

September 11, 1986

Oil Conservation Division
P. O. Box 1980
Hobbs, NM 88240

RE: Reddy-Gulf State #3
Down-hole commingled production
Penrose "B"/Grayburg zones

Gentlemen:

Per your request, we are filing herewith a form C-104 for the Grayburg perforations in the captioned well.

The Grayburg perforations (5646'-5692') were swab-tested separately prior to completion uphole and eventual commingling of production, and averaged 8 barrels of oil per day and 122 barrels of water per day. The Penrose "B" perforations (5068'-5079'), during extended producing time averaged 11 barrels of oil per day and 7 barrels of water per day the last few days. We learned in extended producing time that the Penrose "B" produced water volume declined rapidly, giving us encouragement that our Grayburg water rate would also decline rapidly, and hence we could commingle downhole within the rules. This is the case. The Penrose produced water was and is probably about 7 barrels per day now.

After commingling, the production stabilized at 13 barrels of oil per day and 26 barrels of water per day after a few weeks.

It is our considered opinion that the two zones would have somewhat similar decline rates and the most accurate allocation of oil and water between the two zones is to allocate 8/19 or 42% of the oil and 19/26 or 73% of the water to the Grayburg and 11/19 or 58% of the oil and 7/26 or 27% of the water to the Penrose "B" zone. We believe that the approach to take on water production is that the stabilized Penrose 7 barrels of water per day would persist, and the 122 barrels of water per day from the Grayburg would rapidly decline. Thus, commingled production allocation using 13 BOPD and 26 BWPD and accepting the allocation suggested above, would calculate: Grayburg 5 1/2 BOPD, 19 BWPD; Penrose "B" 7 1/2 BOPD, 7 BWPD.

Unfortunately, the gas volume produced by this well is too small to sell, with only a slight amount now being used on the lease for firing the treater. During cold weather, we hope to be able to fire the treater enough to produce pipeline oil with the small amount of gas being produced.

This well is still economical, but of course it remains to be seen how long this will be the case.

Sincerely,

FRED G. YATES, INC.

John R. McMillan
John R. McMillan

**Fred G. Yates
Inc.**

DHC-608 allocation
GB 42% oil
Queen 58% oil
JRM/fm
gas TSTM
Enclosure

RECEIVED
SEP 12 1986
O.C.D.
HOBBS OFFICE