CONTINENTAL OIL COMPANY

P. O. Box 1621
Durango, Colorado
October 11, 1965

New Mexico Oil Conservation Commission (3)
P. O. Box 2088
Santa Fe, New Mexico

Re: Commingled Oil Treating System -
Penn. "B" and Penn. "CD" Reservoirs,
Rattlesnake Field,
San Juan County, New Mexico

Gentlemen:

The Rattlesnake Field in San Juan County, New Mexico, currently has separate treating and test systems to handle the Pennsylvanian "B" and Pennsylvanian "CD" oil production. On October 10, 1965, the Pennsylvanian "CD" test treater failed and is not considered repairable. Due to the marginal nature of the Pennsylvanian "B" production, Continental requests your permission to commingle the oil production from the Pennsylvanian "B" and the Pennsylvanian "CD" reservoirs in a common production treater which would allow the existing Hogback production treater to be converted to a test treater for the Pennsylvanian "CD".

The following table summarizes the current production and well count statistics for the two zones:

| Zone | No. Completions | BOPD | BWPD | MCFPD | GOR | Prod. Method |
|---|---|---|---|---|---|---|
| Penn. "B" | 3 | 3 | 47 | 128 | 47,404 | F |
| Penn. "CD" | 4 | 91 | 295 | 447 | 5,231 | F |

As the Pennsylvanian "B" completions are averaging only one barrel of oil per day and 43 MCFPD per completion, we consider them definitely subcommercial. The current rate of oil production does not justify the utilization of an individual treater, especially when this equipment is critically needed to maintain efficient control of a significant oil reservoir. Oil production from the Penn. "B" would be allocated on a GOR basis. The Penn. "B" and "CD" have common royalty and working interest.

Following is a brief description of the existing treating system and a discussion of the proposed changes to the system:

(1) Pennsylvanian "B"

The Penn. "B" production is now flowing through a heated choke and to a gas-liquid separator. The gas stream is metered and then goes to the crude stabilization unit (gasoline plant) where it is commingled with the Penn. "CD" gas. The oil and water leaves the separator and is treated in the Penn. "B" production treater. The oil is then commingled with the Penn. "CD" oil in the Penn. run tank and sold through the ACT unit.

(2) Pennsylvanian "CD"

The production from the Penn. "CD" goes through a gas-liquid separator and to a $10^{3}$ x $27^{3}$ treater. The gas is compressed and sent to the crude stabilization unit and the oil goes to the Penn. run tank where it is commingled with the Penn. "B" oil prior to sale through the ACT. The wells have been tested at least once a week in a test treater.

The only revisions to the present mode of operation will be in the handling of the Penn. "B" oil production. We propose to take the oil and water from the Penn. "B" separator and commingle it with the Penn. "CD" oil production in a common treater rather than treat in separate treaters, and then commingle in the run tank. The gas from the two reservoirs will continue to be separated from the oil and water and will continue to be metered individually prior to being commingled in the crude separation unit. The preceeding revision will allow the utilization of the treater now used to treat the three barrels of oil per day from the Penn. "B" reservoir to be used as a well test treater for the four Penn. "CD" oil wells which are now producing approximately ninety barrels of oil per day.

It is believed that the proposed change in the treating of the Penn. "B" oil will result in the prevention of waste as it will allow the commercial processing of an otherwise non-commercial product by the efficient use of existing equipment. This change will additionally benefit the Penn. "CD" reservoir by making possible continued frequent well tests of the individual pumping wells allowing optimum production and ultimate recovery.

May we have your permission for the proposed revisions in the Pennsylvanian reservoirs' treating systems.

Very truly yours,

H. D. Haley
District Manager
Durango District
Production Department

HDH/ca