

### PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762 4001 PENBROOK

January 28, 1991

EXPLORATION AND PRODUCTION GROUP Application for Exception to Permian Basin Region

Statewide Rule No. 303-C to Downhole Commingle Production

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

Attn: William J. LeMay

Director

#### Gentlemen:

Phillips Petroleum Company respectfully requests administrative approval to downhole commingle gas production in our Sims Well No. 5 as provided for in Statewide Rule 303-C. Pertinent well information and data are included herein:

- (a) Name and address of operator: Phillips Petroleum Company 4001 Penbrook Street Odessa, TX 79762
- (d) Sims Well No. 5 660' FWL and 2050' FSL, Section 24, T-22-S, R-37-E Lea County, New Mexico

Pools to be comingled: Tubb Oil and Gas Blinebry Oil and Gas South Brunson Drinkard Abo

- (c) A plat is attached showing acreage dedicated to the well and the ownership of all offsetting leases.
- (d) Current productivity tests on each zone: The Drinkard zone currently is producing 0 BOPD and 0 MCFPD. The Blinebry zone is currently producing 60 MCFPD and 5 BOPD. It is estimated that the Tubb zone will produce approximately 5.0 BOPD and 30 MCFPD.
- (e) Allocation of commingled production based on present production: Production decline curves for both the Blinebry and the Tubb zones are attached. Allocated of production will be based on the current production from the Blinebry zone and a stabilized flowrate from the Tubb zones. The Drinkard zone will be allocated production based on the combined zones' stabilized flowrate, i.e., total production minus Blinebry production minus Tubb production equals Drinkard production.

Application for Exception to Statewide Rule No. 303-C to Downhole Commingle Production

#### (e) Continued

Well completion history (wellbore sketch attached):
The well was drilled and originally completed in July, 1948, in
the Drinkard formation from 6355' - 6435'. It had an initial
flowing potential of 224 BOPD. This interval was acidized several
times with 15% HCl.

In December, 1958, the Drinkard was abandoned and the Tubb formation was added to the well, with perforations from 5884' to 6111', and the well was fracture treated w/ 30,000 gals brine, 52,000# sand, and 750 gal 15% HCl. The well had an initial flowing potential from the Tubb formation of 128 BOPD. This interval of the well was acidized several times with 15% HCl as well.

In January 1975, the Tubb formation was abandoned and the Blinebry formation was added to the well, with perforations from 5376' - 5745'. The well had an initial potential of 14 BOPD and 2676 MCFPD.

#### Prediction of future reserves:

The proposed commingling completion will allow the gas from the Tubb, Blinebery, and Drinkard zones to be produces such that maximum production will result.

Initial gas production from the Tubb is estimated at 5.0 BOPD and 30 MCFPD. Production from the Drinkard is estimated at 4 BOPD and 13 MCFPD.

(f) Bottom hole pressures for each zone:

The bottom hole pressure from the Drinkard zone was measured at 420 psi on 03/09/90. The bottom hole pressure from the Blinebry was measured at 230 psi on 03/11/90.

The bottom hole pressure from the Tubb has not been measured. It is estimated that it will be 300 psi.

(g) Fluid characteristics:

Only the Blinbery zone currently produces condensate. It is anticipated that the Tubb and the Drinkard will produce some condensate as well. No fluid incompatibilities will exist in the wellbore.

(h) Computation of value of commingled production vs. individual production streams:

### <u>Individual streams:</u>

Blinebry Oil and Gas

(5 BOPD) x (\$20.00/BBL) = \$ 100/day

+  $(60 \text{ MCFPD}) \times (\$ 1.00/\text{MCF}) = \$ 60/\text{day}$ TOTAL BLINEBRY = \$ 160/day Application for Exception to Statewide Rule No. 303-C to Downhole Commingle Production

#### (h) Continued

South Brunson Drinkard Abo BOPD) x (\$20.00/BBL) = \$ 0/day (0  $MCFPD) \times (\$ 1.00/MCF) = \$$ 0/day TOTAL DRINKARD = \$ 0/day Tubb Oil and Gas BOPD) x (\$20.00/BBL) = \$ 0/day  $MCFPD) \times (\$ 1.00/MCF) = \$$ + (0 0/day TOTAL TUBBS = \$ 0/day TOTAL INDIVIDUAL STREAMS = \$ 160/day

