

DATE IN 2/12/98	SUSPENSE 3/4/98	ENGINEER DC	LOGGED BY KW	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
- Engineering Bureau -

1840

**ADMINISTRATIVE APPLICATION COVERSHEET**

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

**Application Acronyms:**

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]  
[DD-Directional Drilling] [SD-Simultaneous Dedication]  
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]  
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]  
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]  
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]  
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

**[1] TYPE OF APPLICATION - Check Those Which Apply for [A]**

[A] Location - Spacing Unit - Directional Drilling

☐ NSL ☐ NSP ☐ DD ☐ SD

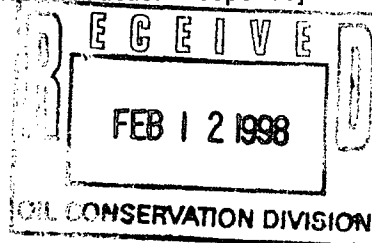
Check One Only for [B] and [C]

[B] Commingling - Storage - Measurement

☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR



**[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply**

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

**[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding**

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Kay Maddox  
Print or Type Name

Signature

*Kay Maddox*

Regulatory Agent  
Title

2/10/98  
Date

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241 1980

DISTRICT II

811 South First St. Artesia NM 88210 2835

DISTRICT III

1000 Rio Brazos Rd. Aztec, NM 87410 1693

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco  
Santa Fe, New Mexico 87505-6429

Form C-107-A  
New 3-12-96

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Operator Conoco Inc. Address 10 Desta Dr. Ste 100W, Midland, Tx. 79705-4500

Lease Warren Unit Well No 108 Unit Ltr Sec Twp Rge Section 28, T-20-S, R-38-E, J County Lea

OGRID NO. 005073 Property Code 003122 API NO. 30-025-32666 Spacing Unit Lease Types: (check 1 or more)  
Federal ☒ State ☐ (and/or) Fee ☐

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Warren; Grayburg-San Andres 96343		Warren Drinkard 63080
2. TOP and Bottom of Pay Section (Perforations)	4070-4620'		6581'-6692'
3. Type of production (Oil or Gas)	Oil		Oil
4. Method of Production (Flowing or Artificial Lift)	Artificial Lift		Artificial Lift
5. Bottomhole Pressure	a (Current)	a.	a.
Oil Zones - Artificial Lift: Estimated Current	500 psia		800 psia
Gas & Oil - Flowing: Measured Current	b (Original)	b.	b.
All Gas Zones: Estimated Or Measured Original	1254 psia		2055 psia
6. Oil Gravity (°API) or Gas BT Content	35		41
7. Producing or Shut-In?	Producing		Producing
Production Marginal? (yes or no)	yes		Yes
• If Shut-In give date and oil/gas/water rates of last production  Note For new zones with no production history applicant should be required to attach production estimates and supporting data  • If Producing, date and oil/gas/water rates of recent test (within 60 days)	Date Rates	Date Rates	Date Rates
	11/1/97 15 BOPD, 24 MCFD, 56 BWPD	11/1/97 5 BOPD, 254 MCFD, 13 BWPD	
8. Fixed Percentage Allocation Formula - % for each zone	oil: 75 % Gas 9 %	oil: % Gas %	oil: 25 % Gas 91

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? ☒ Yes ☐ No  
If not, have all working, overriding, and royalty interests been notified by certified mail? ☒ Yes ☐ No  
Have all offset operators been given written notice of the proposed downhole commingling? ☒ Yes ☐ No

11. Will cross-flow occur? ☐ Yes ☒ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ☐ Yes ☐ No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each others ☒ Yes ☐ No

13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)

14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☒ Yes ☐ No

15. NMOCDD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). \_\_\_\_\_

16. ATTACHMENTS

- \* C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- \* Production curve for each zone for at least one year. (If not available, attach explanation.)
- \* For zones with no production history, estimated production rates and supporting data.
- \* Data to support allocation method or formula.
- \* Notification list of all offset operators.
- \* Notification list of working, overriding and royalty interests for uncommon interest cases.
- \* Any additional statements, data, or documents required to support commingling.

