



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

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GOVERNOR

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ORDER NO. WFX-589

APPLICATION OF ARCO OIL AND GAS COMPANY TO EXPAND ITS
WATERFLOOD PROJECT IN THE SOUTH EUNICE SEVEN RIVERS QUEEN AND
LANGLIE MATTIX SEVEN RIVERS QUEEN GRAYBURG POOLS POOL IN LEA
COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-4589, as amended, ARCO Oil and Gas Company has made application to the Division on October 23, 1989 for permission to expand its Seven Rivers Queen Unit Waterflood Project in the South Eunice Seven Rivers Queen and Langlie Mattix Seven Rivers Queen Grayburg Pools in Lea County, New Mexico.

NOW, on this 20th day of November, 1989, 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 water 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, ARCO Oil and Gas Company, be and the same is hereby authorized to inject water into the Seven Rivers-Queen formation at approximately 3652 feet to approximately 3810 feet through 2 3/8-inch plastic lined tubing set in a packer located approximately within 100 feet of the uppermost injection perforations in the wellss shown on Exhibit "A" attached hereto for purposes 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 shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing in each well annulus 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 pressure 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 Seven Rivers-Queen formation. Such proper showing shall consist of a valid step-rate tests 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-4589, as amended, and Rules 701-708 of the Division Rules and Regulations not inconsistent herewith.

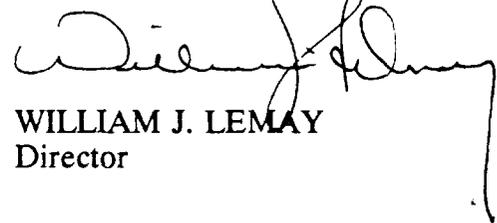
PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner 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.

Administrative Order WFX-589
ARCO Oil and Gas Company
November 20, 1989
Page 3

The operator shall submit monthly progress reports of the project in accordance with Rules 706 and 1115 of the Division Rules and Regulations.

Approved at Santa Fe, New Mexico, on this 14th day of November, 1989.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY
Director

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Administrative Order WFX-589
ARCO Oil and Gas Company
November 20, 1989
Page 4

Exhibit "A"
Order WFX-589

<u>Well and Location</u>	<u>Maximum Surface Injection Pressure</u>
Seven Rivers Queen Unit Well No. 32 2310' FSL & 2310' FEL (Unit J) Section 34, T-22 South, R-36 East, NMPM	736 PSIG
Seven Rivers Queen Unit Well No. 38 660' FSL & 990' FEL (Unit P) Section 34, T-22 South, R-36 East, NMPM	732 PSIG
Seven Rivers Queen Unit Well No. 44 660' FNL 660' FWL (Unit D) Section 2, T-23 South, R-36 East, NMPM	730 PSIG
Seven Rivers Queen Unit Well No. 52 1980' FNL & 660' FEL (Unit H) Section 3, T-23 South, R-36 East, NMPM	731 PSIG

All in Lea County, New Mexico.