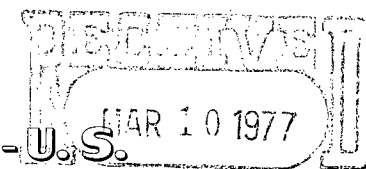


Gulf Energy and Minerals Company - U.S.

PRODUCTION DEPARTMENT
HOBBS AREA

C. D. Borland
AREA PRODUCTION MANAGER

March 7, 1977



OIL CONSERVATION COMM.

Santa Fe

P. O. Box 670

Hobbs, New Mexico 88240

DHC-215
Due-3/30

Re: C. L. Hardy No. 5
Unit L, Section 20-21S-37E,
Lea County, New Mexico

Mr. Joe D. Ramey
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, NM 87501

Dear Sir:

Your administrative approval is requested for an exception to Rule 303-A to permit down-hole commingling of marginal production in the subject well from the Drinkard and Blinebry Oil and Gas Pools. Production from the same two pools is presently being commingled down-hole in Gulf's C. L. Hardy No. 3 per Order No. DHC-202. Production from these two pools is also being commingled in surface storage on Gulf's C. L. Hardy Lease per Orders No. R-1678, PC-357 and PC-357 Amended. There is no evidence of fluid incompatibility, and we do not expect any 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.

The installation of pumping equipment on the Drinkard zone would probably increase production and recoverable reserves; however, the installation of separate pumping equipment on the Drinkard zone cannot be economically justified. If down-hole commingling is permitted, the existing pumping equipment on the Blinebry zone will be utilized to lift the fluids from the two commingled zones. We propose to tube the well through the Drinkard zone and keep the well pumped down to prevent cross flow between the two zones.

Since pumping production from the Blinebry zone has stabilized, we propose to allocate production between the two zones by subtracting Blinebry production from the stabilized commingled production and assigning the remaining production to the Drinkard zone.

Pertinent data regarding this application, as outlined in Rule 303-C, are attached for your consideration.

Yours very truly,

C. D. BORLAND

Attachments
CRK/dch

cc: New Mexico Oil Conservation Commission
P. O. Box 1980, Hobbs, NM 88240
C. F. Kalteyer - Midland

Offset Operators:
Petro-Lewis
J. W. Peery



C. L. HARDY NO. 5

- (1) Operator: Gulf Oil Corporation
P. O. Box 670
Hobbs, NM 88240
- (2) Lease and Well Number: C. L. Hardy No. 5
1980' FSL & 660' FWL Section 20-21S-37E,
Lea County, New Mexico
- (3) Pools Dualled: Blinebry Oil and Gas, Drinkard
OCC Order No. DC-588, April 17, 1958 ✓
- (4) Decline Curves: Attached
- (5) Bottom Hole Pressure Data: Drinkard BHP test shown below was taken on 3-7-77.
Blinebry BHP was estimated from most recent BHP
Data within vicinity of this well:

<u>Pool</u>	<u>Datum</u>	<u>Pressure at Datum</u>
Blinebry Oil & Gas	-2400'	600
Drinkard	-3050'	788

- (6) Fluid Characteristics: Drinkard and Blinebry production are presently being commingled down hole in Gulf's C. L. Hardy No. 3, Order No. DHC-202 dated 9-28-76. There has been no evidence of fluid incompatibility.
- (7) Value of Commingled Fluids: Drinkard and Blinebry production are presently being surface commingled on this lease per Orders No. R-1678, PC-357 and PC-357 Amended. Since this production is already commingled on the surface, down-hole commingling will not affect price.
- (8) Current Tests: Blinebry (3-3-77) pumped 9 BOPD, 4 BWPD, 251 MCFPD, Gor 27,889.
Drinkard (3-4-77) flowed 1 BOPD, 1 BWPD, 4.0 MCFPD, GOR 4,000.
- (9) All offset operators have been notified by copy of this letter:

Petro-Lewis Corporation, P. O. Box 2250, Denver, CO 80201
J. W. Peery, P. O. Box 401, Midland, TX 79702

