



P.O. Box 552
Midland, TX 79702-0552
Telephone 915/682-1626

January 27, 1995

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

Re: Request for Exception to Rule 303-A
Downhole Commingling
Marathon Oil Company
McCallister State No. 11
UL "K" 1927' FSL & 2134' FWL
Section 25, T-17-S, R-34-E
Upper Penn, Wolfcamp, Abo
Vacuum Field
Lea County, New Mexico

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 Vacuum (Upper Penn), Vacuum (Wolfcamp) and Vacuum (Abo) Pools in Lea County, New Mexico.

The Wolfcamp zone was completed and is now producing. Based on log evaluation and historic offset production, commercial Abo and Upper Penn production is anticipated. The three zones have been downhole commingled in offset production with no loss of product value or production. By commingling production from the three zones, production will be realized that could not economically justify the cost of equipment to segregate the zones. Rod pumping equipment will be utilized which will 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 contact me at (915) 682-1626.

Sincerely,

A handwritten signature in cursive script that reads 'Thomas M. Price'.

Thomas M. Price
Advanced Engineering Technician

TMP/9504/r

Enclosure

REQUEST FOR EXCEPTION TO RULE 303-A
McCallister State No. 11
Vacuum Field

- A. Operator
Marathon Oil Company
P. O. Box 552
Midland, TX 79702
- B. Lease Name and Well No.
McCallister State No. 11
UL "K" 1927' FSL & 2134' FWL
Sec. 25, T-17-S, R-34-E
Lea County, New Mexico
- C. Plats and Offset Operators
Attached
- D. C-116's
Attached
- E. Production
Decline Curves attached
- F. Estimated Bottomhole Pressures
Vacuum (Upper Penn) - 1750
Vacuum (Wolfcamp) - 2150
Vacuum (Abo) - 2000
- G. Fluid Characteristics
Marathon has surface commingled the produced fluids from all three zones without compatibility problems.
- H. Value

	Est Daily Prod <u>BOPD</u>	API <u>Gravity</u>	Avg \$/Bbl	Avg Daily <u>Income</u>
N. Vacuum (Abo)	25	39.0	16.00	\$400.00
Vacuum (Wolfcamp)	37	38.3	16.00	\$592.00
Vacuum (Upper Penn)	<u>15</u>	<u>39.9</u>	16.00	<u>\$240.00</u>
	77			\$1,232.00

$$\text{WTD API Grow} = ((25 \times 39.0) + (37 \times 38.3) + (15 \times 39.9)) / 77 = 38.8$$

$$77 \text{ BPD} \times \$16.00 = \$1232 \text{ Avg Revenue Commingled Prod.}$$

\$1232.00 - \$1232.00 = \$0/day loss in value.

Request for Exception to Rule 303-A
McCallister State No. 11
Page 2

I. Production Allocation (Estimated)

<u>Pool</u>	<u>BOPD</u>	<u>MCFPD</u>	<u>BWPD</u>	<u>Test Method</u>
N. Vacuum (Abo)	25	75	5	Est Pumping Est
Vacuum (Wolfcamp)	37	82	21	
Vacuum (Upper Penn)	<u>15</u>	<u>17</u>	<u>15</u>	
	77	174	41	
<u>Allocated Percentages</u>	<u>Oil %</u>	<u>Gas %</u>	<u>Water %</u>	
N. Vacuum (Abo)	32.5	43.1	12.2	
Vacuum (Wolfcamp)	48.1	47.1	51.2	
Vacuum (Upper Penn)	<u>19.4</u>	<u>9.8</u>	<u>36.6</u>	
	100	100	100	

J. Ownership

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

K. Offset Operator Notification

By copy of this letter we are notifying all offset operators (see list, Item C) of the proposed commingling, by certified mail

INTRACOMPANY CORRESPONDENCE

TO T. M. Price
OFFICE Midland, Texas
SUBJECT

DATE January 23, 1995
FROM J. F. Rusnak
OFFICE Midland, Texas

Re: Downhole Commingle Application
Our Lease NM-268 - State of New Mexico B-2706
SW/4 Section 25, T-17-S, R-34-E,
Lea County, New Mexico

Pursuant to your request dated January 19, 1995, the following are the offset operators to our McCallister State Lease, referenced above, for the Abo and Wolfcamp formations:

T-17-S, R-34-E:

Section 25: N/2 & SE/4

Mobil Exploration & Producing U.S. Inc.
P. O. Box 633
Midland, TX 79702-0633

Texaco Exploration and Production Inc.
P. O. Box 46513
Denver, CO 80201-6513

Section 26: E/2

Mobil Exploration & Producing U.S. Inc.

