

Gulf Oil Exploration and Production Company

C. D. Borland
PRODUCTION MANAGER, HOBBS AREA

July 12, 1978



DHC - 250
Due - 8/4/78

P. O. Box 670
Hobbs, NM 88240

Re: H. T. Mattern (NCT-D) No. 12,
Section 6-22S-37E; H. T. Mattern
(NCT-D) No. 14, Section 6-22S-37E;
H. T. Mattern (NCT-D) No. 16,
Section 7-22S-37E; H. T. Mattern
(NCT-D) No. 17, Section 7-22S-37E,
Lea County, New Mexico

Request for Administrative Approval
to Downhole Commingle the Blinebry
and Drinkard Pools

*Adjacent to Blinebry
In Drinkard*

Mr. Joe D. Ramey
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Dear Sir:

Your administrative approval is requested for an exception to Rule 303-A to permit downhole commingling of production in the subject wells from the Blinebry and Drinkard pools. Production from the same two pools is presently being commingled downhole in Gulf's H. T. Mattern (NCT-D) No. 8, per Order No. R-5114 dated November 17, 1975. There is no evidence of fluid incompatibility and we do not expect any reservoir damage due to downhole commingling in the well bore. Ownership of the two pools is common and correlative rights will not be violated.

Currently, Wells No. 12, 14, 16 and 17 each utilize a single pumping unit installation producing from the Drinkard pool. Upon approval to downhole commingle, we will isolate the Drinkard zone and perforate and stimulate the Blinebry zone. The Blinebry will then be tested separately. At that time Gulf will submit to the District Supervisor of the Energy and Minerals Department of the Oil Conservation Division, separate stabilized well tests from the Blinebry pool for computing an allocation formula as provided under the guidelines of Order No. R-5114.

We propose to tube the wells to the Drinkard zone and utilize the pumping equipment on the Drinkard in each of the wells to lift the fluids from the commingled zones. Based upon offsetting wells on the H. T. Mattern (NCT-D) lease, it is our expectation that the Blinebry zone in Wells No. 12, 14, 16 and 17 will need to be artificially lifted.



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Upon approval of this application and in the event that the Blinebry does not require artificial lift, Gulf will postpone downhole commingling until such time both zones require artificial lift and the total daily production from both zones, before commingling, does not exceed 40 barrels per day.

Additional information concerning this application as outlined in Rule 303-C is attached for your consideration.

Yours very truly,



C. D. BORLAND

Attachments
LBI/dch

cc: Energy and Minerals Department
Oil Conservation Commission
P. O. Box 1980
Hobbs, NM 88240

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

Getty Oil Company
P. O. Box 249
Hobbs, NM 88240

Larry L. Yarborough
P. O. Box 1001
Eunice, NM 88231

Sohio Petroleum Company
P. O. Box 3000
Midland, TX 79702

Petro-Lewis Corporation
P. O. Box 509
Levelland, TX 79336

Atlantic Richfield Company
P. O. Box 1610
Midland, TX 79701

Texas Pacific Oil Company, Inc.
P. O. Box 4067
Midland, TX 79701

El Paso Natural Gas Company
600 Building of the Southwest
Midland, TX 79701

Amerada Hess Corporation
P. O. Box 840
Seminole, TX 79360

Shell Oil Company
P. O. Box 1509
Midland, TX 79702

H. T. MATTERN (NCT-D) NO. 16

- (1) Gulf Oil Corporation
P. O. Box 670
Hobbs, NM 88240
- (2) Lease and Well No.: H. T. Mattern (NCT-D) No. 16
Unit E, 1650'FNL & 610'FWL Section 7-22S-37E,
Lea County, New Mexico
- (3) Decline Curve: Attached (Drinkard Oil)
- (4) Well History: The well was originally drilled to a total depth of 6760, with 5-1/2" production casing set at 6760'. Current PBTB is 6725'. On 9-16-75 the 5-1/2" casing was perforated w/4 - 1/2"JHPF in the Drinkard Oil zone (6510-6670'). Drinkard was acidized with 3200 gal 15% NE HCL and fraced with 49,000 gal gelled brine containing 1 - 2# 20-40 SPG. An additional acid stimulation of 2000 gal 15% NE HCL was performed on 9-30-75. Pumping equipment was installed on 10-20-75 and initial production from the Drinkard was 108 BOPD and 49 BWPD on 10-23-75. Drinkard was also acidized with 5000 gal 15% HCL on 2-13-76.
- (5) Bottom Hole Pressure Data:
(Midpoint casing perforation)
Blinebry 550 psi at a subsea depth of -2154'*
Drinkard 670 psi at a subsea depth of -3121'*
*Estimates based on most recent available average BHP data within vicinity of well and fluid level test.
- (6) Fluid Characteristics: Blinebry and Drinkard are presently being commingled downhole in Gulf's H. T. Mattern (NCT-D) No. 8, Order No. R-5114 dated 11-17-75. There has been no evidence of fluid incompatibility.
- (7) Value of Commingled Fluids: Blinebry and Drinkard production are presently being surface commingled on this lease. Since production is already being commingled on the surface, downhole commingling will not affect the price.
- (8) Current Production Test: See attached C-116.
- (9) All offset operators have been furnished a copy of this application.

