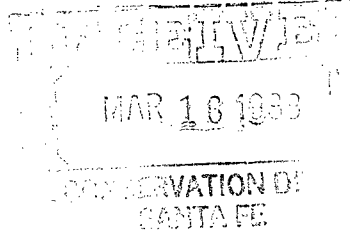


EXXON COMPANY, U.S.A.

POST OFFICE BOX 1600 • MIDLAND, TEXAS 79702-1600

PRODUCTION DEPARTMENT
SOUTHWESTERN DIVISION



March 9, 1988

Downhole Commingling Request
N. G. Penrose No. 3
Unit G, Sec. 13, T-27-S, R-37-E
Lea County, New Mexico

Mr. William J. LeMay, Director
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

Attention: David R. Catanach

Exxon Corporation respectfully requests administrative approval to downhole commingle the Blinebry, Drinkard, and Wantz Granite Wash pools in the N. G. Penrose No. 3. This well is currently downhole commingled in the Drinkard and Wantz Granite Wash pools.

Additional data relative to this commingling is listed below:

1. A lease plat is attached showing the location of this well.
2. A C-116 is included providing a test for the commingled Drinkard/Granite Wash zone.
3. The Blinebry is not currently completed in this well. Expected production is 12 BOPD and 111 MCFPD.
4. A decline curve for the Drinkard/Granite Wash zone is attached.
5. Estimated shut-in bottomhole pressures are 1002 psia for the Blinebry (estimated from static fluid level in the N. G. Penrose No. 2) and 1416 psia for the Drinkard/Granite Wash (estimated from static fluid level in the N. G. Penrose #3). When adjusted to a common average datum of 2767 feet subsea, the Blinebry pressure is 1261 psia and the Drinkard/Granite Wash pressure is 1243 psia.
6. The well currently flows and does not require pumping. However, the pumping unit on the well will be reactivated if the zones do not flow after the additional commingling.

Mr. William J. LeMay
Page 2

7. Working interest and royalty ownership in all formations are the same.
8. The quality of the crude is virtually identical and downhole commingling will not reduce the commercial value. The value of the crude is as follows:

<u>Zone</u>	<u>Oil Gravity</u>	<u>Quality</u>	<u>01/28/88 Posted Price \$ bbl</u>
Blinebry	41.0	Sweet	16.50
Drinkard/Granite Wash	40.8	Sweet	16.50

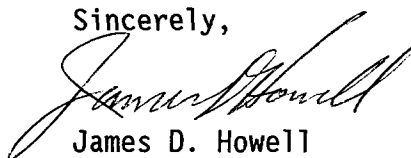
Crude and condensate currently produced from the Blinebry, Tubb, Drinkard and Granite Wash pools on this lease is already being surface commingled into one common stock tank, and sold as a mixture.

9. The following allocation percentages are suggested based upon the ratio of production from each zone:

	<u>Oil</u>	<u>Expected Prod. BOPD</u>	<u>Gas</u>	<u>Expected Prod. MCFPD</u>
Blinebry Oil & Gas	48%	12	74%	111
Drinkard	48%	12	24%	36
Wantz Granite Wash	4%	1	2%	3

10. By copy of this letter, we are notifying the offset operators of this proposed commingling. If these operators have no objections we ask that they execute the attached waiver and return one copy to the NMOCD and another to my attention at the letterhead address.

Sincerely,



James D. Howell

JDH:def

Enclosure

xc: Offset Operators (Certified Mail)
NMOCD District I, Hobbs, New Mexico

[illegible]

bxc: BDT Field Rules File
D. J. Andrews
M. C. Welborn
L. J. Sohaney

OFFSET OPERATORS TO
EXXON'S N. G. PENROSE LEASE

Mabee Petroleum Corp.
400 W. Illinois, Ste. 1500
Midland, Texas 79701

Zachary Oil Operating Co.
1212 Commerce Bldg.
Fort Worth, Texas 76102

Marathon Oil Company
Box 522
125 W. Missouri St.
Midland, Texas 79702

Fina Oil & Chemical Company
6 Desta Drive
Midland, Texas 79705

Texaco Producing, Inc.
Box 3109
500 N. Lorraine
Midland, Texas 79701

Sun Exploration & Production Co.
Box 1861
Midland, Texas 79702

Sohio Petroleum Company
10 Desta Drive, Ste. 600 West
Midland, Texas 79705

J. H. Hendrix Corp.
223 W. Wall
525 Midland Tower Bldg.
Midland, Texas 79701

Form C-116
Revised 10-1-78

DRINKARD - WANTZ GRANITE WASH	LEA
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No well will be assigned an allowable greater than the amount of oil produced on the official test.

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 allowable when authorized by the Division.

Gas volume 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 0.50.

