

**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. 12136  
Order No. R-11187**

**APPLICATION OF PHILLIPS PETROLEUM COMPANY FOR THE  
ESTABLISHMENT OF A DOWNHOLE COMMINGLING REFERENCE CASE  
FOR ITS SAN JUAN 29-6 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 case came on for hearing at 8:15 a.m. on March 18, 1999, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 25<sup>th</sup> day of May, 1999, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

**FINDS THAT:**

(1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.

(2) Cases No. 12136, 12137, 12138 and 12139 were consolidated at the time of the hearing for the purpose of testimony.

(3) 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 notice 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 29-6 Unit located in Township 29 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.

(4) Division Rule 303.E. 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."

(5) The applicant is the current operator of the San Juan 29-6 Unit, which encompasses some 22,510 acres, more or less, in Township 29 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.

(6) Within the San Juan 29-6 Unit, the applicant currently operates thirty-seven (37) Basin-Dakota Gas Pool wells, one hundred forty-three (143) Blanco-Mesaverde Gas Pool wells, fifty-nine (59) Basin-Fruitland Coal Gas Pool wells, and two (2) Gobernador-Pictured Cliffs Gas Pool wells.

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

- a) establish a "reference case" for marginal economic criteria in the Basin-Dakota and Blanco-Mesaverde Gas Pools whereby these pools may be identified as "marginal" on Form C-107-A's subsequently filed for wells within the San Juan 29-6 Unit. The applicant further proposes that the data provided in the immediate case serve as supplemental data or confirmation that these pools should be classified as "marginal";
- b) establish a "reference case" for pressure criteria in the Basin-Dakota and Blanco-Mesaverde Gas Pools whereby the Division may utilize the 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 29-6 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 29-6 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 29-6 Unit without additional notice to each affected interest owner as required by Rule No. 303.D.

(8) In support of its request to except marginal economic criteria, the applicant presented engineering evidence and testimony indicating that within the San Juan 29-6 Unit:

- a) the average estimated Mesaverde and Dakota ultimate recoverable gas reserves within the San Juan 29-6 Unit on a per well basis are approximately .74 BCFG and 1.23 BCFG, respectively;
- b) the average initial producing rate for a Mesaverde and Dakota gas well (either newly drilled or recompleted) is approximately 363 MCFGD and 277 MCFGD, respectively; and
- c) the estimated ultimate gas recoveries and initial producing rates from the Mesaverde and Dakota formations within the San Juan 29-6 Unit are insufficient to justify drilling stand alone wells and/or dually completed wells to recover such gas reserves.

(9) The evidence and testimony presented by the applicant indicates that the Blanco-Mesaverde and Basin-Dakota Gas Pools within the San Juan 29-6 Unit should be properly classified as "marginal".

(10) In support of its request to except pressure criteria within the Mesaverde and Dakota formations within the San Juan 29-6 Unit, the applicant presented engineering evidence and testimony indicating that:

- a) the average shut-in bottomhole pressure within the Mesaverde and Dakota formations at the time of initial development was approximately 1,280 psi and 3,130 psi, respectively; and
- b) the average current shut-in bottomhole pressure within the Mesaverde and Dakota formations is approximately 500 psi and 844 psi, respectively.

(11) Testimony by the applicant indicates that the pressure data described above was obtained from seven (7) Mesaverde and five (5) Dakota wells within the San Juan 29-6 Unit.

(12) The applicant presented insufficient pressure data within the San Juan 29-6 Unit area to except pressure criteria.

(13) The applicant testified that various allocation methods would be utilized for downhole commingled wells within the San Juan 29-6 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 that 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 several weeks to several months, whatever time period is necessary to establish a stabilized production rate. A production forecast will then be obtained from the lower zone based upon the stabilized production rate. The upper zone will be completed and the subtraction method will be utilized for a period of +/- 12 months. Once the production rate has stabilized, a fixed allocation will be determined and utilized.

