

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. 12024
ORDER NO. R-7400-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 case came on for hearing at 8:15 a.m. on August 6, 1998, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 15th day of January, 1999 the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

(1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.

(2) The applicant, Yates Petroleum Corporation ("Yates"), seeks an exception to Division Rule 104.D(3) to continuously and concurrently produce gas from the Little Box Canyon-Morrow Gas Pool from both its proposed Little Box Canyon "AOX" Federal Well No. 2 (**API No. 30-015-30222**), to be drilled as an infill gas well at a location that is 1980 feet from the North line and 1190 feet from the West line of irregular Section 7, Township 21 South, Range 22 East, NMPM, Eddy County, New Mexico, and from its existing Little Box Canyon "AOX" Federal Well No. 1 (**API No. 30-015-24747**), located at an unorthodox gas well location 800 feet from the South line and 1600 feet from the West line (Unit N) of Section 7 (approved by Division Order No. R-7400, issued in Case No. 8006 and dated December 14, 1983). Both wells are to be simultaneously dedicated to the existing non-standard 240.64-acre gas spacing and proration unit (approved by Division Administrative Order NSP-1792, dated July 9, 1998) comprising Lots 1, 2, 3, and 4 and the E/2 W/2 (W/2 equivalent) of Section 7.

(3) The Little Box Canyon-Morrow Gas Pool is an “unprorated gas pool” not subject to the “*General Rules for the Prorated Gas Pools of New Mexico*,” as established by Division Order Nos. R-8170, as amended, and R-10987. This pool is therefore subject to Division Rule 104.C(2)(b), which requires standard 320-acre gas spacing and proration units with wells to be located no closer than 1650 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.

(4) Due to a variation and correction in the legal subdivision of the U. S. Lands Survey, Section 7 is irregular in size and comprises a total of 560.64 acres (see Division Order No. R-10803, dated May 22, 1997). Since it is narrower across its latitudinal (east/west) axis than a normal sized (640-acre) section, the location of Yates’ proposed Little Box Canyon “AOX” Federal Well No. 2, which falls within the SE/4 NW/4 (Unit F) of Section 7, is considered to be standard. Therefore, that portion of the original application seeking an unorthodox gas well location for the Little Box Canyon “AOX” Federal Well No. 2 can be **dismissed**.

(5) Yates presented geological and engineering evidence which indicates that:

- (a) the Morrow formation in the Little Box Canyon-Morrow Gas Pool is comprised of two reservoirs: (i) an Upper Morrow Sand; and (ii) a Lower Morrow Sand herein referred to as the Mescal Sand;
- (b) the Mescal Sand is a narrow channel deposit through the western portion of Section 7 and the northern portion of Section 18, Township 21 South, Range 22 East, NMPM, Eddy County, New Mexico;
- (c) the Mescal Sand is structurally higher to the north and has been produced in the Yates Mescal "SE" Federal Well No. 1 (**API No. 30-015-24002**) located in Unit “C” of Section 18, which offsets the Little Box Canyon AOX Federal Well No. 1 to the south, but has watered out and has been recompleted up-hole into another pool;
- (d) the reservoir drive mechanism within the Mescal Sand is an active water drive;

- (e) the Little Box Canyon "AOX" Federal Well No. 1 was initially capable of water-free production but, due to increasing water production, now is only marginally productive in the Mescal Sand and will soon water out;
- (f) since initial production from the Mescal Sand, the gas/water contact has moved at least 60 feet up dip in the reservoir;
- (g) there is pressure communication in the Mescal Sand between the Little Box Canyon "AOX" Federal Well No. 1 in Section 7 and the Mescal "SE" Federal Well No. 1 in Section 18; and
- (h) producing the Little Box Canyon "AOX" Federal Well No. 1 while continuously and concurrently producing the Little Box Canyon "AOX" Federal Well No. 2 in the W/2 equivalent of Section 7 will dewater the reservoir thereby lowering the abandonment pressure for the reservoir which will result in the additional recovery of natural gas from the Mescal Sand.

(6) Additional natural gas will be recovered from the Mescal Sand in the W/2 equivalent of Section 7 if the Little Box Canyon "AOX" Well Nos. 1 and 2 are concurrently and continuously produced thereby preventing the waste of natural gas and affording Yates the opportunity to produce its fair share of the reserves in this pool which underlie the W/2 equivalent of Section 7 thereby protecting its correlative rights.

(7) The Mescal Sand is confined to the W/2 equivalent of Section 7 and the northern portion of Section 18, which has watered out, and therefore the correlative rights of no offsetting operator will be impaired by the approval of this application.

(8) No other offset operator or interest owner appeared at the hearing in opposition to the proposed unorthodox location.

(9) The simultaneous dedication of the existing 240.64-acre non-standard gas spacing and proration unit comprising the W/2 equivalent of Section 7 to Yates' Little Box Canyon "AOX" Federal Wells No. 1 and 2 in the Mescal Sand of the Morrow formation will result in the increased recovery of hydrocarbons from this formation, will not impair the correlative rights of any operator in this reservoir and should therefore

be approved.

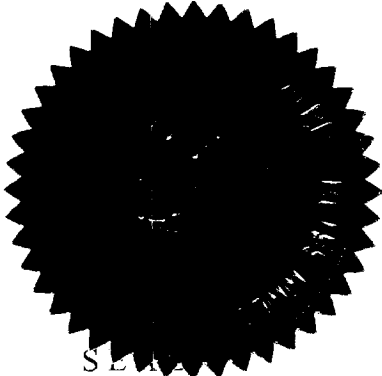
IT IS THEREFORE ORDERED THAT:

(1) The application of Yates Petroleum Corporation ("Yates") for an exception to Division Rule 104.D(3) to continuously and concurrently produce gas from the Little Box Canyon-Morrow Gas Pool from both its proposed Little Box Canyon "AOX" Federal Well No. 2 (**API No. 30-015-30222**), to be drilled at a standard infill gas well location 1980 feet from the North line and 1190 feet from the West line (Unit F) of irregular Section 7, Township 21 South, Range 22 East, NMPM, Eddy County, New Mexico, and its existing Little Box Canyon "AOX" Federal Well No. 1 (**API No. 30-015-24747**), located at an unorthodox gas well location 800 feet from the South line and 1600 feet from the West line (Unit N) of Section 7 (approved by Division Order No. R-7400, issued in Case No. 8006 and dated December 14, 1983), is hereby approved.

(2) The portion of Yates' original application seeking an unorthodox gas well location for the Little Box Canyon "AOX" Federal Well No. 2 is hereby **dismissed**.

(3) 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

Lori Wrotenbery
LORI WROTENBERY
Director