

ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**

- Engineering Bureau -

*194*

**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

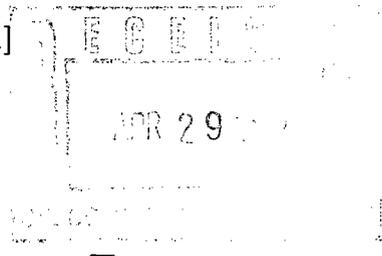
Check One Only for [B] and [C]

[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

*Kay Maddox*  
Signature

Regulatory Agent  
Title

4/24/98  
Date

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

DISTRICT II  
 811 South I 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

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

OIL CONSERVATION DIVISION

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

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 Jicarilla K Well No # 16 E Unit Ltr Sec Twp Rge Section 12, T-25-N, R-5-W, A County Rio Arriba

OGRID NO. 005073 Property Code \_\_\_\_\_ API NO. \_\_\_\_\_ 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	Blanco Mesaverde 72319		Basin Dakota 71599
2. TOP and Bottom of Pay Section (Perforations)	5229-5590'		7257-7487'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	To Flow		To Flow
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a (Current) 562	a.	a. 950
	b(Original) 1321	b.	b. 2810
6. Oil Gravity (°API) or Gas BT Content	1260		1248
7. Producing or Shut-In?	To be Completed		To be Completed
Production Marginal? (yes or no)	Yes (expected)		Yes (expected)
• If Shut-In give date and oil/gas/water rates of 1st 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
	Anticipated 1st Yr Average 126 MCFD, 3, 5 BOPD	Date Rates	Anticipated 1st Yr Average 221 MCFD, 3.3 BOPD
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 Kay Maddox TITLE Regulatory Agent DATE 4/24/98

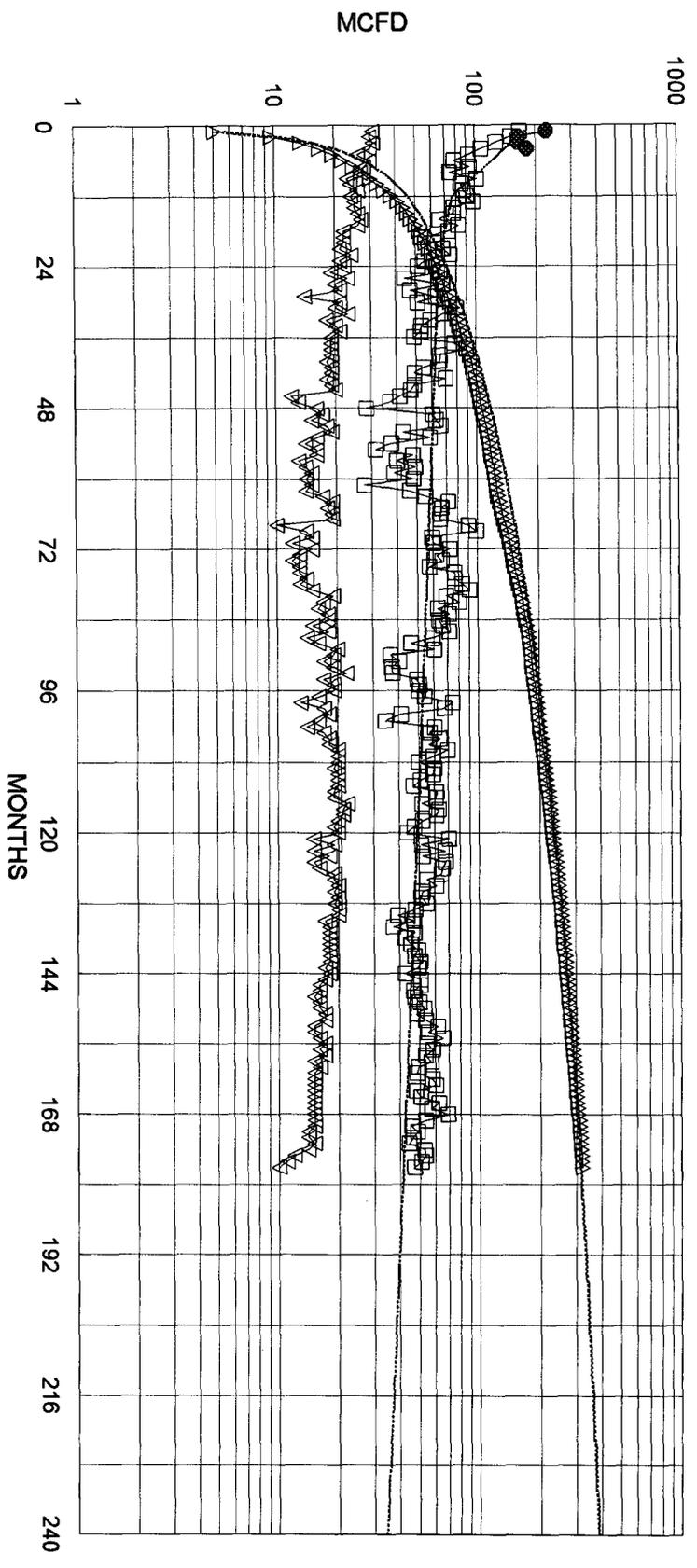
TYPE OR PRINT NAME Kay Maddox TELEPHONE NO. (915) 686-5798