Bottom pf - 6554
Max prod: 40 BOPD

W. 930 251 mcf
Dr - 1 BOPD 4.0
10 255 270

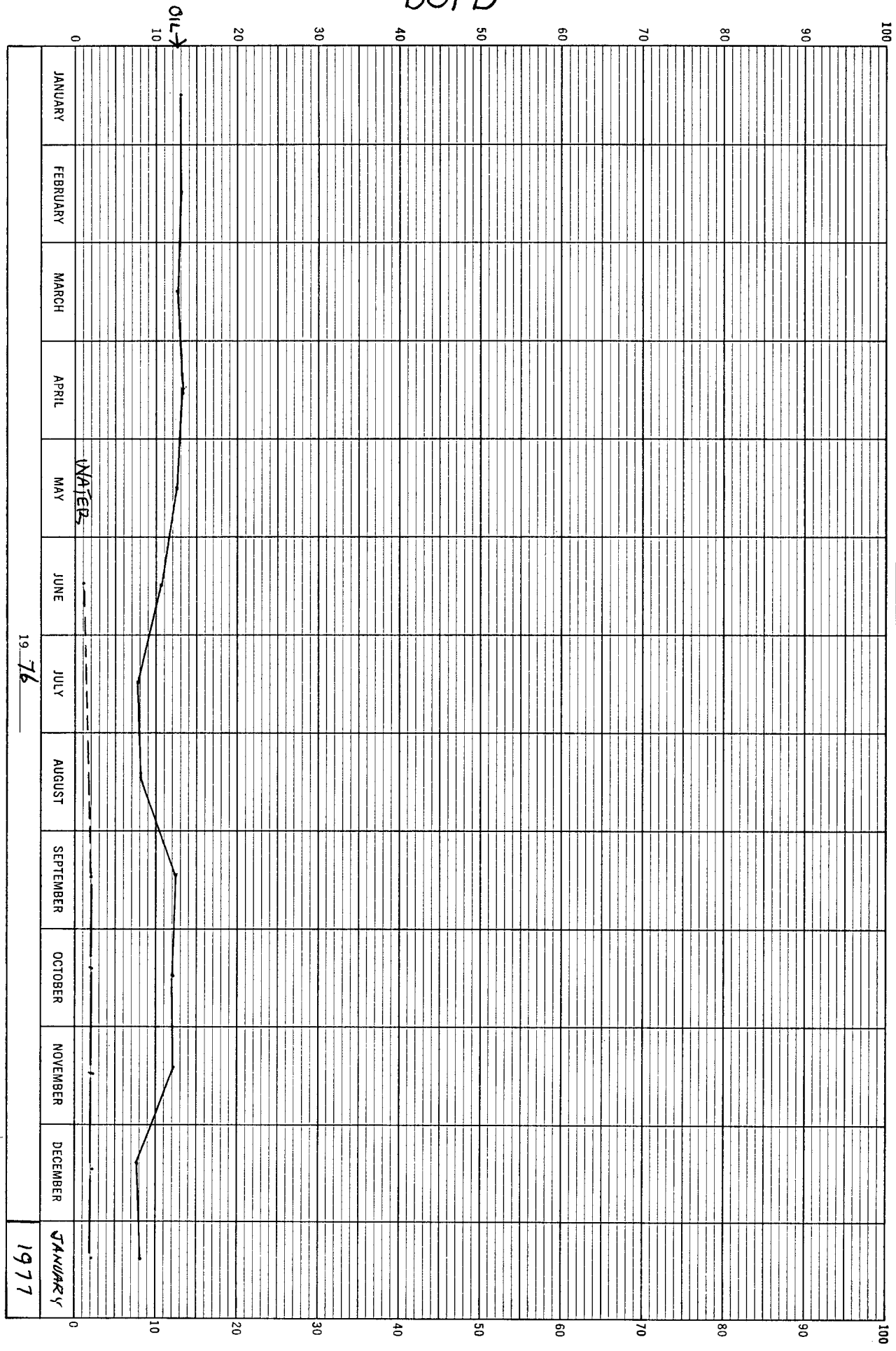
PRODUCTION DECLINE CURVE

C.L. HARDY #5

BURNERY POOL

GULF OIL CORPORATION

BOPD



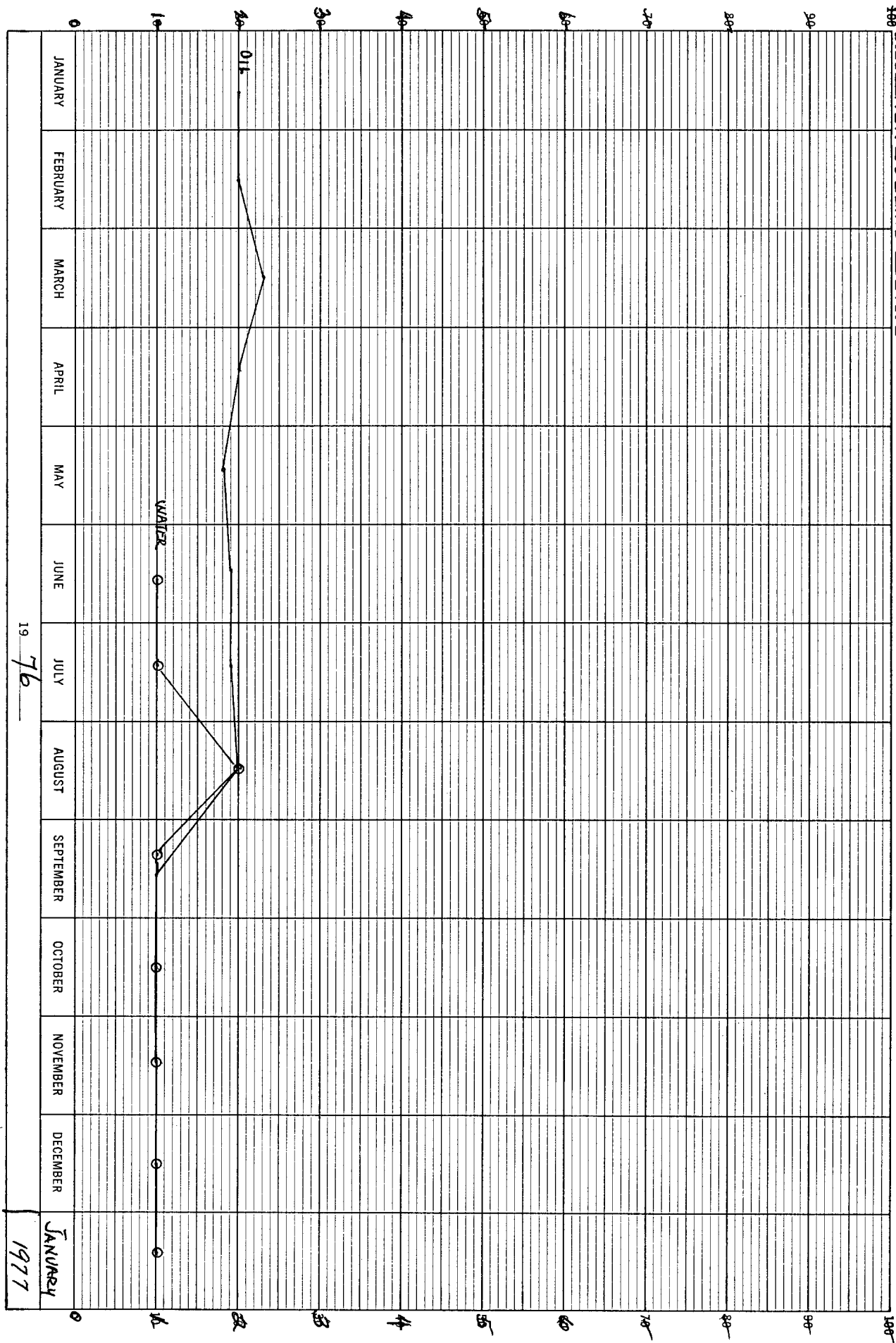
GULF OIL CORPORATION

PRODUCTION DECLINE CURVE

A. L. HARDY #5

DRINKARD Pool

BPD



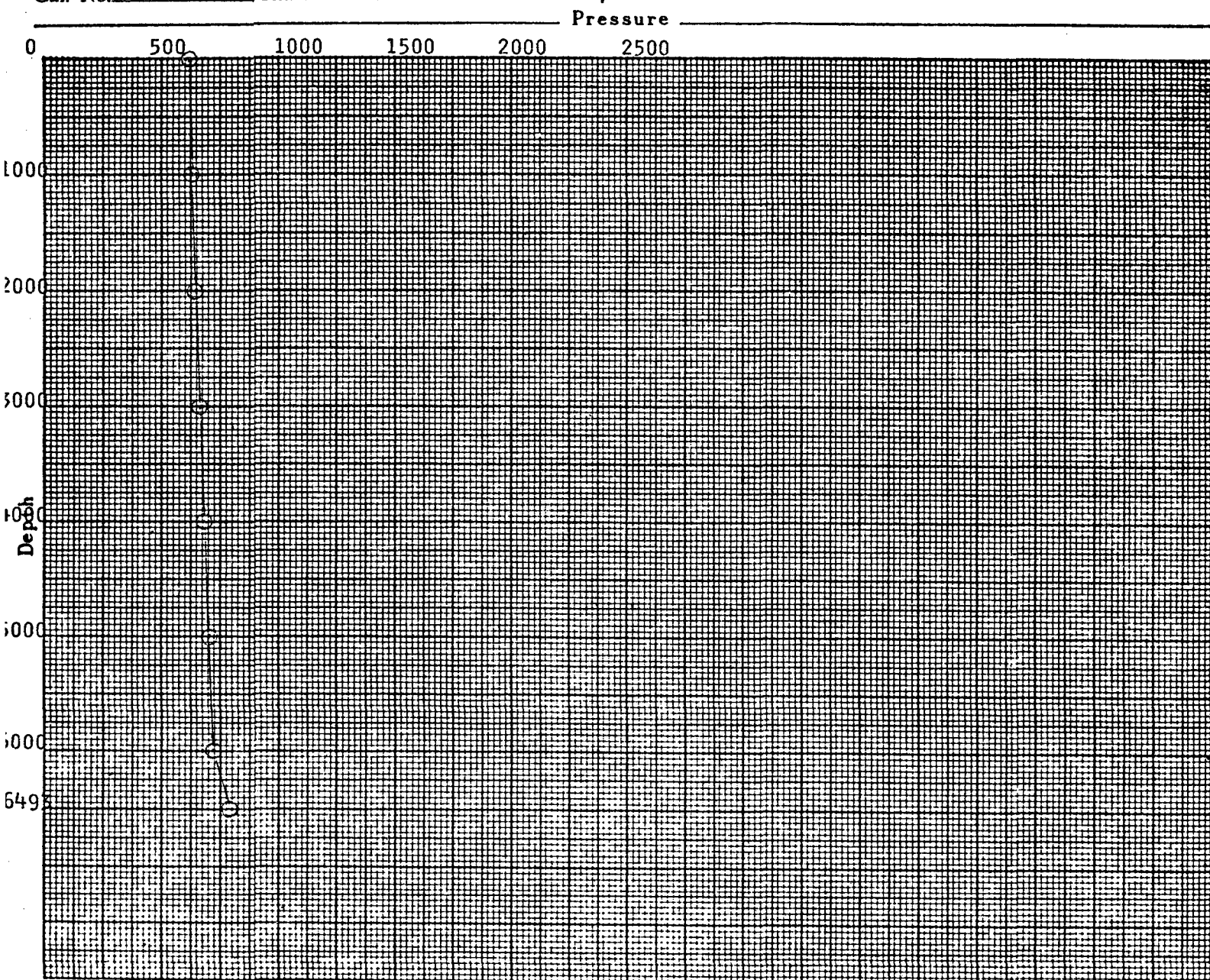
19 76

PHONE
505 393-7616TESTERS
INC.P. O. BOX 2099
HOBBS, NEW MEXICO 88240

BOTTOM HOLE PRESSURE RECORD

OPERATOR GULF OIL CO. US
 FIELD _____ FORMATION DRINKARD
 LEASE C.L. HARDY WELL # 5
 COUNTY LEA STATE N.M.
 DATE 3-7-77 TIME 10:00 AM
