Extered December 18, 1981

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. 7401 Order No. R-6858

APPLICATION OF MORRIS R. ANTWEIL FOR AN UNORTHODOX OIL WELL LOCATION, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on November 4, 1981, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 18th day of December, 1981, 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, Morris R. Antweil, seeks authority to drill a Grayburg-San Andres oil well at an unorthodox location 2410 feet from the North line and 330 feet from the West line of Section 21, Township 18 South, Range 38 East, NMPM, Hobbs Pool, Lea County, New Mexico, and to dedicate thereto in the Hobbs Pool the SW/4 NW/4 of said Section 21.
- (3) That the SW/4 NW/4 of said Section 21 is offset to the west, southwest, and south by lands within the North Hobbs Grayburg-San Andres Unit Area operated by Shell Oil Company, and upon which secondary recovery operations are being conducted.
- (4) That Shell Oil Company appeared at the hearing and objected to the proposed unorthodox location inasmuch as it is planned to place the well directly offsetting the proposed unorthodox location to the west on water injection, and approval of the subject application without penalty, according to Shell, would cause oil to migrate off the North Hobbs Grayburg-San Andres Unit Area onto Antweil's property for production at the proposed unorthodox location, thereby impairing the Unit Owners' correlative rights.

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- (5) That the proposed location is 100 feet south of a well drilled at a point 2310 feet from the North line and 330 feet from the West line of Section 21 by the applicant in 1952, said well having been plugged and abandoned as a dry hole after having recovered only oil-cut mud, water-cut mud, and oil and gas-cut mud on four separate drill stem tests in the Grayburg and San Andres formations, and swabbing dry or swabbing sulphur water only from three attempted completion intervals, one each in the Grayburg formation, Upper San Andres formation, and Lower San Andres formation.
- (6) That the structural dip in the general area in question is to the Northeast, and it is reasonable to assume that those lands in the SW/4 NW/4 of Section 21 lying North and East of the aforesaid dry hole are not productive in the Grayburg or San Andres formation.
- (7) That assuming that the productive limits of the Grayburg and San Andres formations, going Northeast from the main body of the pool, reach to but do not extend beyond the surface location of the aforesaid dry hole, then there are approximately 5.8 acres of productive formation in the SW/4 NW/4 of Section 21 belonging to applicant.
- (8) That the unorthodox location requested by the applicant should be approved in order to permit him to produce his share of the oil and gas in the Hobbs Pool, thereby preventing waste, but the production from said well should be curtailed in order to protect the correlative rights of the owners of offsetting property.
- (9) That the applicant has proposed a formula for determining the penalty which should be assessed against his proposed well, said formula being a combination of percentage impingement factors on offsetting properties on a footage basis on a north/south axis and on an east/west axis compared to a standard location, as well as a percentage impingement factor on offsetting properties on an acreage-drainage-beyond-lease-line basis compared to a standard location, and which in the case at hand would yield an allowable penalty factor of 12.1 percent and an allowable of 87.9 percent of top allowable for the Hobbs Pool.
- (10) That the aforesaid formula has been utilized by the Division on previous occasions and has been found to be fair and equitable in certain cases involving unorthodox locations, but does not take into account the non-productive acreage which may be included in the proration unit dedicated to a well drilled at an unorthodox location.

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- (11) That in the instant case where only 5.8 acres of productive lands may be attributed to the well, the aforesaid formula yielding 87.9 percent of top allowable for the pool imposes an insufficient penalty on the proposed location and does not protect correlative rights, and should not be used.
- (12) That in the absence of any other formula yielding a more equitable penalty, a straight productive acreage ratio should be applied in this case and the allowable factor for a well drilled at the proposed location should be (5.8 ÷ 40) x 100, or 14.5 percent.
- (13) That any such well drilled at said location should be permitted to produce 14.5 percent of its productivity or 14.5 percent of the top unit allowable for the Hobbs Pool, whichever is less, provided however, that a reasonable minimum allowable should be provided in order to avoid premature abandonment and prevent waste.
- (14) That ten barrels per day is a reasonable minimum allowable and should be established for a well drilled at the subject unorthodox location.
- (15) That approval of the application in accordance with the above Findings is in the interest of conservation, will prevent waste, and protect correlative rights.

IT IS THEREFORE ORDERED:

- (1) That the applicant, Morris R. Antweil, is hereby authorized to drill a well to test the Grayburg and San Andres formations at an unorthodox location 2410 feet from the North line and 330 feet from the East line of Section 21, Township 18 South, Range 38 East, NMPM, Hobbs Pool, Lea County, New Mexico.
- (2) That said well, if completed as a producer from the Hobbs Pool, shall have an allowable factor of 14.5 percent of its productivity or 14.5 percent of top unit allowable for the Hobbs Pool, whichever is less, provided however, that said allowable factor shall not be imposed if it results in an allowable of less than ten barrels per day.
- (3) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

JOE D. RAMEY, Director

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