DHC - 158 DHC - 3/20/75 P.O. BOX 633 IDLAND -- TEXAS-7970 February 25, 1975 OIL CONSERVATION COMM Santa Po

New Mexico Oil Conservation Commission (2) P. O. Box 2088 Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

MOBIL OIL CORPORATION'S APPLICATION FOR EXCEPTION TO RULE 303 (A) FOR AUTHORIZATION TO DOWNHOLE COMMINGLE PRODUCTION FROM THE VACUUM WOLFCAMP AND NORTH VACUUM ABO POOLS IN THE WELLBORE OF MOBIL'S STATE CC COM, WELL NO. 1 LEA COUNTY, NEW MEXICO

Gentlemen:

Mobil Oil Corporation respectfully requests the administrative approval of our request for an exception to Rule 303 (A) for authorization to commingle production from the Vacuum Wolfcamp and North Vacuum Abo Pools in the wellbore of Mobil's State CC Com Well No. 1. The subject well is located in Unit L, Section 36, T-17-S, R-34-E, Lea County, New Mexico.

In support of this application we submit the following attachments:

- (1) Plat showing location of subject lease and well
- (2) Copies of the latest well tests for each zone in the subject well
- (3) Production decline curves for each subject zone
- (4) Exhibit "A" Data sheet for both subject zones
- (5) Exhibit "B" Computation of relative values for subject hydrocarbons
- (6) Existing and proposed wellbore sketches
- (7) Copy of letter requesting waivers from offset operators
- (8) Copy of letter of consent from purchaser of crude

Toma a star

New Mexico Oil Conservation Commission Hobbs, New Mexico February 25, 1975 Page 2 Mobil's Application For Exception To Rule 303 (A) State CC Com Well #1

We believe that the subject well will qualify for consideration as an exception to Rule 303 (A) because both zones are low productivity oil zones and are compatible, as evidenced by the successful surface commingling of the subject zones since 1964. The total pumped commingled production has been estimated at 67 BOPD, which is less than the 80 BOPD limit set forth in Rule 303 (C). We do not believe that either zone will produce more water than the 80 BPD limit; and do not believe that this proposal will jeopardize any secondary recovery operations.

The ownership of both subject zones is common including working interest and royalty interests; and all interests have previously agreed to the surface commingling of the subject zones as approved by Order PC-216, dated June 25, 1964. As shown on Exhibit "B", the value of the commingled production will be more than the sum of the values of the individual production streams and the purchaser of the crude has consented to this proposal. We do not believe that the proposed commingling will violate correlative rights in any manner and the offset operators have been notified of this application.

We respectfully request your approval of the proposed downhole commingling in Mobil's State CC Com Well No. 1, as we believe that this proposal will result in the more efficient recovery of hydrocarbons and may substantially extend the productive limits of both zones in the subject well, thereby preventing waste. If there should be any questions regarding this application, please call.

