

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. 10088
ORDER NO. R-9361

APPLICATION OF CIRCLE RIDGE PRODUCTION,
INC. FOR WATERFLOOD EXPANSION, CHAVES
COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on September 5 and October 3, 1990 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 27th day of November, 1990, 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, Circle Ridge Production, Inc., seeks authority to expand its Rock Queen Waterflood Project, authorized by Division Order No. R-1541, by converting its Rock Queen Unit, Section 26, Well No. 3 located 660 feet from the North line and 1980 feet from the West line (Unit C) of Section 26 and its Rock Queen Unit, Section 27, Well No. 9 located 1980 feet from the South line and 660 feet from the East line (Unit I) of Section 27, both in Township 13 South, Range 31 East, NMPM, Caprock-Queen Pool, Rock Queen Unit Area, Chaves County, New Mexico, from producing oil wells to water injection wells.

(3) The conversion to injection of the two existing wells within the Rock Queen Waterflood Project will serve to further develop and maintain proper sweep efficiency in the Queen formation underlying the project area.

(4) No interested party appeared at the hearing in opposition to this application.

(5) The proposed expansion is in the best interest of conservation, will not impair correlative rights, and should result in the recovery of otherwise unrecoverable oil thereby preventing waste.

(6) The application should therefore be approved and both wells should be governed by the applicable provisions of Rules 702 through 708 of the Division General Rules and Regulations.

(7) Injection into the No. 3 well should be accomplished through 2 7/8-inch plastic-lined tubing installed in a packer to be set at approximately 3010 feet, with reinjection of Queen formation produced water into the open hole interval from approximately 3052 to 3064 feet.

(8) Injection into the No. 9 well should be accomplished through 2 7/8-inch plastic-lined tubing installed in a packer to be set at approximately 2990 feet, with reinjection of Queen formation produced water into the open hole interval from approximately 3020 feet to 3028 feet.

(9) 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.

(10) The casing-tubing annulus for both wells 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.

(11) The injection wells or pressurization system for each well should be so equipped as to limit injection pressure at the wellhead to no more than 600 psi.

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

(13) 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 higher pressure will not result in migration of the injected waters from the Queen formation.

(14) 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.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Circle Ridge Production, Inc., is hereby authorized to expand its Rock Queen Waterflood Project, authorized by Division Order No. R-1541, by converting its Rock Queen Unit, Section 26, Well No. 3 located 660 feet from the North line and 1980 feet from the West line (Unit C) of Section 26 and its Rock Queen Unit, Section 27, Well No. 9 located 1980 feet from the South line and 660 feet from the East line (Unit I) of Section 27, both in Township 13 South, Range 31 East, NMPM, Caprock-Queen Pool, Rock Queen Unit Area, Chaves County, New Mexico, from producing oil wells to water injection wells.

(2) Injection into the No. 3 well shall be accomplished through 2 7/8-inch plastic-lined tubing installed in a packer set at approximately 3010 feet, with injection of Queen formation produced water into the open hole interval from approximately 3052 feet to 3064 feet.

(3) Injection into the No. 9 well shall be accomplished through 2 7/8-inch plastic-lined tubing installed in a packer set at approximately 2990 feet, with injection of Queen formation produced water into the open hole interval from approximately 3020 feet to 3028 feet.

(4) The casing-tubing annulus for both wells 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.

(5) Prior to commencing injection operations, the casing in each of the subject wells 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.

(6) The injection wells or pressurization system shall be equipped with a pressure-limiting switch or other acceptable device which will limit the wellhead pressure to no more than 600 psi.

(7) The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said wells that such higher pressure will not result in migration of the injected fluid from the Queen formation.

(8) 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.

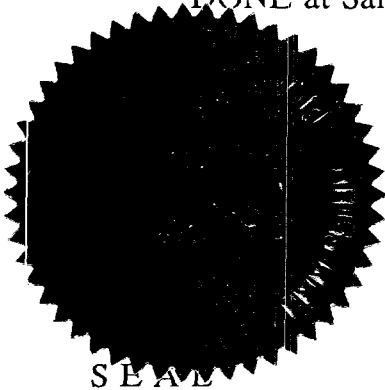
(9) The operator shall immediately notify the supervisor of the Division's Hobbs District Office of the failure of the tubing, casing or packer, in either of said injection wells or the leakage of water or oil from any plugged and abandoned well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.

(10) Both wells shall be governed by the applicable provisions of Rules 702 through 708 of the Division Rules and Regulations.

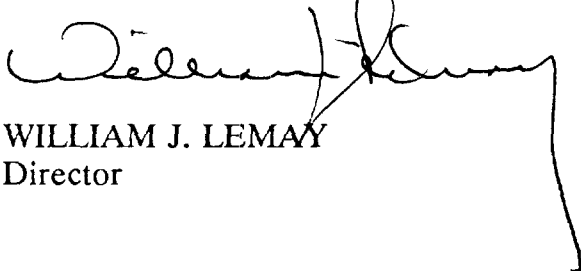
(11) Monthly progress reports shall be submitted to the Division in accordance with Rules 706 and 1115.

(12) 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