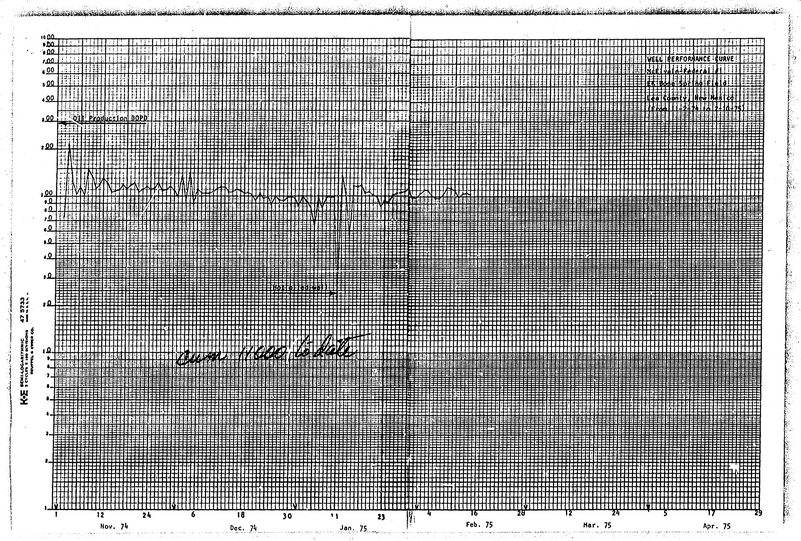
Case No
5422

Large Exhibits





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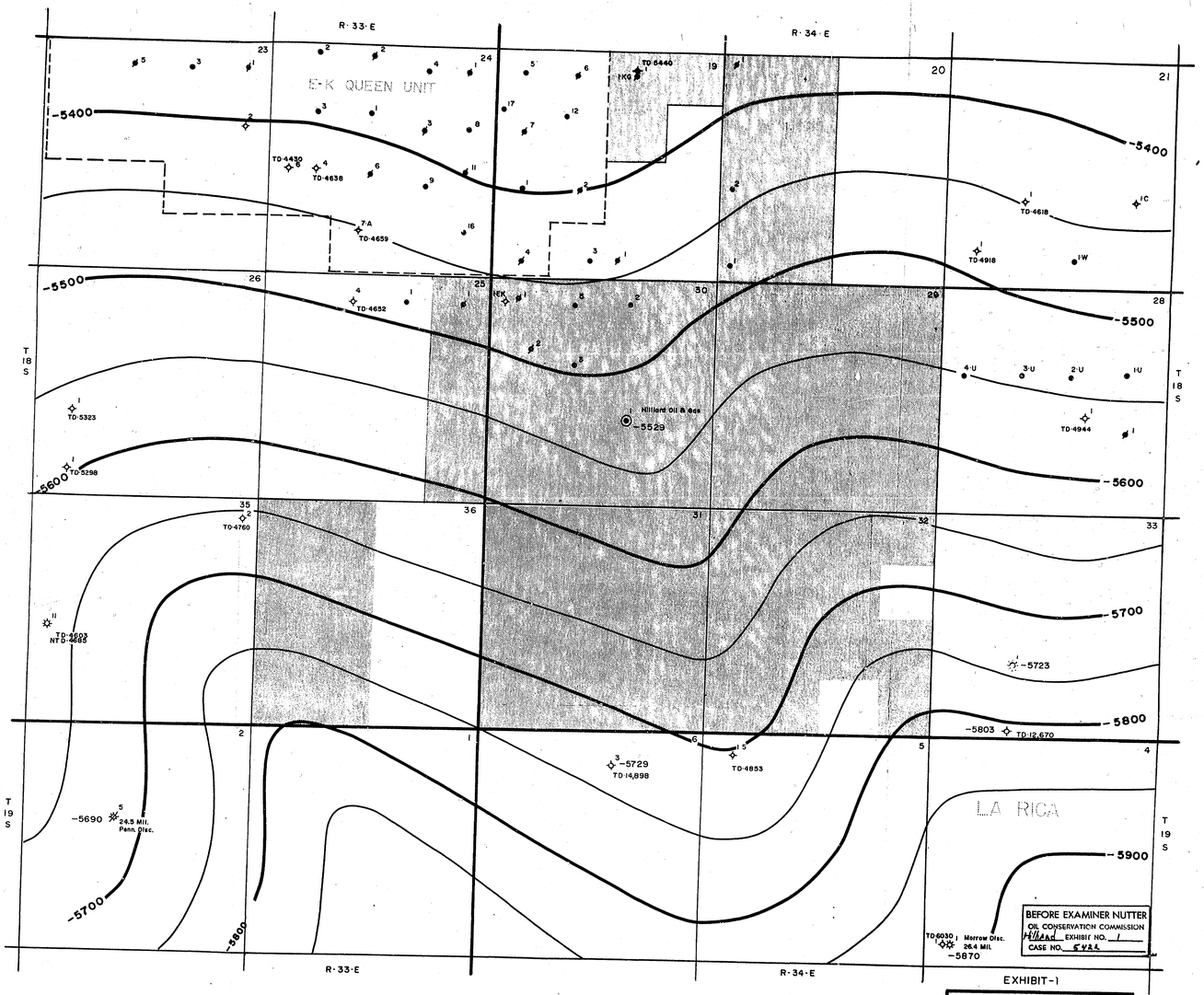
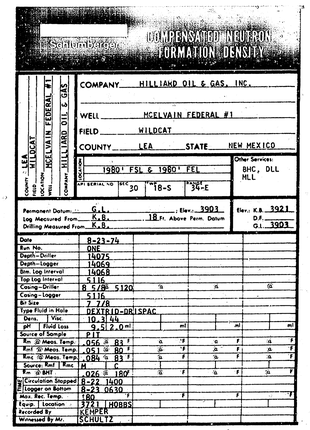


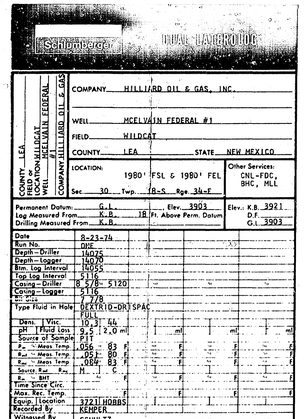
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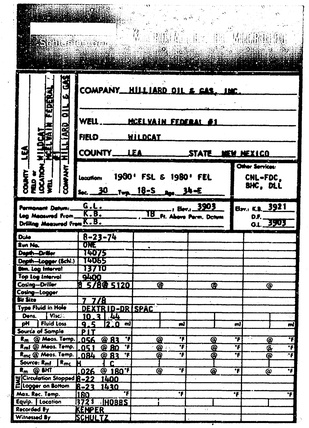
HILLIARD OIL & GAS, INC.
906 BLDG. OF SOUTHWEST
Midland, Texas 79701
E-K BONE SPRING AREA
T/BONE SPRING PAY ZONE
LEA COUNTY, NEW MEX.

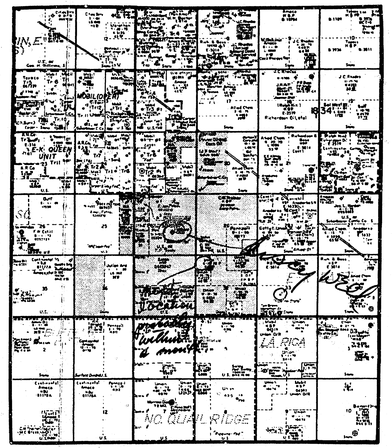
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C.I.
Date
By R.W.S.

V.R.N.C.F. MICROGRAPHICS
BEST AVAILABLE COPY









OWNERSHIP MAP

UNDER WHICH THE BONE SPRING RIGHTS ARE PRESENTLY CONTROLLED BY HILLIARD OIL & GAS INC. ET. AL.

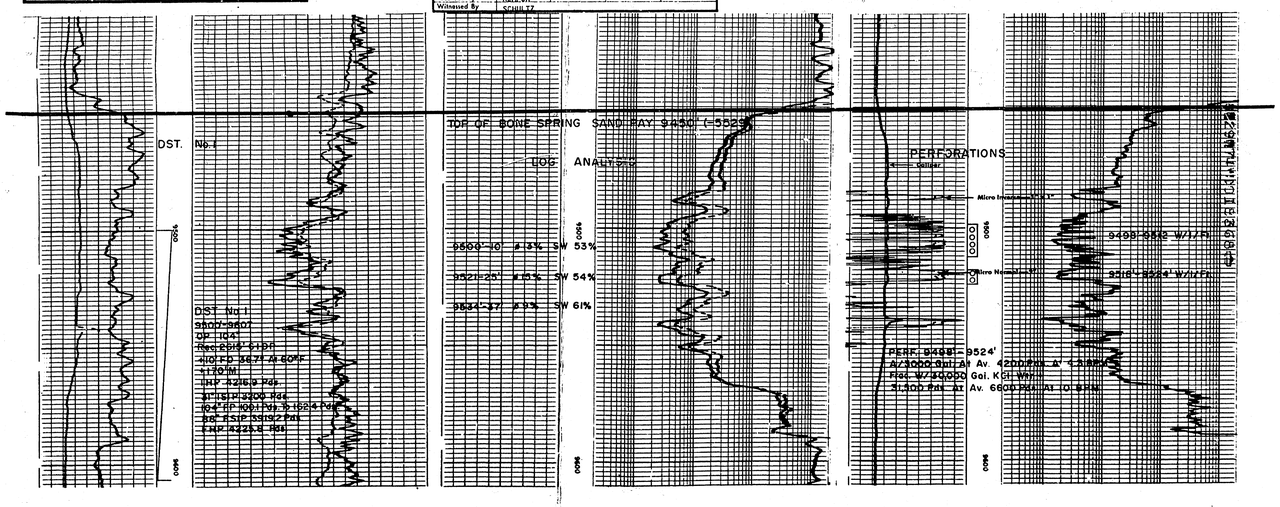
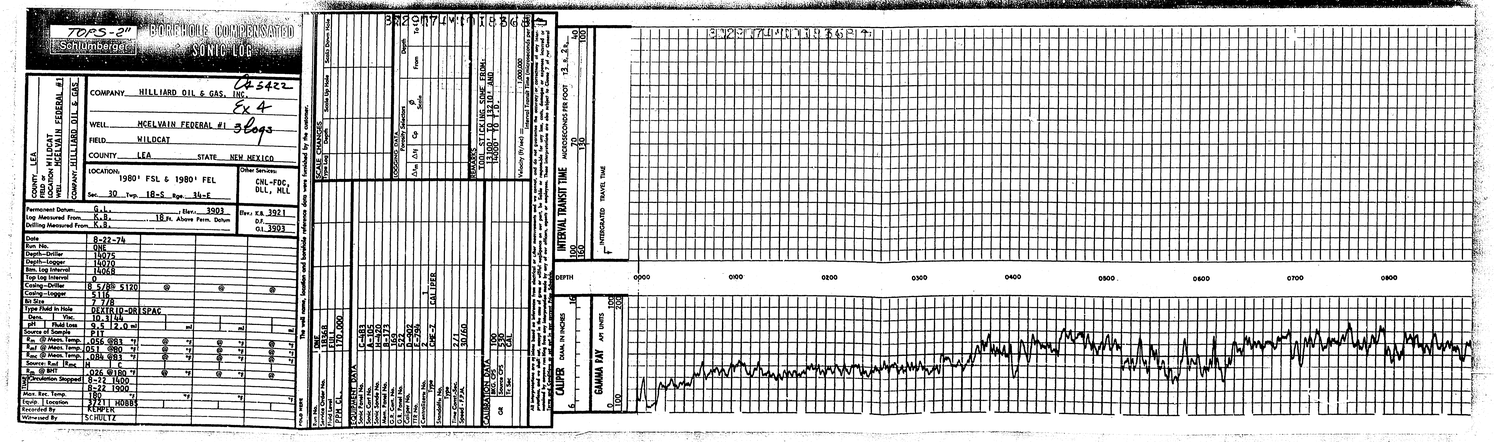


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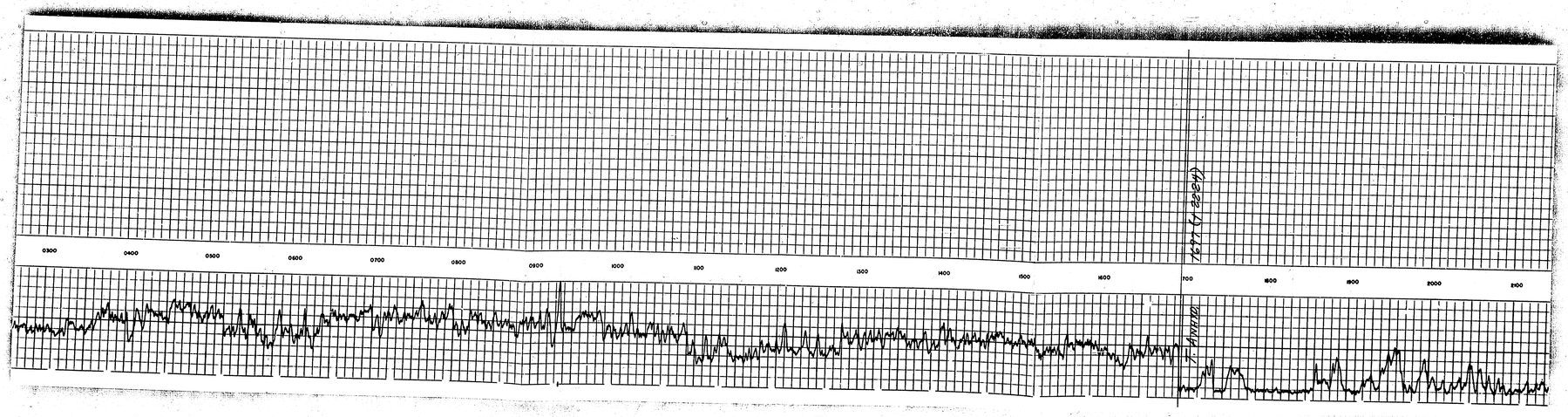
HILLIARD OIL & GAS, INC.
906 BLDG. OF SOUTHWEST
Midland, Texas 79701
E-K BONE SPRING AREA
Scale: 5"=100' By R.W.S.

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Hilliard Exhibit No. 2
Ca. 6743

