

DISTRICT I
401 Box 1900 Hobbs, NM 88240-1900

State of New Mexico
Energy, Minerals and Natural Resources Department

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

DISTRICT II

811 South First St. Artesia NM 88210 2935

DISTRICT III

1000 Rio Brazos Rd. Aztec, NM 87410 1693

OIL CONSERVATION DIVISION

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

APPLICATION FOR DOWNHOLE COMMINGLING

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☐ YES ☒ NO

Conoco Inc.

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

Address

Jicarilla K

14E

Section 11, T-25-N, R-5-W, B

Rio Arriba

Lease

Well No

Unit Ltr Sec Twp Rge

County

OGRID NO 005073

Property Code

18023

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)	5242-5603'		7226-7456'
3 Type of production (Oil or Gas)	Gas		Gas
4 Method of Production (Flowing or Artificial Lift)	To Flow		To Flow
5 Bottomhole Pressure	a (Current) 562	a	a 950
Oil Zones - Artificial Lift Gas & Oil - Flowing All Gas Zones Estimated Current Measured Current Estimated Or Measured Original	b (Original) 1321	b	b 2808
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)
8 If Shut-In give date and oil/gas/water rates of last production	Date Rates	Date Rates	Date Rates
9 If Producing, date and oil/gas/water rates of recent test (within 60 days)	Anticipated 1st Yr average 126 MCFD, 3.5 BOPD	Date Rates	Anticipated 1st Yr Average 221 MCFD, 3.3 BOPD
9 Fixed Percentage Allocation Formula - % for each zone	% Gas %	% Gas %	% 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 NMOC 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.

