

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

1943

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

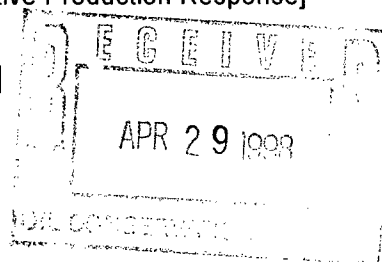
Check One Only for [B] and [C]

[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 Southl 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

OIL CONSERVATION DIVISION

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

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

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
#13 E

Unit Ltr Sec Twp Rge
Section 11, T-25-N, R-5-W, L

County
Rio Arriba

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)	5247-5608'		7242-7472'
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 b(Original) 1322	a. b. 	a. 950 b. 2809
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 last production Note For new zones with no production history applicant shall be required to attach production estimates and supporting data	Date Rates	Date Rates	Date Rates
• 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
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.

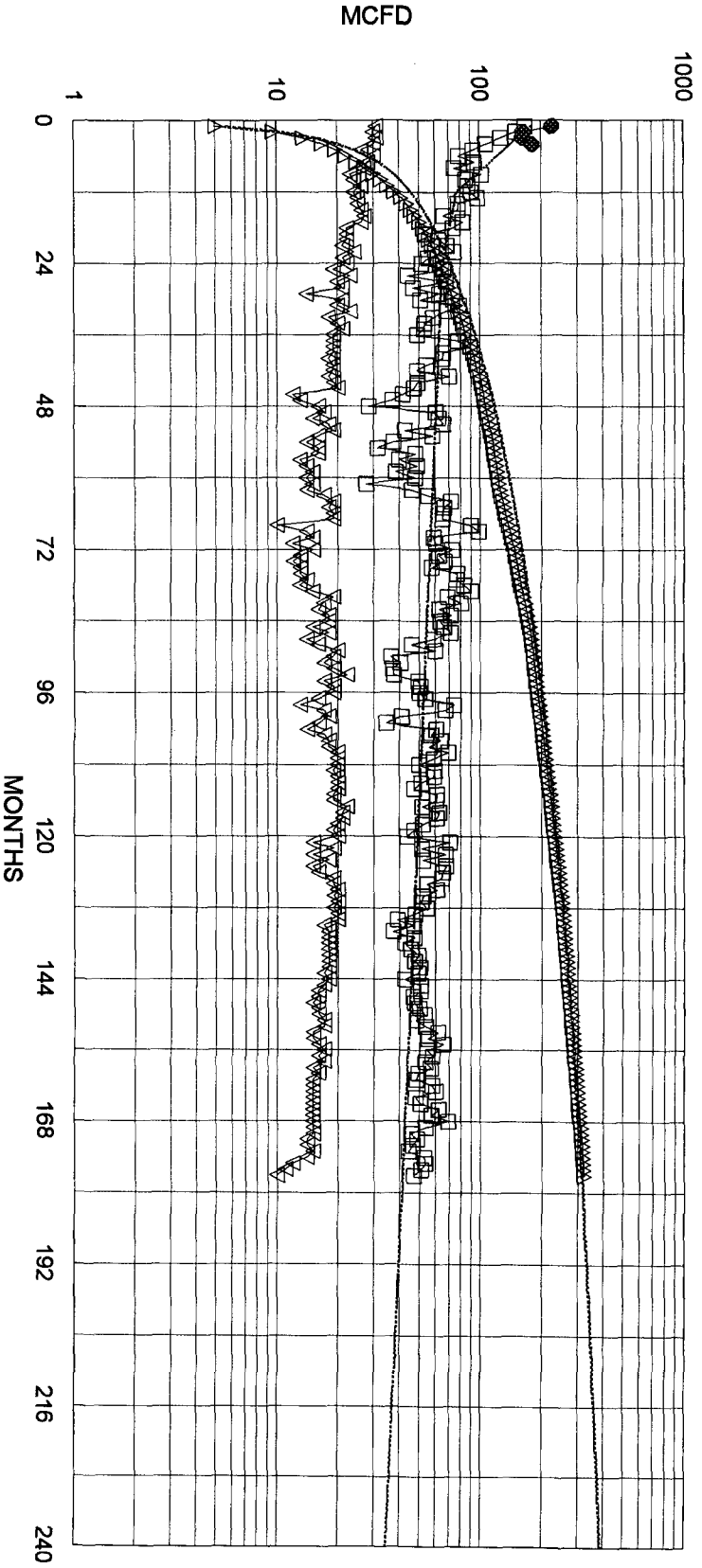
I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Kay Maddox TITLE Regulatory Agent DATE 4-24-98

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

NORMALIZED MESAVERDE 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

NORMALIZED AVERAGE PER WELL & EXPECTED NEW WELL AVG.

