

CS-02-004

[NM-5]
Form C-132

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
~~2040 Pacheco Street~~ 1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

APPLICATION FOR CATEGORY DETERMINATION

FOR DIVISION

USE ONLY:

APPROPRIATE FILING FEE ENCLOSED? YES ☒ NO ☐
DATE COMPLETE APPLICATION FILED August 29, 2001
DATE DETERMINATION MADE Nov. 20, 2002
WAS APPLICATION CONTESTED? YES ☐ NO ☒
NAME(S) OF INTERVENOR(S), IF ANY: na

FILING FEE(S) -

Effective October 1, 1986
a non-refundable filing fee
of \$25.00 per category for
each application is mandatory
(Rule 2, Order No. R-5878-B-3)

- | | |
|---|---|
| 1. Name of Operator: Phillips Petroleum Company | 6. County: Rio Arriba |
| 2. Address of Operator:
5525 Highway 64, NBU 3004
Farmington, NM | <u>C.C. Burlington Resources</u>
<u>P.O. Box 4239</u>
<u>Houston, TX</u>
<u>77210-4239</u>
API No: 30-039-24782 |
| 3. Location of Well: Unit Letter G
located <u>2,000</u> feet from the <u>N</u> line
and <u>1699</u> feet from the <u>E</u> line of
sec. <u>34</u> Twp. <u>29N</u> Rng. <u>5W</u> | 8. Indicate Type of Lease:
State ☐ Fee ☒
9. State Oil & Gas Lease No.: |
| 4. Farm or Lease Name: | 10. Unit Agreement Name:

San Juan 29-5 Unit |
| 5. Well No: 218 | 11. Field and Pool or Wildcat:
Basin |

Check the appropriate box for category sought and information submitted. Enter
Required information on lines 1 and 2, below.

1. Category sought NGPA Section No. 107 A1 ☒ occluded natural gas from coal seam
A3 ☐ natural gas from a designated tight formation
2. Filing Fee(s) amount enclosed: \$25.00
3. All application must contain:
- C-105 Well Completion or Recompletion Report
 - Affidavits of Mailing or Delivery

I HEREBY CERTIFY THAT THE INFORMATION CONTAINED HEREIN IS TRUE AND COMPLETE TO
THE BEST OF MY KNOWLEDGE AND BELIEF.

David K. Miller

NAME OF APPLICANT (Type or Print)

Burlington Resources

TITLE: Manager, Royalty Compliance/Litigation

SIGNATURE OF APPLICANT

DATE: July 17, 2001

FOR DIVISION USE ONLY

APPROVED: ☒DISAPPROVED: ☐

The information contained herein includes all of the information required to be filed by the applicant under
Subpart B of Part 274 of the FERC regulations.

EXAMINER: Matthew L. Hays

**BURLINGTON
RESOURCES**

for Phillips Petroleum Co.

OIL CONSERVATION DIV.

01 AUG 29 AM 7:59

August 22, 2001

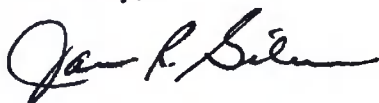
State of New Mexico
Energy and Minerals Department
Oil Conservation Division
2040 Pacheco Street
Santa Fe, NM 87505

Re.: NGPA Filing Fee
San Juan 29-5 Unit #218
~~San Juan Co., NM~~ *Rio Arriba County, NM*
API #30-039-24782

Ladies and Gentlemen:

Enclosed is the NGPA Well Determination Application fee for the referenced well.
Thanks for holding the application for the check.

Sincerely,



James R. Gilcrease
Royalty Compliance

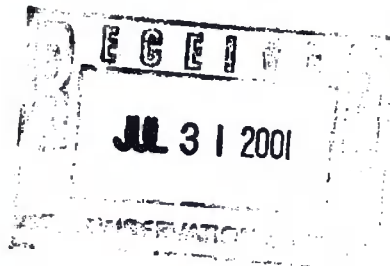
**BURLINGTON
RESOURCES**

8/6/01

**PLEASE NOTE: THIS APPLICATION WILL NOT BE
PROCESSED UNTIL WE RECEIVE YOUR FILING FEE
IN THE AMOUNT OF \$25.00.**

July 17, 2001

Mr. Michael Stogner
State of New Mexico
Energy and Minerals Department
Oil Conservation Division
2040 Pacheco Street
Santa Fe, NM 87505



Re: Application for Well Determination
NGPA Section 107
San Juan 29-5 Unit #218
Rio Arriba Co., NM
API # 30-039-24782

Dear Mr. Stogner:

Burlington Resources Oil & Gas Company is enclosing, for review and approval by the New Mexico Oil Conservation Division, the original and two copies of an Application for Determination for the referenced well.

A copy of this letter, the FERC Form 121 and the OCD Form C-132 has been mailed to each working interest owner entitled to receive Notice of this Application.

Please indicate receipt of this filing by date stamping the attached extra copy of this letter and returning the copy for our records.

Sincerely,

David K. Miller
Manager, Royalty Compliance/Litigation

enclosures

xc: NGPA File

8-31

BURLINGTON RESOURCES

July 17, 2001

Mr. Michael Stogner
State of New Mexico
Energy and Minerals Department
Oil Conservation Division
2040 Pacheco Street
Santa Fe, NM 87505

Re: Application for Well Determination
NGPA Section 107
San Juan 29-5 Unit #218
Rio Arriba Co., NM
API # 30-039-24782



Dear Mr. Stogner:

Burlington Resources Oil & Gas Company is enclosing, for review and approval by the New Mexico Oil Conservation Division, the original and two copies of an Application for Determination for the referenced well.

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Please indicate receipt of this filing by date stamping the attached extra copy of this letter and returning the copy for our records.

Sincerely,

David K. Miller
Manager, Royalty Compliance/Litigation

enclosures

xc: NGPA File

APPLICATION FOR DETERMINATION

A. THE NGPA WELL CATEGORY DETERMINATION IS BEING SOUGHT FOR A WELL PRODUCING:

- A1 X occluded natural gas from a coal seam.
A2 natural gas from Devonian shale.
A3 natural gas from a designated tight formation.

B. FOR ALL APPLICATIONS FOR DETERMINATION PROVIDE THE FOLLOWING:

1. Well Name and No.: San Juan 29-5 Unit #218
2. Completed in (Name of Reservoir): Fruitland Coal
3. Field: Basin
4. County: Rio Arriba
5. State: New Mexico
6. API Well No.: 30-039-24782
7. Measured Depth of the Completion Interval (in feet)
TOP: .3,547" BASE: 3,696"

C. APPLICANT'S MAILING ADDRESS AND THE IDENTITY OF THE PERSON WHO IS RESPONSIBLE FOR APPLICATION:

1. Applicant's Name: Burlington Resources Oil & Gas Company
2. Street: 5051 Westheimer, Suite 1400
3. City: Houston
4. State: Texas
5. Zip Code: 77056-5604
6. Name of Person Responsible: David K. Miller (713) 624-9086
7. Title of Such Person: Manager, Royalty Compliance/Litigation
8. Signature David K. Miller
Date: July 17, 2001



APPLICATION FOR WELL CATEGORY DETERMINATION
PURSUANT TO SECTION 270 OF
THE FEDERAL ENERGY REGULATORY COMMISSION'S
REGULATIONS IMPLEMENTING
THE NATURAL GAS POLICY ACT OF 1978 (NGPA)

AFFIDAVIT
COAL SEAM NATURAL GAS

STATE OF TEXAS

COUNTY OF HARRIS

BEFORE ME, the undersigned authority, duly commissioned and qualified within and for the State and County aforesaid, personally came and appeared David K. Miller, who being by me first duly sworn, deposed and said:

That he is the Manager, Royalty Compliance/Litigation for Burlington Resources Oil & Gas Company, the applicant for the well hereinafter described, and in that capacity, he is requesting the appropriate Authorized Officer to make a determination that this well is producing from a coal seam formation pursuant to the rules and regulations of the State of New Mexico and the Federal Energy Regulatory Commission (FERC), as such rules relate to the NGPA.

That production from the **San Juan 29-5 Unit #218** well, **API No. 30-045-24782** is natural gas produced from a FERC approved coal seam formation, through:

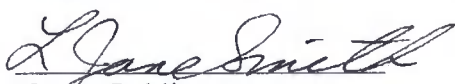
- X a well the surface drilling of which began after December 31, 1979, but before January 1, 1993; or
- a recompletion commenced after January 1, 1993, in a well the surface drilling of which began after December 31, 1979, but before January 1, 1993; or
- a recompletion commenced after December 31, 1979, but before January 1, 1993, where such gas could not have been produced from any completion location in existence in the well bore before January 1, 1980.

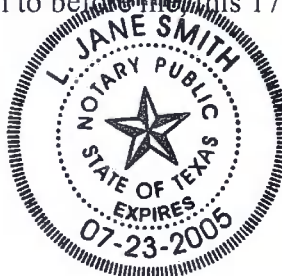
And, that a copy of this filing has been mailed to each owner entitled to receive such a copy.

Said applicant has no knowledge of any information not described in the application that is inconsistent with his conclusion.


David K. Miller,
Manager, Royalty Compliance/Litigation

Subscribed in my presence and duly sworn to before me this 17th day of July 2001.


Notary Public



My Commission Expires:



NMOCD CS Affidavit

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies
DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 5088
Santa Fe, New Mexico 87504-2088

Form C-105
Revised 1-1-89

WELL API NO.

30-039-24782

5. Indicate Type Of Lease

STATE ☐

FEE ☒

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

San Juan 29-5 Unit

8. Well No.

S.J. 29-5 Unit #218

9. Pool name or Wildcat

Basin Fruitland Coal

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well:

OIL WELL ☐

GAS WELL ☒

DRY ☐

OTHER ☐

DIST. 3

b. Type of Completion:

NEW WELL ☒

WORK OVER ☐

DEEPEN ☐

PLUG BACK ☐

DIFF RESVR ☐

OTHER ☐

2. Name of Operator

Phillips Petroleum Company

3. Address of Operator

5525 Highway 64, NBU 3004, Farmington, NM 87401

4. Well Location

Unit Letter G : 2000' Feet From The North Line and 1699' Feet From The East Line

Section

34

Township

29N

Range

5W

NMPM

Rio Arriba, County

10. Date Spudded

11-22-90

11. Date T.D. Reached

11-26-90

12. Date Compl.(Ready to Prod.)

12-11-95

13. Elevations(DF & RKB, RT, GR, etc.)

6667' GL

14. Elev. Casinghead

15. Total Depth

3750'

16. Plug Back T.D.

3720'

17. If Multiple Compl. How Many Zones?

18. Intervals Drilled By

Rotary Tools

Cable Tools

X

19. Producing Interval(s), of this completion - Top, Bottom, Name

Fruitland Coal - 3547' - 3696'

20. Was Directional Survey Made

No

21. Type Electric and Other Logs Run

CBL-CCL-GR, TOC shows @ 125'

22. Was Well Cored

No

23. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#, K-55	282'	12-1/2"	250 sx C1 B, Circ 109	sx
5-1/2"	15.5#	3749'	8-3/4"	Stg 1-125 sx C1 B,	Circ. 10 sx
				Stg 2-888 sx 65/35POZ	Circ. 95 sx

24. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
None				

25. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2-3/8"	3679'	
4.7#		

26. Perforation record (interval, size, and number)

Frt Coal 3686-3690' & 3693-96' 4 spf-36 holes
3547-48', 3552-53', 3589-98', 3603-04',
3606-10', 4 spf-84 holes

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
<u>3686'-3696'</u>	<u>18,000 20/40 Az Sand, 704 bbl</u>
	<u>Slickwater & 2nd 49,704# 20/</u>
<u>3547'-3604'</u>	<u>40 AZ sand, 180 bbl 70 foam</u>

28. PRODUCTION

w/435,000 scf N₂

Date First Production

SI

Production Method (Flowing, gas lift, pumping - Size and type pump)

Flowing

Well Status (Prod. or Shut-in)

SI

Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
<u>12/11/95</u>	<u>1 hr</u>	<u>2"</u>			<u>3.66 mcf</u>	<u>trace</u>	

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)
<u>SI</u>	<u>SI</u>			<u>88 mcfpd</u>	<u>1 bwpd</u>	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

Waiting on connection

Test Witnessed By

Meridian

30. List Attachments

Completion work was done by Meridian.

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature

Ed Hasely

Printed Name

Ed Hasely

Title

Env/Reg. Eng.

Date 1/24/96

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

T. Anhy _____	T. Canyon _____
T. Salt _____	T. Strawn _____
B. Salt _____	T. Atoka _____
T. Yates _____	T. Miss _____
T. 7 Rivers _____	T. Devonian _____
T. Queen _____	T. Silurian _____
T. Grayburg _____	T. Montoya _____
T. San Andres _____	T. Simpson _____
T. Glorieta _____	T. McKee _____
T. Paddock _____	T. Ellenburger _____
T. Blinebry _____	T. Gr. Wash _____
T. Tubb _____	T. Delaware Sand _____
T. Drinkard _____	T. Bone Springs _____
T. Abo _____	T. _____
T. Wolfcamp _____	T. _____
T. Penn _____	T. _____
T. Cisco (Bough C) _____	T. _____

Northeastern New Mexico

T. Ojo Alamo <u>2967</u>	T. Penn. "B" _____
T. Kirtland-Fruitland <u>3137</u>	T. Penn. "C" _____
T. Pictured Cliffs <u>3710</u>	T. Penn. "D" _____
T. Cliff House _____	T. Leadville _____
T. Menefee _____	T. Madison _____
T. Point Lookout _____	T. Elbert _____
T. Mancos _____	T. McCracken _____
T. Gallup _____	T. Ignacio Otzte _____
Base Greenhorn _____	T. Granite _____
T. Dakota _____	T. _____
T. Morrison _____	T. _____
T. Todilto _____	T. _____
T. Entrada _____	T. _____
T. Wingate _____	T. _____
T. Chinle _____	T. _____
T. Permian _____	T. _____
T. Penn "A" _____	T. _____

OIL OR GAS SANDS OR ZONES

No. 1, from _____ to _____	No. 3, from _____ to _____
No. 2, from _____ to _____	No. 4, from _____ to _____

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from _____ to _____ feet _____
No. 2, from _____ to _____ feet _____
No. 3, from _____ to _____ feet _____

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness in Feet	Lithology	From	To	Thickness in Feet	Lithology
2967	3137	170	Ojo Alamo - Sandstone				
3137	3447	310	Kirtland-shale & sandstn				
3447	3521	74	Frtlnd-shl, coal, sandstn				
3521	3701	180	Frt Coal, Shale & coal				



Water Analysis Report by Baker Petrolite

PHILLIPS PETROLEUM

SAN JUAN 29-5
WELL # 218

Account Manager
CRAIG SMITH

Summary				Analysis of Sample 21209 @ 75° F			
Sampling Date	5/12/98	Anions	<i>mg/l</i>	<i>meq/l</i>	Cations	<i>mg/l</i>	<i>meq/l</i>
Analysis Date	6/4/98	Chloride	1906	53.7	Sodium	3280	143
Analyst	SHEILA DEARMAN	Bicarbonate	3820	62.6	Magnesium	18.0	1.48
		Carbonate	0.00	0.00	Calcium	24.0	1.20
TDS (mg/l or g/m³)	9089.00	Sulfate	10.0	0.21	Strontium	9.00	0.20
Density (g/cm³ or tonne/m³)	1.010	Phosphate	N/A	N/A	Barium	12.0	0.17
Anion/Cation Ratio	1.00	Borate	N/A	N/A	Iron	2.00	0.07
		Silicate	N/A	N/A	Potassium	8.00	0.20
Carbon Dioxide					Aluminum	N/A	N/A
Oxygen					Chromium	N/A	N/A
					Copper	N/A	N/A
		pH at time of sampling		7.40	Lead	N/A	N/A
		pH at time of analysis			Manganese	N/A	N/A
		pH used in Calculations		7.40	Nickel	N/A	N/A

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000bbl										
Temp.	Gauge Press.	Calcite CaCO3		Gypsum CaSO4.2H2O		Anhydrite CaSO4		Celestite SrSO4		Barite BaSO4		CO2 Press.
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0.	0.24	9.10	-3.55		-3.61		-1.92		1.00	2.98	0.56
100	0.	0.34	12.6	-3.58		-3.58		-1.90		0.85	2.82	0.96
120	0.	0.43	14.8	-3.61		-3.53		-1.88		0.74	2.65	1.59
140	0.	0.55	16.0	-3.63		-3.46		-1.84		0.64	2.48	2.52

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

Stogner, Michael

From: Gilcrease Jim [JGilcrease@br-inc.com]
Sent: Thursday, February 07, 2002 10:22 AM
To: mstogner@state.nm.us
Subject: NMOCD Well Determination Approvals



NMOCD Follow up
2-7-02.xls

Mike, attached is a revised list.

<<NMOCD Follow up 2-7-02.xls>>

WELL NAME	BR AIN NO.	FERC 121 DATE	API NO.	OPERATOR
Martin Federal Com #1E	1139402	12/12/2001	30-045-24324	Energen
Johnston A #16	1524501	12/18/2001	30-039-24739	BR
Baca Gas Com A #1	5377101	11/17/2001	30-045-26110	XTO
Mexico Federal N #1E	1210401	9/24/2001	30-045-08832	BR
Culpepper Martin #1E	1296401	10/4/2001	30-045-25114	BR
Kelly Knott #1A	1461201	10/1/2001	30-045-25542	BR
New Mexico B Com #1E	1312101	9/24/2001	30-045-2453	BR
Culpepper Martin #1A	1296201	9/26/2001	30-045-25112	BR
San Juan 29-5 Unit #218	653601	7/17/2001	30-039-24782	Phillips
Pierce A #4	5444901	9/24/2001	30-045-25432	BR
Gallegos Canyon Unit #323	2370501	8/29/2001	30-045-24615	Amoco
Gallegos Canyon Unit #323	2370502	8/29/2001	30-045-24615	Amoco
Gallegos Canyon Unit #506	5737002	8/29/2001	30-045-28067	Amoco
Pubco State Com #1A	458101	8/8/2001	30-045-27248	Great Western

Stogner, Michael

From: Gilcrease Jim [JGilcrease@br-inc.com]
Sent: Thursday, February 07, 2002 10:06 AM
To: mstogner@state.nm.us
Subject: Well Determination Filings by NMOCD



NMOCD Follow up
2-7-02.xls

Good morning Mike, Burlington Resources' records indicate that we have not received JA approval on the following wells submitted to the NMOCD for review. We understand that you have other responsibilities and have put well determination filings on hold. However, lack of JA and FERC of these well may cause Burlington and other companies loss of monies. Could you review the wells on the attached list in which Burlington holds or has held an interest.

Thanks for your consideration.

Jim Gilcrease
Burlington Resources
(713) 624-9092
jgilcrease@br-inc.com

<<NMOCD Follow up 2-7-02.xls>>

WELL NAME	BR AIN NO.	FERC 121 DATE	API NO.	OPERATOR
Gallegos Canyon Unit #389	5588501	8/29/2001	30-045-28154	Amoco
Gallegos Canyon Unit #332	2372101	8/29/2001	30-045-25475	Amoco
Heaton Com LS #9A	2611902	8/29/2001	30-045-20903	Amoco
Martin Federal Com #1E	1139402	12/12/2001	30-045-24324	Energen
Johnston A #16	1524501	12/18/2001	30-039-24739	BR
Baca Gas Com A #1	5377101	11/17/2001	30-045-26110	XTO
Mexico Federal N #1E	1210401	9/24/2001	30-045-08832	BR
Culpepper Martin #1E	1296401	10/4/2001	30-045-25114	BR
Kelly Knott #1A	1461201	10/1/2001	30-045-25542	BR
New Mexico B Com #1E	1312101	9/24/2001	30-045-2453	BR
Culpepper Martin #1A	1296201	9/26/2001	30-045-25112	BR
San Juan 29-5 Unit #218	653601	7/17/2001	30-039-24782	Phillips
Pierce A #4	5444901	9/24/2001	30-045-25432	BR
Gallegos Canyon Unit #323	2370501	8/29/2001	30-045-24615	Amoco
Gallegos Canyon Unit #323	2370502	8/29/2001	30-045-24615	Amoco
Gallegos Canyon Unit #506	5737002	8/29/2001	30-045-28067	Amoco
Pubco State Com #1A	458101	8/8/2001	30-045-27248	Great Western

FINAL PRINT



COAL ANALYSIS LOG

COMPANY WELL FIELD COUNTY ST		COMPANY PHILLIPS PETROLEUM COMPANY			
		WELL SAN JUAN 29-5 NO. 218			
		FIELD BASIN FRUITLAND COAL			
		COUNTY RIO ARRIBA		STATE NM	
		API NO. 30-039-24782		OTHER SERVICES	
		LOCATION		SDL	
		2000 FNL AND 1699 FEL		IEL	
				CSNG	
				ML	
		SEC. 34 TWP 29N RGE 5W			
PERMANENT DATUM GL		ELEV. 6753		ELEV.: K.B. 6765	
LOG MEASURED FROM KB		12 FT. ABOVE PERM. DATUM		D.F. 6764	
DRILLING MEASURED FROM KB				G.L. 6753	
DATE	11/26/90				
RUN NO.	ONE				
DEPTH-DRILLER	3756				
DEPTH-LOGGER	3752				
BTM. LOG INTER.	3749				
TOP LOG INTER.	280				
CASING-DRILLER	8.625 @ 282	e	e	e	
CASING-LOGGER	280				
BIT SIZE	8.75				
TYPE FLUID IN HOLE	PAC				
DENS. : VISC	9.1 : 36	i	i	i	
PH : FLUID LOSS	8.0 : 14.8	i	i	i	
SOURCE OF SAMPLE	PIT				
RM @ MEAS. TEMP.	1.79 @ 52	e	e	e	
RMF @ MEAS. TEMP.	1.34 @ 52	e	e	e	
RMC @ MEAS. TEMP.	2.24 @ 52	e	e	e	
SOURCE RMF : RMC	CALC. : CALC.	i	i	i	
RM @ BHT	0.75 @ 134	e	e	e	
TIME SINCE CIRC.	3 HRS				
TIME ON BOTTOM	07:50				
MAX. REC. TEMP.	134 @ TD	e	e	e	
EQUIP. : LOCATION	4550 : FARM	i	i	i	
RECORDED BY	R. FRIDAY				
WITNESSED BY	R. HAWKS				

FILE COPY

Fold Here

Service Ticket No.: 54308

API Serial No.: 30-039-24782

PGM Version: 2.50 E

Change in Mud Type or Additional Samples				RESISTIVITY SCALE CHANGES			
Date/Sample No.	/ /	/ /	Type Log	Depth	Scale Up Hole	Scale Down Hole	
Depth-Driller							
Type Fluid							
in Hole							
Dens. : Visc.	:	:					
pH. : Fluid Loss	:	:					
RESISTIVITY EQUIPMENT DATA							
Source of Sample			Run No	Tool Type & No	Pad Type	Tool Pos. Other	
Rm @ Meas.Temp.	@	@	ONE	DILT #W109612		FREE	
Rmf @ Meas.Temp.	@	@		SGRD #W108910		FREE	
Rmc @ Meas.Temp.	@	@					
Source: Rmf:Rmc	:	:					
Rm @ BHT	@	@					
Rmf @ BHT	@	@					
Rmc @ BHT	@	@					
EQUIPMENT DATA							
GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.		Run No.	ONE	Run No.	
Serial No.	W109005	Serial No.		Serial No.	W109709	Serial No.	
Model No.	432	Model No.		Model No.	465	Model No.	
Diameter	3.625	No.of Cent.		Diameter	4.5	Diameter	
Detector Model No.	NA	Spacing		Log Type	G/G	Log Type	
Type	SCINT			Source Type	CS-137	Source Type	
Length	12"	LSA		Serial No.	SDL-009	Serial No.	
Distance To Source	NA	FWDA		Strength	1.5 CI	Strength	
LOGGING DATA							
GENERAL			GAMMA	ACOUSTIC	DENSITY	NEUTRON	
Run	Depth		Speed	Scale	Scale	Scale	
No.	From	To	Ft/Min	L R	L R Matrix	L R Matrix	
ONE	3752	3500	15	0 200		2.0 3.0 2.65 30% -10% SAND	
	3752	2500	30				
	2500	280	60				
Remarks:							
RIG: AZTEC NO. 301/GRANT							
CREW: R. DE ARMOND, J. MARROQUIN							
Halliburton Logging Services, Inc. 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 HLS personnel or which may appear on the log or in any other form. Any user of such data, interpretations, conversions or recommendations agrees that HLS is not responsible except where due to gross negligence or wilful misconduct, for any loss, damages, or expenses resulting from the use thereof.							

GR CL = 20.000

DENMA = 2.650

SASH = 65.790

IASH = -68.860

GR SH = 120.000

DENFL = 1.000

SMST = 0.032

IMST = 1.733

GR MX = 75.000

DENSH = 2.600

SFCRB = -0.725

IFCRB = 63.850

DENMX = 1.750

SG1 = -542.000

IH1 = 1178.000

SG2 = -0.251

IH2 = 1178.000

RM = 0.750

GAS C = RHOB

PGRAD = 0.450

FOR DEPTHS :

KIM T = 0.140

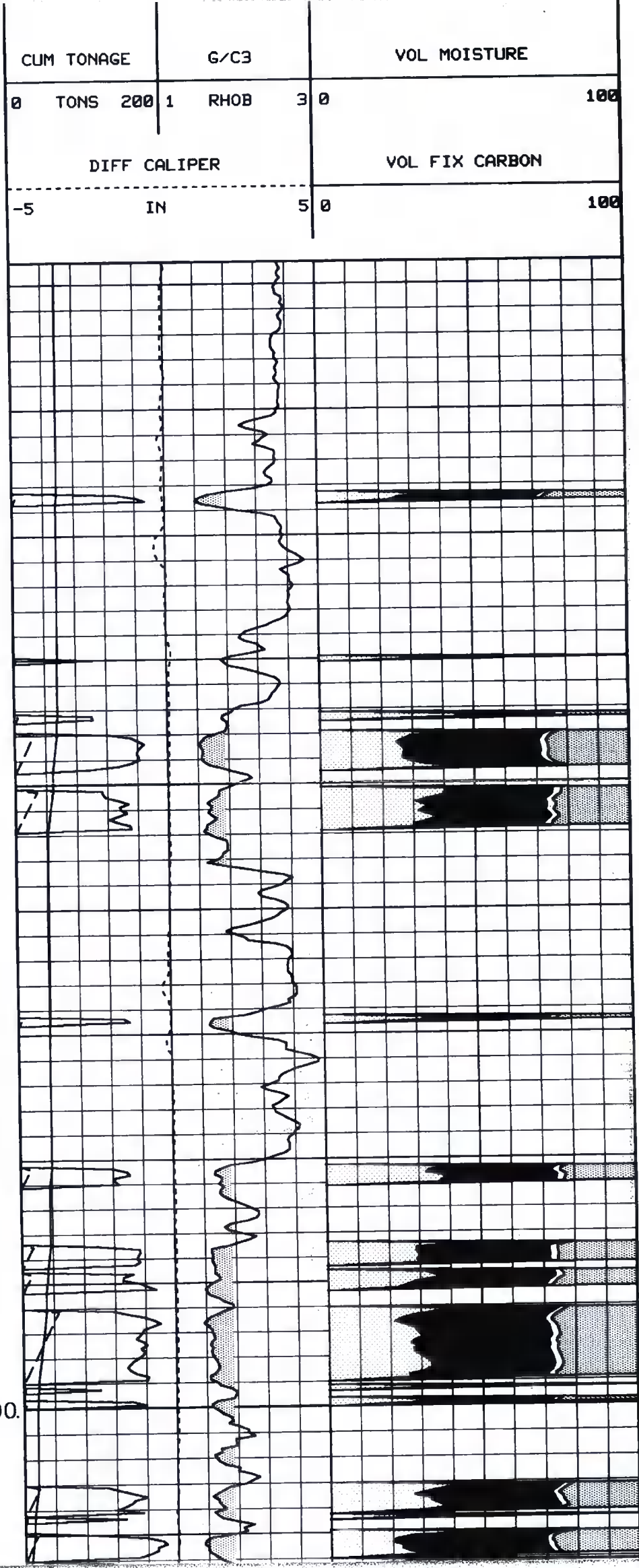
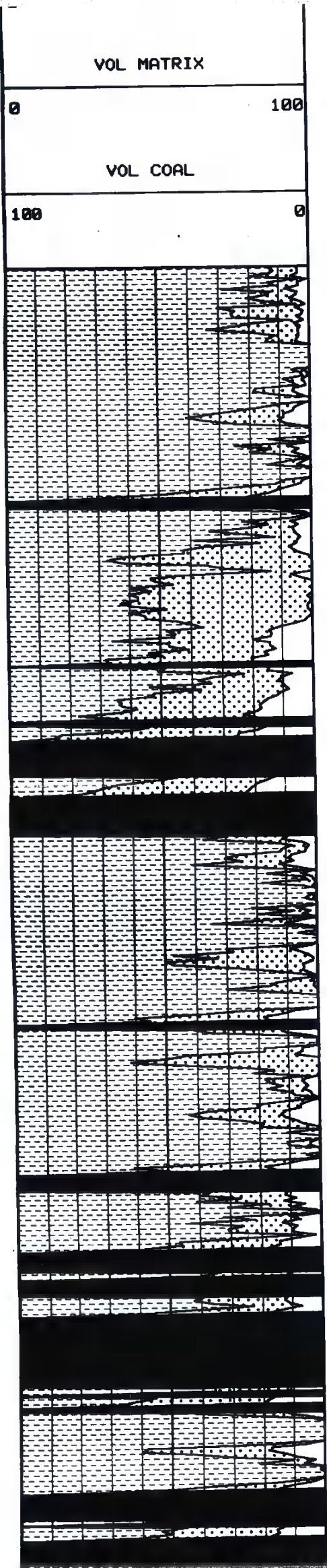
TGRAD = 1.800

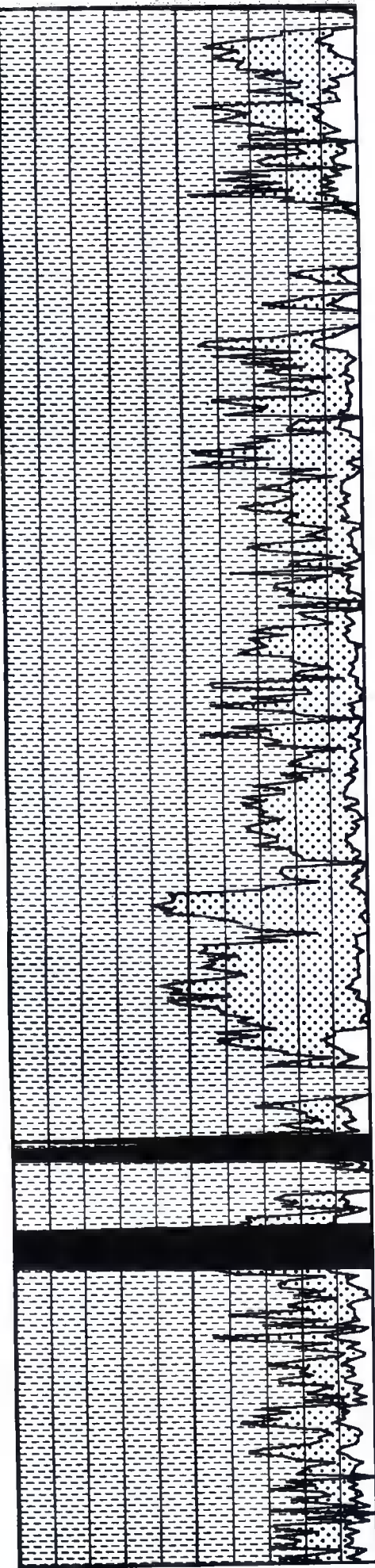
0.50 TO 30000.00

TSURF = 60.000

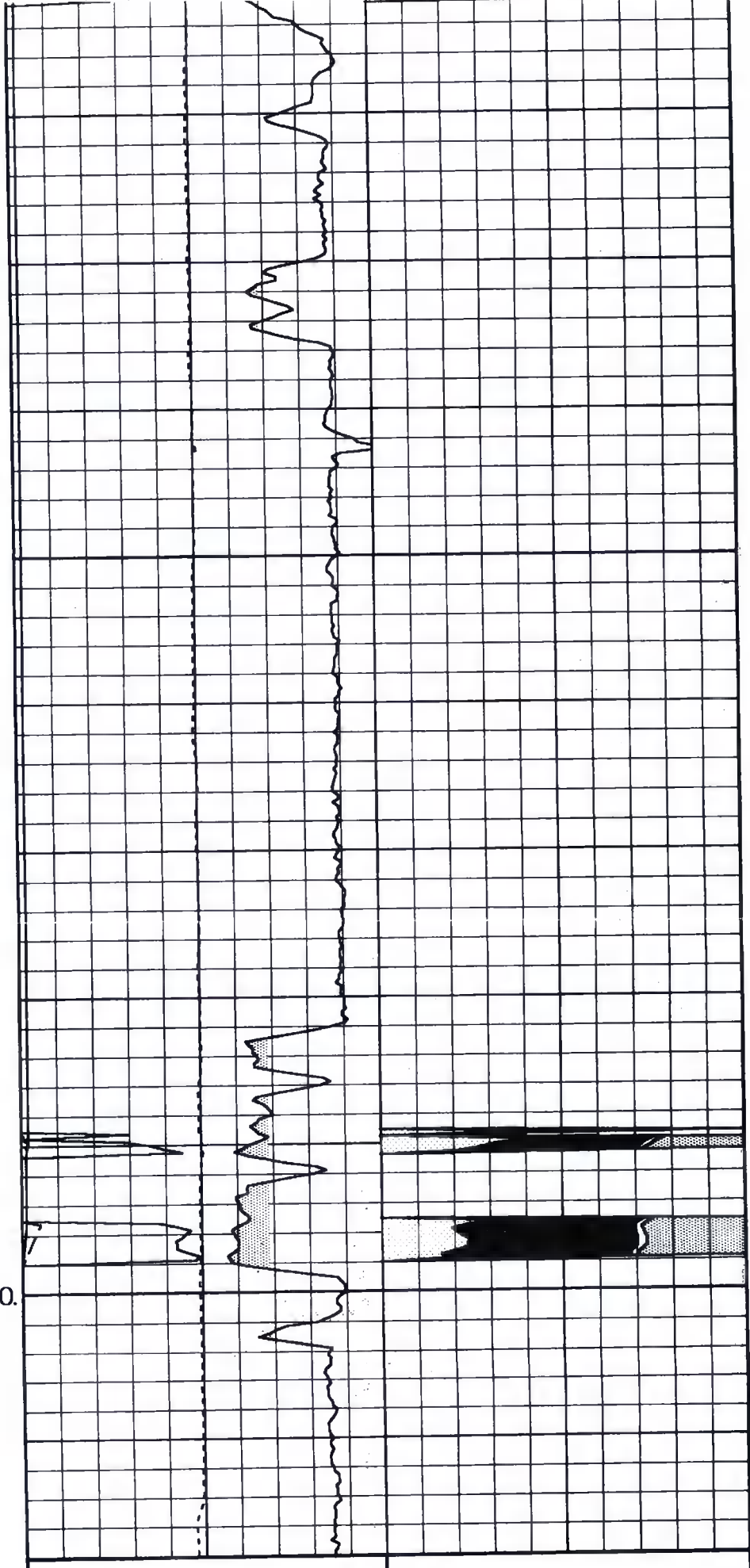
LRATE = 0.500

VOL SHALE	ZONE TONAGE		VOL ASH	
	0	TONS 50	0	100
	GAS CONTENT		VOL VOLIT MAT	
	0	MSCF/TO 500	0	100





VOL COAL	
100	0
VOL MATRIX	
0	100



3700.

