

**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. 11709  
ORDER NO. R-10771**

**APPLICATION OF PHILLIPS  
PETROLEUM COMPANY FOR THE  
ESTABLISHMENT OF A DOWNHOLE  
COMMINGLING "REFERENCE CASE"  
FOR ITS SAN JUAN 30-5 UNIT  
PURSUANT TO DIVISION RULE 303.E.  
AND THE ADOPTION OF SPECIAL  
ADMINISTRATIVE RULES  
THEREFOR, RIO ARriba COUNTY,  
NEW MEXICO.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This cause came on for hearing at 8:15 a.m. on January 23 and February 20, 1997, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 21st day of February, 1997, 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, Phillips Petroleum Company (Phillips), pursuant to the provisions of Division Rule 303.E., seeks to establish a downhole commingling "reference case" to provide exceptions for (a) marginal economic criteria, (b) pressure criteria, (c) allocation formulas and (d) modification of notification rules on a unit-wide basis for downhole commingling of Dakota, Mesaverde, Pictured Cliffs and Fruitland Coal gas production within existing or future drilled wells within the San Juan 30-5 Unit, Rio Arriba County, New Mexico.

(3) Division Rule No. 303.E., amended by Order No. R-10470-A, currently states:

“If sufficient data exists on a lease, pool, formation, geographic area, etc., so as to render it unnecessary to repeatedly provide such data on Form C-107-A, an operator may except any of the various criteria required under Paragraph 303.D. of this rule by establishing a “reference case”. The Division, upon its own motion, or by application from an operator, may establish “reference cases” either administratively or by hearing. Upon Division approval of such “reference cases” for specific criteria, subsequent applications to downhole commingle (Form C-107-A) will be required only to cite the Division order number which established such exceptions and shall not be required to submit data for those criteria.”

(4) The applicant is the current operator of the San Juan 30-5 Unit which encompasses some 19,400 acres, more or less, in portions of Township 30 North, Range 5 West, NMPM, Rio Arriba County, New Mexico.

(5) Within the San Juan 30-5 Unit, the applicant currently operates forty-six (46) Basin-Dakota Gas Pool wells, fifty (50) Blanco-Mesaverde Gas Pool wells, five (5) Gobernador-Pictured Cliffs Gas Pool wells, and forty-three (43) Basin-Fruitland Coal Gas Pool wells.

(6) According to its evidence and testimony, Phillips seeks to:

- a) establish a “reference case” for marginal economic criteria in the Dakota and Mesaverde formations whereby these formations and/or pools may be identified as “marginal” on Form C-107-A’s subsequently filed for wells within the San Juan 30-5 Unit. The applicant further proposes that the data provided in the immediate case serve as supplemental data or confirmation that these formations and/or pools should be classified as “marginal”;
- b) establish a “reference case” for pressure criteria in the Dakota and Mesaverde formations whereby the Division may utilize data provided in the immediate case to verify the pressure data provided on Form C-107-A’s subsequently filed for wells within the San Juan 30-5 Unit;

- c) establish a "reference case" whereby the Division utilizes the data presented in the immediate case to endorse or approve certain methods of allocating production whereby the applicant need not submit additional data or justification when proposing a certain method of allocating production on Form C-107-A's subsequently filed for wells within the San Juan 30-5 Unit; and,
- d) establish a "reference case" or an administrative procedure for authorizing the downhole commingling of existing or future drilled wells within the San Juan 30-5 Unit without additional notice to each affected interest owner as required by Division Rule No. 303.D.

(7) In support of its request to except marginal economic criteria, the applicant presented engineering evidence and testimony which indicates that within the San Juan 30-5 Unit:

- a) the average estimated Mesaverde and Dakota ultimate recoverable gas reserves within the San Juan 30-5 Unit are approximately 1.67 BCFG and 1.7 BCFG, respectively;
- b) the average initial producing rate for a newly drilled or recompleted Mesaverde and Dakota gas well are approximately 419 MCFGD and 438 MCFGD, respectively; and,
- c) the estimated ultimate gas recoveries and initial producing rates from the Mesaverde and Dakota formations are insufficient to justify drilling stand alone wells and/or dually completed wells to recover such gas reserves.

(8) The evidence and testimony presented by the applicant indicates that the Mesaverde and Dakota formations within the San Juan 30-5 Unit should be properly classified as "marginal".

(9) In support of its request to except pressure criteria within the Mesaverde and Dakota formations within the San Juan 30-5 Unit, the applicant presented engineering evidence and testimony which indicates that:

- a) the average shut-in bottomhole pressures within the Mesaverde and Dakota formations at the time of initial development were approximately 1,294 psi and 3,412 psi, respectively; and,

- b) the average current shut-in bottomhole pressure within the Mesaverde and Dakota formations are approximately 1,030 psi and 2,850 psi, respectively;
- c) the current Dakota bottomhole pressure exceeds the initial bottomhole pressure of the Mesaverde formation within the San Juan 30-5 Unit. Applicant testified that commingling of the Mesaverde and Dakota intervals will not occur until such time as the bottomhole pressure of the Dakota formation is drawn down sufficiently so as to qualify pursuant to Division Rule No. 303.C.(1)(b)(ii).