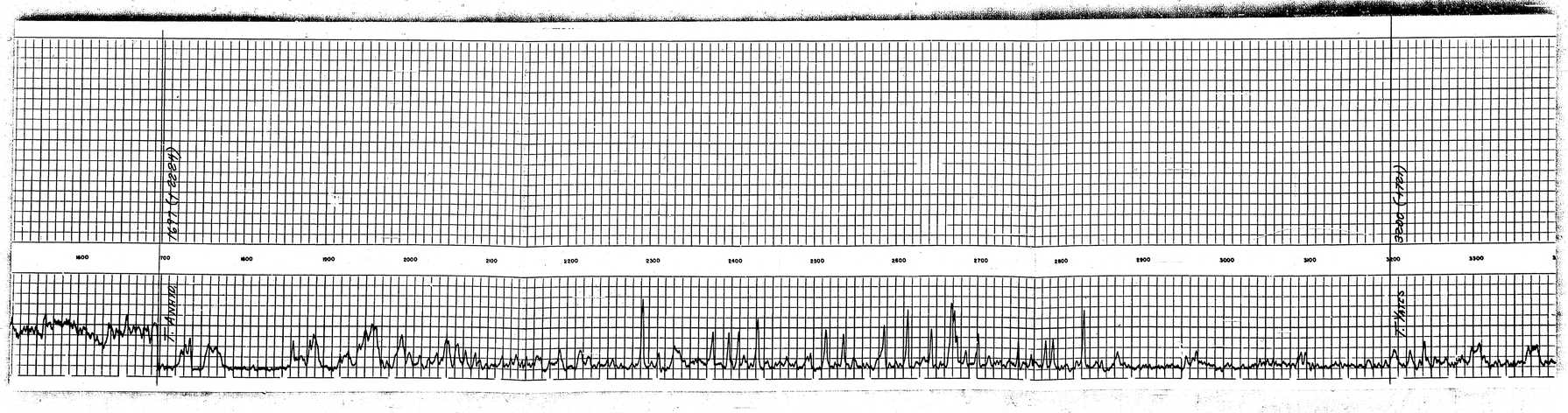
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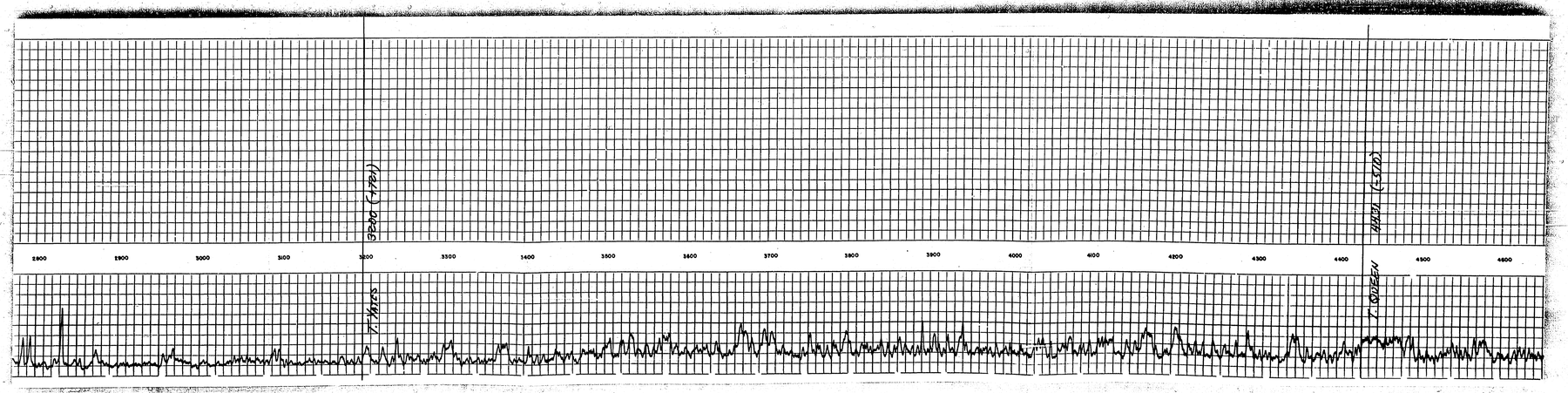
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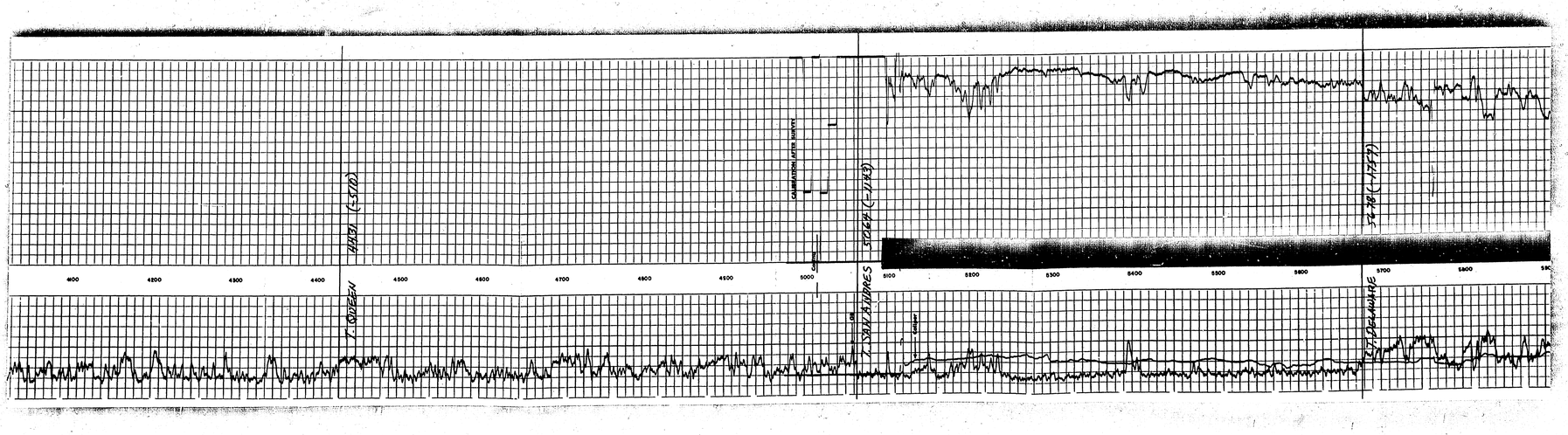
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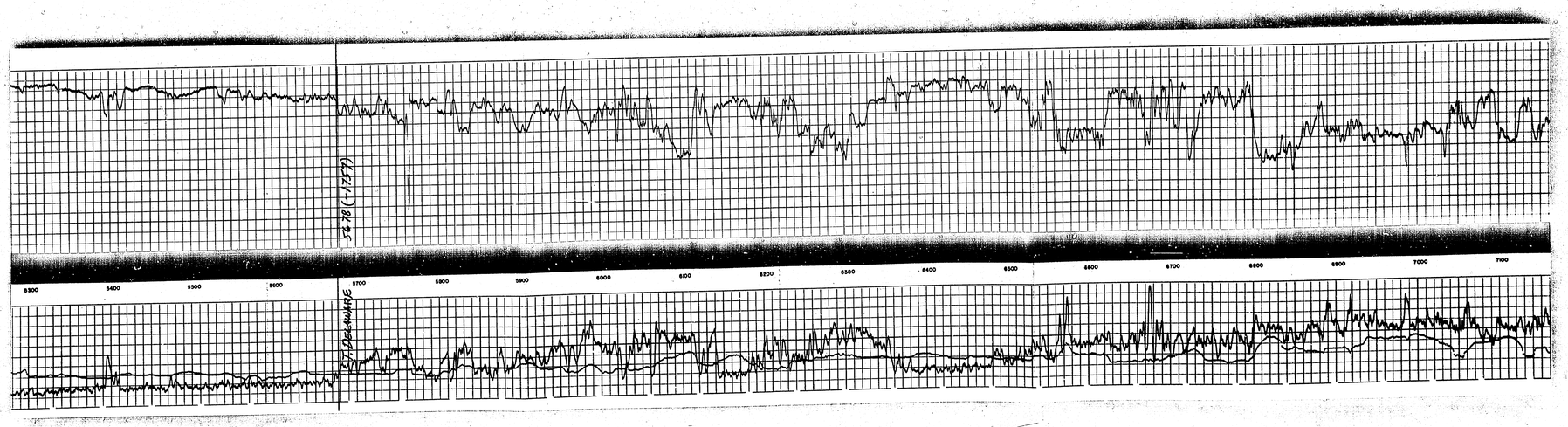
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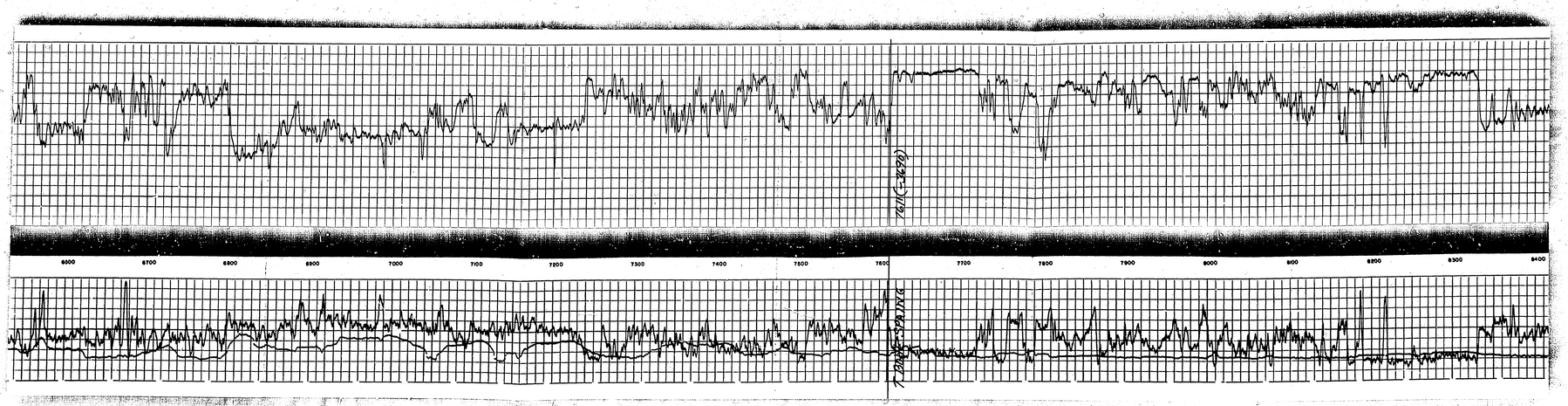
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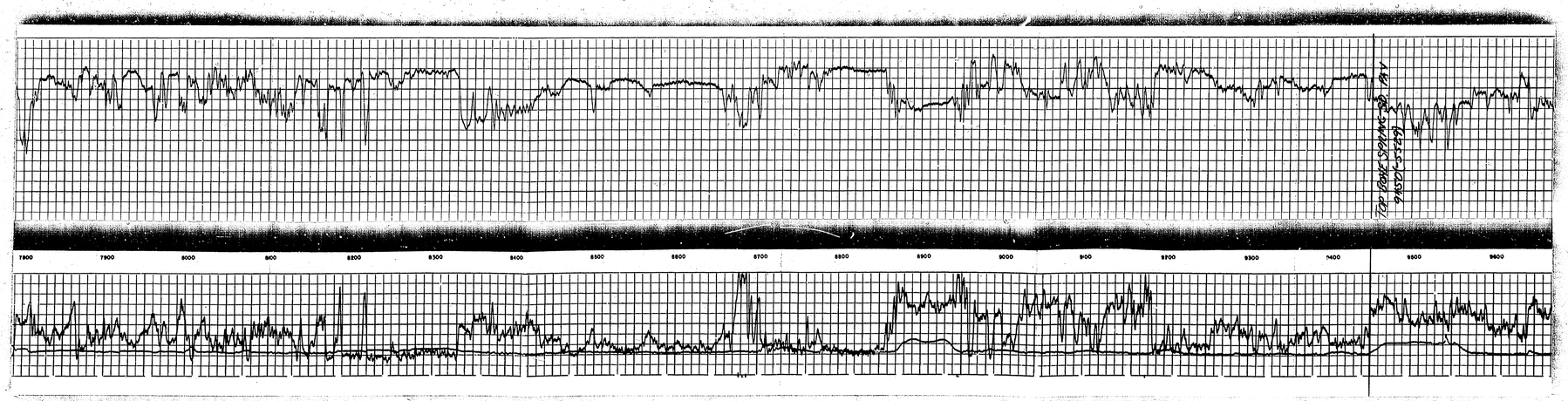
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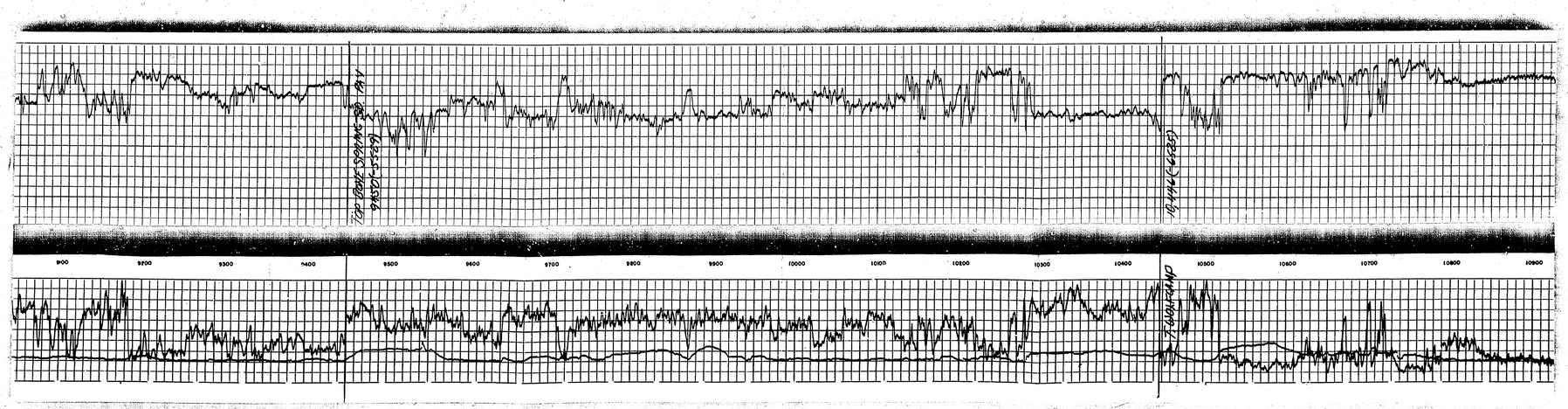
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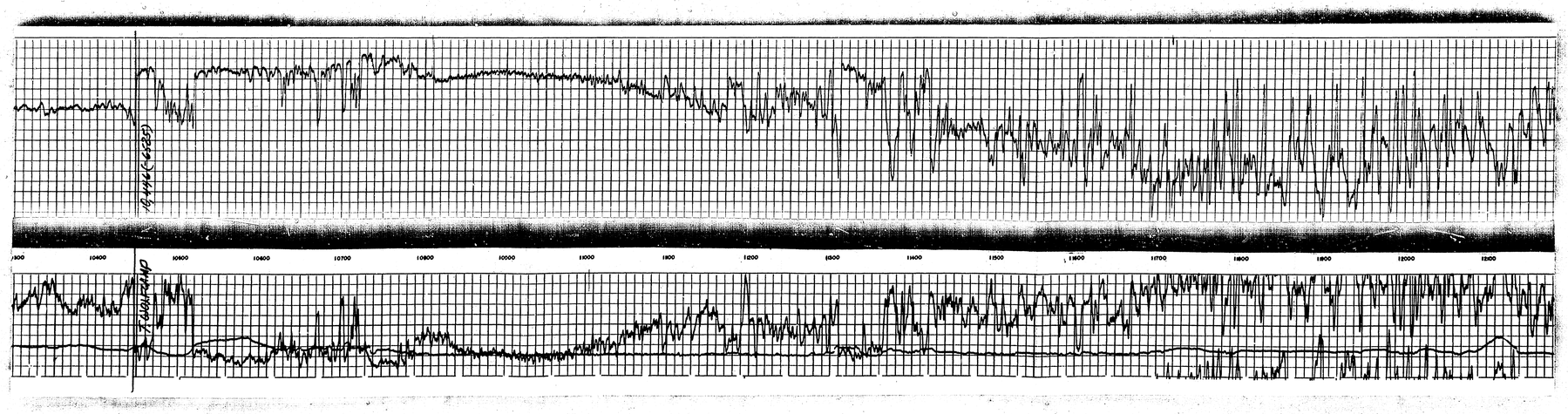
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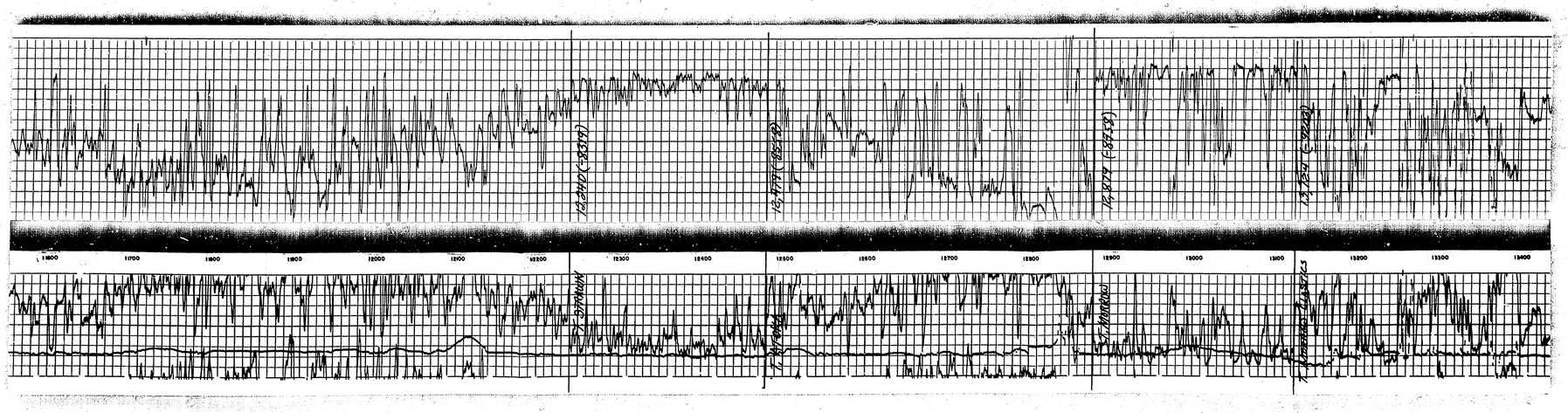
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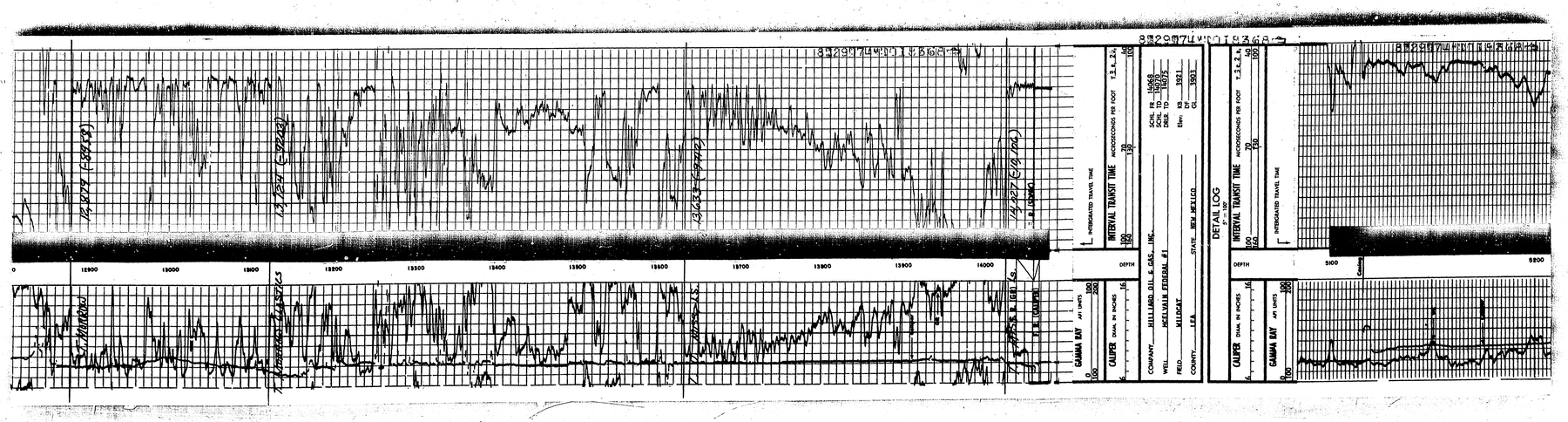
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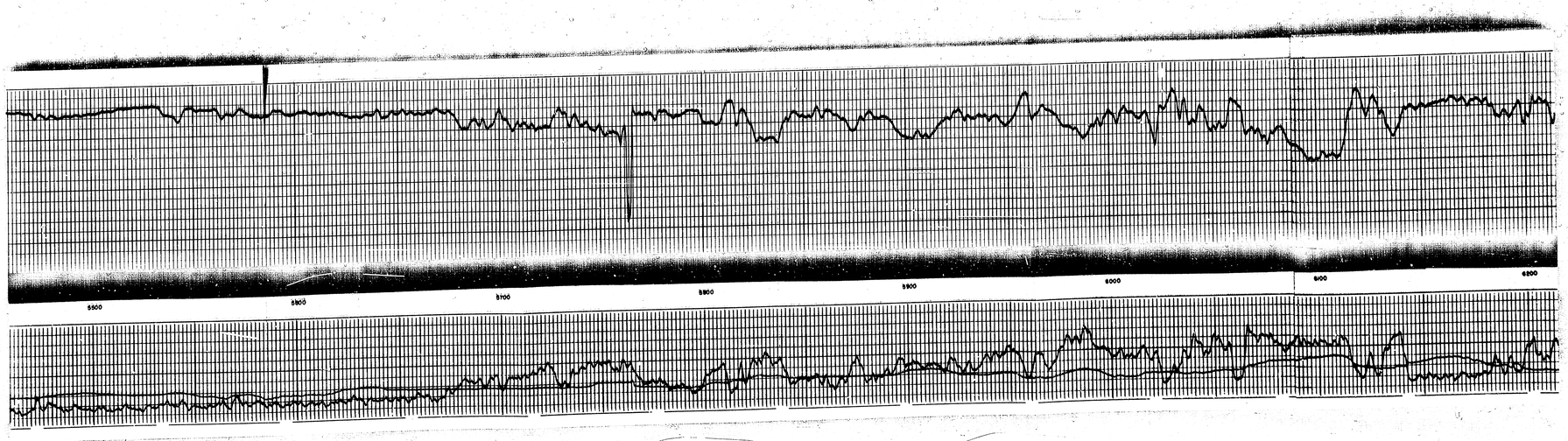
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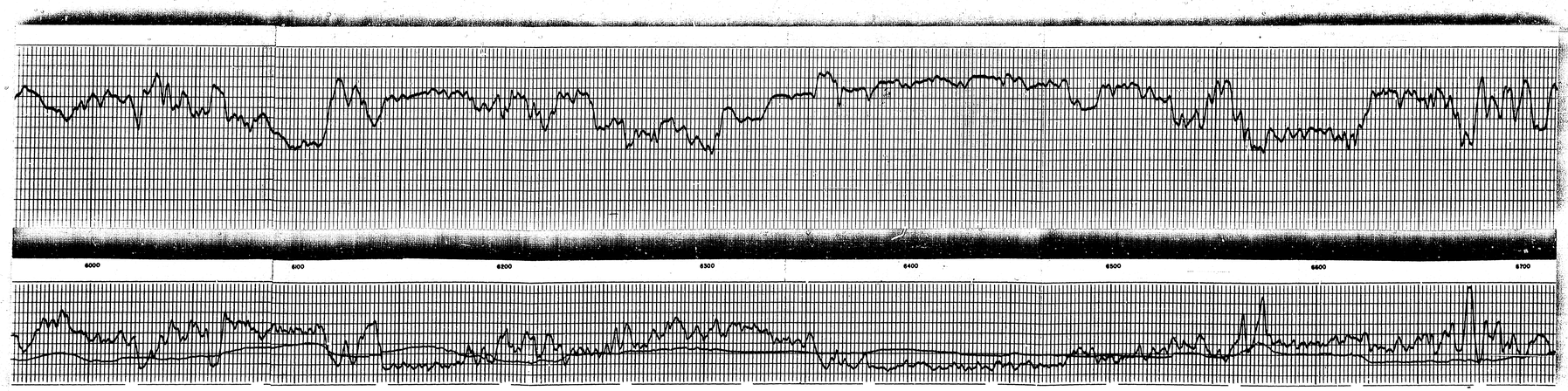
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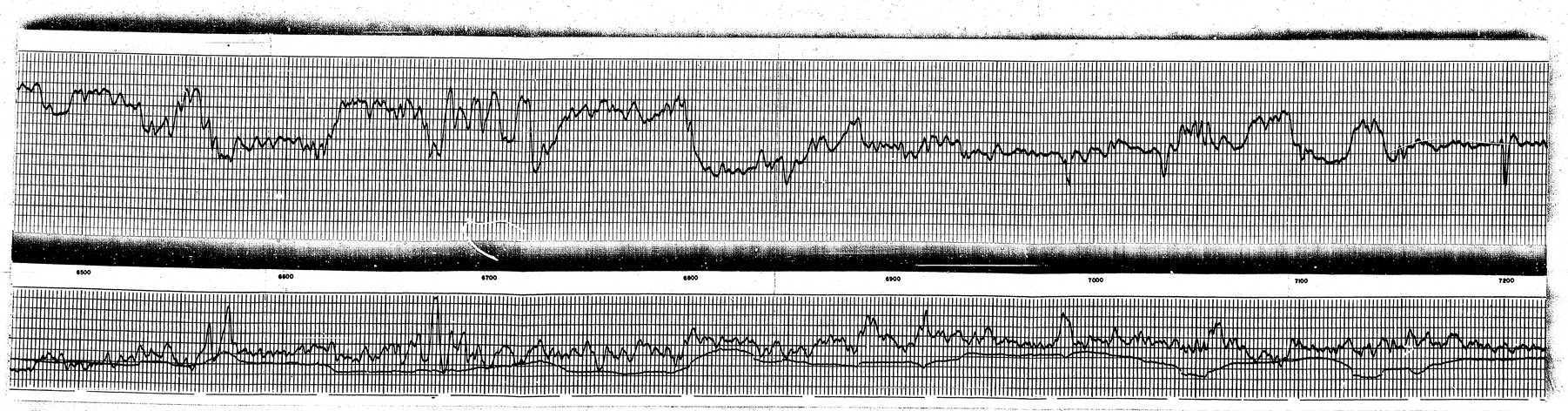
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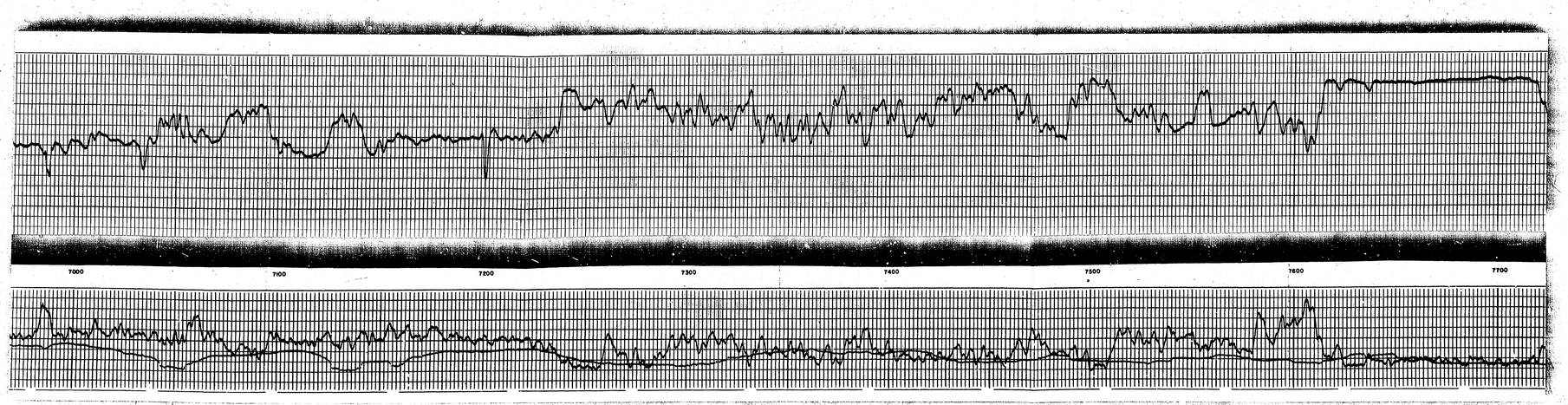
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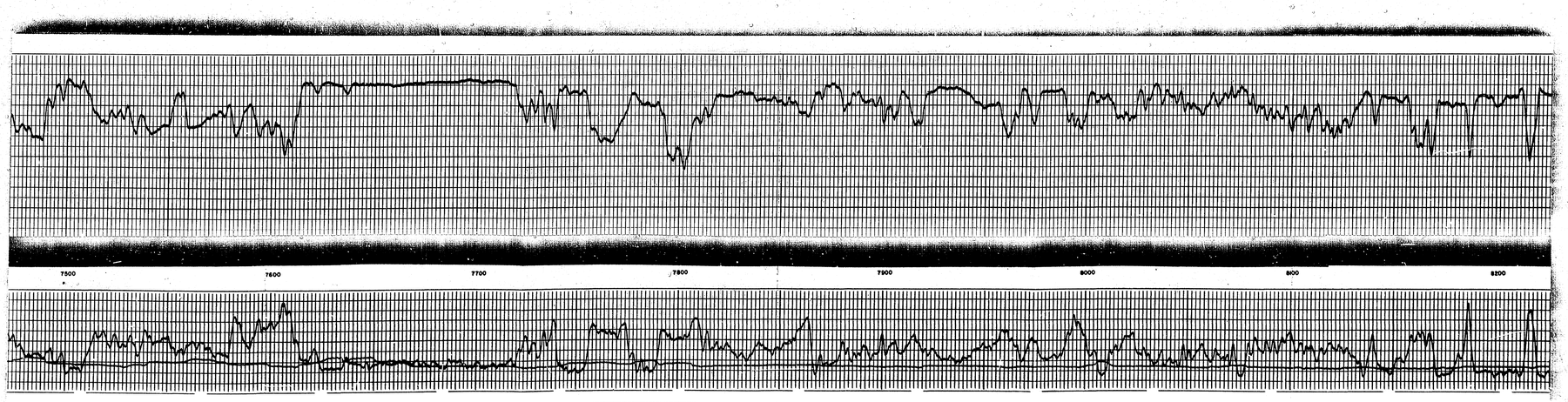
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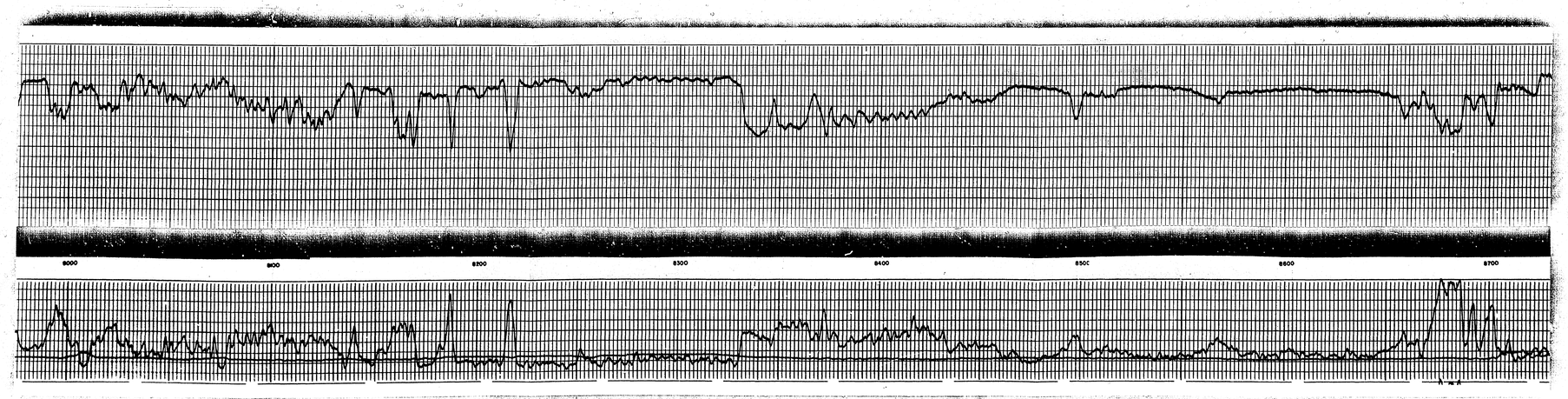
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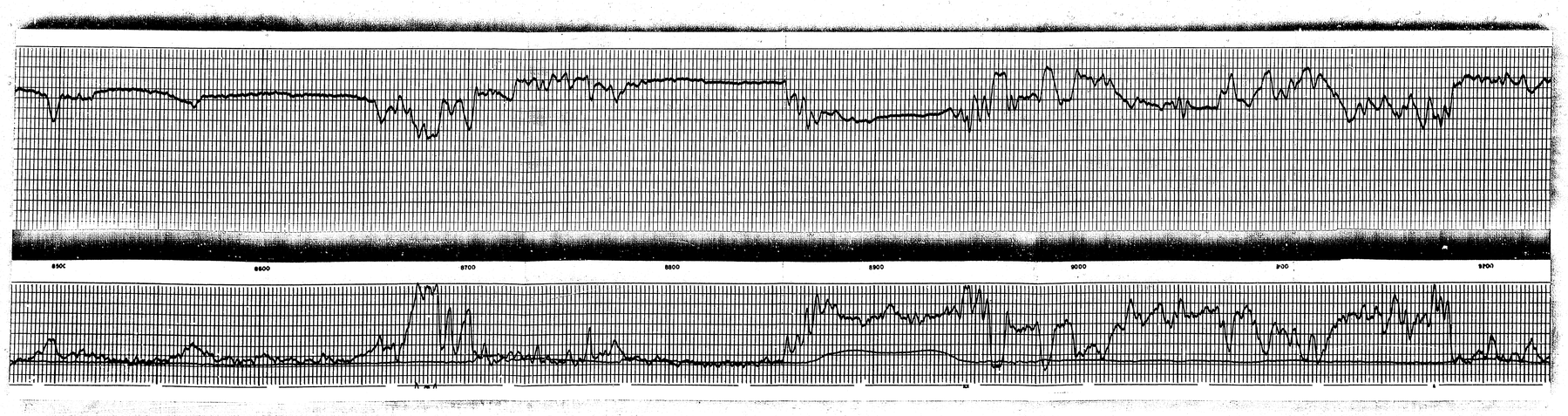
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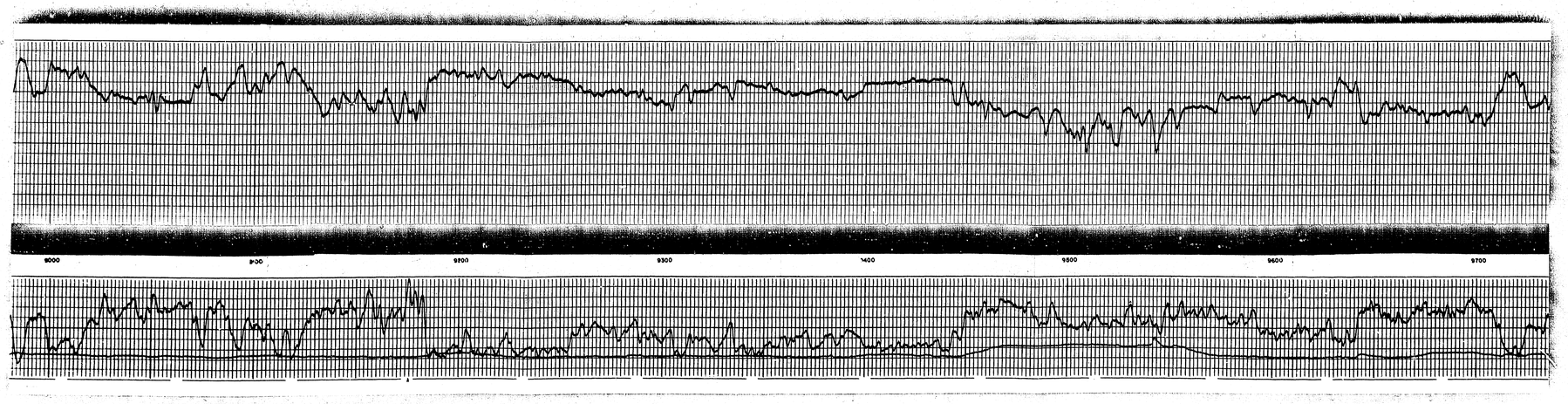


