N.M. OIL CONS. COMMISSION
P.O. BOX 1980
HOBBS, NEW MEXICO 88240

Form 3160-5
(June 1990)

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

5. Lease Designation and Serial No.: LC 031695-B

6. If Indian, Allottee or Tribe Name:

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation: Warren Unit

1. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.: 95

2. Name of Operator: Conoco, Inc.

9. API Well No.: 30-025-30659

3. Address and Telephone No.: 10 Desta Dr. Ste 100W, Midland, TX 79705

10. Field and Pool, or Exploratory Area: ~~Warren Blinebry~~ Tubb

4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 660' FSL & 660' FEL, Sec. 28, T-20S, R-38E

11. County or Parish, State: Lea, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☒ Other Downhole Commingling	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Downhole commingling approval is requested for this well according to the provisions of the attached application.

NOV 1 1995

14. I hereby certify that the foregoing is true and correct

Signed Jerry W. Moore Title Sr. Conservation Coordinator Date 10/31/95

(This space for Federal or State office use)

Approved by Orig. Signed by Adam Salameh Title Petroleum Engineer Date 12/6/95

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

Midland Division
Exploration Production

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

September 28, 1995

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

Gentlemen:

Application to Downhole Commingle
Warren Unit No. 95, Unit P, Sec. 28
T-20S, R-38E, Lea County, New Mexico

Conoco, Inc. requests administrative approval to downhole commingle the Warren Blinebry-Tubb Oil & Gas and Warren Drinkard Pools in the subject well located at 660 feet FSL and 660 feet FEL of Section 28, T-20S, R-38E as indicated by the arrow on the map of EXHIBIT A. On the same map, all of the wells within the dotted enclosure, with the exception of the subject well No. 95, have already been approved for downhole commingling of the Blinebry-Tubb and Drinkard by Division Order No. R-10335.

BACKGROUND:

This well was first produced as a dual completed oil well on January 11, 1990 completed in the Warren Blinebry and Warren Drinkard, respectively. The Blinebry formation was initially completed only in portions of the 4th and 5th zones.

In September 1994, workover operations were commenced on this well in order to add the Tubb formation, Blinebry zones 1-3, and additional portions of Blinebry zone 5. EXHIBIT B, labeled "CURRENT", is representative of the wellbore after this workover. However, according to our after-frac log the fracture treatment of the Tubb zone communicated downward with the Drinkard. This was later confirmed (in May, 1995) when the Warren Unit No. 95 failed its packer leakage test and subsequent remedial work to repair the communication in June, 1995 was also unsuccessful .

Since the communication cannot be repaired, it is in the interest of conservation and the prevention of waste to officially downhole this well, remove all dual equipment, and produce all completed intervals through a single string of tubing as shown in EXHIBIT C. Since the Drinkard completion was not changed or treated during the workover, its production before the workover can be subtracted from the current total (communicated) production to determine the percentage being produced from the enlarged Blinebry-Tubb interval.

Since the only two known production volumes are the Drinkard, prior to the well workover and communication, and the total (Blinebry/Tubb/Drinkard) production after the workover and communication, the allocated production volume for the Blinebry-Tubb must be calculated by subtracting the Drinkard from the total. EXHIBIT D is the known Drinkard production history while EXHIBIT E showns the total well production following the workover. The similar 25% oil and 4% gas declines for these zones are shown on both exhibits.

A common time, June 1995, was chosen to compare Drinkard production with the toal. The Drinkard declines on EXHIBIT D were extended to this date and and the corresponding producing rates of 1 BOPD and 800 MCFGPD noted. The total commingled production of 10 BWPD, 45 BOPD, and 1100 MCFGPD was also noted on EXHIBIT E. Under the extenuating circumstances, where current separate tests cannot be conducted, this appears to provide the best possible estimate for allocation purposes.

While all working interests and royalty interests are common in these two pools, separate participating areas with minor differences in over-riding interests, technically classify this case as one dealing with differing interests. Therefore, all working interests, royalty interests, and over-riding insterest owners will be notified of this application. There are no offsetting operators within a mile of this Warren Unit location, so no such notification is required.