**APPLICATION FOR DOWNHOLE COMMINGLING**

Jicarilla K 16E, Unit Letter A, Section 12-T25N-R5W  
Rio Arriba County, New Mexico

As shown in the attached production plot for offsets to the Jicarilla K 16E, estimated ultimate recoveries and initial production rates from infill wells to the Dakota and Mesaverde formations are clearly marginal in this area. Mesaverde estimated recoveries in particular do not justify drilling stand alone wells (389 MMCF recovery in 20 years, 536 MMCF ultimate recovery). Futhermore, production plots from each zone indicate a similar decline profile and a fixed allocation formula can be utilized. Upon completion, both zones will be tested and stabilized flow rates will be used to allocate production from each zone. This proceduce is common practice in Conoco's 28-7 Unit and reference is made to Order R-10476-B as it applies to downhole commingling of marginal zones and the allocation of production between such zones.

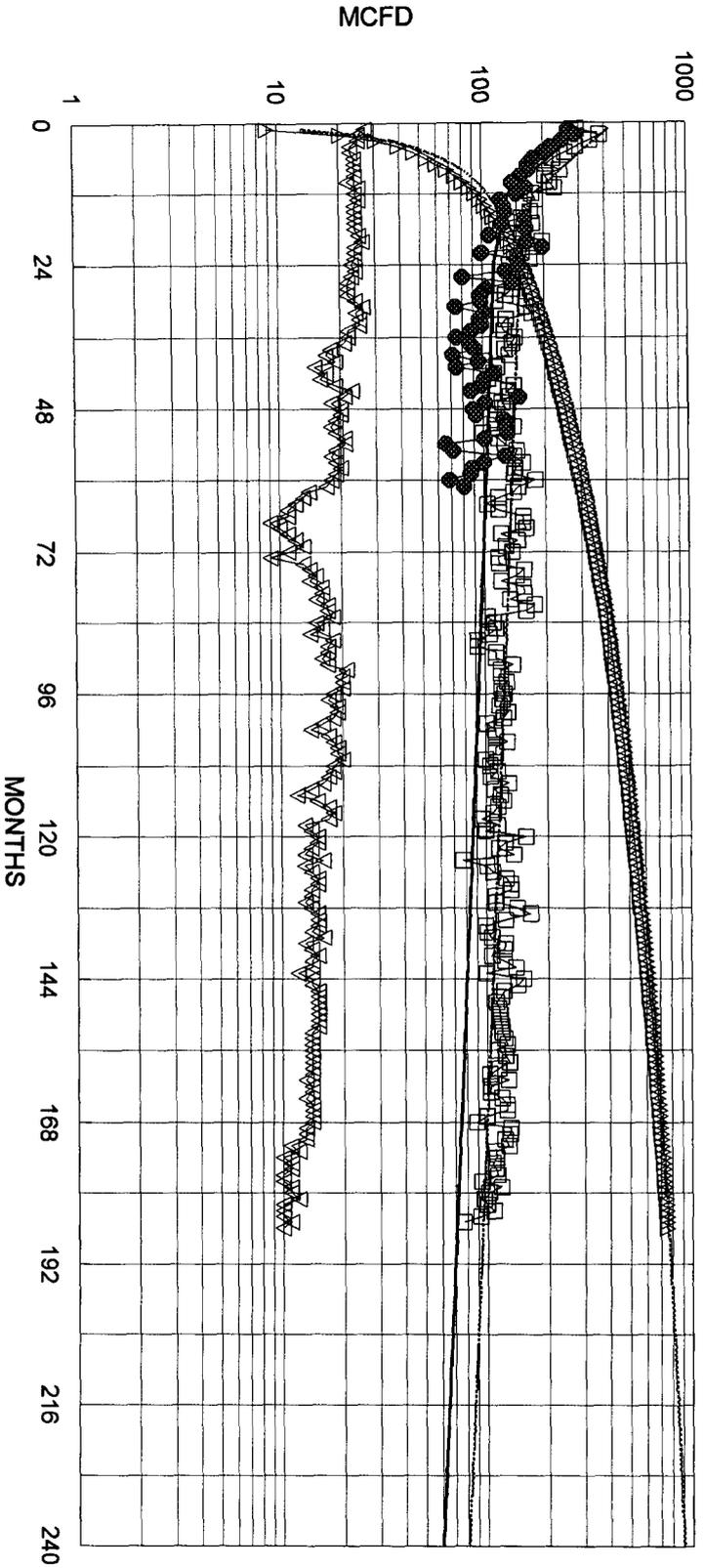
**NORMALIZED MESAVEVERDE PRODUCTION**  
**31 WELLS SINCE 1980; OFFSET TO JICARILLA K LEASE; SE 26N 5W AND NE 25N 05W**



— FIT MCFD                      ▢ NORMALIZED MCFD                      ▲ NORM CUM MMCF  
 ▣ WELLS ON PRODUCTION      - - - FIT CUM MMCF                      ◆ 6 NEW 1997 RECOMPLETIONS