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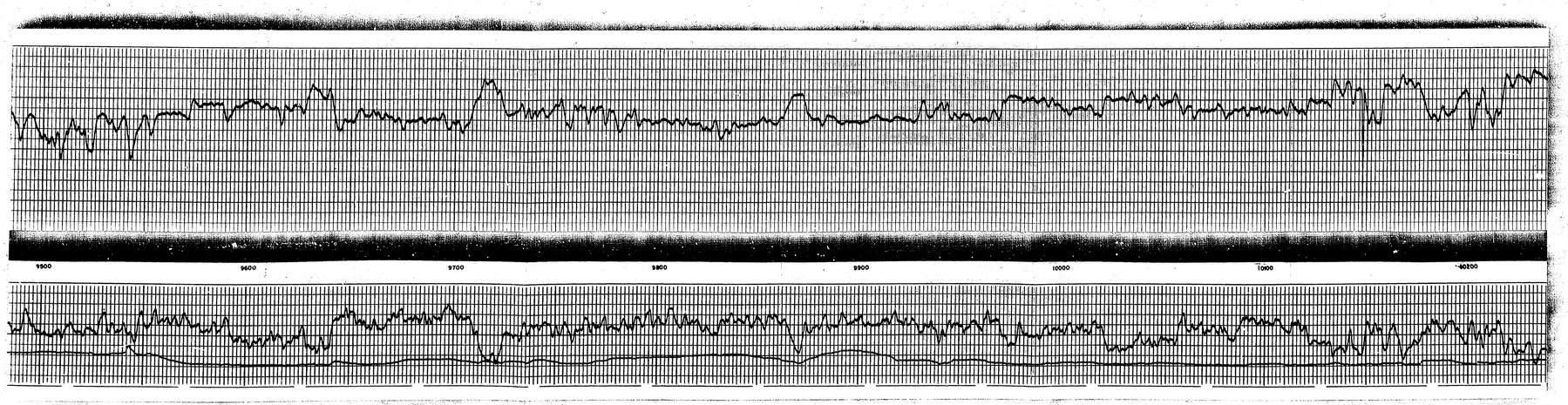


