STATE OF NEW MEXICO



BRUCE KING

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

12-3-92

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

OIL CO	DNSEI	RVATI	(ON DIV)	ISION
P. O.	BOX	2088	3	
SANTA	FE,	NEW	MEXICO	87501

RE: Proposed:

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NSP		 	
SWD		 	
WFX		 	
PMX <sup>-</sup>		 	<u> </u>

Gentlemen:

I have examined the application for the:

#98-A 28-30-38 Lease & Well No. Unit S-T-R Warren Unit Operator

and my recommendations are as follows:

- OK

Yours very truly,

KKK

/Jerry*S*exton Supervisor, District 1

/ed

DHC-868



Midland Division Exploration Production Conoco Inc. 10 Desta Drive, Suite 100W Midland, TX 79705-4500 (915) 686-5400

December 2, 1992

Mr. Jerry Sexton Oil Conservation Division Hobbs District Office P. O. Box 1980 Hobbs, NM 88240

Dear Mr. Sexton:

Application to Downhole Commingle Warren Unit No. 98, Unit A, Sec. 18, <u>T-20S, R-38E, Lea County, New Mexico</u>

Attached is a copy of Conoco's application to downhole commingle the subject well. Following the discovery of the communication between the Tubb and Blinebry formations in this newly drilled well I talked with you about how to handle the situation.

At that time you gave verbal approval to continue producing both zones in the commingled state while we applied for a hearing to request approval. The background discussion in the attached application explains what has transpired since that time. The administrative application which was eventually filed is attached for your information.

Very truly yours,

Jerry W. Hoover Senior Conservation Coordinator



Midland Division Exploration Production Conoco Inc. 10 Desta Drive, Suite 100W Midland, TX 79705-4500 (915) 686-5400

November 20, 1992

State of New Mexico Energy & Minerals Department Oil Conservation Division P.O. Box 2088 Santa Fe, NM 87504-2088

Gentlemen:

Application to Downhole Commingle Warren Unit No. 98, Unit A, Sec. 28, <u>T-20S, R-38E, Lea County, New Mexico</u>

Conoco Inc. respectfully requests administrative approval to downhole commingle the Blinebry Oil & Gas and the Warren Tubb Pools in the subject well located at 660 feet FEL and 660 feet FNL of Section 28, T-20S, R-38E as shown on EXHIBIT A.

## **BACKGROUND:**

On October 10, 1991 this well was first produced as a dual completed oil well in the Warren-Drinkard and Blinebry Oil & Gas Pools as shown by the Original Completion wellbore schematic in EXHIBIT B. Upon depletion of the Drinkard reserves, the well was plugged back and recompleted in the Tubb Gas Pool. During the same workover, additional pay was perforated in the Blinebry Pool with the intent of dually producing the resulting Tubb oil and Blinebry oil completions as shown by the Proposed Completion wellbore schematic in EXHIBIT C.

However, the fracture stimulation of the Tubb zone communicated upward with the Blinebry. Because of the close proximity of the two zones, it was impossible to once again isolate their production without significant loss of pay and reserves. It was also impossible to evaluate the contributions of the newly completed Tubb and the enlarged Blinebry zones to the resulting flow stream.

Since early production from these communicated zones was significantly above the 40 BOPD limit for administrative commingling of these pools, an application was filed for an examiner hearing. That application was docketed as Case 10596 for the November 5, 1992 hearing docket and continued to the November 19 docket. However, since the filing of that application, the combined production from the well has rapidly declined to a daily rate less than 40 BOPD. Therefore the hearing application was dismissed and this new administrative application is being filed instead.

### ATTACHMENTS:

The following attachments, as required by 303 (C) are enclosed:

1. EXHIBIT A is a lease plat showing Blinebry and Tubb completions in the area.

- 2. Separate C-116's for the Tubb and the Blinebry zones cannot be provided since communication of the zones occurred during the completion process before either could be tested. EXHIBIT D is a C-116 for the combined Blinebry and Tubb zones.
- 3. A decline curve for the combined zones is included as EXHIBIT E.
- 4. Isolated bottomhole pressures for each zone are also unavailable, but historically they have been very similar in this area and should be well within the guidelines of 303 (C).
- 5. Basic ownership is the same for both zones.
- 6. The quality of crude has been historically identical for Blinebry and Tubb completions in this area with gravities of approximately 40 \*API for each formation. Therefore, the value of the commingled production should be the same as that for each separate zone.
- 7. The following allocation percentages are suggested:

	<u>0i1</u>	<u>Gas</u>	<u>Water</u>
Blinebry Oil & Gas Pool	63%	56%	68%
Warren Tubb Gas Pool	37%	44%	32%

These percentages are based on cumulative production totals for the Warren Unit No. 43 well. Since it was impossible to secure isolated tests for each zone prior to communication in well No. 98, analogy to a similar well was the next best method available for determining this formula. The No. 43 well is only 2 locations to the northwest of No. 98 and has a similar (a) structural position, (b) initial total rate, and (c) total predicted recovery.

- 8. The Bureau of Land Management, as owner of the minerals at this location, is being notified of this commingling application. Conoco is the only offset operator to this well.
- 9. When this application was initially submitted for an examiner hearing, each the 51 working and royalty interest owners in the Warren Unit was given certified notice, including a copy of the application, of the request for a hearing. EXHIBIT F is a list of these owners. Conoco has received no objections to the application.

Very truly yours,

ooun

/Jerry W. Hoover Senior Conservation Coordinator

cc: Bureau of Land Management Carlsbad Resource Area

Jerry Sexton NMOCD Hobbs District Office



# **ORIGINAL COMPLETION BLINEBRY/DRINKARD DUAL** WARREN UNIT NO. 98





EY: J. MILLER



EXHIBIT C

1000 Rio Brazos Rd., Aztec, NM 87410 DISTRICT II P.O. Drawer DD, Artesia, NM 88210 DISTRICTJ P.O. Box 1980, Hobbs, NM 88240 Submit 2 copies to Appropriate District Office. **DISTRICT III** 

State of New Mexico Energy, Minerals and Natural Resources Department

# Revised 1/1/89 Form C-116

# OIL CONSERVATION DIVISION P.O. Box 2088 Santa Fe, New Mexico 87504-2088

# GAS - OIL BATIO TECT

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Operator Conoco, Inc.						Pool Warren 1	]ubb	Tubb and	Blinebry	ory		3	<b>county</b> Lea			
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(See Rule 301, Rule 1116 & appropriate pool rules.)

Telephone No.

