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. 9830 Order No. R-9097

APPLICATION OF STRATA PRODUCTION COMPANY FOR AN UNORTHODOX GAS WELL LOCATION, HORIZONTAL DIRECTIONAL DRILLING PILOT PROJECT AND SPECIAL OPERATING RULES THEREFOR, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

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This cause came on for hearing at 8:15 a.m. on December 13, 1989, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this <u>9th</u> day of January, 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, Strata Production Company, seeks authority to initiate a horizontal directional drilling pilot project in the SE/4 of Section 18, Township 26 South, Range 25 East, NMPM, Eddy County, New Mexico, forming a standard 160-acre gas spacing and proration unit in the Bone Spring formation, by drilling its Yeso Hills Federal Well No. 1 in the following manner: CASE NO. 9830 Order No. R-9097 Page -2-

> Commence drilling at an unorthodox surface location 460 feet from the South line and 1780 feet from the East line (Unit O) of said Section 18, drilling to a true vertical depth of approximately 4900 feet in the Bone Spring formation whereby the formation will be evaluated to determine the proper direction for the horizontal extension (either north, east, or northeast), plug back to a depth of approximately 4375 feet, and commence a medium radius curve in the predetermined direction to encounter the Bone Spring formation at approximately 4680 feet at which point the well will be drilled horizontally within the Bone Spring formation a distance of approximately 1200-1500 feet.

(3) The applicant further seeks special rules and provisions within the pilot project area including the designation of a prescribed area limiting the horizontal displacement of the proposed wellbore such that it cannot be closer than 660 feet from the north, east, or west lines of the subject proration unit nor closer than 460 feet from the south line of said unit.

(4) Through its evidence and testimony, the applicant demonstrated that the proposed horizontal wellbore, which is experimental in nature, should encounter a substantially greater number of natural fractures within the Bone Spring formation than would a conventional wellbore, which may ultimately result in the recovery of a greater amount of gas from the subject proration unit, thereby preventing waste.

(5) According to the testimony presented, the proposed unorthodox surface location is necessitated by archeological restrictions.

(6) The evidence presented indicates that in its traverse of the Bone Spring formation, the subject wellbore may encroach upon the 660-foot setback requirement only slightly in the South direction.

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(7) The applicant is the operator of the affected acreage to the South as described above, and no other offset operator and/or interest owner appeared at the hearing in opposition to the application.

(8) Approval of the proposed pilot project should result in the recovery of an additional amount of gas from the subject proration unit which may not otherwise be recovered, thereby preventing waste, and will not violate correlative rights provided that the well is drilled as per the bottomhole location restrictions as described above.

(9) The applicant should be required to conduct a directional survey on the vertical portion of the wellbore prior to commencing directional drilling operations, and on the horizontal portion of the wellbore subsequent to directional drilling operations in order that the direction, extent, and terminus of said wellbore may be determined to be in compliance with the proposed bottomhole location.

(10) The applicant should further be required to submit copies of said directional surveys to the Santa Fe and Artesia district offices of the Division.

(11) The applicant should notify the supervisor of the Artesia district office of the Division of the date and time of commencement of directional drilling operations and of the conductance of any directional surveys on the proposed well in order that these operations may be witnessed.

IT IS THEREFORE ORDERED THAT:

(1) The application of Strata Production Company for a horizontal directional drilling pilot project in the SE/4 of Section 18, Township 26 South, Range 25 East, NMPM, Eddy County, New Mexico, is hereby approved.

(2) The applicant is further authorized to drill its Yeso Hills Federal Well No. 1 at the following unorthodox surface location and in the following manner: CASE NO. 9830 Order No. R-9097 Page -4-

> Commence drilling at an unorthodox surface location 460 feet from the South line and 1780 feet from the East line (Unit O) of said Section 18, drilling to a true vertical depth of approximately 4900 feet in the Bone Spring formation whereby the formation will be evaluated to determine the proper direction for the horizontal extension (either north, east, or northeast), plug back to a depth of approximately 4375 feet, and commence a medium radius curve in the predetermined direction to encounter the Bone Spring formation at approximately 4680 feet at which point the well will be drilled horizontally within the Bone Spring formation a distance of approximately 1200-1500 feet.

<u>PROVIDED HOWEVER THAT</u>, the SE/4 of said Section 18 shall be dedicated to the subject well forming a standard 160-acre gas spacing and proration unit for said Bone Spring formation, and;

PROVIDED FURTHER THAT, the horizontal portion of the subject well shall be located no closer than 660 feet from the north, east, and west lines of the subject proration unit, nor closer than 460 feet from the south line of the subject proration unit.

(3) The applicant shall be required to conduct a directional survey on the vertical portion of the wellbore prior to commencing directional drilling operations, and on the horizontal portion of the wellbore subsequent to directional drilling operations in order that the direction, extent, and terminus of said wellbore may be determined to be in compliance with the proposed bottomhole location.

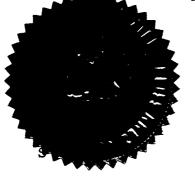
(4) The applicant shall further be required to submit copies of said directional surveys to the Santa Fe and Artesia district offices of the Division.

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(5) The applicant shall notify the supervisor of the Artesia district office of the Division of the date and time of commencement of directional drilling operations and of the conductance of any directional surveys on the proposed well in order that these operations may be witnessed.

(6) 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

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WILLIAM J. (LEMAY Director