



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

GOVERNOR

POST OFFICE BOX 1980  
HOBBS, NEW MEXICO 88241-1980  
(505) 393-6161

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

DHC-1689

RE: Proposed:

MC \_\_\_\_\_  
DHC ☒ \_\_\_\_\_  
NSL \_\_\_\_\_  
NSP \_\_\_\_\_  
SWD \_\_\_\_\_  
WFX \_\_\_\_\_  
PMX \_\_\_\_\_

Gentlemen:

I have examined the application for the:

CONOCO, INC	WARREN UNIT #100	28-20-3S
Operator	Lease & Well No. Unit	S-T-R

and my recommendations are as follows:

*Recommend approval and using a Beam pump.*

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Yours very truly,

*Chris Williams*

Chris Williams  
Supervisor, District 1

/ed

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

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

DISTRICT II

811 South First Street, Artesia, NM 88210 2835

OIL CONSERVATION DIVISION

2040 S. Pacheco  
Santa Fe, New Mexico 87505-8429

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

DISTRICT III

1000 Rio Brazos Rd. Aztec, NM 87410 1693

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE

☒ YES ☐ NO

Conoco Inc.

10 Desta Dr. Ste 100W, Midland, Tx. 79705-4500

Operator

Address

Warren Unit

100

P, Section 28, T-20-S, R-38-E

Lea

Lease

Well No

Unit Ltr Sec Twp Rge

County

OGRID NO. 005073 Property Code 03122 API NO. 30-025-33016 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 - Glorietta 96247
2. TOP and Bottom of Pay Section (Perforations)	3989 - 4534'		5364 - 5614'
3. Type of production (Oil or Gas)	Oil		Oil
4. Method of Production (Flowing or Artificial Lift)	Bean Pump		Bean pump
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a (Current) 900 b(Original) 1350	a. b.	a. 1300 b. 1600
6. Oil Gravity (*API) or Gas BT Content	41.0		38.9
7. Producing or Shut-In?	Producing		Shut-in
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 shall 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 Mid-year average producing rates - see attached table	Date Rates Date Rates	Date Rates Incremental production by subtraction Date Rates
8. Fixed Percentage Allocation Formula - % for each zone	Oil: % Gas %	Oil: % Gas %	Oil: % Gas %

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. NMOCD Reference Cases for Rule 303(D) Exceptions:

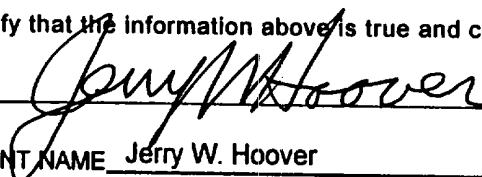
ORDER NO(S).

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



TITLE Sr. Conservation Coord

DATE

9/3/97

TYPE OR PRINT NAME Jerry W. Hoover

TELEPHONE NO.

(915)

