STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

> CASES NOS. 8845 and 8846 Order No. R-8204

APPLICATION OF TENNECO OIL COMPANY 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 March 19, 1986, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this <u>llth</u> day of April, 1986, 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 Cases Nos. 8845 and 8846 were consolidated at the time of the hearing for the purpose of testimony.

(3) In Division Case No. 8845, the applicant, Tenneco Oil Company, seeks authority to downhole commingle production from the Blanco-Mesaverde and Otero-Chacra Pools within the wellbores of two wells, one to be drilled in Section 8, Township 27 North, Range 8 West, and the other in Section 29, Township 28 North, Range 9 West, NMPM, San Juan County, New Mexico.

(4) In Division Case No. 8846, the applicant, also Tenneco Oil Company, seeks authority to downhole commingle production from the Blanco-Mesaverde and Undesignated Otero-Chacra Pools within the wellbores of five wells to be drilled in Sections 18, 20, 21, and 28, Township 27 North, Range 8 West, NMPM, San Juan County, New Mexico. -2-Cases Nos. 8845 and 8846 Order No. R-8204

(5) Inasmuch as the subject matter in Division Case No. 8845 is the same as in Division Case No. 8846, one Division order should be entered covering both cases.

(6) Testimony by the applicant at the hearing indicates that the Mesaverde is the primary objective in these wells, but they expect to encounter productive sands in the Chacra formation as well.

(7) Further testimony by the applicant indicates that the Chacra reserves underlying the above-described wells are estimated to be insufficient to economically justify the capital expenditure required to separately produce these reserves.

(8) The proposed commingling should result in the recovery of additional hydrocarbons from the Chacra formation, thereby preventing waste, and should not violate correlative rights.

(9) Bottom hole pressure estimates for the subject formations in the wells were calculated using information obtained from offset Mesaverde and Chacra wells.

(10) The ratio of bottom hole pressures in the subject formations adjusted to a common datum range from -83 to -88, indicating that no crossflow should occur as a result of commingling.

(11) The reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(12) The ownership of the Mesaverde and Chacra formations in the subject wells is common, including working interest and royalty interest.

(13) The applicant proposed that the production allocation for the wells be based upon the fraction of total estimated reserves contributed by each zone.

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(14) In order to substantiate the reserve estimates submitted as evidence by the applicant, production tests should be conducted on each zone in each well after their completion.

(15) The applicant should submit these production tests and their estimated reserve calculations to the supervisor of the Division's Aztec district office in order that an accurate allocation formula for each well can be determined. -3-Cases Nos. 8845 and 8846 Order No. R-8204

(16) To afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Division any time the subject well is shut-in for 7 consecutive days.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Tenneco Oil Company, is hereby authorized to commingle Blanco-Mesaverde and Otero-Chacra Pool production within the wellbores of two wells, one to be drilled in Section 8, Township 27 North, Range 8 West, and the other to be drilled in Section 29, Township 28 North, Range 9 West, NMPM, San Juan County, New Mexico, being the subject of Division Case No. 8845.

(2) The applicant, Tenneco Oil Company, is hereby further authorized to commingle Blanco-Mesaverde and Undesignated Otero-Chacra Pool production within the wellbores of five wells to be drilled in Sections 18, 20, 21, and 28, Township 27 North, Range 8 West, NMPM, San Juan County, New Mexico, being the subject of Division Case No. 8846.

PROVIDED HOWEVER THAT the applicant shall conduct production tests on each zone in each of the above wells after their completion.

PROVIDED FURTHER THAT the applicant shall submit the results of the production tests and their estimated reserve calculations to the supervisor of the Division's Aztec district office in order that an accurate allocation formula for each well can be determined.

(3) The operator shall use the same allocation in determining the deliverability of the Blanco-Mesaverde for proration purposes and, further, shall report annually the shut-in pressure for the Otero-Chacra as required by General Rule 402.

(4) The operator of the subject well shall immediately notify the Division's Aztec district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Division, a plan for remedial action.

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

-4-Cases Nos. 8845 and 8846 Order No. R-8204

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

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

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