

DHC - 196
Date - 5/24/76

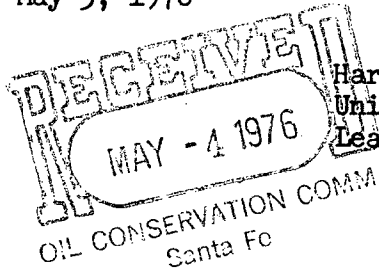
Gulf Energy and Minerals Company - U. S.

PRODUCTION DEPARTMENT
HOBBS AREA

C. D. Borland
AREA PRODUCTION MANAGER

May 3, 1976

P. O. Box 670
Hobbs, New Mexico 88240



Harry Leonard (NCT-C) #12
Unit A, Section 36-21S-36E
Lea County, New Mexico

Mr. J. D. Ramey
N. M. Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Sir:

Your administrative approval is requested for an exception to Rule #303-C-2 as provided for under Order #R-5114 to permit down-hole commingling of marginal Blinebry and Drinkard production in the subject well. The Blinebry and Drinkard production on this lease are currently down-hole commingled in the well bore of Well #17 under Order #R-5114. There is also surface commingling on this lease under Order #PC-512. The filing fee on this lease has previously been paid to the Commissioner of Public Lands.

There is no evidence of fluid incompatibility, and we do not expect any waste or reservoir damage due to down-hole commingling in the well bore. Ownership in the two pools is common, and correlative rights will not be violated. Down-hole commingling will allow the recovery of additional hydrocarbons from this well. Both zones will have to be pumped.

The subject well has recently been deepened and completed in the Drinkard zone. Attached is the completion history of the Drinkard zone, as well as the latest well test. Also attached is a decline curve and last well test on the Blinebry zone before temporary abandonment.

If you concur, it is our recommendation, based on the production history and well tests as submitted on attached C-116 for the Blinebry and Drinkard zones, that the following allocation of production be made:

	<u>Oil</u>	<u>Gas</u>
Blinebry	16%	20%
Drinkard	84%	80%

Should secondary recovery operations become practical in the future, the two zones could be separated at that time without damaging either reservoir.

Also attached are other pertinent data regarding this application as outlined in Rule #303-C-2.

Yours very truly,

C. D. BORLAND



RDWo:ec
Att'd.

cc: NMOCC, Hobbs; C. F. Kalteyer, Midland; Offset Operators

- (1) Operator: Gulf Oil Corporation, P. O. Box 670, Hobbs, New Mexico 88240.
- (2) Lease: Harry Leonard (NCT-C) #12, Section 36-21S-36E, Unit A, Lea County, N. M.
- (3) Well History, Production History, Decline Curve and Latest Tests:

The Harry Leonard (NCT-C) #12 was deepened to the Drinkard zone during November 1975 and a 4" liner set. The well was perforated in six 2' zones between 6534' and 6715' with four 1/2" JHPF, acidized and frac stimulated. Well was equipped to pump. The well was re-acidized January 27, 1976 and flowed for a period of 25 days and died February 20, 1976.

The Drinkard zone was closed in February 21, 1976 and the Blinebry zone was acidized and test pumped until March 23, 1976. The Blinebry zone was closed in and the Drinkard zone opened up and equipped to pump.

Decline curves and production history for both zones, along with C-116, are attached.

- (4) Bottom Hole Pressure Data:

	<u>Datum</u>	<u>Pressure at Datum</u>
Blinebry	-2150'	900 psi *
Drinkard	-3100'	1025 psi *

* Estimates based on most recent available average BHP data within vicinity of well.

