



S. J. Okerson  
District Superintendent

July 15, 1982

File: SJ0-986.51-WF-957

Re: Application to Wellbore Commingle  
Southland Royalty "A" No. 2  
Tubb and Drinkard Oil Pools  
Lea County, New Mexico

The State of New Mexico  
Energy and Minerals Department  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, NM 87501

Gentlemen:

In accordance with Rule 303-C, Amoco Production Company requests administrative approval to wellbore commingle oil production in our Southland Royalty "A" No. 2 located 660 FNL and 1980 FEL, Section 9, T-21-S, R-37-E, Lea County, New Mexico.

The subject well is completed in the Tubb and Drinkard oil pools. A 24 hour productivity test run on July 11, 1982, showed the Tubb to be producing 1 bbl. of oil, 1 bbl of water and 35 MCFD. The Drinkard has been shut in since November, 1981, due to downhole mechanical problems. A productivity test run in April, 1981, showed the Drinkard producing 2 bbls of oil, 2 bbls of water, and 26 MCFD.

Estimated Annual Production

| Formation           | Oil           | Water         | Gas             |
|---------------------|---------------|---------------|-----------------|
| Tubb                | 365 BO        | 365 BW        | 12775 MCF       |
| Drinkard*           | <u>730 BO</u> | <u>365 BW</u> | <u>4745 MCF</u> |
| Combined Production | 1095 BO       | 730 BW        | 17520 MCF       |

\* Volumes based on estimate of Drinkard formations historical production decline.

*At Approval?*  
*pull well file*

*State of New Mexico*  
*Approval from Jerry*

**Amoco Production Company (USA)**  
Post Office Box 68  
Hobbs, New Mexico 88240

**RECEIVED**  
**JUL 19 1982**

SANTA FE

*Mark Ran*

*Last production from BL was apparent in 1974  
(R-4140 in 1971 authorized commingling  
of BL & Dr in one string of tubing and  
produce. The three separate strings  
R 2343 had previously  
authorized triple completions  
of BL Th & Dr three  
3 strings of tubing*

The fluid characteristics from both zones are compatible in the wellbore. Commingling of the Tubb and Drinkard will not jeopardize the efficiency of future secondary recovery operations in either zone. Estimated bottom hole pressure for both zones is approximately 100 psi each. The crude oils on the Southland Royalty "A" Lease are commingled to a common tank battery and sold in mixed streams so no depreciation of value will occur from downhole commingling.

Attached are the most recent gas-oil ratio tests for the Tubb (July 11, 1982) and the Drinkard (April 24, 1981), production decline curves for both zones, and a copy of the certified mail receipt from the notice sent to the offset operator.

Yours very truly,

A handwritten signature in cursive script, appearing to read "S. J. O'Connor".

