

CONSERVATION DIV.  
SANTA FE

October 28, 1983

Energy & Minerals Department  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

Attention: Joe D. Ramey

RE: Application to  
Downhole Commingle  
Bravo #2 Owens Unit "D"  
Sec. 14, T-21-S, R-37-E  
Lea County, New Mexico

Dear Mr. Ramey:

Bravo Energy, Inc. respectfully requests administrative approval for an exception to Rule 303-A, to permit the downhole commingling of the production from the Blinebry and Drinkard formations in the above referenced well.

1. Tests of each zone results in the following:

Blinebry	15 BOPD	80 MCF		9-02-82	C-116
Drinkard	10 BOPD	55 MCFG	0 Water	4-21-83	C-116

See attached C-116 reports.

2. The Blinebry zone produces a trace of water averaging less than two bbls. per day. The Drinkard does not produce any water.

3. Both zones require artificial lift and will utilize a rod pumping system.

4. Surface commingling of produced fluids does not result in a reduction of quality. The authority to commingle fluids from both zones at the surface was given by administrative order #PC-93 dated September 5, 1962. Commingling fluids downhole will not reduce the value since both zones have the same properties as to API gravity and other physical properties.

5. Ownership of minerals and working interests are the same for each reservoir.

6. Commingling of these zones will not jeopardize the effectiveness of any future secondary recovery projects. Currently there are no active secondary recovery projects in the area.

7. Plats showing the Bravo Owen #2 well's proration unit and production from the Blinebry and Drinkard reservoir for a radius of one mile are attached.

8. No Bottom Hole Pressure bombs to obtain Bottom Hole Pressures were run prior to working over this well. However, Bottom Hole Pressures for both zones were calculated from fluid levels found in each tubing string.

In the Drinkard zone, the fluid level was found 4124' from the surface. The mid-point of the perforations was 6524' resulting in a fluid column of 2395'. The gradient of 39° API gravity oil is approximately .357 psi/ft.; therefore,  $(.375 \text{ psi/ft})(2395 \text{ ft}) = 855 \text{ psi}$ .

In the Blinebry zone, the fluid level was found 3513' from the surface. The mid-point of the perforations was 5824' resulting in a fluid column of 2311' using the same gradient since both zones contain 39° API gravity oil. A bottom hole pressure of 825 psi was calculated. The above pressures were calculated prior to removing packers and bridge plugs in October, 1980.

9. Proposed allocations of production for each reservoir based on prior periodic production tests were approved in the amendment to administrative order PC-93 issued in April, 1970 and will be as follows:

	<u>OIL</u>	<u>GAS</u>
Blinebry	60%	60%
Drinkard	40%	40%

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Page 3

10. Attached is a list of all offset operators. These operators were furnished a copy of this application and attachments. Certified mail receipts are attached as verification of offset operator notification.

Bravo Energy, Inc. humbly requests administrative approval to commingle these two reservoirs downhole to facilitate pumping this well and in so doing prevent waste.

Sincerely yours,



Joe T. Janica, P.E.  
Natural Resources Engineering, Inc.  
Agents for Bravo Energy, Inc.

JTJ/jec

Enclosures

cc: file  
      chrono  
      K.D. McPeters - Bravo Energy, Inc.  
      Gilbert Quintana - OCD

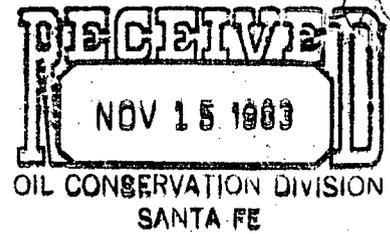
## OFFSET OPERATORS

1. Getty Oil Company  
Two Midland National Bank Center  
Midland, TX 79701
2. Conoco Oil Company  
P.O. Box 460  
Hobbs, NM 88240
3. Shell Oil Production Administrative  
Attention: Alvie Fore  
Woodcreek #4434  
P.O. Box 991  
Houston, TX 77001
4. J. R. Cone  
1423 N. Avenue P  
P.O. Box 10217  
Lubbock, TX 79408
5. Marathon Oil Company  
Attention: Calvin Saathoff  
P.O. Box 2409  
Hobbs, NM 88240

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501



April 10, 1970

Moran Oil Producing & Drilling Corporation  
P. O. Box 1919  
Hobbs, New Mexico 88240

C Attention: Mr. K. D. McPeters

AMENDMENT  
Administrative Order PC-93

O  
P  
Y  
Gentlemen:

Reference is made to your letter dated March 25, 1970, wherein you advise that both zones currently being commingled on your Owen Lease pursuant to the provisions of Administrative Order PC-93 are now of marginal nature. You therefore request that the metering requirement contained in said order be deleted.

