

DHC 3/8/99

Houston Division  
Production Operations, United States



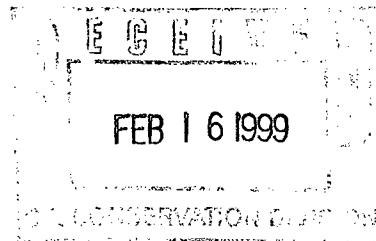
**Marathon  
Oil Company**

P.O. Box 2490  
Hobbs, New Mexico 88240  
Telephone 505/393-7106

0033

February 3, 1999

Mr. David Catanach  
Energy and Minerals Department  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501-2088



Re: Request for Exception to Rule 303-A  
Downhole Commingling  
E. Mitchusson '4' St. No. 1  
1980' FSL & 1980' FWL  
Section 4, T-19-S, R-28-E  
Wolfcamp and Upper Penn Pools  
Travis Field  
Eddy Co., NM

Dear Mr. Catanach:

Marathon Oil Company requests administrative approval for an exception to Rule 303-A to permit the downhole commingling of production in the above subject well from the Travis, Wolfcamp and Travis, Upper Penn.

The well is currently producing from the Wolfcamp, and it is reaching its producible economic limit. For this reason Marathon is requesting to downhole commingle the Wolfcamp and the Upper Penn zones to maximize the economical production from the well. Rod pumping equipment will be utilized to keep the PBHP as low as possible preventing crossflow.

Enclosed is pertinent data supporting this application as outlined in Rule 303-A. If additional information is necessary, please advise.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Andrew J. Schwandt'.

Andrew J. Schwandt  
Production Engineer

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Enclosure



P.O. Box 2490  
Hobbs, New Mexico 88240  
Telephone 505/393-7106

February 3, 1999

Mr. Pete Martinez  
Commissioner of Public Lands  
State Land Office Building  
P.O. Box 1148  
Sante Fe, NM 87504-1148

Re: Request for Exception to Rule 303-A  
Downhole Commingling  
E. Mitchusson '4' St. No. 1  
1980' FSL & 1980' FWL  
Section 4, T-19-S, R-28-E  
Wolfcamp and Upper Penn Pools  
Travis Field  
Eddy Co., NM

Dear Mr. Martinez:

Marathon Oil Company requests administrative approval for an exception to Rule 303-A to permit the downhole commingling of production in the above subject well from the Travis, Wolfcamp and Travis, Upper Penn.

The well is currently producing from the Wolfcamp, and it is reaching its producible economic limit. For this reason Marathon is requesting to downhole commingle the Wolfcamp and the Upper Penn zones to maximize the economical production from the well. Rod pumping equipment will be utilized to keep the PBHP as low as possible preventing crossflow.

Enclosed is pertinent data supporting this application as outlined in Rule 303-A. If additional information is necessary, please advise.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Andrew J. Schwandt'.

Andrew J. Schwandt  
Production Engineer

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Enclosure



P.O. Box 2490  
Hobbs, New Mexico 88240  
Telephone 505/393-7106

February 3, 1999

Mr. Tim Gum  
District 2 Supervisor  
Oil Conservation Division  
811 S. First St.  
Artesia, NM 88210

Re: Request for Exception to Rule 303-A  
Downhole Commingling  
E. Mitchusson '4' St. No. 1  
1980' FSL & 1980' FWL  
Section 4, T-19-S, R-28-E  
Wolfcamp and Upper Penn Pools  
Travis Field  
Eddy Co., NM

Dear Mr. Gum:

Marathon Oil Company requests administrative approval for an exception to Rule 303-A to permit the downhole commingling of production in the above subject well from the Travis, Wolfcamp and Travis, Upper Penn.

The well is currently producing from the Wolfcamp, and it is reaching its producible economic limit. For this reason Marathon is requesting to downhole commingle the Wolfcamp and the Upper Penn zones to maximize the economical production from the well. Rod pumping equipment will be utilized to keep the PBHP as low as possible preventing crossflow.

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A handwritten signature in cursive script, appearing to read 'Andrew J. Schwandt'.

