# 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. 9420 (Reopened) Order No. R-8768-A

IN THE MATTER OF CASE 9420 BEING REOPENED PURSUANT TO THE PROVISIONS OF DIVISION ORDER NO. R-8768, WHICH ORDER CREATED THE BASIN-FRUITLAND COAL GAS POOL IN SAN JUAN, RIO ARRIBA, MCKINLEY AND SANDOVAL COUNTIES AND PROMULGATED TEMPORARY SPECIAL RULES AND REGULATIONS THEREFOR.

#### ORDER OF THE DIVISION

### BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on February 22, 1991, at Santa Fe, New Mexico, and at 8:15 a.m. on April 4, 1991, at Farmington, New Mexico before Examiner David R. Catanach.

NOW, on this 16th day of July, 1991, 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) By Order No. R-8768 dated October 17, 1988, issued in Case No. 9420, the Division created, defined, and promulgated temporary special rules and regulations for the Basin-Fruitland Coal Gas Pool, including provisions for 320-acre gas spacing and proration units and designated well locations.

- (3) Pursuant to the provisions of said Order No. R-8768, this case was reopened to allow the operators in the subject pool to appear and present evidence and testimony relative to the determination of permanent rules and regulations for the Basin-Fruitland Coal Gas Pool.
- (4) The subject pool currently comprises a substantial portion of the San Juan Basin in San Juan, Rio Arriba, McKinley and Sandoval Counties, New Mexico, and currently contains approximately 1,158 wells, either completed or producing, operated by 32 different operators.
- (5) The Fruitland Coalbed Methane Committee, hereinafter referred to as the "Committee", has commissioned ICF Resources (ICF) and Gas Research Institute (GRI) to conduct a reservoir engineering study designed to aid in the determination of permanent well spacing for the subject pool.
- (6) According to evidence presented by ICF and GRI, traditional engineering methods such as decline curve analysis, volumetric calculations and material balance which are usually utilized to determine drainage areas are inapplicable to the Basin-Fruitland Coal Gas Pool due to the unique producing characteristics of coal seams.
- (7) The evidence presented indicates that the best method currently available to evaluate drainage characteristics in coal seam reservoirs is reservoir simulation.
- (8) Representatives of both ICF and GRI testified at the hearing and presented extensive geologic and engineering evidence and results of a reservoir simulation study conducted on the subject pool.
- (9) The results of the reservoir simulation study generally establish that one well in the subject pool can efficiently drain and develop 320 acres.
- (10) The results of the study further indicate however that there may be certain areas within the basin where reservoir parameters such as porosity, permeability, coal thickness, pressure, gas content, sorption isotherm and initial gas/water saturation may exist in certain combinations such that infill drilling may be required to increase gas recovery.
- (11) The hearing was attended by numerous operators in the pool and various other interested parties who generally agreed with and endorsed the findings of the reservoir simulation study.

- (12) The special rules and regulations promulgated by Order No. R-8768 have afforded and will afford the owner of each property in the Basin-Fruitland Coal Gas Pool the opportunity to produce his just and equitable share of the gas in the pool.
- (13) Based on the evidence presented, Rule No. (4) of the Special Rules and Regulations for the Basin-Fruitland Coal Gas Pool should be amended to provide the opportunity for operators to appear before a Division Examiner and present evidence and testimony to support the drilling of a second well on standard 320-acre proration units or approved non-standard proration units for limited, defined areas of the pool.
- (14) In addition, special notice procedures should be incorporated into the special rules and regulations inasmuch as notice procedures for this type of case are not contained within Division General Rule No. 1207.
- (15) Meridian Oil Inc., (Meridian), proposed that Rule No. (3) be amended by adding language to provide that confirmation that a well is producing exclusively from the Basin-Fruitland Coal Gas Pool shall consist of approval of Division Form C-104.
- (16) Rule No. (3) should be amended as proposed provided, however, that such approval of Division Form C-104 should be for Division purposes only, and should not preclude any other governmental jurisdictional agency from making its own determination of production origination utilizing its own criteria.
- (17) Meridian further proposed that Rule No. (5) be amended to expand the current authority of the Division's district supervisor to approve non-standard gas spacing and proration units without notice and hearing when the unorthodox size or shape is necessitated by a variation in the legal subdivision of the United States Public Lands Survey and/or consists of an entire governmental section which contains not less than 70% nor more than 130% of a standard gas proration unit.
- (18) Meridian further proposed the amendment of Rule No. (6) to provide additional authority for the Division to administratively approve a non-standard gas spacing and proration unit which does not lie wholly within a governmental half section and which consists of less than 70% or more than 130% of a standard gas proration unit provided that said unit has previously been approved by the Division for use in developing Blanco-Mesaverde or Basin-Dakota Gas Pool reserves. The proposed amendment further provides that the Division Director, at his discretion, may set any application under Rule (6) for public hearing.

