STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING

SANTA FE, NEW MEXICO 87504 (505) 827-5800

BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY

AMENDED ADMINISTRATIVE ORDER NO. WFX-653

APPLICATION OF PHILLIPS PETROLEUM COMPANY TO EXPAND ITS EAST 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-6856, Phillips Petroleum Company has made application to the Division on October 25, 1993 for permission to expand its East 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 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 Unit Waterflood 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 inject water into the Grayburg and San Andres formations at approximately 4270 feet to approximately 4762 feet through 2 7/8-inch plastic lined tubing set in a packer located within 100 feet of the uppermost injection perforation in the wells described on Exhibit "A".

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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 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 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 No. 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 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.

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DONE at Santa Fe, New Mexico, on this 2nd day of February, 1994.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION 0

WILLIAM J. LEMAY Director

SEAL

cc: Oil Conservation Division - Hobbs

EXHIBIT "A" AMENDED DIVISION ORDER NO. WFX-653

PHILLIPS PETROLEUM COMPANY EAST VACUUM GRAYBURG SAN ANDRES UNIT WATERFLOOD PROJECT LEA COUNTY, NEW MEXICO

APPROVED INJECTION WELLS

Well No.	Location	Unit	S-T-R	Injection Perforations	Packer Depth	Tubing Size	Injection Pressure
3202-001	1330' FSL - 1310' FEL	I	32-17S-35E	4363' - 4628'	4280'	2 7/8"	873 psig
.3315-001	1980' FSL - 660' FEL	I	33-17S-35E	4270' - 4640' ^(OH)	4250'	2 7/8"	854 psig
3202-033	990' FNL - 2306' FEL	E	32-17S-35E	4396' - 4674'	4316'	2 7/8"	879 psig
0524-129	1650' FNL - 990' FWL	(B)	5-18S-35E	4385' - 4762'	4300'	2 7/8"	877 psig
3333-002	3333-002 1980' FNL - 1980' FWL /	F	33-17S-35E	4350' - 4650'	4270'	2 7/8"	870 psig