EXHIBIT F shows that wellbore fluids from the two pools are compatible. EXHIBIT G illustrates that the two similar 40° oil crudes will not be devaluated by commingling

REQUIRED DATA:

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

2. Warren Unit
   Well No. 95
   660 feet FSL and 660 feet FEL of Section 28, T-20S, R-38E
   Warren Blinebry-Tubb Oil & Gas and Warren Drinkard Pools

3. EXHIBIT A is a plat of the area identifying Well No. 95 (by arrow) and other downhole commingled wells in the area (inside the dotted line).

4. Since separate tests for these commingled pools cannot be achieved and allocation is proposed by using projections from the decline curves in EXHIBITS D & E, a C-116 showing producing rates for the Warren Drinkard and the Warren Blinebry-Tubb cannot be furnished.

5. EXHIBIT D is a production decline curve for the Warren Unit No. 95 Drinkard through August, 1994 before the workover and EXHIBIT E is a production decline curve for the Warren Unit No. 95 after the workover showing commingled production from all three formations.

6. Estimated bottomhole pressures for the Drinkard and Blinebry - Tubb at a common datum of -2850 ss are very similar at 803 psi and 901 psi, respectively.

7. EXHIBIT F shows water analyses for both pools and that their mixing will be compatible.

8. EXHIBIT G shows that the gravities of the two oil streams are almost identical and there will be no loss of revenue from selling them as a commingled stream.

9. Allocation using the decline curve projections of EXHIBITS D & E and by the subtraction method as shown below is suggested:

	OIL bopd	Oil %	GAS mcfd	Gas %	H_2O bwpd	Water %
TOTAL Blinebry-Tubb & Drinkard (Measured after workover)	45	100%	1100	100%	10	100%
Drinkard - Measured Separately (before well workover)	1	2%	800	73%	0	0%
Blinebry-Tubb - Calculated (calculated by subtraction)	44	98%	300	27%	10	100%

10. All Warren Unit interest owners (working, royalty, & overriding) and the United States BLM have been notified in writing of this proposed commingling. A list of these parties is included as EXHIBIT H.