DIFF CALIPER			VOL FIX CARBON	
-5	IN	5	0	100
CUM TONAGE		G/C3	VOL MOISTURE	
0	TONS 200	1	RHOB	3 0 100

VOL SHALE		GAS CONTENT		VOL VOLIT MAT	
0	100	0 MSCF/TO 500		0	100
		ZONE TONAGE			VOL ASH
		0 TONS 50		0	100

3509.00	58.309	0.000	100.662	1.000	2.511	0.000	0.000	0.000	0.000
3510.00	58.309	0.000	91.381	1.000	2.484	0.000	0.000	0.000	0.000
3511.00	58.309	0.000	104.946	1.000	2.557	0.000	0.000	0.000	0.000
3512.00	58.309	0.000	94.237	1.000	2.574	0.000	0.000	0.000	0.000
3513.00	58.309	0.000	94.951	1.000	2.564	0.000	0.000	0.000	0.000
3514.00	58.309	0.000	106.374	1.000	2.449	0.000	0.000	0.000	0.000
3515.00	58.309	0.000	122.080	1.000	2.420	0.000	0.000	0.000	0.000
3516.00	58.309	0.000	141.355	1.000	2.473	0.000	0.000	0.000	0.000
3517.00	58.309	0.000	117.796	1.000	2.489	0.000	0.000	0.000	0.000
3518.00	58.309	0.000	102.090	1.000	2.517	0.000	0.000	0.000	0.000
DEPTH	CTON	GC	GR	IMR	RHOB	VASH	VCRB	VMST	VVLM
3519.00	58.309	0.000	122.794	1.000	2.517	0.000	0.000	0.000	0.000
3520.00	58.309	0.000	86.384	1.000	2.474	0.000	0.000	0.000	0.000
3521.00	58.309	0.000	117.796	1.000	2.082	0.000	0.000	0.000	0.000
3522.00	58.309	0.000	106.374	1.000	2.357	0.000	0.000	0.000	0.000
3523.00	58.309	0.000	99.948	1.000	2.329	0.000	0.000	0.000	0.000
3524.00	58.309	0.000	105.660	1.000	2.458	0.000	0.000	0.000	0.000
3525.00	58.309	0.000	131.361	1.000	2.314	0.000	0.000	0.000	0.000
3526.00	58.309	0.000	82.814	1.000	2.353	0.000	0.000	0.000	0.000
3527.00	57.777	404.211	56.399	-0.034	1.455	0.269	0.444	0.026	0.262
3528.00	56.806	0.000	119.224	1.000	1.955	0.000	0.000	0.000	0.000
3529.00	56.806	0.000	99.234	1.000	2.486	0.000	0.000	0.000	0.000
3530.00	56.806	0.000	81.386	1.000	2.543	0.000	0.000	0.000	0.000
3531.00	56.806	0.000	77.817	1.000	2.556	0.000	0.000	0.000	0.000
3532.00	56.806	0.000	84.956	1.000	2.818	0.000	0.000	0.000	0.000
3533.00	56.806	0.000	67.108	1.000	2.561	0.000	0.000	0.000	0.000
3534.00	56.806	0.000	67.108	1.000	2.668	0.000	0.000	0.000	0.000
3535.00	56.806	0.000	57.113	1.000	2.619	0.000	0.000	0.000	0.000
3536.00	56.806	0.000	64.966	1.000	2.632	0.000	0.000	0.000	0.000
3537.00	56.806	0.000	83.528	1.000	2.401	0.000	0.000	0.000	0.000
3538.00	56.806	0.000	54.258	1.000	1.993	0.000	0.000	0.000	0.000
3539.00	56.806	0.000	66.394	1.000	2.242	0.000	0.000	0.000	0.000
3540.00	56.806	256.006	43.549	-0.034	1.719	0.442	0.318	0.031	0.208
3541.00	56.222	0.000	87.098	1.000	2.171	0.000	0.000	0.000	0.000
3542.00	56.222	0.000	82.814	1.000	2.487	0.000	0.000	0.000	0.000
3543.00	56.222	0.000	56.399	1.000	2.360	0.000	0.000	0.000	0.000
3544.00	56.222	0.000	42.835	1.000	1.871	0.000	0.000	0.000	0.000
3545.00	55.053	0.000	65.680	1.000	1.777	0.000	0.000	0.000	0.000
3546.00	55.053	310.951	32.126	-0.034	1.621	0.378	0.365	0.029	0.228
3547.00	53.014	410.792	40.693	-0.034	1.444	0.261	0.449	0.026	0.264
3548.00	51.036	406.222	44.977	-0.034	1.452	0.267	0.445	0.026	0.262
3549.00	48.911	0.000	74.247	1.000	1.875	0.000	0.000	0.000	0.000
3550.00	48.911	0.000	47.118	1.000	1.878	0.000	0.000	0.000	0.000
3551.00	47.778	295.180	57.113	-0.034	1.649	0.396	0.351	0.030	0.223
3552.00	45.636	344.737	65.680	-0.034	1.561	0.338	0.393	0.028	0.240
3553.00	43.497	335.571	58.541	-0.034	1.577	0.349	0.385	0.029	0.237
3554.00	41.939	0.000	82.814	1.000	1.539	0.000	0.000	0.000	0.000
3555.00	41.939	0.000	107.801	1.000	1.772	0.000	0.000	0.000	0.000
3556.00	41.939	0.000	79.245	1.000	1.656	0.000	0.000	0.000	0.000
3557.00	41.939	0.000	114.941	1.000	2.221	0.000	0.000	0.000	0.000
3558.00	41.939	0.000	127.791	1.000	2.476	0.000	0.000	0.000	0.000
3559.00	41.939	0.000	123.508	1.000	2.226	0.000	0.000	0.000	0.000
3560.00	41.939	0.000	100.662	1.000	2.535	0.000	0.000	0.000	0.000
3561.00	41.939	0.000	116.368	1.000	2.206	0.000	0.000	0.000	0.000
3562.00	41.939	0.000	119.938	1.000	1.868	0.000	0.000	0.000	0.000
3563.00	41.939	0.000	91.381	1.000	2.523	0.000	0.000	0.000	0.000
3564.00	41.939	0.000	72.819	1.000	2.545	0.000	0.000	0.000	0.000
3565.00	41.939	0.000	119.938	1.000	2.535	0.000	0.000	0.000	0.000
3566.00	41.939	0.000	89.953	1.000	2.617	0.000	0.000	0.000	0.000

3567.00	41.939	0.000	119.938	1.000	2.622	0.000	0.000	0.000	0.000
3568.00	41.939	0.000	80.673	1.000	2.246	0.000	0.000	0.000	0.000
DEPTH	CTON	GC	GR	IMR	RHOB	VASH	VCRB	VMST	VVLM
3569.00	41.409	363.260	58.541	-0.034	1.528	0.317	0.409	0.027	0.247
3570.00	40.890	0.000	129.933	1.000	1.881	0.000	0.000	0.000	0.000
3571.00	40.890	0.000	102.090	1.000	2.497	0.000	0.000	0.000	0.000
3572.00	40.890	0.000	72.106	1.000	2.920	0.000	0.000	0.000	0.000
3573.00	40.890	0.000	117.082	1.000	2.527	0.000	0.000	0.000	0.000
3574.00	40.890	0.000	102.804	1.000	2.296	0.000	0.000	0.000	0.000
3575.00	40.890	0.000	108.515	1.000	2.523	0.000	0.000	0.000	0.000
3576.00	40.890	0.000	77.103	1.000	2.338	0.000	0.000	0.000	0.000
3577.00	40.890	0.000	100.662	1.000	2.595	0.000	0.000	0.000	0.000
3578.00	40.890	0.000	119.938	1.000	2.581	0.000	0.000	0.000	0.000
3579.00	40.890	0.000	134.216	1.000	2.526	0.000	0.000	0.000	0.000
3580.00	40.890	0.000	82.814	1.000	2.204	0.000	0.000	0.000	0.000
3581.00	40.331	346.921	67.108	-0.034	1.557	0.336	0.395	0.028	0.241
3582.00	38.169	320.582	70.678	-0.034	1.604	0.367	0.373	0.029	0.232
3583.00	37.624	0.000	79.245	1.000	1.650	0.000	0.000	0.000	0.000
3584.00	37.624	0.000	124.935	1.000	2.021	0.000	0.000	0.000	0.000
3585.00	37.624	0.000	94.237	1.000	1.953	0.000	0.000	0.000	0.000
3586.00	37.624	0.000	93.523	1.000	1.882	0.000	0.000	0.000	0.000
3587.00	37.624	253.031	50.688	-0.034	1.724	0.446	0.315	0.032	0.207
3588.00	35.518	376.928	56.399	-0.034	1.584	0.301	0.420	0.027	0.252
3589.00	33.986	0.000	79.959	1.000	1.521	0.000	0.000	0.000	0.000
3590.00	32.388	385.024	58.541	-0.034	1.489	0.291	0.427	0.027	0.255
3591.00	30.916	0.000	77.817	1.000	1.453	0.000	0.000	0.000	0.000
3592.00	30.916	0.000	62.111	1.000	1.767	0.000	0.000	0.000	0.000
3593.00	29.326	428.292	37.838	-0.034	1.413	0.241	0.464	0.025	0.270
3594.00	27.395	388.148	48.546	-0.034	1.484	0.288	0.430	0.027	0.256
3595.00	25.364	404.792	43.549	-0.034	1.454	0.268	0.444	0.026	0.262
3596.00	23.363	377.001	62.111	-0.034	1.584	0.301	0.421	0.027	0.252
3597.00	21.271	349.772	33.554	-0.034	1.552	0.332	0.397	0.028	0.242
3598.00	19.243	0.000	84.242	1.000	1.541	0.000	0.000	0.000	0.000
3599.00	18.655	0.000	58.541	1.000	1.780	0.000	0.000	0.000	0.000
3600.00	17.636	0.000	77.817	1.000	1.492	0.000	0.000	0.000	0.000
3601.00	17.636	0.000	152.064	1.000	1.735	0.000	0.000	0.000	0.000
3602.00	17.636	0.000	161.345	1.000	1.942	0.000	0.000	0.000	0.000
3603.00	17.636	0.000	60.683	1.000	1.792	0.000	0.000	0.000	0.000
3604.00	17.636	0.000	98.520	1.000	1.518	0.000	0.000	0.000	0.000
3605.00	17.636	0.000	128.505	1.000	1.798	0.000	0.000	0.000	0.000
3606.00	17.636	0.000	69.250	1.000	1.897	0.000	0.000	0.000	0.000
3607.00	15.993	399.868	40.693	-0.034	1.463	0.274	0.448	0.026	0.268
3608.00	13.909	303.333	62.111	-0.034	1.635	0.387	0.358	0.030	0.225
3609.00	12.310	0.000	74.247	1.000	1.769	0.000	0.000	0.000	0.000
3610.00	12.310	238.743	42.121	-0.034	1.749	0.462	0.303	0.032	0.202
3611.00	10.295	433.560	50.688	-0.034	1.403	0.235	0.468	0.025	0.272
3612.00	8.340	0.000	80.673	1.000	1.568	0.000	0.000	0.000	0.000
3613.00	7.776	0.000	177.051	1.000	1.887	0.000	0.000	0.000	0.000
3614.00	7.776	0.000	99.234	1.000	2.221	0.000	0.000	0.000	0.000
3615.00	7.776	0.000	77.817	1.000	2.520	0.000	0.000	0.000	0.000
3616.00	7.776	0.000	88.526	1.000	2.606	0.000	0.000	0.000	0.000
3617.00	7.776	0.000	92.095	1.000	2.583	0.000	0.000	0.000	0.000
3618.00	7.776	0.000	89.953	1.000	2.394	0.000	0.000	0.000	0.000
DEPTH	CTON	GC	GR	IMR	RHOB	VASH	VCRB	VMST	VVLM
3619.00	7.776	0.000	74.961	1.000	2.389	0.000	0.000	0.000	0.000
3620.00	7.776	0.000	80.673	1.000	2.087	0.000	0.000	0.000	0.000
3621.00	7.776	0.000	89.953	1.000	2.184	0.000	0.000	0.000	0.000
3622.00	7.776	0.000	103.518	1.000	2.556	0.000	0.000	0.000	0.000
3623.00	7.776	0.000	93.523	1.000	2.510	0.000	0.000	0.000	0.000
3624.00	7.776	0.000	81.386	1.000	2.458	0.000	0.000	0.000	0.000
3625.00	7.776	0.000	72.819	1.000	2.436	0.000	0.000	0.000	0.000
3626.00	7.776	0.000	106.374	1.000	2.465	0.000	0.000	0.000	0.000
3627.00	7.776	0.000	122.794	1.000	2.481	0.000	0.000	0.000	0.000
3628.00	7.776	0.000	122.080	1.000	2.526	0.000	0.000	0.000	0.000
3629.00	7.776	0.000	147.067	1.000	2.507	0.000	0.000	0.000	0.000
3630.00	7.776	0.000	119.224	1.000	2.252	0.000	0.000	0.000	0.000
3631.00	7.776	0.000	109.229	1.000	1.956	0.000	0.000	0.000	0.000
3632.00	7.776	0.000	105.660	1.000	1.630	0.000	0.000	0.000	0.000
3633.00	7.776	0.000	130.647	1.000	2.084	0.000	0.000	0.000	0.000
3634.00	7.776	0.000	146.353	1.000	1.788	0.000	0.000	0.000	0.000

3634.00	7.776	0.000	77.103	1.000	1.980	0.000	0.000	0.000	0.000
3635.00	7.776	0.000	77.103	1.000	1.980	0.000	0.000	0.000	0.000
3636.00	7.776	0.000	79.245	1.000	2.567	0.000	0.000	0.000	0.000
3637.00	7.776	0.000	93.523	1.000	2.557	0.000	0.000	0.000	0.000
3638.00	7.776	0.000	90.667	1.000	2.550	0.000	0.000	0.000	0.000
3639.00	7.776	0.000	78.531	1.000	2.567	0.000	0.000	0.000	0.000
3640.00	7.776	0.000	82.100	1.000	2.517	0.000	0.000	0.000	0.000
3641.00	7.776	0.000	99.234	1.000	2.467	0.000	0.000	0.000	0.000
3642.00	7.776	0.000	84.956	1.000	2.794	0.000	0.000	0.000	0.000
3643.00	7.776	0.000	94.237	1.000	2.650	0.000	0.000	0.000	0.000
3644.00	7.776	0.000	97.093	1.000	2.592	0.000	0.000	0.000	0.000
3645.00	7.776	0.000	90.667	1.000	2.522	0.000	0.000	0.000	0.000
3646.00	7.776	0.000	94.951	1.000	2.549	0.000	0.000	0.000	0.000
3647.00	7.776	0.000	99.234	1.000	2.547	0.000	0.000	0.000	0.000
3648.00	7.776	0.000	107.001	1.000	2.554	0.000	0.000	0.000	0.000
3649.00	7.776	0.000	87.812	1.000	2.568	0.000	0.000	0.000	0.000
3650.00	7.776	0.000	100.662	1.000	2.583	0.000	0.000	0.000	0.000
3651.00	7.776	0.000	110.657	1.000	2.477	0.000	0.000	0.000	0.000
3652.00	7.776	0.000	100.662	1.000	2.536	0.000	0.000	0.000	0.000
3653.00	7.776	0.000	96.379	1.000	2.590	0.000	0.000	0.000	0.000
3654.00	7.776	0.000	108.515	1.000	2.527	0.000	0.000	0.000	0.000
3655.00	7.776	0.000	97.807	1.000	2.523	0.000	0.000	0.000	0.000
3656.00	7.776	0.000	87.812	1.000	2.577	0.000	0.000	0.000	0.000
3657.00	7.776	0.000	102.804	1.000	2.550	0.000	0.000	0.000	0.000
3658.00	7.776	0.000	114.227	1.000	2.534	0.000	0.000	0.000	0.000
3659.00	7.776	0.000	104.232	1.000	2.628	0.000	0.000	0.000	0.000
3660.00	7.776	0.000	87.098	1.000	2.569	0.000	0.000	0.000	0.000
3661.00	7.776	0.000	100.662	1.000	2.592	0.000	0.000	0.000	0.000
3662.00	7.776	0.000	92.095	1.000	2.540	0.000	0.000	0.000	0.000
3663.00	7.776	0.000	103.518	1.000	2.548	0.000	0.000	0.000	0.000
3664.00	7.776	0.000	102.090	1.000	2.554	0.000	0.000	0.000	0.000
3665.00	7.776	0.000	98.520	1.000	2.549	0.000	0.000	0.000	0.000
3666.00	7.776	0.000	85.670	1.000	2.518	0.000	0.000	0.000	0.000
3667.00	7.776	0.000	91.381	1.000	2.572	0.000	0.000	0.000	0.000
3668.00	7.776	0.000	86.384	1.000	2.581	0.000	0.000	0.000	0.000
DEPTH	CTON	GC	GR	IMR	RHOB	VASH	VCRB	VMST	VVLM

3669.00	7.776	0.000	94.951	1.000	2.515	0.000	0.000	0.000	0.000
3670.00	7.776	0.000	101.376	1.000	2.578	0.000	0.000	0.000	0.000
3671.00	7.776	0.000	95.665	1.000	2.589	0.000	0.000	0.000	0.000
3672.00	7.776	0.000	92.809	1.000	2.534	0.000	0.000	0.000	0.000
3673.00	7.776	0.000	65.680	1.000	2.637	0.000	0.000	0.000	0.000
3674.00	7.776	0.000	73.533	1.000	2.589	0.000	0.000	0.000	0.000
3675.00	7.776	0.000	89.953	1.000	2.611	0.000	0.000	0.000	0.000
3676.00	7.776	0.000	74.247	1.000	2.572	0.000	0.000	0.000	0.000
3677.00	7.776	0.000	75.675	1.000	2.571	0.000	0.000	0.000	0.000
3678.00	7.776	0.000	85.670	1.000	2.570	0.000	0.000	0.000	0.000
3679.00	7.776	0.000	67.822	1.000	2.523	0.000	0.000	0.000	0.000
3680.00	7.776	0.000	67.108	1.000	2.612	0.000	0.000	0.000	0.000
3681.00	7.776	0.000	86.384	1.000	2.587	0.000	0.000	0.000	0.000
3682.00	7.776	0.000	77.817	1.000	2.463	0.000	0.000	0.000	0.000
3683.00	7.776	0.000	86.384	1.000	1.515	0.000	0.000	0.000	0.000
3684.00	7.776	0.000	99.234	1.000	1.635	0.000	0.000	0.000	0.000
3685.00	7.776	0.000	222.742	1.000	1.828	0.000	0.000	0.000	0.000
3686.00	7.776	0.000	237.734	1.000	2.340	0.000	0.000	0.000	0.000
3687.00	7.776	0.000	87.812	1.000	1.588	0.000	0.000	0.000	0.000
3688.00	7.776	0.000	106.374	1.000	1.804	0.000	0.000	0.000	0.000
3689.00	7.776	0.000	78.531	1.000	1.605	0.000	0.000	0.000	0.000
3690.00	6.654	356.711	64.252	-0.034	1.540	0.324	0.403	0.028	0.245
3691.00	5.162	0.000	114.941	1.000	1.741	0.000	0.000	0.000	0.000
3692.00	5.162	0.000	120.652	1.000	2.246	0.000	0.000	0.000	0.000
3693.00	5.162	0.000	95.665	1.000	1.505	0.000	0.000	0.000	0.000
3694.00	5.162	0.000	114.941	1.000	1.434	0.000	0.000	0.000	0.000
3695.00	5.162	0.000	82.100	1.000	1.539	0.000	0.000	0.000	0.000
3696.00	3.721	454.242	60.683	-0.034	1.366	0.218	0.486	0.024	0.288
3697.00	1.828	429.495	42.835	-0.034	1.410	0.239	0.465	0.025	0.271
3698.00	0.000	0.000	76.389	1.000	1.357	0.000	0.000	0.000	0.000
3699.00	0.000	0.000	93.523	1.000	2.499	0.000	0.000	0.000	0.000
3700.00	0.000	0.000	109.943	1.000	2.590	0.000	0.000	0.000	0.000
3701.00	0.000	0.000	79.959	1.000	2.534	0.000	0.000	0.000	0.000
3702.00	0.000	0.000	114.941	1.000	2.274	0.000	0.000	0.000	0.000
3703.00	0.000	0.000	107.087	1.000	1.624	0.000	0.000	0.000	0.000
3704.00	0.000	0.000	110.657	1.000	2.405	0.000	0.000	0.000	0.000

3705.00	0.000	0.000	99.234	1.000	2.415	0.000	0.000	0.000	0.000
3706.00	0.000	0.000	108.515	1.000	2.384	0.000	0.000	0.000	0.000
3707.00	0.000	0.000	100.662	1.000	2.379	0.000	0.000	0.000	0.000
3708.00	0.000	0.000	86.384	1.000	2.471	0.000	0.000	0.000	0.000
3709.00	0.000	0.000	104.946	1.000	2.376	0.000	0.000	0.000	0.000
3710.00	0.000	0.000	101.376	1.000	2.430	0.000	0.000	0.000	0.000
3711.00	0.000	0.000	97.807	1.000	2.409	0.000	0.000	0.000	0.000
3712.00	0.000	0.000	97.807	1.000	2.427	0.000	0.000	0.000	0.000
3713.00	0.000	0.000	90.667	1.000	2.494	0.000	0.000	0.000	0.000
3714.00	0.000	0.000	104.232	1.000	2.484	0.000	0.000	0.000	0.000
3715.00	0.000	0.000	100.662	1.000	2.440	0.000	0.000	0.000	0.000
3716.00	0.000	0.000	103.518	1.000	2.437	0.000	0.000	0.000	0.000
3717.00	0.000	0.000	90.667	1.000	2.386	0.000	0.000	0.000	0.000
3718.00	0.000	0.000	107.087	1.000	2.433	0.000	0.000	0.000	0.000
DEPTH	CTON	GC	GR	IMR	RHOB	VASH	VCRB	VMST	VVLM

FINAL PRINT



COMPENSATED
SPECTRAL NATURAL
GAMMA

COMPANY PHILLIPS PETROLEUM COMPANY	
WELL	SAN JUAN 29-5 NO. 218
FIELD	BASIN FRUITLAND COAL
COUNTY	RIO ARRIBA
STATE	NM
API NO.	30-039-24782
LOCATION	2000 FNL AND 1699 FEL
OTHER SERVICES	8DL IEL CSNG ML
SEC. 34	TWP 29N RGE 5W
PERMANENT DATUM GL	ELEV. 6753
LOG MEASURED FROM KB	12 FT. ABOVE PERM. DATUM
DRILLING MEASURED FROM KB	ELEV.: K.B. 6765 D.F. 6764 G.L. 6753
DATE	11/26/90
RUN NO.	ONE
DEPTH-DRILLER	3756
DEPTH-LOGGER	3752
BTM. LOG INTER.	3749
TOP LOG INTER.	280
CASING-DRILLER	8.625 280
CASING-LOGGER	280
BIT SIZE	8.75
TYPE FLUID IN HOLE	PAC
DENS. : VISC	9.1 136
PH : FLUID LOSS	8.0 114.8
SOURCE OF SAMPLE	PIT
RM • MEAS. TEMP.	1.79 • 52
RMF • MEAS. TEMP.	1.34 • 52
RMC • MEAS. TEMP.	2.24 • 52
SOURCE RMF : RMC	CALC. : CALC.
RM • BHT	0.75 • 134
TIME SINCE CIRC.	3 HRS
TIME ON BOTTOM	07:50
X. REC. TEMP.	134 • TD
LOCATION	4550 IFARM
BY	R. FRIDAY
D BY	R. HAWKS

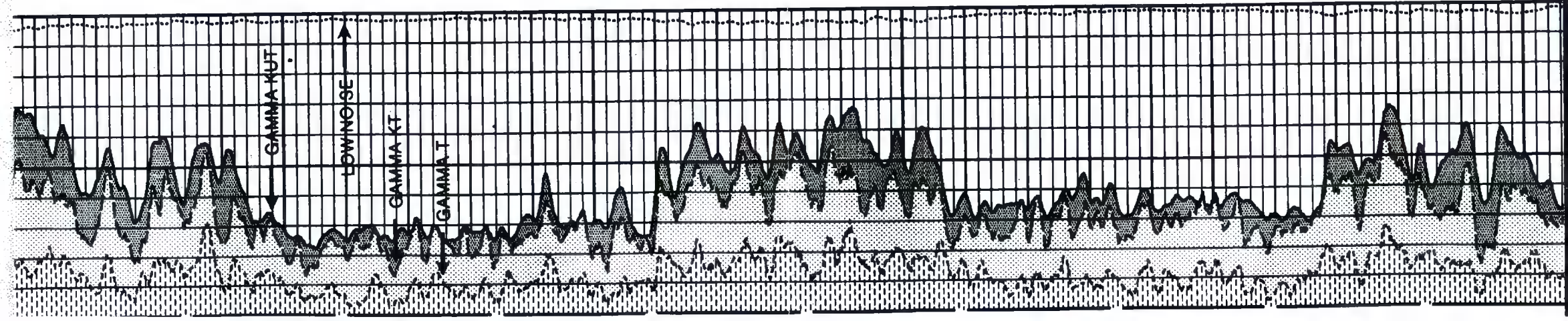
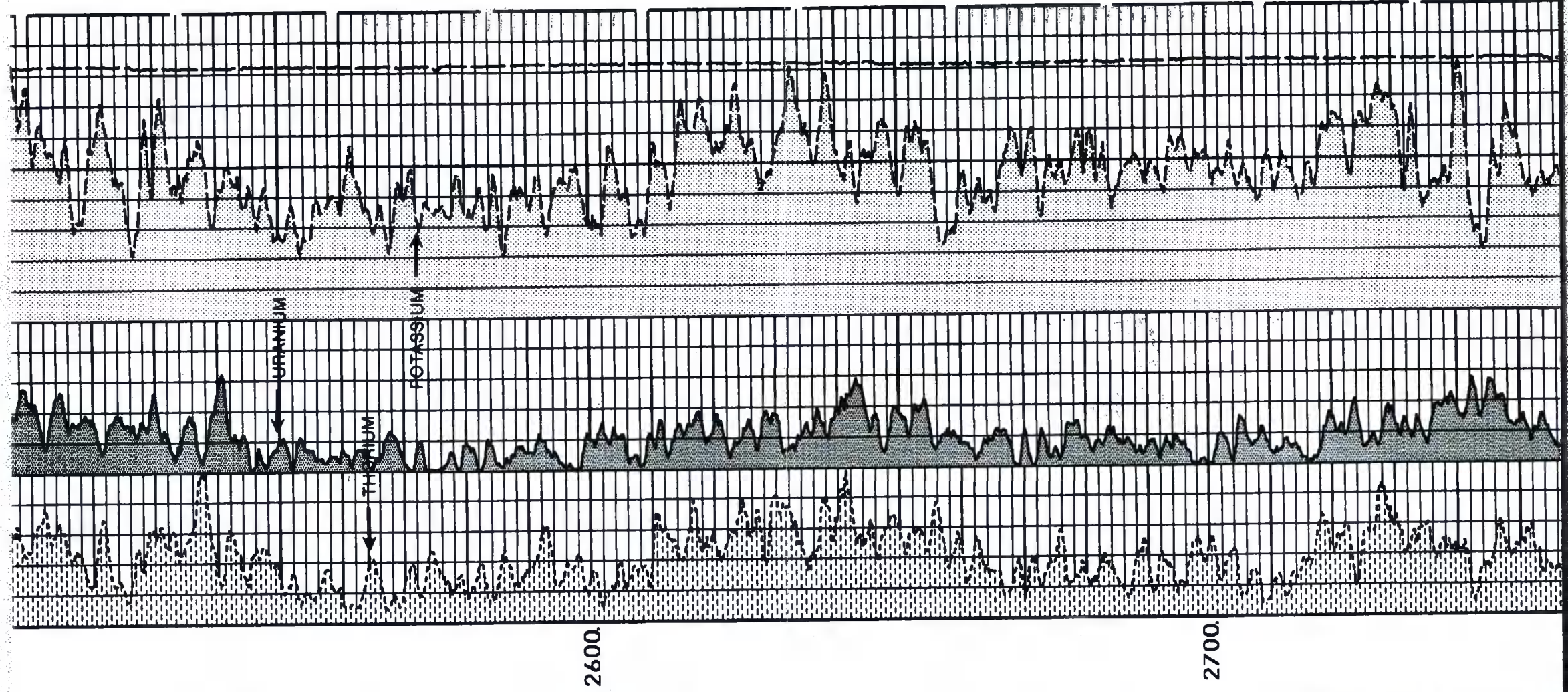
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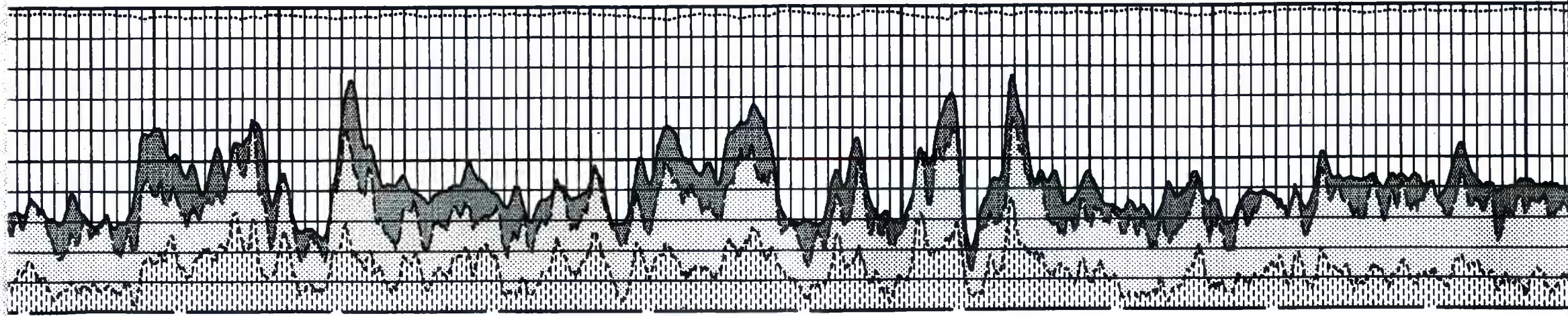
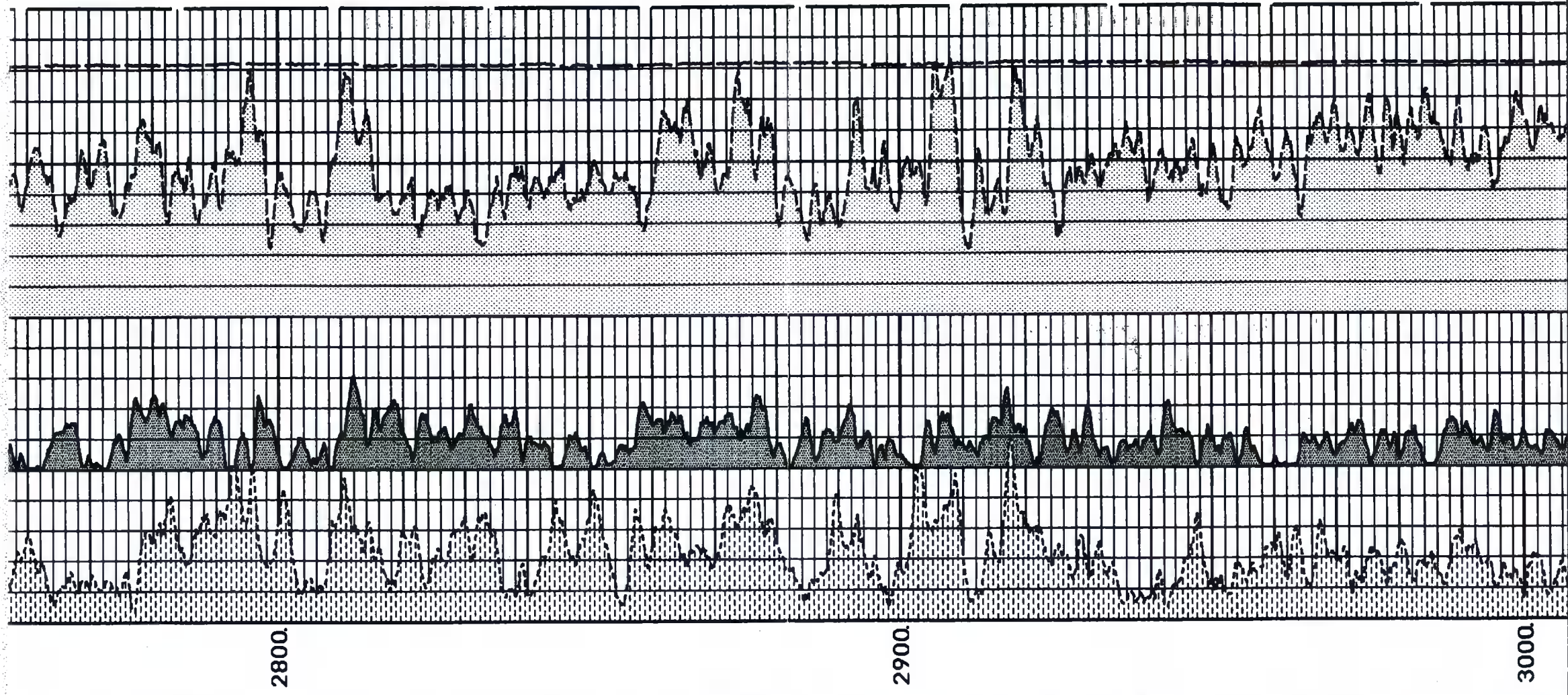
Service Ticket No.: 54388										API Serial No.: 30-039-24782										PGM Version: 2.50 E																			
Change in Mud Type or Additional Samples										RESISTIVITY SCALE CHANGES																													
Date/Sample No.					/ / :					/ / :					Type Log					Depth					Scale Up Hole					Scale Down Hole									
Depth-Driller																																							
Type Fluid																																							
in Hole																																							
Dens. : Visc.										:										:																			
pH. : Fluid Loss										:										:																			
Source of Sample										RESISTIVITY EQUIPMENT DATA																													
Rm @ Meas.Temp.					e					e					Run No					Tool Type & No					Pad Type					Tool Pos.					Other				
Rmf @ Meas.Temp.					e					e					ONE					DILT #W109612										FREE									
Rmc @ Meas.Temp.					e					e										SGRD #W108910										FREE									
Source: Rmf:Rmc										:										:																			
Rm @ BHT					e					e																													
Rmf @ BHT					e					e																													
Rmc @ BHT					e					e																													
EQUIPMENT DATA																																							
GAMMA					ACOUSTIC					DENSITY					NEUTRON																								
Run No.					ONE					Run No.										Run No.					ONE					Run No.									
Serial No.					W109005					Serial No.										Serial No.					W109709					Serial No.									
Model No.					432					Model No.										Model No.					465					Model No.									
Diameter					3.625					No.of Cent.										Diameter					4.5					Diameter									
Detector Model No.					NA					Spacing										Log Type					G/G					Log Type									
Type					SCINT															Source Type					CS-137					Source Type									
Length					12"					LSA										Serial No.					SDL-009					Serial No.									
Distance To Source					NA					FWDA										Strength					1.5 CI					Strength									
LOGGING DATA																																							
GENERAL					GAMMA					ACOUSTIC					DENSITY					NEUTRON																			
Run			Depth		Speed		Scale			Scale			Scale			Scale			Scale																				
No.			From To		Ft/Min		L R			L R Matrix			L R Matrix			L R Matrix																							
ONE			3752 3500		15		0 200						2.0 3.0 2.65			30% -10% SAND																							
			3752 2500		30																																		
			2500 200		60																																		
Remarks:																																							
RIG: AZTEC NO. 301/GRANT																																							
CREW: R. DE ARMOND, J. MARROQUIN																																							
Halliburton Logging Services, Inc. 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 HLS personnel or which may appear on the log or in any other form. Any user of such data, interpretations, conversions or recommendations agrees that HLS is not responsible except where due to gross negligence or willful misconduct, for any loss, damages, or expenses resulting from the use thereof.																																							

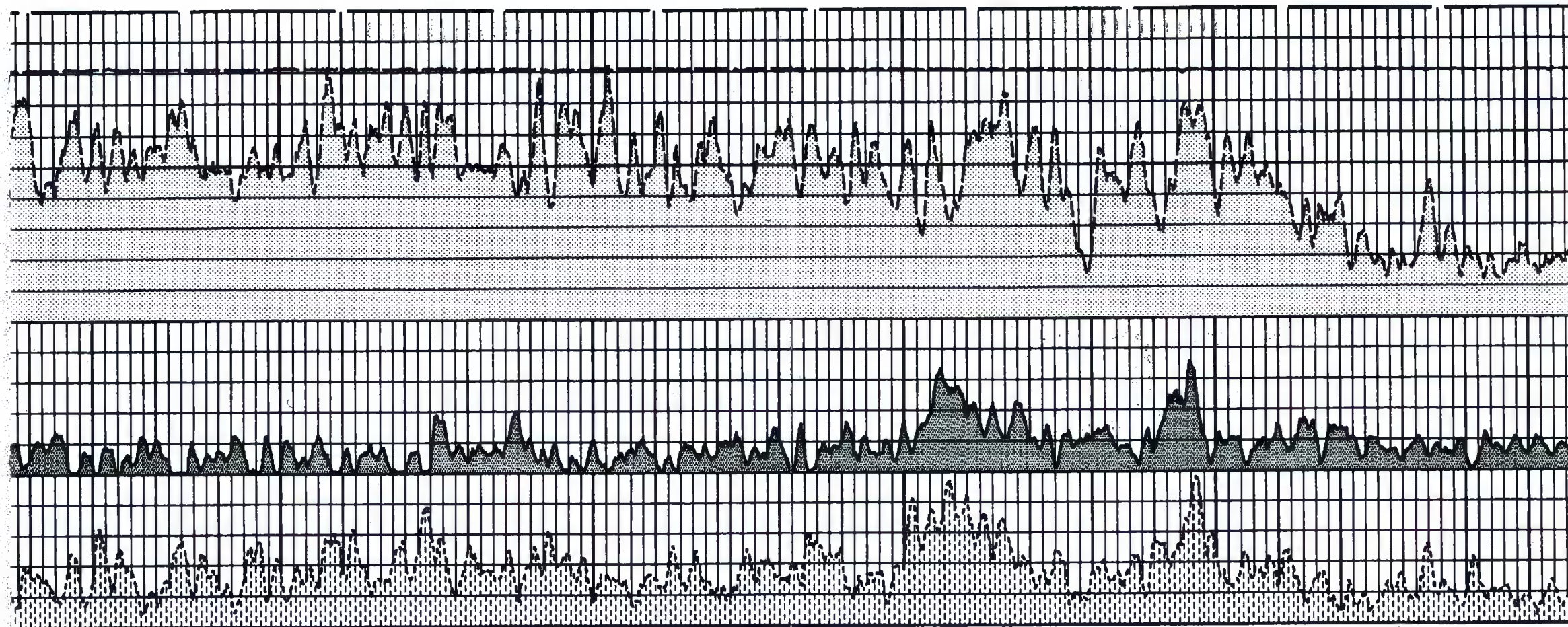
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GAMMA *KT		
0	API	200
GAMMA *T		
0	API	200

THORIUM		
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URANIUM		
-10	PPM	30
POTASSIUM		
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TENSION		
10000	LBS	0

2500.

