

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
911 South First St Artesia NM 88210-2835

OIL CONSERVATION DIVISION

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

DISTRICT III
1000 Rio Brazos Rd Aztec NM 87410-1693

APPLICATION FOR DOWNHOLE COMMINGLING

APPROVAL PROCESS

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☐ YES ☒ NO

Conoco Inc.

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

Jicarilla E

#9M

Section 16, T-26-N, R-4-W, 8

Rio Arriba

Lease

Well No

Unit Ltr Sec Two Rge

Spacing Unit Lease Types (check 1 or more)

OGRID NO 005073

Property Code

API NO

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)	5570-6038'		7625-7854'
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	554		1092
Gas & Oil - Flowing	b (Original)	b	b
All Gas Zones	1457		2635
Estimated Or Measured Original			
6 Oil Gravity ("API) or Gas BT Content	1280		1332
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
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 Anticipated 1st Yr average 183 MCFD, 1.4 BOPD	Date Rates	Date Rates Anticipated 1st Yr Average 268 MCFD, 4.5 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 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 4/24/98

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

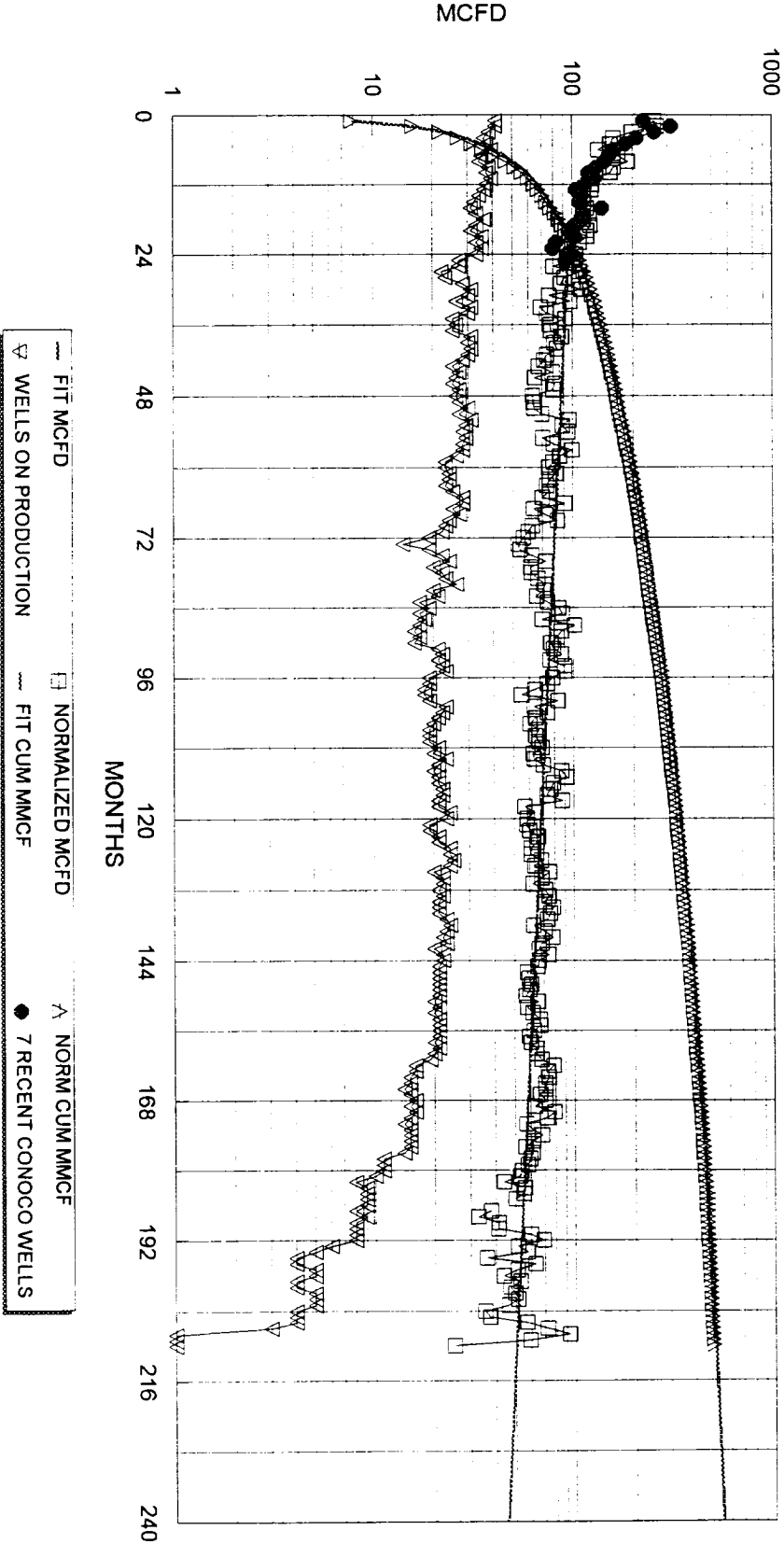
RECEIVED
APR 27 1998
OIL CON. DIV.
DIST. 3