Continental Oil Company, P. O. Box 460, Hobbs, NM 88240
Getty Oil Company, P. O. Box 249, Hobbs, NM 88240
Larry L. Yarborough, P. O. Box 1001, Eunice, NM 88231
Sohio Petroleum Company, P. O. Box 3000, Midland, TX 79702
Petro-Lewis Corporation, P. O. Box 509, Levelland, TX 79336
Atlantic Richfield Company, P. O. Box 1610, Midland, TX 79701
Texas Pacific Oil Company, Inc., P. O. Box 4067, Midland, TX 79701
El Paso Natural Gas Company, 600 Building of the Southwest, Midland, TX 79701
Amerada Hess Corporation, P. O. Box 840, Seminole, TX 79360
Shell Oil Company, P. O. Box 1509, Midland, TX 79702

GLE: 3455

KOB: 3468.6

H = 13.6

Initial Comp. Date: 10-23-75

Producing Formation: Drk

Zone	Comp. Date	Date Aban
<u>6510-670</u>	<u>10-23-75</u>	

8 5/8" OD 24 # Grade K-55

Set @ 1082' w/ 500 sxs

Top of Cmt @ (ent cin) by:

*Equip to pump
6-20-75*

Tbg string

2 3/8" 14.70# EUE BRJ-55,
5 1/2" x 2 3/8" Guib Type TM +bg anchor
set @ 6383 w/ 8,000#-T, 2 3/8" +bs
SNE 6448, scalloped collar.
Btm +bs @ 6465

Treatment History: (Current Zone)

(9-16-75) Perf'd Drk 6510-6670 Acidized

w/ 3200 gal 15% HCL. Frac w/ 49,000 gal
gel brine + 1-2 #20-90SPG

(9-30-75) Acidized w/ 2,000 gal 15%

NE HCL. IP 108 BOPD, 49 BW

(2-13-76) Acidized w/ 5,000 gal 15% HCL

After 38 BOPD 50 BW

Before 16 BOPD 22 BW

Producing History:

Formation: _____

Month or Year	Oil	Wtr	Gas
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Last Test Dated: _____

BOPD

BWPD

FL: _____

Calc. Ppg- Eff: _____

Cum. Oil _____

Cum. Gas _____

Remarks and Recommendation:

5 1/2" OD 15.50 # Grade K-55

Set @ 6760' w/ 650 sxs

Top of Cmt @ 2275 by: TS

350 sk cmt CL C + 16% Gel +
2% salt + .2% CFR-2
300 sk CL H + .5% CFR-2

6444

6465

6510-12

6533-35

6563-65

6596-98

6623-25

6646-48

6668-70

Drinkard
4-1/2" JHPF

PB(FC) 6725

+D 6760

Prepared By: ABD

1-20-78

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

C-116
Revised 1-1-65

Operator Gulf Oil Corporation		Pool Drinkard		County Lea											
Address P. O. Box 670, Hobbs, NM 88240		TYPE OF TEST - (X) <input checked="" type="checkbox"/> Scheduled <input type="checkbox"/> Special		Completion <input type="checkbox"/> Special <input checked="" type="checkbox"/>											
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/SBL		
		U	S	T						R	WATER BLS.	GRAV. OIL		OIL BLS.	GAS M.C.F.
H. T. Mattern (NCT-D)	16	E	7	22	37	6-20-78	P 2 1/4" / O	40	20	24	6	37.8	7	140.0	20000

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.

