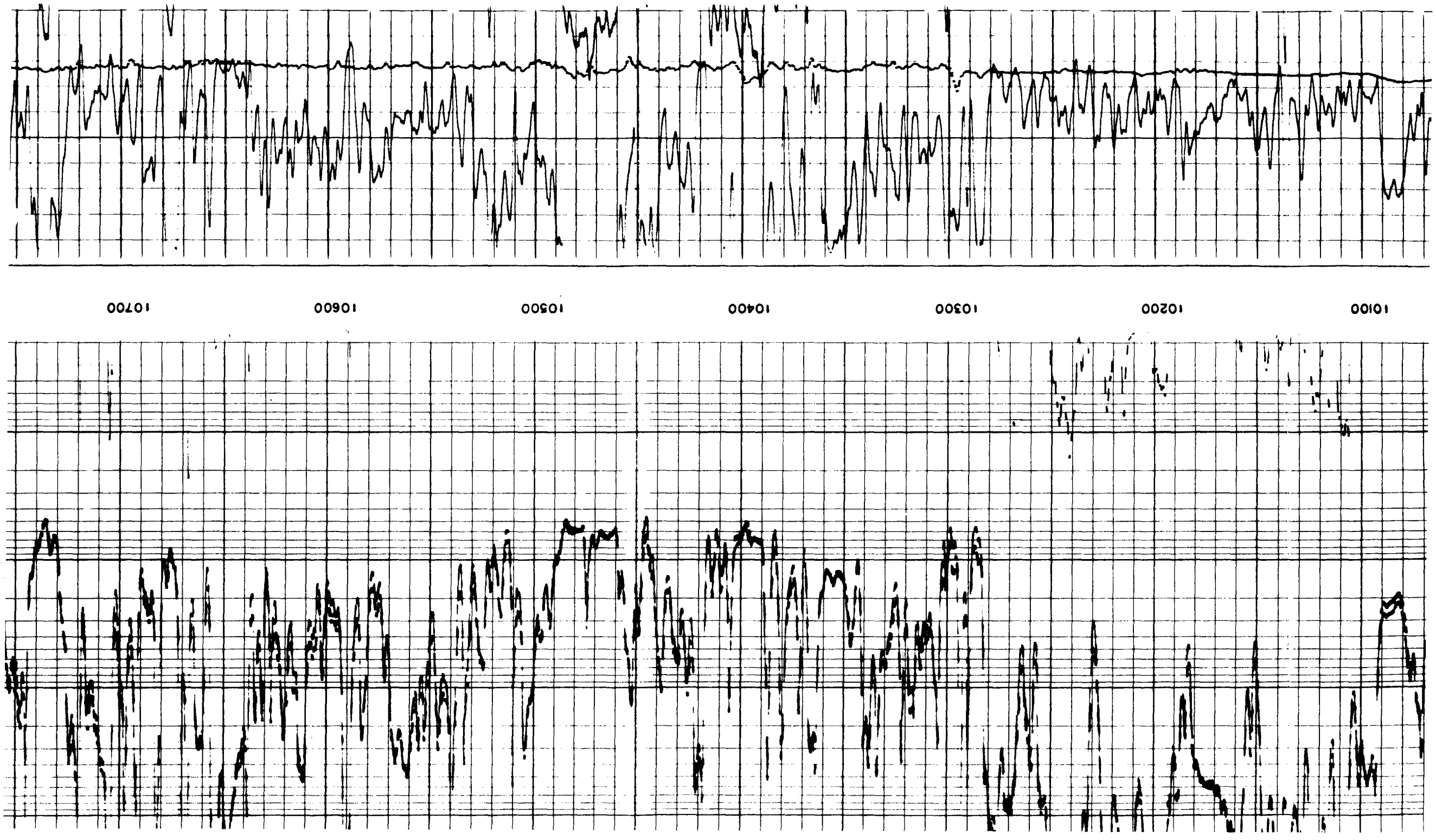
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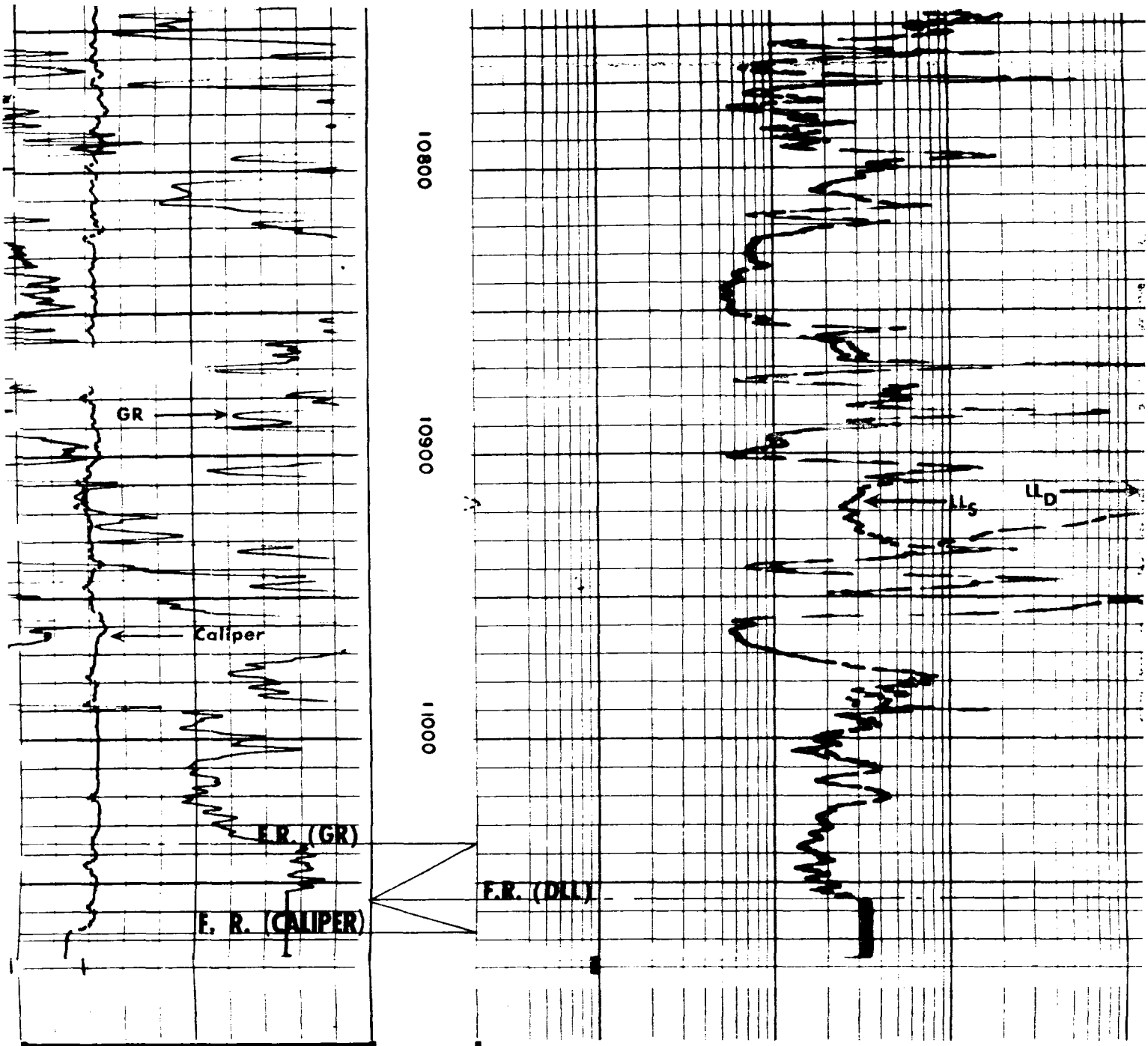


CALIPER DIAM. IN INCHES

6 — 16

GAMMA RAY API UNITS

0 — 100

100 — 200

DEPTH

RESISTIVITY OHMS. M^2/M

SHALLOW LATEROLOG – LL_S

0.2 — 1.0 — 10 — 100 — 1000

DEEP LATEROLOG – LL_D

0.2 — 1.0 — 10 — 100 — 1000

COMPANY ATLANTIC RICHFIELD COMPANY

WELL ROBINSON GAS COM #1

FIELD GRAYBERY - MORROW

COUNTY EDDY STATE NEW MEXICO

SCHL. FR 11068
SCHL. TD 11069
DRLR. TD 11060

Elev: KB 3565
DF 3563
GL 3544

DETAIL LOG

5" = 100'

GAMMA RAY API UNITS

0 — 100

DEPTH

RESISTIVITY OHMS. M^2 M

MICRO - SFL

DETAIL LOG

5" = 100'