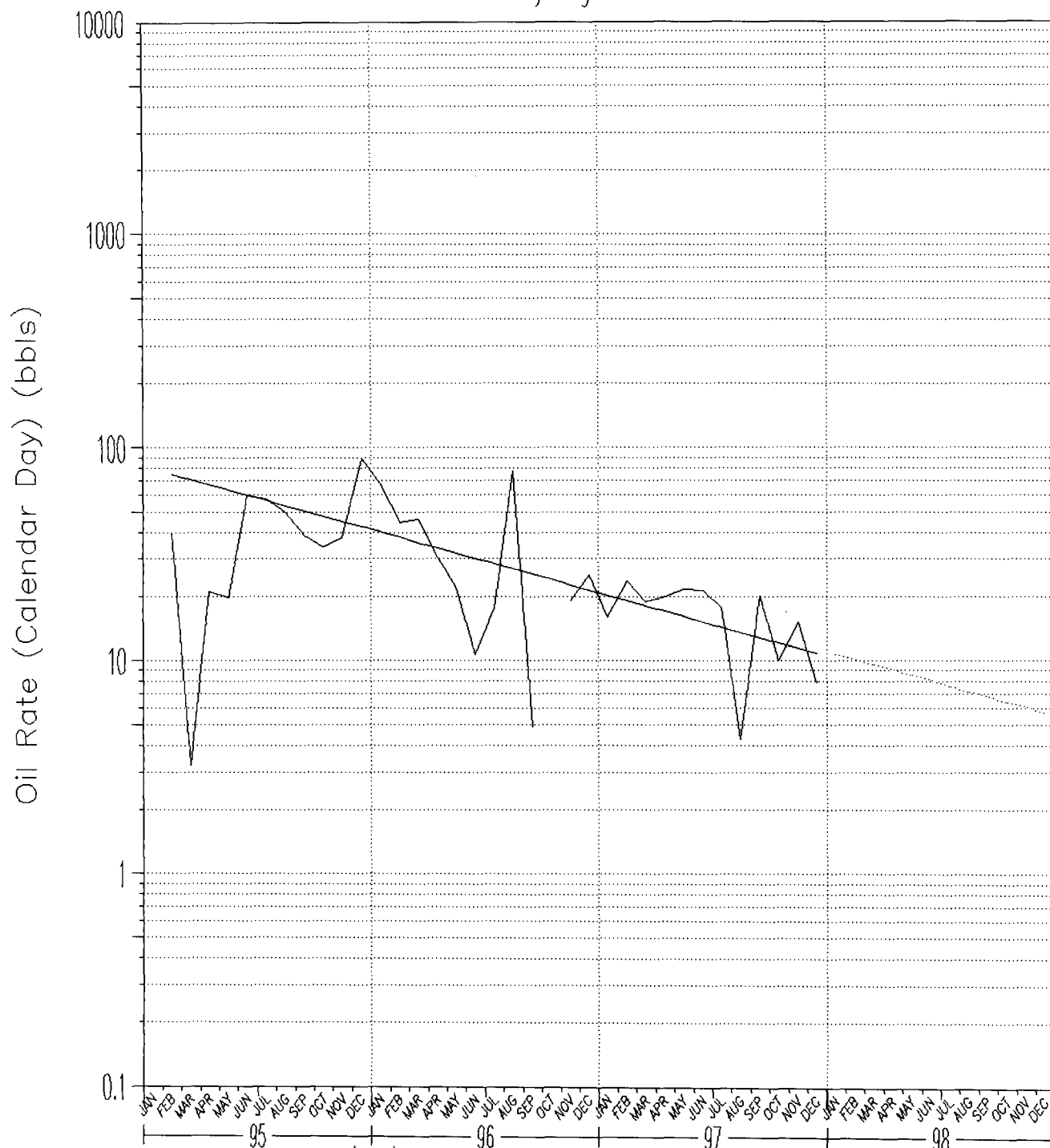
I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Kay Maddox TITLE Regulatory Agent DATE February 10, 1998

