STATE OF NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

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

> CASE NO. 9368 Order No. R-8657

APPLICATION OF SIETE OIL AND GAS CORPORATION FOR A WATERFLOOD PROJECT, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on May 11, 1988, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this <u>19th</u> day of May, 1988, 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, Siete Oil and Gas Corporation, seeks authority to institute a waterflood project on its Blackhawk Federal Lease comprising the SE/4 of Section 23 and the SW/4 and the SE/4 NW/4 of Section 24, Township 18 South, Range 31 East, NMPM, Eddy County, New Mexico, by the injection of water into the Queen and Penrose formations within the Shugart Yates-Seven Rivers-Queen-Grayburg Pool through the perforated interval from approximately 3722 feet to 3747 feet in its Blackhawk Federal Well No. 3 located 2040 feet from the South line and 920 feet from the West line (Unit L) of said Section 24. CASE NO. 9368 Order No. R-8657 Page -2-

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

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

(5) The operator should 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.

(6) Prior to commencing injection operations, the casing in the subject well should be pressure-tested throughout the interval from the surface down to the proposed packer-setting depth, to assure the integrity of such casing.

(7) The injection well or injection pressurization system should be so equipped as to limit injection pressure at the wellhead to no more than 744 psi, but the Division Director should have authority to increase said pressure limitation, should circumstances warrant.

(8) The operator should give advance notification to the supervisor of the Artesia district office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure test in order that the same may be witnessed.

(9) The subject application should be approved and the project should be governed by the provisions of Rules 702 through 708 of the Division Rules and Regulations.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Siete Oil and Gas Corporation, is hereby authorized to institute a waterflood project on its Blackhawk Federal Lease comprising the SE/4 of Section 23 and the SW/4 and the SE/4 NW/4 of Section 24, Township 18 South, Range 31 East, NMPM, Eddy County, New Mexico, by the CASE NO. 9368 Order No. R-8657 Page -3-

injection of water into the Queen and Penrose formations within the Shugart Yates-Seven Rivers-Queen-Grayburg Pool, through the perforated interval from approximately 3722 feet to 3747 feet in its Blackhawk Federal Well No. 3 located 2040 feet from the South line and 920 feet from the West line (Unit L) of said Section 24.

PROVIDED HOWEVER THAT, prior to commencing injection operations, the casing in the subject well shall be pressure-tested to assure the integrity of such casing in a manner that is satisfactory to the supervisor of the Division's district office at Artesia.

(2) Injection into said well shall be through internally coated tubing, set in a packer which shall be located at approximately 3670 feet; the casing-tubing annulus in said well shall be loaded with an inert fluid and equipped with an approved pressure gauge or attention attracting leak-detection device.

(3) The operator shall notify the supervisor of the Artesia district office of the Division in advance of the late and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(4) The operator shall immediately notify the supervisor of the Division's Artesia district office of the failure of the tubing or packer in said injection well, 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.

(5) The injection well herein authorized and/or the injection pressurization system shall be so equipped as to limit injection pressure at the wellhead to no more than 744 psi, 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.

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(6) The subject waterflood project is hereby designated the Siete Blackhawk Federal Waterflood Project and shall be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

(7) Monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 706 and 1115 of the Division Rules and Regulations.

(8) 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 hereinate instance.



STATE OF NEW MEXICQ OIL CONSERVATION DIVISION WILLIAM J. LEMAY Director