

H. T. Mattern "D" #15  
Section 7-T22S-R37E  
Lea County, New Mexico

Approval is requested for an exception to Rule 303-C to permit down-hole commingling of the Drinkard and Tubb in the subject well.

The fluids show no evidence of incompatibility; therefore, down-hole commingling is not expected to result in reservoir damage. Ownership in the two pools is common and correlative rights will not be violated.

Currently, the Tubb is pumping and the Drinkard is TA'd. After down-hole commingling, existing pumping equipment will be used to produce both zones.

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

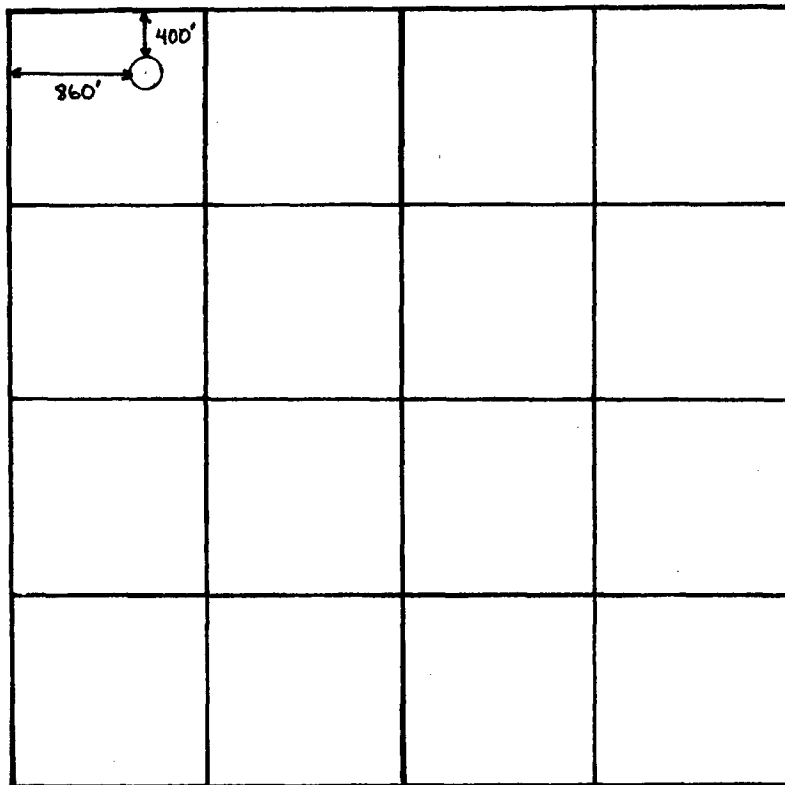
Offset operators are being notified of the intent to down-hole commingle subject well by copy of this application.

1. Operator: Gulf Oil Corporation, P. O. Box 670, Hobbs, NM 88240
2. Lease, Well and Location: H. T. Mattern "D" #15, 400' FNL and 860' FWL, Section 7-T22S-R37E, Lea County, New Mexico.
3. Producing Zones: Currently producing from a single completion in the Tubb Pool.
4. Decline Curve: See attached graphs.
5. Bottom Hole Pressure: The estimated BHP for the Tubb is 1313 psi. The estimated BHP for the Drinkard is 966 psi.
6. Fluid Characteristics: Gulf Oil has commingled these fluids at the surface and down-hole in offset wells and has encountered no incompatibility problems; therefore, no reservoir damage should result from down-hole commingling subject well.
7. Well History: The well was spudded 8-13-75 and drilled to a total depth of 6710'. Five and one half inch production casing was set at 6710'. The Drinkard was perforated at 6516-6658' with 48 holes. Perfs were acidized with 1240 gallons 15% NEA and fractured with 42,000 gallons gel water with 1 to 2 pounds sand per gallon. After stimulation, well was equipped to pump.

8-5-76, well was chemical squeezed with 3000 gallons 15% NEFE HCL treated with 3 gallons Tretolite AR-25 and 220 gallons Tretolite SP-203 in the first 1000 gallons acid.

11-9-82, Drinkard was TA'd with a CIBP set at 6430'. The Tubb was perforated at 6210-6340' with 32 holes. Perfs were acidized with 3000 gallons 15% NEFE HCL and fractured with 41,600- gallons and 44,000 pounds 20/40 sand.
8. Value of Commingled Fluids: The Tubb and Drinkard Zones are being commingled in surface storage facilities on the subject lease per order CTB-254. Therefore, down-hole commingling will not effect the price.
9. Current Production: See attached State Form C-116.

