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

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 7426 (REOPENED) Order No. R-6856-A

APPLICATION OF PHILLIPS PETROLEUM COMPANY FOR AMENDMENT OF DIVISION ORDER NO. R-5897 AND CERTIFICATION OF A TERTIARY RECOVERY PROJECT, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on August 22, 1990, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this <u>19th</u> day of September, 1990, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) By Order No. R-5897, dated January 16, 1979, issued in Case No. 6367, the Division authorized Phillips Petroleum Corporation to institute a pressure maintenance project by the injection of water into the San Andres formation, Vacuum Grayburg-San Andres Pool, through certain wells on its East Vacuum Grayburg San Andres Unit, Lea County, New Mexico.

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(3) By Order No. R-6856, dated December 16, 1981, issued in Case No. 7426, the Division amended Order No. R-5897 by authorizing Phillips Petroleum Corporation to inject water and carbon dioxide into the San Andres formation, Vacuum Grayburg-San Andres Pool, through certain wells on said East Vacuum Grayburg San Andres Unit.

(4) The applicant, Phillips Petroleum Corporation, seeks the further amendment of Order No. R-5897, as amended, to retroactively authorize injection of hydrocarbon gas into the Vacuum Grayburg-San Andres Pool through approved injection wells within the unit.

(5) Injection of carbon dioxide gas commenced within the East Vacuum Grayburg San Andres Unit during September, 1985.

(6) As a result of carbon dioxide gas injection into the reservoir, a portion of the hydrocarbon gas produced within the unit has contained, since approximately 1986, varying amounts of carbon dioxide.

(7) The produced gas from the East Vacuum Grayburg San Andres Unit is processed and marketed through the Phillips Petroleum Corporation Lea Gas Processing Plant, which, according to evidence and testimony, will not accept for processing gas containing 15 percent or greater carbon dioxide.

(8) In November, 1986, the applicant began reinjecting that portion of the unit's produced gas which contained approximately 15 percent or greater carbon dioxide.

(9) To date, approximately 3.2 BCF of hydrocarbon/carbon dioxide gas has been reinjected into the subject reservoir.

(10) According to evidence and testimony, the applicant is currently evaluating the economic viability of constructing a recovery plant whereby the associated liquids contained within the hydrocarbon/carbon dioxide gas stream may be recovered and marketed.

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(11) The applicant's further testimony indicates that construction of facilities to separate the methane gas from the hydrocarbon/carbon dioxide gas stream is not economically viable at the present time.

(12) Injection of the hydrocarbon/carbon dioxide gas stream will not reduce the effectiveness of the project and will not reduce ultimate oil recovery from the subject reservoir.

(13) The applicant's current method of disposition of the hydrocarbon/carbon dioxide gas is in the best interest of conservation, protection of correlative rights, and prevention of waste.

(14) The application should be approved by amending Division Order No. R-5897, as amended by Order No. R-6856.

IT IS THEREFORE ORDERED THAT:

(1) Ordering Paragraph No. (2) of Division Order No. R-6856 is hereby amended to read in its entirety as follows:

"(2) That the applicant, Phillips Petroleum Company, is hereby authorized to inject water, carbon dioxide, and hydrocarbon/carbon dioxide gas stream into the 45 wells listed on Exhibit "A" attached to this order."

(2) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION 00 WILLIAM J. LEMAY , Director

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