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. 11167 ORDER NO. R-4508-A

APPLICATION OF YATES PETROLEUM CORPORATION FOR AN UNORTHODOX INFILL GAS WELL LOCATION AND SIMULTANEOUS DEDICATION, EDDY COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on December 15, 1994, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>13th</u> day of February, 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) The applicant, Yates Petroleum Corporation, seeks approval to drill its Vandiver "CN" Com Well No. 2 at an unorthodox gas well location to test the West Atoka-Morrow Gas Pool, 1242 feet from the North line and 808 feet from the East line (Unit A) of Section 18, Township 18 South, Range 26 East, NMPM, Eddy County, New Mexico.
- (3) Further, the applicant seeks an exception to Division General Rule 104(C)(2), as outlined by Division Memoranda dated July 27, 1988 and August 3, 1990, to continuously and concurrently produce gas from the West Atoka-Morrow Gas Pool from both its proposed Vandiver "CN" Com Well No. 2 and from its existing Vandiver "CN" Com Well No. 1 (API No. 30-015-20858), located at a previously approved unorthodox gas well location (Division Order No. R-4508, dated April 19, 1973) 1650 feet from the North line and 660 feet from the West line (Lot 2/Unit E) of said Section 18 and for the simultaneous dedication of said wells to

the 317.32-acre gas spacing and proration unit comprising Lots 1 and 2, the NE/4, and E/2 NW/4 (N/2 equivalent) of said Section 18 for production from the West Atoka-Morrow Gas Pool.

- (4) The West Atoka-Morrow Gas Pool is at this time considered an "unprorated gas pool" and therefore is not governed by the "General Rules for the Prorated Gas Pools of New Mexico", as promulgated by Division Order No. R-8170, as amended. The West Atoka-Morrow Gas Pool is therefore subject to the Division's Statewide Rule 104.C(2)(b), which require standard 320-acre gas spacing and proration units with wells to be located no closer than 1980 feet from the end boundaries nor closer than 660 feet from the side boundaries nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary.
- (5) Two separate memorandums issued by the Division Director on July 22, 1988 and August 3, 1990 set forth officially the Division's interpretation of said General Rule 104(C)(2) and policy for those instances, such as this case, where an applicant is requesting an additional well on an existing non-prorated gas spacing unit. The Division's conclusions were as follows:

"Application to produce both wells <u>continuously and concurrently</u> will be approved only after notice and hearing and upon compelling evidence that the applicant's correlative rights will be impaired unless both wells are produced.

Requests to produce the wells alternately (one well shut-in while the other produces) may be submitted for administrative handling. The request should set out the length of producing and shut-in cycles for each well (a one month minimum is suggested), the proposed method for ensuring compliance with the proposed producing and shut-in schedules and reasons for the request."

- (6) The Vandiver "CN" Com Well No. 1 was drilled in 1973 and completed in the West Atoka-Morrow Gas Pool and, according to the evidence presented, has cumulatively produced 12.4 billion cubic feet of gas and is currently producing at a rate of 10 MCFPD.
- (7) The primary objective for the proposed Vandiver "CN" Com Well No. 1 is the lower Morrow clastic interval of the Morrow formation which is a channel deposit of varied thickness. The geological evidence presented by the applicant indicates the N/2 of said Section 18 is essentially bisected by a thin layer of deposit material with two distinct and unconnected channel sand bodies running parallel to each other in a north/south direction. The existing Vandiver "CN" Com Well No. 1, located in Lot "2" (Unit "E"), along with four other wells in the immediate vicinity, is producing from a very thick (up to 180 feet) narrow channel sand

reservoir. With its proposed Vandiver "CN" Com Well No. 2, to be drilled in Unit "A" to the west the applicant hopes to intersect with a substantially larger distributory channel sand body that is currently being produced by three or four other wells in the immediate area. Both sand deposits exhibit different pressures and producing characteristics which would further indicate that both channels are two different reservoirs.

<u>FINDING</u>: As a result of the foregoing, both wells are necessary in order to effectively drain and develop the gas reserves underlying the N/2 equivalent of said Section 18 and unless both wells are produced, the applicant's correlative rights may be violated by virtue of not being able to recover all of the gas reserves within the subject spacing unit.

- (8) Evidence further indicates that the subject well drilled at the proposed unorthodox location to be at a more structurally advantageous position within the channel than a well drilled at the nearest standard gas well location thereon, thereby increasing the likelihood of obtaining commercial production.
- (9) All of the acreage comprising Sections 7 and 8, the W/2 of Section 17, and the S/2 of Section 18, all in Township 18 South, Range 26 East, NMPM, Eddy County, New Mexico, are operated by Yates Petroleum Corporation.
- (10) No other offset operator or interest owner appeared at the hearing in opposition to the proposed unorthodox location.
- (11) Approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the West Atoka-Morrow Gas Pool and will otherwise serve to prevent waste and will not cause correlative rights to be violated.

IT IS THEREFORE ORDERED THAT:

- (1) The application of Yates Petroleum Corporation to drill its Vandiver "CN" Com Well No. 2 at an unorthodox infill gas well location in the West Atoka-Morrow Gas Pool, 1242 feet from the North line and 808 feet from the East line (Unit A) of Section 18, Township 18 South, Range 26 East, NMPM, Eddy County, New Mexico is hereby approved.
- (2) The applicant's request for an exception to Division General Rule 104(C)(2), as outlined by Division Memoranda dated July 27, 1988 and August 3, 1990, to continuously and concurrently produce gas from the West Atoka-Morrow Gas Pool from both its proposed Vandiver "CN" Com Well No. 2 and from its existing Vandiver "CN" Com Well No. 1 (API No. 30-015-20858), located 1650 feet from the North line and 660 feet from the West line (Lot 2/Unit E) of said Section 18, is hereby approved.

- (3) The existing 317.32-acre gas spacing and proration unit comprising Lots 1 and 2, the NE/4, and E/2 NW/4 (N/2 equivalent) of said Section 18 shall be dedicated to said well.
- (4) 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