RECEIVED
MAY 13 1998
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

Kay Maddox

TITLE Regulatory Agent

DATE

4/24/98

TYPE OR PRINT NAME Kay Maddox

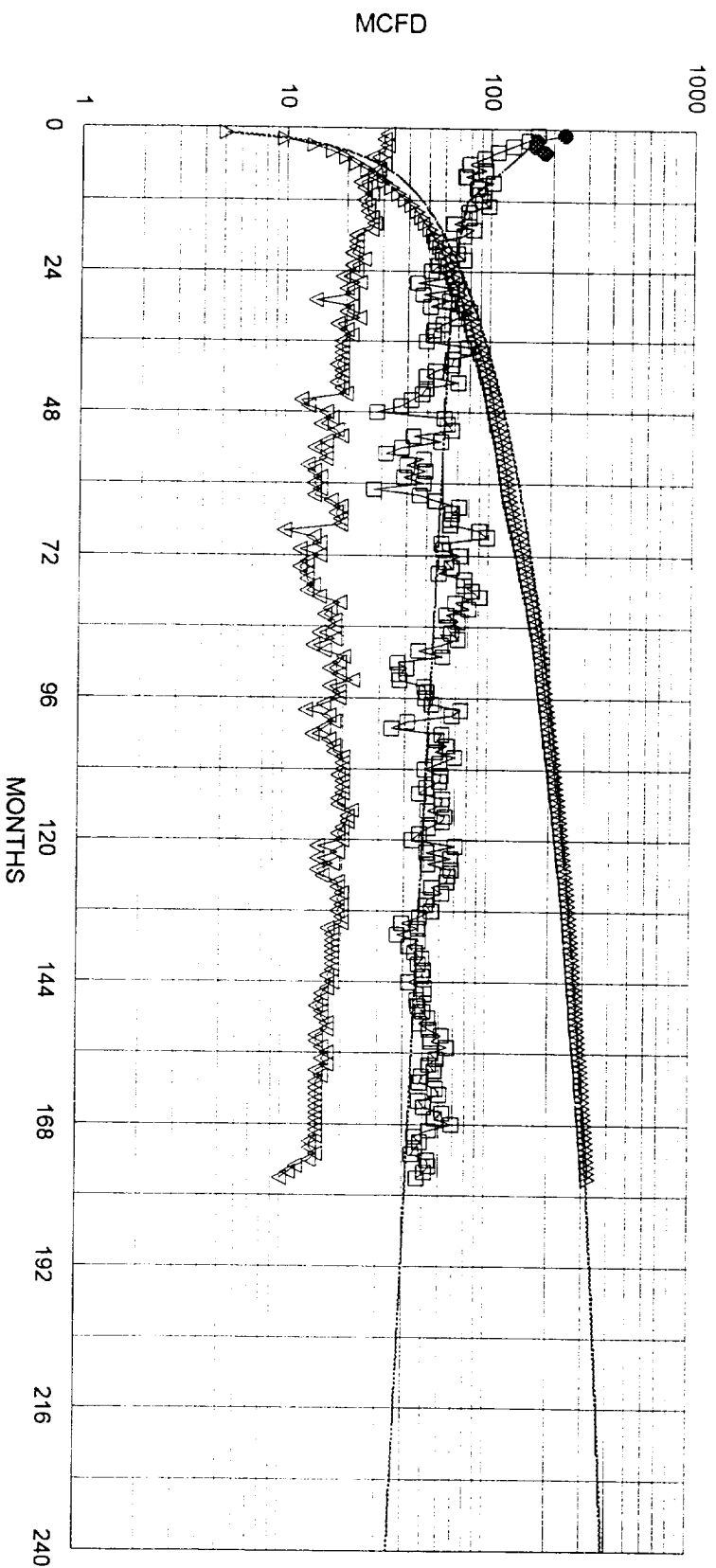
TELEPHONE NO. (915) 686-5798

APPLICATION FOR DOWNHOLE COMMINGLING
Jicarilla K 14E, Unit Letter B, Section 11-T25N-R5W
Rio Arriba County, New Mexico

As shown in the attached production plot for offsets to the Jicarilla K 14E, 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). Furthermore, 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 procedure 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 MESAVERDE PRODUCTION

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



NORMALIZED AVERAGE PER WELL & EXPECTED NEW WELL AVG.

536 MMCF EUR
389 MMCF IN 20 YRS
20 MCFD E.L.
0.0278 bbl/mcf oil yield

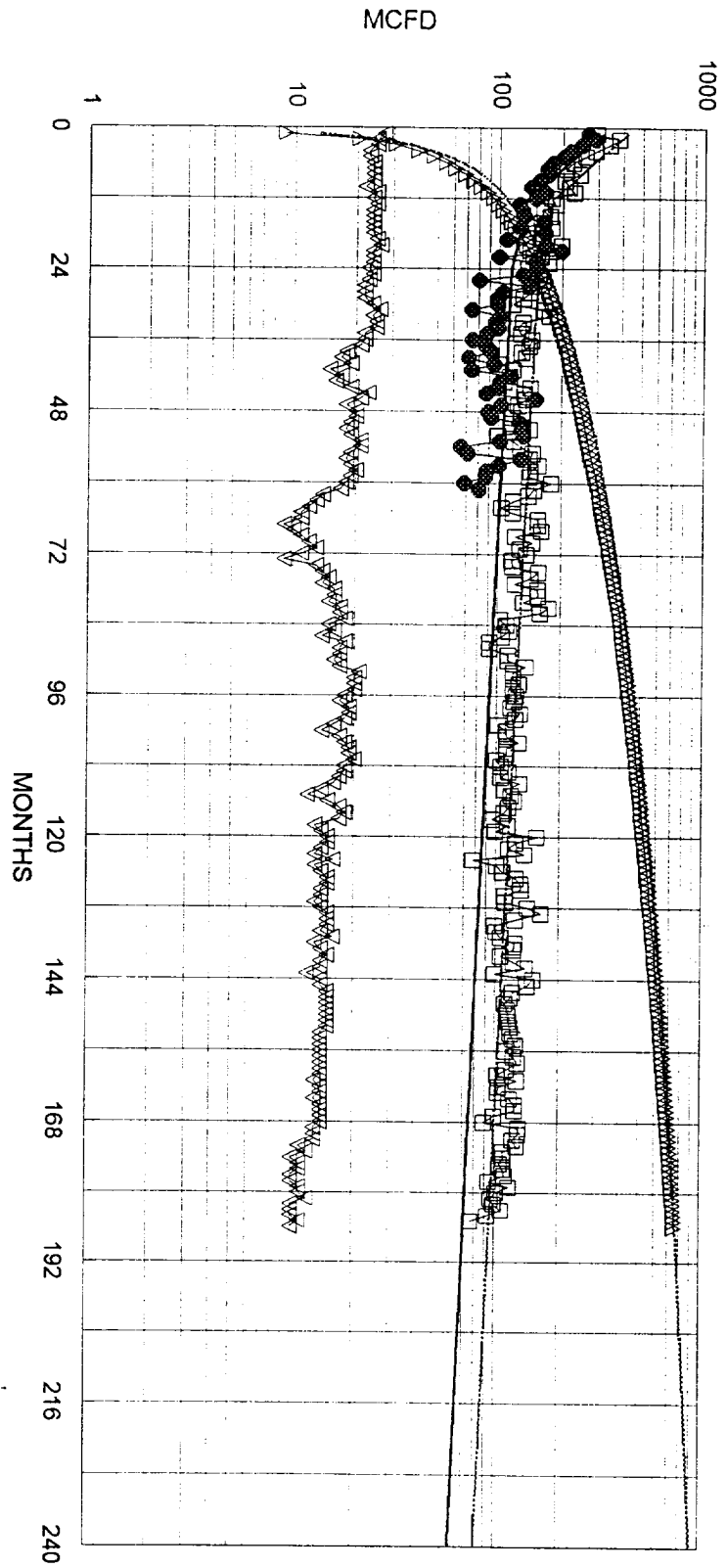
192 MCFD IP
60% DECLINE, 1ST 12 MONTHS
15% DECLINE, NEXT 12 MONTHS
3.5% FINAL DECLINE