### Commingled Streams:

(14 BOPD) x (\$20.00/BBL) = \$280/day + (103 MCFPD) x (\$1.00/MCF) = \$103/day TOTAL COMMINGLED STREAMS = \$383/day

## (i) Formula for allocation of production: Drinkard:

Monthly Oil (Drinkard) = (Total BOPM) - (Monthly Oil Blinebry)
- (Monthly Oil Tubbs)

Monthly Gas (Drinkard) = (Total MCFPM) - (Monthly Gas Blinebry)
- (Monthly Gas Tubbs)

#### Blinebry:

Monthly Oil (Blinebry) = (Total BOPM) x (Blinebry test)/
(Commingled Test)

Monthly Gas (Blinebry) = (Total MCFPM) x (Blinebry test) /
(Commingled test)

#### Tubb:

Monthly Oil (Tubb) = (Total BOPD) x (Tubb test)/
(Commingled test)

Monthly Gas (Tubb) = (Total MCFPM) x (Tubb test)/
(Commingled test)

Where Total BOPM and Total MCFPM in the above formulas refer to the total monthly commingled well production of oil and gas.

Application for Exception to Statewide Rule No. 303-C to Downhole Commingle Production

All parties of interest indicated on the attached list were notified by copy of this application sent February 1, 1991.

The Blinebry currently produces gas and condensate. This well is currently uneconomical to operate. Commingling all three zones will permit the Tubb, Drinkard and the Blinebry to be produced economically. The well will be produced such that bottom hole flowing pressure in the wellbore will be at a minimum; therefore, there will be no opportunity for crossflow between commingled zones. The bottom hole pressure of the Blinebry is 230 psi, which is greater than 50% if the bottom hole pressure of the Drinkard zone when adjusted to the common data of the Drinkard.

The ownership (including working interest, royalty, and overriding royalty) of the Drinkard and the Blinebry is common to all zones.

Your consideration and approval will be appreciated. Direct any questions to the attention of Viveca Skinnider, telephone (915) 368-1489, or to me.

Thank you, Larry M. Sanders/hy Jhn

Larry M. Sanders, Supervisor Regulation and Proration

**Attachments** 

cc: NMOCD, Hobbs Office

Offset Operators

RKB @ 3352' ARFA CHF 9 (10') | ||: TOC a SURF. 111 1 1 11: 111 1 11: 1 11: 1 11: 11: 13 3/8"OD 9 343,13' 111 17 1/4' HOLE 1: 32.48 NAYLOR SPIRAL 1: ----- HELD 8 THD TOC & SURF 1: 1: 8 5/8" 00 9 2954.66' 1 1: TOC & SURF 28# 8 RD THD H-40 ST&C 32# 8 RD THD H-40 ST&C 1: PERFS: BLINEBRY ZONE 5363'-5745 -77 HOLES SLIDING SLEEVE A 5848'(PLUGGED) HOLES IN TUBING BAKER "R" PKR 2 5850' : IX#XI: 1: BLANKING PLUG @ 5862 SHUTTING OUT TUBBS PERFS: TUBB ZONE 5884'-6111' (314 HOLES)

NORTH SUBAREA SHAFTER LAKE DATE: 01/04/91 \_\_\_\_\_

LEASE & HELL NO. SIMS # 5

LEGAL DESCRIPTION 2050'FSL AND 660' FML, SEC 24, T-22-S, R-37-E UNIT L

LEA, COUNTY NEW MEXICO

FIELD BLINEBRY-BLINEBRY TUBB- TUBB

116 MCF (BLINBRY 10-1-90) STATUS PRODUCING 8 BOPD O BMPD

5 BOPD 10 BMPD 0 MCF (TUBB SI 5/1975)

TBG, 2 3/8" SET 9 5850', MITH BAKER "R" PACKER MITH BLANKING PLUG, SLIDING SLEEVE AT 5848' (SLIDING SLEEVE IS PLUGGED, HOLES HAVE BEEN SHOT IN THE TUBING

STIMULATION HISTORY:

	INTERVAL	DATE	TYPE	GALLONS	LBS. SAND	MP	ISOP	IR	Dom
1.	6410'- 6435'	07/29/48	15%	1000		2850			2 3/8
2.	6355'-6410'	07/31/48	15%	10000		1100			2 3/8
3.	6355'-6410'	07/27/48	15%	5000		2500			2 3/8
4.	5884'-6111'	12/07/58	FRAC	30000	52000	2800		30	2 3/8
5.	5363'-5793'	05/06/75	28%	4000		2900	600	4.5	2 3/8
6.	5990'-6111'	05/01/75	28%	1800		3100	1000	5.3	2 3/8
7.	5884'-6111'	05/01/75	28%	5200		3100	1000	5.3	2 3/8
8.									