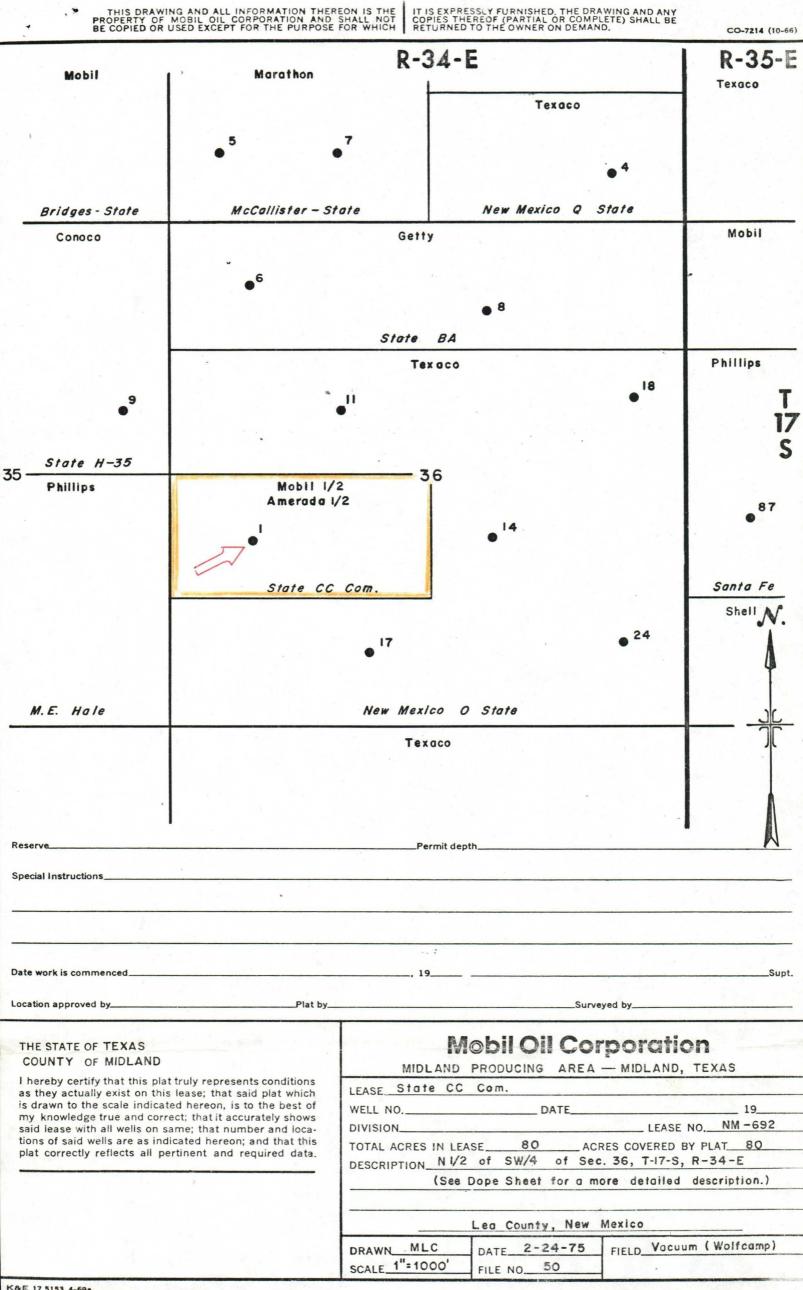
Yours very truly,

& a mornis

Area Operations Engineer

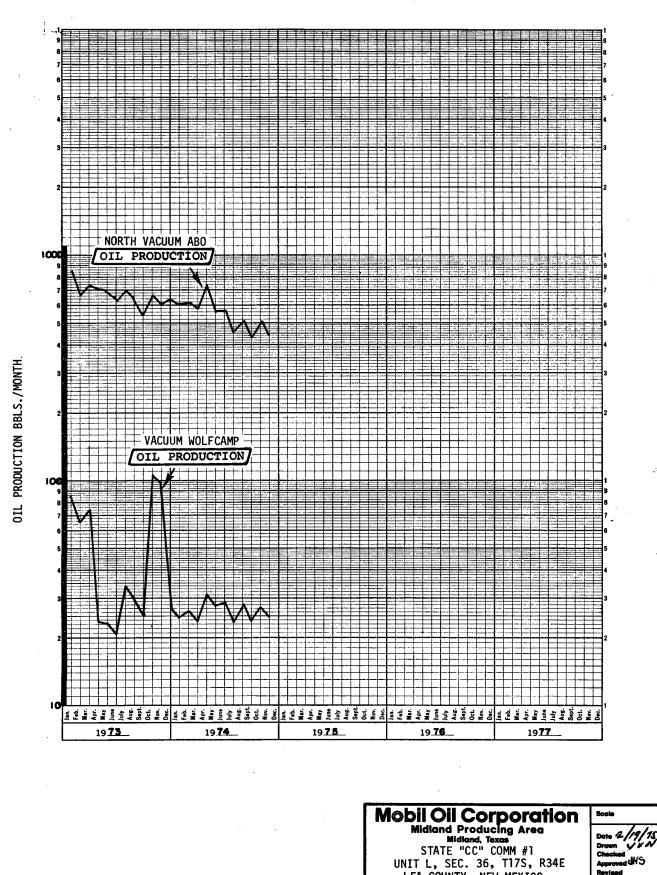
JHSeerey/cs Attachments

cc: NMOCC Dist. 1, Hobbs



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LEA COUNTY, NEW MEXICO PRODUCTION DECLINE CURVES

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#### EXHIBIT "A" DATA SHEET

### MOBIL OIL CORPORATION P. O. BOX 633 MIDLAND, TEXAS 79701

#### APPLICATION FOR EXCEPTION TO RULE 303(a) OF NEW MEXICO OIL CONSERVATION COMMISSION'S RULES & REGULATIONS ALLOWING DOWNHOLE COMMINGLING OF DUALLY COMPLETED OIL WELLS BY ADMINISTRATIVE PROCEDURE (ORDER NO. R-3845)

ė	Lease Name State CC Com
•	Well No
•	Well Location: Unit L, 860 feet from West line, 1980
	feet from South line of Section 36, Township 17S Range 34E
. *	Lea County, New Mexico
•	Upper Zone North Vacuum Abo
 •	Completion Interval 9115-9185'
•	Lower Zone Vacuum Wolfcamp
•	Completion Interval 9962-10,032'
•	Dual Completion Authorized by Commission Order No. MC-1532
•	
*• • ·	Current Productivity Test Summary (Form C-116 attached) North Vacuum Abo Vacuum Wolfcamp
	Current Productivity Test Summary (Form C-116 attached)
•	Current Productivity Test Summary (Form C-116 attached)North Vacuum Abo (Upper Zone)Vacuum Wolfcamp (Lower Zone)Producing Method Oil Gas Water GORPump 17 BOPDFlow 1 BOPD 5 MCFD017 BOPD1 BOPD024705000