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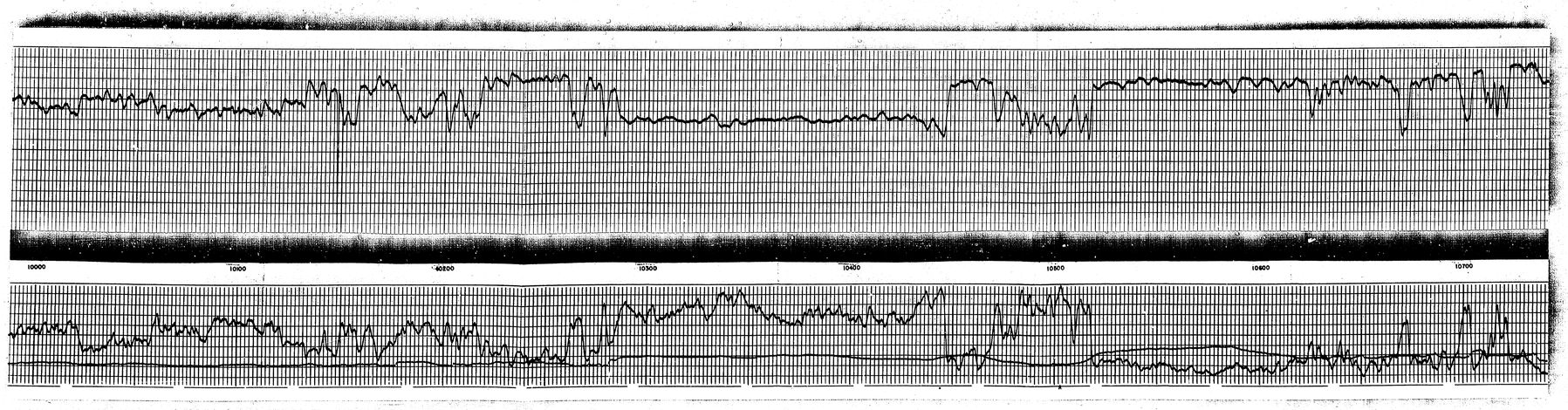
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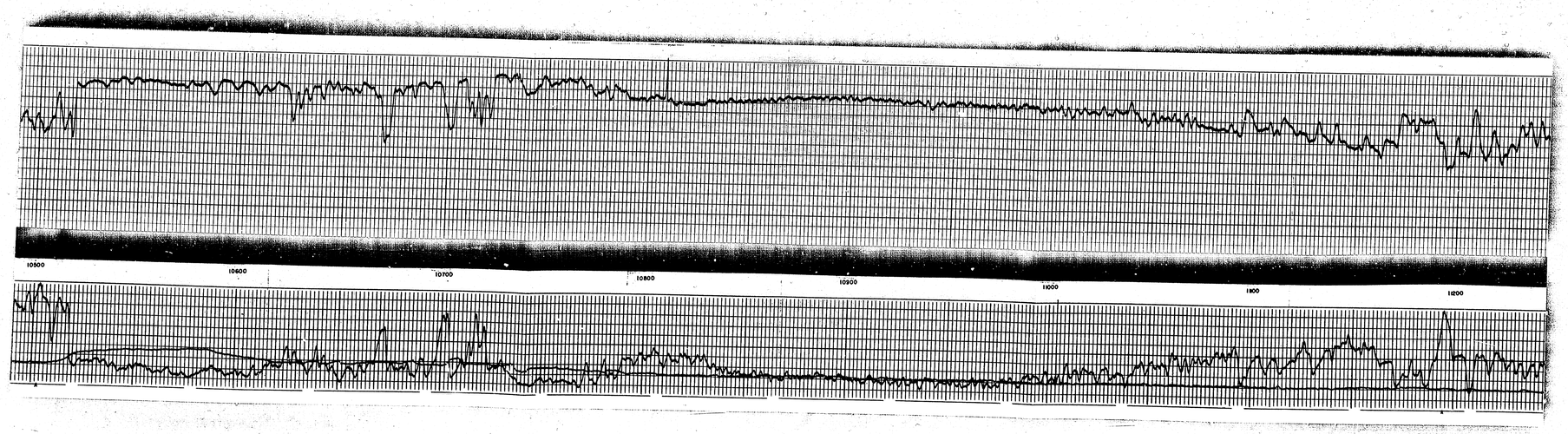
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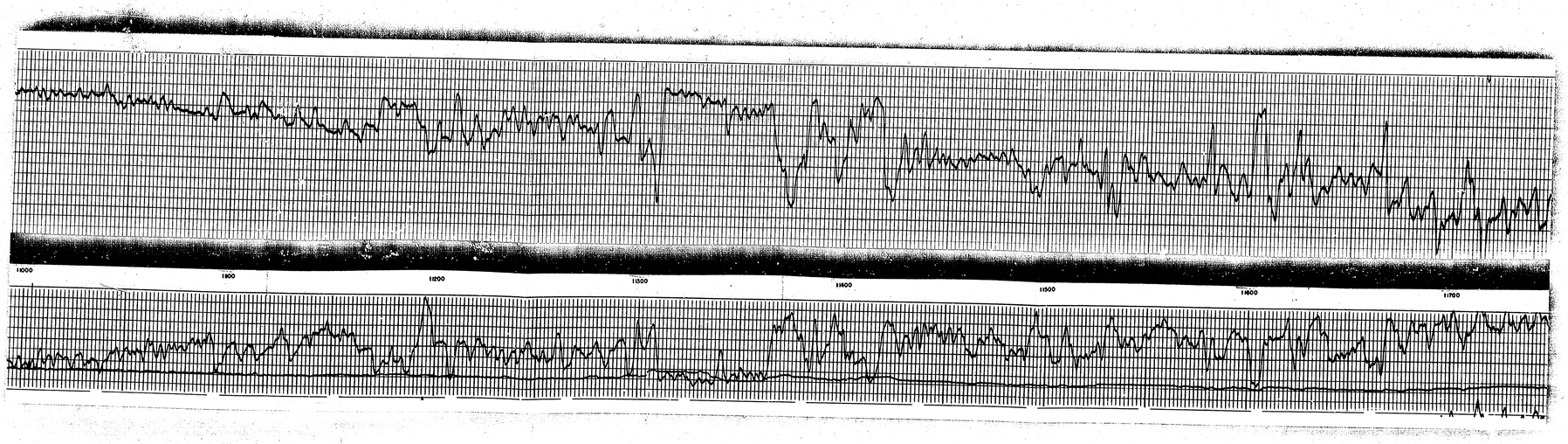
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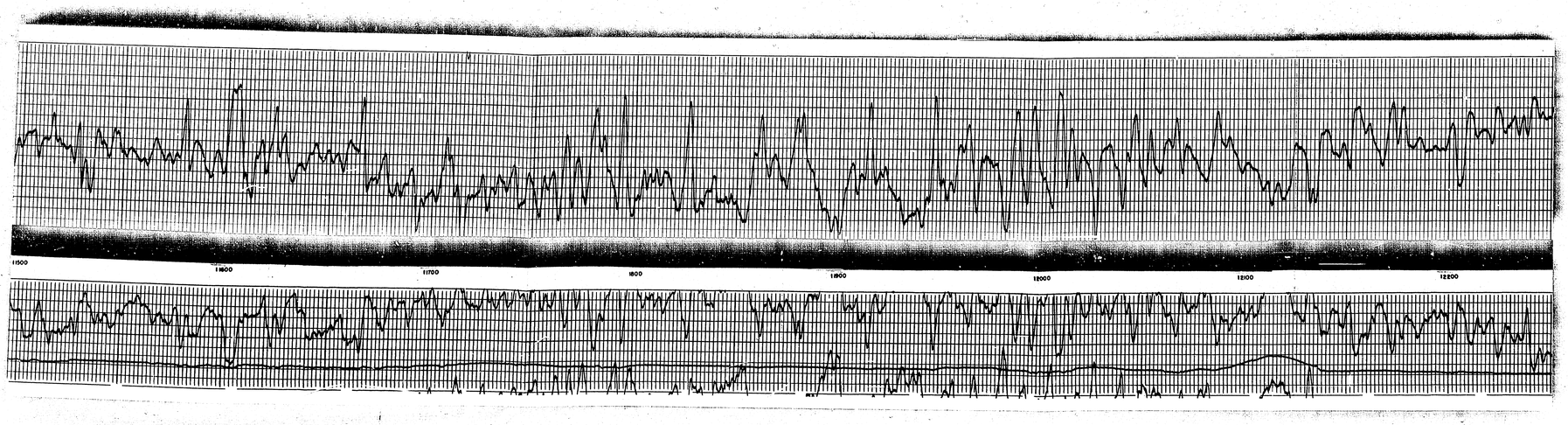
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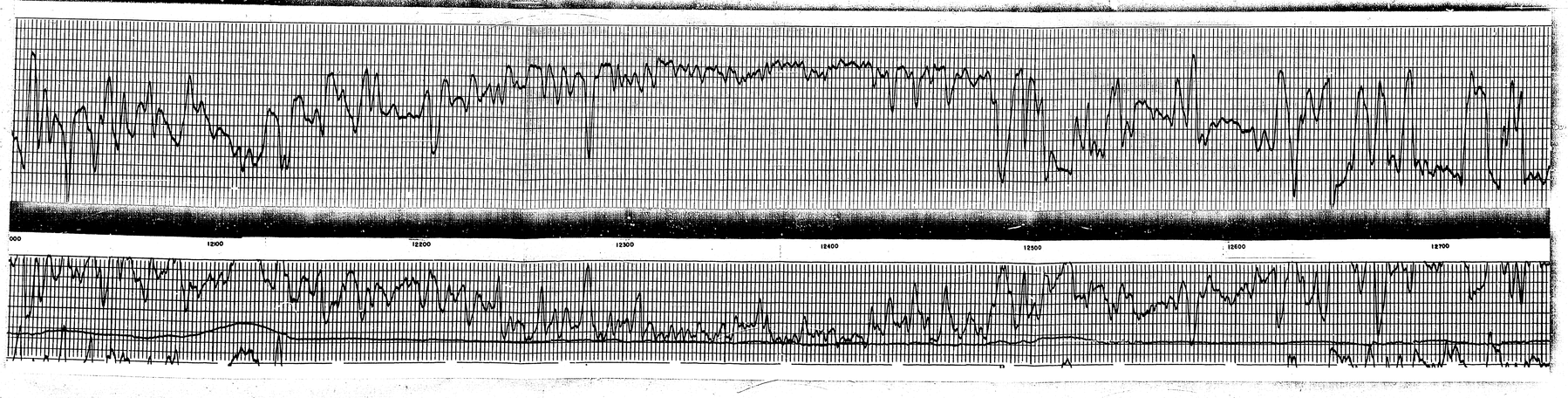
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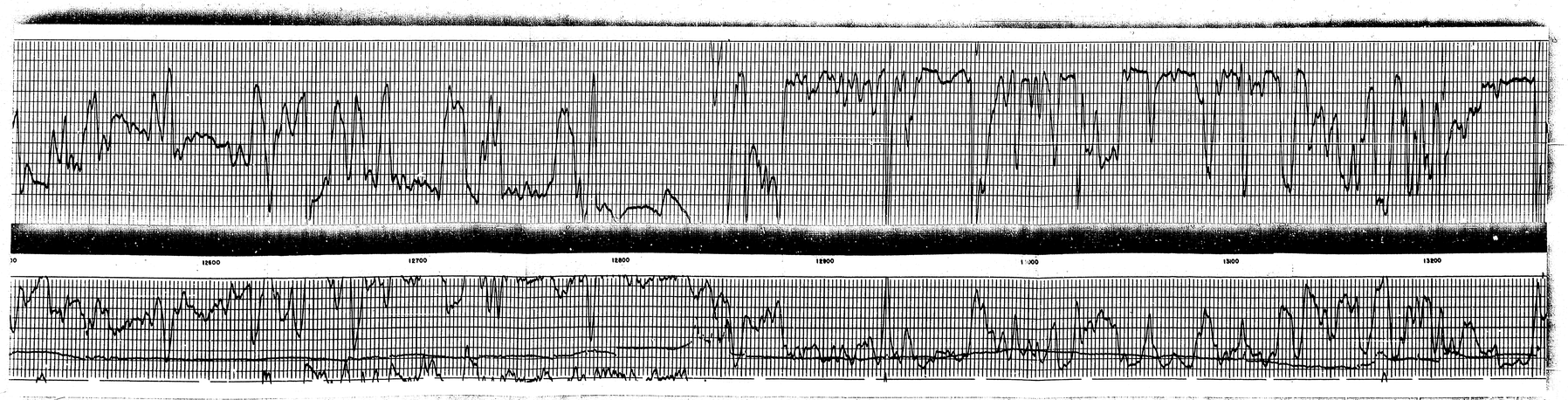


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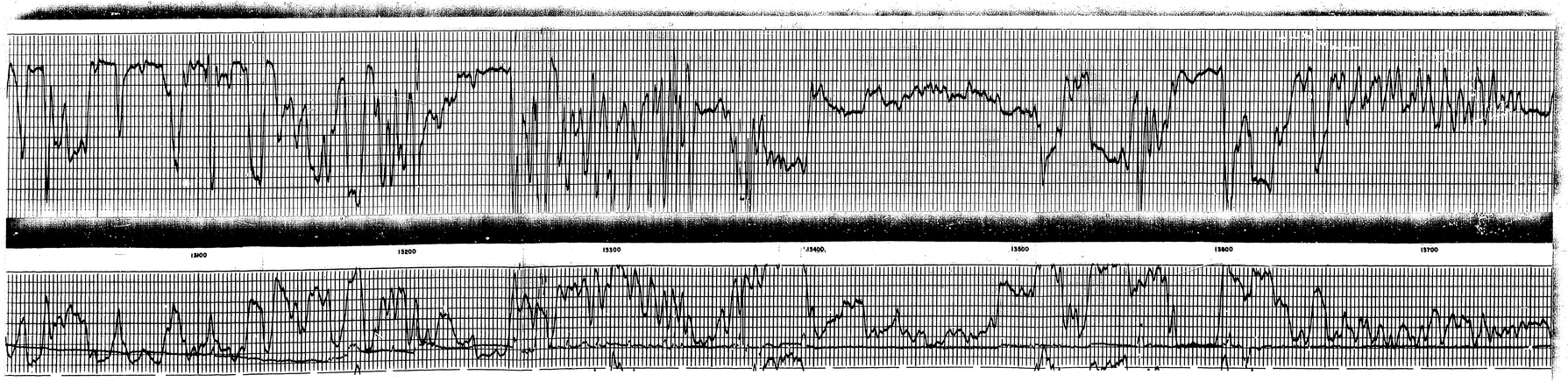


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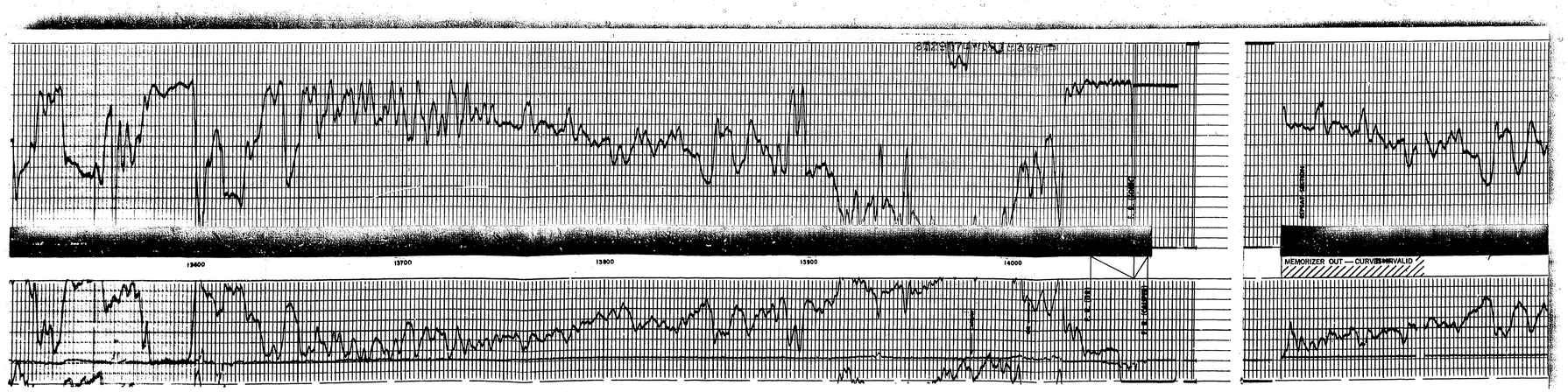
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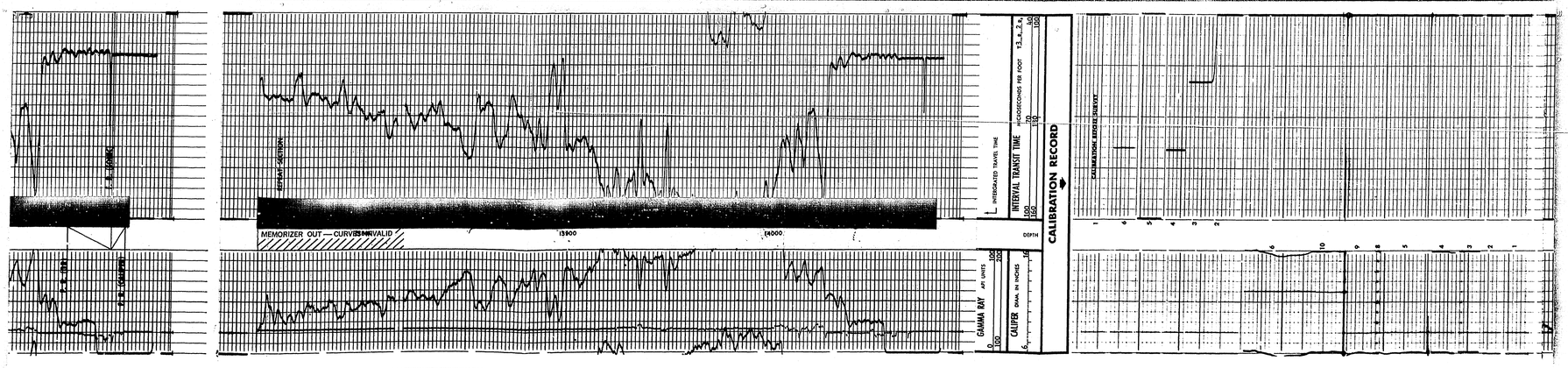
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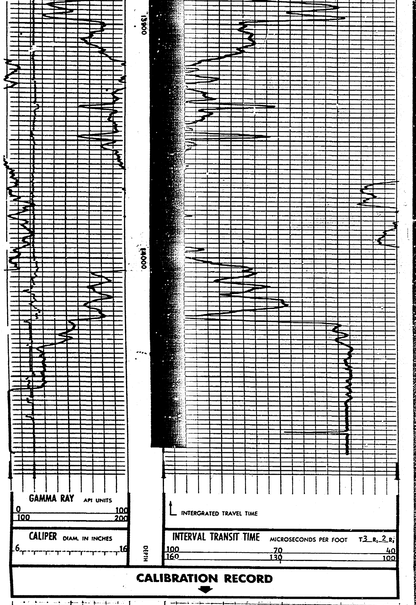
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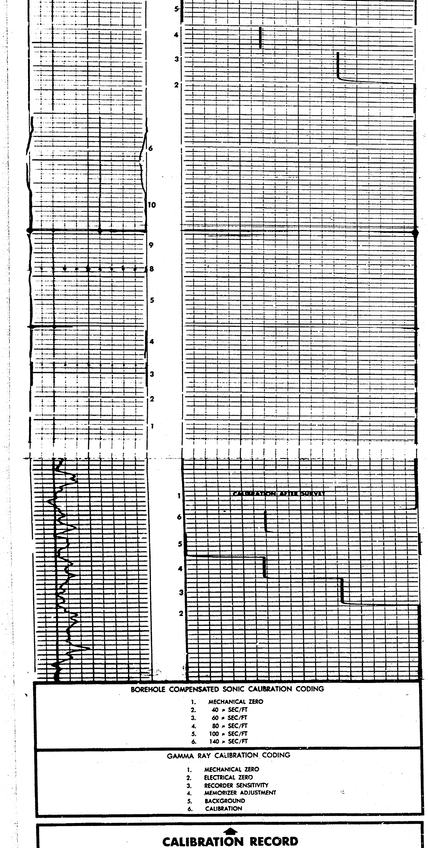
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V.N.M.C.F. MICROGRAPHICS
BEST AVAILABLE COPY



CALIBRATION RECORD



BOREHOLE COMPENSATED SONIC CALIBRATION CODING

1. MECHANICAL ZERO
2. 40 + SEC/FT
3. 60 + SEC/FT
4. 80 + SEC/FT
5. 100 + SEC/FT
6. 140 + SEC/FT

GAMMA RAY CALIBRATION CODING

1. MECHANICAL ZERO
2. ELECTRICAL ZERO
3. RECORDER SENSITIVITY
4. MEMORIZER ADJUSTMENT
5. BACKGROUND
6. CALIBRATION

CALIBRATION RECORD

COMPANY HILLIARD OIL & GAS, INC.