Section 35: NE/4

Conoco Inc.
10 Desta Dr., Ste 100W
Midland, TX 79705

Section 36: N/2

Texaco Exploration and Production Inc.

If anything further is needed, please advise.

JFR:mmc'

Submit 2 copies to Appropriate District Office

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240
DISTRICT II
P.O. Drawer DD, Artesia, NM 88210
DISTRICT III
10000 Kim Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504 2088

Form C-116
Revised 1/1/89

GAS - OIL RATIO TEST

Operator		Pool		County									
Marathon Oil Company		VACUUM ABO		LEA									
Address		TYPE OF TEST (X)		Completion									
P.O. Box 552, Midland, TX 79702		EST		Special <input checked="" type="checkbox"/>									
LEASE NAME	WELL NO.	LOCATION	DATE OF TEST	ESTIMATE	CHORD SIZE	FBG PRESS	DAILY ALLOWABLE	LENGTH OF TEST HOURS	WATER BBL'S	PROD DURING TEST GRAV OIL	OIL BBL'S	GAS MCF	GAS - OIL RATIO CUFT/BBL
McCallister State	11	K 25 17	H 34	ESTIMATE	NA	NA		24	5	39	25	75	3000
Estimated Test.													
For informational use 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.

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

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

Signature *Thomas M. Price*
Thomas M. Price
Printed name and title
1/26/95
Date
915/682/1626
Telephone No

P.O. Box 2088
Santa Fe, New Mexico 87504 2088

GAS-OIL RATIO TEST

Operator Marathon Oil Company		Pool VACUUM WOLF CAMP		County LEA												
Address P.O. Box 552, Midland, TX 79702		TYPE OF TEST - (X)		Completion <input checked="" type="checkbox"/> Special <input type="checkbox"/>												
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	SCHED. TEST	DAILY ALLOW ABIL	LENGTH OF TEST HOURS	PROD DURING TEST			GAS - OIL RATIO CU FT/BBL				
		U	S	T					R	WATER BBL	GHAV OIL		OIL BBL	GAS MCF		
McCallister State	11	K	25	17	34	1/20/95	P	NA	NA	M	24	21	38.3	37	82	3905

I hereby certify that the above information is true and

Instructions:

Instructions:

During gas oil ratio test, each well shall be produced at a rate not exceeding the top limit 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 allowances when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 14.73 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.

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

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

Signature
Thomas M. Price
Printed name and title
1/26/95
Date
915/682/1626
Telephone No.

P.O. Box 2088
Santa Fe, New Mexico 87504 2088

GAS-OIL RATIO TEST

Instructions:

Gas volumes must be reported on a specific gravity base will be 0.60

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

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

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

Thomas M. Price

Printed name and title

1/26/95

915/682/1626

12345

Telephone No. _____

ABO

1000

100

10

Jan-90 Apr-90 Jul-90 Oct-90 Jan-91 Apr-91 Jul-91 Oct-91 Jan-92 Apr-92 Jul-92 Oct-92 Jan-93 Apr-93 Jul-93 Oct-93 Jan-94 Apr-94 Jul-94 Oct-94

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■ BLHCPM ◆ MCFPM ▲ BWPM

VACUUM FIELD POOL PLOTS



**Marathon
Oil Company**

P. O. Box 552
Midland, TX 79702-0552
Telephone 915/682-1626

January 27, 1995

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

Re: Request for Exception to Rule 303-A
Downhole Commingling
Marathon Oil Company
McCallister State No. 11
UL "K" 1927' FSL & 2134' FWL
Section 25, T-17-S, R-34-E
Upper Penn, Wolfcamp, Abo
Vacuum Field
Lea County, New Mexico

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 Vacuum (Upper Penn), Vacuum (Wolfcamp) and Vacuum (Abo) Pools in Lea County, New Mexico.