APPLICATION FOR DOWNHOLE COMMINGLING

Jicarilla E 9M, Unit Letter G, Section 16-T26N-R4W
Rio Arriba County, New Mexico

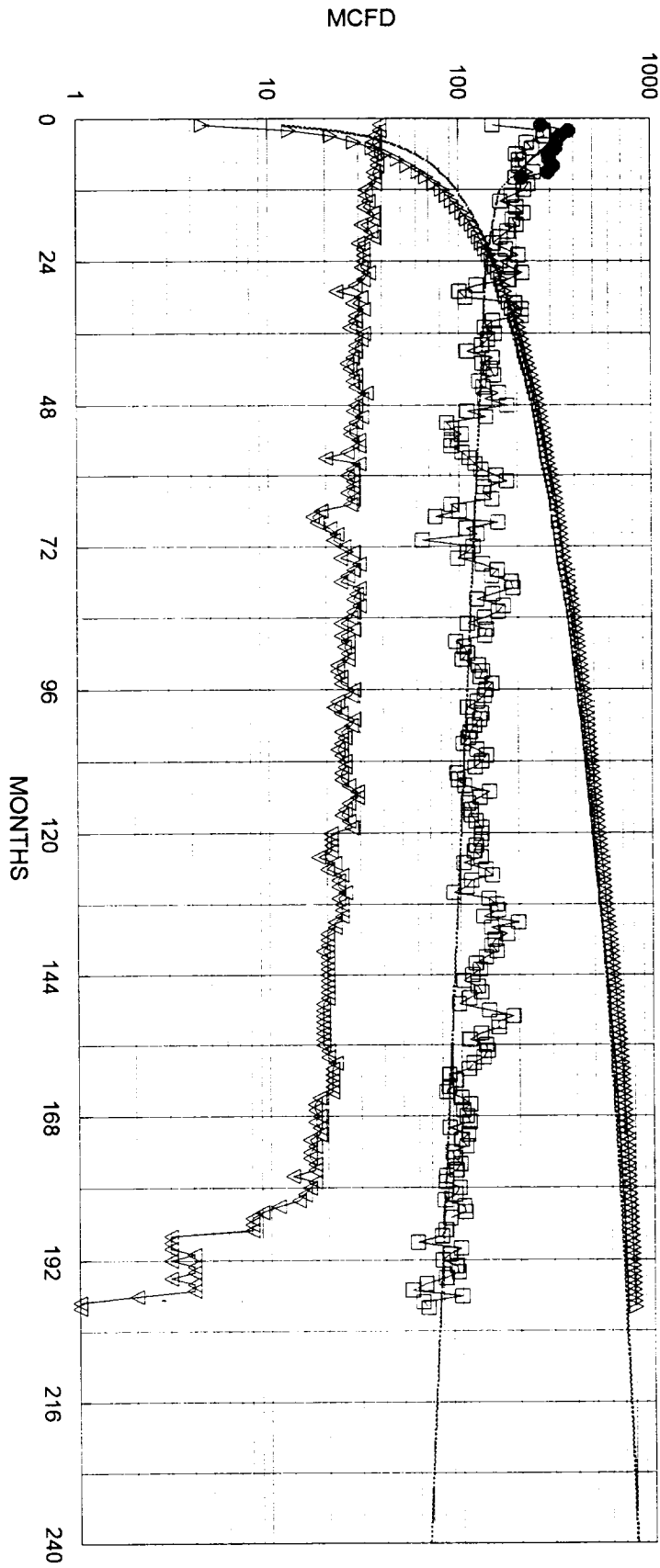
As shown in the attached production plot for offsets to the Jicarilla E 9M, estimated ultimate recoveries and initial production rates from infill wells to the Dakota and Mesaverde formations are clearly marginal in this area. Mesaverde estimated recoveries in particular do not justify drilling stand alone wells (549 MMCF recovery in 20 years, 777 MMCF ultimate recovery). 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
41 WELLS SINCE 1980; TOWNSHIP 26N RANGE 4W



NORMALIZED AVG. & EXPECTED		AVG. NEW COMPLETION RATES:		RECENT WELLS IN 26N 04W (1993 AND NEWER)			
777 MMCF EUR	280 MCFD IP	JICARILLA A	13	13E-26N-4W	JICARILLA E	10E	22B-26N-4W
549 MMCF IN 20 YR	60% DECLINE, 1ST 12 MONTHS	JICARILLA E	7E	15B-26N-4W	JICARILLA A	10	23O-26N-4W
20 MCFD E.L.	15% DECLINE, NEXT 12 MONTHS	JICARILLA E	8M	15K-26-4W	JICARILLA B	9A	26D-26N-4W
0.0077 bbl/mcf oil yield	4.0% FINAL DECLINE	JICARILLA E	9	16B-26N-4W			

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



NORMALIZED AVG AND EXPECTED NEW COMPLETION AVG:		RECENT WELLS (1993 AND NEWER):	
1221 MMCF EUR	410 MCFD IP	JICARILLA E 7E	15K-26N-4W
804 MMCF IN 20 YRS	60% DECLINE, 1ST 12 MONTHS	JICARILLA E 8M	15B-26N-4W
20 MCFD E.L.	15% DECLINE, NEXT 12 MONTHS		
0.0167 bbl/mcf oil yield	4% FINAL DECLINE		

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 ☒

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

1675' FNL & 1845' FEL

At proposed prod. zone

1675' FNL & 1845' 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 drlg. unit line, if Any)

8. NO OF ACRES IN LEASE

9. NO. OF ACRES ASSIGNED
TO THIS WELL

320

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

11. PROPOSED DEPTH

8159'

12. ROTARY OR CABLE TOOLS

Rotary

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

6764' GR

14. APPROX. DATE WORK WILL START *

4/15/98

15. 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'	160 sxs, circ.
8-3/4"	K-55, 7"	23#	3883'	485 sxs, circ.
6-1/4"	K-55, 4-1/2"	10.5#	7859'	400 sxs, toc @ 3700'

It is proposed to drill verical 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 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.

SIGNED Mike L. Mankin 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.