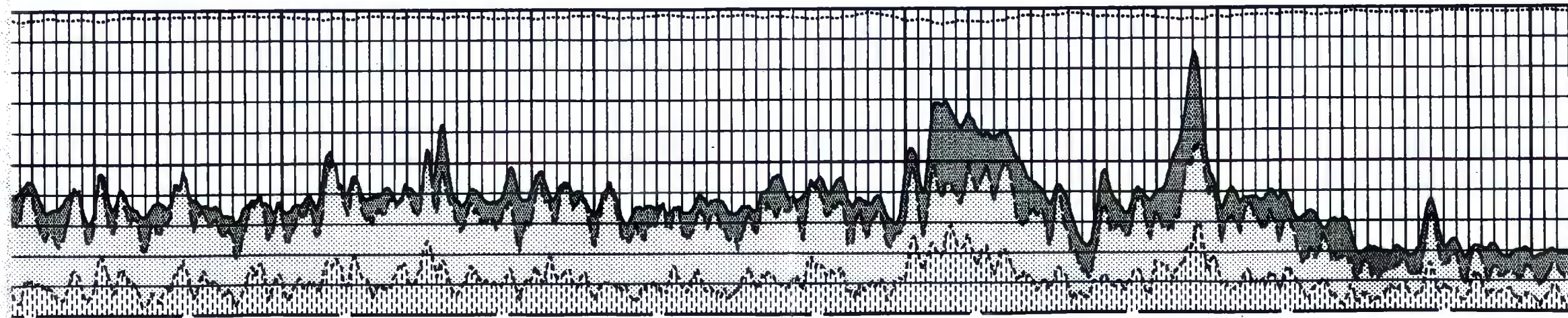


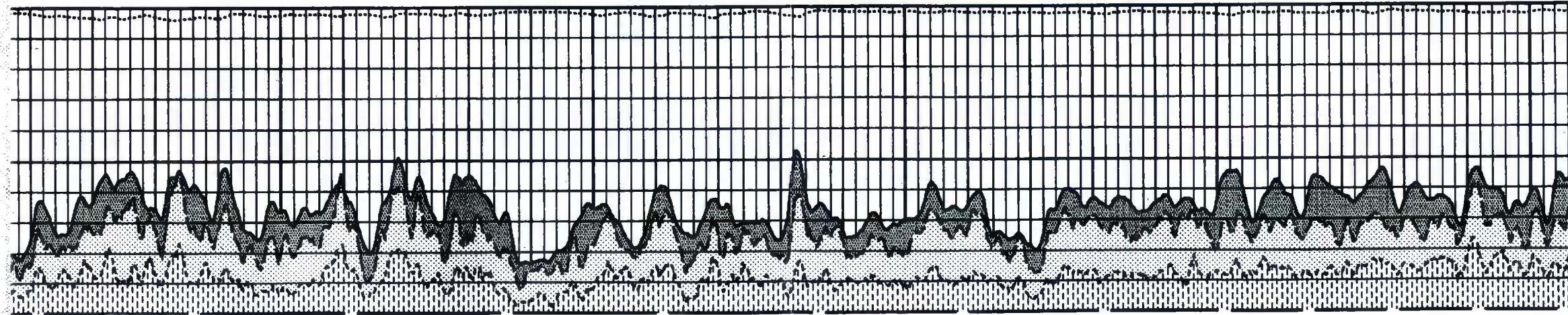
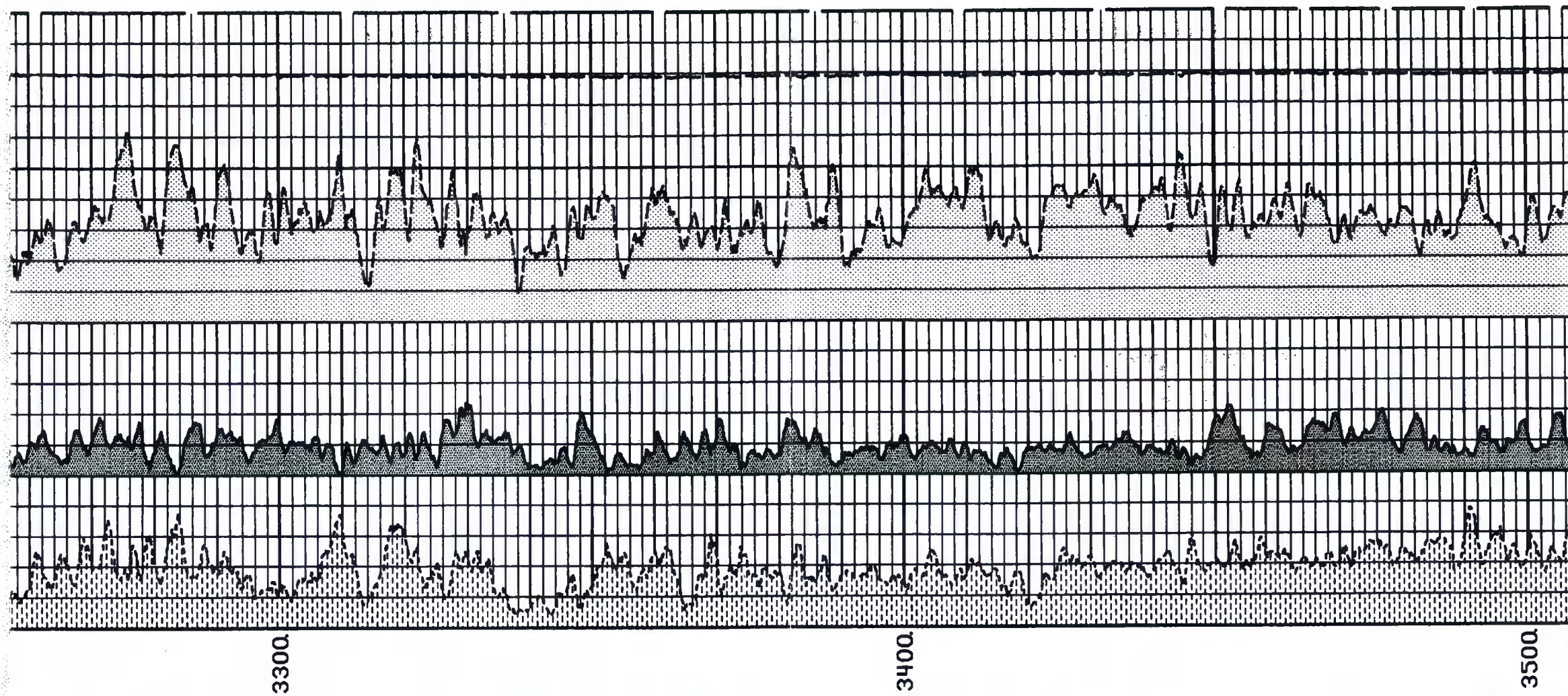


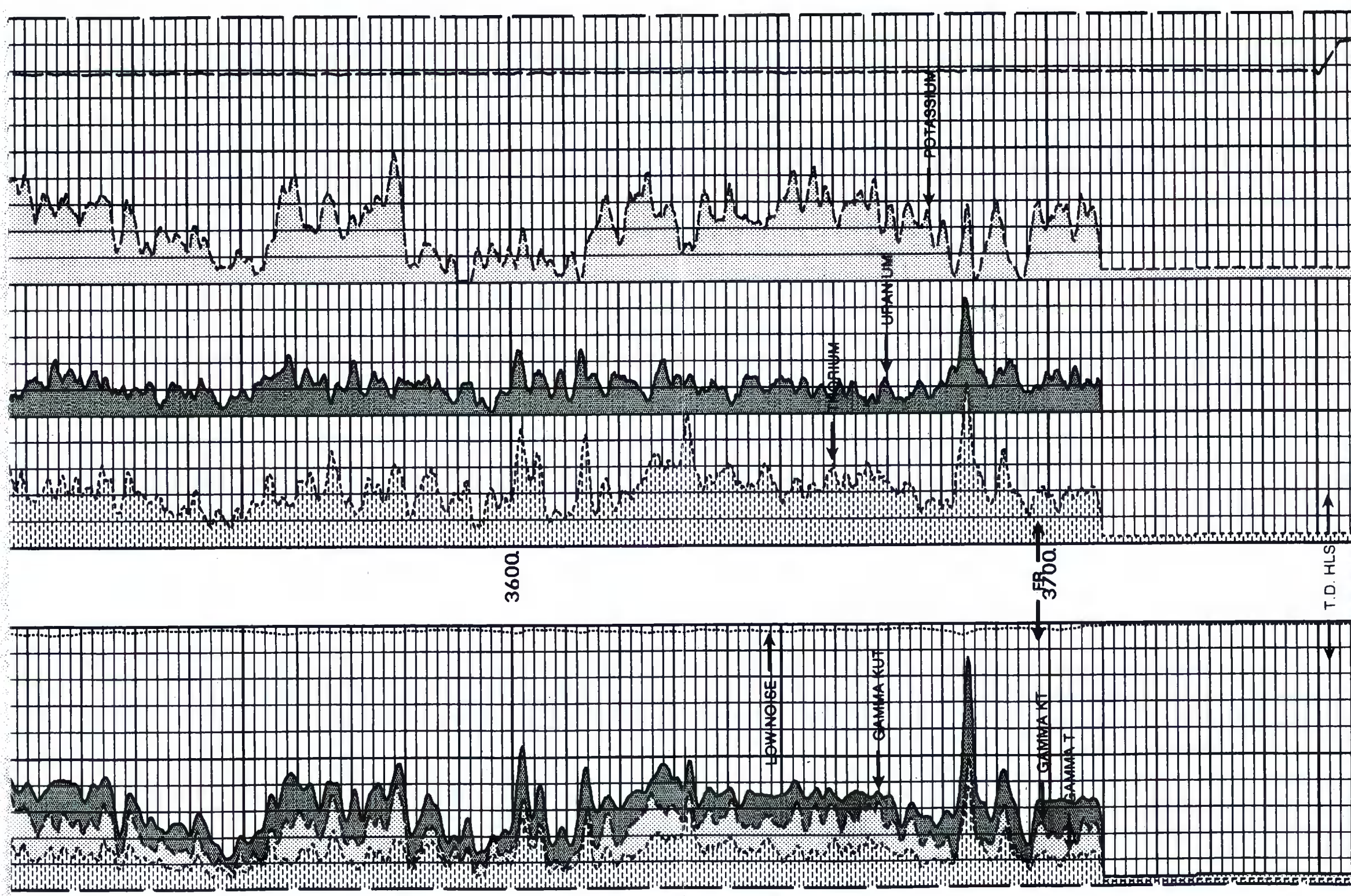


3100

3200







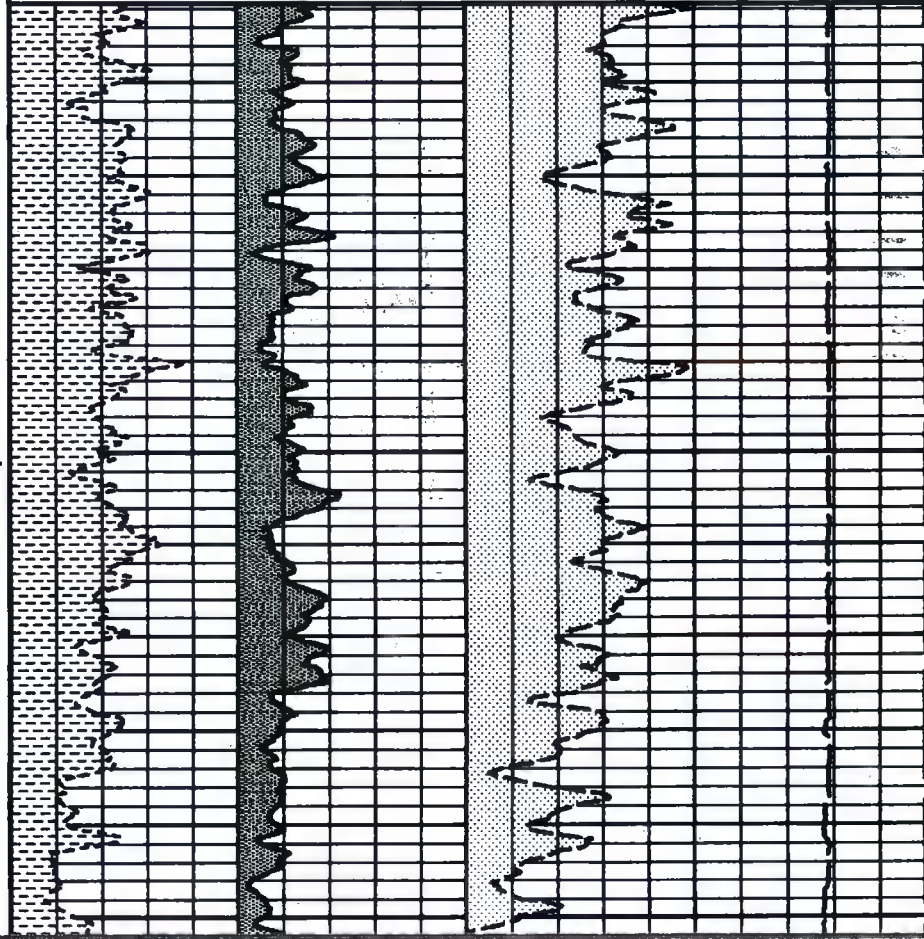
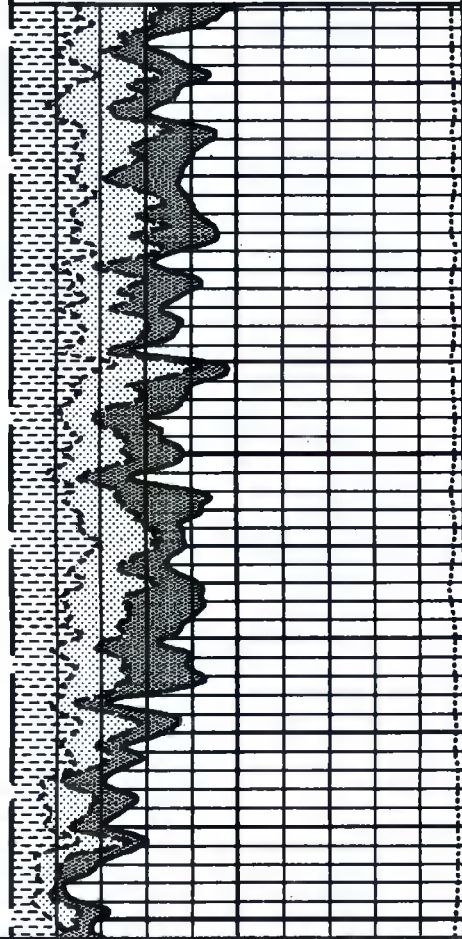
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100	COUNTS	0
GAMMA *KUT		
0	API	200
GAMMA *KT		
0	API	200
GAMMA *T		
0	API	200

THORIUM		
0	PPM	40
URANIUM		
-10	PPM	30
POTASSIUM		
0	PERCENT	5
TENSION		
10000	LBS	0

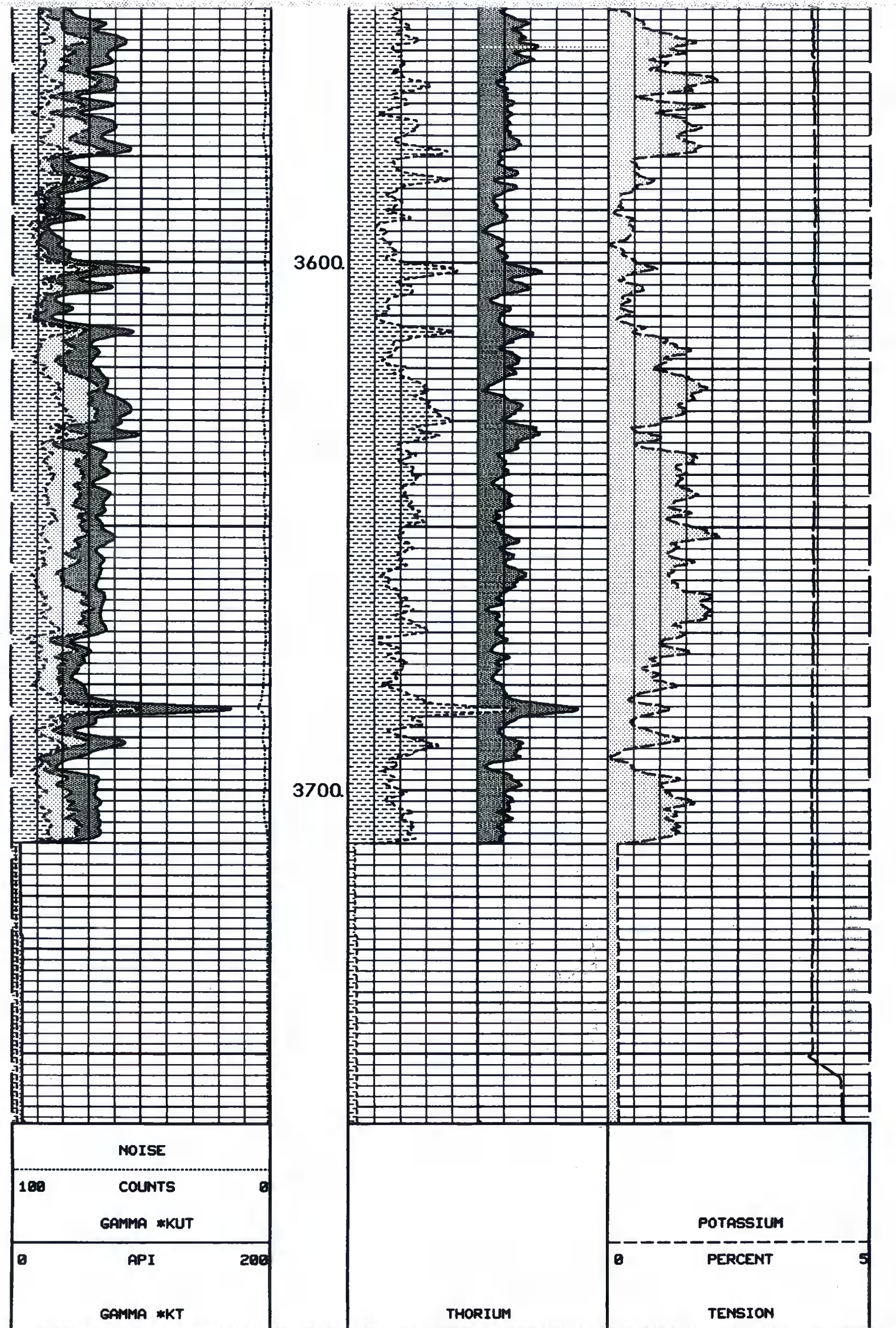
SECTION # 6 Date:11/26/90 Time:18:54 Version:2.50 E

NOISE		
100	COUNTS	0
GAMMA *KUT		
0	API	200
GAMMA *KT		
0	API	200
GAMMA *T		
0	API	200

REPEAT SECTION		
THORIUM		
0	PPM	40
URANIUM		
-10	PPM	30
POTASSIUM		
0	PERCENT	5
TENSION		
10000	LBS	0



3500.



0	API	200
GAMMA * T		
0	API	200

0	PPM	40	10000	LBS	0
URANIUM					
-10	PPM				30

SECTION # 5

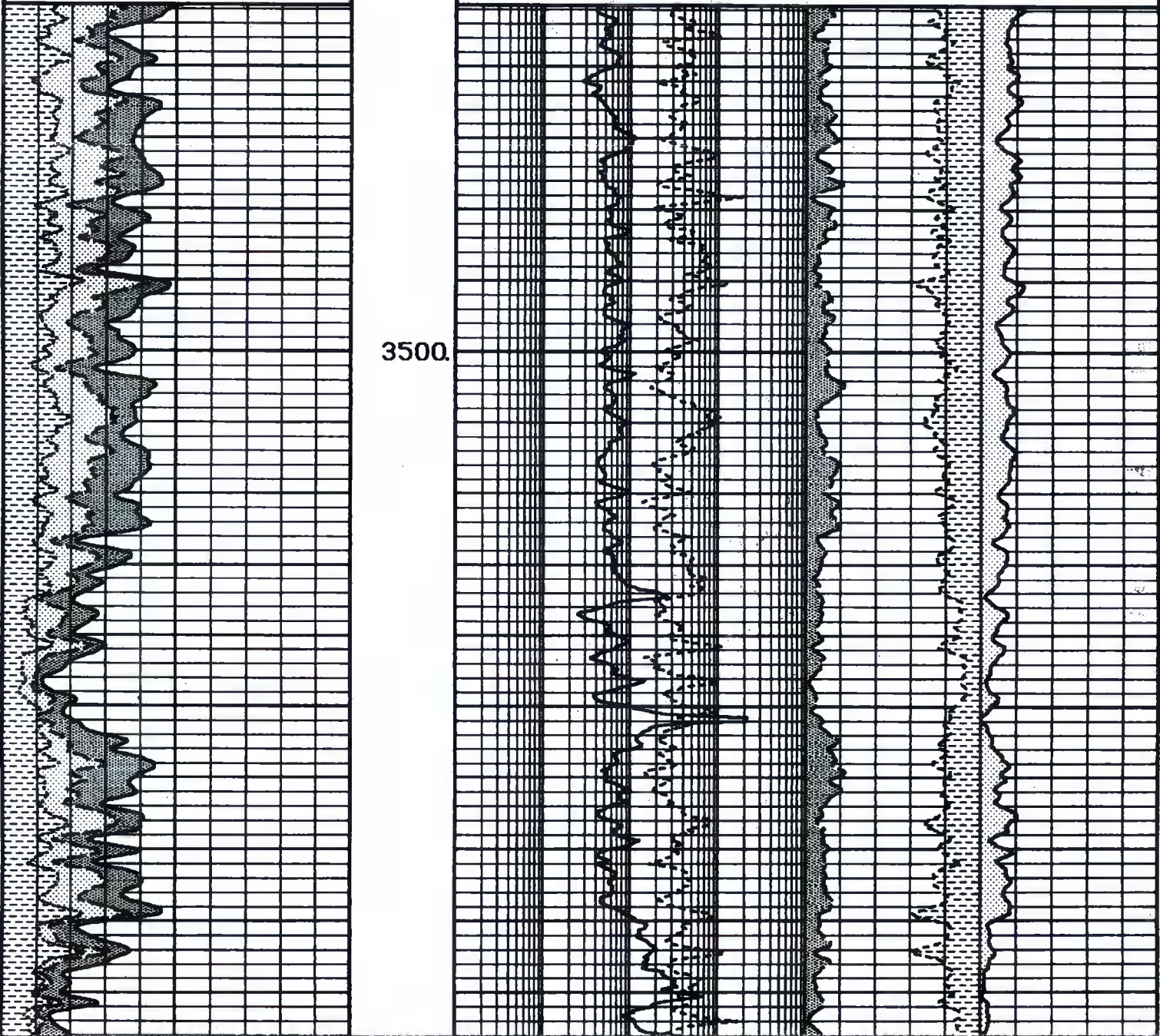
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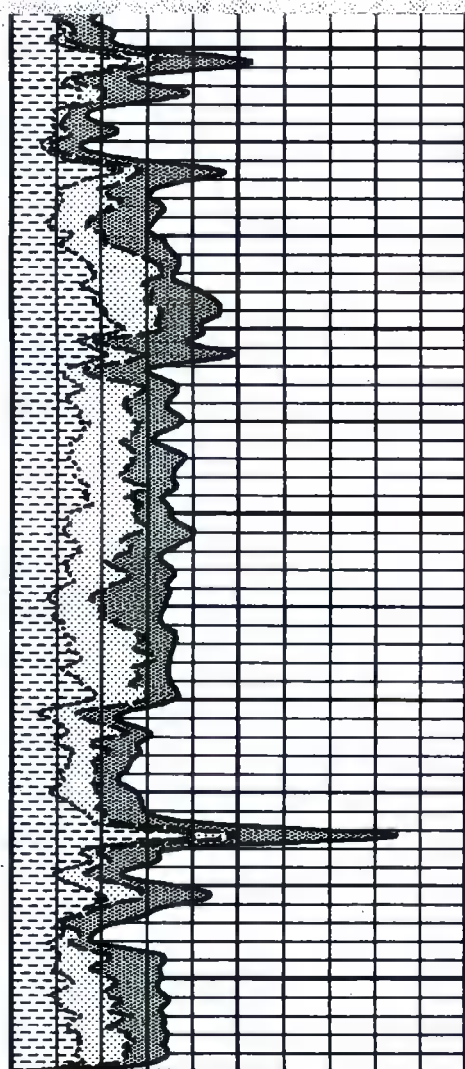
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Version:2.50 E

GAMMA * T		
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GAMMA * KT		
0	API	200
GKUT		
0	API	200

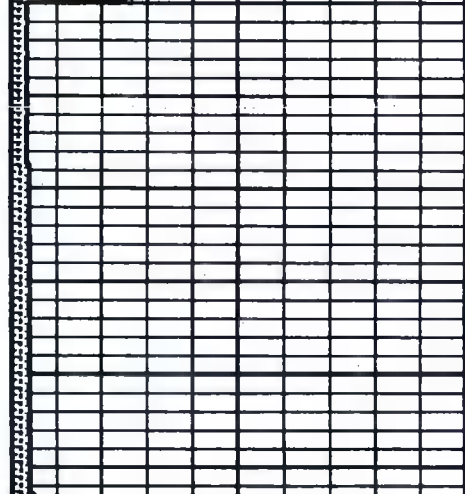
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RATIO THOR/POTA		
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URANIUM		
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THOR		
40	PPM	-40
POTASSIUM		
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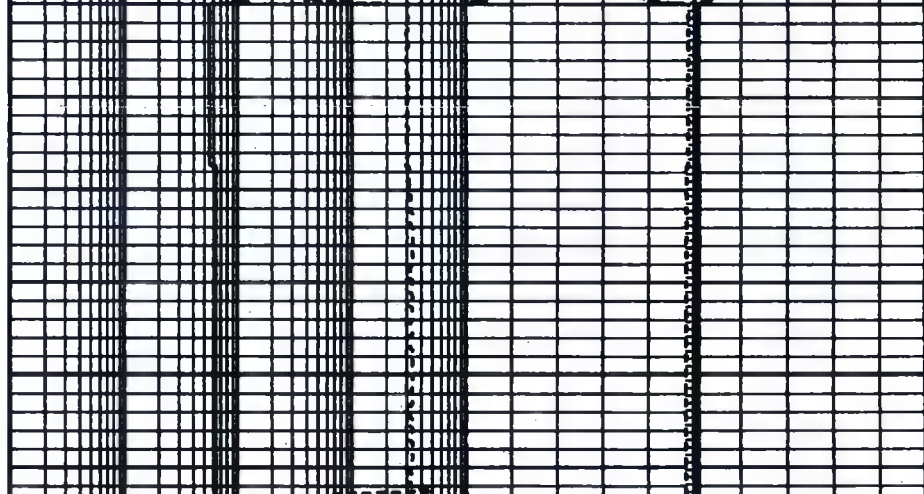
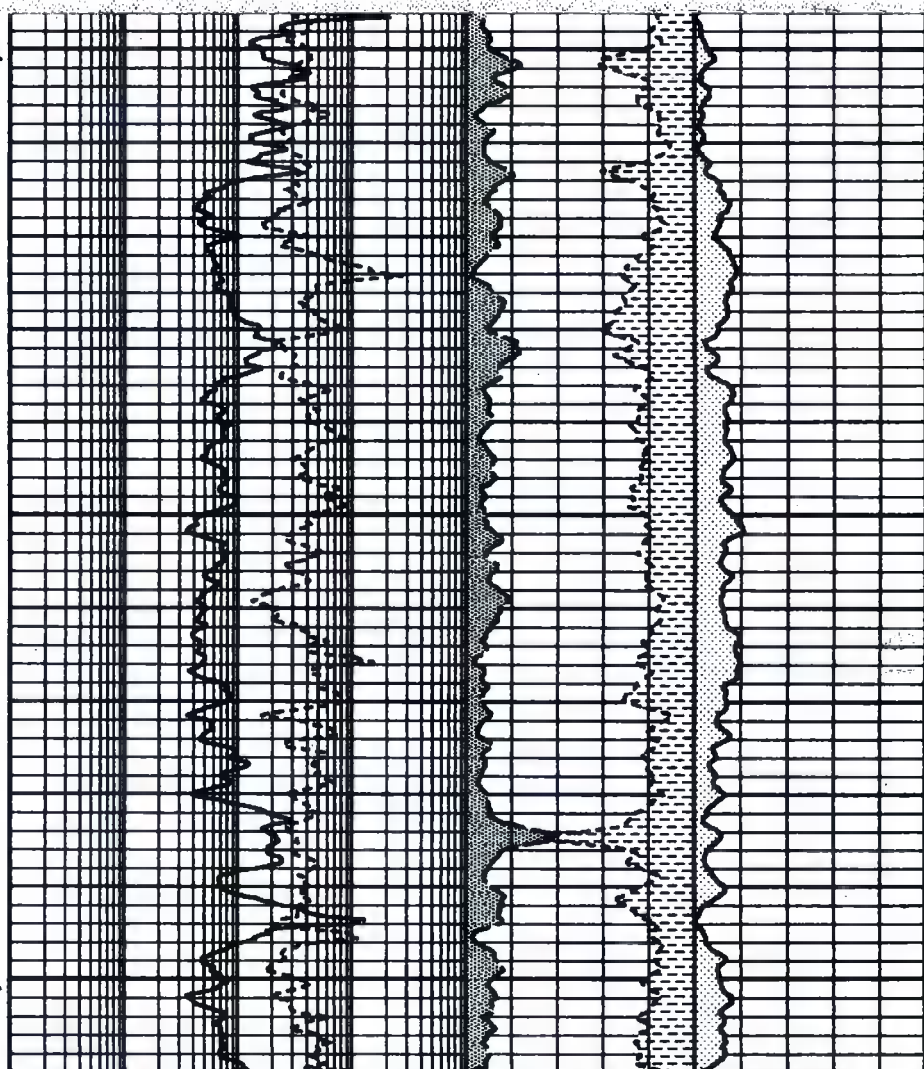


3600.

3700.



GKUT		
0	API	200
GAMMA * KT		
0	API	200
GAMMA * T		
0	API	200



RATIO THOR/POTA		POTASSIUM	
0.1	1000	-1000	1000
RATIO THOR/URAN		THOR	
0.01	100	40	-40
		URANIUM	
		0	40

SH GR = YES
SH SP = NO
SH RT = NO
SH TH = NO
SH K = NO
SHTHK = NO
SHNEU = NO

GR CL = 5.000
SP CL = 0.000
RT CL = 10.000

K CL = 0.000
THKCL = 0.000
NEUCL = 0.100

GR SH = 130.000
SP SH = 100.000
RT SH = 0.000

K SH = 10.000
THKSH = 35.000
NEUSH = 0.400

ND CP = NO
N FLG = NO
N DES = NO
COR D = NO
DENMA = 2.650
DENMN = 1.600
D WCL = 2.400

SHSIG - NO
AG FL - NONE

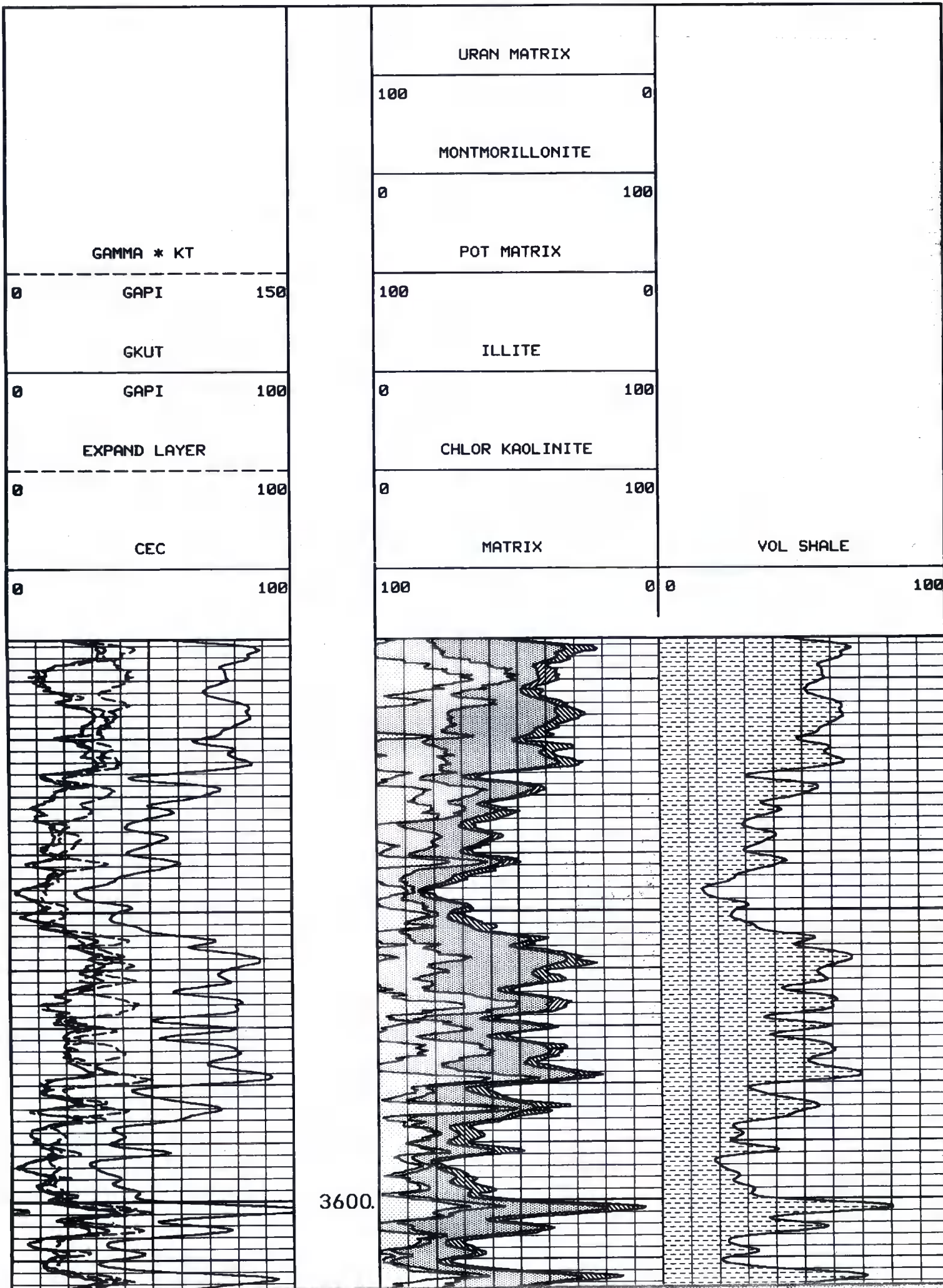
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TH CL = 0.000

