# STATE OF NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASES NO. 10448 and 10449 (DE NOVO) Order No. R-9654-B/R-9655-B

APPLICATION OF YATES PETROLEUM CORPORATION FOR AUTHORIZATION TO DRILL, EDDY COUNTY, NEW MEXICO.

### **ORDER OF THE COMMISSION**

#### BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on October 31, 1992 and December 1, 1992, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 23rd day of August, 1993, the Commission, a quorum being present, having considered the record and being fully advised in the premises,

#### **FINDS THAT:**

- 1. Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- 2. Commission Case Nos. 10446, 10447, 10448 and 10449 were consolidated at the time of the hearing for the purpose of receiving testimony.
- 3. The Applicant in this matter, Yates Petroleum Corporation ("Yates"), seeks approval to drill its Flora "AKF" State Wells No. 1 and No. 2, all within the Designated Potash Area pursuant to all applicable rules and procedures governing said area, as promulgated by Division Order No. R-111-P. The proposed wells are to be located at standard oil well locations comprising Units K and N of Section 2, Township 22 South, Range 31 East, NMPM, Eddy County, New Mexico, with each well scheduled to test the Delaware formation at an approximate depth of 8,500'. Standard 40-acre oil spacing and proration units for the Undesignated Lost Tank-Delaware Pool or Undesignated Livingston Ridge-Delaware Pool are dedicated to each well.
- 4. New Mexico Potash Corporation ("NM Potash"), owner of the state potash lease underlying all of Section 2 appeared at the hearing in opposition to the applications.

5. New Mexico Oil Conservation Commission ("NMOCC") Order No. R-111-P prohibits drilling operations within a Life of Mine Reserve ("LMR") or its attendant buffer zone unless the oil and gas operator and the mine operator mutually agree to permit drilling or the Commission grants an exception to NMOCC Order No. R-111-P upon a showing that commercial potash will not be wasted unduly as a result of the drilling of the well.

## LIFE OF MINE RESERVES (LMR)

6. Life of mine reserves ("LMR") has been defined in NMOCC Order No. R-111-P as those potash deposits within the potash area reasonably believed by the potash lessee to contain potash ore in sufficient thickness and grade to be mineable using current day mining methods, equipment and technology. Mine operators file LMR designation maps annually with the New Mexico State Land Office ("SLO") and with the U. S. Bureau of Land Management ("BLM") as required under this order. NM Potash had filed for and the BLM had established LMR designation for Section 35, Township 21 South, Range 31 East which LMR covers Federal minerals under BLM jurisdiction and had claimed LMR designation for Section 2 which is totally under jurisdiction of the SLO. The north half of Section 2 would be designated as either a SLO created LMR or as a BLM created buffer zone to the LMR designation established in Section 35. The south half of Section 2 would be outside the buffer zone created by the LMR in Section 35 by the BLM but would be within the SLO created LMR covering Section 2.

Yates challenges NM Potash's designation of Section 2 as part of its LMR or buffer zone thereto, argues that an LMR is not established on State Land until designated by the SLO nor does it have retroactive effect once designated and contends notwithstanding an LMR designation that the Oil Conservation Commission is obligated to grant exceptions to Order No. R-111-P unless commercial potash will be unduly wasted as a result of drilling the subject wells. NM Potash argues that the filing of an LMR designation effectively creates an area off limits to oil and gas drilling and that there should be no forum for oil and gas operators to challenge its LMR boundaries.

FINDING: An LMR is not established on state land until designated as such by the State Land Office. Furthermore, an LMR designation by itself cannot act retroactively to prohibit the drilling of wells for which an application to drill has previously been filed. At the time the Applications to Drill the Flora No. 1 and No. 2 wells were filed, the proposed locations were not within the boundaries of a designated LMR or its buffer zone.

#### **WASTE**

7. State law charges the Commission with preventing waste and "waste" is defined to include "drilling or producing operations for oil or gas within any area containing commercial deposits of potash where such operations would have the effect unduly to reduce the total quantity of such commercial deposits of potash which may reasonably be recovered in commercial quantities." "Unduly" is defined as "excessively" or "immoderately". The Commission also is charged with preventing waste of oil and gas and protecting the correlative rights of owners of oil and gas. Failure to grant Yates their applications to drill their Flora No. 1 and No. 2 would deprive them of the opportunity to recover their fair share of oil and gas from the Delaware reservoir, thus violating their correlative rights.

FINDING: Since the subject wells are not within the boundaries or the buffer zone of a designated LMR, the applications to drill should be granted unless N.M. Potash can show that drilling or producing the wells would have the effect to excessively reduce the total quantity of commercial deposits of potash.

8. NM Potash failed to use valuable information such as radioactivity logs to help define mineralized and barren zones. They used carnallite in combination with sylvite to arrive at their determination of commercial potash ore in core hole F-65 located 100 feet from the South and West line of Section 34, Township 21 South, Range 31 East even though carnallite must be blended to obtain commercial ore, and they did not incorporate in their interpretation available data in core hole ERDA-6 in the SE/4 of Section 35, Township 21 South, Range 31 East. Their contention that commercial potash ore is present throughout Section 2 is based upon the results of one core hole K-162, drilled in January, 1992 and located 2,000 feet from the South line and 1,200 feet from the East line of Section 2 which did encounter commercial potash mineralization in both the 4th and 10th ore zones of the Salado Salt.

FINDING: NM Potash did not prove the existence of commercial potash under Section 2 and therefore, the application of Yates to drill their Flora No. 1 and Flora No. 2 in the south half of Section 2 should be granted.

#### IT IS THEREFORE ORDERED THAT:

- 1. The application of Yates to drill their Flora No. 1 and Flora No. 2 in the south half of Section 2 is hereby approved.
- 2. Jurisdiction of this cause is hereby retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

GARY CARLSON, Member

Bill Weiss

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WILLIAM W. WEISS, Member

WILLIAM J. LEMAY, Chairman

SEAL