

June 21, 1984

File: LFS-1270-WF

Re: Application to Downhole Commingle  
State "CK" No. 2  
Blinebry and Drinkard Oil Pools  
Lea County, New Mexico

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

Attention: R. L. Stanets, Director

Approval is being requested to downhole commingle the State "CK" No. 2 well in accordance with NMOCD Rule 3030.

This well is located 1650' FSL x 2207.6' FWL of Section 19, T-21-S, R-37-E, Lea County, New Mexico. This well was initially completed on February 23, 1960, as a triple completion in the Paddock, Blinebry, and Drinkard Horizons and remains as such to this date. The Blinebry had been pumping from below a packer prior to June, 1984, when the pump stuck and efforts to pull it were unsuccessful. This zone is currently shut-in. The Drinkard is also currently shut-in. This zone quit flowing in May of this year and will need artificial lift to be returned to production. The Paddock is currently the only zone producing; however, the 2-1/16" tubing is hindering the artificial lift and causing a number of pulling jobs.

Two offset wells to the State "CK" No. 2 have received approval to downhole commingle the Drinkard and Blinebry horizons. The wells are as follows:

- 1) Petro Lewis - Operator  
L. C. Warlick No. 2  
Unit B, Sec. 19, T-21-S, R-37-E  
Administrative Order No. R-6463

- 2) Campbell and Hedrick - Operator  
Harcy No. 2  
Unit P, Sec. 19, T-21-S, R-37-E  
Administrative Order No. 040-226

In support of our request, we submit the following facts:

1. The latest 24-hour productivity tests are as follows:

|          | <u>Date</u> | <u>BOPD</u> | <u>BWPD</u> | <u>MCFD</u> | <u>PERFORATIONS</u> |
|----------|-------------|-------------|-------------|-------------|---------------------|
| Blinebry | 6-2-84      | 12          | 8           | 18          | 5770-5942'          |
| Drinkard | 4-29-85     | 8           | 5           | 24          | 5609-5659'          |

2. Neither zone produces more than the combined oil limit as determined in Rule 303, Paragraph C, Section 1-(1) and (a)(3).
3. The produced fluids should be compatible and commingling these fluids should not result in precipitates which might damage the reservoir.
4. Downhole commingling of the Blinebry and Tubb-Drinkard will not jeopardize the efficiency of future secondary recovery operations in either zone.
5. The two zones are surface commingled and therefore no depreciation of value will occur from downhole commingling.
6. Expected daily production from the commingled zones is as follows:

|      | <u>BLINEBRY</u> | <u>DRINKARD</u> | <u>COMMINGLED</u> |
|------|-----------------|-----------------|-------------------|
| BOPD | 12              | 8               | 20                |
| MCFD | 18              | 14              | 42                |

7. Since the zones to be commingled are producing from below packers, we are unable to obtain shut-in sonolog shots to determine bottomhole pressures. However, as mentioned previously, two immediate offsets are downhole commingled in the Drinkard and Blinebry and have met the bottomhole pressure requirements. Amoco believes the bottomhole pressures in the State "OK" No. 2 are comparative and will also meet the requirements.
8. Both zones to be commingled have common ownership.
9. Recommended oil and gas allotments are as follows:

|          | <u>OIL</u> | <u>GAS</u> |
|----------|------------|------------|
| Blinebry | 61%        | 43%        |
| Drinkard | 40         | 57%        |

June 21, 1985  
File: LPS-1270-WF  
Page 3

---

10. All offset operators have been notified by registered mail (copy of receipts attached).
11. Attached are: Ownership plat showing the well and all offsets, production decline curves for both zones, and a list of all offset operators and their addresses.

Should you require additional information regarding this matter, feel free to contact Nevin Gates at (505) 393-1781, Extension 250.