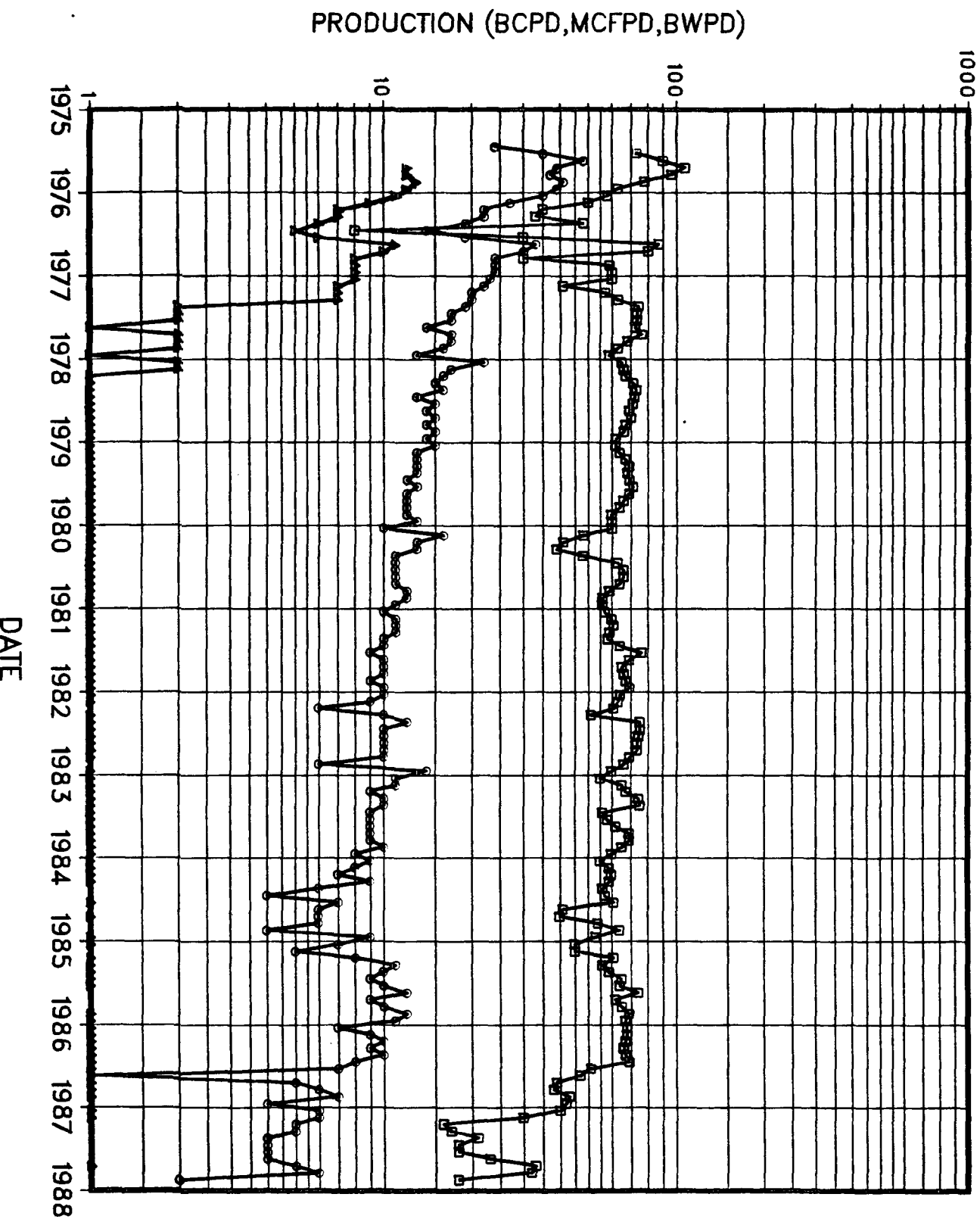
I hereby certify that the above information is true and complete to the best of my knowledge and belief.

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

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 301 and appropriate pool rules.

Date March 1908
 (Signature) Wm. H. H. H.
 (Title) 5-12-8

N G PENROSE #3 DRINKARD-GRANITE WASH PRODUCTION



Legend

- OIL PROD BOPD
- GAS PROD KCFPD
- △ WATER PROD BWPD



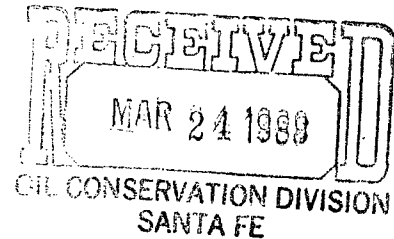
STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

GARREY CARRUTHERS
GOVERNOR

3-21-88

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501



RE: Proposed:

MC _____
DHC X _____
NSL _____
NSP _____
SWD _____
WFX _____
PMX _____

Gentlemen:

I have examined the application for the:

Exxon Corp. N.G. Penrose #3-A 13-22-37
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK

Yours very truly,

Jerry Sexton
Jerry Sexton
Supervisor, District 1

/ed


RECEIVED
APR - 4 1988

Downhole Commingling Request
N. G. Penrose No. 3²²
Unit G, Sec. 13, T-27-S, R-37-E
Lea County, New Mexico

Mr. William J. LeMay, Director
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

Attention: David R. Catanach

As an offset operator, the undersigned has no objection to the Exxon application to downhole commingling the Blinebry, Drinkard and Wantz Granite Wash Pools in the captioned wellbore.

