Entered April 14, 1982

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. 7489 Order No. R-6939

APPLICATION OF CURTIS J. LITTLE FOR DESIGNATION OF A TIGHT FORMATION, RIO ARRIBA COUNTY, NEW MEXICO.

# ORDER OF THE DIVISION

# BY THE DIVISION:

This cause came on for hearing at 9 a.m. on February 17, 1982, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 14th day of April, 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, Curtis J. Little, 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 Rio Arriba County, New Mexico, hereinafter referred to as the Chacra formation, be designated as a tight formation in said Federal Energy Regulatory Commission's regulations:

# TOWNSHIP 25 NORTH, RANGE 6 WEST, NMPM Section 16: All

Section 21: All

Section 22: All

Section 23: S/2

Sections 25 through 28: Sections 34 through 36: A11 A11

Containing a total of 6,720 acres, more or less.

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- (3) That the Chacra formation underlies all of the above-described lands; that the formation consists of marine deposits about 130 feet thick, composed of very fine grained siltstone having varying amounts of shale with carbonaceous and clay infilling; and that the top of such formation is found at an average depth of 3390 feet below the surface of the area set forth in Finding No. (2) above.
- (4) That the type section for the Chacra formation for the proposed tight formation designation is found at a depth of approximately 3425 feet to 3553 feet on the Dresser Atlas Induction Electrolog dated December 19, 1981, from the Curtis J. Little Salazar Well No. 3, located in Unit C of Section 26, Township 25 North, Range 6 West, Rio Arriba County, New Mexico.
- (5) That one well produces natural gas from the Chacra formation within the proposed area being the Kimbell Oil Co. Salazar Federal Well No. 1 located 1450 feet from the South line and 1450 feet from the East line of Section 22, Township 25 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.
- (6) That the Chacra formation underlying the above-described lands has been penetrated by several other wells, none of which produced natural gas in commercial quantities from the Chacra 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 Chacra formation is expected to be 0.1 millidarcy or less; and
  - (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.

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- (8) That the Chacra formation underlying the area described in Paragraph 2 hereof is not being developed by infill drilling.
- (9) 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.
- (10) That within the proposed area there is a recognized aquifer being the Ojo Alamo, found at an average depth of 2200 feet or approximately 1200 feet above the Chacra formation.
- (11) 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 aquifer.
- (12) 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 Rio Arriba County, New Mexico, be designated as a tight formation:

# TOWNSHIP 25 NORTH, RANGE 6 WEST, NMPM Section 16: All Section 21: All Section 22: All Section 23: S/2 Sections 25 through 28: All Sections 34 through 36: All

Containing a total of 6,720 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.

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DONE at Santa Fe, New Mexico, on the day and year herein-above designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

JOE D. RAMEY

Director

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