OIL CONSERVATION DIVISION 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131

ADMINISTRATIVE ORDER NO. PMX-203 P. &

1<sup>st</sup> Amendment M. F

APPLICATION OF PHILLIPS PETROLEUM COMPANY TO EXPAND ITS PRESSURE MAINTENANCE 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 Nos. R-5897 and R-6856, Phillips Petroleum Company has made application to the Division on March 9, 2000 for permission to expand its East Vacuum Grayburg-San Andres Pressure Maintenance 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 wells are eligible for conversion to injection under the terms of Rule 701.
- (5) The proposed expansion of the above referenced East Vacuum Grayburg-San Andres Pressure Maintenance Project will not cause waste nor impair correlative rights.
  - (6) The application should be approved.

# IT IS THEREFORE ORDERED THAT:

The applicant, Phillips Petroleum Company, be and the same is hereby authorized to alternately inject water and CO<sub>2</sub> into the San Andres formation at approximately 4320 feet to approximately 4700 feet through 2 7/8-inch plastic lined tubing set in a packer at located within 100 feet of the uppermost depth of the injection interval in the following described wells for purposes

of pressure maintenance to wit:

# East Vacuum Grayburg San Andres Unit Well No. 395

API No.30-025-34832

2630' FSL & 575' FEL, Unit I,

Injection Interval: 4320 feet to 4700 feet

Maximum Injection Pressure: 1350 psi – water / 1850 psi – CO<sub>2</sub>

#### East Vacuum Grayburg San Andres Unit Well No. 396

API No.30-025-34833

2630' FSL & 1950' FEL, Unit J.

Injection Interval: 4320 feet to 4700 feet

Maximum Injection Pressure: 1350 psi – water / 1850 psi – CO<sub>2</sub>

#### East Vacuum Grayburg San Andres Unit Well No. 398

API No.30-025-34835

1415' FSL & 2140' FEL, Unit J,

Injection Interval: 4320 feet to 4700 feet

Maximum Injection Pressure: 1350 psi – water / 1850 psi – CO<sub>2</sub>

### East Vacuum Grayburg San Andres Unit Well No. 399

API No.30-025-34836

10' FSL & 660' FEL, Unit P,

Injection Interval: 4320 feet to 4700 feet

Maximum Injection Pressure: 1350 psi – water / 1850 psi – CO<sub>2</sub>

All in Section 31, Township 17 South, Range 35 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 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 1350 psig while on water injection and no more than 1850 psig while on CO<sub>2</sub> injection. Those wells which may already have an approved increase in injection pressure in place are exempt from these limits.

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 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 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-5897 and R-6856, 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.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject wells, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

DONE at Santa Fe, New Mexico, on this 2<sup>nd</sup> day of May, 2000.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

LORI WROTENBERY,

Director

SEAL

LW/MWA/kv

cc: Oil Conservation Division - Hobbs