•	Current Productivity Test Summary (Form C-116 attached)North Vacuum Abo (Upper Zone)Vacuum Wolfcamp (Lower Zone)Producing Method Oil Gas Water GOR GOR LimitPump 17 BWPDFlow 1 BOPD 0IT7 BWPD 20000O02470 20005000 2000
•	Current Productivity Test Summary (Form C-116 attached)   North Vacuum Abo (Upper Zone) Vacuum Wolfcamp (Lower Zone)   Producing Method 0i1 Gas Water GOR GOR GOR Limit Pump 17 BOPD 42 MCFD 17 BWPD 0 2470 2000 Flow 1 BOPD 5 MCFD 0 2000   Bottom-hole Pressure of Upper Zone 750 psi (est.)   Bottom-hole Pressure of Lower Zone 793 psi
-	Current Productivity Test Summary (Form C-116 attached)   North Vacuum Abo Vacuum Wolfcamp   (Upper Zone) Vacuum Wolfcamp   (Upper Zone) (Lower Zone)   Producing Method Pump   0i1 17 BOPD   Gas 42 MCFD   Water 17 BWPD   GOR 2470   GOR Limit 2000   Bottom-hole Pressure of Upper Zone 750 psi (est.)
	Current Productivity Test Summary (Form C-116 attached)   North Vacuum Abo (Upper Zone) Vacuum Wolfcamp (Lower Zone)   Producing Method Oil Gas Water GOR GOR Limit Pump 17 BOPD 42 MCFD 17 BWPD 0 Flow 1 BOPD 5 MCFD 0   Bottom-hole Pressure of Upper Zone 750 psi (est.)   Bottom-hole Pressure of Lower Zone 793 psi   Fluid Characteristics of Each Zone Both zones produce an intermedia

Date:

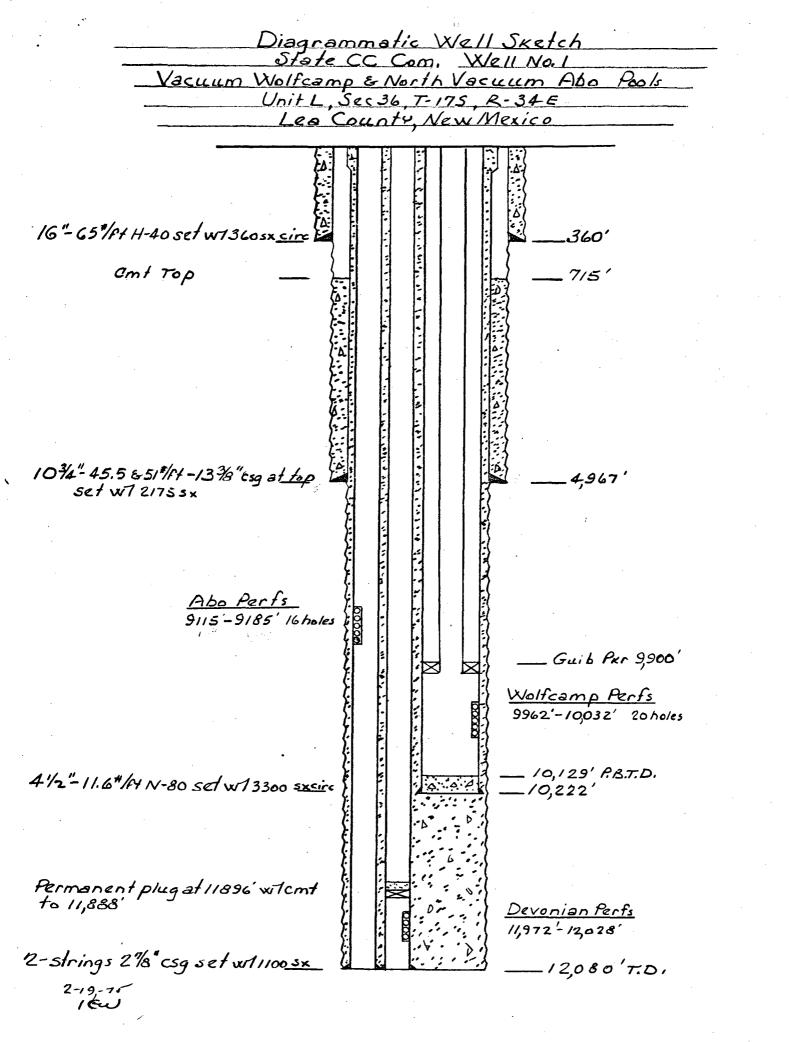
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EXHIBIT "B" MOBIL OIL CORPORATION P. O. BOX 633 MIDLAND, TEXAS 79701 COMPUTATION OF RELATIVE VALUES OF THE HYDROCARBON PRODUCTIVE BEFORE AND AFTER DOWNHOLE COMMINGLING (STATEWIDE RULE 303-C-2-h)

LEASE AND WELL NUMBER	State CC Com Well	No. 1	•
	UPPER POOL	LOWER POOL	COMMINGLED
POOL NAME	<u>North Vacuum</u> Abo	Vacuum Wolfcamp	
GRAVITY, API	39.0	40.2	39.9
SELLING PRICE /BBL.	5.29	5.31	5.29
DAILY PRODUCTION /BBL.	17	1	67
DAILY INCOME	89.93	5.31	\$354.43
TOTAL DATLY INCOME (POOLS	S SEPARATED) \$ 95.2	1	

Net difference realized from downhole commingling based on current well test = \$259.22 /day-<u>--gain</u> or loss.

REMARKS: There will be no real difference in the selling price of the crude because both zones have been commingled on the surface since 1964 in accordance with NMOCC Order PC-216.



Diagrammatic Well Sketch State CC Com\_ Well No. I Vacuum Wolfcamp & North Vacuum Abo Pools Unit L, Sec 36, T-175, R-34-E Les County, New Mexico 16 - 65 / Ft H-40 set w1360sx cire 360' Cmt Top 715' 103/4"- 45.5 & 51 1/1 - 13 3/3" (sg at top 4,967' set wil 2175 5x <u>Abo Perfs</u> 91,15'-9185' 16 holes <u>Proposed Abo Perfs</u> 9115-9185' Wolfcamp Perfs 9962'-10032' 20 holes . 10,129' P.B.T.D. 41/2 - 11.6 #/14 N-80 Set w13300 sxsire \_\_\_/0,222' Permanent plug at 11896' witcmt to 11,888' <u>Devonian Perfs</u> 11,972 - 12028' 2-strings 2% csg set willionsx 12,080'T.D. 2-19-75 IEN