#### RECOMMENDED PROCEDURE: COMMINGLE APPLICATION

.. : PBTD 96180'

: |XXX|: CIBP 2 6185'

": PERFS: DRINKARD ZONE

6355'-6435 (480 HOLES)

/|---|\ 5-1/2" OD @ 6466,60' TOC @ 1967'

14#-17# J-55-H-40 TD 2 6468'

7 7/8"HOLE

PPCO. W.I.: 100

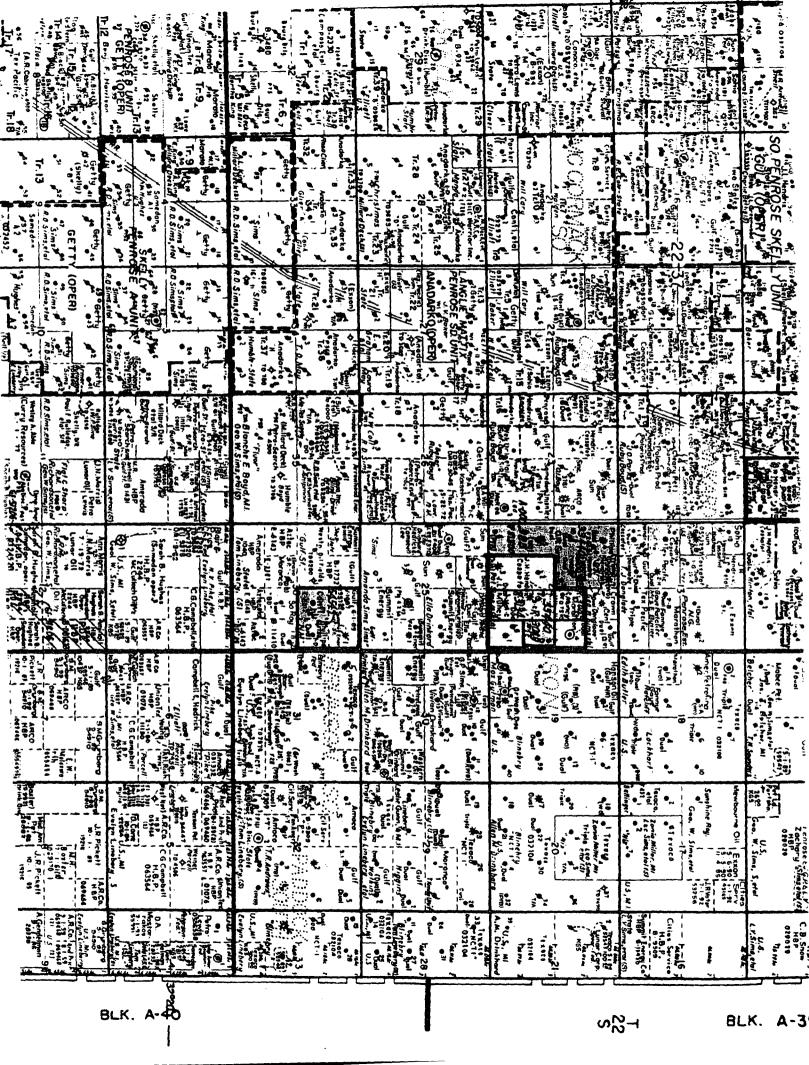
Checked By:

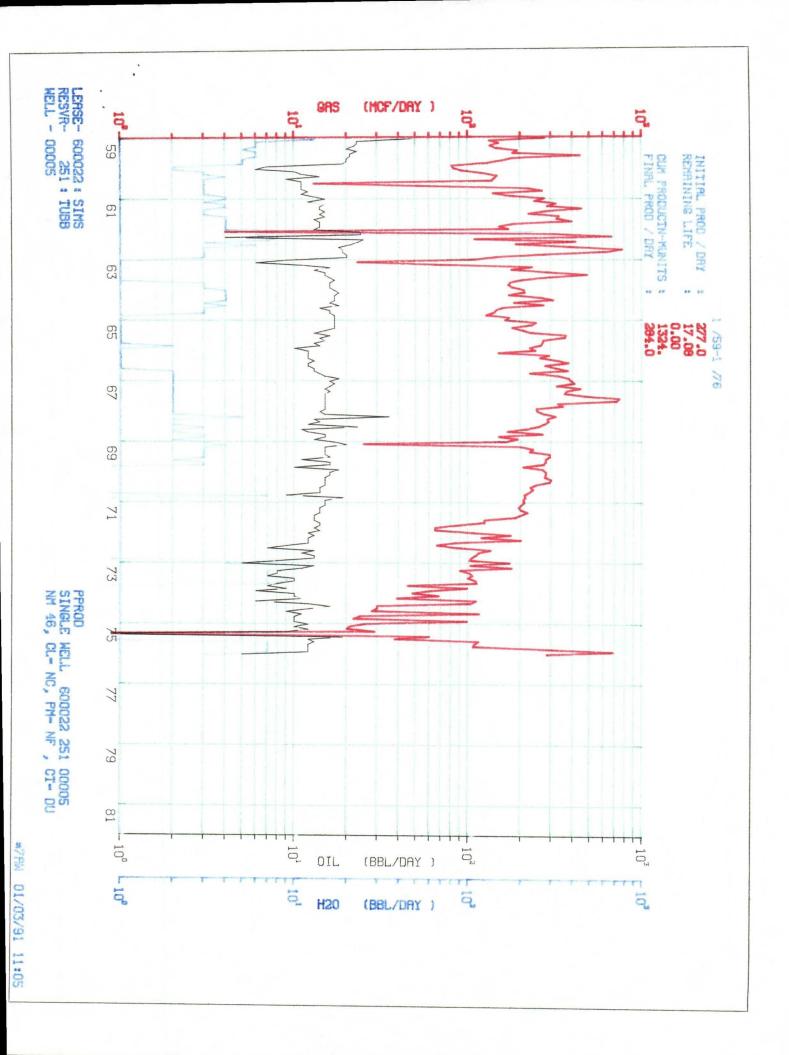
RESV. ENGR.: V. L. SKINNIDER

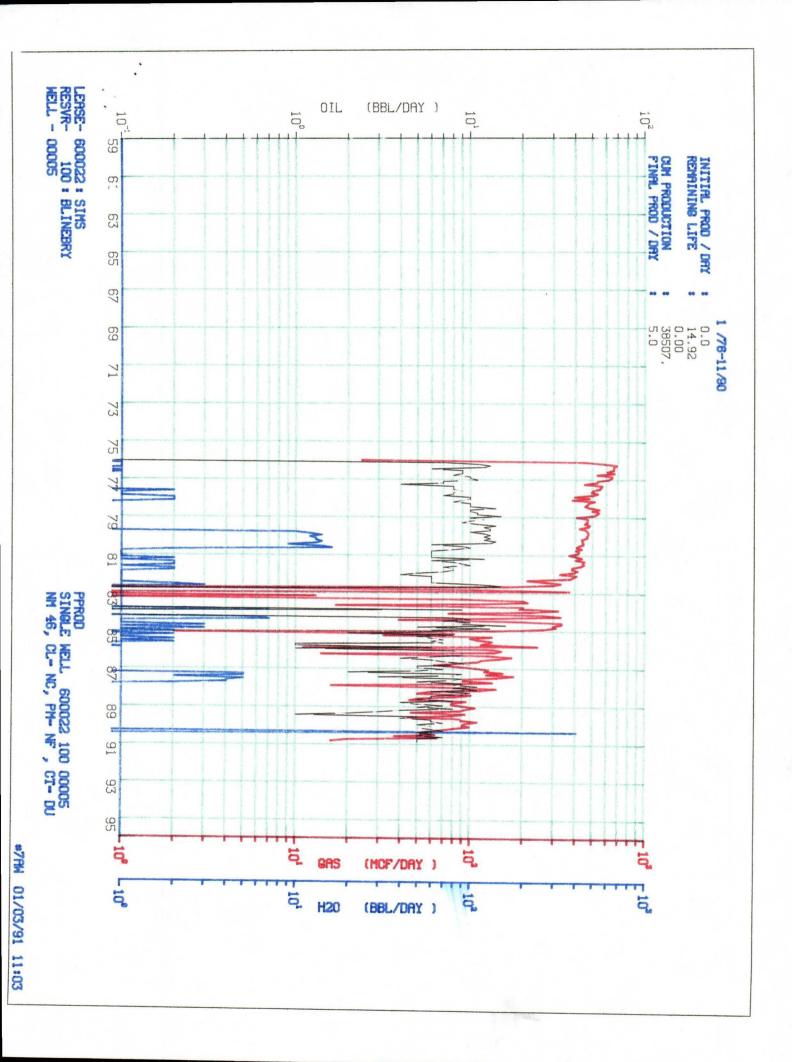
PROD. ENGR.: S. E. GUTBERLET

# WE LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section. Well No. Operator 5 Sims Phillips Petroleum Company Unit Letter Section Township Range County 22**-**S 37-E Lea Actual Footage Location of Well: 2050 660 south west feet from the feet from the line Dedicated Acreage: Ground Level Elev. **Producing Formation** Blinebry Gas 80 3322'Gr.3332'RKB Blinebry 1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc? If answer is "yes," type of consolidation \_\_\_ If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)\_ No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, climinating such interests, has been approved by the Commis-CERTIFICATION DI I hereby certify that the information congin is true and complete to the  $\overline{\mathsf{H}}$ Mueller <u>Senior Reservoir Enginee</u> Phillips Petroleum Co. 1-28-76 I hereby certify that the well location NOTE: This is a replacement well for Well No. shown on this plat was plotted from field 1 which has been temponarily abandoned notes of actual surveys made by me or in the Blinebry Pool under my supervision, and that the same is true and correct to the best of my knowledge and belief. N  $\bar{\mathbf{P}}$ Date Surveyed 5-10-48 Registered Professional Engineer and/or Land Surveyor Certificate No. 1320 2640 1500







Phillips Petroleum Company Application for Exception to Statewide Rule No. 303-C to Downhole Commingle Production

