

Entered January 11, 1982
JBR

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. 7317
Order No. R-6883

APPLICATION OF FOUR CORNERS GAS
PRODUCERS ASSOCIATION FOR DESIG-
NATION OF A TIGHT FORMATION, SAN
JUAN AND RIO ARriba COUNTIES, NEW
MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 29 and August 26, 1981, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 11th day of January, 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, Four Corners Gas Producers Association, 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 Dakota formation underlying the following lands situated in San Juan and Rio Arriba Counties, New Mexico, hereinafter referred to as the Dakota formation, be designated as a tight formation in said Federal Energy Regulatory Commission's regulations:

TOWNSHIP 30 NORTH, RANGE 2 WEST, NMPM
Sections 1 through 36: All

TOWNSHIP 30 NORTH, RANGE 3 WEST, NMPM
Sections 1 through 36: All

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TOWNSHIP 30 NORTH, RANGE 4 WEST, NMPM
Sections 1 through 36: All

TOWNSHIP 30 NORTH, RANGE 5 WEST, NMPM
Sections 1 through 36: All

TOWNSHIP 30 NORTH, RANGE 6 WEST, NMPM
Sections 1 through 36: All

TOWNSHIP 30 NORTH, RANGE 7 WEST, NMPM
Sections 1 through 36: All

TOWNSHIP 31 NORTH, RANGE 2 WEST, NMPM
Sections 1 through 36: All

TOWNSHIP 31 NORTH, RANGE 3 WEST, NMPM
Sections 1 through 36: All

TOWNSHIP 31 NORTH, RANGE 4 WEST, NMPM
Sections 1 through 36: All

TOWNSHIP 31 NORTH, RANGE 5 WEST, NMPM
Sections 1 through 36: All

TOWNSHIP 31 NORTH, RANGE 6 WEST, NMPM
Sections 1 through 36: All

TOWNSHIP 31 NORTH, RANGE 7 WEST, NMPM
Sections 1 through 36: All

Containing a total of 270,260 acres, more or less.

(3) That the area proposed for tight formation designation lies within the horizontal limits of the Basin-Dakota Gas Pool, which is a very large area previously defined and described by the Oil Conservation Division in San Juan and Rio Arriba Counties.

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

(5) That within the Basin-Dakota Gas Pool are large areas of extensive development and large areas of very limited development.

(6) That the area for which a tight formation designation is sought is one of very limited development being comprised of

approximately 432 320-acre proration units of which 66 are developed by one well and two by one well plus an infill well.

(7) That the area proposed for tight formation designation is a largely undeveloped exploratory area.

(8) That the Dakota formation underlies all of the above described lands; that the upper Dakota sand consists of barrier beach deposits about 40 to 60 feet thick, composed of fine grained, quartz-rich sandstones characterized by an increase in grain size upward and low angle crossbedding. The next highest unit is transitional between fluvial and marine sedimentation containing dark carbonaceous shales, thin mudstones, siltstones and sandstones. The basal Dakota consists of carbonaceous shales, thin coal seams, siltstones, and thin channel sandstone.

(9) That the top of the Dakota formation is found at an average depth of 7950 feet below the surface of the area set out in Finding No. (2) above, and has approximately 250 feet of gross thickness.

(10) That the type section for the Dakota formation for the proposed tight formation designation is found at a depth of from approximately 7852 feet to 8084 feet on the log from the Northwest Pipeline Corporation Rosa Unit Well No. 68 located in Unit L of Section 17, Township 31 North, Range 5 West, Rio Arriba County, New Mexico.

(11) That the technical evidence presented in this case demonstrated that the predominant percentage of wells which may be completed in the Dakota formation within the proposed tight formation area may reasonably be presumed to exhibit permeability, gas productivity, or crude oil productivity not in excess of the following parameters:

- (a) average in situ gas permeability throughout the pay section of 0.1 millidarcy; and
- (b) stabilized production rates, without stimulation, against atmospheric pressure, as found in the table set out in 18 C.F.R. §271.703(c)(2)(B) of the regulations; and
- (c) production of more than five barrels of crude oil per day.

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(12) That within the proposed area there is a recognized aquifer being the Ojo Alamo, found at an average depth of 2385 feet or approximately 5565 feet above the Dakota formation.

(13) That existing State of New Mexico and Federal Regulations relating to casing and cementing of wells will assure that development of the Dakota formation will not adversely affect any overlying aquifers.

(14) That in the instant case the Division accepted evidence on economics within this area.

(15) That the economic data was highly variable and of no value in reaching a decision relative to this area.

(16) That based on technical data alone the area described on Exhibit "A" to this order should be recommended to the Federal Energy Regulatory Commission for designation as a tight formation.

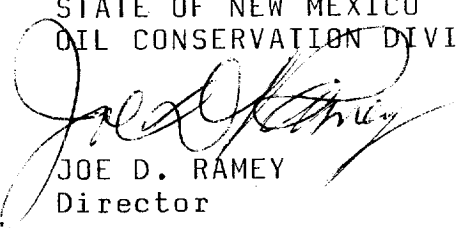
IT IS THEREFORE ORDERED:

(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 Dakota formation underlying those lands in San Juan and Rio Arriba Counties, New Mexico, described on Exhibit "A" to this order, be designated as a tight formation.

(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
OIL CONSERVATION DIVISION


JOE D. RAMEY
Director

S E A L
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