686-6548

# Warren Unit No.100 Downhole Commingle Application

## San Andres Production Forecast

DECLINE (%/YR) Oil 0.3092  
LOSS RATIO Oil 0.6908

DECLINE (%/YR) Gas 0.2400  
LOSS RATIO Gas 0.7600

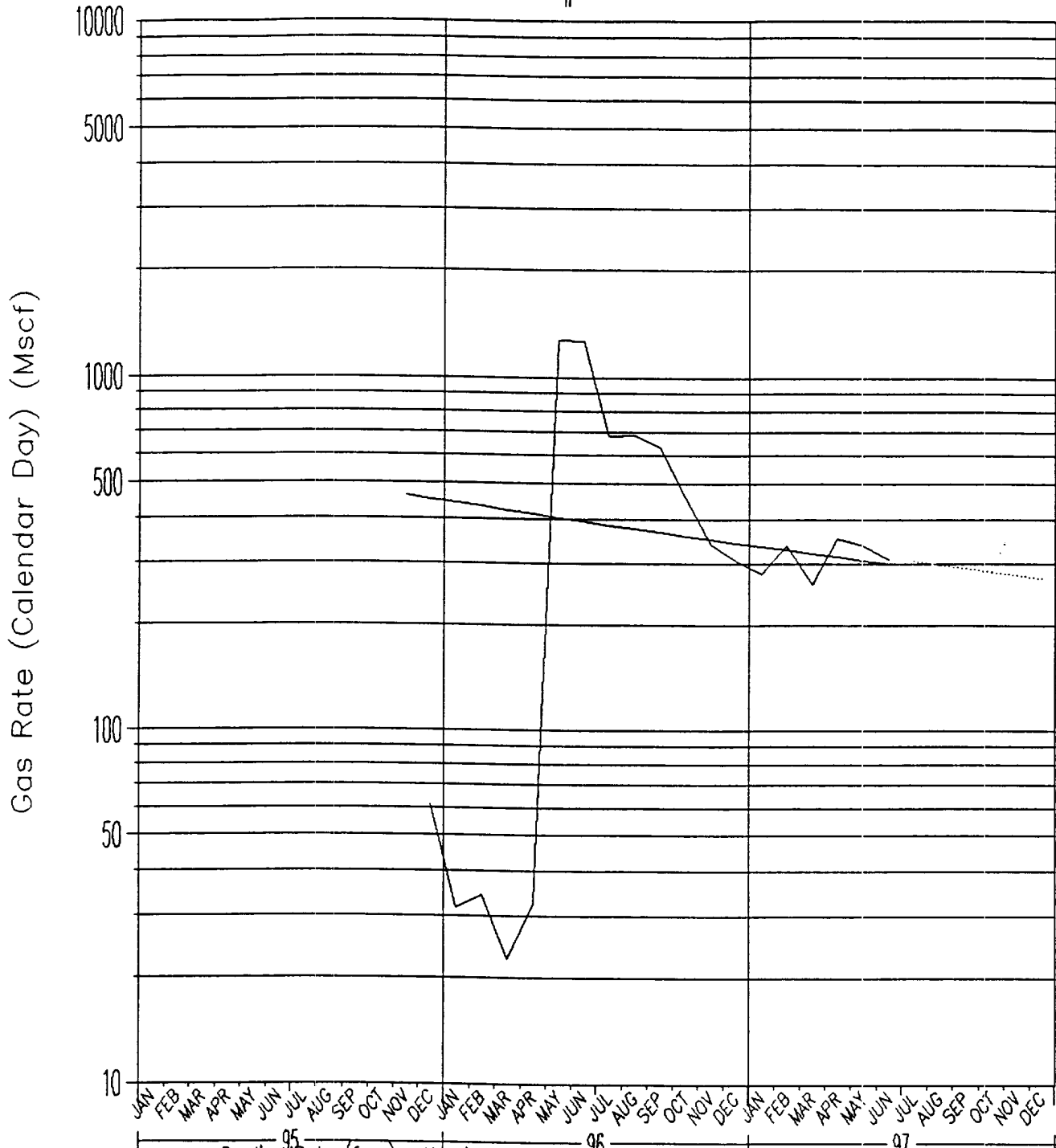
INITIAL RATE (BOPD) 80  
INITIAL RATE (MCFD) 308

NO.MONTHS 1ST YEAR 6  
ECON LIMIT (BOPD) 1

Year	Forecasted Formation	Oil Annual Decline Constant	Gas Annual Decline Constant	Forecasted Oil Production (BO)	Forecasted Gas Production (MCF)	Forecasted Oil Production Daily Average (BOPD)	Forecasted Gas Production Daily Average (MCFPD)
2nd Half 1997	San Andres	0.3092	0.2400	13329	52507	73.0	287.7
1st Half 1998	San Andres	0.3092	0.2400	11078	45776	60.7	250.8
2nd Half 1998	San Andres	0.3092	0.2400	9207	39907	50.5	218.7
1st Half 1999	San Andres	0.3092	0.2400	7652	34791	41.9	190.6
2nd Half 1999	San Andres	0.3092	0.2400	6360	30331	34.8	166.2
1st Half 2000	San Andres	0.3092	0.2400	5286	26442	29.0	144.9
2nd Half 2000	San Andres	0.3092	0.2400	4393	23052	24.1	126.3
1st Half 2001	San Andres	0.3092	0.2400	3651	20097	20.0	110.1
2nd Half 2001	San Andres	0.3092	0.2400	3035	17520	16.6	96.0
1st Half 2002	San Andres	0.3092	0.2400	2522	15274	13.8	83.7
2nd Half 2002	San Andres	0.3092	0.2400	2096	13316	11.5	73.0
1st Half 2003	San Andres	0.3092	0.2400	1742	11609	9.5	63.6
2nd Half 2003	San Andres	0.3092	0.2400	1448	10120	7.9	55.5
1st Half 2004	San Andres	0.3092	0.2400	1203	8823	6.6	48.3
2nd Half 2004	San Andres	0.3092	0.2400	1000	7692	5.5	42.1
1st Half 2005	San Andres	0.3092	0.2400	831	6706	4.6	36.7
2nd Half 2005	San Andres	0.3092	0.2400	691	5846	3.8	32.0
1st Half 2006	San Andres	0.3092	0.2400	574	5097	3.1	27.9
2nd Half 2006	San Andres	0.3092	0.2400	477	4443	2.6	24.3
1st Half 2007	San Andres	0.3092	0.2400	397	3873	2.2	21.2
2nd Half 2007	San Andres	0.3092	0.2400	330	3377	1.8	18.5
1st Half 2008	San Andres	0.3092	0.2400	274	2944	1.5	16.1
2nd Half 2008	San Andres	0.3092	0.2400	228	2567	1.2	14.1
1st Half 2009	San Andres	0.3092	0.2400	189	2237	1.0	12.3
2nd Half 2009	San Andres	0.3092	0.2400	157	1951	0.9	10.7
1st Half 2010	San Andres	0.3092	0.2400	131	1701	0.7	9.3
2nd Half 2010	San Andres	0.3092	0.2400	109	1483	0.6	8.1