Approved by: 
Representing: ZACHARY OIL OPERATING COMPANY
Date: MARCH 30, 1988

STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 9399
Order No. R-8708

APPLICATION OF EXXON CORPORATION
TO AMEND DIVISION ORDER DHC-195, AS
AMENDED, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on June 8, 1988, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 4th day of August, 1988, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) Division Case Nos. 9398 and 9399 were consolidated at the time of the hearing for the purpose of testimony.

(3) By Order DHC-195, as amended, dated April 5, 1988, the Division authorized Exxon Corporation to commingle the production from the Drinkard, Wantz-Granite Wash, and Blinebry Oil and Gas Pools within the wellbore of its N.G. Penrose Well No. 3 located 1980 feet from the North and East lines (Unit G) of Section 13, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, subject to the following provisions:

- "a. Each newly completed zone shall be separately tested a minimum of 30 days or until such time as the production has stabilized.
- b. The Blinebry zone shall not be commingled should it be determined after testing that said zone is a gas zone subject to the Gas Proration Rules and Regulations for the Blinebry Oil and Gas Pool."

(4) The applicant, Exxon Corporation, seeks the amendment of said Order DHC-195 by removing from said order the testing provisions of the Blinebry zone.

(5) The Division has instituted said provisions to Order DHC-195 in order to ensure the protection of correlative rights of the various operators within the Blinebry Oil and Gas Pool should the Blinebry zone in the subject well be completed as a gas zone subject to the General Rules for the Prorated Gas Pools in New Mexico as promulgated by Division Order No. R-8170, as amended.

(6) The applicant presented production data from several Blinebry wells in the area of the N.G. Penrose Well No. 3 which indicates that Blinebry completions below a depth of approximately -2250 sub-sea result in producing gas-oil ratios of less than 16,000 standard cubic feet of gas per barrel of oil.

(7) This data also indicates that Blinebry completions above a depth of approximately -2250 feet sub-sea have resulted in producing gas-oil ratios in excess of 224,000 standard cubic feet of gas per barrel of oil.

(8) The evidence presented indicates that there exists substantial control within the Blinebry formation in this area.

(9) The applicant testified that it intends to perforate and complete only the oil-bearing portions (those at depths deeper than -2250 sub-sea) of the Blinebry formation in the N.G. Penrose Well No. 3 and, as a result, should obtain a producing oil well in the Blinebry Oil and Gas Pool.

(10) The applicant further presented evidence and testimony which indicate that requiring the Blinebry zone to be separately tested within the subject well would substantially increase workover and completion costs which may in turn render the proposal uneconomic.

(11) Approval of the proposed amendment to Order DHC-195 will result in the recovery of additional reserves from the Blinebry Oil and Gas Pool, thereby preventing waste, and will not violate correlative rights provided that the applicant does not perforate and complete said zone in the gas bearing interval described in Finding No. (7) above.

IT IS THEREFORE ORDERED THAT:

(1) Division Order DHC-195, as amended, issued April 5, 1988, is hereby amended by the deletion therefrom of the following provisions:

- "a. Each newly completed zone shall be separately tested a minimum of 30 days or until such time as the production has stabilized.
- b. The Blinebry zone shall not be commingled should it be determined after testing that said zone is a gas zone subject to the Gas Proration Rules and Regulations for the Blinebry Oil and Gas Pool."

PROVIDED HOWEVER THAT, the applicant shall perforate and complete only that portion of the Blinebry zone identified in Finding No. (6) as being oil bearing and located at a depth greater than -2250 sub-sea.

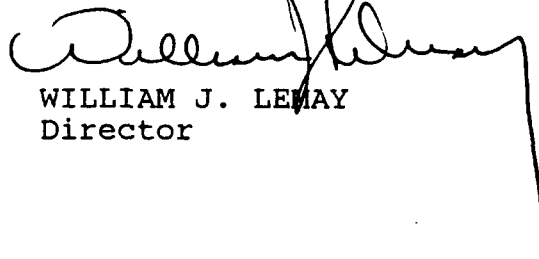
(2) All other provisions contained in Order DHC-195 shall remain in full force and effect.

(3) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

CASE NO. 9399
Order No. R-8708
Page -4-

DONE at Santa Fe, New Mexico, on the day and year
hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in dark ink, appearing to read 'William J. Lemay', is written over the typed name. The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

WILLIAM J. LEMAY
Director

S E A L