BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE NO. 537 Order No. R-326

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

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on May 19, 1953, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on this 26th day of May, 1953, the Commission, a quorum being present, having considered the testimony adduced at said hearing and the exhibits received in this cause, and being fully advised in the premises,

FINDS:

(1) That due notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the Pettigrew-Tocito Pool has been duly classified as an oil pool, embracing lands in Rio Arriba County, New Mexico, defined and described as follows:

Township 26 North, Range 6 West, NMPM SW/4 Section 3, SE/4 Section 4, Section 9, NW/4 and S/2 Section 10, NW/4 Section 15, N/2 Section 16

(3) That the Commission, by virtue of Order R-321, changed the name of the Pettigrew-Tocito Pool to South Blanco-Tocito Pool.

(4) That geological and engineering data presented at the hearing, and available to the Commission, indicate that one well completed to the Tocito sand will efficiently and economically **drain** and develop not less than 80 acres, and that

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the drilling of more wells would result in economic loss and earlier reduction of reservoir pressures, without increasing the ultimate recovery of oil from the reservoir, and would constitute waste, and that correlative rights, including those of royalty owners, will be protected by a spacing program in accordance herewith.

(5) That, for the orderly development of the South Blanco-Tocito Pool, a uniform spacing pattern should be established by this Commission, on the basis of one well to each 80 acres in the pool.

(6) That, in order to maintain reservoir pressures and prevent waste of associated gas, or casinghead gas, a limiting gas-oil ratio should be established, and that a ratio of 2,000 cubic feet of gas per barrel of oil produced is a reasonable limitation.

(7) That, in order to protect the producing formation, and potable waterbearing strata encountered in the pool, a uniform casing program should be adopted.

(8) That the operator or operators of the South Blanco-Tocito Pool should present to the Commission semi-annual reports showing pool performance in relation to bottom-hole pressures and gas-oil ratios.

IT IS THEREFORE ORDERED:

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(1) That this order shall be known as "The South Blanco-Tocito Pool Rules."

(a) The South Blanco-Tocito Pool Rules shall be applicable to and govern the future development and operation of the South Blanco-Tocito Pool as it now exists or may hereafter be extended by order of the Commission.

(2) That all wells hereafter drilled in the South Blanco-Tocito Pool or any extension thereof shall be located in the center of the northwest quarter or the southeast quarter of each governmental quarter section, with a tolerance of 100 feet in any direction to avoid surface obstructions, except that no well shall be located closer than 660 feet to any lease line without special order of the Commission after due notice and hearing.

(a) That no well shall be drilled or produced in said pool except in conformity with the spacing pattern set forth above without special order of the Commission after due notice and hearing.

(b) That the location of any wells heretofore drilled in the South Blanco-Tocito Pool which does not conform to the provisions of these rules shall be treated as unorthodox locations, which said unorthodox locations are hereby approved. This approval shall include Lowry et al Federal 4-13-132, NE/4 NE/4 Section 9; Federal 1-134, NE/4 NW/4 Section 10; Federal 19-34-157, SW/4 NW/4 Section 9; Federal 21-40-182, NE/4 SW/4 Section 10; Federal 22-45-207, SW/4 SE/4 Section 10; Case No. 537 Order No. R-326

and Federal 7-35-109, SW/4 SW/4 Section 3, all in Township 26 North, Range 6 West, NMPM.

(3) That a gas-oil ratio limit is hereby set for the South Blanco-Tocito Pool at the rate of 2000 cubic feet of gas for each barrel of oil produced.

(a) Nothing herein shall be construed as prohibiting the production of oil from wells within the pool whose gas-oil ratio exceeds 2000 cubic feet of gas for each barrel of oil produced, at a reduced rate which in the best judgment of the operator is consistent with good reservoir management, until such time as the production of oil in the South Blanco-Tocito Pool is allocated, at which time the provisions of Rule 506 of the Rules and Regulations of this Commission shall apply.

(4) The casing program of all wells hereafter drilled in the pool shall consist of at least two strings of pipe set in accordance with the following regulations:

(a) The surface casing shall consist of new or reconditioned pipe with an original mill test of not less than 1000 pounds per square inch, and at least one string of surface casing shall be set at a depth sufficient to protect all potable waterbearing strata encountered, and not less than 450 feet below the surface of the ground. Sufficient cement shall be used to fill the annular space back of the pipe to the bottom of the cellar. Cement shall be allowed to stand a minimum of 24 hours before initiating tests. Before drilling the plug a pump pressure of at least 600 pounds per square inch shall be applied. If at the end of 30 minutes the pressure shows a drop of 100 pounds per square inch, or more, the casing shall be condemned, subject to correlative operations and further testing.

(b) The producing oil string shall consist of new or reconditioned pipe with an original mill test of not less than 2100 pounds per square inch. The producing string shall be set and cemented with sufficient cement to fill the calculated annular space behind the pipe to a minimum of 1000 feet above the guide shoe. Cement shall be allowed to stand a minimum of 72 hours before initiating tests. Before drilling the plug a pump pressure of at least 600 pounds per square inch shall be applied. If at the end of 30 minutes the pressure shows a drop of 100 pounds per square inch, or more, the casing shall be condemned, subject to corrective operations and further testing.

(5) That upon the completion of any well in the South Blanco-Tocito Pool, the bottom-hole pressure of such well shall be taken, and a report thereof filed with the Commission.

(a) Semi-annual tests of bottom hole pressures of the pool and producing gas-oil ratios shall be made, said tests to be made during the months of April and October of each year. Such tests are to be made in the presence of a representative of the Commission and may be witnessed by the representative of any owner or operator of a producing well in the pool. Tests as designated herein

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shall apply only to flowing wells within the pool.

(b) Bottom-hole pressure tests, as provided in 5-(a), herein, shall be made as follows: The operators shall cause wells to be shut in for a minimum of 72 hours, and all pressures shall be reported at a datum of minus-100 feet, and otherwise as provided by Rule 302 of the Rules and Regulations of the Commission.

(6) That in the event the production of oil from the South Blanco-Tocito Pool is allocated, then and in that event the individual well allowables for wells drilled in conformity with the spacing pattern provided for herein shall be established in accordance with the 80-acre proportional factors as provided in the <u>Rules</u> and Regulations of the Commission.

(a) The operator may at his option designate the proration unit for each well as being the north half, south half, east half, or west half of the governmental quarter section in which the well is located.

(7) That this order shall cover all of the South Blanco-Tocito Pool common source of supply as discovered in the No. 2 Scott Federal Well, drilled in the NW/4 SE/4 Section 9, Township 26 North, Range 6 West, NMPM.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

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STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

E. S. WALKER, Member

R. R. SPURRIER, Secretary

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