

Entered July 16, 1981
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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. 7252
Order No. R-6726

APPLICATION OF FOUR CORNERS GAS
PRODUCERS ASSOCIATION FOR
DESIGNATION 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 May 6, 1981,
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 16th day of July, 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, 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 24 NORTH, RANGE 7 WEST, NMPM
Sections 5 through 8: All
Sections 17 through 20: All
Sections 29 through 32: All

TOWNSHIP 24 NORTH, RANGE 8 WEST, NMPM
Sections 1 through 36: All

TOWNSHIP 24 NORTH, RANGE 9 WEST, NMPM
Sections 1 through 36: All

TOWNSHIP 24 NORTH, RANGE 10 WEST, NMPM
Sections 1 through 36: All

TOWNSHIP 25 NORTH, RANGE 7 WEST, NMPM
Sections 5 through 8: All
Sections 17 through 20: All
Sections 29 through 32: All

TOWNSHIP 25 NORTH, RANGE 8 WEST, NMPM
Sections 1 through 36: All

TOWNSHIP 25 NORTH, RANGE 9 WEST, NMPM
Sections 1 through 3: All
Sections 10 through 15: All
Sections 22 through 27: All
Sections 31 through 36: All

TOWNSHIP 25 NORTH, RANGE 10 WEST, NMPM
Sections 8 through 10: All
Sections 14 through 17: All
Sections 20 through 23: All
Sections 26 through 36: All

Containing a total of 135,040 acres, more or less.

(3) That the Dakota formation underlies all of the above described lands; that the formation 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; that the top of such formation is found at an average depth of 6350 feet below the surface of the area set out in Finding No. (2) above; and that the thickness of such formation is from 200 to 350 feet within said area.

(4) That the type section for the Dakota formation for the proposed tight formation designation is found at a depth of from approximately 6048 feet to 6338 feet on the Induction Electrical log dated February 17, 1975, from the Universal Resources Grigsby Federal Well No. 4 located in Unit L of Section 8, Township 25 North, Range 10 West, San Juan and Rio Arriba Counties, New Mexico.

(5) That the following described wells produce natural

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gas from the Dakota formation within the proposed area:

Dugan Production Company, M.F. No. 1	NW/4 SW/4, Section 18, Township 24 North, Range 9 West
Dugan Production Company, April Surprise No. 2	NW/4 SW/4, Section 30, Township 24 North, Range 9 West
Kay Kimball, Liberman No. 1	SE/4 SE/4, Section 5, Township 25 North, Range 7 West
Merrion & Bayless, Stephenson No. 1	SW/4 NE/4, Section 17, Township 25 North, Range 8 West
Merrion & Bayless, South Huerfano No. 1 (Previously the Pilgram No. 1)	SW/4 SW/4, Section 35, Township 25 North, Range 8 West
El Paso Natural Gas Company, Nageezi No. 4	NW/4 NW/4, Section 1, Township 25 North, Range 9 West
El Paso Natural Gas Company, Nageezi No. 2	NE/4 SE/4, Section 1, Township 25 North, Range 9 West
El Paso Natural Gas Company, Nageezi No. 5	SW/4 NW/4, Section 12, Township 25 North, Range 9 West
El Paso Natural Gas Company, Nageezi No. 3	NE/4 NE/4, Section 13, Township 25 North, Range 9 West
El Paso Natural Gas Company, Hostein Yazza No. 1	NW/4 SW/4, Section 26, Township 25 North, Range 9 West
Petroleum Corporation of Texas, Mobil Rudman No. 1	NW/4 NW/4, Section 27, Township 25 North, Range 9 West
Universal Resources, Grigsby Federal No. 3	NW/4 NW/4, Section 8, Township 25 North, Range 10 West

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Universal Resources, Grigsby
Federal No. 4

NW/4 SW/4, Section 8,
Township 25 North, Range
10 West

(6) That the Dakota formation underlying the above described lands has been penetrated by several other wells, none of which produce natural gas in commercial quantities from the Dakota formation.

(7) That the evidence presented in this case demonstrated that no well formerly or currently completed in the Dakota formation within the proposed area exhibited permeability, gas productivity, or crude oil productivity 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.

(8) That based on 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 in situ gas permeability throughout the pay section of the Dakota 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 Dakota 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(c)(2)(B) of the regulations; and
- (c) No well drilled into the formation is expected to produce, without stimulation, more than five barrels of crude oil per day.

(9) That within the proposed area there is a recognized aquifer being the Ojo Alamo, found at depths of from 500 feet to 1100 feet or approximately 5200 feet above the Dakota formation.

(10) 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 said aquifers.

(11) That the portion of the Dakota formation described herein is currently authorized for development by infill drilling as defined in 18 C.F.R. §271.703(b)(6) of the regulations.

(12) That no infill drilling has occurred within the area proposed for tight formation designation.

(13) That while the Dakota formation has been extensively drilled and infill drilled to the North of the proposed area development therein has been minimal.

(14) That development of the proposed tight formation area has been inhibited by the poorer quality of the Dakota pay and the poorer prospect of commercial production therein.

(15) That that portion of the Dakota formation proposed for tight formation designation cannot be reasonably developed absent the incentive price established in 18 C.F.R. §271.703(a).

(16) That the Dakota formation within the proposed area 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 the following described lands in San Juan and Rio Arriba Counties, New Mexico, be designated as a tight formation:

TOWNSHIP 24 NORTH, RANGE 7 WEST, NMPM

Sections 5 through 8: All

Sections 17 through 20: All

Sections 29 through 32: All

TOWNSHIP 24 NORTH, RANGE 8 WEST, NMPM

Sections 1 through 36: All

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TOWNSHIP 24 NORTH, RANGE 9 WEST, NMPM
Sections 1 through 36: All

TOWNSHIP 24 NORTH, RANGE 10 WEST, NMPM
Sections 1 through 36: All

TOWNSHIP 25 NORTH, RANGE 7 WEST, NMPM
Sections 5 through 8: All
Sections 17 through 20: All
Sections 29 through 32: All

TOWNSHIP 25 NORTH, RANGE 8 WEST, NMPM
Sections 1 through 36: All

TOWNSHIP 25 NORTH, RANGE 9 WEST, NMPM
Sections 1 through 3: All
Sections 10 through 15: All
Sections 22 through 27: All
Sections 31 through 36: All

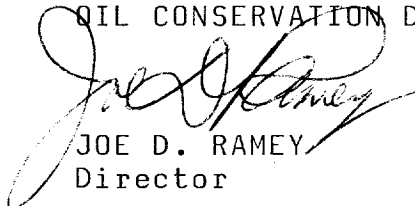
TOWNSHIP 25 NORTH, RANGE 10 WEST, NMPM
Sections 8 through 10: All
Sections 14 through 17: All
Sections 20 through 23: All
Sections 26 through 36: All

Containing a total of 135,040 acres, more or less.

(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

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