Very truly yours,

Jerry W. Hoover
Senior Conservation Coordinator

cc: BLM - Carlsbad Resource Area
NMOCD Hobbs District Office - Jerry Sexton

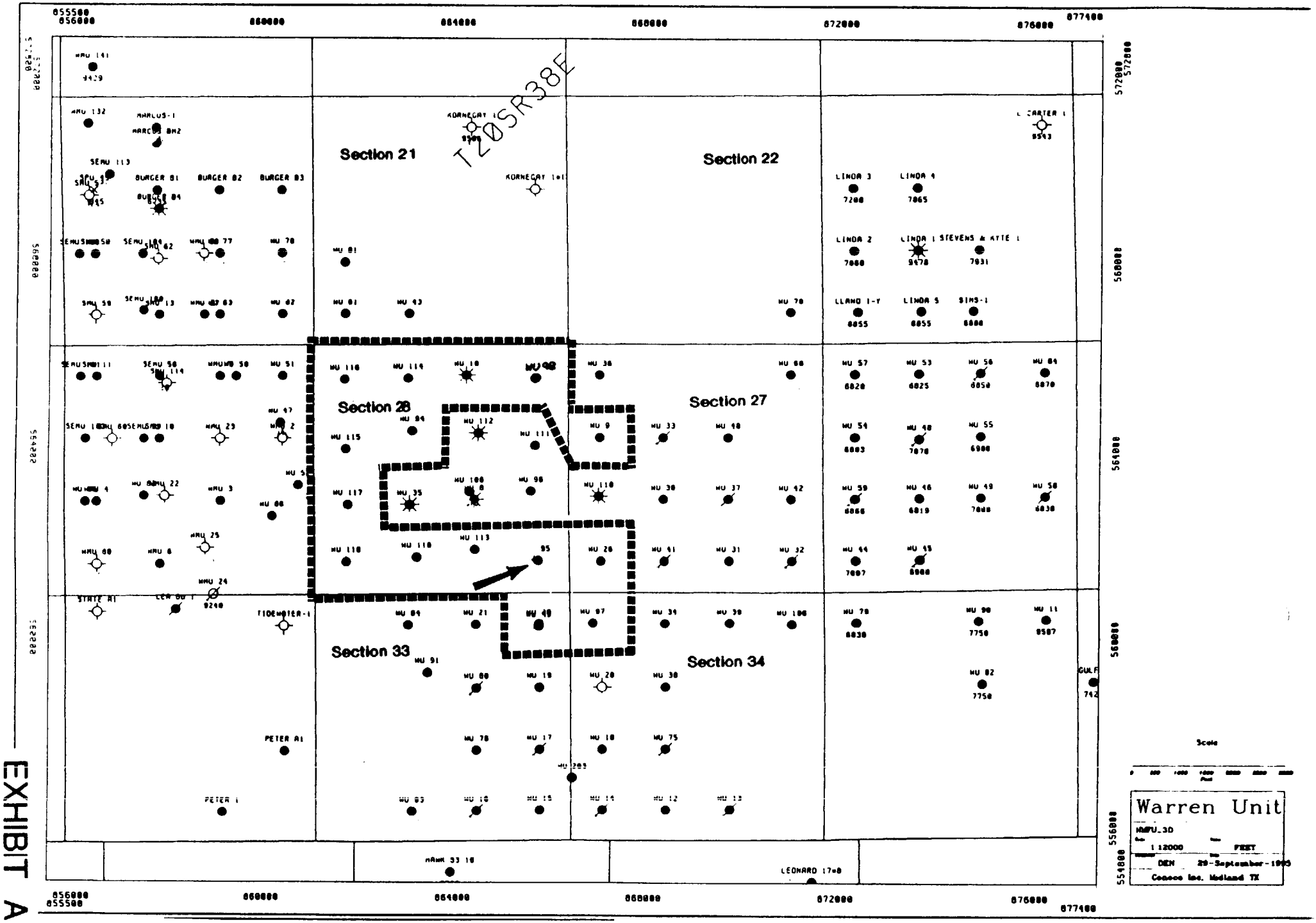
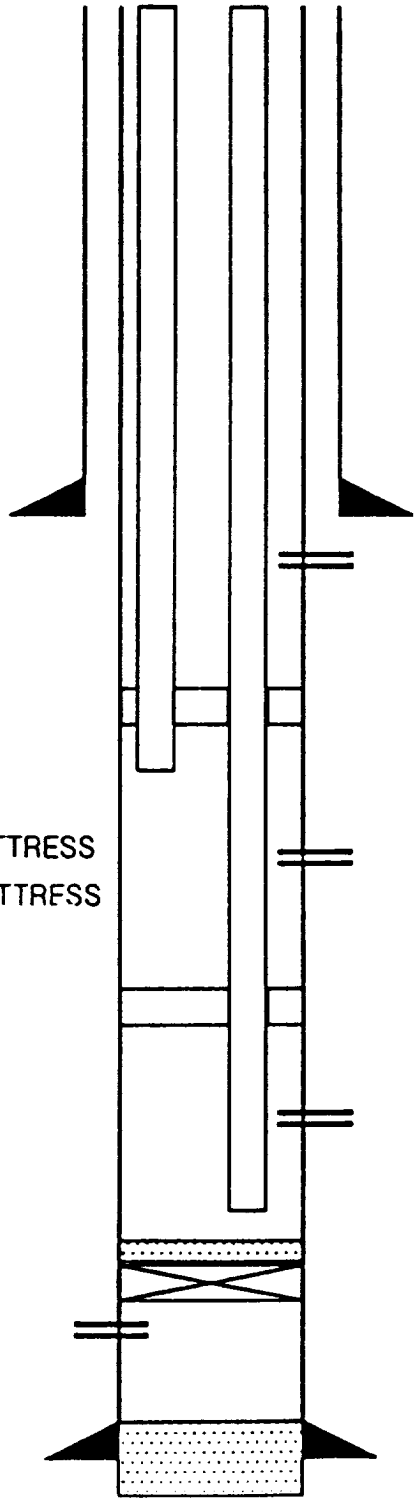