Andrew J. Schwandt  
Production Engineer

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Enclosure

Houston Division  
Production Operations, United States



P.O. Box 2490  
Hobbs, New Mexico 88240  
Telephone 505/393-7106

February 4, 1999

Yates Petroleum Corporation  
105 S. 4<sup>th</sup> Street  
Artesia, NM 88210

Re: Request for Exception to Rule 303-A  
Downhole Commingling  
E. Mitchusson '4' St. No. 1  
1980' FSL & 1980' FWL  
Section 4, T-19-S, R-28-E  
Eddy Co., New Mexico  
Travis: Wolfcamp and Upper Penn

Ladies and/or Gentlemen:

Marathon Oil Company has filed an application with the New Mexico Oil Conservation Division to downhole commingle the above referenced well. Please find enclosed a copy of the application as outlined in Rule 303-A.

If you are in agreement and waive all objections to the downhole commingling, please sign below and mail the original to the NMOCD in the enclosed addressed envelope. Also, please return one copy to Marathon at the letterhead address.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Andrew J. Schwandt'.

Andrew J. Schwandt  
Production Engineer

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Enclosure

Agreed and accepted this \_\_\_\_\_ day of \_\_\_\_\_ 1998

by \_\_\_\_\_, as representative of

**REQUEST FOR EXCEPTION TO RULE 303-A**  
**E. Mitchusson '4' No. 1**  
**Travis Field**

**A: Operator**

Marathon Oil Company  
P.O. Box 2409  
Hobbs, NM 88241-2409

**B: Lease Name and Well Number**

E. Mitchusson '4' St. No. 1  
1980' FSL & 1980' FWL  
Section 4, T-19-S, R-28-E  
Eddy Co., New Mexico  
Travis: Wolfcamp and Upper Penn

**C: Plats and Offset Operators**

Attached

**D: Form C-116**

Attached

**E: Production Decline Curves**

Attached

**F: Estimated Bottomhole Pressures**

Travis (Wolfcamp) -  $\pm 2000$  psi  
Travis (Upper Penn) -  $\pm 2100$  psi

**G: Fluid Characteristics**

Marathon is currently surface commingling (R-11112) production from the Travis, Wolfcamp and Travis, Upper Penn Pools with no compatibility problems.

**H: Value**

Marathon receives the same price for the products from each zone and value will not be adversely affected.

**I: Production Allocation**

<u>Pool</u>	<u>BOPD</u>	<u>MCFPD</u>	<u>BWPD</u>	<u>Test Method</u>
Travis (Wolfcamp)	3	13	2	12/1/98 Test
Travis (Upper Penn)	<u>10</u>	<u>43</u>	<u>3</u>	8/19/98 Test
	13	56	5	

<u>Allocated Percentages</u>	<u>Oil %</u>	<u>Gas %</u>	<u>Water %</u>
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Post-workover utilizing above production

Travis (Wolfcamp)	23%	23%	40%
Travis (Upper Penn)	<u>77%</u>	<u>77%</u>	<u>60%</u>
Total	100	100	100

**J: Ownership**

Ownership of all zones is common and correlative rights will not be violated.

**K: Offset Operator Notification**

By copy of this letter we are notifying all offset operators (attached) of the proposed commingling, by certified mail.

**Marathon Oil Company**  
**E. Mitchusson '4' No. 1**  
**UL K, Sec. 4, T-19-S, R-28-E**  
**1980' FSL & 1980' FWL**  
**Travis Field**  
**Eddy Co., NM**

**Offset Operators and Addresses**

Yates Petroleum Corporation  
105 S. 4<sup>th</sup> Street  
Artesia, NM 88210

State of New Mexico  
Energy, Minerals and Natural Resources Department

# OIL CONSERVATION DIVISION

2040 Pacheco St.  
Santa Fe, NM 87505

Form C-116  
Revised 1/1/89

Submit 2 copies to Appropriate District Office.  
DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240  
DISTRICT II  
811 S. 1st Street, Artesia, NM 88210-2834  
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