GAMMA RAY API UNITS

0 — 100

100 — 200

CALIPER DIAM. IN INCHES

6 — 16

DEPTH

RESISTIVITY OHMS. M^2 M

MICRO - SFL

0.2 — 1.0 — 10 — 100 — 1000

SHALLOW LATEROLOG - LL_S

0.2 — 1.0 — 10 — 100 — 1000

DEEP LATEROLOG - LL_D

0.2 — 1.0 — 10 — 100 — 1000

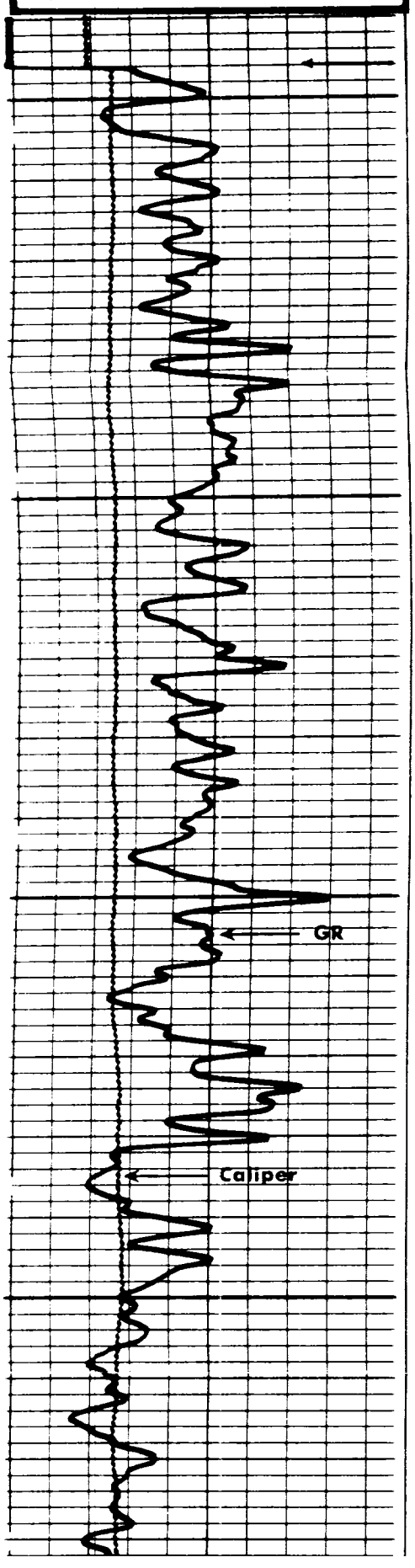
LR

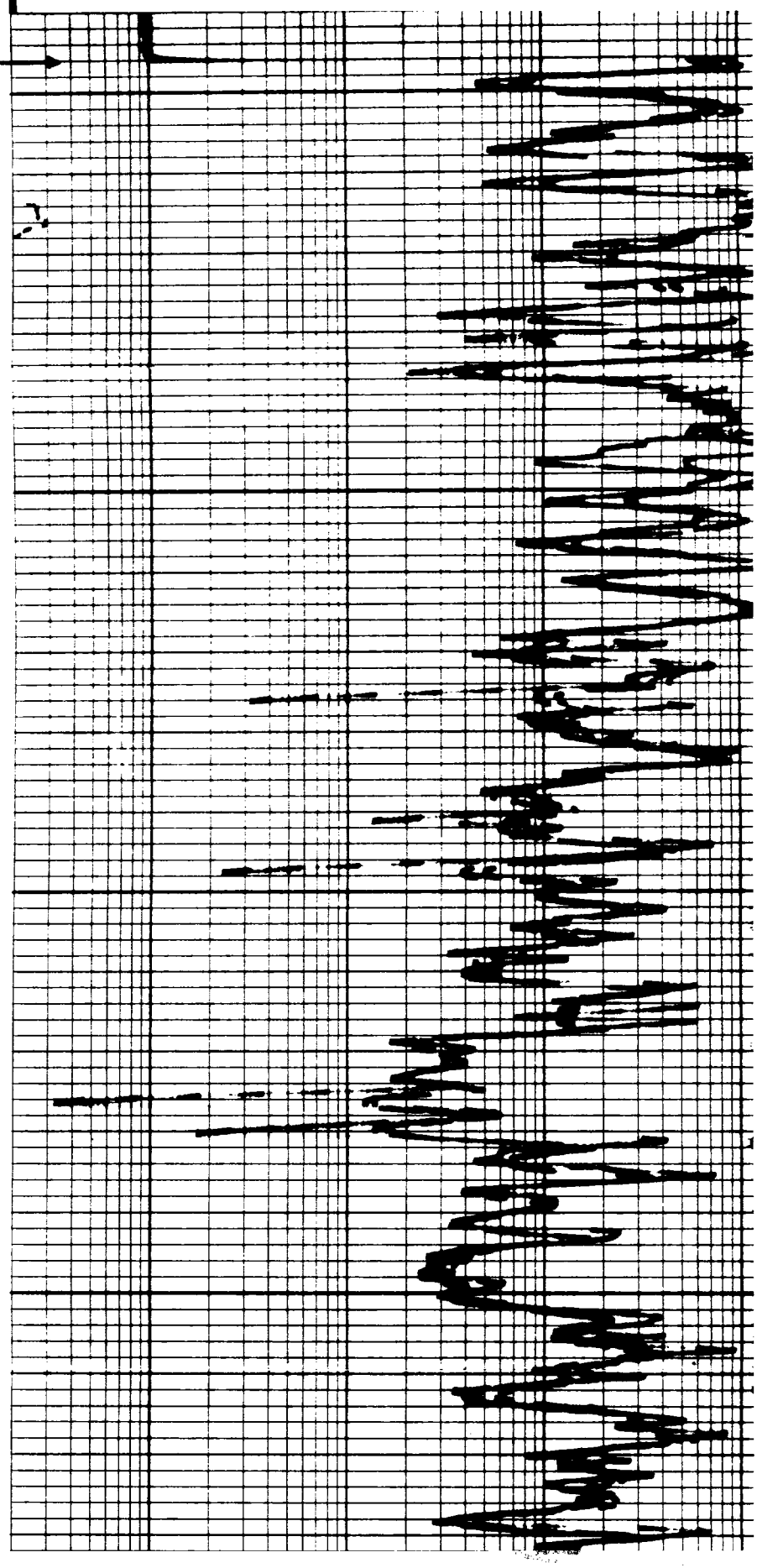
6000

GR

Caliper

6100





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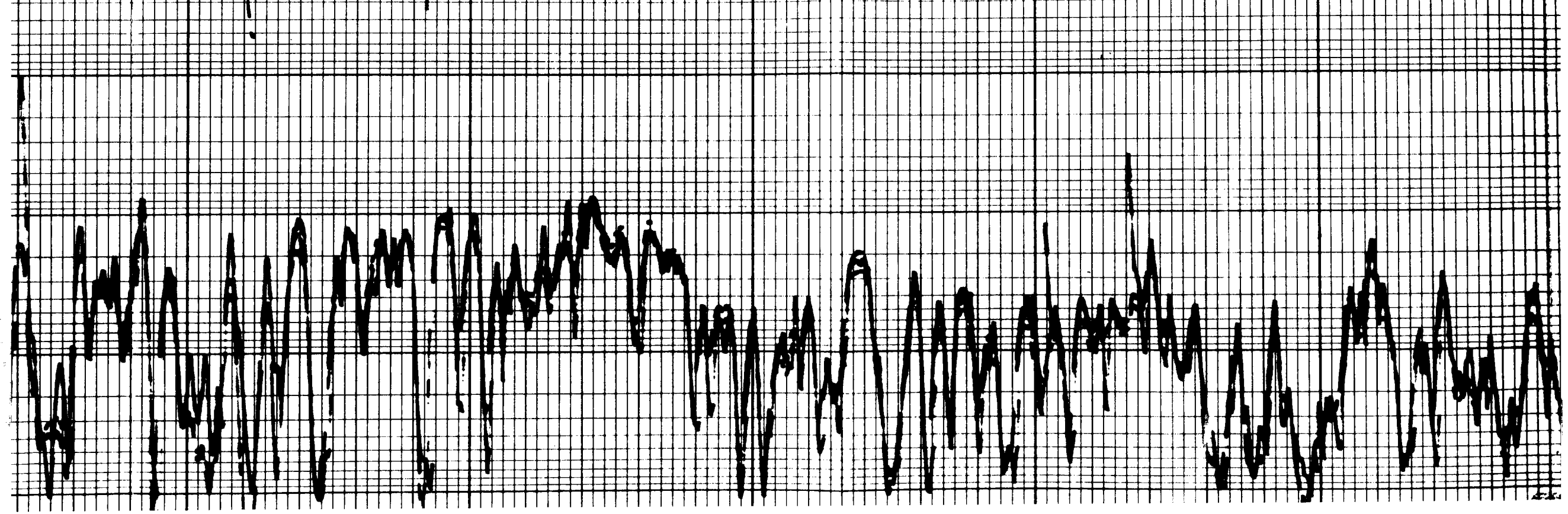

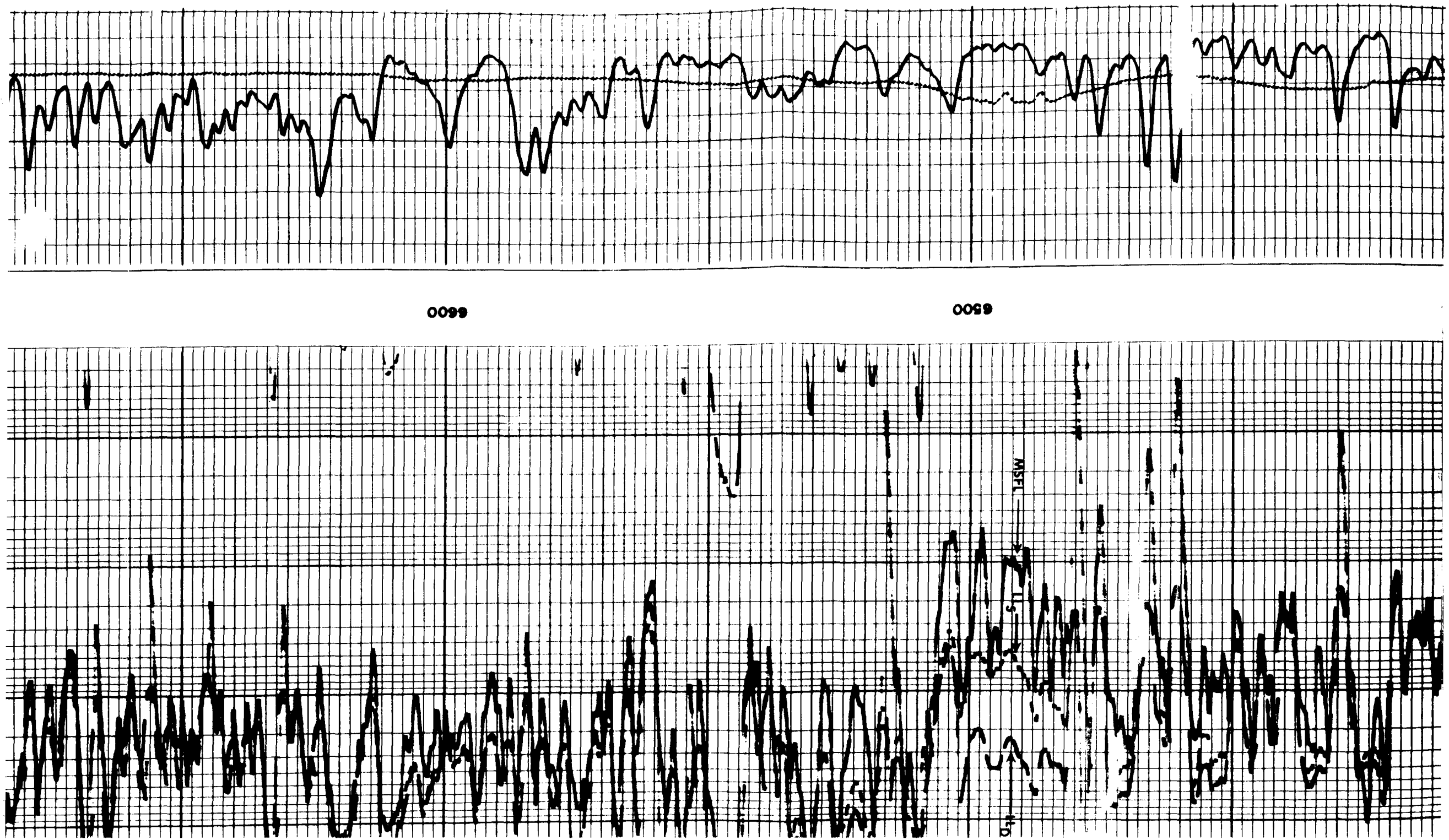
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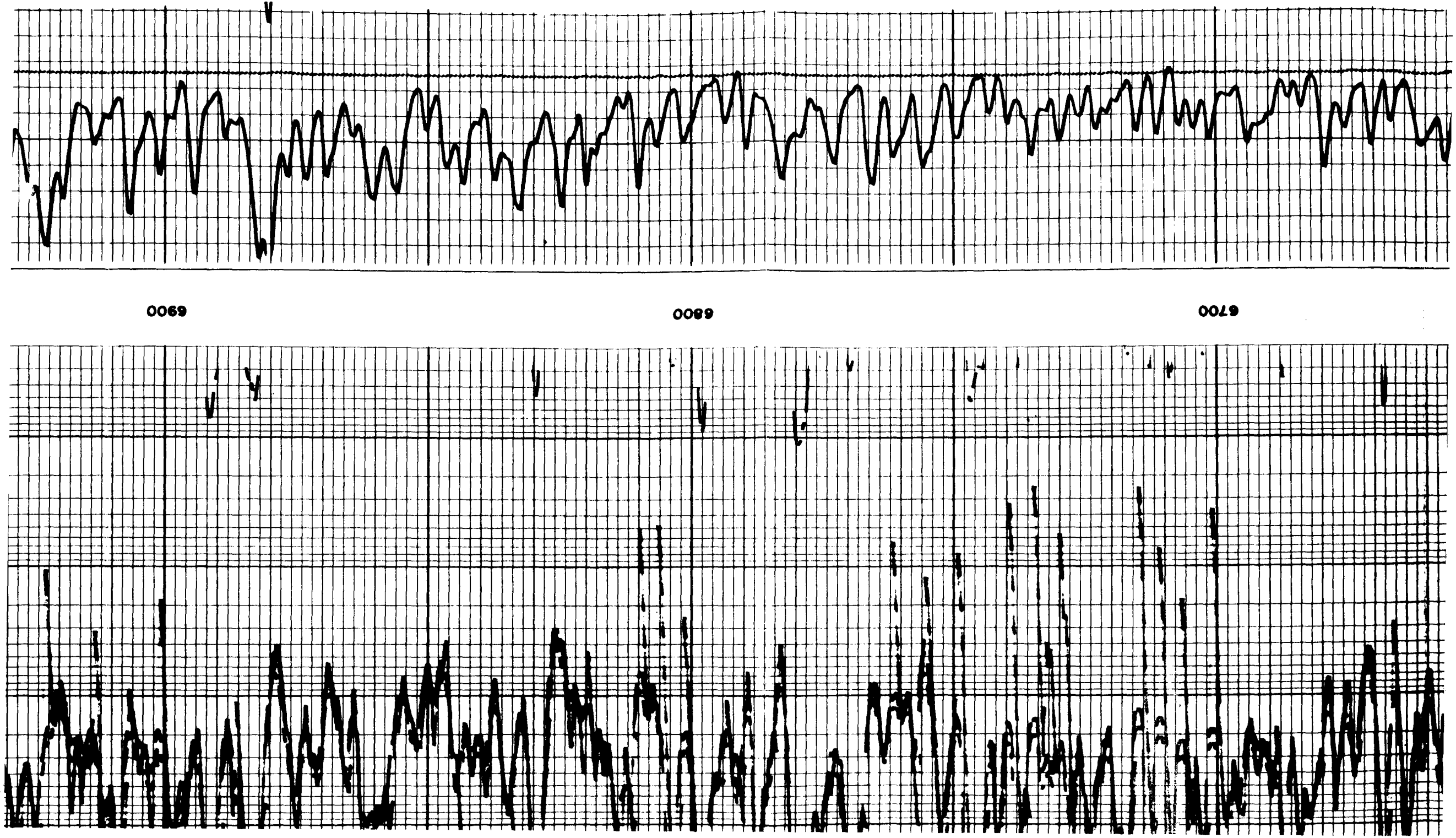
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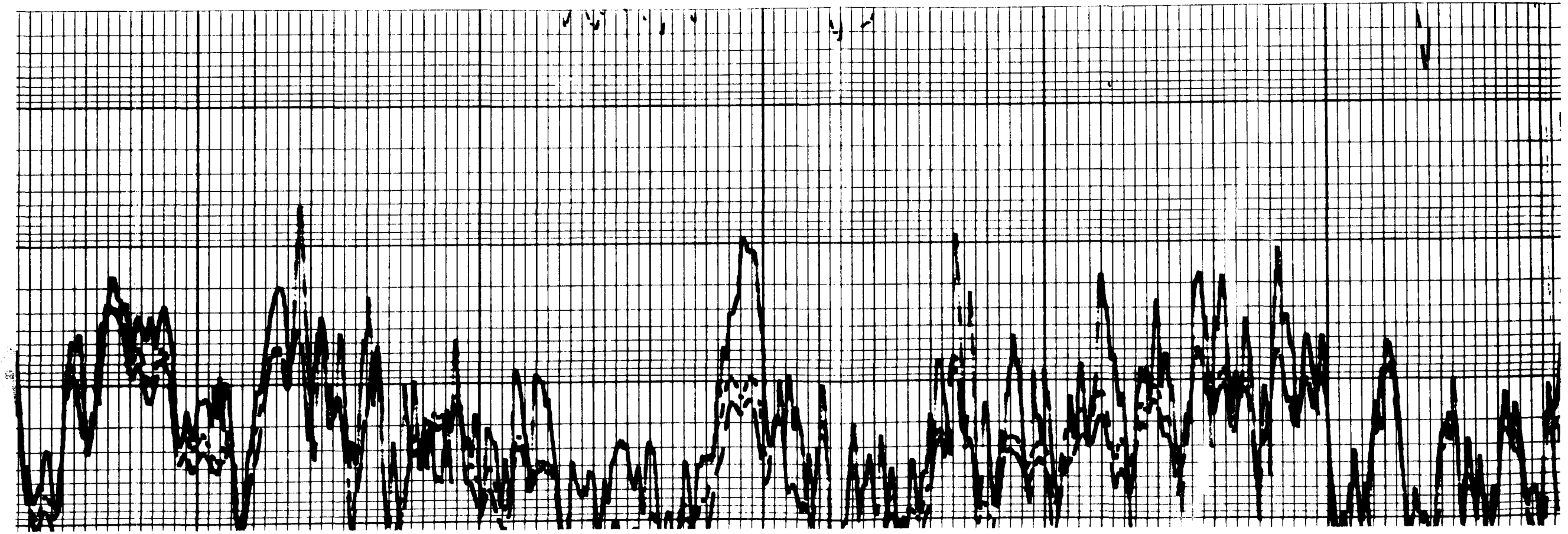