Administrative Order PC-93 is hereby amended to delete the requirement for metering the Drinkard production and determining the Blinebry production by means of the subtraction method. Henceforth you will be authorized to allocate the production to the two pools on this lease by means of periodic well tests, provided however, that you shall notify the Commission at such time as any well on said lease becomes capable of top allowable production.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/DSN/esr

cc: Oil Conservation Commission - Hobbs  
Oil & Gas Engineering Committee - Hobbs

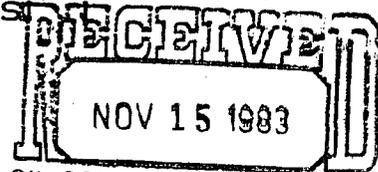
C CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

80005 10/1/62

1962 SEP 7 PM 2:25



OIL CONSERVATION DIVISION  
SANTA FE

September 5, 1962

C Moran Oil Producing & Drilling Corporation  
P. O. Box 1718  
Hobbs, New Mexico

O Attention: Mr. K. D. McPeters

Administrative Order PC-93

Gentlemen:

P Reference is made to your application dated August 30, 1962, for administrative approval of an exception to Rule 303 (a) of the Commission Rules and Regulations to permit the commingling of the production from the Drinkard and Blinebry Oil Pools on your Owen Lease located in Section 14, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, by metering the production from the Drinkard Pool and determining the Blinebry production by means of the subtraction method.

Y By the authority vested in me under the provisions of Rule 303 (b) of the Commission Rules and Regulations, you are hereby authorized to commingle the production from the aforesaid pools on said lease in the above-described manner. Provided however, that the installation shall be operated in accordance with the provisions of the Commission "Manual for the Installation and Operation of Commingling Facilities."

Very truly yours,

A. L. PORTER, Jr.,  
Secretary-Director

ALP/DSN/esr

cc: Oil Conservation Commission - (with enclosure) - Hobbs  
Oil & Gas Engineering Committee - Hobbs

GAS-OIL RATIO TESTS

Operator **MORANCO** Pool **BLINEBRY** County **LEA**

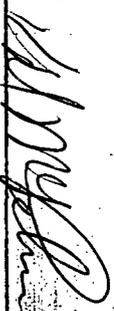
Address **P.O. Box 1860, Hobbs, New Mexico, 88240** TYPE OF TEST - (X)  Scheduled  Special

LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	TYPE OF TEST - (X)	CHOKER SIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS OIL RATIO CU.FT./BB	
		U	S	T							R	WATER BALS.	GRAV. OIL	OIL BALS.		GAS M.C.F.
OWEN	1	E	14	21	37	9-1-82	P	2"	120	5	24	0	39	3	15	5,000
	2	D	14	21	37	9-2-82	P	2"	30	22	24	7	39	15	80	5,667

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.  
 Well original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 301 and appropriate pool rules.

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

  
 K. D. McPeter, Engineer

October 8, 1987

GAS-OIL RATIO TESTS

Operator **Bravo Energy Inc.** Pool **DRINKARD** County **LEA**

Address **P.O. Box 758 - Hobbs, New Mexico 1.88240** TYPE OF TEST - (X)  Scheduled  Completion  Special

LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	TYPE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU.F.T.
		U	S	T							R	WATER BLS.	GRAV. OIL	OIL BLS.	
OWEN	1	E	14	21	4-20-83	F	1/2	80	2	24	0	39	3	40	1330
	2	D	14	21	4-21-83	F	1/2	120	15	24	0	39	10	55	5500

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.