#### Royalty Interest Owners:

United New Mexico Bank at Lea County, Personal Representative for the Elizabeth Sims Daugherty Estate P.O. Box 5614 Hobbs, New Mexico 88241

Winnie L. Sims Kennann P.O. Box 202 Eunice, New Mexico 88231

G.P. Sims P.O. Box 1046 Eunice, New Mexico 88231

Leo V. Sims 423 East Baja Hobbs, New Mexico 88240

Ellie Sims Spear P.O. Drawer 309 Hobbs, New Mexico 88240 Phillips Petroleum Company Application for Exception to Statewide Rule No. 303-C to Downhole Commingle Production

#### Offset Operators:

John H. Hendrix Corporation 525 Midland Tower Midland, Texas 79701

Texas Pacific Oil Co. Inc. 9400 N. Central Expressway Dallas, Texas 75250

Crown Central Petroleum Corp. Suite 1002, Wilco Bldg. Midland, TX 79701

Marathon Oil Company Box 552 Midland, Texas 79702

Coquina Oil Corporation Box 2960 Midland, Texas 79701

Union Texas Petroleum 1300 Wilco Bldg. Midland, Texas 79701

Gulf Energy & Minerals, Inc. Box 1150 Midland, Texas 79701

Samedan Oil Corporation 900 Wall Towers East Midland, Texas 79701

Bruce A. Wilbanks Box 763 Midland, Texas 79701

#### STATE OF NEW MEXICO

# ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE February 18, 1991

GARREY CARRUTHERS
GOVERNOR

/ed

· 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 XX  NSL								
NSP SWD WFX PMX								
Gentlemen:								
I have examined the application for the:								
Phillips Petroleum Co.	Sims #5-L	24-22-37						
Operator	Lease & Well No. Unit	S-T-R						
and my recommendations are as follows:								
0K								
Yours very truly,								
Yours very truly,								