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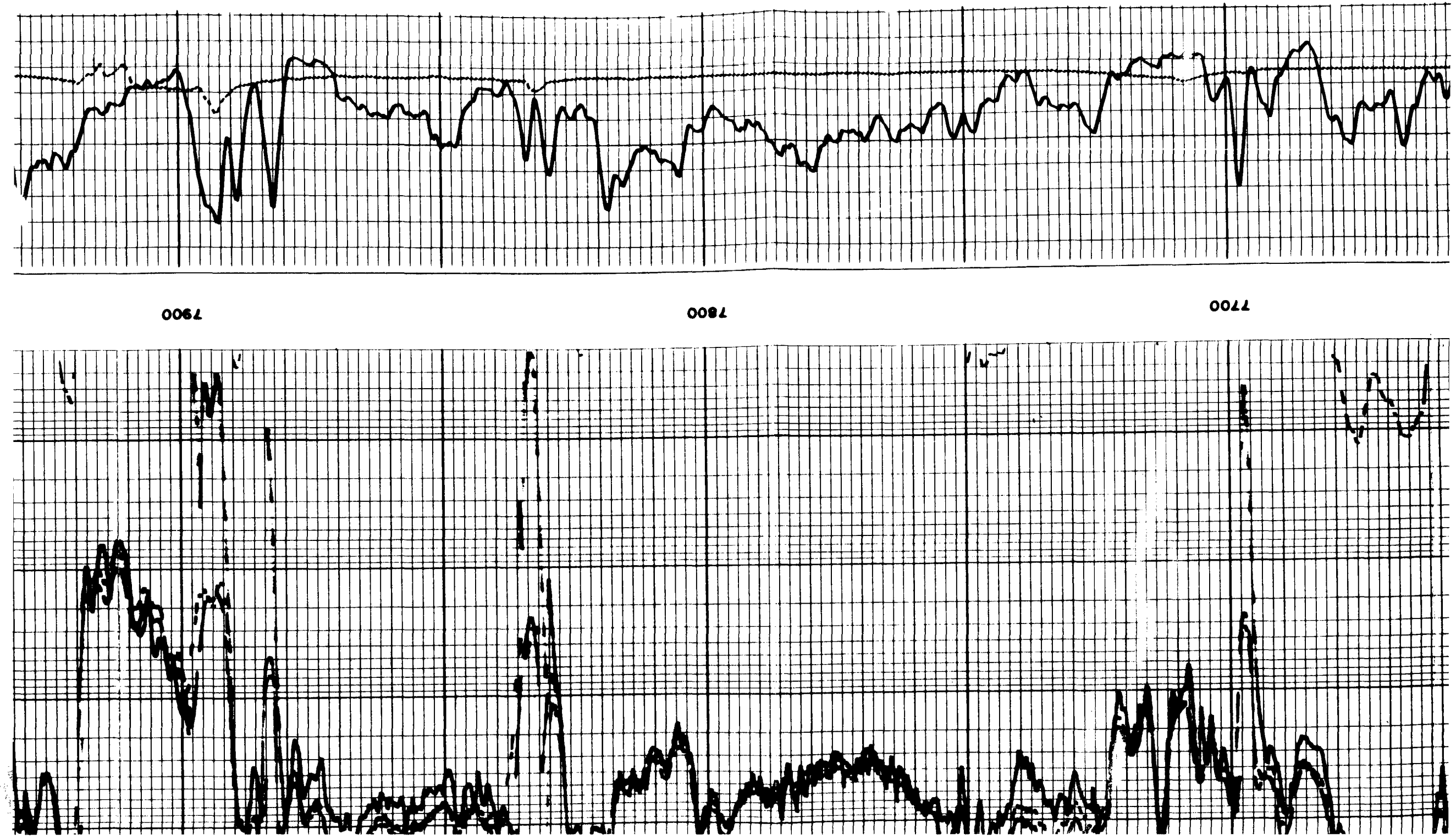
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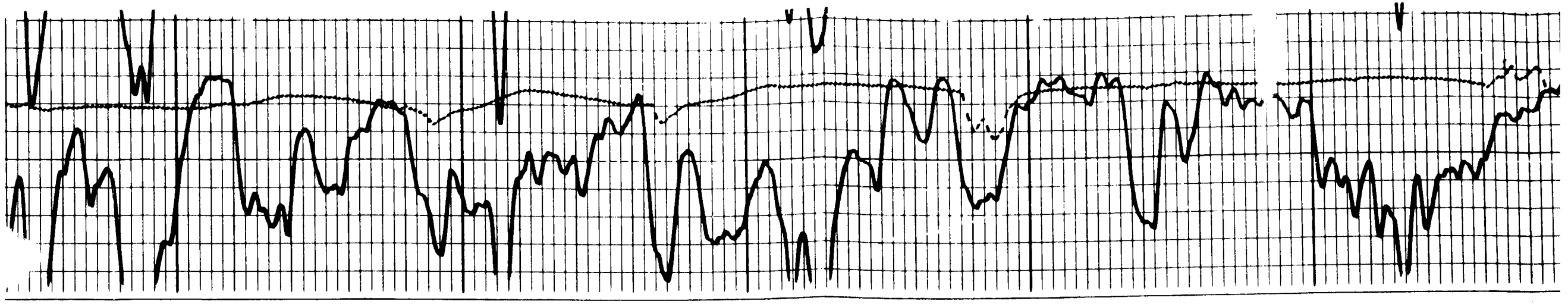

