# 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. 11017 Order No. R-5353-Q

APPLICATION OF TEXACO EXPLORATION AND PRODUCTION INC. FOR POOL RE-CLASSIFICATION, POOL EXPANSION, THE PROMULGATION OF SPECIAL POOL RULES, AND THE FURTHER AMENDMENT OF DIVISION ORDER NO. R-5353, 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., seeks the reclassification of the North Teague Lower Paddock-Blinebry Gas Pool, Lea County, New Mexico, as an "associated pool", and 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.

(4) The applicant further seeks to expand the horizontal limits of the proposed pool to include the NE/4 of Section 8 and the SW/4 of Section 9, all in Township 23 South, Range 37 East, NMPM.

(5) The North Teague-Blinebry Gas Pool was created by Division Order No. R-9646 on March 11, 1992. The discovery well for the pool was the Texaco Exploration and Production Inc. B. F. Harrison "B" Well No. 5 located 1950 feet from the North line and 560 feet from the West line (Unit E) of Section 9, Township 23 South, Range 37 East, NMPM, which was completed in the Blinebry formation in October, 1991.

(6) By Order No. R-9937 dated August 17, 1993, the Division extended the vertical limits of the North Teague-Blinebry Gas Pool to include the Lower Paddock formation and redesignated the pool as the North Teague Lower Paddock-Blinebry Gas Pool.

(7) The North Teague Lower Paddock-Blinebry Gas Pool currently comprises the N/2 of Section 9, Township 23 South, Range 37 East, NMPM.

(8) The North Teague Lower Paddock-Blinebry Gas Pool is offset to the northeast by the West Blinebry Pool, an oil pool whose vertical limits include the Blinebry and Lower Paddock formations and whose horizontal limits include the SW/4 and N/2 of Section 3.

(9) The North Teague Lower Paddock-Blinebry Gas Pool is also offset to the south and southeast by the Teague-Blinebry Pool, an oil pool whose northern boundary comprises the NE/4 of Section 17.

(10) Texaco proposes to develop the Lower Paddock-Blinebry oil and gas reserves within this area concurrently and in conjunction with the development of the oil and gas reserves within the Tubb formation (being the subject of Division Case No. 11016), and the Drinkard-Abo formations (being the subject of Division Case No. 11018).

(11) The applicant currently has four wells producing from the Blinebry formation in this immediate area, these being:

the aforesaid B. F. Harrison "B" Well No. 5 located in Unit E of Section 9 which was completed in the Blinebry formation in October, 1991;

the B. F. Harrison "C" Well No. 1 located in Unit L of Section 9 which was completed in the Blinebry formation in July, 1993;

the F. B. Davis Well No. 3 located in Unit H of Section 8 which was completed in the Blinebry formation in January, 1994; and

the G. W. Sims Well No. 3 located in Unit B of Section 9 which was completed in the Blinebry formation in January, 1994.

(12) According to Division records, the B. F. Harrison "C" Well No. 1, the F. B. Davis Well No. 3, and the G. W. Sims Well No. 3 are currently classified as being in the Teague-Blinebry Pool, although to date the Division has not extended the pool boundaries of the Teague-Blinebry Pool to include this acreage.

(13) Texaco's proposal would place the four wells described in Finding No. (11) above within the redesignated pool.

(14) The applicant presented geologic evidence and testimony to support its request for pool reclassification and extension. This evidence indicates that the proposed Lower Paddock-Blinebry pool is:

- a) a circular shaped feature of limited extent draped over a structural high centered approximately in the NW/4 of Section 9. The trap of the reservoir is formed by a down structural limit of effective porosity within the Blinebry formation;
- b) a single structure feature geologically separated from the Teague-Blinebry Pool; and,
- c) a single common source of supply separated from and not in communication with any other Blinebry pool in this area as evidenced by bottomhole pressure buildup data which indicated original reservoir pressure following initial discovery.

(15) The geologic evidence further indicates that the B. F. Harrison "C" Well No. 1, the F. B. Davis Well No. 3, and the G. W. Sims Well No. 3 should be placed within the proposed Lower Paddock-Blinebry pool.

(16) It has become the recent practice of the Division to include the Lower Paddock formation within Blinebry pools in this area as evidenced by the recent extension of the North Teague-Blinebry Gas Pool, the Cline-Blinebry Pool and the West-Blinebry Pool to include the Lower Paddock formation (all extensions approved by Division Order No. R-9937).

(17) According to applicant's testimony, there is potential for Lower Paddock, production in its wells in this area.

(18) Should the North Teague Lower Paddock-Blinebry Gas Pool be reclassified, the Lower Paddock formation should remain included within the vertical limits of the pool.

(19) Production data presented by the applicant indicates that the B. F. Harrison "C" Well No. 1, the F. B. Davis Well No. 3, and the G. W. Sims Well No. 3 exhibit production characteristics indicative of oil wells while the B. F. Harrison "B" Well No. 5 exhibits production characteristics indicative of a gas well.

(20) Although the B. F. Harrison "B" Well No. 5 is approximately 20 feet upstructure from the nearest oil well, there is no indication that a gas cap exists or is being formed up-structure to the oil wells.

(21) The applicant contends that the occurrence of increased volumes of gas production in the B. F. Harrison "B" Well No. 5 is attributed to the presence of small higher porosity stringers in the Blinebry formation which are both laterally and horizontally discontinuous.

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

(23) 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.

(24) The proposed pool is located approximately 2 1/2 miles south of the southern boundary of the Blinebry Oil and Gas Pool.

(25) 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.

(26) The reservoir data currently available indicates that the North Teague-Blinebry Gas Pool should be reclassified 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".

(27) The subject pool should be designated the North Teague-Lower Paddock-Blinebry Associated Pool and should initially comprise the N/2 and SW/4 of Section 9, and the NE/4 of Section 8, both in Township 23 South, Range 37 East, NMPM. (28) The preliminary reservoir data indicates that the North Teague Lower Paddock-Blinebry Associated Pool may be efficiently and effectively developed on 40acre 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.

(29) The North Teague Lower Paddock-Blinebry 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 Lower Paddock-Blinebry 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.

(30) At the hearing the applicant requested that the rules and regulations promulgated herein be made effective retroactive to March 11, 1992, being the date of the issuance of Division Order No. R-9646, which order created the North Teague-Blinebry Gas Pool.

(31) 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>.

## **IT IS THEREFORE ORDERED THAT:**

(1) The North Teague Lower Paddock-Blinebry Gas Pool, which currently comprises the N/2 of Section 9, Township 23 South, Range 37 East, NMPM, Lea County, New Mexico, is hereby reclassified as an "associated pool" and redesignated the North Teague Lower Paddock-Blinebry Associated Pool.

(2) The North Teague Lower Paddock-Blinebry Associated Pool is hereby extended to include the NE/4 of Section 8, and the SW/4 of Section 9, both in Township 23 South, Range 37 East, NMPM.

(3) The North Teague Lower Paddock-Blinebry 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 LOWER PADDOCK-BLINEBRY 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 107 barrels of oil per day.

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

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

(4) The location of all wells presently drilling to or completed in the North Teague Lower Paddock-Blinebry Associated Pool or in the Lower Paddock-Blinebry 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 Lower Paddock-Blinebry 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 Lower Paddock-Blinebry 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.

(5) 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 Lower Paddock-Blinebry 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.

(6) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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SEAL

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

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

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WILLIAM J. LEMAY DIRECTOR