 Status SHUT IN Test depth 6493
 Time S. I. 3-5-77 Last test date _____
 Tub Pres. 613 BHP last test _____
 Cas. Pres. _____ BHP change _____
 Elev. _____ Fluid top _____
 Datum _____ Water top _____
 Temp. @ 82 Run by DAVIS
 Cal. No. 12267 Chart No. # 1

Depth	Pressure	Gradient
0	613	.016
1000	629	.018
2000	647	.019
3000	666	.019
4000	685	.019
5000	701	.016
6000	721	.020
6493	788	.136



**NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS**

C-116
Revised 1-1-65

Operator Gulf Oil Corporation		Pool Blinebry and Drinkard		County Lea									
Address Box 670, Hobbs, N.M.		Type of Test - (X) <input checked="" type="checkbox"/> TEST - (X)		Schedul <input type="checkbox"/>									
LEASE NAME	WELL NO.	LOCATION		DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	Completion <input type="checkbox"/>			SPECIAL <input checked="" type="checkbox"/>	
		U	S						T	R	WATER BBL.S.		PROD. DURING TEST GRAV. OIL
C. L. Hardy (Blinebry)	5 - L	20	21	37	3-3-77	40	8	24	4	34.7	9	251.0	27,889
C. L. Hardy (Drinkard)	5 L	20	21	37	3-4-77	50	3	24	1	37.0	1	4.0	4,000

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 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.

Well 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.