P.O. BOX 633 MIDLAND, TEXAS 79701

February 25, 1975

Continental 0il Company P. O. Box 460 Hobbs, New Mexico 88240

Texaco, Inc. P. O. Box 3109 Midland, Texas 79701

#### REQUEST FOR WAIVER MOBIL OIL CORPORATION'S APPLICATION FOR DOWNHOLE COMMINGLING, STATE CC COM WELL NO. 1, VACUUM WOLFCAMP AND NORTH VACUUM ABO POOLS, LEA COUNTY, NEW MEXICO

#### Gentlemen:

Mobil Oil Corporation proposes to submit an application to the New Mexico Oil Conservation Commission to request an exception to Rule 303 (A) and authorization to commingle, within the wellbore of Mobil's State CC Com Well No. 1, production from the Vacuum Wolfcamp and North Vacuum Abo Pools. The subject well is located in Unit L, Section 36, T17S, R34E, Lea County, New Mexico.

The basic data for each of the zones proposed to be commingled in the subject well is as follows:

		VACUUM WOLFCAMP	NORTH VACUUM ABO
Gravity		40.2°	39.0°
Present Production	- Oil - Water - Gas - GOR	1 BOPD 0 5 MCFD 5000	17 BOPD 17 BWPD 42 MCFD 2470
Interval		9962' - 10,032'	9115' - 9185'
.Shut-in Pressure		793 psi	750 psi (est.)

Continental Oil Co. Texaco, Inc. February 25, 1975 Page 2 Mobil's Application For Downhole Commingling, State CC Com Well #1 Vacuum Wolfcamp and North Vacuum Abo Pools

We believe that the subject well will qualify for consideration as an exception to Rule 303 (A), since the zones requested to be commingled are both marginal oil zones and are compatible, as evidenced by the successful commingling of the subject zones on the surface since 1964. The ownership of both zones to be commingled is common, including working interest and royalty. We do not believe that the proposed commingling will jeopardize any secondary recovery operations and the value of the production will not be diminished.

A plat of the area showing the location of the subject well is attached hereto. If you, as offset operator, have no objection to this application, please sign the approval provided below and return two copies in the self-addressed envelope provided.

Yours very truly,

Original Signed By: J. A. Morris

 $(4 \sigma v)$  L. A. Davis

Area Operations Engineer

JHSeerey/cs Attachment

The undersigned waives objection to the application contained herein.

Company:

Title:

Signature:

Date: \_\_\_\_\_

DATE February 19, 1975

to J. H. Seerey

STATE CC COMM LEA COUNTY, NEW MEXICO

Mobil Oil Corporation, as the purchaser of the intermediate production of the above captioned lease, has no objection to the downhole commingling of the Abo and Wolfcamp crude oil.

÷.,

**C. C**.

J. N. Ludlum tas

T. N. Ludlum ta Midland Crude Oil Department

TNL/tw

P.O. BOX 633 MIDLAND, TEXAS 79701

New Mexico Oil Conservation Commission (3) P. O. Box 2088 Santa Fe, New Mexico 87501

Attention: Mr. Carl Ulvog

TRANSMITTAL OF EXECUTED WAIVERS FROM OFFSET OPERATORS, MOBIL'S APPLICATION FOR EXCEPTION TO RULE 303 (A), DOWNHOLE COMMINGLING IN STATE CC COM, WELL NO. 1 LEA COUNTY, NEW MEXICO

OF CONSTRATION CONA.

State Fe

Gentlemen:

On February 25, 1975 Mobil Oil Corporation submitted an application to the Commission for administrative approval of downhole commingling in the wellbore of Mobil's State CC Com Well No. 1 the production from the Vacuum Wolfcamp and North Vacuum Abo Pools. At the same time, Mobil requested waivers of objection from each offset operator.

Attached are the executed waivers to this application from the offset operators for your consideration and file. We respectfully request your administrative approval of this exception to Rule 303 (A).

