



Southern

Rockies

Business

Unit

May 3, 1996

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

RECEIVED
MAY 10 1996
OIL CON. DIV.
DIST. 3

Application for Exception to Rule 303-C - Downhole Commingling
VCU #27 Well
Unit M Section 22-T28N-R4W
Basin Fruitland Coal and Choza Mesa Pictured Cliffs Pools
Rio Arriba 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: Mark Rothenberg
Patty Haefele
Wellfile
Proration File
Frank Chavez, Supervisor
NMOCD District III
1000 Rio Brazos Road
Aztec, NM 87410

Duane Spencer
Bureau of Land Management
1235 La Plata Hwy.
Farmington, NM 87401

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 VCU	27	Address M-22-28N-4W	Rio Arriba
Lease	Well No.	Unit Ltr. - Sec Twp - Rge	County
Spacing Unit Lease Types: (check 1 or more)			
OGRID NO. 000778	Property Code 001191	API NO. 3003921595	Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> (and/or) Fee <input type="checkbox"/>

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	BASIN FRUITLAND COAL 71629		CHOZA MESA PICTURED CLIFFS 74960
2. Top and Bottom of Pay Section (Perforations)	4004' - 4094'		4188' - 4290'
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 or Measured Original	(Current) a. (EST) 671 PSI (Original) b. 1149 PSI	a. b.	(EST) 418 PSI b. 1090 PSI
6. Oil Gravity (° API) or Gas BTU Content	1195 BTU		1000 BTU
7. Producing or Shut-In?	PRODUCING		SHUT-IN
Production Marginal? (yes or no)	YES		YES
• 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	Date: NEVER PRODUCED Rates: SEE ALLOCATION METHOD FOR EXPLANATION	Date: Rates:	Date: Rates:
• If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Rates:	Date: Rates:	5/96 Date: 15 MCFD Rates: 0.1BCPD 0 BWPD
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 other? ☒ Yes ☐ No
13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)
15. 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 NM-14916
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. SEE ATTACHED
 - * 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 Pamela W. Staley TITLE REGULATORY AFFAIRS REP DATE 5/3/96

TYPE OR PRINT NAME PAMELA W. STALEY TELEPHONE NO. (303) 830-5344

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form No. 1
Supersedes Form
Edition 10-1-66

All distances must be from the outer boundaries of the section

Operator Amoco Production Company		Lease Valencia Canyon Unit		Well No. 27
Unit Letter M	Section 22	Township 28N	Range 4W	County Rio Arriba
Actual Footage Location of Well: 1140 feet from the South line and 790 feet from the West line				
Ground Level Elev. 7282	Producing Formation Pictured Cliffs	Foot Choza Mesa Pictured Cliffs	Dedicated Acreage 160	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, force-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

