

# Gulf Oil Exploration and Production Company



R. C. Anderson  
PRODUCTION MANAGER, HOBBS AREA

November 20, 1980

Re: R. E. Cole (NCT-A) No. 11  
Unit J-Sec 16-T22S-R37E  
Lea County, New Mexico

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

DHC -  
Due - 12/15/80

Dear Sir:

Your administrative approval is requested for an exception to Rule No. 303-C to permit downhole commingling of marginal Blinebry and Drinkard production in the subject well.

The subject well was drilled and completed in 1968 in the Montoya. In 1971 the Montoya zone was abandoned and the Blinebry zone was completed. In 1975 the Drinkard was completed and the well dual completed under Administrative Order MC-2180. The Drinkard zone flowed intermittently in 1978 and was closed in January 1979. The fluid produced from both zones was commingled above ground per Amendment Order PC-303.

There is no evidence of incompatibility of fluids. Reservoir damage from downhole commingling in the wellbore is not expected to occur. Ownership in the two pools is common and correlative rights will not be violated.

Presently the Blinebry is pumping, and the Drinkard will not flow and has been closed in since January 1979. The reservoir pressure in the Drinkard is too low to allow flowing conditions. Swabbing has failed to restore Drinkard production. The Drinkard will have to be pumped. If this application is approved, the existing pumping equipment will be used to produce the Blinebry and Drinkard production.

All offset operators have been notified by copy of this proposal to down-hole commingle the subject well. Should secondary recovery operations become practical in the future, the two zones could be separated at that time without damaging either reservoir.

Yours very truly,

*R. C. Anderson*  
R. C. ANDERSON

*Bottom of 6572'*

RQH/jr

Attachments

cc: Oil Conservation Division - Hobbs  
C. F. Kalteyer - Midland  
All Offset Operators  
Division Director (Duplicate)

*Blinebry*  
*Drinkard*



OFFSET OPERATORS - R. E. COLE (NCT-A) No. 11, Section 16-T22S-R37E, Lea County, NM

Cities Service Oil Co.  
Box 1919  
Midland, Texas 79701

Exxon  
Box 1600  
Midland, Texas 79701

Continental Oil Co.  
Box 959  
Midland, Texas 79701

John Hendricks  
403 Wall Towers West  
Midland, Texas 79701

Sohio Petroleum Co.  
Box 3000  
Midland, Texas 79701

1. Operator: Gulf Oil Corporation, P. O. Box 670, Hobbs, New Mexico 88240
2. Lease, Well and Location: R. E. Cole (NCT-A) No. 11, Unit J, 1980' FSL & 1980' FEL, Sec 16-T22S-R37E, Lea County, New Mexico
3. Producing Zones: Currently producing the Blinebry pool, which is to be commingled with the temporarily closed in Drinkard pool, if approved. The Drinkard was temporarily closed in October 2, 1978, produced from June to January 1979 and closed in again when swabbing would no longer bring production back.
4. Decline Curves: See Attached Sheets
5. Bottom-Hole Pressures: A bottom-hole pressure survey was run on the Drinkard (see attached Form C-124) and was found to be 785 psi at the midpoint of the perforations (6449'-3040' subsea). The fluid level was at approximately 5200' or 1249' above the midpoint of the perforations (6449'-3040' subsea).

