

DISTRICT I
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

DISTRICT II
511 South First St. Artesia NM 88210-2835

OIL CONSERVATION DIVISION

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

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

Jicarilla B

#13M

Section 36, T-26-N, R-4-W, D

Rio Arriba

Lease

Well No

Unit Ctr Sec 1 wp Hga

County

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)	5818-6282'		7908-8132'
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)	a	a
Oil Zones - Artificial Lift	643		1087
Gas & Oil - Flowing	b (Original)	b	b
All Gas Zones	1322		2477
6 Oil Gravity (°API) or Gas BT Content	1281		1308
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 last production	Date Rates	Date Rates	Date Rates
- If Producing date and oil/gas/water rates of recent test (within 60 days)	Anticipated 1st Yr average 183 MCFD, 1.4 BOPD	Date Rates	Anticipated 1st Yr Average 288 MCFD, 4.5 BOPD
8 Fixed Percentage Allocation Formula - % for each zone			

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?
If not, have all working, overriding, and royalty interests been notified by certified mail?
Have all offset operators been given written notice of the proposed downhole commingling?

X Yes ___ No
___ Yes ___ No
___ 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. X 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

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 2/24/98

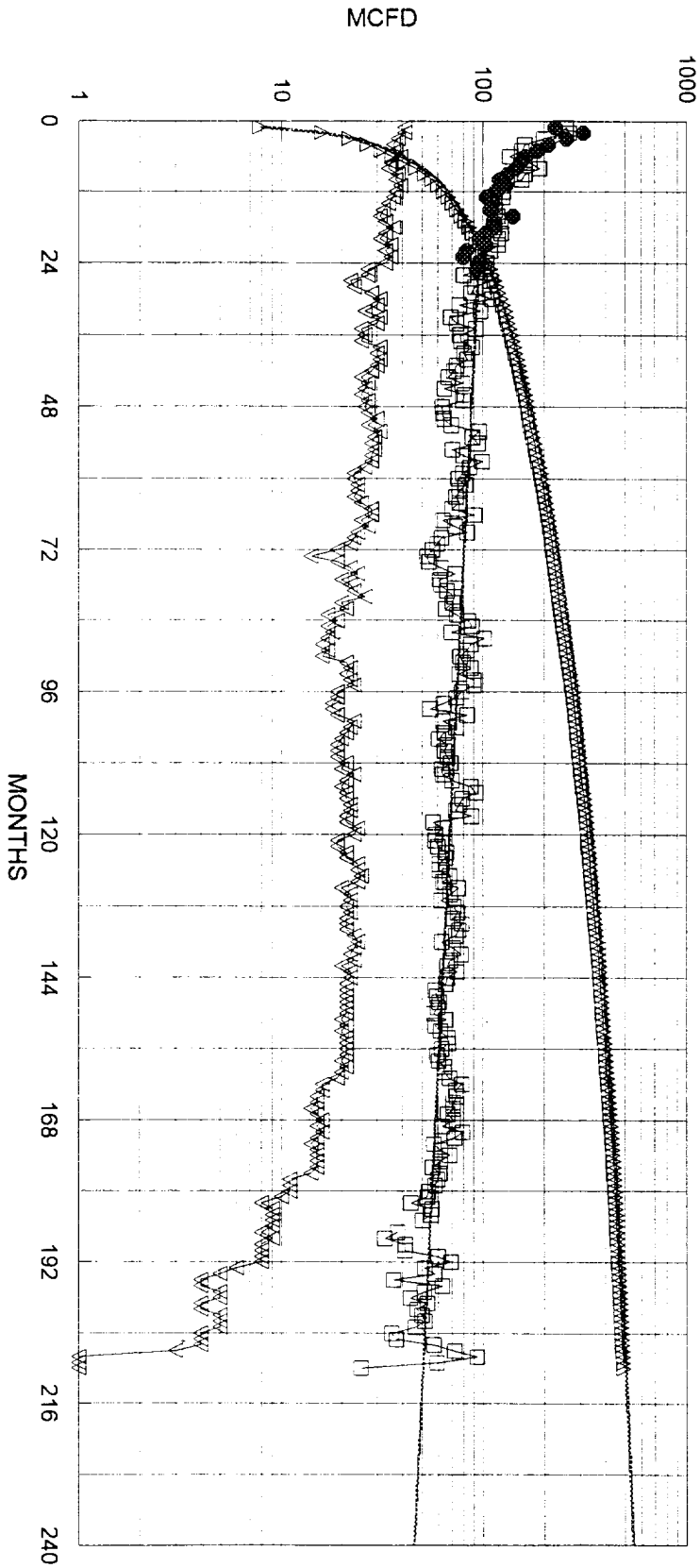
TYPE OR PRINT NAME Kay Maddox TELEPHONE NO. (915) 686-5798

