Entered November 30, 1982 AR

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. 7697 Order No. R-7146

APPLICATION OF OXOCO PRODUCTION CORPORATION FOR DESIGNATION OF A TIGHT FORMATION, SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on September 29, 1982, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this <u>30th</u> day of November, 1982, 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, Oxoco Production Corporation, requests that the Division in accordance with Section 107 of the Natural Gas Policy Act, and 18 C.F.R. §271.703 recommend to the Federal Energy Regulatory Commission that the Mesaverde formation underlying the following lands situated in San Juan County, New Mexico, hereinafter referred to as the Mesaverde formation, be designated as a tight formation in said Federal Energy Regulatory Commission's regulations:

> TOWNSHIP 32 NORTH, RANGE 8 WEST, NMPM Sections 7 and 8: All Sections 17 through 20: All

Containing a total of 3,229 acres, more or less.

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(3) That the Mesaverde formation underlies all of the above-described lands; that the formation consists of marine and non-marine deposits about 2000 feet thick, composed of light gray very fine to fine grained sands well cemented, often argillaceous matrix, with poor visible porosity and numerous coals, silts, and shales; and that the top of such formations found at an average depth of 4460 feet below the surface of the area set forth in Finding No. (2) above.

(4) That the type section for the Mesaverde formation for the proposed tight formation designation is found at a depth of approximately 4460 feet to 6460 feet on the Gamma Ray Neutron Log from the Oxoco Trail Canyon Well No. 3 located in Unit I of Section 7, Township 32 North, Range 8 West, San Juan County, New Mexico.

(5) That five wells have been completed in the Mesaverde formation within the proposed area none of which produced measurable quantities of natural gas prior to stimulation.

(6) That the Mesaverde formation underlying the abovedescribed lands has been penetrated by one other well, which did not produce natural gas from the Mesaverde formation.

(7) That based on an analysis of available data from existing wells within the proposed area and utilizing generally and customarily accepted petroleum engineering techniques and measurements:

- (a) the estimated average <u>in situ</u> gas permeability throughout the pay section of the Mesaverde formation is expected to be 0.1 millidarcy or less; and
- (b) the stabilized production rate, against atmospheric pressure of wells completed for production in the Mesaverde formation, without stimulation, is not expected to exceed production levels determined by reference to well depth, as found in the table set out in 18 C.F.R. \$271.703(2)
 (B) of the regulations; and
- (c) no well drilled into the Mesaverde formation is expected to produce, without stimulation, more than five barrels of crude oil per day.

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(8) That within the Blanco-Mesaverde Pool are large areas of extensive development and large areas of very limited development.

(9) That the Mesaverde formation has been approved for infill drilling which permits the subject area to be developed with one Mesaverde well on each quarter section or 160-acre tract.

(10) That the area for which a tight formation designation is herein sought is one of limited development comprised of approximately 10 320-acre proration units of which 5 are developed by a single well all of which are producers.

(11) That no proration unit within the proposed area contains an infill well.

(12) That the evidence presented in this case demonstrated that the application of incentive pricing is reasonably necessary to stimulate further development of the proposed tight formation underlying the area described in Paragraph 2 hereof.

(13) That within the proposed area there is a recognized aquifer being the Ojo Alamo, found at an average depth of 2250 feet or approximately, 3400 feet above the Mesaverde formation.

(14) That existing State of New Mexico and Federal Regulations relating to casing and cementing of wells will assure that development of the Mesaverde formation will not adversely affect the said aquifer.

(15) That the Mesaverde formation should be recommended to the Federal Energy Regulatory Commission for designation as a tight formation.

IT IS THEREFORE ORDERED:

(1) That it be and hereby is recommended to the Federal Energy Regulatory Commission pursuant to Section 107 of the Natural Gas Policy Act of 1978, and 18 C.F.R. \$271.703 of the regulations that the Mesaverde formation underlying the following described lands in San Juan County, New Mexico, be designated as a tight formation:

> TOWNSHIP 32 NORTH, RANGE 8 WEST, NMPM Sections 7 and 8: All Sections 17 through 20: All

Containing a total of 3,229 acres, more or less.

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(2) 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 amer JOE D. RAMEY Director

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