NEW RECOMPLETIONS IN 1997:

JICARILLA K 10	1D-25N-5W	JICARILLA K 15	1I-25N-5W
JICARILLA K 10E	1K-25N-5W	JICARILLA K 15E	1A-25N-5W
JICARILLA K 11	2E-25N-5W		
JICARILLA K 11E	2B-25N-5W		

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

THIS WELL IS EXPIRING
10/31/97 IN PRODUCTION OR
REVERSE SIDE

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

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1. TYPE OF WORK

DRILL ☒

DEEPEN ☐

2. TYPE OF WELL

OIL WELL ☐

GAS WELL ☒

OTHER

SINGLE ZONE ☐

MULTIPLE ZONE ☐

3. NAME OF OPERATOR

Conoco Inc.

4. ADDRESS AND TELEPHONE NO

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

915-686-5794

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

At surface

1190' FNL & 1580' FEL

At proposed prod. zone

1190' FNL & 1580' FEL

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

7. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drilg. unit line, if Any)

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED
TO THIS WELL

8. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH

20. ROTARY OR CABLE TOOLS

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

6713' 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#	7456'	1085 sxs, circ.

It is proposed to drill vertical wellbore to be downhole commingled in the Blanco Mesaverde and Basin Dakota Pools following the acquisition of sufficient production test data for allocation purposes. A downhole commingling application will be filed with the BLM and NMOCDD 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

SIGNED

TITLE

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.

Oil and Gas Lease
Section 17
Oil and Gas Lease
Section 17
Oil and Gas Lease
Section 17

Oil Conservation 01/13/01
PO Box 2088
Santa Fe, NM 87504-2088

Oil and Gas Lease
Section 17
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Section 17

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APC Number	72319/71599	Pool Name	Blanco Mesaverde/Basin Dakota
Property Code	18023	Property Name	JICARILLA K
CGA ID No	005073	Operator Name	CONOCO, INC.
		Well Number	14E
		Elevation	6713'

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
B	11	25N	5W		1190	North	1580	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
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						
320									

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

5273.40'	1190'	1580'	5280.00'	5270.76'
OPERATOR CERTIFICATION				
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.				
Signature				
Mike L. Mankin				
Printed Name				
Right-of-way Agent				
Title				
5-5-98				
Date				
SURVEYOR CERTIFICATION				
I hereby certify that the well location shown on this plat is plotted from field notes of actual surveys made by me 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				
Professional Surveyor				

Jicarilla K #14E
Section 11, T-25-N, R-5-W, B
Rio Arriba, New Mexico

RE: Downhole Commingle C107A Application

Notification of Offset Operators:

Amoco
PO Box 800
Denver, CO 80201

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