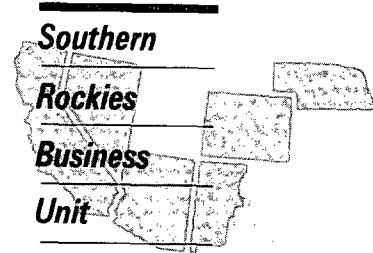
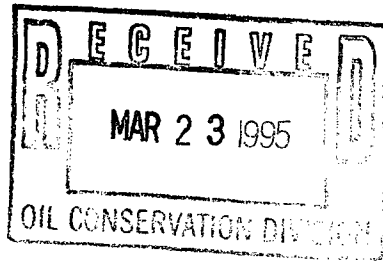


4-11-95



March 21, 1995



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 and  
Approval of Unorthodox Location  
Childers #3E Well  
1290' FSL, 1780' FEL, Section 3-T31N-R11W  
Blanco Pictured Cliffs, Basin Dakota Pools  
San Juan County, New Mexico**

Amoco Production Company hereby requests administrative approval to downhole commingle production from the Blanco Pictured Cliffs and Basin Dakota Pools and approval for an unorthodox location for the Blanco Pictured Cliffs Pool in the Childers #3E well referenced above. This well was originally drilled at an approved non-standard location under order NSL-1627 and has been producing as a single Dakota completion. We now wish to add the Pictured Cliffs formation and downhole commingle the two zones in this well. The ownership (WI, RI ORRI) of these pools is identical in this wellbore. Downhole commingling will offer an economical method of production while protecting against reservoir damage, waste of reserve and violation of correlative rights. Amoco is the only offset operator affected by this application

Sincerely,

J. W. Hawkins

Enclosures

cc: Mark Rothenberg

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

## Application for Exception to Rule 303: SEGREGATION OF PRODUCTION FROM POOLS

### Requirements

- (1) Name and address of the operator:

Amoco Production Company  
P.O. Box 800  
Denver, CO 80201

- (2) Lease name, well number, well location, name of the pools to be commingled:

Lease Name: Childers  
Well Number: 3E  
Well Location: 1290' FSL & 1780' FEL  
Section 3, T31N-R11W  
San Juan County, New Mexico  
Pools Commingled: Blanco Pictured Cliffs  
Basin Dakota

- (3) A plat of the area showing the acreage dedicated to the well and the ownership of all offsetting leases.

### Attached

- (4) A current (within 30 days) 24-hour productivity test on Division Form C-116 showing the amount of oil, gas and water produced from each zone.

The Dakota has produced for over 20 years and is currently averaging about 20 mcf/d. The Pictured Cliffs will be a new completion and has not been produced.

- (5) A production decline curve for both zones showing that for a period of at least one year a steady rate of decline has been established for each zone which will permit a reasonable allocation of the commingled production to each zone for statistical purposes. (This requirement may be dispensed within the case of a newly completed or recently completed well which has little or no production history. However, a complete resume of the well's completion history including description of treating, testing, etc., of each zone, and a prognostication of future production from each zone shall be permitted.)

Dakota Completion: Historical production curve attached.

Pictured Cliffs Completion: not yet completed.

- (6) Estimated bottomhole pressure for each artificially lifted zone. A current (within 30 days) measured bottom hole pressure for each zone capable of flowing.

	BH Pressure	SI Tubing Press.	Fluid Level
Blanco Pictured Cliffs Completion:	500 est. psi		
Basin Dakota Completion	481 psi	431 psi	0'

- (7) A description of the fluid characteristics of each zone showing that the fluids will not be incompatible in the wellbore.

The fluids have no abnormal components that would prohibit commingling, or promote the creation of emulsions or scale.

- (8) A computation showing that the value of the commingled production will not be less than the sum of the values of the individual streams:

Since the BTU content of the produced fluids are very similar, we would expect the commingled production to have the same value as the sum of the individual streams.