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

(15) In support of its request to establish a "reference case" or administrative procedure whereby additional notice of Form C-107-A within the San Juan 29-6 Unit need not be given to interest owners, the applicant presented evidence and testimony indicating that:

- a) the interest ownership between zones within a given wellbore in the San Juan 29-6 Unit is generally not common;
- b) pursuant to Rule No. 303.D., it is currently required to notify all interest owners within the San Juan 29-6 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) the downhole commingling of wells within the San Juan 29-6 Unit will benefit working, royalty, and overriding royalty interest owners. In addition, the downhole commingling of wells within the San Juan 29-6 Unit should not violate the correlative rights of any interest owner; and
- d) no interest owner appeared at the hearing in opposition to the establishment of a "reference case" or administrative procedure for notice.

(16) An administrative procedure should be established within the San Juan 29-6 Unit for obtaining approval for subsequently downhole commingled wells without notice to unit interest owners, provided however that the applicant shall comply with all other provisions contained within Division Rule 303.C.

(17) Approval of the proposed "reference case" 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 303.D. and Form C-107-A, will provide the applicant a streamlined method for obtaining downhole commingling approval within the San Juan 29-6 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 Blanco-Mesaverde and Basin-Dakota Gas Pools, b) allocation formulas, and c) modification of notice 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 29-6 Unit, Rio Arriba County, New Mexico, is hereby approved.

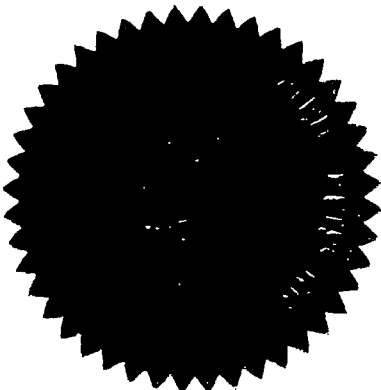
(2) The application of Phillips Petroleum Company to establish a "reference case" for pressure criteria on a unit-wide basis for downhole commingling of Blanco-Mesaverde and Basin-Dakota Gas Pools within the San Juan 29-6 Unit is hereby denied.

(3) Upon filing of Form C-107-A's for wells subsequently downhole commingled within the San Juan 29-6 Unit, the applicant shall not be required to submit supporting data: (a) to justify the classification of the Blanco-Mesaverde and Basin-Dakota Gas Pools as "marginal" and (b) support or justify the utilization of 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 29-6 Unit, the applicant shall file Form C-107-A with the Santa Fe and Aztec Offices of the Division. Such application shall contain all the information required under Division Rule 303.C., provided however that the applicant shall not be required to provide notice to all interest owners within the San Juan 29-6 Unit of such proposed commingling.

(5) 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

LORI WROTENBERY  
Director

S E A L



This map displays a grid of numbered locations across the Los Angeles area. The grid is color-coded with yellow and orange areas, and the numbers are in red and black. The map is oriented with North at the top. The locations are marked with blue circular icons containing a star. The numbers are distributed across the map, with some appearing in red and others in black. The map includes major highways, city boundaries, and numerous numbered points of interest. The grid is color-coded with yellow and orange areas, and the numbers are in red and black. The map is oriented with North at the top.

 Approved 37th Expan., Effective 2/1/1988

T  
29  
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- ACTIVE
- INACTIVE

San Juan Division  
Farmington, New Mexico  
October 13, 2004



R6W

# ConocoPhillips

## San Juan 29-6 Unit

Dakota PA

- Approved 11th Expan., Effective 10/1/2005
- Proposed 12th Expan., Effective 2/1/2004
- Revised 13th Expan., Effective 5/1/2004
- Proposed 14th., Expan., Effective 5/1/2005

T  
29  
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## Well Formation

- FRUITLAND COAL
- PICTURED CLIFFS
- MESAVERDE
- DAKOTA

LAND DEPARTMENT  
San Juan Business Unit  
Farmington, New Mexico  
2009

