### 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:

CASE NO. 10777 Order No. R-9975

## APPLICATION OF TEXACO EXPLORATION AND PRODUCTION INC. FOR 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 August 12, 1993, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 24th day of September, 1993, 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) The applicant, Texaco Exploration and Production Inc., seeks the promulgation of special rules and regulations for the North Teague-Ellenburger Pool, Lea County, New Mexico, including a provision for a special depth bracket allowable of 700 barrels of oil per day.

(3) The North Teague-Ellenburger Pool was created by Division Order No. R-8668 on June 10, 1988. The discovery well for the pool was the Texaco Producing Inc. B. F. Harrison "B" Well No. 1 located in Unit C of Section 9, Township 23 South, Range 37 East, NMPM, Lea County, New Mexico.

(4) The North Teague-Ellenburger Pool, which currently comprises the SW/4 of Section 4 and the NW/4 of Section 9, Township 23 South, Range 37 East, NMPM, is currently governed by General Statewide Rules and Regulations including an oil allowable of 320 barrels per day and a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil.

(5) According to Division records, there are currently four wells producing from the subject pool, the B. F. Harrison "B" Well Nos. 1, 2 and 4 and the R. R. Sims Well No. 1 located, respectively, in Units C, F and D, Section 9 and Unit N of Section 4. All four of the subject producing wells are operated by the applicant.

(6) Geologic evidence presented indicates that the North Teague-Ellenburger Pool is a reservoir of very limited extent comprising a small portion of the SW/4 of Section 4 and the majority of the NW/4 of Section 9.

(7) The reservoir is bounded on the north and east by faults and is bounded on the south and west by the oil-water contact.

(8) The applicant is the owner of all acreage currently within the pool.

(9) According to applicant's testimony, no additional wells will be drilled to develop the North Teague-Ellenburger Pool.

(10) At the hearing the applicant requested that the proposed oil allowable be reduced to 560 barrels of oil per day. The applicant testified that 560 barrels of oil per day represents the maximum capacity of the artificial lift systems being utilized for production.

(11) Applicant's engineering evidence indicates that the initial reservoir pressure within the North Teague-Ellenburger Pool was only slightly above bubble point pressure.

(12) Applicant contends that as a result of production below bubble point pressure, free gas has formed in the reservoir and migrated through fractures up structure. As a result, a secondary gas cap has formed within the reservoir.

(13) Further evidence indicates that the field-wide producing gas-oil ratio has remained constant during the producing history of the pool.

(14) Material balance calculations indicate, according to applicant's testimony, that there is little, if any, water drive in the reservoir.

(15) The reservoir drive mechanisms appear to be solution gas and gas cap expansion.

(16) The applicant requests that the proposed allowable of 560 barrels of oil per day remain in effect for a temporary period of six months. Testimony indicates that the proposed six month period will allow the applicant the opportunity to gather additional reservoir and production data to support and verify its calculations that indicate that the subject reservoir is not rate sensitive.

(17) No offset operator and/or interest owner appeared at the hearing in opposition to the application.

(18) The evidence currently available indicates that approval of the proposed oil allowable for a temporary period of six months should not have a detrimental effect on the reservoir, should not reduce ultimate oil recovery, and will allow the applicant the opportunity to gather additional reservoir and production data.

(19) This case should be reopened at an examiner hearing in April, 1994, at which time the applicant should appear and show cause why the oil allowable for the North Teague-Ellenburger Pool should not revert back to 320 barrels of oil per day.

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

(1) The oil allowable for the North Teague-Ellenburger Pool, located in portions of Sections 4 and 9, Township 23 South, Range 37 East, NMPM, Lea County, New Mexico, is hereby established at 560 barrels of oil per day for a temporary period of six months.

(2) This case shall be reopened at an examiner hearing in April, 1994, at which time Texaco Exploration and Production Inc., or any other operator in the field, shall appear and show cause why the oil allowable for the North Teague-Ellenburger Pool should not revert back to 320 barrels of oil per day.

(3) Jurisdiction of this cause is hereby 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 Director

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