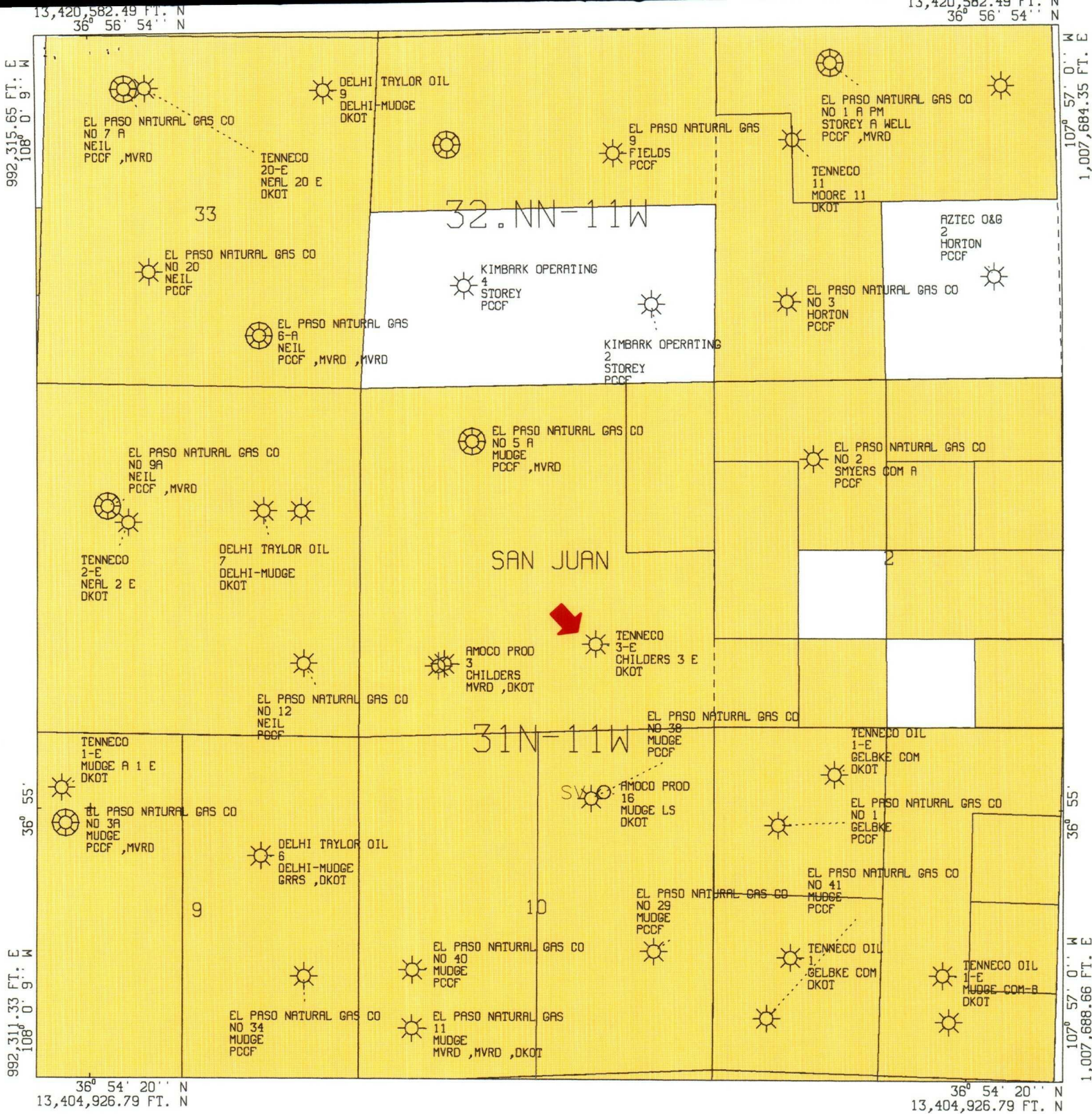
- (9) A formula for the allocation of production to each of the commingled zones and a description of the factors or data used in determining such formula:

The well is undergoing additional testing to aid in determination of the allocation factor. We propose a fixed percentage allocation using the recent average Dakota rate as a percentage of the commingled rate.