WELL MCELVAIN FEDERAL #1

FIELD WILDCAT

COUNTY LEA STATE NEW MEXICO

SCHL. FR 14068
SCHL. TD 14070
DRLR TD 15025

Elev: KB 3921
DF
GL 3903



Schlumberger

MICROLATEROLOG-MICROLOG

COMPANY HILLIARD OIL & GAS, INC.

WELL NGELVAIN FEDERAL #1

FIELD WILDCAT

COUNTY LEA STATE NEW MEXICO

Location: 1980' FSL & 1980' FEL

Sec. 30 Twp. 18-S Rge. 34-E

Other Services: CNL-FDC, BHC, DLL

COUNTY LEA
FIELD WILDCAT
LOCATION 1980' FSL & 1980' FEL
COMPANY HILLIARD OIL & GAS
WELL NGELVAIN FEDERAL

Permanent Datum G.L. Elev. 3903
Log Measured From K.B. 18 Ft. Above Perm. Datum
Drilling Measured From K.B.

Elev.: K.B. 3921
D.F.
G.L. 3903

Date	8-23-74					
Run No.	ONE					
Depth—Driller	14075					
Depth—Logger (Schl.)	14065					
Btm. Log Interval	13710					
Top Log Interval	9400					
Casing—Driller	8 5/8@5120	@		@		@
Casing—Logger						
Bit Size	7 7/8					
Type Fluid in Hole	DEXTRID-DRISPAC					
Dens. / Visc.	10.1 / 44					
pH / Fluid Loss	9.5 / 2.0 ml		ml		ml	
Source of Sample	PIT					
R_m @ Meas. Temp.	.056 @ 83 °F	@	°F	@	°F	@ °F
R_{mf} @ Meas. Temp.	.051 @ 80 °F	@	°F	@	°F	@ °F
R_{mc} @ Meas. Temp.	.086 @ 83 °F	@	°F	@	°F	@ °F
Source R_{mf} / R_{mc}	M / C					
R_m @ BHT	.026 @ 180°	@	°F	@	°F	@ °F
Time Circulation Stopped	8-22 1400					
Time Logger on Bottom	8-23 1630					
Max. Rec. Temp.	180		°F		°F	
Equip. / Location	3721 HOBBS					
Recorded By	KEHPER					
Witnessed By	SCHULTZ					

Rotary Table

RUN NO. ONE
Service Order No. 18308
Elevation: K.B. 3921
Ground Level (G.L.) 3903

DEPTH DRILLER 14075
DEPTH LOGGER 14065
BOTTOM LOGGED INTERVAL 13710
TOP LOGGED INTERVAL 9400
TYPE FLUID IN HOLE DEXTRID-DRISPAC
SALINITY, PPM Cl 5000
DENSITY LB/GAL 10.1
LEVEL FULL
SOURCE OF SAMPLE PIT
R_m @ MEAS. TEMP. .056 @ 83°F
R_{mf} @ MEAS. TEMP. .051 @ 80°F
R_{mc} @ MEAS. TEMP. .086 @ 83°F
R_m @ BHT .026 @ 180°F
TIME CIRC. STOPPED 8-22 1400
TIME LOGGER ON BOTTOM 8-23 1630
MAX. REC. TEMP. 180 °F
EQUIP. NO. & LOCATION 3721 HOBBS
RECORDED BY KEHPER
WITNESSED BY SCHULTZ

Spud Up Hole Rotary Downhole

Type Log	Depth	Driller	Logger
DIL	13308	13308	13308
BHC	13308	13308	13308
FDC	13308	13308	13308

REMARKS:

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our General Terms and Conditions set out in our current Price Schedule.

RESISTIVITY OHMS, R^2/m.
MICROLATEROLOG
100 10 1 .1

DEPTH
9500
9600
9700

Micro Normal 2"

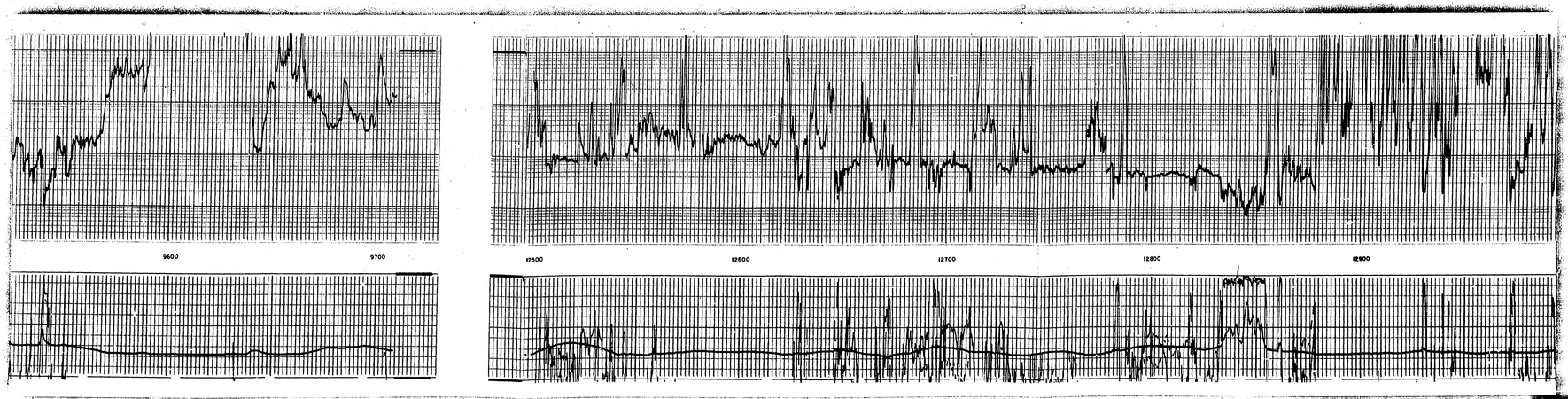
CALIPER DIAM. IN INCHES
6 16

RESISTIVITY OHMS, R^2/m.
MICRO INVERSE 1.5"
2 0

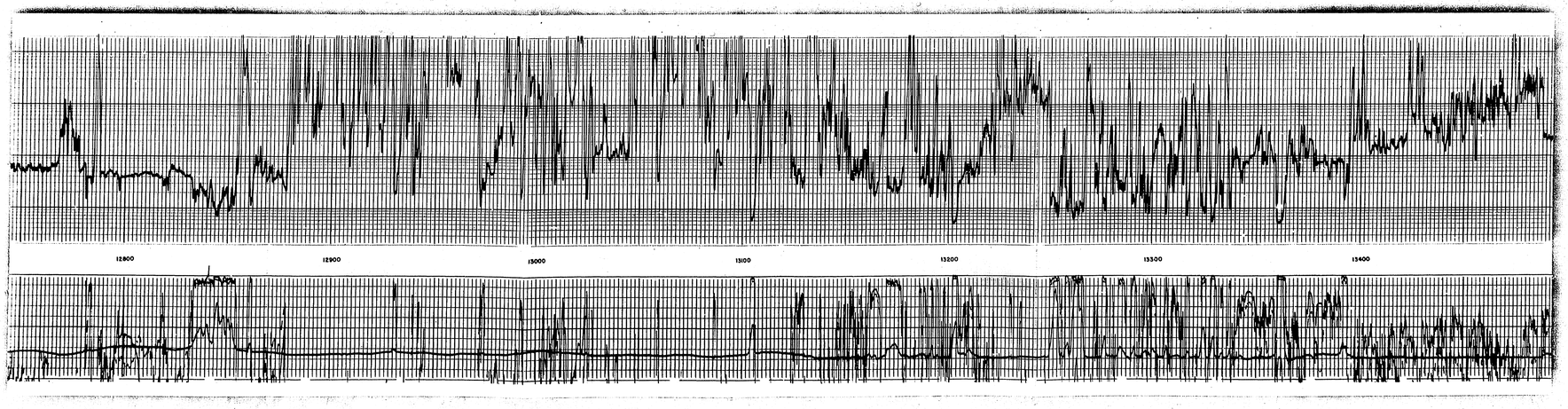
MICRO NORMAL 2"
2 0

CALIPER

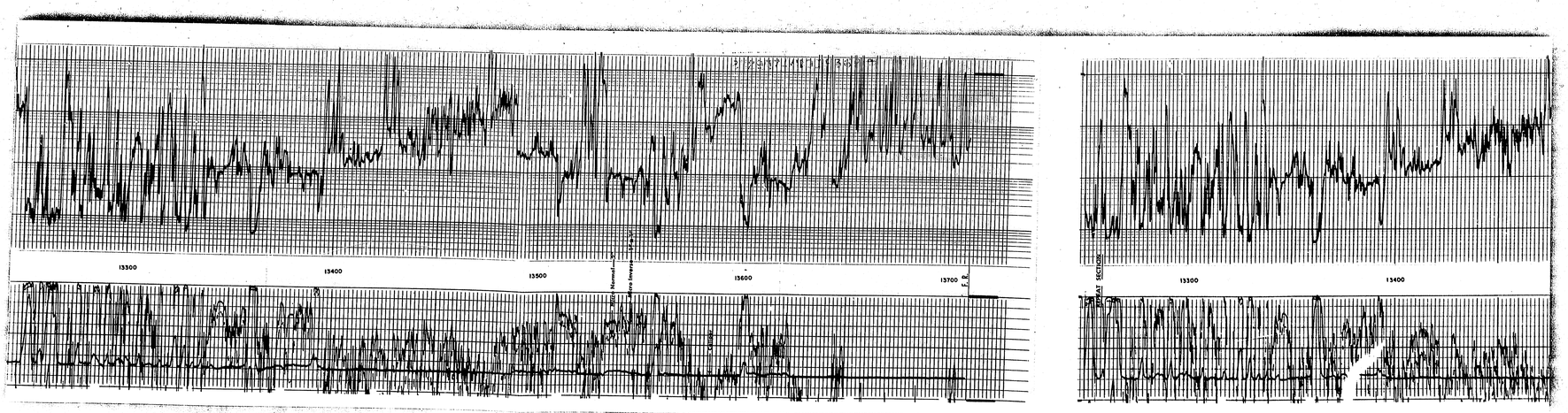
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W.R.N.C.F. MICROGRAPHICS
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V.N.R.C.F. MICROGRAPHICS
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Schlumberger

DUAL LATEROLOG

COMPANY HILLIARD OIL & GAS, INC.

WELL MCELVAIN FEDERAL #1

FIELD WILDCAT

COUNTY LEA STATE NEW MEXICO

LOCATION: 1980' FSL & 1980' FEL

Sec. 30 Twp. 18-S Rge. 34-E

Other Services: CNL-FDC, BHC, HLL

Permanent Datum: G.L. Elev. 3903

Log Measured From: K.B. 18 Ft. Above Perm. Datum

Drilling Measured From: K.B.

Elev.: K.B. 3921, D.F., G.L. 3903

COUNTY LEA
FIELD WILDCAT
LOCATION 1980' FSL & 1980' FEL
COMPANY HILLIARD OIL & GAS

Date	8-23-74					
Run No.	ONE					
Depth—Driller	14075					
Depth—Logger	14070					
Btm. Log Interval	14055					
Top Log Interval	5116					
Casing—Driller	8 5/8@ 5120	@	@			
Casing—Logger	5116					
Bit Size	7 7/8					
Type Fluid in Hole	DEXTRID-DRISPAC FULL					
Dens. | Visc.	10.3 | 44					
pH | Fluid Loss	9.5 | 2.0 ml		ml		ml	ml
Source of Sample	PIT					
R_m @ Meas. Temp.	.056 @ 83 °F	@ °F	@ °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	.051 @ 80 °F	@ °F	@ °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	.080 @ 83 °F	@ °F	@ °F	@ °F	@ °F	@ °F
Source: R_{mf} R_{mc}	M C					
R_m @ BHT	@ °F	@ °F	@ °F	@ °F	@ °F	@ °F
Time Since Circ.						
Max. Rec. Temp.	°F		°F		°F	°F
Equip. | Location	3721 | HOBBS					
Recorded By	KEMPER					
Witnessed By	SCHULTZ					

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

CHANGED TO MUD TYPE OR ADDITIONAL SAMPLES

	Depth	Visc.	Fluid Loss	Source of Sample	R_m @ Meas. Temp.	R_{mf} @ Meas. Temp.	R_{mc} @ Meas. Temp.	Source: R_{mf} R_{mc}	R_m @ BHT
From Hole									
From Flow Line									

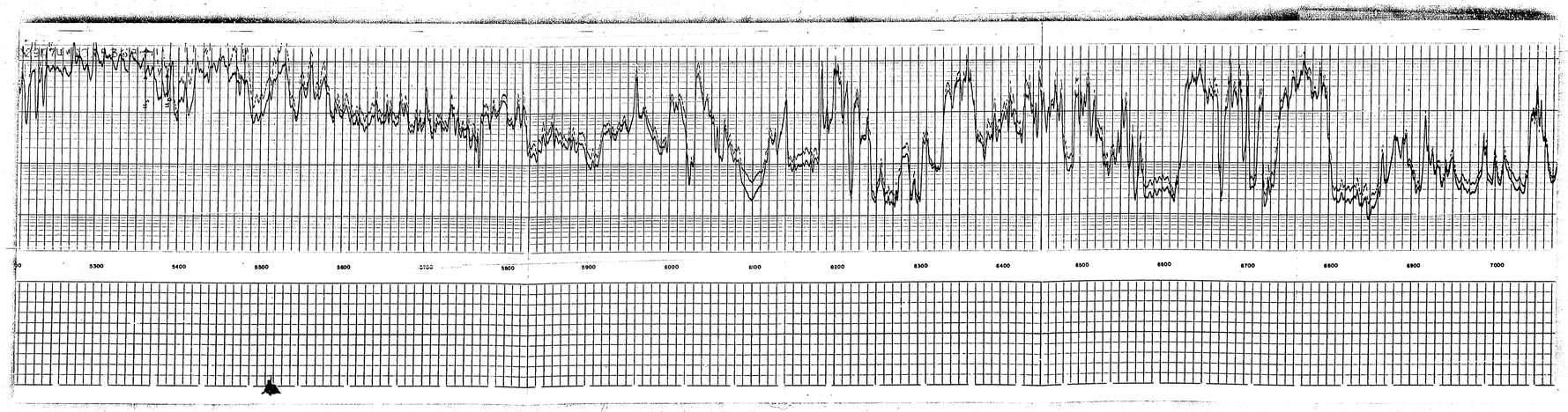
Scale Down Hole
Scale Up Hole
Depth
Type Log

SCALE CHANGES

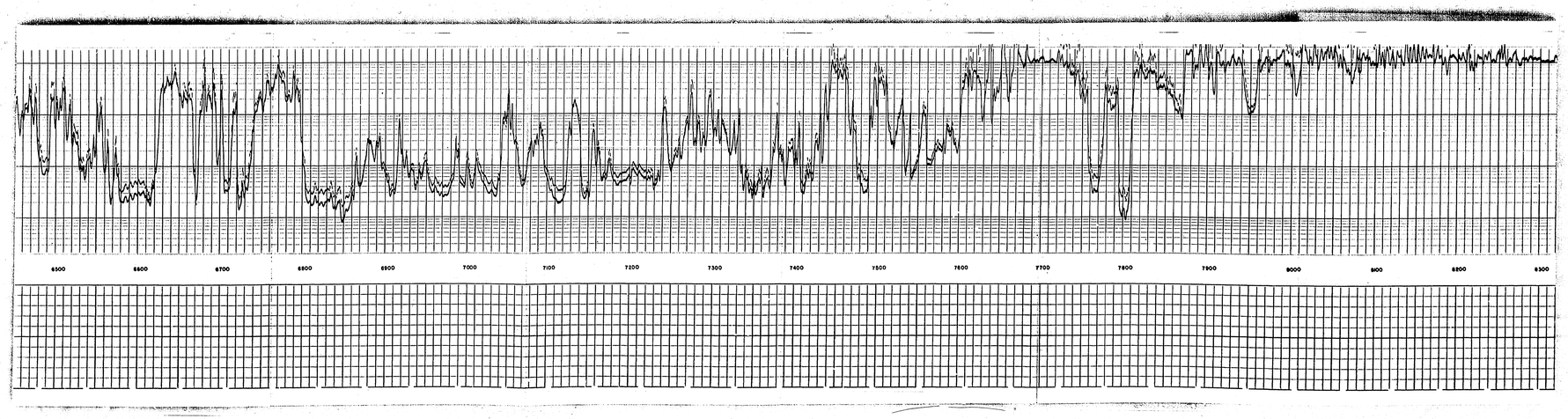
REMARKS
Location No.: 18368

RUN NO. ONE
Date: 8-23-74
Depth-Driller: 14075
Depth-Logger: 14070
Btm. Log Int.: 14055
Top Log Int.: 5116
Type Fluid in Hole: DEXTRID
Dens.: 10.3
Visc.: 44
pH: 9.5
Fluid Loss: 2.0 ml
Source of Sample: PIT
R_m @ Meas. Temp.: .056 @ 83 °F
R_{mf} @ Meas. Temp.: .051 @ 80 °F
R_{mc} @ Meas. Temp.: .080 @ 83 °F
Source: R_{mf} R_{mc}: M C
R_m @ BHT:
Time Since Circ.:
Max. Rec. Temp.:
Equip. \| Location: 3721 \| HOBBS
Recorded By: KEMPER
Witnessed By: SCHULTZ