Section 7



H. T. Mattern "D" #15  
Section 7-T22S-R37E

Dedicated Acreage  
Drinkard: 40 acres  
Tubb: 40 acres

SUGGESTED ALLOCATION

Drinkard: 5 BOPD, 10 BWPD, 20 MCFGPD

Average Prod. from Decline Curves

Tubb: 3 BOPD, 8 BWPD, 45 MCFGPD

The proposed allocation of oil and gas production per zone based on the attached decline curves is as follows:

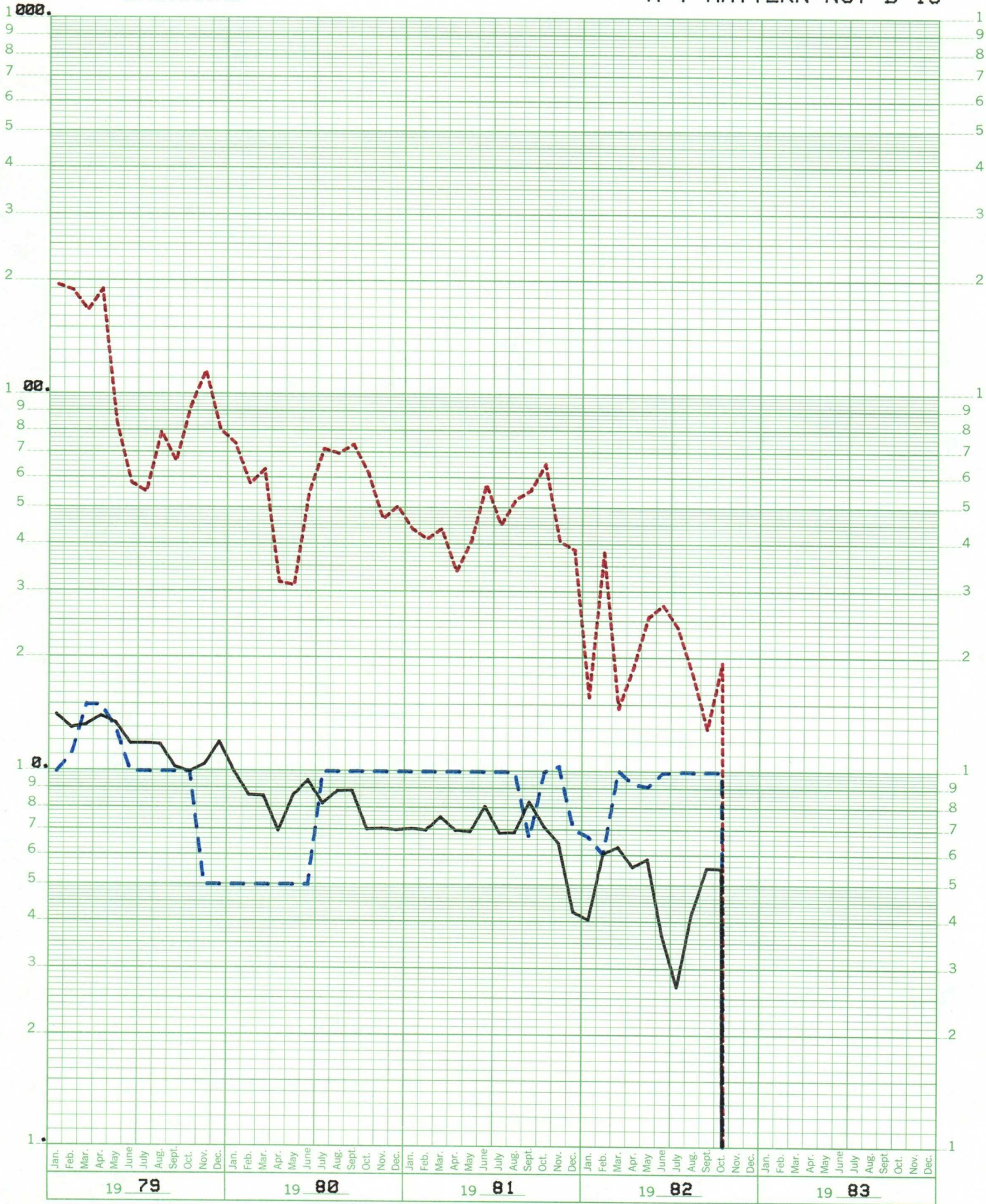
	<u>Drinkard</u>	<u>Tubb</u>
Oil	63%	37%
Gas	31%	69%

DRINKARD

H T MATTERN NCT-D 15

46 6690

5 YEARS BY MONTHS X 3 LOG CYCLES  
KEUFFEL & ESSER CO. MADE IN U.S.A.



— OIL PROD. Bbls/Day. Mult. Scale X 1  
 - - - WATER PROD. Bbls/Day. Mult. Scale X 1  
 - - - - GAS PROD. MCF/Day. Mult. Scale X 1



