Entered September 26, 1983

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. 7935 Order No. R-7354

APPLICATION OF YATES PETROLEUM CORPORATION FOR A WATERFLOOD PROJECT AND UNORTHODOX INJECTION WELL LOCATIONS, EDDY COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on August 17, 1983 and September 14, 1983 at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this <u>26th</u> day of September, 1983, 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, Yates Petroleum Corporation, seeks authority to institute a pilot waterflood project on its Gissler "AV" Lease, Eagle Creek-San Andres Pool, by the injection of water into the San Andres formation through four injection wells at unorthodox locations as shown below and all in Section 23, Township 17 South, Range 25 East, NMPM, Eddy County, New Mexico:

WELL AND WELL NO.			LOCATION				
Gissler	"AV"	39	2055'	FNL	and	1330'	FWL
Gissler	"AV"	40	2630'	FSL	and	1980'	FWL
Gissler	"AV"	41	1980'	FSL	and	1330'	FWL
Gissler	"AV"	42	2630'	FSL	and	660'	FWL

(3) That the wells in the Gissler "AV" lease are currently producing at a rate of 20 barrels per day.

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(4) That because of the nature of the San Andres pay in said pool, waterflooding will be necessary to achieve the maximum recovery.

(5) That said pool should ultimately be unitized for secondary recovery purposes.

(6) That the information gained from the Gissler "AV" pilot waterflood project should facilitate proper unitization of the pool.

(7) 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.

(8) That the injection wells or injection pressurization system should be equipped as to limit injection pressure at the wellhead to no more than 250 psi, but the Division Director should have authority to increase said pressure limitation, should circumstances warrant.

(9) That the Heidbrink and Barger Well No. 1 located in Unit H of said Section 23 may not have been drilled or plugged in accordance with current practices considered to be required for the protection of fresh waters lying closely above the injection interval.

(10) That prior to injection, the operator should consult with the supervisor of the Division's district office at Artesia to determine what action, including replugging if necessary, should be taken to assure that said Heidbrink and Barger well does not serve as an avenue for migration of the injected water from the injection interval.

(11) That no allowable in excess of the top unit allowable for the Eagle Creek-San Andres pool should be assigned to any proration unit in the pilot project until the operator has demonstrated to the supervisor of the Division's district office at Artesia that such allowable is needed as a result of response to injection.

(12) That the applicant further seeks authority to drill its Gissler "AV" Well No. 43 as a producing well at an unorthodox location 2630 feet from the North line and 1330 feet from the West line of said Section 23.

(13) That 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.

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IT IS THEREFORE ORDERED:

(1) That the applicant, Yates Petroleum Corporation, is hereby authorized to institute a pilot waterflood project on its Gissler "AV" Lease, Eagle Creek-San Andres Pool, by the injection of water into the San Andres formation through the following described wells at unorthodox locations all in Section 23, Township 17 South, Range 25 East, NMPM, Eddy County, New Mexico:

- (a) Gissler "AV" Well No. 39 located 2055 feet from the North line and 1330 feet from the West line;
- (b) Gissler "AV" Well No. 40 located 2630 feet from the South line and 1980 feet from the West line;
- (c) Gissler "AV" Well No. 41 located 1980 feet from the South line and 1330 feet from the West line; and
- (d) Gissler "AV" Well No. 42 located 2630 feet from the South line and 660 feet from the West line.

(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 uppermost perforation; 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 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) That the injection wells herein authorized and/or the injection pressurization system shall be so equipped as to limit injection pressure at the wellhead to no more than 250 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.

(5) That the subject waterflood project is hereby designated the Yates Gissler "AV" Eagle Creek Pilot Waterflood Project and shall be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

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(6) That 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.

(7) That prior to any injection in said project, the operator shall consult with the supervisor of the Division's district office at Artesia to determine what action, including replugging if necessary shall be necessary to assure the Heidbrink and Barger Well No. 1 located in Unit H of said Section 23 does not serve as an avenue for injected waters to migrate from the injection interval.

(8) That the applicant is authorized to drill its Gissler "AV" Well No. 43 as a producer at an unorthodox location 2630 feet from the North line and 1330 feet from the West line of said Section 23.

(9) That no allowable in excess of the top unit allowable for the Eagle-Creek San Andres Pool shall be assigned to any project proration unit until the operator has demonstrated that such allowable is needed as a result of response to injection.

(10) That 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 QIL CONSERVATION DIVISION Unes Ł, JOE D. RAMEY Director

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