# 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. 10521 ORDER NO. R-8170-L* 

APPLICATION OF UNION OIL COMPANY OF CALIFORNIA D/B/A UNOCAL FOR TERMINATION OF GAS PRORATIONING IN THE SOUTH BLANCO-PICTURED CLIFFS POOL, RIO ARRIBA, SANDOVAL AND SAN JUAN COUNTIES, NEW MEXICO

## ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on August 6 and 20, 1992, at Santa Fe, New Mexico, before Examiners Michael E. Stogner and David R. Catanach, respectively.

NOW, on this <u>12th</u> day of November, 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, Union Oil Company of California d/b/a UNOCAL (UNOCAL), seeks an order terminating gas prorationing in the South Blanco-Pictured Cliffs Pool which currently encompasses a relatively large geographical area in Townships 23 through 29 North, Ranges 1 through 9 West, NMPM, Rio Arriba, Sandoval and San Juan Counties, New Mexico, and to exclude said pool from the provisions of Division Order No. R-8170, as amended, (General Rule for the Prorated Gas Pools of New Mexico).
- (3) Gas Company of New Mexico, a transporter of gas from the subject pool, appeared in opposition and presented testimony in this case.

- (4) The South Blanco-Pictured Cliffs Pool was created by Division Order No. R-156 which was entered in May, 1952, for the production of gas from the Pictured Cliffs formation.
- (5) By Division Order No. R-565, dated December 23, 1954, as subsequently amended, the Division adopted special rules and regulations for the South Blanco-Pictured Cliffs Pool, Fulcher Kutz-Pictured Cliffs Pool and Aztec-Pictured Cliffs Pool. Said Order No. R-565 also found it necessary to prorate the gas production from these three pools because the producing capability of wells was greater than the market demand for gas from each of the respective pools.
- (6) Later, the West Kutz-Pictured Cliffs Pool, Ballard-Pictured Cliffs Pool and Tapacito-Pictured Cliffs Pool were all prorated.
- (7) All six of said pools lie within close proximity of each other and the Blanco-Pictured Cliffs Pool which was never prorated.
- (8) In 1974, by Division Order No. R-1670-R, the Aztec, Ballard, Fulcher Kutz and West Kutz-Pictured Cliffs Pools were deprorated upon recommendation of an industry committee appointed by the Secretary-Director of the Oil Conservation Commission, which concluded that prorationing should be terminated in the four pools because the productivity of these pools had declined to an average per well production rate of approximately 100 MCF per day and at these low production rates, waste would not be caused nor correlative rights impaired. (Division Order No. R-1670-R, Finding Paragraph Nos. (9) through (12)).
- (9) The data presented at the hearing indicates that five of the aforementioned seven Pictured Cliffs Pools were producing less than 100 MCF per day per well at the time Order No. R-1670-R was issued (Aztec, 66 MCF/day; Ballard, 90 MCF/day; South Blanco, 69 MCF/day; Fulcher Kutz, 84 MCF/day; and West Kutz, 52 MCF/day), except for the Blanco (146 MCF/day) and Tapacito (103 MCF/day). Although the South Blanco-Pictured Cliffs Pool had production rates which were comparable to or below the production rates of the pools in which prorationing was terminated in 1974, prorationing was continued in that pool because there were unequal pipeline pressures between competing pipelines in the pool and under those circumstances there was concern that the termination of prorationing could result in non-ratable takes (Transcript of OCD hearing in Case No. 5154).
- (10) The evidence demonstrated that the problems of non-ratable takes because of unequal pressures between pipelines in the pool no longer exist. Wells in the South Blanco-Pictured Cliffs Pool are in an advanced state of depletion and can only produce into the low pressure gathering system in the pool.

