# STATE OF NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

## IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

NOMENCLATURE CASE NO. 11016 Order No. R-5353-P

APPLICATION OF TEXACO EXPLORATION AND PRODUCTION INC. FOR CREATION OF A NEW POOL IN THE TUBB FORMATION, CLASSIFICATION OF THIS POOL AS AN ASSOCIATED OIL AND GAS POOL AND FOR THE PROMULGATION OF SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO.

#### **ORDER OF THE DIVISION**

#### **BY THE DIVISION:**

This cause came on for hearing at 8:15 a.m. on July 7, 1994, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 26th day of September, 1994, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

## **FINDS THAT:**

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) Division Case Nos. 11016, 11017 and 11018 were consolidated at the time of the hearing for the purpose of testimony.

(3) The applicant, Texaco Exploration and Production Inc. (Texaco), seeks the creation of a new "associated pool" for production from the Tubb formation comprising the NW/4 of Section 9, Township 23 South, Range 37 East, NMPM, Lea County, New Mexico.

is:

(4) The applicant further seeks to adopt the "General Rules and Regulations for the Associated Oil and Gas Pools in Northwest and Southeast New Mexico", as promulgated by Division Order No. R-5353, as amended, as the rules governing this pool, including provisions for 40-acre oil and 160-acre gas spacing and proration units. The applicant further seeks to establish a limiting gas-oil ratio of 6,000 cubic feet of gas per barrel of oil for this pool.

(5) Texaco proposes to develop the Tubb oil and gas reserves within this area concurrently and in conjunction with the development of the oil and gas reserves within the Lower Paddock-Blinebry formations (being the subject of Division Case No. 11017), and the Drinkard-Abo formations (being the subject of Division Case No. 11018).

(6) The applicant has recently concluded drilling operations on its B. F. Harrison "B" Well No. 25 located 825 feet from the North line and 1980 feet from the West line (Unit C) of Section 9. This well was completed in the Tubb formation through the perforated interval from 6,084 feet to 6,234 feet in June, 1994.

(7) The subject well is located within one mile of the outer boundary of the Teague-Tubb Pool, an oil pool comprising the NE/4 of Section 17, Township 23 South, Range 37 East, NMPM.

(8) The applicant presented geologic evidence and testimony to support its position that the subject well has discovered a new common source of supply in the Tubb formation.

(9) Applicant's geologic evidence and testimony indicates that the proposed pool

- a) a circular shaped feature of limited extent draped over a structural high centered approximately in the NW/4 of Section 9;
- b) the reservoir trapping mechanism is a down structural limit of effective porosity within the Tubb formation which effectively isolates it and separates it from the Teague-Tubb Pool.

(10) The geologic and engineering evidence presented indicates that the B. F. Harrison "B" Well No. 25 has discovered a new common source of supply in the Tubb formation.

(11) The geologic and engineering evidence further indicates that the B. F. Harrison "B" Well No. 25 is located at the highest point of its structure feature, and that there is no indication that a gas cap exists or is being formed up-structure to any oil column.

(12) The applicant presented initial production test data from the B. F. Harrison "B" Well No. 25. This initial test data indicates a high gas-oil ratio producing rate ranging from approximately 18,000:1 to 47,000:1. Further testimony by the applicant indicates that during a recent four point test, the subject well produced at an average gas-oil ratio of approximately 20,000:1.

(13) The applicant contends that the occurrence of increased volumes of gas production in the B. F. Harrison "B" Well No. 25 is attributed to the presence of small higher porosity stringers in the Tubb formation which are both laterally and horizontally discontinuous.

(14) "Associated pools" have historically been defined as those pools that have a gas cap overlying an oil zone.

(15) Although the proposed pool does not exhibit the reservoir characteristics of an "associated pool", it appears to exhibit similar reservoir characteristics as found in the Blinebry Oil and Gas Pool and the Tubb Oil and Gas Pool, namely it is a complex reservoir system of interrelated gas-bearing and oil-bearing stringers.

(16) The proposed pool is located approximately  $2 \frac{1}{2}$  miles south of the southern boundary of the Tubb Oil and Gas Pool.

(17) Although not officially classified as "associated pools", the Blinebry Oil and Gas Pool and the Tubb Oil and Gas Pool are both essentially governed by the same rules applicable to "associated pools" as contained within Division Order No. R-5353, as amended, namely 40-acre oil and 160-acre gas spacing, a gas/oil ratio cutoff point in distinguishing between gas wells and oil wells of 50,000 cubic feet of gas per barrel of oil and restricted well location requirements.