RECEIVED
APR 27 1998
OIL CON. DIV.
DIST. 3

APPLICATION FOR DOWNHOLE COMMINGLING
Jicarilla B 13M, Unit Letter D, Section 36-T26N-R4W
Rio Arriba County, New Mexico

As shown in the attached production plot for offsets to the Jicarilla B 13M, 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 (549 MMCF recovery in 20 years, 777 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 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
41 WELLS SINCE 1980; TOWNSHIP 26N RANGE 4W



NORMALIZED AVG. & EXPECTED AVG. NEW COMPLETION RATES:

777 MMCF EUR
549 MMCF IN 20 YR
20 MCFD E.L.
0.0077 bbl/mcf oil yield

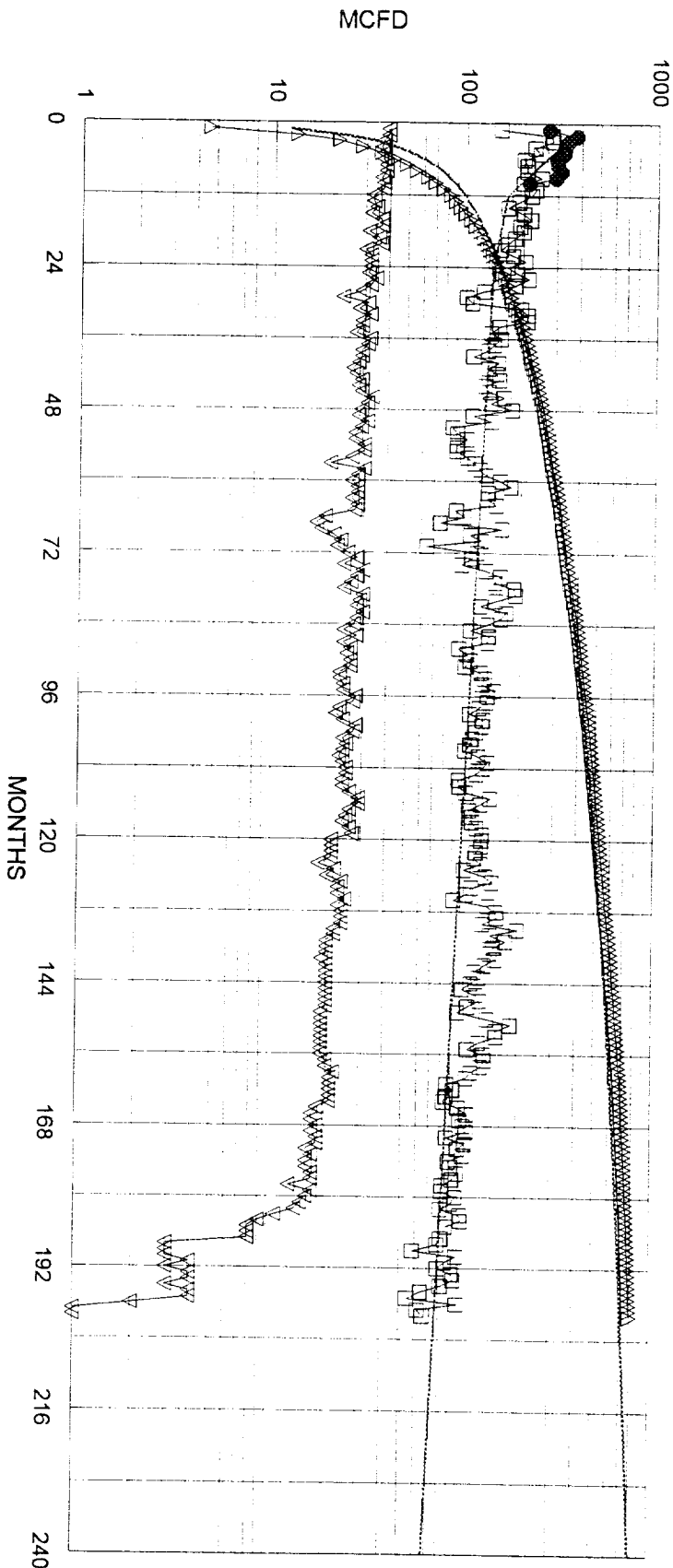
280 MCFD IP
60% DECLINE, 1ST 12 MONTHS
15% DECLINE, NEXT 12 MONTHS
4.0% FINAL DECLINE

RECENT WELLS IN 26N 04W (1993 AND NEWER)

JICARILLA A	13	13E-26N-4W	JICARILLA E	10E	22B-26N-4W
JICARILLA E	7E	15B-26N-4W	JICARILLA A	10	23C-26N-4W
JICARILLA E	8M	15K-26-4W	JICARILLA B	9A	26D-26N-4W
JICARILLA E	9	16B-26N-4W			

