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. 10496 Order No. R-9693

APPLICATION OF SOUTHLAND ROYALTY COMPANY FOR AN UNORTHODOX GAS WELL LOCATION, DOWNHOLE COMMINGLING, AND TO AMEND DIVISION ADMINISTRATIVE ORDER NWU-80, SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on June 25, 1992, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 13th day of July, 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, Southland Royalty Company, seeks approval to downhole commingle Fulcher Kutz-Pictured Cliffs and Basin-Fruitland Coal Gas Pool production within the wellbore of its proposed Aztec Well No. 700 to be drilled at an unorthodox gas well location for both horizons 2280 feet from the South line and 1500 feet from the West line (Unit K) of Section 14, Township 28 North, Range 11 West, NMPM, San Juan County, New Mexico. The S/2 of Section 14 is to be dedicated to the subject well forming a standard 320-acre gas spacing and proration unit for the Basin-Fruitland Coal Gas Pool.

- (3) The applicant further seeks the amendment of Division Administrative Order No. NWU-80, dated May 20, 1955, which order authorized a non-standard 160-acre gas spacing and proration unit in the Fulcher Kutz-Pictured Cliffs Gas Pool comprising the W/2 NW/4 and N/2 SW/4 of Section 14, to show that the proposed Aztec Well No. 700 is to replace the existing Aztec Well No. 3 located in Unit E as the unit's only producing well.
- (4) According to applicant's evidence and testimony, the Aztec Well No. 700 was originally staked at a standard coal gas well location within the S/2 of Section 14; however, said location was denied by the Bureau of Land Management (BLM) due to visual impact.
- (5) The proposed well location is necessitated by topographic considerations, namely the presence of steep terrain within the S/2 of Section 14.
- (6) The proposed location further represents, according to applicant's evidence, the optimum well location for draining remaining Pictured Cliffs gas reserves underlying the non-standard gas proration unit which were not previously recovered by the Aztec Well No. 3.
- (7) No offset operator and/or interest owner appeared at the hearing in opposition to the proposed unorthodox gas well location.
- (8) Approval of the proposed unorthodox well location will afford the applicant the opportunity to produce its just and equitable share of the gas in the affected pools, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells and will otherwise prevent waste and protect correlative rights.
- (9) Applicant's evidence further indicates that both the Pictured Cliffs and Fruitland formations in this area of the basin should be marginally productive.
- (10) The proposed downhole commingling is necessary in order for the applicant to economically recover Basin-Fruitland Coal Gas Pool reserves and remaining Fulcher Kutz-Pictured Cliffs Gas Pool reserves underlying each respective proration unit.
- (11) According to applicant's testimony, if the subject application is approved, the Aztec Well No. 3 will be permanently plugged and abandoned.
- (12) The ownership within the Basin-Fruitland Coal Gas Pool and the Fulcher Kutz-Pictured Cliffs Gas Pool underlying each respective proration unit is common throughout.

- (13) The applicant further demonstrated through its evidence and testimony that:
 - a) there will be no crossflow between the two commingled pools;
 - b) neither commingled zone exposes the other to damage by produced liquids;
 - c) the fluids from each zone are compatible with the other;
 - d) the bottom hole pressure of the lower pressure zone is not less than 50 percent of the bottom hole pressure of the higher pressure zone adjusted to a common datum; and,
 - e) the value of the commingled production is not less than the sum of the values of the individual production.
- (14) Due to the nature of the Basin-Fruitland Coal Gas production, straight allocation of gas volumes from both zones is not appropriate. Southland therefore seeks the adoption of a monthly allocation formula, as shown on Exhibit "A" attached hereto and made a part hereof.
- (15) The operator should be responsible for reporting the monthly gas production from said well by utilizing the proposed allocation formula.
- (16) An annual report should be submitted by the operator to both the Aztec and Santa Fe offices of the Division showing the complete computations for each month.
- (17) Any condensate production from the subject well should be allocated entirely to the Pictured Cliffs interval.
- (18) Any change in the method of gas allocation between the two pools should be made only after due notice and hearing.
- (19) To afford the Division an opportunity to assess the potential of waste and to expeditiously order the appropriate remedial action, the operator should notify the Aztec district office of the Division any time the subject well is shut-in for seven consecutive days.

IT IS THEREFORE ORDERED THAT:

- (1) The applicant, Southland Royalty Company, is hereby authorized to downhole commingle Fulcher Kutz-Pictured Cliffs and Basin-Fruitland Coal Gas Pool production within the wellbore of its Aztec Well No. 700 to be drilled at an unorthodox gas well location for both horizons (also hereby approved) 2280 feet from the South line and 1500 feet from the West line (Unit K) of Section 14, Township 28 North, Range 11 West, NMPM, San Juan County, New Mexico.
- (2) The S/2 of Section 14 shall be dedicated to the subject well forming a standard 320-acre gas spacing and proration unit for the Basin-Fruitland Coal Gas Pool.
- (3) The W/2 NW/4 and N/2 SW/4 of Section 14 shall also be dedicated to the subject well forming a non-standard 160-acre gas spacing and proration unit for the Fulcher Kutz-Pictured Cliffs Gas Pool.
- (4) Division Administrative Order No. NWU-80, dated May 20, 1955, is hereby amended to reflect that the Aztec Well No. 700 shall hereinafter replace the existing Aztec Well No. 3, located in Unit E of Section 14, as the unit's only producing well.
- (5) The allocation of gas produced from both zones shall be in accordance with the allocation formula adopted for this well as further described in Exhibit "A" attached hereto and made a part hereof.
- (6) The operator is responsible for reporting the monthly gas production from the subject well to the Division utilizing the allocation formula adopted herein. An annual report shall be submitted by the operator to both the Aztec and Santa Fe offices of the Division showing the complete computations for the previous twelve month period.
- (7) Condensate production from the subject well shall be allocated entirely to the Fulcher Kutz-Pictured Cliffs Gas Pool. Water production shall be reported in a manner acceptable to the supervisor of the Aztec district office of the Division.
- (8) Any variance in the method of gas allocation between the two pools shall be made only after due notice and hearing.
- (9) The operator shall immediately notify the supervisor of the Aztec district office of the Division any time the subject well has been shut-in for seven consecutive days and shall concurrently present, to the Division, a plan for remedial action.

(10) 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

WILLIAM J. LEMAY

Director

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