#### STATE OF NEW MEXICO



#### ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR ANITA LOCKWOOD CABINET SECRETARY POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

#### ADMINISTRATIVE ORDER NO. WFX-644

APPLICATION OF TEXACO EXPLORATION AND PRODUCTION, INC. TO EXPAND ITS RHODES YATES UNIT WATERFLOOD PROJECT IN THE RHODES YATES SEVEN RIVERS POOL IN LEA COUNTY, NEW MEXICO

### ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order Nos. R-4251 and R-9848, Texaco Exploration and Production, Inc. has made application to the Division on April 15, 1993 for permission to expand its Rhodes Yates Unit Waterflood Project in the Rhodes Yates Seven Rivers Pool in Lea 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 Rhodes Yates Unit Waterflood Project will not cause waste nor impair correlative rights.
  - (6) The application should be approved.

#### IT IS THEREFORE ORDERED THAT:

The applicant, Texaco Exploration and Production, Inc., be and the same is hereby authorized to inject water into the Yates and Seven Rivers formations at approximately 3070 feet to approximately 3327 feet through 2 3/8-inch plastic lined tubing set in a packer within 100 feet of the uppermost perforations in the wells further described in 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 shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing 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 .2 psi/ft. of depth to the uppermost injection perforation.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Yates and Seven Rivers formations. 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 Nos. R-4521 and R-9848 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.

DONE at Santa Fe, New Mexico, on this 17th day of June, 1993.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

WILLIAM J. LEMAY

Director

SEAL

cc: Oil Conservation Division - Hobbs

## EXHIBIT "A" DIVISION ORDER NO. WFX-644

# TEXACO EXPLORATION AND PRODUCTION, INC. RHODES YATES UNIT WATERFLOOD LEA COUNTY, NEW MEXICO

#### APPROVED INJECTION WELLS

| Well<br>No. | Location              | Unit | S-T-R      | Injection Perforations | Packer<br>Depth | Tubing<br>Size | Injection<br>Pressure<br>(psig) |
|-------------|-----------------------|------|------------|------------------------|-----------------|----------------|---------------------------------|
| 4           | 550' FNL - 660' FEL   | Α    | 28-26S-37E | 3114' - 3245' (OH)     | 3100'           | 2 3/8"         | 623                             |
| 6           | 660' FNL - 1980' FWL  | C    | 27-26S-37E | 3070' - 3260' (OH)     | 3020'           | 2 3/8"         | 614                             |
| 11          | 2310' FSL - 2310' FWL | K    | 27-26S-37E | 3130' - 3327' (OH)     | 3080'           | 2 3/8"         | 626                             |