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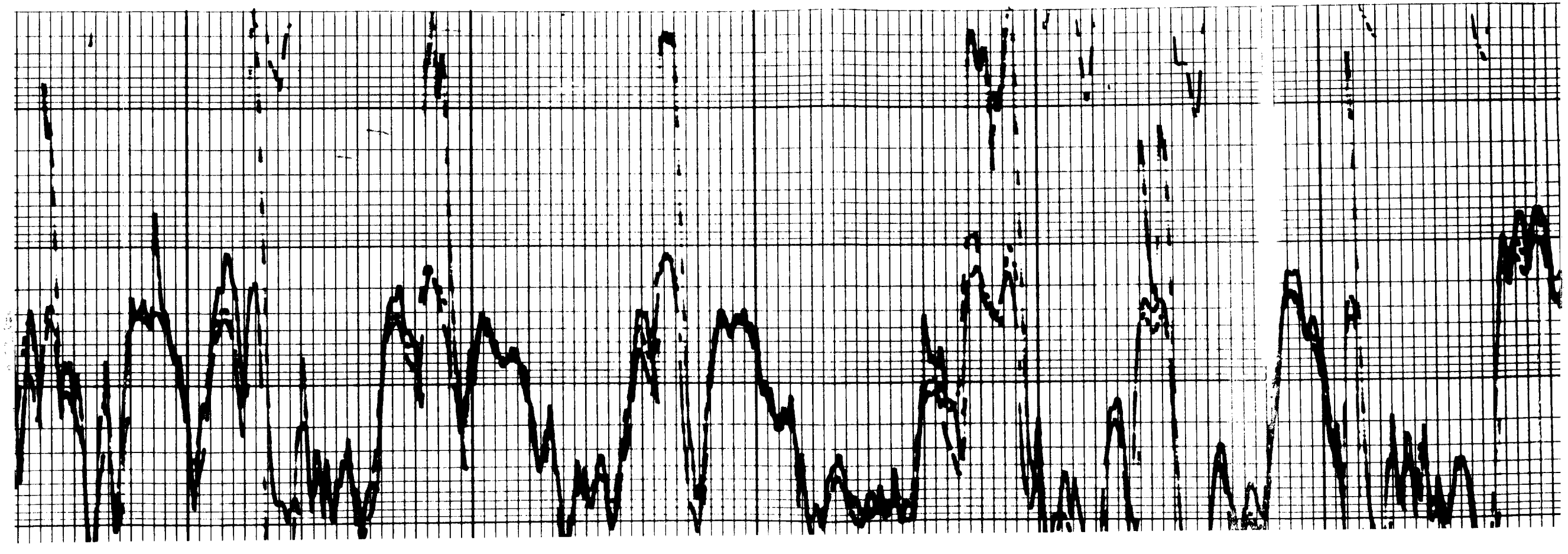

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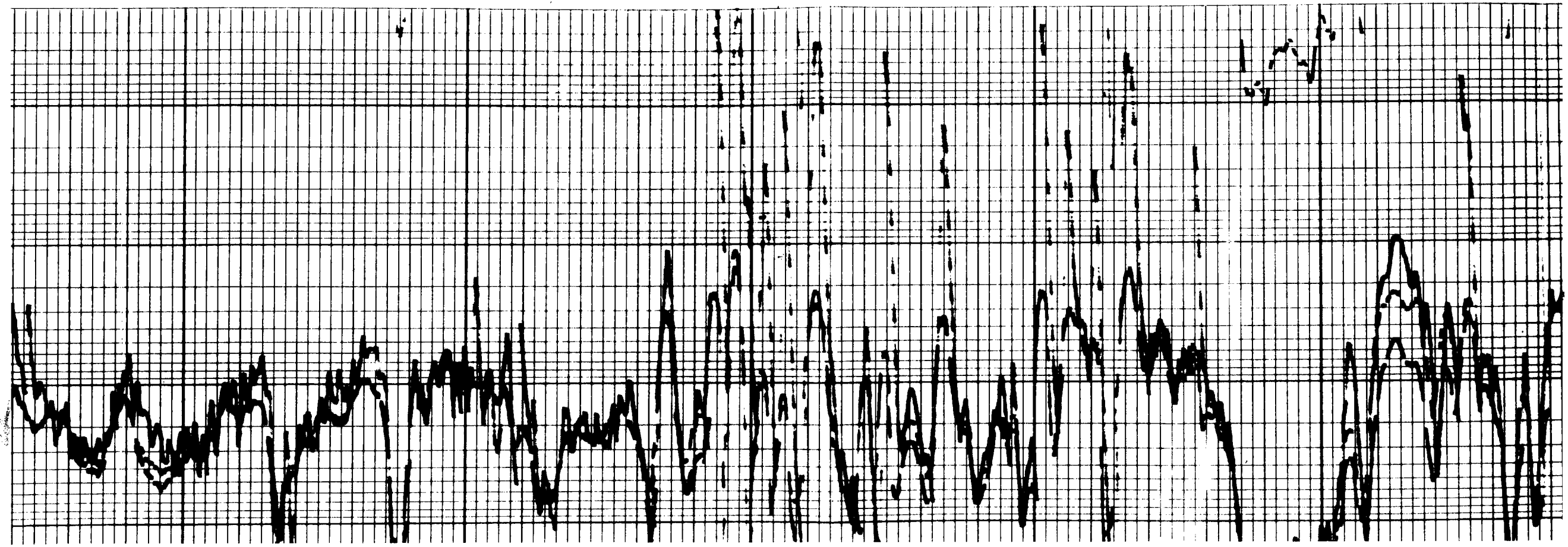

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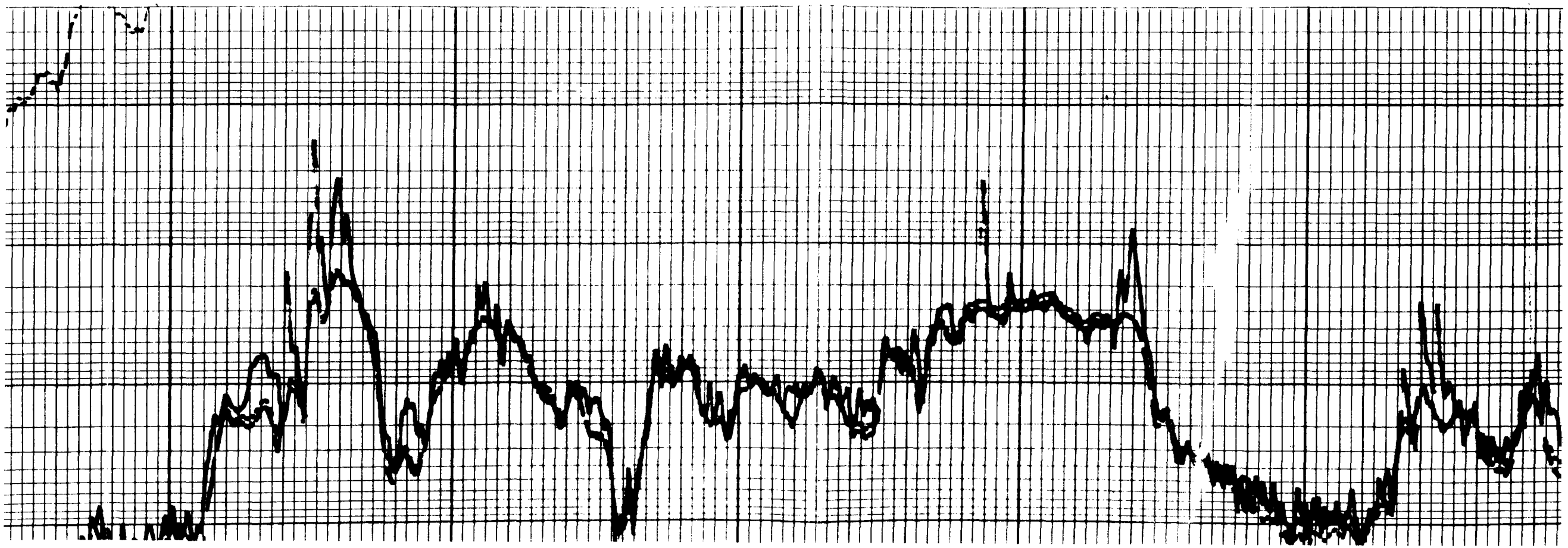