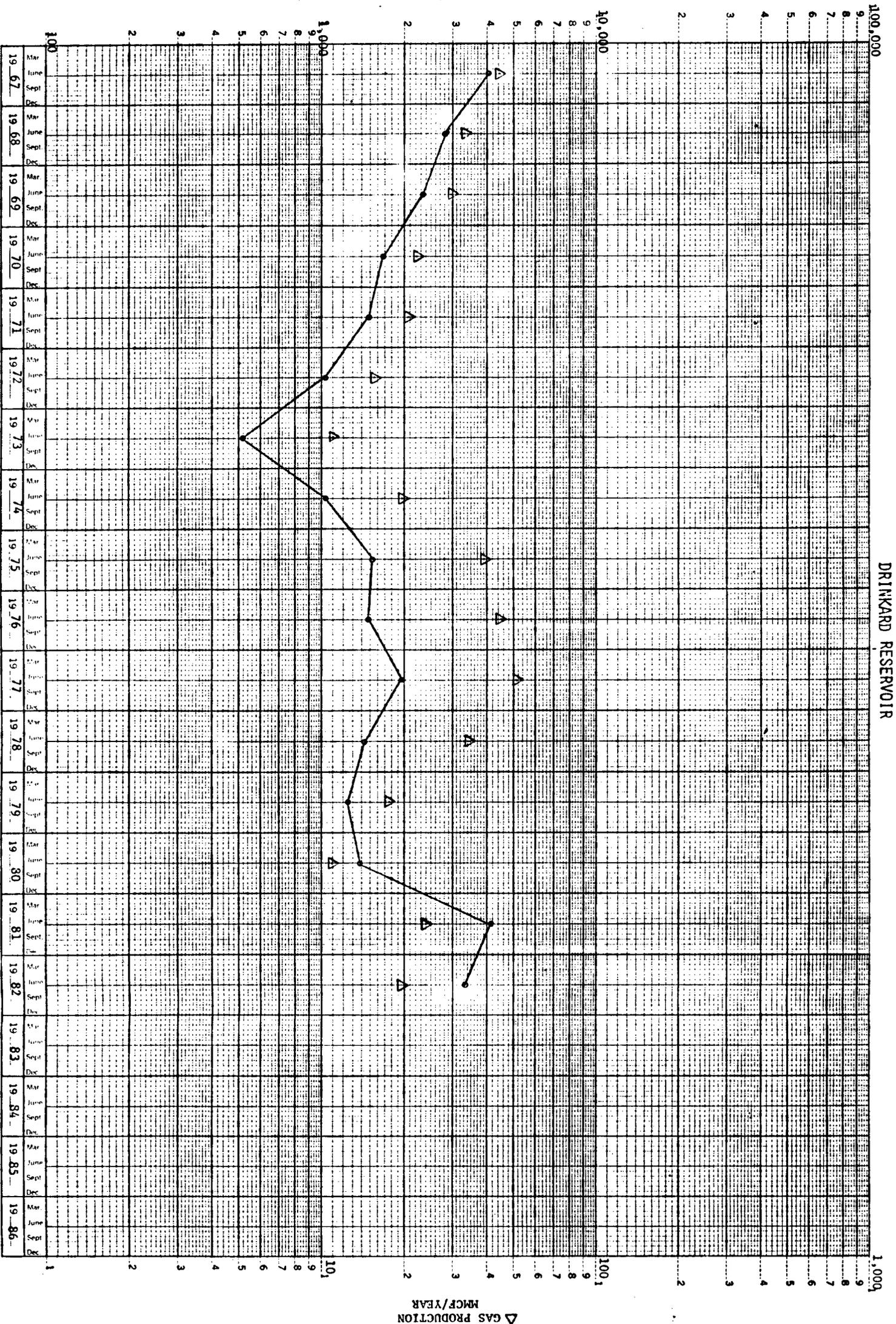
Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 201 and appropriate pool rules.

