# 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. 10489 ORDER NO. R-9721

APPLICATION OF YATES PETROLEUM CORPORATION FOR AN UNORTHODOX GAS WELL LOCATION, CHAVES COUNTY, NEW MEXICO

## **ORDER OF THE DIVISION**

## BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on June 11, 1992, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>16th</u> day of September, 1992 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 of an unorthodox gas well location 330 feet from the South line and 1225 feet from the West line (Unit M) of Section 13, Township 8 South, Range 27 East, NMPM, Chaves County, New Mexico. The projected total depth of approximately 6900 feet for said well will penetrate Precambrian basement with the primary objective being the Siluro-Ordovician dolomite. The S/2 of said Section 13 is to be dedicated to the well forming a standard 320-acre gas spacing and proration unit.
- (3) At the time of the hearing BHP Petroleum (Americas), Inc., a direct offset lease-hold owner to the south and southwest of the subject acreage and operator of the standard 320-acre gas spacing and proration unit comprising the N/2 of Section 24, Township 8 South, Range 27 East, NMPM, Chaves Undesignated Group 4-A gas producing interval (as reported in the official Division production records), Chaves

County, New Mexico, said unit currently dedicated to the Puffer State Well No. 1 located at a previously approved unorthodox gas well location (Division Administrative Order NSL-2942, dated November 19, 1990) 660 feet from the North line and 990 feet from the West line (Unit D) of said Section 24, appeared at these proceedings in objection to this application and tendered witnesses and offered evidence in support of its protest.

- (4) Geological data presented by both parties indicates that the aforementioned Puffer State Well No. 1 is producing gas from a reservoir of limited extent. Both sides presented testimony that was in substantial agreement as to the geometry and the geology of the reservoir, differing in their interpretations of the down dip extent to the south and west and of the reservoir driving mechanism.
- (5) This geologic evidence presented by both parties shows that the reservoir's northeastern boundary formed by faulting extends into the southern half of the SW/4 of said Section 13.
- (6) Testimony presented by both parties indicates that the BHP Puffer State well could by itself adequately and sufficiently drain the entire reservoir of hydrocarbons.
- (7) A well drilled at the proposed unorthodox gas well location should provide Yates a more favorable position structurally than would a well drilled at the nearest orthodox gas well location within said proration unit, thereby increasing the likelihood of obtaining commercial production within this rather small reservoir.
- (8) Evidence indicates that drainage is occurring from underneath the Yates acreage making the drilling of the proposed well at the unorthodox gas well location necessary in order to offset said drainage caused by the Puffer State Well No. 1 within the limited confines of this reservoir.
- (9) A penalty in this instance is not required or recommended since the unorthodox location will not affect drainage of production from the BHP acreage but instead will serve to capture production being drained by the Puffer State Well.
- (10) In such instances where a reservoir has limited horizontal extent, that can reasonably be defined, and encompasses two or more leases, voluntary unitization should be encouraged as a prudent oil and gas conservation practice. Such voluntary unitization could serve to deter the drilling of additional wells which may not be needed, thereby preventing the possibility of waste.

FINDING: In the absence of unitization in this area it is necessary that Yates be allowed to drill a second well into the reservoir, even though this would constitute the drilling of an unnecessary well in the subject reservoir, in order to protect correlative rights by preventing the drainage of hydrocarbons underlying its acreage.

- (11) The application of Yates Petroleum Corporation in this instance for an unorthodox gas well location to be drilled 330 feet from the South line and 1225 feet from the West line (Unit M) of said Section 13 should be approved. Further, no penalty or limitation on production from the Siluro-Ordovician zone in this well should be established at this time.
- (12) Sufficient information was presented by both parties in this case on the geology of the Siluro-Ordovician horizon underlying the immediate area of said Section 13 that the Artesia District Office of the Division should create, classify, and designate a gas pool for the production from BHP's Puffer State Well No. 1. Said designation should be included pursuant to Division General Rule 5 on the next available docket for hearing before an Examiner.

### IT IS THEREFORE ORDERED THAT:

- (1) The application of Yates Petroleum Corporation for an unorthodox gas well location to be drilled to a projected total depth of approximately 6900 feet to test the Siluro-Ordovician formation is hereby approved for a well to be located 330 feet from the South line and 1225 feet from the West line (Unit M) of Section 13, Township 8 South, Range 27 East, NMPM, Chaves County, New Mexico.
- (2) The S/2 of said Section 13 shall be dedicated to the above-described well forming a standard 320-acre gas spacing and proration unit.
- (3) No limitation or penalty on any gas production from the Siluro-Ordovician formation by this well shall be imposed at this time; however, should it become necessary to prevent waste or protect correlative rights the Division Director may take any appropriate action.
- (4) A new pool for gas production from the BHP Petroleum (Americas), Inc. Puffer State Well No. 1 located in Unit D of Section 24, Township 8 South, Range 27 East, NMPM, Chaves County, New Mexico, shall, in a timely manner, be created and defined pursuant to Division General Rule 5.
- (5) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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



STATE OF NEW MEXICO OIL CONSERVATION DIVISION

WILLIAM J. LEM Director