Entered april 20, 1984

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. 8081 Order No. R-4934-D

APPLICATION OF AMOCO PRODUCTION COMPANY FOR AN UNORTHODOX INJECTION WELL LOCATION AND DIRECTIONAL DRILLING, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8 a.m. on February 29, 1984, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this $20 \pm h$ day of April, 1984, 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, Amoco Production Company, is the operator of the South Hobbs Grayburg-San Andres Unit Pressure Maintenance Project, which was approved by Division Order No. R-4934, dated December 3, 1974, located in the Hobbs Grayburg-San Andres Pool, Lea County, New Mexico.
- (3) That the applicant seeks authority to directionally drill its South Hobbs Grayburg-San Andres Unit Well No. 173, the unorthodox surface location being 1978 feet from the North line and 1223 feet from the West line of Section 10, Township 19 South, Range 38 East, NMPM, South Hobbs Grayburg-San Andres Unit Pressure Maintenance Project, Hobbs Grayburg-San Andres Pool, Lea County, New Mexico, in such a manner as to bottom said well within 75 feet of a point 1980 feet from the North and West lines of said Section 10.

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- (4) That the applicant further seeks to utilize said well as a replacement injection well to their South Hobbs Grayburg-San Andres Unit Well No. 77, the surface location being 1980 feet from the North and West lines of said Section 10, which was authorized, in part, by Division Order Nos. R-4934-B and R-4934-C, said South Hobbs Grayburg-San Andres Unit Well No. 77 to be converted from a producing well to an injection well.
- (5) That said South Hobbs Grayburg-San Andres Unit Well No. 77 is unsuitable for conversion to an injection well on account of its undesirable subsurface location being approximately 575 feet to the northeast of its surface location, which would result in a less efficient asymmetrical 5-spot injection pattern in the immediate area of concern and because of unretrievable "junk" in its wellbore.
- (6) That the aforesaid South Hobbs Grayburg-San Andres Unit Well No. 173 should be approved as a water injection well and should be subject to the provisions of Division Order No. R-4934, as amended, which authorized said pressure maintenance project and to those pertaining to the authorization of the aforesaid South Hobbs Grayburg-San Andres Unit Well No. 77 to inject into the Hobbs Grayburg-San Andres Pool.
- (7) That the applicant should be required to determine the subsurface location of the kick-off point prior to directional drilling, and to determine the subsurface location of the bottom of the hole by means of a continuous multi-shot directional survey conducted subsequent to said directional drilling.
- (8) That approval of the subject application will better enable the applicant to complete a more efficient water injection pattern in its South Hobbs Grayburg-San Andres Unit Pressure Maintenance Project, will afford the applicant the opportunity to produce its just and equitable share of the oil in the Hobbs Grayburg-San Andres Pool, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Amoco Production Company, is hereby authorized to directionally drill its South Hobbs Grayburg-San Andres Unit Well No. 173, the unorthodox surface location being 1978 feet from the North line and 1223 feet from the West line of Section 10, Township 19 South, Range 38 East, NMPM, South Hobbs Grayburg-San Andres Unit Pressure

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Maintenance Project, Hobbs Grayburg-San Andres Pool, Lea County, New Mexico, in such a manner as to bottom said well within 75 feet of a point 1980 feet from the North and West lines of said Section 10.

PROVIDED HOWEVER, that prior to directional drilling, the operator shall determine the subsurface location of the kick-off point; and

PROVIDED FURTHER, that subsequent to the above-described directional drilling, a continuous multi-shot directional survey shall be made of the wellbore from total depth to the kick-off point with shot points not more than 100 feet apart; that the operator shall cause the surveying company to forward a copy of the survey report directly to the Santa Fe office of the Division, P. O. Box 2088, Santa Fe, New Mexico, and that the operator shall notify the Division's Hobbs District Office of the date and time said survey is to be commenced.

- That Form C-105 shall be filed in accordance with (2) Division Rule 1105 and the operator shall indicate thereon true vertical depths in addition to measured depths.
- That said South Hobbs Grayburg-San Andres Unit Well No. 173, as described above, is to be a replacement injection well to applicant's South Hobbs Grayburg-San Andres Unit Well No. 77, surface location being 1980 feet from the North and West lines of said Section 10.
- That the operation of and injection into the subject (4)South Hobbs Grayburg-San Andres Unit Well No. 173 shall be subject to the provisions of Division Order No. R-4934, as amended, which authorized the South Hobbs Grayburg-San Andres Unit Pressure Maintenance Project and to those provisions of said Division Order No. R-4934, as amended, pertaining to the injection authorization of said South Hobbs Grayburg-San Andres Unit Well No. 77.
- 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

OLL CONSERVATION DIVISION JOE D. RAMEY

Direct

Director

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