

DISTRICT I  
Oil and Gas Division, NM 88241-1950

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

DISTRICT III  
1005 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

Conoco Inc

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

Jicarilla E

# 12M

Section 22, T-26-N, R-4-W, 0

Rio Arriba

Lease

Well No

Unit Ltr Sec Twp Rge

County

GRID NO 005073 Property Code 18022 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)	5590-6059'		7634-7868'
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) 640	a	a
Oil Zones - Artificial Lift Gas & Oil - Flowing All Gas Zones Estimated Current Measured Current Estimated Or Measured Original	b(Original) 1316	b	b
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
• 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? ☒ 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

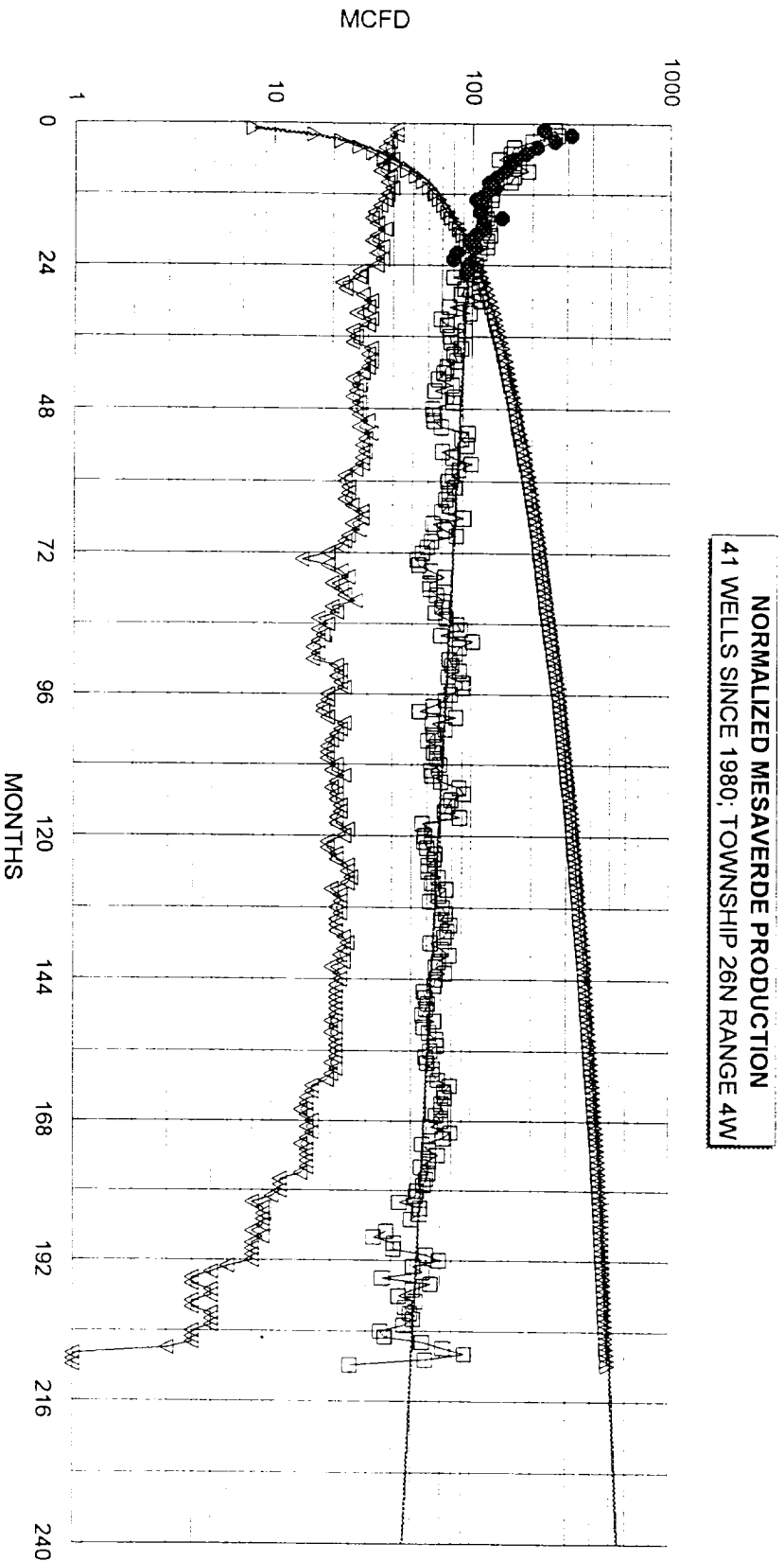
TYPE OR PRINT NAME Kay Maddox TELEPHONE NO. (915) 686-5798

RECEIVED  
MAY 15 1998  
OIL CON. DIV.  
DIST. 3

**APPLICATION FOR DOWNHOLE COMMINGLING**

Jicarilla E 12M, Unit Letter O, Section 22-T26N-R4W  
Rio Arriba County, New Mexico

As shown in the attached production plot for offsets to the Jicarilla B 12M, 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 AVG. & EXPECTED AVG. NEW COMPLETION RATES:**