The Wolfcamp zone was completed and is now producing. Based on log evaluation and historic offset production, commercial Abo and Upper Penn production is anticipated. The three zones have been downhole commingled in offset production with no loss of product value or production. By commingling production from the three zones, production will be realized that could not economically justify the cost of equipment to segregate the zones. Rod pumping equipment will be utilized which will 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 contact me at (915) 682-1626.

Sincerely,

Thomas M. Price
Advanced Engineering Technician

TMP/9506/r

Enclosure

Marathon Oil Company
 MIDLAND, TEXAS
56-389
412

PAY TO THE ORDER OF

NO. 8255

New Mexico State Land Office

MO. DAY YR.

01 | 30 | 95

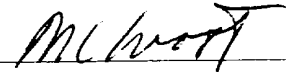
MATCH AMOUNT IN
WORDS WITH NUMBERS

\$30.00

VOID AFTER 180 DAYS

Thirty and no/100 THE AMOUNT IN NUMBERS MUST MATCH THE AMOUNT IN WORDS

 FIRST NATIONAL BANK OF ASHLAND
 AN AFFILIATE OF
NATIONAL CITY BANK
 CLEVELAND, OHIO



@008255@ 1041203895: 0078238@

 MARATHON OIL COMPANY
 P.O. BOX 552
 MIDLAND, TEXAS 79702

DETACH AND RETAIN THIS STATEMENT
 THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW
 IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED

8255

DATE	YOUR INV. NO.	DESCRIPTION	AMOUNT
01/30/95	CR 257141	Downhole Commingle Permit Application McCallister St. #11	\$30.00



**Marathon
Oil Company**

P.O. Box 552
Midland, TX 79702-0552
Telephone 915/682-1626

January 27, 1995

Mobil Exploration & Production
P. O. Box 633
Midland, Texas 79702-0633

Re: Request for Exception to Rule 303-A
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Marathon Oil Company
McCallister State No. 11
UL "K" 1927' FSL & 2134' FWL
Sec. 25, T-17-S, R-34-E
Lea County, New Mexico

Gentlemen:

Marathon Oil Company has filed an application with the New Mexico Oil Conservation Division to downhole commingle the 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 NMOCDD in the attached addressed envelope. Also, please return one copy to Marathon at the letterhead address.

Sincerely,

A handwritten signature in cursive script that reads "Thomas M. Price".

Thomas M. Price
Advanced Engineering Technician

TMP/9501/r
Enclosure

Agreed and accepted this _____ day of _____ 1994
by _____, as representative of
_____.



**Marathon
Oil Company**

P.O. Box 552
Midland, TX 79702-0552
Telephone 915 682-1626

January 27, 1995

Texaco Exploration and Production Inc.
P. O. Box 3109
Midland, Texas 79702-3109

Re: Request for Exception to Rule 303-A
Downhole Commingling
Marathon Oil Company
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Thomas M. Price
Advanced Engineering Technician

TMP/9502/r
Enclosure

Agreed and accepted this _____ day of _____ 1994
by _____, as representative of



**Marathon
Oil Company**

P O Box 552
Midland, TX 79702-0552
Telephone 915/682-1626

January 27, 1995

Conoco Inc.
10 Desta Drive, Suite 100W
Midland, Texas 79705

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Sincerely,

Thomas M. Price
Advanced Engineering Technician

TMP/9503/r
Enclosure

Agreed and accepted this _____ day of _____ 1994

by _____, as representative of

Mid-Continent Region
Production United States



P.O. Box 552
Midland, TX 79702-0552
Telephone 915/682-1626

January 27, 1995

Texaco Exploration and Production Inc.
P. O. Box 3109
Midland, Texas 79702-3109

Re: Request for Exception to Rule 303-A
Downhole Commingling
Marathon Oil Company
McCallister State No. 11
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Sincerely,

A handwritten signature in cursive script that reads 'Thomas M. Price'.

Thomas M. Price
Advanced Engineering Technician

TMP/9502/r
Enclosure

Agreed and accepted this 22nd day of February 1994 ⁵
by James Beach/KFH, as representative of
Texaco E+P Inc.