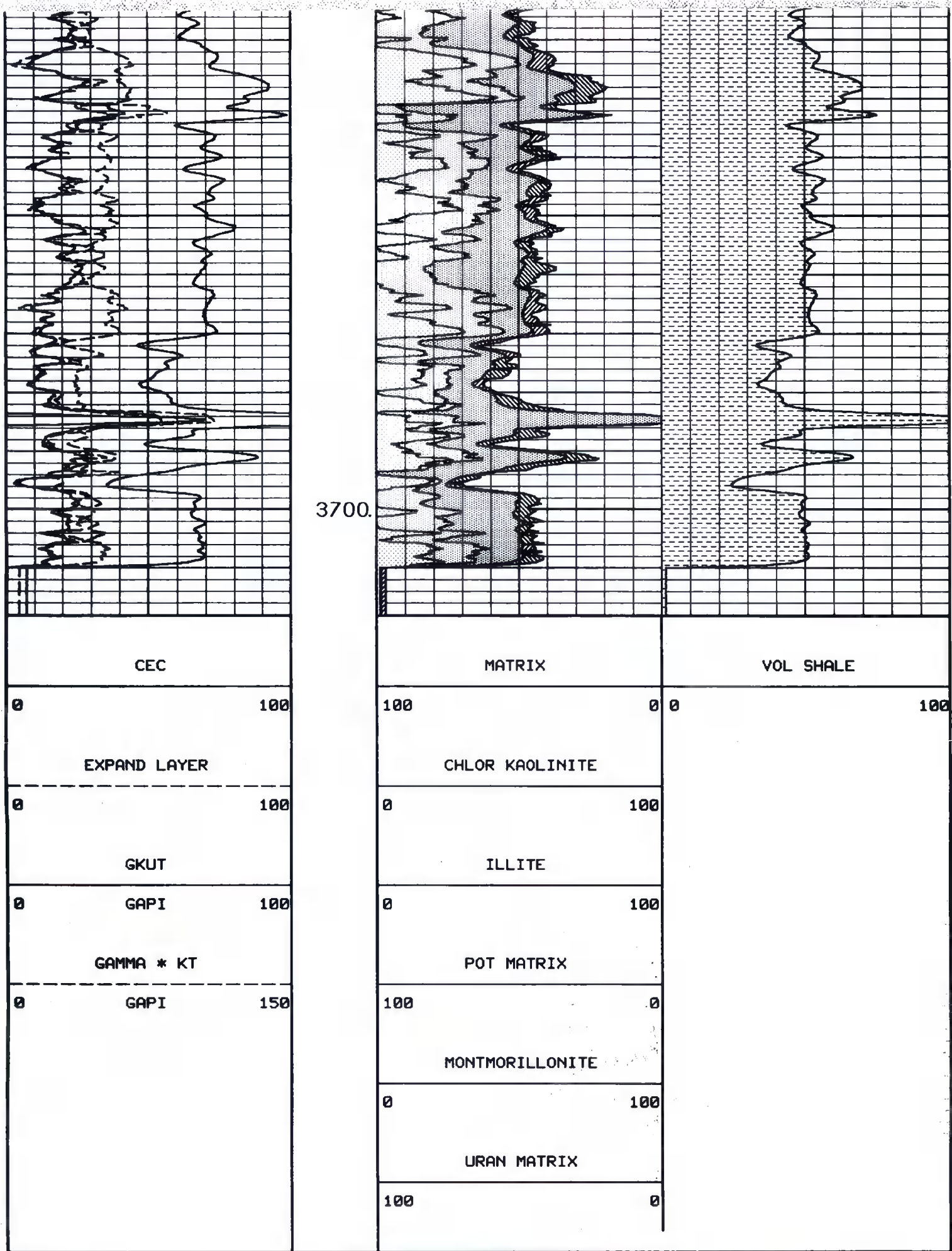
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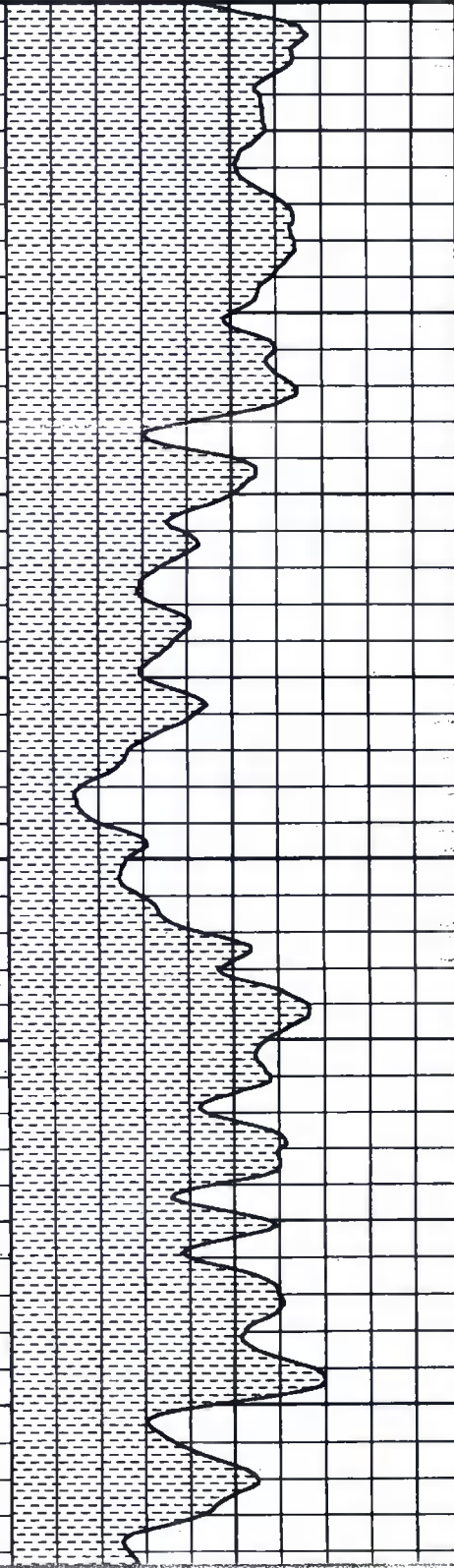
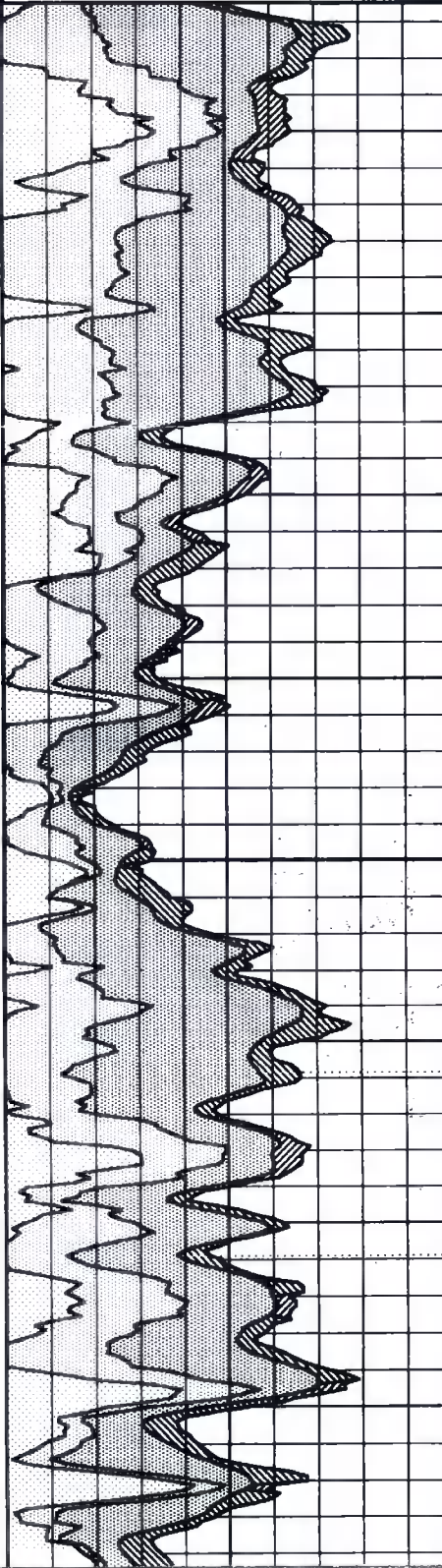
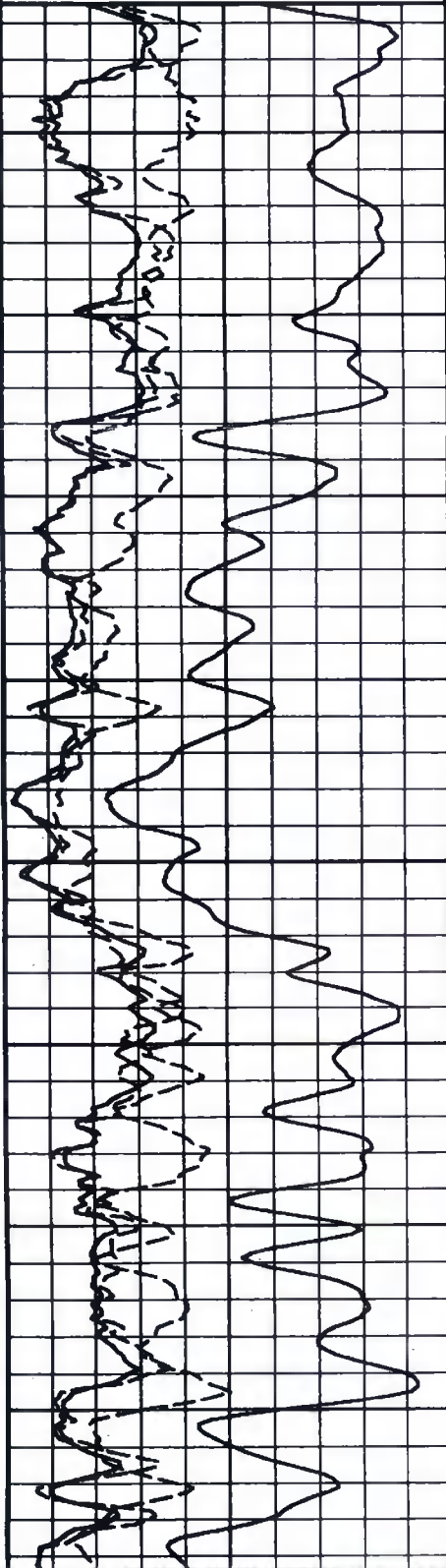
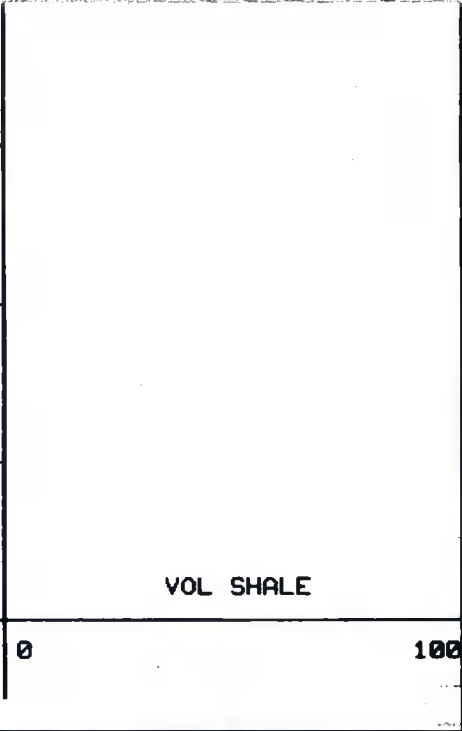
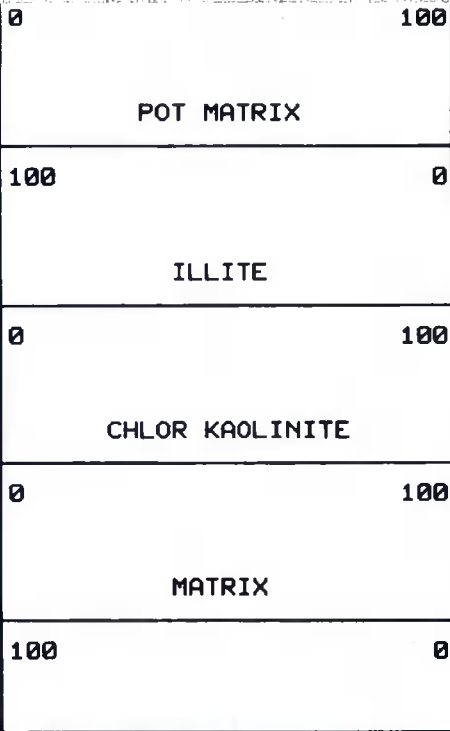
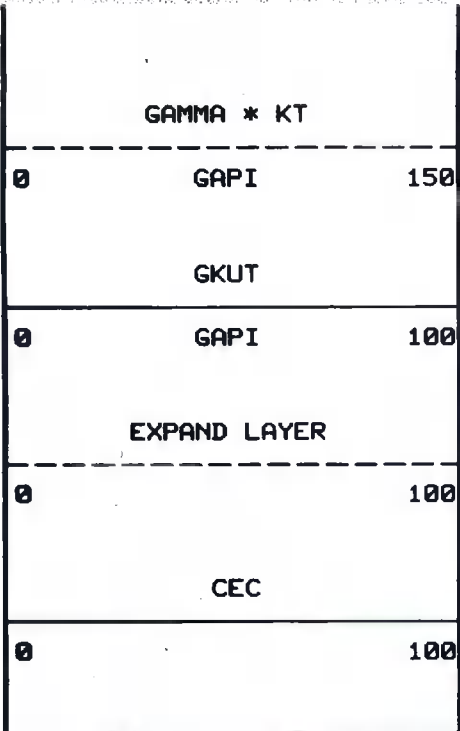
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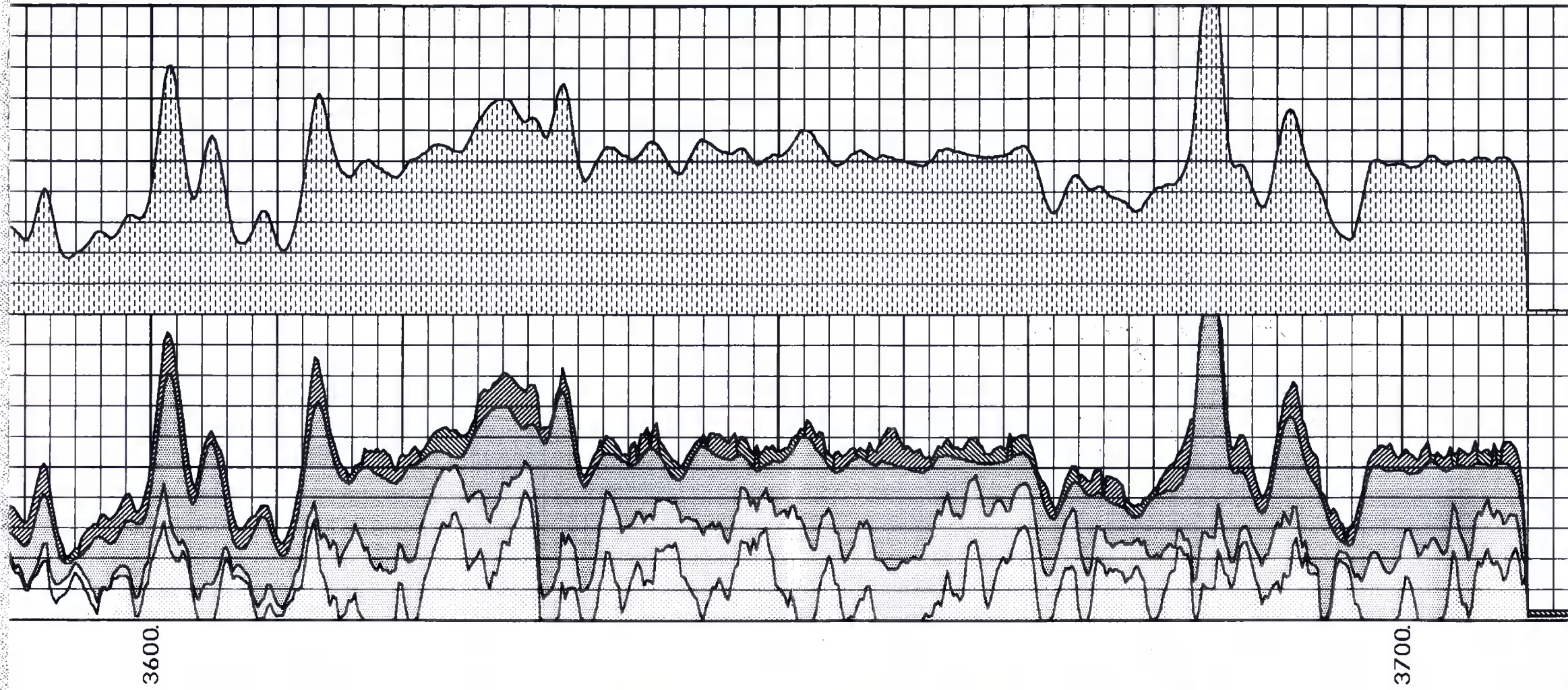
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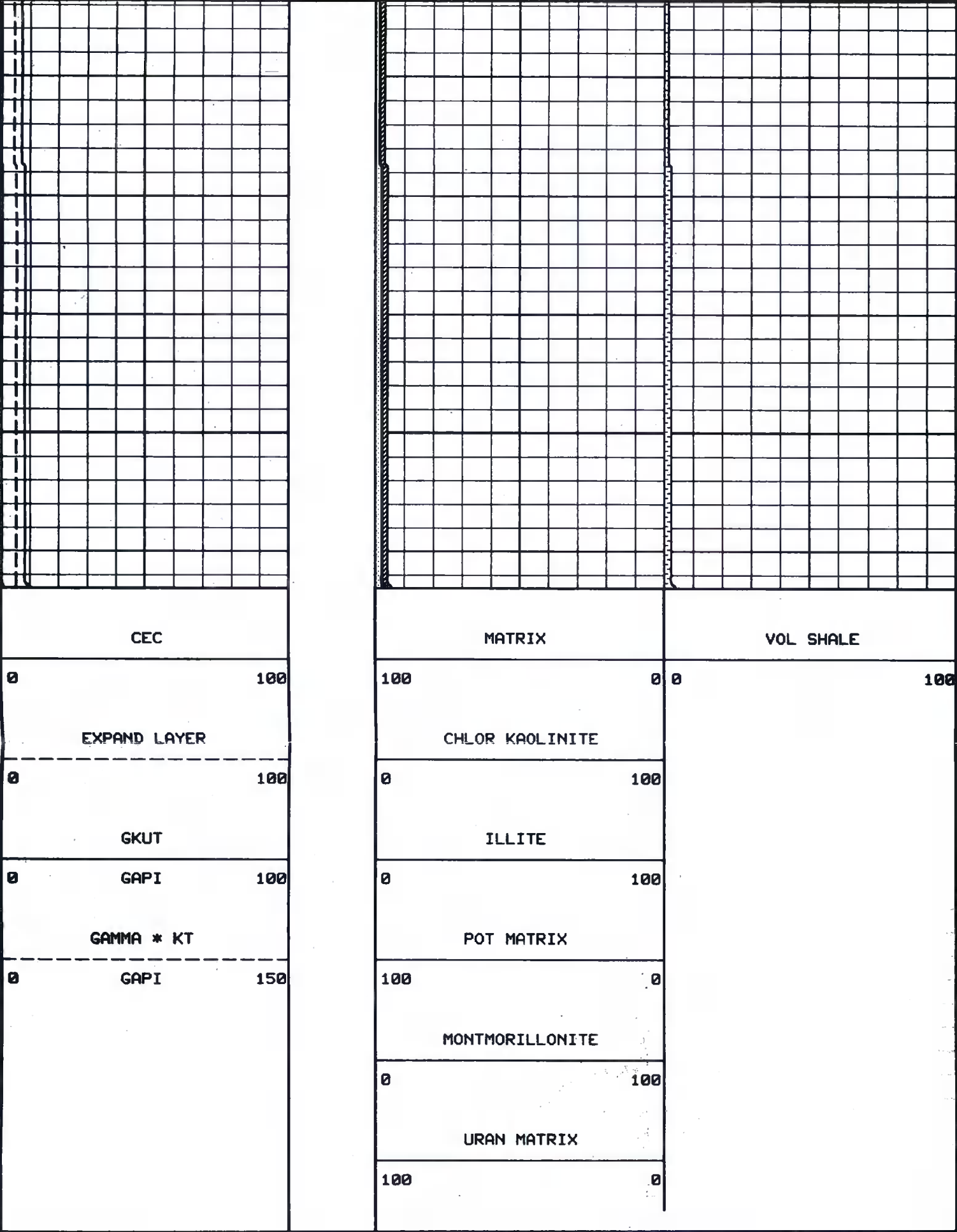




		URAN MATRIX	
		100 0	
		MONTMORILLONITE	







3504.00	0.000	0.200	0.310	0.626	0.626	0.374
3506.00	0.000	0.230	0.302	0.642	0.642	0.358
3508.00	0.177	0.429	0.432	0.560	0.560	0.432
3510.00	0.344	0.492	0.419	0.501	0.501	0.419
3512.00	0.142	0.305	0.409	0.515	0.515	0.405
3514.00	0.135	0.400	0.377	0.623	0.623	0.377
3516.00	0.000	0.255	0.259	0.644	0.644	0.356
3518.00	0.000	0.264	0.350	0.592	0.592	0.400
DEPTH	VCHK	VILL	VKMA	VMON	VSH	VUMA

3520.00	0.142	0.293	0.420	0.503	0.503	0.497
3522.00	0.000	0.245	0.327	0.600	0.600	0.400
3524.00	0.000	0.245	0.295	0.641	0.641	0.359
3526.00	0.127	0.282	0.587	0.413	0.413	0.587
3528.00	0.006	0.249	0.451	0.510	0.510	0.490
3530.00	0.147	0.338	0.500	0.500	0.500	0.500
3532.00	0.191	0.308	0.608	0.392	0.392	0.608
3534.00	0.209	0.245	0.569	0.338	0.338	0.662
3536.00	0.000	0.144	0.624	0.333	0.333	0.667
3538.00	0.007	0.191	0.631	0.369	0.369	0.631
3540.00	0.009	0.117	0.654	0.304	0.304	0.696
3542.00	0.193	0.339	0.584	0.416	0.416	0.584
3544.00	0.000	0.092	0.679	0.268	0.268	0.732
3546.00	0.096	0.128	0.840	0.160	0.160	0.840
3548.00	0.000	0.086	0.757	0.203	0.203	0.797
3550.00	0.130	0.186	0.673	0.262	0.262	0.738
3552.00	0.096	0.097	0.628	0.295	0.295	0.705
3554.00	0.000	0.098	0.535	0.430	0.430	0.570
3556.00	0.067	0.196	0.476	0.467	0.467	0.533
3558.00	0.075	0.331	0.278	0.666	0.666	0.334
3560.00	0.000	0.212	0.343	0.575	0.575	0.425
3562.00	0.000	0.156	0.336	0.585	0.585	0.415
3564.00	0.021	0.209	0.520	0.438	0.438	0.562
3566.00	0.286	0.497	0.397	0.603	0.603	0.397
3568.00	0.045	0.215	0.499	0.453	0.453	0.547
3570.00	0.036	0.291	0.373	0.584	0.584	0.416
3572.00	0.000	0.154	0.516	0.402	0.402	0.598
3574.00	0.154	0.379	0.401	0.599	0.599	0.401
3576.00	0.066	0.279	0.421	0.526	0.526	0.474
3578.00	0.074	0.368	0.278	0.676	0.676	0.324
3580.00	0.218	0.311	0.459	0.447	0.447	0.553
3582.00	0.088	0.165	0.569	0.368	0.368	0.632
3584.00	0.372	0.441	0.326	0.553	0.553	0.447
3586.00	0.028	0.110	0.535	0.426	0.426	0.574
3588.00	0.170	0.192	0.654	0.263	0.263	0.737
3590.00	0.100	0.117	0.685	0.240	0.240	0.768
3592.00	0.108	0.164	0.571	0.353	0.353	0.647
3594.00	0.153	0.186	0.799	0.201	0.201	0.799
3596.00	0.081	0.101	0.660	0.271	0.271	0.729
3598.00	0.144	0.175	0.591	0.320	0.320	0.680
3600.00	0.188	0.259	0.471	0.431	0.431	0.569
3602.00	0.190	0.265	0.187	0.706	0.706	0.294
3604.00	0.000	0.098	0.460	0.488	0.488	0.512
3606.00	0.203	0.238	0.540	0.359	0.359	0.641
3608.00	0.077	0.106	0.662	0.272	0.272	0.728
3610.00	0.012	0.056	0.728	0.231	0.231	0.769
3612.00	0.113	0.210	0.499	0.427	0.427	0.573
3614.00	0.185	0.264	0.320	0.609	0.609	0.391
3616.00	0.068	0.266	0.545	0.455	0.455	0.545
3618.00	0.000	0.162	0.436	0.478	0.478	0.522
DEPTH	VCHK	VILL	VKMA	VMON	VSH	VUMA

3620.00	0.116	0.240	0.456	0.470	0.470	0.530
3622.00	0.158	0.373	0.460	0.540	0.540	0.460
3624.00	0.347	0.504	0.464	0.536	0.536	0.464
3626.00	0.212	0.421	0.276	0.635	0.635	0.365
3628.00	0.259	0.449	0.189	0.701	0.701	0.299
3630.00	0.410	0.511	0.236	0.639	0.639	0.361
3632.00	0.000	0.103	0.326	0.656	0.656	0.344
3634.00	0.068	0.166	0.455	0.488	0.488	0.512
3636.00	0.148	0.361	0.458	0.542	0.542	0.458
3638.00	0.091	0.385	0.489	0.511	0.511	0.489
3640.00	0.121	0.330	0.369	0.564	0.564	0.436
3642.00	0.218	0.362	0.540	0.460	0.460	0.540
3644.00	0.005	0.288	0.391	0.570	0.570	0.430
3646.00	0.068	0.253	0.416	0.528	0.528	0.472
3648.00	0.268	0.397	0.500	0.500	0.500	0.500
3650.00	0.107	0.349	0.481	0.519	0.519	0.481
3652.00	0.000	0.311	0.399	0.601	0.601	0.399
3654.00	0.212	0.366	0.495	0.505	0.505	0.495
3656.00	0.011	0.245	0.433	0.527	0.527	0.473
3658.00	0.000	0.197	0.423	0.516	0.516	0.484

VUMA.

03:53:13 11/12/90

CHANNELS
CHANNELS
CHANNELS
CHANNELS
GAPI

04:19:49 11/12/90
04:19:49 11/12/90

UNITS

CHANNELS
CHANNELS
CHANNELS
CHANNELS
GAPI

ATTACHMENT SUMMARY TABLE

TOLERANCE

+/- 9.0

FINAL PRINT



INDUCTION
ELECTRIC
LOG

COMPANY WELL FIELD COUNTY ST		COMPANY PHILLIPS PETROLEUM COMPANY			
		WELL SAN JUAN 29-5 NO. 218			
		FIELD BASIN FRUITLAND COAL			
		COUNTY RIO ARRIBA		STATE NM	
		API NO. 30-039-24782		OTHER SERVICES	
		LOCATION		SDL	
		2000 FNL AND 1699 FEL		IEL	
				CSNG	
				ML	
		SEC. 34 TWP. 29N RGE 5W			
PERMANENT DATUM CL		ELEV. 6753		ELEV.: K.B. 6765	
LOG MEASURED FROM KB 12		FT. ABOVE PERM. DATUM		D.F. 6764	
DRILLING MEASURED FROM KB				G.L. 6753	
DATE	11/26/90				
RUN NO.	ONE				
DEPTH-DRILLER	3756				
DEPTH-LOGGER	3752				
BTM. LOG INTER.	3749				
TOP LOG INTER.	280				
CASING-DRILLER	8,625#282				
CASING-LOGGER	280				
BIT SIZE	8.75				
TYPE FLUID IN HOLE	PAC				
DENS. : VISC	9.1 : 106				
PH : FLUID LOSS	8.0 : 114.8				
SOURCE OF SAMPLE	PIT				
RM : MEAS. TEMP.	1.79 : 52				
RMF : MEAS. TEMP.	1.34 : 52				
RMC : MEAS. TEMP.	2.24 : 52				
SOURCE RMF : RMC	CALC. : CALC.				
RM : BHT	0.75 : 134				
TIME SINCE CIRC.	8 HRS				
TIME ON BOTTOM	12:55				
MAX. REC. TEMP.	134 : STD				
EQUIP. : LOCATION	4550 : FARM				
RECORDED BY	R. FRIDAY				
WITNESSED BY	R. HAWKS				

FILE COPY

Fold Here

Service Ticket No.: 54308

API Serial No.: 30-039-24782

PGM Version: 2.50 E

Change in Mud Type or Additional Samples

RESISTIVITY SCALE CHANGES

Date/Sample No. / / : / / :

Type Log

Depth

Scale Up Hole

Scale Down Hole

Depth-Driller

Type Fluid

in Hole

Dens. : Visc. :

pH. : Fluid Loss :

Source of Sample

RESISTIVITY EQUIPMENT DATA

Rm @ Meas.Temp. e e Run No Tool Type & No Pad Type Tool Pos. Other

Rmf @ Meas.Temp. e e ONE DILT #W109612 FREE

Rmc @ Meas.Temp. e e SGRD #W108910 FREE

Source: Rmf/Rmc : :

Rm @ BHT e e

Rmf @ BHT e e

Rmc @ BHT e e

EQUIPMENT DATA

GAMMA ACOUSTIC DENSITY NEUTRON

Run No. ONE Run No. Run No. ONE Run No.

Serial No. W108589 Serial No. Serial No. W109709 Serial No.

Model No. 432 Model No. Model No. 465 Model No.

Diameter 3.625 No.of Cent. Diameter 4.5 Diameter

Detector Model No. NA Spacing Log Type G/G Log Type

Type SCINT Source Type CS-137 Source Type

Length 4 " LSA Serial No. SDL-009 Serial No.

Distance To Source NA FWDA Strength 1.5 CI Strength

LOGGING DATA

GENERAL GAMMA ACOUSTIC DENSITY NEUTRON

Run Depth Speed Scale Scale Scale Scale

No. From To Ft/Min L R L R Matrix L R Matrix L R Matrix

ONE 3752 3500 15 0 200 2.0 3.0 2.65 30% -10% SAND

3752 2500 30

2500 200 60

Remarks:

MECHANICAL SP SHIFT AT 3400

AHV COMPUTED FOR 5.5 INCH CASING

RIG: AZTEC NO. 301/GRANT

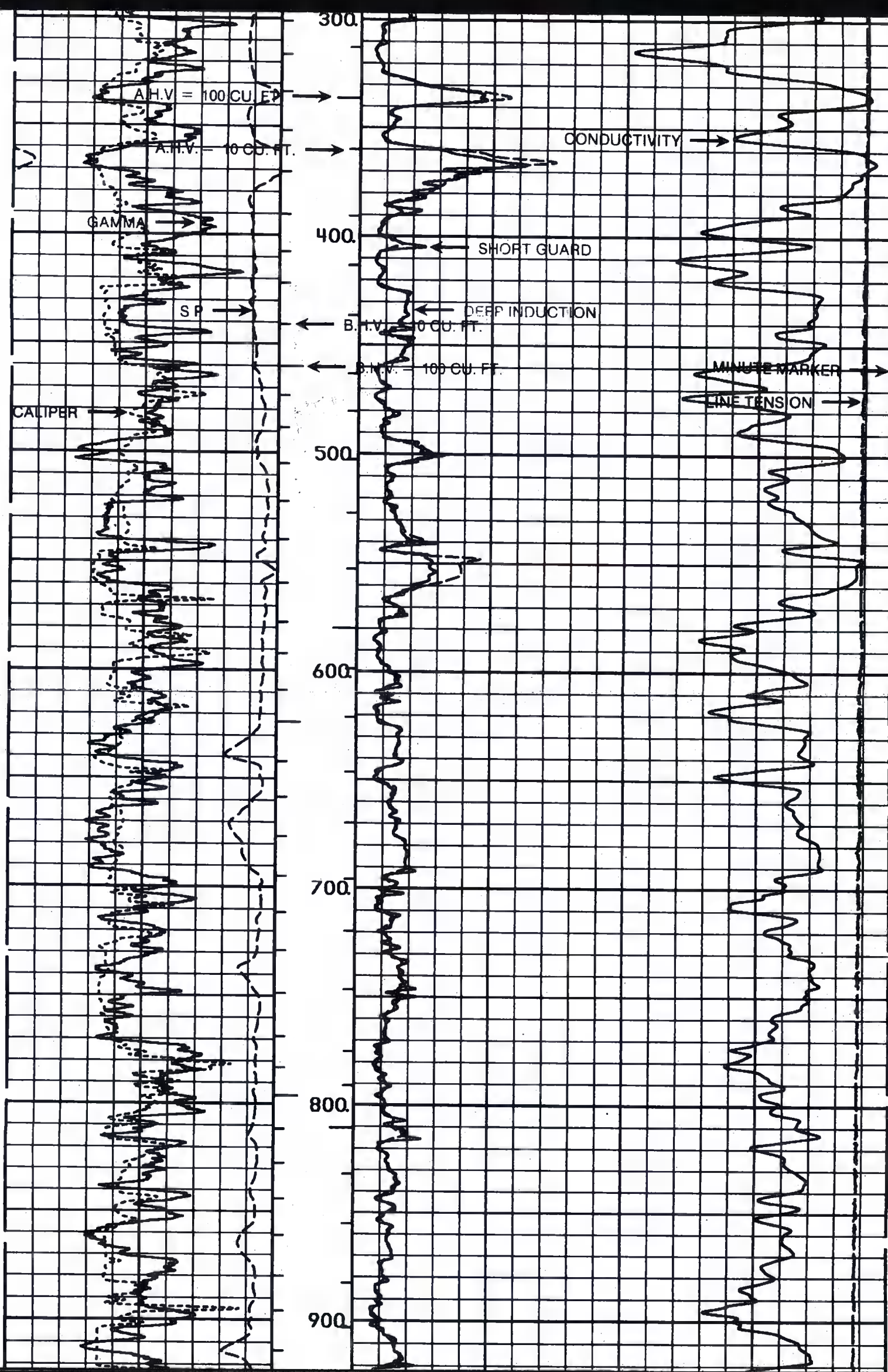
CREW: R. DE ARMOND, J. MARROQUIN

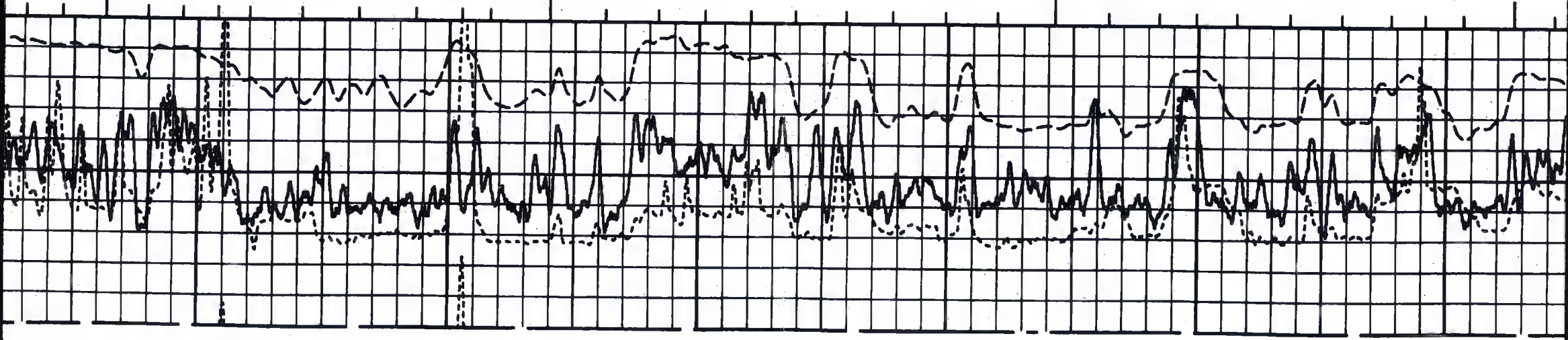
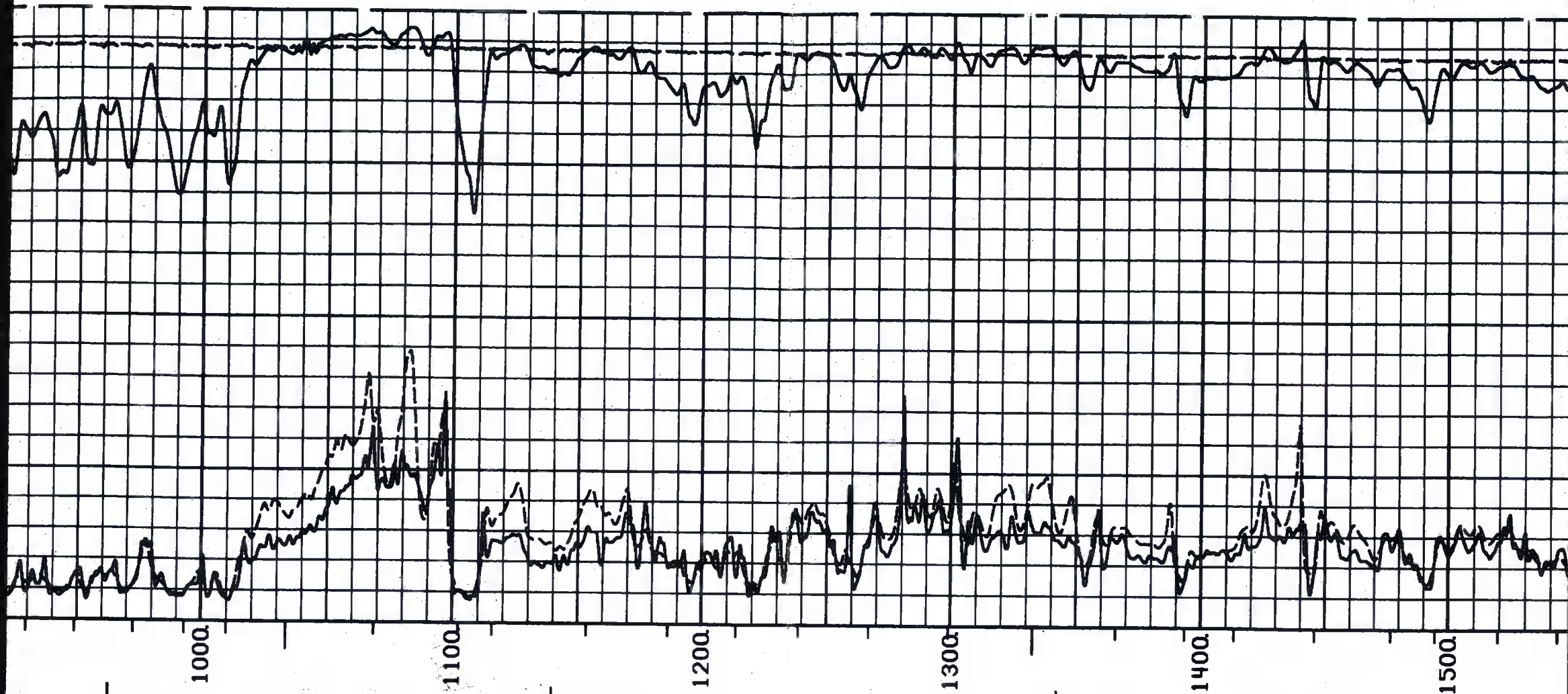
Wellborton Logging Services, Inc. does not guarantee the accuracy of any interpretation of log data, conversion of log data to physical rock parameters or recommendations which may be given by WLS personnel or which may appear on the log or in any other form. Any user of such data, interpretations, conversions or recommendations agrees that WLS is not responsible except where due to gross negligence or willful misconduct, for any loss, damages, or expenses resulting from the use thereof.