## GAS - OIL RATIO TEST

Operator <b>Marathon Oil Company</b>		Pool <b>Travis; Wolfcamp / Upper Penn</b>		County <b>Eddy</b>									
Address <b>P.O. Box 2490 Hobbs, NM 88240</b>		TYPE OF TEST - (X)		Completion <input type="checkbox"/> Special <input checked="" type="checkbox"/>									
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS-OIL RATIO CU.FT./BBL
		U	S	T						R	WATER BBL.S.	GRAV. OIL	
Edward Mitchusson 4 State	1	K	4	19S	28E	P							
DHC Application													
Zone Oil Gas													
Wolfcamp 23 77						Well	Test		24	2	3	13	4300
Upper Penn 23 77						Well	Test		24	3	10	43	4300
FOR INFORMATION ONLY													

### Instructions:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60°F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

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

  
Signature

**Andrew J. Schwardt**  
Printed name and title

**Production Engineer**

**2/8/99**  
Date

**393-7106**  
Telephone No.

(See Rule 301, Rule 1116 & appropriate pool rules.)



State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised October 18, 1994

District I  
PO Box 1980, Hobbs, NM 88241-1980  
District II  
811 S. 1st Street, Artesia, NM 88210-2834  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-015-30165	<sup>2</sup> Pool Code 96833	<sup>3</sup> Pool Name Travis Wolfcamp
<sup>4</sup> Property Code 23145	<sup>5</sup> Property Name Edward Mitchusson 4 State	<sup>6</sup> Well Number 1
<sup>7</sup> OGRID No. 014021	<sup>8</sup> Operator Name Marathon Oil Company	<sup>9</sup> Elevation 3549' GL

<sup>10</sup> Surface Location

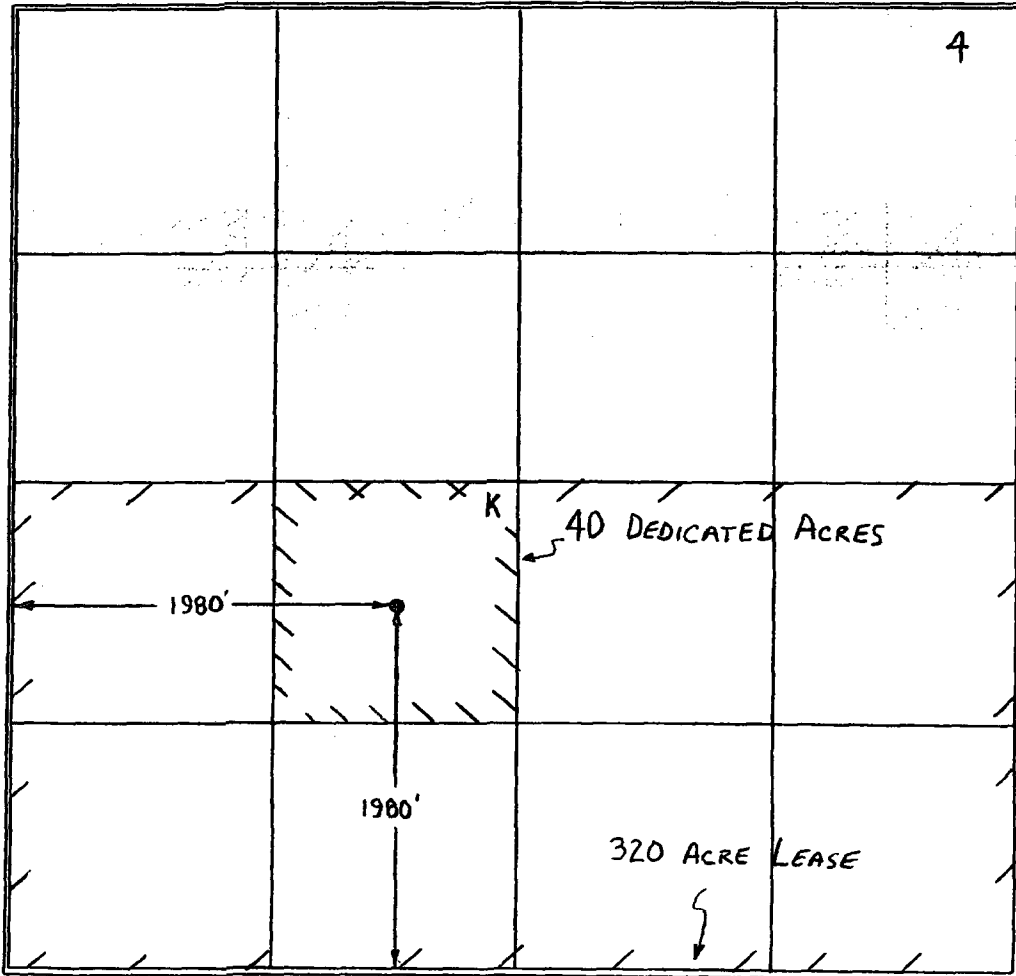
UL or lot no. K	Section 4	Township 19S	Range 28E	Lot. Idn	Feet from the 1980'	North/South Line South	Feet from the 1980'	East/West line West	County Eddy
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<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
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<sup>12</sup> Dedicated Acres 40	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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

