## BEFORE THE OIL CONSERVATION COMMISSION OF

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IN THE MATTER OF THE APPLICATION OF MOBIL OIL CORPORATION FOR AUTHORITY TO INSTITUTE A WATERFLOOD PROJECT WITHIN THE NORTHEAST SQUARE LAKE PREMIER UNIT AREA, CONTAINING 2,200 ACRES, MORE OR LESS, IN EDDY COUNTY, NEW MEXICO, SAID PROJECT TO BE OPERATED IN ACCORDANCE WITH RULE 701 OF THE COMMISSION.

Case No. 3484

## APPLICATION

- 1. Mobil Oil Corporation hereby makes application for authority to inject water into the Premier (Basal Grayburg) formation underlying the Northeast Square Lake Premier Unit Area in Eddy County, New Mexico. Attached to this Application as Exhibit "1" is a plat showing the location of the Unit Area and all wells within a radius of two (2) miles of the proposed injection wells, which are also shown on Exhibit "1". The Exhibit shows leasehold ownership within the radius of two (2) miles.
- 2. Attached as Exhibit "2" is a plat showing the proposed injection pattern within the Unit Area.
- 3. It is proposed that the interval to be affected by the proposed water injection is the continuous stratigraphic section from 3,926 feet to 3,976 feet subsurface, within the Premier Sand (Basal Grayburg) formation. Attached as Exhibit "3" is a sonic log of the Oscar Bourg Drilling Company No. 1 State located 660 feet FSL and 660 feet FWL, Section 2, Township 16 South, Range 31 East. This log depicts typical Premier Sand development in the Unit Area. The top of the Premier Sand is shown at 3,926 feet below derrick floor datum.
- 4. Injection will be through corrosion protected tubing below tension packers. The annular space between the tubing and casing will be filled with corrosion inhibited water. Attached as

Exhibits "4" through "17" are diagrammatic sketches of proposed injection wells showing casing and production strings and other pertinent completion data.

- 5. It is proposed to initiate injection at a rate of 3,500 barrels of water per day into 14 injection wells for an average of 250 barrels per well, per day. Water will be purchased from the Double Eagle Corporation and produced water will be injected as soon as it becomes available.
- 6. A copy of this Application, complete with Exhibits, has been sent to the Office of the State Engineer, Santa Fe, New Mexico.
- 7. It is requested that authority be granted to initiate and operate this Project under the provisions of Commission Rule No. 701 relating to waterflood projects and the establishment of allowables in accordance therewith.
- 8. The reservoir to be injected has reached an advanced stage of depletion, and the initiation of this Project will prevent waste and protect correlative rights.

Applicant respectfully requests that the Commission set this matter for hearing and thereafter issue its Order granting approval for the initiation of the Project as requested and proposed herein.

Respectfully submitted,

MOBIL OIL CORPORATION

Modrall, Seymour, Sperling, Raehl & Harris

Its Attorneys
1200 Simms Building, Post Office Box 466
Albuquerque, New Mexico