Date





# WARREN UNIT NO.98 BLINEBRY/TUBB SINGLE

**PRODUCTION VOLUMES** 

EXHIBIT E



AMOCO PRODUCTION CO. P.O. BOX 65111 CHARLOTTE, NC 28265-0111

ATLANTIC RICHFIELD CO. P.O. BOX 910355 DALLAS, TX 75391-0001

CAHTIE CONE AUVENSHINE P.O. BOX 658 DRIPPING SPRINGS, TX 78620-0658

B H C H MINERAL JOINT VENTURE #460 745 E. MULBERRY SAN ANTONIO, TX 78212-3166

JAMES WILLIAM BISHOP P.O. BOX 2248 HOT SPRINGS, AR 71914-2248

CHLOE BLAIR TRUST MIKE FLOYD TRUSTEE BOX 868 BORGER, TX 79008

EDGAR BLAIR P.O. BOX 868 BORGER, TX 79008

BOYER/COLEMAN/SPITLER COLL. TRUST #1 C/O NATIONS BANK BANK TRUSTEE P O BOX 840738 DALLAS, TX 75284-0738

BOYS CLUB OF AMERICA 771 FIRST AVENUE NEW YORK, NY 10017-3519 CHEVRON USA, INC. P.O. BOX 840592 DALLAS, TX 75284-0592

CHARLES H. COLL BOX 1818 ROSWELL, NM 88202-1818

JON F. COLL BOX 1818 ROSWELL, NM 88202-1818

JAMES N. COLL BOX 1818 ROSWELL, NM 88202-1818

MAX W. COLL II RR 9 BOX 72F SANTA FE, NM 87505

CLIFFORD CONE P.O. BOX 6010 LUBBOCK, TX 79493-6010

ESTATE OF KATHLEEN CONE LEON BINKLEY & DONNA FROST PERSONAL REPRESENTATIVE P.O. BOX 1509 LOVINGTON, NM 88260-1509

KENNETH G. CONE P.O. BOX 11310 MIDLAND, TX 79702-8310

MARILYN CONE TRUSTEE OF D.C. TRUST P.O. BOX 64244 LUBBOCK, TX 79464-4244 TOM R. CONE P.O. BOX 778 JAY, OK 74346-0778

CONOCO INC. 10 DESTA DR., STE 100W MIDLAND, TX 79705

C. E. CORRIGAN ESTATE P.O. BOX 2410 VERO BEACH, FL 32961

PAT CORRIGAN TRUSTEE PAT CORRIGAN TRUST P.O. BOX 2410 VERO BEACH, FL 32961

HUGH CORRIGAN III TRUST HUGH CORRIGAN III TRUSTEE P.O. BOX 50460 MIDLAND, TX 79710-0460

BOYCE RUSH DAVIS P.O. BOX 516124 DALLAS, TX 75251-6124

ELKS NATIONAL FOUNDATION A. PATRICIA KAVANAUGH EXECUTIVE DIRECTOR 2750 LAKE VIEW AVE CHICAGO, IL 60614

ELLIOTT OIL CO BOX 1355 ROSWELL, NM 88202-1355

JOE GIEB, III P.O. BOX 2434 MIDLAND, TX 79702 BRUCE H.C. HILL 745 E. MULBERRY, STE 460 SAN ANTONIO, TX 78212

HAROLD G. HUBBARD 4511 SOUTHERN DALLAS, TX 75205-2624

MORGAN R. HUBBARD P.O. BOX 1961 ABILENE, TX 79604-1961

REMBERT A. LECHNER RT. 3 BOX 325 TERRELL, TX 75160-9803

PATRICK J. LEONARD P.O. BOX 335 DALLAS, TX 75221-0335

ROBERT J. LEONARD BOX 400 ROSWELL, NM 88202-0400

TIMOTHY T. LEONARD BOX 6006 SAN ANTONIO, TX 78209–0006

PEGGY DONNELLY MCCONNELL 816 RIDGLEA BANK BLDG FT WORTH, TX 76116

MERIDIAN OIL P.O. BOX 910497 DALLAS, TX 75391-0497 MINERALS MGT SERVICE ONSHORE FEDERAL #17555 P.O. BOX 5810 DENVER, CO 80217-5810

TARYN NINI MORRIS 2323 OLDHAM LN ABILENE, TX 79602

MWJR PETROLEUM CORP. 2000 POST OAK, STE 100 HOUSTON, TX 77056-4400

NEW MEXICO BOYS RANCH INC. BUSINESS OFFICE 6209 HENDRIX NE ALBUQUERQUE, NM 87131-3111

MARILYN NOWLIN NINI 2 TRAFALGAR SQ ABILENE, TX 79605

REGENTS OF UNIVERSITY OF NEW MEXICO UNM PRE-AUDIT DEPT SCHOLES HALL, RM #260 ALBUQUERQUE, NM 87131-3111

WILLIAM C. SAWTELLE P.O. BOX 1617 BOERNE, TX 78006-6617 SHATTUCK - ST MARYS SCHOOL P.O. BOX 218 FARIBAULT, MN 55021-0218

SHRINERS HOSPITALS FOR CRIPPLED CHILDREN P.O. BOX 0050 TAMPA, FL 33655-0001

PAUL SLAYTON P.O. BOX 2035 ROSWELL, NM 88202-2035

KYLE L. STALLINGS P.O. BOX 10217 MIDLAND, TX 79702-7217

NEVILLE NOWLIN TURNER C/O WM F. COURTNEY 4352 FAIRFAX AVENUE DALLAS, TX 75205-3027

UNION OIL CO. OF CALIFORNIA UNION OIL & GAS DIVISION ATTN: REVENUE ACCOUNTING P.O. BOX 655075 CHARLOTTE, NC 28265-0507

UNITED NEW MEXICO TRUST CO. TR NEVADA CHILDRENS FD INC. RENO CANCER CNTR INC/ NEVADA TUBERCOLOSIS & HEALTH ASSOC P.O. BOX 5614 HOBBS, NM 88241-5614 CARLYLE W. URBAN INDPT EXEC WILL & EST ORVAL L. BRACE DECD C/O ANN M. CLARK 5654 ELLA LEE LANE HOUSTON, TX 77056

## **RUTH RUSH WEAVER** P.O. BOX 195 PEARCY, AR 71964-0195