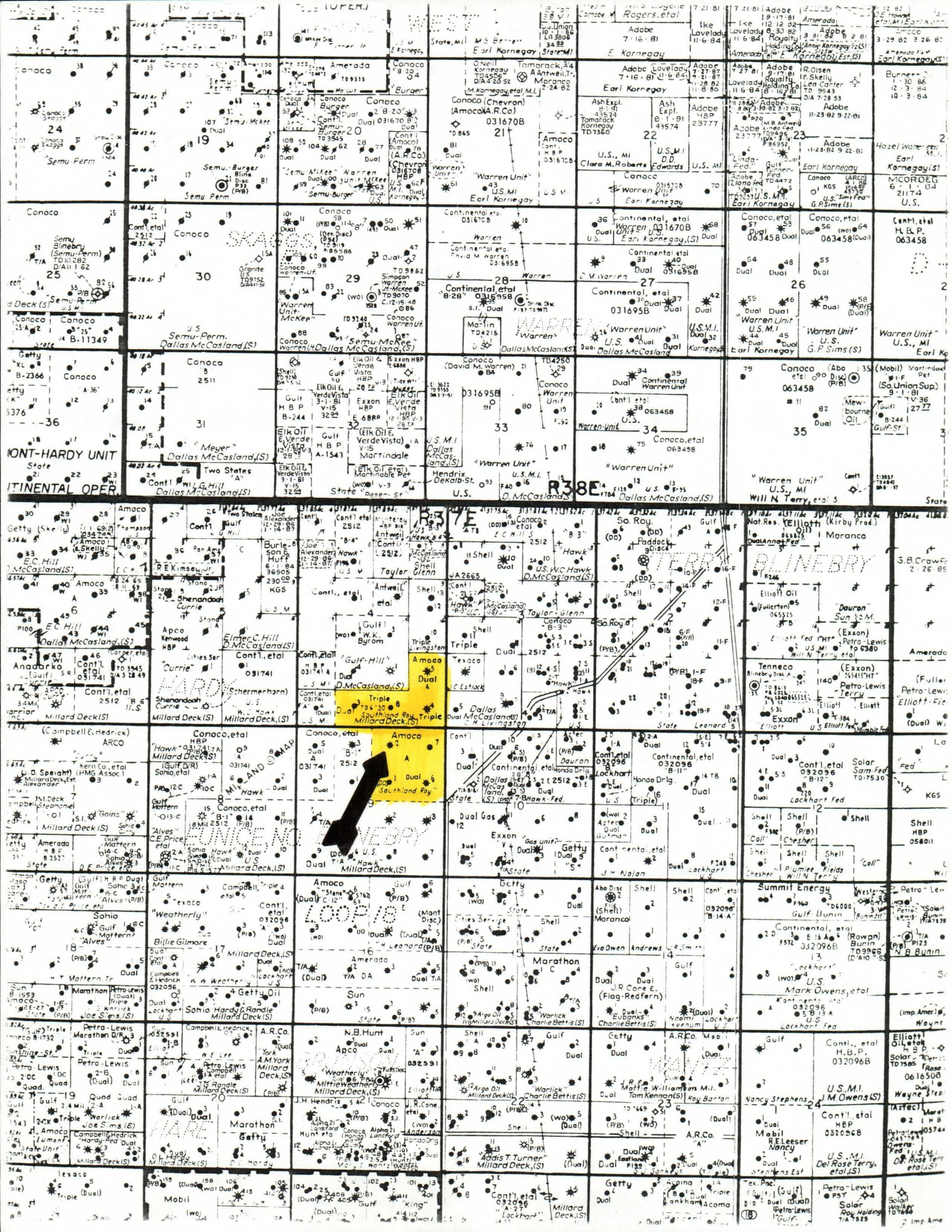
Attachments

cc: D. M. Basinger - Houston

**P 335 767 528**  
**RECEIPT FOR CERTIFIED MAIL**

NO INSURANCE COVERAGE PROVIDED —  
 NOT FOR INTERNATIONAL MAIL  
 (See Reverse)

|                                      |                                 |                    |  |
|--------------------------------------|---------------------------------|--------------------|--|
| SENT TO                              |                                 | Condo              |  |
| STREET AND NO.                       |                                 | P.O. Box 460       |  |
| P.O., STATE AND ZIP CODE             |                                 | Hobbs, N. M. 88241 |  |
| POSTAGE                              |                                 | \$                 |  |
| CONSULT POSTMASTER FOR FEES          | CERTIFIED FEE                   | c                  |  |
|                                      | SPECIAL DELIVERY                | c                  |  |
|                                      | RESTRICTED DELIVERY             | c                  |  |
|                                      | OPTIONAL SERVICES               | c                  |  |
|                                      | RETURN RECEIPT SERVICE          | c                  |  |
|                                      | SHOW TO WHOM AND DATE DELIVERED | c                  |  |
| SHOW TO WHOM AND ADDRESS OF DELIVERY |                                 | c                  |  |
| TOTAL POSTAGE AND FEES               |                                 | 1.51               |  |
| POSTMARK OR DATE                     |                                 | MAY 1982           |  |



NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

JUL 19 1982

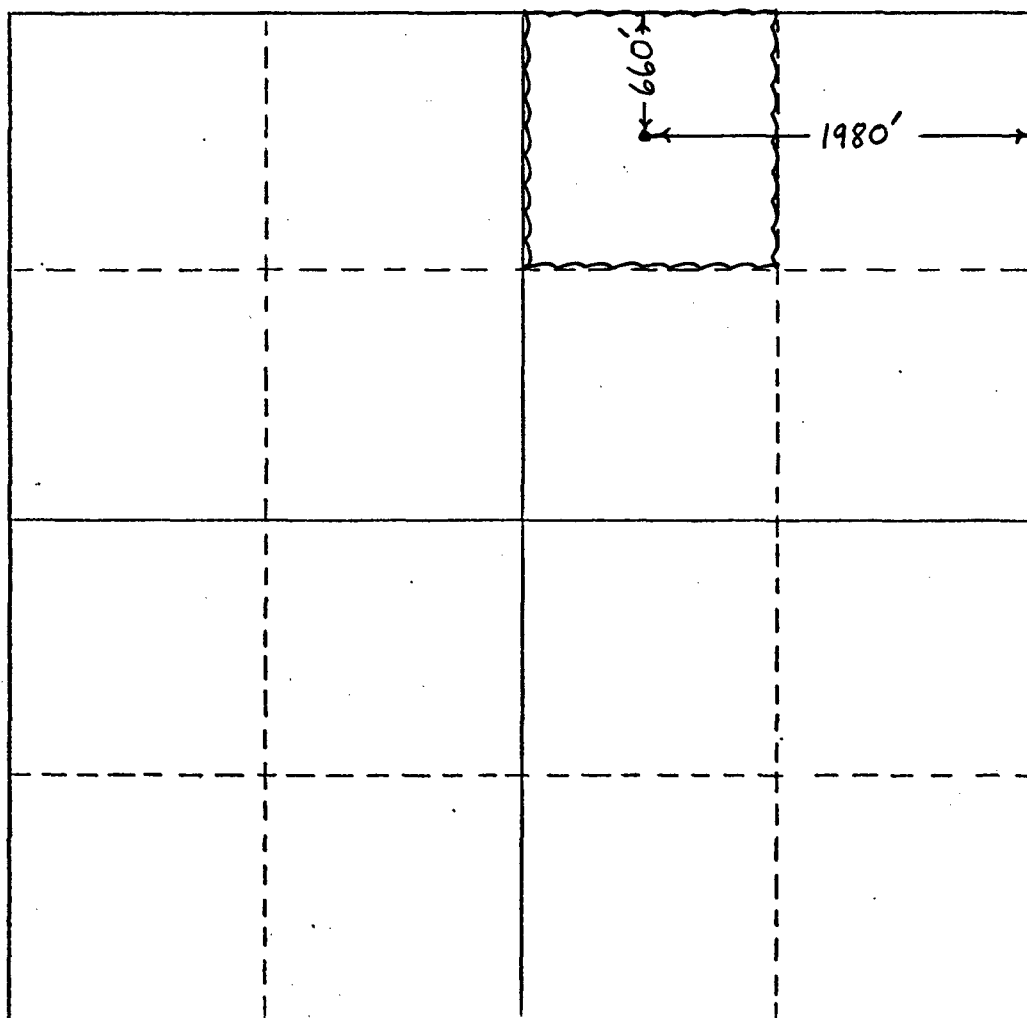
|                                                                                                                               |                                    |                                     |                      |                                       |  |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-------------------------------------|----------------------|---------------------------------------|--|
| Operator<br><b>Amoco Production Company</b>                                                                                   |                                    | Lease<br><b>Southland Royalty A</b> |                      | County<br><b>Lea</b>                  |  |
| Unit Letter<br><b>B</b>                                                                                                       | Section<br><b>9</b>                | Township<br><b>21-S</b>             | Range<br><b>37-E</b> | County<br><b>Lea</b>                  |  |
| Actual Footage Location of Well:<br><b>660</b> feet from the <b>North</b> line and <b>1980</b> feet from the <b>East</b> line |                                    |                                     |                      |                                       |  |
| Ground Level Elev.<br><b>3482 DF</b>                                                                                          | Producing Formation<br><b>Tubb</b> |                                     | Pool<br><b>Tubb</b>  | Dedicated Acreage:<br><b>40</b> Acres |  |

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?

☐ Yes ☐ No 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, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Name Mark Freeman  
Position Assist. Admin. Analyst  
Company Amoco Production Company  
Date 1-25-82

I hereby certify that the well location shown on this plot was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed \_\_\_\_\_

Registered Professional Engineer and/or Land Surveyor

Certificate No. \_\_\_\_\_

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION

JUL 19 1982

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

|                                             |                     |                         |                                     |                      |                      |
|---------------------------------------------|---------------------|-------------------------|-------------------------------------|----------------------|----------------------|
| Operator<br><b>Amoco Production Company</b> |                     |                         | Lease<br><b>Southland Royalty A</b> |                      | Well No.<br><b>2</b> |
| Unit Letter<br><b>B</b>                     | Section<br><b>9</b> | Township<br><b>21-S</b> | Range<br><b>37-E</b>                | County<br><b>Lea</b> |                      |

Actual Footage Location of Well:

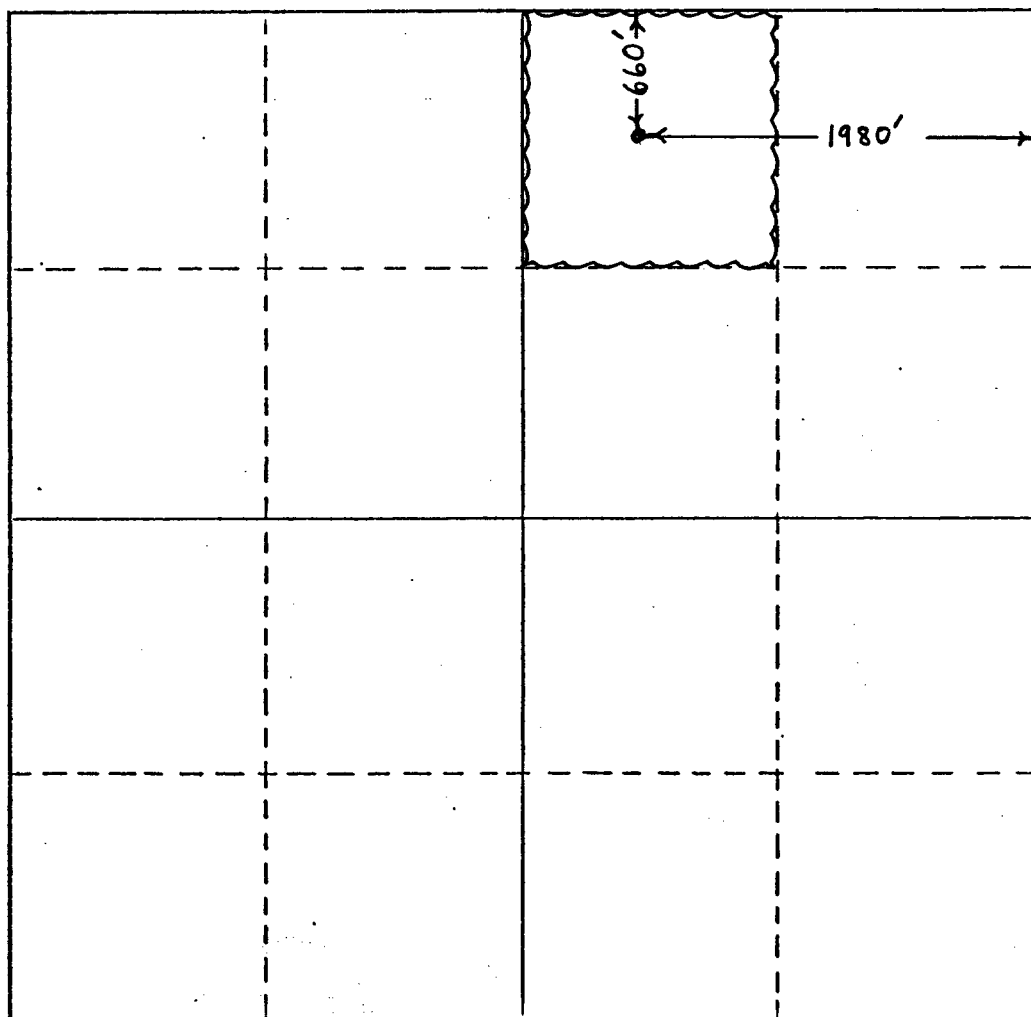
|                                      |                                        |                              |                                       |
|--------------------------------------|----------------------------------------|------------------------------|---------------------------------------|
| 660 feet from the North line and     |                                        | 1980 feet from the East line |                                       |
| Ground Level Elev.<br><b>3482 DF</b> | Producing Formation<br><b>Drinkard</b> | Pool<br><b>Drinkard</b>      | Dedicated Acreage:<br><b>40</b> Acres |

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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?

☐ Yes ☐ No 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, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Name Mark Freeman