Section 21
Section 22
Section 26
Section 27
Section 33
Section 34
T20SR38E
KORNEGAY 1
KORNEGAY 1-01
L CARTER 1
LINDA 3
LINDA 4
LINDA 2
LINDA 1
STEVENS & KITE 1
LLANO 1-Y
LINDA 5
SIMS-1
HARLOS-1
BURGER 81
BURGER 82
BURGER 83
BURGER 84
STATE A1
TIDEWATER-1
PETER A1
PETER 1
LEONARD 17-8
GULF
Scale
Warren Unit
HWFU_3D
1:12000
FEET
DEN
29-September-1995
Conoco Inc. Midland TX

EXHIBIT A

CURRENT
WARREN UNIT NO. 95
NEW MEXICO FEDERAL UNIT

660' FSL & 660' FEL SEC.28,T-20S,R-38E



KBE: 3550'
GLE: 3534'

SURFACE CASING:
13-3/8",54.5#,K-55 @1445'
W/ 1200 SX. TOC: CIRC

YATES SQUEEZE: 2 JSPF
2692'-2697'

OTIS PARALLEL ANCHOR @ 5744'

BLINEBRY TUBING: 2-3/8", 4.6#,J-55 BUTTRESS
DRINKARD TUBING: 2-3/8", 4.6#,J-55 BUTTRESS

BLINEBRY-TUBB PERFS:
1 JSPF @ 5756'-6527'

BAKER LOK-SET PACKER @ 6550'
W/ 1.81" & 1.78" PROFILE NIPPLES

DRINKARD PERFS: 1 JSPF
6570'-6792'

ABO PERFS: 4 JSPF
6952'-7358'

CIBP @ 6900' W/ CMT TO 6865'

PRODUCTION CASING:
7", 23# & 26#, K-55, SET @ 7448'
W/ 2770 SX. TOC: CIRC

PBTD: 6865'(CMT & CIBP)

TD: 7448'

BY: J. MILLER

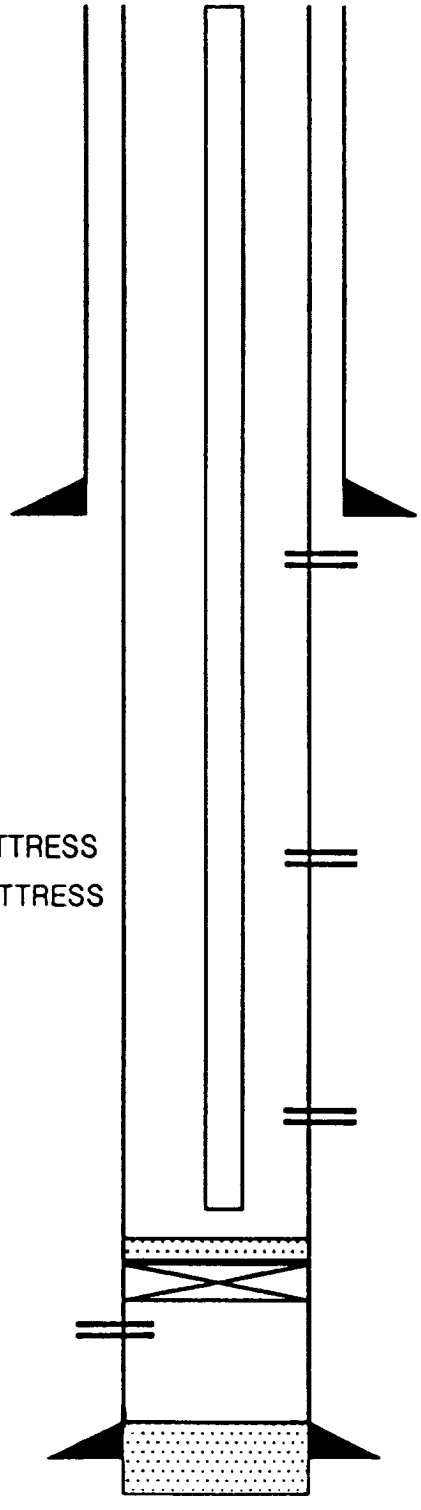
DATE: 03-05-94

EXHIBIT B

PROPOSED
WARREN UNIT NO. 95
NEW MEXICO FEDERAL UNIT

660' FSL & 660' FEL SEC.28,T-20S,R-38E

KBE: 3550'
GLE: 3534'