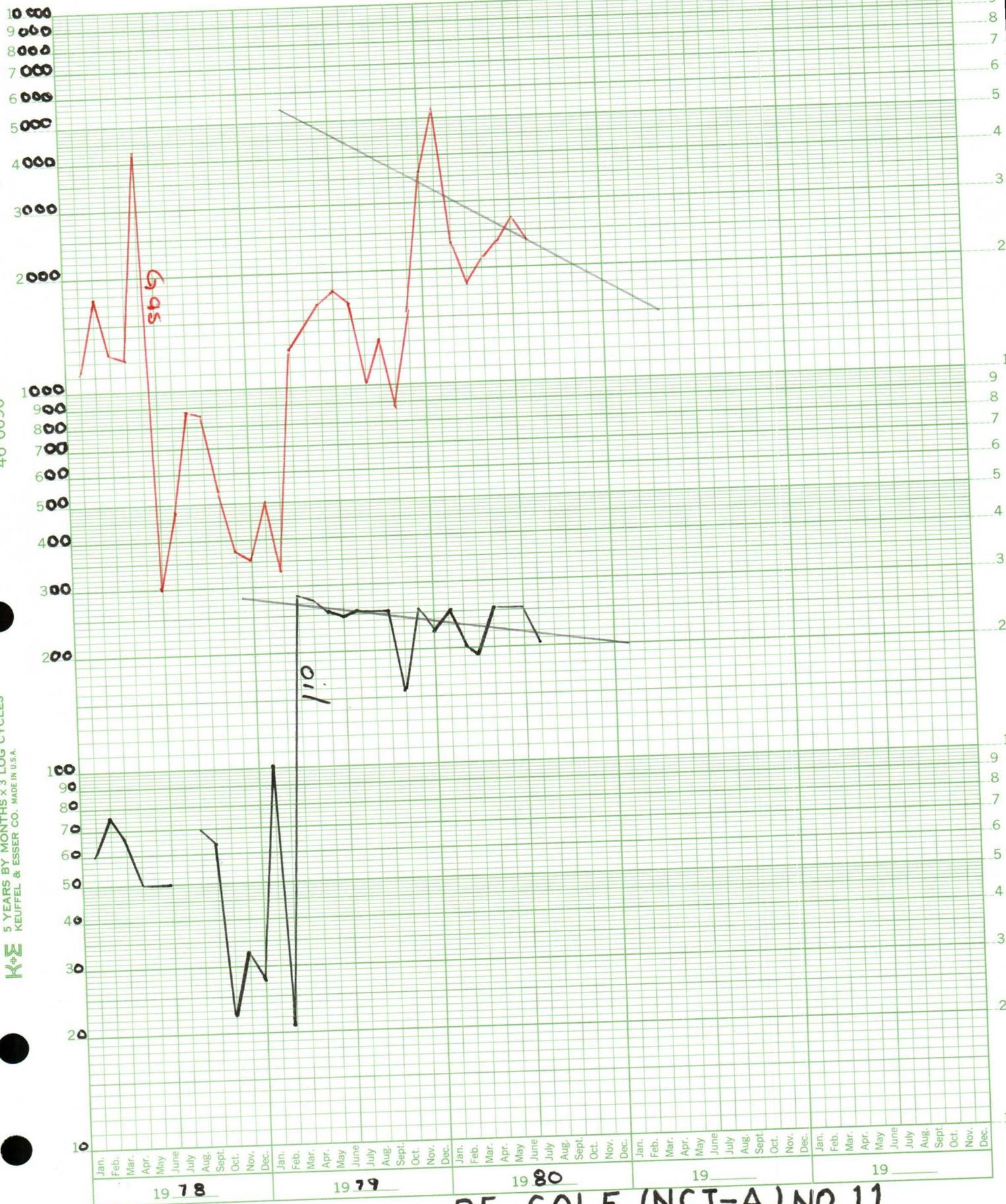
The Blinebry zone was closed in for 24 hours. At the end of the 24 hour period, several fluid shots were taken and the fluid level was found to be 3463' from the surface. The calculated pressure at the midpoint of the perforations (5585'-2176' subsea) was 1010 psi,
6. Fluid Characteristics: The Drinkard and Blinebry are presently commingled in surface facilities on the R. E. Cole (NCT-A) lease per amended Commingling Order PC-303. To date, there has been no evidence of fluid incompatibility.
7. Well History: The well was spudded 1-4-68 and drilled to a total depth of 7260'. Seven inch production casing was set at 7529' with top of cement at 2210'. Initial completion was in the Montoya, 7204-06' with (4) ½" JHPF. The perforated interval was stimulated with 500 gallons 15% NE acid, 1000 gallons 28% NEA, 1000 gallons 3% NE acid, 3000 gallons 28% NE acid, and 3000 gallons 3% NE acid. In February 1968 the interval 7214-16' and 7227-29' was perforated with (4) ½" JHPF and acidized with 1000 gallons 3% NE acid. June 7, 1968 all perforations (7204'-7229') were fractured with 10,000 gallons gelled water and 8750 lbs 20/40 sand. December 3, 1971 the Montoya was abandoned by placing a cast iron bridge plug at 7094' and capped with two sacks cement. A cast iron bridge plug was placed at 5800' and the well was completed in the Blinebry, 5454-56', 5528-30', 5580-82', 5634-36', 5676-78' and 5714-16' with (4) ½" JHPF on December 6, 1971, and fracture treated with 1106 barrels frac fluid with 0# to 3# SPG and 2500 gallons 15% NE acid. March 6, 1975 the well was completed in the Drinkard, 6325-27', 6353-55', 6407-09', 6442-44', 6466-68', 6494-96', 6528-30', 6548-50', 6570-72' with (4) ½" JHPF. The zone was acidized with 4500 gallons NE 15% acid and then fractured with 2400 gallons 15% NE acid, 10,000 gallons gelled brine, and 40,000 gallons gelled brine with 1½# SPG.

