STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY 2040 S. PACHECO SANTA FE, NEW MEXICO 87505 (505) 827-7131

ADMINISTRATIVE ORDER NO. PMX-177

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 October 13, 1994 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 is 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 CO₂ into the San Andres formation at approximately 4097 feet to approximately 4660 feet through 2 7/8-inch plastic lined tubing set in a packer at located within

Administrative Order PMX-177 Phillips Petroleum Company November 8, 1994 Page 2

100 feet of the uppermost depth of the injection interval in the following described wells shown on Exhibit "A" attached hereto, for purposes of pressure maintenance.

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 CO₂ injection.

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 7th day of November, 1994.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

WILLIAM J. LEMAY

Director

SEAL

cc: Oil Conservation Division - Hobbs

EXHIBIT "A"

DIVISION ORDER NO. PMX-177

East Vacuum Grayburg-San Andres Pressure Maintenance Project

APPROVED INJECTION WELLS

1350 psig/1850 psig	2 7/8"	4078'	4116'-4588'	B-33-17S-27E	660' FNL & 1980' FEL	30-025-02988	3332-032	EVGSAU
1350 psig/1850 psig	2 7/8"	4103'	4147'-4660'	N-28-17S-35E	660' FSL & 1992' FEL	30-025-02910	2801-009	EVGSAU
1350 psig/1850 psig	2 7/8"	4053'	4097'-4640'	P-28-17S-35E	660' FSL & 660' FEL	30-025-08546	2801-001	EVGSAU
1350 psig/1850 psig	2 7/8"	4173'	4220'-4597'	L-27-17S-35E	1980' FSL & 660' FEL	30-025-02898	2739-004	EVGSAU
1350 psig/1850 psig	2 7/8"	4178'	4215'-4608'	F-27-17S-35E	1980' FNL & 1980' FWL	30-025-02904	2738-002	EVGSAU
Injection Pressure Water / CO ₂	Tubing Size	Packer Depth	Injection Interval (Open Hole)	S-T-R	Location	API Number	Well No.	Well Name

All wells in Lea County, New Mexico