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. 4232 Order No. R-3867

APPLICATION OF PAN AMERICAN PETROLEUM CORPORATION FOR A PRESSURE MAINTENANCE PROJECT, CHAVES COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 22, 1969, at Santa Pe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this <u>29th</u> day of October, 1969, the Commission, a quorum being present, 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 Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Pan American Petroleum Corporation, seeks authority to institute a pressure maintenance project in the Cato-San Andres Pool on its Baskett "D" Lease, Chaves County, New Mexico, by the injection of water into the San Andres formation through its Baskett "D" Well No. 4, located in Unit I of Section 11, Township 8 South, Range 30 East, NMPM, Chaves County, New Mexico.

(3) That the applicant further seeks the designation of the project area and the promulgation of special rules and regulations governing said project.

-2-CASE No. 4232 Order No. R-3867

(4) That initially the project area should comprise only the following-described area:

CHAVES COUNTY, NEW MEXICO TOWNSHIP 8 SOUTH, RANGE 30 EAST, NMPM Section 11: 5/2 NE/4 and SE/4

(5) That a pressure maintenance project, designated the Pan American Cato Baskett Pressure Maintenance Project, comprising the above described area is in the interest of conservation and should result in greater ultimate recovery of oil, thereby preventing waste.

(6) That an administrative procedure should be established whereby said project area may be expanded for good cause shown and whereby additional wells in the project area may be converted to water injection.

(7) That special rules and regulations for the operation of the Pan American Cato Baskett Pressure Maintenance Project should be promulgated and, for operational convenience, such rules should provide certain flexibility in authorizing the production of the project allowable from any well or wells in the project area in any proportion, provided that no well in the project area which directly or diagonally offsets a well on another lease producing from the same common source of supply should be allowed to produce in excess of top unit allowable for the Cato-San Andres Pool until such time as the well has experienced a substantial response to water injection. When such a response has occurred, the well should be permitted to produce up to two times top unit allowable for the Cato-San Andres Pool. Production of such well at a higher rate should be authorized only after notice and hearing.

IT IS THEREFORE ORDERED:

(1) That the applicant, Pan American Petroleum Corporation, is hereby authorized to institute a pressure maintenance project in the Cato-San Andres Pool on its Baskett "D" Lease, Chaves County, New Mexico, to be designated the Pan American Cato Baskett Pressure Maintenance Project, by the injection of water into the San Andres formation through the following described well in Section 11, Township 8 South, Range 30 East, NMPM, Chaves County, New Mexico:

Baskett "D" Well No. 4, located in Unit I

-3-CASE No. 4232 Order No. R-3867

(2) That the aforesaid water injection well shall be equipped with 2 3/8-inch tubing set in a packer, said packer being set at approximately 3400 feet. Further, that the casing tubing annulus shall be filled with an inert fluid and the annulus equipped with a pressure gauge to facilitate detection of leakage in the tubing or packer.

(3) That Special Rules and Regulations governing the operation of the Pan American Cato Baskett Pressure Maintenance Project, Chaves County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS FOR THE PAN AMERICAN CATO BASKETT PRESSURE MAINTENANCE PROJECT

<u>RULE 1.</u> The project area of the Pan American Cato Baskett Pressure Maintenance Project, hereinafter referred to as the Project, shall comprise the area described as follows:

> CHAVES COUNTY, NEW MEXICO TOWNSHIP 8 SOUTH, RANGE 30 EAST, NMPM Section 11: S/2 NE/4 and SE/4

<u>RULE 2.</u> The allowable for the Project shall be the sum of the allowables of the several wells within the project area, including those wells which are shut-in, curtailed, or used as injection wells. Allowables for all wells shall be determined in a manner hereinafter prescribed.

<u>RULE 3.</u> Allowables for injection wells may be transferred to producing wells within the project area, as may the allowables for producing wells which, in the interest of more efficient operation of the Project, are shut-in or curtailed because of high gas-oil ratio or are shut-in for any of the following reasons: pressure regulation, control of pattern or sweep efficiencies, or to observe changes in pressures or changes in characteristics of reservoir liquids or progress of sweep.