TYPE OR PRINT NAME Kay Maddox TELEPHONE NO. (915) 686-5798

# Warren Unit No.108

## Warren-Grayburg-San Andres Pool



Current Oil rate: 11.0 bbls/d

Economic Limit: 2.0 bbls/d

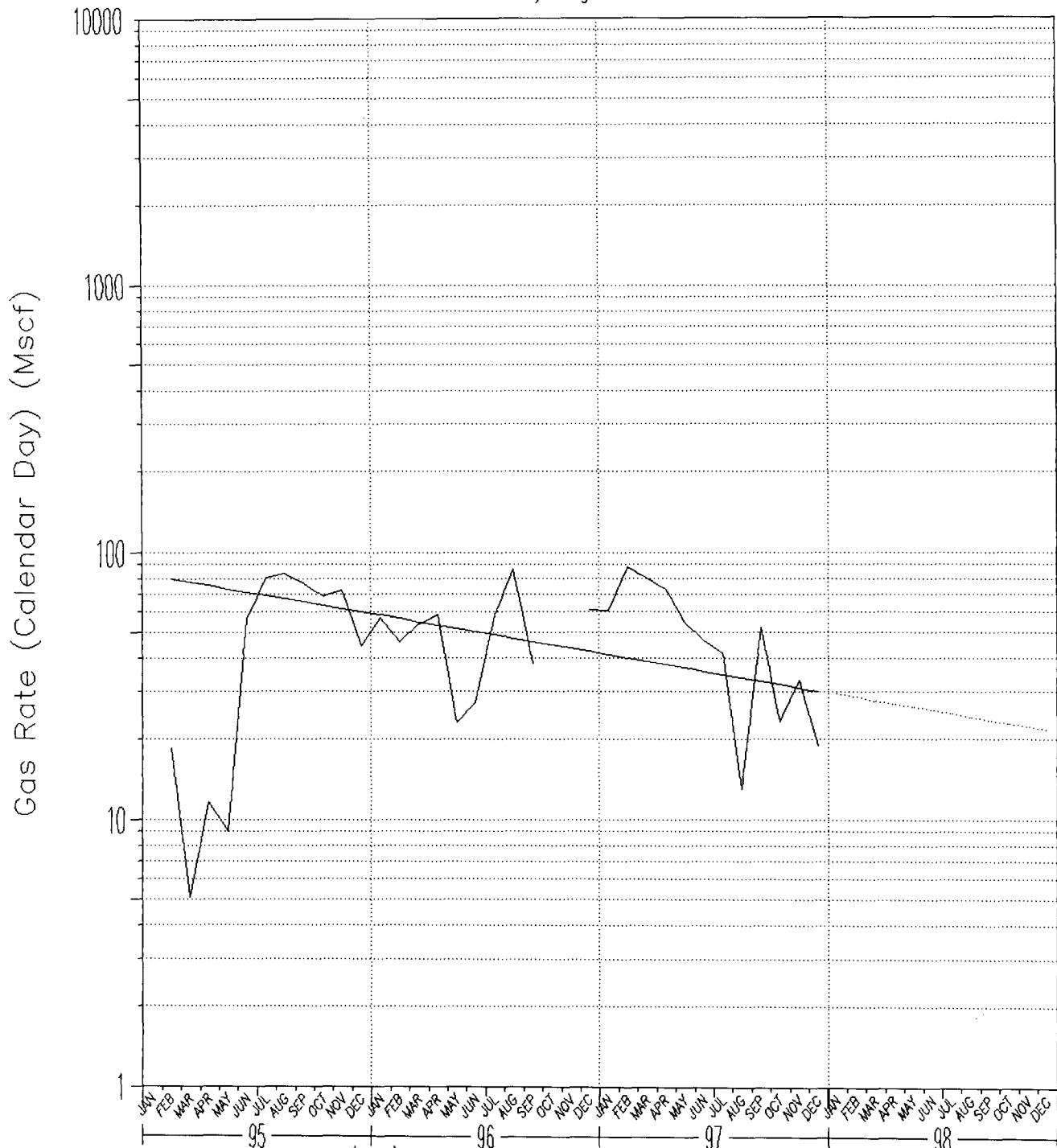
Cumulative Oil Produced: 30.8 Mbbls