- (10) A statement that all offset operators and, in the case of a well on federal land, the United States Bureau of Land Management, have been notified in writing of the proposed commingling.

Amoco is the only offsetting operator.





All geological and geophysical data, including the interpretation thereof, appearing on this map is the private and confidential property of Amoco Production Company. The publication or reproduction thereof without the written permission of said Company is strictly prohibited.

AMOCO PRODUCTION COMPANY  
PLAT MAP  
Childers 3E  
Offset DK and PC Wells

POLYCONIC CENTRAL MERIDIAN - 107° 58' 35'' W LON  
SPHEROID - 6

SCALE 1 IN. = 2,000 FT. FEB 24, 1995



16				<div>17 OPERATOR CERTIFICATION</div> <div>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</div> <div><div>Gail M. Jefferson</div><div>Signature</div><div>Gail M. Jefferson</div><div>Printed Name</div><div>Business Assistant</div><div>Title</div><div>03-16-1995</div><div>Date</div></div>
				<div>18 SURVEYOR CERTIFICATION</div> <div>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.</div> <div>September 23, 1982</div> <div>Date of Survey</div> <div>Signature and Seal of Professional Surveyer:</div> <div>3950</div> <div>Certificate Number</div>

# OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-107  
Revised 10-1-78

STATE OF NEW MEXICO  
OIL AND MINERALS DEPARTMENT

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

Operator <b>TENNECO OIL COMPANY</b>			Lease <b>CHILDERS</b>		Well No. <b>3E</b>
Well Letter <b>0</b>	Section <b>3</b>	Township <b>31N</b>	Range <b>11W</b>	County <b>San Juan</b>	
Actual Footage Location of Well:					
<b>1290</b> feet from the <b>South</b> line and		<b>1780</b> feet from the <b>East</b> line			
Ground Level Elev: <b>5980</b>	Producing Formation <b>Dakota</b>	Pool <b>Basin Dakota</b>	Dedicated Acreage: <b>320</b> Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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?

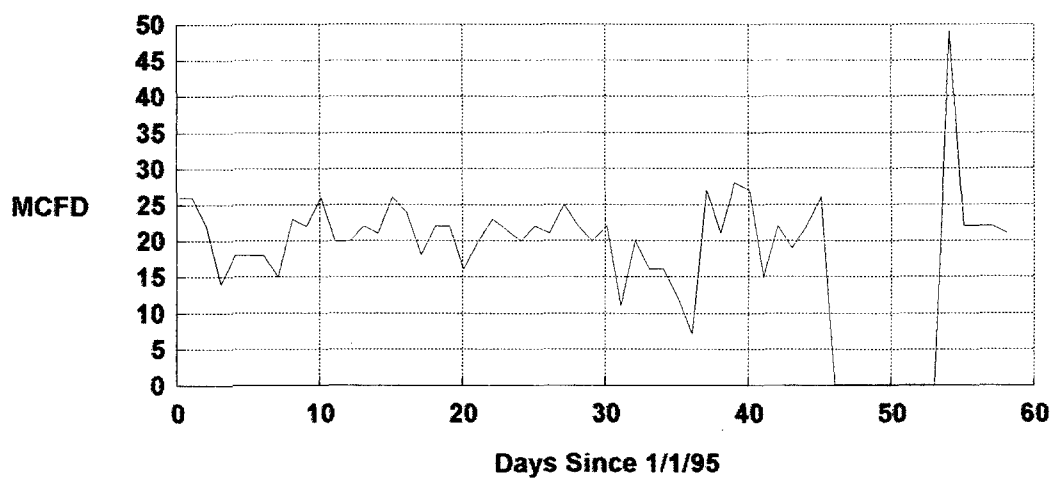
☐ Yes ☐ No If answer is "yes," type of consolidation \_\_\_\_\_

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.

