BEFORE THE OIL CONSERVATION COMMISSION OF

NEW MEXICO

IN THE MATTER OF THE APPLICATION OF SOCONY-MOBIL OIL COMPANY, INC. FOR AUTHORITY TO INSTITUTE A WATERFLOOD PROJECT WITHIN THE WEST HENSHAW PREMIER UNIT AREA, CONTAINING 2400 ACRES, MORE OR LESS, IN EDDY COUNTY, NEW MEXICO, SAID PROJECT TO BE OPERATED IN ACCORDANCE WITH RULE 701 OF THE COMMISSION.

Case No. 3374

APPLICATION

- 1. Socony-Mobil Oil Company, Inc. hereby makes application for authority for the injection of water into the Premier (basal Grayburg) Formation underlying an area designated as the West Henshaw Premier Unit Area in Eddy County, New Mexico.

 Attached to this Application as Exhibit 1 is a plat showing the location of proposed injection wells and the location of all other wells within a radius of two miles of the proposed injection wells. The plat also shows leasehold ownership within said two-mile radius. Exhibit 2 attached to this Application is a map of the proposed injection pattern.
- 2. There is attached as Exhibit 3 to this Application a typical log of proposed injection wells. Also attached as Exhibits 4, A through Z, are diagrammatic sketches of injection well completion data showing casing strings, cement programs and other pertinent information as required by Rule 701 of this Commission.
- 3. It is proposed that the interval to be affected by the proposed water injection is that found and defined as the continuous stratigraphic interval occurring between a point 100 feet above the top of the Premier Zone and the base of the Grayburg Formation, said interval having been penetrated between 2,733 feet and 2,860 feet and the top of the Premier Zone having been found

DOCKET MAILED

Date 2-11-66

at 2,833 feet beneath the derrick floor in the Little Lucky Lake Unit, Shell Well No. 1, located in Lot Nine (9) of Section Three (3), Township 16 South, Range 30 East, N.M.P.M., Eddy County, New Mexico, as said interval is shown in the log of the last well named, which log is attached hereto and marked Exhibit 3.

- 4. Water for injection purposes will be obtained from a commercial water company operating in the area and, in addition, produced water will be injected as it is available and produced. Initial injection rate is proposed at a total of 6,500 barrels per day into the twenty-six (26) injection wells.
- 5. It is not now contemplated that additional wells in the Unit area will be converted to injection wells. However, if flood performance indicates the need for additional injection wells, it is requested that the Order sought herein make provision for the granting of administrative approval and authorization for such additional wells under the provisions of Rule 701e(5) of this Commission following application therefor.
- 6. A copy of this Application, complete with Exhibits, has been sent to the Office of the State Engineer, Santa Fe, New Mexico.

Applicant respectfully requests that the Commission issue its Order granting approval and authorizing institution of the waterflood project as proposed herein.

Respectfully submitted,

SOCONY-MOBIL OIL COMPANY, INC.

Modrall, Seymour, Sperling, Rochl & Harris

Its Attorneys

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