**Original Signed By**  
**LR. Smith**

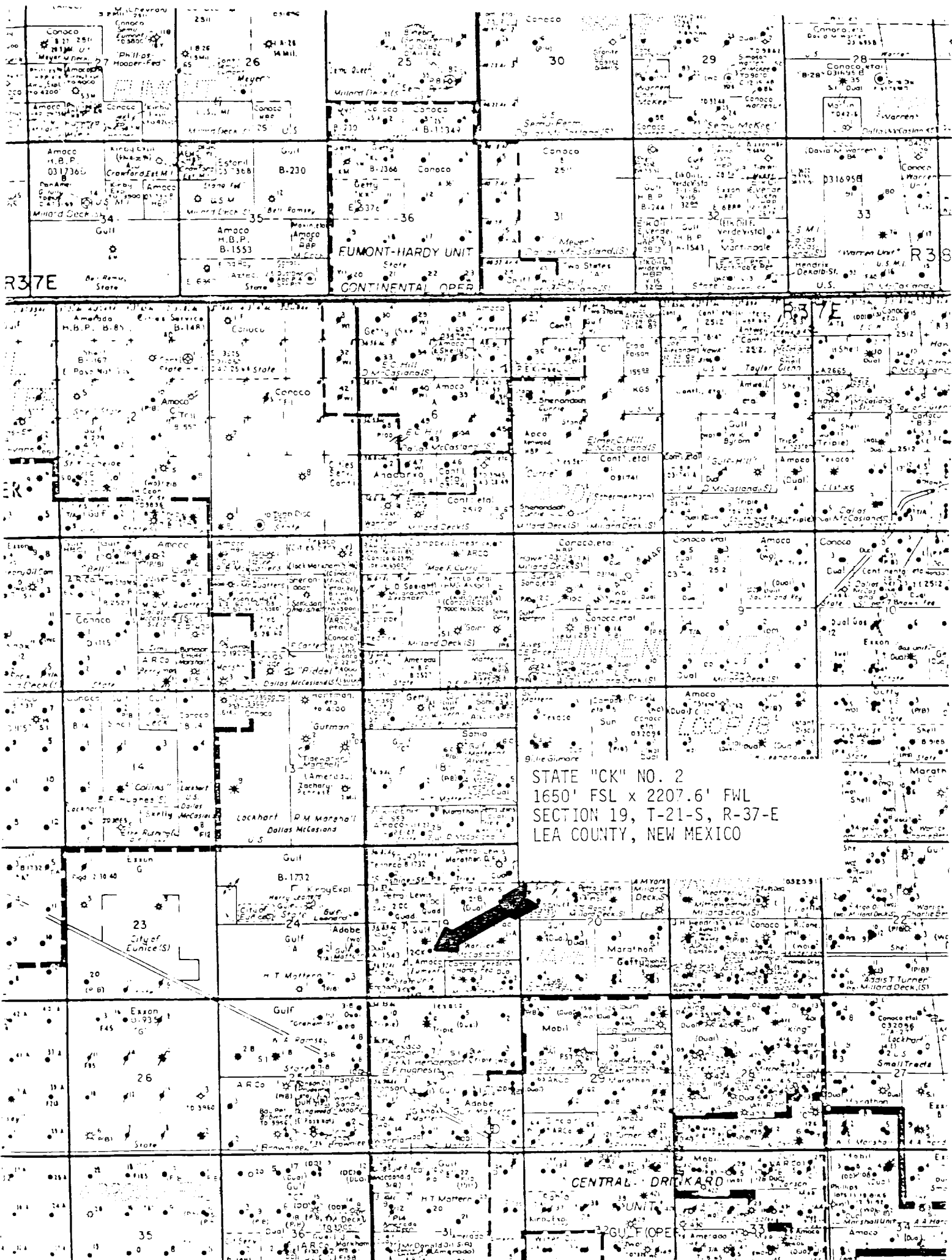
NLG/tjt  
APRD05-M

Attachments

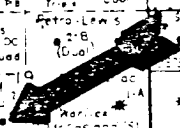
cc: State of New Mexico  
Energy and Minerals Department  
Oil Conservation Division  
P. O. Box 1980  
Hobbs, NM 88240