(10) There is not sufficient useful pressure data at this time within the San Juan 30-5 Unit so as to except pressure criteria as proposed by the applicant.

(11) The applicant testified that various allocation methods will be utilized for downhole commingled wells within the San Juan 30-5 Unit depending on the circumstances. Some of the methods and circumstances are described as follows:

- a) in those instances where a newly completed zone is commingled with an existing producing interval with an established decline, the subtraction method will be utilized for a period of +/- 12 months. Subsequent to this time, and assuming that the production rate has stabilized, a fixed allocation will be determined and utilized; and,
- b) in those instances where a well is newly drilled, the lower zone will be production tested for a period of two to four weeks or until a stabilized rate is obtained. Subsequent to that time, a stabilized rate from both commingled zones within the well will be obtained. A fixed allocation of production will then be determined utilizing the data obtained from the flow tests.

(12) The allocation methods proposed by the applicant are routinely utilized by industry and approved by the Division and therefore, the proposal to except allocation formulas should be approved.

(13) In support of its request to establish a "reference case" or administrative procedure for providing notice within the San Juan 30-5 Unit the applicant presented evidence and testimony which indicates that:

- a) the interest ownership between two zones within a given wellbore in the San Juan 30-5 Unit is generally not common;

- b) pursuant to Division Rule No. 303.D., applicant is currently required to notify all interest owners within the San Juan 30-5 Unit every time a Form C-107-A is submitted to the Division. There are a considerable number of such interest owners within the unit;
- c) providing notice to each interest owner within the San Juan 30-5 Unit of subsequent downhole comminglings is unnecessary and is an excessive burden on the applicant;
- d) the downhole commingling of wells within the San Juan 30-5 Unit Area will benefit working, royalty, and overriding royalty interest owners. In addition, the downhole commingling of wells within the San Juan 30-5 Unit should not violate the correlative rights of any interest owner;
- e) no interest owner appeared at the hearing in opposition to the establishment of a "reference case" or administrative procedure for notice.

(14) An administrative procedure should be established within the San Juan 30-5 Unit for obtaining approval for subsequently downhole commingled wells without notice to Unit interest owners, provided however that, all other provisions contained within Division Rule No. 303.C. are complied with.

(15) Approval of the proposed "reference cases" for marginal economic criteria, allocation formulas and notice will lessen the burden on the applicant insofar as providing the data required pursuant to Division Rule No. 303.D. and Form C-107-A, will provide the applicant a streamlined method for obtaining downhole commingling approvals within the San Juan 30-5 Unit, and will not violate correlative rights.

**IT IS THEREFORE ORDERED THAT:**

(1) The application of Phillips Petroleum Company to establish a "reference case" for (a) marginal economic criteria within the Mesaverde and Dakota formations, (b) allocation formulas and (c) modification of notification rules on a unit-wide basis for downhole commingling of Dakota, Mesaverde, Fruitland Coal and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 30-5 Unit, Rio Arriba County, New Mexico, is hereby approved.

(2) The application of Phillips Petroleum Company to establish a "reference case" for pressure criteria on a unit-wide basis for downhole commingling of Mesaverde and Dakota formations within the San Juan 30-5 Unit is hereby denied.

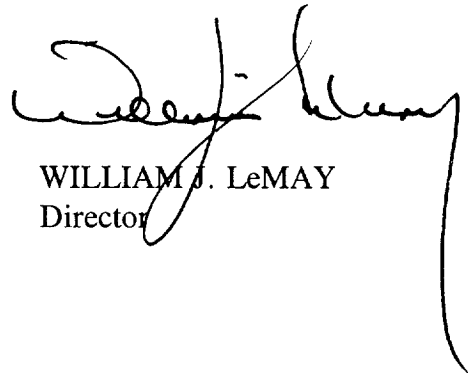
(3) Upon filing of Division Form No. C-107-A's for wells subsequently downhole commingled within the San Juan 30-5 Unit Area, the applicant shall not be required to submit supporting data to justify the classification of the Mesaverde and Dakota formations as "marginal" and support or justification for utilizing a given method or formula for allocation of production, provided however, in the event any of the data described above appearing on Form C-107-A appears to be beyond the data range provided in this case, the Division may require the submittal of additional supporting data.

(4) In order to obtain Division authorization to downhole commingle wells within the San Juan 30-5 Unit, the applicant shall file a Form C-107-A with the Santa Fe and Aztec Offices of the Division. Such application shall contain all the information required under Rule No. 303.C. of the Division Rules and Regulations, provided however that the applicant shall not be required to provide notice to all interest owners within the San Juan 30-5 Unit of such proposed commingling.

(5) 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

A handwritten signature in black ink, appearing to read 'William J. LeMay', is written over the printed name and title.

WILLIAM J. LeMAY  
Director

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