STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 8379 Order No. R-7771

APPLICATION OF ANADARKO PRODUCTION COMPANY FOR A WATERFLOOD EXPANSION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8 a.m. on October 17, 1984, at Santa Fe, New Mexico, before Examiner Gilbert P. Quintana.

NOW, on this 8th day of January, 1985, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

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

(2) The applicant, Anadarko Production Company, seeks authority to expand its Square Lake Federal "Q" Waterflood Project by converting to injection its Federal "R" Well No. 3 located 330 feet from the North and West lines and its Federal "R" Well No. 8 located 1980 feet from the North line and 660 feet from the East line, both in Section 10, Township 17 South, Range 30 East, Square Lake Grayburg-San Andres Pool, Eddy County, New Mexico.

(3) The proposed waterflood expansion should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(4) A well offsetting the proposed waterflood expansion may not be plugged in such a manner as to confine the injected fluids in the waterflood interval.

-2-Case No. 8379 Order No. R-7771

(5) Said well is identified as the W. D. McIntyre 8-D in Unit B of Section 9, Township 17 South, Range 30 East, NMPM, Eddy County, New Mexico.

(6) Prior to the commencement of injection into said waterflood expansion the operator should demonstrate that the well described in Finding No. (5) above has either been re-plugged or has been previously plugged and abandoned in such a manner as to ensure that it does not provide an avenue of escape for fluid from the proposed injection zone and is in accordance with a program satisfactory to the supervisor of the Division's Artesia district office.

(7) The operator should otherwise take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(8) Said injection wells or system should be so equipped as to limit injection pressure at the wellhead to no more than 0.2 pounds per foot of depth, but the Division Director should have authority to increase said pressure limitation should circumstances warrant.

(9) The subject application should be approved and the project should be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Anadarko Production Company, is hereby authorized to expand its Square Lake Federal "Q" Waterflood Project by the conversion to water injection of two wells in Township 17 South, Range 30 East, Square Lake Grayburg-San Andres Pool, Eddy County, New Mexico, as described below:

Square Lake Federal "Q" Waterflood Project Well		
Nos.	Well Locations	Section
Federal R No. 8 Federal R No. 3	1980' FNL & 660' FEL 330' FNL & 330' FWL	10 10

(2) Injection into each well shall be through internally coated tubing, set in a packer located at a maximum of 100 feet from the uppermost perforation; the casing-tubing annulus of each injection well shall be loaded with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.

-3-Case No. 8379 Order No. R-7771

(3) The operator shall immediately notify the supervisor of the Division's Artesia district office of the failure of the tubing or packer in any of said injection wells, the leakage of water or oil from or around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.

(4) Prior to the commencement of injection into said waterflood expansion the operator shall demonstrate that the well in Finding No. (5) has either been re-plugged or has been previously plugged and abandoned in such a manner as to ensure that it does not provide an avenue of escape for fluid from the proposed injection zone and is in accordance with a program satisfactory to the supervisor of the Division's Artesia district office.

(5) The injection wells herein authorized and/or the injection system shall be equipped as to limit injection pressure at the wellhead to no more than 0.2 pounds per foot of depth, provided however, the Division Director may authorize a higher surface injection pressure upon satisfactory showing that such pressure will not result in fracturing of the confining strata.

(6) The subject waterflood project is hereby and shall continue to be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

(7) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

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R. L. STAMETS Director

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