# 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. 11033 ORDER NO. R-/020(

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

## ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on September 1, 1994 at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this \_\_\_\_\_ 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) Case Nos. 11028, 11029, 11030, 11031, 11032, 11033, 11035 and 11036 were consolidated for the purpose of presenting testimony at the hearing.
- (3) In Case No. 11033, the applicant, Conoco, Inc. (Conoco), seeks approval for the downhole commingling of production from the Glades Fruitland Sand and Basin Dakota Pools in its State Com AJ Well No. 34E, located 1185 feet from the South line and 1485 feet from the West line (Unit N) of Section 36, Township 32 North, Range 12 West, NMPM, San Juan County, New Mexico.
- (4) The SW/4 of said Section 36 (160 acres) is dedicated to the Glades Fruitland Sand completion and the W/2 of Section 36 (320 acres) is dedicated to the Basin Dakota completion. Except for the overriding royalty interests, the same working interests and royalty interests share ownership in both completions but the division of ownership among the owners is different for the two completions. There are overriding royalty interests in the Basin Dakota who do not hold an interest in the Fruitland Sand.

- (5) Conoco submitted data showing that the owners of interests in the well and offset operators have been notified of the application. No interest owner or offset operator appeared at the hearing in opposition to the application. A letter of approval from the New Mexico Commissioner of Public Lands was submitted into the record.
- (6) Data was presented at the hearing showing that both completions are low volume producers and that the Fruitland Sand completion is below the economic limit. The proposed commingling is necessary to permit the zone to be produced economically.
- (7) Bottomhole pressure in the Fruitland Sand completion is only 28% that of the Dakota. Conoco presented a reservoir simulation study which indicates that even with this pressure difference, cross flow should not occur after commingling.
- (8) No reservoir damage due to incompatibility of reservoir fluids is expected.
- (9) Commingling is expected to increase total recovery by 26.1 MMCF in 10 years.
- (10) Conoco proposed a method of allocating gas production to the two zones based on current producing rates and relative BTU values. Using current tests, 10.12% of production would be allocated to the Fruitland Sand and 89.88% to the Dakota. Final percentages would be determined based on a combined test following commingling. It is expected that total commingled production will show an increase due to the removal of the packer from the well. Conoco proposes that any increase be attributed to the lower (Dakota) zone. Final percentages for gas allocation would be determined after consulting with the supervisor of the Aztec District Office of the Division.
- (11) Conoco submitted tests and production records to support their proposal that any condensate production be allocated to the Dakota following commingling.
- (12) Approval of this application is in the best interest of conservation and will serve to prevent waste and protect correlative rights.

### IT IS THEREFORE ORDERED THAT:

(1) The application of Conoco, Inc. for authority to downhole commingle production from the Glades Fruitland Sand and Basin Dakota Pools in its State Com AJ Well No. 34E, located 1185 feet from the South line and 1485 feet from the West line (Unit N) of

Section 36, Township 32 North, Range 12 West, NMPM, San Juan County, New Mexico, is hereby approved.

- (2) Conoco shall consult with the Supervisor of the Aztec District Office in determining the proper allocation of gas production using the method discussed in Finding Paragraph No. (10) of this order.
- (3) Final gas allocation percentages shall be reported by Conoco to the Santa Fe Office of the Division referencing this case and order number.
- (4) The operator is responsible for reporting the monthly gas production from the subject well using the allocation method herein adopted.
- (5) Any condensate production shall be allocated entirely to the Dakota interval.
- (6) 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. LEMAY Director

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