SURFACE CASING:
13-3/8",54.5#,K-55 @1445'
W/ 1200 SX. TOC: CIRC

YATES SQUEEZE: 2 JSPF
2692'-2697'

BLINEBRY TUBING: 2-3/8", 4.6#,J-55 BUTTRESS
DRINKARD TUBING: 2-3/8", 4.6#,J-55 BUTTRESS

BLINEBRY-TUBB PERFS:
1 JSPF @ 5756'-6527'

DRINKARD PERFS: 1 JSPF
6570'-6792'

ABO PERFS: 4 JSPF
6952'-7358'

CIBP @ 6900' W/ CMT TO 6865'

PRODUCTION CASING:
7", 23# & 26#, K-55, SET @ 7448'
W/ 2770 SX. TOC: CIRC

PBTD: 6865'(CMT & CIBP)

TD: 7448'

BY: J. BRIENEN

DATE: 10/06/95

EXHIBIT C

Warren Unit #95

Drinkard

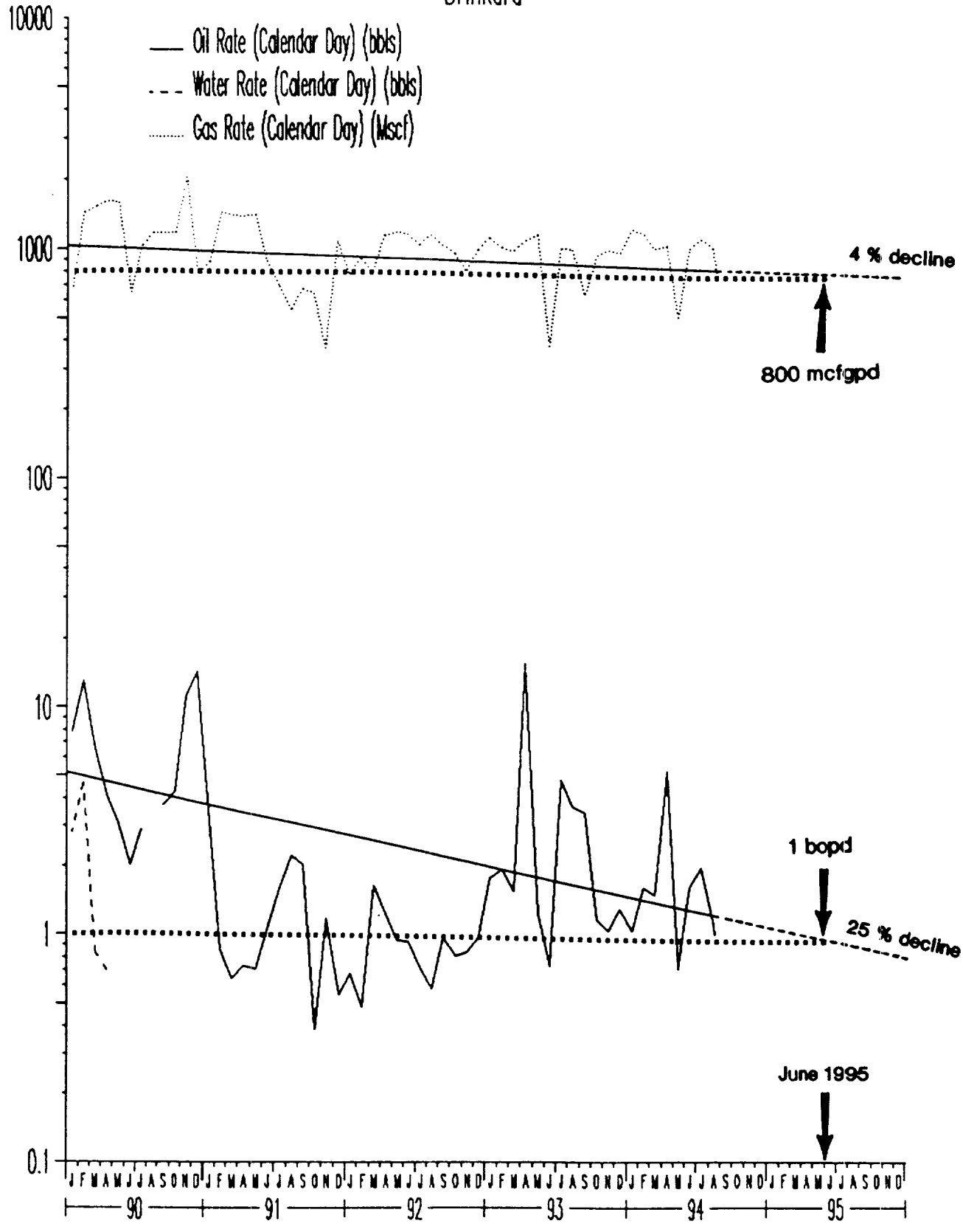


EXHIBIT D

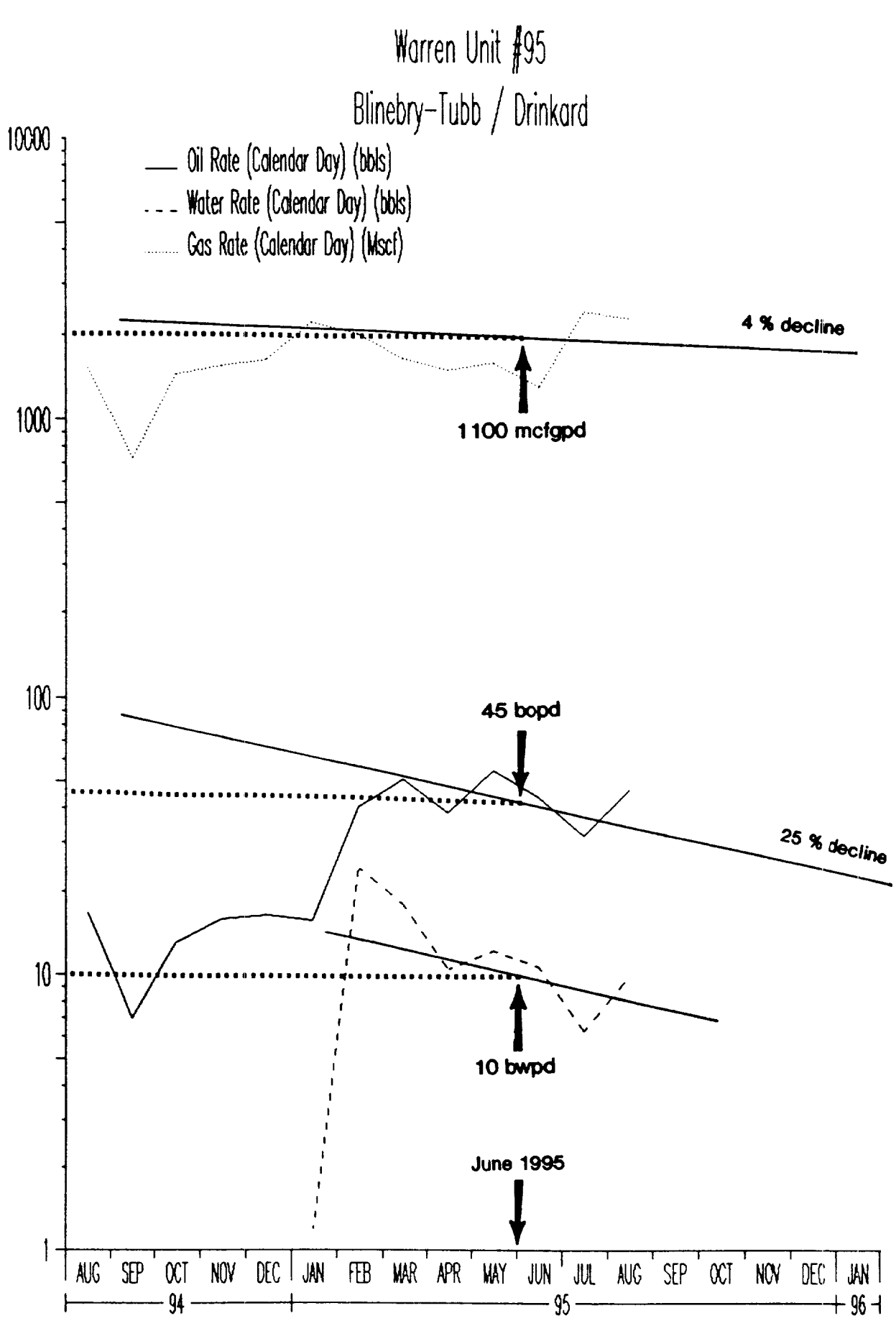

Warren Unit #95
Blinebry-Tubb / Drinkard
Oil Rate (Calendar Day) (bbls)
Water Rate (Calendar Day) (bbls)
Gas Rate (Calendar Day) (Mscf)
10000
1000
100
10
1
4 % decline
1100 mcfgpd
45 bopd
25 % decline
10 bwpd
June 1995
AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN
94
95
96

EXHIBIT E

WARREN UNIT