<b>NORMALIZED AVERAGE PER WELL &amp; EXPECTED NEW WELL AVG.</b> 536 MMCF EUR 389 MMCF IN 20 YRS 20 MCFD E.L. 0.0278 bbl/mcf oil yield		192 MCFD IP 60% DECLINE, 1ST 12 MONTHS 15% DECLINE, NEXT 12 MONTHS 3.5% FINAL DECLINE		<b>NEW RECOMPLETIONS IN 1997:</b> JICARILLA K 10    1D-25N-5W JICARILLA K 10E    1K-25N-5W JICARILLA K 11    2E-25N-5W JICARILLA K 11E    2B 25N-5W		JICARILLA K 15    1I-25N-5W JICARILLA K 15E    1A-25N-5W	
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**NORMALIZED DAKOTA PRODUCTION**  
 27 WELLS SINCE 1980; 16 SECTIONS SURROUNDING JIC; K LEASE (SEC 1,2,11, & 12; 25N-05W)



— FIT MCFD                      ⊕ NORMALIZED MCFD                      ⊕ NORM CUM MMCF                      ⊕ WELLS ON PRODUCTION  
 - - - FIT CUM MMCF                      — RISKED MCFD                      ● 4 WELLS SINCE 1992

NORMALIZED AVG PER WELL: 1531 MMCF EUR 913 MMCF IN 20 YRS 20 MCFD E.L. 0.0149 bbl/mcf oil yield		450 MCFD IP 60% DECLINE, 1ST 12 MONTHS 15% DECLINE, NEXT 12 MONTHS 3.5% FINAL DECLINE		RISKED AVG:                      25% RISK (EXPECTED NEW COMPLETION AVERAGE) 1097 MMCF EUR 684 MMCF IN 20 YR 20 MCFD E.L. 0.0149 bbl/mcf oil yield		338 MCFD IP 60.0% DECLINE, 1ST 12 MONTHS 15.0% DECLINE, NEXT 12 MONTHS 3.5% FINAL DECLINE	
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**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

