



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



BRUCE KING
GOVERNOR

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CABINET SECRETARY

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SANTA FE, NEW MEXICO 87504
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ADMINISTRATIVE ORDER NO. WFX-660

***APPLICATION OF CIRCLE RIDGE PRODUCTION, INC. TO EXPAND ITS
WATERFLOOD PROJECT IN THE CAPROCK-QUEEN POOL IN CHAVES COUNTY, NEW
MEXICO***

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Division Order No. R-2336, Circle Ridge Production, Inc. has made application to the Division on May 2, 1994 for permission to expand its West Caprock Queen Sand Unit Waterflood Project in the Caprock-Queen Pool in Chaves County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been filed in due form.
- (2) Satisfactory information has been provided that all offset operators have been duly notified of the application.
- (3) No objection has been received within the waiting period as prescribed by Rule 701(B).
- (4) The proposed injection wells are eligible for conversion to injection under the terms of Rule 701.
- (5) The proposed expansion of the above referenced waterflood project will not cause waste nor impair correlative rights.
- (6) The application should be approved.

IT IS THEREFORE ORDERED THAT:

The applicant, Circle Ridge Production, Inc., be and the same is hereby authorized to inject water into the Queen formation through the gross interval from approximately 2841 feet to 2891 feet through 2-inch plastic lined tubing set in a packer located within 100 feet of the uppermost injection perforation or casing shoe in the wells shown on Exhibit "A" attached hereto for the purpose of secondary recovery.

IT IS FURTHER ORDERED THAT:

The operator shall 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.

Prior to commencing injection operations into the wells, the casing in each well shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus in each well shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

The injection wells or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection wells to no more than that shown on Exhibit "A".

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. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify 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 tests so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Hobbs district office of the Division of the failure of the tubing, casing or packer in said wells and shall take such steps as may be timely and necessary to correct such failure or leakage.

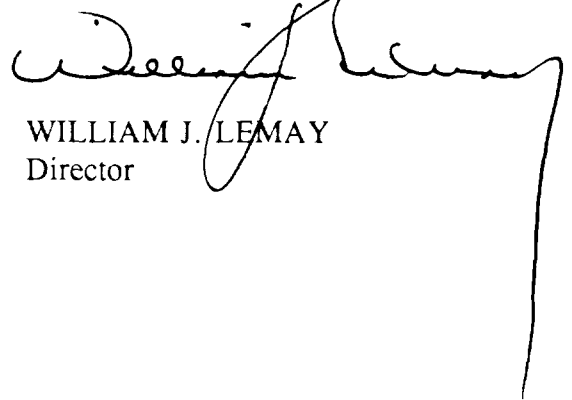
The subject wells shall be governed by all provisions of Division Order No. R-2336, and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, the Division may, after notice and hearing, terminate the injection authority granted herein.

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DONE at Santa Fe, New Mexico, on this 23rd day of June, 1994.

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A handwritten signature in black ink, appearing to read 'William J. Lemay', is written over the printed name and extends downwards with a long vertical line.

WILLIAM J. LEMAY
Director

S E A L

cc: Oil Conservation Division - Hobbs
NM State Land Office - Oil and Gas Division

EXHIBIT "A"
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CIRCLE RIDGE PRODUCTION, INC.
WEST CAPROCK QUEEN SAND UNIT WATERFLOOD PROJECT

APPROVED INJECTION WELLS

<i>Well Name</i>	<i>Well No.</i>	<i>Location</i>	<i>Unit</i>	<i>S-T-R</i>	<i>Injection Interval</i>	<i>Packer Depth</i>	<i>Tubing Size</i>	<i>Injection Pressure</i>
West Caprock Queen Sand Unit Tract 10	2	660' FNL - 1980' FWL	C	21-14S-31E	2880' - 2891	2870'	2"	576 PSIG
West Caprock Queen Sand Unit Tract 10	6	1980' FNL - 660' FWL	E	21-14S-31E	2841' - 2843'	2835'	2"	568 PSIG