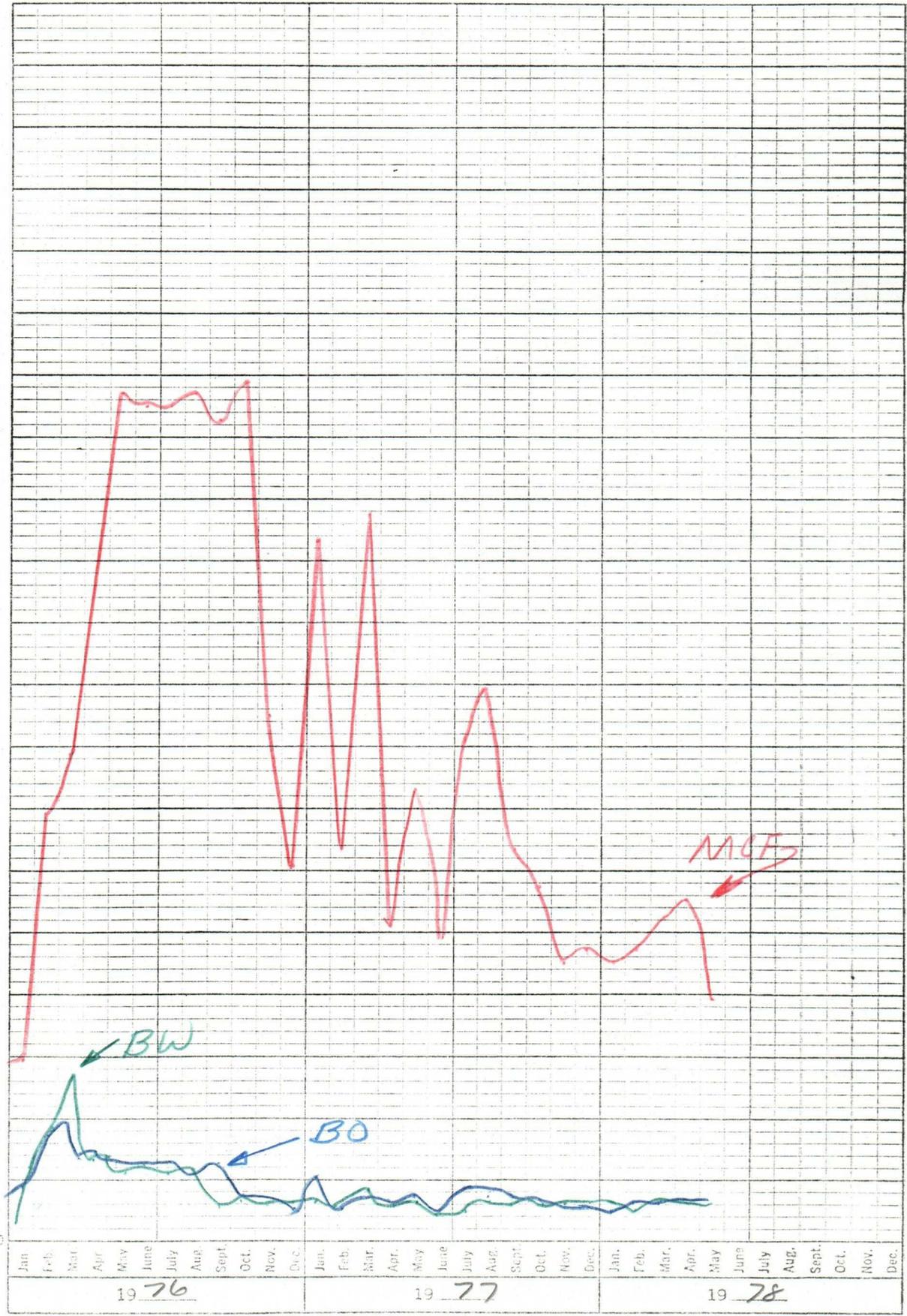
I hereby certify that the above information is true and complete to the best of my knowledge and belief.

[Signature]
Well Tester
(Signature)

July 12, 1978 (Date)

Lease/well H-T. Mattern (NoT=0) #16
 Pool Drinkard

10,000
 9000
 8000
 7000
 MCF
 BBL
 Per
 month
 6000
 5000
 4000
 3000
 2000
 1000
 0



3 YEARS BY MONTHS 359-180
 X 100 DIVISIONS
 KUUFFEL & ESSER CO. MADE IN U.S.A.