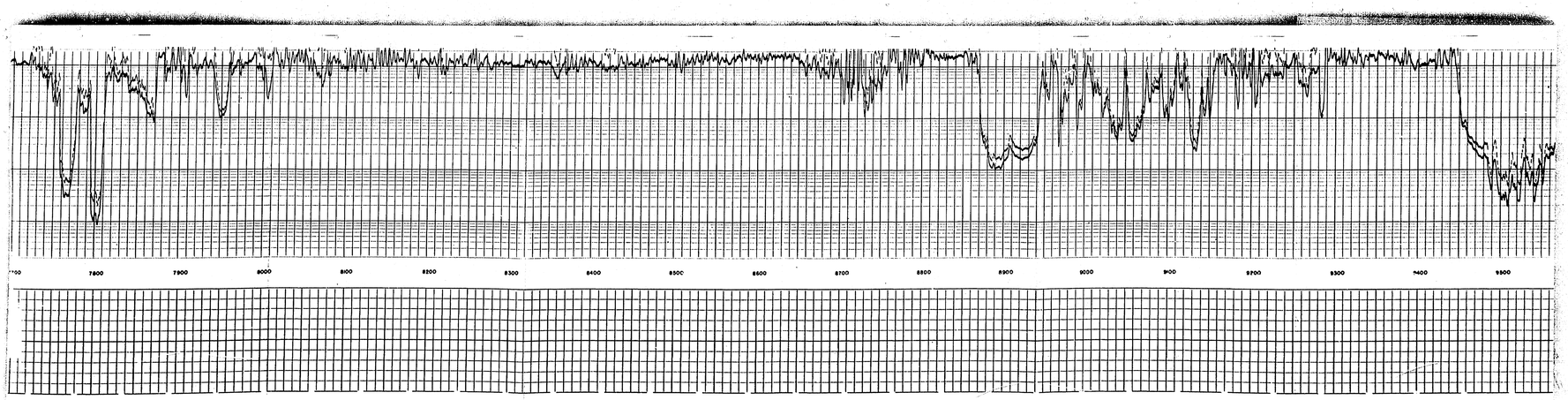
RUN NO. ONE
Bit No.: 1-RR
Type: 7 7/8
Size: 8-3/4
Serial No.:
Make:
Cas. Log:
Cas. No.:
Loc.:
Cas. Log:
Cas. No.:
Loc.:
Cas. Log:
Cas. No.:
Loc.



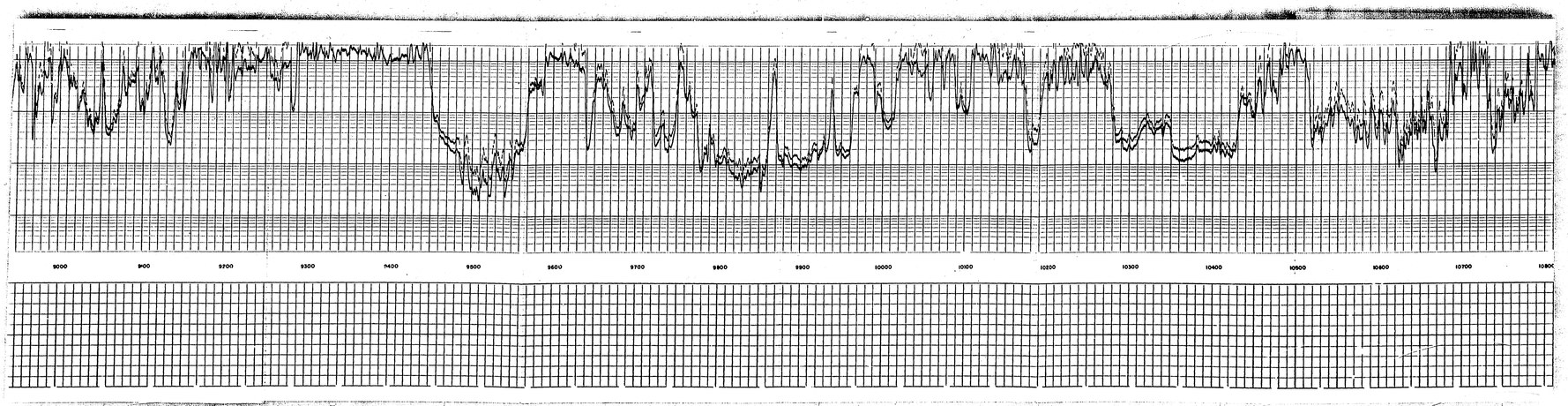
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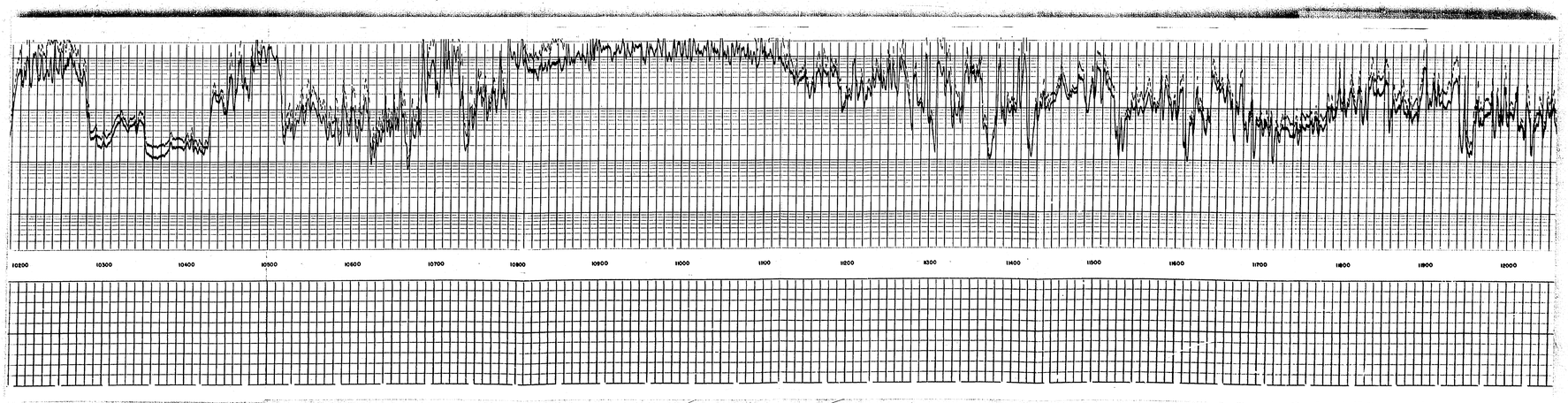
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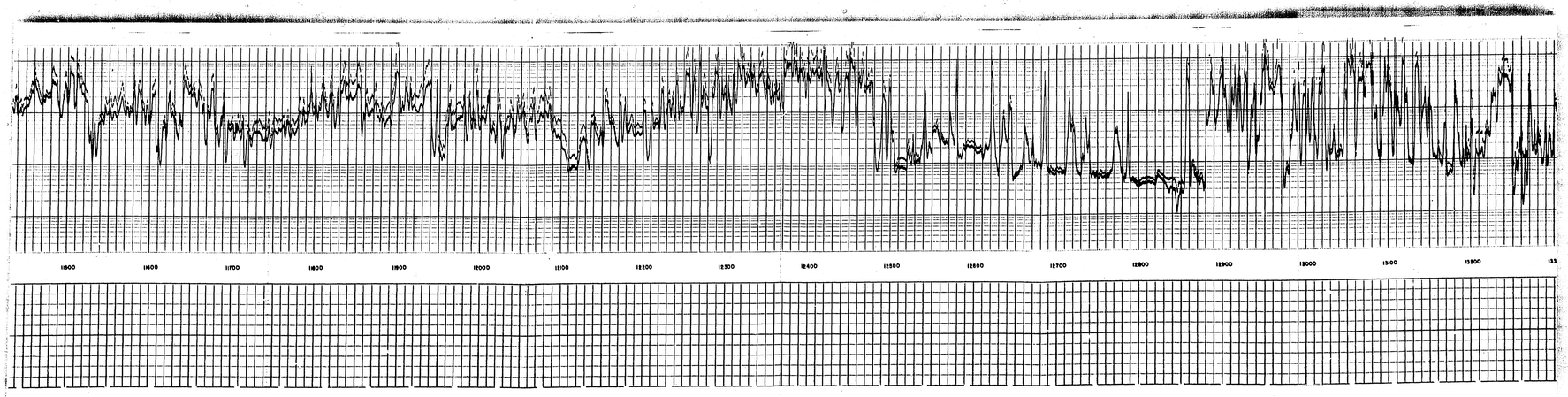
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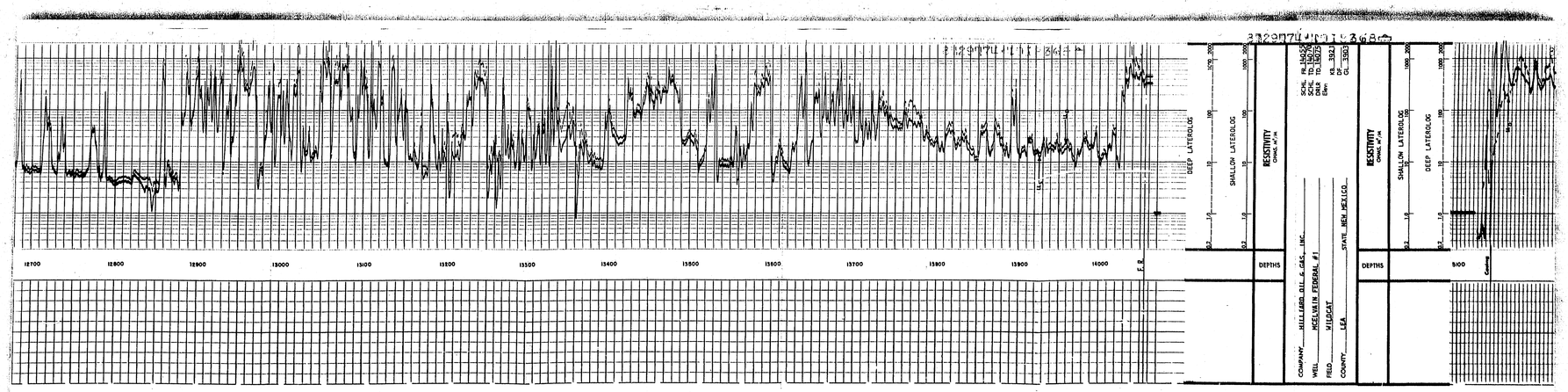
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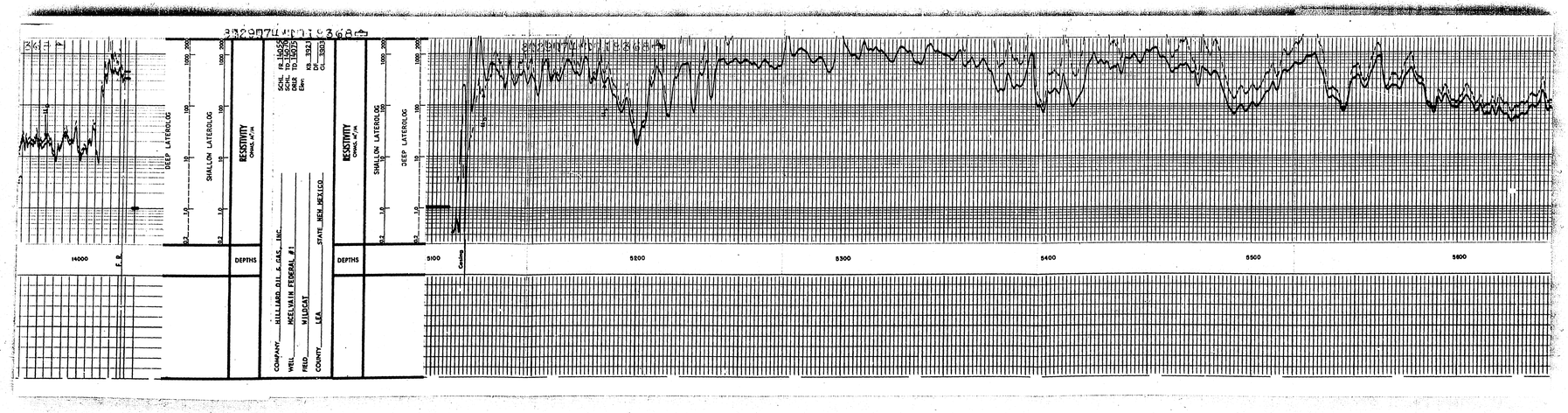
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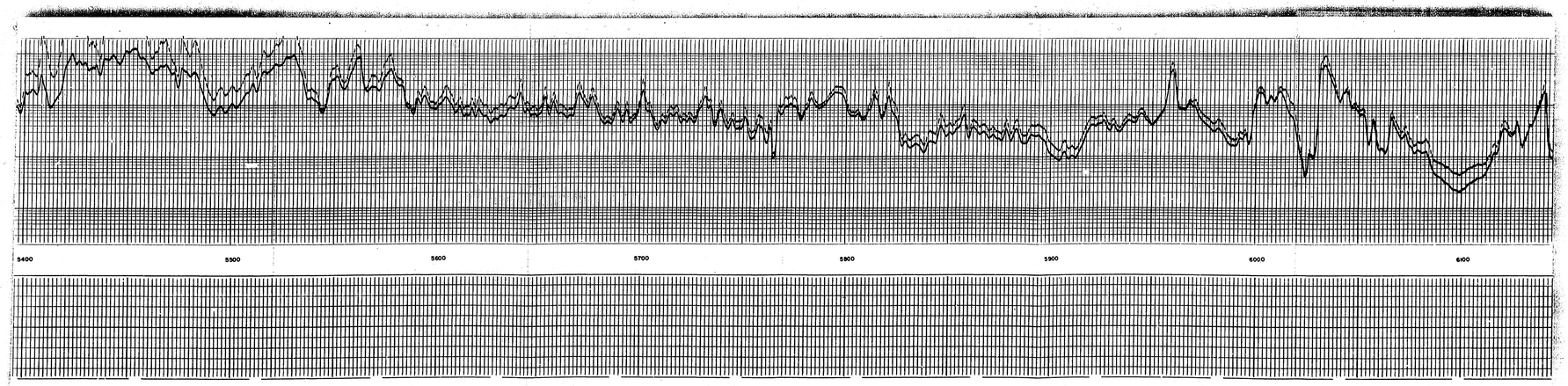
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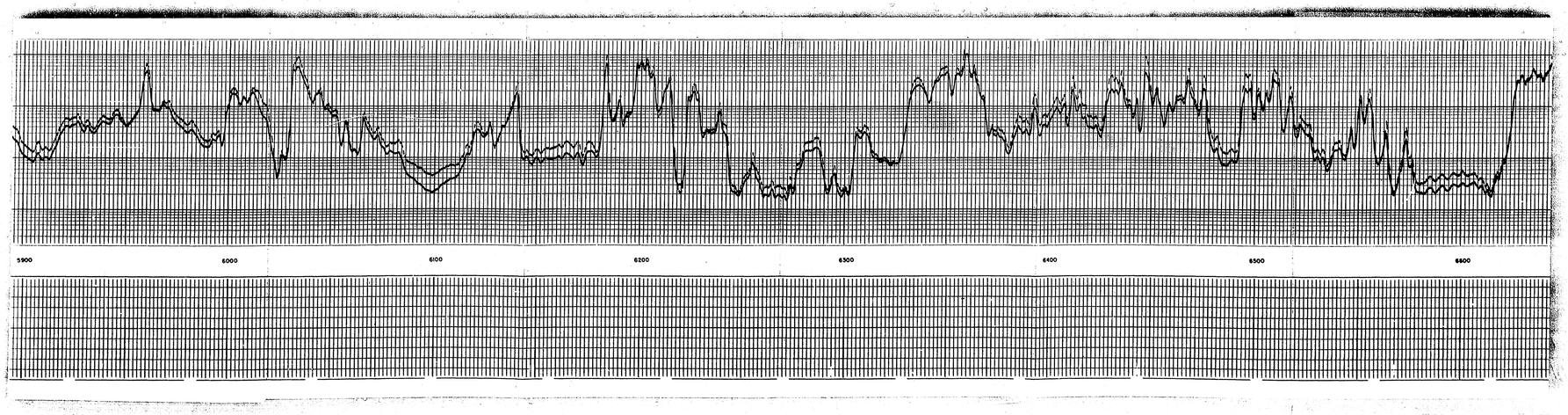
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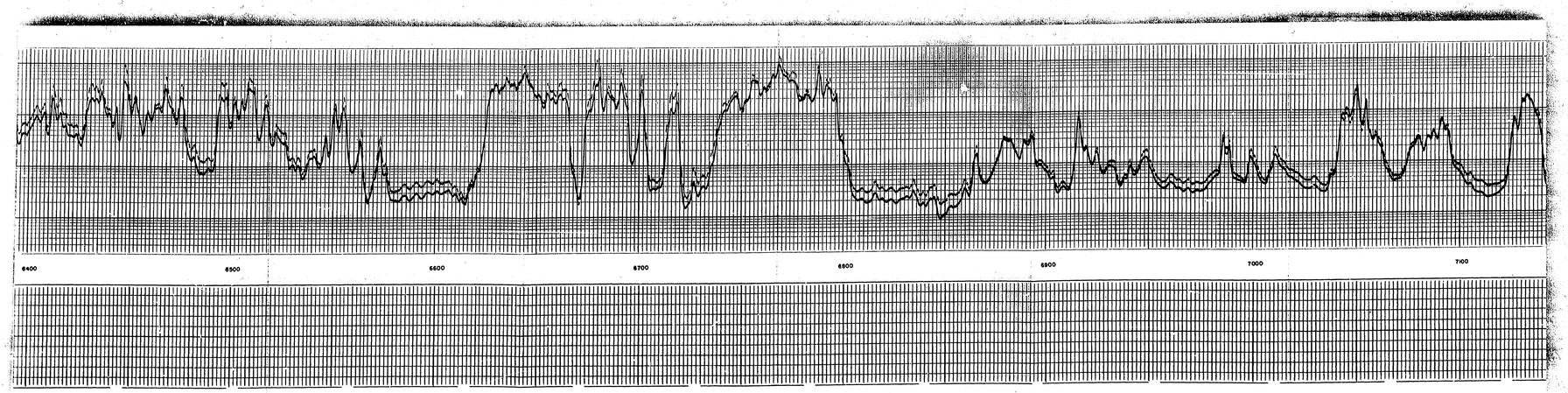
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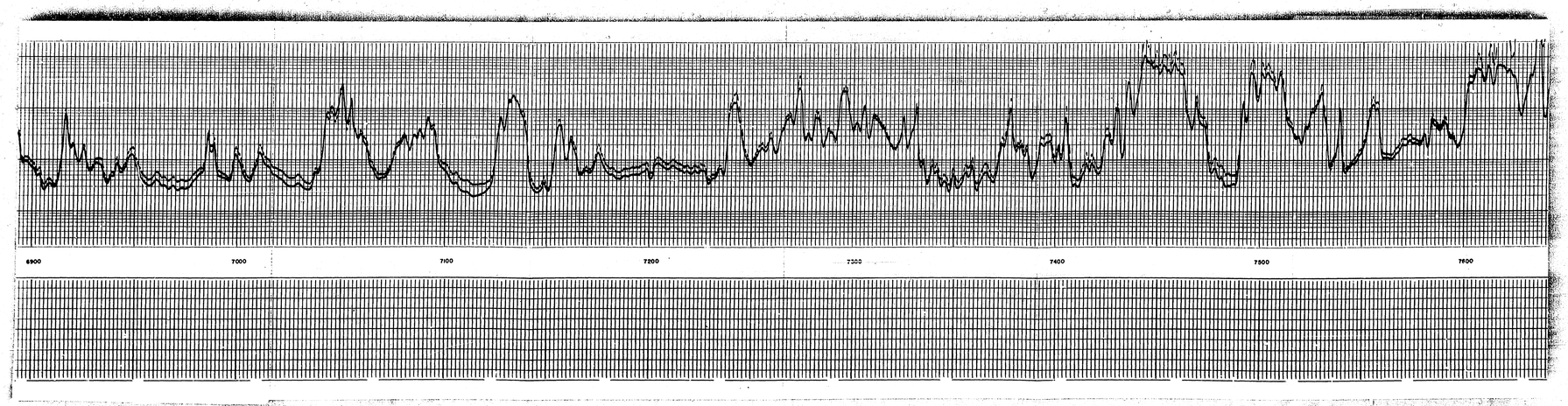
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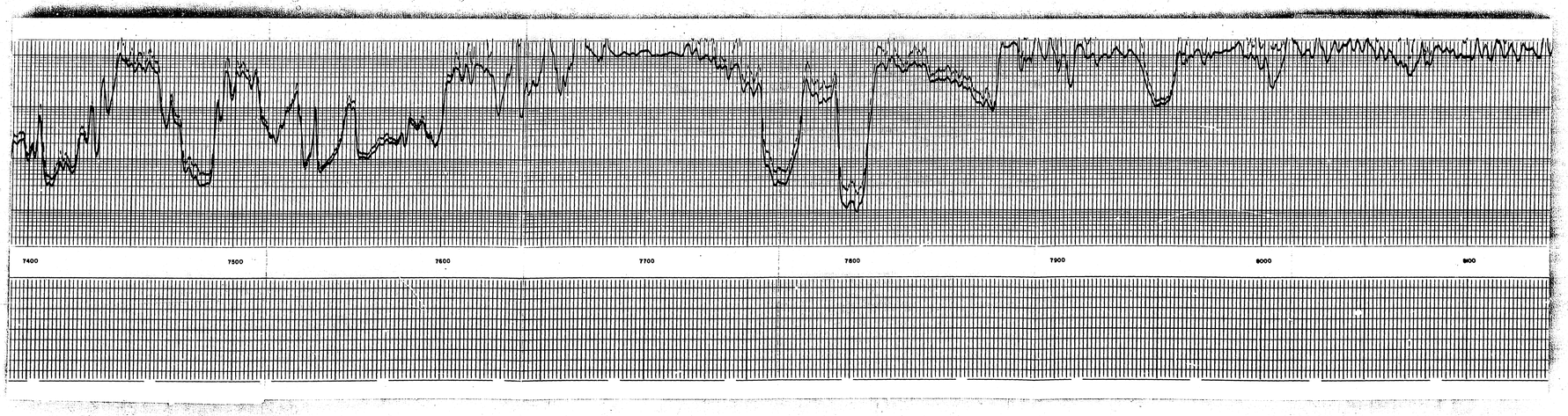
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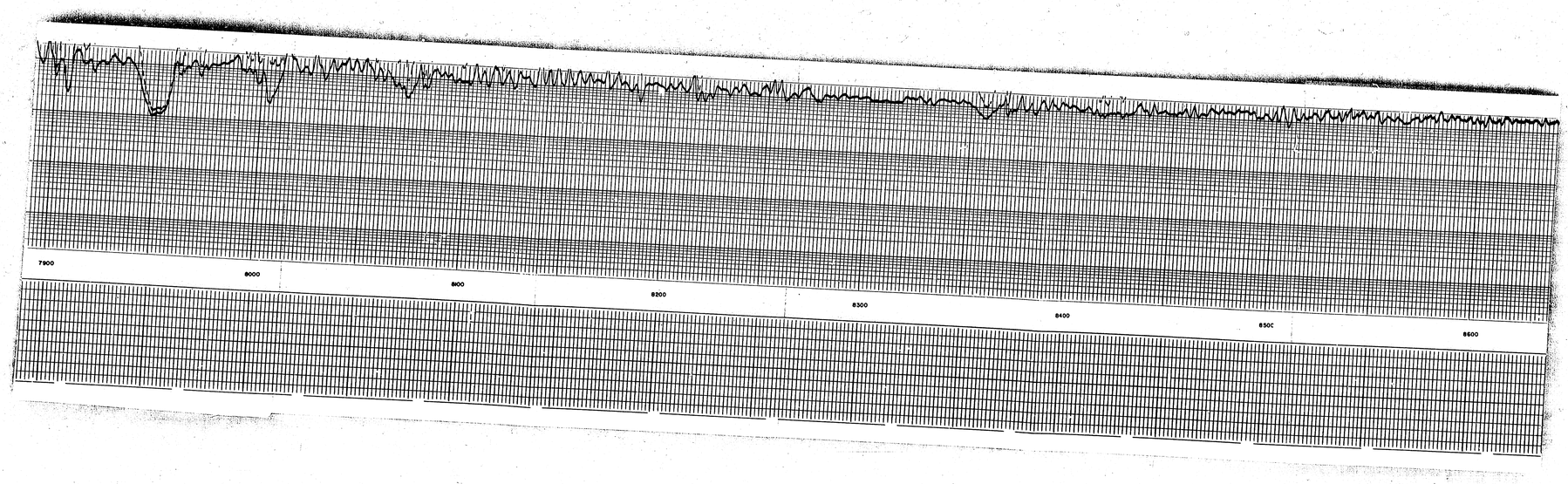
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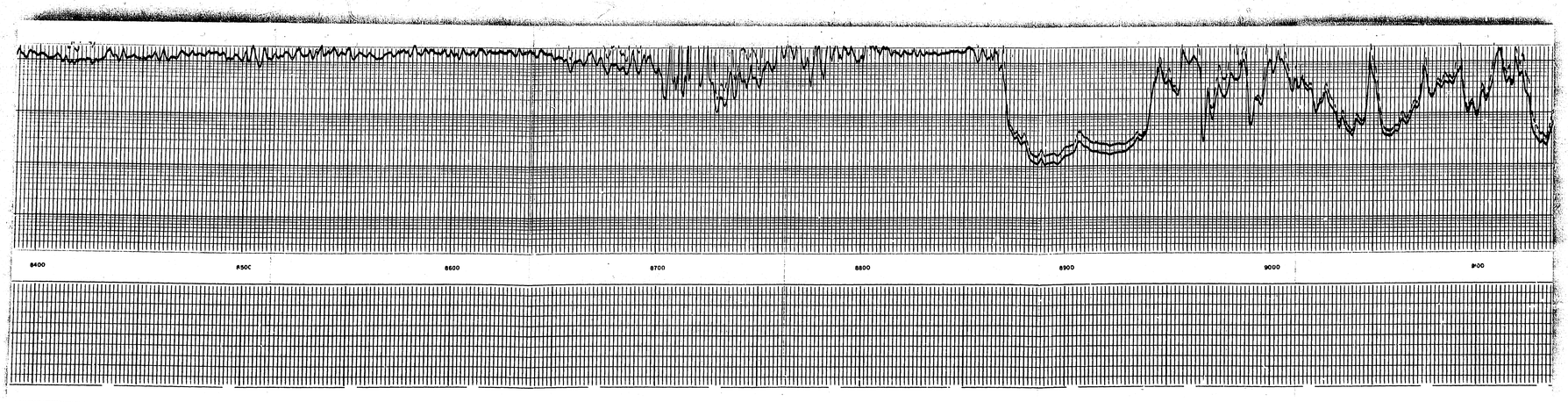