Conoco Inc.

# WARREN UNIT # 100 - San Andres



Decline Rate (frac) Nominal: 0.022869 Effective: 0.022610 Annual: 0.239997

Current Gas rate: 307.90 Mscf/d

Economic Limit: 20.000 Mscf/d

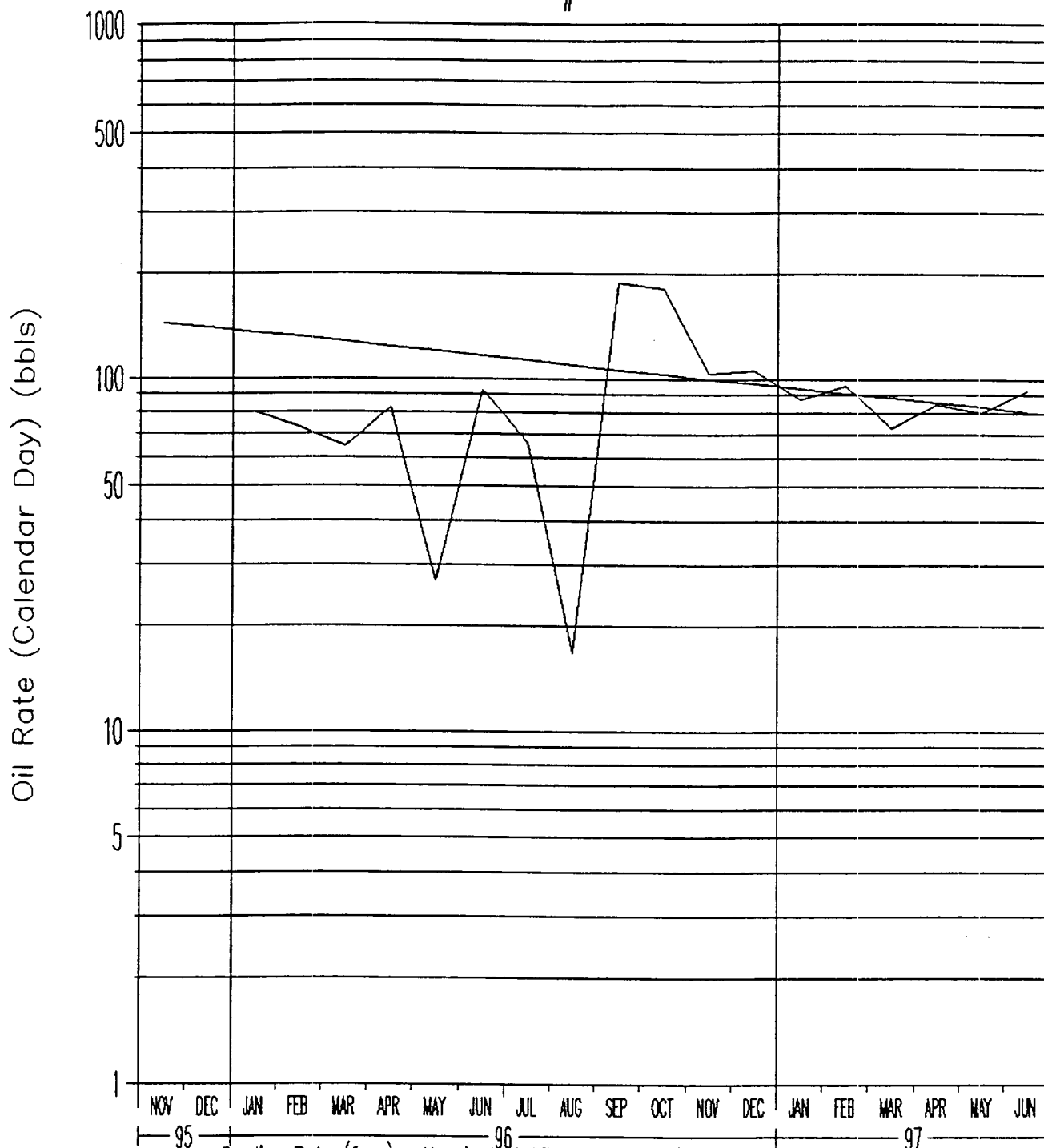
Cumulative Gas Produced: 234.70 MMscf

Remaining Reserves: 383.2 MMscf

Total Reserves: 617.9 MMscf - At the Economic Limit

Conoco Inc.

# WARREN UNIT # 100 - San Andres



Decline Rate (frac) Nominal: 0.030824 Effective: 0.030354 Annual: 0.309190

Current Oil rate: 80.0 bbls/d

Economic Limit: 1.0 bbls/d

Cumulative Oil Produced: 48.6 Mbbls

Remaining Reserves: 78.0 Mbbls

Total Reserves: 126.5 Mbbls - At the Economic Limit

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

# OIL CONSERVATION DIVISION

instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

District III  
1000 Rio Brazos Rd. Aztec, NM 87410

PO Box 2088  
Santa Fe, NM 87504-2088

District IV  
PO Box 2088, Santa Fe, NM 87504-2088

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-33016		2 Pool Code 96247		3 Pool Name Warren Glorieta	
4 Property Code 03122		5 Property Name Warren Unit			6 Well Number 100
7 OGRID No. 005073		8 Operator Name Conoco Inc., 10 Desta Drive, Ste. 100W, Midland, TX 79705-4500			9 Elevation 3531'

### 10 Surface Location

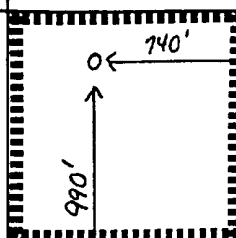
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	28	20S	38E		990	South	740	East	Lea