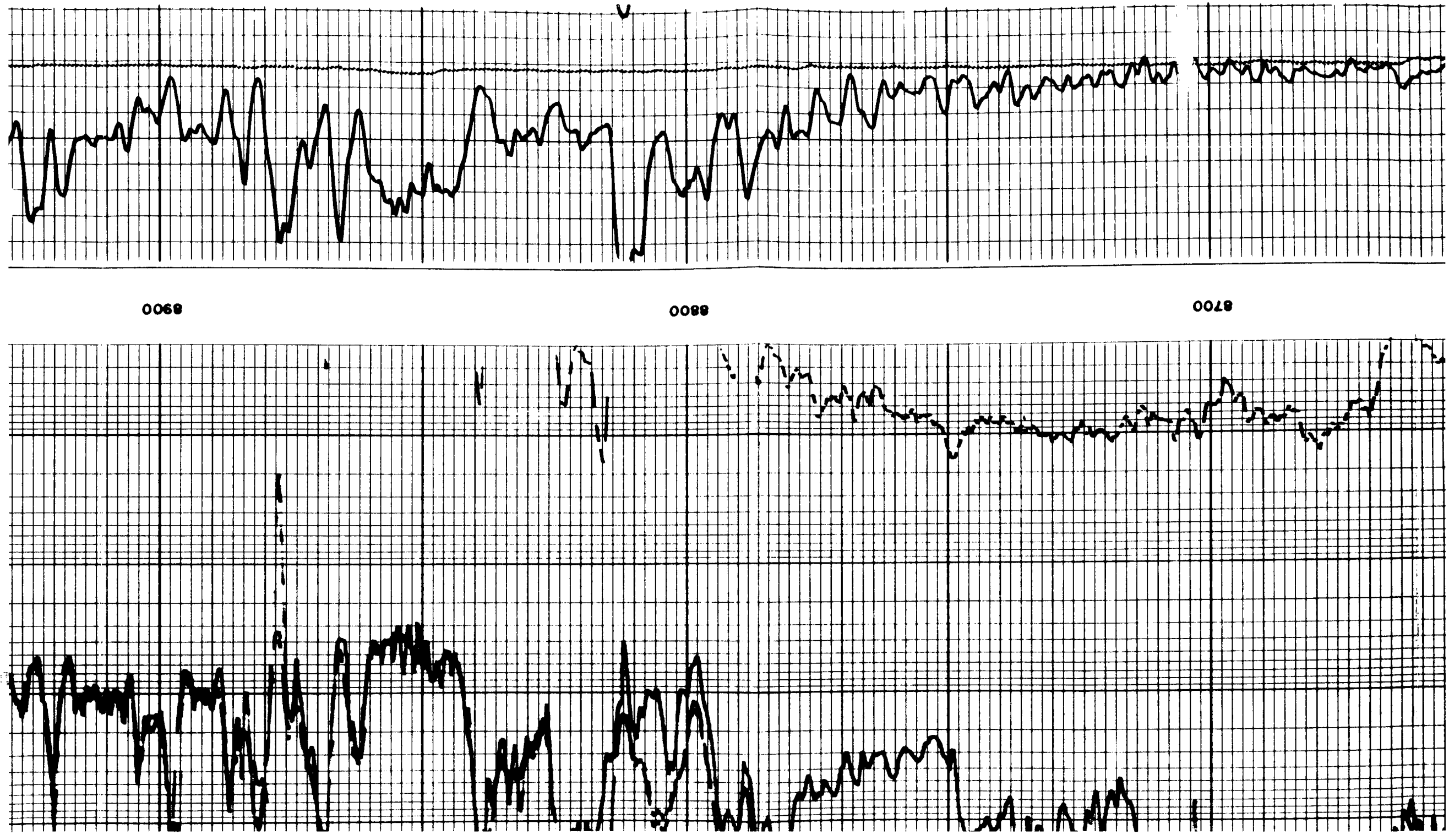
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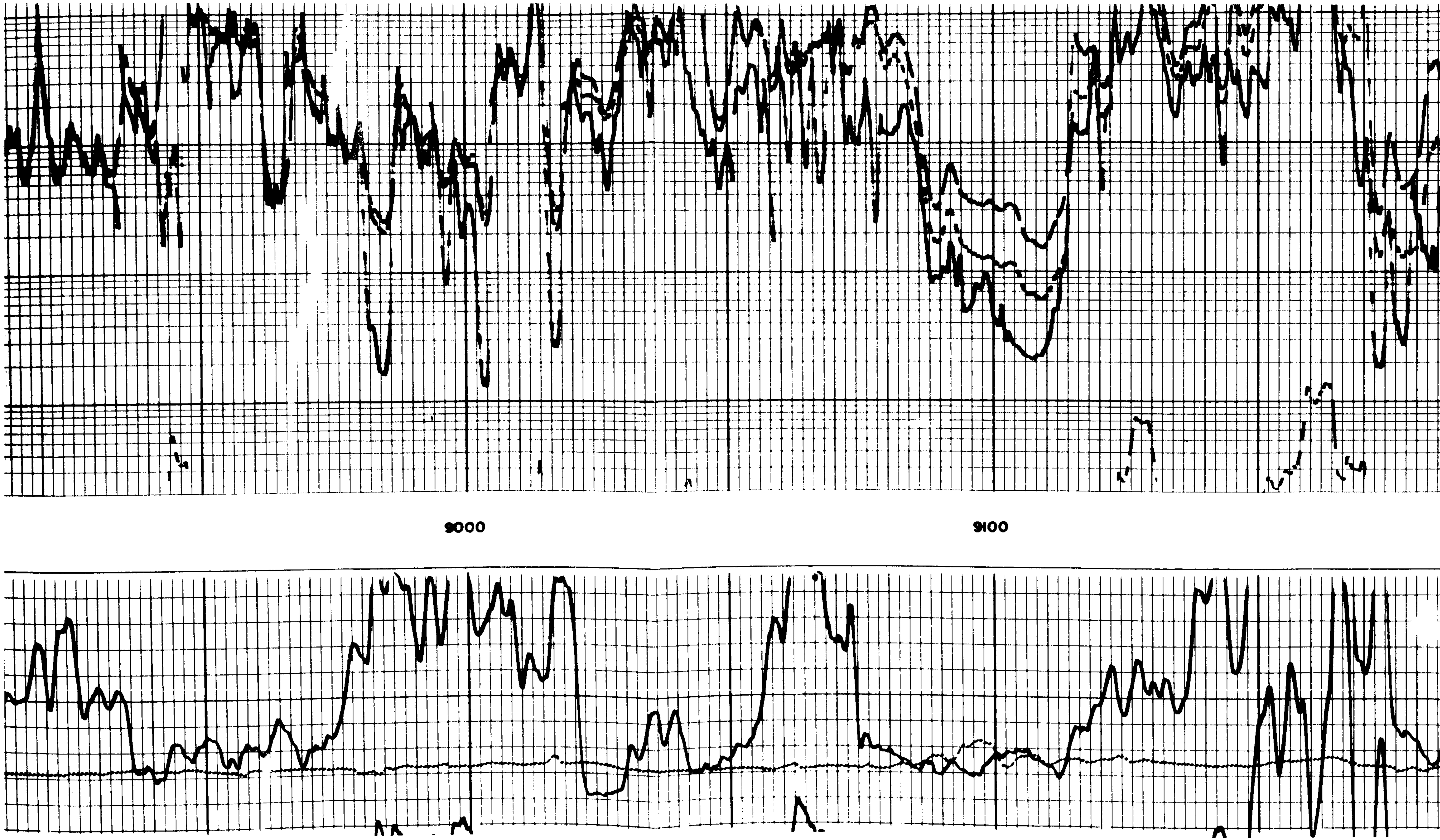
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