Tenneco Oil Exploration and Production

A Tenneco Company

Southwestern Division

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New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 87501

Gentlemen:

Tenneco Oil Company makes application to convert six producing wells to water injection for secondary recovery by waterflood on Leonard Federal and Leonard Brothers leases (USGS Lease No. NM-7951) in Sections 13 and 14, Township 26 South, Range 37 East, Leonard Queen Pool, Lea County, New Mexico. On March 21, 1978 a hearing was held at Santa Fe, New Mexico, Case No. 6161 requesting approval of two waterflood projects and an administrative procedure. The resulting Order No. R-5675 is attached as Exhibit "I".

The six proposed injection wells are Leonard Federal Nos. 9, 10, 11, 13 and Leonard Brothers Nos. 14 and 21 as shown on Exhibit I. Before injection begins in the six wells for which approval is requested, the following work will be completed:

- Internally plastic coated tubing and packer will be run in each well and set at approximately 100 feet above the perforations.
- 2) The casing-tubing annulus in each well will be filled with an inert fluid and a connection for pressure gauge will be installed to permit determination of leakage.
- 3) The surface injection pressure will be limited to 680 pounds until such time approval is obtained for a higher pressure.
- 4) The wells will be equipped to facilitate periodic testing of the bradenhead for pressure or fluid production.

Per Exhibit "A" of New Mexico Oil Conservation Order No. R-5675 (Exhibit No. I), there are five wells which may or may not be plugged adequately. Three of the wells are outside the one-half mile distance to the wells we propose converting to water injection. The three wells, Ralph Lowe No. 2, Stanolind Oil Co. Leonard Oil No. 2, and the Midwest Refining Co.