### 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				<h3>17 OPERATOR CERTIFICATION</h3> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Jerry W. Hoover</i> Signature Jerry W. Hoover Printed Name Sr. Conservation Coordinator Title 9/13/97 Date</p> <h3>18 SURVEYOR CERTIFICATION</h3> <p>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.</p> <p>Date of Survey Signature and Seal of Professional Surveyor</p> <p>Certificate Number</p>



OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

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

☐ AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number	'Pool Code NA	'Pool Name Wildcat San Andres
'Property Code 003127	'Property Name WARREN UNIT	'Well Number 100
'OGRID No. 005073	'Operator Name CONOCO, INC.	'Elevation 3531'

### <sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	28	20-S	38-E	.	990	SOUTH	740	EAST	LEA

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

UL or lot no.	Section	Township	Range	Lot 14n	Feet from the	North/South line	Feet from the	East/West line	County
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"Dedicated Acres 40	"Joint or Infill	"Consolidation Code	"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

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				<p><b>18 SURVEYOR CERTIFICATION</b></p> <p>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 best of my belief.</p> <p>APR 12 1995</p> <p>Date of Survey</p> <p>Signature and</p> <p>of Professional Surveyor</p> <p>8278</p> <p>REGISTERED PROFESSIONAL LAND SURVEYOR</p> <p>Earl Foote</p> <p>8278</p> <p>Certificate Number</p> <p>8278</p>

Conoco, Inc.  
Warren Unit Well # 100  
Section 28, T-20-S, R-38-E  
Lea County, New Mexico

RE: Application For Downhole Commingling

Offset Operators:

Conoco, Inc is the only offset operator