bcc: J. P. Barnett  
Houston, TX

Jim Allen  
Production Department  
Houston, TX



STATE "CK" NO. 2  
1650' FSL x 2207.6' FWL  
SECTION 19, T-21-S, R-37-E  
LEA COUNTY, NEW MEXICO



PLOT 2 01.32.50 SPT 15 JUN, 1985

JOB-R63MPS6, 5000, TULSA CENTER 0135FLA VER 8.2

# INDUSTRY PRODUCTION DATA RATE-TIME PLOTS

API NO: 300230667300

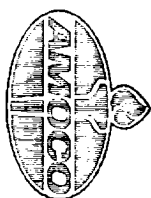
GENID: 4W020402

COMP DATE: 00800/124

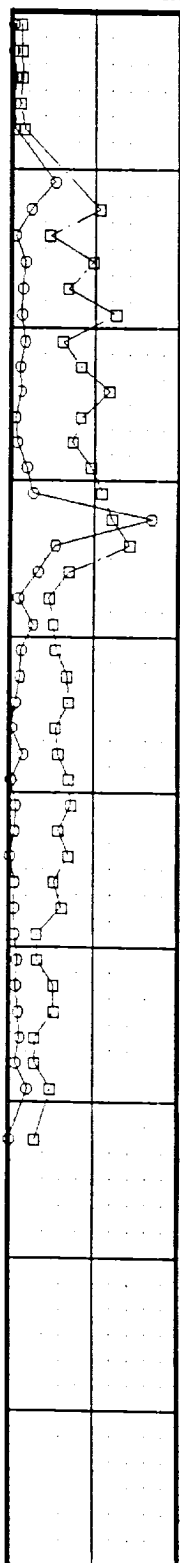
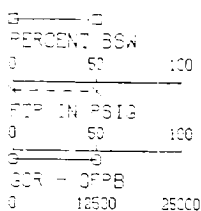
TOT OIL CUM: 154,577

TOT GAS CUM: 236,683

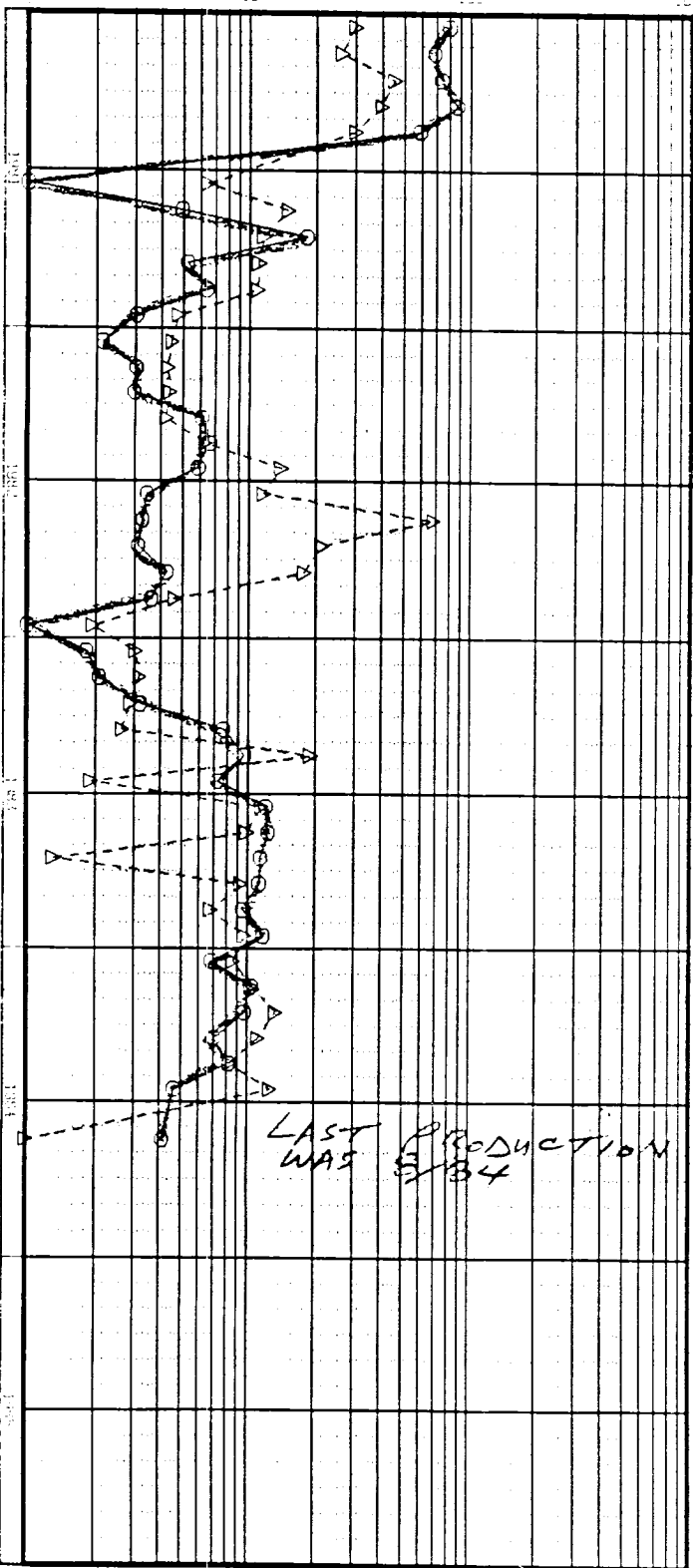
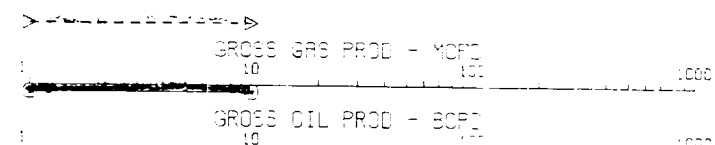
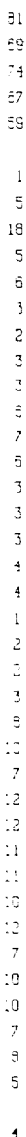
PERFS:



OIL  
WELL: STATE CK  
FIELD: BLINBERRY OIL AND GAS  
OPERATOR: AMOCO PRODUCTION CO  
STATE: NM 30 COUNTY: LEA  
FIRST PROD: LAST PROD 84 12  
REQUESTOR: HUTCHESO-HOB-2 LOCATION: HOBBS



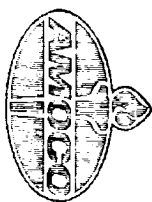
PERFORM PRODUCTION



1985 06 14

TIME

REPORT NUMBER 321



# INDUSTRY PRODUCTION DATA RATE-TIME PLOTS

API NO: 308250667388

GENID: 4W030403

RESERVOIR: DR

COMP DATE

TOT OIL GINT

TOT GAS GINT

PERMS

000002

DIR 003023800

025

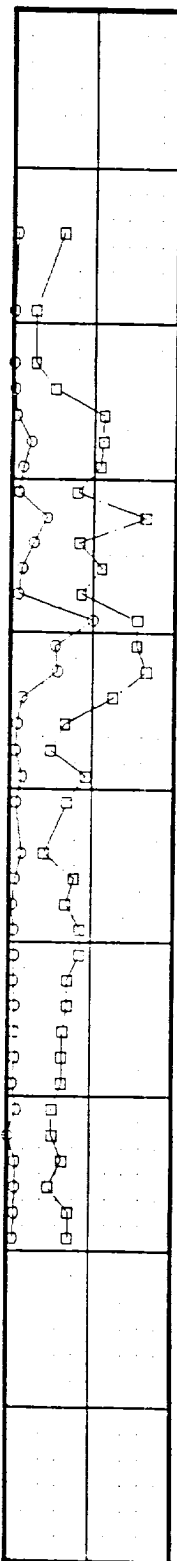
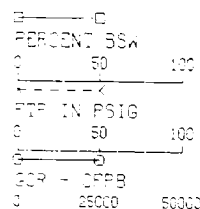
TOT OIL GINT

