Entered June 25, 1913 Of P.

## 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. 4971 Order No. R-4558

APPLICATION OF TESORO PETROLEUM CORPORATION FOR A SECONDARY RECOVERY PROJECT, MCKINLEY COUNTY, NEW MEXICO.

## ORDER OF THE COMMISSION

# BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 23, 1973, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this <u>25th</u> day of June, 1973, 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, Tesoro Petroleum Corporation, seeks authority to institute a secondary recovery project in the Hospah Sand Unit Area, South Hospah-Lower Sand Oil Pool, by the injection of water and/or gas into the Lower Hospah formation through its Santa Fe RR "A" Well No. 84 to be located at a non-standard location five feet from the South line and 2,950 feet from the East line of Section 1, Township 17 North, Range 9 West, NMPM, McKinley County, New Mexico.

(3) That the applicant further seeks the designation of a project area and the promulgation of special rules for the project area which would include a provision for the transfer of allowables within the project area, an administrative procedure whereby the proposed secondary recovery project can be expanded including provisions for drilling additional injection and producing wells at unorthodox locations and conversion of existing wells to injection.

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

MCKINLEY COUNTY, NEW MEXICO TOWNSHIP 17 NORTH, RANGE 9 WEST, NMPM Section 1: S/2 SE/4 and Lot 10 -2-Case No. 4971 Order No. R-4558

(5) That a pressure maintenance project, designated the Tesoro Lower Hospah 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 injection and producing wells may be drilled at unorthodox locations and whereby existing wells in the project area may be converted to injection.

That special rules and regulations for the operation (7) of the Tesoro Lower Hospah 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 South Hospah-Lower Sand 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 South Hospah-Lower Sand Pool. Production of such well at a higher rate should be authorized only after notice and hearing.

(8) That the proposed secondary recovery project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(9) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

## IT IS THEREFORE ORDERED:

(1) That the applicant, Tesoro Petroleum Corporation, is hereby authorized to institute a secondary recovery project in the Hospah Sand Unit Area, South Hospah-Lower Sand Oil Pool, by the injection of water and/or gas into the Lower Hospah formation through its Santa Fe RR "A" Well No. 84 to be located at a non-standard location five feet from the South line and 2,950 feet from the East line of Section 1, Township 17 North, Range 9 West, NMPM, McKinley County, New Mexico.

(2) That Special Rules and Regulations governing the operation of the Tesoro Lower Hospah Pressure Maintenance Project, McKinley County, New Mexico, are hereby promulgated as follows:

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## SPECIAL RULES AND REGULATIONS FOR THE TESORO LOWER HOSPAH PRESSURE MAINTENANCE PROJECT

RULE 1. The project area of the Tesoro Lower Hospah Pressure Maintenance Project, hereinafter referred to as the Project, shall comprise the area described as follows:

> McKINLEY COUNTY, NEW MEXICO TOWNSHIP 17 NORTH, RANGE 9 WEST, NMPM Section 1: S/2 SE/4 and Lot 10

RULE 2. The allowables 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.

RULE 3. 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.

RULE 4. 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.

RULE 5. The allowable assigned to any injection well on a 40-acre proration unit shall be top unit allowable for the South Hospah-Lower Sand Pool.

RULE 6. 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. -4-Case No. 4971 Order No. R-4558

RULE 7. 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.

RULE 8. Each month the project operator shall 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 based upon the pool's depth bracket allowable and the market demand percentage in effect. The aforesaid Pressure Maintenance Project Operator's Report shall be filed in lieu of Form C-120 for the Project.

RULE 9. 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 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 wells, all wells within the project area, and offset operators, locating wells which offset the project area.

(2) A schematic drawing of the proposed injection wells which fully describes the casing, tubing, perforated interval, and depth showing that the injection of gas or water will be confined to the Lower-Hospah formation. -5-Case No. 4971 Order No. R-4558

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

The Secretary-Director may approve the proposed injection wells 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.

(3) That the subject secondary recovery project is hereby approved and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(4) That monthly progress reports of the project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

R. TRUJILLO, Chairman

EX J. ARMIJO, Member

A. L. PORTER, Jr., Member & Secretary

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