NORMALIZED DAKOTA PRODUCTION

39 WELLS SINCE 1980: 26N-4W (MERIT JICARILLA A,B,&E OFFSETS)



— FIT MCFD ▽ NORMALIZED MCFD ▽ NORM CUM MMCF
 ▽ WELLS ON PRODUCTION --- FIT CUM MMCF ● JICARILLA E 7E & 8M

NORMALIZED AVG AND EXPECTED NEW COMPLETION AVG:

1221 MMCF EUR
 804 MMCF IN 20 YRS
 20 MCFD E.L.
 0.0167 bbl/mcf oil yield

410 MCFD IP
 60% DECLINE, 1ST 12 MONTHS
 15% DECLINE, NEXT 12 MONTHS
 4% FINAL DECLINE

RECENT WELLS (1993 AND NEWER):

JICARILLA E 7E 15K-26N-4W
 JICARILLA E 8M 15B-26N-4W

**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

1. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO Cont. 106	
2. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINKER <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Jicarilla	
3. NAME OF OPERATOR Conoco Inc.		7. UNIT AGREEMENT NAME	
4. ADDRESS AND TELEPHONE NO 10 Desta Dr. Ste 430E, Midland, Tx. 79705-4500		8. FARM OR LEASE NAME WELL NO Jicarilla B-13M	
9. LOCATION OF WELL (Report location clearly and in accordance with any State requirements *) At surface 1060' FNL & 1040' FWL At proposed prod. zone 1060' FNL & 1040' FWL		9. API WELL NO	
10. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*		10. FIELD AND POOL, OR WILDCAT Blanco MV/Basin Dakota	
11. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT (Also to nearest drlg. unit line, if Any)		11. SEC. T. R. M. OR BLK AND SURVEY OR AREA Sec. 36, T26N, R4W	
12. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.		12. COUNTY OR PARISH 13. STATE Rio Arriba NM	
13. ELEVATIONS (Show whether DF, RT, GR, etc.) 7089' GR		14. NO. OF ACRES IN LEASE 15. NO. OF ACRES ASSIGNED TO THIS WELL 320	
16. PROPOSED DEPTH 8432'		17. ROTARY OR CABLE TOOLS Rotary	
18. APPROX. DATE WORK WILL START*		1/1/98	

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	K-55, 9-5/8"	36#	300'	170 sxs, circ.
8-3/4"	K-55, 7"	23#	3973'	555 sxs, circ.
6-1/4"	K-55, 4-1/2"	11.6#	8132'	515 sxs, toc @ 3500'

It is proposed to drill a 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 OCD prior to commingling. An NOS was filed 1/29/97. The well will be drilled and equipped according to the following additional attachments:

1. Well Location & Acreage Dedication Plat (C-102).
2. Proposed Well Plan Outline.
3. Cementing Plan.
4. Blowout Preventer Hookup.
5. Surface Use Plan with Production Facility layout.
6. 7.5" quadrangle Topo Map.
7. Wellsite Layout.
8. Cut & Fill Diagram.
9. Access Road Plat.

This application includes ROW's for the well pad 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.

SIGNED Mike L. Mankin TITLE Right of Way Agent DATE 12/14/97
 (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 Hector P. Villalobos TITLE Area Manager DATE 1/5/98

***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.

10. Hobbs, NM 88241-1980
II
Drawer 80, Artesia, NM 88211-9719
District III
1000 Rio Brazos Rd., Alameda, 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

Form O-22
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

APL Number		Pool Code	Pool Name
		71599/72319	Basin Dakota/Blanco Mesaverde
Property Code	Property Name		Well Number
18018	Jicarilla B		13M
OGRID No.	Operator Name		Elevation
05073	CONOCO, INC.		7089'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
D	36	26-N	4-W		1060	North	1040	West	R.A.

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	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.
W/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

16		17 OPERATOR CERTIFICATION	
		<p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>Mike L. Mankin</u> Signature Mike L. Mankin Printed Name Right-of-Way Agent Title 11/25/97 Date</p>	
18 SURVEYOR CERTIFICATION			
<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>12/17/96 Date of Survey</p> <p><u>NEALE C. EDWARDS</u> Signature and Seal of Professional Surveyor NEW MEXICO 6857 Certificate Number</p>			

Jicarilla B # 13M
Section 36, T-26-N, R-4-W,
Rio Arriba County, TX

RE: Application C-107A to Downhole Commingle

Notification of Offset Operators:

Beartooth Oil & Gas
PO Box 2564
Billings, Montana 59103

Chateau Oil & Gas
2515 McKinney Ave STE 840
Dallas, TX 75201

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