TOT GAS GINT

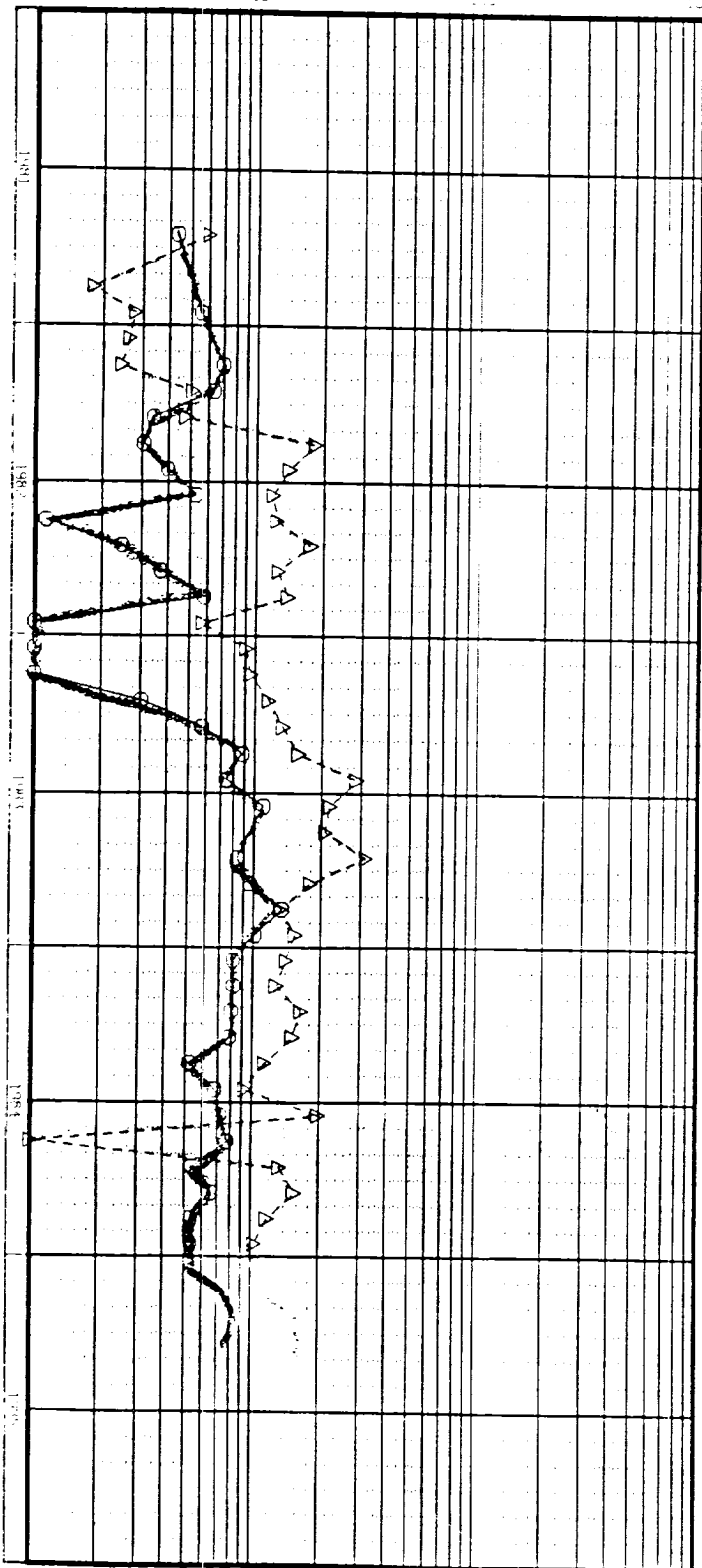
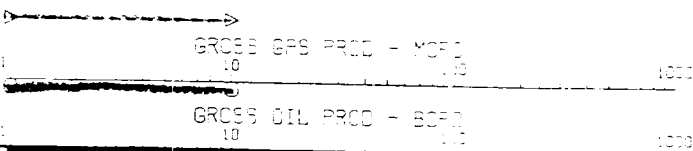
OIL  
WELL: STATE CK  
FIELD: DRINKARD  
OPERATOR: AMOCO PRODUCTION CO  
STATE: NM 30  
COUNTY: LEA  
FIRST PROD: LAST PROD 84 J2  
REQUESTOR: HUTCHES-HOB 2

LOCATION: HOBBS

224.721  
591.019



PLANE PRODUCT



1985 06-14

TIME

REPORT NUMBER 331

OFFSET OPERATORS ADDRESSEE LIST

Petro-Lewis Corporation  
Box 2250  
717 17th St.  
Denver, CO 80201

Gulf Oil Exploration and Production Company  
Box 670  
Hobbs, NM 88240

Campbell and Hedrick  
Box 401  
Midland, TX 79701

Texaco, Inc.  
Box 728  
Hobbs, NM 88240

P 267 162 745

RECEIPT FOR CERTIFIED MAIL

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

SENT TO  
GULF OIL EXP & PROD CO.  
STREET AND NO.  
BOX 670  
P.O. STATE AND ZIP CODE  
HOBBS, NEW MEXICO 88240

|                             |                     |    |
|-----------------------------|---------------------|----|
| POSTAGE                     |                     | \$ |
| CONSULT POSTMASTER FOR FEES | CERTIFIED FEE       |    |
|                             | SPECIAL DELIVERY    |    |
|                             | RESTRICTED DELIVERY |    |
|                             | OPTIONAL SERVICES   |    |
| RETURN RECEIPT SERVICE      |                     |    |

TOTAL POSTAGE AND FEES  
POSTMARK OR DATE

184

PS Form 3800, Apr. 1976

P 267 162 746

RECEIPT FOR CERTIFIED MAIL

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

SENT TO  
PETRO-LEWIS CORP.  
STREET AND NO.  
BOX 2250 (717 17TH ST.)  
P.O. STATE AND ZIP CODE  
DENVER, CO. 80201

|                             |                     |    |
|-----------------------------|---------------------|----|
| POSTAGE                     |                     | \$ |
| CONSULT POSTMASTER FOR FEES | CERTIFIED FEE       |    |
|                             | SPECIAL DELIVERY    |    |
|                             | RESTRICTED DELIVERY |    |
|                             | OPTIONAL SERVICES   |    |
| RETURN RECEIPT SERVICE      |                     |    |