WATER ANALYSIS COMPATIBILITIES

	BLINEBRY-TUBB WATER ANALYSIS mg/l	DRINKARD WATER ANALYSIS
CHLORIDE	68800	101600
SULFATE	1422	1099
CALCIUM	5065	13570
SODIUM	38429	42996
CALCIUM SULFATE	2015	1558
BARIUM	0	0
STRONTIUM	105	131
TOTAL DISSOLVED SOLIDS	119356	164724
CALCIUM SULFATE SCALING TENDENCY	3175 @ 100°	1394 @ 100°

MIXED WATER ANALYSIS

	50% BLINEBRY-TUBB, 50% DRINKARD	25% BLINEBRY-TUBB, 75% DRINKARD	75% BLINEBRY-TUBB, 25% DRINKARD
CALCIUM CARBONATE STABILITY INDEX @ 100° F	1.6	1.8	1.4
CALCIUM SULFATE SCALING TENDENCY @ 100° F	1951	1624	2429
ACTUAL SOLUTION CALCIUM SULFATE	1786	1671	1901

EXHIBIT F

WARREN UNIT

GRAVITY MIXING

FORMATION	GRAVITY	DEDUCT
BLINEBRY-TUBB	39.4^0	$.02
DRINKARD	39.6^0	$.02

	BLINEBRY-TUBB		DRINKARD		
LOW TEST WARREN UNIT #94	$\frac{16}{24}$	39.4^0 API +	$\frac{8}{24}$	39.6^0 =	39.47
HIGH TEST WARREN UNIT #115	$\frac{80}{108}$	39.4^0 +	$\frac{28}{108}$	39.6^0 =	39.45

NO DIFFERENCE SO NO EXTRA DEDUCT