R. E. COLE (NCT-A) NO. 11 (Continued)

8. Value of Commingled Fluids: Drinkard and Blinebry production is being commingled in surface storage facilities on the subject lease per amended Commingling Order PC-303; therefore, downhole commingling will not affect the price.
9. Current Production: See attached C-116
10. All offset operators are being notified by copy of this application.

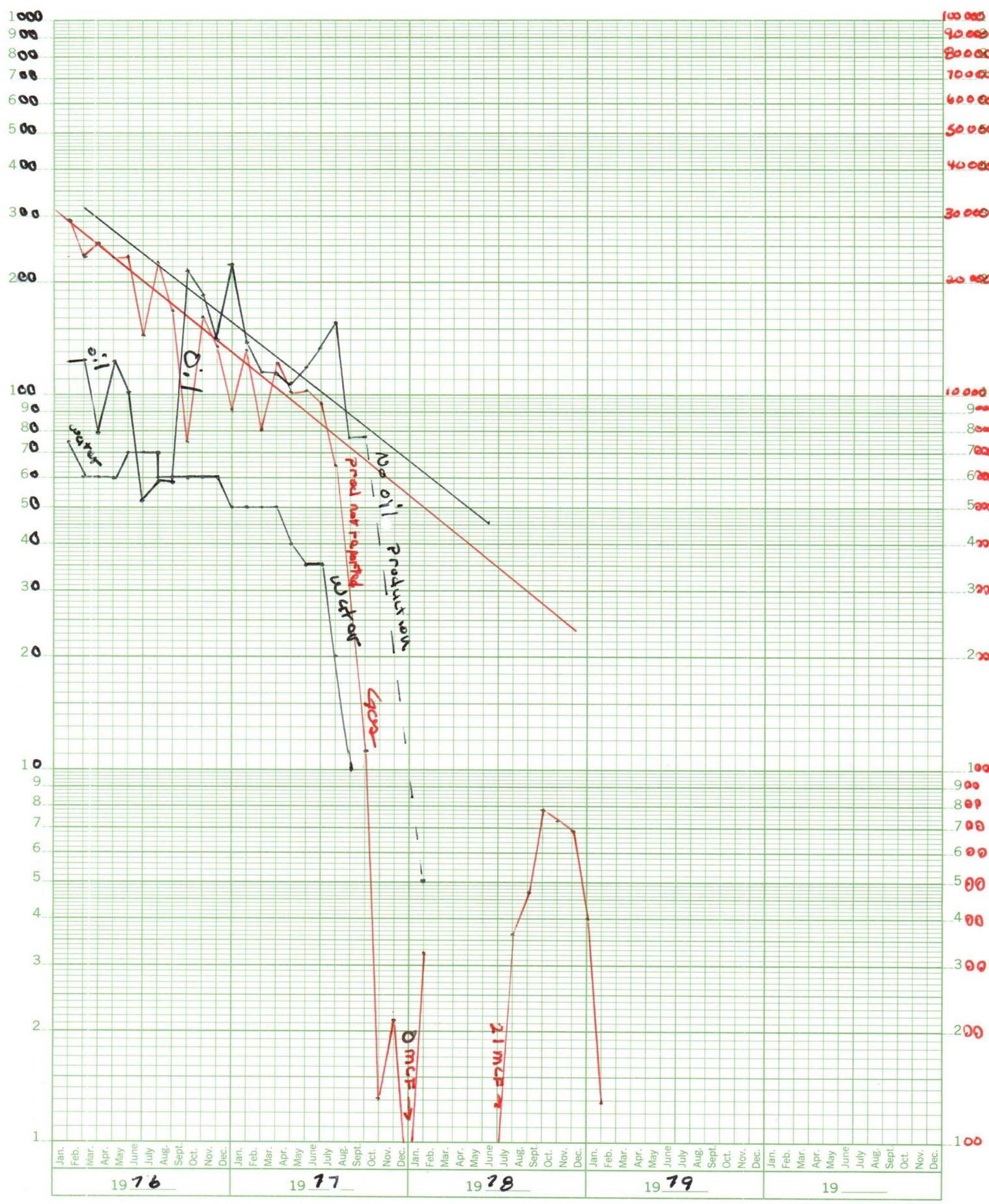
46 6690

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



MCF Gas per month  
BO per month

R.E. COLE (NCT-A) NO. 11  
BLINEBRY



B.O./Mo. & B.W./Mo.

R.E. COLE (NCT-A) NO.11  
DRINKARD

MCF/Mo.

Operator: Gulf Oil Corporation Pool: Blinebry Oil County: Lea

Address: Box 670, Hobbs, NM 88240

LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	TYPE OF TEST - (X)	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	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.	
R. E. Cole (NCT-A)	11	J	16	22	37	10-27-80	P 2" NO	35	7	24	0	39.2	7	48.0	6857
* SPECIAL TEST FOR DOWNHOLE COMBINIE APPLICATION															

Scheduled  Completion  \* Special

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 301 and appropriate pool rules.

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

*A. E. [Signature]*  
 Well Tester (Signature)

October 31, 1980 (Title)