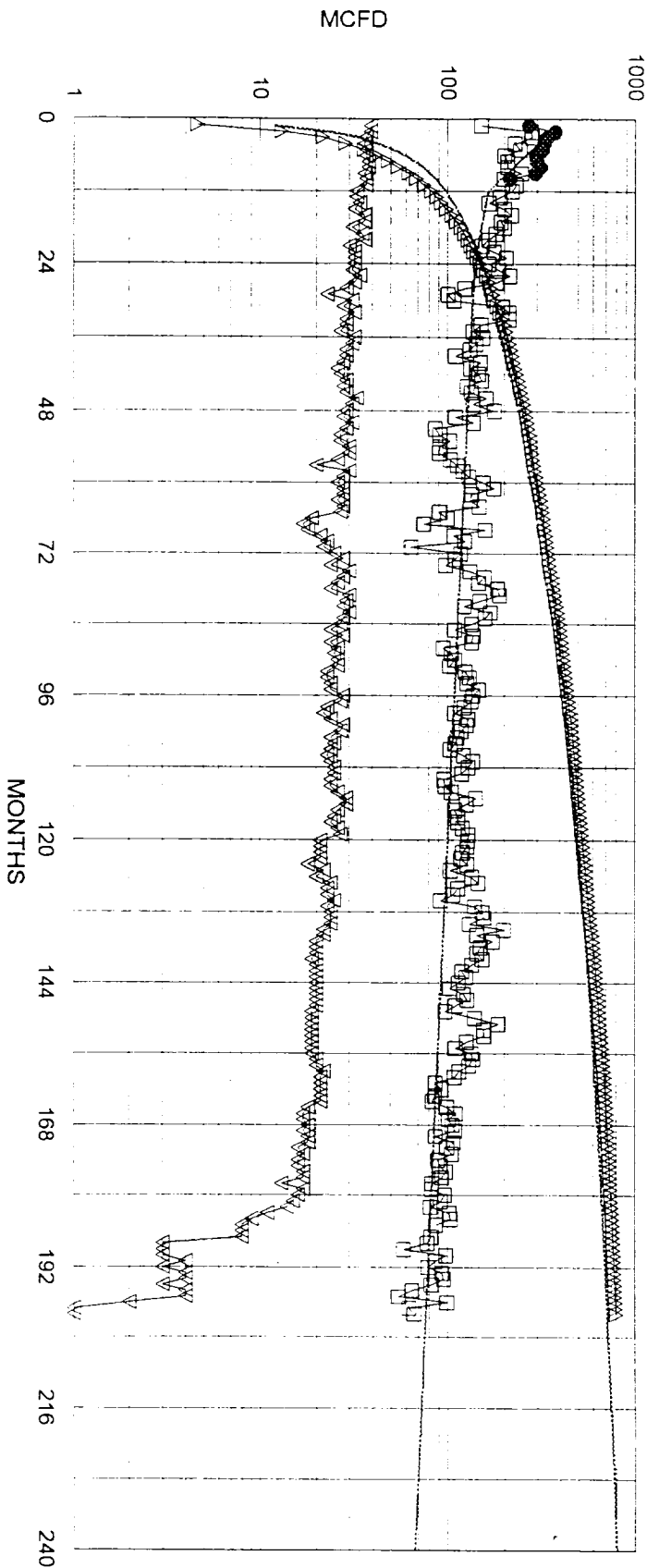
777 MMCF EUR  
549 MMCF IN 20 YR  
20 MCFD E.L.  
0.0077 bbl/mcf oil yield

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	23O-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

NEW MEXICO  
Energy, Minerals & Natural Resources Department  
WELL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