- (19) Meridian testified that it has sought approval of numerous non-standard gas spacing and proration units within the pool and has been required by the current rules to appear before a Division Examiner. Virtually all of the applications were unopposed and were subsequently approved by the Division.
- (20) According to testimony presented by Meridian, the proposed amendments to Rule Nos. (5) and (6) will streamline the administrative process by which non-standard gas spacing and proration units are reviewed and approved, and will relieve operators of the unnecessary expense of appearing and presenting evidence and testimony before a Division Examiner.
  - (21) Rule Nos. (5) and (6) should be amended as proposed.
- (22) The special rules and regulations promulgated by Division Order No. R-8768, with the inclusion of the proposed amendments, have afforded and will afford the owner of each property in the subject pool the opportunity to produce its just and equitable share of the gas in the pool.
- (23) In order to prevent the economic loss caused by the drilling of an excessive number of wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells and to otherwise prevent waste and protect correlative rights, the Special Rules and Regulations for the Basin-Fruitland Coal Gas Pool as promulgated by Division Order No. R-8768, and as amended by this order, should be continued in full force and effect until further notice of the Division.

## IT IS THEREFORE ORDERED THAT:

(1) Rule Nos. (3), (4), (5), and (6) of the Special Rules and Regulations for the Basin-Fruitland Coal Gas Pool, San Juan, Rio Arriba, McKinley and Sandoval Counties, New Mexico, as promulgated by Division Order No. R-8768, are hereby amended in their entirety to read as follows:

"RULE 3. The Division Director may require the operator of a proposed or existing Basin-Fruitland Coal Gas well, Fruitland Sandstone well, or Pictured Cliffs Sandstone well, to submit certain data as described in Rule (2) above, which would not otherwise be required by Division Rules and Regulations, in order to demonstrate to the satisfaction of the Division that said well will be or is currently producing from the appropriate common source of supply. The confirmation that a well is producing exclusively from the Basin-Fruitland Coal Gas Pool shall consist of approval of Division Form C-104, provided however that such approval shall be for Division purposes only, and shall not preclude any other governmental jurisdictional agency from making its own determination of production origination utilizing its own criteria.

<u>RULE 4</u>. Each well completed or recompleted in the Basin-Fruitland Coal Gas Pool shall be located on a standard unit containing 320 acres, more or less, comprising any two contiguous quarter sections of a single governmental section, being a legal subdivision of the United States Public Lands Survey.

Individual operators may apply to the Division for an exception to the requirements of Rule No. (4) to allow the drilling of a second well on standard 320-acre units or on approved non-standard units in specifically defined areas of the pool provided that:

- (a) Any such application shall be set for hearing before a Division Examiner;
- (b) Actual notice of such application shall be given to operators of Basin-Fruitland Coal Gas Pool wells, working interest owners of undrilled leases, and unleased mineral owners within the boundaries of the area for which the infill provision is requested, and to all operators of Basin-Fruitland Coal Gas Pool wells within one mile of such area, provided however any operator in the pool or other interested party may appear and participate in such hearing.

Such notice shall be sent certified or registered mail or by overnight express with certificate of delivery and shall be given at least 20 days prior to the date of the hearing.

RULE 5. The Supervisor of the Aztec district office of the Division shall have the authority to approve a non-standard gas proration unit within the Basin-Fruitland Coal Gas Pool without notice and hearing when the unorthodox size or shape is necessitated by a variation in the legal subdivision of the United States Public Lands Survey and/or consists of an entire governmental section and the non-standard unit in not less than 70% nor more than 130% of a standard gas proration unit. Such approval shall consist of acceptance of Division Form C-102 showing the proposed non-standard unit and the acreage contained therein.

RULE 6. The Division Director may grant an exception to the requirements of Rule (4) when the unorthodox size or shape of the gas proration unit is necessitated by a variation in the legal subdivision of the United States Public Lands Survey and the non-standard gas proration unit is less than 70% or more than 130% of a standard gas proration unit, or where the following facts exist and the following provisions are complied with:

- (a) The non-standard unit consists of quarter-quarter sections or lots that are contiguous by a common bordering side.
- (b) The non-standard unit lies wholly within a governmental half section, except as provided in paragraph (c) following.
- (c) The non-standard unit conforms to a previously approved Blanco-Mesaverde or Basin-Dakota Gas Pool non-standard unit as evidenced by applicant's reference to the Division's order number creating said unit.
- (d) The applicant presents written consent in the form of waivers from all offset operators or owners of undrilled tracts and from all operators owning interests in the half section in which the non-standard unit is situated and which acreage is not included in said non-standard unit.
- (e) In lieu of paragraph (d) of this rule, the applicant may furnish proof of the fact that all of the aforesaid parties were notified by certified or registered mail or overnight express mail with certificate of delivery of his intent to form such non-standard unit. The Division Director may approve the application if no such party has entered an objection to the formation of such non-standard unit within 30 days after the Division Director has received the application.

- (f) The Division Director, at his discretion, may set any application under Rule (6) for public hearing."
- (2) All other provisions contained within Division Order No. R-8768 shall remain in full force and effect until further order of the Division.
- (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

WILLIAM J. LEMAY

Director

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