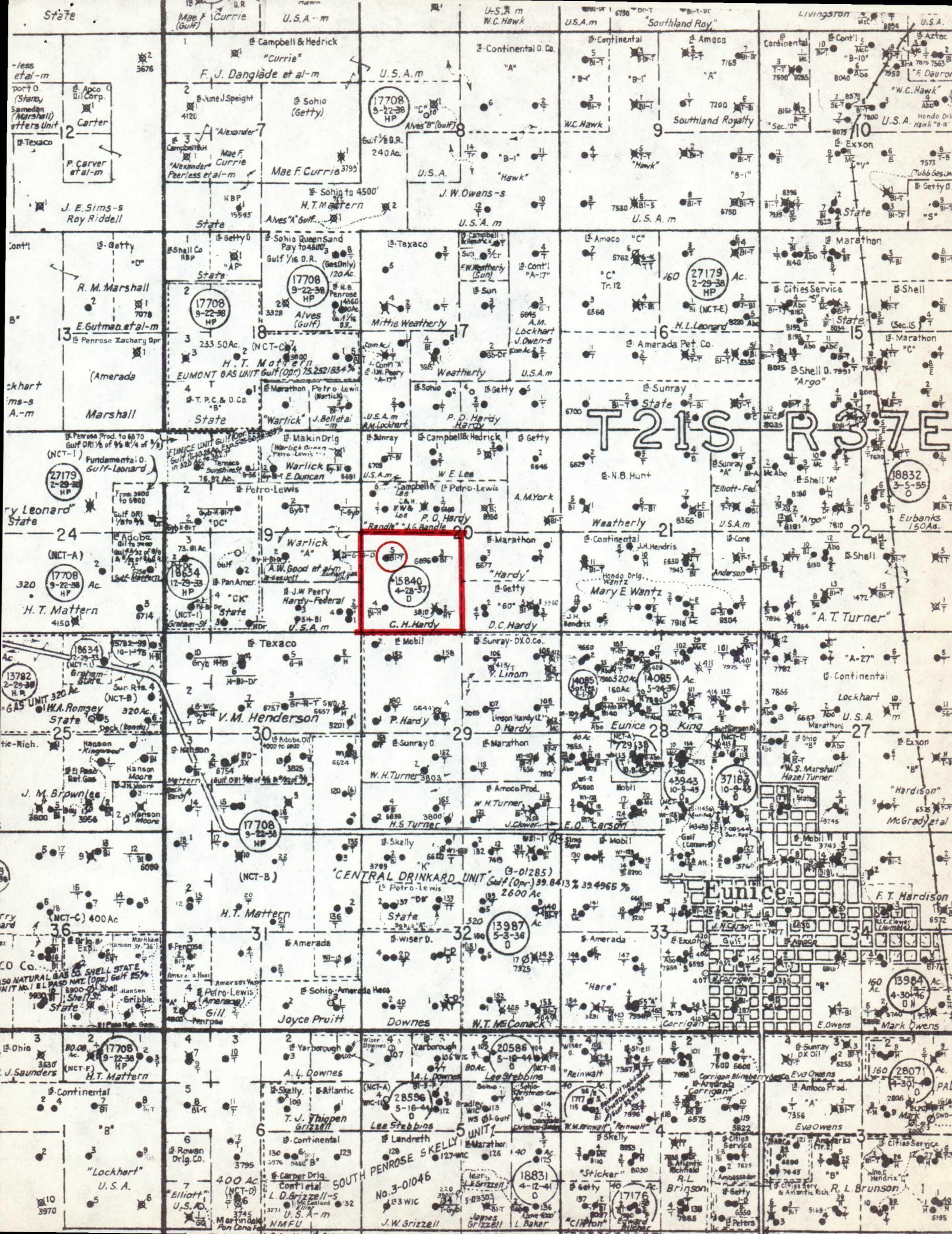
Richard L. ...
(Signature)

Well Tester

(Title)

March 4, 1977

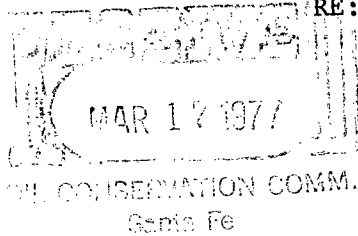
(Date)



OIL CONSERVATION COMMISSION
Hobbs DISTRICT

OIL CONSERVATION COMMISSION
BOX 2088
SANTA FE, NEW MEXICO

DATE March 11, 1977



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. C. L. Hardy #5-L 20-21-37
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

O.K.---J.S.

Yours very truly,