## 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. 10512 ORDER NO. R-9755

## APPLICATION OF PHILLIPS PETROLEUM COMPANY FOR DIRECTIONAL DRILLING AND THREE UNORTHODOX OIL WELL LOCATIONS, LEA COUNTY, NEW MEXICO

#### ORDER OF THE DIVISION

#### **BY THE DIVISION**:

This cause came on for hearing at 8:15 a.m. on August 6 and September 3, 1992, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 4th day of November, 1992 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) The applicant, Phillips Petroleum Company, seeks an exception to Rule 4 of the Special Rules and Regulations for the Four Lakes-Pennsylvanian Pool, as promulgated by Division Order No. R-2326, for three unorthodox oil well locations (one which will be directionally drilled to an unorthodox bottom-hole location) all within its South Four Lakes Unit Area in Lea County, New Mexico:

Well No. 12 to be drilled 1250 feet from the South line and 2450 feet from the West line (Unit N) of Section 35, Township 11 South, Range 34 East, NMPM, the 80 acres comprising the E/2 SW/4 is to be dedicated to said well;

Well No. 11 to be drilled 2200 feet from the North line and 2150 feet from the West line (Unit F) of Section 2, Township 12 South, Range 34 East, NMPM, the 80.11 acres comprising Lot 3 and the SE/4 NW/4 (E/2 NW/4 equivalent) is to be dedicated to said well; and,

Well No. 10 to be drilled from a standard surface location of 2050 feet from the South line and 1980 feet from the East line and directionally drilled to an unorthodox bottomhole location within a 50-foot radius of a point 2200 feet from the South line and 1980 feet from the East line, all in Unit J of Section 2, Township 12 South, Range 34 East, NMPM, the 80 acres comprising the N/2 SE/4 is to be dedicated to said well.

(3) By said Division Order No. R-2326, dated October 3,1962, special rules and regulations were established for the Four Lakes-Pennsylvanian Pool including provisions for 80-acre spacing and proration units and limited well location requirements whereby a well can only be within 150 feet of the center of a quarter-quarter section or lot.

(4) The geological data presented by the applicant in this matter indicates that the Four Lakes-Pennsylvanian Pool in this general area comprises two primary intervals productive of hydrocarbons: The Bough "C" at an approximate depth of 10,000 feet and Cisco at an approximate depth of 10,250 feet.

(5) Utilizing extensive geologic data, including 3-D seismic survey, the applicant has determined that the three locations requested would penetrate this somewhat complex reservoir at the most optimum locations that minimize the risk of encountering watered-out portions of the reservoir, that are positioned higher on the structure, with the production intervals having adequate thickness and porosity. All these factors should maximize the opportunity for this applicant to recover oil in each of the three units which might otherwise not be produced.

(6) Each of the three unorthodox well locations are well within the boundary of the South Four Lakes Unit Area and are not encroaching towards other offsetting owners or operators.

(7) The applicant's request to directionally drill its South Four Lakes Unit Well No. 10 is necessary in order to avoid a pipeline underlying the optimum location in the N/2 SE/4 of said Section 2.

(8) Approval of the subject application will afford the applicant the opportunity to produce his just and equitable share of the oil in the Four Lakes-Pennsylvanian Pool, will prevent the economic loss caused by the drilling of unnecessary wells, is in the best interest of conservation and will otherwise prevent waste and protect correlative rights.

(9) The applicant should be required to determine the subsurface location of the kick-off point of the No. 10 well prior to directional drilling and should subsequently be required to conduct an accurate wellbore survey during or upon completion of drilling operations from the kick-off point to total depth to determine its true depth and course.

(10) No interested party objected to the subject application.

(11) The applicant should be required to notify the supervisor of the Hobbs District Office of the Division of the date and time said directional surveys are to be conducted so that they may be witnessed. The applicant should further be required to provide a copy of said directional surveys to the Santa Fe and Hobbs District Offices of the Division upon completion.

# IT IS THEREFORE ORDERED THAT:

(1) The application of Phillips Petroleum Company is hereby approved for an exception to Rule 4 of the Special Rules and Regulations for the Four Lakes-Pennsylvanian Pool, as promulgated by Division Order No. R-2326, dated October 3, 1962, for the following three unorthodox oil well locations (one of which will be directionally drilled to an unorthodox bottom-hole location) all within its South Four Lakes Unit Area in Lea County, New Mexico:

- (a) in the standard 80-acre oil spacing and proration unit comprising the E/2 SW/4 of Section 35, Township 11 South, Range 34 East, NMPM, the South Four Lakes Unit Well No. 12 shall be located 1250 feet from the South line and 2450 feet from the West line (Unit N) of said Section 35;
- (b) in the 80.11-acre oil spacing and proration unit comprising Lot 3 and the SE/4 NW/4 (E/2 NW/4 equivalent) of Section 2, Township 12 South, Range 34 East, NMPM, the South Four Lakes Unit Well No. 11 shall be located 2200 feet from the North line and 2150 feet from the West line (Unit F) of said Section 2; and,

(c) in the standard 80-acre oil spacing and proration unit comprising the N/2 SE/4 of said Section 2, the South Four Lakes Unit Well No. 10 is to be directionally drilled from a standard surface oil well location 2050 feet from the South line and 1980 feet from the East line to a bottomhole location within 50 feet of a point 2200 feet from the South line and 1980 feet from the East line, all in Unit J of said Section 2.

<u>PROVIDED HOWEVER THAT</u> prior to commencing directional drilling operations into said No. 10 well, the applicant shall establish the location of the kick-off point by means of a directional survey acceptable to the Division.

<u>PROVIDED HOWEVER THAT</u> during or upon completion of said directional drilling operations, the applicant shall conduct an accurate wellbore survey from the kick-off point to total depth in order that the subsurface bottomhole location, as well as the wellbore's true depth and course, may be determined.

(2) The applicant shall notify the supervisor of the Hobbs district office of the Division of the date and time said wellbore surveys are to be conducted so that they may be witnessed. The applicant shall further provide a copy of said wellbore surveys to the Santa Fe and Hobbs offices of the Division upon completion.

(3) Form C-105 shall be filed in accordance with Division Rule No. 1105 and the operator shall indicate thereon true vertical depth in addition to measured depths for the South Four Lakes Unit Well No. 10.

(4) 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 WILLIAM J. LEMA Director

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