(18) The reservoir data currently available indicates that the proposed pool should be initially classified as an "associated pool" and should be governed by the "General Rules and Regulations for the Associated Oil and Gas Pools of Northwest and Southeast New Mexico".

(19) The subject pool should be designated the North Teague-Tubb Associated Pool and should initially comprise the NW/4 of Section 9, Township 23 South, Range 37 East, NMPM.

(20) The preliminary reservoir data indicates that the North Teague-Tubb Associated Pool may be efficiently and effectively developed on 40-acre oil and 160-acre gas spacing. In addition, the evidence indicates that a gas-oil ratio limitation of 6,000 cubic feet of gas per barrel of oil should be established for a temporary period of time, pending the gathering of additional reservoir data. (21) The North Teague-Tubb Associated Pool should be governed by the "General Rules and Regulations for the Associated Oil and Gas Pools of Northwest and Southeast New Mexico", as promulgated by Division Order No. R-5353, as amended, for a temporary period of eighteen months to permit Texaco the opportunity to gather additional reservoir data. This case should be reopened at an examiner hearing in March, 1996, at which time the operators in the subject pool should be prepared to appear and show cause why the North Teague-Tubb Associated Pool should not be reclassified as an oil pool and to show cause why a gas-oil ratio limitation of 6,000 cubic feet of gas per barrel of oil is appropriate for this pool.

(22) At the hearing the applicant requested that the rules and regulations promulgated herein be made effective retroactive to the date of first production from the B. F. Harrison "B" Well No. 25, which, according to evidence presented, was approximately July 1, 1994.

(23) The applicant presented no evidence or testimony which would indicate that a retroactive effective date for the special rules promulgated herein is necessary, therefore this request should be <u>denied</u>.

## **<u>IT IS THEREFORE ORDERED THAT</u>**:

(1) A new pool for the production of oil and gas from the Tubb formation is hereby created and designated the North Teague-Tubb Associated Pool, said pool to comprise the NW/4 of Section 9, Township 23 South, Range 37 East, NMPM, Lea County, New Mexico.

(2) The North Teague-Tubb Associated Pool shall be governed by the "General Rules and Regulations for the Associated Oil and Gas Pools in Northwest and Southeast New Mexico", as promulgated by Division Order No. R-5353, as amended, insofar as said General Rules and Regulations are not inconsistent with the Special Rules and Regulations for the subject pool as hereinafter set forth, in which event the Special Rules shall apply.

# TEMPORARY SPECIAL RULES AND REGULATIONS FOR THE NORTH TEAGUE-TUBB ASSOCIATED POOL

<u>RULE 2 (a)</u>. A standard oil proration unit shall comprise 40 acres. A standard gas proration unit shall comprise 160 acres. Top oil allowable for a 40-acre oil proration unit shall be 142 barrels of oil per day.

<u>RULE 6</u>. The limiting gas-oil ratio for the North Teague-Tubb Associated Pool shall be 6,000 cubic feet of gas per barrel of oil.

### **IT IS FURTHER ORDERED THAT:**

(3) The location of all wells presently drilling to or completed in the North Teague-Tubb Associated Pool or in the Tubb formation within one mile thereof are hereby approved; the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Division in writing of the name and location of the well within 30 days from the date of this order.

Pursuant to Paragraph A of Section 70-2-18, N.M.S.A. 1978 Comp., contained in Laws of 1969, Chapter 271, existing oil wells in the North Teague-Tubb Associated Pool shall have dedicated thereto 40 acres and existing gas wells shall have dedicated thereto 160 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C of said Section 70-2-18, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating the appropriate acreage to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to cancellation of allowable until a non-standard spacing unit has been approved and, subject to said 60-day limitation, each well presently drilling to or completed in the North Teague-Tubb Associated Pool or in its corresponding vertical limits, or within one mile thereof, shall receive no more than a 40-acre allowable for the pool.

(4) This case shall be reopened at an examiner hearing in March, 1996, at which time the operators in the subject pool should be prepared to appear and show cause why the North Teague-Tubb Associated Pool should not be reclassified as an oil pool and to show cause why a gas-oil ratio limitation of 6,000:1 is appropriate for this pool.

(5) 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 OIL CONSERVATION DIVISION WILLIAM J. I ÉМАҮ DIRECTOR

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