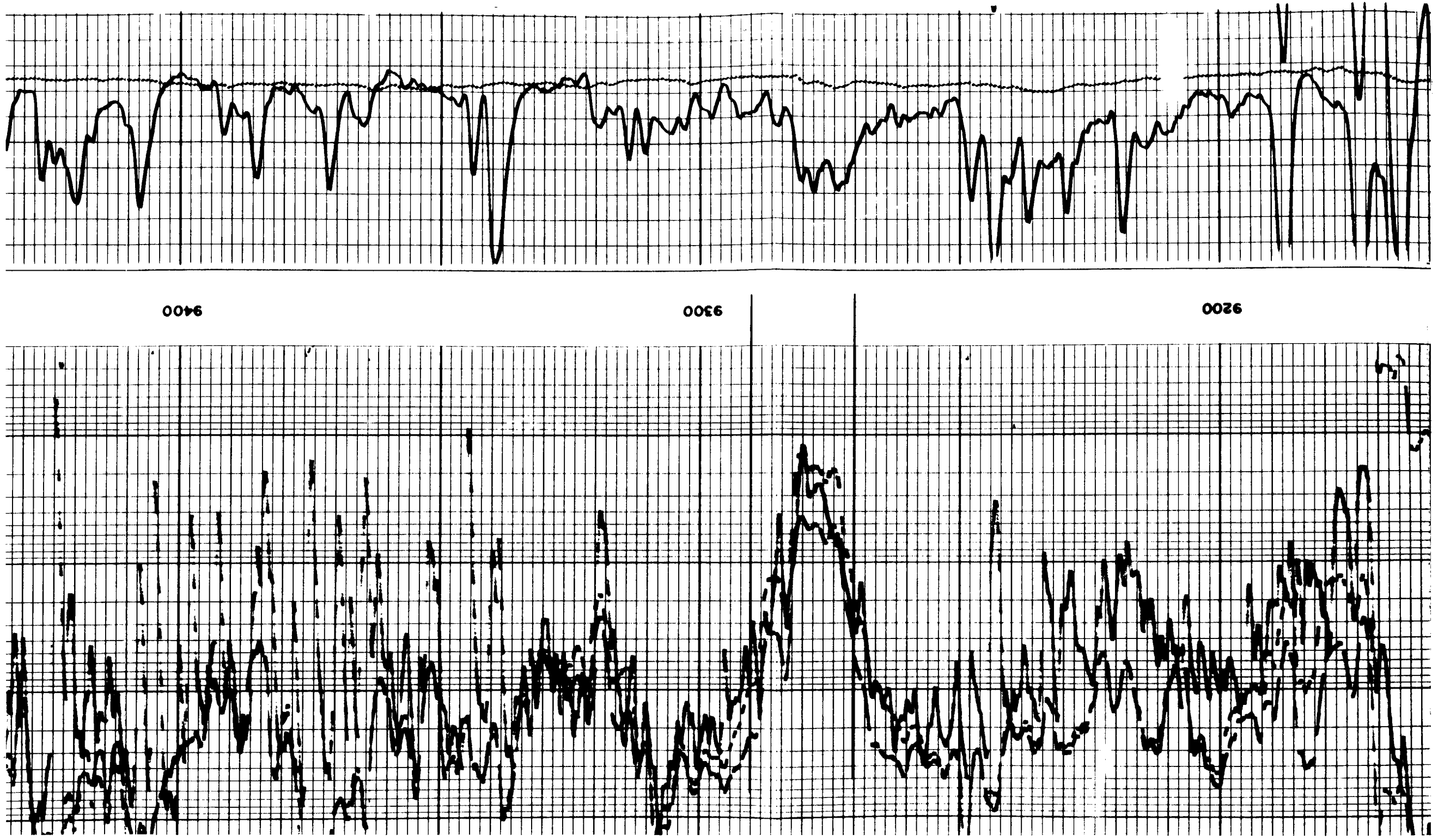
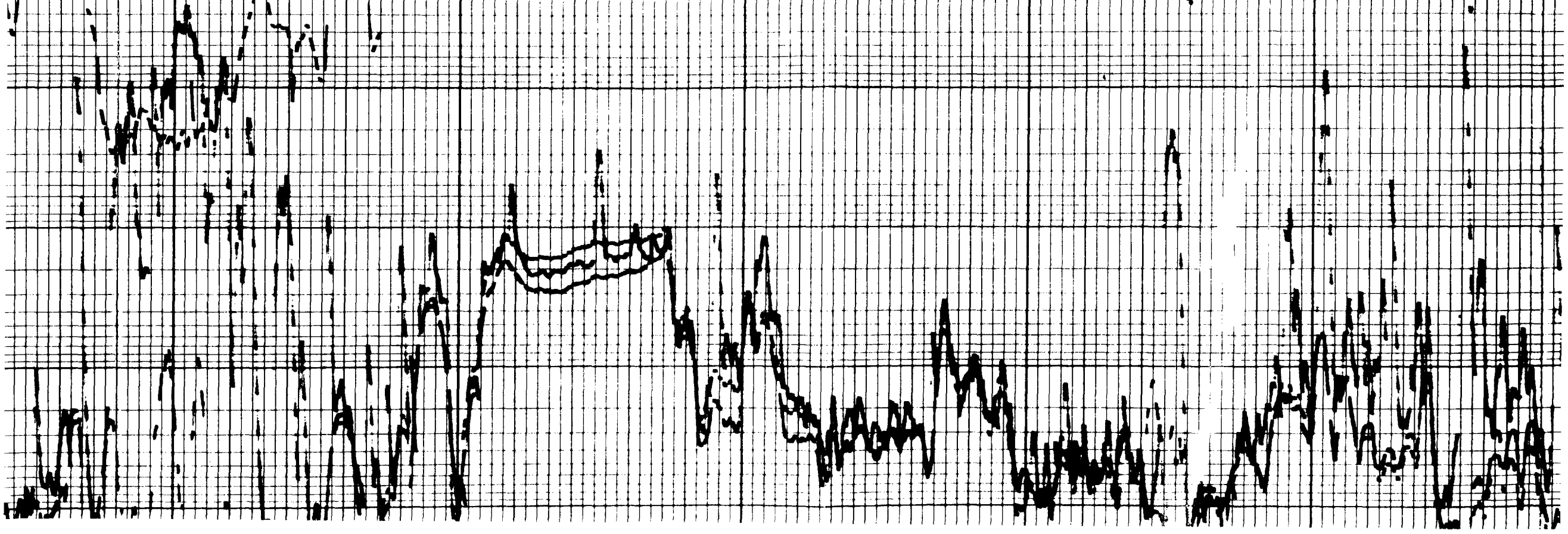
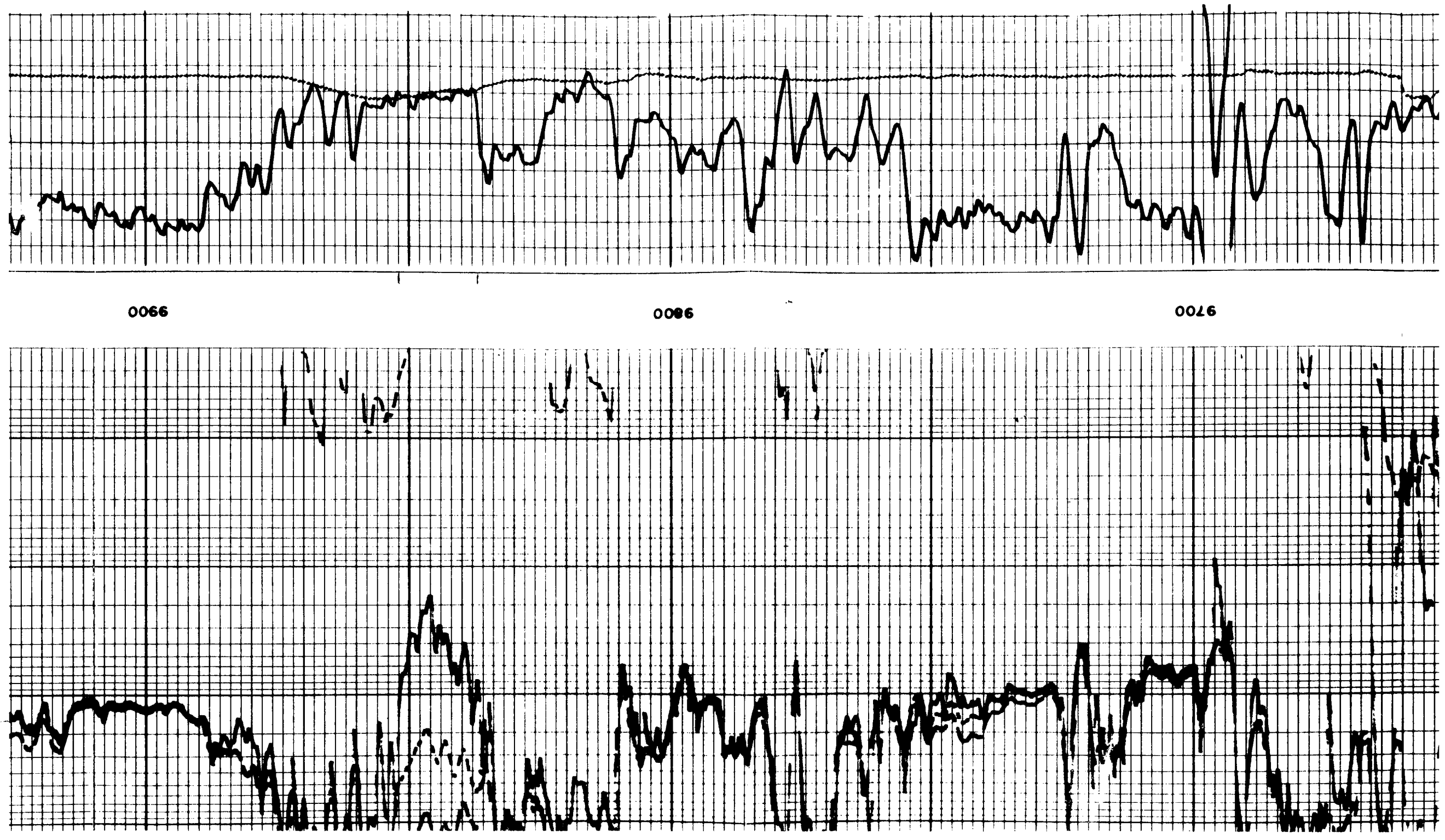
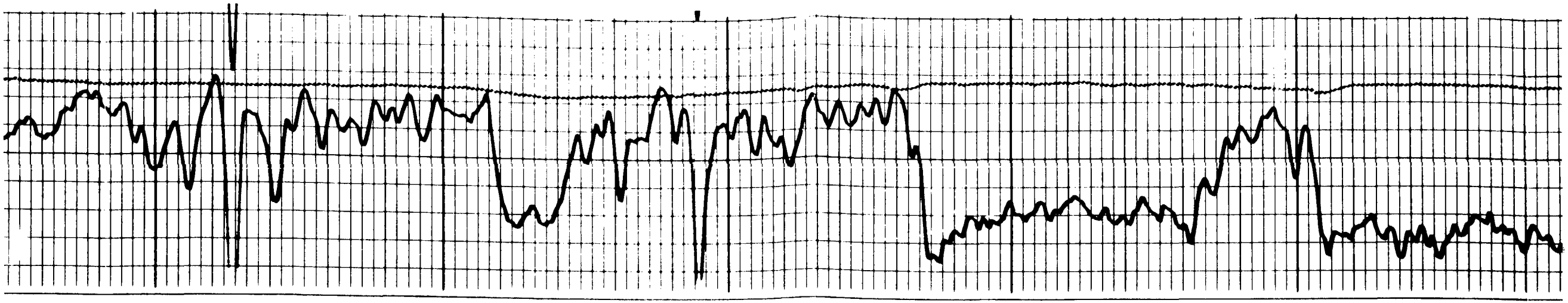


