

Entered January 11, 1982
JMR

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. 7300
Order No. R-6874

APPLICATION OF DOME PETROLEUM
CORPORATION FOR DESIGNATION OF
A TIGHT FORMATION, SANDOVAL
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 2, 1981, at Santa Fe, New Mexico, before Examiner Richard L. Stamets and was readvertised and reopened at a hearing held at 9 a.m. on October 21, 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, Dome Petroleum 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 Chacra formation underlying the following lands situated in Sandoval County, New Mexico, hereinafter referred to as the Chacra formation, be designated as a tight formation in the said Federal Energy Regulatory Commission's regulations:

TOWNSHIP 21 NORTH, RANGE 5 WEST, NMPM
Sections 6 through 8: All
Sections 16 through 22: All
Sections 26 through 36: All

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TOWNSHIP 21 NORTH, RANGE 6 WEST, NMPM

Sections 1 through 18: All
Sections 20 through 27: All
Sections 35 through 36: All

TOWNSHIP 21 NORTH, RANGE 7 WEST, NMPM

Sections 1 through 4: All
Sections 10 through 13: All

TOWNSHIP 22 NORTH, RANGE 6 WEST, NMPM

Sections 6 through 8: All
Sections 16 through 22: All
Sections 26 through 36: All

TOWNSHIP 22 NORTH, RANGE 7 WEST, NMPM

Sections 1 through 36: All

Containing 73,017.58 acres, more or less.

(3) That the Chacra formation underlies all of the above described lands; that the formation consists of fine grained and clay filled transitional shaly sands and silt stones; that the top of such formation is found at an average depth of 1658 feet below the surface of the area set forth in Finding No. (2) above; that the thickness of said formation varies with an average thickness of 300 feet within said area.

(4) That the type section for the Chacra formation for the proposed tight formation designation is found at a depth of approximately 1946 feet to 2340 feet on the Birdwell density and neutron and induction electric logs dated April 5, 1980 and September 6, 1980, respectively, of the Dome Federal 20-22-6 No. 2 Rusty Chacra located in Unit P of Section 20, Township 22 North, Range 6 West, NMPM, Sandoval County, New Mexico.

(5) That the Chacra formation underlying the above described lands has been penetrated by 70 wells of which only fourteen are currently producing natural gas in commercial quantities from the Chacra formation.

(6) 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 in situ gas permeability throughout the pay section of the Chacra formation is expected to be 0.1 millidarcy or less; and

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(b) the stabilized production rate, against atmospheric, of wells completed for production in the Chacra 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 Chacra formation is expected to produce, without stimulation, more than five barrels of crude oil per day.

(7) That the Chacra formation underlying the area described in Paragraph 2 hereof is not being developed by infill drilling.

(8) 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.

(9) That within the proposed area there is a recognized aquifer being the Ojo Alamo, found at a depth of from 500 feet to 1100 feet or approximately 1158 to 558 feet above the Chacra formation.

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

(11) That the Chacra 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 Chacra formation underlying the following described lands in Sandoval County, New Mexico, be designated as a tight formation:

TOWNSHIP 21 NORTH, RANGE 5 WEST, NMPM
Sections 6 through 8: All
Sections 16 through 22: All
Sections 26 through 36: All

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TOWNSHIP 21 NORTH, RANGE 6 WEST, NMPM

Sections 1 through 18: All

Sections 20 through 27: All

Sections 35 through 36: All

TOWNSHIP 21 NORTH, RANGE 7 WEST, NMPM

Sections 1 through 4: All

Sections 10 through 13: All

TOWNSHIP 22 NORTH, RANGE 6 WEST, NMPM

Sections 6 through 8: All

Sections 16 through 22: All

Sections 26 through 36: All

TOWNSHIP 22 NORTH, RANGE 7 WEST, NMPM

Sections 1 through 36: All

Containing 73,017.58 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 designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY
Director

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