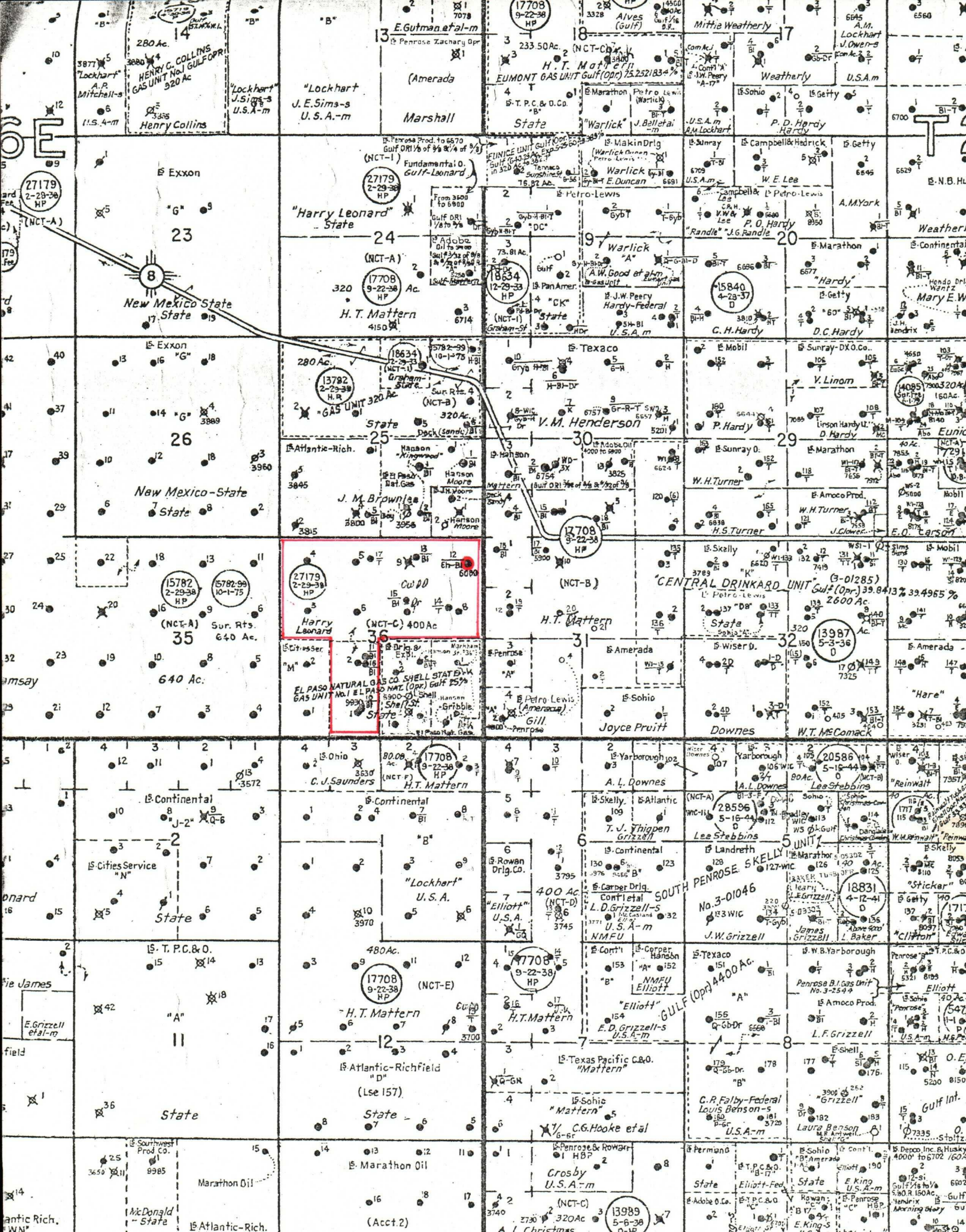
- (5) Fluid Characteristics:

Blinebry and Drinkard production are currently being commingled in the well bore in the Harry Leonard (NCT-C) #17 (Order #R-5114) and surface commingled on the lease under Order #PC-512. There is no evidence of incompatibility.