SUBMIT IN TRIPLICATE\*  
(Other instructions on reverse side)

FORM APPROVED  
OMB NO. 1004-0136  
Expires February 28, 1995

**APPLICATION FOR PERMIT TO DRILL OR DEEPEN**

1a. TYPE OF WORK

DRILL  DEEPEN

b. TYPE OF WELL

OIL WELL  GAS WELL  OTHER  TENSER ZONE  MULTIPLE ZONE

2. NAME OF OPERATOR

Conoco Inc.

3. ADDRESS AND TELEPHONE NO

10 Desta Dr. Ste 430E, Midland, Tx. 79705-4500 915-686-5794

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements \*)

At surface 1190' FNL & 1060' FEL

At proposed prod. zone 1190' FNL & 1060' FEL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

Sec. 12, T25N, R5W

12 COUNTY OR PARISH Rio Arriba 13. STATE NM

5. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if Any)

16 NO OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED TO THIS WELL 320/320/160

8. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH 7787'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc)

6693' GR

22. APPROX. DATE WORK WILL START\*

4/15/98

**PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11"	K-55, 8-5/8"	24#	300'	130 sxs, circ.
7-7/8"	K-55, 5-1/2"	15.5#	7487'	1080 sxs, circ.

It is proposed to drill vertical wellbore to be downhole commingled in the Blanco Mesaverde, Basin Dakota and Otero Chacra Pools following the acquisition of sufficient production test data for allocation purposes. A downhole commingling application will be filed with the BLM and NMOCD prior to commingling. A NOS was filed 10/31/97. This well will drilled and equipped according to the following attachments:

1. Well Location & Acreage Dedication Plat (C-102) and other associated plats.
2. Proposed Well Plan Outline.
3. Cementing Plan.
4. Blowout Preventer Hookup.
5. Surface Use Plan with Production Facility Layout.
6. Pipeline survey plat.

This application includes ROW's for the wellpad and access road.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. Mike L. Mankin Right-of-Way Agent DATE March 4, 1998

(This space for Federal or State office use)

PERMIT NO \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

**\*See Instructions On Reverse Side**

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NO. 100-10000, Santa Fe, NM 87501-0710

NO. 100-10000, Santa Fe, NM 87501-0710

NO. 100-10000, Santa Fe, NM 87504-2088

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

Department of Energy  
New Mexico State Office  
Santa Fe, NM 87505-1300

AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name	Otero
	72319/71599/82329	Blanco Mesaverd/Basin Dakota	Chacra
Property Code	Property Name	Well Number	
	JICARILLA K	16E	
OGRI No.	Operator Name	Elevation	
005073	CONOCO	6693'	

#### 10 Surface Location

UL or lot no.	Section	Township	Range	Lot Ion	Feet from the	North/South line	Feet from the	East/West line	County
A	12	25N	5W		1190	North	1060	East	RIO ARRIBA

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

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

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
320/320/160			

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

**7 OPERATOR CERTIFICATION**

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

*Mike L Mankin*  
Signature

Mike L Mankin  
Printed Name

Right-of-Way Agent  
Title

3-98  
Date

**8 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.

NOVEMBER, 19, 1997  
Date of Survey

Signature and Seal of Professional Surveyor

NEALE C. EDWARDS  
NEW MEXICO  
6857  
REGISTERED PROFESSIONAL SURVEYOR

Certification Number

Jicarilla K # 16E  
Section 12, T-25-N, R-5-W, A  
Rio Arriba, New Mexico

RE: Downhole Commingle C107A Application

**Notification of Offset Operators:**

Amoco, Inc.  
PO Box 800  
Denver, CO 80201

Burlington Resources  
PO Box 4289  
Farmington, NM 87499

A copy of the C-107A has been sent to the above listed party/parties.