EXHIBIT G

WARREN UNIT INTEREST OWNERS

NAME/ADDRESS	% INTEREST	TYPE
Arco Oil & Gas P.O. box 1610 Midland, TX 77701	21.40625	W.I.
Chevron USA Inc. P.O. Box 1150 Midland, TX 79702	21.40625	W.I.
MW Petroleum Corp. 2000 Post Oak Blvd, St 100 Houston, TX 77056	21.19219	W.I.
Conoco Inc. 10 Desta Dr., Ste 100W Midland, TX 79705	21.40625	W.I.
Minerals Management Serv. P.O. Box 5810 Denver, CO 80217	12.50000	R.I.
Amoco Prod ction Co. P.O. Box 3092 Houston, TX 77253	.21406	O.R.R.I.
BHCH Mineral Joint Venture #200 745 E. Mulberry San Antonio, TX 78212	.04219	O.R.R.I.
CEC Trust, F/B/O Eleanor Christie Corrigan J. Pat Corrigan Trustee P.O. Box 2410 Vero Beach, FL 32961	.02088	O.R.R.I.
CEC Trust, F/B/O James Patrick Corrigan Jr. J. Pat Corrigan Trustee P.O. Box 2410 Vero Beach, FL 32961	.02087	O.R.R.I.
CEC Trust, F/B/O Hugh Corrigan IV Hugh Corrigan III Trustee 3809 Shenandoah St. Dallas, TX 75205	.03125	O.R.R.I.