- (6) Value of Commingled Fluids:

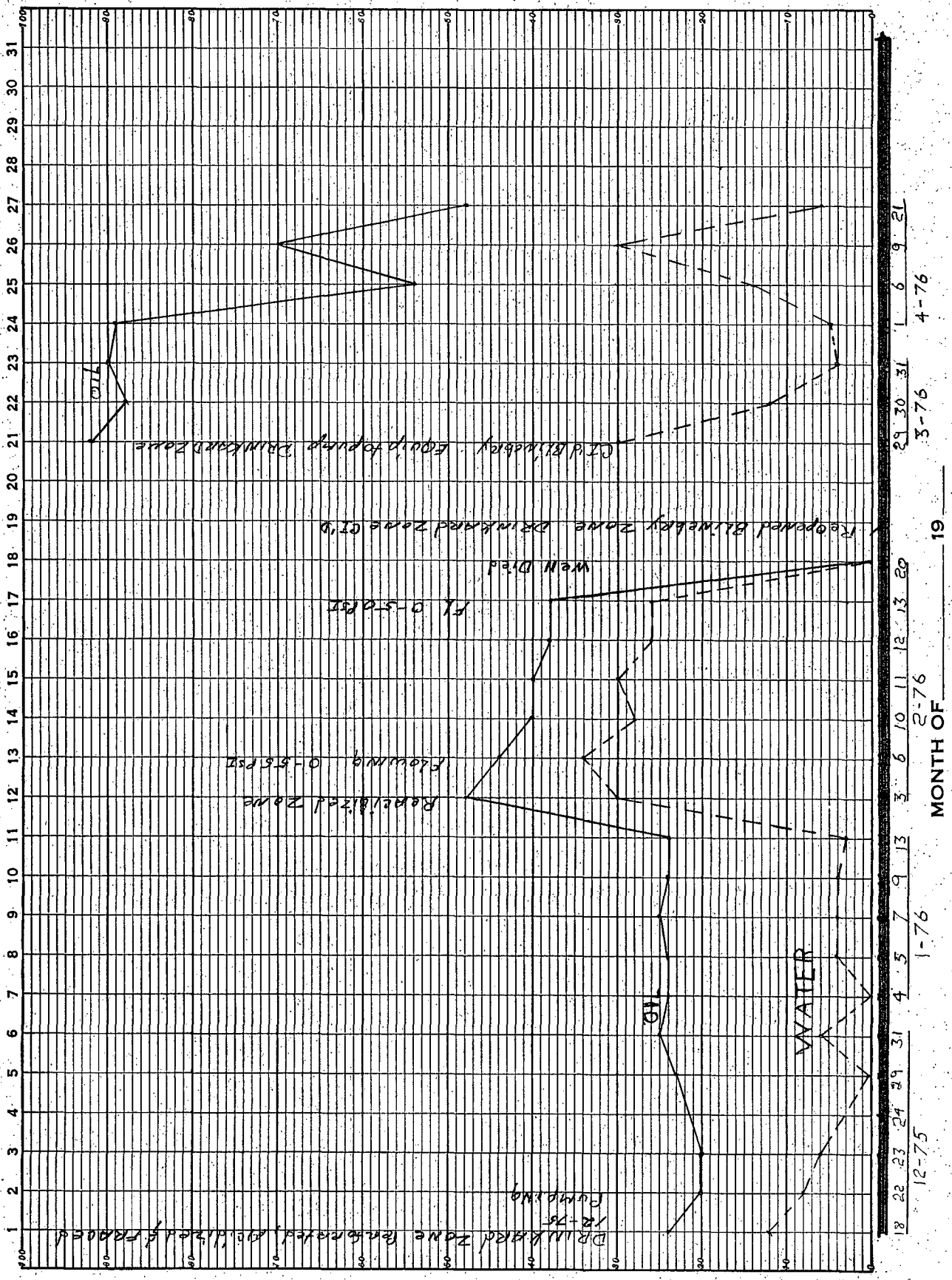
	<u>BOPD</u>	<u>API Gravity</u>	<u>\$/Bbl.</u>	<u>Revenue/Day</u>
Blinebry Oil	9	34.1	\$5.97	\$ 53.73
Drinkard Oil	48	37.1	\$6.89	<u>\$330.72</u>
			Total	\$384.45
Commingled	57	36.6	\$6.75	\$384.75
			Difference	+0.30

- (7) All offset operators have been notified by copy of the attached letter: Shell Oil Company, El Paso Natural Gas, Hanson Oil Company, Jack Markham and J. Hiram Moore.