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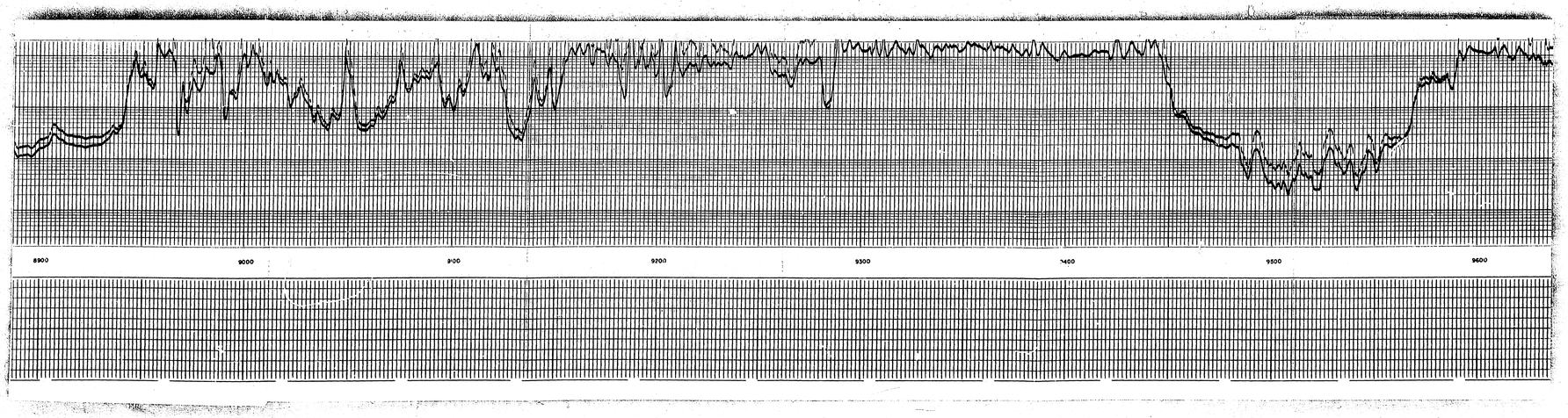