Remaining Reserves: 4.8 Mbbls

Total Reserves: 35.6 Mbbls - At the Economic Limit

# Warren Unit No.108

## Warren-Grayburg-San Andres Pool



Decline Rate (frac) Nominal: 0.028582 Effective: 0.028178 Annual: 0.290354

Current Gas rate: 30.00 Mscf/d

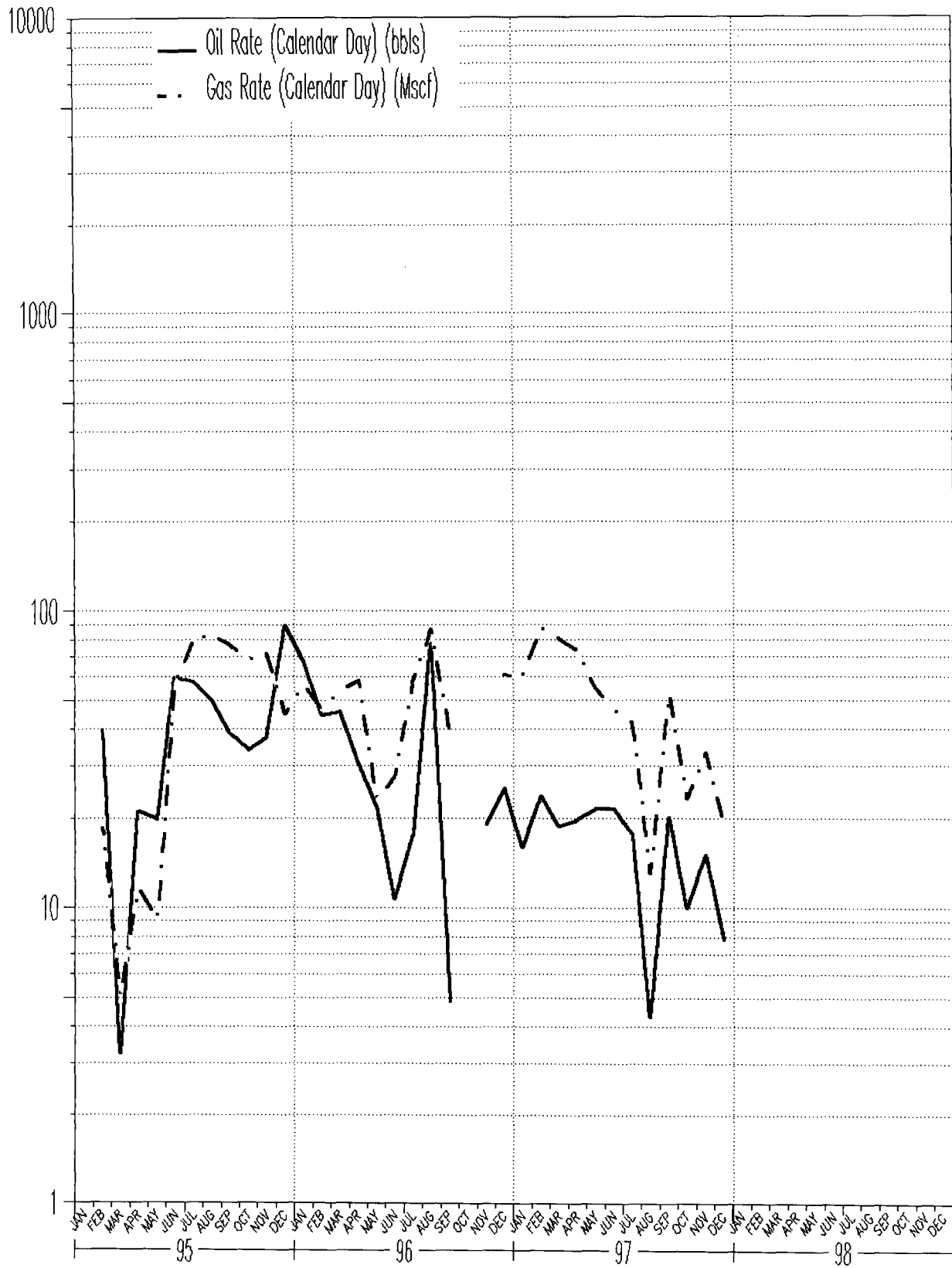
Economic Limit: 10.000 Mscf/d

Cumulative Gas Produced: 49.32 MMscf

Remaining Reserves: 21.5 MMscf

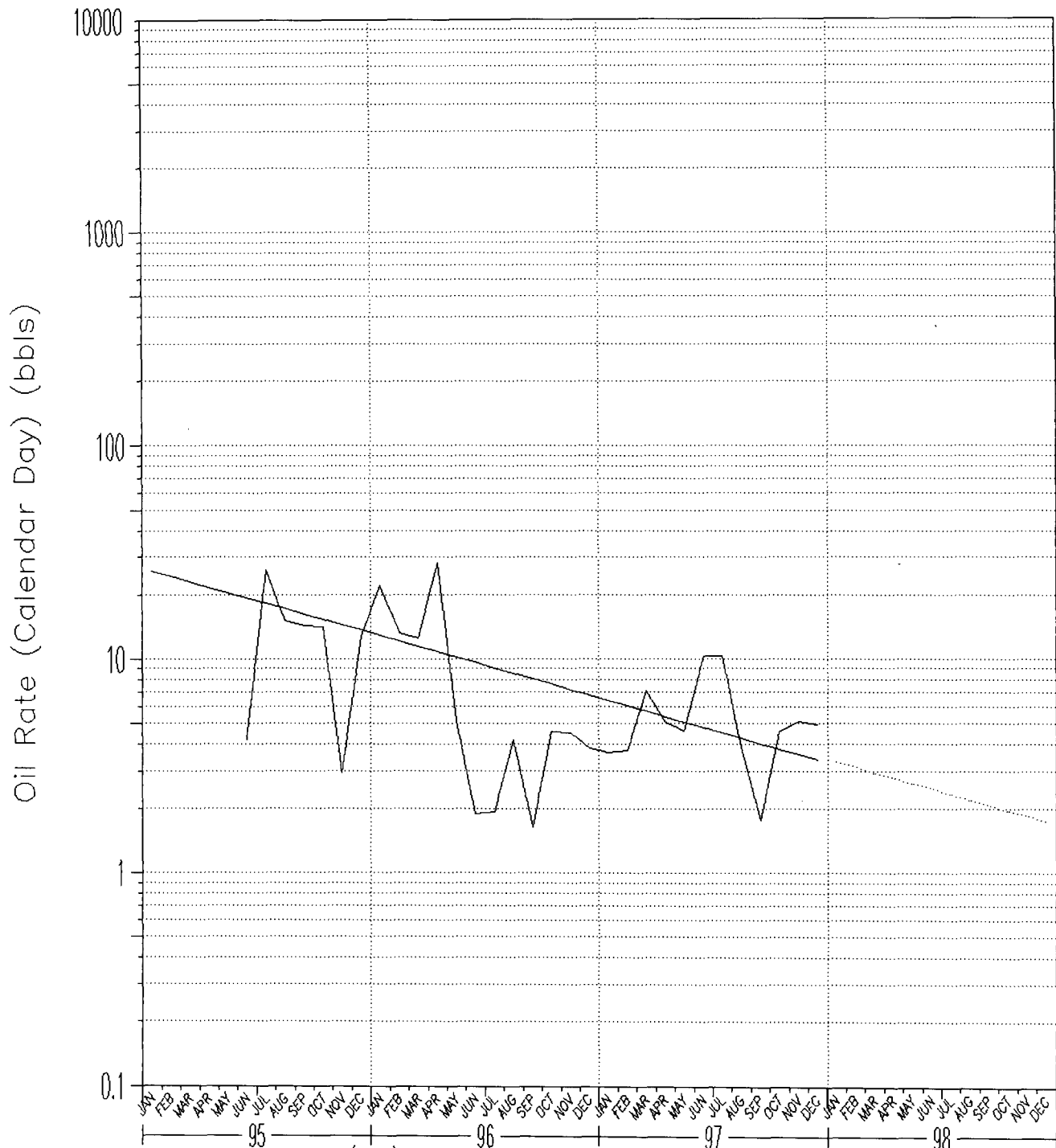
Total Reserves: 70.8 MMscf - At the Economic Limit