Position Assist. Admin. Analyst

Company Amoco Production Company

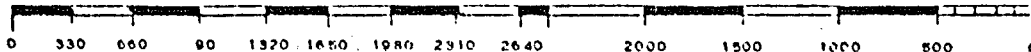
Date 1-25-82

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed \_\_\_\_\_

Registered Professional Engineer and/or Land Surveyor \_\_\_\_\_

Certificate No. \_\_\_\_\_



## GAS-OIL RATIO TESTS

| Operator                      |    | Pool     |    | County   |    | Drinkard     |    | Lea                                         |    | City      |    | State                            |       |
|-------------------------------|----|----------|----|----------|----|--------------|----|---------------------------------------------|----|-----------|----|----------------------------------|-------|
| Amoco Production Company      |    |          |    |          |    |              |    |                                             |    |           |    |                                  |       |
| Address                       |    | WELL NO. |    | LOCATION |    | DATE OF TEST |    | TYPE OF TEST - (X)                          |    | SCHEDULED |    | GAS - OIL RATIO CU. FT. PER BBL. |       |
| P. O. Box 68, Hobbs, NM 88240 |    |          |    |          |    |              |    |                                             |    |           |    |                                  |       |
| Grizzell B                    | 4  | G        | 8  | 22       | 37 | 3-7-81       | P  | 50                                          | 9  | 24        | 17 | 132                              | 14667 |
| Grizzell Deep                 | 2  | L        | 5  | 22       | 37 | 3-13-81      | P  | 55                                          | 5  | 24        | 5  | 26                               | 3714  |
| Southland Royalty A           | 1  | G        | 9  | 21       | 37 | 4-28-81      | F  | 105                                         | 5  | 24        | 2  | 290                              | 72500 |
| Southland Royalty A           | 2  | B        | 9  | 21       | 37 | 4-24-81      |    | ---                                         | 3  | 24        | 2  | 26                               | 13000 |
| Southland Royalty A           | 5  | Q        | 4  | 21       | 37 | 4-10-81      | F  | 60                                          | 6  | 24        | 0  | 101                              | 25250 |
| State C Tract 12              | 4  | F        | 16 | 21       | 37 | 4-7-81       | F  | 100                                         | 5  | 24        | 0  | 338                              | 37556 |
| State C Tract 12              | 6V | C        | 16 | 21       | 37 | 4-7-81       | F  | 100                                         | 3  | 24        | 1  | 28                               | 14000 |
| State CK                      | 1  | N        | 19 | 21       | 37 | 4-6-81       | O  | 70                                          | 20 | 24        | 2  | 128                              | 6476  |
| State CK                      | 2  | K        | 19 | 21       | 37 | 4-24-81      | SI | 0                                           | 0  | 0         | 0  | 0                                | 0     |
| Owen B                        | 1  | M        | 34 | 21       | 37 | 4-26-81      | SI | Not enough pressure to send thru sales line |    |           |    |                                  |       |
| Pike Federal                  | 1  | A        | 6  | 23       | 38 | 4-24-81      | SI | 0                                           | 0  | 0         | 0  | 0                                | 0     |
| Southland Royalty A           | 4  | X        | 4  | 21       | 37 | 4-27-81      | F  | 118                                         | 3  | 24        | 2  | 154                              | 25666 |
| Southland Royalty A           | 6  | H        | 9  | 21       | 37 | 4-22-81      | F  | 45                                          | 4  | 24        | 0  | 14                               | 2800  |

None 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 allowances when authorized by the Division.

Gas volumes must be reported in liters measured at a pressure base of 15.025 psia and a temperature of 68° F. Specific gravity base will be 0.60.

Report cards provide a lot 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 331 and appropriate pool rules.

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

Bob Laws

(Signature)

Admin. Analyst (SG)

Time

5-15-81

| 0+2-NMDCD, H | 1-File | 533.11 | 1-Susp | 1-DMP |
|--------------|--------|--------|--------|-------|
|--------------|--------|--------|--------|-------|

GAS-OIL RATIO TESTS

| Operator<br>Amoco Production Company             |          | Pool<br>Tubb       |   | County<br>Lea                                                                   |              |            |             |                   |                      |                   |             |           |                             |
|--------------------------------------------------|----------|--------------------|---|---------------------------------------------------------------------------------|--------------|------------|-------------|-------------------|----------------------|-------------------|-------------|-----------|-----------------------------|
| Address<br>P. O. Box 68, Hobbs, New Mexico 88240 |          | TYPE OF TEST - (X) |   | Completion <input type="checkbox"/> Special <input checked="" type="checkbox"/> |              |            |             |                   |                      |                   |             |           |                             |
| LEASE NAME                                       | WELL NO. | LOCATION           |   |                                                                                 | DATE OF TEST | CHOKE SIZE | TSG. PRESS. | DAILY ALLOW. ABLE | LENGTH OF TEST HOURS | PROD. DURING TEST |             |           | GAS - OIL RATIO CU.FT./BBL. |
|                                                  |          | U                  | S | T                                                                               |              |            |             |                   |                      | R                 | WATER SOLS. | GRAV. OIL |                             |
| Southland Royalty A                              | 2        | B                  | 9 | 21                                                                              | 37           | 7-11-82    | P           | 3                 | 24                   | 1                 | 1           | 35        | 35,000                      |

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 allowables when authorized by the Division.

Gas volumes 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 0.90.

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

Well original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 331 and appropriate pool rules.