<div style="text-align: center; margin-bottom: 20px;">Sec.</div> <div style="border: 1px dashed black; padding: 10px; margin-bottom: 20px;"> SF 078040 TOC 50% Conqco 50% </div> <div style="text-align: center;"> </div>	<div style="text-align: center;">CERTIFICATION</div> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p style="text-align: center;"><i>Ken Russell</i></p> <p>Name <b>Ken Russell</b></p> <p>Position <b>Sr. Production Analyst</b></p> <p>Company <b>Tenneco Oil Company</b></p> <p>Date <b>November 12, 1982</b></p> <hr/> <p>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.</p> <p>Date Surveyed <b>September 23, 1982</b></p> <p>Registered Professional Engineer and Land Surveyor <i>Fred E. Kerr Jr.</i> <b>Fred E. Kerr Jr.</b></p> <p>Certificate No. _____</p>
---	--

San Juan O.C.  
WELL: CHILDERS 003E-DK (97982701)  
(Downtime excluded)

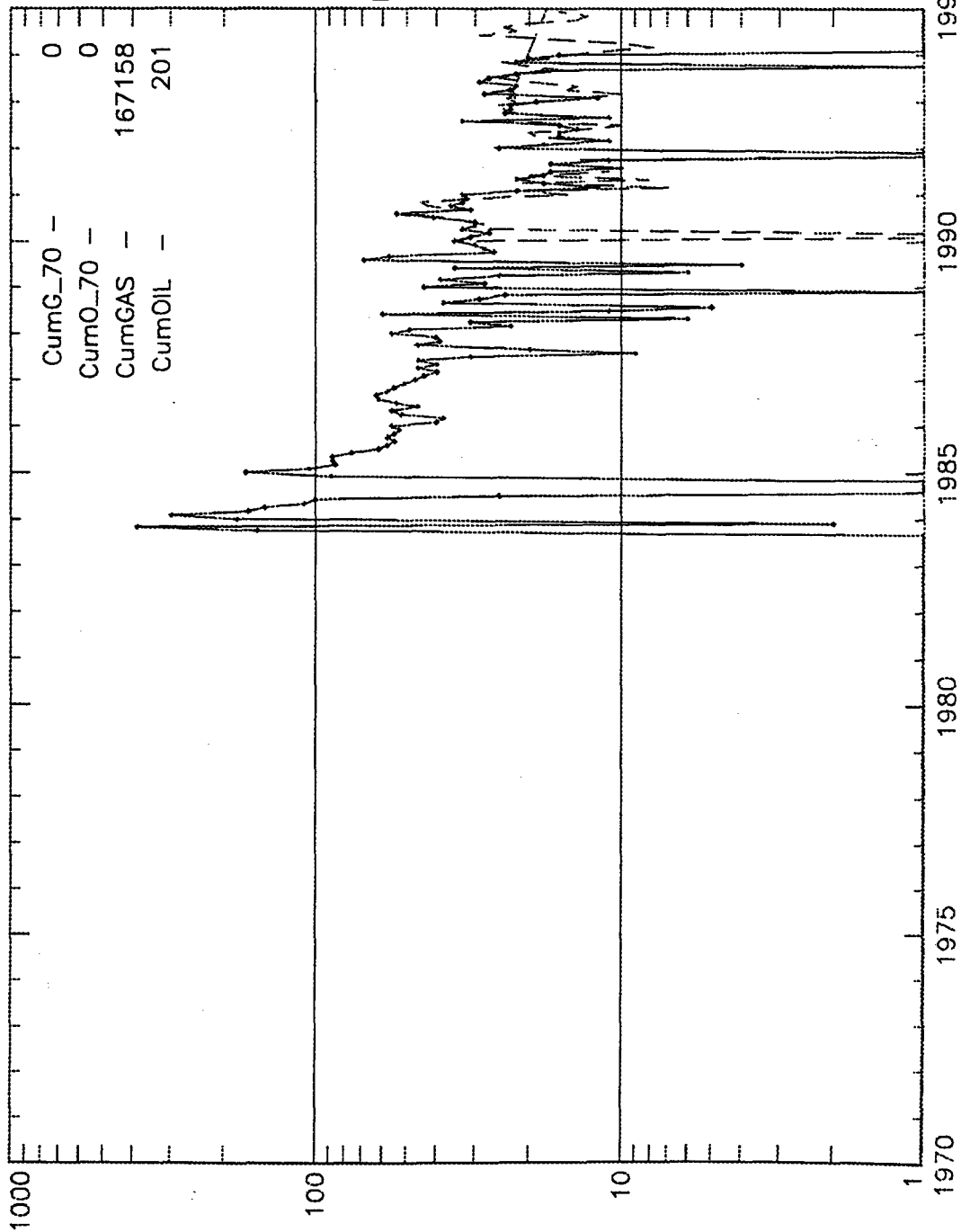


Engr: zmdr16

CHILDERS 3E

Operator-- AMOCO PRODUCTION CO

300452562300DK 0033111-003EDK APC\_WI - 0.50000000



Curr\_Fit  
0.140  
23  
41714  
208872  
1993 8





7/10/94

AMOCO PRODUCTION COMPANY  
WELL ANALYSIS COMPARISONSAN JUAN COUNTY, NM  
DATE RECEIVEDWELL NAME: NEIL LS 12  
STATION NO.: (Neighboring PC)