Warren Unit No.108  
Warren-Grayburg-San Andres Pool



# Warren Unit No.108

## Warren Drinkard Pool



Decline Rate (frac) Nominal: 0.058111 Effective: 0.056455 Annual: 0.502089

Current Oil rate: 3.4 bbls/d

Economic Limit: 1.0 bbls/d

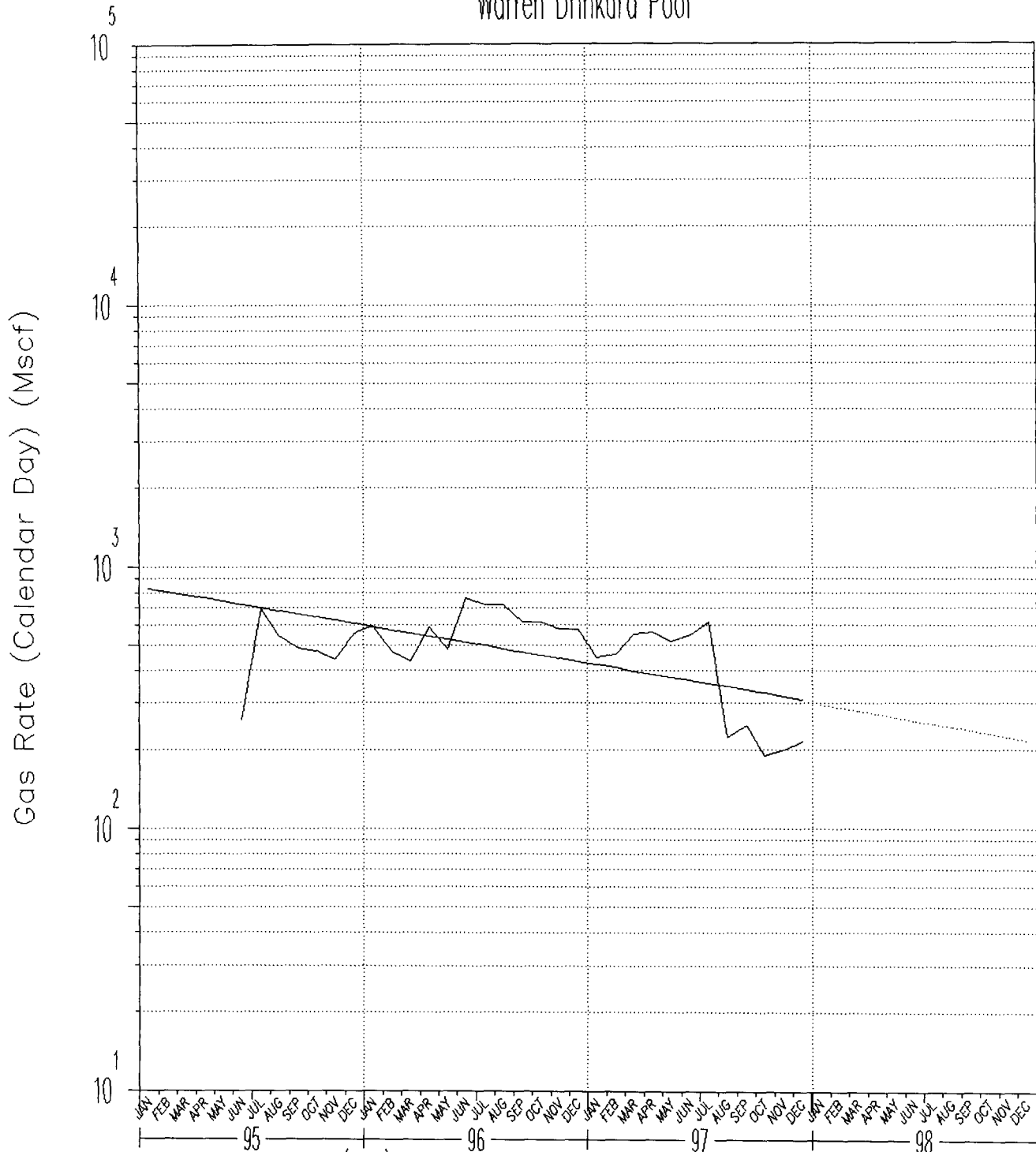
Cumulative Oil Produced: 8.2 Mbbls

Remaining Reserves: 1.3 Mbbls

Total Reserves: 9.5 Mbbls - At the Economic Limit

# Warren Unit No.108

## Warren Drinkard Pool



Decline Rate (frac) Nominal: 0.028036 Effective: 0.027647 Annual: 0.285689

Current Gas rate: 300.00 Mscf/d

Economic Limit: 20.000 Mscf/d

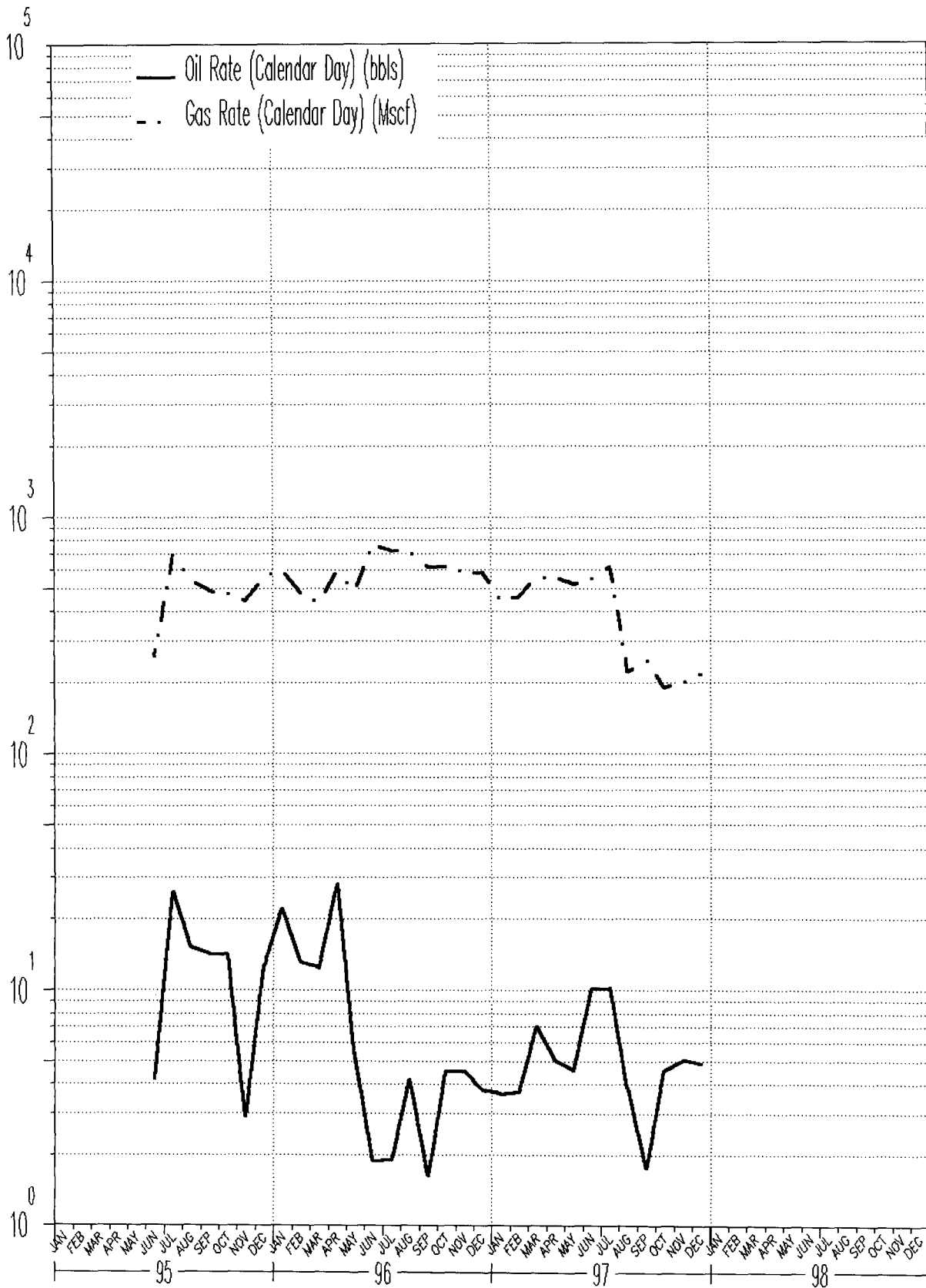
Cumulative Gas Produced: 470.02 MMscf

Remaining Reserves: 304.0 MMscf

Total Reserves: 774.0 MMscf - At the Economic Limit

# Warren Unit No.108

## Warren Drinkard Pool





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  
PO Box 2088  
Santa Fe, NM 87504-2088

Revised February 21, 1994

instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-32666		2 Pool Code 96343		3 Pool Name Warren Grayburg-San Andres	
4 Property Code 003122		5 Property Name Warren Unit			6 Well Number #108
