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. 9903 ORDER NO. R-9167

APPLICATION OF YATES PETROLEUM CORPORATION FOR DIRECTIONAL DRILLING AND AN UNORTHODOX GAS WELL LOCATION, EDDY COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on April 18, 1990, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>lst</u> day of May, 1990, 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, Yates Petroleum Corporation, seeks authority to directionally drill its proposed Gazelle "AHG" Federal Com Well No. 1 from a surface location 2280 feet from the North line and 1180 feet from the West line (Unit E) of Section 15, Township 20 South, Range 29 East, NMPM, Eddy County, New Mexico, wherein the applicant proposes to deviate said well to within 150 feet of the following targeted locations:
 - a) in the Strawn formation 1815 feet from the South line and 2145 feet from the East line (Unit J) of said Section 15; wherein either the S/2 (320-acre gas unit) will be dedicated to the wellbore if the completed interval is determined to be within the

Case No. 9903 Order No. R-9167 Page No. 2

East Burton Flat-Strawn Gas Pool or the NW/4 SE/4 (40-acre oil unit) would be dedicated if it is determined to be within the South Parkway-Strawn Pool; and,

- b) in the Morrow formation 1468 feet from the South line and 1573 feet from the East line (Unit J) of said Section 15 (which is an unorthodox gas well location), said well to be dedicated to the S/2 of said Section 15 forming a standard 320-acre gas spacing and proration unit for the Undesignated Burton Flat-Morrow Gas Pool.
- (3) At the time of the hearing, the applicant requested that the surface location be moved as to avoid a particular surface feature at the previously requested location. Insofar as the amended surface location, being 2250 feet from the North line and 1160 feet from the West line (Unit E) of said Section 15 will not change the downhole completions, the applicant's request should be approved.
- (4) Only portions of each target zone are unorthodox according to the applicable spacing rules for the respective pool.
- (5) Within the S/2 of said Section 15 the Potash Area, governed under Division Order No. R-111-P, encompasses the SE/4 SW/4 and SE/4; however, the proposed surface location lies outside of this area and the proposed bottomhole location lies within a designated Life-of-Mine Reserve (LMR), as described in the provisions of said Order No. R-111-P, Subpart G.
- (6) The applicant is requesting directional drilling for the purposes of meeting the requirements of part G(e)(b) of said Order No. R-111-P which states that "a deep well shall be drilled no closer than one-half (1/2) mile from the L.M.R.)".
- (7) No offset operator or interested party objected to the proposed directional drilling and unorthodox location.
- (8) Approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas and/or oil in the affected pools, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells and will otherwise prevent waste and protect correlative rights.

Case No. 9903 Order No. R-9167 Page No. 3

- (9) The applicant should be required to determine the subsurface location of the kick-off point in the wellbore prior to directional drilling and should subsequently be required to conduct an accurate wellbore survey during or upon completion of drilling operations from a kick-off point to total depth to determine its true depth and course.
- (10) The applicant should be required to notify the supervisor of the Artesia 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 Artesia offices of the Division upon completion.

IT IS THEREFORE ORDERED THAT:

- (1) The applicant, Yates Petroleum Corporation, for an unorthodox well is hereby authorized to directionally drill its proposed Gazelle "AHG" Federal Com Well No. 1 from a surface location 2250 feet from the North line and 1160 feet from the West line of Section 15, Township 20 South, Range 29 East, NMPM, Eddy County, New Mexico, wherein the applicant proposes to deviate said well to within 150 feet of the following targeted locations:
 - a) in the Strawn formation 1815 feet from the South line and 2145 feet from the East line (Unit J) of said Section 15; wherein either the S/2 (320-acre gas unit) will be dedicated to the wellbore if the completed interval is determined to be within the East Burton Flat-Strawn Gas Pool or the NW/4 SE/4 (40-acre oil unit) will be dedicated if it is determined to be within the South Parkway-Strawn Pool; and,
 - b) in the Morrow formation 1468 feet from the South line and 1573 feet from the East line (Unit J) of said Section 15 (which is an unorthodox gas well location), said well to be dedicated to the S/2 of said Section 15 forming a standard 320-acre gas spacing and proration unit for the Undesignated Burton Flat-Morrow Gas Pool.

<u>PROVIDED HOWEVER THAT</u>, prior to the above-described directional drilling, the applicant shall establish the location of the kick-off point by conducting a continuous multi-shot directional survey of the well.

Case No. 9903 Order No. R-9167 Page No. 4

PROVIDED FURTHER THAT, during or upon completion of 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 Artesia 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 Artesia offices of the Division upon completion.
- (3) Form C-105 shall be filed in accordance with Division Rule 1105 and the operator shall indicate thereon true vertical depth in addition to measured depths.
- (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