9600

9500

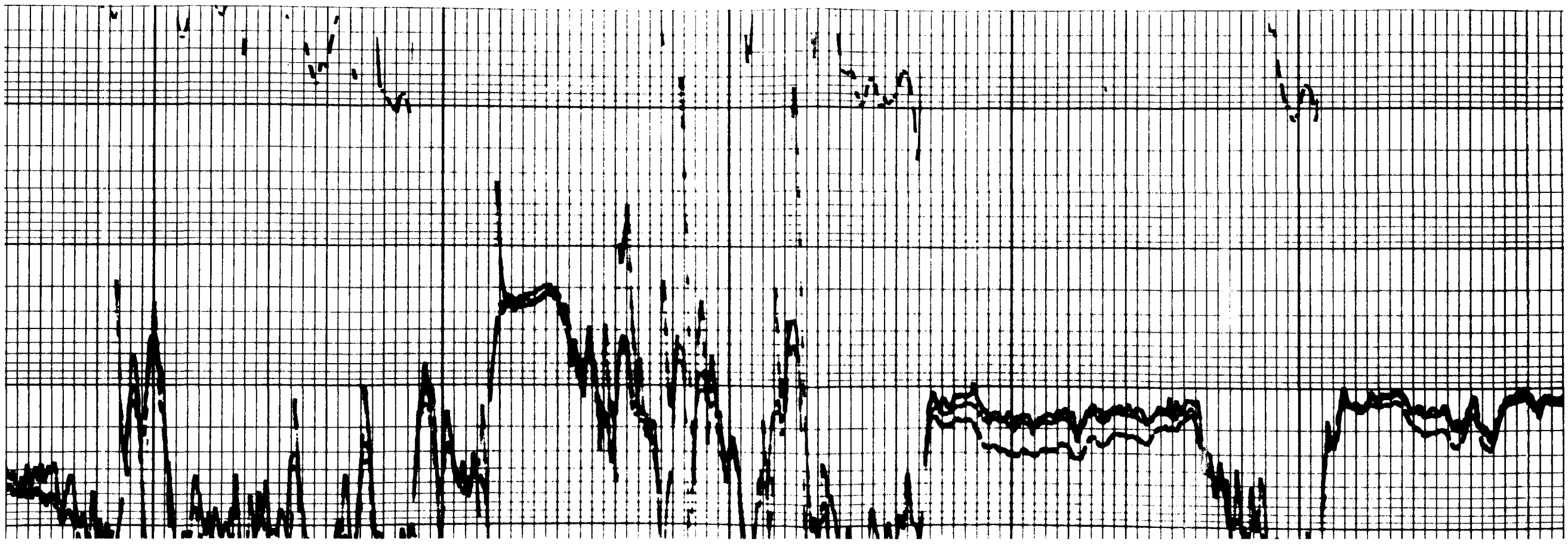


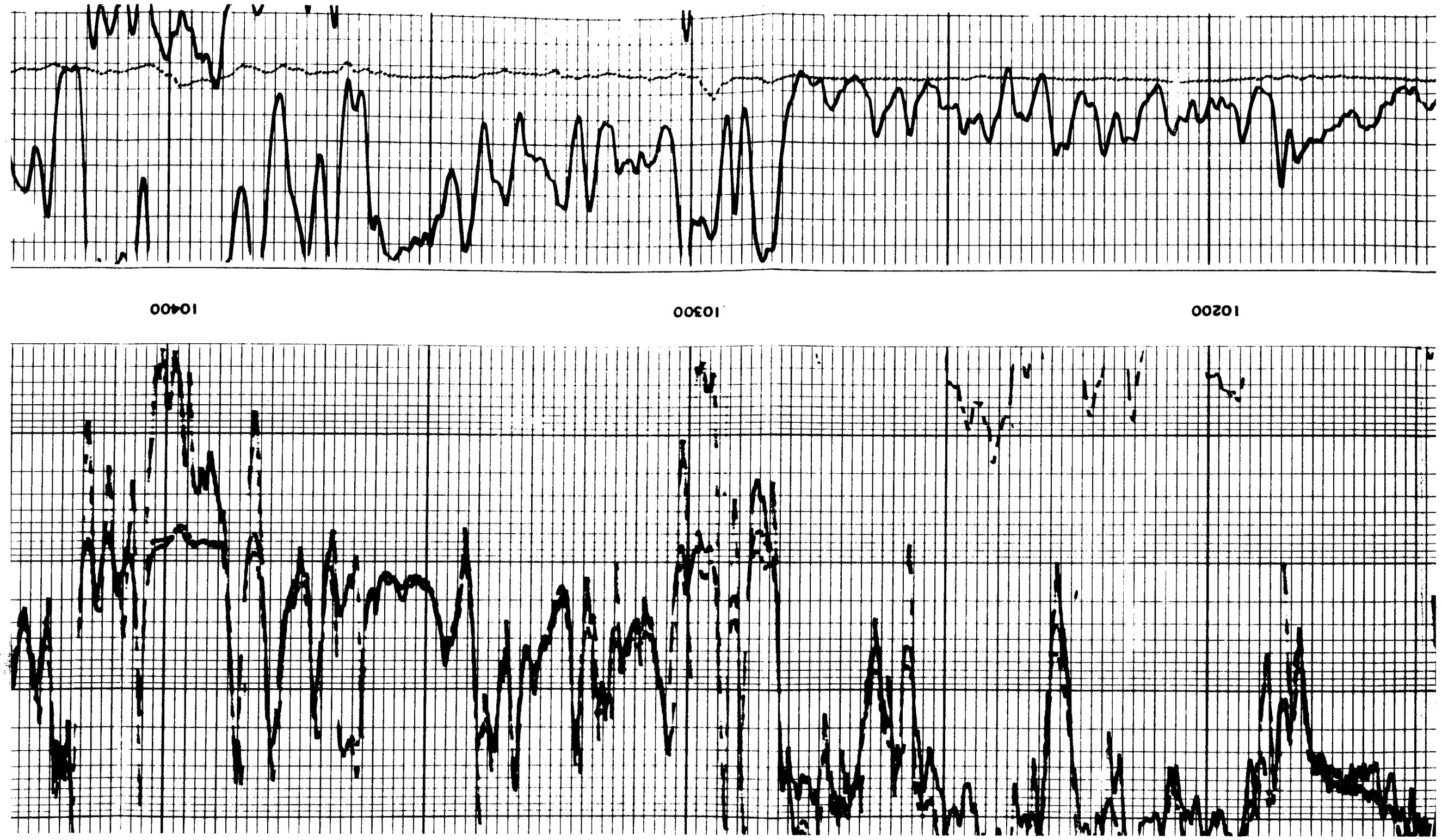

0066
0086
9700



00101

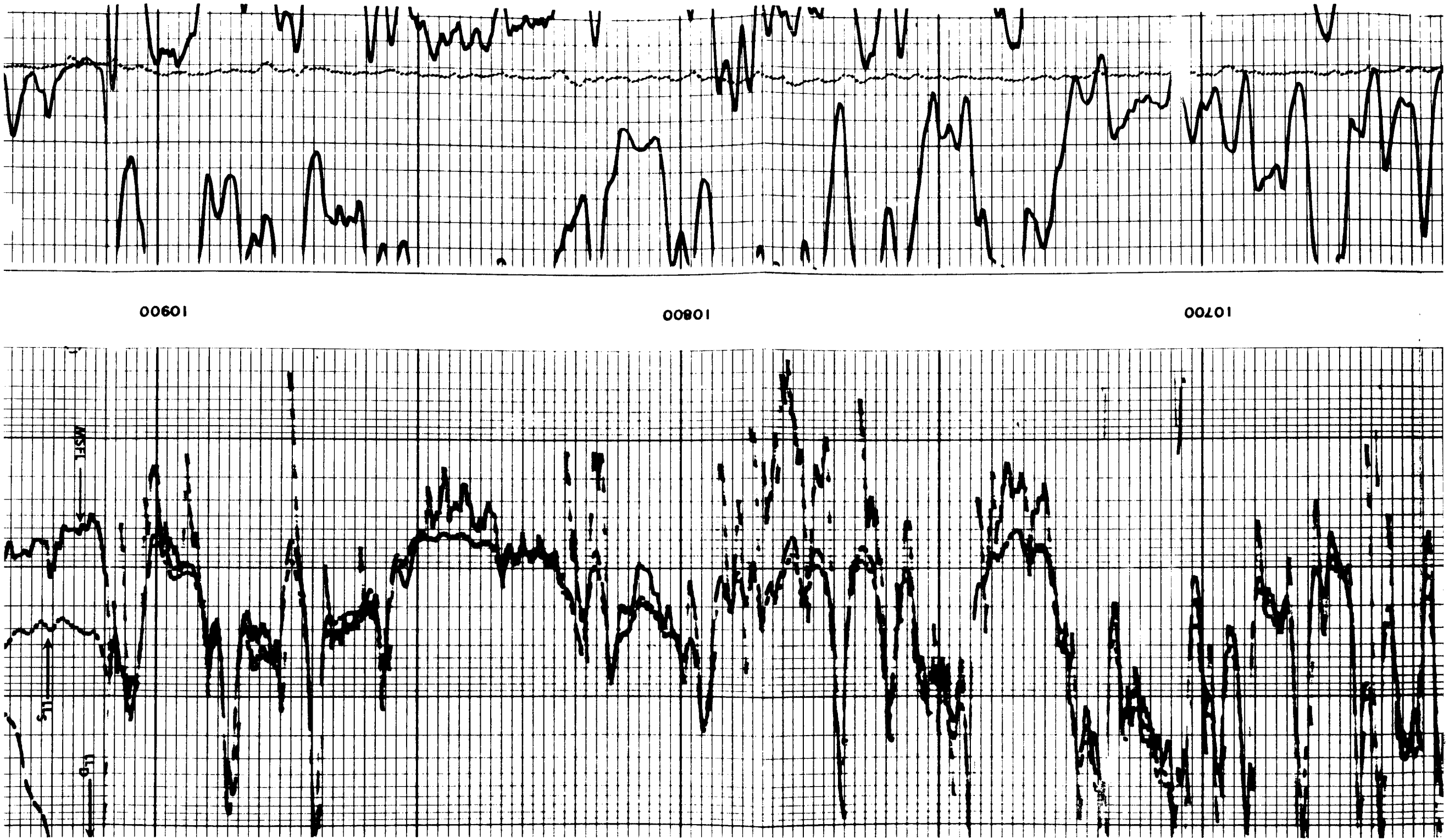
00001

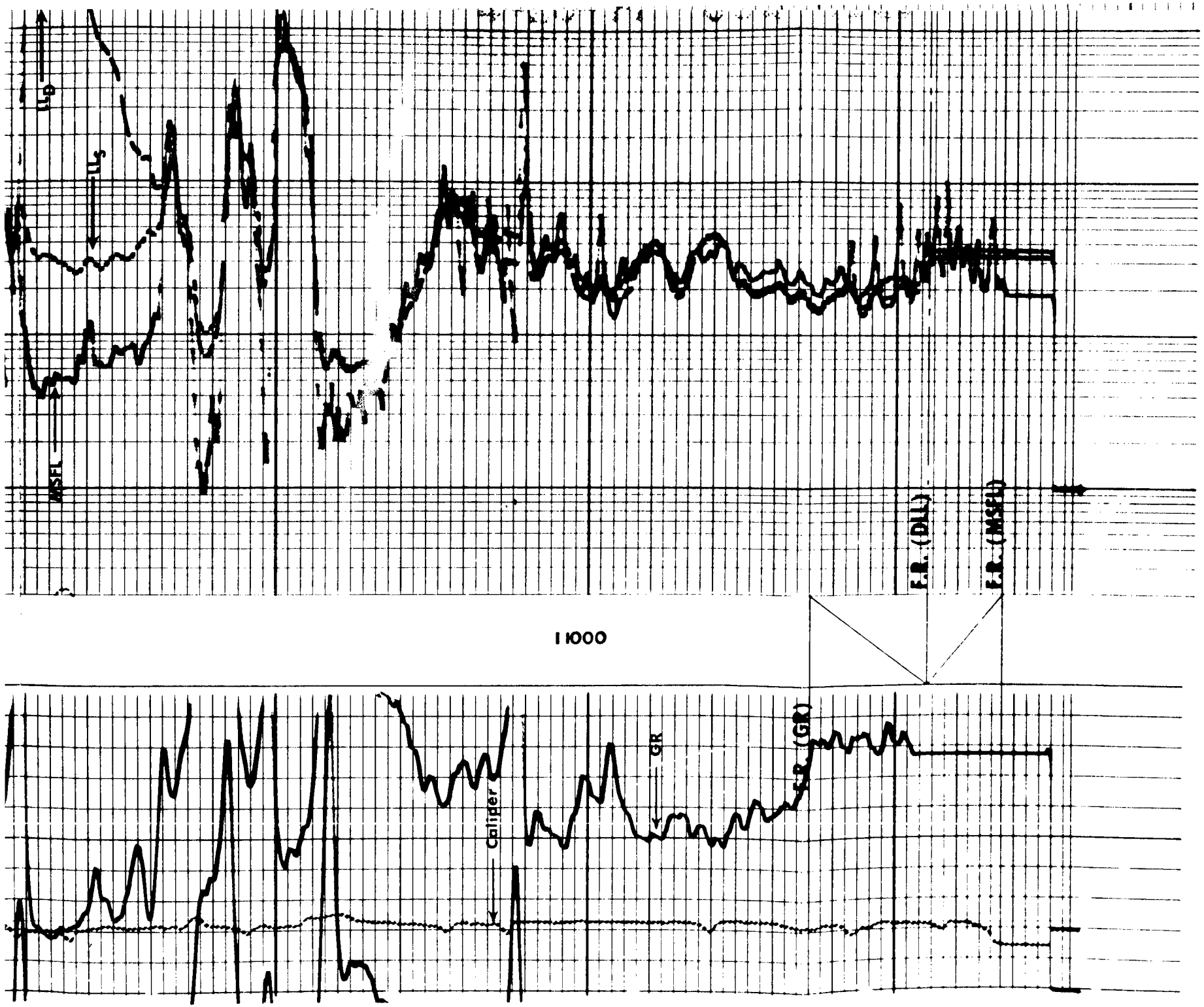


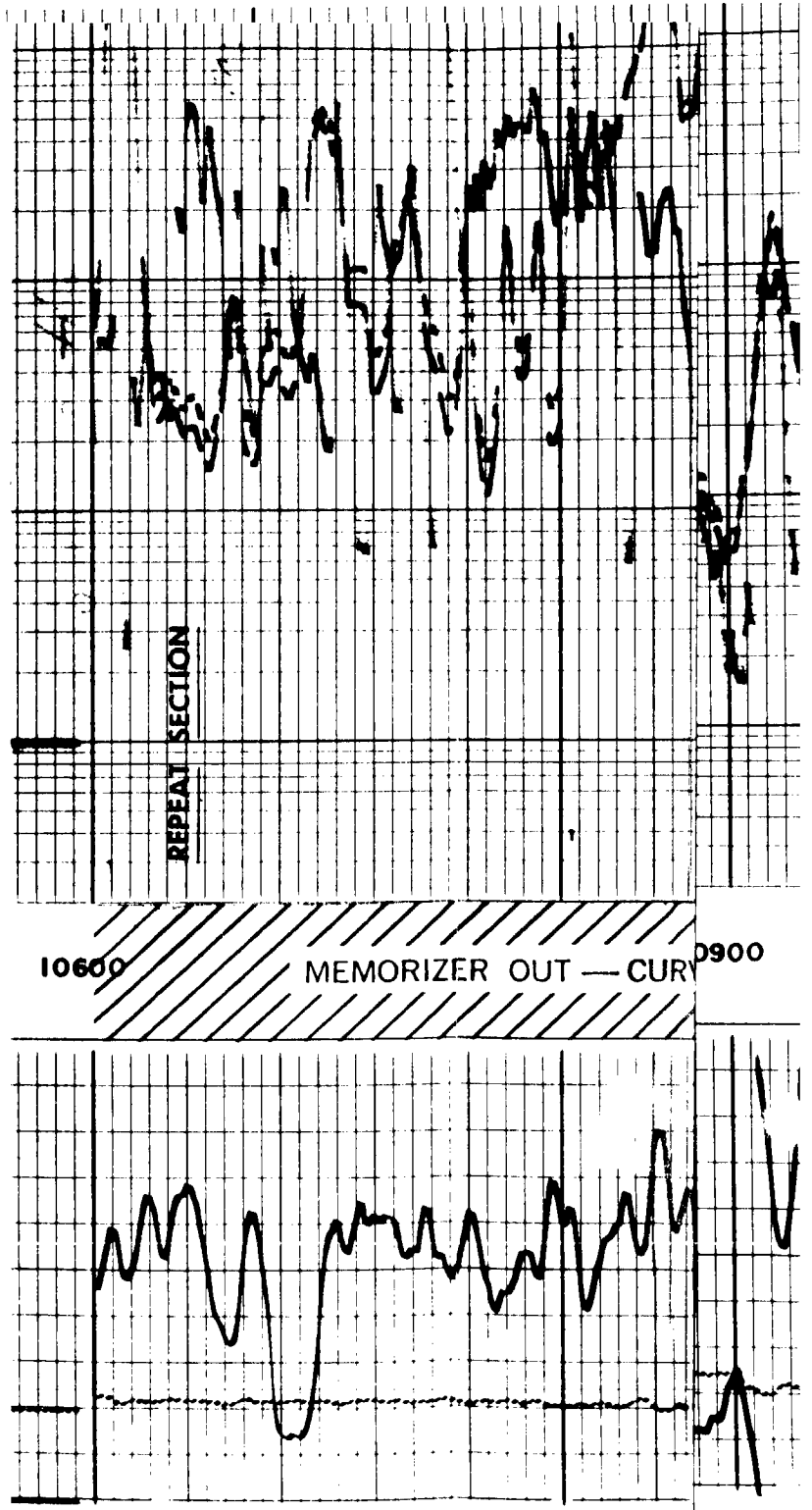

10400
10300
10200

10500

10600


00601
00801
01001
MSFL
S_{11}
θ_{11}


MSFL
11000
Caliper
GR
R (GR)
F.R. (DLL)
F.R. (MSFL)