	<p><sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Bryan L. Williams</i> Signature Bryan L. Williams Printed Name Production Engineer Title 11/12/98 Date</p>
	<p><sup>18</sup> 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.</p> <p>SEE ORIGINAL Date of Survey Signature and Seal of Professional Surveyer: Certificate Number</p>

DISTRICT I  
P.O. Box 1986, Hobbs, NM 88241-1986

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1984  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		Undesignated - Travis-Upper Penn
Property Code	Property Name	Well Number
	EDWARD MITCHUSSON 4 STATE	1
OGRID No. 14021	Operator Name MARATHON OIL COMPANY	Elevation 3549'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	4	19 S	28 E		1980	SOUTH	1980	WEST	EDDY

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
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						
80 N/2, SW/4									

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

	<b>OPERATOR CERTIFICATION</b>  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.   Signature D. P. Nordt Printed Name Drilling Superintendent Title 3/18/98 Date
	<b>SURVEYOR CERTIFICATION</b>  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.  MARCH 12, 1998 Date Surveyed CDG Signature & Seal of Professional Surveyor  3-13-98 Certificate No. RONALD J. EDSON 1239 CARN EDSON 12641

Upper Penn  
Production

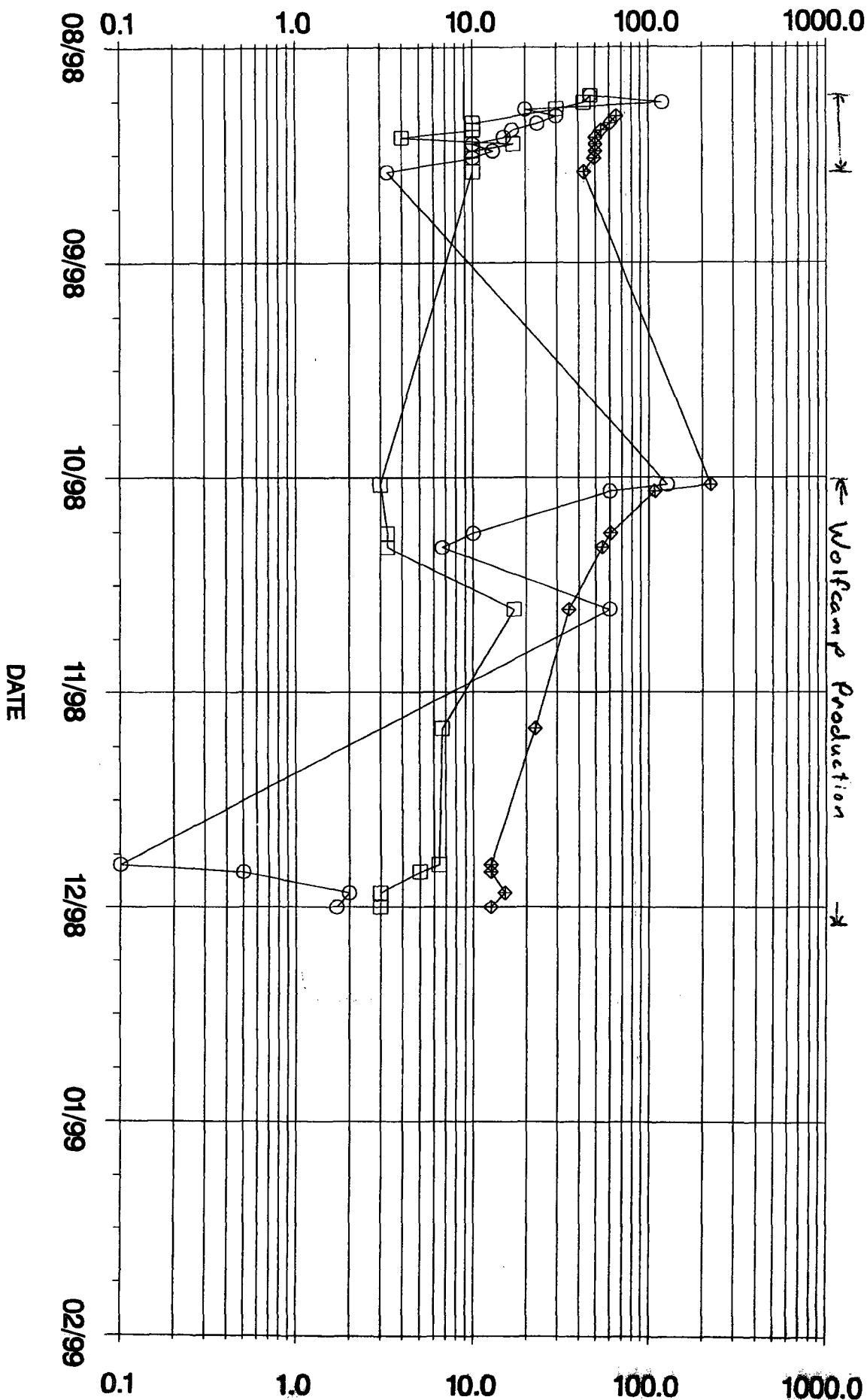
# Midland Operations

MITCHUSSON 4 STATE EDWARD MITCHUSSON 4 ST NO 1

←

← Wolfcamp Production

→



□ □ □ TEST OIL, BOPD  
\*\*\* % RUN TIME

○ ○ ○ TEST WTR, BWPD

◇ ◇ ◇ TEST GAS, MCFPD

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

State of New Mexico  
Energy, Minerals and Natural Resources Department

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

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

## OIL CONSERVATION DIVISION

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

APPROVAL PROCESS:

\_\_\_ Administrative \_\_\_ Hearing