Yours very truly, a L. A. Davis

March 6, 1975

Area Operations Engineer

JHSeerey/cs Attachments

cc: NMOCC Dist. 1, Hobbs, NM

e.<sup>74</sup> e.<sup>3</sup>•

P.O. BOX 633 MIDLAND, TEXAS 79701

February 25, 1975

Continental Oil Company 'P. O. Box 460 Hobbs, New Mexico 88240

Texaco, Inc. P. O. Box 3109 Midland, Texas 79701

> REQUEST FOR WAIVER MOBIL OIL CORPORATION'S APPLICATION FOR DOWNHOLE COMMINGLING, STATE CC COM WELL NO. 1, VACUUM WOLFCAMP AND NORTH VACUUM ABO POOLS, LEA COUNTY, NEW MEXICO

Gentlemen:

Mobil Oil Corporation proposes to submit an application to the New Mexico Oil Conservation Commission to request an exception to Rule 303 (A) and authorization to commingle, within the wellbore of Mobil's State CC Com Well No. 1, production from the Vacuum Wolfcamp and North Vacuum Abo Pools. The subject well is located in Unit L, Section 36, T17S, R34E, Lea County, New Mexico.

The basic data for each of the zones proposed to be commingled in the subject well is as follows:

		VACUUM WOLFCAMP	NORTH VACUUM ABO
Gravity		40.2°	39.0°
Present Production	- Oil - Water - Gas - GOR	1 BOPD 0 5 MCFD 5000	17 BOPD 17 BWPD 42 MCFD 2470
Interval		9962' - 10,032'	9115' - 9185'
Shut-in Pressure		793 psi	750 psi (est.)

Continental Oil Co. Texaco, Inc. February 25, 1975 Page 2 Mobil's Application For Downhole Commingling, State CC Com Well #1 Vacuum Wolfcamp and North Vacuum Abo Pools

We believe that the subject well will qualify for consideration as an exception to Rule 303 (A), since the zones requested to be commingled are both marginal oil zones and are compatible, as evidenced by the successful commingling of the subject zones on the surface since 1964. The ownership of both zones to be commingled is common, including working interest and royalty. We do not believe that the proposed commingling will jeopardize any secondary recovery operations and the value of the production will not be diminished.

A plat of the area showing the location of the subject well is attached hereto. If you, as offset operator, have no objection to this application, please sign the approval provided below and return two copies in the self-addressed envelope provided.

Yours very truly,

Original Signed By: J. A. Morris L. A. Davis Area Operations Engineer

(In)

JHSeerey/cs Attachment

The undersigned waives objection to the application contained herein.

Company: CONTINENTAL OIL CO

Title: DIVISION MANAGER Signature:

Seri :e. ia. PETROLEUM PRODUCTS OIL COM XACO INC. REVAN "O. BOX 3109 ́Р.` Sania Fa P. O. BOA 5105 MIDLAND, TEXAS 79701

PRODUCING DEPARTMENT CENTRAL UNITED STATES MIDLAND DIVISION

> WAIVER OF OBJECTION DOWNHOLE COMMINGLING MOBIL OIL CORPORATION STATE CC COM. WELL NO. 1 VACUUM WOLFCAMP POOL NORTH VACUUM ABO POOL LEA COUNTY, NEW MEXICO

State of New Mexico Oil Conservation Commission **P.** 0. Box 2088 Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

Gentlemen:

Texaco Inc. has been advised by Mobil Oil Corporation of its application to the Oil Conservation Commission request-ing permission to downhole commingle its State CC Com. Well No. 1 in the Vacuum Wolfcamp Pool and the North Vacuum Abo Pool. The well to be commingled is located in Unit L, Section 36, T-17-S, R-34-E, Lea County, New Mexico.

February 27, 1975

Texaco Inc., as an offset operator, waives objection to the application.

Yours very truly,

Darrell Smith Division Manager

Brown

R. G. Assistant to Division Manager

CHF/kf

cc: Mobil Oil Corp. P. 0. Box 633 Midland, Texas

79701 This is recycled paper

### OIL CONSERVATION COMMISSION Hobbs DISTRICT

	ION COMMISSION		DATE	March 3, 1975
BOX 2088 SANTA FE, NEW Gentlemen:	MEXICO	AR - 7 1975	<b>RE :</b>	Proposed MC Proposed DHC Proposed NSL Proposed SWD Proposed WFX Proposed PMX
I have e	xamined the appl	· · · · · ·		
	il Oil Corp. pe <b>rator</b>	State CC Com #		Unit, S-T-R
0.K	J.D.R.			
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