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BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

APPLICATION OF TENNECO OIL COMPANY  
FOR PERMISSION TO CONDUCT SECONDARY  
RECOVERY OPERATIONS BY WATERFLOODING  
THE MESA QUEEN FORMATION UNDERLYING  
PORTIONS OF SECTIONS 16, 17 and 20  
Township 16 South, Range 32 East, Lea  
County, New Mexico

*Case 3790*

Comes now Tenneco Oil Company and for its Application states:

1. Applicant is the owner and operator of certain oil and gas leases within the above described area located in Lea County, New Mexico. Applicant has concurrently with this application filed its application for approval of a Unit Agreement covering the area described above.

2. Applicant hereby seeks approval of the Commission to conduct secondary recovery operations by waterflooding that portion of the Mesa Queen formation which is encountered between the depths of 3,389 feet and 3,420 feet in which underlies the following described area which comprises applicant's proposed Mesa Queen unitized area, to-wit:

The  $W\frac{1}{2}$ , the  $NE\frac{1}{4}$  and the  $NW\frac{1}{4}$  of the  $SE\frac{1}{4}$  Section 16

The  $S\frac{1}{2}$ , and the  $S\frac{1}{2}$  of the  $NE\frac{1}{4}$  Section 17

The  $W\frac{1}{2}$ , and  $NE\frac{1}{4}$  of the  $NW\frac{1}{4}$  Section 20

all in Township 16 South Range 32 East, Lea County, New Mexico

3. Applicant further seeks approval to expand the waterflood project area upon administrative approval by the Secretary-Director of the Commission without notice and hearing after proper showing to the Secretary-Director of justification for any such expansion.

4. Applicant intends to initially operate the proposed waterflood injection into the Mesa Queen formation at an average depth of 3400 feet through the following wells:

**DOCKET MARKED**

Date 6/13/68

1	Well Name and Number	Location
2	1 <del>Tenneco</del> Sinclair State No. 1 2	NW $\frac{1}{4}$ of NE $\frac{1}{4}$ Section 16
3	2 Tenneco Continental State No. 1 1	NE $\frac{1}{4}$ of NW $\frac{1}{4}$ Section 16
4	3 Tenneco Mobil State No. 1 6	SW $\frac{1}{4}$ of NW $\frac{1}{4}$ Section 16
5	4 Tenneco Mobil State No. 3 15	NE $\frac{1}{4}$ of SW $\frac{1}{4}$ Section 16
6	5 Shell M.Q.A. No. 1 9	SE $\frac{1}{4}$ of NE $\frac{1}{4}$ Section 16
7	6 Tenneco Sinclair State A No. 1 - 5	SE $\frac{1}{4}$ of NE $\frac{1}{4}$ Section 17
8	7 Tenneco Sinclair State A No. 2 - 4	SW $\frac{1}{4}$ of NE $\frac{1}{4}$ Section 17
9	8 Shell M.Q.D. No. 1 - 18	SE $\frac{1}{4}$ of SW $\frac{1}{4}$ Section 17
10	9 Shell M.Q.D. No. 2 - 11	NE $\frac{1}{4}$ of SW $\frac{1}{4}$ Section 17
11	10 Shell M.Q.D. No. 4 - 10	NW $\frac{1}{4}$ of SW $\frac{1}{4}$ Section 17
12	11 Tenneco Mobil State C No. 1 - 20	SE $\frac{1}{4}$ of SE $\frac{1}{4}$ Section 17
13	12 Shell De Cleva State No. 1 - 22	NW $\frac{1}{4}$ of NW $\frac{1}{4}$ Section 20

5. An initial injection rate of 300 to 500 barrels of water per well per day is anticipated with a surface injection pressure of approximately 1500 PSIG.

6. Attached hereto marked "Exhibit 1" is a plat showing the two mile radius of the proposed injection project and showing all matters required by Rule 701 B of the New Mexico Oil Conservation Commission. Also attached hereto are logs of the proposed injection wells and diagramatic sketches showing the type of installation proposed.

7. The proposed project area is in the advanced stage of depletion and applicant alleges that the waterflooding of the above mentioned zone will economically recover substantial quantities of oil and other hydrocarbons which cannot be recovered by primary recovery operations. In the interest of conservation, the prevention of waste, the protection of correlative rights and to secure the greatest ultimate recovery of oil and other hydrocarbons from that portion of the Mesa Queen formation described in paragraph 2 above, this application should be granted.

WHEREFORE applicant prays that this application be set down for public hearing and at such public hearing be granted.

TENNECO OIL COMPANY

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