**K<sup>#</sup>W** 5 YEARS BY MONTHS x 3 LOG CYCLES  
KEUFFEL & ESSER CO. MADE IN U.S.A.



GAS-OIL RATIO TESTS

Operator		County		Permit		Address		Type of Test		Completion		General			
Gulf Oil Corp.		Lea		Drinkard		Box 670, Hobbs, NM 88240		TEST - (X)		<input type="checkbox"/>		<input type="checkbox"/>			
LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	CHOKE SIZE	TAG. PRESS.	DAILY ALLOW. ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU. FT./BBL.
		U	S	T	R						WATER BBL.	CRAV. OIL	OIL BBL.	GAS M.C.F.	
H.T. Mattern (NCT-D)	9		6	22	37	8-25-82				10		3	71	23,667	
	10		6	22	37	7-7-82				10		5	128	25,600	
	15		7	22	37	11-3-82				10		10	107	10,700	

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 331 and appropriate pool rules.

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

*Alfred R. Kirk*  
Engineer  
(Signature)  
10-72-84

GAS-OIL RATIO TESTS

Operator		Pool		County										
Gulf Oil Corp		Tubb Oil and Gas		Lea										
Address		Type of Test		Scheduled		Completion		Special						
P.O. Box 670, Hobbs, NM 88240		TEST - (X)		<input checked="" type="checkbox"/>		<input type="checkbox"/>		<input 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./BBL.
		U	S	T	R						WATER BBL'S.	GRAV. OIL BBL'S.	GAS M.C.F.	
H.T. Matern (NCT-D)	9		6	22	37	12/5/84					9	7	101	14,429
	10		6	22	37	12/6/84					5	5	72	14,400
	15		7	22	37	12/10/84					16	8	77	9,625

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 allowable when authorized by the Division.

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

*Harold Ricks*  
Engineer (Signature)  
1-14-85 (Title)



# Gulf Oil Exploration and Production Company

R. C. Anderson  
PRODUCTION MANAGER  
HOBBS AREA

February 14, 1985

P. O. Box 670  
Hobbs, NM 88240

Re: Mattern (NCT-D) Lease Map

Mr. David Catanach  
New Mexico Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Dear Sir:

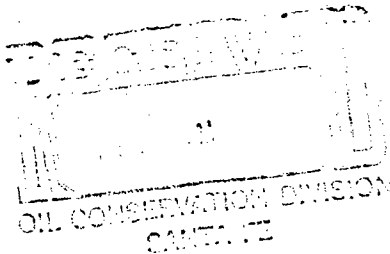
Please find enclosed the Mattern (NCT-D) lease map requested as per telephone conversation with David Ricks of this office.

Yours very truly,



R. C. ANDERSON

DR/skc  
Enclosure



[illegible]

OFFSET OPERATORS

H. T. MATTERN (NCT-D) LEASE

Continental Oil Co.  
P. O. Box 460  
Hobbs, New Mexico 88240

Getty Oil Co.  
P. O. Box 249  
Hobbs, New Mexico 88240

Yarborough Oil Co.  
P. O. Box 1001  
Eunice, New Mexico 88231

Petro Lewis  
P. O. Box 509  
Levelland, Texas 79336

ARCO Oil & Gas  
P. O. Box 1610  
Midland, Texas 79701

Amerada Hess Corporation  
P. O. Drawer 817  
Seminole, Texas 79360

Sun Oil Co.  
P. O. Box 1861  
Midland, Texas 79701

Sohio Petroleum Co.  
P. O. Box 3000  
Midland, Texas 79701

Shell Oil Co.  
P. O. Box 1509  
Midland, Texas 79701

El Paso Natural Gas Co.  
600 Building of the Southwest  
Midland, Texas 79701



STATE OF NEW MEXICO  
**ENERGY AND MINERALS DEPARTMENT**  
OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

January 28, 1985

TONEY ANAYA  
GOVERNOR

POST OFFICE BOX 1980  
HOBBS, NEW MEXICO 88240  
(505) 393-6161

OIL CONSERVATION DIVISION  
P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

RECEIVED  
JAN 31 1985  
HOBBS, NEW MEXICO  
OIL CONSERVATION DIVISION

RE: Proposed:

MC  
DHC       X        
NSL                       
NSP                       
SWD                       
WFX                       
PMX                     

Gentlemen:

I have examined the application for the:

Gulf Oil Corp.	Nattern (NCT-D) #9, #10, #15	6 & 7-22-37
Operator	Lease & Well No.	Unit S-T-R

and my recommendations are as follows:

O.K.---J.S.

Yours very truly,

Jerry Sexton  
Supervisor, District 1

/mc