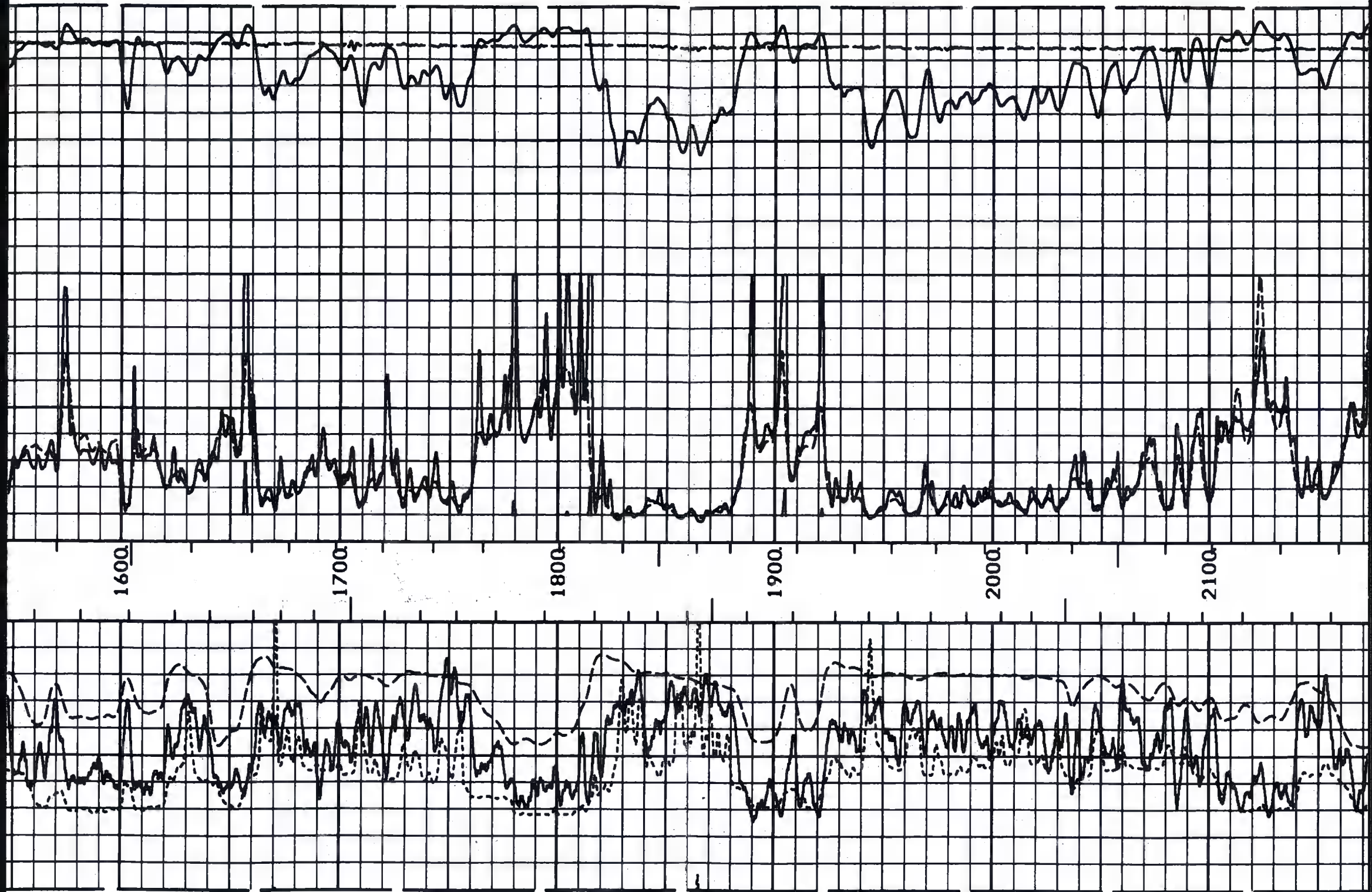
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GAMMA		
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CALIPER		
6	INCHES	16

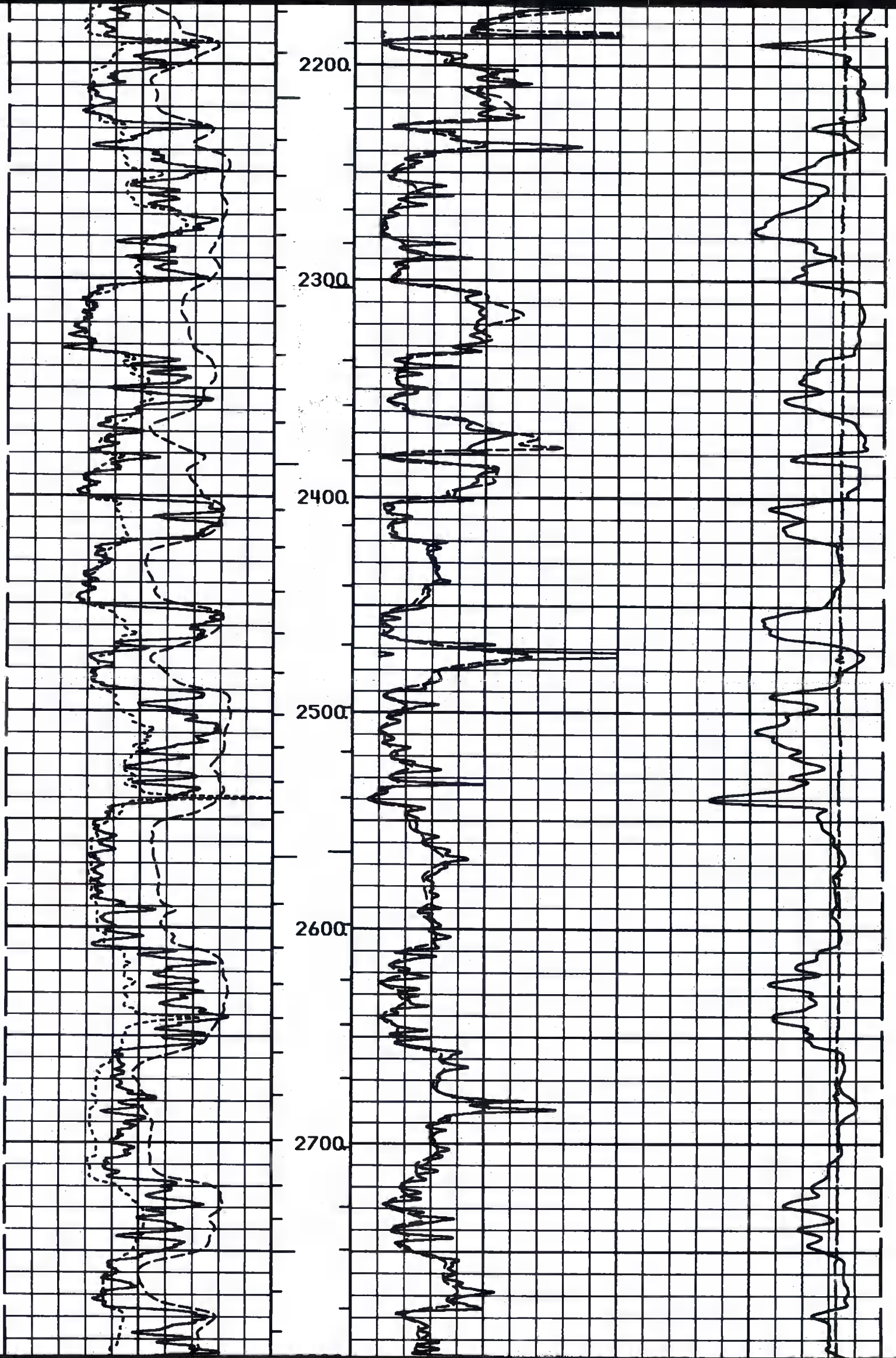
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GUARD		
0	OHM-M	100 10000
TENSION		
POUNDS		
COND		
400	MMHOS	

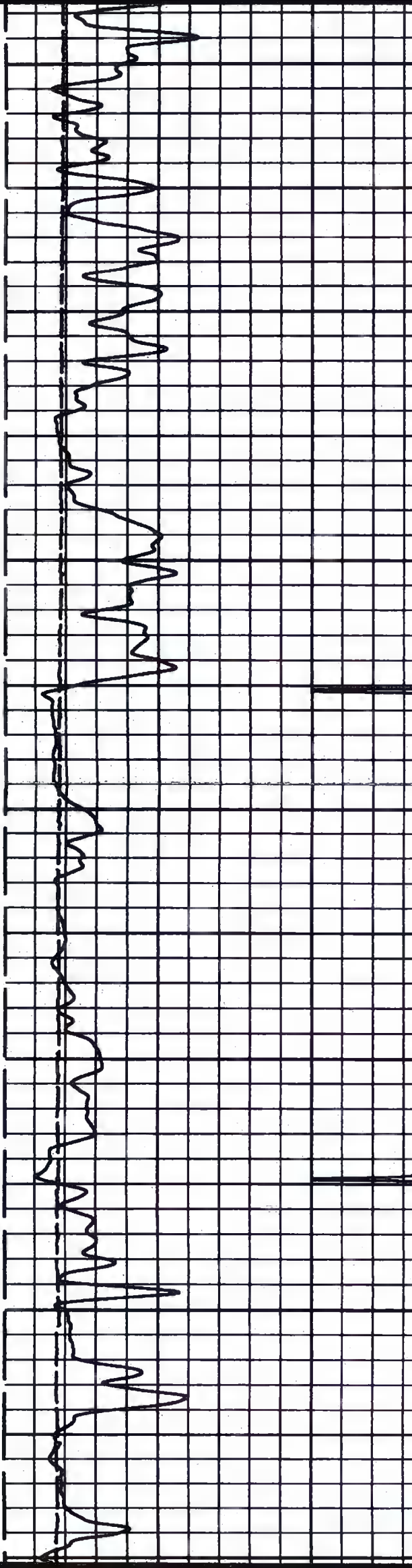
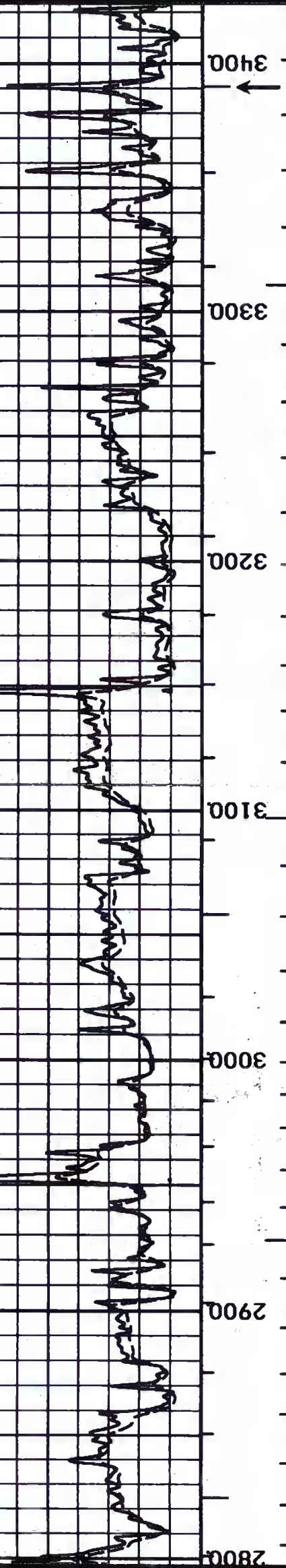
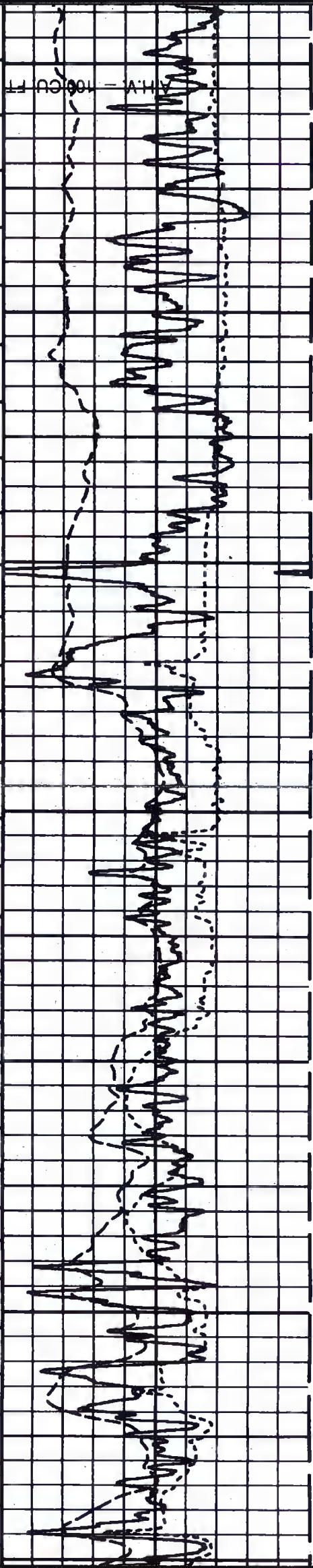
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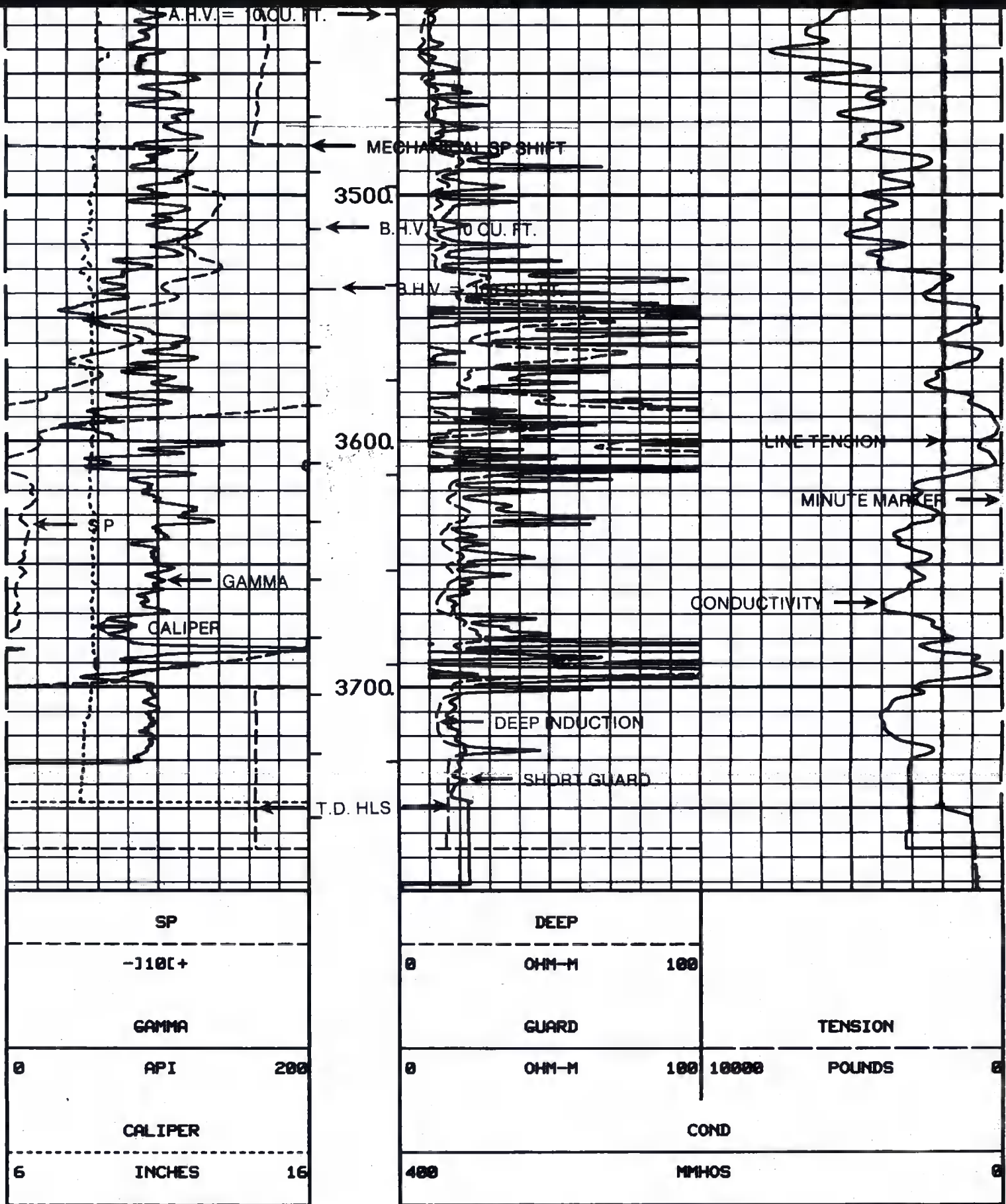








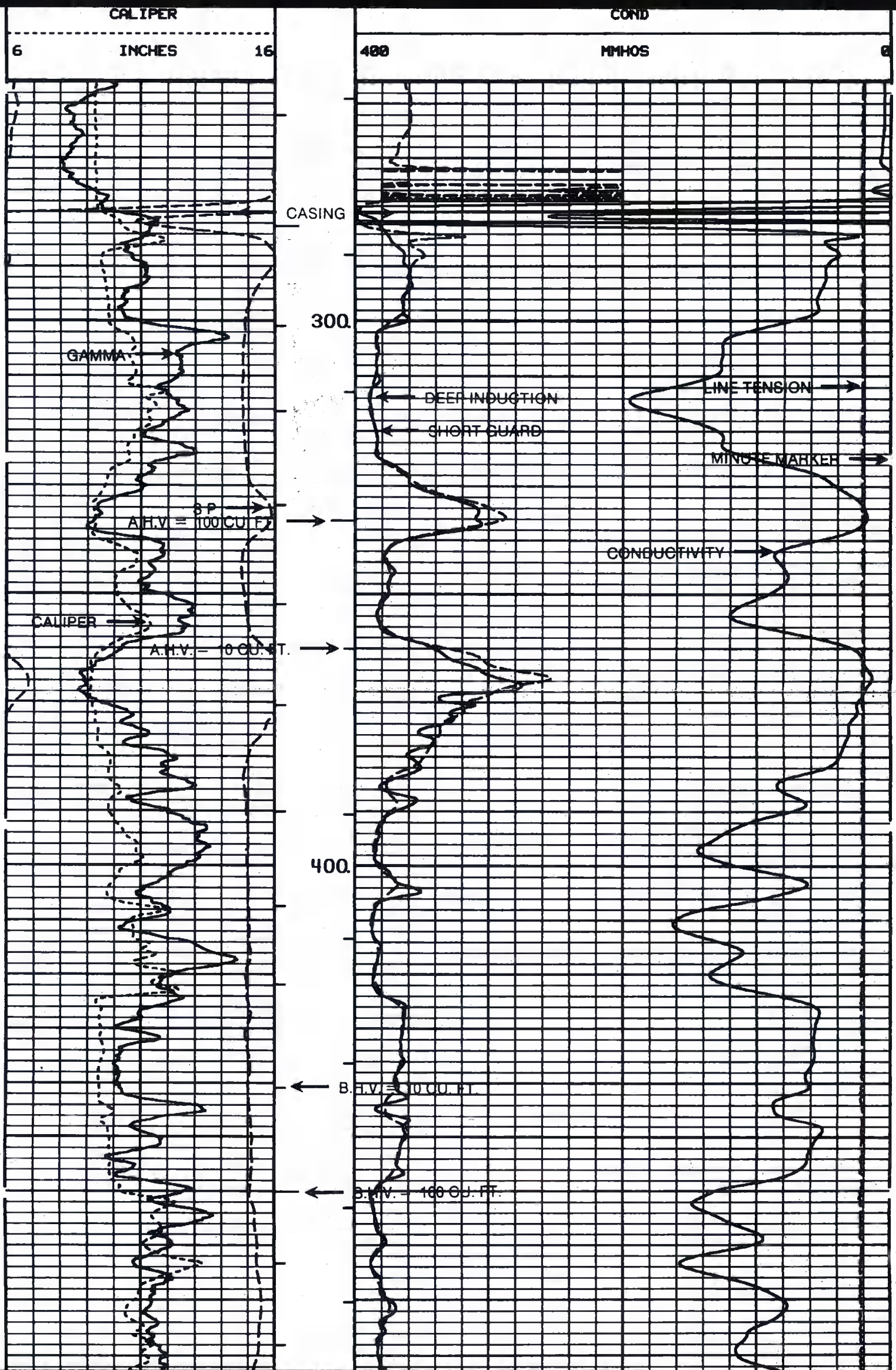


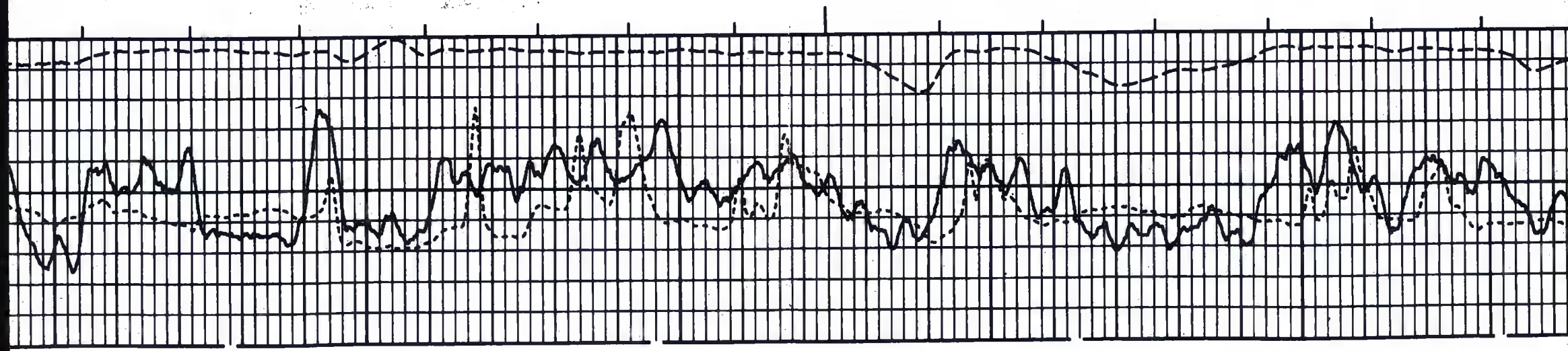
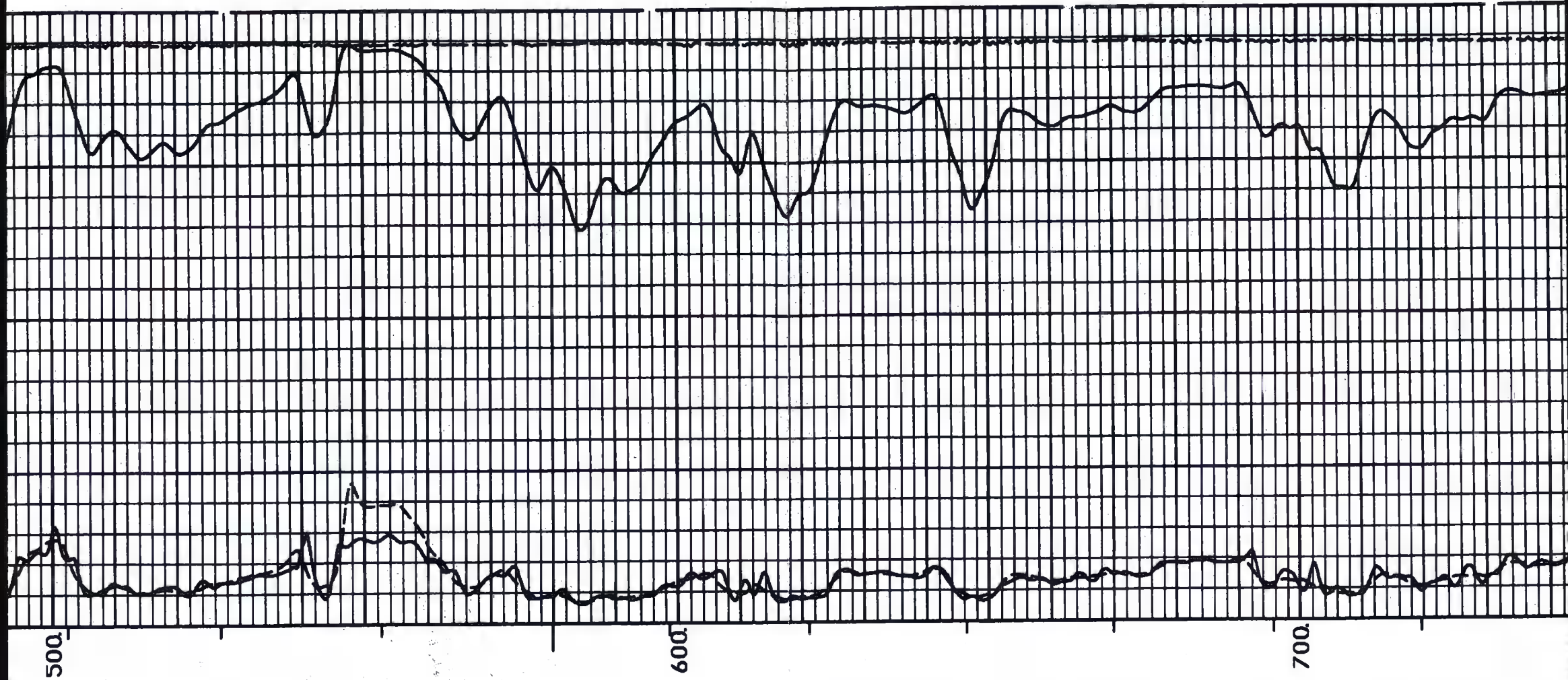


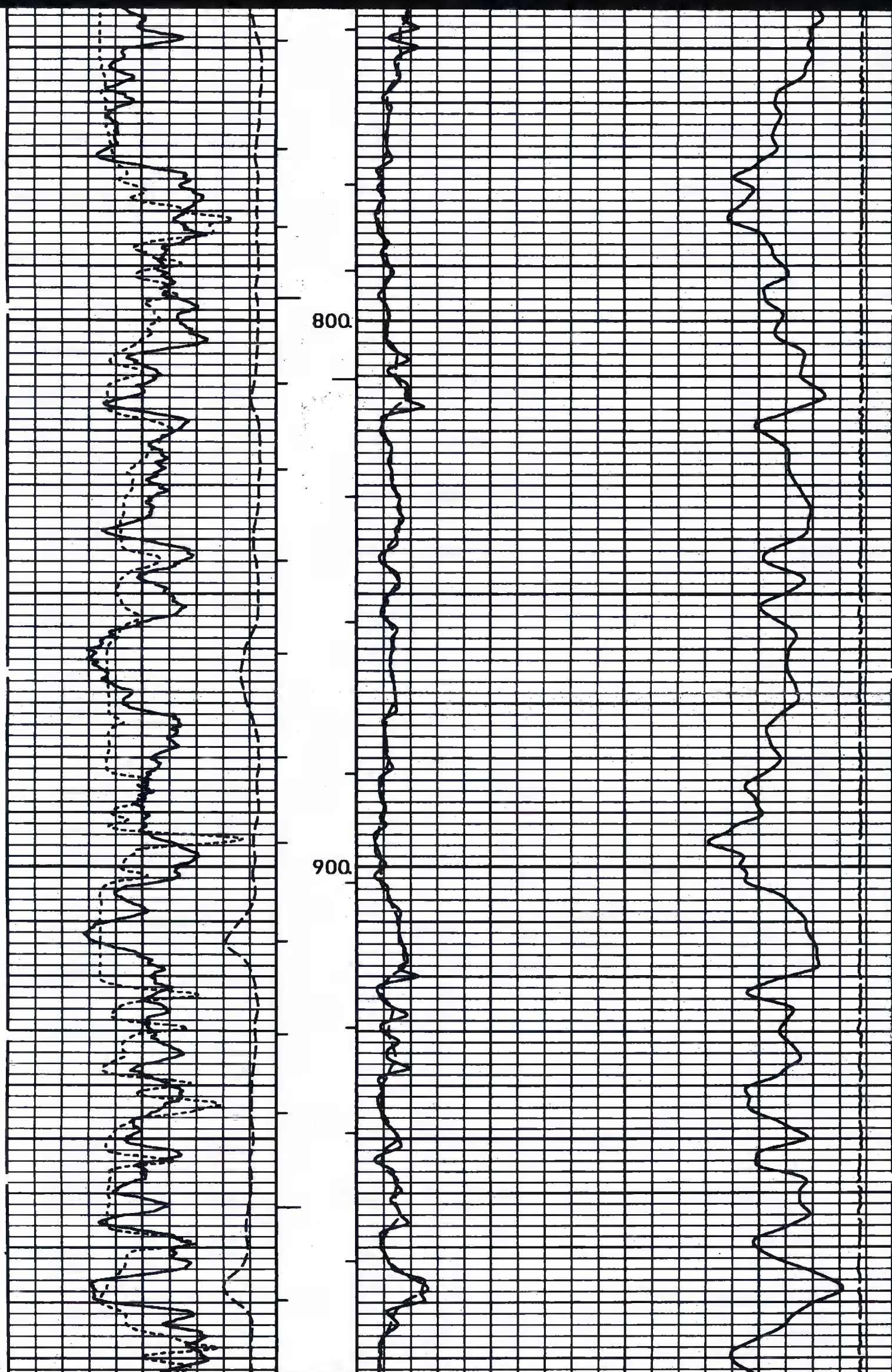
SECTION # 3 Date:11/26/90 Time:17:53 Version:2.50 E

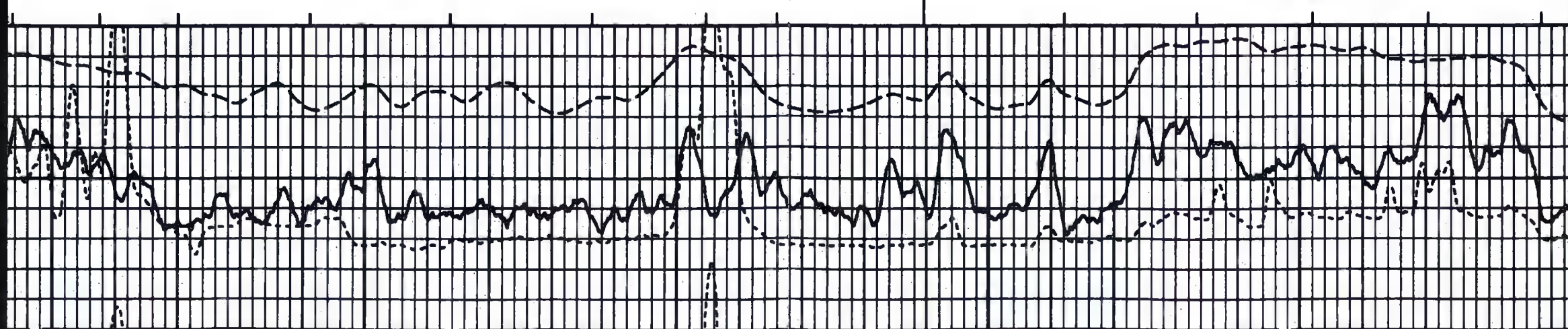
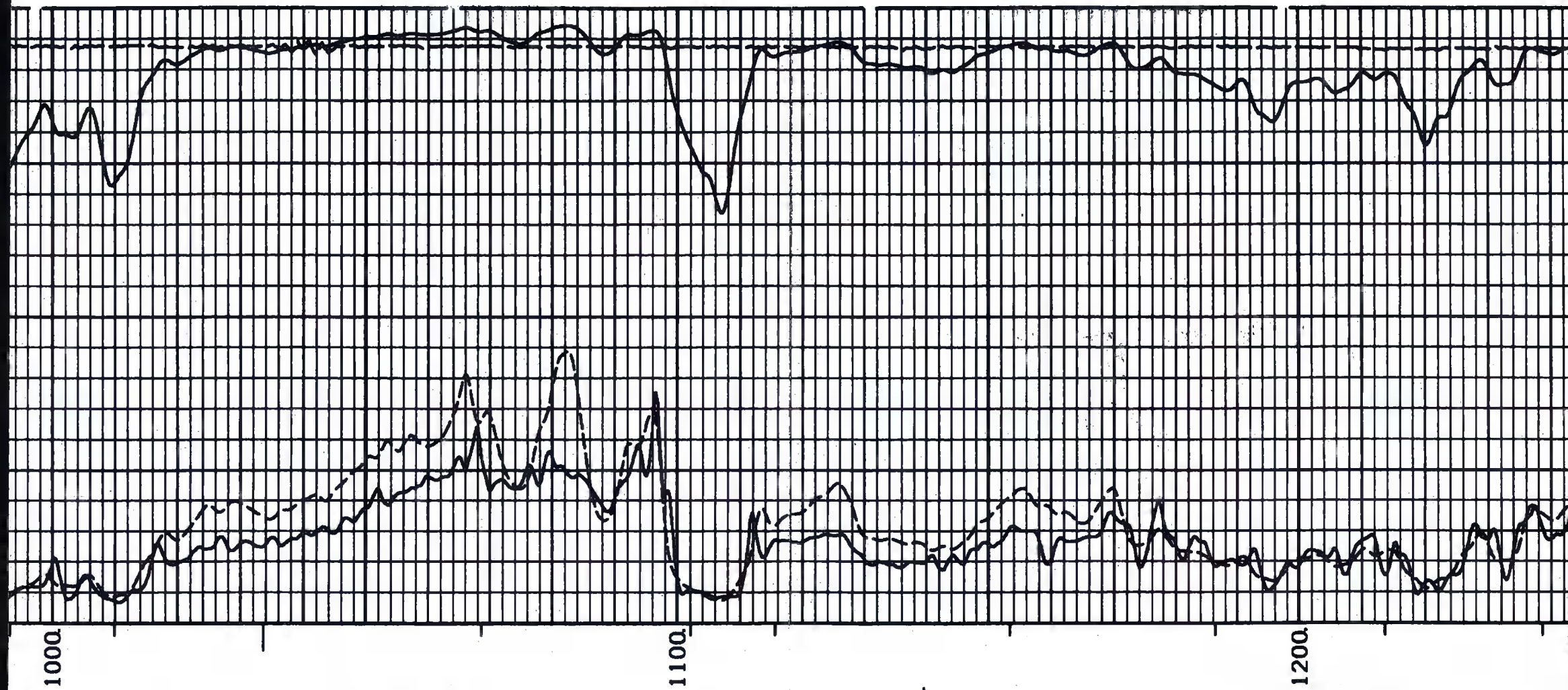
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-110[+		
GAMMA		
0	API	200
CALIPER		
6	INCHES	16