RESERVOIR PRESSURE REPORT

TYPE OF REPORT (X)  
 Initial Completion  
 Special  
 General Survey X

Operator Gulf Oil Exploration & Production Co.  
 Address Box 670, Hobbs, New Mexico 88240  
 Pool Drinkard  
 Producing Formation Drinkard  
 Oil Gradient  
 Water Gradient  
 Gas Gradient  
 Datum Plane (-3040) \*\*

LEASE	WELL NO.	LOCATION				ELEV. (ft.)	OIL (o) OR GAS (g)	DATE TESTED	Z 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	SHUT-IN TBG. PRESS.	BOMB TEST DATA			SONIC INSTRUMENT TEST DATA*			PRESS. AT DATUM
		U	S	T	R						TEST DEPTH	B.H. TEMP. ° F	OB. SERVED PRESS.	PROD. TEST (BBL.S./DAY) OIL WATER	LIQUID LEVEL	LIQUID GRAD-IENT PSI/FT.	
R. E. Cole NCT-A	11	J	16	22S	37E	3409 KB	0	10/22/80	262	6449'	108	785	** MDDPOINT OF CASING PERFORATIONS				
SPECIAL TEST FOR DOWNHOLE COMMINGIE APPLICATION																	

All depths plus or minus sea level; all pressures psi; Bomb shall be calibrated frequently enough against a dead weight tester to ensure an accuracy of one per cent; gas gravity shall be determined by analysis; liquid level shall be feet above datum plane. see RULE 302.  
 \* Well shall be produced at least 24 hours prior to shutting in for sonic test.

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

JARRELL SERVICES, INC.  
 (Signature)  
 Agent  
 (Title)  
 November 3, 1980  
 (Date)