7 OGRID No. 005073		8 Operator Name Conoco Inc., 10 Desta Drive, Ste. 100W, Midland, TX 79705-4500			9 Elevation 3533'

#### 10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	28	20S	38E		2203	South	2058'	East	Lea

#### 11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres 40	13 Joint or Infill	14 Consolidation Code	15 Order No.
--------------------------	--------------------	-----------------------	--------------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16			

#### 17 OPERATOR CERTIFICATION

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

*Kay Maddox*  
Signature  
Kay Maddox  
Printed Name  
Regulatory Agent  
Title  
February 10, 1998  
Date

#### 18 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 belief.

Date of Survey  
Signature and Seal of Professional Surveyor:

Certificate Number

District I  
PO Box 1980, Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals & Natural Resources Department

Revised February 21, 1994

District II  
PO Drawer DD, Artesia, NM 88211-0719

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instructions on back

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PO Box 2088, Santa Fe, NM 87504-2088

☐ AMENDED REPORT

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Signature

Kay Maddox

Printed Name

Regulatory Agent

Title

February 10, 1998

Date

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Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number

Conoco, Inc.  
Warren Unit Well # 108  
API # 30-025-32666  
Section 28, T-20-S, R-38-E, J  
Lea County, New Mexico

RE: Application to Downhole Commingle C-107-A

**Offset Operator:**

Conoco, Inc. is the only offset operator



GOVERNOR

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

3/11/98

DHC-1840

POST OFFICE BOX 1980  
HOBBS, NEW MEXICO 88241-1980  
(505) 393-8161

OIL CONSERVATION DIVISION  
P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

RE: Proposed:

MC  
DHC X  
NSL  
NSP  
SWD  
WFX  
PMX

Gentlemen:

I have examined the application for the:

Conoco Inc Warren Unit #108-J 28-20s-38e  
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

None.

Yours very truly,

Chris Williams

Chris Williams  
Supervisor, District 1

/ed