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

Ruth Brunson  
(Signature)

Administrative Analyst  
7-12-82

# SOUTHLAND ROYALTY A No. 2 TUBB

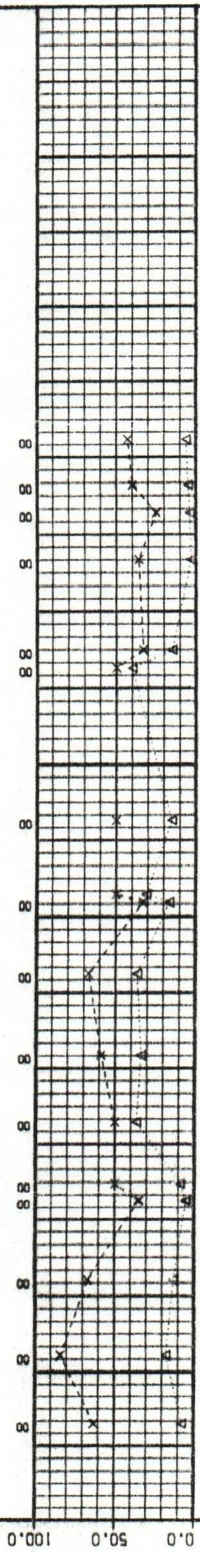
WELL TEST DATA 03-05-82

STATUS CONDITION  
FTP (T) OR  
PWP, CSG, PRES (P) OR  
IFCP (C)  
PROD. HOURS  
PER DAY  
SPM  
TBS, CH, OR  
STROKE LEN.  
DIA.  
PUMP 16THS  
VOL. EFF.

INPUT  
PSIG (I)  
CYCLE TIME  
GL CHOKE  
64THS  
INPUT GFR (MCF/REEL.1)