HARRY-LEONARD (WET-C) #12 DRINKARD



bbl's
1000

HARRY LEONARD (NCT-C) #12

9000

8000

7000

6000

5000

4000

3000

2000

1000

0

Blinberry oil

Blinberry water

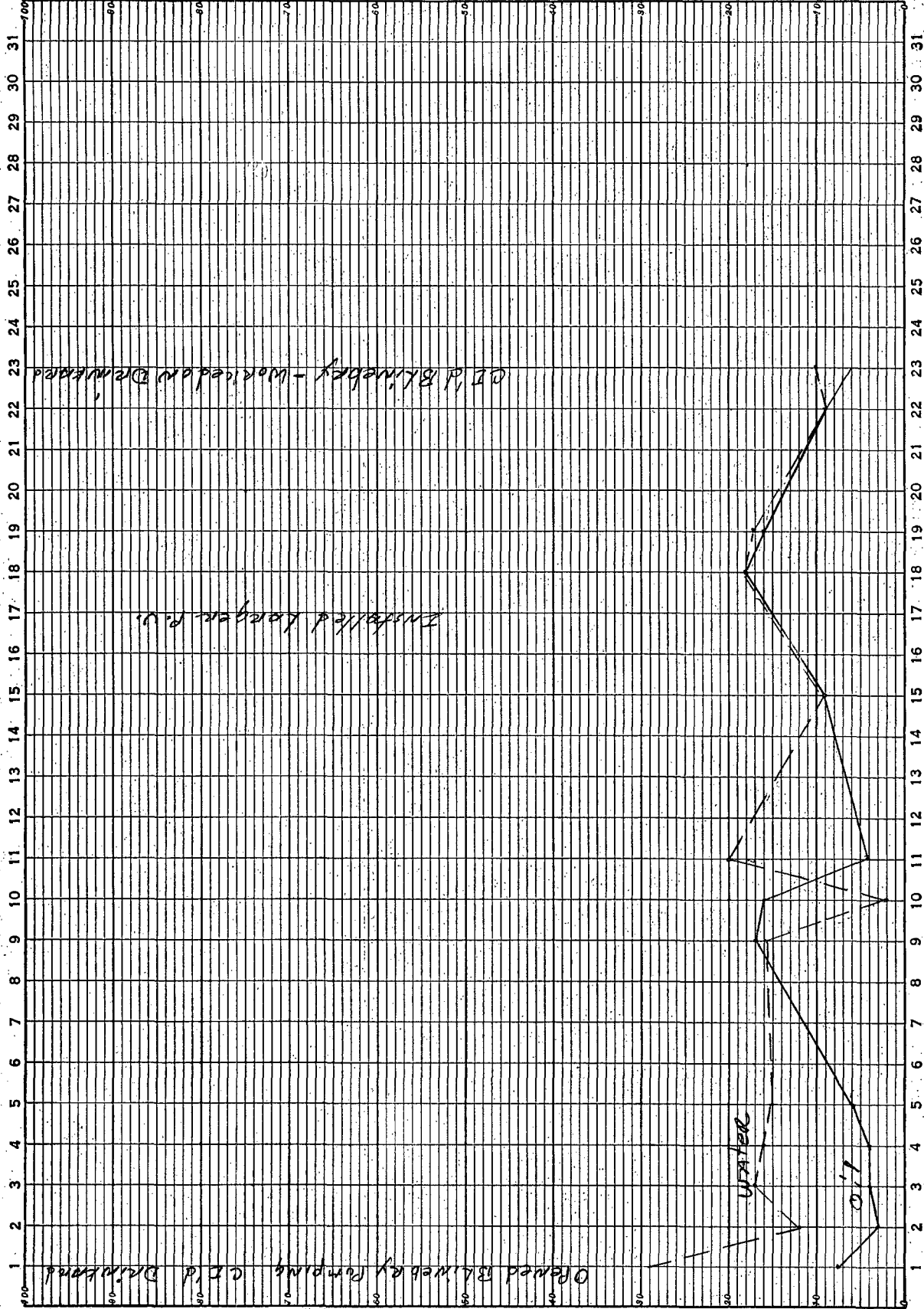
779 Blinberry

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
19 73											
19 74											
19 75											

