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. 11293 Order No. R-10400

APPLICATION OF CONOCO INC. FOR DOWNHOLE COMMINGLING, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on June 1, 1995, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 22nd day of June, 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) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) By Administrative Order No. DHC-886 dated April 5, 1993, the Division authorized Conoco Inc. to downhole commingle Justis-Blinebry and Justis Tubb-Drinkard Pool production within its State A-2 Well No. 4 located 2130 feet from the South line and 1980 feet from the East line (Unit J) of Section 2, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico.
- (3) Pursuant to Order No. DHC-886, commingled production from the subject well is currently allocated as follows:

| POOL | ALLOCATION | |
|----------------------|-------------------|------------|
| | <u>OIL</u> | <u>GAS</u> |
| Justis-Blinebry | 70% | 48% |
| Justis Tubb-Drinkard | 30% | 52% |

- (4) The applicant, Conoco Inc., seeks to downhole commingle North Justis-Abo Pool production with the previously approved Justis-Blinebry and Justis Tubb-Drinkard Pool production within the State A-2 Well No. 4.
- (5) The applicant further seeks authority, as authorized by Order No. DHC-886, to continue to produce the well at a limiting gas-oil ratio of 6,000 cubic feet of gas per barrel of oil.
- (6) This case was styled such that in the absence of objection, the case would be taken under advisement.
- (7) The applicant appeared through legal counsel at the hearing, and no other offset operator and/or interest owner appeared in opposition to the application.
 - (8) The evidence submitted by the applicant in this case indicates that:
 - a) within the SE/4 of Section 2, there is some potential for production from the North Justis-Abo Pool. Applicant's State A-2 Well No. 3, located in Unit O, cumulatively produced 6,902 barrels of oil and 129 MMCF of gas from this pool prior to being abandoned;
 - b) the North Justis-Abo Pool contains marginal oil and gas reserves primarily located under the applicant's State A-2 Lease which comprises the W/2 SE/4 of Section 2;
 - c) the remaining oil and gas reserves in the North Justis-Abo Pool are insufficient to justify the drilling of a new well to recover these reserves; and,
 - d) remaining oil and gas reserves in the North Justis-Abo Pool underlying the NW/4 SE/4 of Section 2 can be economically recovered by downhole commingling such production within the State A-2 Well No. 4.
 - (9) The evidence further indicates that within the State A-2 Well No. 4:
 - 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 bottomhole 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.
- (10) The evidence indicates that the proposed downhole commingling is necessary in order to economically recover the remaining oil and gas reserves in the Abo formation underlying the NW/4 SE/4 of Section 2.
- (11) In support of its request to produce the State A-2 Well No. 4 at a gas-oil ratio limitation of 6,000 cubic feet of gas per barrel of oil, the applicant presented a production plot from its State A-2 Well No. 3. Production information indicates that the State A-2 Well No. 3 produced at a relatively high gas-oil ratio during its producing life.
- (12) Producing the State A-2 Well No. 4 at a gas-oil ratio limitation of 6,000:1 should not reduce the recovery of oil from any of the commingled zones.
- (13) The applicant proposed utilizing production projections based upon decline curve analysis to forecast Blinebry and Tubb-Drinkard production from the State A-2 Well No. 4 for the next several years. The applicant further proposed that Abo production from the subject well be determined by subtracting projected Blinebry/Tubb-Drinkard production from actual well production.
- (14) The applicant's proposed method of allocation is reasonable and should be adopted.
- (15) The operator should immediately notify the supervisor of the Hobbs District Office of the Division any time the subject well has 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, Conoco Inc., is hereby authorized to downhole commingle North Justis-Abo Pool production with previously approved downhole commingled Justis-Blinebry and Justis Tubb-Drinkard Pool production (Division Order No. DHC-886) within the State A-2 Well No. 4 located 2130 feet from the South line and 1980 feet from the East line (Unit J) of Section 2, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico.
- (2) The maximum amount of oil which may be produced from the subject well shall not exceed 40 barrels per day. The maximum amount of gas which may be produced from the subject well shall not exceed 642 MCF gas per day.
- (3) Production from each of the pools within the subject well shall be allocated as follows:

Production from the Blinebry/Tubb-Drinkard interval shall be determined by utilizing the production forecast tables presented as evidence in this case. Individual Blinebry and Tubb-Drinkard allocation shall be determined by utilizing the allocation percentages contained within Order No. DHC-886. North Justis-Abo Pool production shall be determined by subtracting Blinebry/Tubb-Drinkard production from the total well production.

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

Director