<u>RULE 4.</u> The allowable assigned to any well which is shut-in or which is curtailed in accordance with the provisions of Rule 3 which allowable is to be transferred to any well or wells in the project area for production, shall in no event be greater than its ability to produce during the test prescribed by Rule 6, below, or greater than the current top unit allowable for the pool during the month of transfer, whichever is less. -4-CASE No. 4232 Order No. R-3867

<u>RULE 5.</u> The allowable assigned to any injection well on a 40-acre proration unit shall be top unit allowable for the Cato-San Andres Pool.

<u>RULE 6.</u> The allowable assigned to any well which is shut-in or curtailed in accordance with Rule 3, shall be determined by a 24-hour test at a stabilized rate of production, which shall be the final 24-hour period of a 72-hour test throughout which the well should be produced in the same manner and at a constant rate. The daily tolerance limitation set forth in Commission Rule 502 I (a) and the limiting gas-oil ratio (2,000 to 1) for the pool shall be waived during such tests. The project operator shall notify all operators offsetting the well, as well as the Commission, of the exact time such tests are to be conducted. Tests may be witnessed by representatives of the offsetting operators and the Commission, if they so desire.

<u>RULE 7</u>. The basic allowable assigned to each producing well in the Project shall be equal to the well's ability to produce or to top unit allowable for the pool, whichever is less. Wells capable of producing more than top unit allowable may also receive transfer allowable, provided however, that no producing well in the project area which directly or diagonally offsets a well on another lease producing from the same common source of supply shall receive an allowable or produce in excess of two times top unit allowable for the pool. Each producing well shall be subject to the limiting gas-oil ratio (2,000 to 1) for the pool.

<u>RULE 8.</u> Each month the project operator shall, within three days after the normal unit allowable for Southeast New Mexico has been established, submit to the Commission a Pressure Maintenance Project Operator's Report, on a form prescribed by the Commission, outlining thereon the data required, and requesting allowables for each of the several wells in the Project as well as the total project allowable. The aforesaid Pressure Maintenance Project Operator's Report shall be filed in lieu of Form C-120 for the Project.

<u>RULE 9.</u> The Commission shall, upon review of the report and after any adjustments deemed necessary, calculate the allowable for each well in the Project for the next succeeding month in accordance with these rules. The sum of the allowables so calculated shall be assigned to the Project and may be produced from the wells in the Project in any proportion except that no well in the Project -5-CASE No. 4232 Order No. R-3867

which directly or diagonally offsets a well on another lease producing from the same common source of supply shall produce in excess of two times top unit allowable for the pool.

<u>RULE 10</u>. The conversion of producing wells to injection, the drilling of additional wells for injection, and expansion of the project area shall be accomplished only after approval of the same by the Secretary-Director of the Commission. To obtain such approval, the project operator shall file proper application with the Commission, which application, if it seeks authorization to convert additional wells to injection or to drill additional injection wells shall include the following:

(1) A plat showing the location of proposed injection well, all wells within the project area, and offset operators, locating wells which offset the project area.

(2) A schematic drawing of the proposed injection well which fully describes the casing, tubing, perforated interval, and depth showing that the injection of gas or water will be confined to the San Andres formation.

(3) A letter stating that all offset operators to the proposed injection well have been furnished a complete copy of the application and the date of notification.

The Secretary-Director may approve the proposed injection well if, within 20 days after receiving the application, no objection to the proposal is received. The Secretary-Director may grant immediate approval, provided waivers of objection are received from all offset operators.

Expansion of the project area may be approved by the Secretary-Director of the Commission administratively when good cause is shown therefor.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary. -6-CASE No. 4232 Order No. R-3867

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

STATE OF NEW MEXICO OLL CONSERVATION COMMISSION 1 the DAVID F. CARGO, Chairma ARMIJO, Member ALEX J A. L. PORTER, Jr., Member & Secretary esr/