Entered february 12,1707

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE No. 4037 Order No. R-3677

APPLICATION OF ANADARKO PRODUCTION COMPANY FOR SEVERAL WATERFLOOD PROJ-ECTS AND WATERFLOOD BUFFER ZONES, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on February 5, 1969, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this <u>13th</u> day of February, 1969, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Anadarko Production Company, seeks authority to institute two waterflood projects in the Square Lake Pool by the injection of water into the Grayburg and San Andres formations by the conversion to water injection of its Etz Federal Well No. 3 and its Grier Well No. 14, located, respectively, in Sections 19 and 20 of Township 16 South, Range 31 East, NMPM, Eddy County, New Mexico.

(3) That the wells in the project areas are in an advanced state of depletion and should properly be classified as "stripper" wells.

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(4) That the proposed waterflood projects should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(5) That the applicant further proposes that the S/2 SW/4 and the N/2 SE/4 of said Section 19 be designated a waterflood buffer zone and that the N/2 SE/4 of said Section 20 be designated a waterflood buffer zone.

(6) That the S/2 SW/4 and the N/2 SE/4 of said Section 19 are offset on the south, east, and southeast by capacity-type waterflood projects.

(7) That the N/2 SE/4 of said Section 20 is offset on the west, southwest, and southeast by capacity-type waterflood projects.

(8) That approval of the proposed buffer zones will afford the applicant the opportunity to produce its just and equitable share of the oil in the pool.

(9) That the subject application should be approved and the projects should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations, provided however, that capacity allowables may be assigned to the wells in the $S/2 \ SW/4$ and the $N/2 \ SE/4$ of said Section 19, and that capacity allowables may be assigned to the wells in the $N/2 \ SE/4$ of said Section 20.

IT IS THEREFORE ORDERED:

(1) That the applicant, Anadarko Production Company, is hereby authorized to institute the two following waterflood projects in the Square Lake Pool by the injection of water into the Grayburg and San Andres formations through the followingdescribed wells in Township 16 South, Range 31 East, NMPM, Eddy County, New Mexico:

Anadarko Square Lake Etz Waterflood Project

Injection well:

Anadarko Etz Federal Well No. 3 located in Unit I of Section 19

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Anadarko Square Lake Grier No. 2 Waterflood Project

Injection well:

Anadarko Grier Well No. 14 located in Unit I of Section 20

(2) That the subject waterflood projects shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations, provided however, that the S/2 SW/4 and the N/2 SE/4 of said Section 19 is hereby designated a waterflood buffer zone and that the N/2 SE/4 of said Section 20 is hereby designated a waterflood buffer zone.

(3) That water can be injected and wells produced in each of the aforesaid buffer zones at rates comparable with the capacity-type waterflood projects offsetting each of said buffer zones and described in Findings Nos. (6) and (7) above.

(4) That monthly progress reports of the waterflood projects herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION DAVID F. CARGO, Chairman ALEX J. ARMIJO, 14 240 Member PORTER, Jr., Member & Secretary L.

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