Oil Conservation Division

AMENDED ADMINISTRATIVE ORDER NO. PMX-176

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 August 9, 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) Certain wells originally authorized by this Division Order have since had an increase in injection pressure approved and are therefore not limited in that respect by this amendment.

(7) 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_2 into the San Andres formation at approximately 4350 feet to approximately 4650 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 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 CO_2 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.

<u>PROVIDED FURTHER THAT</u>, 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

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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 24th day of July, 1995.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION WILLIAM J MAY Director

SEAL

WJL/BES

cc: Oil Conservation Division - Hobbs

EXHIBIT "A" AMENDED DIVISION ORDER NO. PMX-176 East Vacuum Grayburg-San Andres Pressure Maintenance Project APPROVED INJECTION WELLS

1350 psig/1850 psig	4078'	L-33-17S-35E	1440' FSL & 508' FWL	387	EVGSAU
1350 psig/1850 psig	4103'	M-32-17S-35E	1310' FSL & 531' FWL	386	EVGSAU
1350 psig/1850 psig	4053'	P-32-17S-35E	875' FSL & 1160' FEL	385	EVGSAU
1350 psig/1850 psig	4173'	0-33-17S-35E	825' FSL & 2524' FEL	384	EVGSAU
1350 psig/1850 psig	4178'	M-33-17S-35E	1219' FSL & 1769' FWL	383	EVGSAU
Injection Pressure Water / CO ₂ *	Packer Depth	S-T-R	Location	Well No.	Well Name

All wells in Lea County, New Mexico

* Does not apply to injection pressure increases approved subsequent to the original issuance of this Division Order.