DISTRICT III  
1000 Rio Brazos Rd, Aztec, NM 87410

## APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE

X YES \_\_\_ NO

Operator Marathon Oil Company PO Box 2490 Address Hobbs, NM 88240  
Lessee Edward Mitchusson 4 State Well No. 1 Unit Ltr. - Sec - Twp - Rge K 4 19S 28E County Eddy  
OGRID NO. 014021 Property Code 23145 API NO. 30-015-30165 Spacing Unit Lease Types: (check 1 or more)  
Federal \_\_\_ , State X , (and/or) Fee \_\_\_

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zones	Lower Zone
1. Pool Name and Pool Code	Wolfcamp 96833		Upper Penn 59860
2. Top and Bottom of Pay Section (Perforations)	8894 - 9586'		9673 - 9786'
3. Type of production (Oil or Gas)	Oil		Oil
4. Method of Production (Flowing or Artificial Lift)	Artificial Lift		Artificial Lift
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current) 2000 b. (Original) 2400	a.  b.	a. 2100 b. 2300
6. Oil Gravity (° API) or Gas BTU Content	42		45
7. Producing or Shut-In?	Producing		Shut-In
Production Marginal? (yes or no)	Yes		Yes
* 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 * If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Rates:  Date: 12/1/98 Rates: 3/13/2	Date: Rates:  Date: Rates:	Date: 8/19/98 Rates: 10/43/3  Date: Rates:
8. Fixed Percentage Allocation Formula -% for each zone	Oil: 23% Gas: 23 %	Oil: % Gas: %	Oil: 77 % Gas: 77 %

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? X 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? X Yes \_\_\_ No

11. Will cross-flow occur? \_\_\_ Yes X 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? X Yes \_\_\_ No

13. Will the value of production be decreased by commingling? \_\_\_ Yes X 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. X Yes \_\_\_ No

15. NMOCD Reference Cases for Rule 303(C) 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 Andrew J. Schwandt TITLE Production Engineer DATE 2/8/99

TYPE OR PRINT NAME Andrew J. Schwandt TELEPHONE NO. ( 505 ) 393-7106