DEEP		
0 OHM-M 100		
GUARD		
0	OHM-M	100
TENSION		
10000	POUNDS	0
COND		
400	MMHOS	0







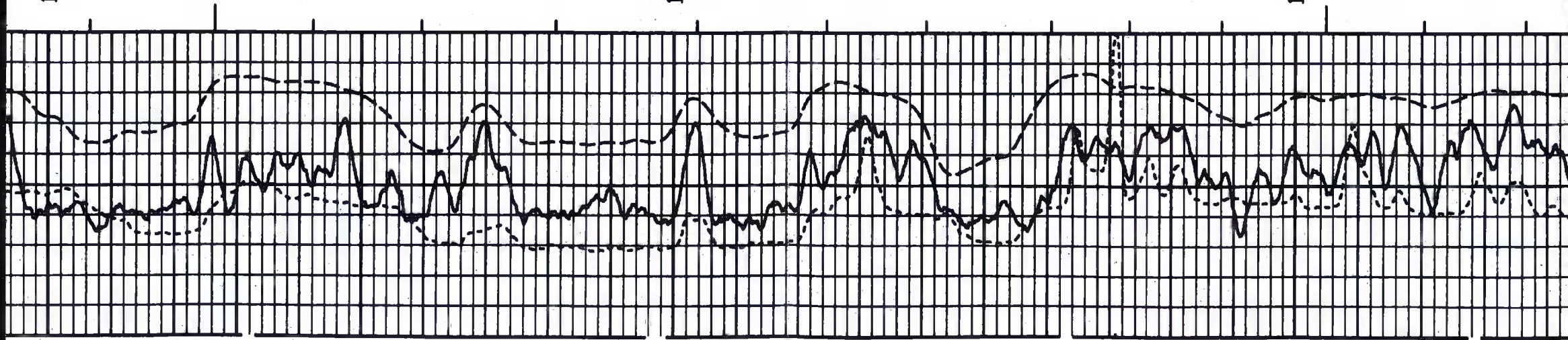
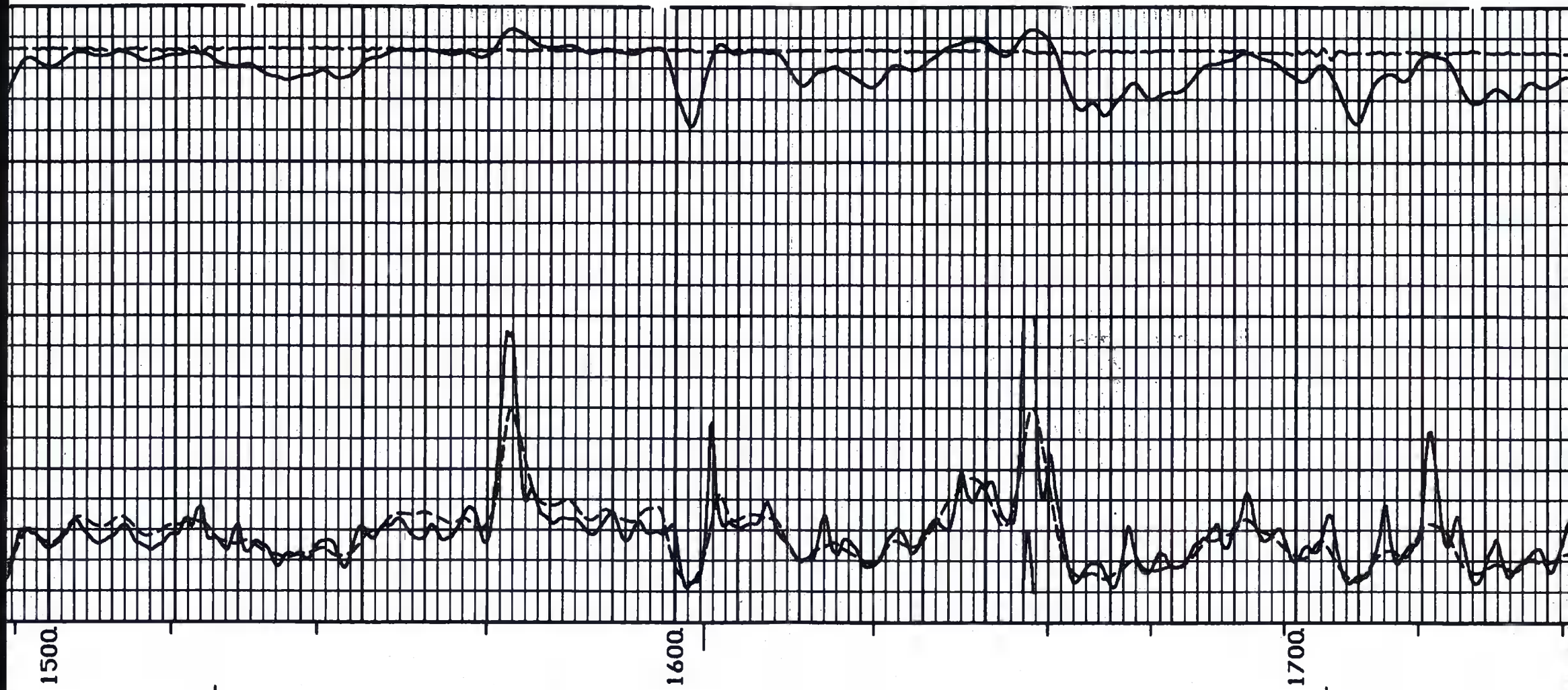


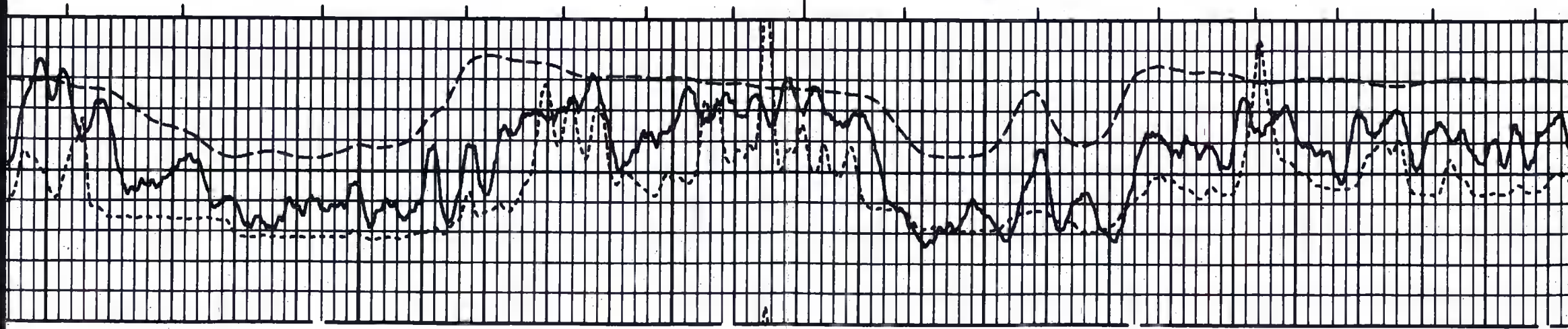
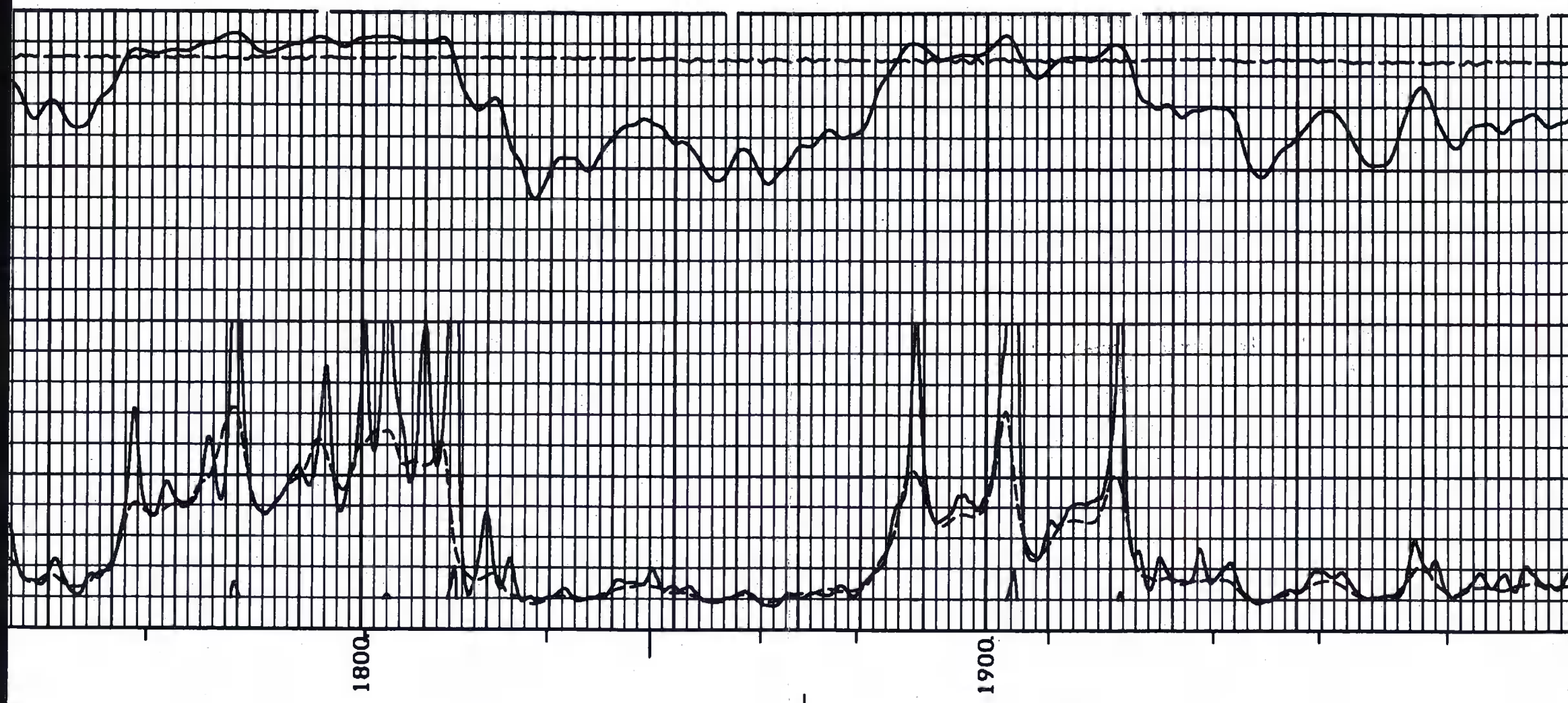


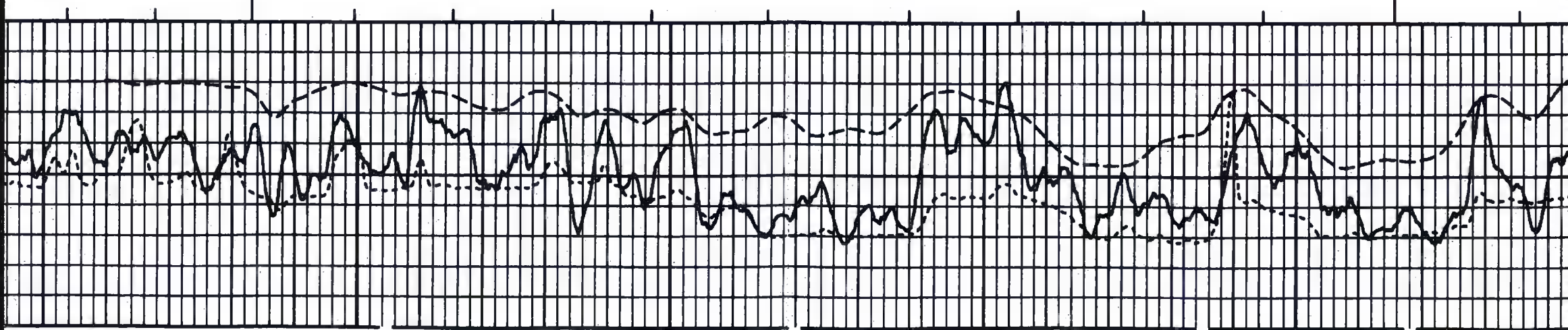
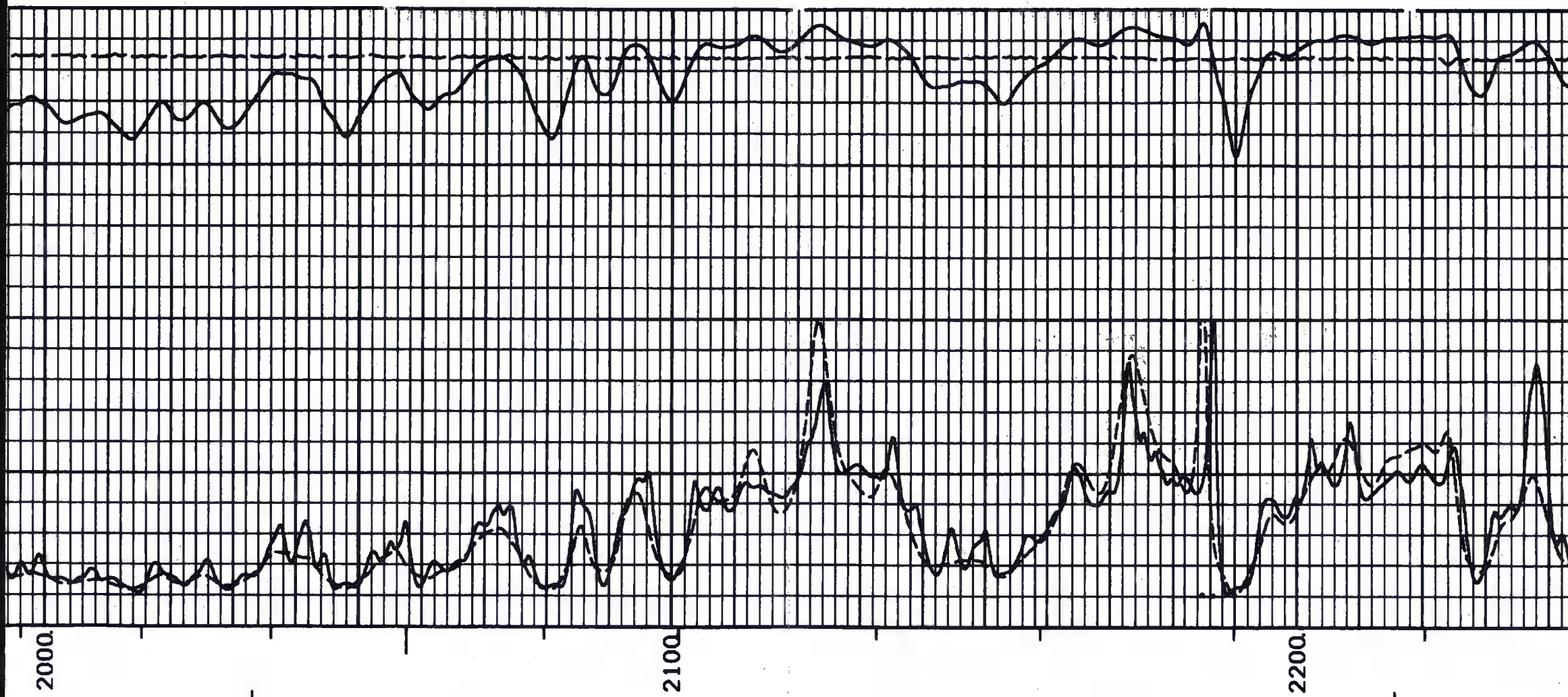
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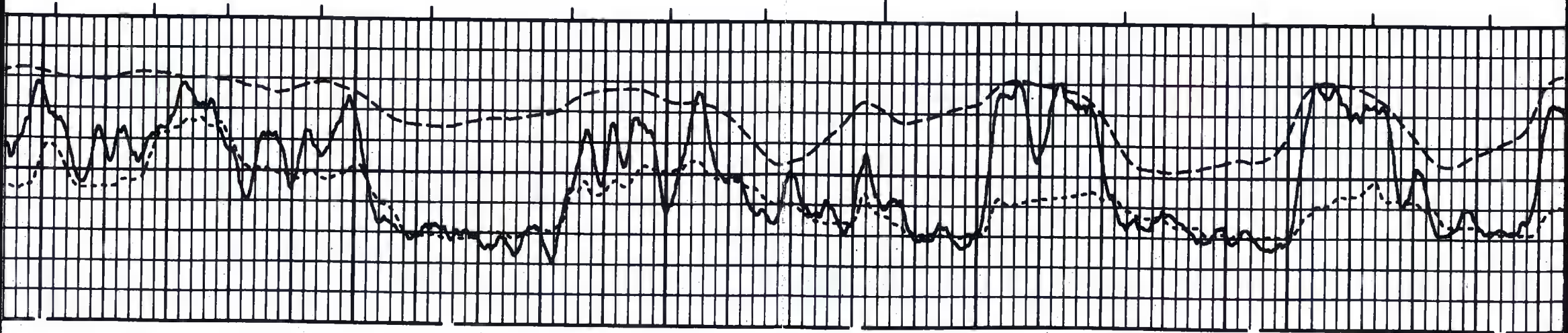
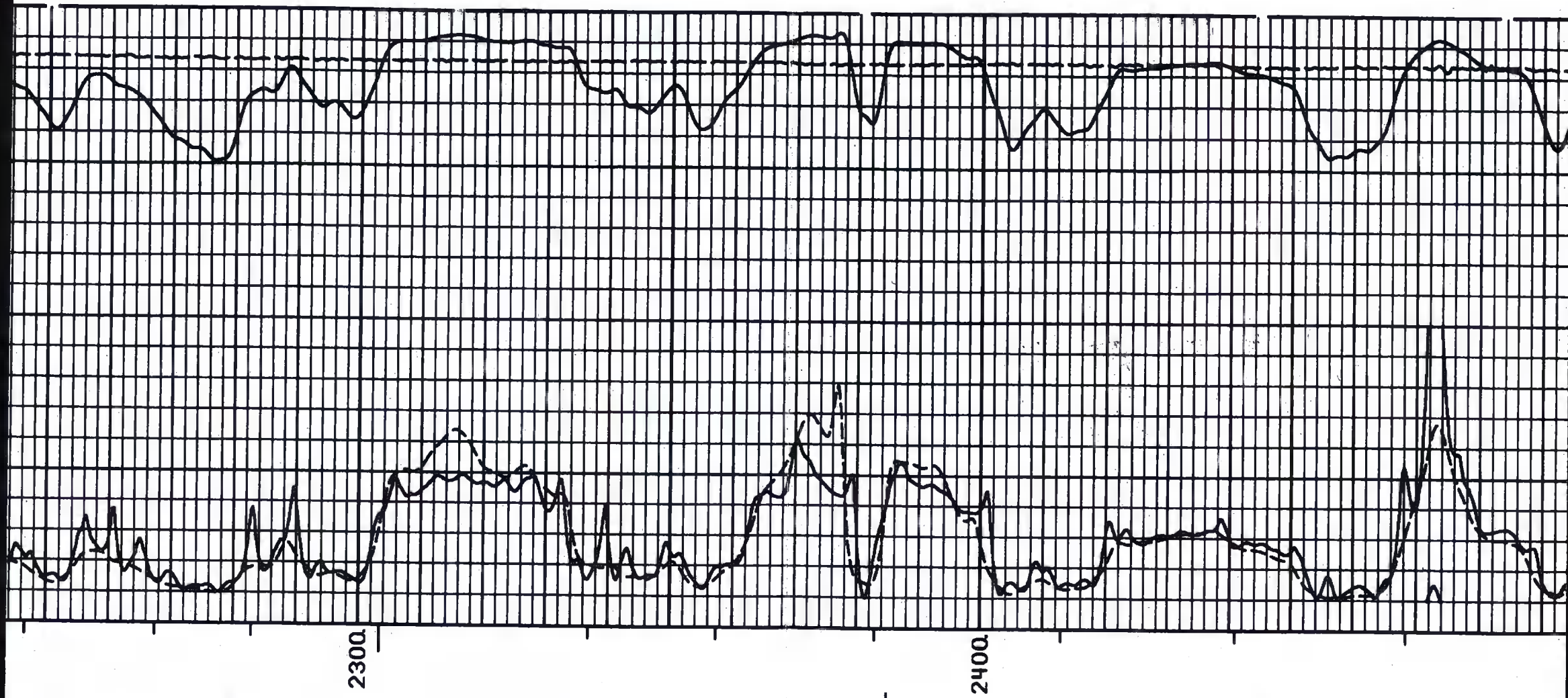
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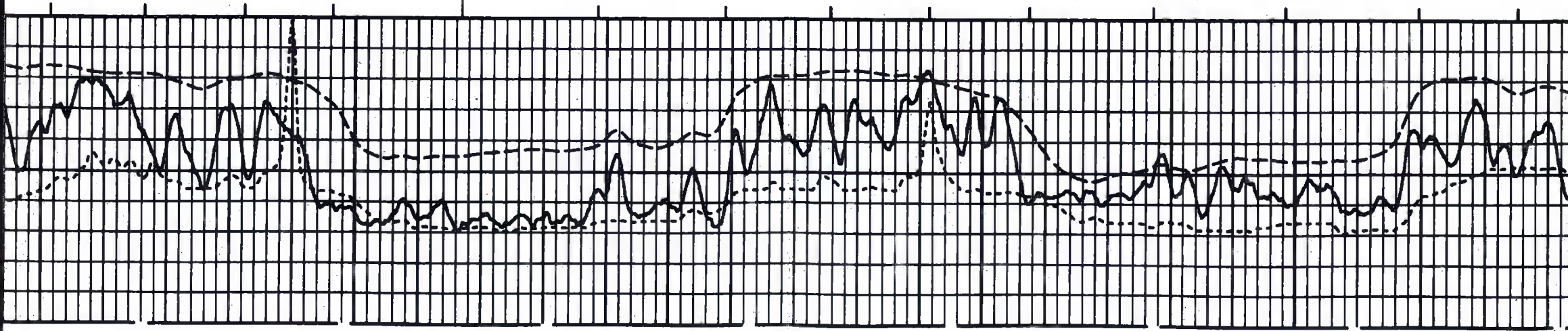
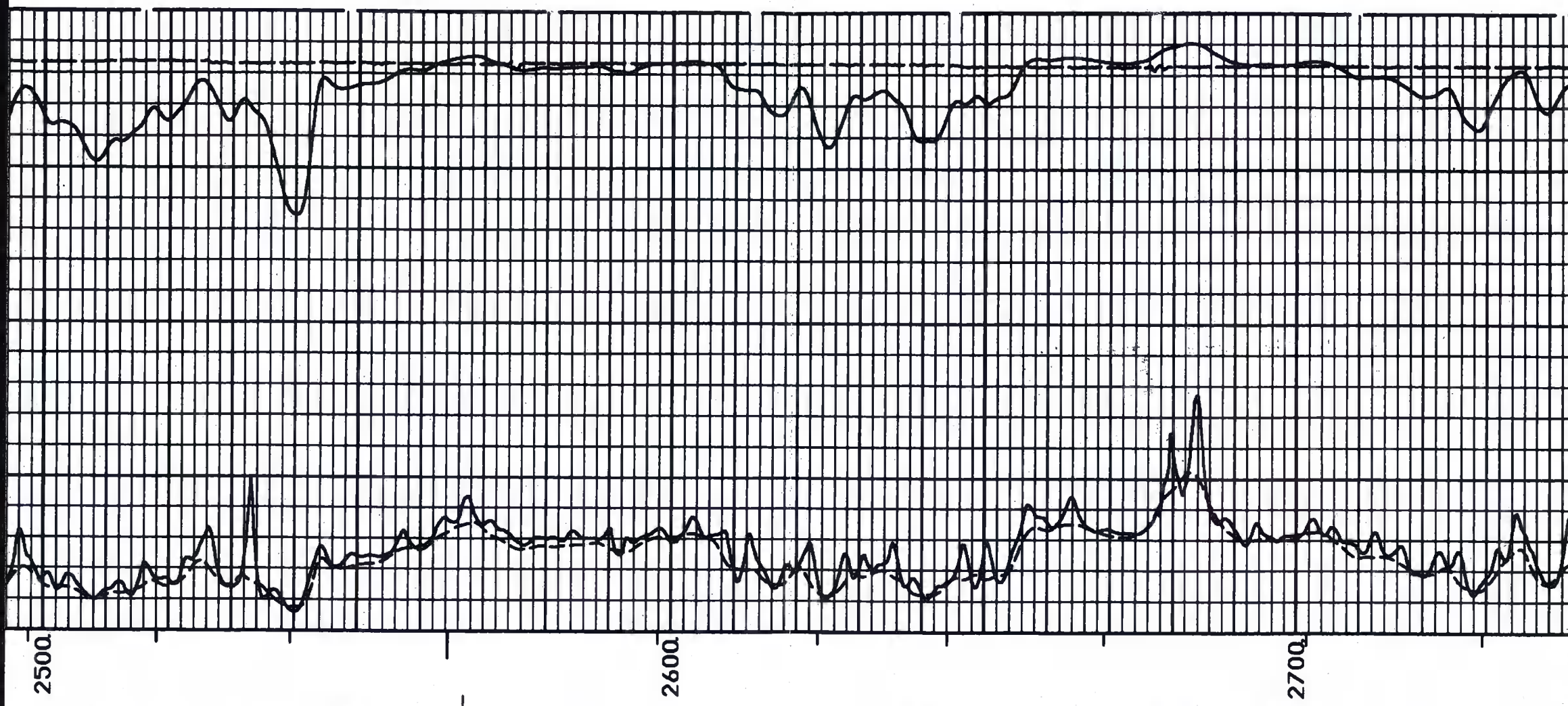


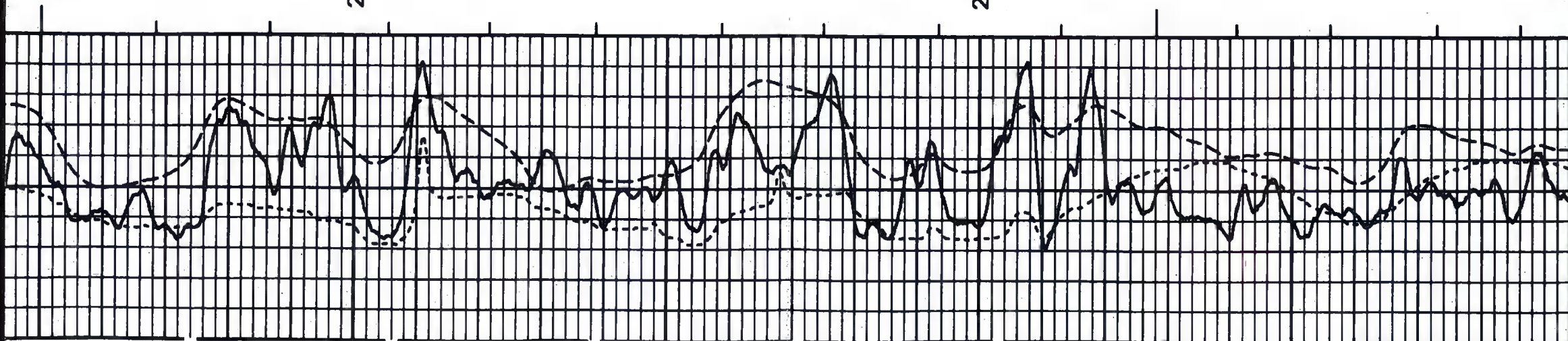
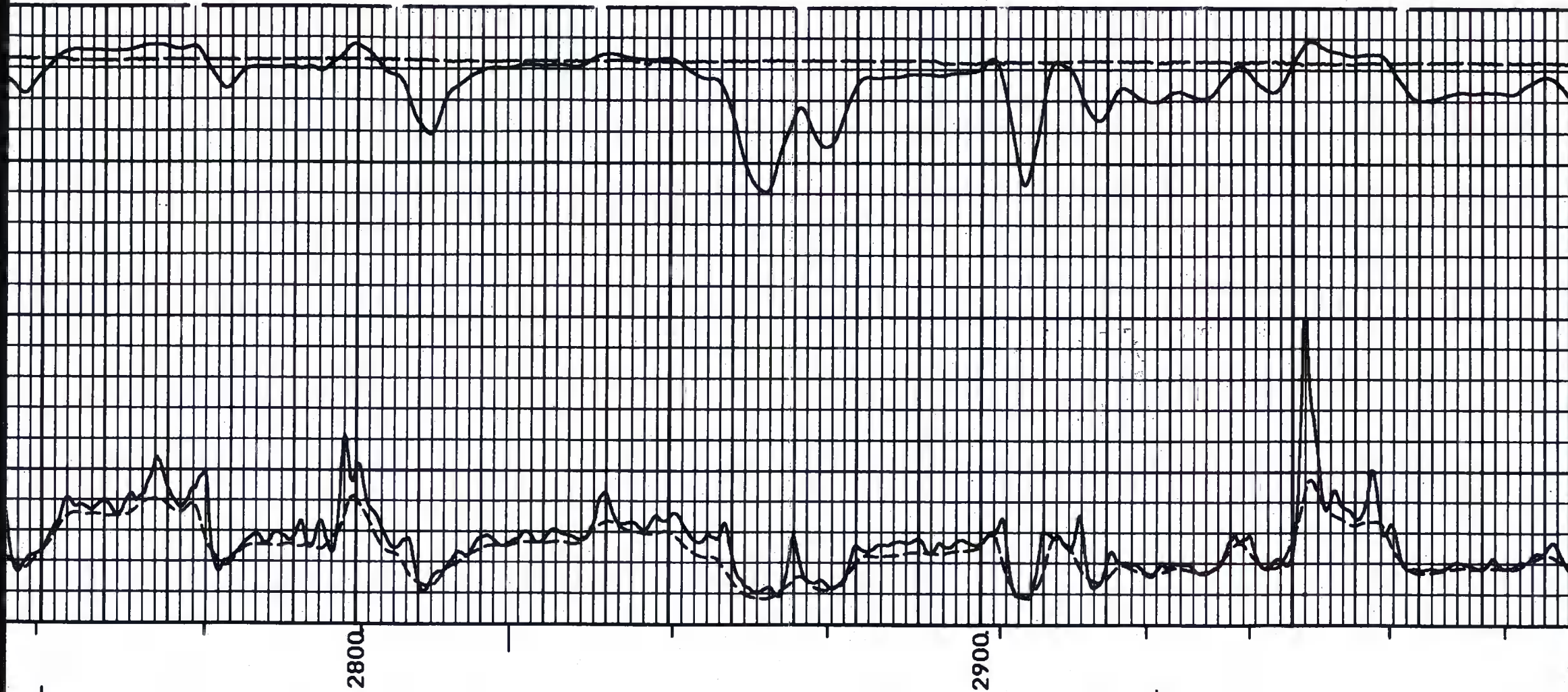








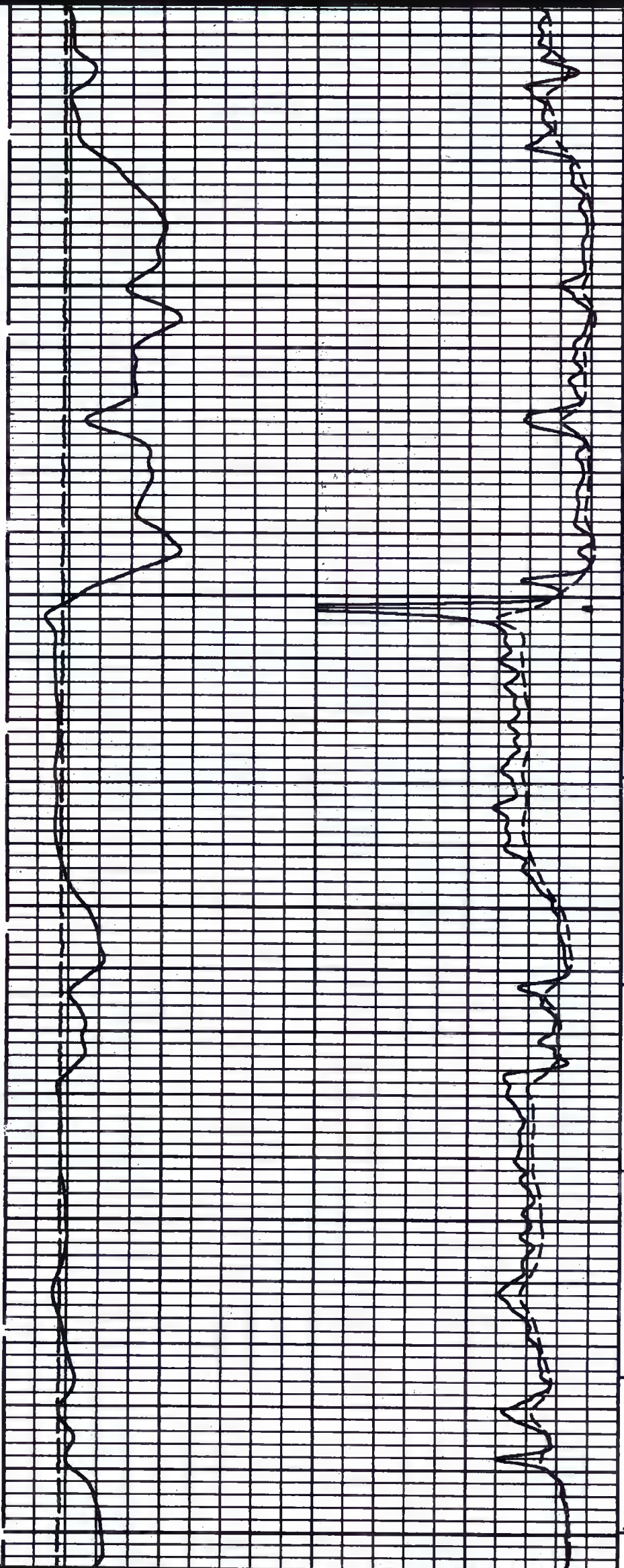
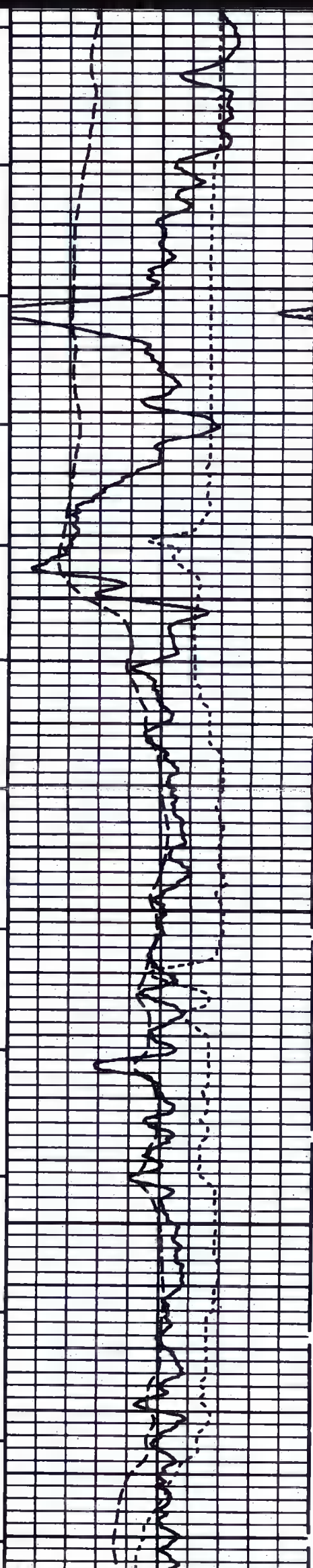