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

  
(Signature)  
K. D. McPeters, Engineer

● OIL PRODUCTION  
BBLs/YEAR

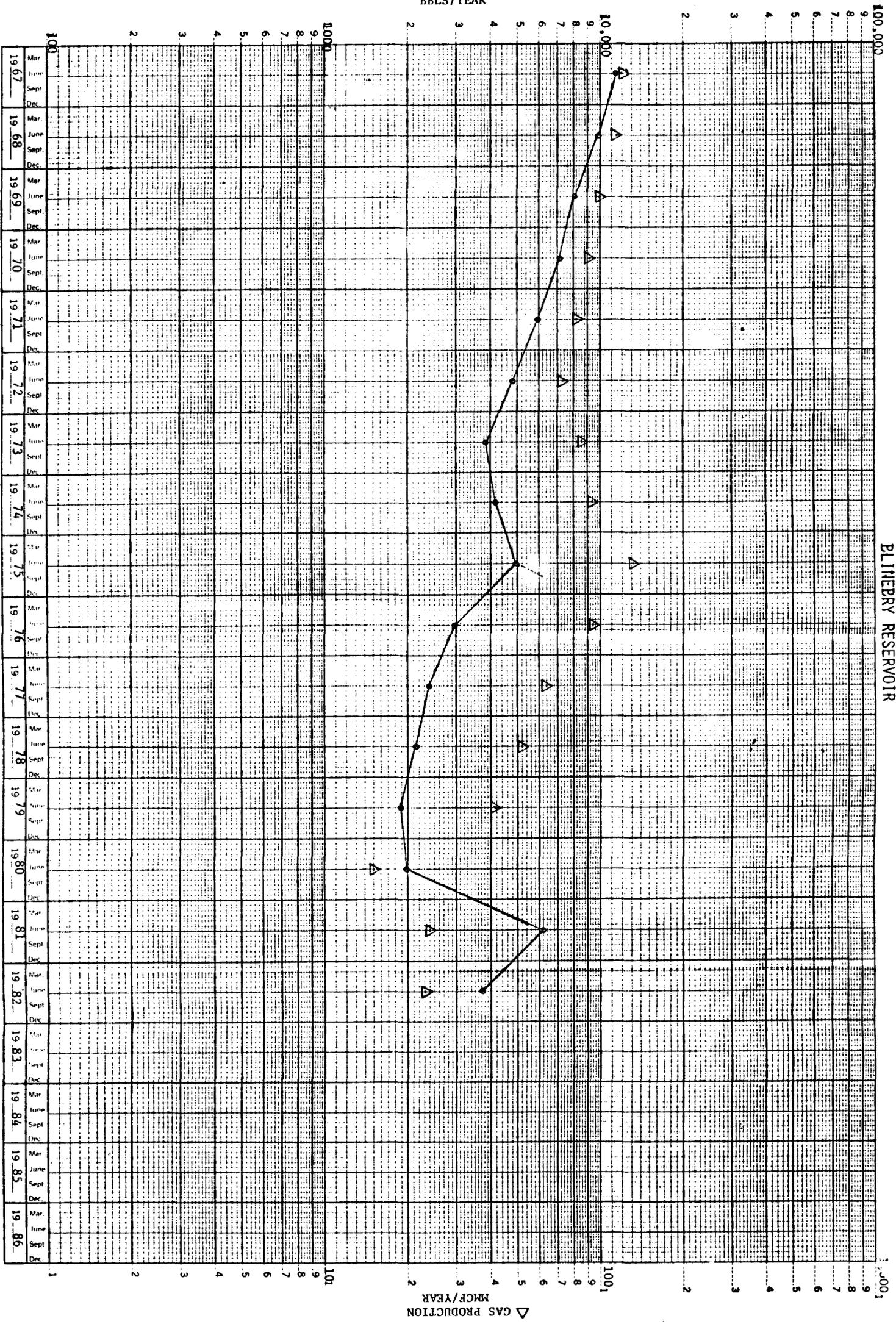


DRAVO ENERGY - OWENS #2  
DRINKARD RESERVOIR

△ GAS PRODUCTION  
MCF/YEAR

• OIL PRODUCTION  
 BBLs/YEAR

BLINBERY RESERVOIR







Notification of  
Offset Operators

PS Form 3811, Dec. 1980

● **SENDER:** Complete items 1, 2, 3, and 4.  
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).  
 Show to whom and date delivered ..... —¢  
 Show to whom, date, and address of delivery.. —¢

2.  **RESTRICTED DELIVERY** —¢  
*(The restricted delivery fee is charged in addition to the return receipt fee.)*

TOTAL \$ \_\_\_\_\_

3. ARTICLE ADDRESSED TO:  
 Conoco Oil Company  
 P.O. Box 460  
 Hobbs, NM 88240

4. TYPE OF SERVICE:      ARTICLE NUMBER  
 REGISTERED     INSURED  
 CERTIFIED     COD  
 EXPRESS MAIL

ARTICLE NUMBER: **P433674623**

(Always obtain signature of addressee or agent)  
 I have received the article described above.  
 SIGNATURE     Addressee     Authorized agent

DATE OF DELIVERY      POSTMARK

6. ADDRESSEE'S ADDRESS *(Only if requested)*

7. UNABLE TO DELIVER BECAUSE:      7a. EMPLOYEE'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

Conoco Oil Company  
 P.O. Box 460  
 Hobbs, NM 88240

PS Form 3811, Dec. 1980

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2.  **RESTRICTED DELIVERY** —¢  
*(The restricted delivery fee is charged in addition to the return receipt fee.)*

TOTAL \$ \_\_\_\_\_

3. ARTICLE ADDRESSED TO:  
 Getty Oil Company  
 Two Midland National Bank Bldg.  
 Midland, TX 79701

4. TYPE OF SERVICE:      ARTICLE NUMBER  
 REGISTERED     INSURED  
 CERTIFIED     COD  
 EXPRESS MAIL

ARTICLE NUMBER: **P433674624**

(Always obtain signature of addressee or agent)  
 I have received the article described above.  
 SIGNATURE     Addressee     Authorized agent