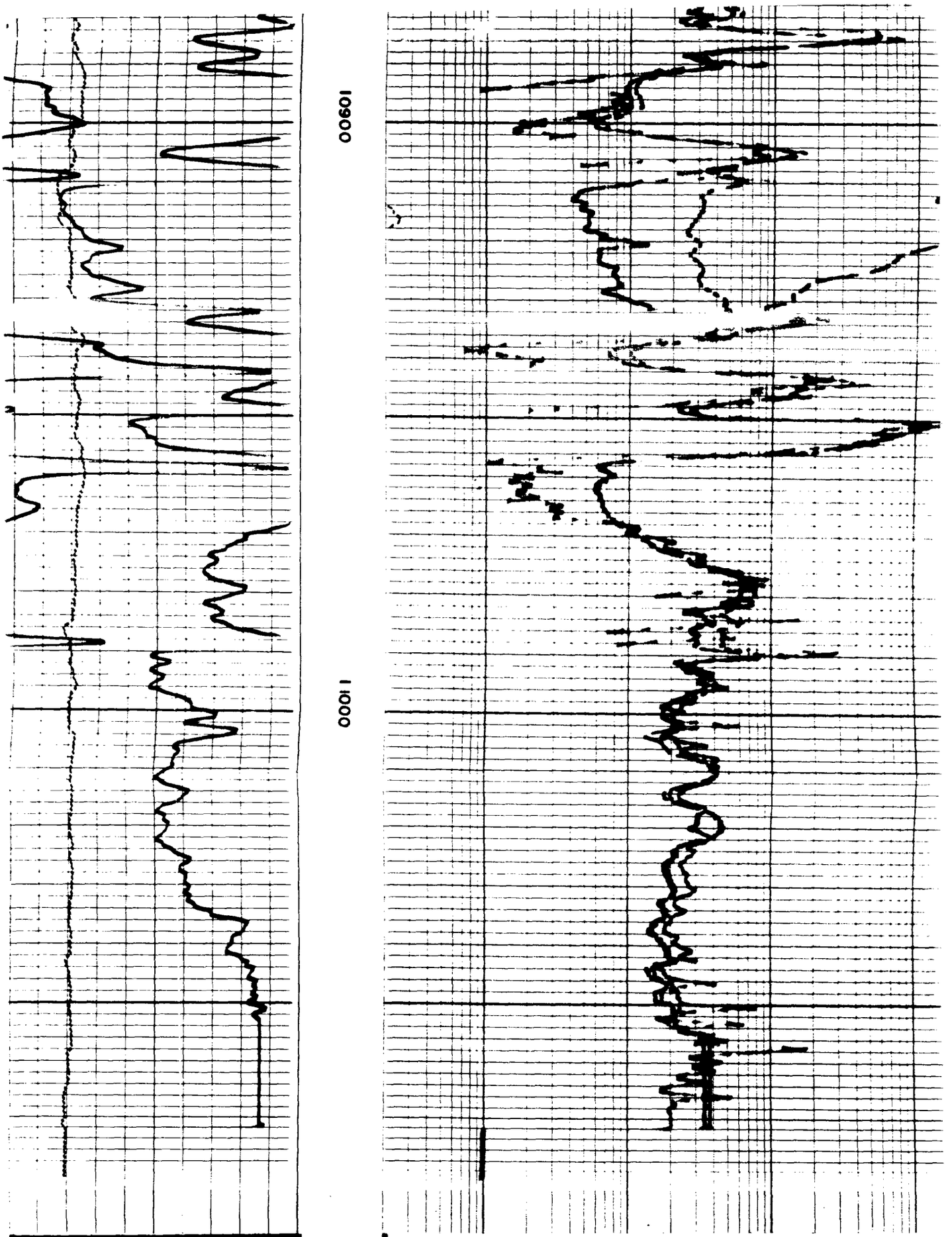

REPEAT SECTION
10600
MEMORIZER OUT — CURV
0900

ZER OUT — CURVES INVALID

10700

10800

10900



CALIPER DIAM. IN INCHES

6 16

GAMMA RAY API UNITS

0 100

RESISTIVITY OHMS. M^2/M

MICRO - SFL

0.2 1.0 10 100 1000 20

SHALLOW LATEROLOG - LL_S

0.2 1.0 10 100 1000 20

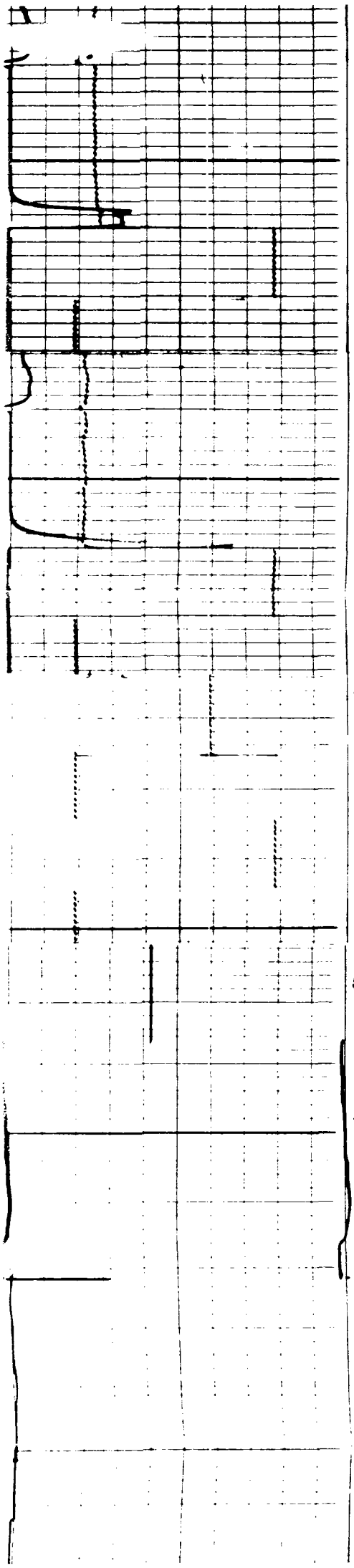
DEEP LATEROLOG - LL_D

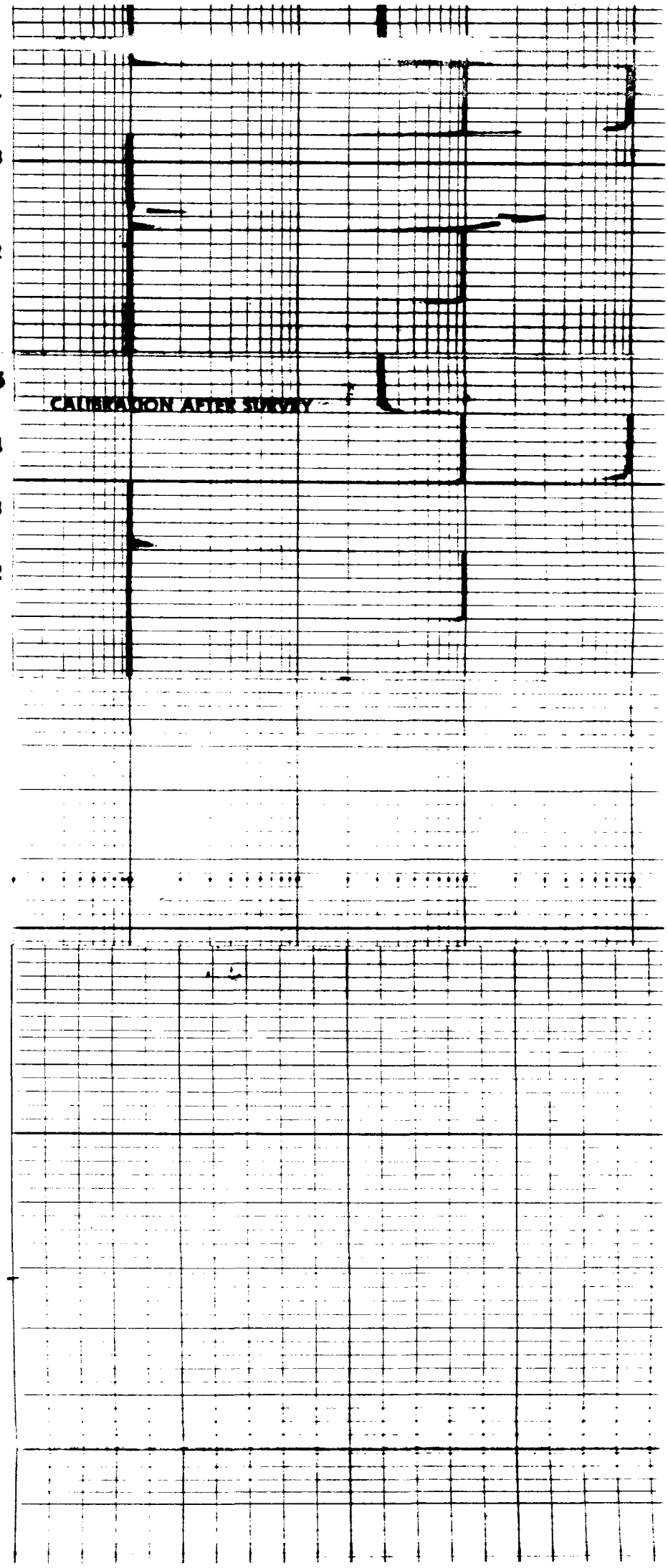
GAMMA RAY API UNITS
0 100
100 200

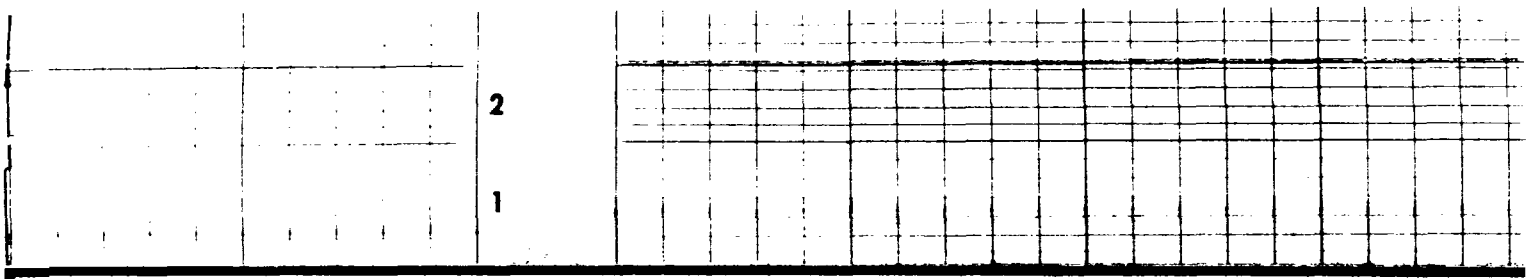
DEPTH

0.2 1.0 10 100 1000 20
SHALLOW LATEROLOG – LL_S
0.2 1.0 10 100 1000 20
DEEP LATEROLOG – LL_D
0.2 1.0 10 100 1000 20

CALIBRATION RECORD







SIMULTANEOUS DUAL LATEROLOG CALIBRATION CODING

1. MECHANICAL ZERO
2. RECORD SET (SP CALIBRATE)
3. TEST - 1 (1 ohm-m)
4. TEST - 2 (LL-1000, M-SFL-100)
5. TOOL CAL (LL-31.6, M-SFL-1)

GAMMA RAY CALIBRATION CODING

1. MECHANICAL ZERO
2. TEST - 1 - ELECTRICAL ZERO
3. TOOL CAL - BACKGROUND
4. TOOL CAL- TEST JIG ON
5. CAL CHECK f = _____

CALIBRATION RECORD

COMPANY ATLANTIC RICHFIELD CO.

WELL ROBINSON GAS COM #1

FIELD GRAYBERY - MORROW

COUNTY EDDY STATE NEW MEXICO

SCHL. FR 11068
SCHL. TD 11069
DRLR. TD 11060

Elev: KB 3565
DF 3563
GL 3544