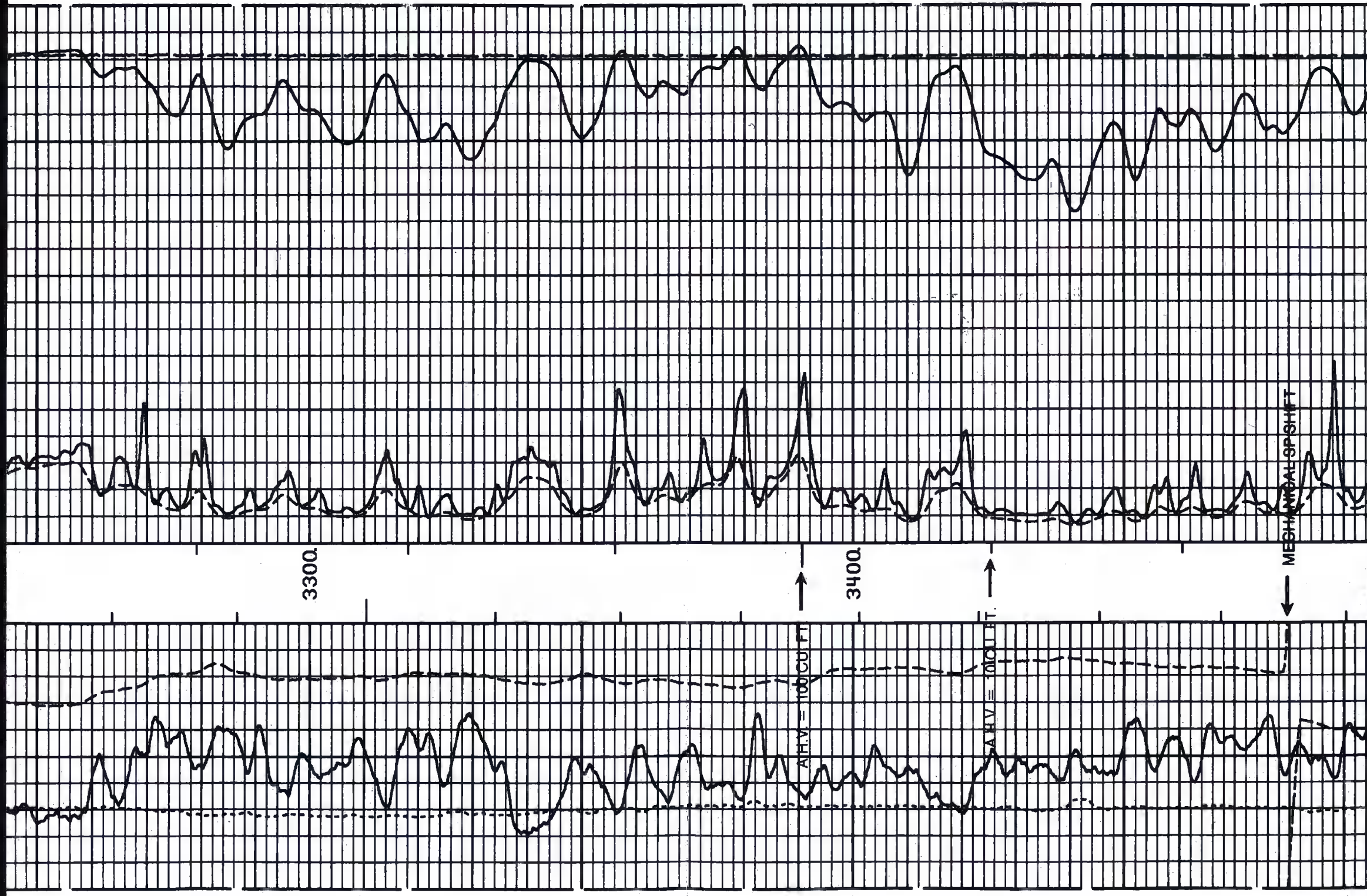


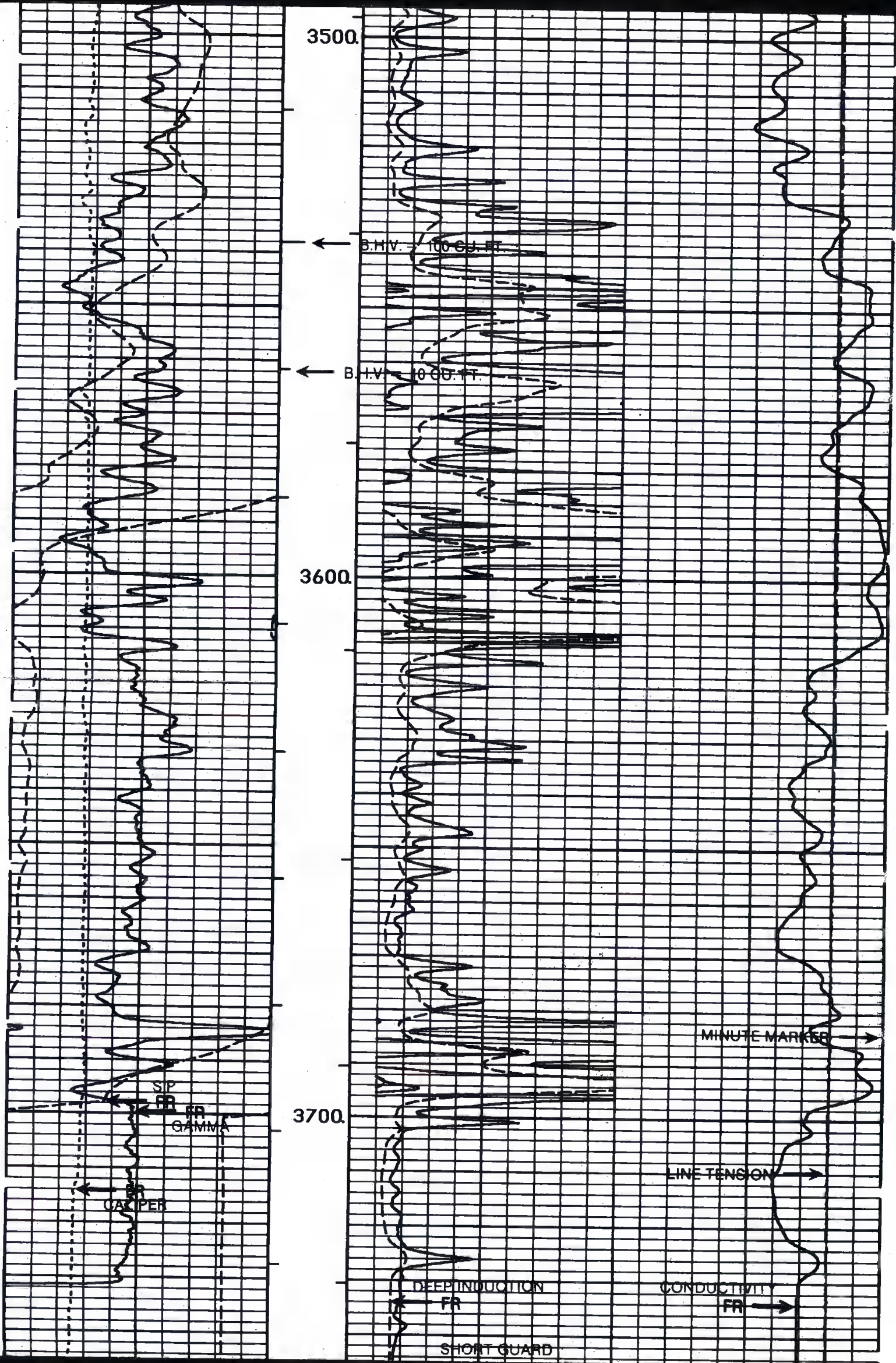
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3100

3000









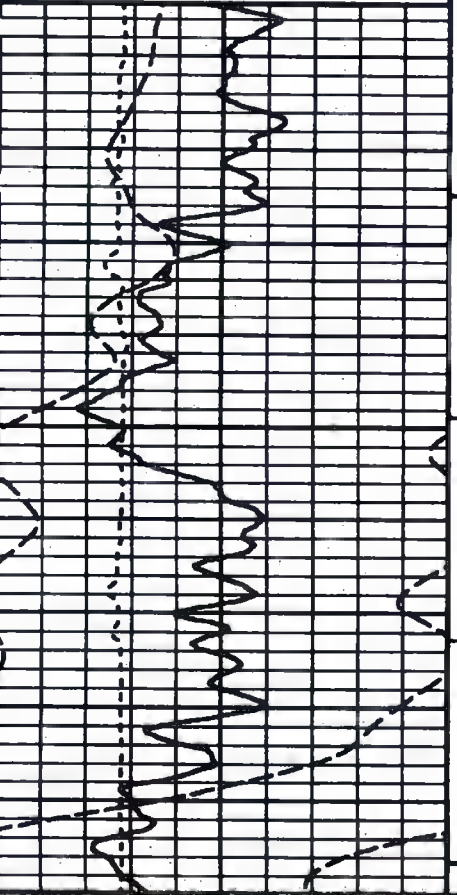
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-110[+		
GAMMA		
0	API	200
CALIPER		
6	INCHES	16



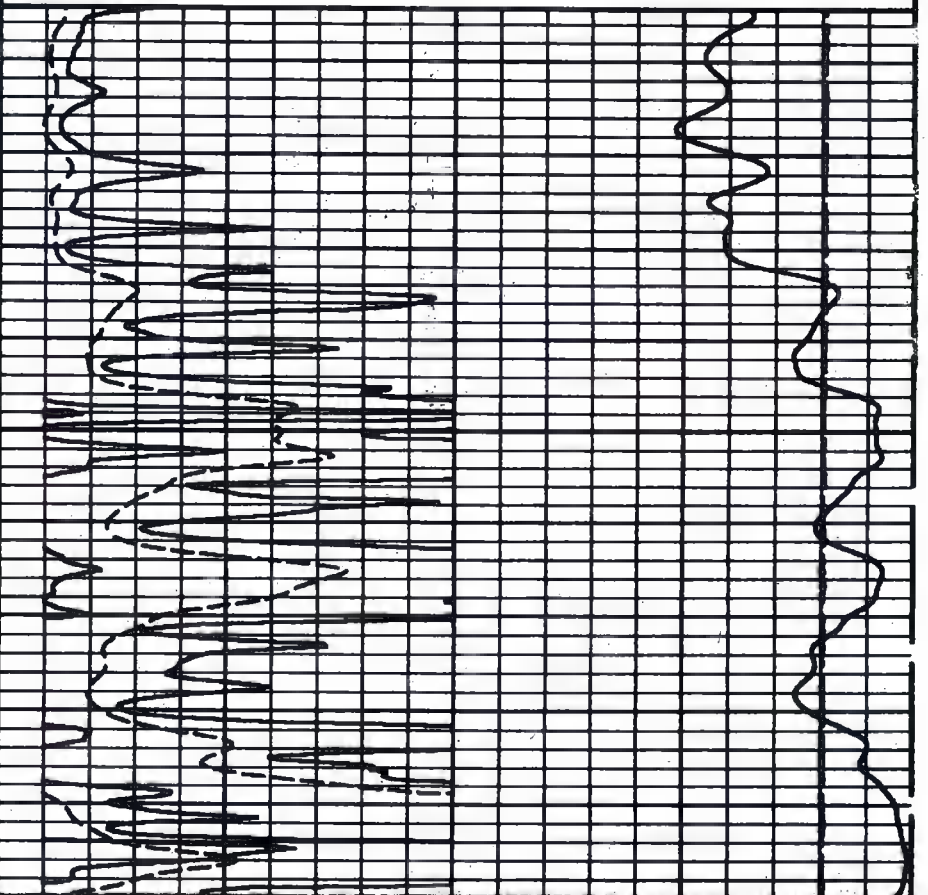
DEEP		
0	OHM-M	100
GUARD		
0	OHM-M	100
COND		
400	MMHOS	0
TENSION		
POUNDS		

SECTION # 3 Date:11/26/90 Time:17:37 Version:2.50 E

SP		
-110[+		
GAMMA		
0	API	200
CALIPER		
6	INCHES	16

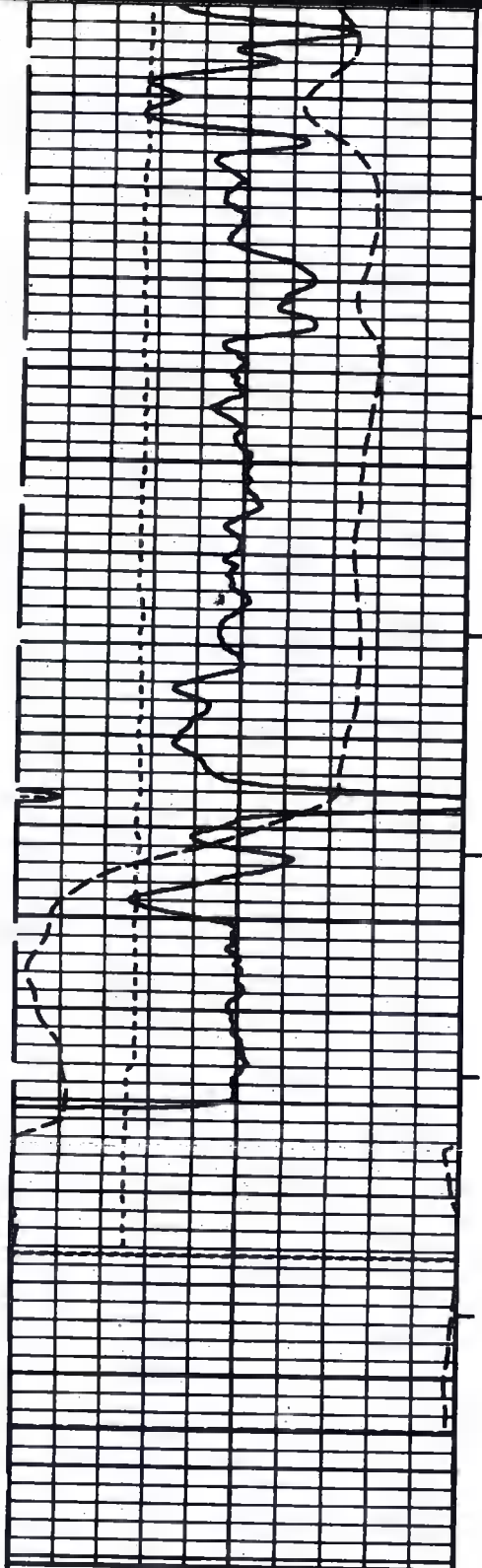


REPEAT SECTION		
DEEP		
0	OHM-M	100
GUARD		
0	OHM-M	100
COND		
400	MMHOS	0
TENSION		
POUNDS		

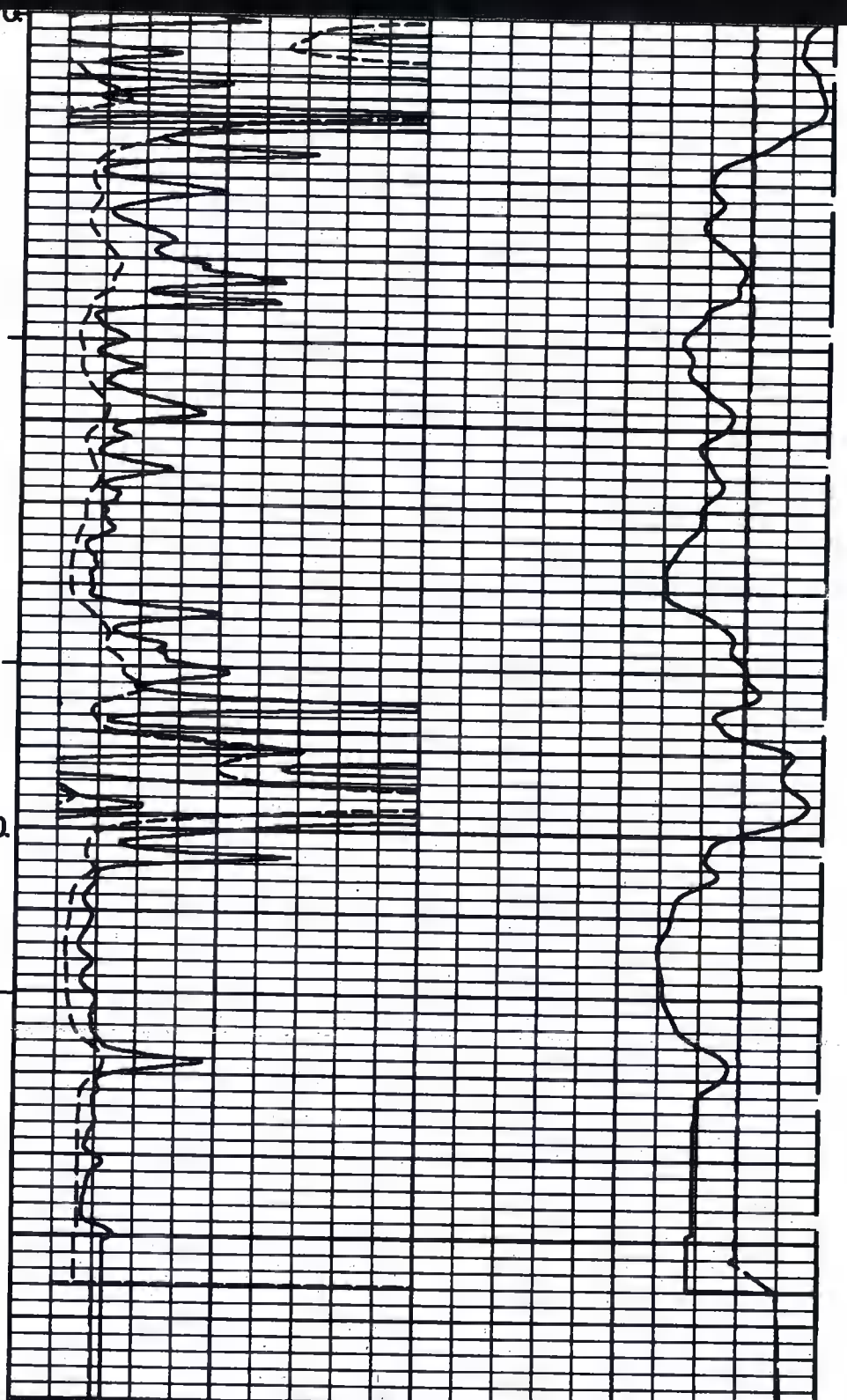


5800

3700



SP		
-110[+		
GAMMA		
0	API	200
CALIPER		
6	INCHES	16



DEEP			
0	OHM-M	100	
GUARD		TENSION	
0	OHM-M	100	10000 POUNDS
		COND	
400		MMHOS	0

SECTION # 2 Date:11/26/90 Time:17:35 Version:2.50 E

SHORT GUARD/NORMAL SHOP CALIBRATION SUMMARY
 PERFORMED: 11:30:56 10/30/90 LAST SHOP CALIBRATION: 11:25:12 09/29/90
 SERIAL NUMBER: 108910 PROGRAM VERSION: 2.50 E
 MODEL: #DSGT-A
 PERFORMED BY: CLR

	MEASURED	CALIBRATED	UNITS
EXT. CAL. POINT #1	.205	.199	OHM-M
EXT. CAL. POINT #2	20.012	20.000	OHM-M
EXT. CAL. POINT #3	2000.712	2000.000	OHM-M
INTERNAL REFERENCE	20.092	20.079	OHM-M

SHORT GUARD/NORMAL BEFORE SURVEY FIELD CHECK SUMMARY
 PERFORMED: 12:16:04 11/26/90 LAST SHOP CALIBRATION: 11:30:56 10/30/90

	SHOP	FIELD	UNITS
INTERNAL REFERENCE	20.079	20.062	OHM-M

SHORT GUARD/NORMAL AFTER SURVEY FIELD CHECK SUMMARY
 PERFORMED: 14:40:16 11/26/90 LAST SHOP CALIBRATION: 11:30:56 10/30/90

	BEFORE	AFTER	UNITS
INTERNAL REFERENCE	20.062	20.012	OHM-M

DUAL INDUCTION SHOP CALIBRATION SUMMARY
 PERFORMED: 11:43:05 10/30/90 LAST SHOP CALIBRATION: 11:19:30 09/29/90
 SERIAL NUMBER: 109612 PROGRAM VERSION: 2.50 E
 MODEL: #DILT-A
 PERFORMED BY: CLR

	DEEP INDUCTION		MEDIUM INDUCTION		UNITS
	MEASURED	CALIBRATED	MEASURED	CALIBRATED	
TOOL ZERO	-.289	.000	-.028	.000	MMHOS/M
INTERNAL REFERENCE	506.883	499.817	510.118	502.455	MMHOS/M
WHEEL	505.111	500.000	507.072	500.000	MMHOS/M
MANDREL BASE	4.032	2.590	4.703	4.217	MMHOS/M

DUAL INDUCTION BEFORE SURVEY FIELD CHECK SUMMARY
 PERFORMED: 12:14:45 11/26/90 LAST SHOP CALIBRATION: 11:43:05 10/30/90

	DEEP INDUCTION		MEDIUM INDUCTION		UNITS
	SHOP	FIELD	SHOP	FIELD	
TOOL ZERO	.000	-.031	.000	.119	MMHOS/M
INTERNAL REFERENCE	499.816	502.405	502.454	504.921	MMHOS/M
MANDREL BASE	2.590	2.590	4.217	4.217	MMHOS/M

DUAL INDUCTION AFTER SURVEY FIELD CHECK SUMMARY
 PERFORMED: 14:41:30 11/26/90 LAST SHOP CALIBRATION: 11:43:05 10/30/90

	DEEP INDUCTION		MEDIUM INDUCTION		UNITS
	BEFORE	AFTER	BEFORE	AFTER	
TOOL ZERO	-.031	-.463	.119	-.820	MMHOS/M
INTERNAL REFERENCE	502.404	509.452	504.921	512.859	MMHOS/M
MANDREL BASE	2.590	2.590	4.217	4.217	MMHOS/M

GAMMA SHOP CALIBRATION SUMMARY
 PERFORMED: 13:12:19 10/30/90 LAST SHOP CALIBRATION: 10:56:51 09/29/90
 SERIAL NUMBER: 108589 PROGRAM VERSION: 2.50 E
 MODEL: #NGRT FIELD CALIBRATOR: #E-18
 PERFORMED BY: RD

	MEASURED	CALIBRATED	UNITS
BACKGROUND	61	63	GAPI
BACKGROUND+CALIBRATOR	236	245	GAPI
CALIBRATOR	176	182	GAPI

GAMMA BEFORE SURVEY FIELD CHECK SUMMARY
 PERFORMED: 11:15:50 11/26/90 LAST SHOP CALIBRATION: 13:12:19 10/30/90
 FIELD CALIBRATOR: #E-18

	SHOP	FIELD	UNITS
BACKGROUND	63	54	GAPI
BACKGROUND+CALIBRATOR	245	242	GAPI
CALIBRATOR	182	188	GAPI

GAMMA AFTER SURVEY FIELD CHECK SUMMARY
 PERFORMED: 15:19:44 11/26/90 LAST SHOP CALIBRATION: 13:12:19 10/30/90

	BEFORE	AFTER	UNITS
BACKGROUND	54	55	GAPI
BACKGROUND+CALIBRATOR	242	247	GAPI
CALIBRATOR	188	192	GAPI

SDL CALIPER SHOP CALIBRATION SUMMARY
 PERFORMED: 14:49:25 11/21/90 LAST SHOP CALIBRATION: 14:45:42 11/21/90
 SERIAL NUMBER: 109709 PROGRAM VERSION: 2.50 E
 MODEL: #RED
 PERFORMED BY: CLR

	MEASURED	CALIBRATED	UNITS
VALUE 1	7.113	7.750	INCHES
VALUE 2	12.008	12.249	INCHES

SDL CALIPER BEFORE SURVEY FIELD CHECK SUMMARY
 PERFORMED: 11:22:11 11/26/90 LAST SHOP CALIBRATION: 14:49:25 11/21/90

	SHOP	FIELD	UNITS
VALUE 1	7.750	7.851	INCHES

SDL CALIPER AFTER SURVEY FIELD CHECK SUMMARY
 PERFORMED: 15:15:58 11/26/90 LAST SHOP CALIBRATION: 14:49:25 11/21/90

	BEFORE	AFTER	UNITS
VALUE 1	7.851	8.022	INCHES

H L S CALIBRATION SUMMARY TABLE

SERVICE or SIGNAL	SHOP	BEFORE	AFTER	CHANGE	TOLERANCE
GUARD	20.079	20.062	20.012	.049	+/- .80
DEEP INDUCTION	499.816	502.404	509.452	-7.047	+/- 20
MEDIUM INDUCTION	502.454	504.921	512.859	-7.937	+/- 20
GAMMA	182	188	192	-3	+/- 9.0
CALIPER VALUE 1	7.750	7.851	8.022	-.170	+/- 0.50

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, NM 87504-2088

OIL CONSERVATION DIVISION
RECEIVED

Form C-104
Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Phillips Petroleum Company 5525 Highway 64, NBU 3004 Farmington, NM 87401		² OGRID Number 017654
		³ Reason for Filing Code AO
⁴ API Number 30-039-24782	⁵ Pool Name Basin Fruitland Coal	⁶ Pool Code 71629
⁷ Property Code 009256	⁸ Property Name San Juan 29-5 Unit	⁹ Well Number #218

II. ¹⁰ Surface Location

UL or lot no. G	Section 34	Township 29N	Range 5W	Lot. Idn	Feet from the 2000'	North/South Line North	Feet from the 1699'	East/West line East	County Rio Arriba
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¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
¹² Lse Code	¹³ Producing Method Code	¹⁴ Gas Connection Date	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ POD	²¹ O/G	²² POD ULSTR Location and Description
025244	Williams Field Service P.O.Box 58900 Salt Lake City, UT 84158-0900	2816946	G	
009018	Giant Refining Co. 5764 Hwy. 64 Farmington, NM 87401	2817326	0	

RECEIVED
MAY - 7 1996

IV. Produced Water

²³ POD 2816947	²⁴ POD ULSTR Location and Description
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OIL CON. DIV.
DIST. 3

V. Well Completion Data

²⁵ Spud Date	²⁶ Ready Date	²⁷ TD	²⁸ PBTD	²⁹ Perforations
³⁰ Hole Sie	³¹ Casing & Tubing Size	³² Depth Set	³³ Sacks Cement	

VI. Well Test Data

³⁴ Date New Oil	³⁵ Gas Delivery Date	³⁶ Test Date	³⁷ Test Length	³⁸ Tbg. Pressure	³⁹ Csg. Pressure
⁴⁰ Choke Size	⁴¹ Oil	⁴² Water	⁴³ Gas	⁴⁴ AOF	⁴⁵ Test Method

⁴⁶ I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Ed Hasely*

Printed name:
Ed Hasely

Title:
Environmental/Regulatory Engineer

Date: 5-6-96

Phone: 505-599-3460

OIL CONSERVATION DIVISION

Approved by:

Title: SUPERVISOR DISTRICT #3

Approval Date:

MAY - 7 1996

⁴⁷ If this is a change of operator fill in the OGRID number and name of the previous operator

Previous Operator Signature	Printed Name	Title	Date

State of New Mexico
Energy, Minerals & Natural Resources Department

☐ **AMENDED REPORT**

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, NM 87504-2088

¹ Operator name and Address Phillips Petroleum Company 5525 Highway 64, NBU 3004 Farmington, NM 87401		² OGRID Number 017654
		³ Reason for Filing Code NW
⁴ API Number 30-039-24782	⁵ Pool Name Basin Fruitland Coal	⁶ Pool Code 71629
⁷ Property Code 009256	⁸ Property Name San Juan 29-5 Unit	⁹ Well Number #218

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
G	34	29N	5W		2000'	North	1699'	East	Rio Arriba

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
¹² Lse Code P	¹³ Producing Method Code F	¹⁴ Gas Connection Date SI			¹⁵ C-129 Permit Number		¹⁶ C-129 Effective Date		¹⁷ C-129 Expiration Date

18 Transporter OGRID	19 Transporter Name and Address	20 POD	21 O/G	22 POD ULSTR Location and Description
025244	Williams Field Services P.O. Box 58900 Salt Lake City, UT 84158-0900	2816946	G	

RECEIVED
JAN 26 1996

23 POD 2816947	24 POD ULSTR Location and Description	OIL CON. DIV. DIST. 3
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²⁵ Spud Date 11-22-90	²⁶ Ready Date 12-11-95	²⁷ TD 3750'	²⁸ PBTD 3720'	²⁹ Perforations 3547-3696'
³⁰ Hole Size	³¹ Casing & Tubing Size	³² Depth Set	³³ Sacks Cement	
12-1/2"	9-5/8", 36# K-55	282'	250 sx C1 B, Circ 109 s	
8-3/4"	5-1/2", 15.5#	3749'	stg 1 - 125 sx C1 B	
			stg 2-888 sx 65/35 POZ	
	2-3/8" 4.7#	3679'		

³⁴ Date New Oil	³⁵ Gas Delivery Date	³⁶ Test Date	³⁷ Test Length	³⁸ Tbg. Pressure	³⁹ Csg. Pressure
	SI	12/11/95	1 hr	SI	870 SI
⁴⁰ Choke Size	⁴¹ Oil	⁴² Water	⁴³ Gas	⁴⁴ AOF	⁴⁵ Test Method
2"		1 bwpd	88 mcfpd		F

Previous Operator Signature	Printed Name	Title	Date
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Submit to Appropriate
District Office
State Lease - 6 copies
Federal Lease - 5 copies
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-105
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-0088

RECEIVED
JAN 26 1996

WELL API NO.

30-039-24782

5. Indicate Type Of Lease

STATE ☐

FEE ☒

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

San Juan 29-5 Unit

8. Well No.

S.J. 29-5 Unit #218

9. Pool name or Wildcat

Basin Fruitland Coal

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

a. Type of Well:

OIL WELL ☐

GAS WELL ☒

DRY ☐

OTHER ☐

b. Type of Completion:

NEW WELL ☒

WORK OVER ☐

DEEPEN ☐

PLUG BACK ☐

DIFF RESVR ☐

OTHER ☐

c. Name of Operator

Phillips Petroleum Company

d. Address of Operator

5525 Highway 64, NBU 3004, Farmington, NM 87401

e. Well Location

Unit Letter G : 2000' Feet From The North Line and 1699' Feet From The East Line

Section 34 Township 29N Range 5W NMPM Rio Arriba, County

0. Date Spudded 11-22-90	11. Date T.D. Reached 11-26-90	12. Date Compl.(Ready to Prod.) 12-11-95	13. Elevations(DF & RKB, RT, GR, etc.) 6667' GL	14. Elev. Casinghead
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5. Total Depth 3750'	16. Plug Back T.D. 3720'	17. If Multiple Compl. How Many Zones?	18. Intervals Drilled By Rotary Tools X	Cable Tools
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9. Producing Interval(s), of this completion - Top, Bottom, Name

Fruitland Coal - 3547' - 3696'

1. Type Electric and Other Logs Run

DBL-CCL-GR, TOC shows @ 125'

22. Was Well Cored

No

3. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#, K-55	282'	12-1/2"	250 sx C1 B, Circ 109	sx
5-1/2"	15.5#	3749'	8-3/4"	Stg 1-125 sx C1 B,	Circ. 10 sx
				Stg 2-888 sx 65/35POZ	Circ. 95 sx

4. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
None					2-3/8"	3679'	
					4.7#		

6. Perforation record (interval, size, and number)

Frt Coal 3686-3690' & 3693-96' 4 spf-36 holes
3547-48', 3552-53', 3589-98', 3603-04',
3606'10', 4 spf-84 holes

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
3686'-3696'	18,000 20/40 Az Sand, 704 bbl
	Slickwater & 2nd 49,704# 20/
3547'-3604'	40 AZ sand, 180 bbl 70 foam

3. PRODUCTION

Rate First Production SI	Production Method (Flowing, gas lift, pumping - Size and type pump) Flowing	Well Status (Prod. or Shut-in) SI
Date of Test 12/11/95	Hours Tested 1 hr	Choke Size 2"
Prod'n For Test Period	Oil - Bbl.	Gas - MCF 3.66 mcf
Water - Bbl.	Gas - Oil Ratio	
Low Tubing Press. SI	Casing Pressure SI	Calculated 24-Hour Rate
Oil - Bbl.	Gas - MCF 88 mcfpd	Water - Bbl. 1 bwpd
Oil Gravity - API (Corr.)		

7. Disposition of Gas (Sold, used for fuel, vented, etc.)

Waiting on connection

Test Witnessed By

Meridian

8. List Attachments

Completion work was done by Meridian.

9. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature

Ed Hasely

Printed Name

Ed Hasely

Title

Env/Reg. Eng.

Date

1/24/96

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

Northeastern New Mexico

T. Anhy	T. Canyon	T. Ojo Alamo 2967	T. Penn. "B"
T. Salt	T. Strawn	T. Kirtland-Fruitland 3137	T. Penn. "C"
B. Salt	T. Atoka	T. Pictured Cliffs 3710	T. Penn. "D"
T. Yates	T. Miss	T. Cliff House	T. Leadville
T. 7 Rivers	T. Devonian	T. Menefee	T. Madison
T. Queen	T. Silurian	T. Point Lookout	T. Elbert
T. Grayburg	T. Montoya	T. Mancos	T. McCracken
T. San Andres	T. Simpson	T. Gallup	T. Ignacio Otzte
T. Glorieta	T. McKee	Base Greenhorn	T. Granite
T. Paddock	T. Ellenburger	T. Dakota	T.
T. Blinebry	T. Gr. Wash	T. Morrison	T.
T. Tubb	T. Delaware Sand	T. Todilto	T.
T. Drinkard	T. Bone Springs	T. Entrada	T.
T. Abo	T.	T. Wingate	T.
T. Wolfcamp	T.	T. Chinle	T.
T. Penn	T.	T. Permian	T.
T. Cisco (Bough C)	T.	T. Penn "A"	T.

OIL OR GAS SANDS OR ZONES

No. 1, from _____ to _____

No. 2, from _____ to _____

No. 3, from _____ to _____

No. 4, from _____ to _____

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from _____ to _____ feet _____

No. 2, from _____ to _____ feet _____

No. 3, from _____ to _____ feet _____

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness in Feet	Lithology
2967	3137	170	Ojo Alamo - Sandstone
3137	3447	310	Kirtland-shale & sandstn
3447	3521	74	Frtlnd-shl, coal, sndstn
3521	3701	180	Frt Coal, Shale & coal

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION
Energy, Minerals and Natural Resources Department

Santa Fe, New Mexico 87504-2088

DEC 29 1992

Form C-105
Revised 1-1-89

WELL API NO.

30-039-24782

5. Indicate Type of Lease

STATE ☐

FEE ☒

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

San Juan 29-5 Unit

8. Well No.

218

9. Pool name or Wildcat

Basin Fruitland Coal

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well: OIL WELL ☐ GAS WELL ☒ DRY ☐ OTHER ☐

1b. Type of Completion:

NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DEEP RESER ☐ OTHER ☐

2. Name of Operator

Phillips Petroleum Company

3. Address of Operator

5525 Hwy 64 NBU 3004, Farmington, NM 87401 (505) 599-3412

4. Well Location

Unit Letter G : 2000 Feet From The North Line and 1699 Feet From The East Line

Section 34 Township 29N Range 5W NMPM Rio Arriba County

10. Date Spudded

11-22-90

11. Date T.D. Reached

11-26-90

12. Date Compl. (Ready to Prod.)

11-27-90

13. Elevations (DFA & RKB, RT, GR, etc.)

6667' GL

14. Elev. Casinghead

15. Total Depth

3750'

16. Plug Back T.D.

3749'

17. If Multiple Compl. How Many Zones?

18. Intervals Drilled By

Rotary Tools

Cable Tools

X

19. Producing Interval(s), of this completion - Top, Bottom, Name

Coal Intervals 3521'-3701'

20. Was Directional Survey Made

NO

21. Type Electric and Other Logs Run

22. Was Well Cored

NO

23.

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#, K-55	282'	12-1/2"	250 Sx C1 B, Circ 109 Sx	
5-1/2"	15.5#	3749'	8-3/4"	Stg 1-125 Sx C1B, Circ 10 Sx	
				Stg 2-888 Sx 65/35 Poz, Circ 95 Sx	

24.

LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
None				

25. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
None		

26. Perforation record (interval, size, and number)

Coal Intervals 3521'-3701'. There are no other producing horizons at this depth. We will perf at later date or leave as an open hole completion as needed.

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL - AMOUNT AND KIND MATERIAL USED

28. PRODUCTION

Date First Production SI	Production Method (Flowing, gas lift, pumping - Size and type pump) Flowing	Well Status (Prod. or Shut-in) SI
Date of Test	Hours Tested 1	Choke Size 2"
Flow Tubing Press. SI	Casing Pressure SI	Calculated 24-Hour Rate
	Oil - Bbl.	Gas - MCF
	Water - Bbl.	Oil Gravity - API - (Corr.)

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

Test Witnessed By

Waiting on connection

30. List Attachments

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature R.A. Allred

Printed Name

R.A. Allred

Title Drlg. Supv.

Date 12-21-92

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radioactivity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

Northwestern New Mexico

T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn. "B"
T. Salt	T. Strawn	T. Kirtland-Fruitland	T. Penn. "C"
B. Salt	T. Atoka	T. Pictured Cliffs	T. Penn. "D"
T. Yates	T. Miss	T. Cliff House	T. Leadville
T. 7 Rivers	T. Devonian	T. Menefee	T. Madison
T. Queen	T. Silurian	T. Point Lookout	T. Elbert
T. Grayburg	T. Montoya	T. Mancos	T. McCracken
T. San Andres	T. Simpson	T. Gallup	T. Ignacio Otzte
T. Glorieta	T. McKee	Base Greenhorn	T. Granite
T. Paddock	T. Ellenburger	T. Dakota	T. _____
T. Blinberry	T. Gr. Wash	T. Morrison	T. _____
T. Tubb	T. Delaware Sand	T. Todilto	T. _____
T. Drinkard	T. Bone Springs	T. Entrada	T. _____
T. Abo	T. _____	T. Wingate	T. _____
T. Wolfcamp	T. _____	T. Chinle	T. _____
T. Penn	T. _____	T. Permian	T. _____
T. Cisco (Bough C)	T. _____	T. Penn "A"	T. _____

OIL OR GAS SANDS OR ZONES

No. 1, from.....to.....
No. 2, from.....to.....
No. 3, from.....to.....
No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from to feet
No. 2, from to feet
No. 3, from to feet

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness in Feet	Lithology	From	To	Thickness in Feet	Lithology

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO. 30-039-24782
5. Indicate Type of Lease STATE ☐ FEE ☒
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name San Juan 29-5 Unit
8. Well No. 218
9. Pool name or Wildcat Basin Fruitland Coal
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 6667' GL

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"
(FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: OIL WELL ☐ GAS WELL ☒ OTHER	2. Name of Operator PHILLIPS PETROLEUM COMPANY
3. Address of Operator 300 W. ARRINGTON, SUITE 200, FARMINGTON, NM 87401	4. Well Location Unit Letter G : 2000 Feet From The North Line and 1699 Feet From The East Line Section 34 Township 29N Range 5W NMPM Rio Arriba County
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 6667' GL	

Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☒	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐		CASING TEST AND CEMENT JOB ☐	
OTHER: ☐		OTHER: ☐	

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

11-22-90

MIRU Aztec Well Service Rig No. 301. Spud 12-1/4" hole @ 1:00 PM. Ran 9-5/8", 36#, K-55 ST&C casing set @ 282'. RU Howco and cemented w/250 Sx Class B cement w/3% CaCl2 and 1/4# Flocele/Sk. Circ. 109 Sx cement. Plug down @ 8:45 PM. Bumped plug w/1000 psi. WOC 9 hours. NU BOP and pressure tested to 1000 psi - okay.

RECEIVED
NOV 30 1990
OIL CON. DIV.
DIST 3

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE R. A. Allred TITLE Drilling Supervisor DATE 11-26-90
TYPE OR PRINT NAME R. A. Allred TELEPHONE NO.

