

DHC  
/352

8/21/96

Southern

Rockies

Business

Unit

July 29, 1996

Mr. William J. LeMay, Director  
New Mexico Oil Conservation Division  
2040 S. Pacheco Street  
P. O. Box 6429  
Santa Fe, NM 87505

**Application for Exception to Rule 303-A**  
**Downhole Commingling**  
**Jicarilla Contract 146 Well #11E**  
**Unit O Section 4-T25N-R5W**  
**Basin Dakota and Blanco Mesaverde Pools**  
**San Juan County, New Mexico**

Enclosed please find an administrative application form (C-107-A) and attachments for downhole commingling for the captioned well. By copy of this application by certified mail, return receipt requested, Amoco is notifying all offset operators in the formations captioned above as well as all affected interest owners if the ownership of those formations is not common. The Division Director may approve the proposed downhole commingling in the absence of a valid objection from any offset operator or any interest owner in those instances where ownership is not common in the zones to be commingled within 20 days after the receipt of the application if, in his opinion, waste will not result thereby, and correlative rights will not be violated.

Should there be questions concerning this matter, please contact me at (303) 830-5344.

Sincerely,

Pamela W. Staley

Enclosures

cc: Steve Smethie  
Patty Haefele  
Wellfile  
Proration File

Frank Chavez, Supervisor  
NMOCD District III  
1000 Rio Brazos Road  
Aztec, NM 87410

Robert Kent  
Bureau of Land Management  
435 Montano NE  
Albuquerque, NM 87107

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

OIL CONSERVATION DIVISION

APPROVAL PROCESS:

DISTRICT II  
811 South First St., Artesia, NM 88210-2835

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

☒ Administrative ☐ Hearing

DISTRICT III  
1000 Rio Brazos Rd. Aztec, NM 87410-1693

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE  
☒ YES ☐ NO

Amoco Production Company

P.O. Box 800 Denver, CO 80201

Operator  
Jicarilla Apache 146

11E

Address  
Unit O Section 4-T25N-R5W

Rio Arriba

Lease

Well No.

Unit Ltr. - Sec Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 000778 Property Code 000738 API NO. 3003922520 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)	5190' - 5350'		7183' - 7369'
3. Type of production (Oil or Gas)	GAS		GAS
4. Method of Production (Flowing or Artificial Lift)	FLOWING		FLOWING
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated or Measured Original	(Current) a. 851 PSI  (Original) b. 1402 PSI	a.  b.	a. 1212 PSI  b. 2976 PSI
6. Oil Gravity (° API) or Gas BTU Content	1283 BTU		1264 BTU
7. Producing or Shut-In?	PRODUCING		PRODUCING
Production Marginal? (yes or no)  • If Shut-In, give data 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  • If Producing, give date and oil/gas/water rates of recent test (within 60 days)	YES  Date: Rates:  6/96 111 MCFD 0.4 BCPD 0.90 BWPD	  Date: Rates:   Date: Rates:	NO  Date: Rates:  6/96 102 MCFD 0.7 BCPD 0.7 BWPD
8. Fixed Percentage Allocation Formula -% for each zone	Oil: 36 % Gas 52 %	Oil: % Gas %	Oil: 64 % Gas 48 %

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 other? ☒ Yes ☐ No

13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)

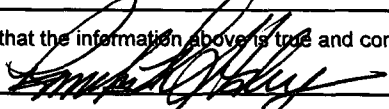
14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☒ Yes ☐ No JICARILLA APACHE 146

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  TITLE REGULATORY AFFAIRS REP DATE 7/29/96  
TYPE OR PRINT NAME PAMELA W. STALEY TELEPHONE NO. ( 303 ) 830-5344

## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088  
SANTA FE, NEW MEXICO 87501Form C-107  
Revised 10-1-7

All distances must be from the outer boundaries of the Section.

Operator <b>AMOCO PRODUCTION COMPANY</b>			Lease <b>JICARILLA CONTRACT 146</b>		Well No. <b>11E</b>
Unit Letter <b>0</b>	Section <b>4</b>	Township <b>25N</b>	Range <b>5W</b>	County <b>Rio Arriba</b>	
Actual Footage Location of Well: <b>980</b> feet from the <b>South</b> line and <b>1660</b> feet from the <b>East</b> line					
Ground Level Elev: <b>6726</b>	Producing Formation <b>Chacra-Mesaverde/Dakota</b>		Pool <b>Otero Chacra-Gonzales MV/ Basin Dakota</b>		Dedicated Acreage: <b>160/320</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

Sec.		4	
980'		1660'	

Scale: 1"=1000'

## CERTIFICATION

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

*R. A. Downey*  
Name

R. A. DOWNEY

Position

DISTRICT ENGINEER

Company

AMOCO PRODUCTION COMPANY

Date

SEPTEMBER 5, 1980

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 knowledge and belief.

