Entered July 13, 1983

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

CASE NO. 7875 Order No. R-6765-A

APPLICATION OF HARVEY E. YATES COMPANY FOR AMENDMENT OF DIVISION ORDER NO. R-6765 AND APPROVAL OF A TERTIARY OIL RECOVERY PROJECT UNDER THE CRUDE OIL WINDFALL PROFITS TAX ACT OF 1980, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on May 25, 1983, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 13th day of July, 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, Harvey E. Yates Company, seeks authority to convert its Travis Penn Unit Waterflood Project 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 the Travis Penn Unit is currently operated as a secondary recovery project injecting water into the Cisco-Canyon formation in the Travis-Upper Pennsylvanian Pool.
- (4) That said pool was created in April, 1978, and experienced substantial development thereafter with waterflooding being initiated during 1981.
- (5) That the Travis Penn Unit consisting of approximately 480 acres was approved as a waterflood project by Division

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Order No. R-6765 dated August 28, 1981, and water injection was commenced within the unit in 1981.

- (6) That the applicant now seeks approval for the installation of a tertiary recovery polymer-augmented waterflood initially by the injection of polymers into the Travis Penn Unit Well No. 5 located in Unit K of Section 13, Township 18 South, Range 28 East, Eddy County, New Mexico, and the designation as a qualifying tertiary recovery project area of all the area within the Travis Penn Unit.
- (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 the purpose of the Crude Oil Windfall Profits Tax Act of 1980.
- (8) That the portion of the Qualifying Tertiary Project Area (QTP Area) under which applicant seeks approval of the tertiary recovery polymer-augmented waterflood lies wholly within the Travis Penn Unit and consists of the following described acreage:

TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM Section 12: S/2 SE/4
Section 13: N/2 and N/2 SW/4

containing 480 acres, more or less, Eddy County, New Mexico.

- (9) That the proposed project will utilize 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 493,883 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 polymers will improve the mobility ratio and vertical conformance, and the Travis Penn Unit project is designed, and will be operated, in accordance with sound engineering principles.
- (12) That the entire Travis Penn Unit will be affected and that it is adequately delineated.

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- (13) That the Travis Penn Unit tertiary recovery operations beginning date is after May, 1979, with the injection of polymer not to begin until after May, 1983.
- (14) That past production from the Cisco-Canyon formation in the Travis Penn Unit has been 433,969 barrels of oil through February 28, 1983; without the proposed tertiary recovery project additional future recovery is estimated to be 69,260 barrels; and with the proposed tertiary recovery project an estimated 493,883 barrels will be recovered, resulting in an increased production of 424,623 barrels of oil.
- (15) That the Travis Penn Unit presently thereon has one injection well and five producing wells, with the unit being developed on an 80-acre spacing pattern.
- (16) That the single injection well will receive an initial polymer treatment to attempt to shut-off the higher porosity section of the reservoir and that after the initial treatment, applicant will observe the project for a period of time to determine the success of the initial treatment.
- (17) That after successfully plugging the high porosity portion of the reservoir, applicant will begin a program of a continuous polymer-augmented waterflood with a total estimated project life of 12 years.
- (18) That the projected future expense of the proposed tertiary project is \$7,035,155 and that the estimated gross profit BFIT of the project is projected to be \$11,500,420.
- (19) That the proposed tertiary recovery operations within the Travis Penn Unit area meet all requirements of Section 4993 (C) (2) (A), (B) and (C) of the Internal Revenue Code.
- (20) That the approval of this application will prevent waste, protect correlative rights, and promote conservation.

IT IS THEREFORE ORDERED:

(1) That effective June 1, 1983, or the first day of the month following initiation of polymer injection, the Qualifying Tertiary Recovery Project Area, described in Finding No. 8 of this order, being the Cisco-Canyon formation of the Travis-Upper Pennsylvanian Pool in the Travis Penn Unit, Eddy County, New Mexico, is hereby approved as a Qualified Tertiary Recovery Project under the Crude Oil Windfall Profits Tax Act of 1980.

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- (2) That the applicant, Harvey E. Yates Company, is hereby authorized to inject water and polymers into approved injection wells in this unit, and that Division Order No. R-6765 dated August 28, 1981, is hereby amended to allow the injection of said polymers.
- (3) 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
OIL CONSERVATION PIVISION

JOE D. RAMEY

DIRECTOR

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