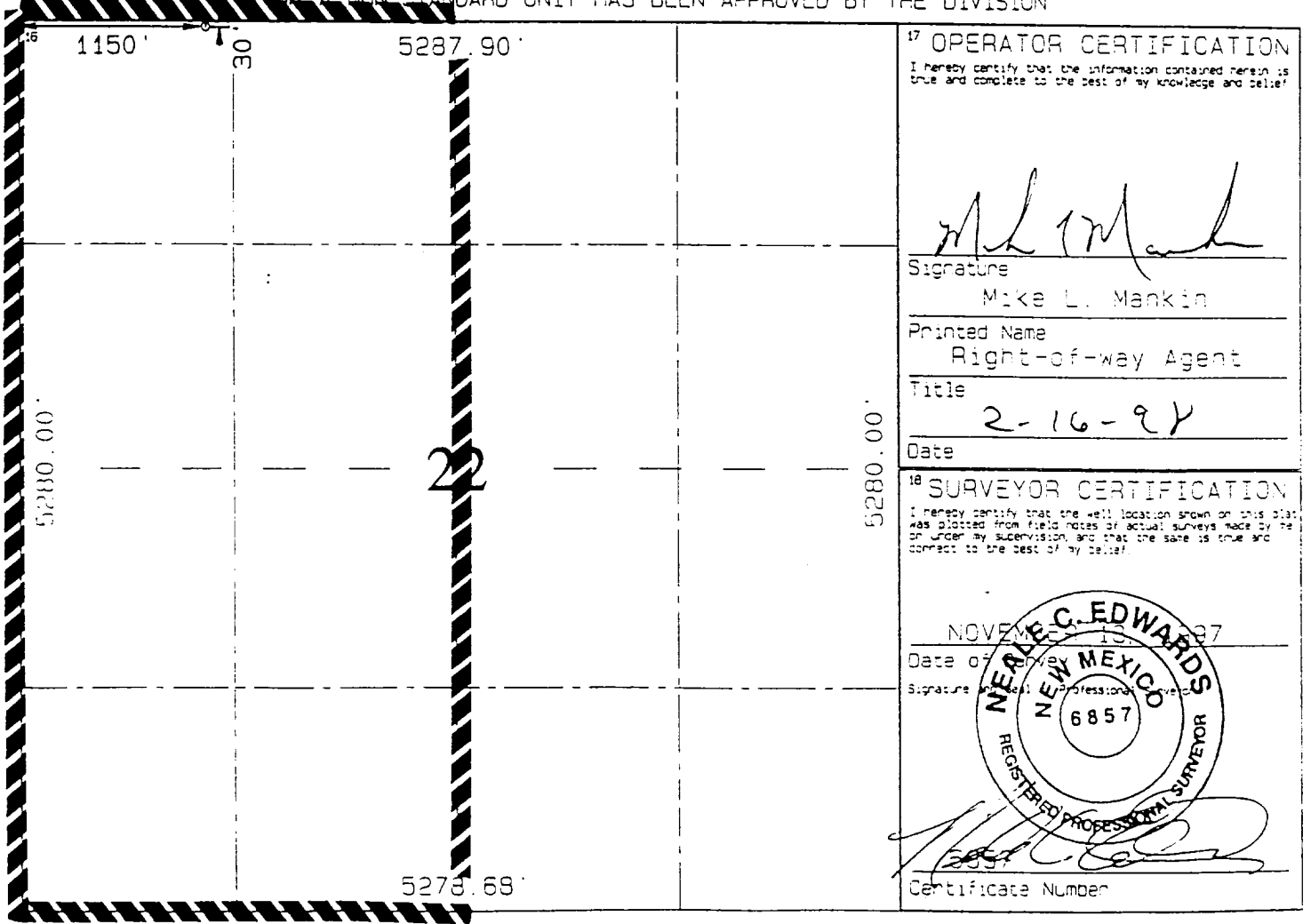
Form 10-1  
10-1-10  
Produced Pursuant to  
Subchapter A, Article 10, Section 1-10  
State Lease - 10-1-10  
Oil Lease - 10-1-10

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

Well Number		Prod. Code		Prod. Name	
		72319/71599		Blanco Mesaverde/Basin Dakota	
Property Code		Property Name			Well Number
18022		JICARILLA E			12M
CONPRO No		Operator Name			Elevation
005073		CONOCO, INC.			6797
10 Surface Location					
UL or Lot No	Section	Township	Range	Lot No	Feet from the North/South Line
0	22	26N	4N		30
				Feet from the East/West Line	County
				1150	West
				ARIZONA	
11 Bottom Hole Location If Different From Surface					
UL or Lot No	Section	Township	Range	Lot No	Feet from the North/South Line
				Feet from the East/West Line	County
Dedicated Acres		Joint or Infill	Consolidation Code	Order No.	
320				Non Standard Location has been applied for	

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



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0136  
Expires February 23, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1. TYPE OF WELL: ☒ DRILL ☐ DEEPEN

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: 30' FNL & 1150' FWL

At proposed prod. zone: 30' FNL & 1150' FWL

5. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE:

6. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any):

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

8. ELEVATIONS (Show whether DF, RT, GR, etc.): 6797' GR

9. PROPOSED CASING AND CEMENTING PROGRAM

10. PROPOSED DEPTH: 8168'

11. ROTARY OR CABLE TOOLS: Rotary

12. APPROX. DATE WORK WILL START: 4/15/98

13. COUNTY OR PARISH: Rio Arriba

14. STATE: NM

15. FIELD AND POOL, OR W/LOCAT: Blanco MV/Basin Dakota

16. SEC. T. R. M. OR BLK AND SURVEYOR AREA: Sec. 22, T26N, R4W

17. NO. OF ACRES IN LEASE

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Jicarilla E #12M  
Section 22, T-26-N, R-4-W, O  
Rio Arriba, New Mexico

RE: Downhole Commingle C107A Application

**Notification of Offset Operators:**

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

Burlington Resources  
PO Box 4289  
Farmington, NM 87499

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

CONDITIONS OF APPROVAL FOR DOWNHOLE COMMINGLING

Operator Conoco Inc. Well Name Jic. 104 E #12M

1. The individual production zones will be tested every three years, or more often if production rates indicate a change to allocation factors, to verify that the allocation factors and methods remain proper.
2. Production from downhole commingled wells are to be reported with an alpha character, "C" (ie C1, C2, etc).
3. The following modifications to your downhole commingling program are to be made :

Submit production allocation formula upon completion of testing.

Submit well bore diagram upon completion of well.