Monthly Production



HARRY LEONARD (NCT-C) #12

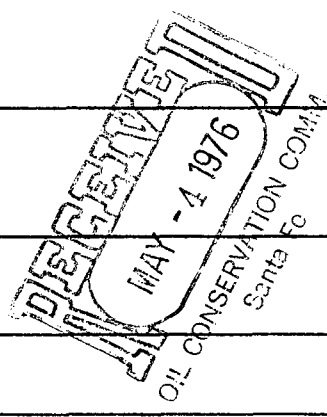


MONTH OF MARCH 1976

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

C-116
Revised 1-1-65

Operator		Pool	County											
Gulf Oil Corporation		Blinebry - Drinkard	Lea											
Address		TYPE OF TEST - (X)		Scheduled ☐	Completion ☐	Special ☒								
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT/BBL	
		U	S	T						R	WATER BBLs.	GRAV. OIL		OIL BBLs.
H. Leonard (NCT-C) Blinebry	12	A	36	21	36	P 2" W0	40	-	24	9	34.1	9	55.0	6111
H. Leonard (NCT-C) Drinkard	12	A	36	21	36	P 2" W0	40	90	24	8	37.4	48	226.0	4708
Special Test for Down-Hole Commingling Application														



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 Commission.

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 Commission in accordance with Rule 301 and appropriate pool rules.

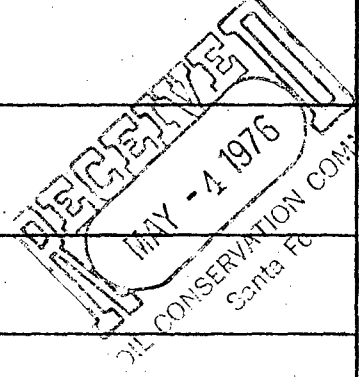
I hereby certify that the above information is true and complete to the best of my knowledge and belief.

[Signature]
(Signature)
Well Tester
4-30-76
(Title)
(Date)

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

C-116
Revised 1-1-65

Operator		Pool		County		Lea									
Gulf Oil Corporation		Blinebry - Drinkard													
Address		P. O. Box 670, Hobbs, N. M.		TYPE OF TEST - (X)		Completion ☐ Scheduled ☐ Special ☒									
LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU.FT./BBL
		U	S	T	R						WATER BBL.S.	GRAV. OIL	OIL BBL.S.	GAS M.C.F.	
H. Leonard (NCT-C) Blinebry	12	A	36	21	36	3-22-76	P 2" WO	40	-	24	9	34.1	9	55.0	6111
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(Signature)

Well Tester

(Title)

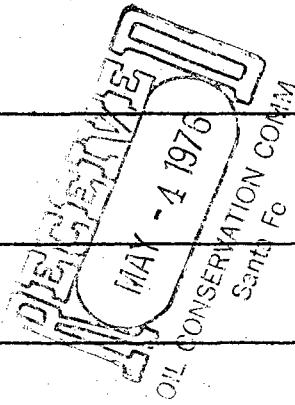
4-30-76

(Date)

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

C-116
Revised 1-1-65

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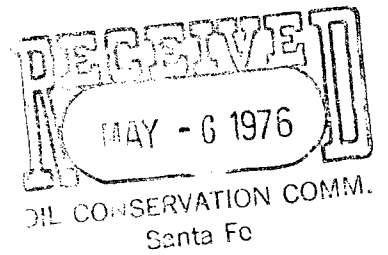
I hereby certify that the above information is true and complete to the best of my knowledge and belief.

Michael
(Signature)

Well Tester

4-30-76
(Title)

OIL CONSERVATION COMMISSION
Hobbs DISTRICT



OIL CONSERVATION COMMISSION
BOX 2088
SANTA FE, NEW MEXICO

DATE May 4, 1976

RE: Proposed MC _____
Proposed DHC X _____
Proposed NSL _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

I have examined the application dated _____
for the Gulf Oil Corp. Harry Leonard (NCT-C) #12-A 26-21-36
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

O.K.---J.S.

Yours very truly,

A handwritten signature in cursive script, appearing to read "Jerry Sexton", written over a horizontal line.