	BRADENHEAD	CASING
ANALYSIS NO.:	AMO40732	AMO40733
DATE:	7/7/94	7/7/94
<u>COMPONENT</u>	<u>MOLE %</u>	<u>MOLE %</u>
NITROGEN	7.172	0.206
CO2	0.041	0.505
METHANE	83.030	86.270
ETHANE	4.876	7.592
PROPANE	2.748	3.245
I-BUTANE	0.615	0.553
N-BUTANE	0.730	0.830
I-PENTANE	0.256	0.274
N-PENTANE	0.167	0.192
HEXANE +	0.365	0.333
<u>BTU'S</u>	<u>1078.8</u>	<u>1174.3</u>
<u>GPM</u>	<u>2.8064</u>	<u>3.6829</u>
<u>SPEC. GRAV.</u>	<u>0.6730</u>	<u>0.6675</u>



7/7/94

AMOCO PRODUCTION COMPANY  
WELL ANALYSIS COMPARISONWELL NAME: MOORE COM 1  
STATION NO.: (Neighboring DK)

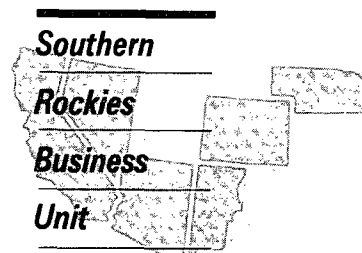
	BRADENHEAD	CASING	INTERMEDIATE
ANALYSIS NO.:	AMO40711	AMO40712	AMO40713
DATE:	7/6/94	7/6/94	7/6/94
<u>COMPONENT</u>	<u>MOLE %</u>	<u>MOLE %</u>	<u>MOLE %</u>
NITROGEN	0.211	0.181	0.182
CO2	0.145	0.150	0.148
METHANE	85.669	85.673	85.747
ETHANE	8.535	8.556	8.528
PROPANE	3.375	3.384	3.364
I-BUTANE	0.566	0.568	0.562
N-BUTANE	0.791	0.792	0.785
I-PENTANE	0.246	0.246	0.242
N-PENTANE	0.185	0.184	0.180
HEXANE +	0.277	0.266	0.262
<u>BTU'S</u>	<u>1183.1</u>	<u>1183.3</u>	<u>1182.0</u>
<u>GPM</u>	<u>3.9255</u>	<u>3.9294</u>	<u>3.9076</u>
<u>SPEC. GRAV.</u>	<u>0.6672</u>	<u>0.6672</u>	<u>0.6663</u>