(This space for State Use)

APPROVED BY 35.48 TITLE SUPERVISOR DISTRICT # 3 DATE NOV 30 1990
CONDITIONS OF APPROVAL, IF ANY:

OIL CONSERVATION DIVISION

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION
Santa Fe, NM 87504-1088
RECEIVED
DEC 20 AM 9 27 DEC 13 1990

WELL API NO. 30-039-24782
5. Indicate Type of Lease STATE ☐ FEE ☒
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name San Juan 29-5 Unit
8. Well No. 218
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SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPLY PLUG BACK TO A
DIFFERENT RESERVOIR. USE 'APPLICATION FOR PERMIT'
(FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: OIL WELL ☐ GAS WELL ☒ OTHER
2. Name of Operator PHILLIPS PETROLEUM COMPANY
3. Address of Operator 300 W. ARRINGTON, SUITE 200, FARMINGTON, NM 87401
4. Well Location Unit Letter <u>G</u> : <u>2000</u> Feet From The <u>North</u> Line and <u>1699</u> Feet From The <u>East</u> Line Section <u>34</u> Township <u>29N</u> Range <u>5W</u> NMPM Rio Arriba County
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 6667' GL

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK ☐	REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐	ALTERING CASING ☐
PULL OR ALTER CASING ☐	COMMENCE DRILLING OPNS. ☐
OTHER: ☐	PLUG AND ABANDONMENT ☐
	CASING TEST AND CEMENT JOB ☐
	OTHER: Casing Change ☒

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

11-26-90 thru 11-27-90

Aztec Well Service Rig #301 ran 5-1/2", 15.50#, J-55, LT&C casing set @ 3749.32'. RU Halliburton and cemented Stage #1 with 125 Sx Class B #5 Gilsonite/Sk with 1/4# Flocele/Sk and 2% CaCl₂. Plugged down on Stage #1 @ 2:30 AM 11-27-90. Bumped plug w/1500 psi and circ. 10 sx cement. Dropped plug and opened D.V. tool @ 1390 psi. Set D.V. tool @ 3209.30'. Circ. between stages. Halliburton cemented Stage #2 with 888 sx 65/35 poz with 6% gel, 5# Gilsonite/sk - 1/4# Flocele/Sk and 2% CaCl₂. Plugged down @ 7:00 am on 11-27-90 with 2500 psi. Circ. 95 sx cement. PU BOP and set slips w/60,000#. Released rig @ 8:30 AM.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE R. A. Allred TITLE Drilling Supervisor DATE 12-10-90
TYPE OR PRINT NAME R. A. Allred TELEPHONE NO.

(This space for State Use)

APPROVED BY [Signature] TITLE SUPERVISOR DISTRICT # 3 DATE DEC 13 1990
CONDITIONS OF APPROVAL, IF ANY:

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO. 30-039-24782
5. Indicate Type of Lease STATE ☐ FEE ☒
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name San Juan 29-5 Unit
8. Well No. 218
9. Pool name or Wildcat Basin Fruitland Coal
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 6667' GL

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' (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: OIL WELL ☐ GAS WELL ☒ OTHER
2. Name of Operator PHILLIPS PETROLEUM COMPANY
3. Address of Operator 300 W. ARRINGTON, SUITE 200, FARMINGTON, NM 87401
4. Well Location Unit Letter G : 2000 Feet From The North Line and 1699 Feet From The East Line Section 34 Township 29N Range 5W NMPM Rio Arriba County
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 6667' GL

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK ☐	REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐	ALTERING CASING ☐
PULL OR ALTER CASING ☐	COMMENCE DRILLING OPNS. ☐
OTHER: ☐	PLUG AND ABANDONMENT ☐
	CASING TEST AND CEMENT JOB ☐
	OTHER: Casing Change ☒

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

The casing program on the above well is changed from setting 7" casing to the top of the coals to setting 5-1/2", 15.5# casing to the base of the coal and cementing to surface.

RECEIVED
DEC 13 1990
OIL CON. DIV
DIST. 3

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE R. A. Allred TITLE Drilling Supervisor DATE 12-10-90

TYPE OR PRINT NAME R. A. Allred TELEPHONE NO. _____

(This space for State Use)

APPROVED BY [Signature] TITLE SUPERVISOR DISTRICT # 3 DATE DEC 13 1990

CONDITIONS OF APPROVAL, IF ANY:

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2688N
Santa Fe, New Mexico 87504-2088

OIL CONSERVATION DIVISION
RECEIVED

NOV 1 AM 9 09

WELL API NO.
5. Indicate Type of Lease STATE ☐ FEE ☒
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name San Juan 29-5 Unit
8. Well No. 218
9. Pool name or Wildcat
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 6739' GL

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" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: OIL WELL ☐ GAS WELL ☒ OTHER
2. Name of Operator Phillips Petroleum Company
3. Address of Operator 300 W. Arrington, Suite 200, Farmington, NM 87401
4. Well Location Unit Letter <u>G</u> : <u>2000</u> Feet From The <u>North</u> Line and <u>1699</u> Feet From The <u>East</u> Line Section <u>34</u> Township <u>29N</u> Range <u>5W</u> NMPM Rio Arriba County

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK ☐	REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐	ALTERING CASING ☐
PULL OR ALTER CASING ☐	COMMENCE DRILLING OPNS. ☐
OTHER: ☐	PLUG AND ABANDONMENT ☐
	CASING TEST AND CEMENT JOB ☐
	OTHER: <u>Change of Location</u> ☒

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

The above well has been moved from 2429' FNL & 2494' FEL to 2000' FNL & 1699' FEL.

RECEIVED
OCT 31 1990
OIL CON. DIV
DIST. 2

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [Signature] TITLE Area Landman DATE 10-31-90
TYPE OR PRINT NAME A. J. Kieke, Jr. TELEPHONE NO.

(This space for State Use)

APPROVED BY [Signature] TITLE SUPERVISOR DISTRICT # 3 DATE OCT 31 1990
CONDITIONS OF APPROVAL, IF ANY:

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

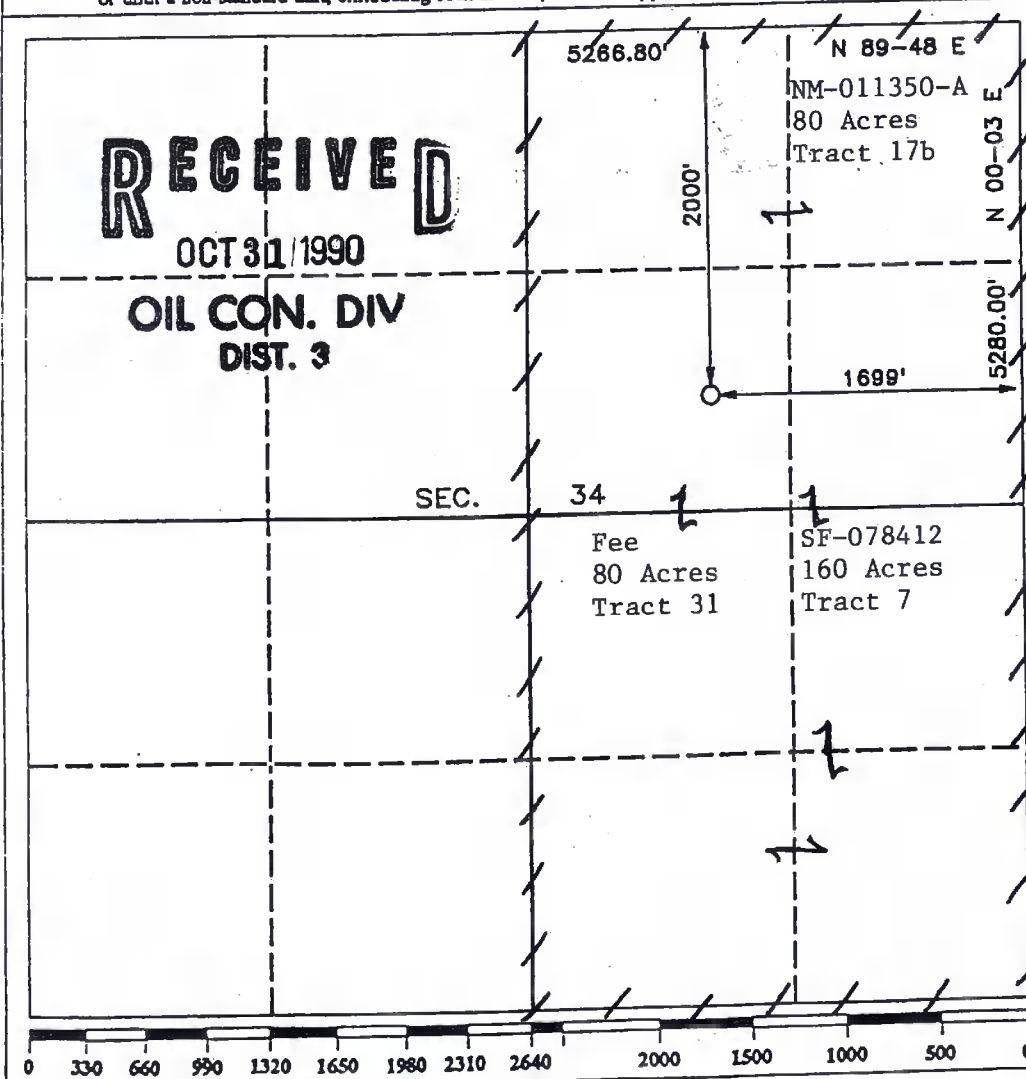
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator PHILLIPS PETROLEUM		Lease SAN JUAN 29-5 UNIT		Well No. 218
Unit Letter G	Section 34	Township T.29 N.	Range R.5 W. NMPM	County RIO ARRIBA COUNTY
Actual Footage Location of Well: 2000 feet from the NORTH line and 1699 feet from the EAST line				
Ground level Elev. 6739	Producing Formation Fruitland	Pool Basin Fruitland Coal	Dedicated Acreage: 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?
- ☒ Yes ☐ No If answer is "yes" type of consolidation Unitization
- If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)
- No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature _____

Printed Name

Printed Name _____

A. J. Kleke, Jr.

Position

Area Landman

Company

Phillips Petroleum Co.

Date _____

October 31, 1990

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed _____

MAY 10 1990

Signature & Seal of Professional Surveyor

R. HOWARD DAGG

Certificate No.

~~9879~~
~~Registered Professional~~
~~Land Surveyor~~

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-101
Revised 1-1-89

OIL CONSERVATION DIVISION

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DB, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

Santa Fe, New Mexico 87504-2088

API NO. (assigned by OCD on New Wells)

30-039-24782

5. Indicate Type of Lease

STATE ☐

FEE ☒

6. State Oil & Gas Lease No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work:

DRILL ☒

RE-ENTER ☐

DEEPEN ☐

PLUG BACK ☐

b. Type of Well:

OIL
WELL ☐

GAS
WELL ☒

OTHER

SINGLE
ZONE ☒

MULTIPLE
ZONE ☐

2. Name of Operator

Phillips Petroleum Company

3. Address of Operator

300 W. Arrington, Suite 200, Farmington, N.M. 87401

7. Lease Name or Unit Agreement Name

San Juan 29-5 Unit

8. Well No.

218

9. Pool name or Wildcat

Basin Fruitland Coal

4. Well Location

Unit Letter

G

: 2429

Feet From The

North

Line and

2494

Feet From The

East

Line

Section

34

Township

29N

Range

5W

NMPM

Rio Arriba

County

10. Proposed Depth

3615'

11. Formation

Fruitland

12. Rotary or C.T.

Rotary

13. Elevations (Show whether DF, RT, GR, etc.)

6667' (GL Unprepared)

14. Kind & Status Plug. Bond

Blanket

15. Drilling Contractor

Advise Later

16. Approx. Date Work will start

Upon Approval

17.

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12-1/4"	9-5/8"	36#, K-55	250'	200 Sxs	Circ to Surface
8-3/4"	7"	23#, K-55	3411'	600 Sxs	Circ to Surface
6-1/8"	5-1/2"	15.5# or 23#	3311'-3615'		*

*If the coal is cleated a 5-1/2", 23#, P-110 liner will be run in the open hole without being cemented.

*If the coal is not cleated the well will be stimulated and a 5-1/2", 15.5#, J-55 liner will be run without being cemented.

RECEIVED

MAY 30 1990

OIL CON. DIV
DIST. 3

Use mud additives as required for control.

BOP Equipment: See attached schematic (Fig. 7-9 or 7-10)

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE L. M. Sanders TITLE Supv. Regulatory Affairs DATE May 30, 1990

TYPE OR PRINT NAME L. M. Sanders

TELEPHONE NO.

(This space for State Use)

APPROVED BY

DEPUTY OIL & GAS INSPECTOR, DIST. #3

TITLE

DATE

JUN 01 1990

CONDITIONS OF APPROVAL, IF ANY:

APPROVAL EXPIRES 12-1-90
UNLESS DRILLING IS COMMENCED.
SPUD NOTICE MUST BE SUBMITTED
WITHIN 10 DAYS.

Hold C-109 FOR NSL

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

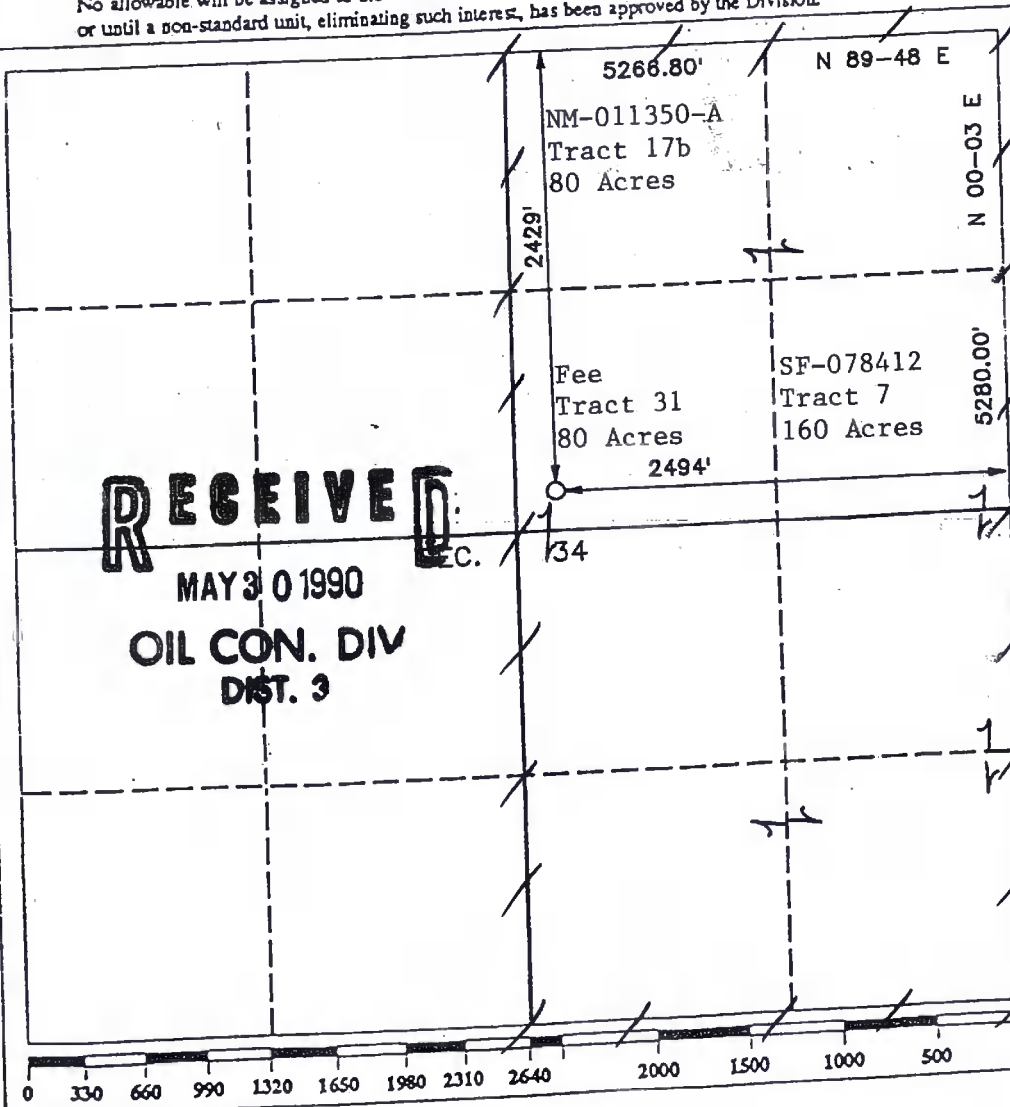
DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT
All Distances must be from the outer boundaries of the section

Operator PHILLIPS PETROLEUM			Lease SAN JUAN 29-5 UNIT		Well No. 218
Unit Letter G	Section 34	Township T.29 N.	Range R.5 W.	County RIO ARRIBA COUNTY	
Actual Footage Location of Well: 2429 feet from the NORTH line and 2494 feet from the EAST line			Dedicated Acreage: 320 Acres		
Ground level Elev. 6667	Producing Formation Fruitland		Pool Basin Fruitland Coal		

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?
☒ Yes ☐ No If answer is "yes" type of consolidation Unitization
If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature

L. M. Sanders

Printed Name

L. M. Sanders

Position

Supv. Regulatory Affairs

Company

Phillips Petroleum Co.

Date

May 30, 1990

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

MAY 1 1990

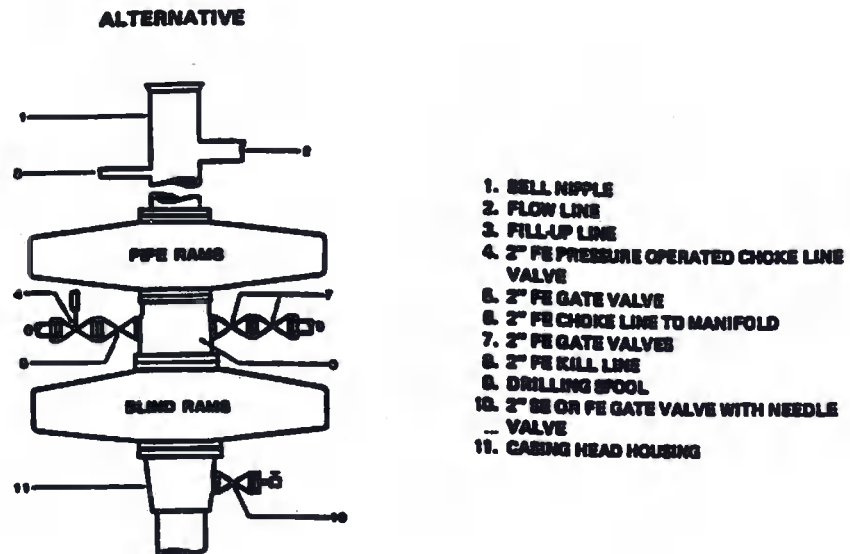
Signature & Seal of Professional Surveyor

R. HOWARD DAGGETT

Certificate No.

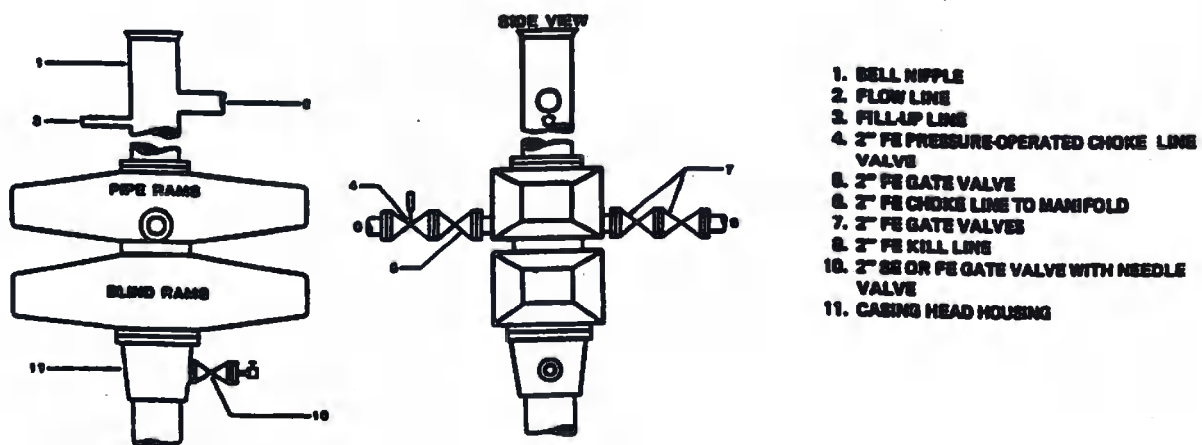
9679

Registered Professional
Land Surveyor



NOTE: THE DRILLING SPOOL MAY BE LOCATED BELOW BOTH SETS OF RAMS IF A DOUBLE PREVENTER IS USED AND IT DOES NOT HAVE SUITABLE OUTLETS BETWEEN RAMS

**Figure 7-9. Standard Hydraulic Blowout Preventer Assembly
3 M Working Pressure Alternative 1**



**Figure 7-10. Standard Hydraulic Blowout Preventer Assembly
3 M Working Pressure Alternative 3 (without Drilling Spool)**

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

11/20/02 17:25:26
OGOMES -TP0X
PAGE NO: 1

Sec : 34 Twp : 29N Rng : 05W Section Type : NORMAL

D 40.00 Federal owned U	C 40.00 Federal owned U	B 40.00 Federal owned U	A 40.00 Federal owned U
E 40.00 Federal owned U	F 40.00 Fee owned U	G 40.00 Fee owned U A A A	H 40.00 Federal owned U

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07 BKWD	PF08 FWD	PF09 PRINT	PF10 SDIV	PF11	PF12

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

11/20/02 17:25:32
OGOMES -TP0X
PAGE NO: 2

Sec : 34 Twp : 29N Rng : 05W Section Type : NORMAL

L 40.00 Federal owned U A A	K 40.00 Fee owned U A	J 40.00 Fee owned U	I 40.00 Federal owned U
M 40.00 Federal owned U	N 40.00 Federal owned U	O 40.00 Federal owned U	P 40.00 Federal owned U

PF01 HELP
PF07 BKWD

PF02
PF08 FWD

PF03 EXIT
PF09 PRINT

PF04 GoTo
PF10 SDIV

PF05
PF11

PF06
PF12

Well No : 218
GL Elevation: 6667

	U/L	Sec	Township	Range	North/South	East/West	Prop/Act (P/A)
B.H. Locn	: G	34	29N	05W	FTG 2000 F N	FTG 1699 F E	P
Lot Identifier:							
Dedicated Acre:							
Lease Type	: P						
Type of consolidation (Comm, Unit, Forced Pooling - C/U/F/O)							: U

M0025: Enter PF keys to scroll

```
PF01  HELP      PF02      PF03  EXIT      PF04  GoTo      PF05      PF06
PF07      PF08      PF09      PF10  NEXT-WC  PF11  HISTORY  PF12  NXTREC
```

CMD : ONGARD 11/20/02 17:26:06
OG6ACRE C102-DEDICATE ACREAGE OGOMES -TP0X
Page No : 1

API Well No : 30 39 24782 Eff Date : 11-27-1990
Pool Idn : 71629 BASIN FRUITLAND COAL (GAS)
Prop Idn : 9256 SAN JUAN 29 5 UNIT Well No : 218
Spacing Unit : 41973 OCD Order : Simultaneous Dedication:
Sect/Twp/Rng : 34 29N 05W Acreage : 320.00 Revised C102? (Y/N) :
Dedicated Land:

S	Base	U/L	Sec	Twp	Rng	Acreage	L/W	Ownership	Lot	Idn
	A		34	29N	05W	40.00	N	FD		
	B		34	29N	05W	40.00	N	FD		
	G		34	29N	05W	40.00	N	FE		
	H		34	29N	05W	40.00	N	FD		
	I		34	29N	05W	40.00	N	FD		
	J		34	29N	05W	40.00	N	FE		
	O		34	29N	05W	40.00	N	FD		
	P		34	29N	05W	40.00	N	FD		

E0005: Enter data to modify or PF keys to scroll

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM
PF07 BKWD PF08 FWD PF09 PF10 LAND PF11 NXTSEC PF12 RECONF

CMD : ONGARD 11/20/02 17:26:21
 OG6IPRD INQUIRE PRODUCTION BY POOL/WELL OGOMES -TP0X
 Page No: 1

OGRID Identifier : 17654 PHILLIPS PETROLEUM CO NW
 Pool Identifier : 71629 BASIN FRUITLAND COAL (GAS)
 API Well No : 30 39 24782 Report Period - From : 01 1993 To : 10 2002

API Well No	Property Name	Prodn. Days MM/YY Prod	Production Volumes Gas Oil Water	Well Stat
30 39 24782	SAN JUAN 29 5 UNIT	01 96		S
30 39 24782	SAN JUAN 29 5 UNIT	02 96		S
30 39 24782	SAN JUAN 29 5 UNIT	03 96 31	1771	80 F
30 39 24782	SAN JUAN 29 5 UNIT	04 96 30	2769	F
30 39 24782	SAN JUAN 29 5 UNIT	05 96 29	2530 3	70 F
30 39 24782	SAN JUAN 29 5 UNIT	06 96 30	1519	F
30 39 24782	SAN JUAN 29 5 UNIT	07 96 31	2561 14	F

Reporting Period Total (Gas, Oil) :

M0025: Enter PF keys to scroll

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM
 PF07 BKWD PF08 FWD PF09 PF10 NXTPOOL PF11 NXTOGD PF12

CMD : ONGARD 11/20/02 17:26:25
OG6IPRD INQUIRE PRODUCTION BY POOL/WELL OGOMES -TP0X
Page No: 2

OGRID Identifier : 17654 PHILLIPS PETROLEUM CO NW
Pool Identifier : 71629 BASIN FRUITLAND COAL (GAS)
API Well No : 30 39 24782 Report Period - From : 01 1993 To : 10 2002

API Well No	Property Name	Prod.	Days	Production Volumes	Well
		MM/YY	Prod	Gas Oil Water	Stat
30 39 24782	SAN JUAN 29 5 UNIT	08 96	31	2116	F
30 39 24782	SAN JUAN 29 5 UNIT	09 96	30	2518	F
30 39 24782	SAN JUAN 29 5 UNIT	10 96	31	1438 2	F
30 39 24782	SAN JUAN 29 5 UNIT	11 96	30	1233	F
30 39 24782	SAN JUAN 29 5 UNIT	12 96	28	1508	F
30 39 24782	SAN JUAN 29 5 UNIT	01 97	31	2339 2	F
30 39 24782	SAN JUAN 29 5 UNIT	02 97	27	1667	F

Reporting Period Total (Gas, Oil) :

E0049: User may continue scrolling.

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM
PF07 BKWD PF08 FWD PF09 PF10 NXTPOOL PF11 NXTOGD PF12

CMD : ONGARD 11/20/02 17:26:26
 OG6IPRD INQUIRE PRODUCTION BY POOL/WELL OGOMES -TP0X
 Page No: 3

OGRID Identifier : 17654 PHILLIPS PETROLEUM CO NW
 Pool Identifier : 71629 BASIN FRUITLAND COAL (GAS)
 API Well No : 30 39 24782 Report Period - From : 01 1993 To : 10 2002

API Well No	Property Name	Prodn. Days MM/YY Prod	Production Volumes Gas Oil Water	Well Stat
30 39 24782	SAN JUAN 29 5 UNIT	03 97 31	2055 1	F
30 39 24782	SAN JUAN 29 5 UNIT	04 97 30	2576	F
30 39 24782	SAN JUAN 29 5 UNIT	05 97 31	2768 1	F
30 39 24782	SAN JUAN 29 5 UNIT	06 97 30	2435 8 26	F
30 39 24782	SAN JUAN 29 5 UNIT	07 97 31	2568	F
30 39 24782	SAN JUAN 29 5 UNIT	08 97 31	2613	F
30 39 24782	SAN JUAN 29 5 UNIT	09 97 30	2244 2	F

Reporting Period Total (Gas, Oil) :

E0049: User may continue scrolling.

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM
 PF07 BKWD PF08 FWD PF09 PF10 NXTPOOL PF11 NXTOGD PF12

CMD : ONGARD 11/20/02 17:26:27
 OG6IPRD INQUIRE PRODUCTION BY POOL/WELL OGOMES -TP0X
 Page No: 4

OGRID Identifier : 17654 PHILLIPS PETROLEUM CO NW
 Pool Identifier : 71629 BASIN FRUITLAND COAL (GAS)
 API Well No : 30 39 24782 Report Period - From : 01 1993 To : 10 2002

API Well No	Property Name	Prodn. Days MM/YY Prod	Production Volumes Gas Oil Water	Well Stat
30 39 24782	SAN JUAN 29 5 UNIT	10 97 31	1961	28 F
30 39 24782	SAN JUAN 29 5 UNIT	11 97 30	1778	F
30 39 24782	SAN JUAN 29 5 UNIT	12 97 31	1881	F
30 39 24782	SAN JUAN 29 5 UNIT	01 98 31	1266 12	F
30 39 24782	SAN JUAN 29 5 UNIT	02 98 28	1135	F
30 39 24782	SAN JUAN 29 5 UNIT	03 98 31	1856	F
30 39 24782	SAN JUAN 29 5 UNIT	04 98 30	1284	F

Reporting Period Total (Gas, Oil) :

E0049: User may continue scrolling.

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM
 PF07 BKWD PF08 FWD PF09 PF10 NXTPOOL PF11 NXTOGD PF12

CMD : ONGARD 11/20/02 17:26:30
OG6IPRD INQUIRE PRODUCTION BY POOL/WELL OGOMES -TP0X
Page No: 6

OGRID Identifier : 17654 PHILLIPS PETROLEUM CO NW
Pool Identifier : 71629 BASIN FRUITLAND COAL (GAS)
API Well No : 30 39 24782 Report Period - From : 01 1993 To : 10 2002

API Well No	Property Name	Prod.	Days	Production Volumes	Well
		MM/YY	Prod	Gas Oil Water	Stat
30 39 24782	SAN JUAN 29 5 UNIT	12 98	31	1747	F
30 39 24782	SAN JUAN 29 5 UNIT	01 99	31	1636	F
30 39 24782	SAN JUAN 29 5 UNIT	02 99	28	1551	F
30 39 24782	SAN JUAN 29 5 UNIT	03 99	31	1715	F
30 39 24782	SAN JUAN 29 5 UNIT	04 99	27	1521	F
30 39 24782	SAN JUAN 29 5 UNIT	05 99	31	1415	F
30 39 24782	SAN JUAN 29 5 UNIT	06 99	30	1820	20 F

Reporting Period Total (Gas, Oil) :

E0049: User may continue scrolling.

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM
PF07 BKWD PF08 FWD PF09 PF10 NXTPPOOL PF11 NXTOGD PF12

CMD : ONGARD 11/20/02 17:26:31
 OG6IPRD INQUIRE PRODUCTION BY POOL/WELL OGOMES -TP0X
 Page No: 7

OGRID Identifier : 17654 PHILLIPS PETROLEUM CO NW
 Pool Identifier : 71629 BASIN FRUITLAND COAL (GAS)
 API Well No : 30 39 24782 Report Period - From : 01 1993 To : 10 2002

API Well No	Property Name	Prodn. Days MM/YY Prod	Production Volumes Gas Oil Water	Well Stat
30 39 24782	SAN JUAN 29 5 UNIT	07 99 31	1807	F
30 39 24782	SAN JUAN 29 5 UNIT	08 99 31	1795	F
30 39 24782	SAN JUAN 29 5 UNIT	09 99 30	1767	F
30 39 24782	SAN JUAN 29 5 UNIT	10 99 31	1793	F
30 39 24782	SAN JUAN 29 5 UNIT	11 99 30	1631	F
30 39 24782	SAN JUAN 29 5 UNIT	12 99 31	1354	F
30 39 24782	SAN JUAN 29 5 UNIT	01 00 31	1204	F

Reporting Period Total (Gas, Oil) :

E0049: User may continue scrolling.

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM
 PF07 BKWD PF08 FWD PF09 PF10 NXTPOOL PF11 NXTOGD PF12

CMD : ONGARD
OG6IPRD INQUIRE PRODUCTION BY POOL/WELL

11/20/02 17:26:32
OGOMES -TPOX
Page No: 8

OGRID Identifier : 17654 PHILLIPS PETROLEUM CO NW
Pool Identifier : 71629 BASIN FRUITLAND COAL (GAS)
API Well No : 30 39 24782 Report Period - From : 01 1993 To : 10 2002

API Well No	Property Name	Prod.	Days	Production Volumes	Well
		MM/YY	Prod	Gas Oil Water	Stat
30 39 24782	SAN JUAN 29 5 UNIT	02 00	29	1537	F
30 39 24782	SAN JUAN 29 5 UNIT	03 00	31	1882	F
30 39 24782	SAN JUAN 29 5 UNIT	04 00	30	1879	23 F
30 39 24782	SAN JUAN 29 5 UNIT	05 00	31	1939	F
30 39 24782	SAN JUAN 29 5 UNIT	06 00	30	1895	F
30 39 24782	SAN JUAN 29 5 UNIT	07 00	31	1906	F
30 39 24782	SAN JUAN 29 5 UNIT	08 00	31	2149	F

Reporting Period Total (Gas, Oil) :

E0049: User may continue scrolling.

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM
PF07 BKWD PF08 FWD PF09 PF10 NXTPOOL PF11 NXTOGD PF12

CMD : ONGARD 11/20/02 17:26:33
 OG6IPRD INQUIRE PRODUCTION BY POOL/WELL OGOMES -TP0X
 Page No: 9

OGRID Identifier : 17654 PHILLIPS PETROLEUM CO NW
 Pool Identifier : 71629 BASIN FRUITLAND COAL (GAS)
 API Well No : 30 39 24782 Report Period - From : 01 1993 To : 10 2002

API Well No	Property Name	Prodn. Days MM/YY Prod	Production Volumes Gas Oil Water	Well Stat
30 39 24782	SAN JUAN 29 5 UNIT	09 00 30	1785	F
30 39 24782	SAN JUAN 29 5 UNIT	10 00 31	1842 9	F
30 39 24782	SAN JUAN 29 5 UNIT	11 00 30	1650	F
30 39 24782	SAN JUAN 29 5 UNIT	12 00 31	1462 25	F
30 39 24782	SAN JUAN 29 5 UNIT	01 01 31	1739	F
30 39 24782	SAN JUAN 29 5 UNIT	02 01 28	1639	F
30 39 24782	SAN JUAN 29 5 UNIT	03 01 31	2070	F

Reporting Period Total (Gas, Oil) :

E0049: User may continue scrolling.

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM
 PF07 BKWD PF08 FWD PF09 PF10 NXTPOOL PF11 NXTOGD PF12

CMD : ONGARD 11/20/02 17:26:34
 OG6IPRD INQUIRE PRODUCTION BY POOL/WELL OGOMES -TPOX
 Page No: 10

OGRID Identifier : 17654 PHILLIPS PETROLEUM CO NW
 Pool Identifier : 71629 BASIN FRUITLAND COAL (GAS)
 API Well No : 30 39 24782 Report Period - From : 01 1993 To : 10 2002

API Well No	Property Name	Prodn. Days MM/YY Prod	Production Volumes Gas Oil Water	Well Stat
30 39 24782	SAN JUAN 29 5 UNIT	04 01 30	1974	F
30 39 24782	SAN JUAN 29 5 UNIT	05 01 31	1764	F
30 39 24782	SAN JUAN 29 5 UNIT	06 01 30	1749	F
30 39 24782	SAN JUAN 29 5 UNIT	07 01 31	1716	F
30 39 24782	SAN JUAN 29 5 UNIT	08 01 31	1942	F
30 39 24782	SAN JUAN 29 5 UNIT	09 01 30	1829	F
30 39 24782	SAN JUAN 29 5 UNIT	10 01 31	1809	22 F

Reporting Period Total (Gas, Oil) :

E0049: User may continue scrolling.

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM
 PF07 BKWD PF08 FWD PF09 PF10 NXTPOOL PF11 NXTOGD PF12

CMD : ONGARD 11/20/02 17:26:35
 OG6IPRD INQUIRE PRODUCTION BY POOL/WELL OGOMES -TP0X
 Page No: 11

OGRID Identifier : 17654 PHILLIPS PETROLEUM CO NW
 Pool Identifier : 71629 BASIN FRUITLAND COAL (GAS)
 API Well No : 30 39 24782 Report Period - From : 01 1993 To : 10 2002

API Well No	Property Name	Prodn. Days MM/YY Prod	Production Volumes Gas Oil Water	Well Stat
30 39 24782	SAN JUAN 29 5 UNIT	11 01 30	1775 1	F
30 39 24782	SAN JUAN 29 5 UNIT	12 01 31	1616	F
30 39 24782	SAN JUAN 29 5 UNIT	01 02 31	1547	F
30 39 24782	SAN JUAN 29 5 UNIT	02 02 28	1299	F
30 39 24782	SAN JUAN 29 5 UNIT	03 02 31	1580	F
30 39 24782	SAN JUAN 29 5 UNIT	04 02 30	1875	F
30 39 24782	SAN JUAN 29 5 UNIT	05 02 31	1229	F

Reporting Period Total (Gas, Oil) :

E0049: User may continue scrolling.

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM
 PF07 BKWD PF08 FWD PF09 PF10 NXTPOOL PF11 NXTOGD PF12

CMD : ONGARD 11/20/02 17:26:36
OG6IPRD INQUIRE PRODUCTION BY POOL/WELL OGOMES -TP0X
Page No: 12

OGRID Identifier : 17654 PHILLIPS PETROLEUM CO NW
Pool Identifier : 71629 BASIN FRUITLAND COAL (GAS)
API Well No : 30 39 24782 Report Period - From : 01 1993 To : 10 2002

API Well No	Property Name	Prodn. Days MM/YY Prod	Production Volumes Gas Oil Water	Well Stat
30 39 24782	SAN JUAN 29 5 UNIT	06 02 25	1267	18 F
30 39 24782	SAN JUAN 29 5 UNIT	07 02 31	1842	37 F
30 39 24782	SAN JUAN 29 5 UNIT	08 02 31	1833	F

Reporting Period Total (Gas, Oil) : 142968 58 389

E0049: User may continue scrolling.

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM
PF07 BKWD PF08 FWD PF09 PF10 NXTPOOL PF11 NXTOGD PF12