TOTAL POSTAGE AND FEES  
POSTMARK OR DATE

184

PS Form 3800, Apr. 1976

P 267 162 743

RECEIPT FOR CERTIFIED MAIL

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

SENT TO  
TEXACO, INC.  
STREET AND NO.  
BOX 728  
P.O. STATE AND ZIP CODE  
HOBBS, NEW MEXICO 88240

|                             |                     |    |
|-----------------------------|---------------------|----|
| POSTAGE                     |                     | \$ |
| CONSULT POSTMASTER FOR FEES | CERTIFIED FEE       |    |
|                             | SPECIAL DELIVERY    |    |
|                             | RESTRICTED DELIVERY |    |
|                             | OPTIONAL SERVICES   |    |
| RETURN RECEIPT SERVICE      |                     |    |

TOTAL POSTAGE AND FEES  
POSTMARK OR DATE

184

PS Form 3800, Apr. 1976

P 267 162 744

RECEIPT FOR CERTIFIED MAIL

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

SENT TO  
CAMPBELL & HEDRICK  
STREET AND NO.  
BOX 401  
P.O. STATE AND ZIP CODE  
MIDLAND, TEXAS 79701

|                             |                     |    |
|-----------------------------|---------------------|----|
| POSTAGE                     |                     | \$ |
| CONSULT POSTMASTER FOR FEES | CERTIFIED FEE       |    |
|                             | SPECIAL DELIVERY    |    |
|                             | RESTRICTED DELIVERY |    |
|                             | OPTIONAL SERVICES   |    |
| RETURN RECEIPT SERVICE      |                     |    |

TOTAL POSTAGE AND FEES  
POSTMARK OR DATE

184

PS Form 3800, Apr. 1976



GAS-OIL RATIO TESTS

| LEASE NAME | WELL NO. | LOCATION |    |    | DATE OF TEST | CHOKE SIZE | TBG. PRESS. | DAILY ALLOWABLE | LENGTH OF TEST HOURS | PROD. DURING TEST |              |                  |            | GAS - OIL RATIO CU.FT./BBL. |
|------------|----------|----------|----|----|--------------|------------|-------------|-----------------|----------------------|-------------------|--------------|------------------|------------|-----------------------------|
|            |          | U        | S  | T  |              |            |             |                 |                      | R                 | WATER BBL.S. | GRAV. OIL BBL.S. | GAS M.C.F. |                             |
|            |          |          |    |    |              |            |             |                 |                      |                   |              |                  |            |                             |
| STATE CK   | 2        | K        | 19 | 21 | 37           | 4-28-85    | 8           | 24              | 3                    | 8                 | 24           | 3000             |            |                             |

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 0.60.

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 321 and applicable pool rules.

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

*Robert M. Leary*  
(Signature)  
Administrative Analyst (SG)  
6-25-85

GAS-OIL RATIO TESTS

| LEASE NAME | WELL NO. | LOCATION                           |                                     |                             | DATE OF TEST | CHOKE SIZE | TBG. PRESS. | DAILY ALLOWABLE | LENGTH OF TEST HOURS | PROD. DURING TEST |           |            |            | Special <input checked="" type="checkbox"/> |
|------------|----------|------------------------------------|-------------------------------------|-----------------------------|--------------|------------|-------------|-----------------|----------------------|-------------------|-----------|------------|------------|---------------------------------------------|
|            |          | TYPE OF TEST - (X)                 |                                     |                             |              |            |             |                 |                      | WATER BBL'S.      | GRAV. OIL | OIL BBL'S. | GAS M.C.F. |                                             |
|            |          | Scheduled <input type="checkbox"/> | Completion <input type="checkbox"/> | GAS - OIL RATIO CU.F.T./BBL |              |            |             |                 |                      |                   |           |            |            |                                             |
| STATE CK   | 2        | K                                  | 19                                  | 21                          | 37           | 6-2-84     | 11          | 24              | 4                    | 12                | 18        | 1500       |            |                                             |

County Lea

Pool Blueberry

Amoco Production Company  
P. O. Box 68, Hobbs, New Mexico 88240

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 allowances 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 0.60.

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 321 and appropriate pool rules.

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

Paul M. Lerry  
(Signature)

Administrative Analyst (SG)

(Title)  
6-25-85