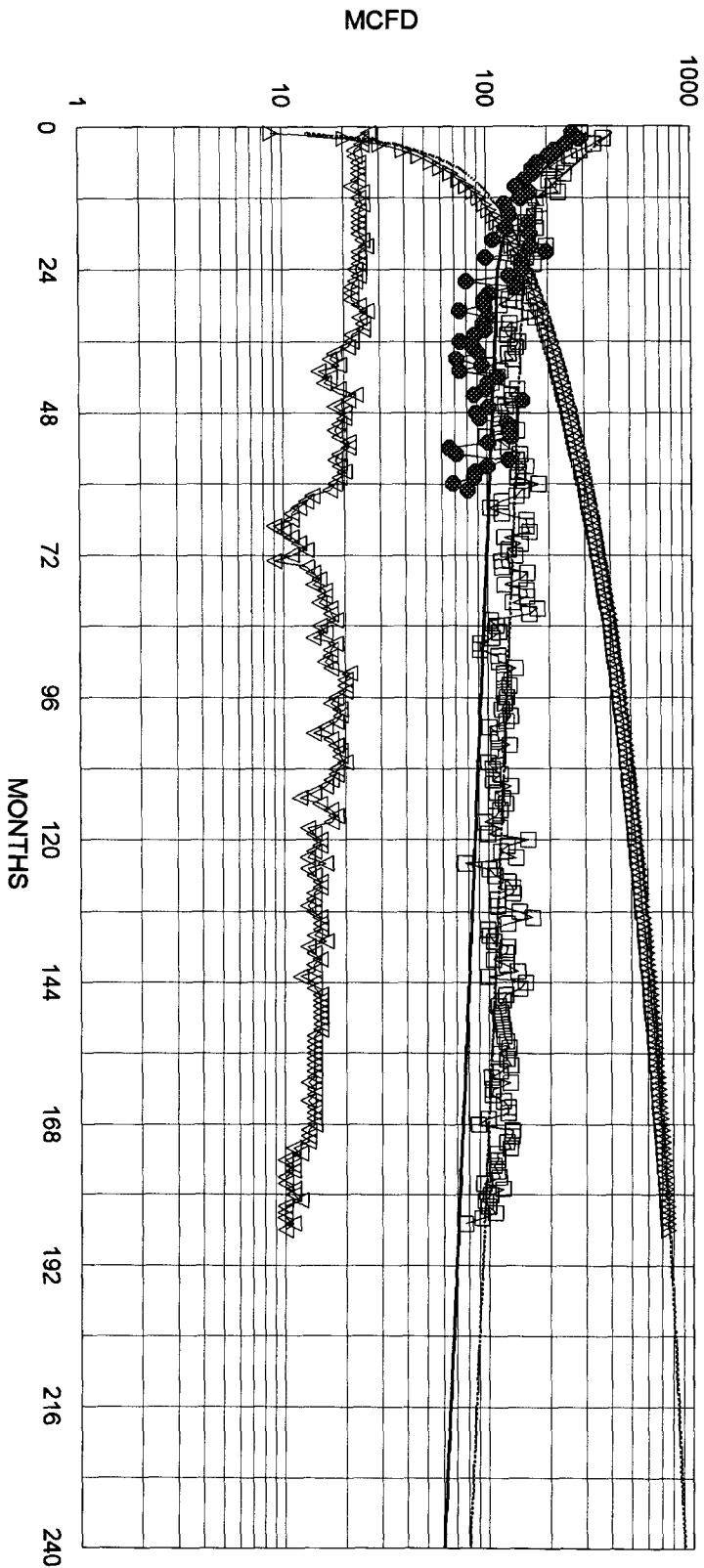
536 MMCF EUR
 389 MMCF IN 20 YRS
 20 MCFD E.L.
 0.0278 bbl/mcf oil yield

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	11-25N-5W
JICARILLA K 10E	1K-25N-5W	JICARILLA K 16E	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

APPLICATION FOR DOWNHOLE COMMINGLING

Jicarilla K 13E, Unit Letter L, Section 11-T25N-R5W
Rio Arriba County, New Mexico

As shown in the attached production plot for offsets to the Jicarilla K 13E, 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.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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

At surface

1450' FSL & 940' FWL

At proposed prod. zone

1450' FSL & 940' FWL

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

7. LEASE DESIGNATION AND SERIAL NO

CONT 145

8. IF INDIAN, ALLOTTEE OR TRIBE NAME

JICARILLA

9. UNIT AGREEMENT NAME

10. FARM OR LEASE NAME WELL NO

JICARILLA K #13E

11. API WELL NO

12. FIELD AND POOL, OR WILDCAT

Blanco MV/Basin Dakota

13. SEC. T. R. M., OR BLK. AND SURVEY OR AREA

Sec 11, T25N, R5W

14. COUNTY OR PARISH

Rio Arriba

15. STATE

NM

16. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if Any)

17. NO. OF ACRES IN LEASE

18. NO. OF ACRES ASSIGNED TO THIS WELL

319.5

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

20. PROPOSED DEPTH

7772'

21. ROTARY OR CABLE TOOLS

Rotary

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

6766' GR

23. APPROX. DATE WORK WILL START*

3/31/98

24

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#	7472'	1085 sxs, circ.

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 NMOCD prior to commingling. An NOS was filed 10/31/97. The well will be drilled and equipped according to the following additional 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 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.

24.

SIGNED Mike L. Mankin

Mike L. Mankin

TITLE Right of Way Agent

DATE 3/9/98

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number		*Pool Code	*Pool Name
		72319/71599	Blanco Mesaverde/Basin Dakota
*Property Code	*Property Name		*Well Number
18023	JICARILLA K		13E
*GRID No.	*Operator Name		*Elevation
005073	CONOCO, INC.		6766'

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
L	11	25N	5W		1450	South	940	West	RIO ARriba

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	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
319.5			

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	
		I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
		Signature <u>Mike L. Mankin</u>	
		Printed Name <u>Mike L. Mankin</u>	
		Title <u>Right-of-Way Agent</u>	
		Date <u>2-3-97</u>	
		¹⁸ 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	
		Certificate Number	

Jicarilla K # 13E
Section 11, T-25-N, R-5-W, L
Rio Arriba, New Mexico

RE: Downhole Commingle C107A Application

Notification of Offset Operators:

Amoco, Inc.
PO Box 800
Denver, CO 80201

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