NEW MEXICO OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

IN THE MATTER OF THE APPLICATION OF LOWRY, ET AL OPERATING ACCOUNT FOR THE ESTABLISHMENT OF POOL RULES FOR THE PETTIGREW-TOCITO (ERKAN-TOCITO) POOL, RIO ARRIBA COUNTY, NEW MEXICO; FIXING THE SPACING OF WELLS; FIXING GAS-OIL RATIOS; ESTABLISHING A CASING PROGRAM; AND RELATED MATTERS.

CASE NO. <u>537</u>

TO THE NEW MEXICO OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO.

Comes the undersigned, Lowry et al Operating Account, with offices at 616 Central Avenue, East, Albuquerque, New Mexico, by its attorney, Jason W. Kellahin, P. O. Box 361, Santa Fe, New Mexico, and petitions this honorable commission for an order, fixing by appropriate rules and regulations, rules for the development and operation of the Pettigrew-Tocito (Erkan-Tocito) Pool, Rio Arriba County, New Mexico, as now defined by Commission order or orders, and as the same may hereafter be extended, as follows:

- 1. The fixing by appropriate rules and regulations, of spacing requirements applicable to wells hereafter drilled in the Pettigrew-Tocito (Erkan-Tocito) Pool, Rio Arriba County, New Mexico, on the basis of one well on each 80-acres and setting a spacing pattern therefore with provisions for related matters, including special approval, after notice and hearing, of unorthodox well locations necessitated by the size and shape of available units or by the nature of the terrain, or for other causes.
- 2. The fixing, by appropriate order, of gas-oil ratios in such amount as the Commission may determine may be produced without waste.

3. The establishment of a casing and cementing program for the protection of shallow potable water strata or stratum from pollution.

In support of which Petitioner would show the Commission as follows:

I.

The Pettigrew-Tocito (Erkan-Tocito) Pool is located in Rio Arriba County, New Mexico, its boundaries being defined by order of this Commission, as more fully described in Exhibit A, which is attached hereto and made a part hereof. The Pool is productive of oil in commercial quantities from the Tocito sand, encountered at a depth of approximately 6,600 feet.

II.

There are now a total of nine wells which are productive of oil from the Tocito sand within the boundaries of the Petti-grew-Tocito (Erkan-Tocito) Pool, all of which are operated by Petitioner. These wells have been drilled, for the most part, to conform to an 80-acre spacing pattern, as proposed in this petition, as more fully shown by Exhibit A, attached hereto, and made a part hereof.

III.

Petitioner has been actively engaged in the drilling and operation of wells within the Pettigrew-Tocito (Erkan-Tocito)

Pool. It has accumulated statistics and information bearing upon the permeability, porosity and producing characteristics of the Tocito sand and from such information and statistics it believes that one well completed in the Tocito sand will efficiently and economically arain not less than 80 acres of that formation, and that the drilling of more wells is unnecessary, would result in economic loss without increasing the ultimate recovery of oil from the reservoir, and would constitute waste, as defined by New Mexico Statutes and the rules and

regulations of this Commission.

IV.

Petitioner is prepared to submit evidence pertinent to a proper spacing program which will economically and efficiently permit, without unnecessary drilling costs or operating expenses, and without impairment of the rights of others, the recovery of oil reasonably producible from the Pettigrew-Tocito (Erkan-Tocito) Pool. From information available to it, Petitioner believes, and would show, that a uniform spacing unit of not less than 80 acres should be provided with respect to wells hereafter drilled in the Pool, with such wells to be located on said drilling units to conform to present development in the Pool.

V.

Petitioner has accumulated statistics and information bearing upon the production of associated gas, or casinghead gas, in connection with the production of oil from the Tocito sand within the boundaries of the Pettigrew-Tocito (Erkan-Tocito) Pool, and from such information and statistics, believes and would show that the limiting gas-oil ratio within the Pool should reasonably be set at 2,000 cubic feet of gas for each barrel of oil produced, in accordance with Commission Rule 506 (a).

. VI.

Petitioner has accumulated statistics and information bearing upon the location, depth and thickness of potable water-bearing strata within the boundaries of the Pettigrew-Tocito (Erkan-Tocito) Pool, and from such information and statistics, believes and would show that a proper casing and cementing program should be established for the protection of such strata against pollution, by requiring that the surface pipe be set through the shallow potable water-bearing beds and set with a

sufficient amount of cement to circulate the cement behind the pipe to the bottom of the cellar.

WHEREFORE, Petitioner requests the Commission, after notice and hearing as required by law and the rules and regulations of the Commission, to enter its order or orders fixing the spacing of wells hereafter drilled in the Pettigrew-Tocito (Erkan-Tocito) Pool, Rio Arriba County, New Mexico, as it now exists or may hereafter be extended, on the basis of one well located on a drilling unit of approximately 80 acres substantially in the shape of a rectangle, such drilling unit to lie wholly within the same quarter section, according to the governmental survey thereof, and to consist of adjoining quarter quarter sections which have contiguous boundaries, either South or East, Morth or West, with wells to be located on said drilling units substantially in the center of the NW2 and SE2 of each quarter section, as shown by the governmental survey thereof, with an allowable tolerance of 100 feet from such location, with suitable provisions for any related matters, including special provisions, after notice and hearing, of unorthodox well locations for good cause shown; and providing for a gas-oil ratio limitation of 2,000 cubic feet of gas to each barrel of oil produced, said gas-oil ratio limitation to be enforced by the Commission by suitable order or orders as may become necessary; and providing for a casing and cementing program which would require that the surface pipe be set through the shallow potable waterbearing beds and set with a sufficient amount of cement to circulate the cement behind the pipe to the bottom of the cellar; and providing that in the event the Commission determines to institute orders prorating production of oil at some future date, that each 80-acre drilling unit shall be treated as a proration unit for such purpose.

Respectfully submitted

LOWRY et al OPERATING ACCOUNT

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Attorney for Petitioner