

Entered September 22, 1980
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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. 6984
Order No. R-6475

APPLICATION OF HARVEY E. YATES
COMPANY FOR DESIGNATION OF A
TIGHT FORMATION, LEA COUNTY,
NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 23, 1980,
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 22nd day of September, 1980, 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, Harvey E. Yates Company, requests
that the Division in accordance with Section 107 of the Natural
Gas Policy Act, and 18 C.F.R. §271.705 of the interim regula-
tions recommend to the Federal Energy Regulatory Commission
that the Mississippian formation underlying the following
described lands situated in Lea County, New Mexico, hereinafter
referred to as the Austin-Mississippian formation, be designated
as a tight formation in said Federal Energy Regulatory Commis-
sion's regulations:

Township 13 South, Range 35 East, NMPM
Township 13 South, Range 36 East, NMPM
Township 14 South, Range 35 East, NMPM
Township 14 South, Range 36 East, NMPM
Township 15 South, Range 35 East, NMPM
Township 15 South, Range 36 East, NMPM

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containing 138,240 acres, more or less.

(3) That the Austin-Mississippian formation underlies all of the above described lands; that the formation consists of a shallow water limestone; that the top of such formation is found at depths of from 13,200 feet to 13,300 feet within the area set out in Finding No. (2) above; and that the thickness of such formation is from 200 to 300 feet within said area.

(4) That the type section for the "Austin" Mississippian formation for the proposed tight sand designation is found at a depth of from approximately 13,180 feet to 13,494 feet on the Gamma Ray-Neutron log of the Phillips Petroleum Company Austin Well No. 1 located in Unit M of Section 17, Township 14 South, Range 36 East, Lea County, New Mexico.

(5) That the following wells produce or have produced natural gas from the Austin-Mississippian formation within the proposed area:

Harvey E. Yates Company
Austin Monteith No. 1

1650 feet from South line and
1980 feet from West line of
Section 8, Township 14 South,
Range 36 East, NMPM

Southern Union Exploration Company
State 17 No. 1

1980 feet from North line and
1980 feet from West line of
Section 17, Township 14 South,
Range 36 East, NMPM

Yates Petroleum Corporation
Barbee LL No. 1

1980 feet from North line and
1980 feet from East line of
Section 18, Township 14 South,
Range 36 East, NMPM

Adobe Oil Corporation
Hannah No. 1

1980 feet from North line and
660 feet from East line of
Section 17, Township 14 South,
Range 36 East, NMPM

Phillips Petroleum Company
Austin No. 1

661 feet from South line and
661 feet from West line of
Section 17, Township 14 South,
Range 36 East, NMPM

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Adobe Oil Corporation
State 16 No. 1

990 feet from South line and
660 feet from West line of
Section 16, Township 14 South,
Range 36 East, NMPM

Adobe Oil Corporation
State 16 No. 2

1980 feet from North line and
1980 feet from West line of
Section 16, Township 14 South,
Range 36 East, NMPM

(6) That the Austin-Mississippian formation underlying the above described lands has been penetrated by a number of other wells, none of which produced natural gas in commercial quantities from the Austin-Mississippian or any other formation.

(7) That the evidence presented in this case demonstrated that no well formerly or currently completed in the Austin-Mississippian 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, against atmospheric pressure, as found in the table set out in 18 C.F.R. §271.705(b)(i)(ii) of the interim 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 Austin-Mississippian formation is expected to be 0.1 millidarcy or less; and
- (b) The stabilized production rate, against atmospheric pressure, of wells contemplated for production in the Austin-Mississippian formation,

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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. §271.705(b)(i)(ii) of the interim regulations; and

- (c) No well drilled into the formation is expected to produce more than five barrels of crude oil per day.

(9) That within the proposed area there are two recognized aquifers being the Ogallala, a fresh water aquifer found at depths of from 60 feet to 300 feet, and the Santa Rosa, a brackish water aquifer found at depths of from 1000 feet to 1200 feet.

(10) That existing State of New Mexico and Federal Regulations relating to casing and cementing of wells will assure that development of the Austin-Mississippian formation will not adversely affect said water zones.

(11) That the Austin-Mississippian formation, or any portion thereof, as described herein, is not currently being developed by infill drilling as defined in 18 C.F.R. §271.703(b)(6) of the final regulations as promulgated by FERC Order No. 99.

(12) That the Austin-Mississippian 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. §271.705 of the interim regulations, and 18 C.F.R. §271.703 of the final regulations that the Austin-Mississippian formation underlying the following described lands in Lea County, New Mexico, be designated as a tight formation:

Township 13 South, Range 35 East, NMPM
Township 13 South, Range 36 East, NMPM
Township 14 South, Range 35 East, NMPM
Township 14 South, Range 36 East, NMPM
Township 15 South, Range 35 East, NMPM
Township 15 South, Range 36 East, NMPM

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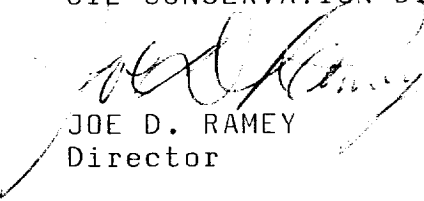
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containing 138,240 acres, more or less.

(2) That jurisdiction of this cause is hereby 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 described.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



JOE D. RAMEY
Director

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