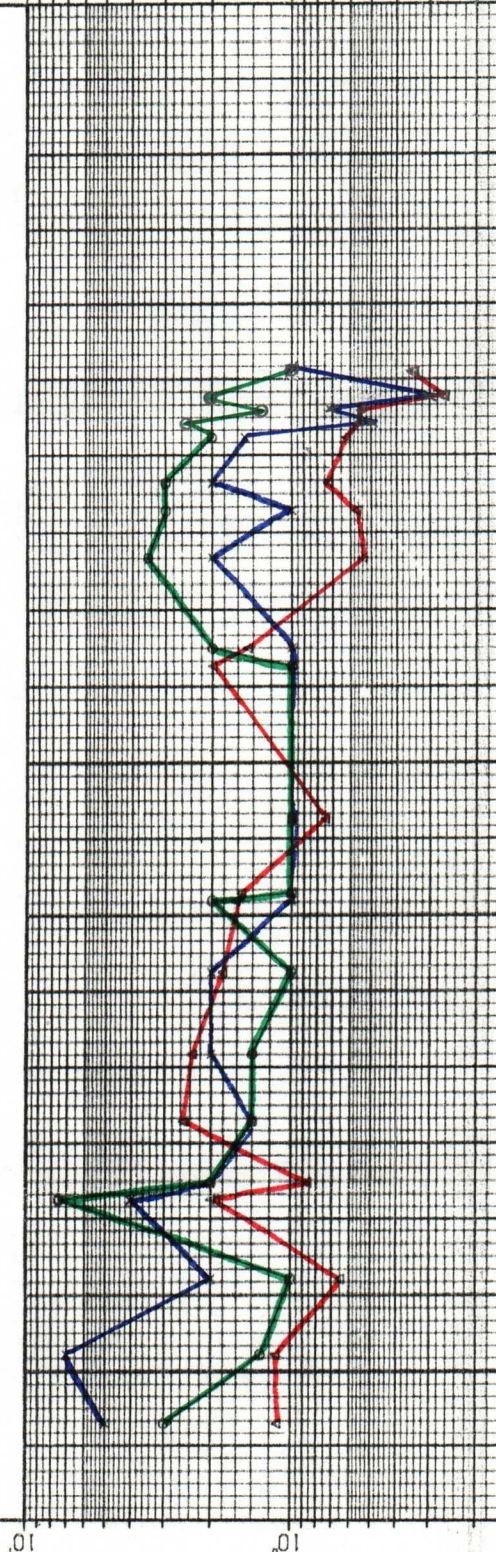
WATERCUT  
X-----X

GOR, SCF/BBL.1  
X  
GOR, MCF/DAY



WATER, BBL.S./DAY  
OIL, BBL.S./DAY

24 HOUR TEST RATE  
GOR, MCF/DAY



FLUCCINELLI-HOF - 924873-02  
COMPLETION DATE - 03-05-84  
LEASE WELL NO - 002809  
JOB REQUEST - 002-01

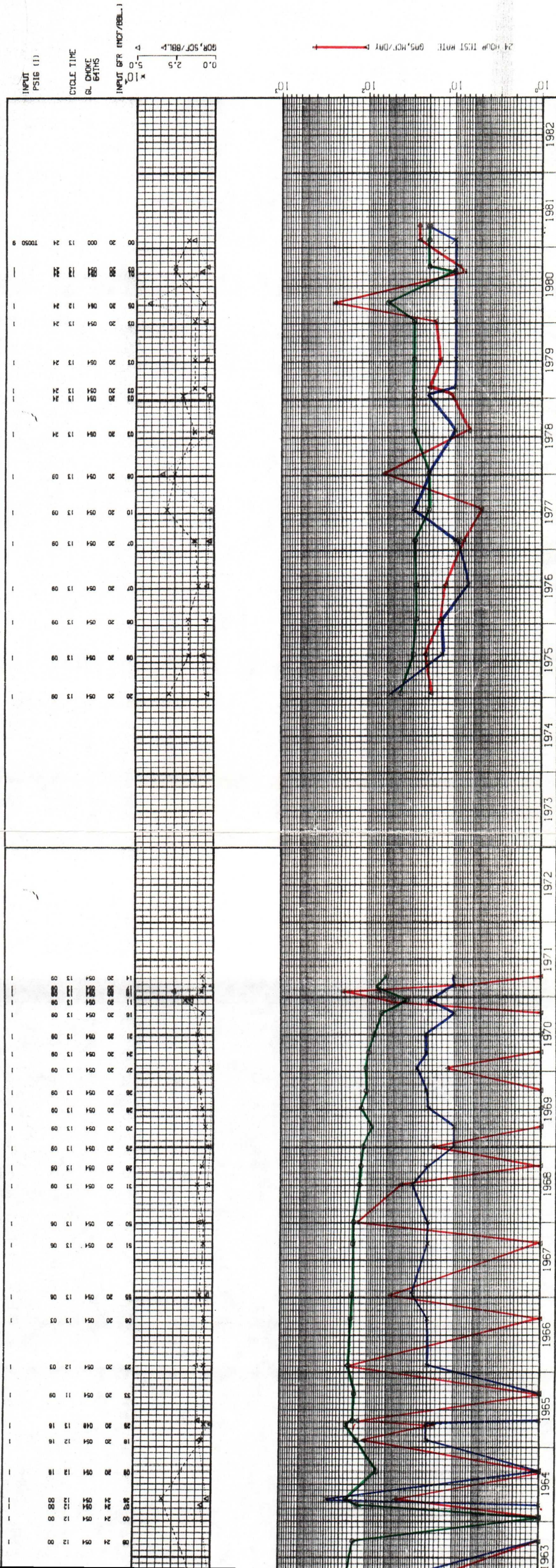
COMPLETION ZONE NAME - TUBB  
STATE-REG FIELD/POOL - 30 8209 TUBB  
FLUCCINELLI-HOF - 390814 SOUTHLAND ROYALTY A No. 2 TUBB  
NAME - PSC-HOBBS MAIL CODE/ADJOM

DIVISION NO - 8 HOU-NWEST PROD  
OPER AREA - 63 HOBBS  
OPERATOR - AMOCO PRODUCTION CO USA  
MAIL TO LOC. NO. - 63A

SOUTHLAND ROYALTY A No. 2 DRINKARD

WELL TEST DATA 03-05-82

WELL TEST DATA 03-05-82



WELL NO - 8  
HOU-WEST PROD  
STATE-REG FIELD/POOL - 30 3406  
FLACIL/UT - 390814 SOUTHLAND ROYALTY A/NO  
NAME - PSC-HOBBS  
MAIL CODE/RZOM -

COMPLETION ZONE NAME - DRINKARD  
STATE-REG FIELD/POOL - 30 3406  
FLACIL/UT - 390814 SOUTHLAND ROYALTY A/NO  
NAME - PSC-HOBBS  
MAIL CODE/RZOM -

WELL NO - 8  
HOU-WEST PROD  
STATE-REG FIELD/POOL - 30 3406  
FLACIL/UT - 390814 SOUTHLAND ROYALTY A/NO  
NAME - PSC-HOBBS  
MAIL CODE/RZOM -

COMPLETION ZONE NAME - DRINKARD  
STATE-REG FIELD/POOL - 30 3406  
FLACIL/UT - 390814 SOUTHLAND ROYALTY A/NO  
NAME - PSC-HOBBS  
MAIL CODE/RZOM -

FLACIL/UT - 390814 SOUTHLAND ROYALTY A/NO  
COMPLETION DATE - 02-00-48  
LEASE WELL NO - 002809  
JOB REQUEST - 002-01

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

CASE NO. 4530  
Order No. R-4140

APPLICATION OF AMOCO PRODUCTION  
COMPANY FOR DOWN-HOLE COMMINGLING,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION  
BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 28, 1971, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 6th day of May, 1971, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Amoco Production Company, is the owner and operator of the Southland Royalty "A" Well No. 2, located in Unit B of Section 9, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.

