Entered February 28, 1979

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. 6226 Order No. R-5939

APPLICATION OF BARBER OIL, INC. FOR A WATERFLOOD PROJECT, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on August 2, 1978, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 28th day of February, 1979, the Division Director, 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 Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Barber Oil, Inc., seeks authority to institute a waterflood project on its Saladar Lease, Saladar-Yates Pool, by the injection of water into the Yates formation through five injection wells located in Units K, L, N and O of Section 33, Township 20 South, Range 28 East, NMPM, Eddy County, New Mexico.
- (3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.
- (4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.
- (5) That 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.

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- (6) That the Unit Operator should immediately notify the supervisor of the Artesia District Office of the Division of the failure of the tubing, casing, or packer of any well in the Unit Area or of the leakage of water from or around any well within one-half mile of the Saladar Unit Area, including wells which have been plugged and abandoned.
- (7) That upon such failure of any well within one-half mile of an injection well in the Saladar Unit Area, the Division Director should be authorized to limit injection pressure in the Yates formation in such injection well to no more than hydrostatic pressure, and to maintain such pressure limitation until such time as workover operations (including re-plugging, if necessary) have been completed correcting such failure.
- (8) That the injection wells or system should be equipped with a pressure control device or other acceptable substitute which will limit the surface injection pressure to no more than 557 psi. Provision should be made for the Division Director to administratively authorize a pressure limitation in excess of said 557 psi upon a showing by the Unit Operator that such higher pressure is necessary to effectively and efficiently waterflood the Saladar Unit Area and that such higher pressure limitation will not result in fracturing of the confining strata.
- (9) That the subject application should be approved subject to the above conditions, and the project should be governed by the provisions of Rules 701, 702, and 703 of the Division Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Barber Oil, Inc., is hereby authorized to institute a waterflood project on its Saladar Lease, Saladar-Yates Pool, by the injection of water into the Yates formation through the following-described wells in Section 33, Township 20 South, Range 28 East, NMPM, Eddy County, New Mexico:

Original Well Name and No.	Unit Well No.	<u>Unit Letter</u>
Riggs Hughes Fed No. 3	1-3	K
Riggs Hughes Fed No. 5	1-5	K
Riggs Hughes Fed No. 7	1-7	Ñ
Conley Mayfield Fed No. 2	2-2	0
Riggs Malco-Keystone No. 1	3-1	$\mathbf L$

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- (2) That injection into each of said wells shall be through internally coated tubing, set in a packer which shall be located as near as practicable to the casing shoe; that 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) That 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 around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area or within one-half mile of the Saladar Unit Area.
- (4) That upon such failure of any well within one-half mile of an injection well in the Saladar Unit Area, the Division Director is hereby authorized to limit injection pressure in the Yates formation in such injection well to no more than hydrostatic pressure, and to maintain such pressure limitation until such time as workover operations (including re-plugging, if necessary) have been completed, successfully correcting such failure.
- (5) That the injection wells or system shall be equipped with a pressure control device or other acceptable substitute which will limit the surface injection pressure to no more than 557 psi. The Division Director may administratively authorize a pressure limitation in excess of said 557 psi upon a showing by the Unit Operator that such higher pressure is necessary to effectively and efficiently waterflood the Saladar Unit Area and that such higher pressure limitation will not result in fracturing of the confining strata.
- (6) That the subject waterflood project is hereby designated the Saladar Unit Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Division Rules and Regulations.
- (7) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 704 and 1120 of the Division Rules and Regulations.
- (8) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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 ${\tt DONE}$ at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OLL CONSERVATION DIVISION

JOE D. RAMEY

Director

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