CERTIFICATION

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

Name
J. L. KRUPKA

Position
AREA ENGINEER

Company
AMOCO PRODUCTION COMPANY

Date
DECEMBER 14, 1977

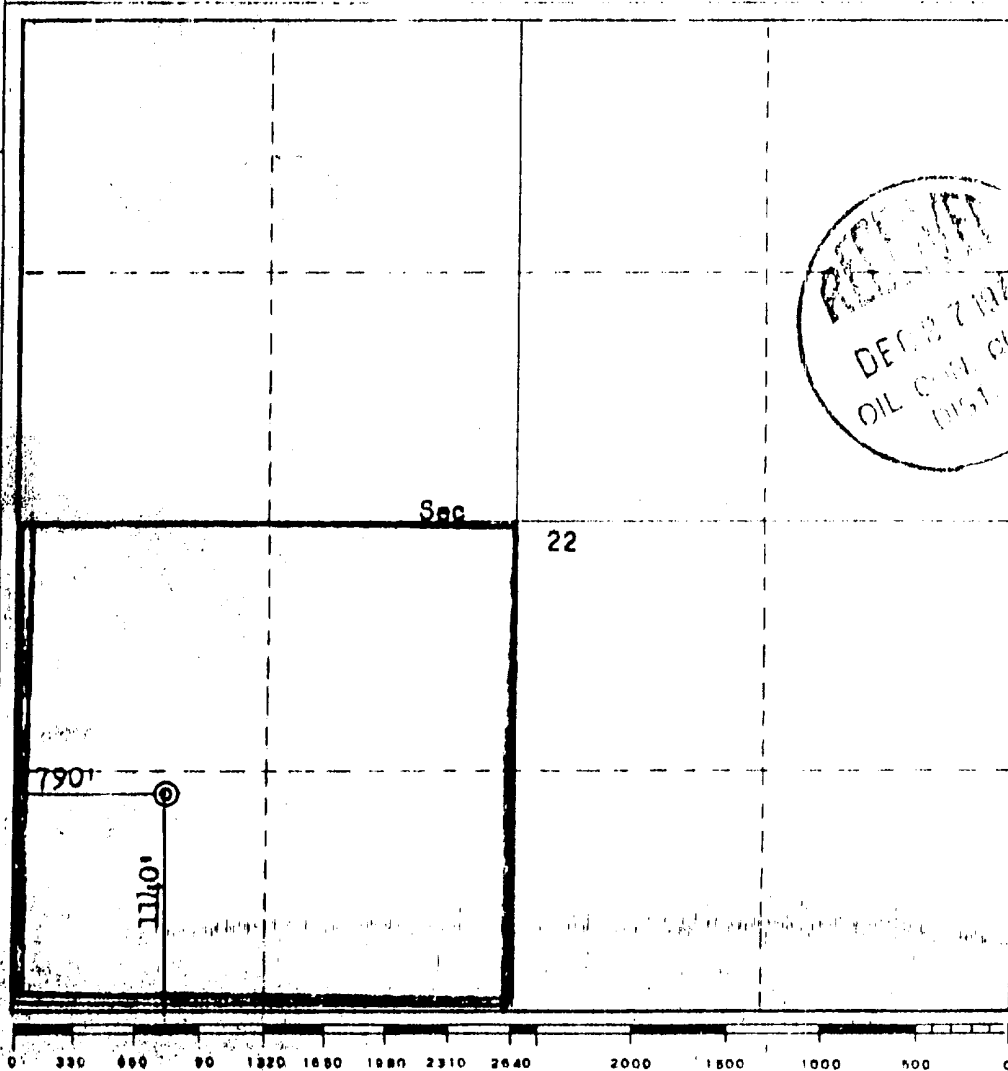
I hereby certify that the well location shown on this plat was plotted from the notes of actual surveys made by me under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
December 9, 1977

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr Jr.

Certificate No.
3950



☐ AMENDED REPORT

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

' API Number 30-039-21595		' Pool Code 71629	' Pool Name Fruitland Coal	
' Property Code	' Property Name Valencia Canyon Unit			' Well Number 27
' OGRID No. 000778	' Operator Name Amoco Production Company			' Elevation 7282' GR

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
M	22	28N	4W	M	1140	South	790	West	Rio Arriba

" 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
" Dedicated Acres 320	" Joint or Infill	" Consolidation Code		" Order No.					

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				<p>17 OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i></p> <p style="text-align: center;"><u>Patty Haeefe</u></p> <p>Signature <u>Patty Haeefe</u></p> <p>Printed Name <u>Business Associate</u></p> <p>Title <u>1-26-95</u></p> <p>Date <u>1-26-95</u></p>
<p>790'</p> <p>1140'</p>				<p>18 SURVEYOR CERTIFICATION</p> <p><i>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.</i></p> <p style="text-align: center;"><u>12/14/77</u></p> <p>Date of Survey <u>12/14/77</u></p> <p>Signature and Seal of Professional Surveyor:</p> <p style="text-align: center;">On File</p> <p style="text-align: center;">3950</p> <p>Certificate Number <u>3950</u></p>

Dwights

Lease: VALENCIA CANYON UNIT 000027

04/09/96

Retrieval Code: 251,039,28N04W22M00PC

10³
10³
10³

10⁴

10²
10²
10²

10³

10
10

10²

1
1

10

1978

1980

1982

1984

1986

1988

1990

1992

1994

Oil (bbl/mo)

Water (bbl/mo)

