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. 9736 ORDER NO. R-9082

APPLICATION OF WALLEN PRODUCTION COMPANY FOR A WATERFLOOD PROJECT, LEA COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on September 6, 1989, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>14th</u> day of December, 1989, 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, Wallen Production Company, seeks authority to institute a waterflood project on its Wallen Tonto Lease comprising the SW/4, N/2 SE/4 and SE/4 SE/4 of Section 30, Township 19 South, Range 33 East, NMPM, Lea County, New Mexico, by the injection of water into the South Tonto Yates-Seven Rivers Pool through the open-hole interval from approximately 2900 feet to 3113 feet in its Wallen Tonto Well No. 7 located 1650 feet from the South line and 990 feet from the East line (Unit I) of said Section 30.
- (3) The wells in the proposed project area are in an advanced state of depletion and should therefore be properly classified as "stripper wells."
- (4) The proposed waterflood area is within the Oil Conservation Division "Oil Potash Area" which is governed by the provisions of Division Rule R-111-P.
- (5) Applicant has provided Noranda Exploration Inc., the only potash lessee in the area, with a copy of the applicant's complete Division Form C-108 with

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and Noranda has signed and filed its waiver with the Division indicating it has no objection to the applicant conducting a waterflood project as proposed.

- (6) When the proposed injection well, Wallen Tonto Well No. 7, was originally drilled and completed it was cased and cemented, pursuant to the Special Provisions as promulgated by Division Order Nos. R-4253 and R-5731, as a producing Yates-Seven Rivers formation well.
- (7) 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 into other formations or onto the surface from injection, production or plugged and abandoned wells.
- (8) Injection should be accomplished through 2 3/8-inch plastic-coated tubing installed in a packer set at approximately 2800 feet; the casing-tubing annulus should be filled with an inert fluid; and a pressure gauge or approved leak-detection device should be attached to the annulus in order to determine leaks in the casing, tubing or packer.
- (9) Prior to commencing injection operations, the casing of the subject well should be pressure-tested throughout the interval, from the surface down to the proposed packer-setting depth, to assure integrity of such casing.
- (10) The injection well or injection pressurization system should be so equipped as to limit injection pressure at the wellhead to no more than 580 psi.
- (11) The Director of the Division should be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such high pressure will not result in migration of the injected waters from the South Tonto Yates-Seven Rivers Pool.
- (12) The operator should give advance notification to the supervisor of the Hobbs 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.
- (13) 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, Wallen Production Company, is hereby authorized to institute a waterflood project on its Wallen Tonto Lease, as described below, by the injection

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of water into the South Tonto Yates-Seven Rivers Pool through its Wallen Tonto Well No. 7 located 1650 feet from the South line and 990 feet from the East line (Unit I) of Section 30, Township 19 South, Range 33 East, NMPM, Lea County, New Mexico:

WALLEN TONTO LEASE LEA COUNTY, NEW MEXICO

TOWNSHIP 19 SOUTH, RANGE 33 EAST, NMPM, Section 30: SW/4, N/2 SE/4, AND SE/4 SE/4

(2) Injection into said well shall be accomplished through 2 3/8-inch plastic-coated tubing installed in a packer set at approximately 2800 feet, with injection into the open-hole interval from approximately 2900 feet to 3113 feet;

PROVIDED HOWEVER THAT, the casing-tubing annulus shall be filled with an inert fluid, and a pressure gauge shall be attached to the annulus or the annulus shall be equipped with an approved leak-detection device in order to determine leakage in the casing, tubing or packer.

<u>PROVIDED FURTHER THAT</u>, 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 Hobbs District Office.

- (3) The injection well or system shall be equipped with a pressure-limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 580 psi.
- (4) The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the South Tonto Yates-Seven Rivers Pool.
- (5) The operator shall notify the supervisor of the Hobbs District Office of the Division in advance 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.
- (6) The operator shall immediately notify the supervisor of the Division's Hobbs District Office of the failure of the tubing, casing or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.
- (7) The subject waterflood project is hereby designated the Wallen Tonto Lease Waterflood Project and shall be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

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- (8) 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.
- (9) 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

WILLIAM J. LEMAY

Director

SEAL