4-18-95



OIL CONSERVATION DIVISION  
RECEIVED

195 MAR 21 PM 8 52



March 21, 1995

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 and  
Approval of Unorthodox Location  
Childers #3E Well  
1290' FSL, 1780' FEL, Section 3-T31N-R11W  
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Sincerely,

*JWHawkins/eb*

J. W. Hawkins

Enclosures

cc: Mark Rothenberg

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

## Application for Exception to Rule 303: SEGREGATION OF PRODUCTION FROM POOLS

### Requirements

- (1) Name and address of the operator:

Amoco Production Company  
P.O. Box 800  
Denver, CO 80201

- (2) Lease name, well number, well location, name of the pools to be commingled:

Lease Name: Childers  
Well Number: 3E  
Well Location: 1290' FSL & 1780' FEL  
Section 3, T31N-R11W  
San Juan County, New Mexico  
Pools Commingled: Blanco Pictured Cliffs  
Basin Dakota

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### Attached

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- (10) A statement that all offset operators and, in the case of a well on federal land, the United States Bureau of Land Management, have been notified in writing of the proposed commingling.

Offsetting operators listed on the attached page will receive a copy of this application by certified mail..

# Amoco Production Company

Offset Operator Plat

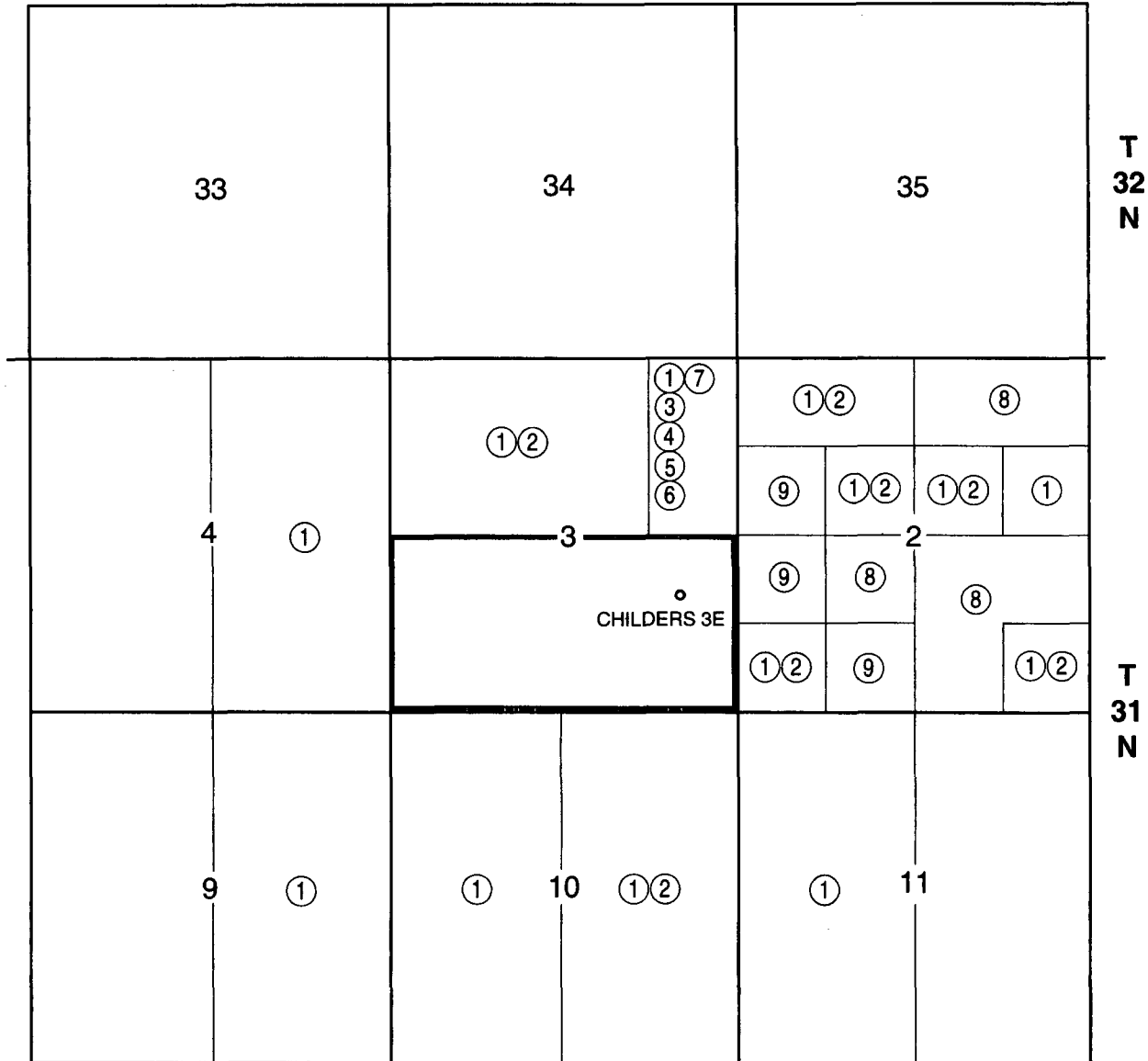
Childers 3E

T31N-R11W Sec. 3

1290' FSL & 1780' FEL

Dakota Formation

R 11 W



- ① Amoco Production Company
- ② Conoco, Inc.
- ③ Robert Umbach
- ④ George Umbach
- ⑤ Wayne Moore
- ⑥ Cross Timbers Oil Company
- ⑦ Meridian Oil, Inc.
- ⑧ Meridian Oil Production, Inc.
- ⑨ El Paso Production Company



