Entered January 26, 1983

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. 7783 Order No. R-7196

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 January 19, 1983, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this <u>26th</u> day of January, 1983, 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 7 WEST, NMPM

Sections 4 through 8: All

Section 9: N/2 Section 10: N/2 -2-Case No. 7783 Order No. R-7196

TOWNSHIP 26 NORTH, RANGE 7 WEST, NMPM
Sections 5 through 9: All
Section 10: W/2
Section 14: S/2
Sections 15 through 22: All
Section 23: SW/4
Section 25: SW/4
Sections 26 through 36: All

Containing a total of 20,160 acres, more or less.

- (3) That the Chacra formation underlies all of the above-described lands; that the formation consists of marine deposits about 110 to 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 3350 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 3734 feet to 3844 feet on the Dresser Atlas Induction Gamma Ray Log dated August 7, 1982, from the Curtis J. Little Turner Well No. 2, located in Unit K of Section 25, Township 26 North, Range 7 West, Rio Arriba County, New Mexico.
- (5) That the following five wells have produced natural gas from the Chacra formation within the proposed area:

Depco, Inc., Burns Federal No. 2, NW NE, Section 5, T-26-N, R-7-W
NCRA Candado No. 23, NW NE, Section 9, T-26-N, R-7-W
NCRA Candado No. 23-A, SE SE, Section 9, T-26-N, R-7-W
NCRA Candado No. 24, SW SW, Section 9, T-26-N, R-7-W
NCRA Candado No. 24-A, SW NW, Section 9, T-26-N, R-7-W

- (6) That the Chacra formation underlying the above-described lands has been penetrated by several other wells, none of which have 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

-3-Case No. 7783 Order No. R-7196

- the stabilized production rate, against atmospheric pressure 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 (2) (B) of the regulations; and
- no well drilled into the Chacra formation is expected to produce, without stimulation, more than five barrels of crude oil per day.
- (8) That the Chacra formation underlying the area described in Paragraph (2) hereof is not being developed by infill drilling.
- That within the proposed area there is a recognized (9) aquifer being the Ojo Alamo, found at an average depth of 1920 feet or approximately 1400 feet above the Chacra formation.
- 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.
- That the Chacra formation underlying the area described in Finding No. (2) above should be recommended to the Federal Energy Regulatory Commission for designation as a tight formation.

IT IS THEREFORE ORDERED:

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 7 WEST, NMPM Sections 4 through 8: All

Section 9: N/2Section 10: N/2 -4-Case No. 7783 Order No. R-7196

TOWNSHIP 26 NORTH, RANGE 7 WEST, NMPM Sections 5 through 9: All

Section 10: W/2 Section 14: S/2

Sections 15 through 22: All

Section 23: SW/4 Section 25: SW/4

Sections 26 through 36: A11

Containing a total of 20,160 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 QIL CONSERVATION DIVISION

JOE D. RAMEY

Director

S E A L