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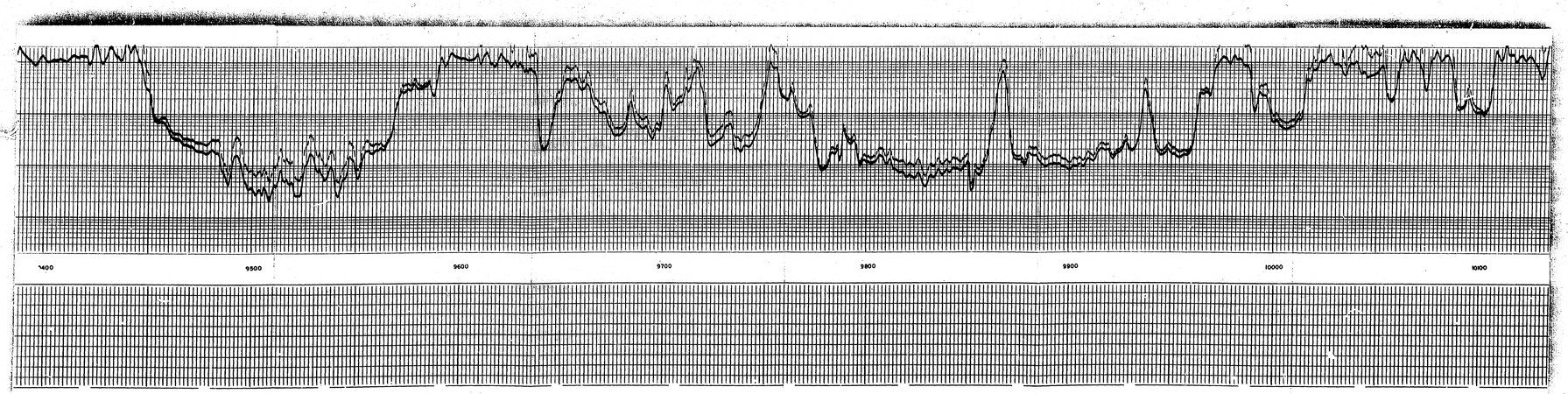
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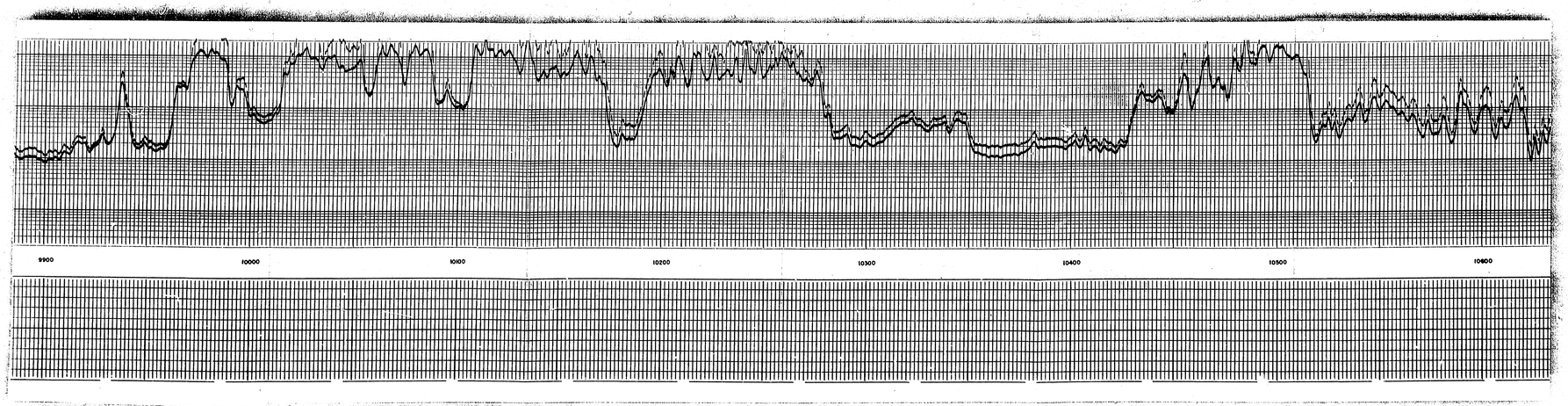
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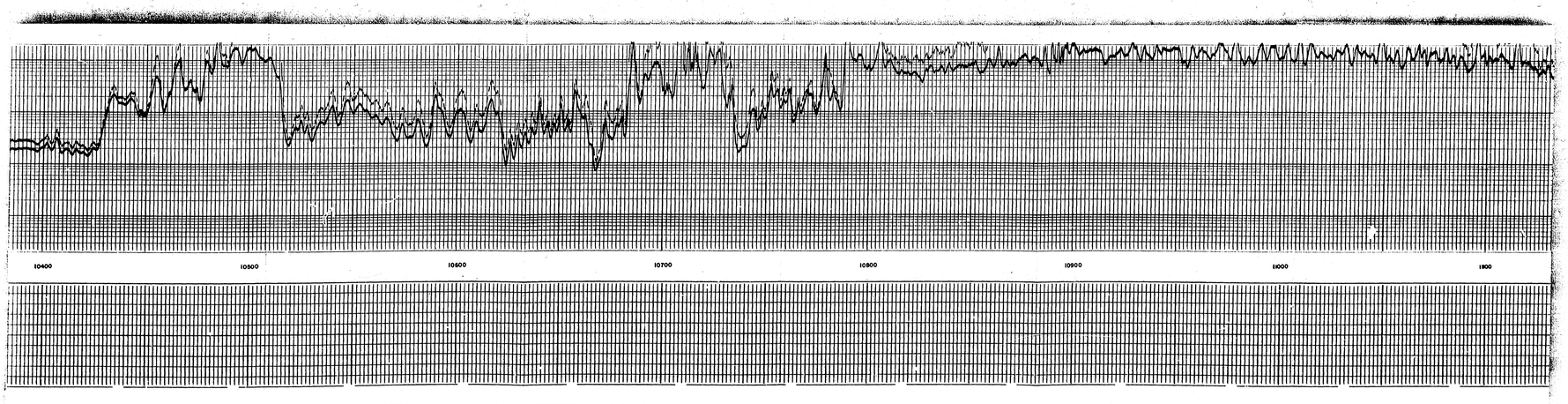
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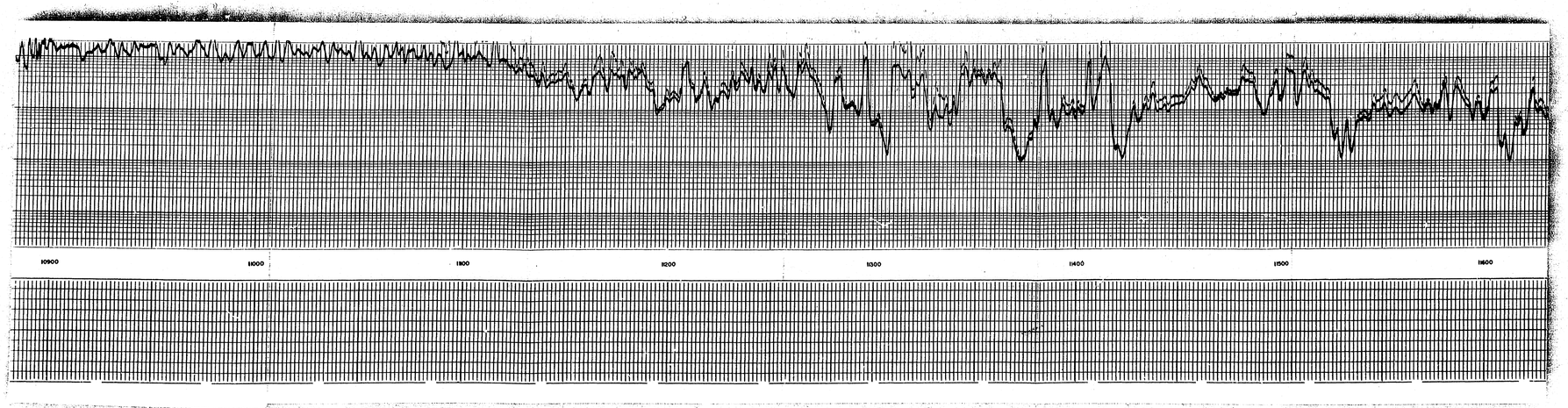
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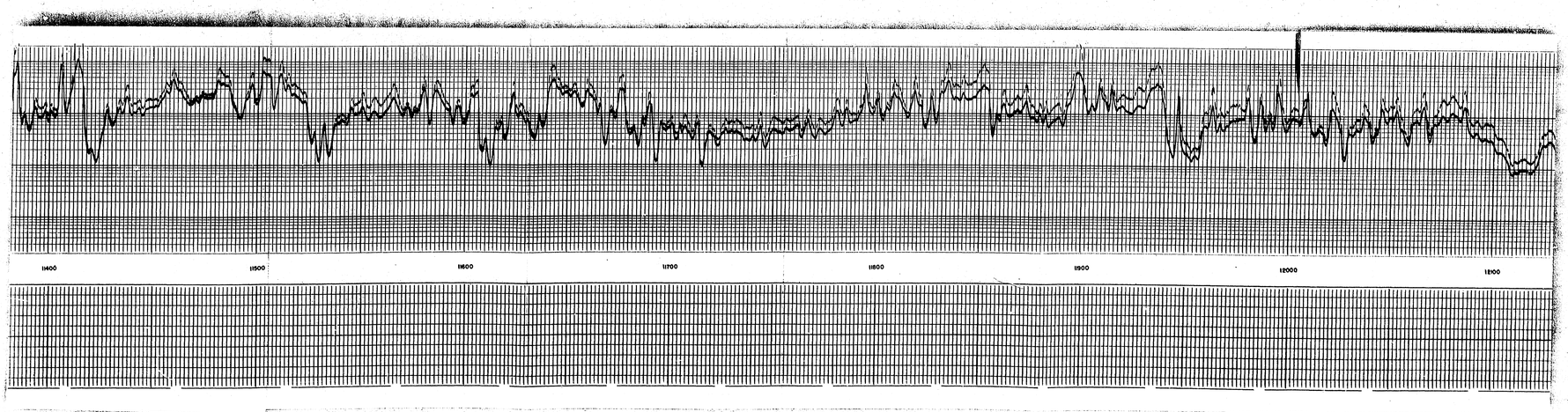
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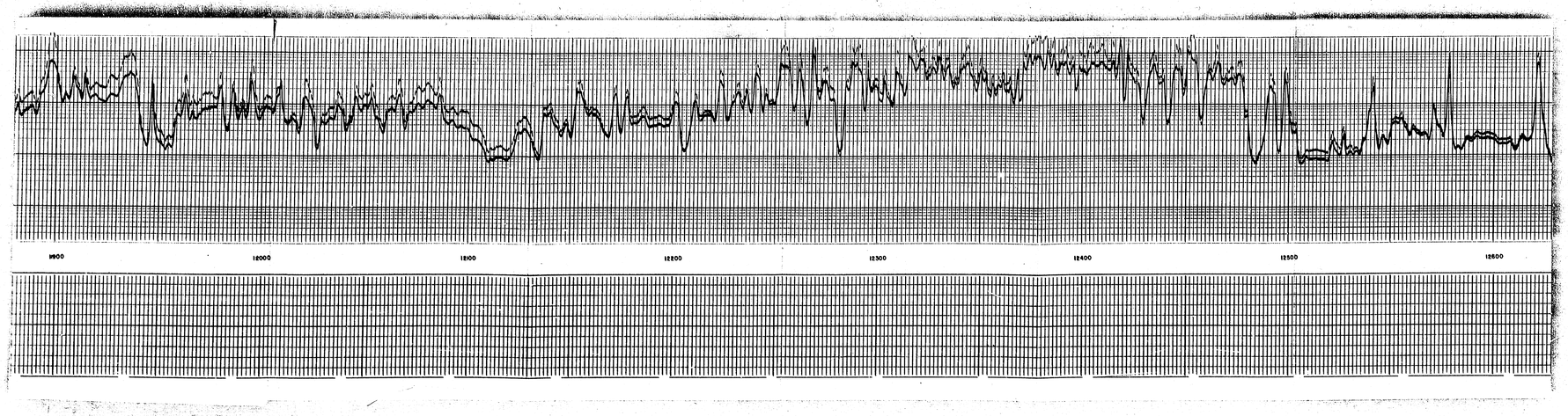
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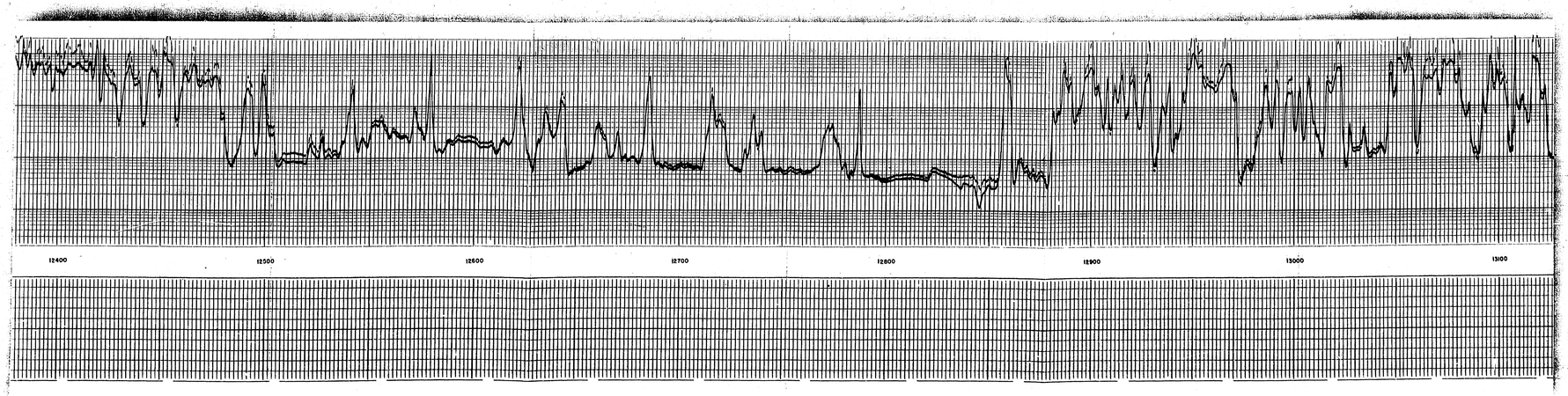
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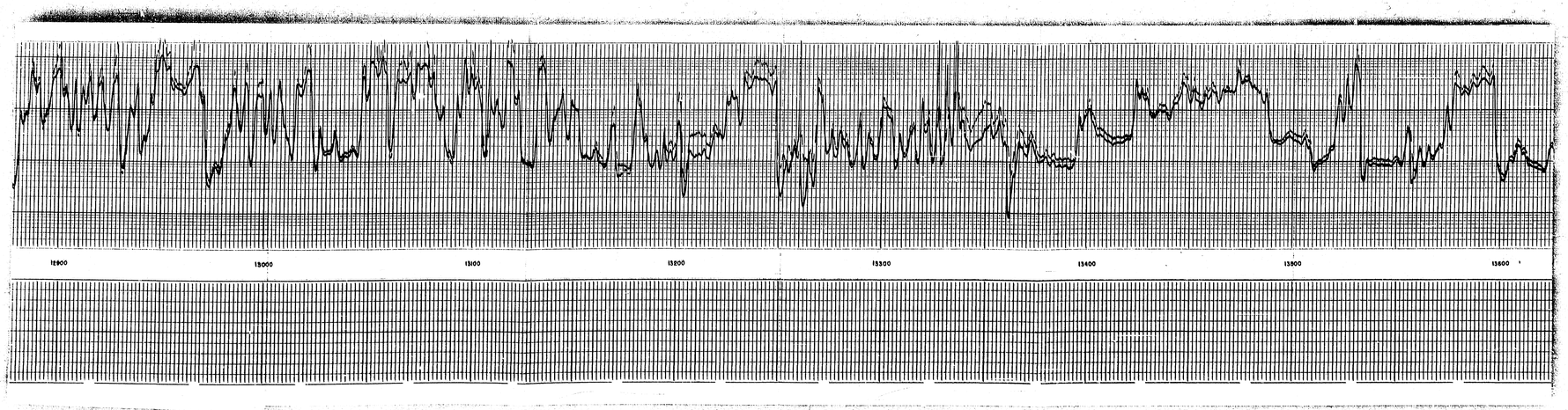
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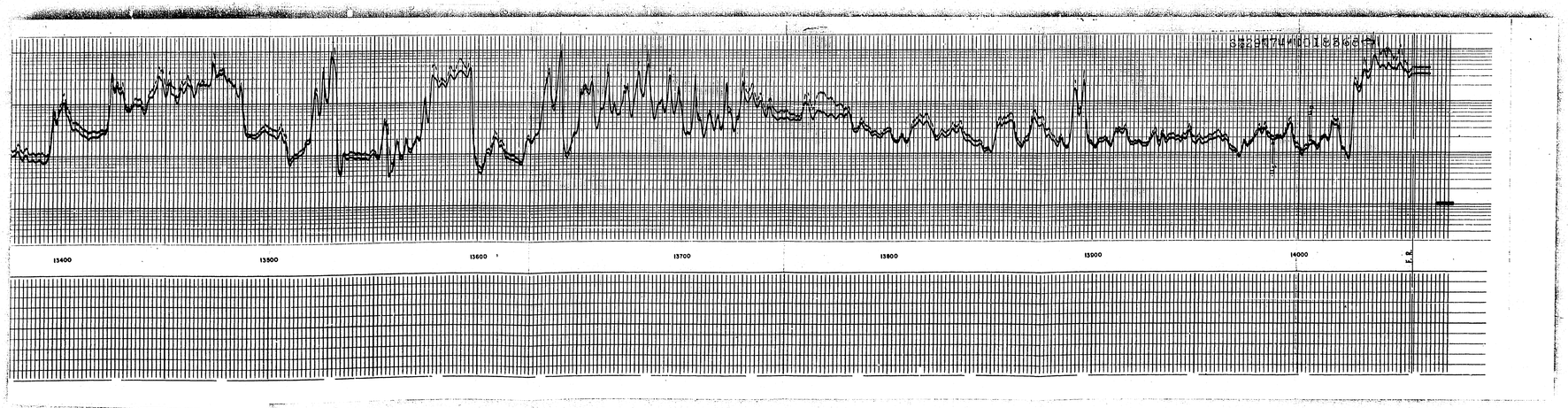
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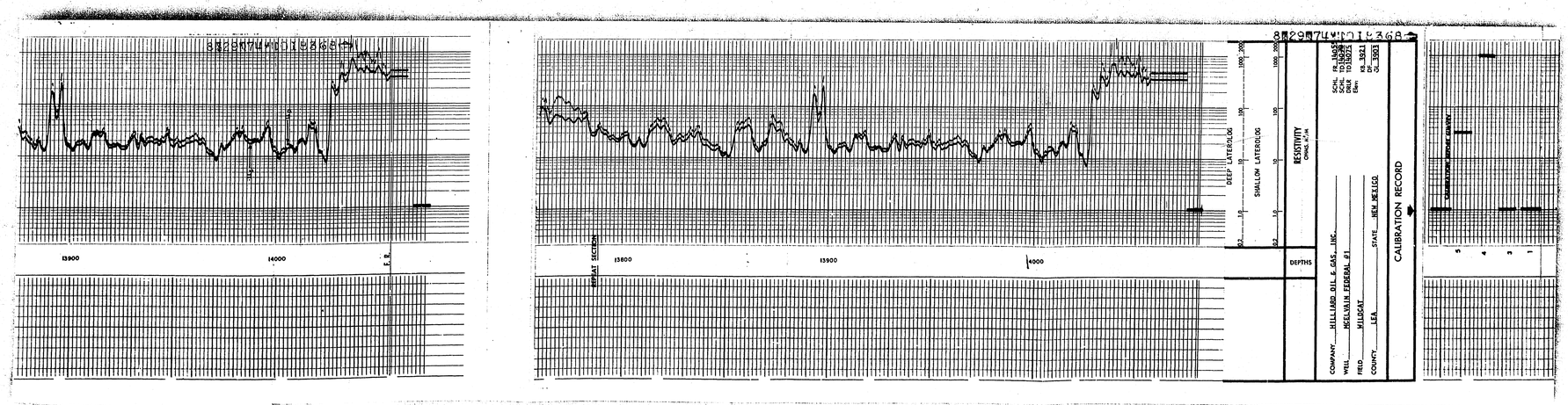
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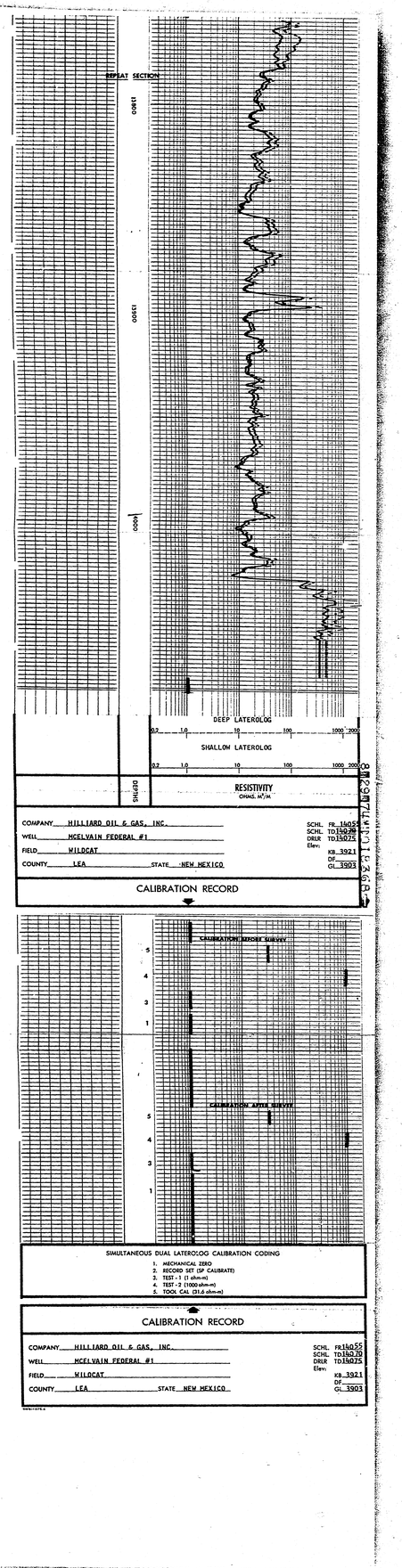
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V.E.N.C.F. MICRO-FAPHIC



W.R.N.C.F. MICROGRAPHICS
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REPEAT SECTION
13900
13950
14000
DEEP LATEROLOG
0.2 1.0 10 100 1000 2000
SHALLOW LATEROLOG
0.2 1.0 10 100 1000 2000
DEPTHS
RESISTIVITY
OHMS, M²/M
COMPANY HILLIARD OIL & GAS, INC.
WELL MCELVAIN FEDERAL #1
FIELD WILDCAT
COUNTY LEA STATE NEW MEXICO
SCHL FR 14055
SCHL TD 13998
DRLR TD 13975
Elev.
KB 3921
DF
GL 3903
CALIBRATION RECORD
CALIBRATION ABOVE SURVEY
5
4
3
1
CALIBRATION BELOW SURVEY
5
4
3
1
SIMULTANEOUS DUAL LATEROLOG CALIBRATION CODING
1. MECHANICAL ZERO
2. RECORD SET SP CALIBRATE)
3. TEST - 1 (1 ohm-m)
4. TEST - 2 (100 ohm-m)
5. TOOL CAL (31.6 ohm-m)
CALIBRATION RECORD
COMPANY HILLIARD OIL & GAS, INC.
WELL MCELVAIN FEDERAL #1
FIELD WILDCAT
COUNTY LEA STATE NEW MEXICO
SCHL FR 14055
SCHL TD 14070
DRLR TD 14075
Elev.
KB 3921
DF
GL 3903