

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. 10145
Order No. R-6368-B

APPLICATION OF YATES PETROLEUM
CORPORATION FOR SPECIAL POOL RULES FOR
THE AVALON-DELAWARE POOL, EDDY COUNTY,
NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on November 28, 1990, at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this 11th day of December, 1990, 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, Yates Petroleum Corporation, seeks an order promulgating special pool rules for the Avalon-Delaware Pool including a provision for a gas-oil ratio of 7,500 cubic feet of gas per barrel of oil. Said Pool is located in all or portions of Sections 25 and 26, Township 20 South, Range 27 East and Sections 19, 28, 29, 30, 31 and 32, Township 20 South, Range 28 East, NMPM, Eddy County, New Mexico.

(3) The Avalon-Delaware Pool was created and defined by Division Order No. R-6368, as amended, and is currently governed by the Oil Conservation Division's General Statewide Rules and Regulations, including a gas-oil ratio of 2,000 cubic feet of gas per barrel of oil and a top oil allowable of 80 barrels per day.

(4) Notice concerning the applicant's request was provided to all offset operators within one mile of the Avalon-Delaware Pool. Waivers were received from 12 of the offset operators. Premier Production Company appeared at the hearing in opposition to the application.

(5) Applicant's engineering witness testified that oil production from the pool is from both the Cherry Canyon and Brushy Canyon portions of the Delaware Formation. The gross productive interval includes several hundred feet of shale and sand stringers some of which may be productive of oil and some of gas. He expressed the opinion that some of the excessive gas production comes from the gas stringers and pointed to one example where log data shows excessive gas in a productive sand stringer.

(6) Additional testimony by the applicant's witness was that several wells in the pool would benefit from the proposed increase in the gas-oil ratio limit. Two good wells operated by the applicant currently produce with a gas-oil ratio of approximately 4,000. The request for a 7,500 cubic feet per barrel limit would provide a cushion in the event the gas-oil ratio continues to increase. The witness expressed the opinion that a gas-oil ratio limit of 5,000 would be adequate.

(7) Applicant's witness also testified that the recovery of oil and gas reserves from the pool will neither be increased nor decreased if the request is approved. In his opinion production efficiency will be improved and recovery of reserves will be at a faster rate if a higher gas-oil ratio limit is authorized.

(8) Evidence submitted by the applicant indicates that the pool is produced by both a solution gas drive and a partial water drive. Witness for the applicant said there is no gas cap in the field.

(9) Applicant's witness expressed the opinion that the higher gas-oil ratio limit would not affect recoveries from offset leases. At the proposed rates, he does not believe any coning will occur or that there will be any adverse effect on the depletion of reservoir energy.

(10) Most of the wells in the field are produced by pumping.

(11) Mr. Larry Jones, owner of Premier Production Company, appeared and opposed the application. Premier owns leases on the West side of the field which were acquired in July, 1990. There are no producing wells on the leases at this time, but a recompletion of an existing shut-in well is planned in 1991.

(12) The proposed Premier recompletion is a West offset to applicant's Avalon-Delaware producing leases. Mr. Jones expressed the opinion that the requested increase in the gas-oil ratio limit would allow oil and gas reserves to move from his leases to structurally higher offset wells on the applicant's leases.

(13) Based on evidence presented at the hearing, a higher gas-oil ratio limit in the Avalon-Delaware Pool will allow the reserves in the field to be produced at a faster more efficient rate without harm to correlative rights and without causing waste. An increase in the gas-oil ratio limit from the current 2,000 to 4,000 cubic feet per barrel should be approved subject to review in one year.

IT IS THEREFORE ORDERED THAT:

(1) The application of Yates Petroleum Corporation for special pool rules providing for an increased gas-oil ratio limit for the Avalon-Delaware Pool, Eddy County, New Mexico, is hereby approved on a temporary basis.

(2) Temporary special pool rules for the Avalon-Delaware Pool are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS FOR THE
AVALON-DELAWARE POOL

RULE 1. The limiting gas-oil ratio for the Avalon-Delaware Pool shall be 4,000 cubic feet of gas for each barrel of oil.

IT IS FURTHER ORDERED THAT:

(3) The Special Rules and Regulations for the Avalon-Delaware Pool shall become effective January 1, 1991.

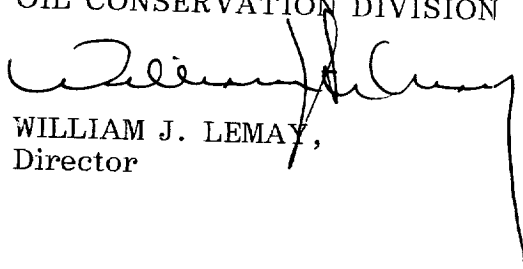
(4) This case shall be reopened at an examiner hearing in January, 1992, at which time the operators in the pool may appear and present evidence and show cause why the foregoing Special Rules and Regulations should remain in effect.

(5) Jurisdiction of this cause is retained for 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.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


WILLIAM J. LEMAY,
Director

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