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. 11278 Order No. R-10371

APPLICATION OF TEXACO EXPLORATION AND PRODUCTION INC. FOR DOWNHOLE COMMINGLING, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

<u>BY THE DIVISION</u>:

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This cause came on for hearing at 8:15 a.m. on May 4, 1995, at Santa Fe. New Mexico, before Examiner David R. Catanach.

NOW, on this 24th day of May, 1995, 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) 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 authority to downhole commingle Justis-Blinebry and Justis Tubb-Drinkard Pool production within those existing and subsequently drilled wells located within the following described area in Lea County, New Mexico:

TOWNSHIP 24 SOUTH. RANGE 37 EAST. NMPM Section 26: E/2, SW/4 SW/4 Section 35: All

TOWNSHIP 25 SOUTH, RANGE 37 EAST, NMPM Section 2: SW/4, S/2 NW/4, NW/4 NW/4 CASE NO. 111278 Order No. R-10371 Page -2-

(3) The subject acreage is contained within the applicant's 1995 Re-development Area, and is composed of the following described Federal and State Leases. The interest ownership within any given lease, according to applicant's testimony, is common throughout including working, royalty and overriding royalty interests:

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LEASE NAME DESCRIPTION Erwin "B" NCT-1 NE/4 Section 26 Fristoe "B" NCT-2 SE/4 Section 26 NE/4, E/2 NW/4 Section 35 Fristoe NCT-1 SW/4 SW/4 Section 26 Fristoe "A" NCT-1 W/2 NW/4 Section 35 Erwin "A" SW/4 Section 35 Erwin "B" NCT-2 SE/4 Section 35 State "BB" NW/4 NW/4 Section 2 State "L" S/2 NW/4 Section 2 N.M. State "BZ" NCT-10 SW/4 Section 2

(4) According to Division records, there are approximately fifteen wells currently producing from the Justis-Blinebry, two wells currently producing from the Justis Tubb-Drinkard, and nine wells currently downhole commingled in the Justis-Blinebry and Justis Tubb-Drinkard Pools within the subject area.

(5) Applicant's testimony indicates that approximately twelve of the existing wells within the subject area are candidates for downhole commingling. In addition, applicant testified that an additional ten wells, which may be drilled in the near future within the subject area, are also candidates for downhole commingling.

(6) The Justis-Blinebry and Justis Tubb-Drinkard Pools within the subject area are in an advanced state of primary depletion.

(7) According to production data presented by the applicant, the average production from the Justis-Blinebry and Justis Tubb-Drinkard Pools within the nine downhole commingled wells it operates within the subject area is approximately 3.22 and 3.0 BOPD, respectively.

(8) Division records further indicate that during December, 1993, the average production from the Justis-Blinebry and Justis Tubb-Drinkard Pools within the subject area was approximately 7.3 BOPD and 43.0 MCFGD and 2.0 BOPD and 12.0 MCFGD, respectively.

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(9) Due to the marginal nature of both producing horizons, applicant testified that it is much more economic to downhole commingle existing and subsequently drilled wells within the subject area as opposed to dually completing these wells.

(10) In its newly drilled wells, the applicant expects to encounter producing rates of approximately 50 BOPD, however, these rates should decline sharply in a short period of time.

(11) The applicant further demonstrated through its evidence and testimony that within the wells it proposes to commingle within the subject area:

- a) there will be no crossflow between the commingled pools;
- b) none of the commingled zones exposes the others to damage by produced liquids;
- c) the fluids from each zone are compatible with the other;
- d) the bottomhole pressure of the lower pressure zones should not be less than 50 percent of the bottom hole pressure of the higher pressure zone adjusted to a common datum; and,
- e) the value of the commingled production is not less than the sum of the values of the individual production.

(12) The evidence indicates that the proposed downhole commingling is necessary in order to economically recover the remaining oil and gas reserves within the Blinebry and Tubb-Drinkard formations underlying the subject area.

(13) Approval of the subject application will allow the applicant the opportunity to recover additional oil and gas reserves from the Blinebry and Tubb-Drinkard formations which may otherwise not be recovered, thereby preventing waste, and will not violate correlative rights.

(14) The applicant proposed that the production from a well on a given lease within the subject area be allocated on the basis of cumulative Blinebry and Tubb-Drinkard production that has occurred on such lease.

(15) A more accurate method of allocating production from the subject wells should be utilized.

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(16) Production from the wells within the subject area should be allocated as follows:

- a) for existing wells where production history from both zones is available, the allocation of production should be determined by such production history;
- b) for existing wells where production history from only one zone is available, the applicant should be required to calculate remaining recoverable reserves from each zone and the allocation of production should be determined utilizing these calculations;
- c) for newly drilled wells, the applicant should be required to obtain a stabilized test rate from the Blinebry zone and a stabilized test rate from the commingled Blinebry/Tubb-Drinkard zones. The allocation of production should be determined on the basis of such flow tests.

(17) The applicant should be required to submit the data described in Finding No. (16) above to the Santa Fe office of the Division for approval of the allocation percentages determined for each well within the subject area.

(18) The applicant should notify the supervisor of the Division's Hobbs district office of the date and time of the conductance of flow tests on the newly drilled wells within the subject area in order that these tests may be witnessed.

(19) The operator should immediately notify the supervisor of the Hobbs district office of the Division any time any of the subject wells have been shut-in for seven consecutive days and shall concurrently present, to the Division, a plan for remedial action.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Texaco Exploration and Production Inc., is hereby authorized to downhole commingle Justis-Blinebry and Justis Tubb-Drinkard Pool production within those existing and subsequently drilled wells located within the following described area in Lea County, New Mexico:

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TOWNSHIP 24 SOUTH. RANGE 37 EAST. NMPM Section 26: E/2, SW/4 SW/4 Section 35: All

TOWNSHIP 25 SOUTH. RANGE 37 EAST. NMPM Section 2: SW/4, S/2 NW/4, NW/4 NW/4

- (2) Production from the wells within the subject area shall be allocated as follows:
- a) for existing wells where production history from both zones is available, the allocation of production shall be determined by such production history;
- b) for existing wells where production history from only one zone is available, the applicant shall calculate remaining recoverable reserves from each zone and the allocation of production shall be determined utilizing these calculations;
- c) for newly drilled wells, the applicant shall obtain a stabilized test rate from the Blinebry zone and a stabilized test rate from the commingled Blinebry/Tubb-Drinkard zones. The allocation of production shall be determined on the basis of such flow tests.

(3) The applicant shall submit the data described in Ordering Paragraph No. (2) above to the Santa Fe office of the Division for approval of the allocation percentages determined for each well within the subject area.

(4) The applicant shall notify the supervisor of the Division's Hobbs district office of the date and time of the conductance of flow tests on the newly drilled wells within the subject area in order that these tests may be witnessed.

(5) The operator shall immediately notify the supervisor of the Hobbs District Office of the Division any time any of the subject wells have been shut-in for seven consecutive days and shall concurrently present, to the Division, a plan for remedial action.

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

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

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STATE OF NEW MEXICO OIL CONSERVATION DIVISION 0 WILLIAM J. LEMAY, Director

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