EXHIBIT H

CEC Trust, F/B/O Patrick Edward Corrigan Hugh Corrigan III Trustee P.O. Box 50280 Midland, TX 79710	.03125	O.R.R.I.
CEC Trust, F/B/O Hugh Daniels Corrigan J Pat Corrigan Trustee P.O. Box 2410 Vero Beach, FL 32961	.02075	O.R.R.I.
Charles H. Coll P.O. Box 1818 Roswell, NM 88202	.03125	O.R.R.I.
Jon F. Coll P.O. Box 1818 Roswell, NM 88202	.03125	O.R.R.I.
James N. Coll P.O. Box 1818 Roswell, NM 88202	.03125	O.R.R.I.
Max W. Coll II RR 9, Box 72F Santa Fe, NM 87505	.03125	O.R.R.I.
Kyle Stallings P.O. Box 10217 Midland, TX 79702	.02087	O.R.R.I.
Joe Gieb III P.O. Box 2434 Midland, TX 75205	.01172	O.R.R.I.
Boyce Rush Davis P.O. Box 516124 Dallas, TX 75251	.07031	O.R.R.I.
Taryhn Nini Morris 2323 Oldham Ln Abilene, TX 79602	.01953	O.R.R.I.
United New Mexico Trust CO TR Nevada Children FDN Inc Reno Cancer Cntr Inc+Nevada Tubercolosis + Health Assn. P.O. Box 5614 Hobbs, NM 88241	.23436	O.R.R.I.

Pat Corrigan Trustee Pat Corrigan Trust P.O. Box 2410 Vero Beach, FL 32961	.06250	O.R.R.I.
Harold G. Hubbard #235 10034 Regal Park Ln Dallas, TX 75230	.09376	O.R.R.I.
Morgan R. Hubbard P.O. Box 1961 Abilene, TX 79604	.09374	O.R.R.I.
Peggy Donnelly McConnell Ste. 1111 6300 Ridglea Pl Ft. Worth, TX 76116	.12500	O.R.R.I.
William C. Sawtelle P.O. Box 1617 Boerne, TX 78006	.00469	O.R.R.I.
Neville Turner Estate Marilyn Nowlin NINI & Taryn Louise Morris CO- IND Exec 2323 Oldham Lane Abilene, Tx 79602	.02344	O.R.R.I.
Shriners Hospitals For Crippled Children 550050 Lockbox Tampa, FL 33655	.07814	O.R.R.I.
Hugh Corrigan III Trust Hugh Corrigan III Trustee P.O. Box 50460 Midland, TX 79710	.06250	O.R.R.I.
Meridian Oil P.O. Box 840656 Dallas, TX 75284	.37500	O.R.R.I.
James William Bishop P.O. Box 2248 Hot Springs, AR 71914	.03955	O.R.R.I.
Union Oil Company of California Union OIl & Gas Div. Attn Revenue Accounting P.O. Box 84155 Dallas, TX 75284	.09375	O.R.R.I.

Carlyle W. Urban Indpt. Exec Will + Est Orval L. Brace Decd C/O Ann M Clark 5654 Ella Lee Lane Houston, TX 77056	.03125	O.R.R.I.
Ruth Rush Weaver P.O. Box 195 Pearcy, AR 71964	.03076	O.R.R.I.
Marilyn Nowlin NINI 2 Trafalgar Sq. Abilene, TX 79605	.02734	O.R.R.I.
Rembert A Lechner Route 3, Box 325 Terrell, TX 75160	.07031	O.R.R.I.