BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF RYDER SCOTT MANAGEMENT COMPANY FOR EXPANSION OF A WATERFLOOD PROJECT, ARTESIA POOL, EDDY COUNTY, NEW MEXICO WITH BUFFER ZONE UNLIMITED ALLOWABLES AND FOR AN EXCEPTION TO THE WELL LOCATION REQUIREMENTS OF RULE 104 OF THE OIL CONSERVATION COMMISSION.

No. 7h/ Herr 5 mil

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APPLICATION

COMES RYDER SCOTT MANAGEMENT COMPANY, by its attorney, A. J. Losee, and states:

- 1. On June 7, 1962 and on July 17, 1962, the Oil Conservation Commission ("Commission") by Order Nos. R-2272 and R-2272-A, respectively, authorized the establishment of a waterflood project on the SE/4 NE/4 Section 20 and W/2 NW/4 Section 21, Township 18 South, Range 28 East, N.M.P.M., as a buffer zone with capacity allowables.
- 2. Applicant is the operator and Waterflood Associates, Inc. is the owner of eight producing oil wells and one abandoned well offsetting the above lands in the Artesia Pool, Eddy County, New Mexico and within the proposed area covered by this application, to-wit:

Township 18 South, Range 28 East, N.M.P.M.,

Section 20: NE/4 NE/4, W/2 NE/4, NE/4 NW/4,

S/2 NW/4, W/2 SE/4

Section 29: NW/4 NE/4

containing 360 acres, more or less.

- 3. There is attached hereto and by reference made a part hereof, a plat showing the location of the original waterflood project area and the expanded waterflood project area, the wells therein and the location of all other wells and leases within a radius of one mile from the project area.
- 4. The producing wells within the project area have reached an advanced or "stripper" state of depletion and the Applicant proposes to inject water into the producing or once producing Grayburg and San Andres formations of the hereinafter described wells in sufficient quantities and under sufficient pressure to stimulate the production of oil from the wells in the project area, said injection wells being described as follows:

Mershon State Well No. 2 located in the NW/4 NW/4 Section 21;

Western-Yates Collier State Well No. 1 located in the SE/4 NW/4 Section 20;

Vandeventer Well No. 2 to be located at an unorthodox location in the NW/4 NE/4 Section 20;

Rotary State Well No. 7 to be located at an unorthodox location in the NW/4 SE/4 Section 20; and

Rotary State Well No. 8 to be located at an unorthodox location in the NW/4 SE/4 Section 20.

- 5. There is attached hereto and by reference made a part hereof a copy of the producing portions of the logs of the Mershon State Well No. 2 and the Western-Yates Collier State Well No. 1.
- 6. Applicant proposes to selectively inject the water down the casing annulus and down the tubing and will submit, prior to the hearing on this application, a diagrammatic sketch of each of the proposed injection wells including

all casing strings, diameters and setting depths, quantities used and tops of cement and perforated or open-hole intervals.

- 7. Applicant is presently purchasing water for this project from offsetting waterflood projects operated by Cima Capitan and Fina but proposes in the near future to complete the development of its own water supply for the project.
- 8. Applicant proposes to initially inject water into the Loco Hills zone at a rate of near 200 barrels per day and at a well-head pressure near 2700 p.s.i. Applicant proposes to intially inject water into the Metex, Premier and Lovington zones at a rate of near 600 barrels per day and at a pressure near 2700 p.s.i.
- 9. The approval of the said expansion of the previously authorized waterflood project as a buffer zone with
 unrestricted rates of production for said expanded project
 area will prevent waste and is necessary to protect correlative
 rights.
- 10. In the alternative to the allegations of paragraph 9, the approval of the said expansion of the previously authorized waterflood project with authority to transfer allowables between leases with the expanded project area will prevent waste and is necessary to protect the correlative rights.
- 11. Applicant proposes to drill, as an exception to well location requirements of Rule 104 of the Commission, three new injection wells as follows:

Rotary State No. 7 - 2650' FNL & 2650' FWL of Section 20;

Rotary State No. 8 - 1330' FEL and 2650' FNL of Section 20; and

Vandeventer State No. 2 - 1330' FEL and 1310' FNL of Section 20.

12. The approval of these unorthodox injection well locations will be in the interest of conservation and will protect correlative rights.

WHEREFORE, Applicant prays the orders of the Commission as follows:

- 1. That this matter be set for hearing before an examiner duly appointed by the Commission and that due notice be given thereof as required by law.
- 2. That after hearing, an order be entered authorizing the Applicant to expand the already existing waterflood project as either (a) a buffer zone with unrestricted rates of production or (b) with authority to transfer allowables between the leases in the expanded project area.
- 3. That after hearing, an order be entered authorizing the drilling of the three aforesaid injection wells at unorthodox locations as an exception to Rule 104 of the Commission.
- 4. And for such other relief as may be just in the premises.

RYDER SCOTT MANAGEMENT COMPANY

Attorney for Applicant

P. O. Drawer 239 Artesia, New Mexico