County: RIO ARRIBA, NM

Field: CHOZA MESA (PICTURED CLIFFS) Oil Cum: 490 bbl

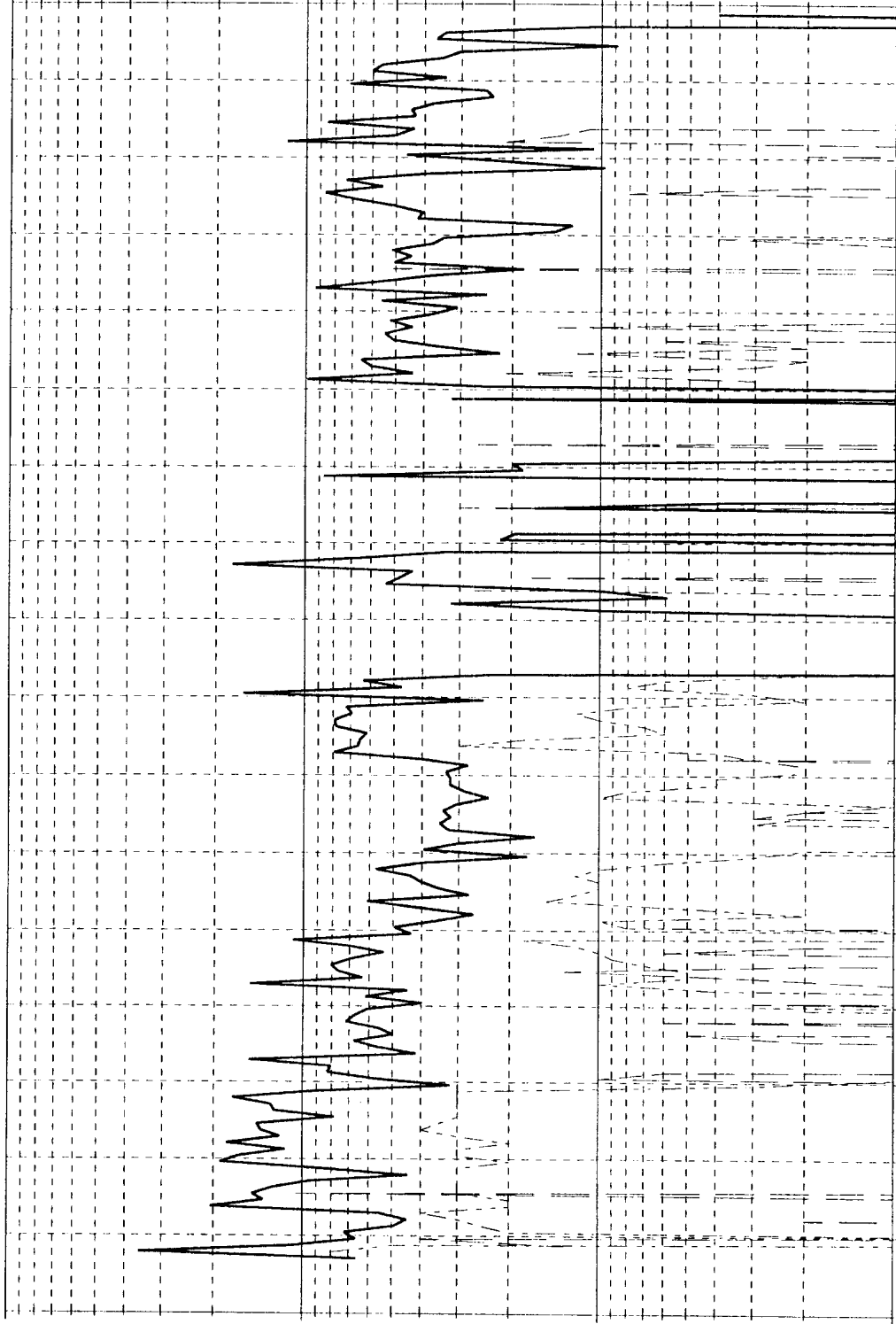
Reservoir: PICTURED CLIFFS

Gas Cum: 101.0 mmcf

Operator: AMOCO PRODUCTION CO

Location: 22M 28N 4W

Gas (mcf/mo)



VCU #27

OFFSET OPERATORS

Meridian Oil, Inc.
P.O. Box 4289
Farmington, NM 87499

PROPOSED ALLOCATION METHOD

The VCU #27 has been producing since 1978 from the Pictured Cliffs formation. The Pictured Cliffs has a stable decline curve as evidenced in the attached production curve. In 1995, we perforated the Fruitland to determine if it we could inject air and produce the formation. Now we propose placing the Fruitland on production and commingling it with the Pictured Cliffs.

The proposed allocation method would be by the subtraction method. The attached production curve shows the average production on an annual basis for the Pictured Cliffs formation. We propose that the following production schedule be used for the Pictured Cliffs until the economic limit of 10 MCFD is reached (estimated to be 2015). Total production minus the scheduled production listed below would be the production attributed to the Fruitland Coal. All liquid should be attributed 100% to the Pictured Cliffs formation.

1996 - 15 MCFD

1997 - 15 MCFD

1998 - 15 MCFD

1999 - 14 MCFD

2000 - 14 MCFD

2001 - 14 MCFD

2002 - 14 MCFD

2003 - 13 MCFD

2004 - 13 MCFD

2005 - 13 MCFD

2006 - 13 MCFD

2007 - 12 MCFD

2008 - 12 MCFD

2009 - 12 MCFD

2010 - 12 MCFD

2011 - 11 MCFD

2012 - 11 MCFD

2013 - 11 MCFD

2014 - 11 MCFD

2015 - 10 MCFD POTENTIAL ECONOMIC LIMIT