Date Surveyed

July 29, 1980

Registered Professional Engineer  
and Land Surveyor

*Fred B. Kern Jr.*  
Fred B. Kern Jr.

Certificate No. 12

3950

For: zhab0b  
Engr: zhab0b

JICARILLA CONTRACT 146 11E

Operator- AMOCO PRODUCTION CO

300392252000DK 0042505-011EDK

APC\_WI - 1.00000000

CumG_70 -	0
CumO_70 -	0
CumGAS -	620510
CumOIL -	7020

gas, MCFD

DCLN	0.0508
CurrQ	NA
RemRes	1131452
EUR	1751962
Fit_date	NA

Reserves

Year

Last Op. Forecast by zhab0b in 04/1996

For: zhab0b

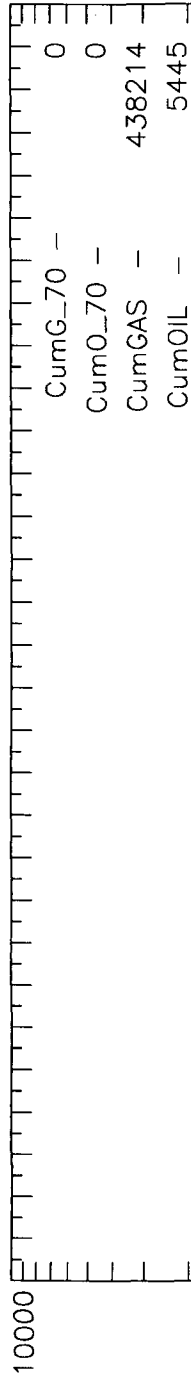
Engr: zhab0b

JICARILLA CONTRACT 146 11E

Operator— AMOCO PRODUCTION CO

300392252000MV 0042505—011EMV

APC\_WI — 1.0000000



DCLN	0.0951
CurrQ	NA
RemRes	445472
EUR	883686
Fit_date	NA

Reserves

Last Op. Forecast by zhab0b in 04/1996

STATE OF NEW MEXICO  
ENERGY and MINERALS DEPARTMENT

Page 1

## OIL CONSERVATION DIVISION

## NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator: AMOCO PRODUCTION COMPANY Lease/Well #: JIC CONTRACT 146 11E

Location of Well: ~~0042505~~ Meter #: 85523 RTU: 1-109-01 County: RIO ARRIB

	NAME RESERVOIR OR POOL		TYPE PROD	METHOD PROD	MEDIUM PROD
UPR COMP	BLANCO MESAVERDE 85524		GAS	FLOW	TBG
LWR COMP	BASIN DAKOTA 85523		GAS	FLOW	TBG

## PRE-FLOW SHUT-IN PRESSURE DATA

	Hour/Date Shut-In	Length of Time Shut-In	SI Press. PSIG	Stabilized
UPR COMP	11/19/90	72 Hours	430	No
LWR COMP	11/19/90	72 Hours	630	No

## FLOW TEST DATE NO.1

Commenced at (hour,date)\*

Zone Producing (Upr/Lwr)

TIME (hour, date)	LAPSED TIME SINCE*	PRESSURE		Prod Temp.	REMARKS
		Upper	Lower		
11/19/90	Day 1	270	359		Both Zones SI
11/20/90	Day 2	435	535		Both Zones SI
11/21/90	Day 3	468	643		Both Zones SI
11/22/90	Day 4	430	630		flowed lower zone
11/23/90	Day 5	432	331		
11/24/90	Day 6	434	377		

Production rate during test

Oil: \_\_\_\_\_ BOPD based on \_\_\_\_\_ BBLs in \_\_\_\_\_ Hrs \_\_\_\_\_ Grav \_\_\_\_\_ GOR \_\_\_\_\_

Gas: \_\_\_\_\_ MFCPD: Tested thru (Orifice or Meter) \_\_\_\_\_

## MID-TEST SHUT-IN PRESSURE DATA

	Hour, Date SI	Length of Time SI	SI Press. PSIG	Stabilized (yes/no)
UPR COMP				

RECEIVED

DEC 13 1990

OIL CON. DIV  
DIST. 3

***ESTIMATED BOTTOMHOLE PRESSURES BY FORMATION***  
Jicarilla Contract 146 Well #11E

MV midperf at 5270'  
DK midperf at 7276'

Shut in pressures --- MV = 430 PSIG  
DK = 630 PSIG

GRADIENT = 0.08 PSI/FT

MV BHP = 430 PSIG + 5270' X 0.08 PSIG  
= 851 PSIG

DK BHP = 630 PSIG + 7276' X 0.08 PSIG  
= 1212 PSIG

**OFFSET OPERATORS**

**Jicarilla Contract 146 Well #11E**

Conoco, Inc.  
10 Desta Drive West  
Midland, Texas 79705