



BRUCE KING
GOVERNOR

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CABINET SECRETARY

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



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SANTA FE, NEW MEXICO 87504
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ADMINISTRATIVE ORDER NO. PMX-173

***APPLICATION OF TEXACO EXPLORATION AND PRODUCTION, INC. TO EXPAND
ITS VACUUM GRAYBURG SAN ANDRES UNIT WATERFLOOD PROJECT IN THE
VACUUM GRAYBURG SAN ANDRES POOL IN LEA COUNTY, NEW MEXICO***

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Division Order No. R-4442, PMX-43, PMX-44, PMX-74, R-6094, R-7010, PMX-120 and PMX-157, Texaco Exploration and Production, Inc. has made application to the Division on July 12, 1993 for permission to expand its Vacuum Grayburg San Andres Unit Waterflood Project in the Vacuum Grayburg-San Andres 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 well is eligible for conversion to injection under the terms of Rule 701.
- (5) The proposed expansion of the above referenced Vacuum Grayburg San Andres 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 Grayburg-San Andres formation at approximately 4300 feet to approximately 4750 feet through 2 3/8-inch plastic lined tubing set in a packer located at least 100 feet of the uppermost injection perforations in the following described well for purposes of pressure maintenance to wit:

VGSAU Well No. 146 1320' FNL - 1980' FEL	VGSAU Well No. 147 1320' FNL - 660' FEL
Both wells in Section 2, Township 18 South, Range 34 East, NMPM, Lea County, New Mexico.	

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 well, 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 well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well 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 Grayburg-San Andres 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.

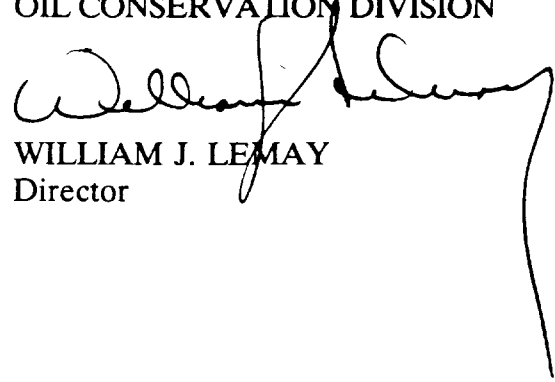
The operator shall immediately notify the supervisor of the Hobbs district office of the Division of the failure of the tubing, casing or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

The subject well shall be governed by all provisions of Division Order Nos. R-4442, PMX-43, PMX-44, PMX-74, R-6094, R-7010, PMX-120 and PMX-157, as amended 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 10th day of August, 1993.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


WILLIAM J. LEMAY
Director

S E A L

cc: Oil Conservation Division - Hobbs

VGSAU Well No.146
1320' FNL & 1980' FEL

VGSAU Well No.147
1320' FNL & 660' FEL

Both wells in Section 2, Township 18 South, Range 34 East,
NMPM, Lea County, New Mexico

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 **.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 wells that such higher pressure will not result in migration of the injected fluid from the **Grayburg and San Andres** 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 test 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. * *
* **SAME** * * * 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.