DATE OF DELIVERY      POSTMARK

6. ADDRESSEE'S ADDRESS *(Only if requested)*

7. UNABLE TO DELIVER BECAUSE:      7a. EMPLOYEE'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

Getty Oil Company  
 Two Midland National Bank  
 Midland, TX 79701

Notification of  
Offset Operators

PS Form 3811, Dec. 1980

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Add your address in the "RETURN TO" space  
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**(CONSULT POSTMASTER FOR FEES)**

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 Show to whom and date delivered ..... —¢  
 Show to whom, date, and address of delivery.. —¢

2.  **RESTRICTED DELIVERY**  
*(The restricted delivery fee is charged in addition to  
the return receipt fee.)* —¢

**TOTAL \$** \_\_\_\_\_

3. **ARTICLE ADDRESSED TO:**  
 Marathon Oil Company  
 Attention: Calvin Saathoff  
 P.O. Box 2409  
 Hobbs, NM 88240

4. **TYPE OF SERVICE:** **ARTICLE NUMBER**  
 REGISTERED  INSURED  
 CERTIFIED  COD  
 EXPRESS MAIL  
 P433674625

**(Always obtain signature of addressee or agent)**

I have received the article described above.

**SIGNATURE**  Addressee  Authorized agent

5. **DATE OF DELIVERY** \_\_\_\_\_ **POST MARK**

6. **ADDRESSEE'S ADDRESS (Only if requested)**

7. **UNABLE TO DELIVER BECAUSE:** \_\_\_\_\_ **7A. EMPLOYEE'S INITIALS**

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

Marathon Oil Company  
 Attention: Calvin Saathoff  
 P.O. Box 2409  
 Hobbs, NM 88240

Notification of  
Offset Operators

PS Form 3811, Oct. 1980

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on reverse.

**(CONSULT POSTMASTER FOR FEES)**

1. The following service is requested (check one).  
 Show to whom and date delivered .....  
 Show to whom, date, and address of delivery .....

2.  **RESTRICTED DELIVERY** .....  
*(The restricted delivery fee is charged in addition to  
the return receipt fee.)*

TOTAL \$

3. **ARTICLE ADDRESSED TO:**  
 J. R. Cone  
 1423 N. Avenue P  
 P.O. Box 10217  
 Lubbock, TX 79408

4. **TYPE OF SERVICE:** **ARTICLE NUMBER**  
 REGISTERED  INSURED  
 CERTIFIED  COD  
 EXPRESS MAIL  
 P433674626

*(Always obtain signature of addressee or agent)*

I have received the article described above.  
**SIGNATURE**  Addressee  Authorized agent

5. **DATE OF DELIVERY**  
 NOV 4 1983

6. **ADDRESSEE'S ADDRESS (Only if requested)**

7. **UNABLE TO DELIVER BECAUSE:** 7a. **EMPLOYEE'S INITIALS**

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

J. R. Cone  
 1423 N. Avenue P  
 P.O. Box 10217  
 Lubbock, TX 79408

PS Form 3811, Oct. 1980

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on reverse.

**(CONSULT POSTMASTER FOR FEES)**

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 Show to whom and date delivered .....  
 Show to whom, date, and address of delivery .....

2.  **RESTRICTED DELIVERY** .....  
*(The restricted delivery fee is charged in addition to  
the return receipt fee.)*

TOTAL \$

3. **ARTICLE ADDRESSED TO:**  
 Shell Oil Production Administrative  
 Attention: Alvie Fore  
 Woodcreek #4434 P.O. Box 991  
 Houston, TX 77001

4. **TYPE OF SERVICE:** **ARTICLE NUMBER**  
 REGISTERED  INSURED  
 CERTIFIED  COD  
 EXPRESS MAIL  
 P433674627

*(Always obtain signature of addressee or agent)*

I have received the article described above.  
**SIGNATURE**  Addressee  Authorized agent

5. **DATE OF DELIVERY**  
 NOV 4 1983

6. **ADDRESSEE'S ADDRESS (Only if requested)**

7. **UNABLE TO DELIVER BECAUSE:** 7a. **EMPLOYEE'S INITIALS**

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

Shell Oil Production Admin.  
 Attn: Alvie Fore  
 Woodcreek #4434  
 P.O. Box 991  
 Houston, TX 77001