(3) That pursuant to authority granted by Order No. R-2343 the subject well was completed as a triple completion (conventional) to produce oil from the Blinebry and Drinkard Pools and gas from the Tubb Gas Pool.

(4) That the Blinebry and Drinkard zones in the subject well are now capable of only low marginal production.

(5) That the applicant now proposes to complete the subject well in such a manner as to produce gas from the Tubb Gas Pool through one string of 2-inch tubing and to produce the low

marginal oil production from the Blinebry and Drinkard Pools through a single parallel string of 2 3/8-inch tubing, commingling in the well-bore the production from the Blinebry and Drinkard oil zones, with separation of the Tubb zone and the commingled Blinebry and Drinkard zones by means of packers set at approximately 6037 feet and 6550 feet.

(6) That the proposed commingling of the Blinebry and Drinkard zones may substantially extend the productive lives of said zones.

(7) That the reservoir characteristics of the Blinebry and Drinkard zones in the subject well are such that underground waste would not be caused by the proposed commingling in the well-bore.

(8) That the proposed commingling may result in the recovery of additional oil from each of the commingled zones, thereby preventing waste, and will not violate correlative rights.

(9) That the mechanics of the proposed completion are feasible and in accord with good conservation practices.

(10) That in order to allocate the commingled production to each of the commingled zones in the subject wells, 50% of the commingled oil production should be allocated to the Blinebry zone, 50% of the commingled oil production to the Drinkard zone, 32% of the commingled gas production to the Blinebry zone, and 68% of the commingled gas production to the Drinkard zone in the subject well.

(11) That approval of the subject application will prevent waste and protect correlative rights.

(12) That Order No. R-2343 should be superseded.

**IT IS THEREFORE ORDERED:**

(1) That the applicant, Amoco Production Company, is hereby authorized to complete its Southland Royalty "A" Well No. 2 located in Unit B of Section 9, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner as to produce gas from the Tubb Gas Pool through one string of 2-inch tubing and to produce oil from the Blinebry and Drinkard Pools through a single parallel string of 2-3/8-inch tubing, commingling in the

CASE NO. 4530

Order No. R-4140

well-bore the production from the Blinebry and Drinkard Pools, with separation of the Tubb zone and the commingled Blinebry and Drinkard zones by means of packers set at approximately 6037 feet and 6550 feet.

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall notify the Commission of any substantial increase of the gas-oil ratio of the commingled zones.

(2) That 50% of the commingled oil production shall be allocated to the Blinebry zone, 50% of the commingled oil production to the Drinkard zone, 32% of the commingled gas production to the Blinebry zone, and 68% of the commingled gas production to the Drinkard zone.

(3) That the commingling in the well-bore authorized by this order shall continue only so long as the commingled production of the two zones does not exceed 40 barrels of oil per day nor 80 barrels of water per day.

(4) That the maximum amount of gas which may be produced daily from the commingled zones in the subject well shall be determined by multiplying 2,000 by the top unit allowable for the Blinebry Pool.

(5) That Order No. R-2343 is hereby superseded.

(6) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

-4-

CASE NO. 4530  
Order No. R-4140

DONE at Santa Fe, New Mexico, on the day and year herein-  
above designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

A. L. PORTER, Jr., Member & Secretary

SEAL

dr/

OIL CONSERVATION DIVISION  
DISTRICT I

RECEIVED  
SEP 10 1982

OIL CONSERVATION DIVISION  
SANTA FE

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

DATE September 7, 1982

RE: Proposed MC \_\_\_\_\_  
Proposed DHC X \_\_\_\_\_  
Proposed NSL \_\_\_\_\_  
Proposed NSP \_\_\_\_\_  
Proposed SWD \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed PMX \_\_\_\_\_

Gentlemen:

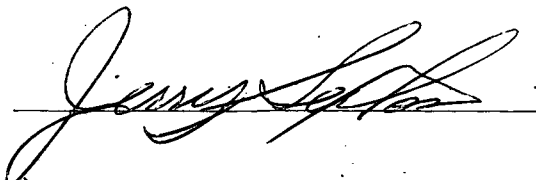
I have examined the application for the:

|                                                   |                    |                 |
|---------------------------------------------------|--------------------|-----------------|
| <u>Amoco Production Co. Southland Royalty "A"</u> | <u>No. 2-B</u>     | <u>9-21-37</u>  |
| Operator                                          | Lease and Well No. | Unit, S - T - R |

and my recommendations are as follows:

O.K.---J.S.

Yours very truly,

  
/mc