Entered august 30, 1783

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

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

> CASE NO. 7937 Order No. R-7103-A

APPLICATION OF PHILLIPS PETROLEUM COMPANY FOR AMENDMENT OF DIVISION ORDER NO. R-7103 AND APPROVAL OF A TERTIARY OIL RECOVERY PROJECT UNDER THE CRUDE OIL WINDFALL PROFITS TAX ACT OF 1980, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 9 a.m. on August 17, 1983, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this <u>30th</u> day of August, 1983, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

## FINDS:

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

(2) That the applicant, Phillips Petroleum Company, seeks authority to convert the Phillips Hale-Mable Vacuum G-SA Pressure Maintenance Project (water injection) to a polymer-augmented waterflood, and pursuant to Section 212.78 of the United States Department of Energy Regulations and Section 4993 of the Internal Revenue Code seeks certification of said project as a Qualified Tertiary Oil Recovery Project.

(3) That said pressure maintenance project lies within the Vacuum Grayburg-San Andres Pool, Lea County, New Mexico.

(4) That said pool was discovered in May, 1929, by Socony Vacuum Oil Company, experienced substantial development thereafter with waterflooding being initiated during 1977. -2-Case No. 7937 Order No. R-7103-A

(5) That the Phillips Petroleum Company Phillips Hale-Mable Vacuum G-SA Pressure Maintenance Project (water injection) consisting of approximately 320 acres was approved by Division Order No. R-7103 on October 12, 1982, and water injection was commenced within said project beginning in May, 1983.

(6) That the applicant now seeks approval for the installation of a tertiary recovery polymer-augmented waterflood by the injection of polyacrylamide polymers into eight wells and the designation of a qualifying tertiary recovery project area all within said pressure maintenance project.

(7) That the New Mexico Oil Conservation Division has been designated by the Governor of the State of New Mexico as the appropriate agency to approve Qualified Tertiary Recovery Projects in New Mexico for purposes of the Crude Oil Windfall Profits Tax Act of 1980.

(8) That the proposed Qualifying Tertiary Project Area (QTP Area) lies wholly within said Phillips Hale-Mable Vacuum G-SA Pressure Maintenance Project in the Vacuum Grayburg-San Andres Pool and consists of the following described acreage:

Mable Lease:

TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM Section 35: W/2 NW/4

Hale Lease:

TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM Section 35: E/2 SW/4 and SE/4

Containing 320 acres, more or less.

(9) That the proposed project is a tertiary recovery method described in Section 212.78(c) of the Department of Energy Regulations and as defined in Section 4993 of the Internal Revenue Code.

(10) That the proposed Tertiary Recovery Project is expected to result in the recovery of at least an additional 275,000 barrels of incremental tertiary crude oil which the Division finds is more than an insignificant increase in the ultimate recovery of crude oil.

(11) That the injection of polyacrylamide polymers will improve mobility ratio and vertical conformance, and the

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Phillips QTP Area project is designed, and will be operated, in accordance with sound engineering principles.

(12) That the entire Phillips Hale-Mable Vacuum G-SA Pressure Maintenance Project will be affected and it is adequately delineated.

(13) That the QTP Area tertiary recovery operations beginning date is after May, 1979, with scheduled polymer injection to begin during August, 1983.

(14) That past production from the Vacuum Grayburg-San Andres Pool underlying the Hale-Mable Area is 5,565,000 barrels through June, 1983; future recovery thereafter without the proposed tertiary recovery project is estimated to be 5,417,500 barrels of oil; and with the proposed tertiary recovery project an additional 275,000 barrels of incremental tertiary oil will be recovered resulting in a total production of 5,692,500 barrels of oil.

(15) That the Phillips Hale-Mable Vacuum G-SA Pressure Maintenance Project presently has thereon 14 producing wells and 8 injection wells.

(16) That all injection wells located in the Phillips Hale-Mable Vacuum G-SA Pressure Maintenance Project will receive polymer-augmented injection for an extended period of time (estimated to be 26 months) until a 15 percent pore volume of polymer/water solution is injected.

(17) That the projected future expense for the proposed tertiary project is one million eighty-two thousand dollars (\$1,082,000) for the cost of the polymer and associated chemicals and ninety-eight thousand five hundred dollars (\$98,500) is estimated for polymer handling equipment.

(18) That the proposed tertiary recovery operations within said QTP Area meets all requirements of Section 4993(c) (2) (A),(B) and (C) of the Internal Revenue Code.

(19) That the approval of this application will prevent waste, protect correlative rights and promote conservation, provided however, that the production allowable provisions of Division Order No. R-7103, dated October 12, 1982, should remain in effect. -4-Case No. 7937 Order No. R-7103-A

## IT IS THEREFORE ORDERED:

(1) That effective the first day of the initiation of polymer injection, the Qualifying Tertiary Recovery Project Area, described in Finding No. (8) of this Order, being the Phillips Petroleum Company Phillips Hale-Mable G-SA Vacuum Pressure Maintenance Project, Vacuum Grayburg-San Andres Pool, Lea County, New Mexico, is hereby approved as a Qualified Tertiary Recovery Project under the Crude Oil Windfall Profits Tax Act of 1980.

(2) That the applicant, Phillips Petroleum Company, is hereby authorized to inject water and polyacrylamide polymers into approved injection wells in this project, and that Division Order No. R-7103 dated October 12, 1982, is hereby amended to allow the injection of said polymers.

# IT IS FURTHER ORDERED:

(1) That the production allowable provisions of Rules of Division Order No. R-7103 shall remain in full force and effect until further order of the Division.

(2) That 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 QIL CONSERVATION DIVISION Ame RAMEY JOE D. Director

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