- (11) The South Blanco-Pictured Cliffs Pool is now a low productivity reservoir in an advanced state of depletion. Producing rates for wells in the Pool have continued to decline from an average rate of 69 MCF per day in 1973 to an average rate of 24 MCF per day in 1991.
  - (12) The applicant testified that volumetric calculations showed that the drainage area for four selected wells ranged from 92 to 140 acres. The data used to calculate the area included log interpretations for net pay thickness ranging from 67.5 to 92.5 feet. Information in Division well files for those same wells shows that the intervals perforated/completed had a gross thickness of 23 to 57 feet. This differs by a factor of 1.6 to 2.9 from the numbers used by the applicant's witness, which, because thickness and drainage area are directly proportionate, could cause a drainage area miscalculation of the same magnitude.

<u>FINDING</u>: The evidence does not conclusively show that wells in the South Blanco Pool are not draining 160 acres, and if they are draining greater than 160 acres, correlative rights could be impaired.

- (13) Notwithstanding evidence which establishes that this is a low permeability reservoir in an advanced state of depletion, it cannot be established that those wells capable of producing 100 MCF per day or more could not drain more than 160 acres.
- (14) The evidence currently available does not ensure that drainage of offsetting acreage will occur in wells that produce in excess of 100 MCF per day, thereby violating correlative rights.
- (15) There is, however, ample evidence to support an adjustment to the pool allowables that will prorate those wells capable of producing in excess of 100 MCF per day and will allow those wells that produce less and 100 MCF per day to continue producing without restrictions.
- (16) Further evidence and testimony indicates that the production limitations imposed by the gas proration system may have discouraged and may continue to discourage further developmental drilling and attempted workovers of existing wells.
- (17) The evidence at this time indicates that the institution of a minimum gas allowable for the South Blanco-Pictured Cliffs Pool, in accordance with Rule 8 of Order No. R-8170-H, would be in the best interests of conservation, prevention of waste and protection of correlative rights.

- (18) 100 MCF of gas per day per acreage factor of 1.0 or 3,000 MCF of gas per month should be utilized as the minimum gas allowable. Said minimum gas allowable should remain in effect for a period of one year, provided however, the Division may reopen this case at any time during the one-year period to consider additional evidence and testimony should it become apparent that continuation of the minimum gas allowable will not serve to prevent waste and protect correlative rights.
- (19) This case should be reopened in November, 1993, at which time the applicant and/or the operators in the subject pool should be prepared to appear and present evidence and testimony relevant to the continuation of a minimum gas allowable, adjustments to volume or to deprorate the South Blanco-Pictured Cliffs Pool.

### IT IS THEREFORE ORDERED THAT:

(1) The application of Union Oil Company of California d/b/a UNOCAL for an order terminating gas prorationing in the South Blanco-Pictured Cliffs Pool in Rio Arriba, Sandoval and San Juan Counties, New Mexico, is hereby <u>denied</u>.

## IT IS ORDERED HOWEVER, THAT:

- (2) The "Special Rules and Regulations for the South Blanco-Pictured Cliffs Pool" as promulgated by Division Order No. R-8170, as amended, are hereby amended by the addition of Rule No. 8 as follows:
  - RULE 8. MINIMUM ALLOWABLES: Notwithstanding the provisions of Rule Nos. 3 and 5 of the General Rules and Regulations for the Prorated Gas Pools of New Mexico, the Division shall assign a minimum gas allowable of 100 MCF of gas per day per acreage factor of 1.0.
- (3) Rule No. 8 shall remain in effect for a period of one year provided however, the Division may reopen this case at any time during the one-year period to consider additional evidence and testimony should it become apparent that continuation of the minimum gas allowable will not serve to prevent waste and protect correlative rights.
- (4) Unless reopened pursuant to Paragraph No. (2) above, this case shall be reopened in November, 1993, at which time the applicant and/or operators in the subject pool should be prepared to appear and present evidence and testimony relevant to the continuation of a minimum gas allowable in the South Blanco -Pictured Cliffs Pool.
  - (5) This order shall be effective December 1, 1992.

(6) 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