# Amoco Production Company

Offset Operator Plat

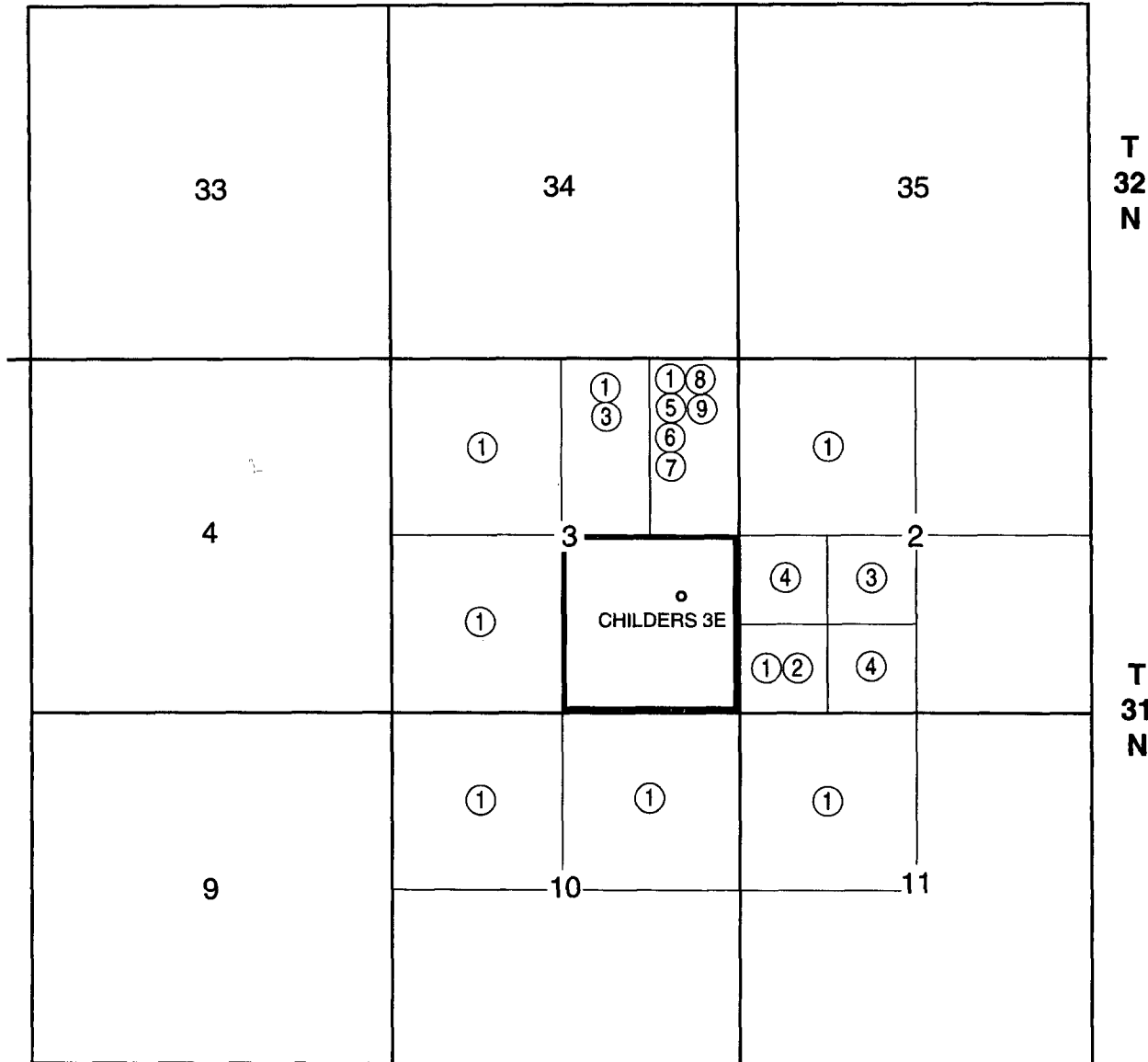
Childers 3E

T31N-R11W Sec. 3

1290' FSL & 1780' FEL

Picture Cliffs Formation

R 11 W



- ① Amoco Production Company
- ② Conoco, Inc.
- ③ Meridian Oil Production, Inc.
- ④ El Paso Production, Inc.
- ⑤ Meridian Oil, Inc.
- ⑥ Cross Timbers Oil Company
- ⑦ Wayne Moore
- ⑧ George Umbach
- ⑨ Robert Umbach

CONOCO INC  
10 DESTA DRIVE SUITE 100W  
MIDLAND TX 79705-4500

ROBERT UMBACH  
P O BOX 5310  
FARMINGTON NM 87499-5310

GEORGE UMBACH  
P O BOX 95247  
LAS VEGAS NV 89193-5427

WAYNE MOORE  
403 N MARIENFELD  
MIDLAND TX 79701-4323

CROSS TIMBERS OIL COMPANY  
810 HOUSTON ST STE 2000  
FT WORTH TX 76102-6223

MERIDIAN OIL INC  
P O BOX 4289  
FARMINGTON NM 87499-4289

MERIDIAN OIL PRODUCTION INC  
P O BOX 4289  
FARMINGTON NM 87499-4289

EL PASO PRODUCTION COMPANY  
C/O MERIDIAN OIL INC  
P O BOX 4289  
FARMINGTON NM 87499-4289

## David Catanach

---

**From:** Ernie Busch  
**To:** David Catanach  
**Subject:** AMOCO (DHC)  
**Date:** Tuesday, March 28, 1995 10:07AM  
**Priority:** High

CHILDERS #3E  
O-03-31N-11W

RECOMMEND: THEY SHOULD BE ABLE TO SUBMIT A LIST OF THE CLOSEST OFFSETTING PC WELLS TO  
GIVE US A BETTER IDEA OF EXPECTED PERFORMANCE